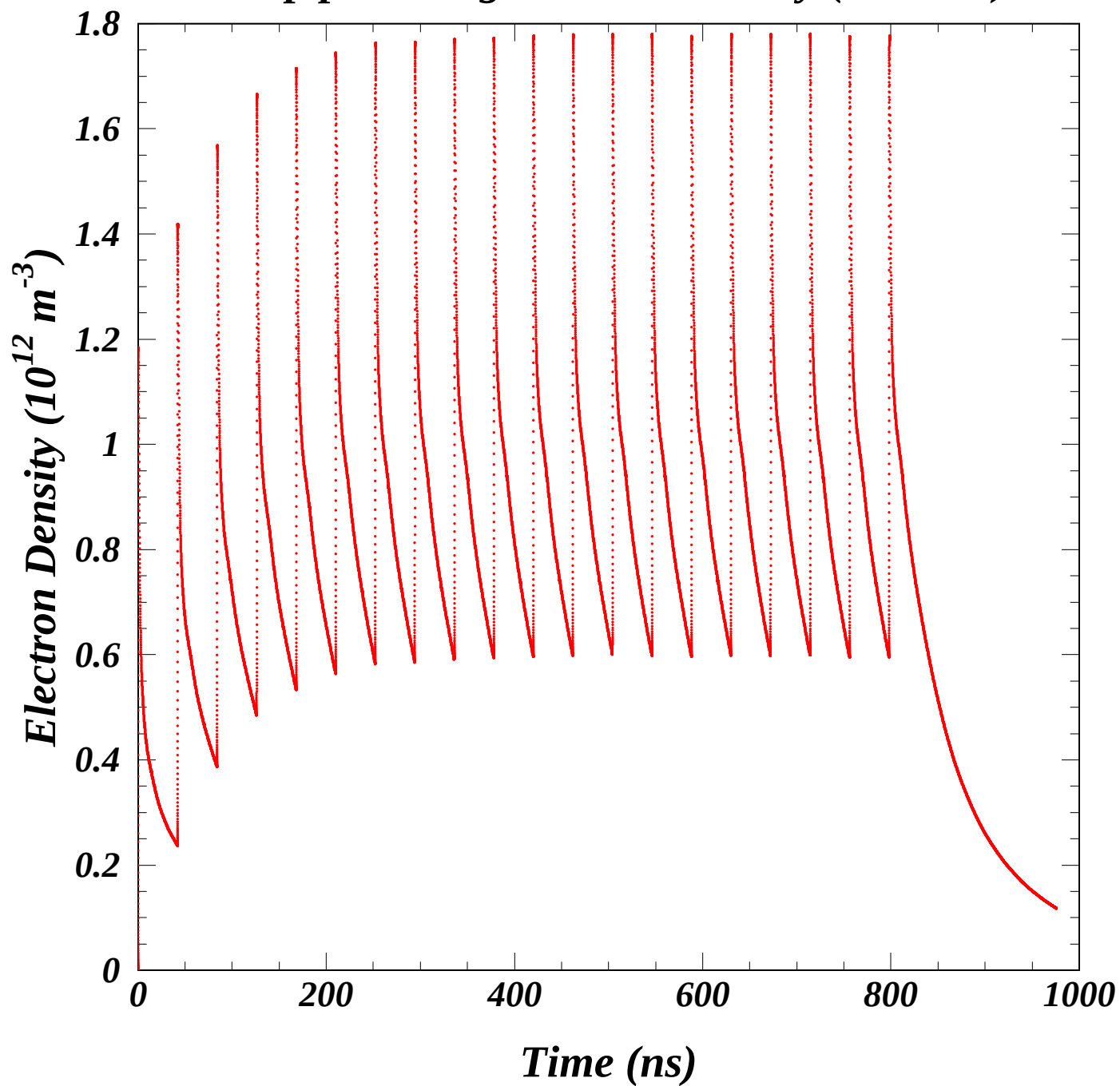
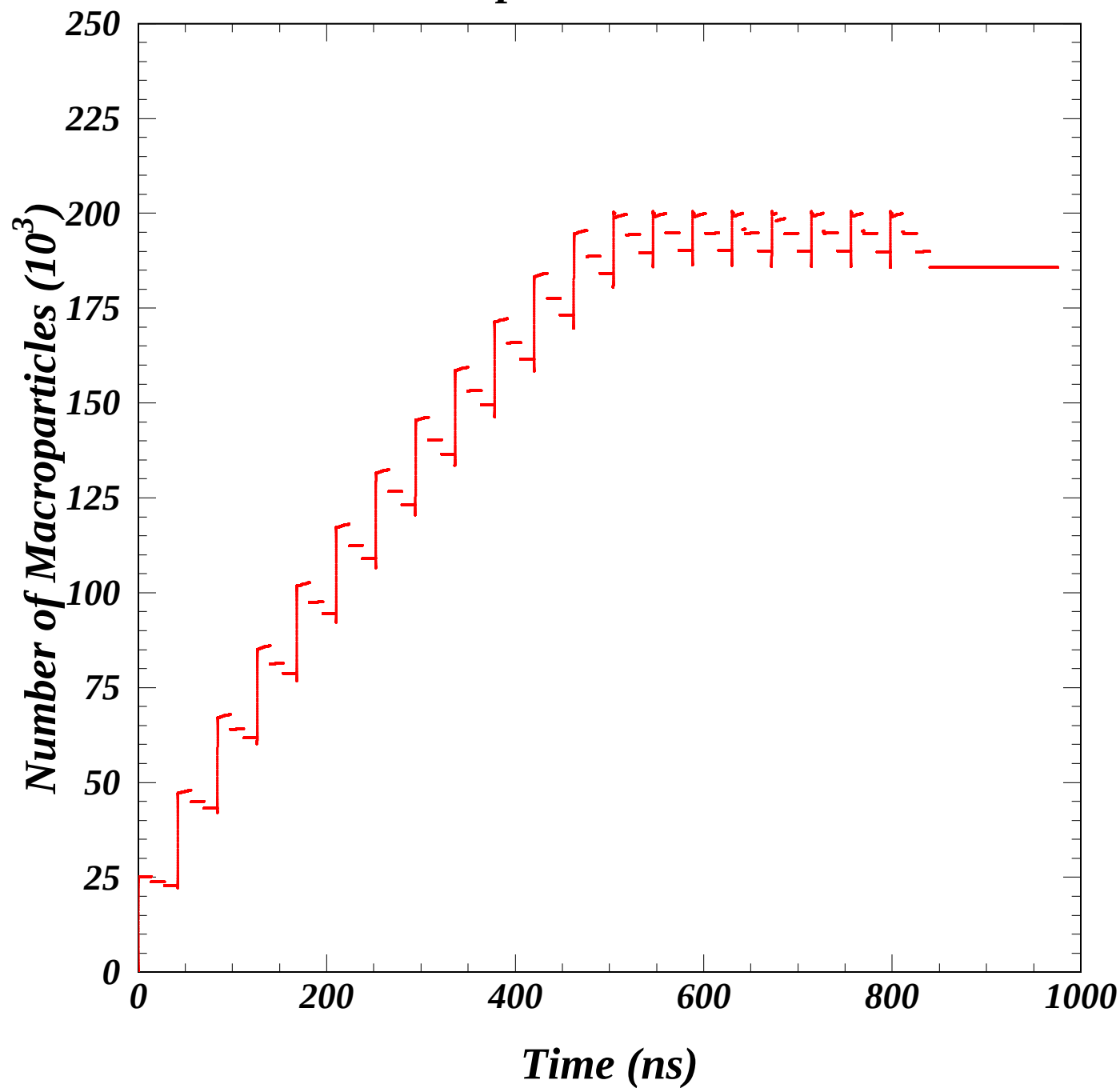


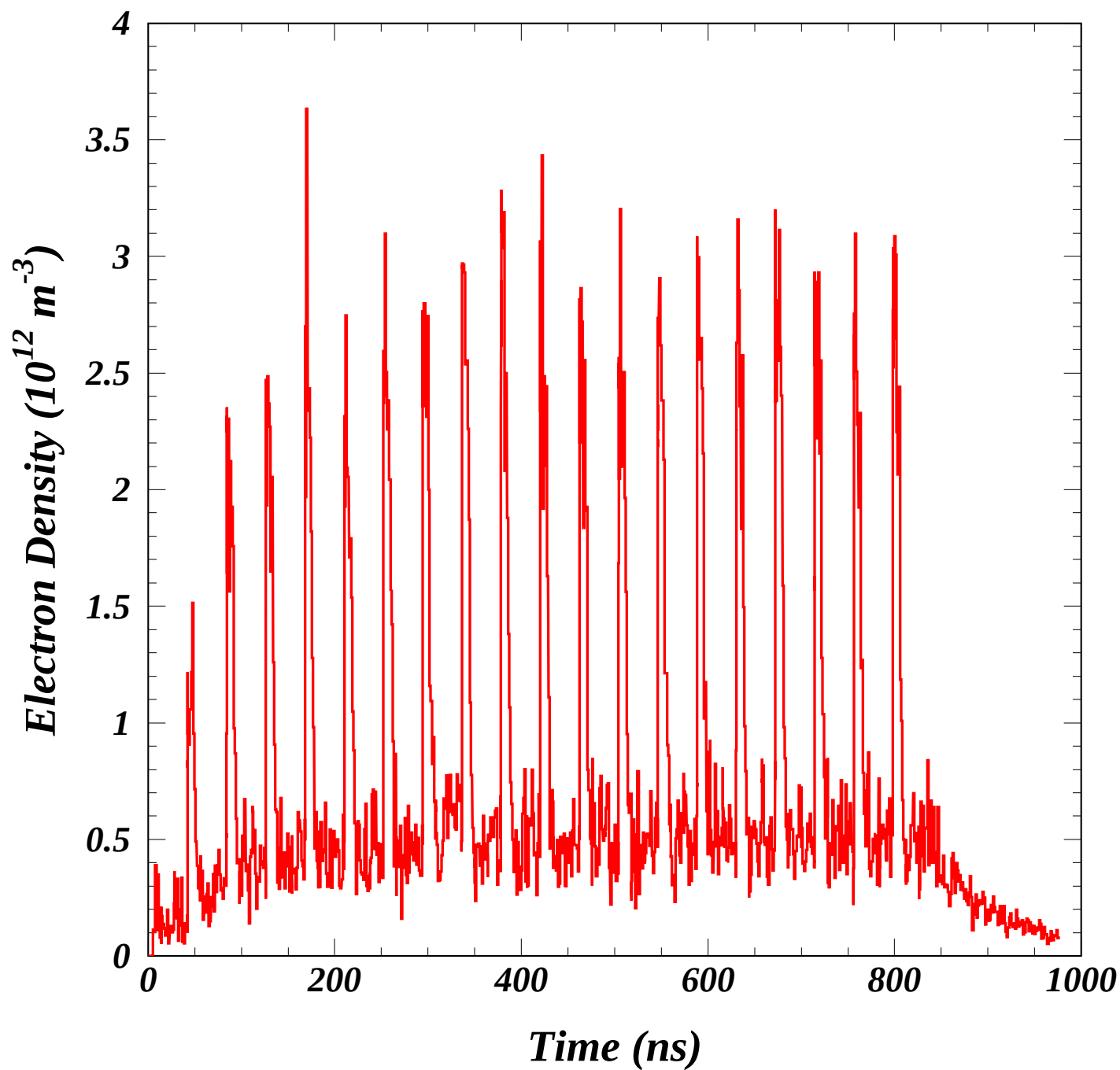
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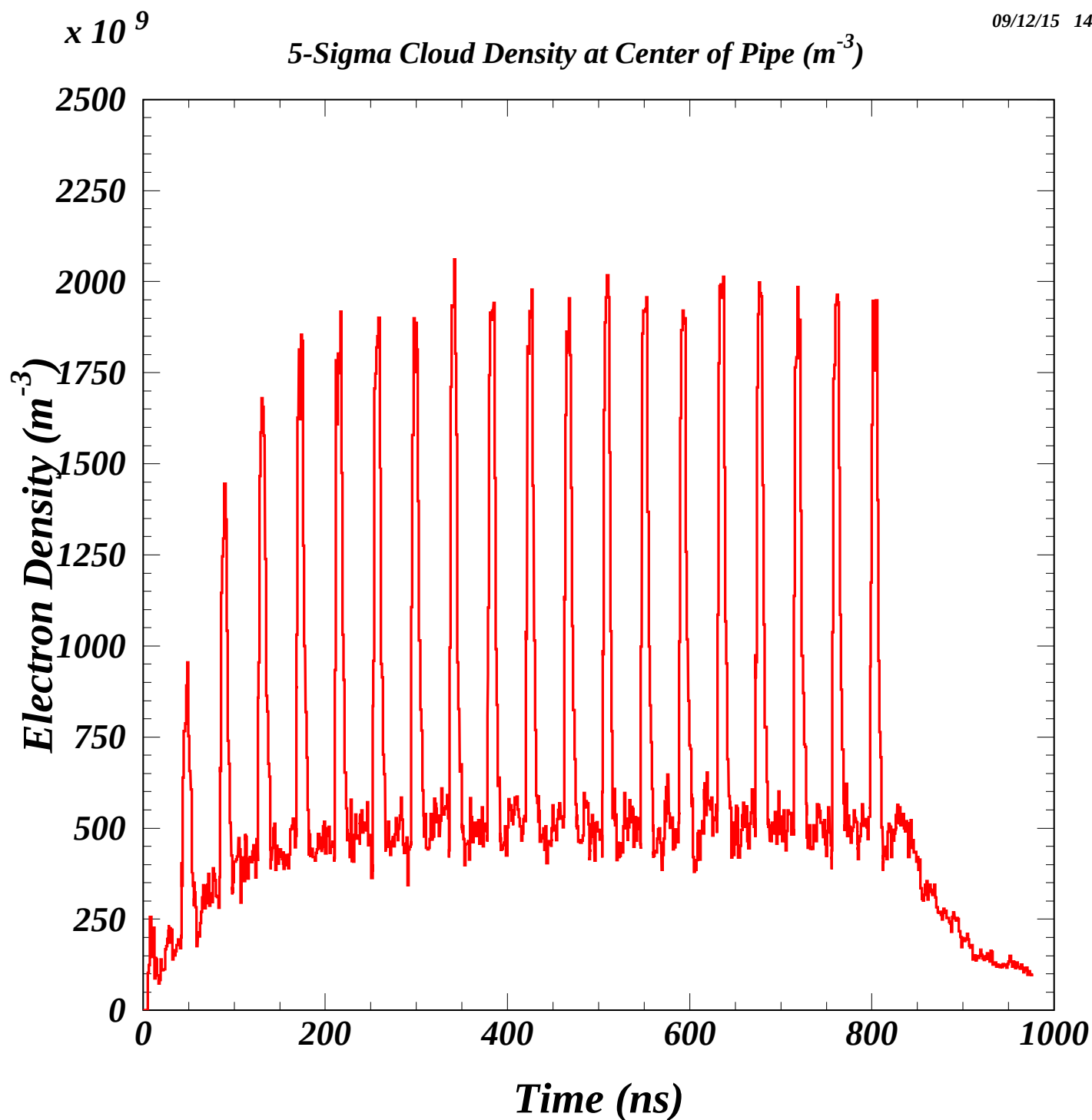
Beampipe-averaged Cloud Density (10^{12} m^{-3})



