

Impacts of BC aerosol mixing state

Objective: Examine the impacts of black carbon mixing state on cloud microphysical properties

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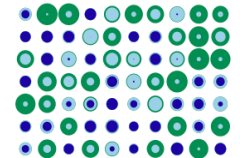
Funding status: funded

Challenges or needed resources/collaborators: none

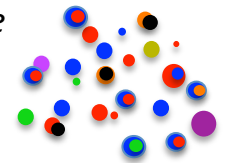
Summary of progress:

- Perform particle-resolved simulations and cloud parcel simulations.
- Examine response of cloud microphysical properties to change in BC emission and BC mixing state.
- Examine error in cloud microphysical properties due to neglect of BC mixing state.
- A paper about black carbon mixing state impacts on cloud microphysical properties is accepted. Another one is in preparation.

PartMC-MOSAIC



Particle level-information of BC mixing state



Adiabatic cloud parcel model



Cloud microphysical properties

