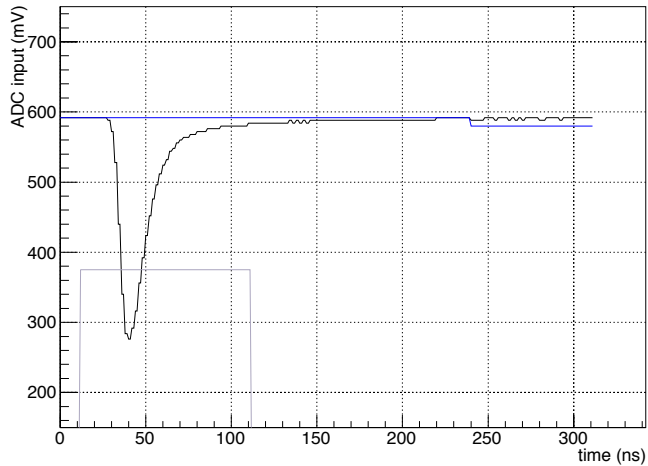


Update 2016.05.17

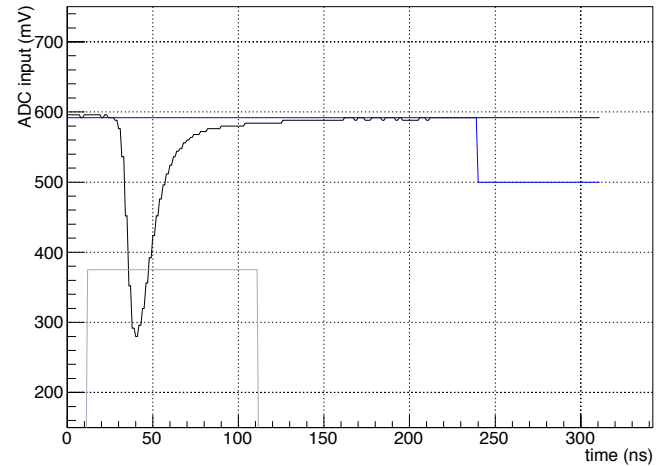
Hiu Fung Wong

[July 2015] Run 079, waveforms with a change in digitiser-recorded baseline

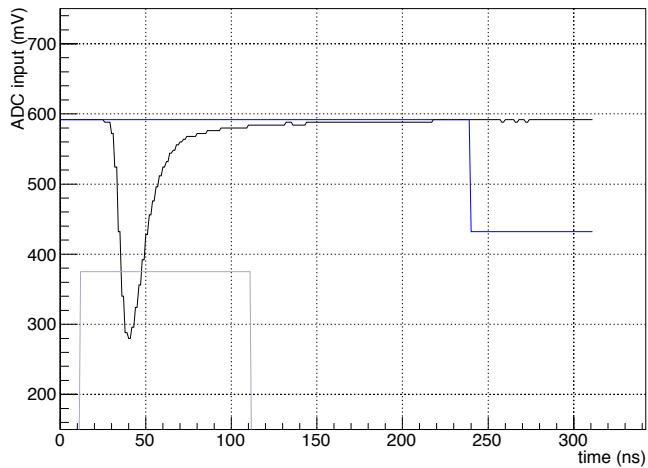
ADC input over time (file: 00036)



ADC input over time (file: 00066)

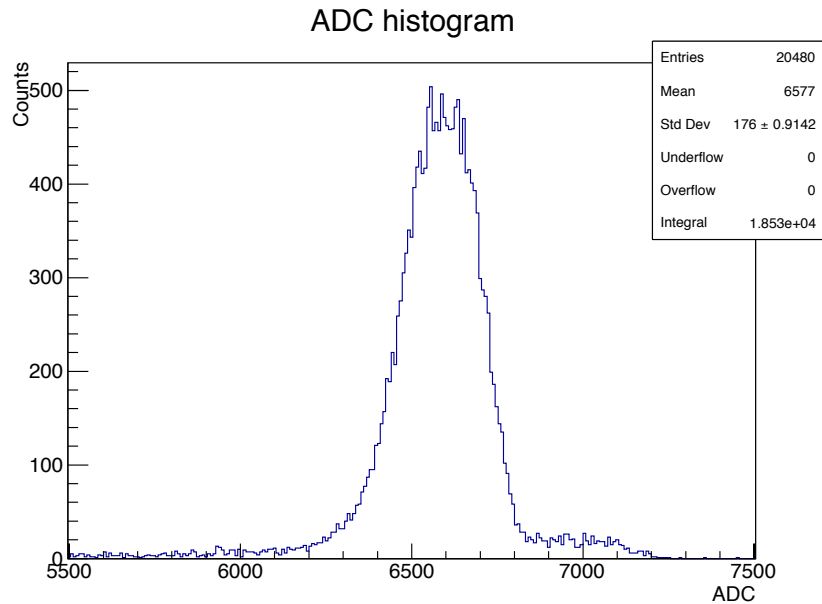


ADC input over time (file: 00129)

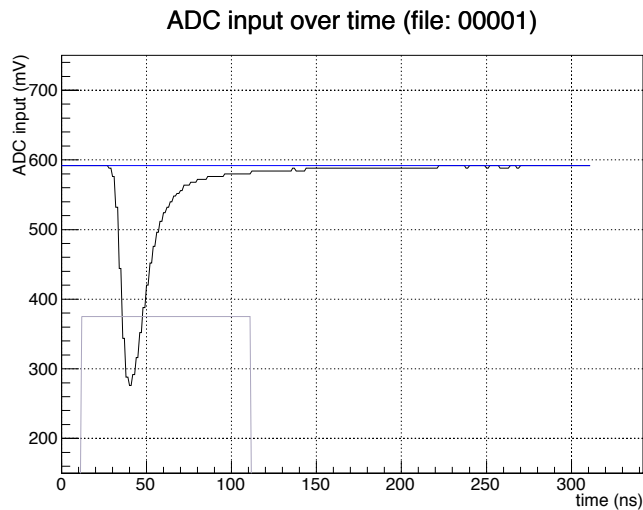


- Total number waveforms with change in digitiser-recorded baseline: 1915 / 20480 (9.4%).

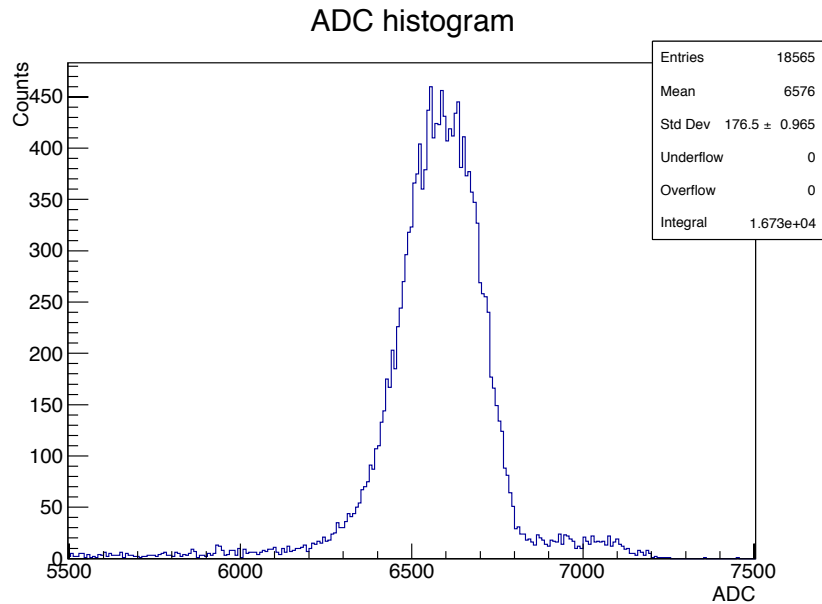
[July 2015] Run 079, reconstructed waveform histogram



