APPLY 36-2024

Scientist/Model Developer - Earth Observation Data

The Exploratory Modeling Of Human-Natural Systems (EM) and the Integrated Assessment and Climate Change (IACC) Research Groups at IIASA are looking to recruit a scientist experienced with Earth Observation data (especially, high resolution satellite products), with good programming and modeling skills to work on the Earth Observation for Bookkeeping Modeling (EO4BK) project.

BACKGROUND

The EO4BK project aims to assess the opportunities for improved understanding and quantification of changes in the land use related carbon pools and fluxes, by incorporating Earth Observation (EO) information in bookkeeping (BK) models. The project is sponsored by the European Space Agency and is jointly implemented with partner institutions, with IIASA in the lead.

THE ROLE

The selected candidate will join an interdisciplinary and international team to develop a new-generation BK model fully driven by EO data. The work will focus on the European and Brazilian regions, with the concrete objective of estimating the effect of changing crop types and management practices on land use CO_2 emissions, which is notably motivated by the existing European Green Deal policy.

Depending on the successful applicant's own interests, longer-term opportunities related to this position could range from applying the newly developed model at global scale to contribute to the Global Carbon Budget and other community exercises, to further supporting and improving the modeling tools and capabilities of the Earth system modeling team.

MAIN TASKS AND RESPONSIBILITIES

- Develop a new bookkeeping modeling platform, using existing concepts but a new code infrastructure.

- Derive new bookkeeping model parameters using EO data.

- Benchmark the resulting bookkeeping model through extensive test simulations.

- Write and contribute to the project deliverables.

- Write and contribute to scientific articles derived from the above work, and present those at scientific workshops and conferences.

REQUIREMENTS

- PhD degree (or equivalent) in physical geography, climate sciences, environmental sciences, or other relevant field(s); other qualifications/profiles close to that of a scientific programmer may also be considered.

- Experience with scientific programming using the Python language is essential. Knowledge of other programming languages will be considered an asset.

- Experience working with Earth Observation data, in particular satellite data products essential.

- Excellent communication skills in English (written and verbal).

- Proven ability to write scientific articles an asset.

- Excellent organizational skills, results-oriented mindset, proactivity and adaptability.

- IIASA offers an interdisciplinary and international workplace, and the possibility to interact with researchers of different nationalities, with strong ties to a world-wide network of research institutions engaged in environmental systems research. The successful candidate must be able to work in, and have respect for, an intercultural environment, and IIASA core values.

APPOINTMENT TERMS

The successful candidate should be available to take up the position in November 2024 or as soon as possible thereafter. We offer an initial fixed-term, full-time employment contract for one year, with the possibility for extension thereafter.

Eligible applicants wishing to work part-time hours may be considered.

Duties will be carried out at the IIASA premises in Laxenburg, near Vienna in Austria.

The successful candidate will be appointed as a Research Scholar (R2) in accordance with the IIASA profiles for research careers.

WE OFFER

- The possibility to contribute to environmental sciences for sustainability and global wellbeing.

- Career development perspectives.

- An international atmosphere and pleasant working environment in a historic market town surrounded by green areas.

- An attractive salary which is exempt from income tax in Austria and negotiable, based on the qualifications, skills and experience of the selected individual and *at least* EUR 51,894.00 gross per annum (subject to deductions for health insurance and/or social security).

IIASA salaries are:

- Not directly comparable with other employers in Austria, due to the unique legal status and privileges granted to IIASA.

- Subject to the principle of income aggregation (Progressionsvorbehalt in German).

OTHER BENEFITS

- Educational subsidies for children of school age enrolled in private schools in Austria.

- A generous annual leave entitlement.

- Relocation allowances and paid home leave for employees in scientific and professional categories hired from international locations.

- The possibility to work up to 100 days per year in home office (within Austria).

- Assistance for newcomers to Austria with visa, work and residency permit applications.

- Support finding accommodation in Austria.

Further details here.

About IIASA

IIASA is committed to a working environment that promotes equality, diversity, tolerance and inclusion within its workforce. This is reflected in our IIASA core values and the IIASA Gender Equality Plan (GEP). We encourage qualified candidates from all religious, ethnic, and social backgrounds to apply. In the case that candidates are equally qualified, preference will be given to applicants from countries where IIASA has a Member Organization.

Further Information

For further information about this opportunity please contact:

Thomas Gasser, Senior Research Scholar

For general information about working at IIASA, please contact: recruitment@iiasa.ac.at

Applications

To apply for this opportunity, you will need to provide the following documents in English:

- A cover letter outlining your motivation for and fit to the position.
- A detailed Curriculum Vitae.
- A link to a repository showcasing past work on model development and/or EO data processing

Deadline for receipt of applications: until filled

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