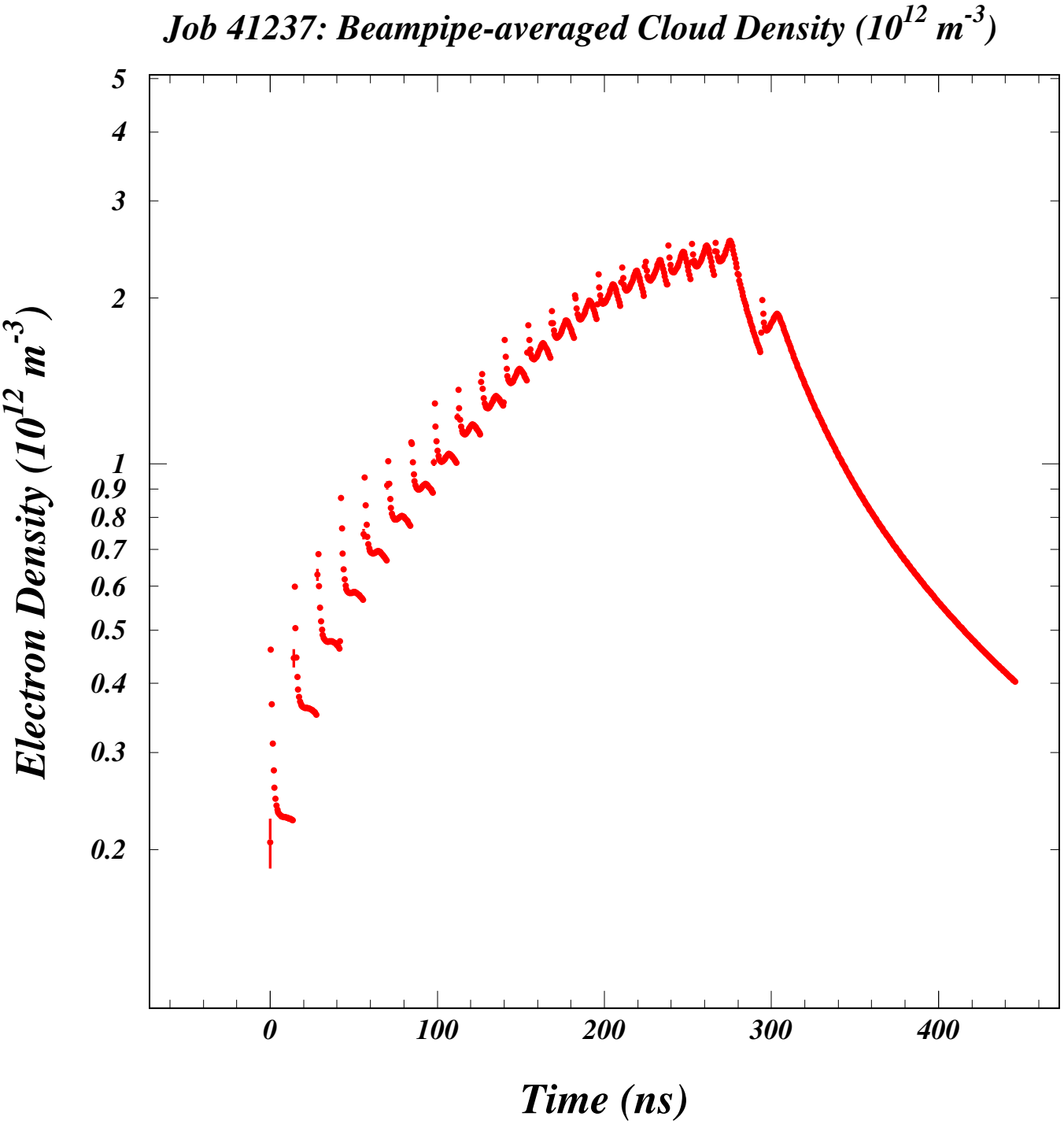
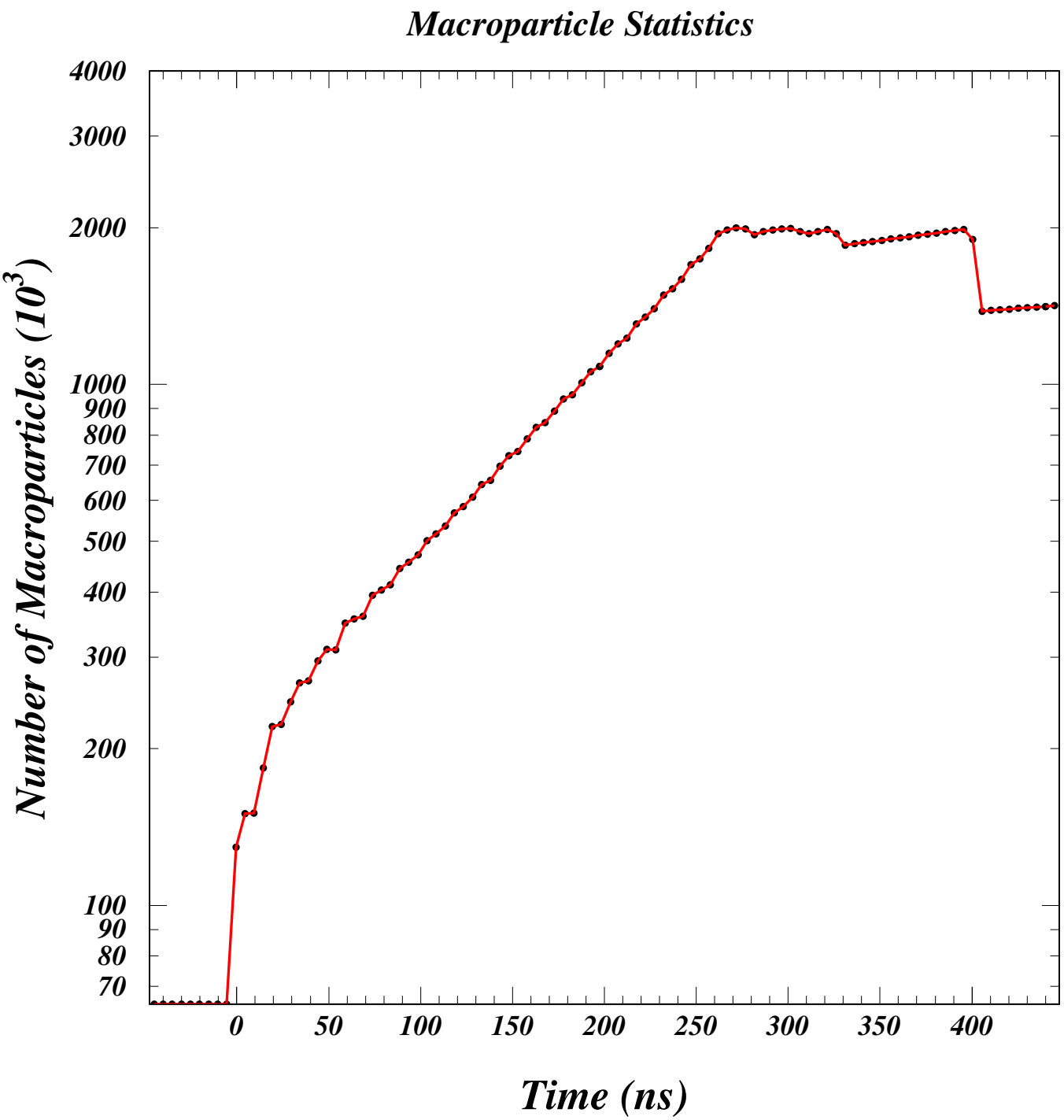

Job 41237: Beampipe-averaged Cloud Density (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
5
4
3
2
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400
Time (ns)


Macroparticle Statistics
Number of Macroparticles (10^3)
4000
3000
2000
1000
900
800
700
600
500
400
300
200
100
90
80
70
0
50
100
150
200
250
300
350
400
Time (ns)

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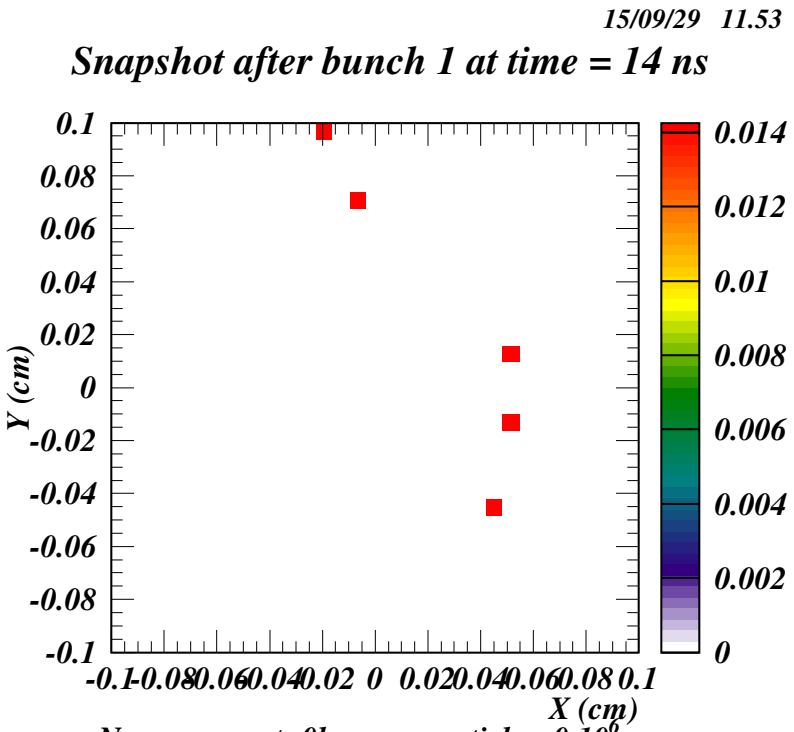
Snapshot after bunch 1 at time = 14 ns
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
Y (cm)
-0.1 -0.08 -0.06 -0.04 -0.02 0 0.02 0.04 0.06 0.08 0.1
X (cm)
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
No energy cut: 0k macroparticles, 0 10^6 e-

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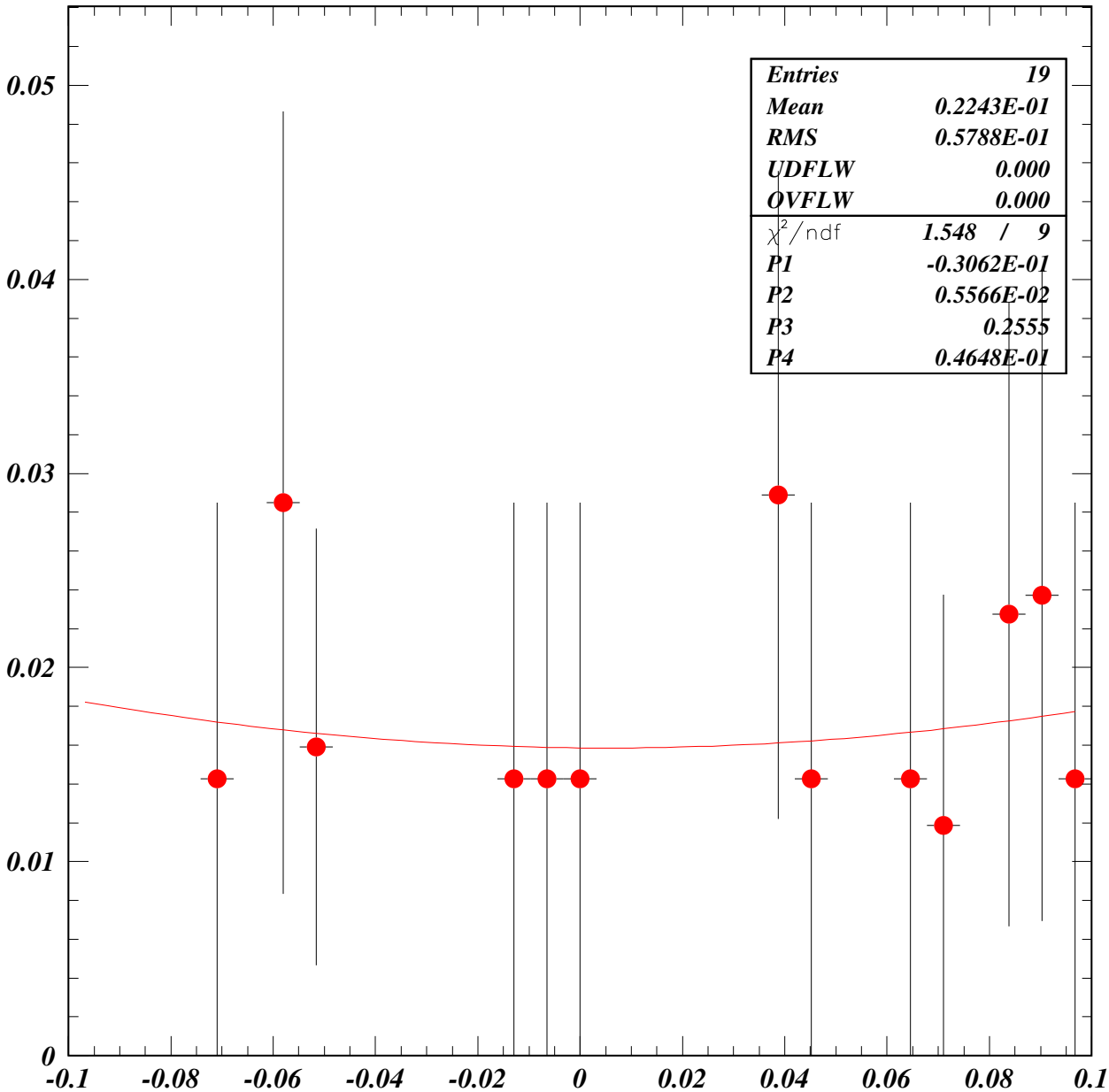
Job 41237: Time slice 2 at time 28 ns



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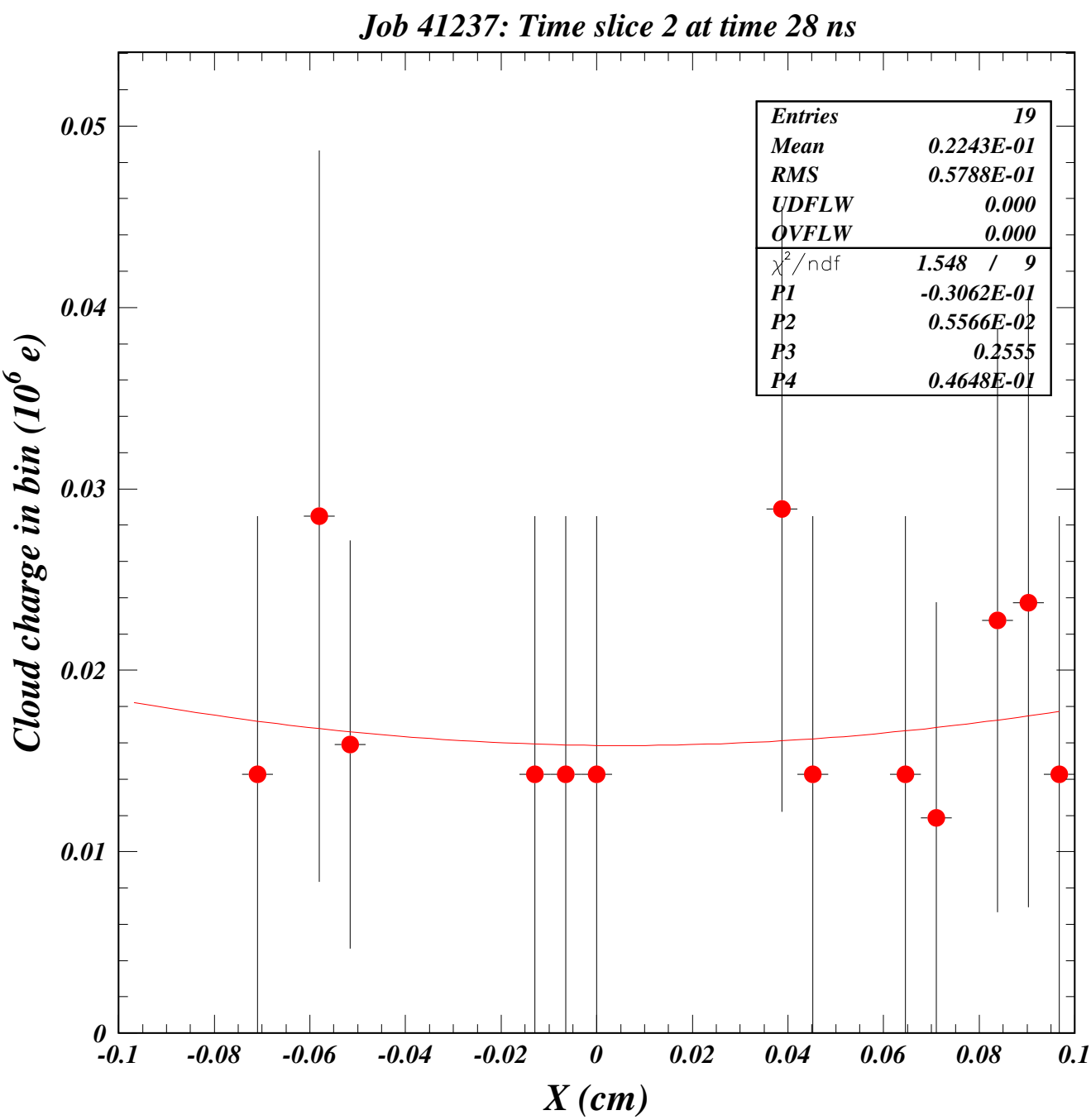
Job 41237: Time slice 2 at time 28 ns
Entries 19
Mean 0.2243E-01
RMS 0.5788E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 1.548 / 9
P1 -0.3062E-01
P2 0.5566E-02
P3 0.2555
P4 0.4648E-01
Cloud charge in bin (10⁶ e)
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
X (cm)

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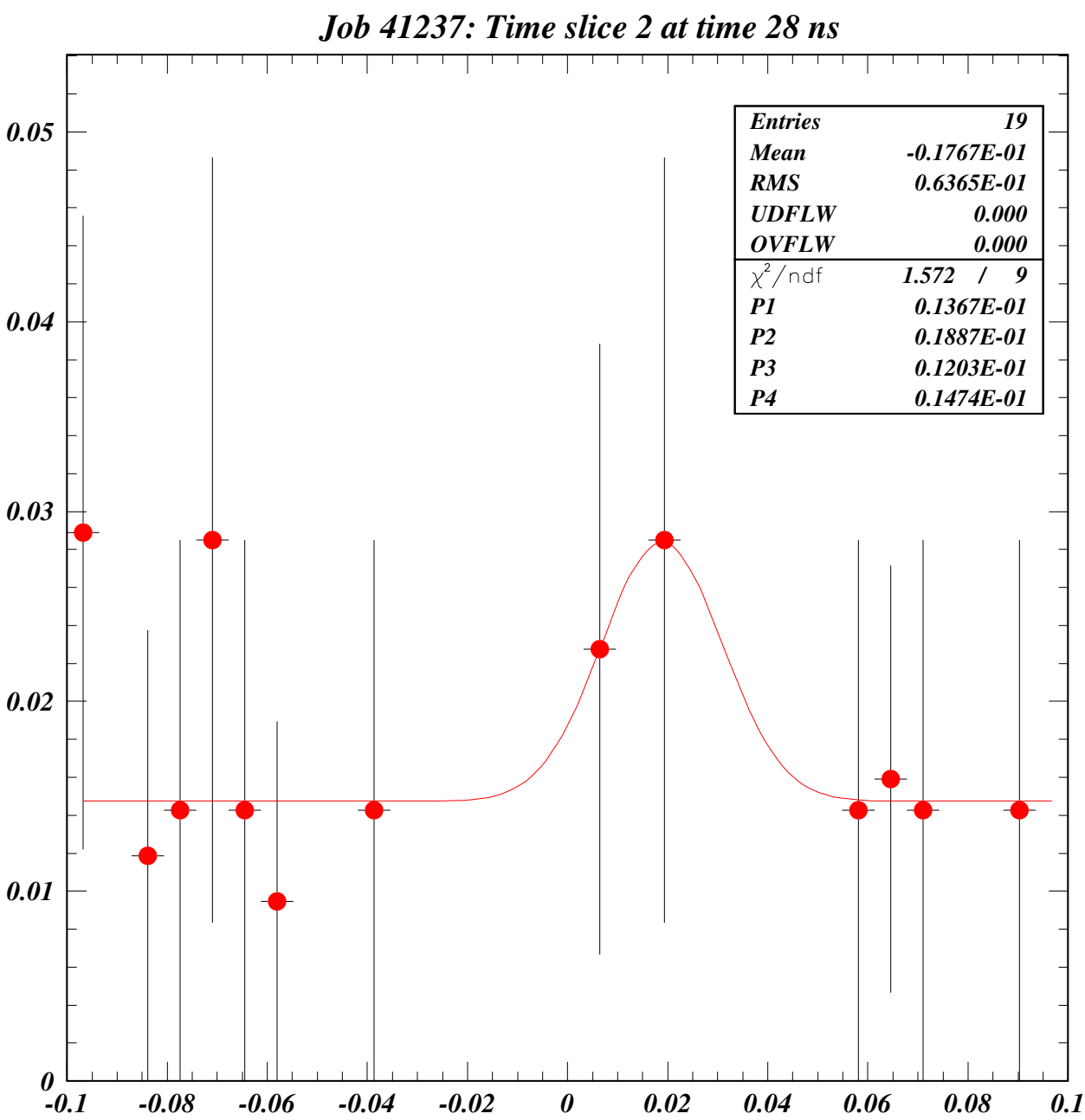
Job 41237: Time slice 2 at time 28 ns
Entries 19
Mean -0.1767E-01
RMS 0.6365E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 1.572 / 9
P1 0.1367E-01
P2 0.1887E-01
P3 0.1203E-01
P4 0.1474E-01
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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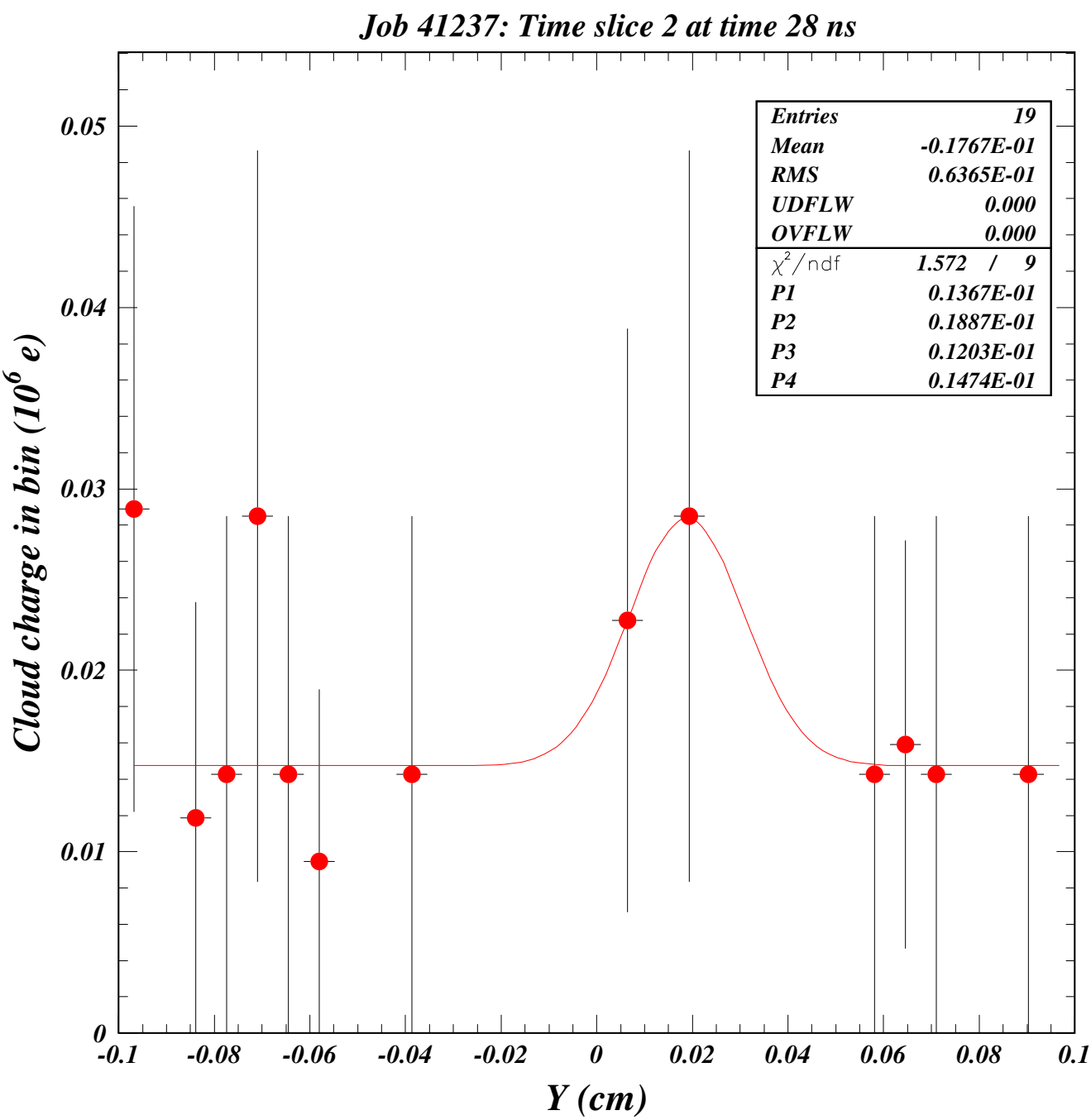
Job 41237: Time slice 2 at time 28 ns
Entries 19
Mean -0.1767E-01
RMS 0.6365E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 1.572 / 9
P1 0.1367E-01
P2 0.1887E-01
P3 0.1203E-01
P4 0.1474E-01
Cloud charge in bin (10⁶ e)
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
Y (cm)

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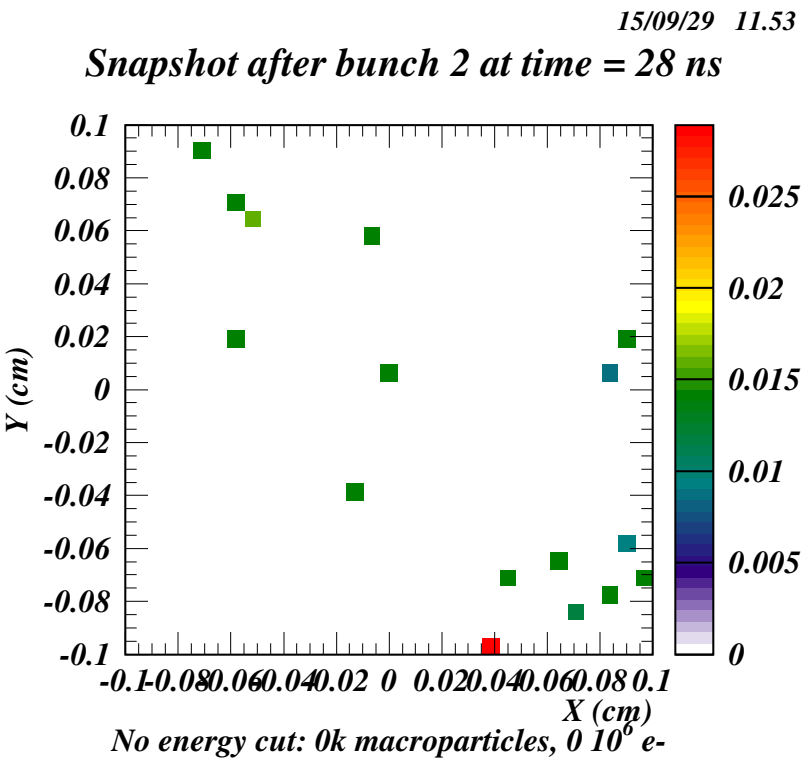
Snapshot after bunch 2 at time = 28 ns
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
Y (cm)
-0.1 -0.08 -0.06 -0.04 -0.02 0 0.02 0.04 0.06 0.08 0.1
X (cm)
0.025
0.02
0.015
0.01
0.005
0
No energy cut: 0k macroparticles, 0 10^6 e-

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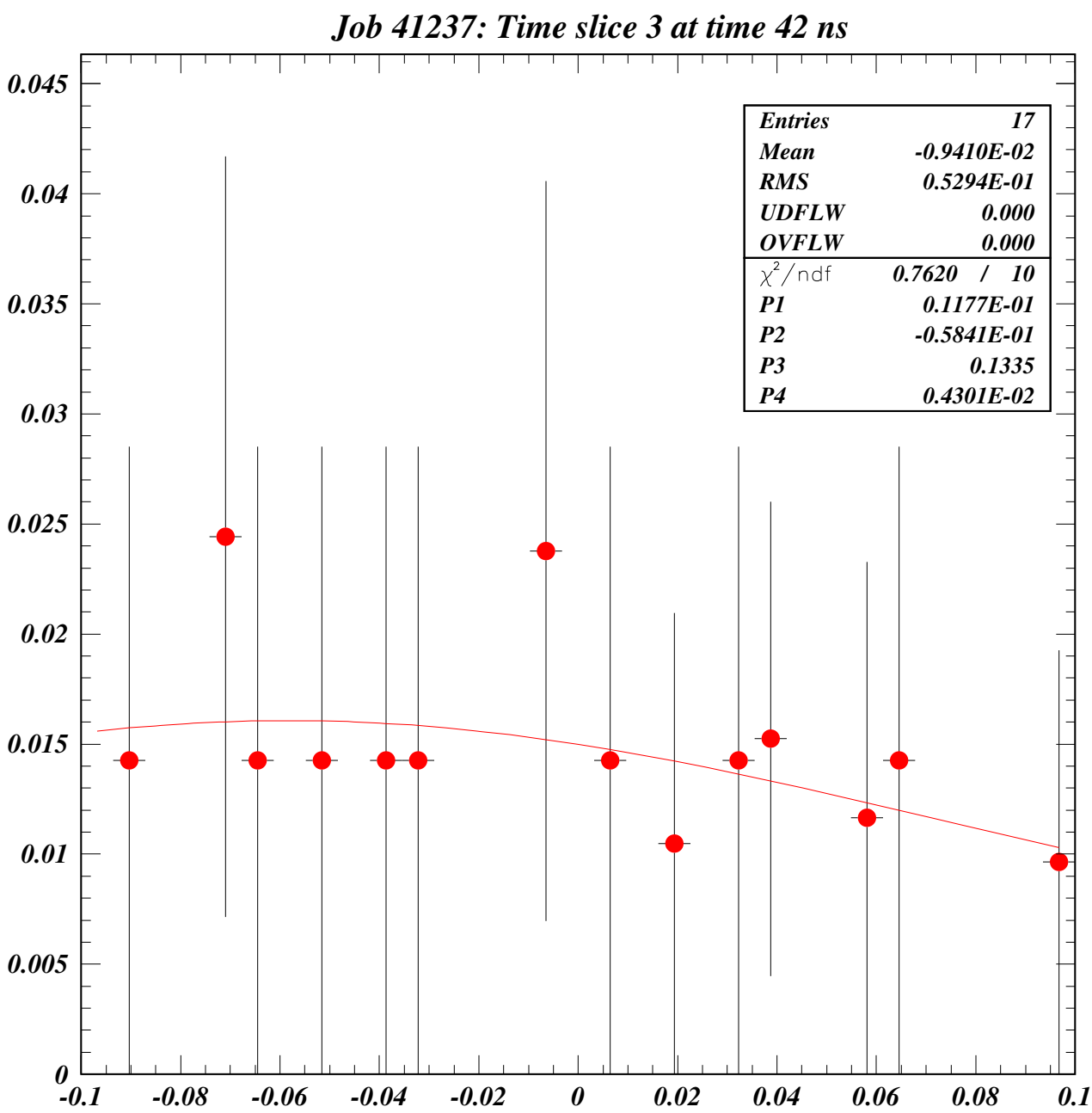
Job 41237: Time slice 3 at time 42 ns
Entries 17
Mean -0.9410E-02
RMS 0.5294E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 0.7620 / 10
P1 0.1177E-01
P2 -0.5841E-01
P3 0.1335
P4 0.4301E-02
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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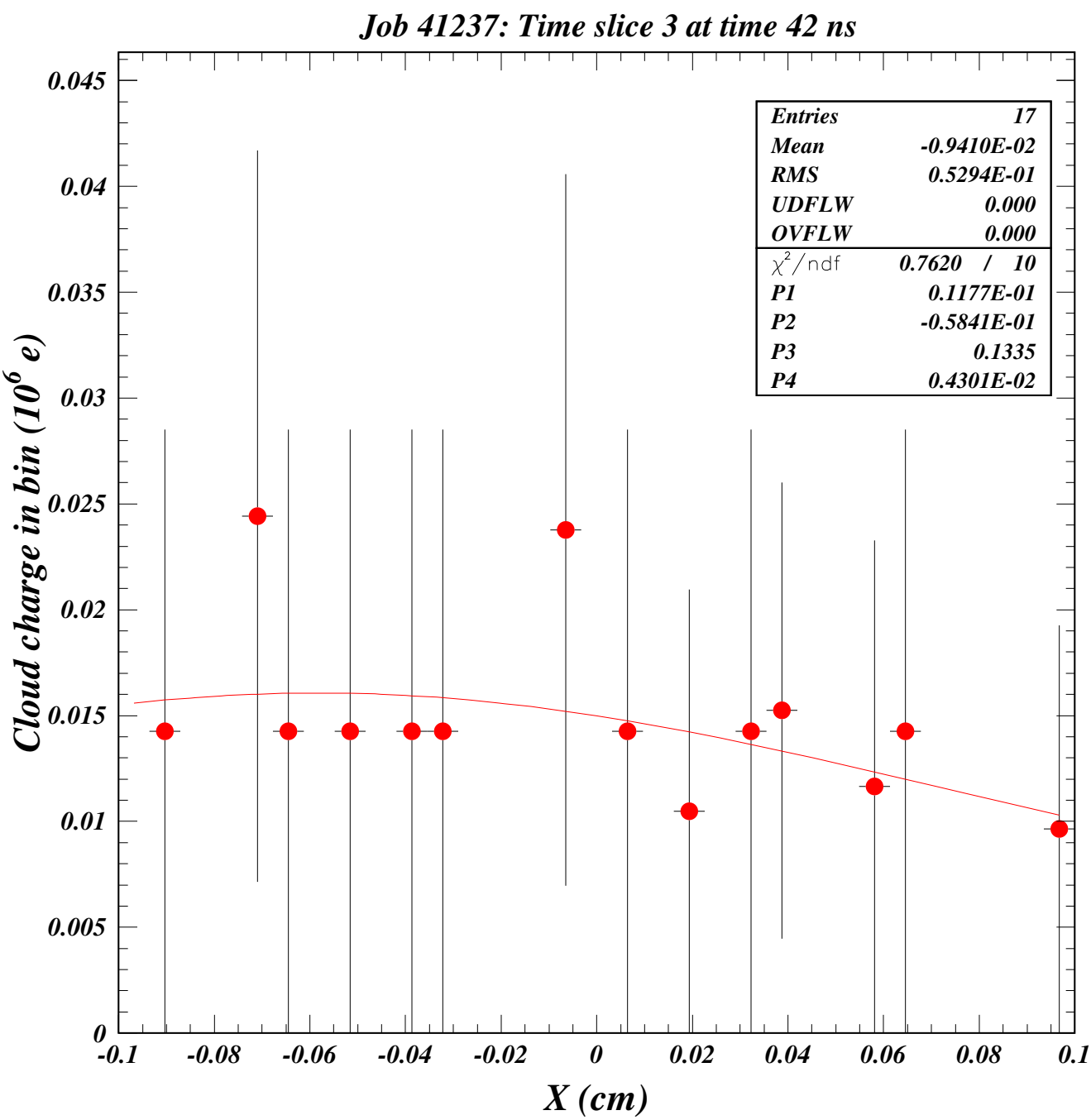
Job 41237: Time slice 3 at time 42 ns
Entries 17
Mean -0.9410E-02
RMS 0.5294E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 0.7620 / 10
P1 0.1177E-01
P2 -0.5841E-01
P3 0.1335
P4 0.4301E-02
Cloud charge in bin (10⁶ e)
X (cm)
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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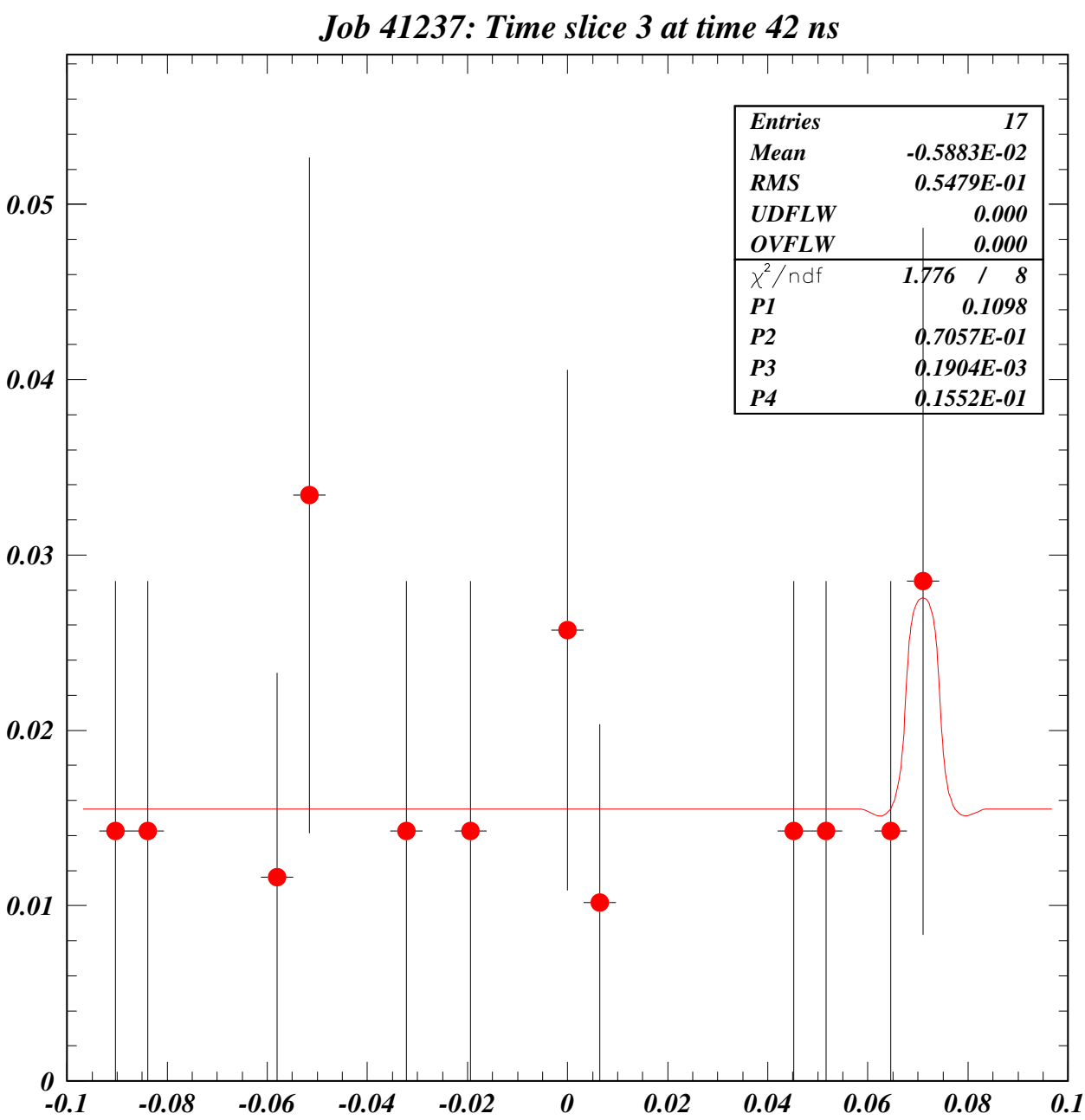
Job 41237: Time slice 3 at time 42 ns
Entries 17
Mean -0.5883E-02
RMS 0.5479E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 1.776 / 8
P1 0.1098
P2 0.7057E-01
P3 0.1904E-03
P4 0.1552E-01
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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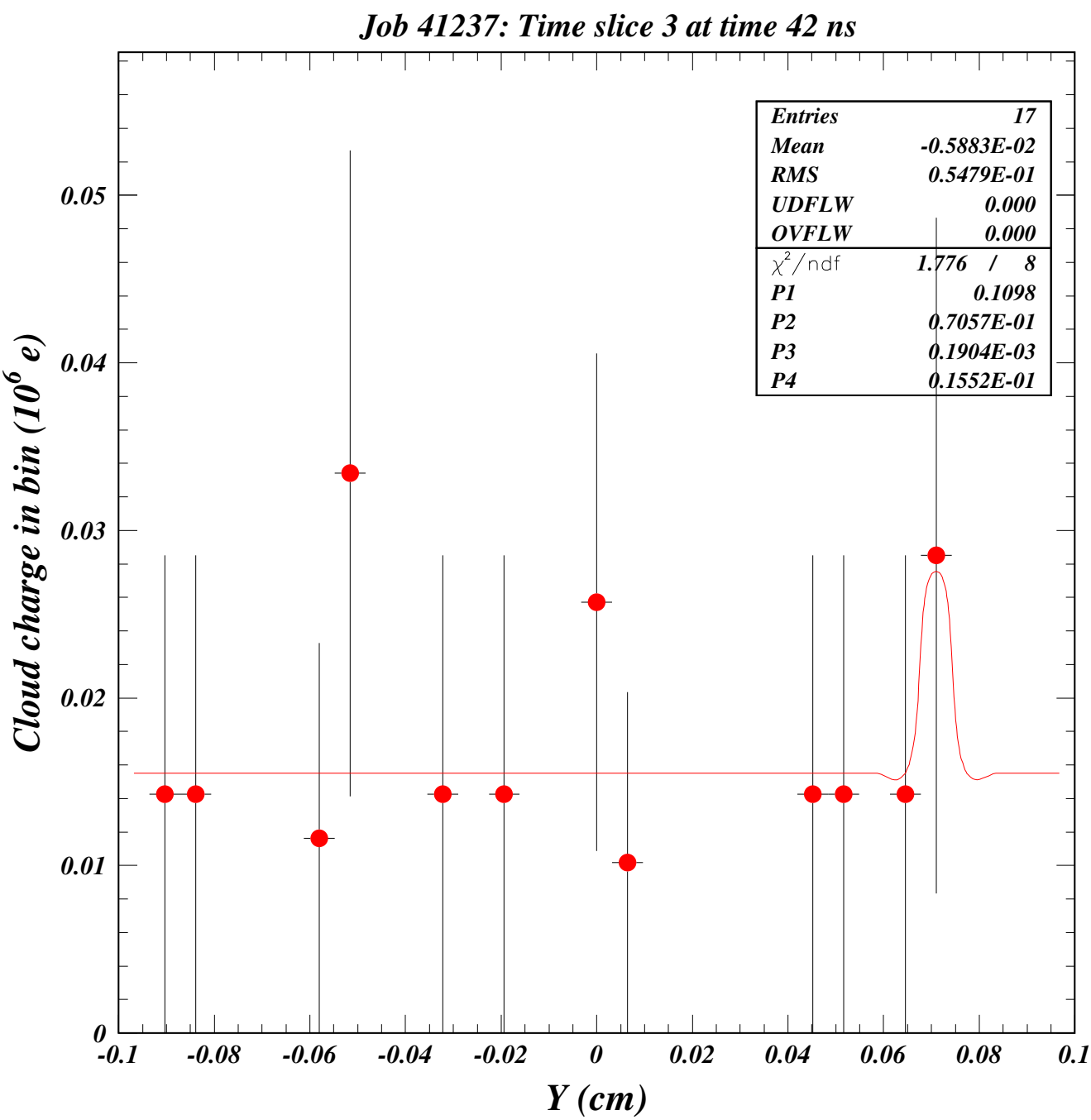
Job 41237: Time slice 3 at time 42 ns
Entries 17
Mean -0.5883E-02
RMS 0.5479E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 1.776 / 8
P1 0.1098
P2 0.7057E-01
P3 0.1904E-03
P4 0.1552E-01
Cloud charge in bin (10⁶ e)
0
0.01
0.02
0.03
0.04
0.05
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
Y (cm)

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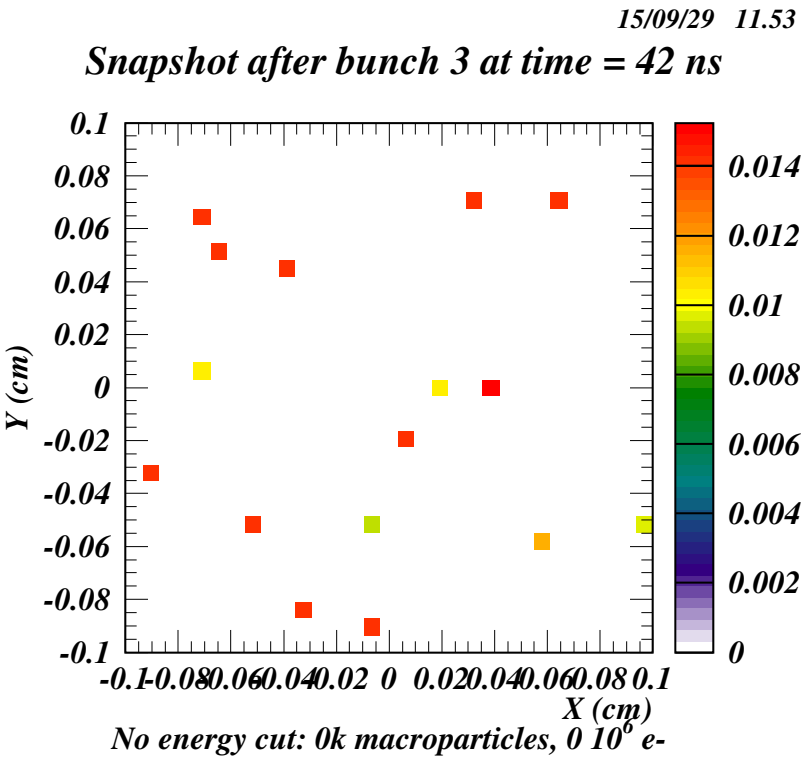
Snapshot after bunch 3 at time = 42 ns
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
Y (cm)
-0.1 -0.08 -0.06 -0.04 -0.02 0 0.02 0.04 0.06 0.08 0.1
X (cm)
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
No energy cut: 0k macroparticles, 0 10^6 e-

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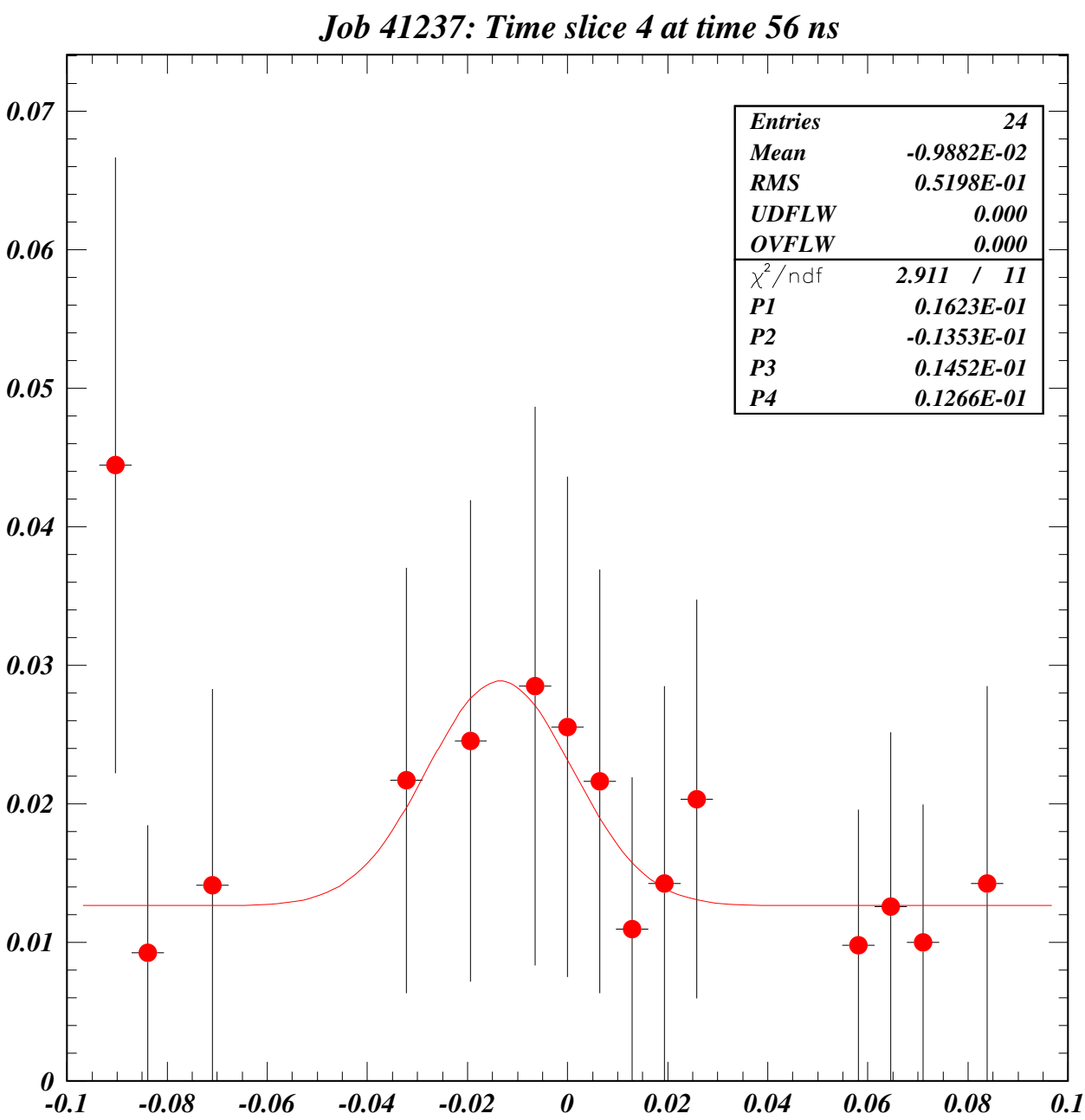
Job 41237: Time slice 4 at time 56 ns
Entries 24
Mean -0.9882E-02
RMS 0.5198E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 2.911 / 11
P1 0.1623E-01
P2 -0.1353E-01
P3 0.1452E-01
P4 0.1266E-01
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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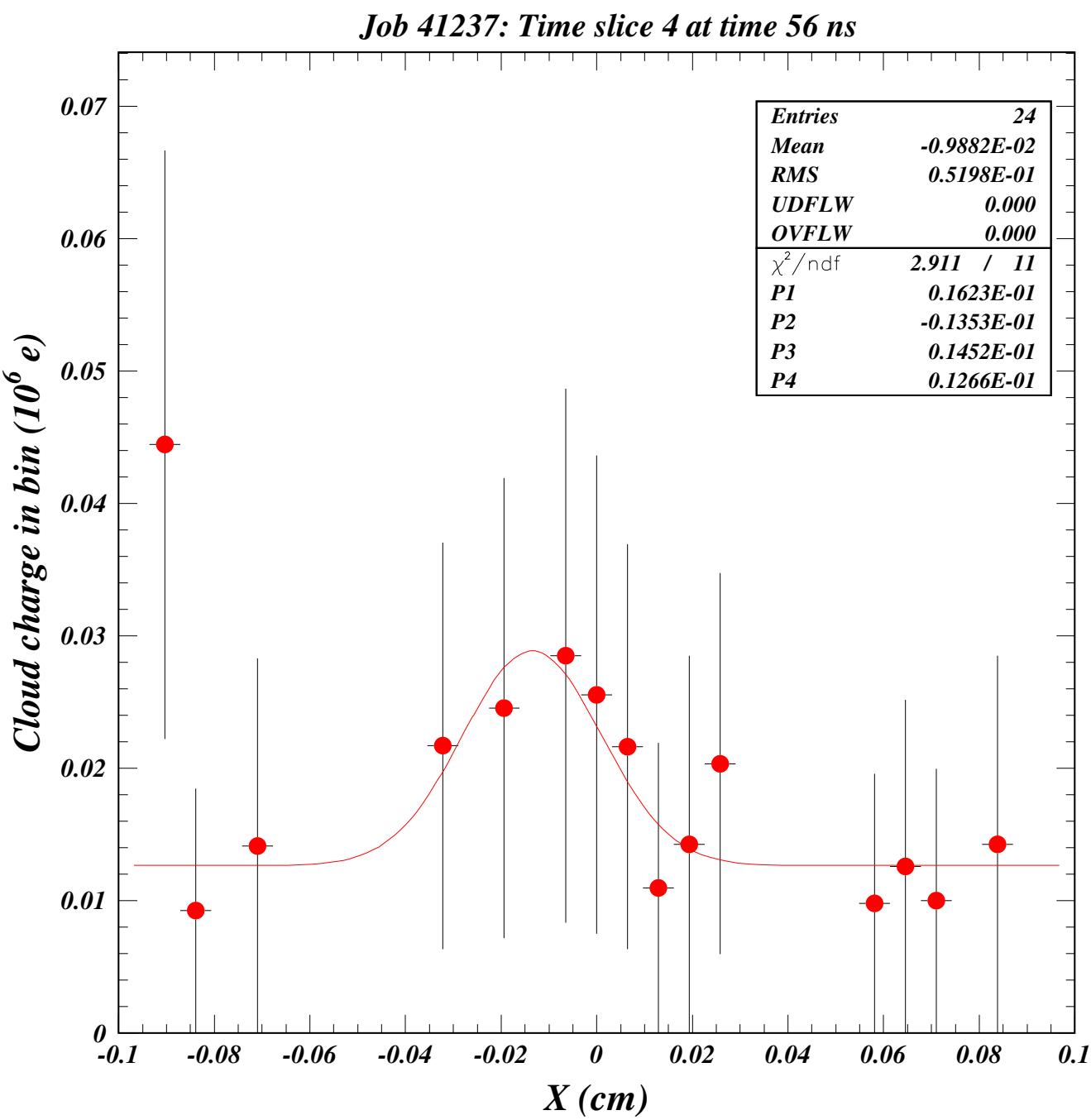
Job 41237: Time slice 4 at time 56 ns
Entries 24
Mean -0.9882E-02
RMS 0.5198E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 2.911 / 11
P1 0.1623E-01
P2 -0.1353E-01
P3 0.1452E-01
P4 0.1266E-01
Cloud charge in bin (10⁶ e)
X (cm)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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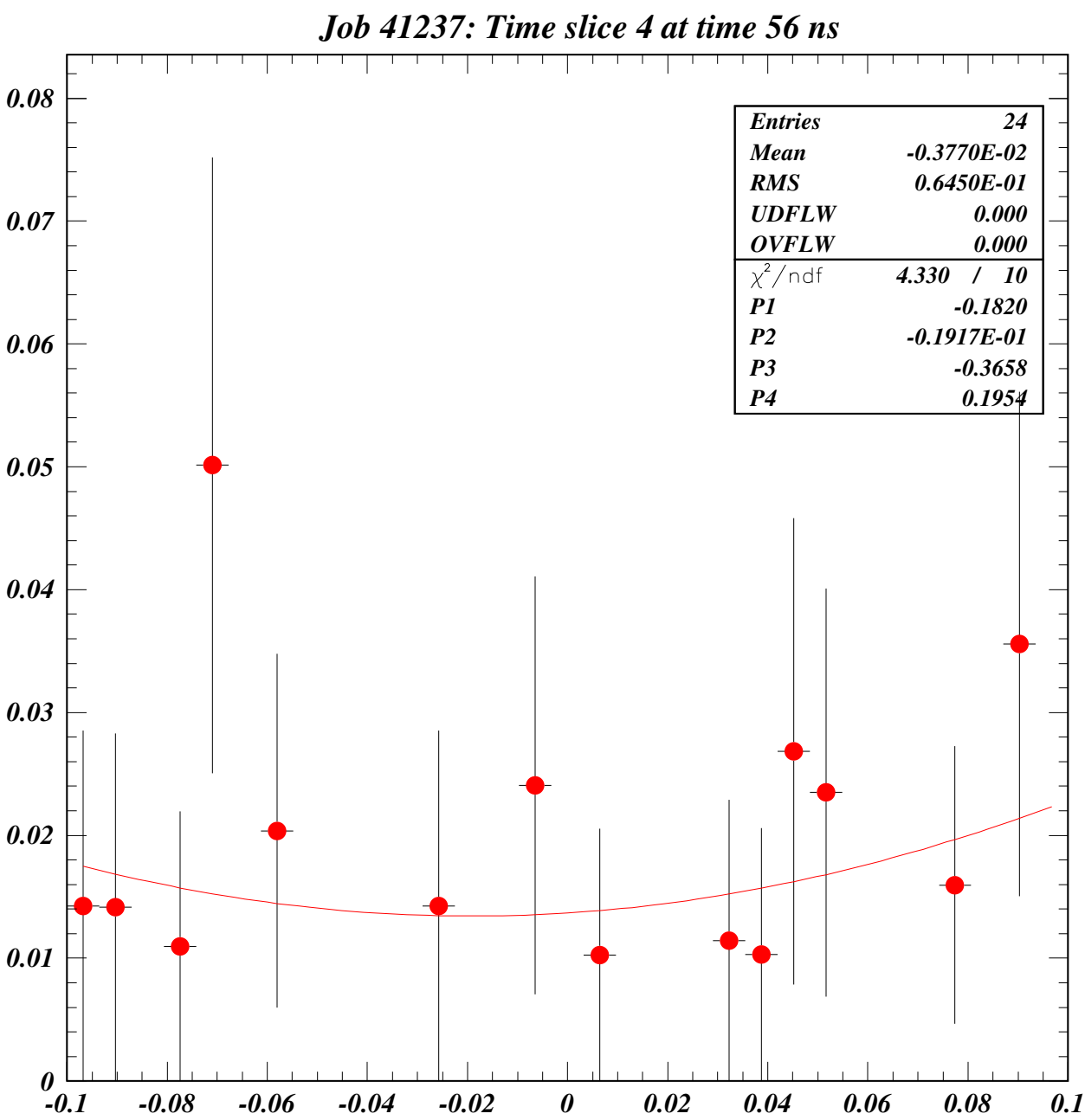
Job 41237: Time slice 4 at time 56 ns
Entries 24
Mean -0.3770E-02
RMS 0.6450E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 4.330 / 10
P1 -0.1820
P2 -0.1917E-01
P3 -0.3658
P4 0.1954
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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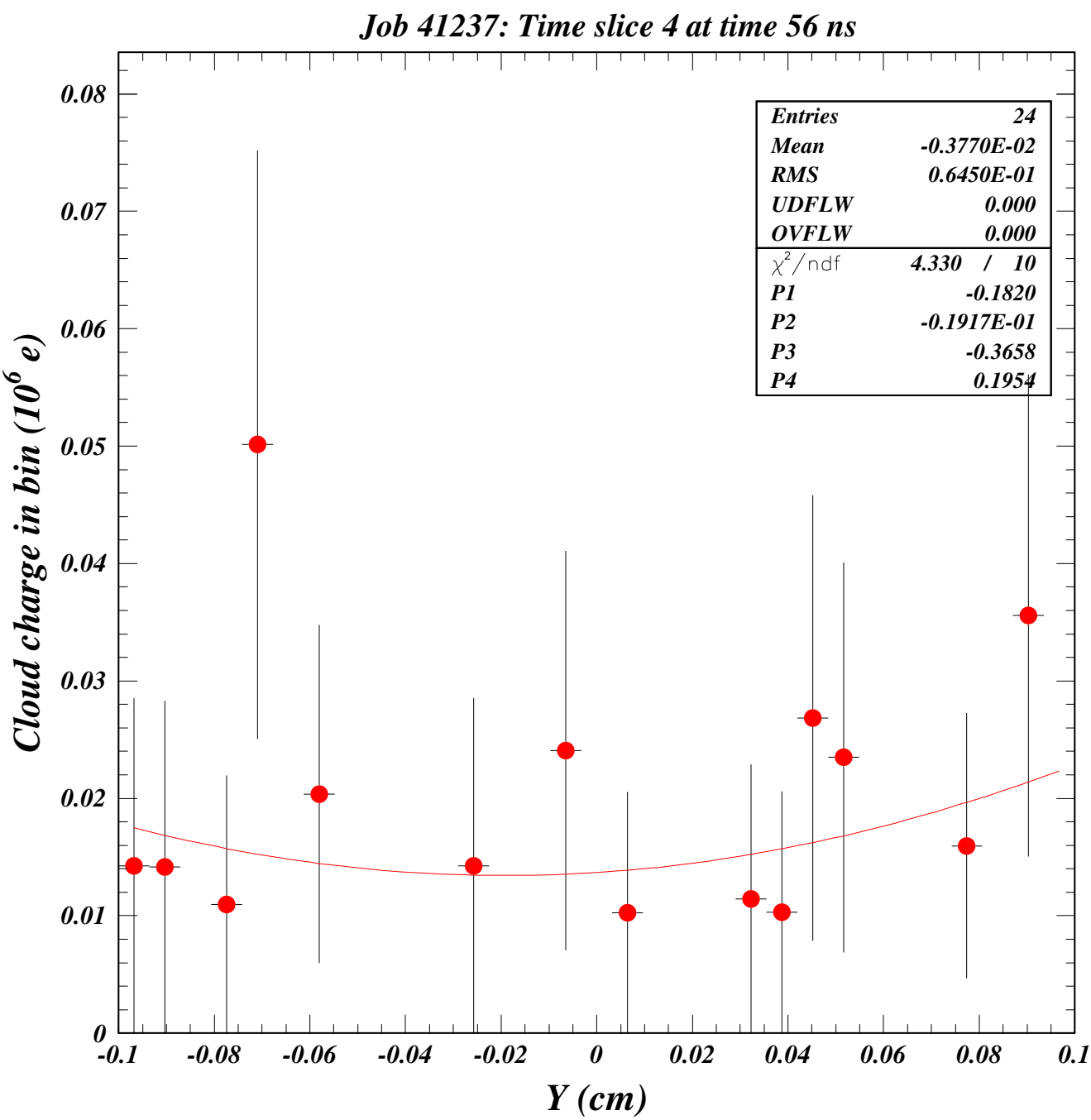
Job 41237: Time slice 4 at time 56 ns
Entries 24
Mean -0.3770E-02
RMS 0.6450E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 4.330 / 10
P1 -0.1820
P2 -0.1917E-01
P3 -0.3658
P4 0.1954
Cloud charge in bin (10⁶ e)
Y (cm)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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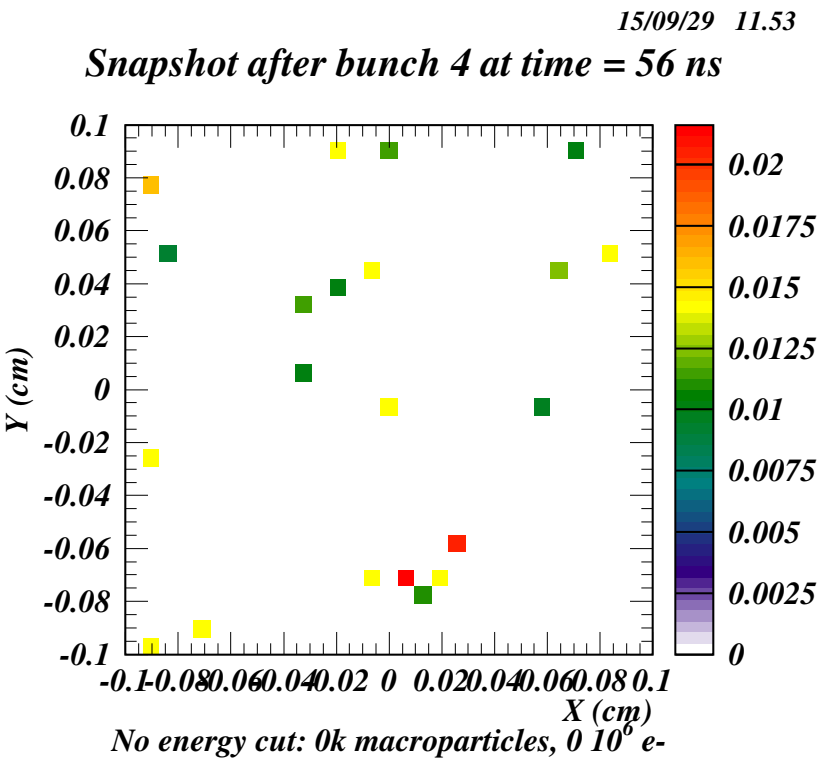
Snapshot after bunch 4 at time = 56 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
0.02
0.0175
0.015
0.0125
0.01
0.0075
0.005
0.0025
0
No energy cut: 0k macroparticles, 0 10^6 e-

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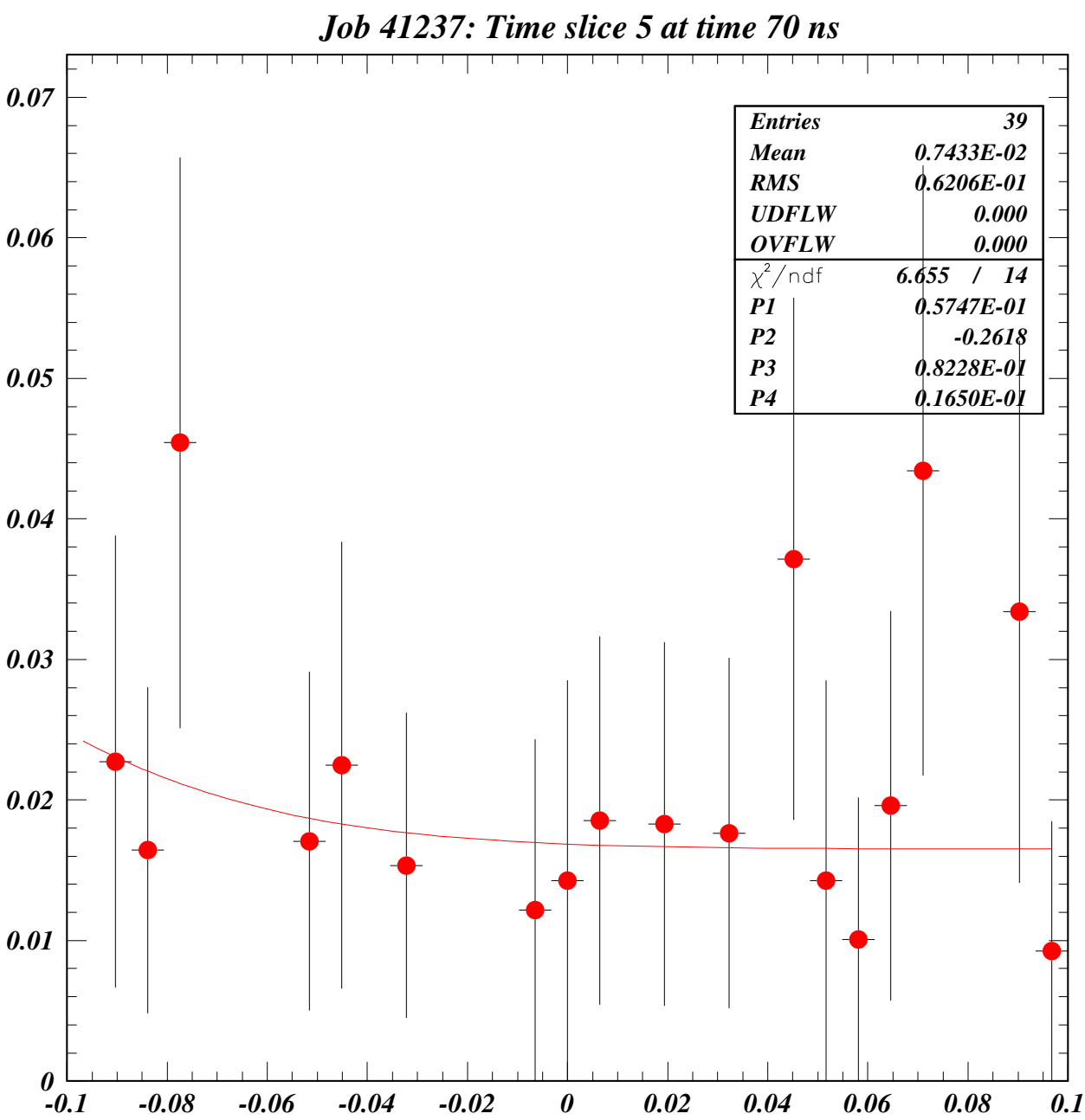
Job 41237: Time slice 5 at time 70 ns
Entries 39
Mean 0.7433E-02
RMS 0.6206E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 6.655 / 14
P1 0.5747E-01
P2 -0.2618
P3 0.8228E-01
P4 0.1650E-01
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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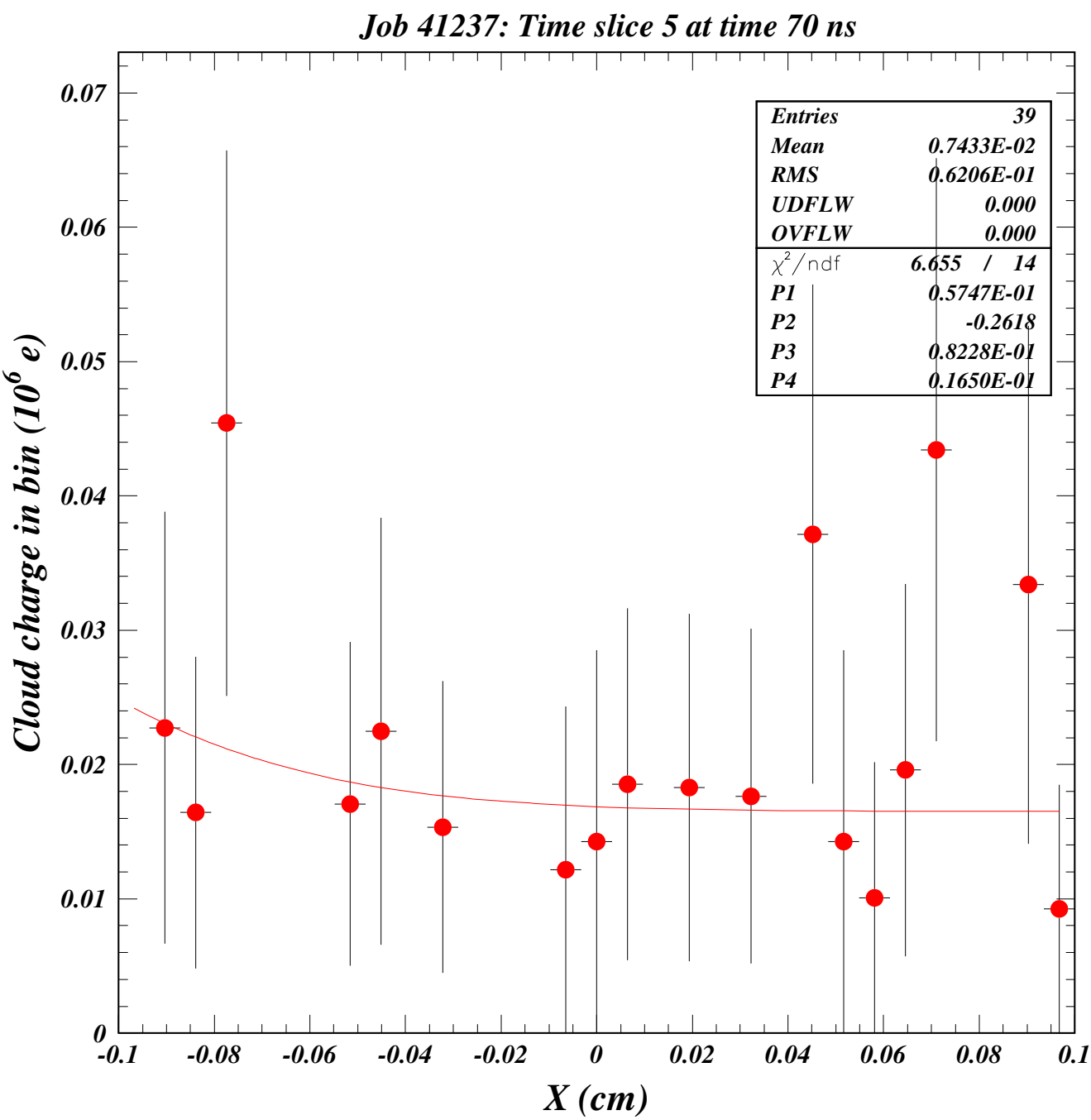
Job 41237: Time slice 5 at time 70 ns
Entries 39
Mean 0.7433E-02
RMS 0.6206E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 6.655 / 14
P1 0.5747E-01
P2 -0.2618
P3 0.8228E-01
P4 0.1650E-01
Cloud charge in bin (10⁶ e)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
X (cm)

