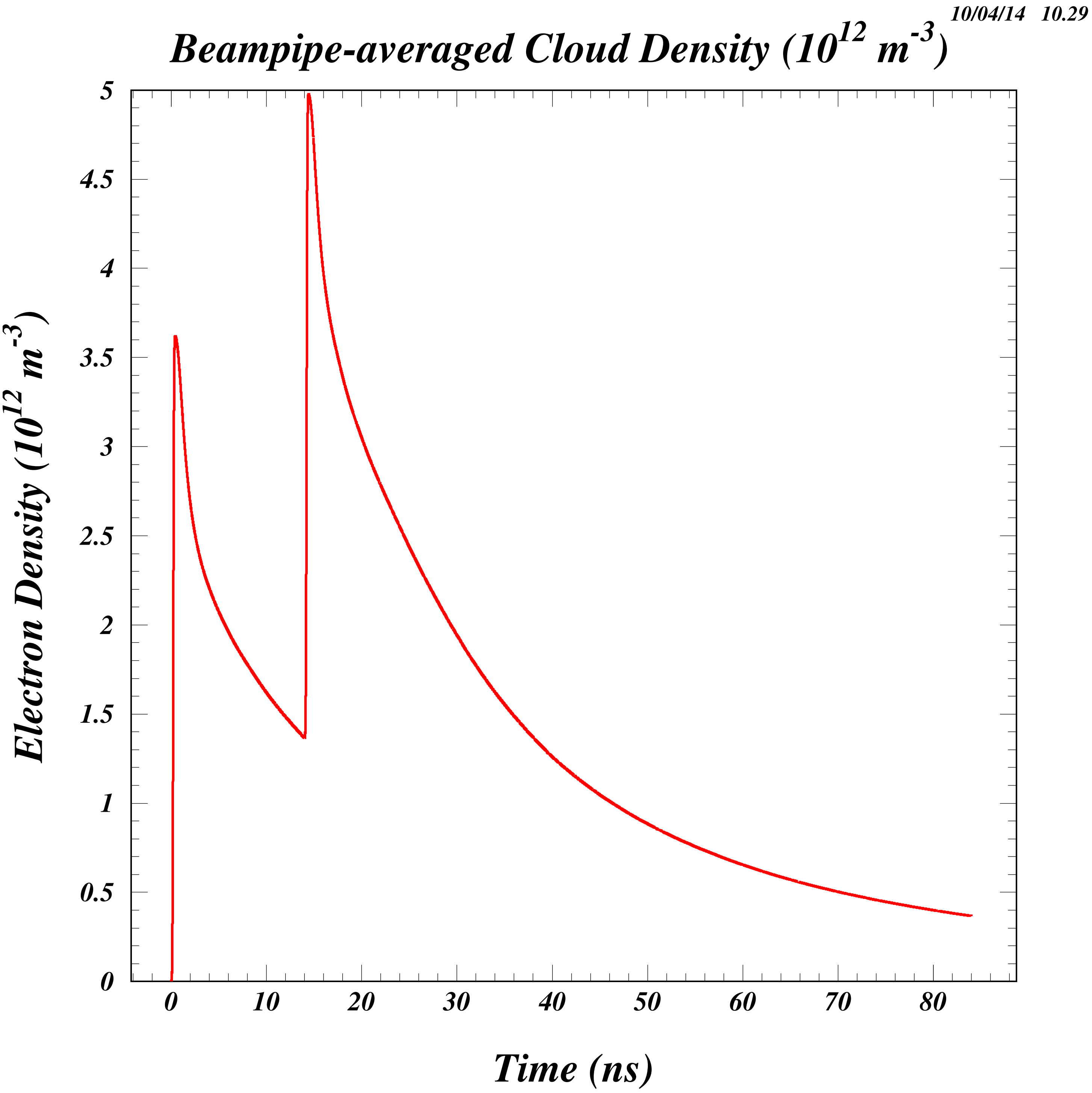
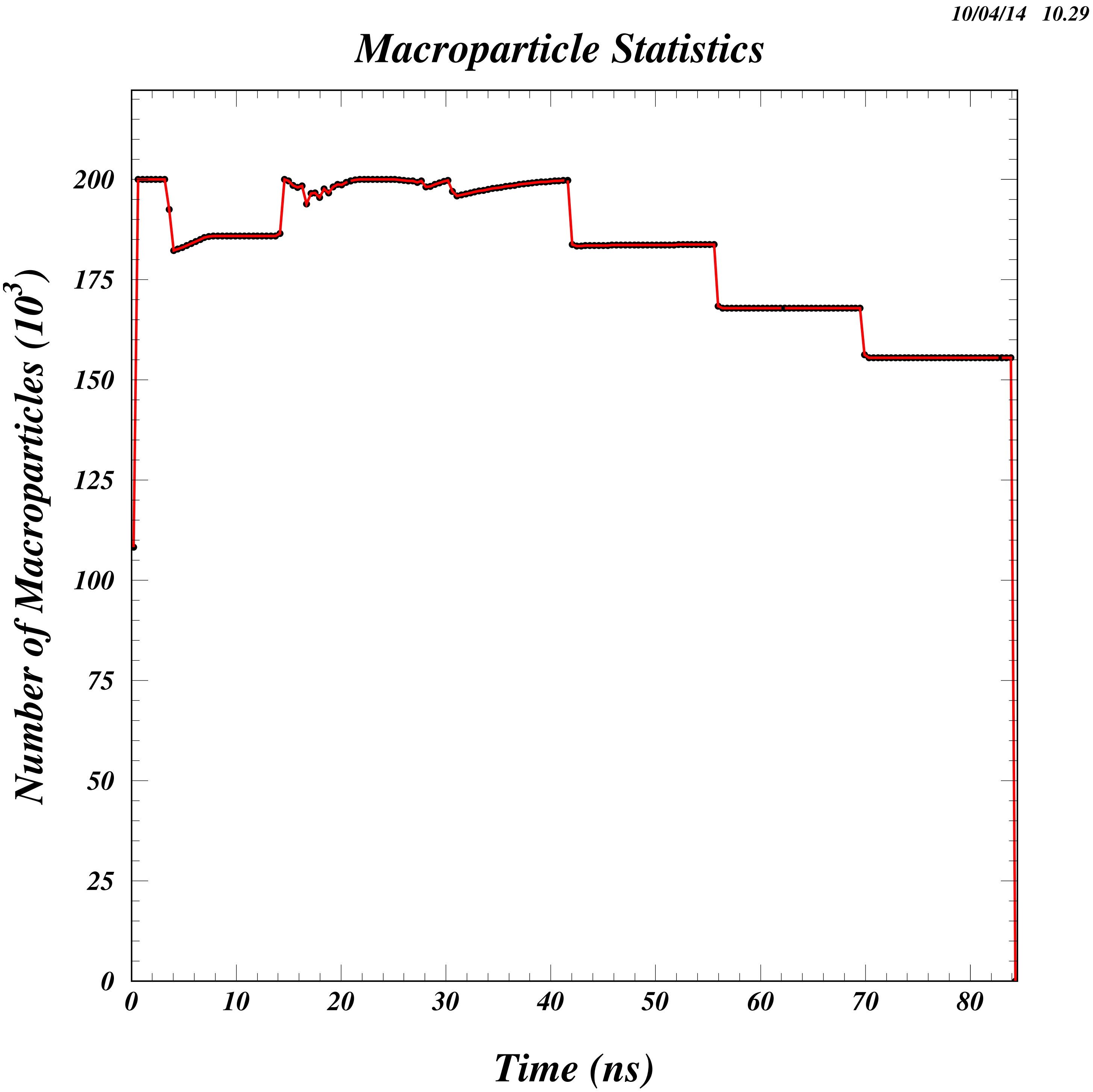
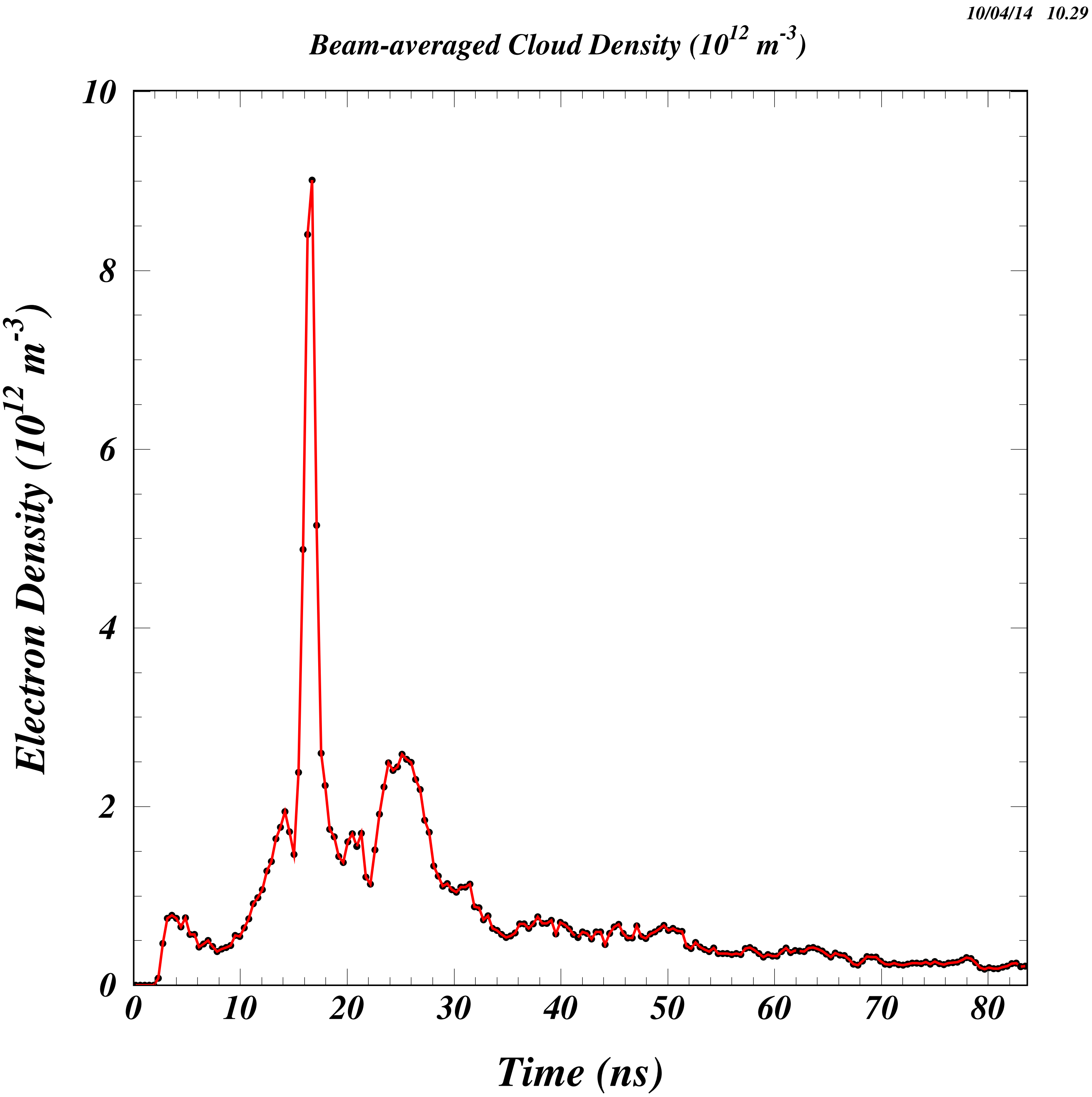
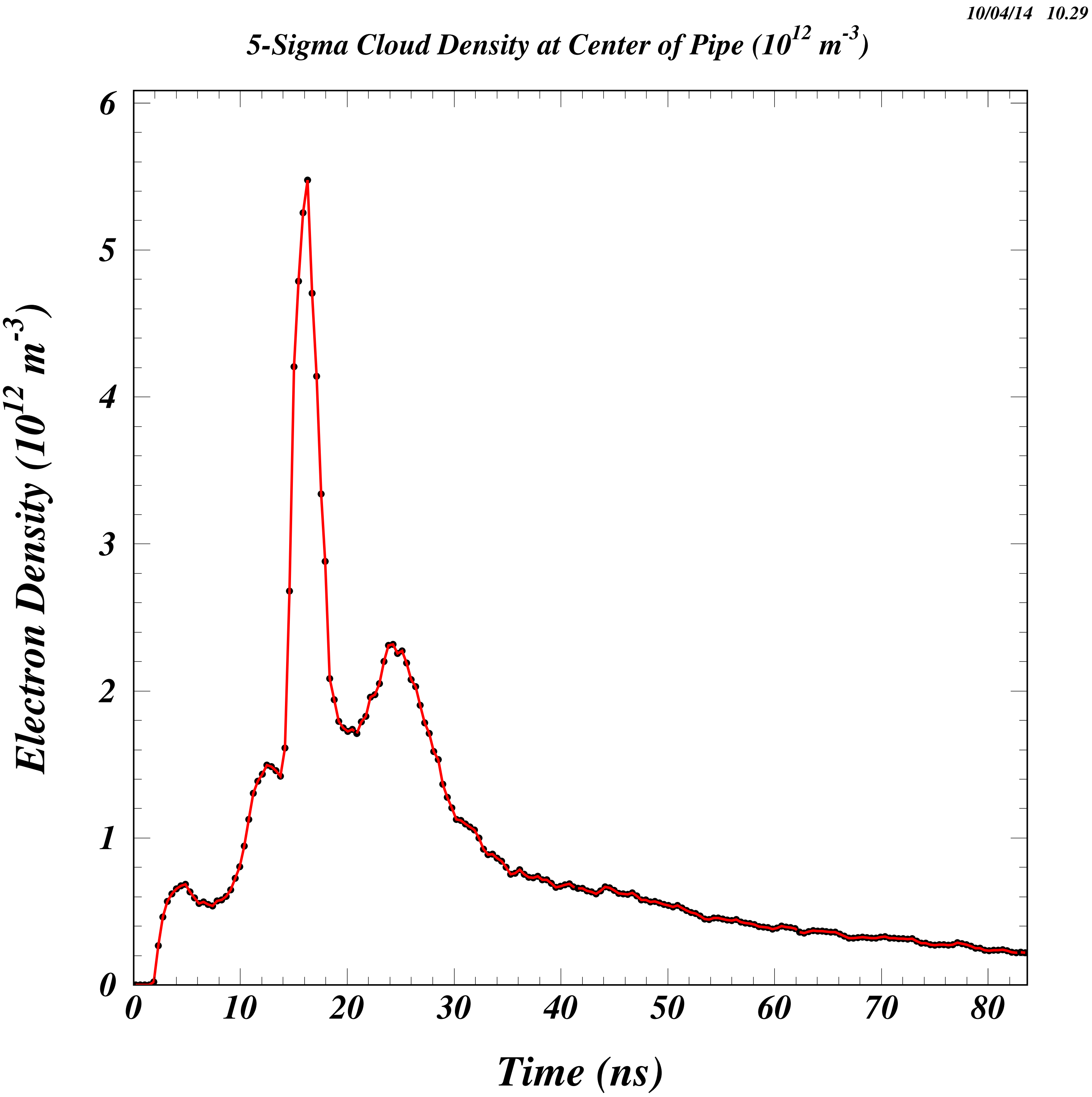

