The 2nd Street-in-Grid (SinG) Modeling Symposium and the 3nd SinG Model Training Workshop

June 24-28, 2019, Champs-sur-Marne, France

Draft Agenda

Days 1-4: The 3rd SinG Model Training Workshop, Ecole des Ponts ParisTech, P402 12 Boulevard Copernic - 77420 Champs-sur-Marne, France

Program

Day 1 (Monday, June 24)
09:30 – 09:50 Opening by Pietro Bernardara
09:50 – 10:20 Introduction to Polyphemus system (Yelva Roustan)
http://cerea.enpc.fr/polyphemus/introduction.html
10:20 – 10:30 Coffee break
10:30 – 11:00 Introduction to Polair3D (Yelva Roustan)
11:00 – 12:00 Polair3D – Preprocessing (Yelva Roustan)
Test case #1: Europe (horizontal resolution: 50 km)
Test case #2: France using nesting (horizontal resolution: 13 km)
Test case #3: Île-de-France using nesting (Greater Paris, horizontal resolution: 3 km)
http://cerea.enpc.fr/polyphemus/polair3d_test_case.html
12:00 – 13:30 Lunch break (Campus cafeteria)
13:30 – 15:00 Polair3D – Preprocessing (Yelva Roustan)
15:00 – 15:20 Coffee break
15:20 – 17:00 Polair3D – Preprocessing (Yelva Roustan)

Day 2 (Tuesday, June 25)
09:30 – 10:30 Polair3D – Processing/Postprocessing (Yelva Roustan)
Setup and Run
Verification of simulation results
10:30 – 10:40 Coffee break
10:40 – 11:30 Polair3D – Processing/Postprocessing (Yelva Roustan)
11:30 – 12:00 Introduction to MUNICH (Youngseob Kim)
Concept and overview of physical parametrizations
12:00 – 13:30 Lunch break (Campus cafeteria)
13:30 – 15:00 MUNICH – Preprocessing (Youngseob Kim)
Test-case: a Paris suburb Le Perreux-sur-Marne
Geographical data / Meteorological data
Traffic model and emissions
Boundary conditions
15:00 – 15:20 Coffee break
15:20 – 17:00 MUNICH – Preprocessing (Youngseob Kim)

Day 3 (Wednesday, June 26)

09:30 – 10:30 MUNICH – Processing/Postprocessing (Youngseob Kim)
Verification of simulation results
10:30 – 10:40 Coffee break
10:40 – 12:00 MUNICH – Processing/Postprocessing (Youngseob Kim)
Verification of simulation results
12:00 – 13:30 Lunch break (Campus cafeteria)
13:30 – 15:00 MUNICH – Processing/Postprocessing (Youngseob Kim)
Verification of simulation results
15:00 – 15:20 Coffee break
15:20 – 17:00 MUNICH – Processing/Postprocessing (Youngseob Kim)
Verification of simulation results

Day 4 (Thursday, June 27)

09:30 – 10:00 Introduction to Street-in-Grid (Youngseob Kim)
10:00 – 10:30 Street-in-Grid – Preprocessing (Youngseob Kim)
Test-case: Le Perreux-sur-Marne
Removal of the traffic emission from the emission data in order to avoid double
10:30 – 10:40 Coffee break
10:40 – 12:00 Street-in-Grid – Preprocessing (Youngseob Kim)
12:00 – 13:30 Lunch break (Campus cafeteria)
13:30 – 15:00 Street-in-Grid – Processing/Postprocessing (Youngseob Kim)
Setup and Run
Verification of simulation results
Comparison between Polaird3D, MUNICH and SinG
15:00 – 15:20 Coffee break
15:20 – 17:00 **SinG Developer and User Meeting (with Yang Zhang, Pietro Bernardara, Yelva Roustan, Karine Sartelet, Youngseob Kim) and Closing**

Day 5 (Friday, June 28), The 2nd SinG Modeling Symposium, Navier amphitheater, Ecole des Ponts ParisTech, 12 Boulevard Copernic - 77420 Champs-sur-Marne, France
(For presentations with multiple coauthors, the speakers are indicated with "*")

