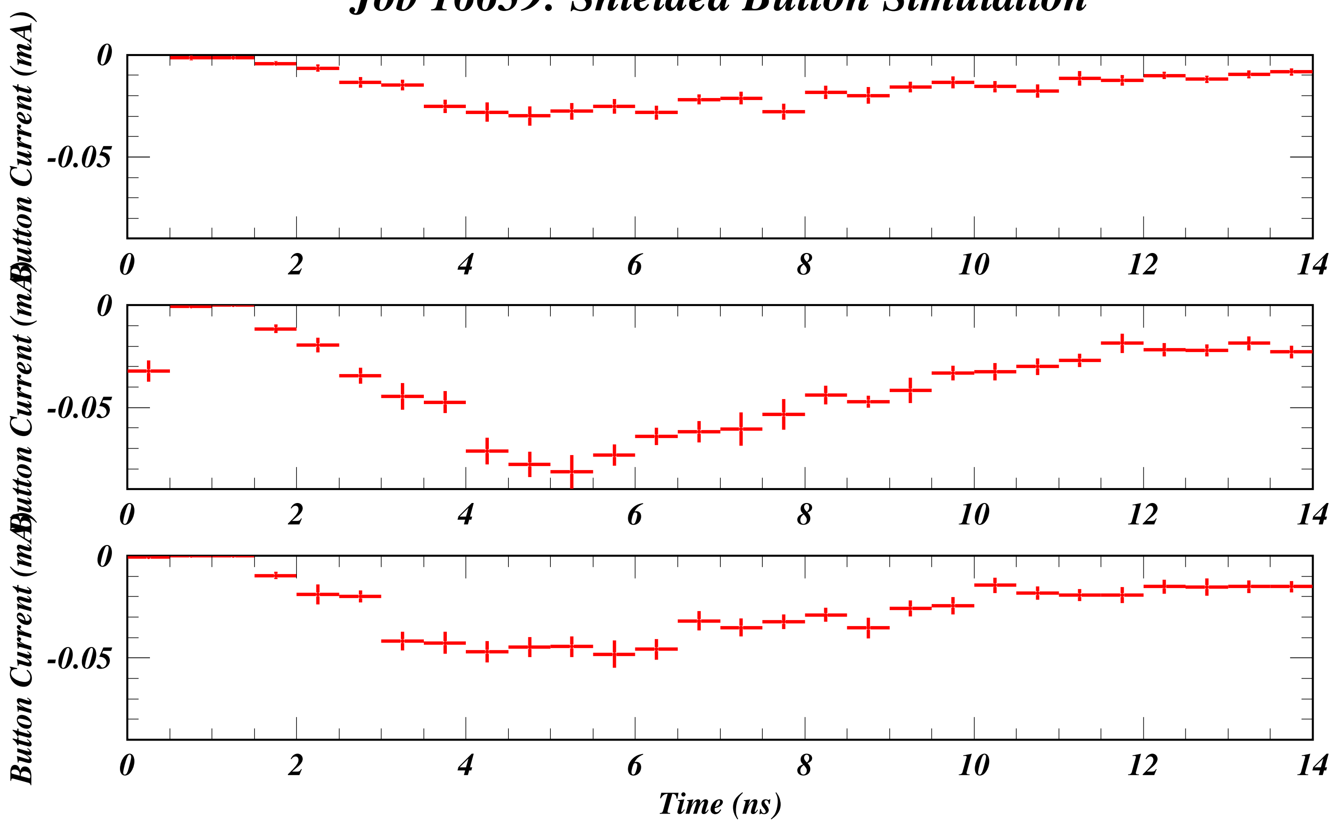
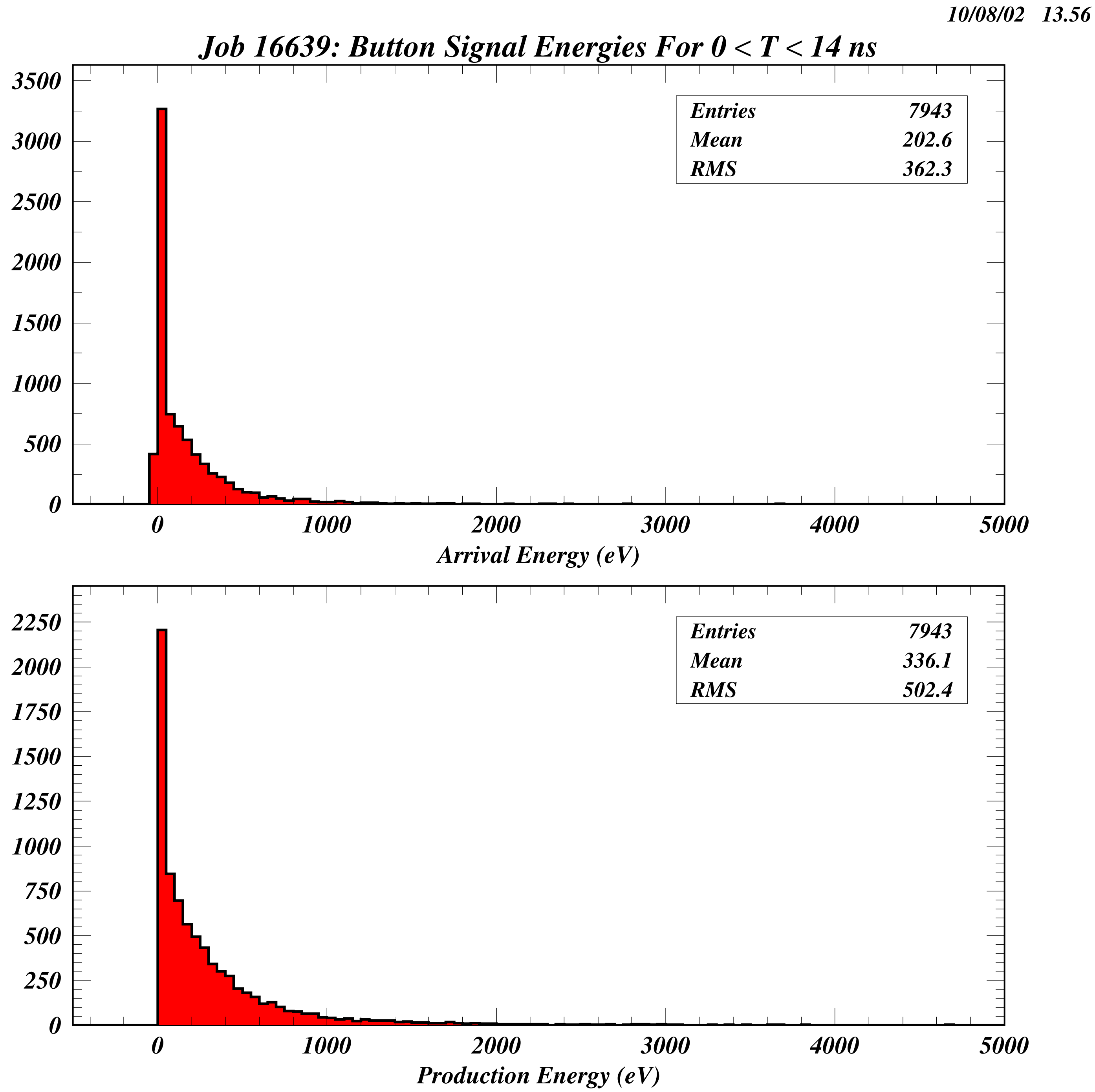
10/08/02 13.56

Job 16639: Shielded Button Simulation




10/08/02 13.56
Job 16639: Button Signal Energies For 0 < T < 14 ns
Entries 7943
Mean 202.6
RMS 362.3
Arrival Energy (eV)
Entries 7943
Mean 336.1
RMS 502.4
Production Energy (eV)