10/04/14 10.29
Beampipe-averaged Cloud Density (10^12 m^-3)
Electron Density (10^12 m^-3)
Time (ns)
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
0
10
20
30
40
50
60
70
80



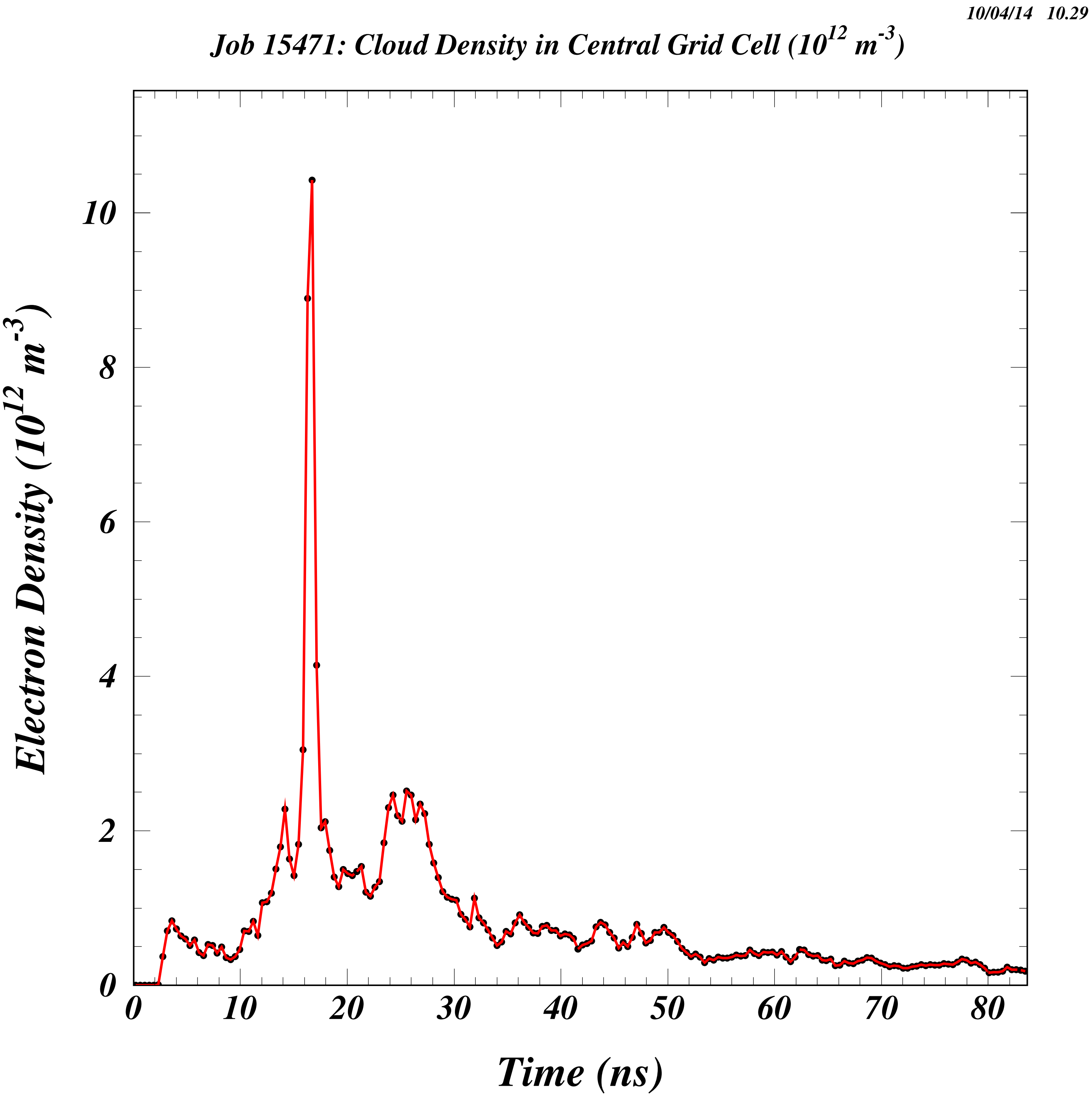
10/04/14 10.29
Macroparticle Statistics
Number of Macroparticles (10^3)
0
25
50
75
100
125
150
175
200
0
10
20
30
40
50
60
70
80
Time (ns)



