

The Max Planck Institute for Biogeochemistry (MPI-BGC) in Jena is dedicated to interdisciplinary fundamental research in the field of Earth system sciences with a focus on climate and ecosystems. The internationally renowned institute, which currently employs around 230 people, will celebrate its 25<sup>th</sup> anniversary in 2022. Jena is known for high-tech industry, internationally renowned research institutions and a modern university, but it also has a beautiful natural setting in the green Saale valley with steep limestone slopes. The city of Jena has an active student scene and a diverse cultural life. For the Hydrology-Biosphere-Climate Interactions group within the Department of Biogeochemical Integration, we are inviting applications for a

## **PhD position on extreme weather impacts (m/f/d)** (full-time, 3 years)

### **Background and position description:**

The Hydrology-Biosphere-Climate Interactions group (<https://tinyurl.com/4wbh4ubz>) and the Department of Biogeochemical Integration (<https://tinyurl.com/ypxmm7d7>) study the response of eco-hydrological systems to climate (change). This includes impacts of, and feedbacks related to hydro-meteorological extreme events such as heat waves, droughts or floods. This PhD position is offered in the framework of the EU-H2020 funded project MYRIAD which aims at comprehensively characterizing the risks associated with weather extremes, including coinciding or cascading events. Impacts of these extremes will be analyzed for various sectors such as agriculture, public health, (social) media attention, or property damage. Also vulnerability and exposure will be considered for each combination of extremes and impact sectors. The investigation will be done by analyzing observation-based data with statistical and machine learning methods. In this context, we are looking for a motivated and creative PhD student (m/f/d) to join our team to contribute to the implementation of the project ideas.

### **Your tasks:**

- Investigate the intensity-damage relationships of various combinations of extreme event types and impact sectors
- Contrast return and recovery times of the extreme events with respect to their impacts
- Disseminate your results at project meetings, conferences, and through publications in peer-reviewed journals
- Interact with researchers across the group, the department, and with the external project collaborators

### **Your profile:**

- Master's degree in environmental science (or related)
- Experience in climate data analysis (using e.g. R, Python or Fortran)
- Good written and oral English language skills

### **Our offer:**

Funding for this position is currently guaranteed for 3 years, with a gross annual salary of at least € 32'000 (TVöD Bund E13, 65%). In addition, we will provide a pension plan based on the public service (VBL). The position is expected to start in autumn 2021, and will be in collaboration with Dr. René Orth, Dr. Dorothea Frank, and Prof. Dr. Markus Reichstein.

The Max Planck Society (MPS) strives for gender equality and diversity. The MPS aims to increase the proportion of women in areas where they are underrepresented. Women are therefore explicitly encouraged to apply. We welcome applications from all fields. The Max Planck Society has set itself the goal of employing more severely disabled people. Applications from severely disabled persons are expressly encouraged.

**Your application:**

Interested candidates should send (1) cover letter including a statement of motivation, (2) your CV, and (3) names and contact details of two referee persons. Please send us your application documents in one PDF file (max. 10 MB) by e-mail including the reference number **21/2021** in the title to [bewerbung@bgc-jena.mpg.de](mailto:bewerbung@bgc-jena.mpg.de), or to the

Max-Planck-Institut für Biogeochemie  
Personalbüro: Kennwort "PhD Extreme Weather Impacts"  
Hans-Knöll-Straße 10  
D-07745 Jena

We kindly ask you not to submit copies of your application documents only, as your documents will be destroyed in accordance with data protection regulations after completion of the application procedure.

Screening of applications will start at **15 September 2021** and continue until the position is filled. In the case of any questions, do not hesitate to contact Dr. René Orth ([rene.orth@bgc-jena.mpg.de](mailto:rene.orth@bgc-jena.mpg.de)).

We look forward to receiving your application!