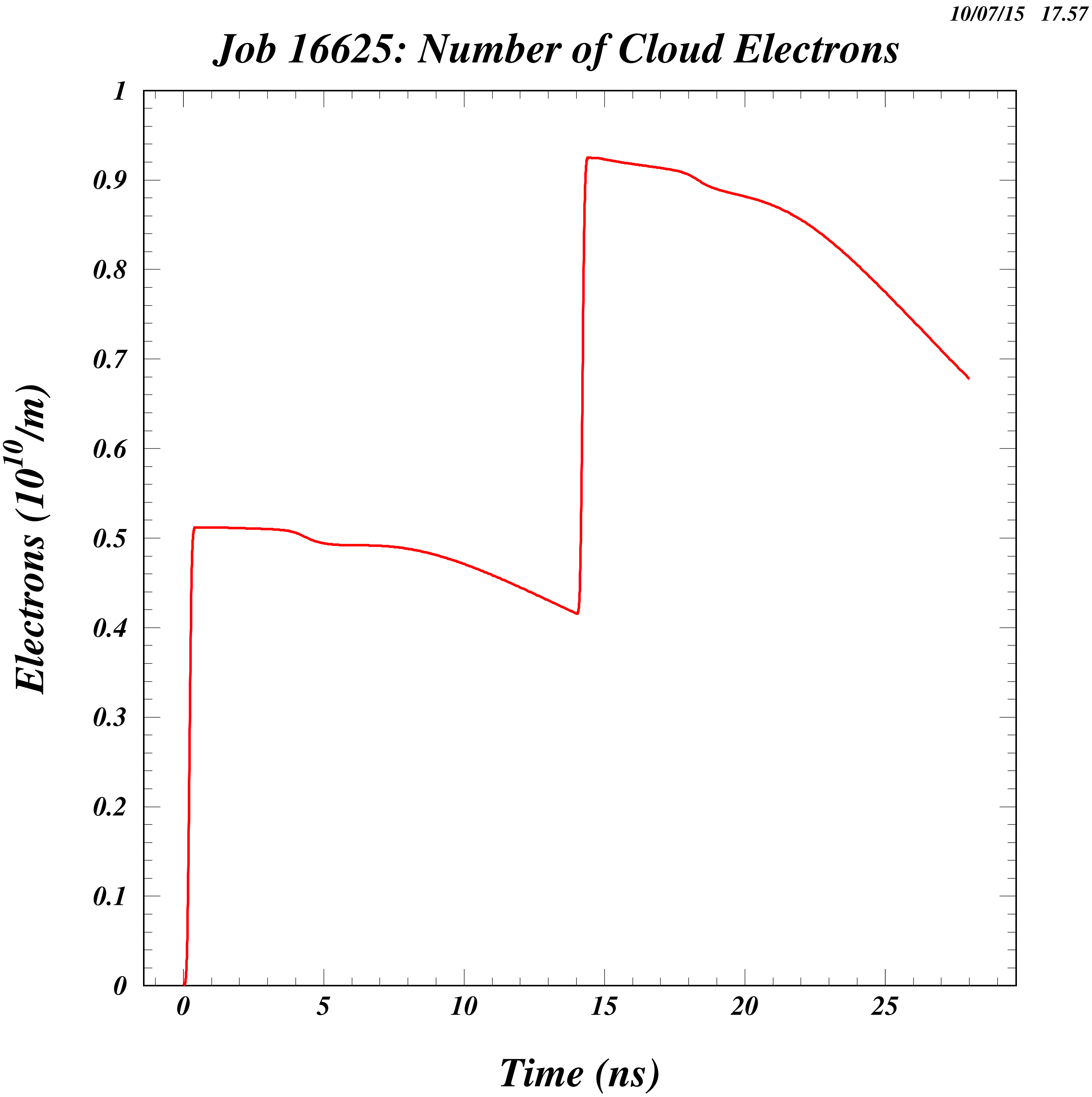
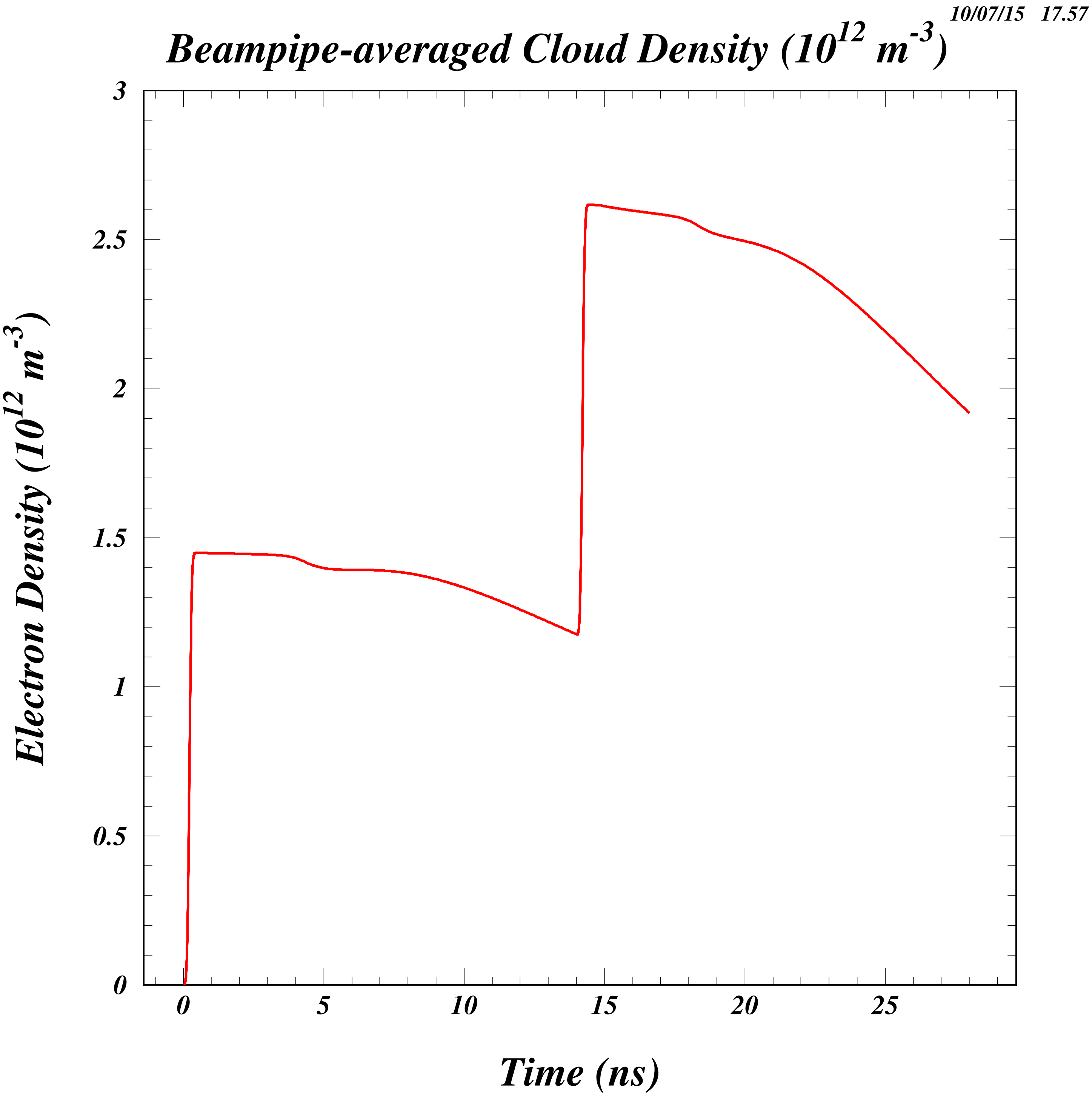
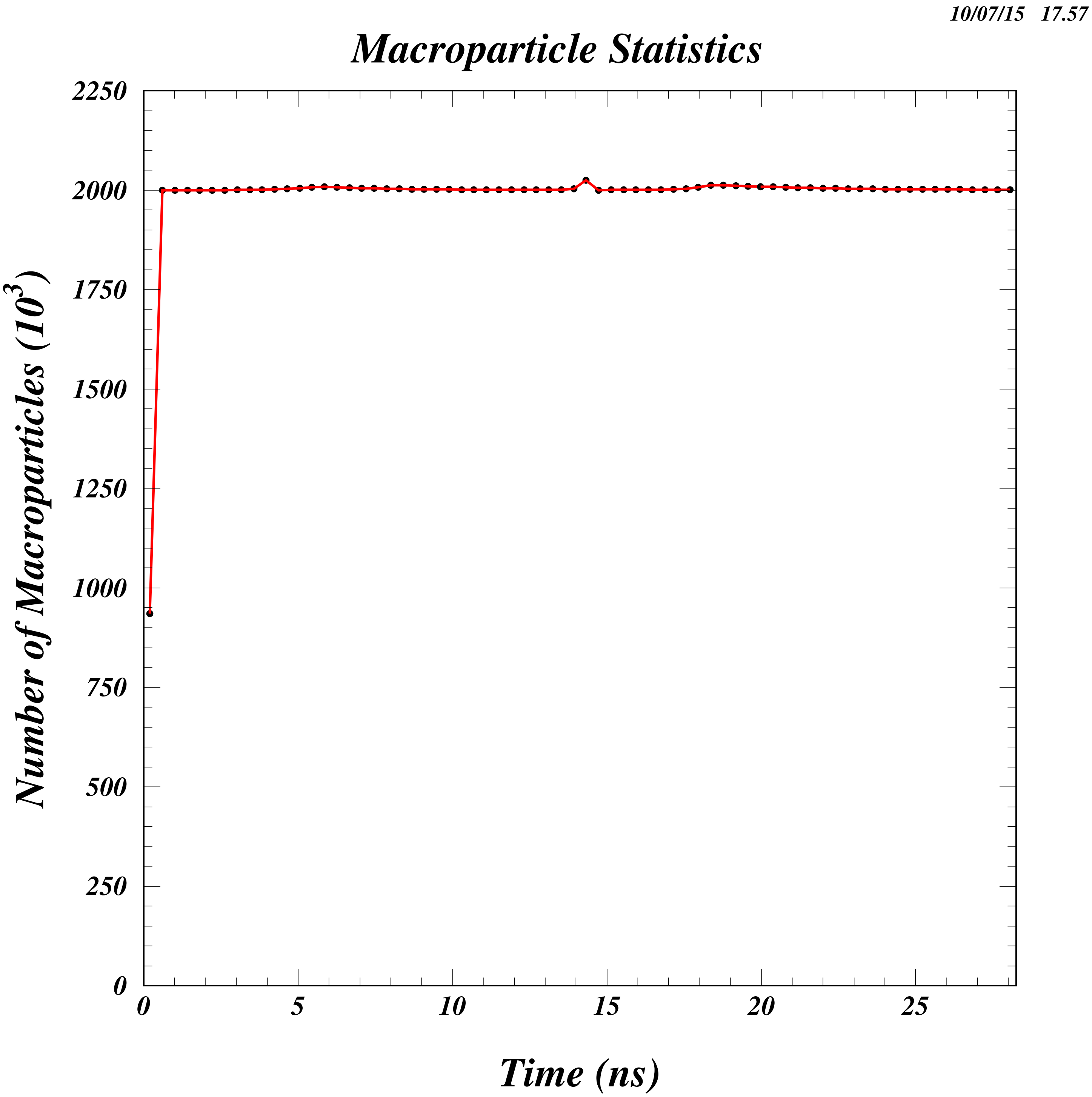
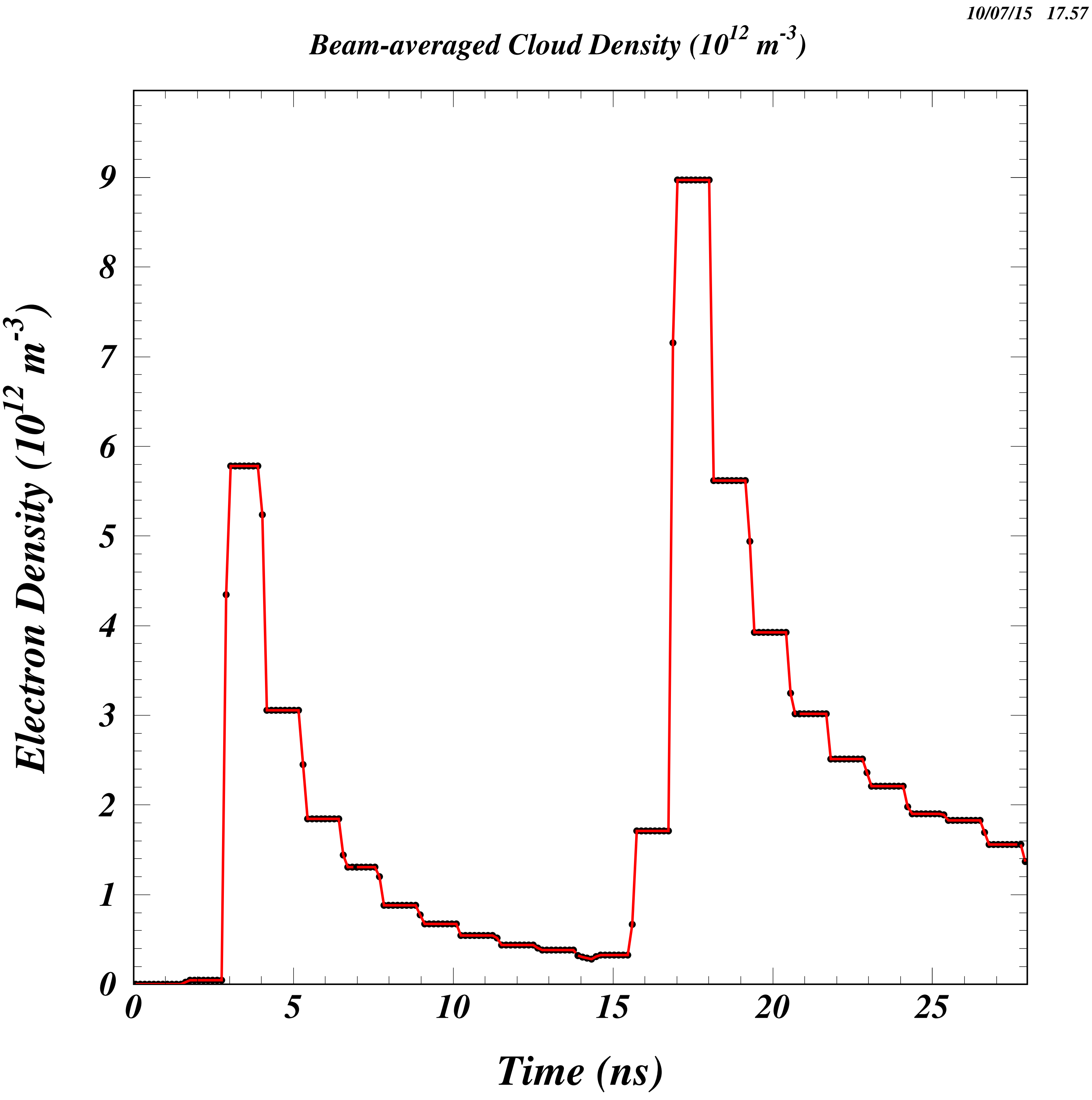


