Post-doc position in Earth system near-term predictions at Météo-France research center (CNRM), Toulouse (France)

A 36-month postdoctoral fellowship/researcher position (with a possibility for extension) is available for the research topic "**Assessment of near-term predictions of marine ecosystems using Earth system models**" in the Centre National de Recherches Météorologiques (CNRM, Toulouse, France, <u>http://www.umr-</u> <u>cnrm.fr/cmip6/</u>).

Expected starting date is approximately **April 1st, 2020**.

The gross monthly salary will be between 3280 and 3890 €, commensurate with experience. This includes French social security (health insurance).

General context and objectives:

The position is funded through the EU H2020/BG08 project TRIATLAS¹ which aims to assess both near-term (seasonal to decadal) and long-term (centennial) predictability of key climate and biogeochemical drivers for marine ecosystems (such as water temperature or net primary production) and to deliver multi-model predictions and scenarios and associated uncertainties for these drivers to relevant stakeholders. These goals will be achieved by combining ecosystem observations, climate-based ecosystem prediction and information on future socio-economic and ecosystem service changes.

Météo-France/CNRM coordinates research on near-term predictability in TRIATLAS and opens, in this context, a 36-month postdoctoral fellowship/researcher position. It is expected that the candidate will:

- Contribute to the realization of retrospective predictions over the observed period with both CNRM-ESM2-1 and CNRM-CM6-1
- Exploit available perfect model predictability ensembles and assess the predictability of key climate and biogeochemical variables driving the variability of marine ecosystems as simulated by CNRM-ESM2-1 (but also by other TRIAT-LAS Earth system model: NorESM2-LM, IPSL-CM6A-LR and EC-Earth)
- Compare the impact of interaction between Earth system components on seasonal-to-annual predictive skill

Required qualification

We are looking for a candidate with strong interests in oceanography, ocean biogeochemistry and climate physics, and with demonstrated statistical and numerical (Linux, Fortran, CDAT/Python, NCL and/or R) skills. The candidate should hold a recent PhD degree in climate science and have experience with complex models on super-computers, analyses of large climate data sets. Innate curiosity, enthusiasm for reading scientific literature, excellent writing and communication skills in English are also essential. Some experience with evaluating climate prediction ensembles would be a clear asset.

Applicants should send to <u>roland.seferian@meteo.fr</u> and <u>lauriane.batte@meteo.fr</u> [1] a curriculum vitae (including research experience, publications and conferences, computing skills and different language practice...) [2] a brief statement of research interests

¹ Standing for South and Tropical Atlantic climate-based marine ecosystem prediction for sustainable management

[3] names and contact details (email + telephone number) of three academic referees

Please note that attachments larger than ~5Mo are not supported by our e-mail server.

Expected starting date is approximately **April 1st, 2020**. Consideration of applications begins immediately. Applications should be sent by email no later than **February 14th, 2020**.

Practical aspects:

The candidate will be based at the CNRM laboratory in Toulouse.

Toulouse is a vibrant city that is recognized world-wide for its aerospace industry and research centers.

The Centre National de Recherches Météorologiques (CNRM) is the research department of Météo-France (<u>http://www.cnrm.meteo.fr</u>). It is responsible for conducting the largest part of the research activities in weather forecasting, climate modelling, atmospheric chemistry, land-surface processes including snow related processes, oceanography. CNRM has a long history within the climate research community and contributes to the successive IPCC reports.