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Mod-3 Run2 LRS

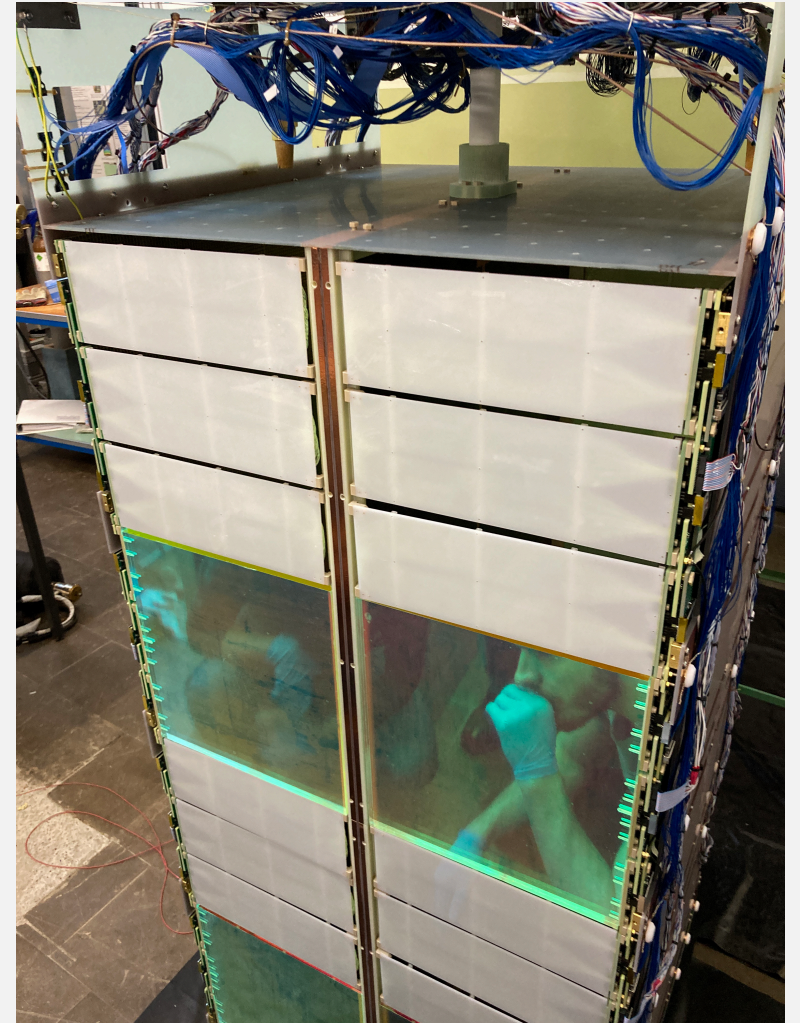
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on behalf of the LRS team

