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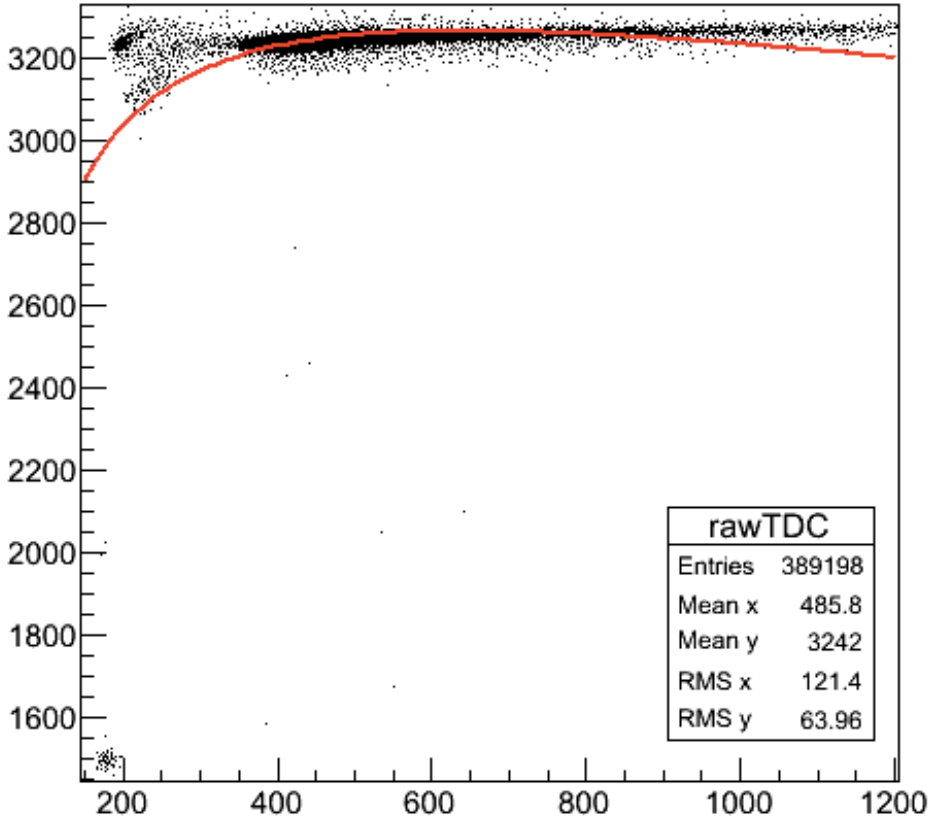
In this week, I studied how I get correct slewing correction data with free beam choice. Next step, I'm going to get correct correction data with suitable beam choice.

Please point out if there are some mistakes in my study, and comment to me.

Slewing Correction Study

1. (1) Fitting original data with parameters

Red fitting curve
= par[0]/sqrt(ADC)
+ par[1]*sqrt(ADC)
+ par[2]

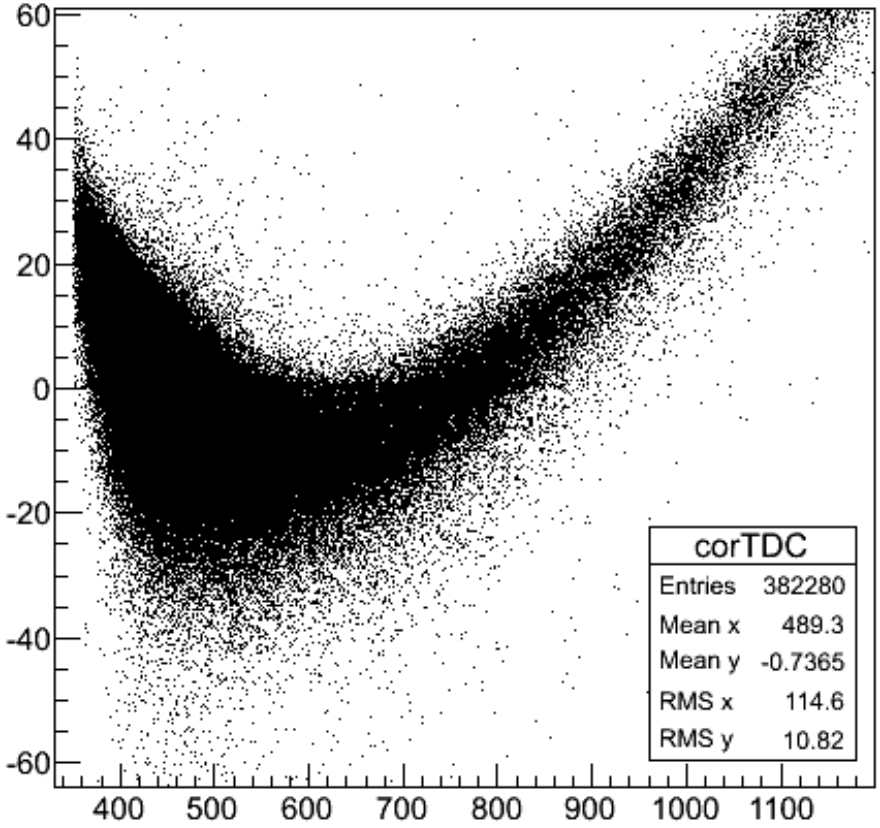


Slewing Correction Study

1. (2) Slewing corrected data

In some interval with ADC smaller than a value there are doubtful points (maybe pedestal),
so I saw correction with ADC only larger than a value.

In this data, ADC > 350.