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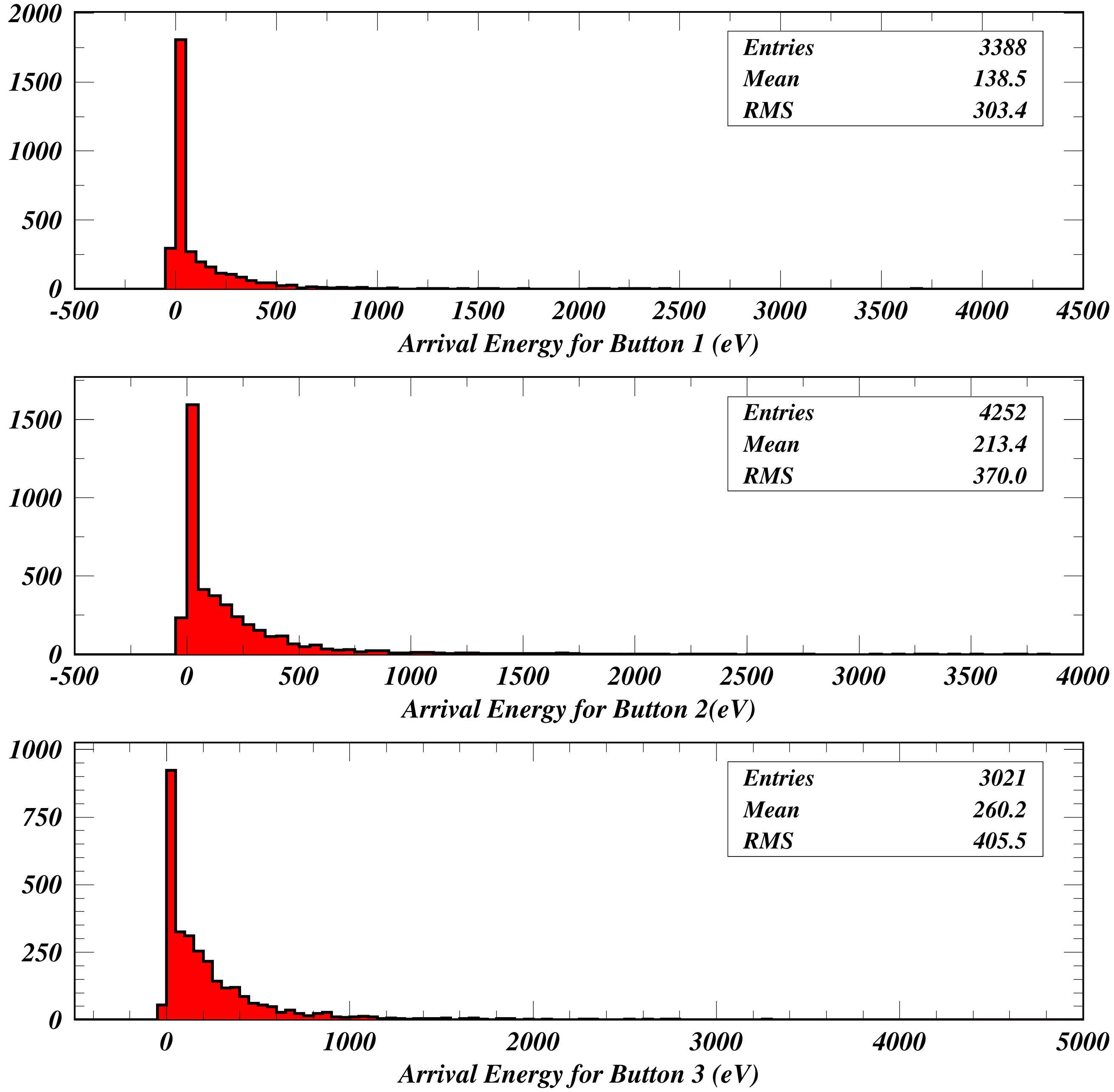
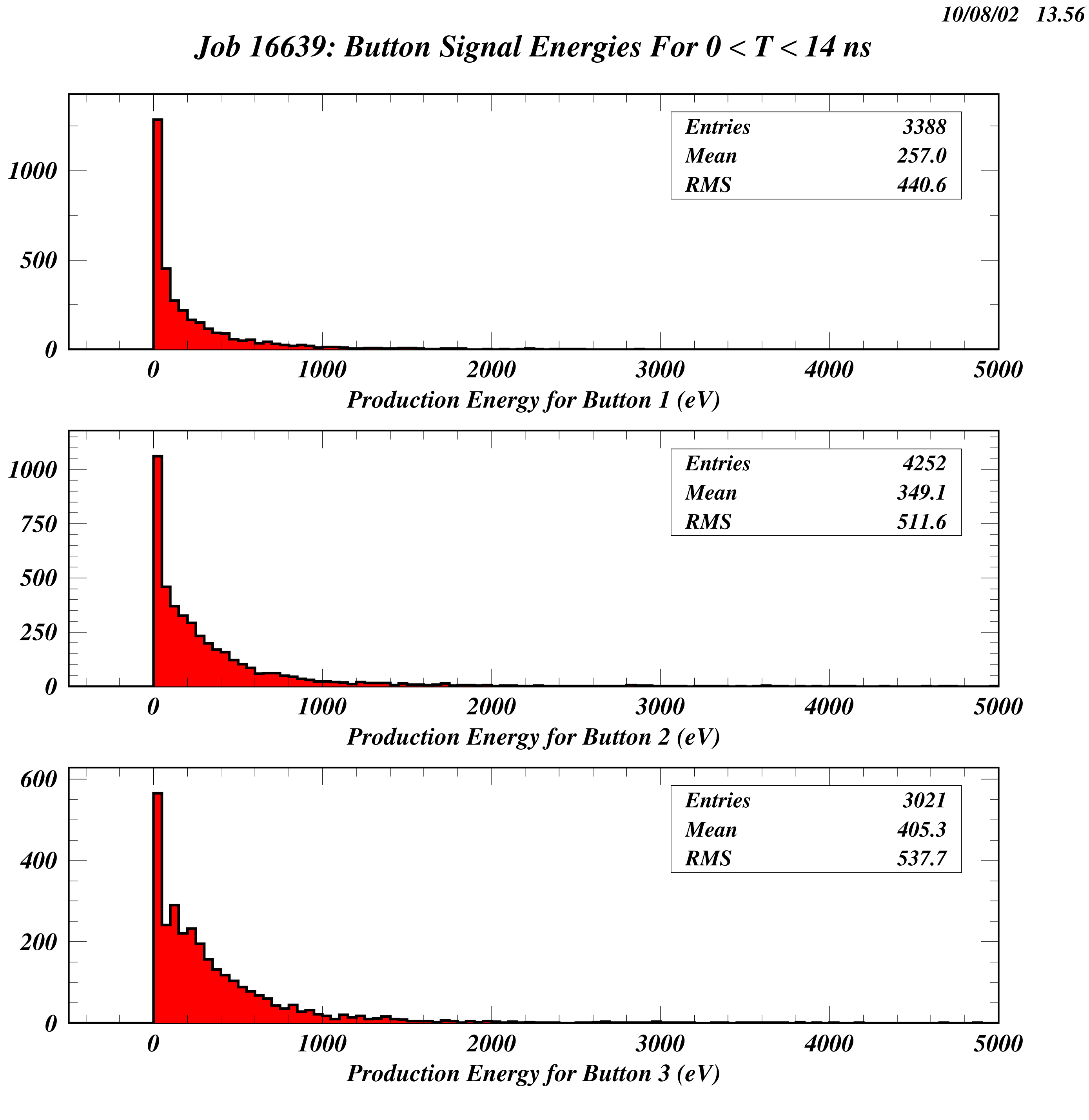
Job 16639: Button Signal Energies For 0 < T < 14 ns




