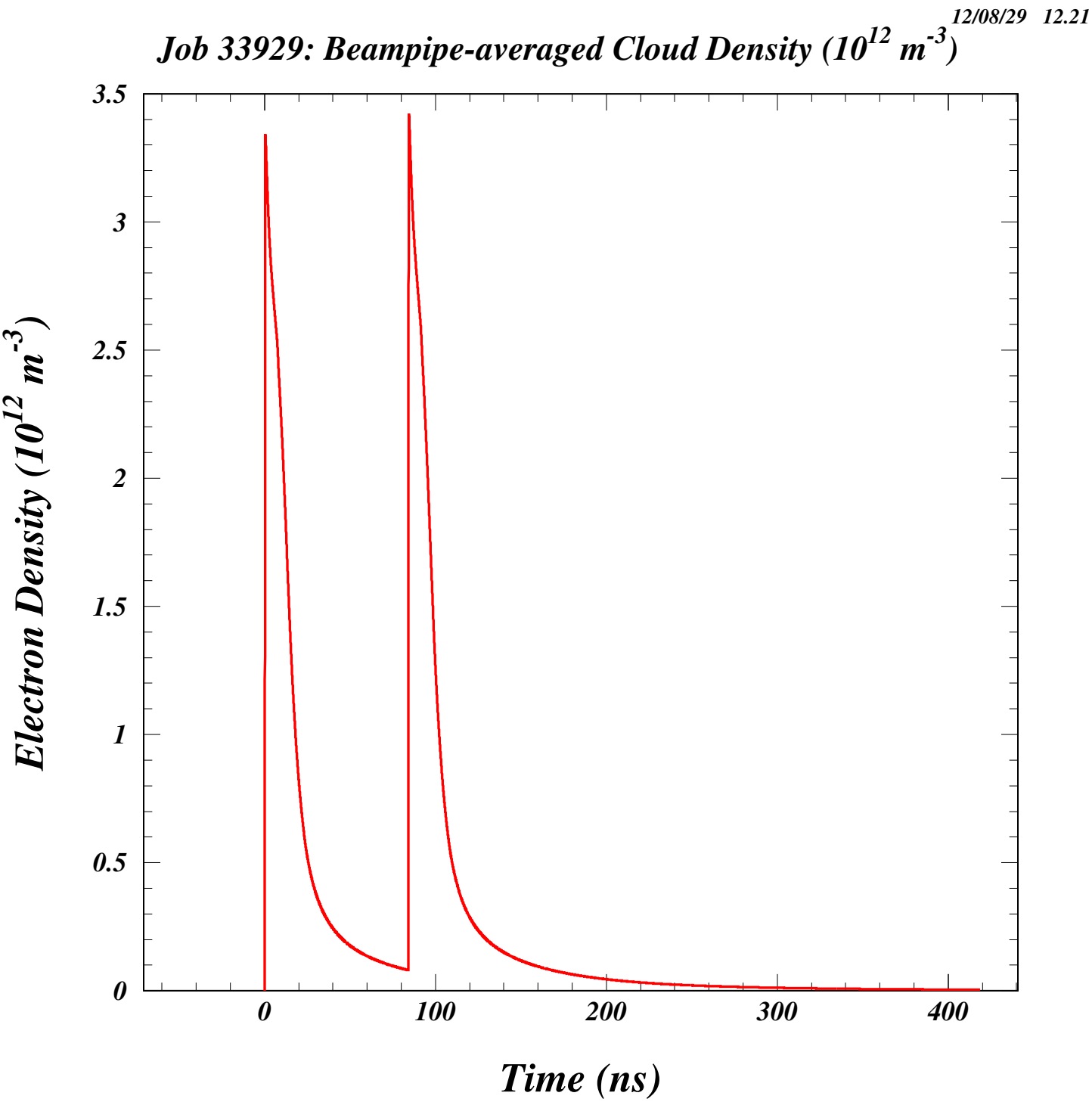
12/08/29 12.21
Job 33929: Beampipe-averaged Cloud Density (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
3.5
3
2.5
2
1.5
1
0.5
0
0
100
200
300
400
Time (ns)

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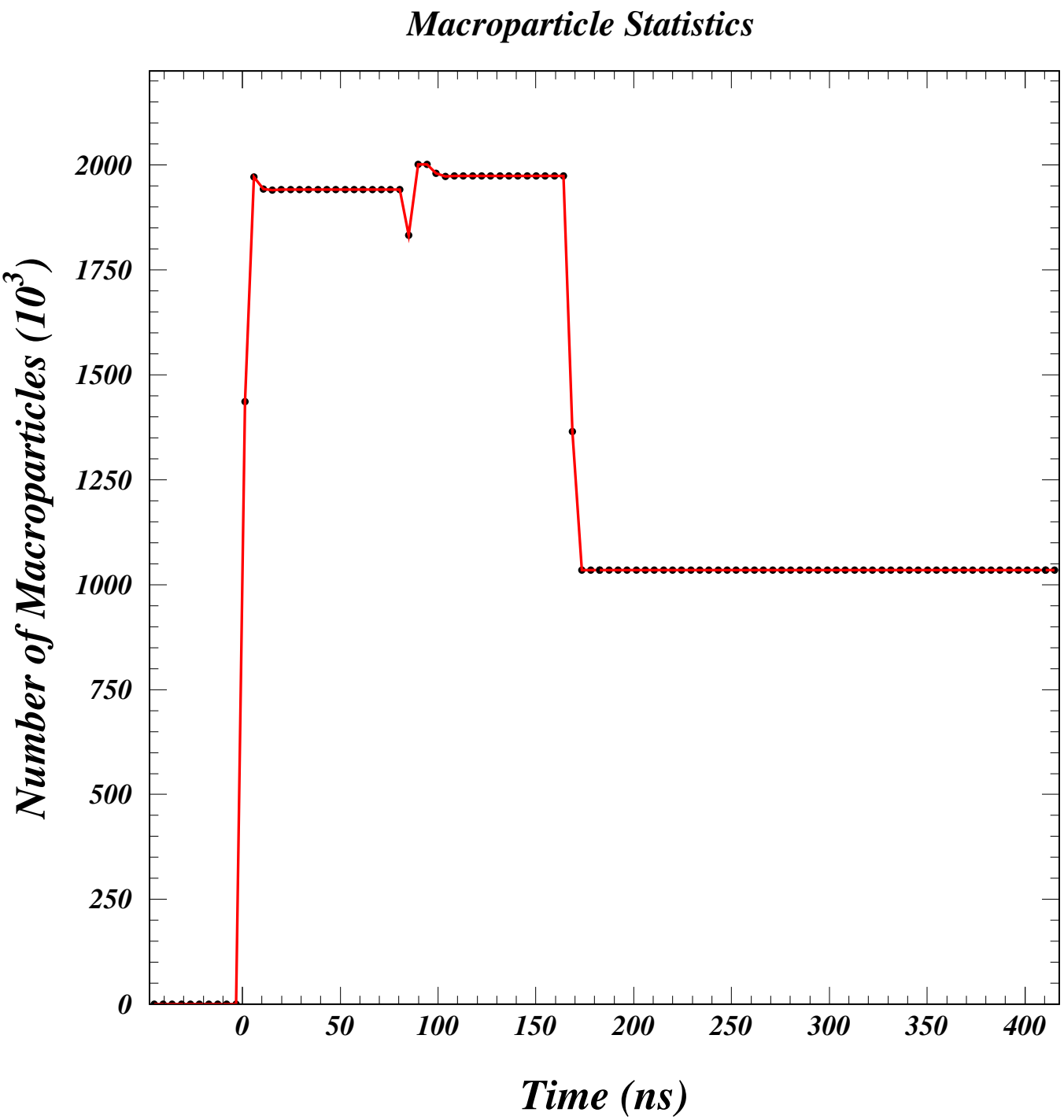
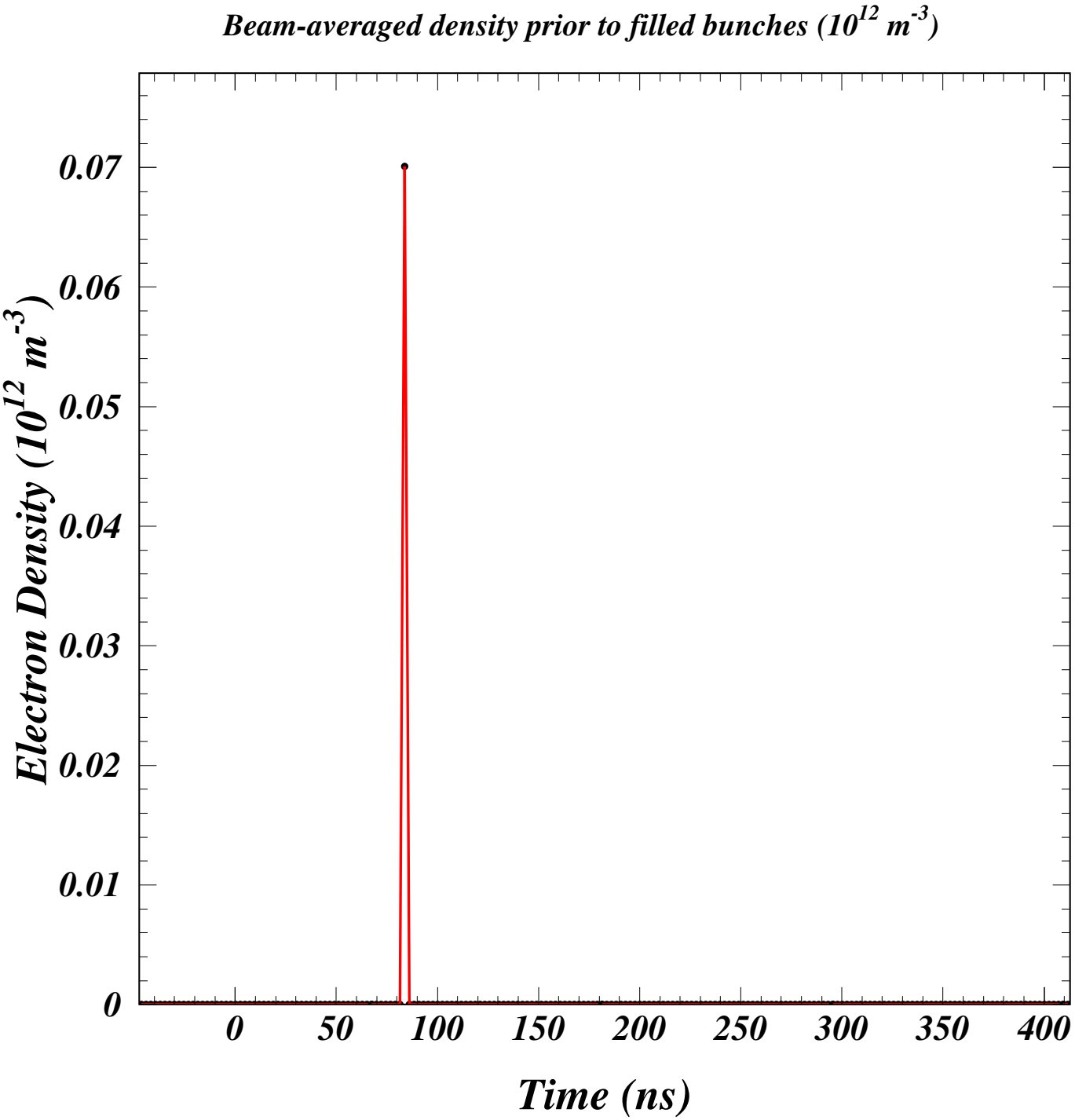
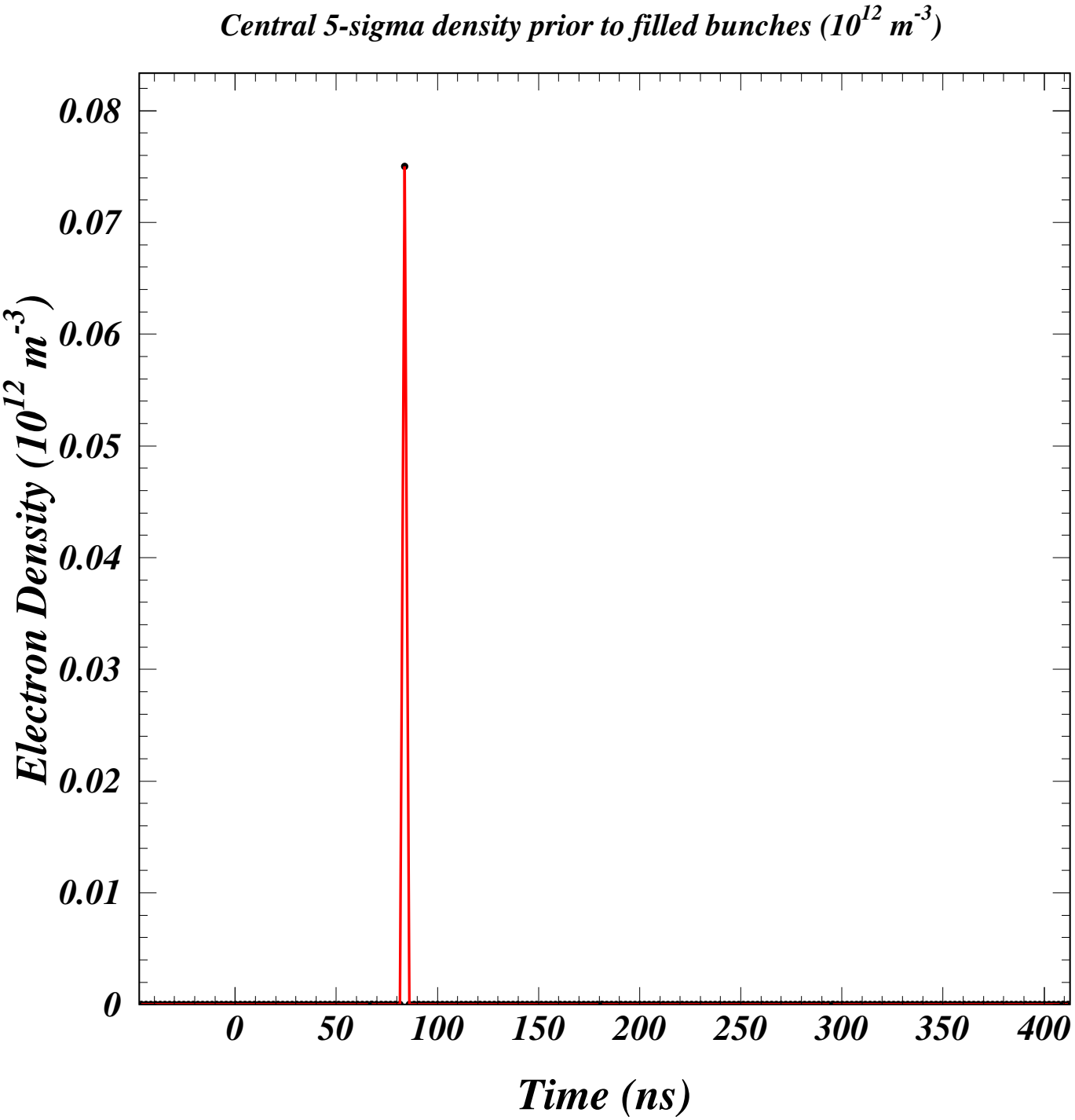
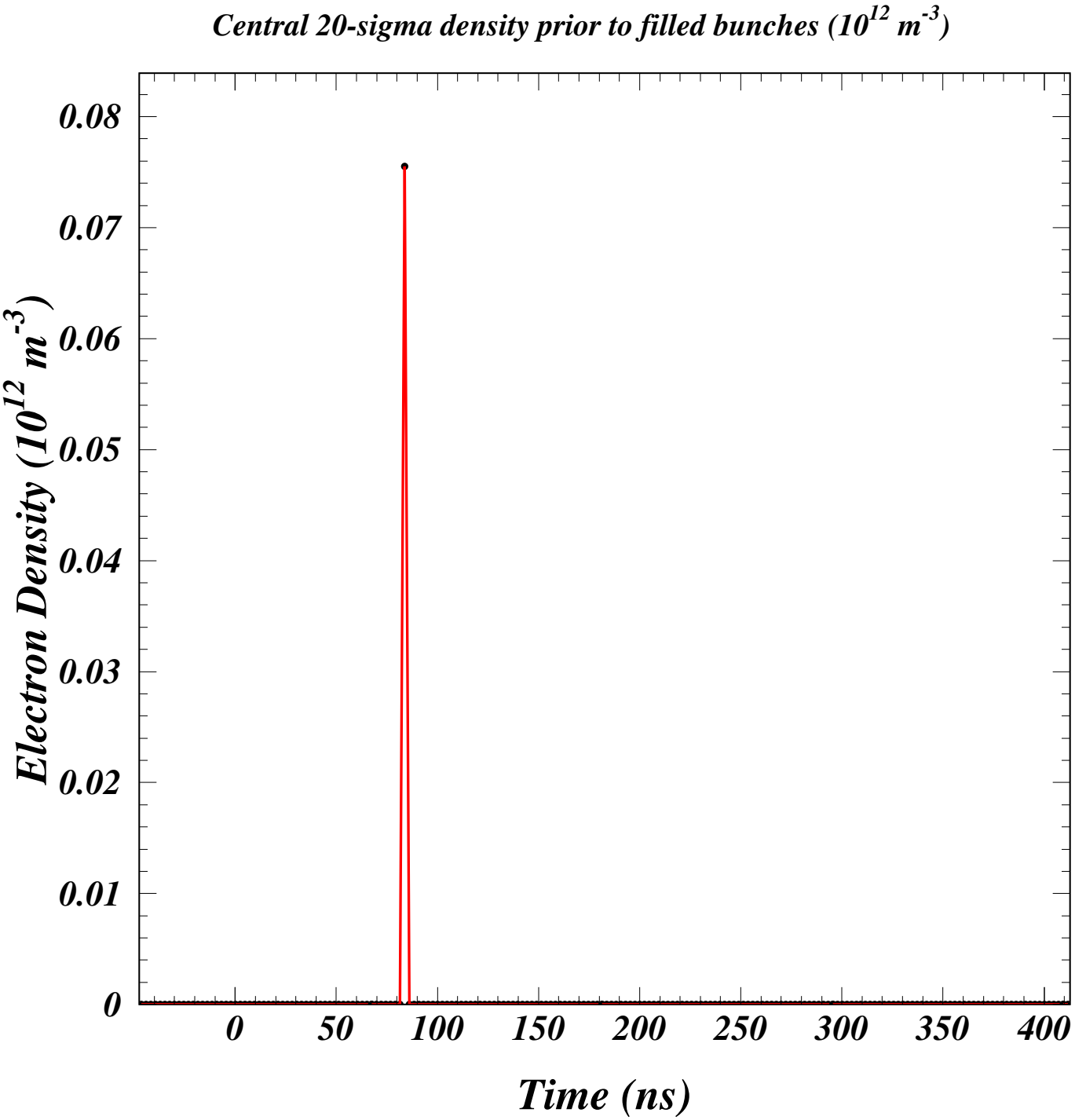