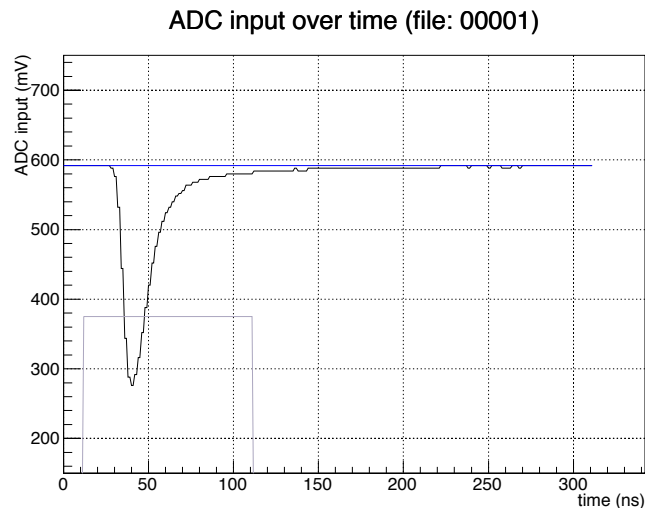
- Baseline: from digitiser.
- Gate: 100ns (from digitiser).
- Cut: none.
- E-resolution:
 2.933 ± 0.036 % FWHM.



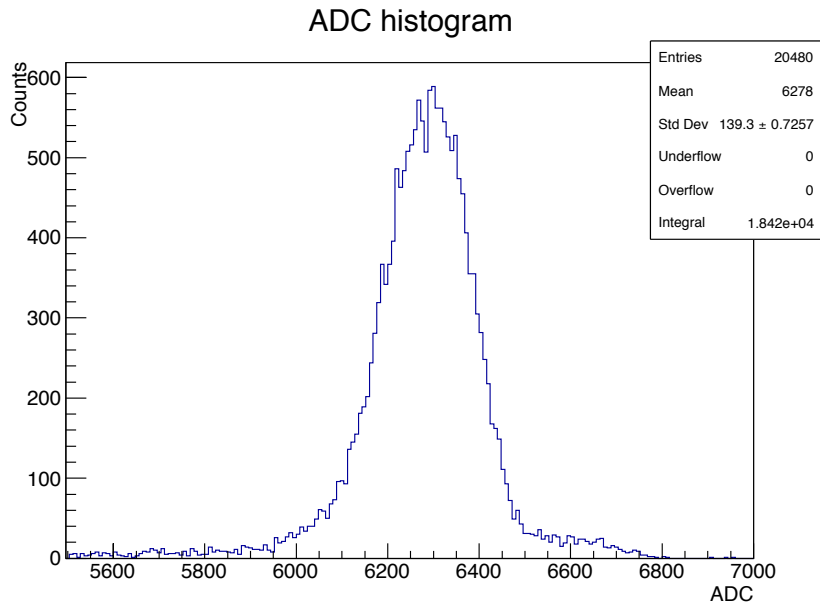
[July 2015] Run 079, reconstructed waveform histogram



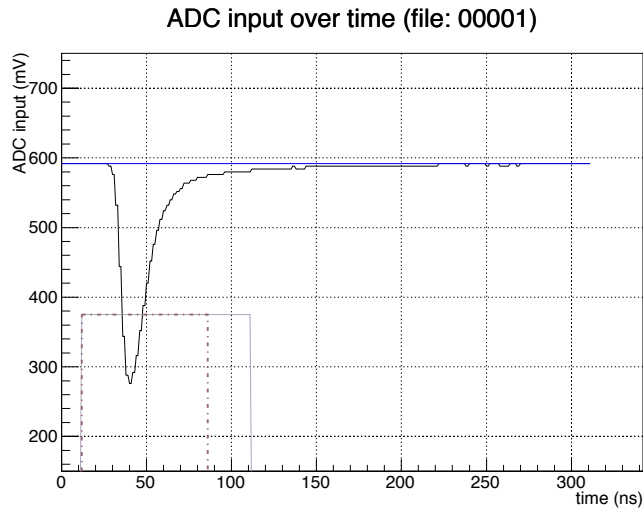
- Baseline: from digitiser.
- Gate: 100ns (from digitiser).
- Cut:
 - Any waveforms hitting 0: 0.
 - Any waveforms with change in digitiser-recorded baseline: 1915.
- E-resolution:
2.936 +/- 0.038 % FWHM



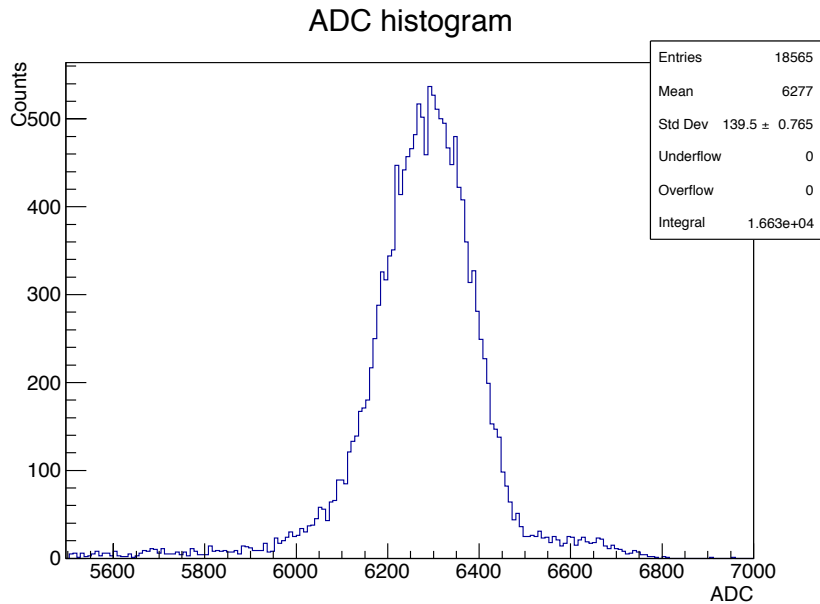
[July 2015] Run 079, reconstructed waveform histogram



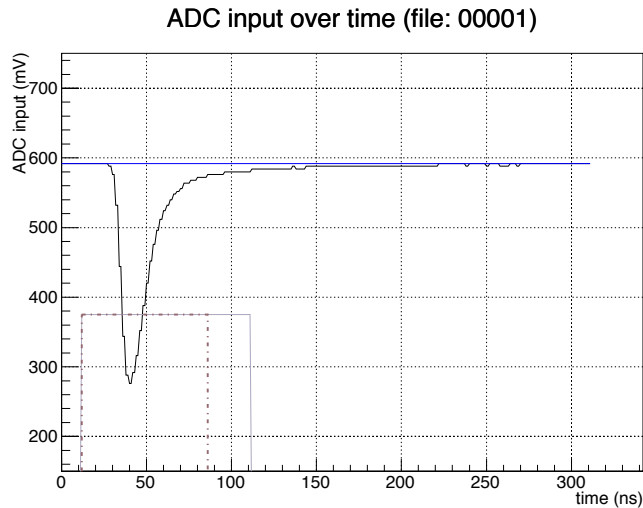
- Baseline: from digitiser.
- Gate: 75 ns.
- Cut: none.
- E-resolution:
2.660 +/- 0.034 % FWHM.



