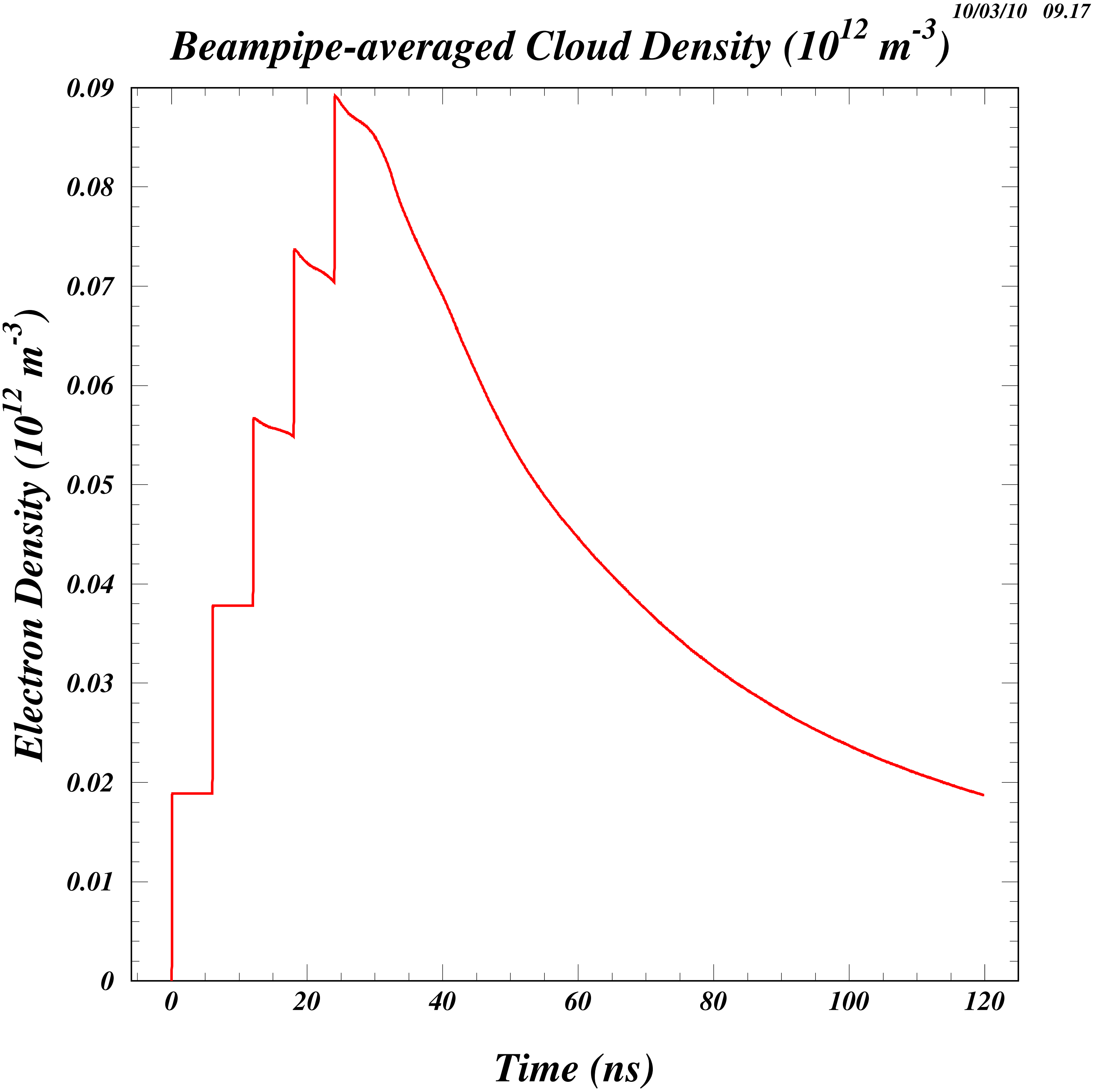
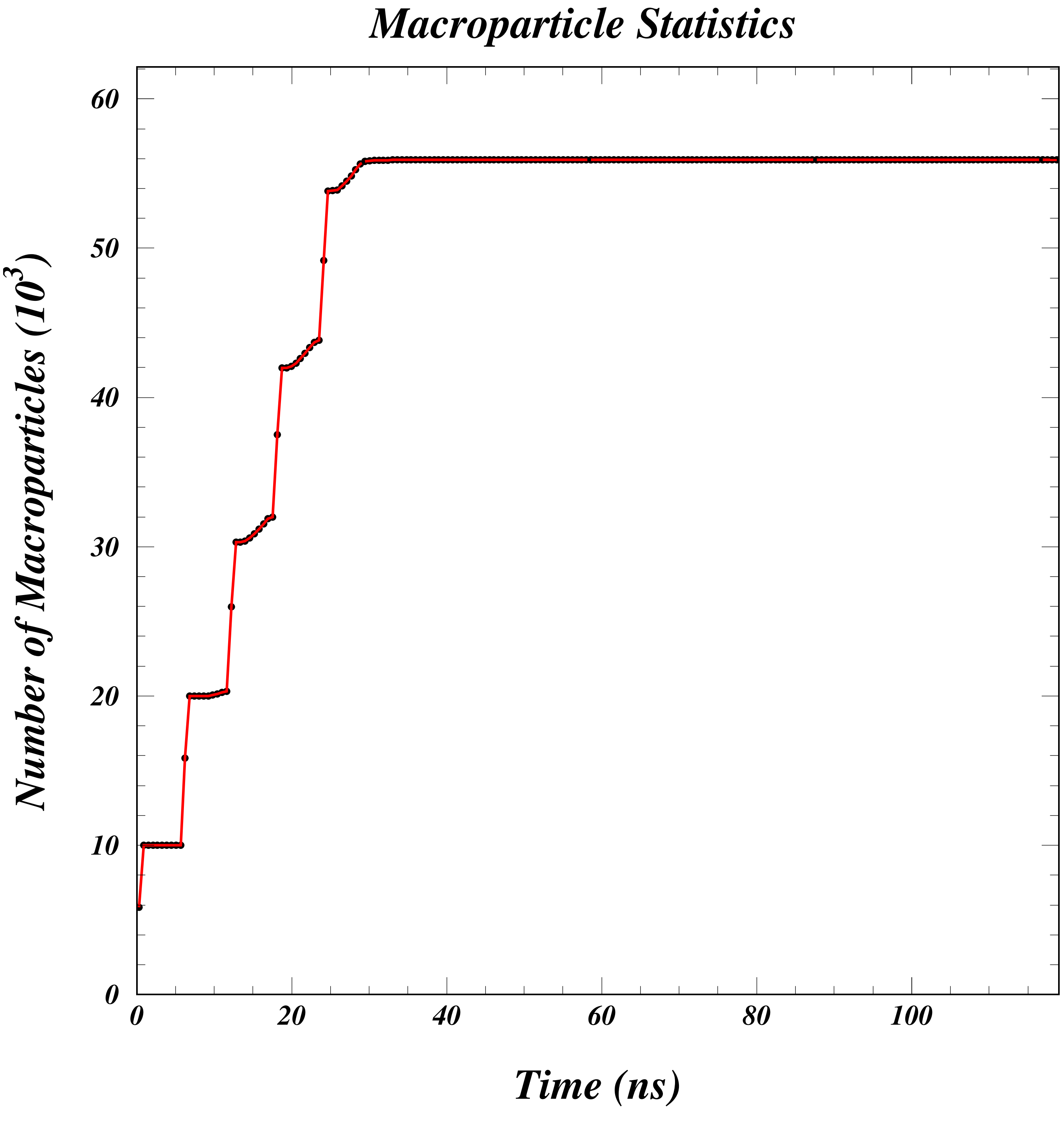
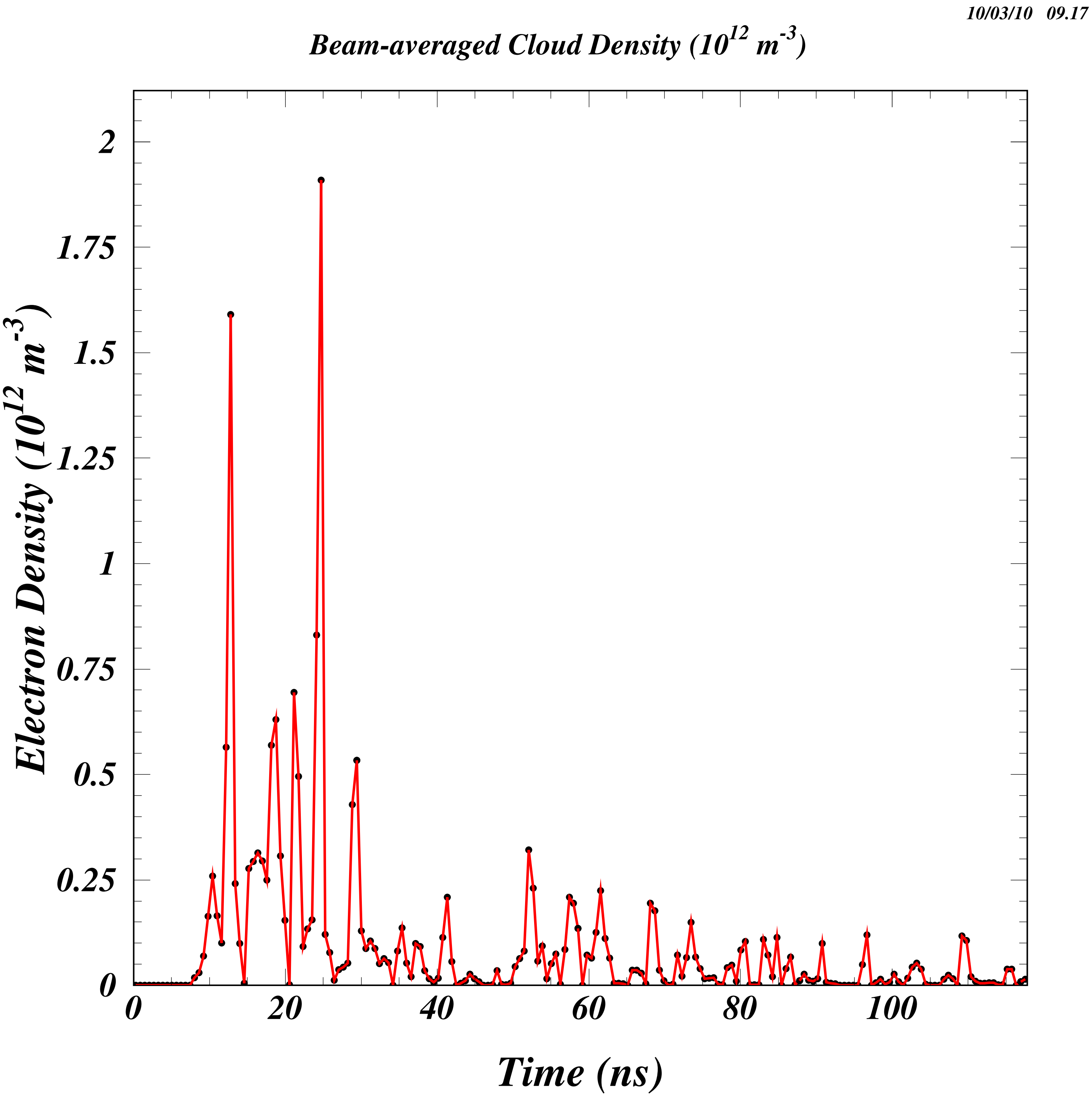


