

Monday, September 11, 2023

11:00 Check-in at DWD12:30 Webex Stream Begins

13:00 Welcome

Astrid Eichhorn-Müller, Deutscher Wetterdienst, Germany Dr. Christina Koppe, Deutscher Wetterdienst, Germany Prof. Dr. Siegfried Raasch, Leibniz Universität Hannover, Germany

13:20 | SESSION 1: Urban Climate Research (Chair: Sebastian Giersch)

13:20 Modelling the impact of an urban development project on microclimate and outdoor thermal comfort in a mid-latitude city

Julian Anders, Leibniz Universität Hannover, Germany

Does facade and roof greening reduce heat stress in urban environments? A PALM case study for Magdeburg.

Pierre Monteyne, Leibniz Universität Hannover, Germany

13:50 Effect of radiation interaction and aerosol processes on ventilation and aerosol concentrations in a real urban neighbourhood in Helsinki

Jani Strömberg, University of Helsinki, Germany

14:05 The LES-LES self-nesting capability in PALM

Antti Hellsten, Finnish Meteorological Institute, Finland

14:20 coffee break



Monday, September 11, 2023

14:50	SESSION 2: Development (Chair: Johannes Schwenkel)
14:50	Application of PALM to cloud chamber simulations Prof. Dr. Hyunho Lee, Kongju National University, South Korea
15:05	New Snow Scheme in the PALM Land Surface Model and First Results Dr. Christopher Mount, Leibniz Universität Hannover, Germany
15:20	3-D radiative interactions for non-orthogonal (slanted) surfaces in PALM using cut-cell grid Dr. Pavel Krc, Czech Academy of Science, Czech Republic
15:35	Integrating MATSim and PALM - Coupling Large Scale Microscopic Traffic and Emission Modelling with High Resolution Computational Fluid Dynamics Dispersion Modelling Janek Laudan, Technische Universität Berlin, Germany
15:50	PALM-4U GUI: A cloud based user-friendly graphical user interface for the urban climate model PALM-4U Sebastian Stadler, Fraunhofer Institute for Building Physics IBP, Germany
16:05	discussion

16:30 URSA-MAJOR project meeting

18:00 Conference Dinner



Tuesday, September 12, 2023

10:25 coffee break

09:00	SESSION 3: Application and Practice (Chair: Sebastian Giersch)
09:00	Integration of PALM simulations in urban climate policymaking Prof. Dr. Igor Esau, Nansen Environmental and Remote Sensing Center, Norway
09:15	Pros and Cons Working with PALM as a Consultant Dr. Tobias Gronemeier, iMA Richter & Röcke GmbH & Co. KG, Germany
09:30	Application of PALM at the German Weather Service Astrid Eichhorn-Müller, Deutscher Wetterdienst, Germany
09:45	Overview of recent PALM-4U related research activities at the Austrian weather service Brigitta Hollosi, GeoSphere Austria, Austria
10:00	LES at the wind turbine manufacturer ENERCON Dr. Marcus Letzel, ENERCON, Germany
10:15	discussion



Tuesday, September 12, 2023

12:20 lunch break

10:55	SESSION 4a: ABL Dynamics, Turbulence and Dispersion (Chair: Astrid Eichhorn-Müller)
10:55	Mesoscale-coupled PALM simulations in complex terrain: Applications and challenges Oliver Maas, ENERCON, Germany
11:10	Towards the simulation of a wind machine based on an actuator disk model to improve frost protection Dr. Clara Le Cap, Weather Measures, France
11:25	Surface heterogeneity induced effects on the diurnally evolving convective boundary layer from coupled large eddy simulations of the CHEESEHEAD19 field campaign Sreenath Paleri, University of Oklahoma, USA
11:40	LES of local scale atmospheric boundary layer dynamics using PALM at the Finnish Meteorological Institute Dr.Jukka-Pekka Keskinen, Finnish Meteorological Institute, Finland
11:55	Large-Eddy Simulation of passive plumes in neutral stratified and slightly stable boundary layers Marilina Barulli, Ecole Centrale de Lyon, France
12:10	discussion



Tuesday, September 12, 2023

15:00 Constitutional Meeting

13:20	SESSION 4b: ABL Dynamics, Turbulence and Dispersion (Chair: Johannes Schwenkel)
13:20	Implementing moving emissions and simulating the dispersion of ship exhaust plumes Katrin Gehrke, pecanode GmbH, Germany
13:35	Effects of RV Polarstern on the atmospheric flow and observations during MOSAiC Dr. Robert Klingel, Leibniz Univeristät Hannover, Germany
13:50	Introduction and validation of a simplistic method to represent vehicle-induced turbulence in PALM Giovanna Motisi, Leibniz Universität Hannover, Germany
14:05	Application of PALM to modelling of indoor ventilation problems Mikko Auvinen, Finnish Meteorological Institute, Finland
14:20	discussion
14:30	coffee break