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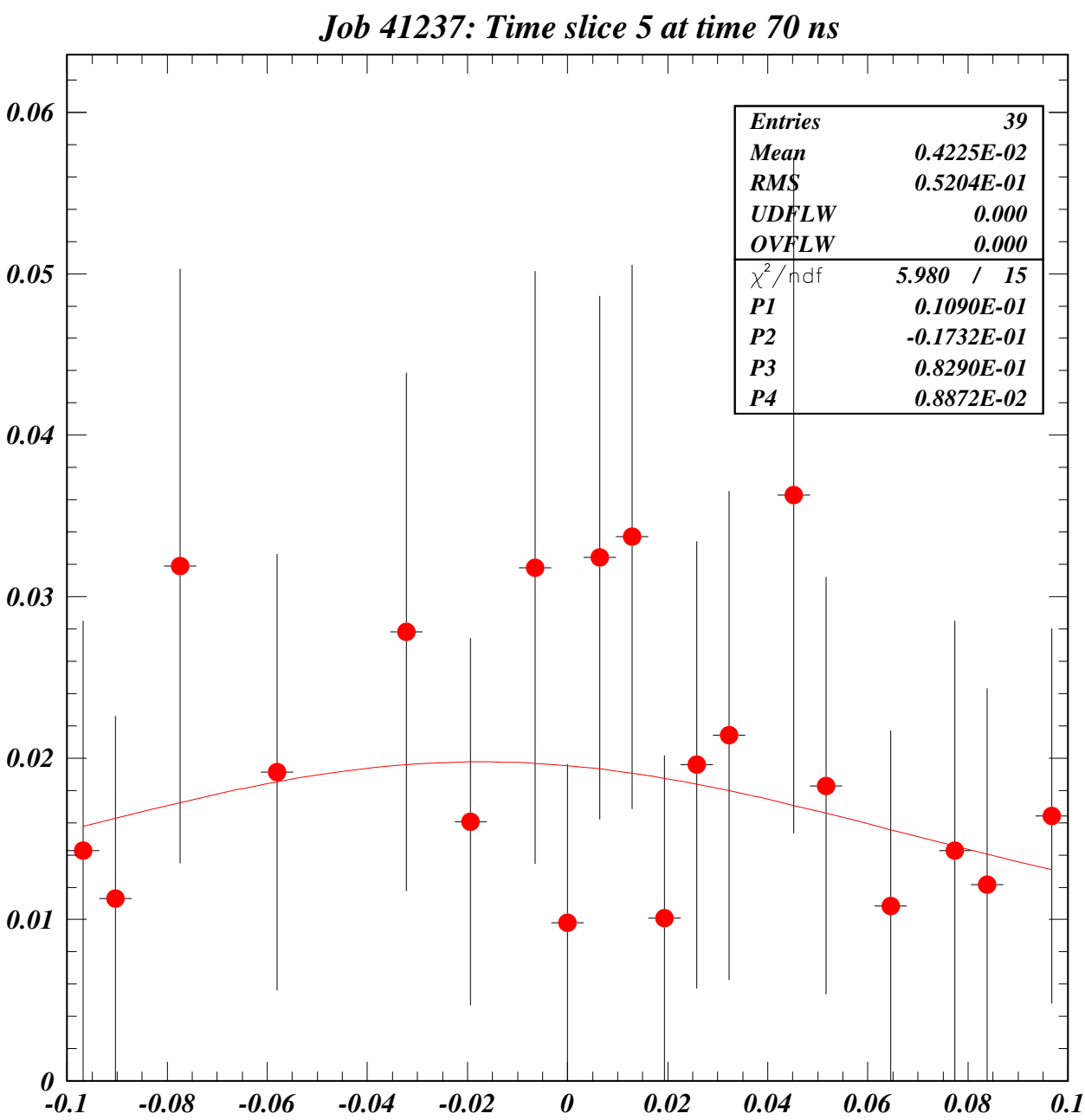
Job 41237: Time slice 5 at time 70 ns
Entries 39
Mean 0.4225E-02
RMS 0.5204E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 5.980 / 15
P1 0.1090E-01
P2 -0.1732E-01
P3 0.8290E-01
P4 0.8872E-02
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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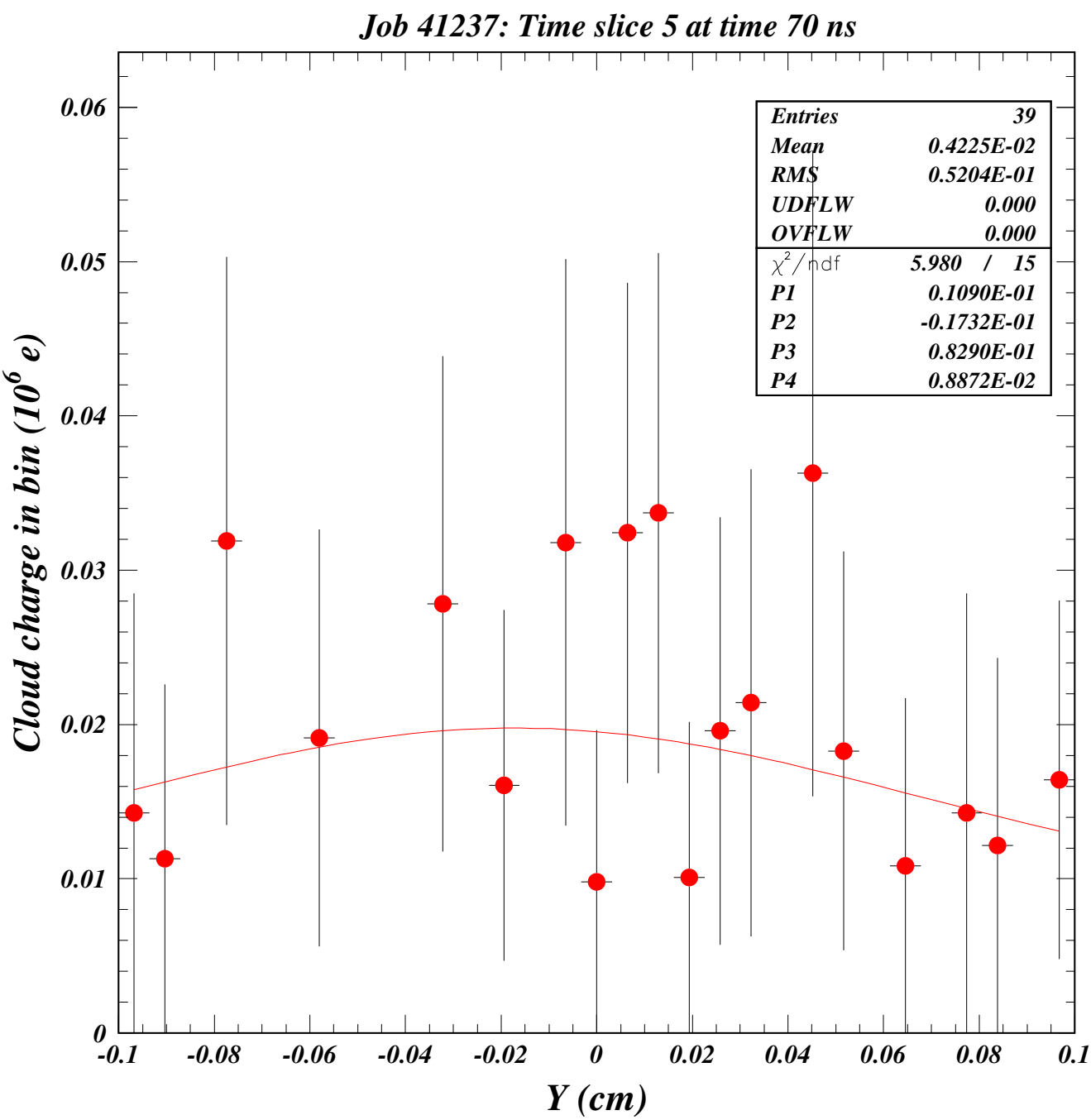
Job 41237: Time slice 5 at time 70 ns
Entries 39
Mean 0.4225E-02
RMS 0.5204E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 5.980 / 15
P1 0.1090E-01
P2 -0.1732E-01
P3 0.8290E-01
P4 0.8872E-02
Cloud charge in bin (10⁶ e)
Y (cm)
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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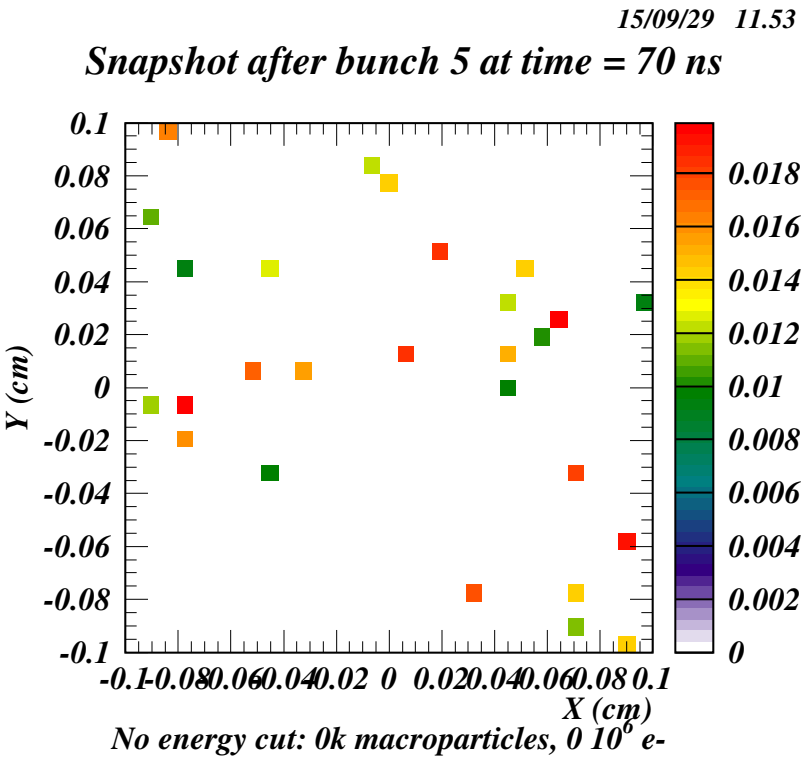
Snapshot after bunch 5 at time = 70 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
No energy cut: 0k macroparticles, 0 10^6 e-

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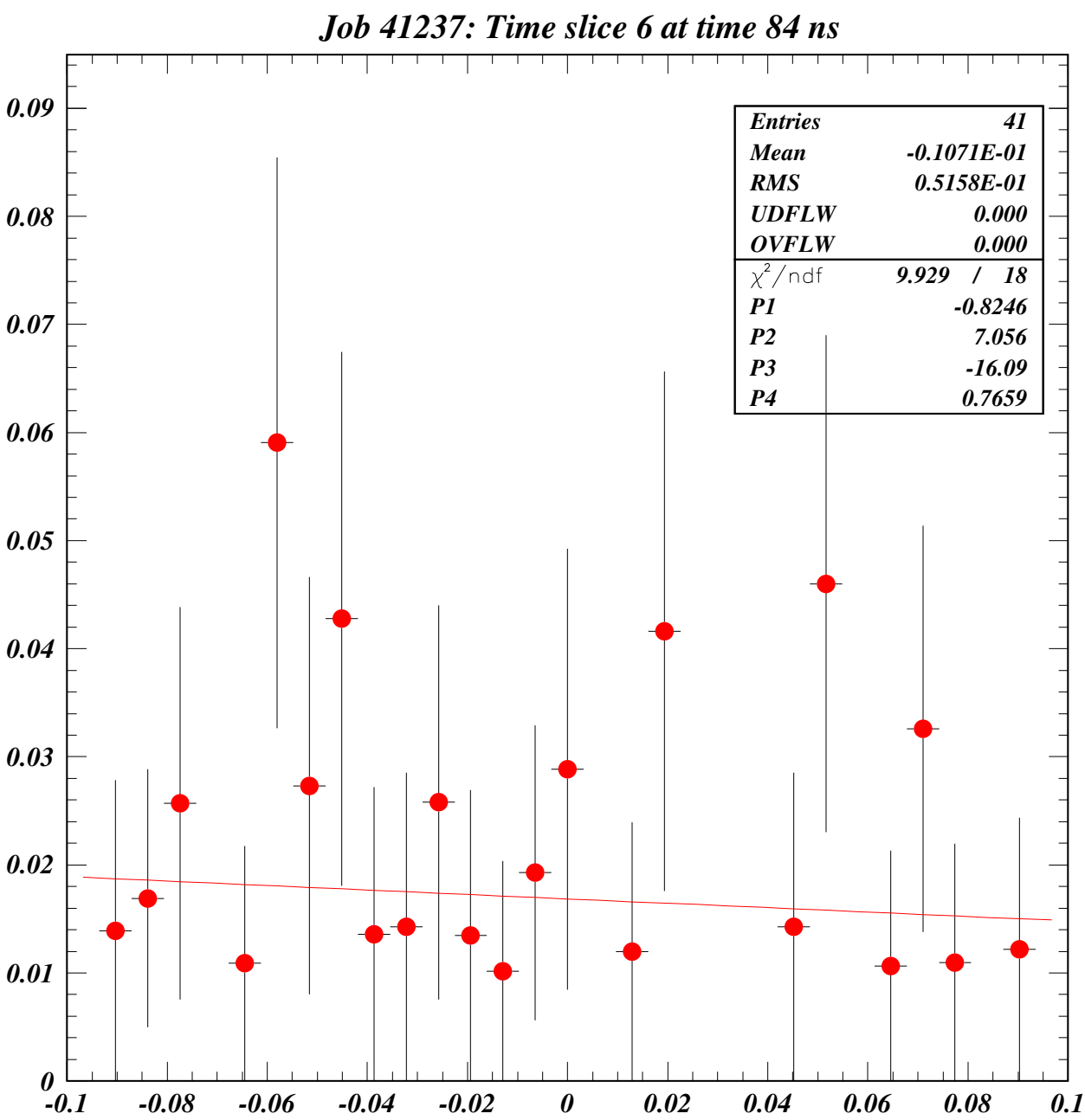
Job 41237: Time slice 6 at time 84 ns
Entries 41
Mean -0.1071E-01
RMS 0.5158E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 9.929 / 18
P1 -0.8246
P2 7.056
P3 -16.09
P4 0.7659
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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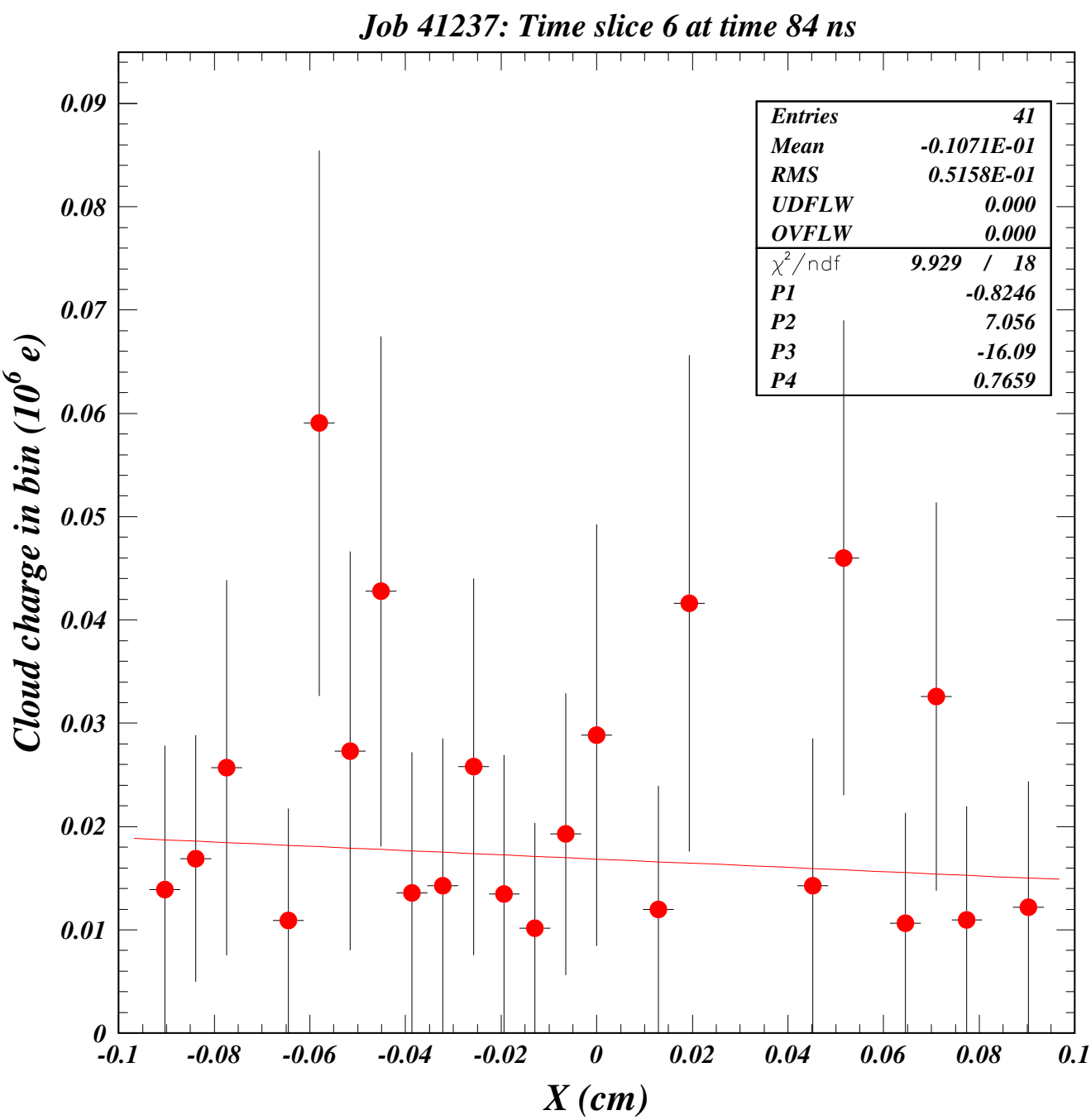
Job 41237: Time slice 6 at time 84 ns
Entries 41
Mean -0.1071E-01
RMS 0.5158E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 9.929 / 18
P1 -0.8246
P2 7.056
P3 -16.09
P4 0.7659
Cloud charge in bin (10⁶ e)
X (cm)
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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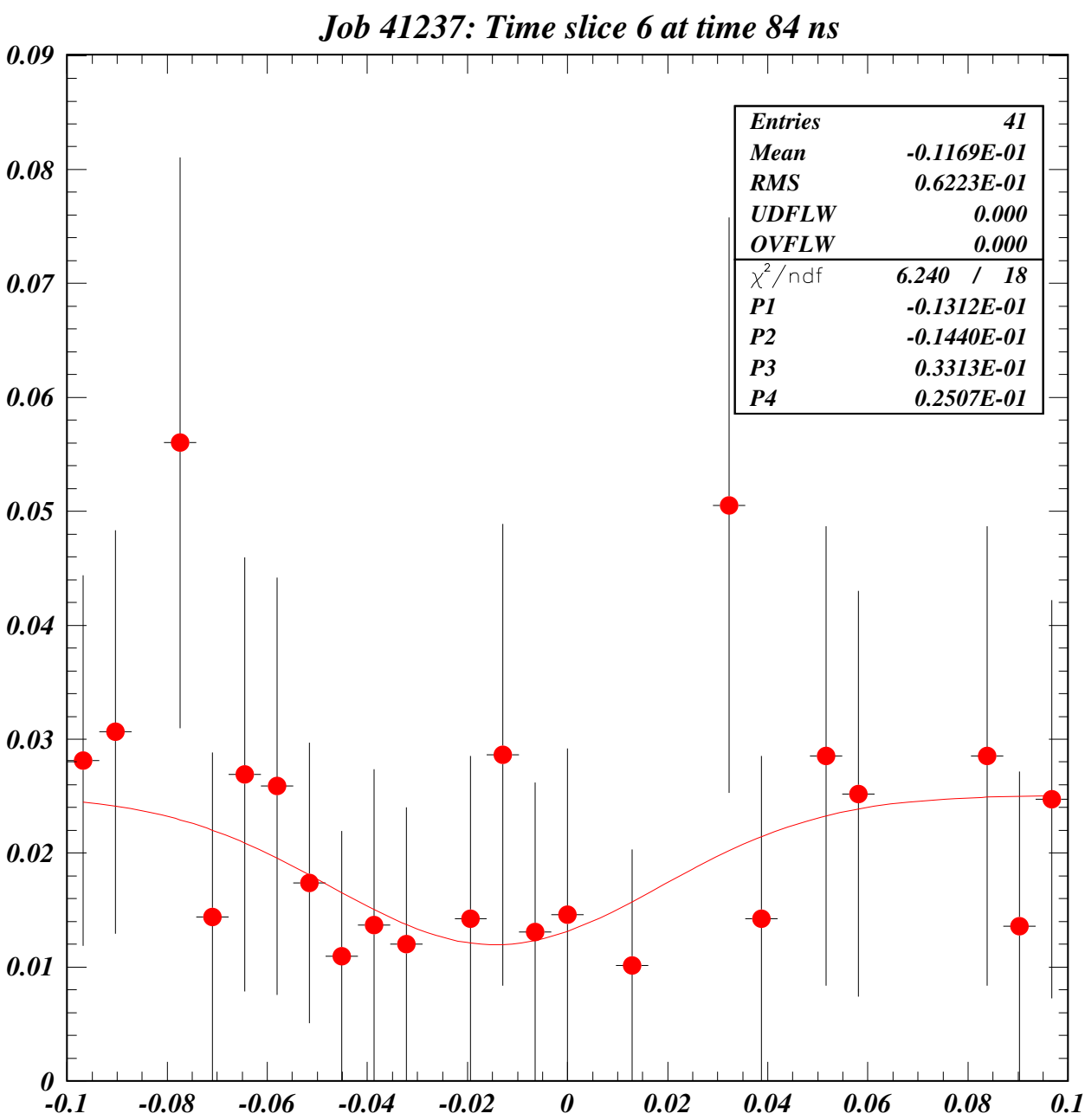
Job 41237: Time slice 6 at time 84 ns
Entries 41
Mean -0.1169E-01
RMS 0.6223E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 6.240 / 18
P1 -0.1312E-01
P2 -0.1440E-01
P3 0.3313E-01
P4 0.2507E-01
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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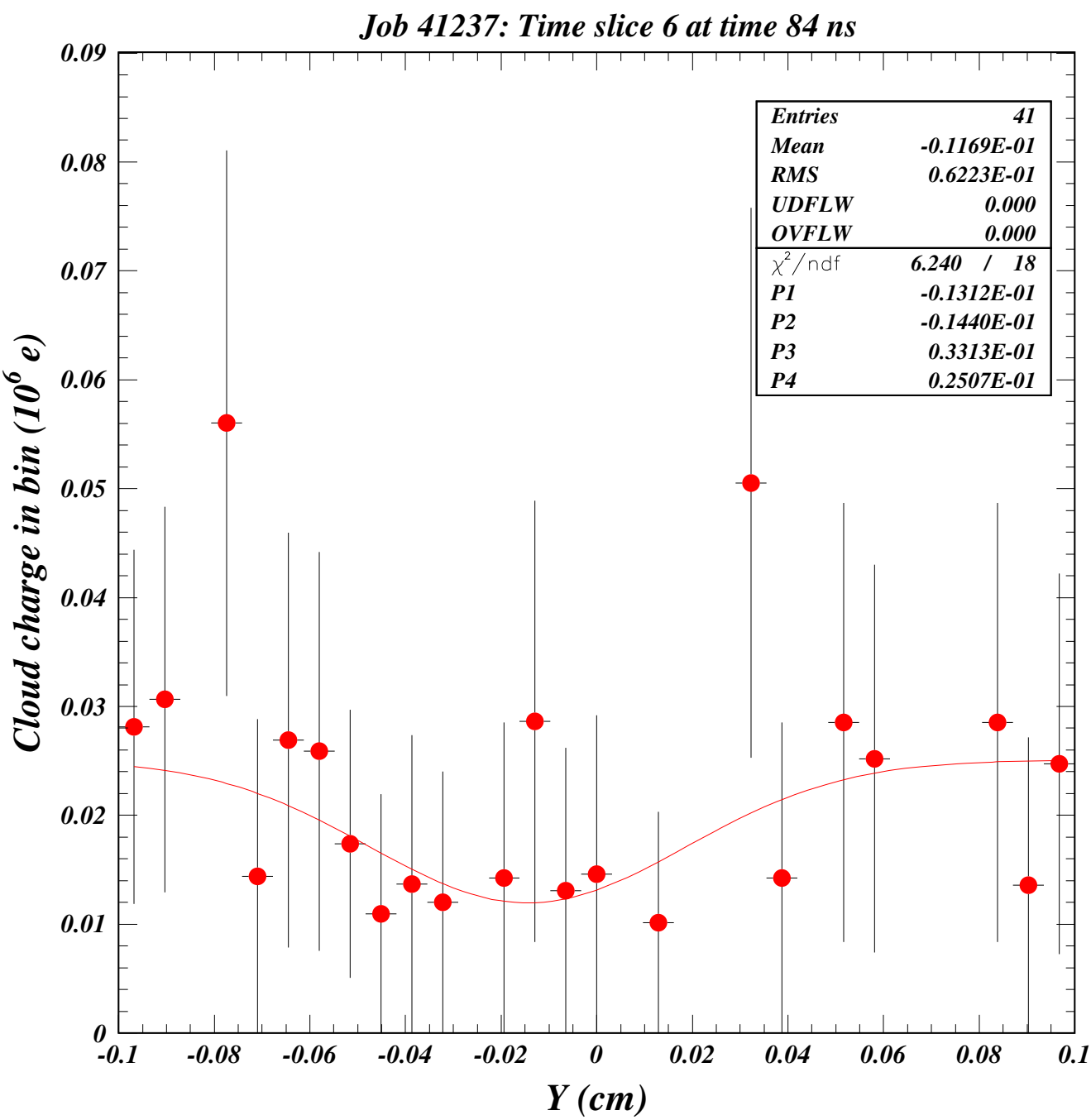
Job 41237: Time slice 6 at time 84 ns
Entries 41
Mean -0.1169E-01
RMS 0.6223E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 6.240 / 18
P1 -0.1312E-01
P2 -0.1440E-01
P3 0.3313E-01
P4 0.2507E-01
Cloud charge in bin (10⁶ e)
Y (cm)
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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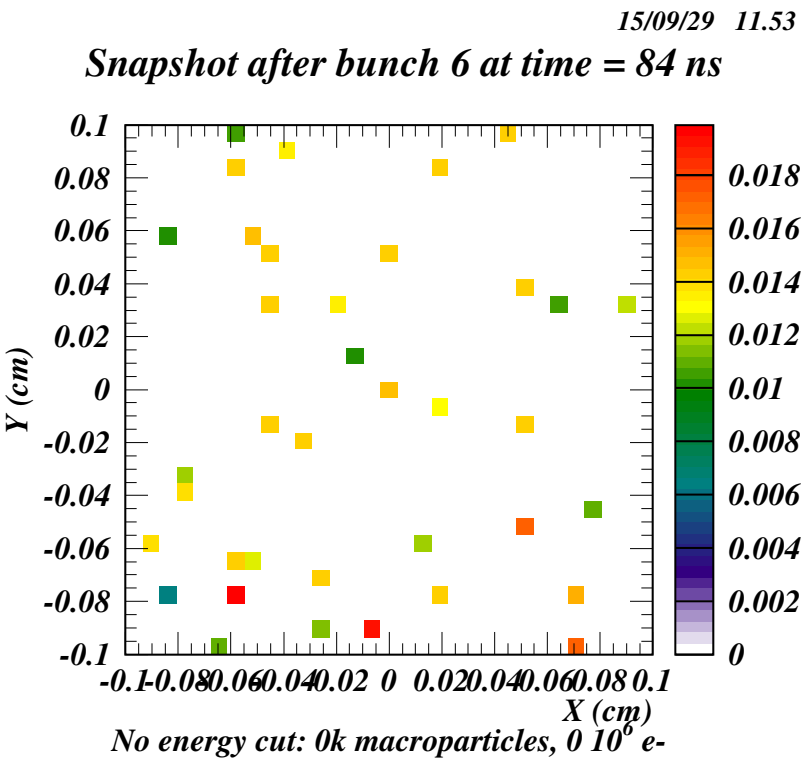
Snapshot after bunch 6 at time = 84 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
No energy cut: 0k macroparticles, 0 10^6 e-

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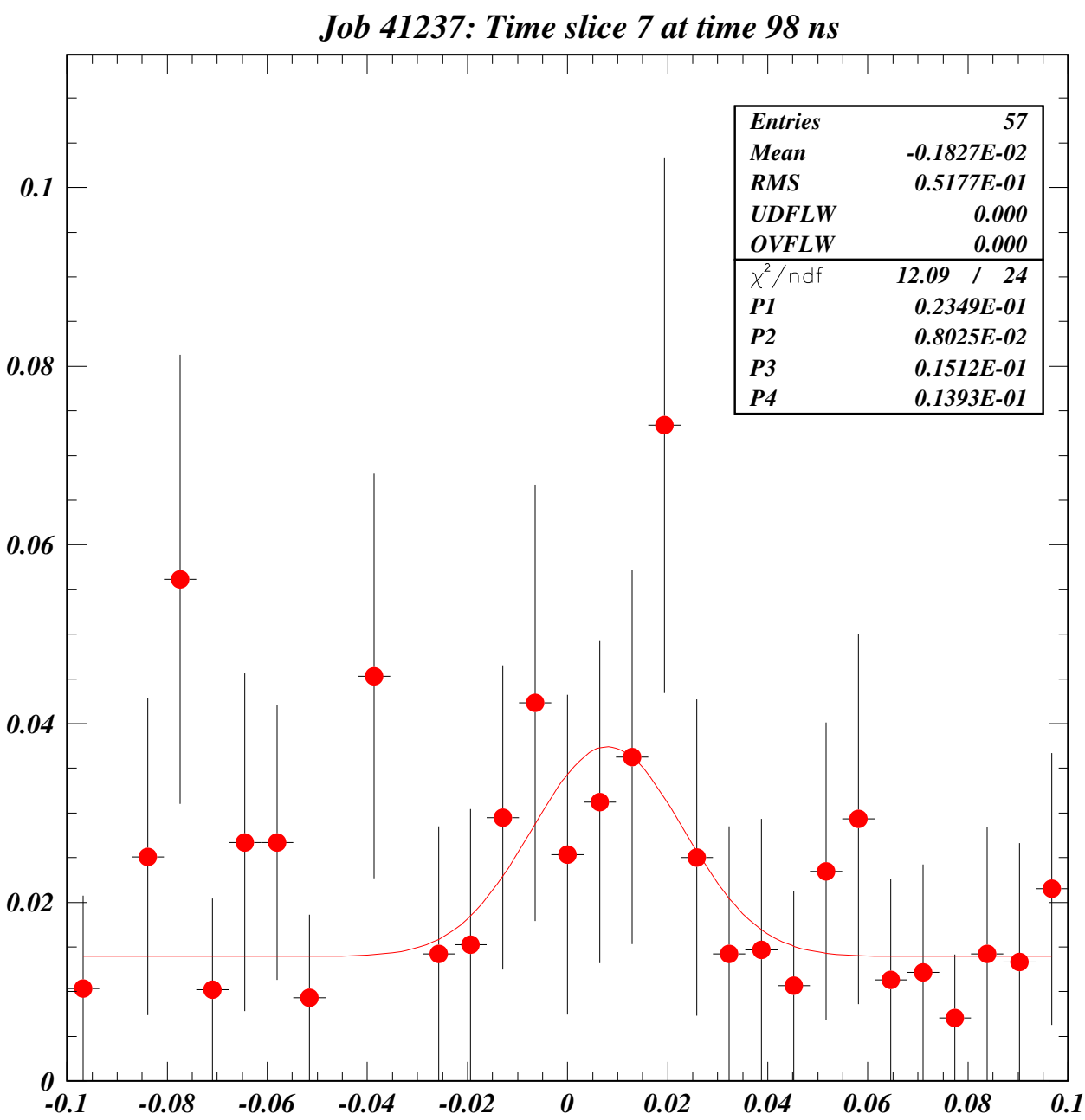
Job 41237: Time slice 7 at time 98 ns
Entries 57
Mean -0.1827E-02
RMS 0.5177E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 12.09 / 24
P1 0.2349E-01
P2 0.8025E-02
P3 0.1512E-01
P4 0.1393E-01
0.1
0.08
0.06
0.04
0.02
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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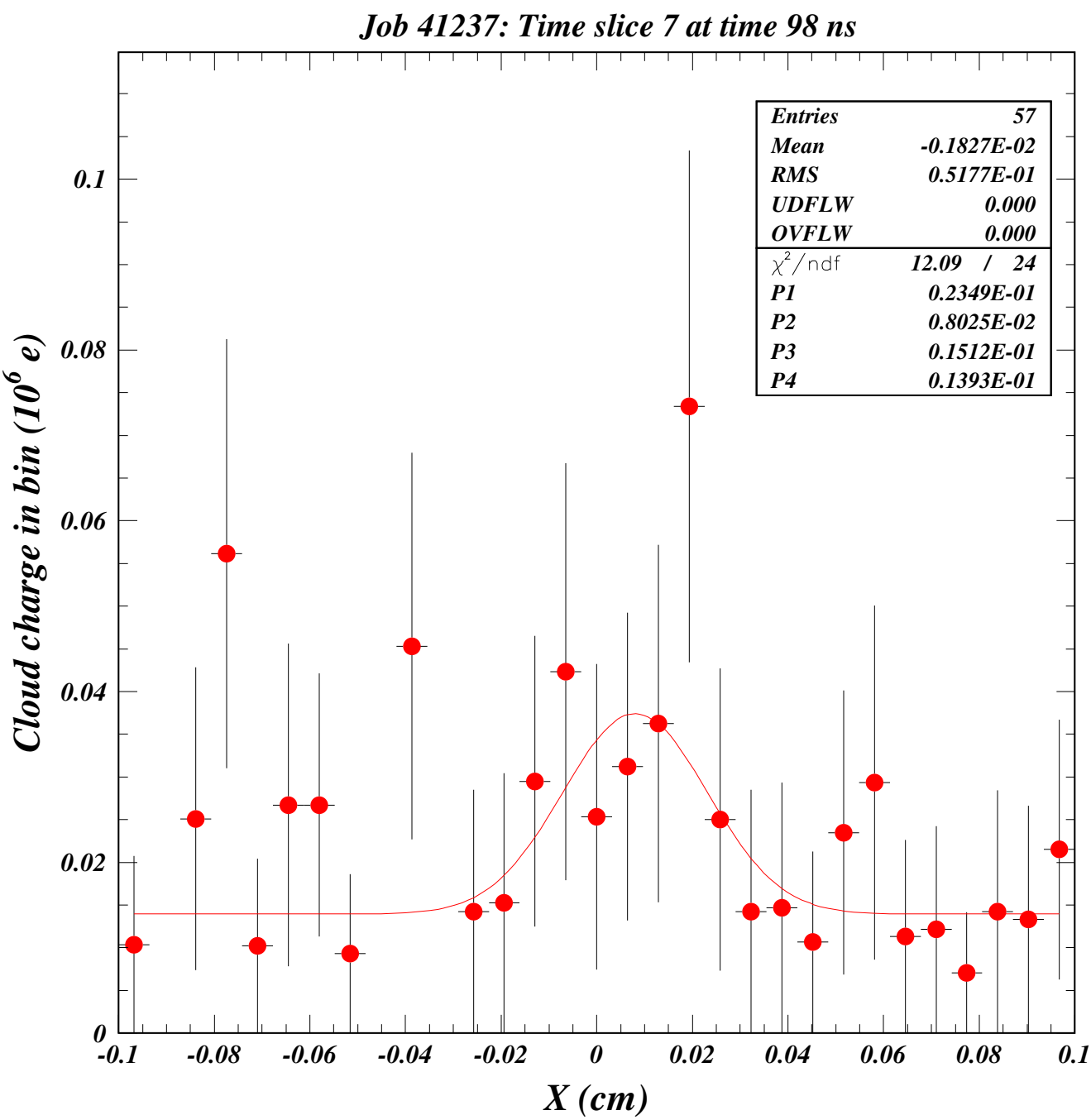
Job 41237: Time slice 7 at time 98 ns
Entries 57
Mean -0.1827E-02
RMS 0.5177E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 12.09 / 24
P1 0.2349E-01
P2 0.8025E-02
P3 0.1512E-01
P4 0.1393E-01
Cloud charge in bin (10⁶ e)
0
0.02
0.04
0.06
0.08
0.1
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
X (cm)

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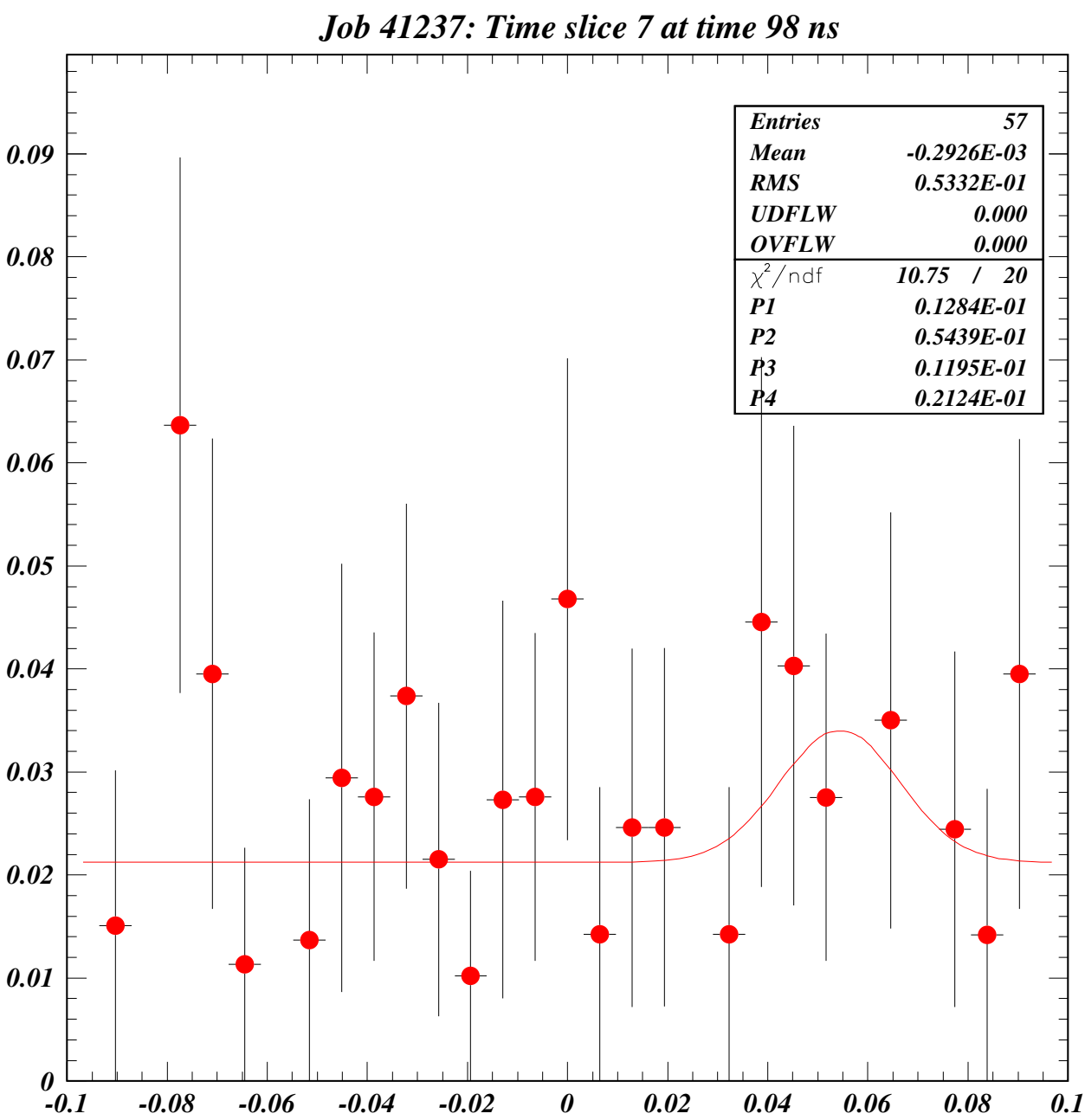
Job 41237: Time slice 7 at time 98 ns
Entries 57
Mean -0.2926E-03
RMS 0.5332E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 10.75 / 20
P1 0.1284E-01
P2 0.5439E-01
P3 0.1195E-01
P4 0.2124E-01
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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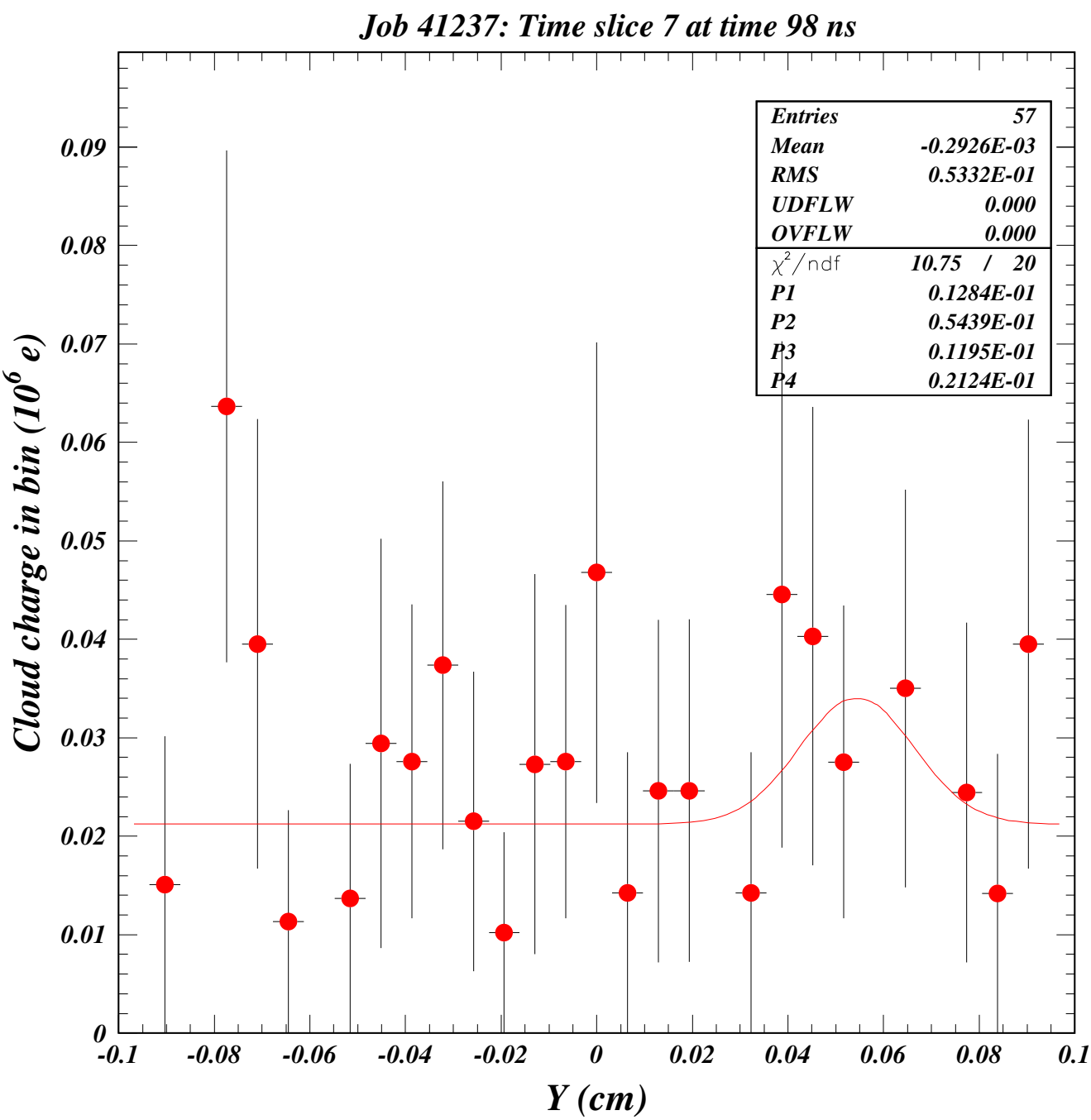
Job 41237: Time slice 7 at time 98 ns
Entries 57
Mean -0.2926E-03
RMS 0.5332E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 10.75 / 20
P1 0.1284E-01
P2 0.5439E-01
P3 0.1195E-01
P4 0.2124E-01
Cloud charge in bin (10⁶ e)
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
Y (cm)

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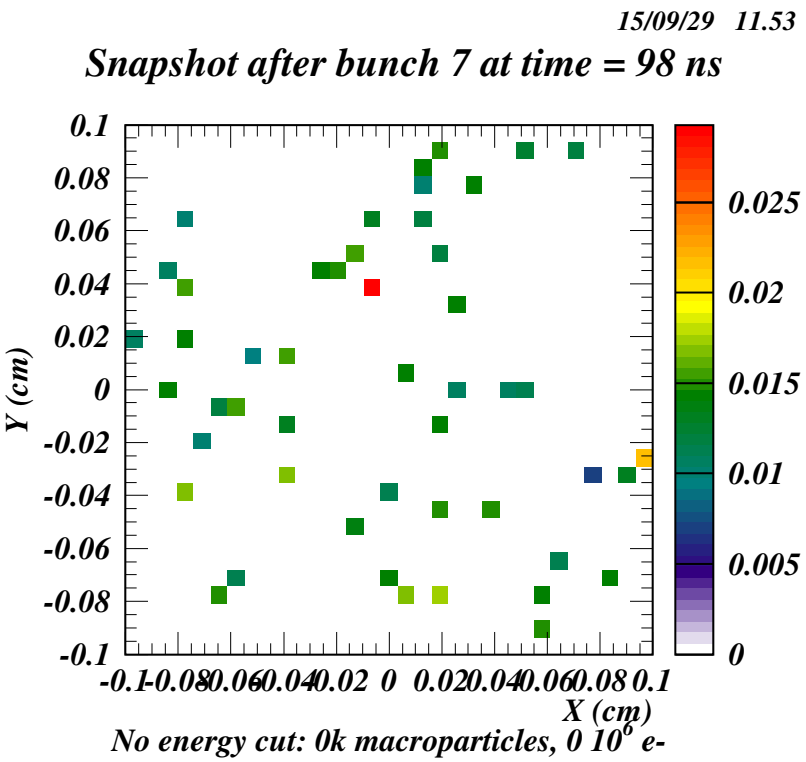
Snapshot after bunch 7 at time = 98 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
0.025
0.02
0.015
0.01
0.005
0
No energy cut: 0k macroparticles, 0 10^6 e-

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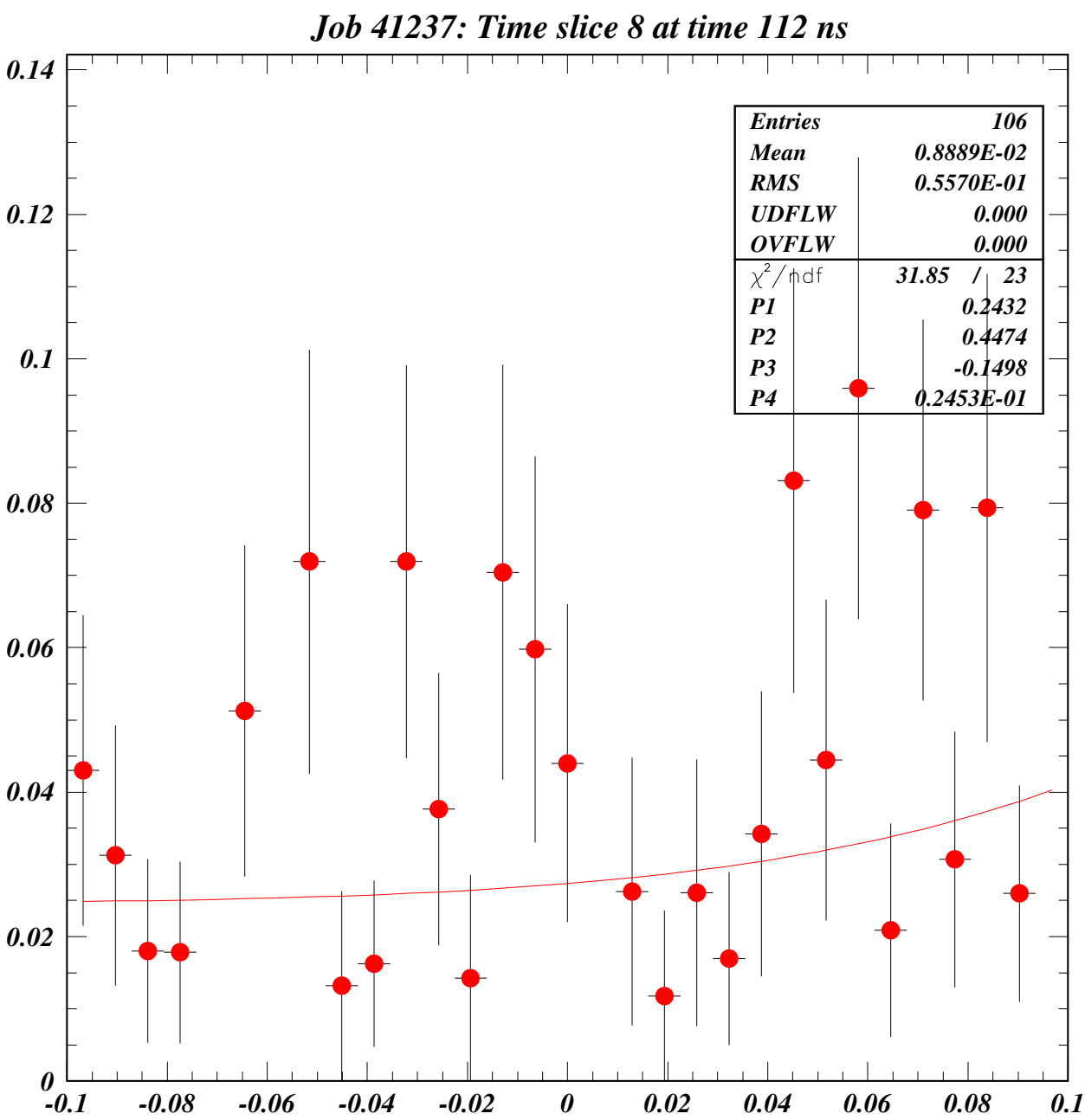
Job 41237: Time slice 8 at time 112 ns
Entries 106
Mean 0.8889E-02
RMS 0.5570E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 31.85 / 23
P1 0.2432
P2 0.4474
P3 -0.1498
P4 0.2453E-01
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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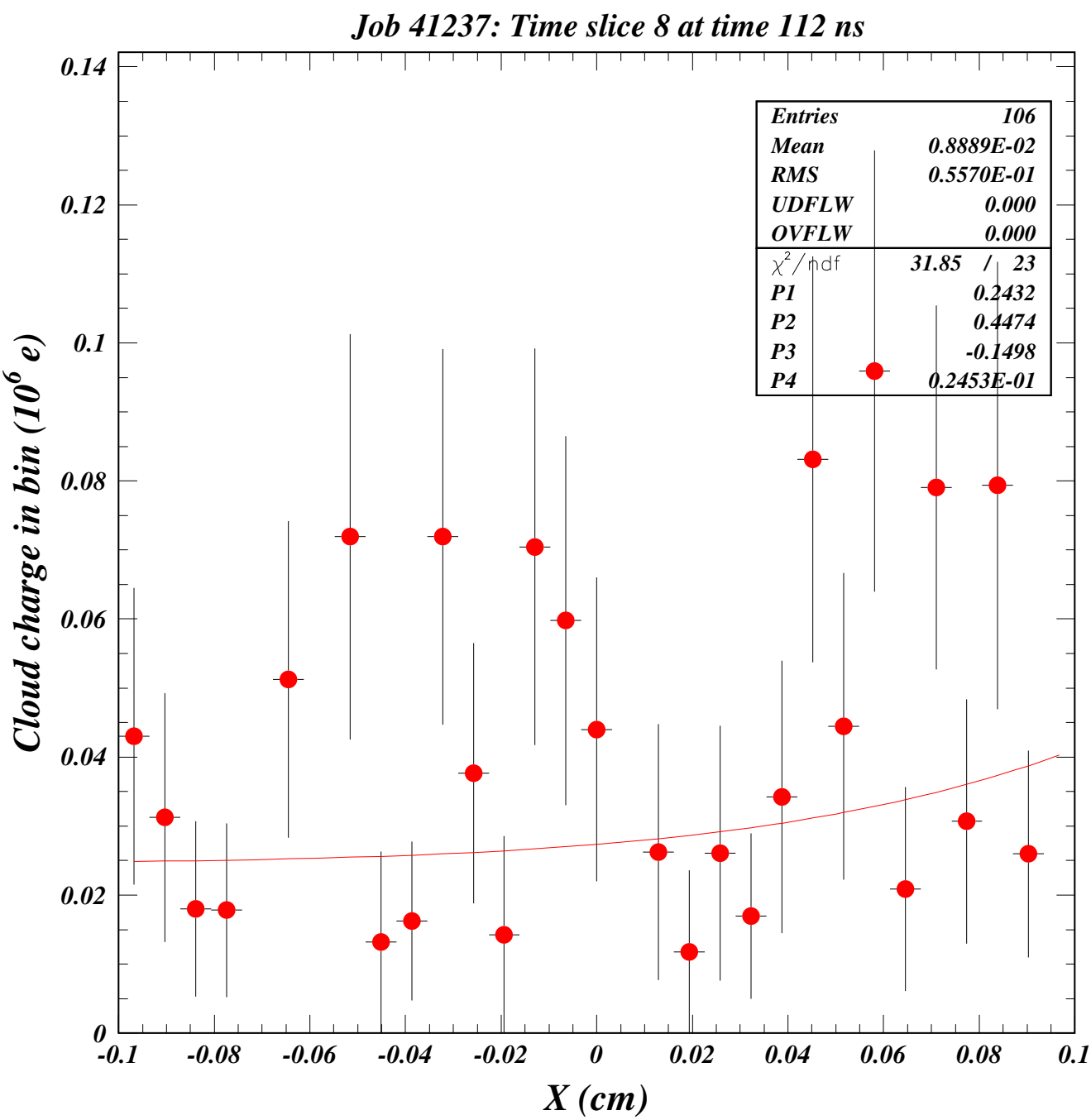
Job 41237: Time slice 8 at time 112 ns
Entries 106
Mean 0.8889E-02
RMS 0.5570E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 31.85 / 23
P1 0.2432
P2 0.4474
P3 -0.1498
P4 0.2453E-01
Cloud charge in bin (10⁶ e)
X (cm)
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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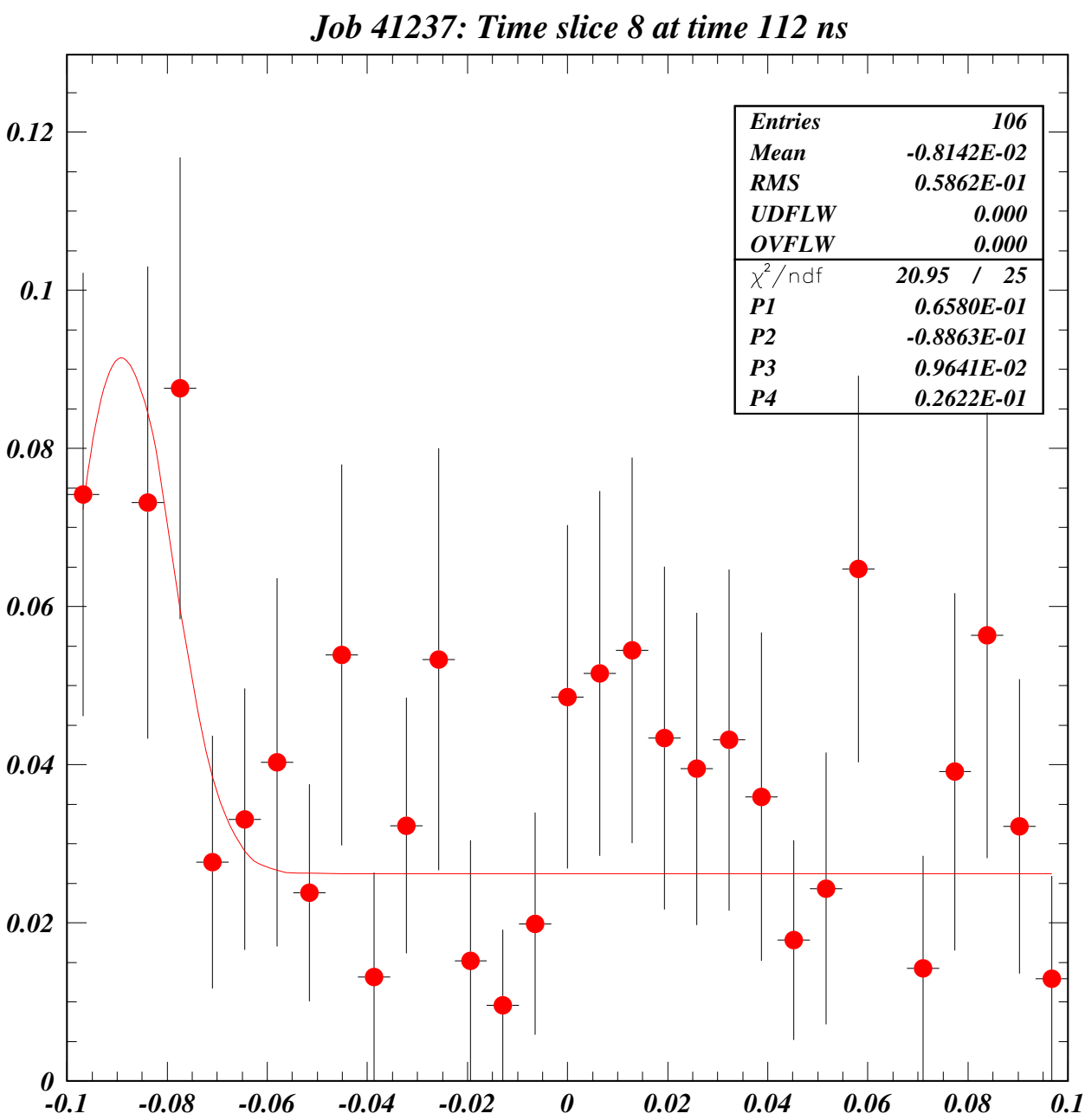
Job 41237: Time slice 8 at time 112 ns
Entries 106
Mean -0.8142E-02
RMS 0.5862E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 20.95 / 25
P1 0.6580E-01
P2 -0.8863E-01
P3 0.9641E-02
P4 0.2622E-01
0.12
0.1
0.08
0.06
0.04
0.02
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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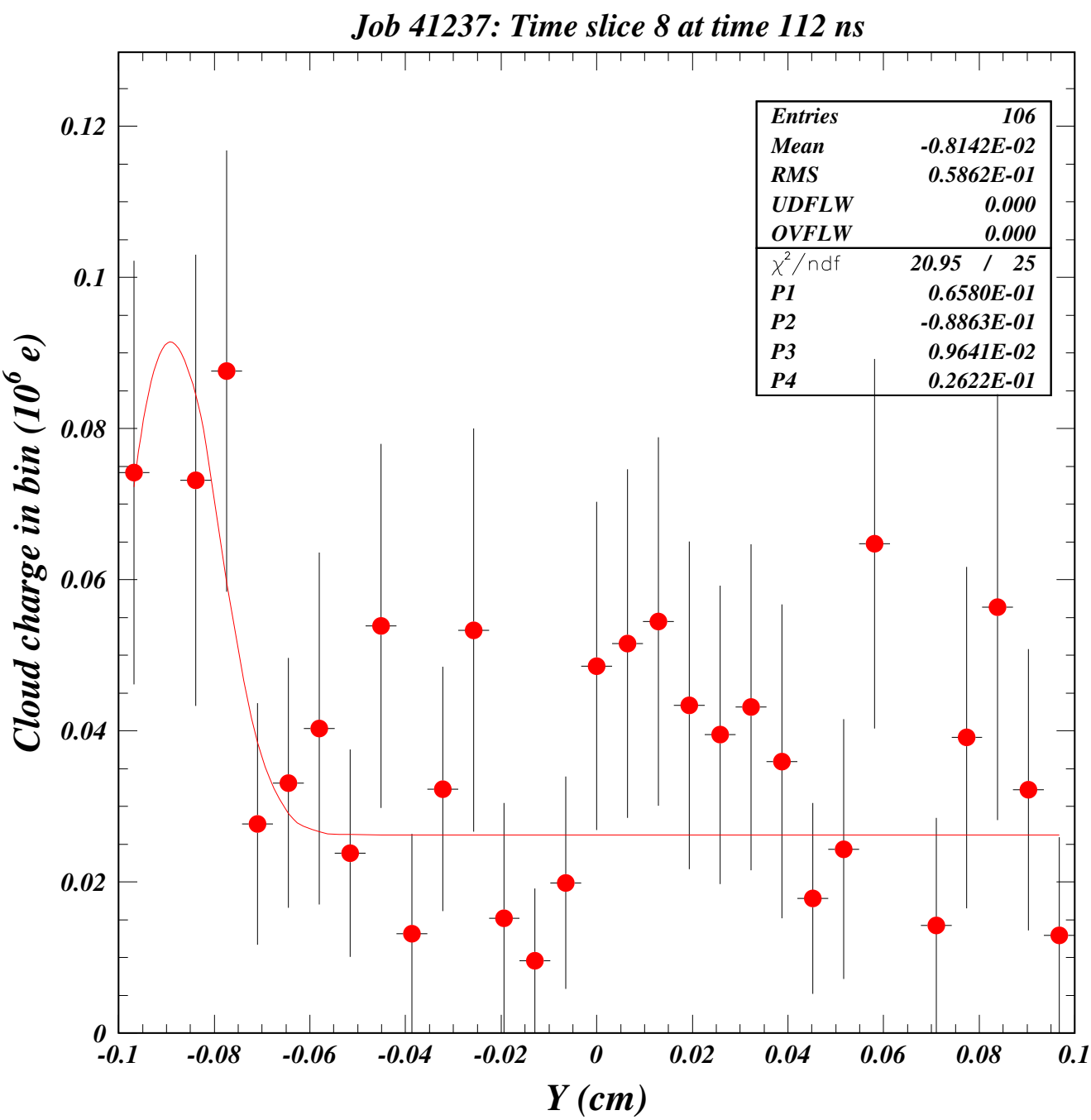
Job 41237: Time slice 8 at time 112 ns
Entries 106
Mean -0.8142E-02
RMS 0.5862E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 20.95 / 25
P1 0.6580E-01
P2 -0.8863E-01
P3 0.9641E-02
P4 0.2622E-01
Cloud charge in bin (10⁶ e)
Y (cm)
0
0.02
0.04
0.06
0.08
0.1
0.12
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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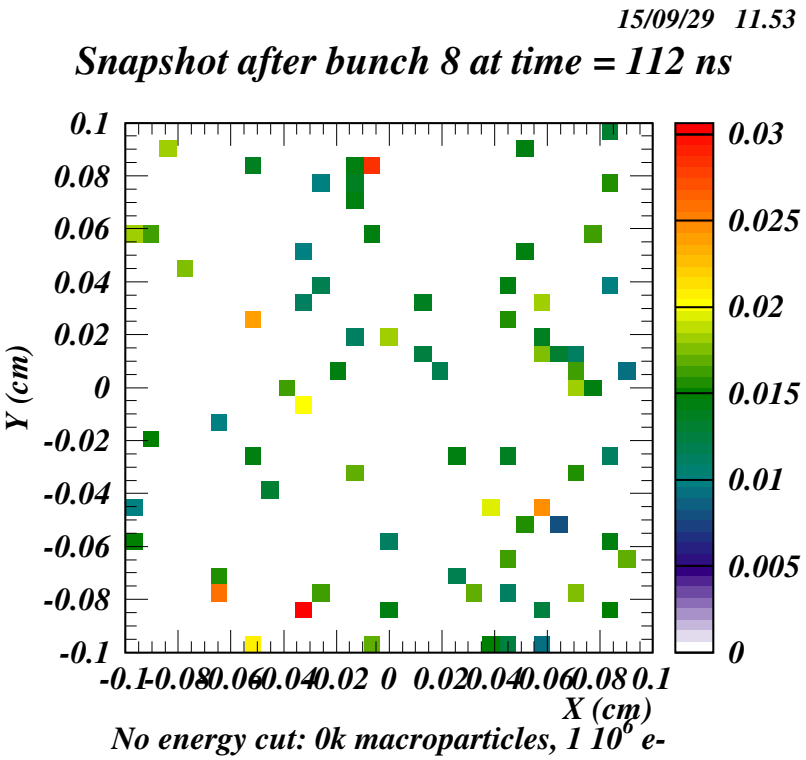
Snapshot after bunch 8 at time = 112 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
0.03
0.025
0.02
0.015
0.01
0.005
0
No energy cut: 0k macroparticles, 1 10^6 e-

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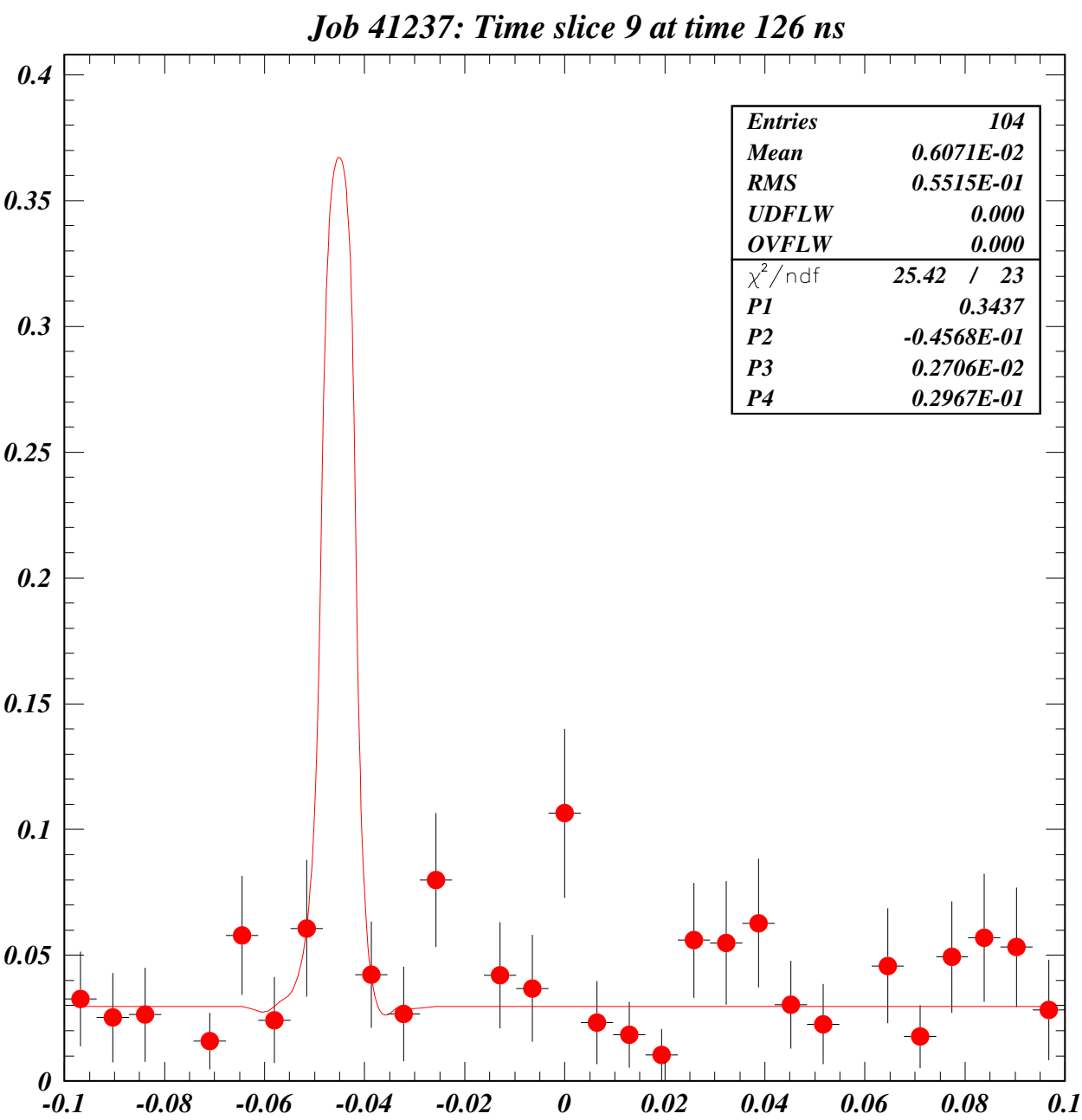
Job 41237: Time slice 9 at time 126 ns
Entries 104
Mean 0.6071E-02
RMS 0.5515E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 25.42 / 23
P1 0.3437
P2 -0.4568E-01
P3 0.2706E-02
P4 0.2967E-01
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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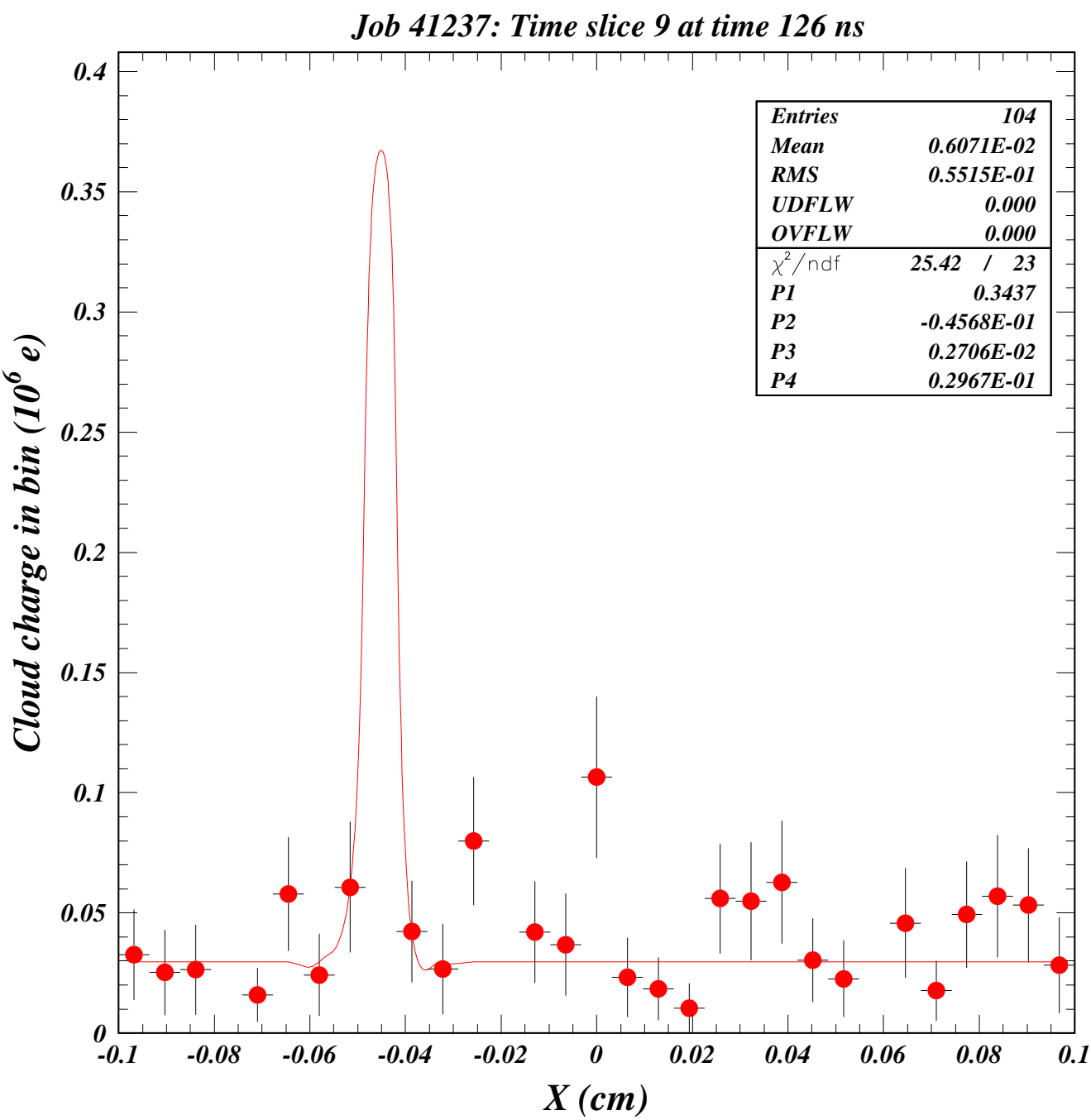
Job 41237: Time slice 9 at time 126 ns
Entries 104
Mean 0.6071E-02
RMS 0.5515E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 25.42 / 23
P1 0.3437
P2 -0.4568E-01
P3 0.2706E-02
P4 0.2967E-01
Cloud charge in bin (10⁶ e)
X (cm)
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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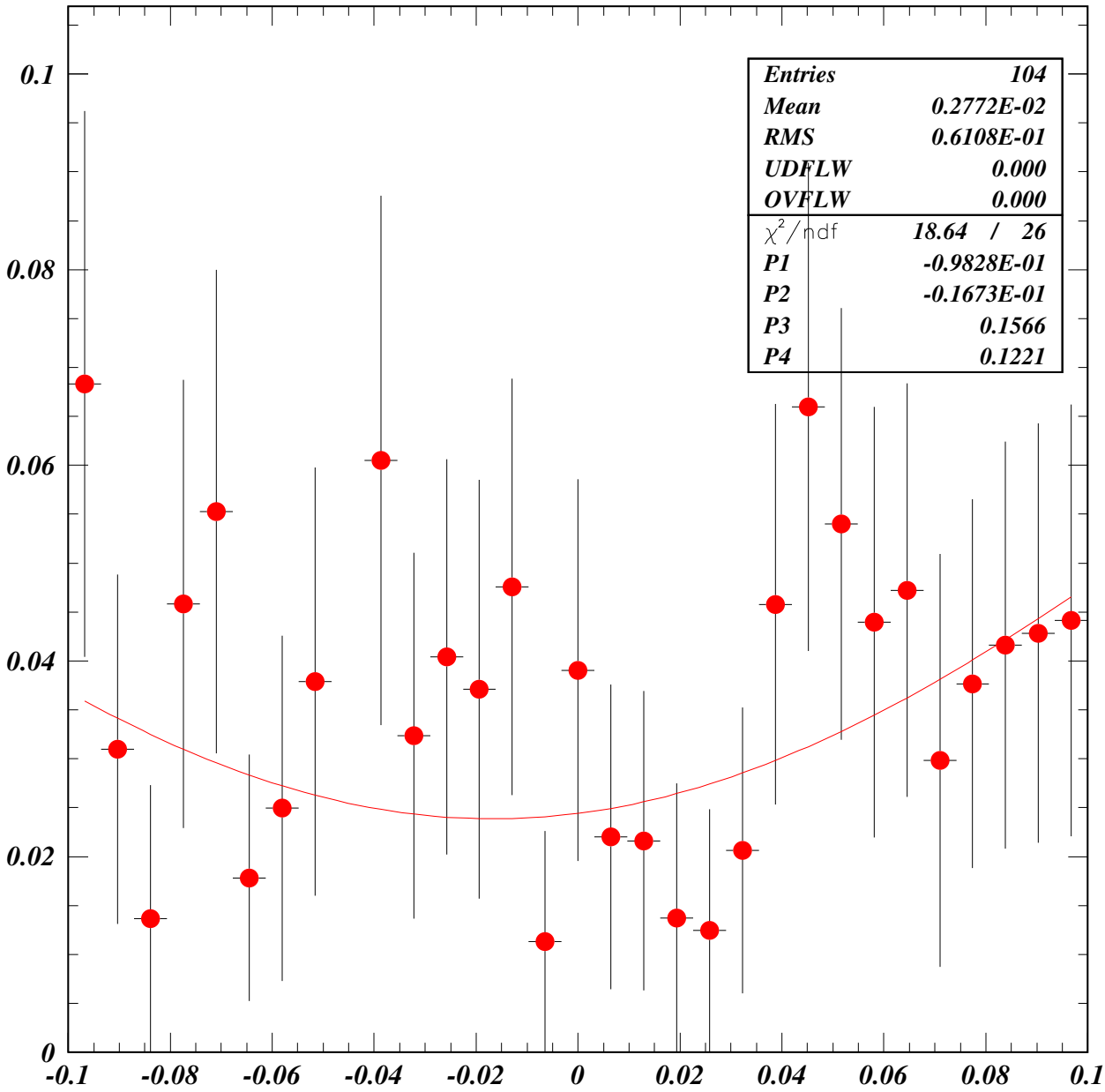
Job 41237: Time slice 9 at time 126 ns



