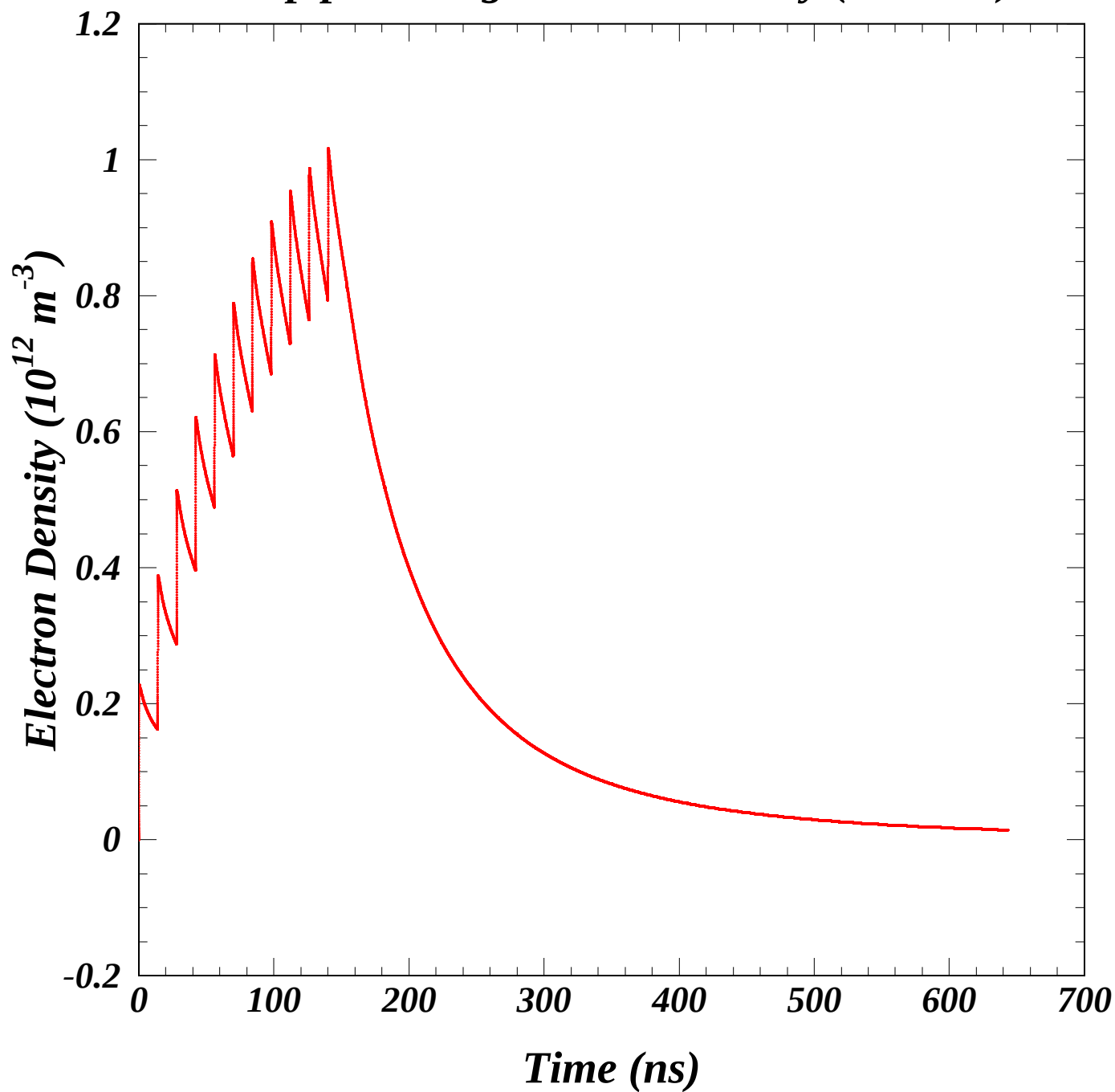
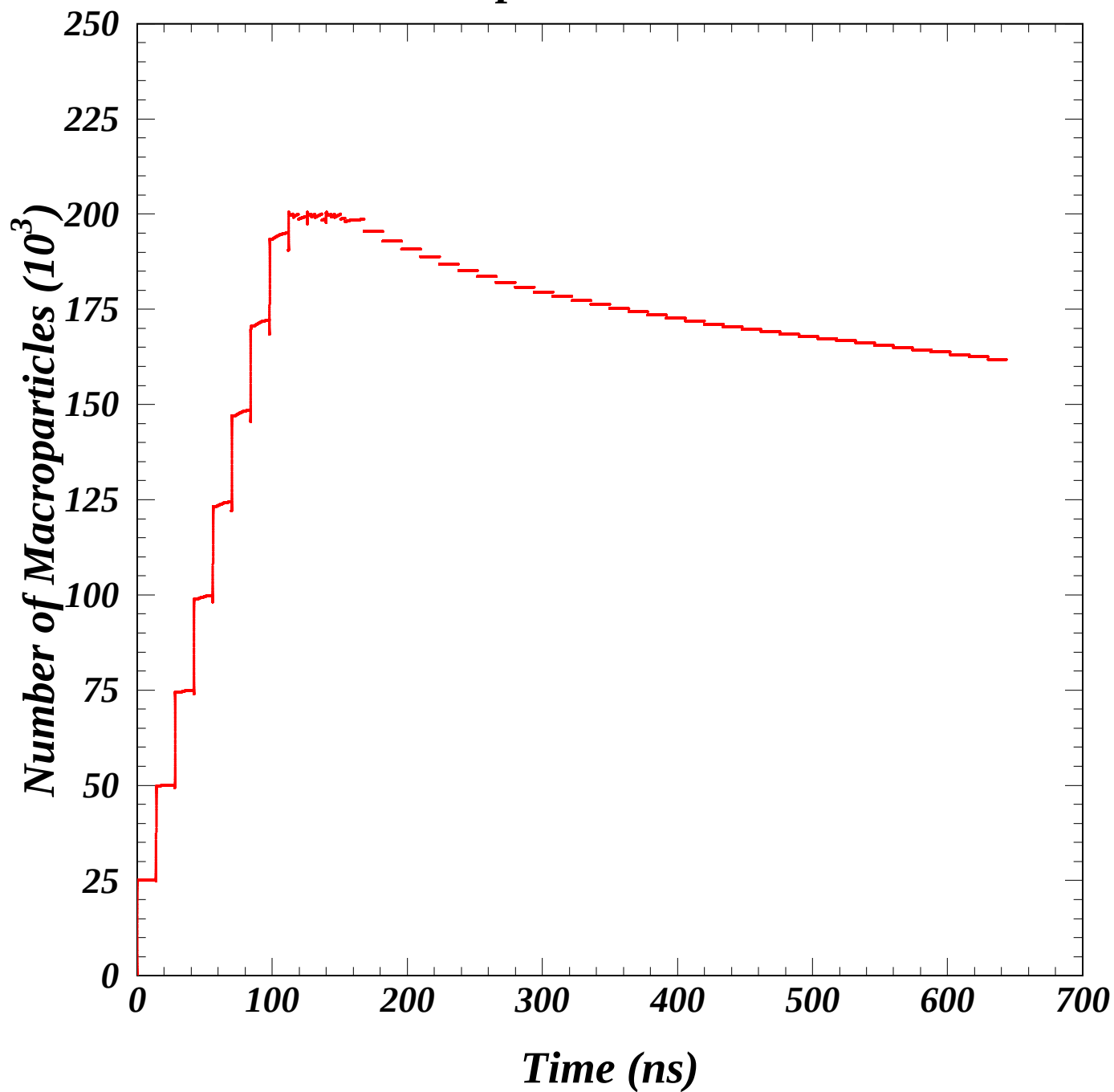
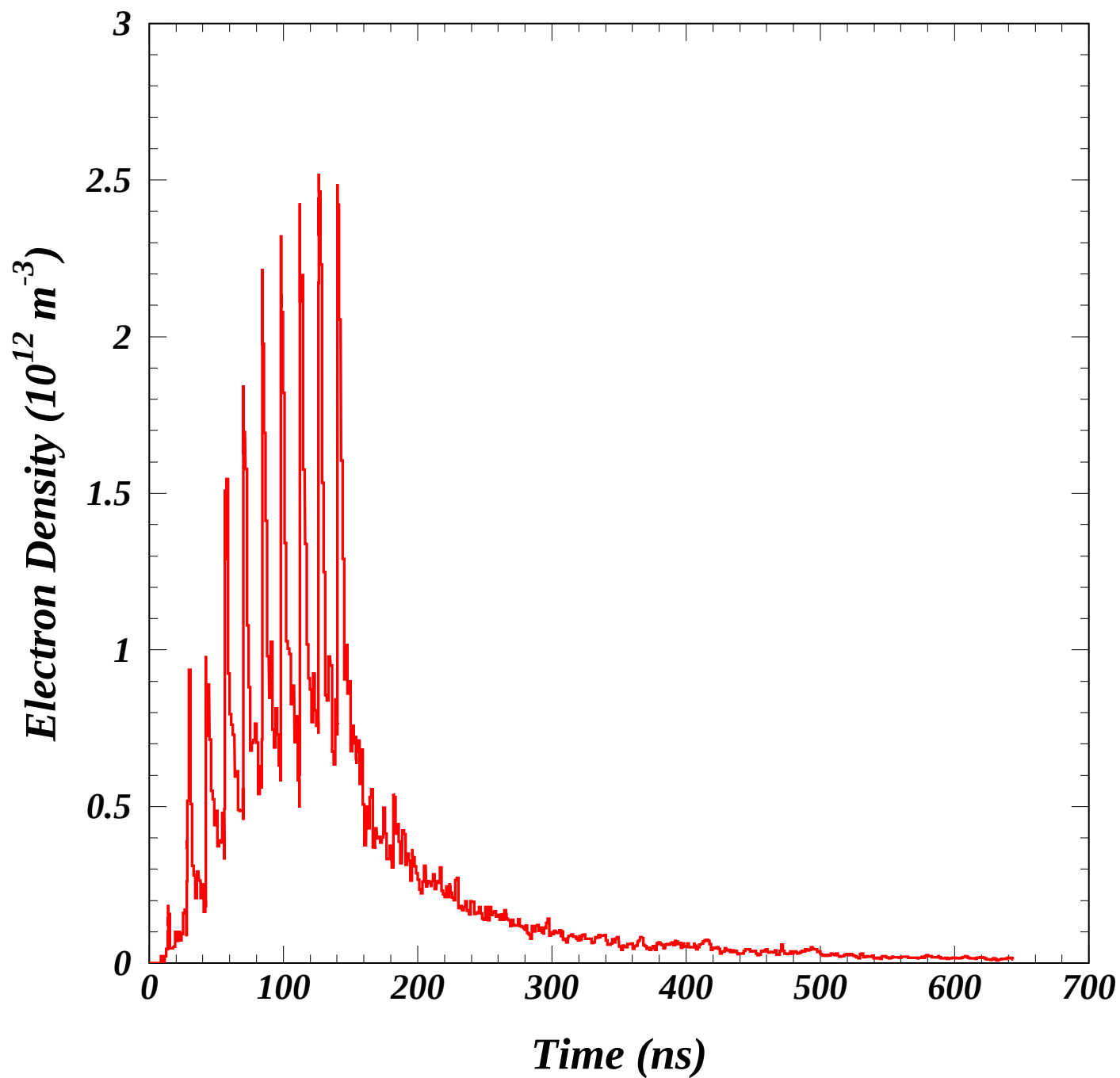


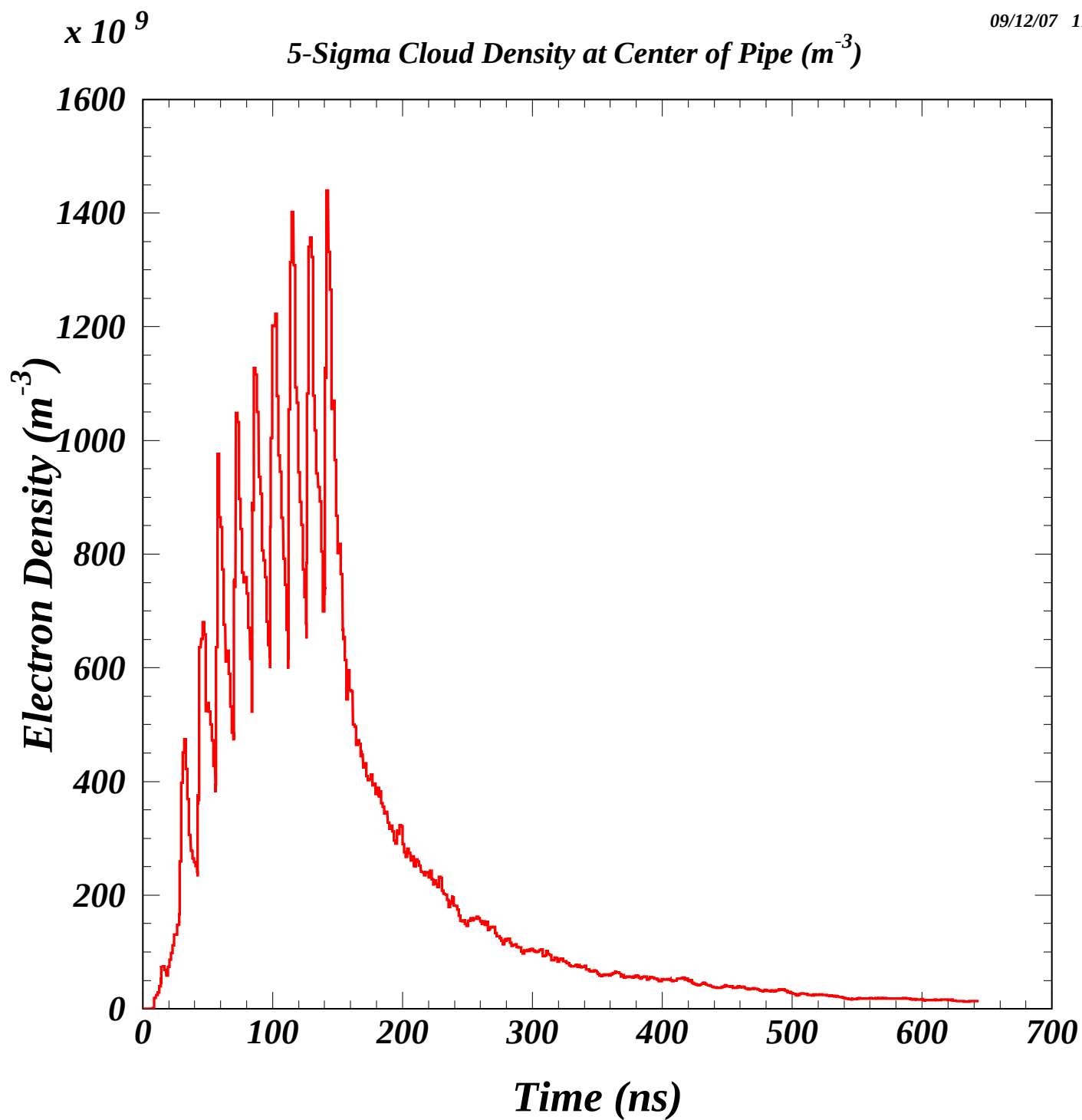
***Beampipe-averaged Cloud Density ( $10^{12} \text{ m}^{-3}$ )***