10/08/02 13.56
Job 16639: Button Signal Energies For 0 < T < 14 ns
Entries 3388
Mean 257.0
RMS 440.6
1000
500
0
0
1000
2000
3000
4000
5000
Production Energy for Button 1 (eV)
Entries 4252
Mean 349.1
RMS 511.6
1000
750
500
250
0
0
1000
2000
3000
4000
5000
Production Energy for Button 2 (eV)
Entries 3021
Mean 405.3
RMS 537.7
600
400
200
0
0
1000
2000
3000
4000
5000
Production Energy for Button 3 (eV)

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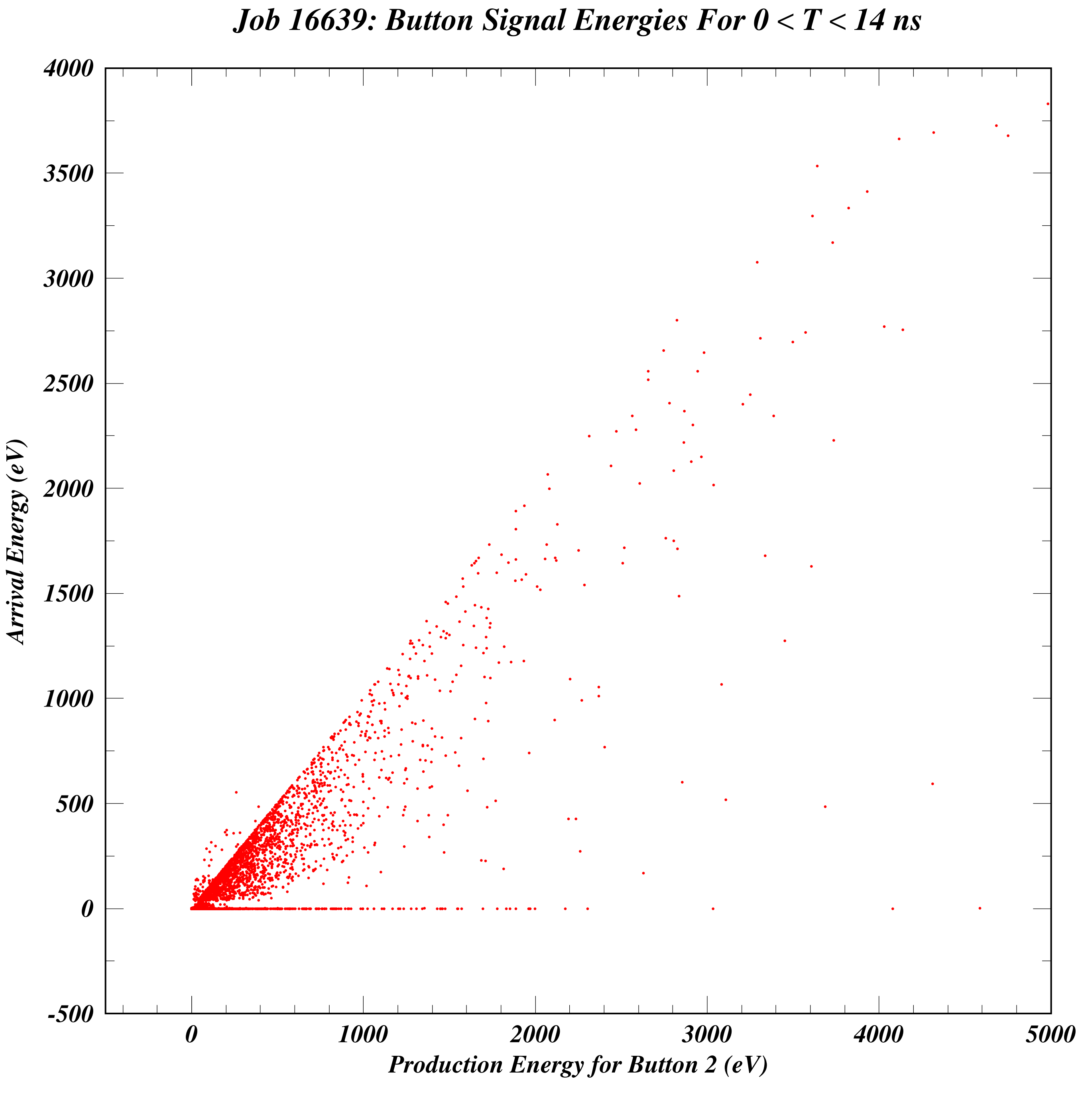

Job 16639: Button Signal Energies For 0 < T < 14 ns
Arrival Energy (eV)
Production Energy for Button 2 (eV)
4000
3500
3000
2500
2000
1500
1000
500
0
-500
0
1000
2000
3000
4000
5000

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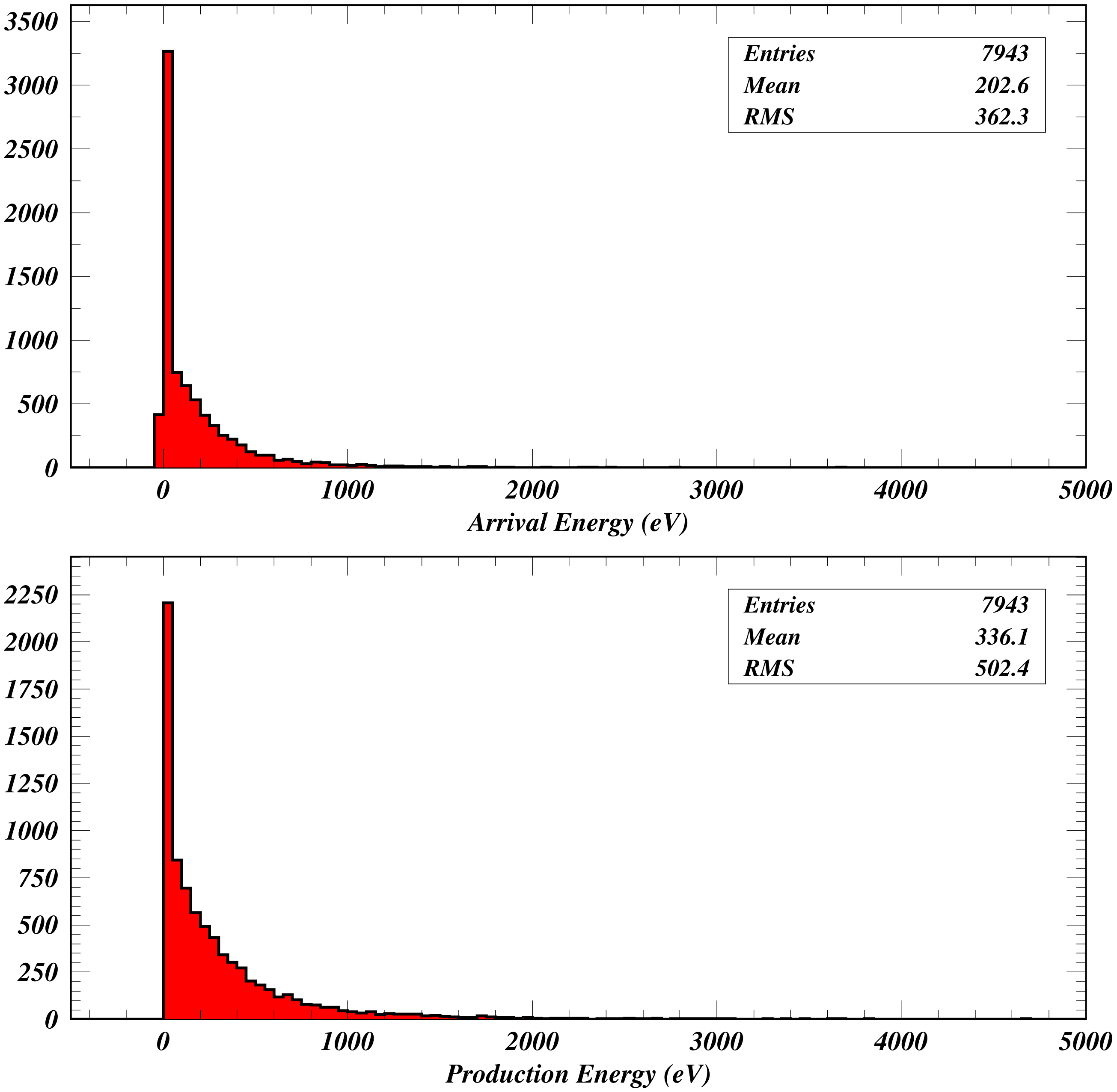
Job 16639: Button Signal Energies For 0 < T < 14 ns: Primaries Only



