

Seminar über Microwavephysics and Atmospheric Physics

Referent: Dr. Michael Armand Sprenger, Institut für Atmosphäre und Klima, ETH Zürich

Titel: Lagrangian Analysis of Weather Systems

The dynamical tropopause of the extra-tropics acts as a barrier to stratosphere–troposphere mass exchange (STE). Any transport across this barrier is necessarily associated with diabatic or frictional processes such as turbulence, radiative forcing or condensational heating. Most of these processes are linked to distinct flow phenomena and hence with distinct signatures of the velocity and other meteorological fields. This presentation provides a Lagrangian methodology how to diagnose STE and discusses the structure and the dynamics of the tropopause related to this exchange. In particular, a 30-year global climatology of STE will be shown, and distinct case studies will be used to study the dynamical processes at the tropopause.

Zeit: Freitag, 17.11.2017, 10:15 Uhr

Ort: **Hörsaal A97**, Gebäude exakte Wissenschaften, Sidlerstrasse 5, Bern, Schweiz