

Tuesday, 14 March 2017

13:30 - 13:50	Welcome and Introduction
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13:50 - 14:05	Andreas Minikin	HALO as a platform for atmospheric and geophysical research after the first years of intensive deployment: Development, experiences and perspectives
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Session A: Aerosols, Clouds and Precipitation	Chairperson: Manfred Wendisch		
	14:05 - 14:35	Thomas Koop	Keynote Presentation
	14:35 - 14:50	Christiane Voigt	ML-CIRRUS - The airborne experiment on natural cirrus and contrail cirrus with the high-altitude long-range research aircraft HALO
	14:50 - 15:05	Johannes Schneider	Single particle analysis of aerosol particles and cirrus ice residuals during ML-CIRRUS
	15:05 - 15:20	Ulrich Schumann	Contrail cirrus - prediction, observation, properties and open issues - a summary based on ML-CIRRUS
	15:20 - 15:40	Coffee Break	
	Chairperson: Christiane Voigt		
	15:40 - 15:55	Benedikt Urbanek	Investigating cirrus properties and cloud evolution with airborne water vapor lidar measurements
	15:55 - 16:10	Martina Krämer	Analyzing mid-latitude and arctic cirrus clouds based on the HALO field campaigns ML-Cirrus and POLSTRACC
	16:10 - 16:25	Stefan Kaufmann	Intercomparison of in-situ water vapor measurements on HALO
16:25 - 16:40	Ralf Weigel	Cloud investigations with underwing probes on board of HALO during ML-CIRRUS and ACRIDICON	
16:40 - 16:55	Trismono Kriena	Airborne and satellite remote sensing of optical and microphysical properties of cirrus and	

10:40 - 10:55	THIRTIETH MEETING	deep convective clouds (DCCs) during ML-CIRRUS and ACRIDICON-CHUVA
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Wednesday, 15 March 2017

Session A: Aerosols, Clouds and Precipitation	Chairperson: Christiane Voigt		
	9:00 - 9:15	Manfred Wendisch/ Evi Jäkel	ACRIDICON: Vertical distribution of the phase state of particles in tropical deep-convective clouds as derived from cloud-side reflected solar radiation measurements during ACRIDICON-CHUVA
	9:15 - 9:30	Tobias Zinner	Cloud droplet profiles from high-resolution airborne solar spectral imagery during ACRIDICON
	9:30 - 9:45	Mira Pöhlker	Cloud interaction of cloud condensation nuclei and black carbon aerosol particles
	9:45 - 10:00	Martin Schnaiter	Simultaneous cloud particle imaging and angular light scattering measurements with the novel PHIPS-HALO probe
	10:00 - 10:30	Coffee Break	
	Chairperson: Manfred Wendisch		
	10:30 - 10:45	Susanne Crewell	NARVAL: Next-generation aircraft remote sensing for validation studies
	10:45 - 11:00	Florian Ewald	A road towards EarthCARE: Remote sensing of ice cloud properties using combined lidar-radar measurements from HALO
	11:00 - 11:15	Bernhard Mayer / Bjorn Stevens	EUREC4A: a field campaign to elucidate the couplings between clouds, convection and circulation
11:15 - 11:30	Johannes Kiliani	Calibration of the Raman lidar at the Barbados Cloud Observatory	

Physics	Chairpersons: Christoph Förste and Maximilian Semmling		
	11:30 - 12:00	Fausto Ferraccioli	Keynote Presentation
	12:00 - 12:15	Christoph Förste	Airborne gravimetry onboard the HALO aircraft - results from the GEOHALO mission and outlook on the ANTHALO project

Session D: Geodesy and Geo	12:15 - 12:30	Theresa Schaller	Inversion of airborne gravity data from the GEOHALO campaign to infer bathymetry in the Mediterranean around Italy
	12:30 - 14:00 Lunch Break		
	Chairperson: Christoph Förste		
	14:00 - 14:15	David Becker	Strapdown airborne vector gravimetry aboard HALO
	14:15 - 14:30	Maximilian Semmling	Assessment of sea and ice reflectometry in preparation of the ANTHALO mission
	14:30 - 14:45	Olaf Eisen	Operating ice-penetrating radars on GVs in Antarctica to improve climate and sea level change characteristics: ANTHALO as a multinational approach

Session E: Chemical Composition: Multiphase and Photochemical Processing	Chairperson: Martin Riese		
	14:45 - 15:15	James Crawford	Keynote Presentation
	15:15 - 15:30	Andreas Fix	CoMet: Carbon Dioxide and Methane Mission for HALO
	15:30 - 15:45	Lola Hernández	EMeRGe: Overview, progress, and planned campaigns
	15:45 - 16:00	Katja Bigge	Aircraft-based 2- and 3D measurements of trace gases with the Heidelberger airborne imaging DOAS Instrument (HAIDI) during the Phase II Mission EMeRGe
	16:00 - 16:15	Klaus Pfeilsticker	Overcoming the difficulties of multiple scattering in the interpretation of air-borne UV/Vis/nearIR limb observations for high precision mini-DOAS measurements of trace gases and cloud parameters from HALO
	16:15 - 16:45 Coffee Break		
	Chairperson: Andreas Engel		
	16:45 - 17:00	Hermann Oelhaf	The Polar Stratosphere in a Changing Climate (POLSTRACC): Mission overview
	17:00 - 17:15	Michael Höpfner	NO _y -redistribution and chlorine deactivation observed with GLORIA during the Arctic winter 2015/16 POLSTRACC campaign
17:15 - 17:30	Jens-Uwe Groö	Vertical NO _y -redistribution in the winter 2015/2016	