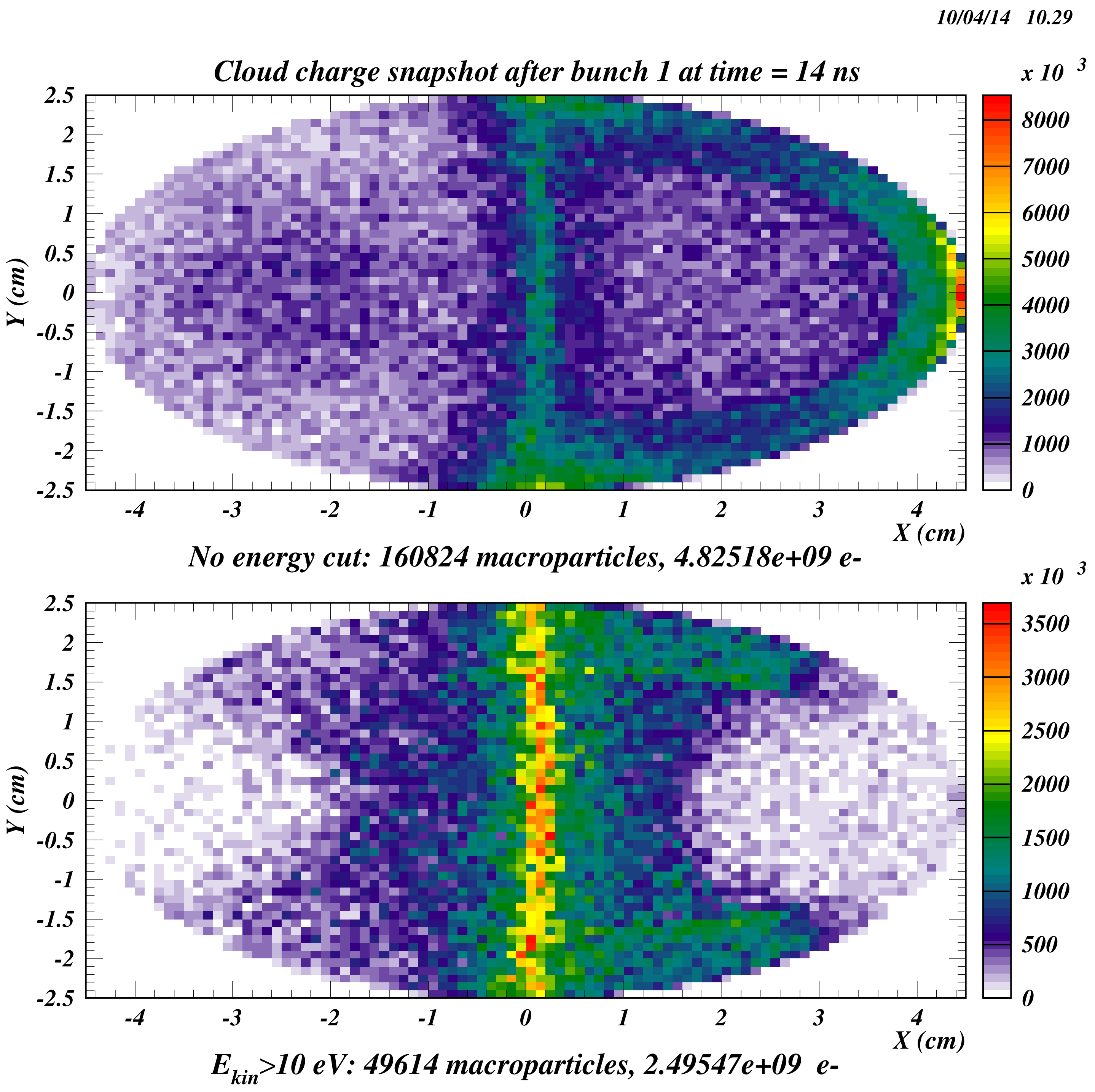
10/04/14 10.29
Beam-averaged Cloud Density (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
Time (ns)
0
2
4
6
8
10
0
10
20
30
40
50
60
70
80



10/04/14 10.29
5-Sigma Cloud Density at Center of Pipe (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
Time (ns)
0
1
2
3
4
5
6
0
10
20
30
40
50
60
70
80

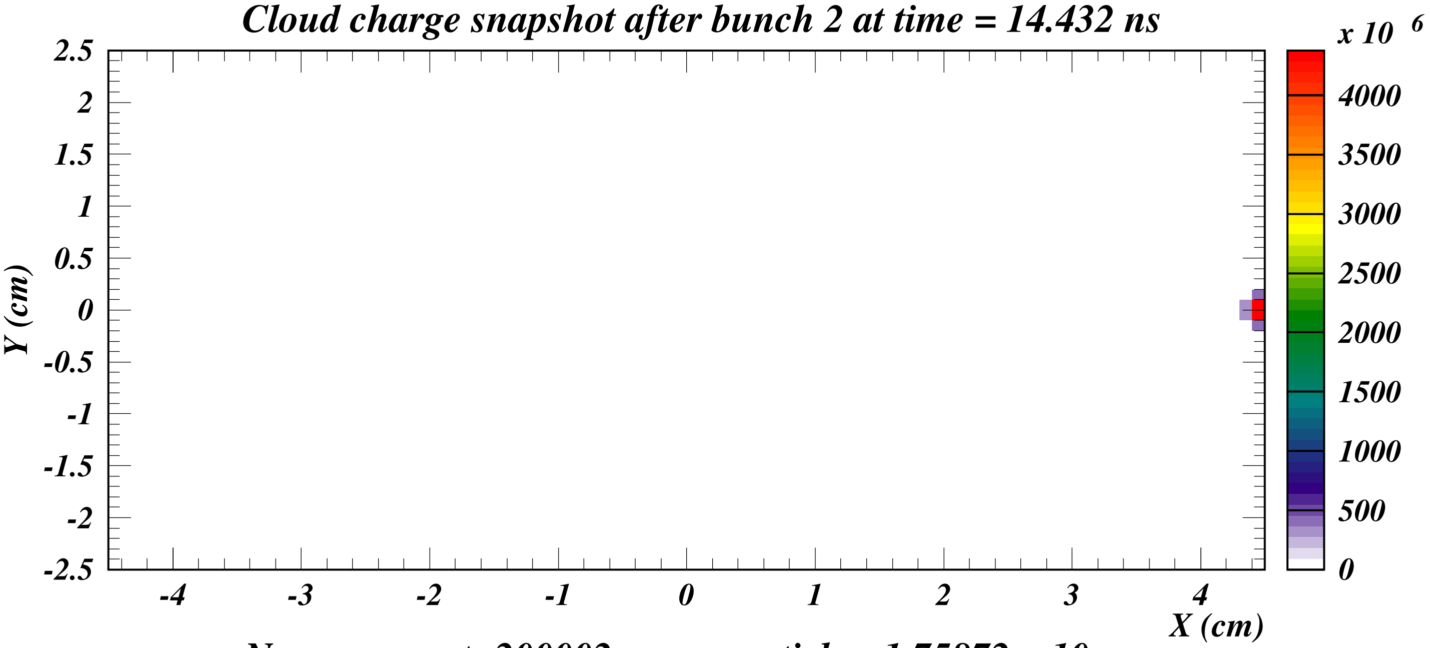


10/04/14 10.29
Job 15471: Cloud Density in Central Grid Cell (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
Time (ns)
0
2
4
6
8
10
0
10
20
30
40
50
60
70
80