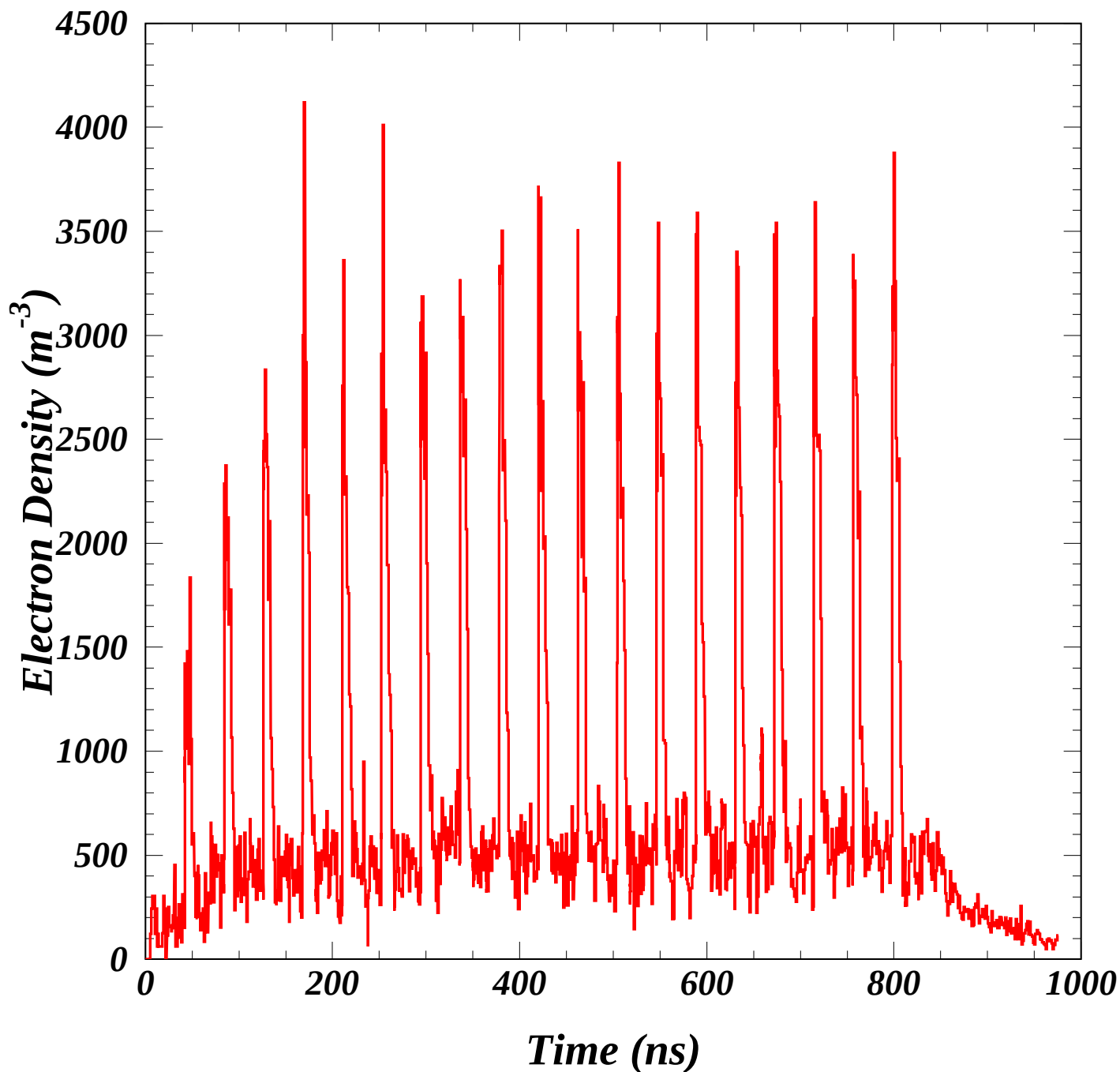
Macroparticle Statistics

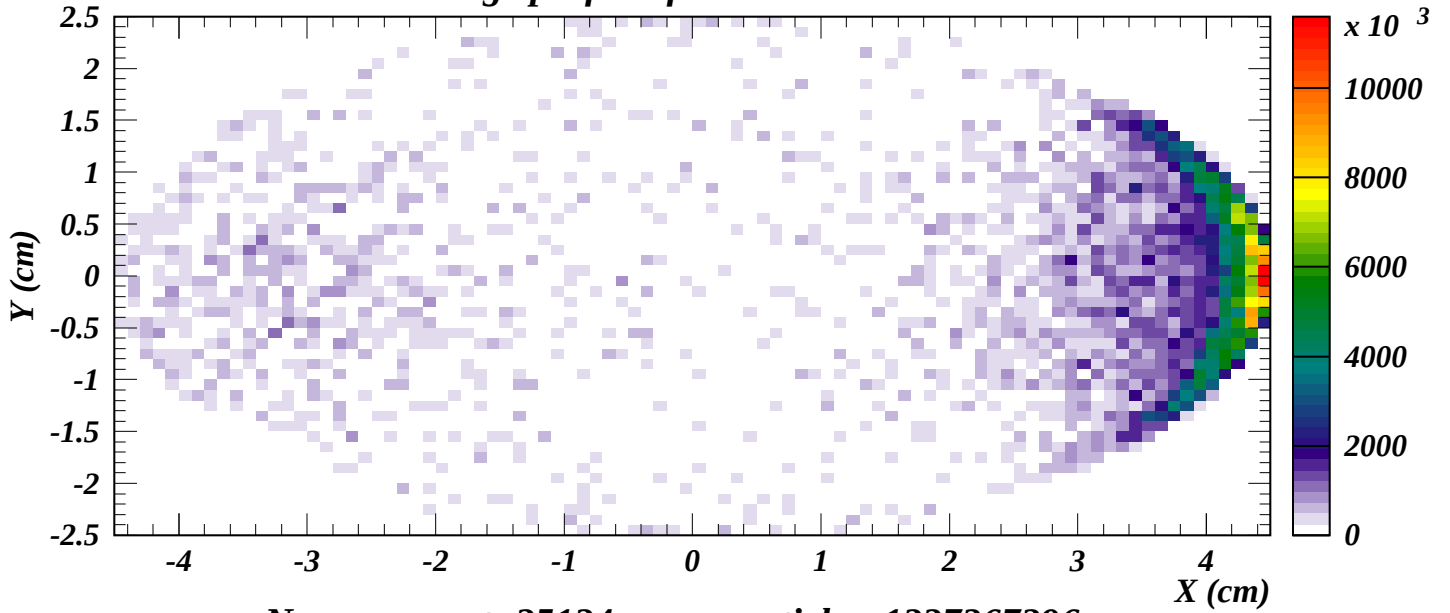
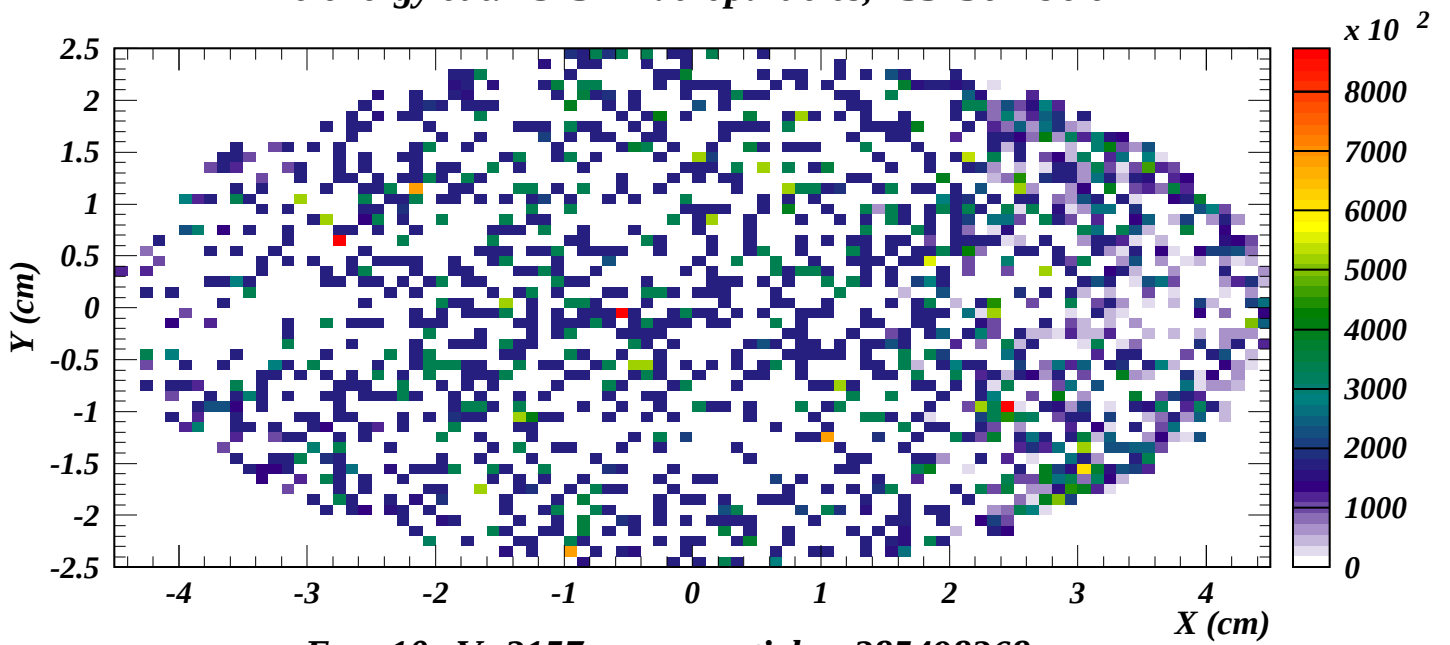


Beam-averaged Cloud Density (10^{12} m^{-3})

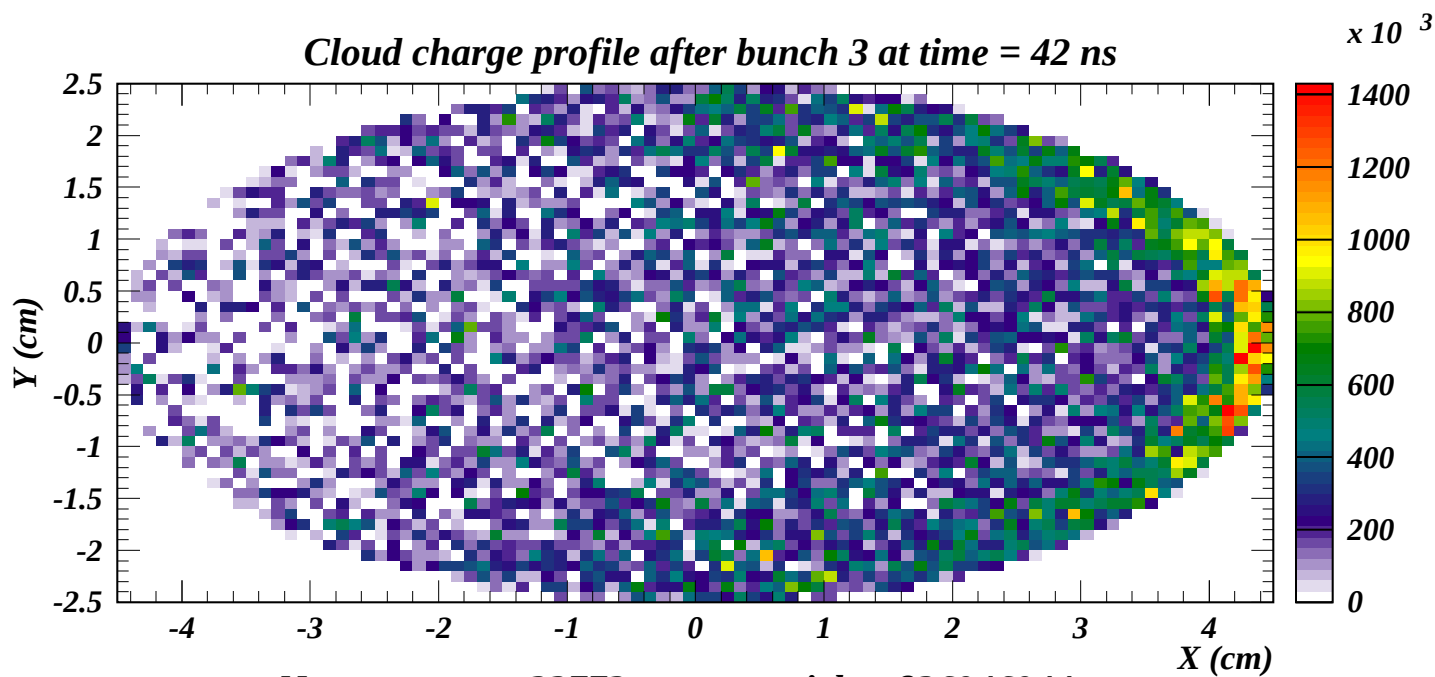
5-Sigma Cloud Density at Center of Pipe (m^{-3})

$\times 10^9$ 09/12/15 14.30
ECLLOUD-CesrTA_4_0GeV: Cloud Density in Central Grid Cell (m^{-3})

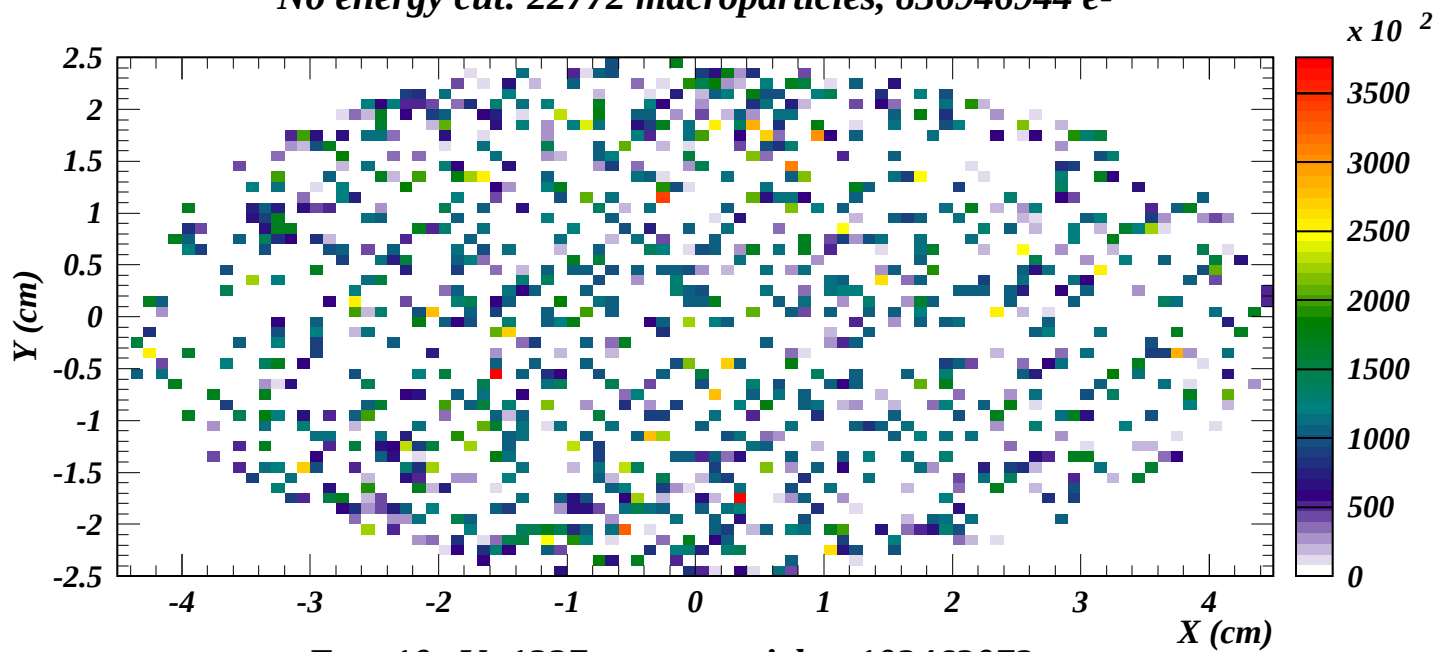


Cloud charge profile after bunch 1 at time = 14 ns*No energy cut: 25134 macroparticles, 1337367296 e-* *$E_{\text{kin}} > 10$ eV: 2157 macroparticles, 285498368 e-*

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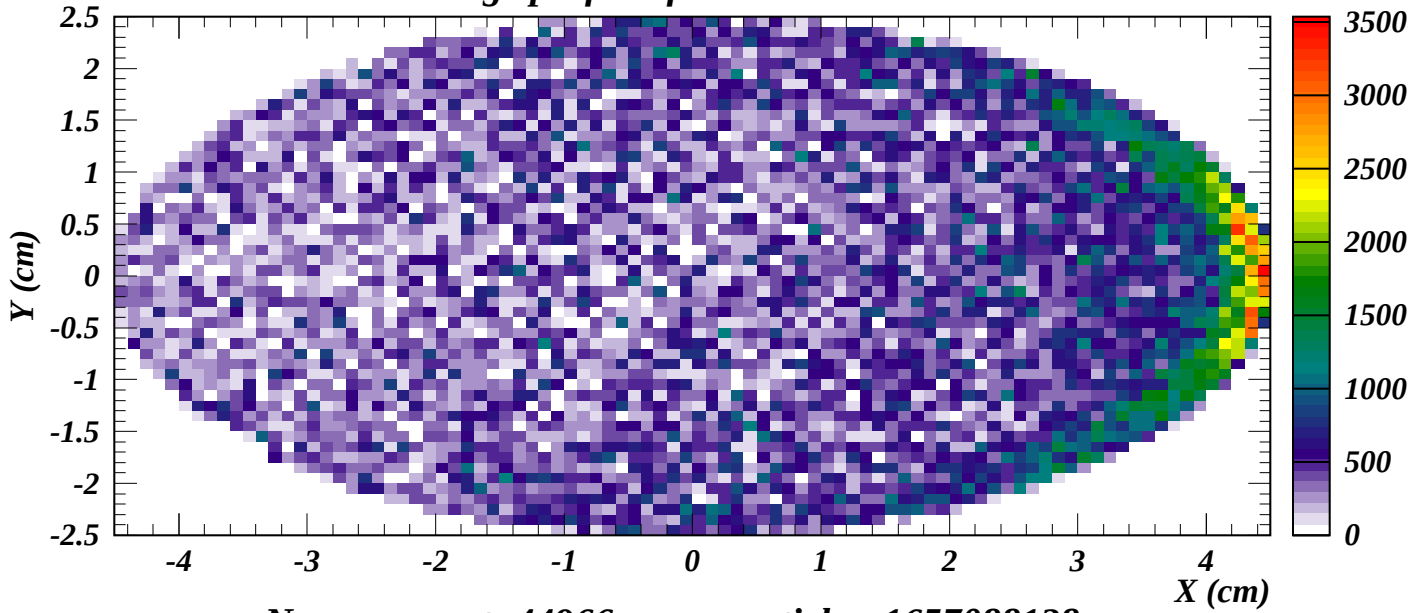
No energy cut: 22772 macroparticles, 836946944 e-



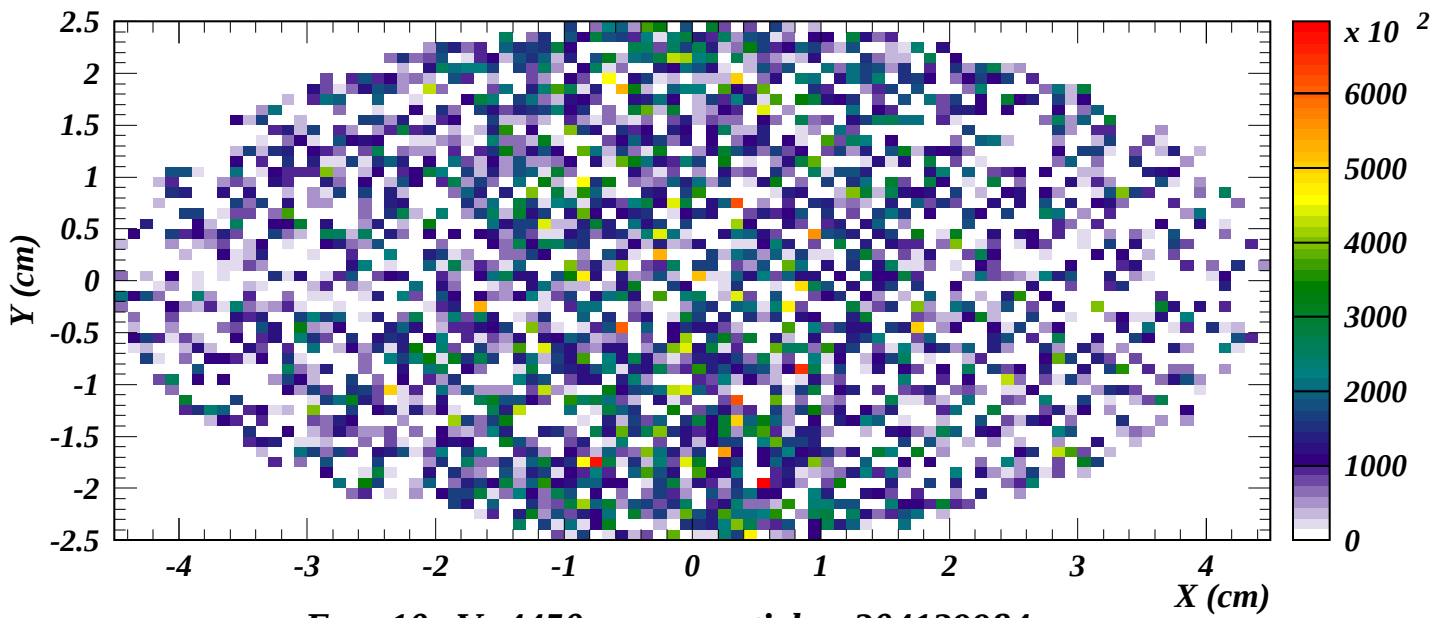
$E_{\text{kin}} > 10$ eV: 1337 macroparticles, 102463072 e-