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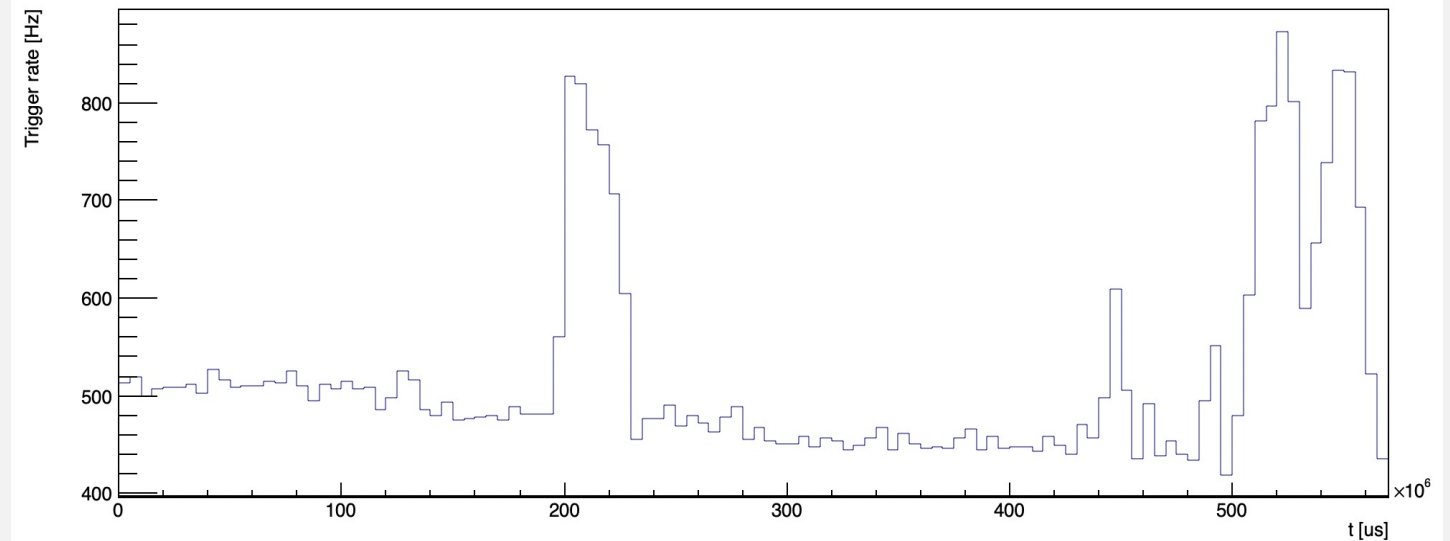
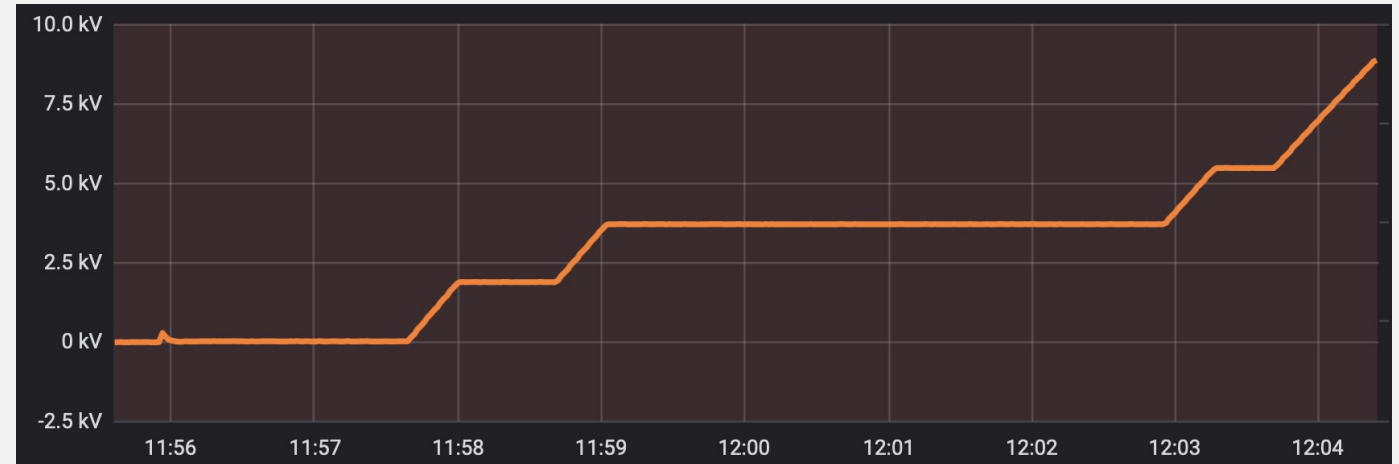
LRS Performance

- No changes on LRS compared to Mod-2
- Same set of readout electronics used
- 2 (of 96) channels dead inside module
 - Pre-amp or cabeling failure
- 3 dead channels on warm side of DAQ chain
 - No time for investigation during run
 - Problem resolved in warm



