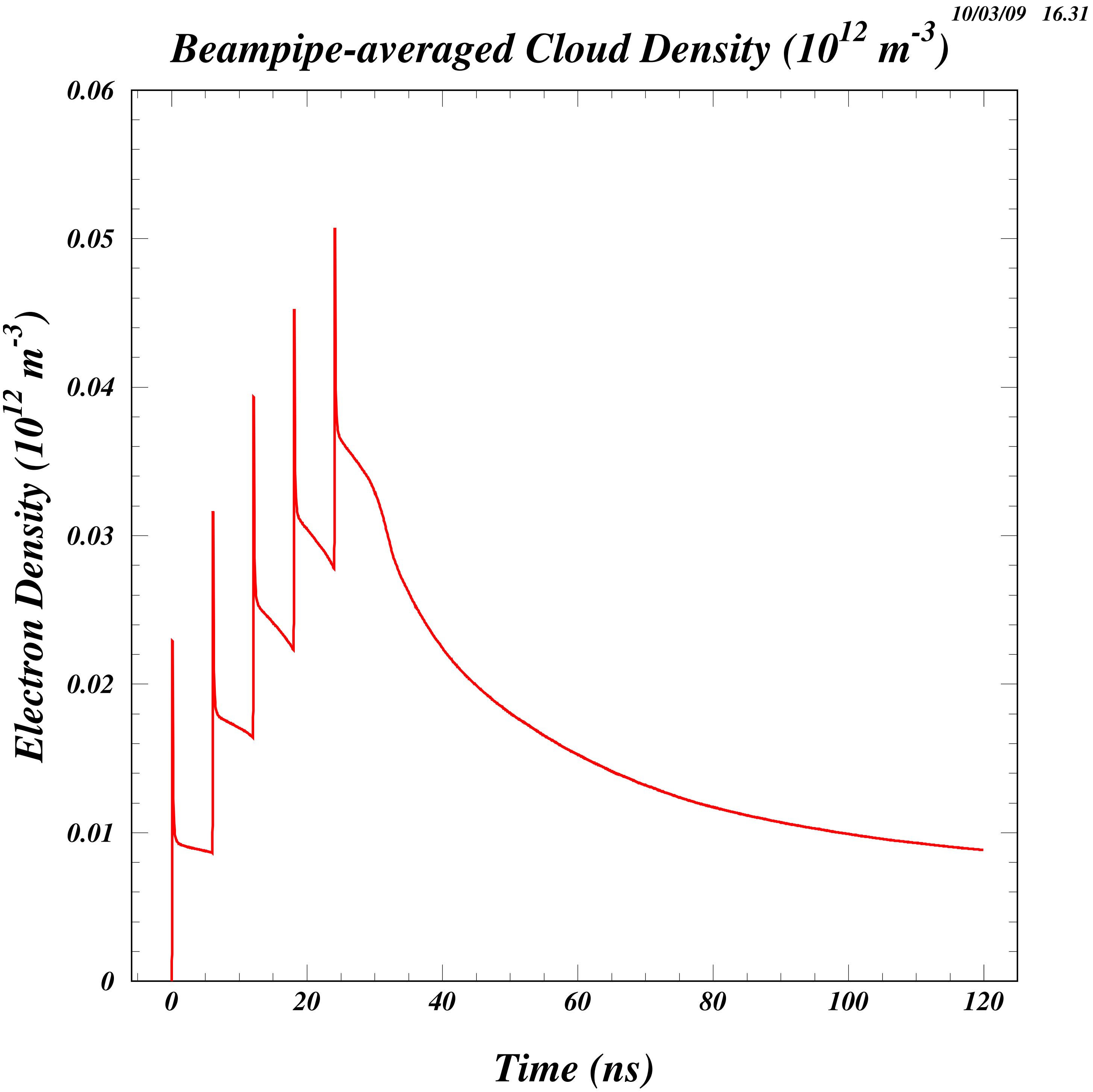
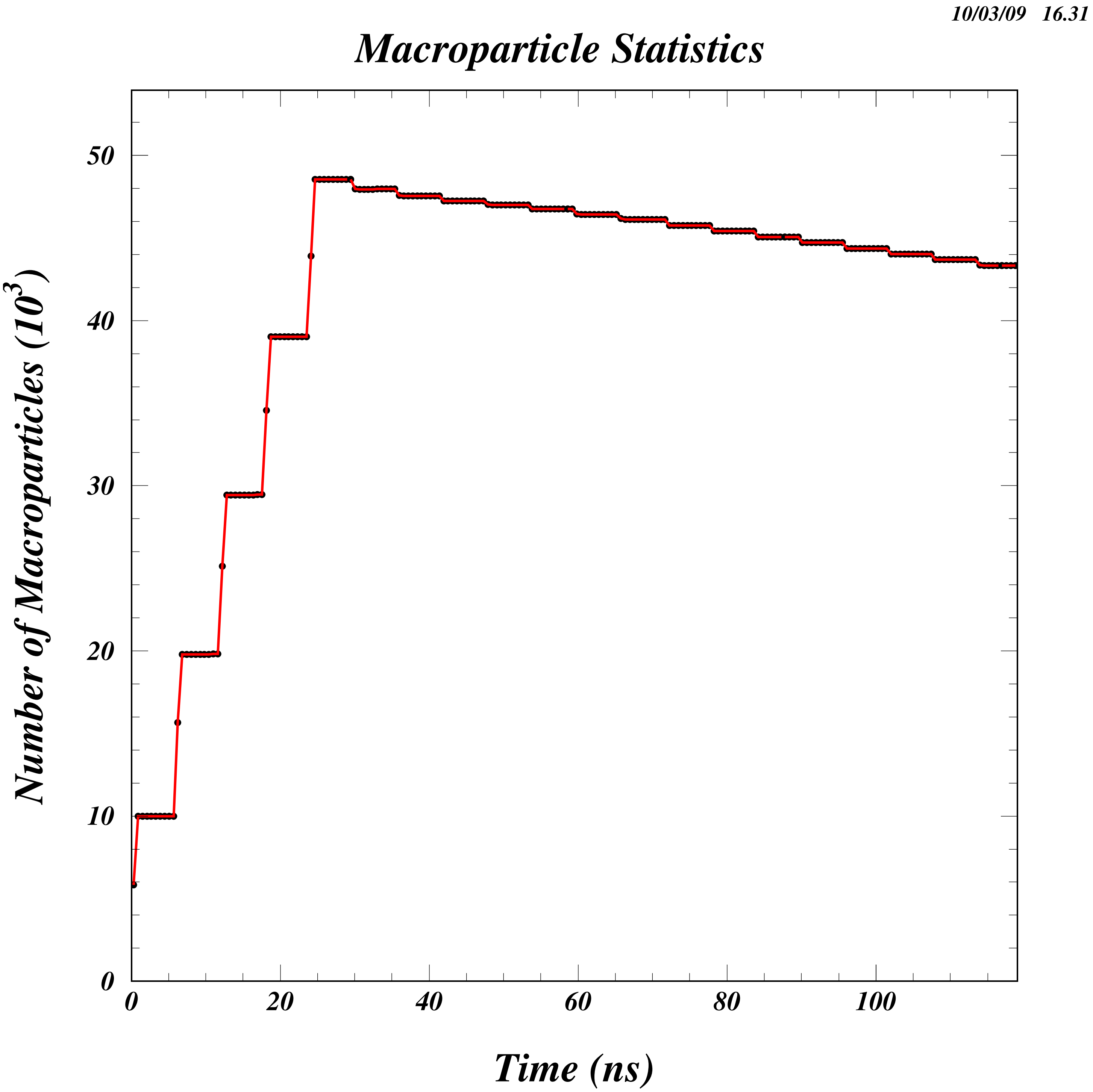
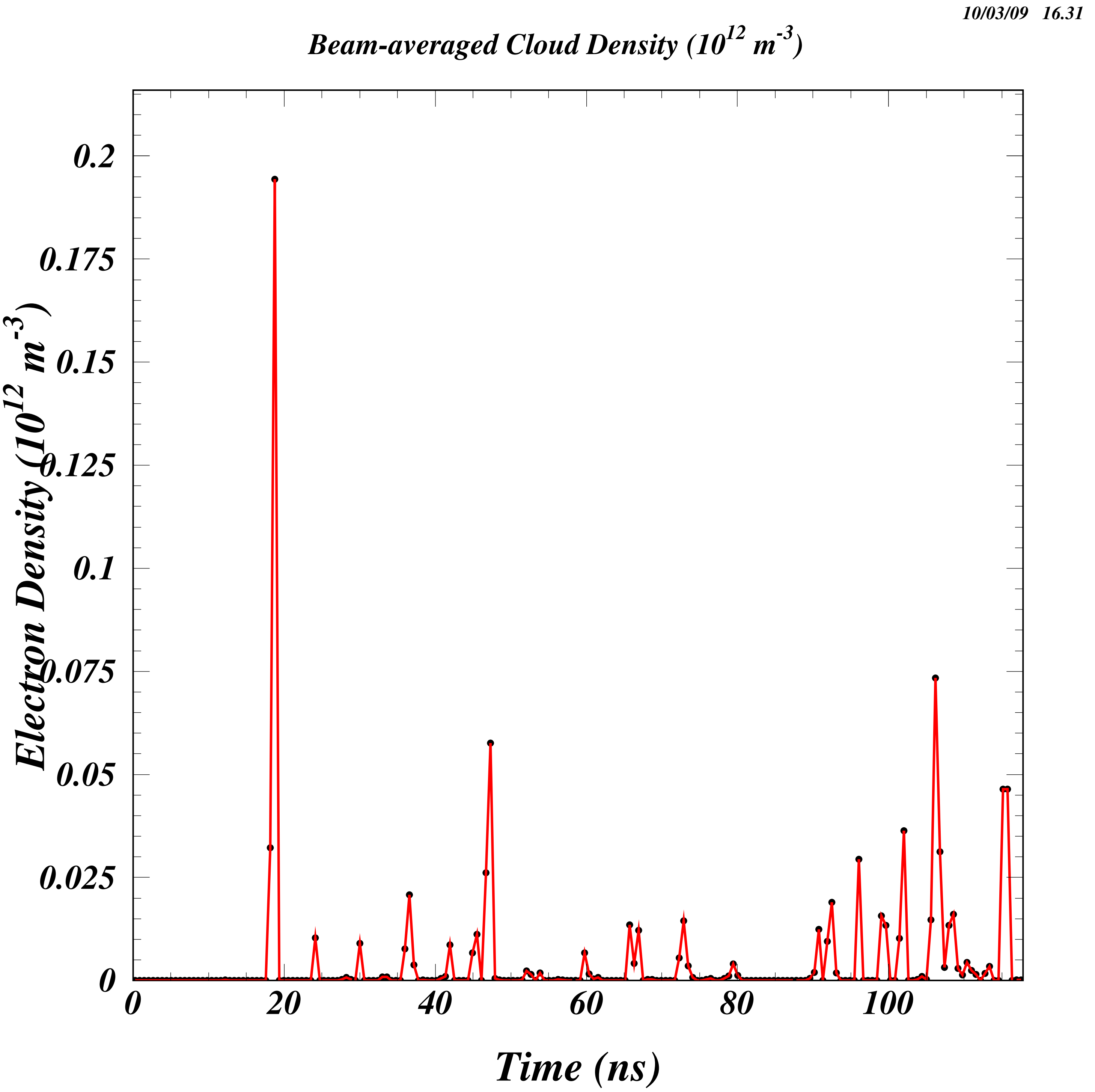
