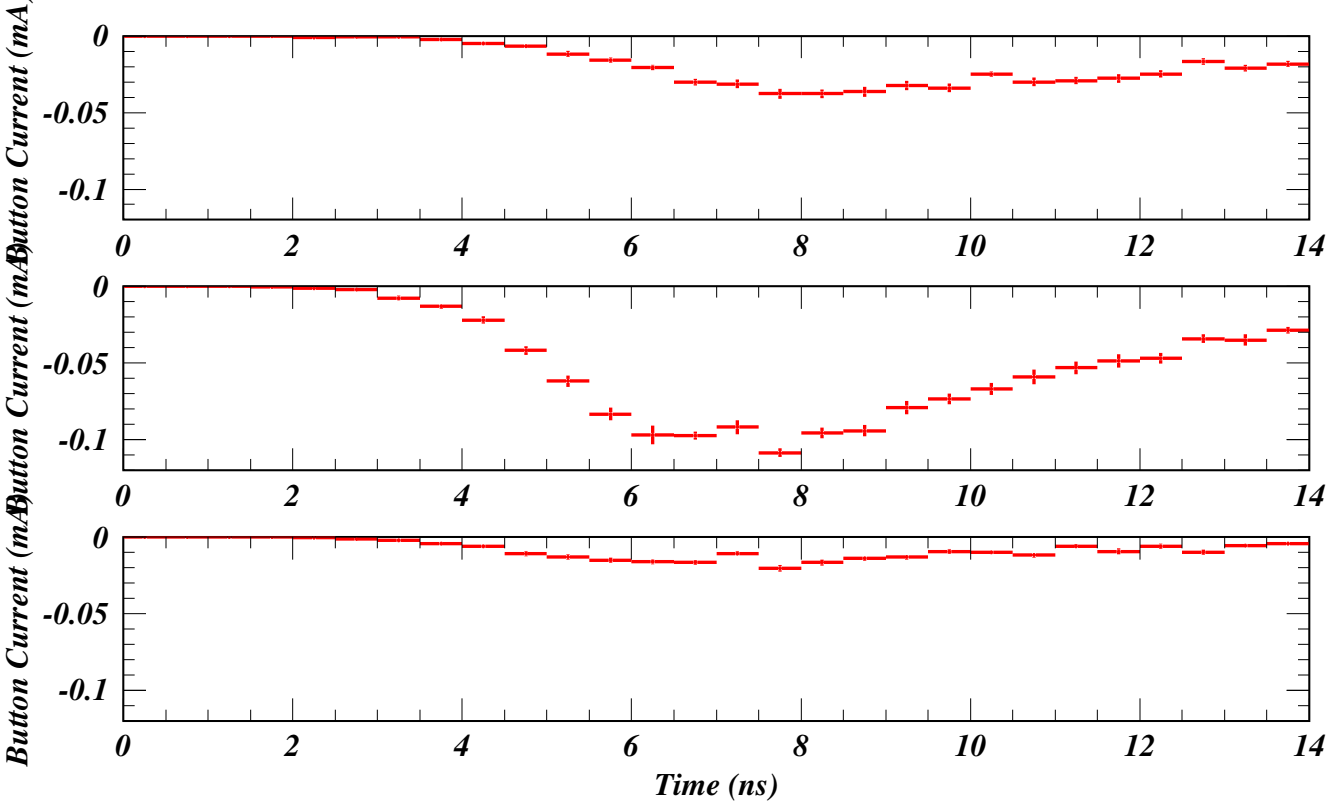
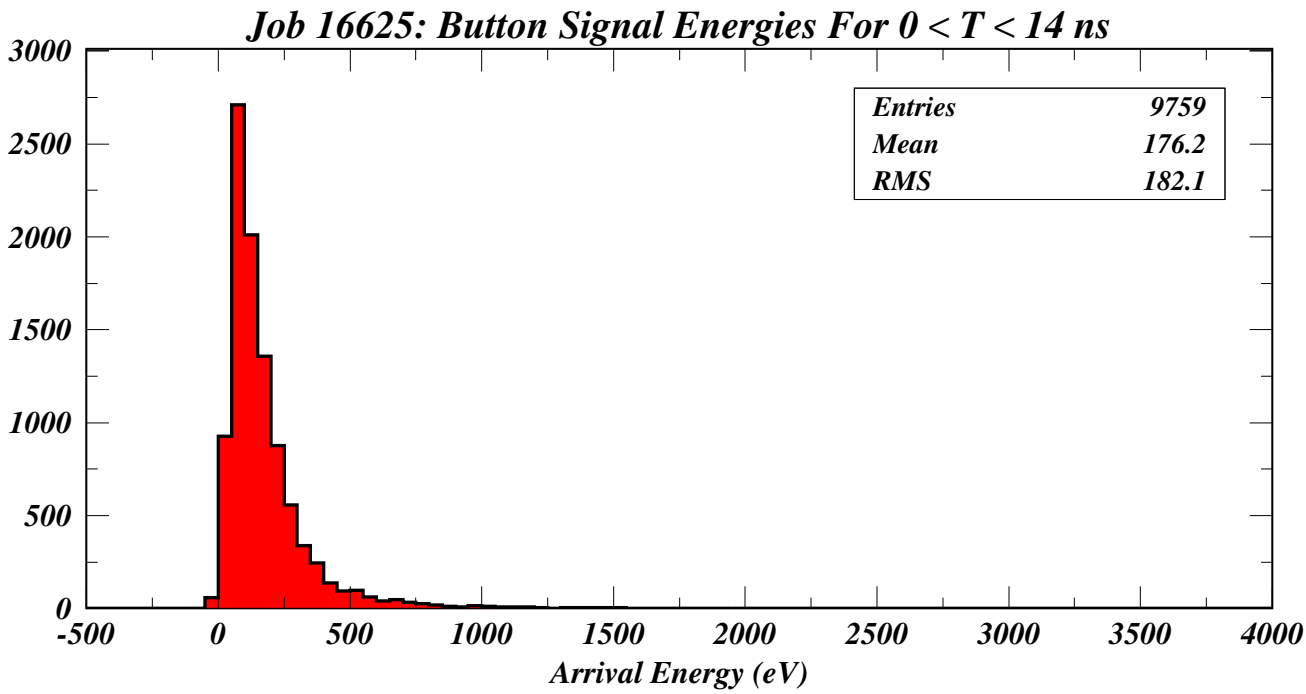
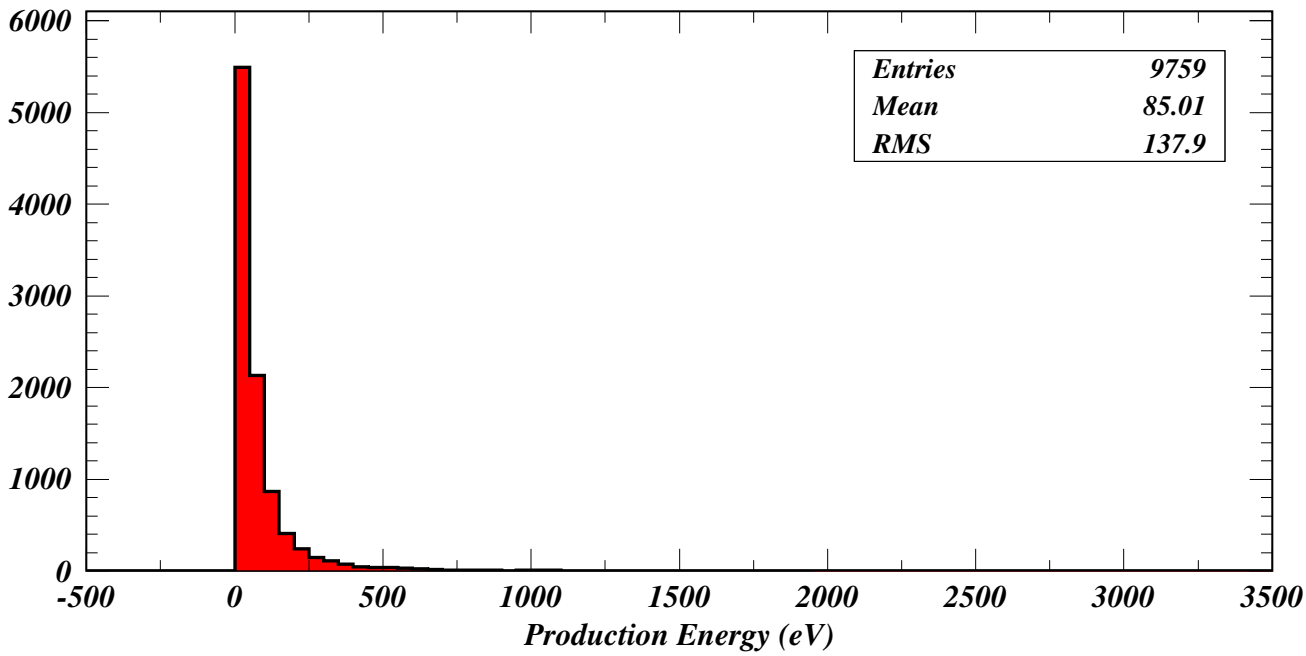
10/08/03 12.05

