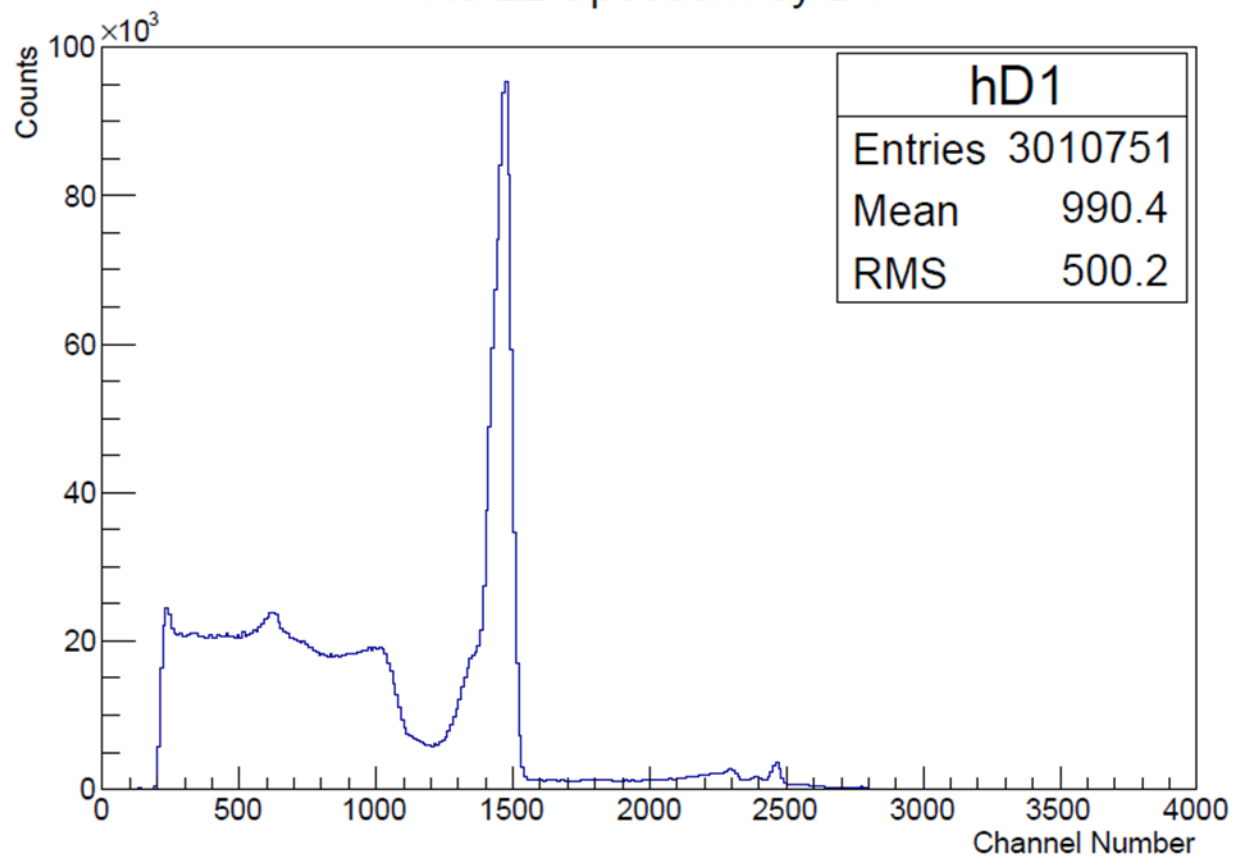


Slewing Correction and Time Resolution Update

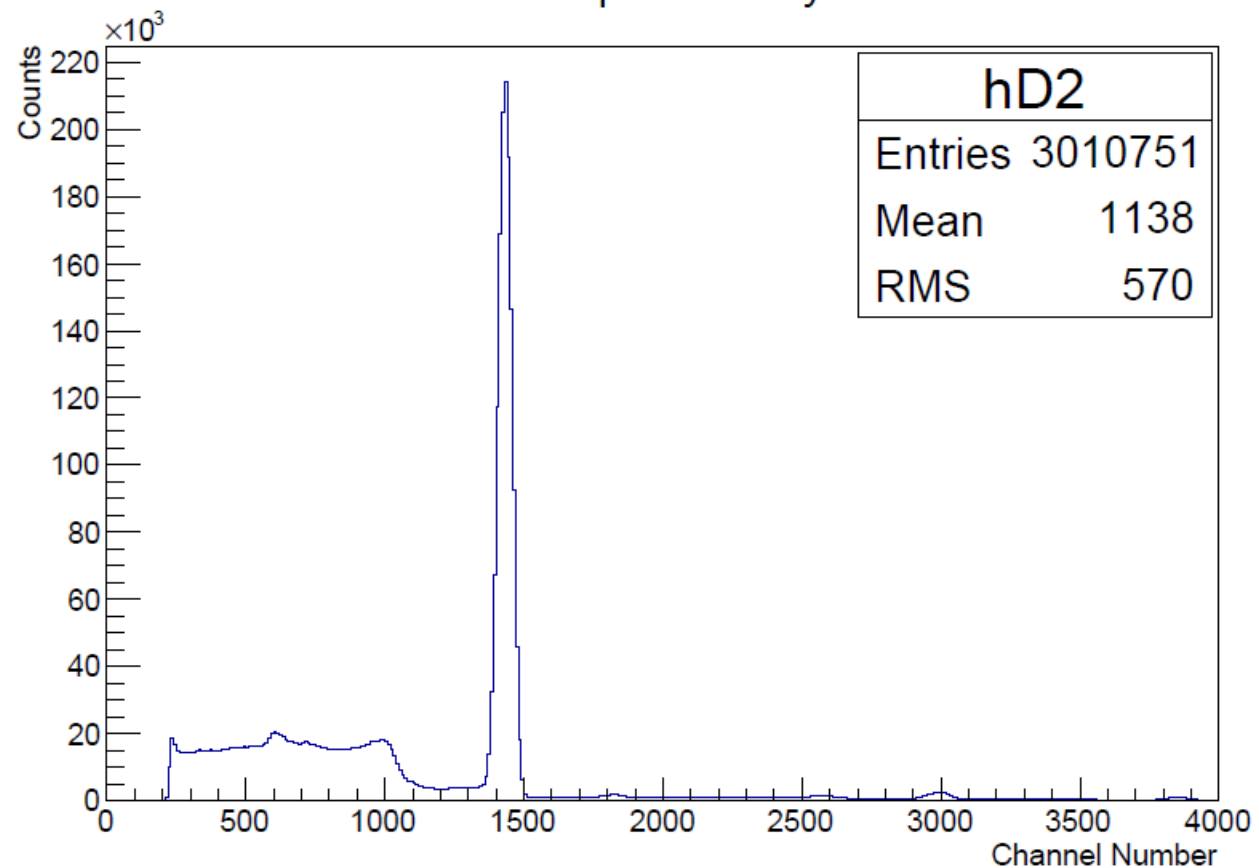
I.J Lugendo, Lab Meeting, 22/09/2016

Raw Na-22 Spectra

Na-22 Spectrum by D1

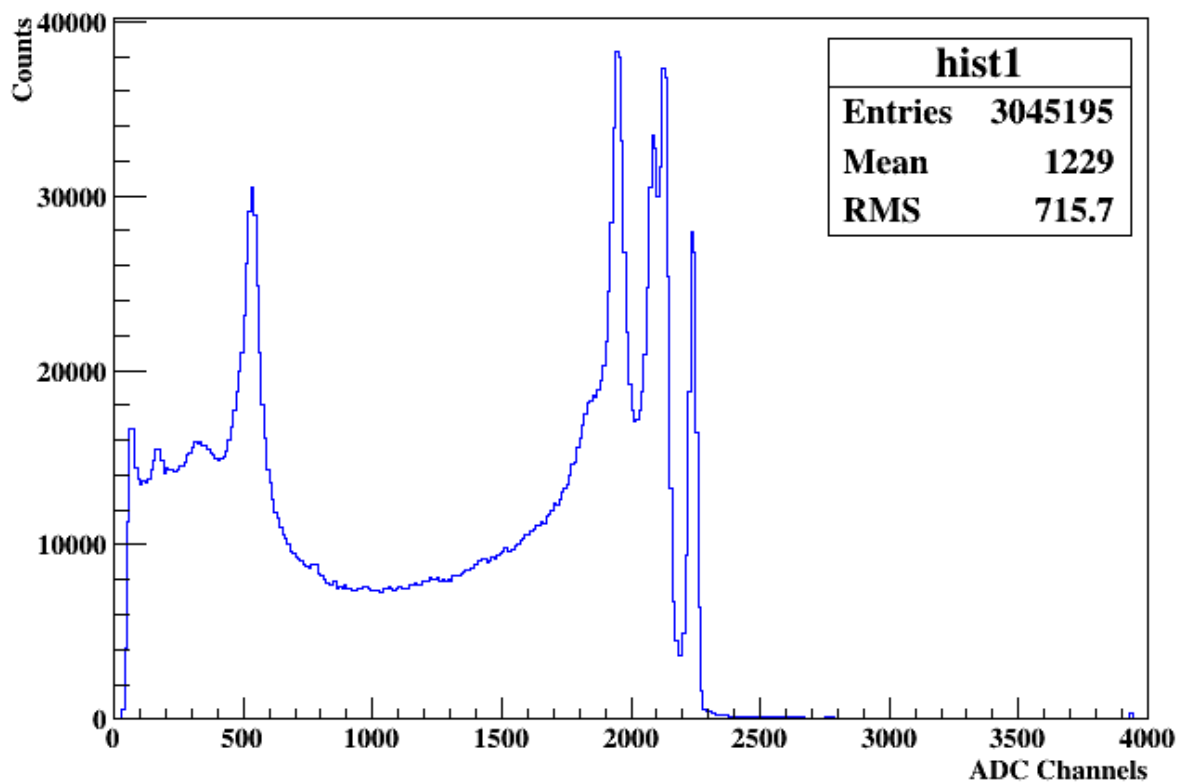


Na-22 Spectrum by D2

