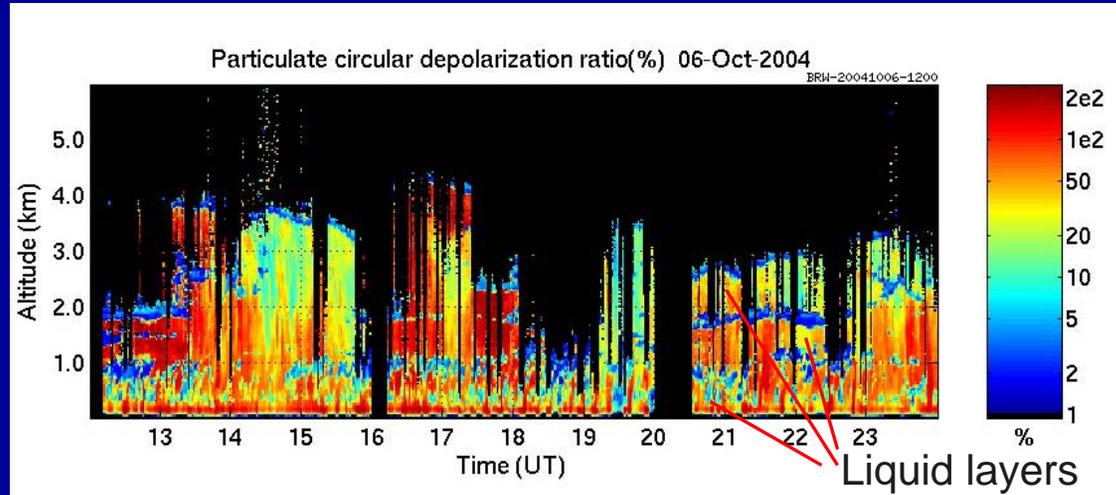
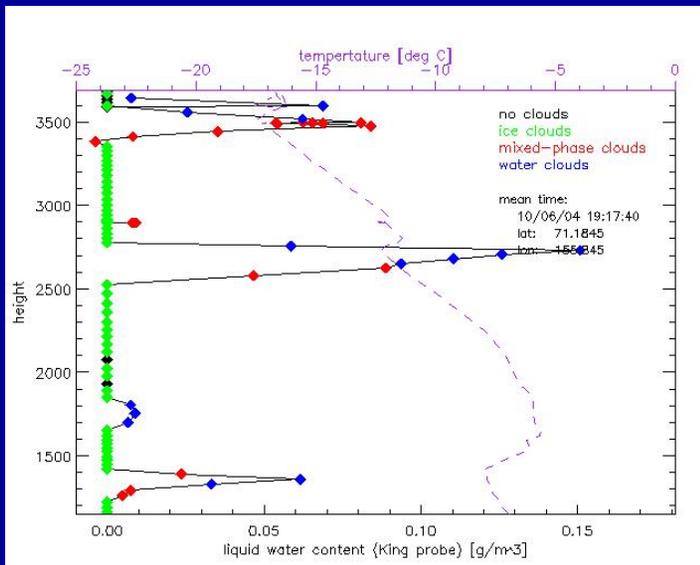


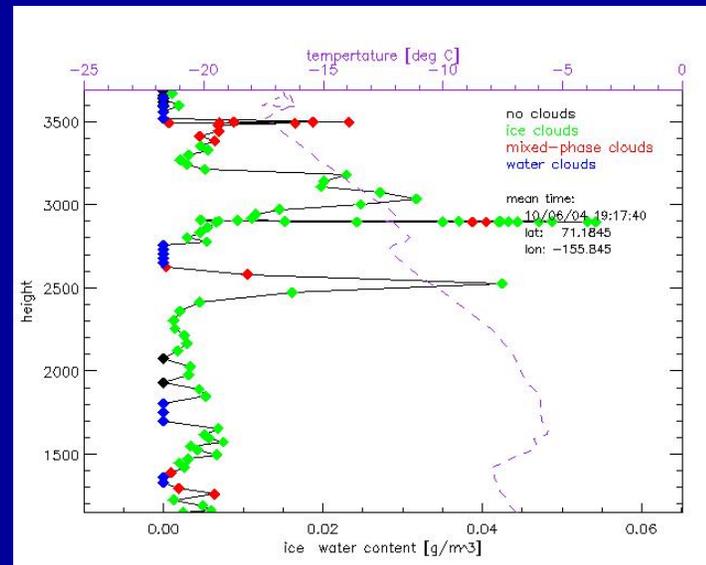
MPACE Period A



Aircraft liquid water content



Aircraft ice water content



Key questions for Period A

- How does increasing complexity of the cloud microphysics scheme impact model's ability to simulate mixed-phase layers, and how does this differ from Period B?
- Are model's able to better simulate either the upper or lower mixed-phase layers? How do the thermodynamic processes differ between the upper and lower layers in models able to capture multi-layered structure? Are these models also able to capture the distinct well-mixed layers?
- How important is vertical resolution in capturing these fairly thin mixed-phase layers?
- What is the role of ice precipitation in depleting liquid in the lower layers, and how does this differ among the models? Is there any analogue to the "seeder-feeder" process in mid-latitude cloud systems?
- Does the ability to capture smaller-scale circulations in CRM's improve the simulation of the multi-layered structure relative to the SCM's?

Logistics/timing

- Initial analysis of results can begin in April after final model submission deadline
- Feasibility of trying to complete at same time as Period B? Do we care?
- Comments/questions/suggestions:

morrison@ucar.edu