Shielded Button Simulation: Positrons_8ma



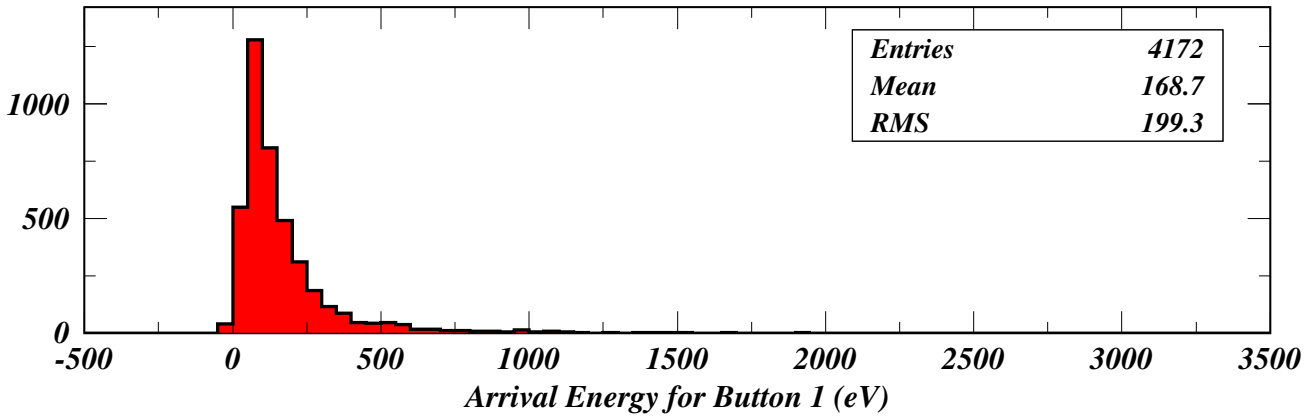
10/08/03 12.05

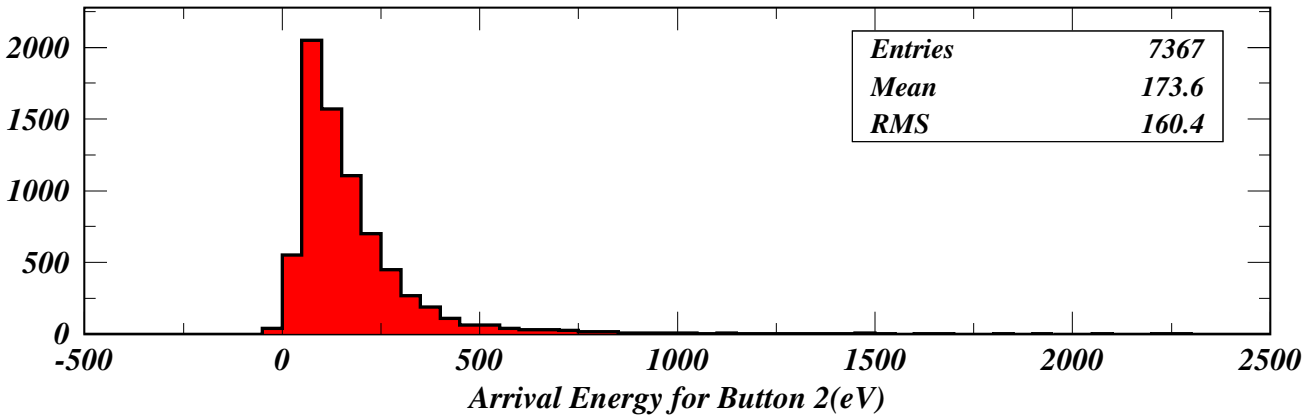

Job 16625: Button Signal Energies For 0 < T < 14 ns
Entries 9759
Mean 176.2
RMS 182.1
3000
2500
2000
1500
1000
500
0
-500
0
500
1000
1500
2000
2500
3000
3500
4000
Arrival Energy (eV)

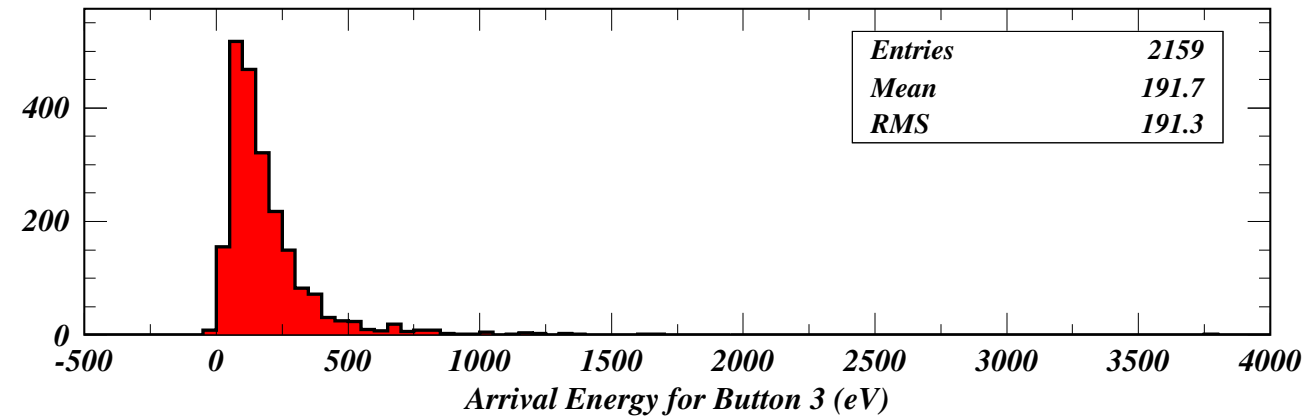

Entries 9759
Mean 85.01
RMS 137.9
6000
5000
4000
3000
2000
1000
0
-500
0
500
1000
1500
2000
2500
3000
3500
Production Energy (eV)