[July 2015] Run 079, reconstructed waveform histogram

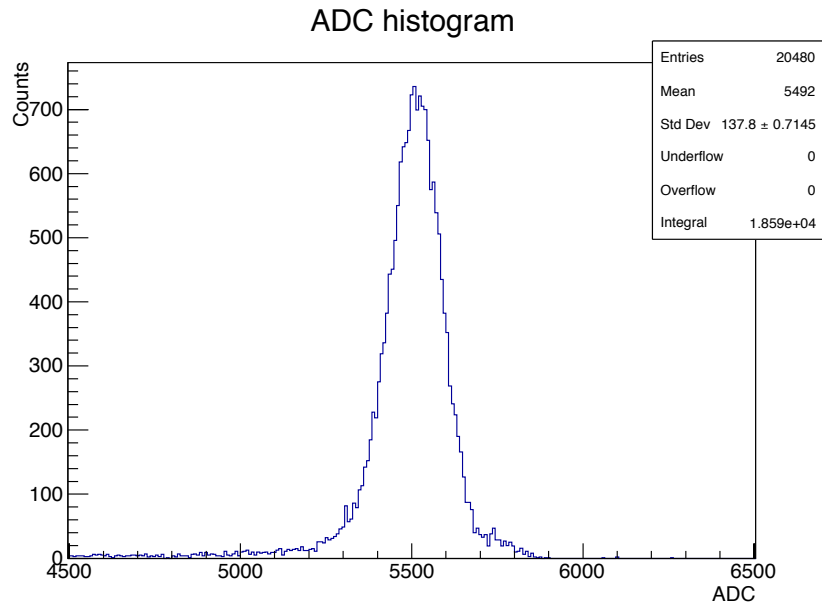


- Baseline: from digitiser.
- Gate: 75 ns.
- Cut:
 - Any waveforms hitting 0: 0.
 - Any waveforms with change in digitiser-recorded baseline: 1915.

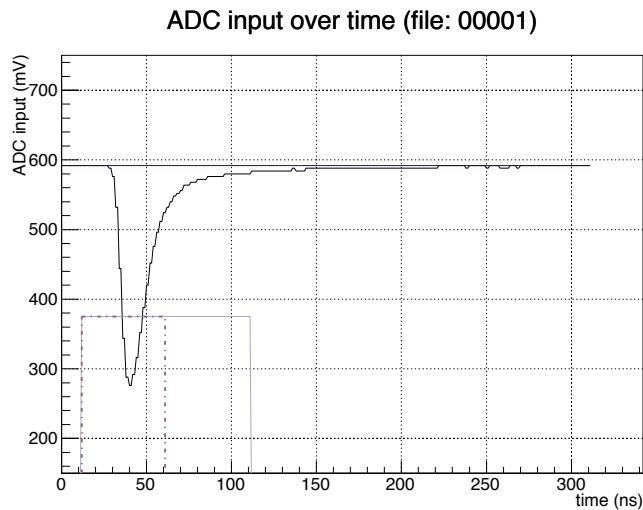


- E-resolution:
2.661 +/- 0.036 % FWHM

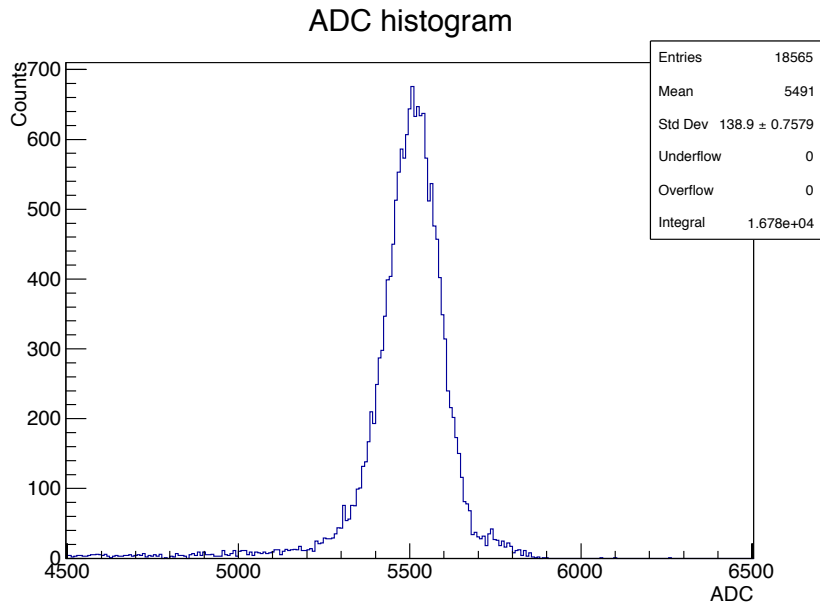
[July 2015] Run 079, reconstructed waveform histogram



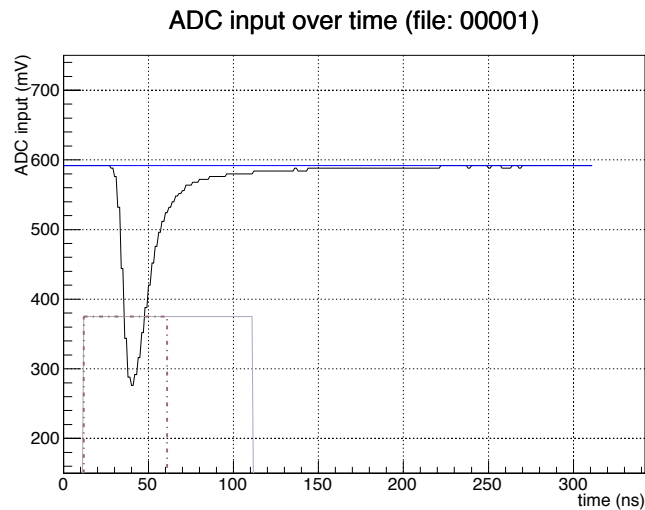
- Baseline: from digitiser.
- Gate: 50 ns.
- Cut: none.
- E-resolution:
 2.803 ± 0.046 % FWHM



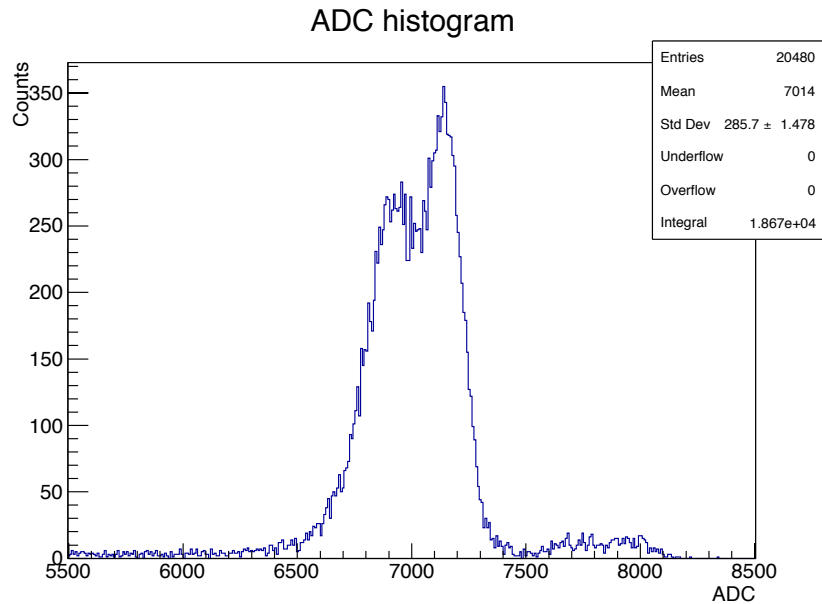
[July 2015] Run 079, reconstructed waveform histogram