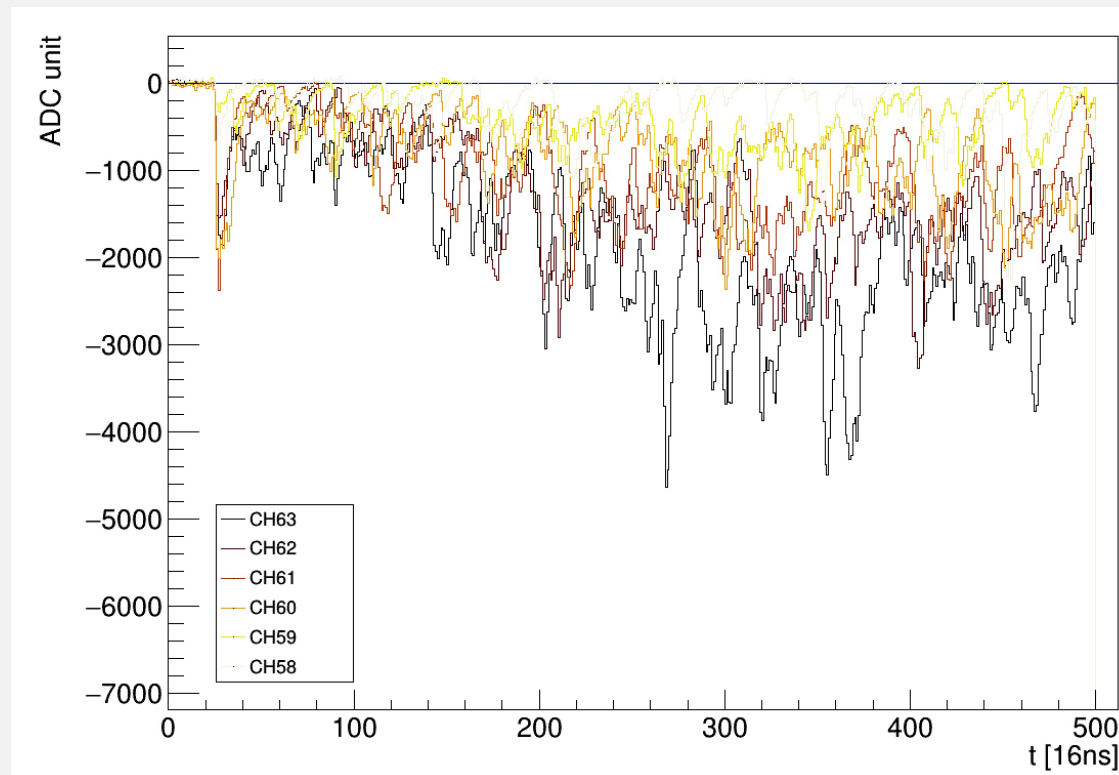
HV discharges

- Normal operation with HV off
- First increased trigger rate during ramp up to 3.7kV
- Trigger rate at nominal filed at $\sim 1\text{kHz}$

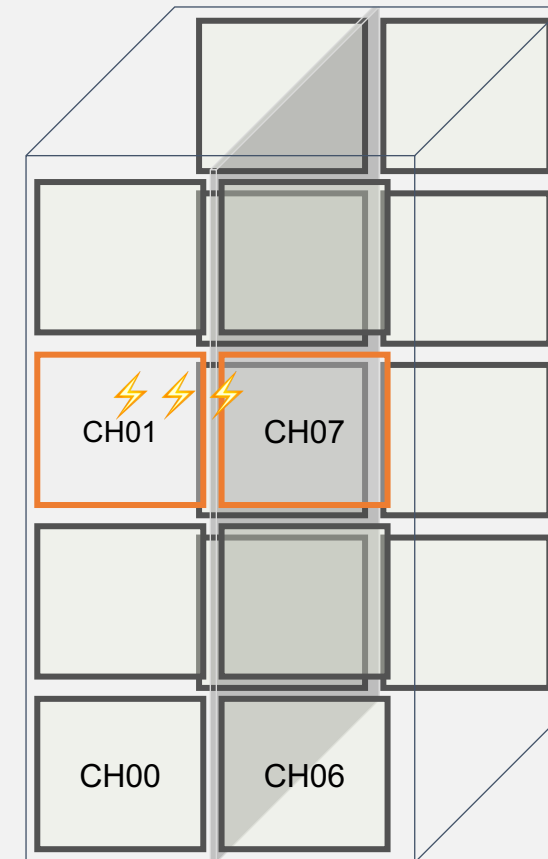


Location

- Excessive light events moved with side panel
- Most light in TPC 1, less on TPC2



