Steering Committee Meeting Agenda
January 5-6 (half day), 2011
FL1, Room 2198, EOL Atrium

Day 1 (Wednesday 5-Jan)

8:30-Continental Breakfast
9:00 Statement of Goals of Meeting (Heymsfield/Field/Rogers)
9:15 Agenda (Heymsfield)
9:30 Funding status of investigators and research goals, with time span (Heymsfield)
10:00 Break
10:30 New Relevant Research/Findings of Steering Committee Members (TBD) (10 minute presentations)

- Hudson
- Demott: Ice nuclei and their relation to ice formation in clouds
- Lawson (Bruintjes): How coalescence affects ice formation in clouds
- Wang: Ice generation in altocu near the -10C level due to APIPS
- Lasher-Trapp: Lessons learned from RICO
- Jorgen Jensen: Obsevations from PREDICT, GNI for ICE-T
- Jeff Stith: Some observations from PREDICT

12:00 Lunch

1:00 ICE-T Objectives (**see Appendix A** below) and Flight Plans (Heymsfield/Field/Rogers)
2:00 Tuning of ICE-T Science Objectives (Heymsfield/Field)

a. Forecasting (UK Met. Office), Clearance Issues, How far to extend, Lagrangian Sampling, coordination to Bjorn at Barbados, Coordination with Olga

3:00 Break
3:30 Instrument Payload and Readiness (Rogers/Stith/Schanot/Lawson/Wang)
4:00 Further discussion of Flight Plans (Rogers/Stith)
4:30 Project schedule:

- Steering Committee planning workshop (today)
- ICE-T Workshop (~1 March)
- Flight mission planning (today>June)
  - Instrumentation upload to C-130 (Schanot)
  - Flight readiness review, safety briefings (Schanot)
  - Test flights
  - Ferry to St Croix
- Research Period
- Ferry home
- Data workshops, conferences

5:00 Adjourn for day

Dinner at Walnut Brewery 6pm

Day 2 (Thursday 5-Jan)

8:30 Continental Breakfast
9:00 Education/outreach activities; student involvement (Sonia)
10:15 Break
10:45 Field Catalog and Data Access Policy (Williams)
11:15 Decide on dates and generate agenda for the March planning meeting and list action items from January meeting.
Other items as needed.

Appendix A
ICE-T Objectives

1. Attempt to observe the conditions leading to glaciation of maritime cumulus with top temperatures warmer than -10C.

2. Characterize the aerosol as CCN and IN and investigate the dependence on temperature, size and aging (special interest in dust and biological material).

3. Characterize the link between warm rain and primary and secondary ice processes as a function of time and environmental conditions. As part of this characterization, estimate the fraction of vapor flowing into cloud base (the cloud base mixing ratio) that arrives at the 0C, -5C and -10C temperature levels in the form of vapor+supercooled liquid water+ice? How does dust affect these fractions? How does this depend on the cloud lifecycle?

4. Determine if primary ice nucleation can explain the onset and glaciation of maritime cumuli.

5. Determine whether secondary ice formation processes are critical to the glaciation of cumuli. If so, what concentration of primary IN are sufficient to trigger them and how does the process work?

6. Determine whether mid-level entrainment plays a role in feeding CCN and IN into maritime convective clouds.

7. Test primary and secondary ice nucleation schemes in models and evaluate them against observations.

8. Determine whether APIPs might have influenced earlier observations in tropical clouds.

Cloud Types to be Studied

Developing Cumulus Congestus