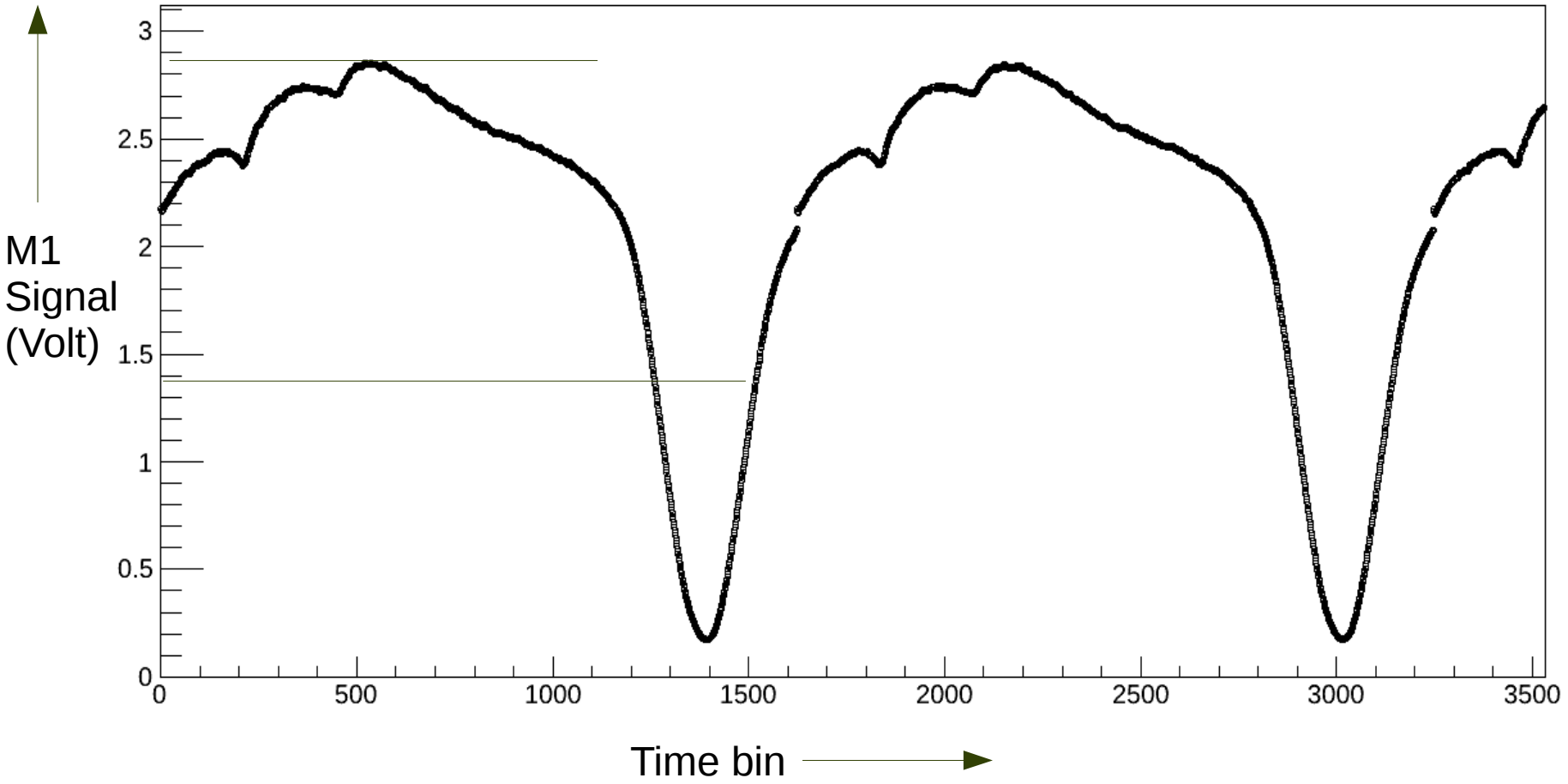
Chopper Phases and Beam intensity Cut

Chopper Phases :

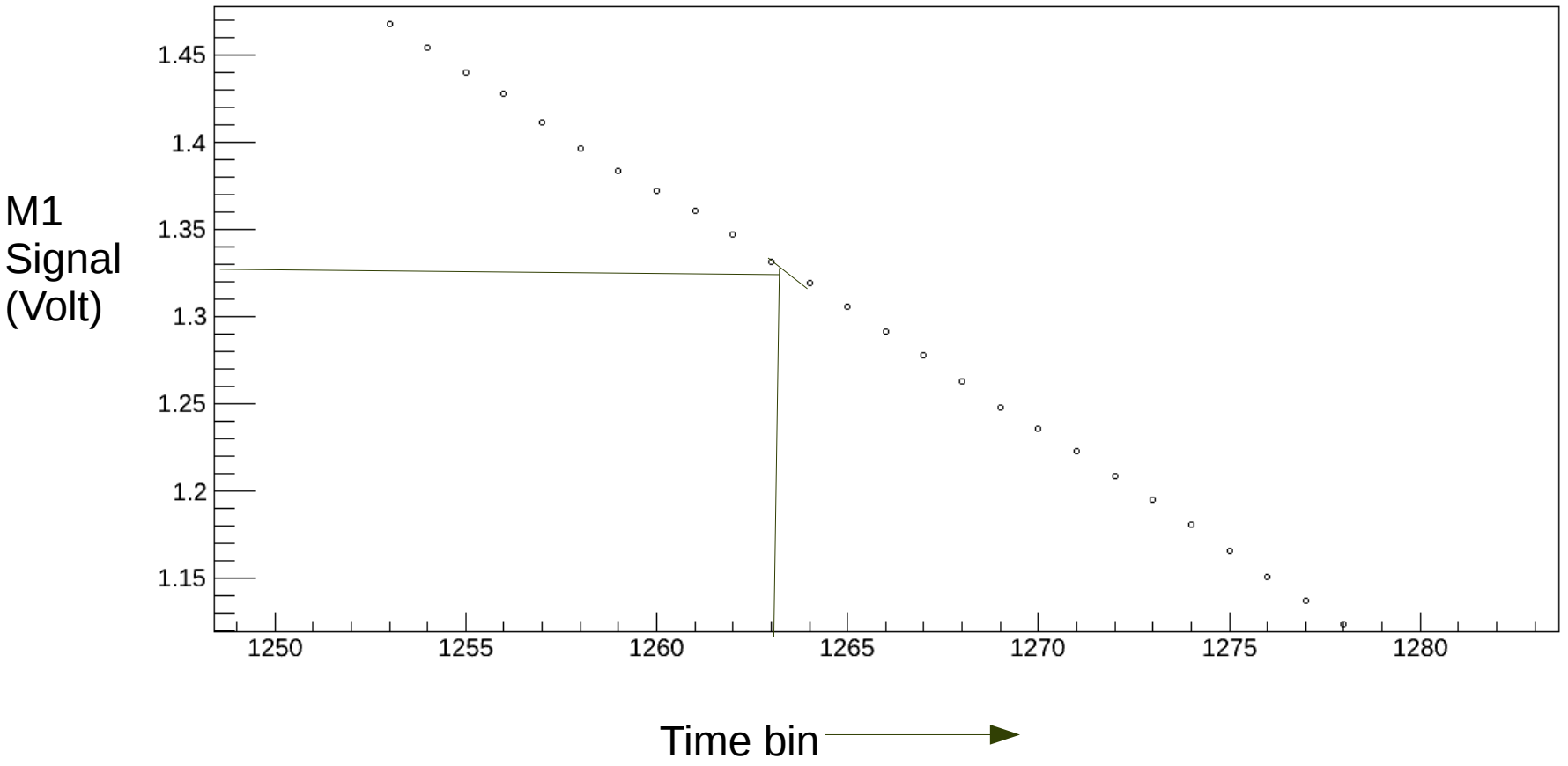
1. For a given pulse, find the maximum intensity Max using M1 signal.