TPC 1

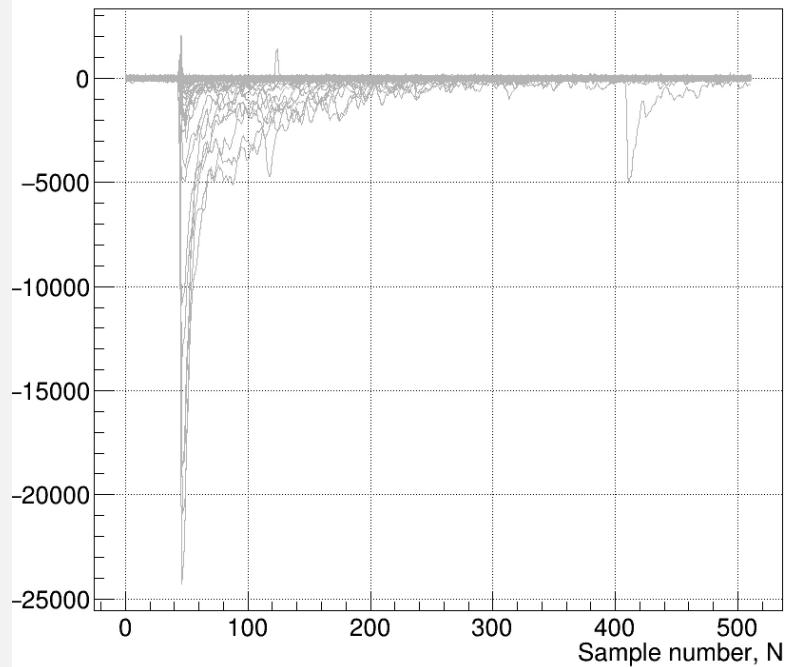


TPC 2

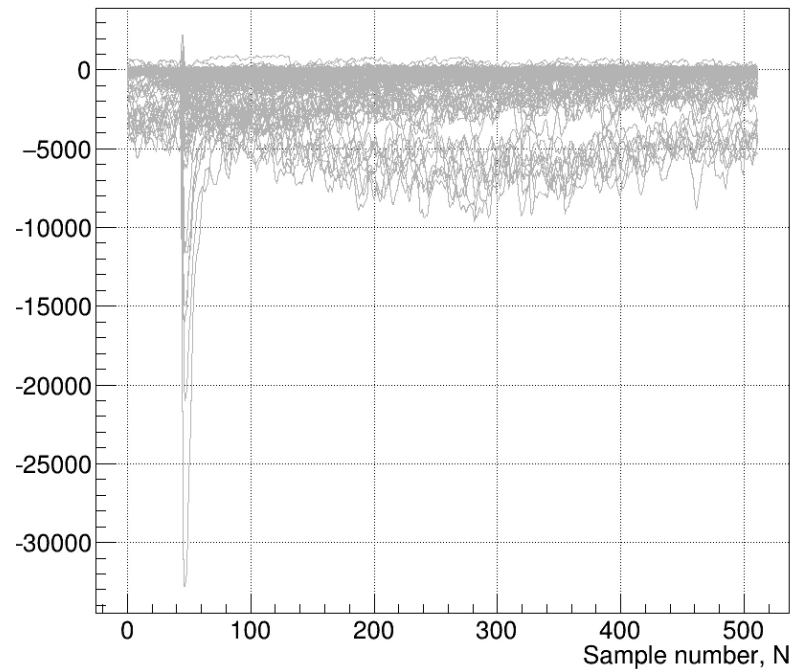
Run 1

- Sum / trigger channels with noise tiles triggering
- At 4.9kV

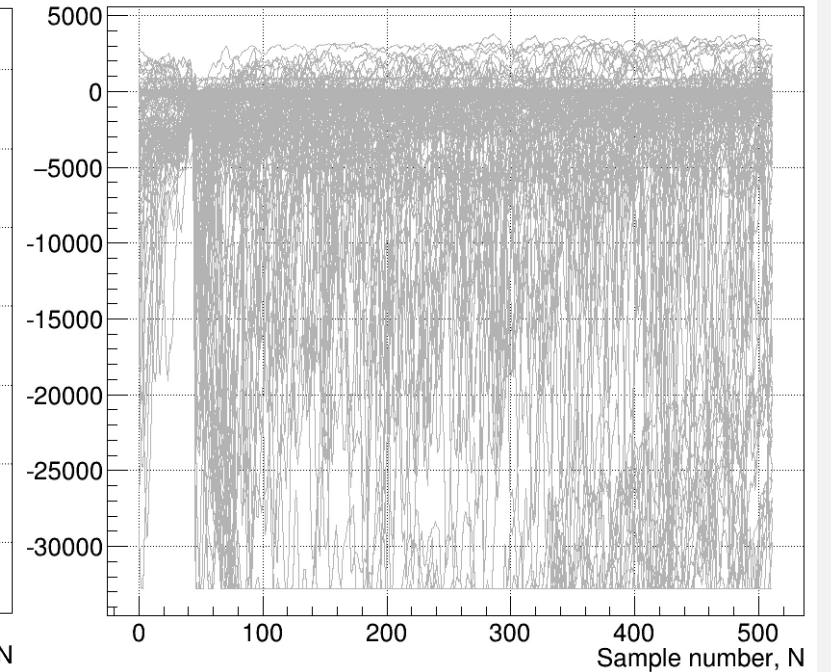
Single waveforms CH00



Single waveforms CH03