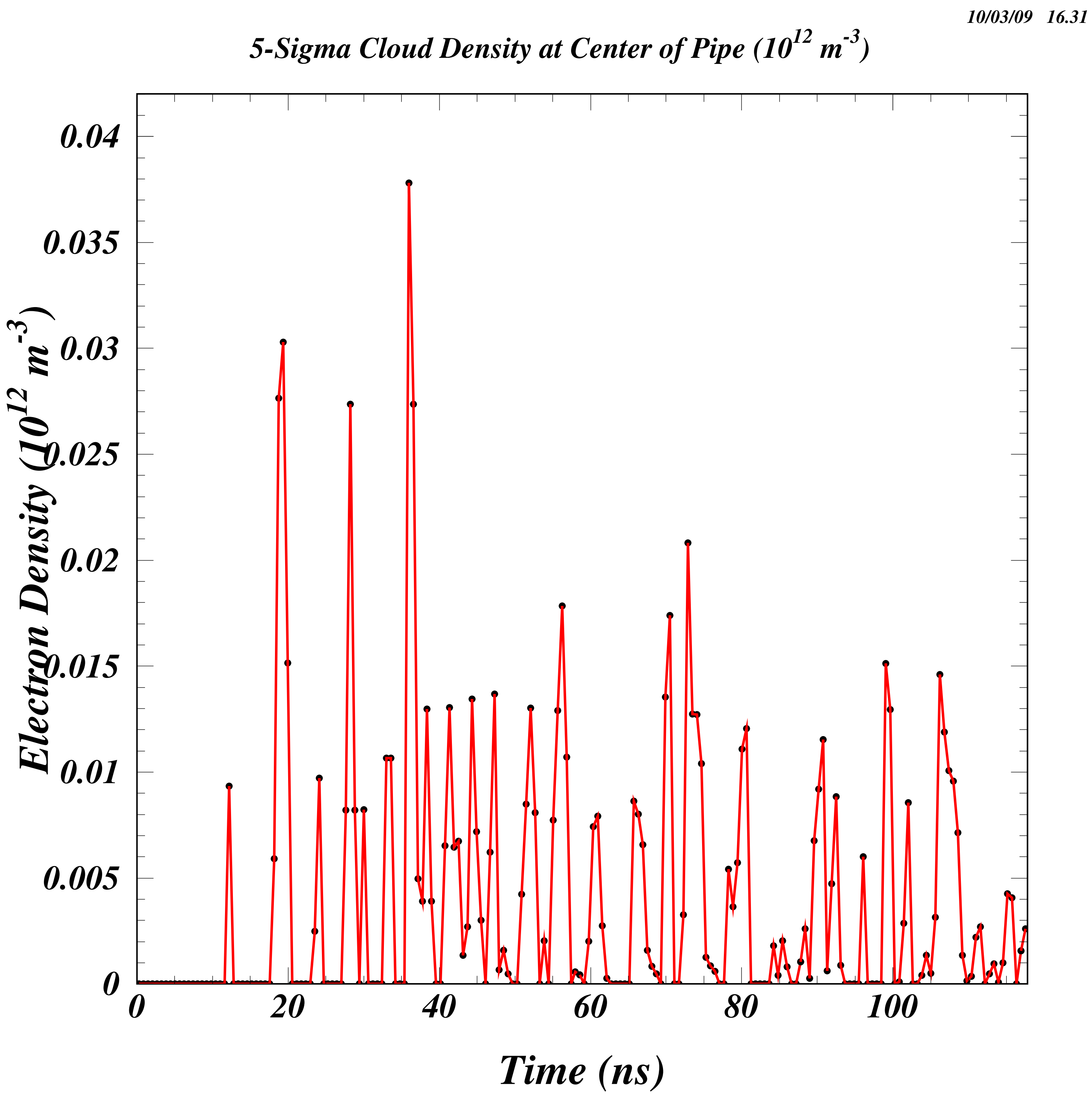
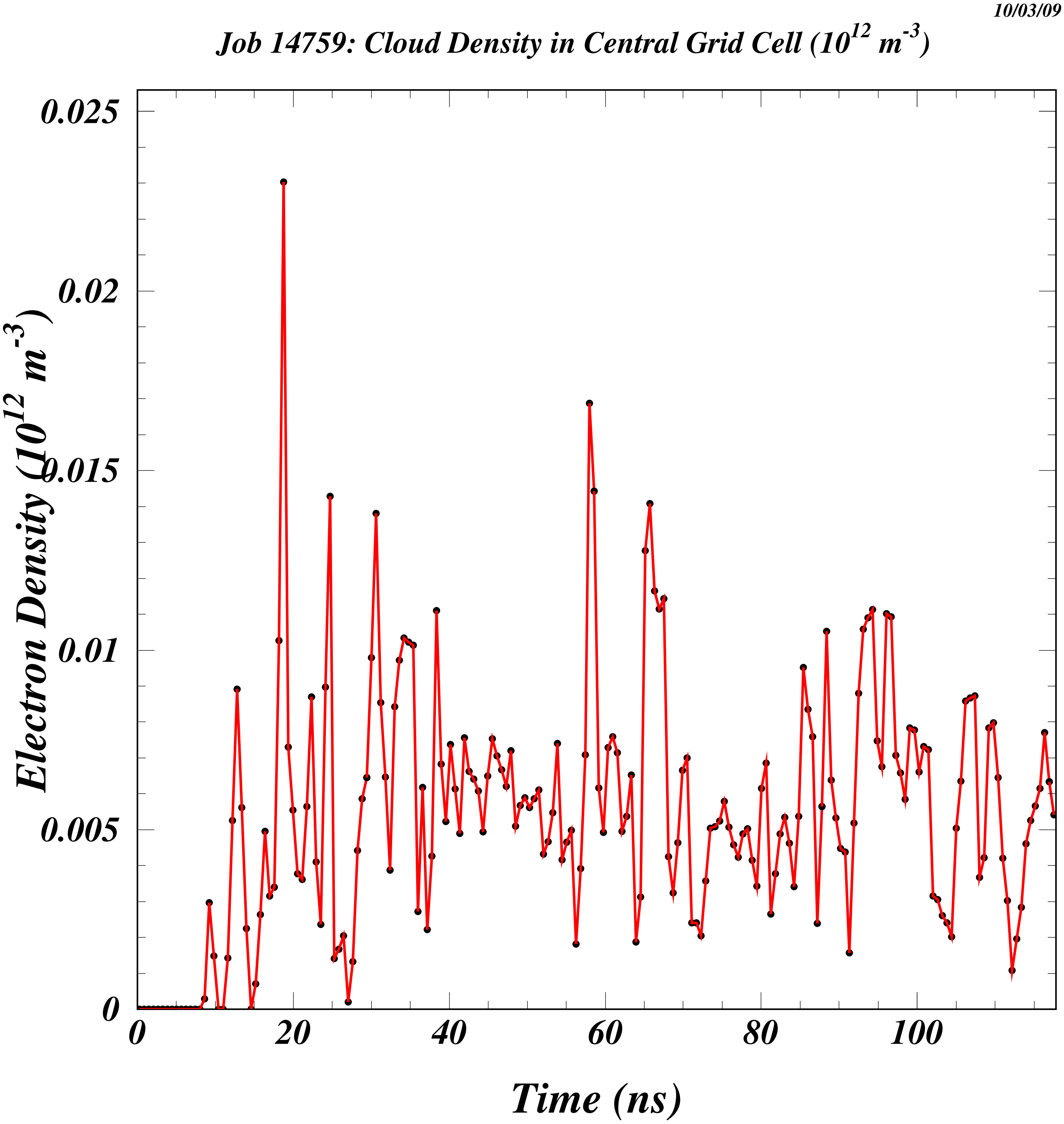