10/08/03 12.05

Job 16625: Button Signal Energies For 0 < T < 14 ns

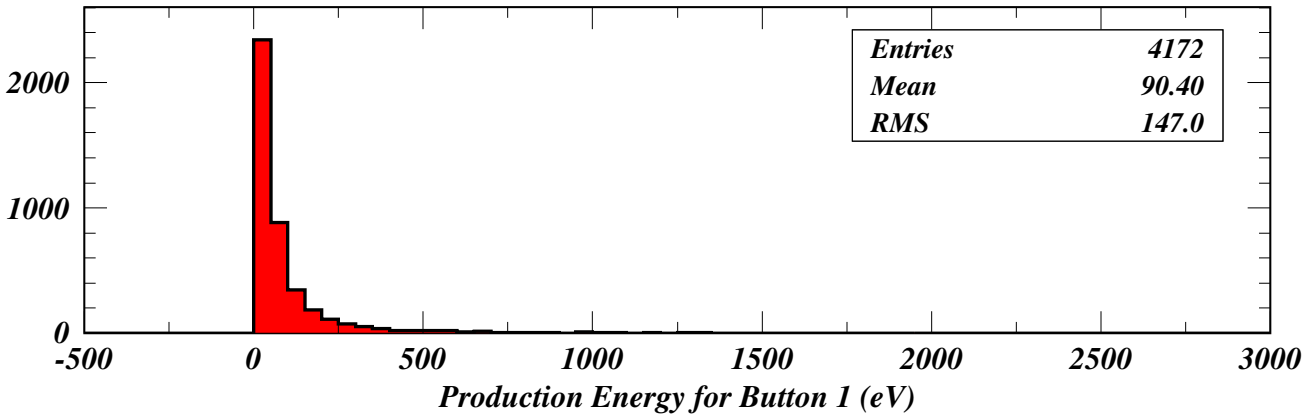


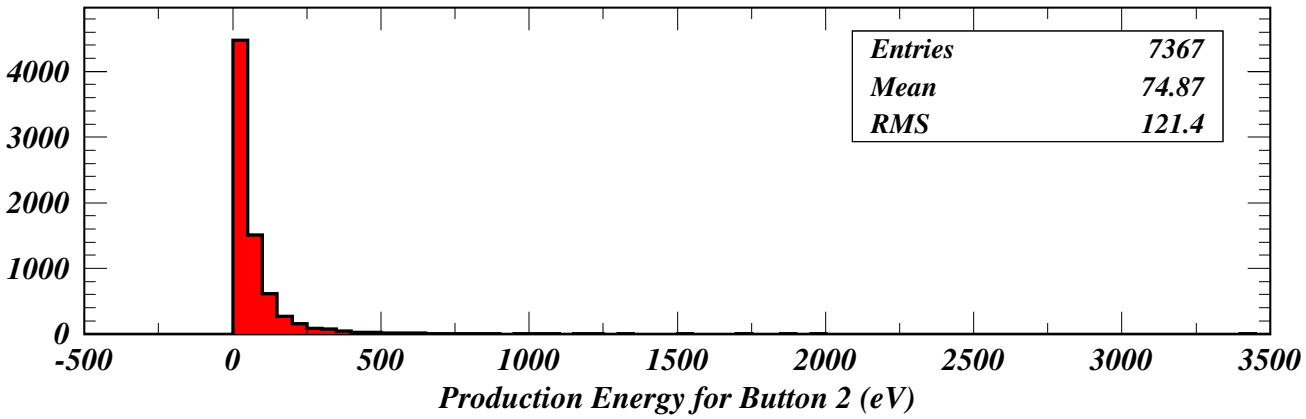


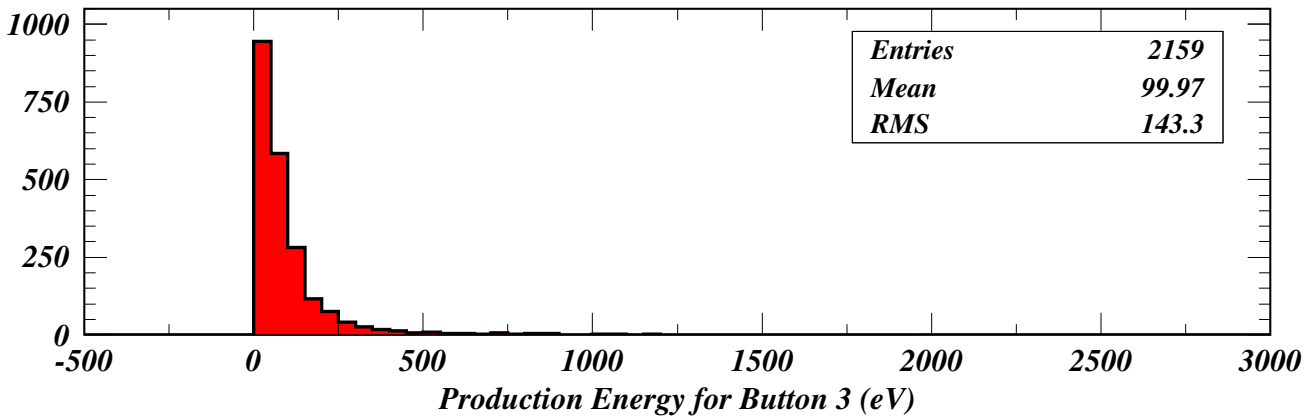


10/08/03 12.05

Job 16625: Button Signal Energies For 0 < T < 14 ns

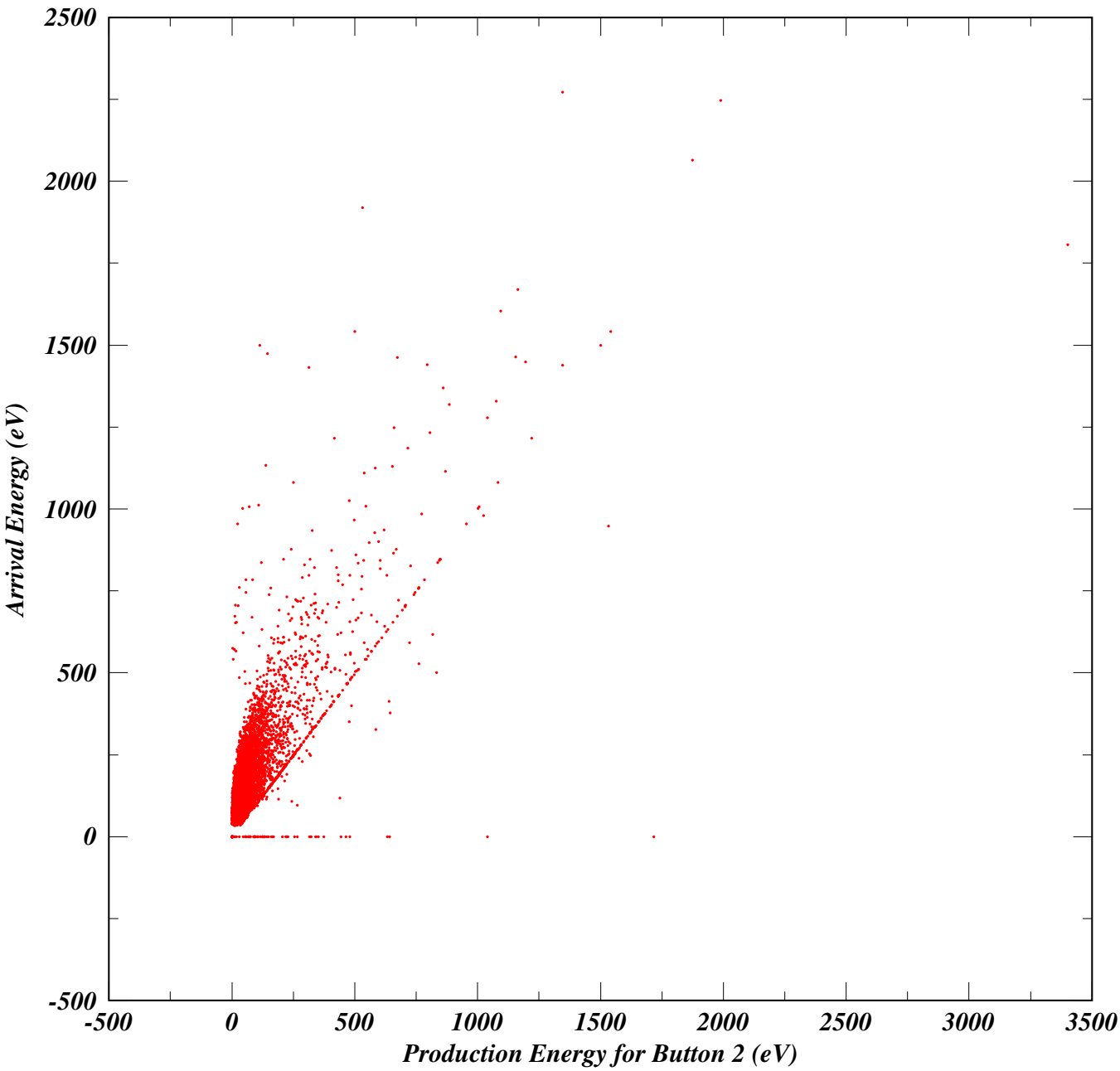






