

Job Title: Data Quality and Cal/Val Engineer

Req ID 2501 - Posted 19/12/2017



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

Data Quality and Cal/Val Engineer

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

Location

ESRIN, Frascati, Italy

Description

Data Quality and Cal/Val Engineer for the Swarm mission and polar missions, in the Sensor Performance, Products & Algorithms Section, ESA EO Mission Management Division, Mission Management and Ground Segment Department, Directorate of Earth Observation Programmes.

Duties

The postholder contributes to the overall quality of Earth Explorer Swarm data products provided by ESA and the science community and will also provide gradual product quality and Cal/Val support for the other EO scientific missions/data provided by ESA, specifically related to scientific challenges in the polar and climate areas. The Engineer will work closely with the managers of the Swarm and Earth Explorer missions, ground segment and science teams, ensuring the best possible data quality for the benefit of users.

Tasks include:

- managing the end-to-end data quality process for Swarm mission data during its exploitation phase, including the products and processing scenario definition, algorithm definition and evolution for level 1 and level 2 products, calibration and the geophysical validation concepts;
- managing industrial contracts related to Swarm data quality, algorithm evolution, Cal/Val activities, in particular the Swarm Data Innovation Science Cluster;
- participating in ESA EO missions related to the polar domain and ocean/coastal circulation with the objective of increasing knowledge of atmospheric processes and ocean-circulation patterns that affect climate and weather; managing the CryoSat mission from the data quality, algorithm and Cal/Val viewpoint and preparing potential future missions dedicated to the polar domain;
- continuously assessing evolving user requirements regarding ESA EO science missions in terms of data quality and validation, exploring potential synergies with missions under EOP-GM responsibility;
- fostering ESA strategy and innovation in terms of algorithms and validation, including harmonisation and standardisation with European scientific and international partners, in particular the Climate Change Initiative, Eumetsat and the International Union of Geodesy & Geophysics;
- supporting mission managers for communication activities, contributing to preparing presentations and reports; publishing papers in peer-reviewed journals is highly encouraged.

Technical competencies

Experience in remote sensing retrieval techniques

General background and specific experience in the technical domains covered by the position

Knowledge of (large) international scientific research collaborations, preferably using space-based techniques

Knowledge of international scientific community

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

State-of-the-art knowledge in area of responsibility at required level

Experience in development and maintenance of ground infrastructure and/or software systems

Behavioural competencies

Communication

Planning & Organisation

Problem Solving

Relationship Management

Results Orientation

Teamwork

Ambassadorship

Additional requirements

Applicants should provide a track record of peer-reviewed scientific publications.

Education

Applicants should have a PhD or Master's in physics, engineering or earth sciences with particular emphasis on data-processing algorithms, calibration and validation applied to EO missions.

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 16 January 2018.

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.

According to the ESA Convention the recruitment of staff must take into account an adequate distribution of posts among nationals of the ESA Member States. Priority will first be given to internal candidates and secondly to external candidates from under-represented Member States when short-listing for interview.

<http://esamultimedia.esa.int/docs/careers/NationalityTargets.pdf>

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.