

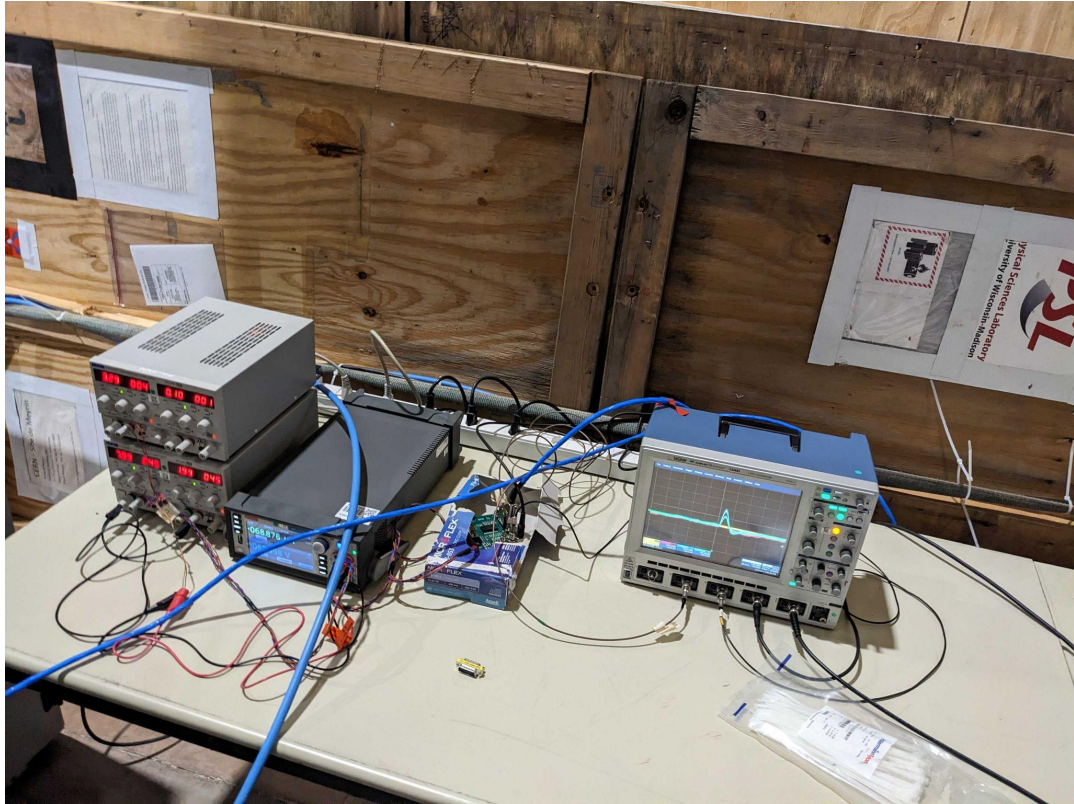
First megacell test DMEM cold electronic