## *Macroparticle Statistics*

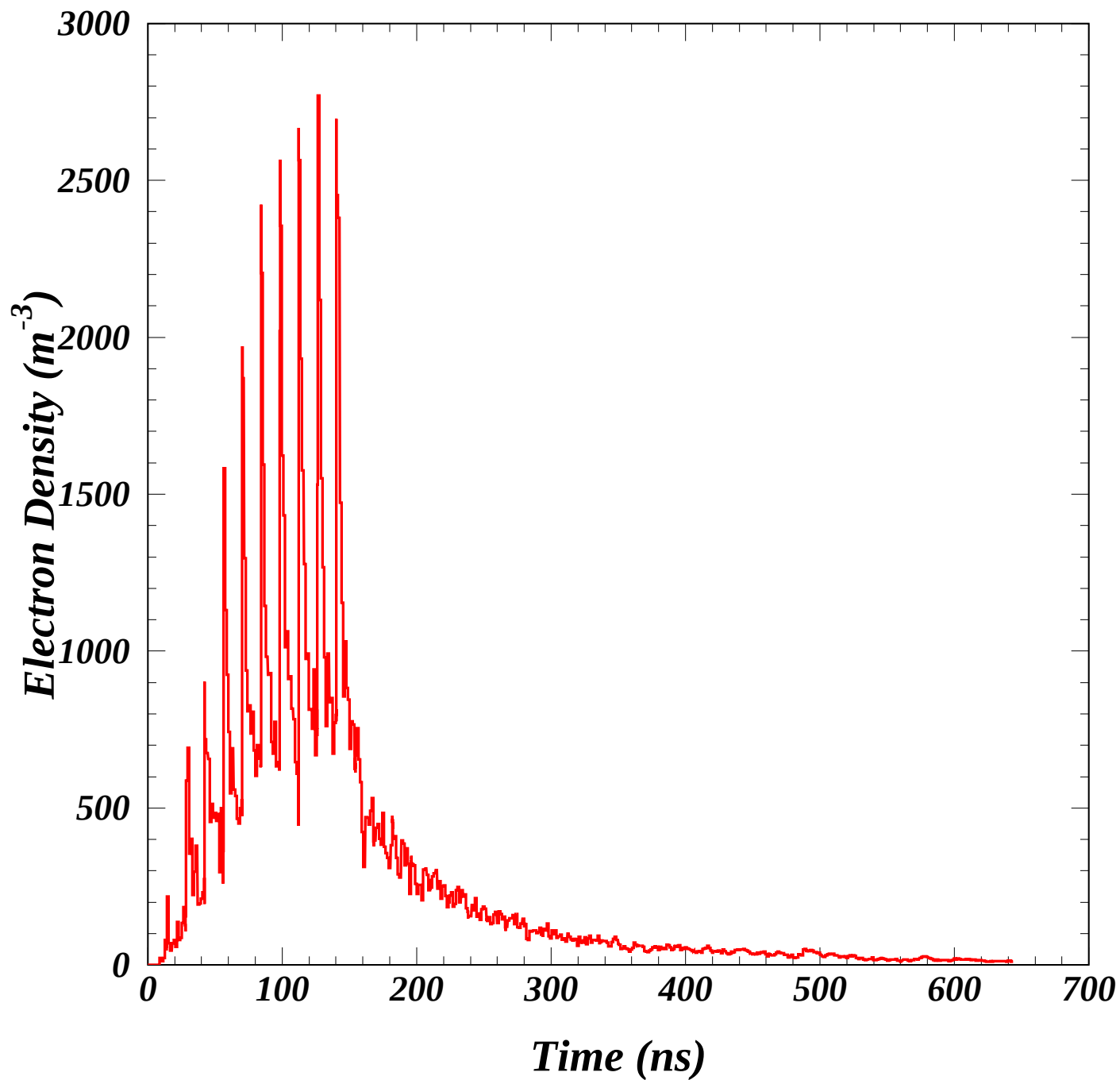


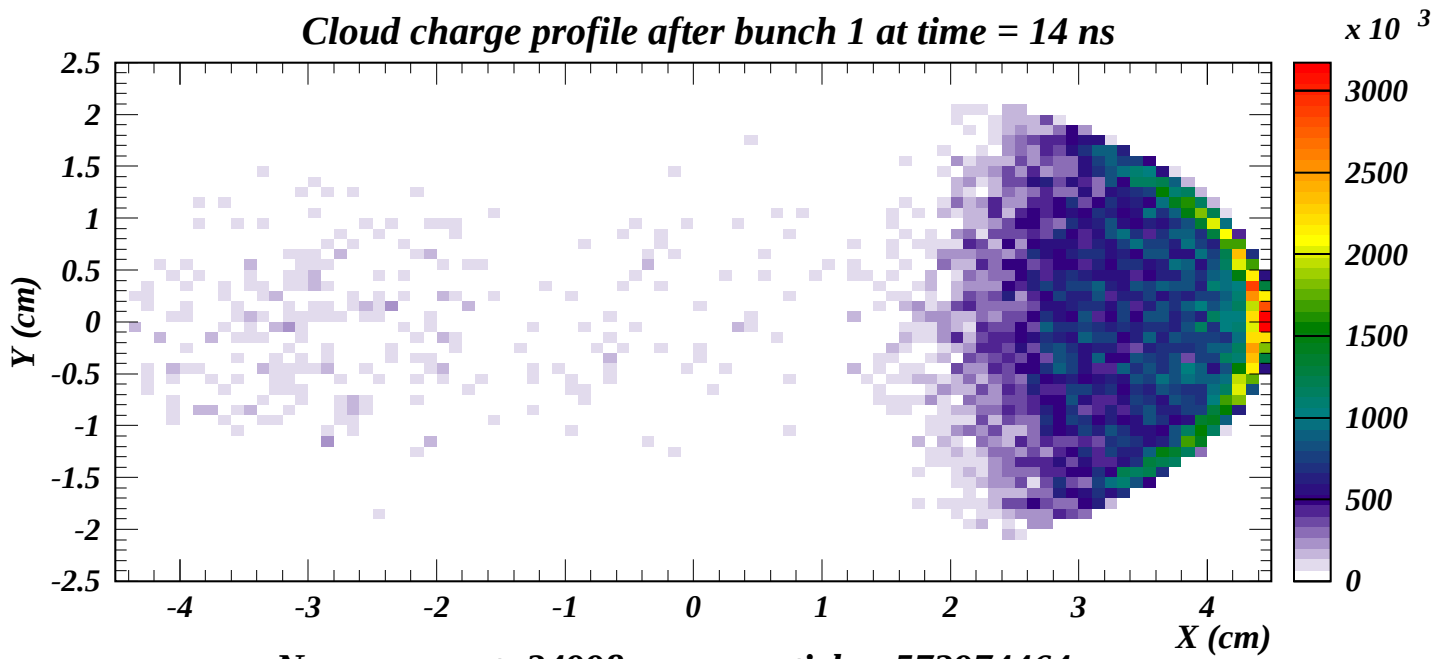
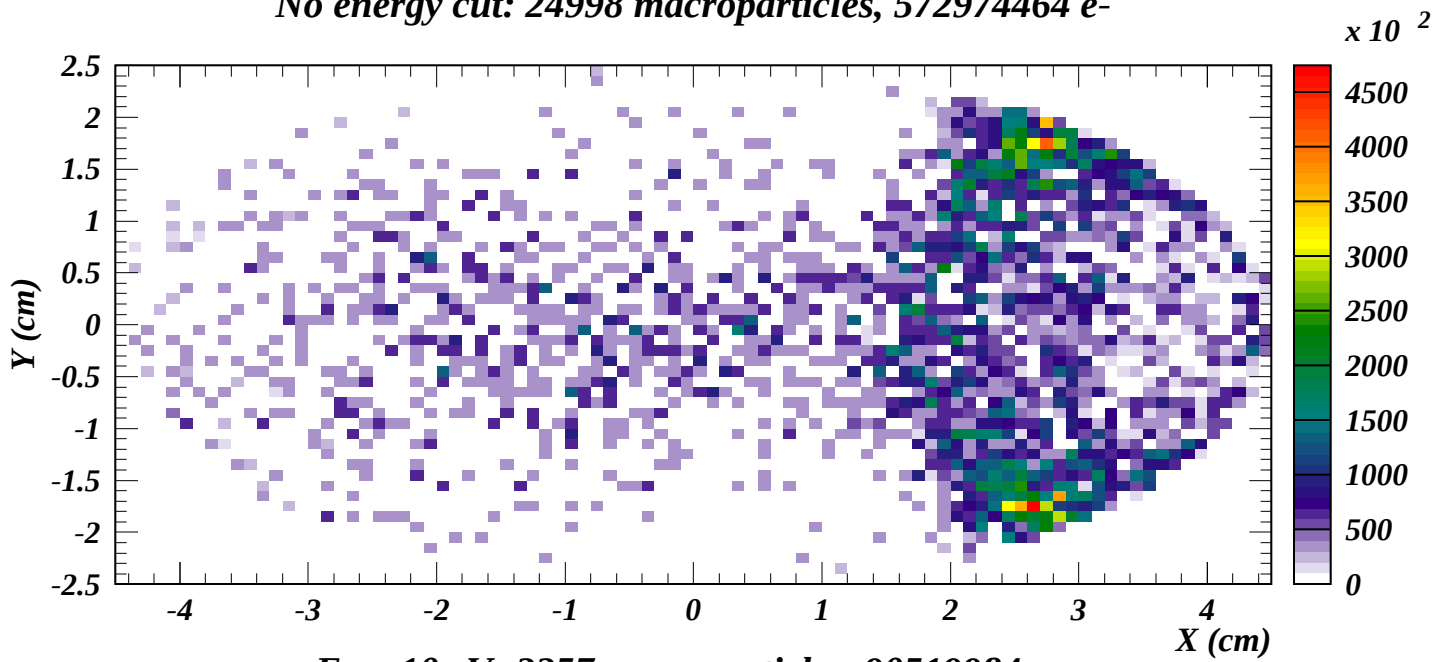
*Beam-averaged Cloud Density ( $10^{12} \text{ m}^{-3}$ )*

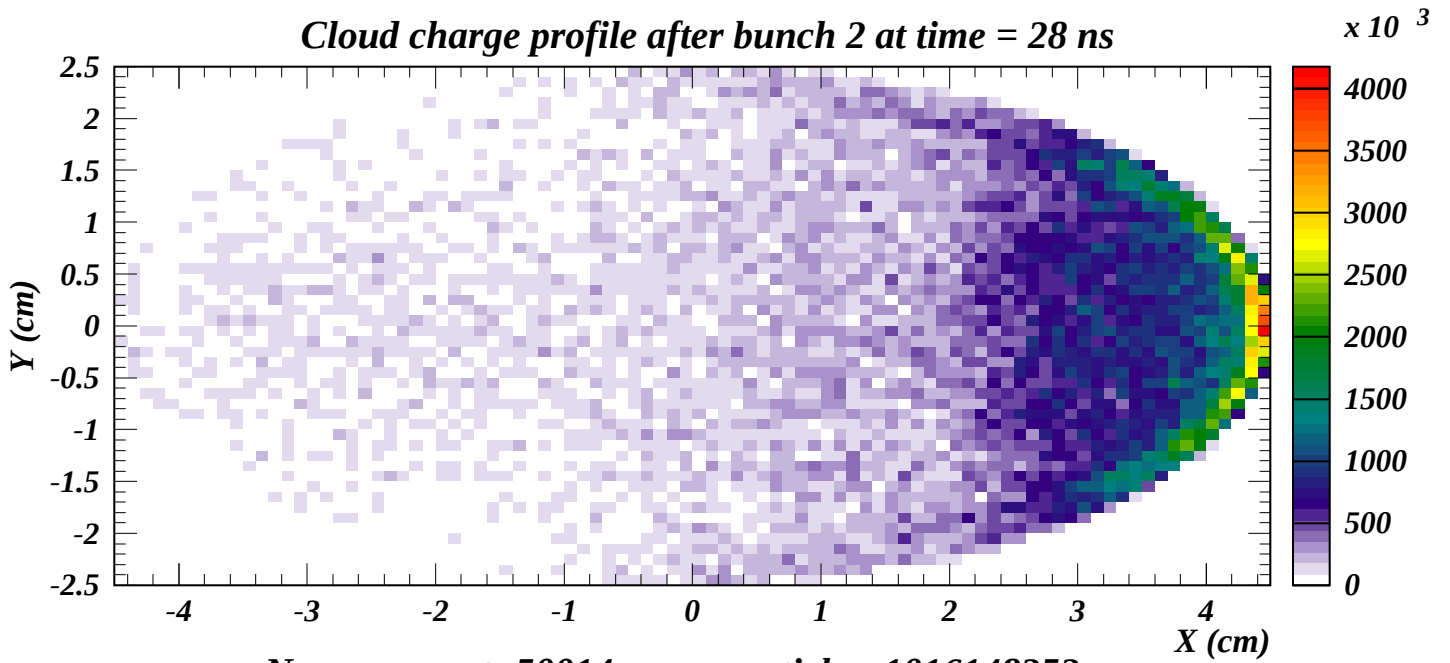
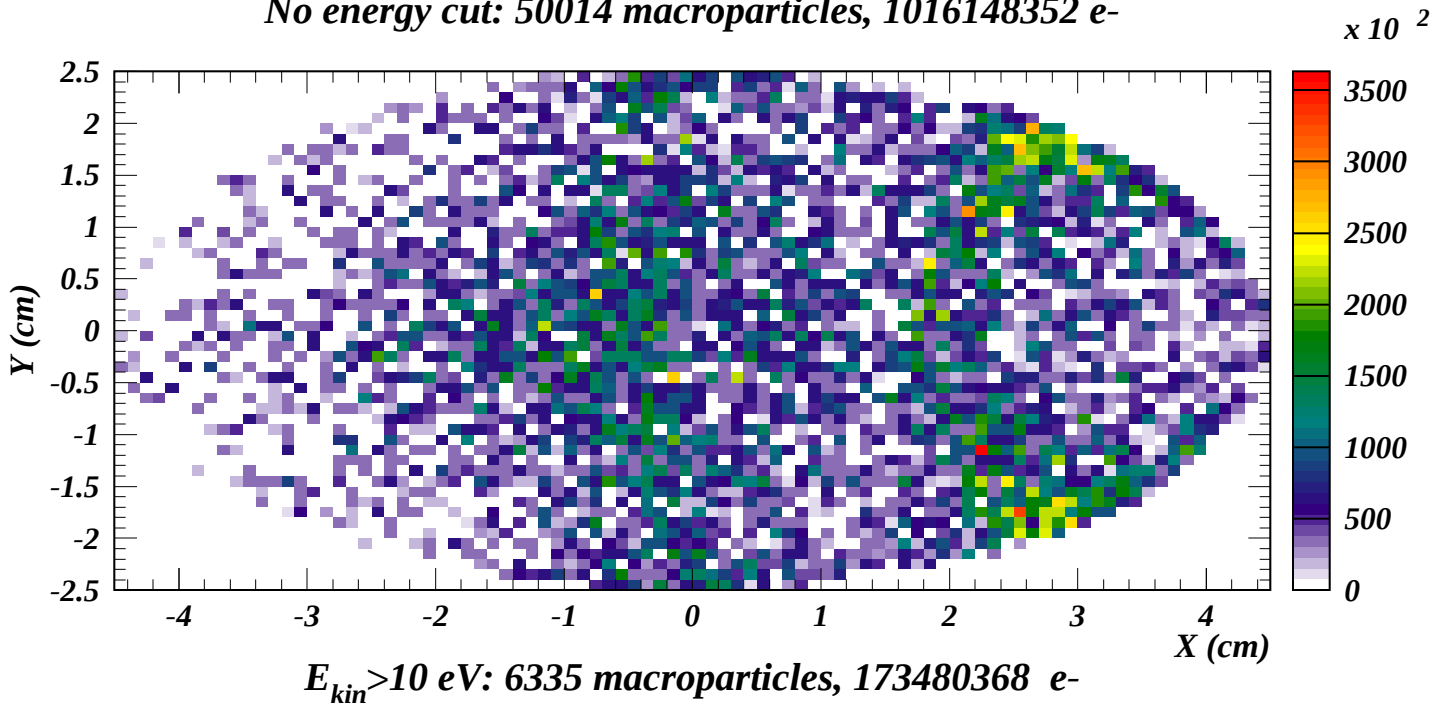


