VN 24/09 Remote Sensing Scientist – Polarimetry

The Remote Sensing and Products (RSP) Division is tasked with providing the scientific expertise required to develop, implement, validate, maintain and evolve the operational observational products for all EUMETSAT satellites and agreed third party missions, as well as establishing the user requirements for future EUMETSAT satellite programmes.

With the Multi-viewing, Multi-channel, Multi-polarisation Imager (3MI) to be flown on future EUMETSAT Metop-SG satellites, having the capability to measure the polarised signature of Earth-Atmosphere radiance in addition to the directional and spectral ones, a unique characterisation of the optical and microphysical properties of the particles populating the atmosphere, namely aerosols and clouds, becomes possible for the 25 years of operation of the mission. The polarimetry will also be exploited in the Copernicus CO2 mission (CO2M) for the need of aerosol correction in order to improve the greenhouse-gas retrieval.

Within the Clouds and Aerosols Competence Area (ClA-CA) of the Remote Sensing and Products Division (RSP), the Remote Sensing Scientist –Polarimetry will work on the inversion of polarised multi-directional radiances for the retrieval of aerosol and cloud parameters from 3MI observations.

Duties

- Acquire and maintain an in depth understanding of the aerosol and cloud products, as well as their performances, derived from the 3MI polarimeter;
- Support the definition, development, prototyping and validation of new or enhanced aerosol and cloud products from polarimeters, specifically
- Contribute to calibration, validation, and monitoring of 3MI products, radiances, as well as aerosol and cloud products, in collaboration with mission partners and the scientific and user communities;
- Support industrial activities for operational Level-1, aerosol, and cloud

LOCATION

Darmstadt, Germany

QUALIFICATIONS

Advanced university degree or equivalent in remote sensing of atmospheric composition parameters, meteorology, physics or another relevant discipline.

LANGUAGES

The official languages of EUMETSAT are English and French. Candidates must be able to work effectively in English and have some knowledge of French.

DEADLINE

25 April 2024

based on 3MI, but also in a synergistic approach with other sensors;
- Provide scientific and technical expertise on the processing and analysis of 3MI products: radiometric and geometric correction of images, as well as inversion of atmospheric physical parameters in support of environment monitoring, forecasting applications, and climate applications;
processor specification and development;
- Based on interactions with the scientific and user communities, contribute to the advancement of the understanding of innovative measurements of aerosol & cloud properties and related products and to the preparation and development of their applications;
- Support interactions with mission and international partners.

Skills and Experience

- Knowledge of the most relevant imagery missions, their products, applications and user communities;
- Demonstrated expertise in the physics of optical remote sensing of aerosol and/or cloud properties, and their validation. Experience in instrument calibration and characterisation would be advantageous;
- Understanding of the functioning, operation, and data processing of products derived from multi-viewing polarimetric missions. Experience with Level-1 and/or Level-2 retrieval would be an asset;
- Demonstrable experience in developing scientific applications software in Python, IDL and/or MATLAB, experience with operational data processing software (e.g. Java, C++, Fortran) would be an advantage;
- Demonstrable experience with scientific development projects and working with user communities and researchers;
- Strengths in analysis, synthesis and presentation;
- Good interpersonal skills with a proven ability to apply these to the interactions within a team and between teams.

Employment Conditions

The initial contract will be of 4 years' duration, with subsequent 5 year contracts being awarded thereafter, subject to individual performance and organisation requirements. There is no limit to the amount of follow-up contracts a staff member can receive up to the EUMETSAT retirement age of 63 and there are certainly opportunities to establish a long career perspective at

EUMETSAT.
This post is graded A2/A4 on the EUMETSAT salary scales. The minimum basic salary for this post is EURO 7146 per month (net of internal tax but excluding pension contribution and insurances) which may be negotiable on the basis of skills and experience. The salary scale provides for increments on the anniversary of taking up employment, and scales are reviewed by the EUMETSAT Council with effect from 1 January each year. In addition to basic salary, EUMETSAT offers attractive benefits. Further information, including salary details, is available on the EUMETSAT web site.

EUMETSAT is committed to providing an equal opportunities work environment for men and women.
Please note that only nationals of EUMETSAT Member States may apply. The EUMETSAT Convention requires that Staff shall be recruited on the basis of their qualifications, account being taken of the international character of EUMETSAT.

About EUMETSAT

EUMETSAT is Europe's meteorological satellite agency. Its role is to establish and operate meteorological satellites to monitor the weather and climate from space - 24 hours a day, 365 days a year. This information is supplied to the National Meteorological Services of the organisation's Member States in Europe, as well as other users worldwide.

EUMETSAT also operates several Copernicus missions on behalf of the European Union and provide data services to the Copernicus marine and atmospheric services and their users.

As an intergovernmental European Organisation, EUMETSAT has 30 Member States (Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.)

Apply Now