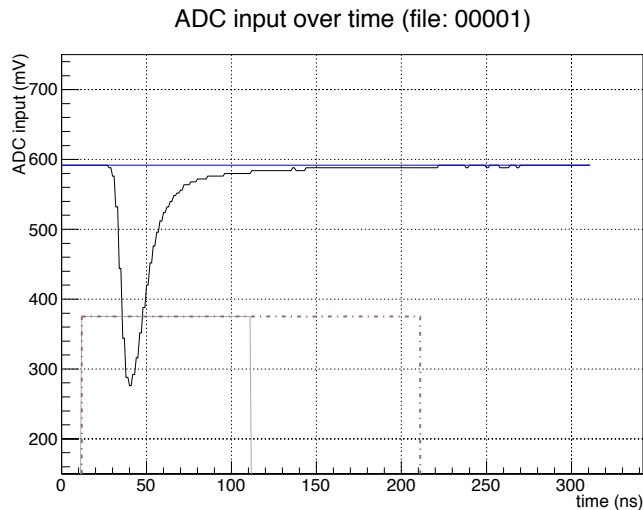
- Baseline: from digitiser.
- Gate: 50 ns.
- Cut:
 - Any waveforms hitting 0: 0.
 - Any waveforms with change in digitiser-recorded baseline: 1915.
- E-resolution:
2.787 +/- 0.051 % FWHM



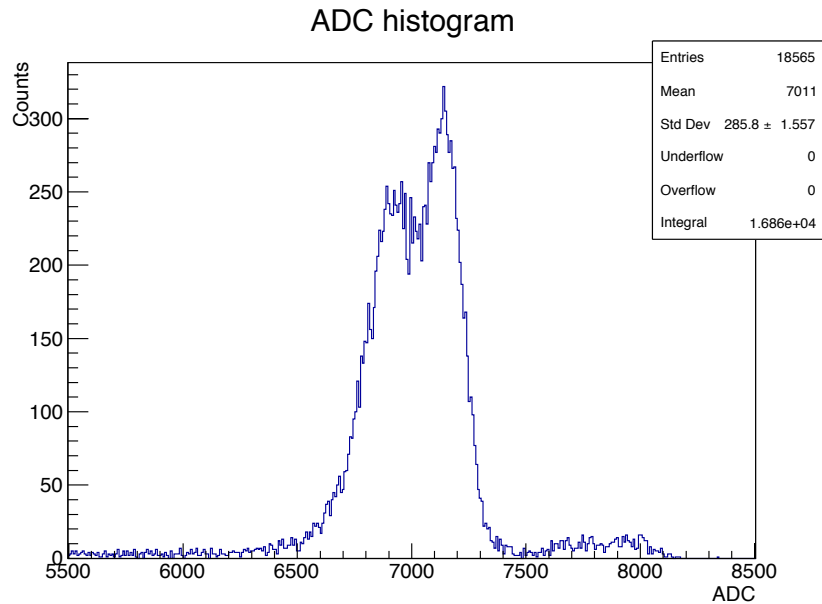
[July 2015] Run 079, reconstructed waveform histogram



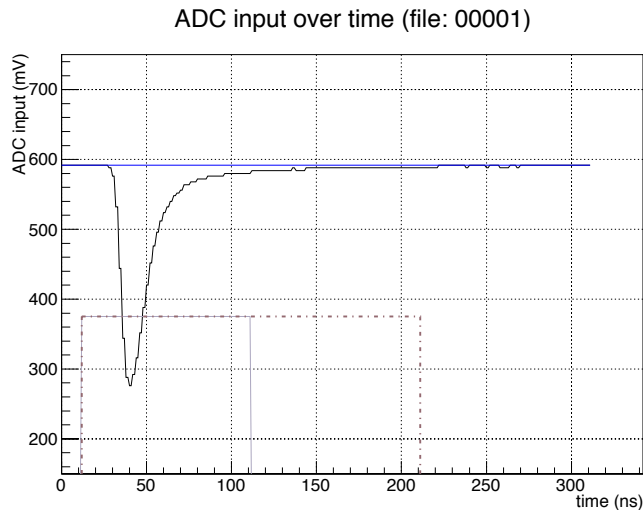
- Baseline: from digitiser.
- Gate: 200 ns.
- Cut: none.
- E-resolution: (couldn't fit)



[July 2015] Run 079, reconstructed waveform histogram

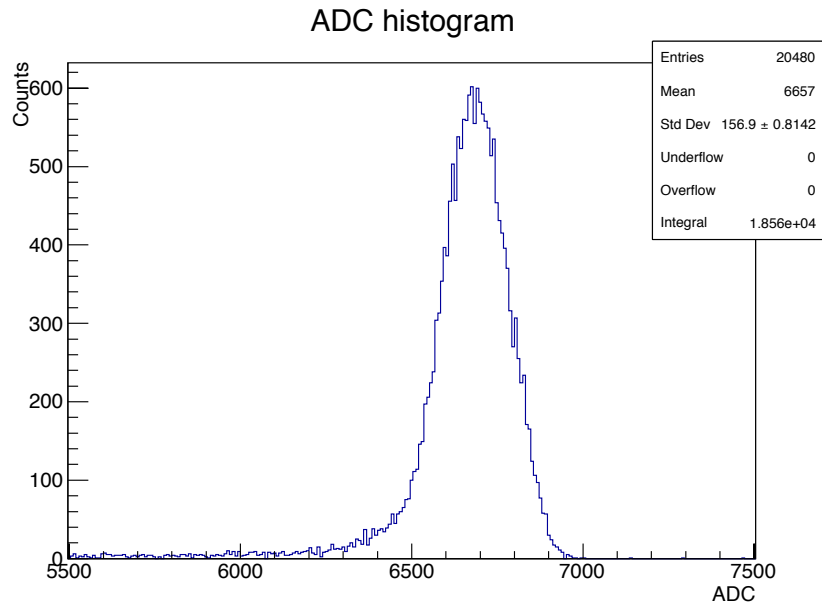


- Baseline: from digitiser.
- Gate: 200 ns.
- Cut:
 - Any waveforms hitting 0: 0.
 - Any waveforms with change in digitiser-recorded baseline: 1915.

