We are excited to announce that the Collaborative Research Centre 301

The Tropopause Region in a Changing Climate

will continue into its second phase, starting 1st January 2026!

The project is funded by DFG,
the German Research Foundation (Deutsche Forschungsgemeinschaft).

If you are looking for...

... a **PhD** position,

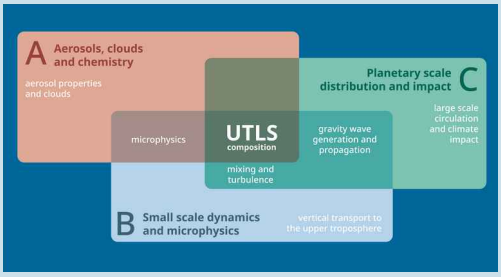
... a **student assistant** job, or

... a **Postdoc** opportunity,

you can find a wide range of topics at the seven collaborating institutions: From laboratory to field measurements, complex theoretical projects, especially with aerosol-chemical and dynamical topics, as well as their embedment in Earth system modelling on different scales.

We are hiring!

Find out more at
https://tpchange.de/open-positions



The research centre is divided into three research areas. ©TPChange

Phase I results will be integrated into models. ©DWD

Aircraft measurements will be a central part of Phase II. © P. Joppe

The research programme

We investigate the tropopause region at 9–18 km altitude, the critical transition zone between troposphere and stratosphere that governs global atmospheric circulation and climate. Here, water vapor, ozone, and aerosols interact dynamically: water vapor modulates vertical temperature gradients, altering large-scale circulation patterns, which in turn redistribute these constituents and affect ice clouds. Surface weather is tightly coupled to processes in this altitude region.

Despite its climatic significance, these feedback mechanisms remain poorly quantified, intro-ducing major uncertainties in climate projections under global change. TPChange therefore targets *precise mechanistic understanding* of tropopause processes and their climate system impacts.

Phase I (2021-2025) established foundational process-level insights; *Phase II* (2026-2029) will integrate these into climate models to rigorously assess how climate change impacts the tropopause region and, consequently, Earth's climate system.