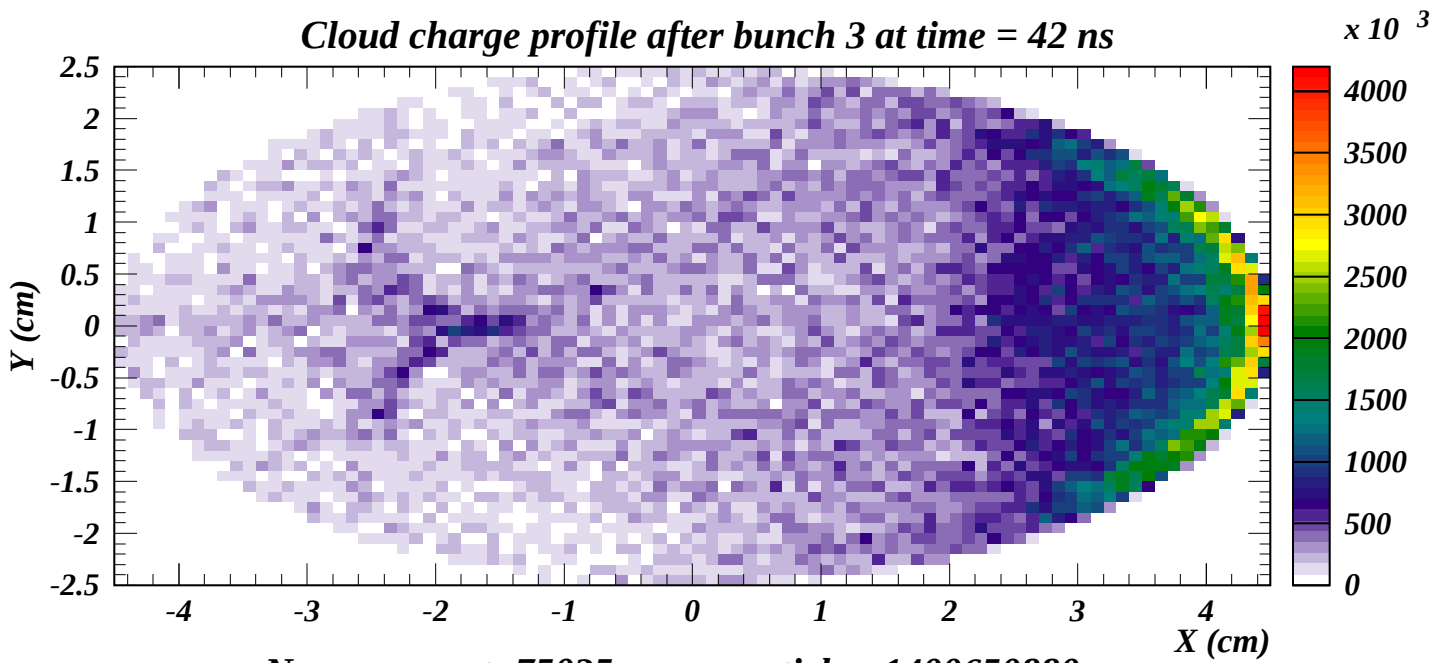
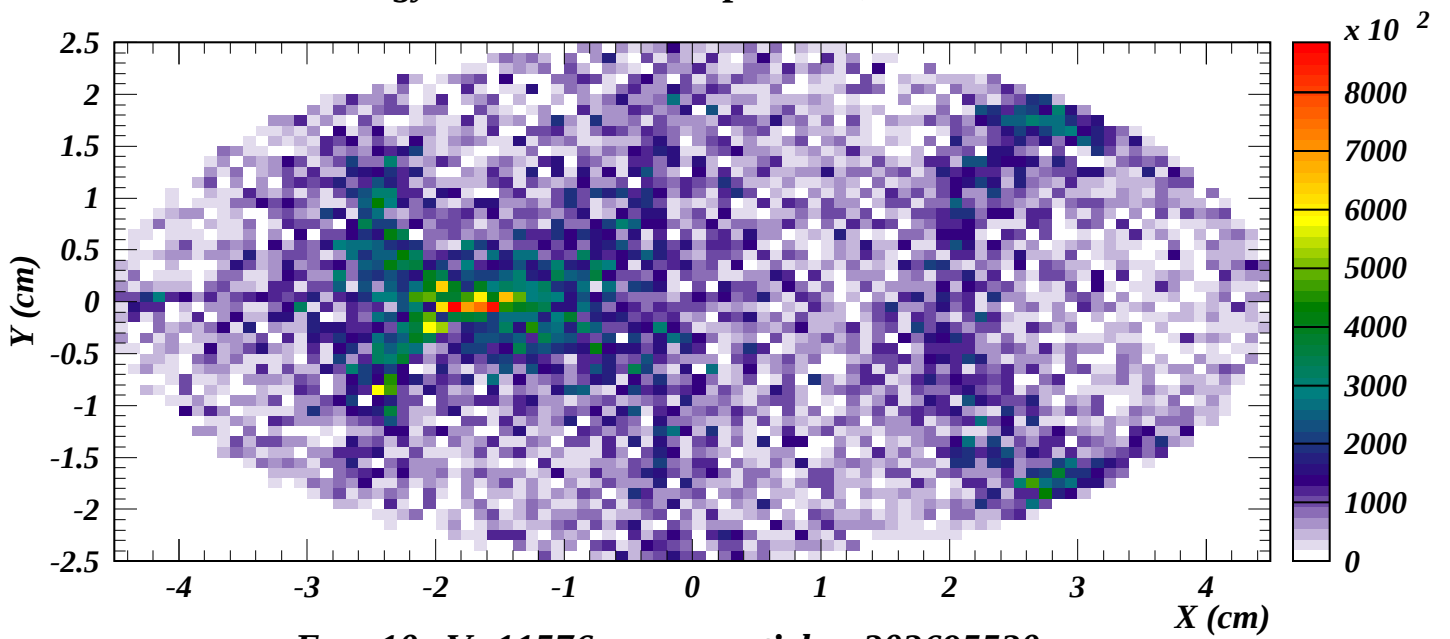
**5-Sigma Cloud Density at Center of Pipe ( $\text{m}^{-3}$ )**

$\times 10^9$  09/12/07 11.46  
*ECLLOUD-TS0608\_SEY20\_Epk310: Cloud Density in Central Grid Cell ( $m^{-3}$ )*



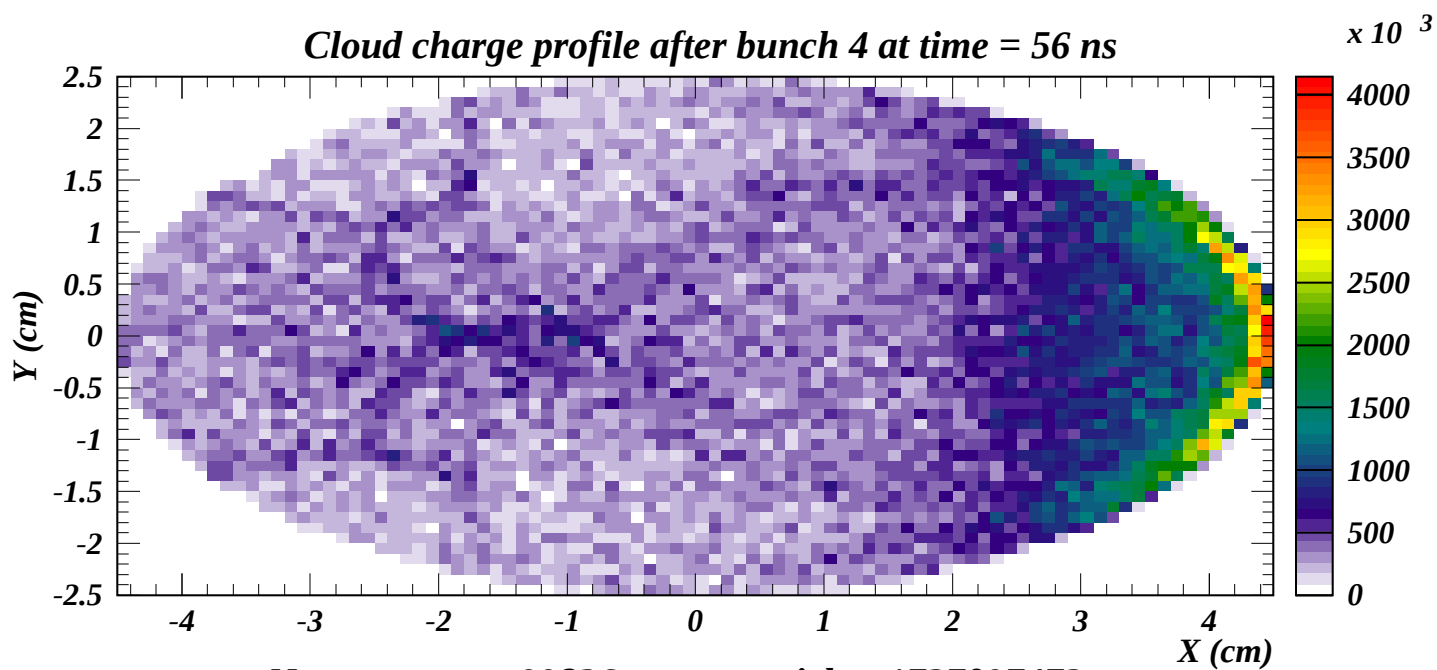
*Cloud charge profile after bunch 1 at time = 14 ns**No energy cut: 24998 macroparticles, 572974464 e-* *$E_{kin} > 10$  eV: 3257 macroparticles, 90519984 e-*

*Cloud charge profile after bunch 2 at time = 28 ns**No energy cut: 50014 macroparticles, 1016148352 e-* *$E_{\text{kin}} > 10$  eV: 6335 macroparticles, 173480368 e-*

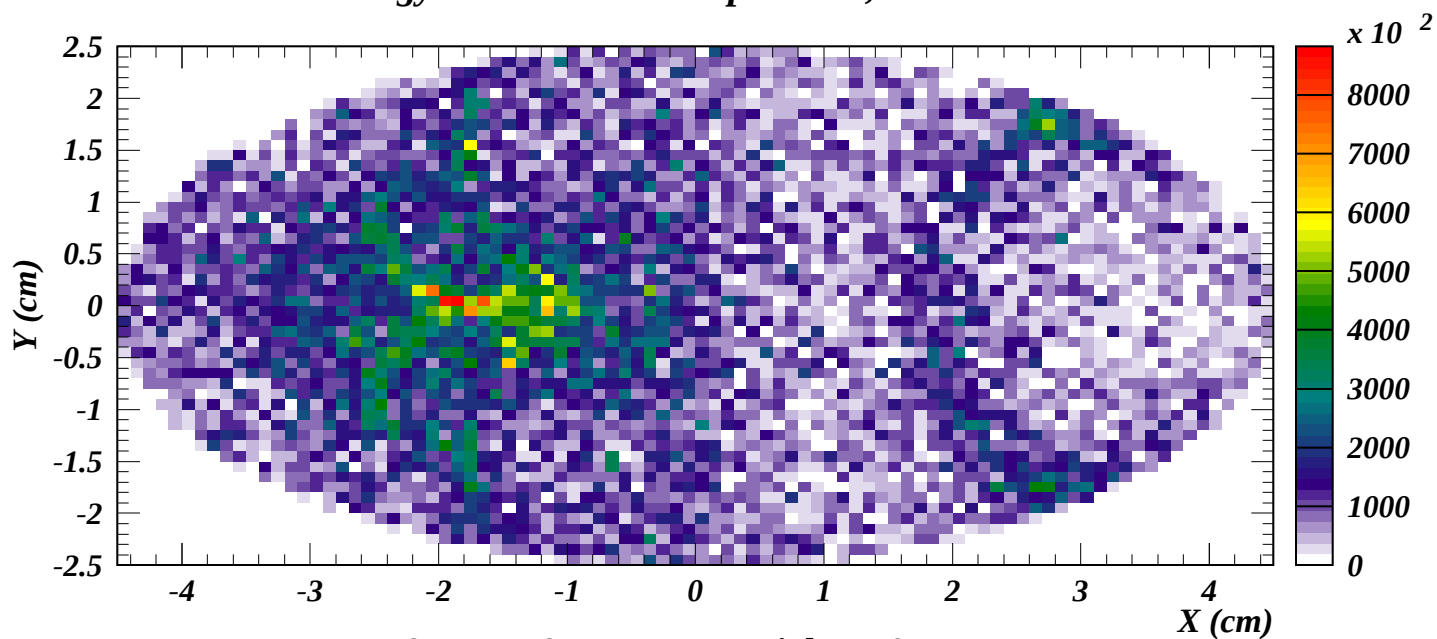
*Cloud charge profile after bunch 3 at time = 42 ns**No energy cut: 75035 macroparticles, 1400650880 e-* *$E_{kin} > 10$  eV: 11576 macroparticles, 302695520 e-*

09/12/07 11.47

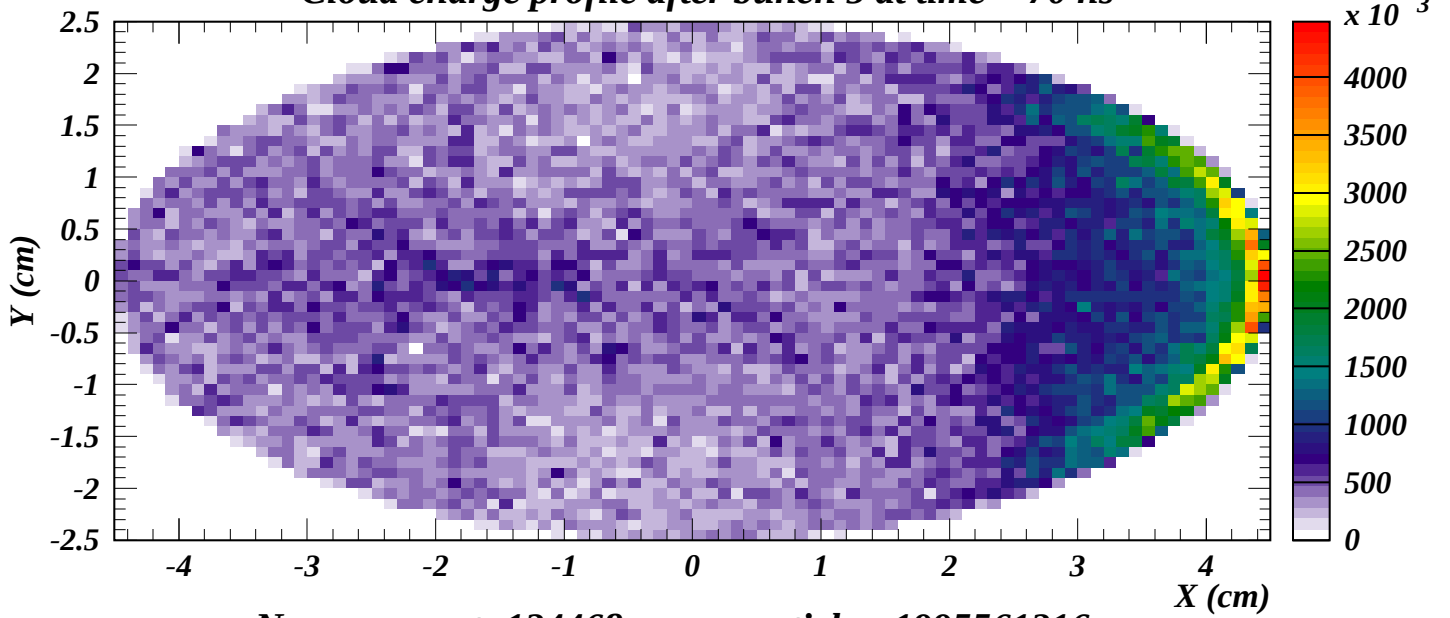
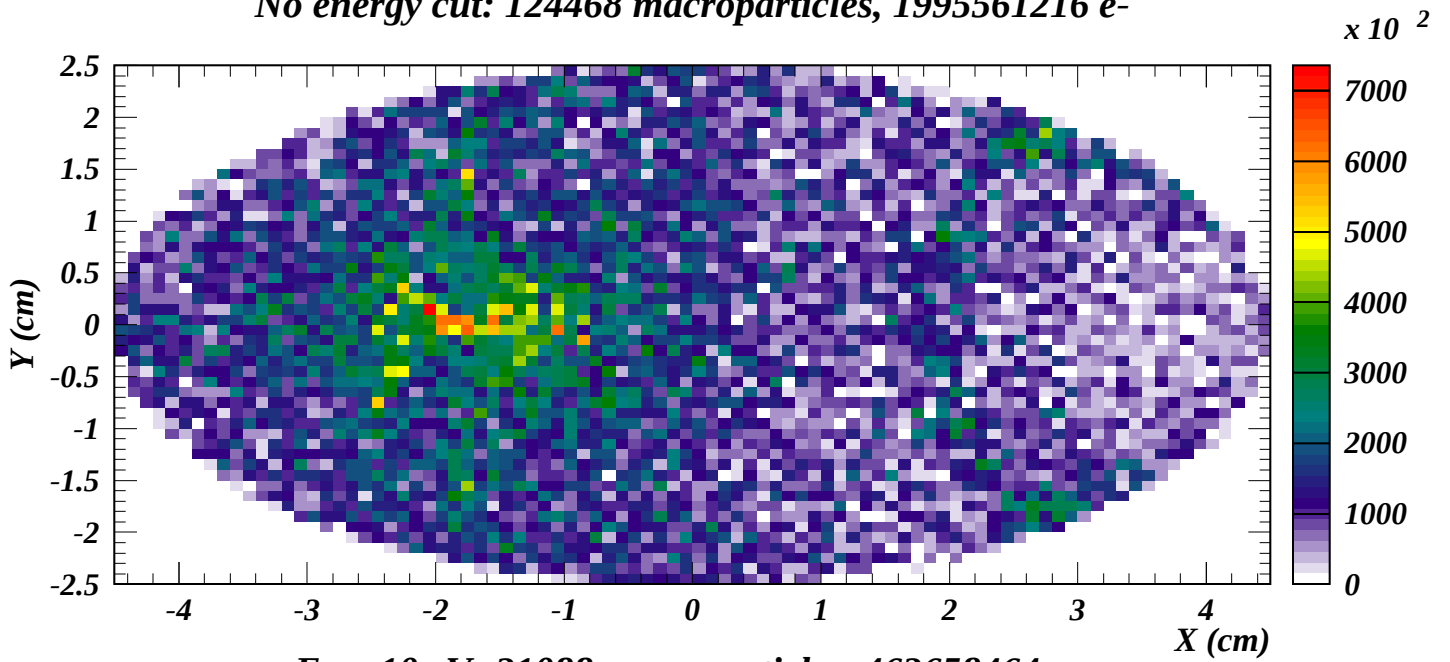
*Cloud charge profile after bunch 4 at time = 56 ns*