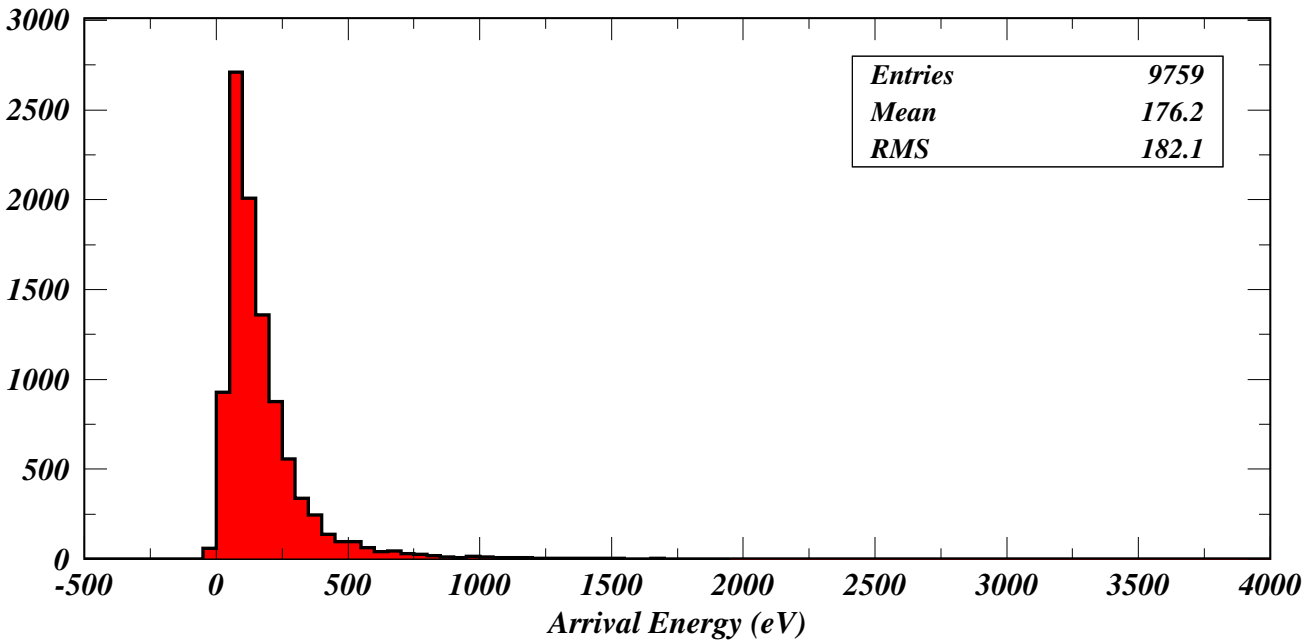
10/08/03 12.05

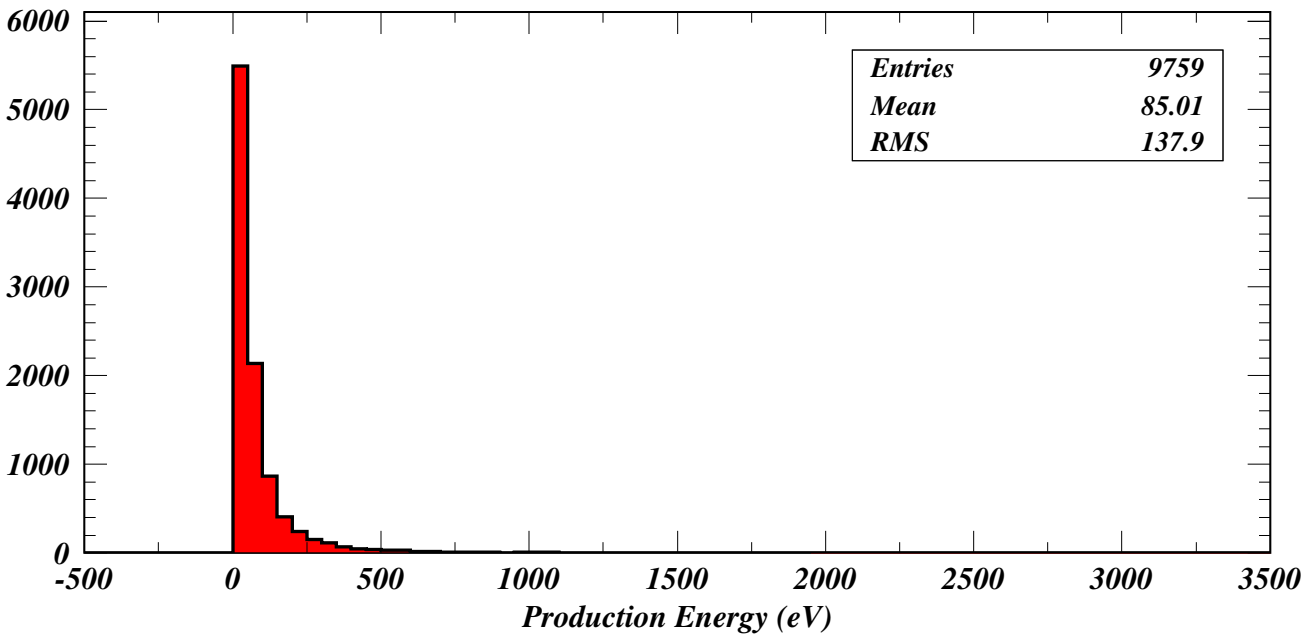
Job 16625: Button Signal Energies For 0 < T < 14 ns



10/08/03 12.05

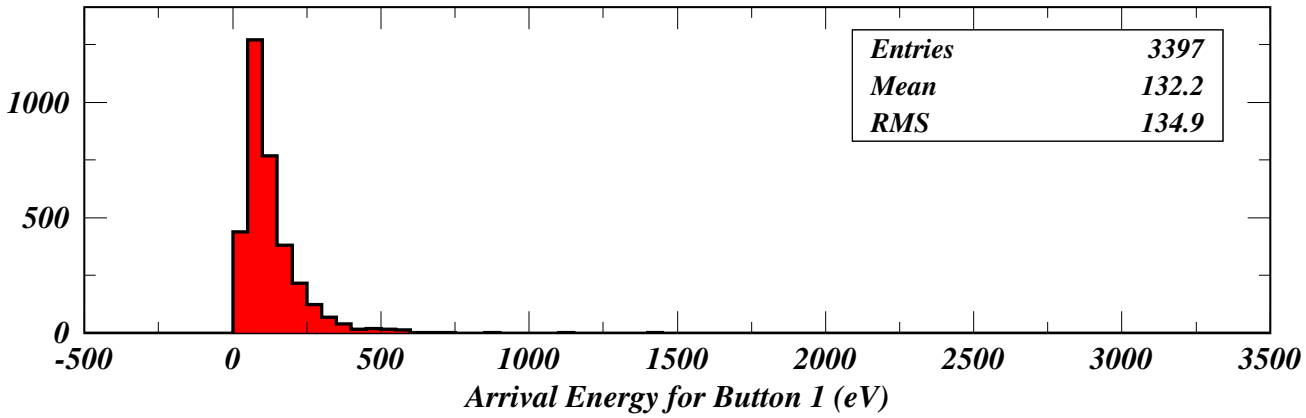
Job 16625: Button Signal Energies For 0 < T < 14 ns: Primaries Only