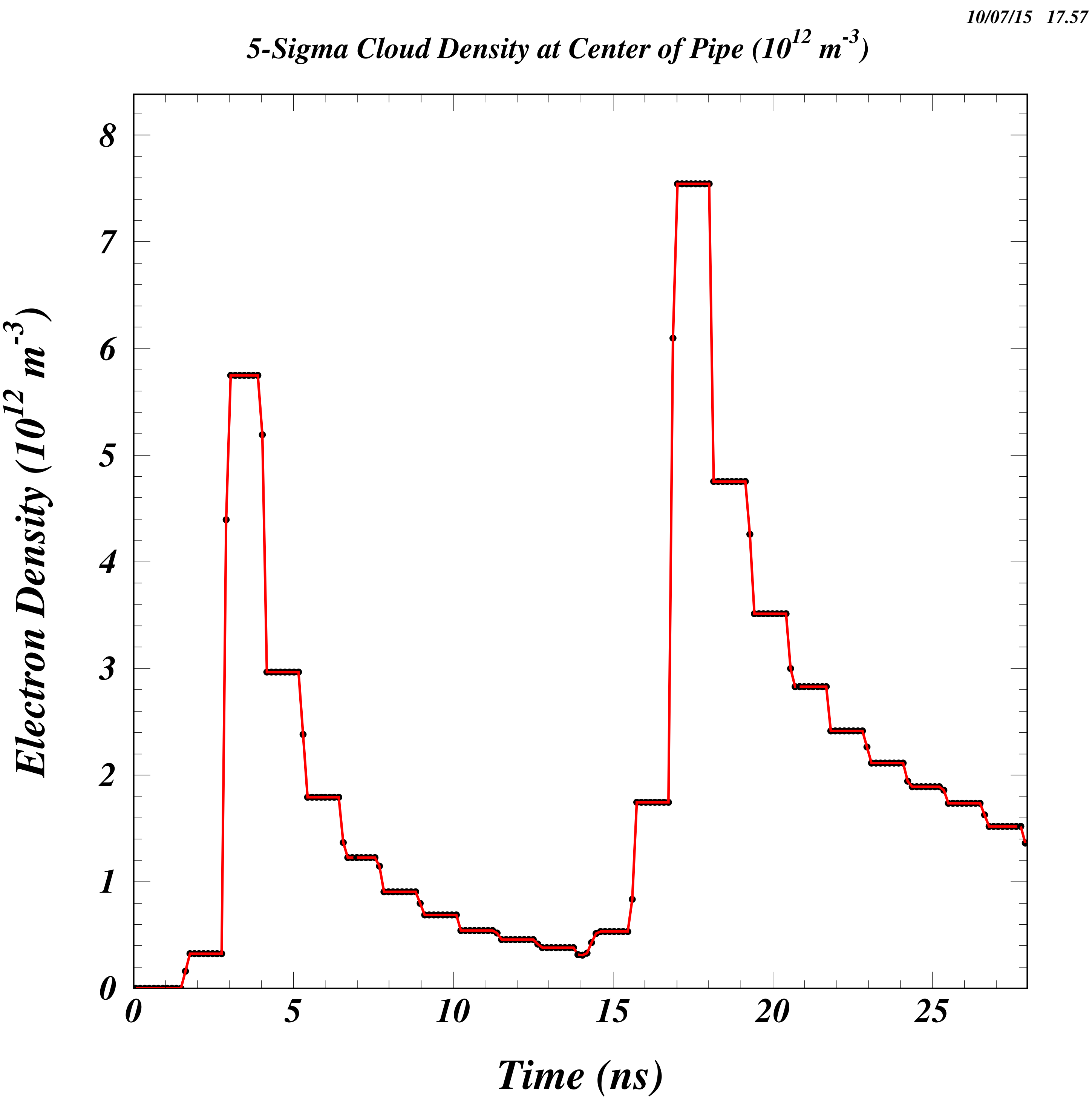
10/07/15 17.57
Job 16625: Number of Cloud Electrons
Electrons (10^{10}/m)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
0
5
10
15
20
25
Time (ns)



