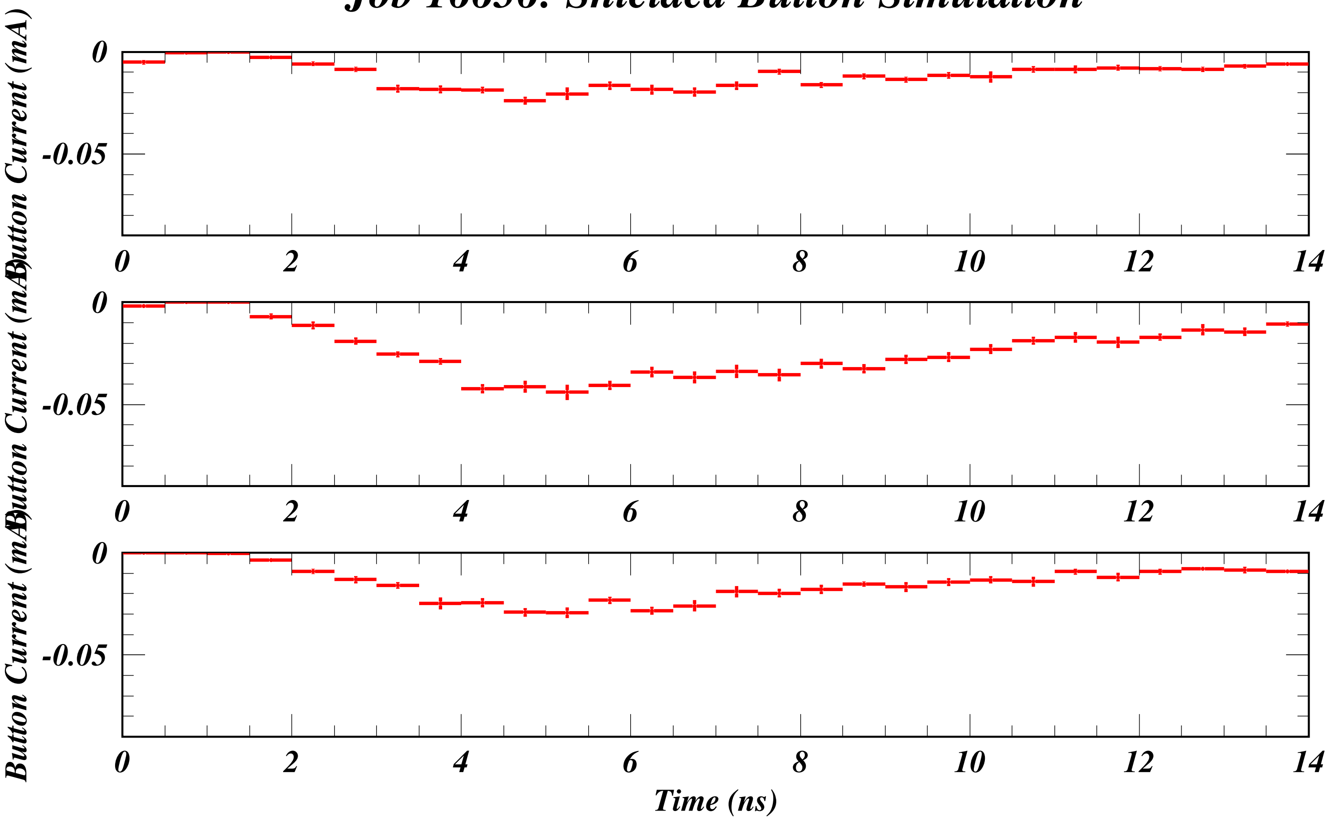
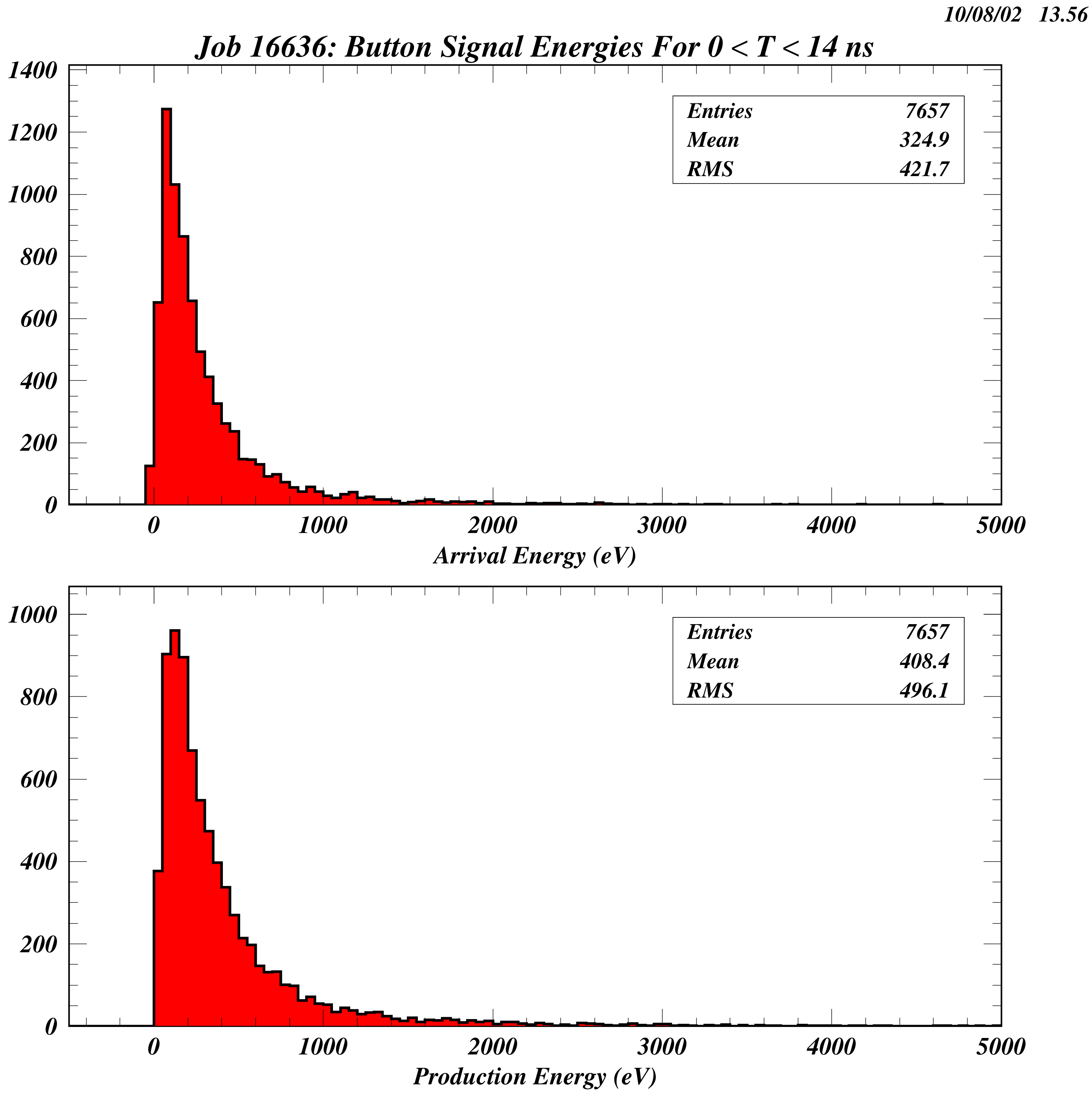
10/08/02 13.56

