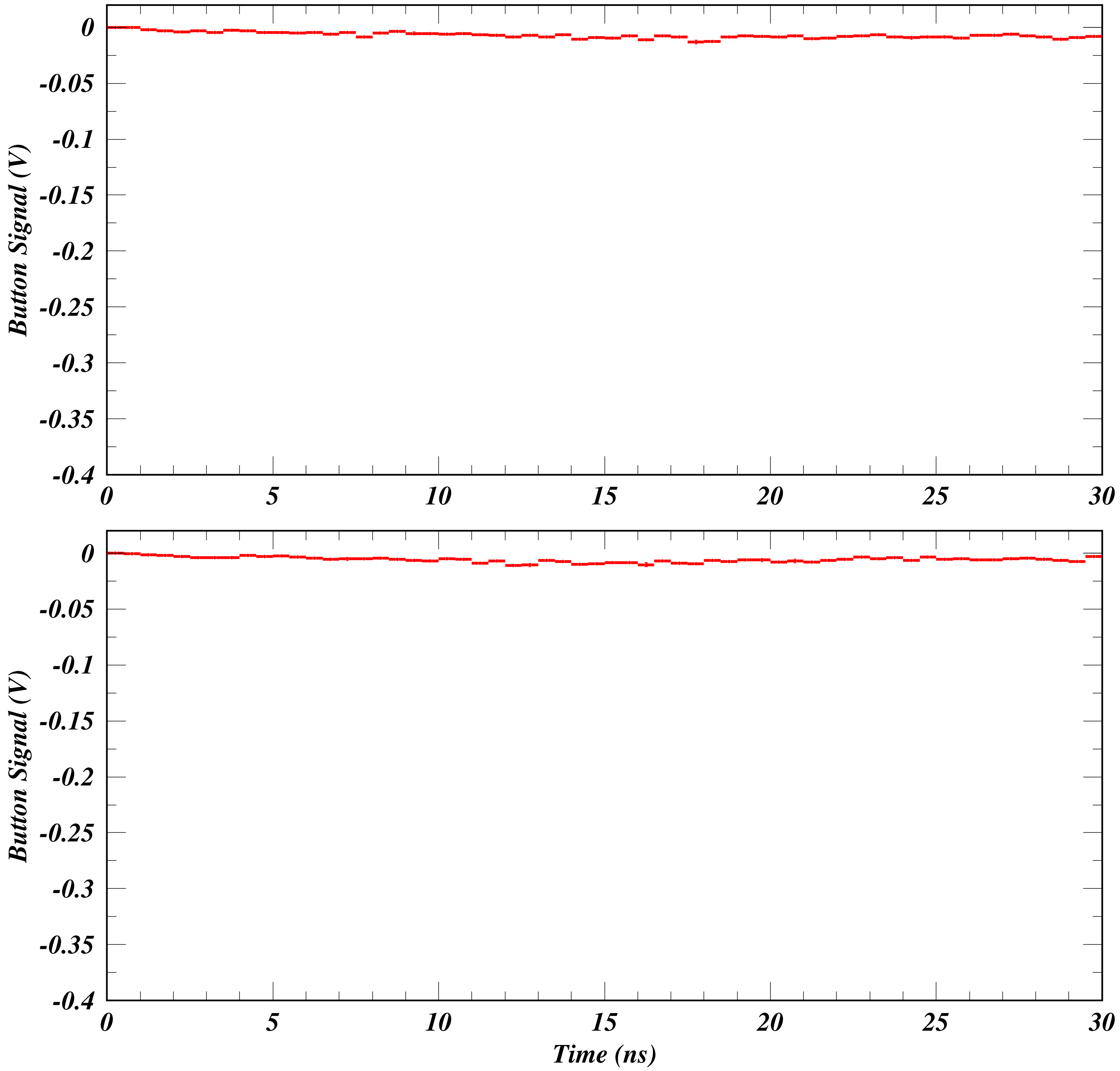
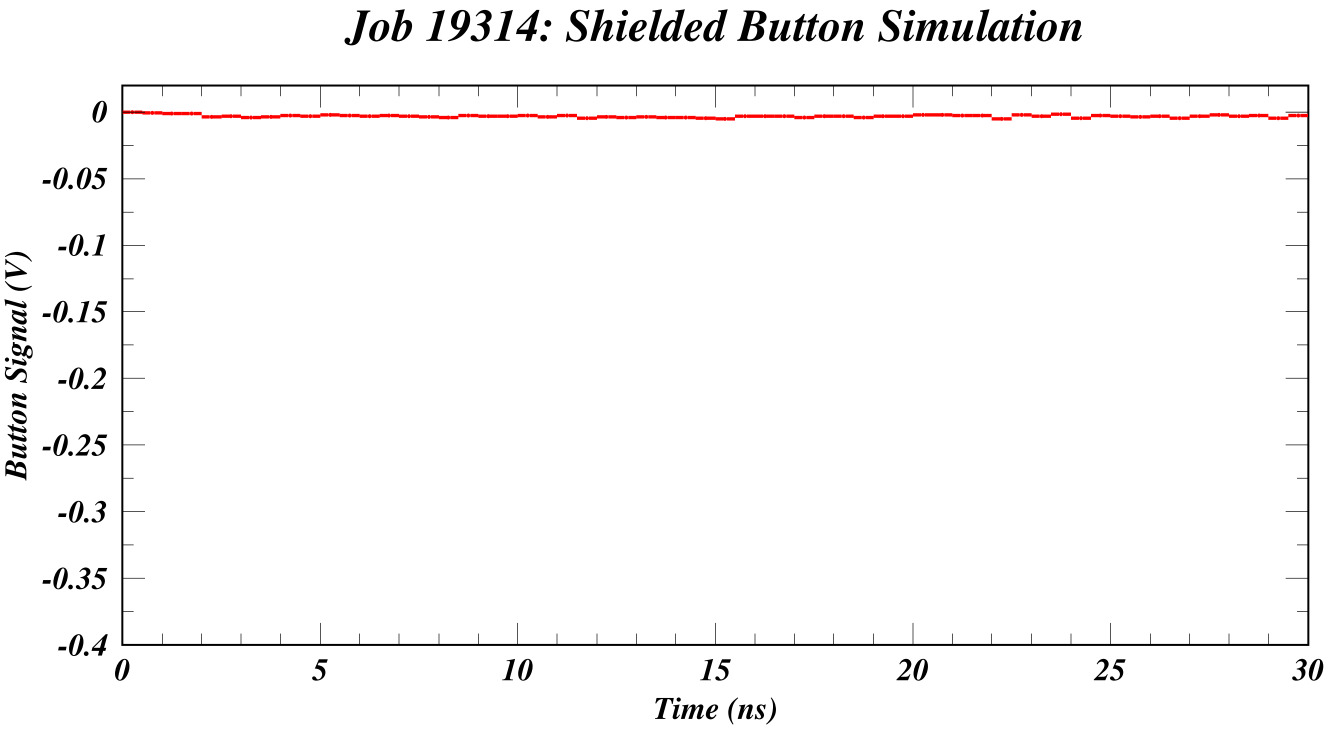
10/11/24   10.50