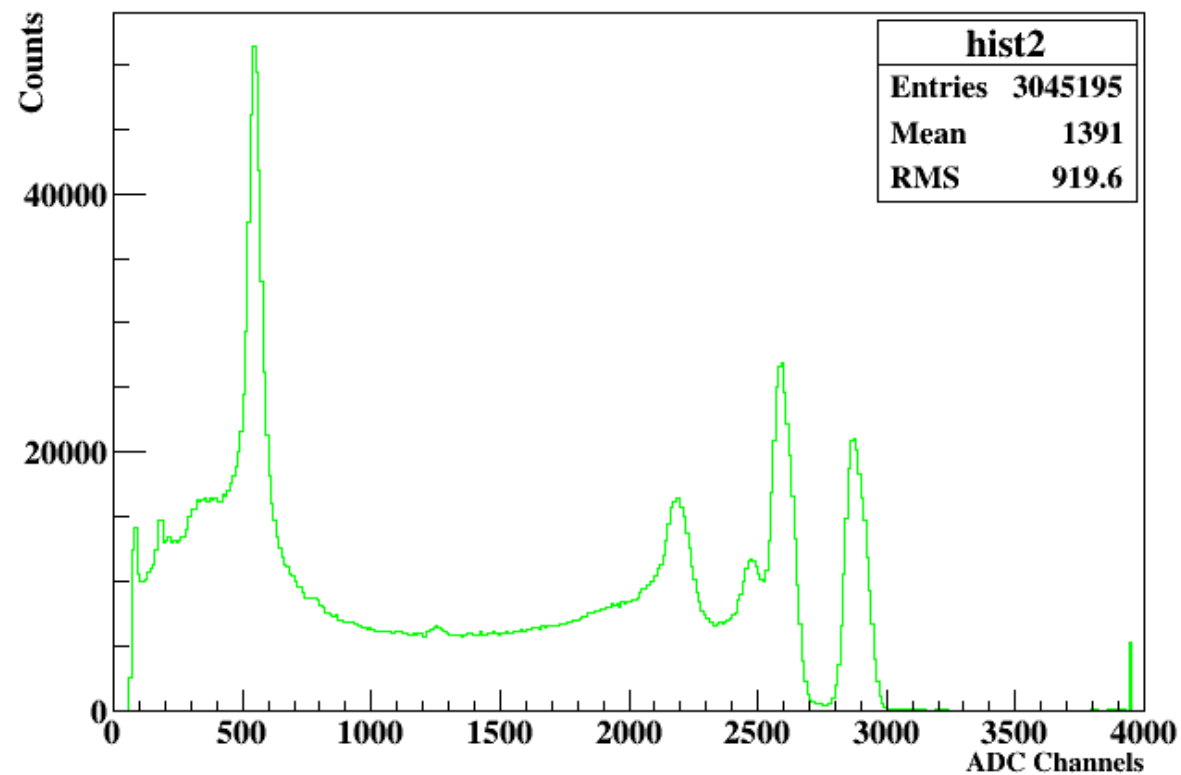


Raw Co-60 Spectra

D1 Spectrum for Co-60

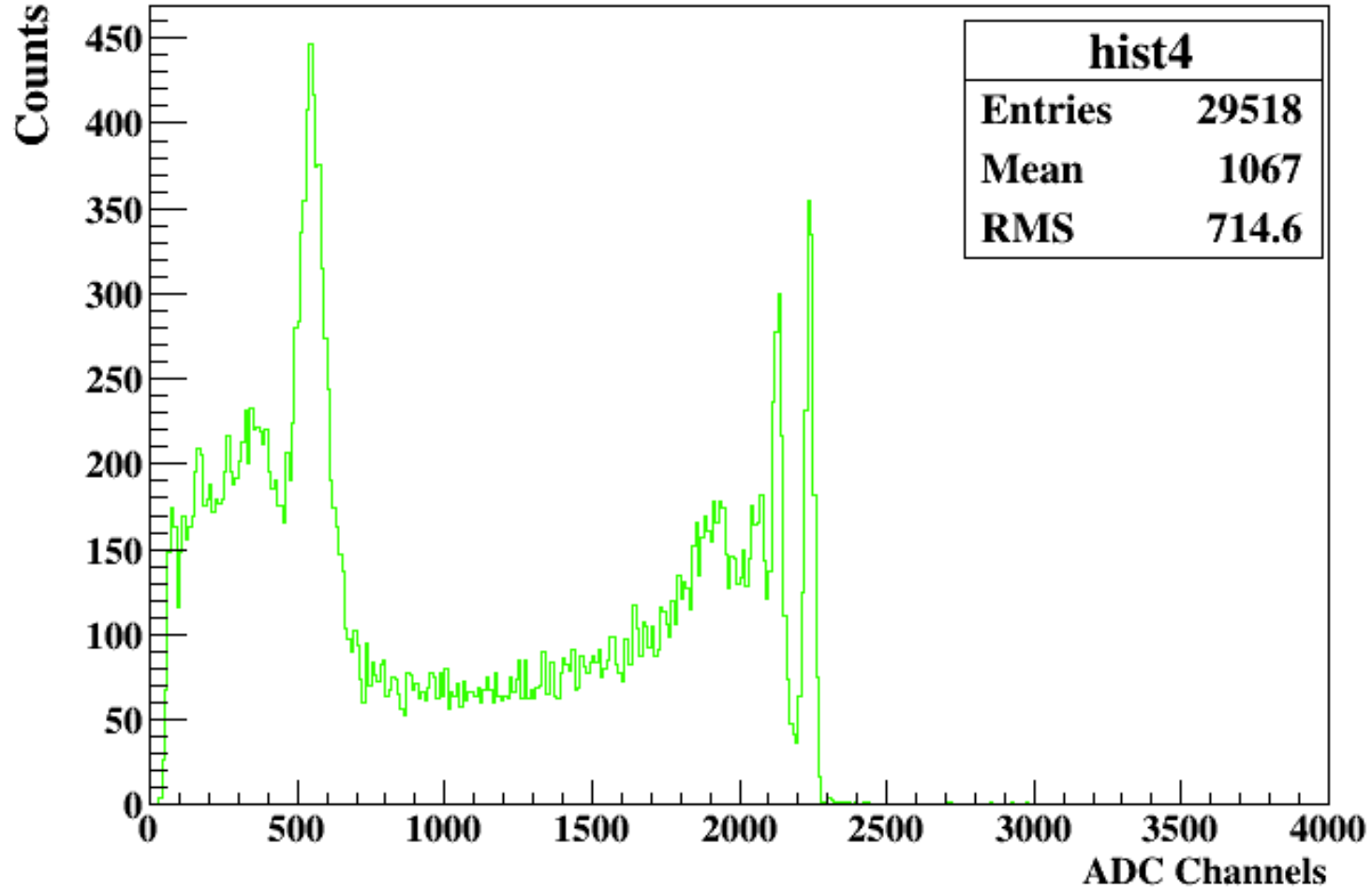


D2 Spectrum for Co-60



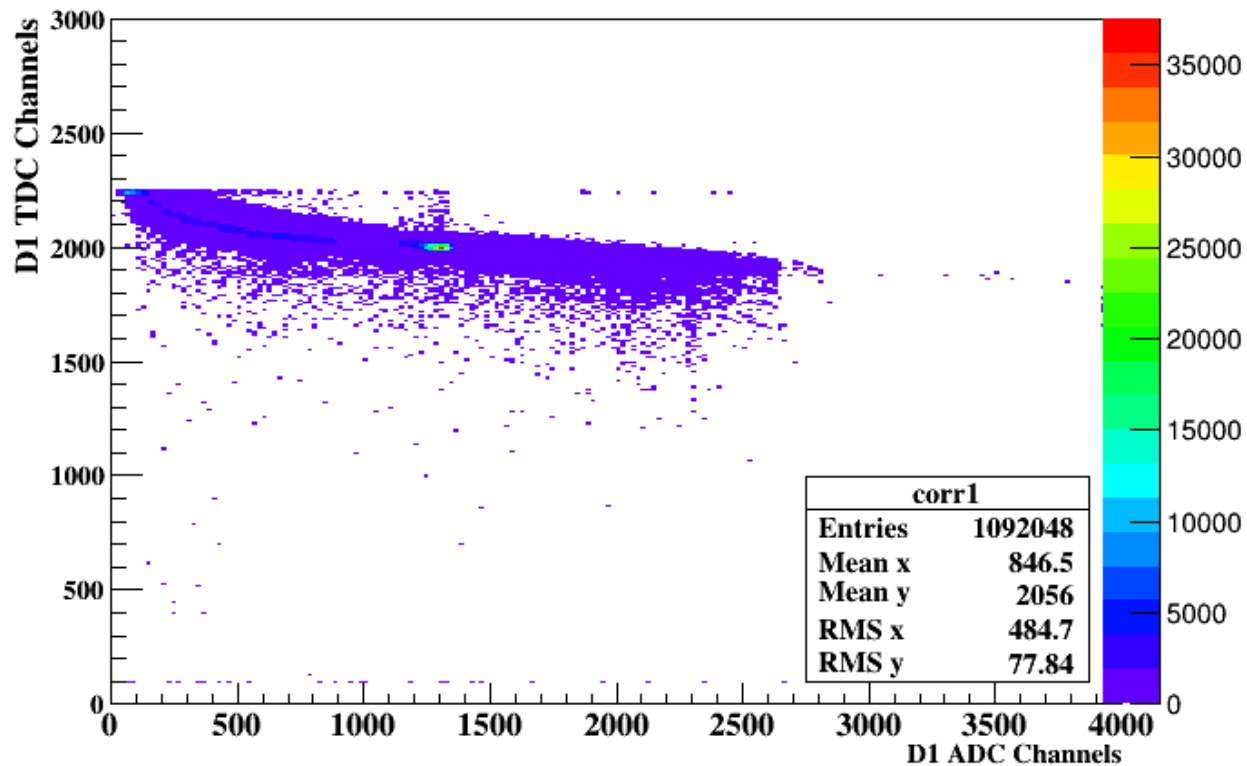
Coincidence with Compton Events

D1 Coincident with 1.17 MeV Gamma

