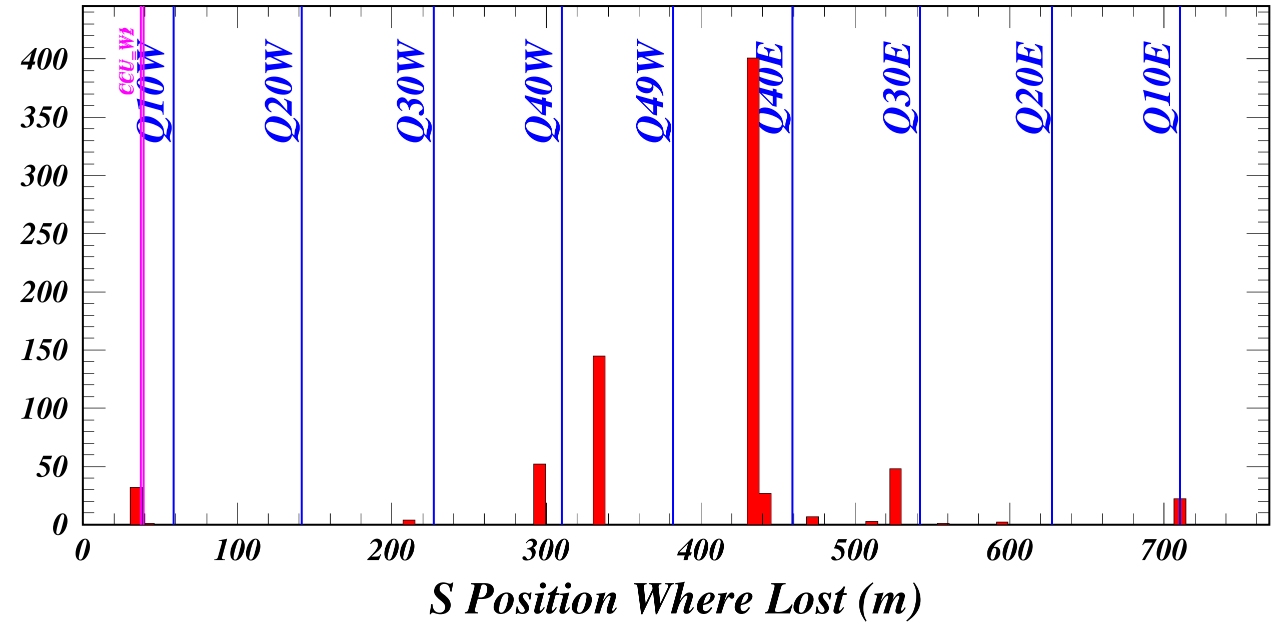
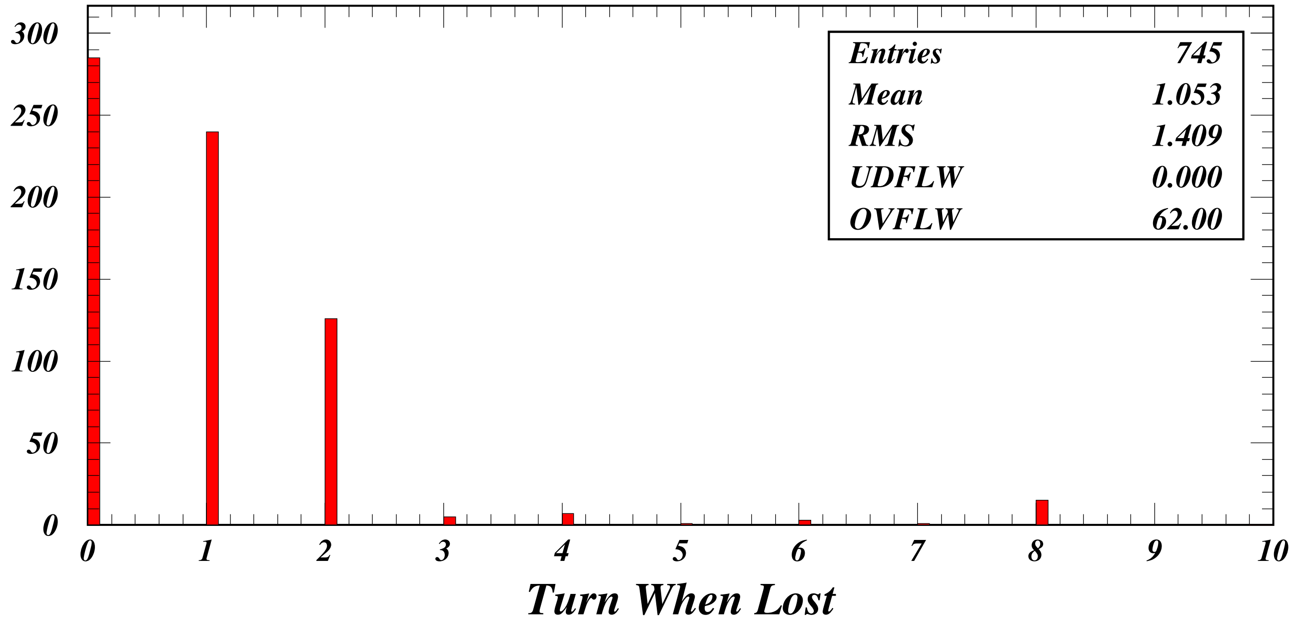
15/03/02 10.33

