

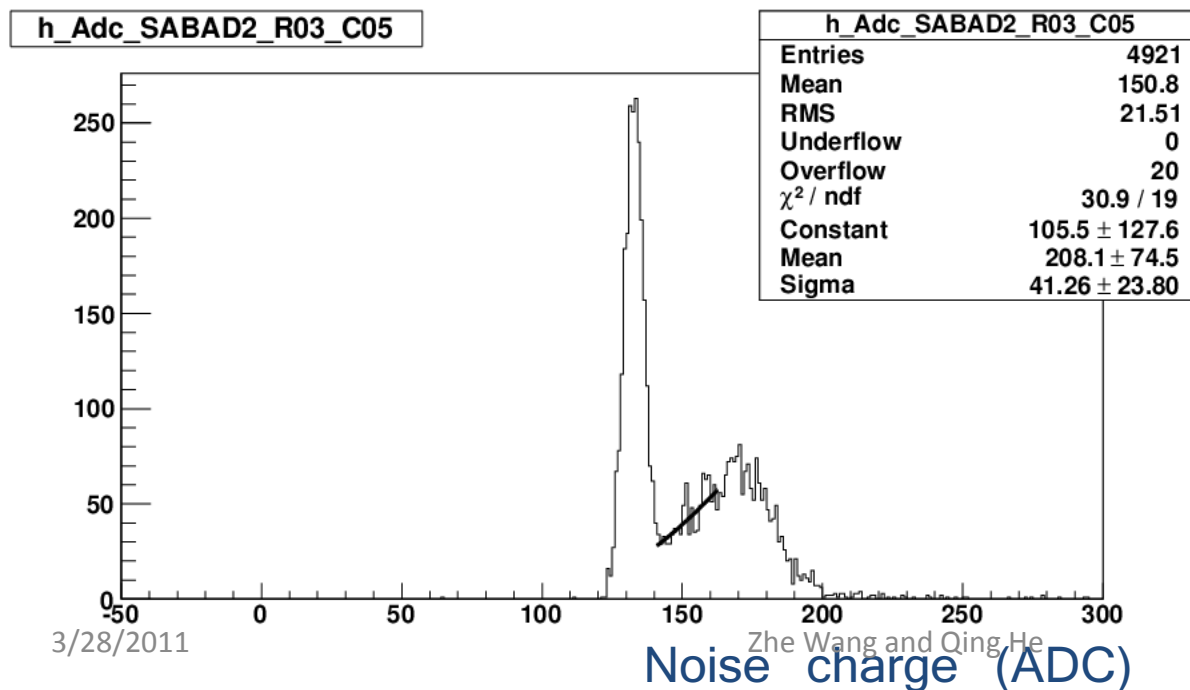
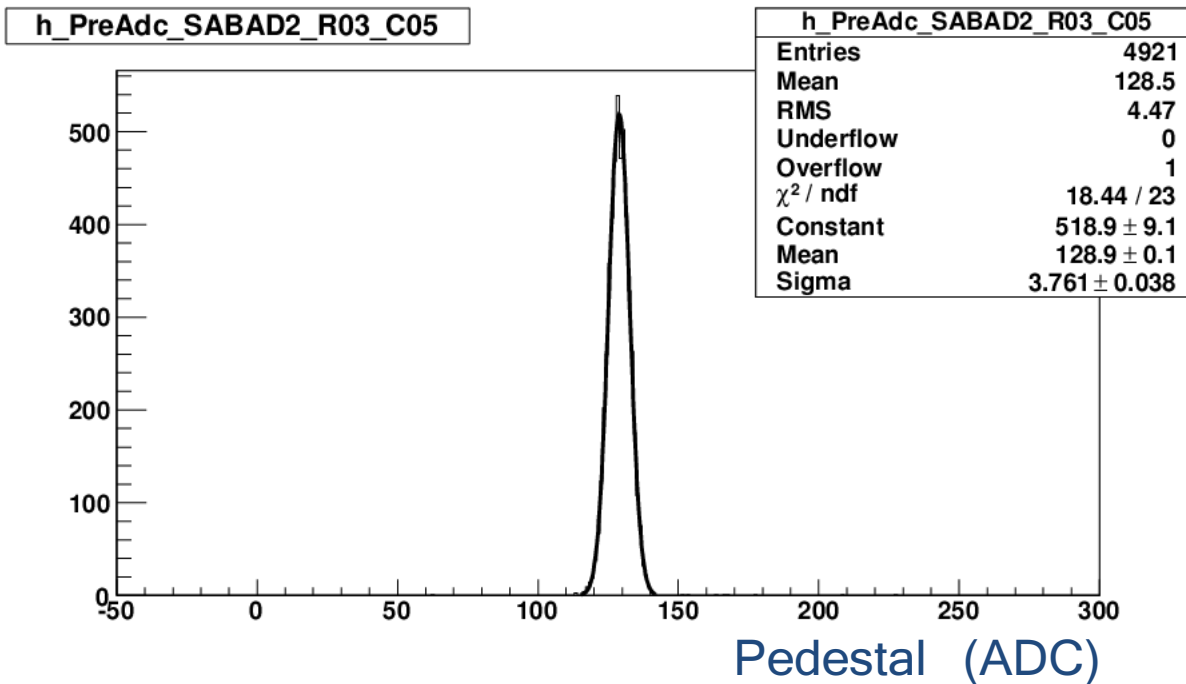
AD4 Rolling Gain and Dark Rate History info.

Check for longRun.pdf for details. Only focus on the data points during the stability run. Others may fluctuate due to low statistics.