09/12/15 14.30
 $\times 10^3$

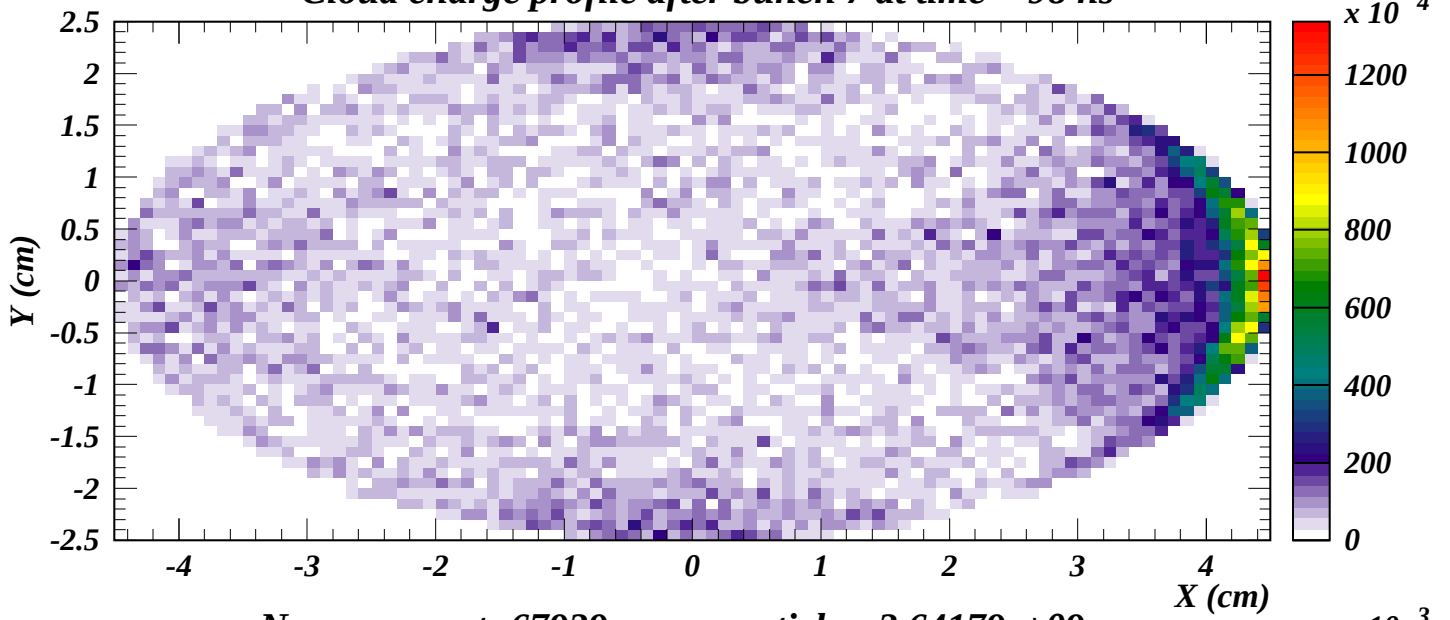
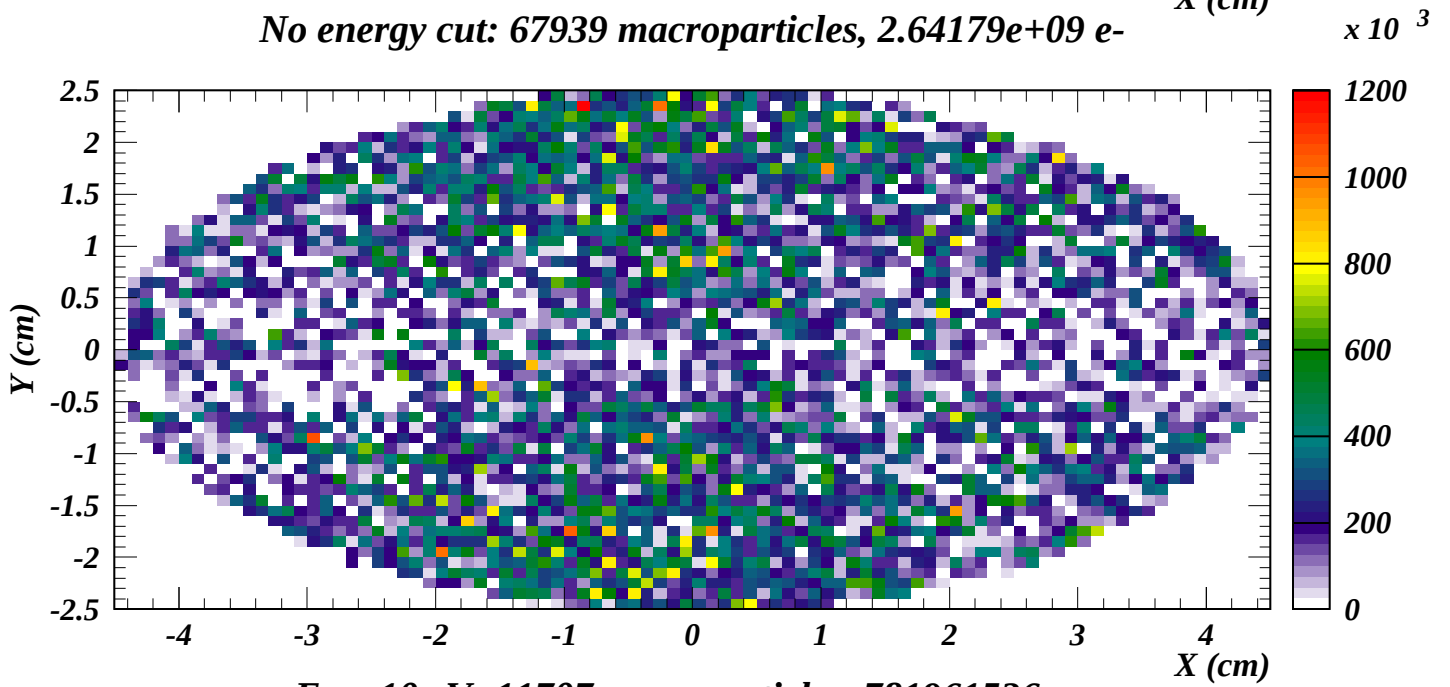
Cloud charge profile after bunch 5 at time = 70 ns



No energy cut: 44966 macroparticles, 1657088128 e-

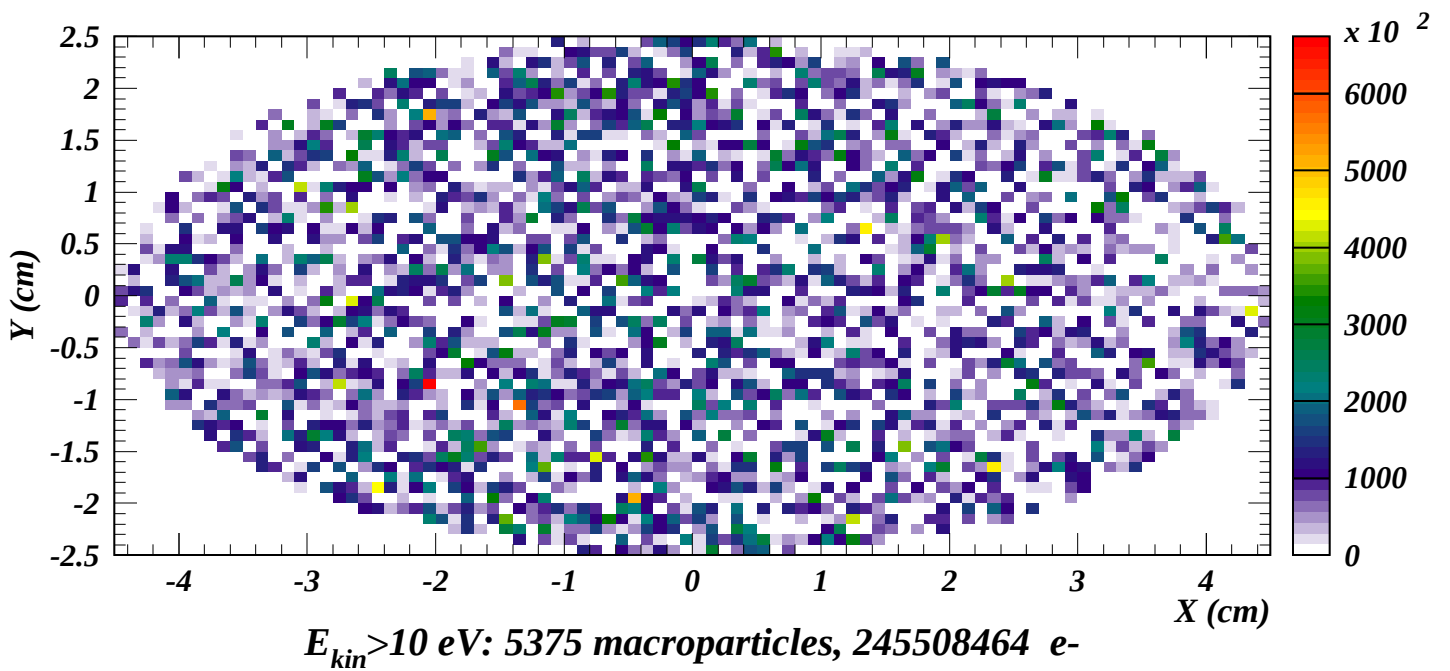
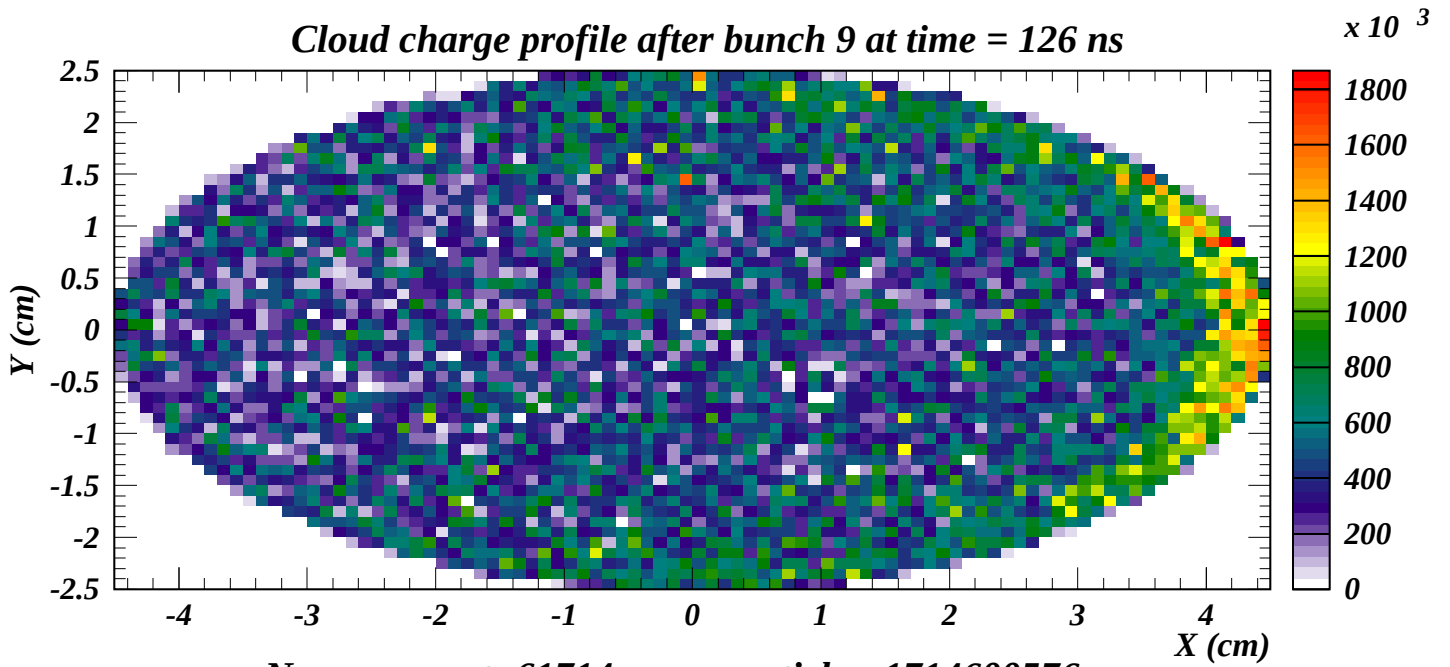


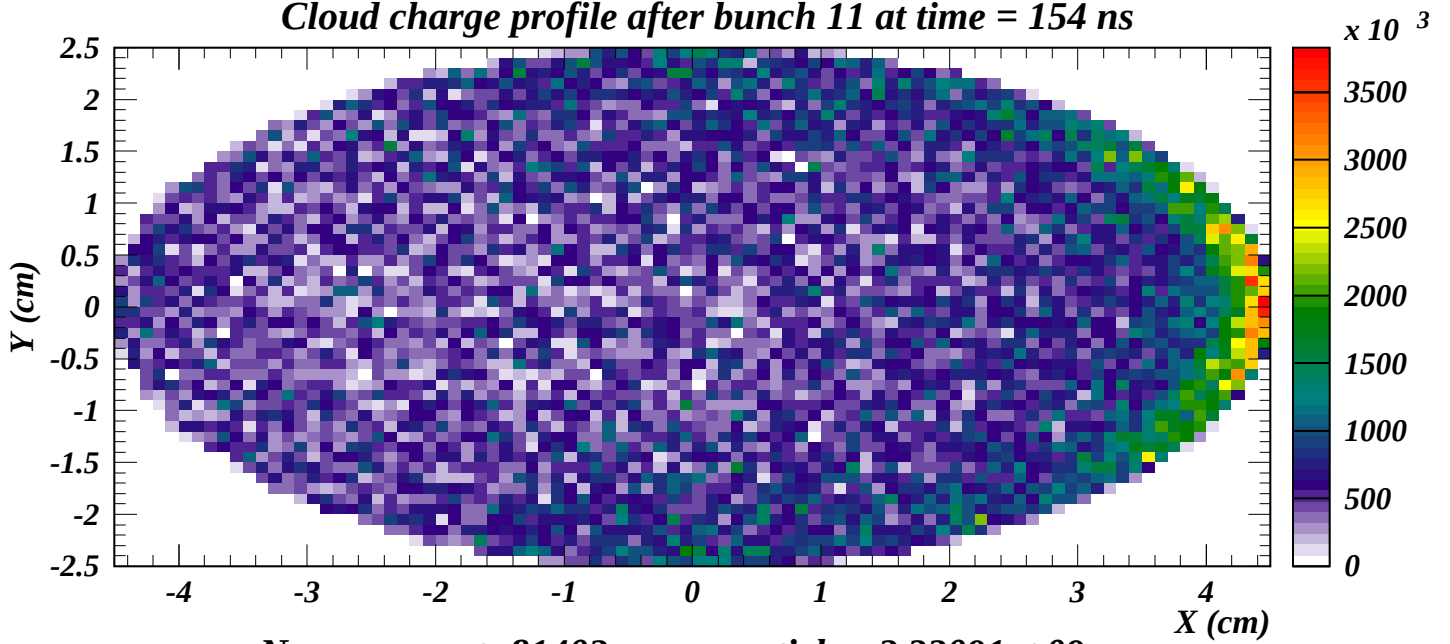
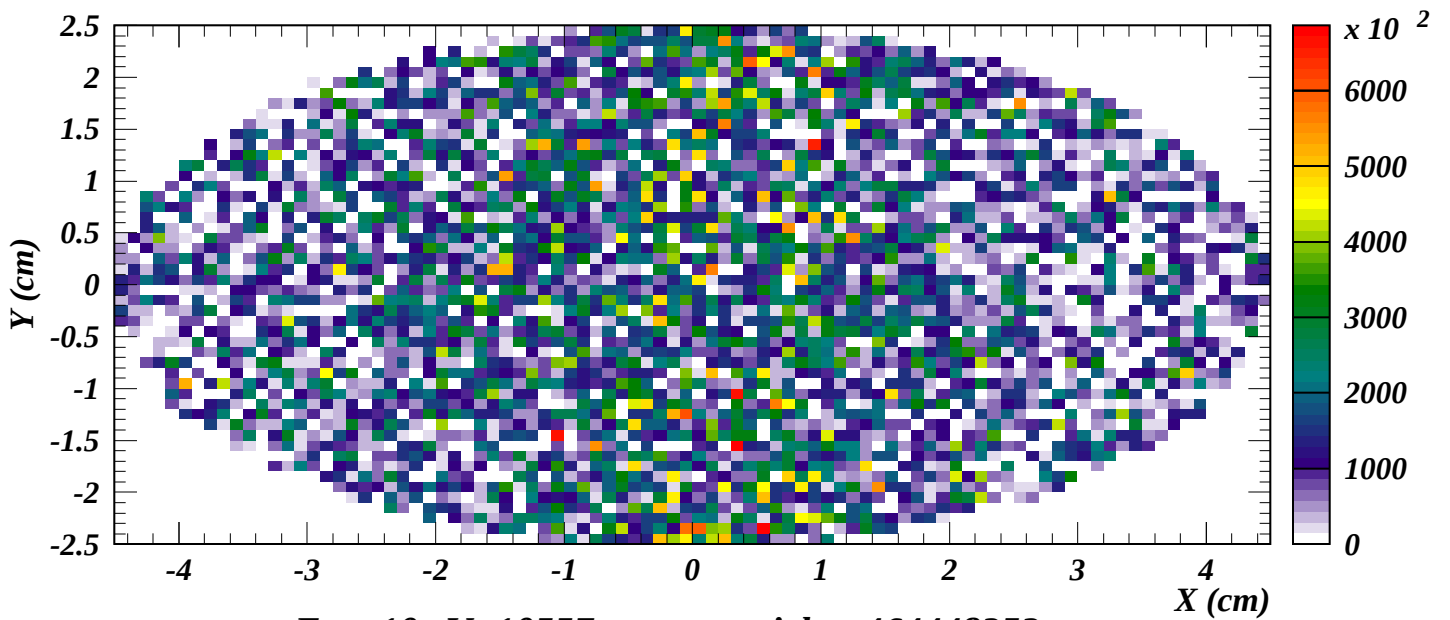
$E_{\text{kin}} > 10 \text{ eV}$: 4450 macroparticles, 304129984 e-

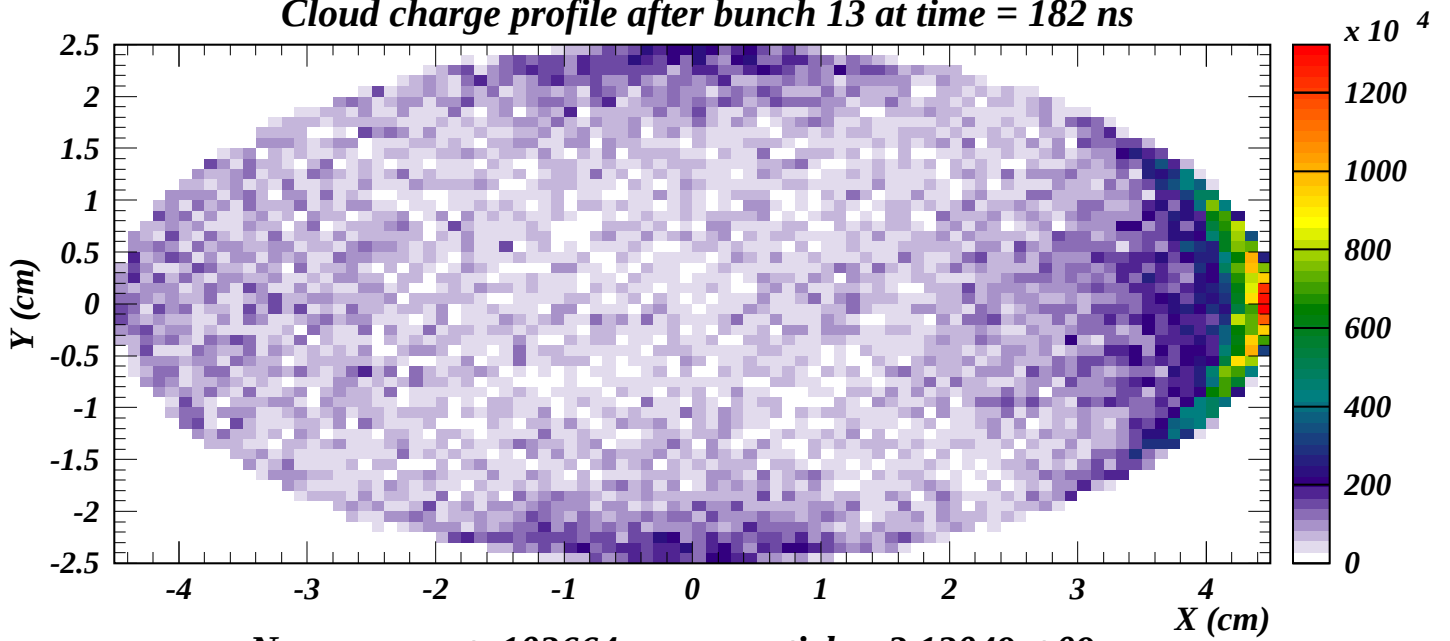
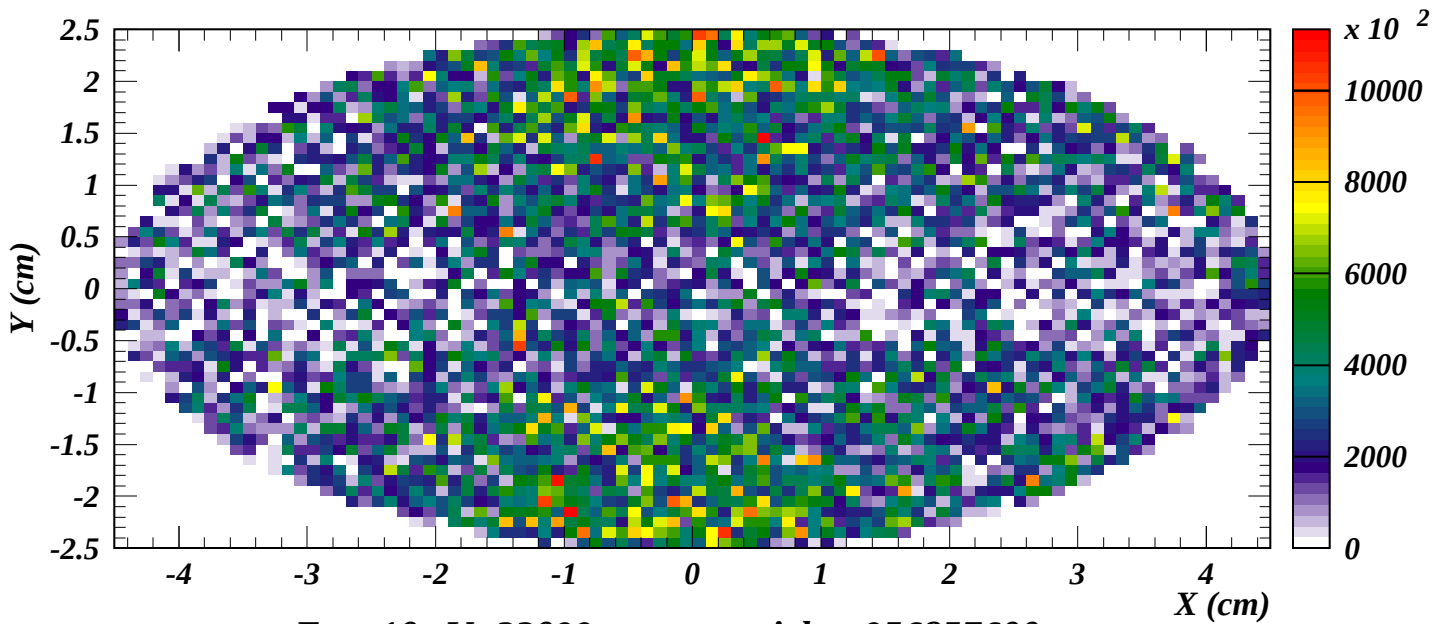
Cloud charge profile after bunch 7 at time = 98 ns*No energy cut: 67939 macroparticles, 2.64179e+09 e-* *$E_{kin} > 10$ eV: 11707 macroparticles, 781961536 e-*