DUNE VD - Module 0

HD-style readout - 2 Flexes per channel - 4 channels

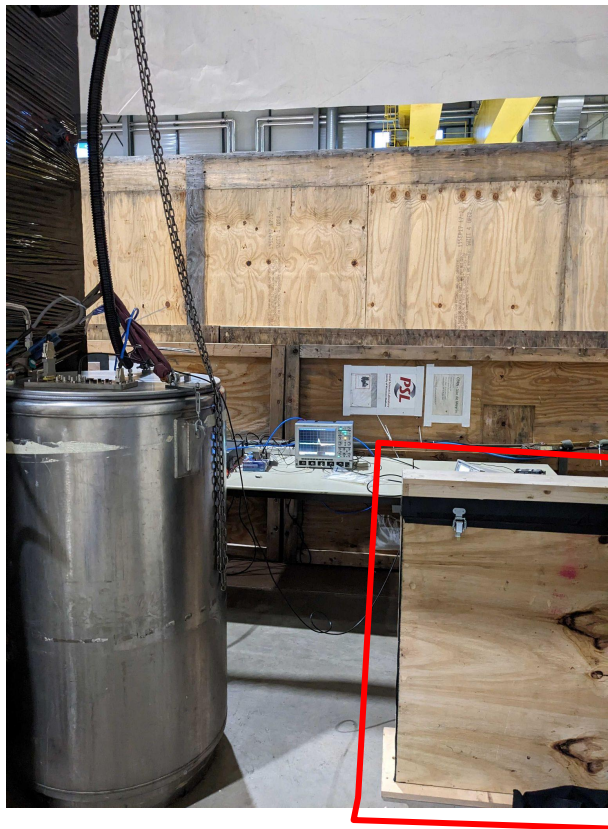


HD-style readout - 2 Flexes per channel - 4 channels

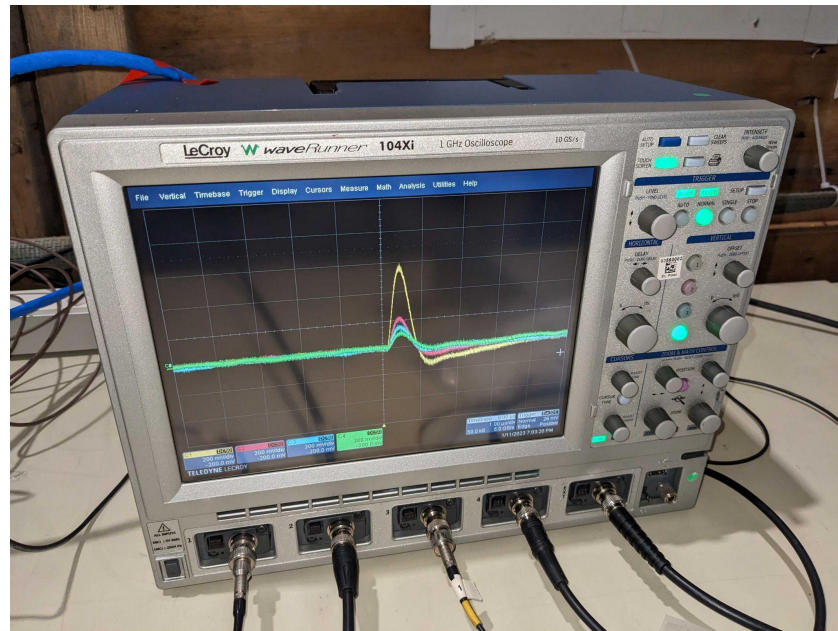


Test in warm

54V VBias



+ black blanket



COLD test:

Coherent
noise in all
channels

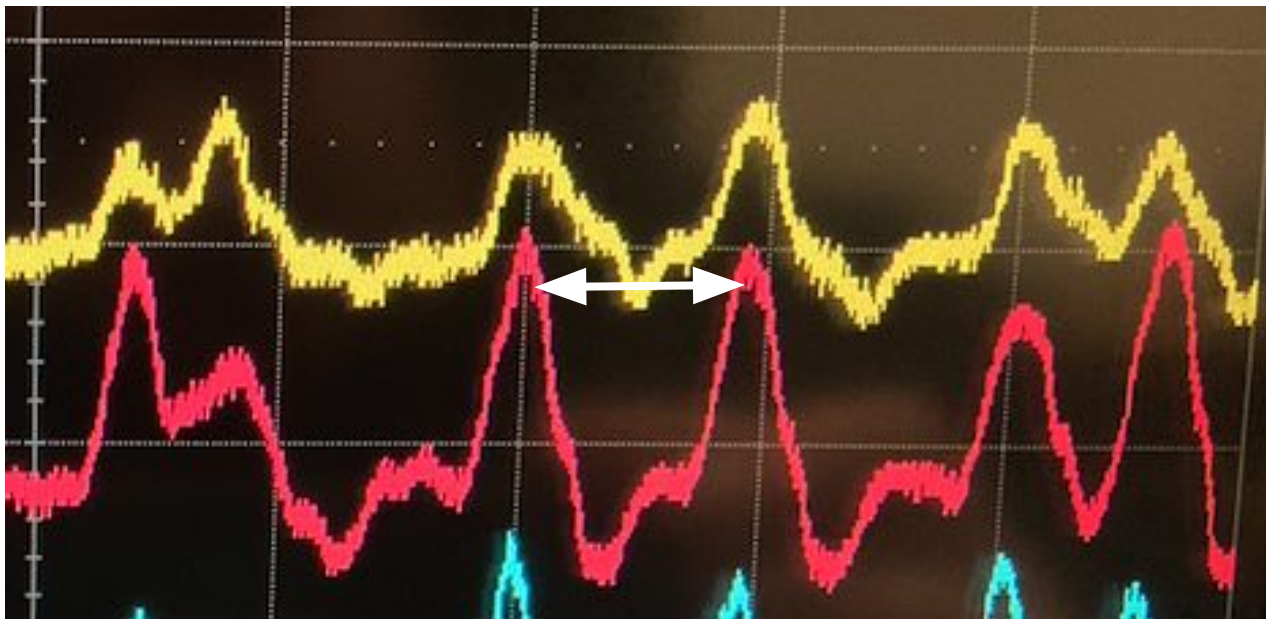
Ch 1,2,3
20 mV/div

Ch 4
1 V/div



3 - 5 MHz noise?

20 mV/div



FFT ch1 and ch2 - SiPM bias on 45V, LED

5 MHz/div

FFT Peak
around
4MHz?



