

Program

9.5.2023				convener
13:00	14:00	Registration		
14:00	14:15	Welcome & Logistics		
14:15	14:45	1 Patrick Jöckel (DLR)	Status and further perspectives of the Modular Earth Submodel System	developments
14:45	15:00	2 Astrid Kerkweg (FZJ)	Status ICON/MESSy	
15:00	15:15	3 Sabine Brinkop (DLR)	LaMETTA - Development and first results	
15:15	15:30	4 Miriam Sinnhuber (KIT)	Simulating energetic particle precipitation with EMAC	
15:30	15:45	5 Jens-Uwe Groöf (FZJ)	Incorporation of Flux Boundaries into CLaMS	
15:45	16:30	coffee break		
16:30	16:45	6 Alexandros Milousis (FZJ)	Implementation of the ISORROPIA-lite aerosol thermodynamics model into the EMAC Chemistry Climate Model	Markus Kunze
16:45	17:00	7 Alexandra Tsimpidi (FZJ)	Continued developments on the ORACLE family within EMAC	
17:00	17:15	8 Felix Wieser (FZJ)	A chemistry update towards better SOA representation	
17:15	17:30	9 Holger Tost (JGU)	Aerosol composition via ML	
17:30	17:45	10 Bastian Kern (DLR)	In-Situ Visualisation with Catalyst in MESSy	
17:45	18:00	11 Francisco Pérez-Invernón (CSIC)	Atmospheric electricity in EMAC	
10.5.2023				
09:00	09:15	12 Roland Eichinger (DLR)	Horizontal redistribution of orographic gravity wave flux in EMAC	Emission/impacts
09:15	09:30	13 Petr Šácha (CUNI)	Towards parameterizing unresolved gravity wave effects on transport and chemistry - project description	
09:30	09:45	14 Mariano Mertens (DLR)	Impact of transport emissions on air quality	
09:45	10:00	15 Catherine Acquah (DLR)	The impact of different emission inventories on the tropospheric ozone budget and methane lifetime	
10:00	10:15	16 Apostolos Koumparos (FZJ)	Unraveling the global secondary atmospheric pollutants response to emission reductions imposed during the COVID-19 pandemic	
10:15	11:00	coffee break		
11:00	11:15	17 Robin Thor (DLR)	An inconsistency in aviation emissions between CMIP5 and CMIP6 and the implications for short-lived species and their radiative forcing	Christof Beer
11:15	11:30	18 Ryan Vella (MPIC)	BVOC emissions in EMAC with interactive vegetation dynamics from LPJ-GUESS	
11:30	11:45	19 Monica Sharma (DLR)	Double-box model for aircraft plumes based on MADE3 microphysics	
11:45	12:00	20 Hiroshi Yamashita (DLR)	Multiobjective Optimization in AirTraf 3.0	
12:00	12:15	21 Sigrun Matthes (DLR)	Aviation influence on reactive species in multi-scale modelling EMAC/MECO(1)	
12:30	12:45	Symposium group photo		
12:45	14:00	Lunch		
14:00	18:00	poster session		
19:30		Dinner		
11.5.2023				
09:00	09:15	22 Jingmin Li (DLR)	Investigation of global aerosol regimes from pre-industrial times to the future based on machine learning techniques	Trends / climate
09:15	09:30	23 Susanne Scholz (FZJ)	Aerosol Composition Trends during 2000-2020: In depth insights from model predictions and multiple worldwide observation datasets	
09:30	09:45	24 Moritz Witt (DLR)	The composition of the global UTLS nowadays and at the end of the 21 st century	
09:45	10:00	25 Tamara Emmerichs (FZJ)	Storyline scenarios for studying driving factors in weather-pollution interactions	
10:00	10:15	26 Laura Stecher (DLR)	Chemical-climate feedback of atmospheric CH ₄ and its radiative impact on the climate sensitivity (with EMAC)	
10:15	10:30	27 Evgeniya Predybaylo (KAUST)	Future climate response to the reduction of anthropogenic methane emissions	
10:30	11:00	coffee break		
11:00	11:15	28 Theo Christoudias (CYI)	UTLS simulations with EMAC	aerosols/gases
11:15	11:30	29 Domenico Taraborrelli (FZJ)	Global simulation of chemical kinetics in deliquescent aerosols	
11:30	11:45	30 Alexandra Laeng (KIT)	Comparison of EMAC ozone with satellite instruments	regional
11:45	12:00	31 Kshitija Naktode (JGU)	MECO(n) simulations over South American region	
12:00	12:15	32 Tony Chun Hang Chau (JGU)	Simulated mixing in the upper troposphere by small-scale turbulence in MECO(n)	
12:15	12:45	Plenary discussion		
12:45	13:00	final remarks		

