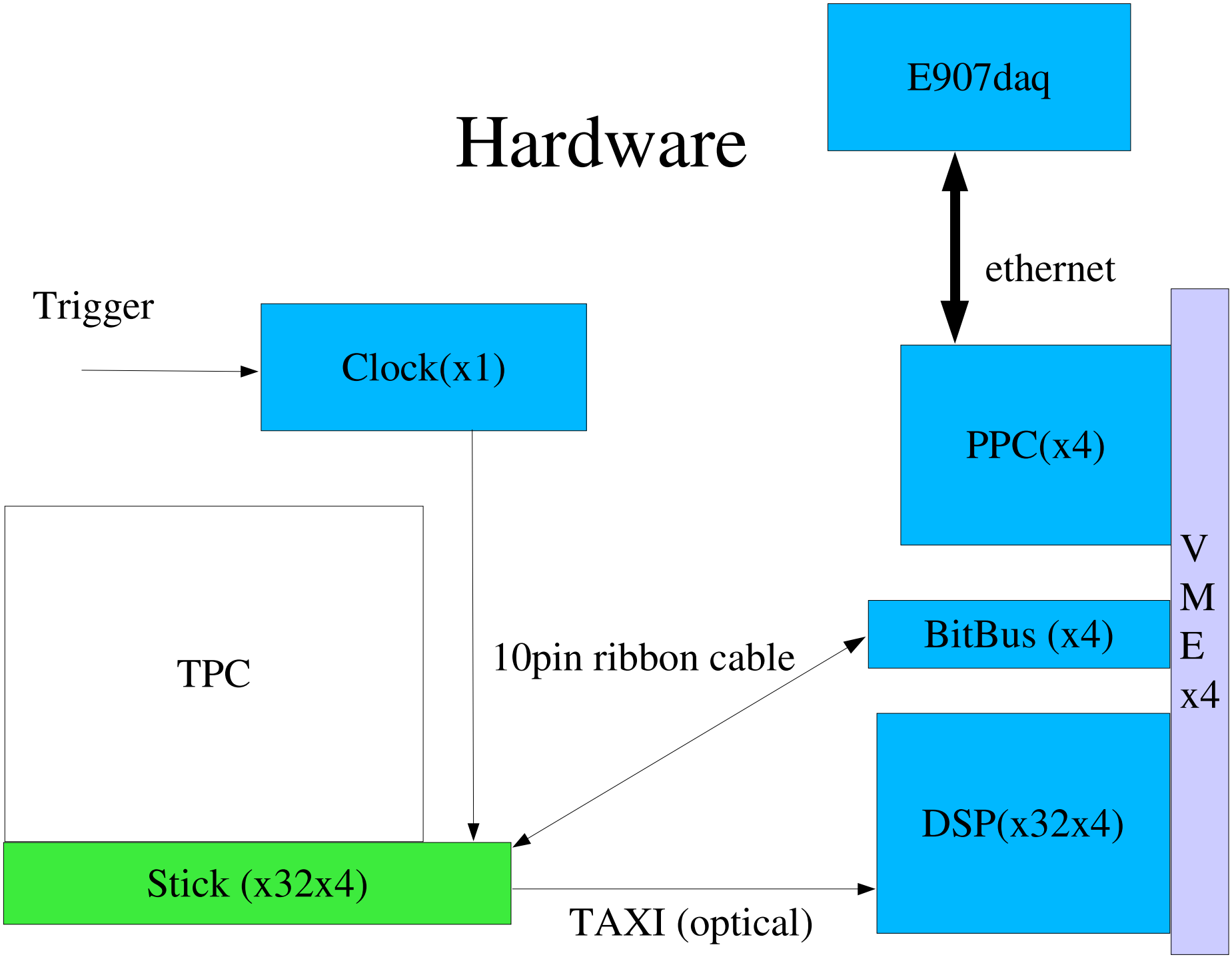