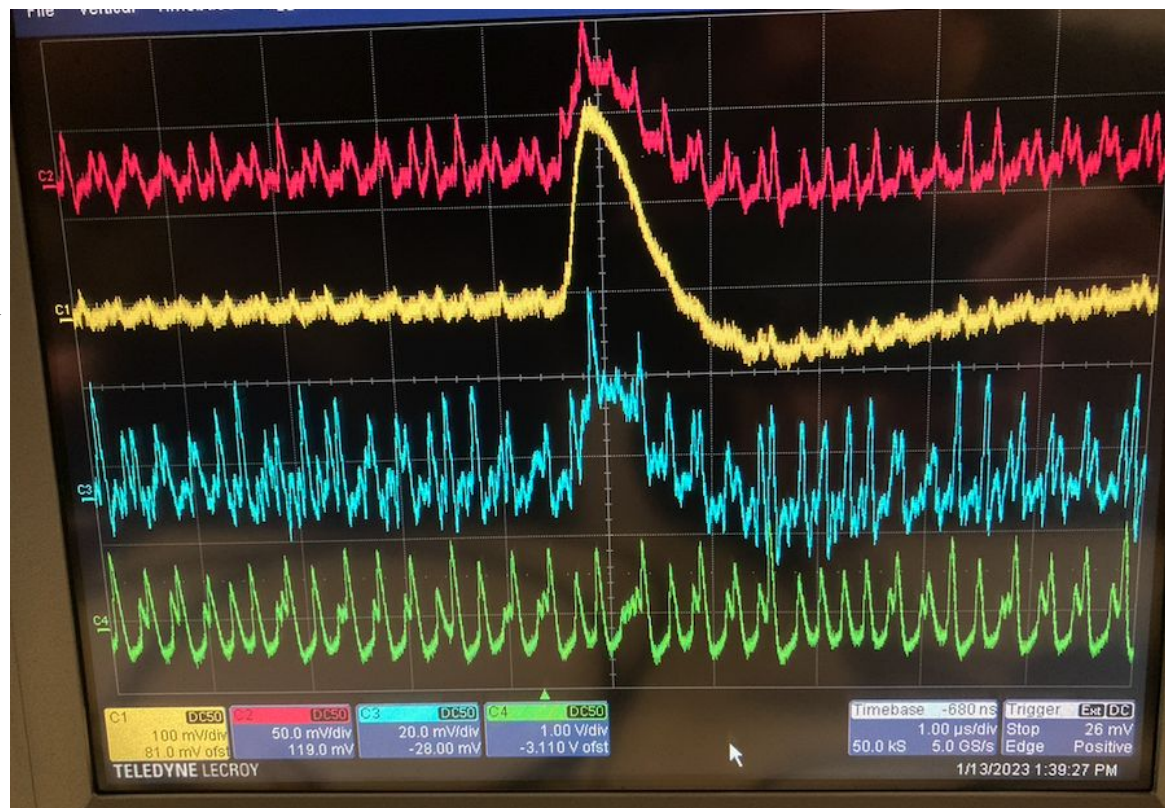
All channels - SiPM bias on 45V, LED on.

Ch 2: 50 mV/div →

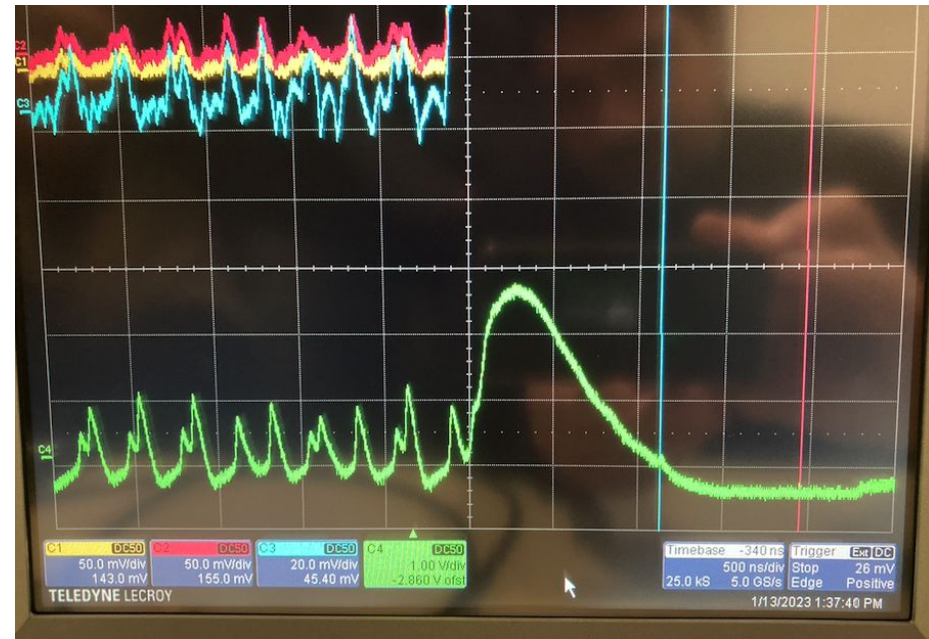
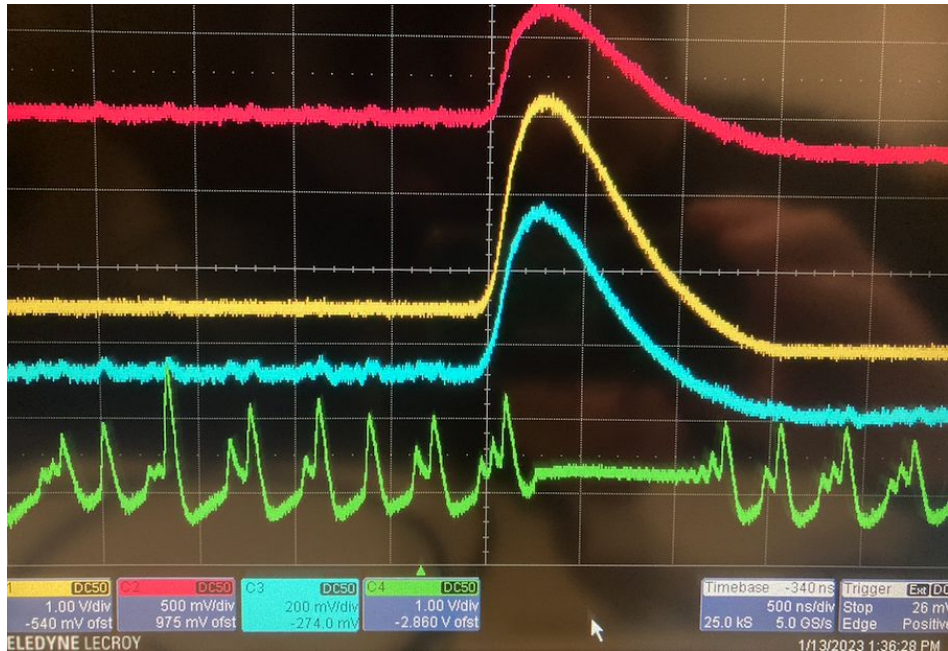
Ch 1: 100 mV/div →

