



Oceanographer specialised in physical modelling (F/M)

12-month fixed-term position

Who are we?

Mercator Ocean International has been a pioneer in operational oceanography activities for nearly 25 years through its public service mission to preserve the ocean. Many scientific and societal challenges need to be met in order to ensure a sustainable ocean, whether they relate to the environment, biodiversity, climate change, the blue economy or education. To meet these challenges, we are required to constantly and in real time describe, analyse and forecast the state of the global ocean using reliable numerical models, then make this information relevant and accessible to all — whether public or commercial services, manufacturers, policy makers, associations, NGOs, teachers or citizens. Mercator Ocean International thus combines scientific excellence and social commitment on a daily basis. As a non-profit company under multinational governance (ES, FR, GB, IT, NO), we work in a climate of trust with our nine shareholding partners, all key players in the development of European oceanography.

Mercator Ocean International has been conducting the Copernicus Marine Environment Monitoring Service since 2014 on behalf of the European Union. CMEMS offers free, open access to scientifically validated operational information on the ocean to several thousand subscribers worldwide. To this end, the company coordinates a unique network of around 100 partners in Europe specialising in Earth observation and ocean forecasting.

Based near Toulouse in South-West France, the company's 100 or so contributors are all committed to achieving the United Nations' sustainable development goals.

About the job:

We are looking for new talent with similar objectives. Our operational oceanography department is offering a 12-month fixed-term position with possible extension to someone with the following profile **Oceanographer specialised in physical modelling (F/M)**

Within the Innovation service and in partnership with the IMMERSE ocean modelling research project, you will develop the new configuration that prefigures the ocean forecasting prototype for the Atlantic coast of Europe. Based on your developments, you will carry out sensitivity experiments in order to evaluate the impact of new parameterizations available in the NEMO code and in particular the capacity to increase the resolution based on the AGRIF tool. You will analyse in particular the behaviour of fine oceanic scales. You will propose new diagnostics. You will exchange the data produced with the other project partners and participate in their analyses. You will participate in the writing of IMMERSE project progress reports and in the dissemination of results

More specifically, you will be in charge of:

- You will define the future analysis and forecasting system.
- You will develop the final configuration (including a very high resolution zoom) and carry out experiments in order to valorise the new developments and the increased resolution.
- You will produce standard diagnostics and propose new ones in order to analyse the experiments and quantify the contribution of the parameterisations and the resolution.
- You exchange data with the other groups involved in the project.
- You produce reports on the developments and experiments carried out.
- You valorise the results obtained by participating in the drafting of project documents and by presenting the results in workshops

About you:

You have a PhD in physical oceanography (preferred) or a minimum of 5 years of higher education with a specialisation in oceanography and you are familiar with the use of ocean models.

Assets to succeed include:

- You have developed solid skills in oceanography, scientific computing, programming languages (in particular Fortran, Python and C++) and the use of supercomputers.
- Rigorous, used to working in a team, curious and open-minded, you wish to bring your contribution and ideas to ambitious projects and international collaborations to be developed.
- Your innovative skills and results will be put to good use by the teams to optimise the performance of methods and systems.
- You are fluent in written and spoken English

How to apply:

Send your cover letter and a detailed CV with the following reference 2021-04/OO/OM to recruitment@mercator-ocean.fr

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