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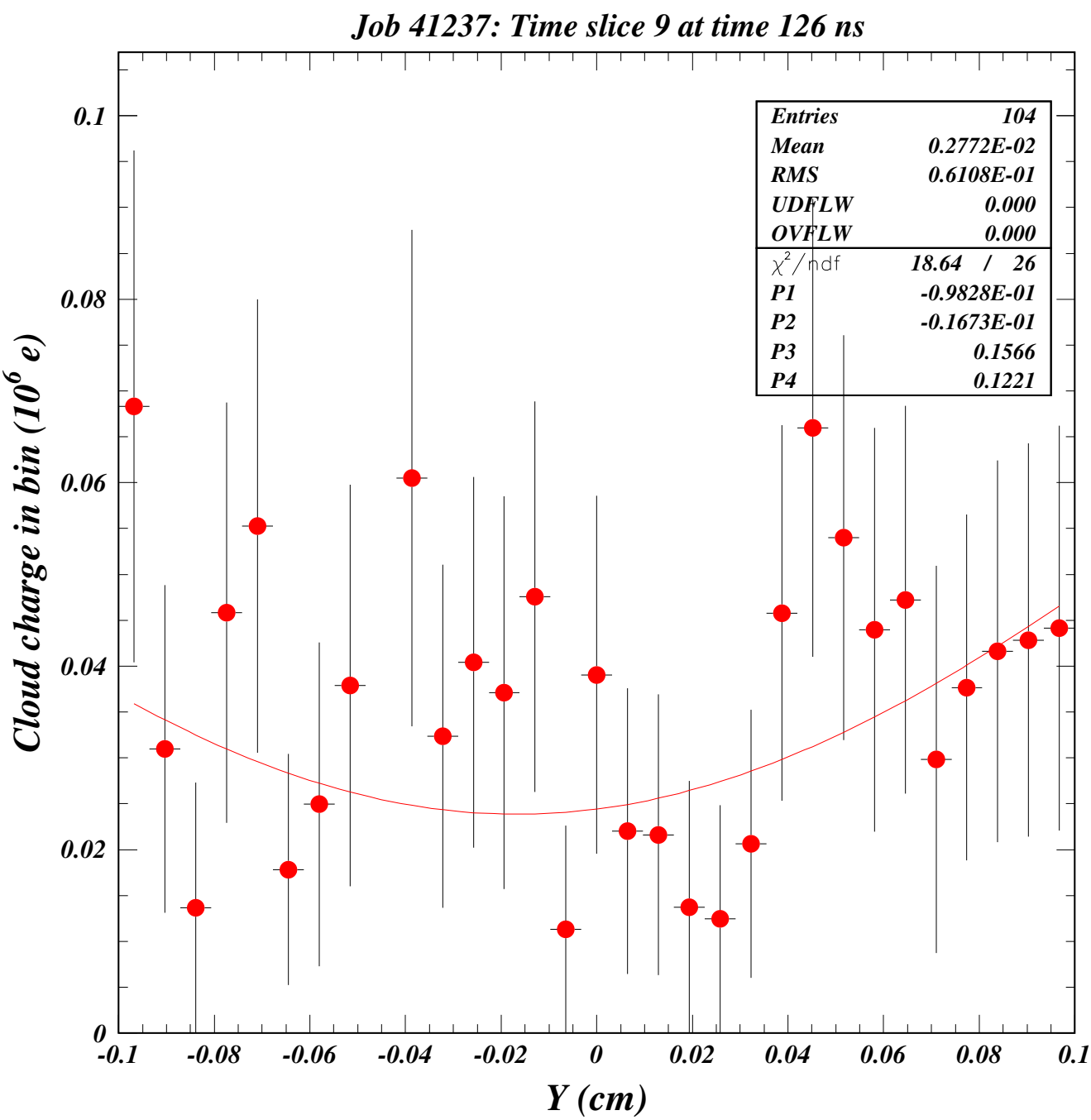
Job 41237: Time slice 9 at time 126 ns
Entries 104
Mean 0.2772E-02
RMS 0.6108E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 18.64 / 26
P1 -0.9828E-01
P2 -0.1673E-01
P3 0.1566
P4 0.1221
Cloud charge in bin (10⁶ e)
Y (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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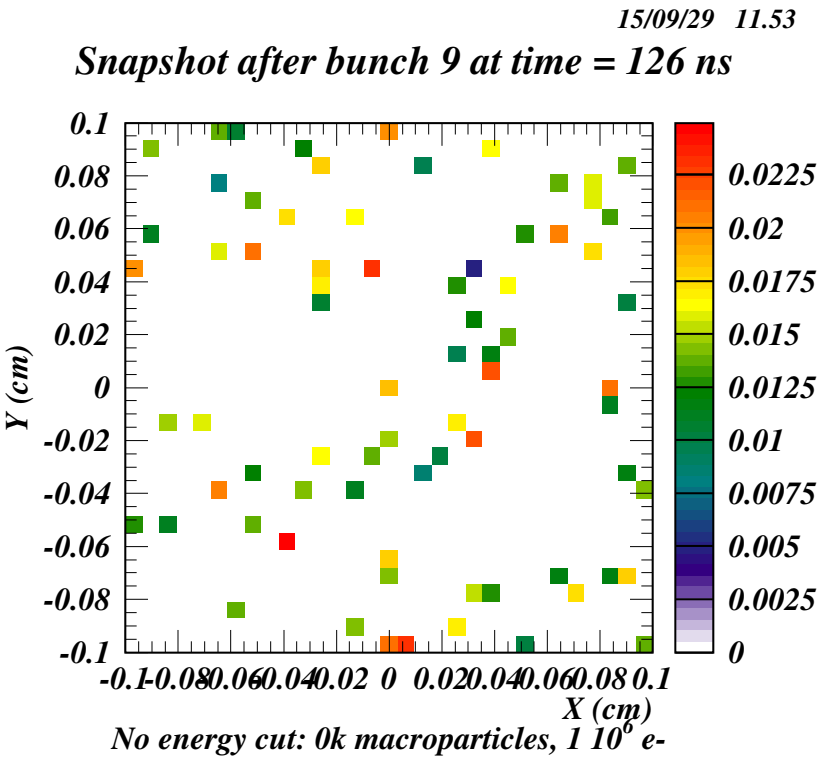
Snapshot after bunch 9 at time = 126 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
-0.1 -0.08 -0.06 -0.04 -0.02 0 0.02 0.04 0.06 0.08 0.1
0.0225
0.02
0.0175
0.015
0.0125
0.01
0.0075
0.005
0.0025
0
No energy cut: 0k macroparticles, 1 10^6 e-

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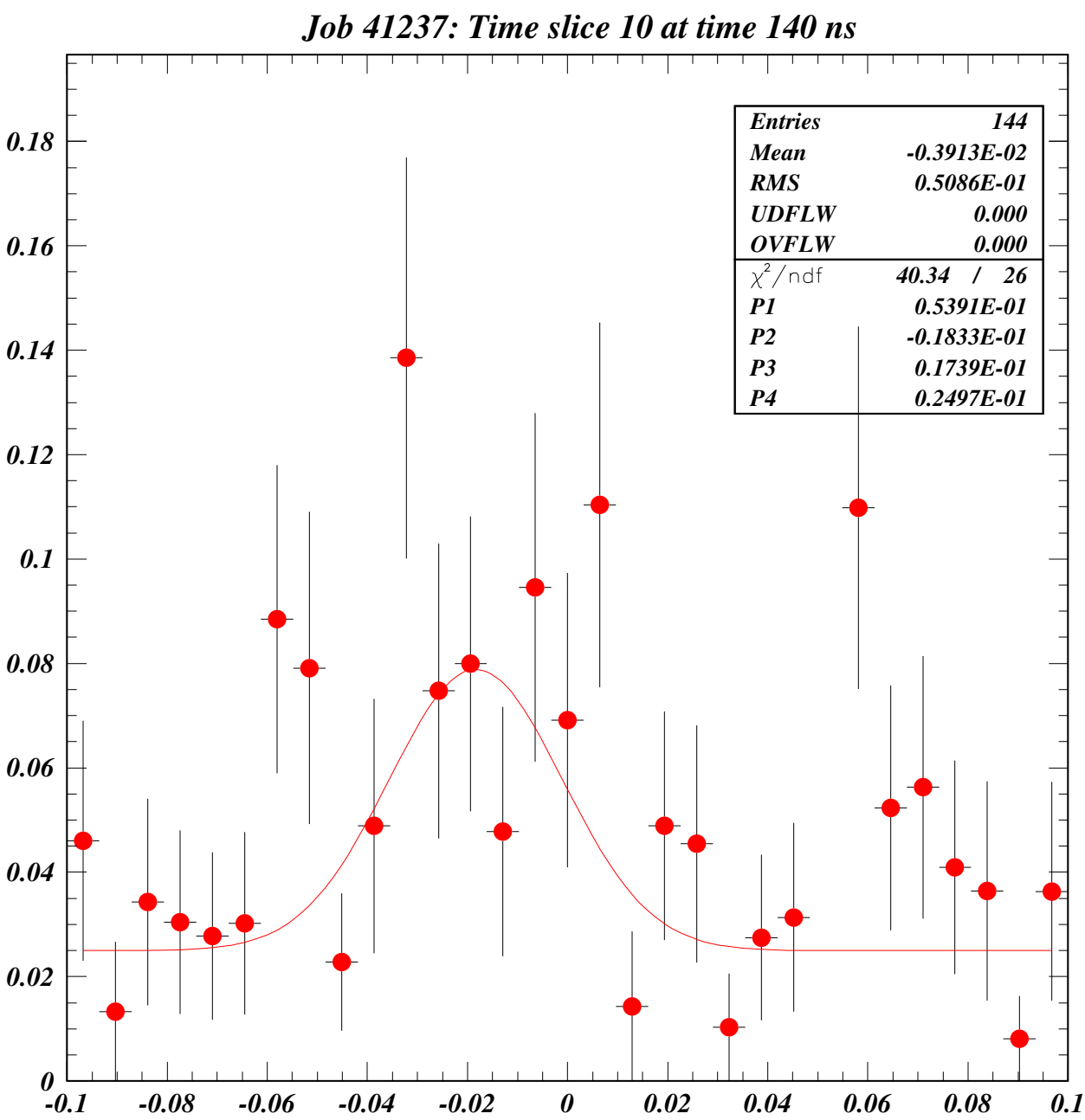
Job 41237: Time slice 10 at time 140 ns
Entries 144
Mean -0.3913E-02
RMS 0.5086E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 40.34 / 26
P1 0.5391E-01
P2 -0.1833E-01
P3 0.1739E-01
P4 0.2497E-01
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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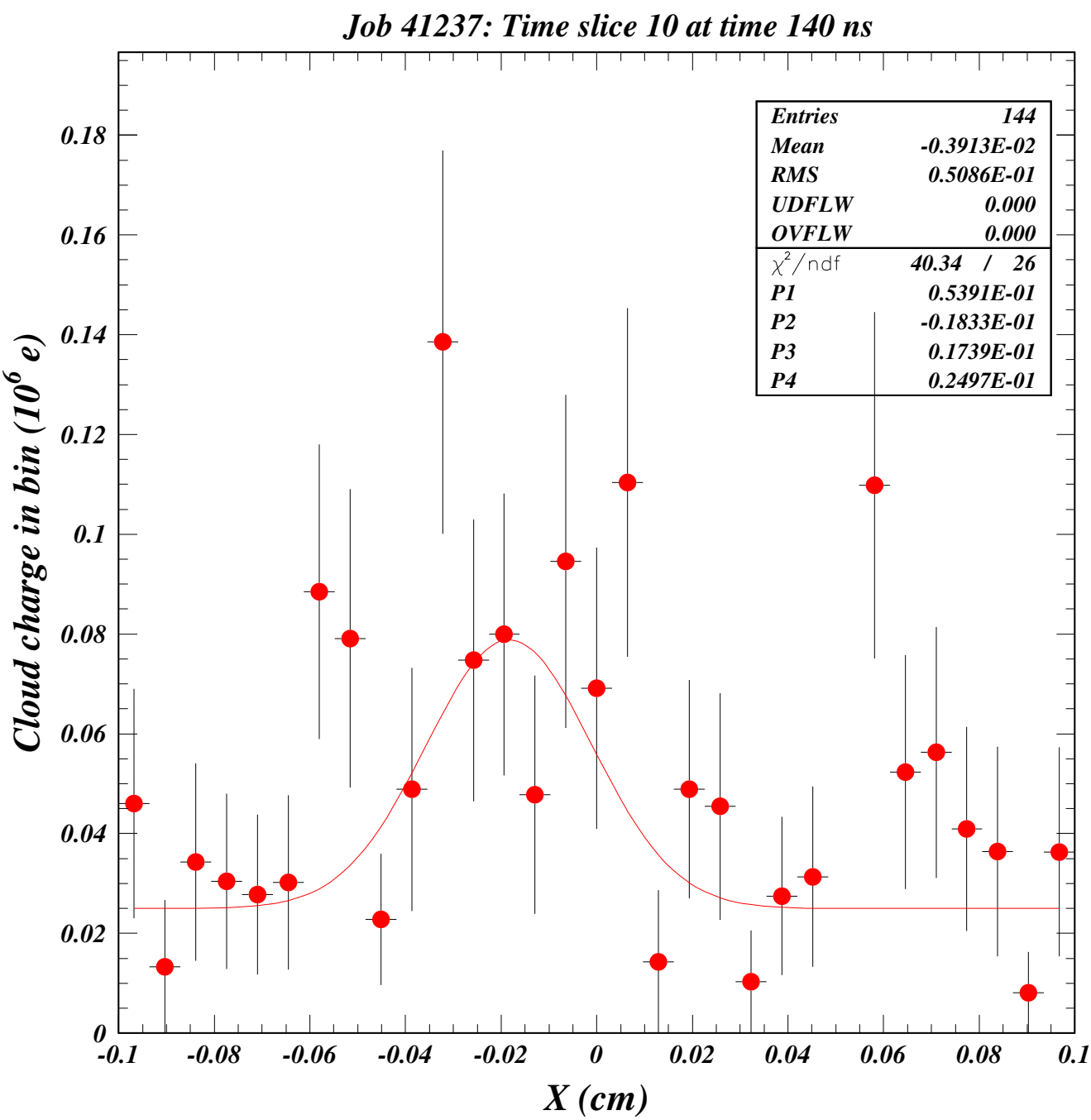
Job 41237: Time slice 10 at time 140 ns
Entries 144
Mean -0.3913E-02
RMS 0.5086E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 40.34 / 26
P1 0.5391E-01
P2 -0.1833E-01
P3 0.1739E-01
P4 0.2497E-01
Cloud charge in bin (10⁶ e)
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
X (cm)

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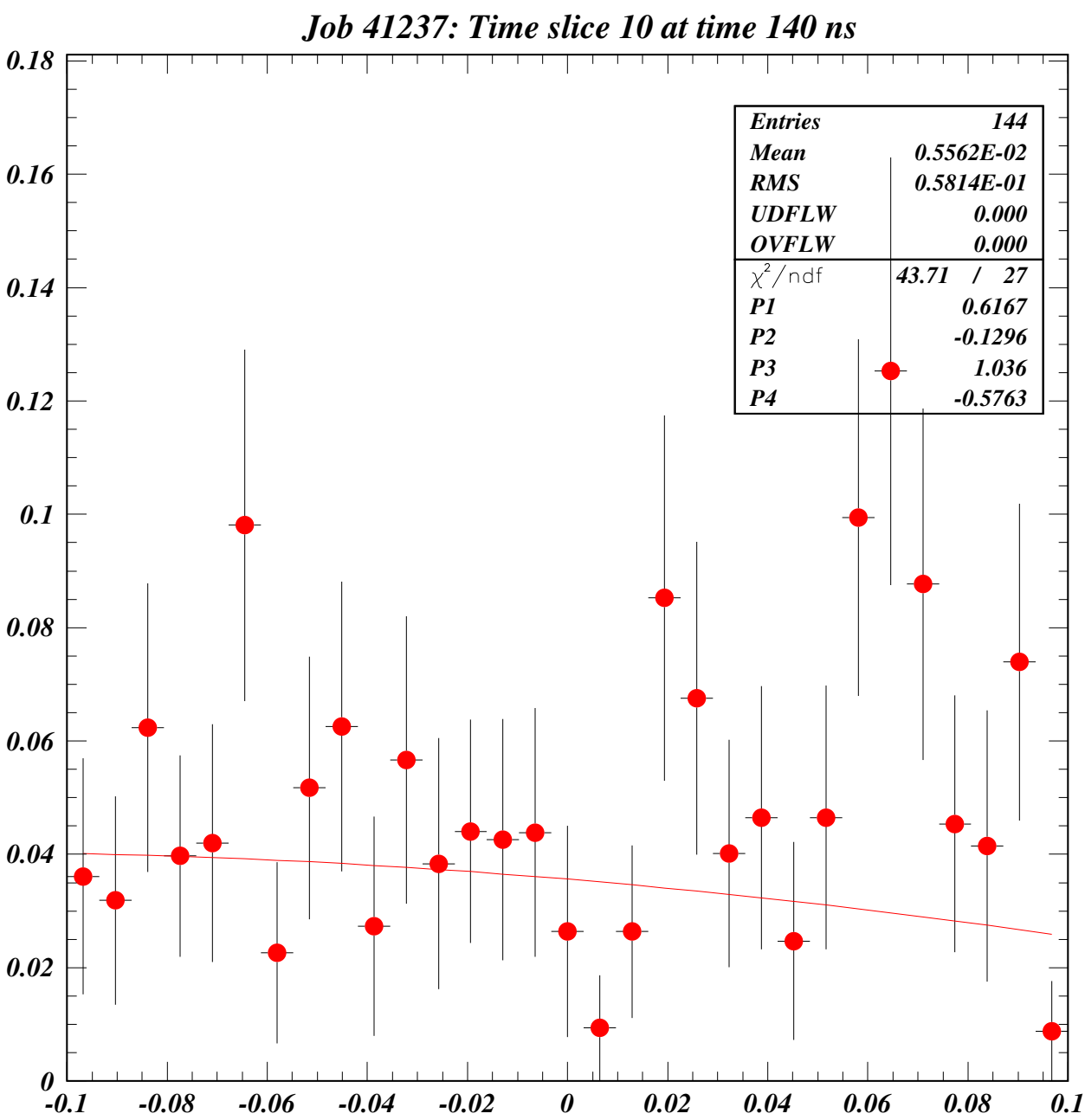
Job 41237: Time slice 10 at time 140 ns
Entries 144
Mean 0.5562E-02
RMS 0.5814E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 43.71 / 27
P1 0.6167
P2 -0.1296
P3 1.036
P4 -0.5763
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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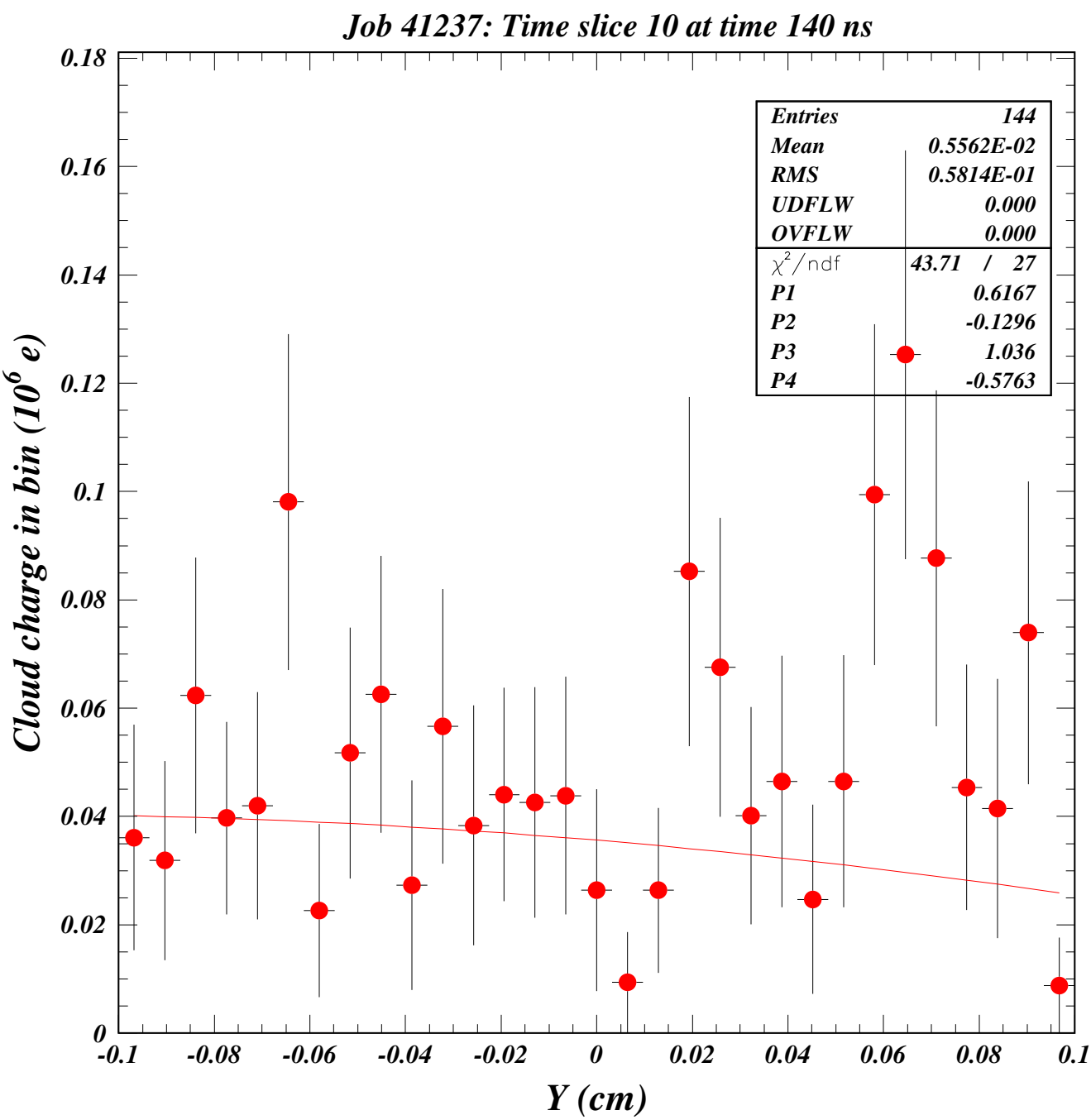
Job 41237: Time slice 10 at time 140 ns
Entries 144
Mean 0.5562E-02
RMS 0.5814E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 43.71 / 27
P1 0.6167
P2 -0.1296
P3 1.036
P4 -0.5763
Cloud charge in bin (10⁶ e)
Y (cm)
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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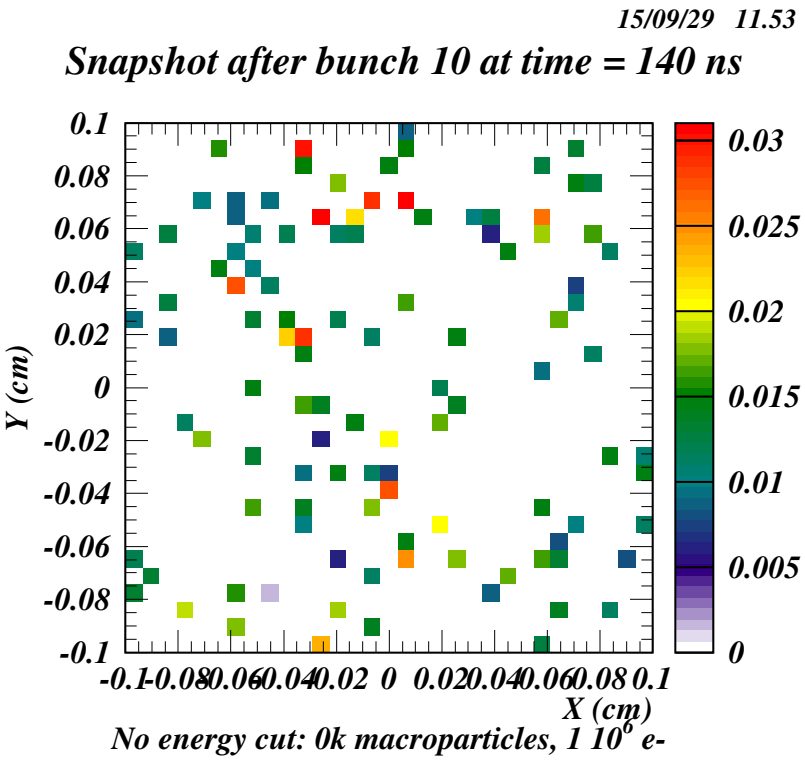
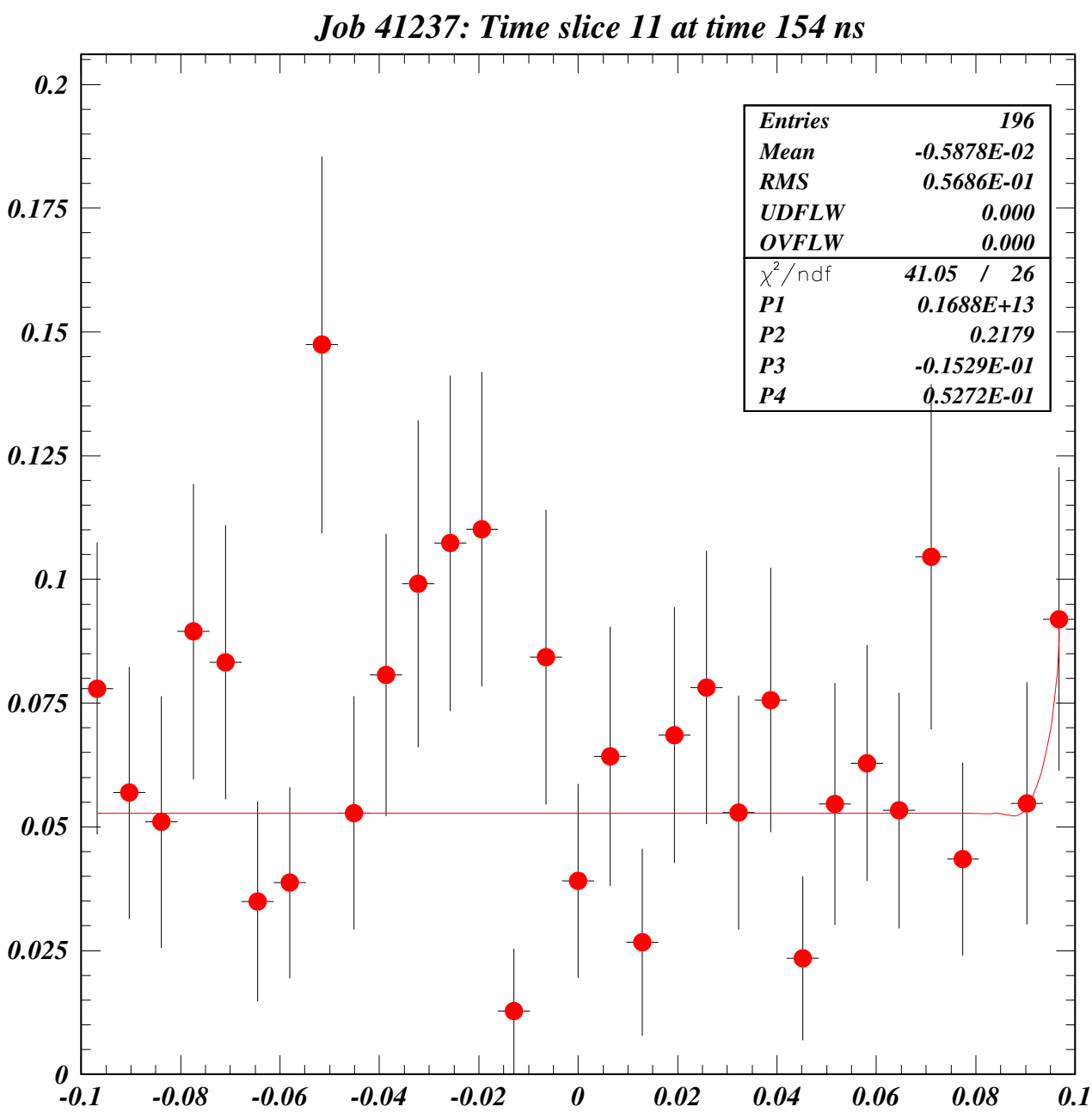

Snapshot after bunch 10 at time = 140 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
0.03
0.025
0.02
0.015
0.01
0.005
0
No energy cut: 0k macroparticles, 1 10^6 e-

15/09/29 11.53


Job 41237: Time slice 11 at time 154 ns
Entries 196
Mean -0.5878E-02
RMS 0.5686E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 41.05 / 26
P1 0.1688E+13
P2 0.2179
P3 -0.1529E-01
P4 0.5272E-01
0.2
0.175
0.15
0.125
0.1
0.075
0.05
0.025
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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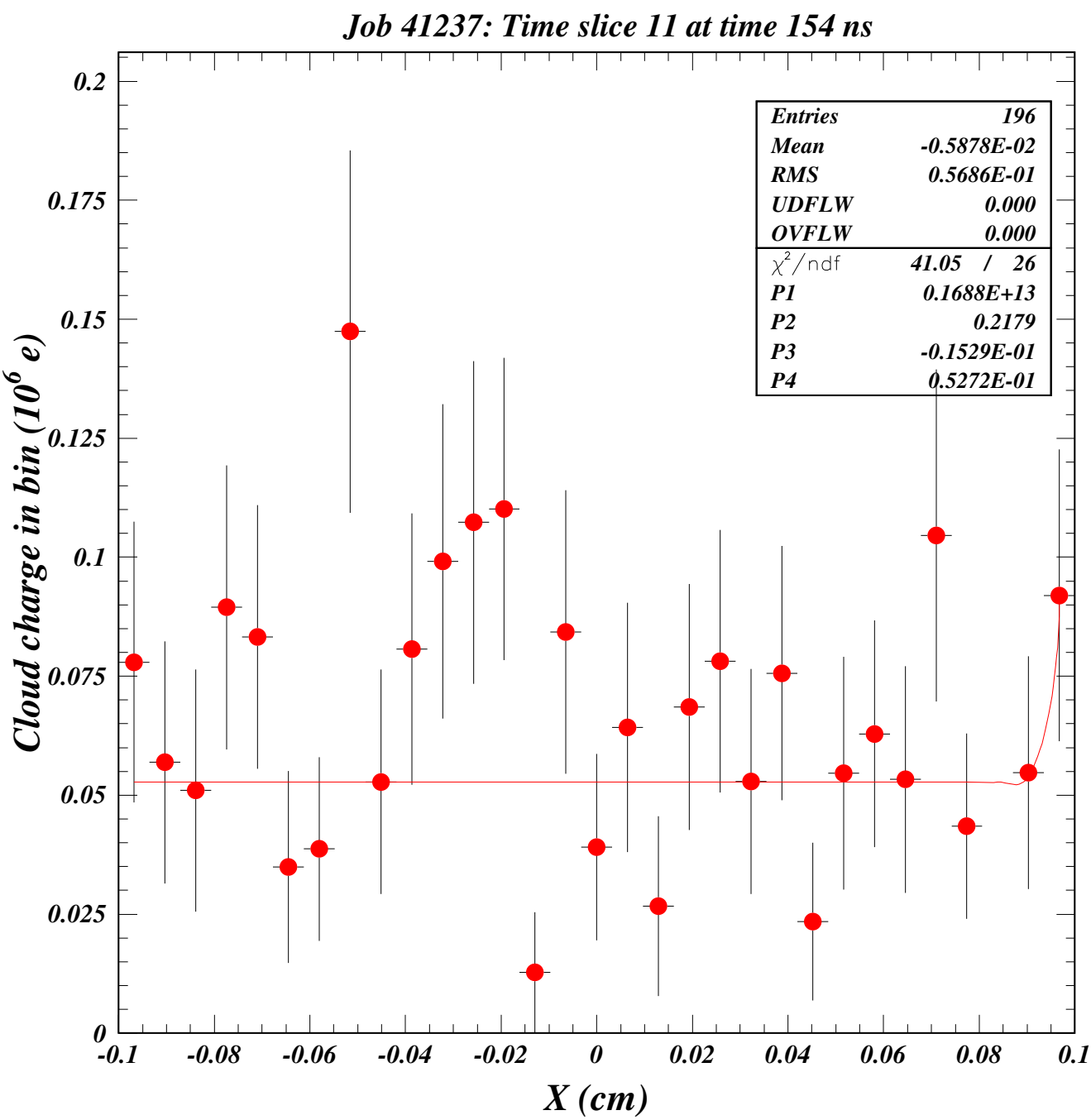
Job 41237: Time slice 11 at time 154 ns
Entries 196
Mean -0.5878E-02
RMS 0.5686E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 41.05 / 26
P1 0.1688E+13
P2 0.2179
P3 -0.1529E-01
P4 0.5272E-01
Cloud charge in bin (10⁶ e)
X (cm)
0.2
0.175
0.15
0.125
0.1
0.075
0.05
0.025
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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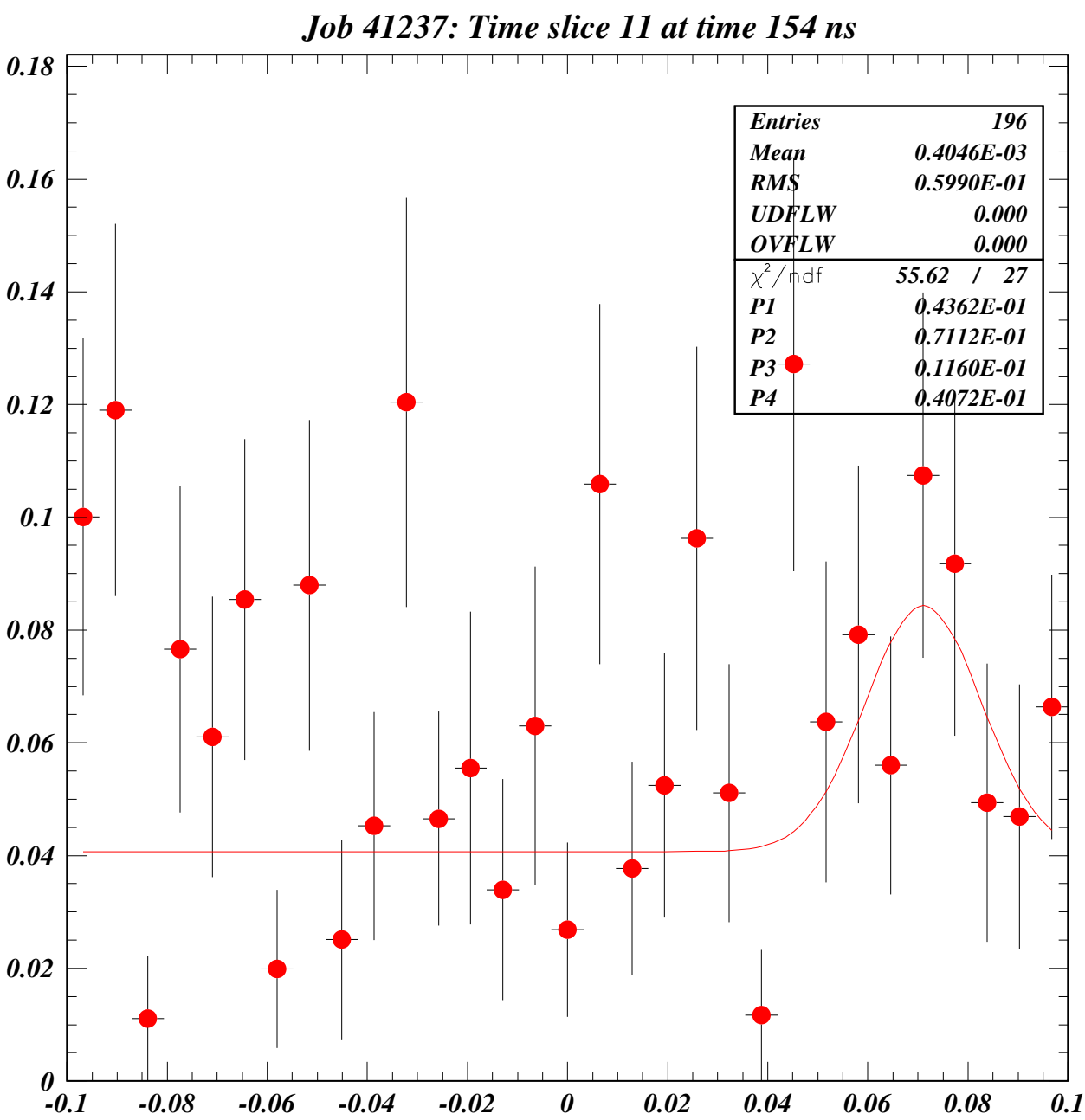
Job 41237: Time slice 11 at time 154 ns
Entries 196
Mean 0.4046E-03
RMS 0.5990E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 55.62 / 27
P1 0.4362E-01
P2 0.7112E-01
P3 0.1160E-01
P4 0.4072E-01
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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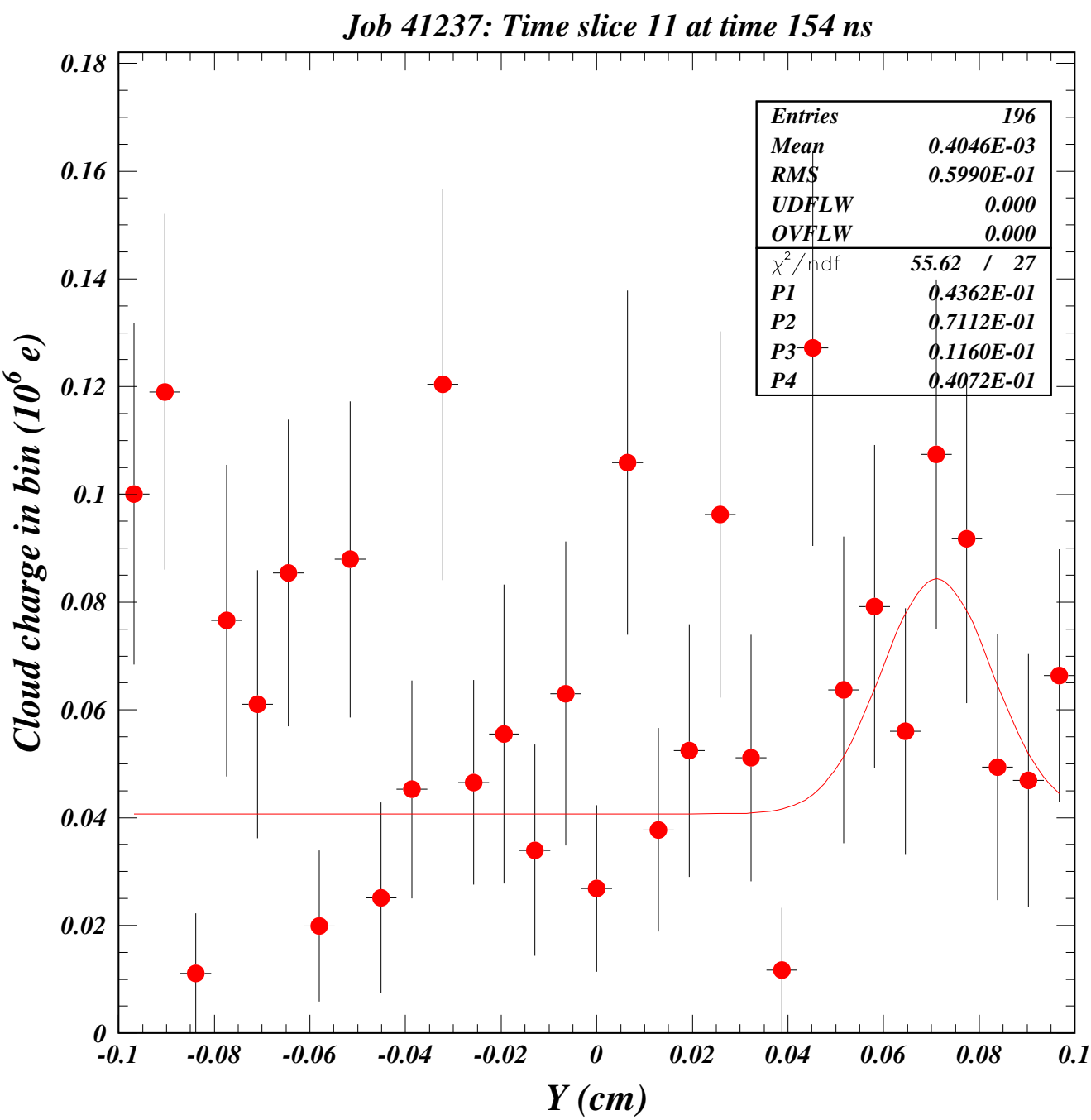
Job 41237: Time slice 11 at time 154 ns
Entries 196
Mean 0.4046E-03
RMS 0.5990E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 55.62 / 27
P1 0.4362E-01
P2 0.7112E-01
P3 0.1160E-01
P4 0.4072E-01
Cloud charge in bin (10⁶ e)
Y (cm)
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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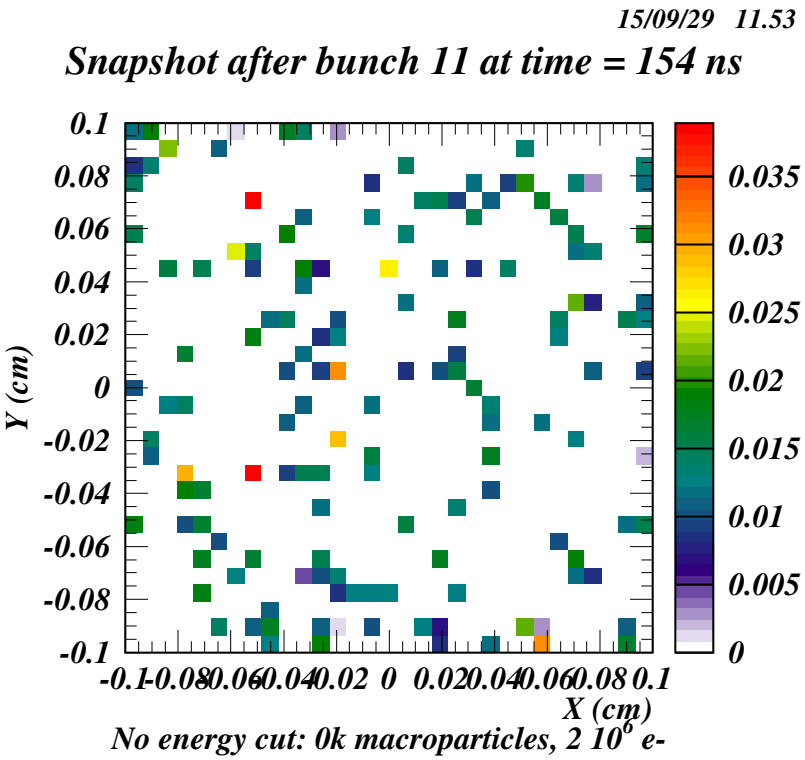
Snapshot after bunch 11 at time = 154 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
No energy cut: 0k macroparticles, 2 10^6 e-

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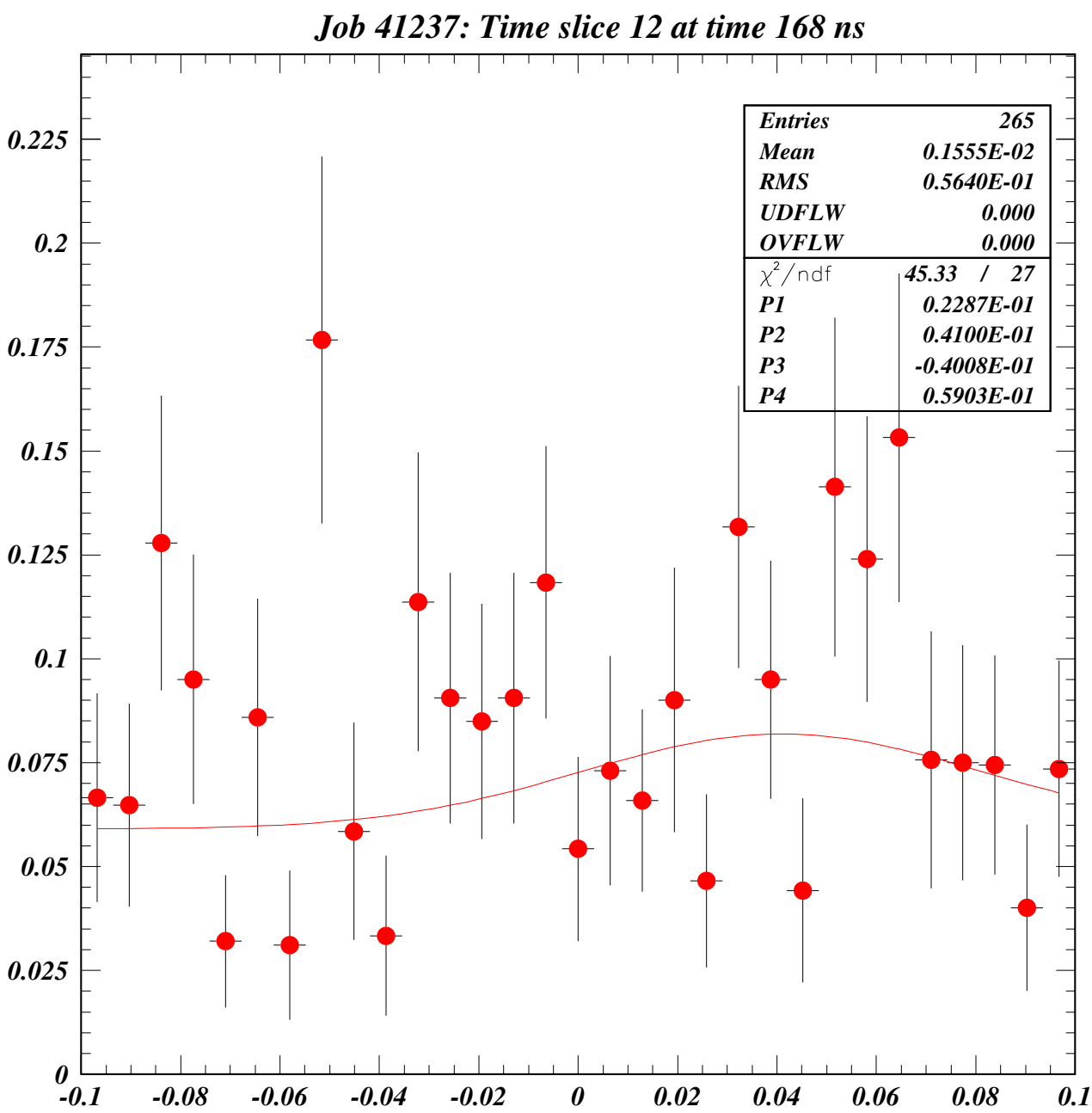
Job 41237: Time slice 12 at time 168 ns
Entries 265
Mean 0.1555E-02
RMS 0.5640E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 45.33 / 27
P1 0.2287E-01
P2 0.4100E-01
P3 -0.4008E-01
P4 0.5903E-01
0.225
0.2
0.175
0.15
0.125
0.1
0.075
0.05
0.025
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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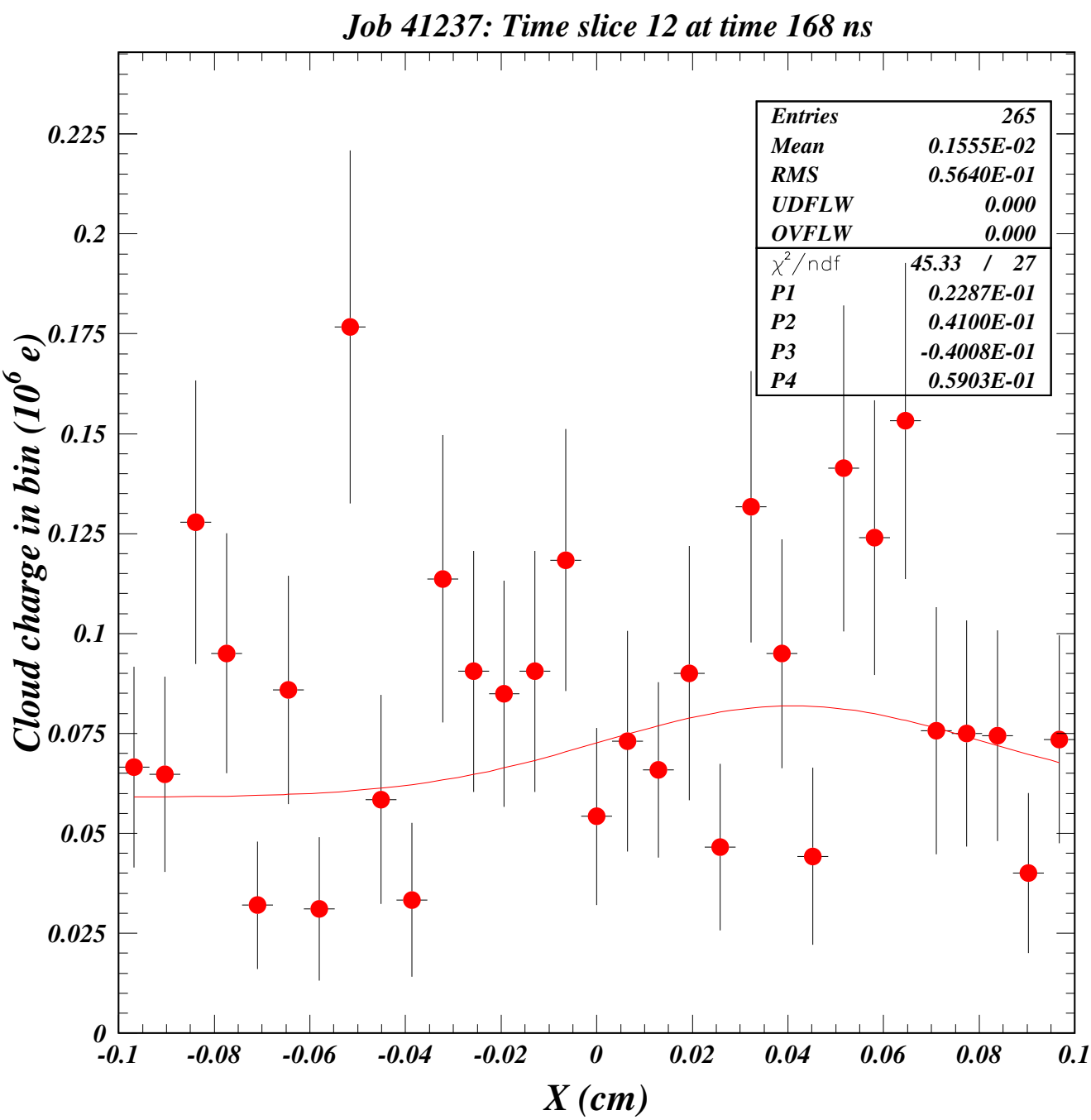
Job 41237: Time slice 12 at time 168 ns
Entries 265
Mean 0.1555E-02
RMS 0.5640E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 45.33 / 27
P1 0.2287E-01
P2 0.4100E-01
P3 -0.4008E-01
P4 0.5903E-01
Cloud charge in bin (10⁶ e)
X (cm)
0.225
0.2
0.175
0.15
0.125
0.1
0.075
0.05
0.025
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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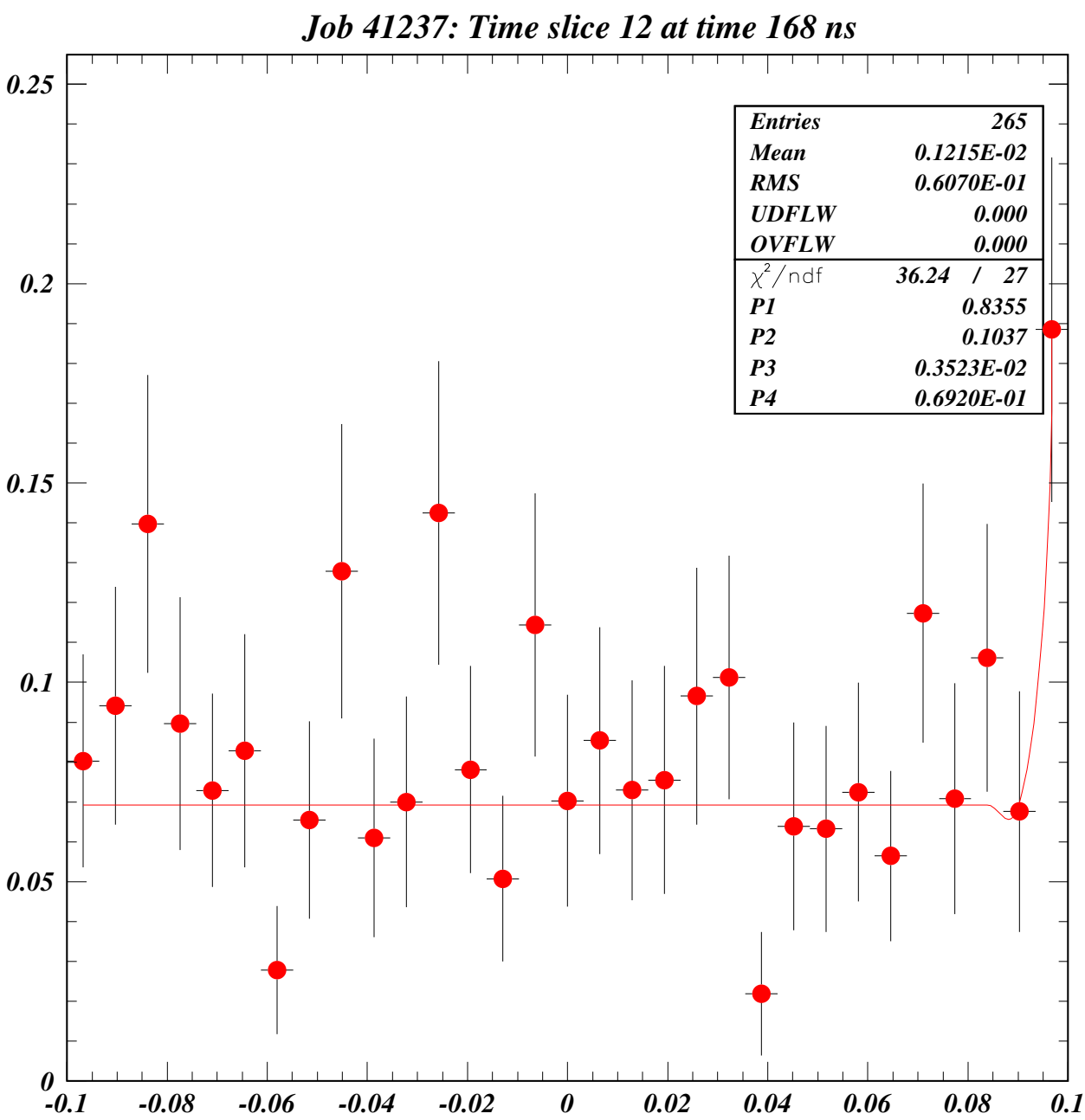
Job 41237: Time slice 12 at time 168 ns
Entries 265
Mean 0.1215E-02
RMS 0.6070E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 36.24 / 27
P1 0.8355
P2 0.1037
P3 0.3523E-02
P4 0.6920E-01
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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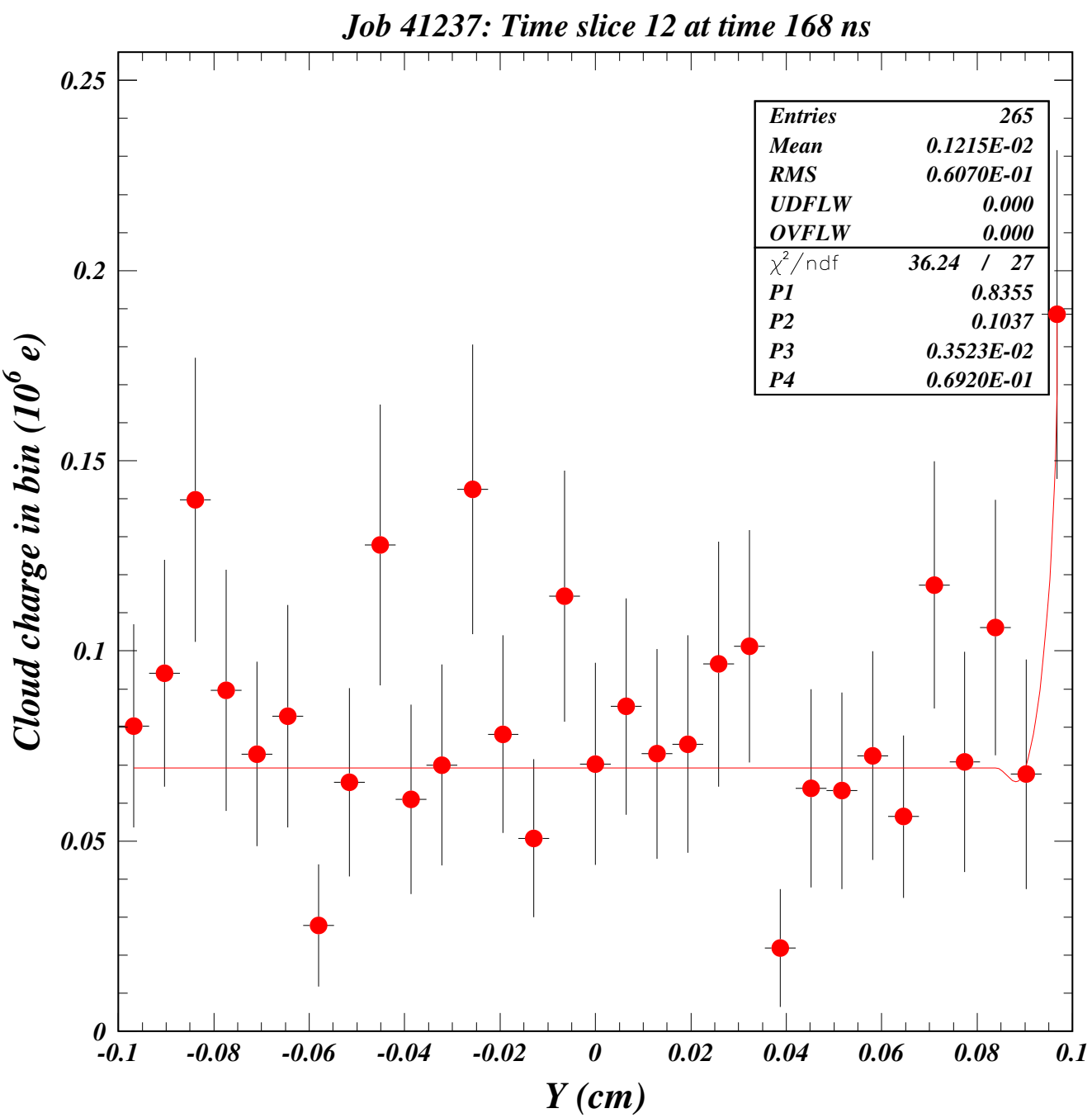
Job 41237: Time slice 12 at time 168 ns
Entries 265
Mean 0.1215E-02
RMS 0.6070E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 36.24 / 27
P1 0.8355
P2 0.1037
P3 0.3523E-02
P4 0.6920E-01
Cloud charge in bin (10⁶ e)
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
Y (cm)

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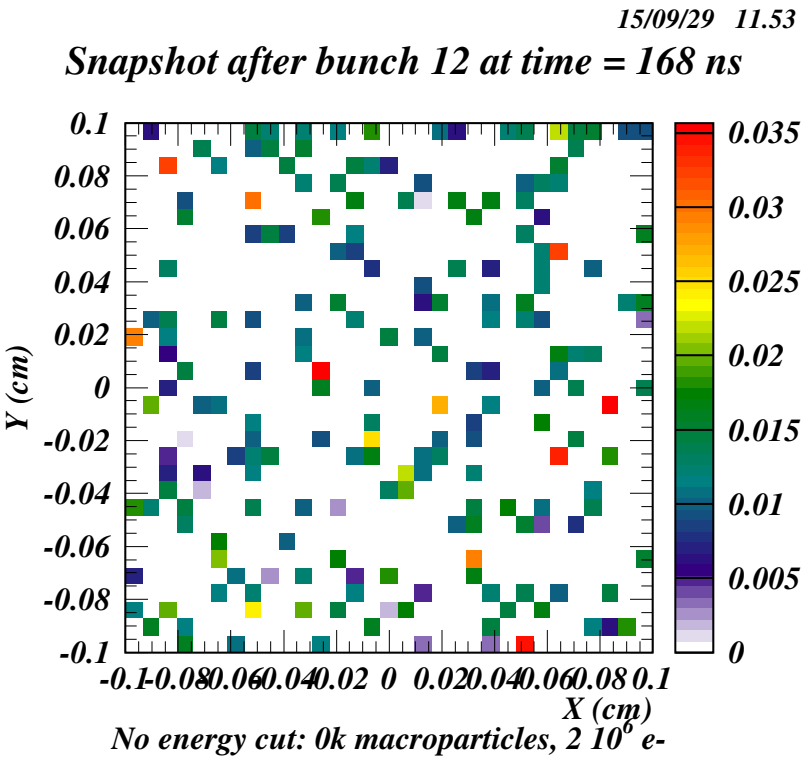
Snapshot after bunch 12 at time = 168 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
-0.1 -0.08 -0.06 -0.04 -0.02 0 0.02 0.04 0.06 0.08 0.1
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
No energy cut: 0k macroparticles, 2 10^6 e-

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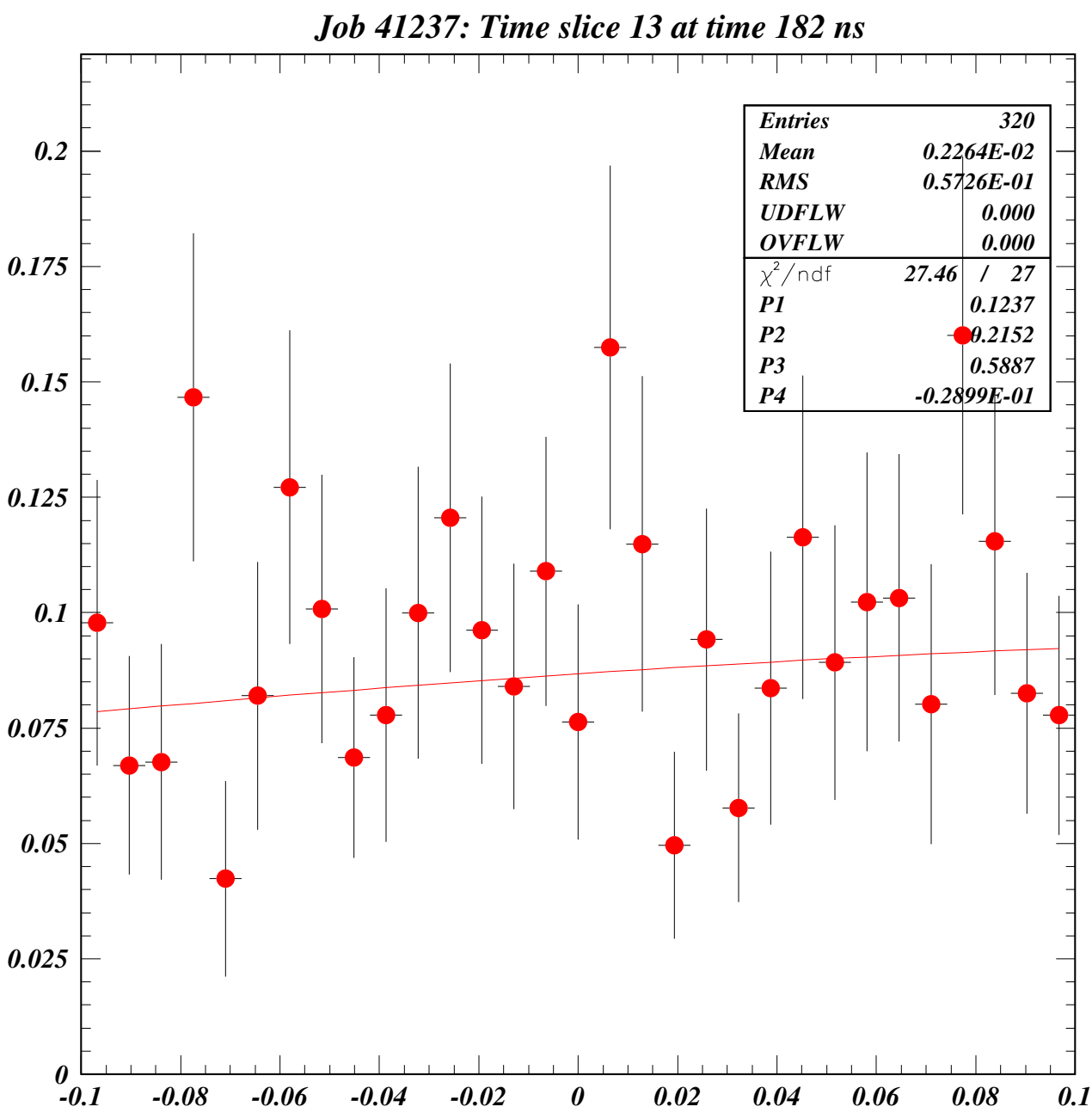
Job 41237: Time slice 13 at time 182 ns
Entries 320
Mean 0.2264E-02
RMS 0.5726E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 27.46 / 27
P1 0.1237
P2 0.2152
P3 0.5887
P4 -0.2899E-01
0.2
0.175
0.15
0.125
0.1
0.075
0.05
0.025
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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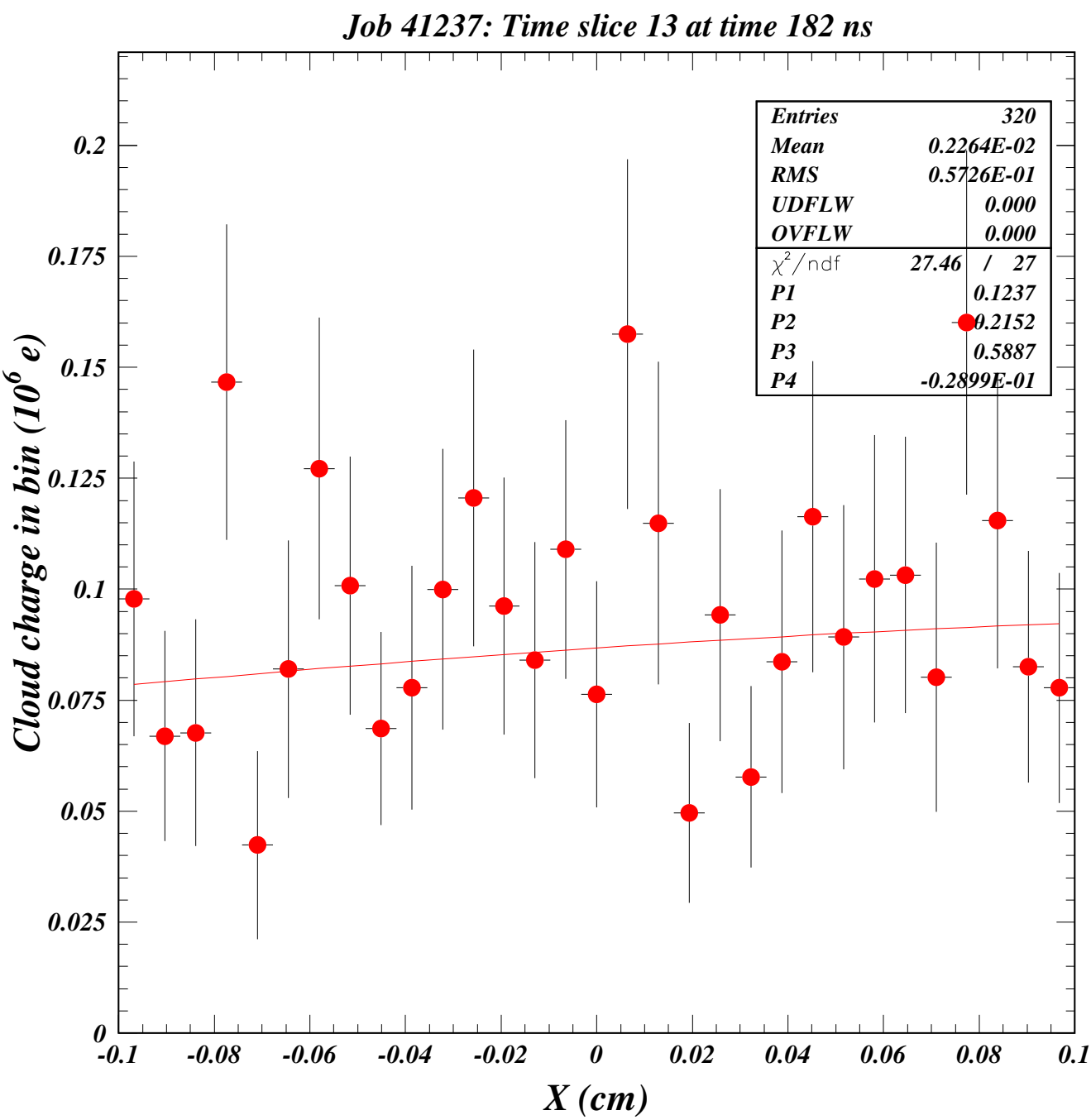
Job 41237: Time slice 13 at time 182 ns
Entries 320
Mean 0.2264E-02
RMS 0.5726E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 27.46 / 27
P1 0.1237
P2 0.2152
P3 0.5887
P4 -0.2899E-01
Cloud charge in bin (10⁶ e)
X (cm)
0
0.025
0.05
0.075
0.1
0.125
0.15
0.175
0.2
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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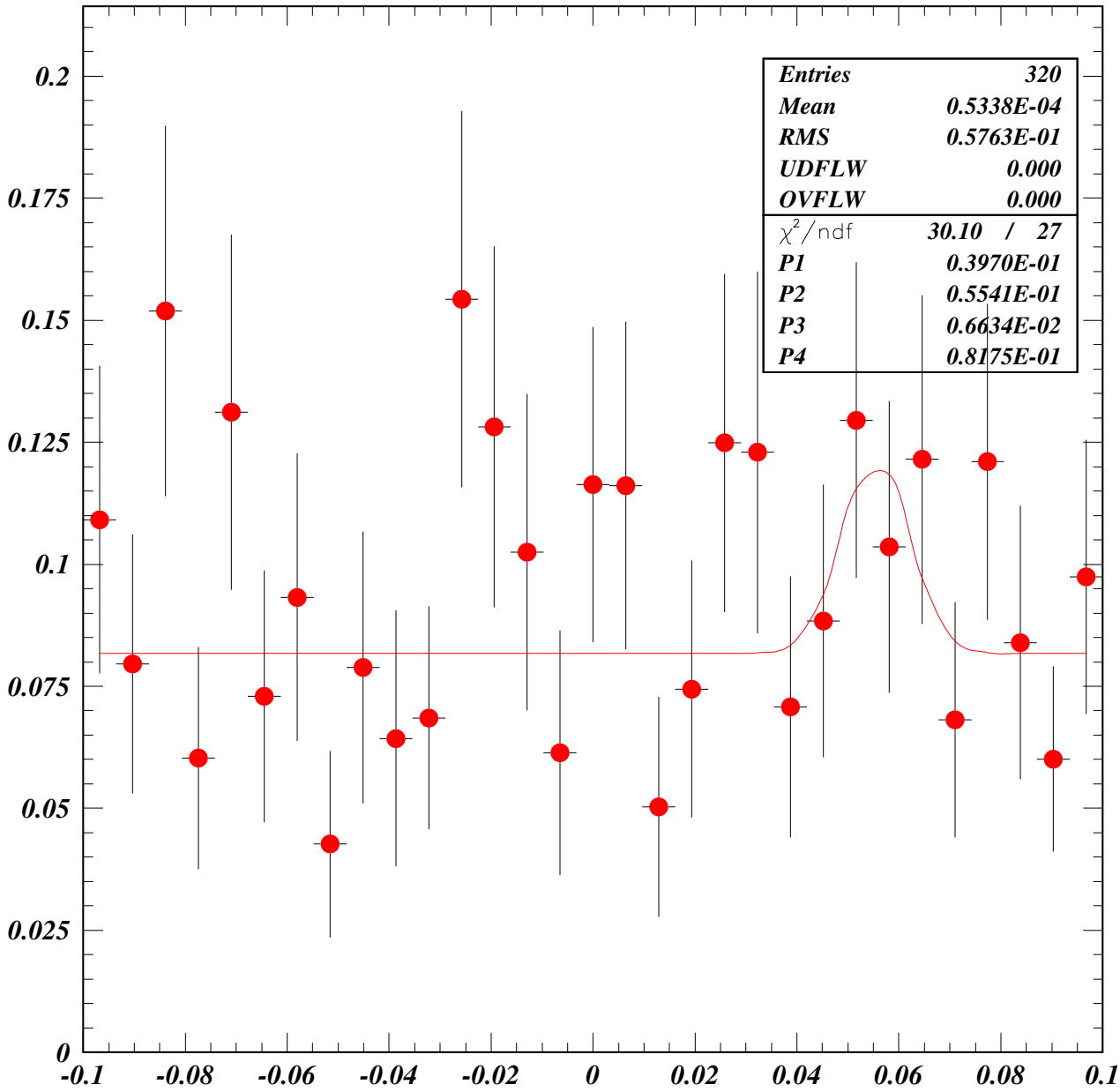
Job 41237: Time slice 13 at time 182 ns



