

Waveform Summing Methods Update

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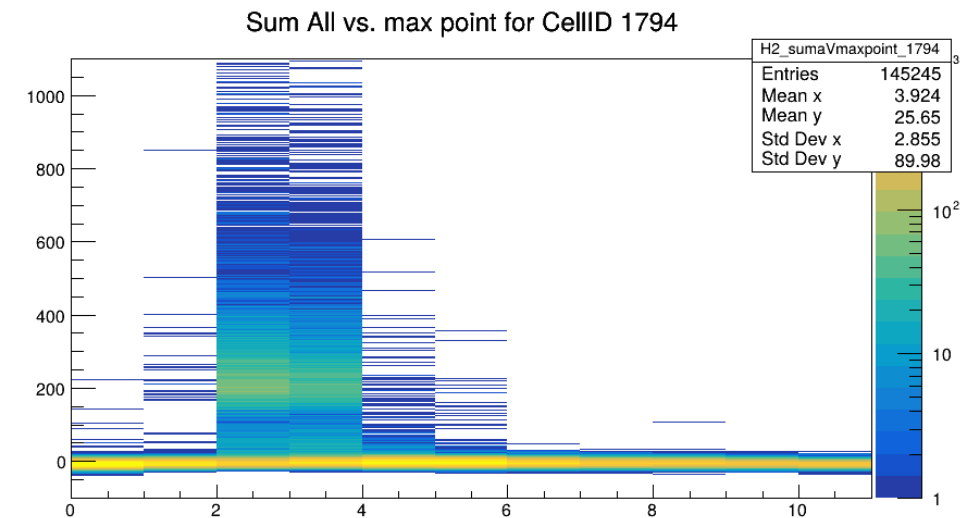