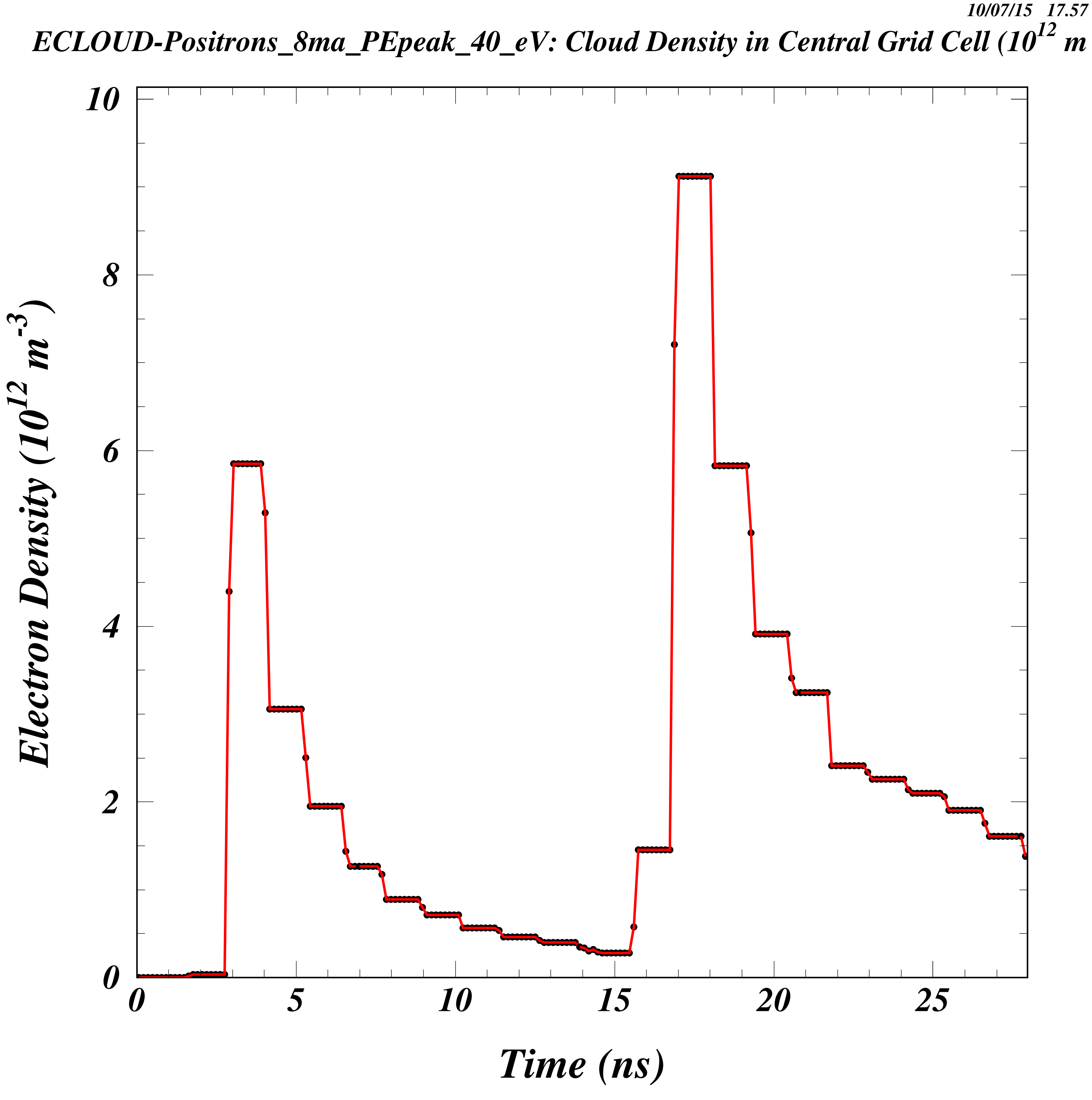
10/07/15 17.57
Beampipe-averaged Cloud Density (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
Time (ns)
0
0.5
1
1.5
2
2.5
3
0
5
10
15
20
25

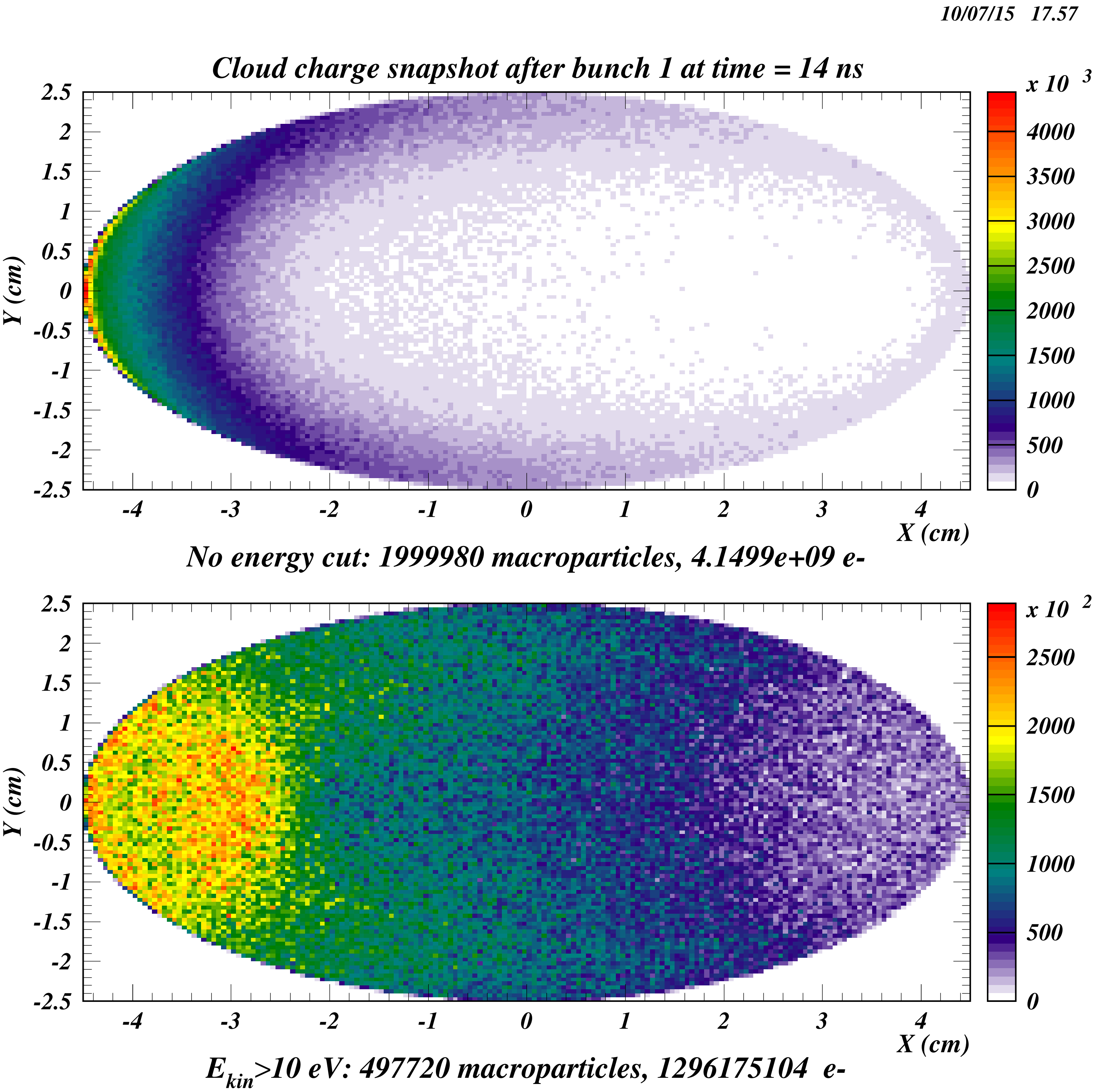

10/07/15 17.57
Macroparticle Statistics
Number of Macroparticles (10^3)
Time (ns)
0
250
500
750
1000
1250
1500
1750
2000
2250
0
5
10
15
20
25


10/07/15 17.57
Beam-averaged Cloud Density (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
Time (ns)
0
1
2
3
4
5
6
7
8
9
0
5
10
15
20
25