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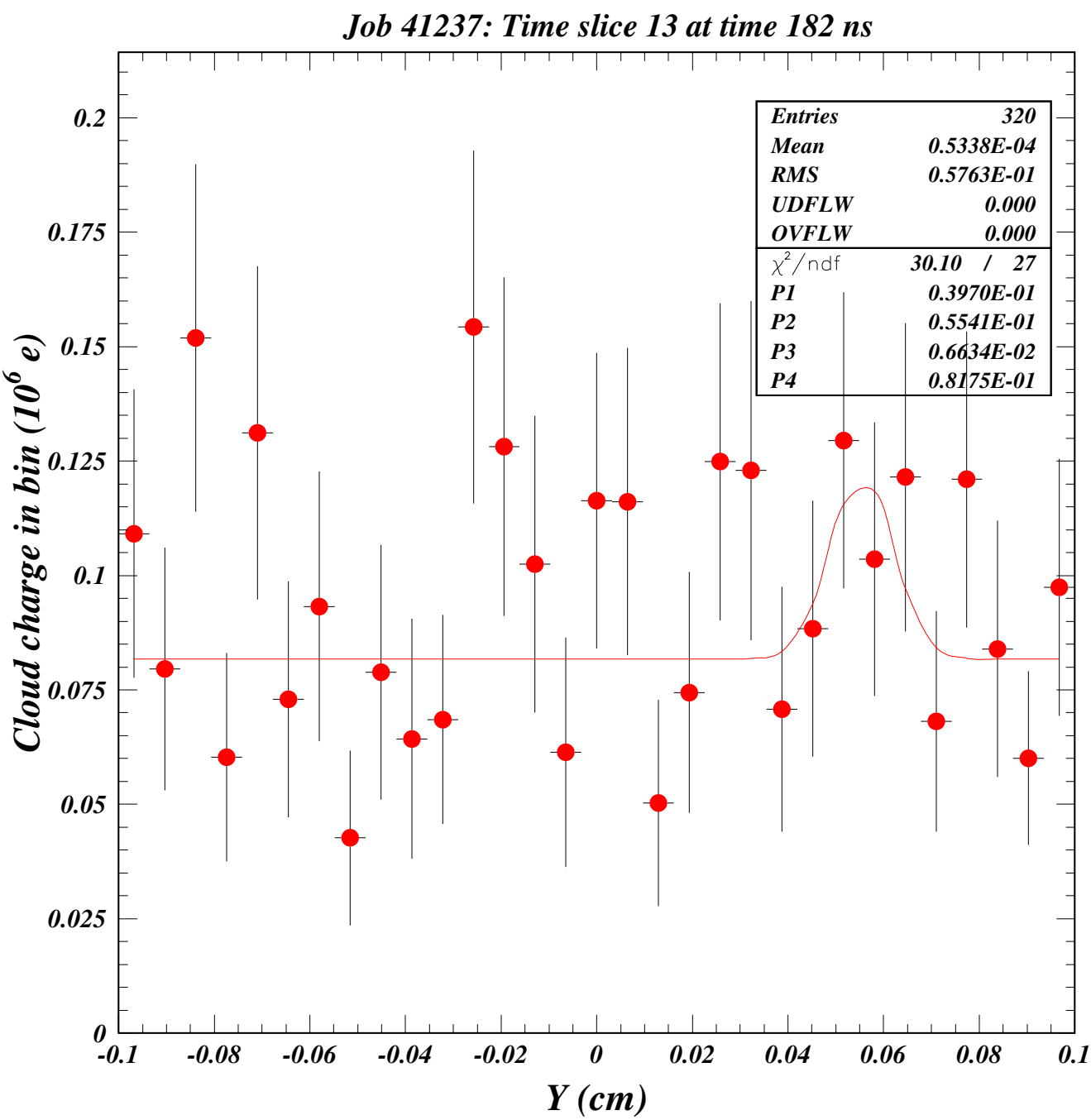
Job 41237: Time slice 13 at time 182 ns
Entries 320
Mean 0.5338E-04
RMS 0.5763E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 30.10 / 27
P1 0.3970E-01
P2 0.5541E-01
P3 0.6634E-02
P4 0.8175E-01
Cloud charge in bin (10⁶ e)
0.2
0.175
0.15
0.125
0.1
0.075
0.05
0.025
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
Y (cm)

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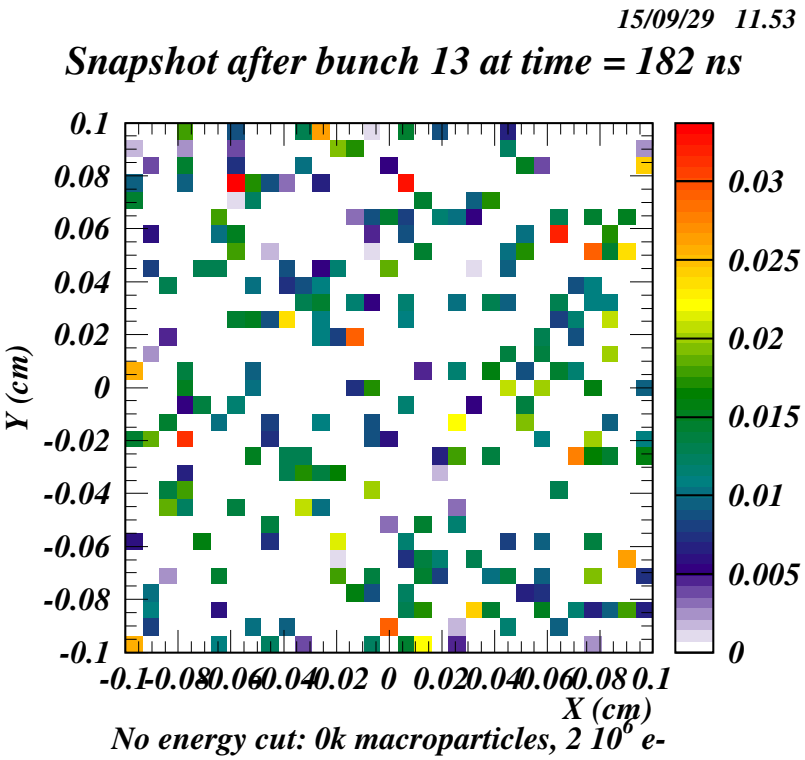
Snapshot after bunch 13 at time = 182 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
-0.1 -0.08 -0.06 -0.04 -0.02 0 0.02 0.04 0.06 0.08 0.1
0.03
0.025
0.02
0.015
0.01
0.005
0
No energy cut: 0k macroparticles, 2 10^6 e-

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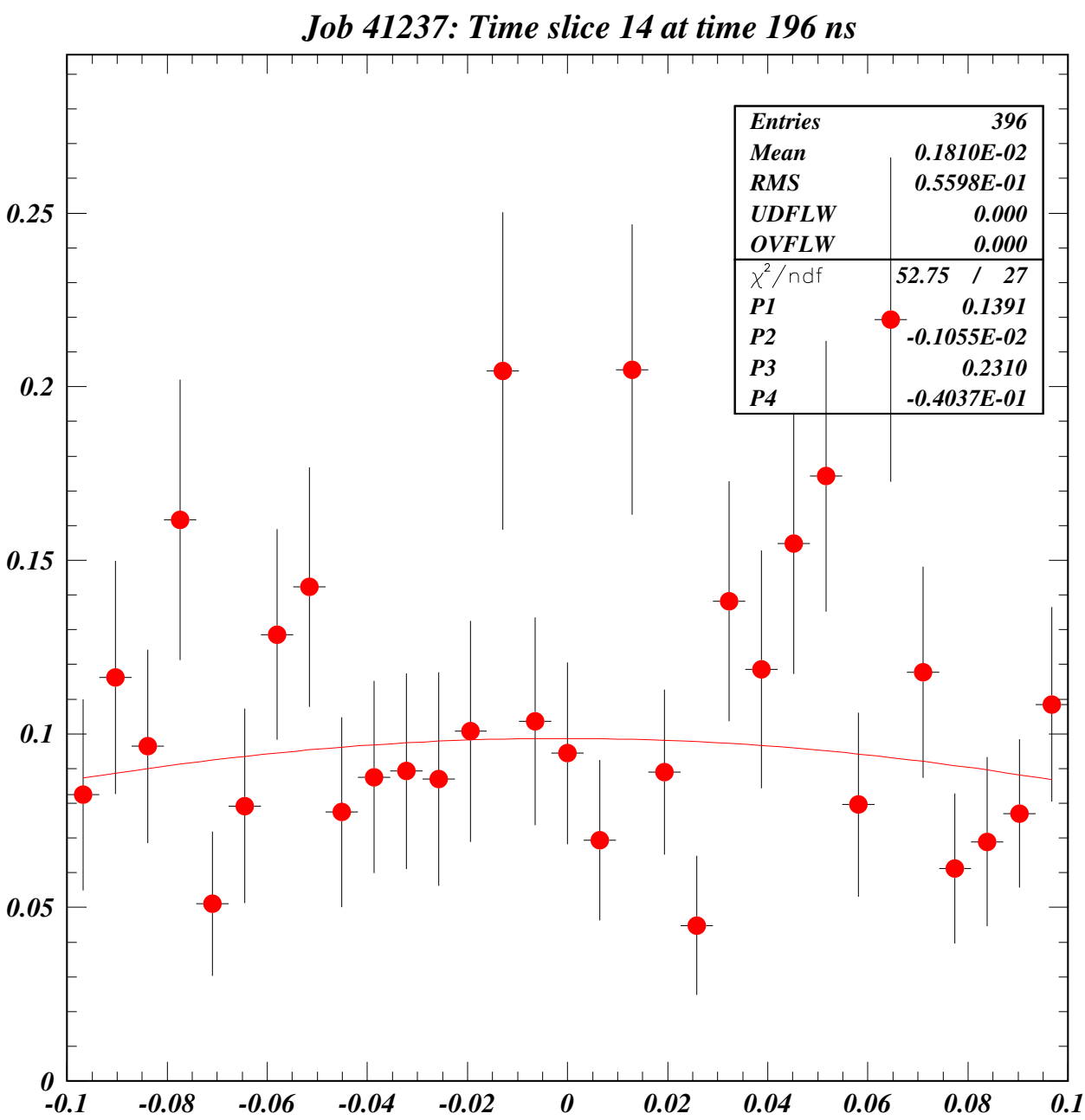
Job 41237: Time slice 14 at time 196 ns
Entries 396
Mean 0.1810E-02
RMS 0.5598E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 52.75 / 27
P1 0.1391
P2 -0.1055E-02
P3 0.2310
P4 -0.4037E-01
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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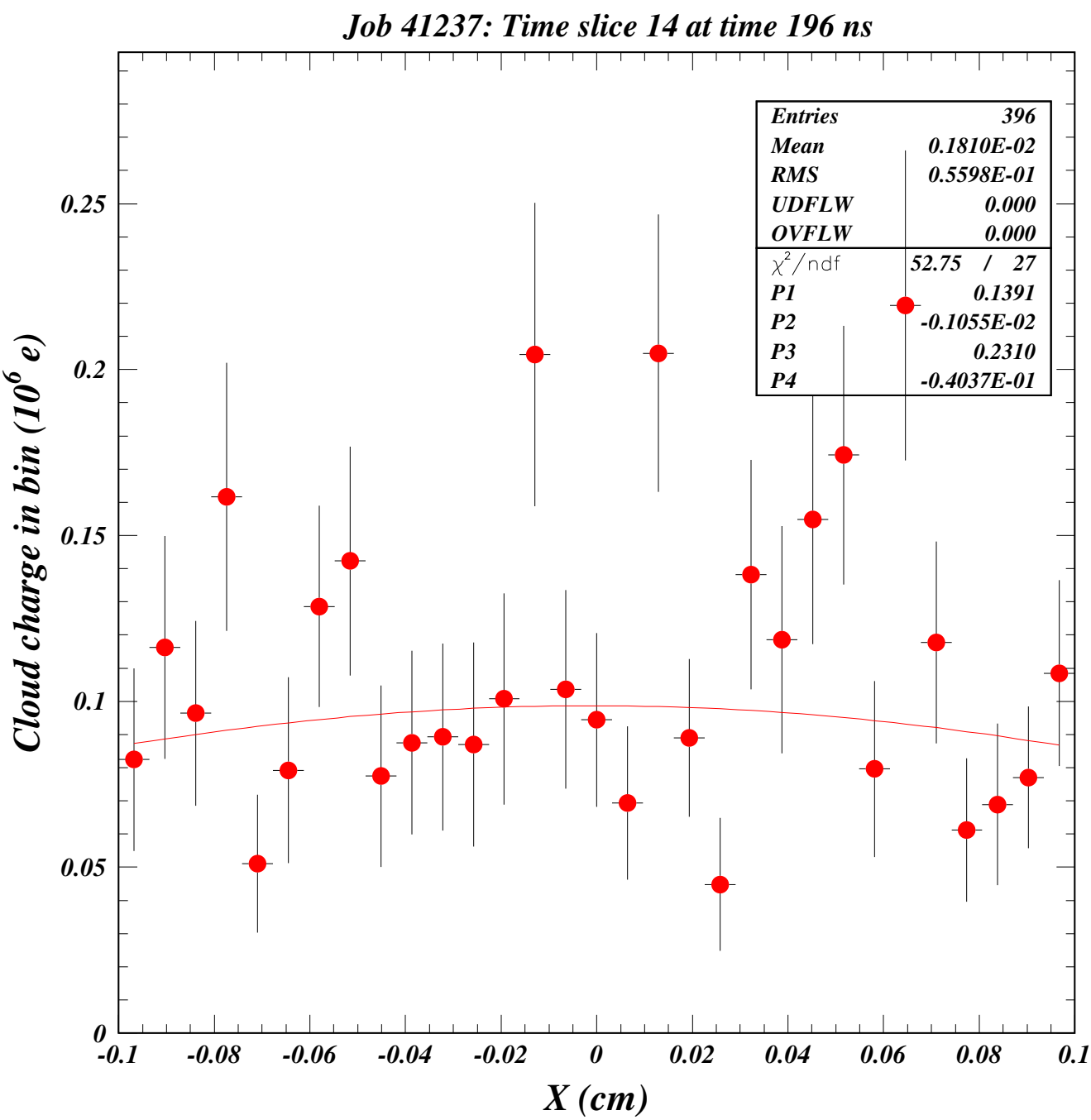
Job 41237: Time slice 14 at time 196 ns
Entries 396
Mean 0.1810E-02
RMS 0.5598E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 52.75 / 27
P1 0.1391
P2 -0.1055E-02
P3 0.2310
P4 -0.4037E-01
Cloud charge in bin (10⁶ e)
0
0.05
0.1
0.15
0.2
0.25
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
X (cm)

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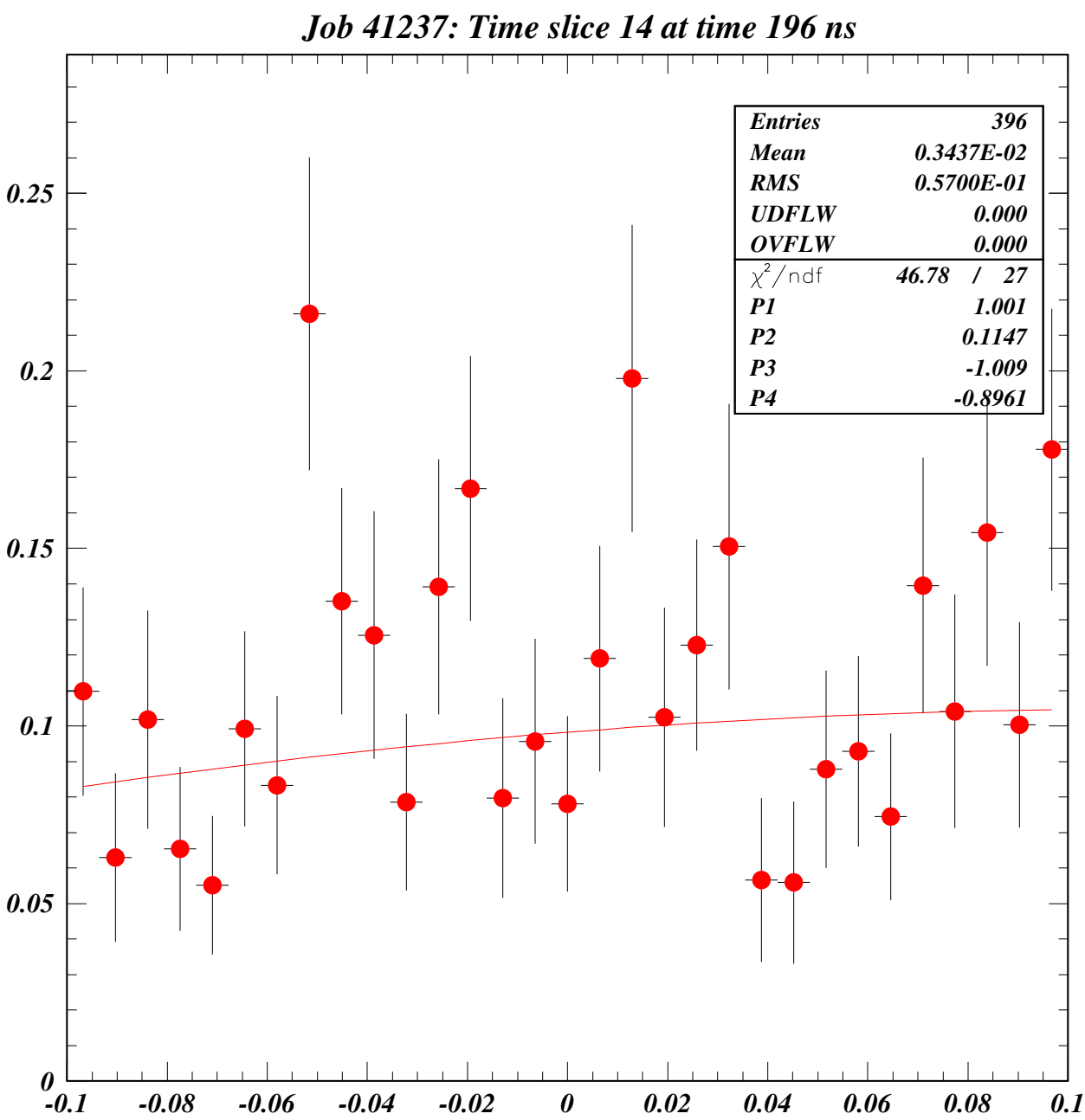
Job 41237: Time slice 14 at time 196 ns
Entries 396
Mean 0.3437E-02
RMS 0.5700E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 46.78 / 27
P1 1.001
P2 0.1147
P3 -1.009
P4 -0.8961
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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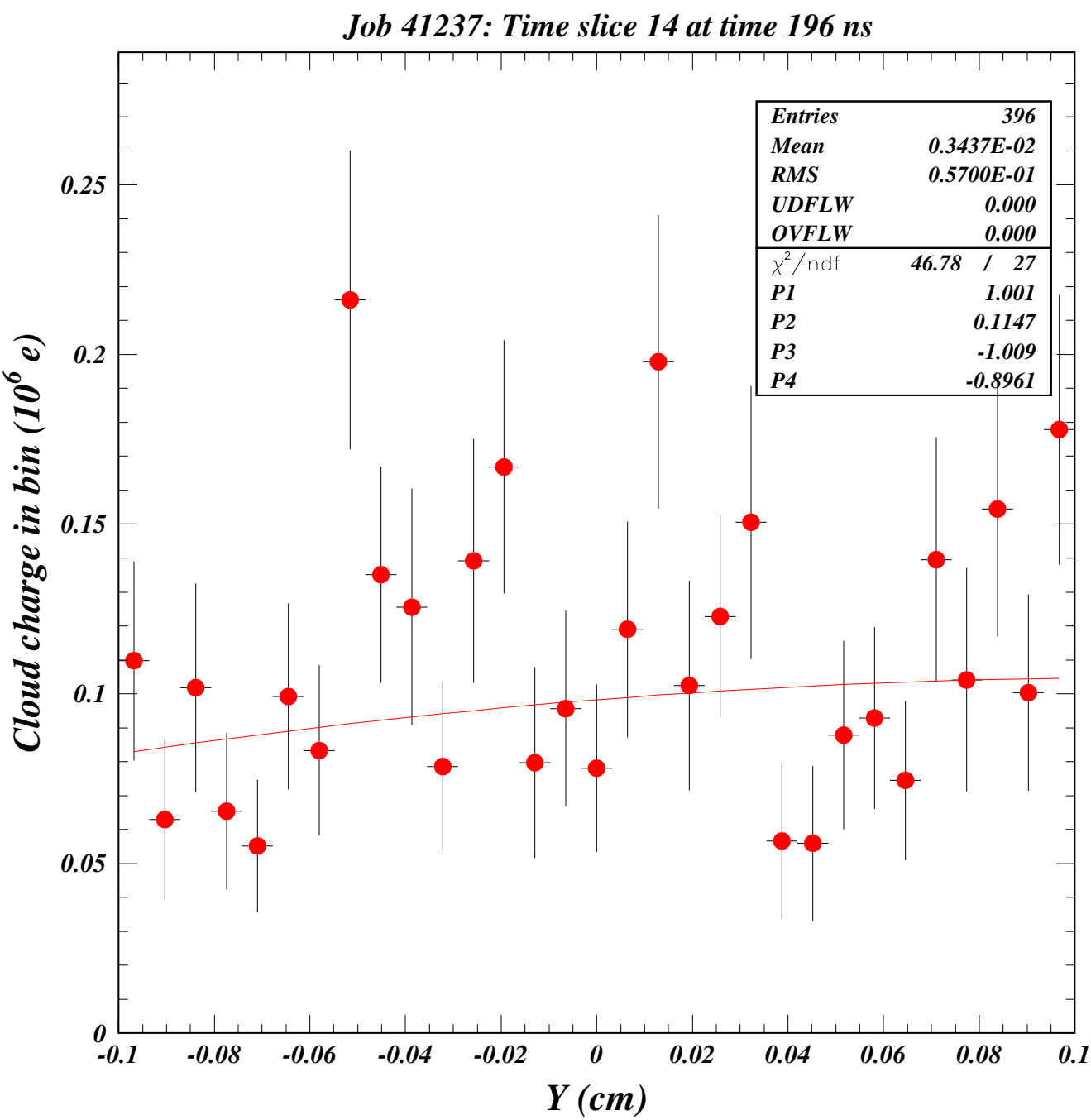
Job 41237: Time slice 14 at time 196 ns
Entries 396
Mean 0.3437E-02
RMS 0.5700E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 46.78 / 27
P1 1.001
P2 0.1147
P3 -1.009
P4 -0.8961
Cloud charge in bin (10⁶ e)
0
0.05
0.1
0.15
0.2
0.25
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
Y (cm)

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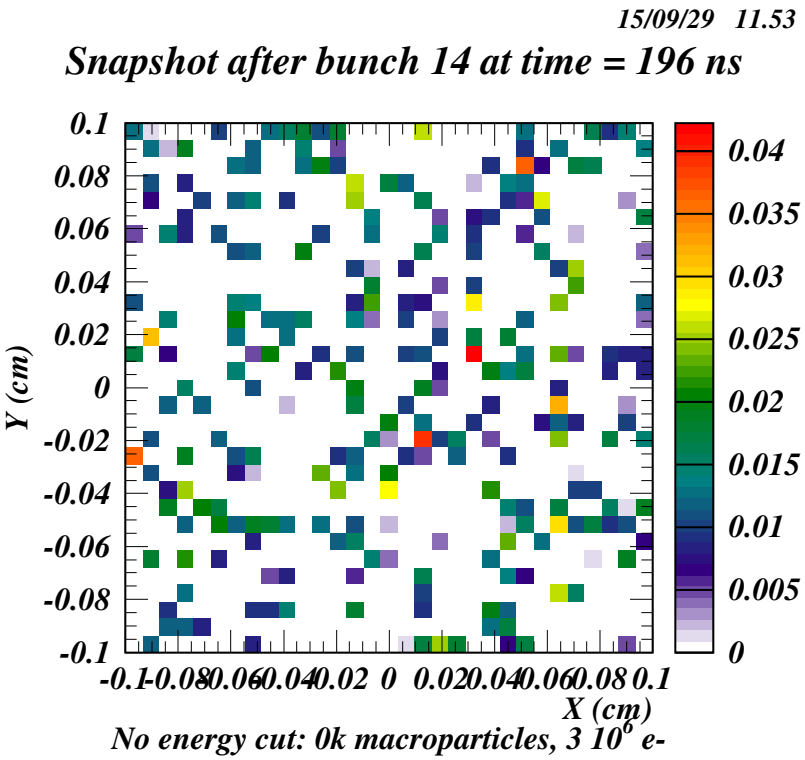
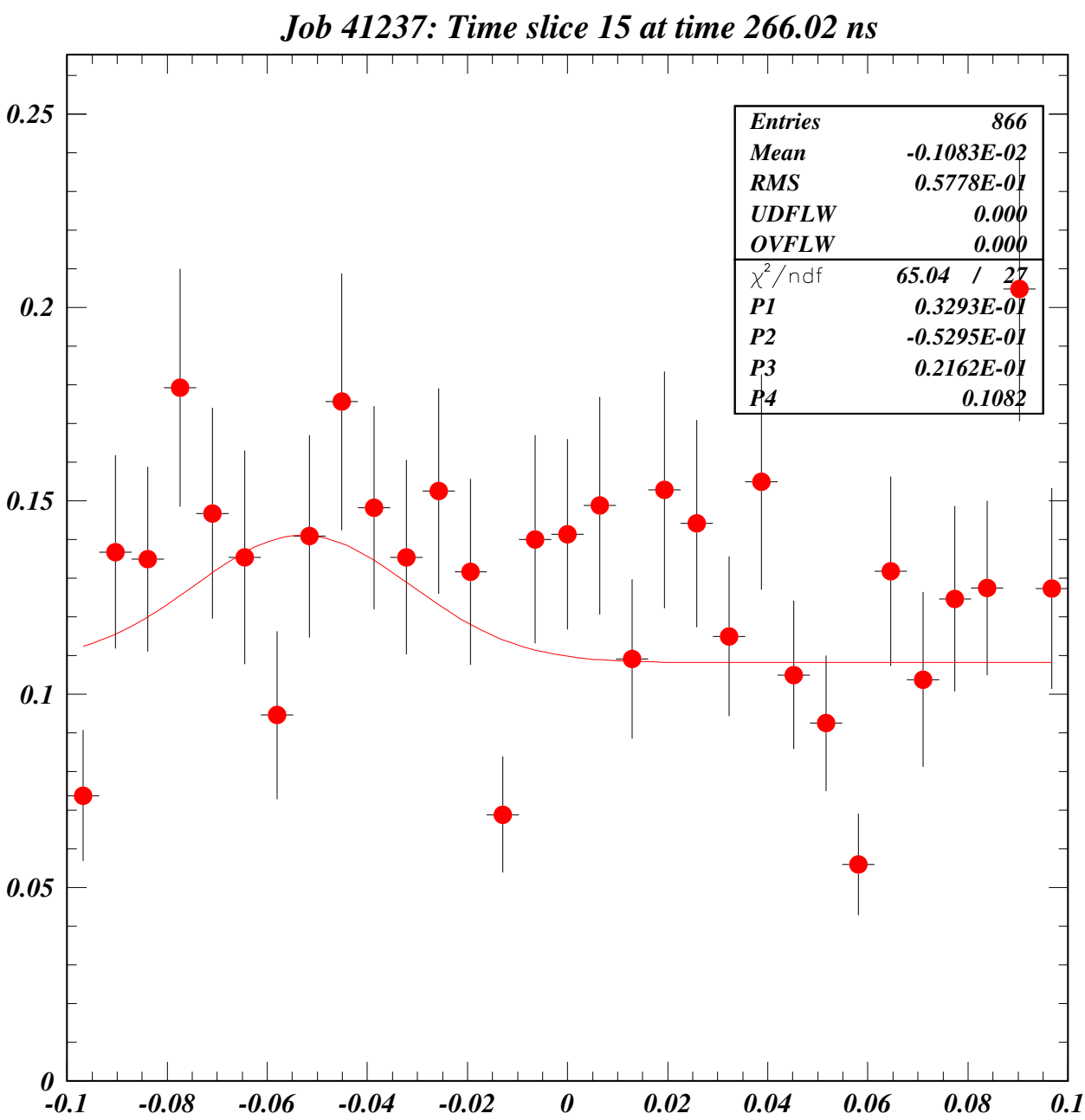

Snapshot after bunch 14 at time = 196 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
No energy cut: 0k macroparticles, 3 10^6 e-


Job 41237: Time slice 15 at time 266.02 ns
Entries 866
Mean -0.1083E-02
RMS 0.5778E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 65.04 / 27
P1 0.3293E-01
P2 -0.5295E-01
P3 0.2162E-01
P4 0.1082
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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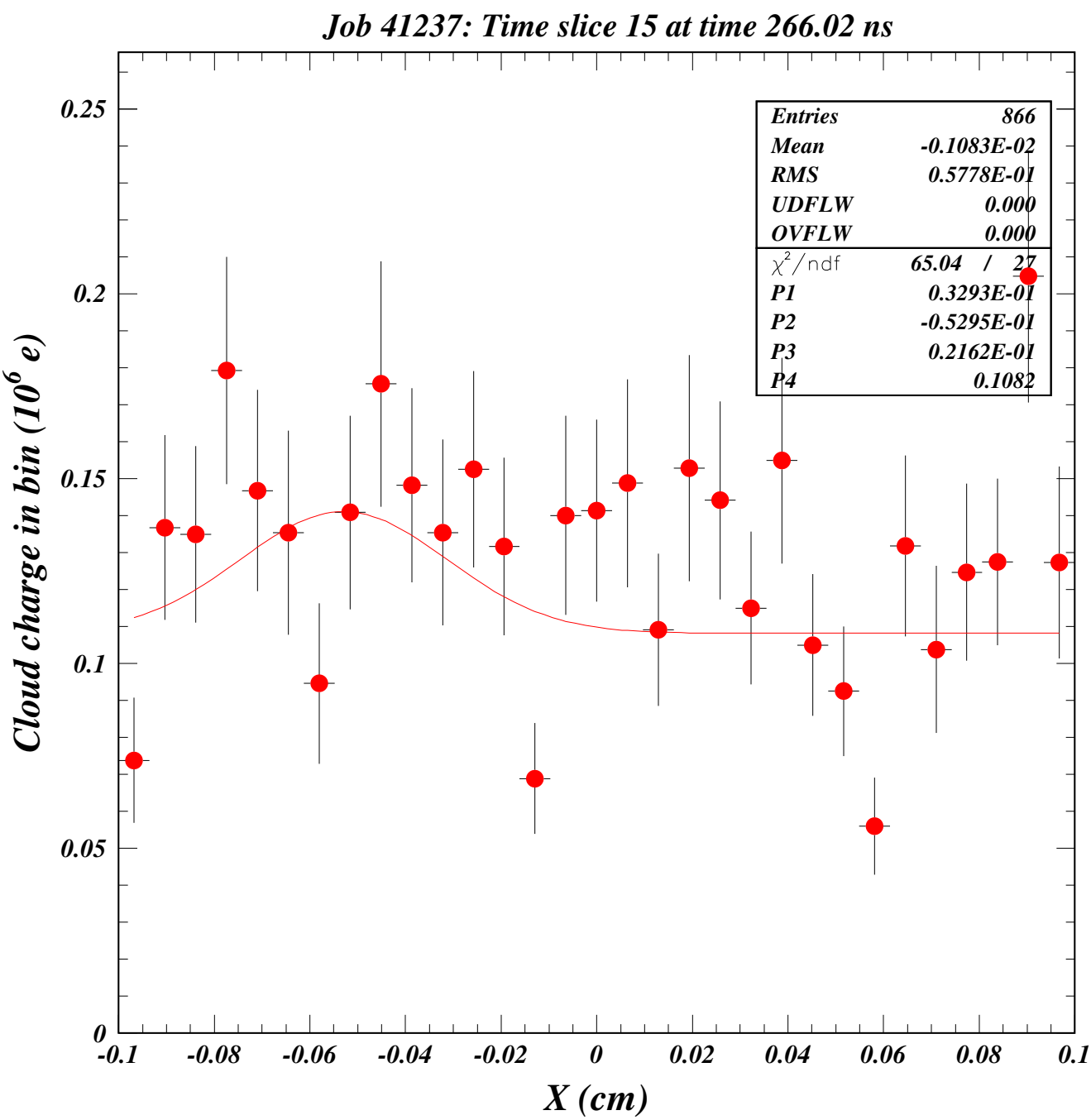
Job 41237: Time slice 15 at time 266.02 ns
Entries 866
Mean -0.1083E-02
RMS 0.5778E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 65.04 / 27
P1 0.3293E-01
P2 -0.5295E-01
P3 0.2162E-01
P4 0.1082
Cloud charge in bin (10⁶ e)
X (cm)
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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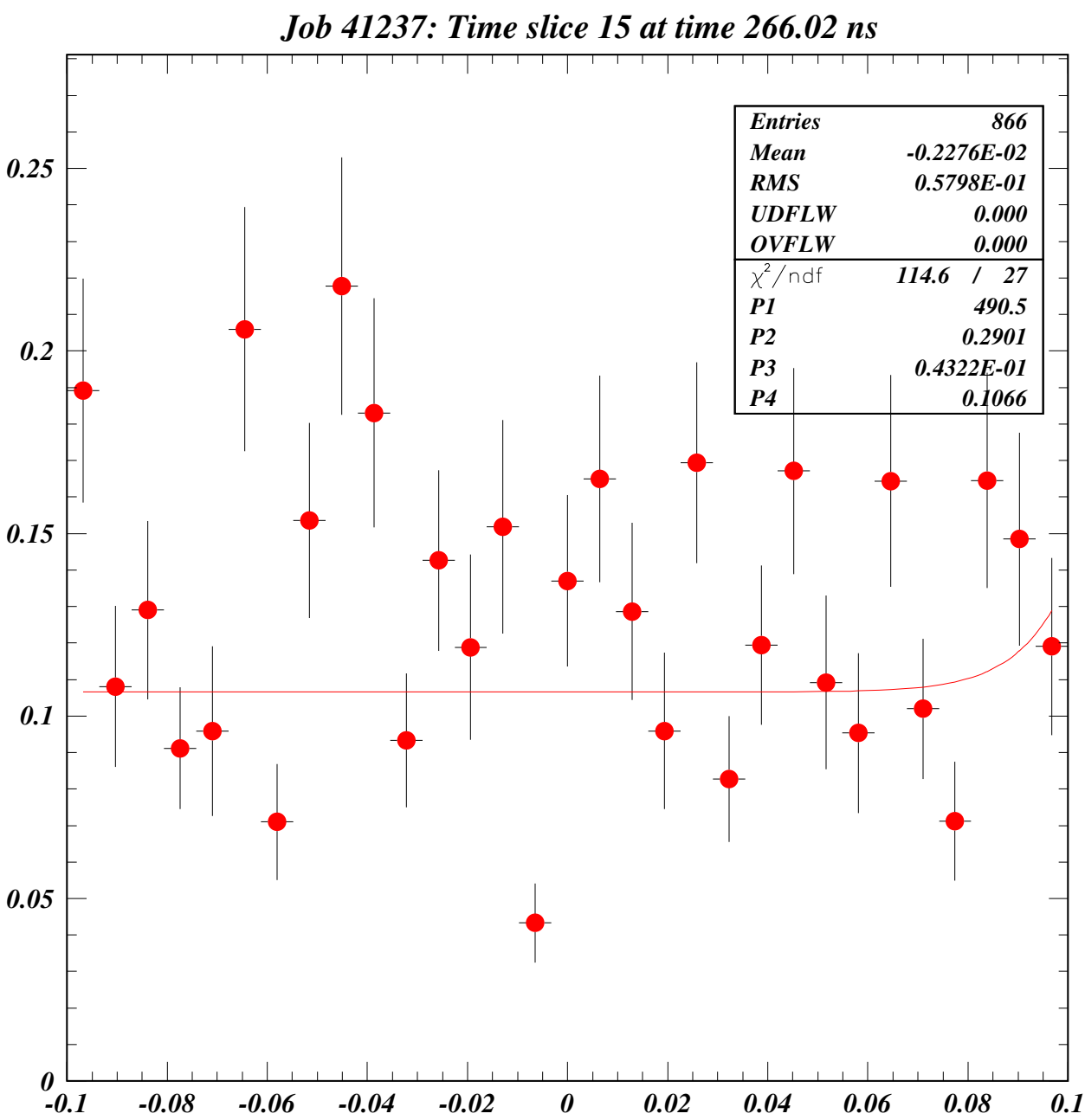
Job 41237: Time slice 15 at time 266.02 ns
Entries 866
Mean -0.2276E-02
RMS 0.5798E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 114.6 / 27
P1 490.5
P2 0.2901
P3 0.4322E-01
P4 0.1066
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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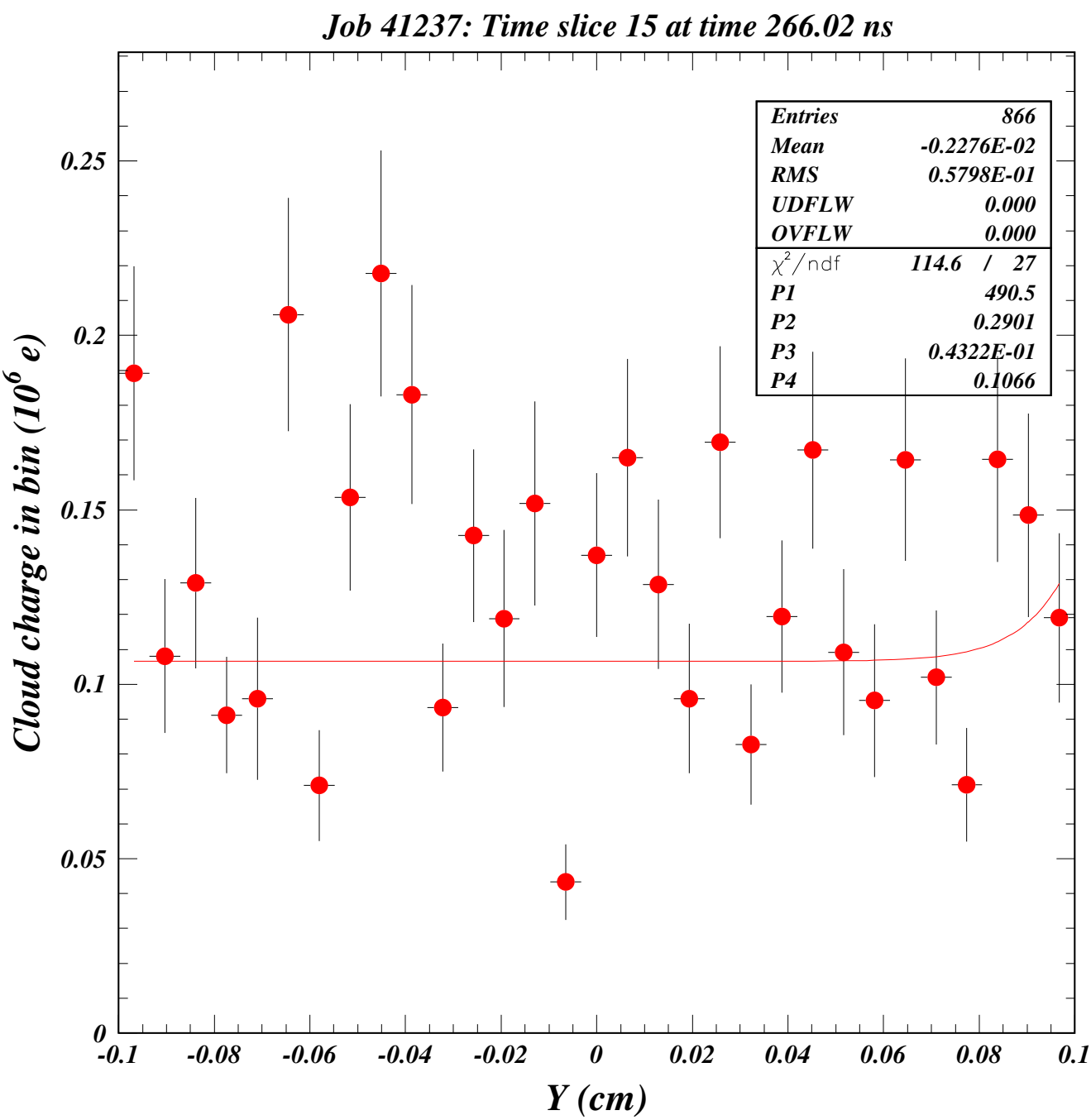
Job 41237: Time slice 15 at time 266.02 ns
Entries 866
Mean -0.2276E-02
RMS 0.5798E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 114.6 / 27
P1 490.5
P2 0.2901
P3 0.4322E-01
P4 0.1066
Cloud charge in bin (10⁶ e)
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
Y (cm)

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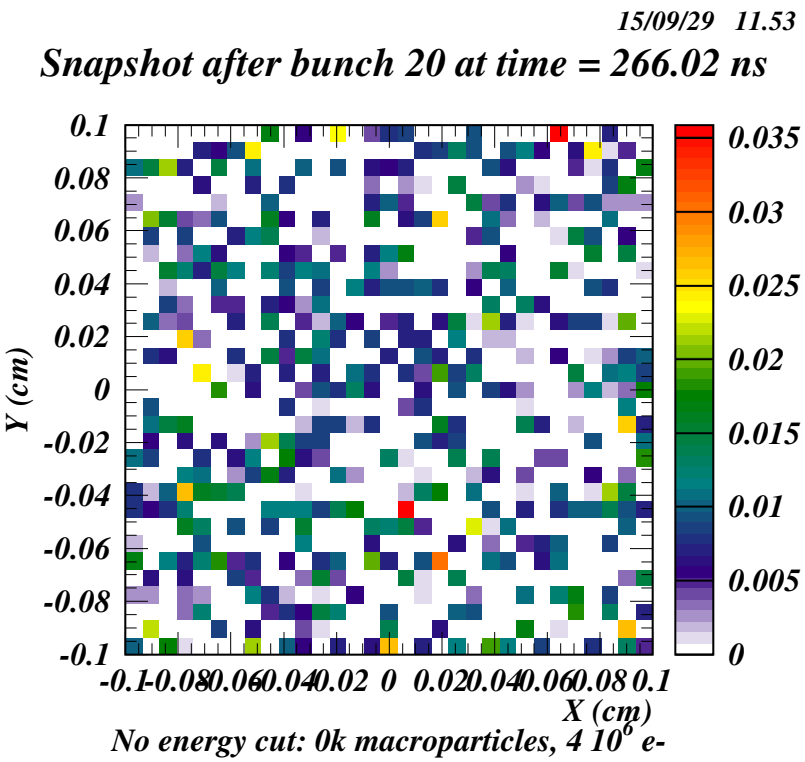
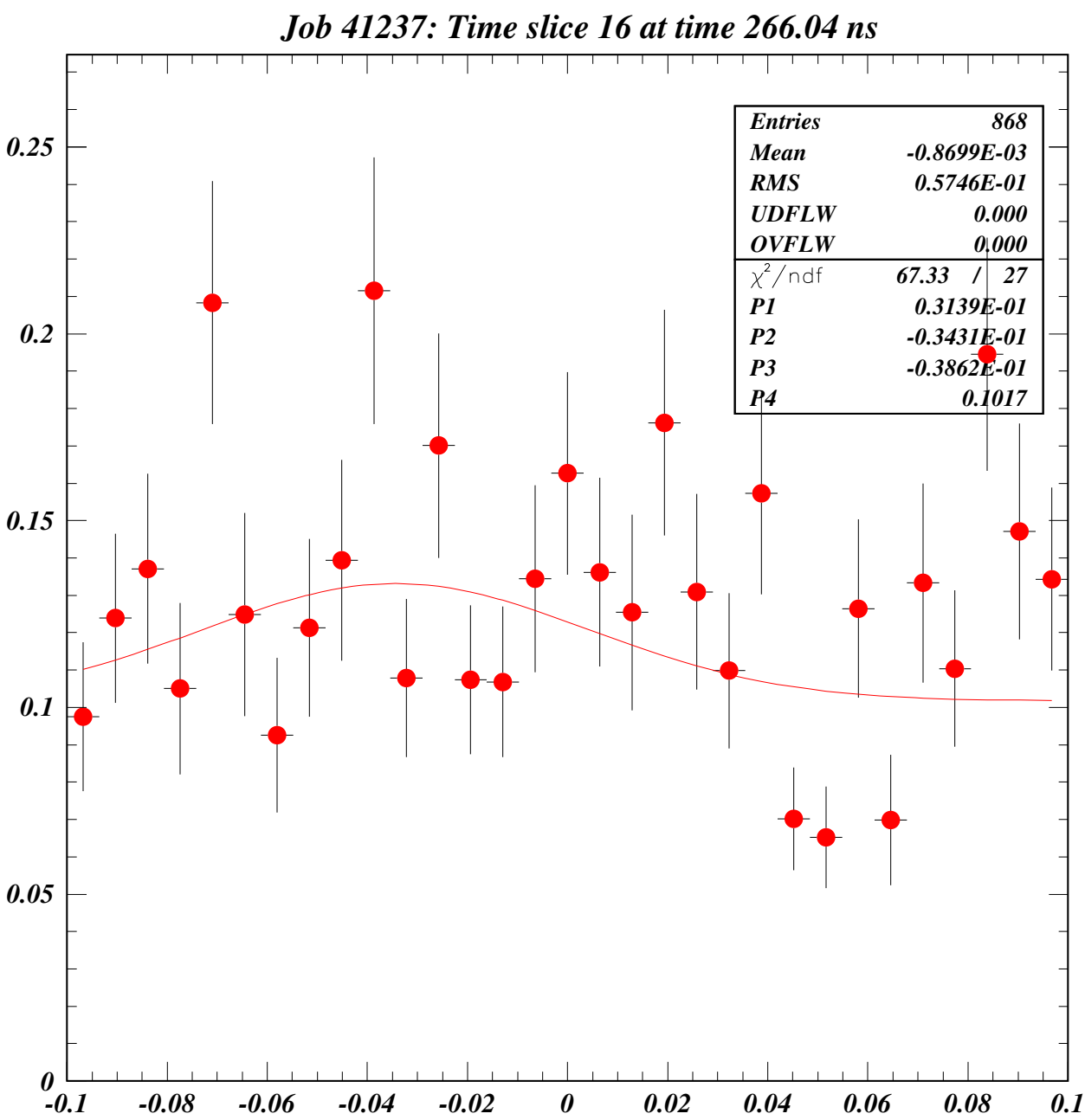

Snapshot after bunch 20 at time = 266.02 ns
Y (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
-0.1 -0.08 -0.06 -0.04 -0.02 0 0.02 0.04 0.06 0.08 0.1
X (cm)
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
No energy cut: 0k macroparticles, 4 10^6 e-

15/09/29 11.53


Job 41237: Time slice 16 at time 266.04 ns
Entries 868
Mean -0.8699E-03
RMS 0.5746E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 67.33 / 27
P1 0.3139E-01
P2 -0.3431E-01
P3 -0.3862E-01
P4 0.1017
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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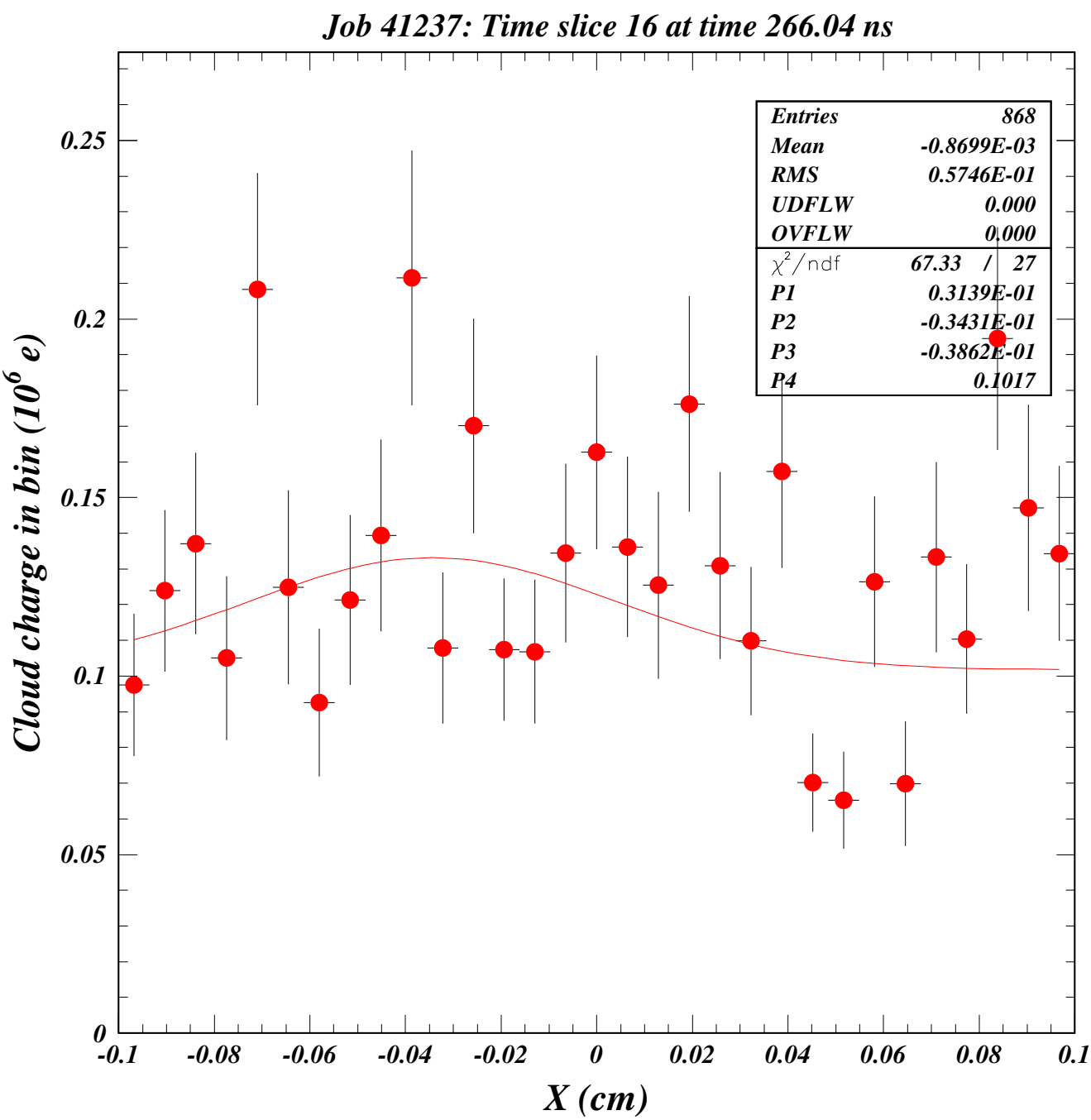
Job 41237: Time slice 16 at time 266.04 ns
Entries 868
Mean -0.8699E-03
RMS 0.5746E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 67.33 / 27
P1 0.3139E-01
P2 -0.3431E-01
P3 -0.3862E-01
P4 0.1017
Cloud charge in bin (10⁶ e)
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
X (cm)

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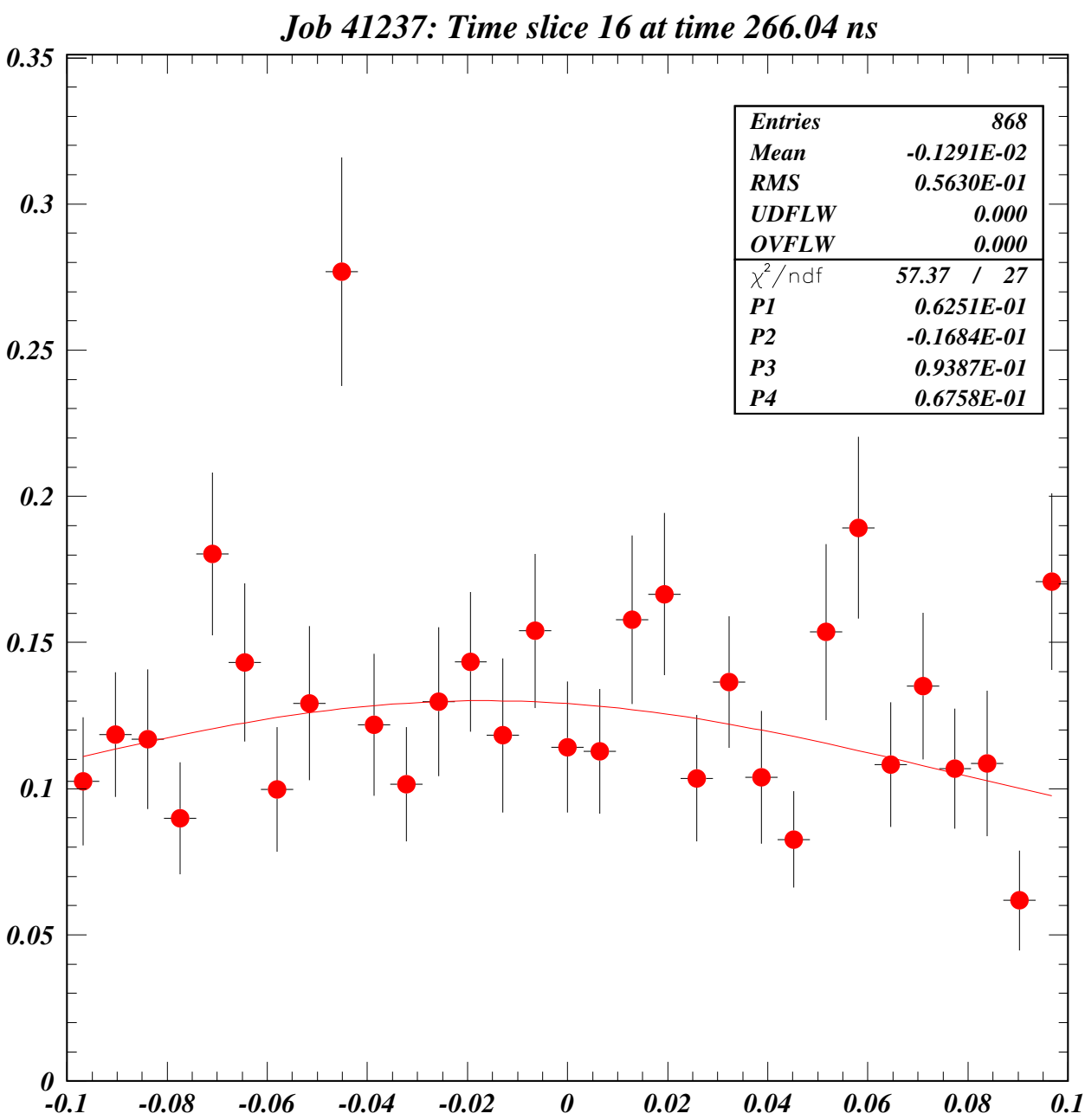
Job 41237: Time slice 16 at time 266.04 ns
Entries 868
Mean -0.1291E-02
RMS 0.5630E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 57.37 / 27
P1 0.6251E-01
P2 -0.1684E-01
P3 0.9387E-01
P4 0.6758E-01
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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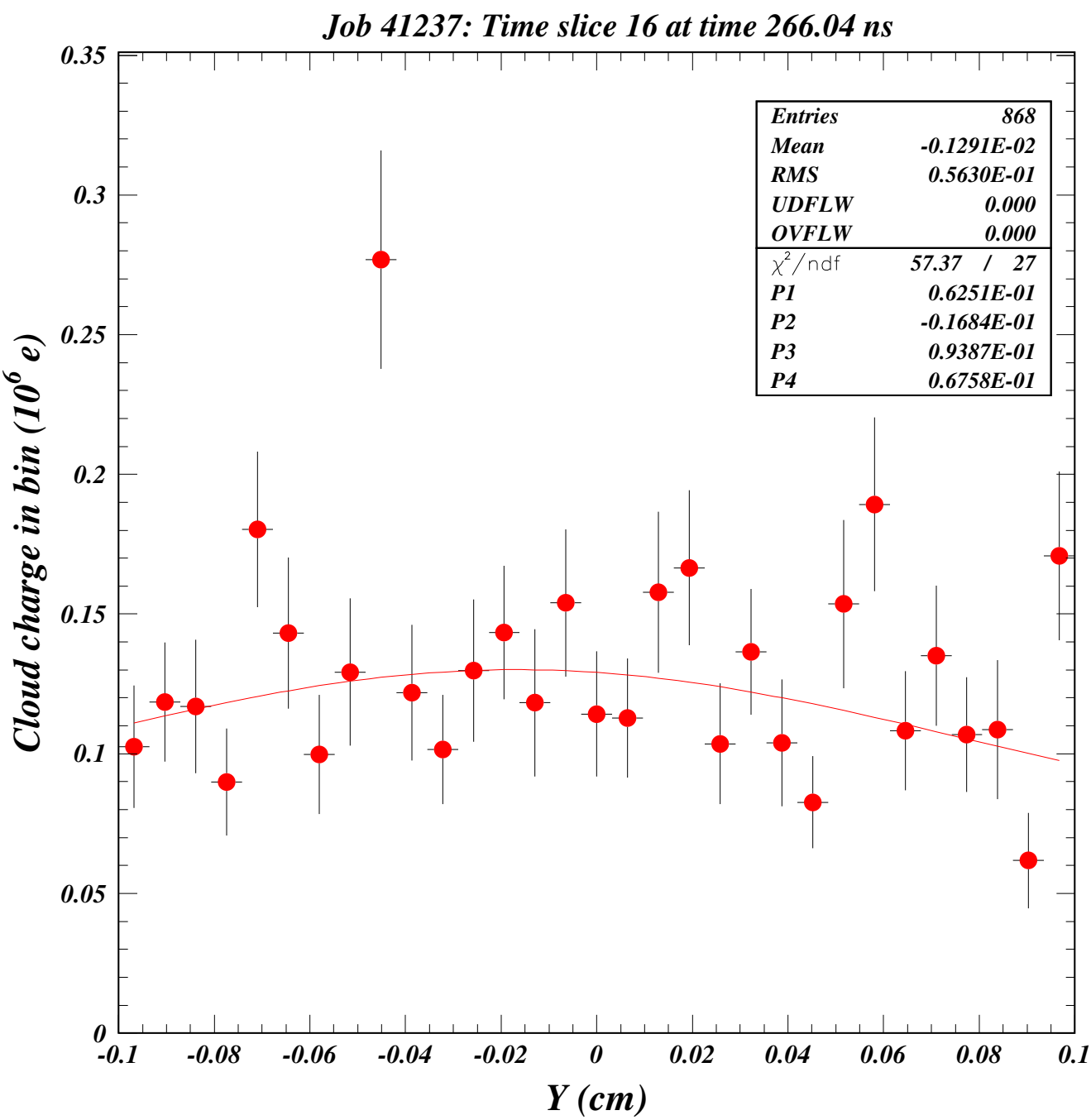
Job 41237: Time slice 16 at time 266.04 ns
Entries 868
Mean -0.1291E-02
RMS 0.5630E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 57.37 / 27
P1 0.6251E-01
P2 -0.1684E-01
P3 0.9387E-01
P4 0.6758E-01
Cloud charge in bin (10⁶ e)
Y (cm)
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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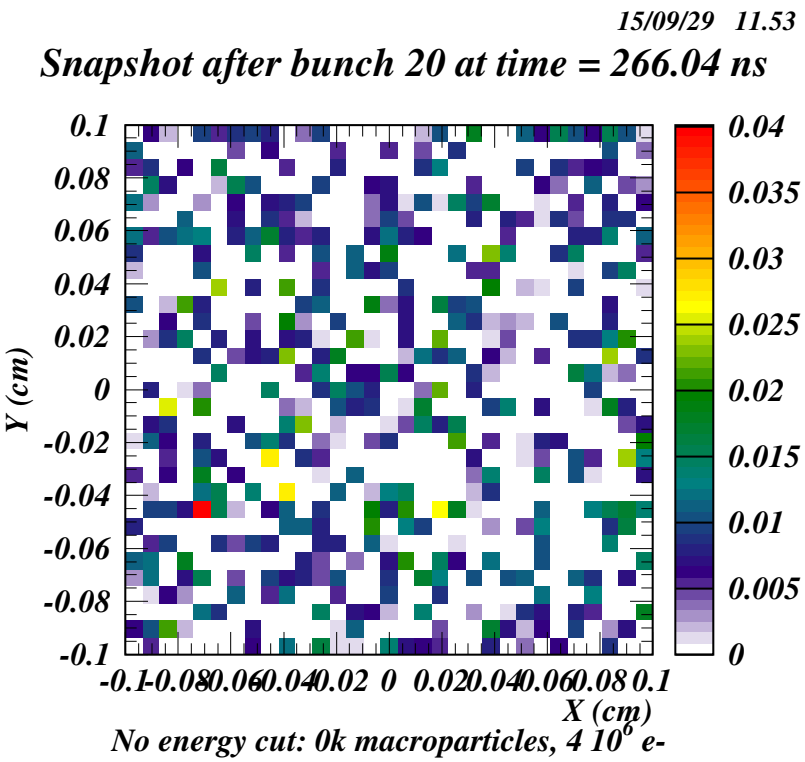
Snapshot after bunch 20 at time = 266.04 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
No energy cut: 0k macroparticles, 4 10^6 e-

