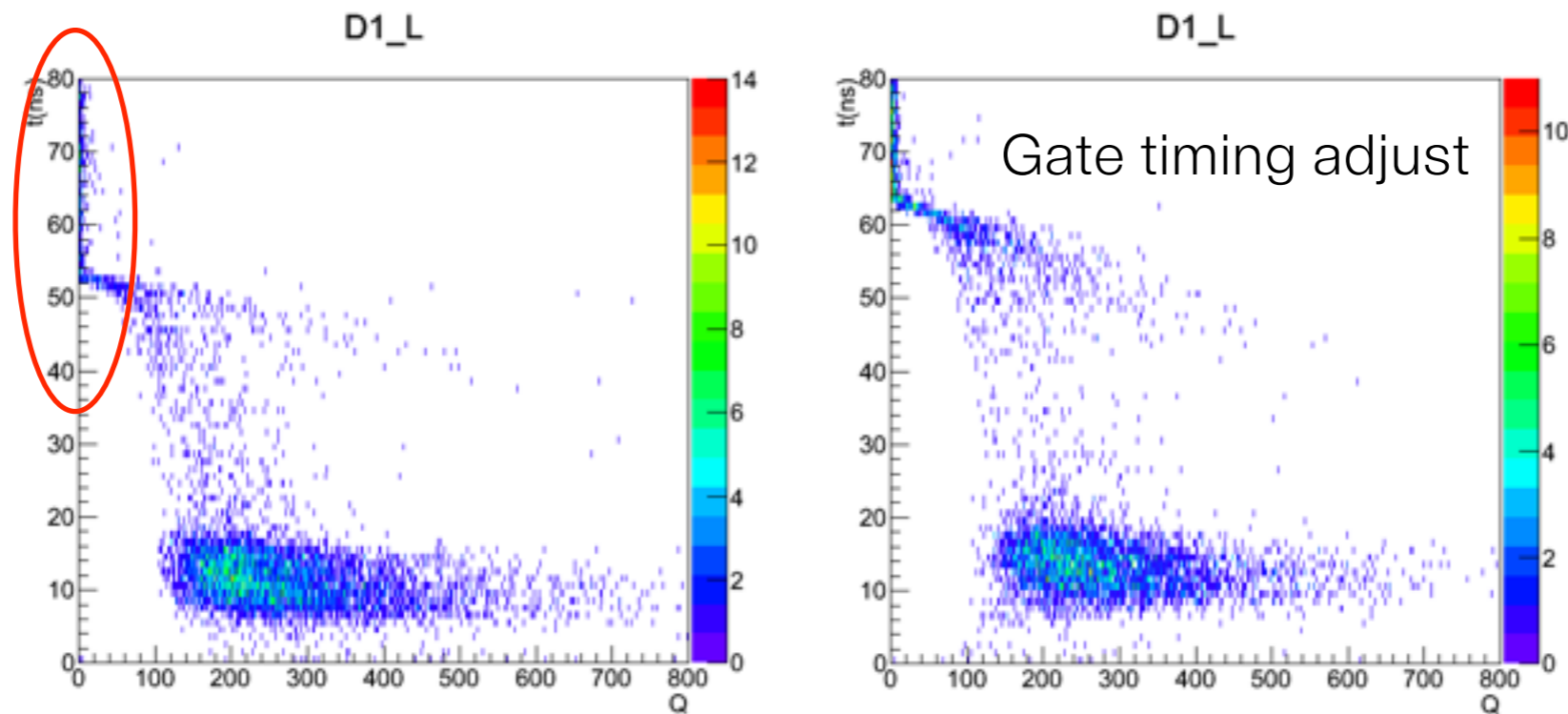


1 m distance with 2 m long bar

2014_3_7_labmeeting
KiSoo Lee

previous



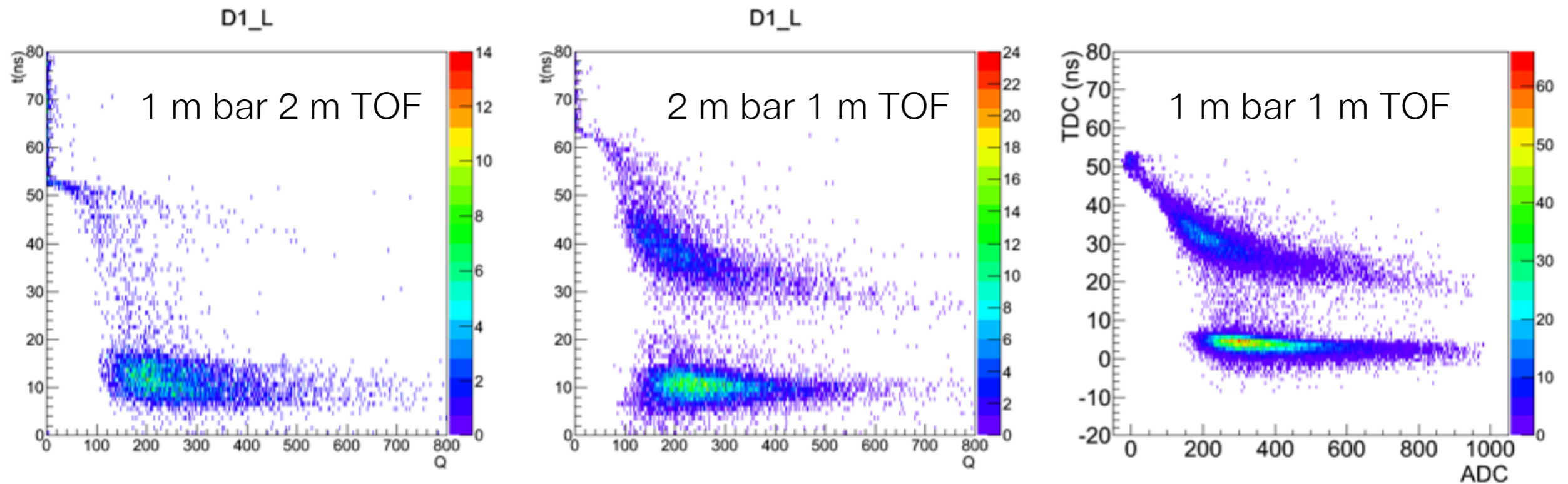
- to find the reason of pedestal like value at large time, several change have tried
- surrounding, threshold, high voltage, gate timing
- gate timing looks work

distance change



- if distance between source and detector is short, time difference between gamma and neutron is short
- low energy neutron charge can reach inside gate

