RCNP E479 WAVEFORM DATA ANALYSIS

Lab Meeting

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Waveform Data Analysis

Status

Study of:

- Typical single waveform pulse.
- Total waveform for all events for 392 MeV data.

1. Single Waveform Data

392 MeV beamNew_5_wf_event Run

Raw Waveform Data

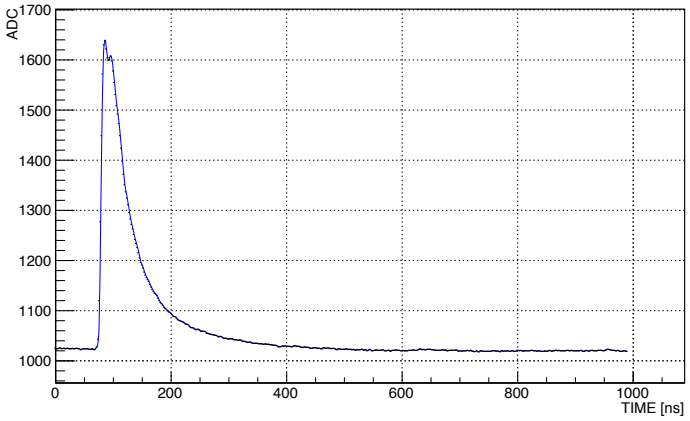


Fig.1(a): Ch6 –Typical FADC Waveform.

Pedestal free waveform

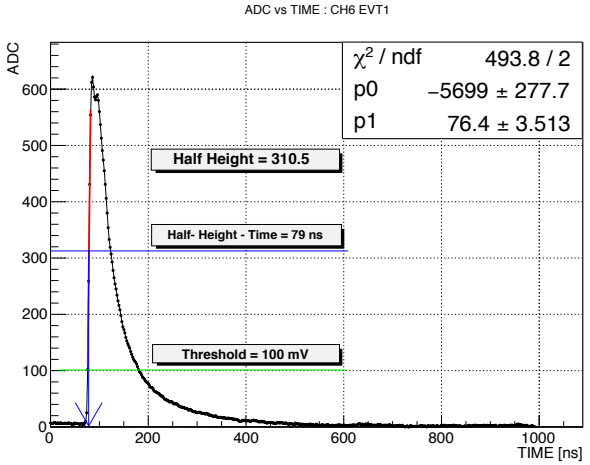


Fig.1(b): Ch6 Pedestal subtracted waveform.

2. Total Waveform Data

Scan of Different Height Regions for all Fired Channels

Histo_Ch_200	*Histo_Ch_400*	*Histo_Ch_600*	*Histo_Ch_800*	*Histo_Ch_1000*
200	400	600	800	1000

Tab.1: Scan of different waveform height regions for all fired channels

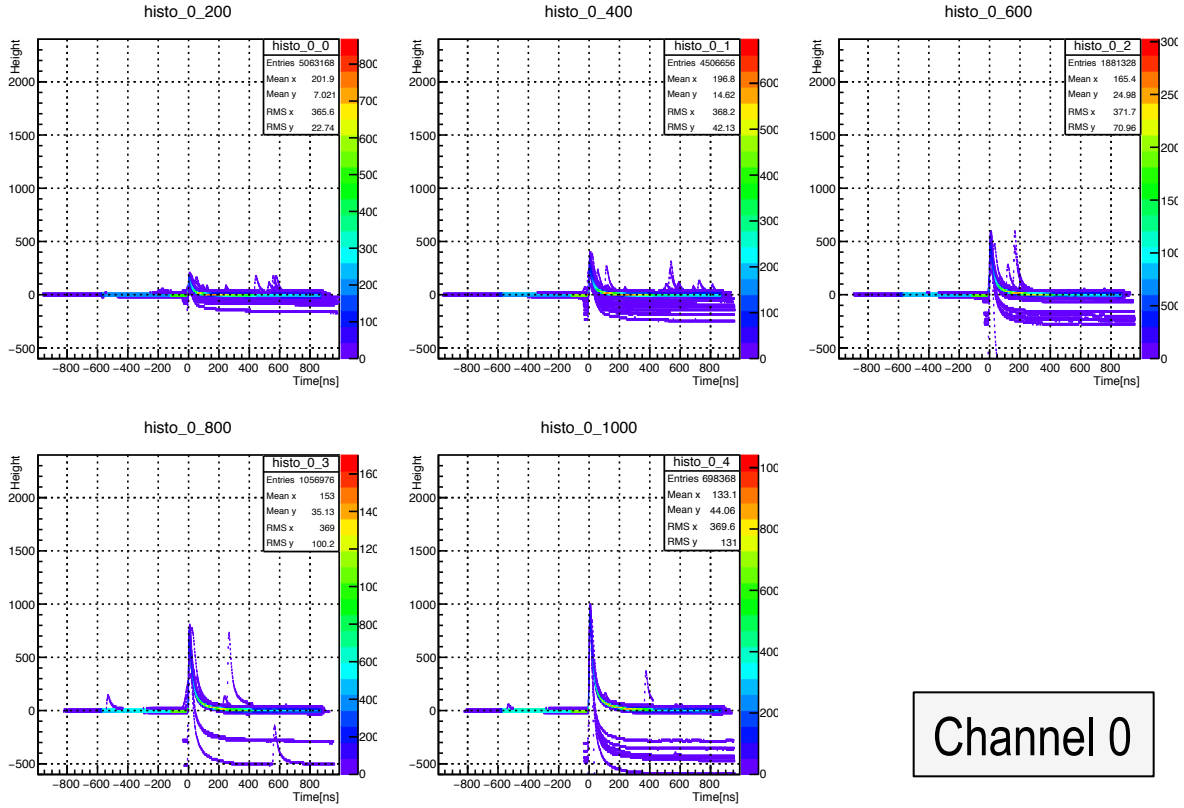
- Check dependence of waveform's height on timing.
- Half-height-time extracted using pol1 function.

