

Scientist – Atmospheric Composition

1. Position information

Vacancy No.: VN17-12	Department: Research
Grade: A2	Section: Earth System Predictability Section
Job Ref. No.: STF-PS/17-12	Reports to: Atmospheric Composition Team Leader
Publication Date: 2 August 2017	Closing Date: 15 September 2017

2. About ECMWF

ECMWF 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.

The Atmospheric Composition team in the Research Department is responsible for assessing ways in which atmospheric composition, mainly ozone and aerosols, can be used to improve Medium- and Extended-Range NWP. The team's work involves interacting and collaborating with other teams and sections at ECMWF on both scientific and technical aspects. It also contributes to the EC projects AURORA and ACTRIS2, and to a number of other ongoing ESA projects.

For details, see www.ecmwf.int/.

3. Summary of the role

This position is in the Atmospheric Composition team that is part of the Earth System Predictability Section of the Research Department.

The scientist will be responsible for the evaluation and improvement of the operational ozone analysis, for instance in relation to the observation operator, thus supporting future developments of the ECMWF IFS. Particular emphasis will be given to the exploitation of new ozone observations (e.g. Sentinel-5 Precursor) and the optimization required to assimilate large data volume data as delivered by the Copernicus Sentinels.

The scientist will also support the team in delivering the ECMWF contributions to a number of externally funded projects, and collaborate with other teams at ECMWF.

4. Main duties and key responsibilities

Key responsibilities:

- Assessing the quality of the ECMWF ozone analysis, including improved tools to verify against independent ozone observations (in situ and remotely sensed) and model fields when required.
- Maintaining and improving the ozone analysis system, for instance in terms of the observation operator and bias correction approach;
- Contributing to the optimization of the IFS code to deal with new ozone products, including large data volumes from the future Sentinel-4, -5, and -5P missions;
- Writing reports and scientific articles in peer-reviewed papers as appropriate;
- Participating to meetings and teleconferences as required.

5. Personal attributes

- Excellent analytical and problem-solving skills with a proactive approach
- Excellent interpersonal and communication skills, preferably in an international environment
- Flexibility with the ability to adapt to changing priorities and needs
- Ability to work under pressure
- Dedication and enthusiasm to work independently and as part of a small team
- Ability to collaborate with both internal and external experts

6. Qualifications and experience required

Education	<p>A university degree or equivalent level of experience in physics, meteorology, geosciences, or a related subject is required.</p> <p>A PhD is desirable but not essential.</p>
Experience	<p>Knowledge of data assimilation and/or model verification with focus on atmospheric composition is desirable.</p> <p>Experience working with complex models and numerical codes would constitute an advantage.</p> <p>Experience working in projects and teams with tight schedules would also be advantageous.</p>
Knowledge and skills (including language)	<p>Good knowledge of a high-level programming language such as C/C++, Fortran is essential. Knowledge of Python would be useful.</p> <p>Experience with UNIX (and/or Linux) systems is required.</p> <p>Candidates must be able to work effectively in English and interviews will be conducted in English.</p> <p>A good knowledge of one of the Centre's other working languages (French or German) would be an advantage.</p>

7. Other information

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 **£56,487** net of tax. This position is assigned to the employment category STF-PS as defined in the Staff Regulations.

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

Starting date: As soon as possible.

Length of contract: One year, with the possibility of further extension subject to availability of funding.

Location: The position will be based in the Reading area, in Berkshire, United Kingdom.

8. How to apply

Please apply by completing the online application form available at www.ecmwf.int/en/about/jobs

ECMWF has an Equal Opportunities Policy and applications from all suitably qualified candidates are welcome.

Staff are usually recruited from among nationals of the following Member States and Co-operating States:

Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, the former Yugoslav Republic of Macedonia, Finland, France, Hungary, Germany, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Montenegro, the Netherlands, Norway, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Staff from other countries may be considered in exceptional cases.