2. Both for rising and falling edge of the pulse, solve for the time when M1 intensity=Max/2

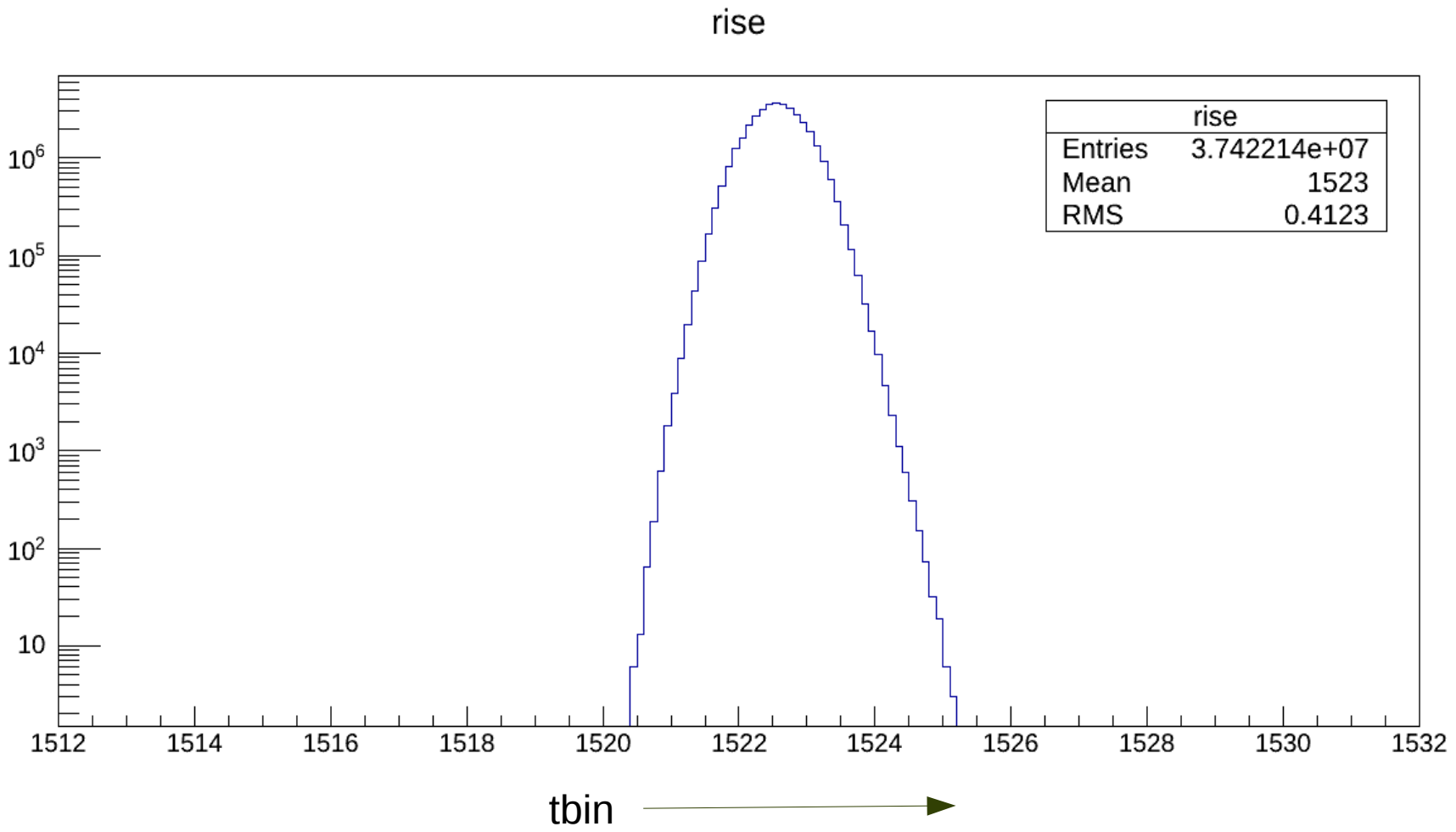
Solving for time at Max/2



Solving for time at Max/2

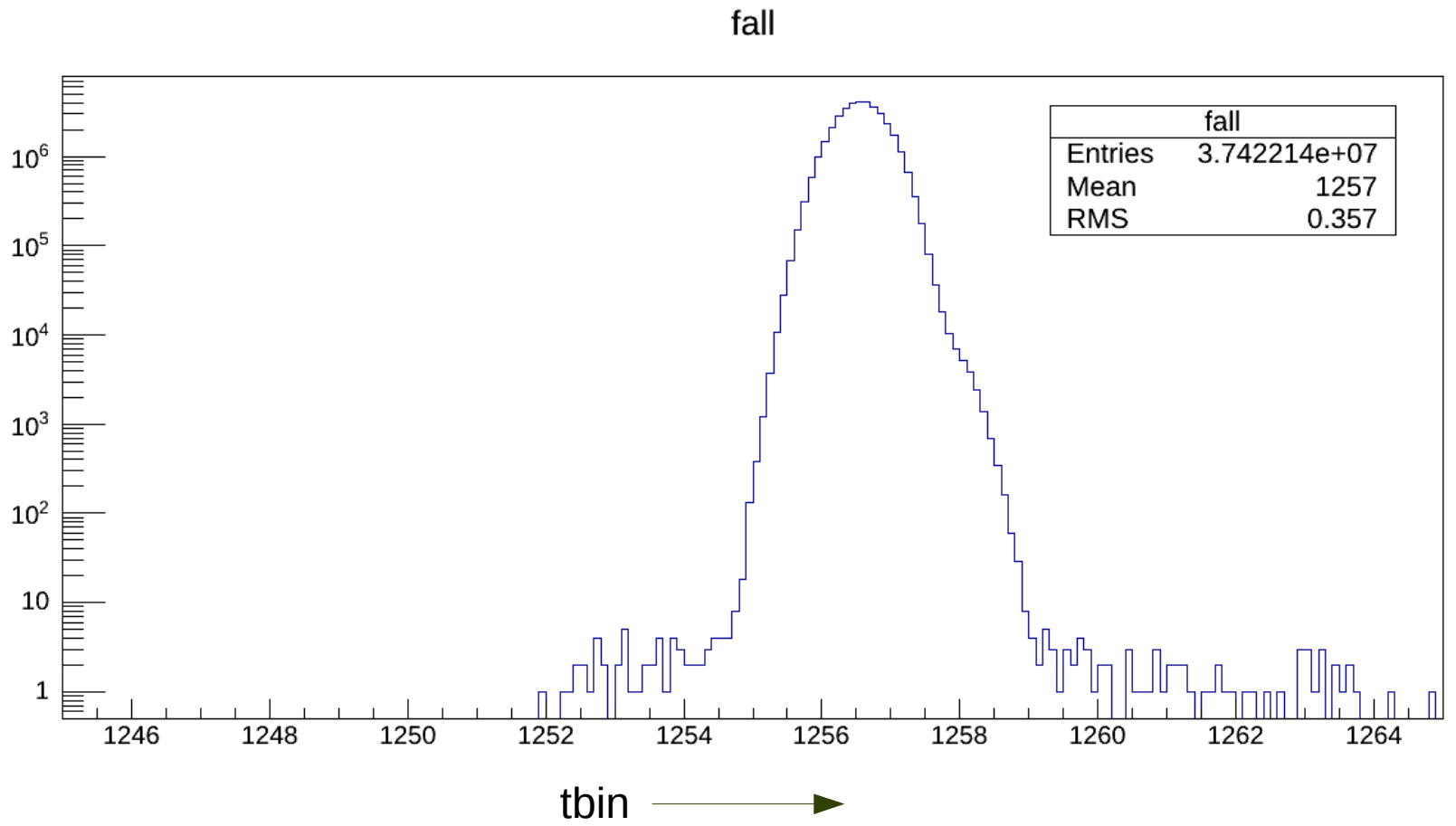


Distribution for rising edge



1 tbin = 10 micro sec

