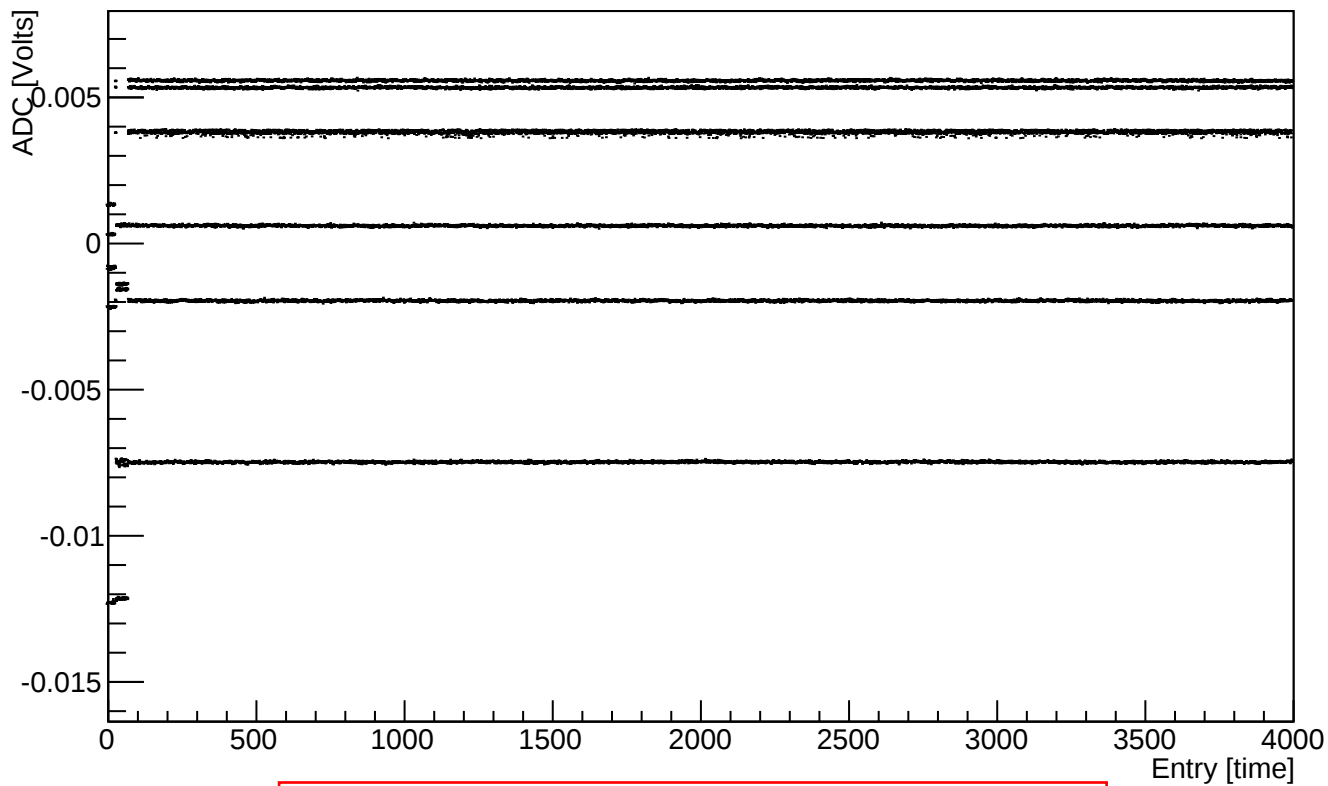


Comparison of ACQ164 and ACQ2006 DAQ

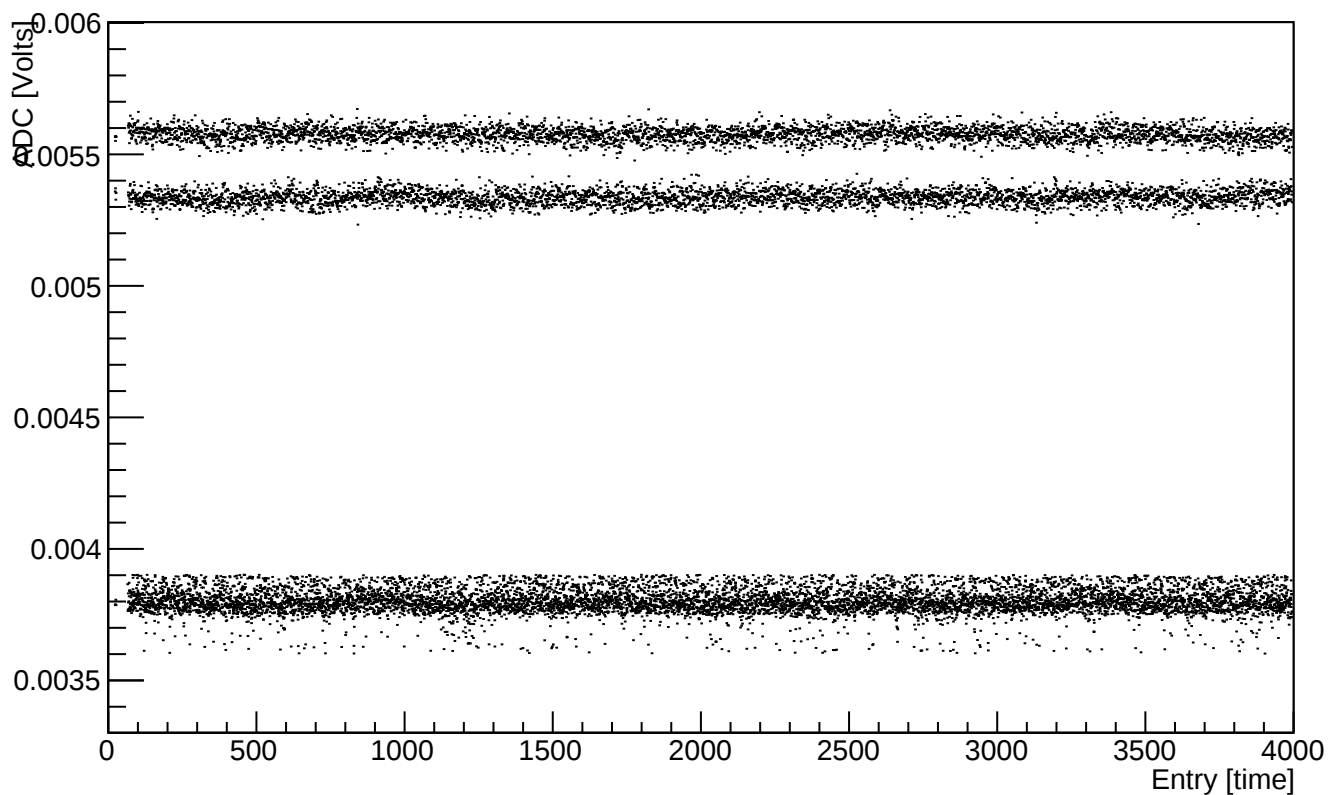
- Both ADCs are running at 50KHz sample rate.
- ADC noise (RMS value) for both of them without any input.
- 1Volt 60Hz sinusoidal signal applied to any one channel for both of them.
- Cross talk for first 8 channels examined.

