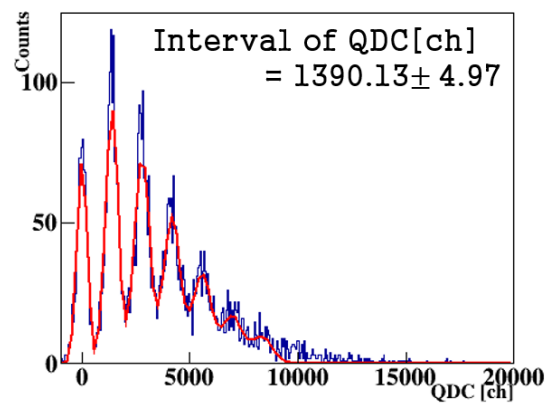
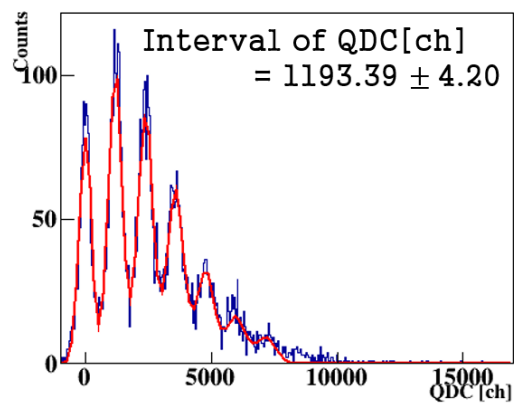
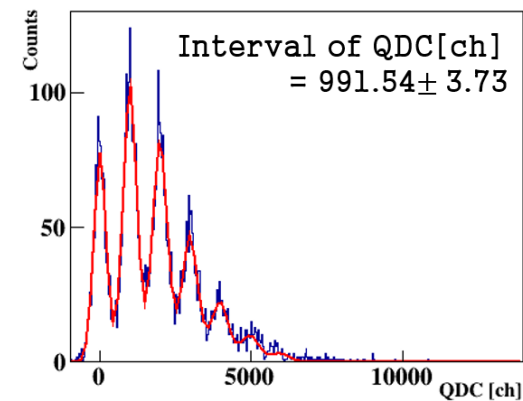
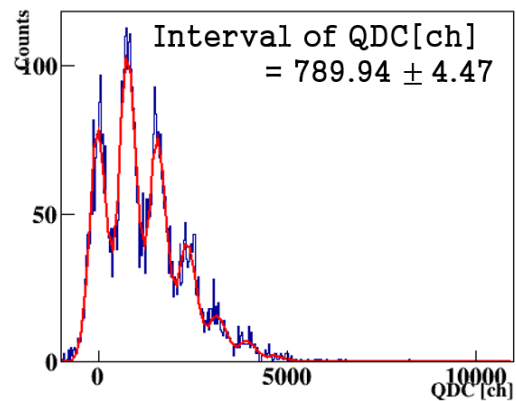
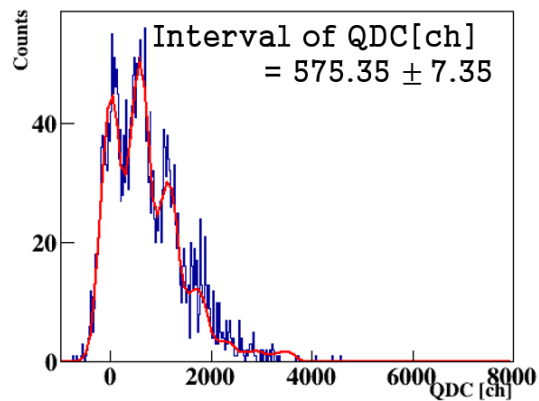
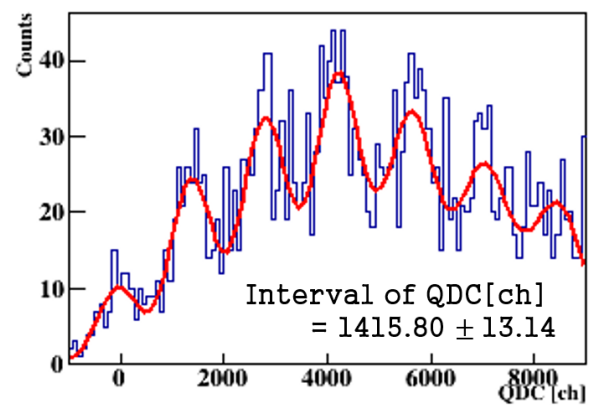
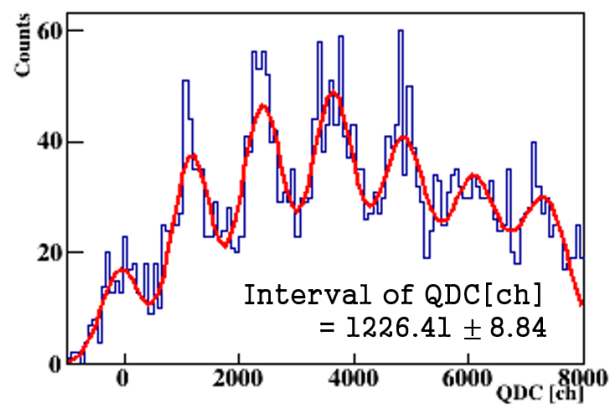
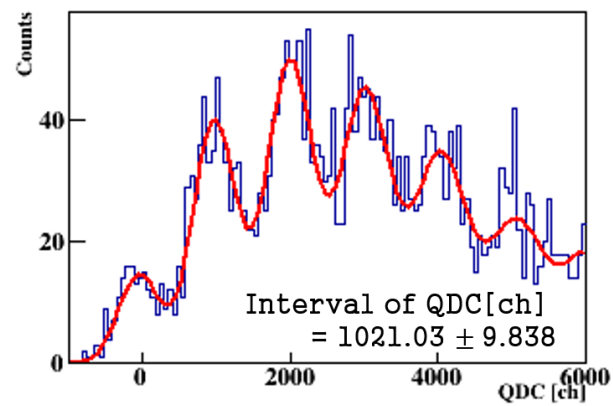
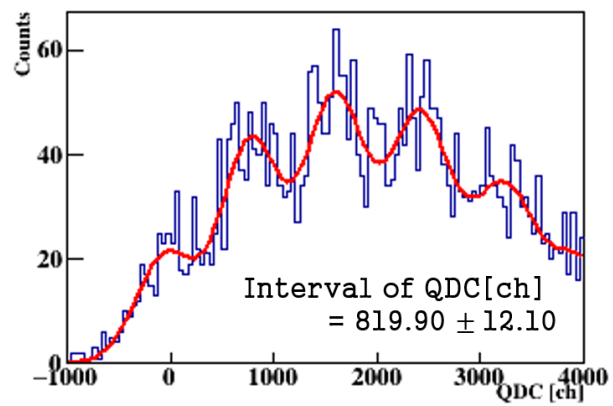


