

## Post-doctoral fellowship at CNRM (UMR 3589 – METEO-FRANCE, CNRS)

Applications are invited for one postdoctoral research fellowship starting at the beginning of 2023, at Météo-France, in the Mesoscale Modelling Group of Centre National de Recherches Météorologiques (CNRM) in Toulouse, France (http://www.umr-cnrm.fr/) to work on the following subject:

## Evaluation of SURFEX LDAS-Monde data products over Europe

(6-month contract)

CNRM develops the ISBA land surface model within SURFEX, an operational modeling platform able to simulate the terrestrial water and carbon fluxes. SURFEX is coupled to a number of atmospheric and hydrological models, and includes a land data assimilation system (LDAS) based on an Extended Kalman filter, able to analyze soil moisture and vegetation biomass at spatial resolutions ranging from 1 to 25 km.

LDAS-Monde is operational at a global scale and satellite-derived products (soil moisture, LAI) are integrated into the ISBA land surface model. The analyses produced by LDAS-Monde account for the synergies of the various upstream products. LDAS-Monde produces analyzed soil moisture and

LAI together with carbon and water flux data.

The post-doctorate fellow will contribute to the evaluation of LDAS-Monde. The simulated photosynthesis will be evaluated using solar-induced fluorescence observations from Sentinel-5P. The simulated soil moisture will be evaluated using in situ soil moisture observations.

The gross annual salary will vary from about  $39000 \in \text{to } 46000 \in, \text{ depending on qualification.}$ 

Application should be done by email by sending a resume, a motivation letter, and the names, telephone and email address of two referees to:

## jean-christophe.calvet@meteo.fr

The closing date for applications is 16 October 2022.

The candidates should have knowledge on data assimilation and possibly land surface modelling and/or remote sensing of continental surfaces. They should be familiar with programming data analysis in Python, with the Linux environment, and with the FORTRAN programming language.

Funding source: Météo-France.