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

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

Final 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 Pietro Bernardara, Yang Zhang, 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)**
9:30-9:45 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)**
9:45-10:15 am	**Overview on Current Development and Application of SinG model** (Karine Sartelet, *Center for Atmospheric Research (CEREA), France*)
10:15-10:45 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*)
10:45-11:15 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*)
11:15-11:45 am	**CALIOPE-Urban v1.0: Coupling R-LINE with 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*)
11:45 am-1:15 pm	**Lunch Break**
Session 2	**Street Level Air Quality Modeling in Asia and South America (Invited Presentation) (Co-Chairs: Youngseob Kim and Sunling Gong)**
1:15-1:45 pm	**Development of a New System to Simulate Street Level Pollution** (Sunling Gong* and Jianjun He, *Chinese Academy of Meteorological Sciences, China*)
1:45-2:15 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*)
2:15-2:45 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*)
2:45-3:15 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*)
3:15-3:30 pm	**Coffee Break**
Session 3	**Urban Air Quality Modeling and Forecasting (Platform Presentation) (Co-Chairs: Yelva Roustan and Hongquan Song)**
3:30 -3:45 pm	**Street-in-Grid Modeling of Urban Air Pollution Using WRF/Chem-MUNICH over Xi'an, a typical northwestern city in China** (Ruiguang Xu*, Litao Wanga, Mengyao Qi, Le Zhao, Xiaohan Lu, Xuexi Tie, Junji Cao, Ming Fan, Qing Wang, Zhiguang Xue, Ying Shi, Kedong An)
3:45-4:00 pm	**Multi-scale Modeling of Gas-Phase Pollutant over Paris** (Lya Lugon* and Karine Sartelet, *Center for Atmospheric Research (CEREA), France*)
4:00-4:15 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*)
4:15-4:30 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)**
4:30-5:00 pm	**Collaboration and Funding Opportunities on Model Development and Application using SinG and Other Urban/Street Network Models**
5:00 pm	**Adjourn**