ACQ164 no input running at 50KHz

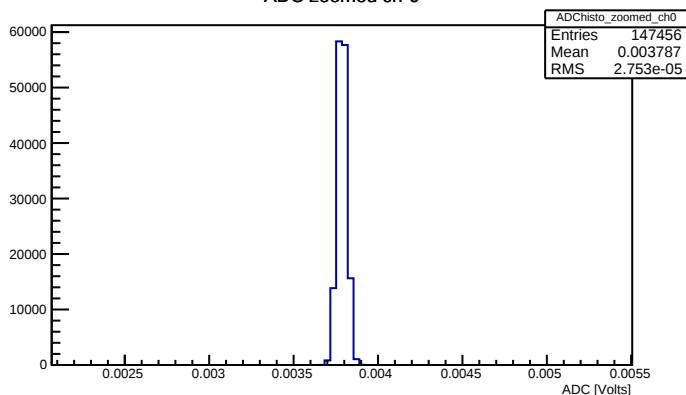


ACQ164 no input running at 50KHz

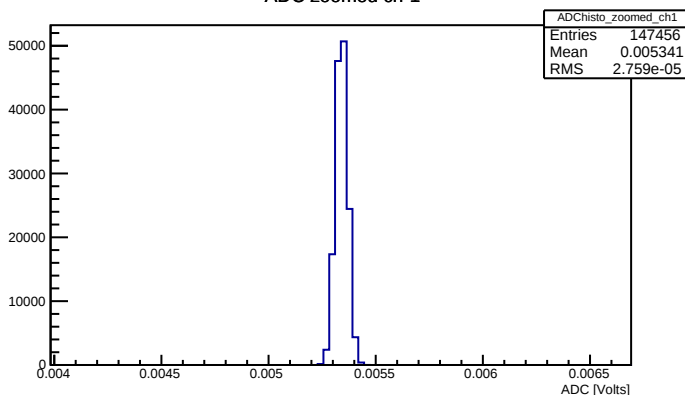
Zoomed



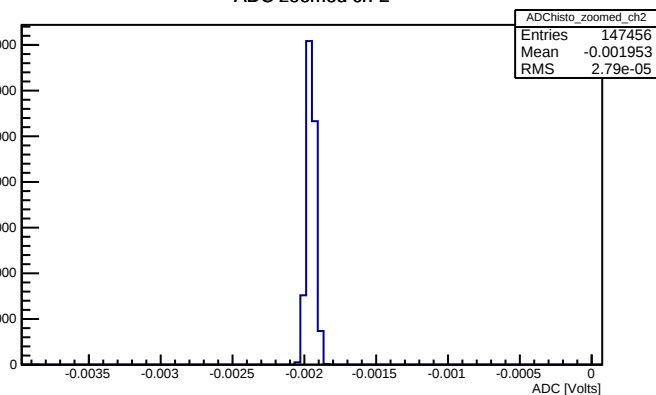
ADC zoomed ch-0



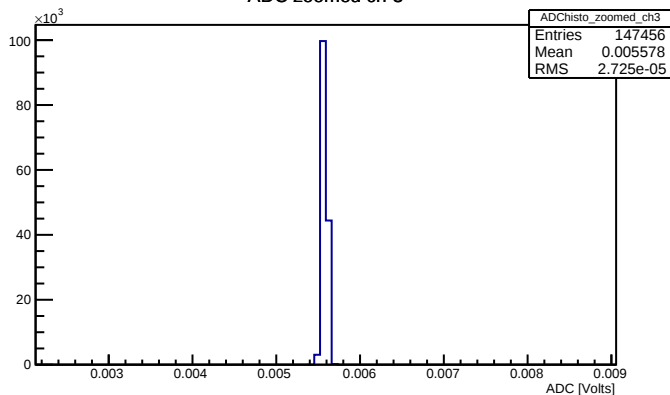
ADC zoomed ch-1



ADC zoomed ch-2

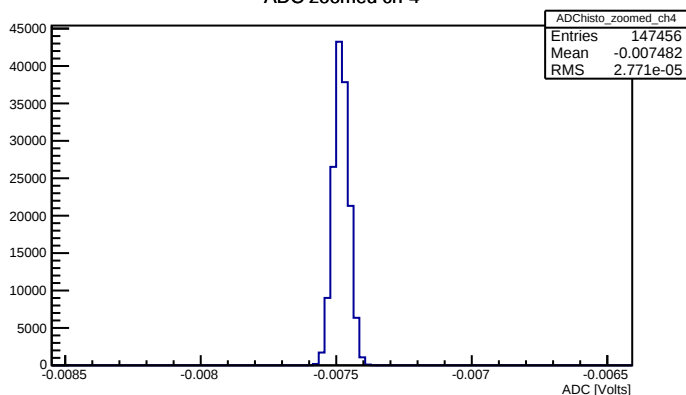


ADC zoomed ch-3

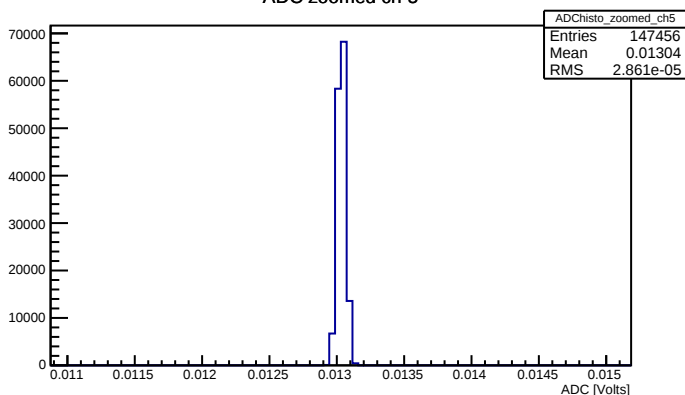


ACQ164 with no input running at 50KHz

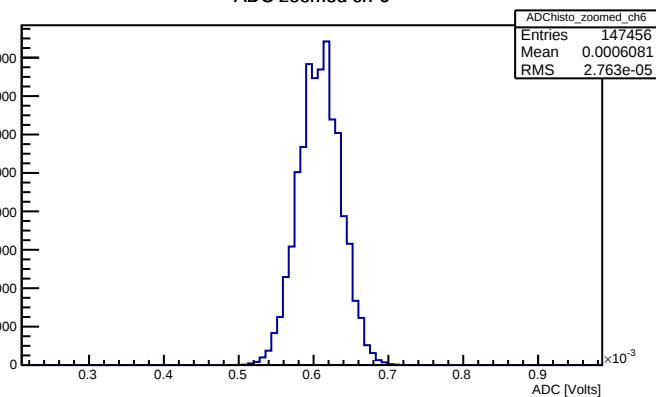
ADC zoomed ch-4



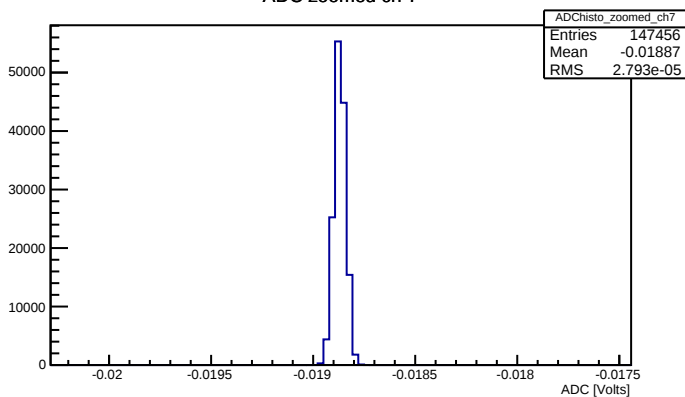
ADC zoomed ch-5



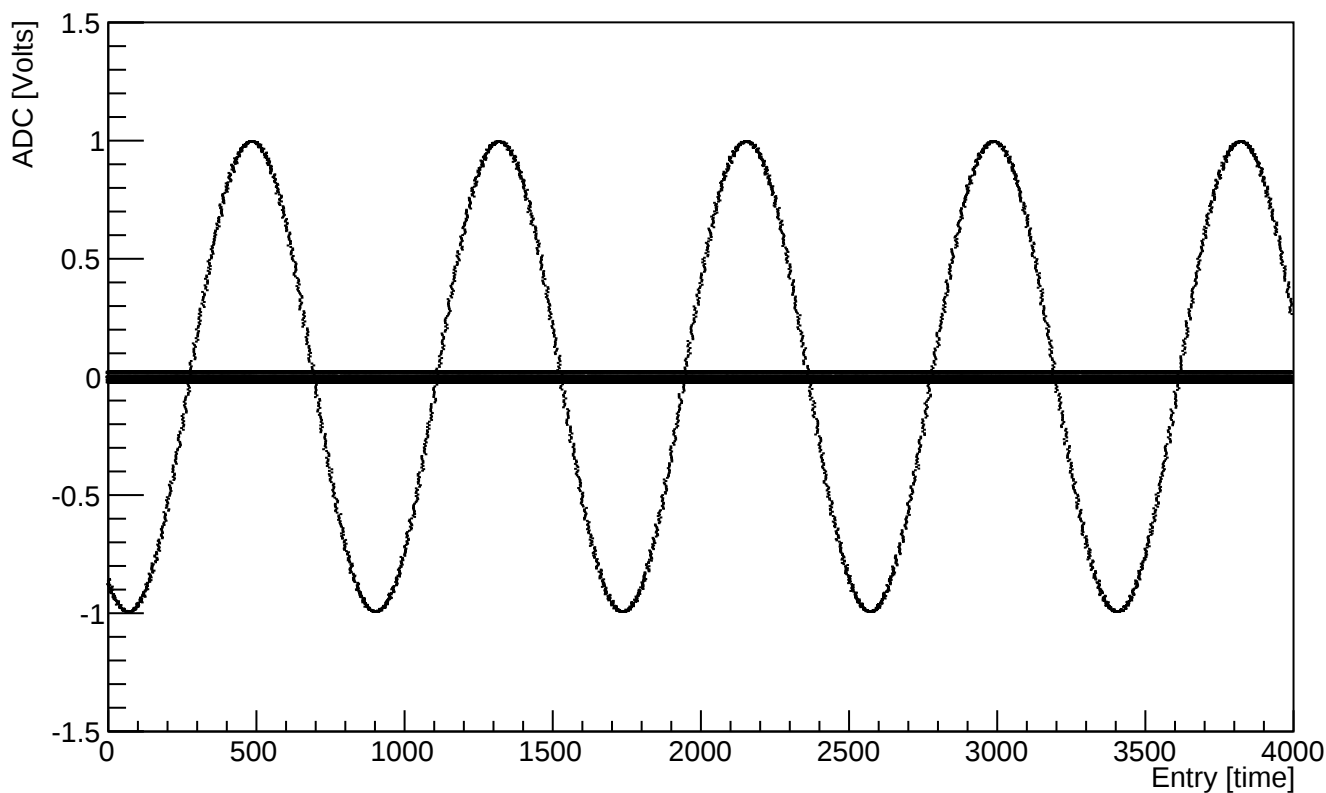
ADC zoomed ch-6



ADC zoomed ch-7

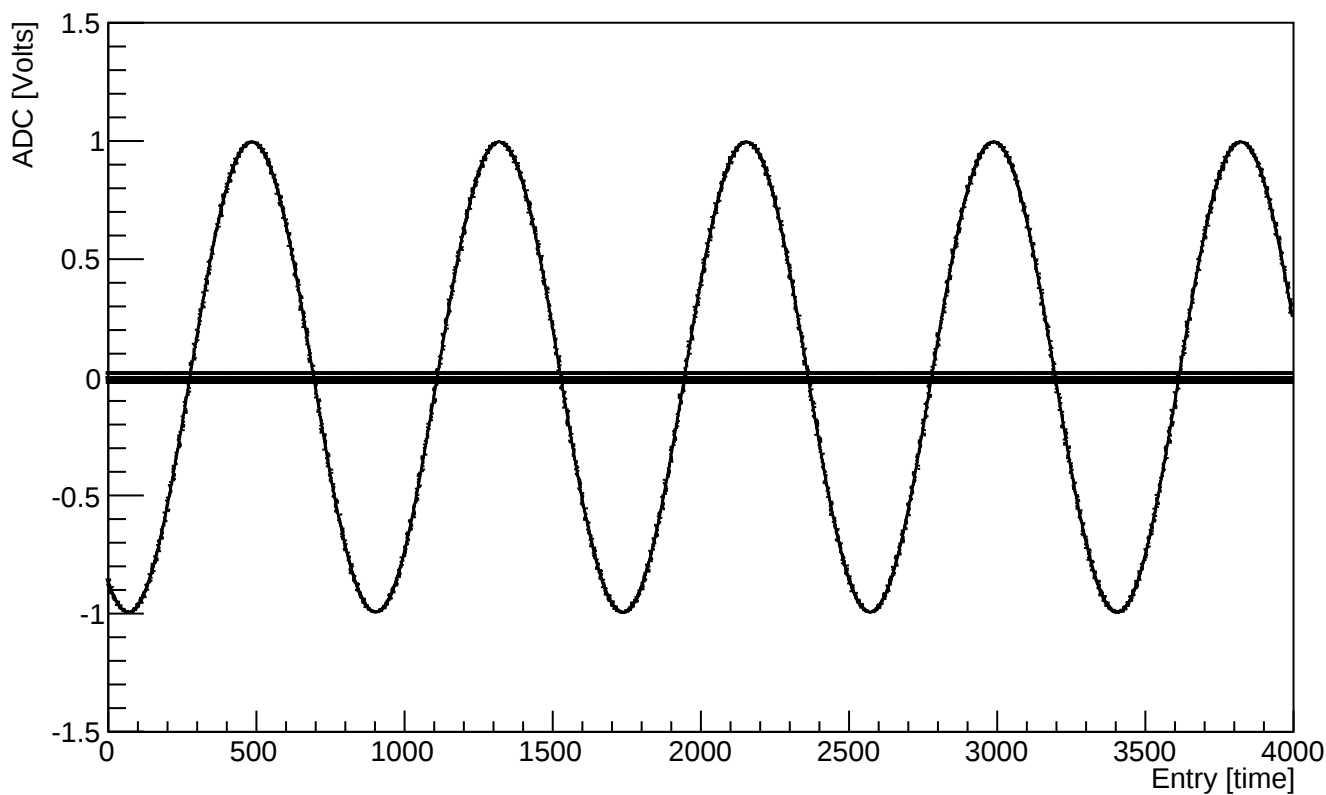