10/03/09 16.31
Beampipe-averaged Cloud Density (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
0.06
0.05
0.04
0.03
0.02
0.01
0
0
20
40
60
80
100
120
Time (ns)


10/03/09 16.31
Macroparticle Statistics
Number of Macroparticles (10^3)
0
10
20
30
40
50
0
20
40
60
80
100
Time (ns)


10/03/09 16.31
Beam-averaged Cloud Density (10^12 m^-3)
Electron Density (10^12 m^-3)
0
0.025
0.05
0.075
0.1
0.125
0.15
0.175
0.2
0
20
40
60
80
100
Time (ns)


10/03/09 16.31
5-Sigma Cloud Density at Center of Pipe (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
Time (ns)
0
0.005
0.01
0.015
0.02
0.025
0.03
0.035
0.04
0
20
40
60
80
100

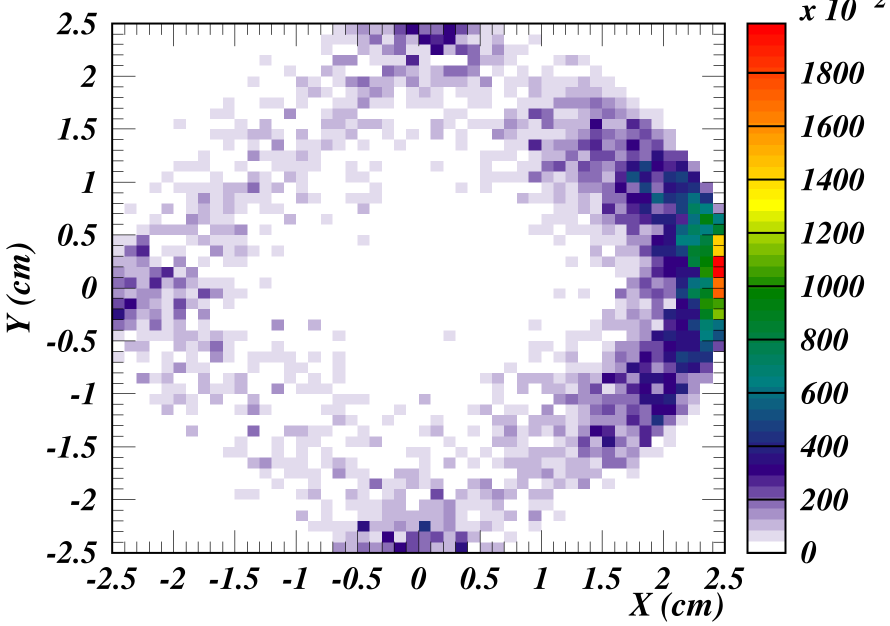
10/03/09 16.31



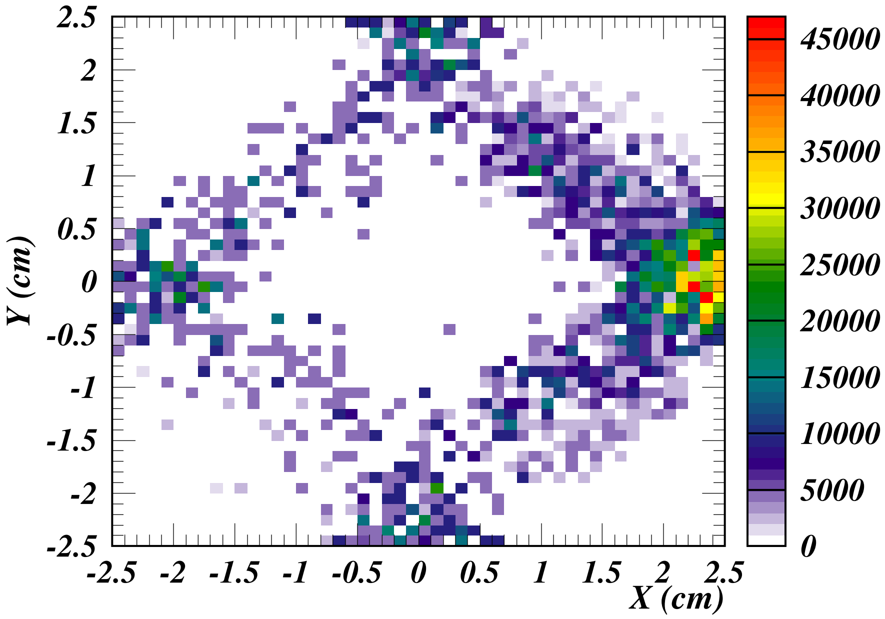
Job 14759: Cloud Density in Central Grid Cell (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
0.025
0.02
0.015
0.01
0.005
0
0
20
40
60
80
100
Time (ns)

10/03/09 16.31

Cloud charge snapshot after bunch 1 at time = 6 ns



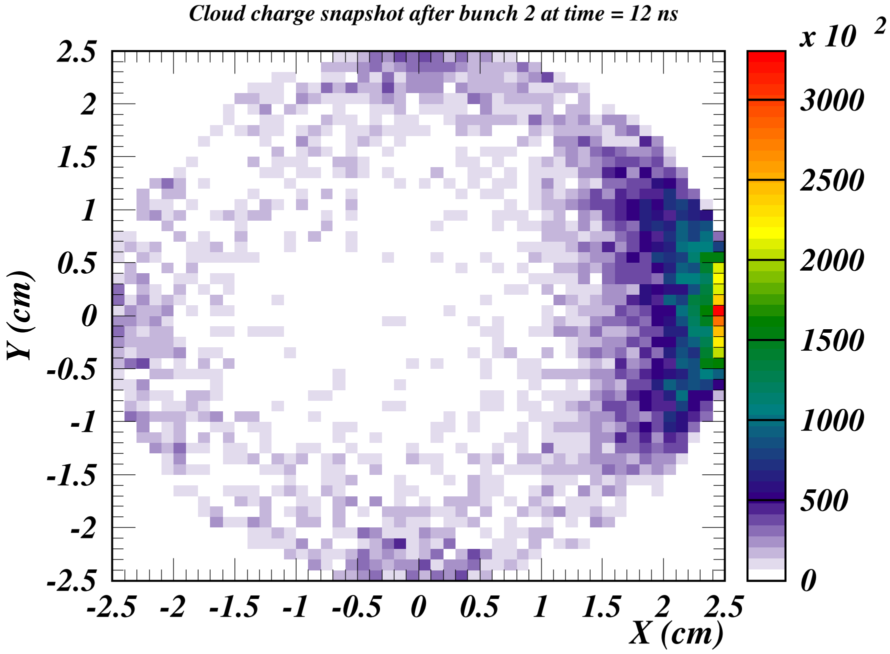
No energy cut: 9996 macroparticles, 17540632 e-



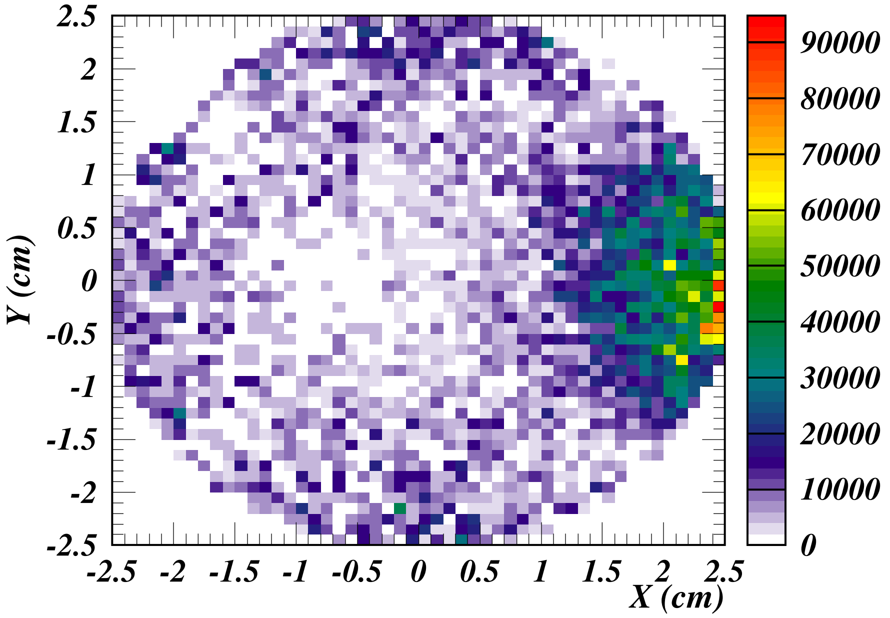
E_{kin}>10 eV: 2032 macroparticles, 6.0632e+06 e-

10/03/09 16.31

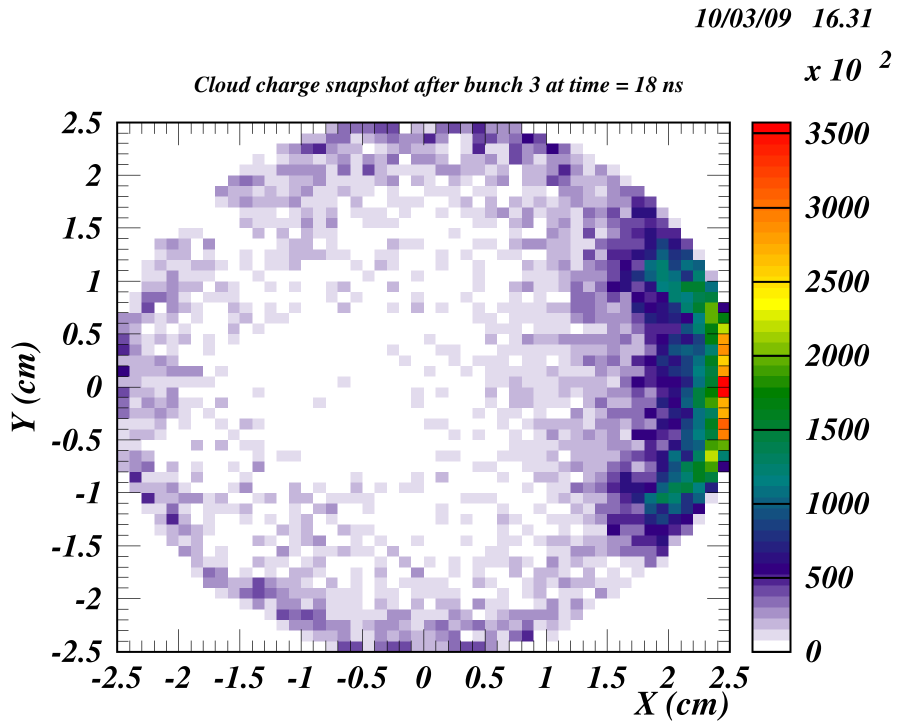
Cloud charge snapshot after bunch 2 at time = 12 ns