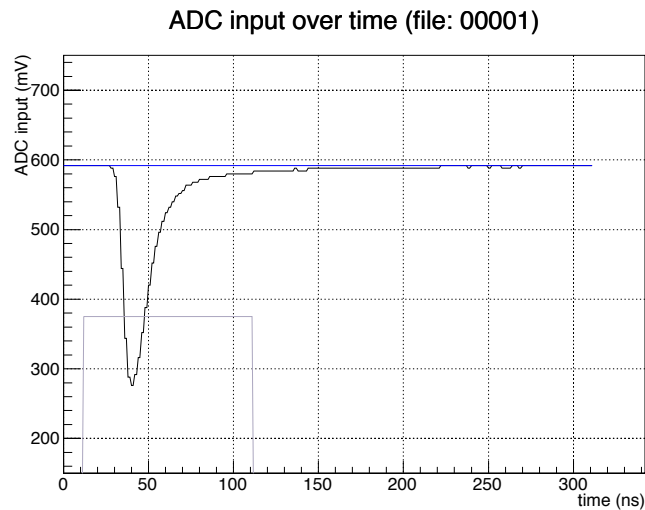


- E-resolution:
(couldn't fit)

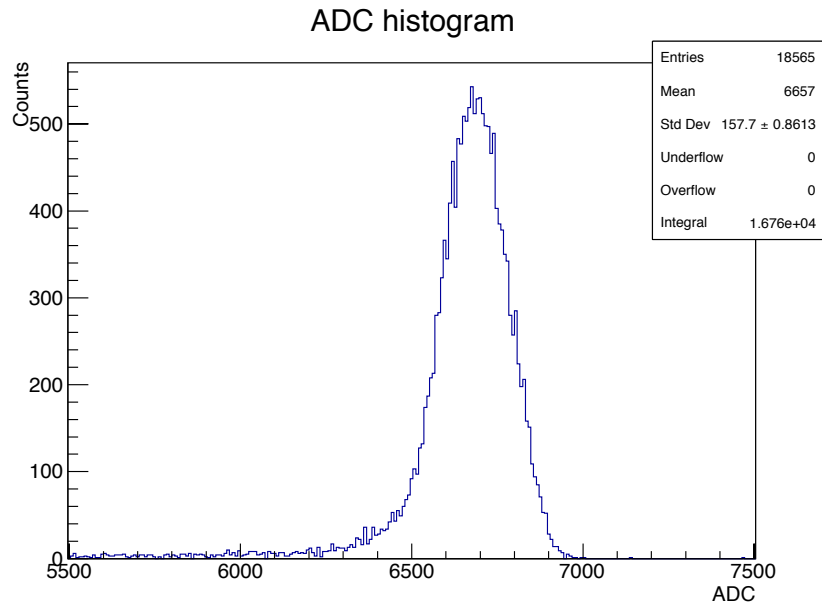
[July 2015] Run 079, reconstructed waveform histogram



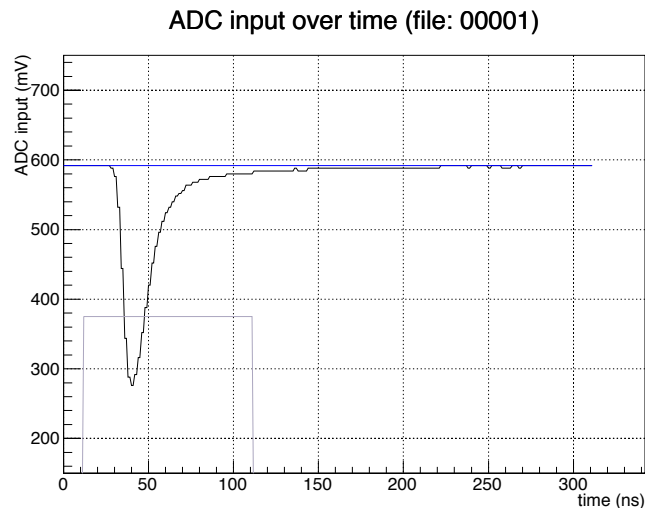
- Baseline: from fit (to flat portion of waveform).
- Gate: 100ns (from digitiser).
- Cut: none.
- E-resolution: $2.789 \pm 0.026 \%$ FWHM



[July 2015] Run 079, reconstructed waveform histogram

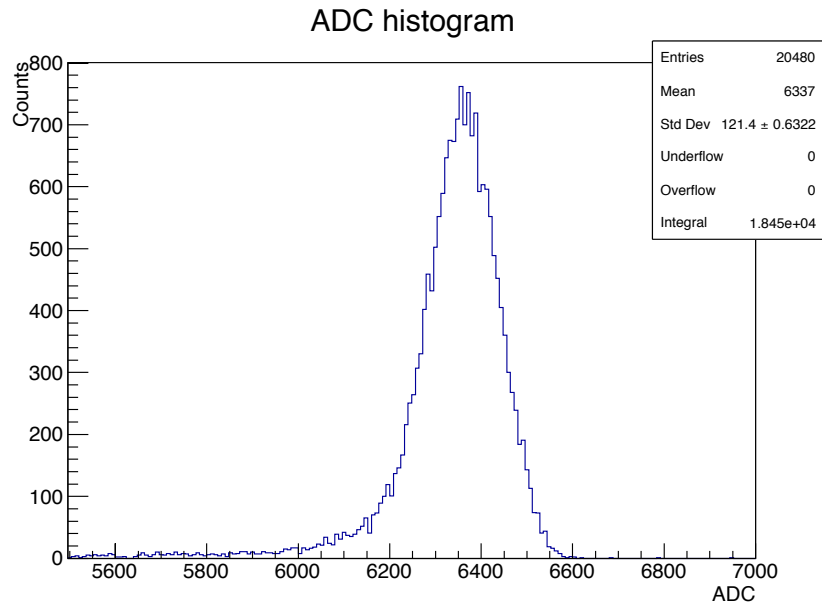


- Baseline: from fit (to flat portion of waveform).
- Gate: 100ns (from digitiser).
- Cut:
 - Any waveforms hitting 0: 0.
 - Any waveforms with change in digitiser-recorded baseline: 1915.

