

EUM/VN (18)58 Darmstadt, 02 August 2018

Original: English

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. 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).

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

POST: Research Fellowship (assimilation of sounder radiances from polar-

orbiting satellites in NWP)

LOCATION: European Centre for Medium-Range Weather Forecasts

Shinfield Park

Reading, Berkshire RG2 9AX

UNITED KINGDOM

www.ecmwf.int

This role will be based in Reading, Berkshire, United Kingdom.

ECMWF is an inter-governmental organisation supported by 34 Member and Co-operating States. It is both a research institute and a 24/7 operational service, producing and disseminating numerical weather predictions to its Member States. ECMWF carries out scientific and technical research directed to the improvement of its forecasts, collects and processes large amounts of observations, and manages a long-term archive of meteorological data. Satellite and in situ observations provide the information for up-to-date global analyses and climate reanalyses of the atmosphere, ocean and land surface. For details, see www.ecmwf.int.

DURATION:

The fellowship is offered for one year, with possibility of extension for up to two additional years. Start date is in April 2019 or soon thereafter.

AREA OF **RESEARCH:**

The Research Fellow will join the Earth System Assimilation Section in the Research Department at ECMWF (Reading, UK). She or he will work alongside ECMWF scientists taking active part in research and development activities to improve the interpretation of satellite information and its assimilation into the ECMWF weather forecast model.

The Fellow's work will be directed towards the assimilation of radiance products from atmospheric sounding instruments on polarorbiting satellites, in particular the improved assimilation of radiances from microwave temperature and humidity sounders (e.g., ATMS, AMSU-A, MHS, etc). These radiances are a leading contributor to today's weather forecast skill, and the optimised and extended use of these observations is a continuous challenge for Numerical Weather Prediction centres.

The fellowship activities will involve the following topics:

- Real-time monitoring and assessment of the quality of radiance products from microwave sounders on different polar-orbiting satellites (Metop, NOAA, S-NPP, JPSS, FY-3, etc.) in the operational ECMWF assimilation system;
- Updates of the assimilation of radiance observations in line with operational system changes and support of radiance data usage in re-analysis activities;
- Evaluation of radiance products from new satellites, including preparations for the use of MWS on EPS-SG;
- General enhancement of the assimilation of sounder radiances in the ECMWF system, including the enhancement of quality control procedures, assigned observation errors, data sampling techniques, and observation operator developments;
- Research regarding the better use of sounding radiances in challenging conditions, for instance in cloudy/rainy regions or over land, sea ice, and snow.

QUALIFICATIONS: • The Fellow should have a good university degree, ideally including PhD or equivalent study, covering Physics, Maths and Meteorology or equivalent and relevant research experience,. Experience in satellite data analysis and/or data assimilation is particularly desirable:

- Strong computing skills are essential, with the job requiring the ability to (a) understand and modify the forecasting system, which is mainly written in Fortran-90 and Unix scripts, and (b) make statistical analyses and scientific figures using tools like IDL, Python or Metview.
- Good interpersonal and team working skills are also required, along with strengths in scientific analysis, synthesis and presentation.

Candidates must be able to work effectively in English and a good knowledge of one of the ECMWF's other working languages (French or German) would be desirable.

At ECMWF, we consider an inclusive environment as key for our success. We are dedicated to ensuring a workplace that embraces diversity and provides equal opportunities for all, without distinction as to race, gender, age, marital status, social status, disability, sexual orientation, religion, personality, ethnicity and culture. We value the benefits derived from a diverse workforce and are committed to having staff that reflect the diversity of the countries that are part of our community, in an environment that nurtures equality and inclusion.

GRADE & REMUNERATION:

The successful candidate will be recruited at the A2 grade, according to the scales of the Co-ordinated Organisations and the annual basic salary will be £58,238.40 net of tax. This position is assigned to the employment category STF-PS as defined in the Staff Regulations of ECMWF, with the exception of the removal expenditure which is reimbursed within the agreed ceiling laid down by EUMETSAT.

Full details of salary scales and allowances are available on the ECMWF website at www.ecmwf.int/en/about/jobs, including the ECMWF's Staff Regulations regarding the terms and conditions of employment.

CLOSING DATE:

04 November 2018

Interviews are tentatively scheduled for week 49/2018.

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