Fired Channels for all events:

- Ch0, Ch2, Ch3, Ch4, Ch5, Ch6 and Ch7.

2. Total Waveform Data

1. Ch0: Scan of Different Height Regions

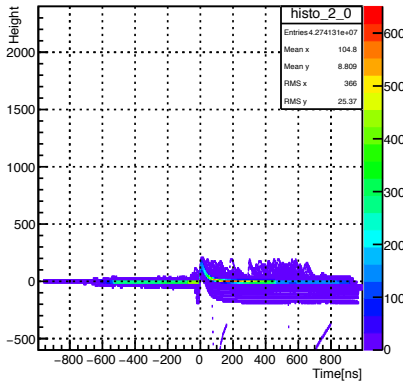


Channel 0

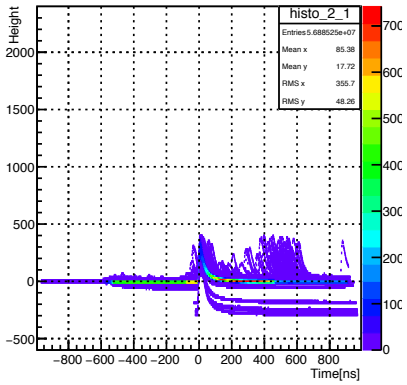
2. Total Waveform Data

2. Ch2: Scan of Different Height Regions

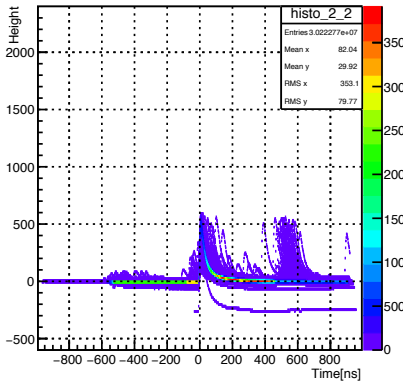
histo_2_200



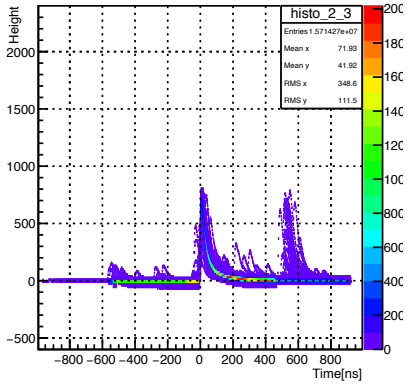
histo_2_400



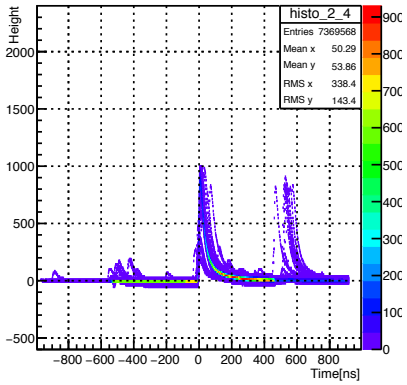
histo_2_600



histo_2_800



histo_2_1000



Channel 2

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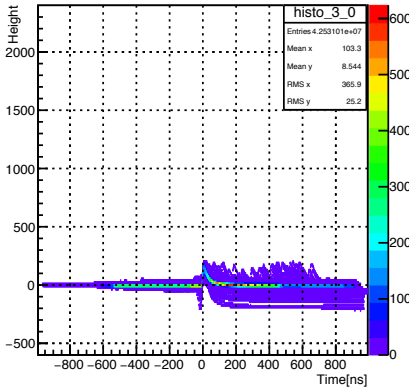
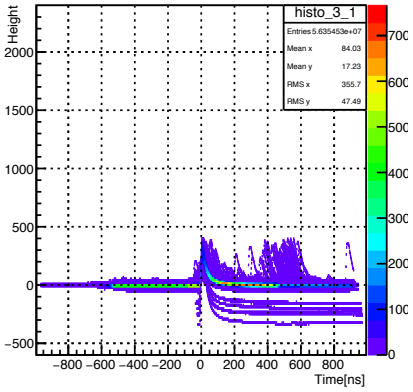
2. Total Waveform Data

