

## WG 3ab: Parallel Session (in person)

**Monday, September 2, 2024 (hours in local time of Offenbach)**

<b>Session of WG 3a/b: Current activity around BL-modelling for ICON</b> <b>- model treatment of sub-grid heterogeneity and surface processes -</b> <b>Room: Blau</b>		
08:50 – 09:00	All	Preparations
09:00 – 09:05	Matthias Raschendorfer (DWD)	Welcome and Introduction
<b>Experiences with ICON-simulations at hectometric scales and first measures in order to tackle related problems:</b> <b>Chair: Matthias Raschendorfer</b>		
09:05 – 09:25	Alberto de Lozar (DWD)	Problems/Challenges at High Resolution runs (as a DWD contribution to the GLORI project)
09:25 – 09:45	Angelo Capanale (CMCC)	Problems/Challenges at high Resolution Runs (as a CMCC contribution to the GLORI project)
09:45 – 10:05	Davide Cinquegrana, Edoardo Bucchignani (both CIRA, online)	Problems/Challenges at high Resolution Runs (as a CIRA contribution to the GLORI project)
10:05 – 10:25	Günther Zängl (DWD)	Special Physics-Tuning for ICON-D05
10:25 – 10:40	All	Discussion about possible sources of still existing problems at high resolution runs
10:40 – 11:00	All	<b>Coffee</b> (optional small-group discussions)
<b>Running BL modelling of atmospheric processes for ICON:</b> <b>Chair: Jean-Marie Bettems</b>		
11:00 – 11:20	Christian Steger (Meteo Swiss)	Topographic Shading (as part of the GLORI project)
11:20 – 11:40	Dmitrii Mironov (DWD)	Strongly stable BL Flows over thermally heterogeneous Surfaces: Effect of Heterogeneity Orientation
11:40 – 12:00	Jaydeep Singh et al. (Uni-Frankfurt)	Improving Cloud and Turbulence Representation in Atmospheric Simulations
12:00 – 12:15	Ekaterina Machulskaja (DWD)	Work status of TKESV
12:15 – 12:30	Matthias Raschendorfer (DWD)	Continuous Development of ICON Turbulence and the Treatment of Surface Roughness (as part of ConSAT)
12:30 – 14:00	All	Lunch (optional small-group discussions)
14:00 – 14:15	All	Discussion about mutual dependencies of development lines and possibilities for unification of ABL modelling

<b>Session of WG 3a/b: Current Boundary-Layer (BL) modelling in ICON</b> <b>- model treatment of sub-grid heterogeneity and surface processes -</b> <b>Room: <a href="#">Blau</a></b>		
<b>Running BL modelling of Terra-processes for ICON:</b> <b>Chair: Matthias Raschendorfer</b>		
14:15 – 14:30	Martin Köhler (DWD)	Impact on River discharge into the Ocean halves thermohaline Circulation
14:30 – 14:45	Roland Wirth, Linda Schlemmer (both DWD)	Modularization of Terra
14:45 – 15:00	Sascha Belaire (DWD)	Implementation of NIX into ICON (Principal Coupling with Soil and Atmosphere)
15:00 – 15:15	Matthias Raschendorfer (DWD)	Terra-related ConSAT development
15:15 – 15:30	All	Discussion about mutual dependencies and a harmonization of current Terra-development if necessary
15:30 – 16:00	All	Coffee (optional small-group discussions)
<b>Session of WG 3b: Model treatment of the Cryosphere</b> <b>Room: <a href="#">Blau</a></b>		
16:00 – 16:05	Jean-Marie Bettems (Meteo Swiss)	Introduction
<b>Running modelling of cryospheric processes for ICON</b> <b>Chair: Jean-Marie Bettems</b>		
16:05 – 16:25	Martin Lange (DWD)	Issues in assimilation of Snow observations from Snotel network
16:25 – 16:45	Daniel Krüger (DWD)	Snow above sea-ice
16:45 – 17:05	Nanda Wever (Meteo Swiss)	Multilayer snow-model NIX (part 1)
17:05 – 17:25	Sascha Bellaire (Meteo Swiss)	Multilayer snow-model NIX (part 2)
17:25 – 18:30	All	Discussion about various aspects of cryosphere modelling and the NIX roadmap

## ICON WG meeting on "Radiation, Clouds, Aerosols and Chemistry"

03.09.2024 14:00-18:00 CET, hybrid: DWD Offenbach and Online in WebEx:

Time	Presenter	Title
<i>Part 1: Radiation and cloud microphysics; Chair: Ali Hoshyaripour</i>		
14:00 - 14:10	M. Burba (DWD)	ecRad in ICON: status and plans
14:10 - 14:30	B. Keshtgar (KIT)	Cloud-radiative impact on the dynamics of extratropical cyclones
14:30 - 14:50	P. Khain (IMS)	Preliminary results of mixed phase SBM in ICON
14:50 - 15:10	H. Muskatel (IMS)	Overview of CAIR and ACLIIM projects
15:10 - 15:30	E. Augoustoglou (HNMS)	CAIR developments: verifications over South-East-Europe
15:30 - 16:00		Break
<i>Part 2: Aerosols and chemistry; Chair: Mareike Burba</i>		
16:00 - 16:20	A. Hoshyaripour (KIT)	ICON-ART: status and plans
16:20 - 16:40	A. Seifert (DWD)	Aerosol effects on clouds and radiation during Saharan dust events
16:40 - 17:00	C. Keller (EMPA)	Evaluation of Reactive Nitrogen Species in ICON-ART with MOZART Chemistry
17:00 - 17:20	F. Senf (TROPOS)	Functional concurrency for ICON's atmospheric transport and radiation schemes
17:20 - 18:00	all	Discussion

**Parallel Session WG3b / PP CITTA' (Urban Modelling)**

**Tuesday, 03 September 2024, 14:00 – 18:00 CEST**

<b>Chair: Jan-Peter Schulz, Room Green</b>		
14:00 – 14:10	Jan-Peter Schulz	Introduction and Agenda
14:10 – 14:40	Adam Jaczewski, Andrzej Wyszogrodzki, Witold Interewicz	A case study on COSMO and ICON-LAM models for Warsaw, Poland
14:40 – 15:10	Massimo Milelli	PP CITTA' update from CIMA
15:10 – 15:40	Angelo Campanale, Marianna Adinolfi, Mario Raffa, Jan-Peter Schulz, Paola Mercogliano	Updates from CMCC on the last TERRA_URB implementation in ICON
<b>15:40 – 16:10</b>	<b>All</b>	<b>COFFEE BREAK</b>
16:10 – 16:40	Valeria Garbero	PP CITTA' update on high-resolution experiments with ICON-LAM
16:40 – 17:10	Davide Cinquegrana, Myriam Montesarchio, Alessandra Lucia Zollo, Edoardo Bucchignani	Effects of varying AHF on UHI in the Naples metropolitan area at hectometric scale with the TERRA_URB scheme
17:10 – 17:25	Julia Fuchs	Boundary-layer clouds over Milan: First test runs with TERRA_URB in ICON-LAM
17:25 – 17:40	Hawwa Kadum	Land-Atmospheric Interactions over Heterogeneous Surfaces: Observation to Numerical Weather Prediction Models
<b>17:40 – 18:00</b>	<b>All</b>	<b>Discussion</b>