Macroparticle Statistics
Number of Macroparticles (10^3)
2000
1750
1500
1250
1000
750
500
250
0
0
50
100
150
200
250
300
350
400
Time (ns)


Beam-averaged density prior to filled bunches (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0
50
100
150
200
250
300
350
400
Time (ns)


Central 5-sigma density prior to filled bunches (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0
50
100
150
200
250
300
350
400
Time (ns)


Central 20-sigma density prior to filled bunches (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0
50
100
150
200
250
300
350
400
Time (ns)

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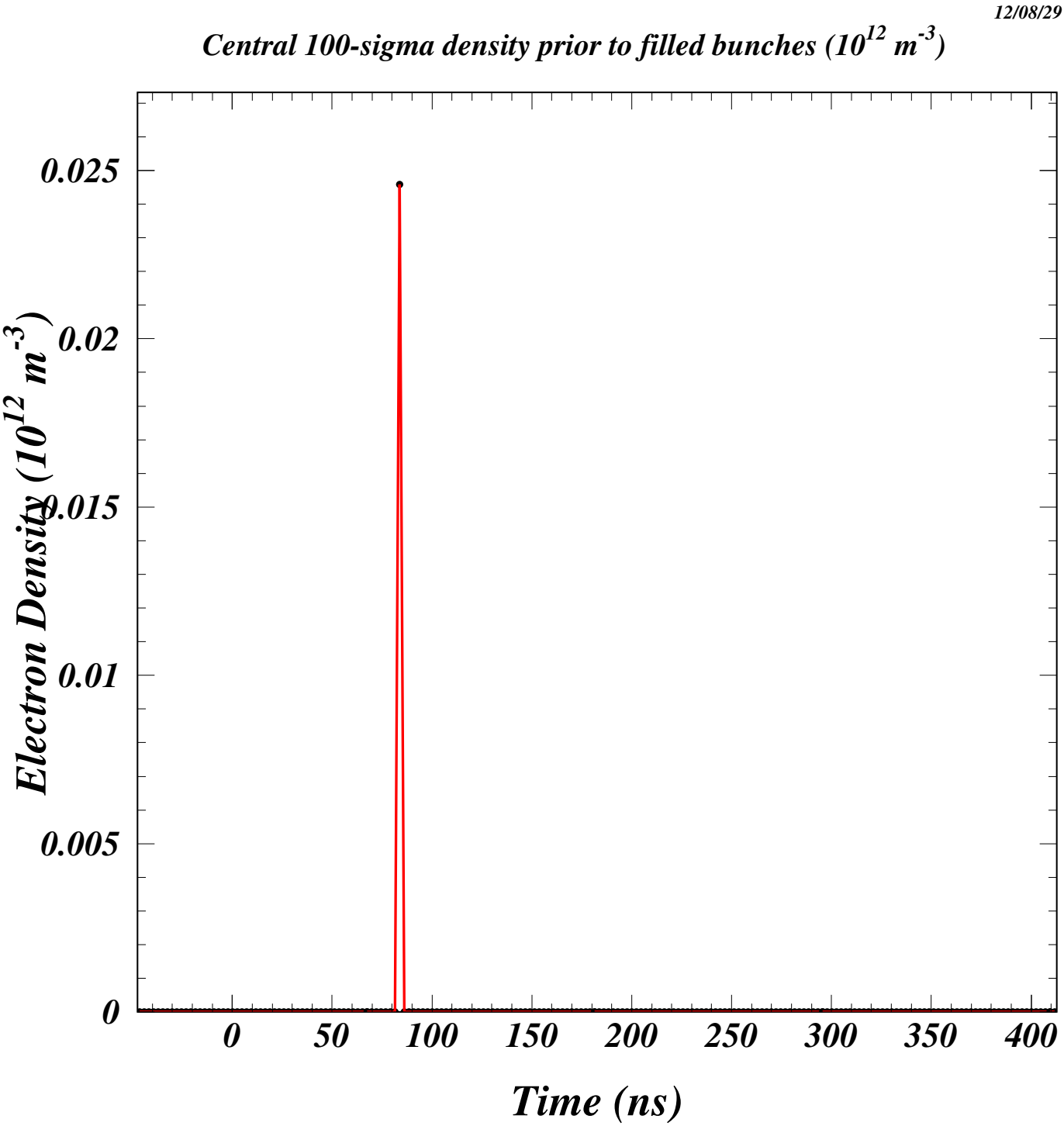
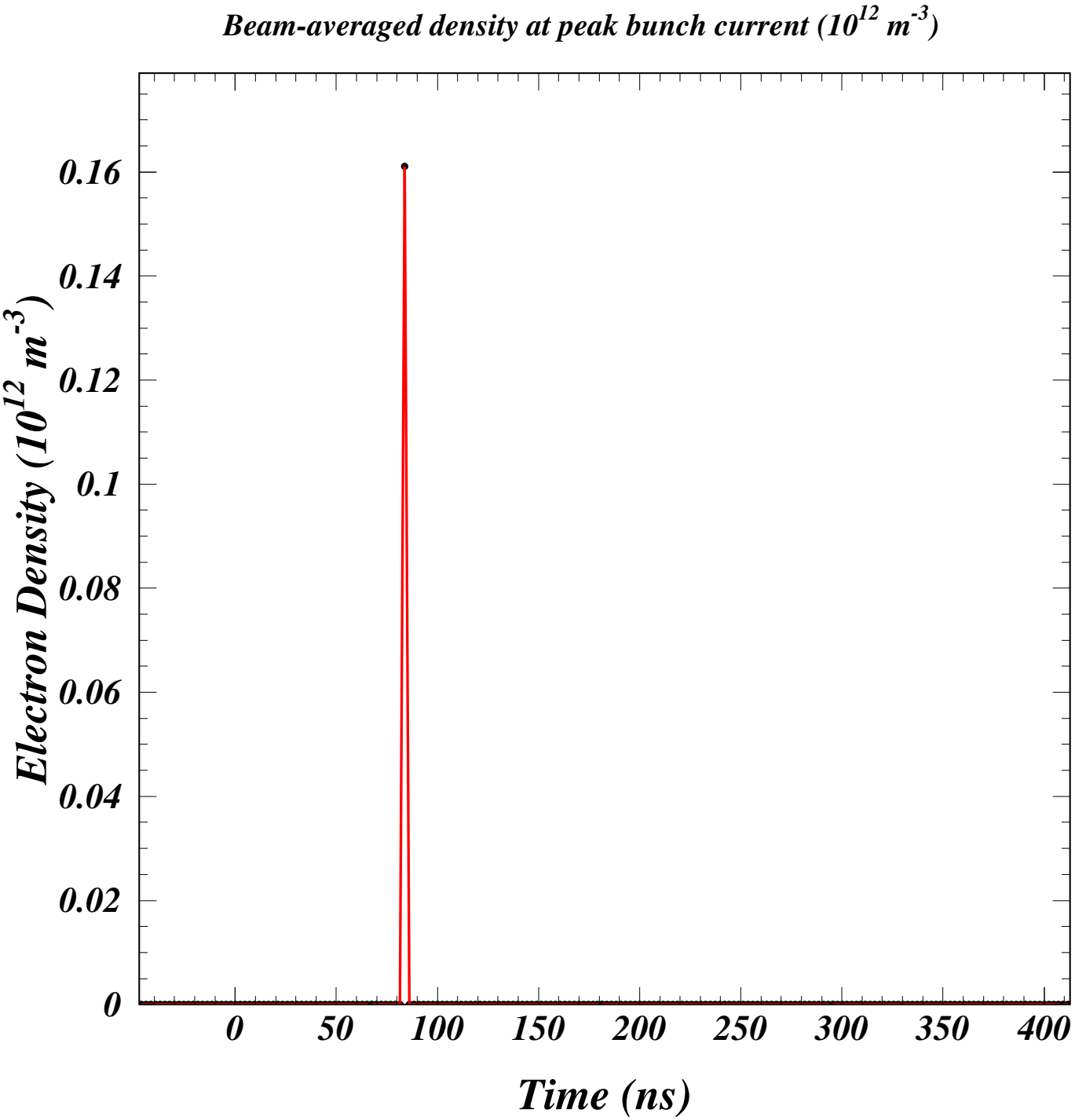
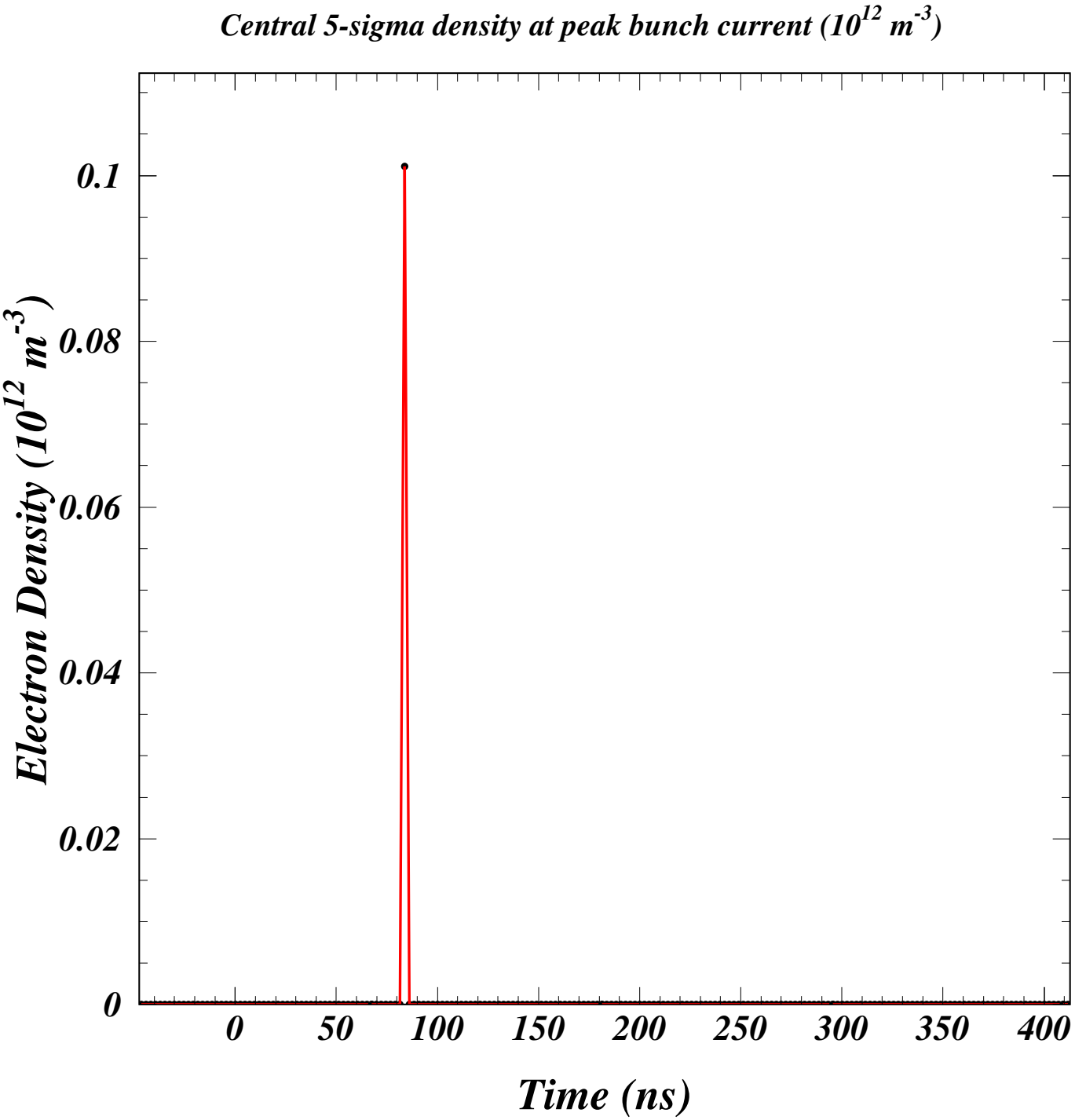
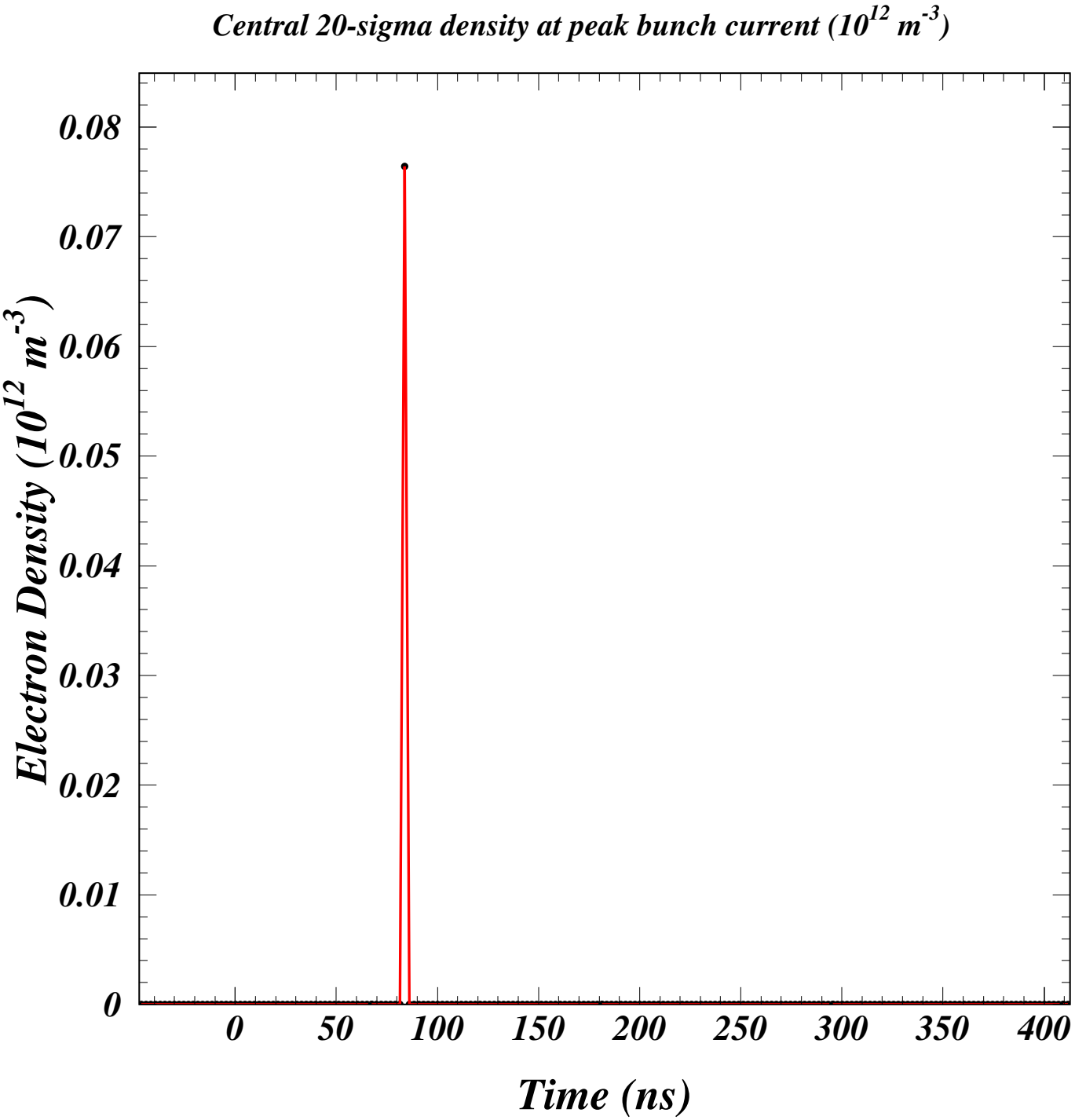