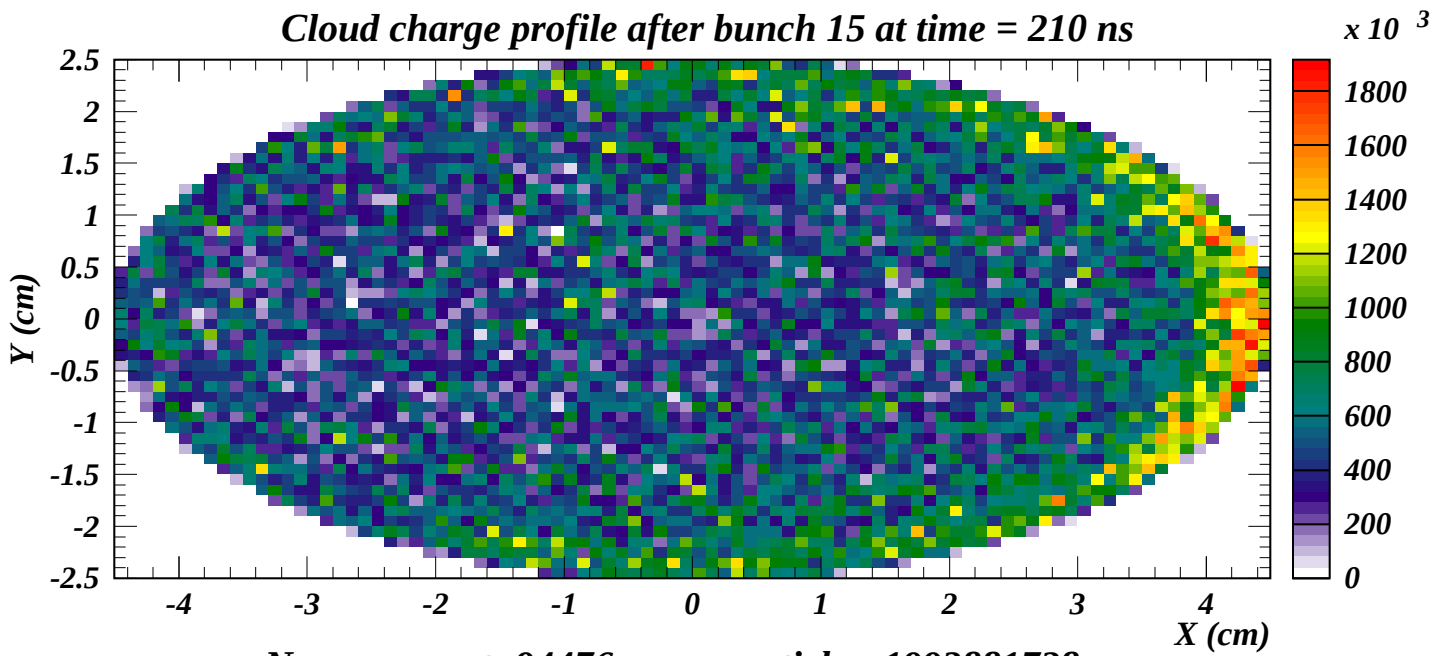
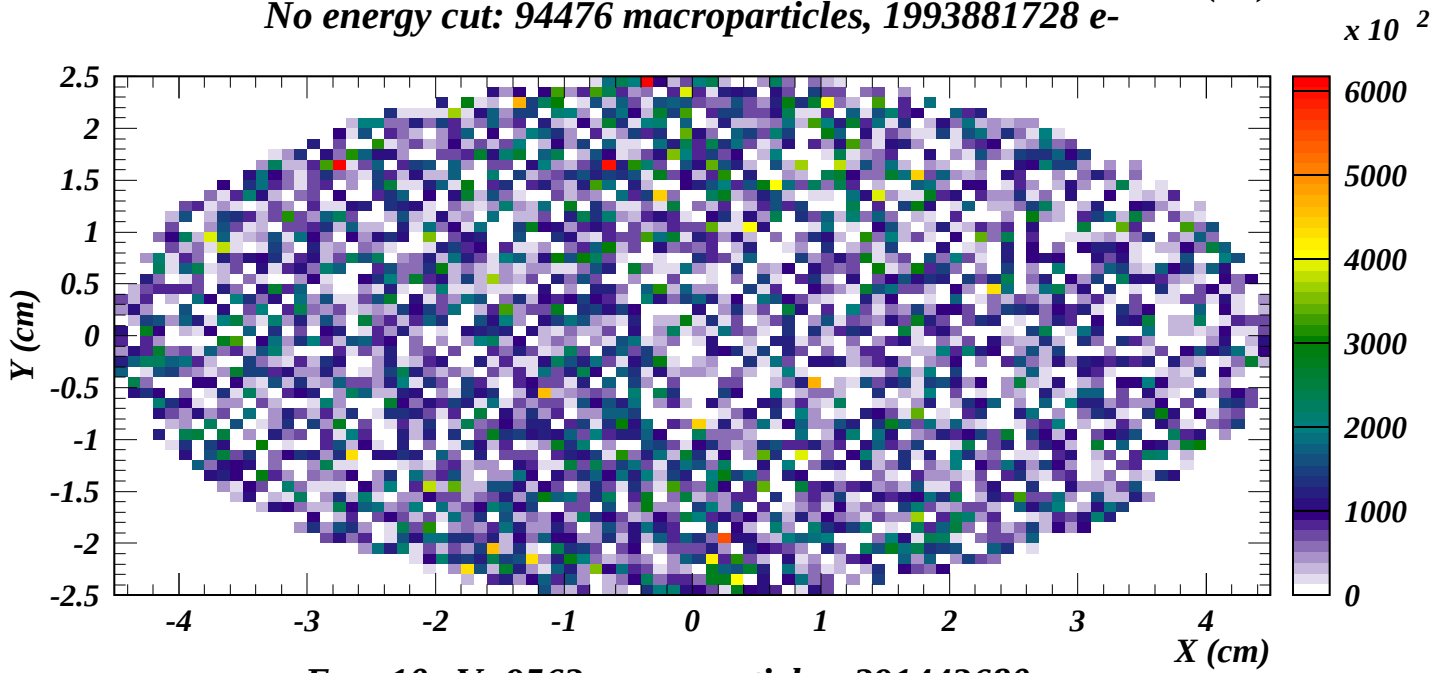
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Cloud charge profile after bunch 9 at time = 126 ns



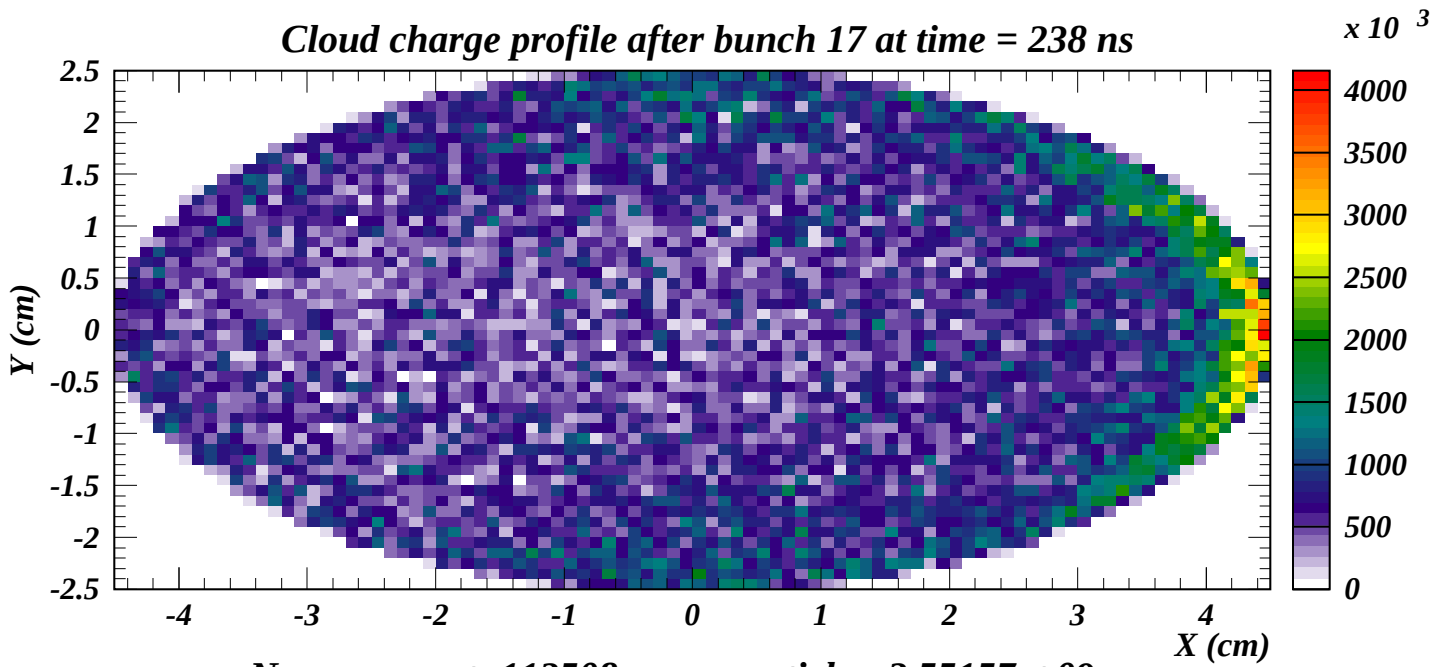
Cloud charge profile after bunch 11 at time = 154 ns*No energy cut: 81402 macroparticles, $2.32091e+09 \text{ e-}$*  *$E_{\text{kin}} > 10 \text{ eV}$: 10557 macroparticles, 464448352 e-*

Cloud charge profile after bunch 13 at time = 182 ns*No energy cut: 102664 macroparticles, $3.12049\text{e}+09 \text{ e-}$*  *$E_{kin} > 10 \text{ eV}$: 22099 macroparticles, 956857600 e-*

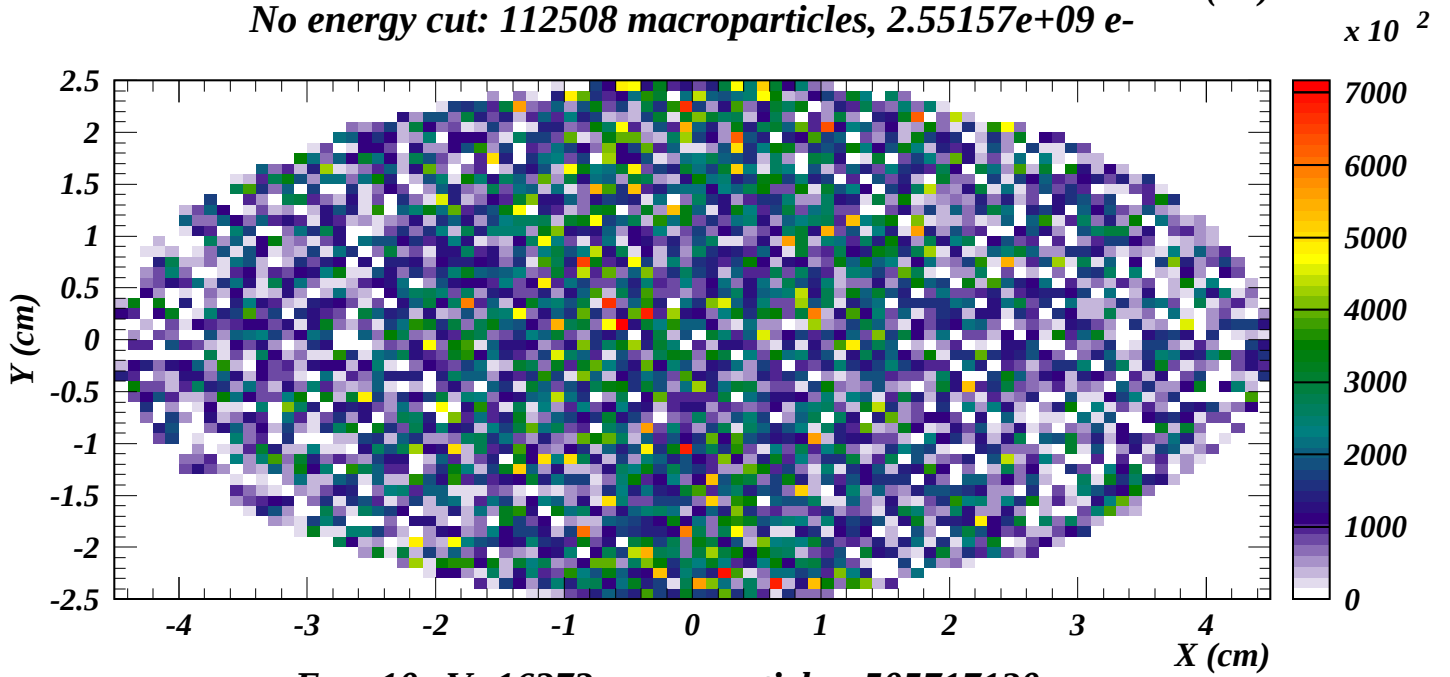
Cloud charge profile after bunch 15 at time = 210 ns*No energy cut: 94476 macroparticles, 1993881728 e-* *$E_{\text{kin}} > 10$ eV: 9563 macroparticles, 291443680 e-*

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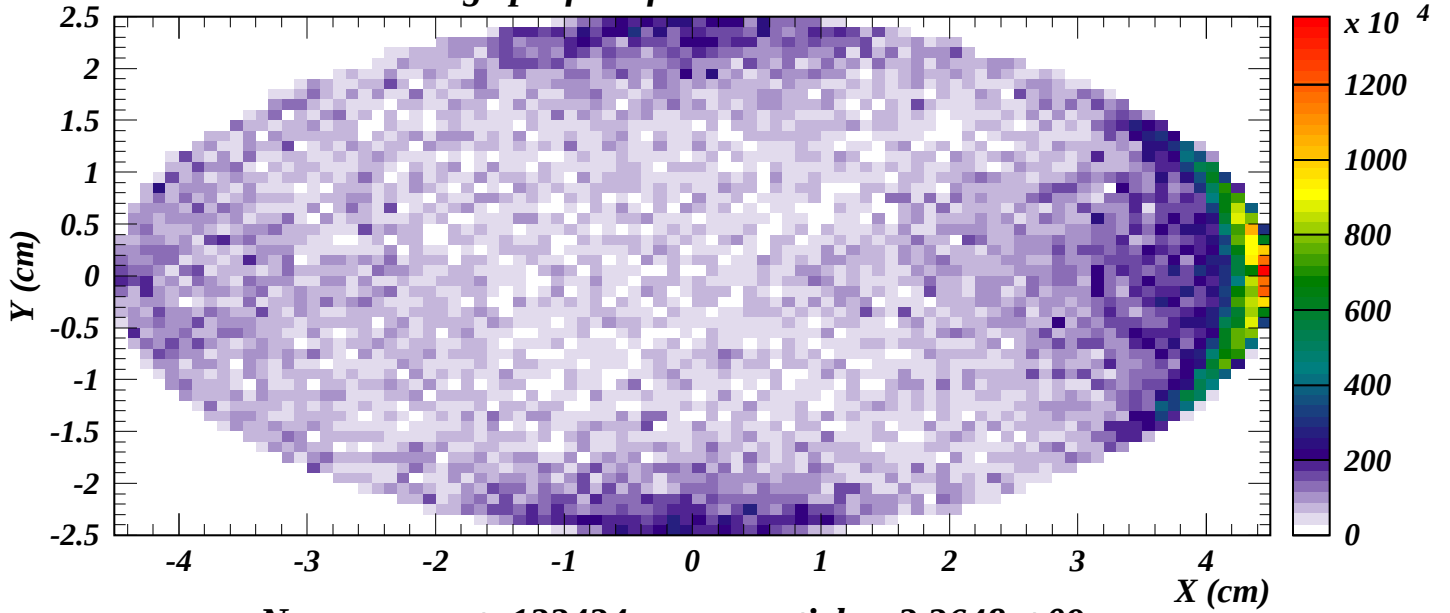
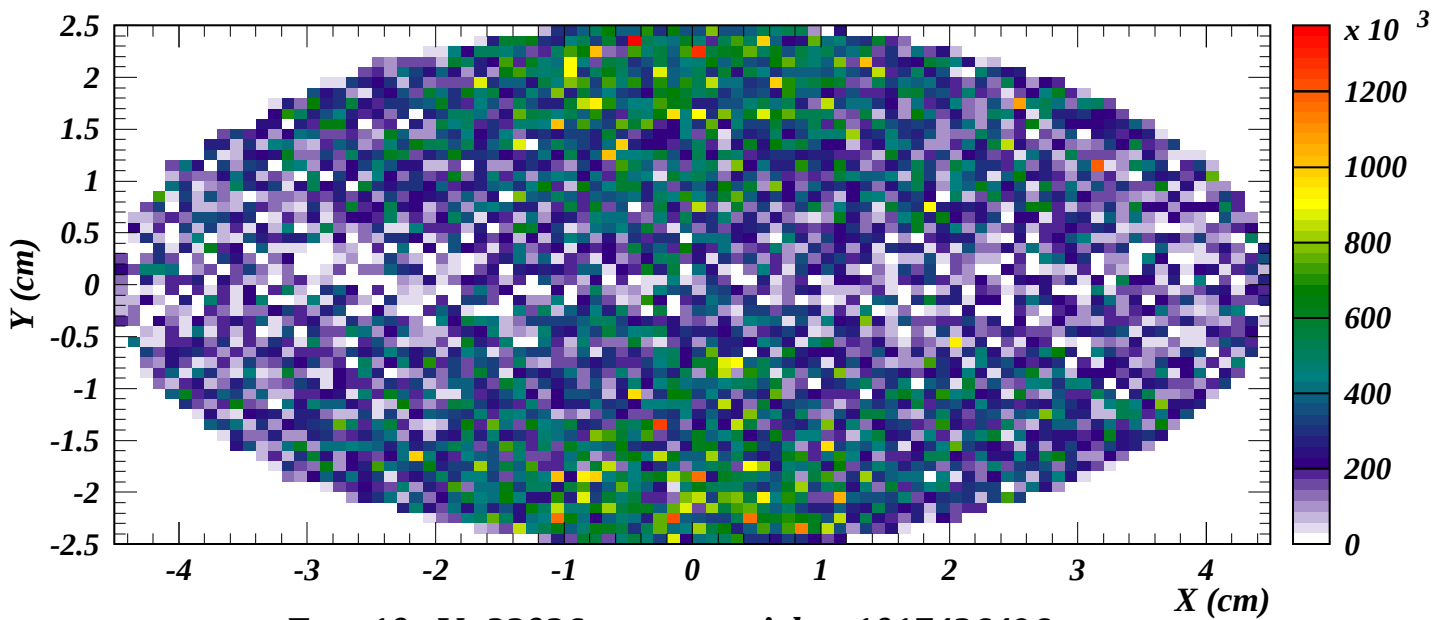
Cloud charge profile after bunch 17 at time = 238 ns