Distribution for falling edge

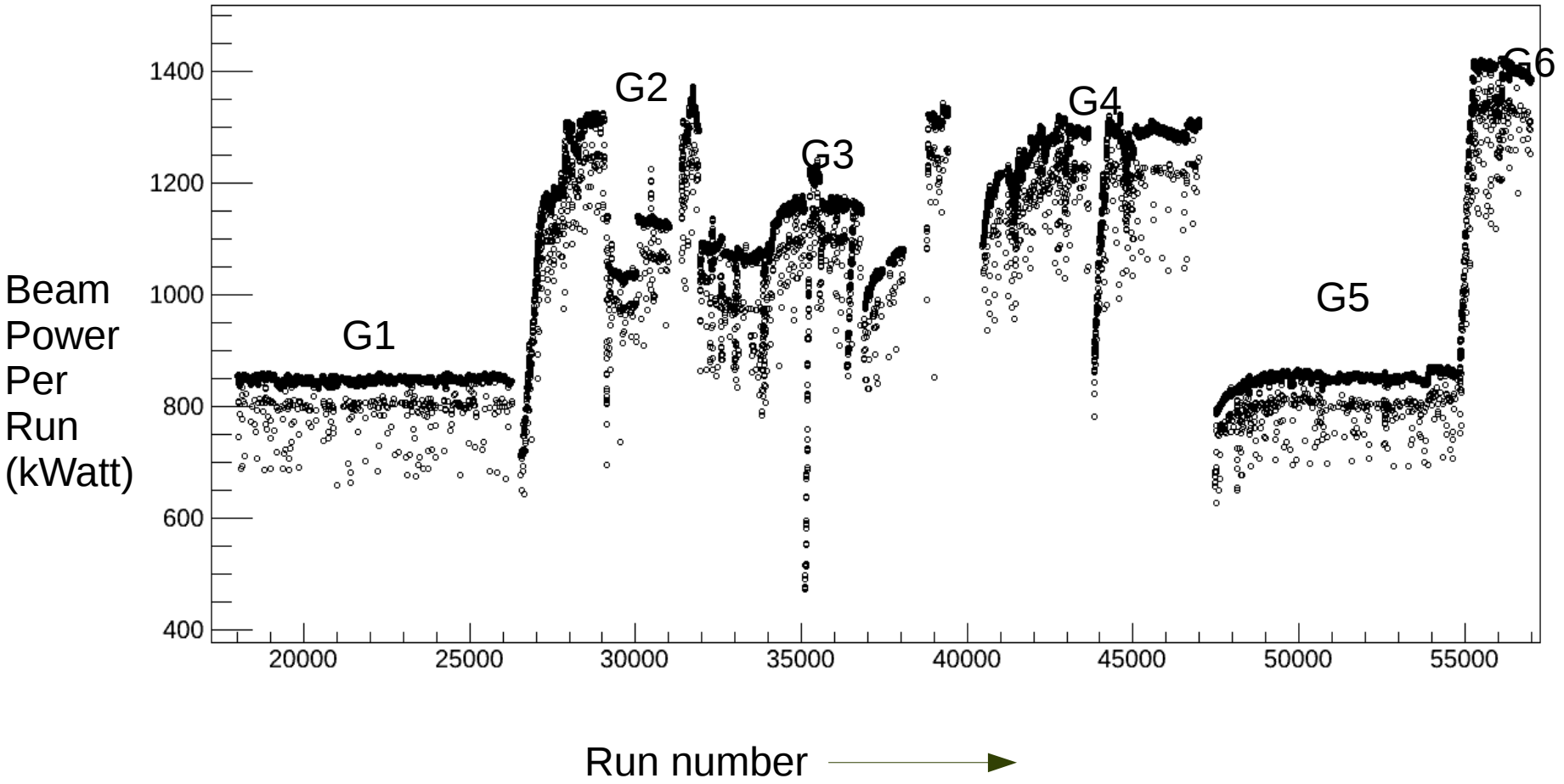


1 tbin = 10 micro sec

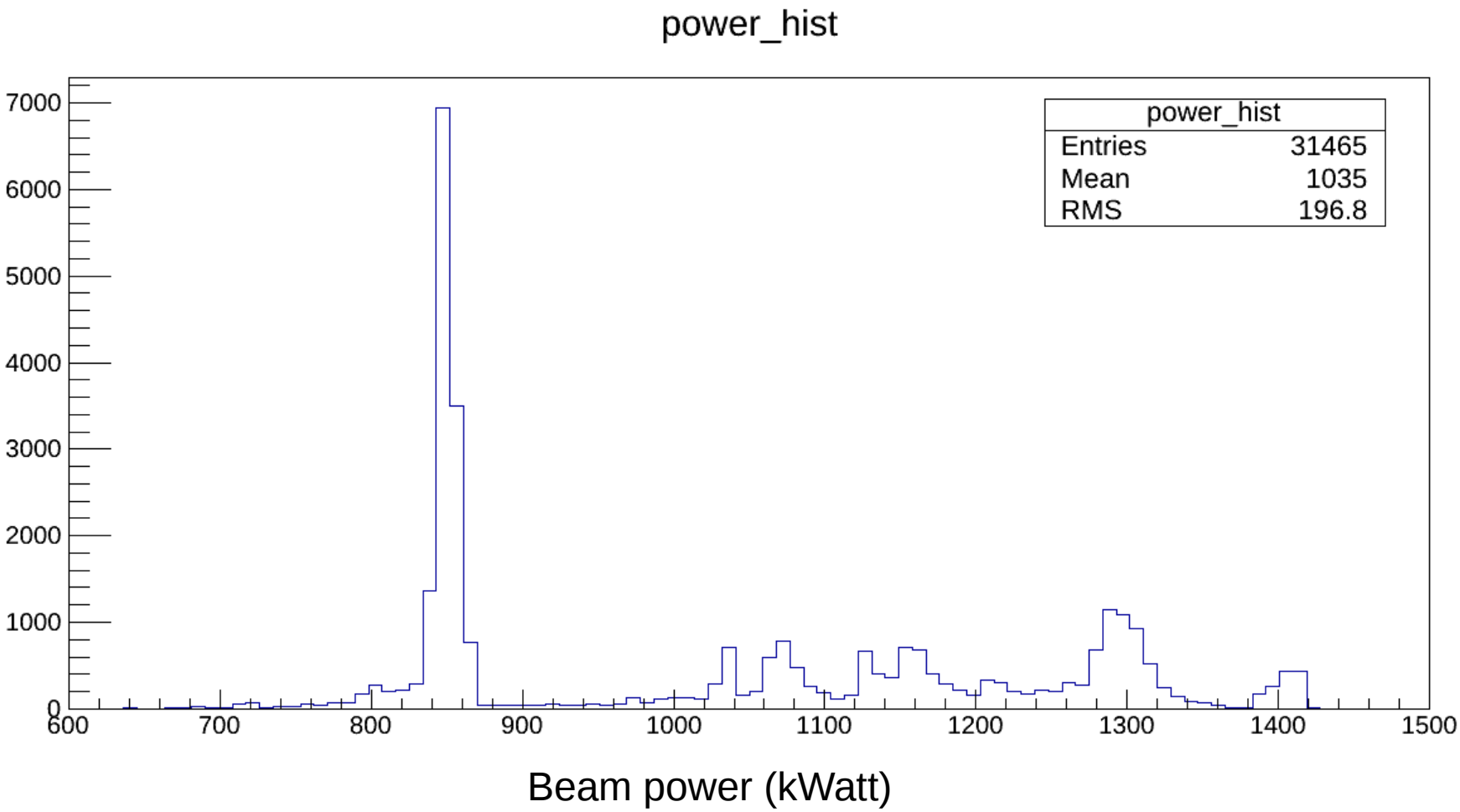
Beam Intensity Cut

1. Divide the entire data set in sub sets based on stable run condition.
2. For each sub set determine optimal cut based on M1 intensity