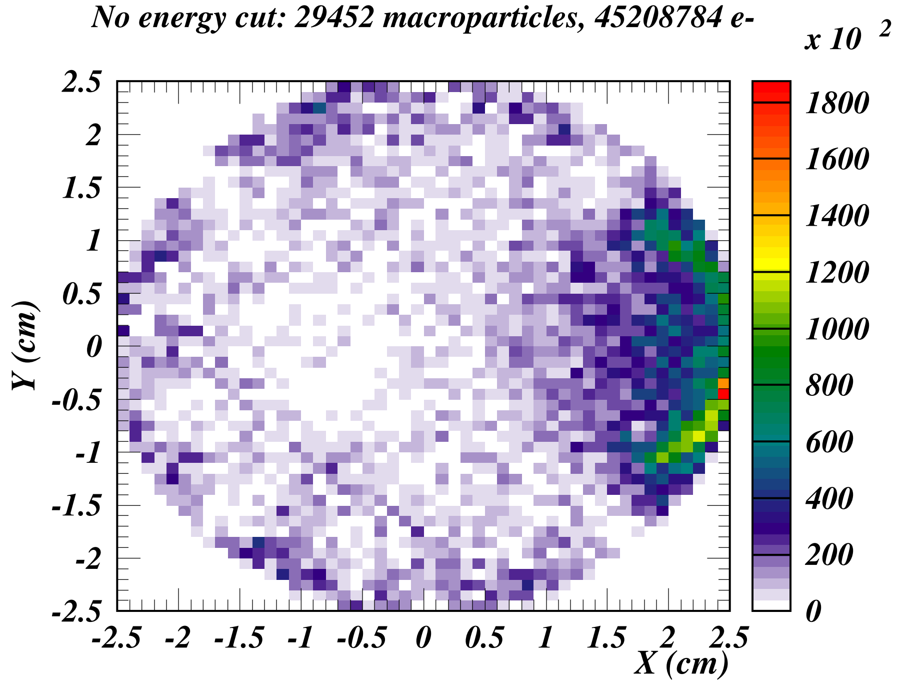
No energy cut: 19807 macroparticles, 33273604 e-



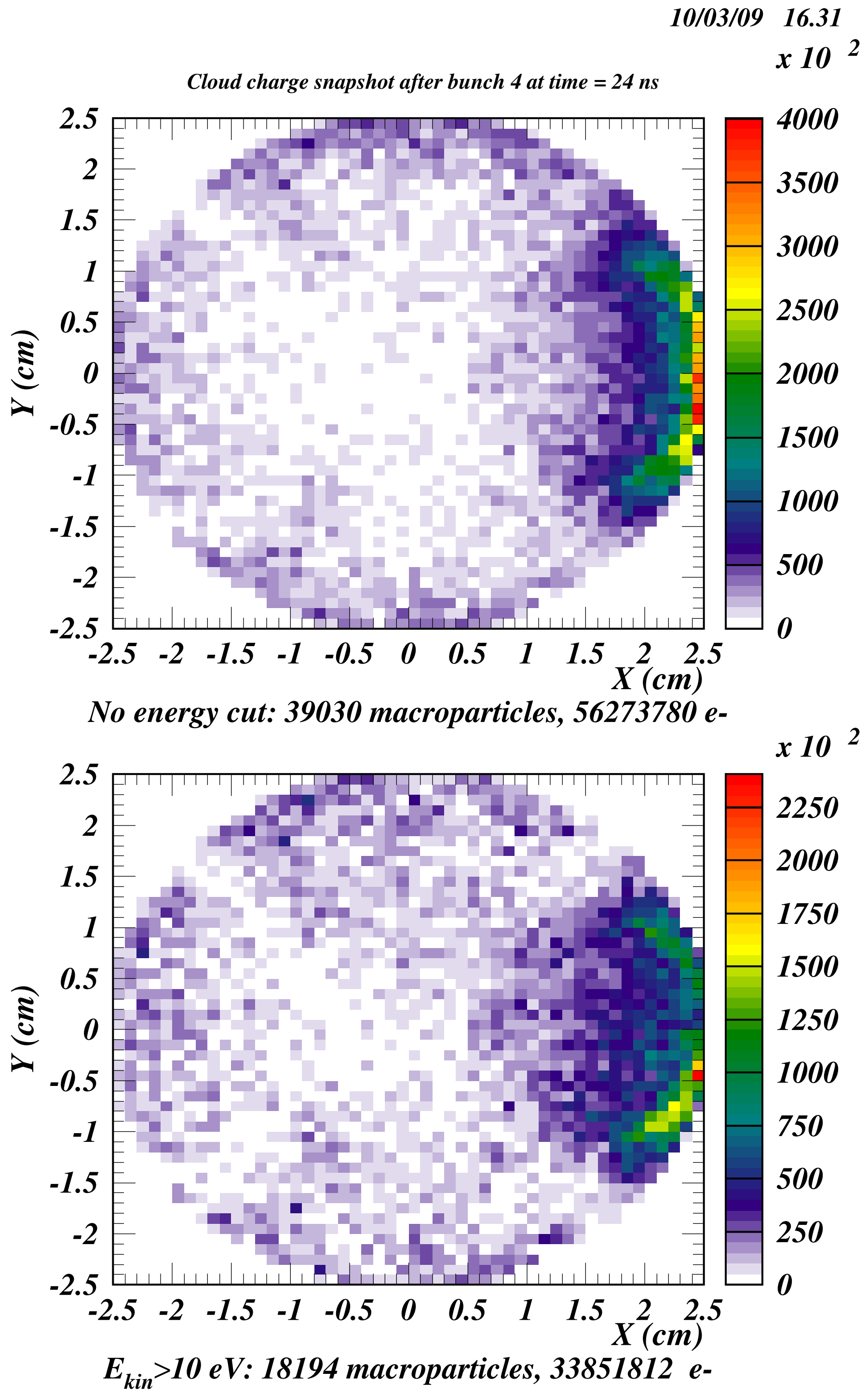
E_{kin}>10 eV: 6968 macroparticles, 17359804 e-



No energy cut: 29452 macroparticles, 45208784 e-

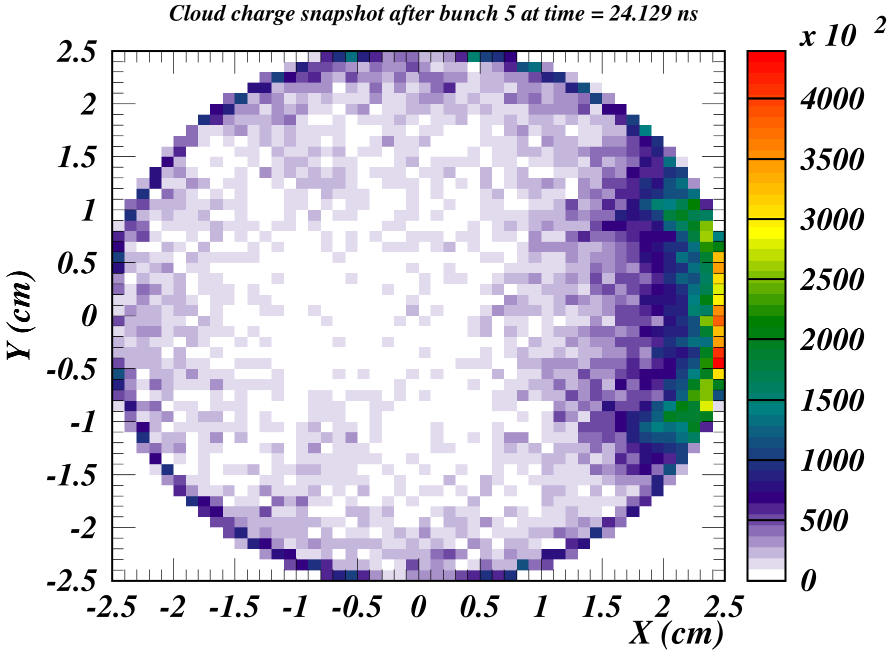


E_{kin}>10 eV: 12466 macroparticles, 25941454 e-

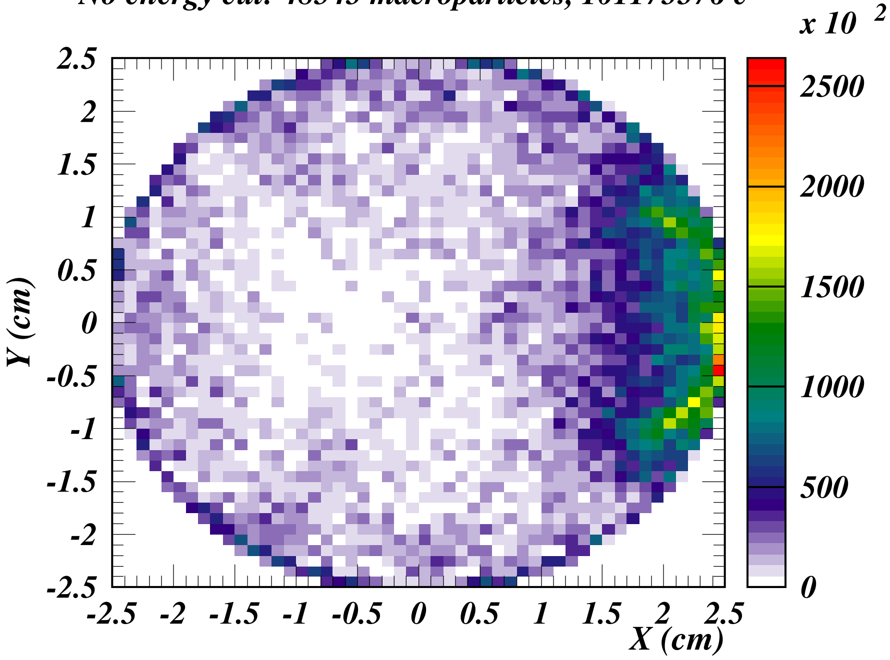

10/03/09 16.31
Cloud charge snapshot after bunch 4 at time = 24 ns
x 10 2
Y (cm)
X (cm)
No energy cut: 39030 macroparticles, 56273780 e-
E kin >10 eV: 18194 macroparticles, 33851812 e-

