

Deliverable D8: Validating PR model simulations with observations from CARES and TCAP

Objective: Design and perform particle-resolved model studies that simulate particular episodes during CARES and during TCAP with emphasis on connecting single-particle field observations with particle-resolved model output.

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Collaborators: Alla Zelenyuk, Larry Berg, Ryan Moffet, Mary Gilles

Funding status: funded/proposed

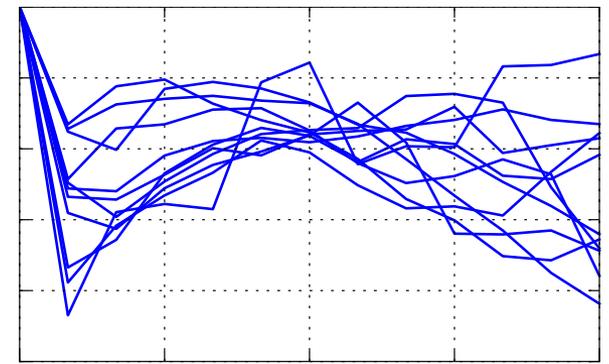
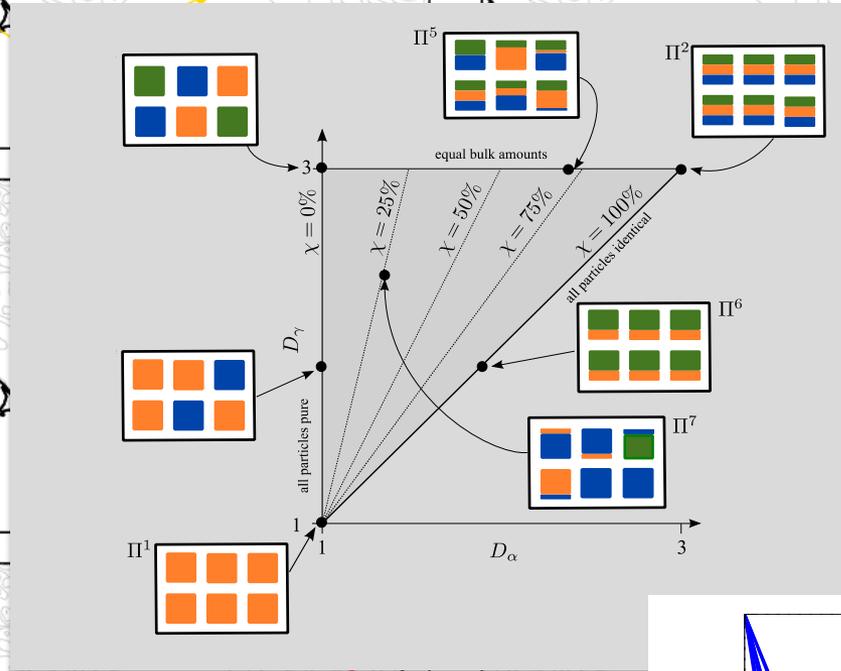
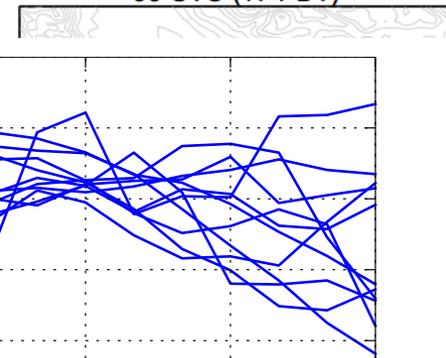
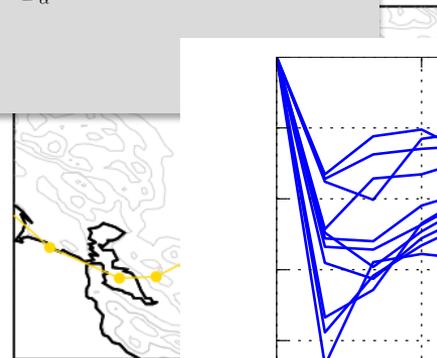
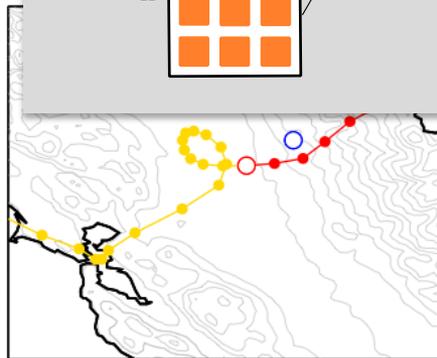
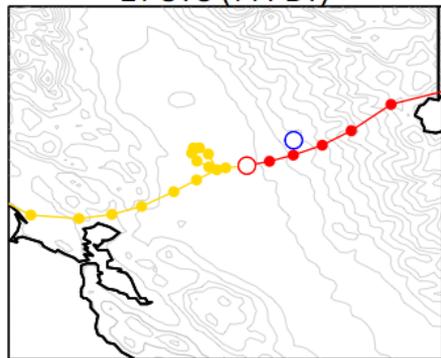
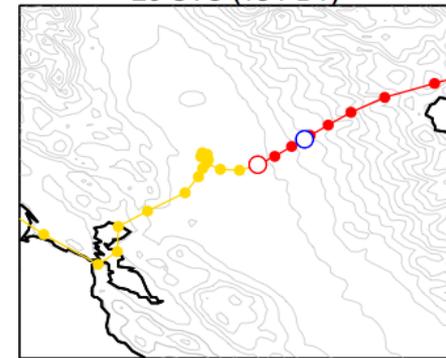