*No energy cut: 99826 macroparticles, 1727097472 e-*

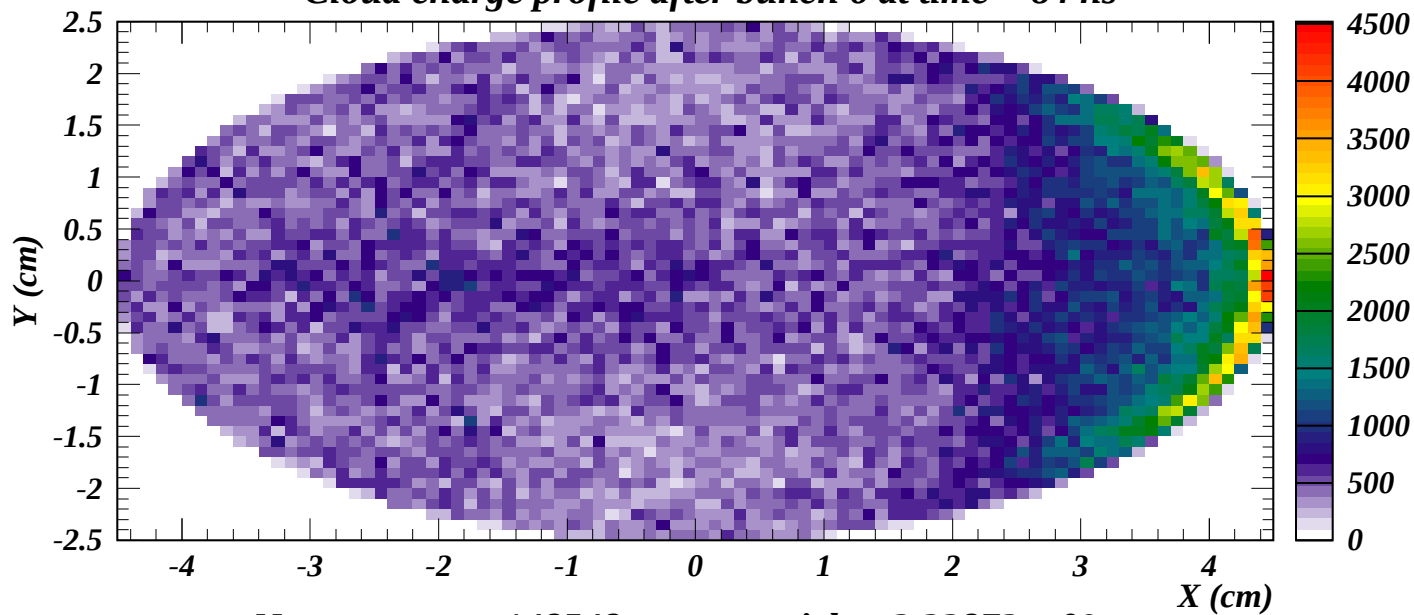


*$E_{kin} > 10 \text{ eV}$ : 17014 macroparticles, 409734656 e-*

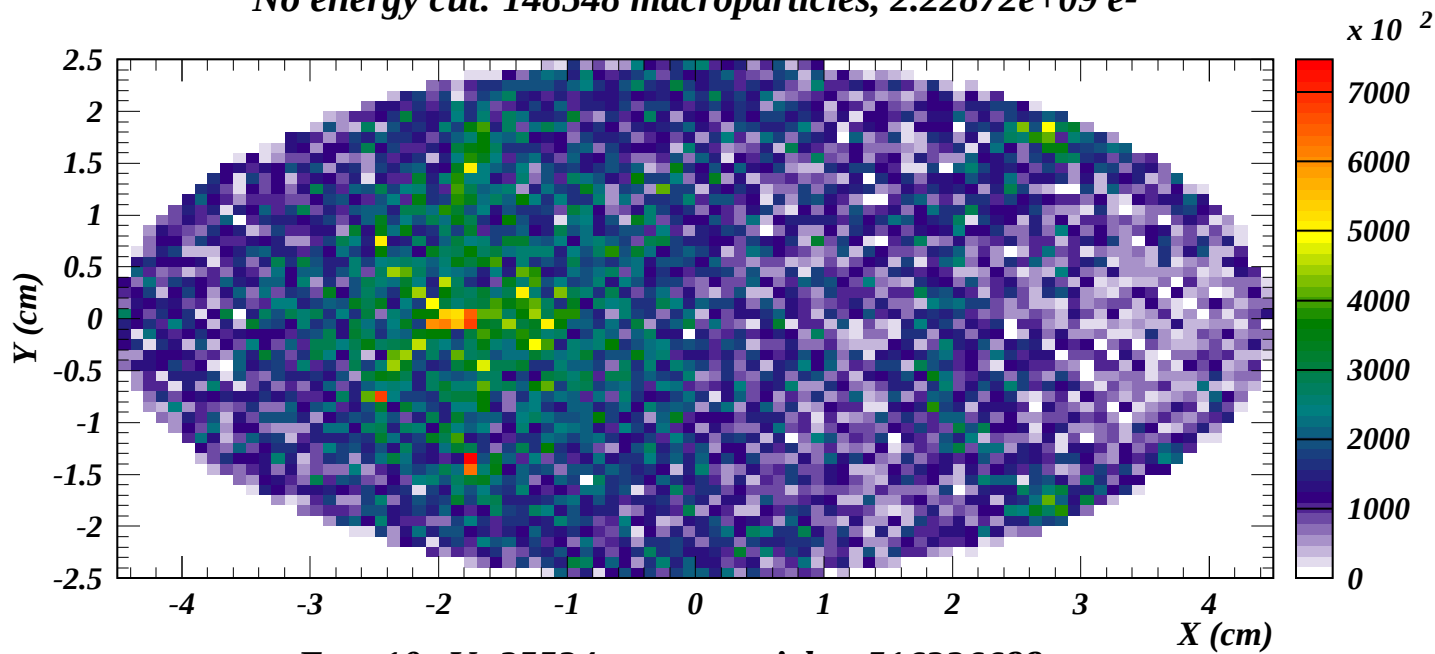
*Cloud charge profile after bunch 5 at time = 70 ns**No energy cut: 124468 macroparticles, 1995561216 e-* *$E_{kin} > 10$  eV: 21088 macroparticles, 463658464 e-*

09/12/07 11.47  
 $\times 10^3$

*Cloud charge profile after bunch 6 at time = 84 ns*



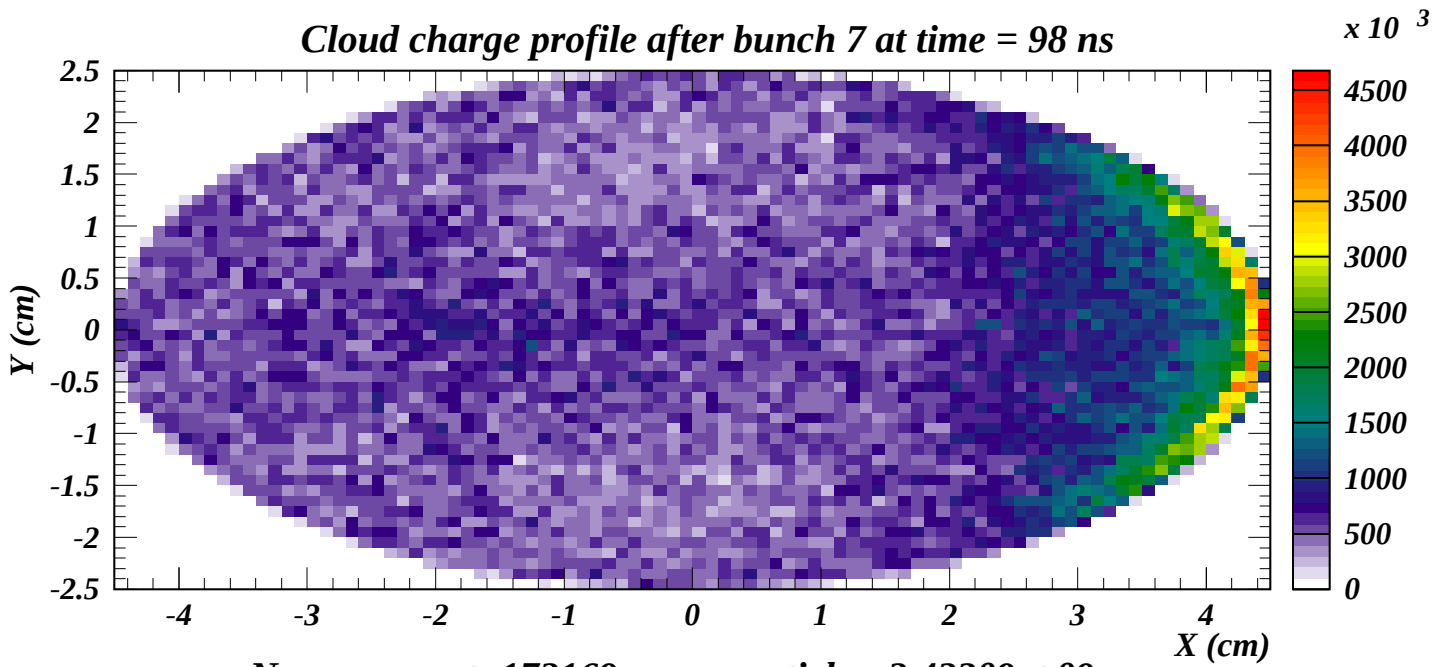
*No energy cut: 148548 macroparticles,  $2.22872e+09$  e-*



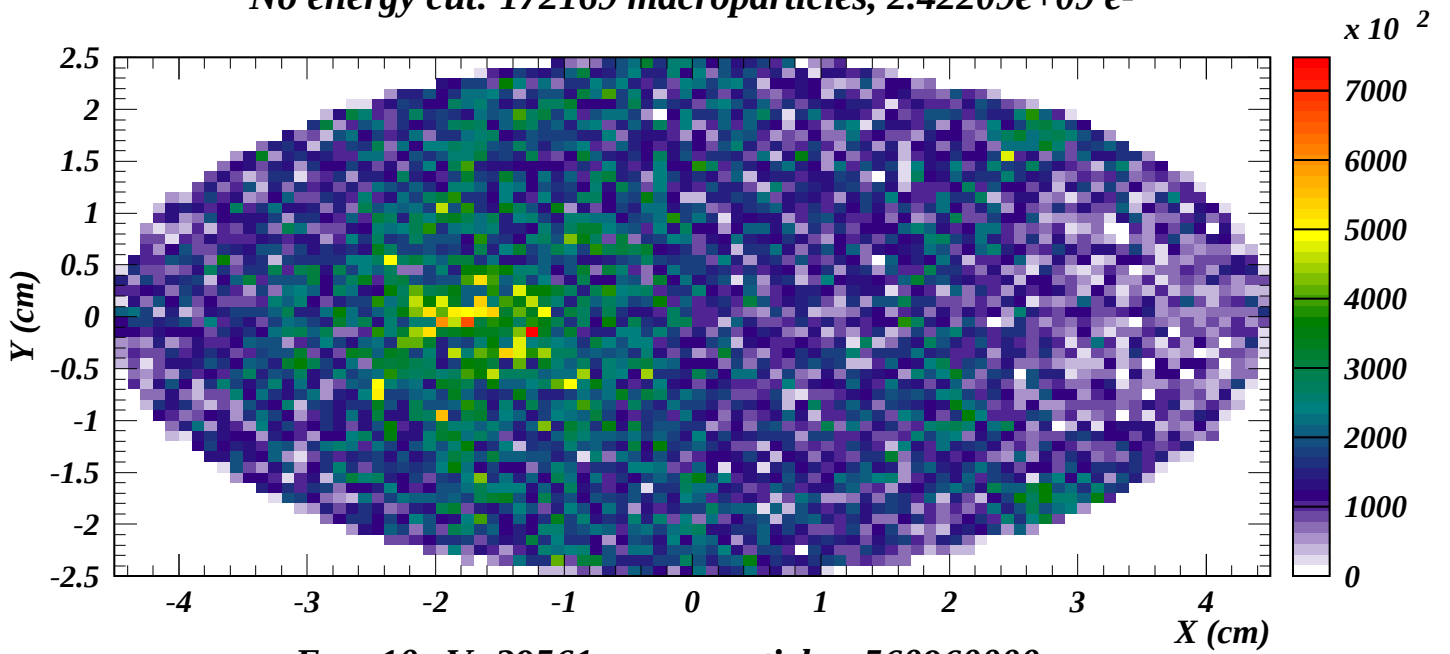
*$E_{kin} > 10$  eV: 25534 macroparticles,  $516326688$  e-*