10/03/09 16.31

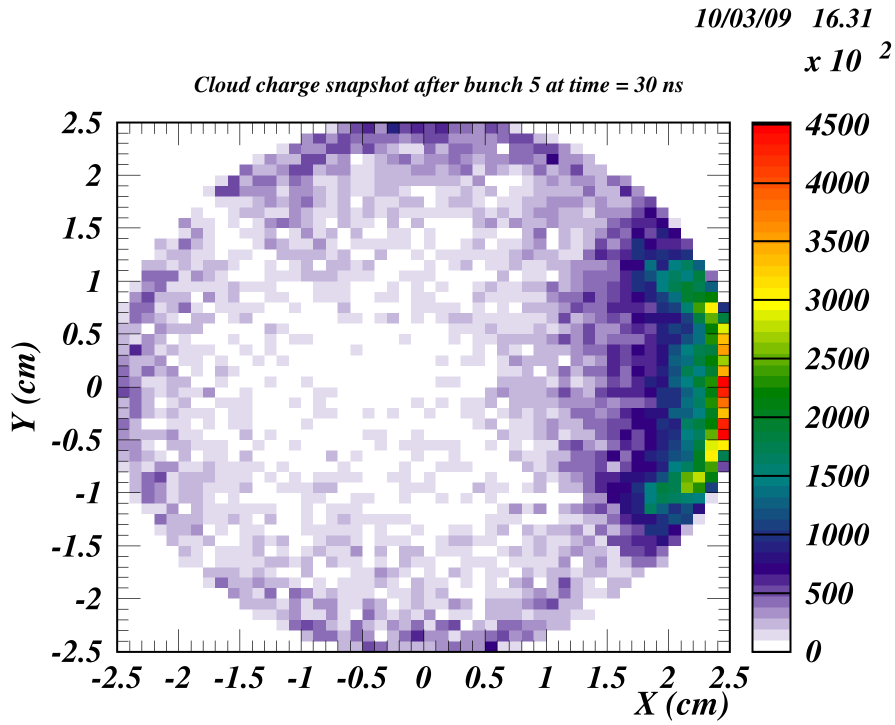
Cloud charge snapshot after bunch 5 at time = 24.129 ns



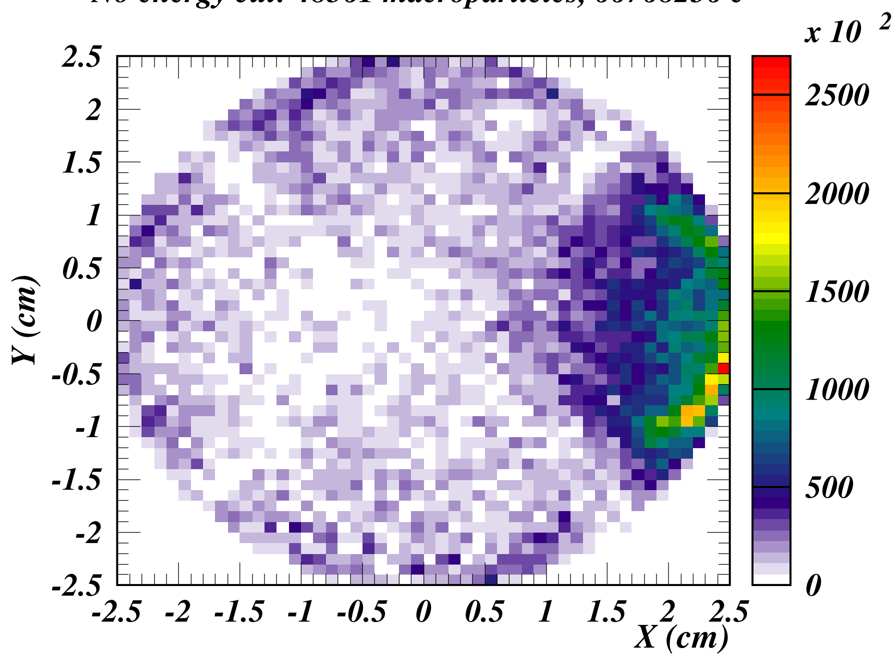
No energy cut: 48543 macroparticles, 101173376 e-



E_{kin}>10 eV: 31079 macroparticles, 65471344 e-

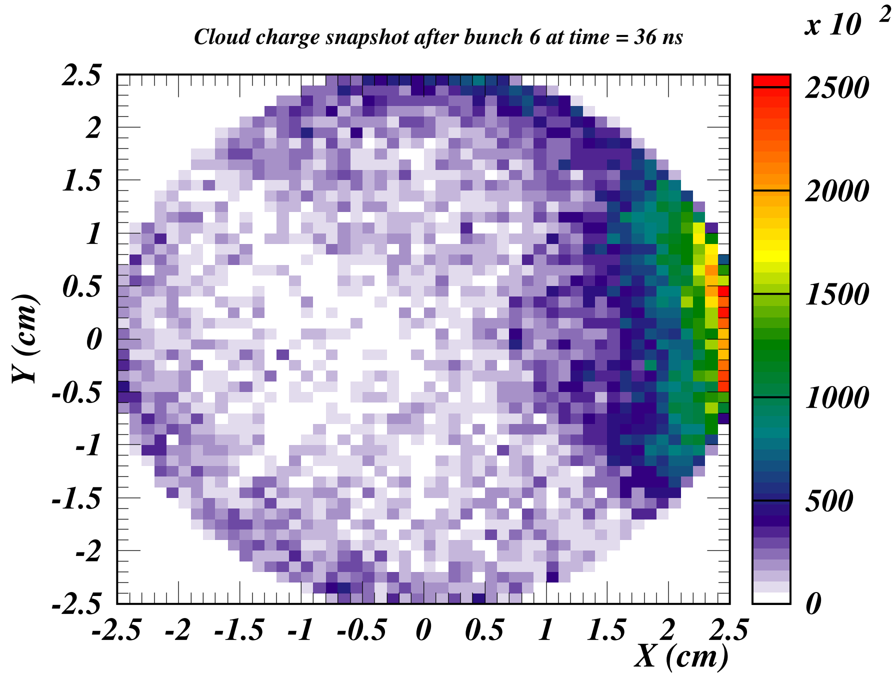


No energy cut: 48561 macroparticles, 66768256 e-

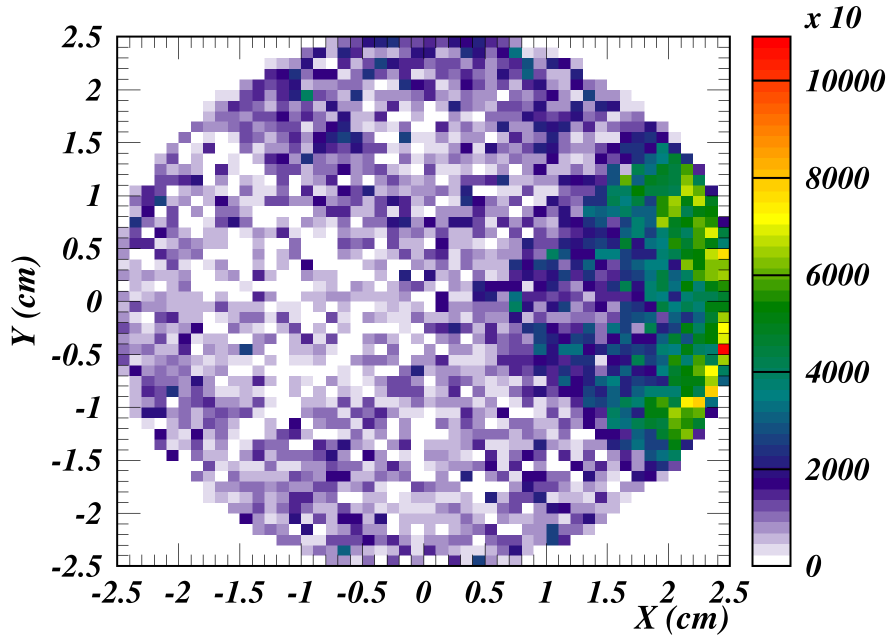


E_{kin}>10 eV: 25178 macroparticles, 43183012 e-

10/03/09   16.31



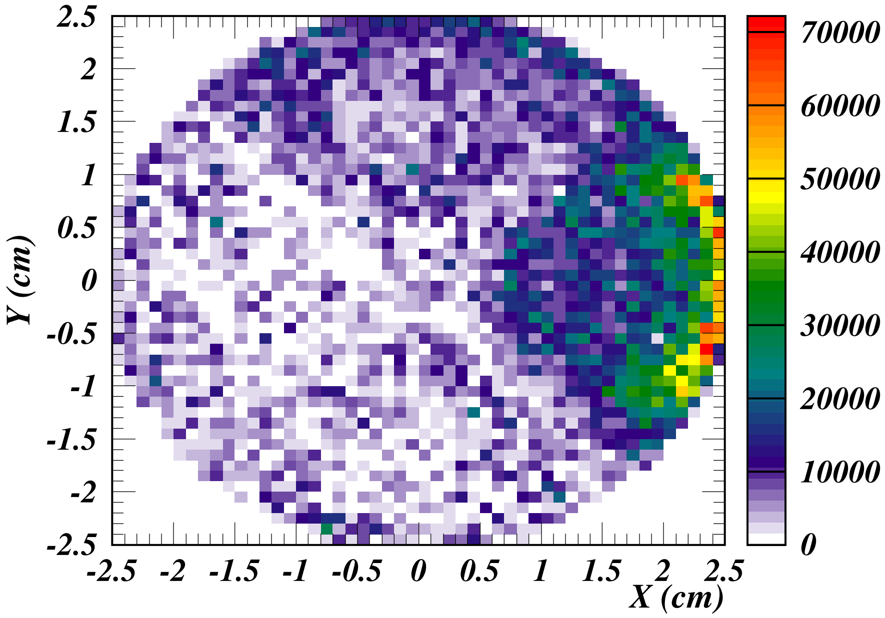
No energy cut: 47964 macroparticles, 51279480 e-



