Flight summary: Saturday August 9, 2008

Today Saturday August 9, it rained heavily at times, interspersed with sunshine.

We were able to fly the first mission with MAC-3 (aerosol radiation):
(All altitudes are AGL. Ground level at 1175 ft)
Takeoff and in circular 2 miles radius orbit at 1000 ft 15 minutes (check communications and engine performance)
Climbed to 3000 ft for 45 minutes. In racetrack pattern, 9 miles long, north south direction (in hope to catch the westerly flows) right above the main runway. It rained very heavily during this time, but the aircraft was safely above the rain clouds. Everyone was soaking wet. The ground station was placed inside the rear of the van. MAC-5 on the tarmac was covered with a tablecloth, the only tarp-like thing that Ramana could find.
Descended to 2000 ft for 30 minutes
Descended to 1000 ft for 30 minutes, then landed.

Then we launched MAC-5 (cloud physics with CDP and LWC) in scattered rains.
Takeoff (climbed through thick and low clouds at 500 ft and up) orbit at 1000 ft 15 minutes (check communications and engine performance)
3000 ft 30 minutes (engine performance and fuel burn) (9 miles long racetrack)
2000 ft 30 minutes (mostly in clouds)
1500 ft 45 minutes (mostly in clouds), then landed.

This was the cloudiest piece of atmosphere that MAC-5 has ever flown through. It could be said the Manta is quite a remarkable aircraft.

We left our hotel early in the morning before breakfast, and then got stuck along the runway doing the missions, no lunch. But flying unmanned aircraft in scattered showers was very exciting, playing cat-and-mouse but mostly mouse with the rains, everyone was on edge the whole time, thus food was not in our minds.

Ramana said he'll send back today data on Monday, since tomorrow Sunday we still have a heavy day ahead of us. Forecasts call for rains to stop by early afternoon tomorrow, we hope so.

John Walker of DMT will leave for home tomorrow. He has done great job keeping the PASS 3 and CCN going. He conducted the last training session tonight to Ramana and 2 Korean students. Monday will be inspection day 1, and Tuesday either continuation of inspection or would be a flight day for us, we hope.

SangWoo Kim, SoonChang's postdoc will arrive on Monday August 11 to lead the ground obs program.

We will test fly MAC-6 (aerosol radiation) tomorrow. Rains will stop by noon. We will try for longer duration, weather permitting, to confirm fuel consumption calculation.