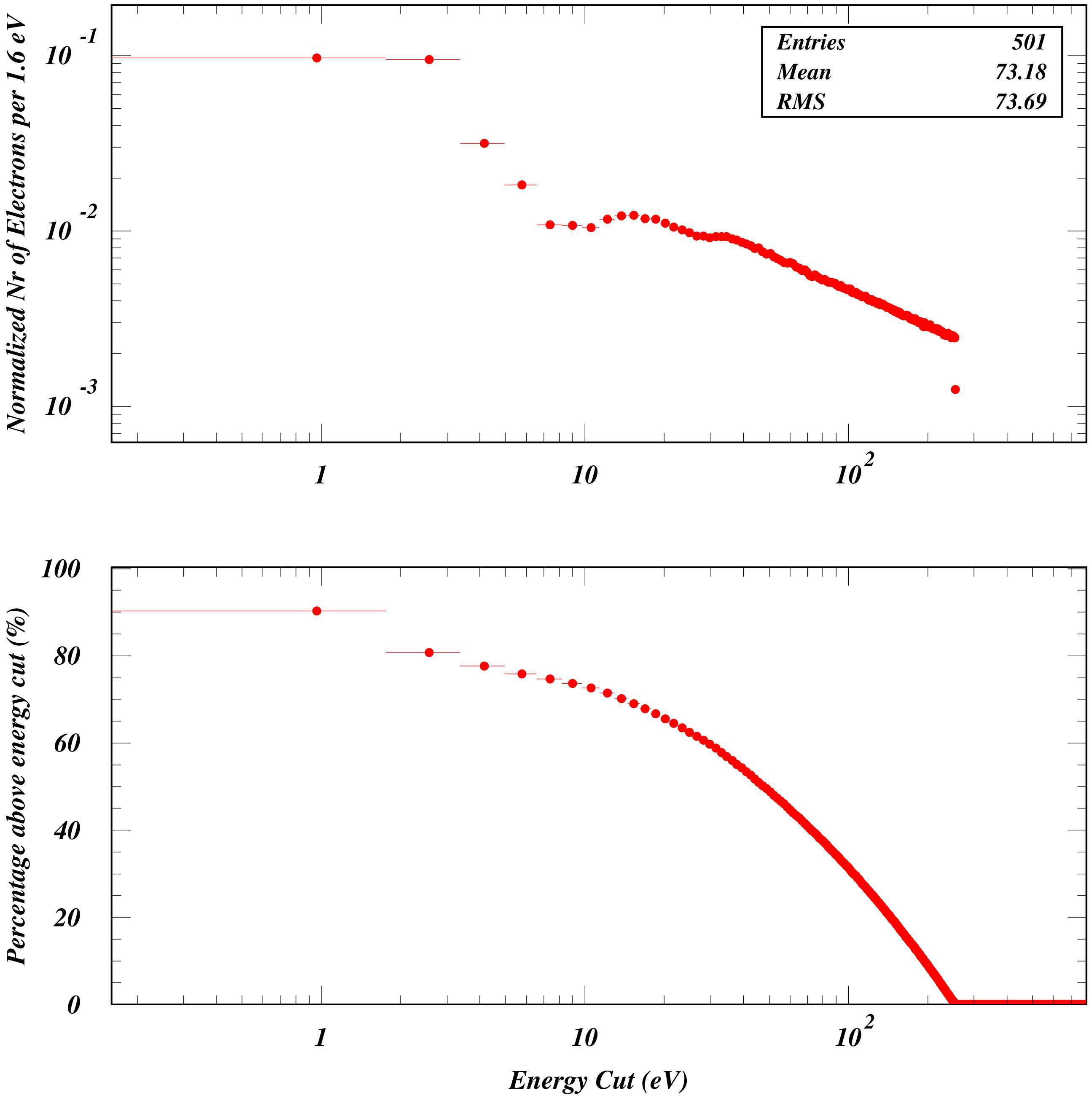
10/07/15 17.57
5-Sigma Cloud Density at Center of Pipe (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
0
1
2
3
4
5
6
7
8
0
5
10
15
20
25
Time (ns)


10/07/15 17.57
ECLOUD-Positrons_8ma_PEpeak_40_eV: Cloud Density in Central Grid Cell (10^{12} m
Electron Density (10^{12} m^{-3})
Time (ns)
0
2
4
6
8
10
0
5
10
15
20
25


10/07/15 17.57
Cloud charge snapshot after bunch 1 at time = 14 ns
Y (cm)
X (cm)
x 10^3
No energy cut: 1999980 macroparticles, 4.1499e+09 e-
Y (cm)
X (cm)
x 10^2
E_kin>10 eV: 497720 macroparticles, 1296175104 e-