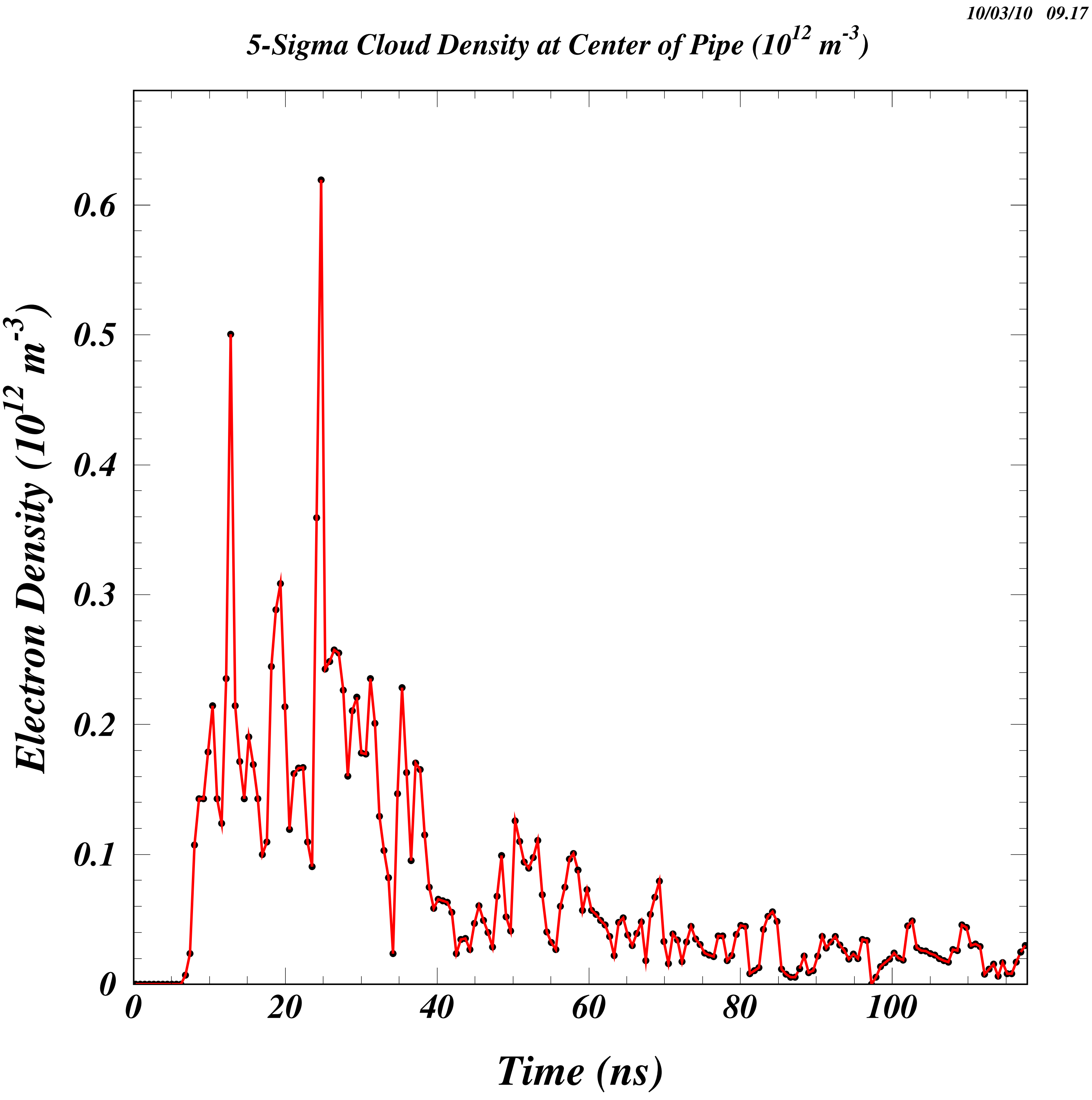
10/03/10 09.17
Beampipe-averaged Cloud Density (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
Time (ns)
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0
20
40
60
80
100
120

