Daily status, July 8

AHATS daily status 7/08/08

Staff: Maclean, Horst, Khoung, McIntyre; Semmer arrived today

Summary:

We will count July 7 12:30 PDT as the new start of (good) operations.

A revised configuration schedule, accounting for the start and stop
times of reconfiguration days:

Config	z (m)	S (m)	Dates	Length
1	3-4	4	7/7-15	8.7 days
2	3-4	1.3	7/18-23	6.6 days
3	7-8	1.3	7/25-30	6.6 days
4	7-8	0.43	8/2-9	8.6 days

Gordon replaced the serial board in the downwind-2 adam, which should
eliminate the outages we have been experiencing there.

For more details, see the ahats logbook at https://wiki.ucar.edu/display/ahatslogbook

Good wind direction: For the period 7/7 12:30 through 7/8 12:30, we have
only 3.33 hours (14%) of good data. We no longer are getting good wind
directions either day or night.

Pressure:

11b not connected. Pressure, but not temperature, bad at 9t.
Diurnal variation of fast pressure is an order of magnitude less
than ambient pressure.

Profiles:

Missing data 17:30 - 18:50, July 7 (power outage at trailer)

diag: spikes around 14:30, July 7.
samples.sonic: same spikes
spd: ok
dir: ok
w: ok
tc: ok
sigma_w/u*: ok (1.3 at night)
w'w': ok
u*: ok
w'tc': ok
T: ok
RH: 4m may be low by less than 1% RH
P: okay

Upwind (hts=3.5):

(+/- = ~1 std deviation)
Missing data 17:30 - 18:50, July 7 (power outage at trailer)
Missing sonic 7u 13:00 July 7 - 10:25 July 8 (bad port on new serial card)

diag: ok
samples.sonic: ok
spd: ok, +/- 15 cm/s (6u has +15 cm/s offset in u)
dir: ok, +/- 5 deg
w: ok, +/- 5 cm/s
tc: ok, +/- 0.2 deg
w'w': ok, +/- 0.01 m^2/s^2 (30 min avg for second moments)
u*: ok, +/- 2 cm/s
sigma_w/u*: ok (1.3 at night)
w'tc': ok, +/- 0.02 m/s degC
tc'tc': ok, +/- 0.05 degC^2

Lower (hts=3):

Missing data 17:30 - 18:50, July 7 (power outage at trailer)
Missing sonics 7b-13b 10:15 - 10:40 July 8 (swapping serial board)

diag: ok
samples.sonic: ok
spd: ok, +/- 20 cm/s
dir: ok, +/- 6 deg
w: ok, +/- 5 cm/s
tc: ok, +/- 0.27 deg
w'w': ok, +/- 0.01 m^2/s^2 (30 min avg for second moments)
u*: ok, +/- 3 cm/s
sigma_w/u*: ok (1.3 at night)
w'tc': ok, +/- 0.02 m/s degC
tc'tc': ok, +/- 0.1 degC^2

Upper (hts=4):

Missing data 17:30 - 18:50, July 7 (power outage at trailer)
Missing sonics 7t-11t 10:15 - 10:40 July 8 (swapping serial board)

diag: ok
samples.sonic: ok
spd: ok, +/- 20 cm/s
dir: ok, +/- 5 deg; 6t is about 6.5 degrees off from profile sonic
w: ok, +/- 6 cm/s
tc: ok, +/- 0.2 deg
w'w': ok, +/- 0.01 m^2/s^2 (30 min avg for second moments)
u*: ok, +/- 4 cm/s
sigma_w/u*: ok (1.3 at night)
w'tc': ok, +/- 0.02 m/s degC
tc'tc': ok, +/- 0.1 degC ^2