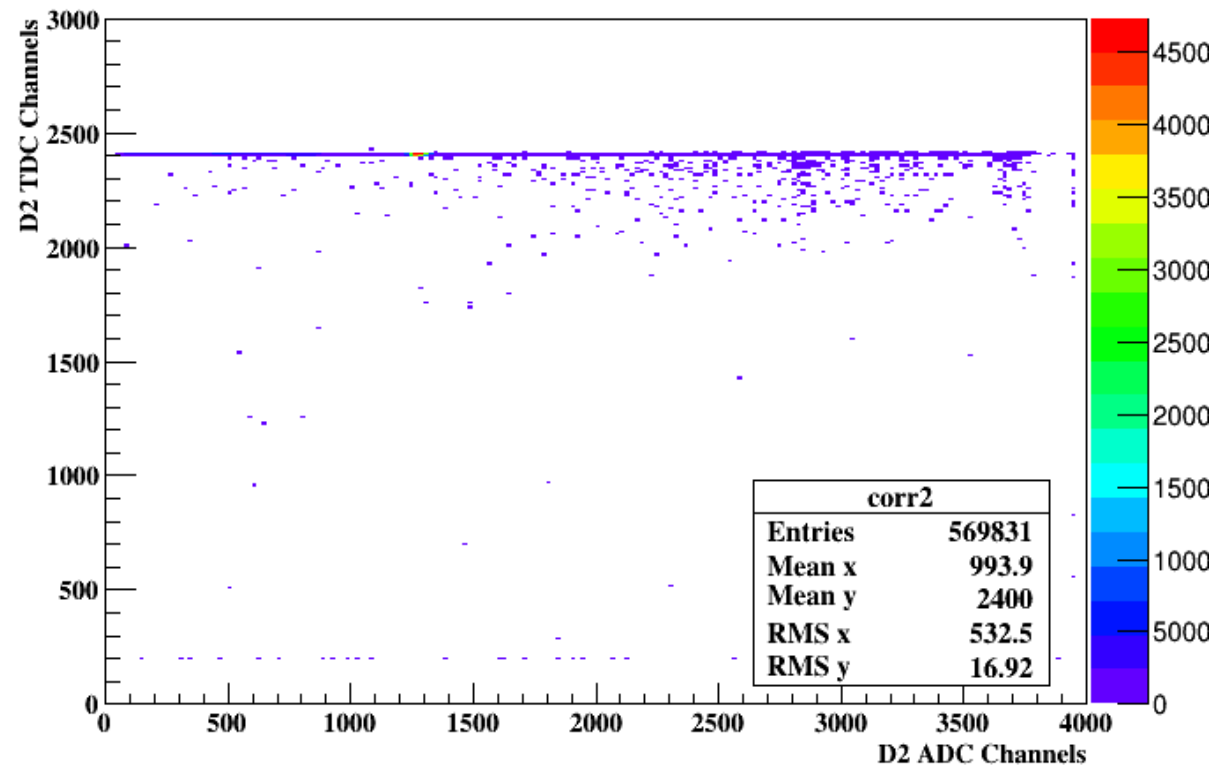


Raw Correlation Plots

Time Spec from D1

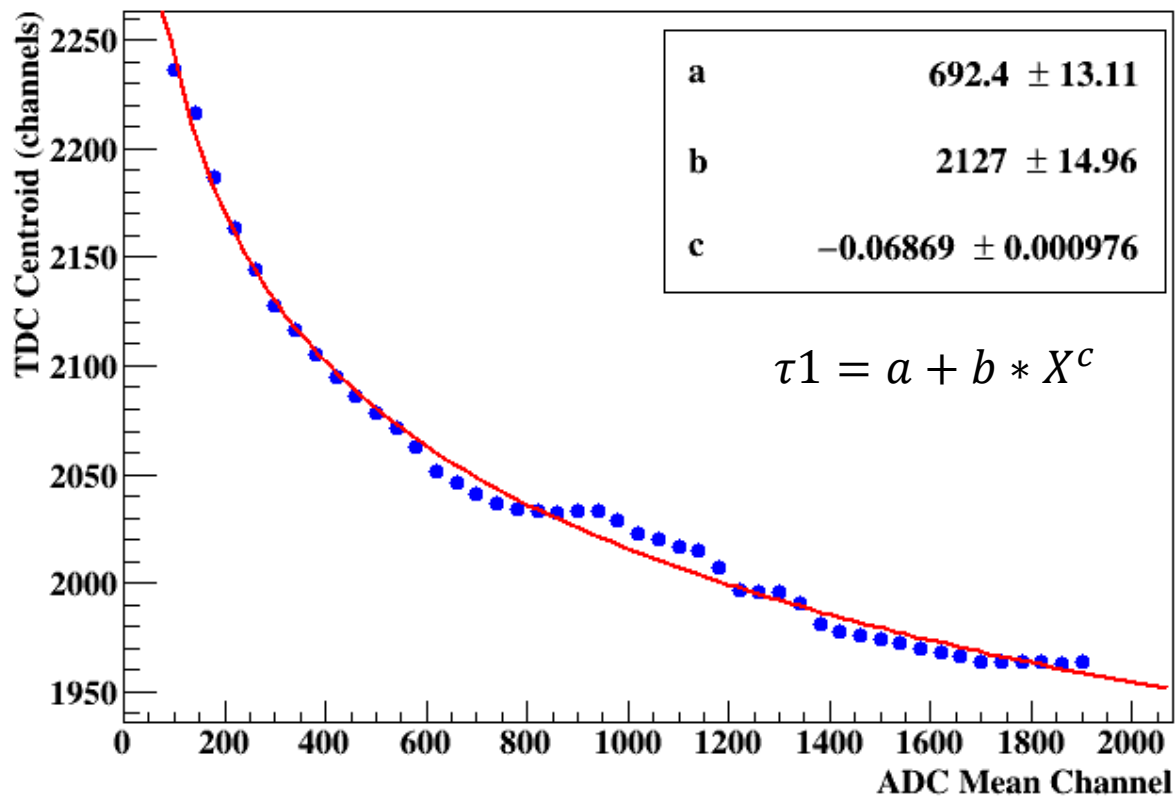


Time Spec from D2

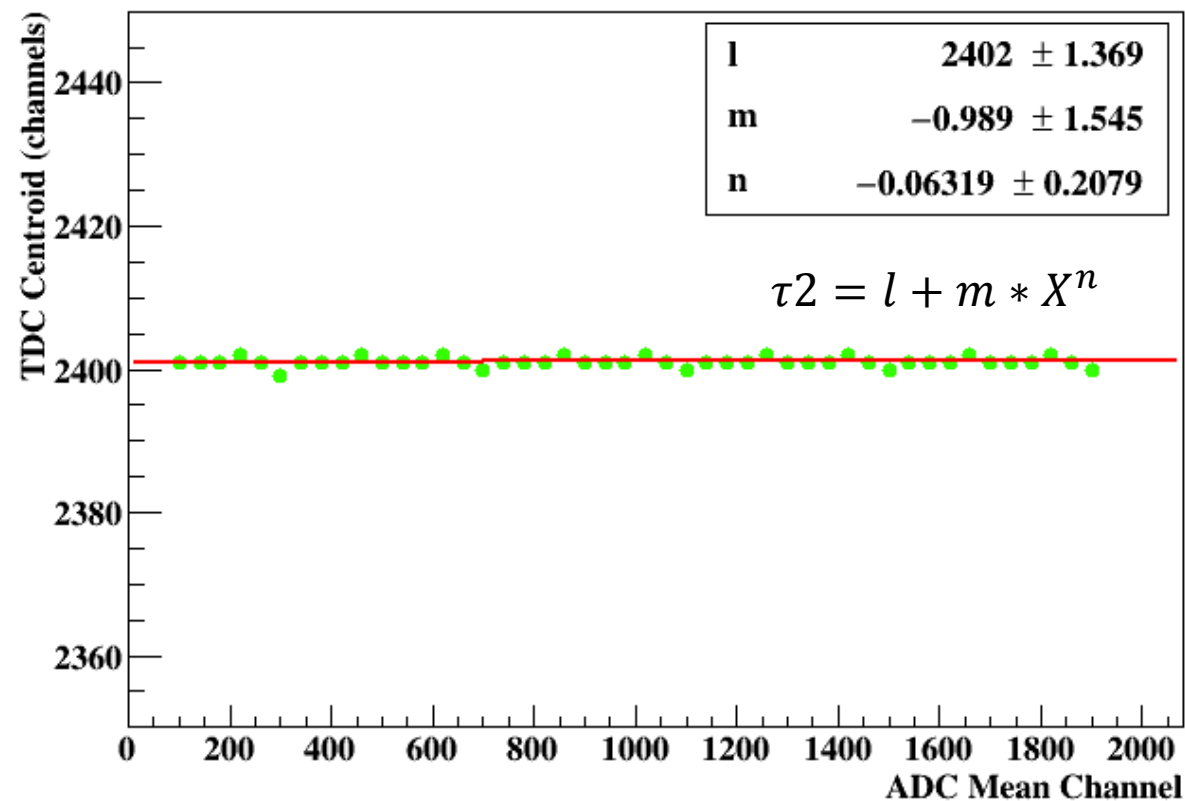


Detector Time Walk Characteristic for Na-22

Time Walk Characteristic for D1