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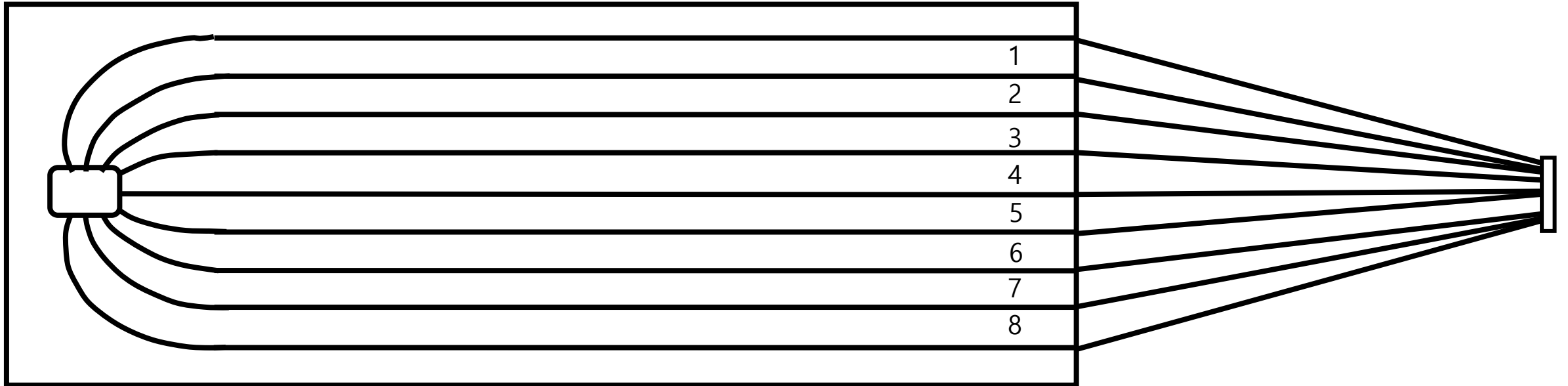
# CS-type MPPC Gain



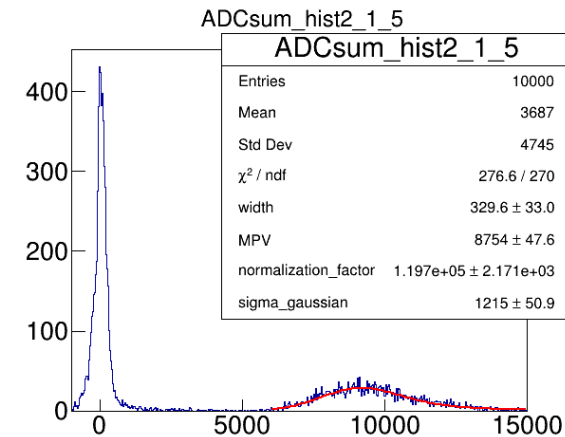
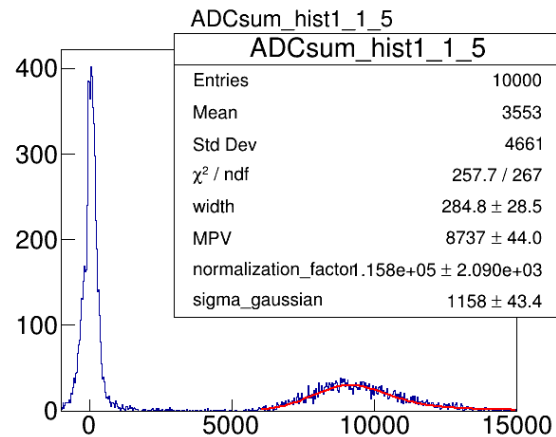
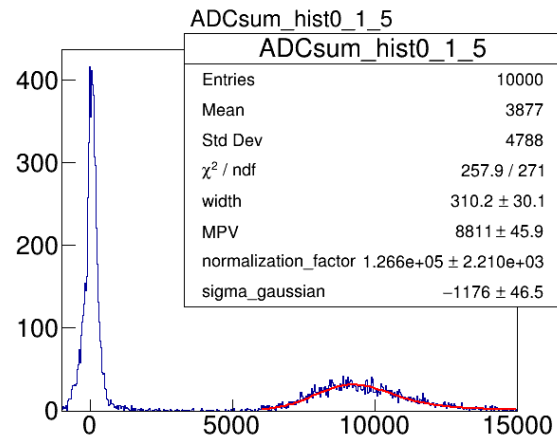
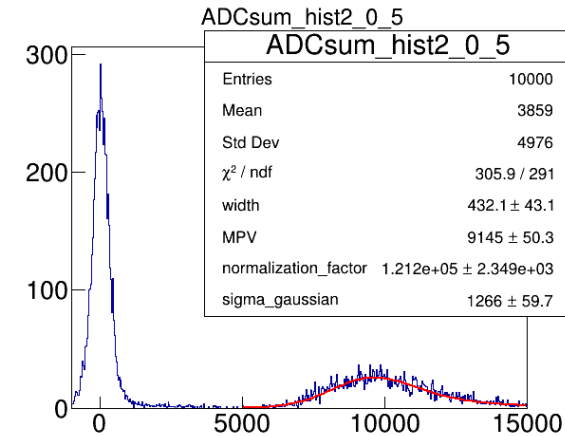
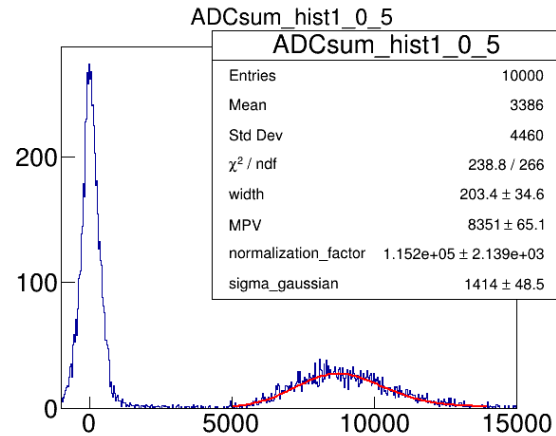
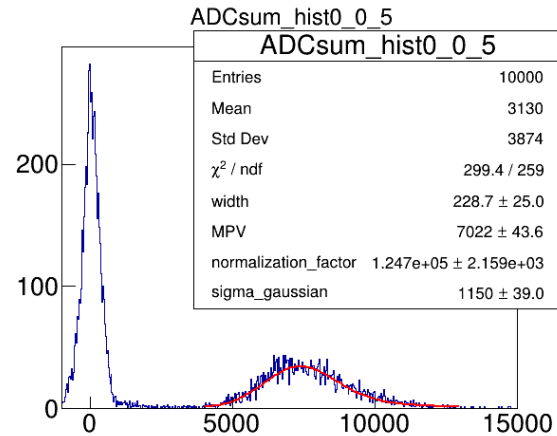
# PE-type MPPC Gain



