

VACANCY NOTICE

Research Fellowship

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. EUMETSAT is the prime source of satellite observations, data, products and services to the National Meteorological Services of the organisation's Member and Cooperating states, and for the European meteorological and climate community at large. EUMETSAT delivers to users worldwide and is a major contributor to the World Meteorological Organisation (WMO) programmes.

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, United Kingdom) and 1 Cooperating State (Serbia).

EUMETSAT is now inviting applications from suitably qualified scientists from its Member States and Cooperating State for a Research Fellowship.

POST: Research Fellowship (Developing a Dynamic Infrared Emissivity Atlas Based on IASI Retrievals)

LOCATION: Met Office,
FitzRoy Road
Exeter
Devon
EX1 3PB
United Kingdom

DURATION: The fellowship is offered for one year, with the possibility of extension for up to two additional years.

AREA OF RESEARCH: The Research Fellow will join the Satellite Applications section at the Met Office (Exeter, UK). H/she will work alongside Met Office scientists taking active part in research and development activities to improve the geophysical interpretation of satellite information and its assimilation into the Met Office weather forecast model. The Fellow's work will in particular be directed towards the exploitation of retrieved land surface properties from hyper-spectral sounder data, and in particular, the use of surface emissivity information derived from IASI on the MetOp satellites in the assimilation of radiances in NWP models.

The Research Fellow will be involved in the following topics:

- Extending the existing Met Office operational IASI pre-processing system to enable the use of land surface emissivity retrievals outside of the NWP system;
- Developing a dynamic, gridded land surface emissivity dataset derived from IASI retrievals;
- Evaluating the quality of the surface emissivity dataset, and identifying areas where processing improvements are necessary. This may involve comparisons with other emissivity datasets and aircraft observations;
- Developing methods for transforming IASI emissivity retrievals into a form suitable for use with radiometers of lower spectral resolution (e.g. SEVIRI on the Meteosat Second Generation satellites), and evaluating the characteristics of the transformed dataset when applied to SEVIRI radiances;
- Carrying out retrieval and/or data assimilation experiments using SEVIRI radiances in conjunction with the new surface emissivity product.

QUALIFICATIONS: The Fellow for these tasks should have a University degree with a strong physics, meteorology or mathematical content to PhD level or equivalent and relevant research experience, with particular skills in satellite data analysis and/or data assimilation techniques. Some knowledge of radiative transfer or experience with land surface analysis would be advantageous.

Strong interpersonal and team working skills are required along with strengths in analysis, synthesis and presentation. Strong IT skills are also required, including proficiency in high-level programming languages such as FORTRAN, IDL and Python, and a proven ability to work with large computer codes.

The official languages of EUMETSAT are English and French. The working language of the post is English and therefore candidates must be able to work effectively in this language.

REMUNERATION: £26010 - £35040 per annum depending on experience. In addition, approved travel costs are reimbursed.

CLOSING DATE: 11 December 2014

Interviews are tentatively scheduled for week 4/2015.

Applications in English should be sent via our online form (attaching curriculum vitae and covering letter quoting Reference VN(14)06(*re-issue*) at

www.eumetsat.int

Please note that only nationals of EUMETSAT Member States and Cooperating States may apply and that applications will not be returned.