# Job 16636: Shielded Button Simulation

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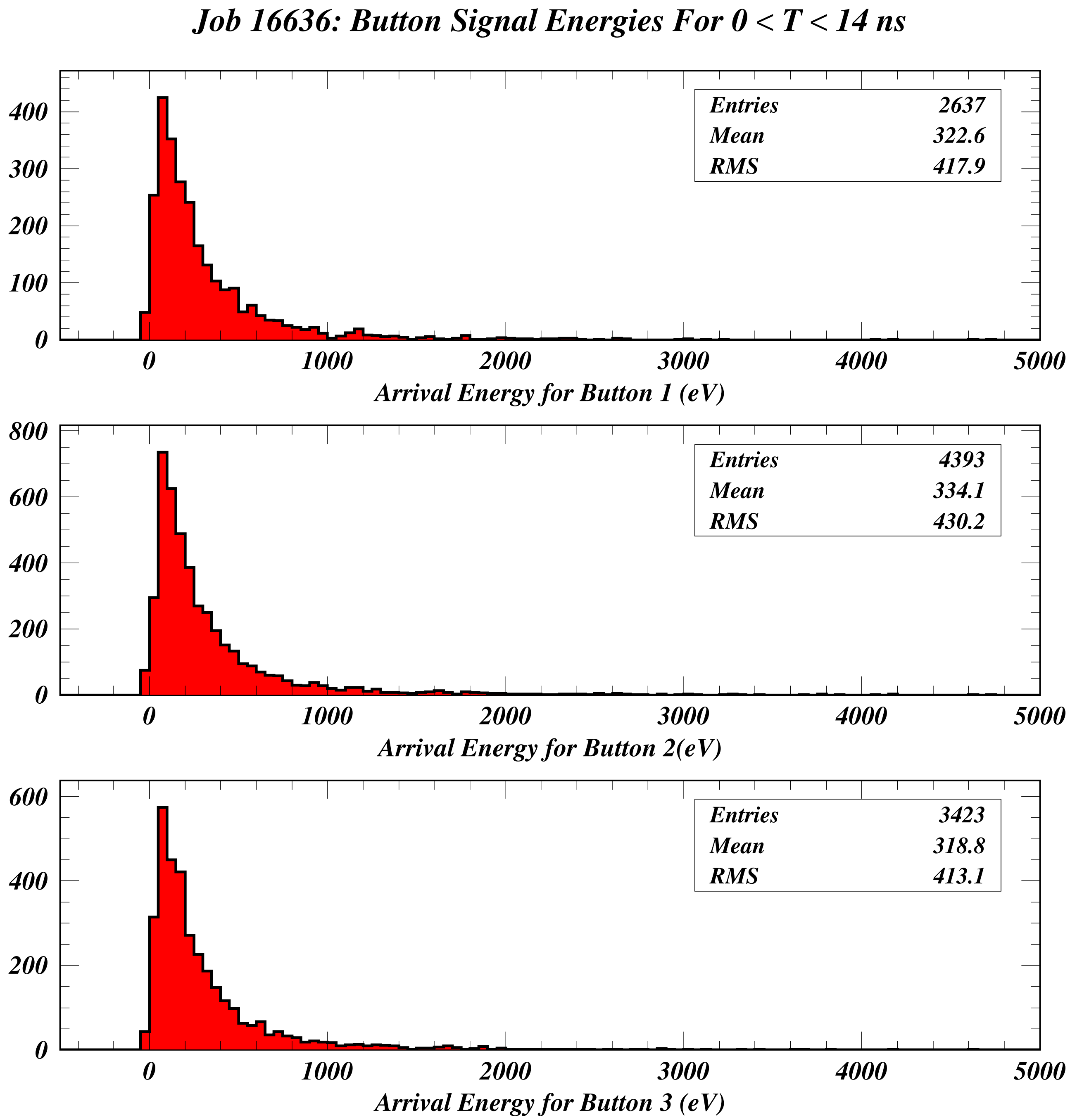
Job 16636: Button Signal Energies For 0 < T < 14 ns
Entries 7657
Mean 324.9
RMS 421.7
1400
1200
1000
800
600
400
200
0
0
1000
2000
3000
4000
5000
Arrival Energy (eV)
Entries 7657
Mean 408.4
RMS 496.1
1000
800
600
400
200
0
0
1000
2000
3000
4000
5000
Production Energy (eV)


Job 16636: Button Signal Energies For 0 < T < 14 ns
Entries 2637
Mean 322.6
RMS 417.9
Arrival Energy for Button 1 (eV)
Entries 4393
Mean 334.1
RMS 430.2
Arrival Energy for Button 2(eV)
Entries 3423
Mean 318.8
RMS 413.1
Arrival Energy for Button 3 (eV)

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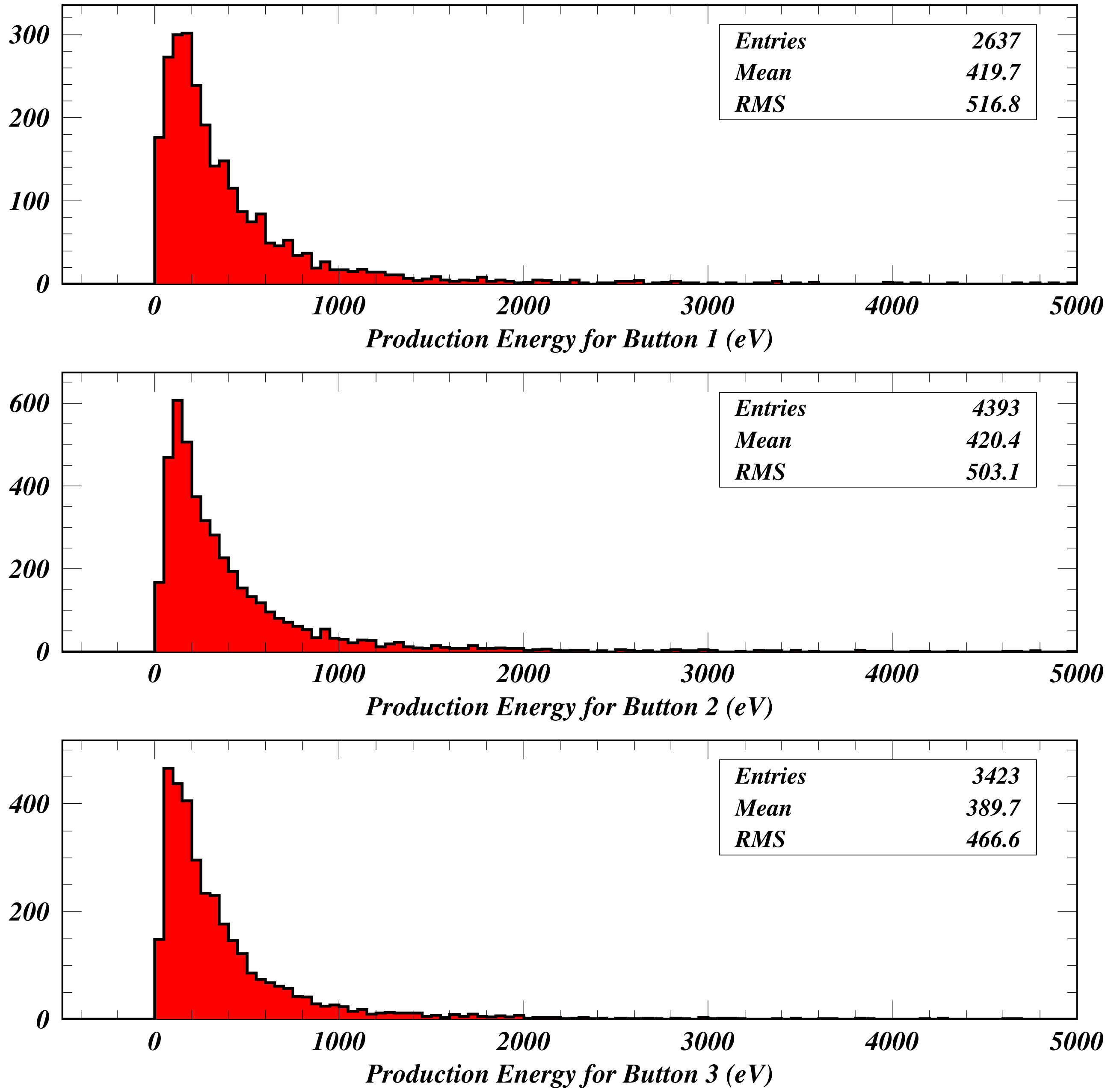
# Job 16636: Button Signal Energies For 0 < T < 14 ns