# Data Numbering

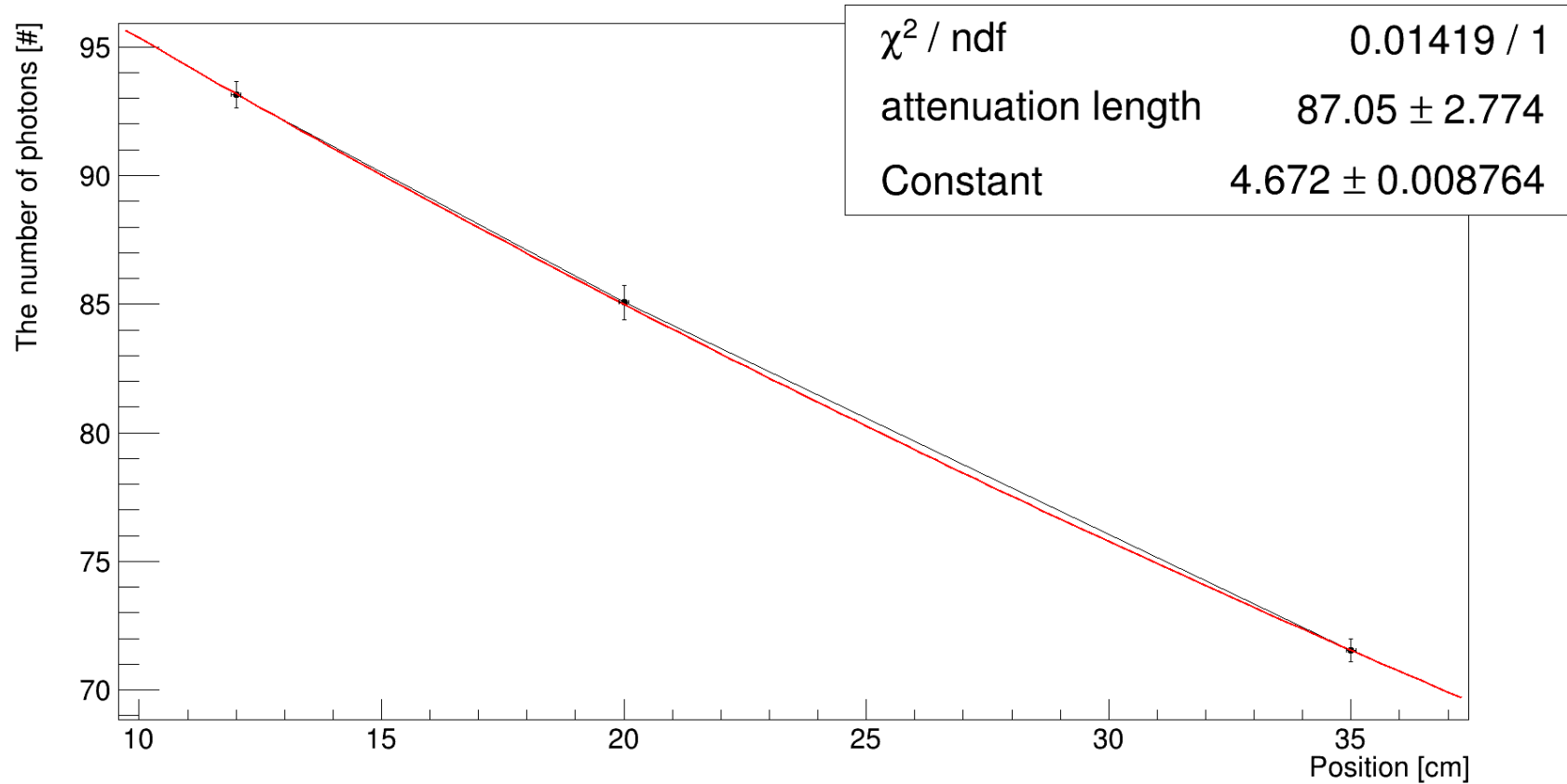


# Light yield



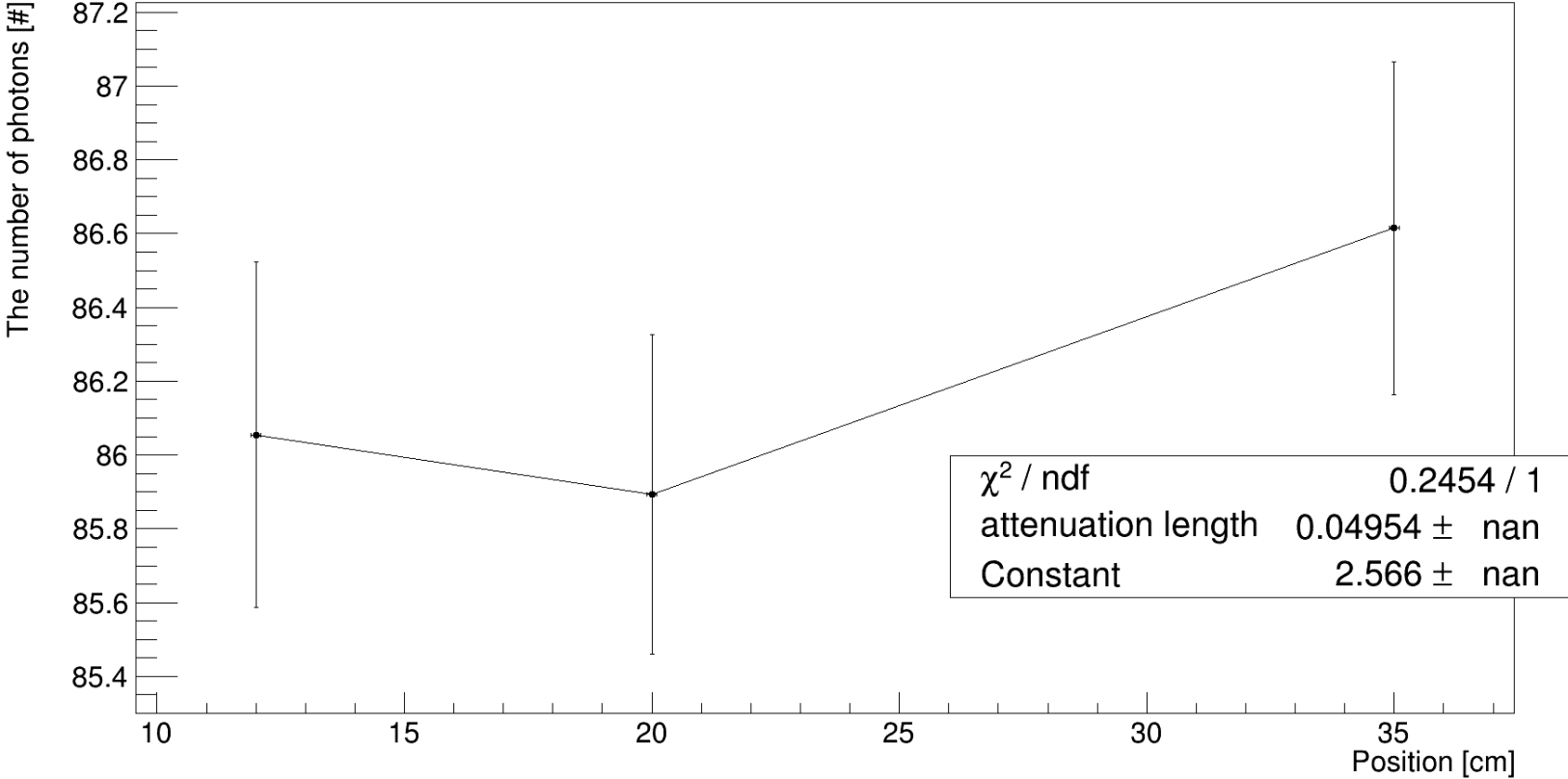