09/12/07 11.47

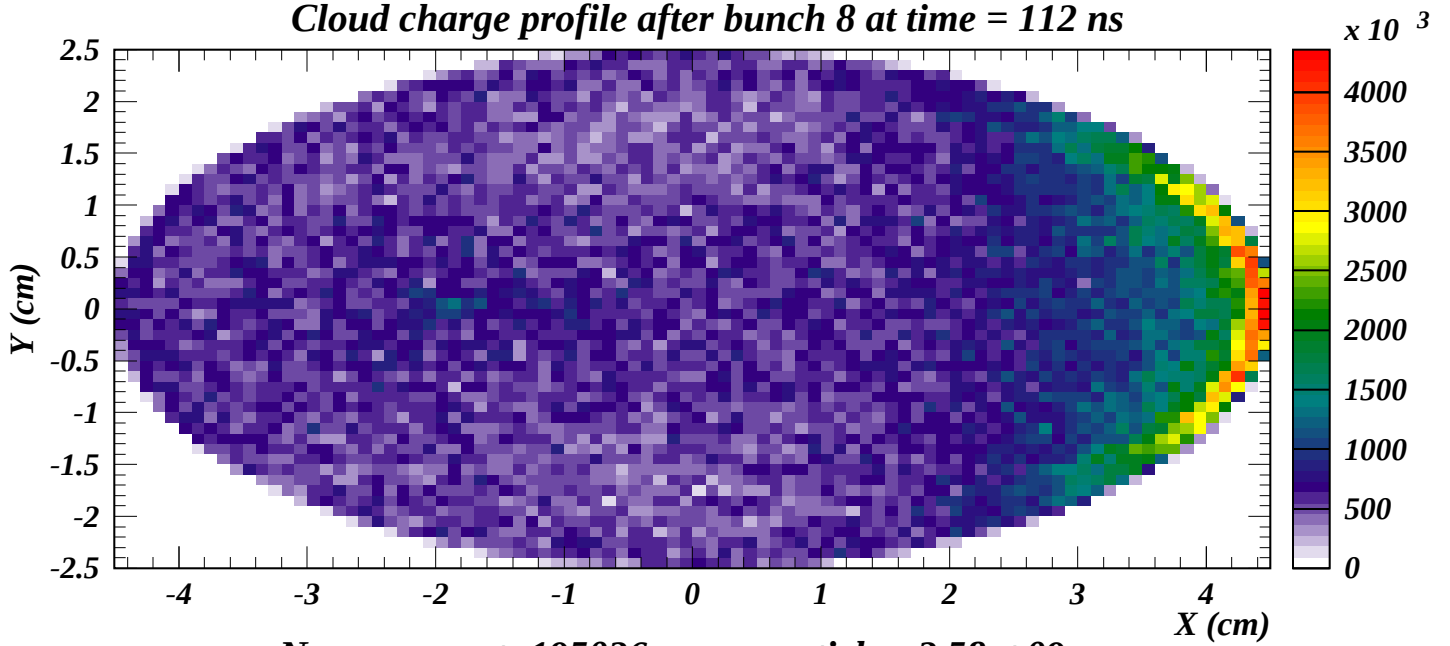
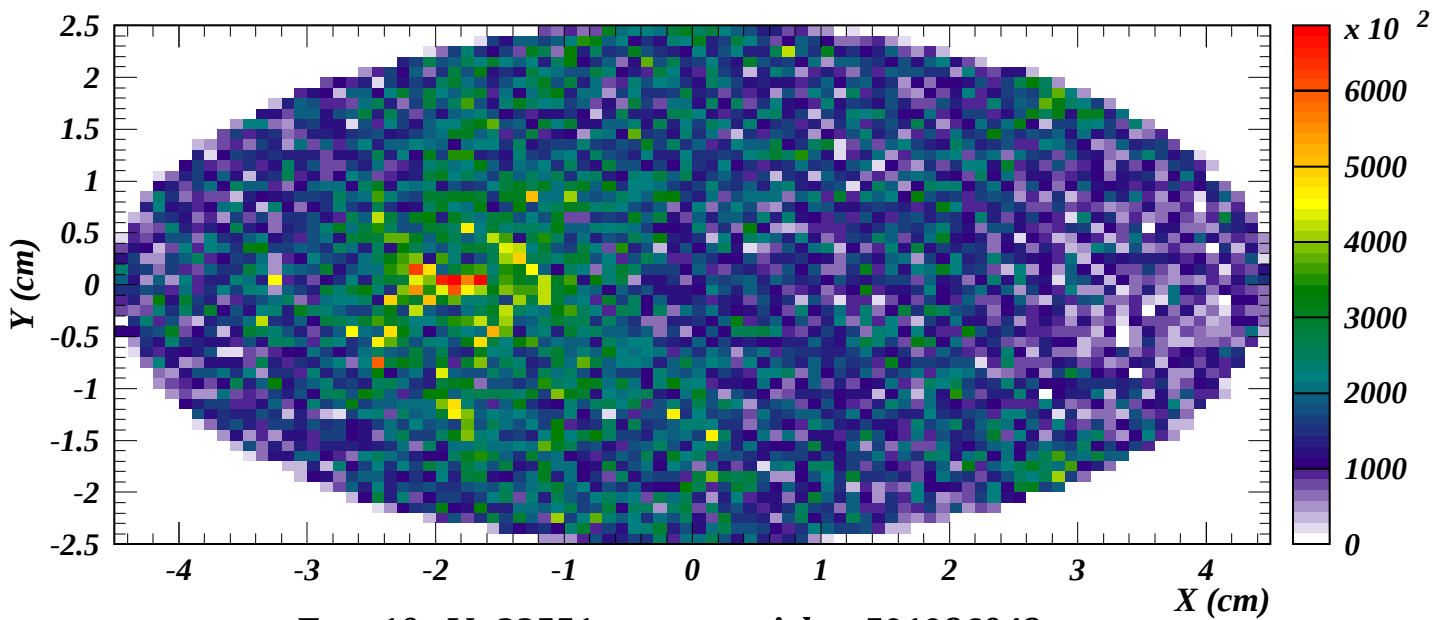
*Cloud charge profile after bunch 7 at time = 98 ns*

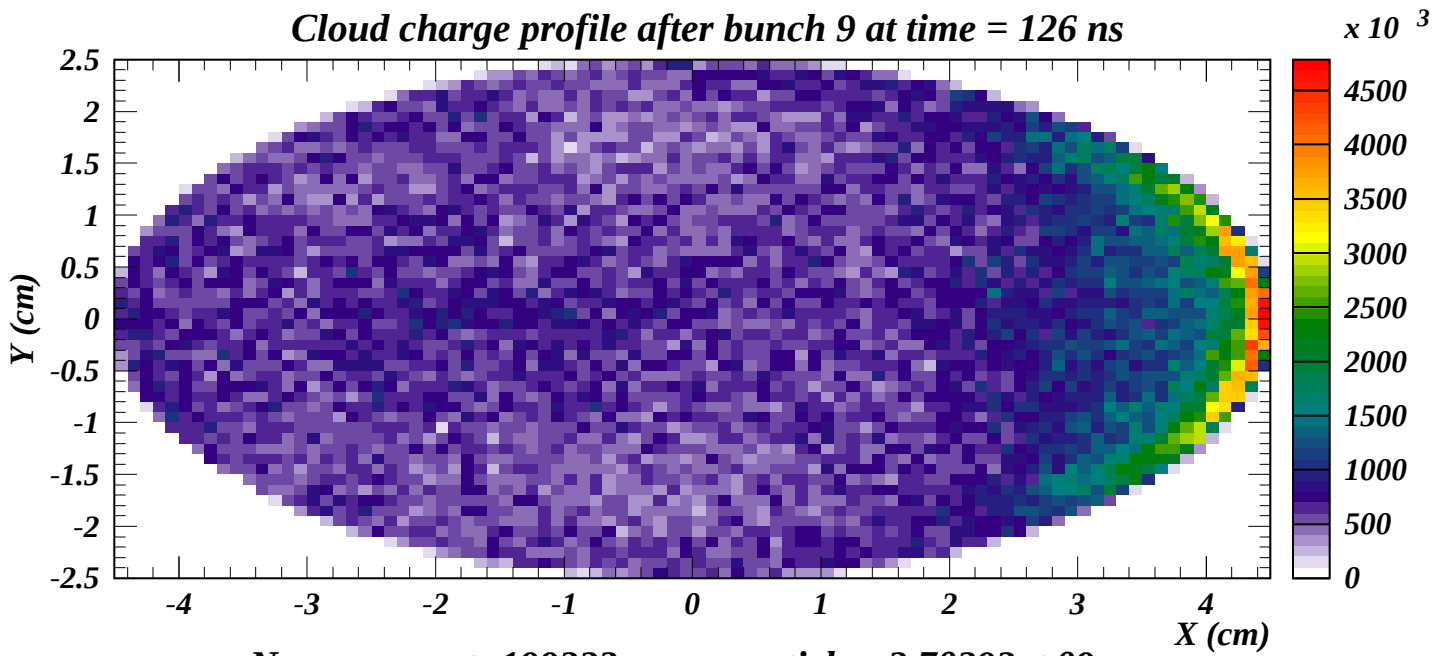
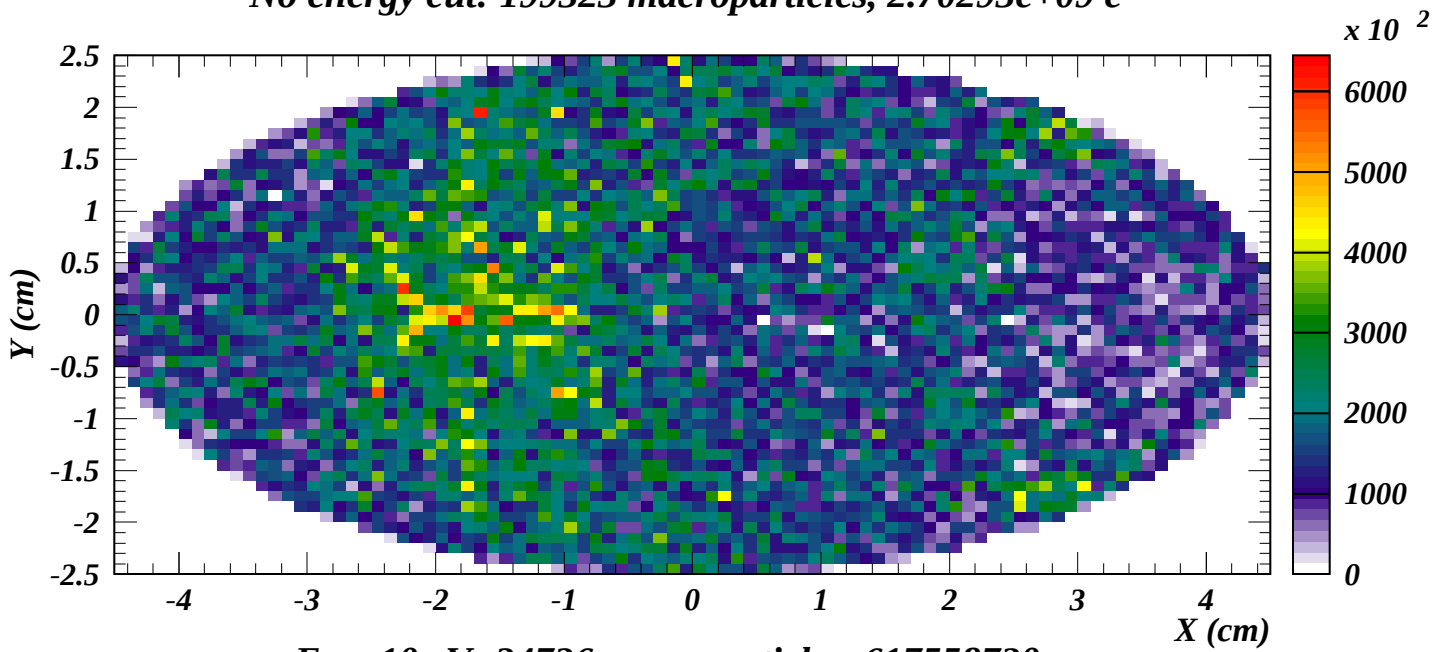


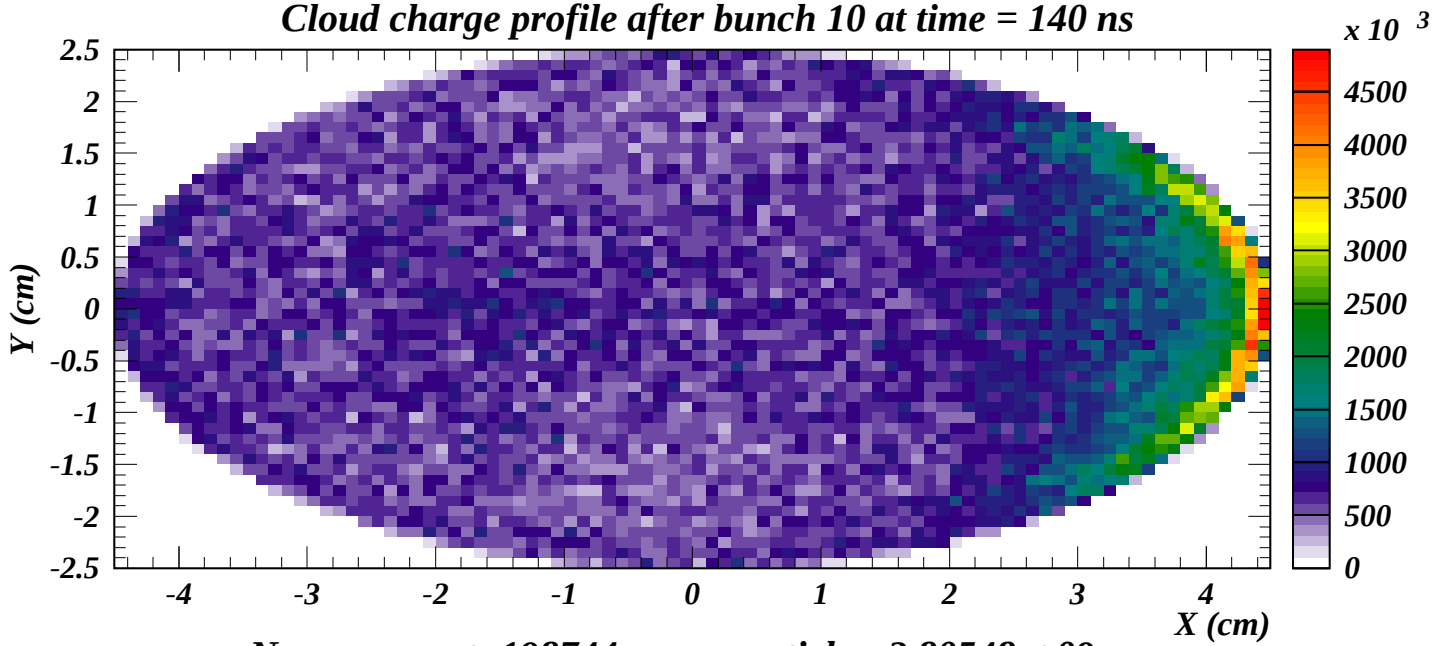
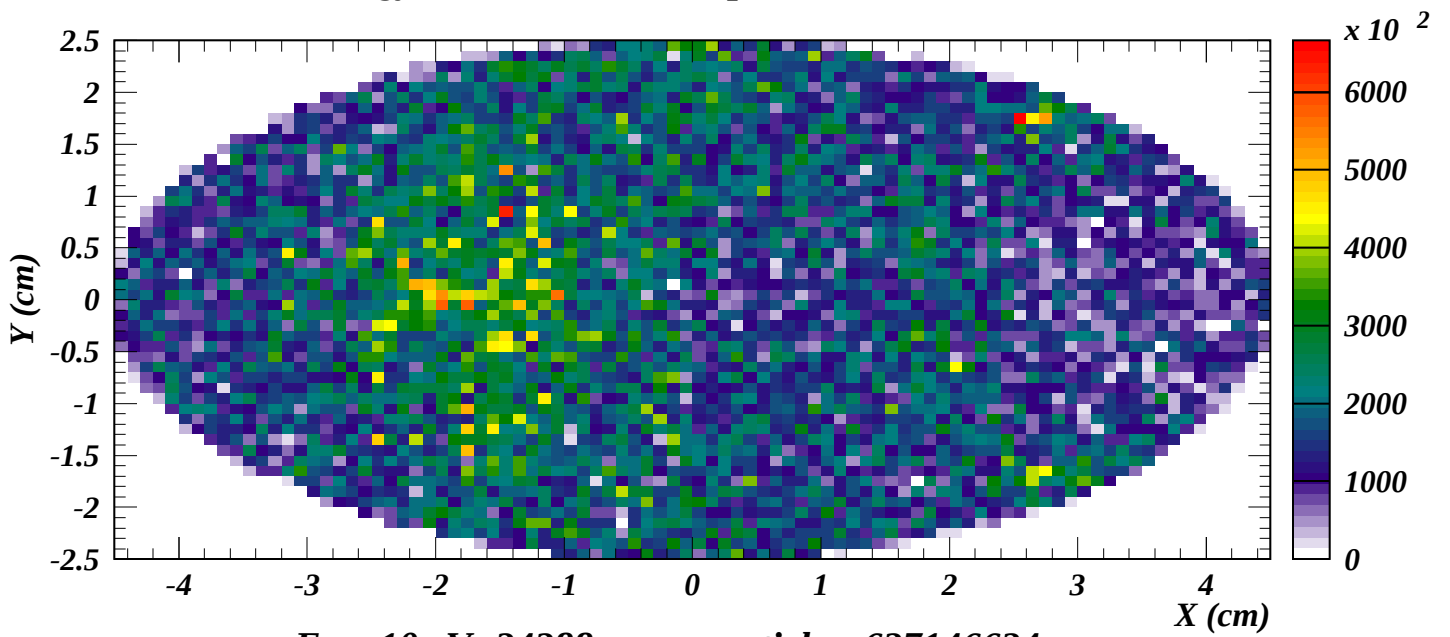
*No energy cut: 172169 macroparticles,  $2.42209\text{e}+09 \text{ e-}$*