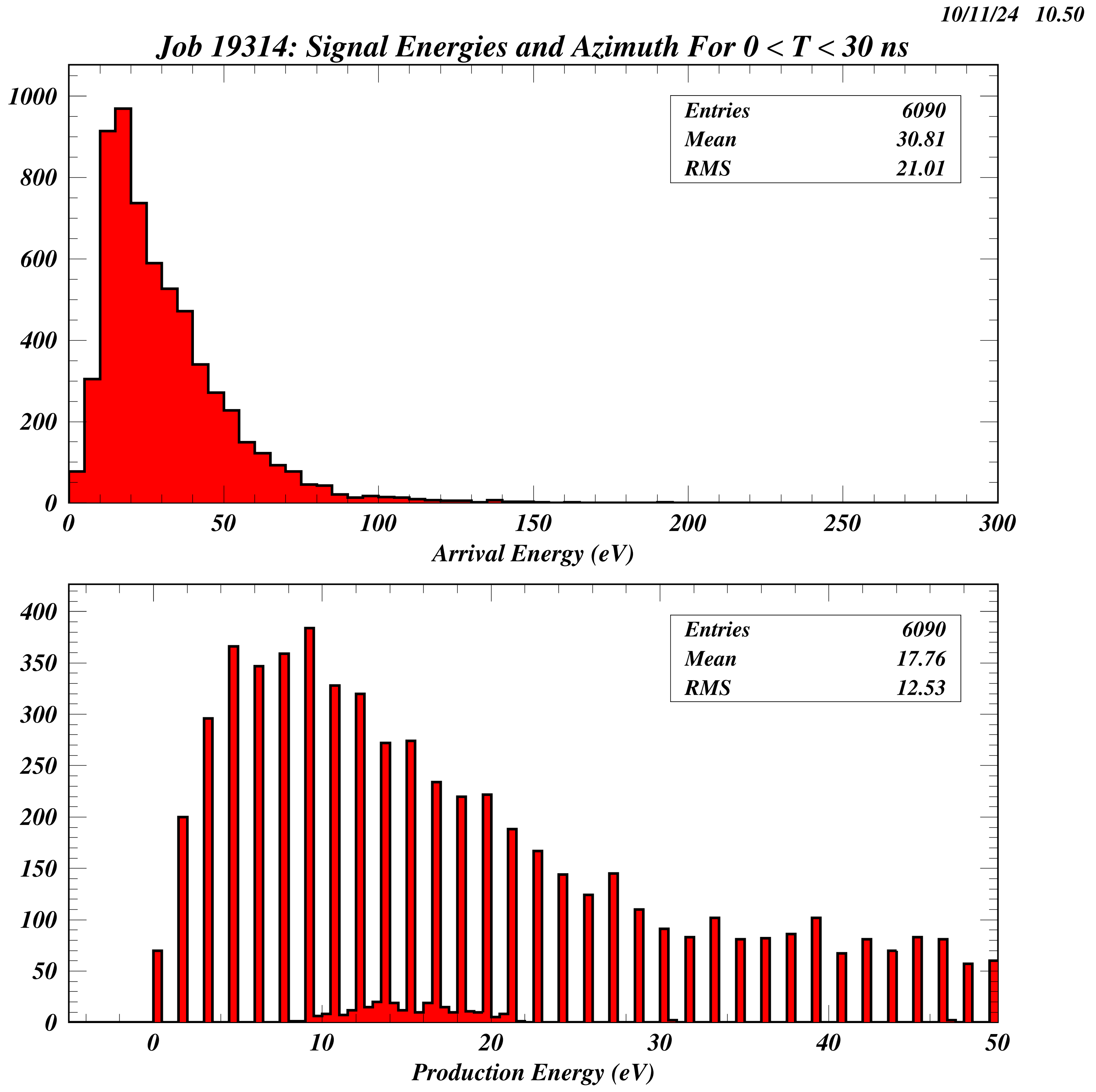
Job 19314: Shielded Button Simulation



10/11/24 10.50

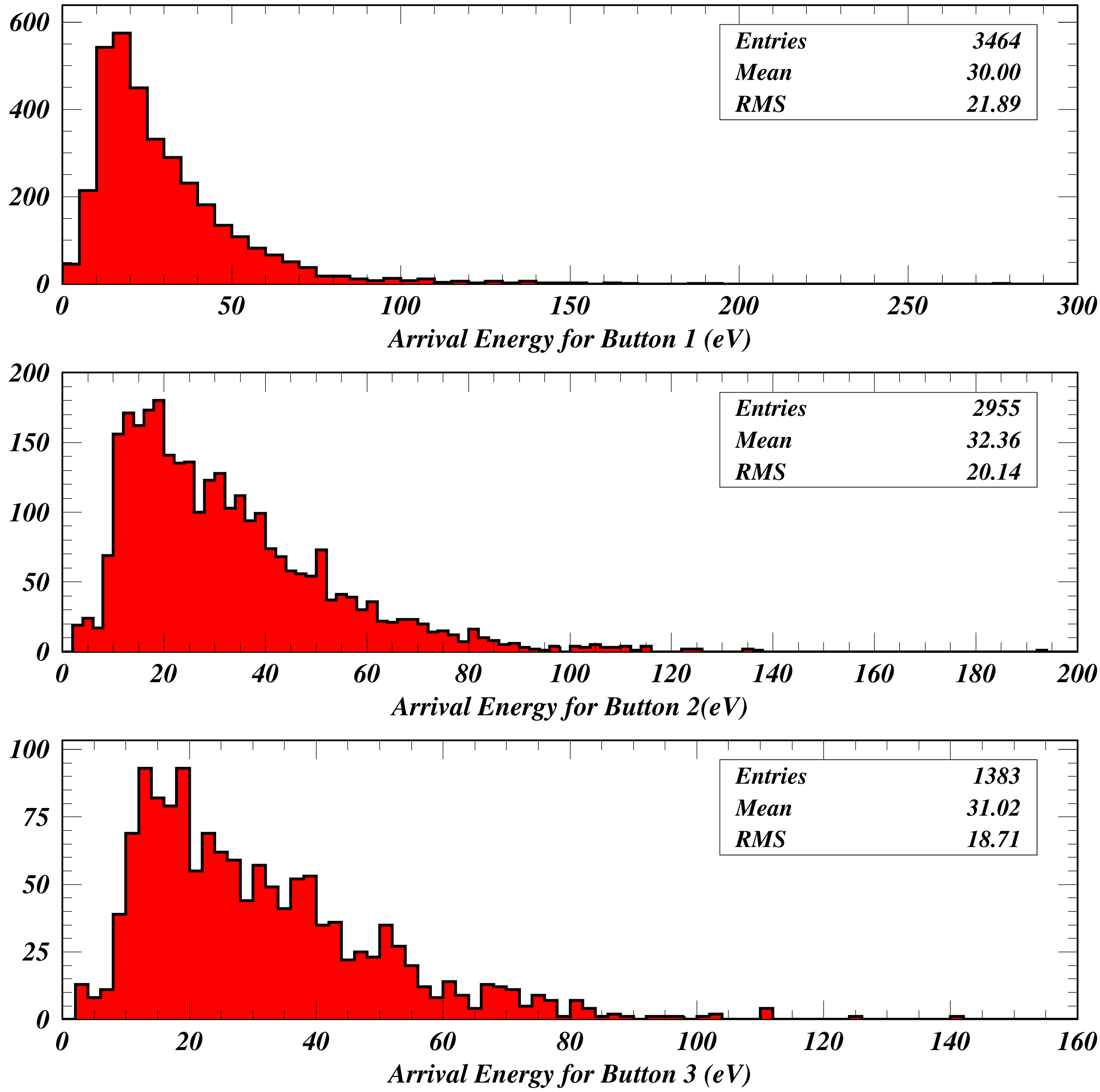


Job 19314: Shielded Button Simulation
0
-0.05
-0.1
-0.15
-0.2
-0.25
-0.3
-0.35
-0.4
Button Signal (V)
0
5
10
15
20
25
30
Time (ns)


10/11/24 10.50
Job 19314: Signal Energies and Azimuth For 0 < T < 30 ns
Entries 6090
Mean 30.81
RMS 21.01
0
200
400
600
800
1000
0 50 100 150 200 250 300
Arrival Energy (eV)
Entries 6090
Mean 17.76
RMS 12.53
0
50
100
150
200
250
300
350
400
0 10 20 30 40 50
Production Energy (eV)