10.5.2023			
POSTERS			
14:00	18:00	1 Anna-Leah Nickl (DLR)	Numerical simulation of the atmospheric methane increase and the corresponding decrease of $\delta^{13}\text{C}(\text{CH}_4)$ after 2007
14:00	18:00	2 Anna Martin(MPIC)	Numerical modeling of vegetation and its impact on atmospheric composition
14:00	18:00	3 Rolf Sander (MPIC)	Recent updates in the MECCA submodel
14:00	18:00	4 Patrick Peter (DLR)	Comparison of EMAC contrail parameter with observations
14:00	18:00	5 Kerstin Hartung (DLR)	Towards adaptive mesh refinement in MESSy
14:00	18:00	6 Ismail Makroum (DLR)	Investigation and evaluation of atmospheric sulphur dioxide
14:00	18:00	7 Matthias Kohl (MPIC)	Modelling atmospheric aerosols from the surface to the stratosphere
14:00	18:00	8 Christof Beer (DLR)	Regional aerosol simulations with MADE3 in MECO(n)
14:00	18:00	9 Dominika Hájková (CU)	Review and possible improvement of orographic gravity wave parameterizations
14:00	18:00	10 Christopher Kaiser (DLR)	TransClim v2 - rapid comprehensive climate assessment of transportation emissions
14:00	18:00	11 Christoph Brühl (MPIC)	Radiative forcing by stratospheric aerosol from volcanoes and major fires for the last 3 decades
14:00	18:00	12 Klaus Klingmüller (MPIC)	Data-driven aeolian dust emission scheme for climate modelling
14:00	18:00	13 Peter Zimmermann (MPIC)	Statistical approach based on EMAC-MESSy model output to explain the global post 2007 methane increase.
14:00	18:00	14 Matthias Nuetzel (DLR)	Updating the radiation infrastructure in MESSy
14:00	18:00	15 Ole Kirner (KIT)	The influence of using ERA-5 instead of ERA-Interim on stratospheric chemistry and ozone in EMAC simulations
14:00	18:00	16 Nicklas Boeing (DLR)	Adaptive Data Reduction Techniques for Atmospheric Models
14:00	18:00	17 Robert Eerenstein (FZJ)	Lagrangian simulation of stratospheric water vapor feedback
14:00	18:00	18 Johannes Pletzer (DLR)	t.b.d.
14:00	18:00	19 Markus Kunze (IAP)	Upper Atmosphere ICON(NWP) - Climatology and Northern winter variability
14:00	18:00	20 Ed Charlesworth (FZJ)	UTLS Wet Biases and the Atmospheric Circulation in Models
14:00	18:00	21 Xurong Wang (FZJ)	The role of ammonia emissions on the size-resolved global atmospheric aerosol composition and acidity
14:00	18:00	22 Swen Metzger (UF)	EQSAM4ESM: Introducing EQSAM for Earth System Modeling - a noise-free and computationally efficient alternative to GMXe
14:00	18:00	23 Jianzhong Ma (CAMS)	Research activities at CAMS with EMAC
14:00	18:00	24 Tim Butler (RIFS)	TOAST Ozone tagging
14:00	18:00	25 Kerstin Hartung (DLR)	Icon Community Interface
14:00	18:00	26 Mariano Mertens (DLR)	Can mitigation options in the shipping sector help improve air quality > in Northern Germany?