Daily status, July 1

July 1, 19:38 CDT
Dan Rajewski (in Ames)

Summary: Stations 1-4 operational, no ISFS staff on site
    Krypton hygrometer at stn 4 needing lens cleaning
    winds backing to SE or ESE during the overnight
    strong southerly winds, warm and very moist daytime

Vdsm: 13.5-13.9 V during day, down to 12.4 at night
P: ok, relative pressures between 1-2 and 3-4 about 0.25 mb during the night, closer
agreement in the daytime

T.2m: ok, stn 1 and 2 slightly cooler than 3-4 around 6:00-6:30 CDT
    stn 3 and 4 slightly cooler (0.5 C) than 1-2 in daytime 16:00 CDT
    stn 4 cools (t2m < t10m) 1 hr earlier in the evening than at stn 1-3

RH.2m: 80-100% at night; stns 1 & 2 few %RH less than stn 3; stn 3 few %RH less than stn 4
    55-65 % during day stns 1-3 lower than stn 4
H2O.2m: day: stns 1-2 are ~1 g/m^3 less than stn 3, stn 3 ~1 g/^3 less than stn4
    stn 1 within 0.5 g/m^3 at night of stns 2,3, stn 4 is 0.5 g/m^3 more than stn 2-3

Wetness: none

T.10m: ok,
RH.10m: ok, 80-90% at night
H2O.10m: ok, 1 & 4 drier than 2 & 3

Spd.10m: ok, stn 1 lower than 2-4 most of night; stn 1 lower than 2-4 in day, stn 4 highest speeds
Dir.10m: ok, 1 & 3 and 2 & 4 agree best last night, no easterly flow indicated at stn 2-4 at 6:00

T.10m - T.2m: ok, diurnal cycle as expected, very similar at all sites; slight cooling at stn4 as mentioned above for T.2m
H2O.10m - H2O.2m: stn 1 > 0 last night, stn 4 < 0 ~1 g/m^3

spd.4.5m: ok, see comments for spd.10m
dir.4.5m: ok,
w.4.5m: ok, stn 2 slightly w>0 night, more in the day; stns 3 & 4 have more w<0 at night, and more w<0 for daytime
tc.4.5m: ok, all sites agree within +/- 0.5 degC
ldiag: ok

vh2ov: below 100 mV, but h2o up 23 gm/m^3
kh2o: stn 4 needs the sensor cleaned
h2o(licor): ok
lidiag (licor): ok

TKE.4.5m: ok, lower at stn 1 than 2:4 last night
w'w': ok, see comment for TKE (also u'u' and v'v')

w'h2o': ok, sometimes highest at site 4 during daytime (previous day stn3 had highest vapor flux >0)
h2o'h2o': ok
kh2o'kh2o': not ok; huge variance at stn 4 continuing beyond June 30 (sensor needs cleaning)

w'co2': ok, daytime flux greater (more negative) at 3 than 1
co2'co2': ok, see comment for w'co2'