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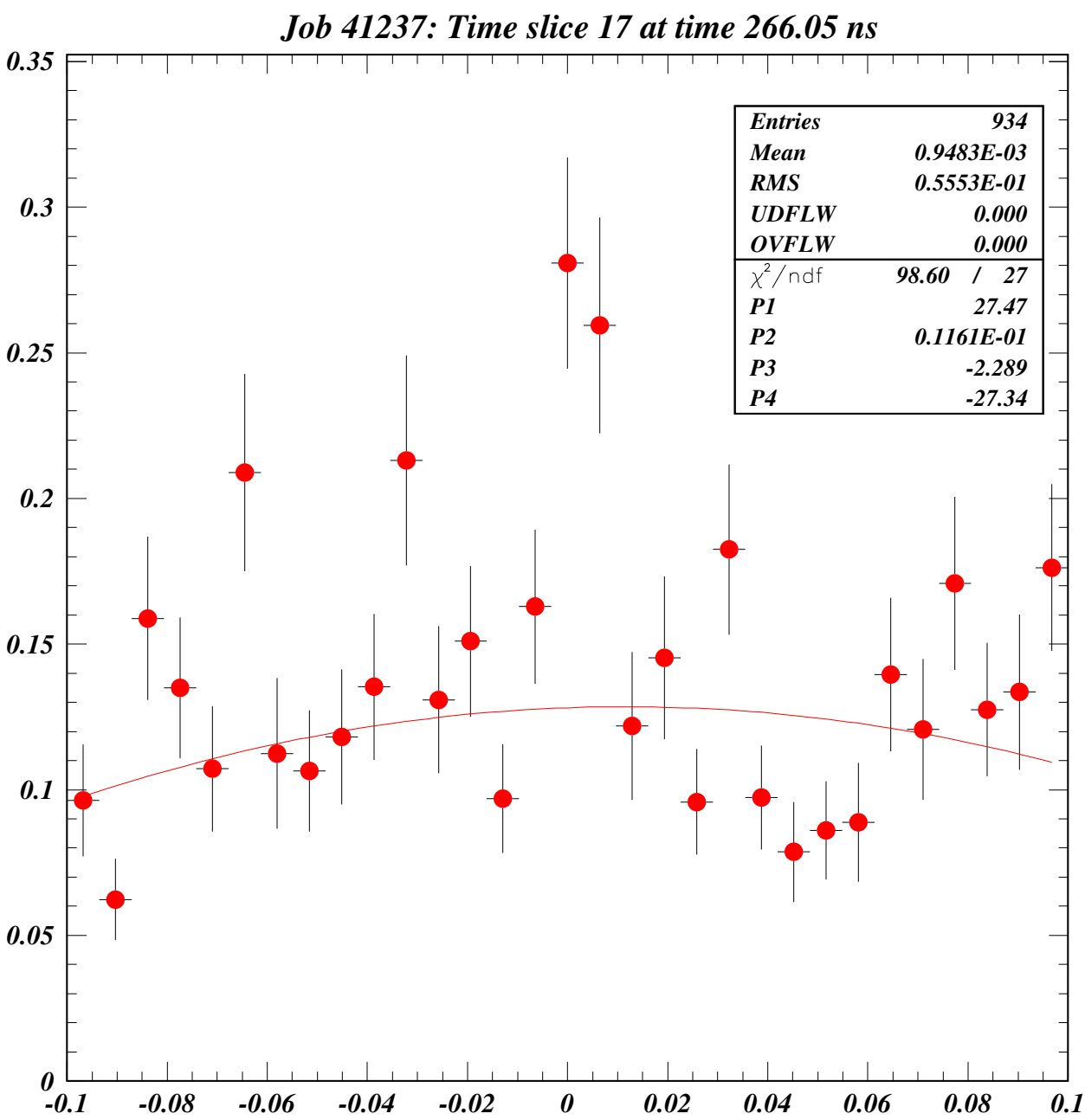
Job 41237: Time slice 17 at time 266.05 ns
Entries 934
Mean 0.9483E-03
RMS 0.5553E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 98.60 / 27
P1 27.47
P2 0.1161E-01
P3 -2.289
P4 -27.34
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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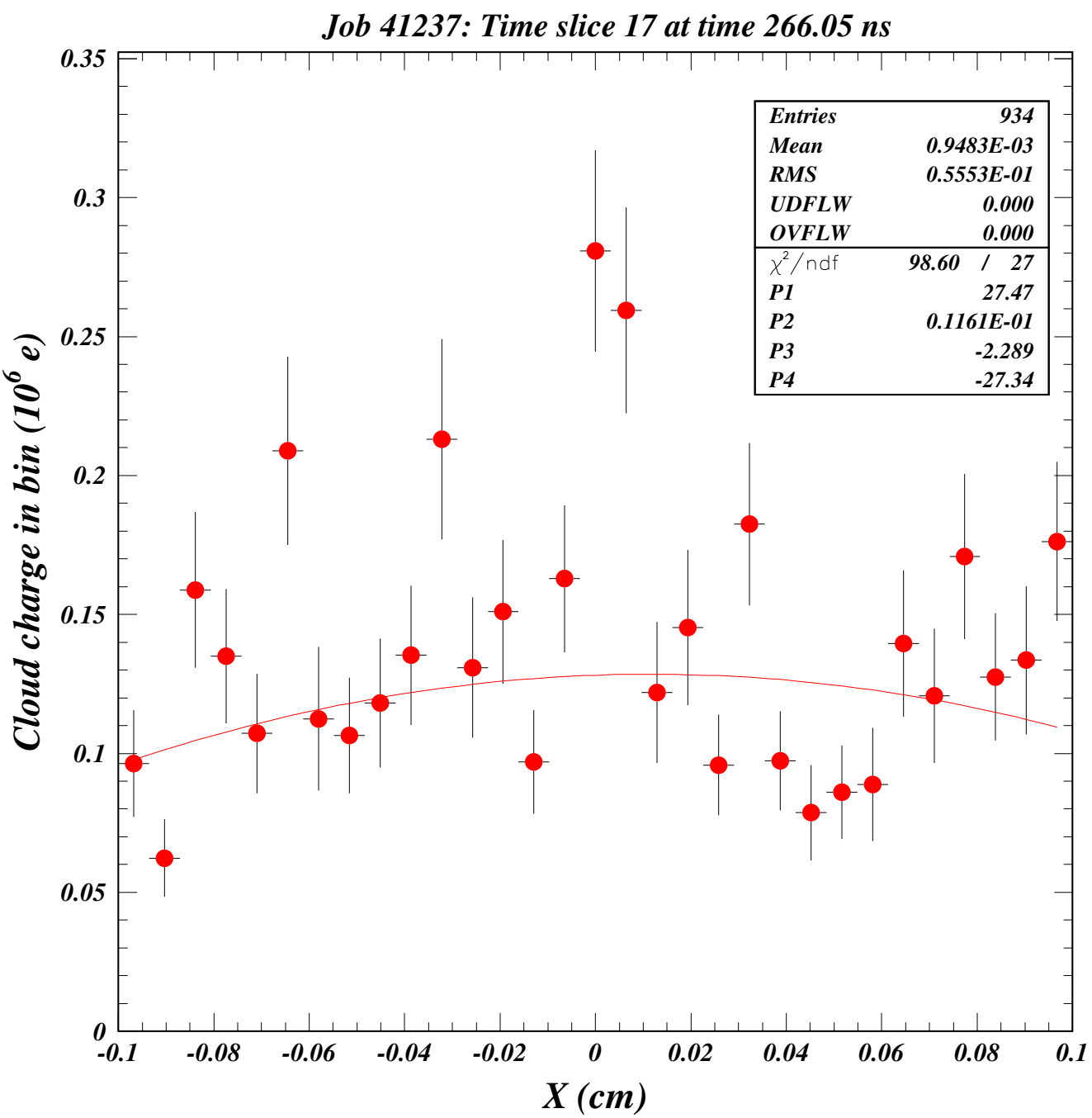
Job 41237: Time slice 17 at time 266.05 ns
Entries 934
Mean 0.9483E-03
RMS 0.5553E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 98.60 / 27
P1 27.47
P2 0.1161E-01
P3 -2.289
P4 -27.34
Cloud charge in bin (10⁶ e)
X (cm)
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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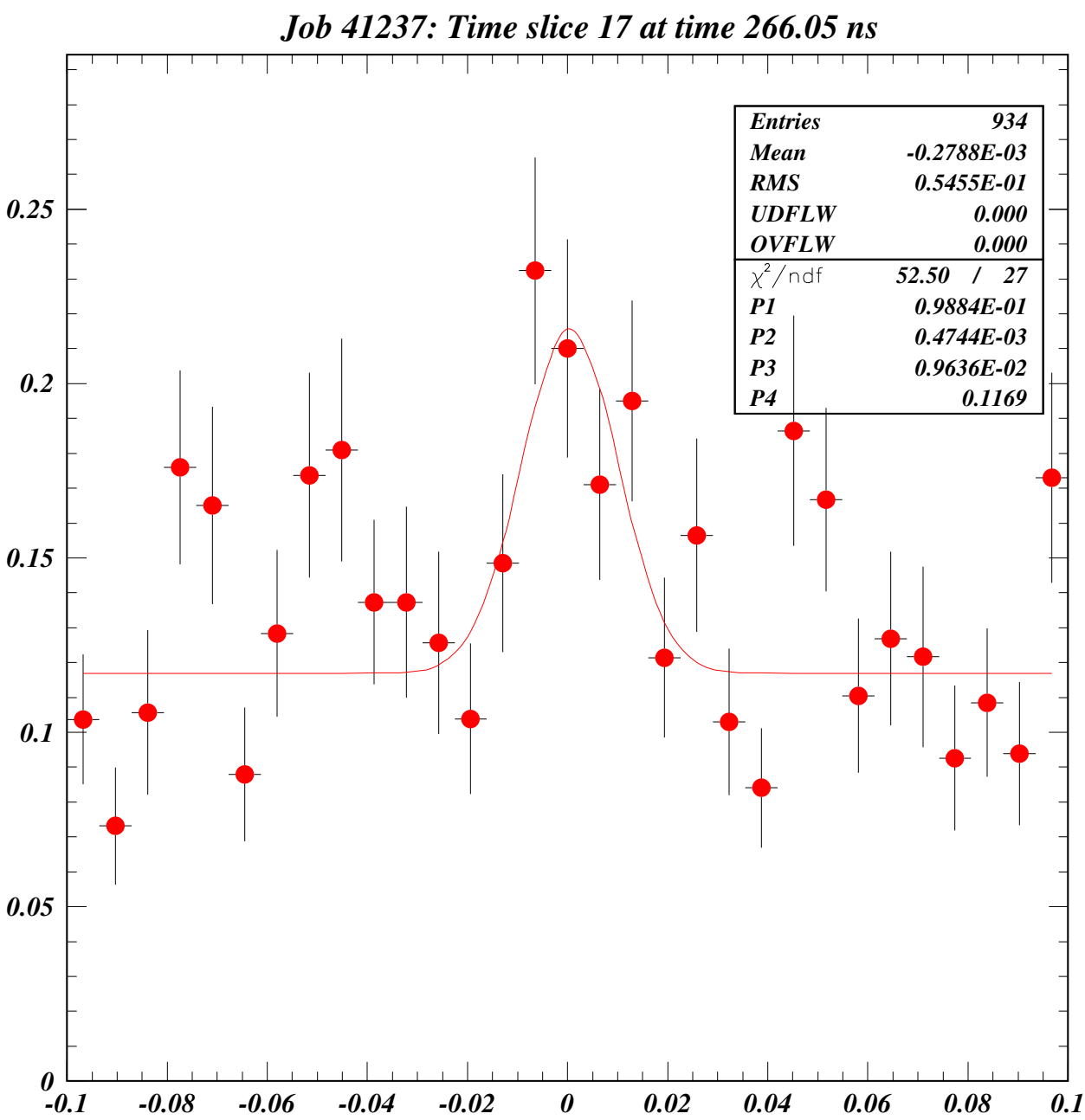
Job 41237: Time slice 17 at time 266.05 ns
Entries 934
Mean -0.2788E-03
RMS 0.5455E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 52.50 / 27
P1 0.9884E-01
P2 0.4744E-03
P3 0.9636E-02
P4 0.1169
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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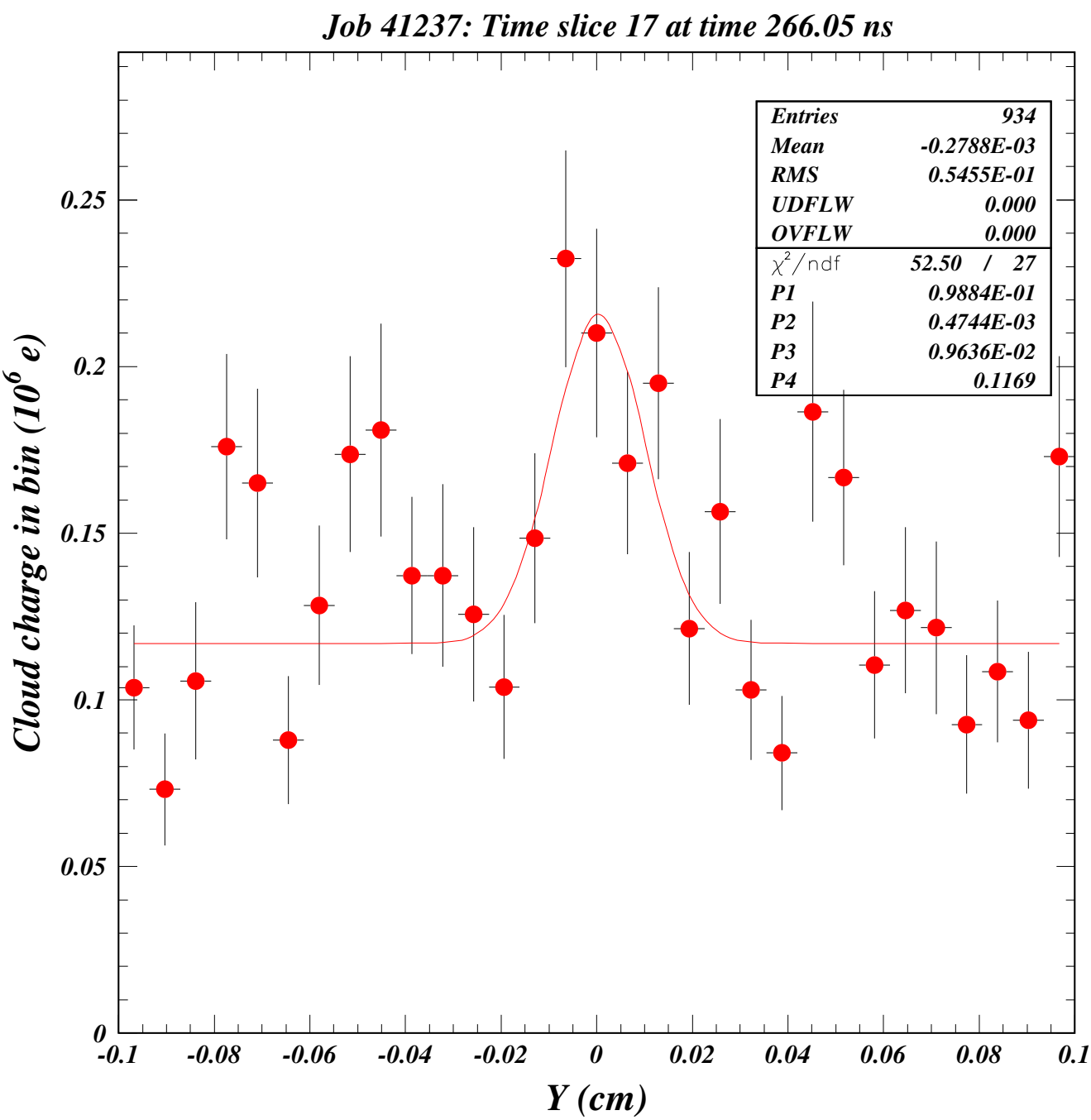
Job 41237: Time slice 17 at time 266.05 ns
Entries 934
Mean -0.2788E-03
RMS 0.5455E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 52.50 / 27
P1 0.9884E-01
P2 0.4744E-03
P3 0.9636E-02
P4 0.1169
Cloud charge in bin (10⁶ e)
0.25
0.2
0.15
0.1
0.05
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
Y (cm)

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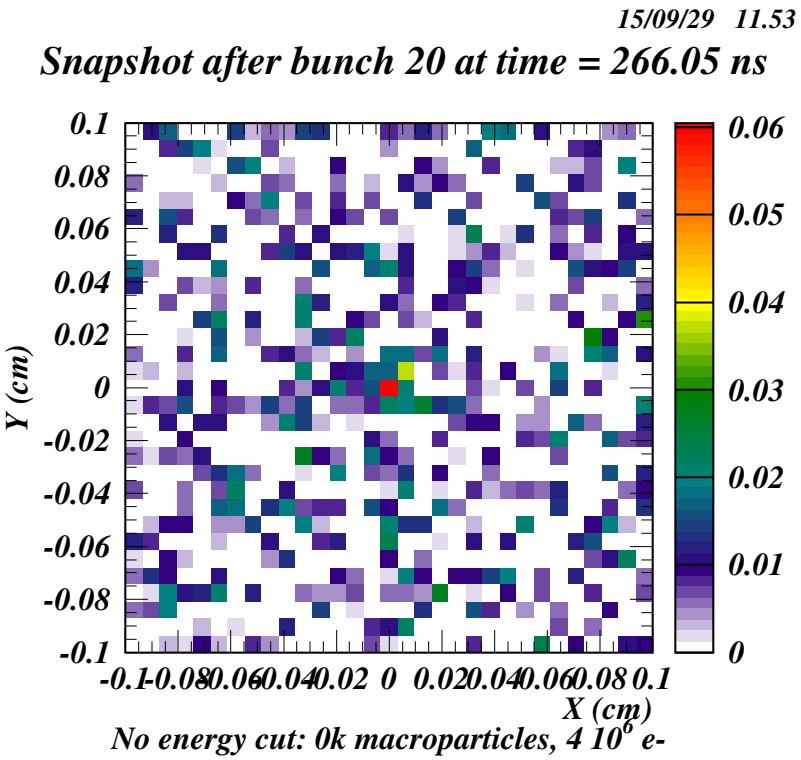
Snapshot after bunch 20 at time = 266.05 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
0.06
0.05
0.04
0.03
0.02
0.01
0
No energy cut: 0k macroparticles, 4 10^6 e-

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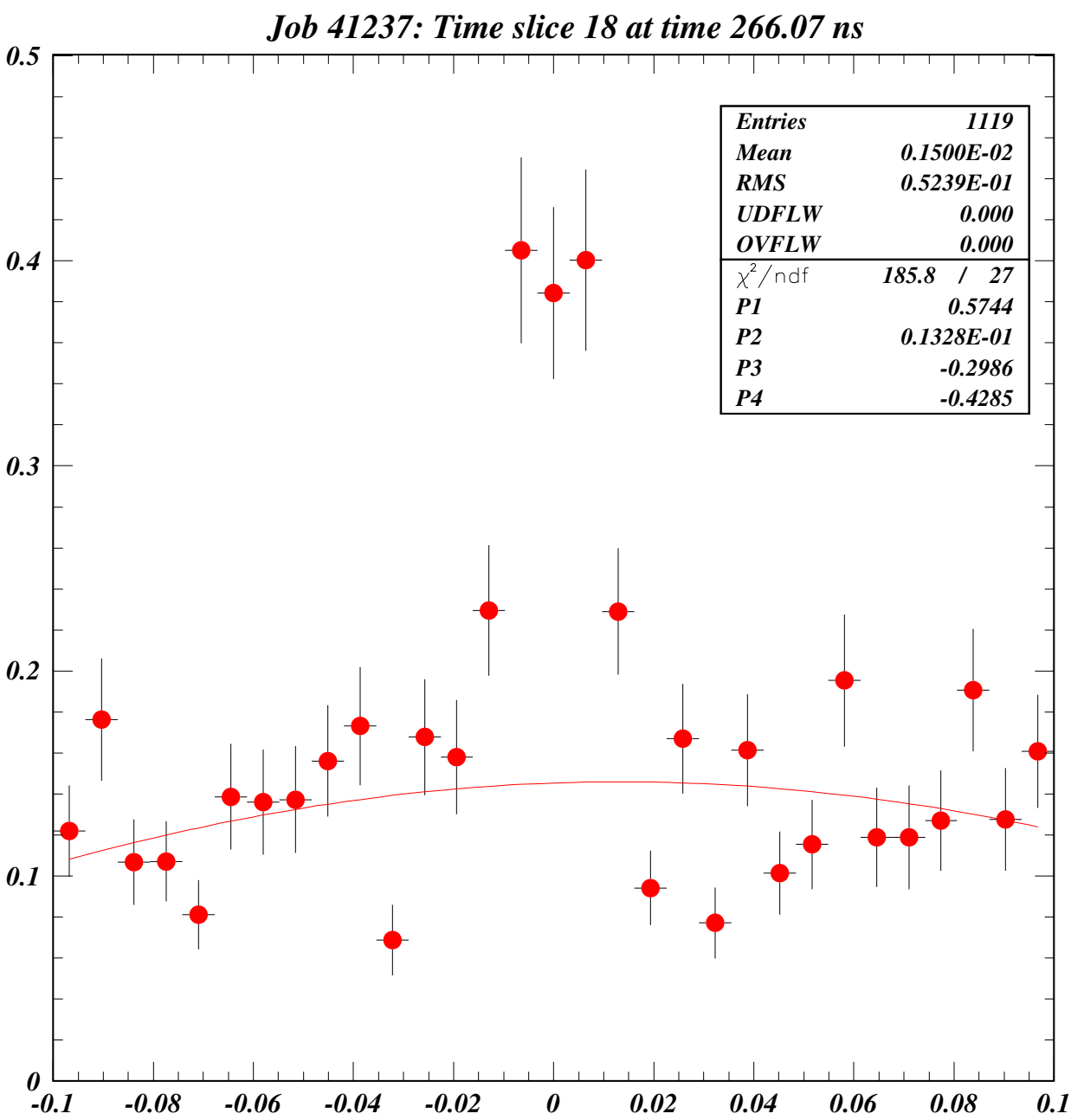
Job 41237: Time slice 18 at time 266.07 ns
Entries 1119
Mean 0.1500E-02
RMS 0.5239E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 185.8 / 27
P1 0.5744
P2 0.1328E-01
P3 -0.2986
P4 -0.4285
0.5
0.4
0.3
0.2
0.1
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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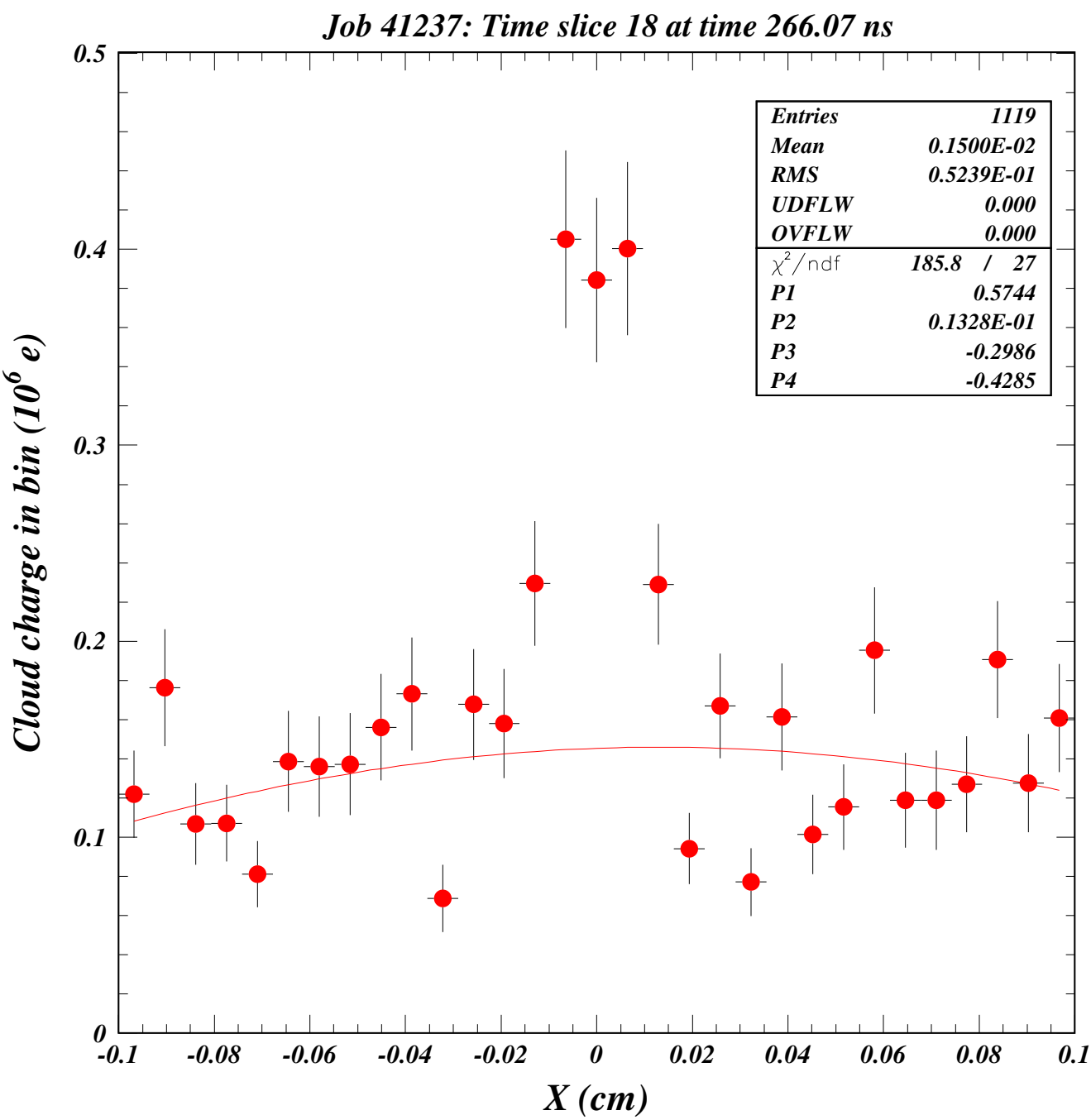
Job 41237: Time slice 18 at time 266.07 ns
Entries 1119
Mean 0.1500E-02
RMS 0.5239E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 185.8 / 27
P1 0.5744
P2 0.1328E-01
P3 -0.2986
P4 -0.4285
Cloud charge in bin (10⁶ e)
X (cm)
0.5
0.4
0.3
0.2
0.1
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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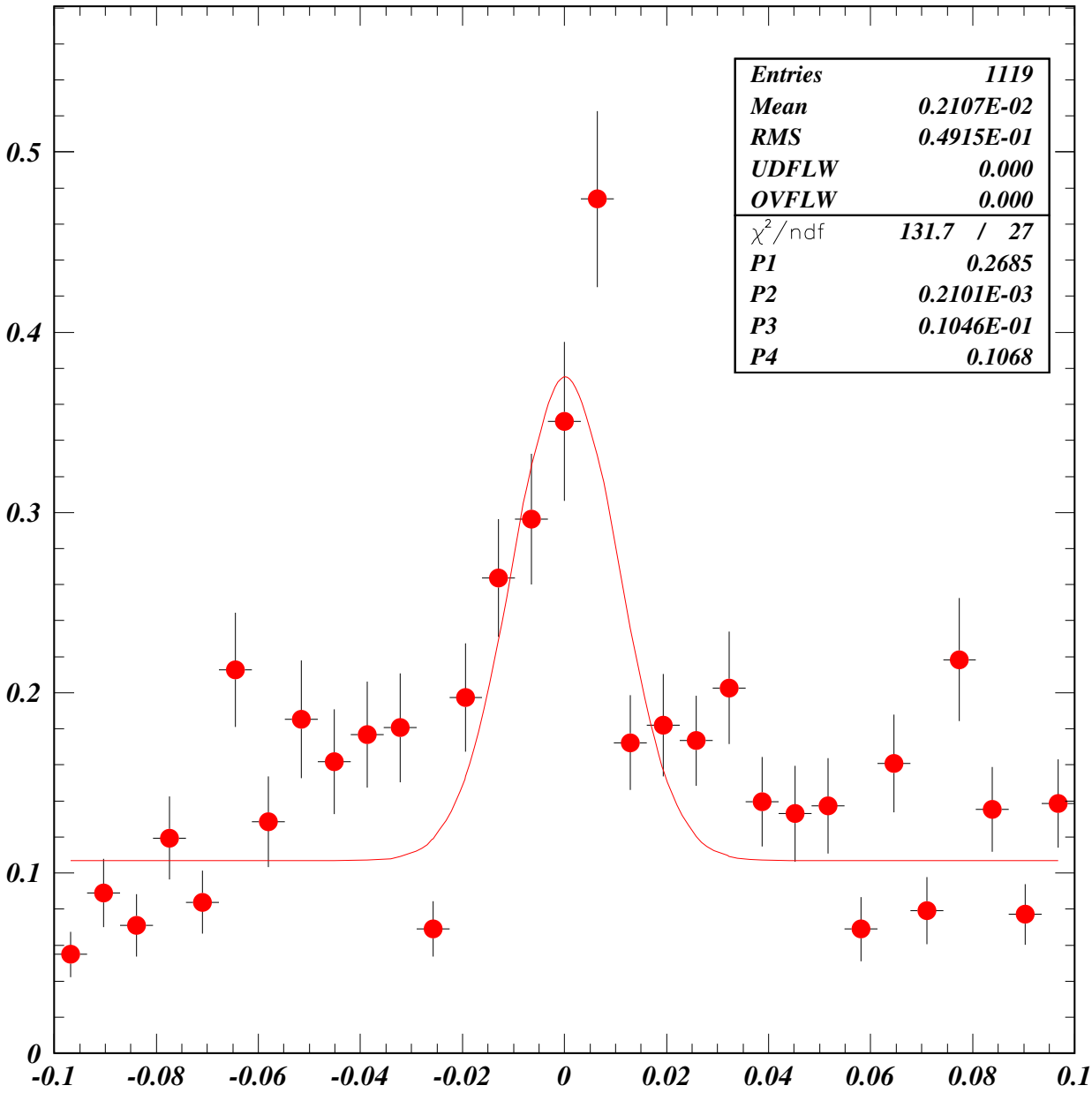
Job 41237: Time slice 18 at time 266.07 ns



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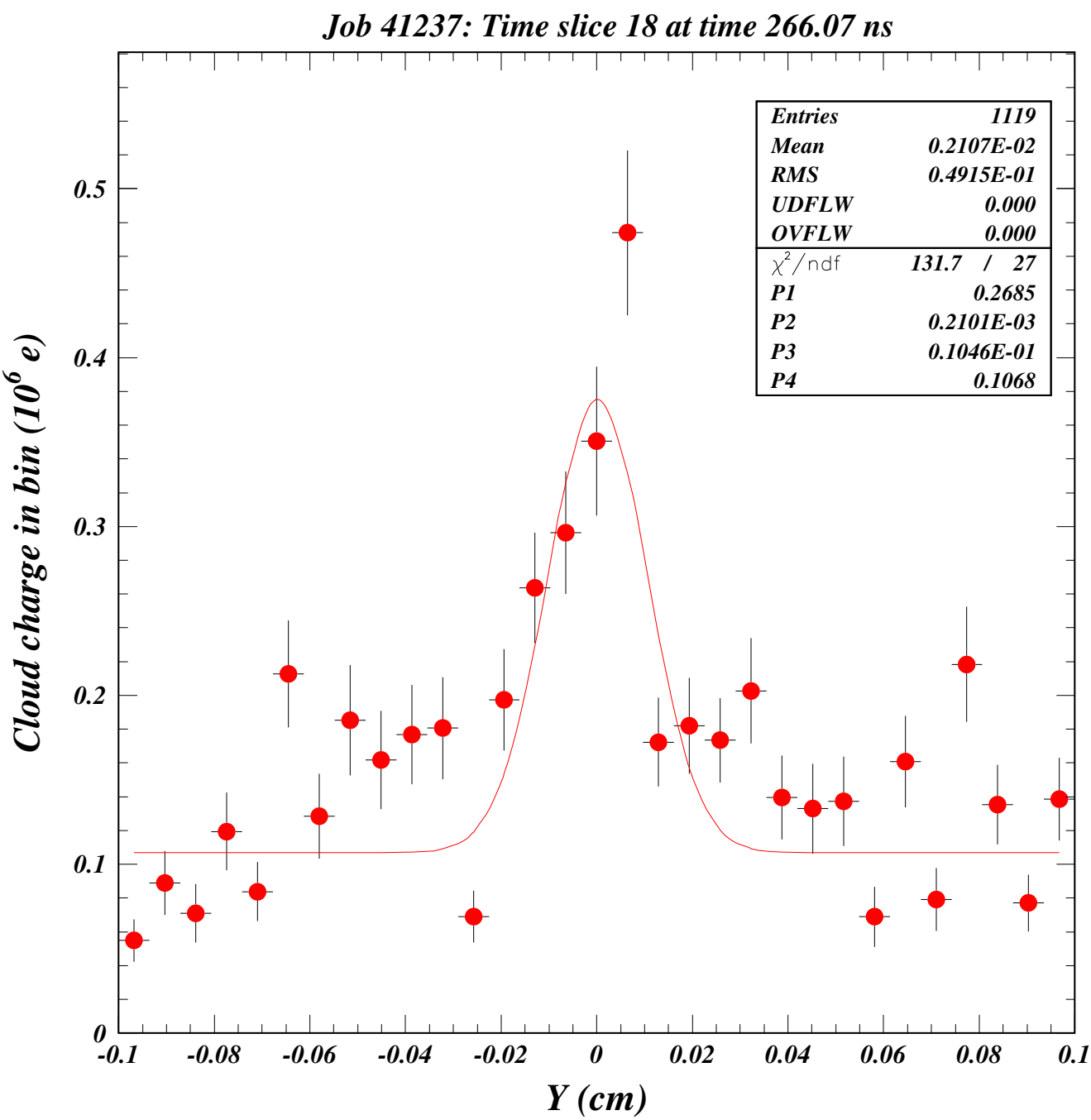
Job 41237: Time slice 18 at time 266.07 ns
Entries 1119
Mean 0.2107E-02
RMS 0.4915E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 131.7 / 27
P1 0.2685
P2 0.2101E-03
P3 0.1046E-01
P4 0.1068
Cloud charge in bin (10⁶ e)
0
0.1
0.2
0.3
0.4
0.5
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1
Y (cm)

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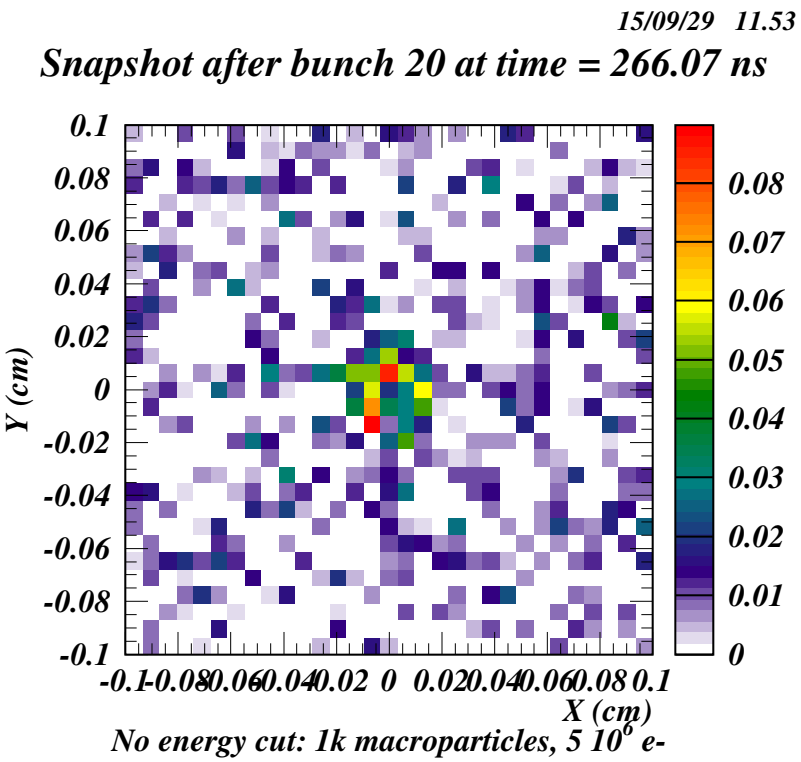
Snapshot after bunch 20 at time = 266.07 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
No energy cut: 1k macroparticles, 5 10^6 e-

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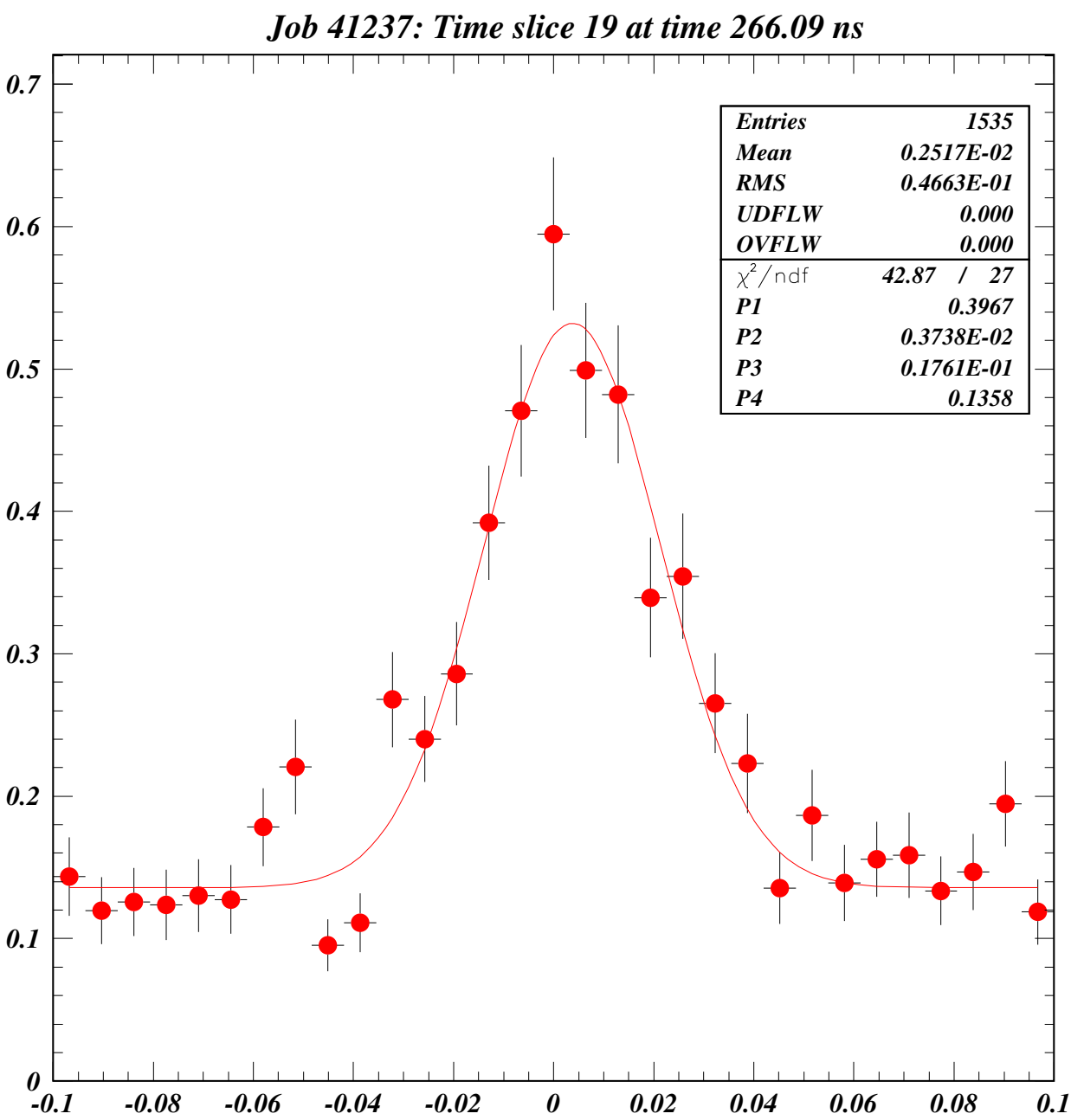
Job 41237: Time slice 19 at time 266.09 ns
Entries 1535
Mean 0.2517E-02
RMS 0.4663E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 42.87 / 27
P1 0.3967
P2 0.3738E-02
P3 0.1761E-01
P4 0.1358
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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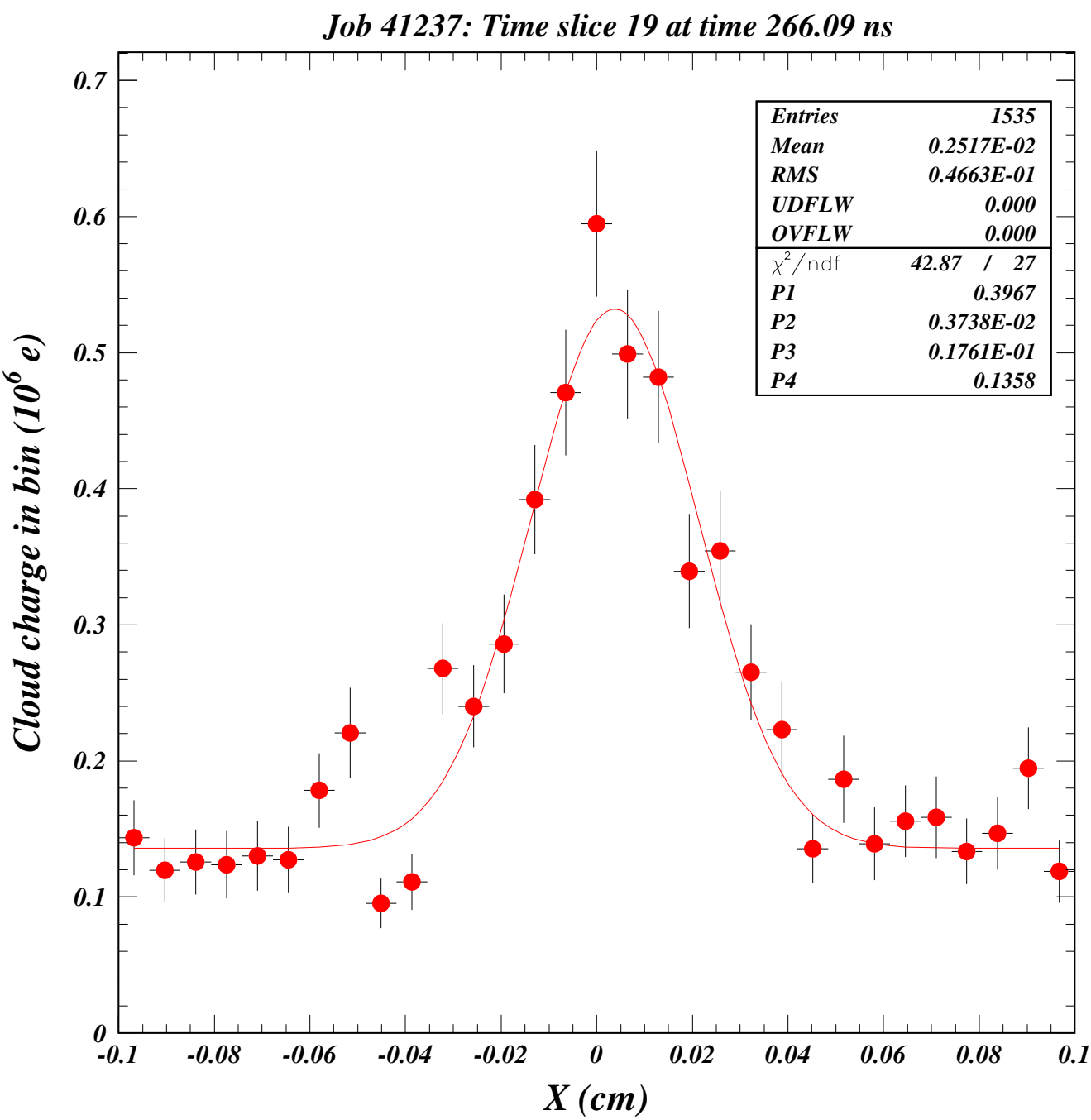
Job 41237: Time slice 19 at time 266.09 ns
Entries 1535
Mean 0.2517E-02
RMS 0.4663E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 42.87 / 27
P1 0.3967
P2 0.3738E-02
P3 0.1761E-01
P4 0.1358
Cloud charge in bin (10⁶ e)
X (cm)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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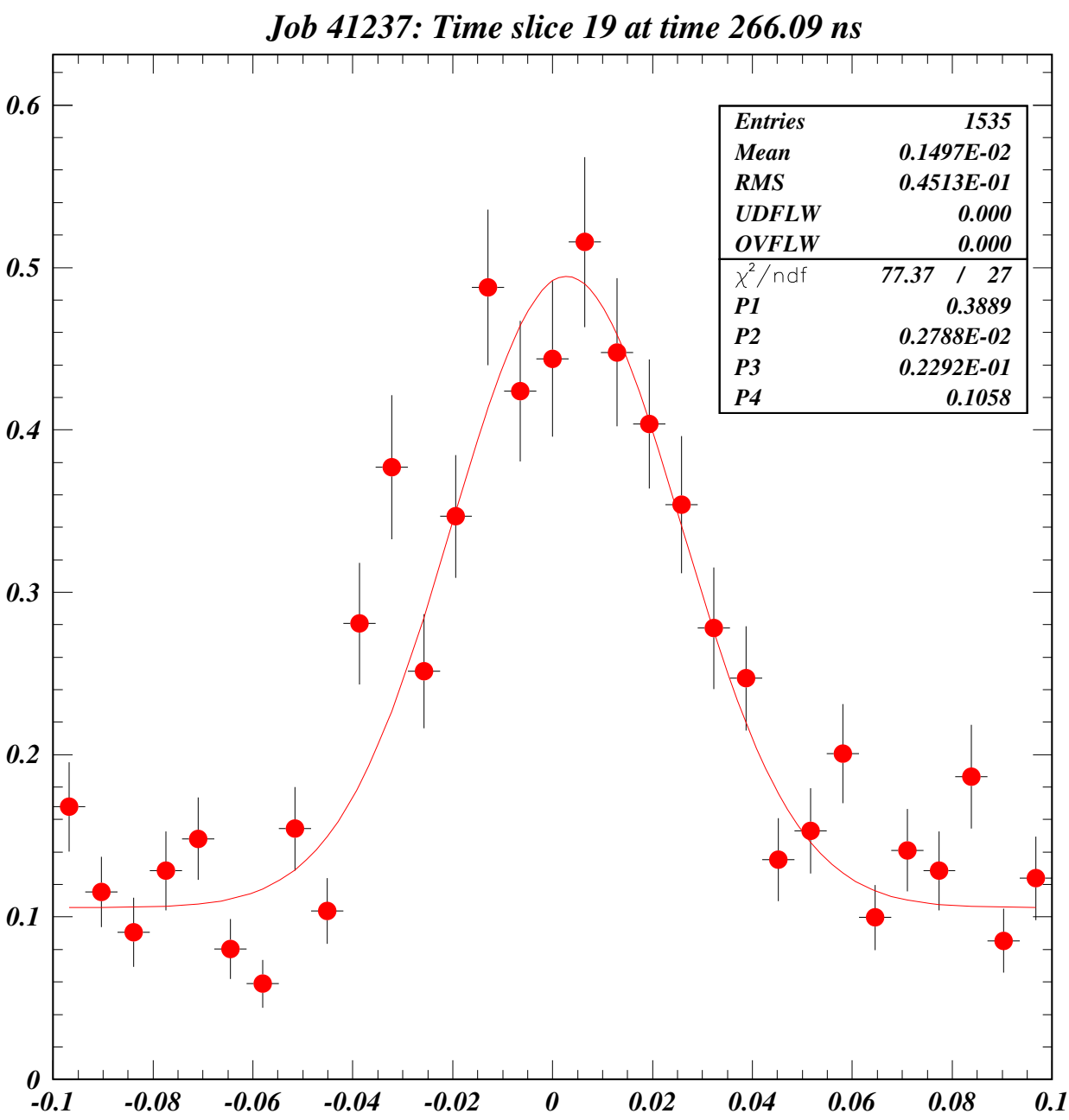
Job 41237: Time slice 19 at time 266.09 ns
Entries 1535
Mean 0.1497E-02
RMS 0.4513E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 77.37 / 27
P1 0.3889
P2 0.2788E-02
P3 0.2292E-01
P4 0.1058
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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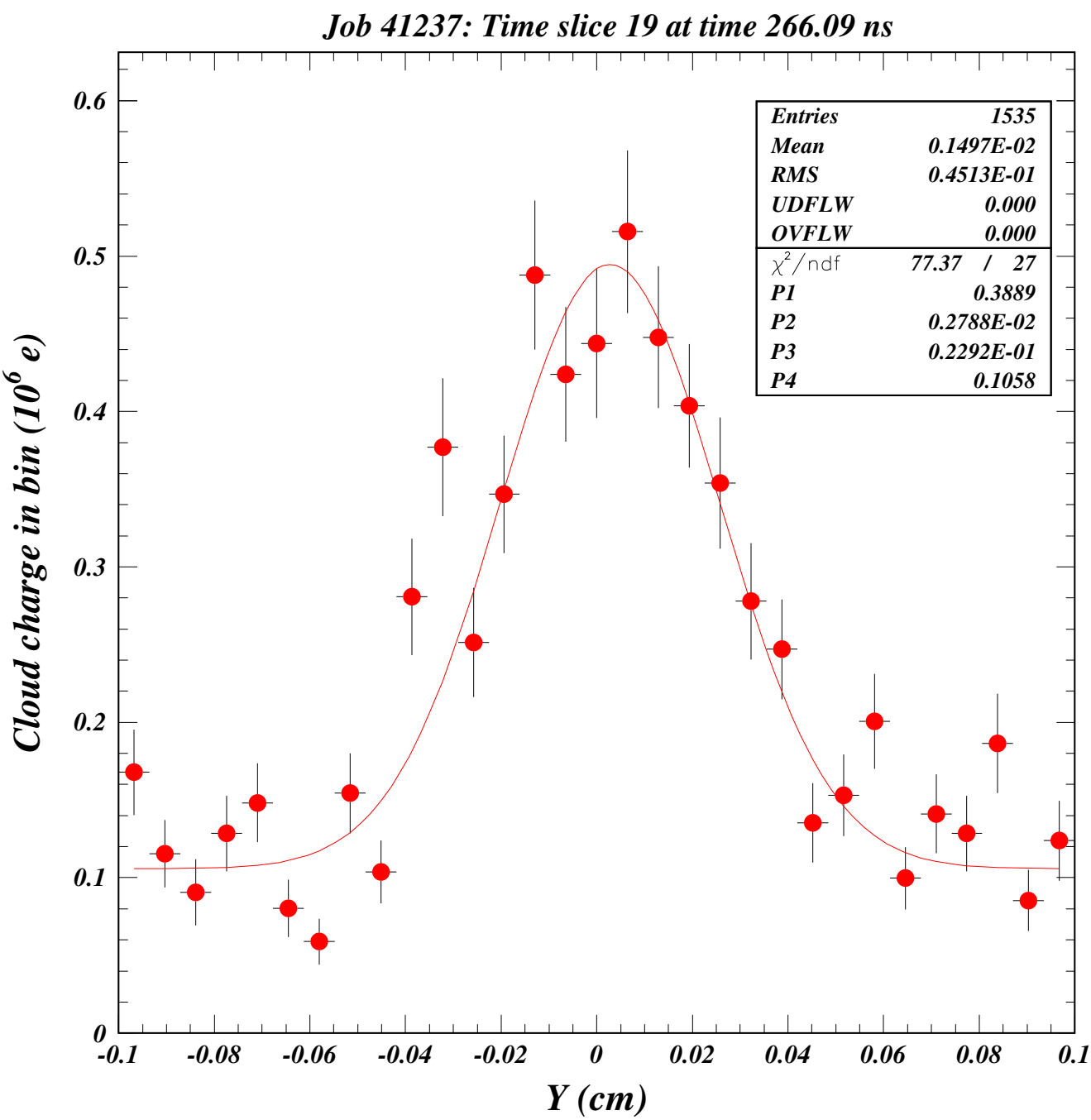
Job 41237: Time slice 19 at time 266.09 ns
Entries 1535
Mean 0.1497E-02
RMS 0.4513E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 77.37 / 27
P1 0.3889
P2 0.2788E-02
P3 0.2292E-01
P4 0.1058
Cloud charge in bin (10⁶ e)
Y (cm)
0
0.1
0.2
0.3
0.4
0.5
0.6
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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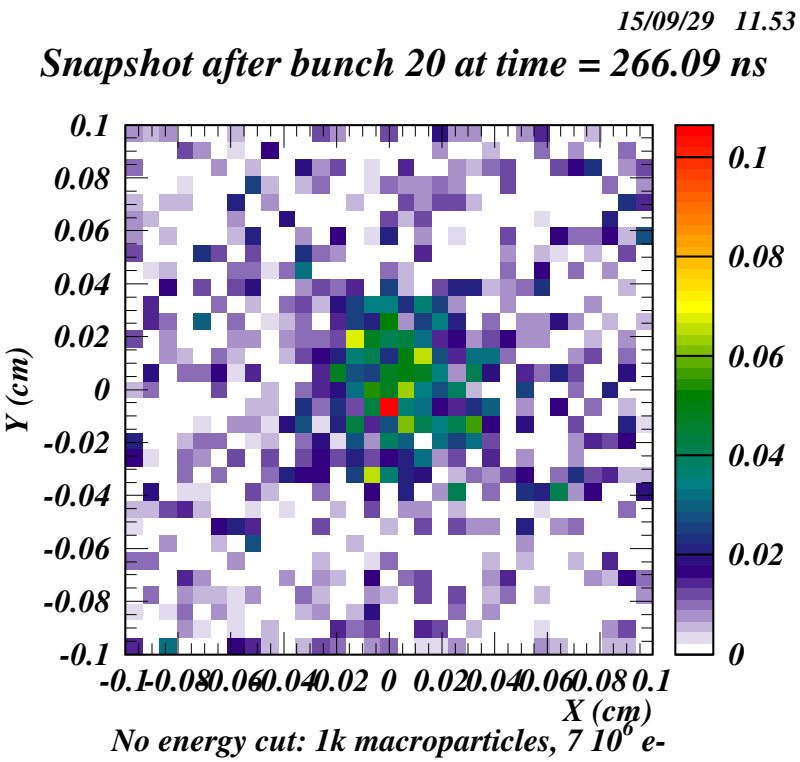
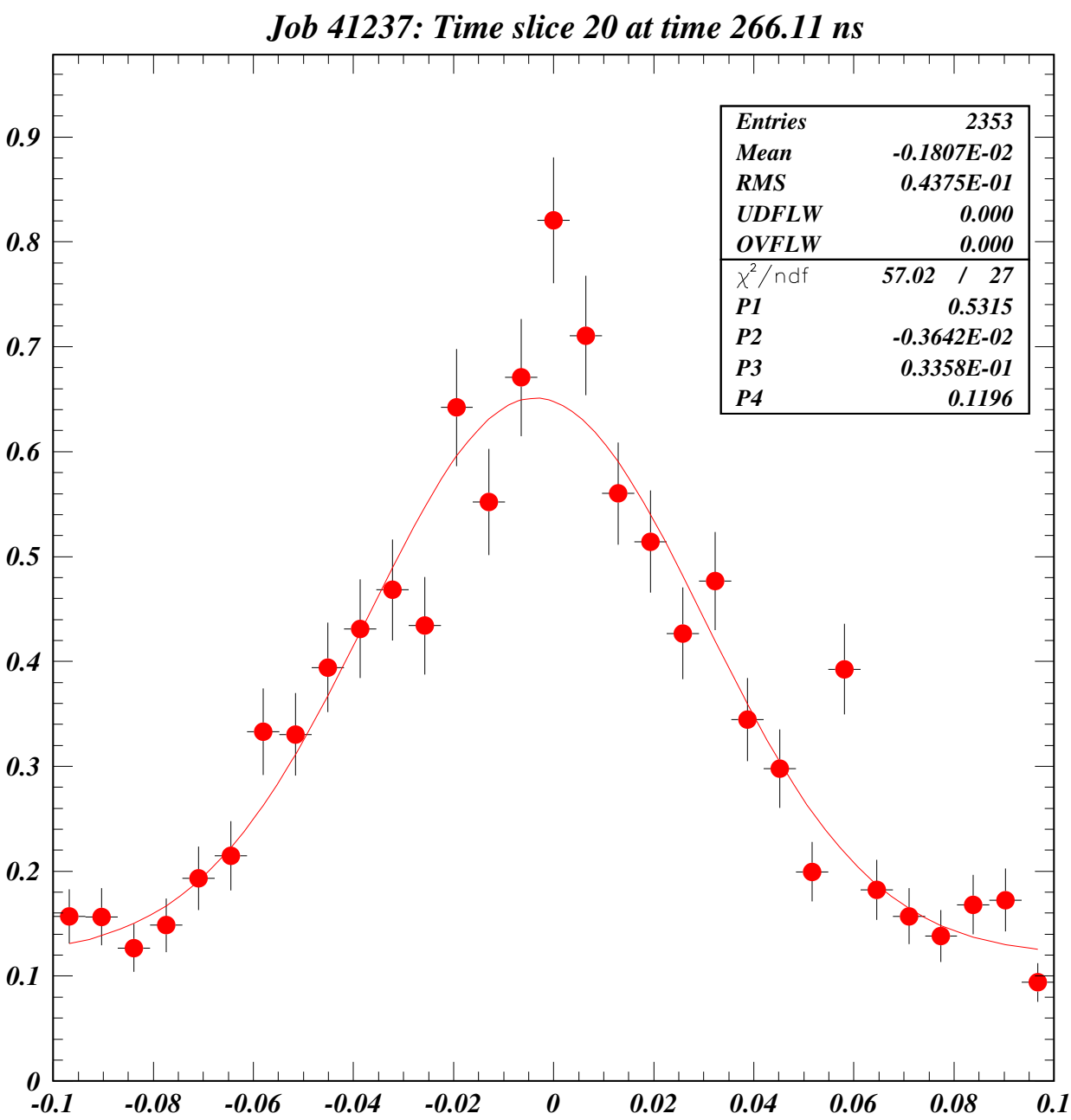

Snapshot after bunch 20 at time = 266.09 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
No energy cut: 1k macroparticles, 7 10^6 e-

15/09/29 11.53


Job 41237: Time slice 20 at time 266.11 ns
Entries 2353
Mean -0.1807E-02
RMS 0.4375E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 57.02 / 27
P1 0.5315
P2 -0.3642E-02
P3 0.3358E-01
P4 0.1196
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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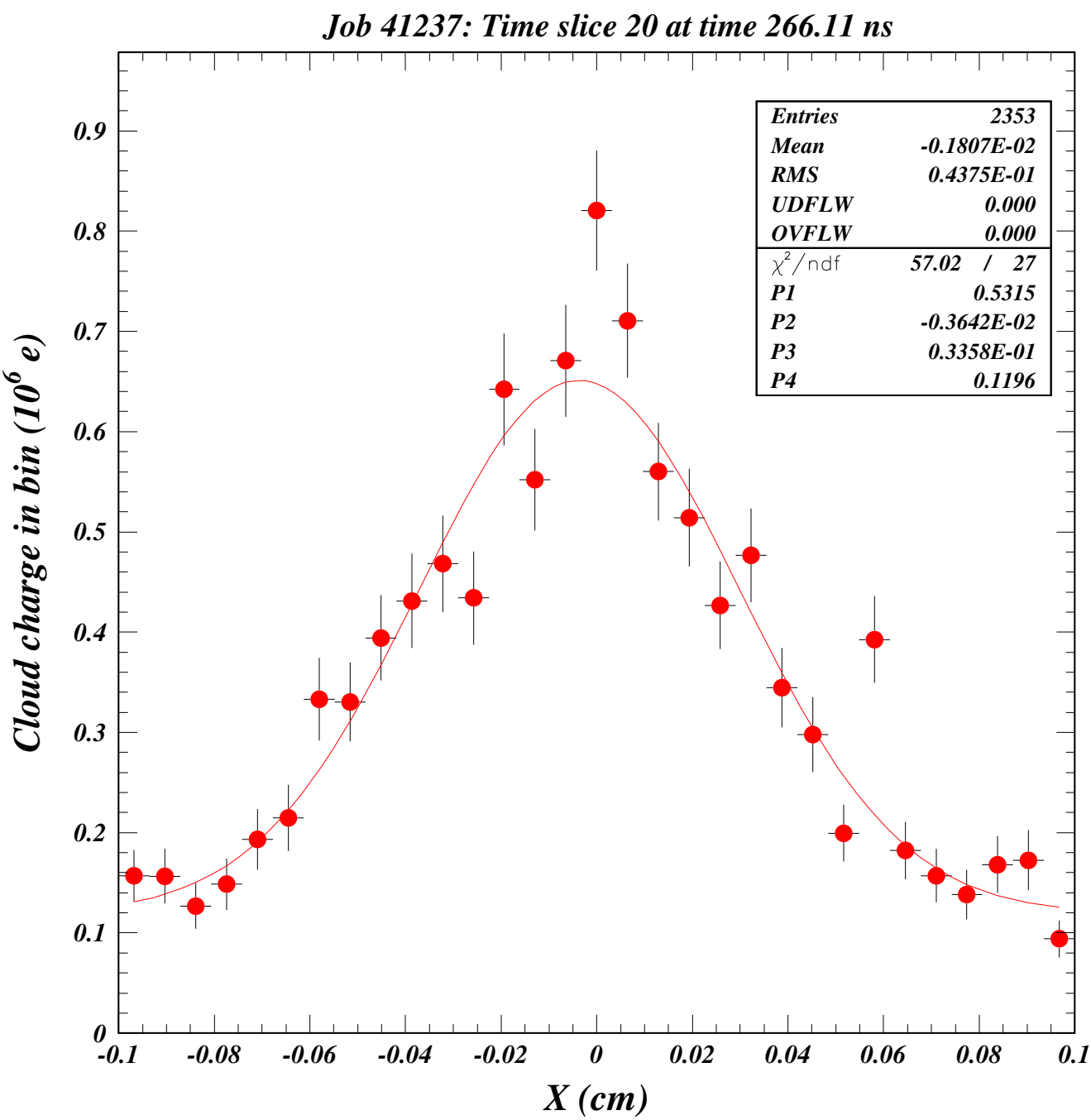
Job 41237: Time slice 20 at time 266.11 ns
Entries 2353
Mean -0.1807E-02
RMS 0.4375E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 57.02 / 27
P1 0.5315
P2 -0.3642E-02
P3 0.3358E-01
P4 0.1196
Cloud charge in bin (10⁶ e)
X (cm)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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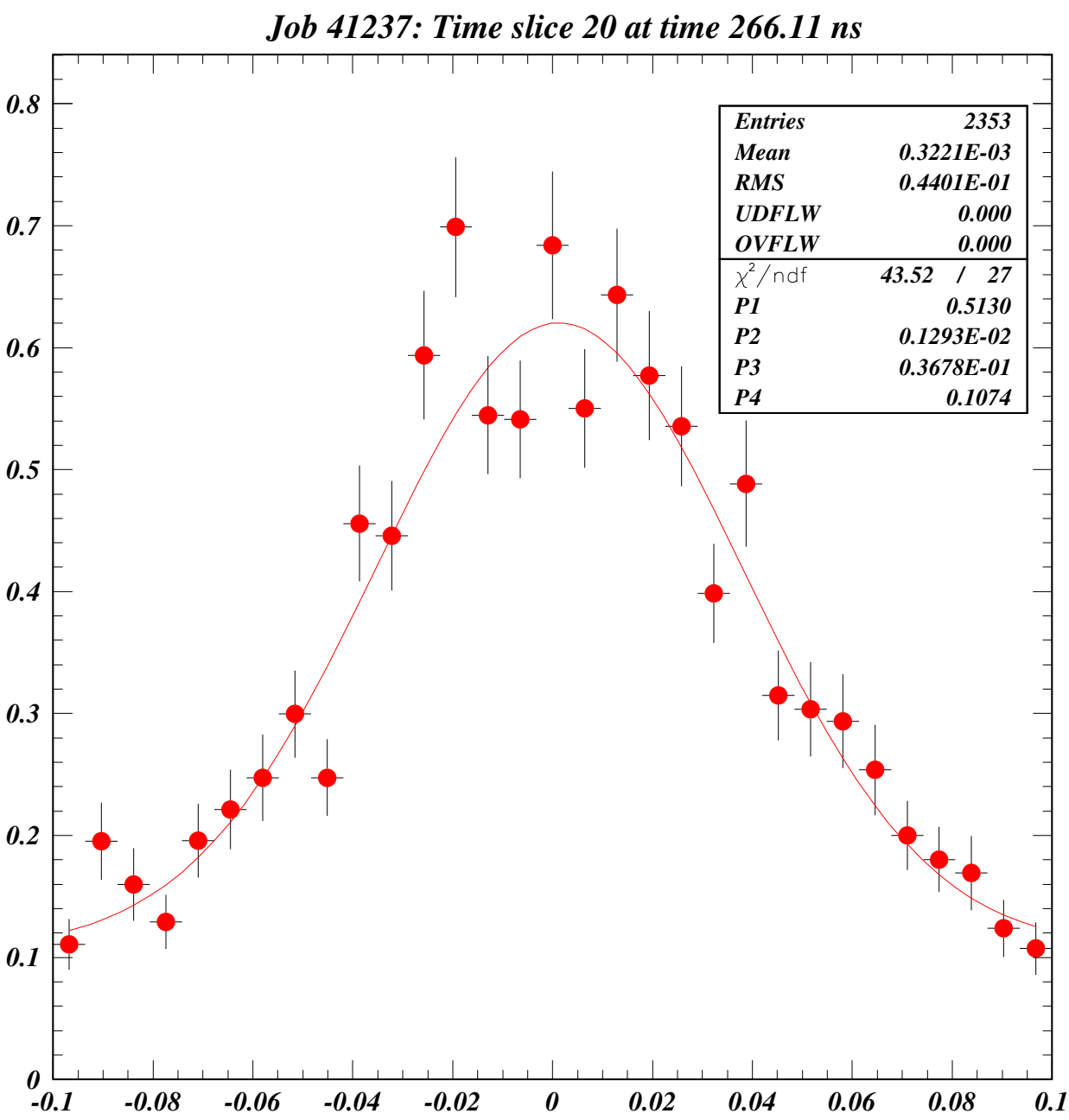
Job 41237: Time slice 20 at time 266.11 ns
Entries 2353
Mean 0.3221E-03
RMS 0.4401E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 43.52 / 27
P1 0.5130
P2 0.1293E-02
P3 0.3678E-01
P4 0.1074
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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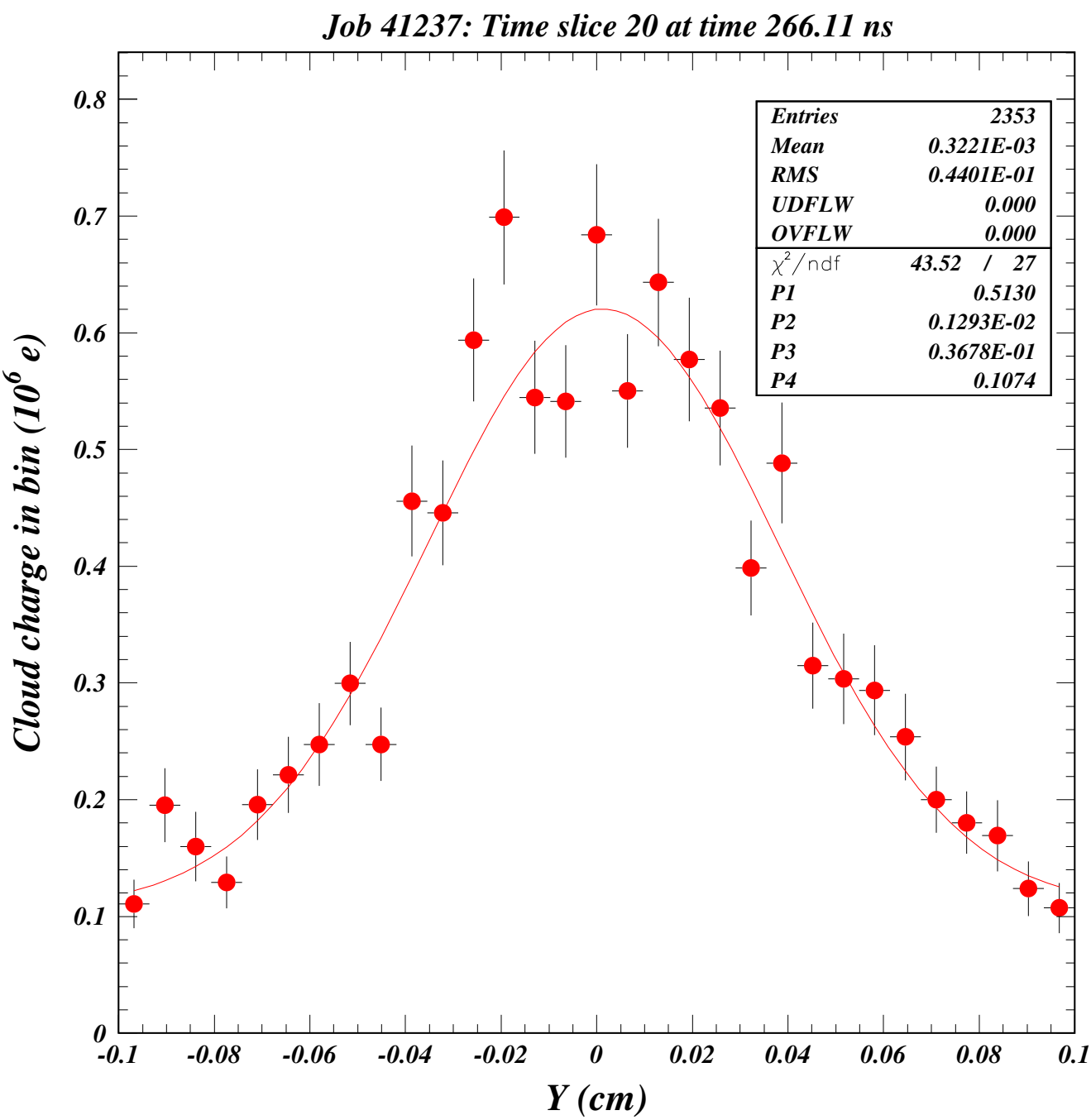
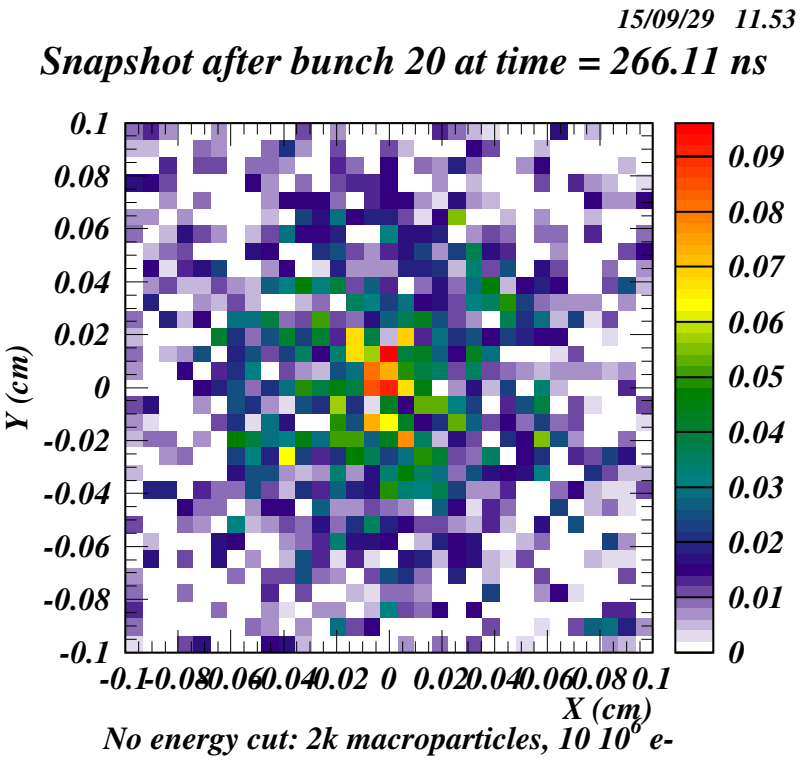

Job 41237: Time slice 20 at time 266.11 ns
Entries 2353
Mean 0.3221E-03
RMS 0.4401E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 43.52 / 27
P1 0.5130
P2 0.1293E-02
P3 0.3678E-01
P4 0.1074
Cloud charge in bin (10⁶ e)
Y (cm)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

15/09/29 11.53


Snapshot after bunch 20 at time = 266.11 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
No energy cut: 2k macroparticles, 10 10^6 e-