ACQ164 with sinusoidal(1volt,60Hz) signal applied to channel-1

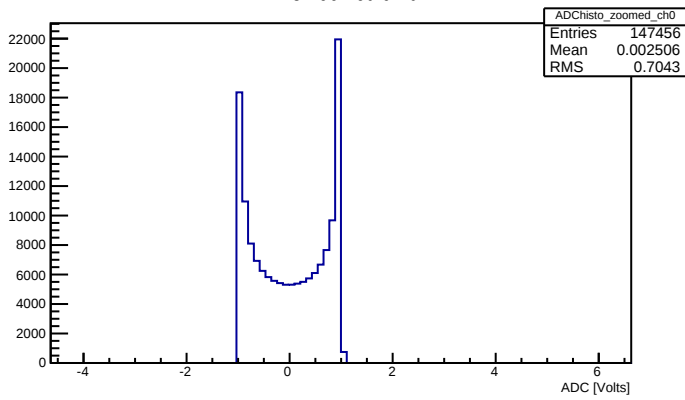


ACQ164 with sinusoidal(1volt,60Hz) signal applied to channel-1

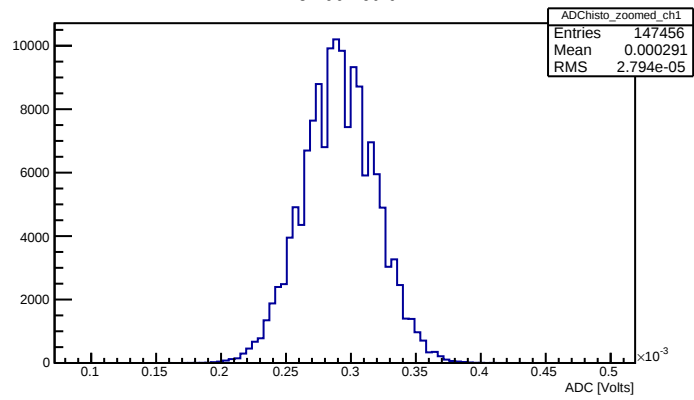
Zoomed



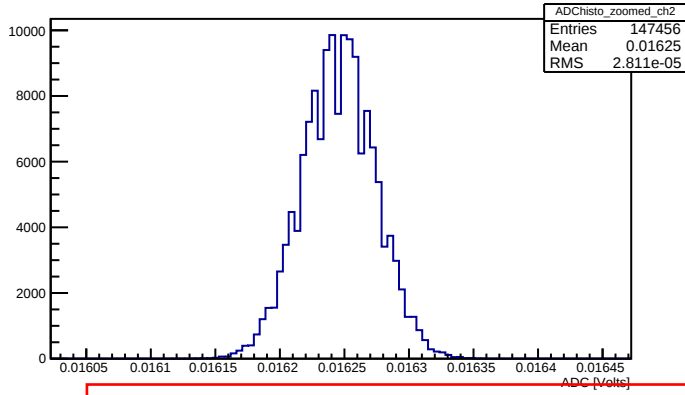
ADC zoomed ch-0



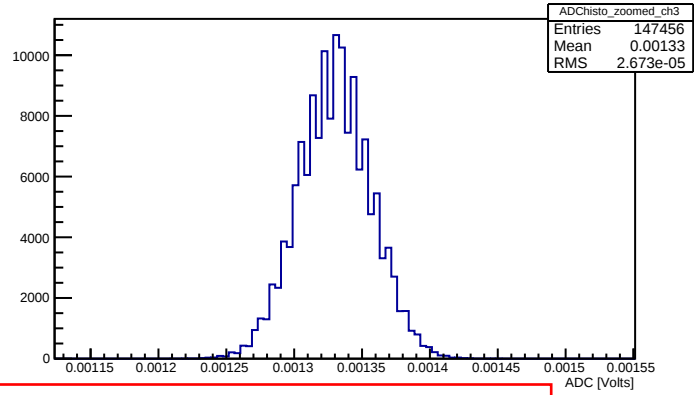
ADC zoomed ch-1



ADC zoomed ch-2

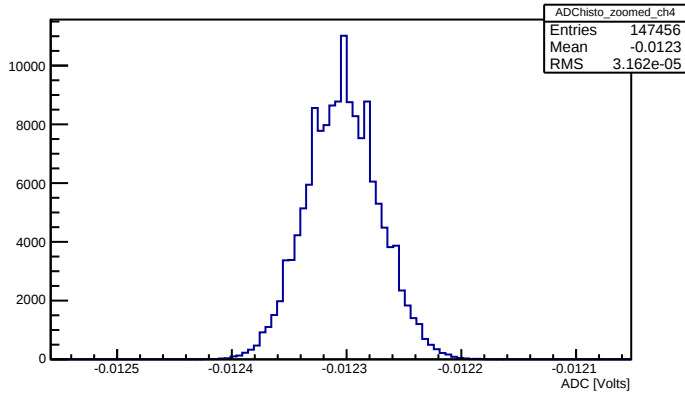


ADC zoomed ch-3

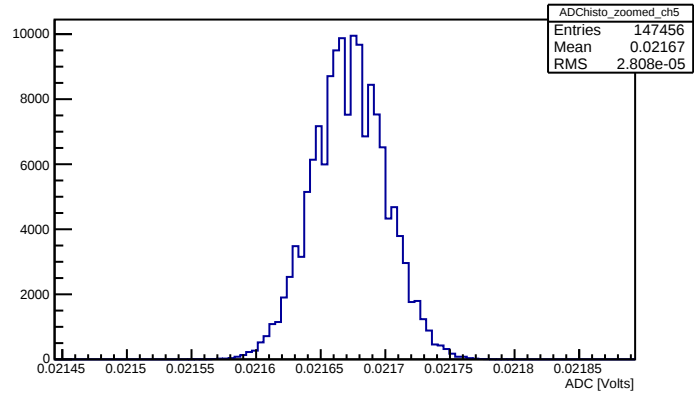


ACQ164 with sinusoidal(1volt,60Hz) signal applied to channel-1

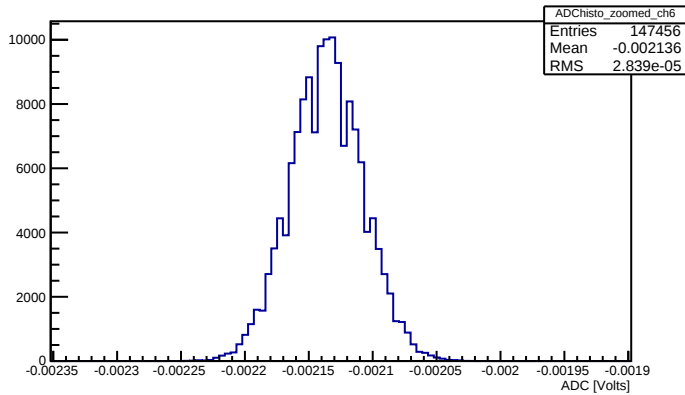
ADC zoomed ch-4



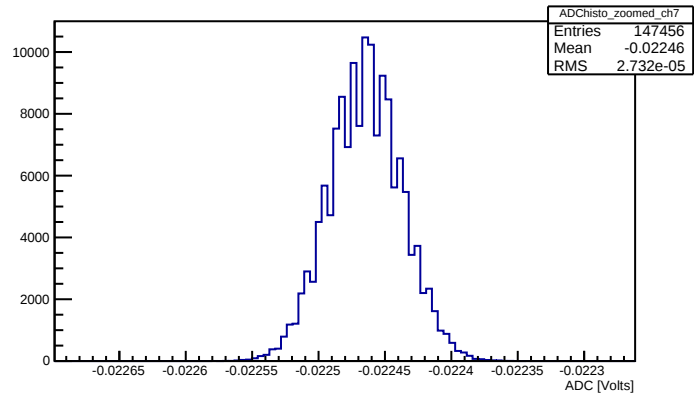
ADC zoomed ch-5