*$E_{\text{kin}} > 10 \text{ eV}$ : 29561 macroparticles,  $560960000 \text{ e-}$*

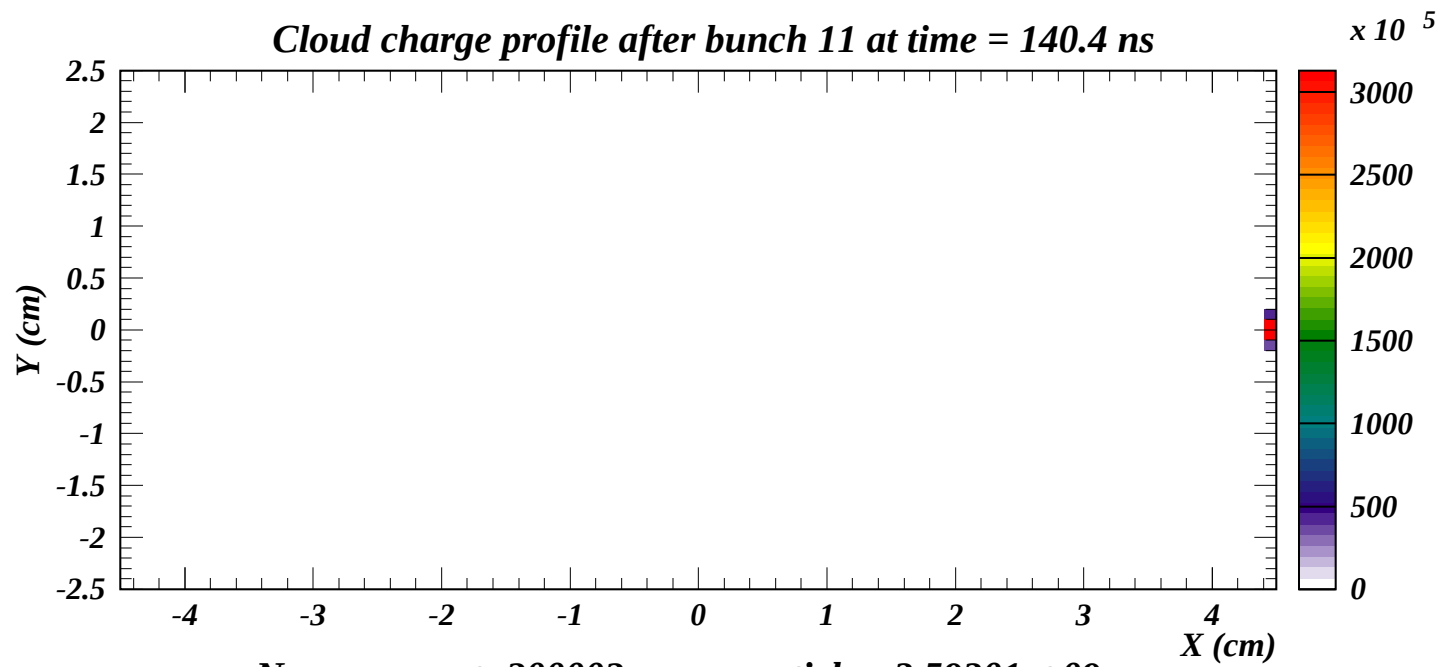
*Cloud charge profile after bunch 8 at time = 112 ns**No energy cut: 195026 macroparticles,  $2.58e+09 \text{ e-}$*  *$E_{kin} > 10 \text{ eV}$ : 33551 macroparticles,  $591986048 \text{ e-}$*

*Cloud charge profile after bunch 9 at time = 126 ns**No energy cut: 199323 macroparticles,  $2.70293e+09 \text{ e-}$*  *$E_{\text{kin}} > 10 \text{ eV}$ : 34726 macroparticles,  $617558720 \text{ e-}$*

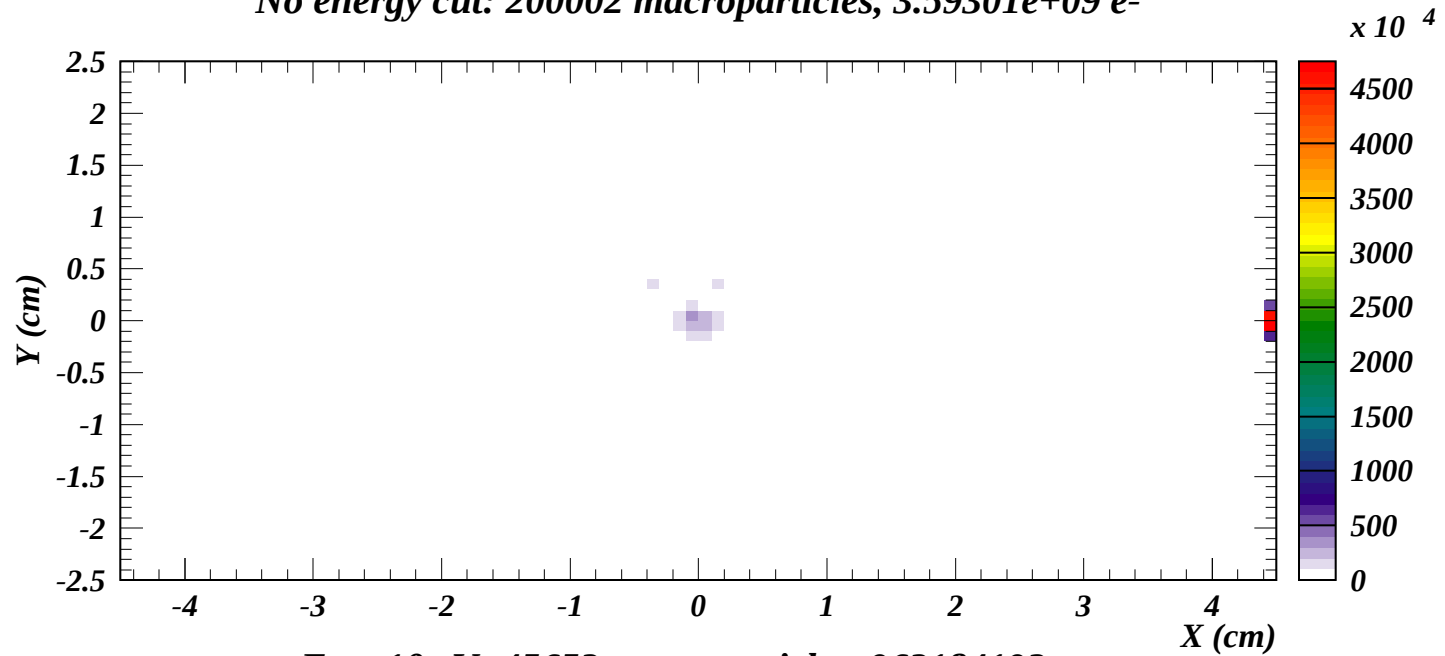
*Cloud charge profile after bunch 10 at time = 140 ns**No energy cut: 198744 macroparticles,  $2.80548 \times 10^9 \text{ e-}$*  *$E_{\text{kin}} > 10 \text{ eV}$ : 34288 macroparticles,  $627146624 \text{ e-}$*

09/12/07 11.47

*Cloud charge profile after bunch 11 at time = 140.4 ns*



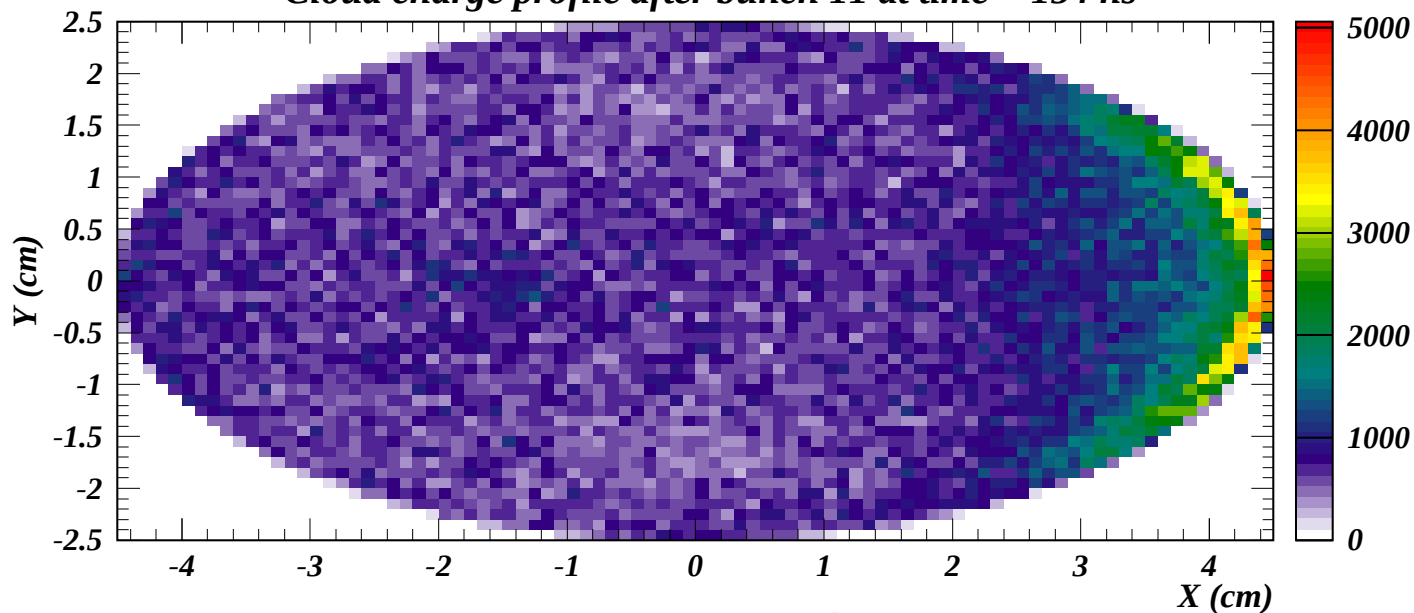
*No energy cut: 200002 macroparticles,  $3.59301e+09 e^-$*



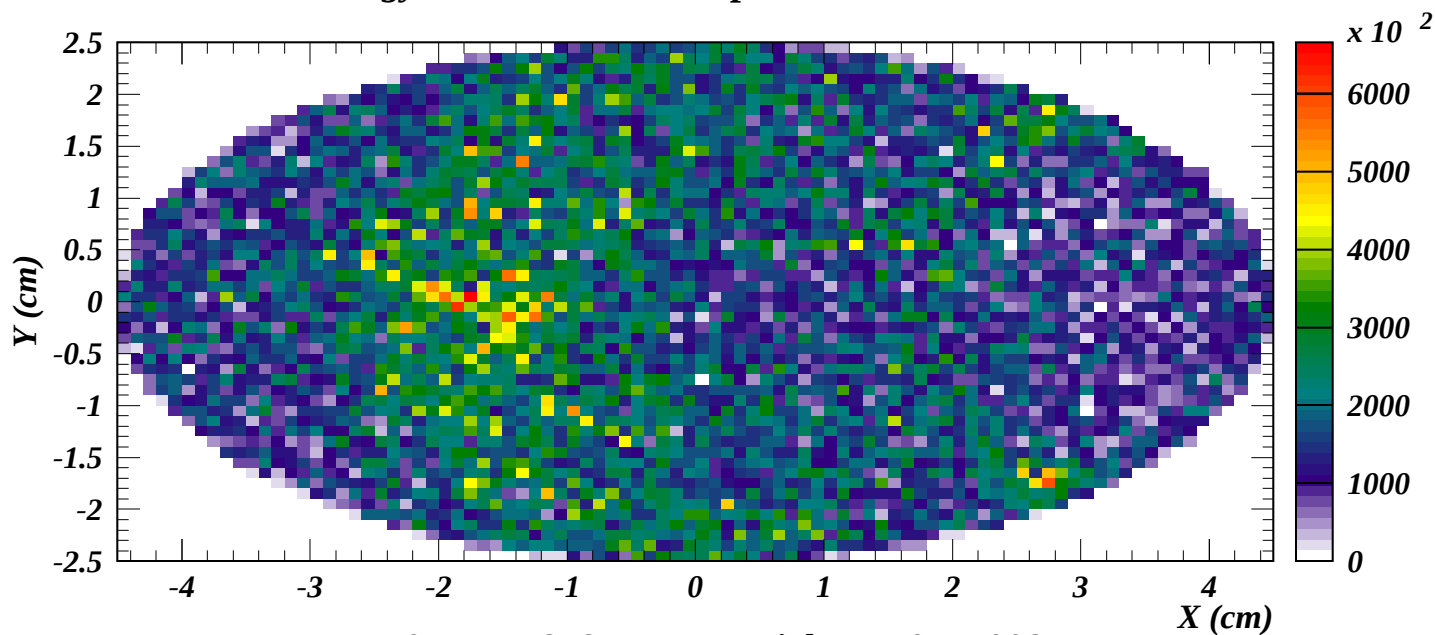
*$E_{kin} > 10$  eV: 45653 macroparticles,  $962184192 e^-$*