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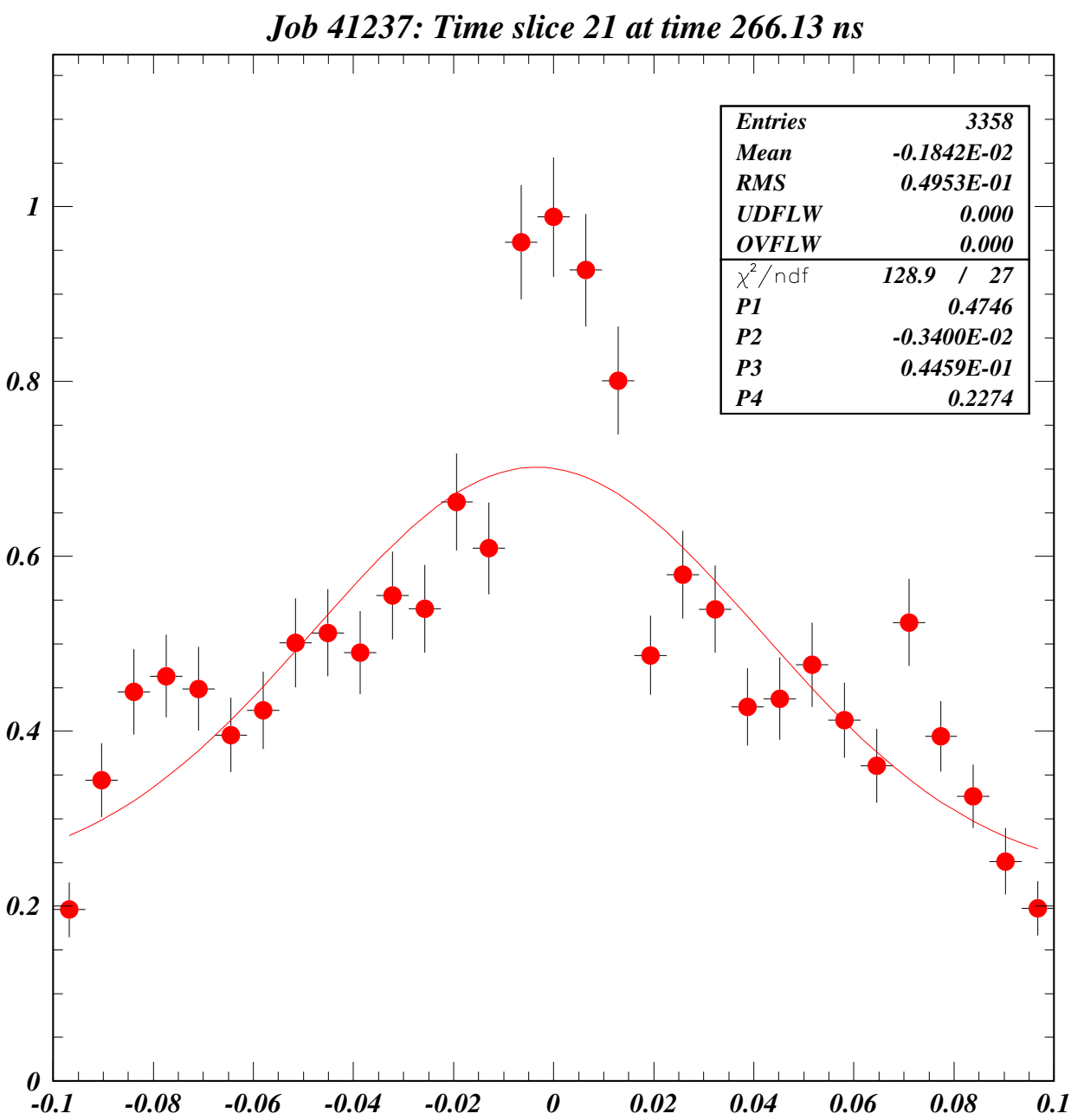
Job 41237: Time slice 21 at time 266.13 ns
Entries 3358
Mean -0.1842E-02
RMS 0.4953E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 128.9 / 27
P1 0.4746
P2 -0.3400E-02
P3 0.4459E-01
P4 0.2274
1
0.8
0.6
0.4
0.2
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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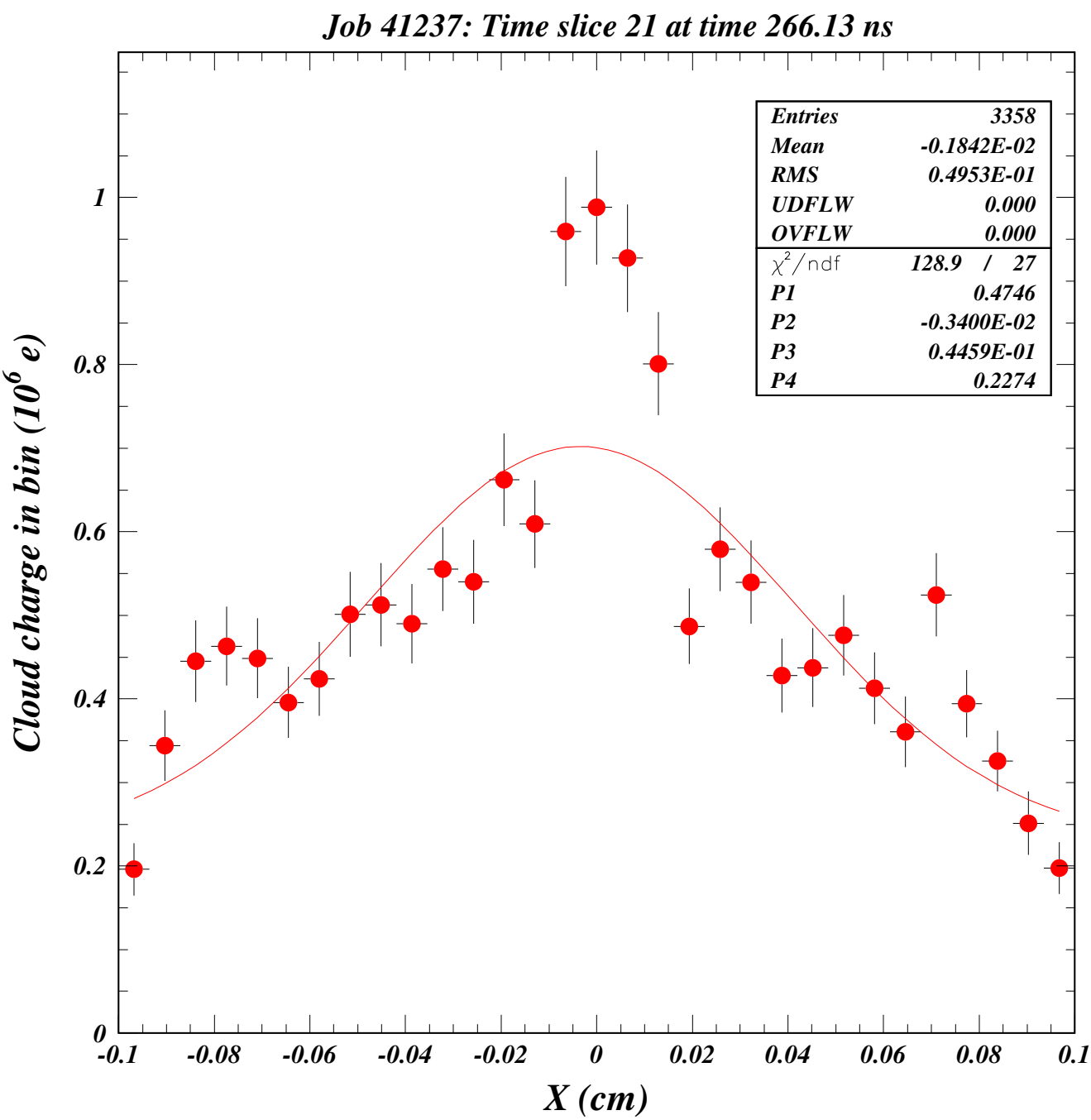
Job 41237: Time slice 21 at time 266.13 ns
Entries 3358
Mean -0.1842E-02
RMS 0.4953E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 128.9 / 27
P1 0.4746
P2 -0.3400E-02
P3 0.4459E-01
P4 0.2274
Cloud charge in bin (10⁶ e)
X (cm)
0
0.2
0.4
0.6
0.8
1
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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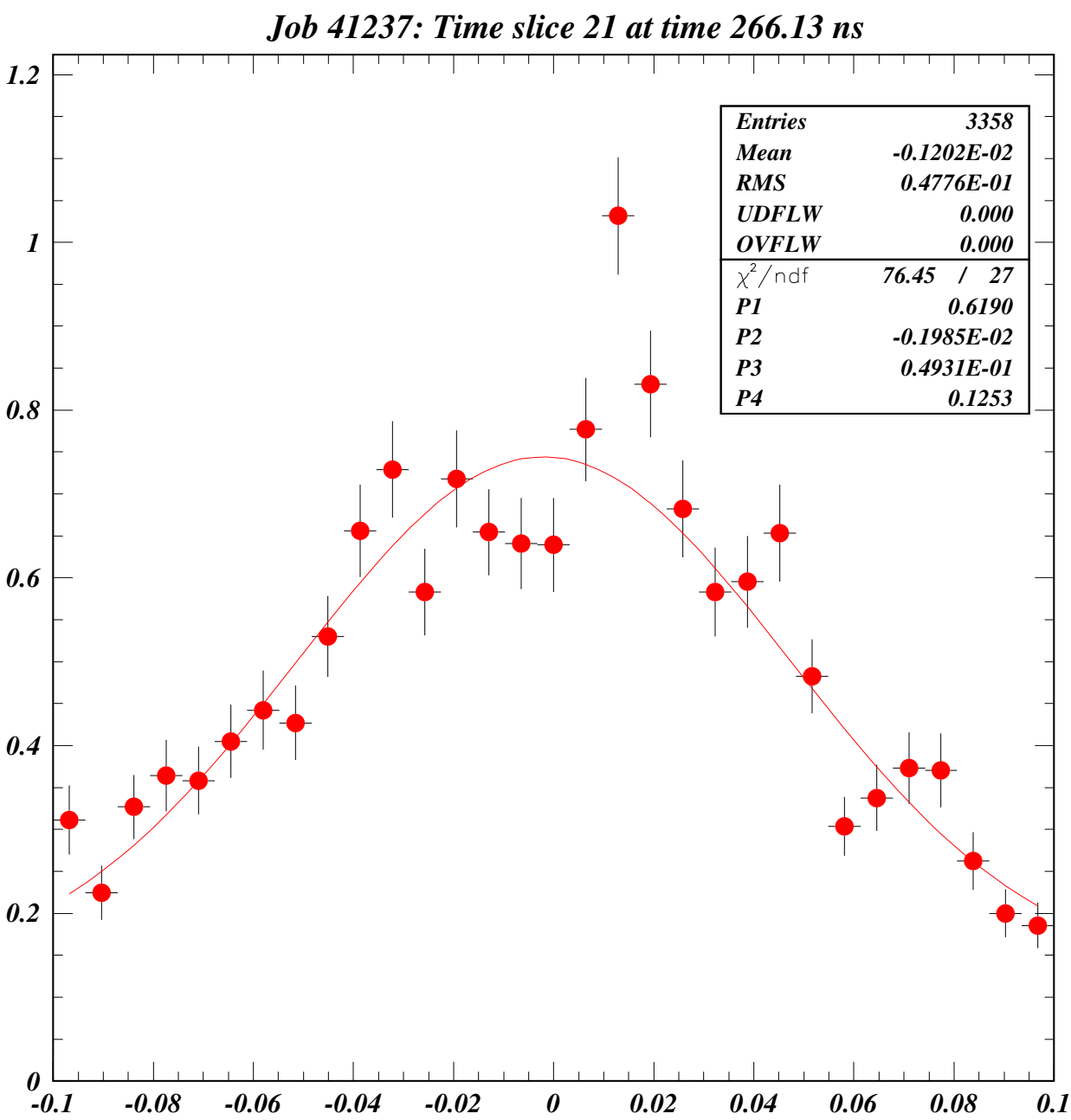
Job 41237: Time slice 21 at time 266.13 ns
Entries 3358
Mean -0.1202E-02
RMS 0.4776E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 76.45 / 27
P1 0.6190
P2 -0.1985E-02
P3 0.4931E-01
P4 0.1253
1.2
1
0.8
0.6
0.4
0.2
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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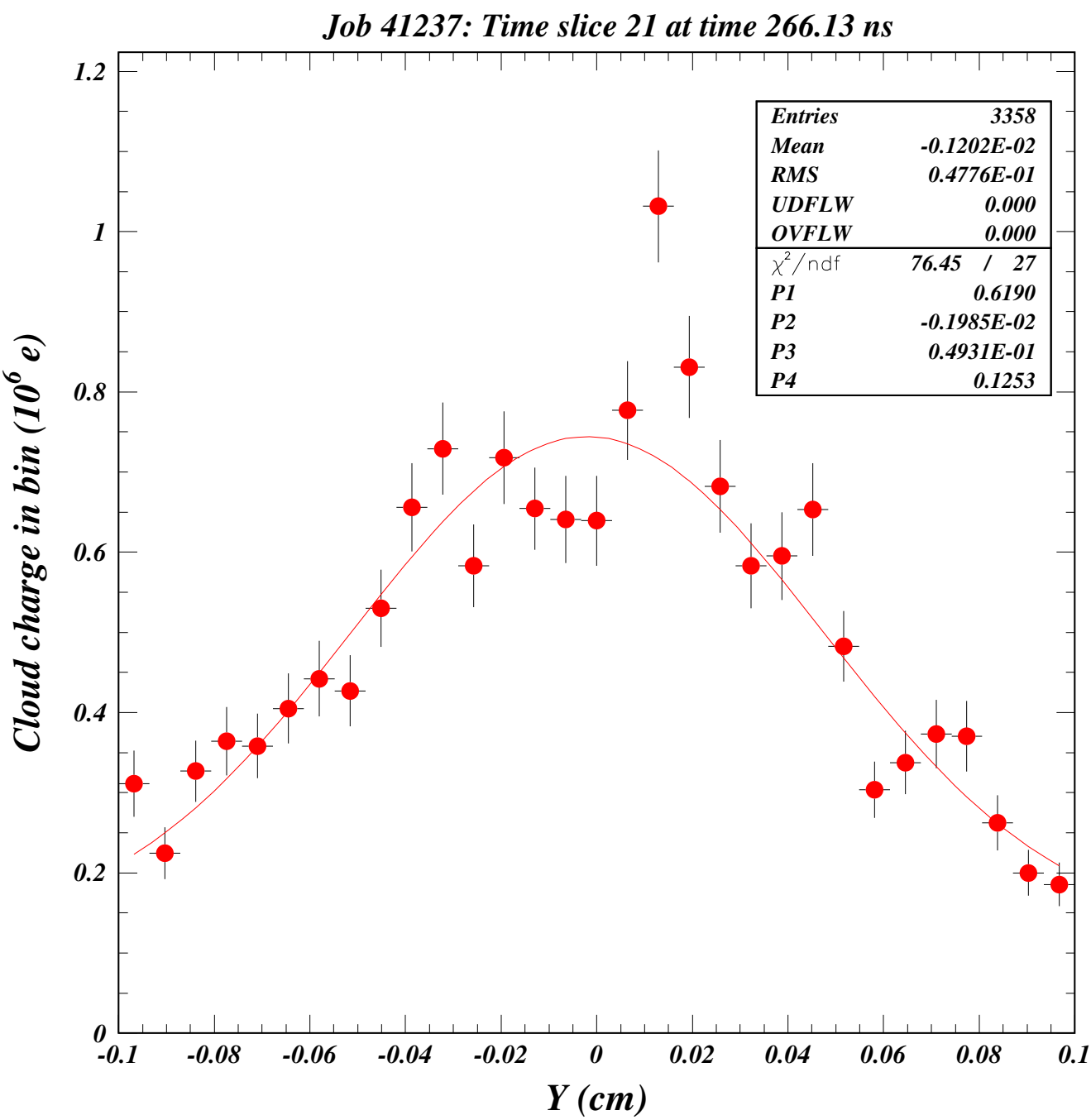
Job 41237: Time slice 21 at time 266.13 ns
Entries 3358
Mean -0.1202E-02
RMS 0.4776E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 76.45 / 27
P1 0.6190
P2 -0.1985E-02
P3 0.4931E-01
P4 0.1253
Cloud charge in bin (10⁶ e)
Y (cm)
1.2
1
0.8
0.6
0.4
0.2
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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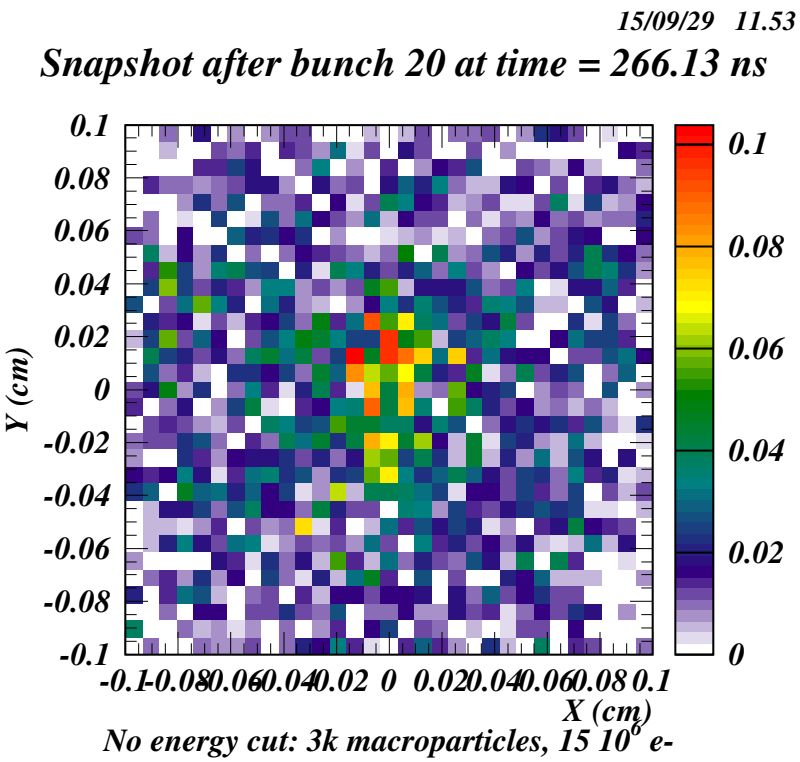
Snapshot after bunch 20 at time = 266.13 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
No energy cut: 3k macroparticles, 15 10^6 e-

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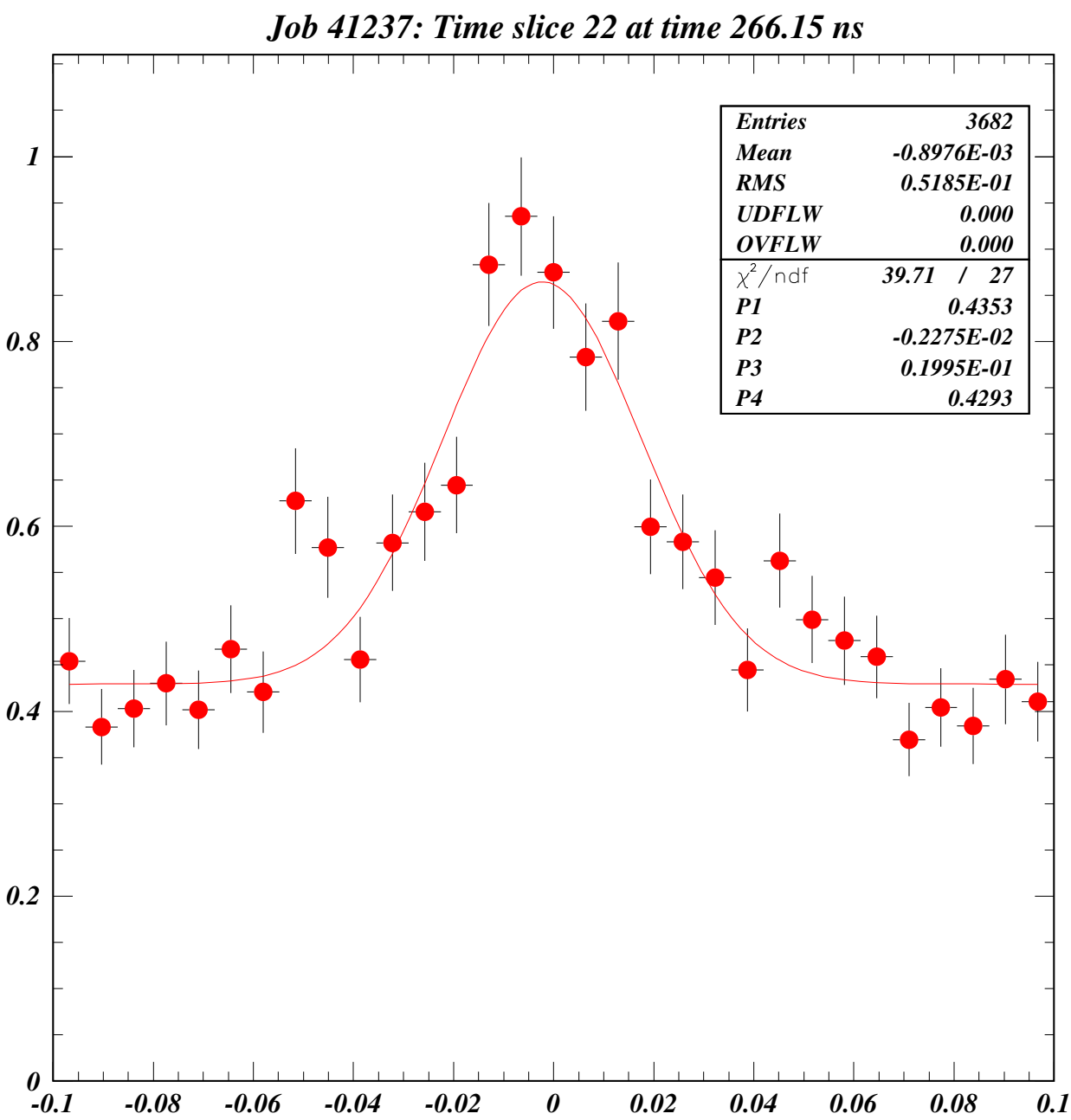
Job 41237: Time slice 22 at time 266.15 ns
Entries 3682
Mean -0.8976E-03
RMS 0.5185E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 39.71 / 27
P1 0.4353
P2 -0.2275E-02
P3 0.1995E-01
P4 0.4293
1
0.8
0.6
0.4
0.2
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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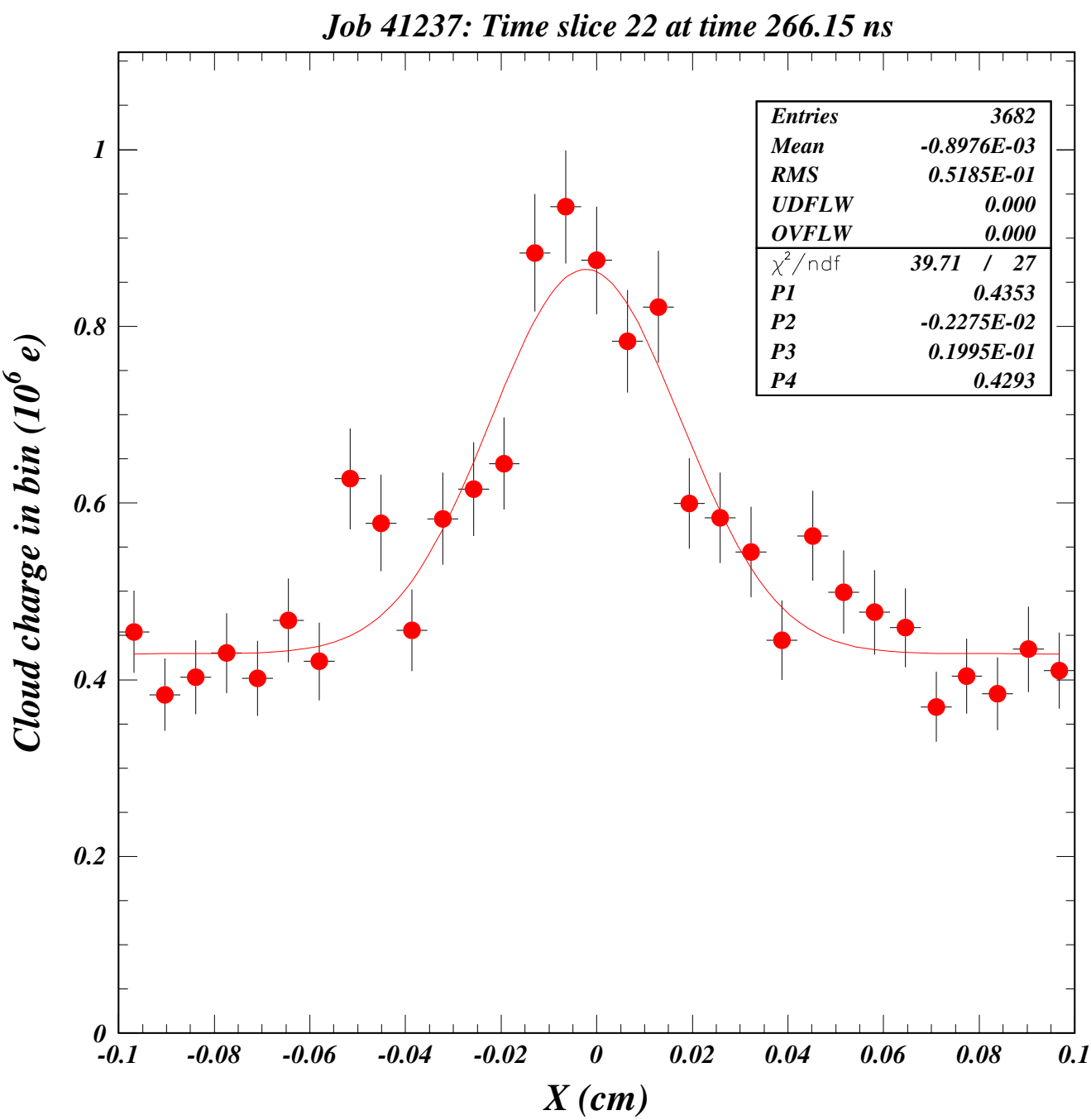
Job 41237: Time slice 22 at time 266.15 ns
Entries 3682
Mean -0.8976E-03
RMS 0.5185E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 39.71 / 27
P1 0.4353
P2 -0.2275E-02
P3 0.1995E-01
P4 0.4293
Cloud charge in bin (10⁶ e)
X (cm)
0
0.2
0.4
0.6
0.8
1
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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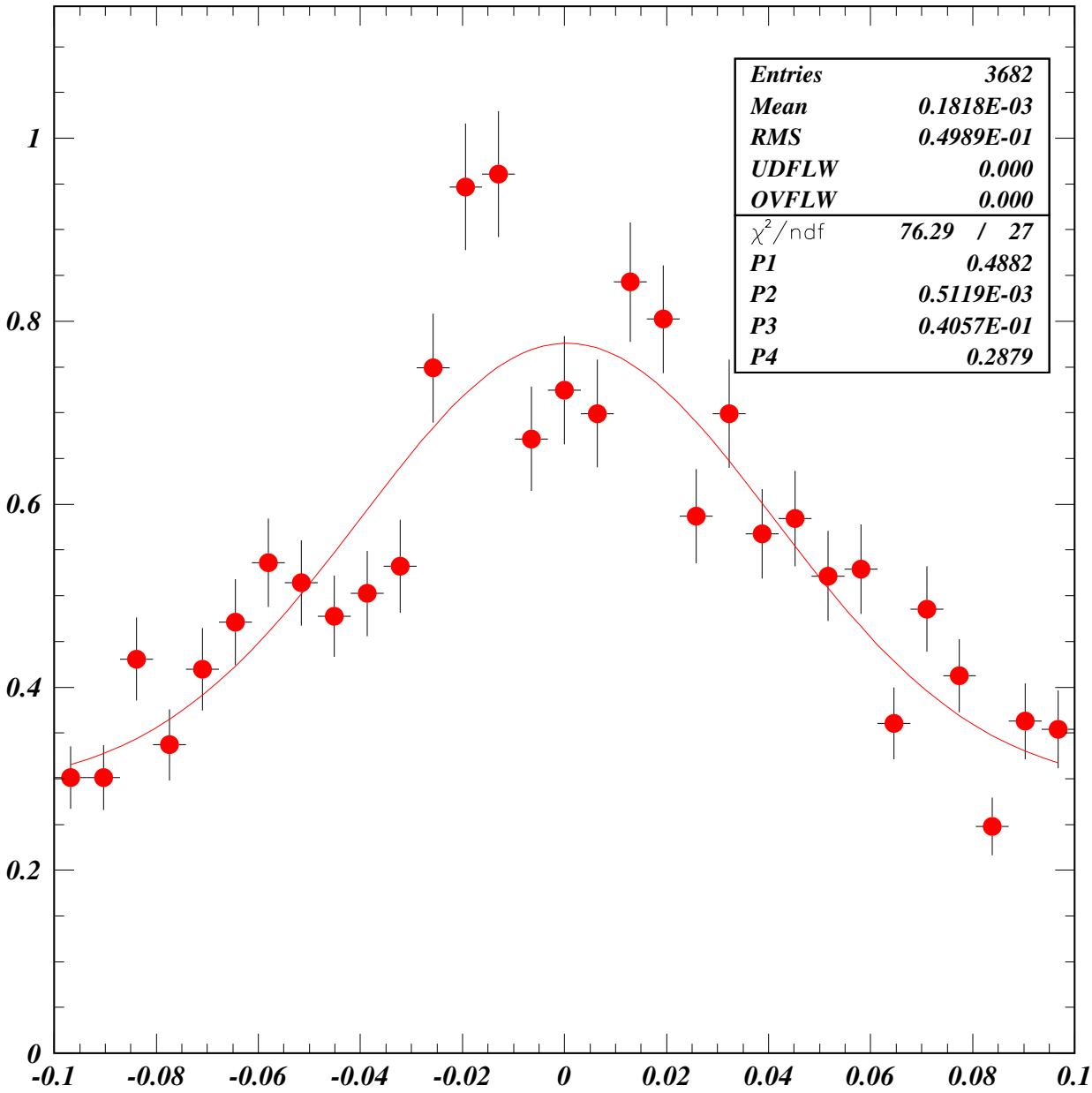
Job 41237: Time slice 22 at time 266.15 ns



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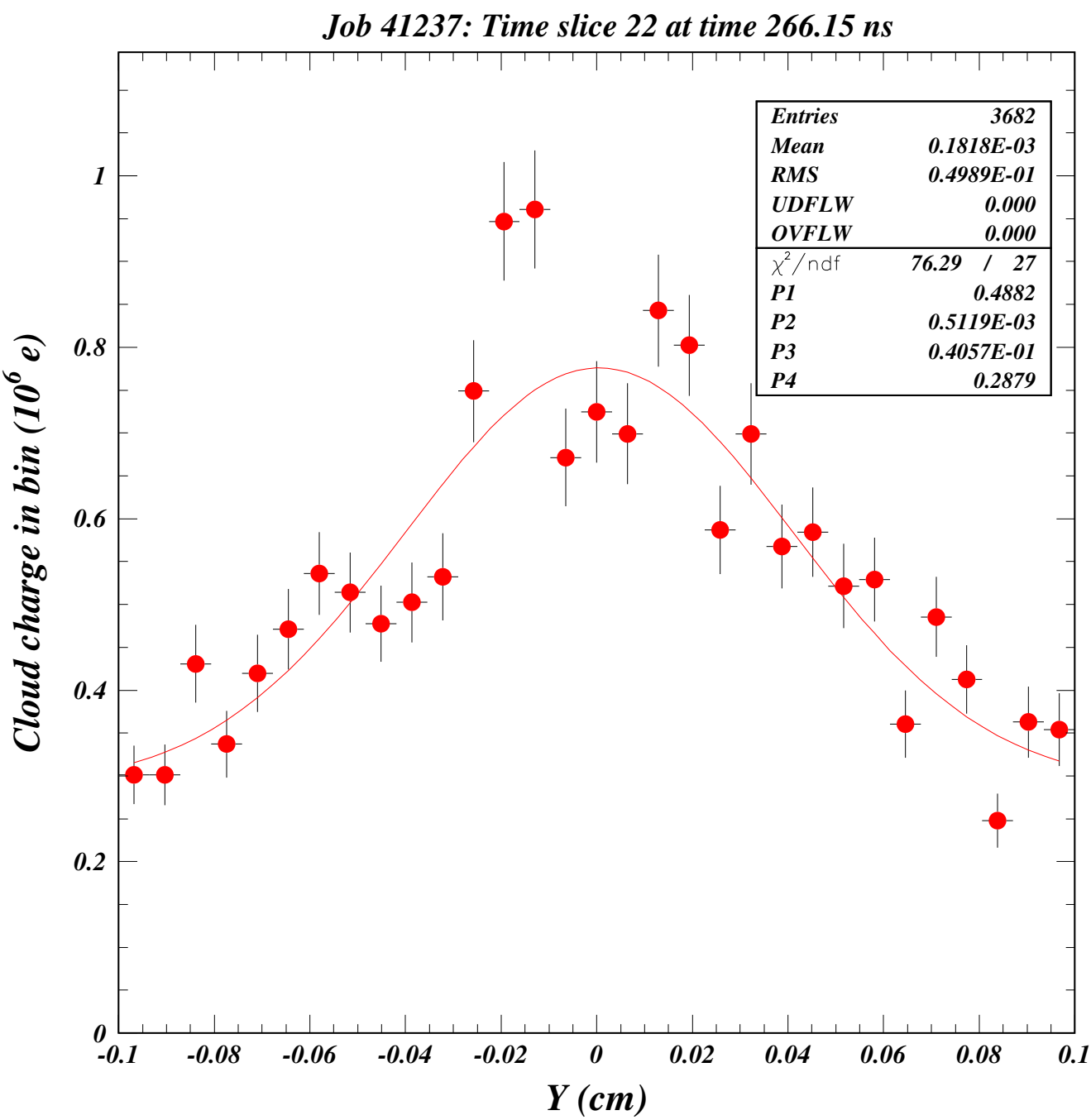
Job 41237: Time slice 22 at time 266.15 ns
Entries 3682
Mean 0.1818E-03
RMS 0.4989E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 76.29 / 27
P1 0.4882
P2 0.5119E-03
P3 0.4057E-01
P4 0.2879
Cloud charge in bin (10⁶ e)
Y (cm)
0
0.2
0.4
0.6
0.8
1
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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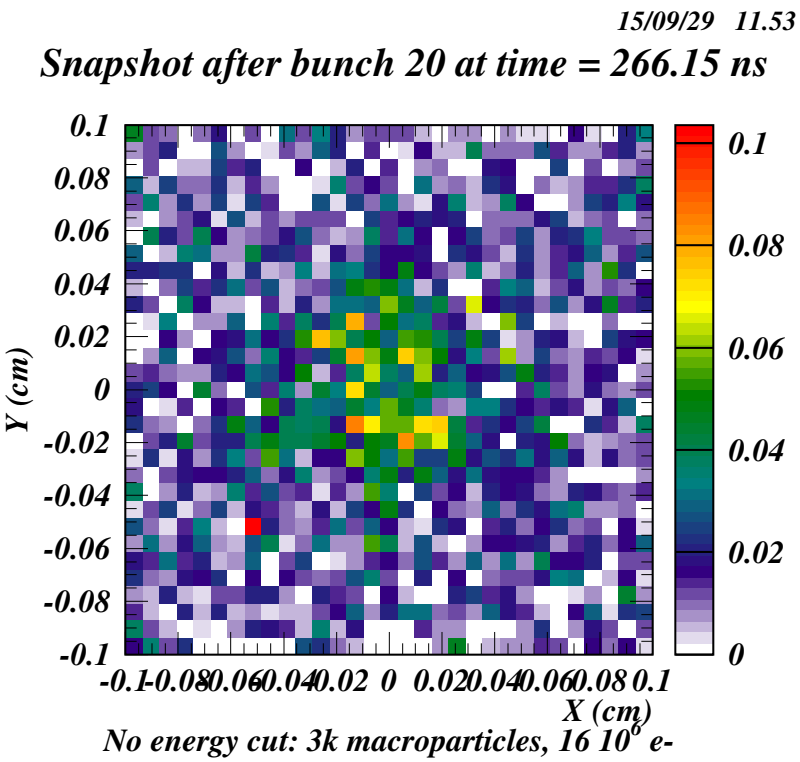
Snapshot after bunch 20 at time = 266.15 ns
Y (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
-0.1 -0.08 -0.06 -0.04 -0.02 0 0.02 0.04 0.06 0.08 0.1
X (cm)
0.1
0.08
0.06
0.04
0.02
0
No energy cut: 3k macroparticles, 16 10^6 e-

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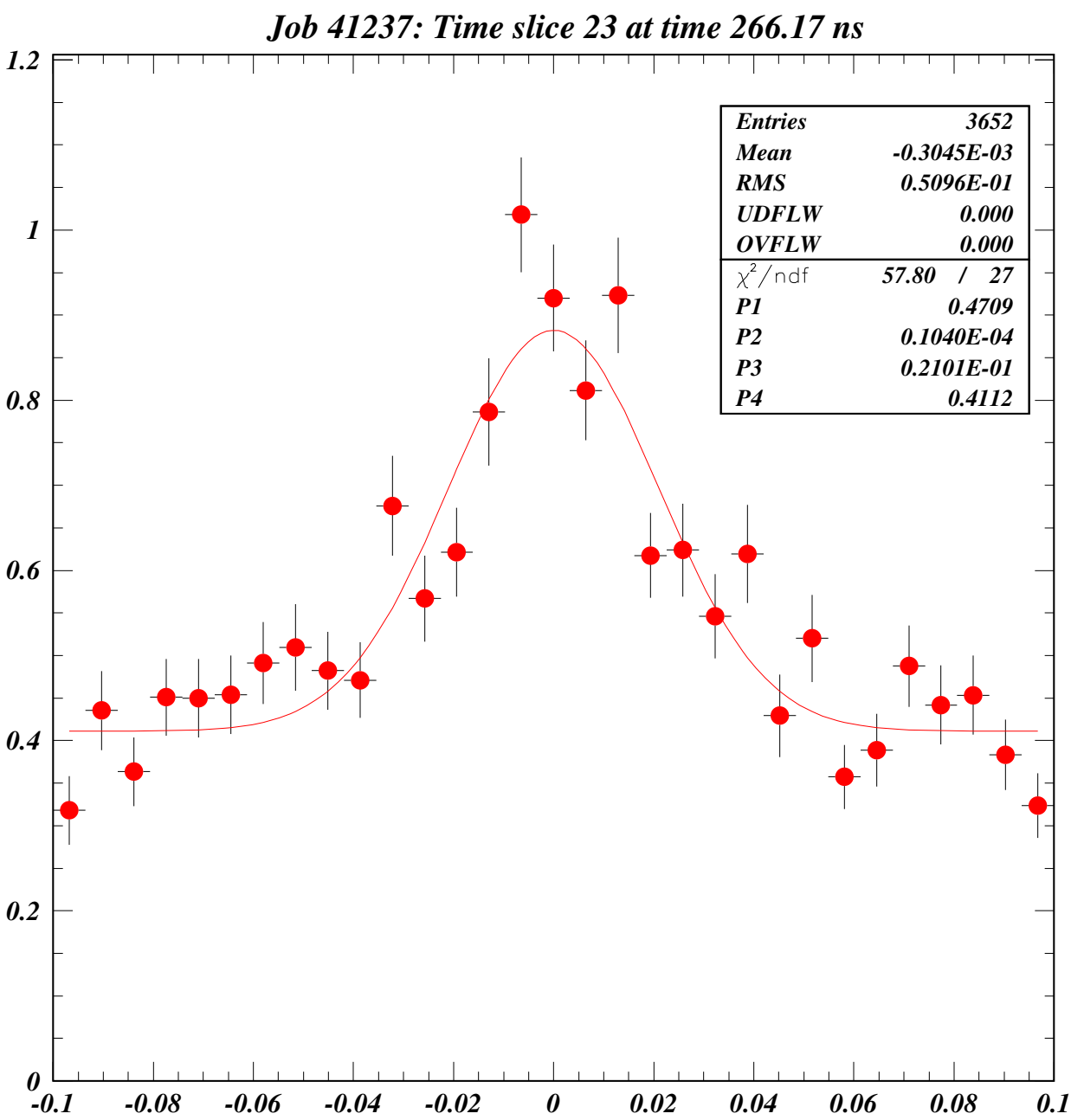
Job 41237: Time slice 23 at time 266.17 ns
Entries 3652
Mean -0.3045E-03
RMS 0.5096E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 57.80 / 27
P1 0.4709
P2 0.1040E-04
P3 0.2101E-01
P4 0.4112
1.2
1
0.8
0.6
0.4
0.2
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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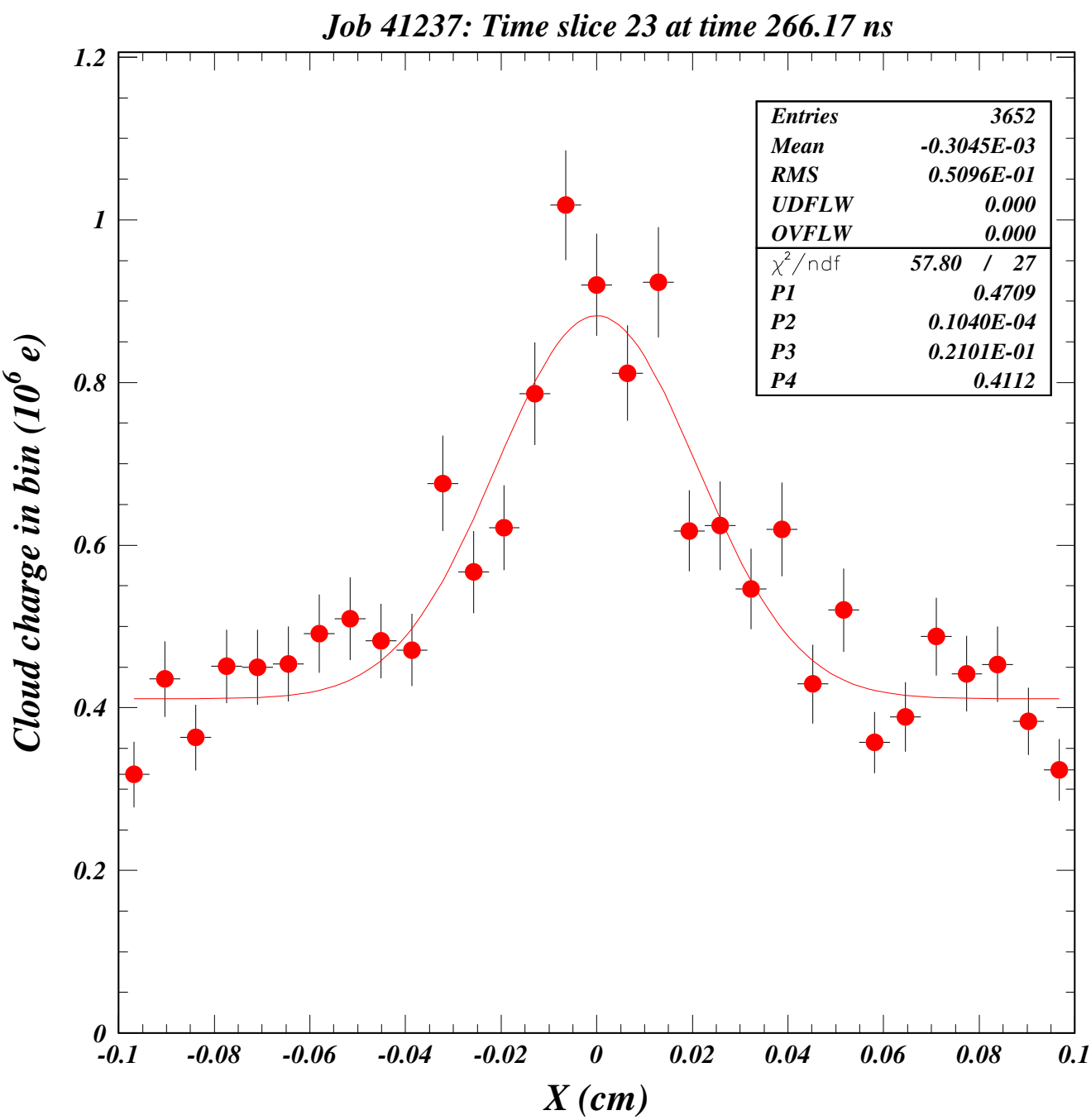
Job 41237: Time slice 23 at time 266.17 ns
Entries 3652
Mean -0.3045E-03
RMS 0.5096E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 57.80 / 27
P1 0.4709
P2 0.1040E-04
P3 0.2101E-01
P4 0.4112
Cloud charge in bin (10⁶ e)
X (cm)
1.2
1
0.8
0.6
0.4
0.2
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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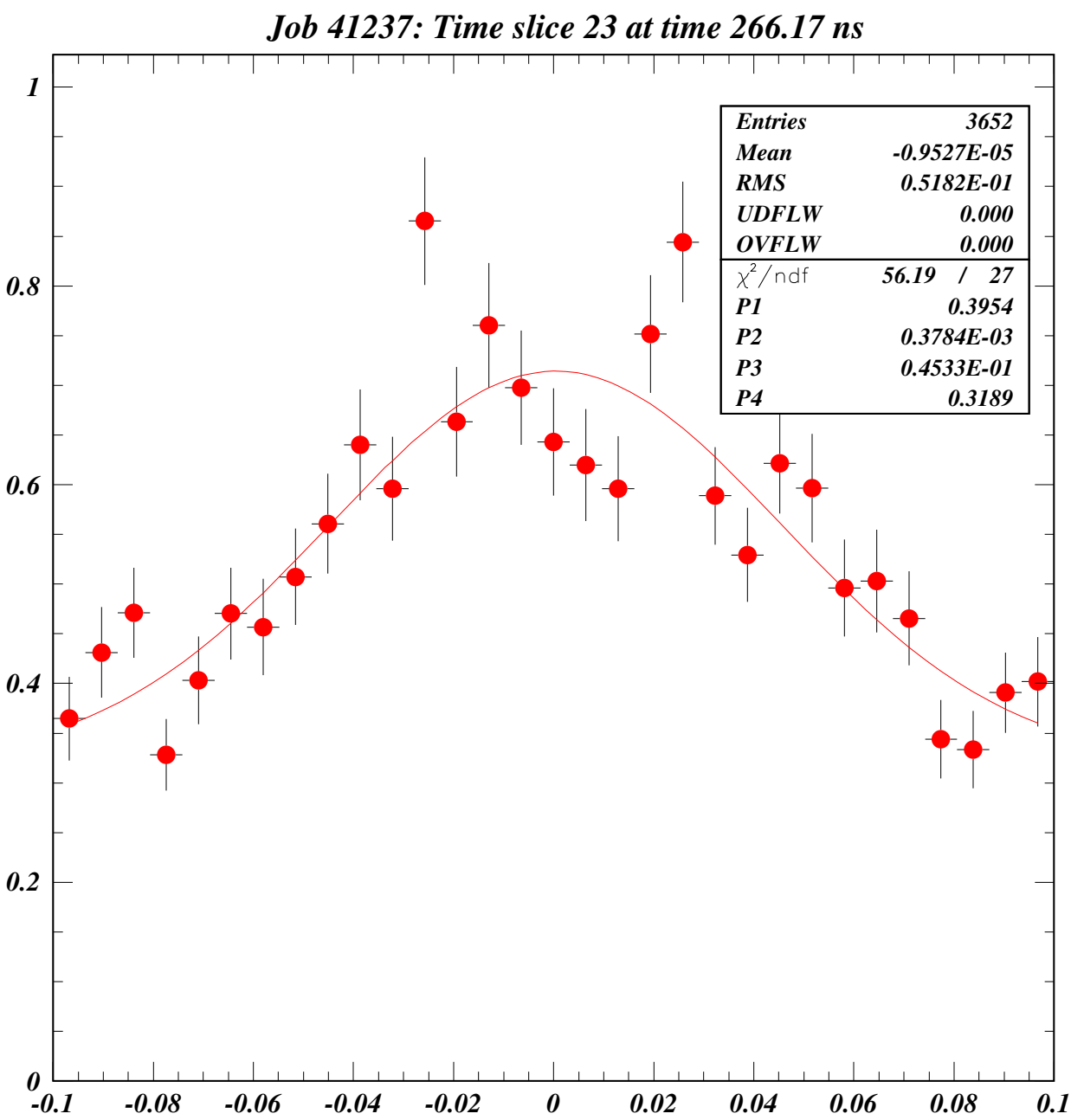
Job 41237: Time slice 23 at time 266.17 ns
Entries 3652
Mean -0.9527E-05
RMS 0.5182E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 56.19 / 27
P1 0.3954
P2 0.3784E-03
P3 0.4533E-01
P4 0.3189
1
0.8
0.6
0.4
0.2
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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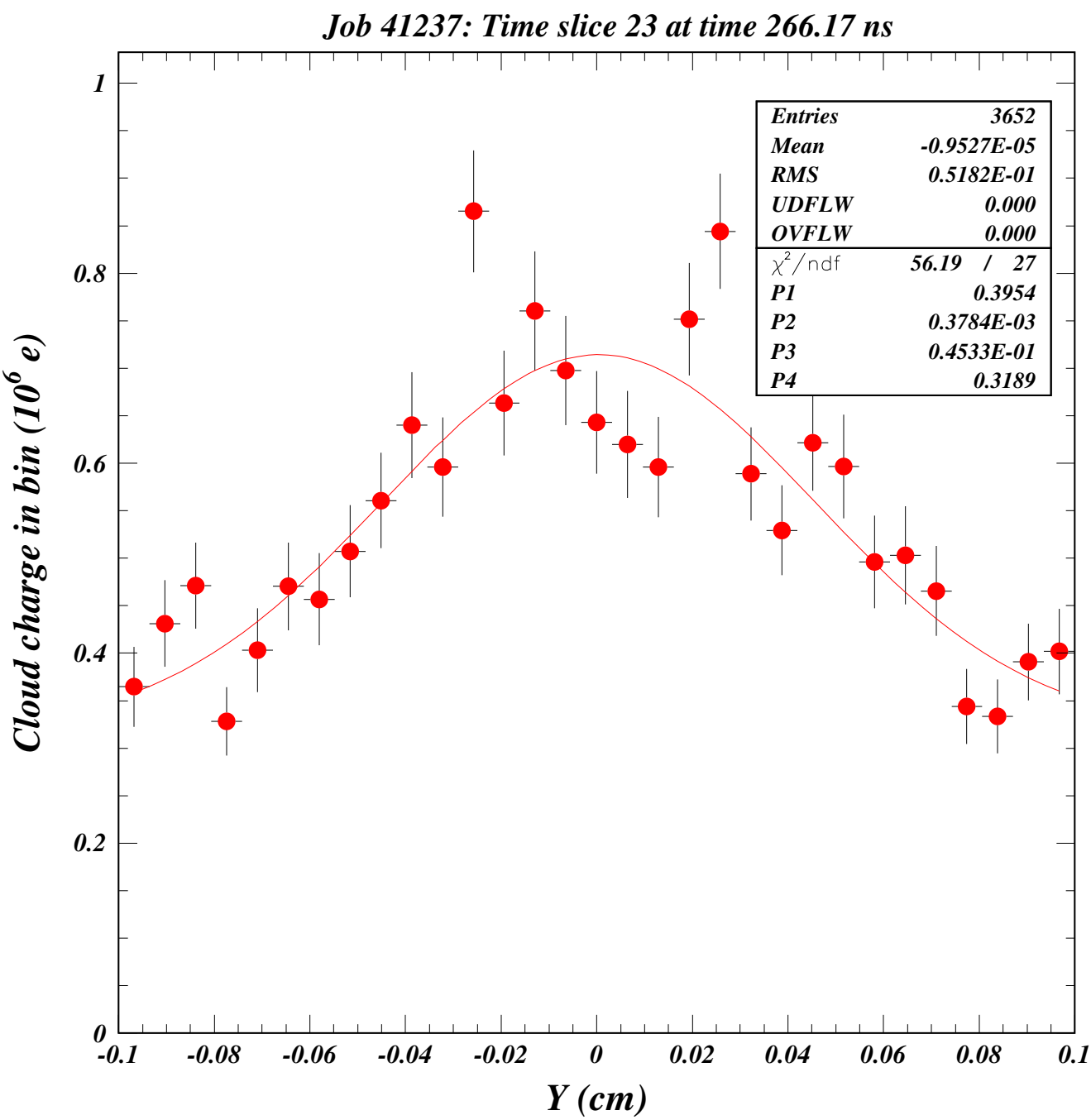
Job 41237: Time slice 23 at time 266.17 ns
Entries 3652
Mean -0.9527E-05
RMS 0.5182E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 56.19 / 27
P1 0.3954
P2 0.3784E-03
P3 0.4533E-01
P4 0.3189
Cloud charge in bin (10⁶ e)
Y (cm)
0
0.2
0.4
0.6
0.8
1
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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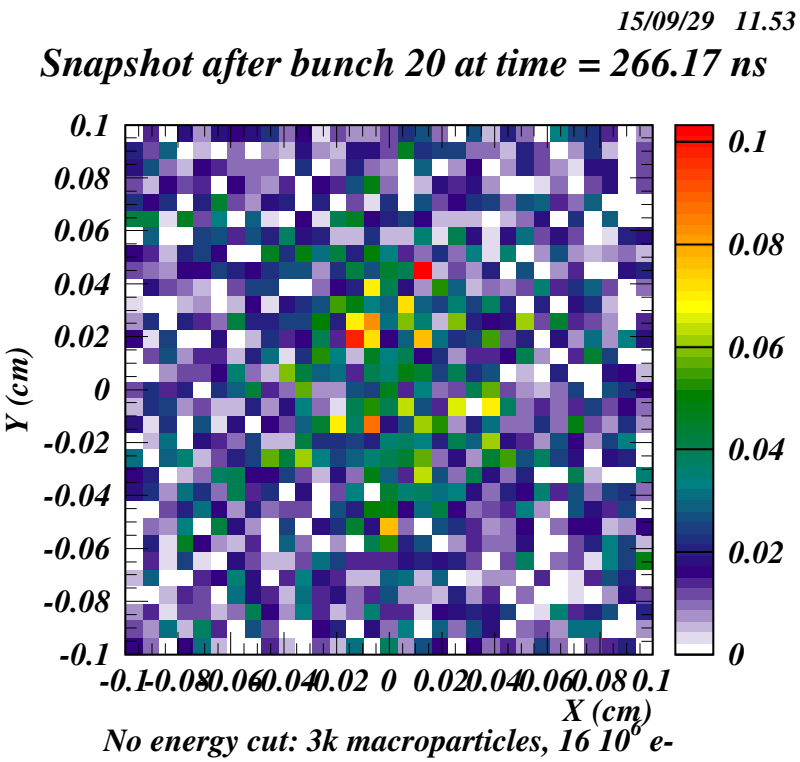
Snapshot after bunch 20 at time = 266.17 ns
Y (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
-0.1 -0.08 -0.06 -0.04 -0.02 0 0.02 0.04 0.06 0.08 0.1
X (cm)
0.1
0.08
0.06
0.04
0.02
0
No energy cut: 3k macroparticles, 16 10^6 e-

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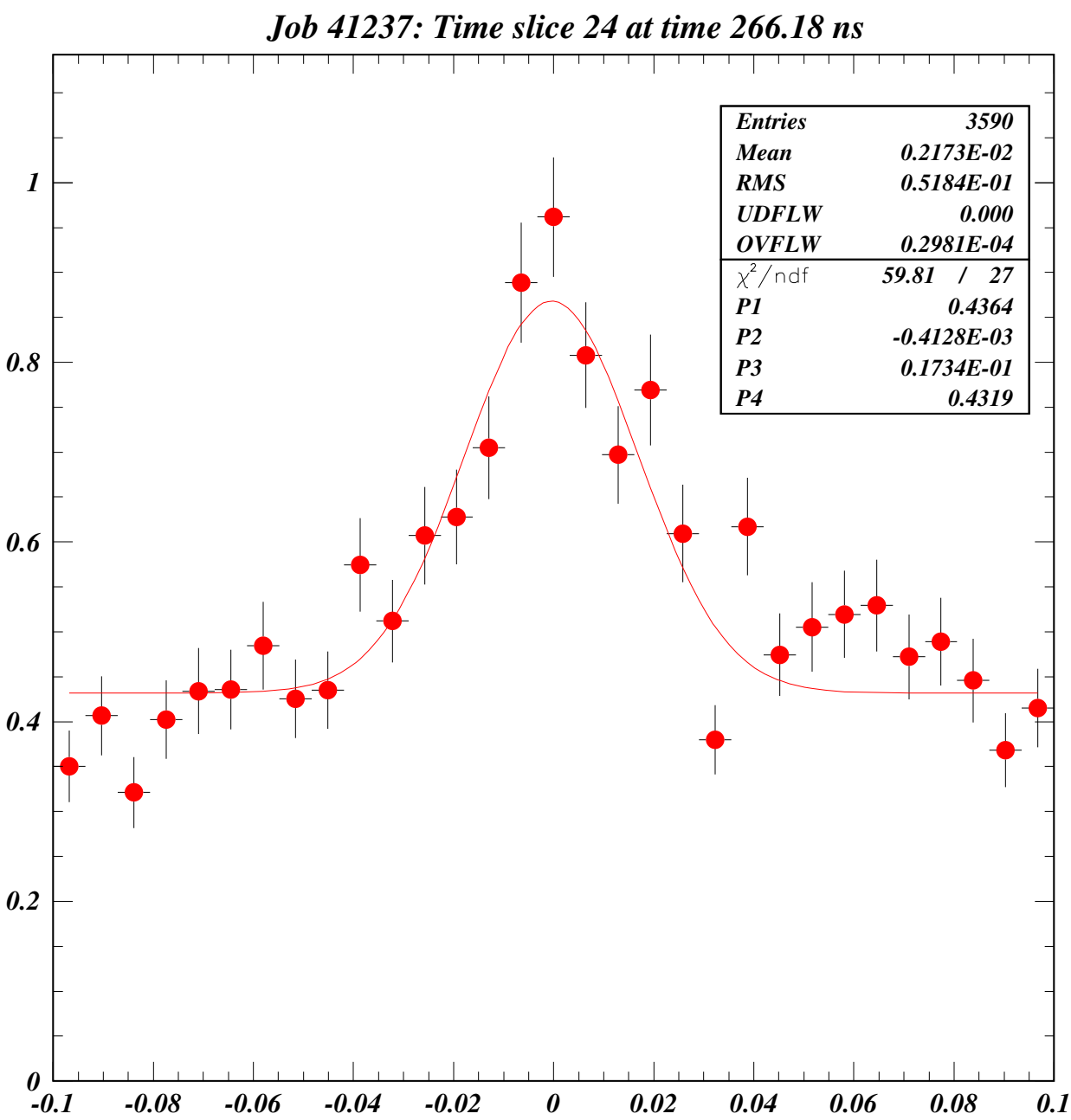
Job 41237: Time slice 24 at time 266.18 ns
Entries 3590
Mean 0.2173E-02
RMS 0.5184E-01
UDFLW 0.000
OVFLW 0.2981E-04
χ²/ndf 59.81 / 27
P1 0.4364
P2 -0.4128E-03
P3 0.1734E-01
P4 0.4319
1
0.8
0.6
0.4
0.2
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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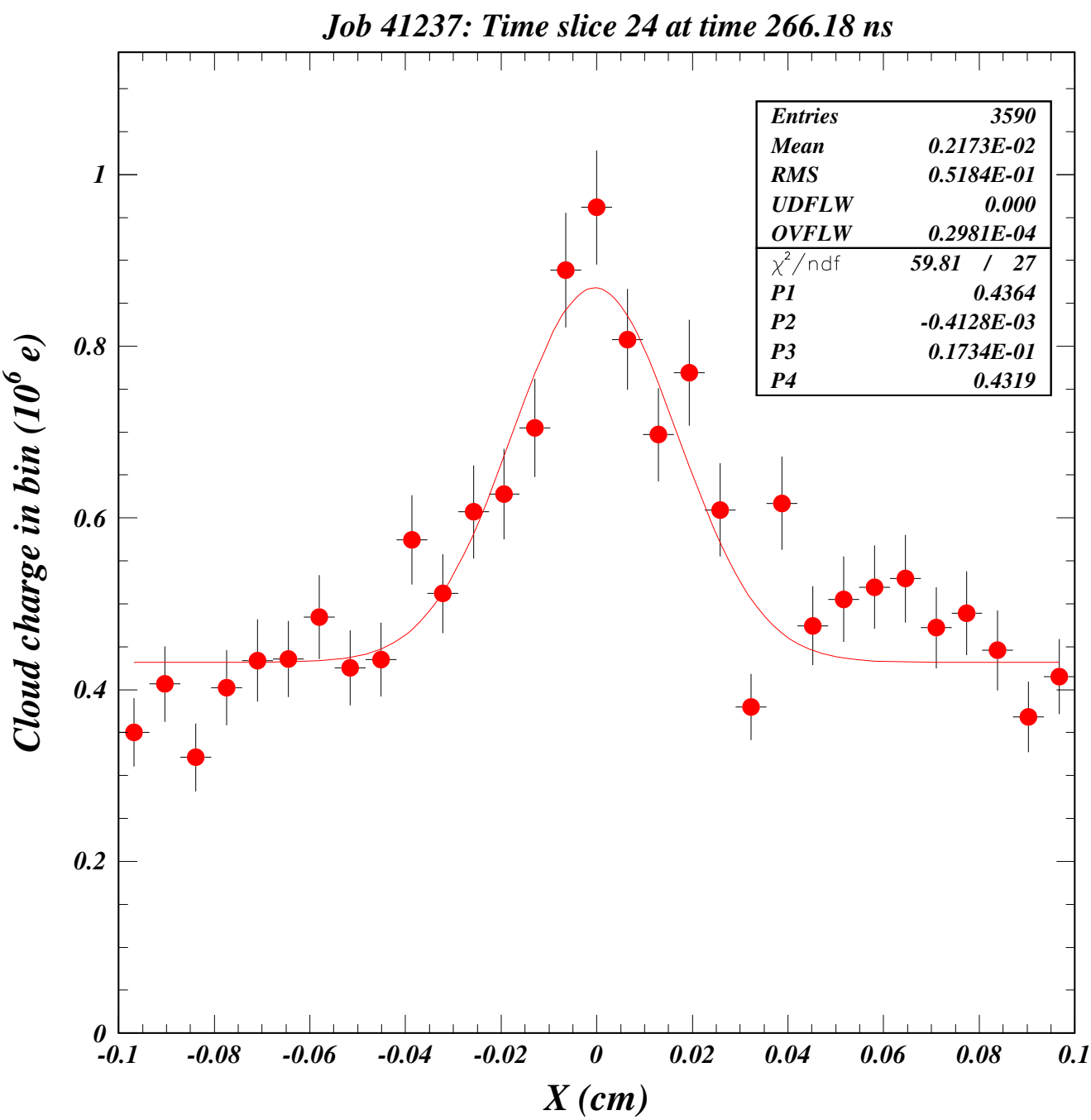
Job 41237: Time slice 24 at time 266.18 ns
Entries 3590
Mean 0.2173E-02
RMS 0.5184E-01
UDFLW 0.000
OVFLW 0.2981E-04
χ²/ndf 59.81 / 27
P1 0.4364
P2 -0.4128E-03
P3 0.1734E-01
P4 0.4319
Cloud charge in bin (10⁶ e)
X (cm)
0
0.2
0.4
0.6
0.8
1
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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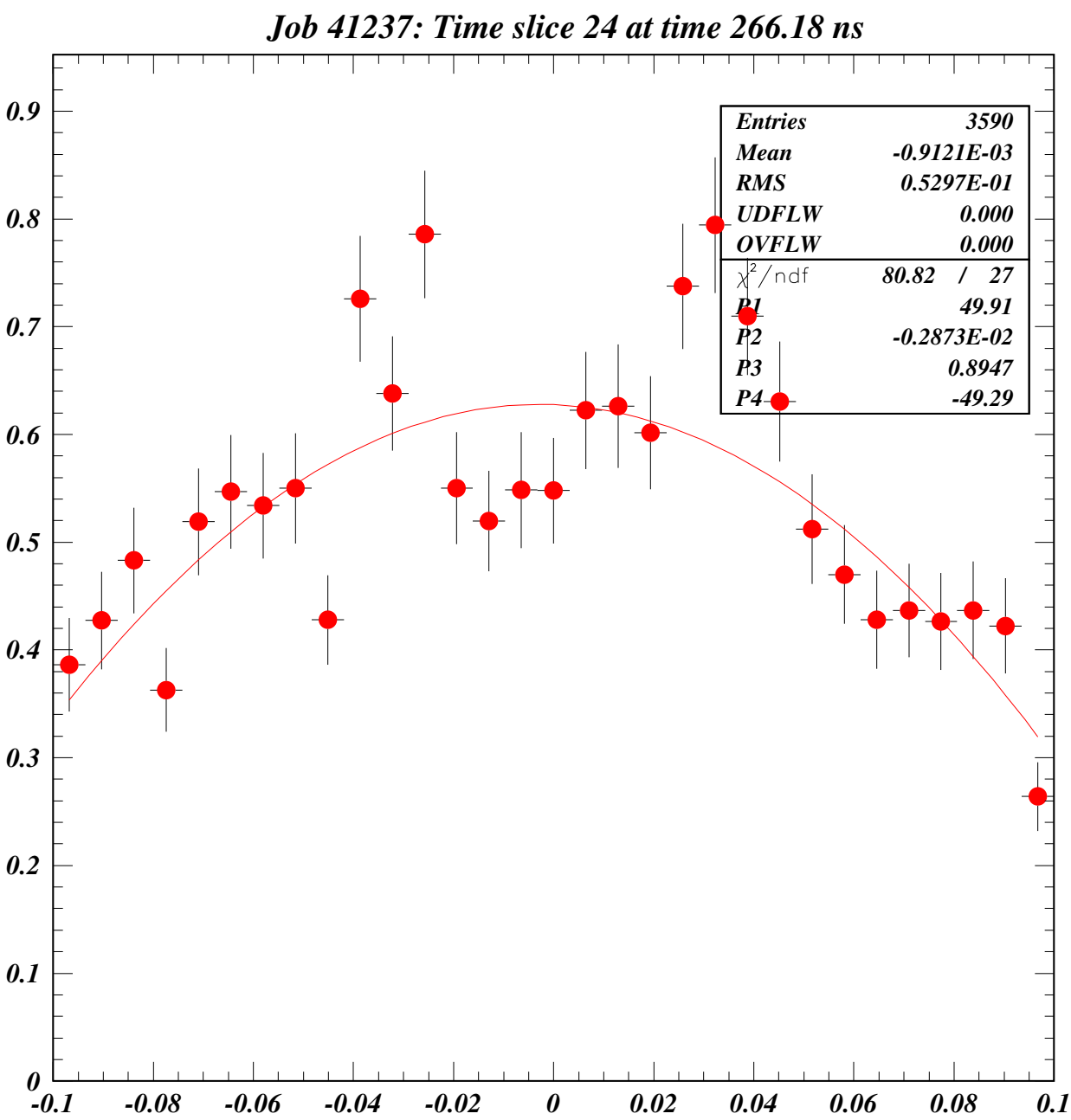
Job 41237: Time slice 24 at time 266.18 ns
Entries 3590
Mean -0.9121E-03
RMS 0.5297E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 80.82 / 27
P1 49.91
P2 -0.2873E-02
P3 0.8947
P4 -49.29
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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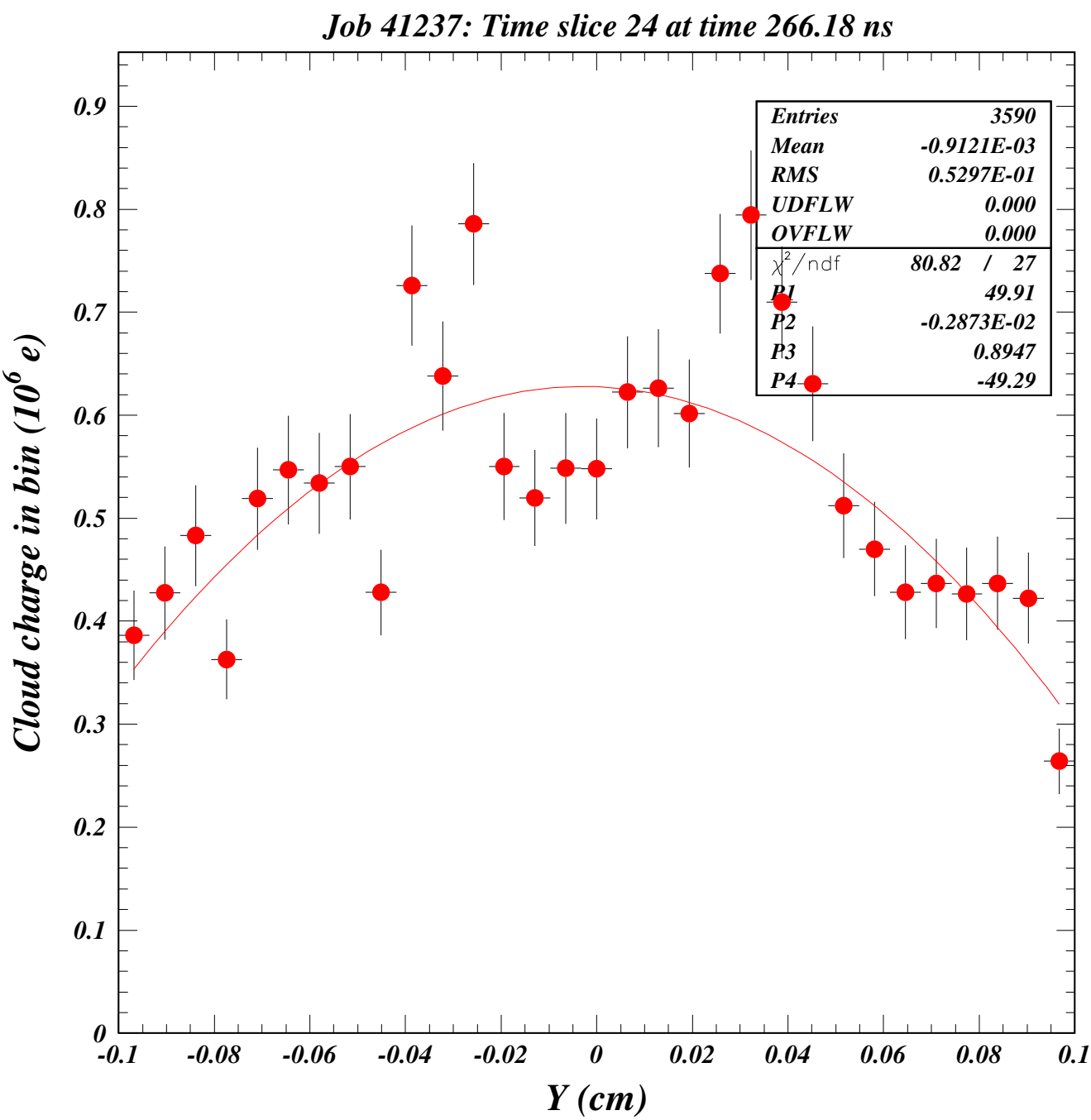
Job 41237: Time slice 24 at time 266.18 ns
Entries 3590
Mean -0.9121E-03
RMS 0.5297E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 80.82 / 27
P1 49.91
P2 -0.2873E-02
P3 0.8947
P4 -49.29
Cloud charge in bin (10⁶ e)
Y (cm)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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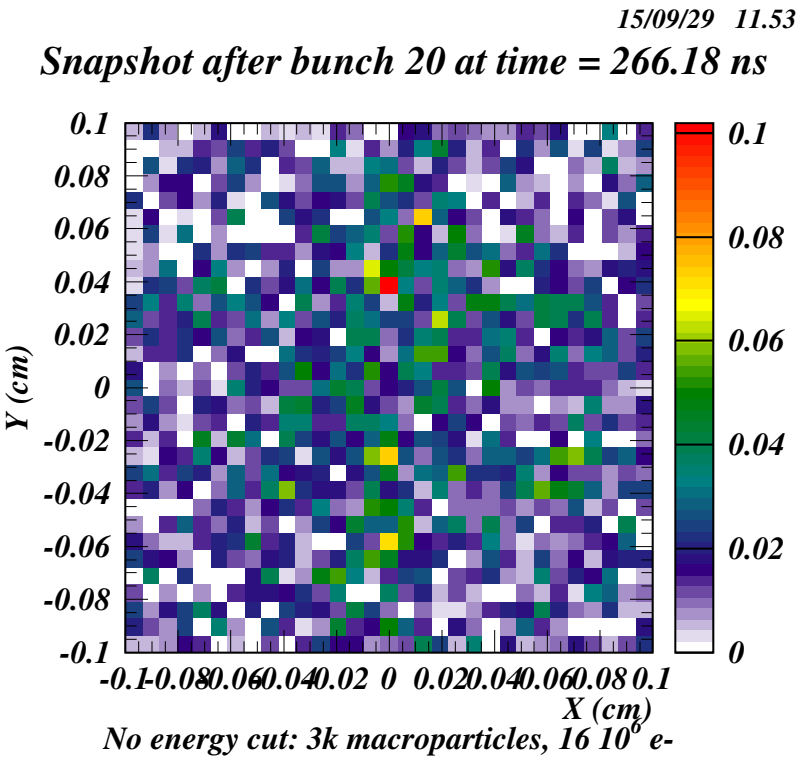
Snapshot after bunch 20 at time = 266.18 ns
Y (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
-0.1 -0.08 -0.06 -0.04 -0.02 0 0.02 0.04 0.06 0.08 0.1
X (cm)
0.1
0.08
0.06
0.04
0.02
0
No energy cut: 3k macroparticles, 16 10^6 e-