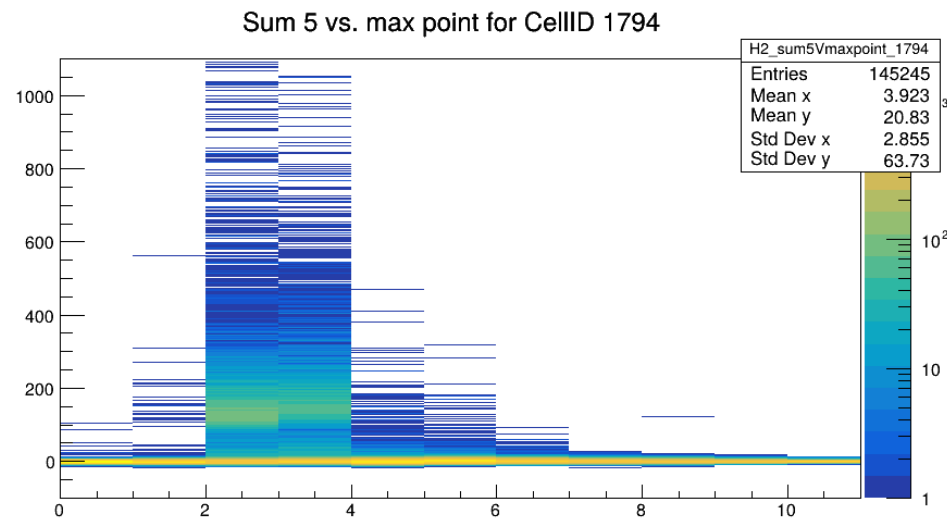
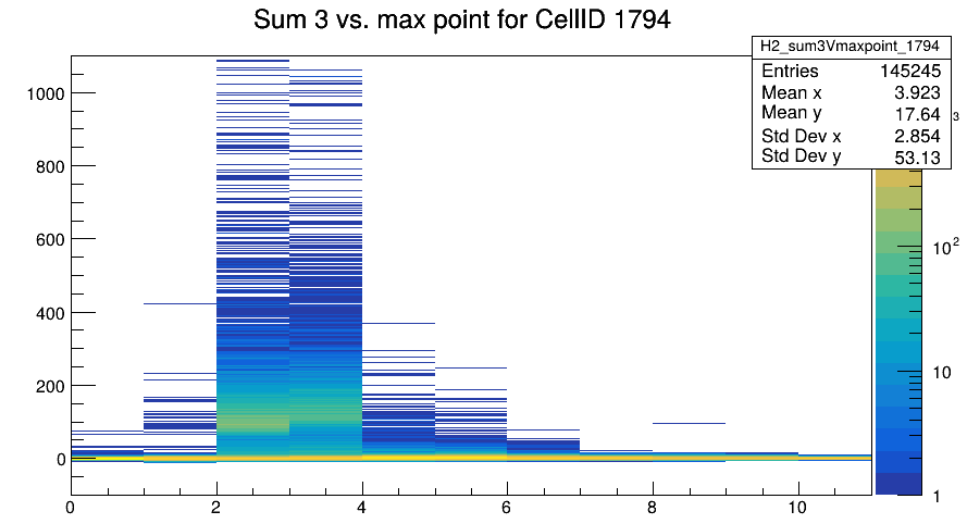
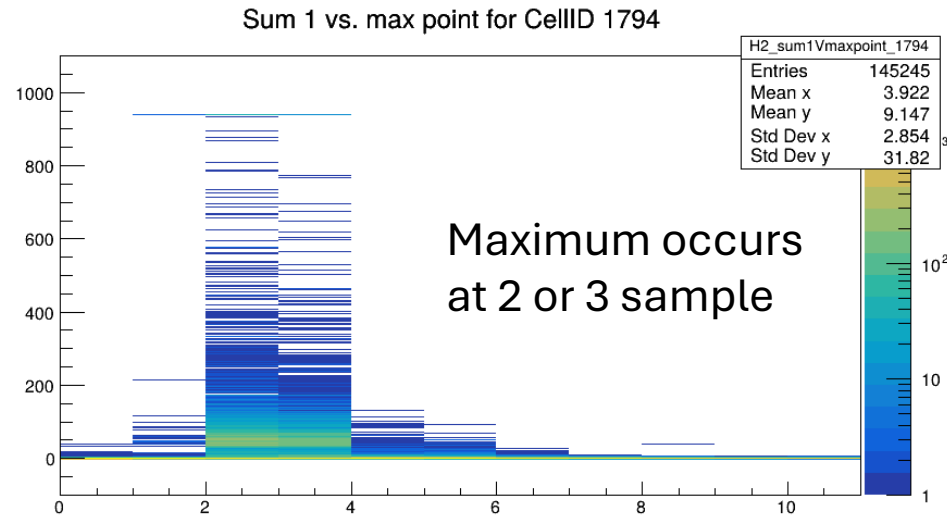
August 25, 2026

