Research Engineer position at Météo France

Contribution to the engineering activities of Land Surface Analysis SAF project in relation to the development and implementation of algorithms for an operational retrieval from satellite observations of BRDF, albedo and down-welling surface shortwave radiation

The open position is to join the SAF (Satellite Application Facility) Consortium on Land Surface Analysis (LSA SAF) implemented by EUMETSAT in order to maintain activities related to the development and integration of operational algorithms for data processing of instruments like SEVIRI (Meteosat Second Generation, MSG) and AVHRR (EUMETSAT Polar System, EPS). Météo France is responsible for the shortwave radiation fluxes (BRDF, albedo, down-welling radiation). The algorithms are now operational for MSG and will need to be adapted to EPS in a dedicated computing environment.

The LSA SAF project now entered in CDOP-2 (Continuous Development Operational Phase) since March 1rst, 2012, that will end up February 2017. The host institute of LSA SAF is IPMA, the Portuguese met office. IPMA is in charge of the ground segment. The developed algorithms are delivered to IPMA that ensures their integration in the whole operational processing and production chains of LSA SAF.

The incumbent will be responsible for the technical adaptation and integration of the algorithms related the following tasks:

- adaptation to EPS of the operational codes of BRDF and albedo products developed for MSG.
- implementation for both MSG and EPS of the existing method leading to a separation of soil/vegetation/snow-free albedo products.
- Implementation and algorithm improvement for MSG of the existing method separating direct/diffuse down-welling radiation components as a function of cloudiness and aerosol.
- merging BRDF and albedo products from MSG and EPS in order to ensure a global coverage.
- participation to the writing of documents of reference (ATBD, Product User Manual, Validation).

Additional information on the LSA SAF project can be found in using the following links: <u>http://www.eumetsat.int/Home/Main/Satellites/GroundNetwork/ApplicationGroundSegment/SAFs/index.htm</u> <u>http://landsaf.meteo.pt/</u>

The candidate will be based at the Centre National de Recherches Météorologiques (Toulouse, France). She/he must have a very good expertise in programming language (Fortran, C, PYTHON) and also expertise in graphical software such as PVWave, IDL, R. Additional knowledge in satellite data processing and atmospheric radiative transfer would be appreciated. The position is open for research engineers and post-doctoral fellows. It is foreseen travels to attend progress meetings and LSA SAF workshops.

The open position is foreseen June 1st 2014. Candidates will be considered as applications are received. Successful candidates will be employed under an appointment for 1 year, with a possible 1 year renewal. Candidate must send a CV, a motivation letter, name and address of 2 referees, date of availability, and optionally a list of publications.

The net current salary ranges between 2,676€ and 3,174€ per month, according to the experience. This includes health insurance.

<u>Contact</u>: Jean-Louis Roujean (jean-louis.roujean@meteo.fr), CNRM / Météo-France.