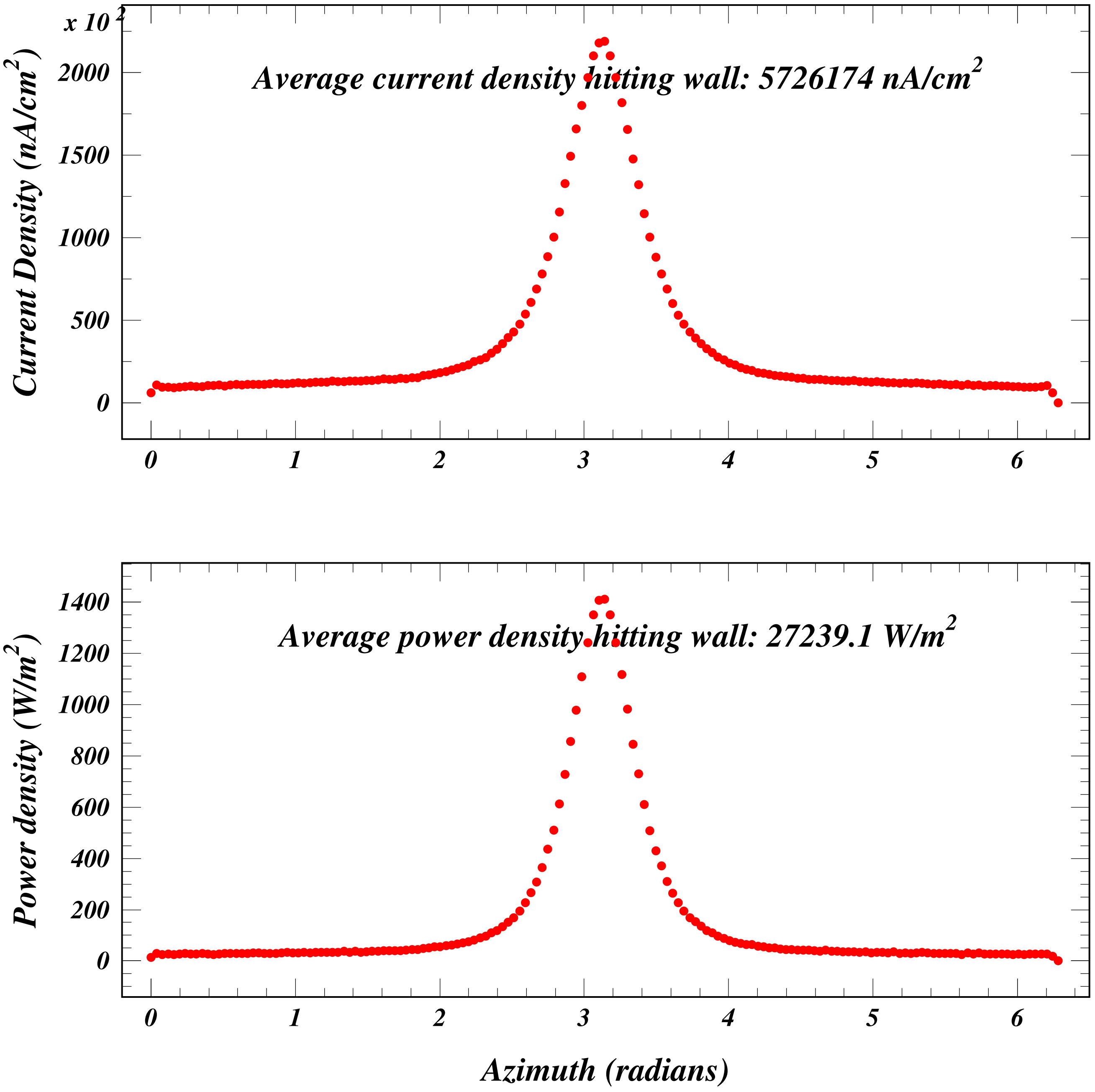
10/07/15 17.57

ECLOUD-Positrons_8ma_PEpeak_40_eV: Time-Integrated Energies of Electrons Hitting



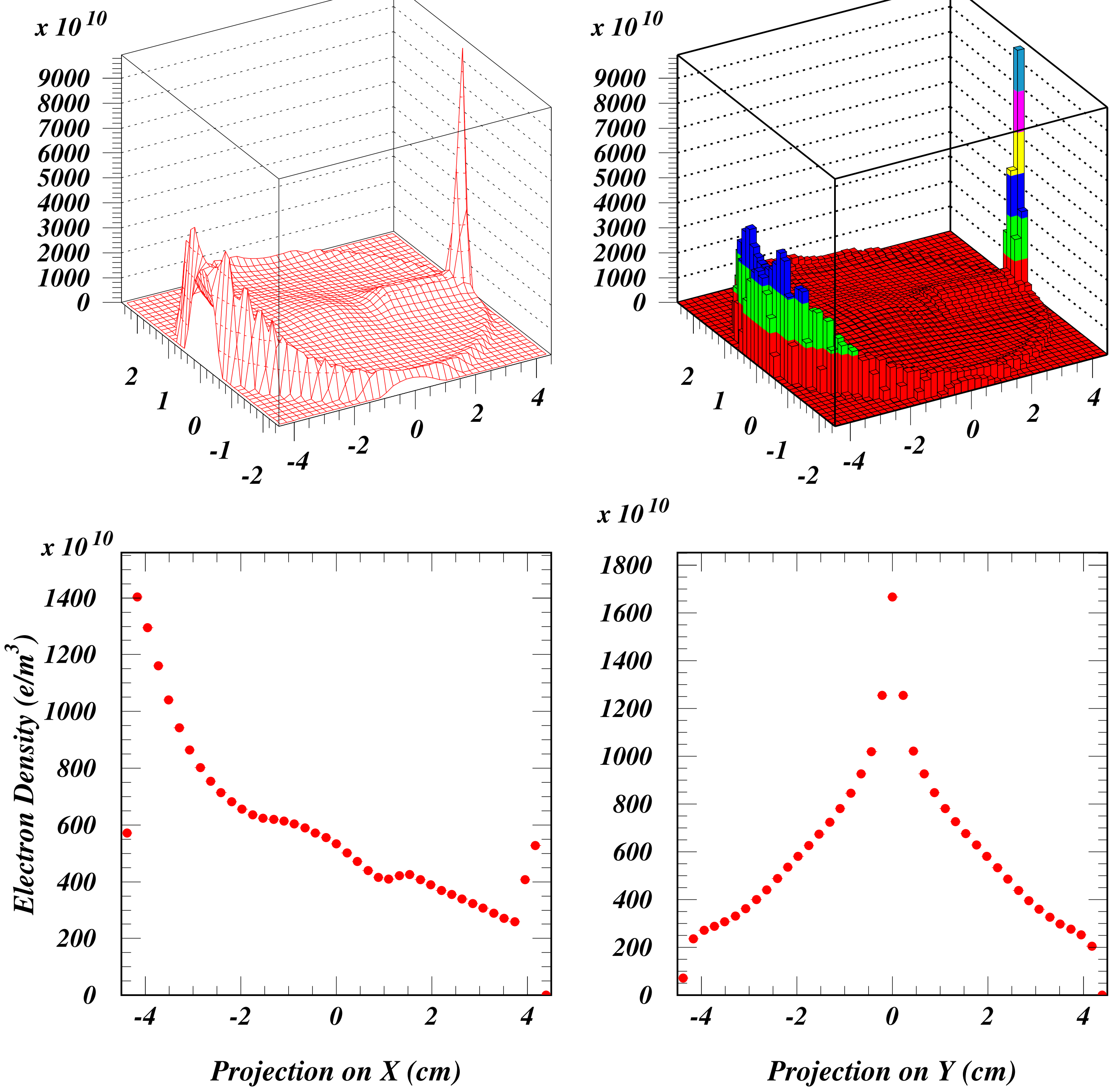
10/07/15 17.57

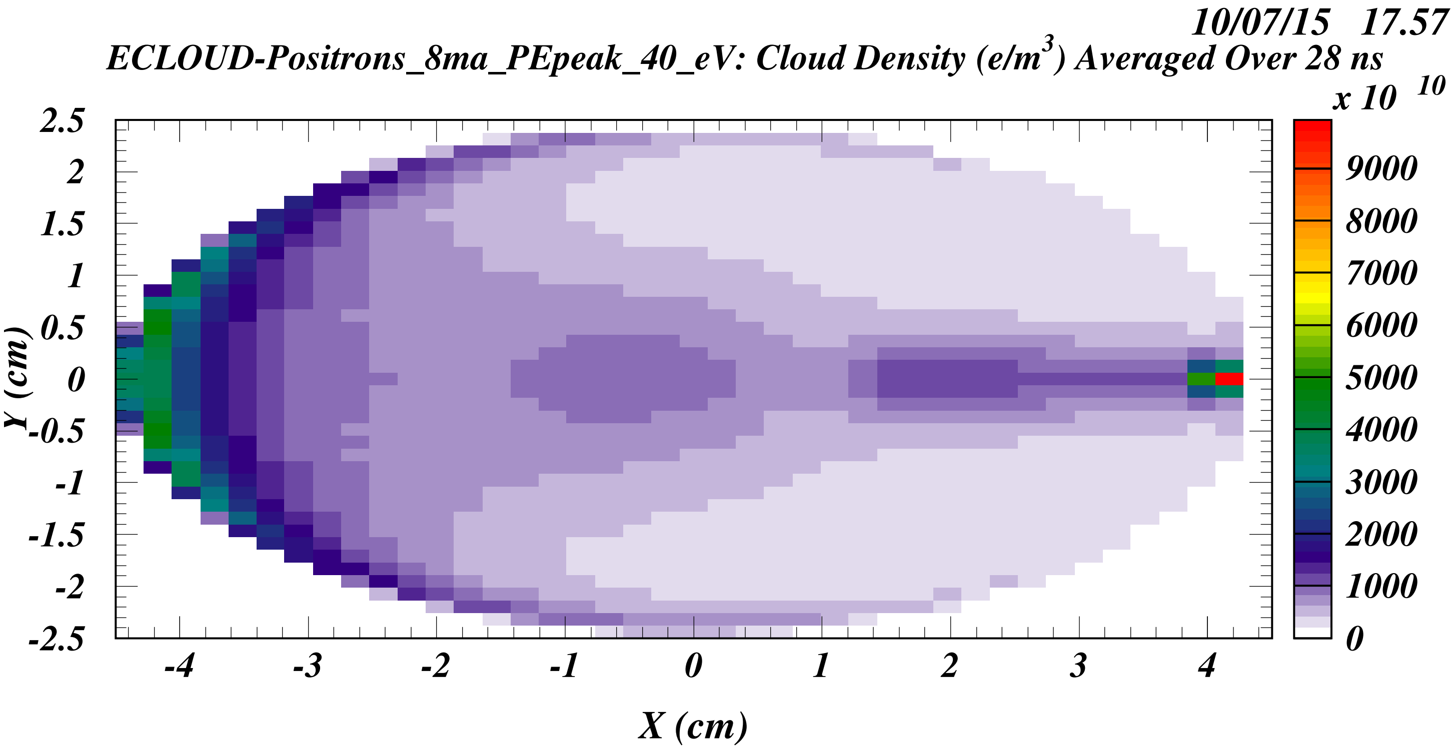
ECLOUD-Positrons_8ma_PEpeak_40_eV: Time-Integrated Energies of Electrons Hitting



