

Building Collaborations Around TRACER Science Objectives

Breakout Session 2 Monday 07 August 4:15 – 6:15

Conveners: Mike Jensen, Anita Rapp, Chongai Kuang

04:15 – 04:20 Mike Jensen (Brookhaven National Laboratory [BNL]): Intro and Goals of Session

04:20 – 04:30 Maria Zawadowicz (BNL): Variability of aerosol/CCN properties

04:30 – 04:50 Discussion

04:50 – 05:00 Milind Sharma (Texas A&M): Regional variability of thermodynamics/Sea Breeze

05:00 – 05:20 Discussion

05:20 – 05:30 Kelcy Brunner (Texas Tech U.): Convective updraft microphysical properties

05:30 – 05:50 Discussion

05:50 – 06:00 Stephen Saleeby (Colorado State U.): TRACER - Model Intercomparison Project

06:00 – 06:15 Discussion

1. Identify complementary efforts
2. Build collaborations
3. Define potential roadblocks and other issues

Links to CPMSG objectives

Convection Problems & Roadblocks

- Poorly observed, localized, 4-D environment has significant impacts on dynamics and microphysics

Discussion of aerosol and thermodynamic variability (spatial and temporal) are directly aimed at using the TRACER and external datasets to describe the 4-D environment to help constrain, inform and/or evaluate convection analysis and modeling.

- Uncertainties in retrievals of velocity and microphysical properties.

Discussion of convective updraft microphysical observations may go into issues related to the uncertainties

Other CPMG subtopics

- Develop ideas for joint observation-modeling projects

The discussion of the ACPC TRACER Model Intercomparison Project (MIP) will be directly aligned with this subtropical area. Leveraging a previous MIP effort, this one will specifically aim to take advantage of the unique measurements during TRACER to compare and evaluate convective simulations and aerosol-convection interactions.