



## CALL FOR APPLICATIONS

### 24-MONTH POSTDOCTORAL FELLOWSHIP AT METEO-FRANCE (TOULOUSE, FRANCE)



Applications are invited for a **24-month (12-month + 12-month)** position starting in **March 2018**, to work in collaboration with the climate research group of the CNRM (Centre National de Recherches Météorologiques) and the Météo-France Climate Services Department, DCSC (Direction de la Climatologie et des Services Climatiques) on the following topic:  
“Seasonal forecast calibration and verification for applications in sectoral climate services over the Mediterranean region”

The deadline for applications is 15<sup>th</sup> November 2017.

#### 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 workpackages WP3 and WP4, from seasonal forecast output calibration and correction to developing user-relevant climate services in the hydrology sector.

#### Work description

The successful candidate will contribute to the design and development of advanced bias correction and forecast calibration methods, as well as forecast quality assessment and statistical downscaling techniques. These developments will be included into a freely released toolbox of software packages coded in R/python.

The successful applicant will use these techniques 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 a second phase of the contract, the successful applicant will work on the identification and evaluation of 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 between the CNRM and DCSC departments, both based in the “Météopole” site in Toulouse, France. The opened position will start as soon as possible from March 2018, for 12 months, extendable to another 12 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 15<sup>th</sup> November 2017 to:  
Lauriane Batté ([lauriane.batte@meteo.fr](mailto:lauriane.batte@meteo.fr))  
and

Jean-Michel Soubeyroux ([jean-michel.soubeyroux@meteo.fr](mailto:jean-michel.soubeyroux@meteo.fr))

For more details about this call, feel free to contact:

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