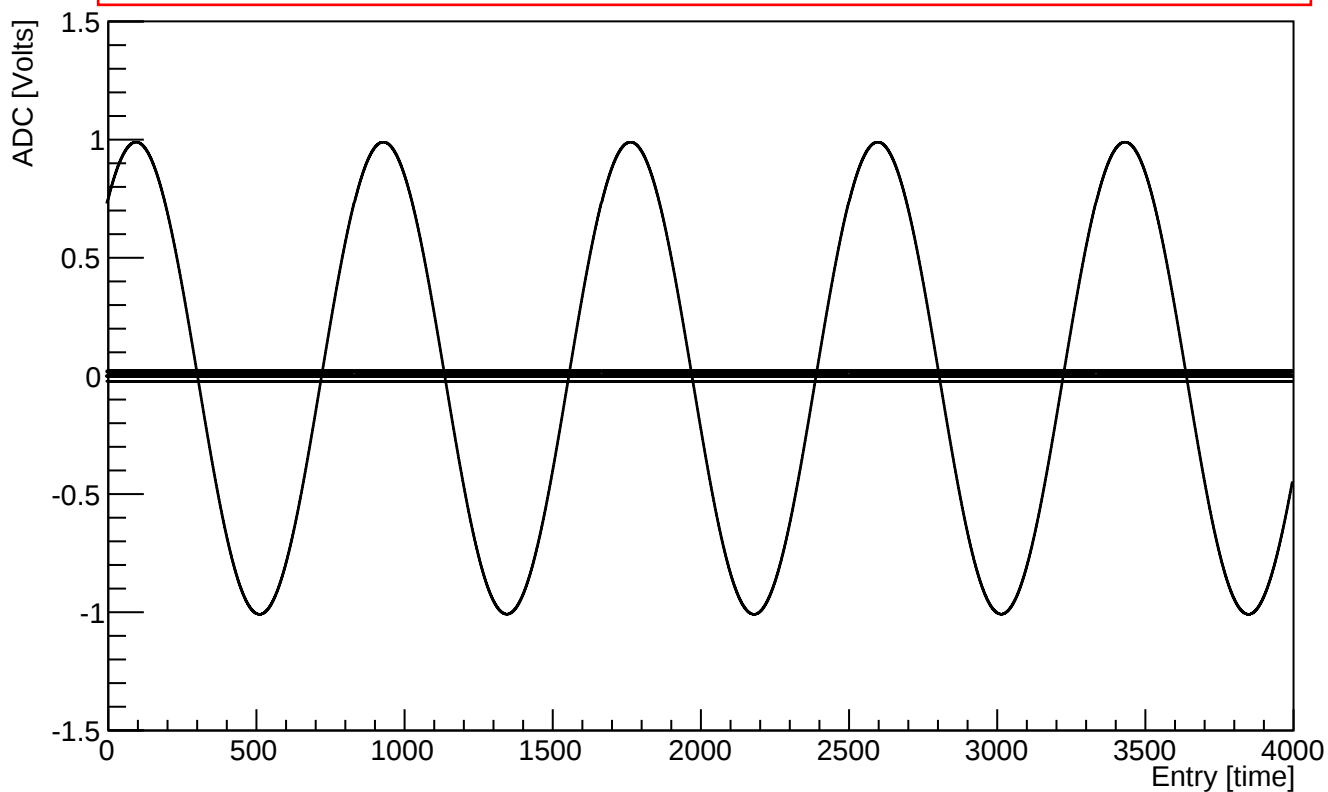
ADC zoomed ch-6



ADC zoomed ch-7

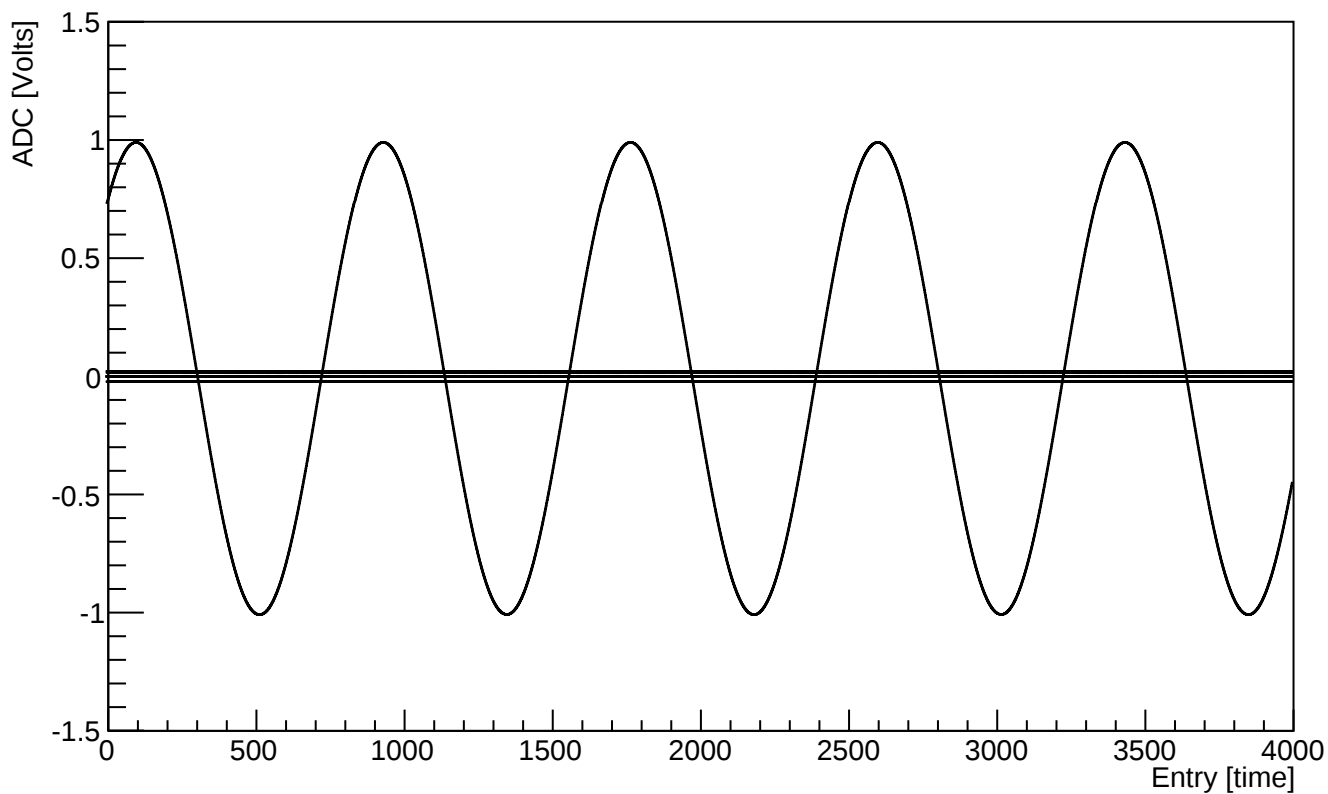


ACQ164 with sinusoidal(1volt,60Hz) signal applied to channel-2

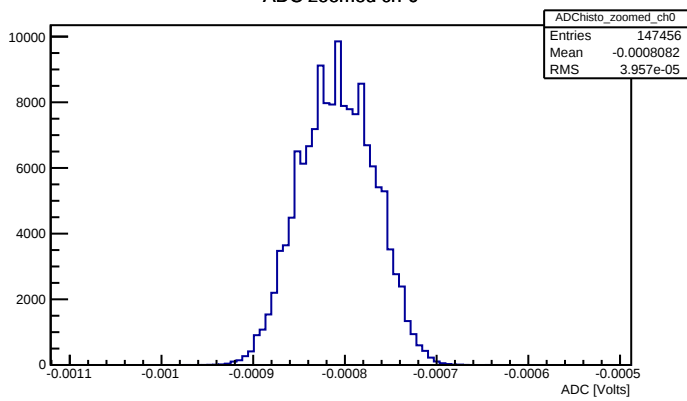


ACQ164 with sinusoidal(1volt,60Hz) signal applied to channel-2

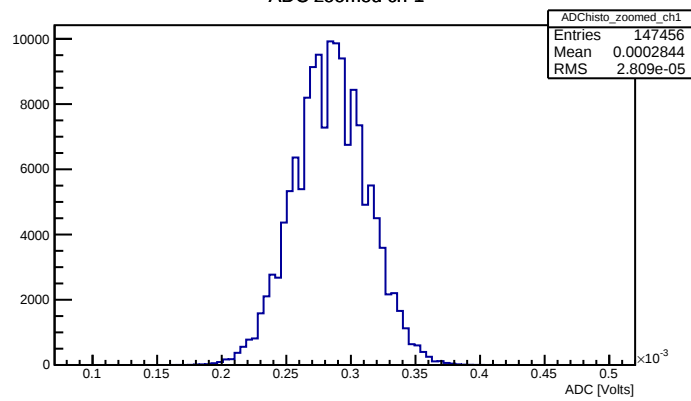
Zoomed



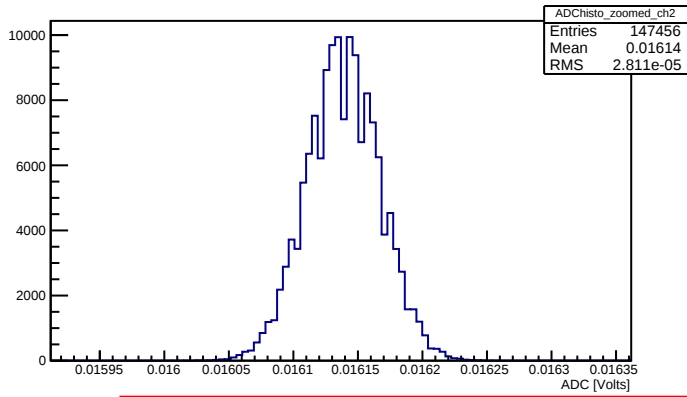
ADC zoomed ch-0



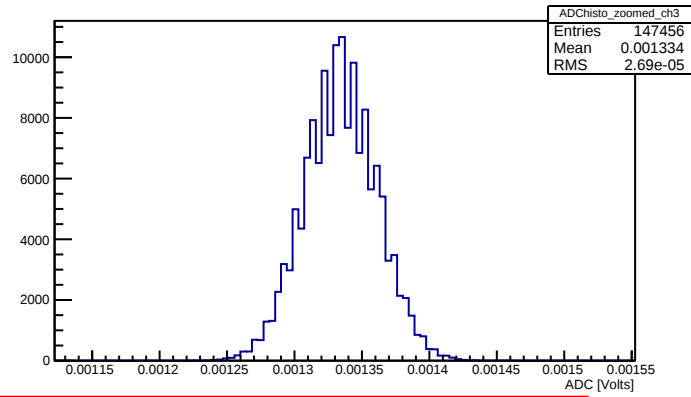
ADC zoomed ch-1



ADC zoomed ch-2

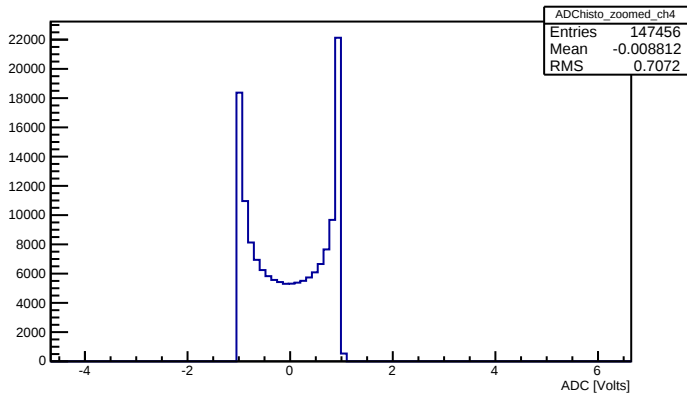


ADC zoomed ch-3

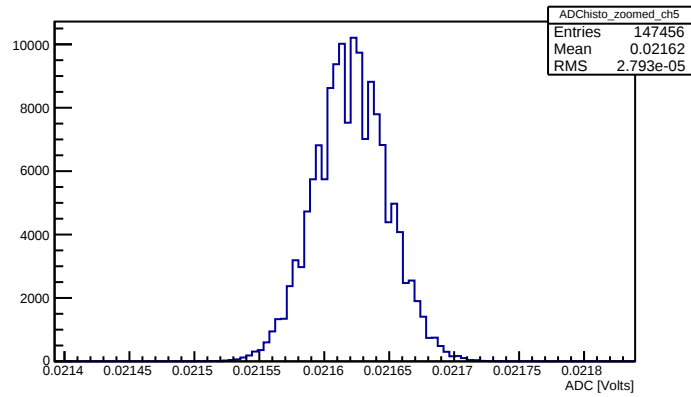


ACQ164 with sinusoidal(1volt,60Hz) signal applied to channel-2

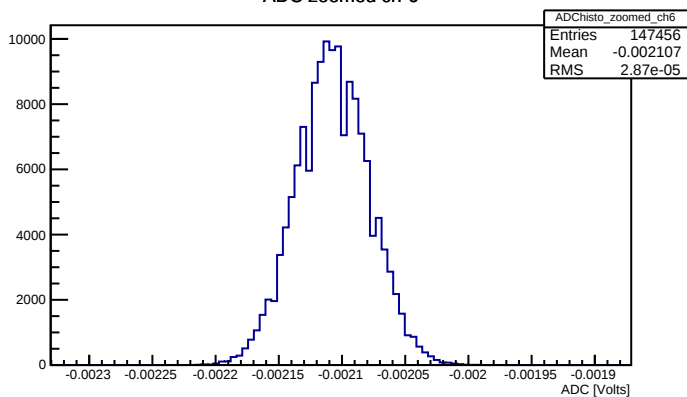