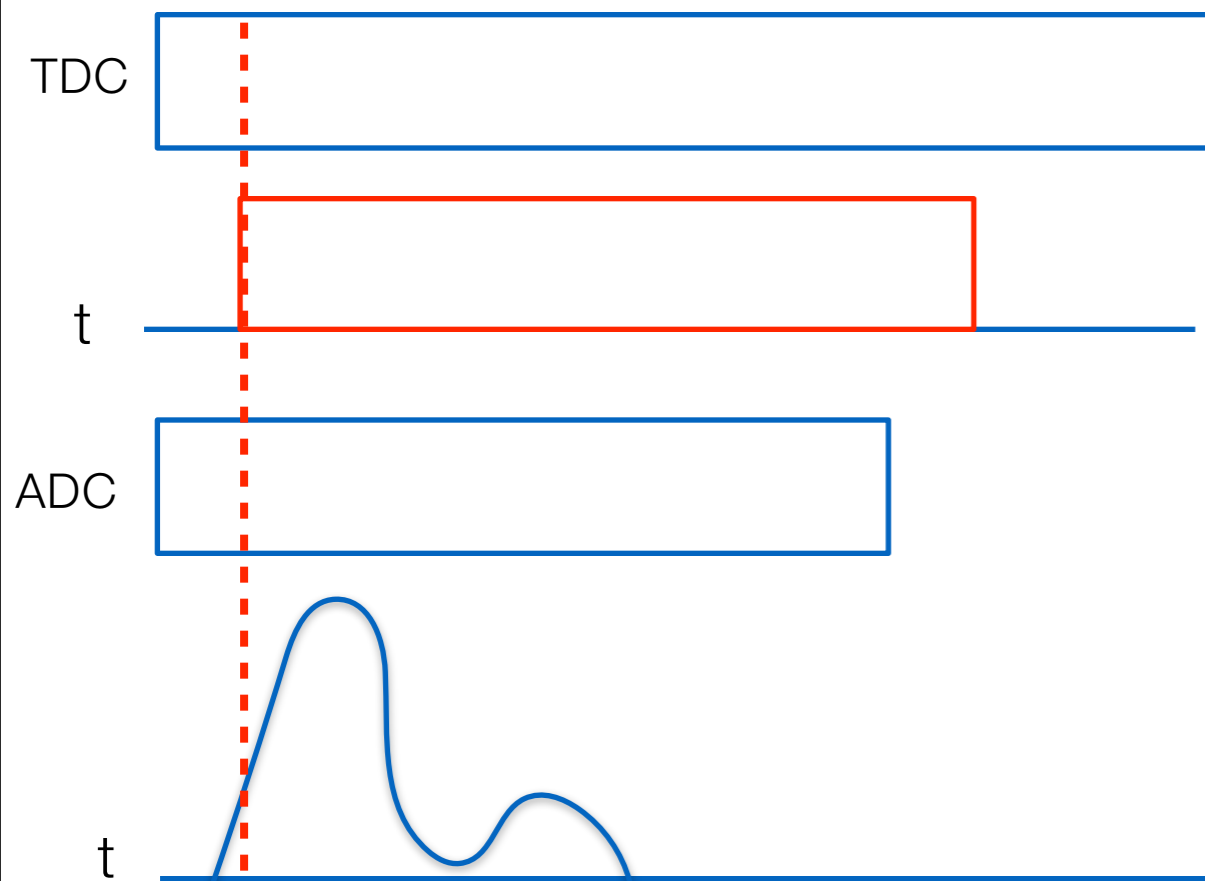
result



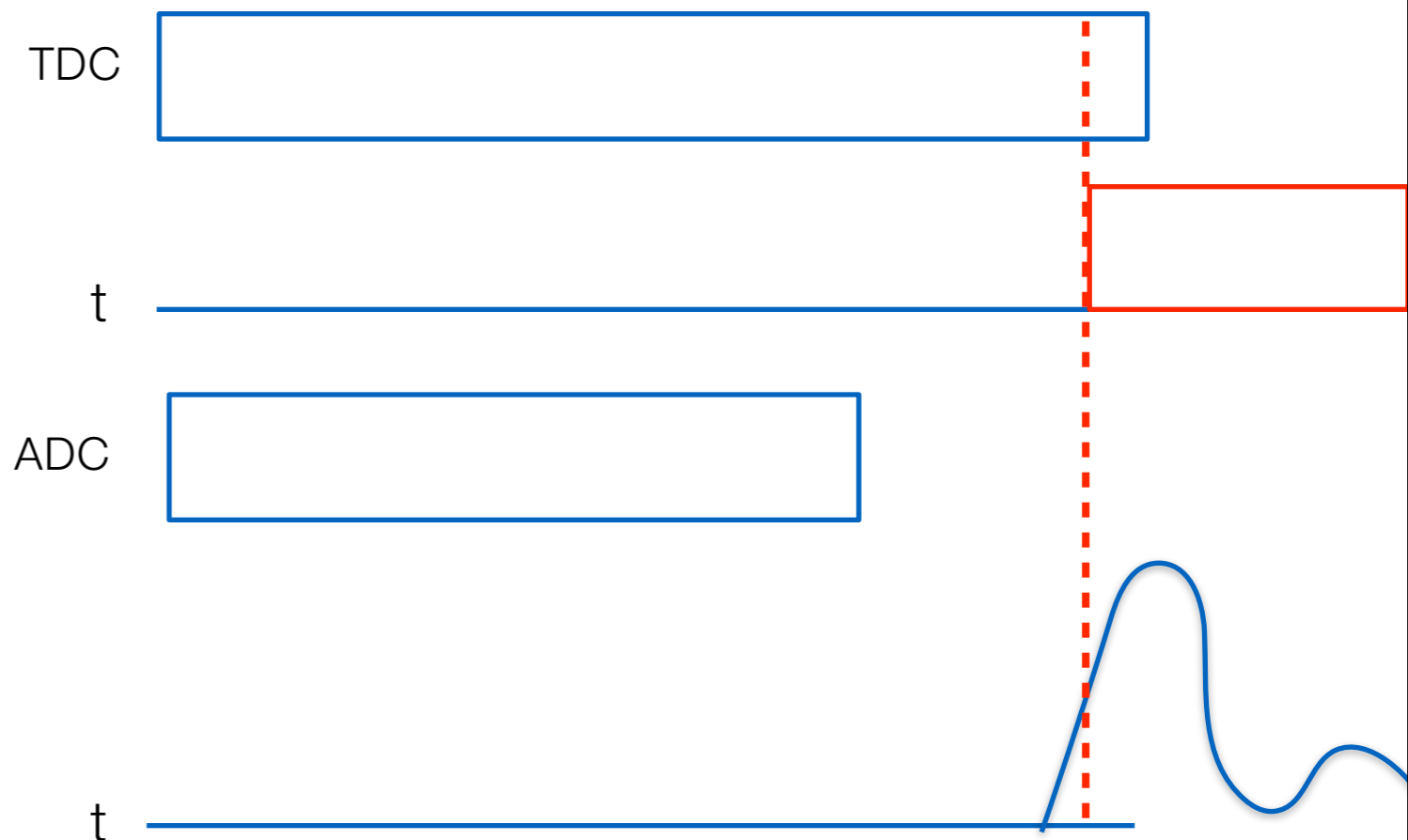
- pedestal like region is still exist, but neutron is appeared
- it seems that TDC limit is set by electronics and ADC limit is set by trigger width