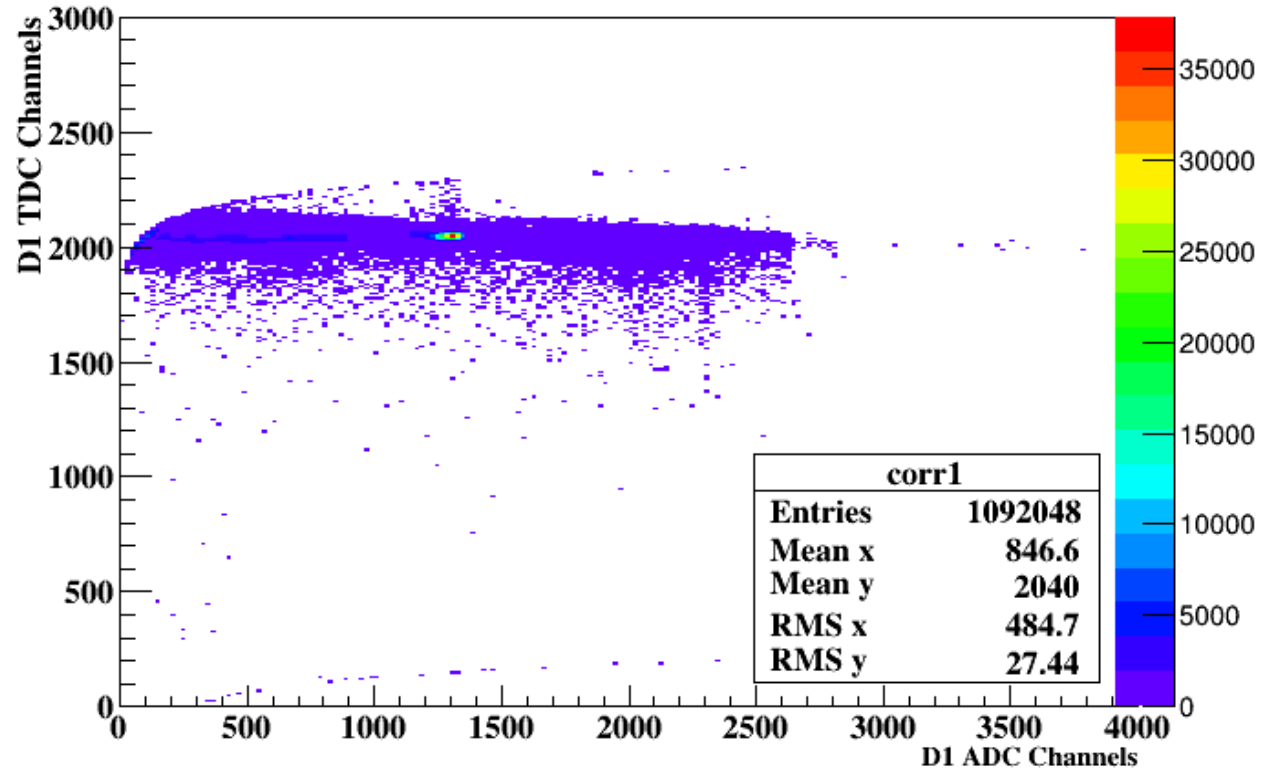


Time Walk Characteristic for D2

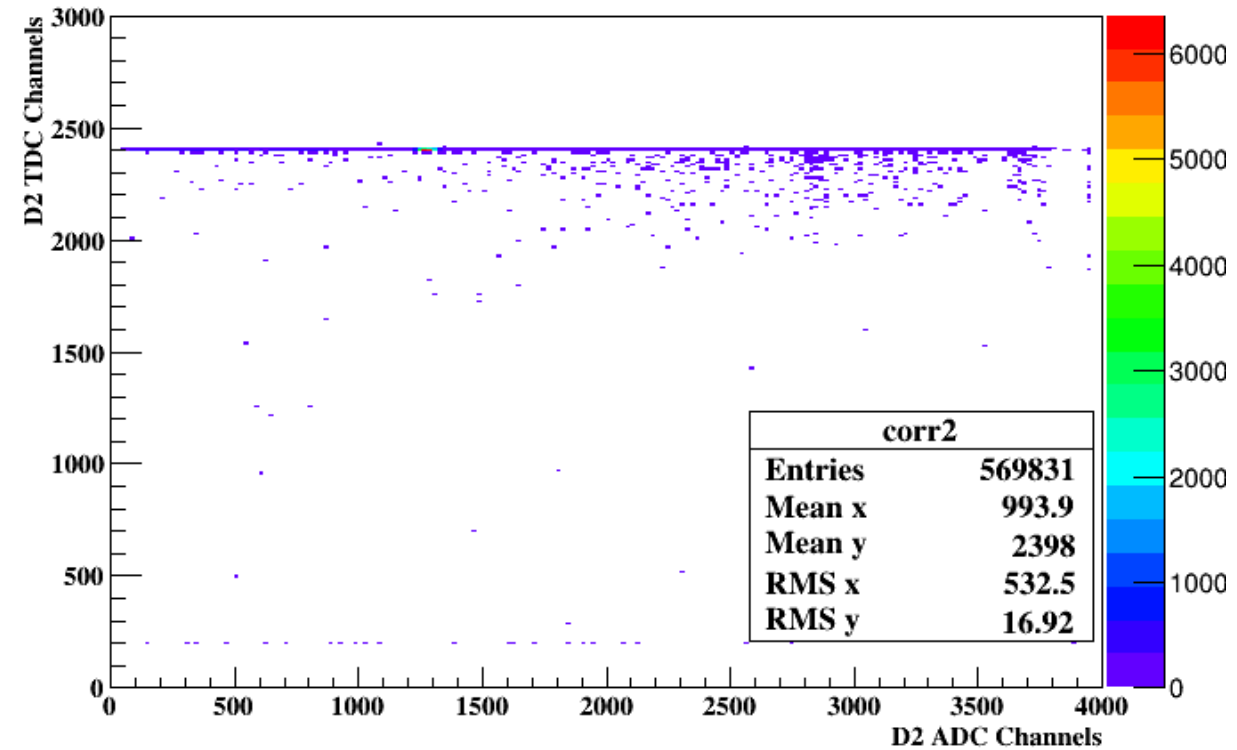


Correlation After Slewing Correction for Na-22

Corrected Time Correlation for D1

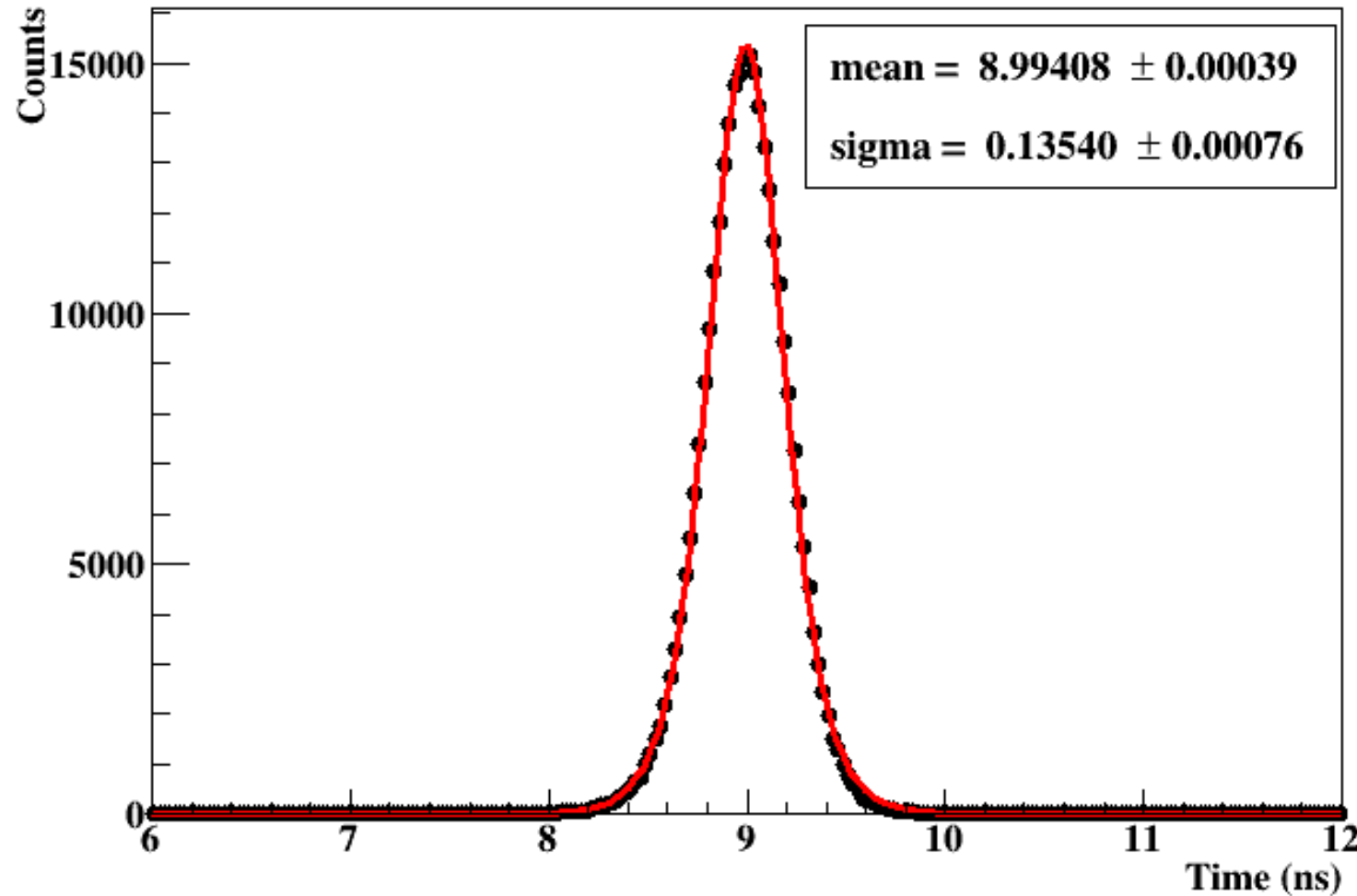