ADC zoomed ch-4



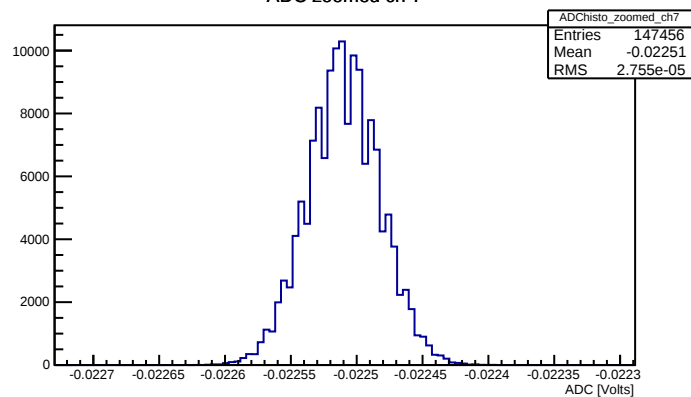
ADC zoomed ch-5



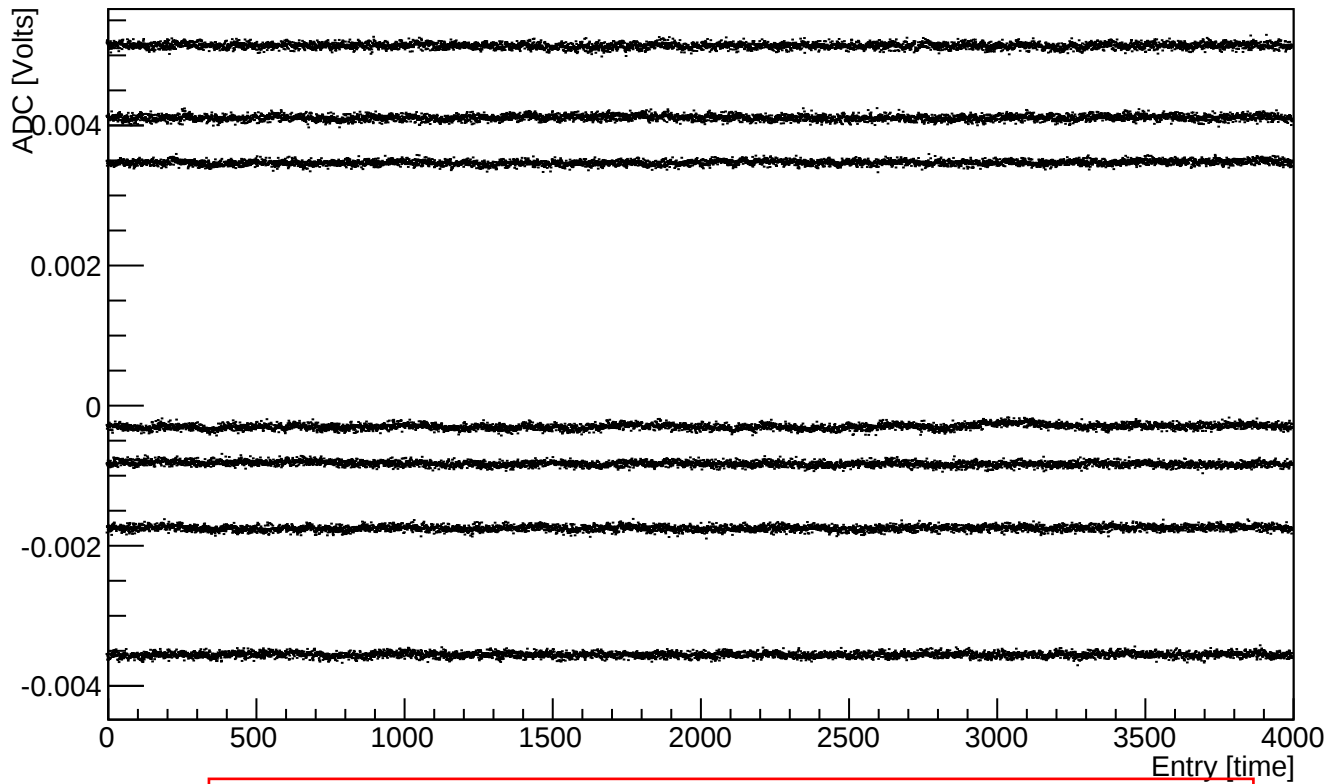
ADC zoomed ch-6



ADC zoomed ch-7

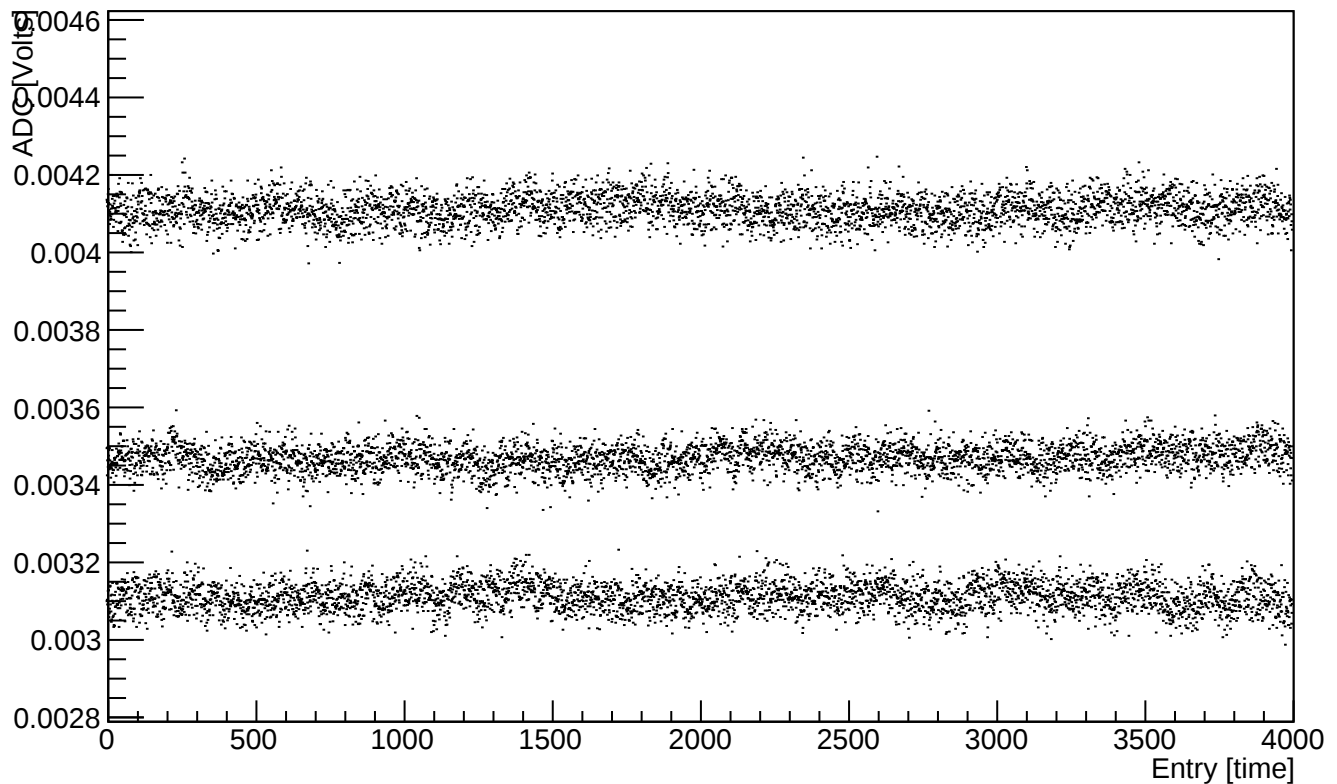


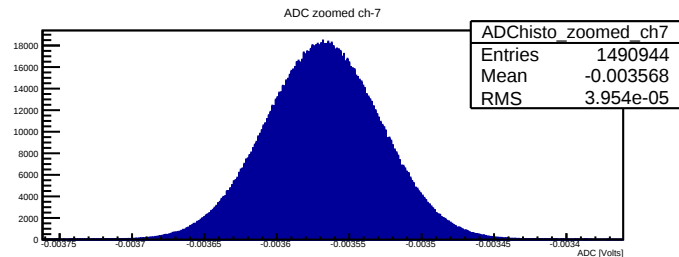
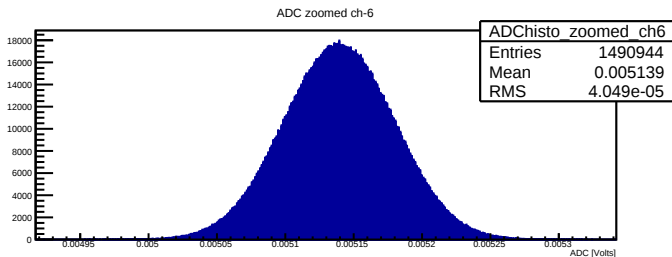
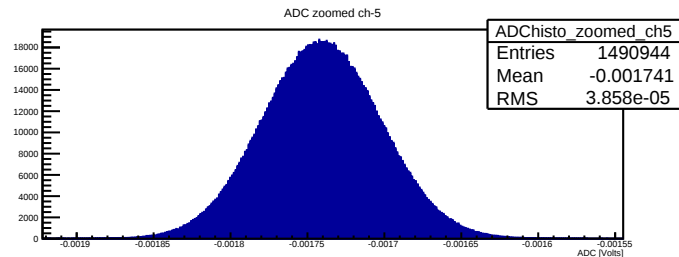
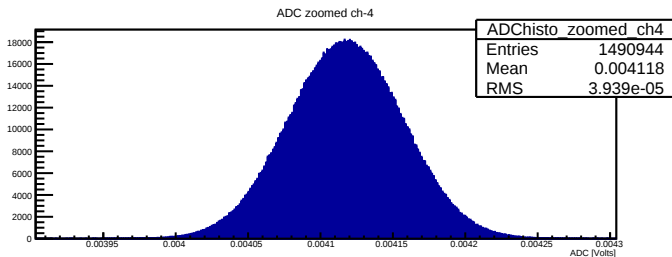
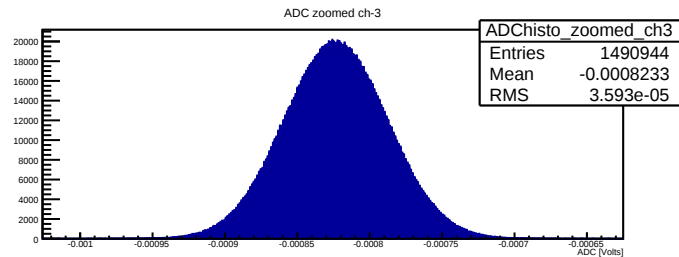
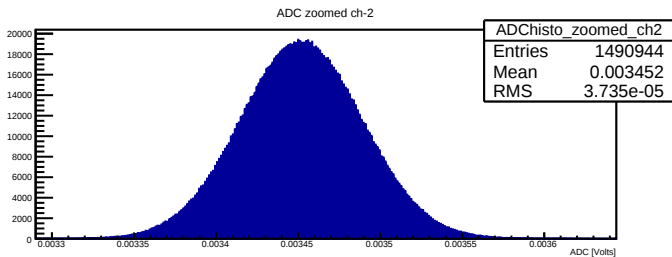
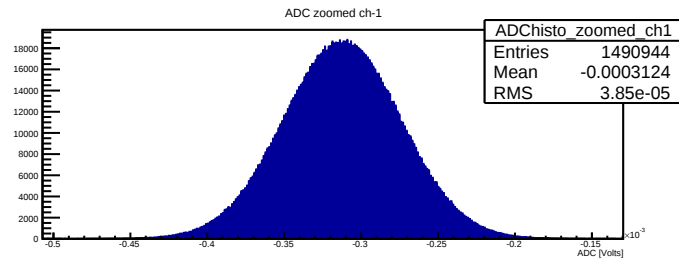
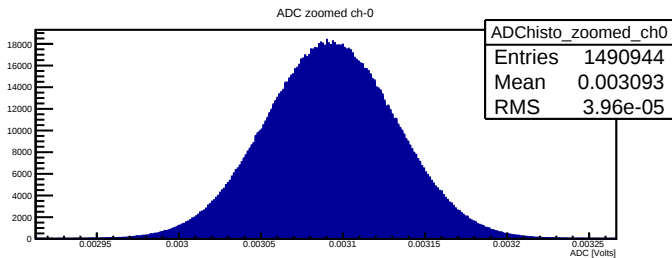
ACQ2006 no input & no cable running at 50KHz



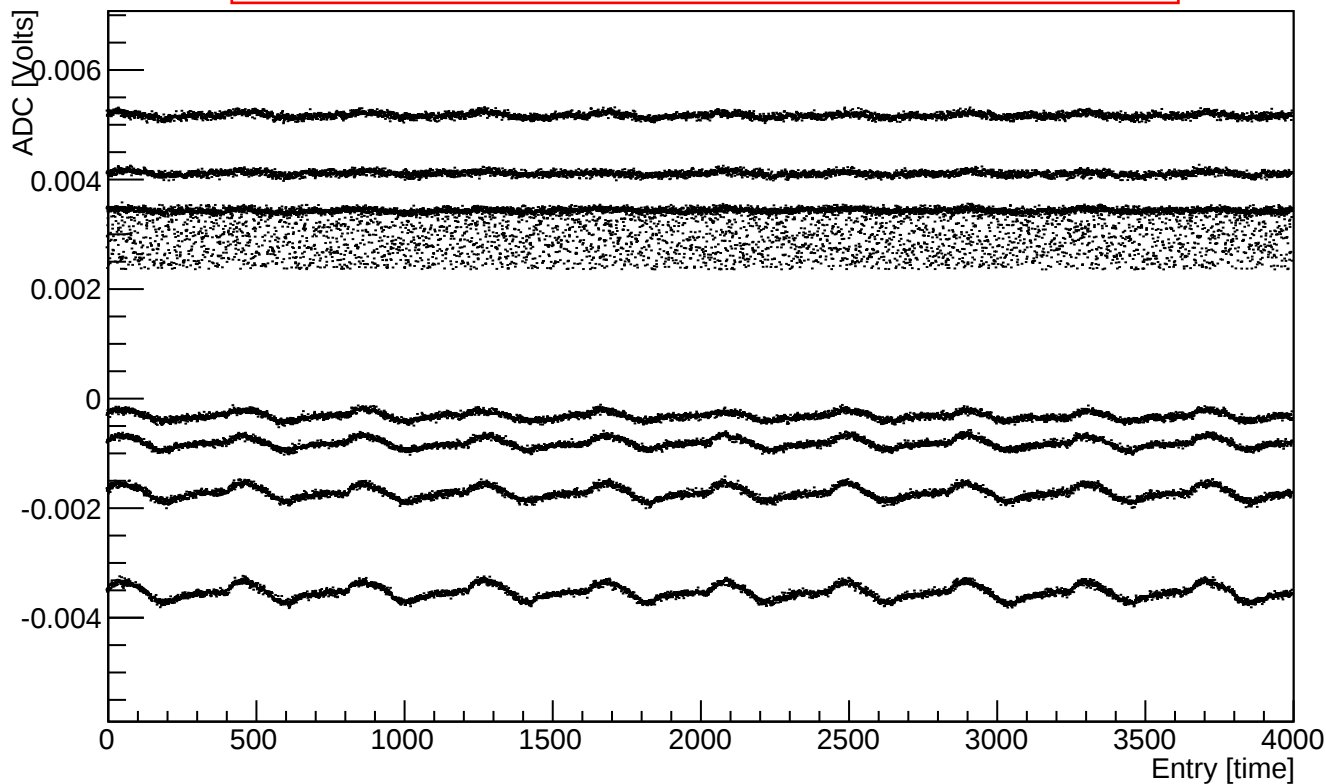
ACQ2006 no input & no cable running at 50KHz