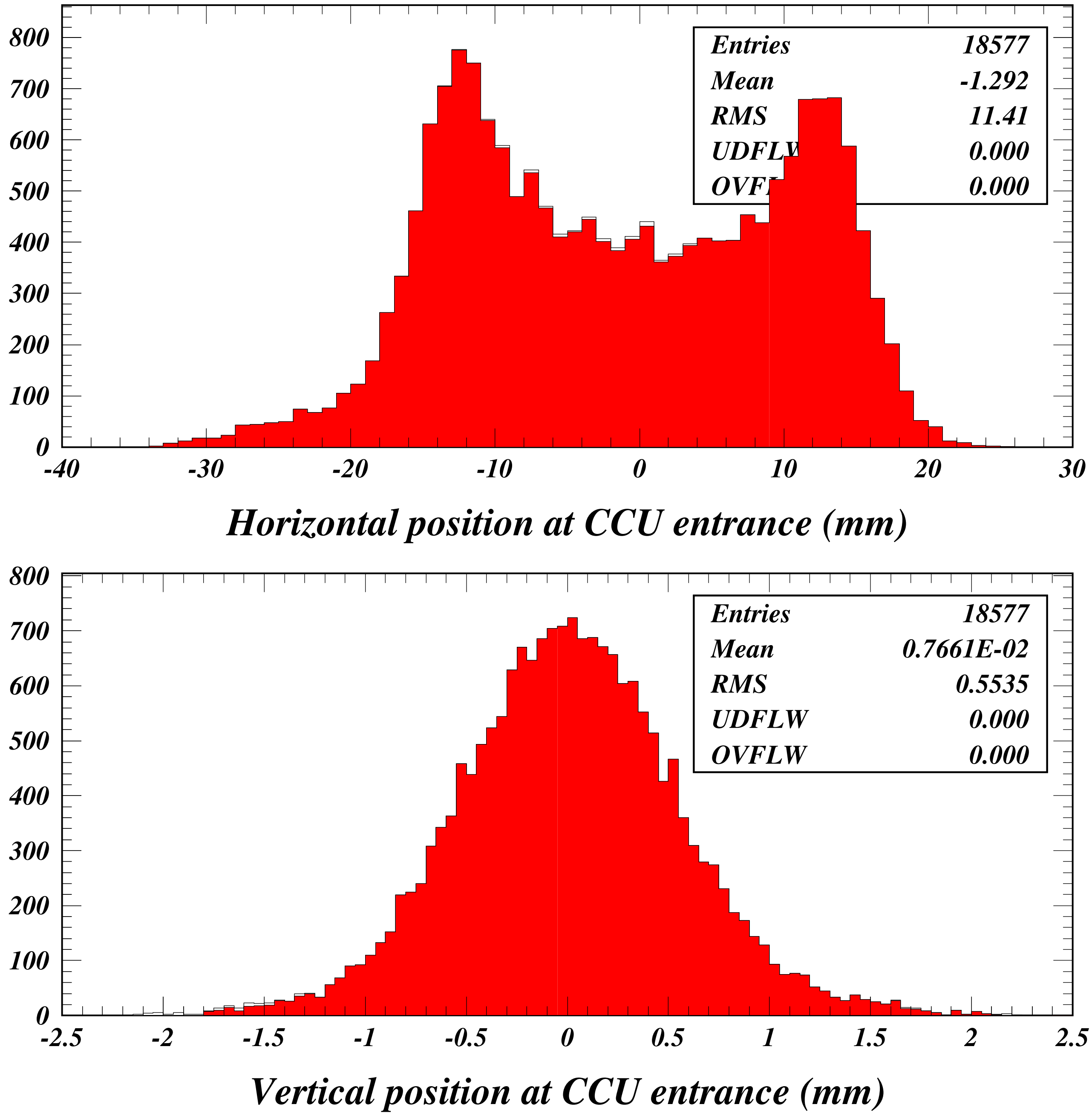
Energy Offset -0.3%

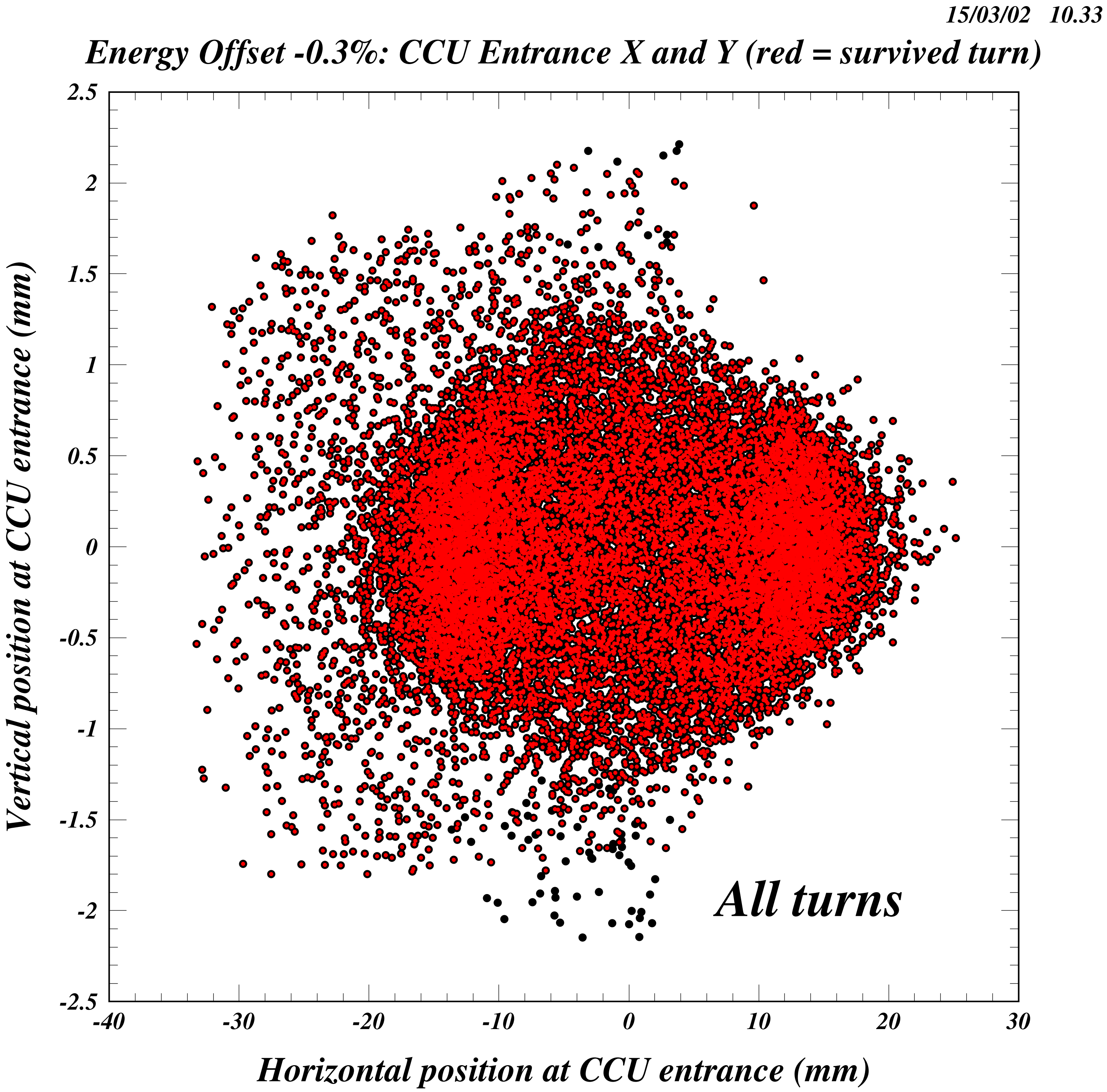




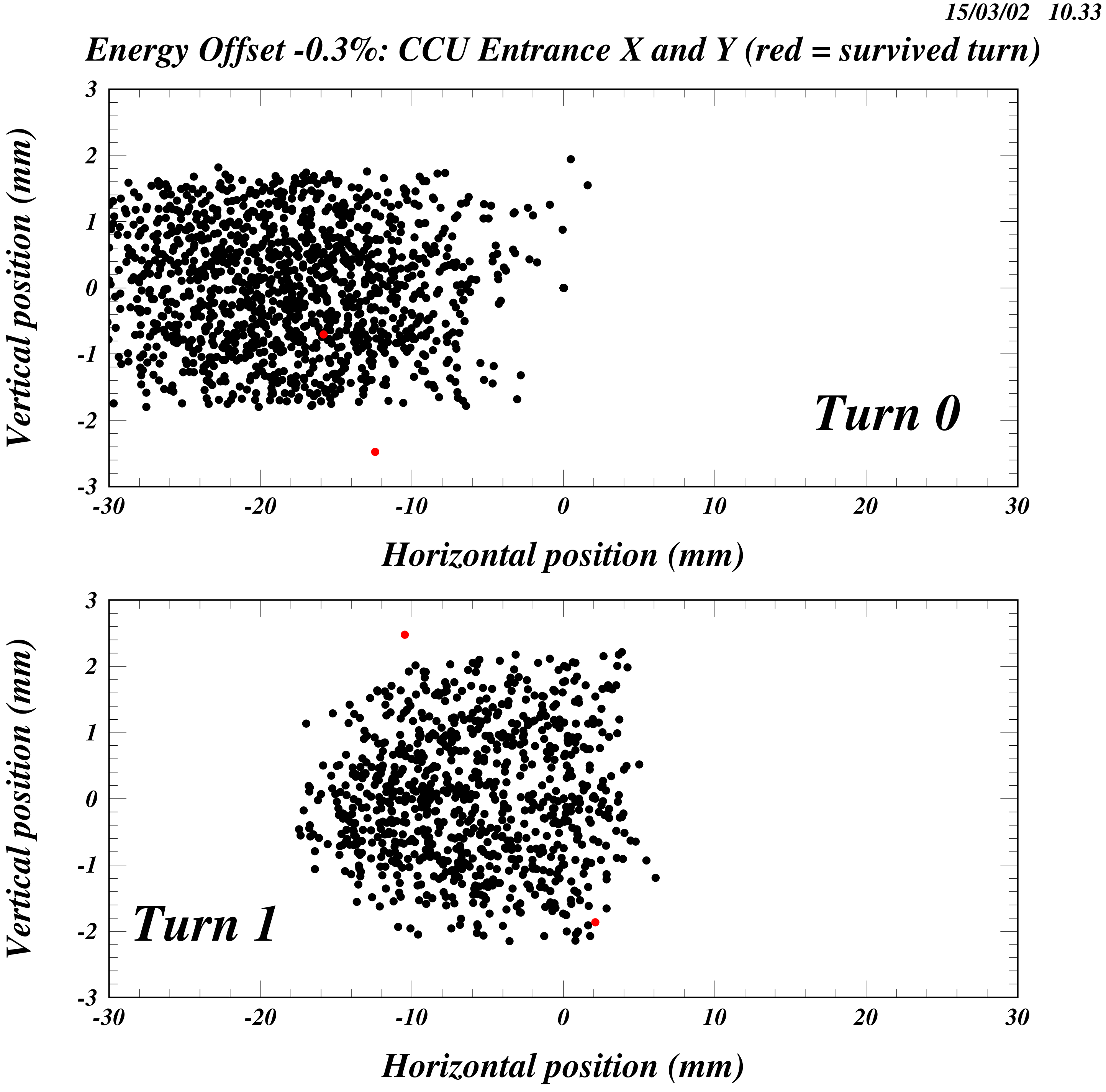
15/03/02 10.33

Energy Offset -0.3%: CCU Entrance X and Y (red = survived turn)

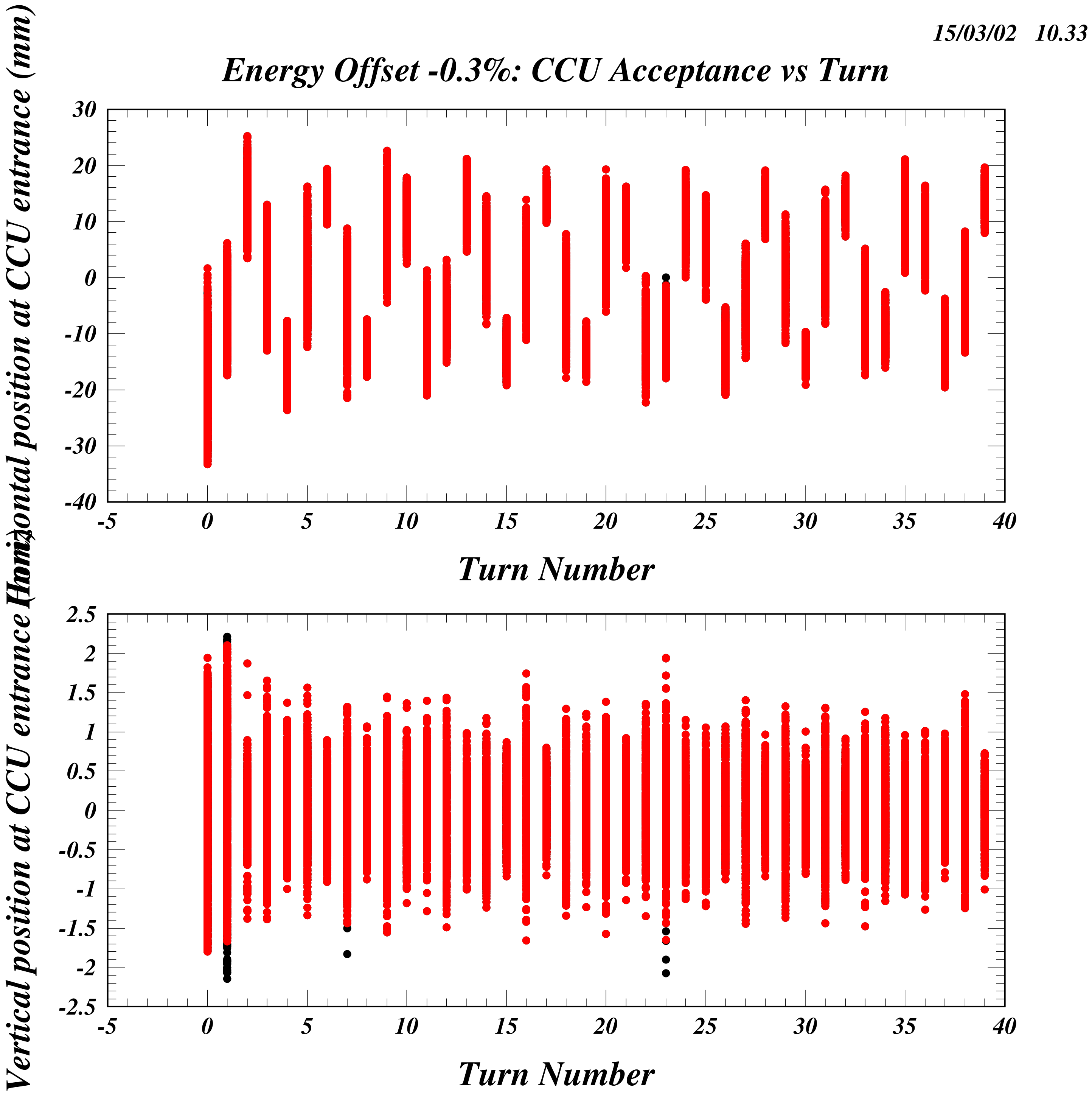




15/03/02 10.33
Energy Offset -0.3%: CCU Entrance X and Y (red = survived turn)
Vertical position at CCU entrance (mm)
Horizontal position at CCU entrance (mm)
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-40
-30
-20
-10
0
10
20
30
All turns