# Attenuation

Attenuation length for MPPC with Aluminum box



# Attenuation

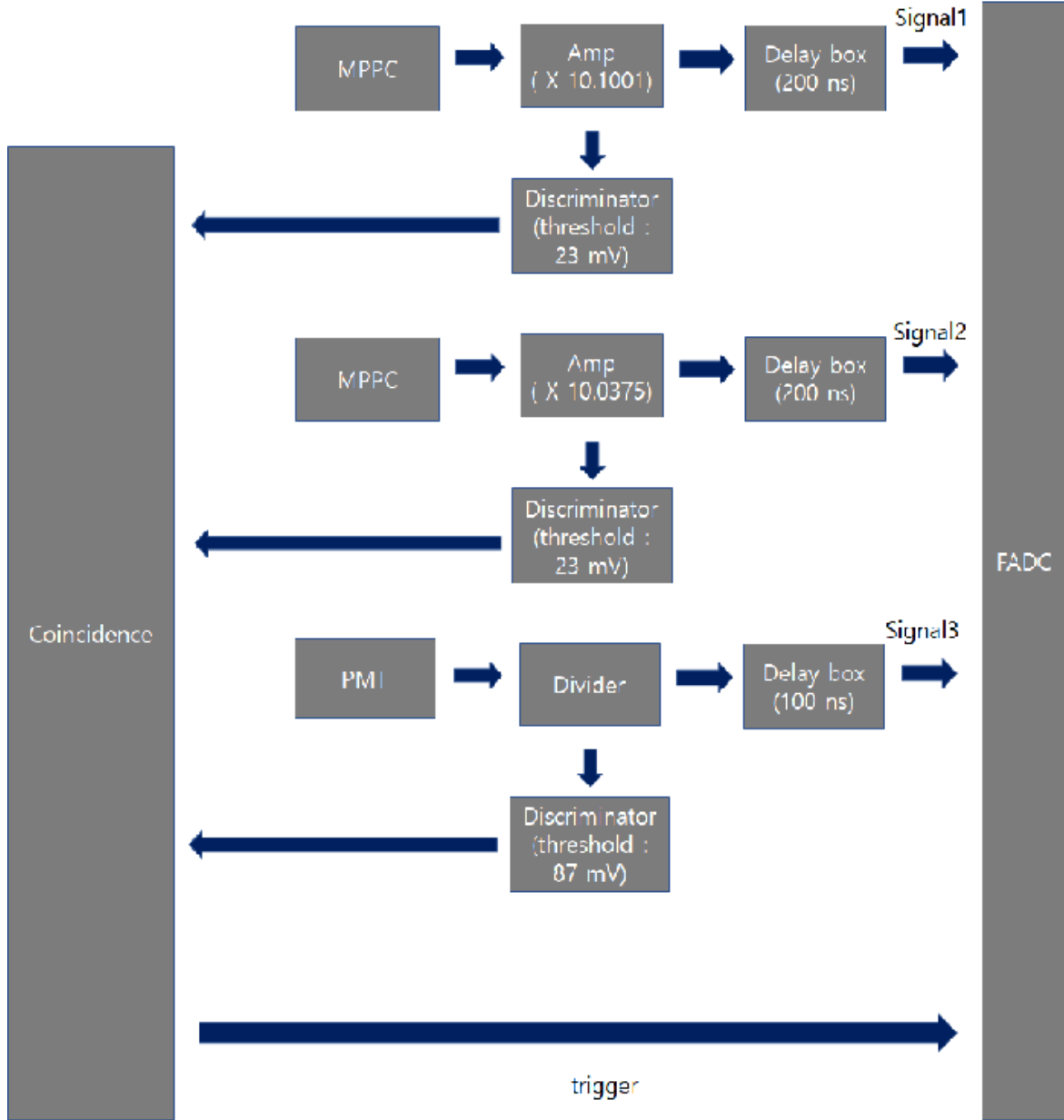