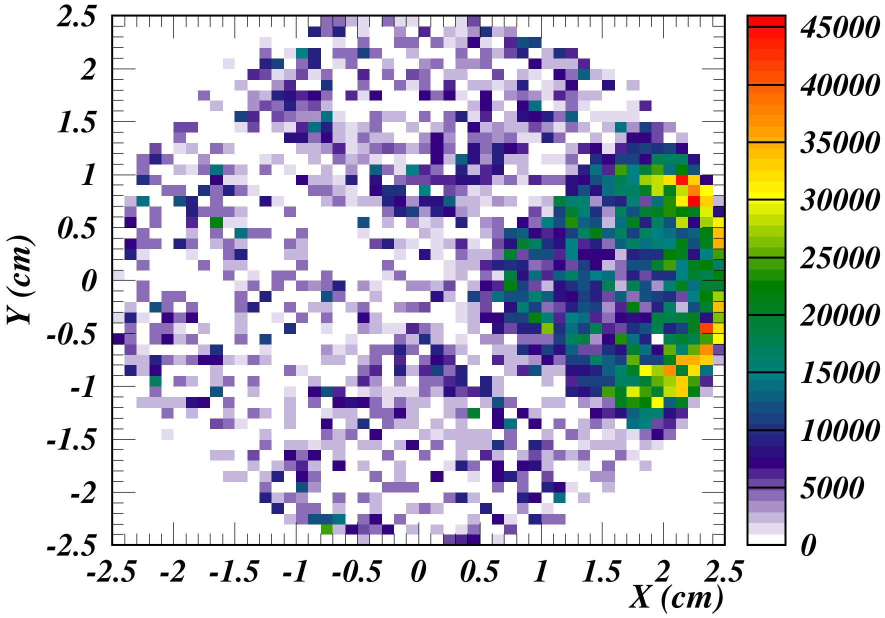
E_{kin}>10 eV: 16988 macroparticles, 26068614 e-

10/03/09 16.31

Cloud charge snapshot after bunch 21 at time = 120 ns



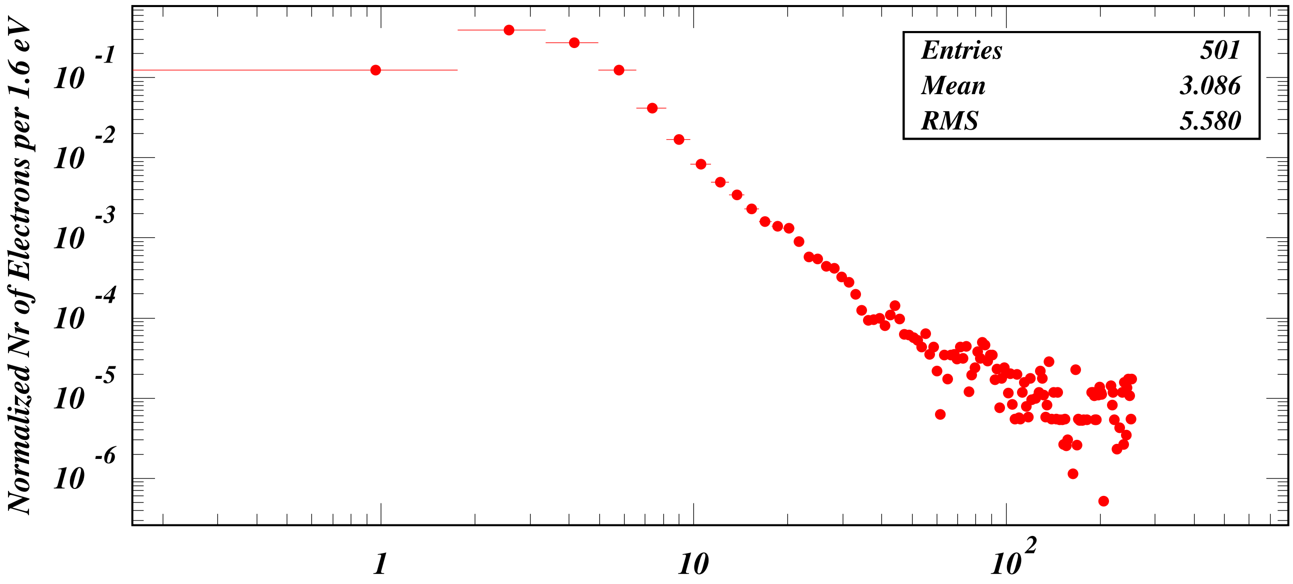
No energy cut: 43000 macroparticles, 17902768 e-