10/03/10 09.17

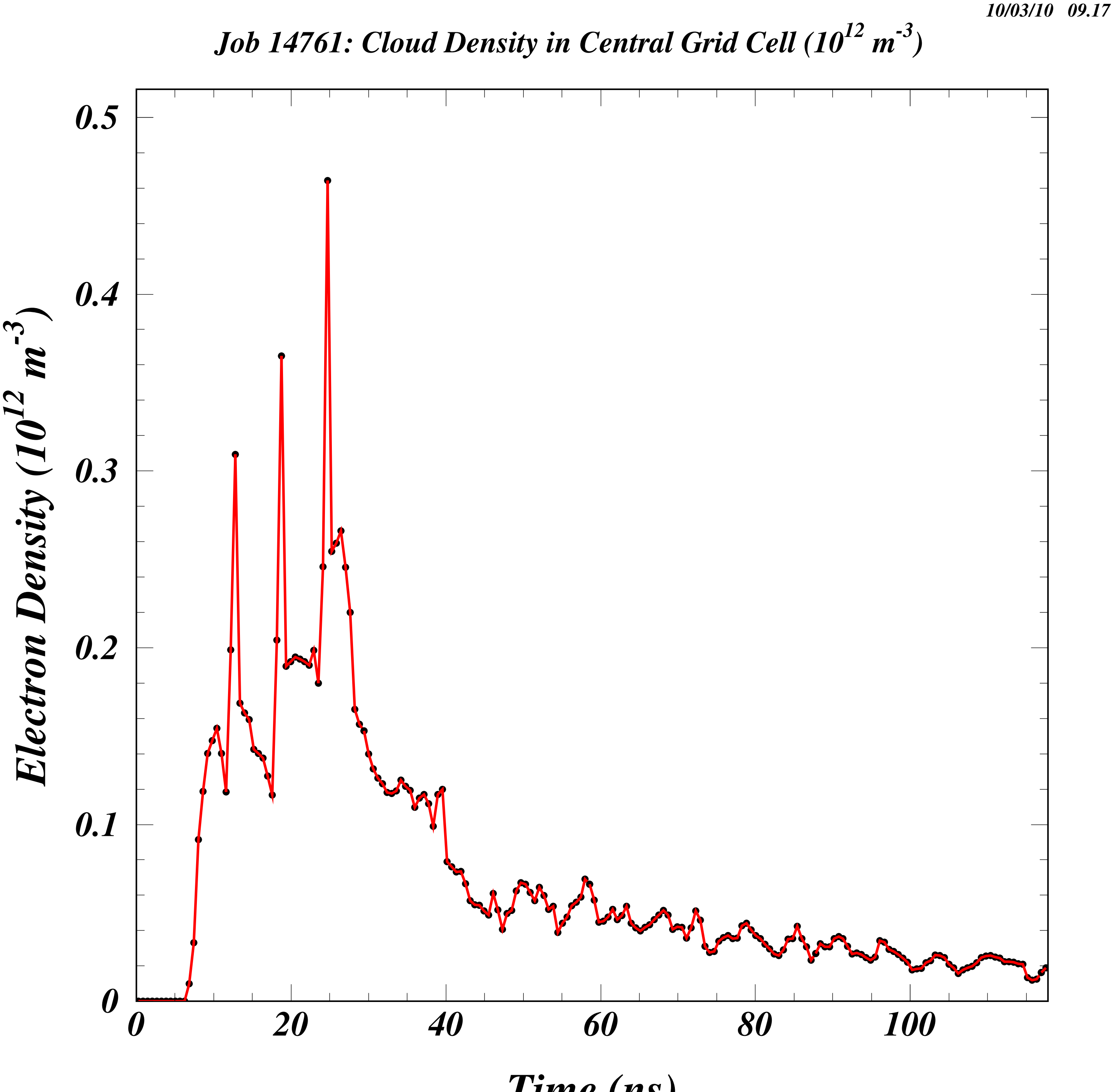


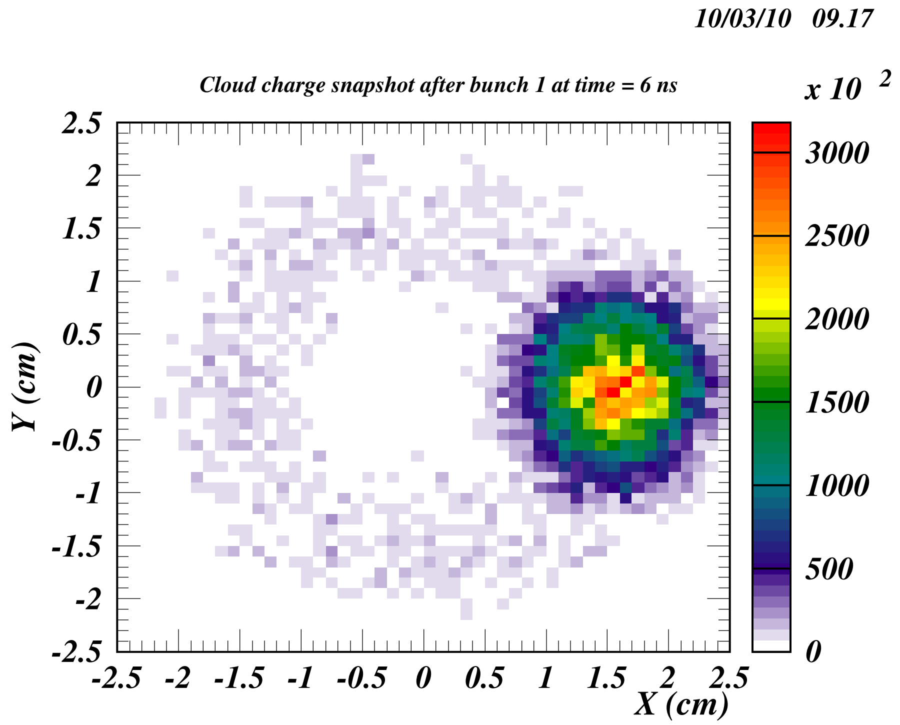
Macroparticle Statistics
Number of Macroparticles (10^3)
Time (ns)
0
10
20
30
40
50
60
0
20
40
60
80
100


10/03/10 09.17
Beam-averaged Cloud Density (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
0
0.25
0.5
0.75
1
1.25
1.5
1.75
2
0
20
40
60
80
100
Time (ns)

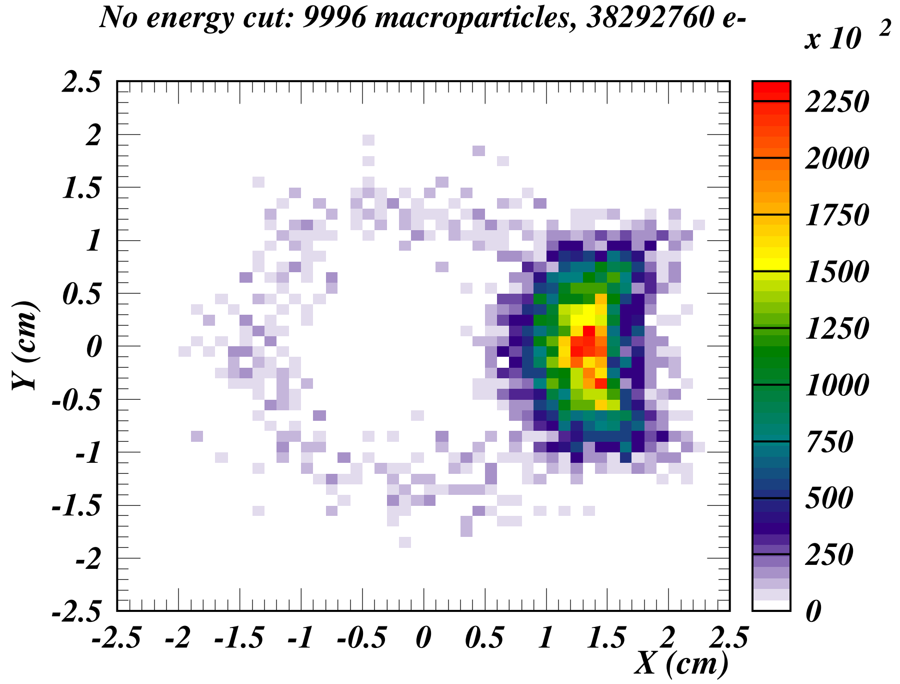


10/03/10 09.17
5-Sigma Cloud Density at Center of Pipe (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
0
0.1
0.2
0.3
0.4
0.5
0.6
0
20
40
60
80
100
Time (ns)


10/03/10 09.17
Job 14761: Cloud Density in Central Grid Cell (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
0
0.1
0.2
0.3
0.4
0.5
0
20
40
60
80
100
Time (ns)