TDC & ADC condition

gamma

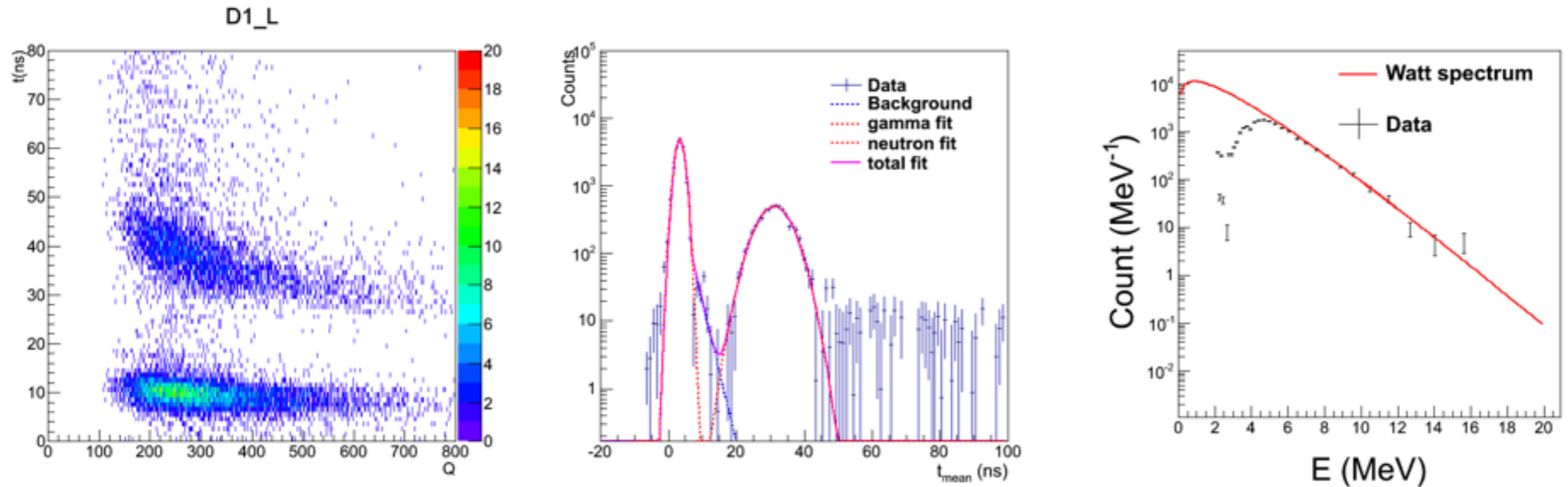


low energy neutron



- TDC can take low energy neutron information
- ADC can not take low energy neutron information
- for the ADC gate we need large width pulse

large gate module result



- pedestal like region disappeared
- gamma and neutron are well separated
- energy distribution well describes Watt spectrum over than 5 MeV