Ch 3: 20 mV/div →

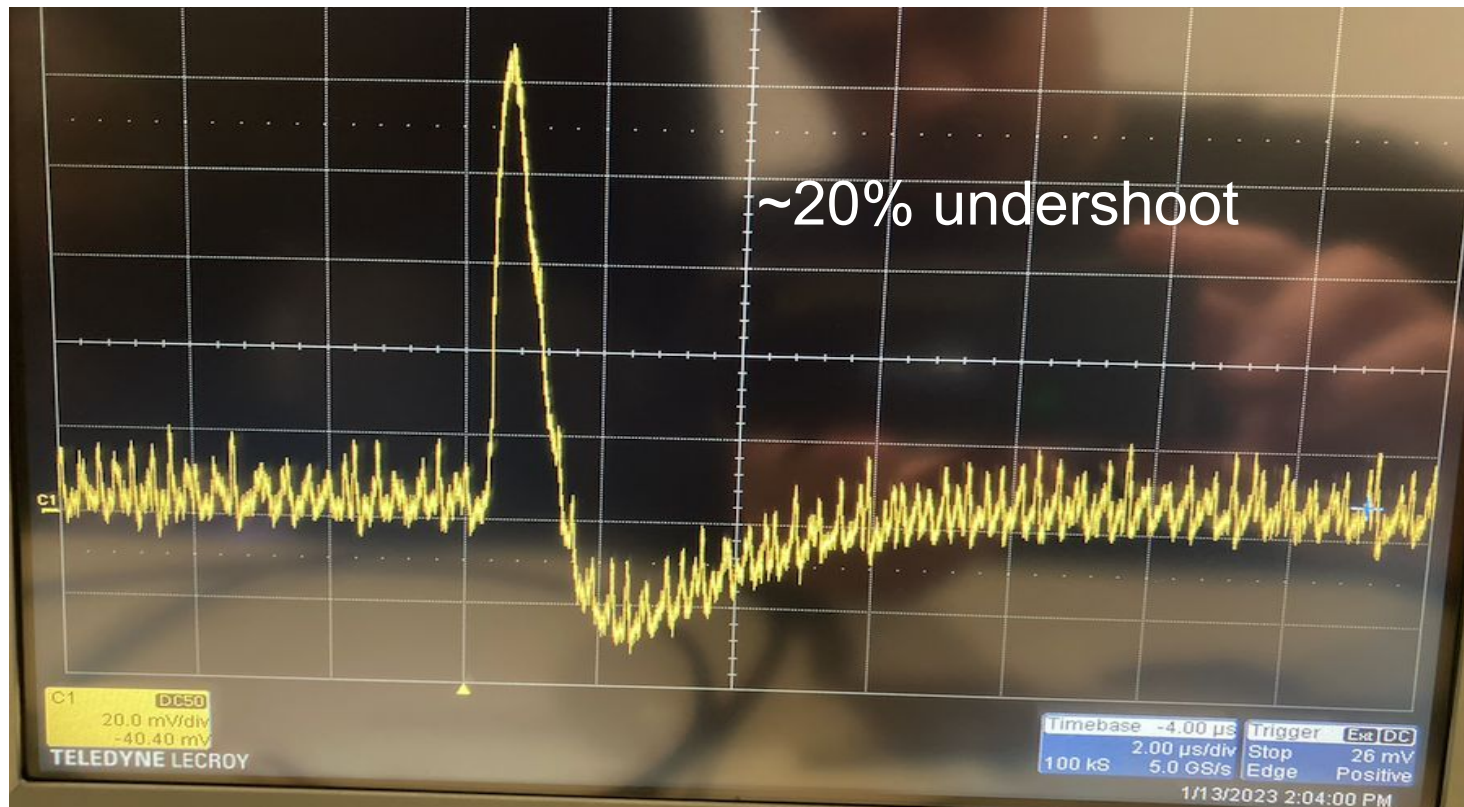
Ch 4: 1 V/div →



All channels - SiPM bias on 45V, large LED signals.