ePIC LFHCAL Test Beam Analysis Meeting

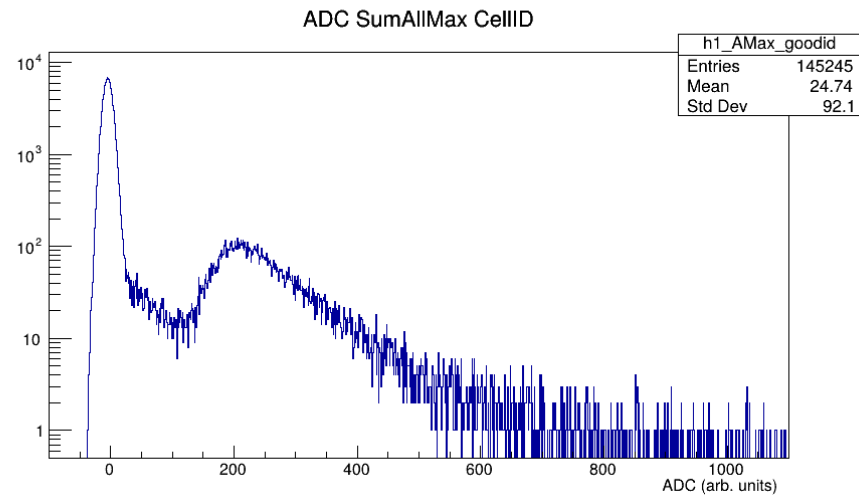
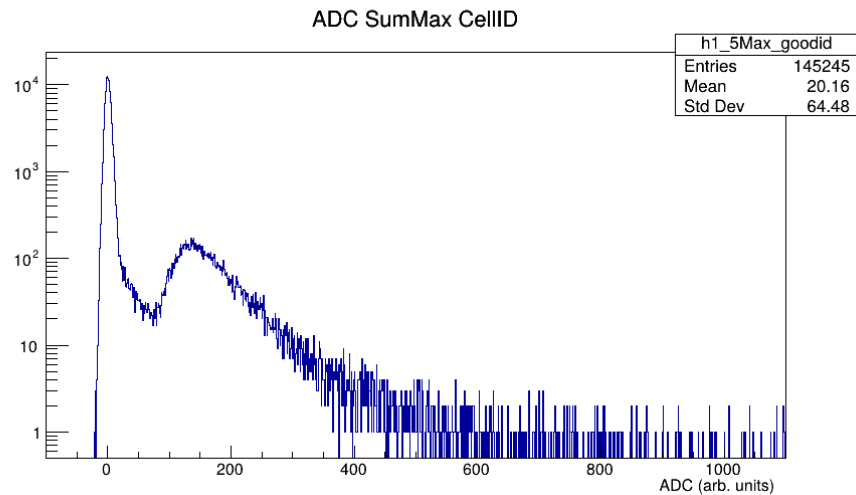
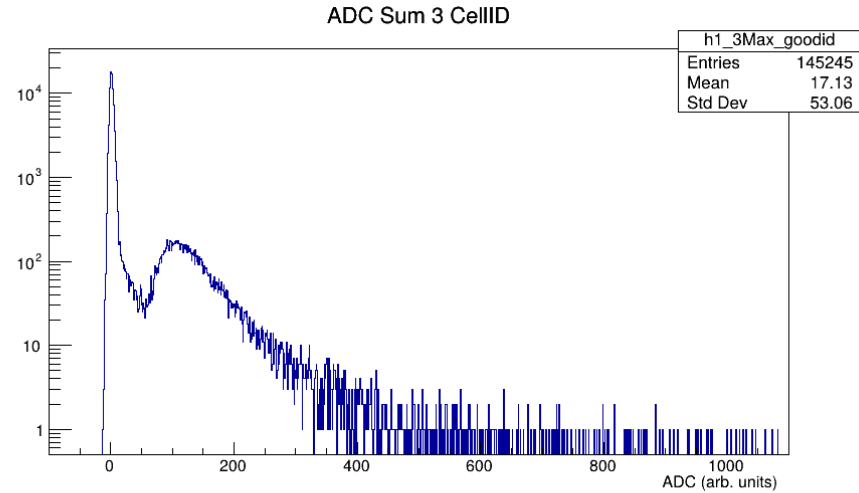
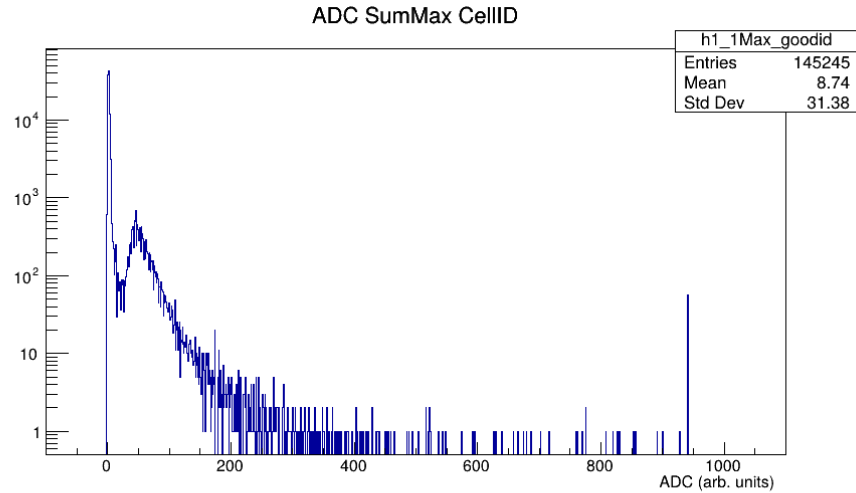
Goals/Recap