1. Three channels have failed fit. Check attached plots for details.
 - a) R05_C04, R02_C05 and R03_C05
 - b) They have good pedestal, single PE peak is also clearly visible
 - c) But extra noise hits like pedestal
 - d) Lasted for one and half days. (In the longRun.pdf in the beginning they have bad fits and did not plotted. The first good fit point shows up after 25 hours. For example the blue trace in page 12 of longRun.pdf)
2. The gain spread is wide.
 - a) R06_C09 has the lowest gain (only 28) which is 20% lower than the rest.
 - b) R02_C06 has gain 29ADC during all the test.

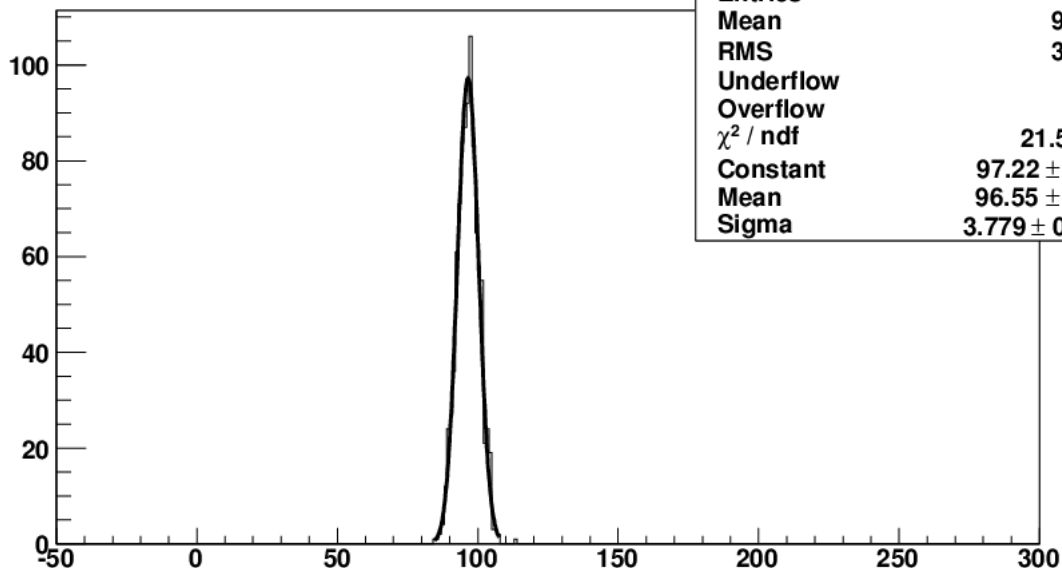
Seek a stable platform can run this automatically.

R03_C05 Pedestal Noise charge



R06_C09 Pedestal Noise charge

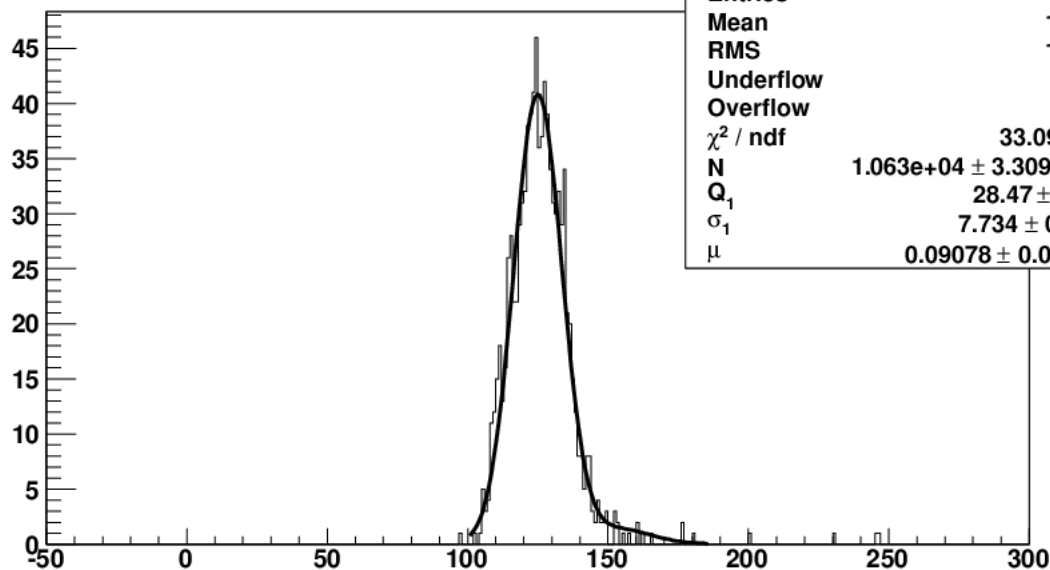
h_PreAdc_SABAD2_R06_C09



h_PreAdc_SABAD2_R06_C09	
Entries	942
Mean	96.13
RMS	3.879
Underflow	0
Overflow	0
χ^2 / ndf	21.5 / 21
Constant	97.22 ± 3.90
Mean	96.55 ± 0.13
Sigma	3.779 ± 0.088

Pedestal (ADC)

h_Adcd_SABAD2_R06_C09



h_Adcd_SABAD2_R06_C09	
Entries	942
Mean	125.7
RMS	12.08
Underflow	0
Overflow	5
χ^2 / ndf	33.09 / 52
N	$1.063\text{e}+04 \pm 3.309\text{e}+03$
Q ₁	28.47 ± 0.33
σ_1	7.734 ± 0.269
μ	0.09078 ± 0.02997

Noise charge (ADC)