

Title: 11th International Cloud Modeling Workshop (ICMW) 2024
Date: July 8-12, 2024
Venue: Yonsei University, Seoul, South Korea
Sponsor: Yonsei University
Organizers: Lulin Xue (xuel@ucar.edu) and Seong Soo Yum (ssyum@yonsei.ac.kr)
Accommodation: See hotel information below

Scientific objective and scope of the meeting

Following tradition, the 11th International Cloud Modeling Workshop (ICMW) 2024 will be held at Yonsei University in Seoul, South Korea, in July 2024, the week before the International Conference on Clouds and Precipitation (ICCP). In the ~40 years history of the ICMW, each workshop provided a platform for the cloud modeling community to discuss the current issues, progress, and challenges based on several well-designed cases.

Recent workshops identified aerosol-microphysics-dynamics interactions as a research focus by the cloud modeling community. The cross-scale nature of this topic requires innovative modeling strategies, approaches, and tools. The novel case design of reproducing cloud chamber experiments allows different dynamic frameworks and microphysics approaches to be thoroughly tested in a well-constrained turbulent environment and carefully validated against detailed observations, which was highlighted in the 10th ICMW 2021. Recent advancements in the Lagrangian microphysics approach made it possible to address aerosol-microphysics-dynamics interactions in the most natural way at subcloud and single-cloud scales. Mesoscale-microscale coupling and Lagrangian LES become popular approaches to address detailed aerosol-microphysics-dynamics interactions under the influence of large-scale forcing. Property-based bulk microphysics schemes have shown advantages in representing mixed-phase clouds when validated against radar observations.

The 11th ICMW 2024 includes 5 unique cases applying different aspects of the recent modeling innovations. The cases and case leaders of 11th ICMW 2024 are listed in the following. The discussions about the case results will be led by corresponding leaders. Summary of the workshop and future plan will be covered at the end of the workshop. We welcome all who are interested in this workshop to join us at Yonsei University in July.

Case A. COMBLE Model-Observation Intercomparison. Dr. Tim Juliano (tjuliano@ucar.edu) from NCAR, Drs. Florian Tornow (ft2544@columbia.edu) and Ann Fridlind (ann.fridlind@nasa.gov) from NASA

Case B. ACE-ENA Marine Stratocumulus Case. Dr. Fan Yang (fanyang@bnl.gov) from BNL and Dr. Kyoungock Choi (choiko@uw.edu) from University of Washington

Case C. Pi Chamber Mixed-Phase Cloud Simulation Case. Dr. Aaron Wang (aaron.wang@pnnl.gov) from PNNL, Dr. Steven Krueger (Steve.Krueger@utah.edu) from University of Utah and Dr. Sisi Chen (sisichen@ucar.edu) from NCAR

Case D. Simulation of an Isolated Cumulus Congestus Cloud with Collision-Coalescence using Lagrangian and Bin Microphysics Approaches. Dr. Kamal Kant Chandrakar (kkchandr@ucar.edu) and Dr. Noémi Sarkadi (sarkadin@gamma.ttk.pte.hu) from University of Pecs

Case E. Wintertime Orographic Precipitation Case from ICE-POP 2018 Campaign. Dr. Kyo-Sun Lim (kyosunlim@knu.ac.kr) from Kyungpook National University, Dr. Jason Milbrandt (jason.milbrandt@ec.gc.ca) from Environment Canada and Dr. GyuWon Lee (gyuwon@knu.ac.kr) from Kyungpook National University

Proposed agenda

Monday July 8

9:00 to 9:30	Introduction, scope, and goals
9:30 to 10:30	Introduction of each case
10:30 to 11:00	Break
11:00 to 12:00	Contributing talks
12:00 to 14:00	Lunch break and social time
14:00 to 15:30	Part 1 of CASE A discussion
15:30 to 16:00	Break
16:00 to 17:30	Part 2 of CASE A discussion

Tuesday July 9

8:30 to 10:00	Part 1 of CASE B discussion
10:00 to 10:30	Break
10:30 to 12:00	Part 2 of CASE B discussion
12:00 to 14:00	Lunch break and social time
14:00 to 15:30	Part 1 of CASE C discussion
15:30 to 16:00	Break
16:00 to 17:30	Part 2 of CASE C discussion

Wednesday July 10

8:30 to 10:00	Part 1 of CASE D discussion
10:00 to 10:30	Break
10:30 to 12:00	Part 2 of CASE D discussion
12:00 to 14:00	Lunch break and social time
14:00 to 15:30	Part 1 of CASE E discussion
15:30 to 16:00	Break

16:00 to 17:30 Part 2 of CASE E discussion

Thursday July 11

8:30 to 10:00 Summary of each case
10:00 to 10:30 Break
10:30 to 12:00 Contributing talks
12:00 to 14:00 Lunch break and social time
14:00 to 18:00 Excursion (TBD)
19:00 to 21:00 Group Dinner

Friday July 12

8:30 to 10:00 Summary of the workshop
10:00 to 10:30 Break
10:30 to 12:00 Future plan of ICMW
12:00 Workshop adjourns.

Hotels near Yonsei University

1. Ever8 Serviced Residence

Address: 7, Sinchonnyeok-ro, Seodaemun-gu, Seoul, Republic of Korea

Contact Information Tel: +82-2-364-0807

Website: <http://www.ever8.co.kr/>

Distance from Yonsei Univ. 1.1 km (8 min by car, 24 mins on foot)

2. Monday Cracker Hongdae

Address: 40-8, Yeonhui-ro 1-gil, Mapo-gu, Seoul, Republic of Korea

Contact Information Tel: +82-10-2741-2610

Website: <https://www.mondaycracker.com/>

Distance from Yonsei Univ. 1.2 km (10 min by car, 23 mins on foot)

3. Wegoinn Hostel

Address: 141, Sinchon-ro, Seodaemun-gu, Seoul, Republic of Korea

Contact Information Tel: +82-2-393-9922

Website: <https://www.wegoinn.com/>

Distance from Yonsei Univ. 1.5 km (8 min by car, 30 mins on foot)

4. HOLIDAY INN EXPRESS SEOUL HONGDAE

Address: 188, Yanghwa-ro, Mapo-gu, Seoul, Republic of Korea

Contact Information Tel: +82-2-768-3000

Website: http://www.holidayinnexpress.com/seoul_hongdae

Distance from Yonsei Univ. 1.5 km (11 min by car, 30 mins on foot)