**April 21, 2016 - Kessler**

UTC = local time + 6hrs

Flights conducted 15-20 yards away from the Washington Mesonet Tower

Front

Back

Windsonde 249

Windsonde 247

Windsonde 246

Windsonde 248

All windsondes located under the rotors and shielded by small PVC pipes (not in contact). See pictures below.

Flight 1

Start Battery: 12.42 V

Start Direction: 100° E

Windsondes: 248 & 249

Ascent Start: 12:45.08 UTC

12:46.05 Reached 50 m

12:47.00 Reached 97 m

Max Height: 97 m

12:47.47 Coming down

Landed: 12:50.35 UTC

End Battery: 11.5 V

Remarks: We had some problems with Mission Planner so it had to be flown manually. There is a restriction on the copter such that it cannot fly above 97 m when flown manually.

Flight 2

Start Battery: 11.3 V

Start Direction: 100° E

Windsondes: 248 & 249

Ascent Start: 12:54.03 UTC

12:55.22 Reached 50

12:56.32 Reached 97

Max Height: 97 m

12:56.38 Coming Down

Landed: 12:59.00 UTC

End Battery: 10.8 V

Remarks: We had some problems with Mission Planner so it had to be flown manually. There is a restriction on the copter such that it cannot fly above 97 m when flown manually.

Flight 3

Start Battery: ?

Windsondes: 246 & 247

Ascent Start: 13:21.11 UTC

13:21.26 Came down and went back up

13:21.55 Hovering and moving around

Landed: 13:22.35 UTC

End Battery: ?

Remarks: Sonde 246 was on the sun side so it was reading higher temperatures than the other sonde. We also noticed that running the rotors affected the temperatures the sondes measured. When the rotors were turned on, the temperature of Sonde 246 immediately cooled down. Sonde 247 was not affected by the rotor motion because it was not being warmed by the sun and the aspiration didn’t change its temperature. We are going to try to start the rotors and arm the copter to let the temperatures of the sondes even out before starting to fly. When we were actually able to fly, it was acting weird, flying around, and not staying still. The copter stopped communicating with the controller and Mission Planner so we were unable to see the battery voltages.

For next time: We need to figure out what is going wrong with the copter and Mission Planner.