Attenuation length for MPPC tied at the end



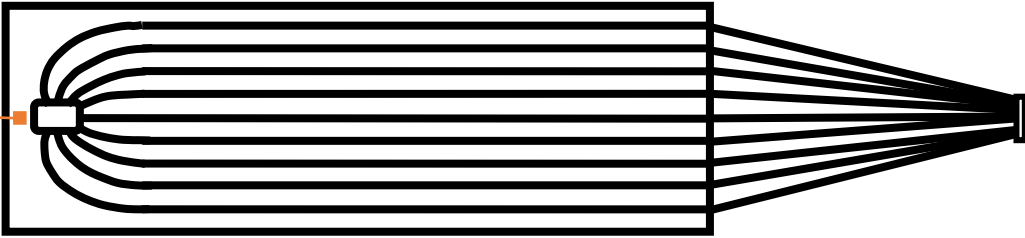
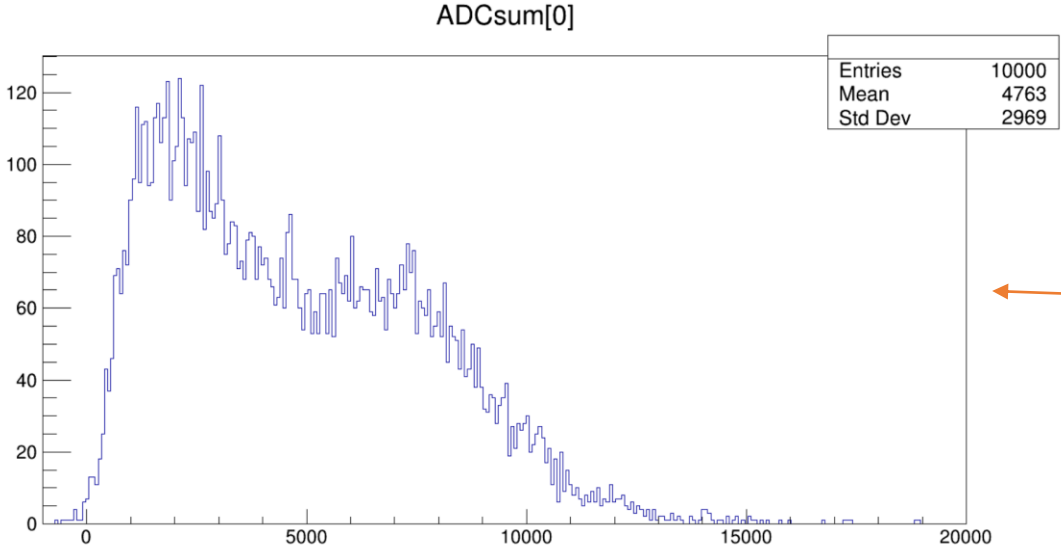
At edge of DCV