- To understand the effects of different summing methods
 - Maximum (1)
 - Three around maximum (3)
 - Five around maximum (5)
 - Trapezoidal Sum (All)
- Picked one muon run from SPS test
 - Run 266 (Pedestal 264)
 - table position: 0,0
 - HV: 45V
 - Summing Scheme: V2
- Picked cellID 1794 which had reasonable signals after plotting signals from all cellIDs as a channel to validate methods on

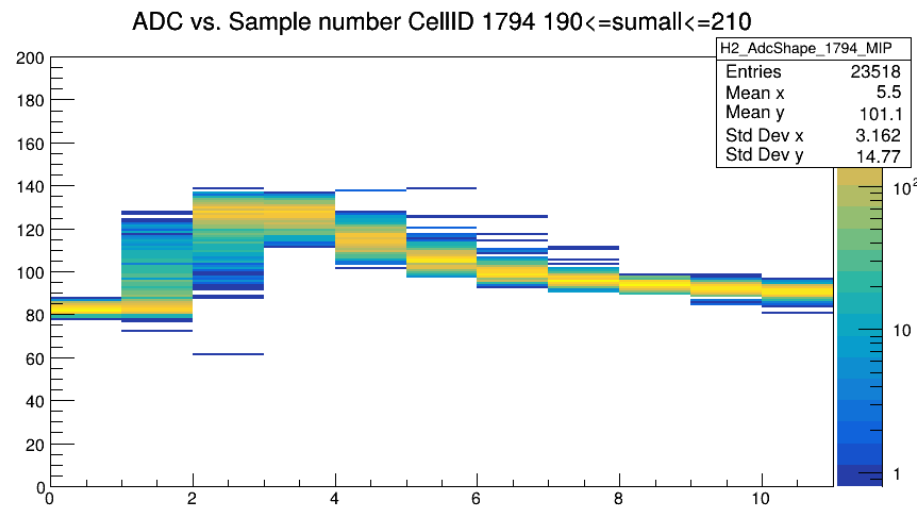
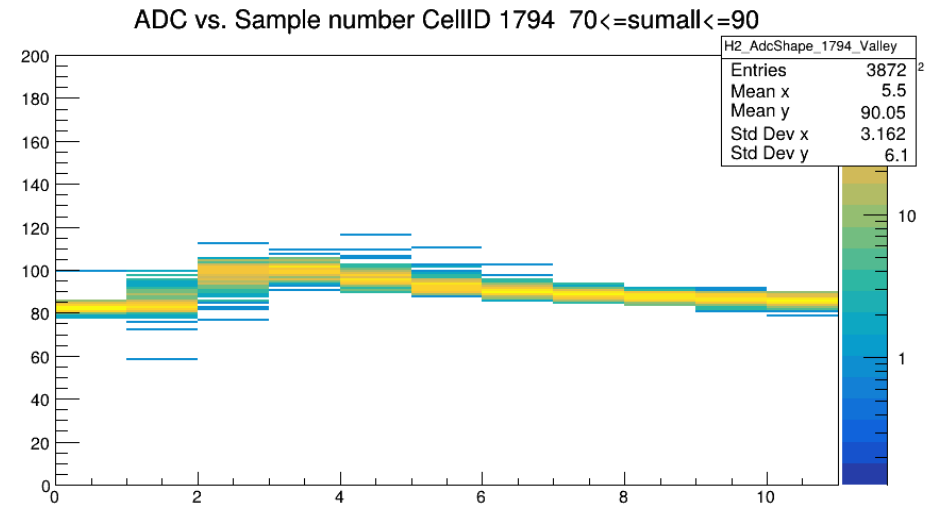
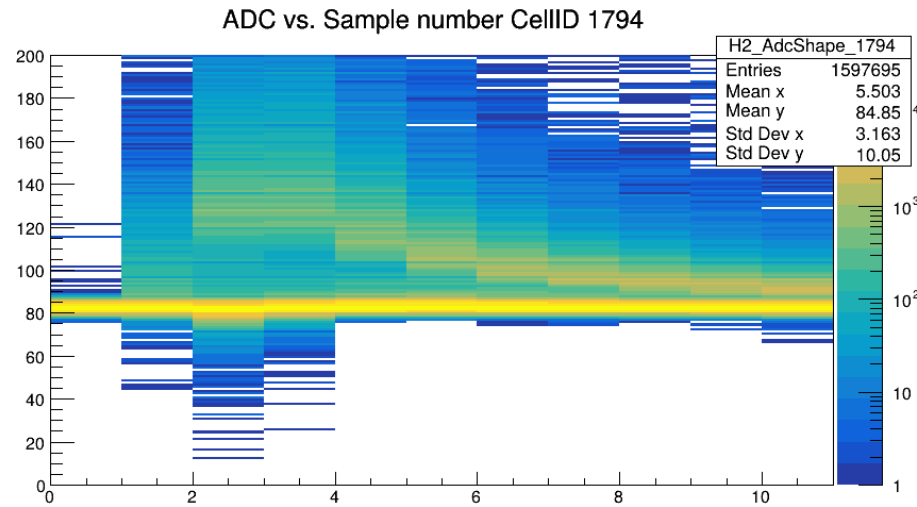
Sum vs. Maximum position



