



CALL FOR APPLICATIONS

15-MONTH POSTDOCTORAL FELLOWSHIP AT METEO-FRANCE (TOULOUSE, FRANCE)

Applications are invited for a **15-month** position starting in **February 2019**, to work at the Météo-France Climate Services Department, DCSC (Direction de la Climatologie et des Services Climatiques) in collaboration with the climate research group of the CNRM (Centre National de Recherches Météorologiques) on the following topic:

“Seasonal forecast calibration and verification for applications in sectoral climate services over the Mediterranean region”

The deadline for applications is **18 November 2018**.

Scope

The post-doctoral fellowship is funded by the European Union through the ERA-Net ERA4CS-Medscope project, coordinated by CMCC (Italy) and co-coordinated by BSC-ES (Spain).

The uptake of climate services based on seasonal predictions relies on the provision of high-quality, reliable and user-oriented information. Over Europe, several past initiatives have worked on prototypes of climate services (e.g. EUPORIAS), and the ERA-Net ERA4CS-Medscope project will work on filling some of the gaps between variables provided by coupled climate model forecasts and information of use to sectoral end-users.

The main goal of the work planned is to contribute to the project workpackage WP4, aiming to develop and evaluate user-relevant climate services at the seasonal time scale based on impact models, in particular for the energy, hydrology and agriculture sectors.

Work description

In the project, the Météo-France team is currently developing an advanced bias correction and forecast calibration method, as well as forecast quality assessment and statistical downscaling techniques.

These techniques will be used to assess the quality of the Météo-France coupled model at a seasonal time scale and the added value of correction/calibration methods, and participate in multi-model assessments.

In the framework of this contract, the successful applicant will contribute to the implementation of a new bias correction method for the Météo-France coupled seasonal re-forecasts and will carry on this work by identifying and evaluating relevant indicators for sectoral climate services. Tasks will include expanding the RIFF climate service developed by Météo-France in the FP7-EUPORIAS project (<http://www.euporias.eu/prototype/water>) to other pilot regions of the Mediterranean region, and computing probabilistic forecasts of impact indicators for the energy and agriculture sector. The work includes setting up and running the hydrological model Surfex-Trip, initialized by the UERRA analysis and forced by

bias corrected seasonal re-forecasts. The sectoral indicators to build, concerning soil wetness, snow water equivalent and river flows will be derived from the Surfex-Trip model.

Required qualifications

1. A PhD in climate sciences, meteorology or related fields.
2. Demonstrated skill/proficiency in statistical languages, post-processing and visualization software (e.g. R, Python, NCL, CDO...).
3. Proven ability to effectively communicate scientific results in project meetings, international conferences and peer-reviewed publications.

Experience in statistics, numerical modeling, climate forecasting and/or climate services will be distinct advantages.

Practical information

The successful applicant will be contracted by Météo-France and will work at the DCSC (Météo-France climate services department) in close collaboration with the CNRM. Both are based in the "Météopole" site in Toulouse, France. The opened position will start as soon as possible from February 2019, for a minimum duration of 15 months. Net salary (before income tax) is commensurate to qualifications and experience, and ranges from 2600 to 3300 euros per month.

For full consideration, an application letter including a detailed statement of the candidates' research interest for the position, alongside a full curriculum vitae (research experience, publications, conferences, programming skills and languages) as well as contact details for two referees (names, e-mail and phone) should be sent by e-mail by 18th November 2018 to: Lauriane Batté (lauriane.batte@meteo.fr) and Jean-Michel Soubeyroux (jean-michel.soubeyroux@meteo.fr)

Our e-mail server limits the size of attachments to approx. 5 Mo so please take this into account when sending us your application.