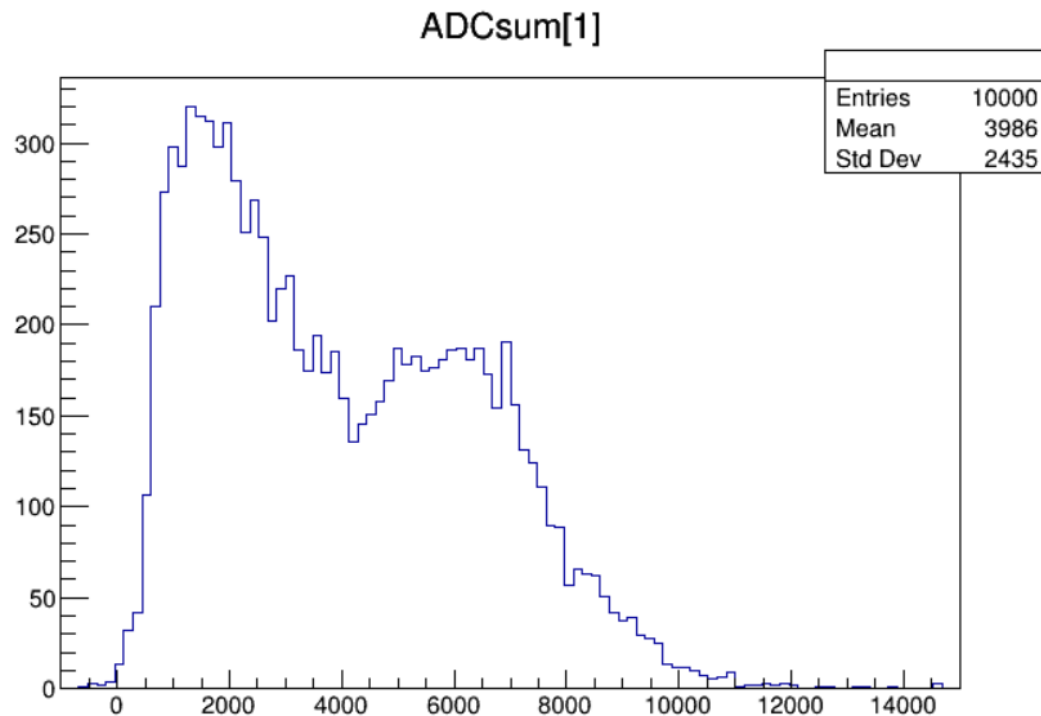
# DAQ



# ADCsum

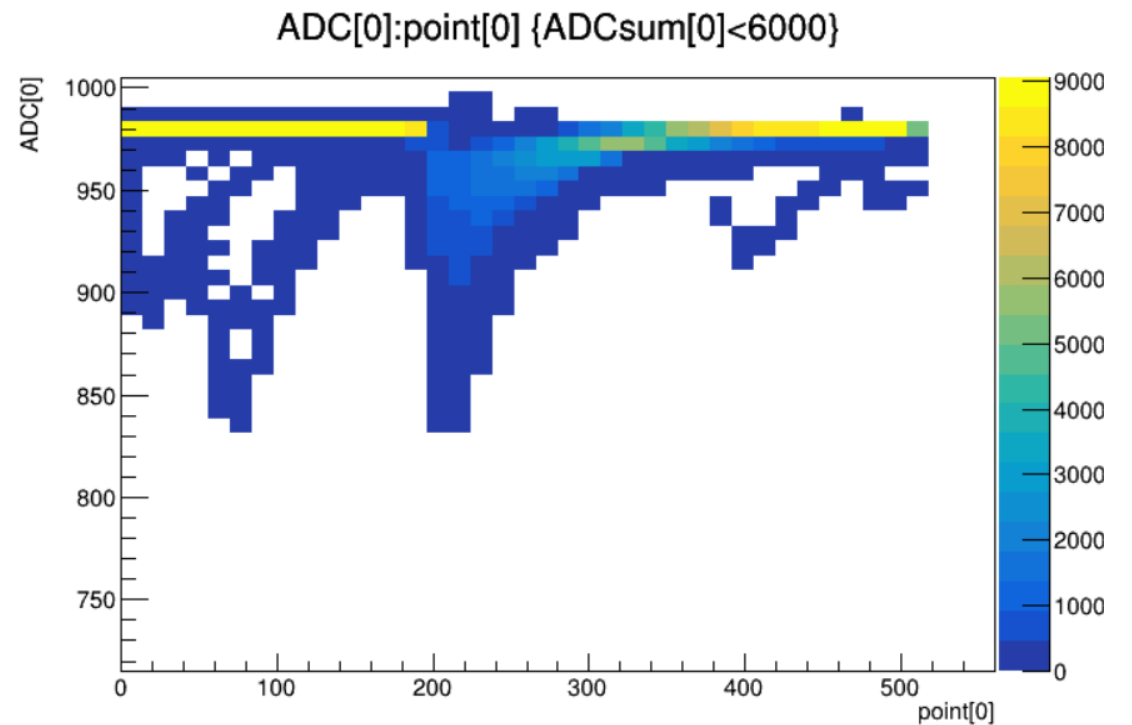
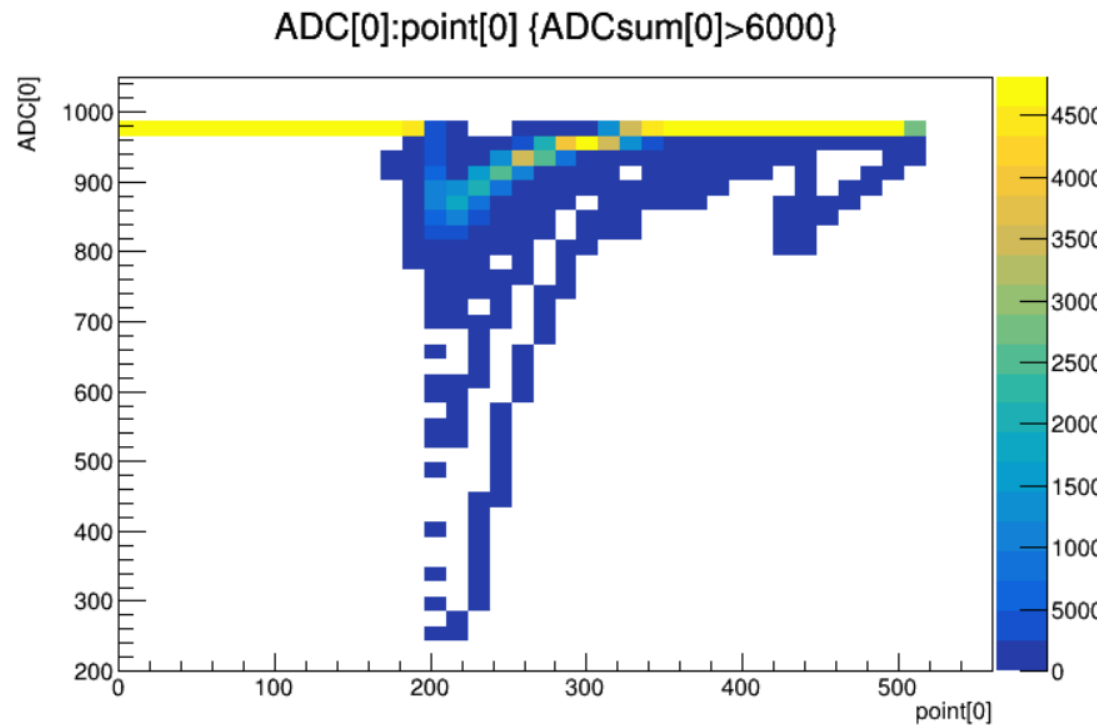