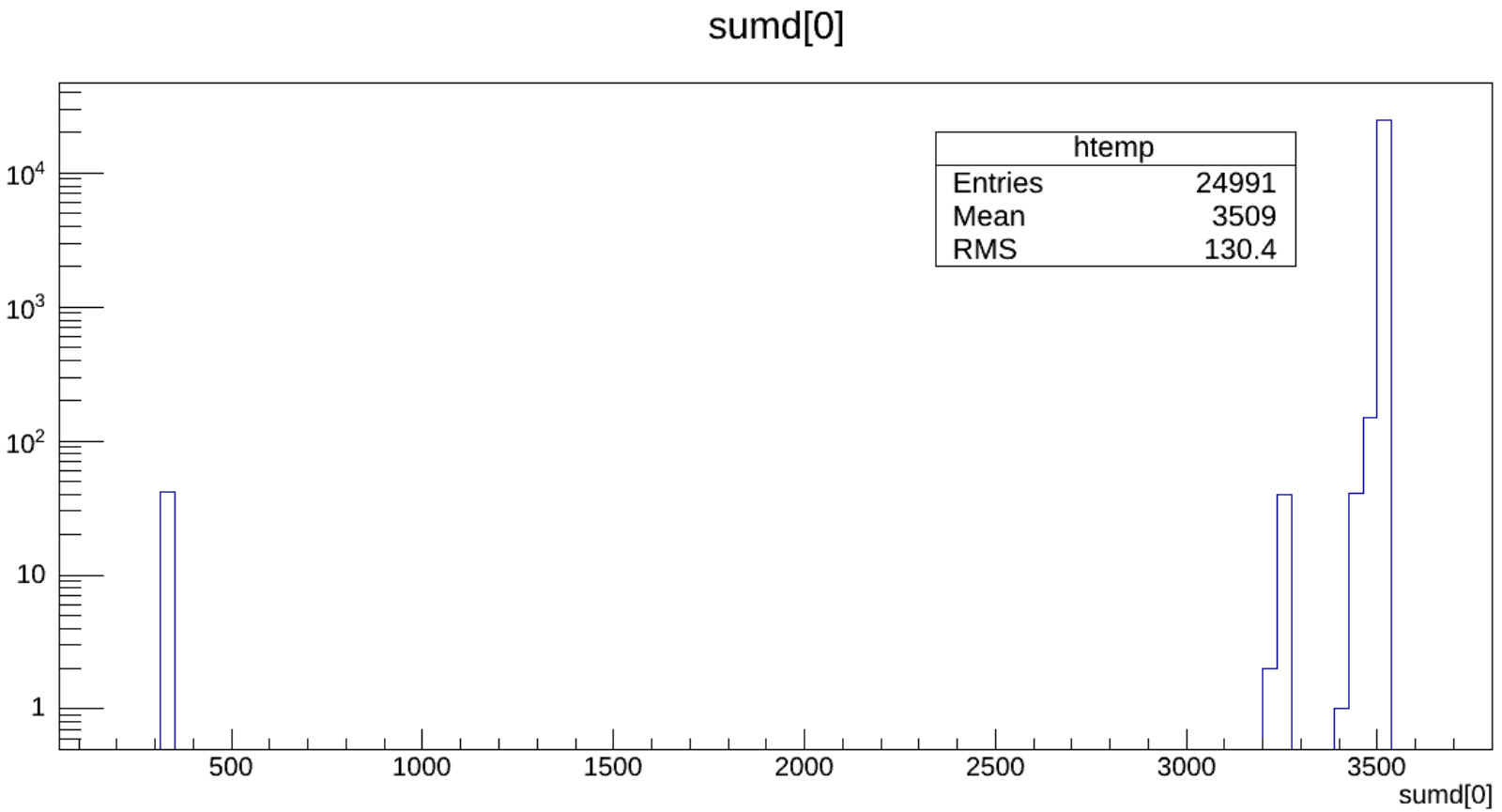
Beam Power for all UD runs



Beam Power for all UD runs

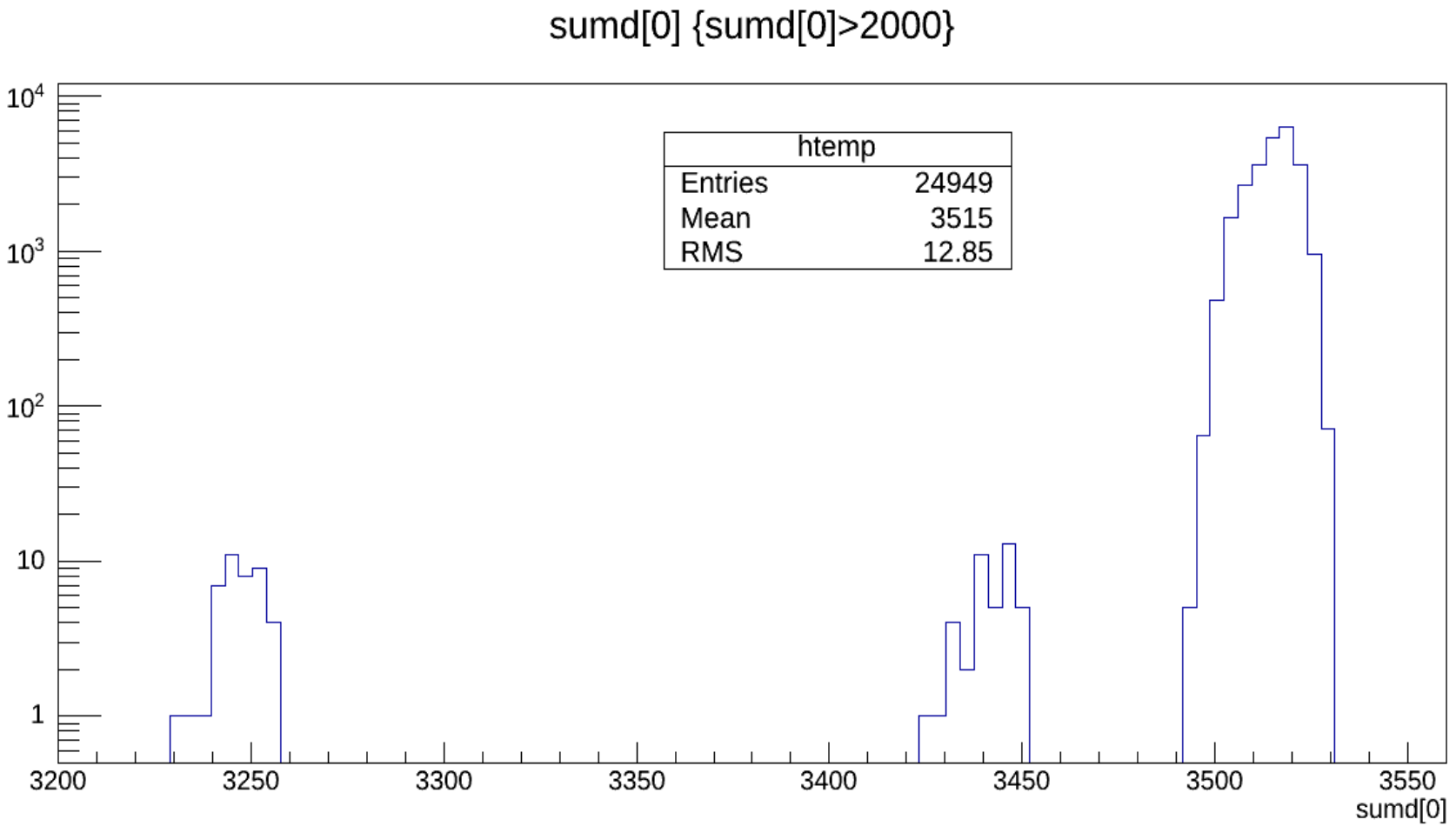


M1 distribution For Run#20100