Corrected Time Correlation for D2



Time Resolution After Slewing Correction

Time Resolution Using ^{22}Na

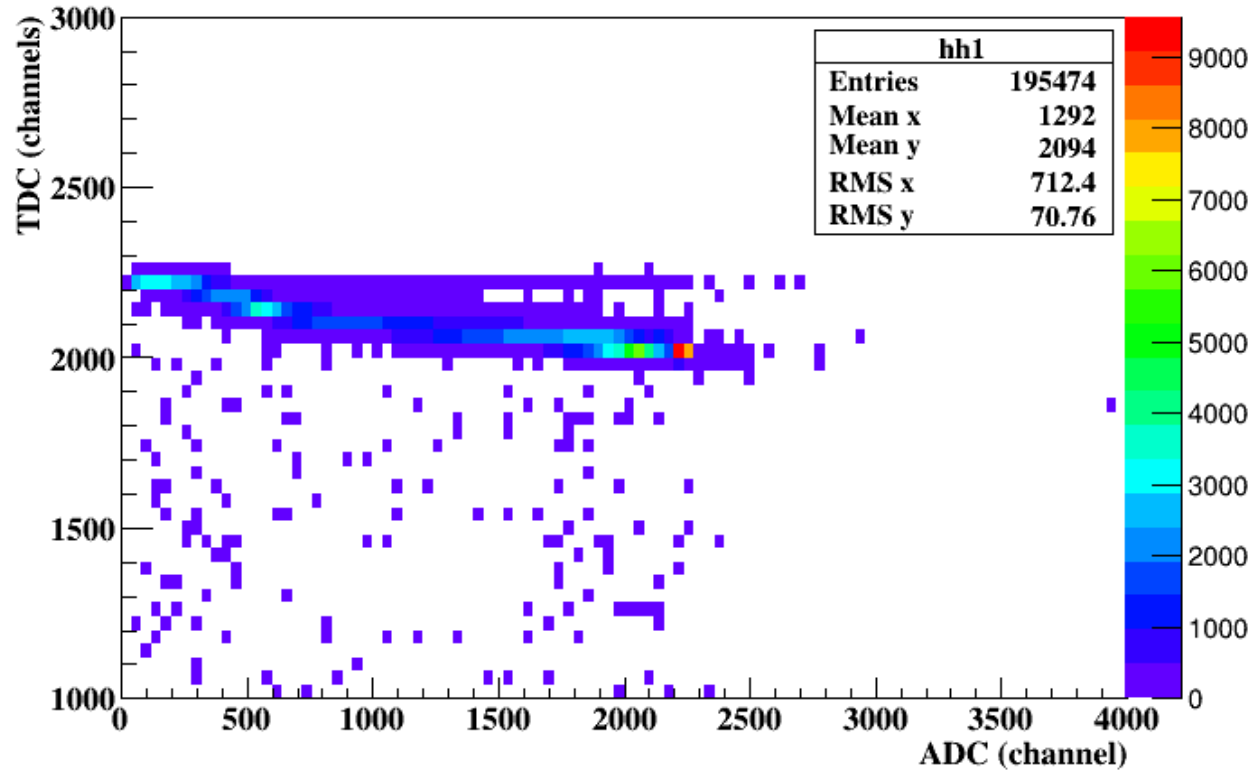


$$\text{Resolution} = \frac{FWHM}{\sqrt{2}}$$

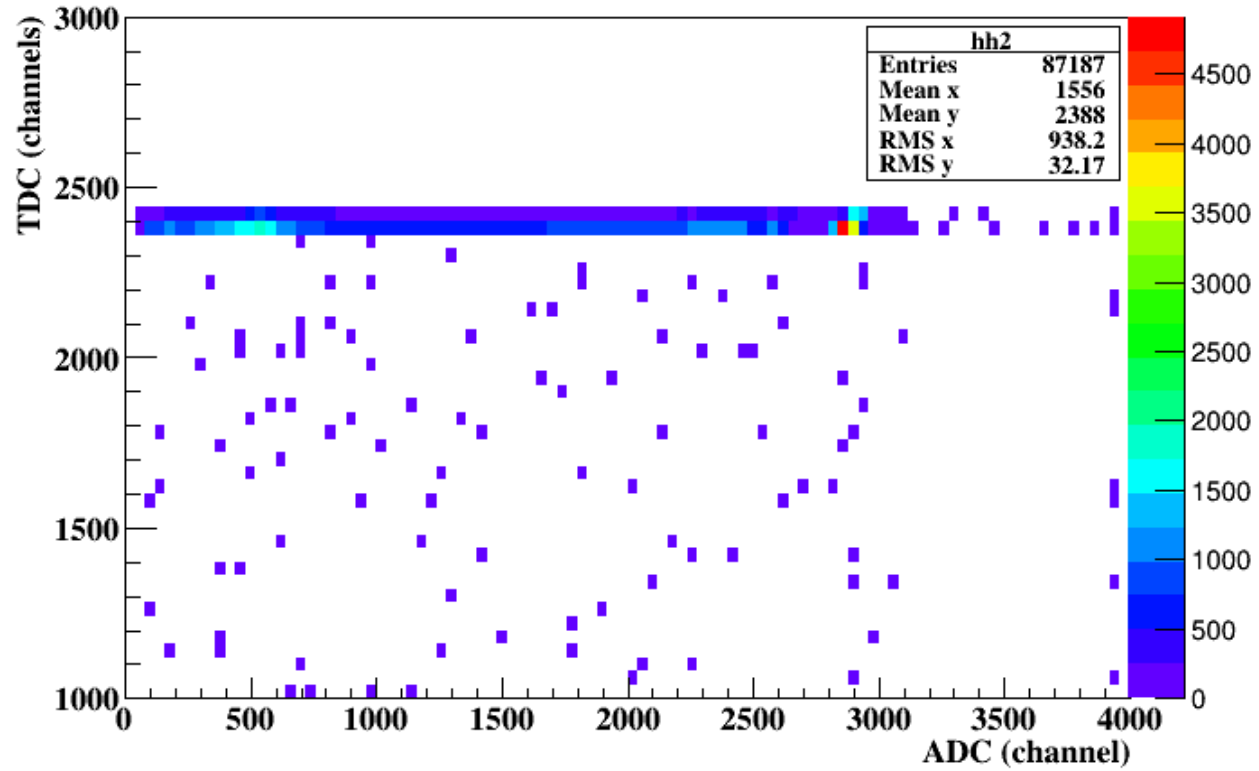
$$\text{Resolution} = 225\text{ps}$$