10/07/15 17.57

ECLOUD-Positrons_8ma_PEpeak_40_eV: Cloud Density (e/m^3) Averaged Over 28 ns

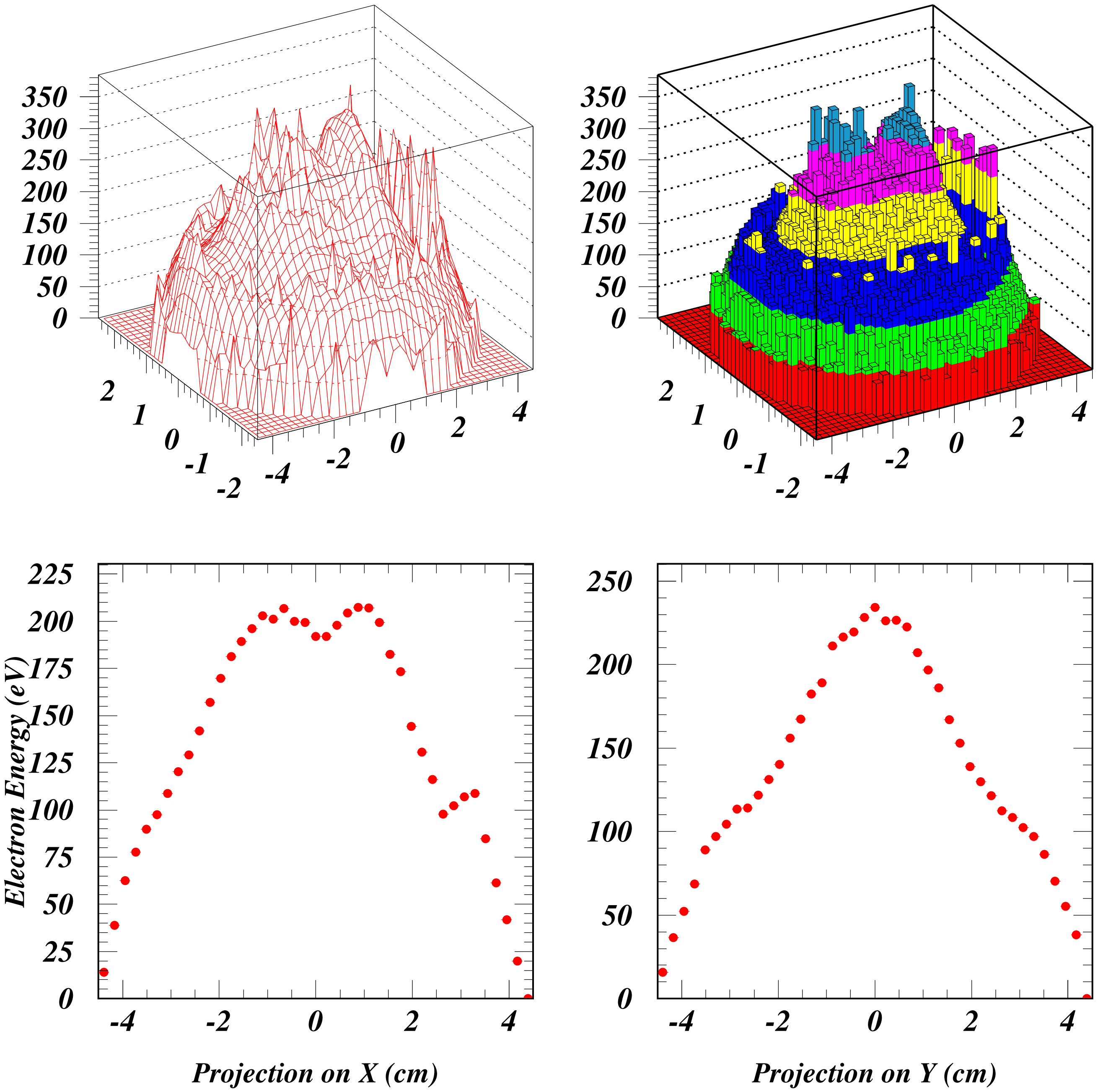


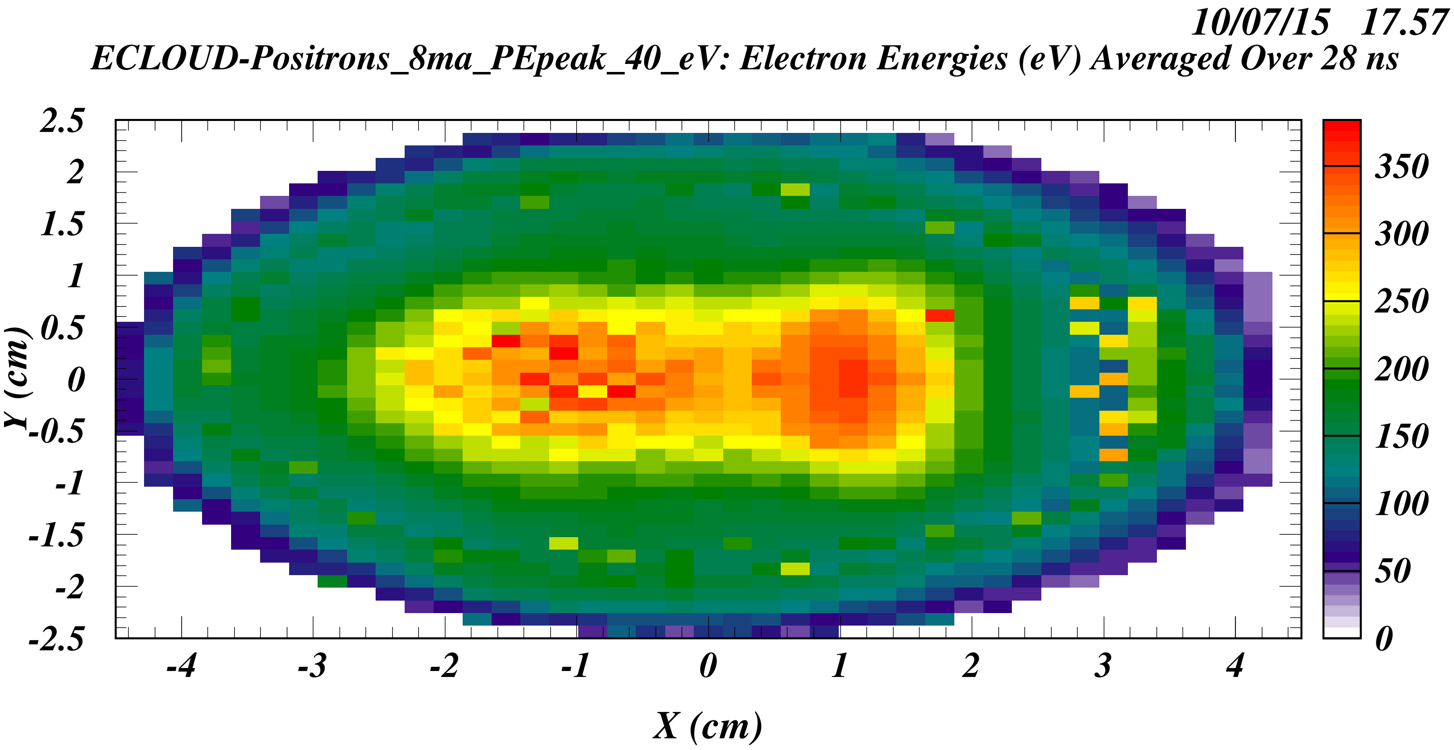


10/07/15 17.57
ECLOUD-Positrons_8ma_PEpeak_40_eV: Cloud Density (e/m^3) Averaged Over 28 ns
x 10 ^{10}
Y (cm)
X (cm)
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-4
-3
-2
-1
0
1
2
3
4
9000
8000
7000
6000
5000
4000
3000
2000
1000
0

10/07/15 17.57

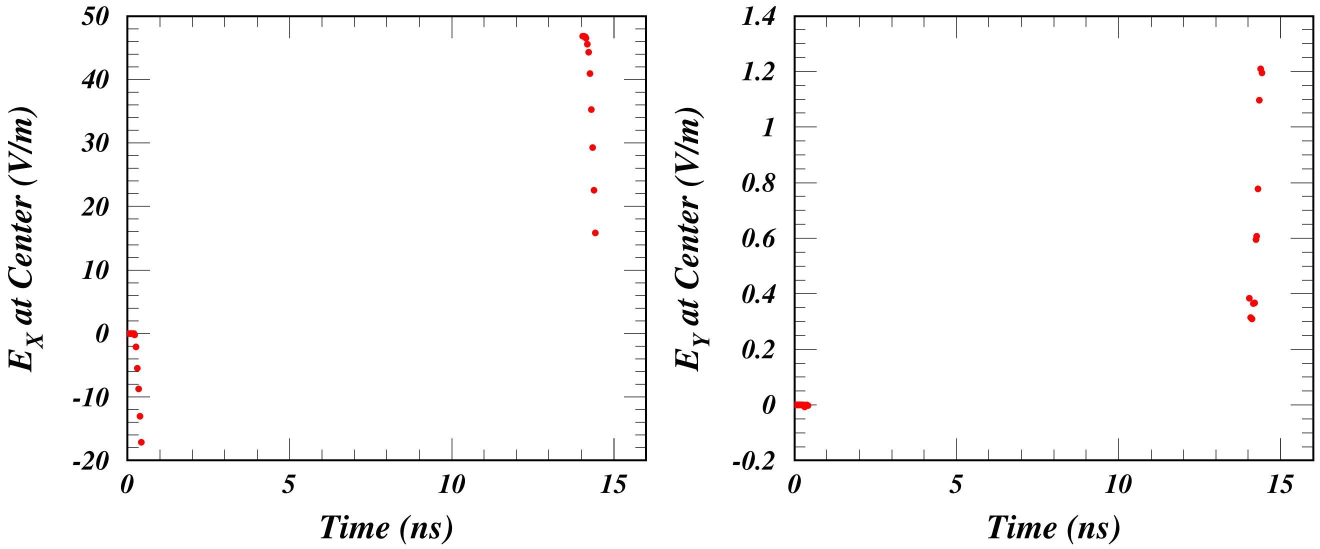
ECLOUD-Positrons_8ma_PEpeak_40_eV: Electron Energies (eV) Averaged Over 28 ns