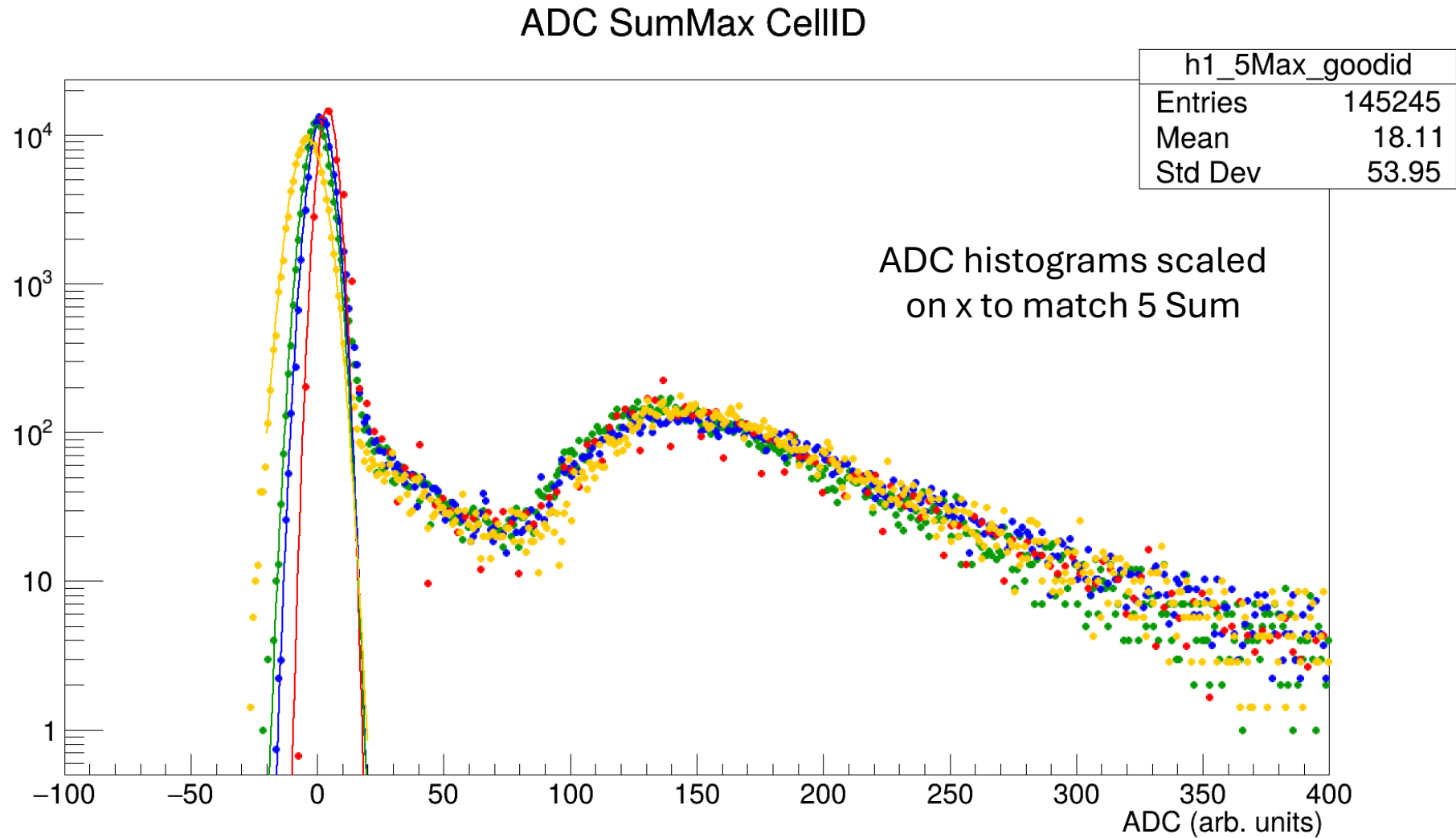
Unscaled ADC histograms