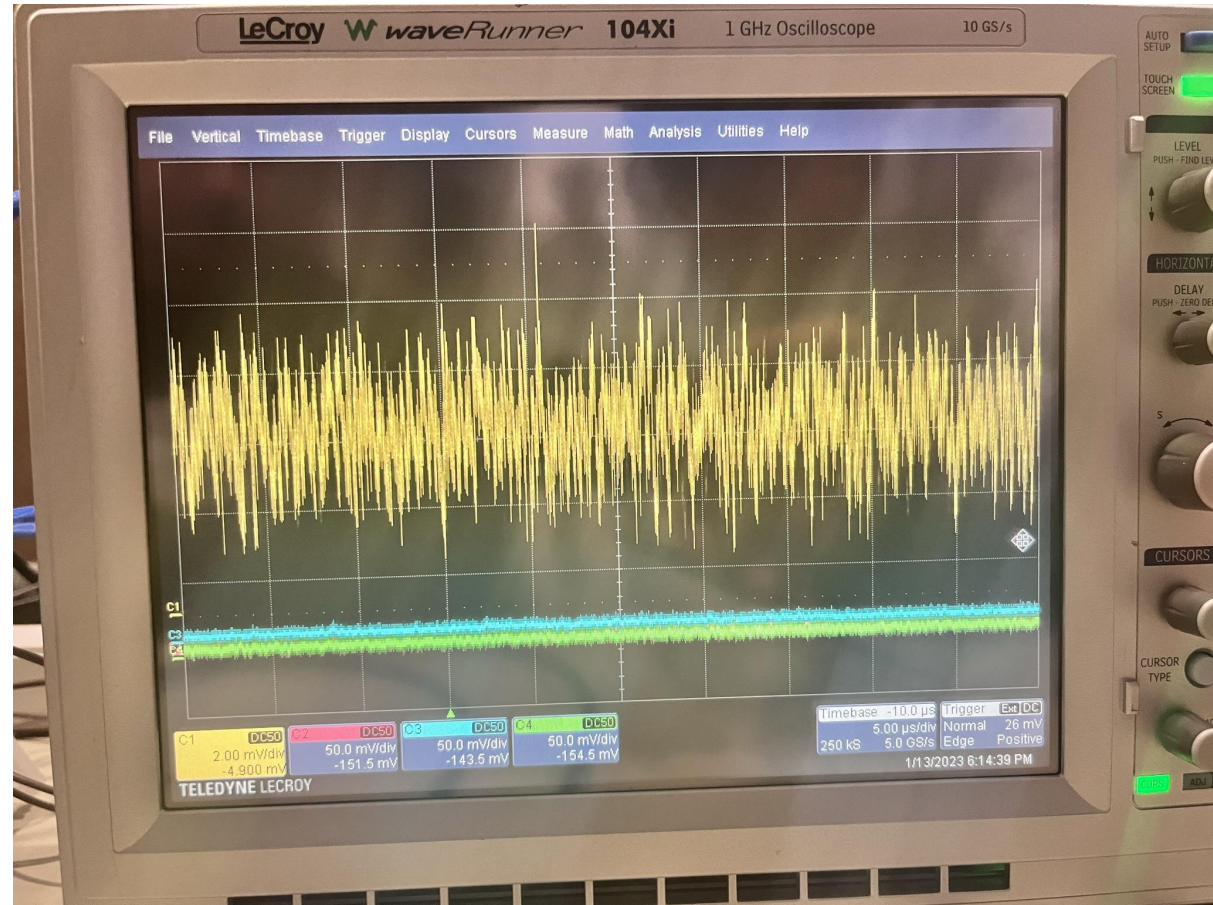


Ch1 - SiPM bias 45V - LED on. Cold Test.



