

Daily status June 30

AHATS daily status 6/30/08

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Summary: Chenning and Khung working on completion of pressure sensor deployment. They may not finish until Tuesday since they are waiting for delivery of tubing connectors, but the lower 9 sonics are now connected. Chenning is burying the reference cylinder this morning.

We continue to have intermittent problems with the wireless data transmission from the array to the base.

Good wind direction: For the period 6/25 17:00 through 6/30 10:00, we have 41.75 hours of data periods of length 20 minutes or longer with wind directions from 195-355 degrees. This includes 12 periods of length greater than one hour and equates to good periods 37%(!!) of the time.

Note that the daytime periods may be compromised by work on the array, e.g. installing the pressure sensors.

Profiles:

missing all but 1.5 and 3 m sonic data after 15:00 june 30

spd: ok
dir: ok
u*: ok
w'tc': ok
diag: ok up until 12:00, June 30
T: ok
RH: 4m may be low by less than 1% RH
P: okay

(+/- = ~1 std deviation)

Upwind (hts=3.5):

some missing data June 29, 06:00 - 16:00

spd: ok, +/- 15 cm/s
dir: ok, +/- 5 deg
tc: ok, +/- 0.2 deg
w'w': ok, +/- 0.01 m²/s² (30 min avg for second moments)
sigma_w/u*: ok (1.3 at night)
tc'tc': ok, +/- 0.1 degC²
u*: ok, +/- 0.04 m/s
w'tc': ok, +/- 0.02 m/s degC
diag: ok, mostly << 1 but some spikes prior to 6/29 16:00 that are likely caused by samples lost during rf transmission; local data storage should be okay.

Lower (hts=3):

missing sonic 2b after 6/29 18:50 6/29; restarted 6/30 16:50
missing data from 7b-13b (downwind-2) 6/29 05:45 - 15:10

spd: ok, +/- 20 cm/s
dir: ok, +/- 5 deg
tc: ok, +/- 0.25 deg
w'w': ok, +/- 0.015 m²/s² (30 min avg for second moments)
sigma_w/u*: ok (1.3 at night)
tc'tc': ok, +/- 0.1 degC²
u*: ok, +/- 0.04 m/s
w'tc': ok, +/- 0.02 m/s degC
diag: ok, mostly << 1 but spikes after 12:00 6/30 on downwind-1.

Upper (hts=4):

missing sonics from downwind-2 adam 05:45 - 15:10, 6/29: 7t--11t

spd: ok, +/- 20 cm/s
dir: ok, +/- 5 deg; 6t is about 6.5 degrees off from profile sonic
tc: ok, +/- 0.2 deg
w'w': ok, +/- 0.02 m²/s² (30 min avg for second moments)
sigma_w/u*: ok (1.3 at night)
tc'tc': ok, +/- 0.1 degC ²
u*: ok, +/- 0.05 m/s
w'tc': ok, +/- 0.025 m/s degC
diag: ok, mostly << 1 but spikes after 12:00 6/30 on downwind-1.