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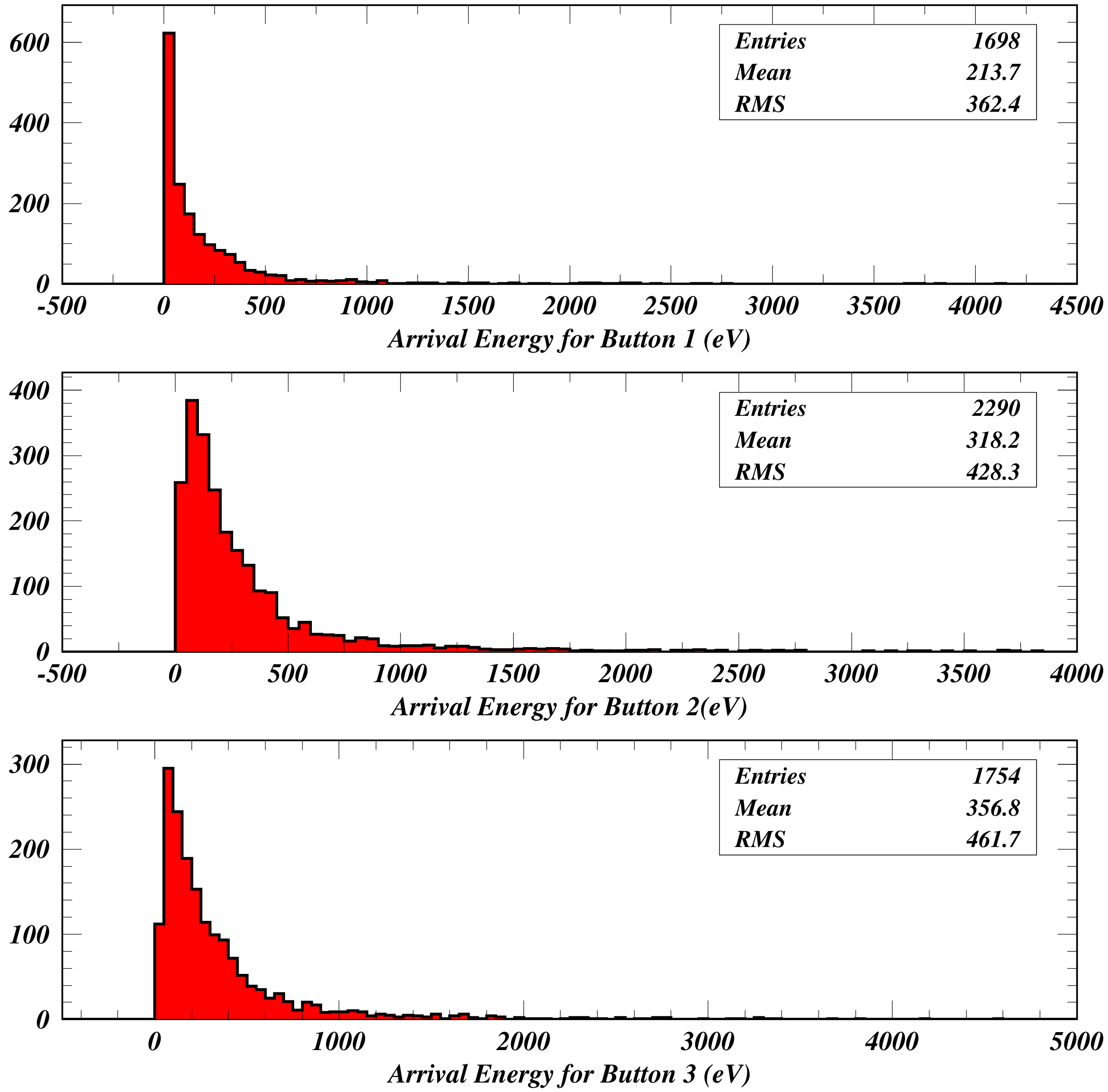
Job 16639: Button Signal Energies For 0 < T < 14 ns: Primaries Only