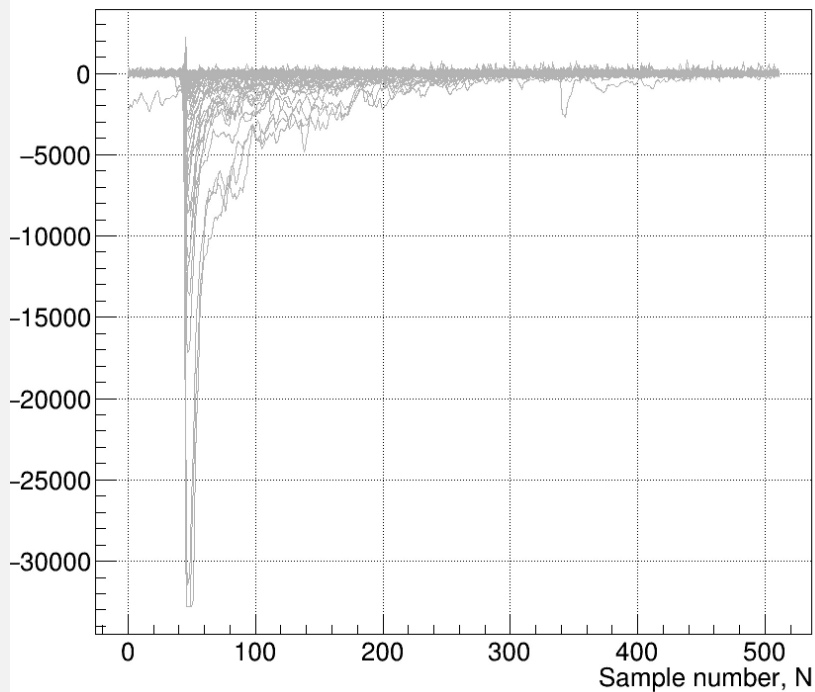
Single waveforms CH05



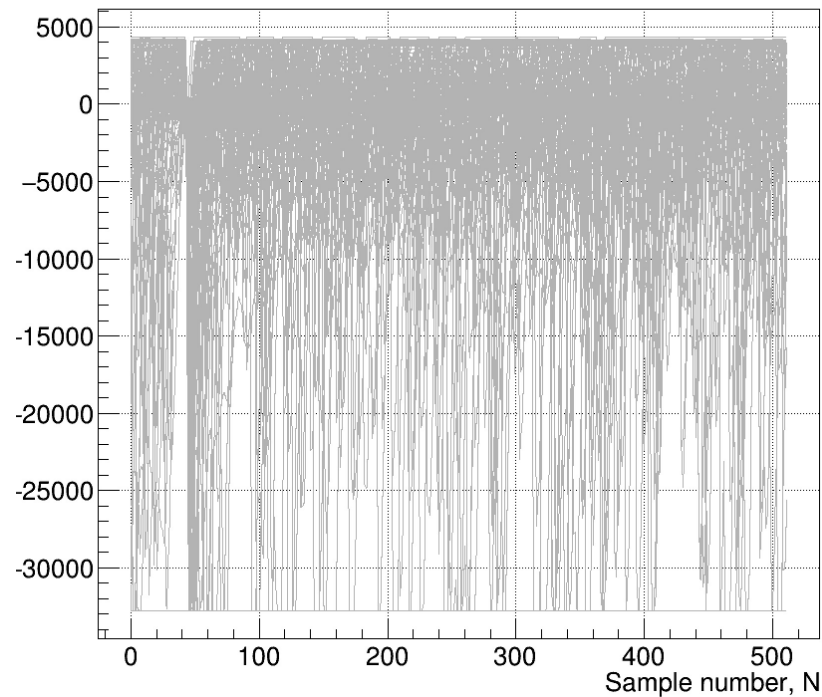
Run 2

- Sum / trigger channels with noise tiles triggering
- At 8.8kV

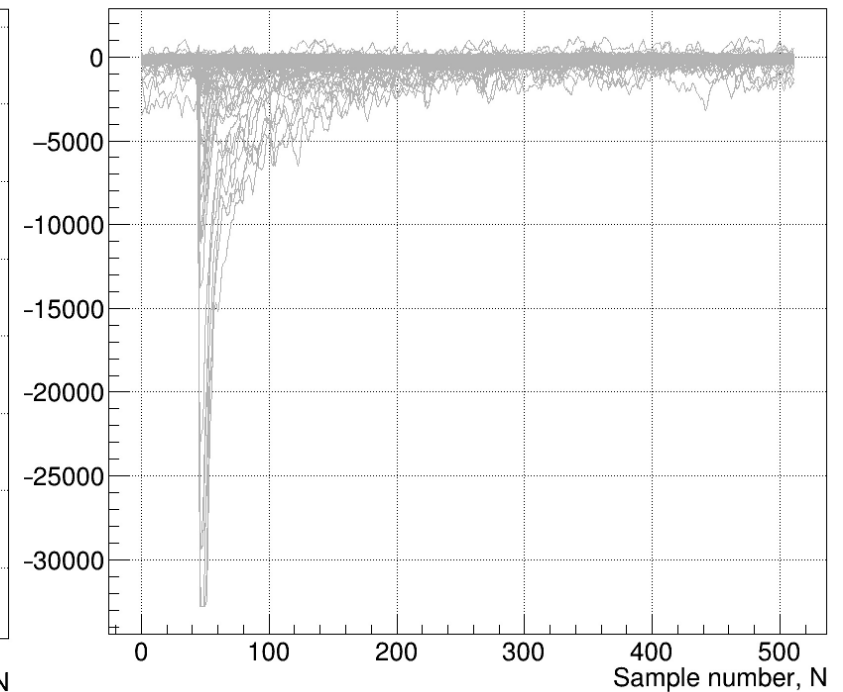
Single waveforms CH00