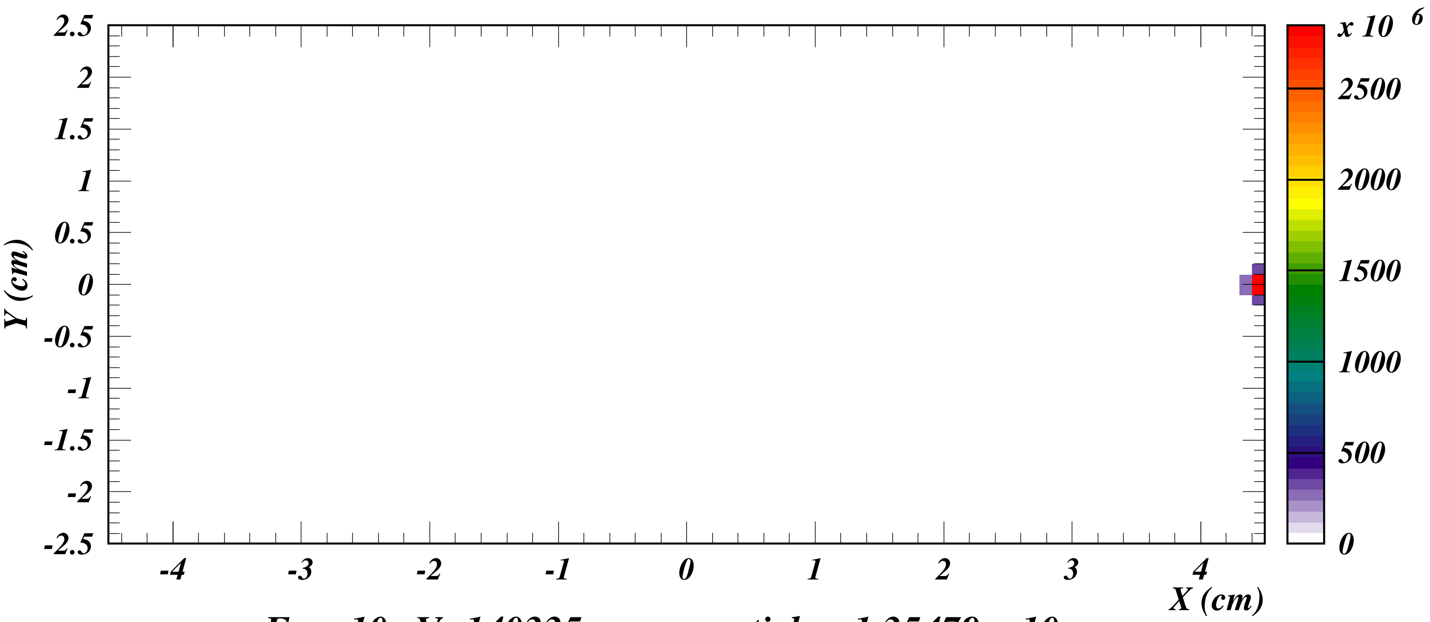

10/04/14 10.29
Cloud charge snapshot after bunch 1 at time = 14 ns
x 10 3
8000
7000
6000
5000
4000
3000
2000
1000
0
Y (cm)
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-4
-3
-2
-1
0
1
2
3
4
X (cm)
No energy cut: 160824 macroparticles, 4.82518e+09 e-
x 10 3
3500
3000
2500
2000
1500
1000
500
0
Y (cm)
X (cm)
E_kin>10 eV: 49614 macroparticles, 2.49547e+09 e-

10/04/14 10.29

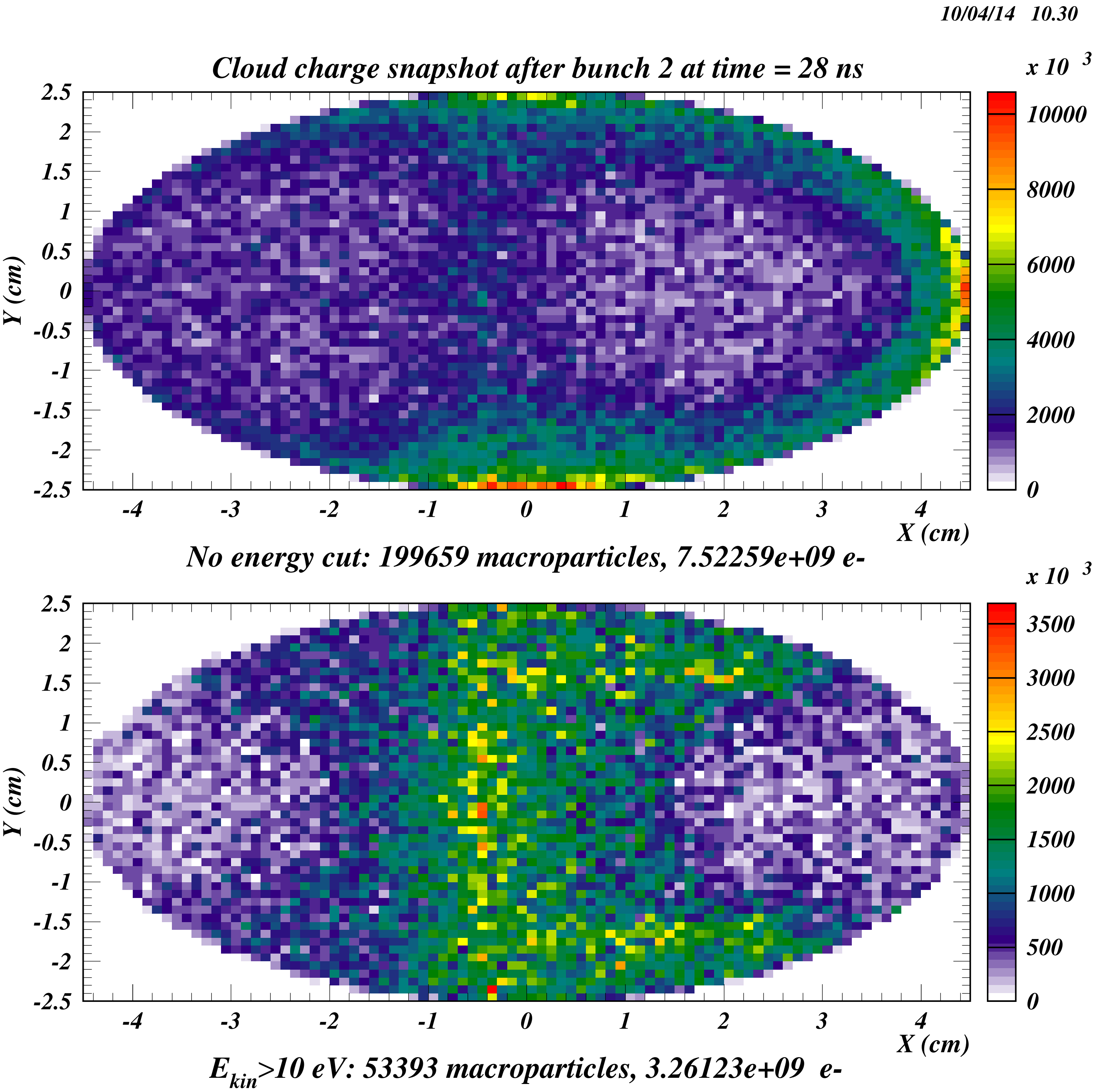
Cloud charge snapshot after bunch 2 at time = 14.432 ns



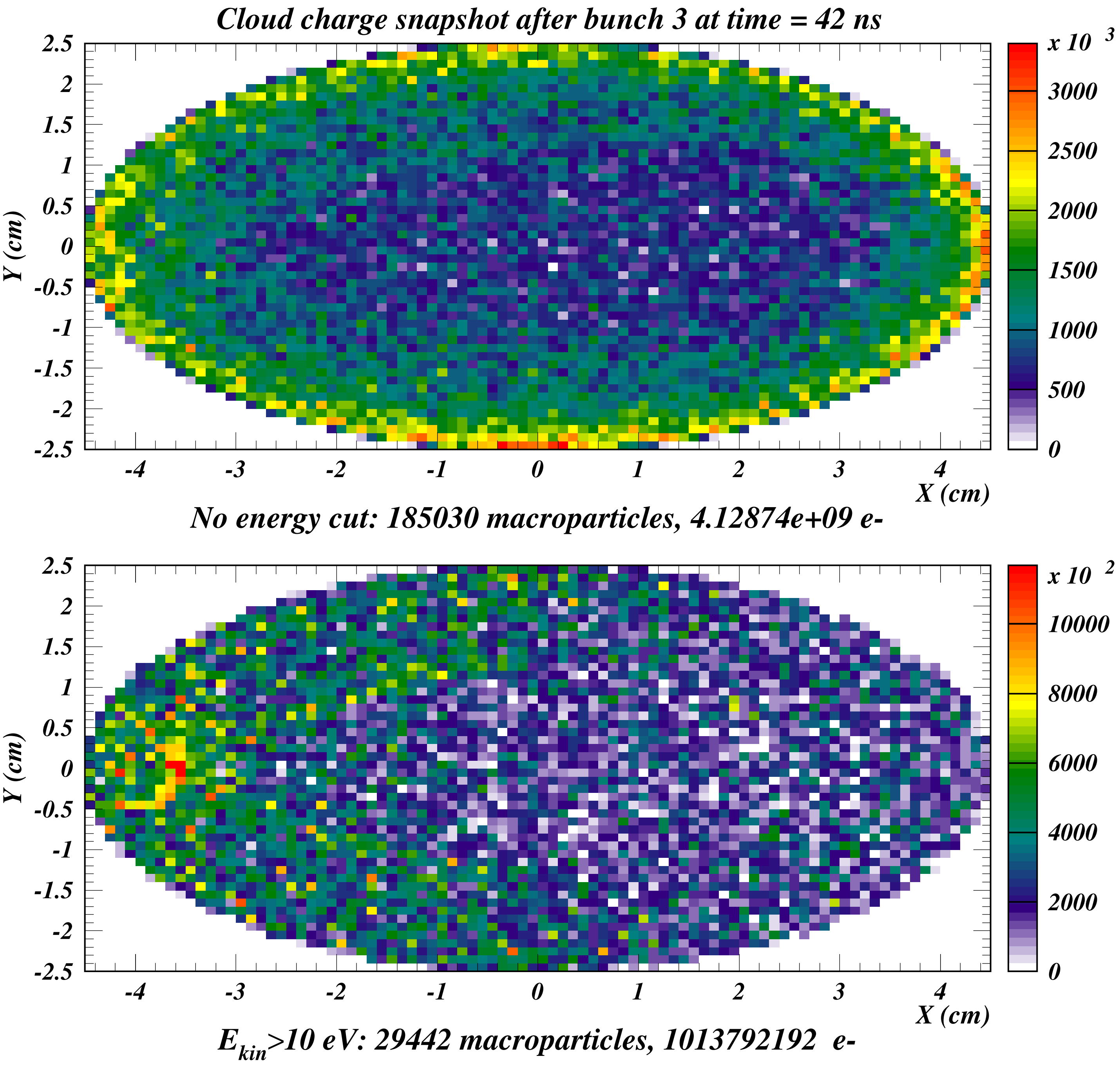
No energy cut: 200002 macroparticles, 1.75872e+10 e-

