

Job Title: EODH Research Data Technician

**Grade:** 6

Salary: £31,396 to £36,024 per annum pro rata

**Department:** National Centre for Earth Observation, School of Physics and Astronomy

**Hours/Contract:** Full time, fixed term contract until 31 March 2025

**Job Family:** Technical and Experimental

Reference: 10610

### **Role Purpose**

The National Centre for Earth Observation (NCEO) has received funding from the Natural Environment Research Council (NERC) to develop a pathfinder EO Data Hub, developing new concepts and demonstrating the usage and access to the best of Earth Observation (EO) data.

The EO Data Hub will offer new services and test new data acquisition and processing models, for the first time bringing together publicly funded and commercial satellite data, together with data quality checks and information. The access to commercial satellite data will particularly benefit users wishing to investigate high spatial resolution effects. In addition, the EO Data Hub will also provide an interface to the new UK EO Climate Information Service.

The EO Data Hub is led by NCEO through its Leicester and RAL Space teams.

The purpose of this role is to provide technical support to users of our national EO Data Hub and Leicester systems for accessing Earth Observation (EO) data from satellites in space through online computing environments. This includes research data, public data from operational satellites and commercially provided data.

The postholder will maintain and manage systems for accessing the relevant EO data sets. They will be involved in the testing, implementation and refinement of processes for the new EO Data Hub systems. They will test and demonstrate supplied software for the techniques involved in reading and handling satellite EO data, particularly commercial data. They will document the procedures involved so that others can follow them and identify improvements. They will ensure Leicester systems for accessing such data fit with EO Data Hub systems.

The postholder will also support the EO Data Hub team in liaising with users, including managing a Help Desk for the EO Data Hub. They will train new users and support existing users of the EO Data Hub, including contributions to a user engagement plan for the system. The postholder will be an interface to user projects, documenting their requirements and providing liaison for the practicalities of implementing the technical side of the projects. They will need to ensure users follow protocols and procedures. They may support the users with test activities based on the postholder's user of techniques for accessing and qualifying the EO data.

### Main Duties and Responsibilities

- Maintain and manage EO Data Hub (EODH) and Leicester systems / pathways for accessing EO data including commercial data.
- Maintain, contribute to improvements in and support users of EODH procedures for accessing EO Data, documenting agreed procedures and providing technical support.













- Test, provide written feedback on and suggest improvements in processes for accessing and handling satellite data in the EO Data Hub, particularly commercial satellite data
- Evaluate performance of the EO data access processes within EODH, potentially by comparison with other systems including those at Leicester
- Develop documented procedures and iterate with users, improving the technical documents through feedback, evaluations of performance and investigations of the actual steps required.
- Develop a portfolio of non-EO datasets at the EODH working with groups of selected users and project partners, including NCEO teams at U. Leicester and RAL Space.
- Support the EO Data Hub team with user projects
  - Support the management of EODH user projects
  - Act as first point-of-contact for subsets of the projects
  - o Work with selected user projects, providing an interface for their technical requirements
  - Document requirements from the user projects and their outcomes such as usage of resources, output products, outcomes and impacts of the projects
  - Train and support users to follow protocols and procedures, developing technical support documents and demonstrating technical routes.
  - Support the users with advice, tests of their requirements, logging of requests and resource/cost estimation for their projects.
  - Maintain a compendium of users and their projects.
- Provide a help desk support function for the EO Data Hub
  - o Manage the EODH help desk function, working with the NCEO team at RAL Space.
  - Triage user help requests to science experts, software developers, IT experts and data providers.
  - Maintain a list of help queries and ways in which they are dealt with.
  - Advise managers on the technical requirements of the help desk function.
  - Maintain an equivalent function at Leicester for EO data access
- Provide general support to the Leicester and RAL Space CEDA teams with practical EO Data Hub tasks

### **Internal and External Relationships**

Daily interactions with the NCEO Leicester EO Data Hub team including the Leicester PDRAs, the Leicester line manager who is the Investment Lead for the project

Twice-weekly interactions with the NCEO RAL Space EO Data Hub team and daily interactions with relevant members of the EODH Project team. Regular reports to the RAL Space team on project progress and quality.

