VACANCY:

3-YEAR POST-DOC POSITION ON CONSTRAINING EUROPEAN CLIMATE PROJECTIONS AT CNRM (TOULOUSE, FRANCE)

Applications are invited for a 3-year postdoctoral position starting on September 1st 2018 (+/- 3 months), in the climate research group of the CNRM in Toulouse (France), to work on European climate projections. The deadline for application is April 15th 2018.

Framework:

The National Centre for Meteorological Research (CNRM) is a joint Météo-France and CNRS lab located in Toulouse, one of the most liveable and vibrant cities in France. It is one of the leading climate science research institutes in Europe. It provides a highly international and interdisciplinary environment for conducting scientific research as well as access to great scientific facilities.

The advertised position is funded by the European H2020 project EUCP: European Climate Projection system, which involves many leading European research institutes in climate sciences. The final goal of this project is to provide consistent and authoritative climate projections over Europe, combining initialised near-term and long-term projections, global coupled models and regional convection-permitting models. A wide range of methods will be used to quantify / constrain uncertainty, and investigate changes of specific events or indicators.

Work description:

The proposed work will focus on observational constraints and probabilistic description of global and regional climate projections.

Observational constraints involve the combined use of models and observations in order to assess their consistency, and reduce the uncertainty on future climate using past information. Several constraints might be investigated or re-examined in the light of newly available CMIP6 data. This includes constraints based on detection-attribution approaches (involving estimation of GHG-induced warming), or physically-based constraints, in particular those related to the water cycle (e.g. soil moisture, clouds, snow cover).

Probabilistic description of future changes will address the issue of combining together multi-model ensembles of projections, and (a possibly large number of) observational constraints. Uncertainty quantification techniques could be used in this respect.

Desirable qualifications:

- 1) A Ph.D. in climate sciences or applied mathematics (statistics).
- 2) Demonstrated programming skills in a Linux environment (e.g. shell scripts, R, NCL, MatLab, or equivalent). Experience in the field of observational constraints or uncertainty quantification will be appreciated but is not mandatory.
- 3) Excellent written and oral communication skills in English. Practice of the French language would be convenient but is not mandatory.

Practical information:

The successful applicant will be contracted by CNRS and will be based at the "Centre National de Recherches Météorologiques" (Toulouse, France; http://www.umr-cnrm.fr/) within the climate research group. The targeted starting date for this position is September 1st, with some flexibility (between June and December). The net salary will be between **2200 and 3000 euros per month**, depending on qualification and experience. Note that for a highly experienced scientist (i.e. with higher salary), the contract might be shorter that 3 years.

For full consideration, an application letter including a detailed statement of research interests, along with a curriculum vitae (including research experience, publications and conferences, computer skills and language practises) and the names, telephone and email address of 2 referees should be sent by email before April 15th 2018 to:

aurelien.ribes@meteo.fr and herve.douville@meteo.fr

For more details about this call, please contact:

Aurélien Ribes Hervé Douville

Email: <u>aurelien.ribes@meteo.fr</u> Email: <u>herve.douville@meteo.fr</u>

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