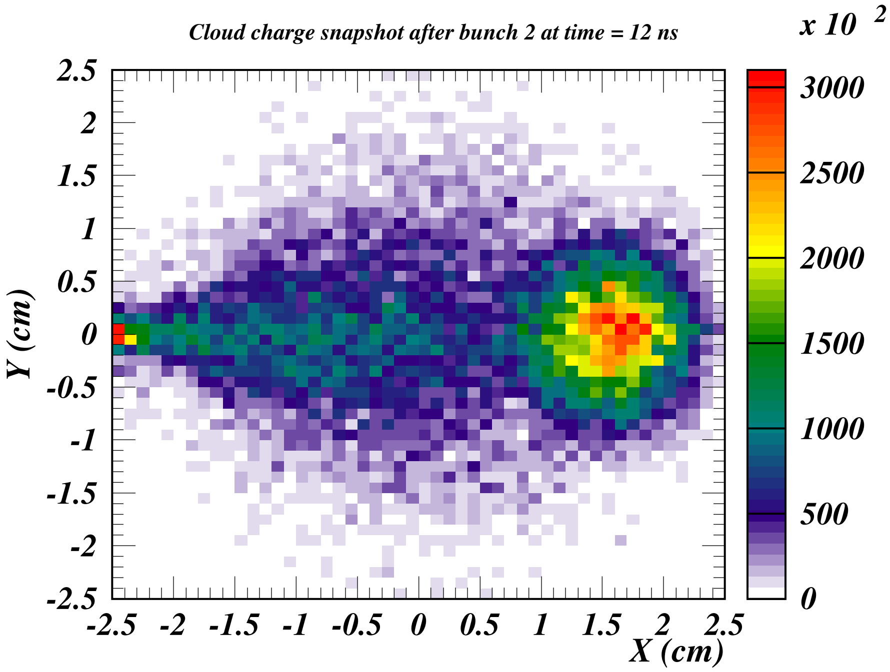


No energy cut: 9996 macroparticles, 38292760 e-

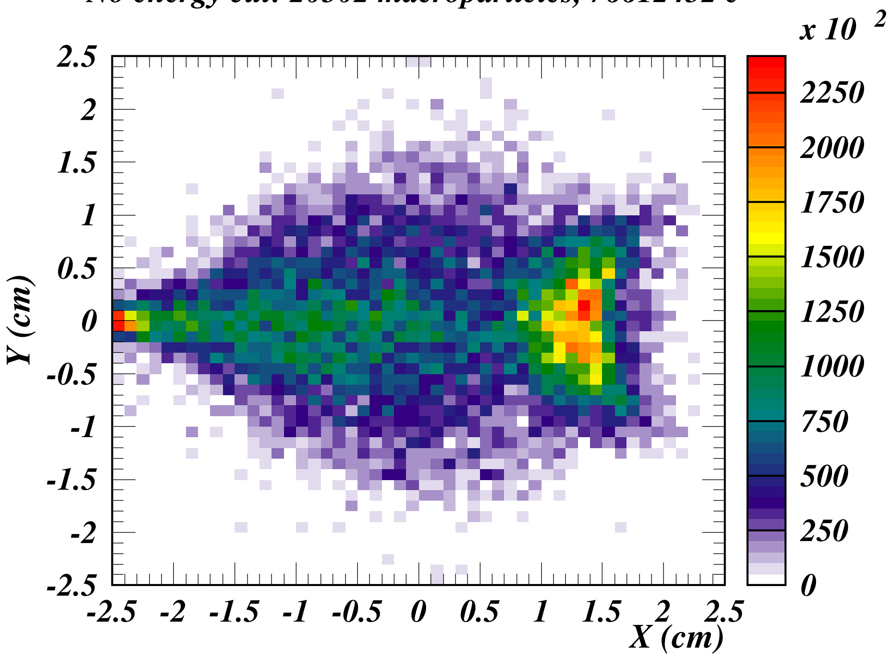


E_{kin}>10 eV: 5726 macroparticles, 21935116 e-

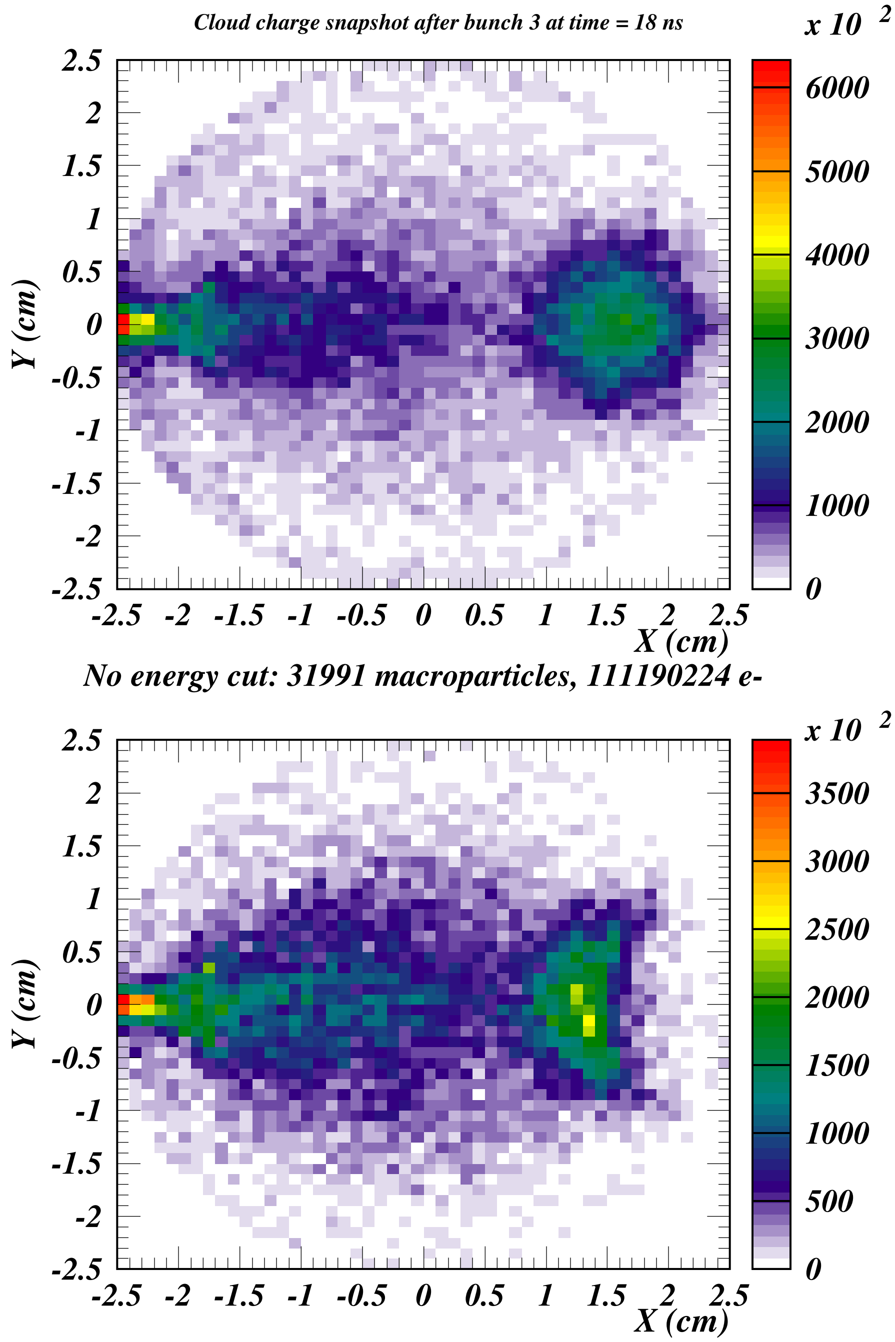
10/03/10 09.17



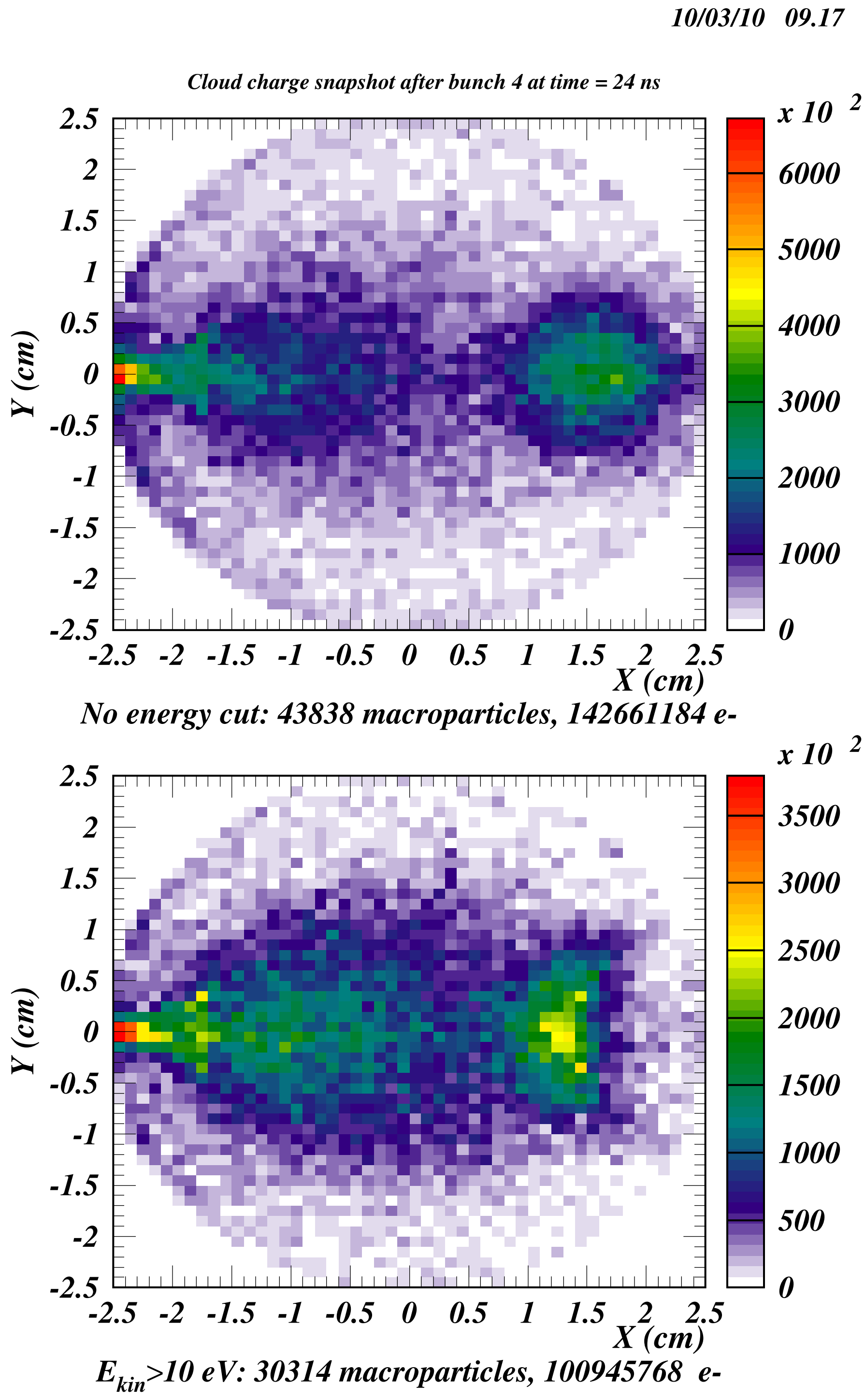
No energy cut: 20302 macroparticles, 76612432 e-



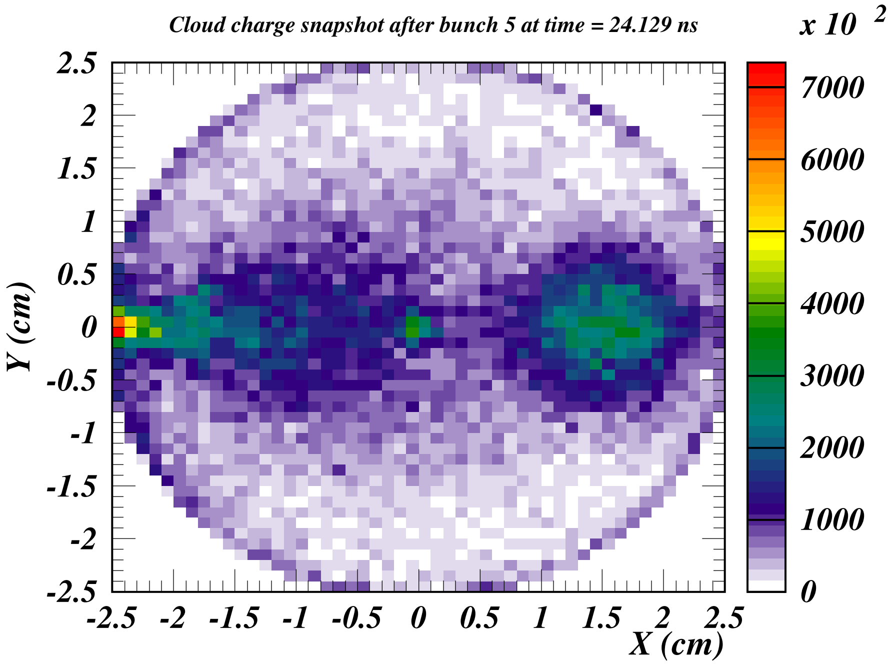
E_{kin}>10 eV: 15466 macroparticles, 58541212 e-



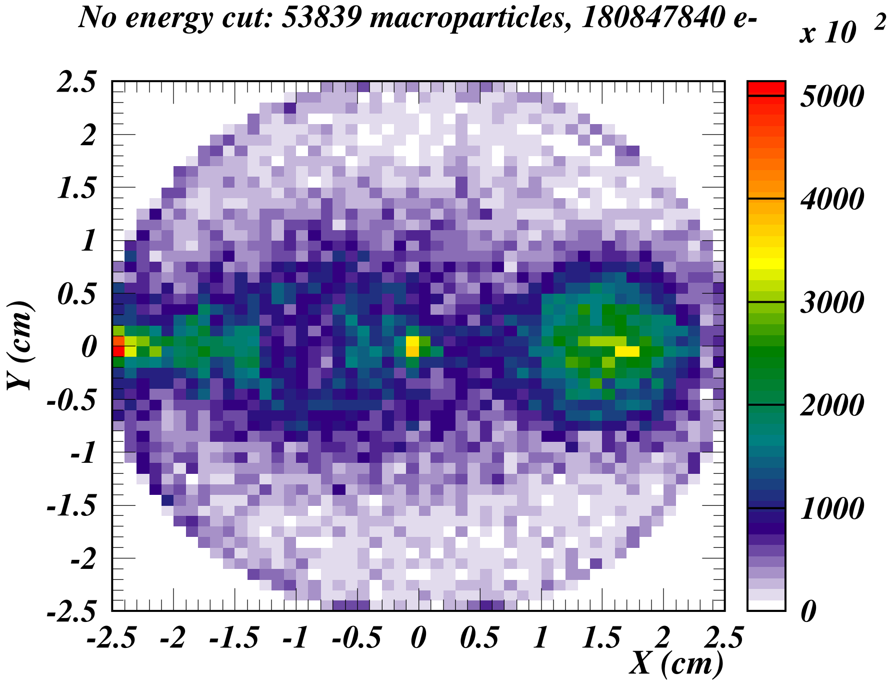
E_{kin}>10 eV: 22044 macroparticles, 79671984 e-