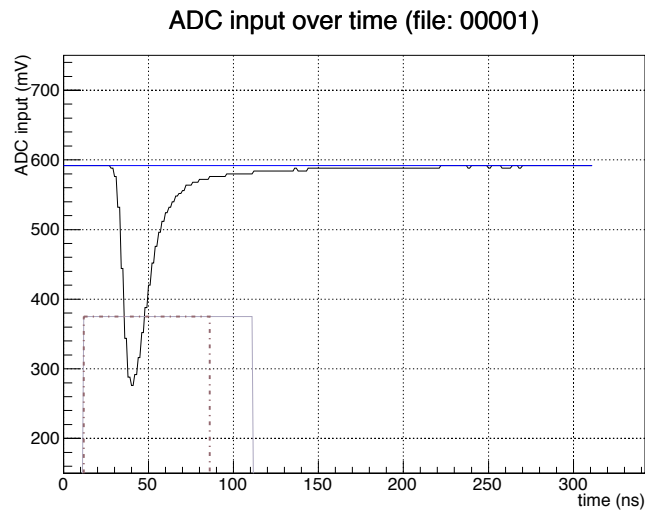


- E-resolution:
 $2.810 \pm 0.031 \%$ FWHM

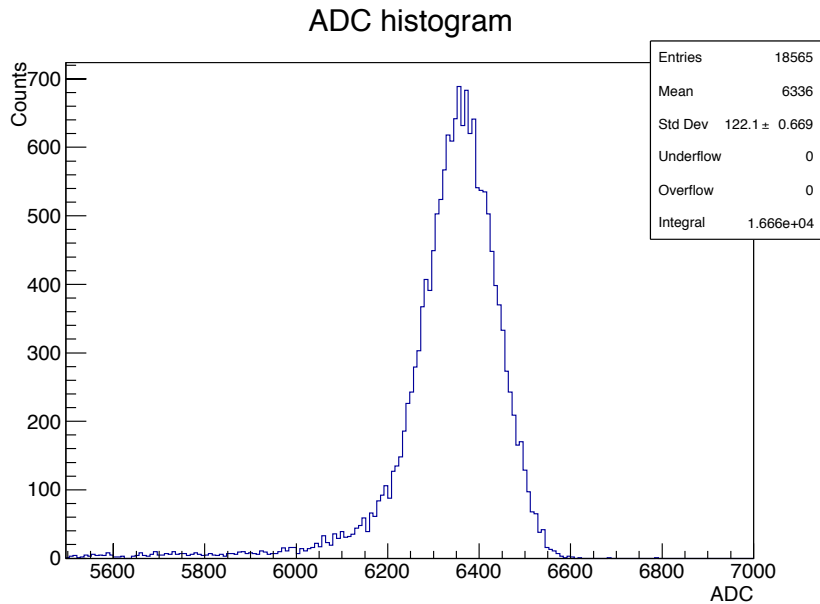
[July 2015] Run 079, reconstructed waveform histogram



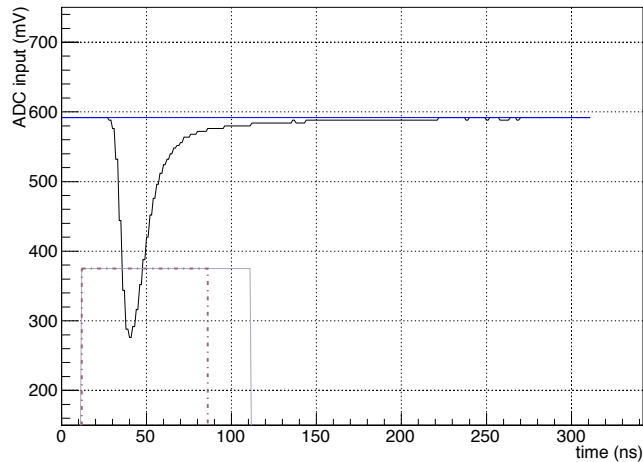
- Baseline: from fit (to flat portion of waveform).
- Gate: 75 ns.
- Cut: none.
- E-resolution: 2.285 ± 0.023 % FWHM.



[July 2015] Run 079, reconstructed waveform histogram

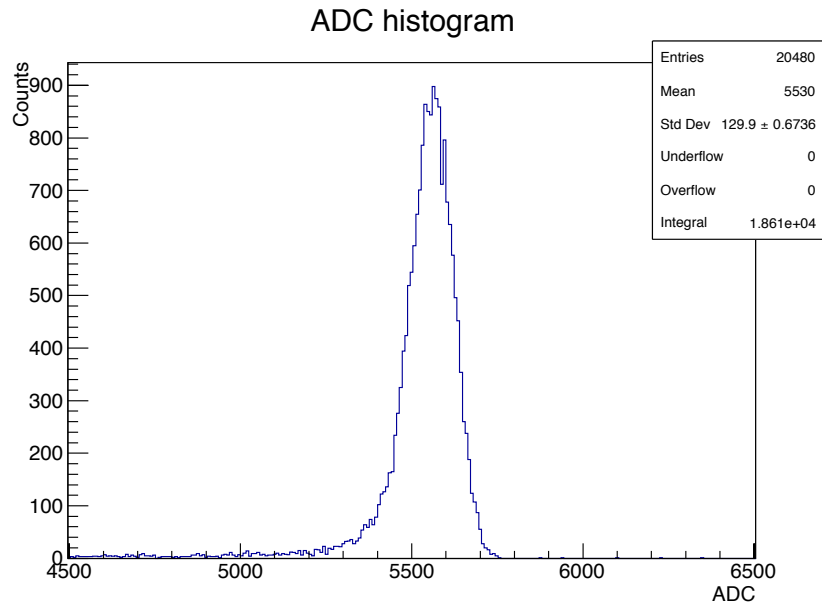


ADC input over time (file: 00001)

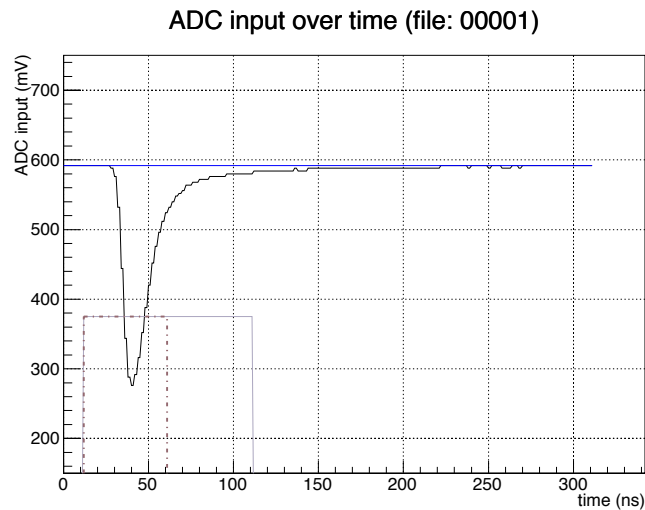


- Baseline: from fit (to flat portion of waveform).
- Gate: 75 ns.
- Cut:
 - Any waveforms hitting 0: 0.
 - Any waveforms with change in digitiser-recorded baseline: 1915.
- E-resolution:
2.365 +/- 0.031 % FWHM

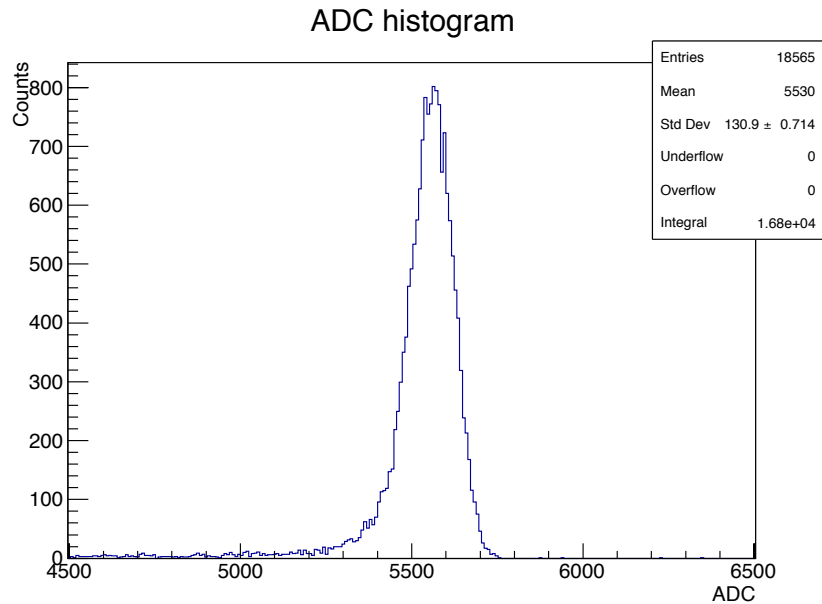
[July 2015] Run 079, reconstructed waveform histogram