Zoomed



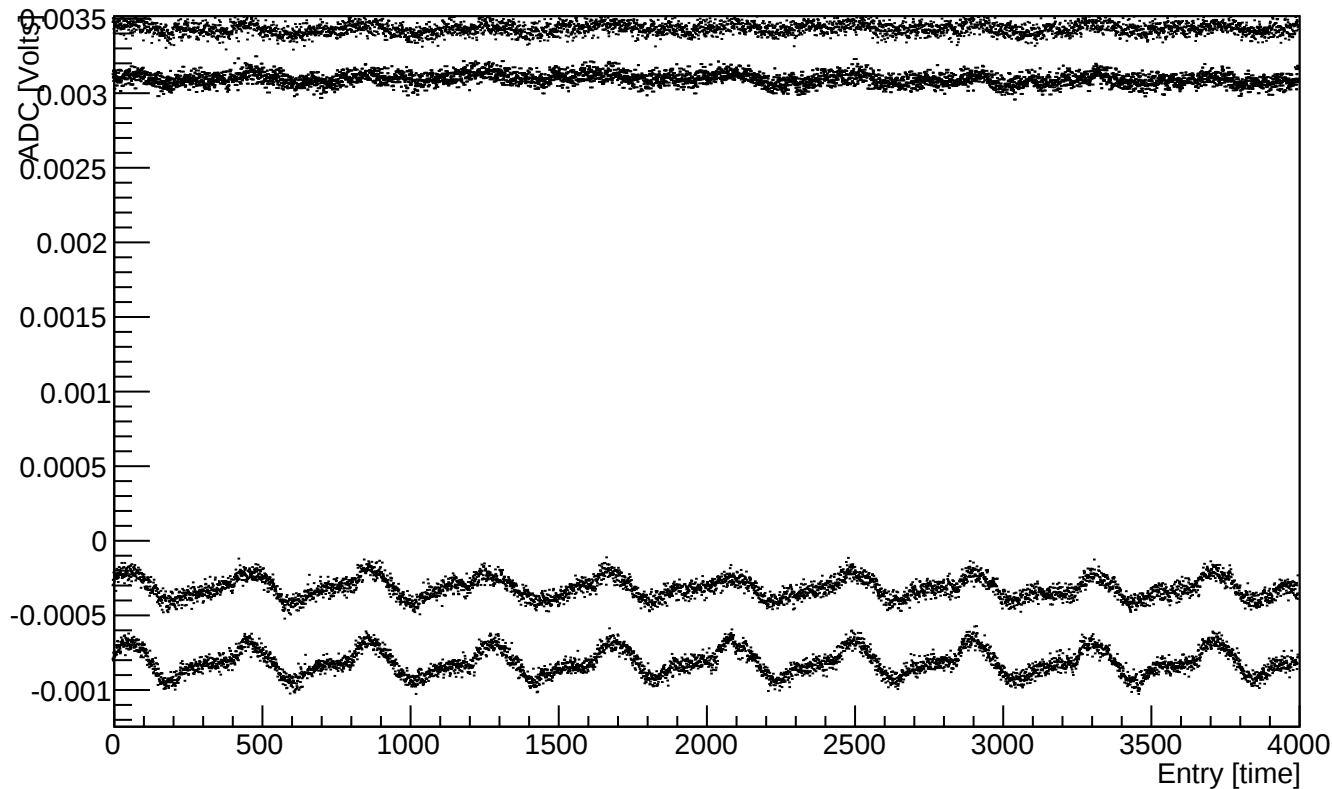


ACQ2006 with no input running at ~50KHz

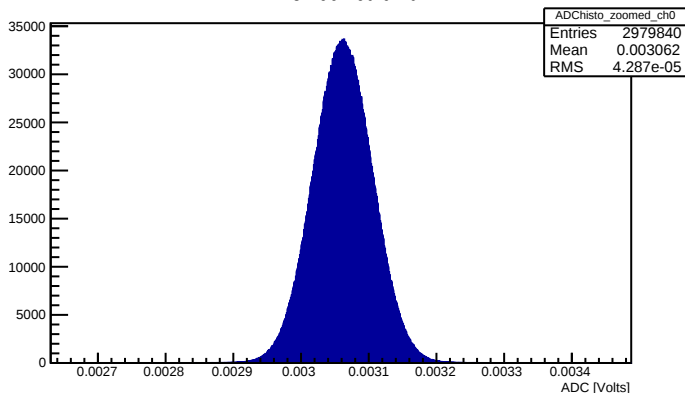


ACQ2006 with no input running at 50KHz

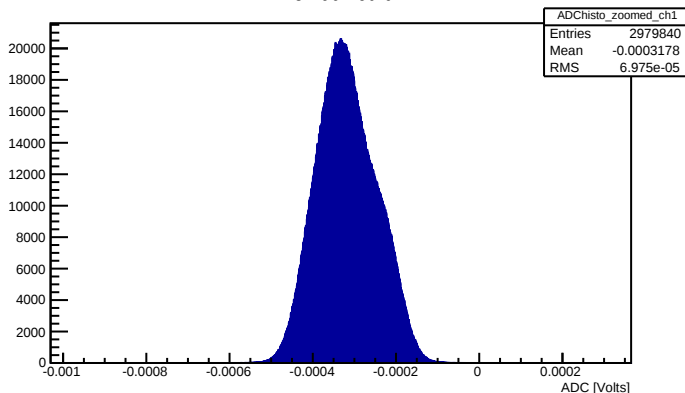
Zoomed



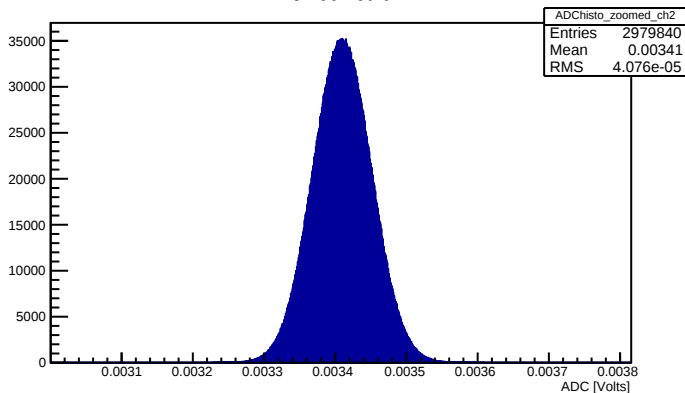
ADC zoomed ch-0



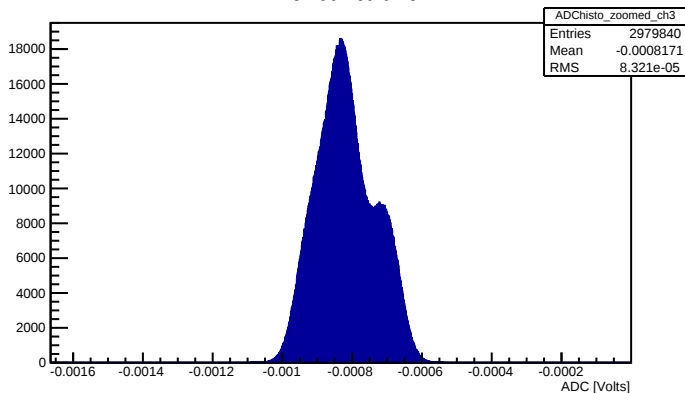
ADC zoomed ch-1



ADC zoomed ch-2

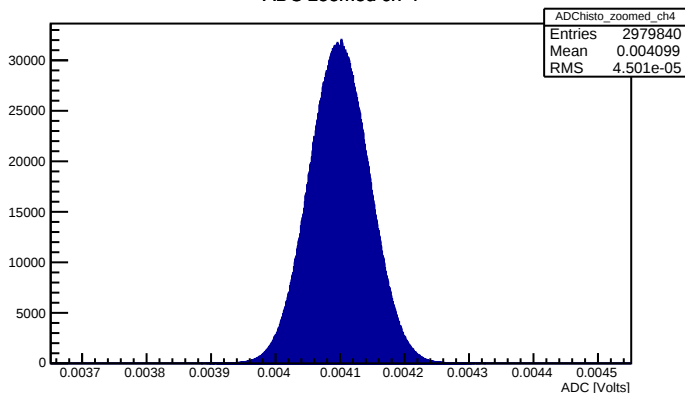


ADC zoomed ch-3

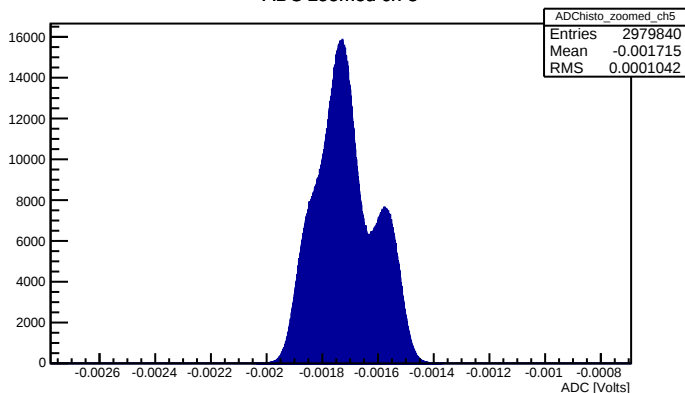


ACQ2006 with no input running at ~50KHz

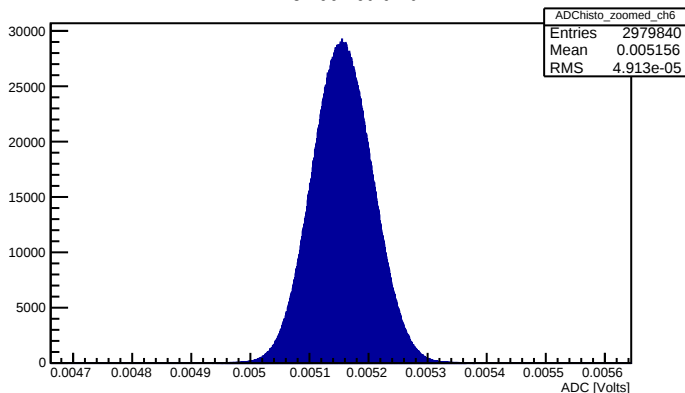
ADC zoomed ch-4



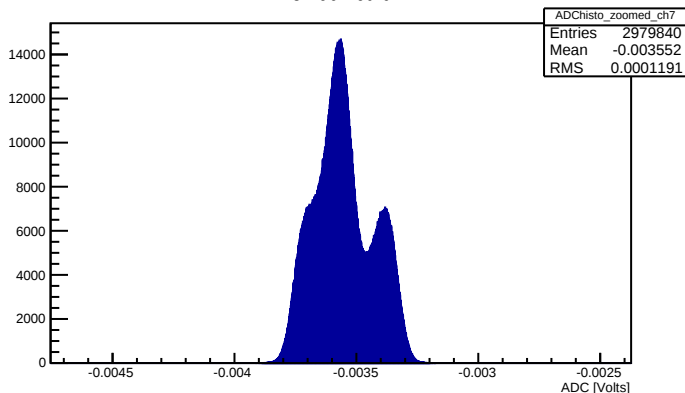
ADC zoomed ch-5

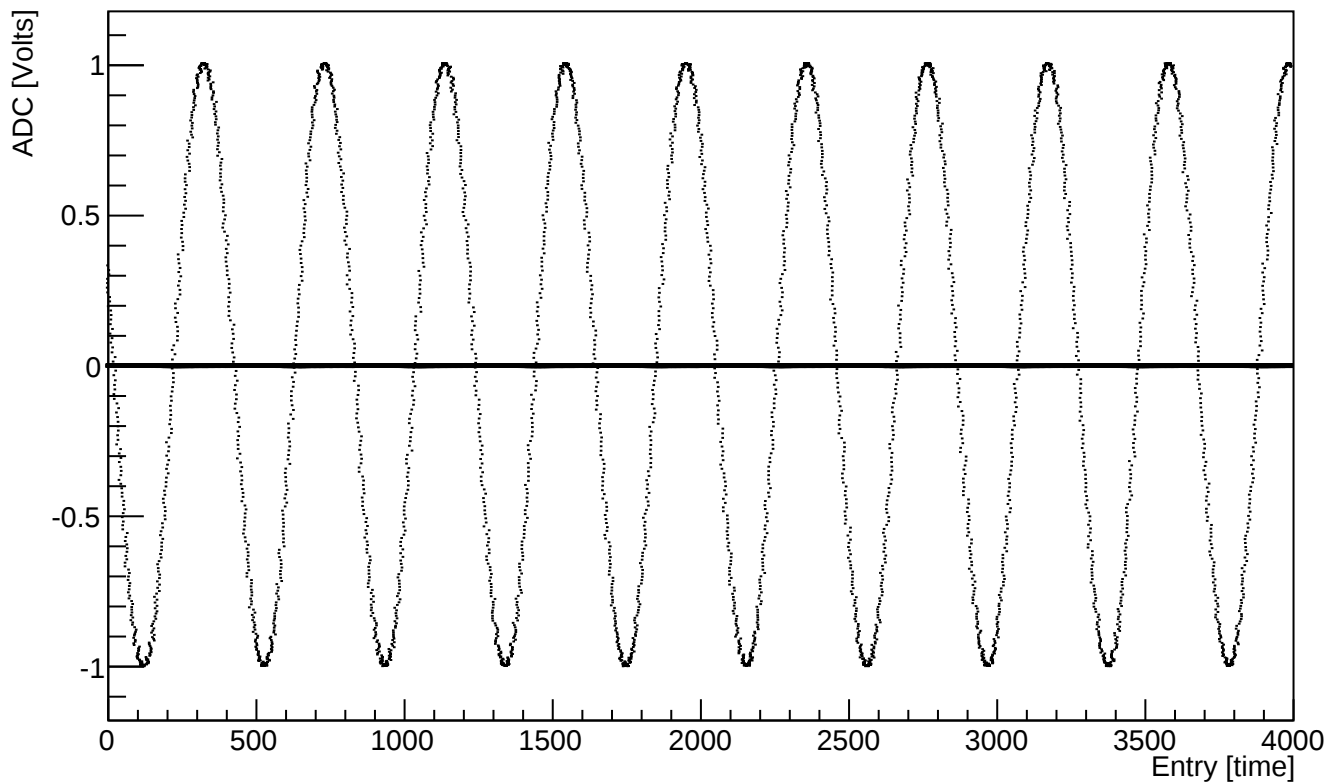


ADC zoomed ch-6



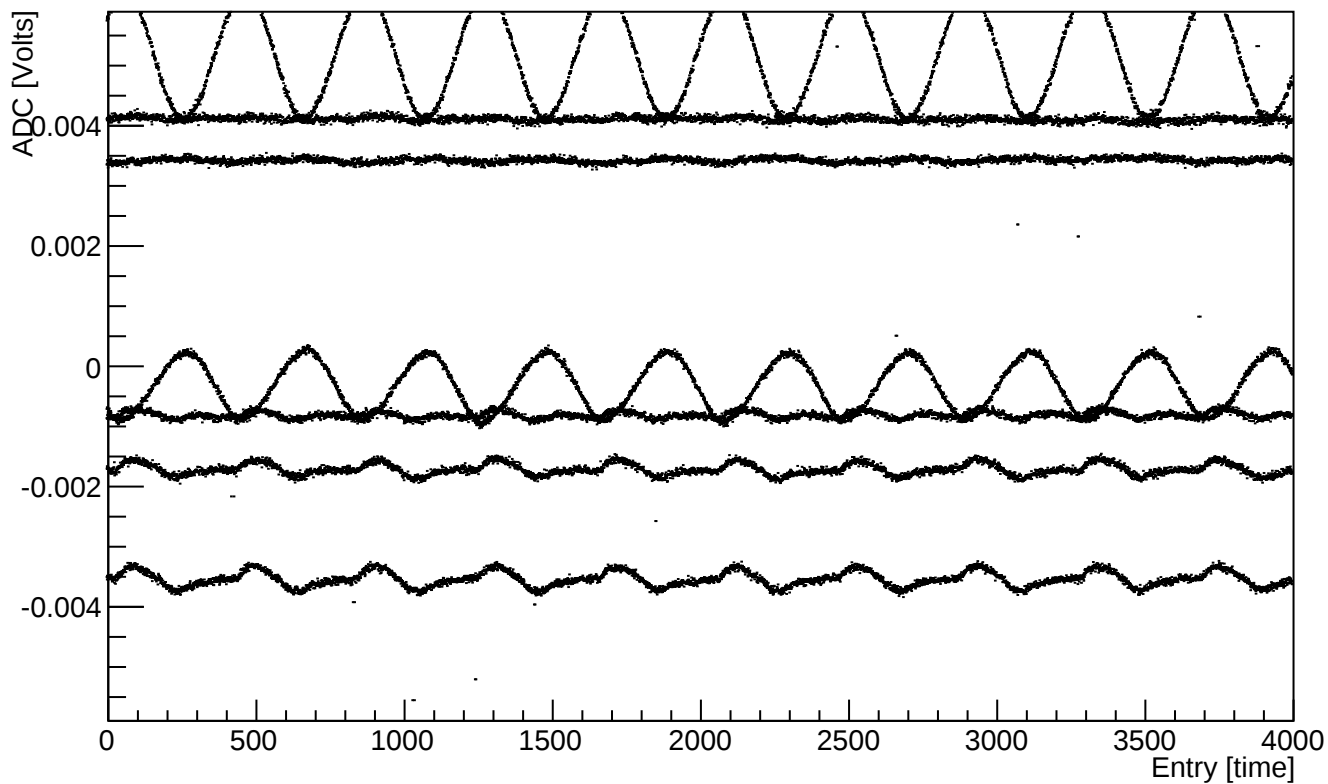
ADC zoomed ch-7



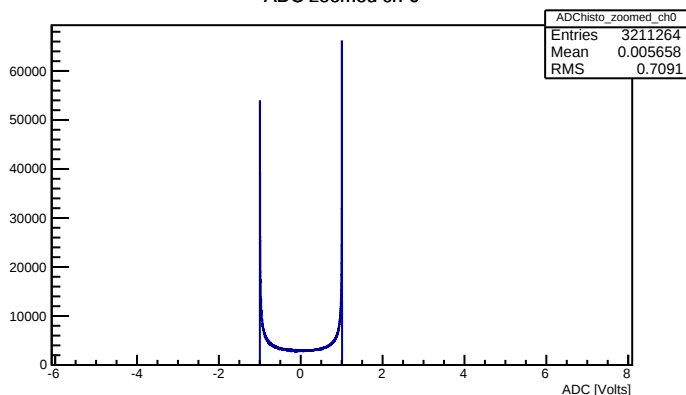


ACQ2006 with sinusoidal signal(1volt, 60Hz) signal applied on channel-1