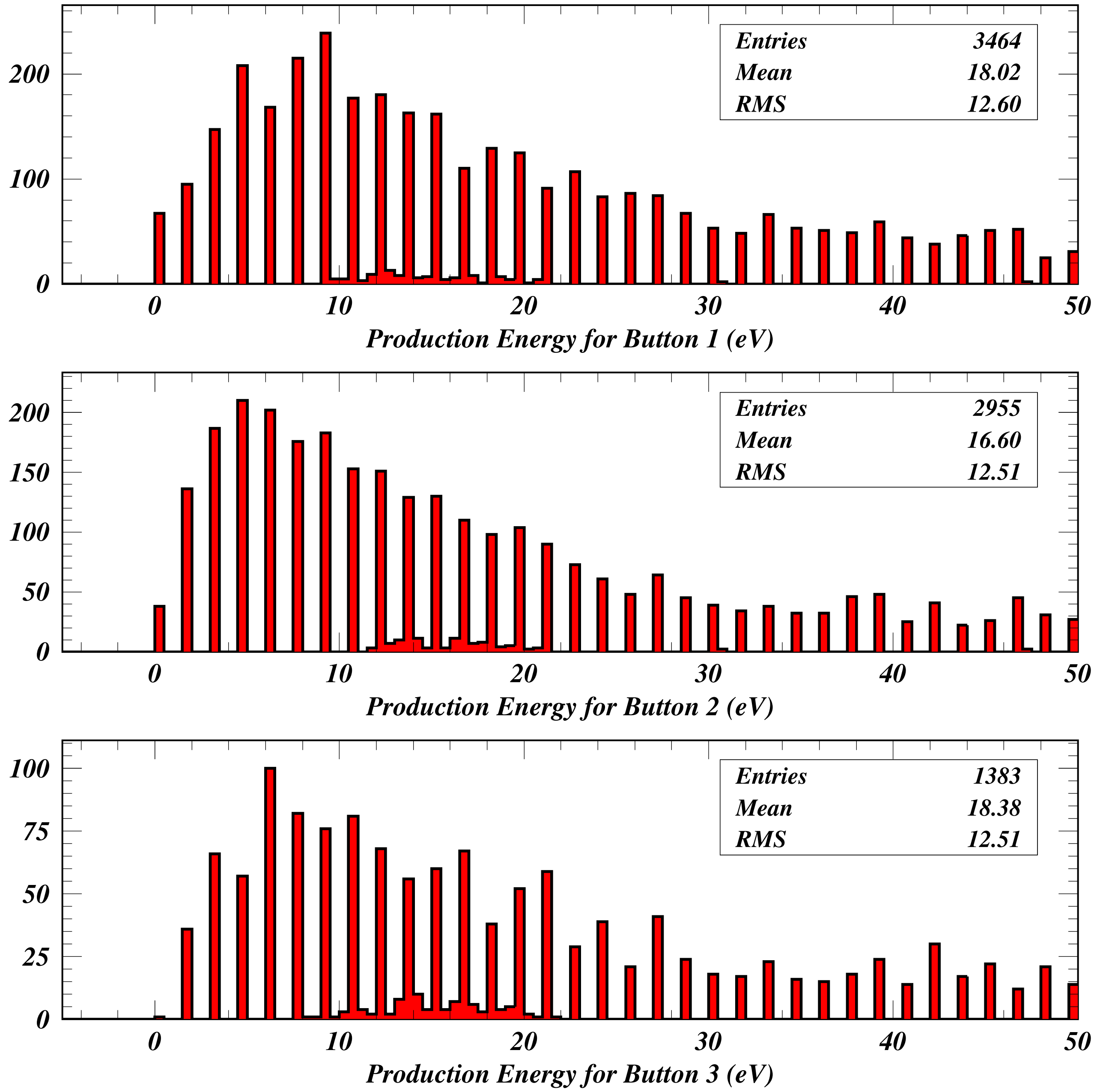
10/11/24 10.50

Job 19314: Signal Energies and Azimuth For 0 < T < 30 ns

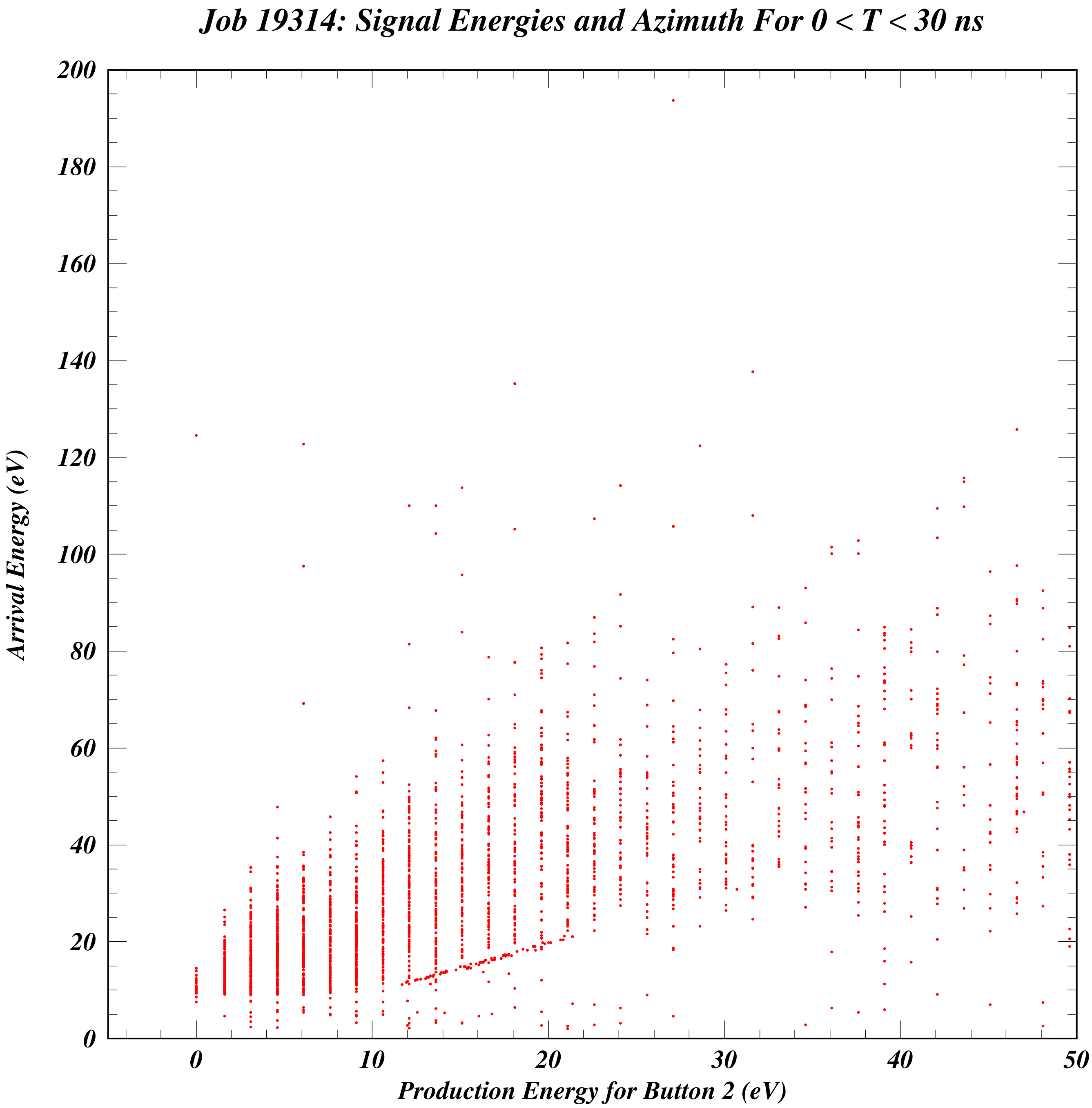


10/11/24 10.50

Job 19314: Signal Energies and Azimuth For 0 < T < 30 ns

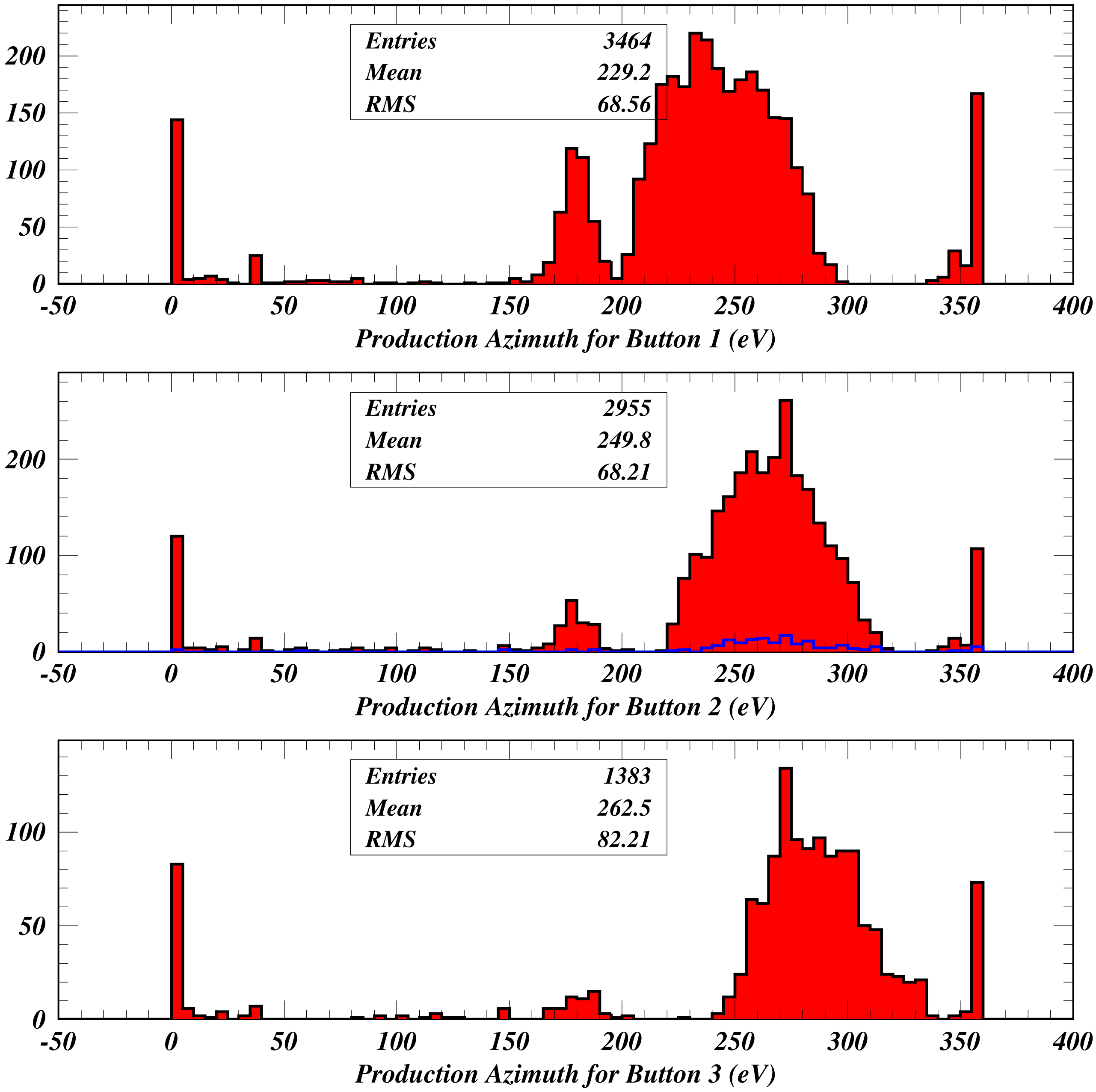


10/11/24 10.50


Job 19314: Signal Energies and Azimuth For 0 < T < 30 ns
Arrival Energy (eV)
Production Energy for Button 2 (eV)
0
20
40
60
80
100
120
140
160
180
200
0
10
20
30
40
50

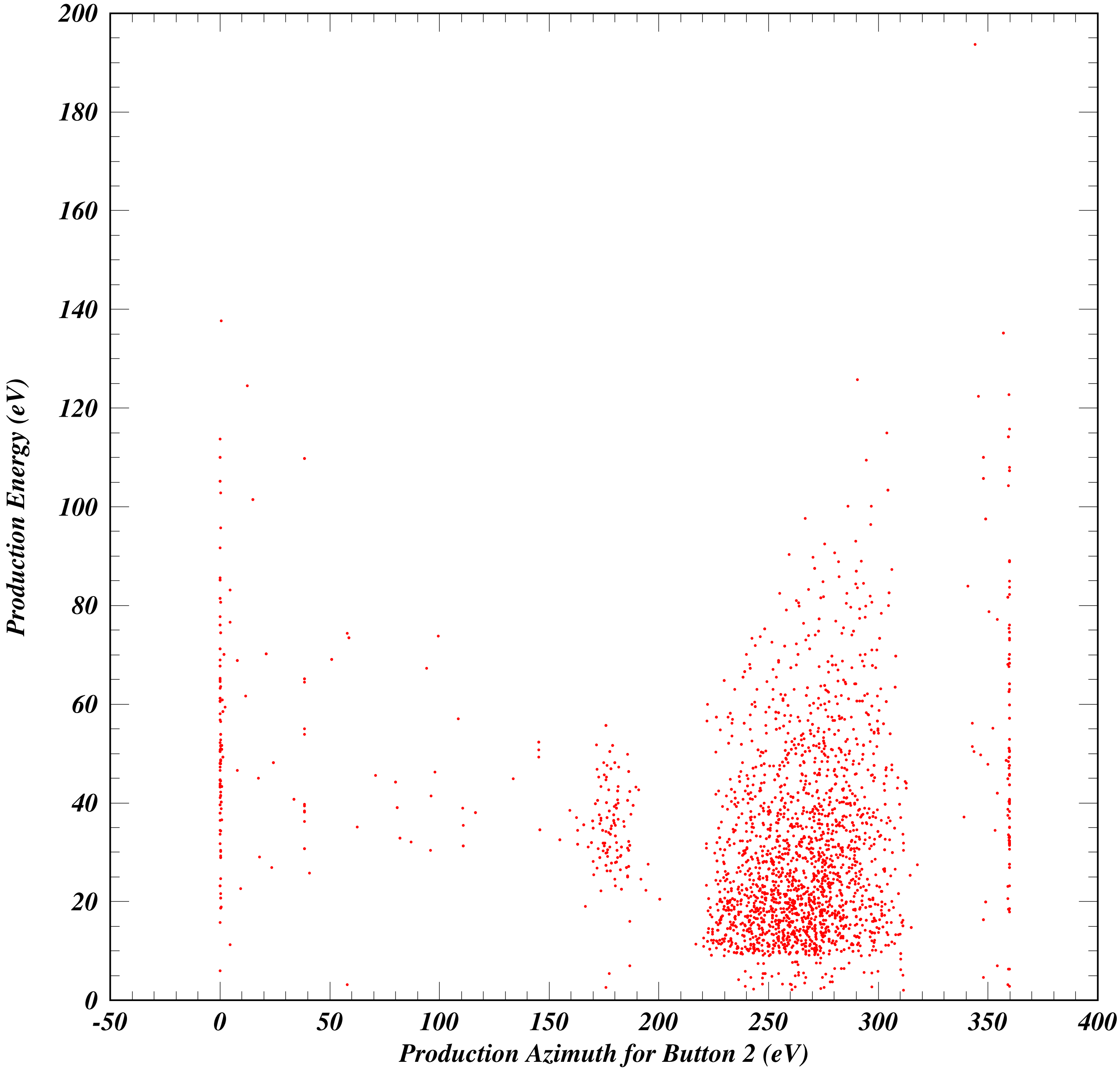
10/11/24 10.50

Job 19314: Signal Energies and Azimuth For 0 < T < 30 ns



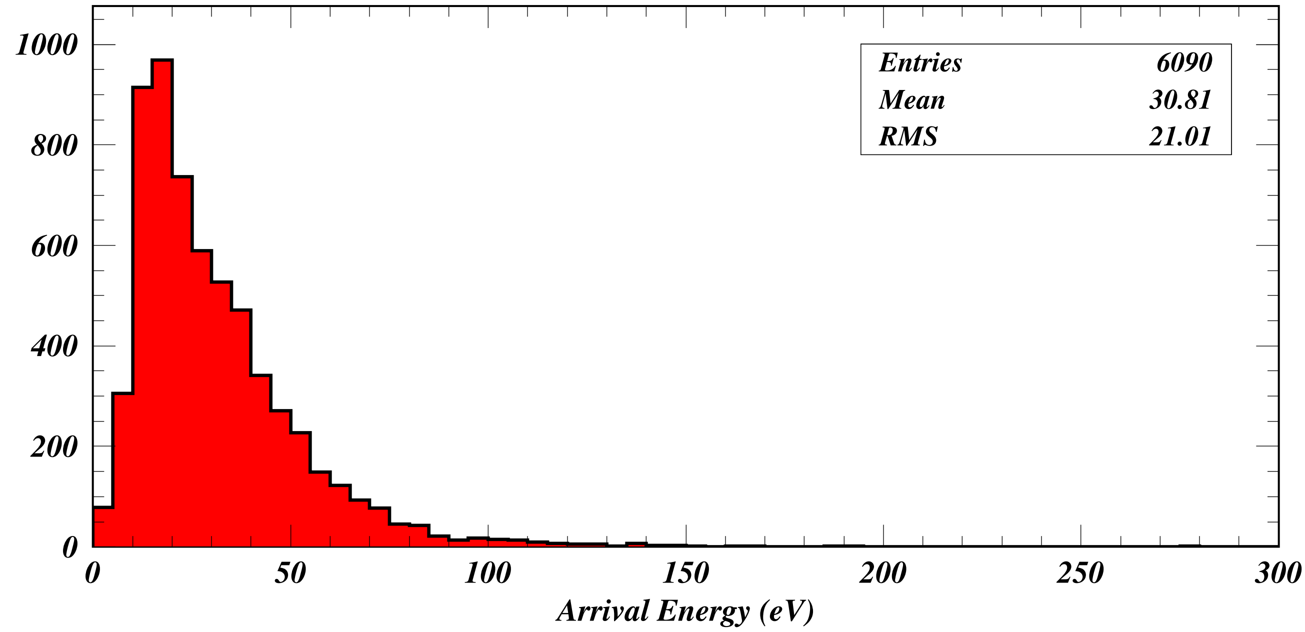
10/11/24 10.50

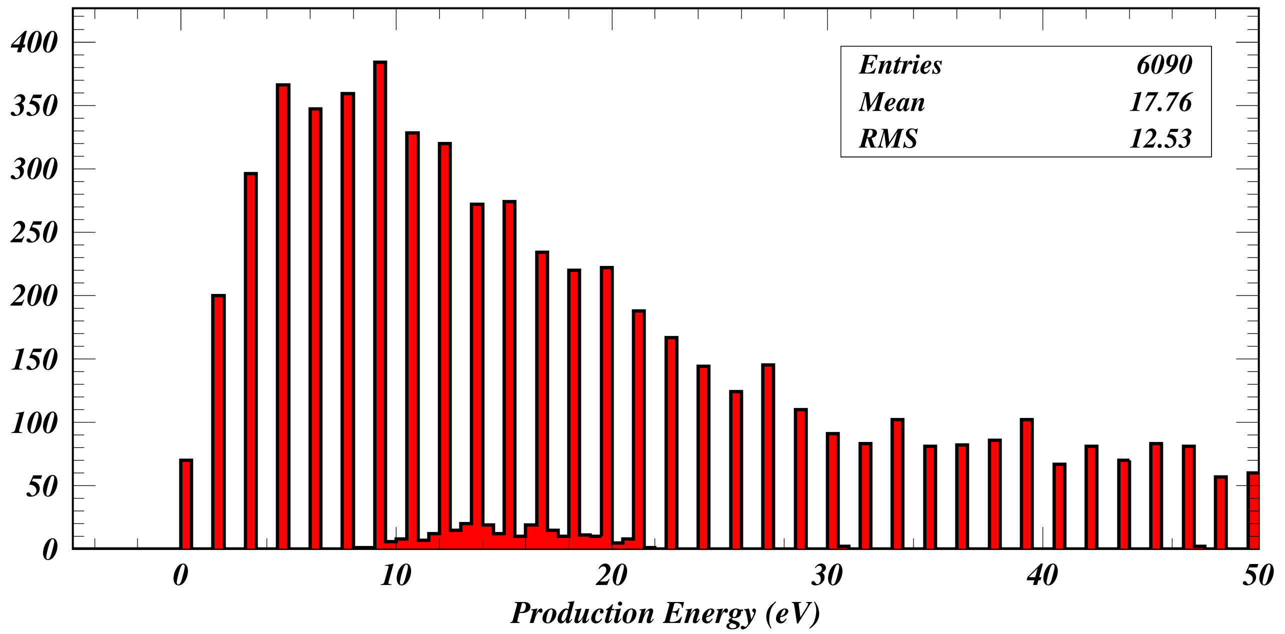
Job 19314: Signal Energies and Azimuth For 0 < T < 30 ns