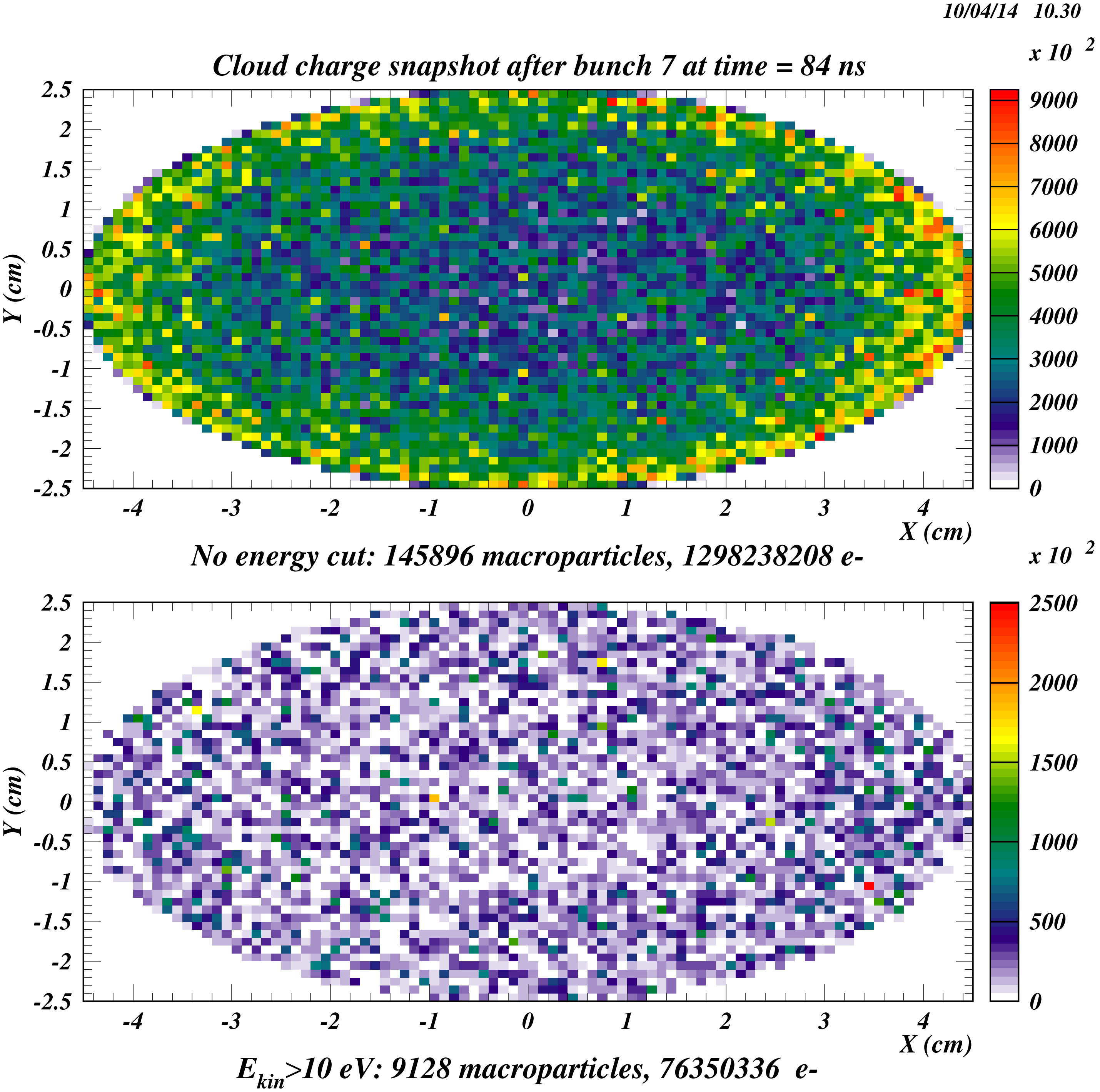


E_{kin}>10 eV: 140335 macroparticles, 1.35479e+10 e-

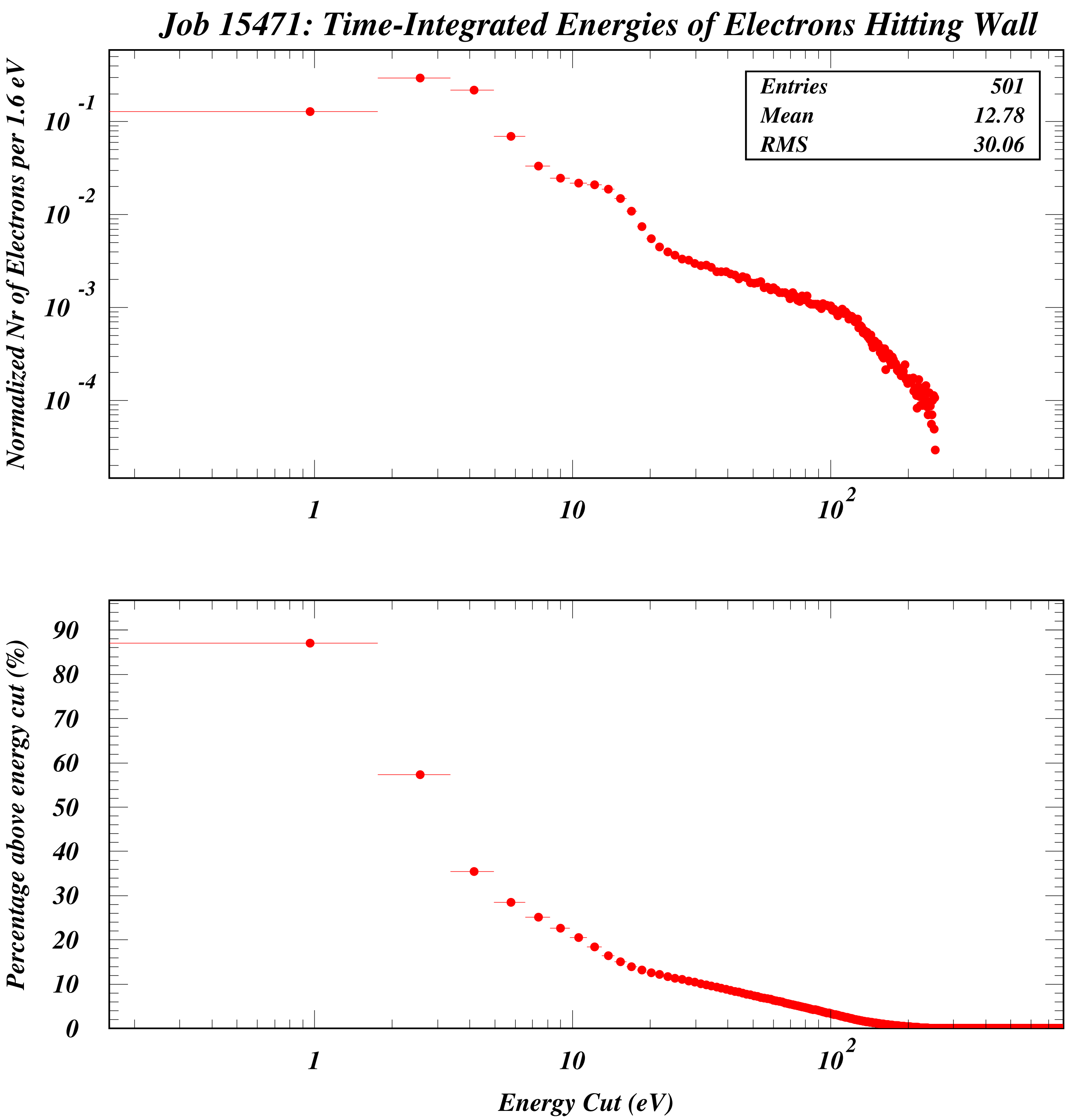

10/04/14 10.30
Cloud charge snapshot after bunch 2 at time = 28 ns
x 10^3
10000
8000
6000
4000
2000
0
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
Y (cm)
-4
-3
-2
-1
0
1
2
3
4
X (cm)
No energy cut: 199659 macroparticles, 7.52259e+09 e-
x 10^3
3500
3000
2500
2000
1500
1000
500
0
Y (cm)
X (cm)
E_kin>10 eV: 53393 macroparticles, 3.26123e+09 e-