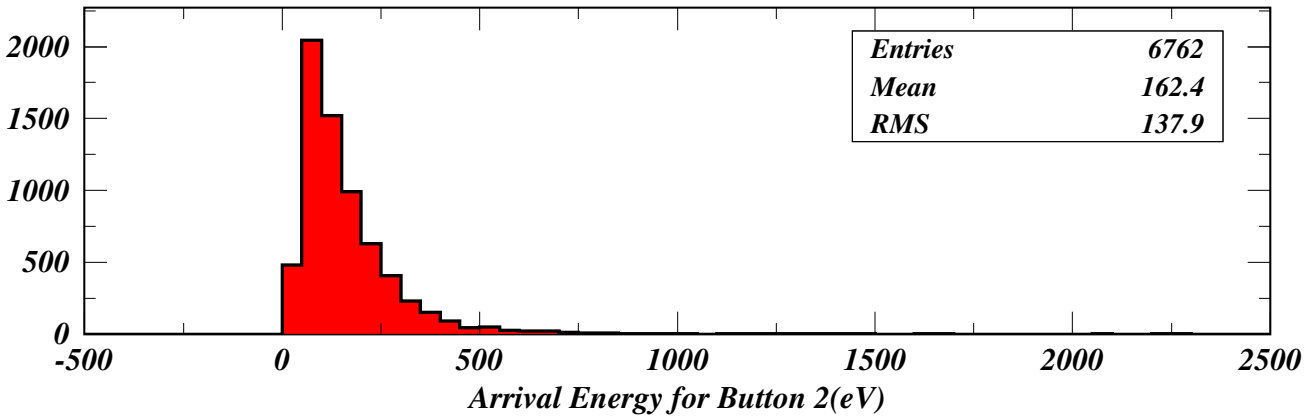


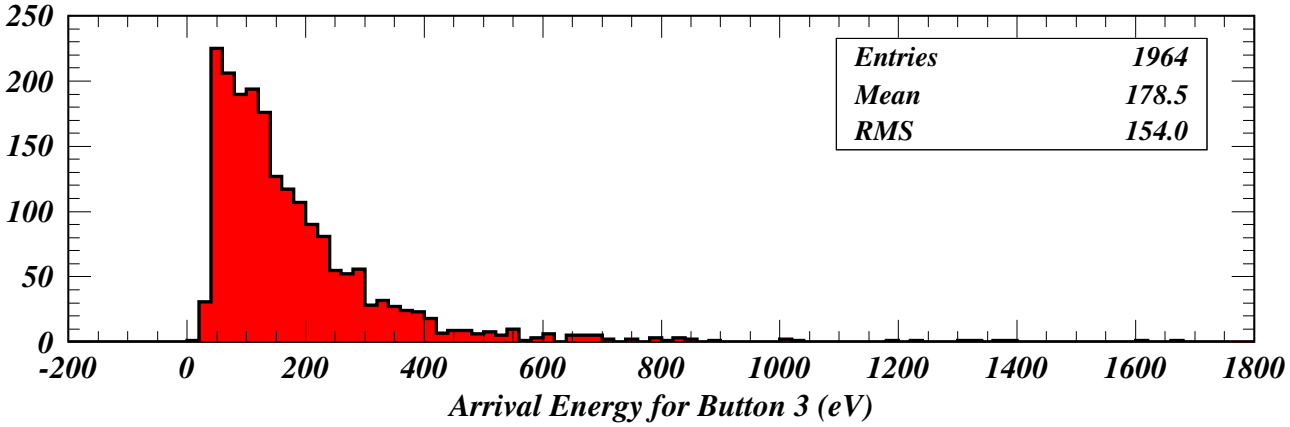


10/08/03 12.05

Job 16625: Button Signal Energies For 0 < T < 14 ns: Primaries Only

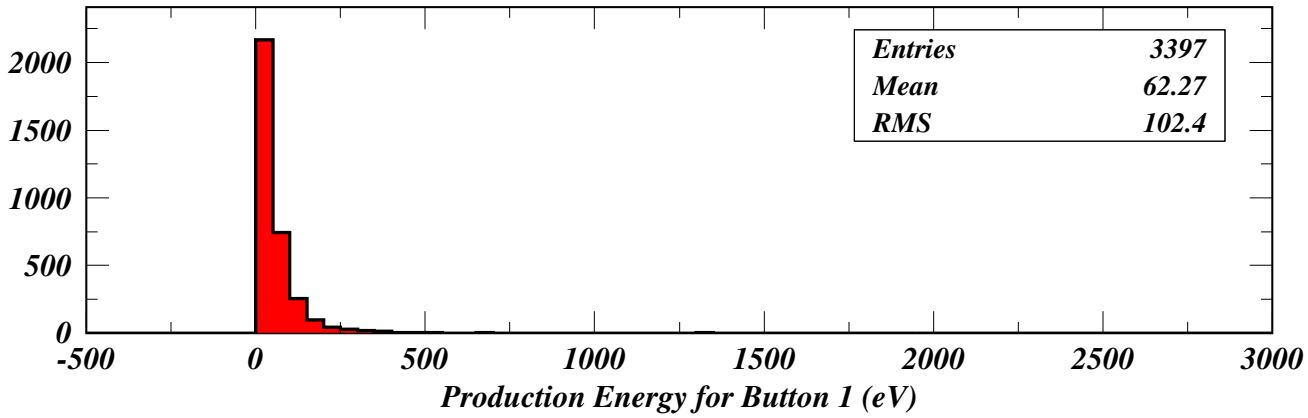


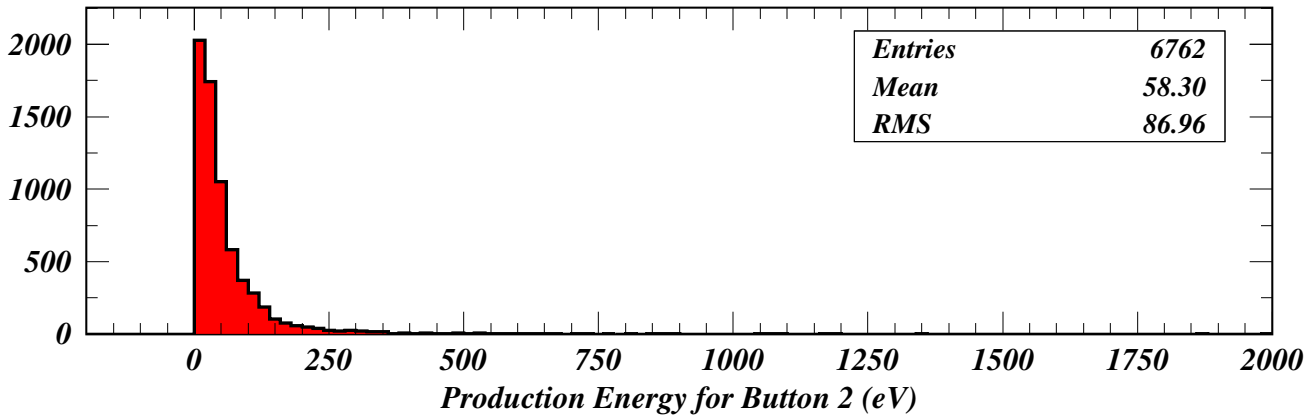


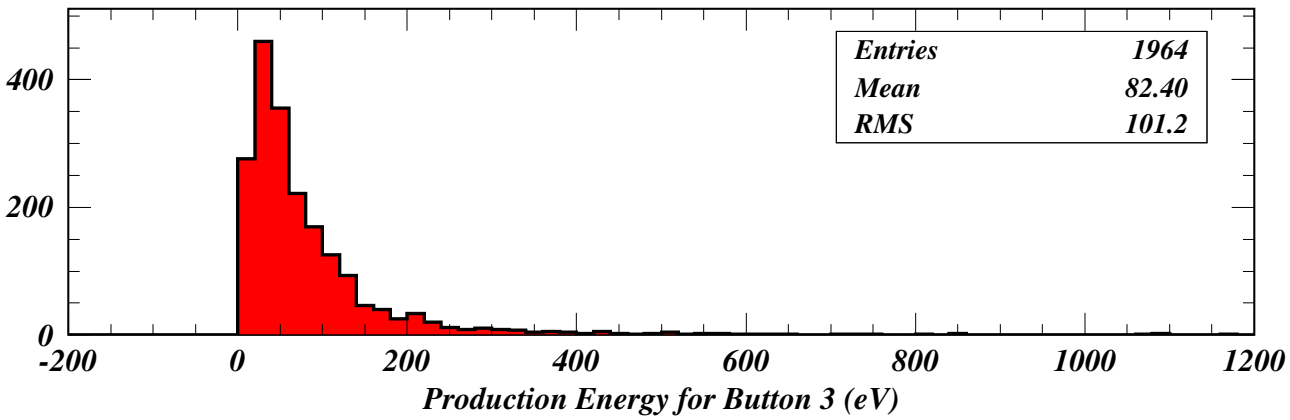


10/08/03 12.05

Job 16625: Button Signal Energies For 0 < T < 14 ns: Primaries Only

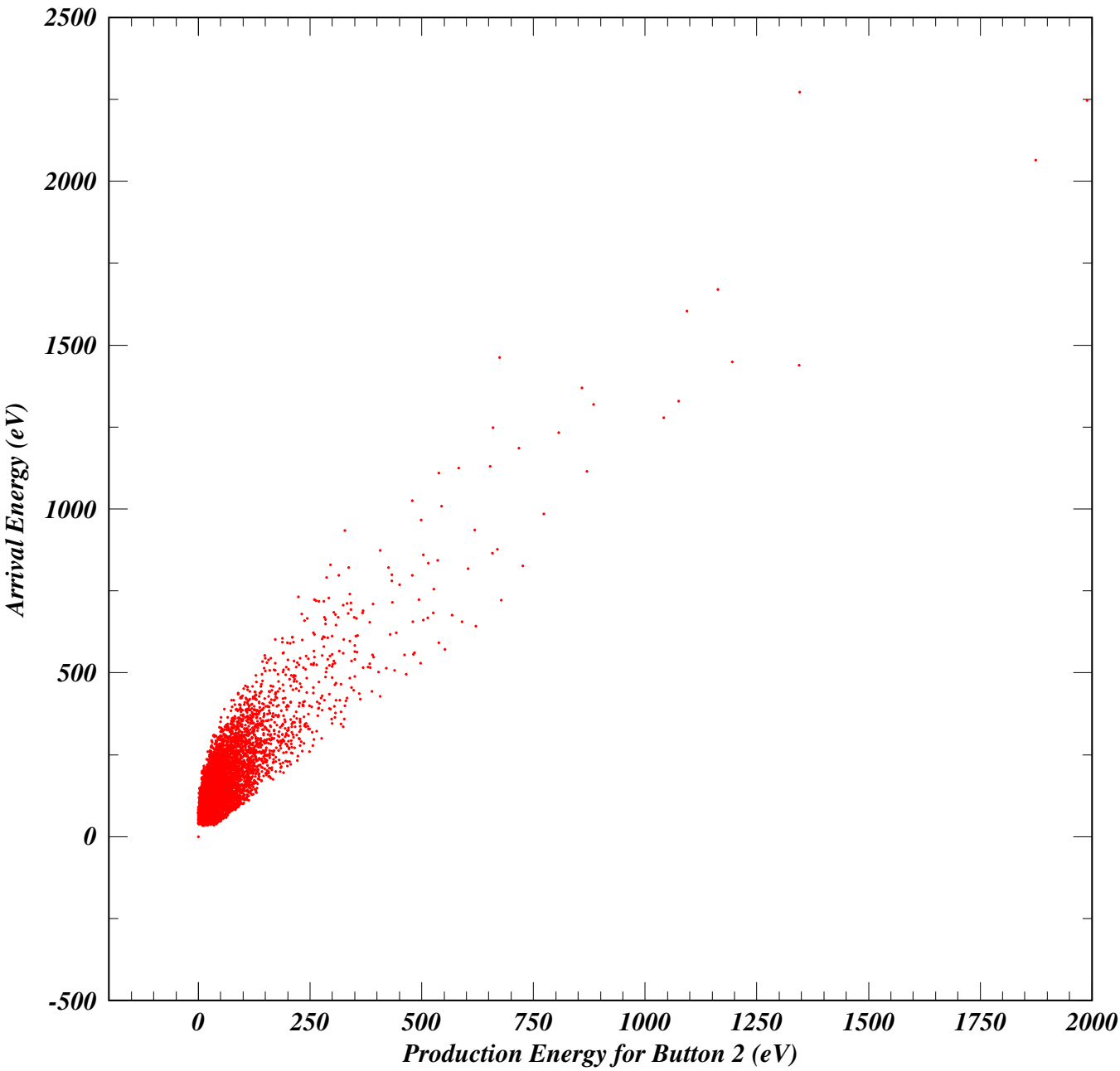