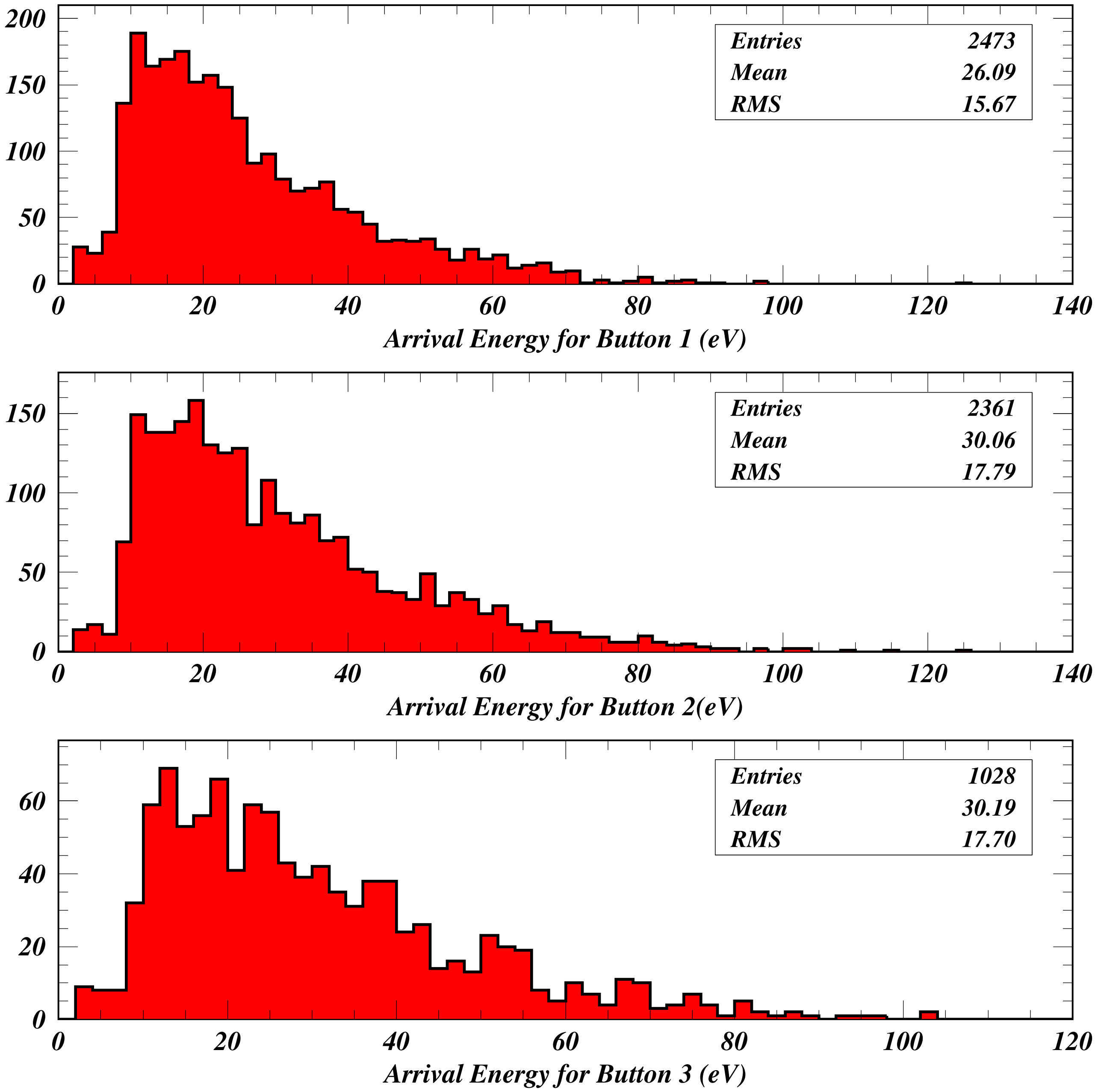
10/11/24 10.50

Job 19314: Signal Energies and Azimuth For 0 < T < 30 ns: Primaries Only



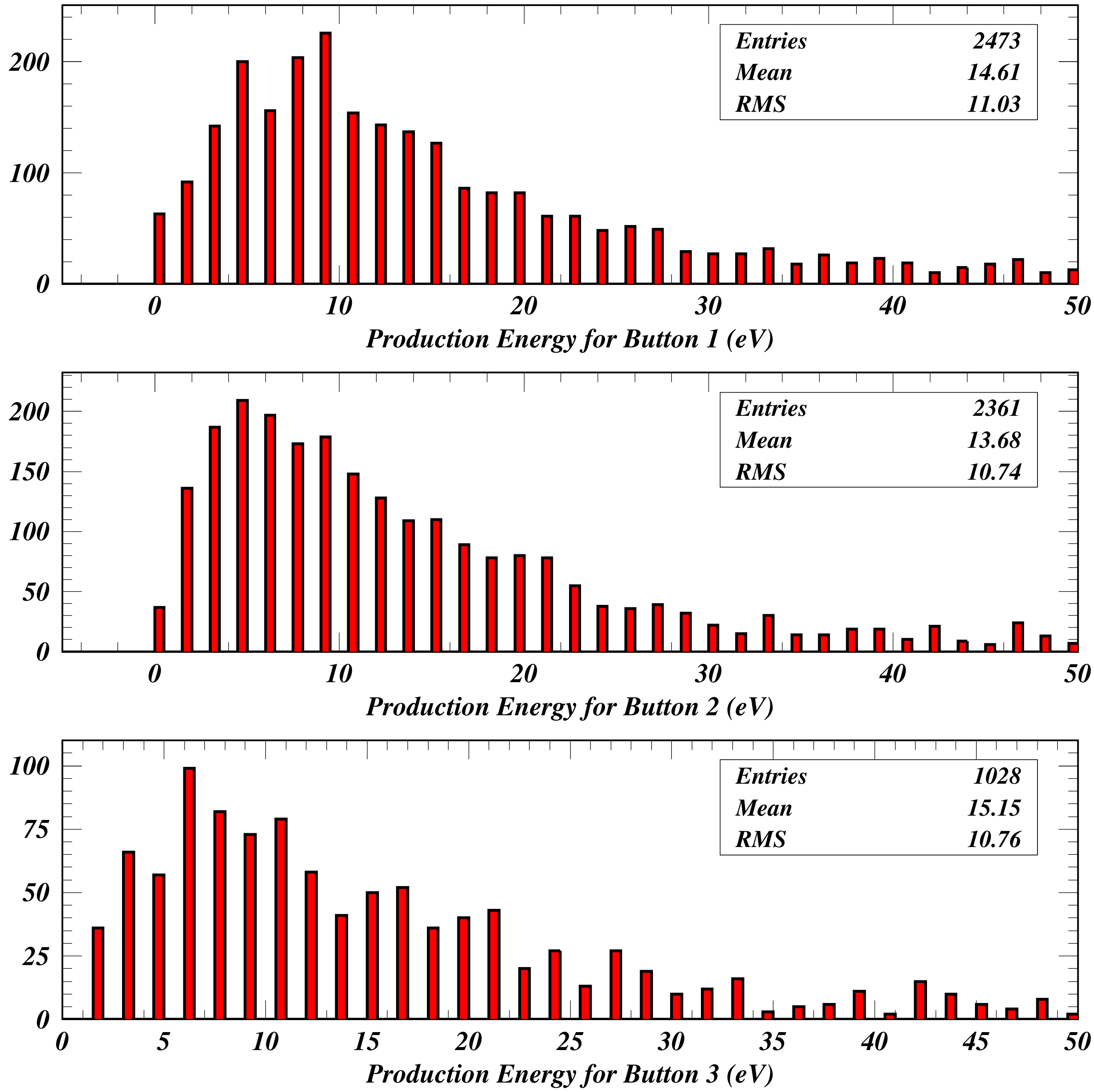


Job 19314: Signal Energies and Azimuth For 0 < T < 30 ns: Primaries Only

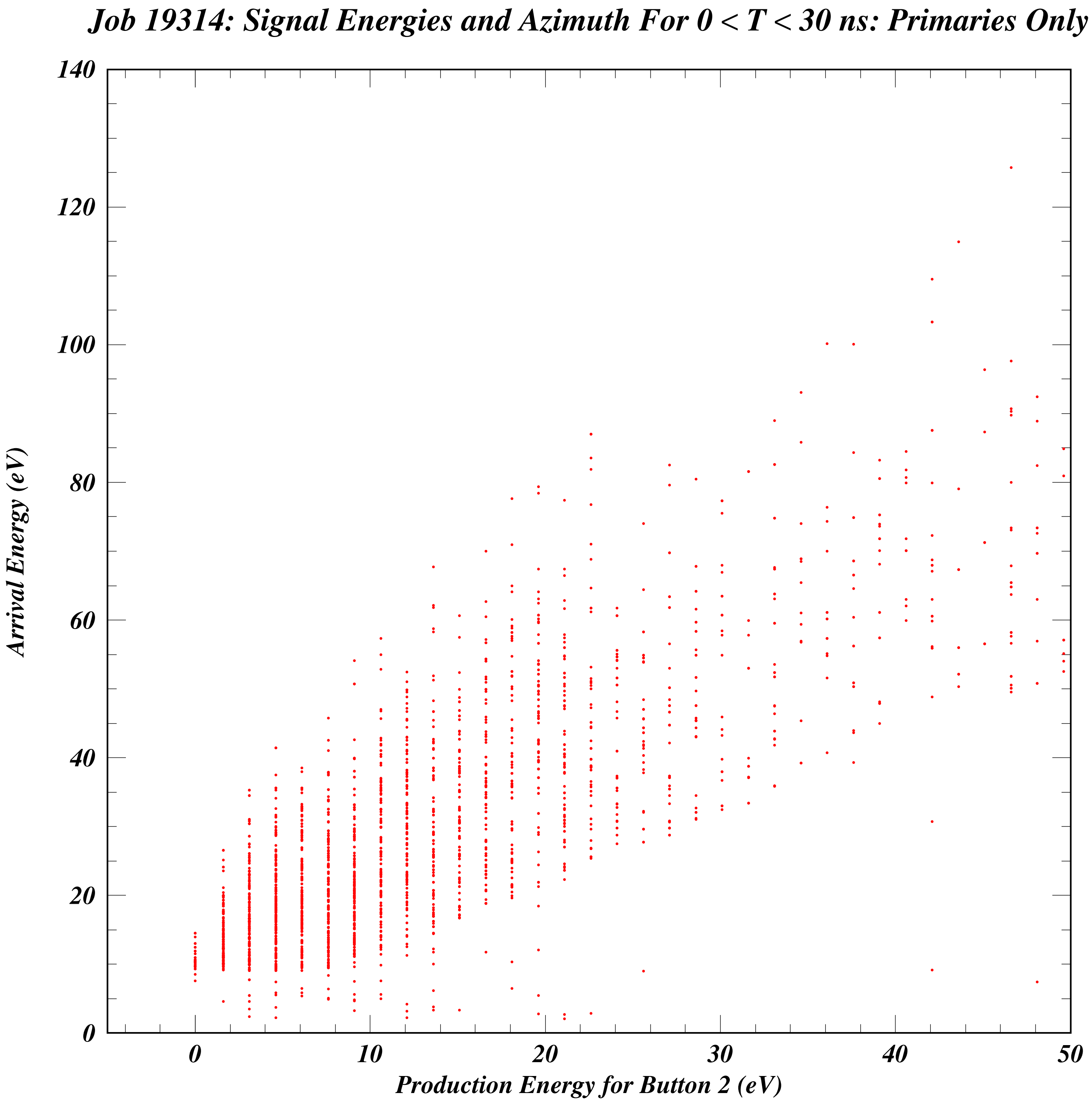


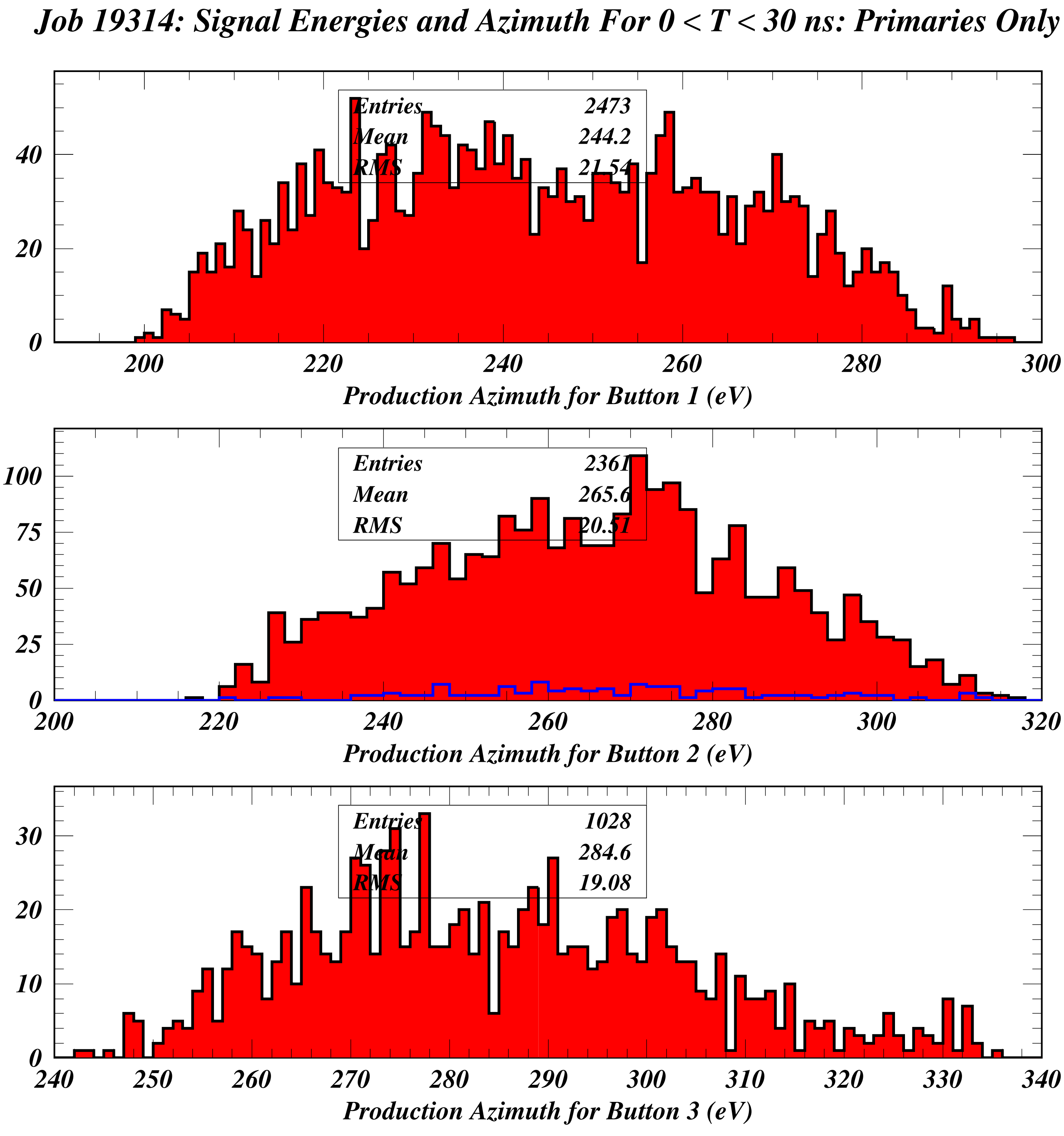
10/11/24 10.50

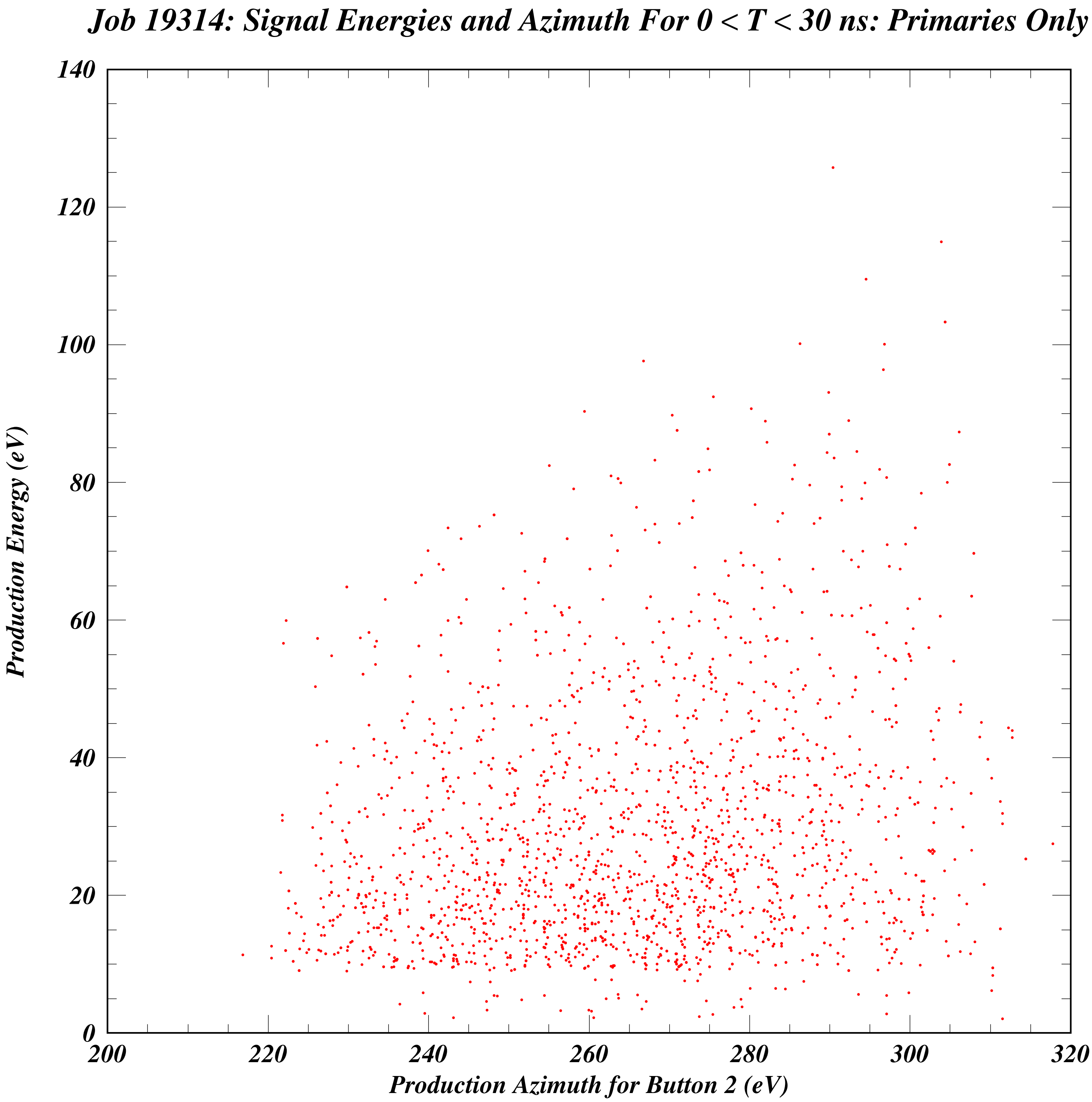
Job 19314: Signal Energies and Azimuth For 0 < T < 30 ns: Primaries Only

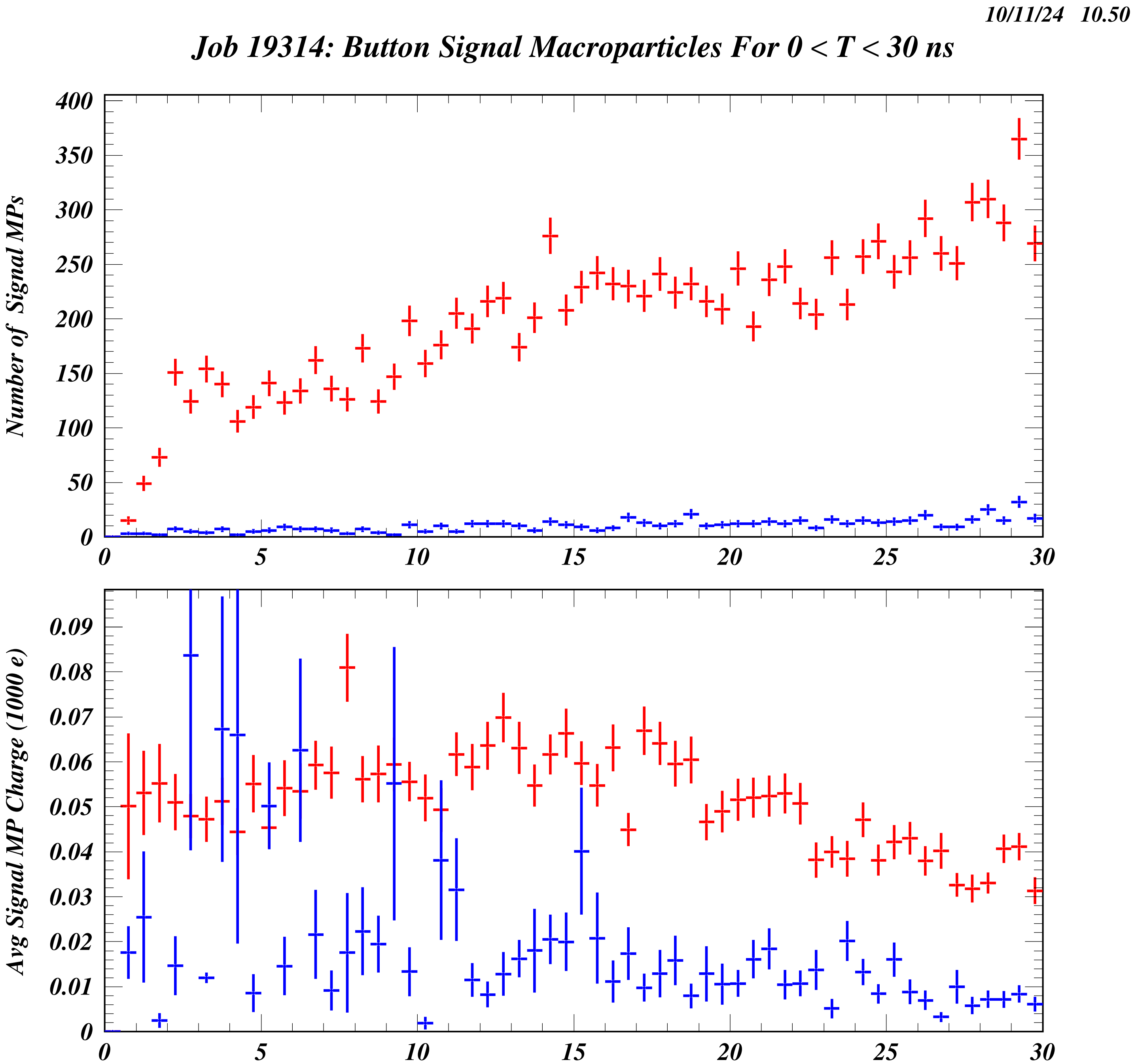


10/11/24 10.50


Job 19314: Signal Energies and Azimuth For 0 < T < 30 ns: Primaries Only
140
120
100
80
60
40
20
0
0
10
20
30
40
50
Arrival Energy (eV)
Production Energy for Button 2 (eV)


Job 19314: Signal Energies and Azimuth For 0 < T < 30 ns: Primaries Only
Entries 2473
Mean 244.2
RMS 21.54
Production Azimuth for Button 1 (eV)
Entries 2361
Mean 265.6
RMS 20.51
Production Azimuth for Button 2 (eV)
Entries 1028
Mean 284.6
RMS 19.08
Production Azimuth for Button 3 (eV)

