

Scientist- Diurnal cycle in the ocean

1. Position information

Vacancy No.: VN17-06	Department: Research
Grade: A2	Section: Earth System Modelling
Job Ref. No.: STF-SP/17-06	Reports to: Coupled Processes Team-Leader
Publication Date: 15 May 2017	Closing Date: 8 June 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.

For details, see www.ecmwf.int/.

3. Summary of the role

The position is in the Earth System Modelling Section of the Research Department. The Scientist will work in the Coupled Processes team, in close collaboration with the atmospheric physics and coupled assimilation teams. The aim is to diagnose the amplitude and phase of the diurnal cycle in surface and sub-surface ocean temperature of the ECMWF coupled Earth system model.

The Scientist will research mixed-layer and air-sea interactions processes to identify the main characteristics of diurnal cycle variability with the aid of in-situ and satellite-based oceanographic observations. Revision of the coupling will be tested and the results will be evaluated in the ECMWF global forecasting system and in ocean only simulations.

The research will contribute to diurnal cycle ocean diagnostics studies with perspective of participation in workshops involving the oceanographic and numerical weather prediction community.

4. Main duties and key responsibilities

- To assess the upper ocean temperature diurnal cycle in global coupled simulations with the ECMWF Integrated Forecasting System (IFS) using in situ and satellite datasets

- To employ coupled simulations to investigate air-sea interactions with a focus on the warm oceans processes and their impact on atmospheric circulation
- To investigate optimal approaches for coupling the surface mixed-layer with the atmosphere and evaluate the impact on the diurnal cycle and medium-range forecast quality

5. Personal attributes

- Excellent analytical and problem-solving skills with a proactive approach
- Dedication and enthusiasm to work in a team
- Good interpersonal and communication skills
- Ability to work efficiently and complete diverse tasks in a timely manner

6. Qualifications and experience required

Education	A university degree or equivalent in oceanography, atmospheric science, hydrometeorology or related areas of physics. A PhD is desirable but not essential.
Experience	Experience in dealing with both observational and model data in various formats such as netCDF and GRIB. Experience in the evaluation of model developments for coupled Earth system simulations.
Knowledge and skills (including language)	Knowledge of upper ocean processes and air-sea interaction Proficiency in handling and analysing large datasets Very good programming and scripting skills Candidates must be able to work effectively in English and interviews will be conducted in English. A good knowledge of one of the Centre's other working languages (French or German) would be an advantage.

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-SP 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: Up to 12 months.

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, Finland, former Yugoslav Republic of Macedonia, 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

Interviews will take place in Reading, Berkshire week commencing 26-30 June 2017.