

JOB DESCRIPTION

Vacancy reference:	SRF19967
Post Title:	Postdoctoral Research Assistant
Grade:	6
School/Department:	Meteorology, SMPCS
Reports to:	Professor Sue Grimmond
Responsible for:	N/A

Purpose:

To participate in research urban meteorology projects UrbanFluxes/DARE/CSSP- China Urban Climate Services project and other closely related projects. This project is funded by the Met Office/Newton Fund. The main goal of the work will be to undertake model development, testing, application and evaluation for urban areas. The post will be based in the Department of Meteorology, University of Reading, UK but will involve working with others.

Main duties and responsibilities

- Compile forcing data and surface characteristics to undertake modelling within cities.
- Contribute to the modelling and evaluation of the storage heat, sensible heat, latent heat flux and anthropogenic heat fluxes using urban land surface models (e.g. SUEWS, JULES/MORUSES, SLUCM, BEP/BEM, etc) offline and online.
- Co-ordinate with others in the research cities so they can also apply the model and evaluate within their cities.
- Undertake modelling for future scenarios
- Understand potential climate service needs
- Effectively communicate and collaborate with project partners to facilitate cross disciplinary research with the international and interdisciplinary partners
- Be able to meet tight deadlines in preparing journal articles, conference presentations and posters and material for workshops and stakeholder events.
- Participate in the maintenance and/or analysis of field observations
- Lead/participate literature reviews
- Contribute to maintenance and analysis of observations (e.g. radiative fluxes, surface temperature, sensible and latent heat fluxes, boundary layer height, etc) using e.g. ceilometers, scintillometers, radiometers, crowd sourced data etc)
- Contribute to the development of models and data assimilation
- Contribute to the preparation of reports and articles to achieve milestones and deliverables (journal articles, conference presentations, materials for workshops etc), often with tight deadlines, in the project description in collaboration with project partners

Supervision received: The post reports to Reading project leader Prof Sue Grimmond who will oversee the overall research. The post-holder will also benefit from support and guidance from other members of the research team.

Supervision given: Other members of Grimmond's research group *will* benefit from *interaction and* guidance from the post-holder. Opportunities for supervision of postgraduate students and for teaching within the department will be provided to support the post-holders staff development.

Contact

In addition to the day to day contact with team members, academic and departmental staff, the post holder will liaise with a wide range of University departments (Finance, HR etc) and external bodies within the scope of this role. In particular this will include those involved in the other urban meteorology and climate projects, field sites in London, and other stakeholders in other cities (UK and internationally).

Terms and conditions

Full time and fixed term for two years (depending on start date).

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.

The University aspires to be an “Employer of Choice” and recognises that success is not simply determined by a competitive suite of terms and conditions of service, but by fostering a working environment that protects the physical and mental well-being of its staff. Full details of the University's Health and Well-being policy are available from through the [HR website](#). The University is committed to work-life balance and supportive of flexible working arrangements, and the School's website gives examples of excellent practices in respect of [flexible work](#) as well as for [maternity/parental leave](#) within the School. The University supports its staff in many other ways:

- its Centre for Staff Training and Development (<http://www.reading.ac.uk/internal/cstd/>),
- its excellent Nursery facilities (<http://www.rusu.co.uk/intheunion/nursery/>),
- its SportsPark (<http://www.sport.reading.ac.uk/>),
- its membership of Childcare+ (<http://www.reading.ac.uk/internal/humanresources/>)



The School of Mathematical and Physical Sciences was awarded an Athena SWAN Silver award in 2014 in recognition of its good employment practices in relation to women working in science, engineering and technology (SET). Please follow the link for more information:

<http://www.athenaswan.org.uk/html/athena-swan/>

Date assessed: 11 July 2017

PERSON SPECIFICATION

Job Title	School/Department
PDRA	Meteorology/ SMPCS

Criteria	Essential	Desirable
Skills Required	<ul style="list-style-type: none"> • Excellent computing and data management skills • Good oral presentation skills • Excellent written English 	<ul style="list-style-type: none"> • Programming in R, MATLAB, Python, and/or Fortran • Familiar with GIS software • Familiar with processing remote sensing data: wide range of formats • Familiar with meteorological instrumentation • Familiar with running WRF and/or the UM • Familiar with analysing climate model runs
Attainment & Knowledge	<ul style="list-style-type: none"> • Data processing of observational or modelled data sets • Analysis of large data sets • Preparation/publication of peer reviewed journal papers • Conference presentations • Preparation of literature reviews 	<ul style="list-style-type: none"> • Development of model components or programming code • Experience with eddy covariance, thermal camera/IRT data/ scintillometry data and wireless sensors
Relevant Experience	<ul style="list-style-type: none"> • Data processing of observational or modelled data sets • Analysis of large data sets • Preparation/publication of peer reviewed journal papers • Conference presentations • Preparation of literature reviews 	<ul style="list-style-type: none"> • Development of model components or programming code • Experience with eddy covariance, thermal camera/IRT data/ scintillometry data and wireless sensors

Disposition	<ul style="list-style-type: none"> • Work well with others and independently • Excellent problem solver • Ability to communicate and work with project participants and stakeholders • Work well to deadlines 	
Other	<ul style="list-style-type: none"> • Flexibility (e.g. to respond to instrument problems at odd times e.g. weekends) • Ability to attend/travel to conferences/meetings/field work in London and/or overseas 	

Completed by: Sue Grimmond	Date: 11 th July 2017
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