

JOB OFFER

BIRA-IASB is opening a:

Postdoctoral Position in Atmospheric Chemistry and Data Analysis (m/w/x)

Deadline for applications: July 31st, 2024 Start date: October 1st 2024 Statute: Contractual, Half-time position (50%)

Assignment, division & context

Within BIRA-IASB, the Tropospheric Modelling Team is studying the emissions of pollutants in the atmosphere, the chemistry and role of chemical compounds involved in the budget of oxidants, the derivation of emissions of trace gases from satellite data by inverse modelling, and the interpretation of satellite data through models. See for more details about our activities at http://tropo.aeronomie.be.

More about BIRA-IASB

The Royal Belgian Institute for Space Aeronomy (BIRA-IASB) is a Belgian Federal Scientific Institute. Since its founding in 1964, BIRA-IASB has been conducting research and providing public services in space aeronomy, i.e. the physics and chemistry of Earth's atmosphere and other planets, and outer space. The research performed at BIRA-IASB addresses issues of societal interest such as atmospheric composition changes and their link with climate.

For more information on the institute and its activities, visit our website www.aeronomie.be

Job description

The aim of this position is to contribute to an improved understanding of the atmospheric system by relying on atmospheric models, satellite and other observations, and assimilation and inversion tools. We are looking for a scientist holding a Doctoral degree in Sciences or Applied Sciences, for a half-time SW1 (50%) position of a duration of one year (with possibility for extension upon successful evaluation and adequate funding), starting from October 1st, 2024.

The successful candidate will contribute to (i) the Horizon Europe CONCERTO (2024-2028) project aiming at an improved understanding, monitoring and modelling of the carbon cycle through the integration of multiple data sources, including Earth Observation data and modelling tools to address important gaps in the quantification of the global carbon budget; (ii) the Climate Change Initiative Precursors of Aerosols and Ozone (CCIprec) project (2023-2025), aiming to develop long-term climate data records and their uptake from the community of climate data users.

Atmospheric models (IMAGES/MAGRITTE), developed by the Tropospheric Modelling team, will be used to simulate the air composition at different spatial scales and interpret the satellite observations and their seasonal and interannual variability and trends. The successful candidate will be in charge of the:

- development of analysis tools for the visualization of the model input/output
- development of data analysis tools for the exploitation of Earth observation data and their trends
- interpretation of the results, identification of drivers of the observed changes
- presentation of the research outcomes in project team meetings, project reports, communications to workshops and international congresses.

Qualifications

Required competences:

- Doctoral degree in Sciences or Applied Sciences (*)
- Experience in Atmospheric Sciences and scientific data formats (NetCdf, HDF) are strong assets
- Advanced programming and scripting skills in a Linux/Unix environment
- Solid knowledge of Fortran or any other compiled language
- Excellent programming background (Python/Matlab) and experience with data handling and analysis
- Excellent level in oral and written English, a good knowledge of either French or Dutch is an asset
- Strong motivation, initiative, scientific curiosity, and team spirit
- Excellent oral and written communication skills, sense for organization, timeliness

(*) In the situation where the Master or PhD degree was awarded by a body outside the Benelux, the candidate might possibly will have to apply for an equivalence of the level of studies preceding the PhD in order to prove that this level corresponds to a generic Belgian Master degree. This should only be done after the candidate has been selected for the job and before he/she takes up the job. To obtain the equivalence, you can choose to apply for it at the French or Dutch speaking community of Belgium. You can find more information on this at https://www.naricvlaanderen.be/nl/erkenningen or https://equisup.cfwb.be/.

We offer

- Half-time (50%) with 1-year contract in the Activity Group I (Scientific Research and Experimental Development) and SW1 class, with possibility of extension (upon positive evaluation).
- Salary according to the federal regulations for the scientific career in the SW1 barema. All relevant work experience (public + private sector) will be considered when determining seniority.
- Possibility to acquire a bonus for bilinguism (Dutch/French)
- Dynamic working environment with many international contacts
- Refund of commuting expenses when using public transportation or bicycle
- Flexible schedule and possibility to occasionally telework
- Meal voucher
- Attractive leave scheme (at least 26 vacation days per full calendar year)
- Access to special advantages arranged for the employees of the federal scientific institutions (e.g., collective hospital insurance, possibility to follow trainings, free childcare in July/August)
- Working in a green and pleasant environment



Interested?

Send your application (CV and cover letter) to:

<u>hr-ae@aeronomie.be</u> with <u>trissevgeni.stavrakou@aeronomie.be</u> and <u>jean-francois.muller@aeronomie.be</u> in copy

with the reference "D23_TROPO" before July 31st, 2024