Time Correlations For Co-60

D1 Correlation before Walk Correction

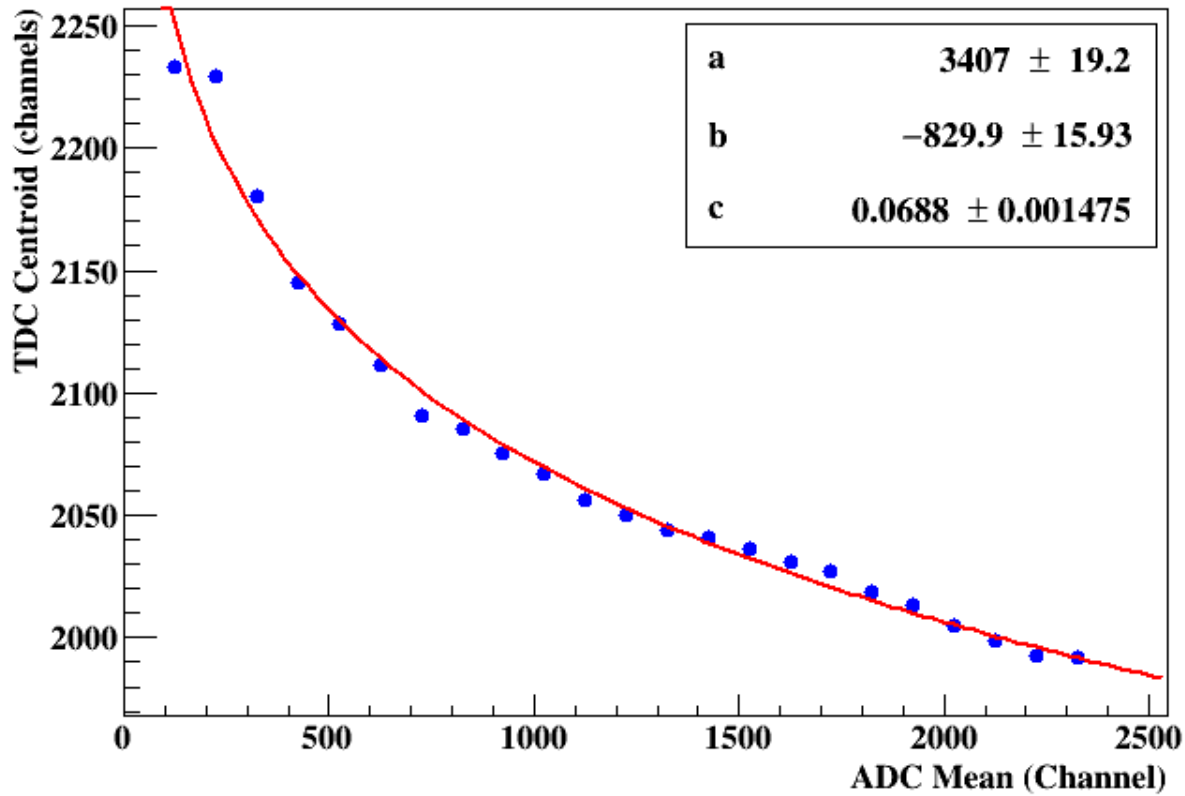


D2 Correlation before Walk Correction

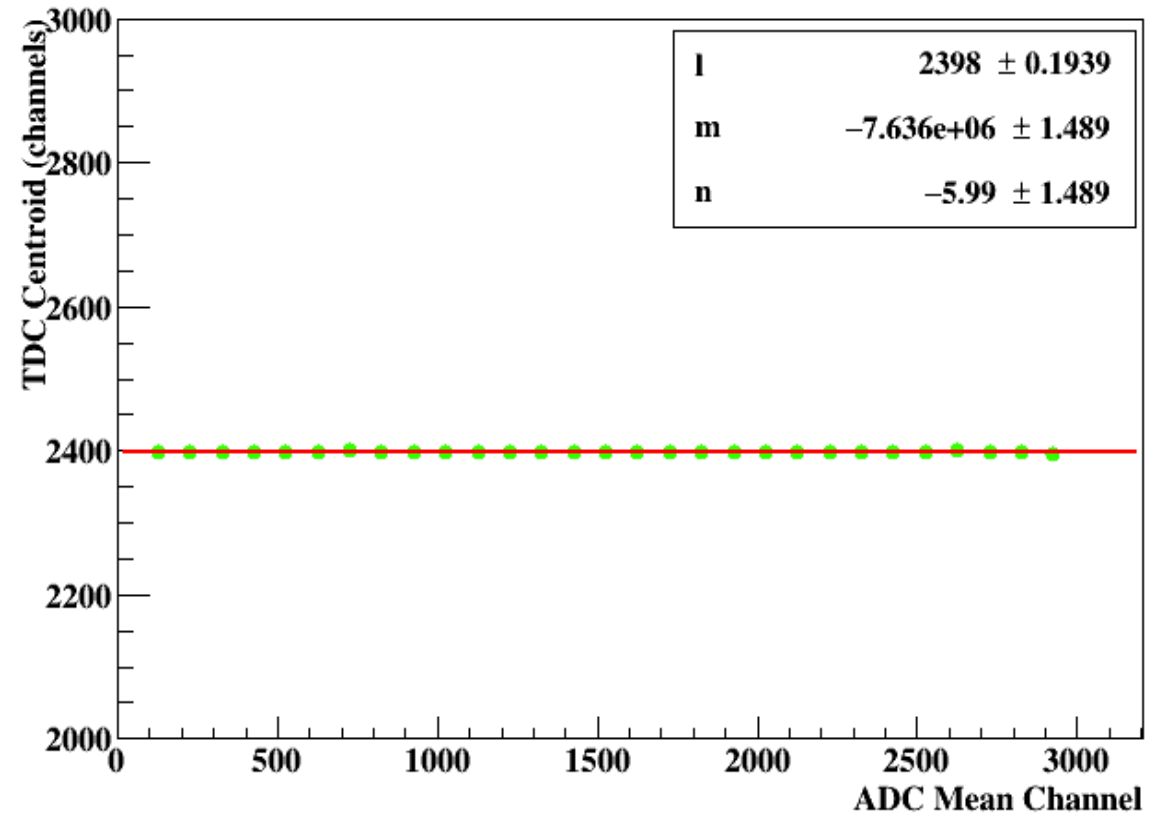


Detector Time Walk Characteristic for Co-60

Slewing Correction Function for D1