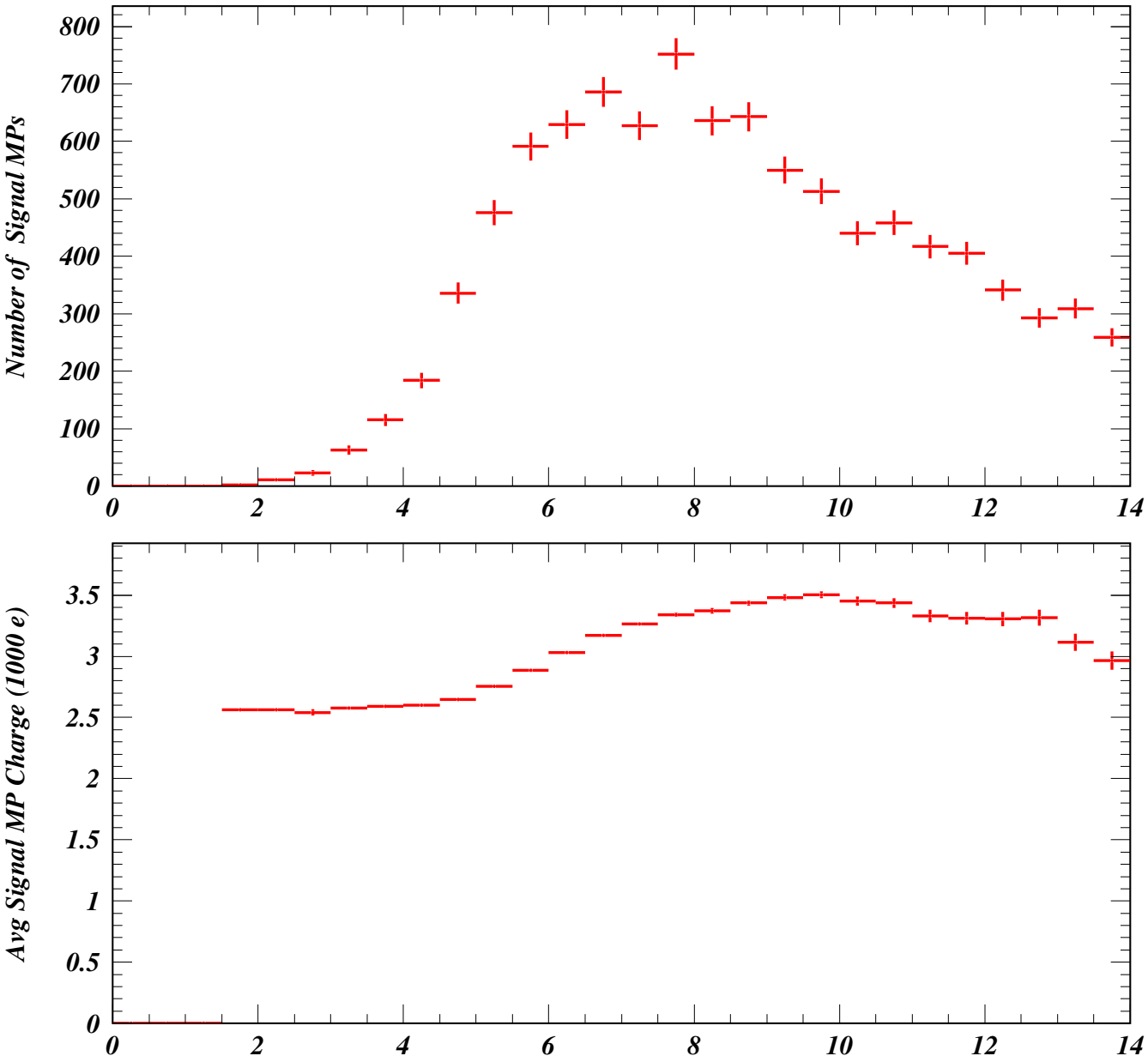
10/08/03 12.05

Job 16625: Button Signal Energies For 0 < T < 14 ns: Primaries Only



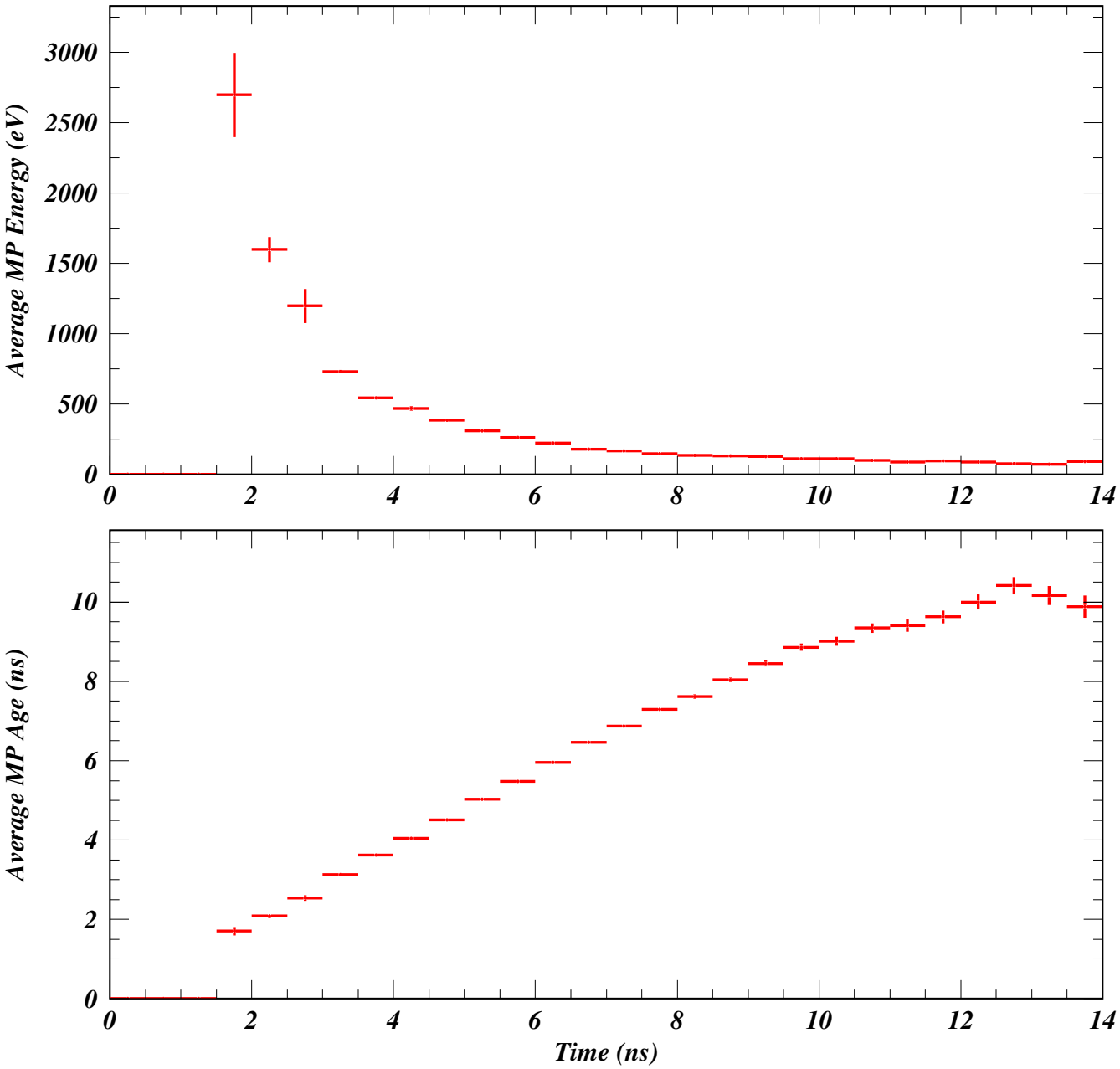
10/08/03 12.05

Button Signal Macroparticles: Positrons_8ma

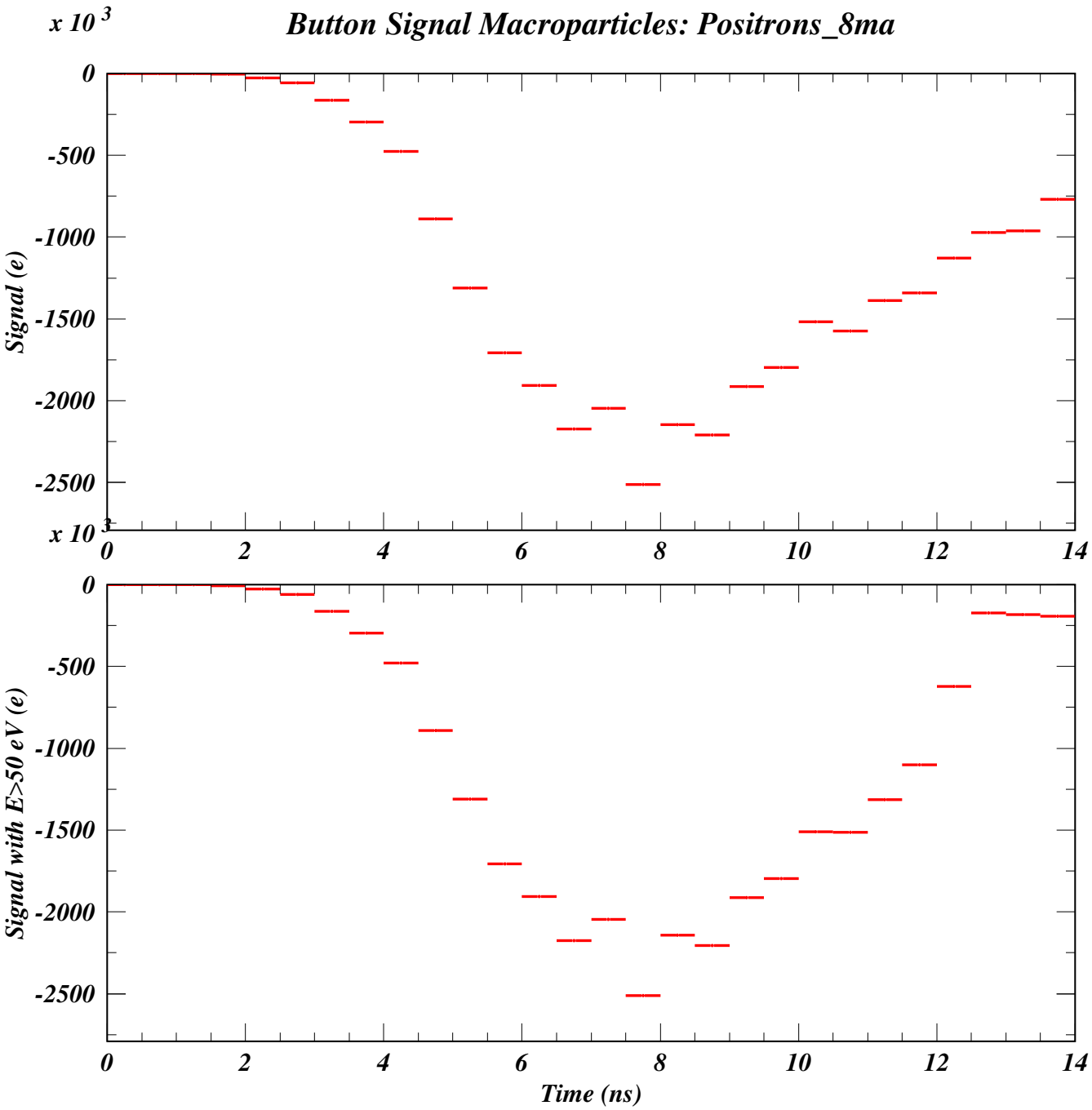


10/08/03 12.05

Button Signal Macroparticles: Positrons_8ma

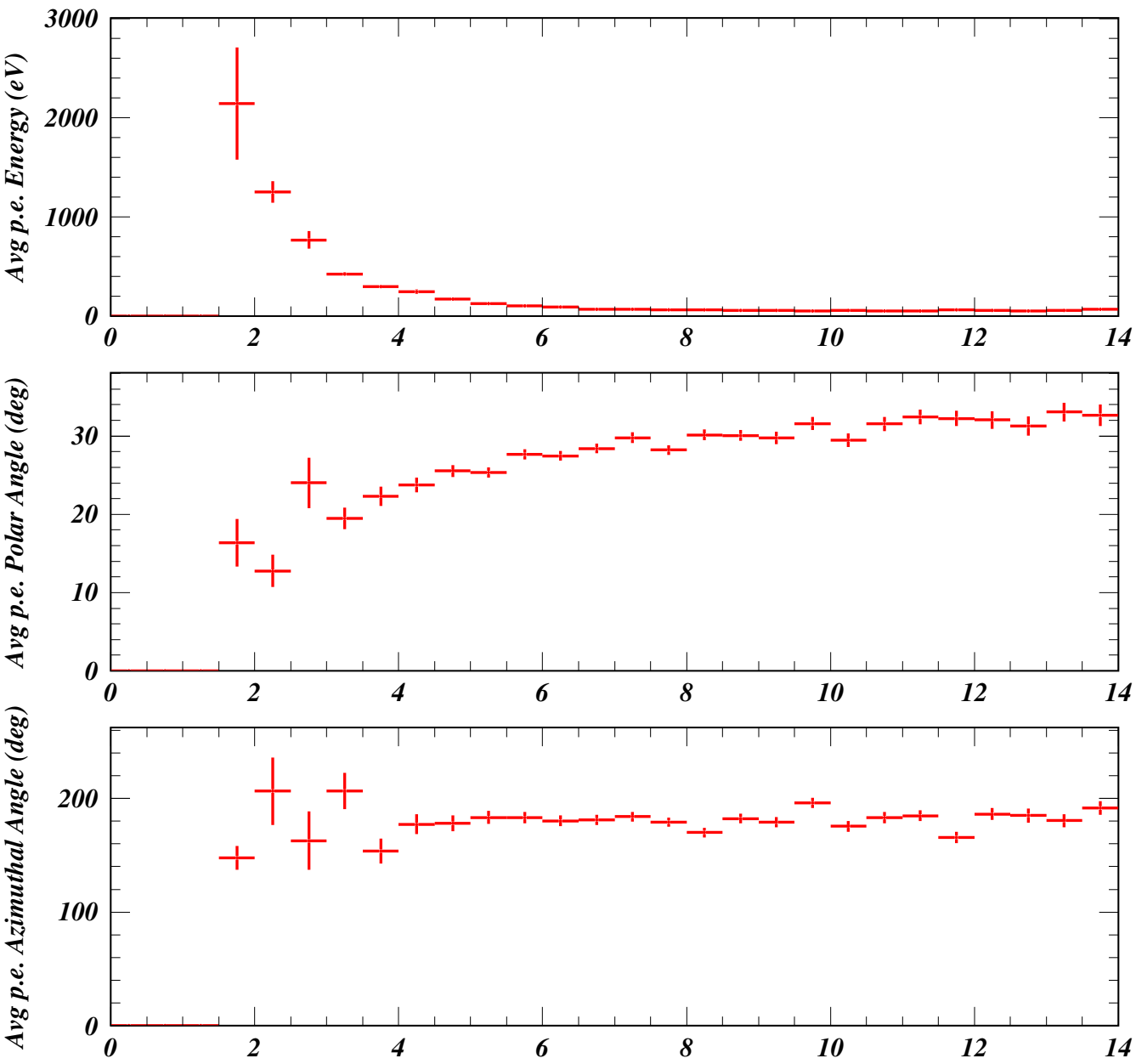


10/08/03 12.05

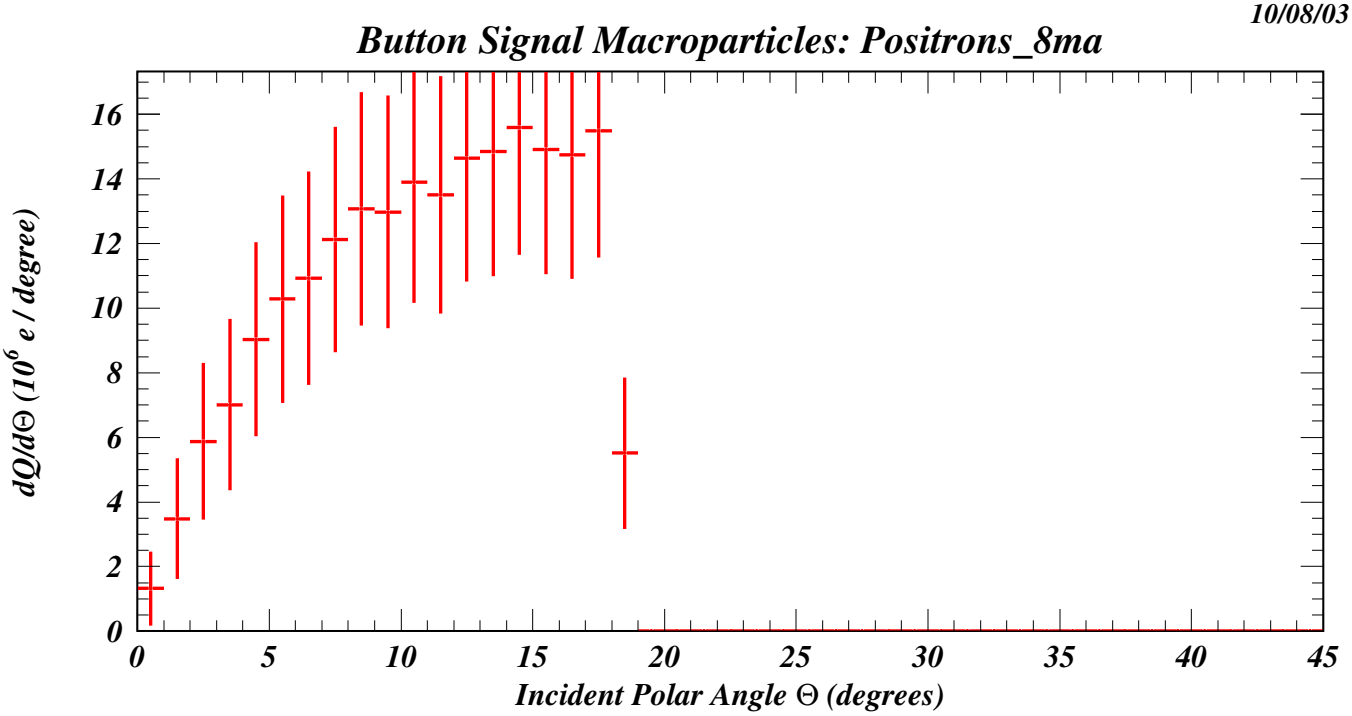