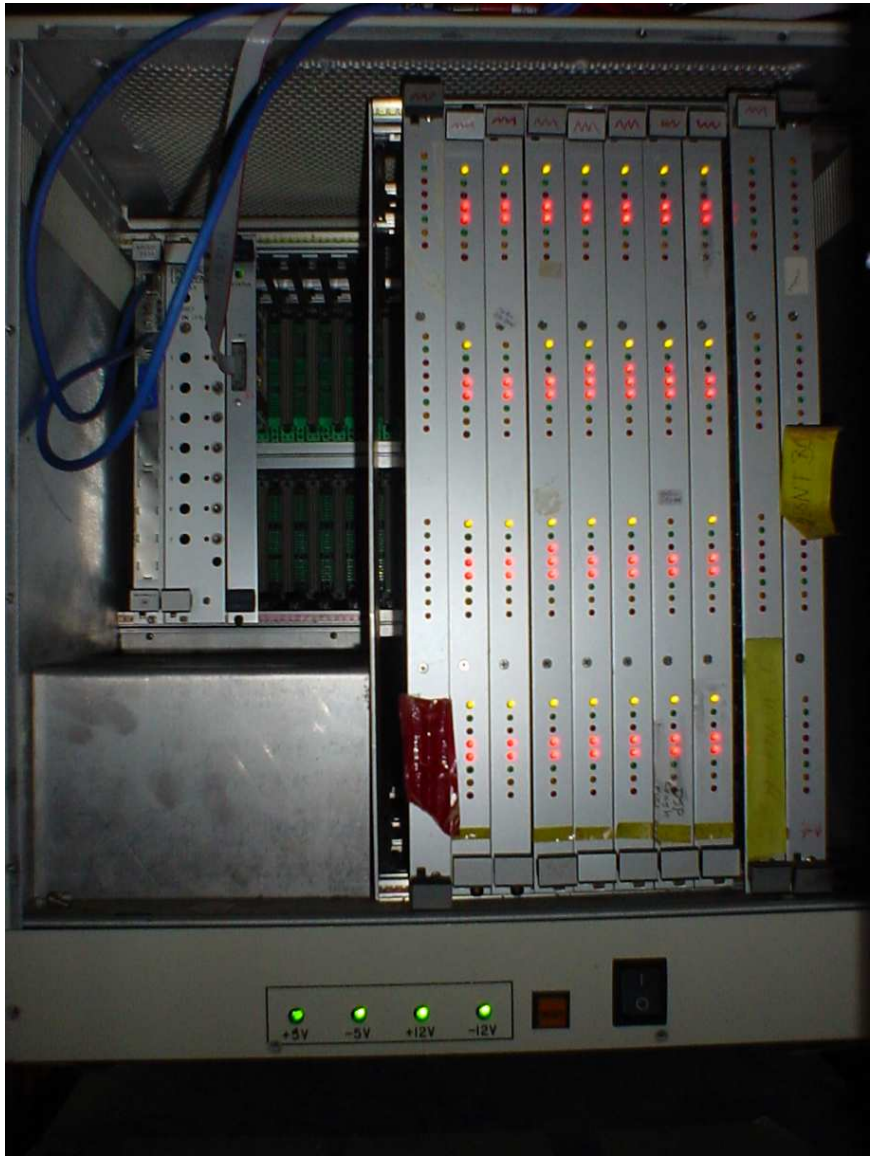
# TPC Online Software Update