Back to warm
after cold test

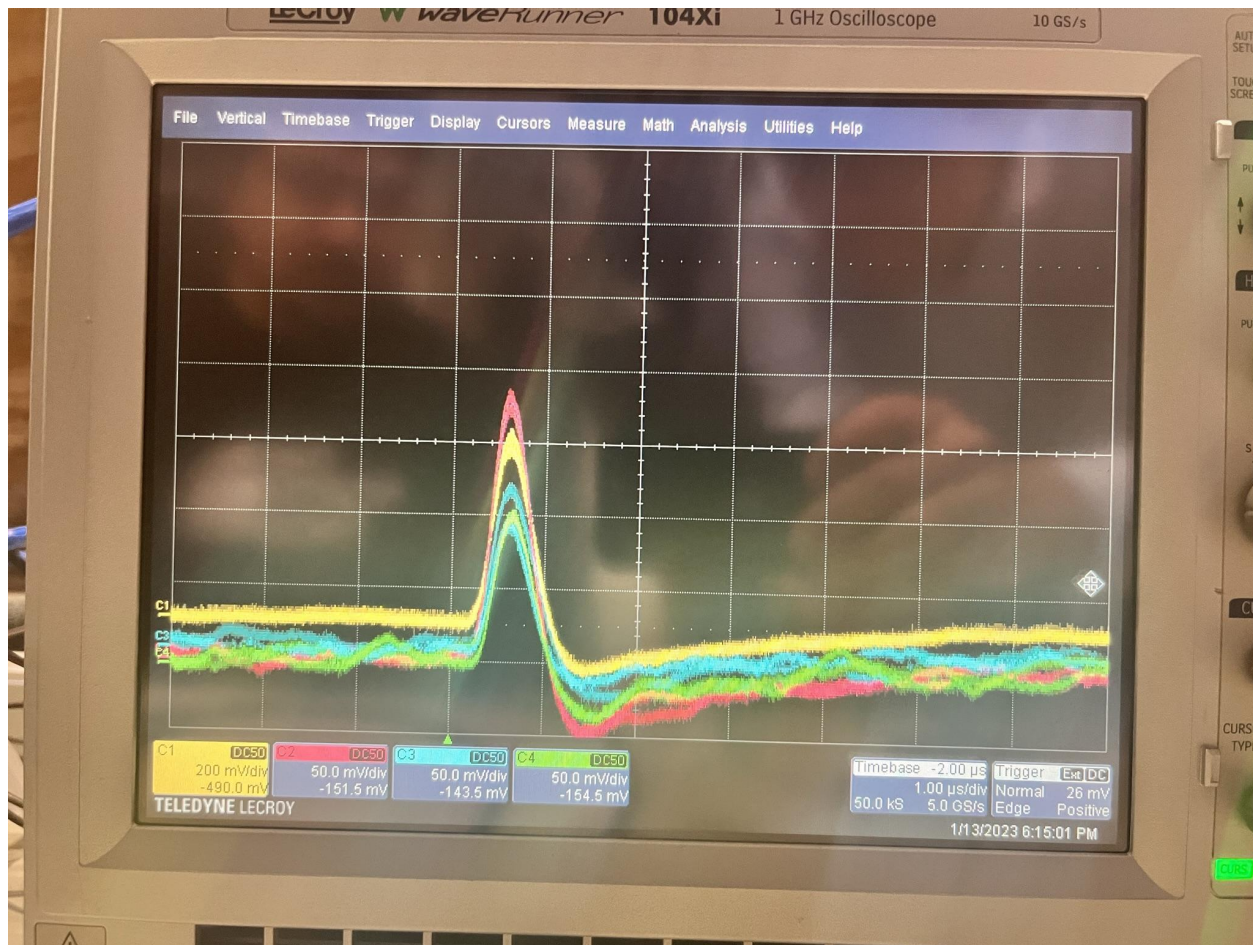
SiPM bias off



Back to warm
after cold test

SiPM bias
54V

LED on