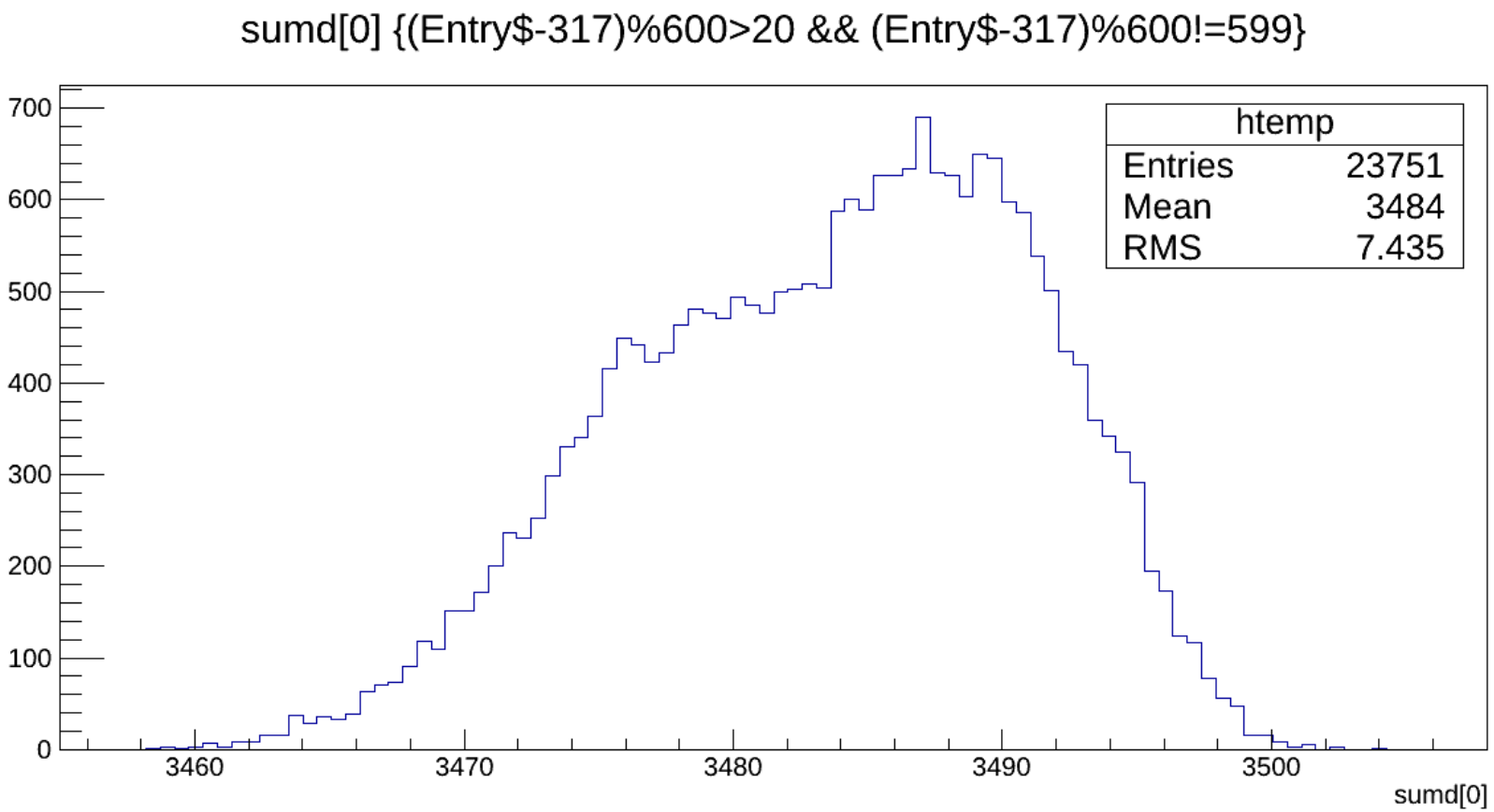
M1 intensity per pulse (volt)

Run 20100 with cut1



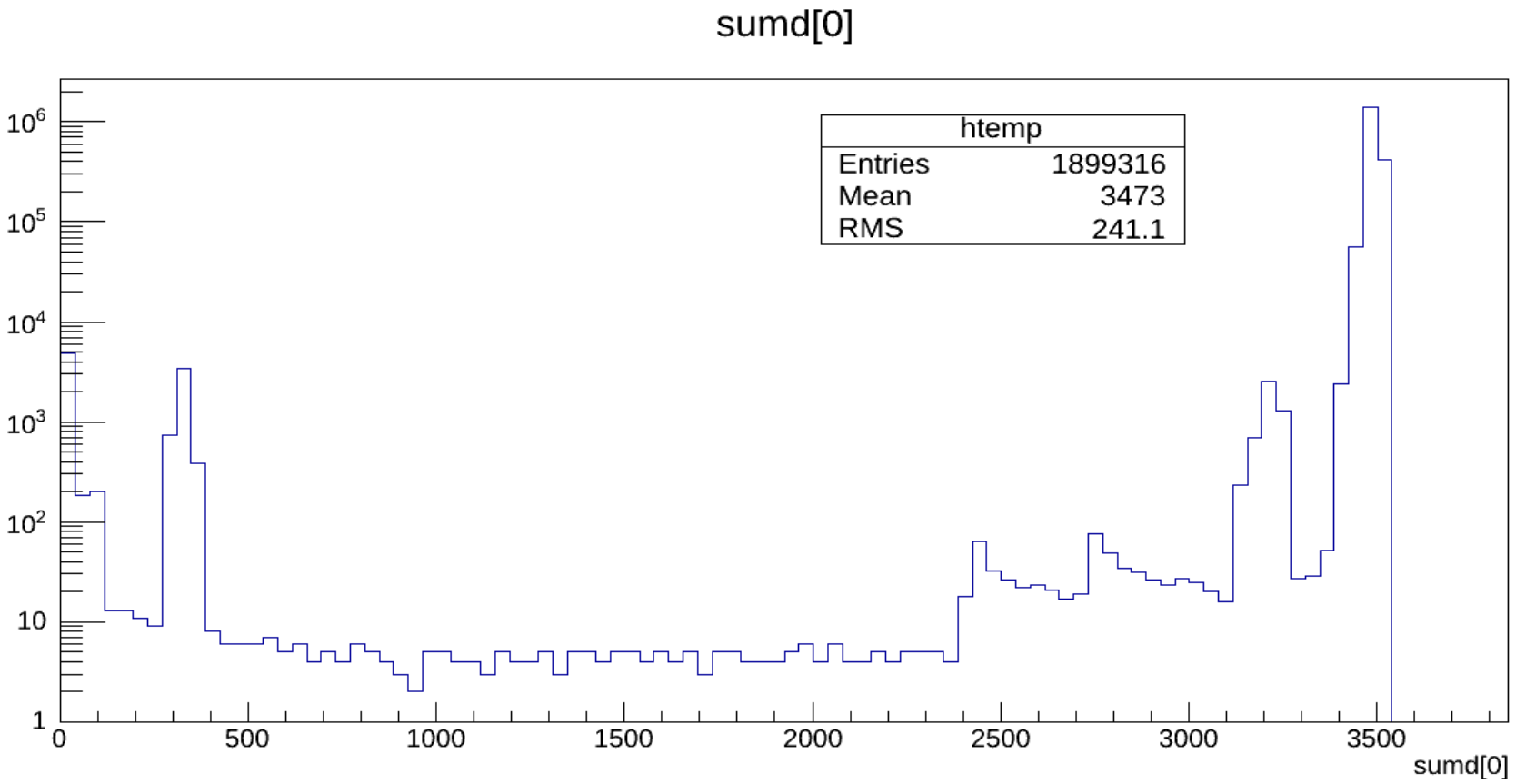
M1 intensity per pulse (volt)