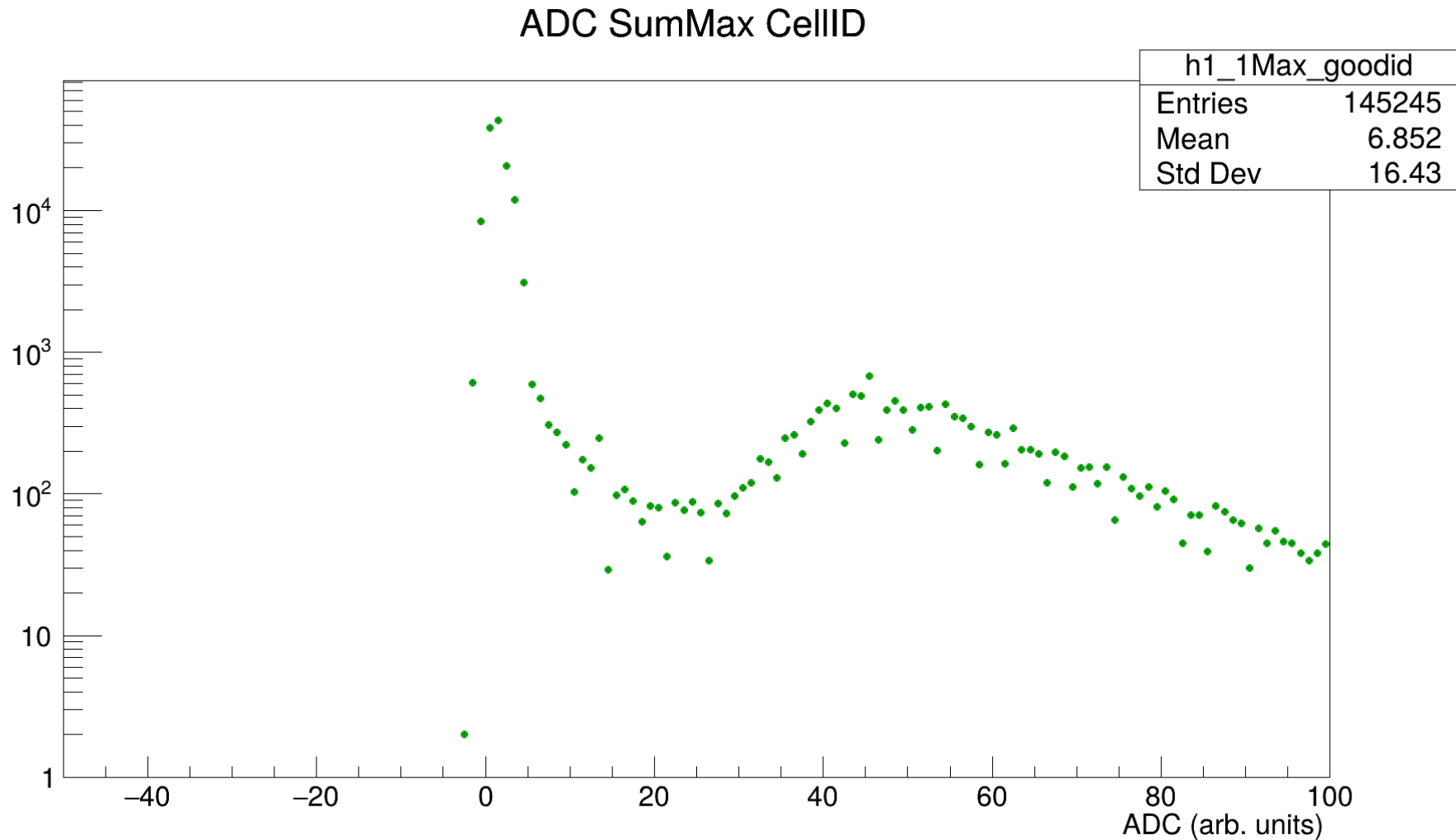
Comparing ADC vs. Sample at different sums



