

S9 TRH woes

At 0310 this morning, S9's TRH Ifan jumped to 330mA and stayed there for 30min. There was heavy rain at the time. If the PIC electronics had been working properly, this couldn't have happened. (The PIC would have shut it down after one sample.) However, Iload doesn't show a jump in current at all, indicating that this high Ifan reading wasn't real.

About 0340, the sensor stopped reporting completely, though Iload if anything increased a bit.

I manually connected to the sensor at 0810. Initially, rserial showed that no data were coming in and no response to R, thus the PIC was hung. With tio 2 0/1, got the PIC running again. Ifan was immediately 0 (didn't have one sample high and get turned off by the PIC). Iload if anything got lower at exactly this time, hinting that the fan might actually be off now.

However, the temperature reading cooled during the first 5 min after this restart. Usually, I would say that the sensor had heated up in the sun and that the cooling indicates a fan that was stopped and is now running. Rsw.in only shows 20 W/m2, though (it is raining, with lots of cloud), so it is hard to believe that the sensor would have that much radiation heating. The only other source of heat could be a stuck fan, but I don't quite believe this either.

5 min after being restarted, the temperature agrees with the adjacent S1.

Ultimately, we don't know if the fan is running or not to determine if we have good T,RH data. (But errors would be small in the cloudy, windy conditions now.)