



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Land-Atmosphere Interactions, Faculty of Environment



Salary: Grade 7 (£32,004 – £38,183 p.a.)

Please note that due to funding limitations an appointment will not be made above £34,956 p.a.

Reference: ENVEE1148

Closing date: 26 March 2017

Fixed term for 24 months, up to 31 March 2019 (external funding)

Research Fellow in Land-Atmosphere Interactions School of Earth and Environment, Faculty of Environment

Are you an ambitious researcher looking for your next challenge? Do you have a background in atmospheric science? Do you want to further your career in one of the UK's leading research intensive Universities?

This project will improve our understanding of land-atmosphere interactions, improving prediction of seasonal precipitation and how this is modulated by changes to the land-surface, with implications for predictions across all time scales.

You will improve our understanding of land-atmosphere interactions in the tropics by assembling and synthesising data on the land surface and land-atmosphere interactions and develop new metrics to evaluate modelled representation of the land surface and land-atmosphere coupling. You will use these metrics to evaluate simulated land-atmosphere interactions over forested regions of Brazil, an important area of land-atmosphere coupling, with significant ongoing changes in land-use. The tools you will develop will be added to community-wide evaluation toolkits for Earth System Models, which will increase the visibility and impact of your work.

The project is led by [Professor Dominick Spracklen](#), in collaboration with [Dr Luis Garcia-Carreras](#), [Dr John Marsham](#), [Dr Wolfgang Buermann](#) and [Professor Manuel Gloor](#). It is funded through the [Climate Science for Service Partnership Brazil](#), part of the [Newton Fund](#). The project will offer you the opportunity to collaborate with researchers in Brazil and at the [UK Met Office](#).

You will have a relevant PhD, or be close to completion, with expertise in a relevant area of atmospheric science or a related physical science. You will work in a large, vibrant and internationally recognised research team, alongside others working on related projects, and as such you will need excellent communication skills. You will also have a commitment to publishing original results at an international level.

What does the role entail?

As a Research Fellow, your main duties will include:

- Working with, and in support of, Professor Dominick Spracklen's research grant to ensure the project is successfully completed;



- Assembling and synthesising of data on the land surface and land-atmosphere interactions;
- Developing new metrics to evaluate modelled representation of the land surface and land-atmosphere coupling;
- Using new metrics to evaluate coupled climate models and Earth System Models over Brazil;
- Using your own initiative to identify areas for research, develop new research objectives and methods and extend the research approach as dictated by initial results;
- Making a significant contribution to the dissemination of research results by publication in internationally-recognised and peer-reviewed journals, and by presentation at national and international workshops/meetings;
- Working independently, and as part of a larger team of researchers, both internally and externally, to develop research links, collaborations and proposals, engaging in knowledge transfer activities where appropriate;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects, and acting as a mentor to less experienced colleagues.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As a Research Fellow you will have:

- A PhD, or be close to completion, in a relevant area of atmospheric science or a related physical science;
- Proven skills in numerical modelling and experience of analysing, and ideally running, complex numerical models;
- Experience analysing large datasets and of using data analysis and visualisation software such as IDL or Python;



- The ability to independently develop, and successfully carry out, your own research ideas as part of a research team, leading to lead author publications;
- A high level of scientific integrity, and attention to detail, to ensure that scientific results are reliable, documented and verifiable;
- A demonstrable commitment to the publication of original results at an international level;
- Excellent communication skills, both written and verbal, with a passion for communicating new scientific understanding;
- Excellent organisational, planning and self-management skills with the ability to prioritise and meet milestones/deadlines;
- The ability to independently develop research partnerships or collaborations within and outside your research area as appropriate;
- Strong self-motivation, enthusiasm and a commitment to your own continuous professional development.

You may also have:

- Experience of using coupled climate models such as the Met Office Unified Model;
- Expertise in land-atmosphere interactions;
- Experience with version-control systems such as git;

How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23.59** (UK time) on the advertised closing date.

Contact information

To explore the post further or for any queries you may have, please contact:

Dominick Spracklen, Professor of Biosphere-Atmosphere Interactions

Tel: +44(0)113 343 7488



Email: D.V.Spracklen@leeds.ac.uk

Additional information

Working at Leeds

Find out more about the benefits of working at the University and what it's like to live and work in the Leeds area on our [Working at Leeds](#) information page.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our [Accessibility](#) information page or by getting in touch with us at disclosure@leeds.ac.uk.

Criminal record information

Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our [Criminal Records](#) information page.