15/03/02 10.33
Energy Offset -0.3%: CCU Entrance X and Y (red = survived turn)
Vertical position (mm)
Horizontal position (mm)
Turn 0
Vertical position (mm)
Horizontal position (mm)
Turn 1



15/03/02 10.33
Energy Offset -0.3%: CCU Acceptance vs Turn
Horizontal position at CCU entrance (mm)
30
20
10
0
-10
-20
-30
-40
-5
0
5
10
15
20
25
30
35
40
Turn Number
Vertical position at CCU entrance (mm)
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
-2.5
-5
0
5
10
15
20
25
30
35
40
Turn Number

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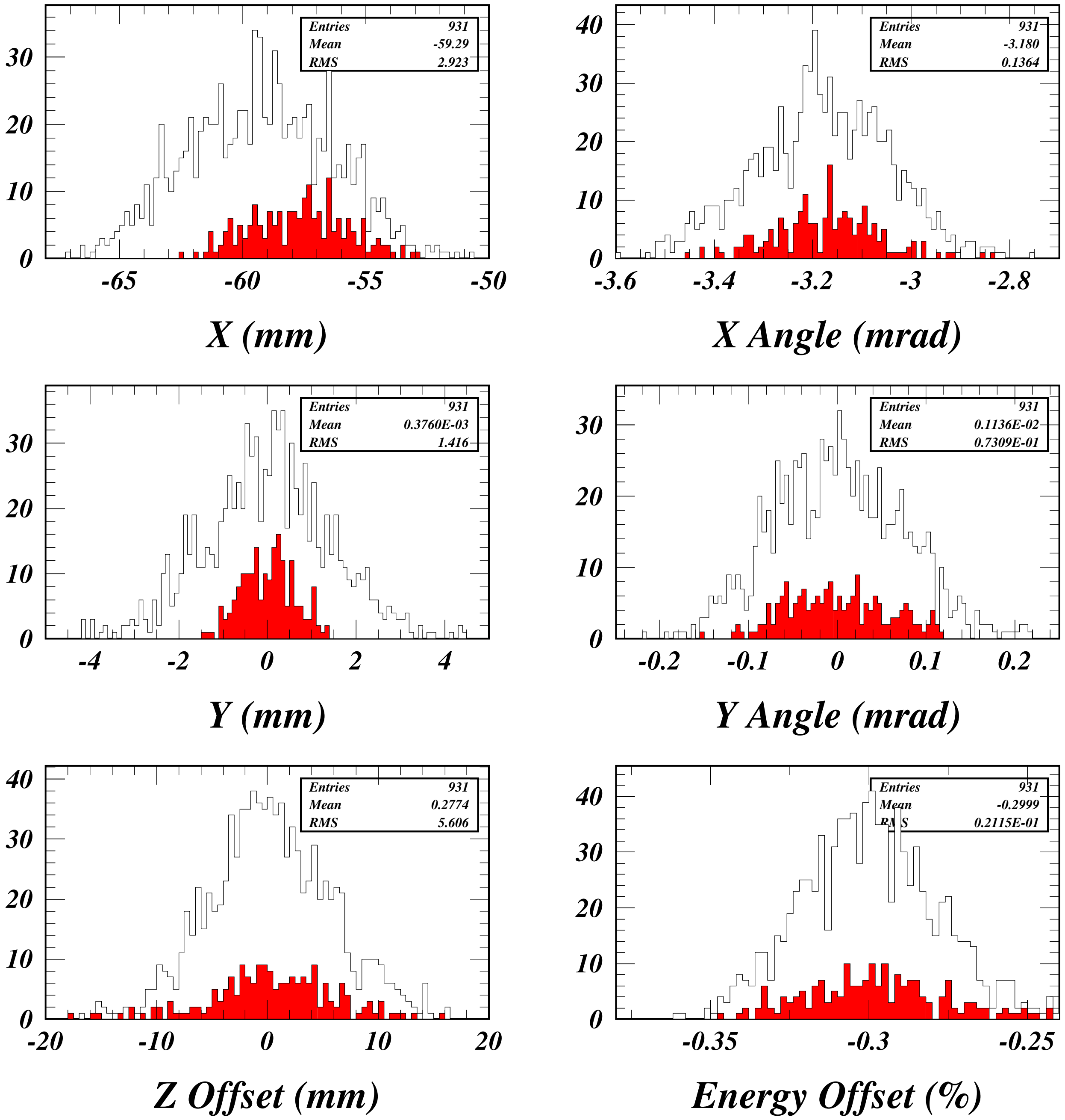
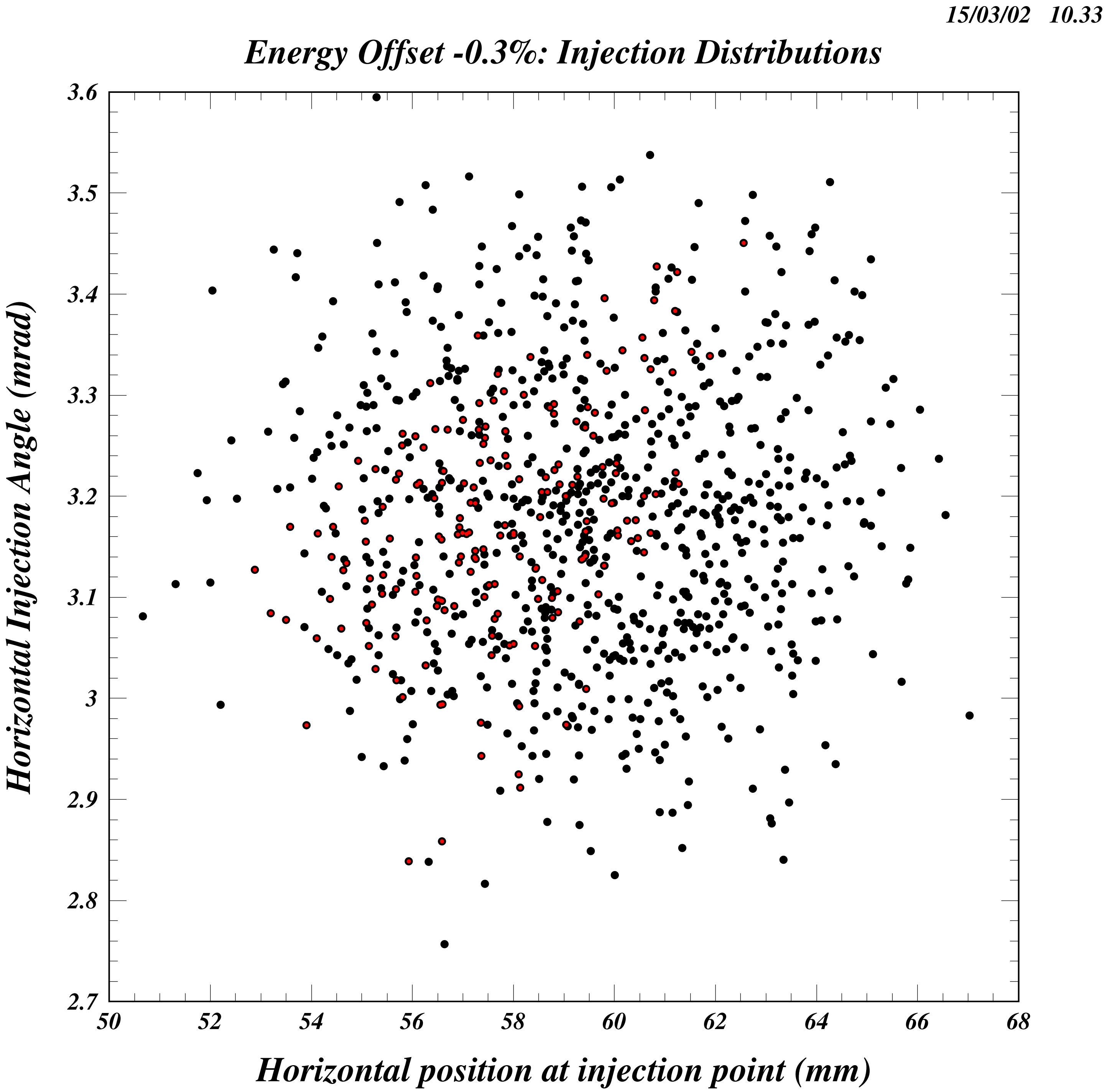
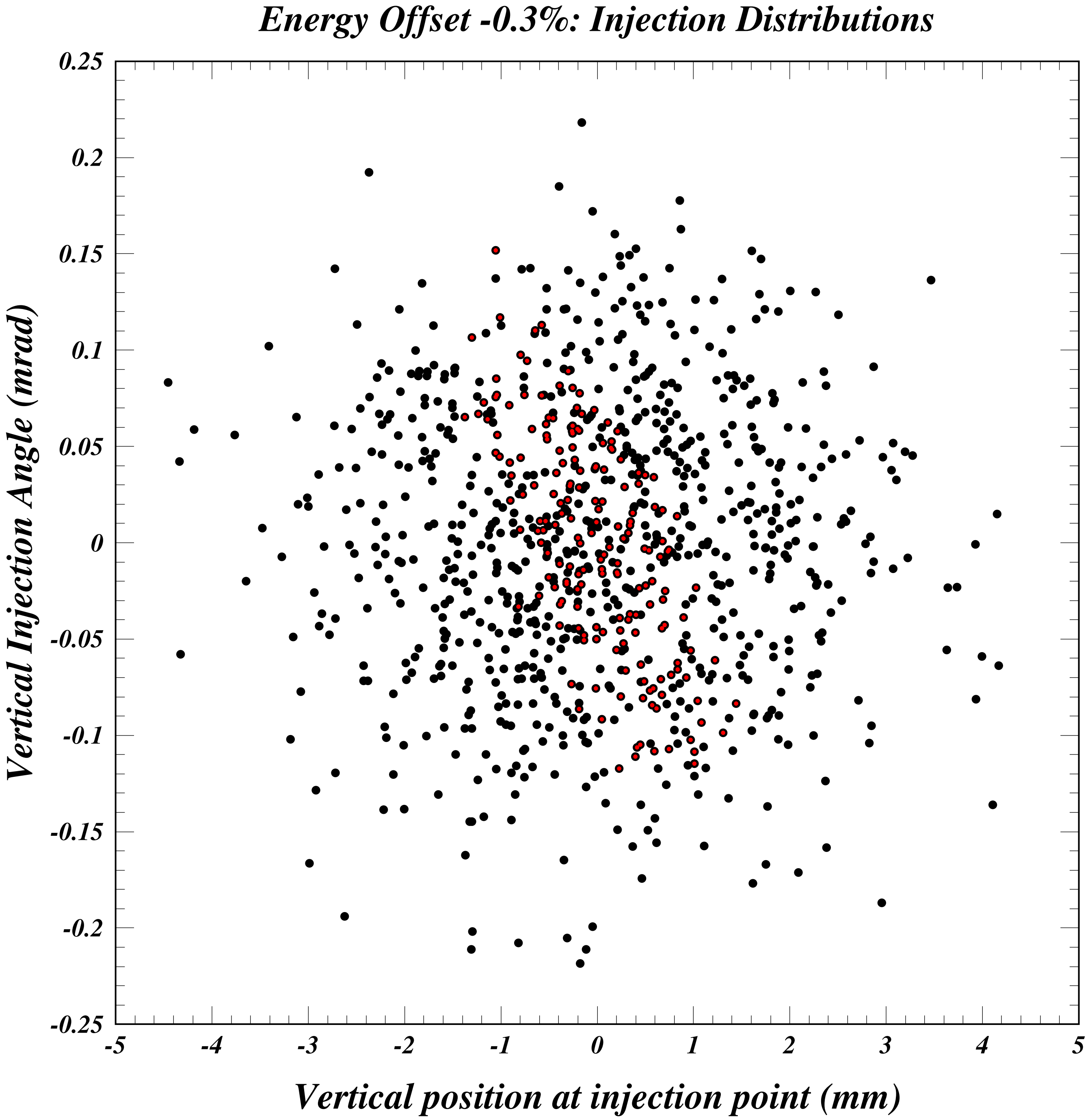
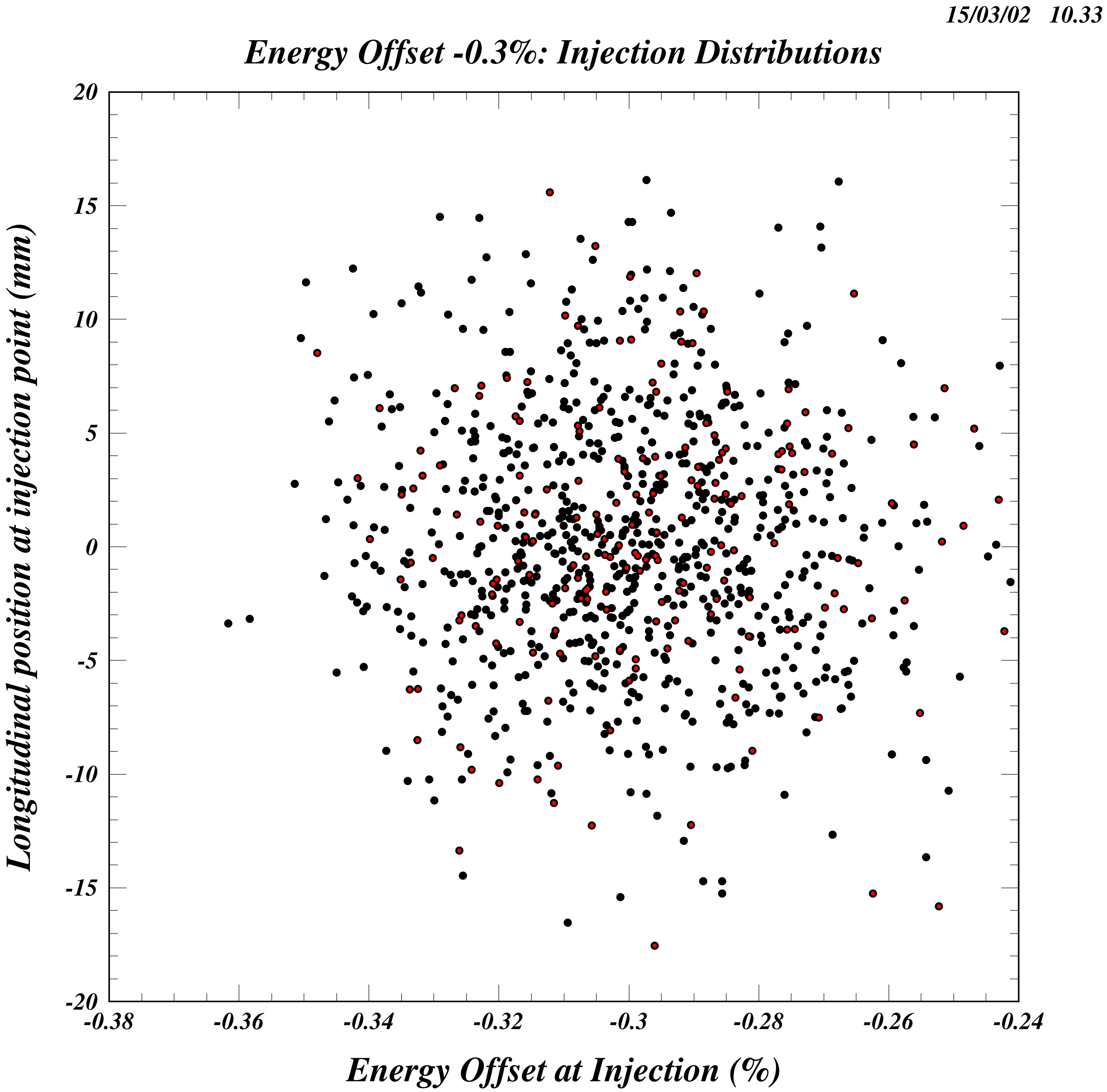
Energy Offset -0.3%: Injection Distributions

