

Job Title: Cryosphere Scientist

Req ID 1422 - Posted 11/09/2017



EUROPEAN SPACE AGENCY

Vacancy in the Directorate of Earth Observation Programmes.

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. Applications from women are encouraged.

Post Cryosphere Scientist

This post is classified A2-A4 on the Coordinated Organisations' salary scale.

Location

ECSAT, Harwell, United Kingdom

Description

Cryosphere Scientist in the ESA Climate Office of the Earth Observation Science, Applications and Climate Department.

Duties

The main responsibilities of the post are to expand the awareness, utilisation and scientific impact of EO data for climate research and applications, in particular for the cryosphere but also for other domains of the Earth system. The tasks include conducting scientific data exploitation activities and research studies to address gaps in knowledge as part of the contribution of European Earth Observation science to future IPCC assessments and reports, supporting and informing the implementation of global policy decisions taken at COP-21 in Paris, December 2015.

In carrying out these tasks, the postholder shall provide support to and advise on the detailed scientific goals of the various international scientific and operational user communities concerned with international climate research, modelling, adaptation and mitigation activities.

Responsibilities include the following duties :

- Establishing a dialogue with specialised cryosphere user communities, analysing their needs for satellite-based observations of the climate system, and assessing their feedback on available EO-based information;
- Deriving technical specifications for Fundamental Climate Data Records and Essential Climate Variables related to the cryosphere, chiefly from ESA EO Missions, with specific regard to long-term stability, consistency, completeness, availability, error-characterisation, reducing uncertainties, and compatibility with climate observations from other (Space and non space) sources;
- Setting up and managing industrial contracts (R&D projects and other EO exploitation activities) to respond to the needs for EO-based information of climate research and climate services, including for reanalysis, modelling, attribution, projection, prediction, trends assessment, and data assimilation;
- Ensuring the results of such developments are tested and verified with the corresponding climate user communities;
- Cooperating with internal and external partner organisations to transfer capabilities developed under a research and demonstration context into an operational framework;
- Maintaining links and ensuring coherence with relevant activities of Member States and international partner organisations;
- Contributing to the Agency's public communications on EO;
- Supporting the work of Young Graduate Trainees and Research Fellows.

Technical competencies

Knowledge of scientific discipline, including strategic vision of the area of Earth Observation

Major international initiatives related to Earth Observation (eg.: CEOS, GEO, UN Environmental Conventions)

Experience in meteorology

Experience in radiative transfer modelling
Experience in remote sensing retrieval techniques
General background and experience in the technical domains covered by the position
Knowledge of (large) international scientific research collaborations, preferably using space-based techniques
Knowledge of atmospheric science
Knowledge of international scientific community

Behavioural competencies

Systems & broader business thinking
Teamwork
Self motivation
Integrity
Innovation & creativity

Additional requirements

Applicants should have extensive professional experience on product definition, calibration, validation, algorithm development, quality assessment and exploitation of Earth Observation data, particularly ESA missions, a demonstrable experience from relevant scientific exploitation activities either internationally or in ESA member states and an established profile with research communities working on the cryosphere and its relation to climate. Particular importance will be attached to a candidate's personal scientific ability and credibility amongst their peers, as well as flexibility and adaptability. The candidate should be capable of working effectively in a team with minimum supervision and have excellent communication and presentation skills.

Education

Applicants should hold a PhD preferably in cryosphere physics or geophysics, or other appropriate scientific fields and have at least two years of experience in related remote sensing applications development and/or research.

Other information

For behavioural competencies expected from ESA staff in general, please refer to the ESA Competency Framework. The working languages of the Agency are English and French. A good knowledge of one of these is required. Knowledge of another Member State language would be an asset. The Agency may require applicants to undergo selection tests.

The closing date for applications is 10 October 2017.

If you require support with your application due to a disability, please email contact.human.resources@esa.int.

Please note that applications are only considered from nationals of one of the following States: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, the United Kingdom and Canada and Slovenia.

Priority will first be given to internal candidates and secondly to external candidates from under-represented Member States.

In accordance with the European Space Agency's security procedures and as part of the selection process, successful candidates will be required to undergo basic screening before appointment.