TEAMX Newsletter July 2023

TEAMx Workshop

The 3rd TEAMx Workshop took place on 15&16 June at ETH in Zürich. Around 60 people attended the workshop in-person and around 30 followed online. The first version of the Numerical Modelling Plan (NMP) and the first draft of the Implementation Plan (IP) for the TEAMx Observational Campaign (TOC) were first addressed in Working Group meetings and later discussed in the plenary (Feedback NMP, Feedback IP).

Besides several splinter meetings dedicated to model intercomparison projects or TOC planning, Anurag Dipankar held a presentation about the EXCLAIM project. EXCLAIM and the digital alpine twin project GLORI-A (a tri-lateral project between Germany, Switzerland, and Italy) are the first two applications* which may make use of TEAMx data.

*Such applications (grey boxes in Figure 1) are outlined as core objectives in the TEAMx White Paper.

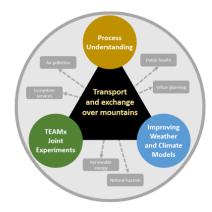


Figure 1: Objectives of the TEAMx programme (Fig. 2 in TEAMx White Paper).

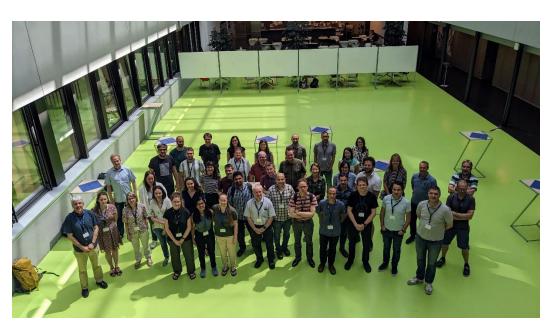


Figure 2: In-person participants at the TEAMx Workshop.



Figure 3: Workshop dinner at Rote Fabrik.

New partners

Since February, four additional institutions have signed the Memorandum of Understanding. We are happy that the Humboldt-Universität zu Berlin and the Ludwig-Maximilians-Universität München from Germany, the University of Basel from Switzerland, and the University of Bergen from Norway have formalised their partnership with TEAMx.

New subgroup on glaciers

The working group on <u>Surface-Atmosphere Exchange</u> now includes a subgroup focusing on glacier-atmosphere exchange. It is led by <u>Lindsey Nicholson</u> (University of Innsbruck), <u>Tobias</u> <u>Sauter</u> (Humboldt-Universität zu Berlin), and <u>Jean-Emmanuel Sicart</u> (University of Grenoble).

New working group leaders

The working group on Waves and Dynamics has two new leaders. <u>Sonja Gisinger</u> (DLR) and <u>Petr Šácha</u> take over the tasks from <u>Annelize van Niekerk</u> (ECMWF) and Andrew Elvidge (formerly University of East Anglia). We thank the previous working group leaders for their work and welcome Sonja and Petr in their new roles.

Newly funded proposals

PI Dino Zardi, DECIPHER: **Disentangling mechanisms controlling atmospheric transport and mixing processes over mountain areas at different space- and timescales** (University of Trento, CNR, University of Bologna). This project includes an observational campaign taking place during summer 2024 and/or 2025 at Monte Baldo and Col Margherita (Adige Valley Target Area). A scanning wind lidar, a sodar and an EC station at Monte Baldo will allow the detailed investigation of thermally-driven slope winds and associated transport processes. The awarded funding amounts to 200 kEuros.

PI Miguel Teixeira: A new diagnostic for fluid flow instability and turbulence generation (University of Reading, UK Met Office, University of Innsbruck). This project focuses on using clear-air turbulence data to test a new diagnostic for fluid flow instability and turbulence generation that replaces the Richardson number. Data obtained from aircraft observations during the TOC will be used to test the diagnostic in a boundary layer setting. The project does not have any funding associated with measuring equipment. It will use commercial CAT data and whatever TEAMx data exists that may be useful. Most of the funding is used for a 3-year PostDoc at the University of Reading. The awarded grant amounts to £ 292,795. Funding body: The Leverhulme Trust. Starts in January 2024, ends in December 2026.

Planning the TEAMx Observational Campaign (TOC)

The TOC will start in little more than a year from now and the outcome of numerous research proposals which had requested funding to participate in the TOC is already known. A discourse is led by the TEAMx Target Area representatives to find the optimal distribution of the available observational platforms over all TAs to address the research outlined in the TEAMx White Paper. The resulting "TOC Backbone" will be presented to the TEAMx community in a couple of weeks.

Target Area (TA) representatives

If you are interested to learn more about a specific TA, you are welcome to reach out directly to the following TA representatives:

Bavarian Pre-Alps: Hannes Vogelmann

Inn Valley: Manuela Lehner

Alpine Crest: Charles Chemel

Adige Valley: Nadia Vendrame