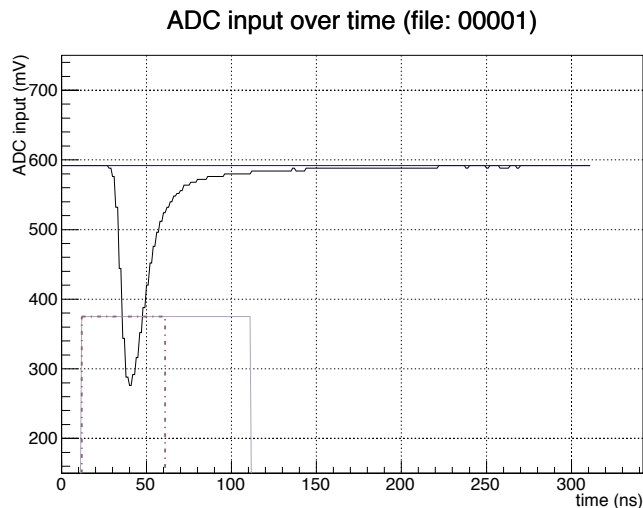
- Baseline: from fit (to flat portion of waveform).
- Gate: 50 ns.
- Cut: none.
- E-resolution: 2.243 ± 0.026 % FWHM



[July 2015] Run 079, reconstructed waveform histogram

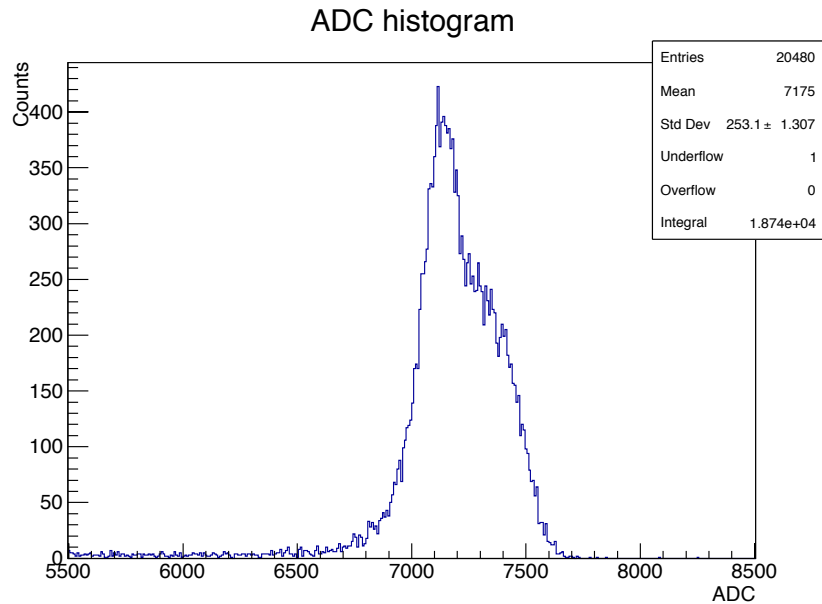


- Baseline: from fit (to flat portion of waveform).
- Gate: 50 ns.
- Cut:
 - Any waveforms hitting 0: 0.
 - Any waveforms with change in digitiser-recorded baseline: 1915.

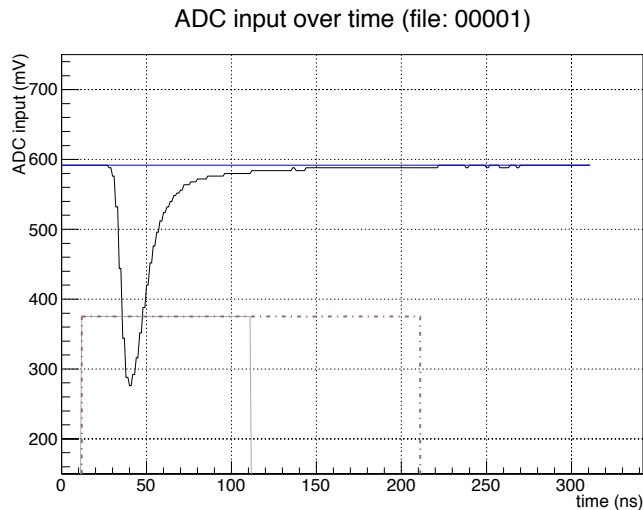


- E-resolution:
 $2.203 \pm 0.024 \% \text{ FWHM}$

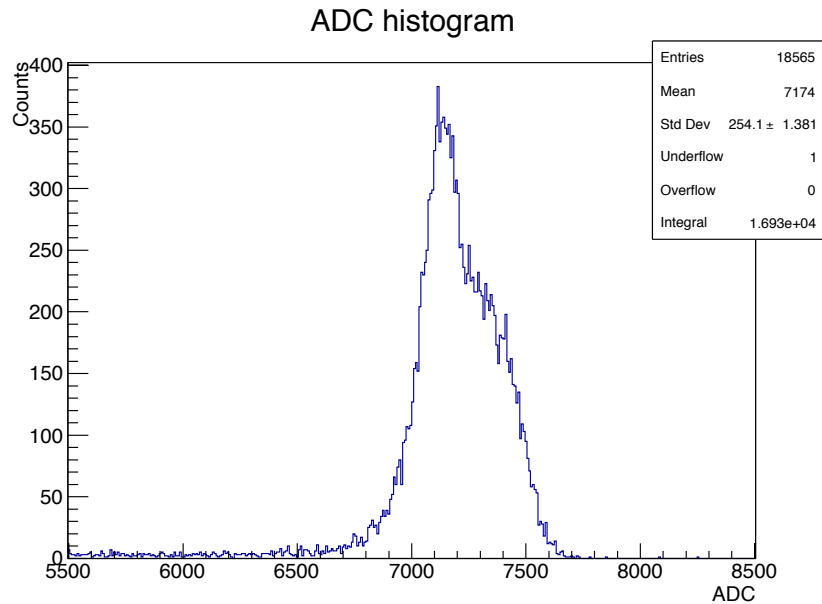
[July 2015] Run 079, reconstructed waveform histogram



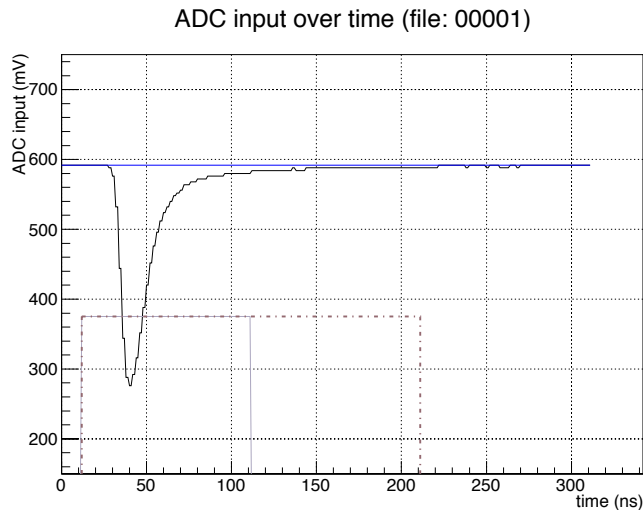
- Baseline: from fit (to flat portion of waveform).
- Gate: 200 ns.
- Cut: none.
- E-resolution: (couldn't fit)