Run 20100 with cut2



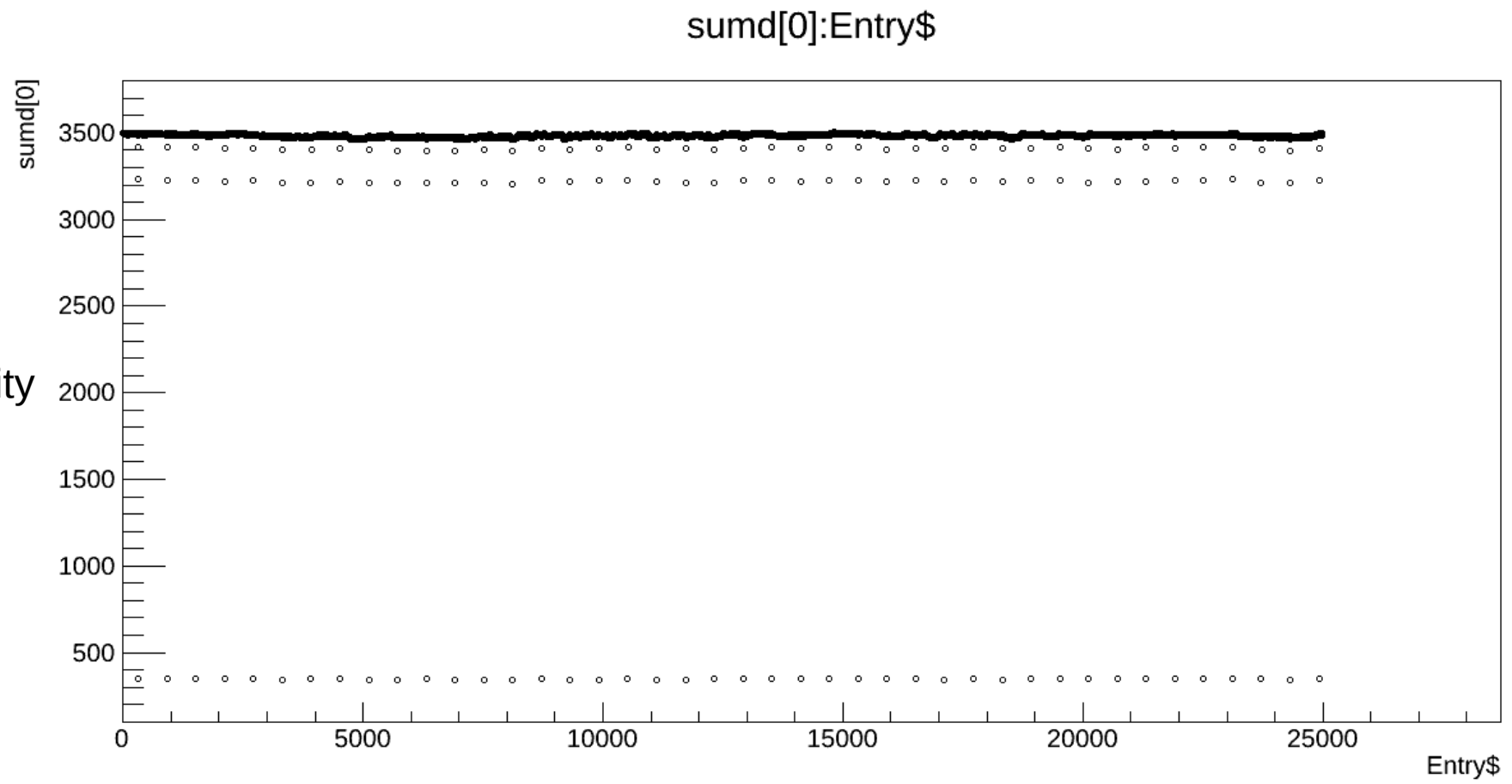
M1 intensity per pulse (volt)

M1 distribution for run range : 20100-20200



M1 intensity per pulse (volt)

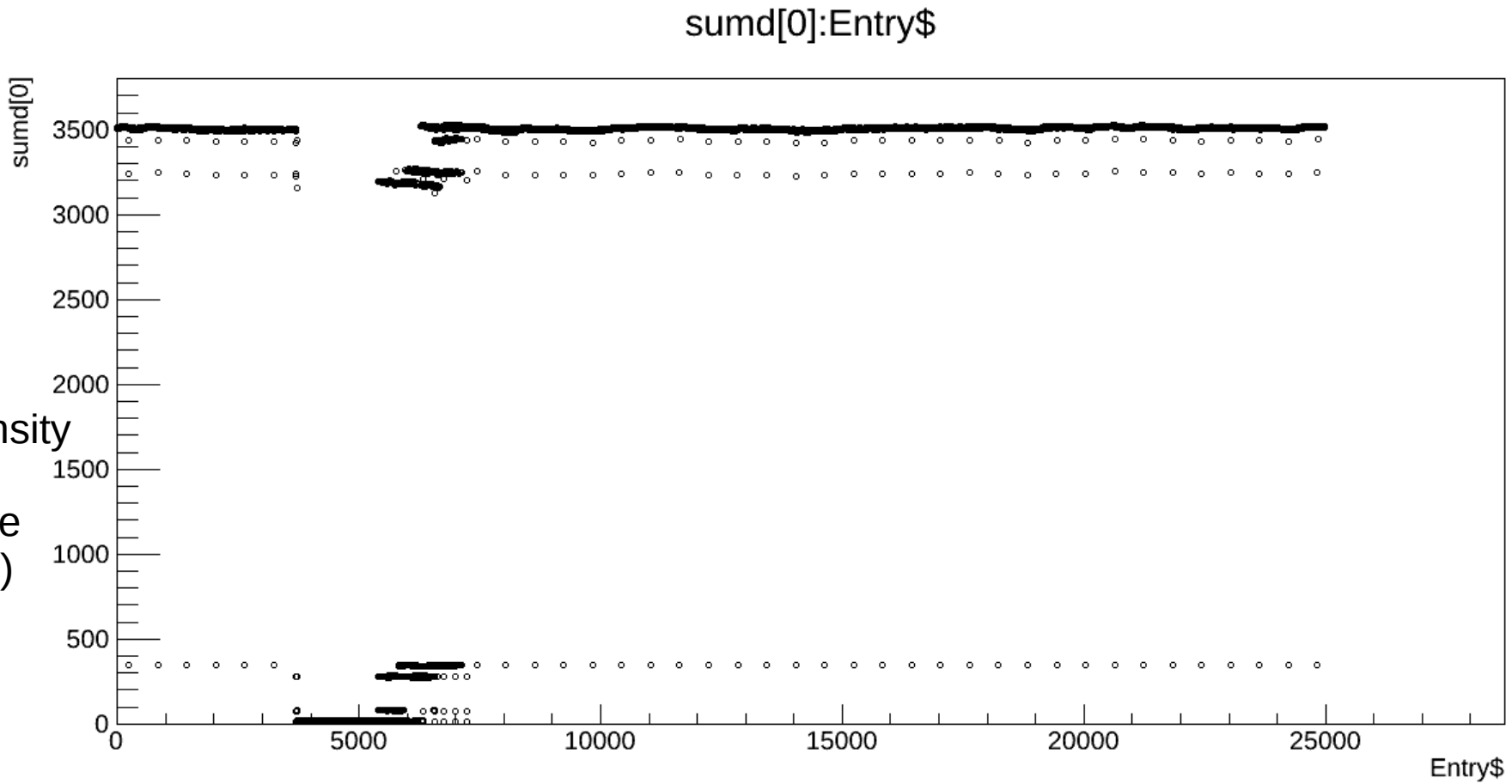
M1 intensity for run#26230



M1 Intensity Per Pulse (Volt)