Single waveforms CH01



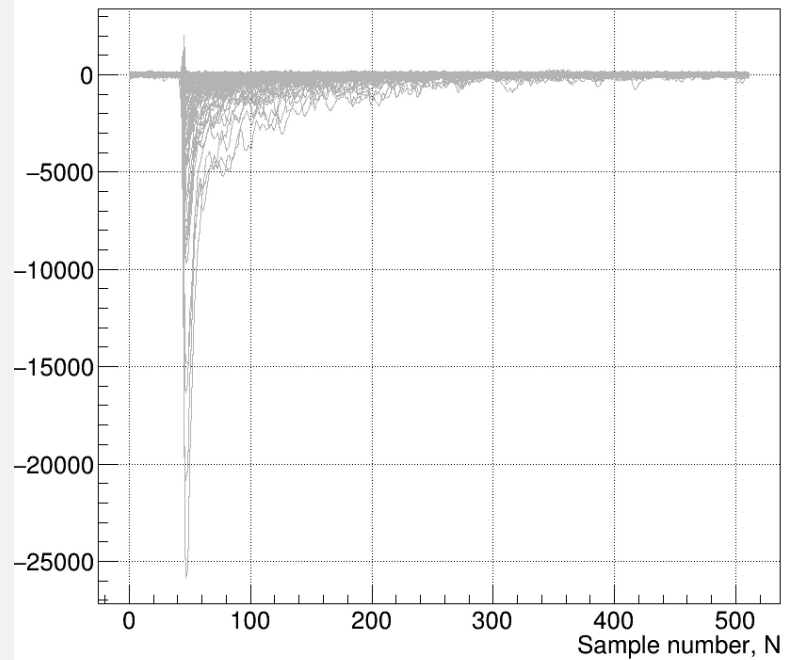
Single waveforms CH07



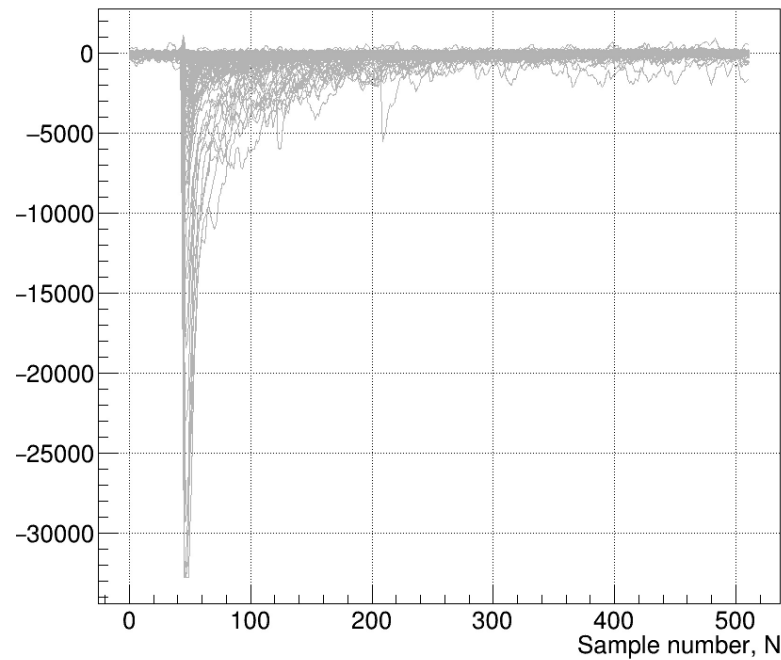
Run 1 – Nominal operation

- Sum / trigger channels **without** noise tiles triggering
- At nominal field (15kV)