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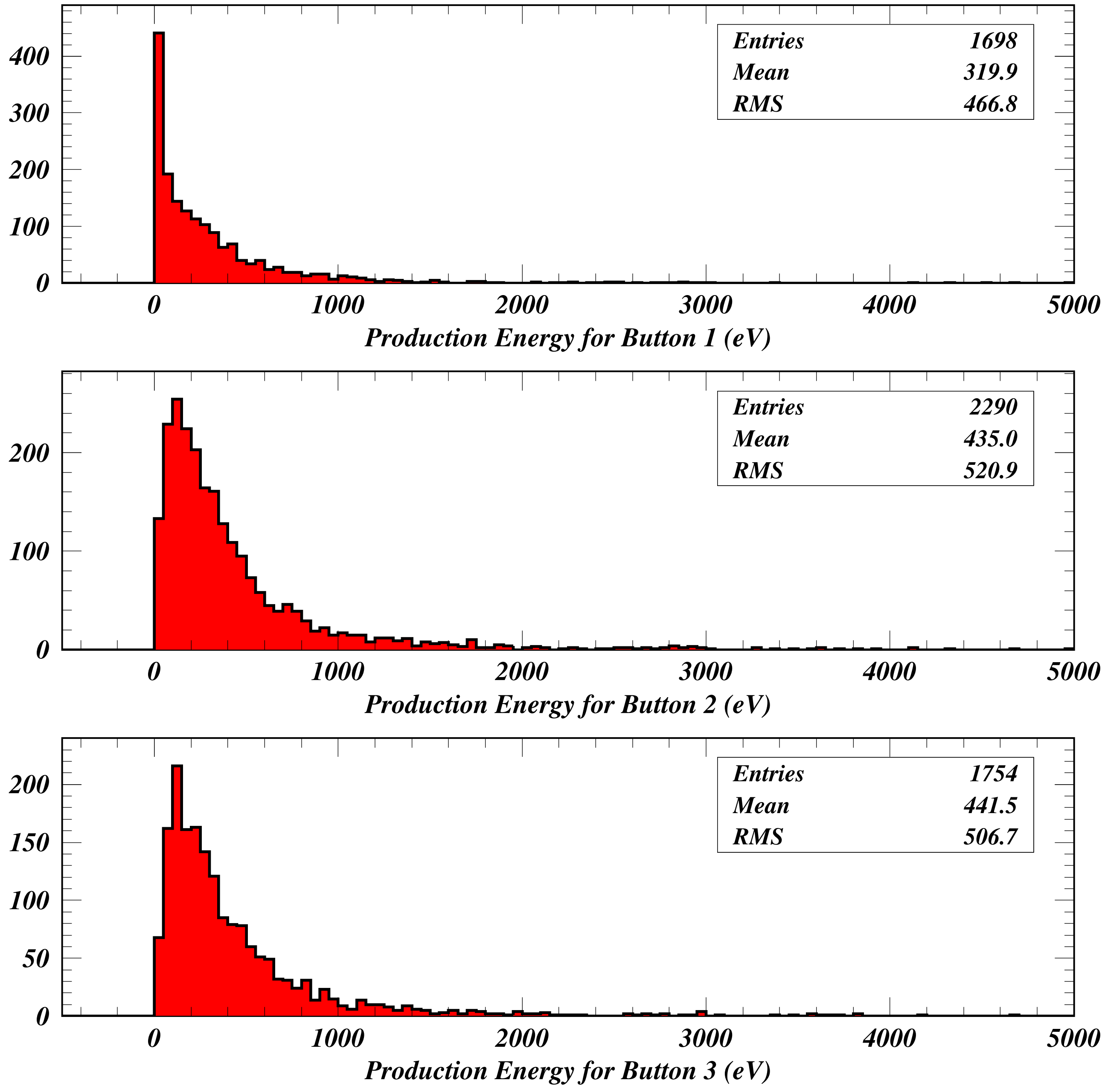
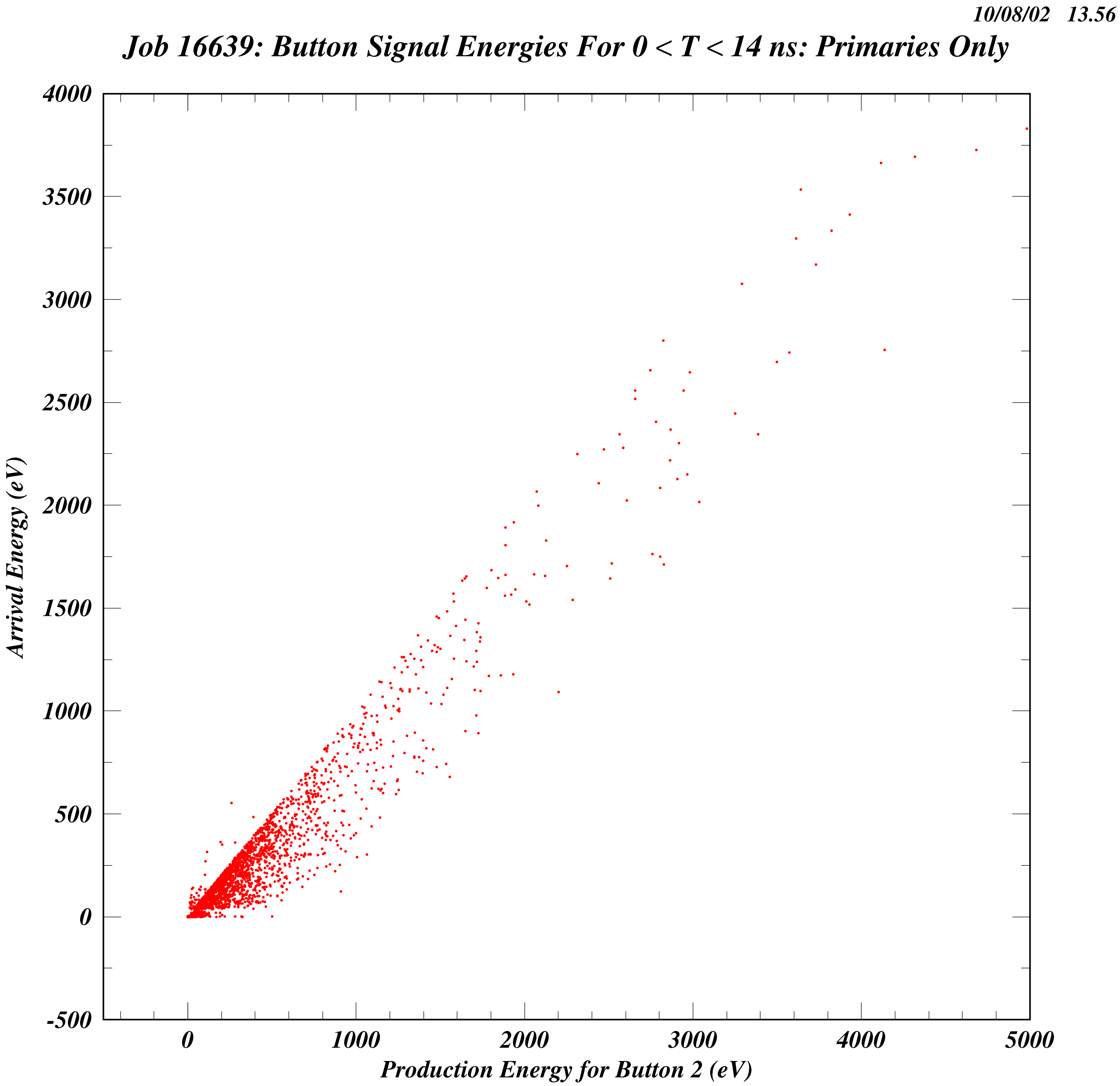
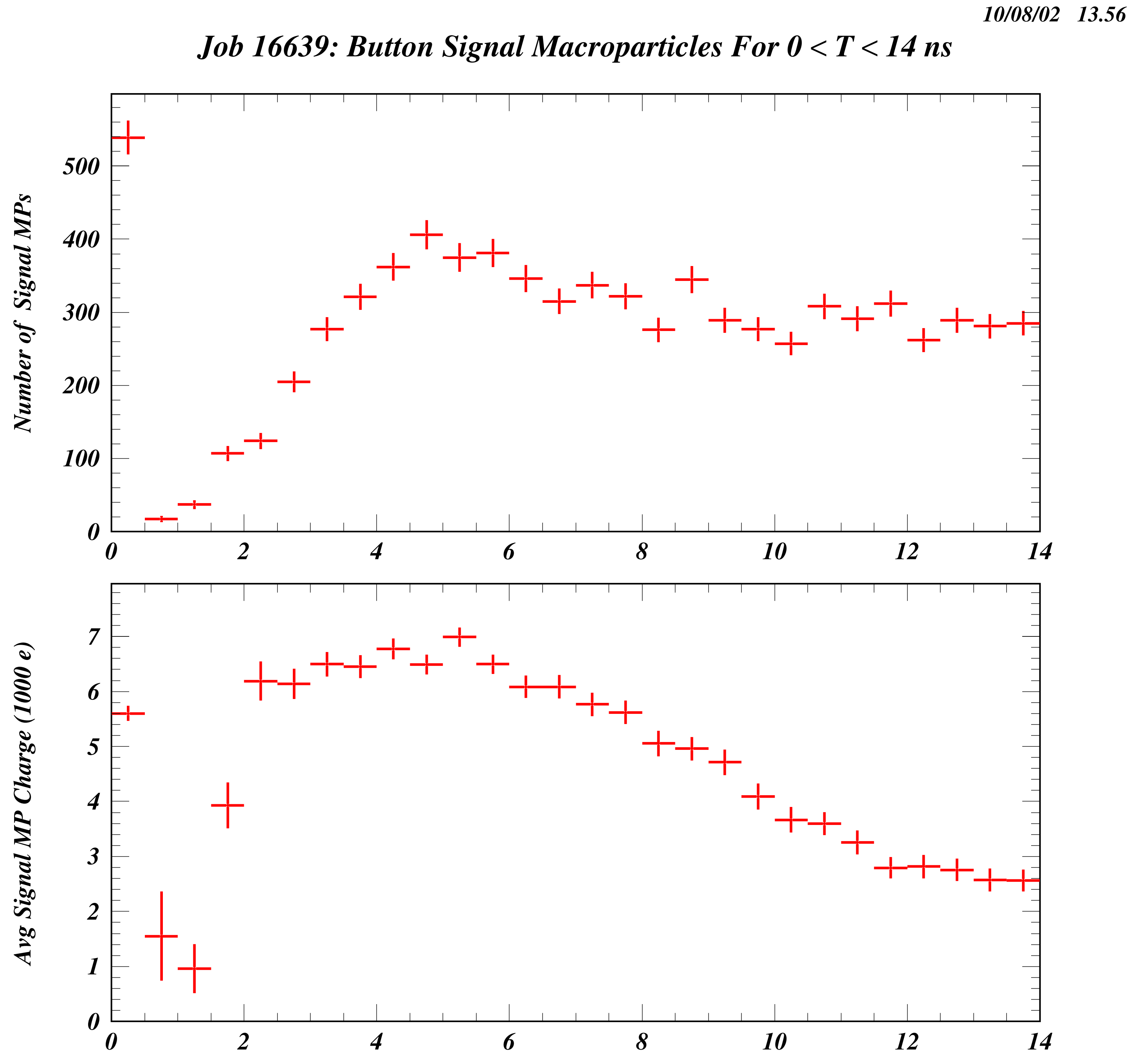
Job 16639: Button Signal Energies For 0 < T < 14 ns: Primaries Only