Pulse Number

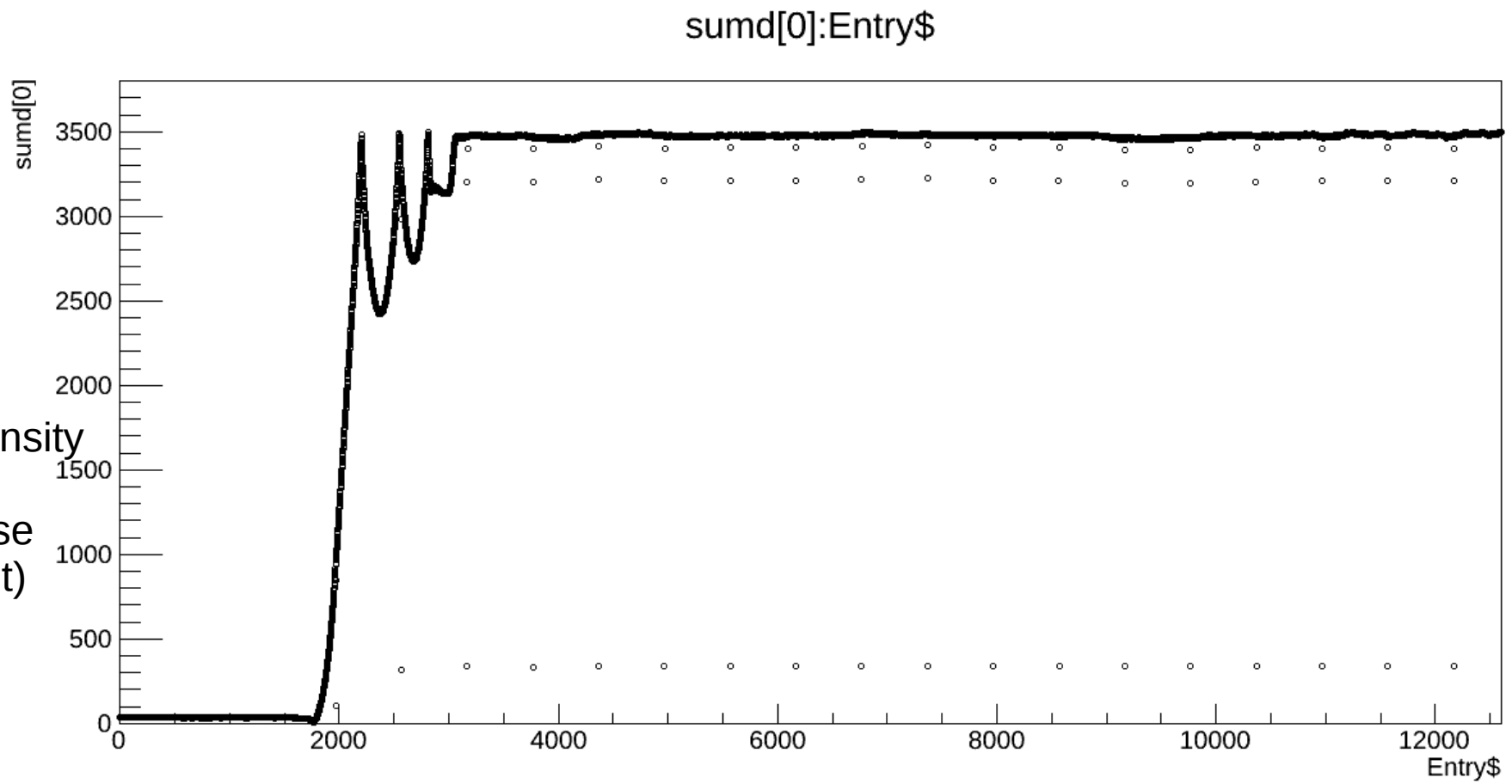
M1 intensity for run#26217



M1 Intensity Per Pulse (Volt)

Pulse Number

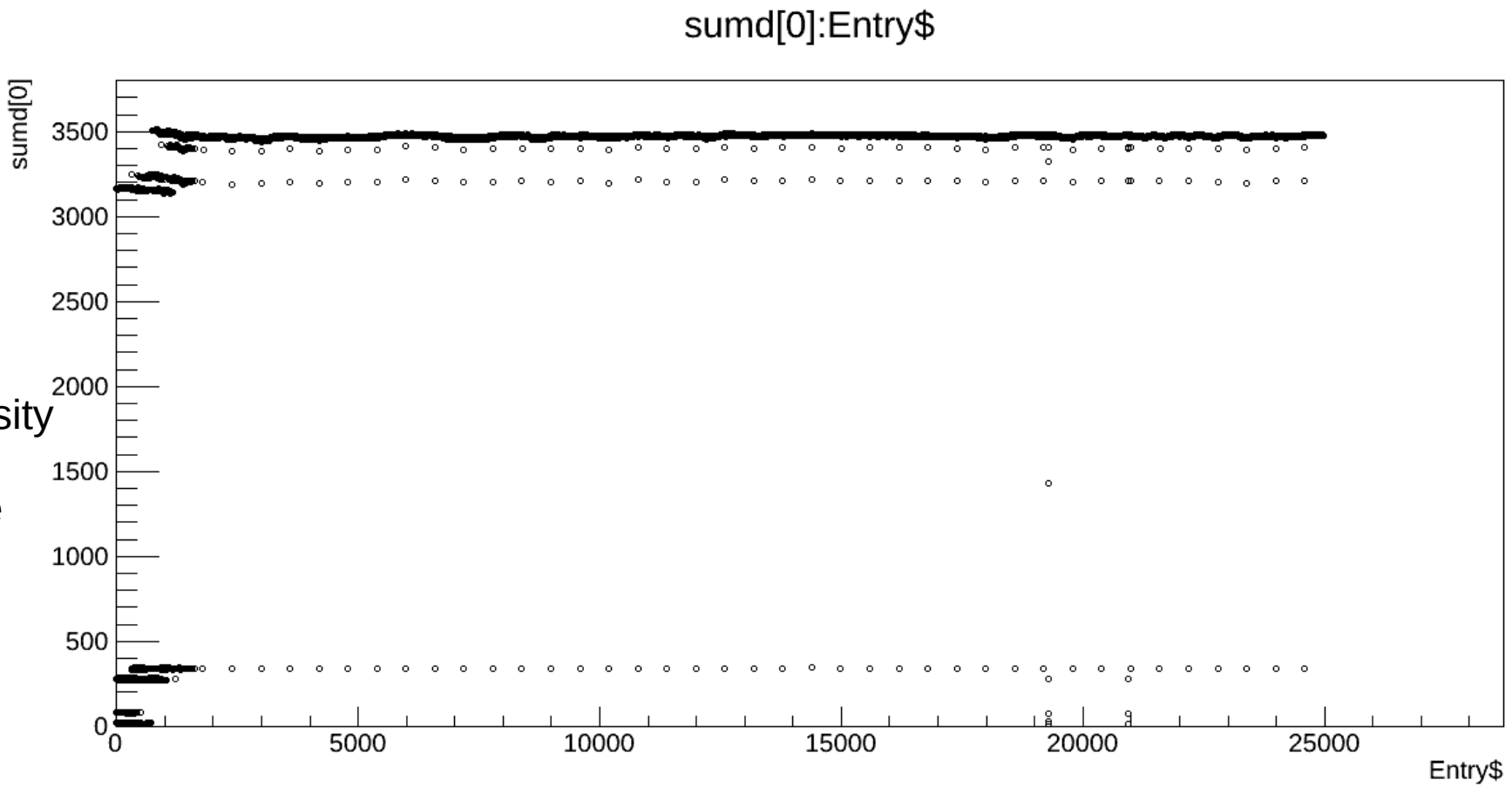
M1 intensity for run#26214



M1 Intensity Per Pulse (Volt)