10/03/10 09.17
Cloud charge snapshot after bunch 4 at time = 24 ns
Y (cm)
X (cm)
x 10 2
No energy cut: 43838 macroparticles, 142661184 e-
Y (cm)
X (cm)
x 10 2
E kin>10 eV: 30314 macroparticles, 100945768 e-

10/03/10 09.18



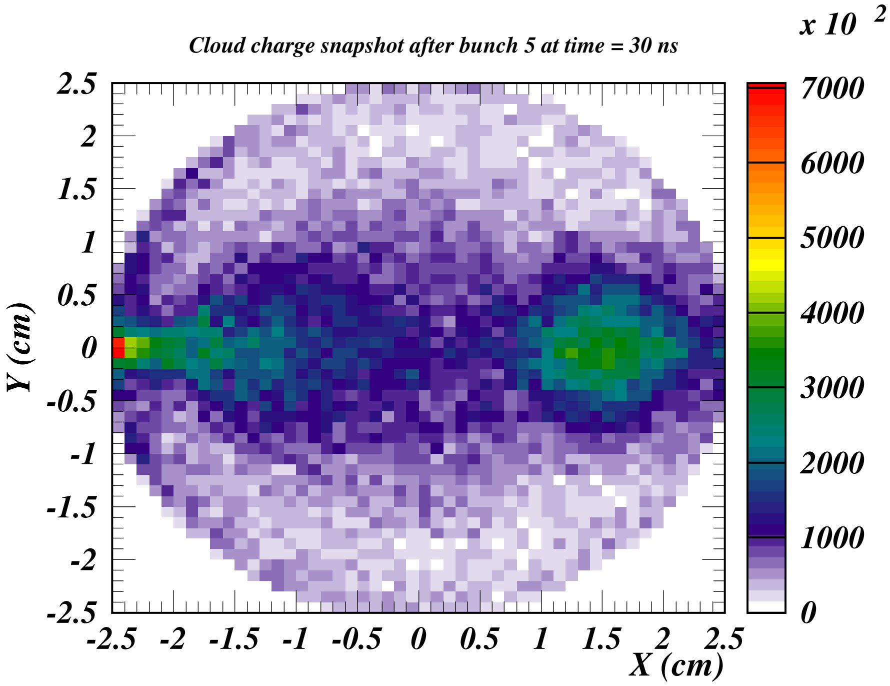
No energy cut: 53839 macroparticles, 180847840 e-



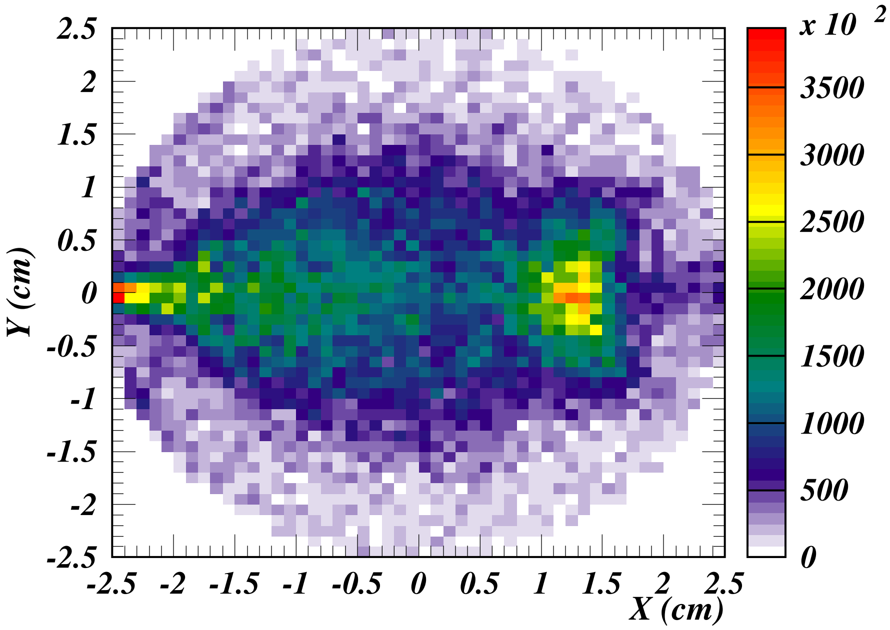
E_{kin}>10 eV: 44759 macroparticles, 147289008 e-

10/03/10 09.18

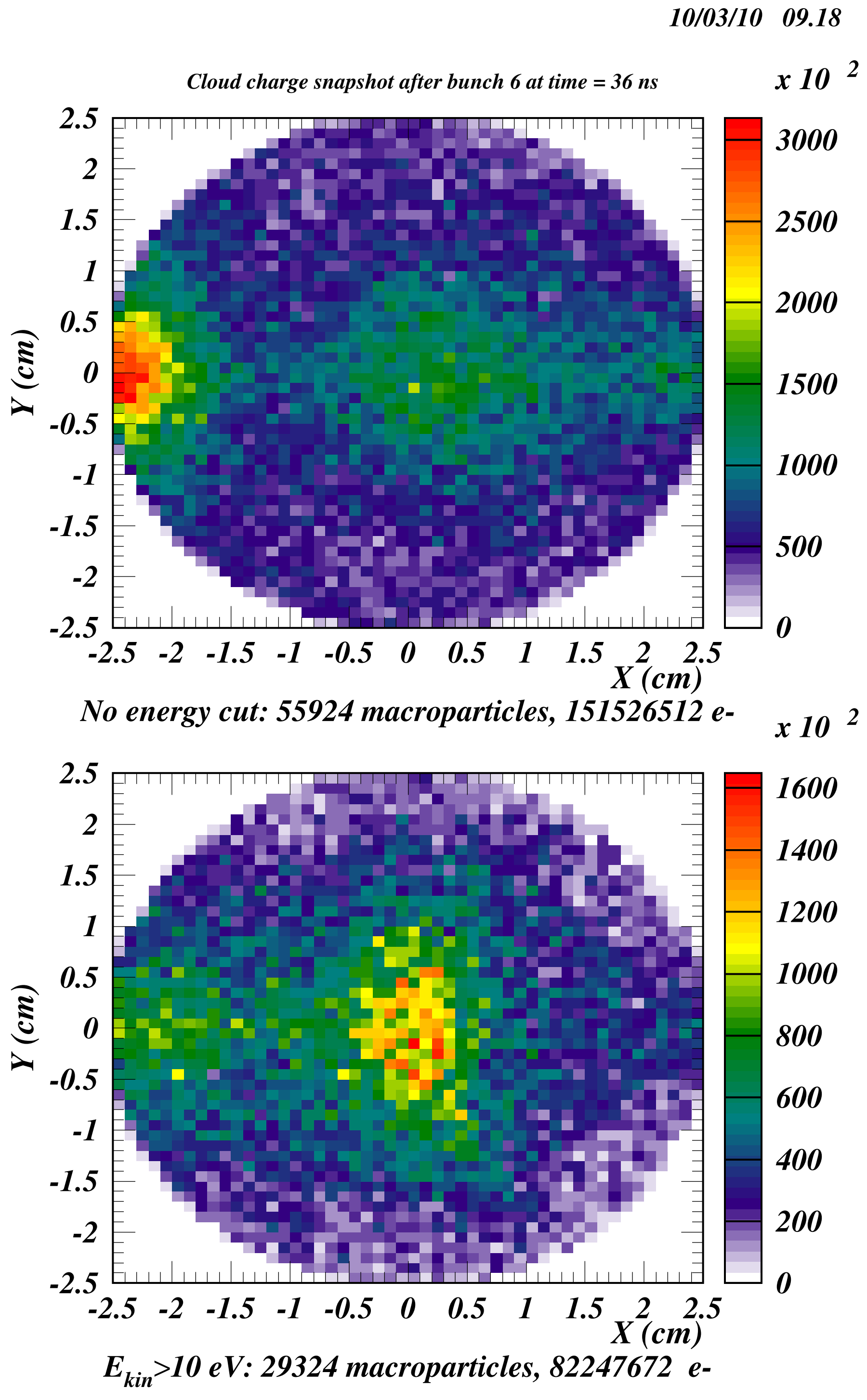
Cloud charge snapshot after bunch 5 at time = 30 ns



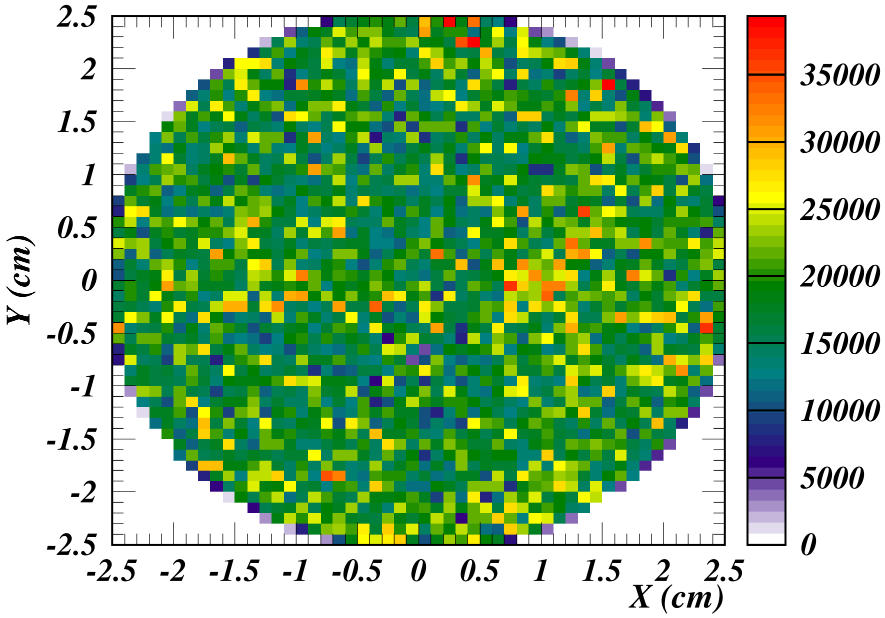
No energy cut: 55856 macroparticles, 172470432 e-