10/08/02 13.56
Job 16639: Button Signal Energies For 0 < T < 14 ns: Primaries Only
Arrival Energy (eV)
4000
3500
3000
2500
2000
1500
1000
500
0
-500
0
1000
2000
3000
4000
5000
Production Energy for Button 2 (eV)


10/08/02 13.56
Job 16639: Button Signal Macroparticles For 0 < T < 14 ns
Number of Signal MPs
0
100
200
300
400
500
0
2
4
6
8
10
12
14
Avg Signal MP Charge (1000 e)
0
1
2
3
4
5
6
7

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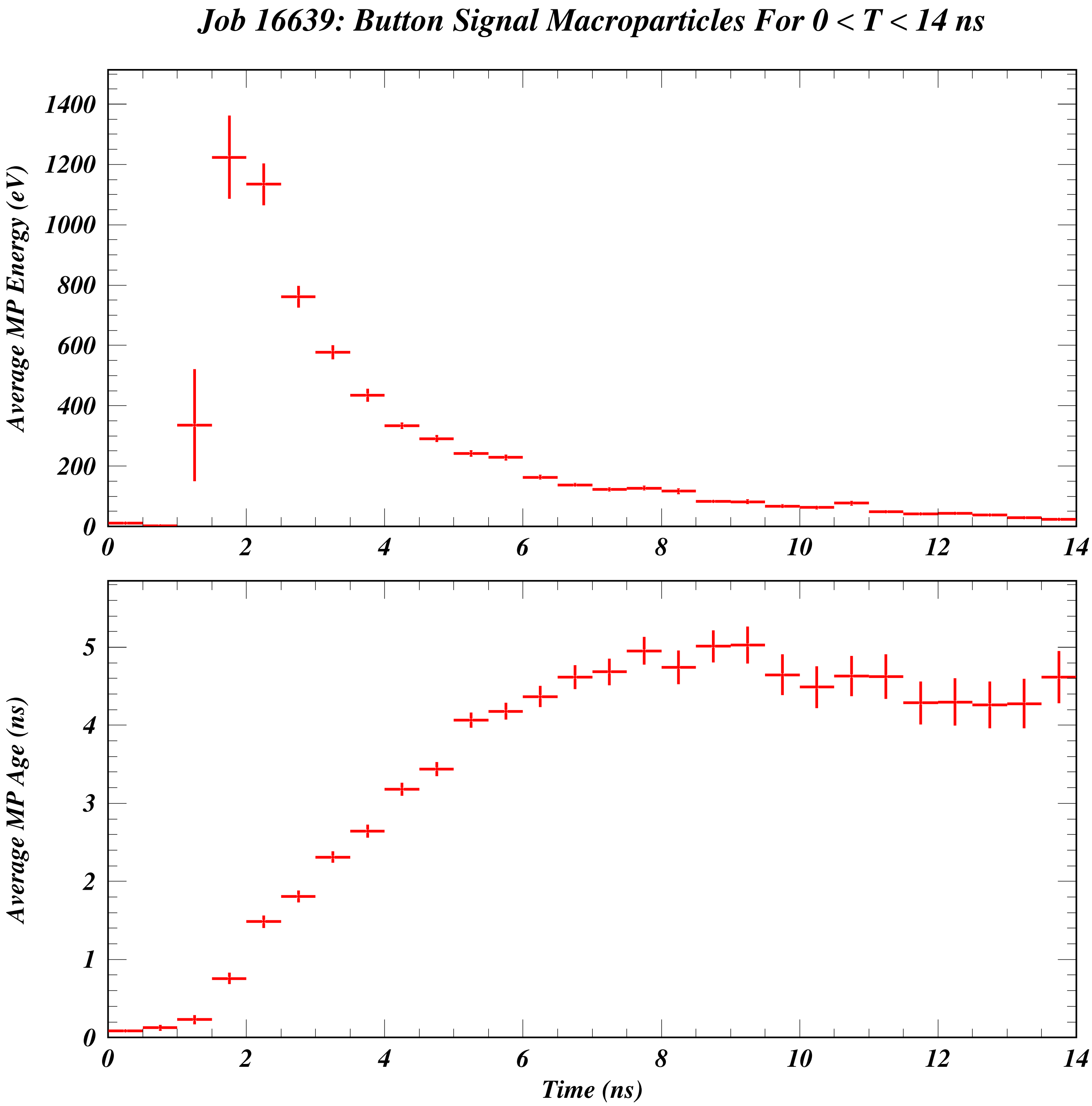
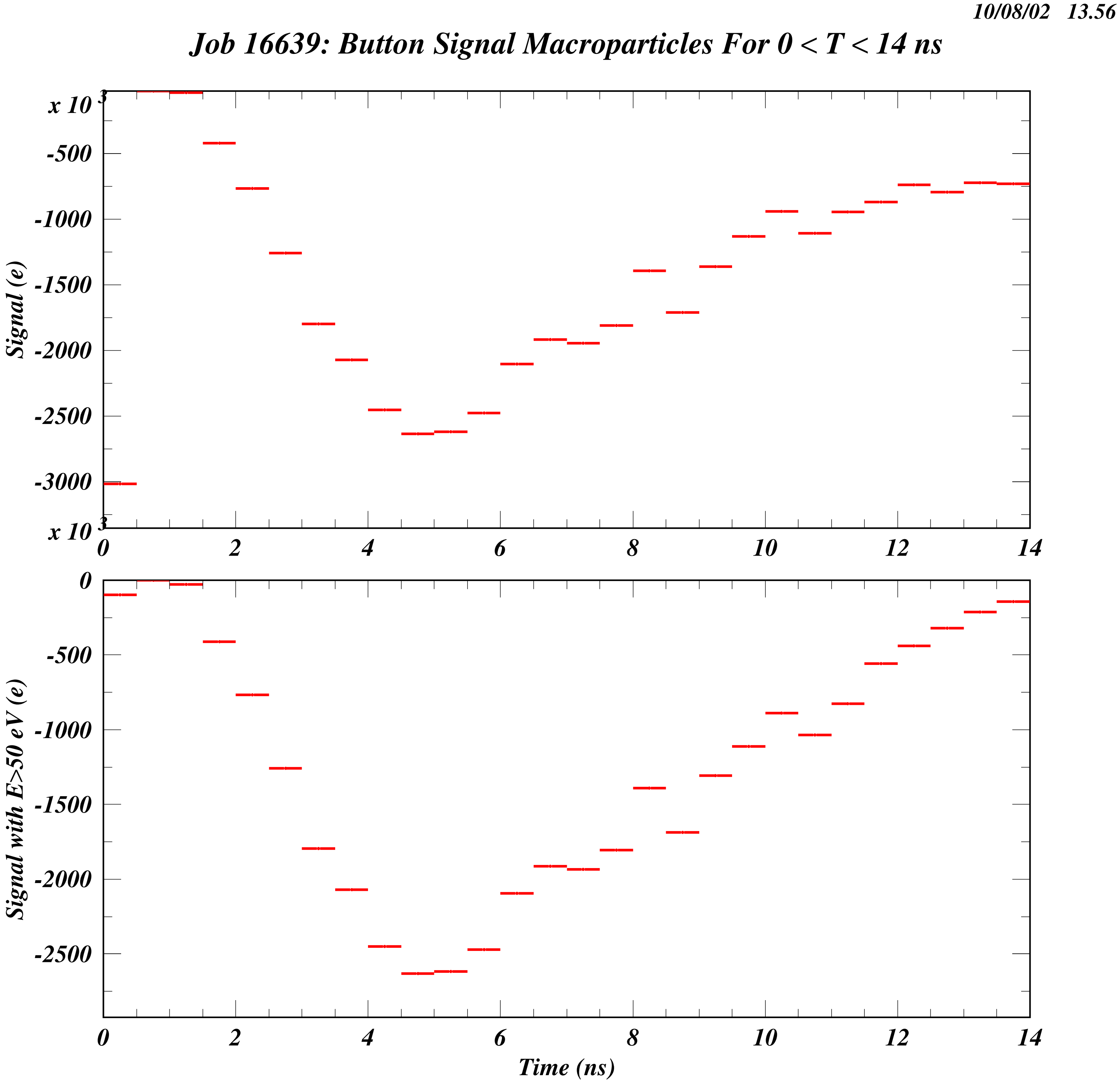