Button Signal Macroparticles: Positrons_8ma
x 10 3
0
-500
-1000
-1500
-2000
-2500
x 10 3
Signal (e)
0
2
4
6
8
10
12
14
0
-500
-1000
-1500
-2000
-2500
Signal with E>50 eV (e)
0
2
4
6
8
10
12
14
Time (ns)

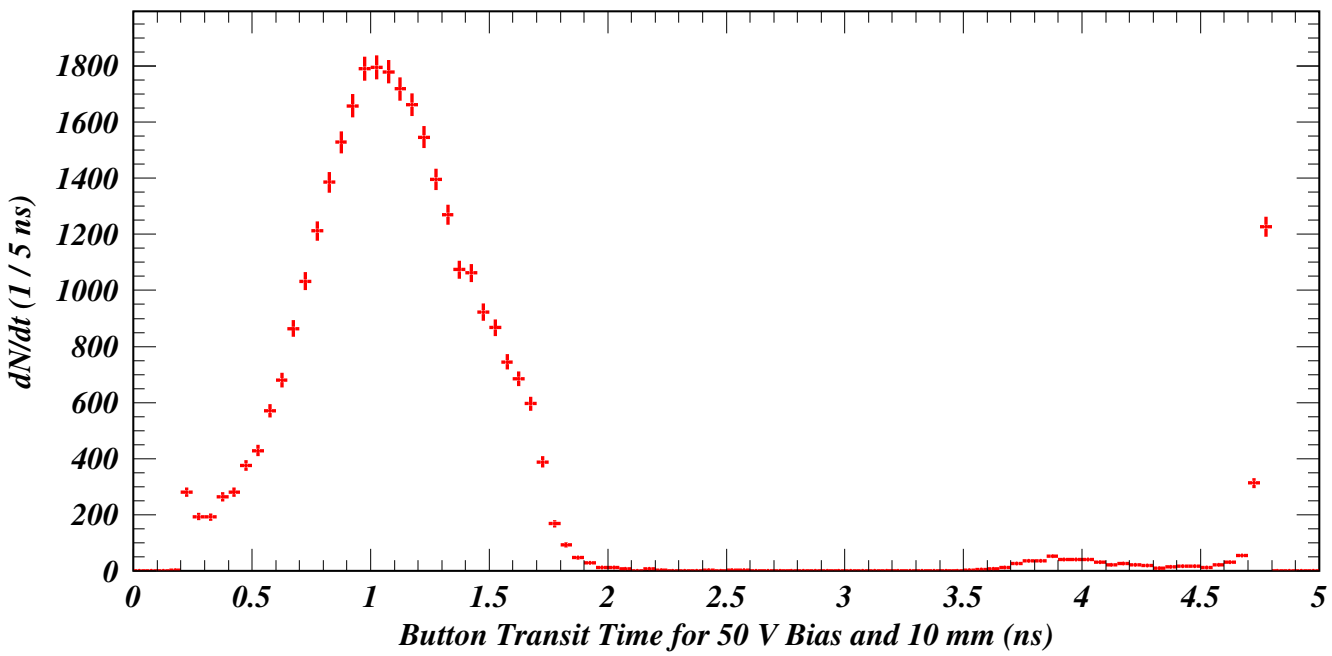
10/08/03 12.05

Button Signal Macroparticles: Positrons_8ma

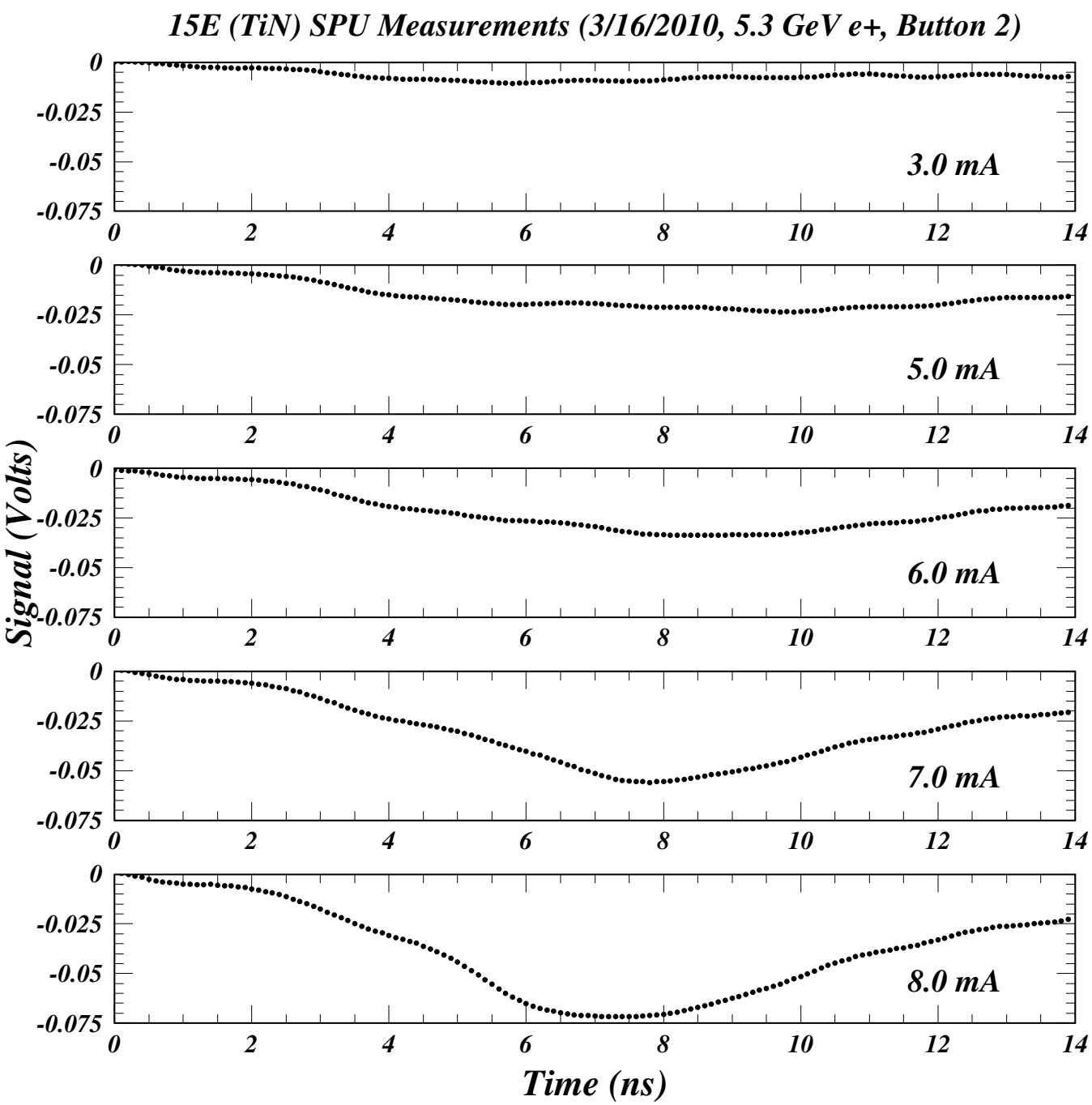


10/08/03 12.05


Button Signal Macroparticles: Positrons_8ma
dQ/dΘ (10^6 e / degree)
0
2
4
6
8
10
12
14
16
0
5
10
15
20
25
30
35
40
45
Incident Polar Angle Θ (degrees)


dN/dt (1 / 5 ns)
0
200
400
600
800
1000
1200
1400
1600
1800
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
Button Transit Time for 50 V Bias and 10 mm (ns)

10/08/03 12.05


15E (TiN) SPU Measurements (3/16/2010, 5.3 GeV e+, Button 2)
Signal (Volts)
3.0 mA
5.0 mA
6.0 mA
7.0 mA
8.0 mA
0
-0.025
-0.05
-0.075
0
2
4
6
8
10
12
14
Time (ns)