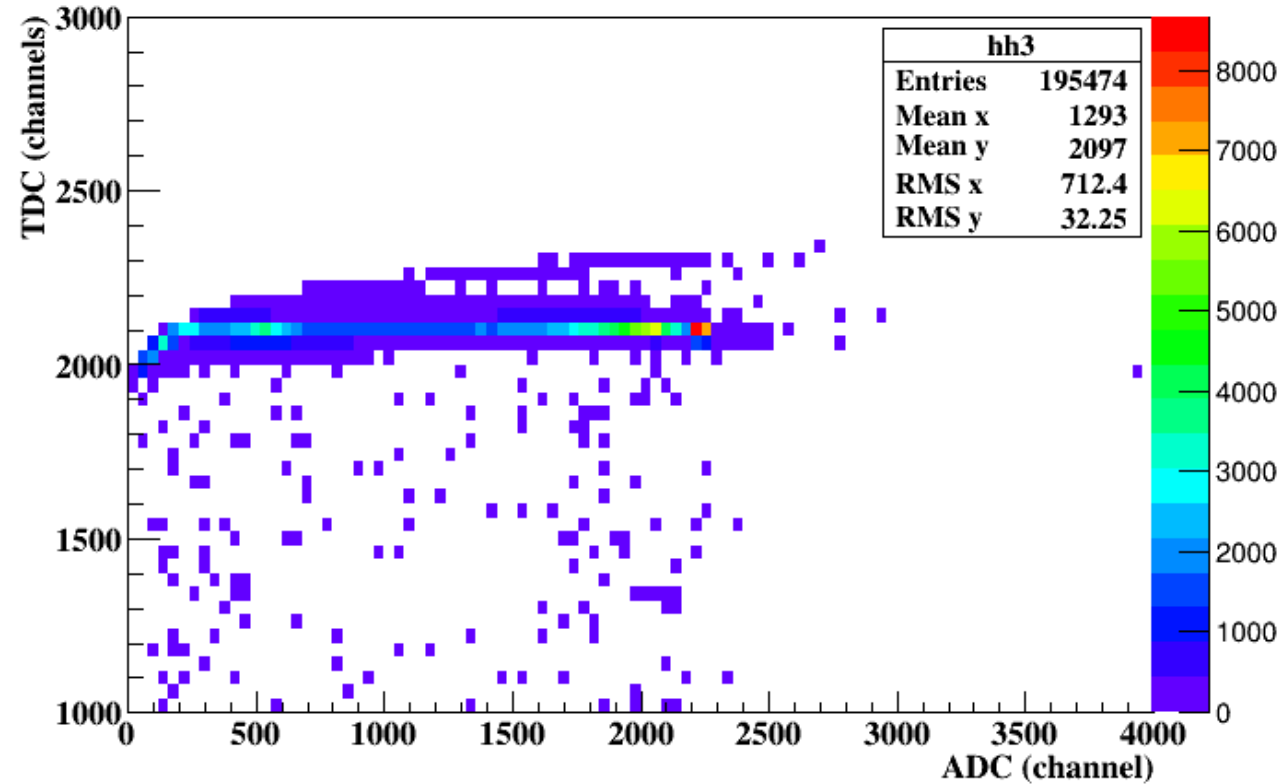


Slewing Correction Function for D2

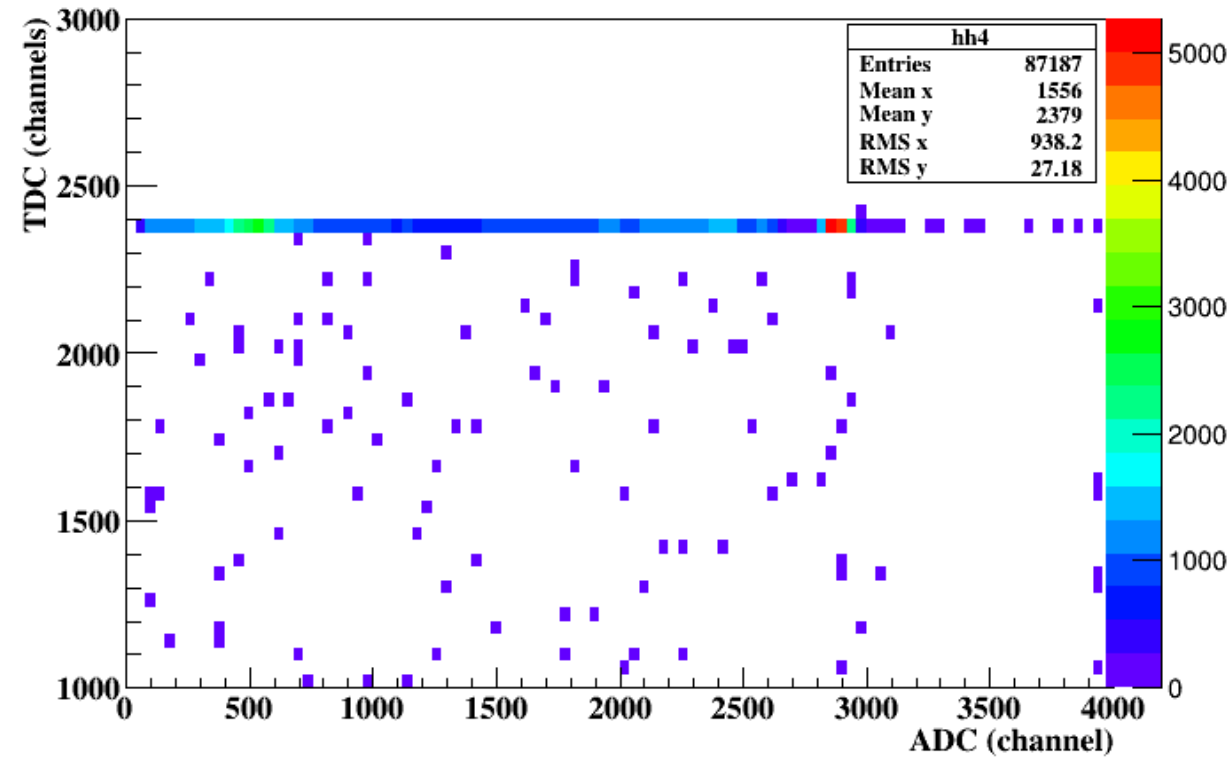


Time Correlations For Co-60 After Slewing Correction

D1 Correlation After Walk Correction

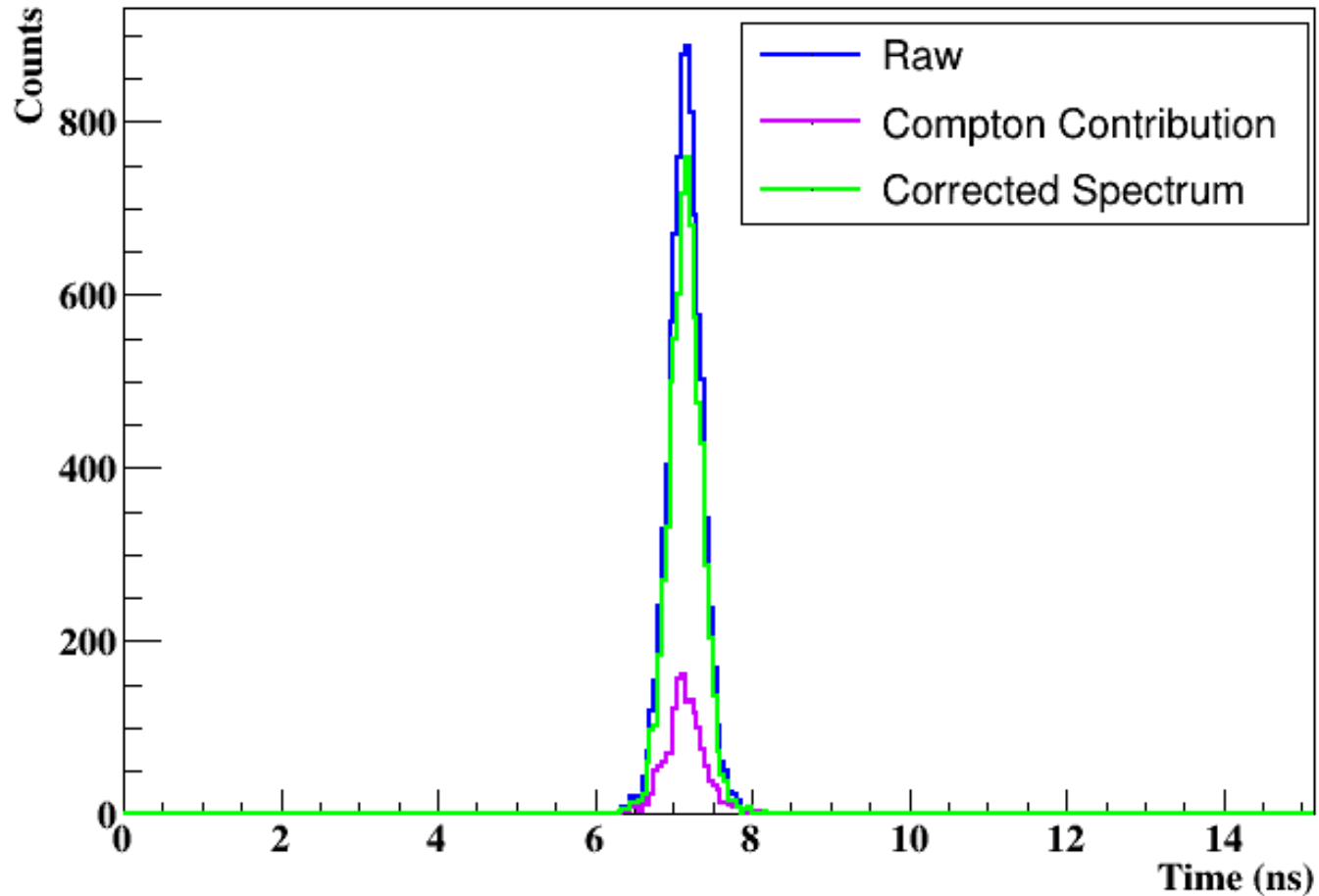


