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

**Applications are invited for one post-doctoral research fellowship starting in June 2019, 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:**

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## Reanalysis of the Land Surface Variables using a global land data assimilation system (LDAS-Monde) over Western Africa

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**(7-month contract, junior researcher)**

CNRM develops the ISBA land surface model within SURFEX, an operational modelling 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 50 km. LDAS-Monde is operational at a global scale and satellite-derived products are integrated into the ISBA land surface model.

The post-doctoral fellow will contribute to the set up of an LDAS-Monde over Burkina-Faso for monitoring and forecasting of the Land Surface Variables. In particular, the use of microwave derived soil moisture and vegetation properties (e.g., leaf area index and vegetation optical depth) will be tested at different spatial resolutions. The potential impact of the resulting analysis on applications in hydrology, agrometeorology, and on the quality control of satellite-derived land surface variables will be assessed. Set up of an irrigation representatoin strategy over Burkina-Faso will be considered.

The gross monthly salary is about 3280 € before income tax.

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

clement.albergel@meteo.fr

The closing date for applications is
**27 February 2019.**

The candidates should have knowledge on land surface modelling and possibly on data assimilation. They should be familiar with programming data analysis in Python, with the Linux environment. A strong background in FORTRAN programming language is mandatory.

**Funding source:** "Climate Risk & Early Warning System" (CREWS).
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