

Daily status, 3 Dec

A somewhat frustrating day. We started with the plan to instrument the short towers that have been erected. (Today, we confirmed that tse12 is built and tse10 has two (unguyed) sections in the air.) Already, though, two of those towers need booms from Samortecnica that we do not yet have, so we wouldn't have been able to complete this job. Nevertheless, I gathered what we thought we needed from the seatainer (requiring two pickup trips) and started kitting these 5 towers. Then, we ran into problems:

- The EC100 boxes (for both the CSAT3As and EC150s), were not set to binary mode. It took quite a while to figure out that this can be done by connecting the USB port and, via minicom, setting "+", then "X" (with some yesses to confirm) to establish binary mode.
- Even then, the CSAT3As show errors that require the grounding solution we had found in FLAB. Unfortunately, we can't seem to locate the straps that Rick made. We have some braid to make up more, but it would be nice to locate the prebuilt ones!
- There were lots of nan's in the data. These mostly are due to missing cal_files, so we had to make about 8 so far.
- 4-component radiometer values were coming in on the wrong address. Changed sensor_catalog to set the correct range of I2C addresses.
- Even so, we never got RIW data – there are no Wisard messages getting through the motes from the K&Z pyrgeometers. This result was consistent through a change of pygs and motes. Semmer suggested looking at the Binder wiring, but it seemed to be the same as for the psp's. We can try to build a test cable, based on the Pi hat USB console module since there apparently are TTL level signals out of the radiometers.
- We noticed that we forgot to bring single-channel wisard boards for the wetness sensors. We only need 3, for the 3 darkhorses.
- We also will have to figure out how to transport darkhorses with a short-bed pickup!

In the middle of all this diagnosis, moderate rain started up with low cloud covering the ridges, so it didn't seem to be a nice day for driving on the ridge or climbing anyway. Rain is forecast to continue tomorrow.

We also slipped in a slight reorientation of the base WiFi access point. I've calculated that it needs to point up by 230m across 2800m, or 4.7 degrees, and the mount only allows pitching up by 3 degrees. However, by swapping the top and bottom brackets, we can tilt up up to 10 degrees. This angle is now set to ~4.5 degrees.

We've decided to take our first (and probably only) day off tomorrow. We assume that Monday will be busy preparing rsw02 for INEGI to instrument, while starting with me01+ ourselves. We also need to revisit tse13 to replace the bad POE cable (I verified that it had a short) that Per removed.