Postdoc and PhD Positions in Atmospheric Modelling (Mountain Boundary Layer), University of Innsbruck, Austria

The Atmospheric Dynamics group at the Department of Atmospheric and Cryospheric Sciences (ACINN), University of Innsbruck, Austria, invites applications for a **Postdoc** and a **PhD position**. Both positions are part of the FWF-funded project **MIXMOBL** (Multiscale interactions and exchange in the mountain boundary layer), led by Alexander Gohm.

MIXMOBL is embedded in the international **TEAMx** initiative (https://www.teamx-programme.org). Focusing on the Nafingalm target area (Weer Valley, Austria), the project will investigate multiscale atmospheric interactions, leveraging extensive observational data from the 2025 TEAMx summer campaign. Successful candidates for both positions will apply the novel **Portable Model for multiscale Atmospheric Prediction (PMAP)** over realistic and truly complex Alpine terrain to perform nested **mesoscale** and **Large-Eddy Simulations (LES)**. Close collaboration between the two researchers is therefore key to the project's success. They will also have the opportunity to work together with the model developers and other experts in numerical modelling and atmospheric turbulence over complex terrain.

The Postdoc position focuses on **real-case simulations** of TEAMx Intensive Observation Periods (IOPs). You will utilize an extensive suite of novel ground-based and airborne remote sensing and in-situ measurements to evaluate simulation quality and explore scale interactions.

The PhD position focuses on **semi-idealized simulations** using real terrain but idealized forcing. This role will systematically test how scale interactions, transport, and turbulence kinetic energy (TKE) structures react to varying surface sensible heat fluxes and synoptic conditions.

Postdoc specific essential qualifications: PhD in Atmospheric Science or a related field; strong track record in high-resolution meso- and/or microscale atmospheric modelling.

PhD specific essential qualifications: MSc in Atmospheric Science or a related field; experience in atmospheric modelling (ideally within a BSc/MSc thesis).

Shared qualifications (both roles): Profound knowledge of atmospheric dynamics; excellent Python programming skills; experience with large datasets and HPC systems; strong independent working skills alongside a collaborative team mindset; excellent oral and written English communication skills.

Assets: Background in mountain meteorology and complex terrain boundary layer processes.

Both positions are initially awarded for one year and will be extended to a total duration of 35 months for the Postdoc and 3 years for the PhD, subject to a positive evaluation. The preferred starting date is **01 October 2026**. Remuneration is based on the Austrian collective agreement for university employees (representative figures are provided by the Austrian Science Fund, https://www.fwf.ac.at/en/research-funding/personnel-costs/).

Applications received before **29 July 2026** will receive full consideration. The **application package** (a single PDF file, not exceeding 10 MB) should be submitted via e-mail to Alexander Gohm (alexander.gohm@uibk.ac.at) and must include the following information:

1. Curriculum vitae
2. Cover letter of motivation, stating your interest and qualifications as well as vision for the position
3. Degree transcripts
4. Abstract of PhD thesis and/or MSc thesis
5. Fileshare link to the full PDF file of the PhD and/or MSc thesis
6. Contact information for two referees

ACINN is a leading center for mountain meteorology, offering a collaborative environment with international TEAMx researchers. The PhD student will join the doctoral program *Mountain Climate and Environment*. The University of Innsbruck values diversity and especially welcomes applications from qualified women. For further details, please contact Assoc. Prof. Dr. Alexander Gohm via e-mail.