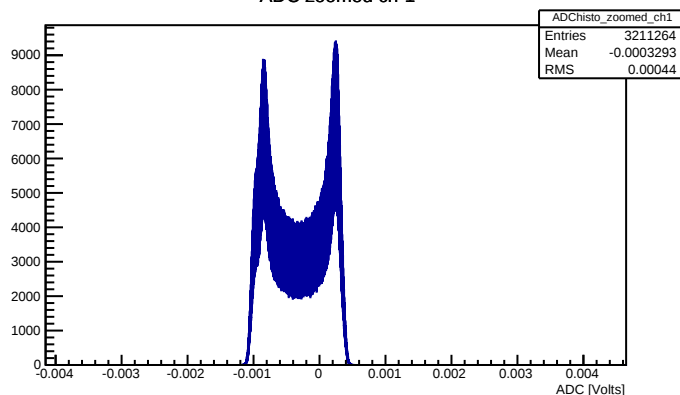
Zoomed



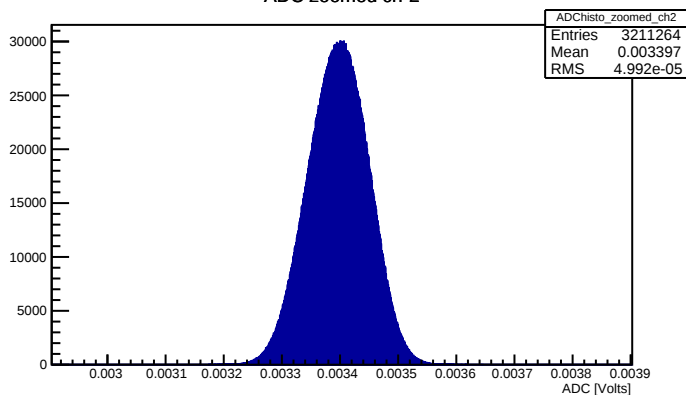
ADC zoomed ch-0



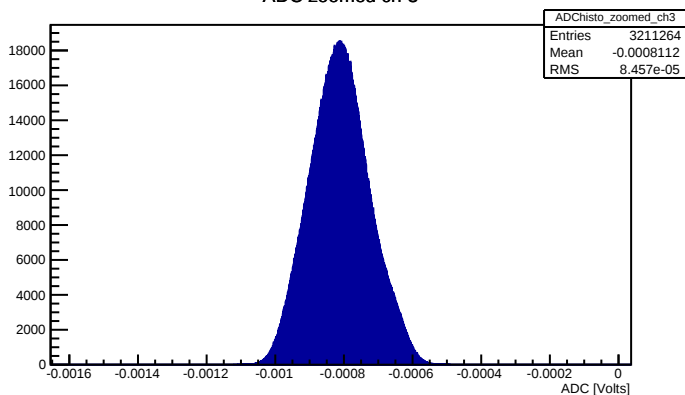
ADC zoomed ch-1



ADC zoomed ch-2

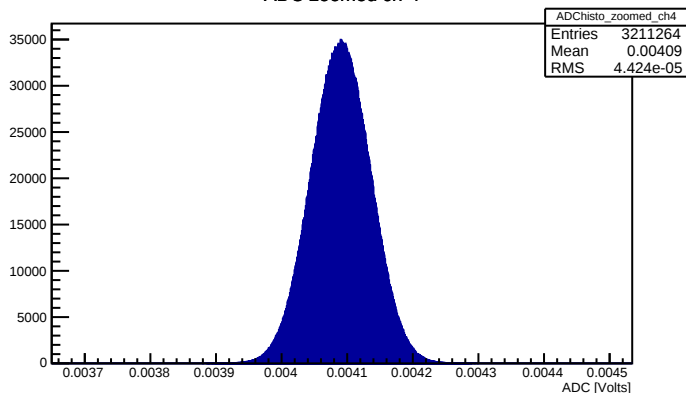


ADC zoomed ch-3

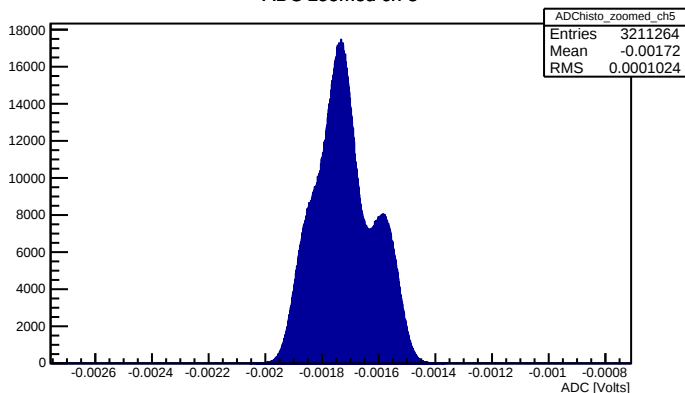


ACQ2006 with sinusoidal signal(1volt, 60Hz) signal applied on channel-1

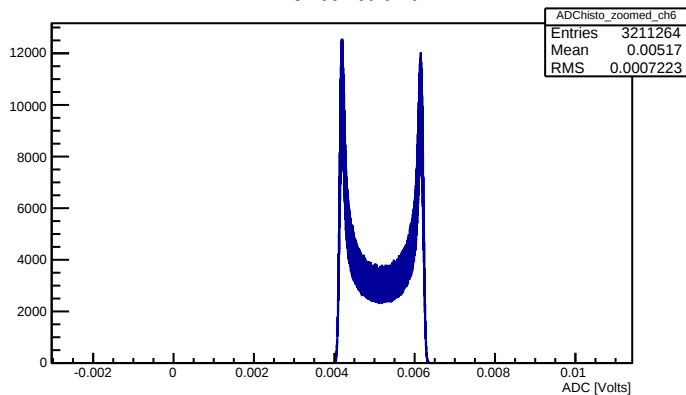
ADC zoomed ch-4



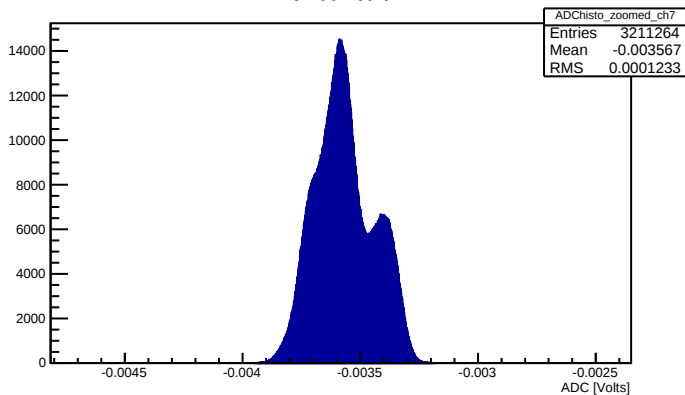
ADC zoomed ch-5

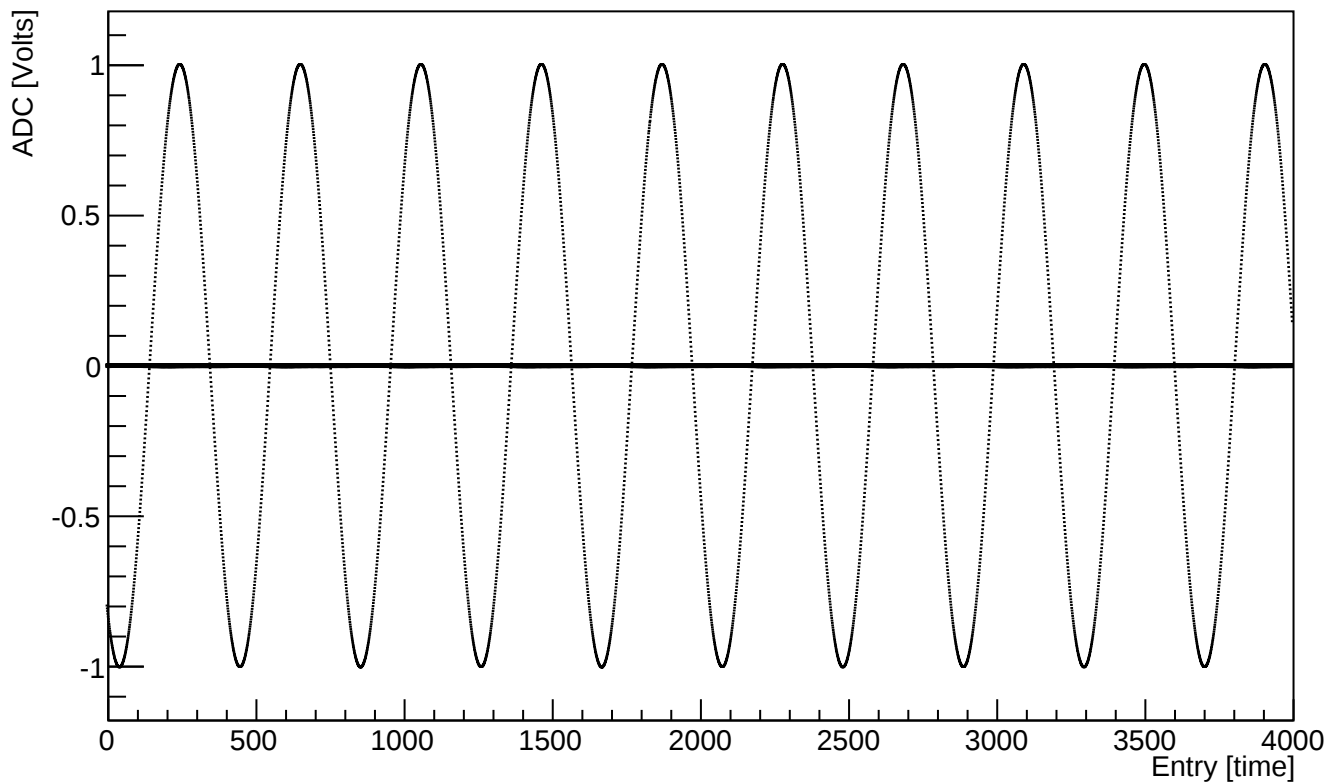


ADC zoomed ch-6



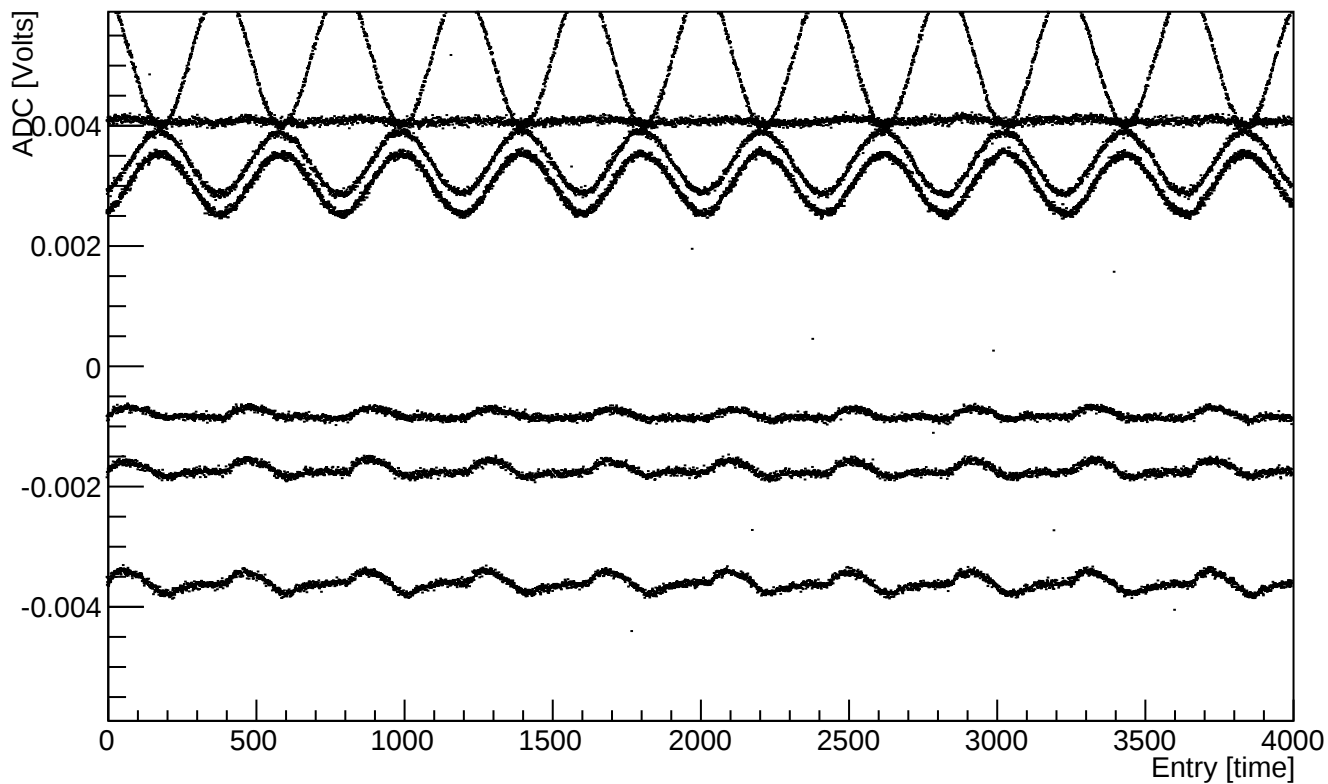
ADC zoomed ch-7



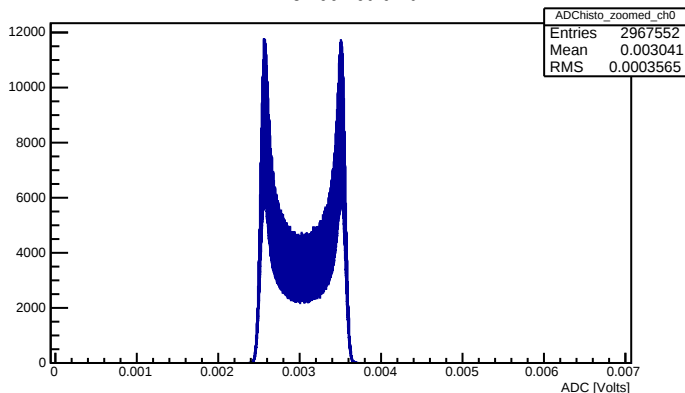


ACQ2006 with sinusoidal signal(1volt, 60Hz) signal applied on channel-2

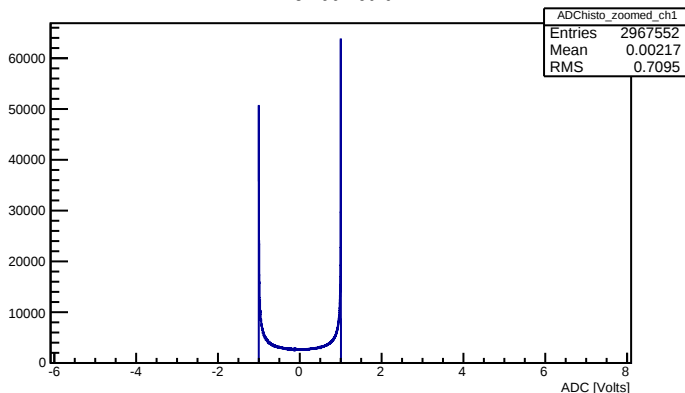
Zoomed



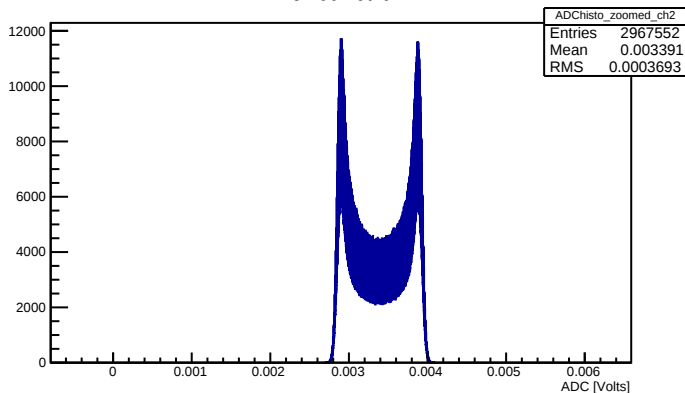
ADC zoomed ch-0