Central 100-sigma density prior to filled bunches (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
0.025
0.02
0.015
0.01
0.005
0
0
50
100
150
200
250
300
350
400
Time (ns)


Beam-averaged density at peak bunch current (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
0
50
100
150
200
250
300
350
400
Time (ns)


Central 5-sigma density at peak bunch current (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
0.1
0.08
0.06
0.04
0.02
0
0
50
100
150
200
250
300
350
400
Time (ns)


Central 20-sigma density at peak bunch current (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0
50
100
150
200
250
300
350
400
Time (ns)

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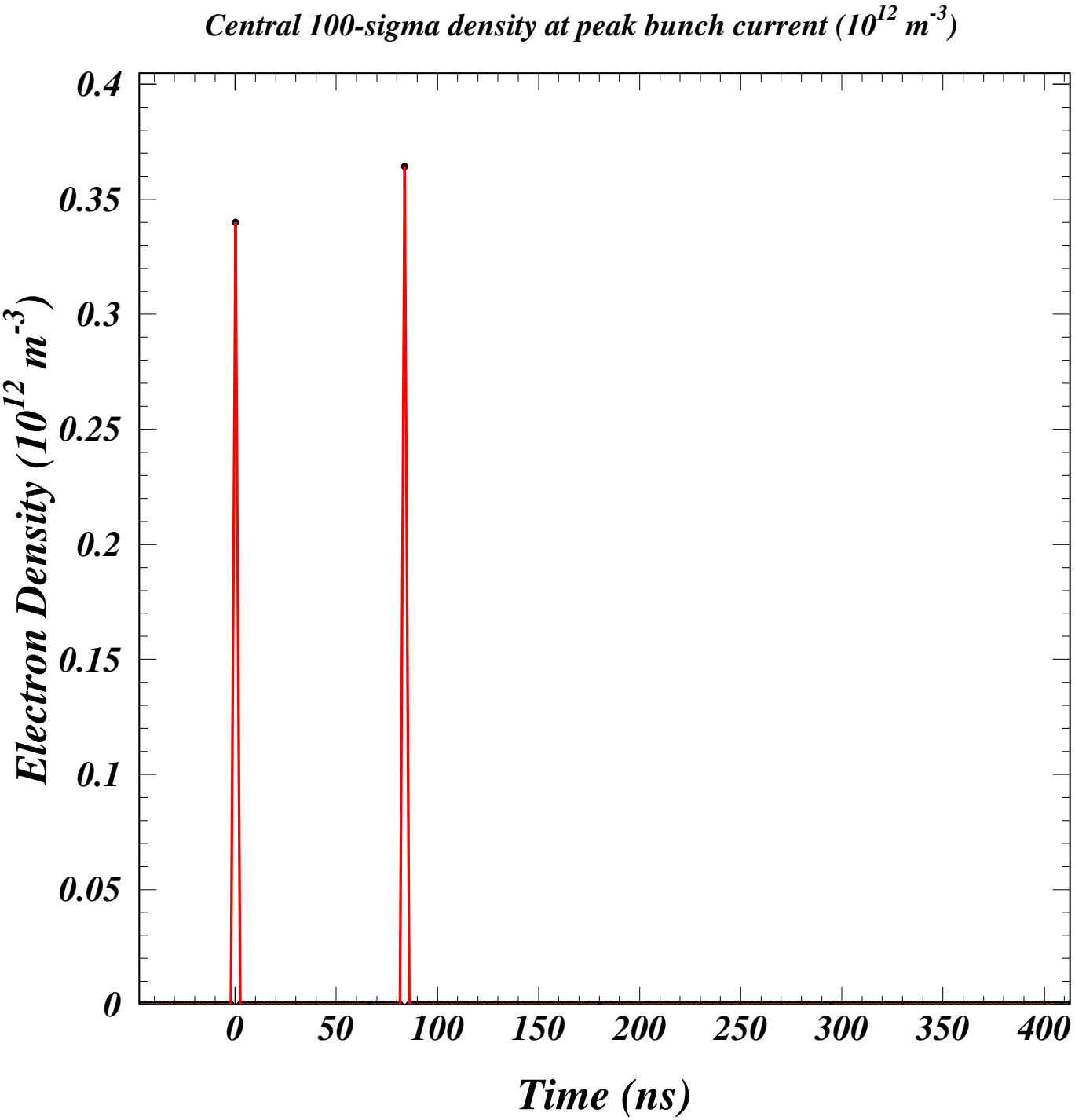
Central 100-sigma density at peak bunch current (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
50
100
150
200
250
300
350
400
Time (ns)

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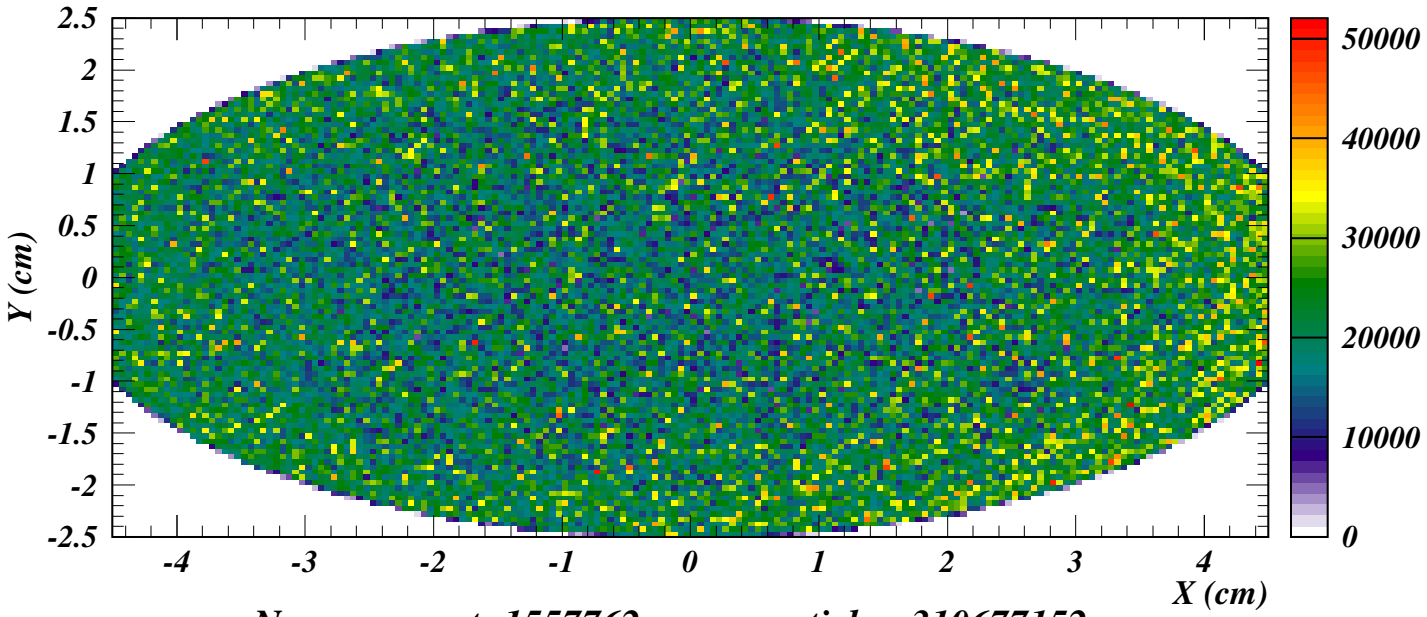
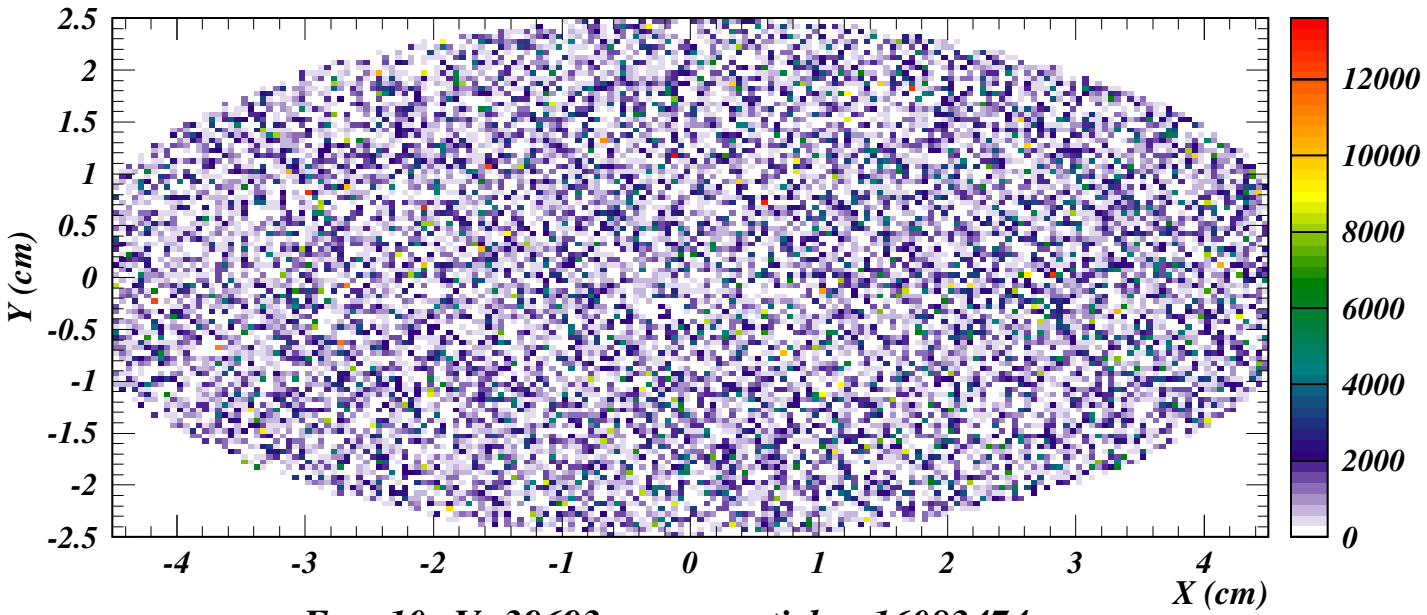
Cloud charge snapshot after bunch 1 at time = 84 ns



