



UNIVERSITY OF LEEDS

## CANDIDATE BRIEF

### Research Fellow in Boundary Layer Meteorology, Faculty of Environment



**Salary:** Grade 7 (£41,064 – £48,822 p.a. pro-rata depending on experience)

**Reporting to:** Dr Andrew Ross - Associate Professor in Dynamical Meteorology

**Reference:** ENVEE1881

**Fixed term (6 months at 0.5FTE to complete specific time limited work):** End date no later than 31<sup>st</sup> March 2027.

**Location:** School of Earth and Environment, Leeds (with scope for hybrid working)

**We are open to discussing flexible working arrangements**

# Research fellow in Boundary Layer Meteorology, School of Earth and Environment

## Overview of the Role

**Are you an ambitious researcher with a passion for the weather? Do you want to further your career in one of the UK's leading research-intensive universities, conducting fundamental research with real world applications?**

UNICON is a joint project between the Universities of Reading and Leeds, funded as part of WCSSP India to develop diagnostics for evaluation of the Met Office Unified Model using new observations from the Indian Atmospheric Research Testbed – Central India (ART-CI) site established by project partners IITM. The diagnostics will be coded up for inclusion in the open-source CSET model evaluation toolkit being developed as a shared resource across the Met Office UM partnership.

This post will focus on the development and inclusion of boundary layer diagnostics, particularly utilising lidar observations for long-term.

Based in the Institute of Climate and Atmospheric Science in the School of Earth and Environment you will join a large dynamic research community with internationally recognised expertise in atmospheric dynamics and convection. As one of the founder members of the Met Office Academic Partnership, Leeds has a long-standing and close collaboration with the Met Office, and the post-holder will work closely with them as well as with project partners at IITM and NCMRWF in India to ensure pull-through of the research to operations.

## Main duties and responsibilities

- Develop boundary layer diagnostics for evaluating the MetUM and implement them in CSET;
- Use the newly implemented diagnostics to evaluate the representation of the MetUM in selected case studies;
- Generating and pursuing independent and original research ideas in the appropriate subject area;
- Developing research objectives and proposals and contributing to setting the direction of the research project and team including preparing proposals for funding in collaboration with colleagues;
- Evaluating methods and techniques used and results obtained by other researchers and to relate such evaluations appropriately to your own work;



- Preparing papers for publication in leading international journals and disseminating research results through other recognised forms of output;
- Working both independently and also as part of a larger team of researchers, engaging in knowledge-transfer activities where appropriate and feasible;
- Contribute to regular reporting to the research funder;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project.

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.

## Qualifications and skills

### Essential

- A PhD or near completion - i.e. the initial thesis needs to have been handed in at the point of application in a relevant quantitative physical science such as Atmospheric Science, Meteorology, Physics or Applied Maths, or a closely allied discipline;
- A strong background or interest in atmospheric science;
- Experience in scientific programming in a language such as Python or Matlab and experience with the Linux operating system;
- Good time management and planning skills, with the ability to meet tight deadlines, manage competing demands and work effectively under pressure without close support;
- A developing track record of peer reviewed publications in international journals;
- Excellent written and verbal communication skills including presentation skills;
- A proven ability to work well both individually and in a team;
- A strong commitment to your own continuous professional development.

### Desirable

- Experience of pursuing external funding to support research;
- A track record of research in boundary layer meteorology;



- Experience in atmospheric dynamics
- Experience in handling and analysing large volumes of observational or numerical model data;
- Experience of running atmospheric models such as the MetUM;
- Experience of using observations to evaluate weather or climate models;
- Experience of code development and management using tools such as git;

## Additional information

The current funding is for 6 months at 0.5FTE although we would consider other working patterns subject to the constraint that the work must be completed by 31<sup>st</sup> March 2027. The post may be extended beyond that date subject to further funding.

Please note: If you are not a British or Irish citizen, from 1 January 2021 you will require permission to work in the UK. This will normally be in the form of a visa but, if you are an EEA/Swiss citizen and resident in the UK before 31 December 2020, this may be your passport or status under the EU Settlement Scheme.

Please note that this post may be suitable for sponsorship under the Skilled Worker visa route but first-time applicants might need to qualify for salary concessions. For more information please visit: [www.gov.uk/skilled-worker-visa](https://www.gov.uk/skilled-worker-visa)

For research and academic posts, we will consider eligibility under the Global Talent visa. For more information please visit: <https://www.gov.uk/global-talent>

Find out more about the [Faculty of Environment](#)

Find out more about our [School of Earth and Environment](#)

Find out more about the [Institute for Climate and Atmospheric Science](#)

Find out more about [Equality in the Faculty](#)



## Working at Leeds

We are a campus-based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our [Working at Leeds](#) information page.

## Our University

As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the School of Earth and Environment we are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring, and particularly encourage applications from, but not limited to Black, Asian, those who belong to a minority ethnic community; people who identify as LGBT+; and disabled people. Candidates will always be selected based on merit and ability.

The Faculty of Environment has received a prestigious Athena SWAN silver award from [Advance HE](#), the national body that promotes equality in the higher education sector. This award represents the combined efforts of all schools in the Faculty and shows the positive actions we have taken to ensure that our policies, processes and ethos all promote an equal and inclusive environment for work and study.

## Information for disabled candidates

Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found under the 'Accessibility' heading on our [How to Apply](#) information page or by getting in touch by [emailing HR via hr@leeds.ac.uk](mailto:hr@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.

## Contact information

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

[Dr Andrew Ross](#), **Associate Professor in Dynamical Meteorology**

Email: [A.N.Ross@leeds.ac.uk](mailto:A.N.Ross@leeds.ac.uk)