D2 Correlation After Walk Correction



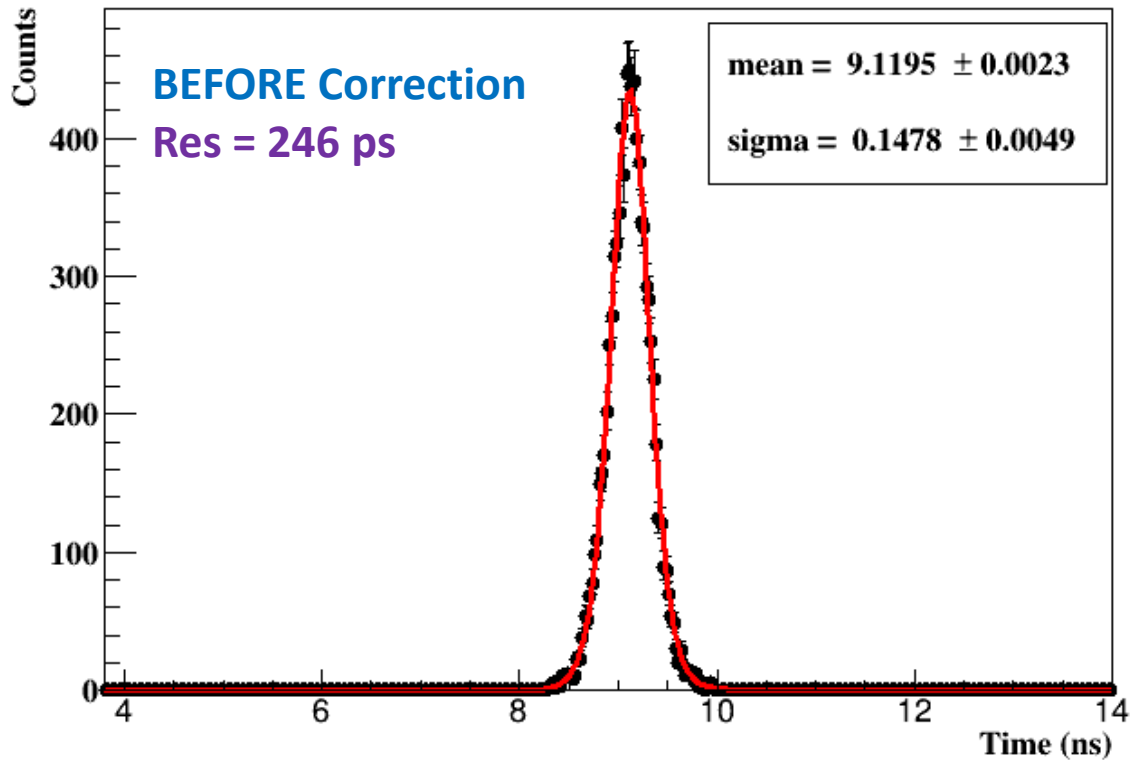
Time Spectrum After Walk Correction

Time Spectrum For Co-60



Time Resolution Before and After Slewing Correction

Time Resolution Using ^{60}Co



Time Resolution Using ^{60}Co