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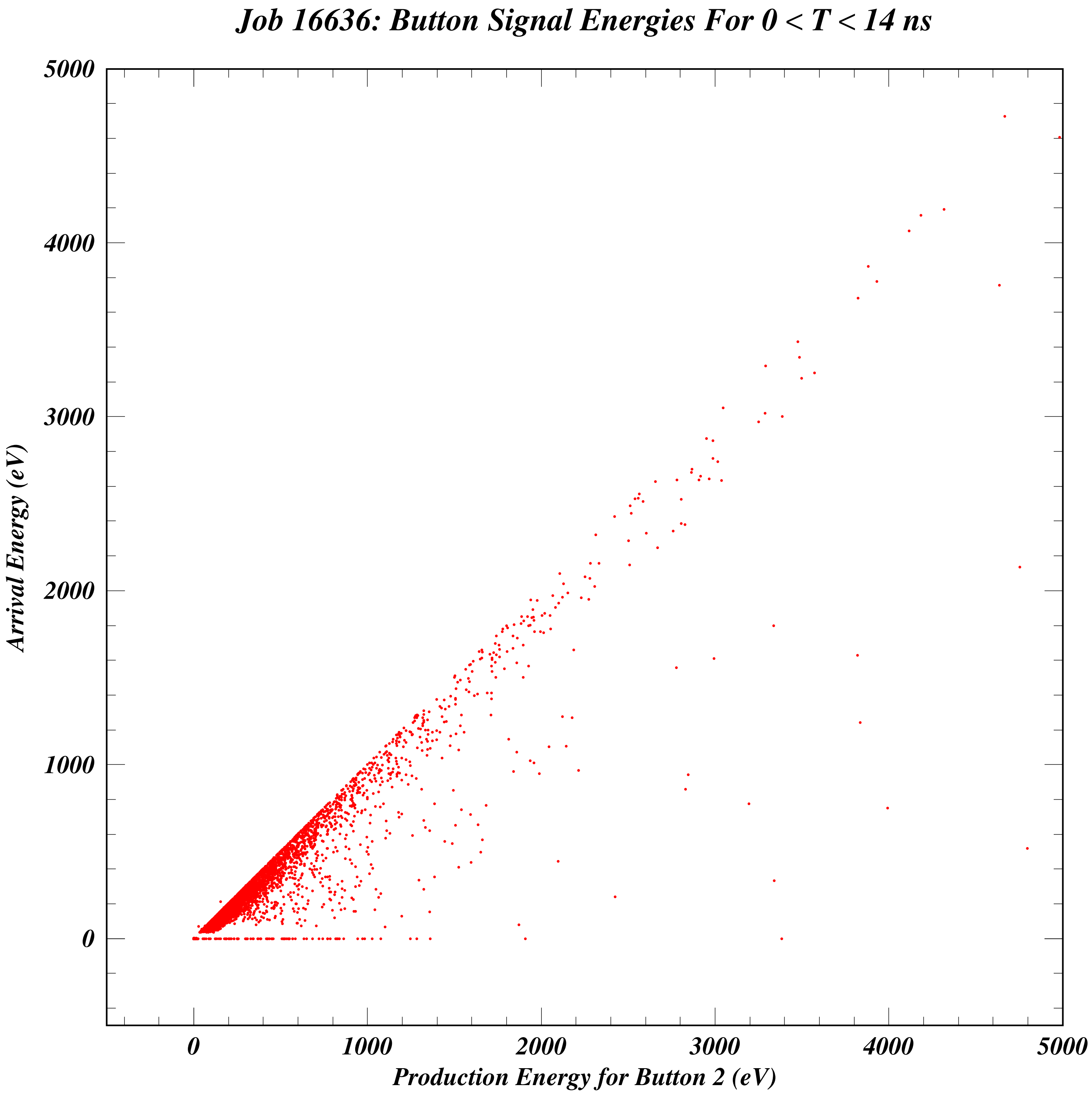
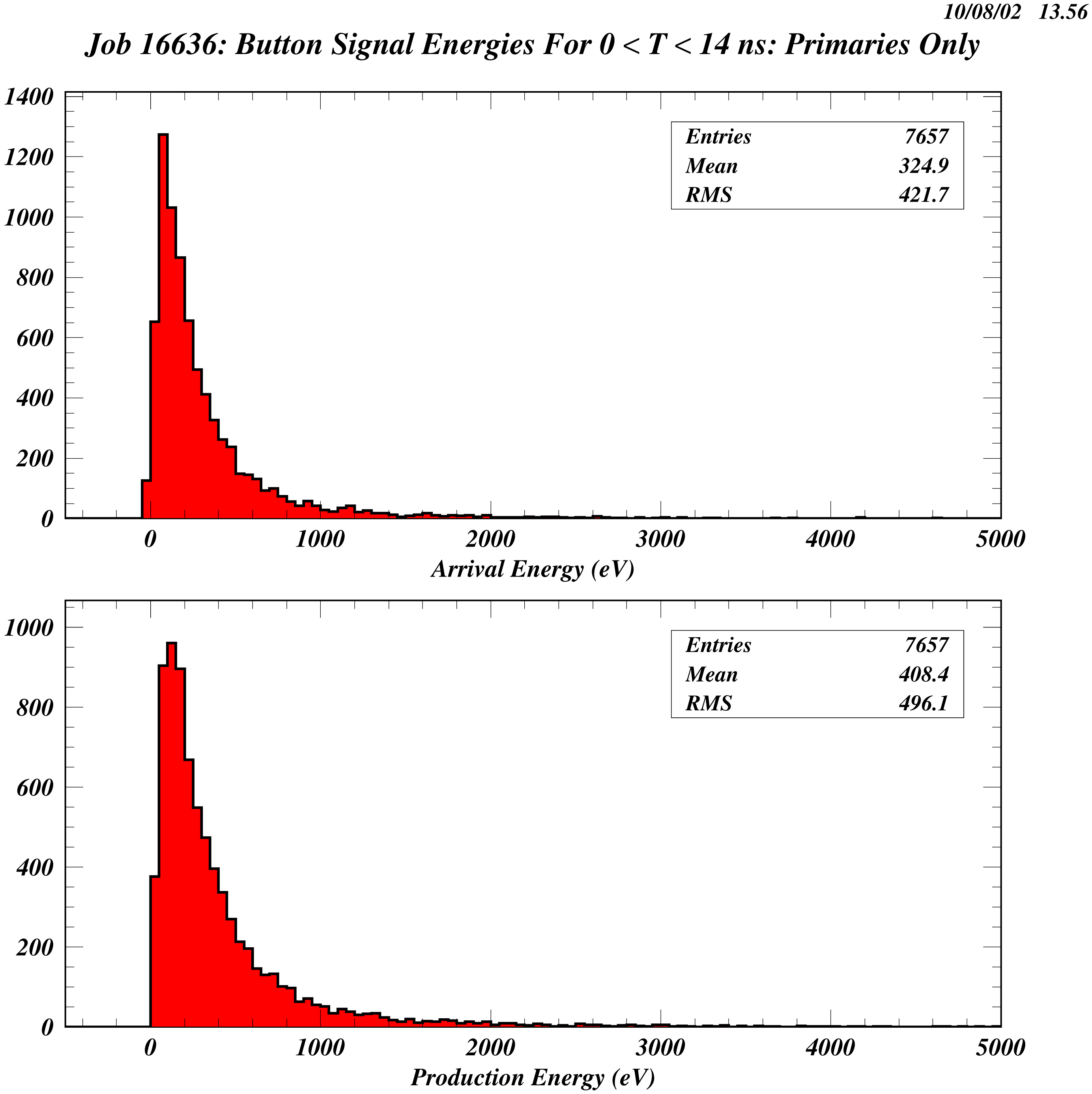
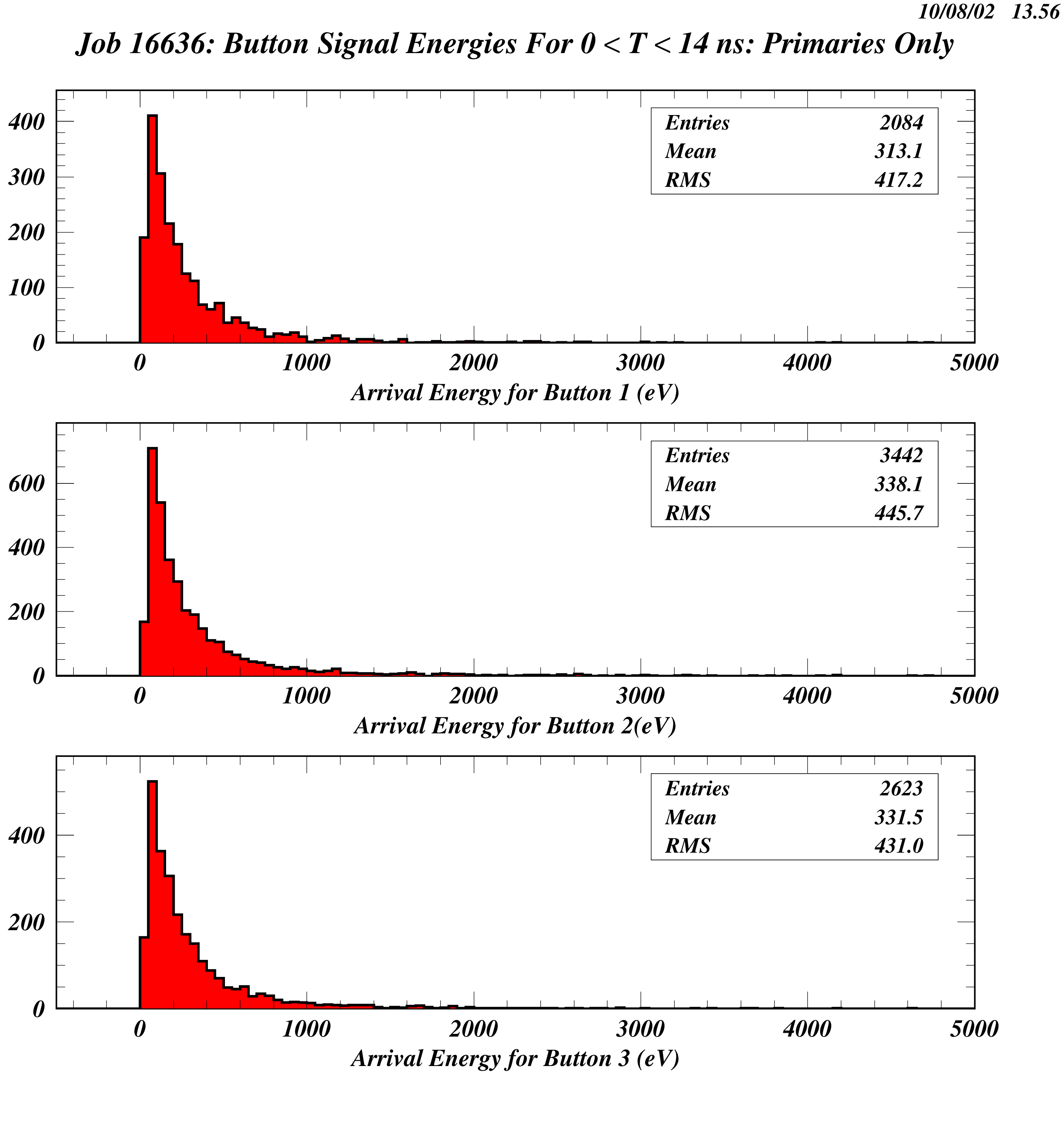