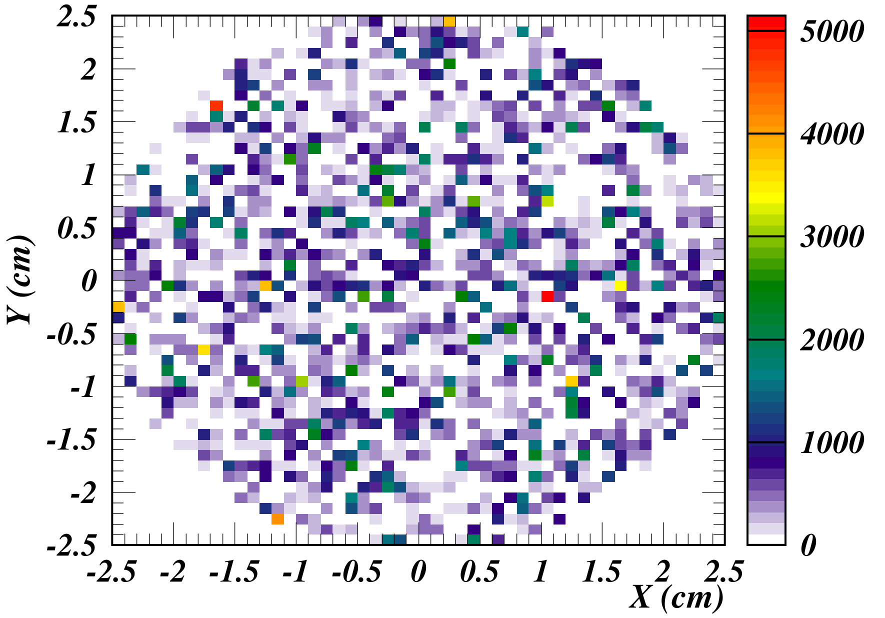
E_{kin}>10 eV: 38794 macroparticles, 121789672 e-


10/03/10 09.18
Cloud charge snapshot after bunch 6 at time = 36 ns
x 10^2
Y (cm)
X (cm)
No energy cut: 55924 macroparticles, 151526512 e-
x 10^2
Y (cm)
X (cm)
E_kin>10 eV: 29324 macroparticles, 82247672 e-

Cloud charge snapshot after bunch 21 at time = 120 ns



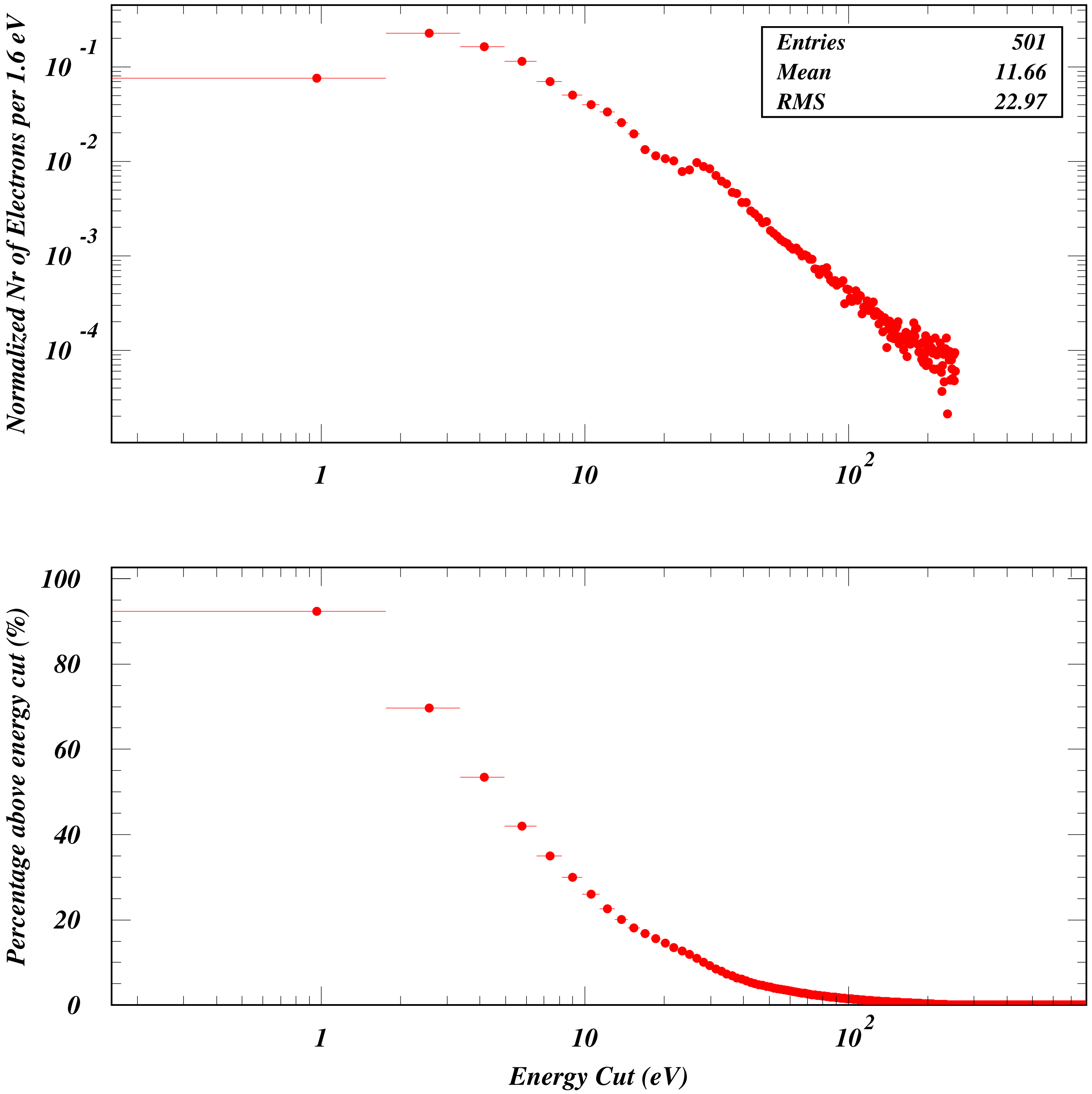
No energy cut: 55904 macroparticles, 37908500 e-