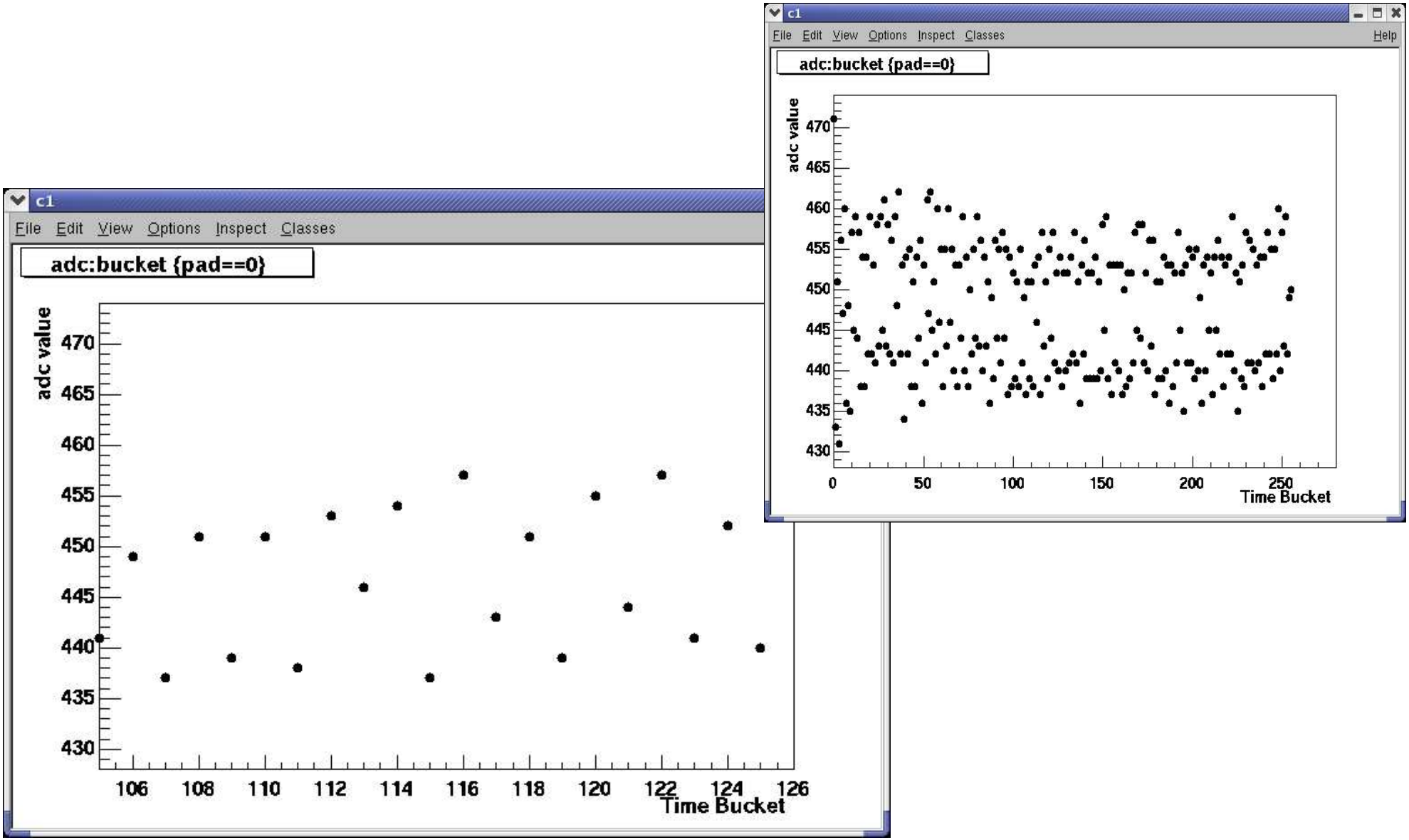
# Hardware


E907daq
ethernet
Trigger
Clock(x1)
PPC(x4)
TPC
10pin ribbon cable
BitBus (x4)
VME x4
DSP(x32x4)
Stick (x32x4)
TAXI (optical)