No energy cut: 1557762 macroparticles, 310677152 e-



E_{kin}>10 eV: 39693 macroparticles, 16083474 e-

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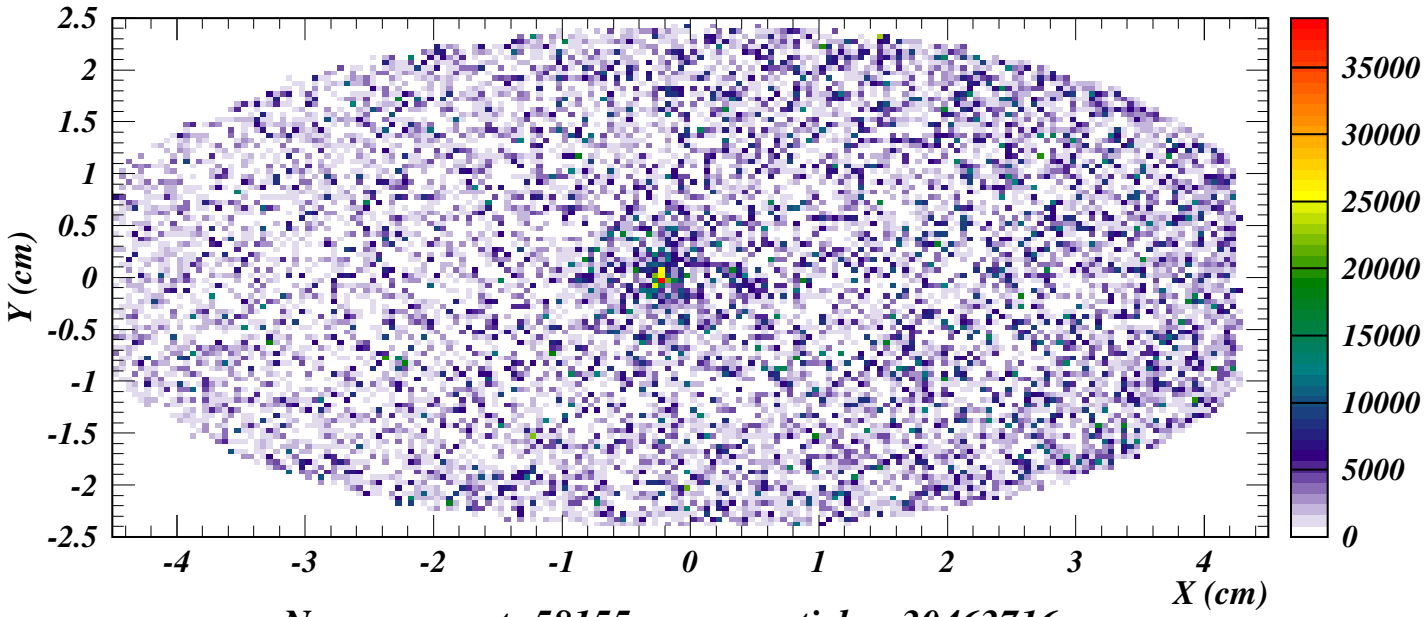
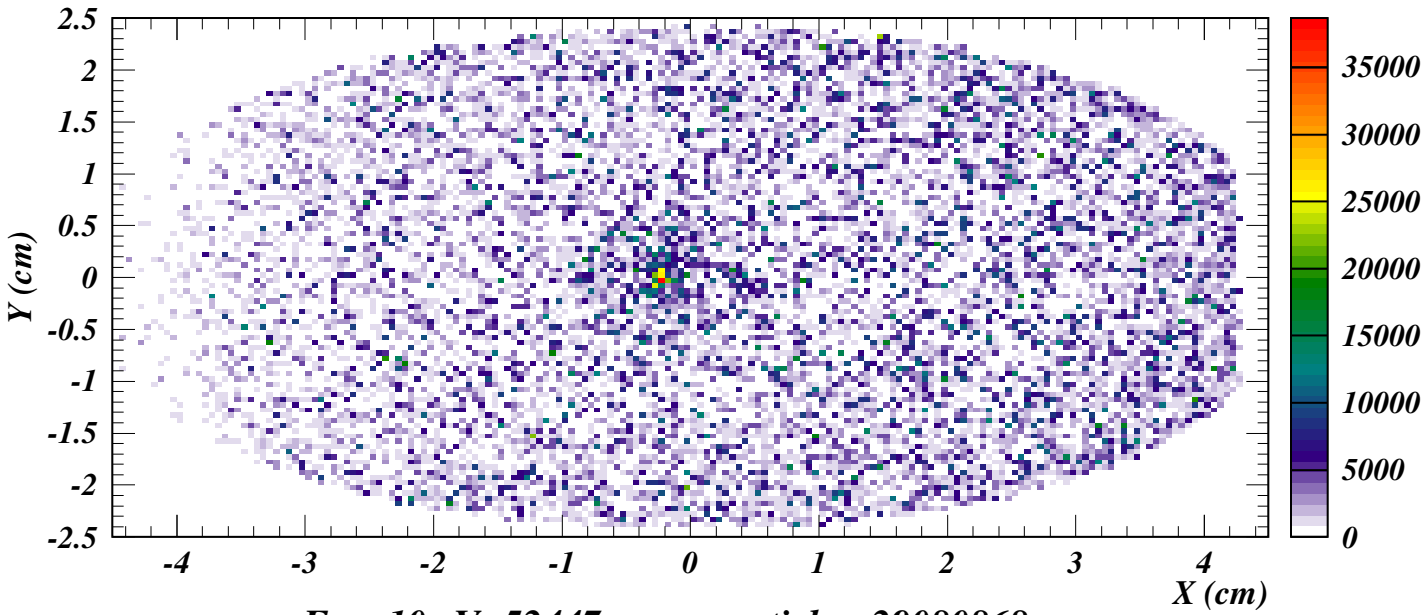
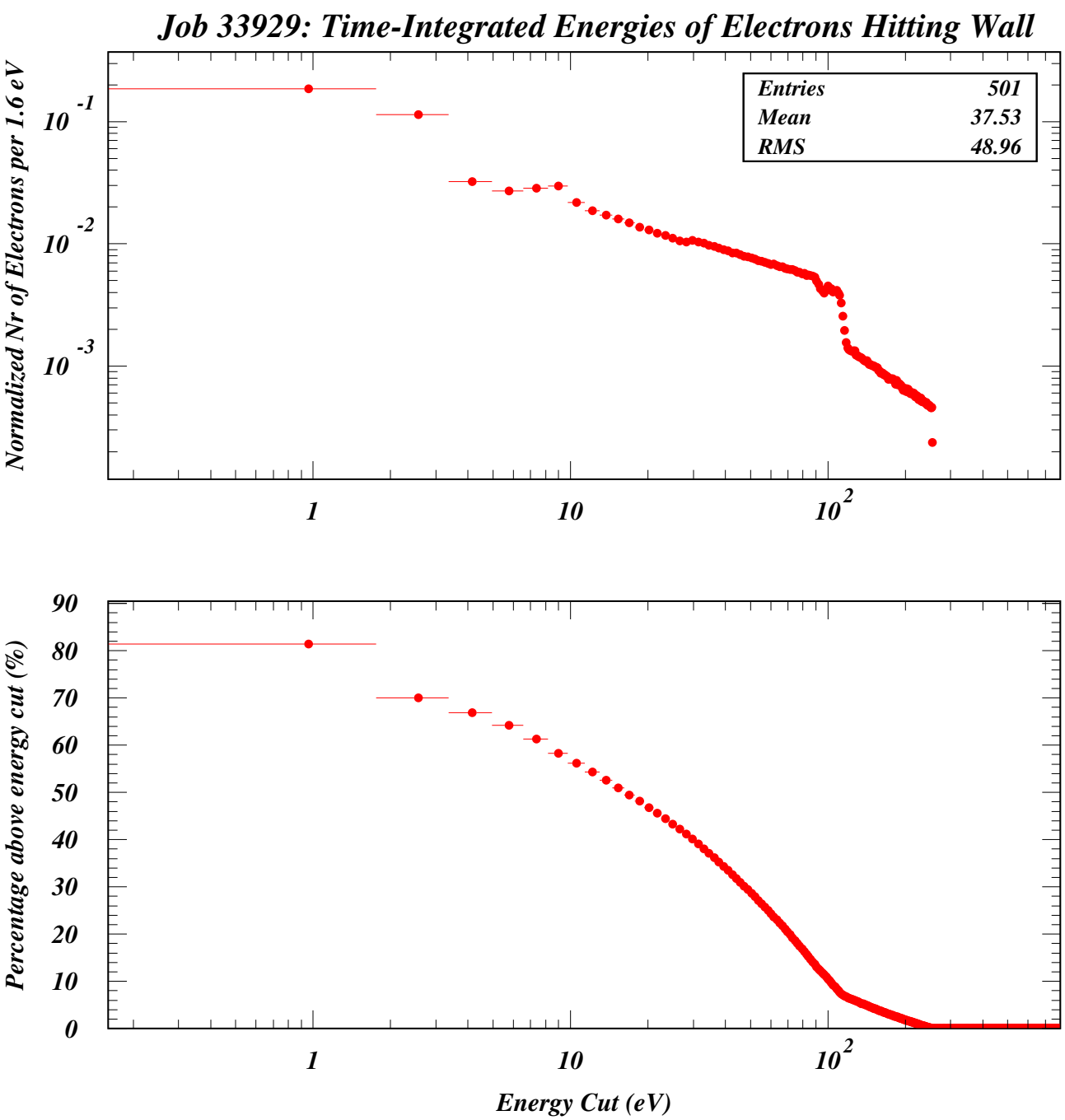
Cloud charge snapshot after bunch 2 at time = 84.432 ns

