Conducting research for a changing society: This is what drives us at Forschungszentrum Jülich. As a member of the Helmholtz Association, we aim to tackle the grand societal challenges of our time and conduct research into the possibilities of a digitized society, a climate-friendly energy system, and a resource-efficient economy. Work together with around 7,500 employees in one of Europe's biggest research centres and help us to shape change!

At the Institute of Bio- and Geosciences – Agrosphere (IBG-3) we conduct research to improve our understanding of hydrological and biogeochemical processes in terrestrial systems, using a combination of experiments, modelling, and innovative observation technologies. Our research contributes to the sustainable and resource-conserving use of soils and water and to the quantification of the effect of climate and land use change on terrestrial ecosystems.

Join our team from 01.09.2025 as

Student Assistant - Organizing Phenotypic Data for Soil-Plant Model Calibration

Your Job:
The CROP (Combining Root Contrasted Phenotypes for More Resilient Agro-Ecosystems) project aims to evaluate the beneficial impact of combining contrasting wheat root phenotypes within the same field. We focus on assessing how this combination affects water, carbon, and nitrogen fluxes, microbial activity, and plant development. In the first phase of the project, experiments were conducted under both field and laboratory conditions, and a soil-plant model was developed. The experimental data gathered from these studies is now available to calibrate and test the model.

Your tasks in detail:

- Get familiar with experimental setups and model parameter requirements
- Organize and preprocess experimental datasets (Excel): improve file readability, document metadata, and log data locations
- Collaborate with PhD researchers from the modelling and experimental teams to link data and model components
- Assist in ongoing field sampling campaigns
- Conduct basic data analysis

The job will be advertised until the position has been successfully filled. You should therefore submit your application as soon as possible. We look forward to receiving your application via our **Online-Recruitment-System!**

Questions about the vacancy?
Get in touch with us by using **our contact form.**
Please note that for technical reasons we cannot accept applications via email.
www.fz-juelich.de

Your Profile:

- You are enrolled as a student at a German university
- You have strong Excel skills, and ideally, experience in programming with Python or R.
- You are organized, reliable, and proactive
- You are a good communicator and enjoy teamwork
- You are comfortable working in English
- Bonus: background in agriculture, environmental or geosciences, and some understanding of soil/plant systems
- Bonus: interest in data science or modelling

Our Offer:

We work on the very latest issues that impact our society and are offering you the chance to actively help in shaping the change! We support you in your work with:

- A dynamic, international work environment at one of Germany's leading research centers
- Flexible supervision—autonomous or guided, depending on your preference
- Opportunity to learn about both experimental and modelling research and acquire further scientific and technical training
- Potential to contribute to sustainable agriculture and climate resilience
- Student salary
- Ideal conditions for gaining 6 months of practical experience alongside your studies

In addition to exciting tasks and a collaborative working atmosphere in Jülich, we have a lot more to offer: https://go.fzj.de/benefits

We welcome applications from people with diverse backgrounds, e.g. in terms of age, gender, disability, sexual orientation / identity, and social, ethnic and religious origin. A diverse and inclusive working environment with equal opportunities in which everyone can realize their potential is important to us.

Further information on diversity and equal opportunities: https://go.fzj.de/equality