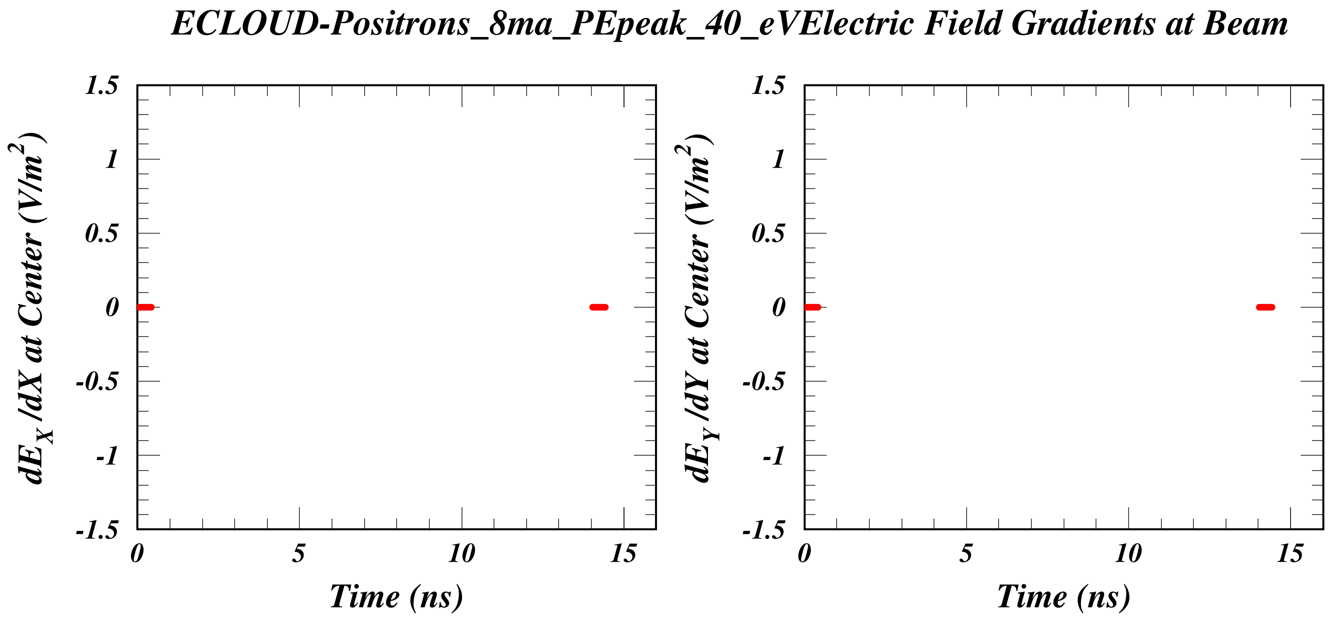




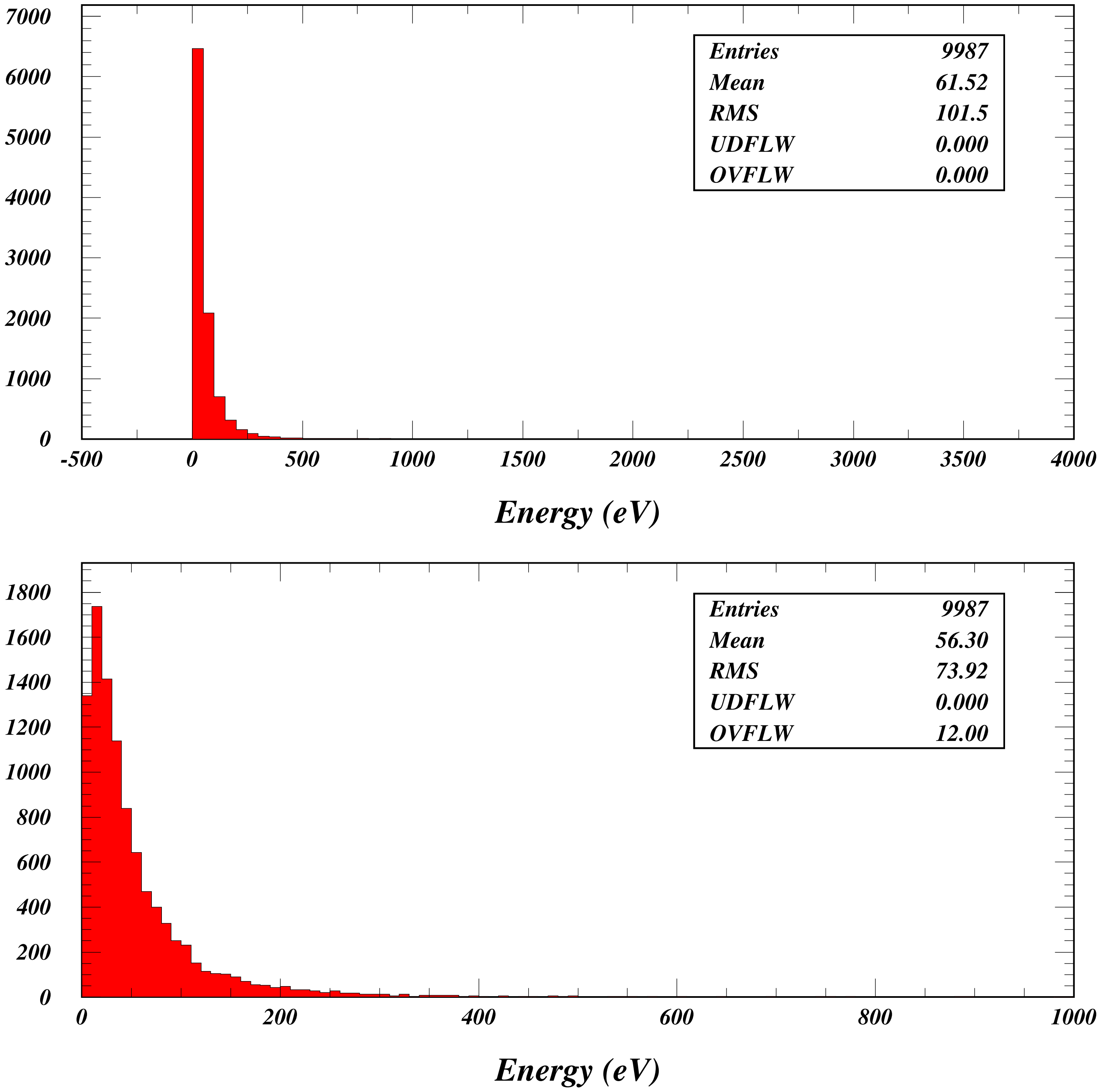
10/07/15 17.57
ECLOUD-Positrons_8ma_PEpeak_40_eV: Electron Energies (eV) Averaged Over 28 ns
Y (cm)
X (cm)
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-4
-3
-2
-1
0
1
2
3
4
350
300
250
200
150
100
50
0

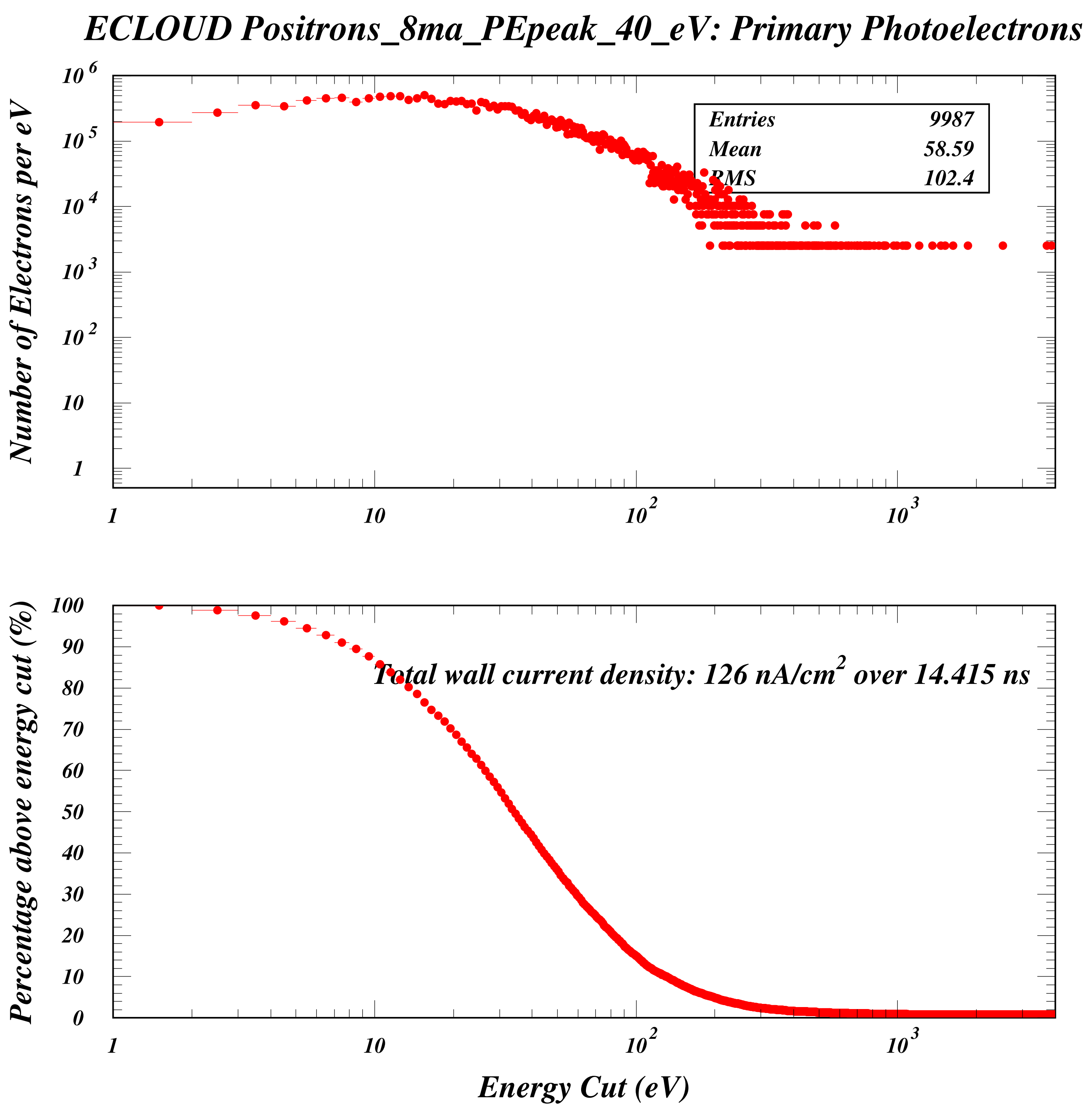
ECLOUD-Positrons_8ma_PEpeak_40_eV: Electric Field at Beam