# ADCsum



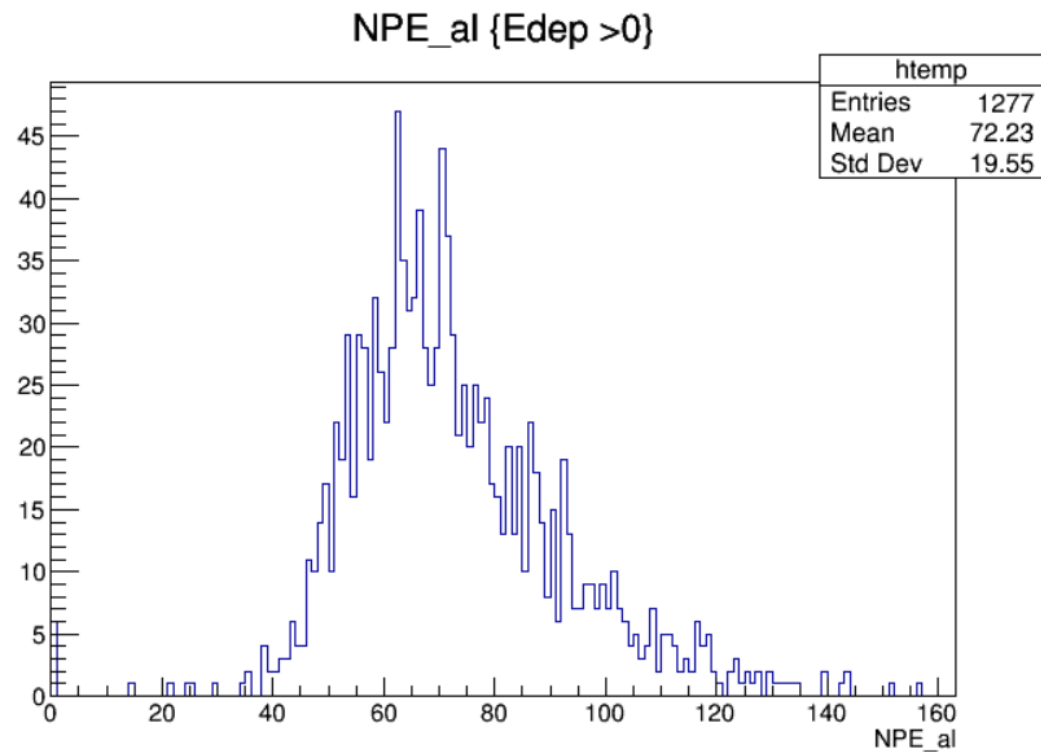
- Aluminum light box 위쪽 영역에서 5군데에서 측정을 진행하였으나 모두 동일한 결과가 나타났다.
- Pedestal이 나타나지 않은 이유는, MPPC의 신호 역시 Coincidence를 통해 trigger 신호에 사용되었기 때문이다.

# Waveform



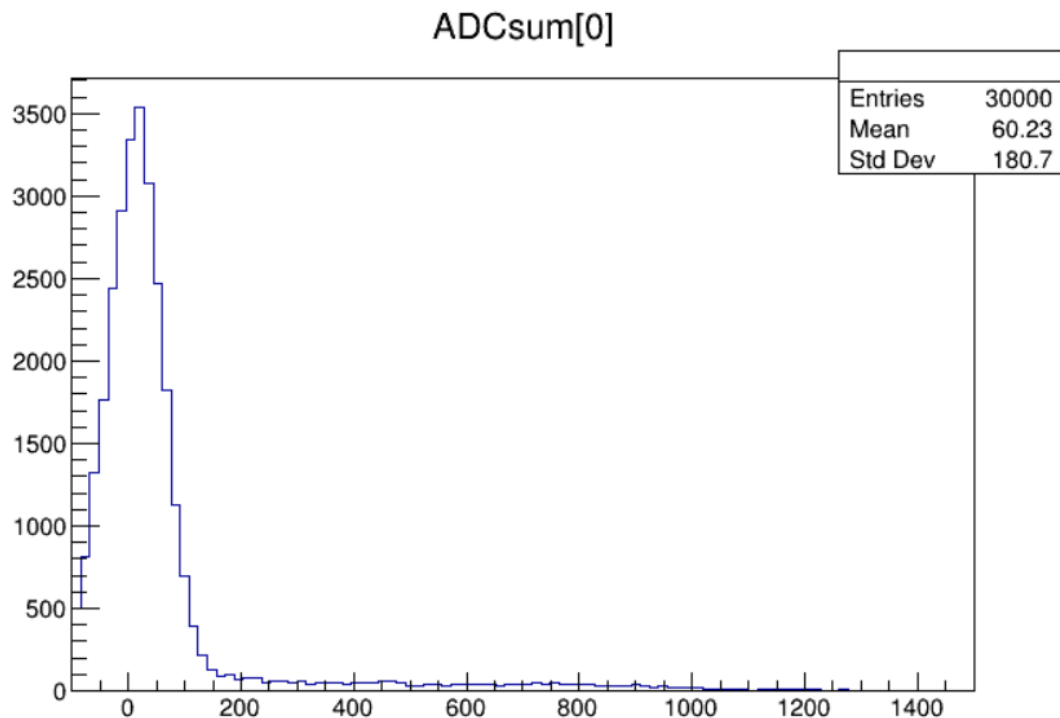
- 하지만 waveform을 살펴봤을 때, 파형이 생기는 시간이 일정하기 때문에 분명 source로 인한 신호임을 확인할 수 있다.