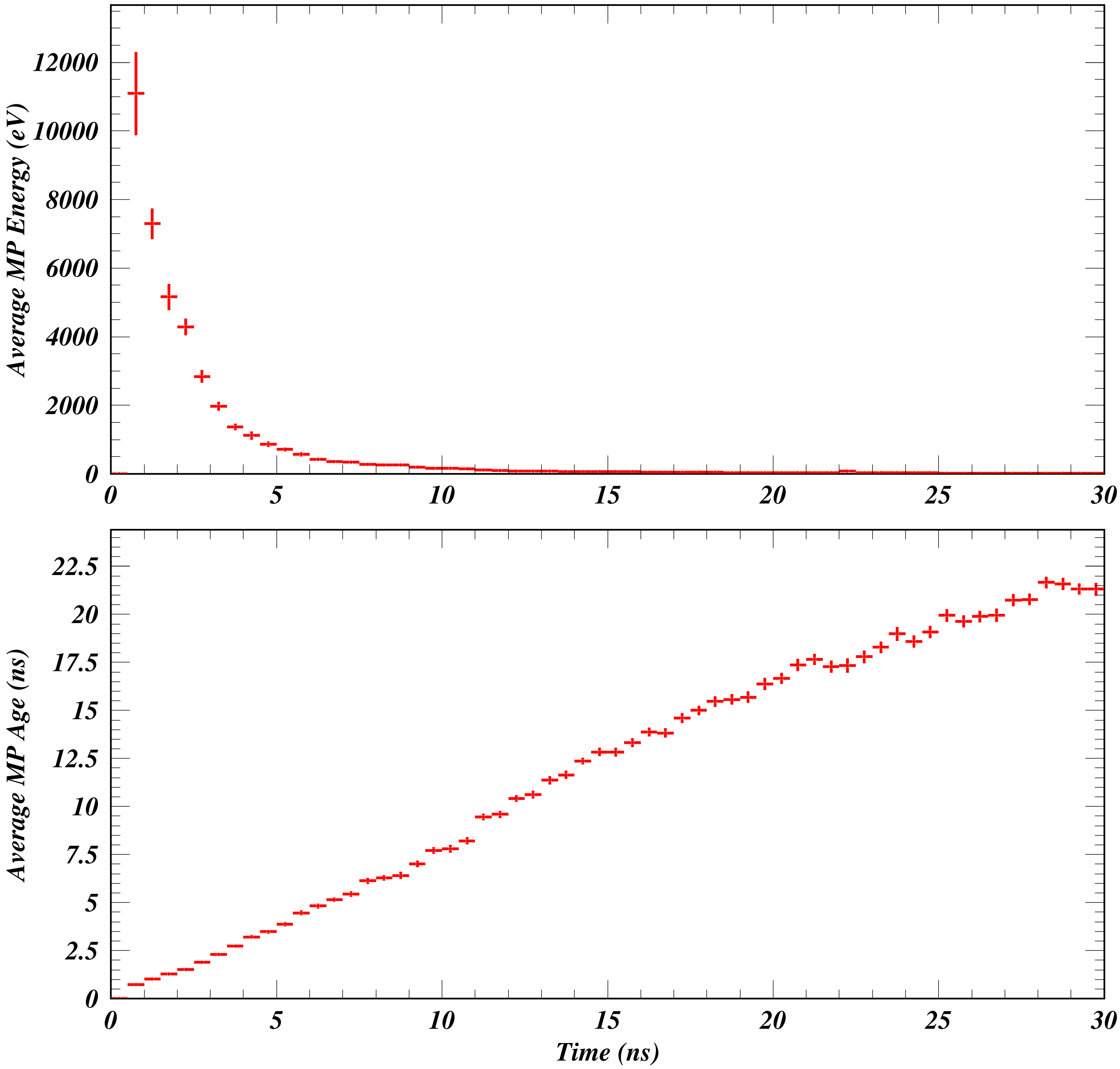

Job 19314: Signal Energies and Azimuth For 0 < T < 30 ns: Primaries Only
Production Energy (eV)
Production Azimuth for Button 2 (eV)
0
20
40
60
80
100
120
140
200
220
240
260
280
300
320



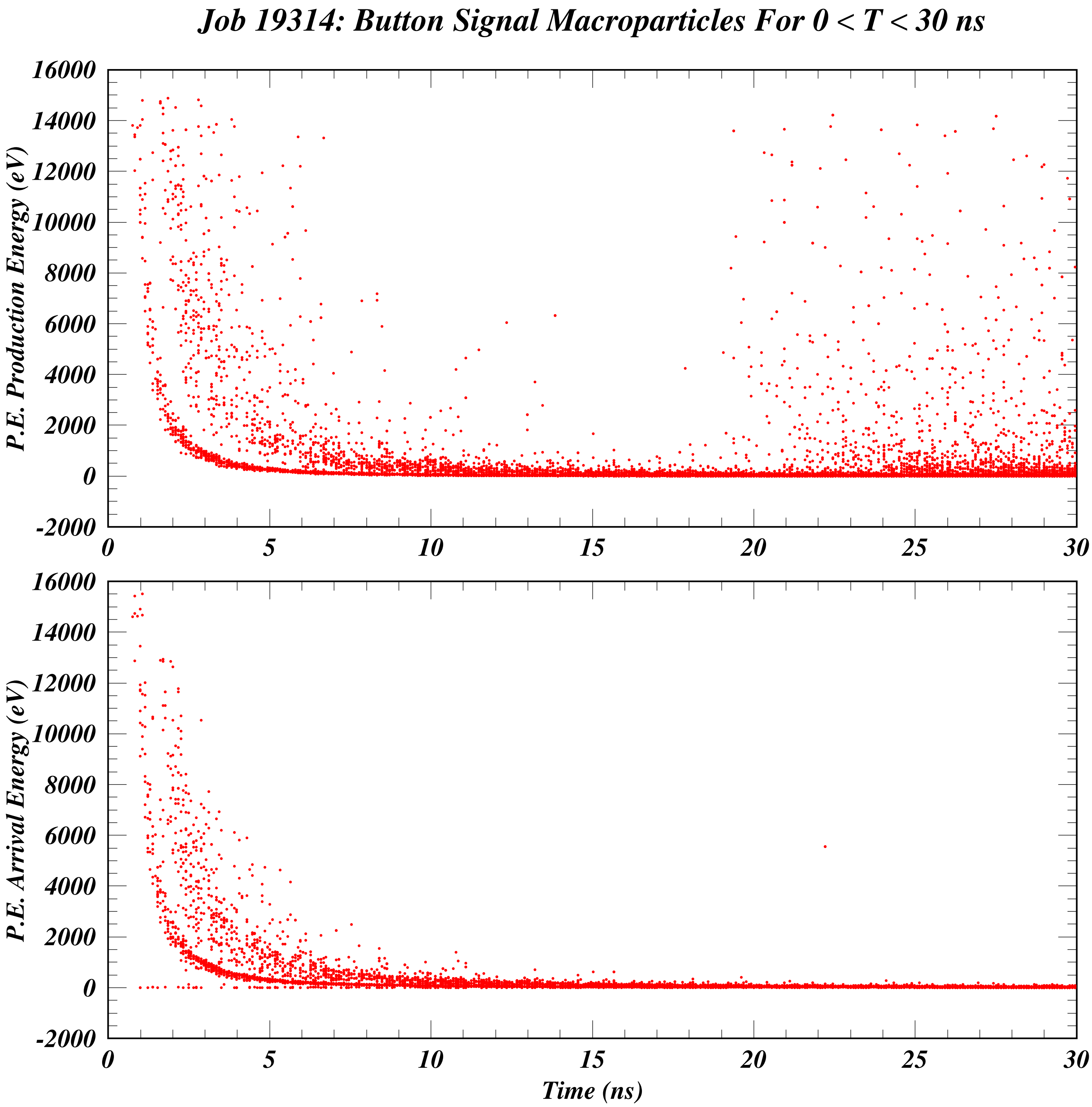
10/11/24 10.50
Job 19314: Button Signal Macroparticles For 0 < T < 30 ns
Number of Signal MPs
0
50
100
150
200
250
300
350
400
0
5
10
15
20
25
30
Avg Signal MP Charge (1000 e)
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0
5
10
15
20
25
30

10/11/24 10.50

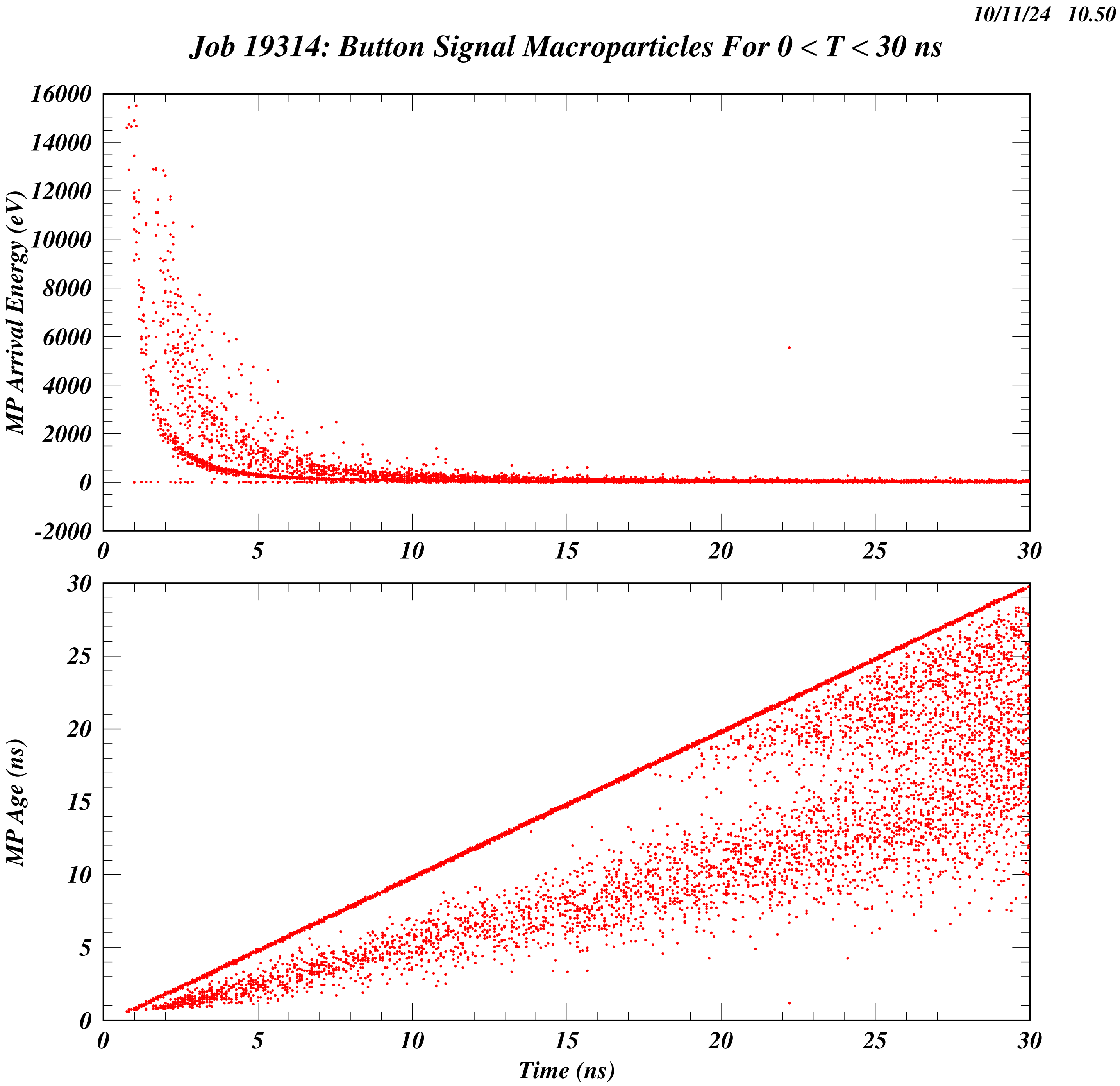
Job 19314: Button Signal Macroparticles For 0 < T < 30 ns