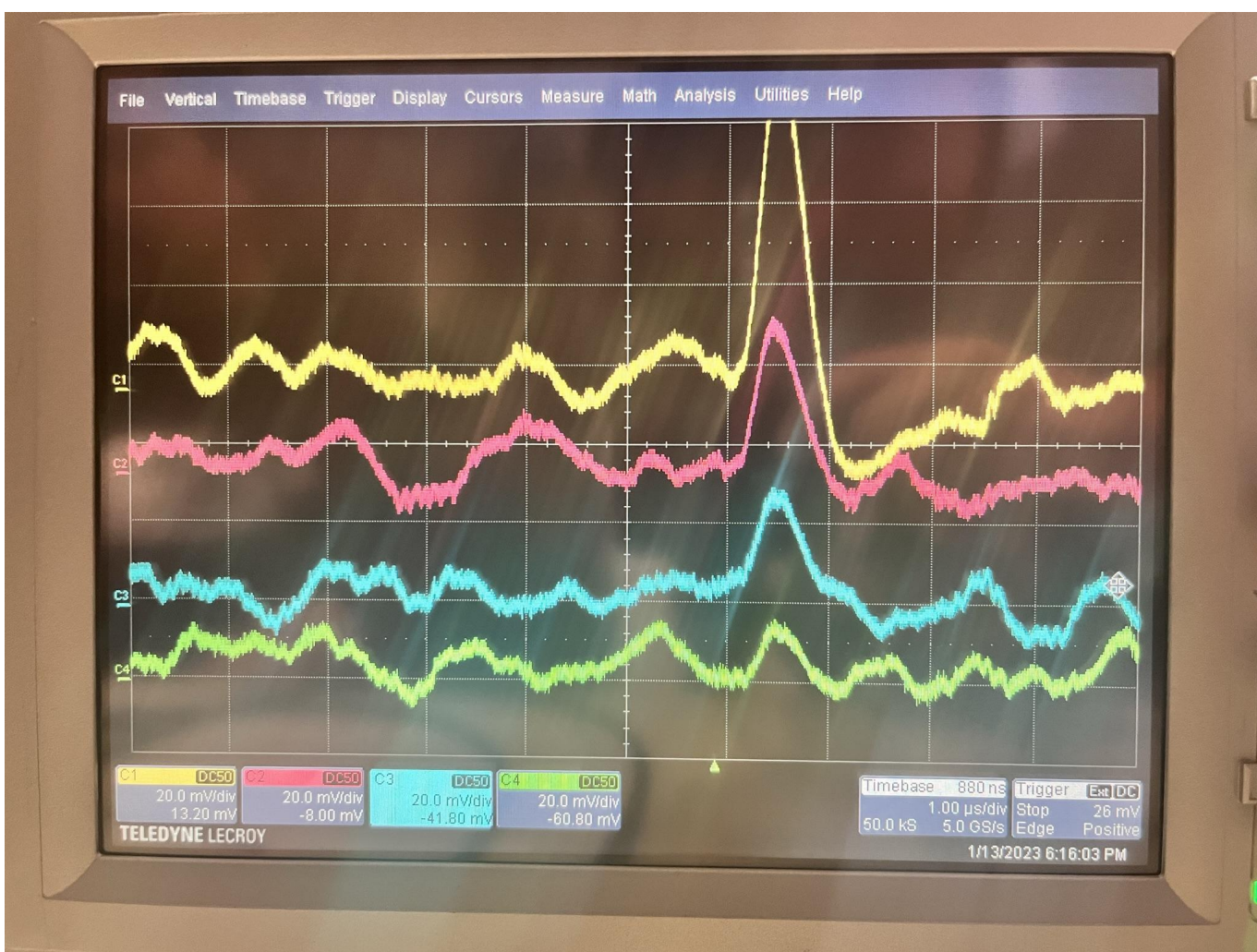


Back to warm
after cold test

SiPM bias 54V

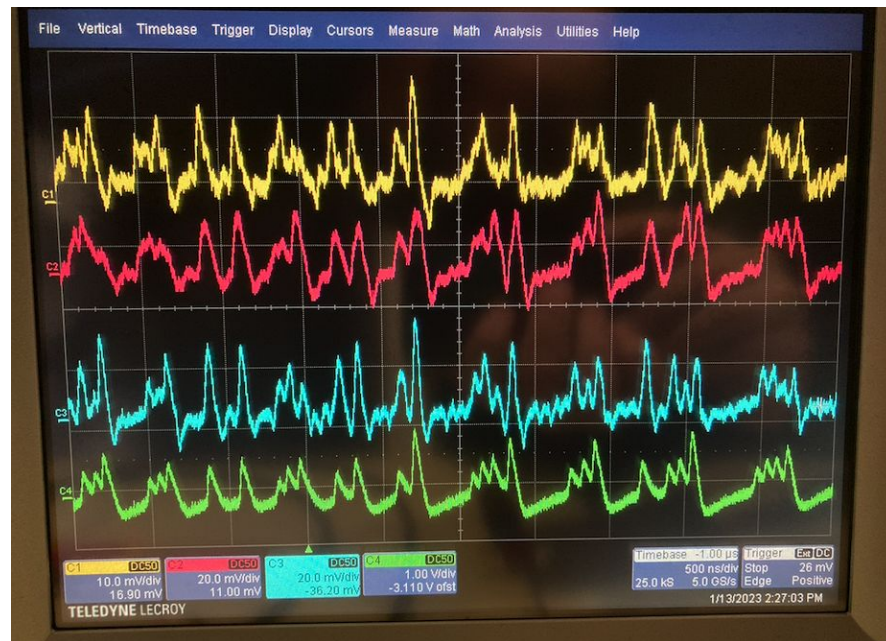
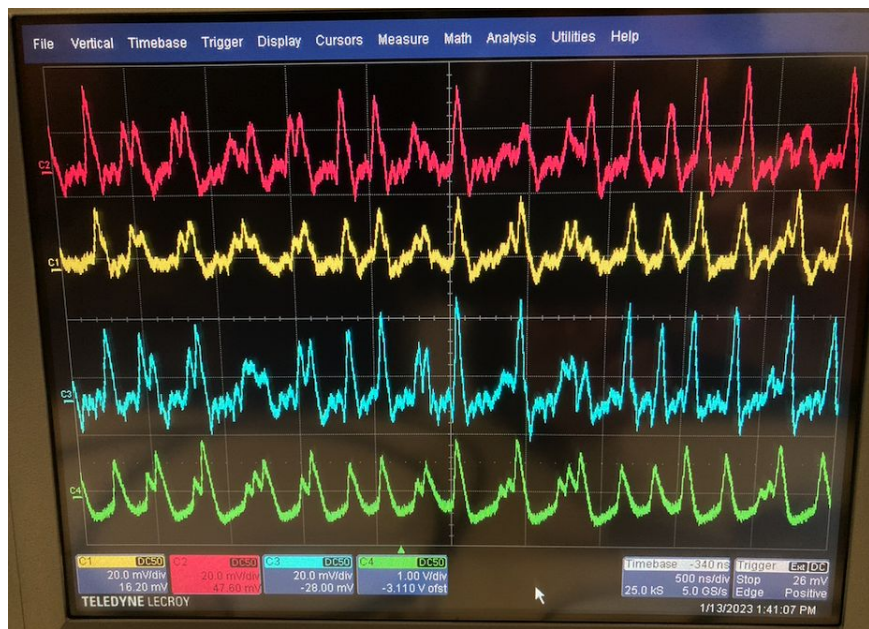
LED on