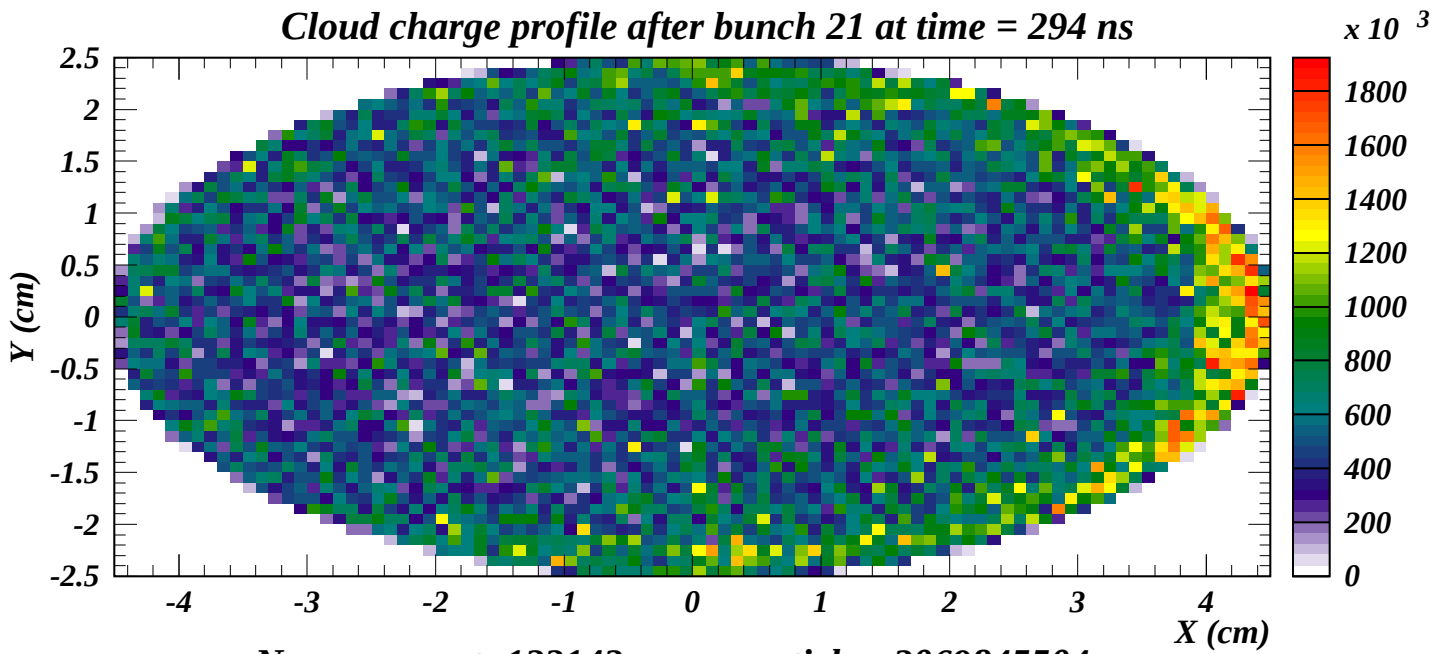
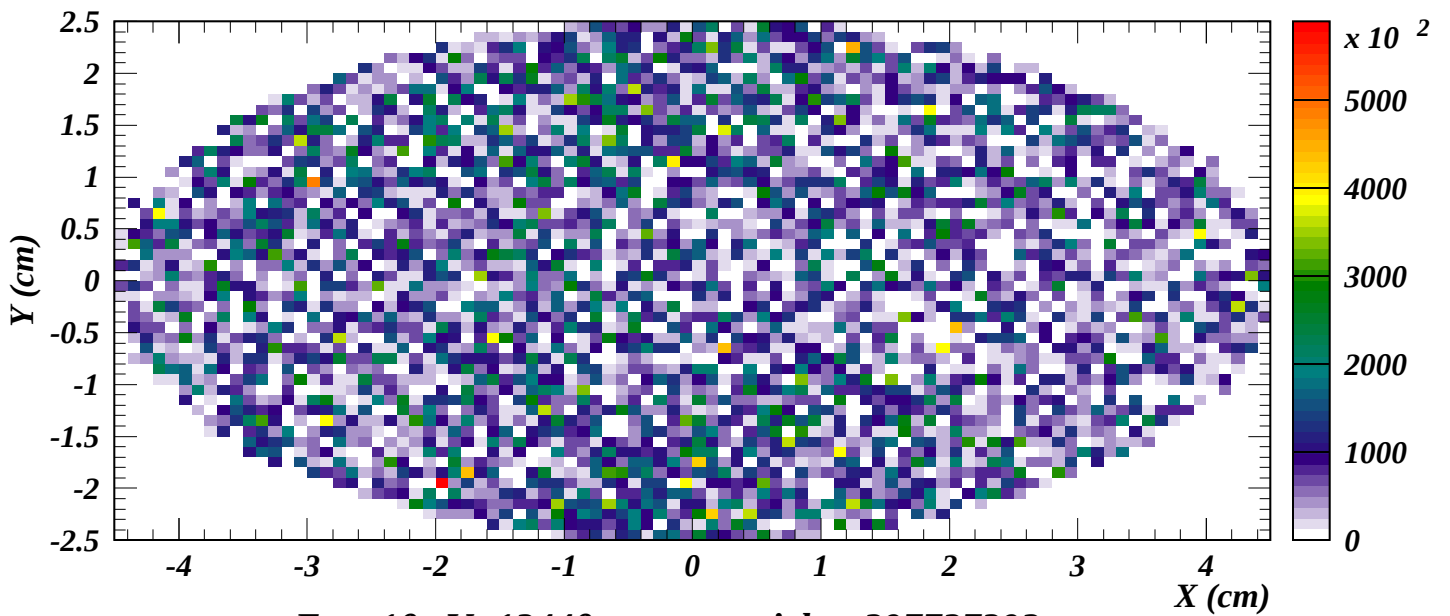


No energy cut: 112508 macroparticles, $2.55157e+09 \text{ e-}$

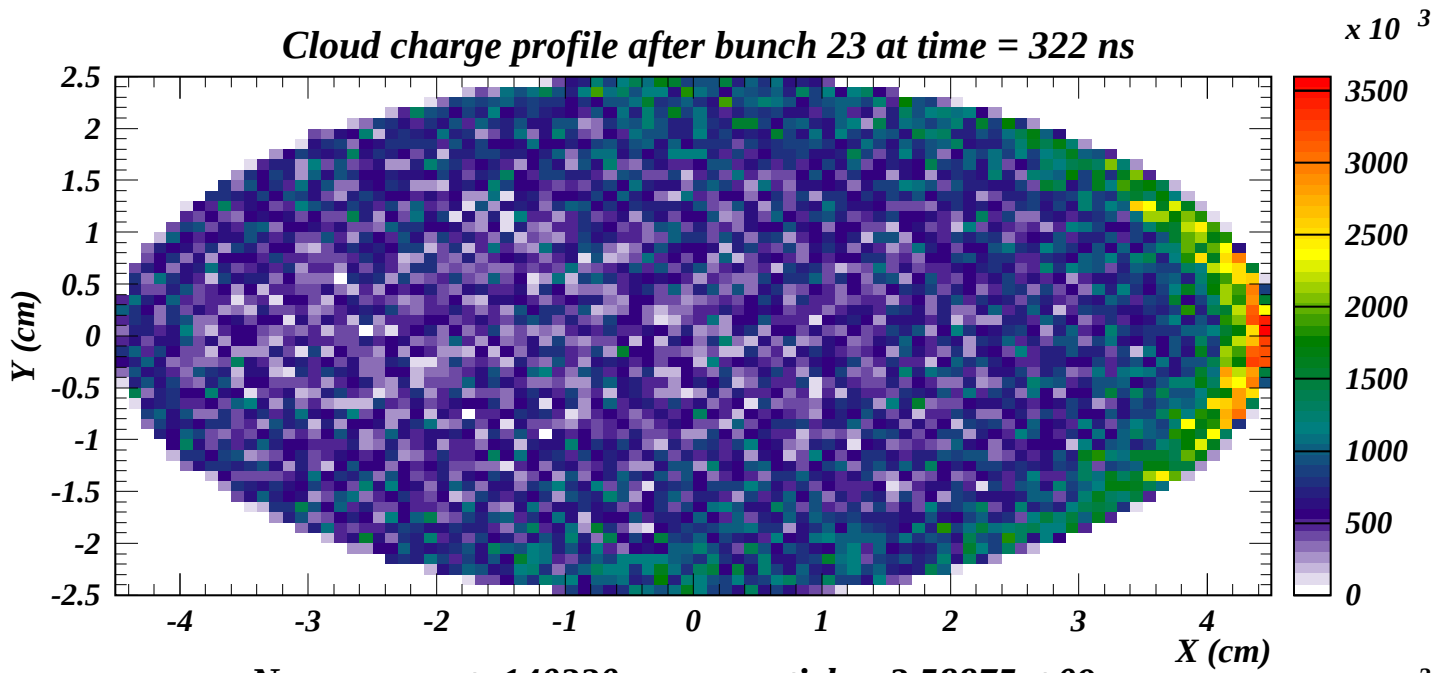


$E_{kin} > 10 \text{ eV}$: 16373 macroparticles, 505717120 e-

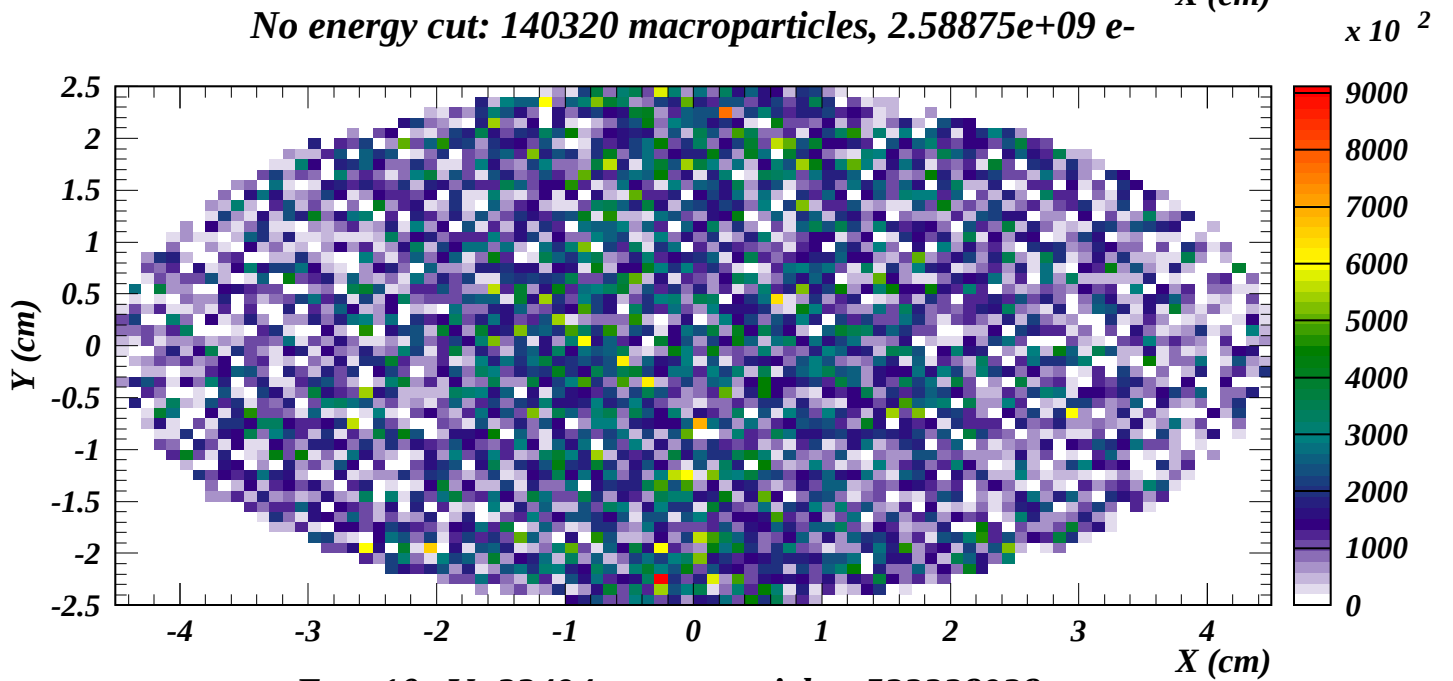
Cloud charge profile after bunch 19 at time = 266 ns*No energy cut: 132434 macroparticles, 3.2648e+09 e-* *$E_{\text{kin}} > 10 \text{ eV}$: 32026 macroparticles, 1017426496 e-*

Cloud charge profile after bunch 21 at time = 294 ns*No energy cut: 123142 macroparticles, 2069845504 e-* *$E_{kin} > 10$ eV: 13440 macroparticles, 297727392 e-*

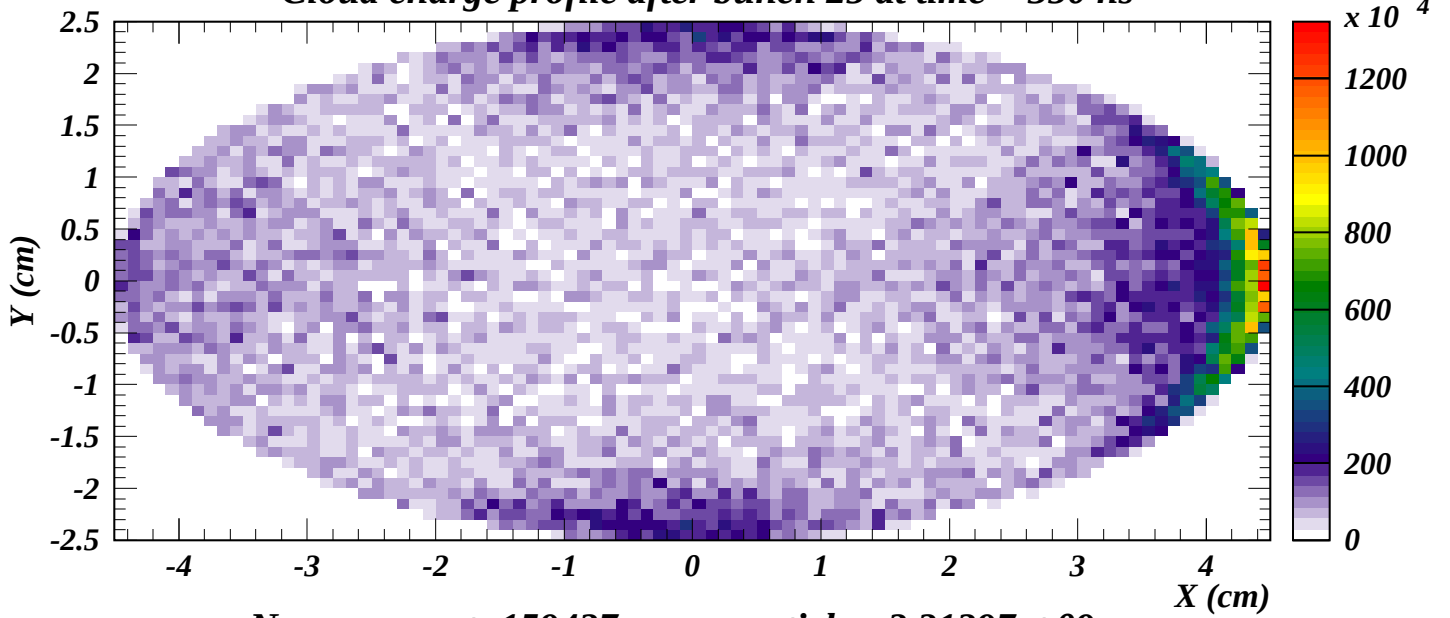
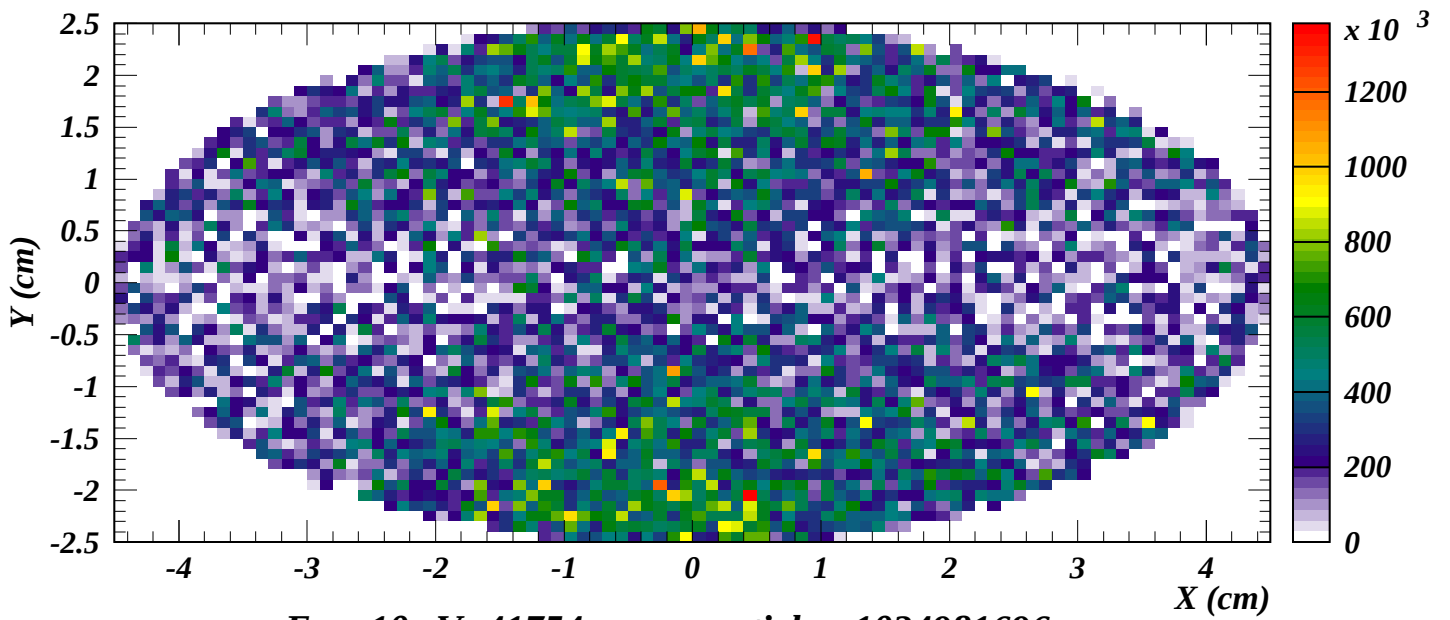
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No energy cut: 140320 macroparticles, 2.58875e+09 e-