Job 16636: Button Signal Energies For 0 < T < 14 ns
Arrival Energy (eV)
Production Energy for Button 2 (eV)
5000
4000
3000
2000
1000
0
0
1000
2000
3000
4000
5000


10/08/02 13.56
Job 16636: Button Signal Energies For 0 < T < 14 ns: Primaries Only
Entries 7657
Mean 324.9
RMS 421.7
0
200
400
600
800
1000
1200
1400
0
1000
2000
3000
4000
5000
Arrival Energy (eV)
Entries 7657
Mean 408.4
RMS 496.1
0
200
400
600
800
1000
0
1000
2000
3000
4000
5000
Production Energy (eV)


10/08/02 13.56
Job 16636: Button Signal Energies For 0 < T < 14 ns: Primaries Only
Entries 2084
Mean 313.1
RMS 417.2
Arrival Energy for Button 1 (eV)
Entries 3442
Mean 338.1
RMS 445.7
Arrival Energy for Button 2(eV)
Entries 2623
Mean 331.5
RMS 431.0
Arrival Energy for Button 3 (eV)

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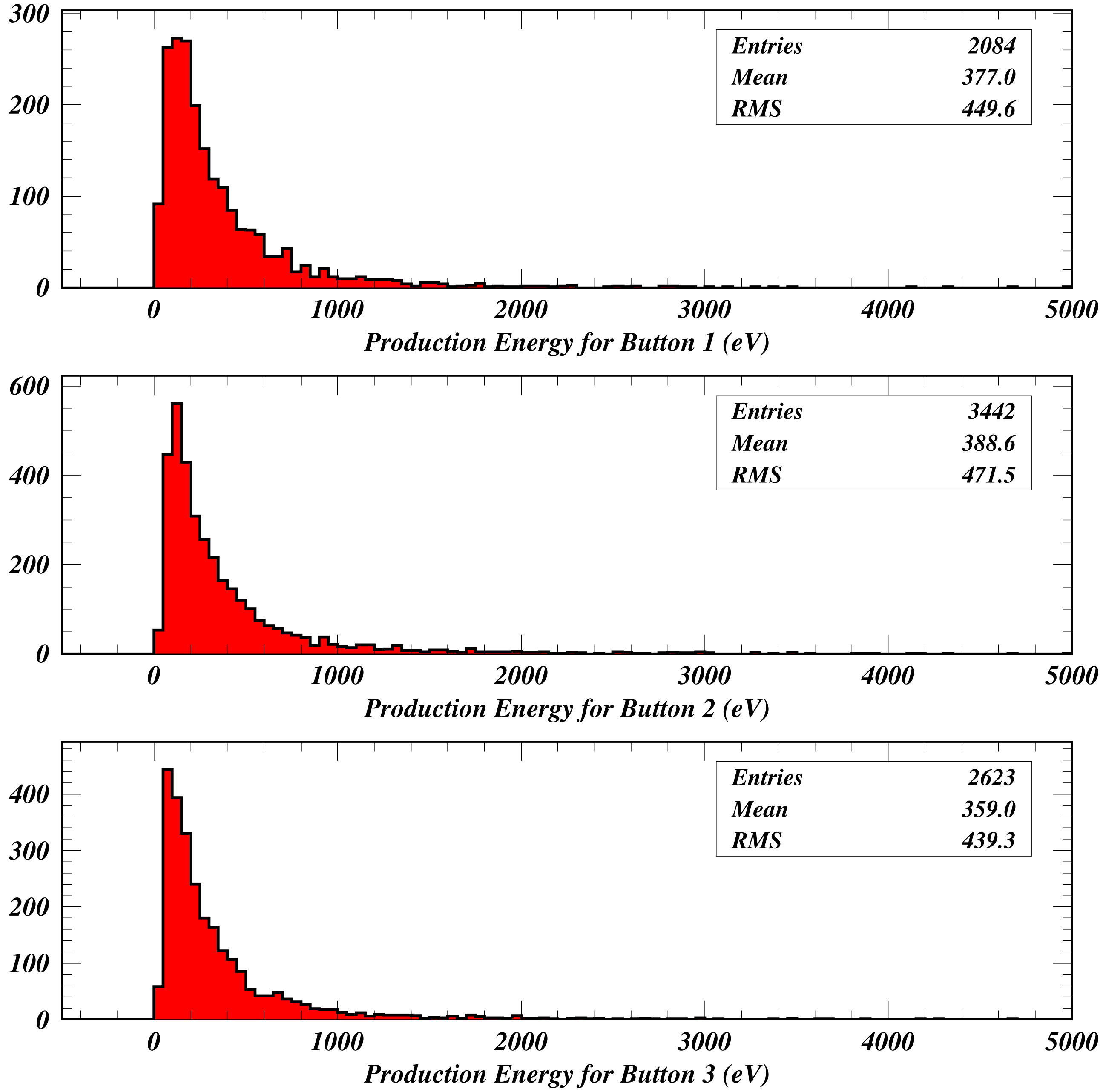
Job 16636: Button Signal Energies For 0 < T < 14 ns: Primaries Only



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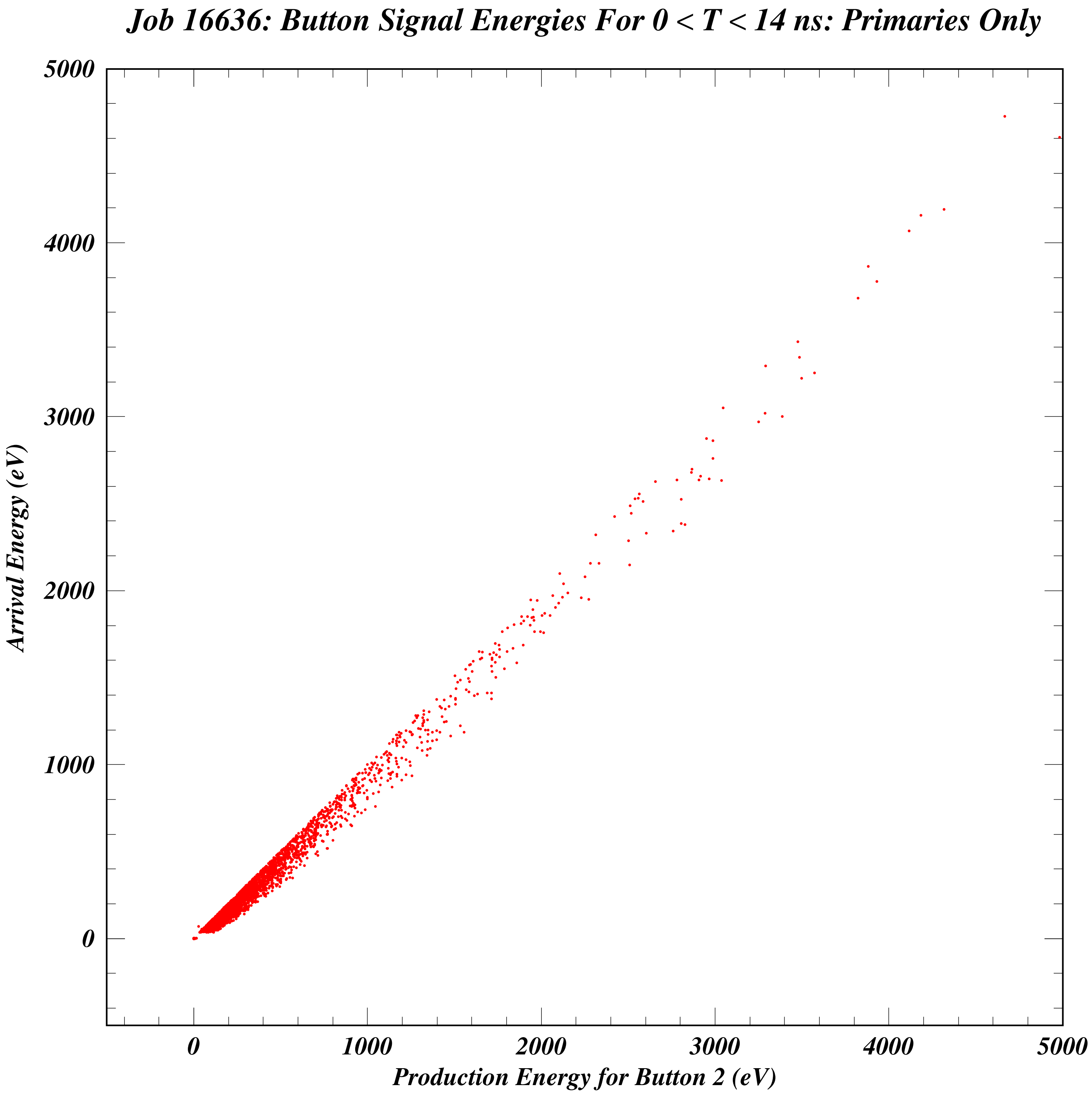
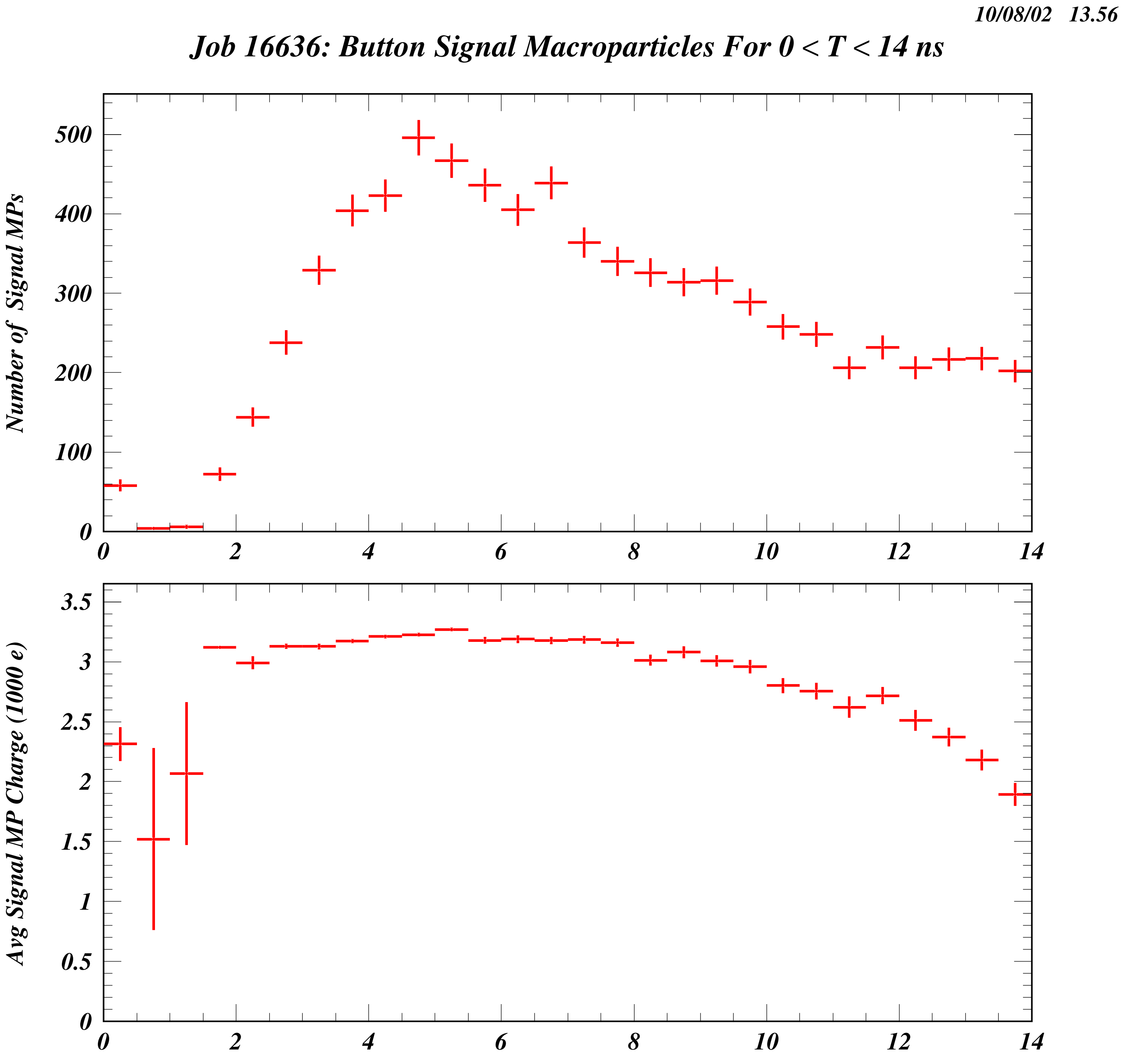