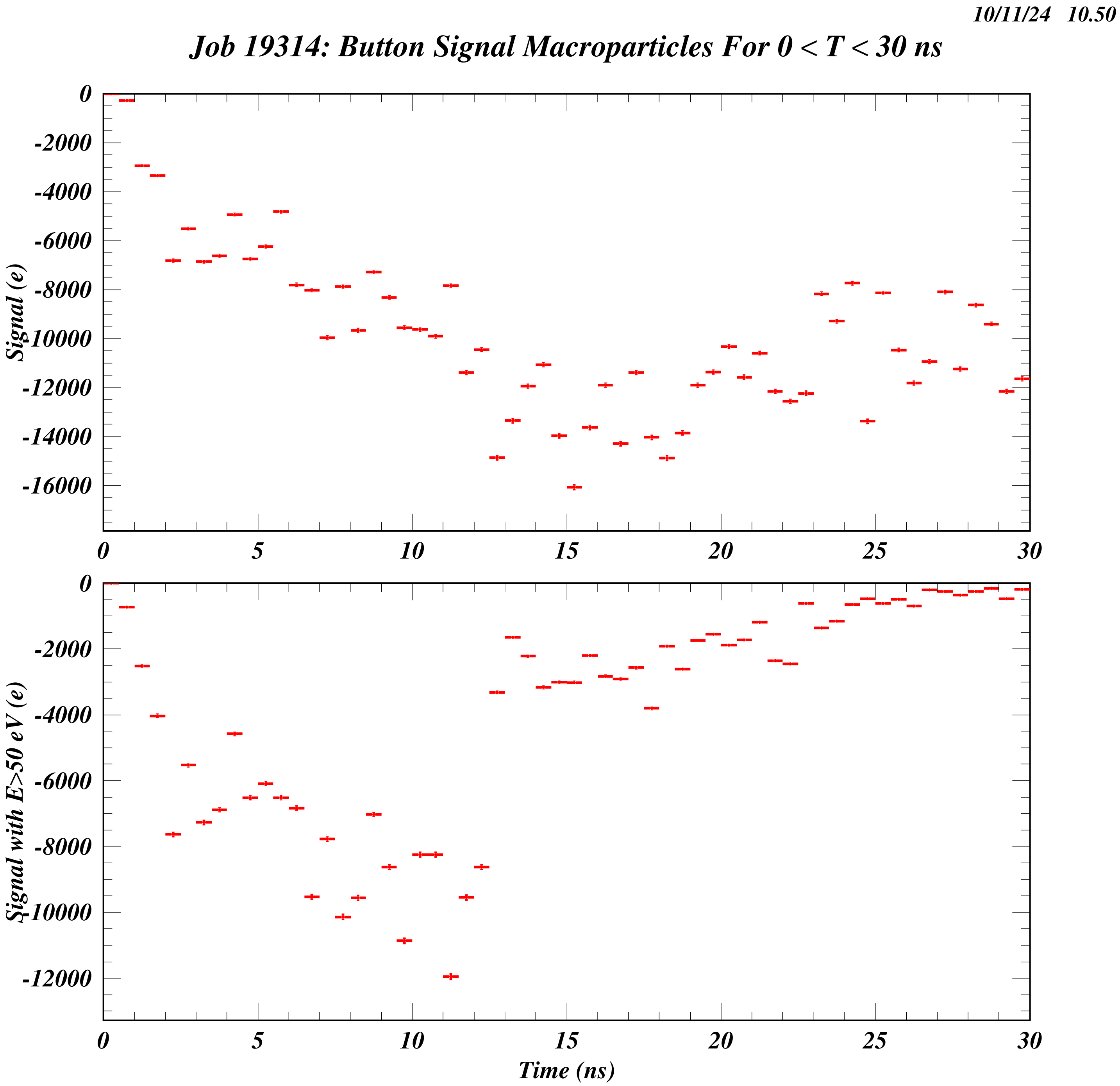


10/11/24 10.50



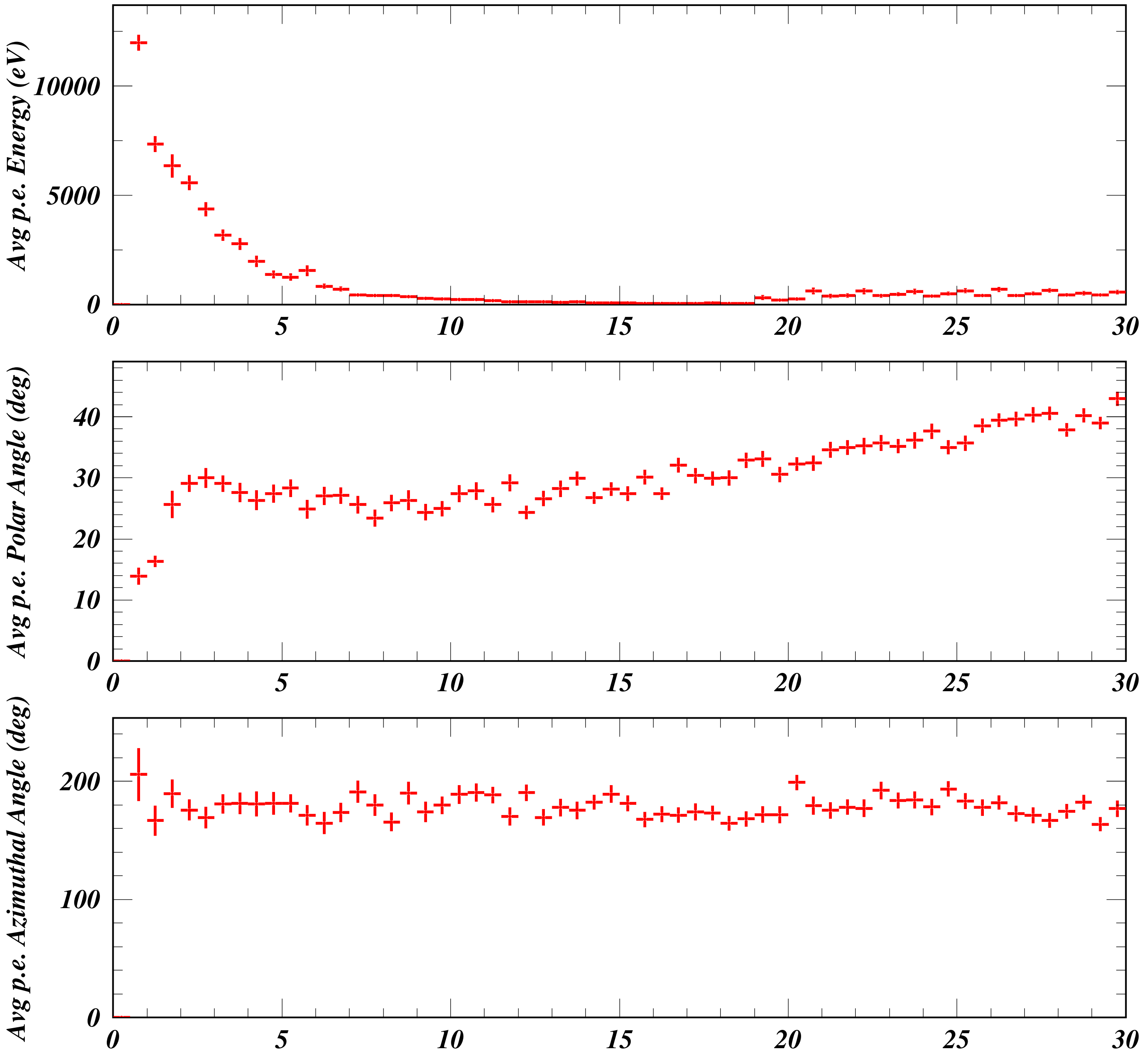
Job 19314: Button Signal Macroparticles For 0 < T < 30 ns
P.E. Production Energy (eV)
P.E. Arrival Energy (eV)
Time (ns)
16000
14000
12000
10000
8000
6000
4000
2000
0
-2000
0
5
10
15
20
25
30

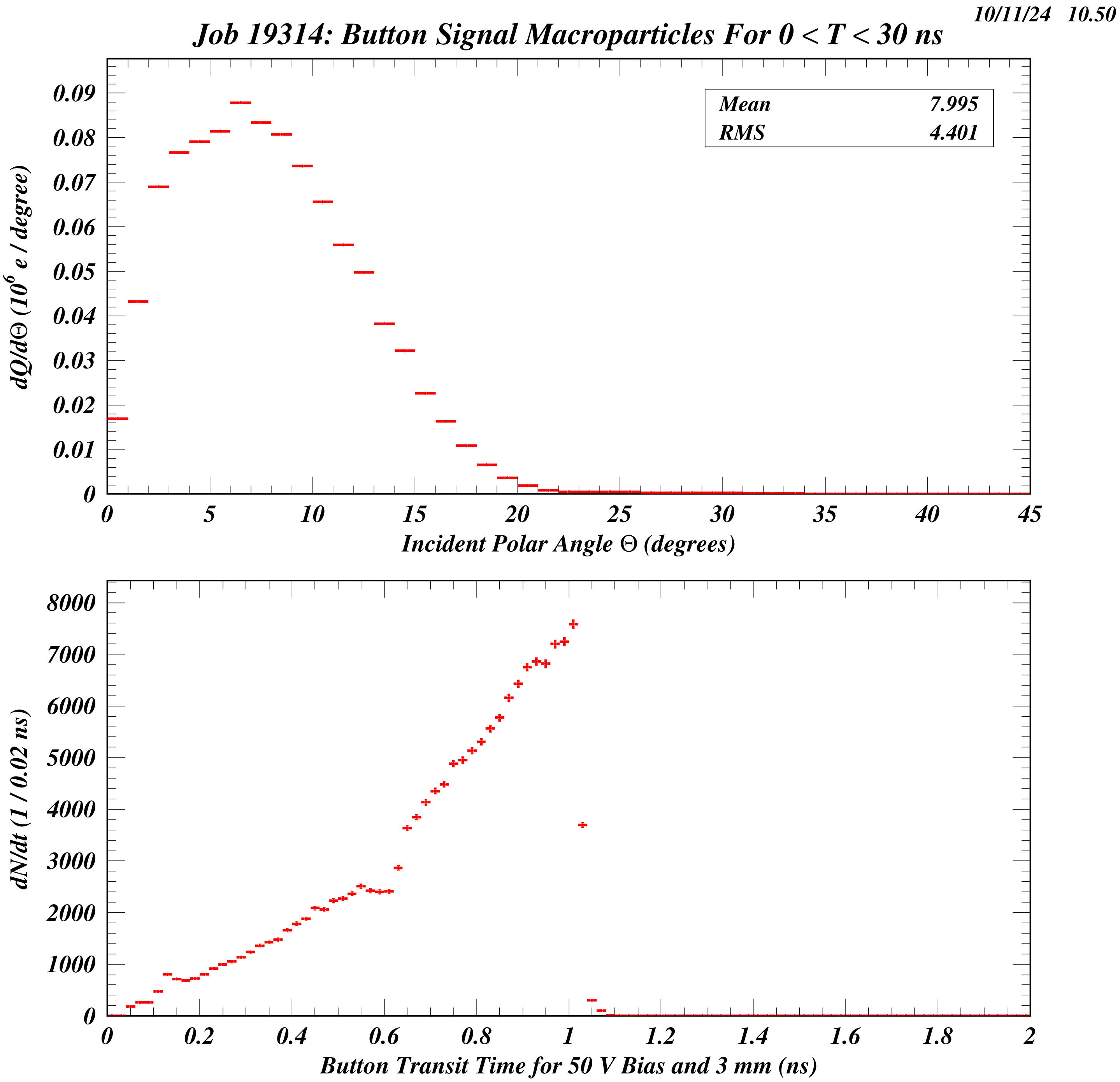

10/11/24 10.50
Job 19314: Button Signal Macroparticles For 0 < T < 30 ns
MP Arrival Energy (eV)
16000
14000
12000
10000
8000
6000
4000
2000
0
-2000
0
5
10
15
20
25
30
MP Age (ns)
30
25
20
15
10
5
0
Time (ns)


10/11/24 10.50
Job 19314: Button Signal Macroparticles For 0 < T < 30 ns
Signal (e)
0
-2000
-4000
-6000
-8000
-10000
-12000
-14000
-16000
0
5
10
15
20
25
30
Signal with E>50 eV (e)
0
-2000
-4000
-6000
-8000
-10000
-12000
0
5
10
15
20
25
30
Time (ns)