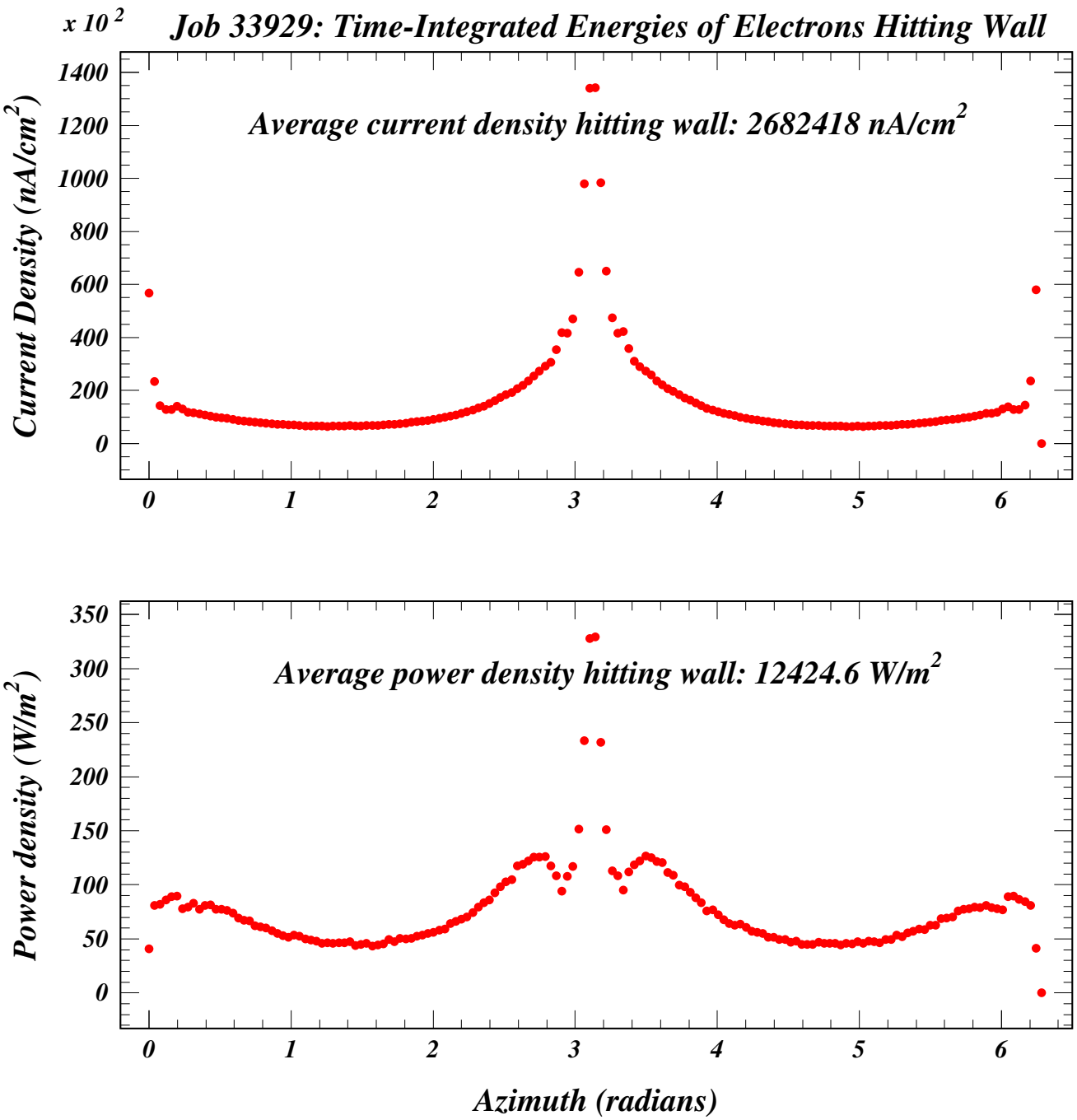


No energy cut: 58155 macroparticles, 30463716 e-

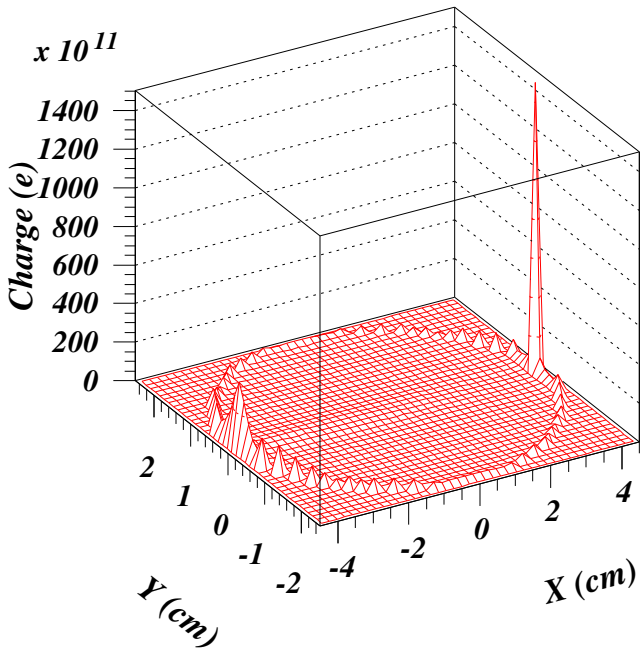


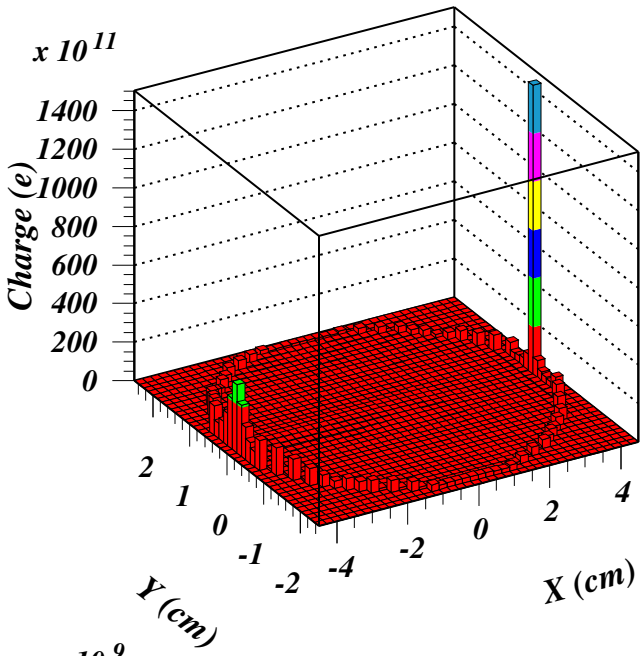
E_{kin}>10 eV: 52447 macroparticles, 29080868 e-

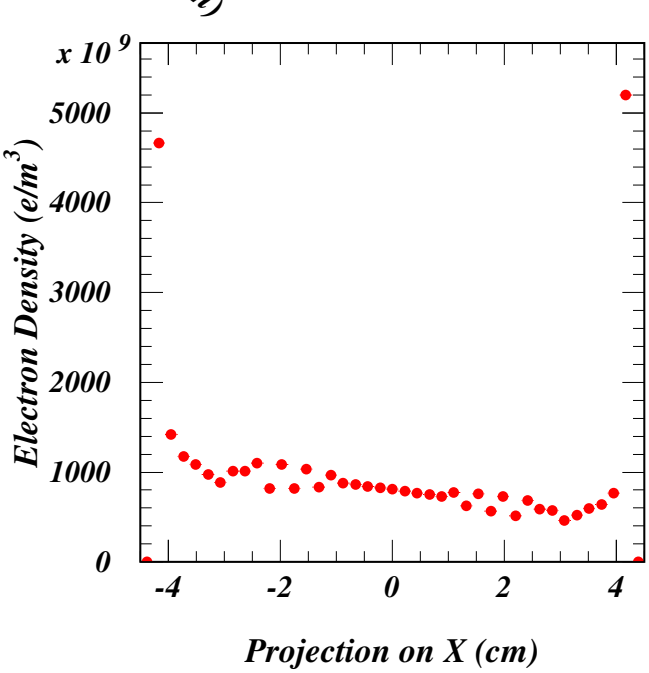

Job 33929: Time-Integrated Energies of Electrons Hitting Wall
Entries 501
Mean 37.53
RMS 48.96
Normalized Nr of Electrons per 1.6 eV
10 -1
10 -2
10 -3
1
10
10 2
Percentage above energy cut (%)
90
80
70
60
50
40
30
20
10
0
1
10
10 2
Energy Cut (eV)

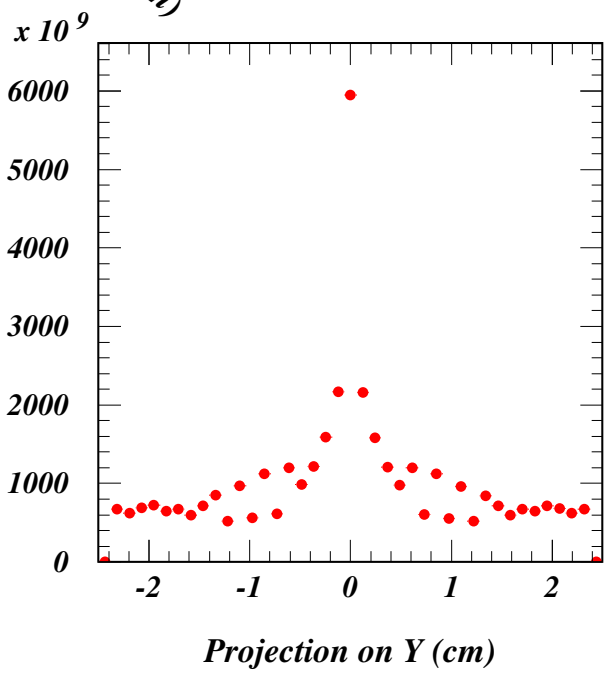

x 10 2
Job 33929: Time-Integrated Energies of Electrons Hitting Wall
Average current density hitting wall: 2682418 nA/cm2
Current Density (nA/cm2)
1400
1200
1000
800
600
400
200
0
0
1
2
3
4
5
6
Average power density hitting wall: 12424.6 W/m2
Power density (W/m2)
350
300
250
200
150
100
50
0
Azimuth (radians)

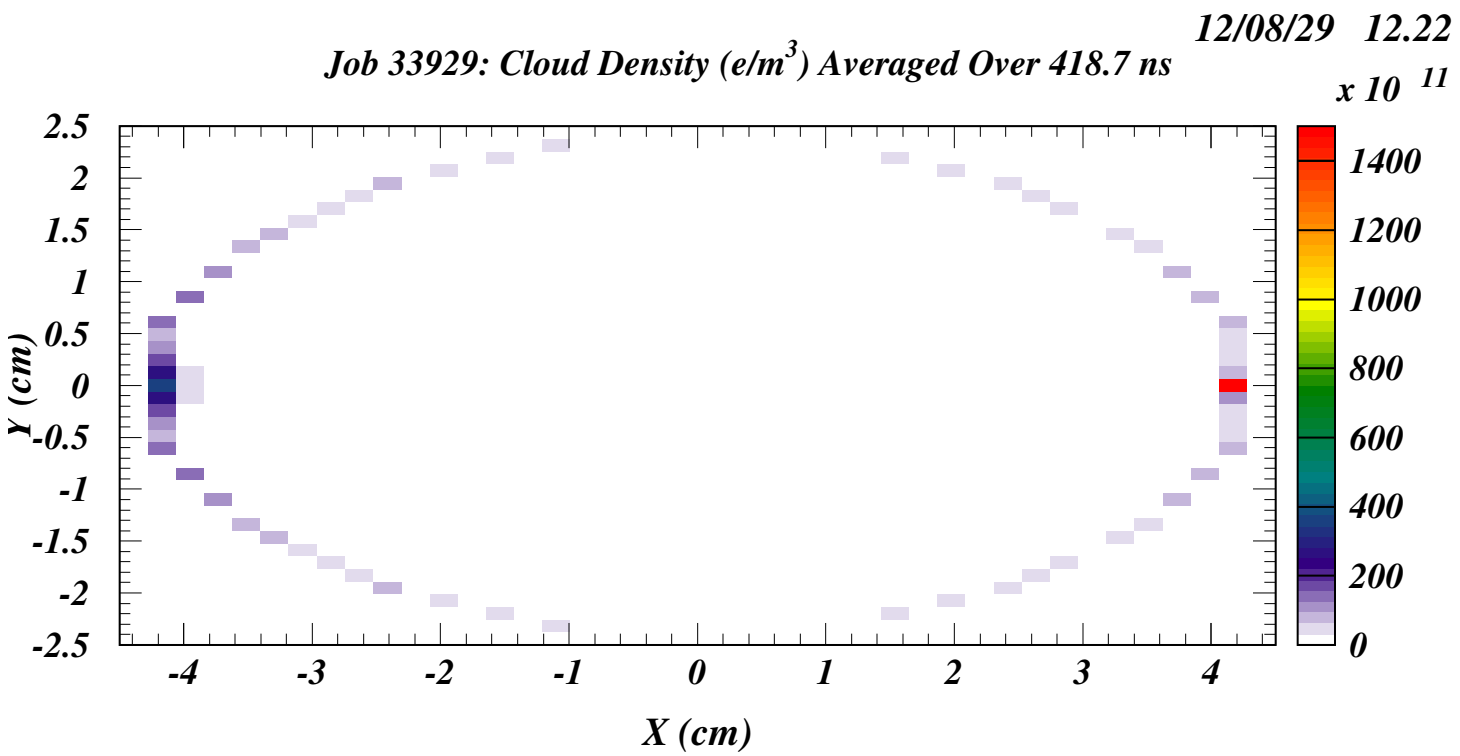
Job 33929: Cloud Density (e/m^3) Averaged Over 418.7 ns










12/08/29 12.22
Job 33929: Cloud Density (e/m3) Averaged Over 418.7 ns
x 10 11
1400
1200
1000
800
600
400
200
0
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
Y (cm)
-4
-3
-2
-1
0
1
2
3
4
X (cm)

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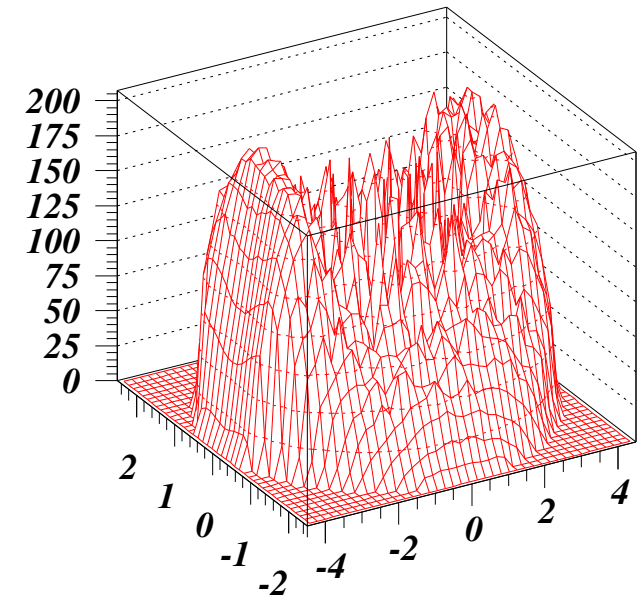
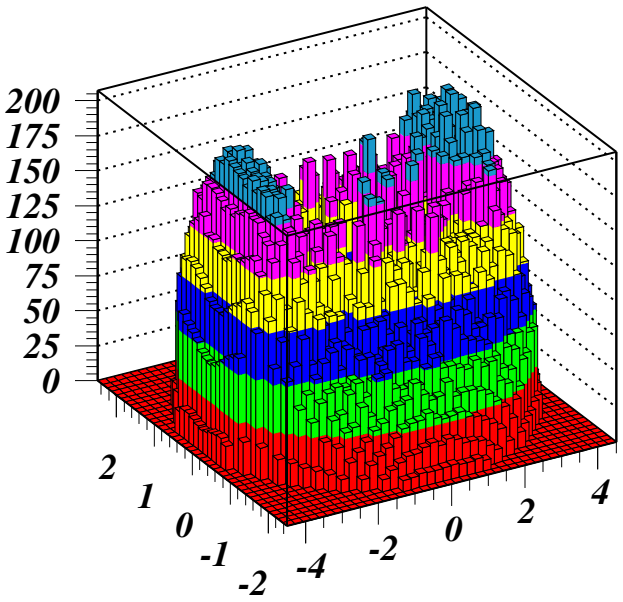
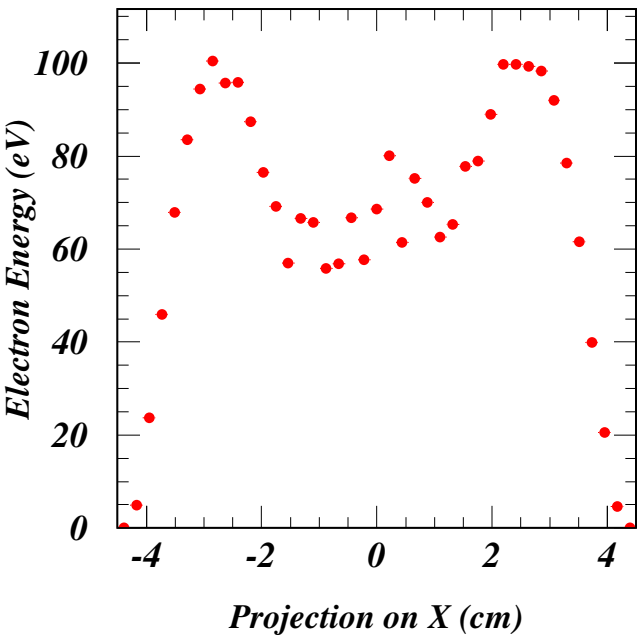
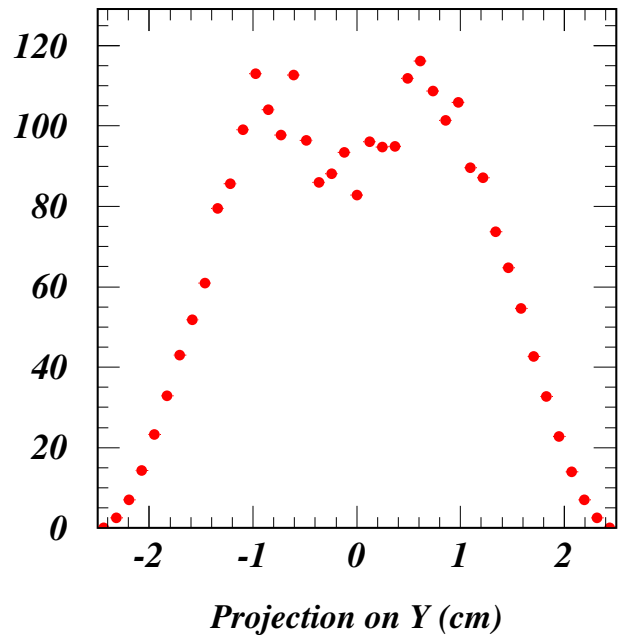
Job 33929: Electron Energies (eV) Averaged Over 418.7 ns