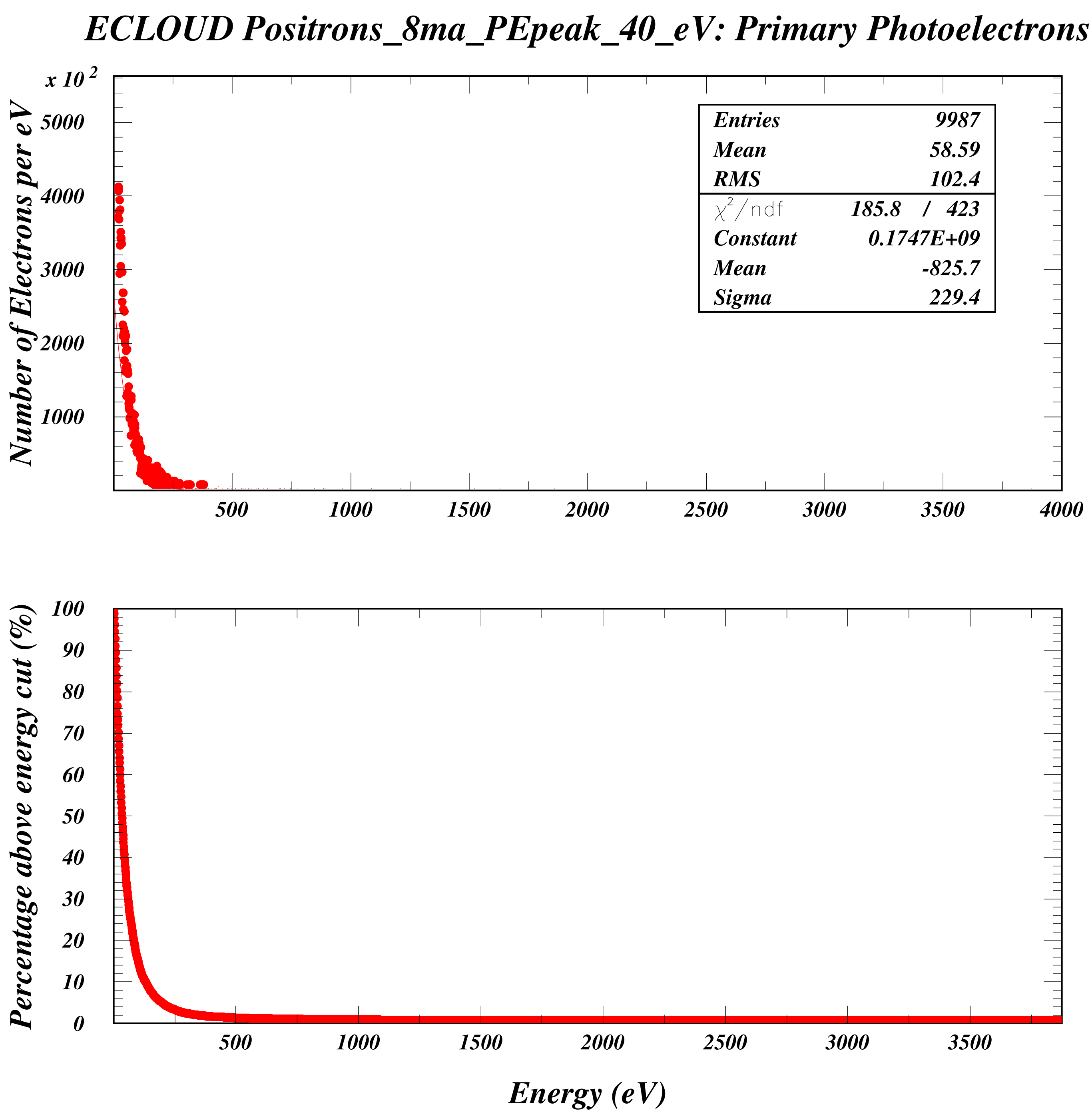



ECLOUD-Positrons_8ma_PEpeak_40_eVElectric Field Gradients at Beam
dE_X /dX at Center (V/m^2)
dE_Y /dY at Center (V/m^2)
1.5
1
0.5
0
-0.5
-1
-1.5
0
5
10
15
Time (ns)

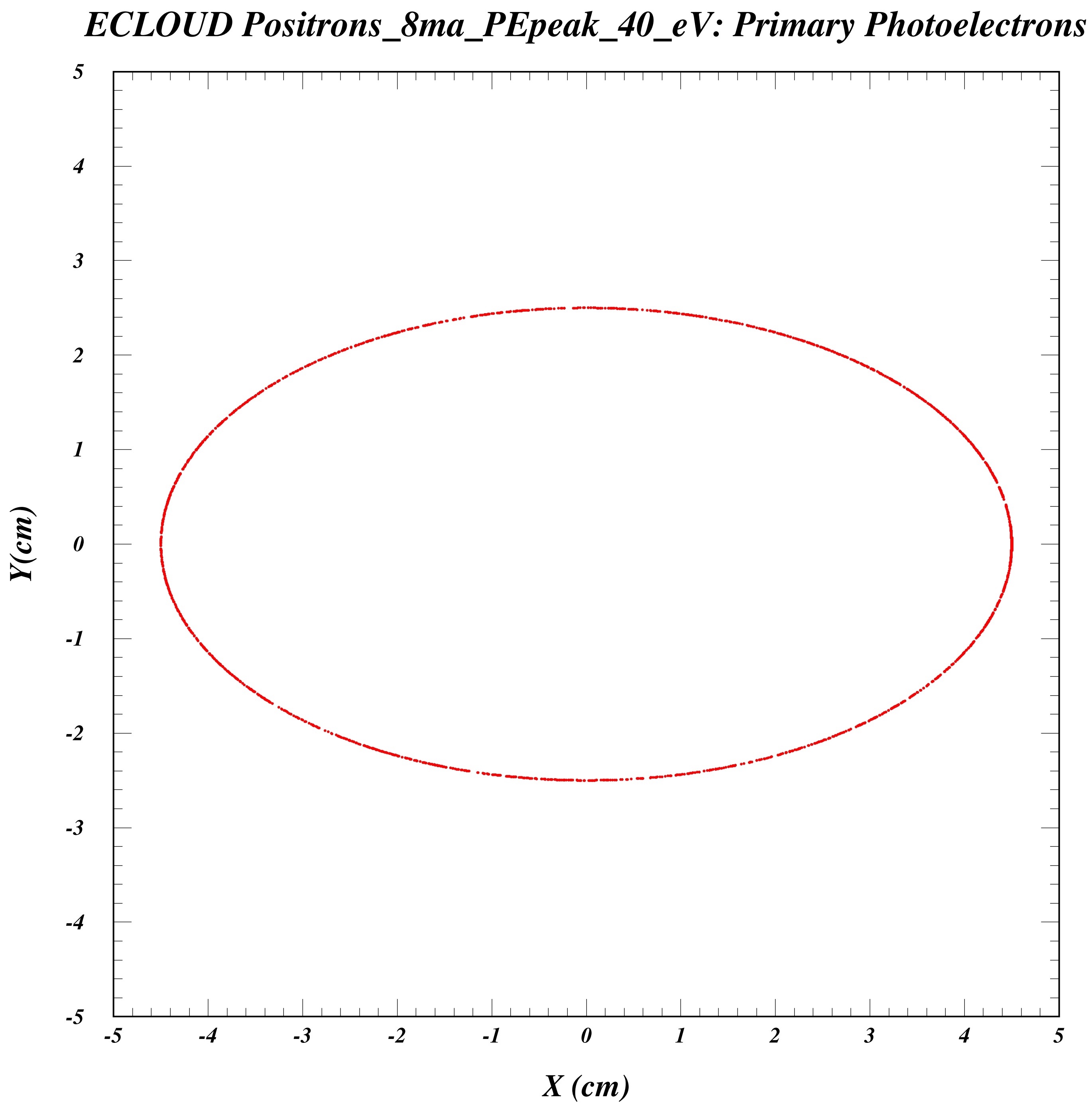
ECLOUD Positrons_8ma_PEpeak_40_eV: Primary Photoelectrons




ECLOUD Positrons_8ma_PEpeak_40_eV: Primary Photoelectrons
Number of Electrons per eV
Entries 9987
Mean 58.59
RMS 102.4
Percentage above energy cut (%)
Total wall current density: 126 nA/cm2 over 14.415 ns
Energy Cut (eV)



ECLOUD Positrons_8ma_PEpeak_40_eV: Primary Photoelectrons
x 10^2
Number of Electrons per eV
Entries 9987
Mean 58.59
RMS 102.4
χ²/ndf 185.8 / 423
Constant 0.1747E+09
Mean -825.7
Sigma 229.4
Percentage above energy cut (%)
Energy (eV)


ECLOUD Positrons_8ma_PEpeak_40_eV: Primary Photoelectrons
Y(cm)
X (cm)
5
4
3
2
1
0
-1
-2
-3
-4
-5

ECLOUD Positrons_8ma_PEpeak_40_eV: Primary Photoelectrons