10/11/24 10.50

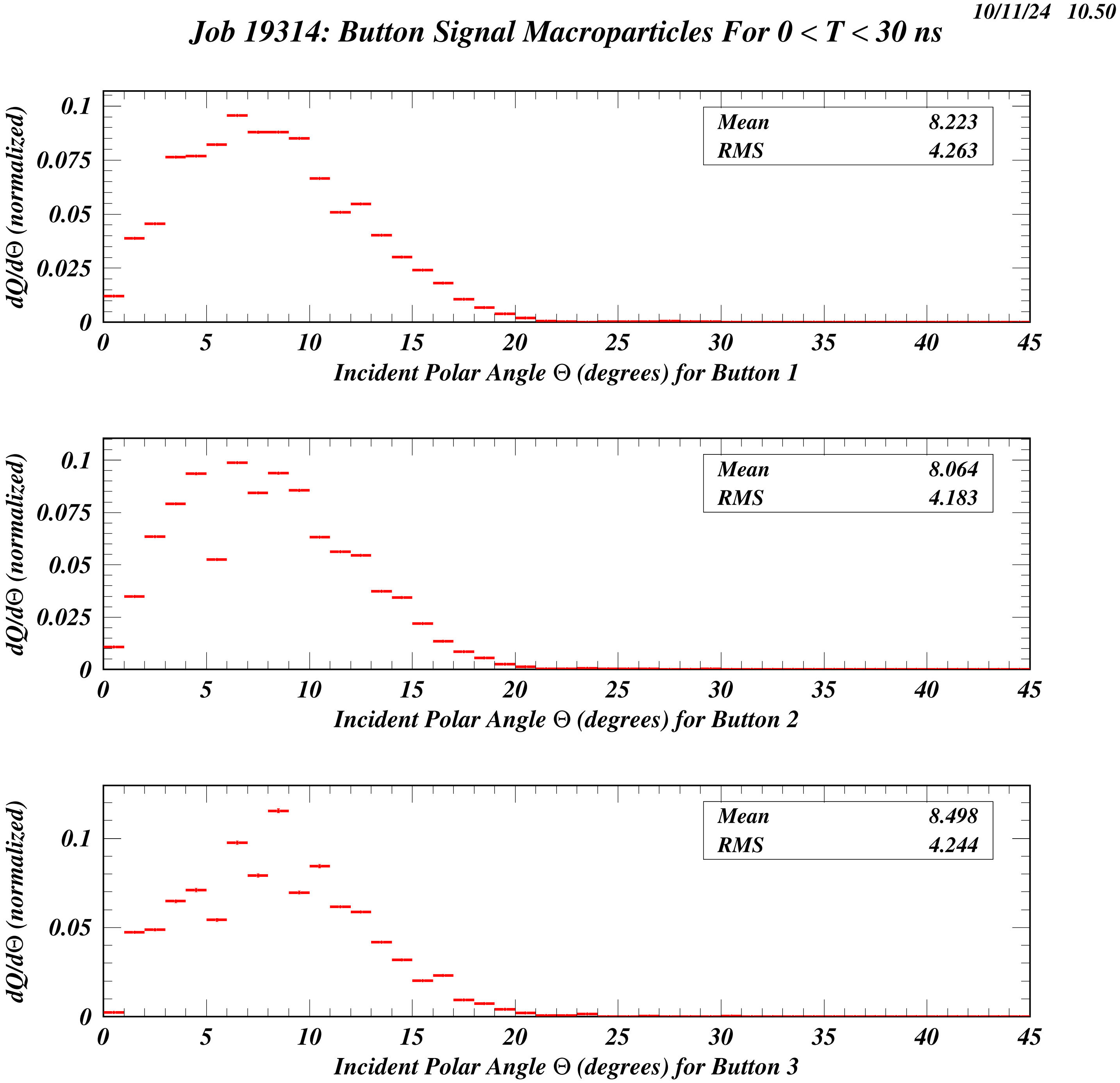
Job 19314: Button Signal Macroparticles For 0 < T < 30 ns

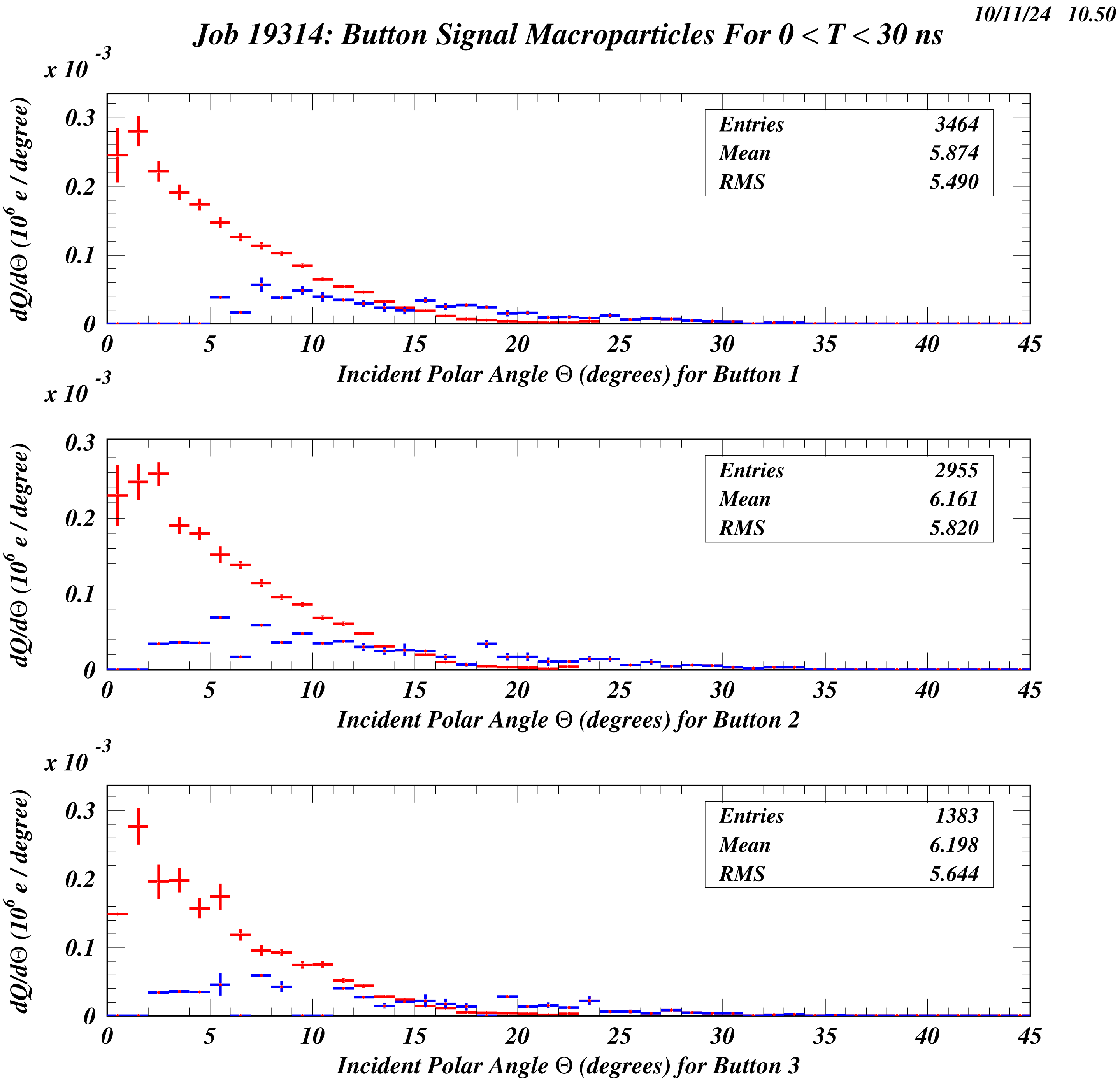




10/11/24 10.50
Job 19314: Button Signal Macroparticles For 0 < T < 30 ns
Mean 7.995
RMS 4.401
dQ/dΘ (10^6 e / degree)
0 0.01 0.02 0.03 0.04 0.05 0.06 0.07 0.08 0.09
0 5 10 15 20 25 30 35 40 45
Incident Polar Angle Θ (degrees)
dN/dt (1 / 0.02 ns)
0 1000 2000 3000 4000 5000 6000 7000 8000
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2
Button Transit Time for 50 V Bias and 3 mm (ns)

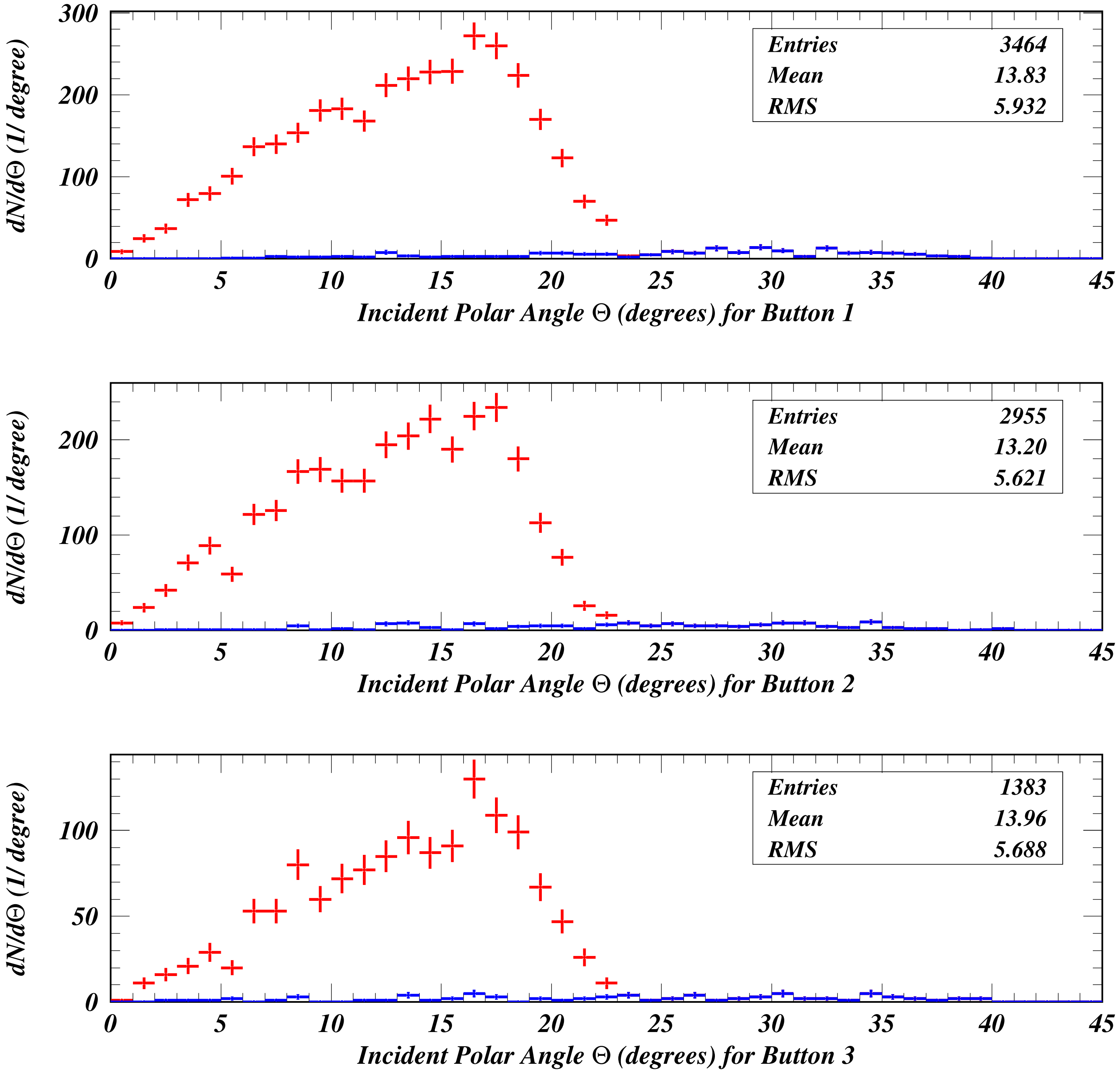
10/11/24 10.50


Job 19314: Button Signal Macroparticles For 0 < T < 30 ns
dQ/dΘ (normalized)
Mean 8.223
RMS 4.263
Incident Polar Angle Θ (degrees) for Button 1
dQ/dΘ (normalized)
Mean 8.064
RMS 4.183
Incident Polar Angle Θ (degrees) for Button 2
dQ/dΘ (normalized)
Mean 8.498
RMS 4.244
Incident Polar Angle Θ (degrees) for Button 3


10/11/24 10.50
Job 19314: Button Signal Macroparticles For 0 < T < 30 ns
x 10^-3
dQ/dΘ (10^6 e / degree)
Entries 3464
Mean 5.874
RMS 5.490
Incident Polar Angle Θ (degrees) for Button 1
Entries 2955
Mean 6.161
RMS 5.820
Incident Polar Angle Θ (degrees) for Button 2
Entries 1383
Mean 6.198
RMS 5.644
Incident Polar Angle Θ (degrees) for Button 3

10/11/24 10.50

Job 19314: Button Signal Macroparticles For 0 < T < 30 ns



10/11/24 10.50

Job 19314: Button Signal Macroparticles For 0 < T < 30 ns