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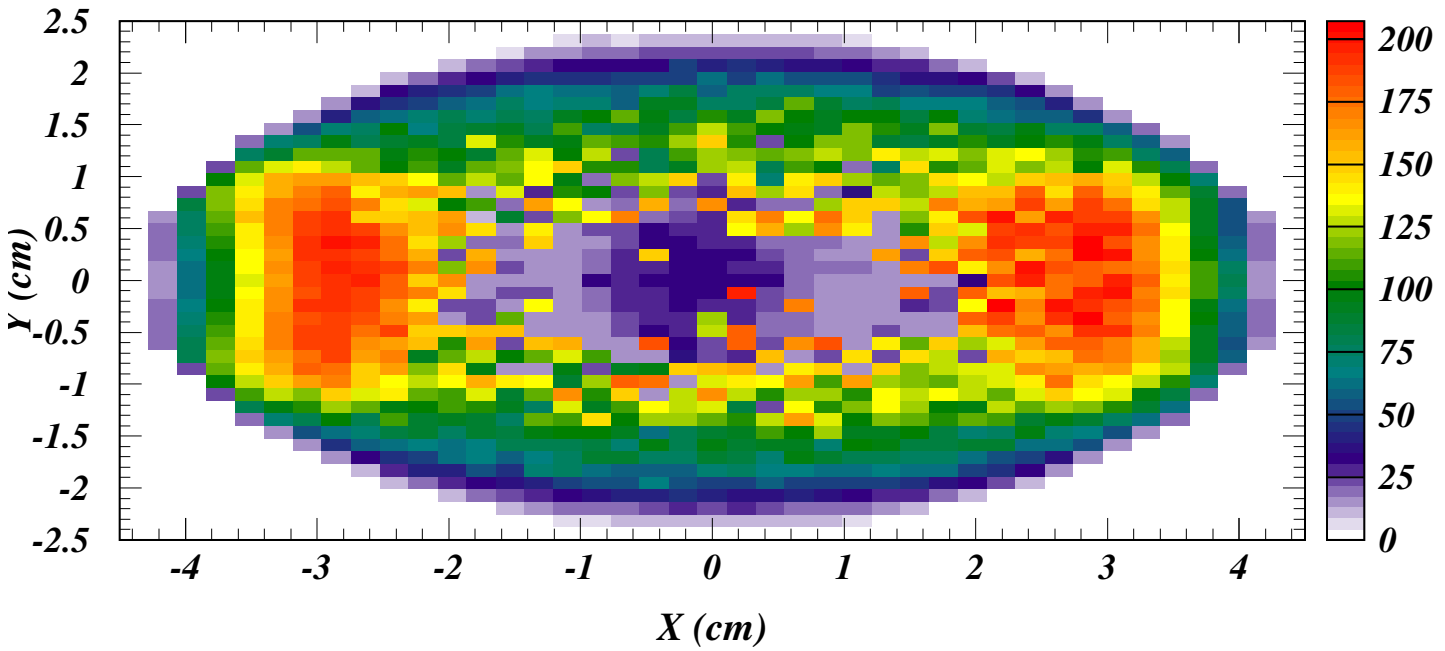
Job 33929: Electron Energies (eV) Averaged Over 418.7 ns



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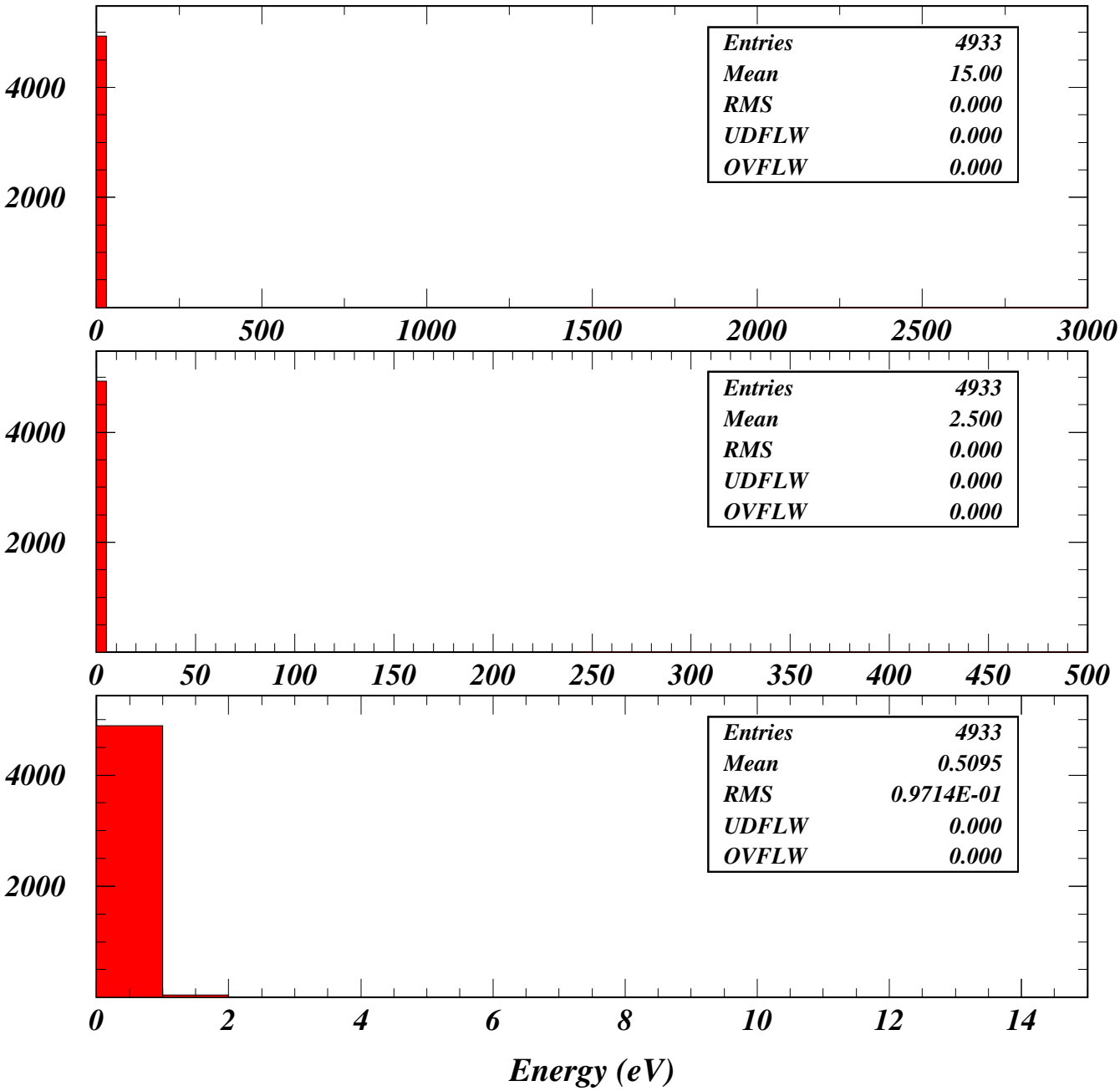
Job 33929: Photoelectrons from Direct Photons



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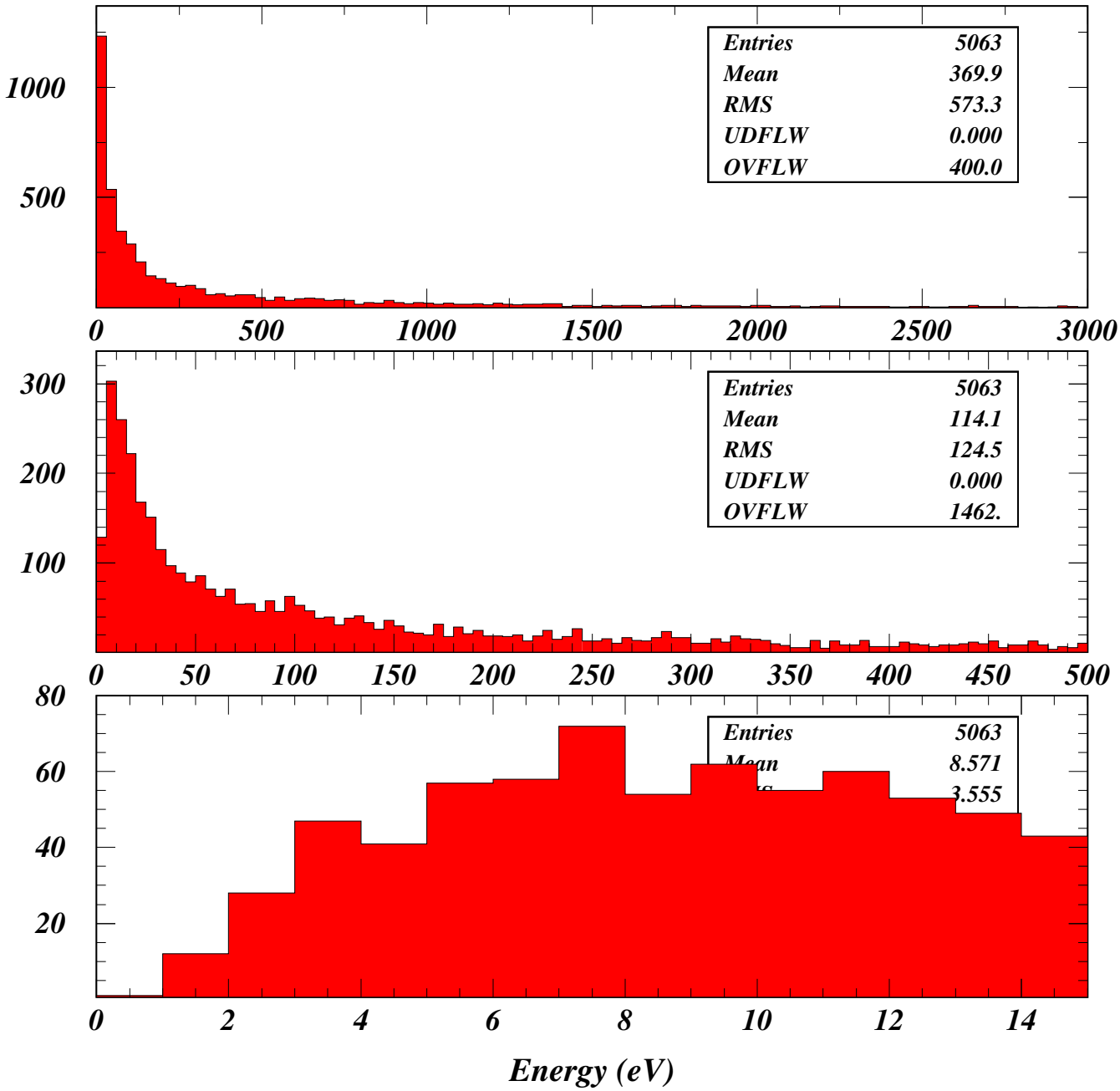
Job 33929: Photoelectrons from Reflected Photons



