

Using ARM Observations to Validate and Improve Cloud Microphysical Schemes

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Two major efforts of project

- **Warm clouds.** We will use microphysical retrievals from Nauru and SGP (including CLASIC), together with aircraft observations (RICO) to assess model simulations of shallow cumulus.
- Focus is on treatment of turbulent-microphysical interactions and impact on optical properties.

- **Mixed-phase and ice clouds.** We will use microphysical retrievals and aircraft observations from NSA (MPACE, ISDAC), SGP (March 200 cirrus), and TWP-ICE.
- Focus is on testing and further development of a new ice microphysics scheme that represents a novel treatment of ice growth.