Job 16636: Button Signal Energies For 0 < T < 14 ns: Primaries Only
Arrival Energy (eV)
Production Energy for Button 2 (eV)
5000
4000
3000
2000
1000
0
0
1000
2000
3000
4000
5000



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Job 16636: 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
0.5
1
1.5
2
2.5
3
3.5
0
2
4
6
8
10
12
14

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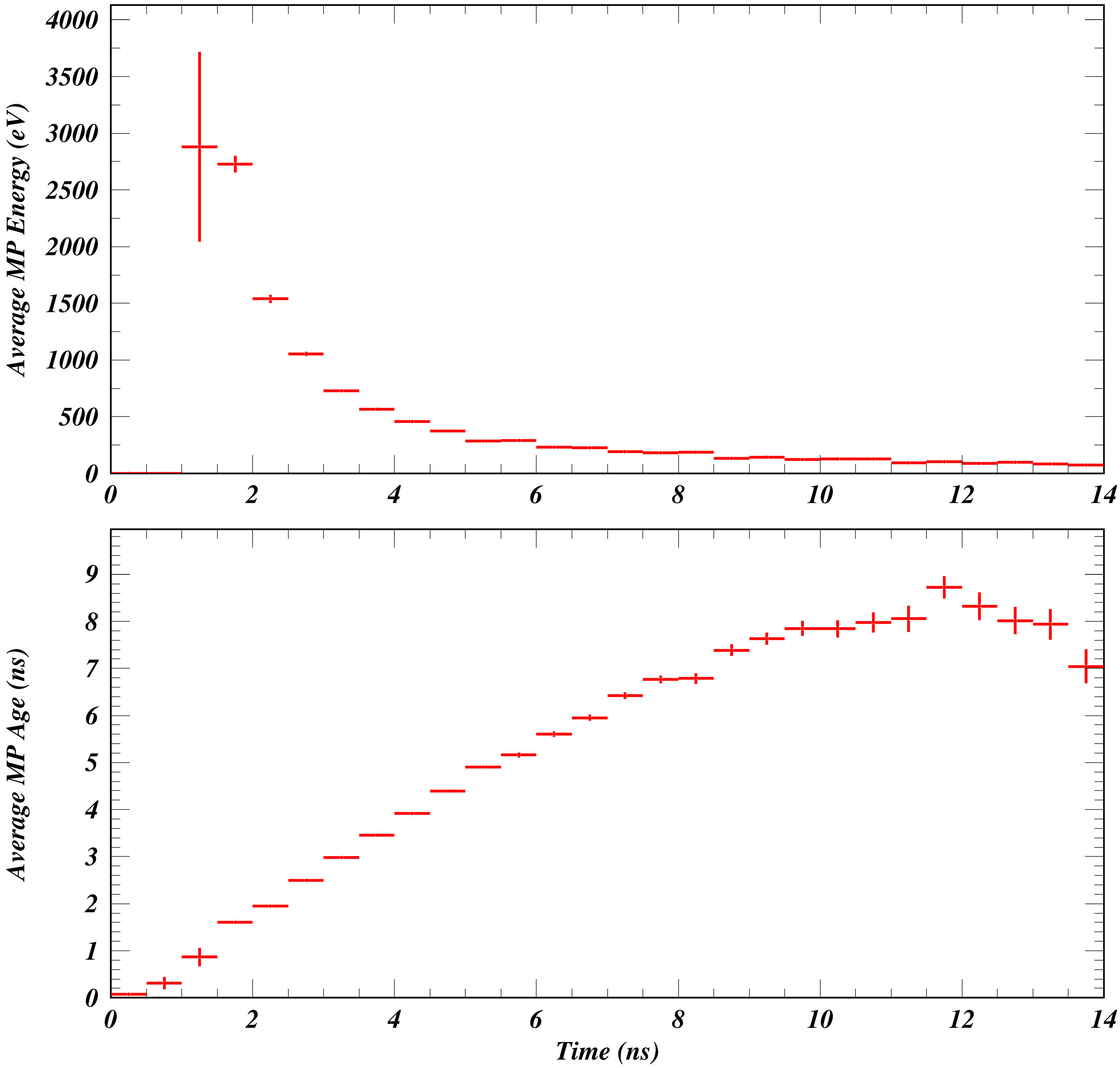
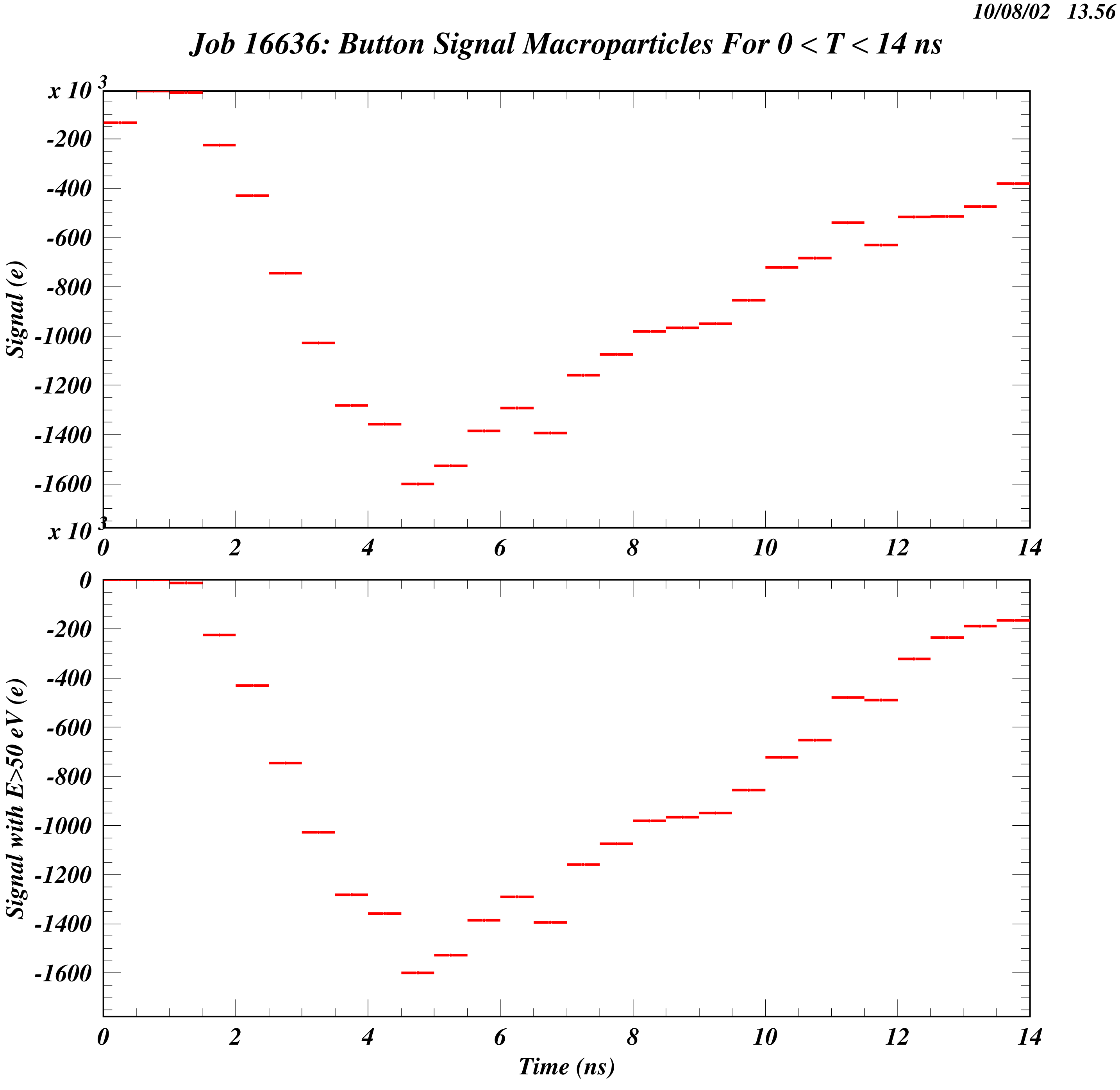
Job 16636: Button Signal Macroparticles For 0 < T < 14 ns