3. Ch3: Scan of Different Height Regions

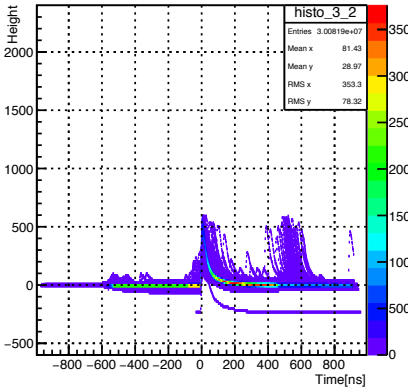
histo_3_200



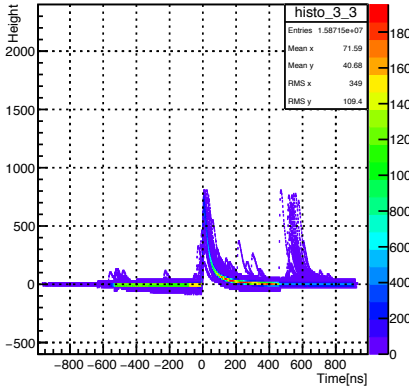
histo_3_400



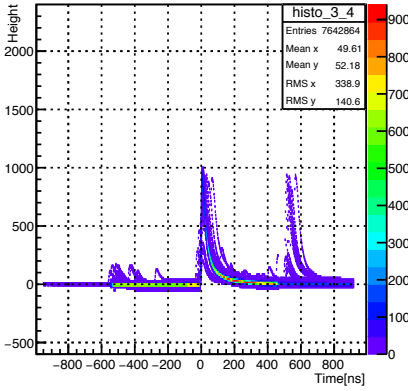
histo_3_600



histo_3_800



histo_3_1000

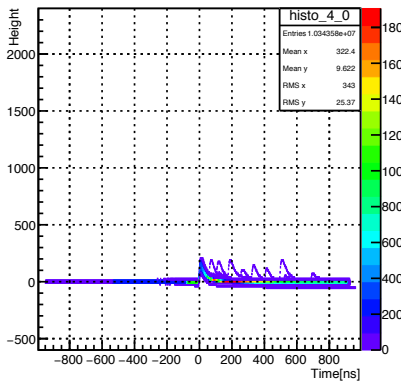


Channel 3

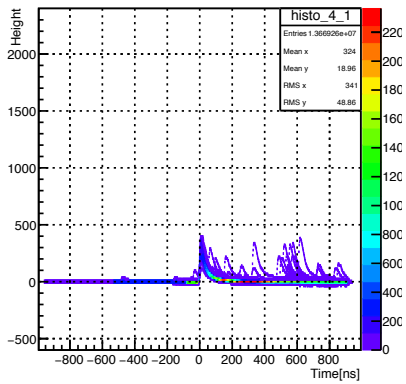
2. Total Waveform Data

4. Ch4: Scan of Different Height Regions

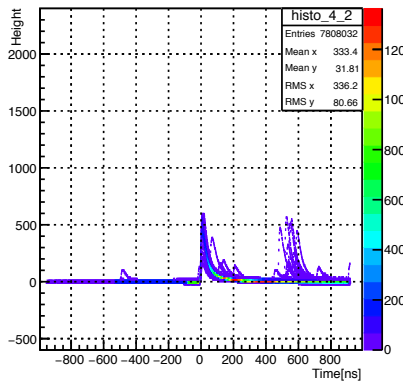
histo_4_200



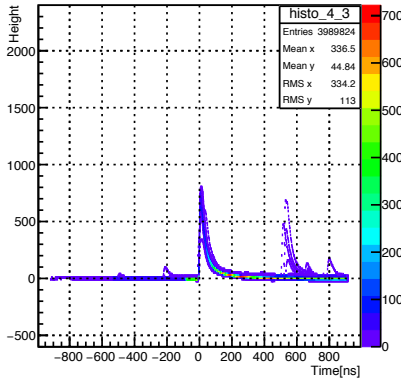
histo_4_400



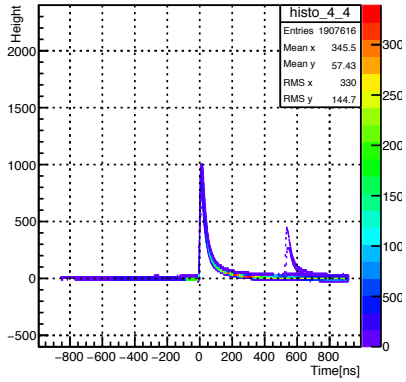
histo_4_600



histo_4_800



histo_4_1000



Channel 4

2. Total Waveform Data

Tasks to be done next!!

[1] Check total waveform for remaining fired channels:

- Channel 5
- Channel 6
- Channel 7

[2] Normalizing waveform height.

[3] Study other useful waveform parameters…