

Nanobarometer at tse06 reporting at wrong rate

The nano-barometer at tse06 reports at a rate of 30Hz, according to data_stats and my own crude timing of the messages, unlike the other nano-barometers which report at 14.83 Hz, such as at tse08. Steve suggested there might be a configuration problem, so I tried to fix the configuration. Here's what I found out.

For reference, the configuration the nano should be using is described here: <http://wiki.eol.ucar.edu/sew/ISFS/SensorInformation/NanoParo>. I also compared the nano on tse06 with the one on tse08.

The settings all match: OI=0, TI=67, IA=7, XM=1, TS=0, MD=2.

Both are model 6000-15A, both have firmware version: R5.23.

I also checked serial numbers and crystal correction coefficients for each:

tse06: SN=123996 TC=.6781674

tse08: SN=123997 TC=.6781677

Both running at 9600 baud.

As a test, I set tse06 PI=134, cycled power on it, and then verified that PI was still set to 134, but the messages are still 30Hz. I did the same thing except setting OI=1 instead. That still does not change the rate from 30Hz, though the manual says that should cut the rate by half.

So I think there's something flaky going on here, and at the moment I am unable to do anything about it. The sensor continues to report at 30Hz, the others at 14.83Hz, and all will be converted to 20Hz for the high-rate netcdf output.