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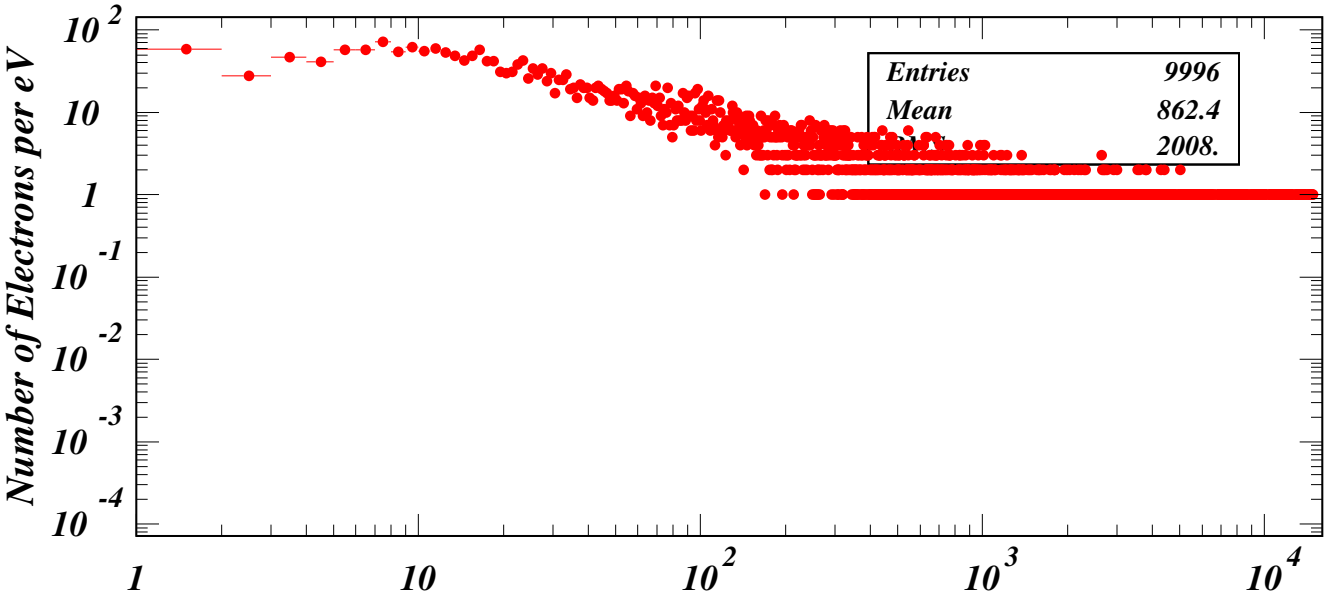
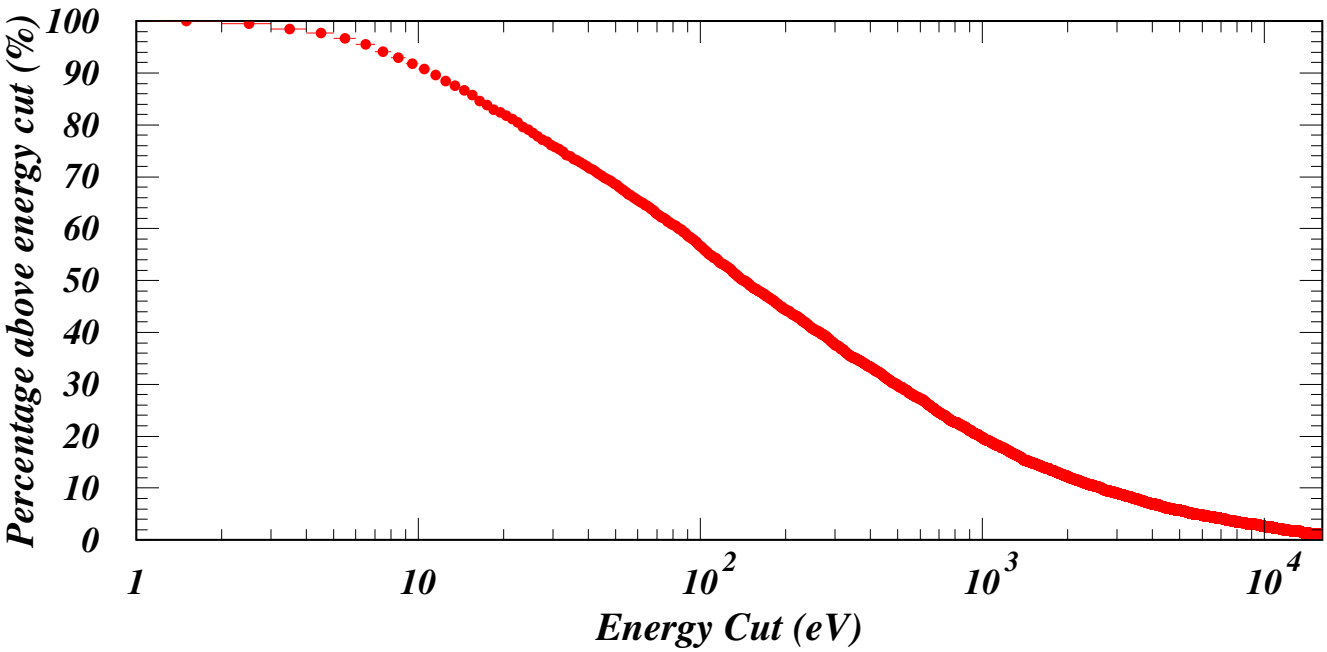
Job 33929: Photoelectron Energies





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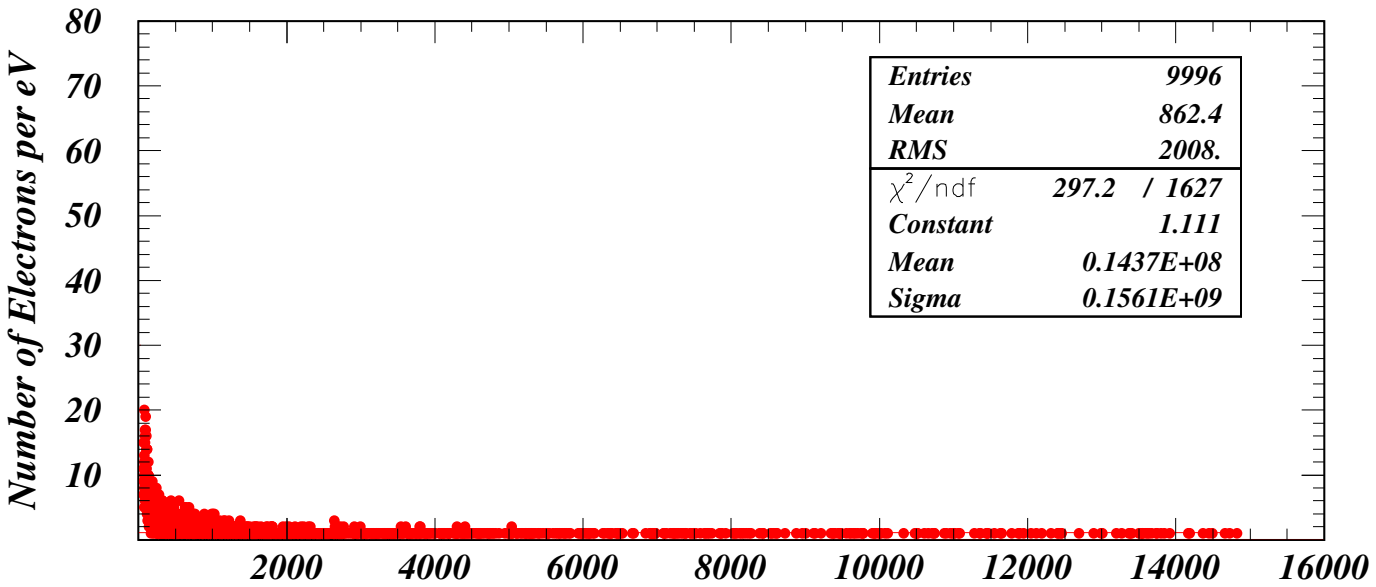
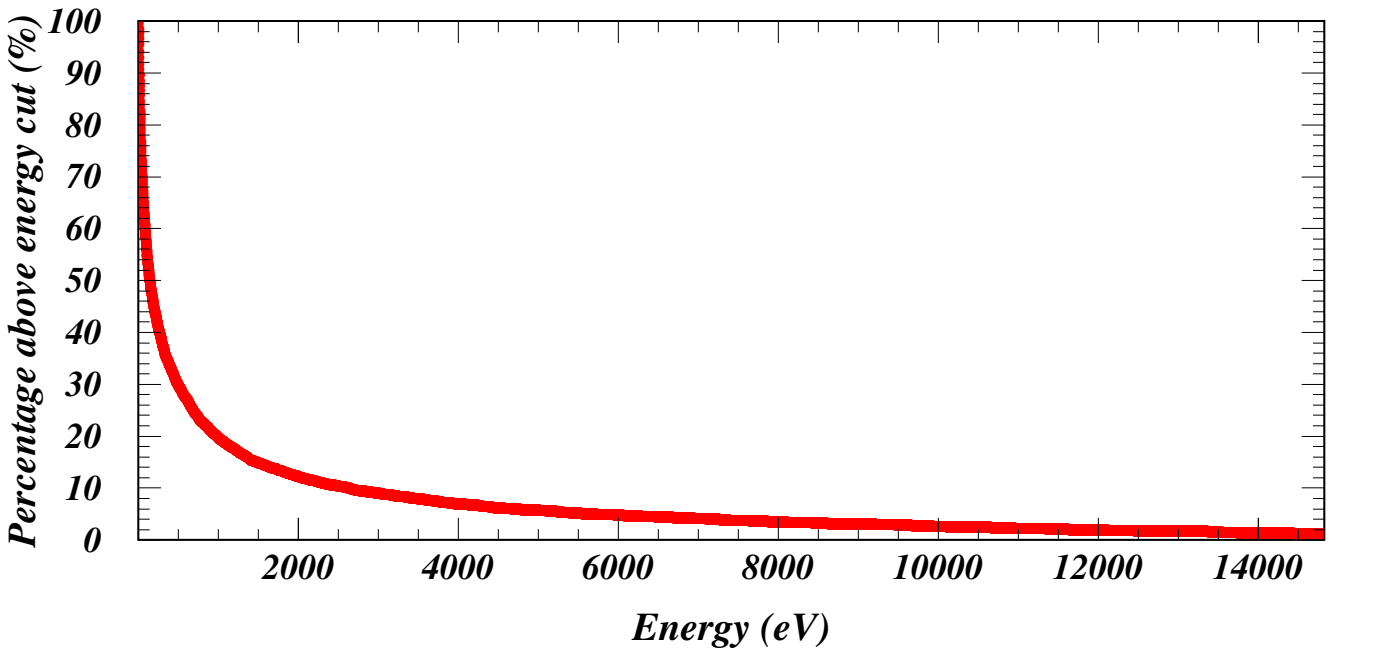
Job 33929: Photoelectron Energies