Pulse Number

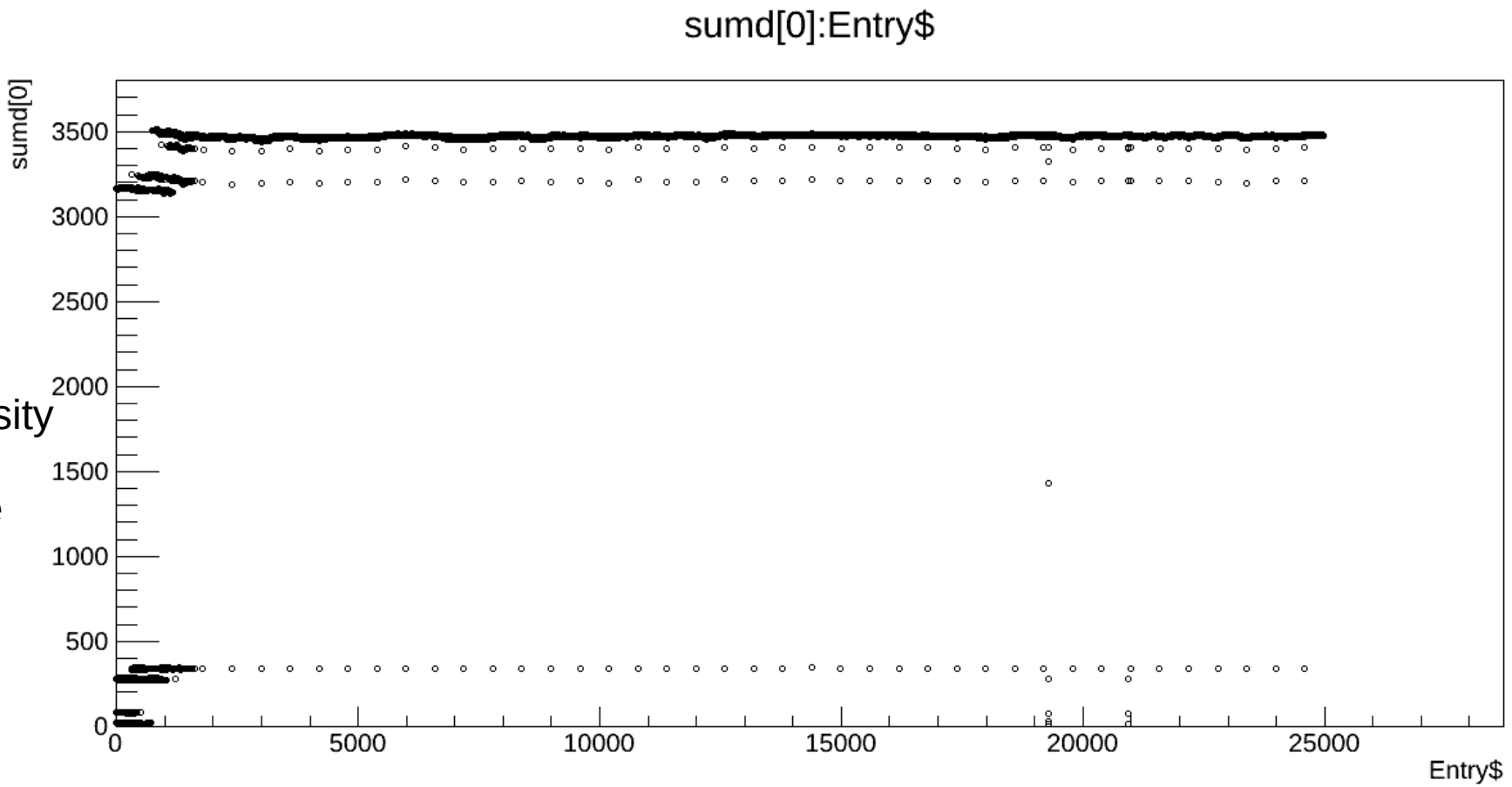
M1 intensity for run#26283



M1 Intensity Per Pulse (Volt)

Pulse Number

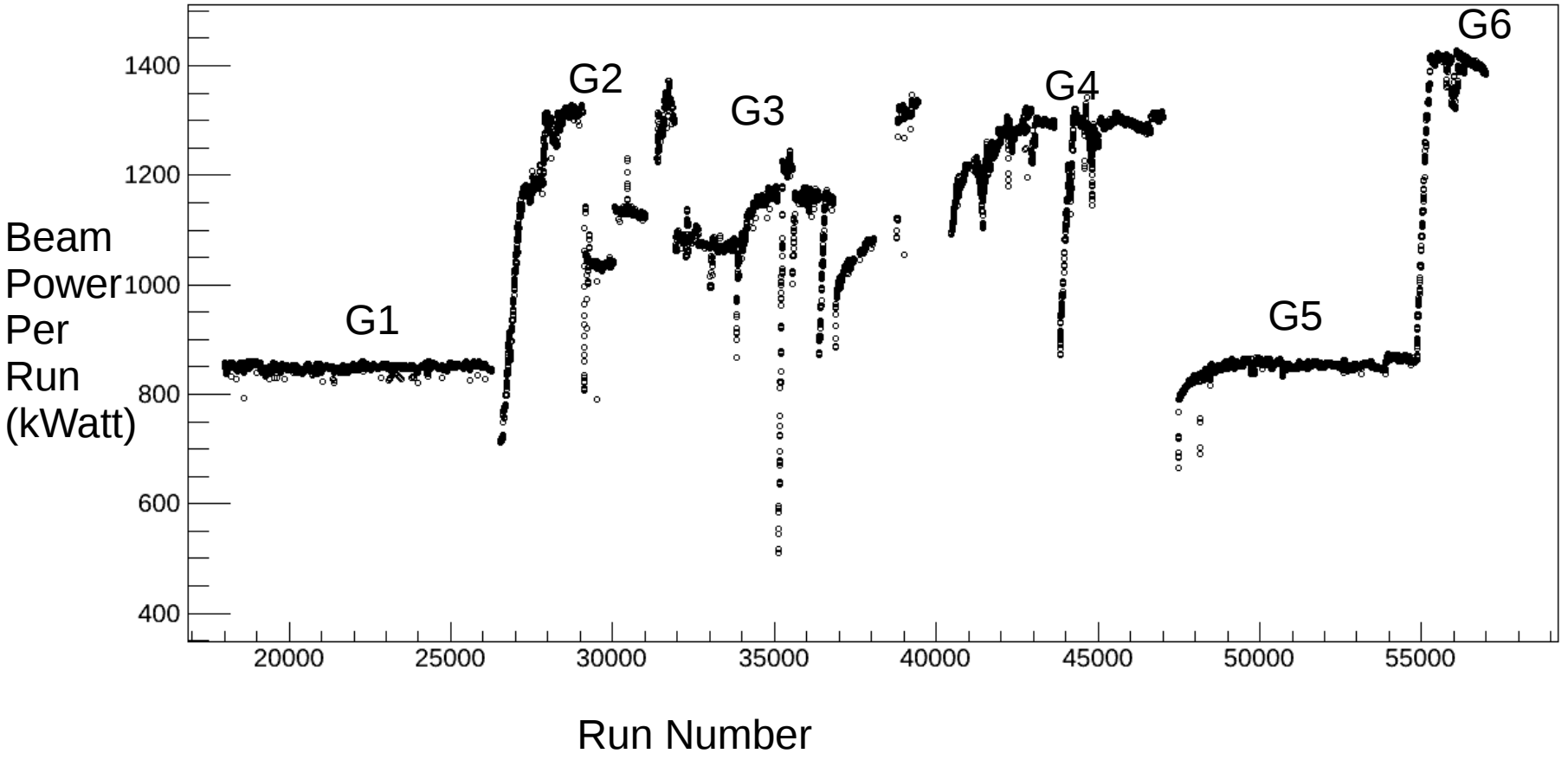
M1 intensity for run#26283



M1 Intensity Per Pulse (Volt)

Pulse Number

Beam Power for all UD runs with cut



Beam Power distribution for all UD runs