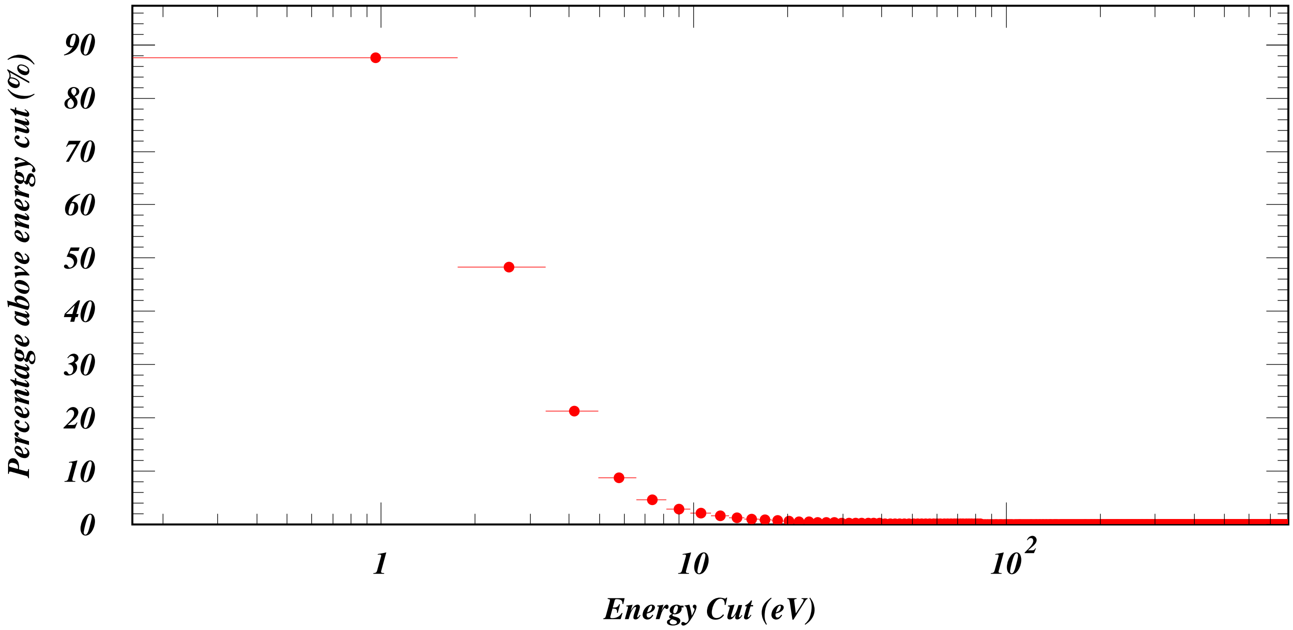


E_{kin}>10 eV: 5312 macroparticles, 9781638 e-

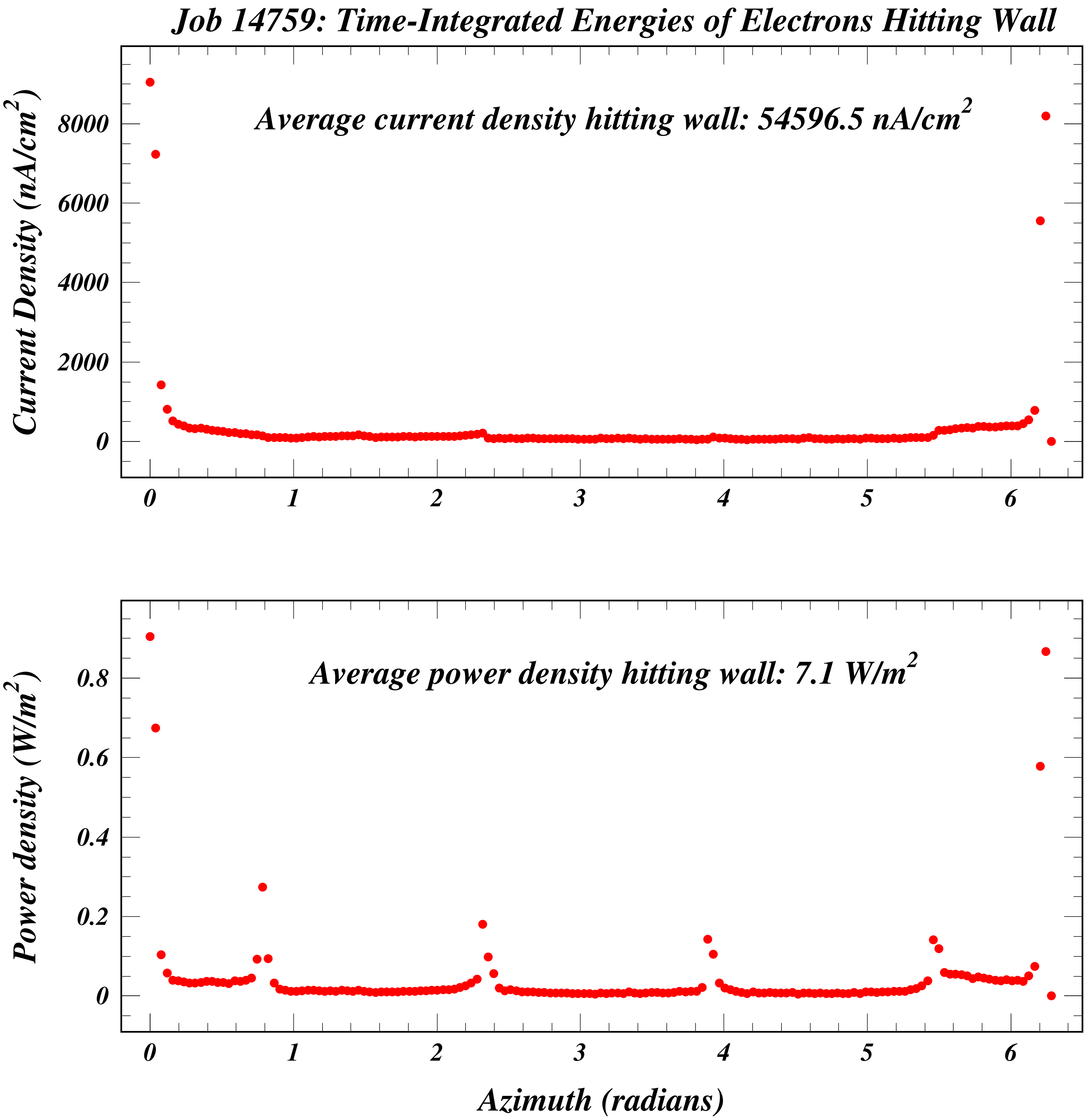
10/03/09 16.31

Job 14759: Time-Integrated Energies of Electrons Hitting Wall





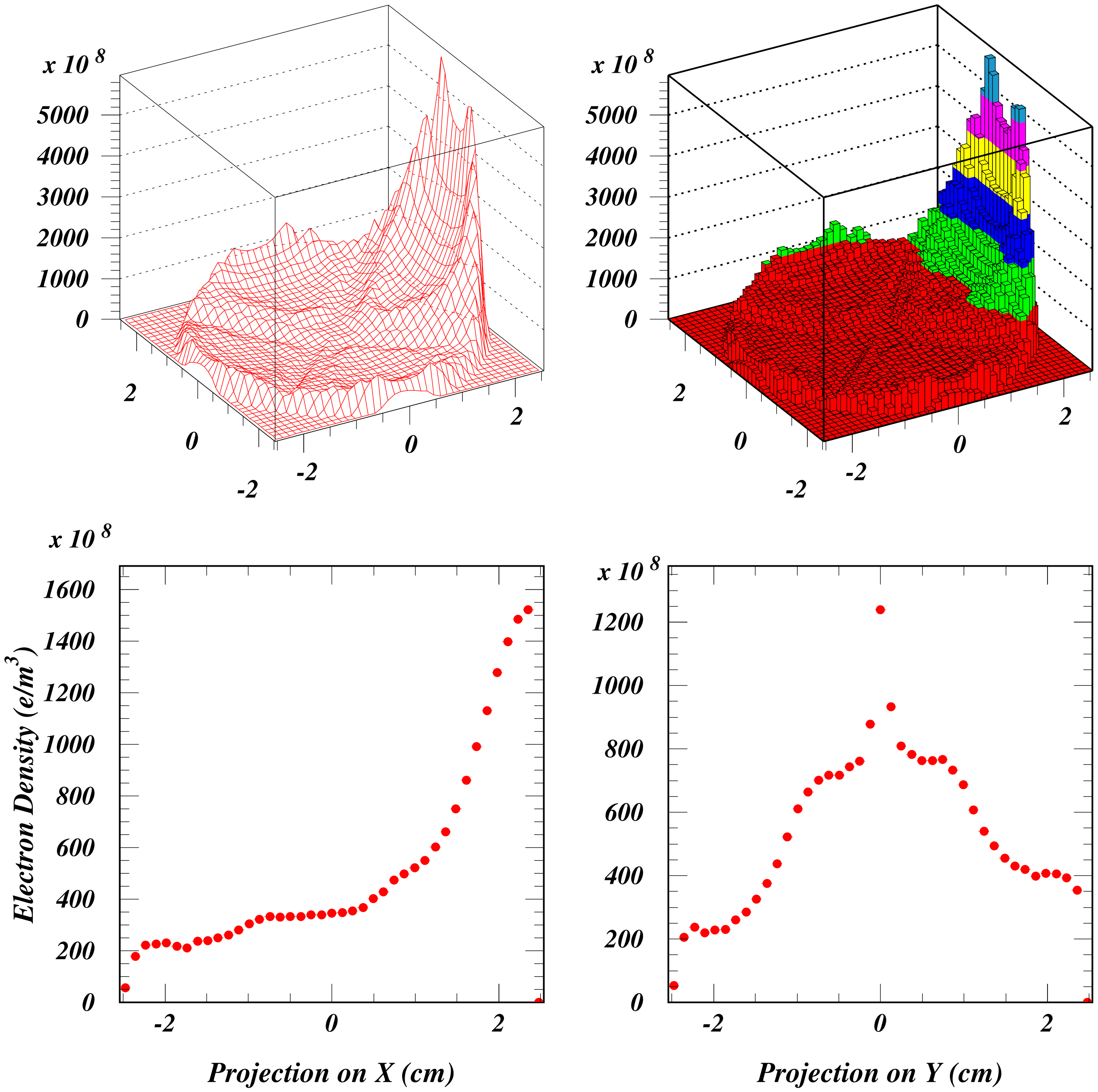
10/03/09 16.31



Job 14759: Time-Integrated Energies of Electrons Hitting Wall
Average current density hitting wall: 54596.5 nA/cm2
Current Density (nA/cm2)
8000
6000
4000
2000
0
0
1
2
3
4
5
6
Average power density hitting wall: 7.1 W/m2
Power density (W/m2)
0.8
0.6
0.4
0.2
0
0
1
2
3
4
5
6
Azimuth (radians)

