Scientist for Numerical Weather Prediction and AI integration

f/m/x • Full time • 1190 Vienna

Working for our future!

GeoSphere Austria is the national geological, geophysical, climatological, and meteorological service in Austria. We combine over 150 years of expertise and experience with the latest research findings, always prioritizing the needs of people in all our efforts. With a team of over 500 experts, we are your trusted knowledge partner on topics such as weather, climate change, resource security, geology, the environment, natural hazards, and groundwater.

Your contribution:

- Implement, configure, test and maintain numerical weather prediction models and applications including the related software environment on high-performance computing (HPC) platforms
- Participate in the development and implementation of hybrid systems combining traditional NWP models with AI-based forecasting techniques
- Contribute to the development and implementation of data-driven AI weather forecasting models in collaboration with international partners
- Support the transition of research developments into operational systems (R2O) including performance optimization work
- Monitor and evaluate operating systems, troubleshoot issues and resolve operational problems
- Analyze large datasets, including observational data, model outputs, and AI-generated results
- Collaborate with national and international cooperation partners, take part in working meetings and international workshop and conferences

Your skills and qualifications:

- PhD or Master's degree in atmospheric science, scientific computing, meteorology, physics, or related field.
- Strong programming skills, particularly in Python, C++ and/or Fortran and familiarity with Linux based systems
- Experience in software development and system enhancement including software versioning and management
- Excellent communication skills in English, verbally and in writing.
- Ability to work independently and as part of a team
- Readiness to travel and take part in international workshops, conferences and activities
- Unrestricted access to the Austrian labor market
- Familiarity with meteorological data and numerical weather prediction models
- Experiences to work on HPC platforms

- Knowledge of AI applications and libraries, such as deep neural networks (e.g. generative models or Graph Neural Networks)
- Experience with visualization tools, workflow automation and MLOps (e.g. Docker, Kubernetes)

Your benefits with us:

- **Annual gross salary**: starting from **52.019 EUR**. Remuneration depends on qualifications and increases according to applicable regulations based on relevant prior experience
- **Universal benefits**: Pluxee vouchers, staff canteen
- **Health program**: Back fitness classes, workplace yoga, access to a ping-pong table
- **Work model**: Flexible working hours (flex time and home office options)
- **Social impact**: Family-friendly environment
- **Modern office:** Ergonomic workstations and access to a garden on the company premises
- **Development opportunities:** Play an active role in shaping and making a difference
- **Job security:** Join a successful organization that makes a significant contribution to our future

The term of employment is limited until August 31, 2026 with an option for an unlimited extension.

Become part of our Analysis & Model Development team and shape the future with us!

We look forward to receiving your application!

Please submit your application **latest on 28.02.2025** to GeoSphere Austria's recruitment team via e-mail to bewerbung@geosphere.at and to Christoph Wittmann christoph.wittmann@geosphere.at, quoting reference number 24/25_102.

Your application should include:

- CV
- Relevant certificates, references, and supporting documents

We value diversity and welcome applications from all individuals – regardless of gender, nationality, ethnic and social background, religion/belief, disability, age, sexual orientation, or identity.

By submitting your application, you expressly consent to the processing of your personal data.