

APPLY 08-2026

Research Scholar/Modeler – Global Land Carbon Cycle and Land Use Change

As part of a joint initiative of the **Exploratory Modeling of human-natural systems (EM) research group** of the **Advancing Systems Analysis (ASA) program** and the **Integrated Assessment and Climate Change (IACC) research group** of the **Energy, Climate, and Environment (ECE) program**, the Earth system modeling research theme is looking for a research scholar with expertise in global land surface and carbon cycle modeling. The role will develop open-source, surrogate models of land-atmosphere exchange, at various spatial resolutions and using various methodologies, to contribute to a better understanding of the carbon and climate impacts of historical and future land disturbances, especially land use change.

THE ROLE

This position will contribute to the CLARiTy project, a five-year initiative that aims to dramatically reduce uncertainty in land carbon fluxes by integrating Earth observation data with advanced modeling techniques. By harmonizing definitions, improving spatial resolution, making modeling approaches converge, and aligning scientific estimates with national greenhouse gas inventories, CLARiTy is expected to deliver more accurate and operational carbon budget assessments to support climate policies and global stocktakes.

The successful applicant will join IIASA scientists from the ASA and ECE programs to contribute to this effort and related projects. Their modeling work will be split across various modeling tools, including

- a spatially explicit model of the biophysical effect of land use change,
- a machine learning emulation of dynamic global vegetation models.

Both activities aim to improve understanding and quantification of the effects of land management and environmental factors on land carbon and climate dynamics.

TASKS AND RESPONSIBILITIES

- Develop and apply a first-order, spatially explicit model of the biophysical effects of land use change and its linkage with climate change

- Develop and apply a machine learning emulation of dynamic global vegetation models to investigate land carbon fluxes
- Set up, run, and share simulations using these models and potentially others
- Exploit existing model data to better align land use change emissions with countries' reporting
- Write and contribute to project deliverables as required
- Write and contribute to scientific articles arising from the above work, and present findings at scientific workshops and conferences

JOB REQUIREMENTS

- PhD (or equivalent) in land surface or land carbon cycle modeling, or a closely related field
- Advanced understanding of current research in land surface modeling, land carbon and land use change, and more broadly in Earth system science and climate change
- Strong experience with the Python programming language is an absolute requirement
- Experience with global vegetation models, satellite products (L3 or L4), and/or machine learning applied to spatially explicit data would be an asset
- Excellent organizational skills, a results-oriented mindset, and a high degree of autonomy, proactivity, and adaptability
- Excellent communication skills (written and verbal) in English, and a proven track record in writing scientific articles

APPOINTMENT TERMS

The successful candidate should be available to take up the position as soon as possible. We offer an initial one-year employment contract with the possibility of extension thereafter.

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

More junior candidates may be considered, depending on their profile.

The place of work is IIASA in Laxenburg, near Vienna, Austria (home office options available).

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.
- An international atmosphere and pleasant working environment in a historic market town surrounded by green areas.
- An attractive annual salary, exempt from income tax in Austria (subject to deductions for health insurance and/or social security), of at least EUR 55,215.00.

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).

ADDITIONAL 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 who are hired from international locations.

- 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](#). 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.
- The names, addresses (including e-mail), and telephone numbers of two reference givers.
- A link to a repository exhibiting some of your own python code (e.g., data processing, model solving, etc.).

Deadline for receipt of applications: 30 April 2026

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