09/12/07 11.47  
 $\times 10^3$

*Cloud charge profile after bunch 11 at time = 154 ns*



*No energy cut: 199001 macroparticles,  $2.88862e+09 e^-$*

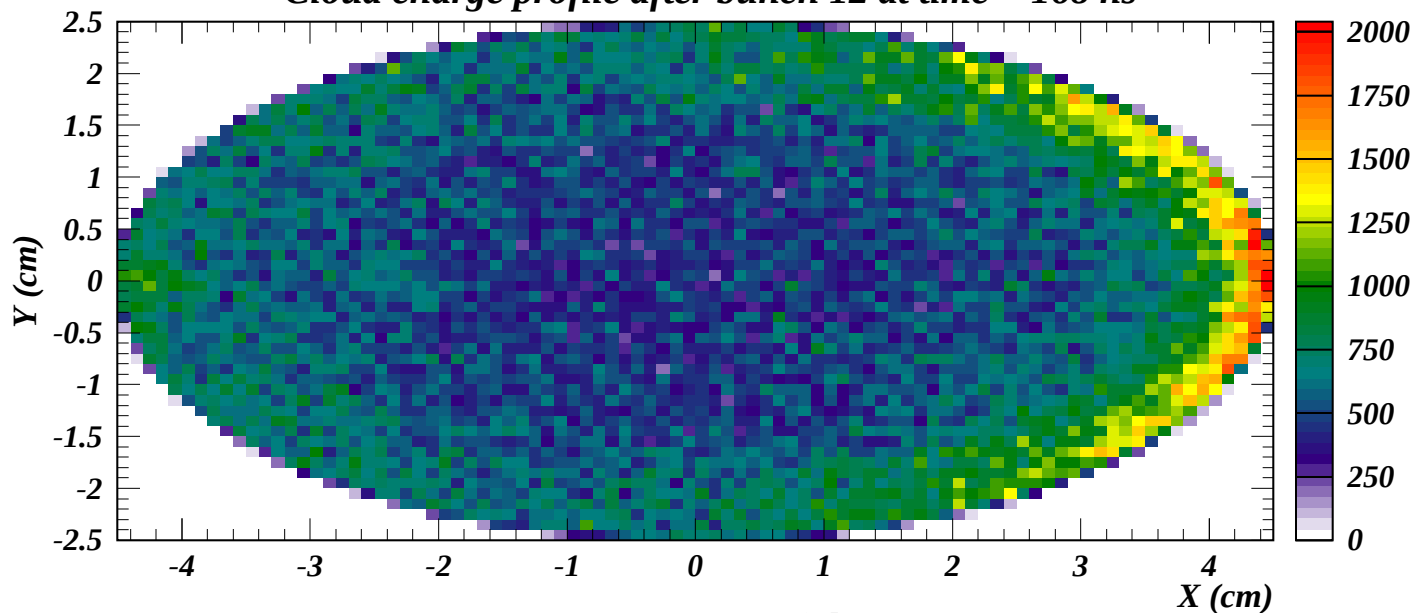


*$E_{kin} > 10 \text{ eV}$ : 33818 macroparticles,  $640779008 e^-$*

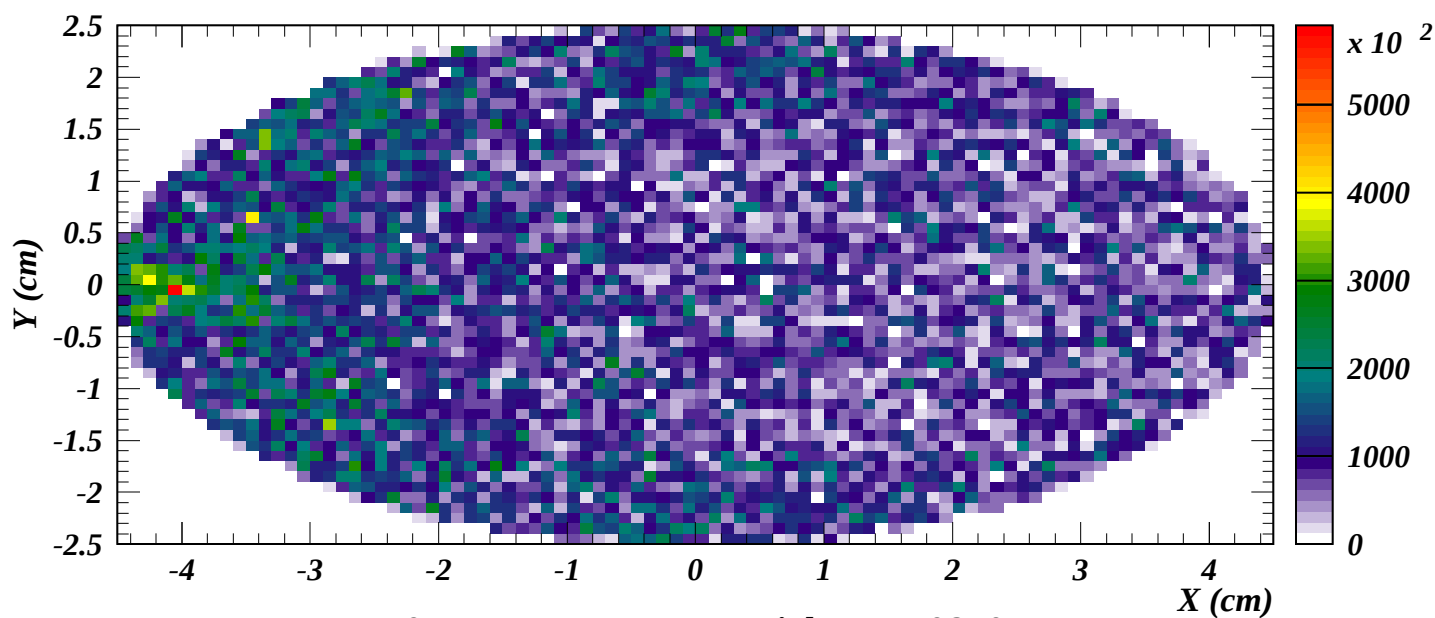
09/12/07 11.47

$\times 10^3$

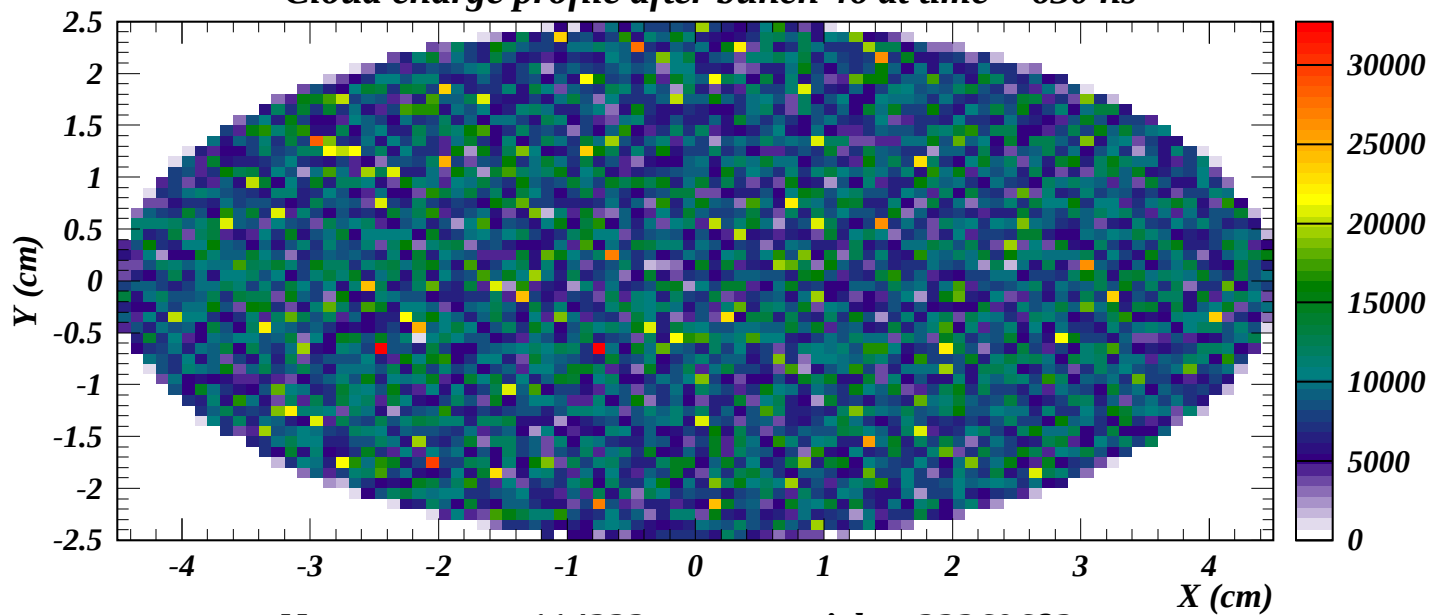
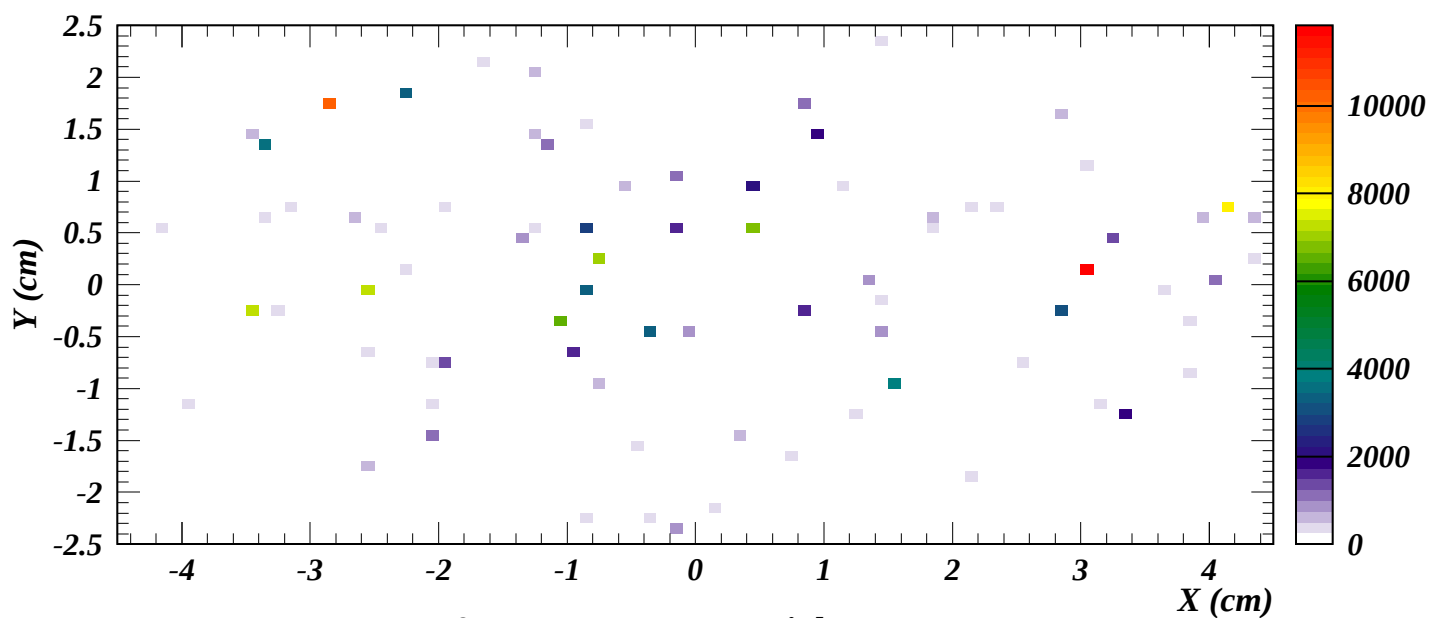
*Cloud charge profile after bunch 12 at time = 168 ns*

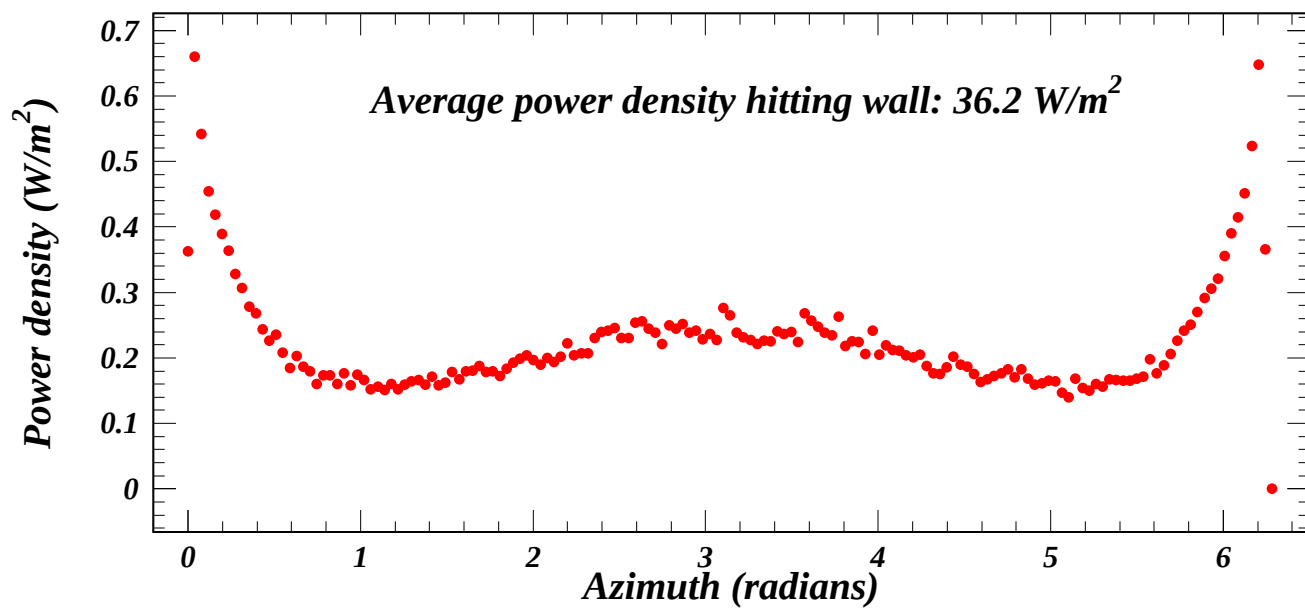
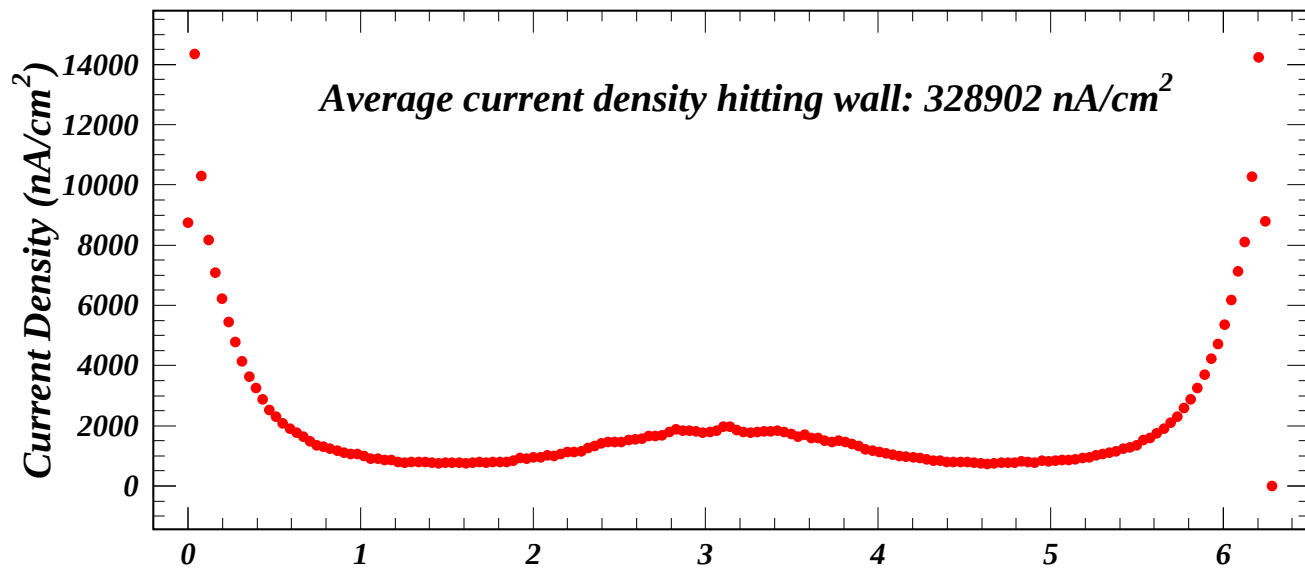