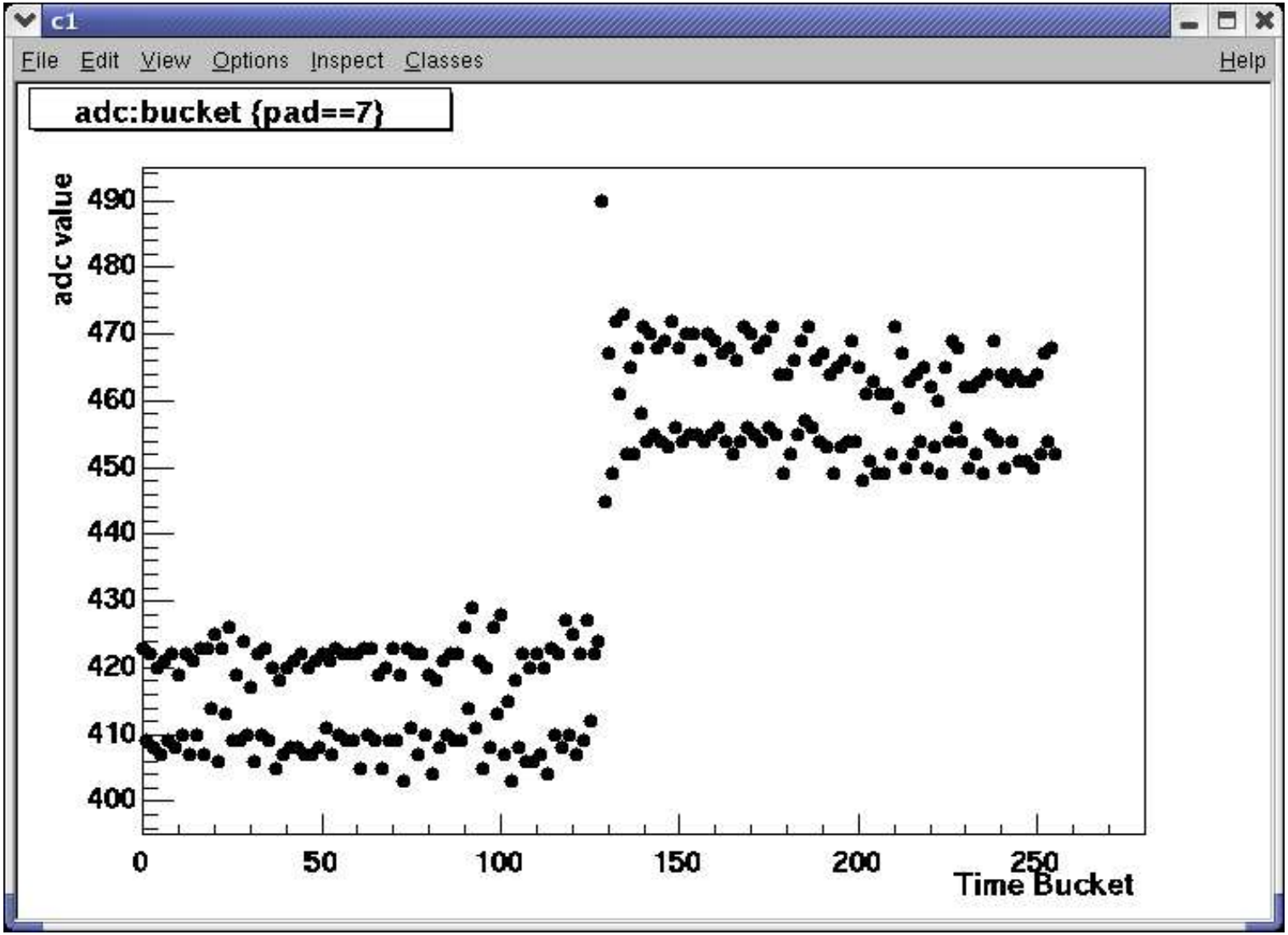
# Before and After



# pedestals


c1
File Edit View Options Inspect Classes
adc:bucket {pad==0}
adc value
470
465
460
455
450
445
440
435
430
106 108 110 112 114 116 118 120 122 124 126
Time Bucket
c1
File Edit View Options Inspect Classes Help
adc:bucket {pad==0}
adc value
470
465
460
455
450
445
440
435
430
0 50 100 150 200 250
Time Bucket

# more pedestals



# Done

Reverse engineering (biggest task for TPC software)
ppc conversion
Slow controls (bitbus)
dsp controls (loader,reset, pedestals etc)
dsp software rewrite(zero/sup need test)
Autoinitialize()

Tested in DAQ!

# Todo

Pedestal generation/testing
Test dsp zero suppression
logger
select kernel jiffy time/get interrupts
speed up boot (60 sec)
Code cleanup and documentation
data corruption checks
debugging
stick characterization