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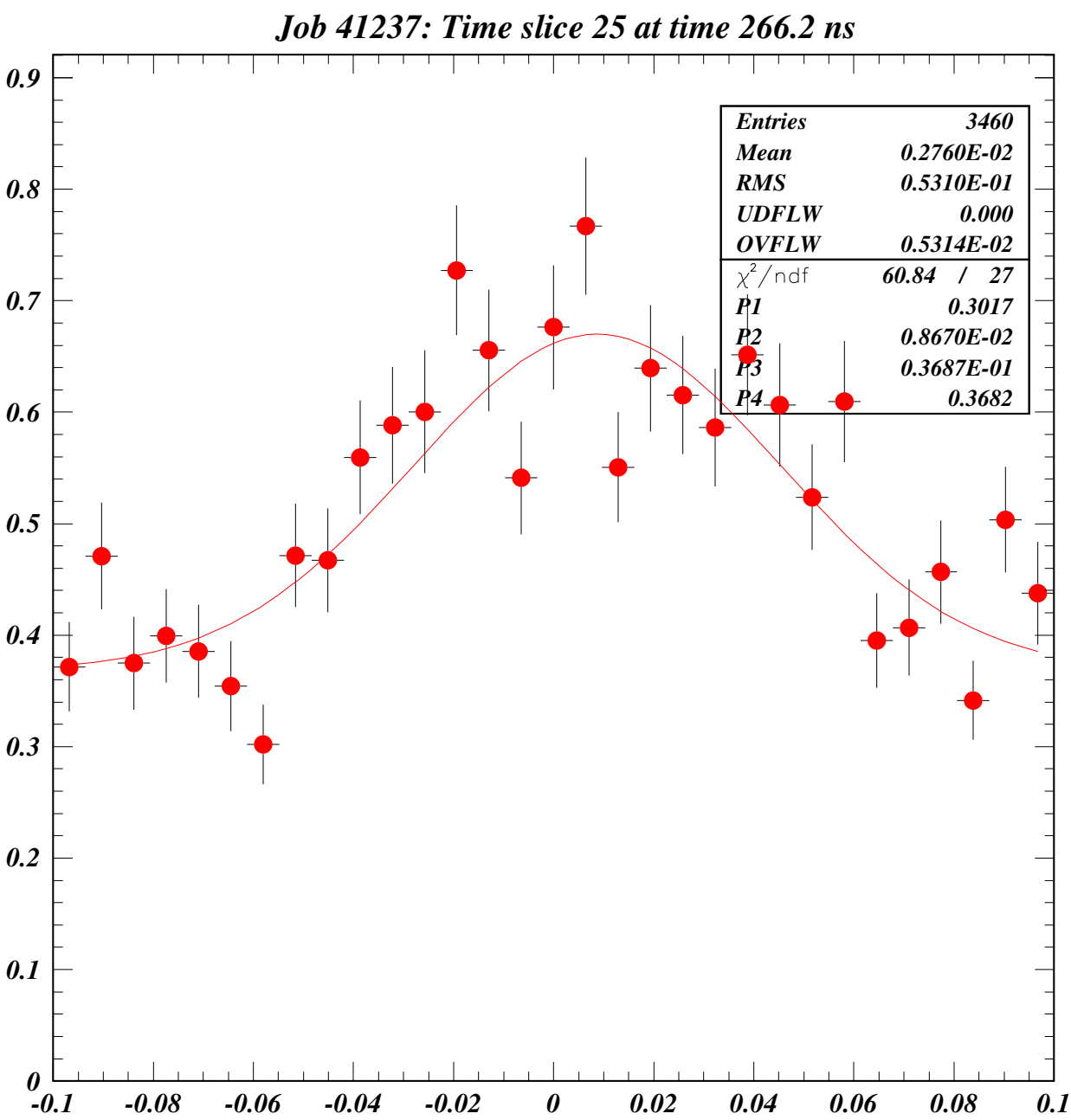
Job 41237: Time slice 25 at time 266.2 ns
Entries 3460
Mean 0.2760E-02
RMS 0.5310E-01
UDFLW 0.000
OVFLW 0.5314E-02
χ²/ndf 60.84 / 27
P1 0.3017
P2 0.8670E-02
P3 0.3687E-01
P4 0.3682
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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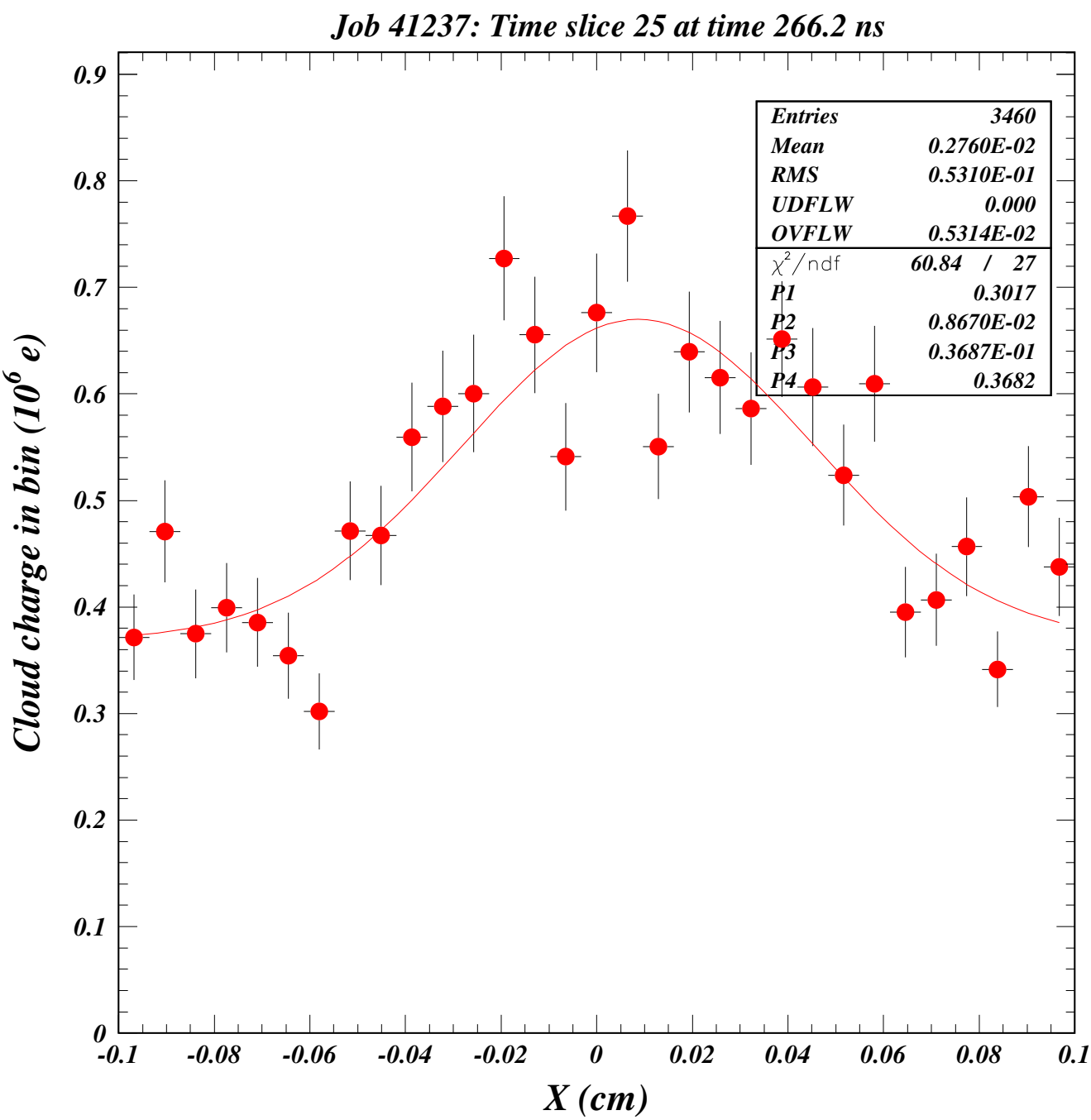
Job 41237: Time slice 25 at time 266.2 ns
Entries 3460
Mean 0.2760E-02
RMS 0.5310E-01
UDFLW 0.000
OVFLW 0.5314E-02
χ²/ndf 60.84 / 27
P1 0.3017
P2 0.8670E-02
P3 0.3687E-01
P4 0.3682
Cloud charge in bin (10⁶ e)
X (cm)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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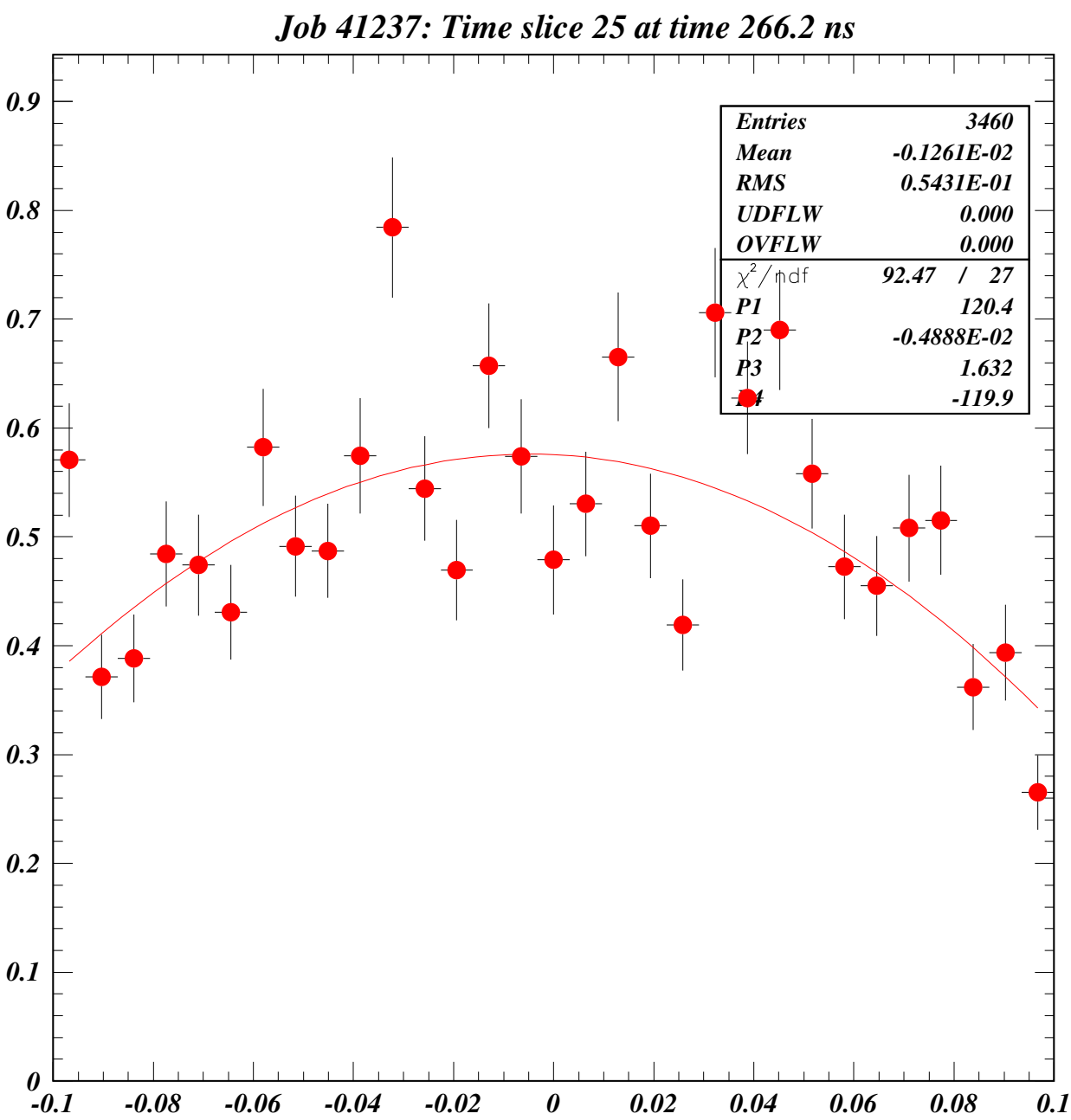
Job 41237: Time slice 25 at time 266.2 ns
Entries 3460
Mean -0.1261E-02
RMS 0.5431E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 92.47 / 27
P1 120.4
P2 -0.4888E-02
P3 1.632
P4 -119.9
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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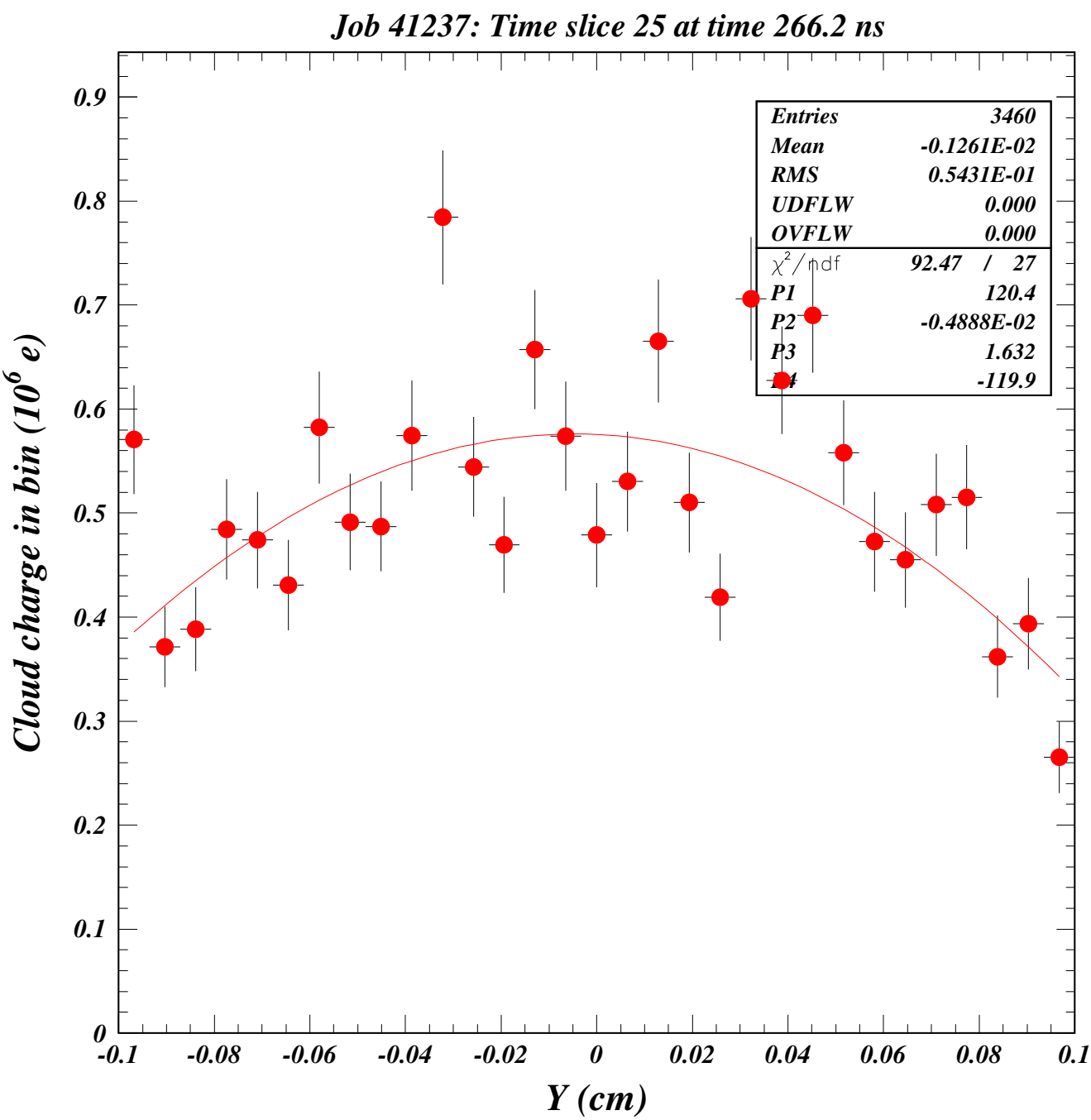
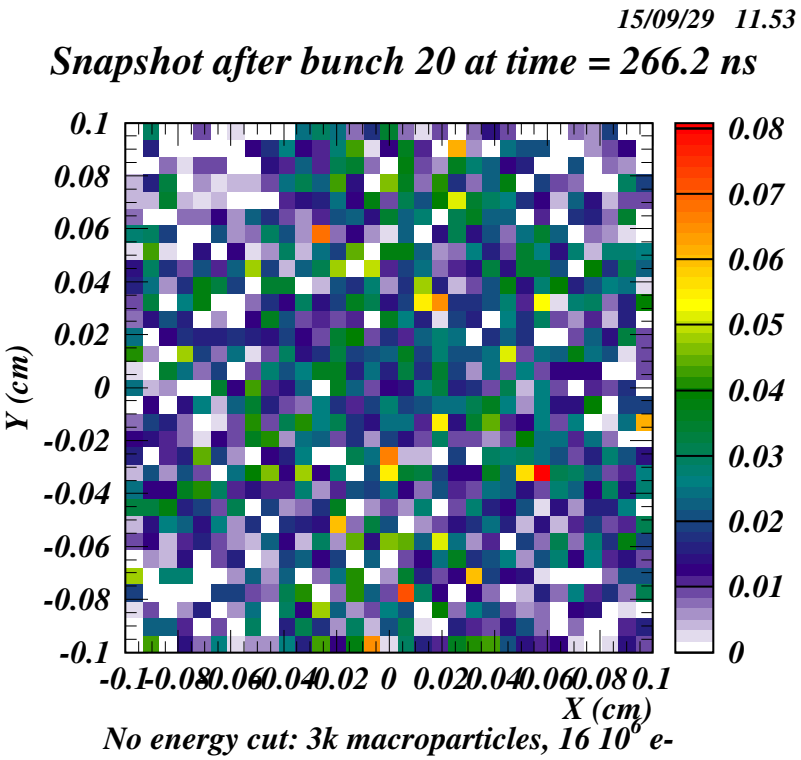
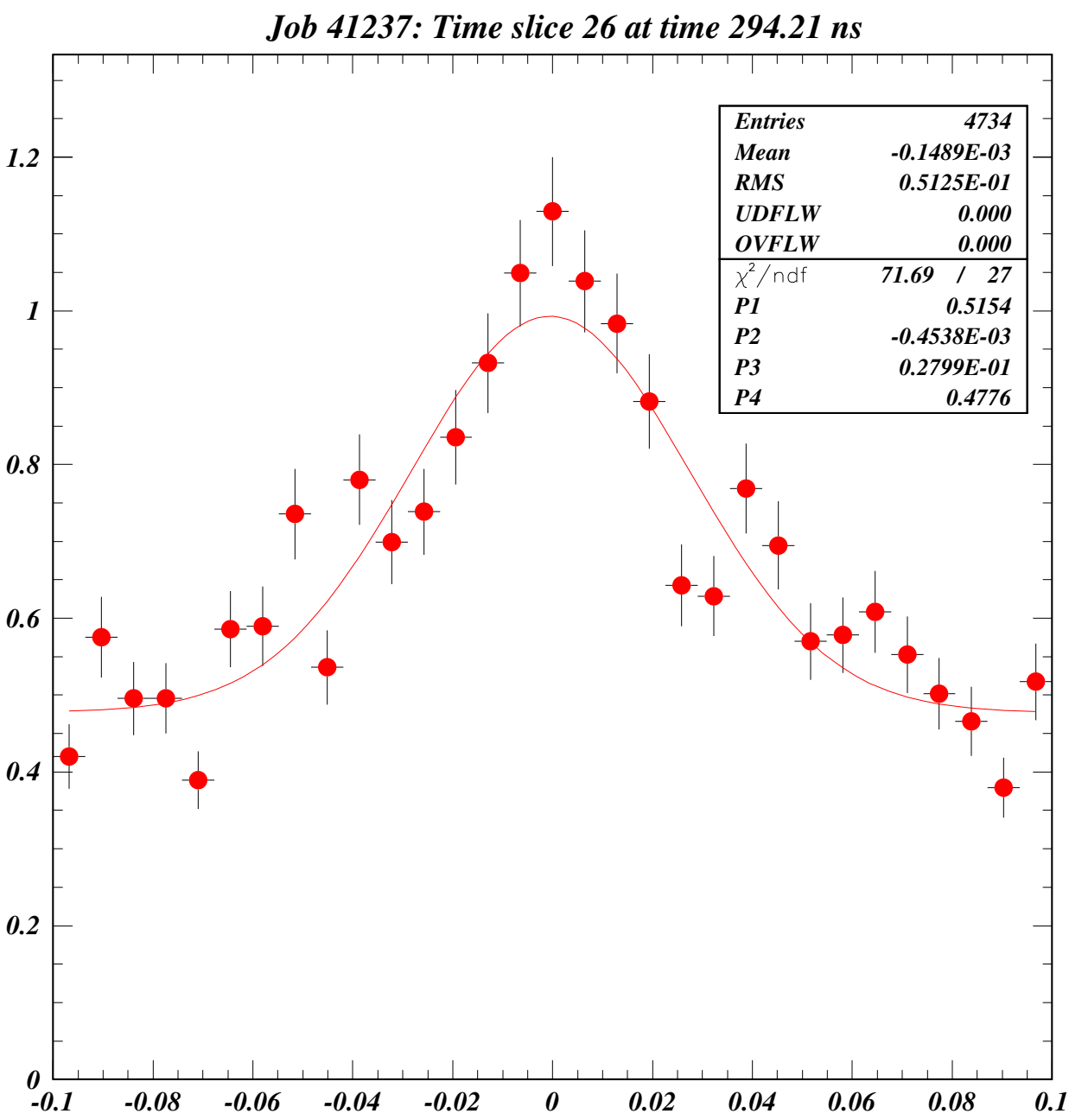

Job 41237: Time slice 25 at time 266.2 ns
Entries 3460
Mean -0.1261E-02
RMS 0.5431E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 92.47 / 27
P1 120.4
P2 -0.4888E-02
P3 1.632
P4 -119.9
Cloud charge in bin (10⁶ e)
Y (cm)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

15/09/29 11.53


Snapshot after bunch 20 at time = 266.2 ns
Y (cm)
X (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
No energy cut: 3k macroparticles, 16 10^6 e-

15/09/29 11.53


Job 41237: Time slice 26 at time 294.21 ns
Entries 4734
Mean -0.1489E-03
RMS 0.5125E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 71.69 / 27
P1 0.5154
P2 -0.4538E-03
P3 0.2799E-01
P4 0.4776
1.2
1
0.8
0.6
0.4
0.2
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

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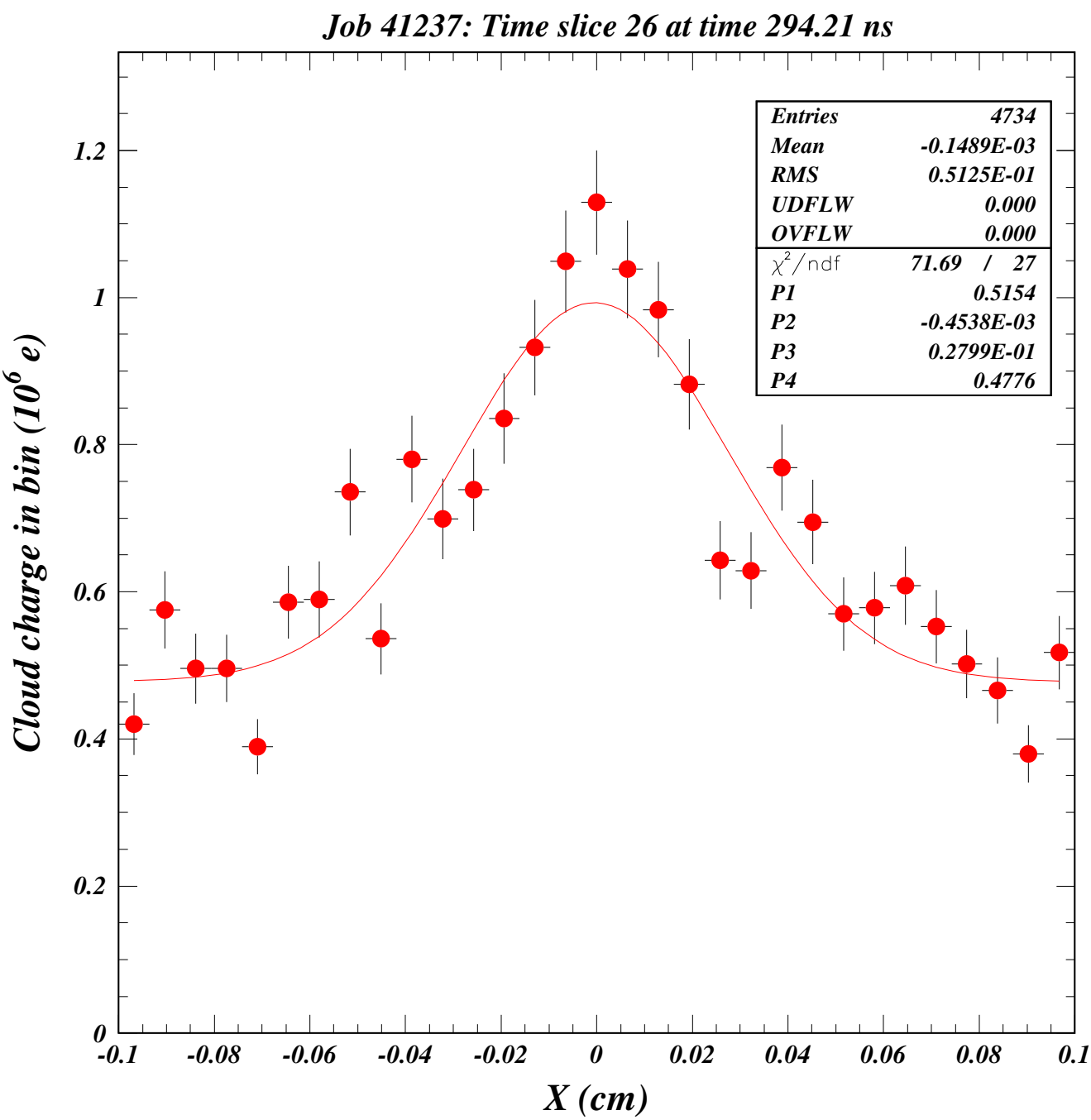
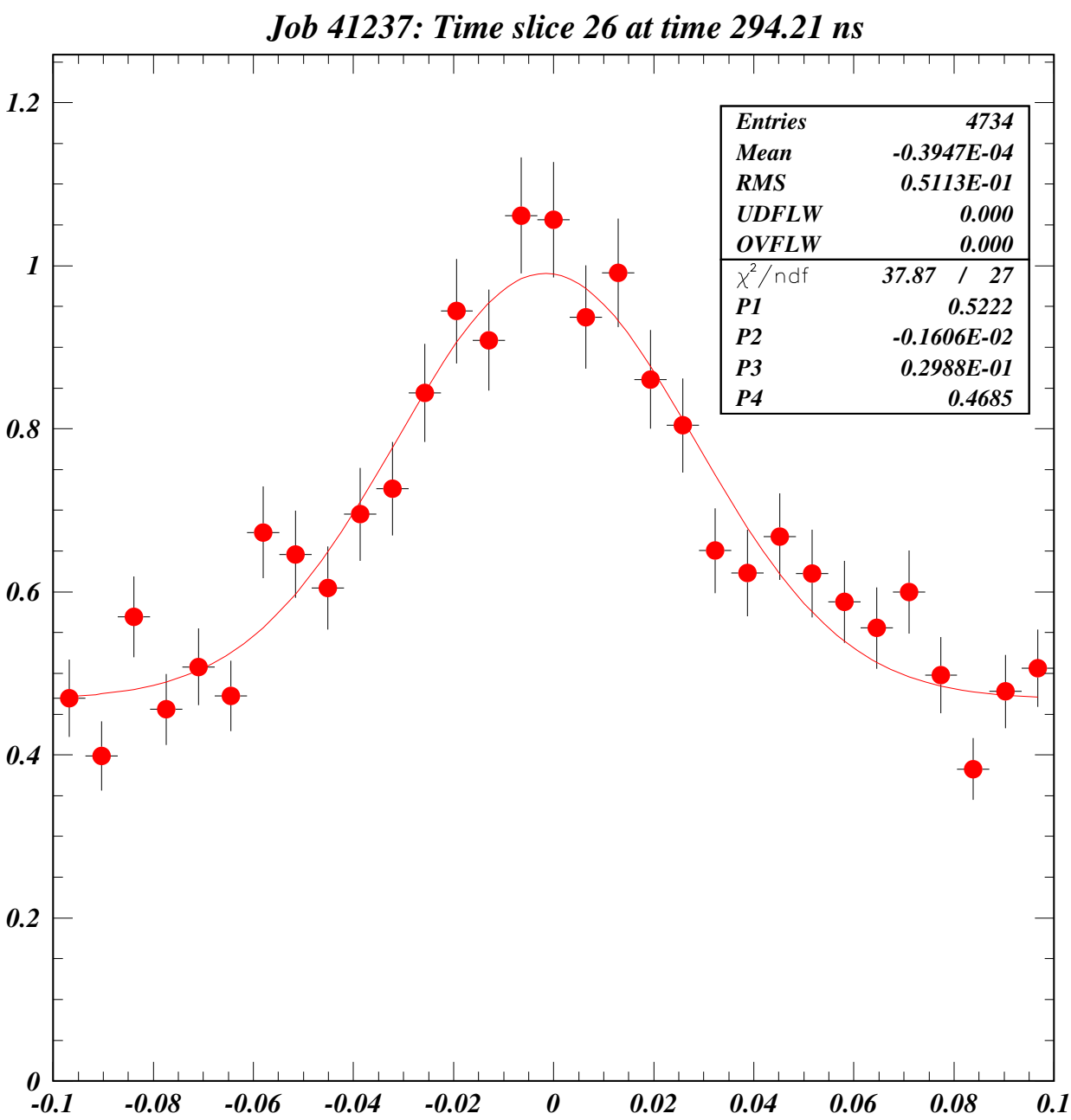
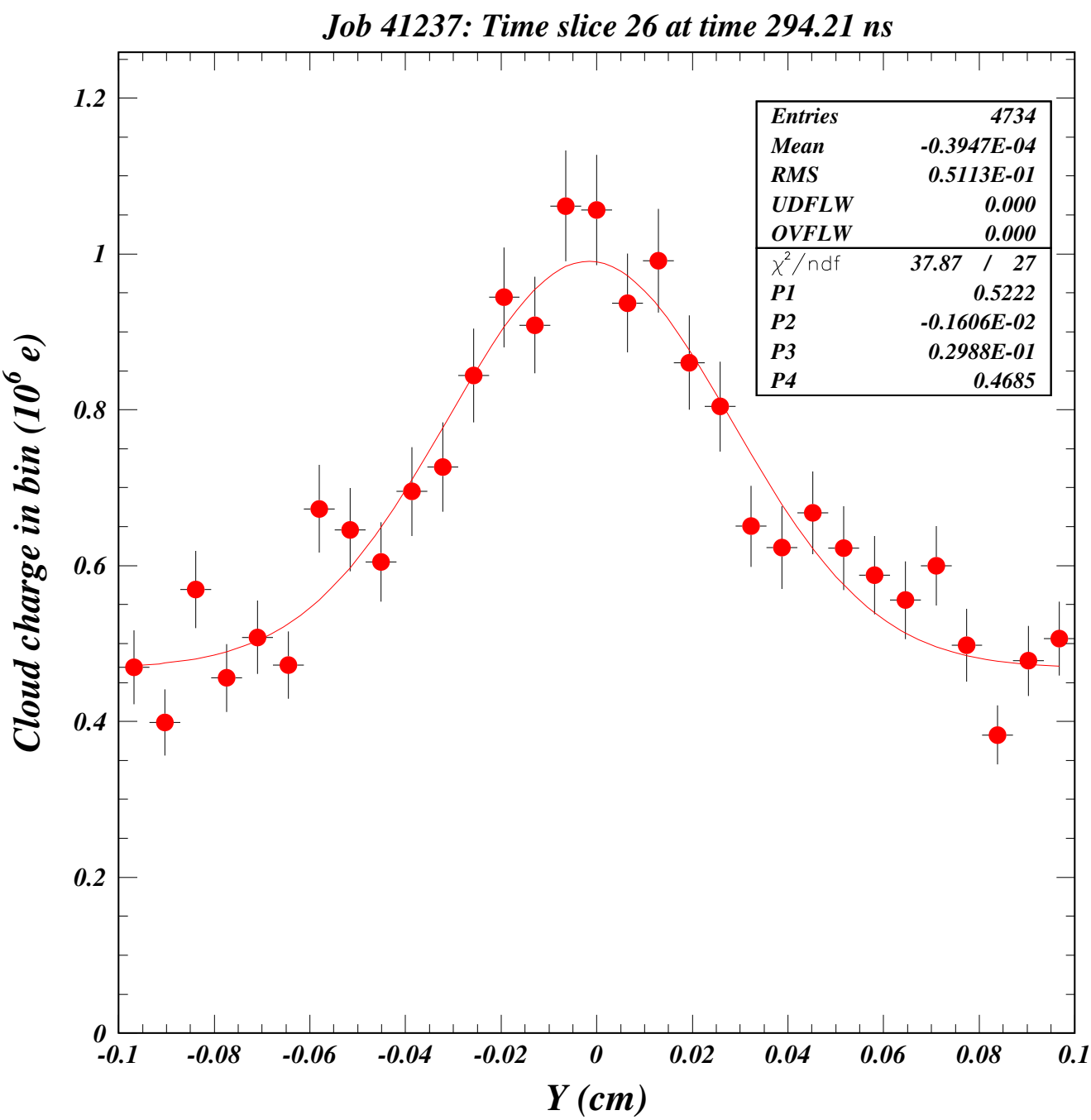

Job 41237: Time slice 26 at time 294.21 ns
Entries 4734
Mean -0.1489E-03
RMS 0.5125E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 71.69 / 27
P1 0.5154
P2 -0.4538E-03
P3 0.2799E-01
P4 0.4776
Cloud charge in bin (10⁶ e)
X (cm)
0
0.2
0.4
0.6
0.8
1
1.2
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

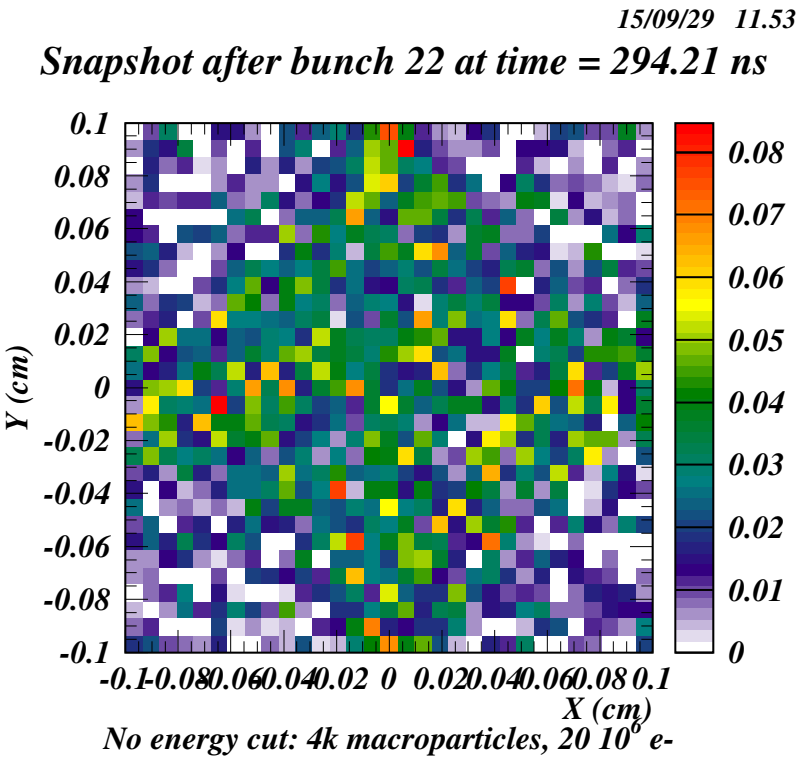
15/09/29 11.53


Job 41237: Time slice 26 at time 294.21 ns
Entries 4734
Mean -0.3947E-04
RMS 0.5113E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 37.87 / 27
P1 0.5222
P2 -0.1606E-02
P3 0.2988E-01
P4 0.4685
1.2
1
0.8
0.6
0.4
0.2
0
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

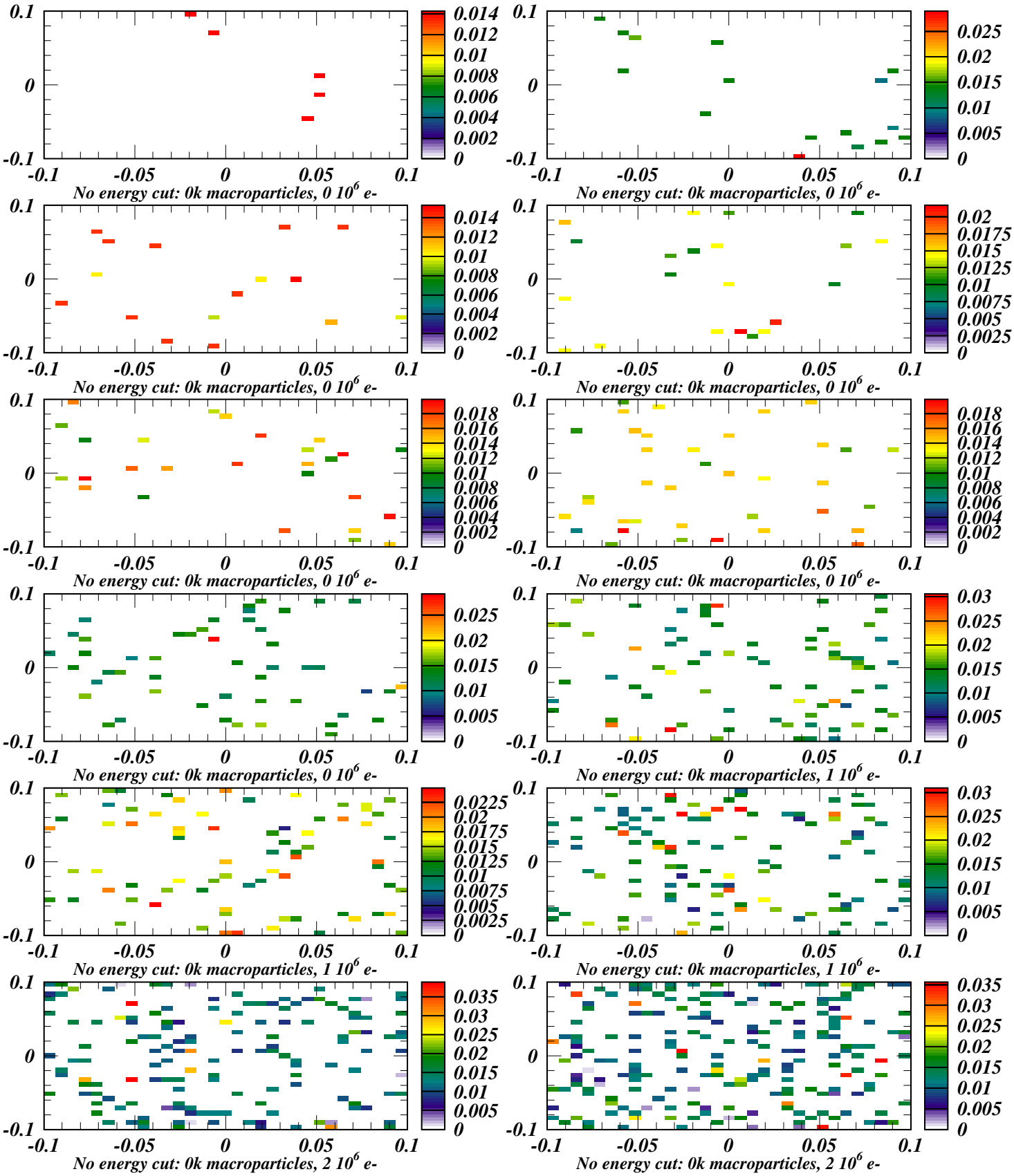
15/09/29 11.53


Job 41237: Time slice 26 at time 294.21 ns
Entries 4734
Mean -0.3947E-04
RMS 0.5113E-01
UDFLW 0.000
OVFLW 0.000
χ²/ndf 37.87 / 27
P1 0.5222
P2 -0.1606E-02
P3 0.2988E-01
P4 0.4685
Cloud charge in bin (10⁶ e)
Y (cm)
0
0.2
0.4
0.6
0.8
1
1.2
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
0.08
0.1

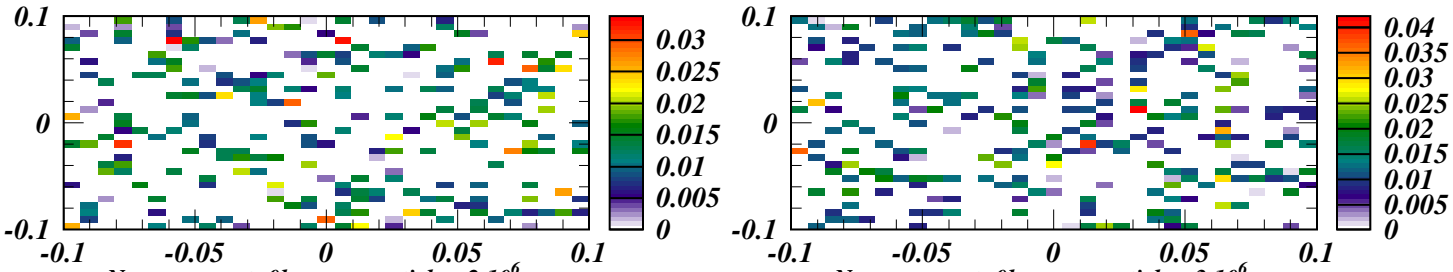
15/09/29 11.53


Snapshot after bunch 22 at time = 294.21 ns
Y (cm)
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
-0.1
-0.1 -0.08 -0.06 -0.04 -0.02 0 0.02 0.04 0.06 0.08 0.1
X (cm)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
No energy cut: 4k macroparticles, 20 10^6 e-

Job 41237: Cloud charge shapshots

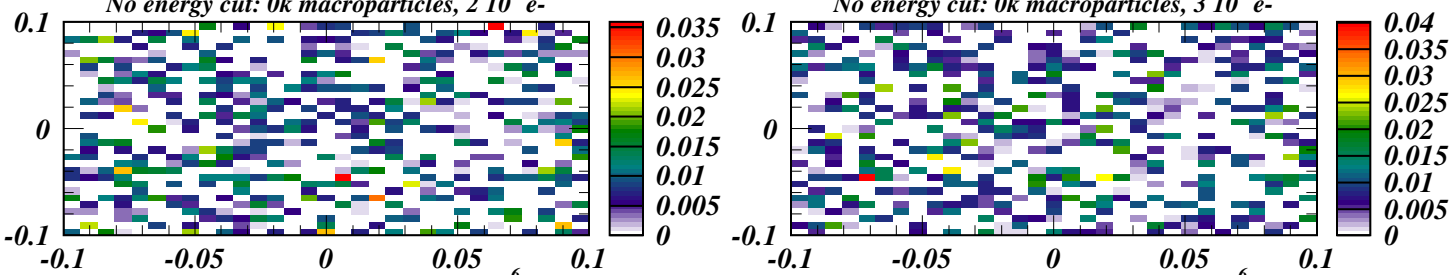


Job 41237: Cloud charge shapshots



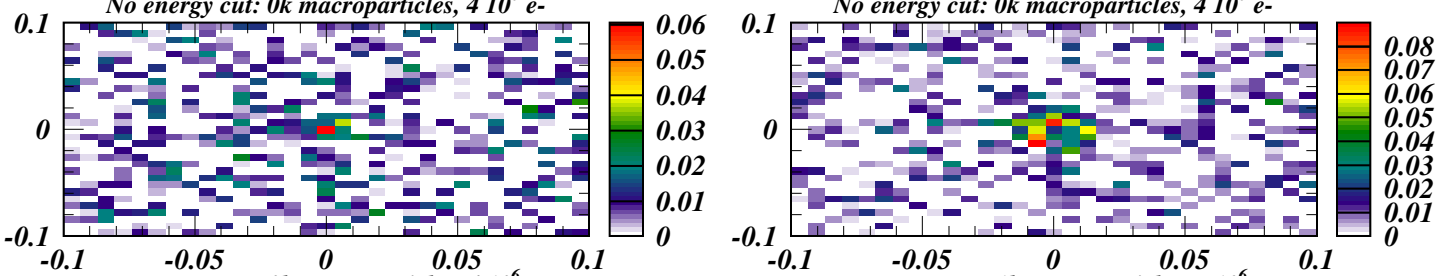
No energy cut: 0k macroparticles, 2 10^6 e-

No energy cut: 0k macroparticles, 3 10^6 e-



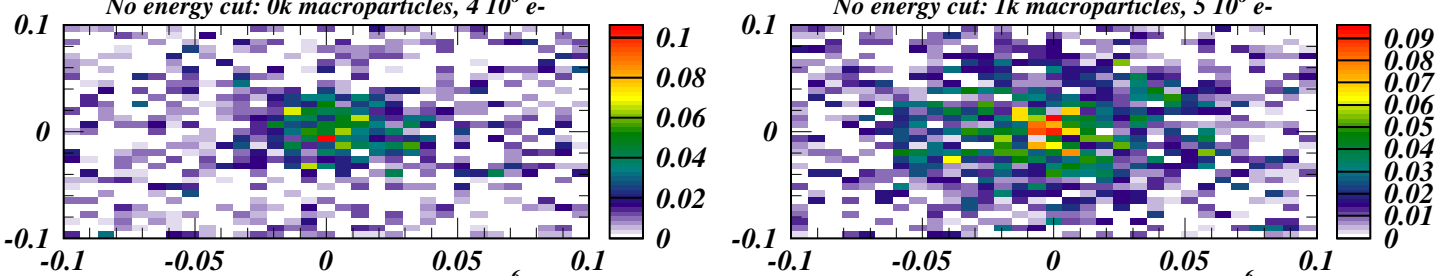
No energy cut: 0k macroparticles, 4 10^6 e-

No energy cut: 0k macroparticles, 4 10^6 e-



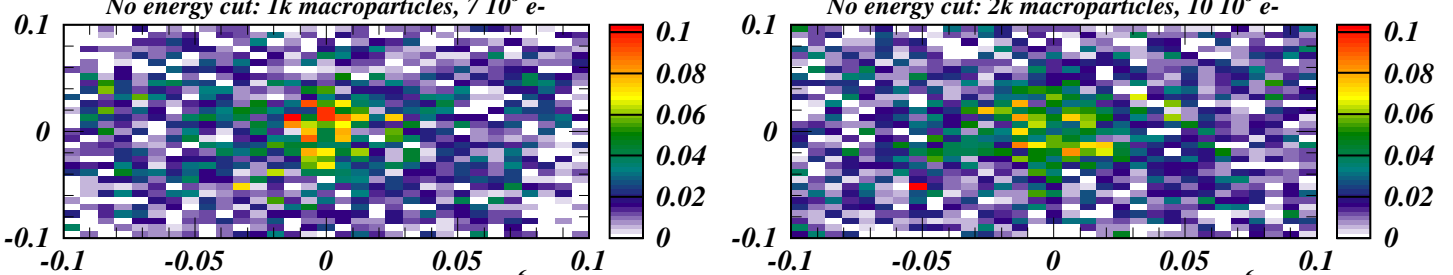
No energy cut: 0k macroparticles, 4 10^6 e-

No energy cut: 1k macroparticles, 5 10^6 e-



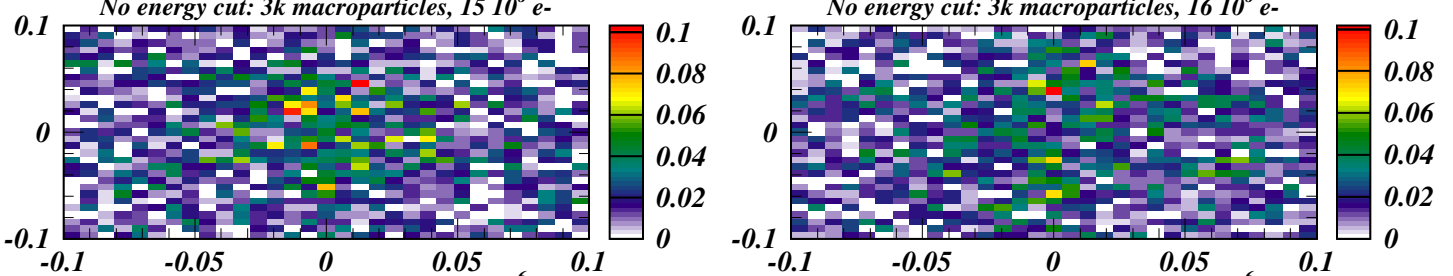
No energy cut: 1k macroparticles, 7 10^6 e-

No energy cut: 2k macroparticles, 10 10^6 e-



No energy cut: 3k macroparticles, 15 10^6 e-

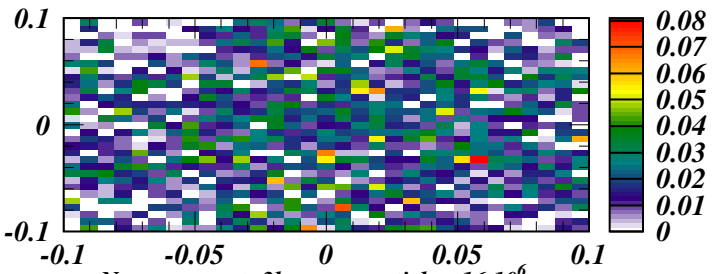
No energy cut: 3k macroparticles, 16 10^6 e-



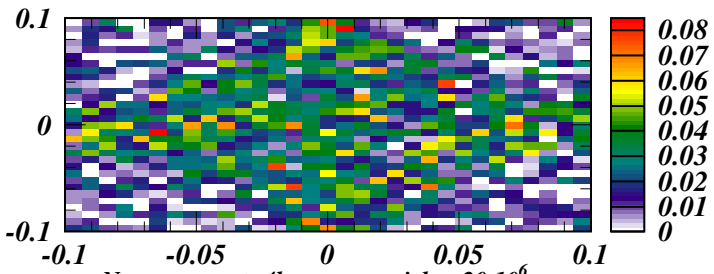
No energy cut: 3k macroparticles, 16 10^6 e-

No energy cut: 3k macroparticles, 16 10^6 e-

Job 41237: Cloud charge shapshots

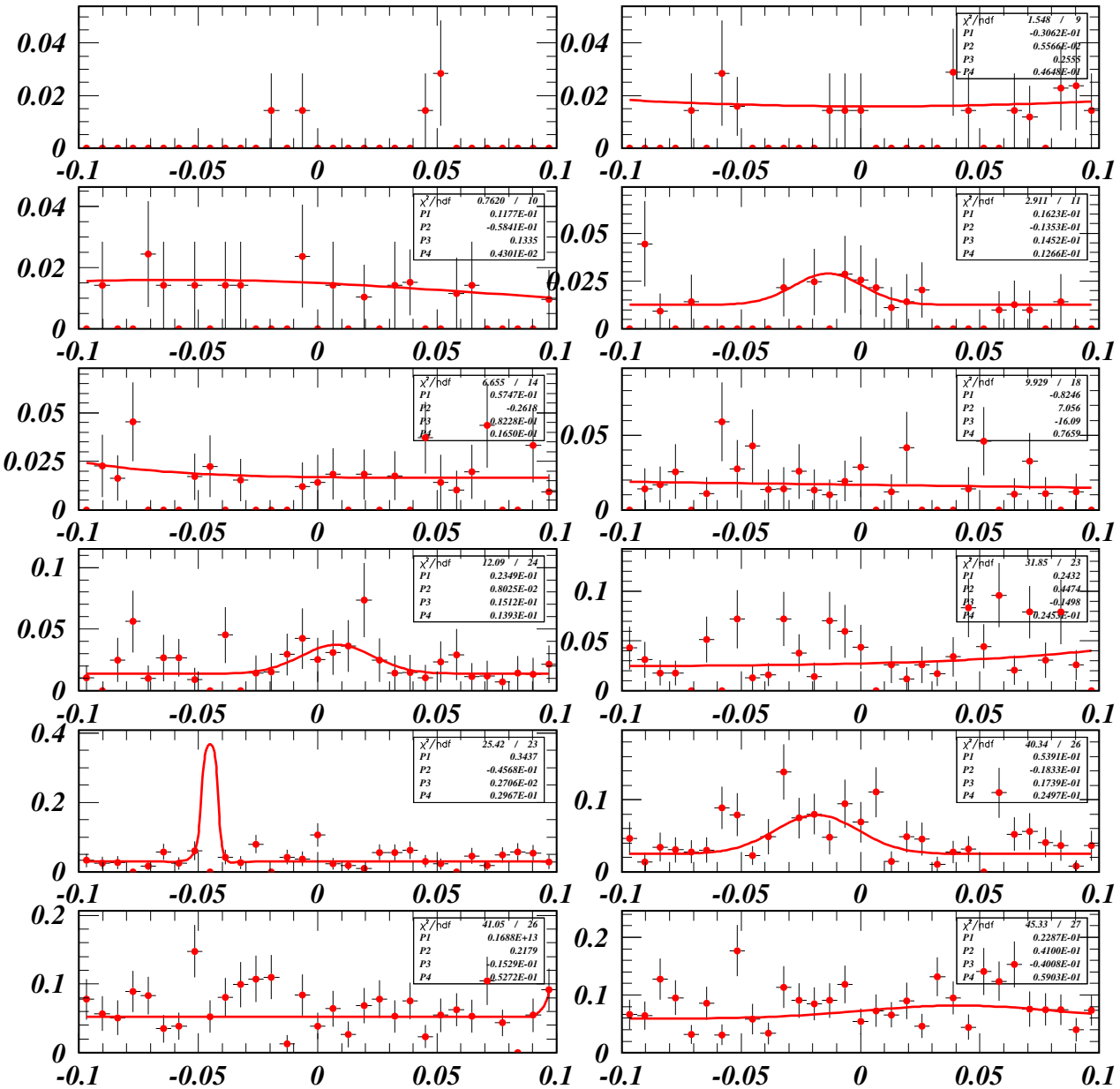


No energy cut: 3k macroparticles, 16 10^6 e-

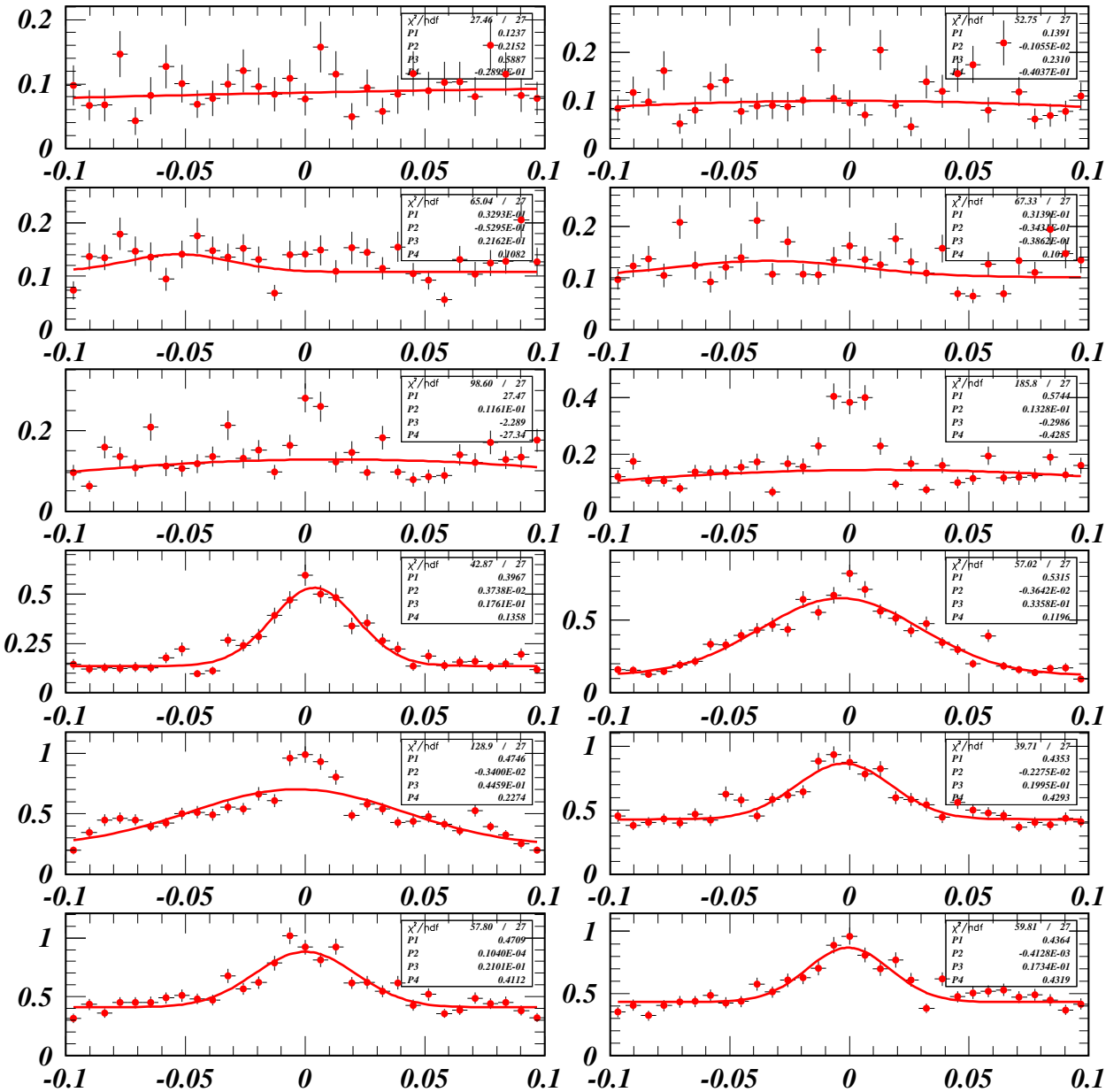


No energy cut: 4k macroparticles, 20 10^6 e-

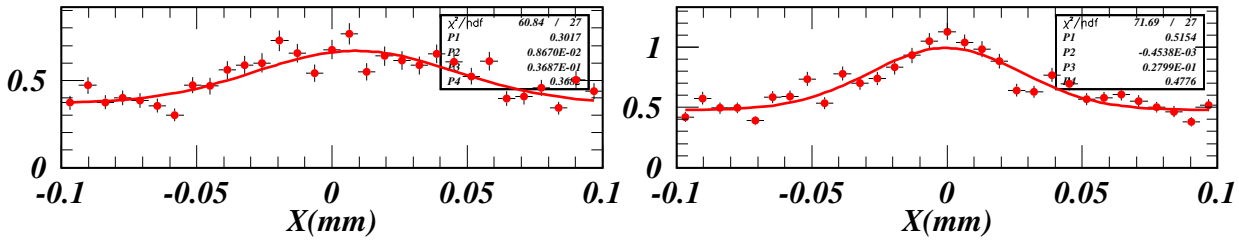
Job 41237: Fits to cloud charge X distribution



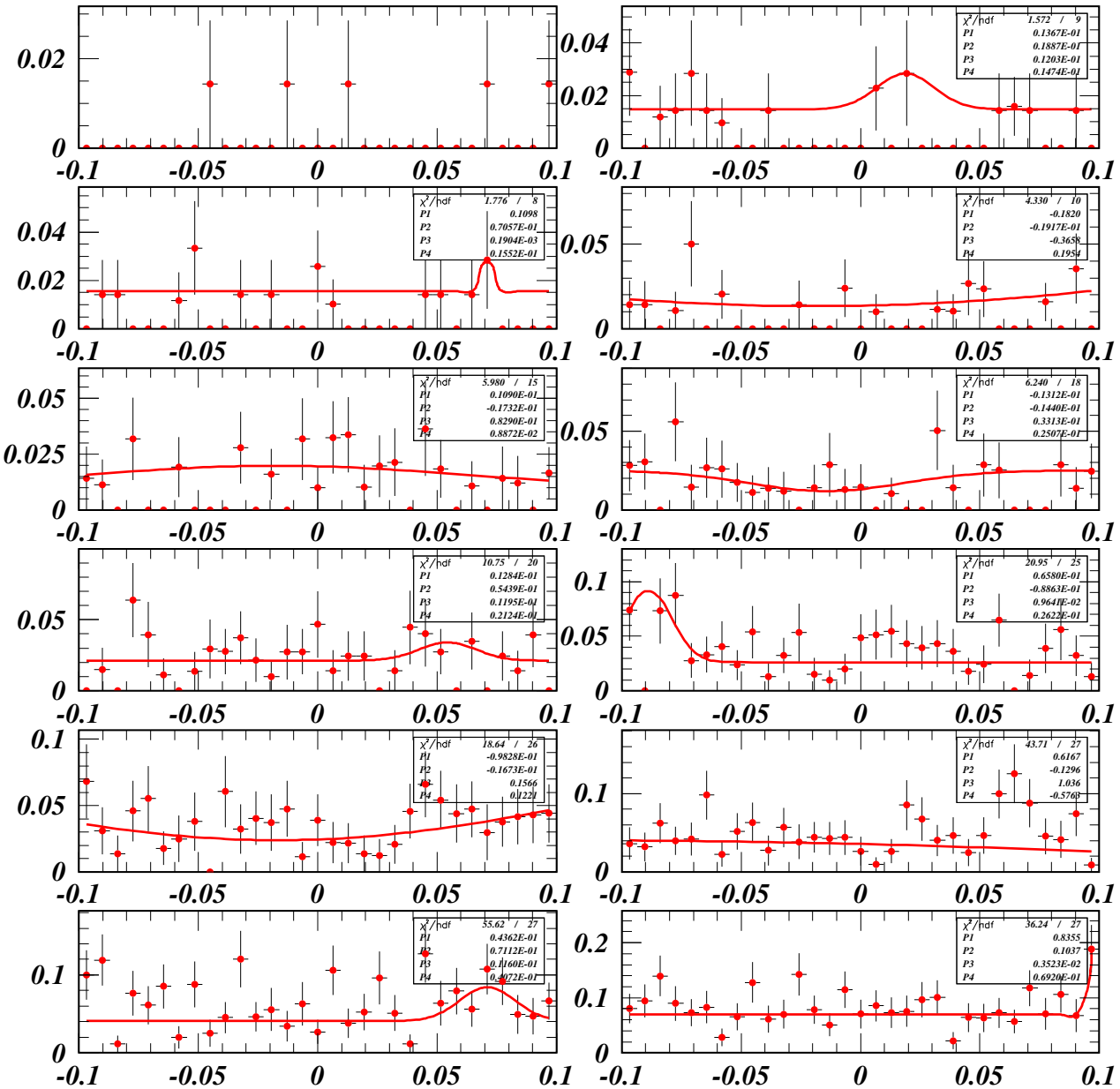
Job 41237: Fits to cloud charge X distribution



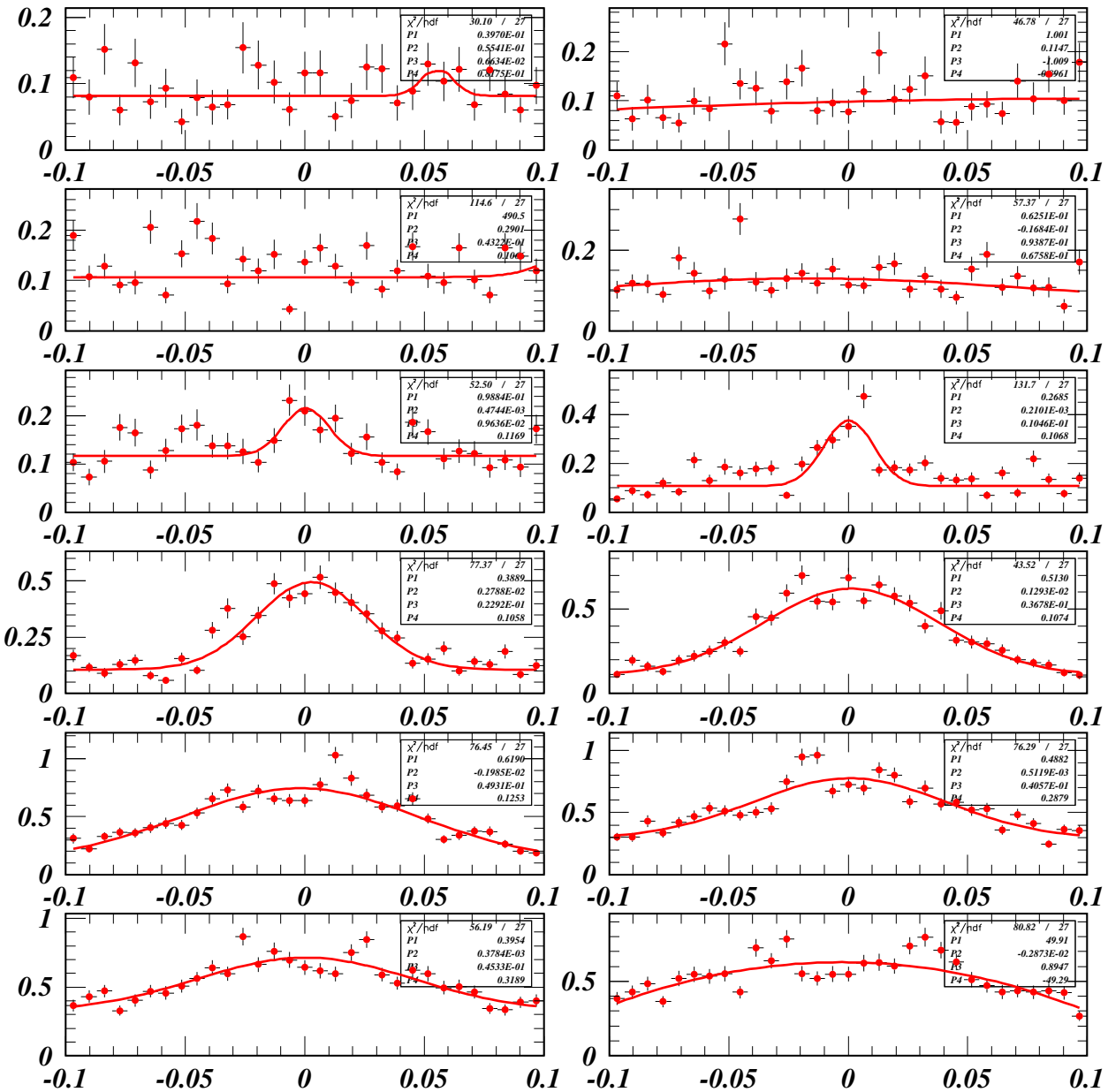
Job 41237: Fits to cloud charge X distribution



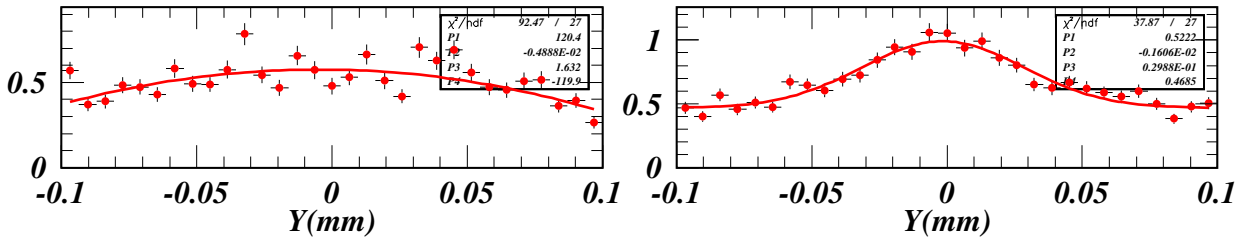
Job 41237: Fits to cloud charge Y distribution

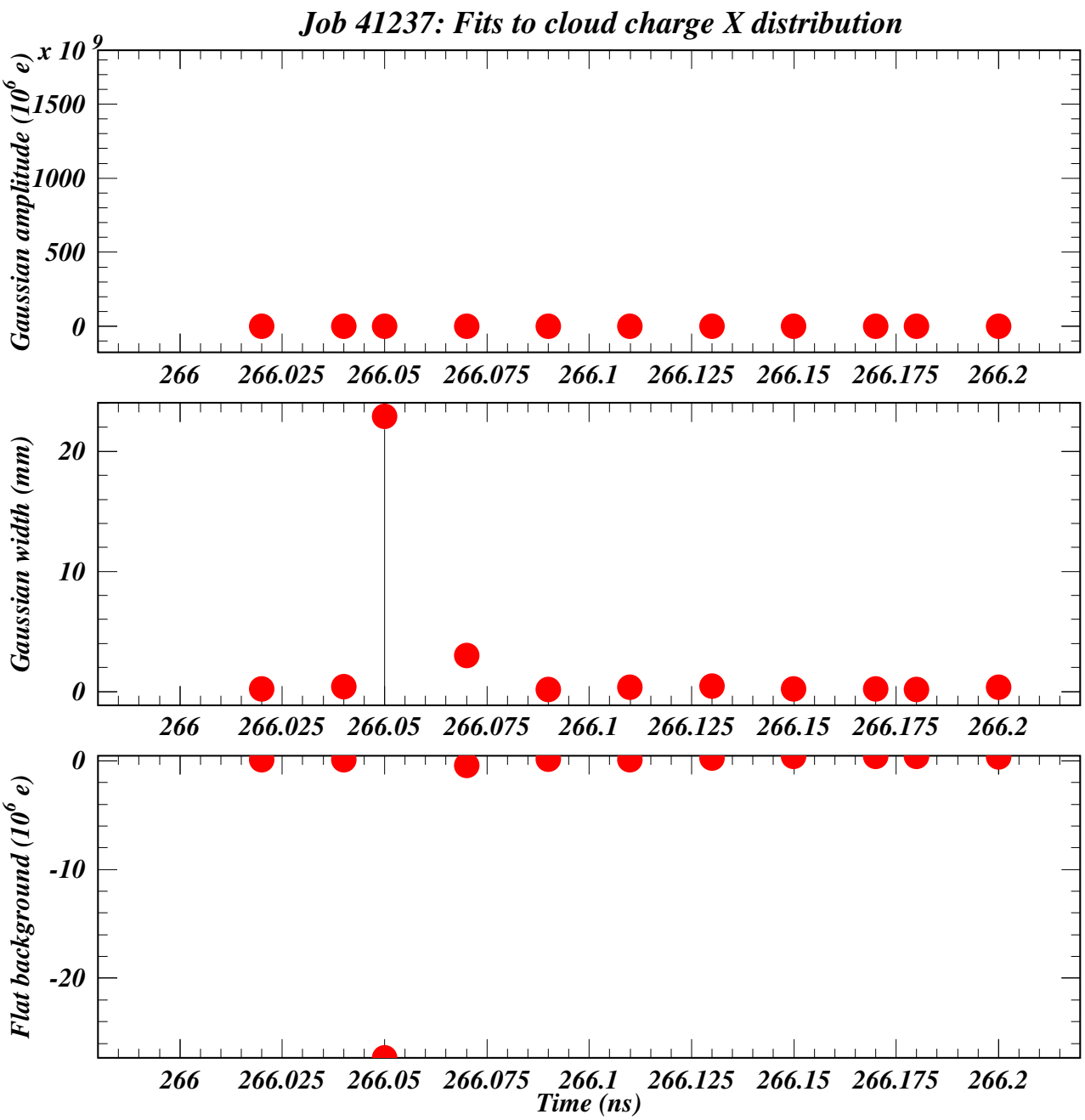


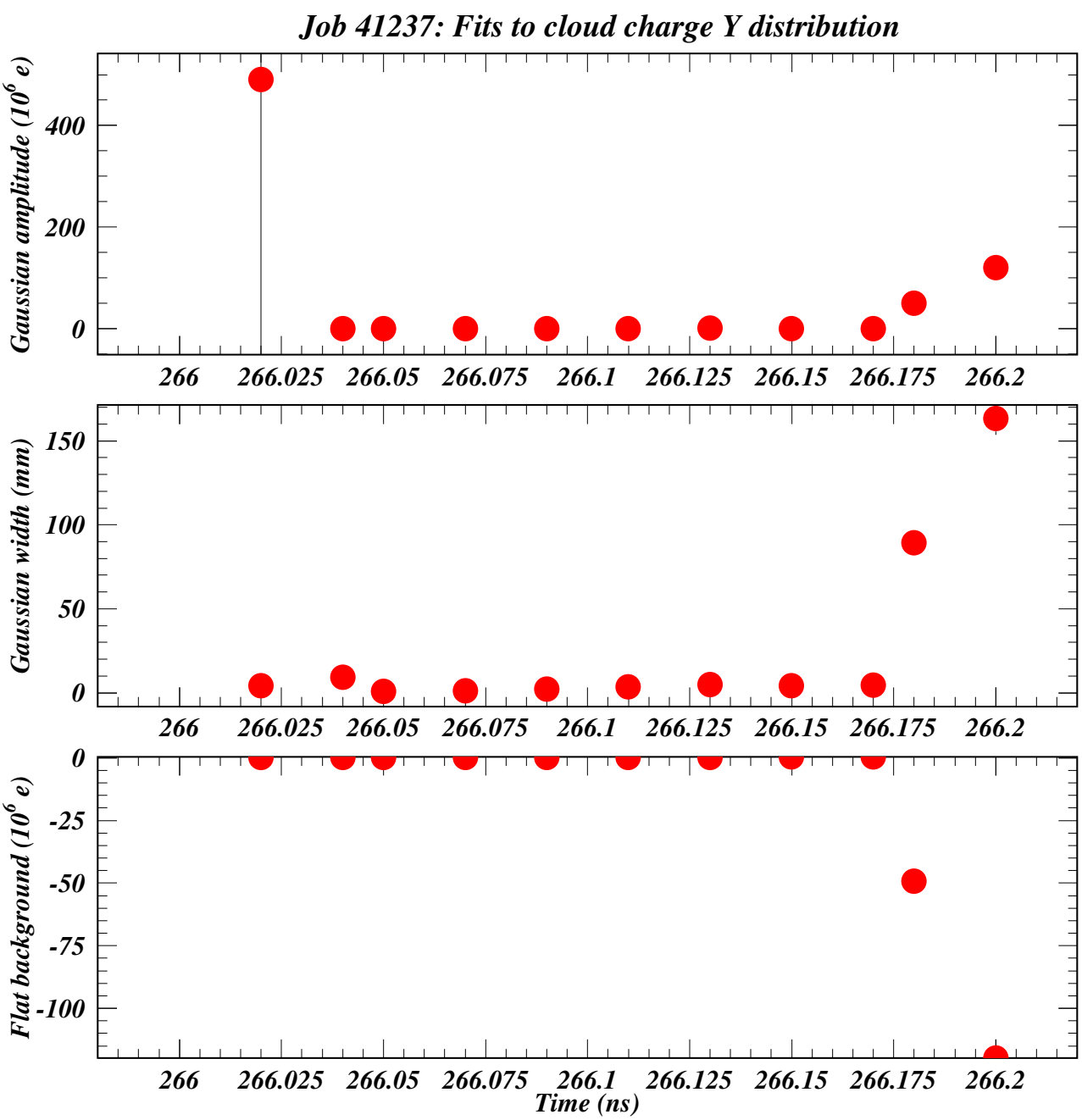
Job 41237: Fits to cloud charge Y distribution



Job 41237: Fits to cloud charge Y distribution




Job 41237: Fits to cloud charge X distribution
x 10 9
Gaussian amplitude (10^6 e)
1500
1000
500
0
Gaussian width (mm)
20
10
0
Flat background (10^6 e)
0
-10
-20
266
266.025
266.05
266.075
266.1
266.125
266.15
266.175
266.2
Time (ns)


Job 41237: Fits to cloud charge Y distribution
Gaussian amplitude (10^6 e)
400
200
0
Gaussian width (mm)
150
100
50
0
Flat background (10^6 e)
0
-25
-50
-75
-100
266
266.025
266.05
266.075
266.1
266.125
266.15
266.175
266.2
Time (ns)

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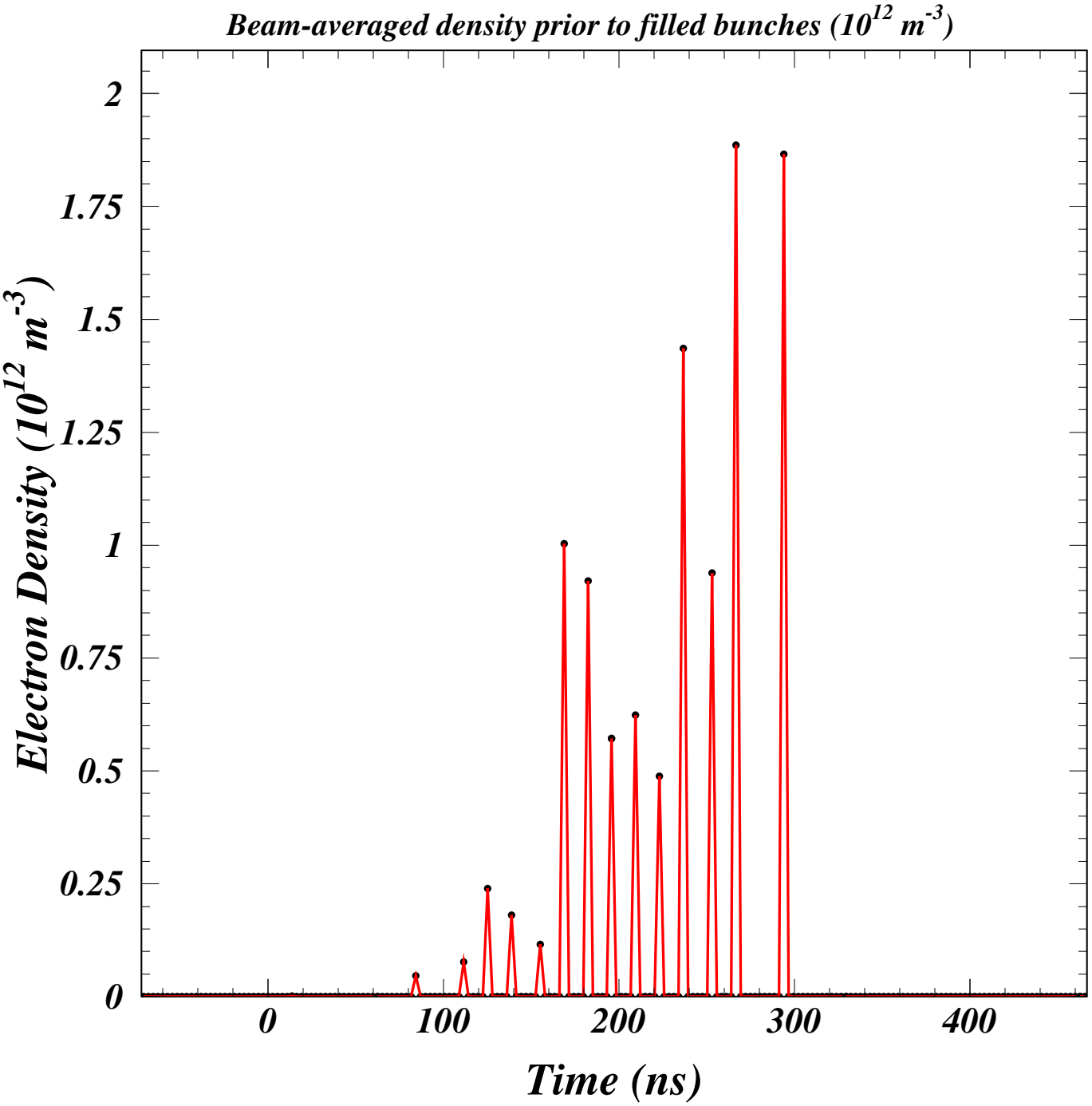
Beam-averaged density prior to filled bunches (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
2
1.75
1.5
1.25
1
0.75
0.5
0.25
0
0
100
200
300
400
Time (ns)