[July 2015] Run 079, reconstructed waveform histogram



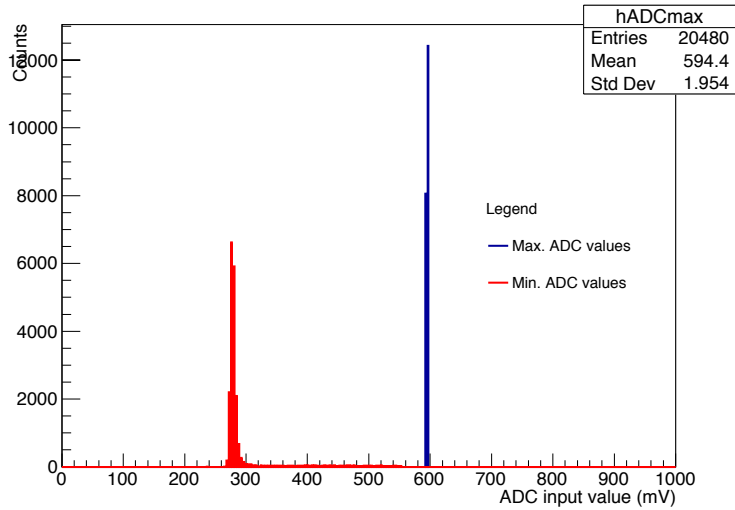
- Baseline: from fit (to flat portion of waveform).
- Gate: 200 ns.
- Cut:
 - Any waveforms hitting 0: 0.
 - Any waveforms with change in digitiser-recorded baseline: 1915.



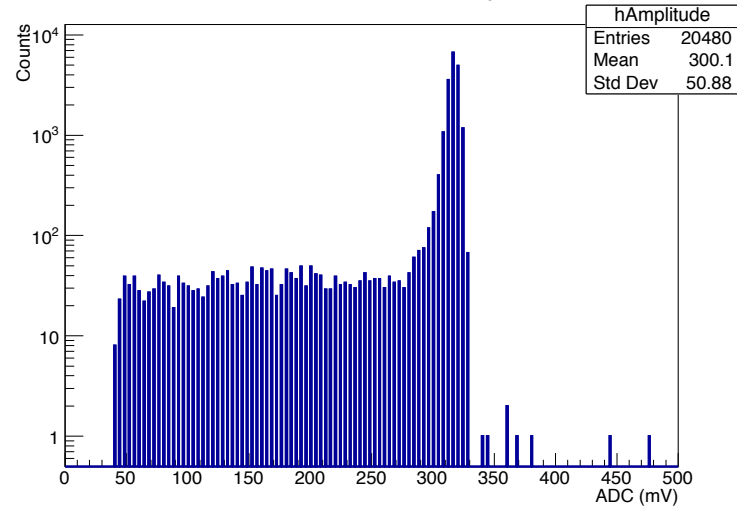
- E-resolution:
(couldn't fit)

[July 2015] Run 079, max and min ADC input values, and WF amplitudes

Distribution of maximum and minimum waveform values

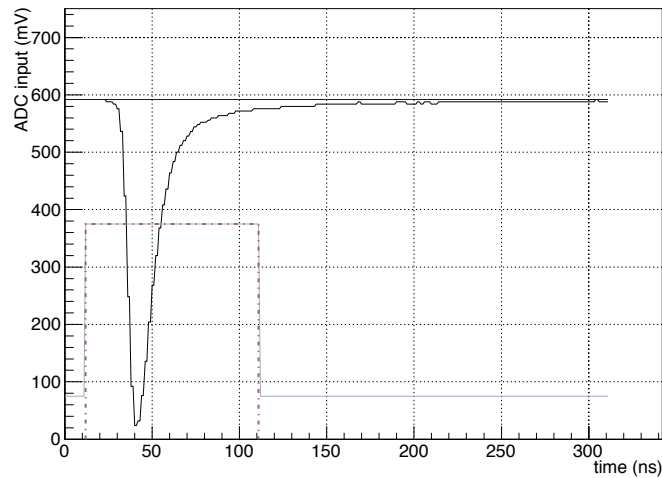


Distribution of waveform amplitudes

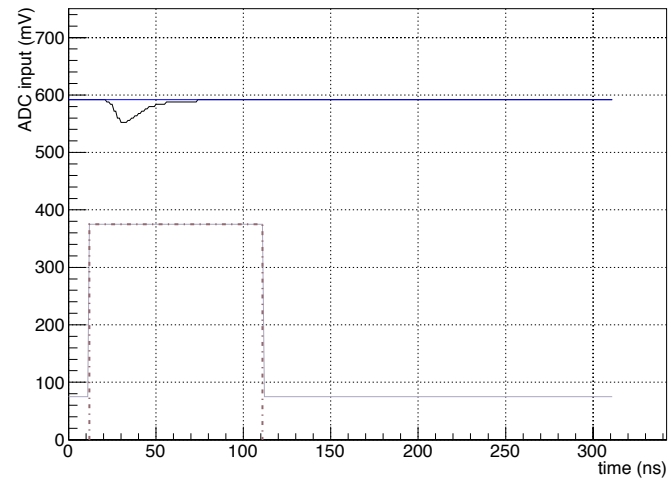


Amplitude of WF =
Max. ADC input value
– Min. ADC input
value

ADC input over time (file: 07397)

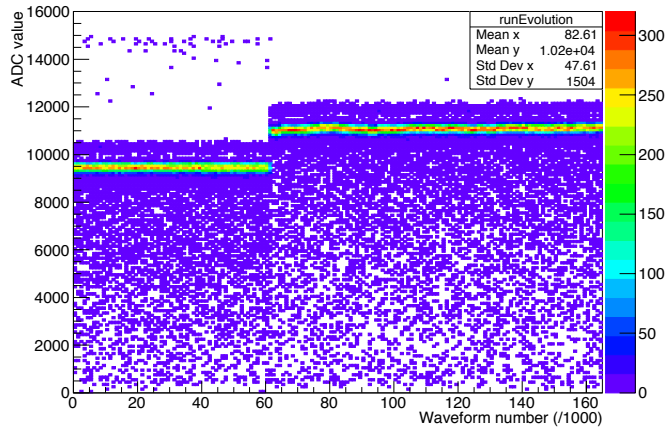


ADC input over time (file: 00525)

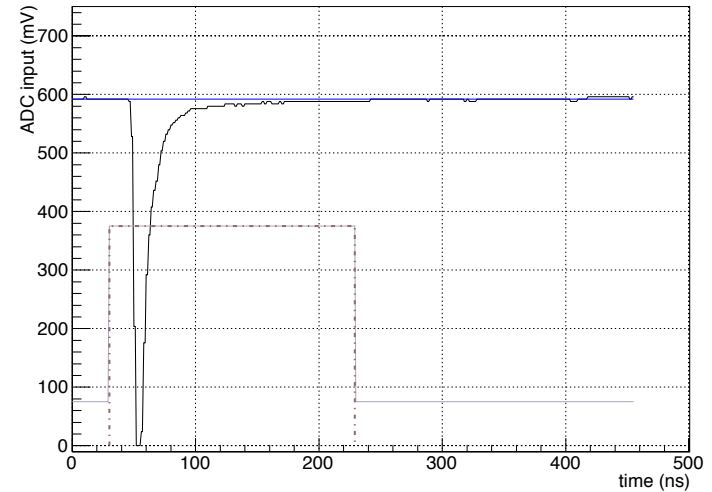


[Dec 2015] Run 007

Evolution of ADC spectrum over run



ADC input over time (file: 000001)



- Gate: 200 ns (from digitiser).
- How many waveforms hit 0 mV: 56454/60000 (94%).
- How many waveforms had a change in the digitiser-recorded baseline: 6501.

ADC histogram