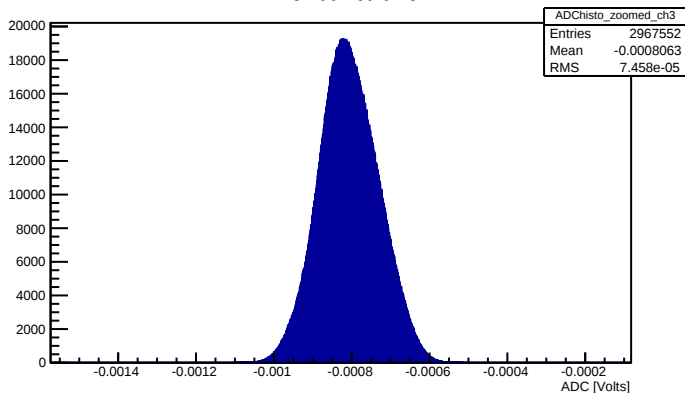
ADC zoomed ch-1



ADC zoomed ch-2

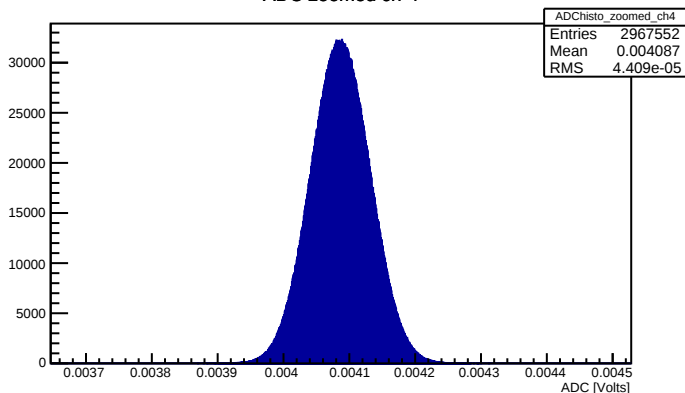


ADC zoomed ch-3

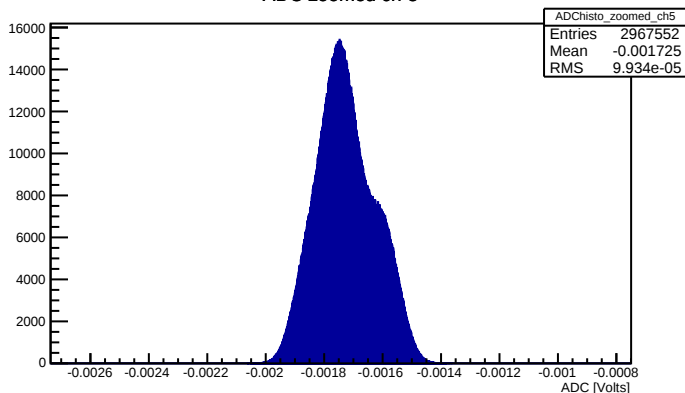


ACQ2006 with sinusoidal signal(1volt, 60Hz) signal applied on channel-2

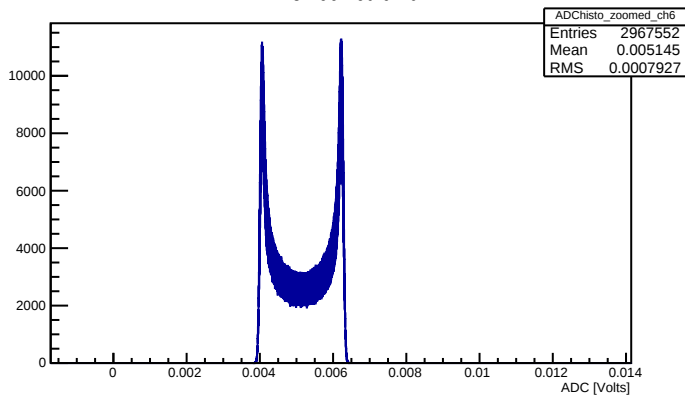
ADC zoomed ch-4



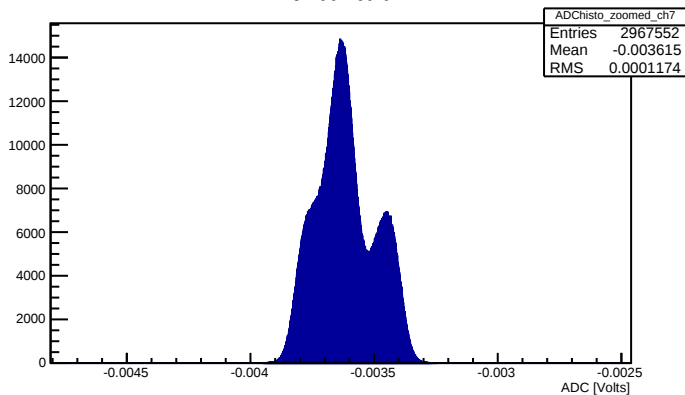
ADC zoomed ch-5



ADC zoomed ch-6



ADC zoomed ch-7



Summery:

At 50KHz sample rate:

- For ACQ164 ADC noise (RMS value) ~ 28 micro volt
For ACQ2006 ADC noise(RMS vale) ~ 45 micro
volt(not fixed)
- No significant cross talk for ACD164 when sinusoidal
signal applied(for first 8 channels).
- ACQ2006 gives Gaussian noise if no cable connected.
- For ACQ2006 it gets distorted if cable is connected
even if there is no input
- Small cross talk between channels for ACQ2006
observed when sinusoidal signal applied.