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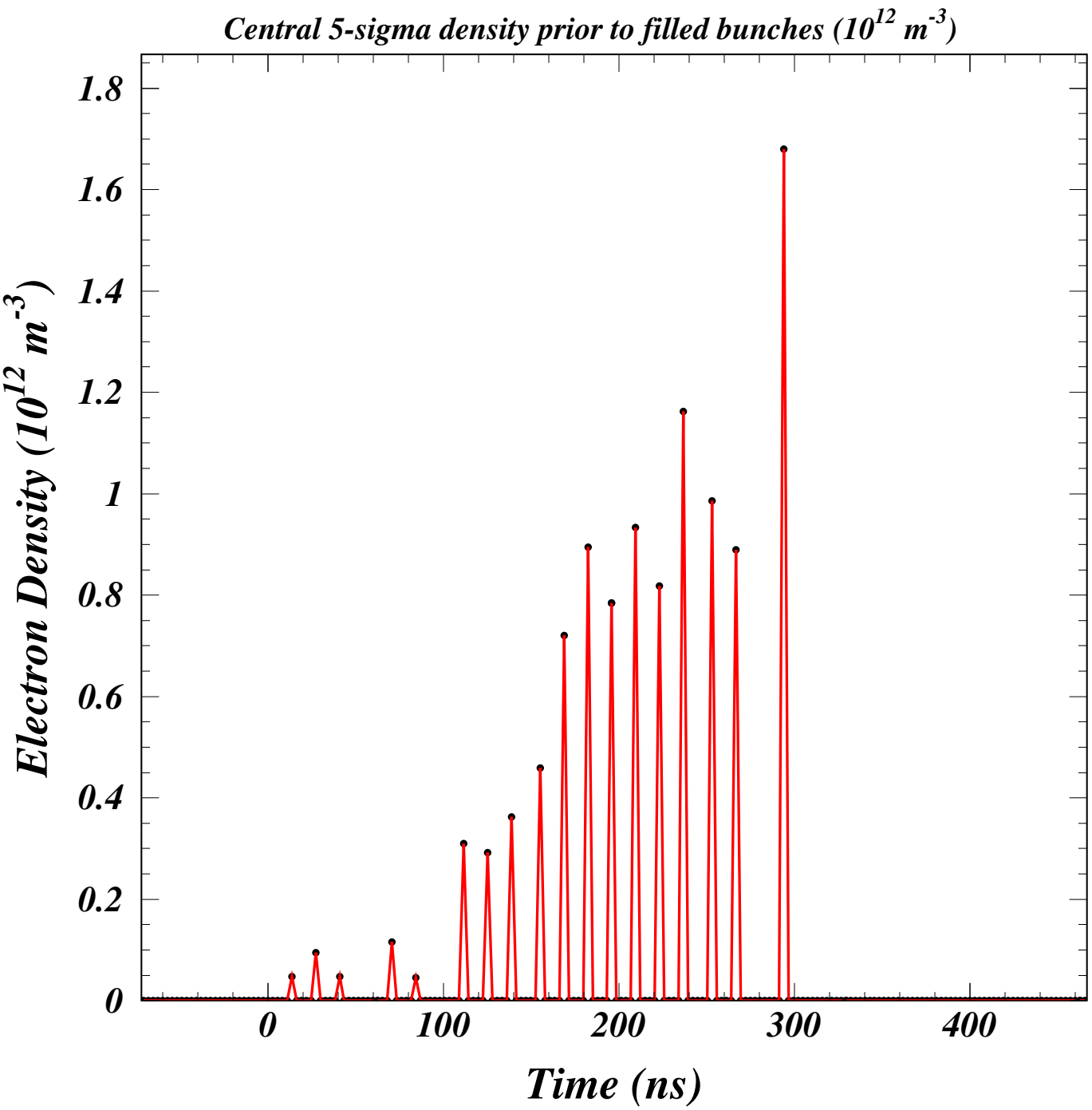
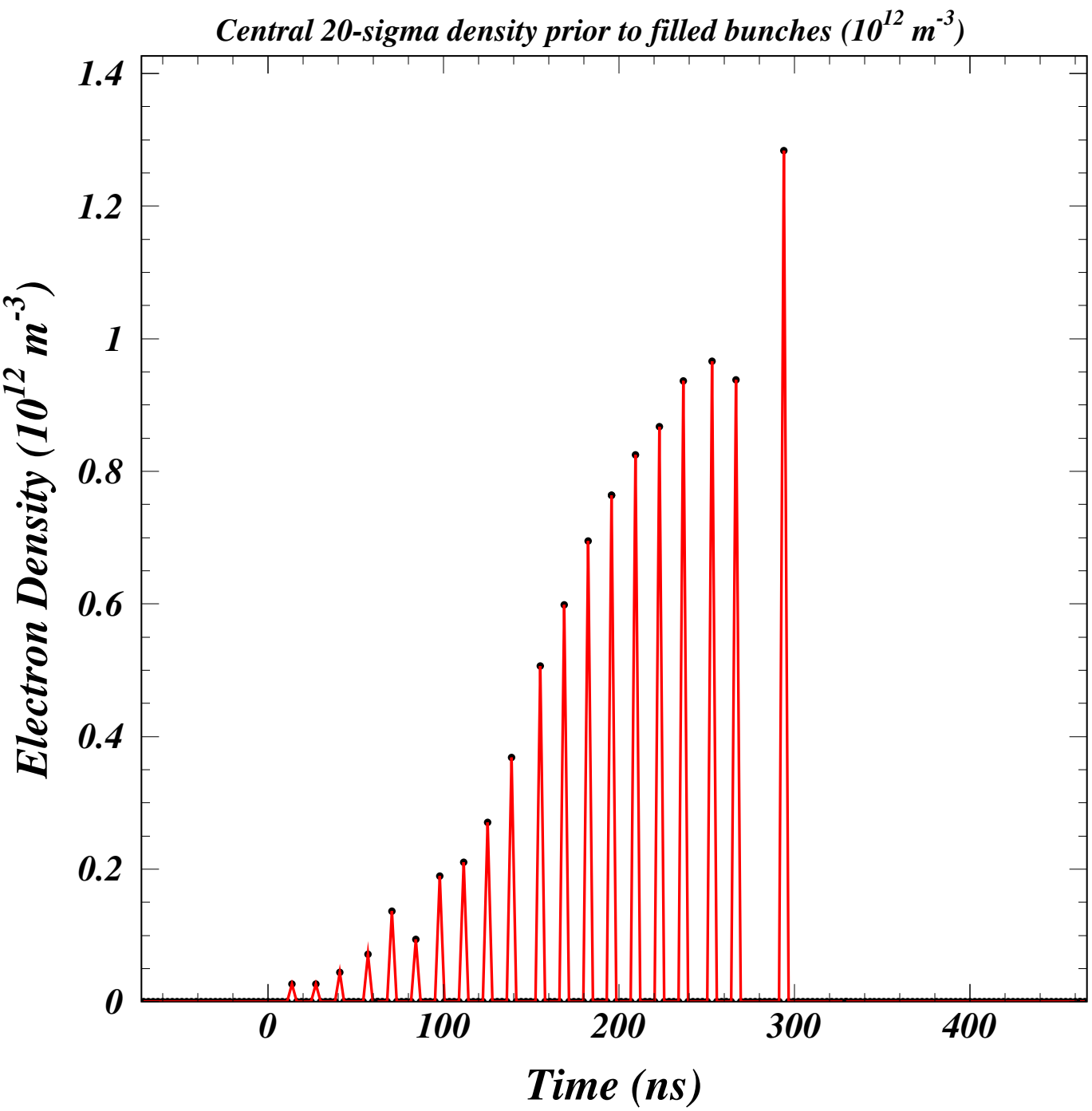

Central 5-sigma density prior to filled bunches (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
100
200
300
400
Time (ns)

15/09/29 11.53


Central 20-sigma density prior to filled bunches (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
100
200
300
400
Time (ns)

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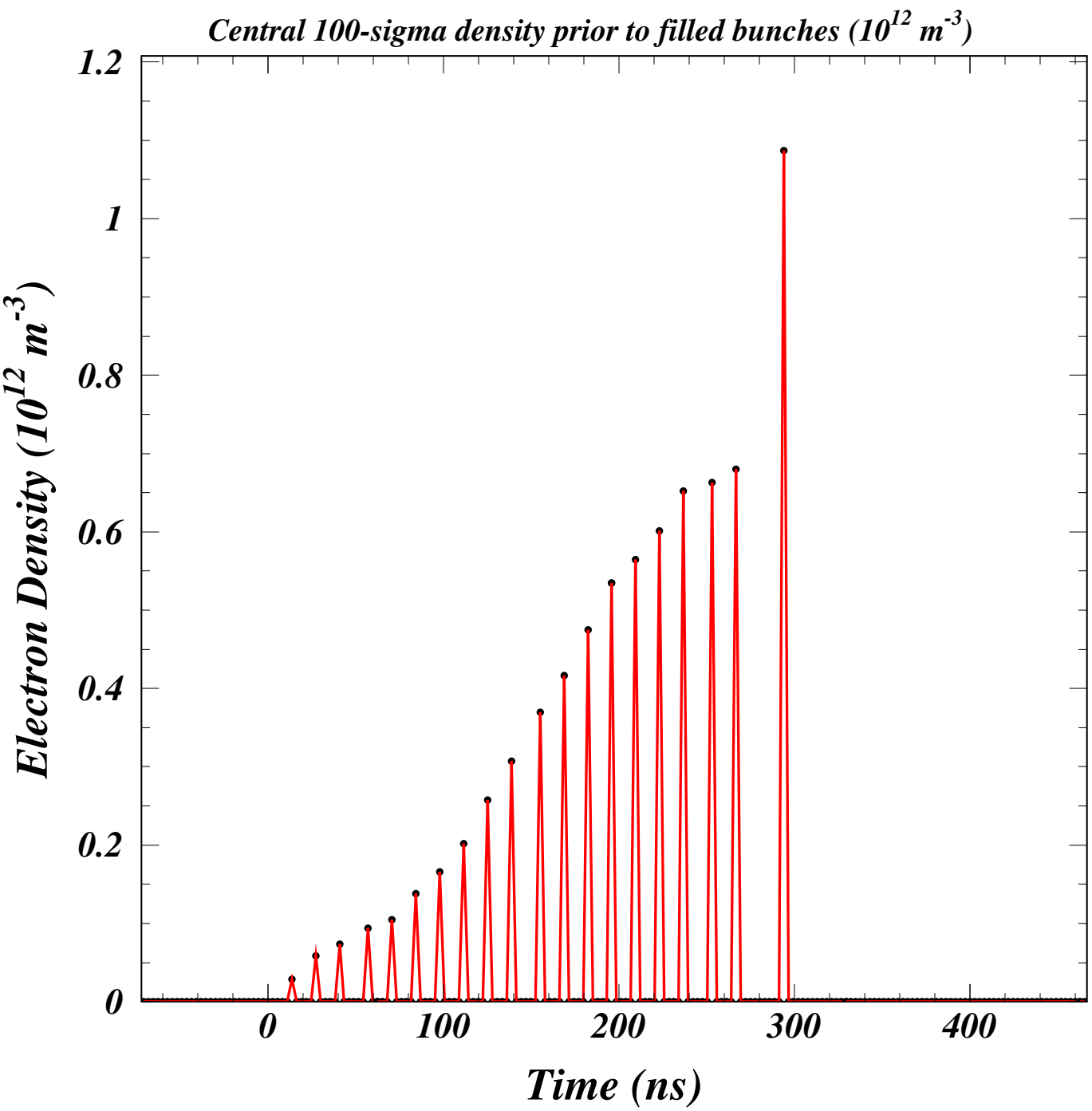
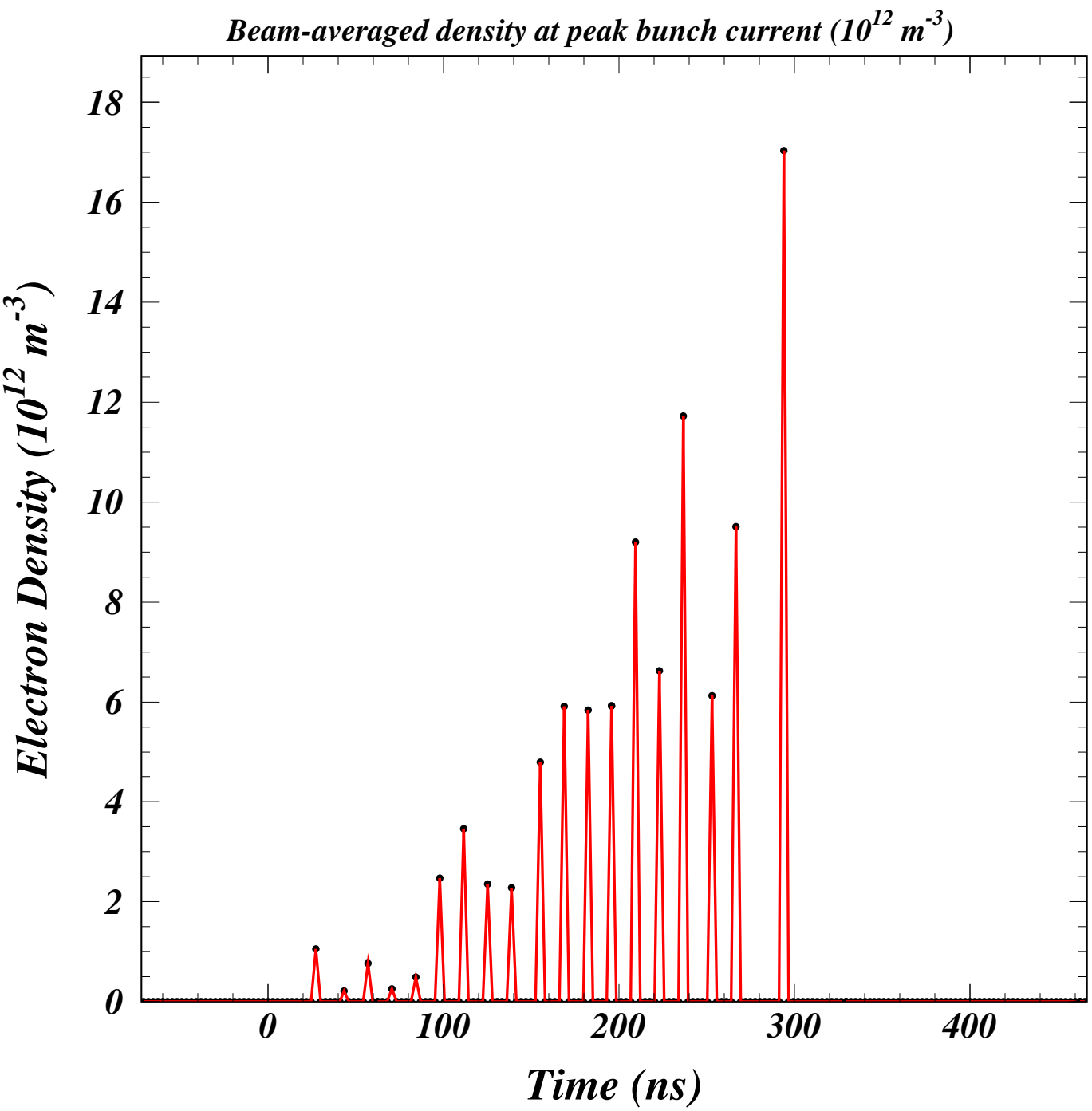
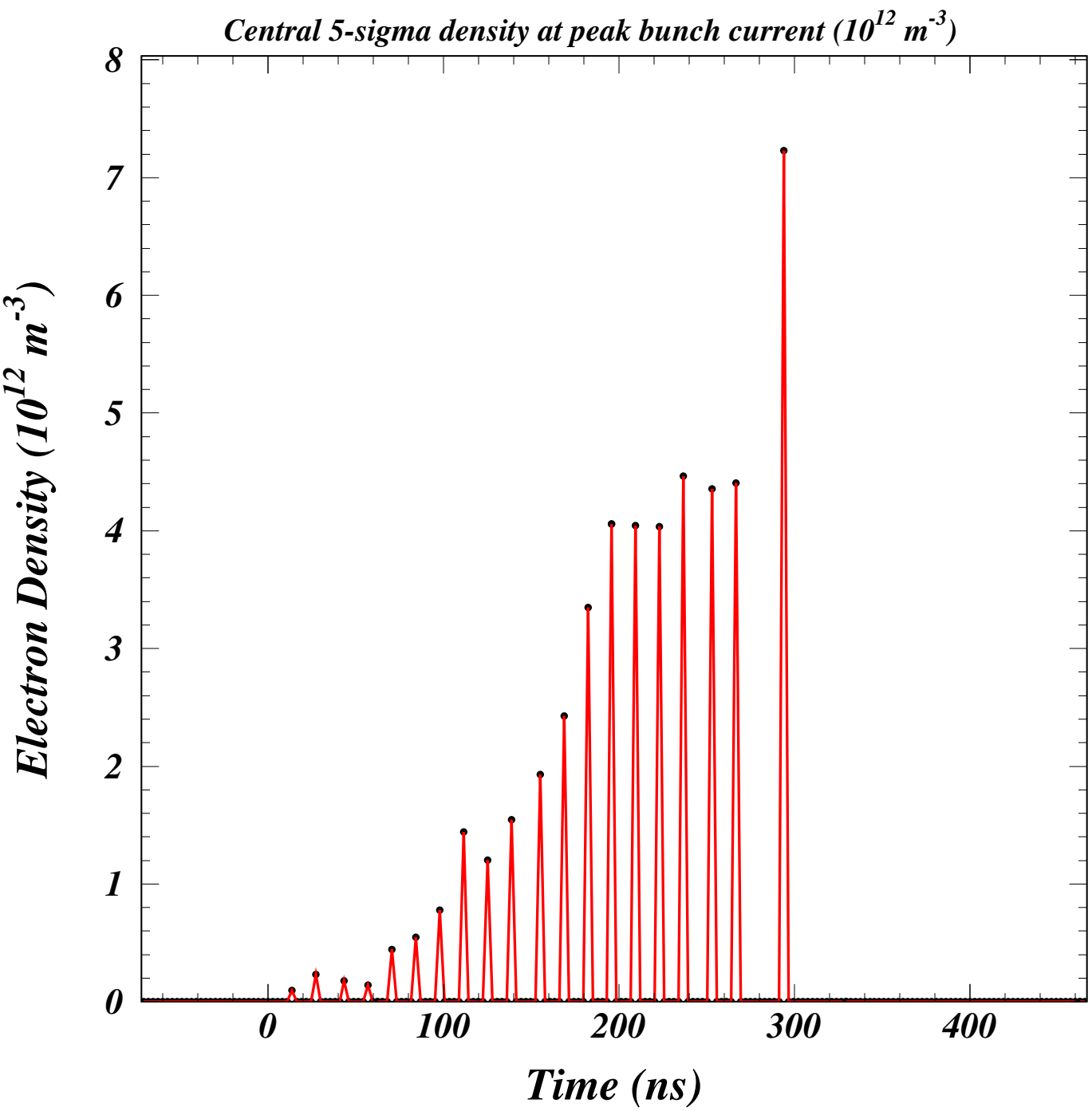

Central 100-sigma density prior to filled bunches (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
1.2
1
0.8
0.6
0.4
0.2
0
0
100
200
300
400
Time (ns)

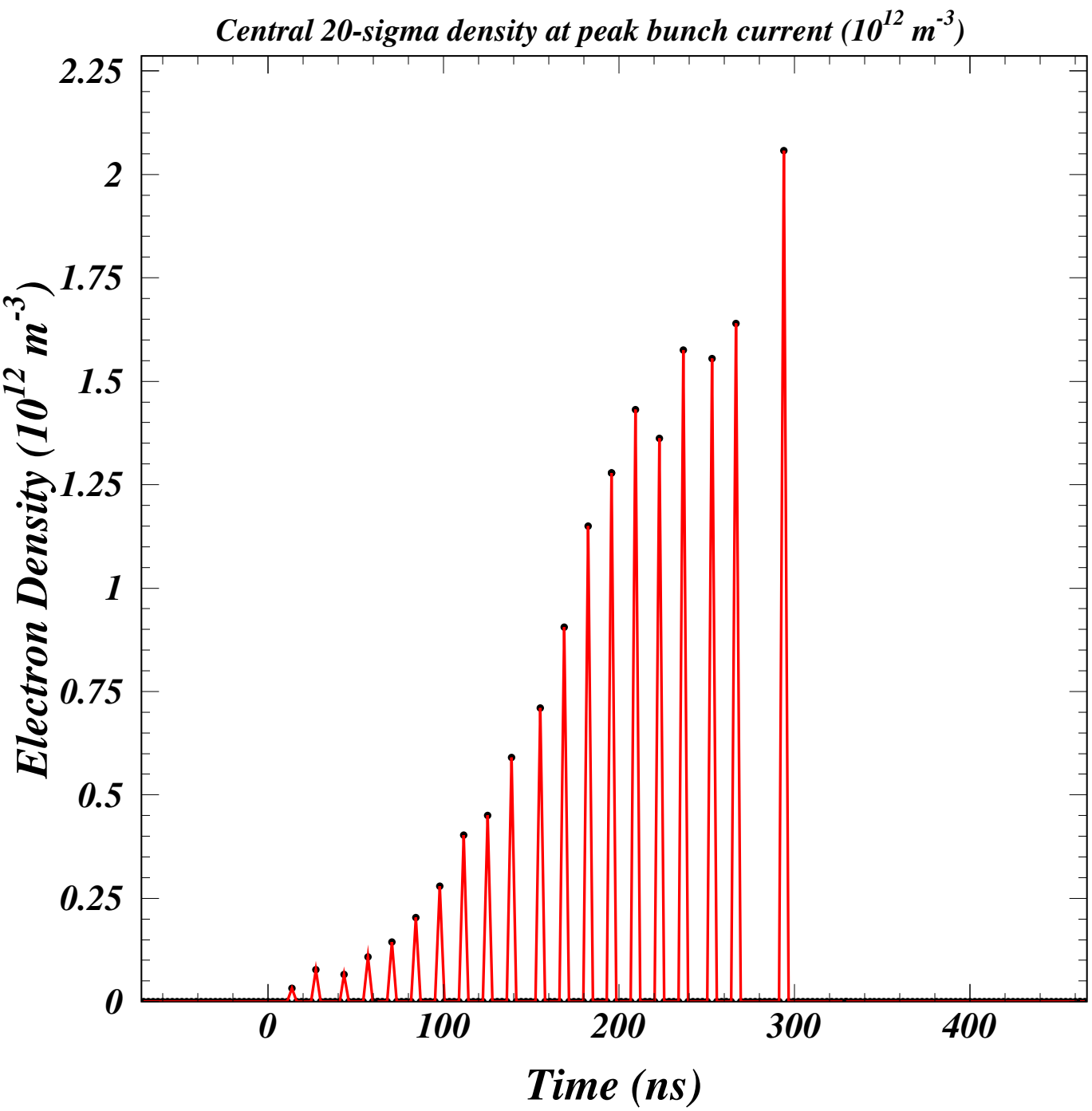
15/09/29 11.53


Beam-averaged density at peak bunch current (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
0
2
4
6
8
10
12
14
16
18
0
100
200
300
400
Time (ns)

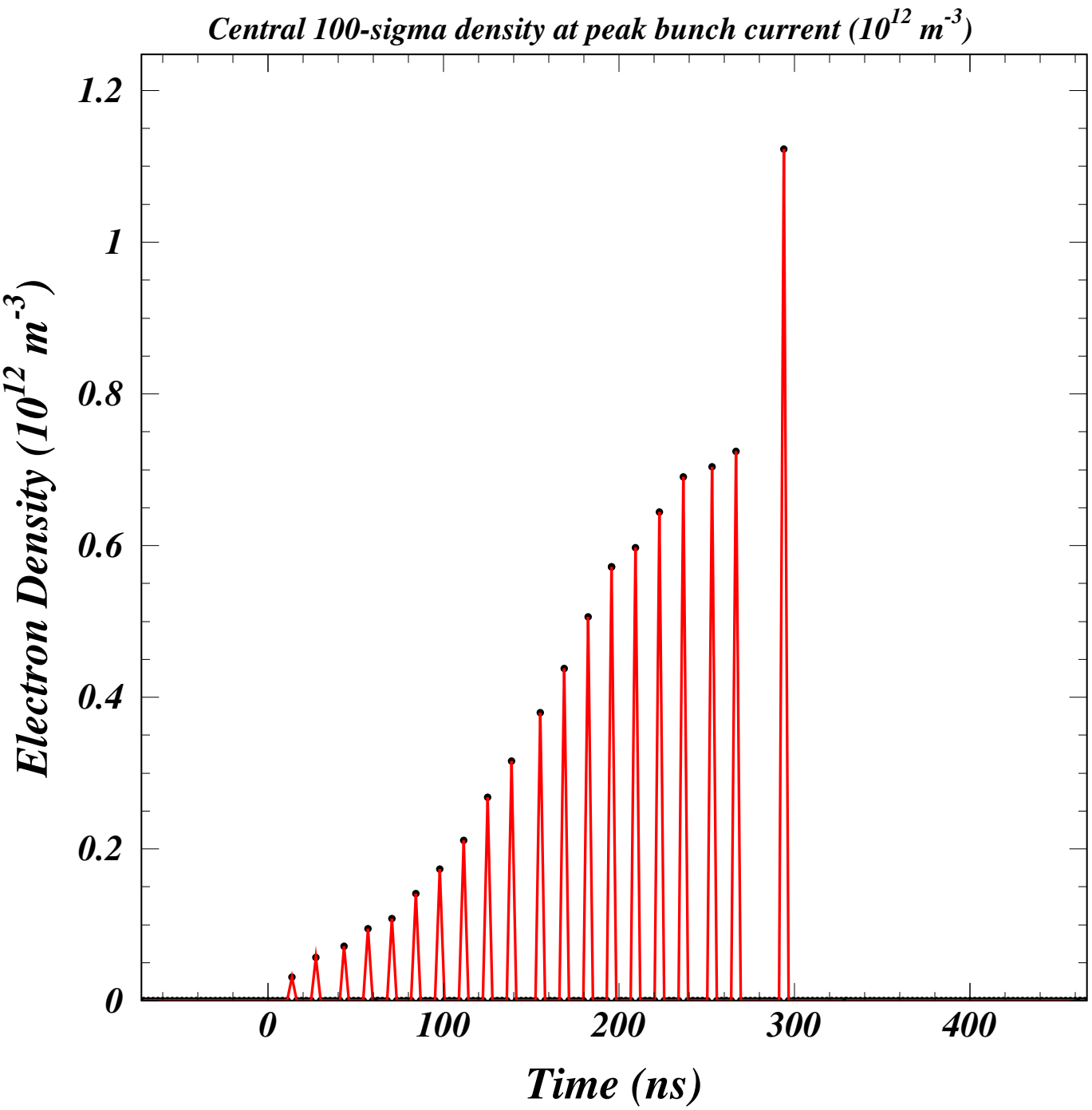
15/09/29 11.53

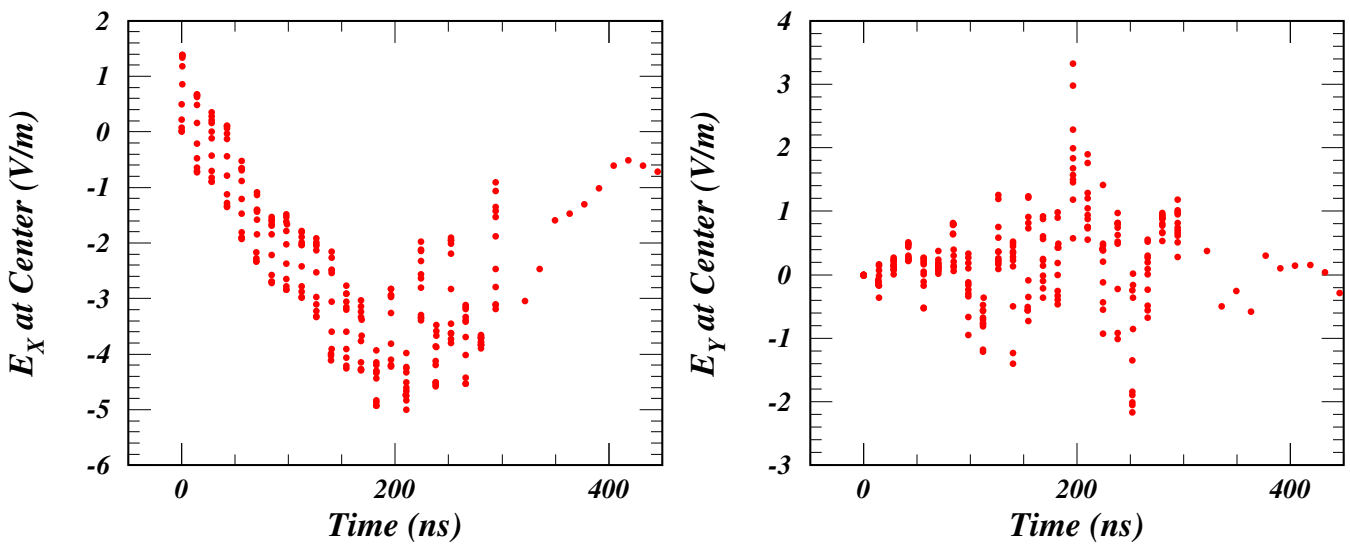

Central 5-sigma density at peak bunch current (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
Time (ns)
0
1
2
3
4
5
6
7
8
0
100
200
300
400

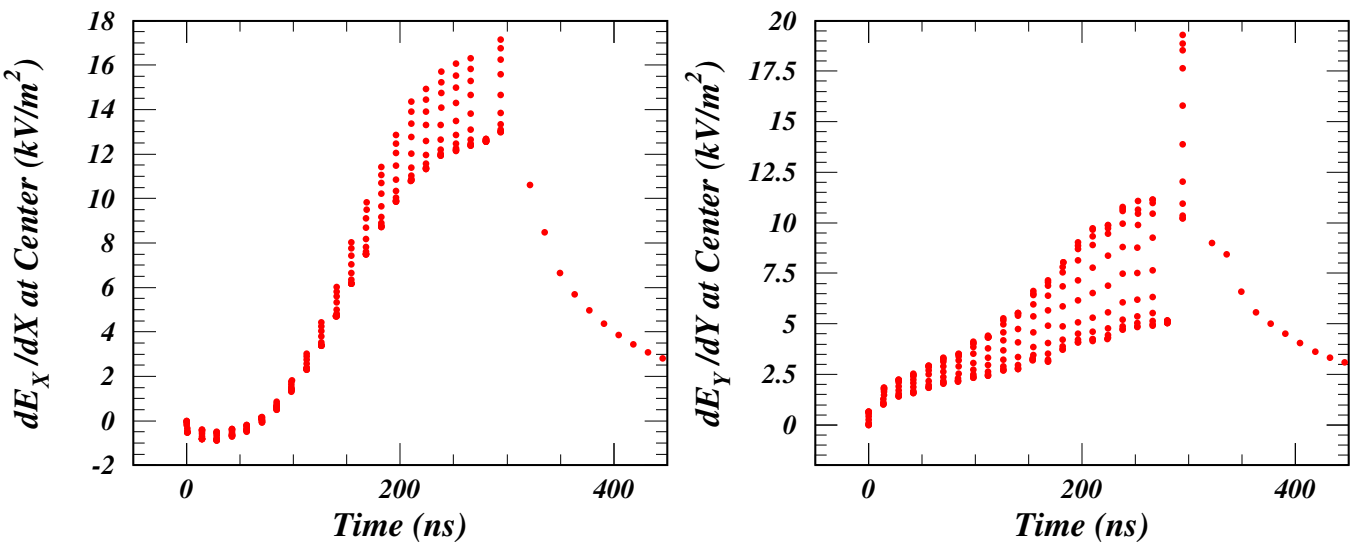
15/09/29 11.53

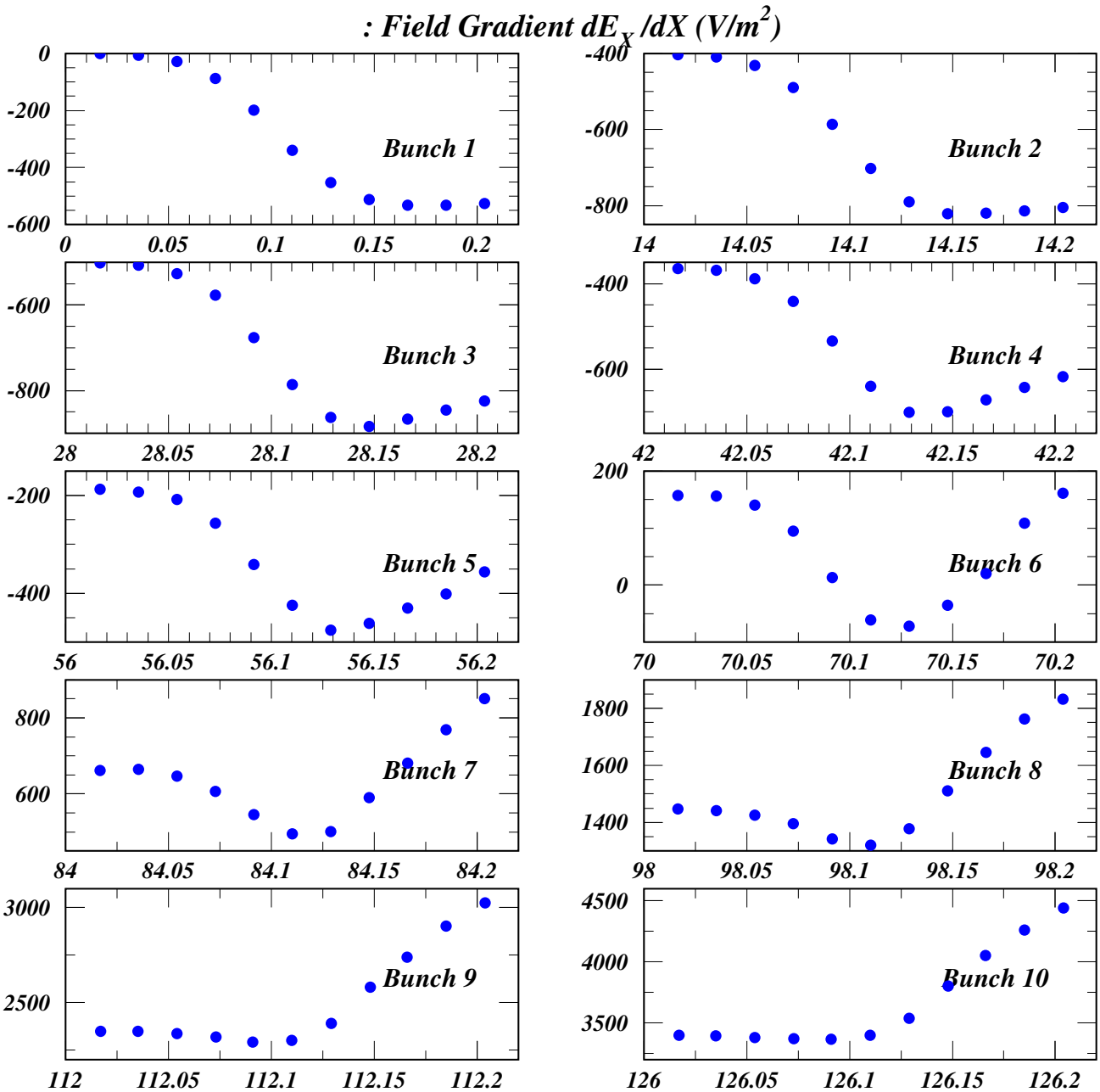

Central 20-sigma density at peak bunch current (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
2.25
2
1.75
1.5
1.25
1
0.75
0.5
0.25
0
0
100
200
300
400
Time (ns)

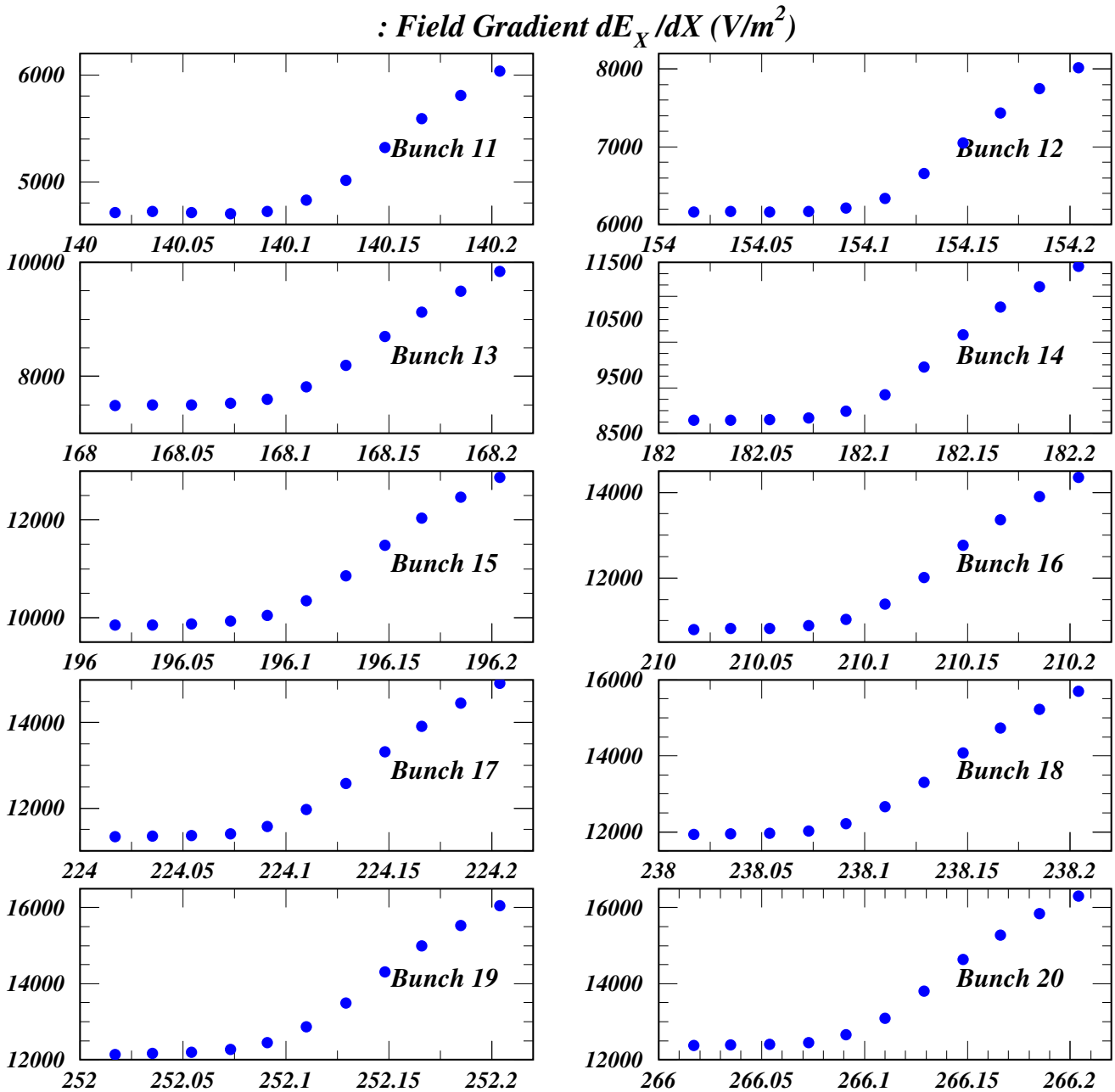
15/09/29 11.53

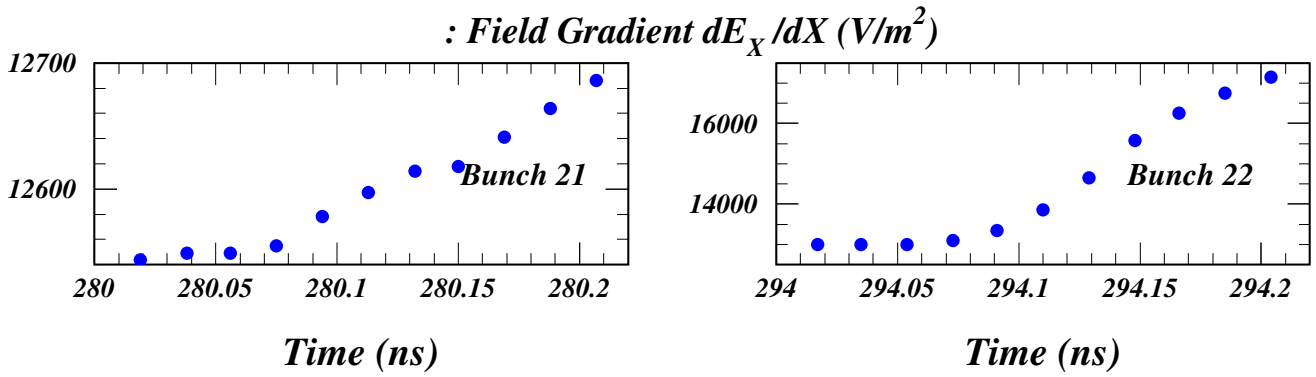

Central 100-sigma density at peak bunch current (10^{12} m^{-3})
Electron Density (10^{12} m^{-3})
1.2
1
0.8
0.6
0.4
0.2
0
0
100
200
300
400
Time (ns)

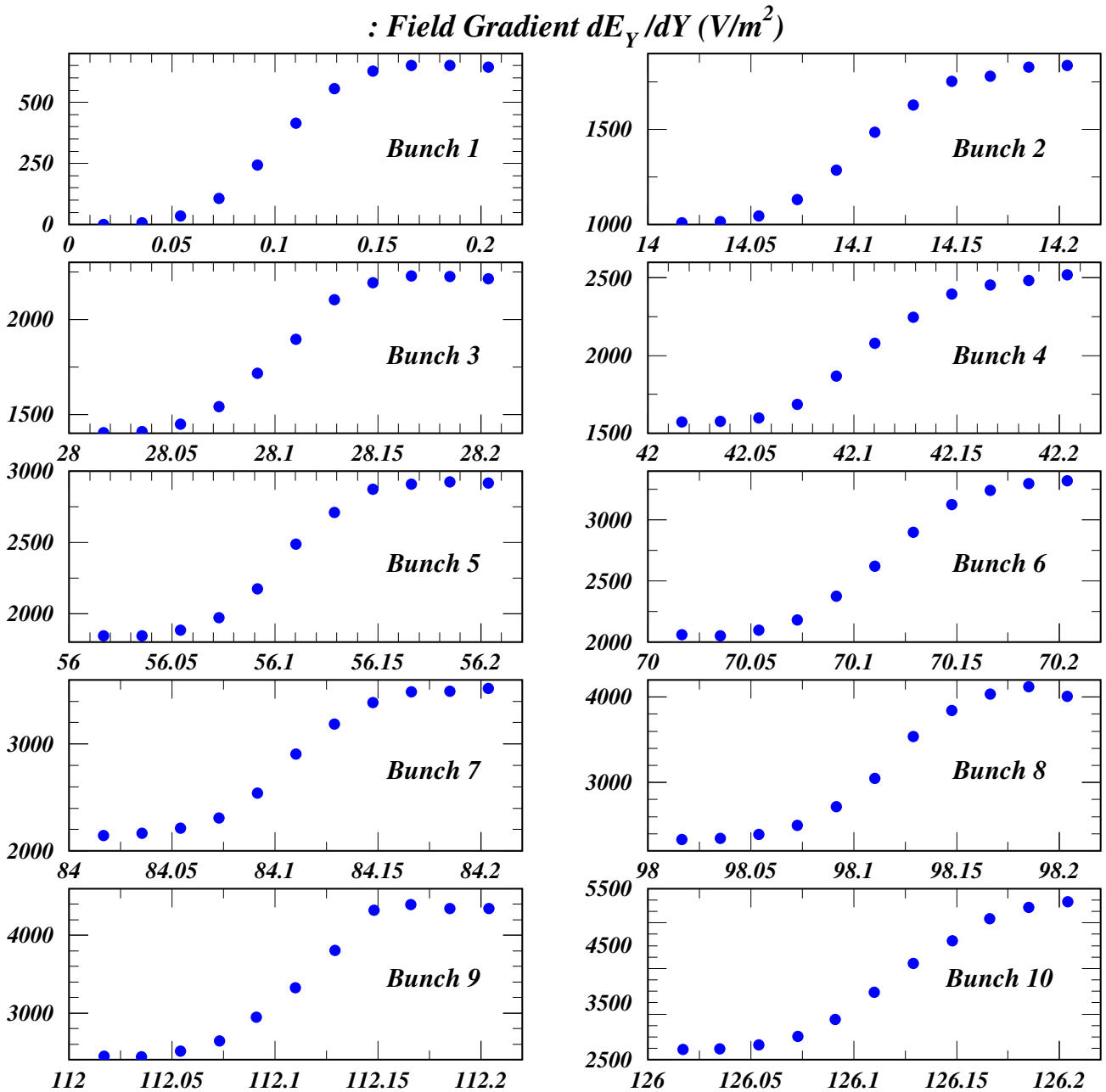

E_X at Center (V/m)
2
1
0
-1
-2
-3
-4
-5
-6
0
200
400
Time (ns)
E_Y at Center (V/m)
4
3
2
1
0
-1
-2
-3
0
200
400
Time (ns)

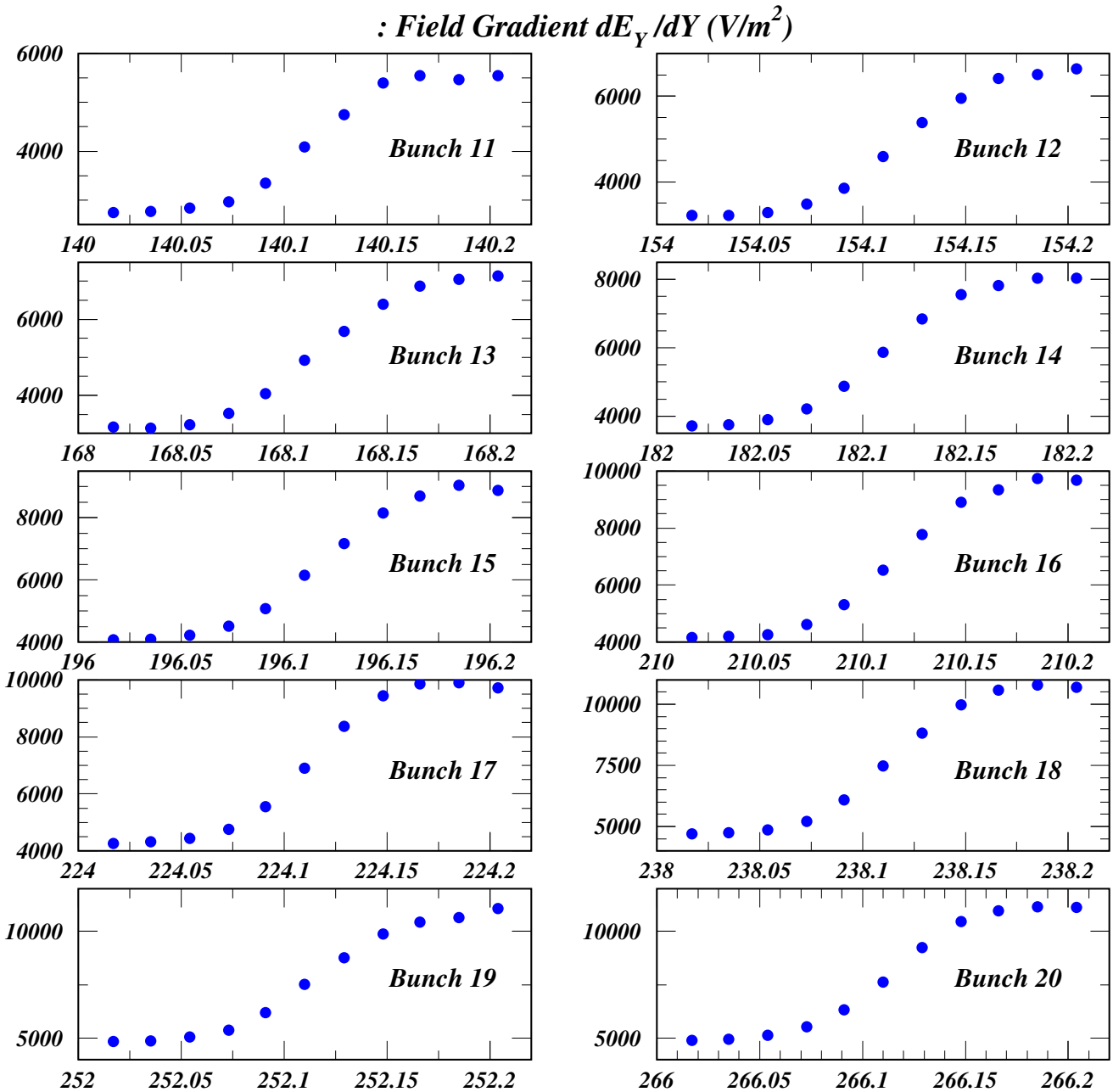

dE_X/dX at Center (kV/m^2)
18
16
14
12
10
8
6
4
2
0
-2
0
200
400
Time (ns)
dE_Y/dY at Center (kV/m^2)
20
17.5
15
12.5
10
7.5
5
2.5
0
0
200
400
Time (ns)

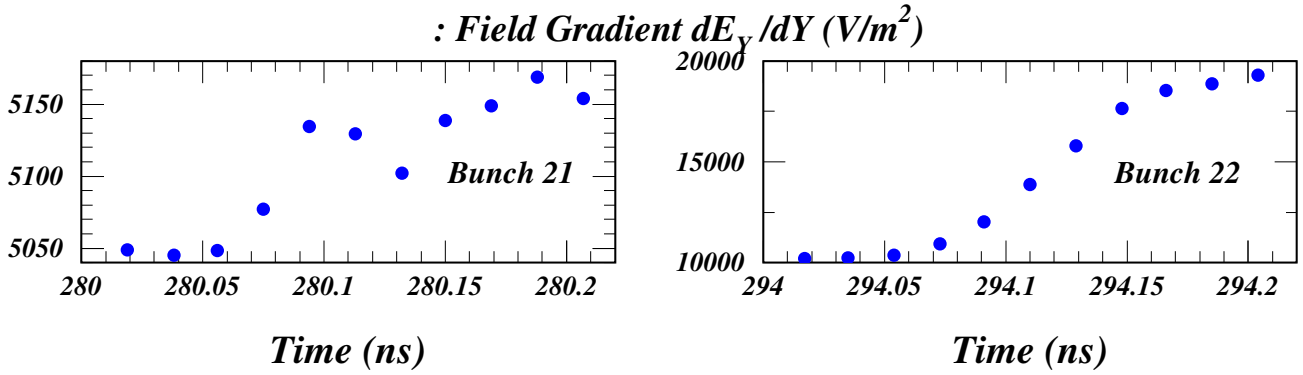

: Field Gradient dE_X /dX (V/m^2)
Bunch 1
Bunch 2
Bunch 3
Bunch 4
Bunch 5
Bunch 6
Bunch 7
Bunch 8
Bunch 9
Bunch 10

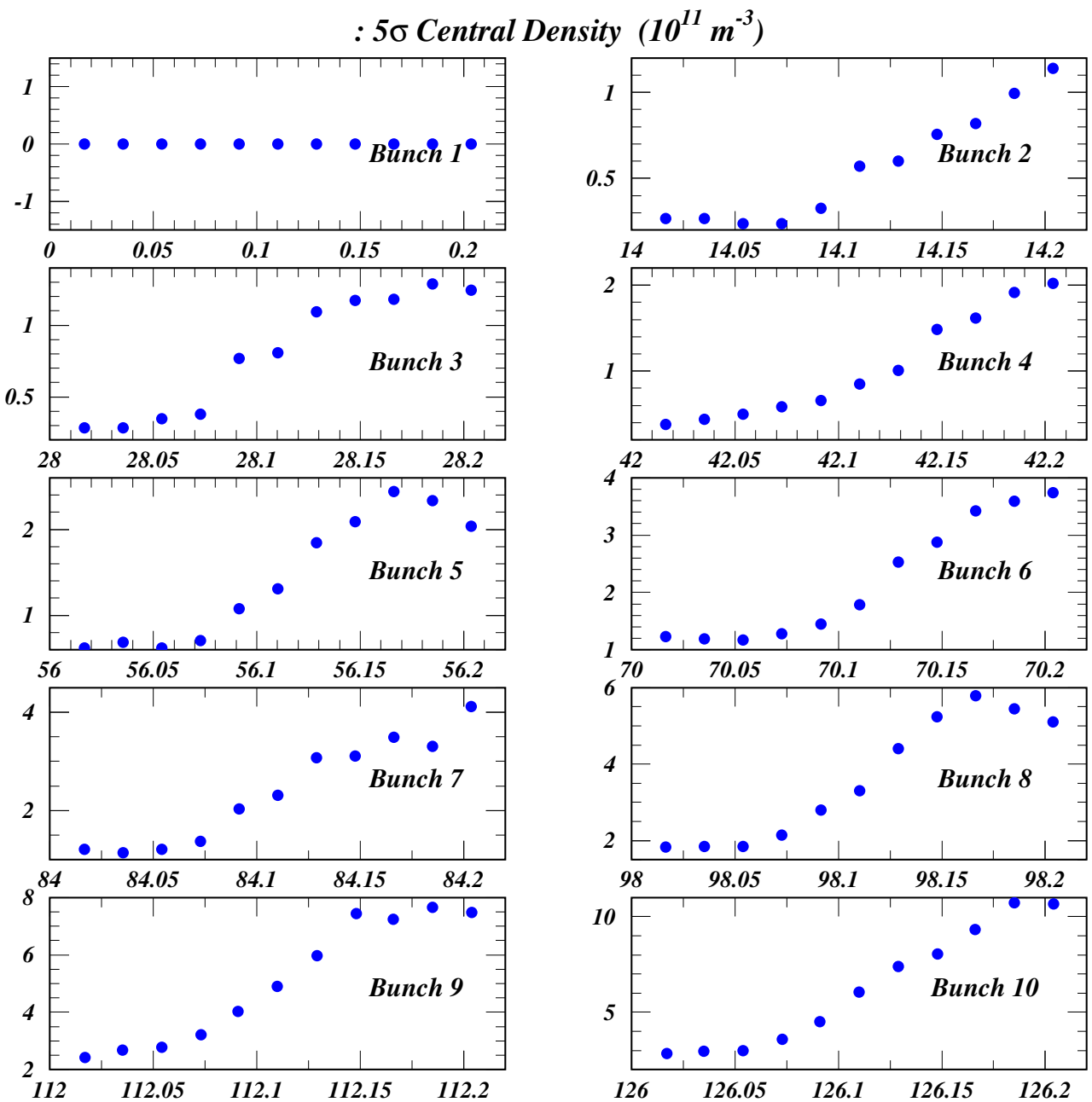

: Field Gradient dE_X /dX (V/m^2)
Bunch 11
Bunch 12
Bunch 13
Bunch 14
Bunch 15
Bunch 16
Bunch 17
Bunch 18
Bunch 19
Bunch 20

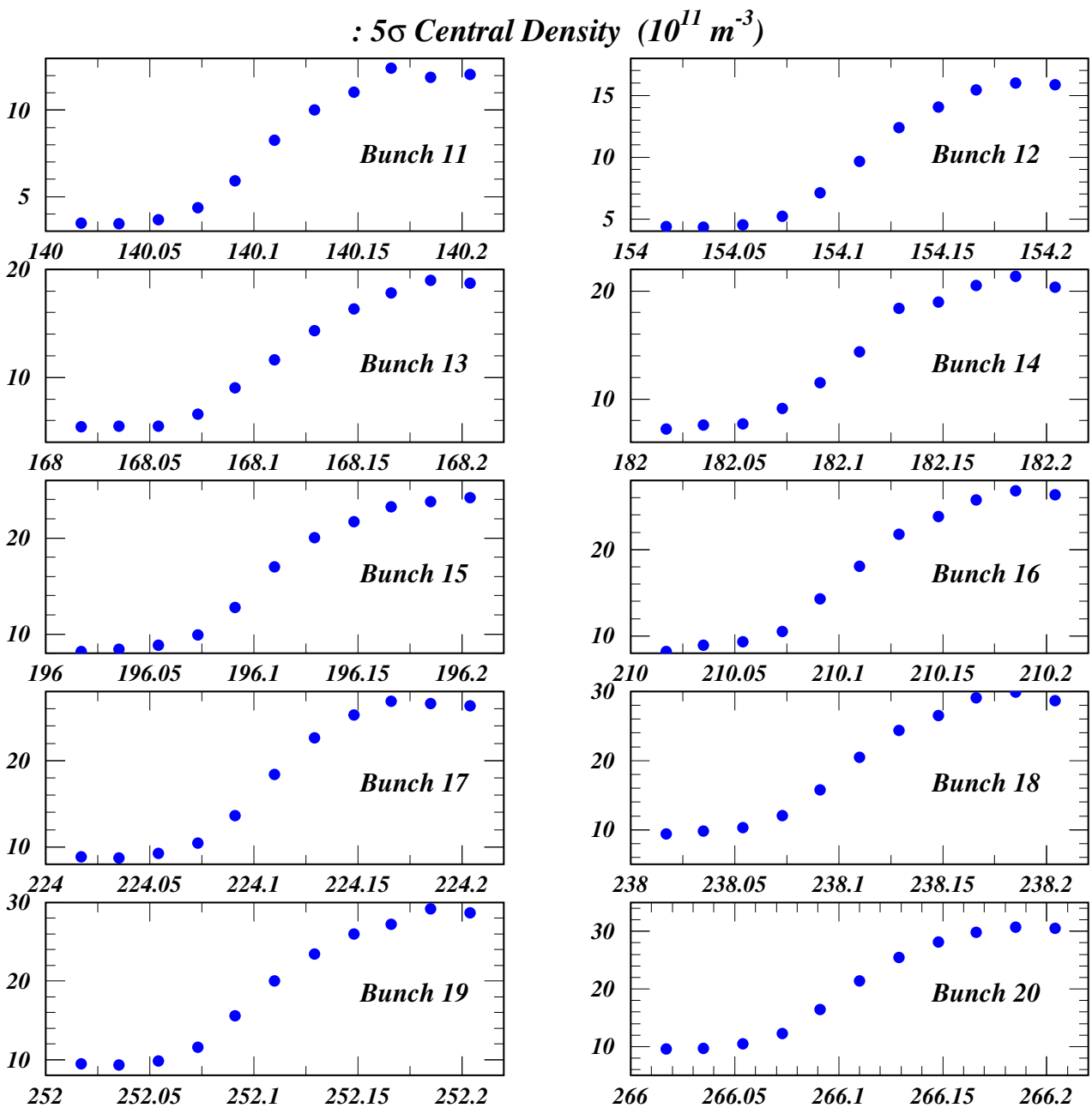

: Field Gradient dE_X /dX (V/m^2)
12700
12600
Bunch 21
280
280.05
280.1
280.15
280.2
Time (ns)
16000
14000
Bunch 22
294
294.05
294.1
294.15
294.2
Time (ns)

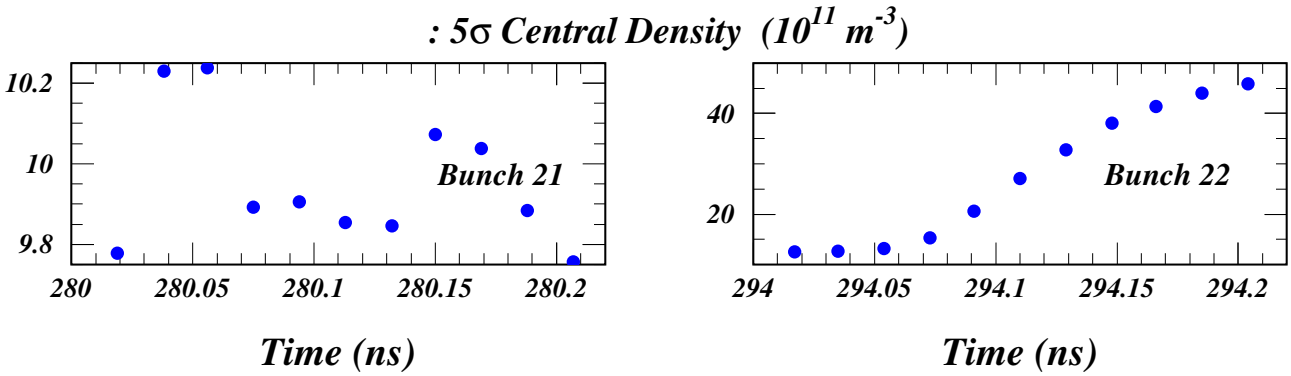

: Field Gradient dE_Y /dY (V/m^2)
Bunch 1
Bunch 2
Bunch 3
Bunch 4
Bunch 5
Bunch 6
Bunch 7
Bunch 8
Bunch 9
Bunch 10

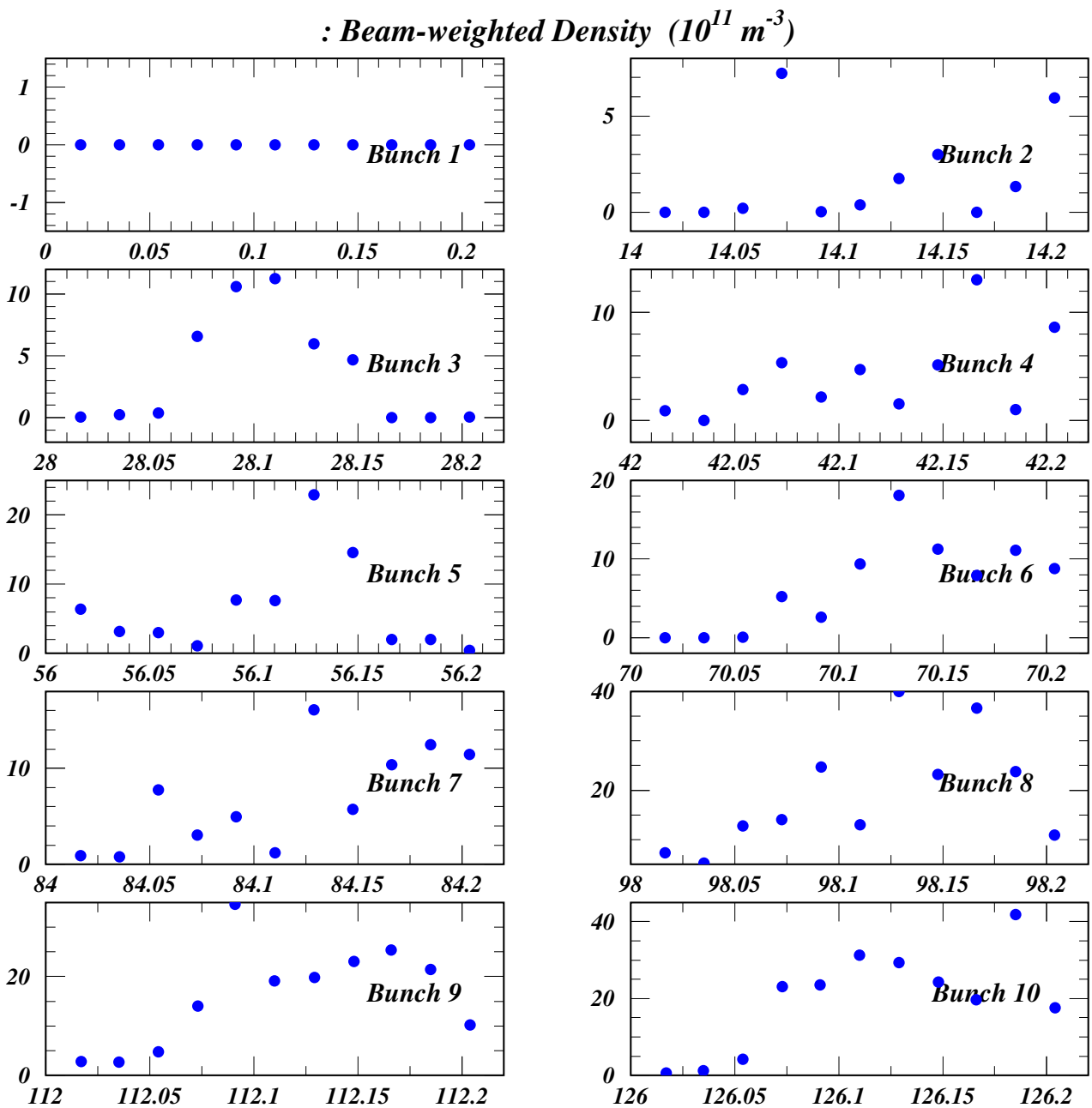

: Field Gradient dE_Y /dY (V/m^2)
Bunch 11
Bunch 12
Bunch 13
Bunch 14
Bunch 15
Bunch 16
Bunch 17
Bunch 18
Bunch 19
Bunch 20

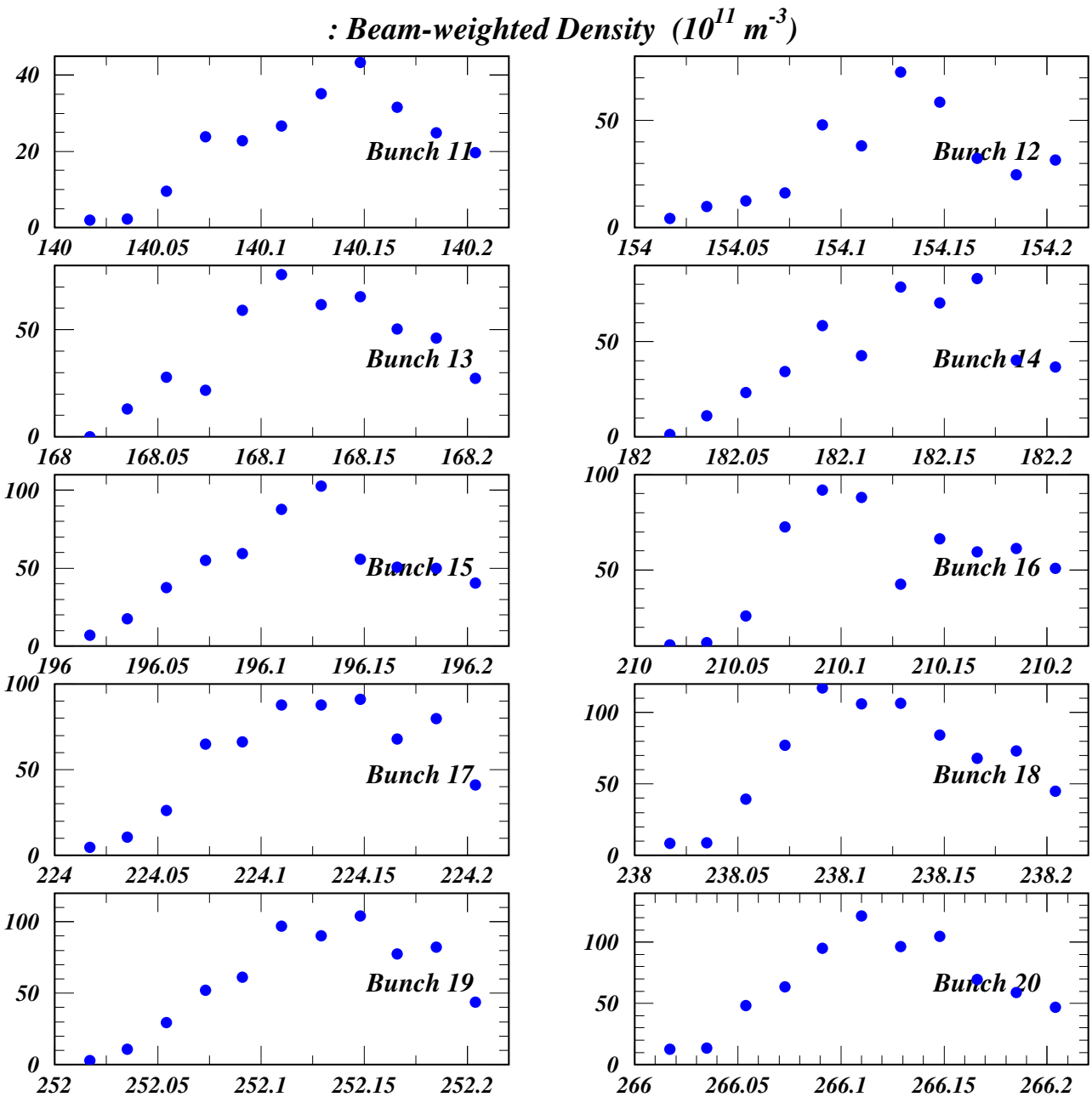

: Field Gradient dE_Y /dY (V/m^2)
5150
5100
5050
280
280.05
280.1
280.15
280.2
Bunch 21
Time (ns)
20000
15000
10000
294
294.05
294.1
294.15
294.2
Bunch 22
Time (ns)

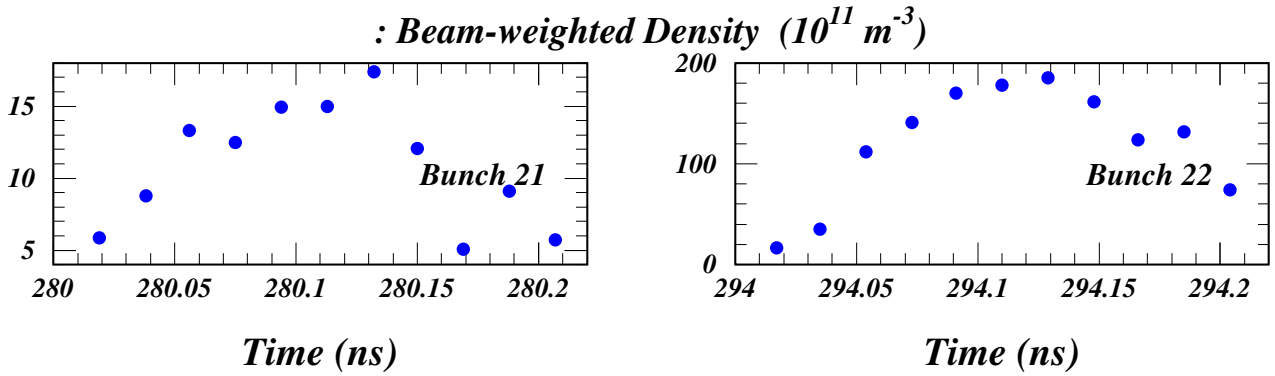

: 5σ Central Density (10^11 m^-3)
Bunch 1
Bunch 2
Bunch 3
Bunch 4
Bunch 5
Bunch 6
Bunch 7
Bunch 8
Bunch 9
Bunch 10


: 5σ Central Density (10^11 m^-3)
Bunch 11
Bunch 12
Bunch 13
Bunch 14
Bunch 15
Bunch 16
Bunch 17
Bunch 18
Bunch 19
Bunch 20


: 5σ Central Density (10^11 m^-3)
10.2
10
9.8
Bunch 21
280
280.05
280.1
280.15
280.2
Time (ns)
40
20
Bunch 22
294
294.05
294.1
294.15
294.2
Time (ns)


: Beam-weighted Density (10^11 m^-3)
Bunch 1
Bunch 2
Bunch 3
Bunch 4
Bunch 5
Bunch 6
Bunch 7
Bunch 8
Bunch 9
Bunch 10


: Beam-weighted Density (10^11 m^-3)
Bunch 11
Bunch 12
Bunch 13
Bunch 14
Bunch 15
Bunch 16
Bunch 17
Bunch 18
Bunch 19
Bunch 20


: Beam-weighted Density (10^11 m^-3)
15
10
5
280
280.05
280.1
280.15
280.2
Bunch 21
Time (ns)
200
100
0
294
294.05
294.1
294.15
294.2
Bunch 22
Time (ns)