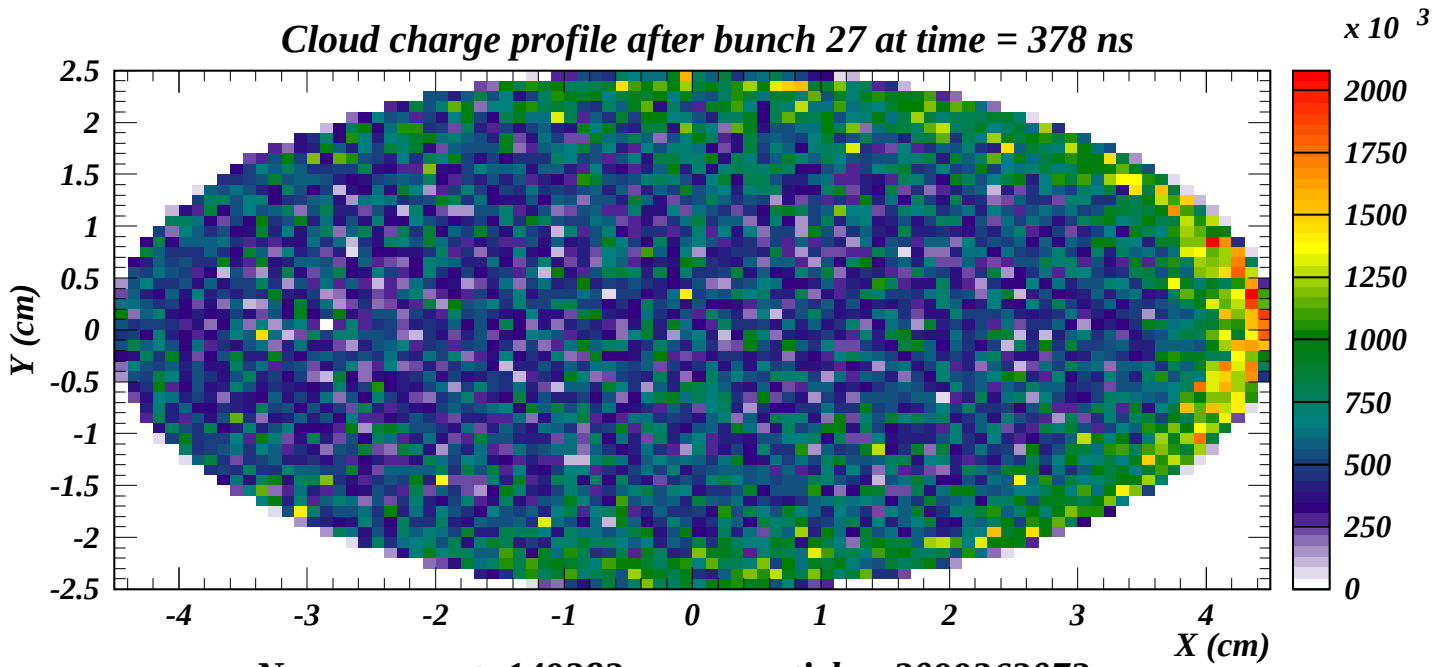


$E_{kin} > 10$ eV: 22494 macroparticles, 523328928 e-

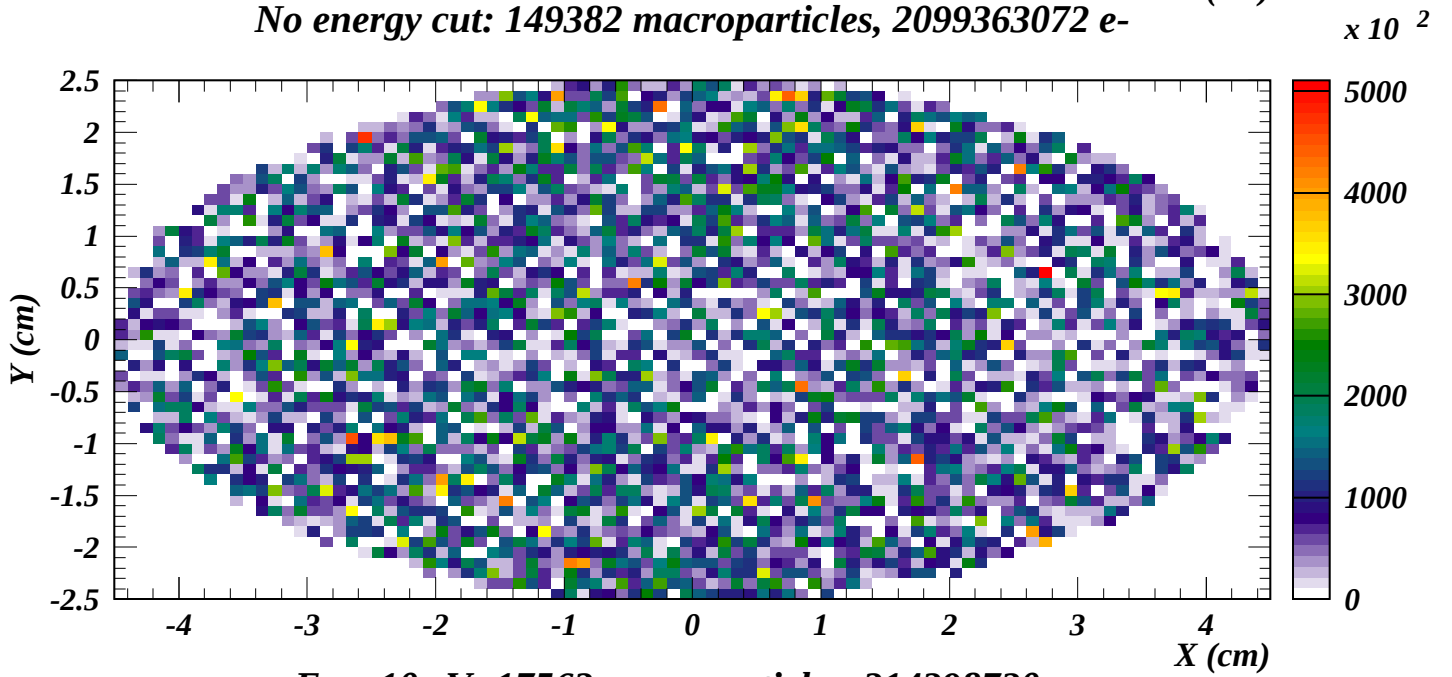
Cloud charge profile after bunch 25 at time = 350 ns*No energy cut: 159427 macroparticles, $3.31397e+09 \text{ e-}$*  *$E_{\text{kin}} > 10 \text{ eV}$: 41754 macroparticles, 1034981696 e-*

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Cloud charge profile after bunch 27 at time = 378 ns

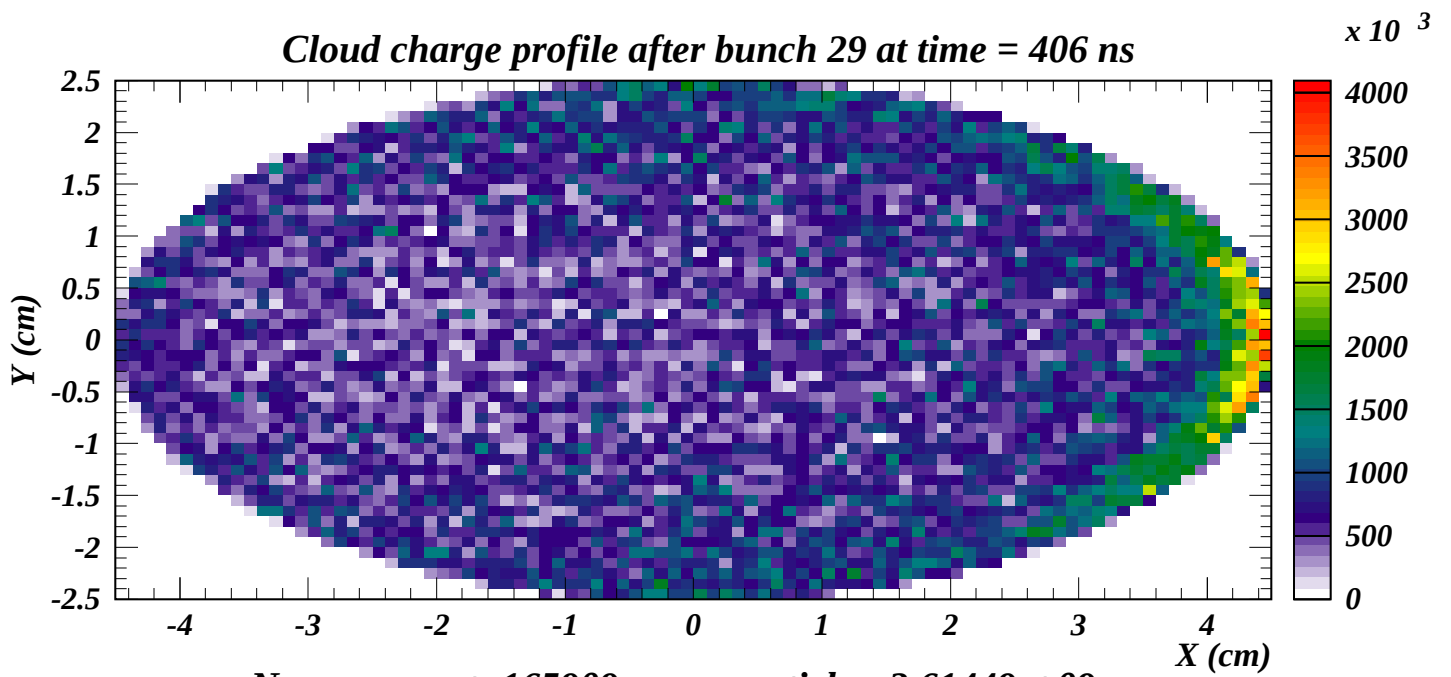


No energy cut: 149382 macroparticles, 2099363072 e⁻

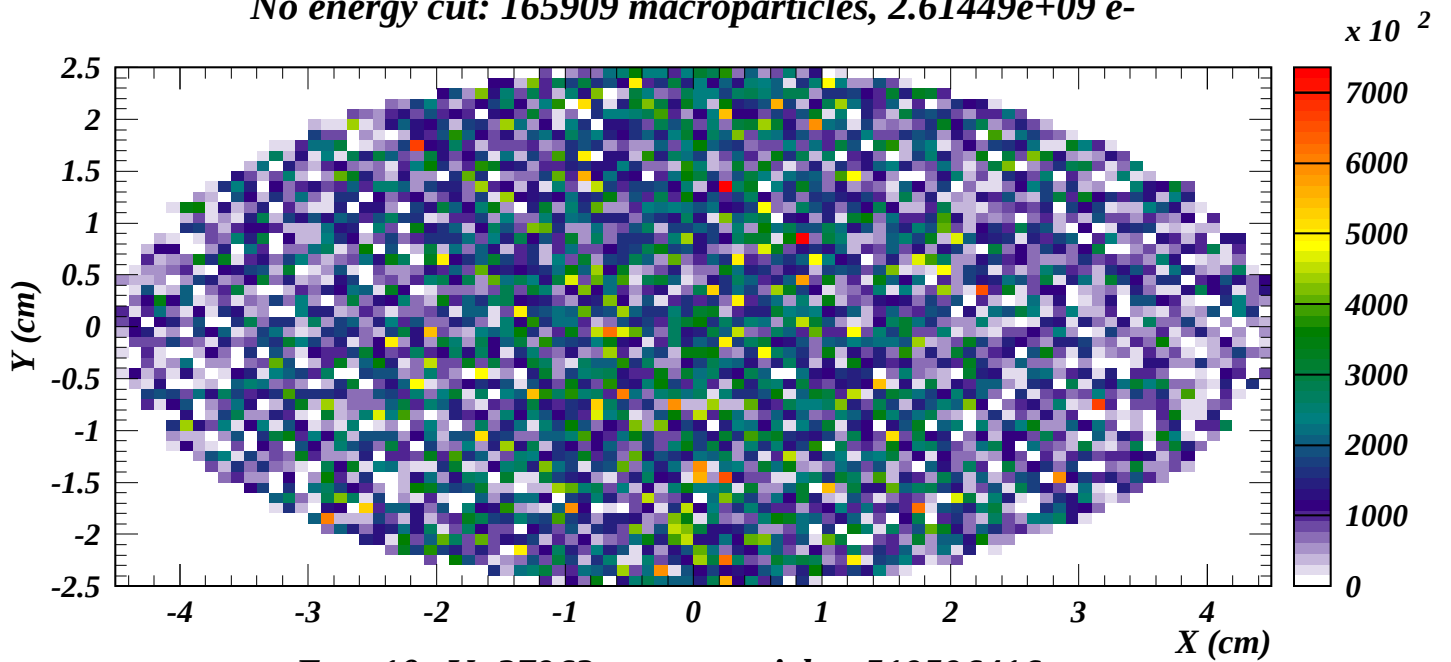


$E_{kin} > 10$ eV: 17563 macroparticles, 314398720 e⁻

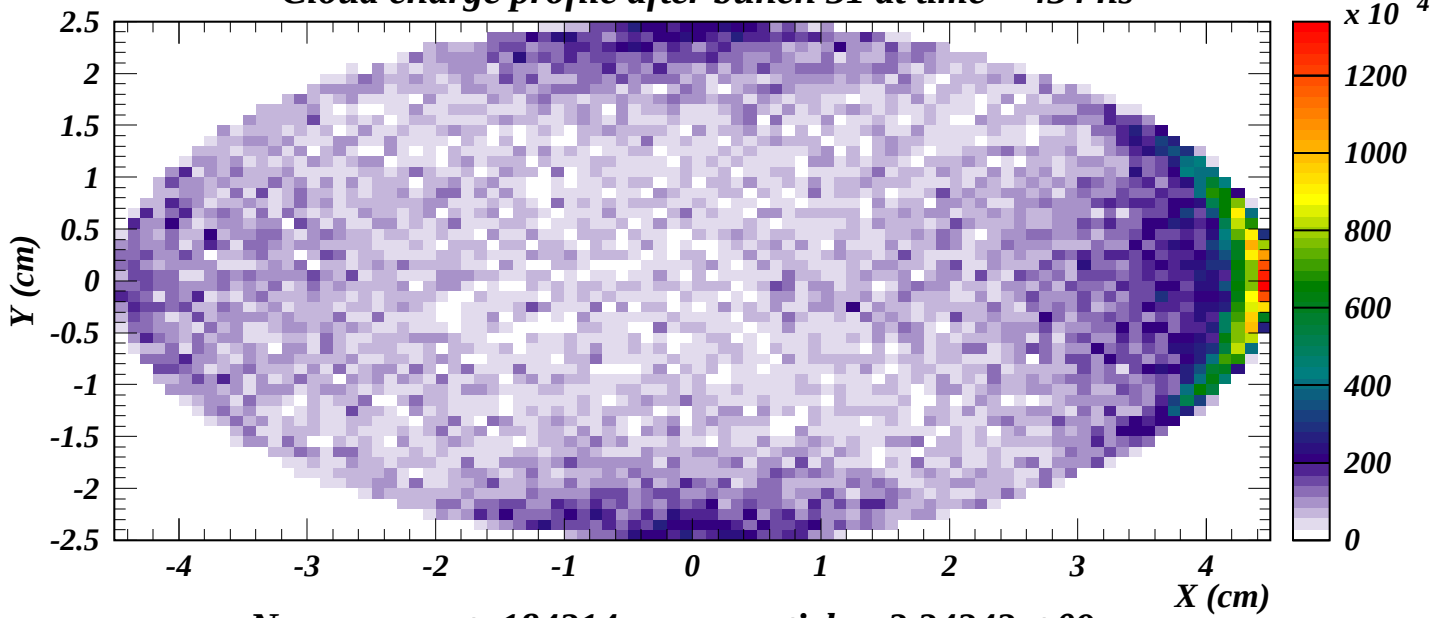
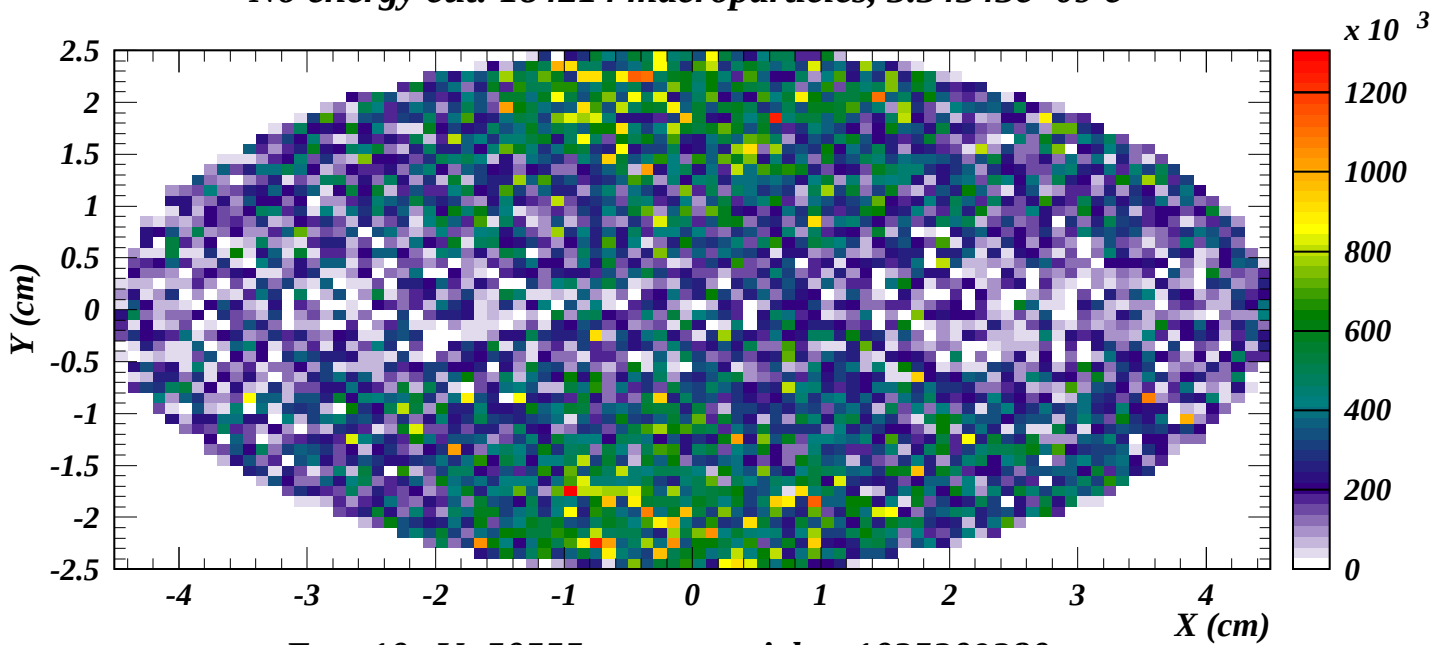
09/12/15 14.31