Scaled ADC histograms

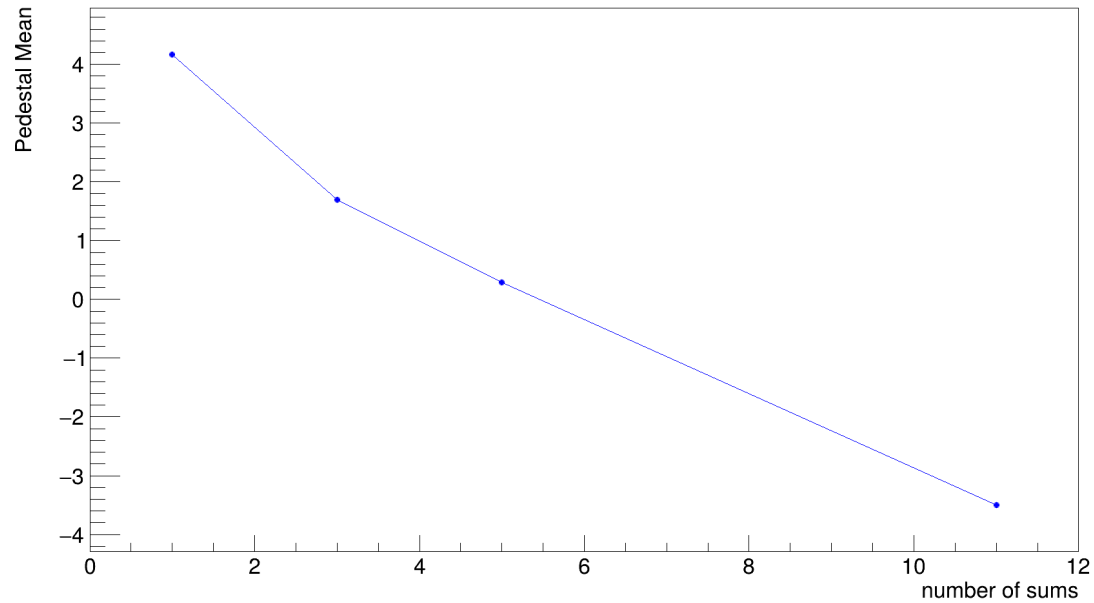


Unscaled ADC histogram for Sum coming only from Max



Pedestal Mean and Width from different sum methods

Mean vs. Sum number



Width vs. Sum number