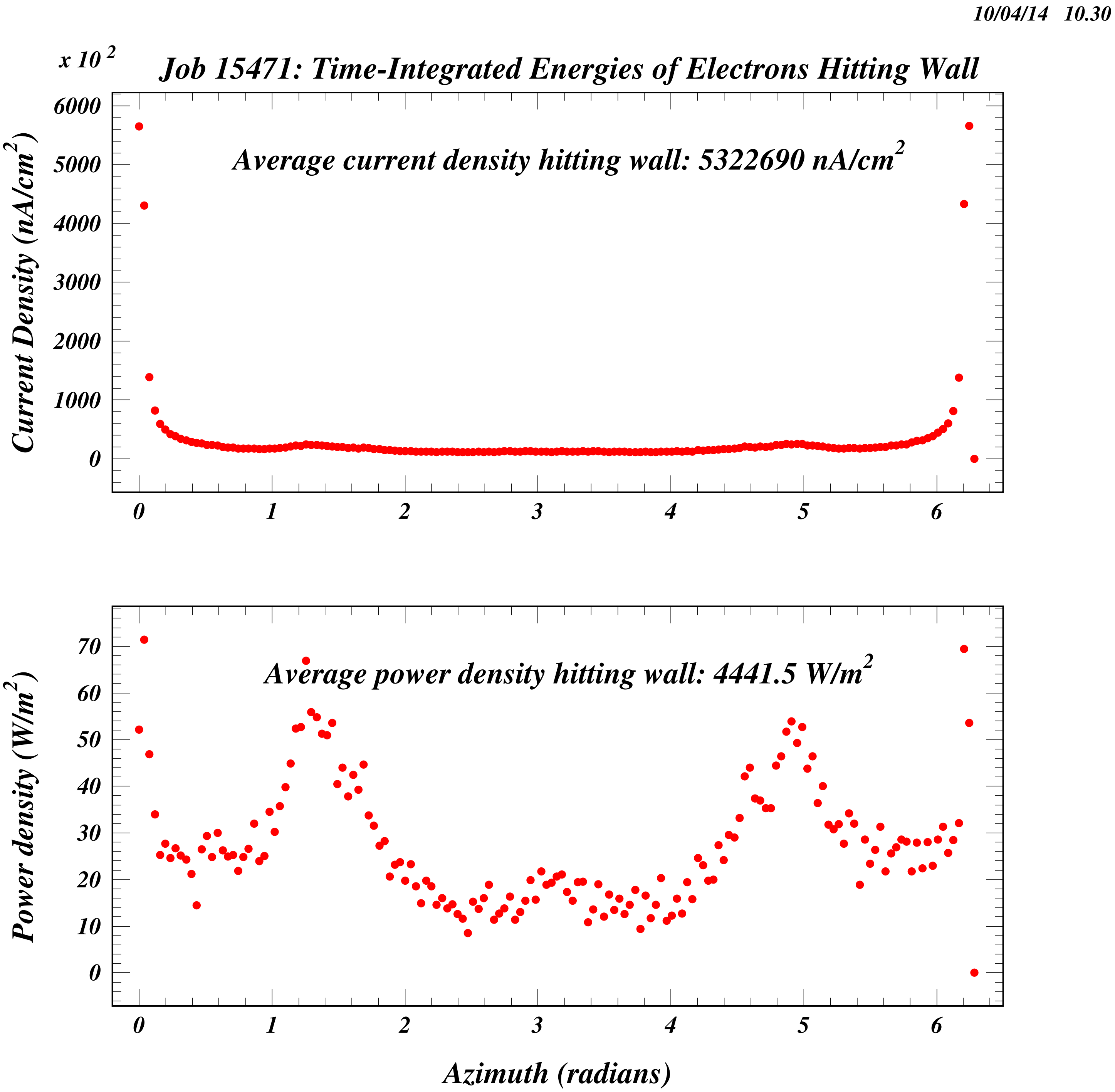
10/04/14   10.30


Cloud charge snapshot after bunch 3 at time = 42 ns
Y (cm)
X (cm)
x 10 3
3000
2500
2000
1500
1000
500
0
No energy cut: 185030 macroparticles, 4.12874e+09 e-
x 10 2
10000
8000
6000
4000
2000
E_{kin}>10 eV: 29442 macroparticles, 1013792192 e-


10/04/14 10.30
Cloud charge snapshot after bunch 7 at time = 84 ns
x 10 2
Y (cm)
X (cm)
No energy cut: 145896 macroparticles, 1298238208 e-
x 10 2
Y (cm)
X (cm)
E_{kin}>10 eV: 9128 macroparticles, 76350336 e-