Job 16639: Button Signal Macroparticles For 0 < T < 14 ns
Average MP Energy (eV)
1400
1200
1000
800
600
400
200
0
0
2
4
6
8
10
12
14
Average MP Age (ns)
5
4
3
2
1
0
Time (ns)


10/08/02 13.56
Job 16639: Button Signal Macroparticles For 0 < T < 14 ns
x 10^3
Signal (e)
-500
-1000
-1500
-2000
-2500
-3000
Signal with E>50 eV (e)
0
Time (ns)
0
2
4
6
8
10
12
14

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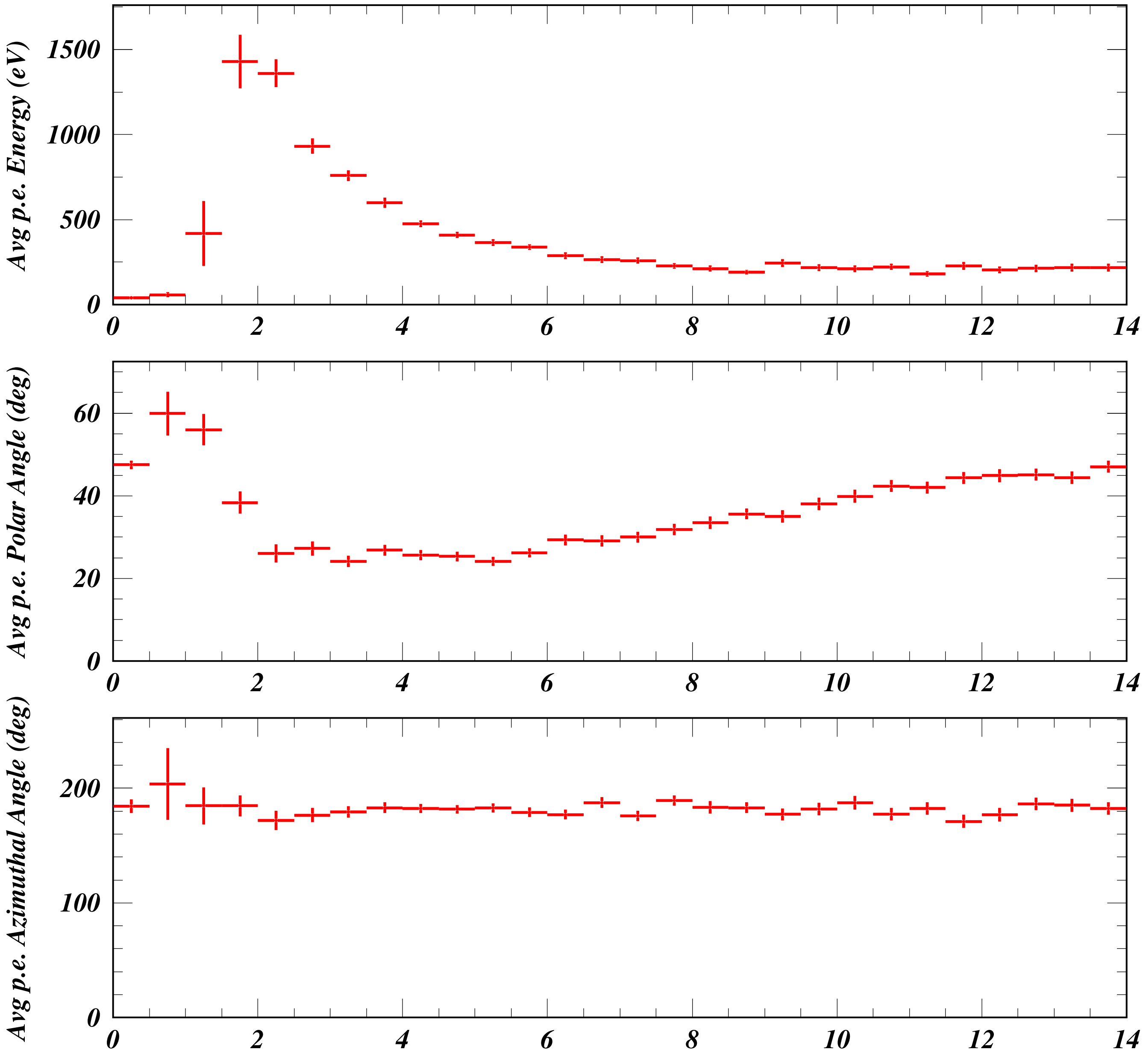
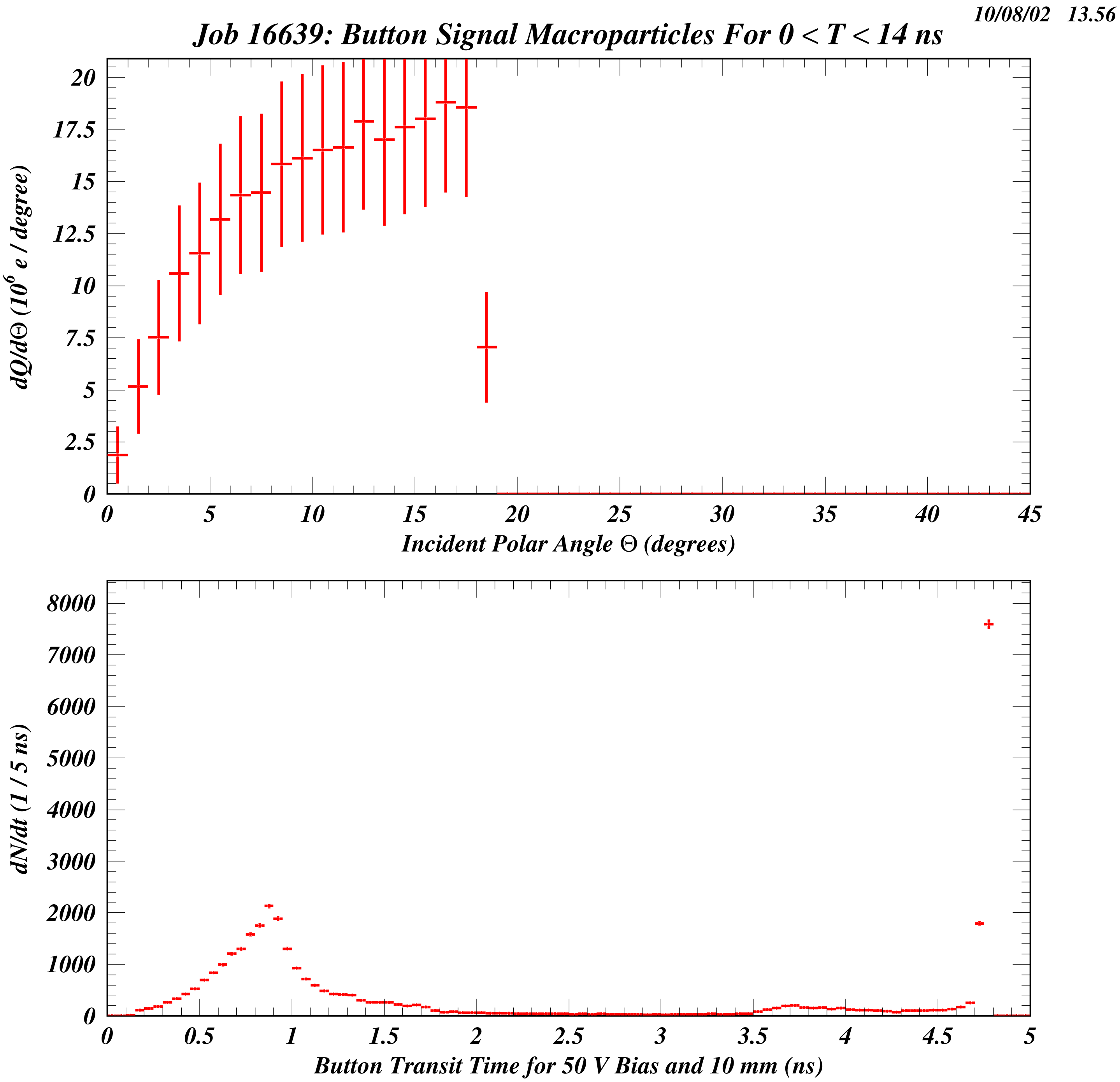
Job 16639: Button Signal Macroparticles For 0 < T < 14 ns




