



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

Applications are invited for one post-doctoral research fellowship starting in 2nd quarter of 2018, at Météo-France, in the Mesoscale Modelling Group of Centre National de Recherches Météorologiques (CNRM) in Toulouse, France (<http://www.umn-cnrm.fr/>) to work on the following subject:

Assimilation of microwave derived soil moisture and vegetation properties in a global land data assimilation system (LDAS-Monde)

(18-month contract)

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 upgrade of LDAS-Monde. In particular, the use of microwave derived soil moisture

and vegetation properties (e.g., leaf area index and vegetation optical depth) at different wavelengths (C-band, L-band) 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.

The net annual salary is about 36550 € before income tax, depending on qualification.

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
25 February 2018.

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: "Fondation - Sciences et Technologies pour l'Aéronautique et l'Espace" (STAE), Toulouse, France.