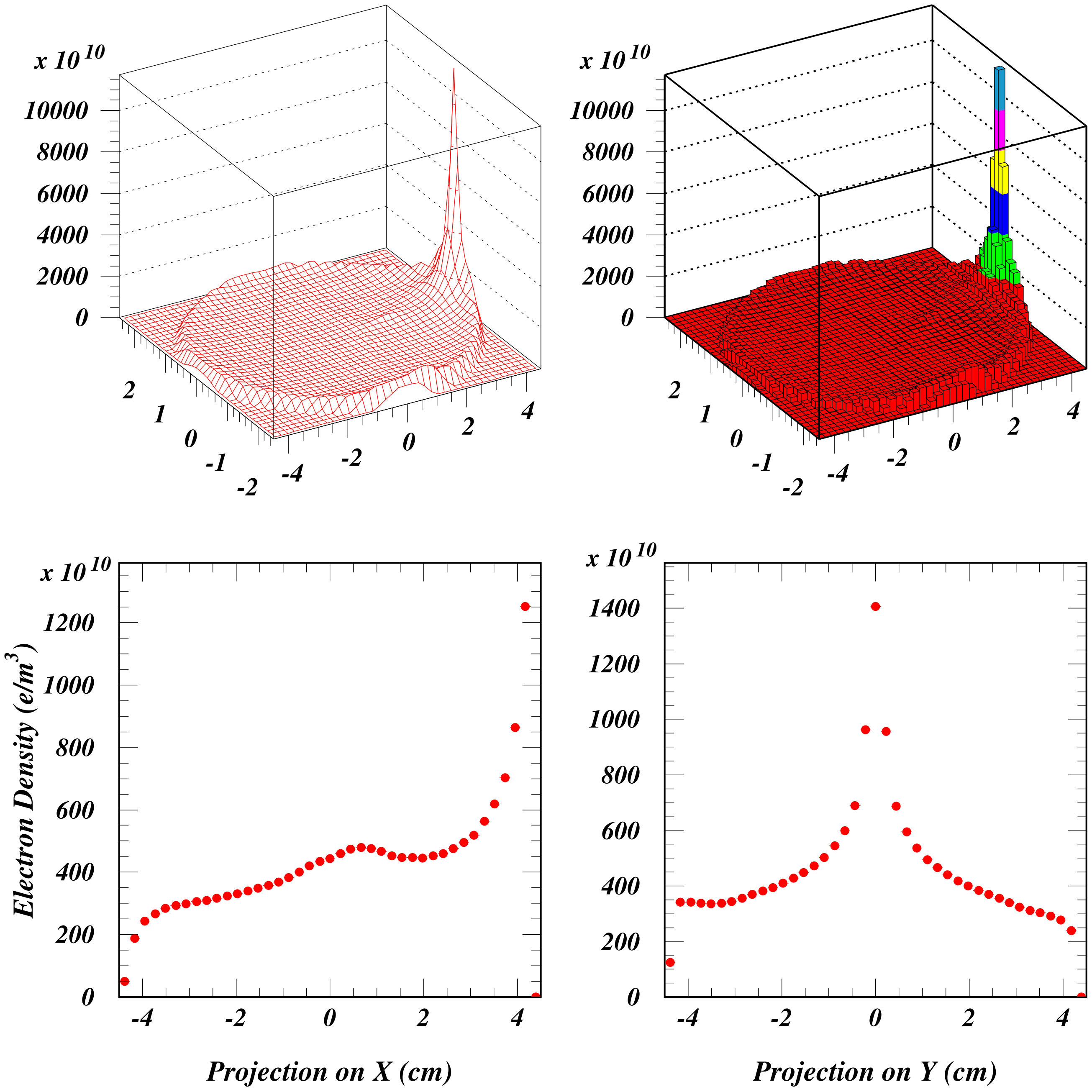
10/04/14 10.30

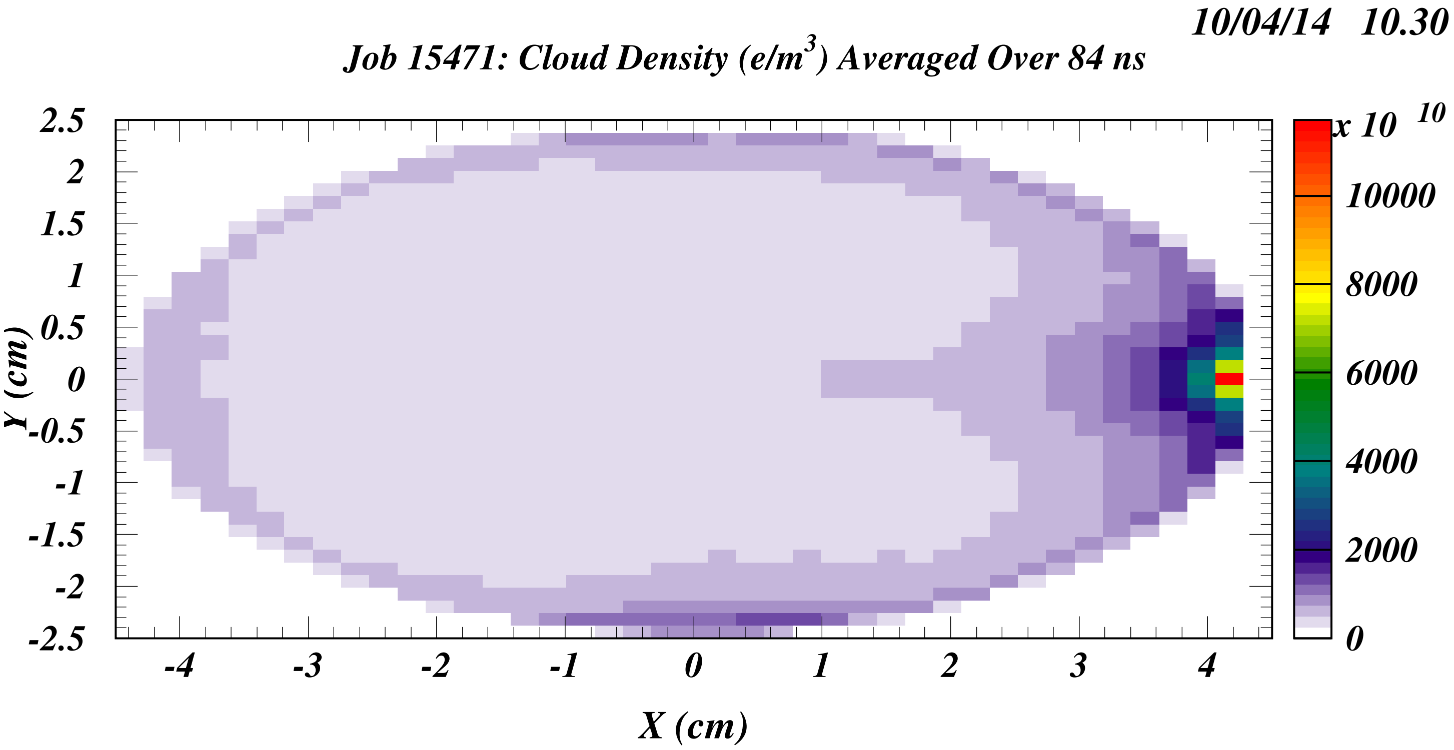

Job 15471: Time-Integrated Energies of Electrons Hitting Wall
Entries 501
Mean 12.78
RMS 30.06
Normalized Nr of Electrons per 1.6 eV
Percentage above energy cut (%)
Energy Cut (eV)


10/04/14 10.30
x 10 2
Job 15471: Time-Integrated Energies of Electrons Hitting Wall
Average current density hitting wall: 5322690 nA/cm2
Current Density (nA/cm2)
6000
5000
4000
3000
2000
1000
0
0
1
2
3
4
5
6
Average power density hitting wall: 4441.5 W/m2
Power density (W/m2)
70
60
50
40
30
20
10
0
Azimuth (radians)

10/04/14 10.30

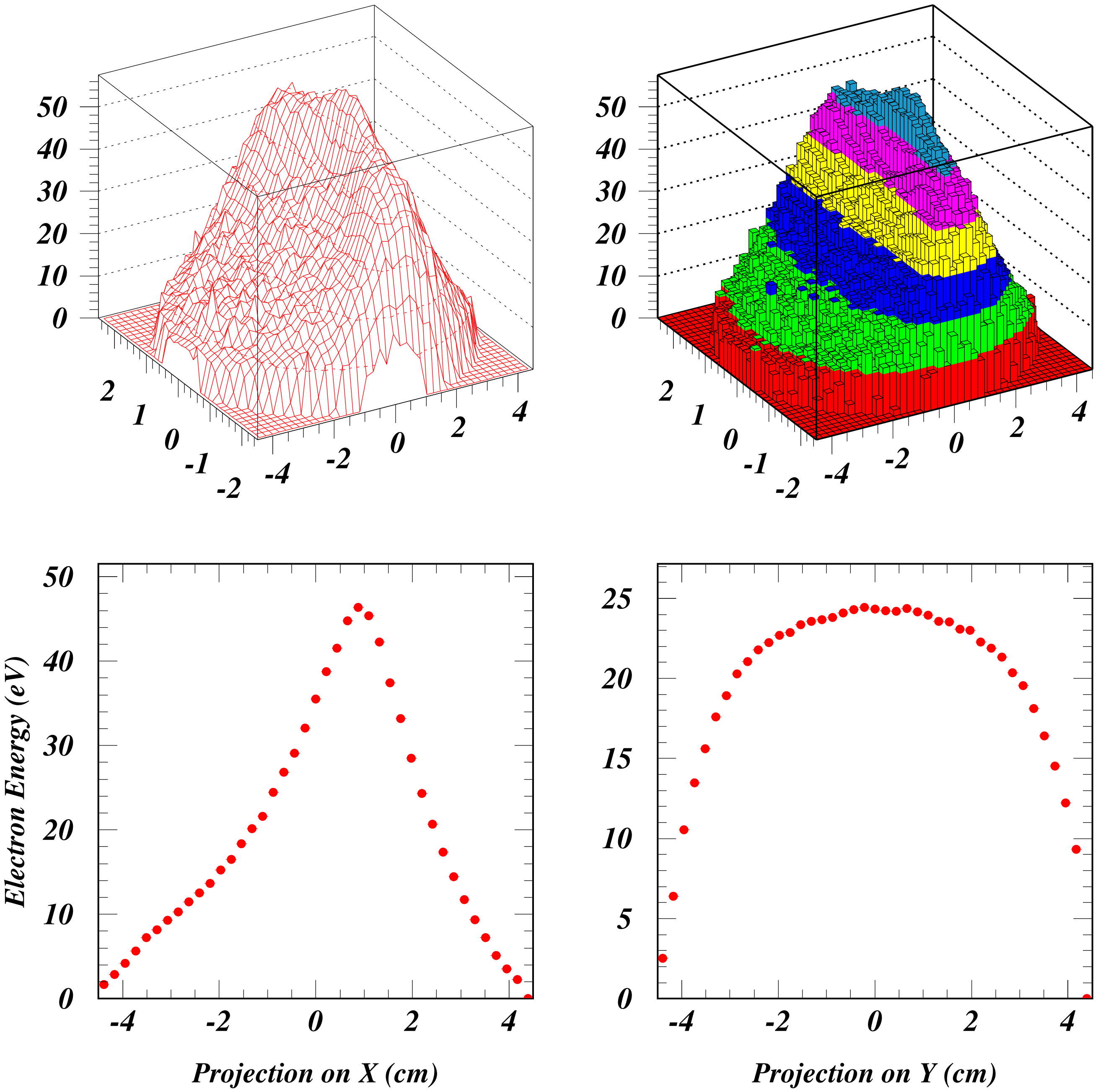
Job 15471: Cloud Density (e/m^3) Averaged Over 84 ns

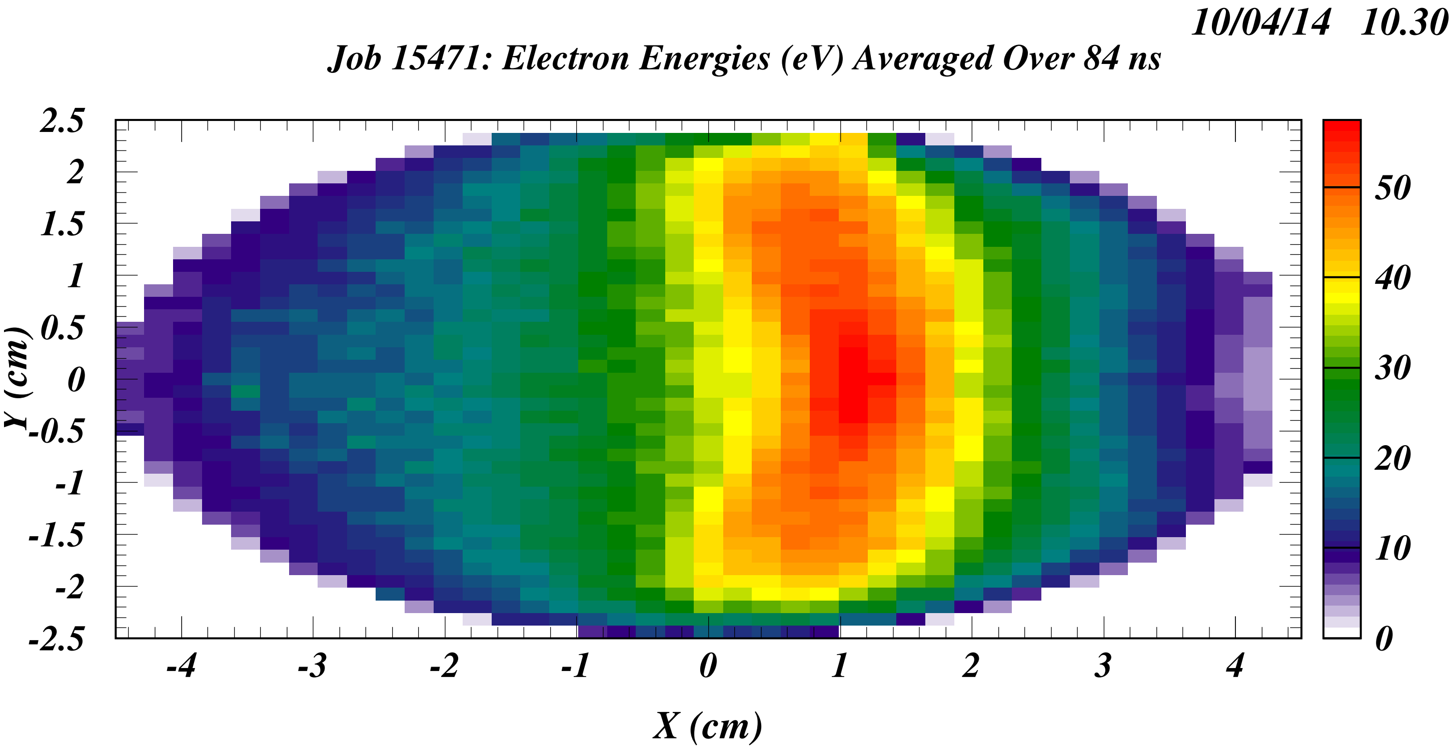



10/04/14 10.30
Job 15471: Cloud Density (e/m^3) Averaged Over 84 ns
x 10^{10}
10000
8000
6000
4000
2000
0
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
Y (cm)
-4
-3
-2
-1
0
1
2
3
4
X (cm)