Session C: Transport and Transformations	17:15 - 17:30	JENS-OWE GROOS	VERTICAL NO ₂ -REDISTRIBUTION IN THE WINTER 2015/2016
	17:30 - 17:45	Andreas Marsing	Chlorine partitioning in the extreme Arctic winter 2015/2016
	17:45 - 18:00	Michael Volk	In situ observations of CO ₂ and tracers with the HAGAR-V instrument during POLSTRACC/GW-LCYCLE/SALSA
	18:00 - 18:15	Jens Krause	Seasonal contrasts of air mass composition in the extratropical UTLS measured on board the HALO research aircraft
	18:15 - 18:30	Martin Riese	First 3D measurements of temperature fluctuations induced by gravity wave with the infrared limb imager GLORIA

Thursday, 16 March 2017

Transport and Dynamics in the Troposphere and Lower Stratosphere, Atmospheric Coupling Processes	Chairperson: Peter Hoor		
	9:00 - 9:30	Thomas Birner	Keynote Presentation
	9:30 - 9:45	Andreas Engel	Overview and results of the TACTS/ESMVal campaign
	9:45 - 10:00	Bärbel Vogel	Long-range transport pathways of tropospheric source gases originating in Asia into the northern lower stratosphere during the Asian monsoon season 2012
	10:00 - 10:15	Klaus-Dirk Gottschaldt	Composition and transport in the Asian summer monsoon anticyclone: A case study based on in-situ observations during ESMVal and EMAC simulations
	10:15 - 10:30	Andreas Schäfler	Overview of the North Atlantic Waveguide and Downstream Impact Experiment (NAWDEx)
	10:30 - 11:00	Coffee Break	
	Chairperson: Hermann Oelhaf		
	11:00 - 11:15	Peter Hoor	WISE (Wave driven Isentropic Exchange)
11:15 - 11:30	Daniel Kunkel	The tropopause inversion layer in the mid-latitudes: from idealized model experiments to measurements over the North Atlantic	

Session B: Tr	11:30 - 11:45	Felix Ploeger	Characteristics of transport in the lower stratosphere inferred from the age of air spectrum
	11:45 - 12:00	Paul Konopka	In situ-based climatologies of mean age, ozone, CO and water vapor as a tool for validation of atmospheric models in the vicinity of the tropopause

12:00 - 12:15	Closing
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Poster Session - Tuesday, 14 March 2017, 17:00 - 19:00

Session A: Aerosols, Clouds and Precipitation	Manuel Gutleben	Detection of shallow marine cumulus convection with airborne and spaceborne lidar-systems over the tropical North Atlantic Ocean
	Bruna Holanda	Properties of refractory black carbon containing particles during the ACRIDICON-CHUVA aircraft campaign in the Amazon basin
	Marcus Klingebiehl	HALO cloud radar measurements during NARVAL-II in comparison to CloudSat
	Heike Konow	Cloud properties from aircraft measurements and model evaluation during NARVAL
	Annette Miltenberger	On the evaluation of high-resolution simulations of mixed-phase clouds and the detectability of aerosol-cloud interactions
	Andreas Minikin	The HALO Submicrometer Aerosol Inlet (HASI): Design concept and first characterization
	Stephan Mertes	Measurements of cloud particle residue properties sampled by means of the HALO-CVI during the HALO cloud missions ML-CIRRUS and ACRIDICON-CHUVA
	Daniel Sauer	AMETYST: Aerosol microphysics measurements on HALO
	Christiane Schulz	Airborne aerosol and cloud residual chemical composition measurements in the Amazon tropical troposphere during ACRIDICON-CHUVA 2014
	Odran Sourdeval	Ice crystal number concentration estimates from active satellite remote sensing : Method and in situ evaluation
Bjorn Stevens / Christopher Kiemle	Structure and dynamical influence of water vapor in the lower tropical troposphere	

	Frank Stratmann	High Volume Aerosol Sampler for HALO (Hera4HALO) Developments concerning the physical and chemical characterization of ice nucleating aerosol particles with HALO
	Kevin Wolf	Potential of remote sensing of cirrus optical thickness by airborne spectral radiance measurements in different viewing angles and nadir geometry
	Tobias Zinner	Spectral solar imagery of clouds over the Atlantic during NARVAL-2 and NAWDEX

B: Transport & Dynam	Andreas Engel	Variability of stratospheric halogen loading
	Thorsten Kaluza	Variability of the tropopause inversion layer in high-resolution ECMWF IFS analysis data: a pre-WISE case study and climatology
	Theresa Klausner	In-situ measurements of sulfur dioxide in the upper troposphere within the asian summer monsoon anticyclone during OMO 2015
	Marc Krebsbach	Observations of stable carbon isotope ratios in atmospheric VOC across the asian summer monsoon anticyclone on HALO during the OMO-ASIA campaign

C: Chemistry	Klaus-Dirk Gottschaldt	The HALO database
	Sigrun Matthes	Reactive species in the upper troposphere and lower stratosphere during ML-Cirrus: measurement and EMAC modelling
	Wolfgang Woiwode	Analysis of trace gas distributions across an Arctic tropopause fold influenced by gravity wave activity
	Helmut Ziereis	In-situ measurements of reactive nitrogen in the arctic lower stratosphere in winter 2015/2016 during POLSTRACC

Other Posters	Klaus-Dirk Gottschaldt	The HALO database
	Andreas Giez	Inflight Calibration of the HALO Airflow Sensor System
	Martin Zöger	SHARC (Sophisticated Hygrometer for Atmospheric Research)