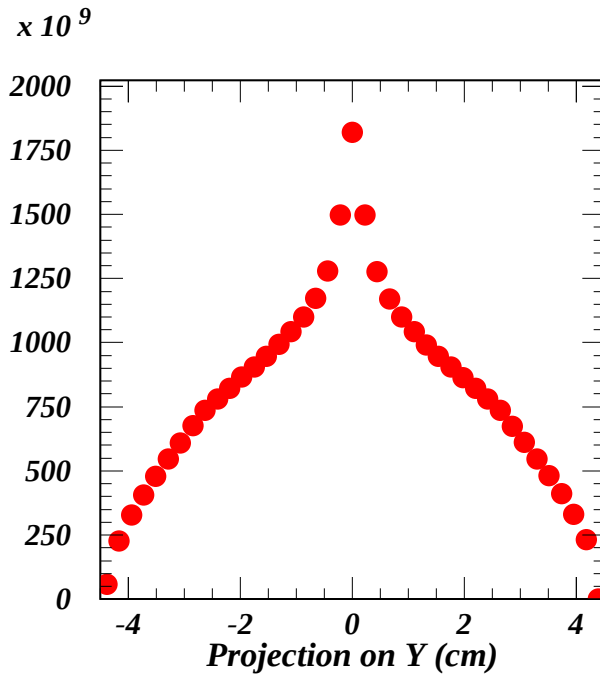
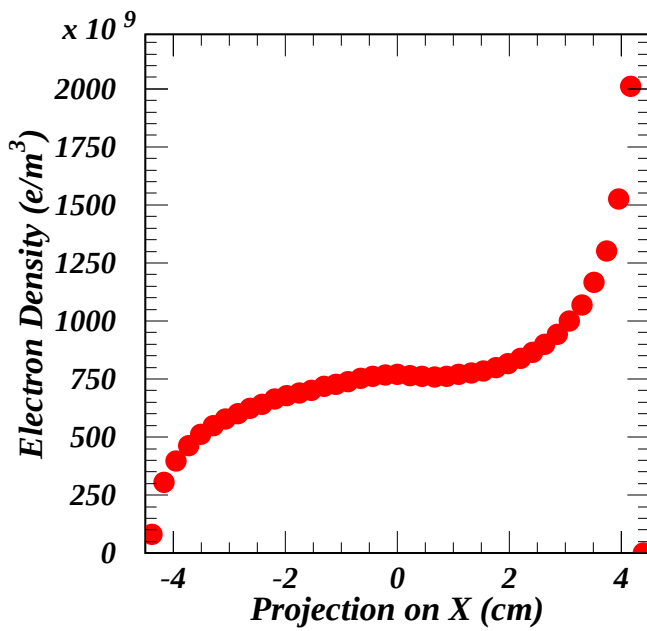
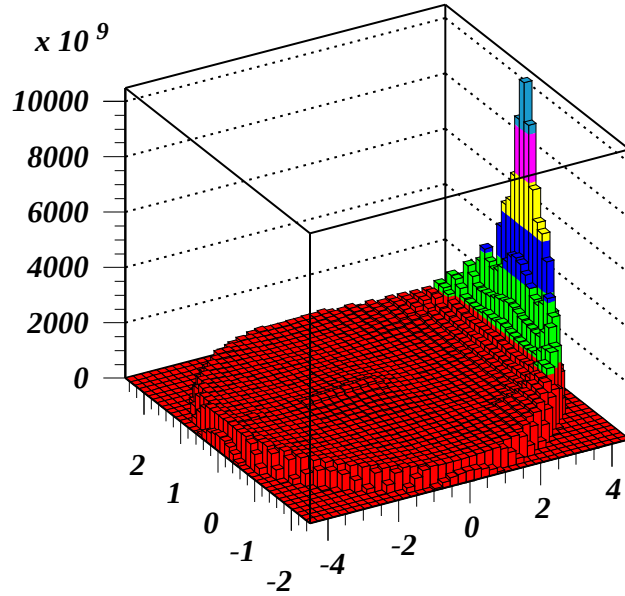
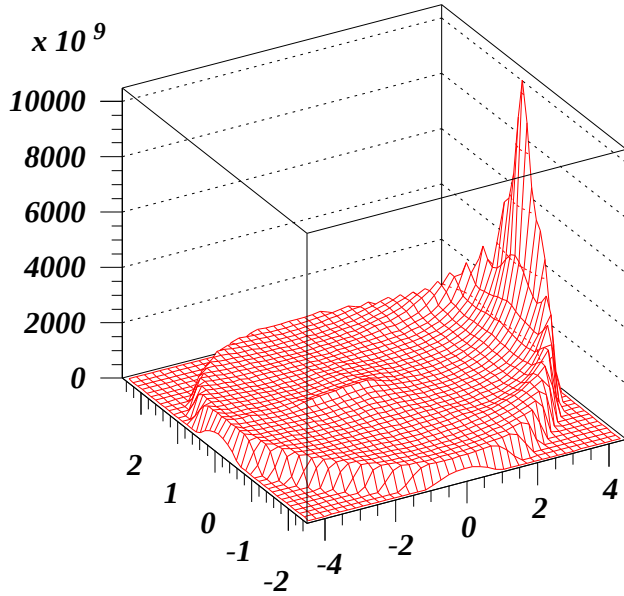
*No energy cut: 198584 macroparticles,  $2.27885e+09 \text{ e-}$*



*$E_{kin} > 10 \text{ eV}$ : 23349 macroparticles,  $353081056 \text{ e-}$*

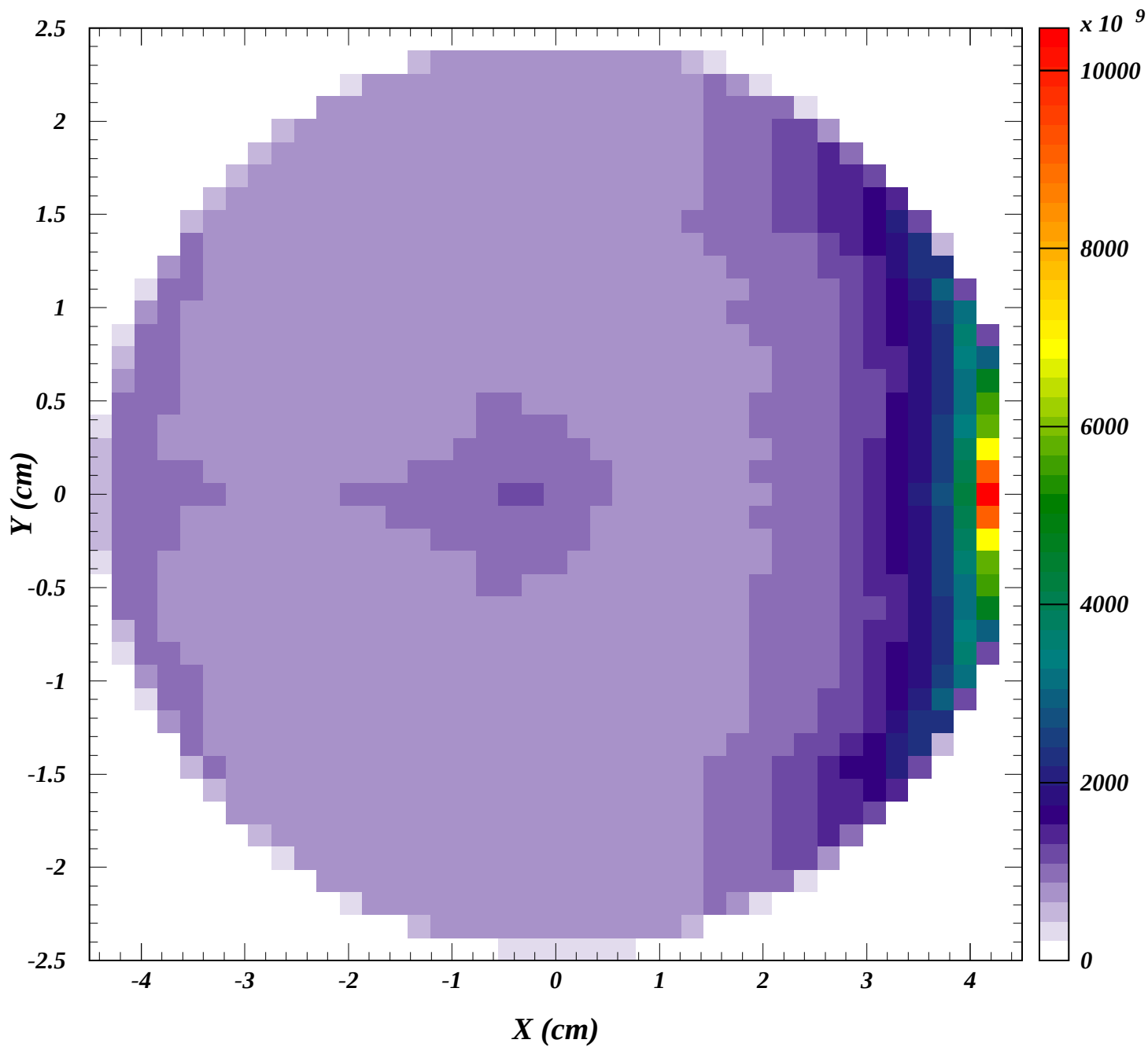
*Cloud charge profile after bunch 46 at time = 630 ns**No energy cut: 114233 macroparticles, 32269682 e-* *$E_{kin} > 10 \text{ eV}$ : 656 macroparticles, 153139 e-*

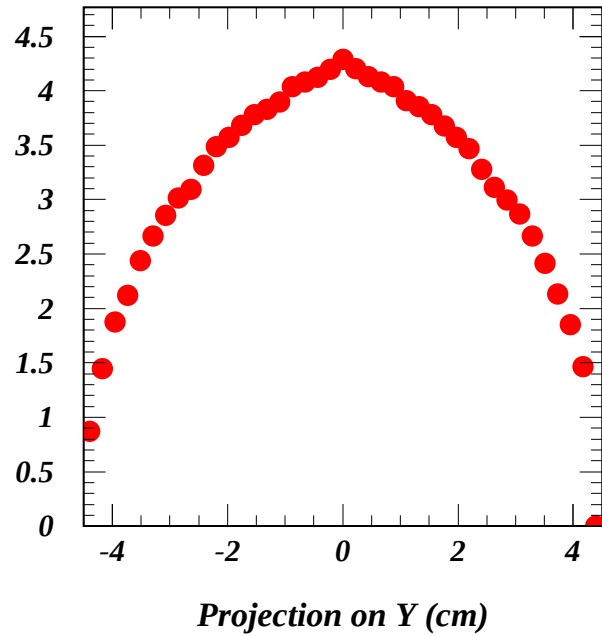
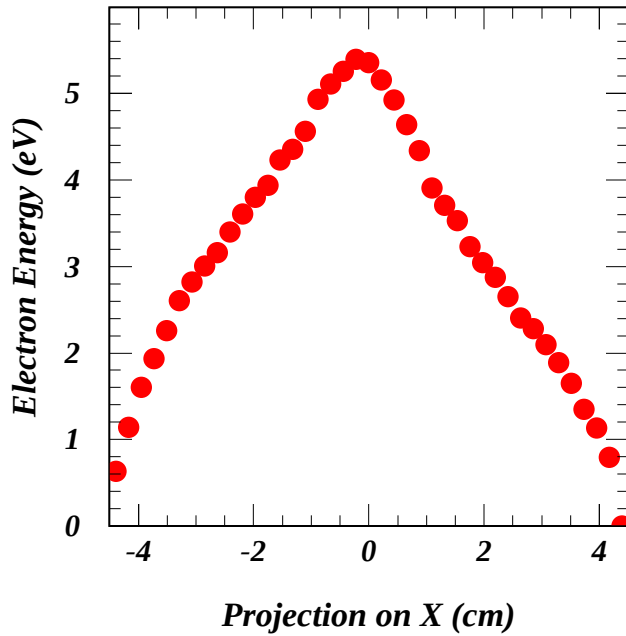
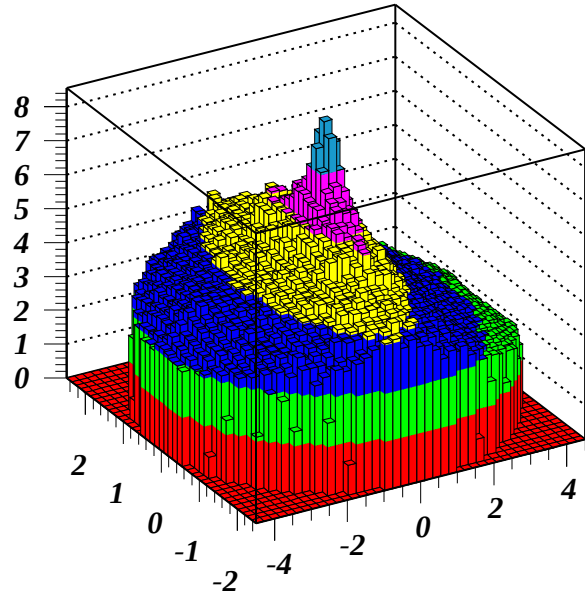
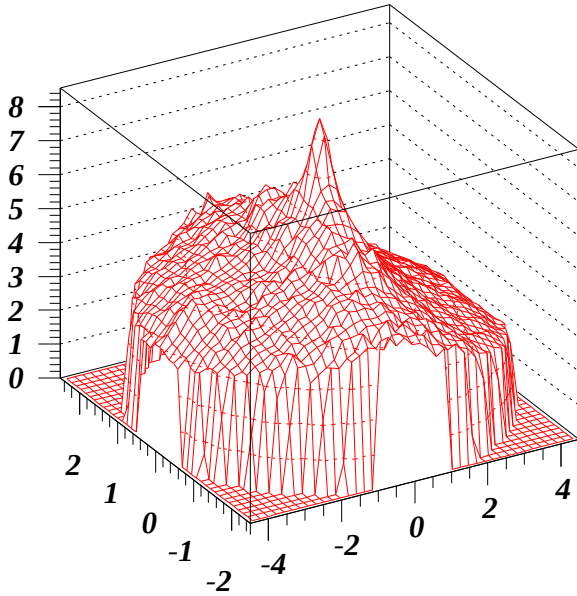


***ECLLOUD-TS0608\_SEY20\_Epk310: Cloud Density ( $e/m^3$ ) Averaged Over 643.6 ns***

09/12/07 11.47

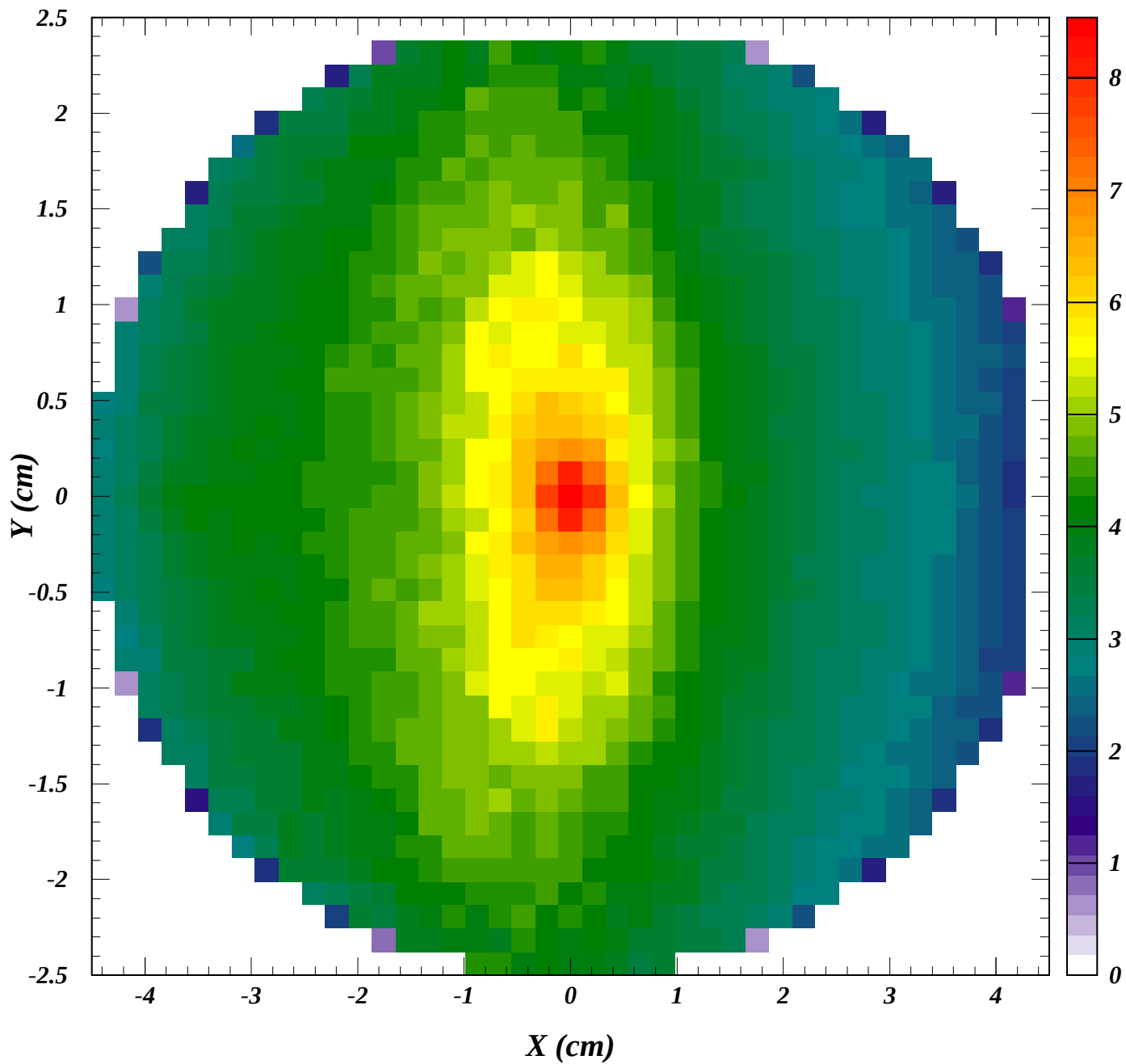
***ECLLOUD-TS0608\_SEY20\_Epk310: Cloud Density ( $e/m^3$ ) Averaged Over 643.6 ns***



***ECLLOUD-TS0608\_SEY20\_Epk310: Electron Energies (eV) Averaged Over 643.6 ns***

09/12/07 11.47

***ECLLOUD-TS0608\_SEY20\_Epk310: Electron Energies (eV) Averaged Over 643.6 ns***



***Jobs 14283 to 14283: RFA Collector Currents (nA)***