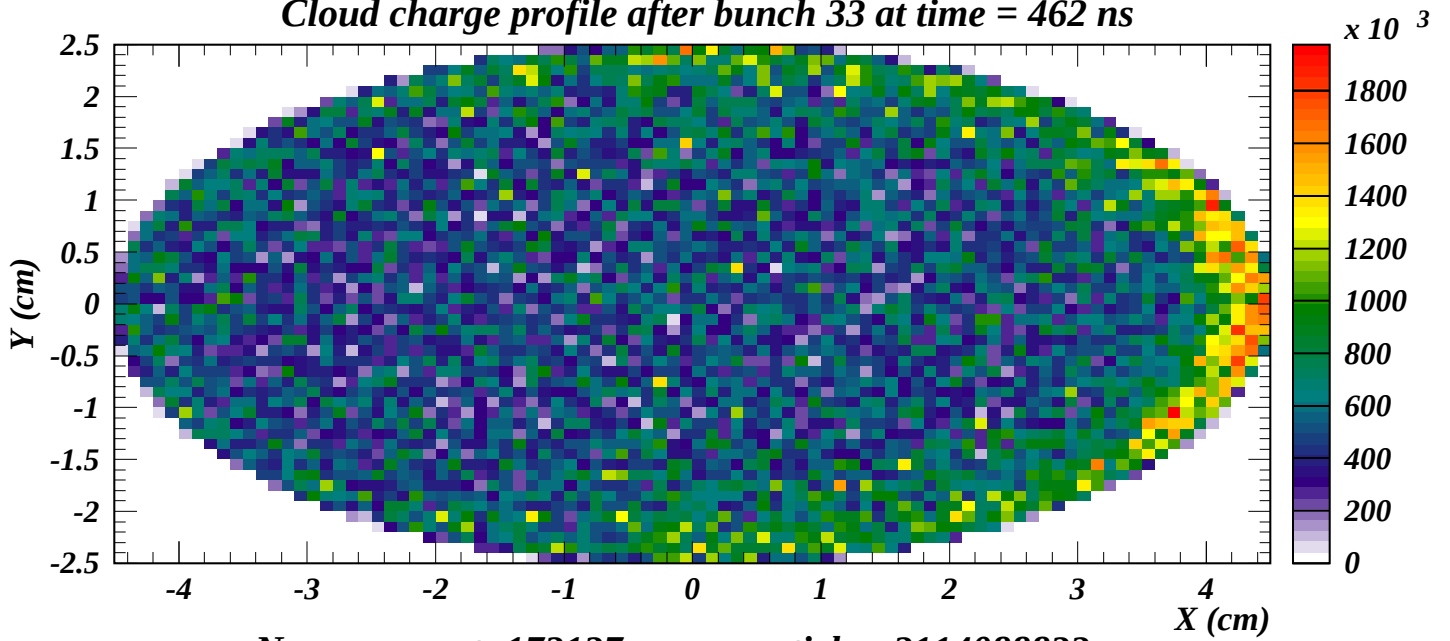
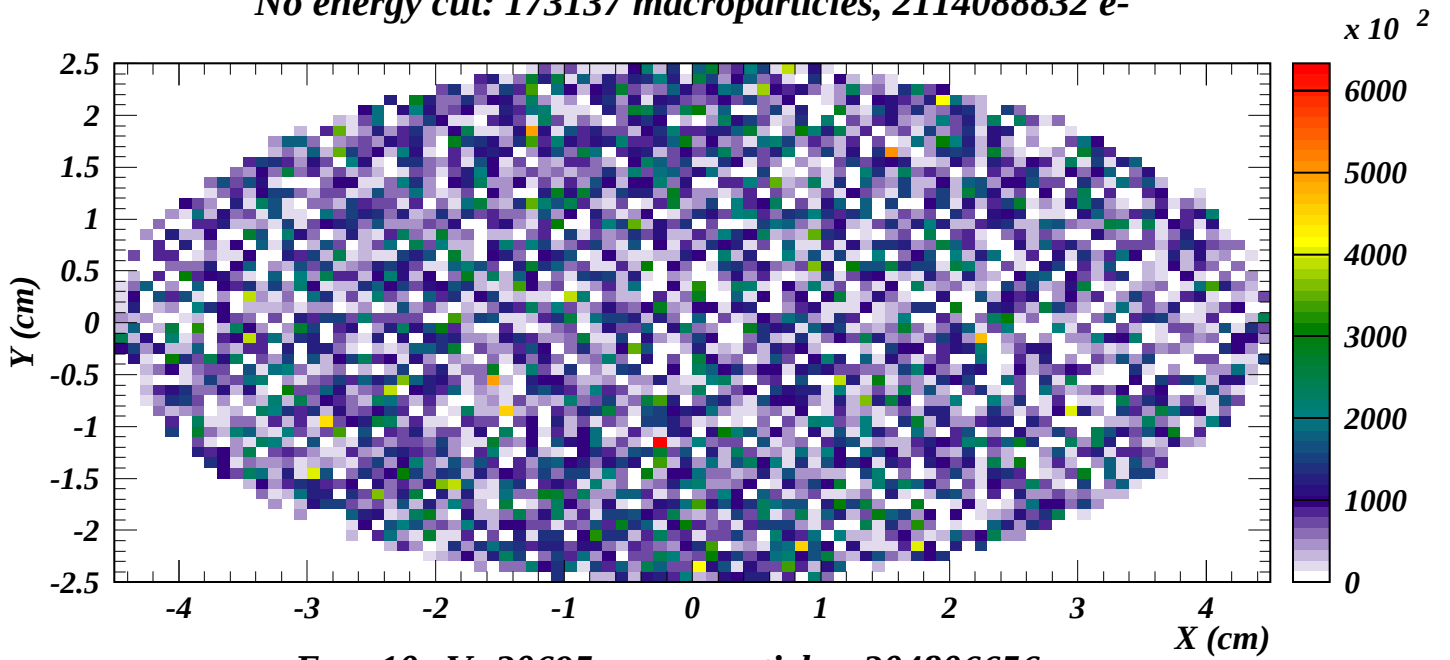


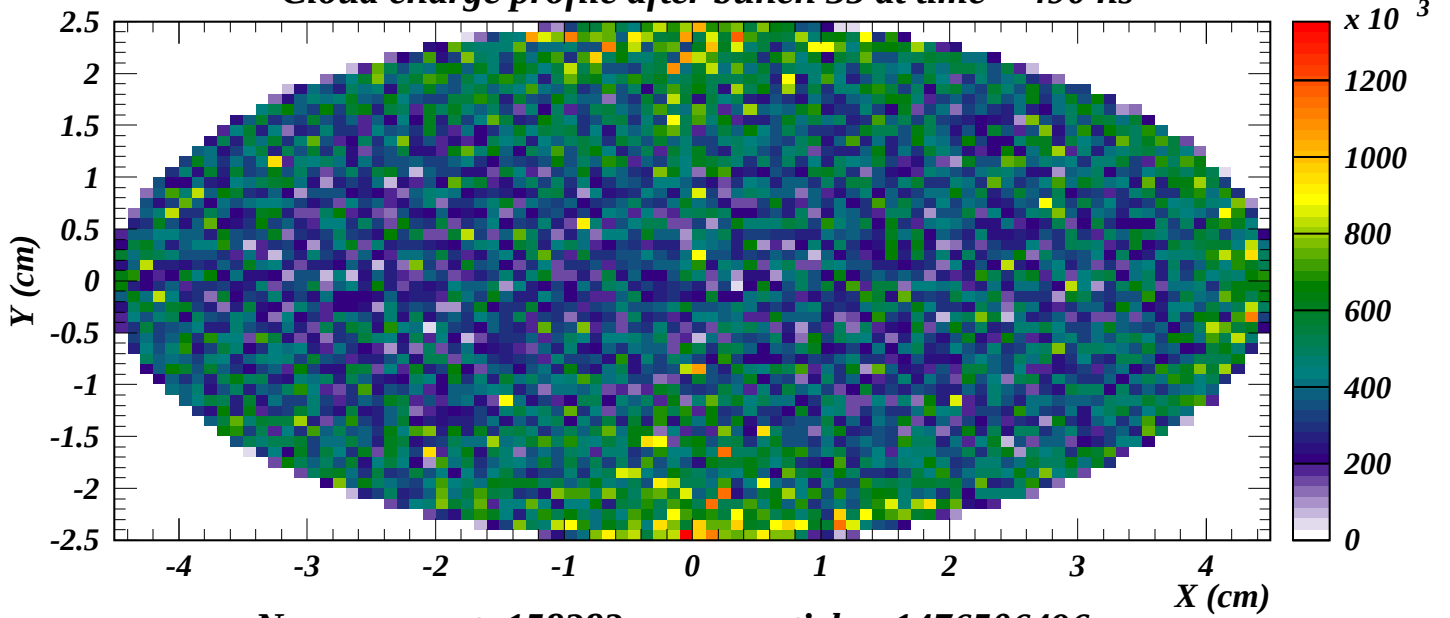
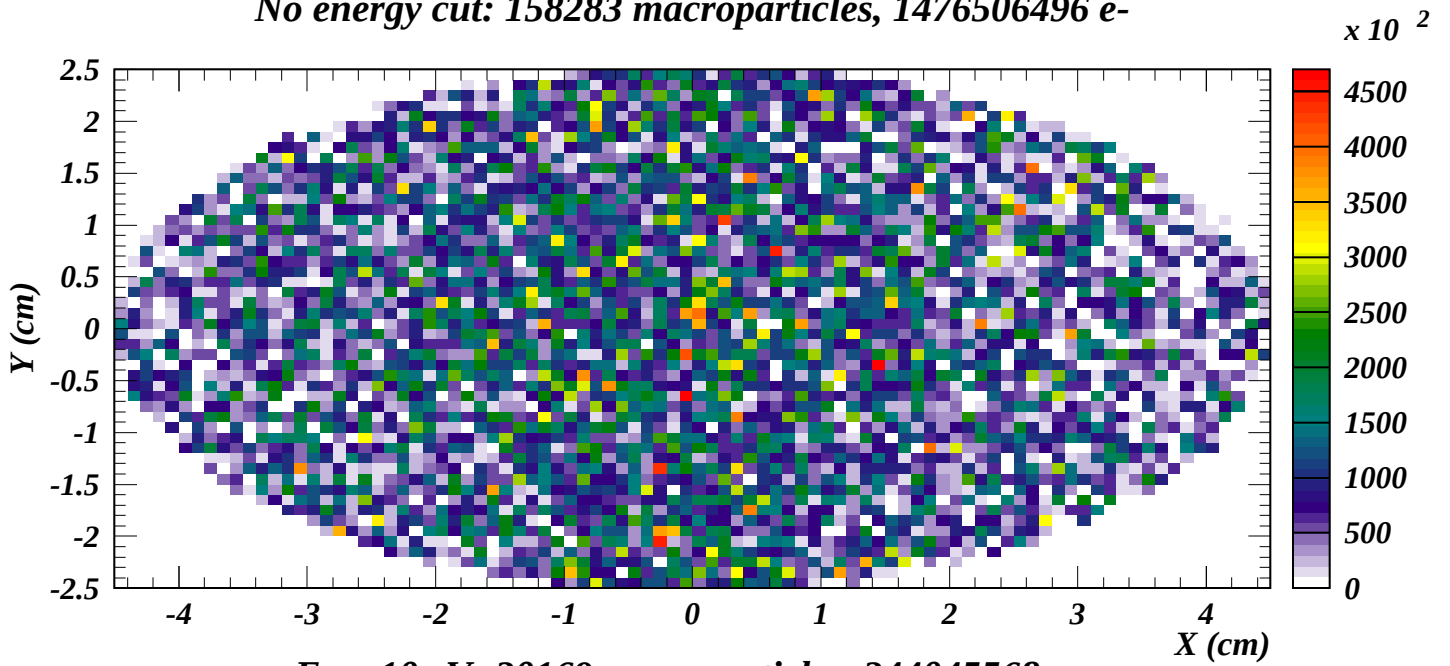
No energy cut: 165909 macroparticles, 2.61449e+09 e-

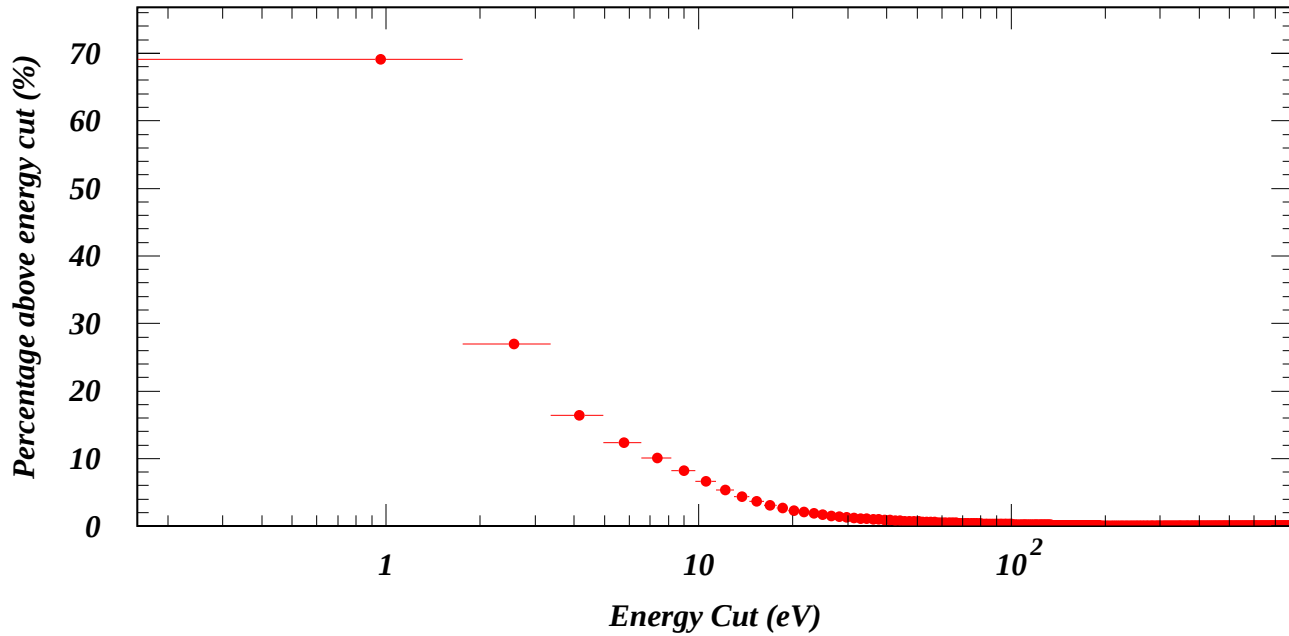
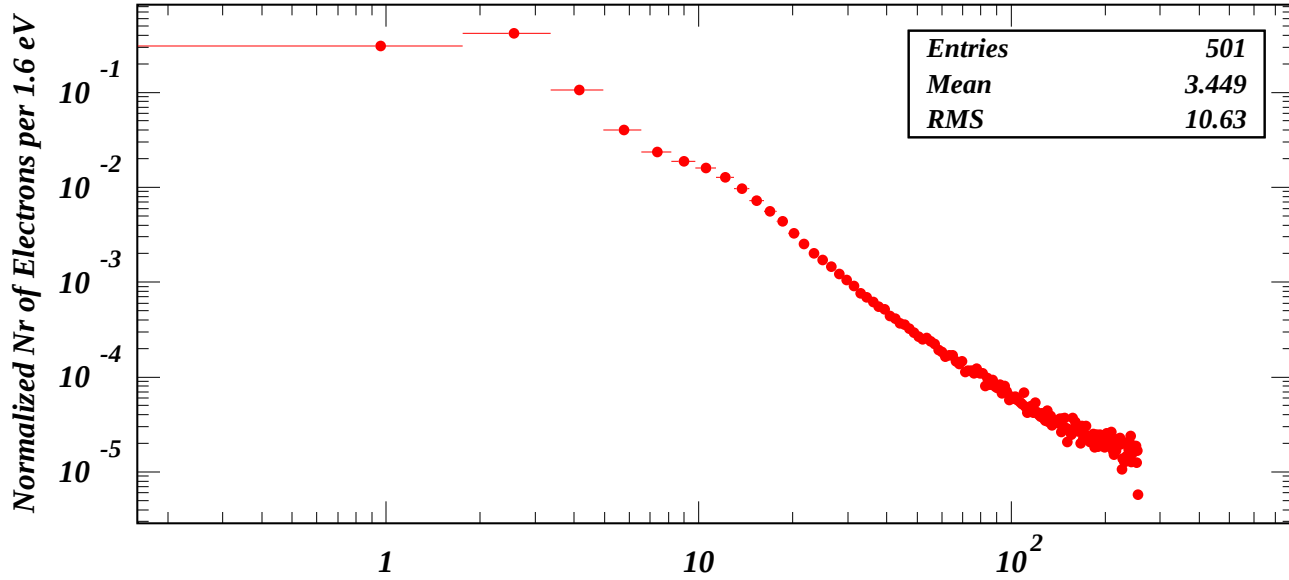


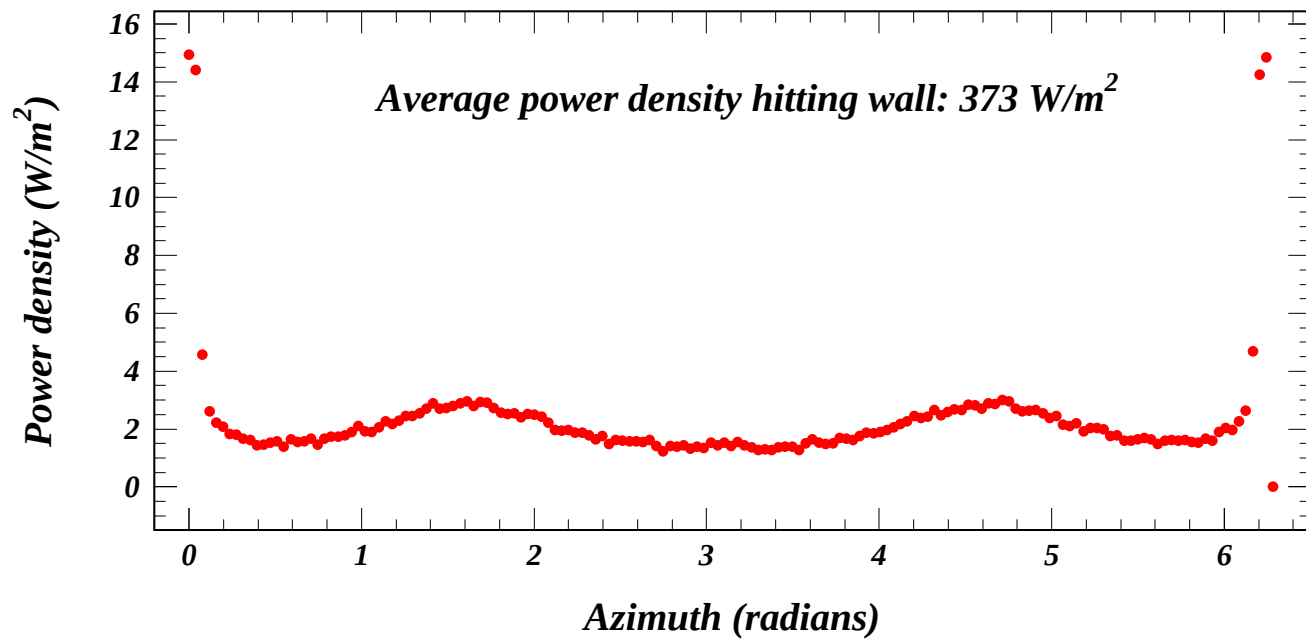
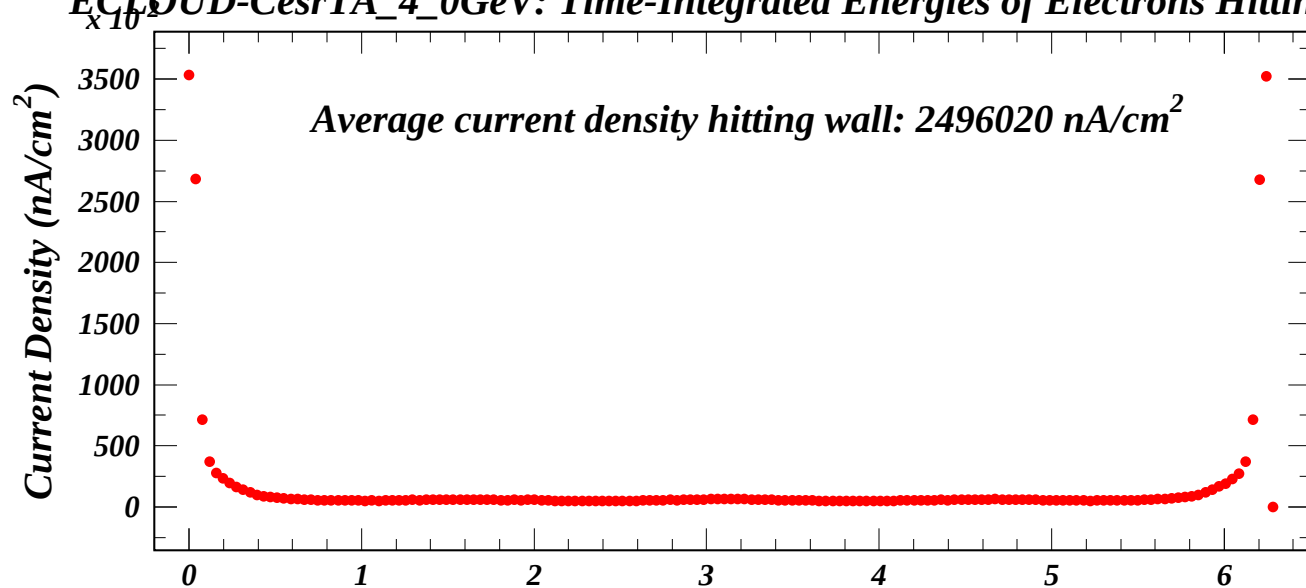
$E_{kin} > 10$ eV: 27963 macroparticles, 519596416 e-