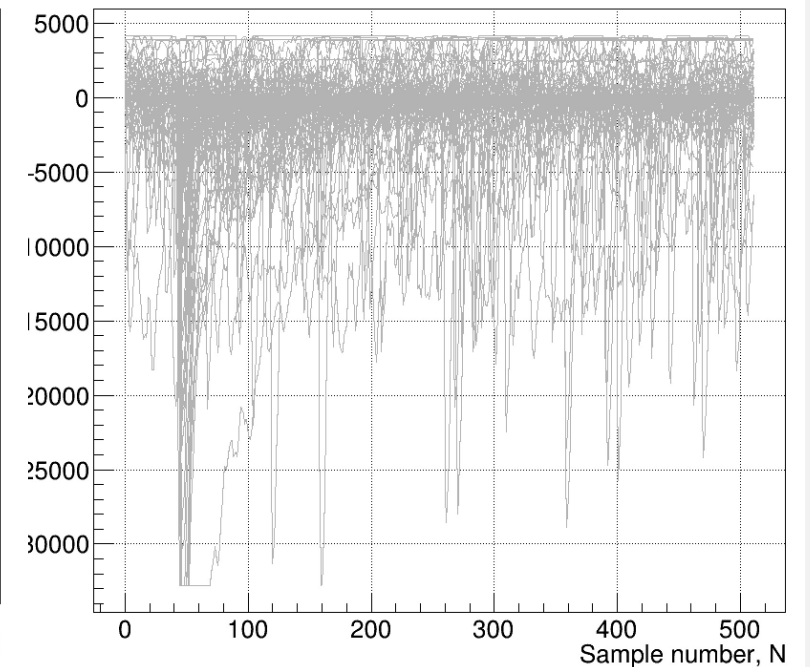
Single waveforms CH00



Single waveforms CH03

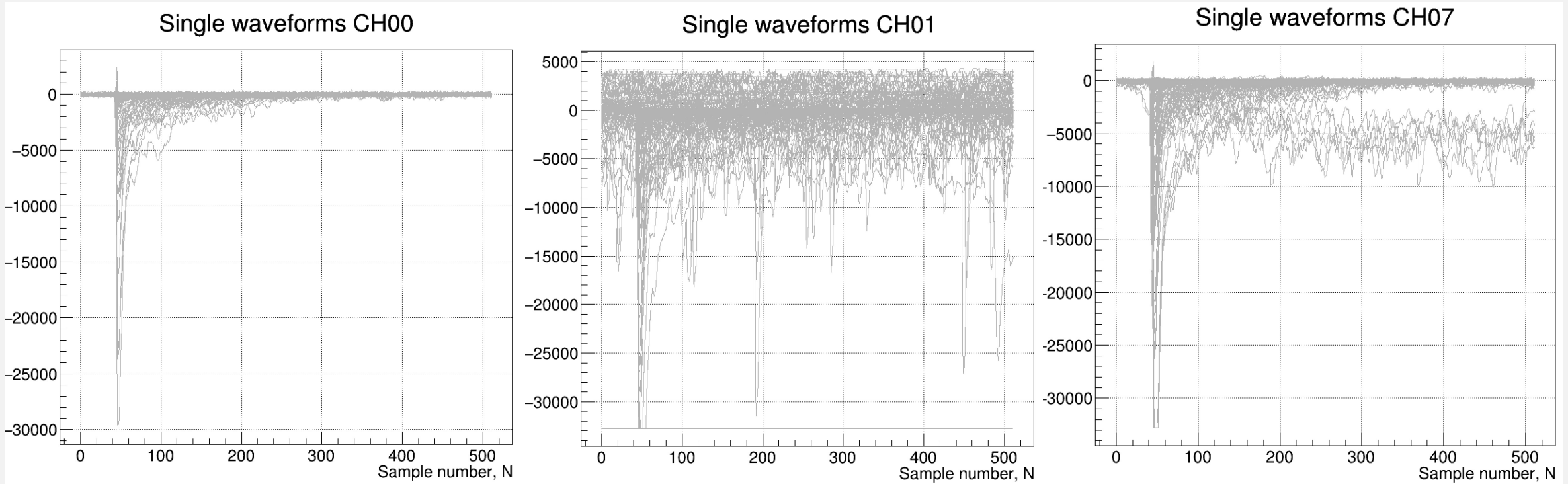


Single waveforms CH05



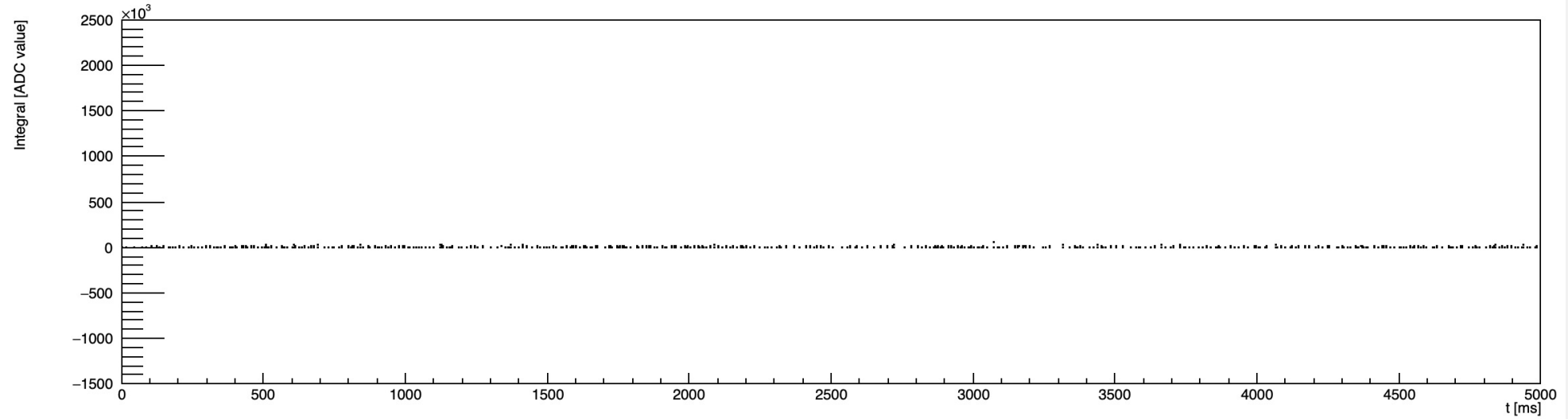
Run 2 – Nominal operation