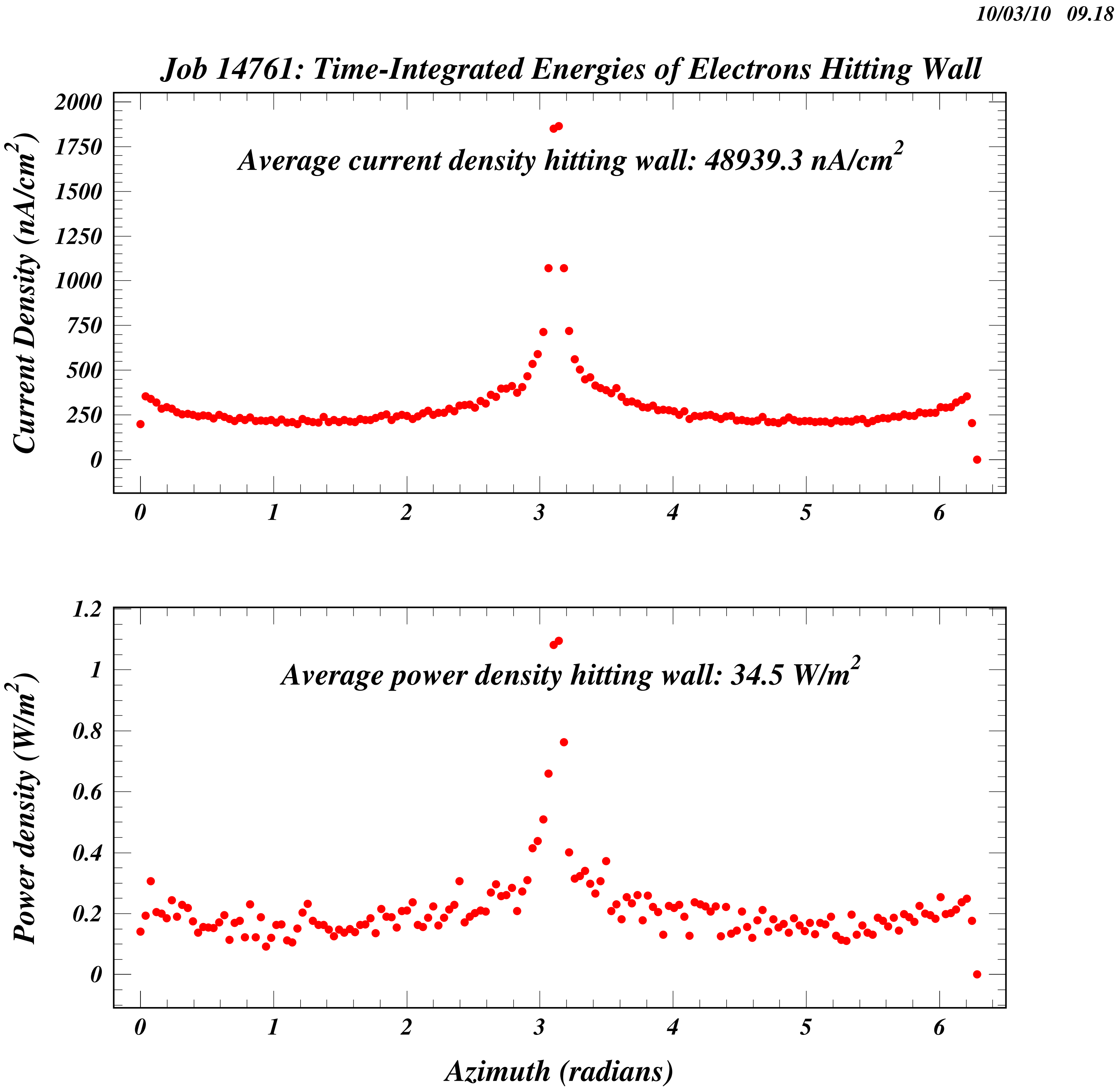


E_{kin}>10 eV: 2075 macroparticles, 786106 e-

10/03/10   09.18

Job 14761: Time-Integrated Energies of Electrons Hitting Wall

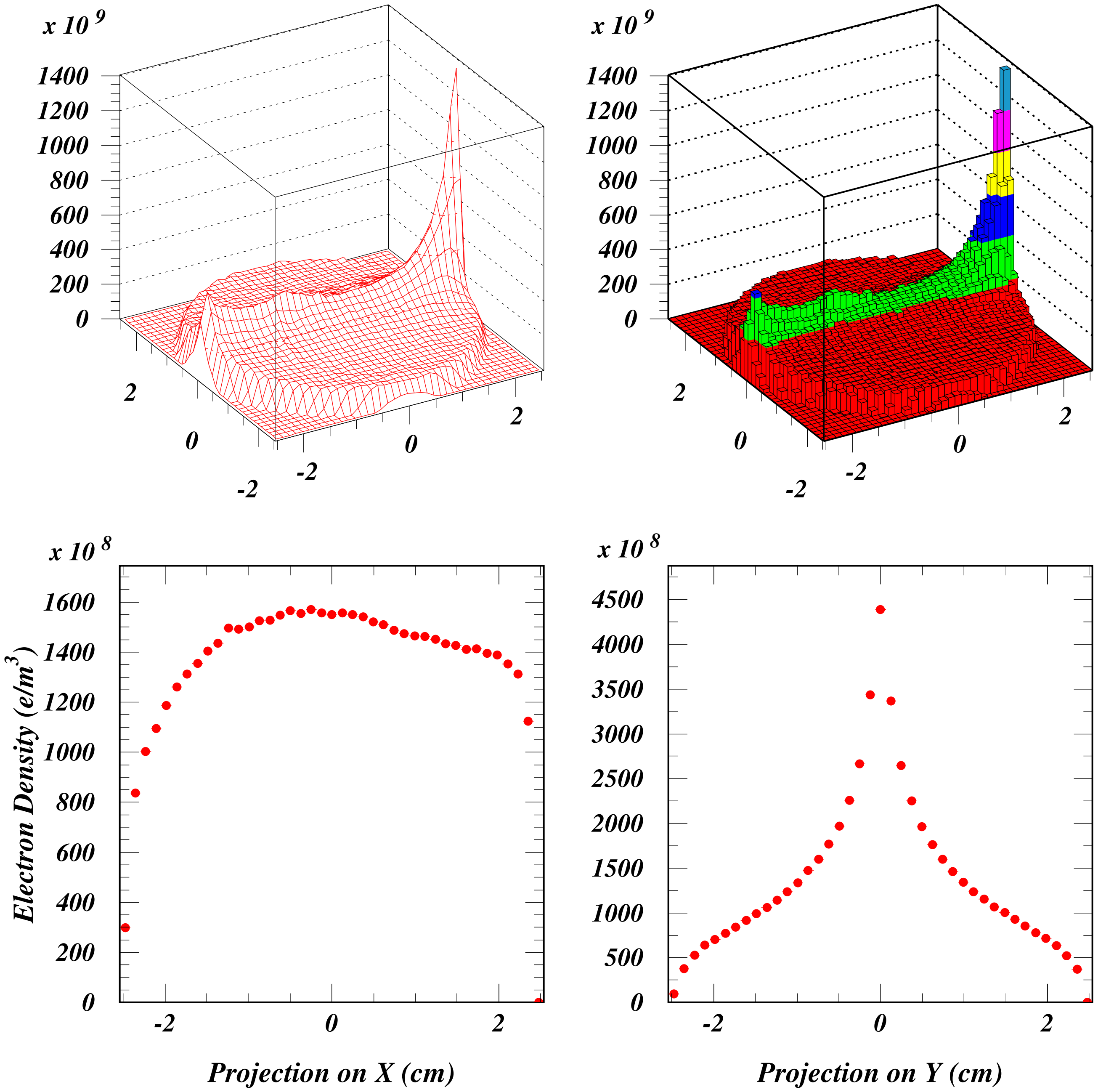


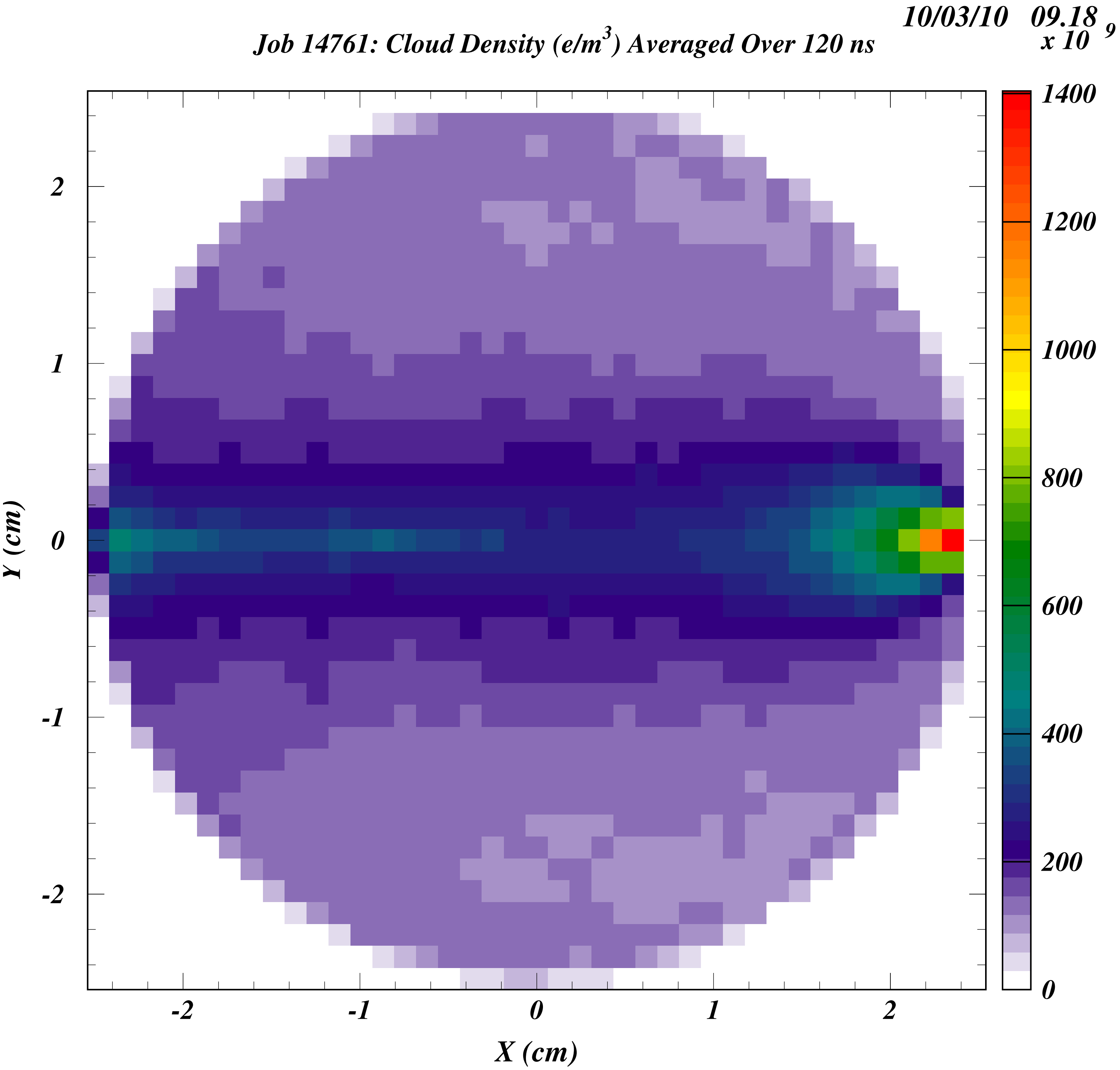


10/03/10 09.18
Job 14761: Time-Integrated Energies of Electrons Hitting Wall
Average current density hitting wall: 48939.3 nA/cm²
Current Density (nA/cm²)
2000
1750
1500
1250
1000
750
500
250
0
0
1
2
3
4
5
6
Average power density hitting wall: 34.5 W/m²
Power density (W/m²)
1.2
1
0.8
0.6
0.4
0.2
0
Azimuth (radians)