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Job 16636: Button Signal Macroparticles For 0 < T < 14 ns
x 10 3
-200
-400
-600
-800
-1000
-1200
-1400
-1600
Signal (e)
x 10 3
0
2
4
6
8
10
12
14
0
-200
-400
-600
-800
-1000
-1200
-1400
-1600
Signal with E>50 eV (e)
0
2
4
6
8
10
12
14
Time (ns)

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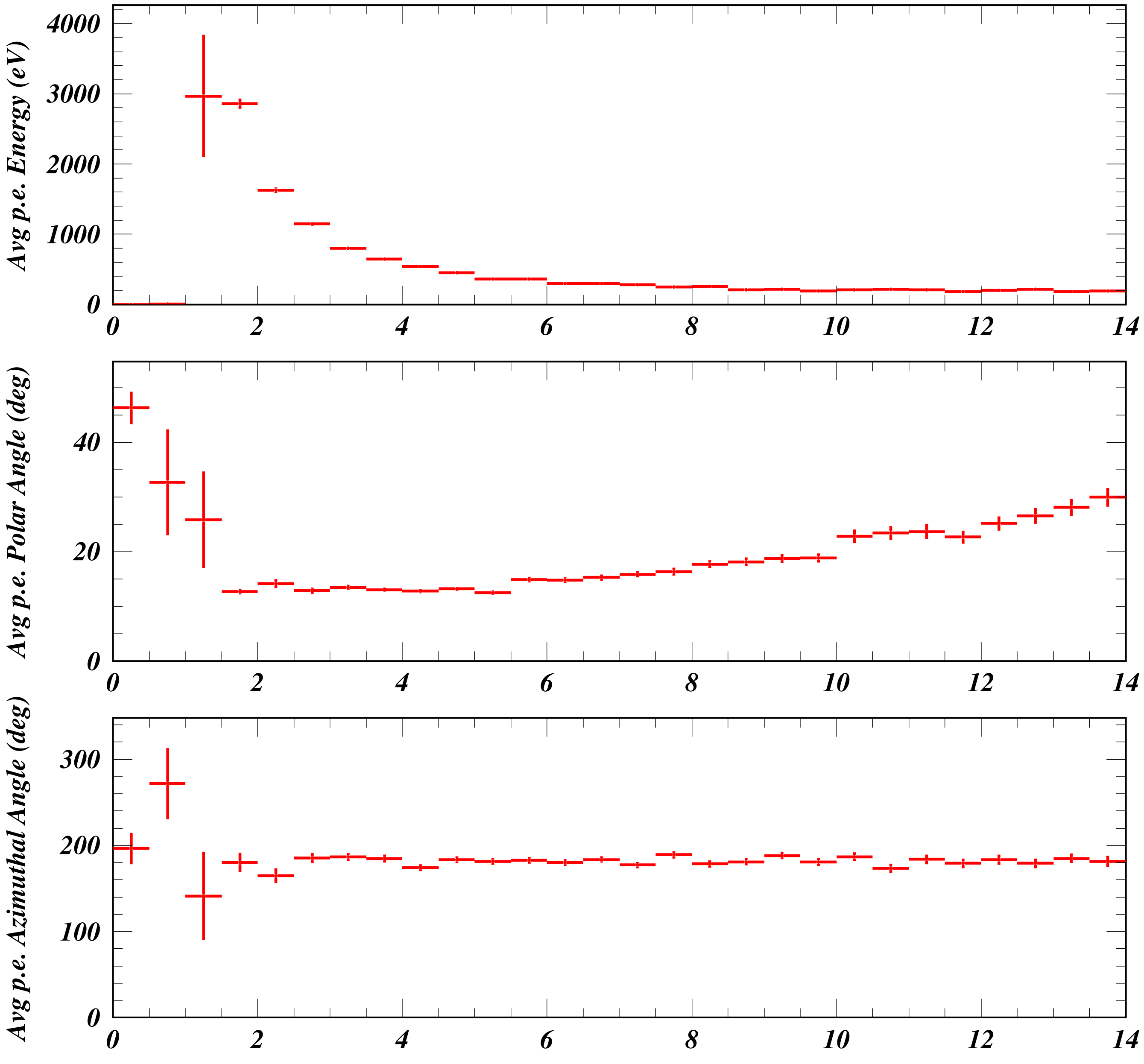
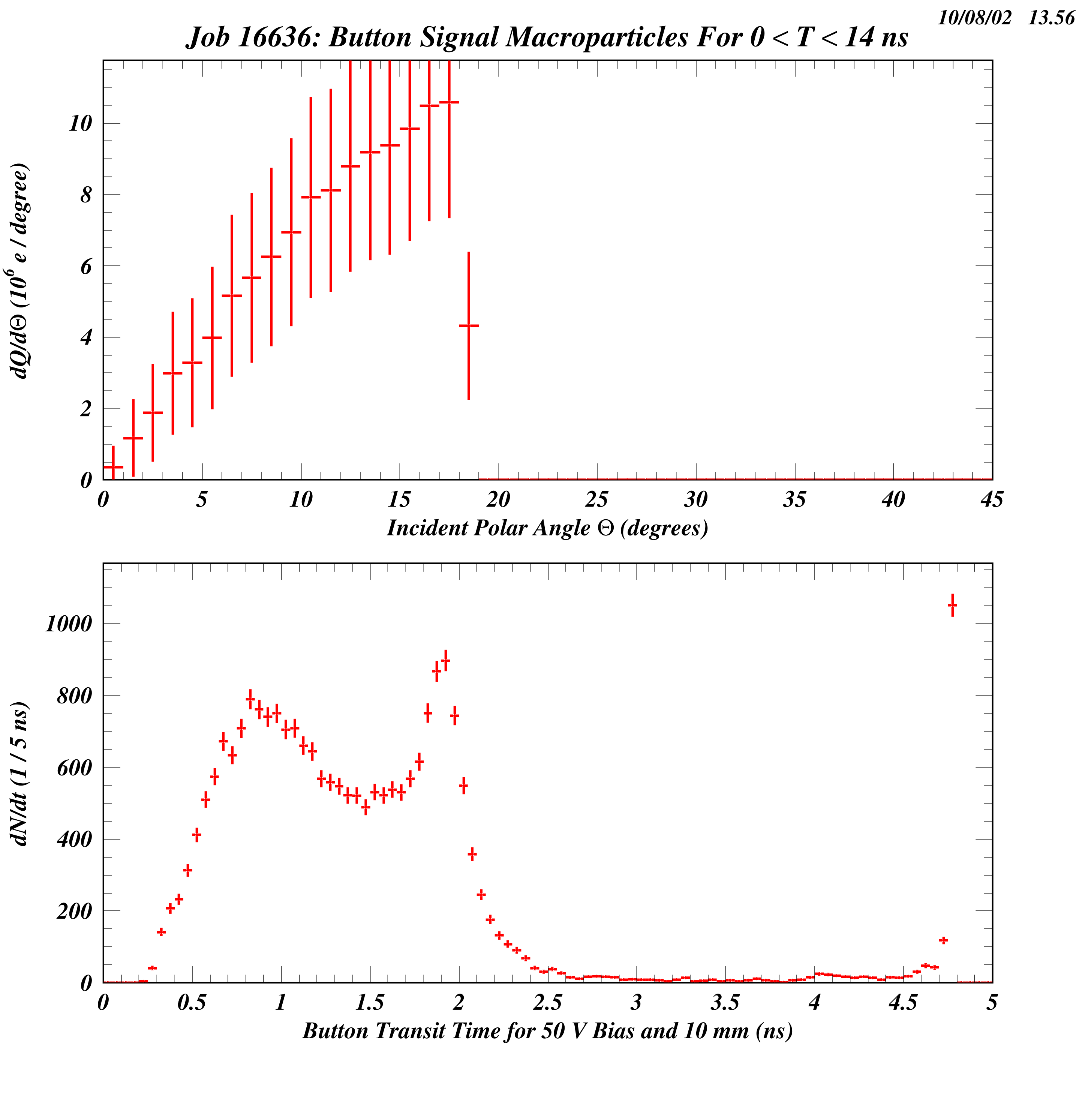
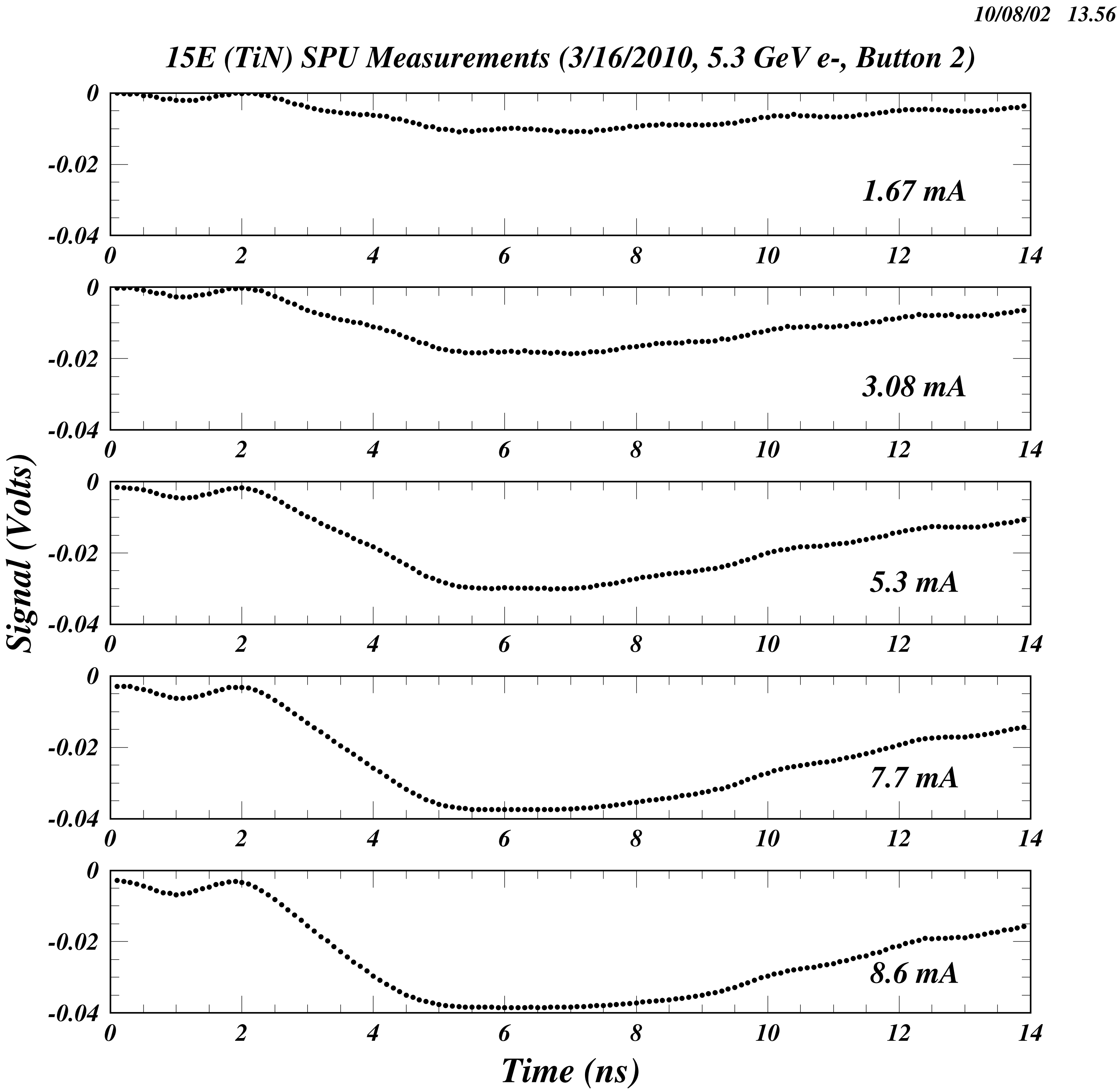
**Job 16636: Button Signal Macroparticles For 0 < T < 14 ns**




10/08/02 13.56
Job 16636: Button Signal Macroparticles For 0 < T < 14 ns
dQ/dΘ (10^6 e / degree)
0
2
4
6
8
10
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
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)


10/08/02 13.56
15E (TiN) SPU Measurements (3/16/2010, 5.3 GeV e-, Button 2)
Signal (Volts)
Time (ns)
1.67 mA
3.08 mA
5.3 mA
7.7 mA
8.6 mA
0
-0.02
-0.04
0
2
4
6
8
10
12
14