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The Royal Belgian Institute for Space Aeronomy (BIRA-IASB) is a Federal Scientific Research Institute based at the Space Pole in Brussels, Belgium. One of its main missions is to acquire scientific and technological expertise about the physics and chemistry of the Earth's atmosphere. The UV-Visible DOAS Research team (http://uv-vis.aeronomie.be) is part of the Atmospheric Reactive Gases Division and focuses on the monitoring of the atmospheric composition using a combination of space-based, aircraft and ground-based observations performed in an international context. Ongoing activities are performed in the context of the European Copernicus Program and the related Sentinel 4, 5 and S5P missions jointly funded by the European Space Agency (ESA), the European Union (EU) and the Belgian Science Policy (BELSPO).

The Institute is looking for
1 COMPUTER SCIENTIST (M/F)
to strengthen the satellite activities of the UV-vis DOAS team.

The candidate will be in charge of further developing and maintaining the software tools in place at BIRA-IASB for the level 1-2 data analysis of satellite UV-Visible atmospheric chemistry missions. These tools are designed using a combination of C/C++, Fortran, Python and Bash programming languages. To cope with the large volume of recent satellite missions (in particular S5P), applications are run on a High Performance Computing System (HPC) available on the Space Pole. The selected candidate will join an existing team of approximately 20 persons all involved in international research projects, and he/she will therefore evolve in a highly collaborative working environment. More specifically, his/her task will consist in developing software solutions for the management of large amount of data (including their web-based dissemination). He/she will also closely collaborate to the design of numerical algorithms at the basis of the level 1-2 satellite data retrieval by which atmospheric composition data products are generated from UV-Vis radiance measurements. We also expect from the candidate a contribution to the generation of long-term climate data records (CDRs) based on historical satellite sensors available since the early nineties.

This vacancy is for the Dutch linguistic role as established by the Federal Laws. This means that the candidate's diploma required for this job must have been delivered by a Dutch or Flemish institution, or that the candidate has passed successfully a language exam for the Dutch language.

Required competences

- Master or doctoral degree in engineering, computing science or sciences (mathematics, physics, or applied sciences)
- Experience with software development in a Linux environment
- Experience processing large datasets in a Linux environment including resource management
- Good knowledge of scientific programming languages (Fortran, C/C++, Python)
- Good communication skills
- Good oral and written English, knowledge of French is a plus
- Ability to work autonomously and in a team
- Flexible, ready to travel occasionally

Specific expertise in any or more of the following fields is a bonus:

- Experience with software development methodologies (debugging and profiling, versioning e.g. using Subversion, dependencies, client-server architectures, etc.)
- Experience with webdesign
- Notions of ICT security

We offer:

- One year contract at start, with possibility of extension
- Salary according to the federal regulations for the scientific career in the SW11 barema. All relevant work experience (public + private sector) will be considered when determining seniority.
- Dynamic working environment.
- Refund of commuting expenses when using public transportation or bicycle.
- Flexible schedule and possibility of teleworking.
- Access to special advantages arranged for the employees of the federal scientific institutions (e.g., collective hospital insurance and possibility to follow trainings).

This job will be filled in as full-time contractual position, based at the Royal Belgian Institute for Space Aeronomy. If you are interested in this position, please send your application (CV and cover letter) including the reference "**D31SCI_UVVIS**" to the BIRA-IASB Human Resources Department: hr-ae@aeronomie.be with a copy to Dr. M. Van Roozendael: michel.vanroozendael@aeronomie.be **before 21 January 2018.**

Recruitment is possible from the 1st March 2018

More information about this vacancy can be obtained from Dr. Nicolas Theys or Dr. M. Van Roozendael, by Email: nicolas.theys@aeronomie.be or by phone +32 (0) 2 373 0407 - michel.vanroozendael@aeronomie.be +32 (0) 2 3730416.