

Research Engineer in Scientific Computation at METEO FRANCE

Encoding and migration of algorithms for the LSA SAF surface albedo and radiation flux products derived from MSG, EPS, and the forthcoming MTG platforms.

The open position at METEO FRANCE in Toulouse is to work on the Land Surface Analysis Satellite Application Facility (LSA SAF) program of EUMETSAT in a joint consortium piloted by IPMA (Portugal). The candidate will be responsible for a number of on-line software codes for radiative flux and surface albedo products, e.g. operational maintenance for products for Meteosat Second Generation (MSG) and European Polar System (EPS), and will contribute to the development of the Meteosat Third Generation (MTG) platform. The primary task will consist of re-writing these codes as appropriate to improve their functionality, efficiency, and ease of use. A migration of existing C++ and FORTRAN codes to Python interfaces will be implemented gradually. An additional task will be to unify the codes as appropriate and to help set the strategy for their future development, in collaboration with the Portuguese team in charge of METEO FRANCE code implementations within the ground segment based on the IPMA premises. Close interactions with IPMA for the operation and monitoring of codes will be established. The candidate will closely collaborate with scientists to implement the appropriate algorithms for optimization. The candidate will also work to support the other scientists on the team to improve the existing products and to develop new ones. In addition, the candidate will conduct validation studies and will be responsible for updates to scientific and technical documents (product user manual, validation reports, etc.).

The candidate will be based at the Centre National de Recherches Météorologiques (Toulouse, France). She/he should be an expert numerical programmer, having built and maintained complex applications, using the languages mentioned above, and their scientific extensions. Also, she/he should have gained experience with software engineering disciplines that led to automated testing and configuration management. Experience exploiting Linux/Unix as a programming environment is required. Further, the position requires a fluent knowledge of English, intellectual curiosity, flexibility, and interpersonal communication skills. Candidates with experience in satellite data manipulation are welcome.

The position is open to PhDs and software engineers. The selection of candidates will be performed as applications are received. Some travel will be required in order to attend progress meetings.

The open position will start in February 2016. Applications should be sent by email including a resume, a letter of motivation, and two letters of reference.

The net monthly salary will vary between 2,676€ and 3,284€, depending on experience. A one-year contract is proposed, with a possible renewal for two more years. The quoted salary is before income tax and includes health insurance.

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