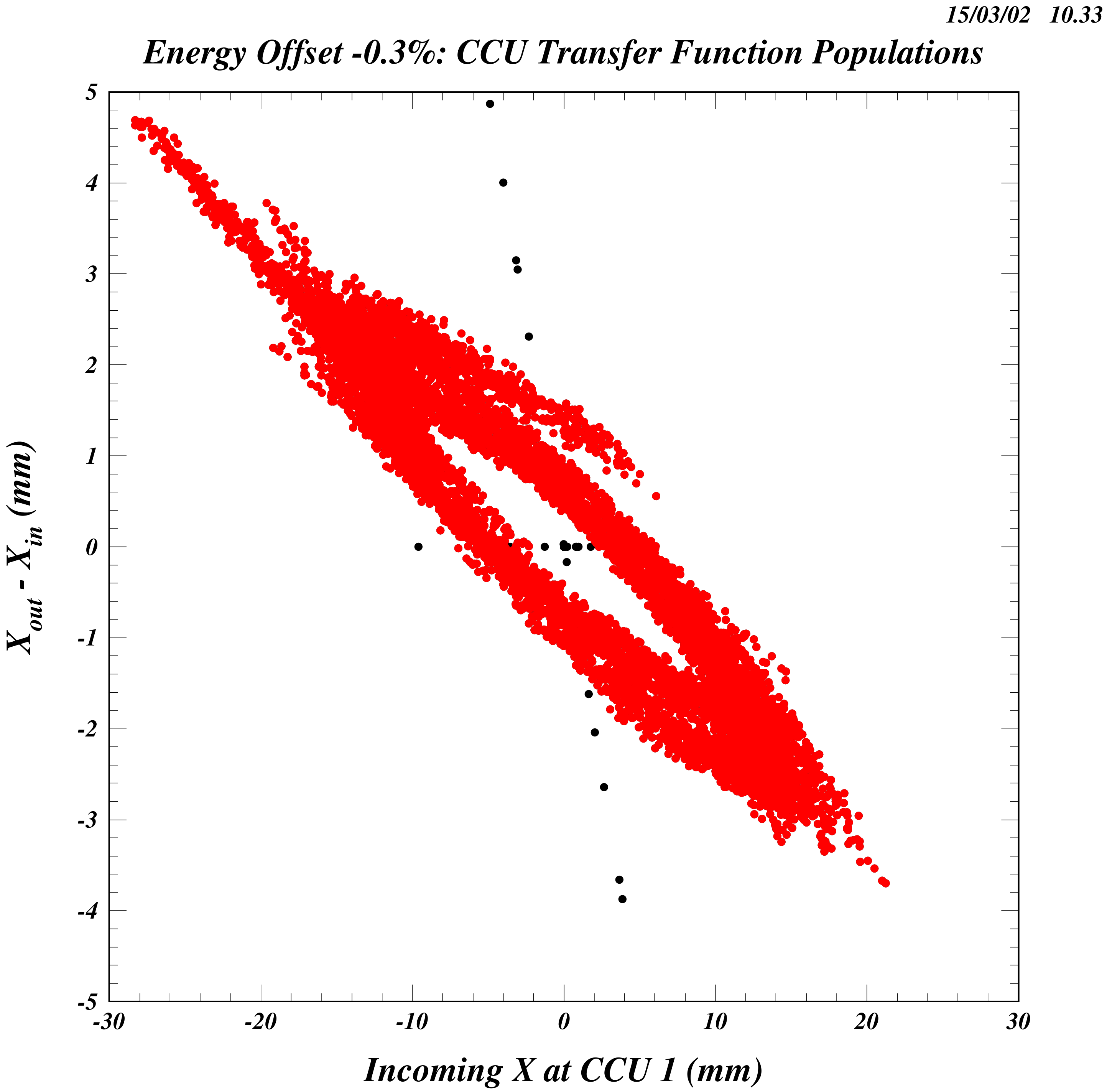



15/03/02 10.33
Energy Offset -0.3%: Injection Distributions
Horizontal Injection Angle (mrad)
3.6
3.5
3.4
3.3
3.2
3.1
3
2.9
2.8
2.7
50
52
54
56
58
60
62
64
66
68
Horizontal position at injection point (mm)