Daily interactions in the first part of the project with the teams providing software and technical routes for accessing the satellite data. Thereafter, weekly meetings.













Regular interactions with contact and relevant technical team members of EODH user projects.

Daily interactions with users of the EODH, providing a helpful, accessible and knowledgeable source of information and advice.

Regular interactions with EO researchers and NCEO staff at Leicester and other NCEO locations.

## **Planning and Organising**

The post-holder will be required to effectively manage their time to deliver on the priorities of the project.

The post-holder must be well-organised and have very good attention to detail. They must be able to proceed logically through a set of technical procedures and document them. They should be able to plan in advance to schedule user interactions and ensure work is to designated quality standards. They should be able to report on users of the system and maintain logs of relevant information.

Must be capable of operating processes for working with IT systems and audit requirements for projects.

Must be able to operate, diagnose and, if necessary, improve software codes and scripts.

Must be able to manage and plan different tasks withing their working day in such a way as to meet the schedule demands of the EODH.

Must be able to provide management reports on the performance of systems, numbers of users and consumption of computing resources.

## **Qualifications, Knowledge and Experience**

## **Essential**

- Should have a technical or scientific education to at least HNC or NVQ4 level.
- Should have experience of accessing and handling satellite EO data or equivalent environmental model data \*
- Experience of working on a managed IT system with datasets \*
- Good working knowledge of Microsoft Office applications \*
- Experience of working with software systems and data\*

## Desirable

Demonstration of one or more of the following would be desirable:

- A relevant Honours degree or a number of years of experience working with datasets and providing user support.
- Experience of working with databases/accessing and downloading datasets
- Attention to detail.
- Experience of planning activities and schedules. \*













## Skills, Abilities and Competencies

#### **Essential**

- Knowledge of principles of satellite remote sensing \*
- Skills in using interactive analysis software such as python, R, Matlab or equivalent software skills
- Skills in accessing data remotely, for example stored at remote or online data centres through automated processes \*
- Excellent verbal communication skills \*
- Excellent written communication skills \*
- Abilities to manage software/computing functions and groups of users\*

#### **Desirable**

- Very good attention to detail
- Ability to work independently and also as part of a larger research team
- Proven ability to document projects and activities, and to report on them
- Skills in using scripts or equivalent computing tools

\*Criteria to be used in shortlisting candidates for interview

## **Reason for Fixed Term Contract**

The reason for the fixed term contract is stated in section 1.9 in the summary of contractual terms in your contract of employment.

## **Criminal Declaration**

If you become an employee, you must inform your manager immediately, in writing, if you are the subject of any current or future police investigations/legal proceedings, which could result in a criminal offence, conviction, caution, bind-over or charges, or warnings.

## **Supporting University Activities**

As a University of Leicester citizen, you are expected to support key university activities such as clearing, graduation ceremonies, student registration and recruitment open days. We expect all staff as citizens to work flexibly across the University if required. Similarly, NCEO may have task or activities it requires support on at particular times and to which the postholder could be expected to contribute

## **University Values**













**Inclusive** - We are diverse in our makeup and united in ambition. Our diversity is our strength and makes our community stronger.

**Inspiring** - We are passionate about inspiring individuals to succeed and realise their ambitions. We challenge our community to think differently, to get involved, and to constantly embrace new ideas.

**Impactful** - As Citizens of Change we will generate new ideas which deliver impact and empower our community

## **Equity and Diversity**

We believe that equity, diversity and inclusion is integral to a successful modern workplace. By developing and implementing policies and systems that challenge stereotypes across all aspects of our work, we have a culture that recognises and values the diverse contributions of our staff which benefits everyone. Our strong values of inclusivity and equality support our efforts to attract a diverse range of high-quality staff and students, and identify our University as a progressive and innovative workplace that mainstreams equality, diversity and inclusion.









