Poster Session 1:

1 *Christine Borchers:* Development and deployment of a drone-based sampling system to study altitude profiles of organic aerosols with respect to their molecular composition in the planetary boundary layer

9 *Sarah Richter:* Gas measurements in the tropical troposphere of MSA and DMA during CAFE-BRAZIL and CAFE-PACIFIC

21 *Kshitija Naktode:* Aerosol nucleation in upper troposphere using model MECO(n)

16 *Irina Thaler:* Ion enhanced aerosol growth and its link to Solar variability

6 *Sadath Ismayil:* An integrated package for UTLS refractory aerosol sampling: MultiMINI8, SPAFiS, and NanoPS

35 *Luis Valero Tuya:* Balloon-borne soundings for vertical aerosol and trace gas measurements

27 *Neelam Firdous Khan:* Refining the distinction between inside and outside cloud conditions using IAGOS Relative Humidity and BCP data as well as ECMWF Cloud Ice Water Content

45 *Lisa Schneider:* A new airborne sampler for ice-nucleating particle measurements in the cirrus cloud regime

37 *Lasse Moormann:* Vertical pollutant distribution in the lower troposphere: first results and lessons learned from BISTUM 2023

40 *Christian Rolf:* Balloon instruments for TPChallenges

48 *Johanna Mayer:* Remote Sensing of the Life Cycle of Convective Clouds

Poster Session 2

4 *Alena Kosareva:* Interaction of cirrus clouds and gravity waves in the UTLS region

7 *Hannah Bergner:* Gravity waves and ice clouds – Interaction of dynamics and microphysics using a Lagrangian approach

12 *Anahí Villalba Pradas:* Do we understand the role of atmospheric gravity waves for the stratosphere- troposphere exchange in the tropics?

46 *Laura Tomsche:* Injection of water vapor into the stratosphere in a convective system above Europe – a measurement perspective

15 *Lisa Schneider:* Refractory particles in the East Asian UTLS during the Asian summer monsoon anticyclone as seen from a single particle perspective

20 *Muhammad Zeeshaan Shahid:* Decadal Variability of Aerosol Optical Properties over the Indo-Gangetic Plain in South Asia

26 *Gregory Schill:* Single-Particle Aerosol Composition in the Asian Tropopause Aerosol Layer and in the North American Upper Troposphere/Lower Stratosphere during ACCLIP

29 *Gordon Novak:* In-situ measurements of reactive halogen and nitrogen species in the UTLS and constraints on heterogeneous cycling

32 *Fatih Ekinci:* Airborne observations conducted in the extratropical UTLS reveal ammonium nitrate particles associated with the Asian summer monsoon

38 *Oliver Eppers:* Chemical characterization of aerosol particles in the eastern outflow region of the Asian Tropopause Aerosol Layer

43 *Oleh Kachula:* Interannual variability of the Asian Summer Monsoon Anticyclone

Poster Session 3

2 *Zuzana Procházková:* ERA5-based gravity wave climatology

3 *Madhuri Umbarkar:* Gravity waves and shear in the lower stratosphere: idealized baroclinic life cycle experiments

8 *Irmgard Knop:* Impact of small-scale gravity waves on tracer transport

11 *Tobias Göcke:* Higher Moments in the Sky. Distribution of small scale variables, comparing NWP-model against in-situ observations.

14 *Chun Hang Chau:* Simulated mixing in the upper troposphere by small scale turbulence in MECO(n)

17 *Roshny Siri Jagan:* Impact of turbulence parameterization and vertical grid spacing on orographic gravity waves and turbulence in the UTLS

23 *Ming Hon Franco Lee:* Influence of clear air turbulence on the dynamics and exchange in the extratropical tropopause region

22 *Mansooreh Abdollahi:* Structure formation and mixing at the extratropical tropopause region

25 *Daniel Kunkel:* A novel diagnostic to determine regions of non-conservation of potential vorticity

30 *Andreas Schäfler:* Influence of synoptic-scale weather systems on paired H2O–O3 distributions in the UTLS - a case study using collocated airborne lidar observations

33 *Nicolas Emig:* Fine scale composition gradients and mixing at the tropopause region

36 *Ziyan Guo:* Climatological Quantifications of Warm Conveyor Belt Contributions to UTLS Moisture

41 *Marc Bär:* Analysis of convective Transport in ICON and ICON/MESSy

42 *Shweta Singh:* Simulating moist deep exchange over the European Alps using the ICON-RTTOV

47 *Annette Miltenberger:* Modification of air mass composition by deep convection - Lagrangian diagnostics to connect convective inflow and outflow

49 *Annette Miltenberger:* Lagrangian diagnostics for the interpretation of aircraft data - impact of a stochastic trajectory module

Poster Session 4

5 *Franziska Weyland:* Long-term changes in the thermodynamic structure of the lowermost stratosphere based on reanalysis data

10 *Hella Garny:* A review of Age of stratospheric air: Progress on processes, observations and long-term trends

13 *Patrick Konjari:* Water vapor variability in the extratropical UTLS from combined passenger and reasearch aircraft measurements

18 *Nils Brast:* Temporal and Spatial Patterns of Ice Supersaturation: A 3D climatology over the North Atlantic Region

19 *Susanne Rohs / Yun Li:* Climatologies and trends from IAGOS water vapour and RH_ice in the Ex-UTLS of the northern mid-latitudes

28 *Christoph Brühl:* Radiative forcing and radiative heating by stratospheric aerosol from volcanoes and major forest fires in the period 1991 to 2022

31 *Tanja Schuck:* Interhemispheric gradients of halogenated tracers in the upper troposphere

34 *Vaidehi Joshi:* Transport processes regulating the lowermost stratospheric ozone reservoir

39 *Piera Raspollini:* CAIRT measurements for improving the knowledge of UTLS and the added value of synergistic exploitation of limb and nadir imaging measurements

44 *Hans-Christoph Lachnitt:* Observational data synthesis (Central Project Z01)

24 Lianet Hernández Pardo: The Tropical Upper-Tropospheric Aerosol Source: Pathways, Impact, and Significance for Other Regions