10/08/02 13.56
Job 16639: Button Signal Macroparticles For 0 < T < 14 ns
dQ/dΘ (10^6 e / degree)
0
2.5
5
7.5
10
12.5
15
17.5
20
0
5
10
15
20
25
30
35
40
45
Incident Polar Angle Θ (degrees)
dN/dt (1 / 5 ns)
0
1000
2000
3000
4000
5000
6000
7000
8000
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)

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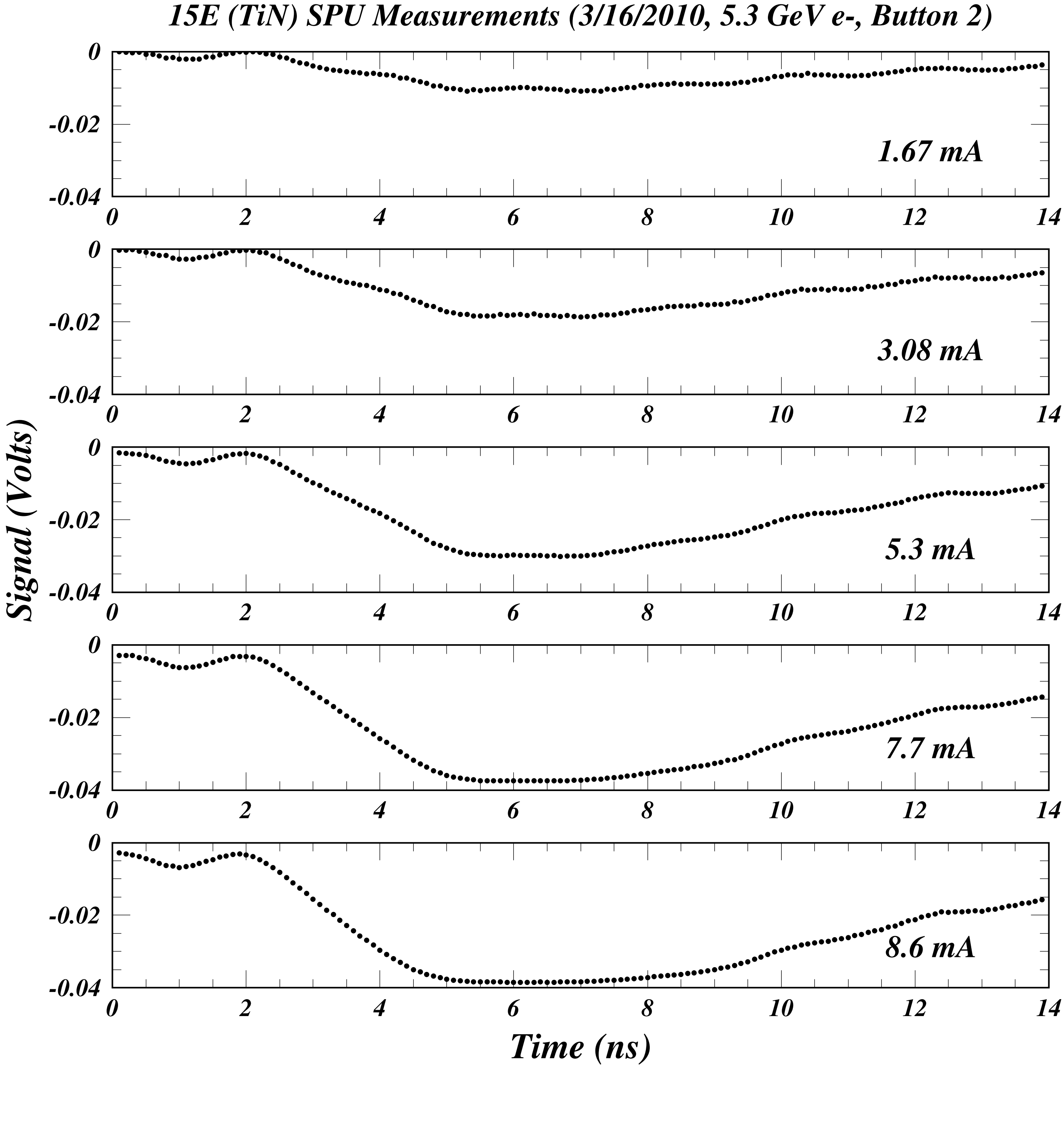
15E (TiN) SPU Measurements (3/16/2010, 5.3 GeV e-, Button 2)
Signal (Volts)
0
-0.02
-0.04
0 2 4 6 8 10 12 14
1.67 mA
3.08 mA
5.3 mA
7.7 mA
8.6 mA
Time (ns)