

Postdoctoral or Doctoral researcher position (m/f/d)



POTSDAM INSTITUTE FOR
CLIMATE IMPACT RESEARCH

The climate needs bright minds. The Potsdam Institute for Climate Impact Research (PIK) addresses crucial scientific questions in the fields of global change, climate impacts and sustainable development. It is one of the world's leading research institutions in its field and offers natural and social scientists from around the world an inspiring environment for excellent interdisciplinary research.

For the Research Department 2: Climate Resilience, PIK is offering a

Postdoctoral or Doctoral researcher position (m/f/d)

(Position number: 19a-2022-Postdoctoral position, 19b-2022-Doctoral position)

in the working group "Adaptation in Agricultural Systems", **starting as soon as possible**.

The position is **funded until July 31st, 2026**. Remuneration is in accordance with the German public tariff scheme (**TV-L Brandenburg**) **salary group E 13 (100% for a postdoctoral and 75% for a doctoral researcher)**. This is a full-time position with a weekly working time of 40 hours per week but can be filled on a part-time basis. Appointment is conditional on approval by the funding agency.

We are looking for a doctoral or postdoctoral researcher to join our team in the field of climate impact attribution in agriculture. Attributing the impacts of climate change is a new and dynamic topic of research that will gain further importance as both climate change and the public debate and legal frameworks dealing with its impacts are progressing, including for example the Warsaw International Mechanism for Loss and Damage (WIM).

The goal of the planned research is to estimate the share of historical losses in agricultural production that can be attributed to climate change. This includes both the impacts of long-term changes in mean climate and, especially, the impacts of individual climate and weather events. The geographic scope ranges from sub-national to global, with a focus on low- to middle-income countries at risk of food insecurity. The work is carried out within different third-party funded projects, of which climate impact attribution is one part amongst other research work that supports climate change adaptation. Project partners include for example the Food and Agriculture Organization of the United Nations (FAO) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

The successful applicant will analyse observational and model-derived historical climate data together with observational agricultural data. Modelling tools may include both process-based and empirical crop models. The tasks are done in cooperation with climate scientists and agricultural economists. The applicant will join the growing team of attribution scientists in the research group and benefit from close collaboration and inspiring exchange to grow as, or advance into, an expert in climate impact attribution in agriculture.

Either a postdoctoral or doctoral researcher will be appointed, depending on the suitability of the respective candidates.

Key responsibilities:

- Design, perform, and interpret research in the field of climate impact attribution in agriculture. The focus areas will be based on the applicants' interests and ideas as well as project constraints; an interest in Sub-Saharan Africa is desirable.
- Co-develop a statistical framework for estimating the fraction of observed agricultural production losses that can be attributed to climate change, considering a range of climate hazards.
- Prepare and analyse historical and counter-factual climate data without (anthropogenic) climate change, for example from the ISIMIP or CMIP6 projects, for selected case studies.
- Apply crop models for selected case studies, using the described climate data, with the aim of estimating the share of crop losses that can be attributed to changes in mean climate or to extreme climate and weather events.
- Coordinate and contribute to the implementation of research projects through close collaboration with other researchers at PIK as well as the stakeholders involved.
- Write and publish articles in peer-reviewed journals that highlight findings from the research projects and present research findings at international conferences.
- Liaise and maintain communication with project donors, responding to information requests, preparing project progress reports and policy briefs.
- Support data collection, literature review and analysis.
- Manage projects, develop new project proposals and apply for funding.

We further encourage you to pursue your own research interests, which should have a thematic overlap with the above responsibilities.

Requirements:

- You hold a Master's degree (for the doctoral position) or PhD (for the postdoctoral position) in either one of Agricultural Science, Statistics, Agricultural Economics or one of Physics, Climate Science, Meteorology. Proven interest (doctoral) or expertise (postdoctoral) in the other field is desirable. Knowledge and work experience in climate impact analysis is valuable.
- You have a solid understanding of (postdoctoral) or keen interest in (doctoral) climate physics, extreme weather events and climate change impacts.
- You have experience or are interested in process-based and statistical crop modelling or related climate impact modelling.
- You hold solid expertise in statistics, programming skills in R or python (postdoctoral and doctoral). You are familiar with (postdoctoral) or not afraid of (doctoral) large data sets and associated file formats (e.g. NetCDF).
- Experience in project management and development of research proposals is valuable.
- You have strong analytical and excellent scientific writing skills, excellent communications skills, and you are fluent in oral and written English.
- You have the ability to work independently, goal-oriented and on your own initiative.

We offer:

- an inspiring, international, and interdisciplinary work environment in one of the world's leading research institutes on climate change
- participation in user driven research projects with international partners
- insights into international projects with extensive stakeholder engagement
- opportunities for cooperation with PIK's national and international network of leading climate and agricultural research institutes
- guidance and supervision in career development
- high-impact of your research through publications in renowned journals and consortia
- flexi-time and mobile working (up to 40% of your hours),
- a collective pay scheme and associated benefits as well as a subsidized travel card.

PIK values equality and diversity. All qualified applicants will receive consideration for employment regardless of ethnic and social origin, religion, sex, sexual orientation, gender identity, national origin, disability, care responsibilities, or age. PIK seeks to increase the share of women in scientific positions and therefore explicitly encourages women to apply. In cases of equal qualification and

within the given legal scope, women will be given preference. PIK also encourages applications by parents returning from parental leave.

Please apply by 30.06.2022 directly using our application form.

If you hold an international higher education qualification, please also submit the Statement of Comparability from the Central Office for Foreign Education (ZAB) with your application. In the case that you do not yet have a ZAB Statement of Comparability for your qualification, please be aware that you will need to request this if your application is successful. You can find further information on this website: <https://www.kmk.org/zab/central-office-for-foreign-education.html>

Application documents should comprise a letter of motivation including research interests, CV, relevant certificates, and a short sample of your work (e.g. journal publication, approx. 2-10 pages). For further information or to discuss the position please contact Dr. Sabine Undorf at sabine.undorf@pik-potsdam.de.



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