# 시뮬레이션 결과



- 약 70개 정도의 Photon이 들어왔음을 확인할 수 있다.
- 이는 PE-type의 MPPC에서 Single photon이 만드는 ADCsum이 약 102.1임을 감안했을 때, 뒷부분 peak에 대한 설명은 가능하다.

# 다른 실험



- Amp를 이용해서 해당 실험을 하기 전에, Amp 없이 측정한 실험 data가 하나 있었다.
- 이 때의 데이터를 살펴보면, Pedestal이 잘 나타나 있는 것을 볼 수 있다.
- 달라진 건 Amp를 사용하는 것과 balcksheet의 유무인데, 이것과 Pedestal이 관계가 있을 수 있나?

Backup

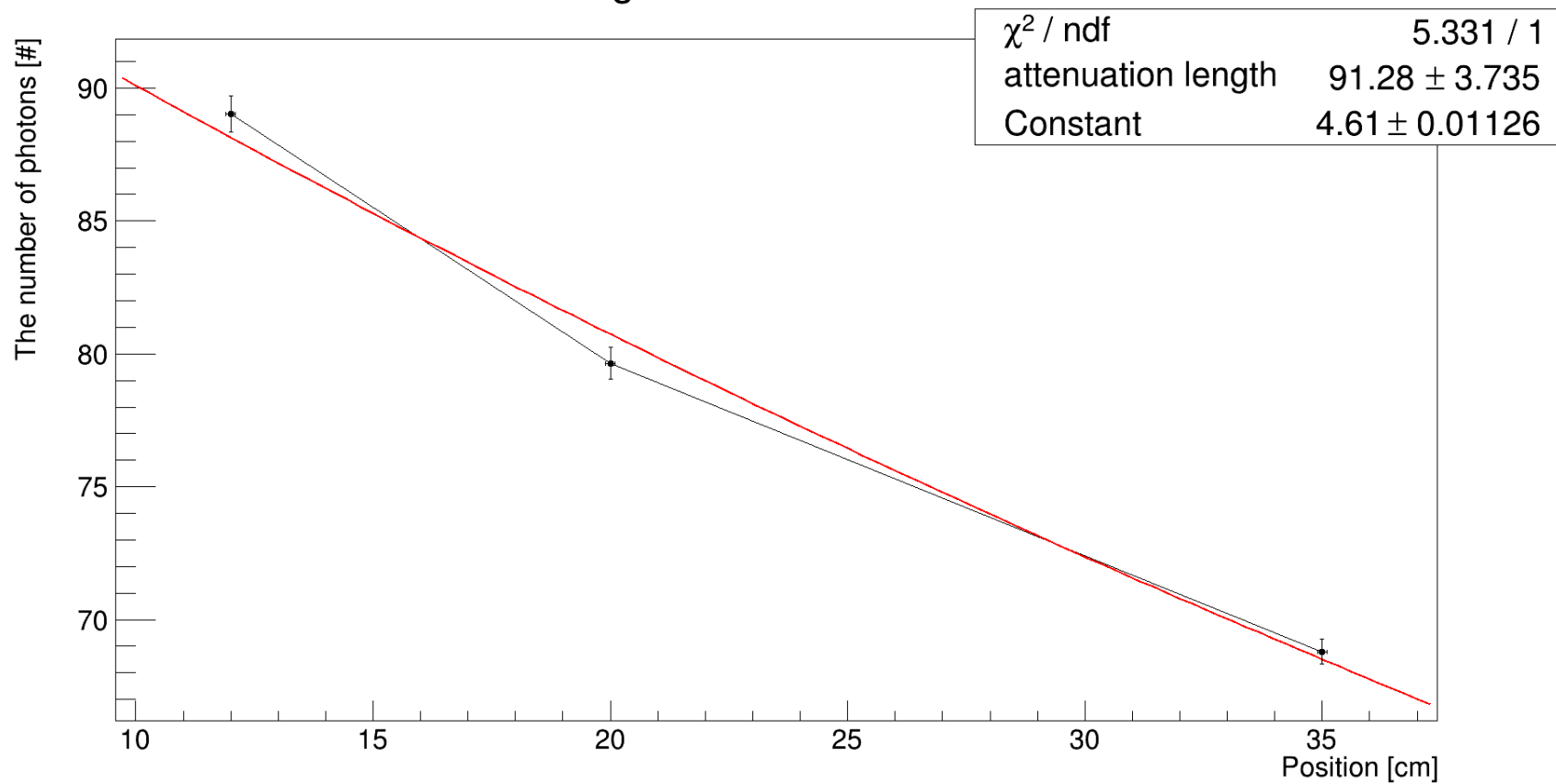
# Data Numbering





# Data1

Attenuation length for MPPC with Aluminum box



# Data2

Attenuation length for MPPC with Aluminum box