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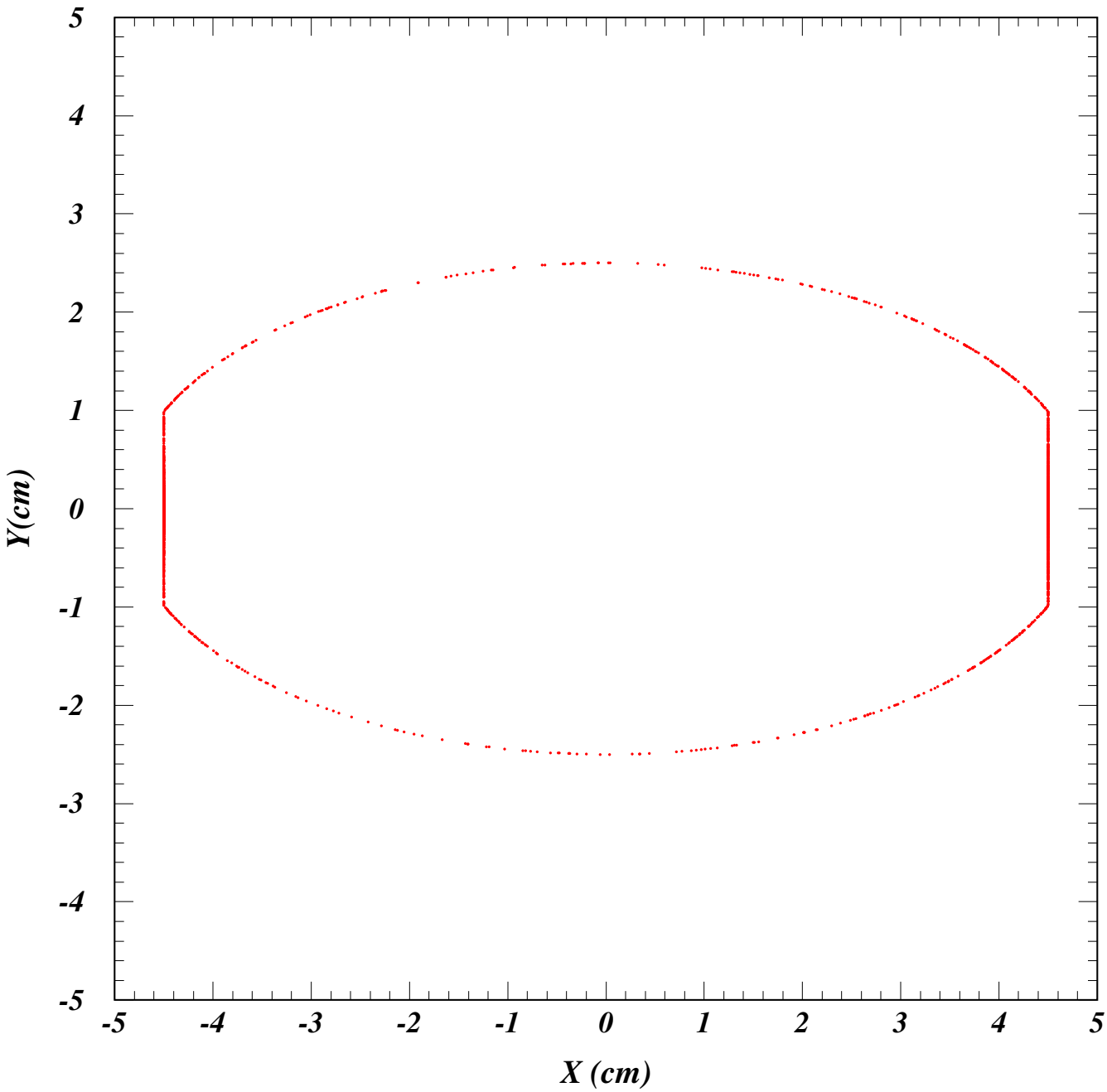
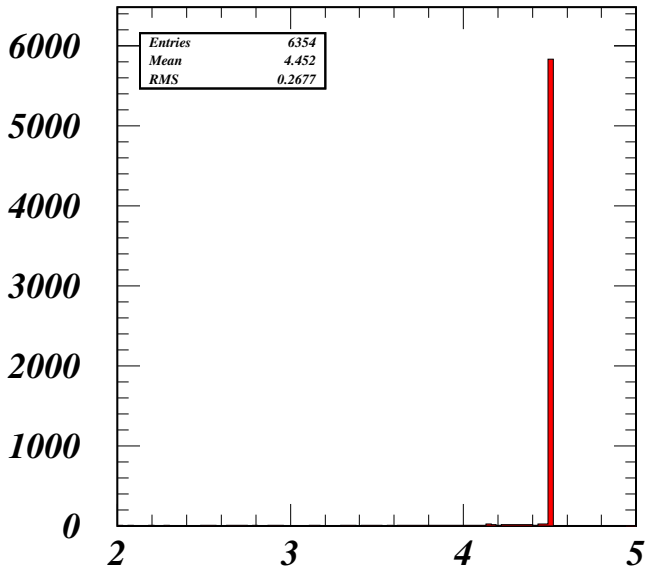
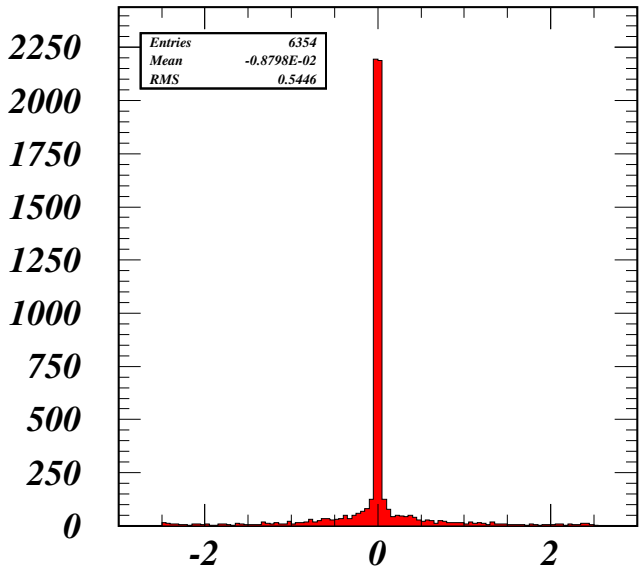
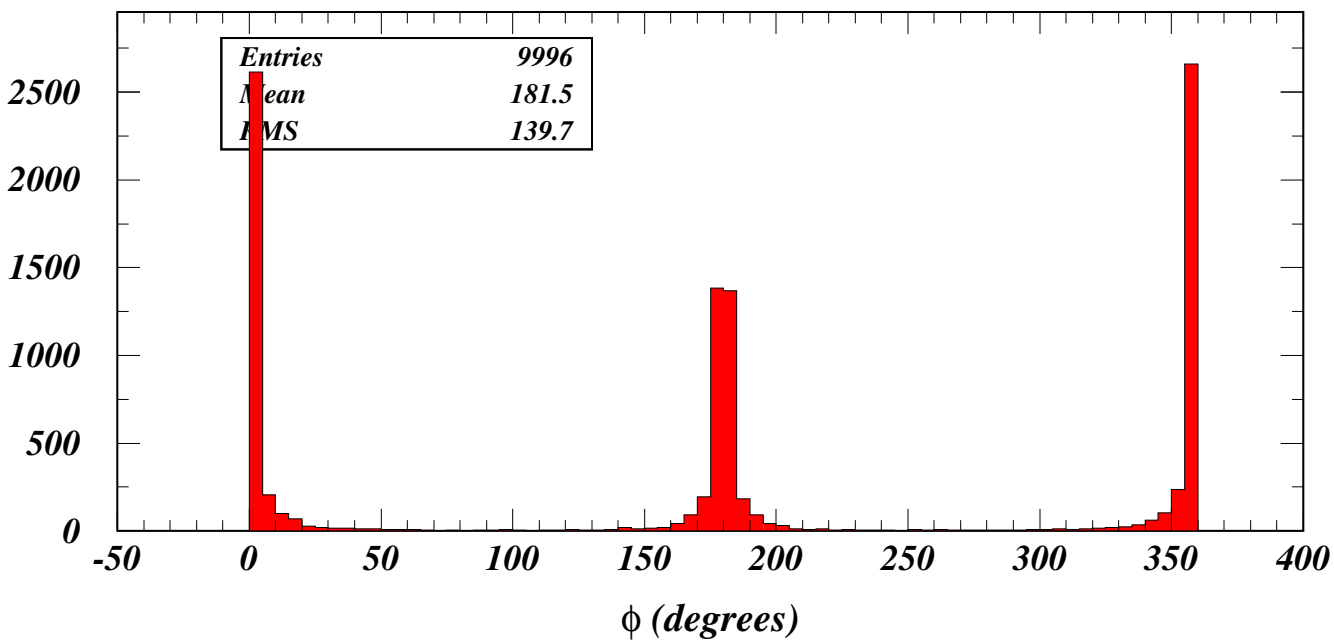
Job 33929: Photoelectron Production Distributions



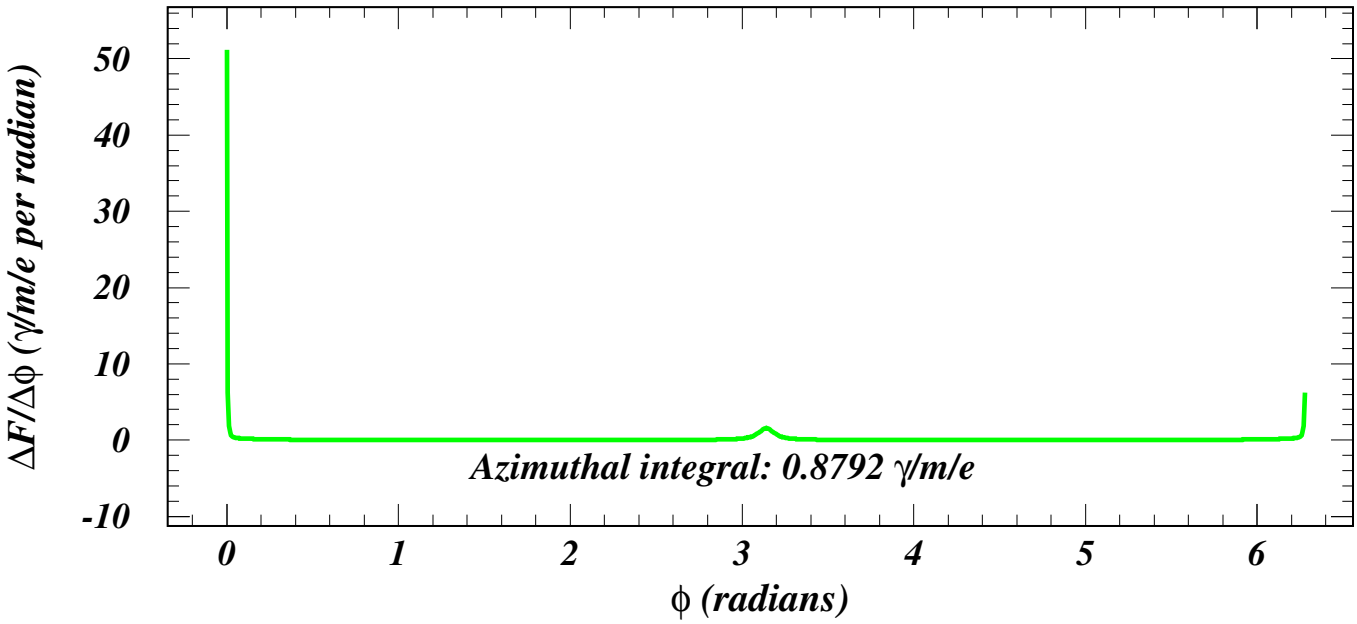
Job 33929: Photoelectron Production Distributions

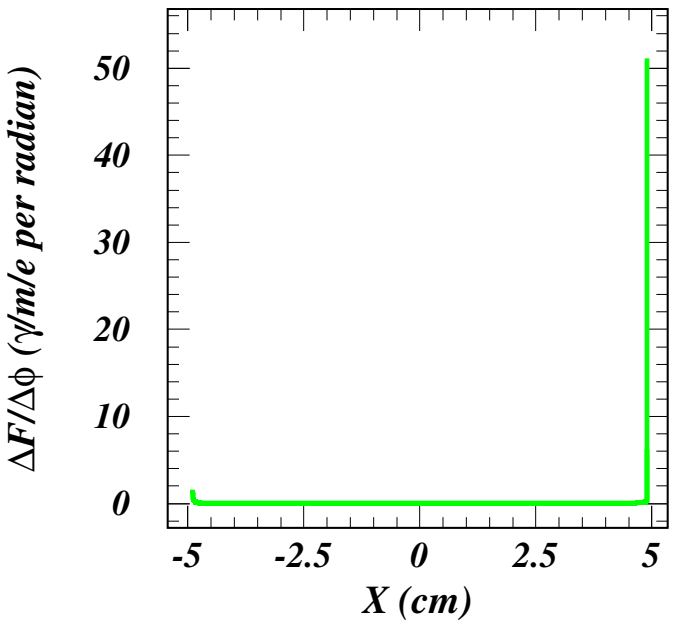


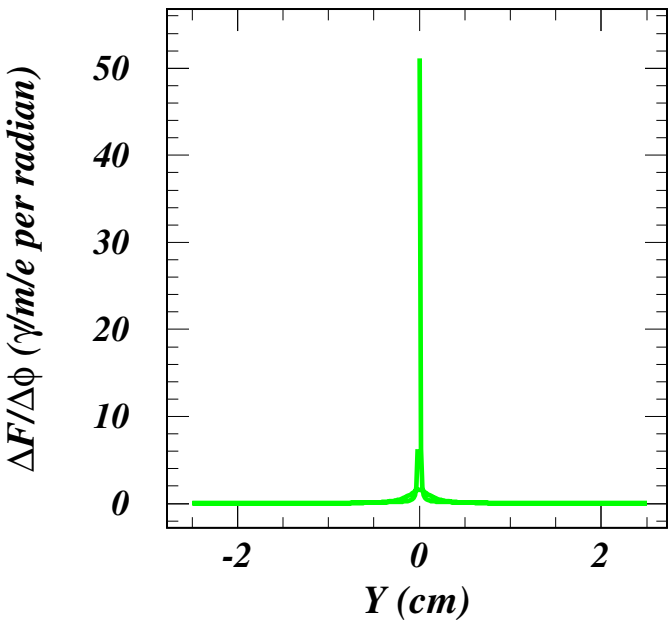


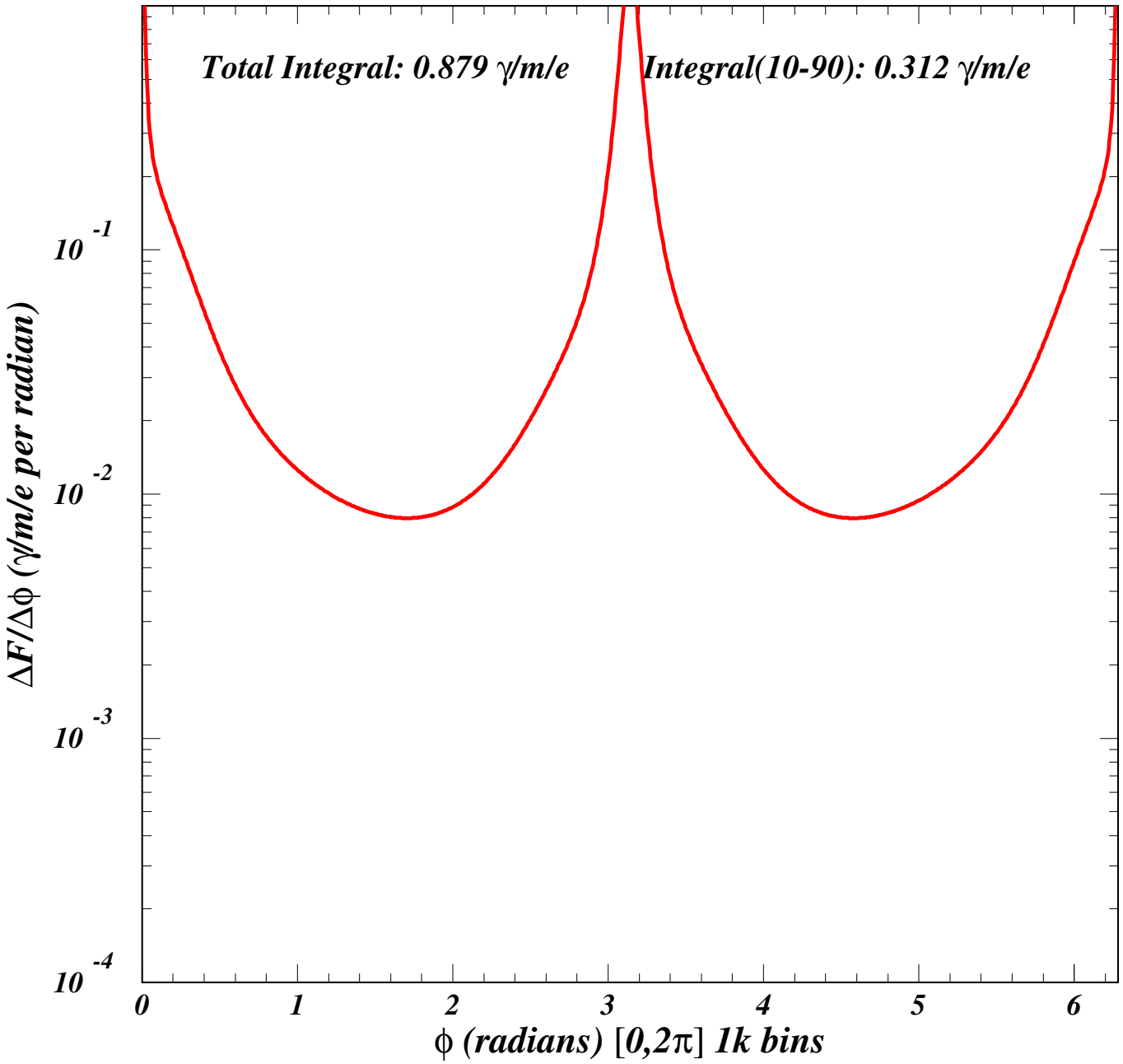


Job 33929: Photoelectron Production Distributions







12/08/29 12.22

Job 33929: Photoelectron Production Distributions