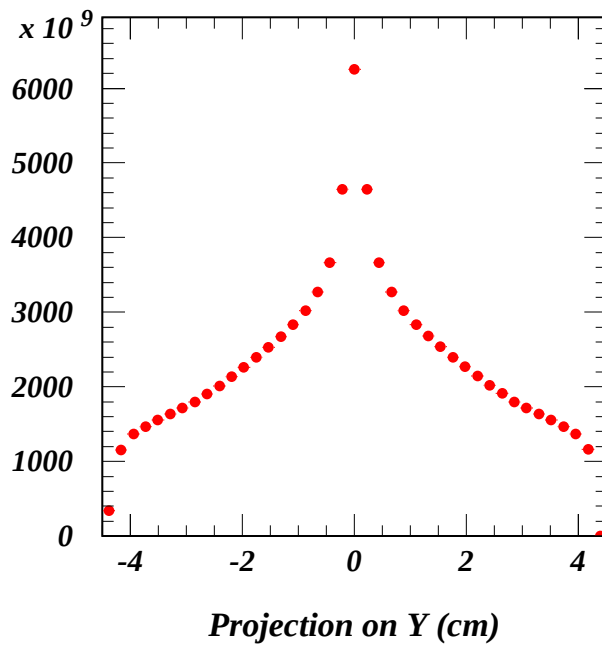
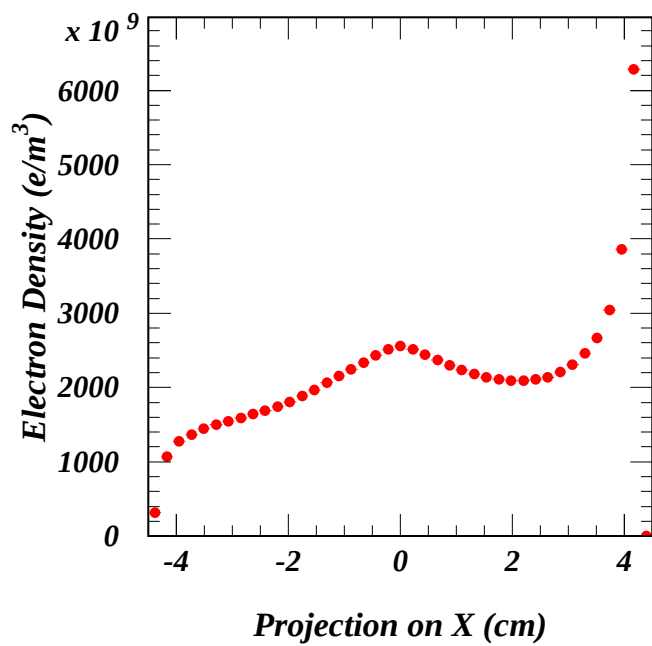
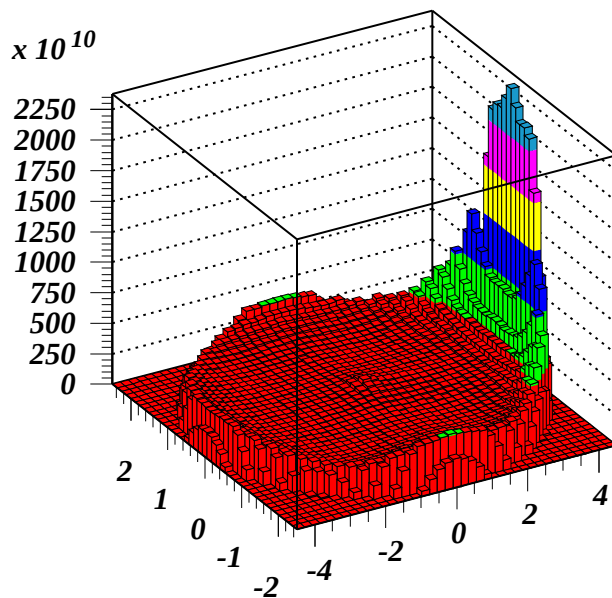
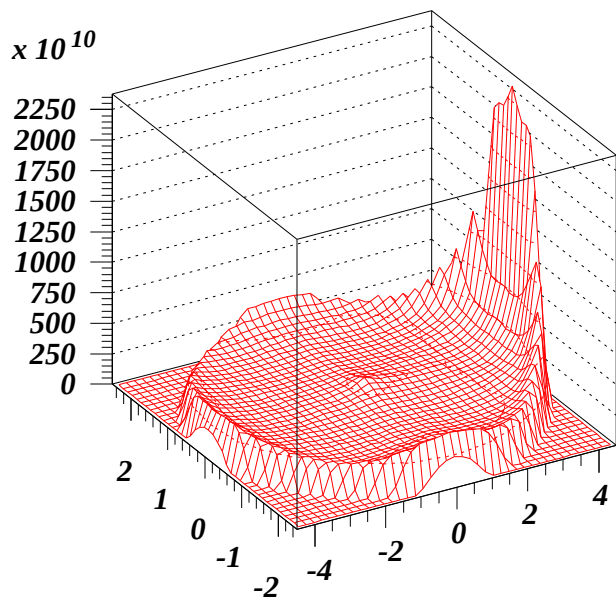
Cloud charge profile after bunch 31 at time = 434 ns*No energy cut: 184214 macroparticles, 3.34343e+09 e-* *$E_{kin} > 10$ eV: 50555 macroparticles, 1035209280 e-*

Cloud charge profile after bunch 33 at time = 462 ns*No energy cut: 173137 macroparticles, 2114088832 e⁻* *$E_{kin} > 10$ eV: 20695 macroparticles, 304806656 e⁻*

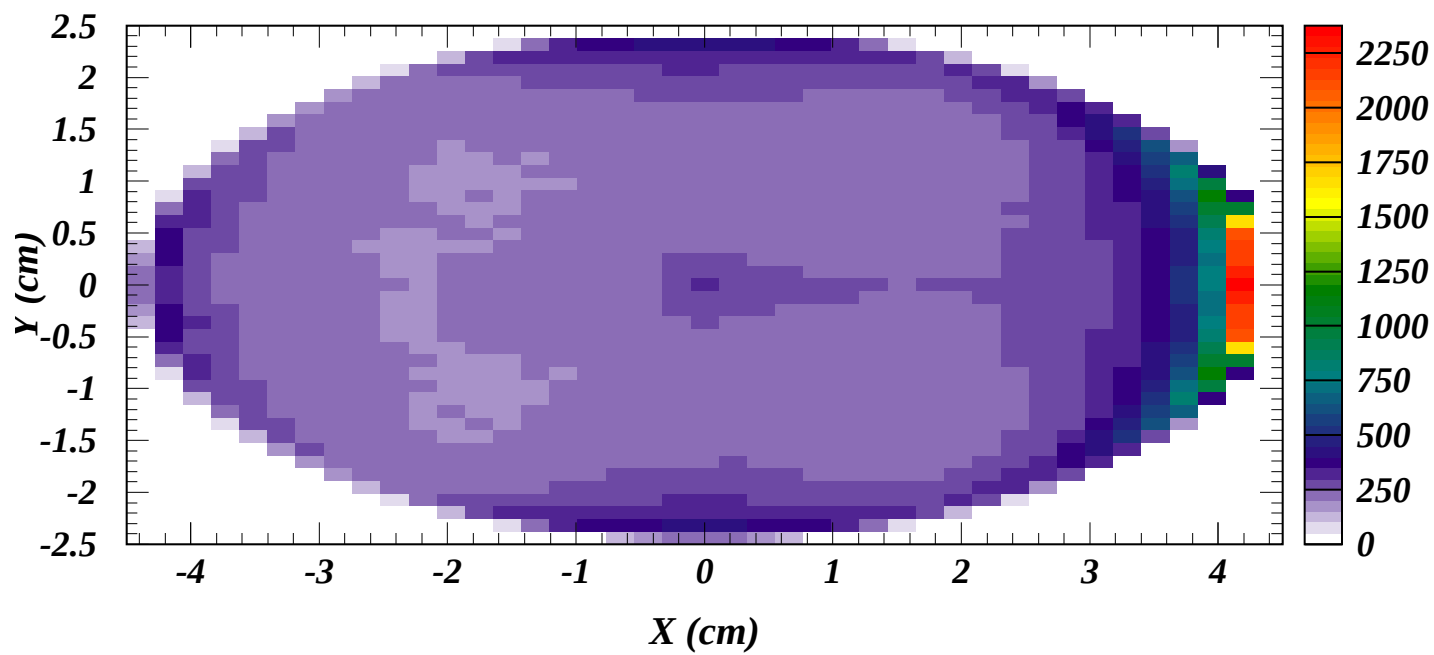
Cloud charge profile after bunch 35 at time = 490 ns*No energy cut: 158283 macroparticles, 1476506496 e-* *$E_{kin} > 10$ eV: 30169 macroparticles, 344045568 e-*

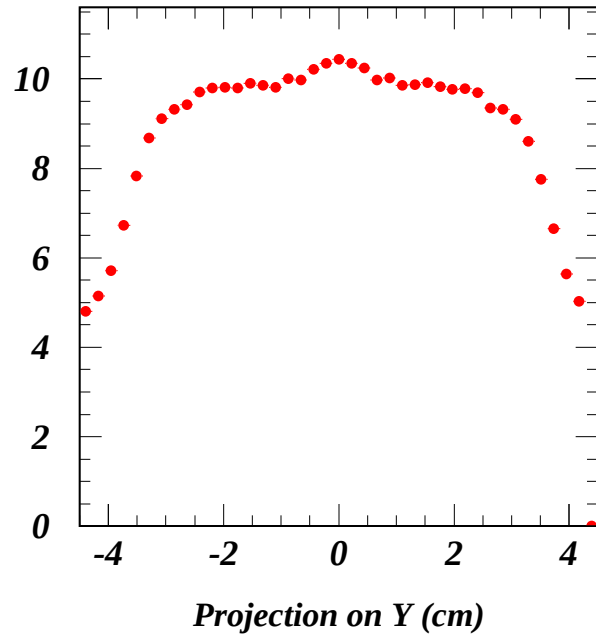
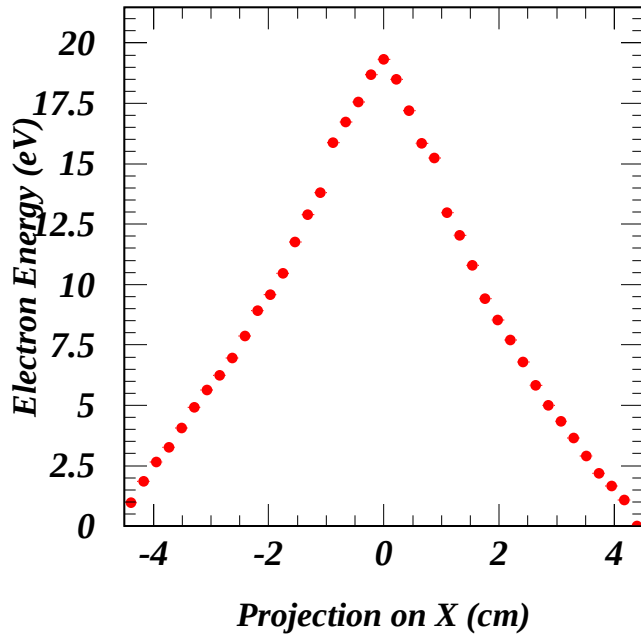
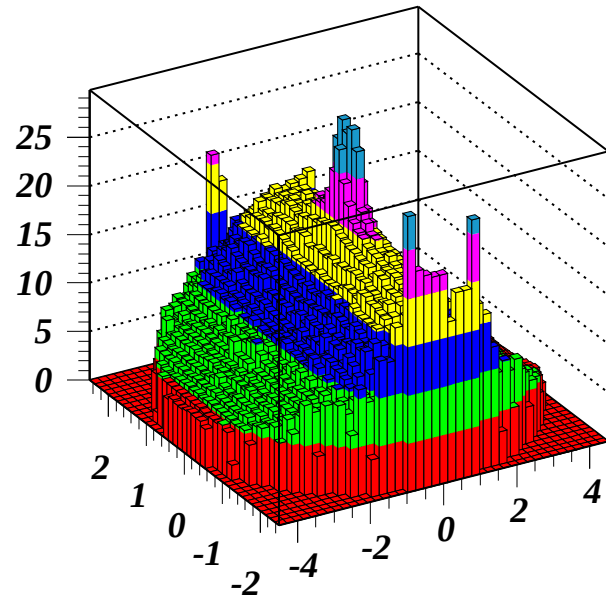
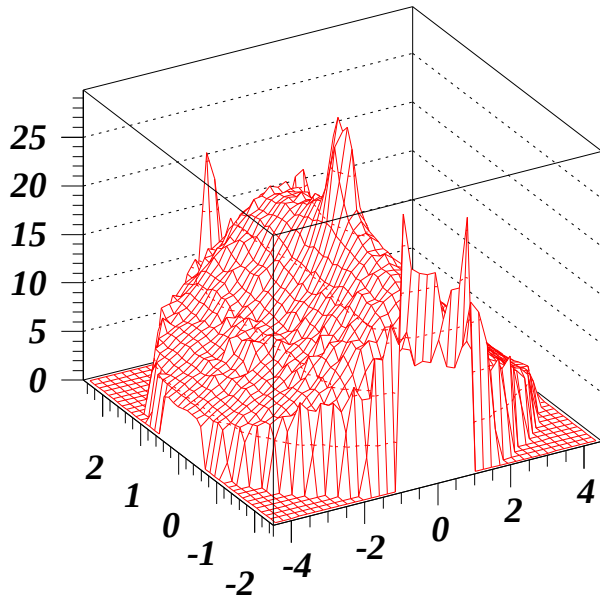
ECLLOUD-CesrTA_4_0GeV: Time-Integrated Energies of Electrons Hitting Wall

ECLLOUD-CesrTA_4_0GeV: Time-Integrated Energies of Electrons Hitting Wall

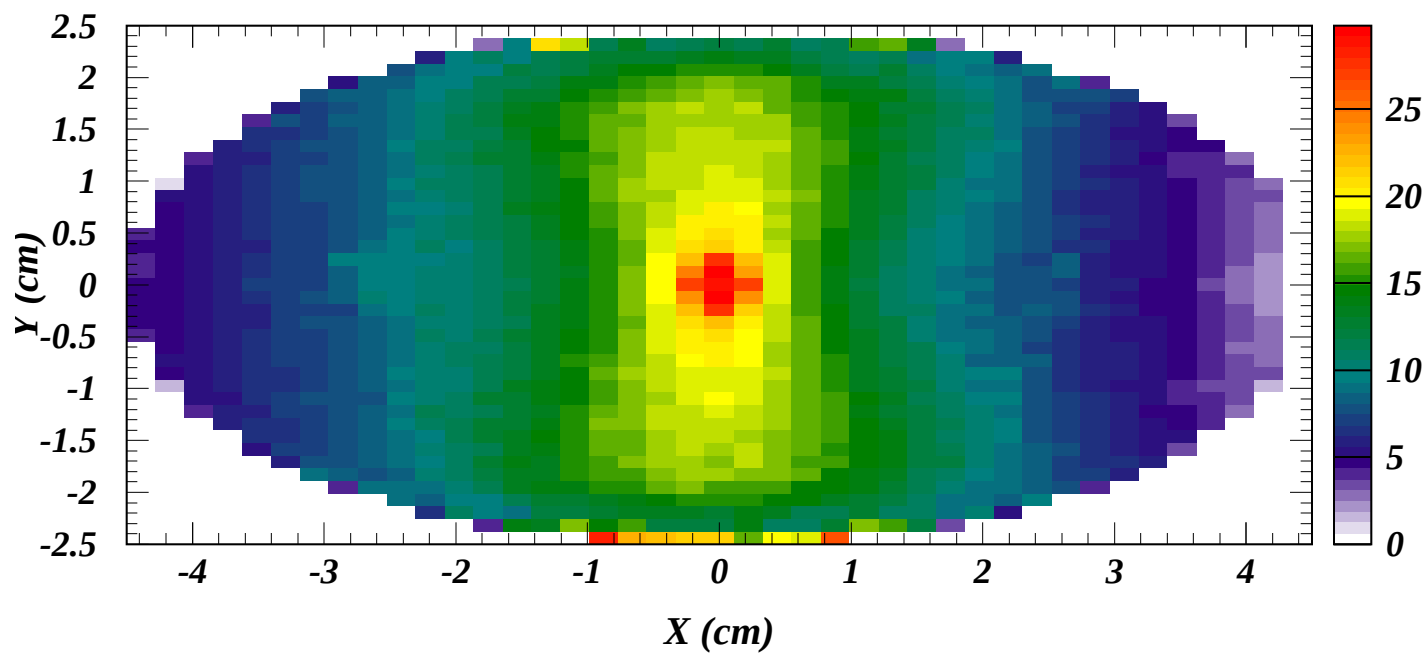
ECLOUD-CesrTA_4_0GeV: Cloud Density (e/m^3) Averaged Over 976.02 ns

09/12/15 14.31
ECLOUD-CesrTA_4_0GeV: Cloud Density (e/m^3) Averaged Over 976.02 ns $\times 10^{10}$



ECLOUD-CesrTA_4_0GeV: Electron Energies (eV) Averaged Over 976.02 ns

09/12/15 14.31
ECLLOUD-CesrTA_4_0GeV: Electron Energies (eV) Averaged Over 976.02 ns



CesrTA quadrupole 4 GeV - Simulated Chicane RFA Collector Currents (μA)