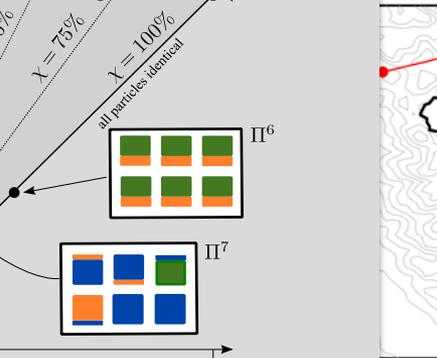
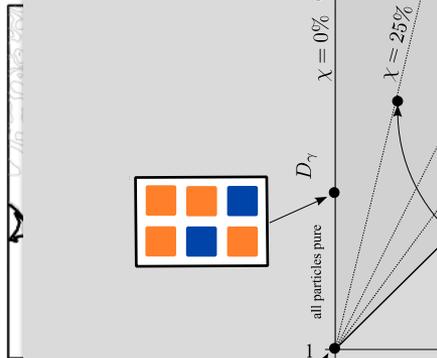
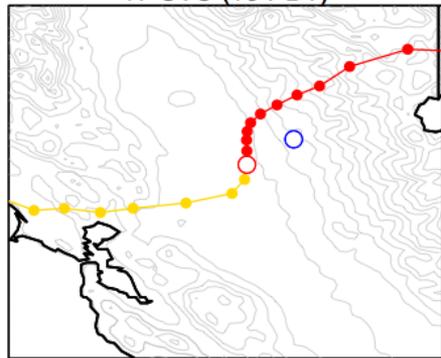
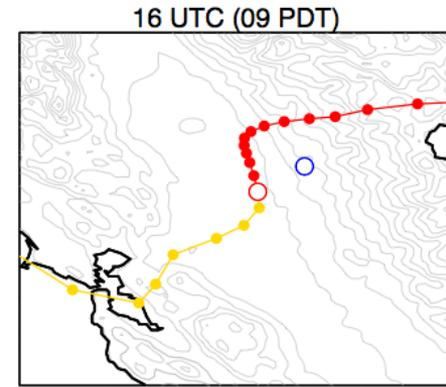
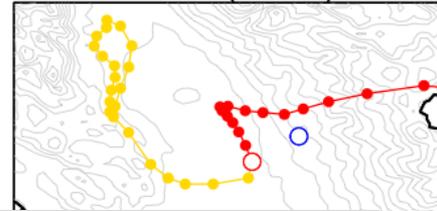
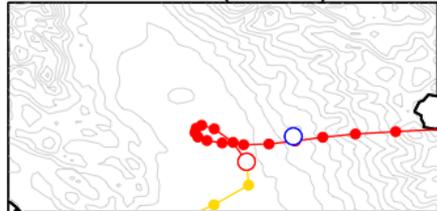
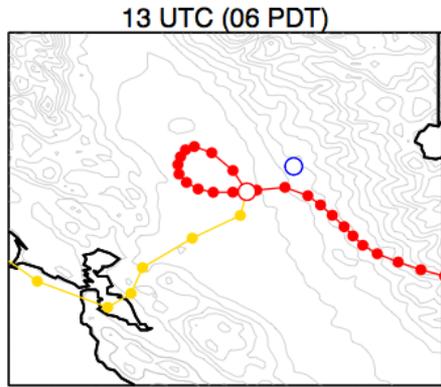
Challenges or needed resources/collaborators: Mapping particle-resolved observations to/from particle-resolved model output.

Summary of progress:

Set up initial pipeline to perform PartMC-MOSAIC trajectory simulations for CARES using WRF, and compute mixing state index χ .

Pipeline set up: Field campaign -> WRF -> PartMC -> mixing state information

Start times of 24-h trajectories on June 15, based on WRF
 14 UTC (07 PDT) 15 UTC (08 PDT)



forward trajectory at T0

backward trajectory at T0