- Sum / trigger channels **without** noise tiles triggering
- At nominal field (15kV)

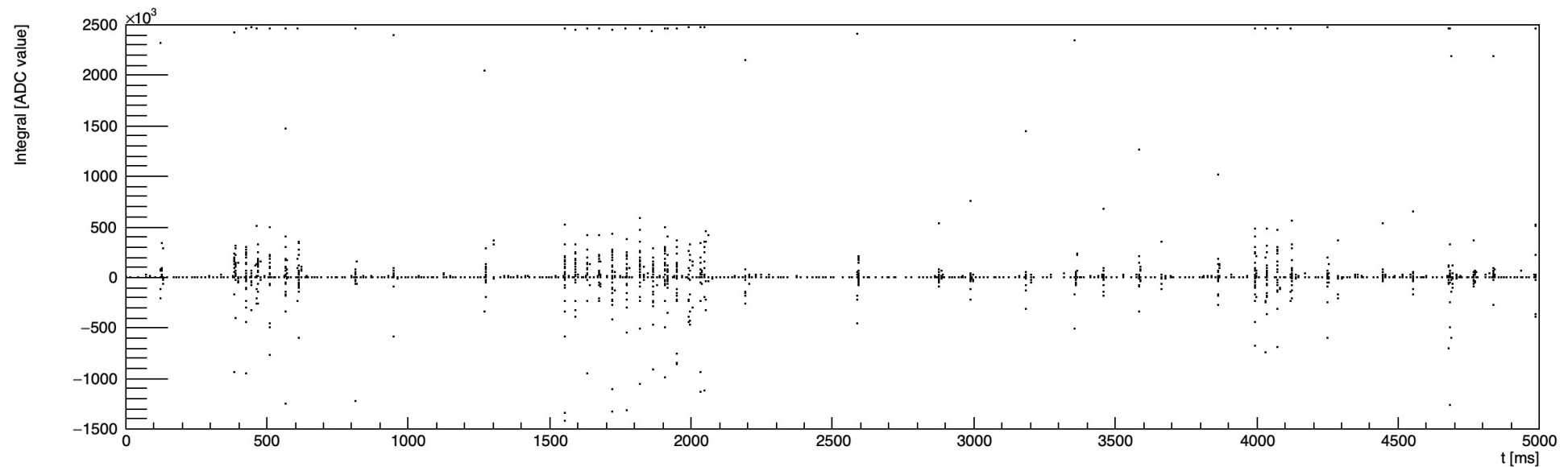


Off signal integral

CH00



CH01



- Frequency of discharge events varying in $O(s)$
- Typical duration 2-4 ms