10/03/10 09.18

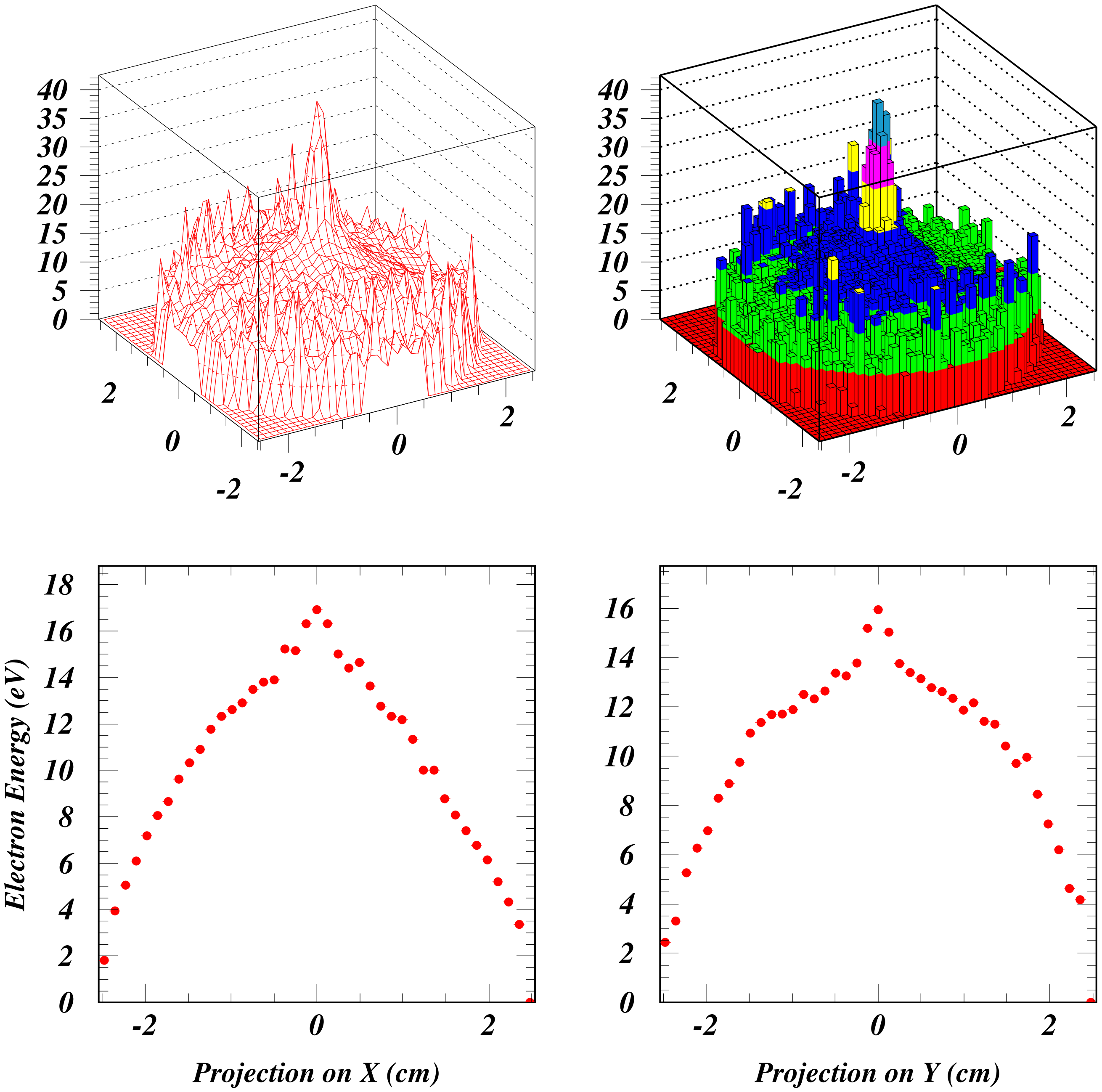
Job 14761: Cloud Density (e/m^3) Averaged Over 120 ns

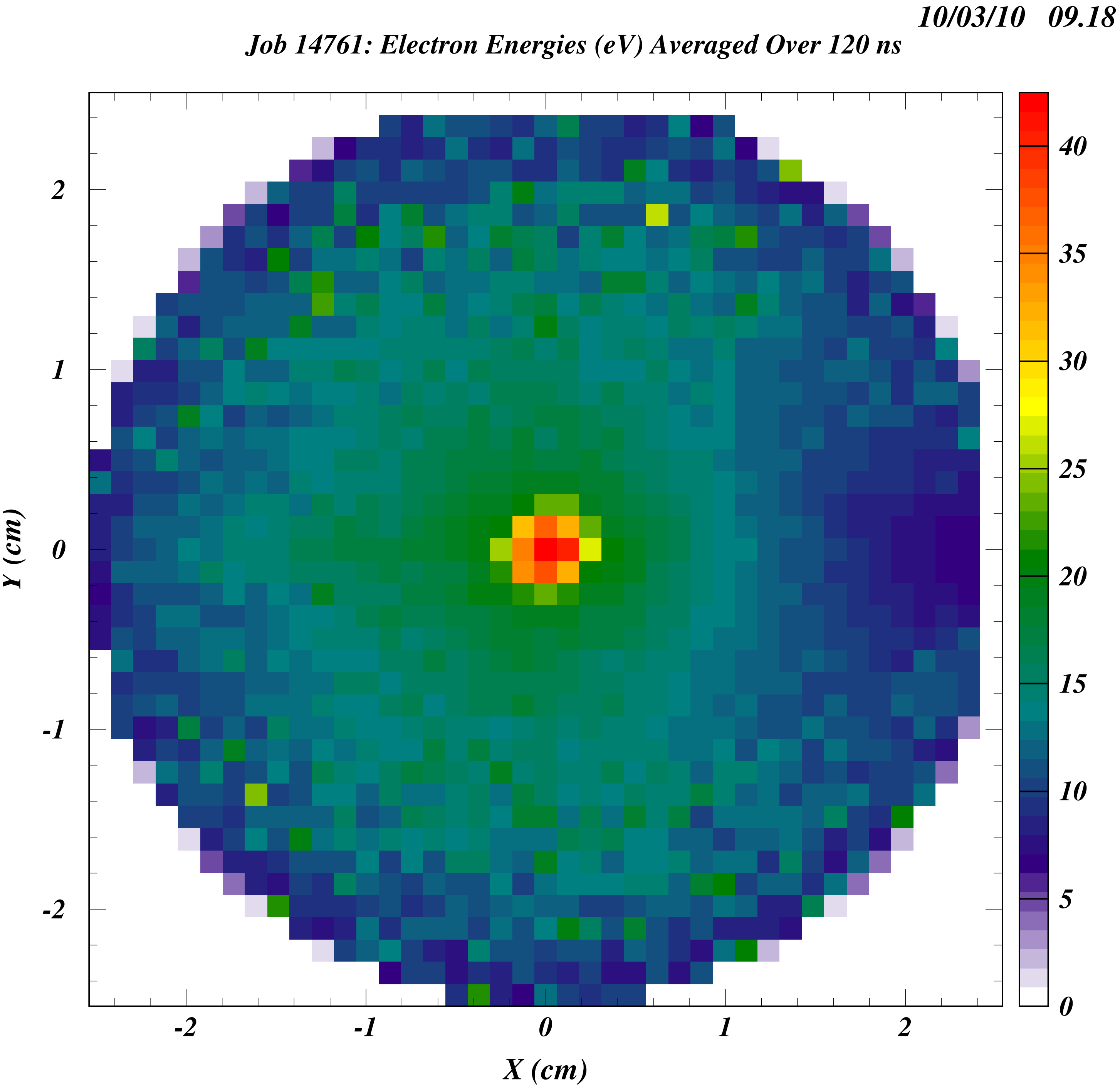



10/03/10 09.18
Job 14761: Cloud Density (e/m^3) Averaged Over 120 ns
x 10^9
1400
1200
1000
800
600
400
200
0
2
1
0
-1
-2
Y (cm)
-2
-1
0
1
2
X (cm)

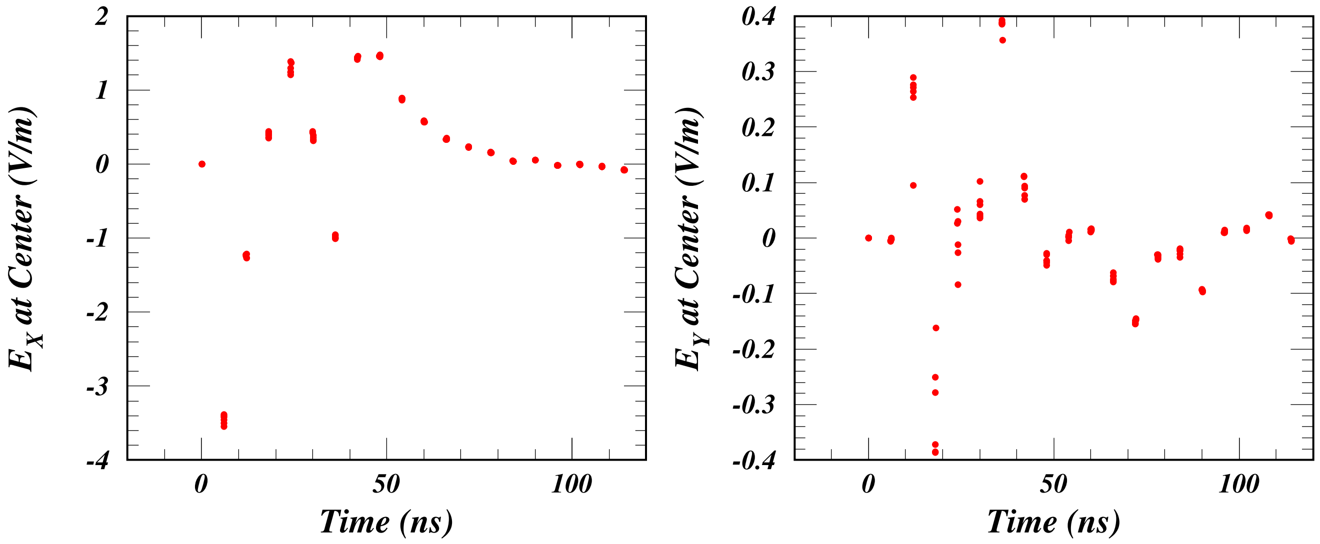
10/03/10 09.18

Job 14761: Electron Energies (eV) Averaged Over 120 ns




10/03/10 09.18
Job 14761: Electron Energies (eV) Averaged Over 120 ns
Y (cm)
X (cm)
2
1
0
-1
-2
-2
-1
0
1
2
40
35
30
25
20
15
10
5
0

Job 14761: Electric Field at Beam



Job 14761Electric Field Gradients at Beam