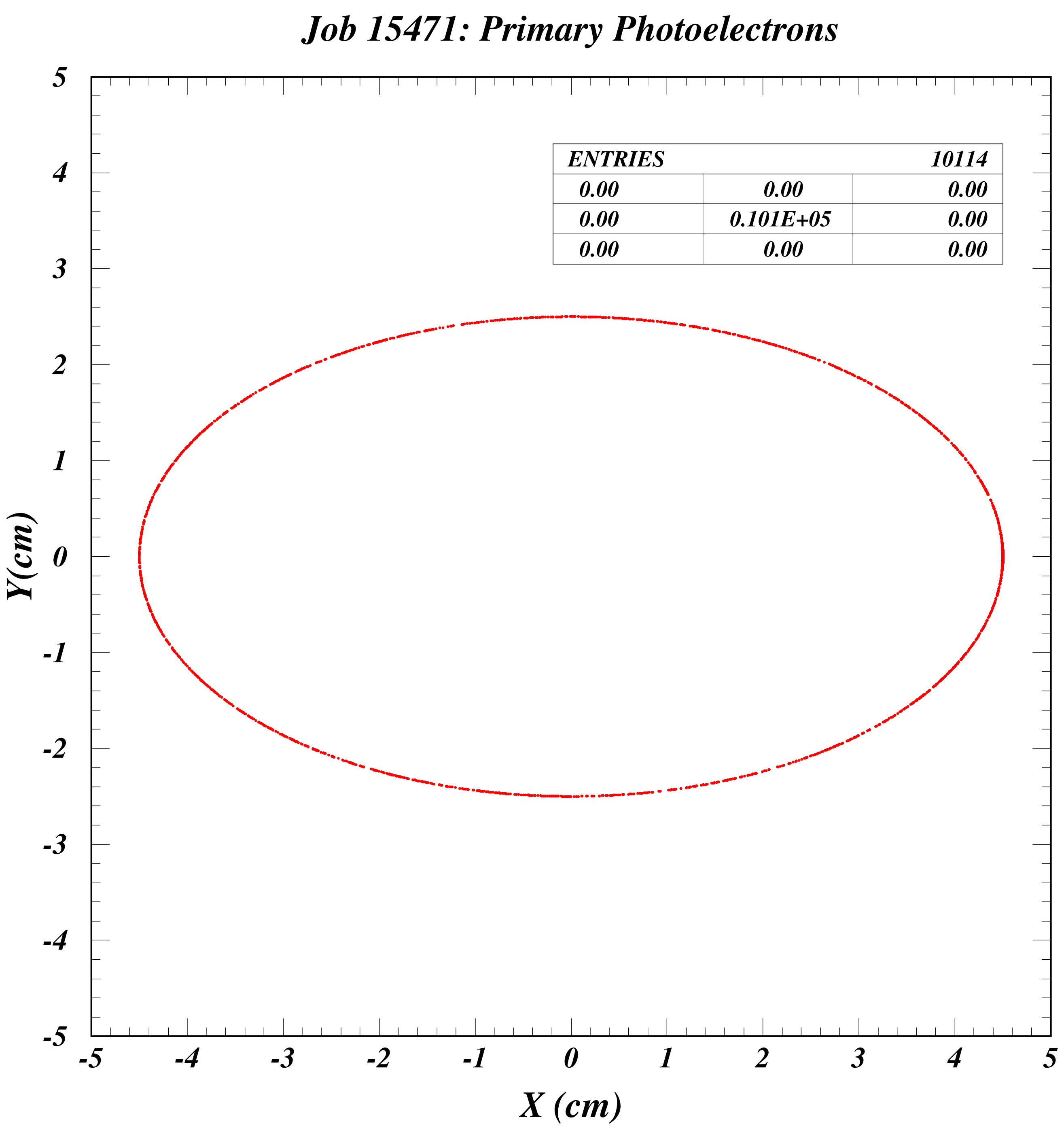
10/04/14 10.30

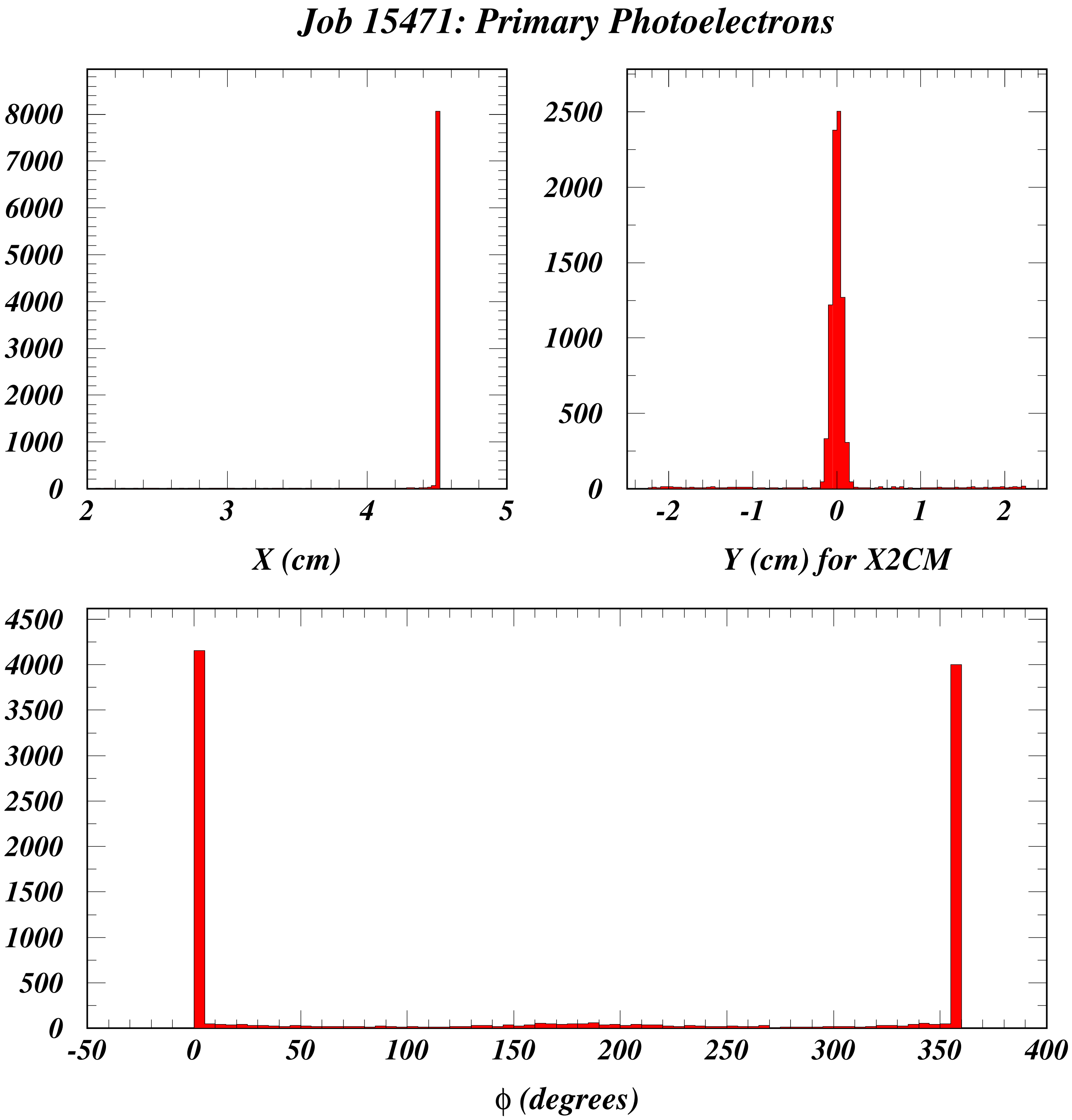
Job 15471: Electron Energies (eV) Averaged Over 84 ns





10/04/14 10.30
Job 15471: Electron Energies (eV) Averaged Over 84 ns
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)
50
40
30
20
10
0


Job 15471: Primary Photoelectrons
ENTRIES 10114
0.00 0.00 0.00
0.00 0.101E+05 0.00
0.00 0.00 0.00
Y(cm)
X (cm)
5
4
3
2
1
0
-1
-2
-3
-4
-5


Job 15471: Primary Photoelectrons
8000
7000
6000
5000
4000
3000
2000
1000
0
2
3
4
5
X (cm)
2500
2000
1500
1000
500
0
-2
-1
0
1
2
Y (cm) for X2CM
4500
4000
3500
3000
2500
2000
1500
1000
500
0
-50
0
50
100
150
200
250
300
350
400
ϕ (degrees)