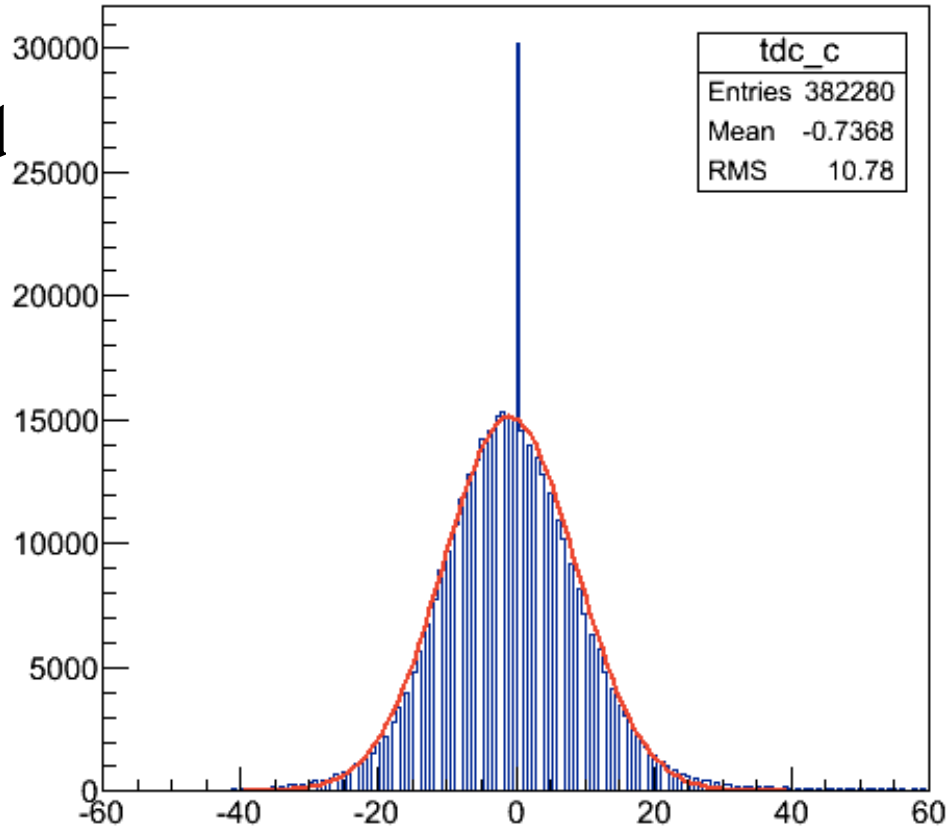


Slewing Correction Study

1. (3) Getting time resolution

I got time resolution by Gaussian fitting corrected TDC distribution.

Next step, I will apply this with suitable beam region and get more realistic time resolution.



Slewing Correction Study

2. Time of flight distribution

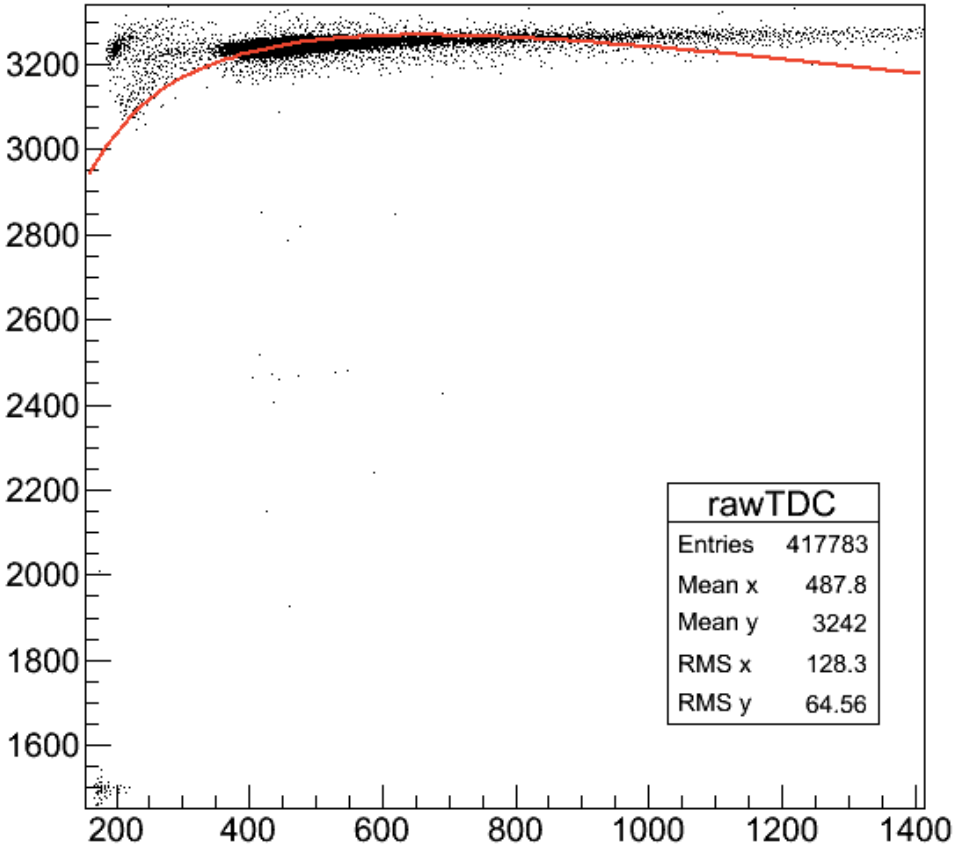
How can I get time of flight distribution between two detectors with each detectors' ADC and TDC data?

Just subtract two TDC?
But there is no reference time.

Slewing Correction Study

3. Ugly data set

This is 84th BH2 data.
And previous is 85th.
When seeing this red fitting curve, we can expect 85th correction data will be not realistic in comparison to 84th.



Then can I use time resolution information about BH2 with only 84th data?