15/03/02 10.33

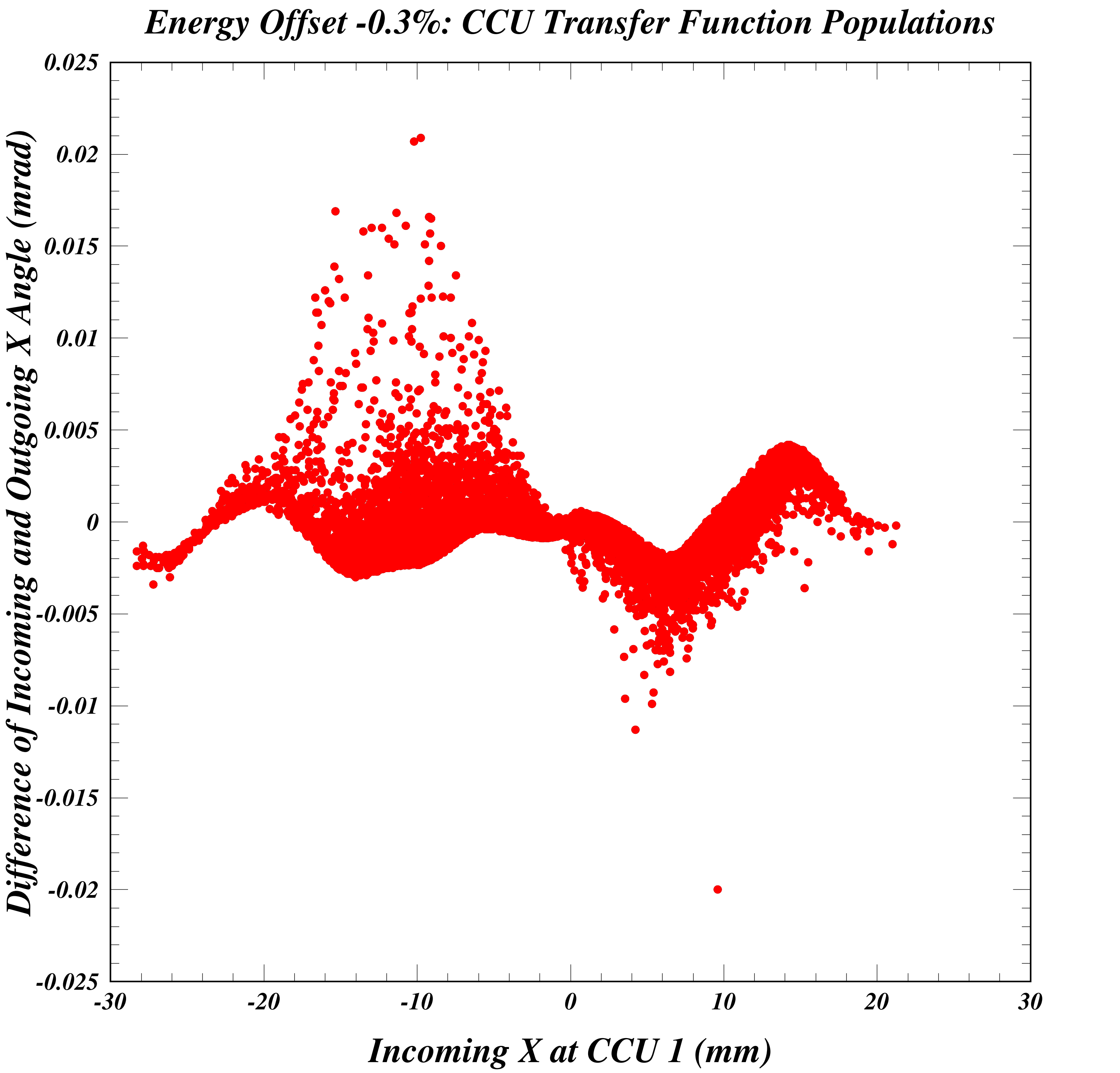

Energy Offset -0.3%: Injection Distributions
Vertical Injection Angle (mrad)
Vertical position at injection point (mm)
0.25
0.2
0.15
0.1
0.05
0
-0.05
-0.1
-0.15
-0.2
-0.25
-5
-4
-3
-2
-1
0
1
2
3
4
5


15/03/02 10.33
Energy Offset -0.3%: Injection Distributions
Longitudinal position at injection point (mm)
Energy Offset at Injection (%)
20
15
10
5
0
-5
-10
-15
-20
-0.38
-0.36
-0.34
-0.32
-0.3
-0.28
-0.26
-0.24