Time	Activities
8:30-9:00 am	**Registration and A/V Upload for Oral Presenters**
	Introduction and Welcome (Co-Chairs: Pietro Bernardara and Yang Zhang)
9:00-9:10 am	**Opening Remark and Logistics** (Yang Zhang, MEAS, NCSU)
9:10-9:20 am	**Welcome Remark by CEREA, France** (Pietro Bernardara, Director, CEREA, France)
9:20-9:30 am	**Welcome Remark by ENPC or EDF R&D, France (ENPC Director (or Director from EDF R&D) France)**
9:30-9:50 am	**Photo and Coffee Time (Photo for All Participants)**
Session 1	**Street Level Air Quality Modeling in Europe (Invited Presentation) (Co-Chairs: Karine Sartelet and Pietro Bernardara)**
9:50-10:15 am	**Overview on Current Development and Application of SinG model** (Karine Sartelet, *Center for Atmospheric Research (CEREA), France*)
10:15-10:40 am	**Development and Applications of Multi-Scale Air Quality Modelling in Denmark** (Steen Solvang Jensen*, Matthias Ketzel, Jørgen Brandt, Jesper Christensen, Morten Winther, Ole-Kenneth Nielsen, Marlene Plejdrup, Ole Hertel, Thomas Ellermann, *Aarhus University, Denmark*)
10:40-11:05 am	**Air Pollution Modelling from Continental Scale Down to Street Level for the City of Zurich** (D. Brunner*, Q. Mu, D. Ochsner, and A. Berchet, *Swiss Federal Laboratories for Materials Science and Technology (EMPA), Switzerland*)
11:05-11:30 am	**CALIOPE-Urban v1.0: Coupling R-LINEwith a Mesoscale Air Quality Modelling System for Urban Air Quality Forecasts over Barcelona City (Spain)** (Jaime Benavides, Michelle Snyder, Marc Guevara, Albert Soret, Carlos Pérez García-Pando, Fulvio Amato, Xavier Querol, and Oriol Jorba*, *Barcelona Supercomputing Center, Spain*)
11:30 am-1:00 pm	**Lunch Break**
Session 2	**Street Level Air Quality Modeling in Asia and South America (Invited Presentation) (Co-Chairs: Youngseob Kim and Sunling Gong)**
1:00-1:25 pm	**Development of a New System to Simulate Street Level Pollution** (Sunling Gong* and Jianjun He, *Chinese Academy of Meteorological Sciences, China*)
1:25-1:50 pm	**Simulation for the Impacts of Motor Vehicle Restriction on Air Pollution at the Street-Level using WRF/Chem and MUNICH Model in Kaifeng, China** (Hongquan Song*, Haipeng Zhao, Xiaoyang Li, Tuanhui Wang, Shenghui Zhou, *Henan University, China*)
1:50-2:15 pm	**Street Level Pollutants in Urban Area of Beijing: Modeling and Source Apportionment**

	(Xin Li*, Jianjun He, Youngseol Kim, Zhiliang Yao, Yang Zhang, Qiang Zhang, *Beijing Technology and Business University, China*)
2:15-2:40 pm	**Simulation of NO_x and O_3 concentrations at Street Level in Sao Paulo Urban Canyons with MUNICH Model (**Mario Gavidia-Calderon, Sergio Ibarra-Espinosa, Youngseob Kim, Maria de Fatima Andrade, Yang Zhang*, *University of São Paulo, Brazil*)
2:40-3:00 pm	**Coffee Break**
Session 3	**Urban Air Quality Modeling and Forecasting (Platform Presentation) (Co-Chairs: Yelva Roustan and Hongquan Song)**
3:00 -3:15 pm	**Street-scale Air Quality Modelling in Beijing with ADMS-Urban: Emissions Development and Model Validation** (Michael J. Biggart*, Ruth M. Doherty, David J. Carruthers, Jenny R. Stocker, Oliver Wild, and Michael Hollaway, *University of Edinburgh, U.K.*)
3:15-3:30 pm	**Multi-scale Modeling of Gas-Phase Pollutant over Paris** (Lya Lugon* and Karine Sartelet, *Center for Atmospheric Research (CEREA), France*)
3:30-3:45 pm	**Source Apportionment of $PM_{2.5}$ in Chengdu with High Resolution Brute-Force CMAQ Modeling Technology** (Chengwei Lu*, Ye Deng, Tianyue Zhang, Xinyue Yang, Danlin Song, and Qinwen Tan, *Chengdu Academy of Environmental Sciences, Chengdu, China*)
3:45-4:00 pm	**Real-time Forecasting of Air Pollution using WRF-Chem Model over New Delhi** (Aman W. Khan* and Prashant Kumar, *Space Applications Centre, ISRO, India*)
4:00-4:15 pm	**Particulate Matter Forecasting using WRF-Chem Model over Ulanbator** (Tergel Shijirtuya* and Aman W. Khan, *National Agency for Meteorology and Environmental Monitoring of Mongolia, Mongolia*)
Session 4	**Open Discussions: Collaboration and Funding Opportunities (Leaders: Yang Zhang and Pietro Bernardara)**
4:15-5:00 pm	**Collaboration and Funding Opportunities on Model Development and Application using SinG and Other Urban/Street Network Models**
5:00 pm	**Adjourn**