Ch 1,2,3,4
20 mV/div

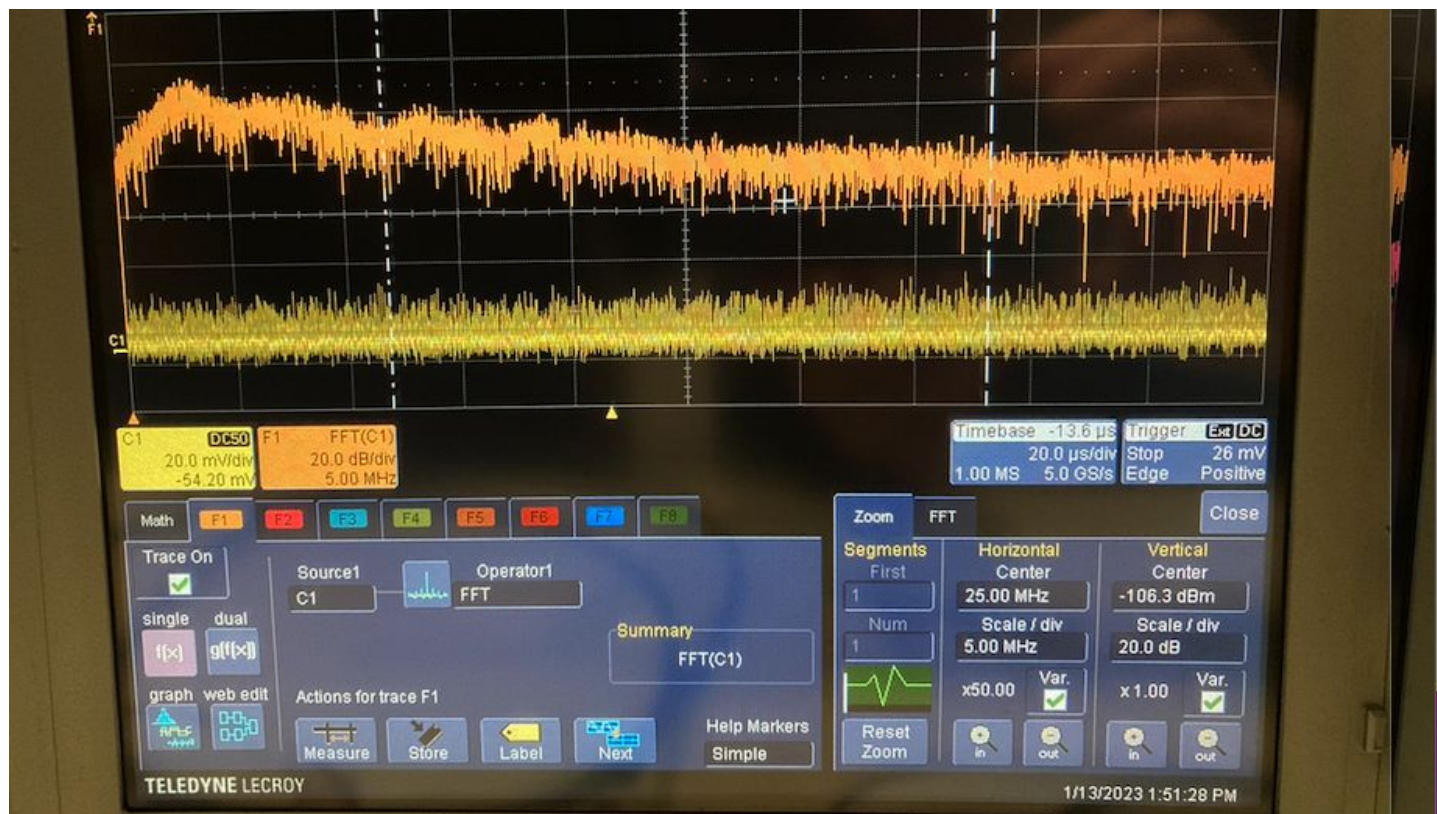


Backup Slides

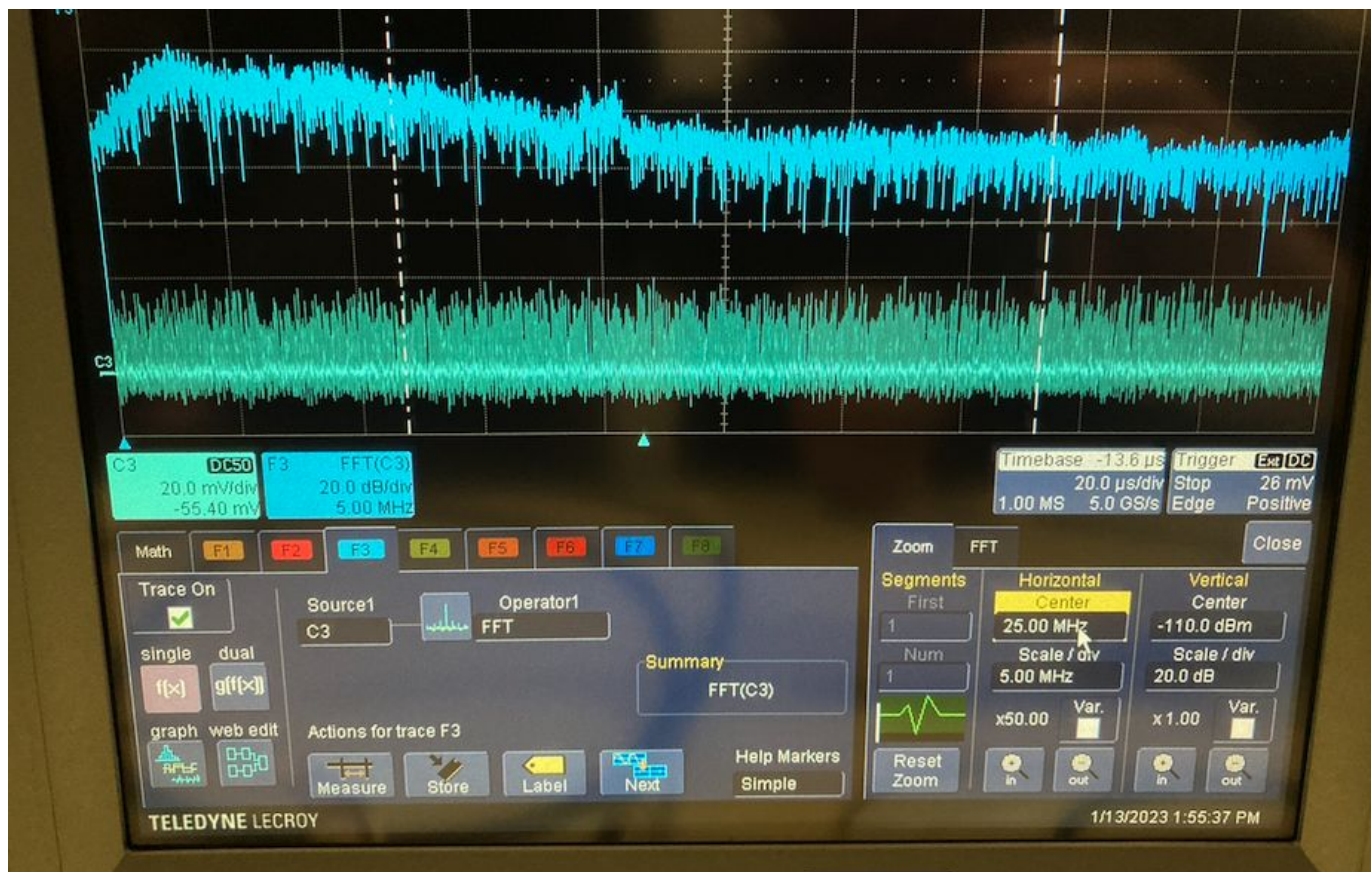
“SiPM bias ON” vs. “SiPM bias OFF”



FFT ch1



FFT ch3



FFT ch 4