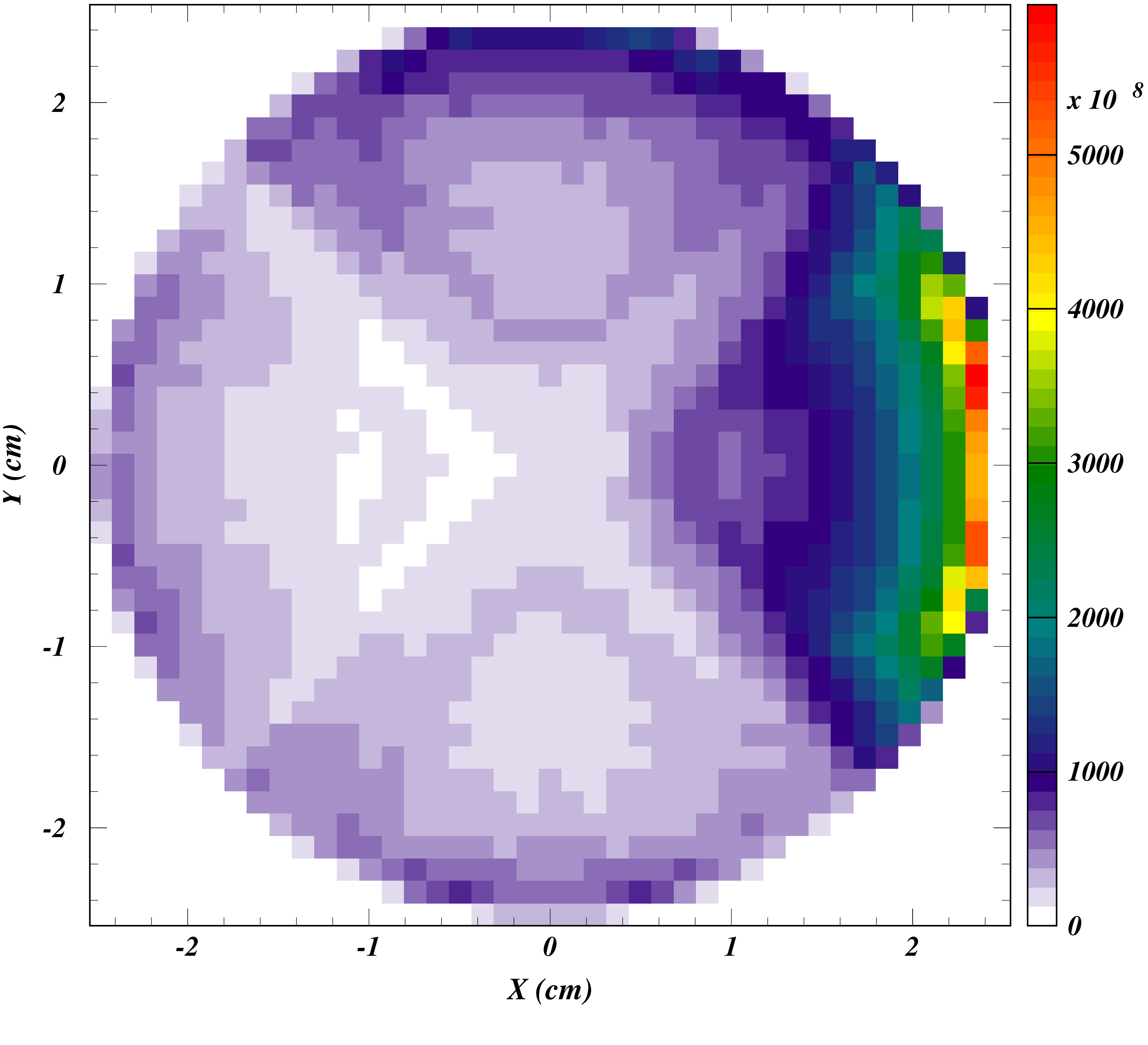
10/03/09 16.31

Job 14759: Cloud Density (e/m^3) Averaged Over 120 ns



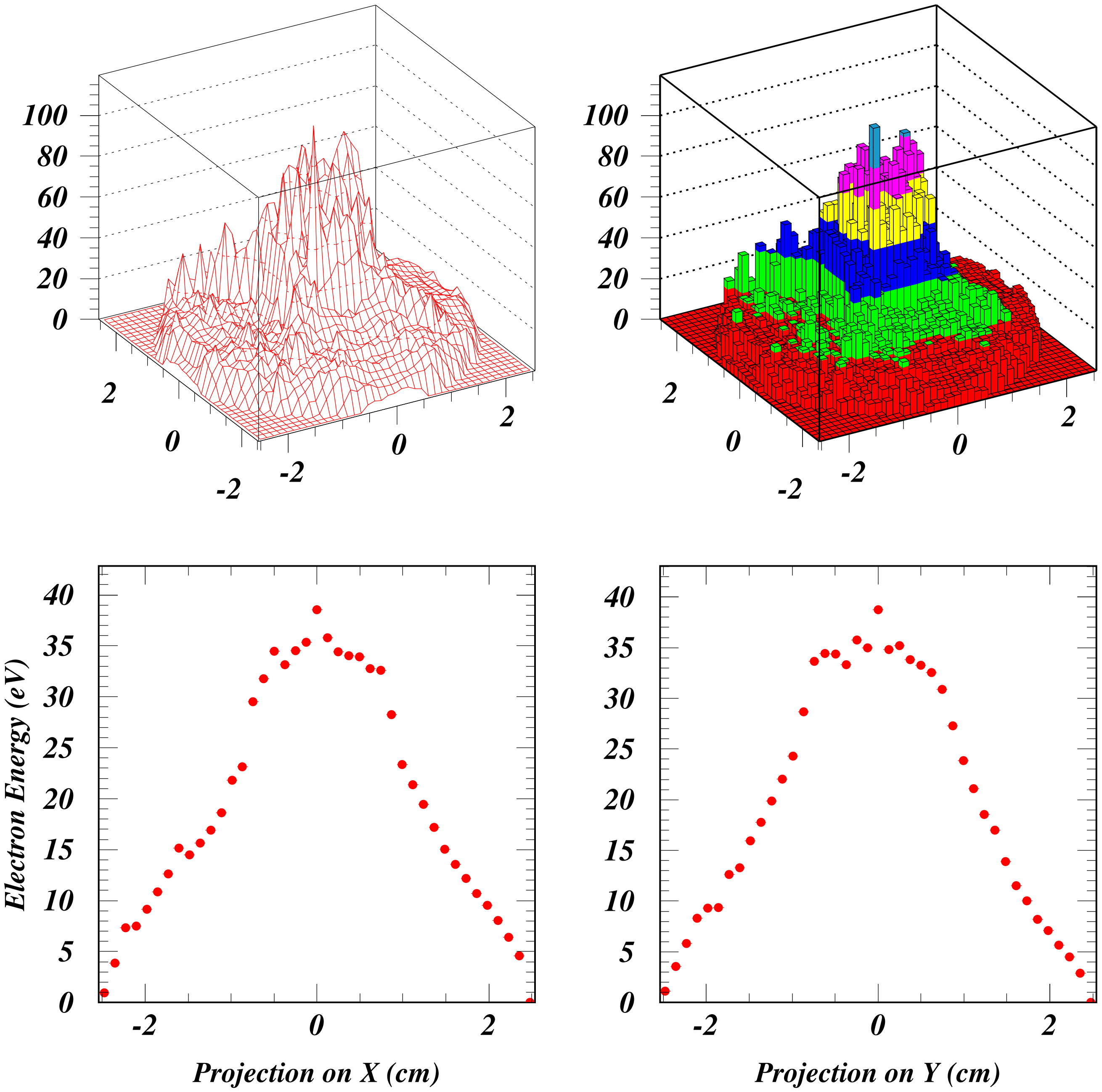
10/03/09 16.31

Job 14759: Cloud Density (e/m^3) Averaged Over 120 ns

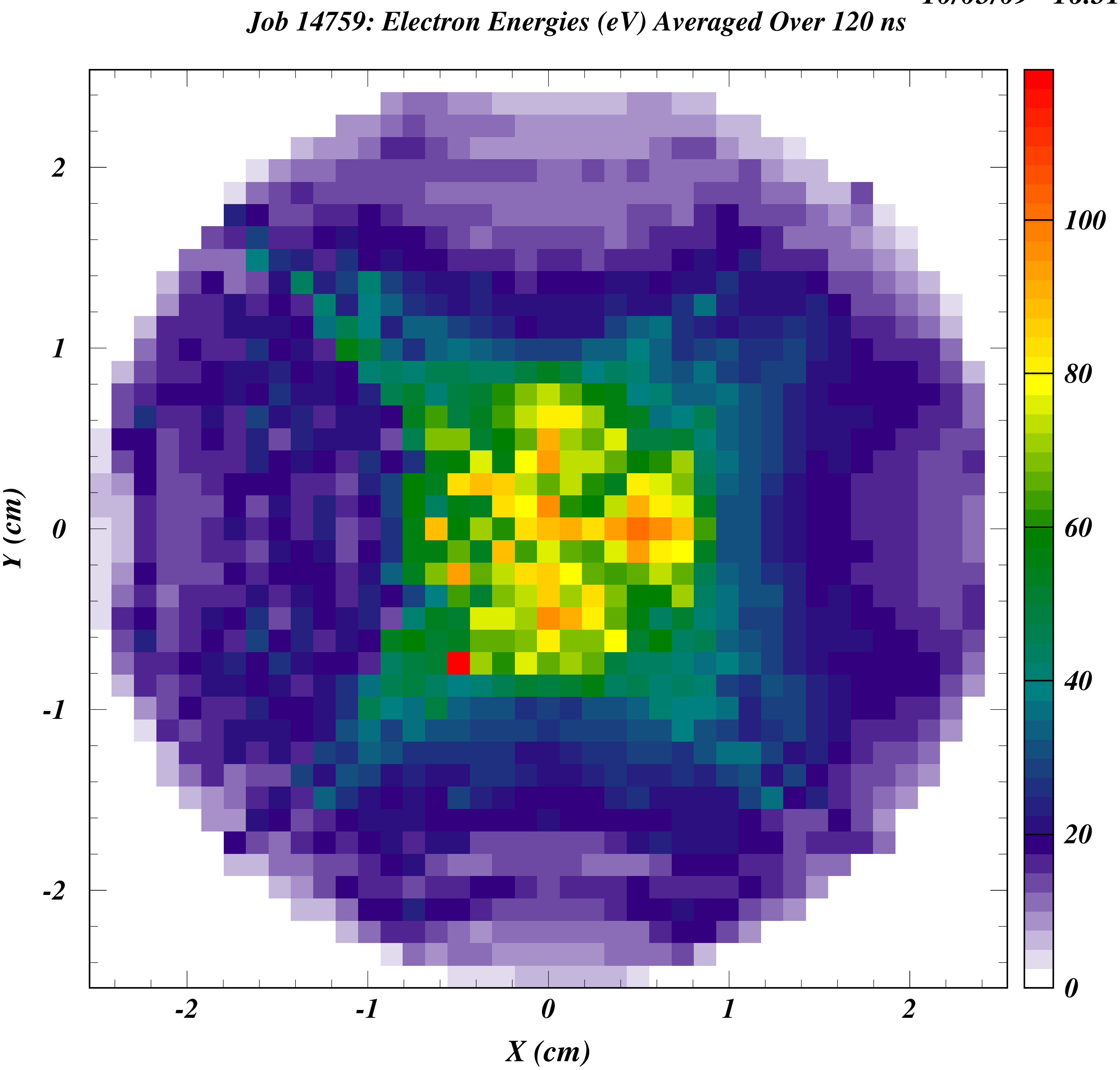


10/03/09 16.31

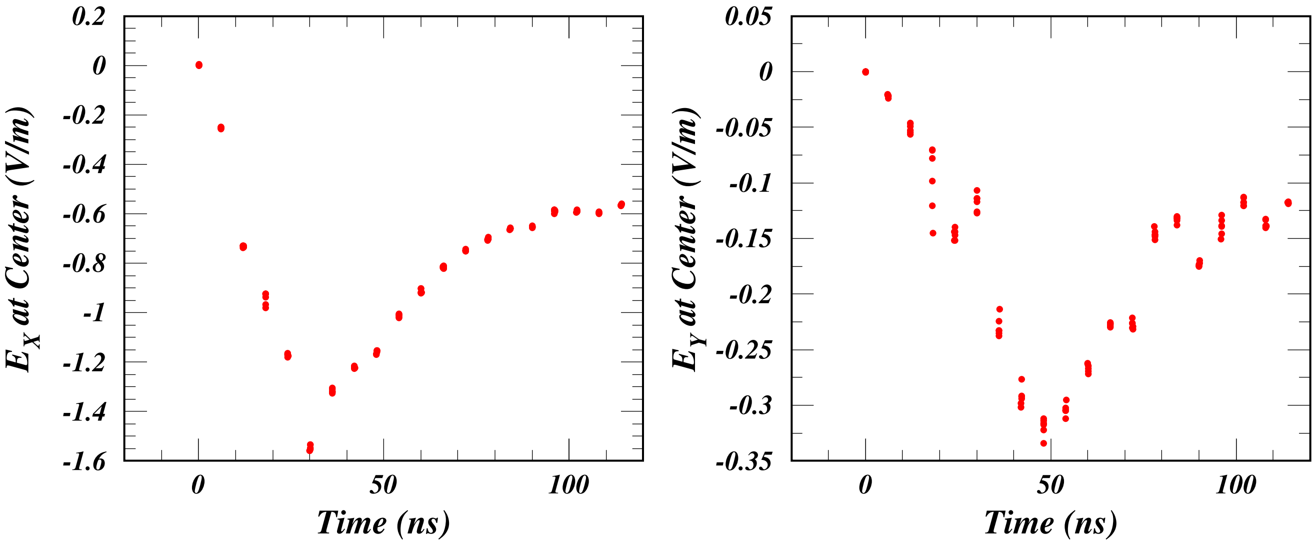
Job 14759: Electron Energies (eV) Averaged Over 120 ns



10/03/09 16.31


Job 14759: Electron Energies (eV) Averaged Over 120 ns
Y (cm)
X (cm)
2
1
0
-1
-2
-2
-1
0
1
2
100
80
60
40
20
0

Job 14759: Electric Field at Beam



Job 14759Electric Field Gradients at Beam