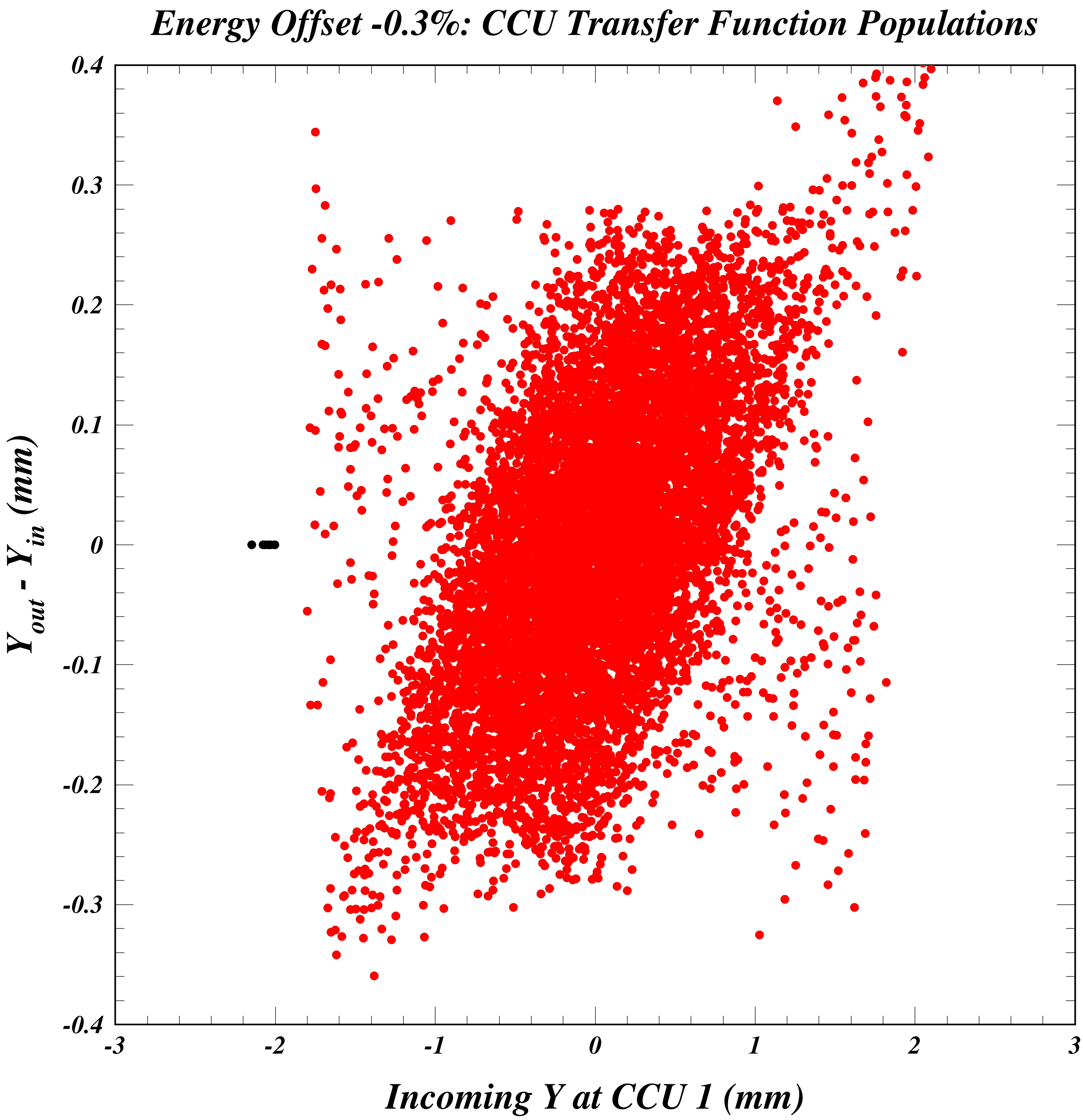
15/03/02 10.33
Energy Offset -0.3%: CCU Transfer Function Populations
X_{out} - X_{in} (mm)
Incoming X at CCU 1 (mm)
5
4
3
2
1
0
-1
-2
-3
-4
-5
-30
-20
-10
0
10
20
30

15/03/02 10.33

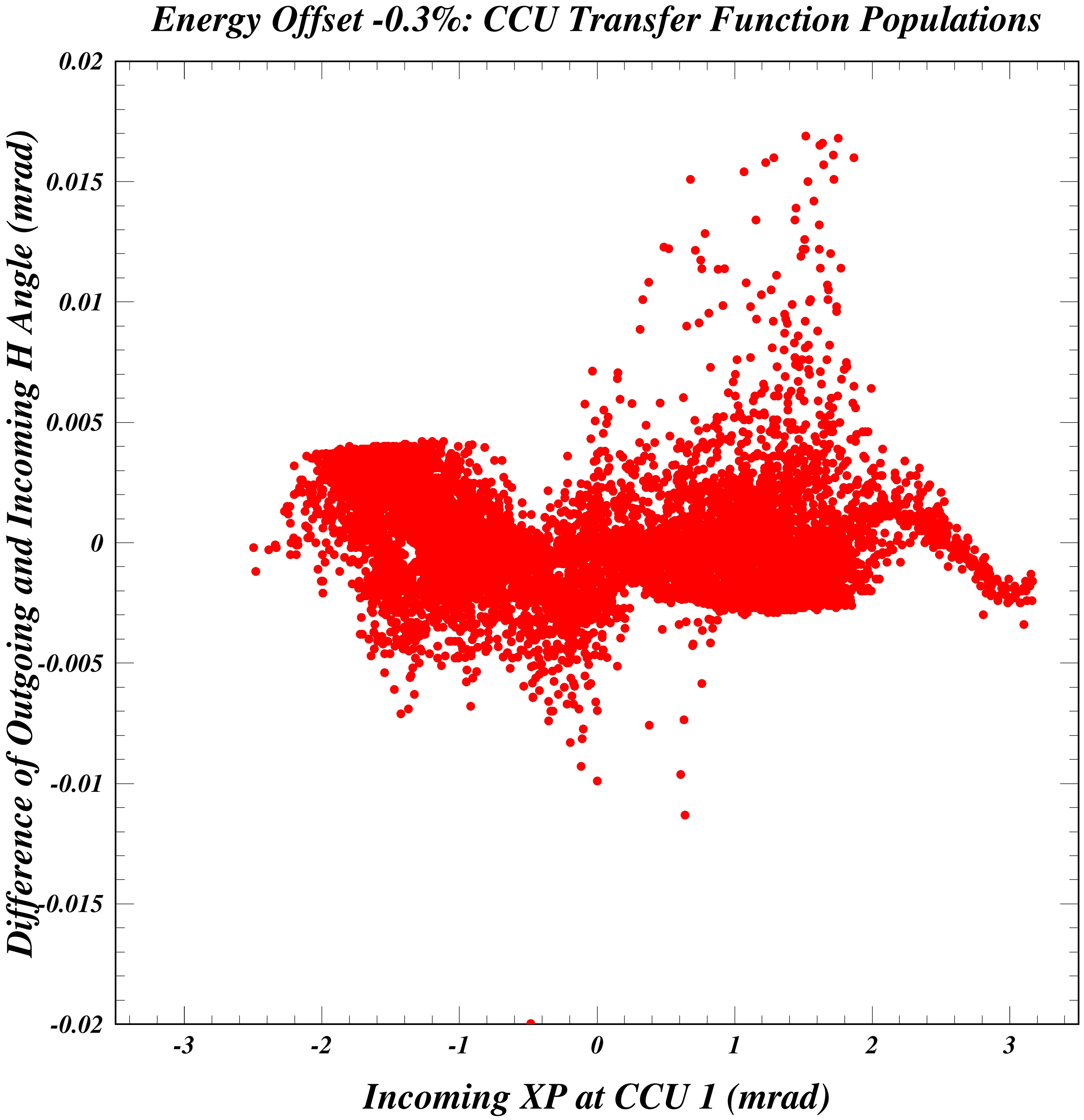


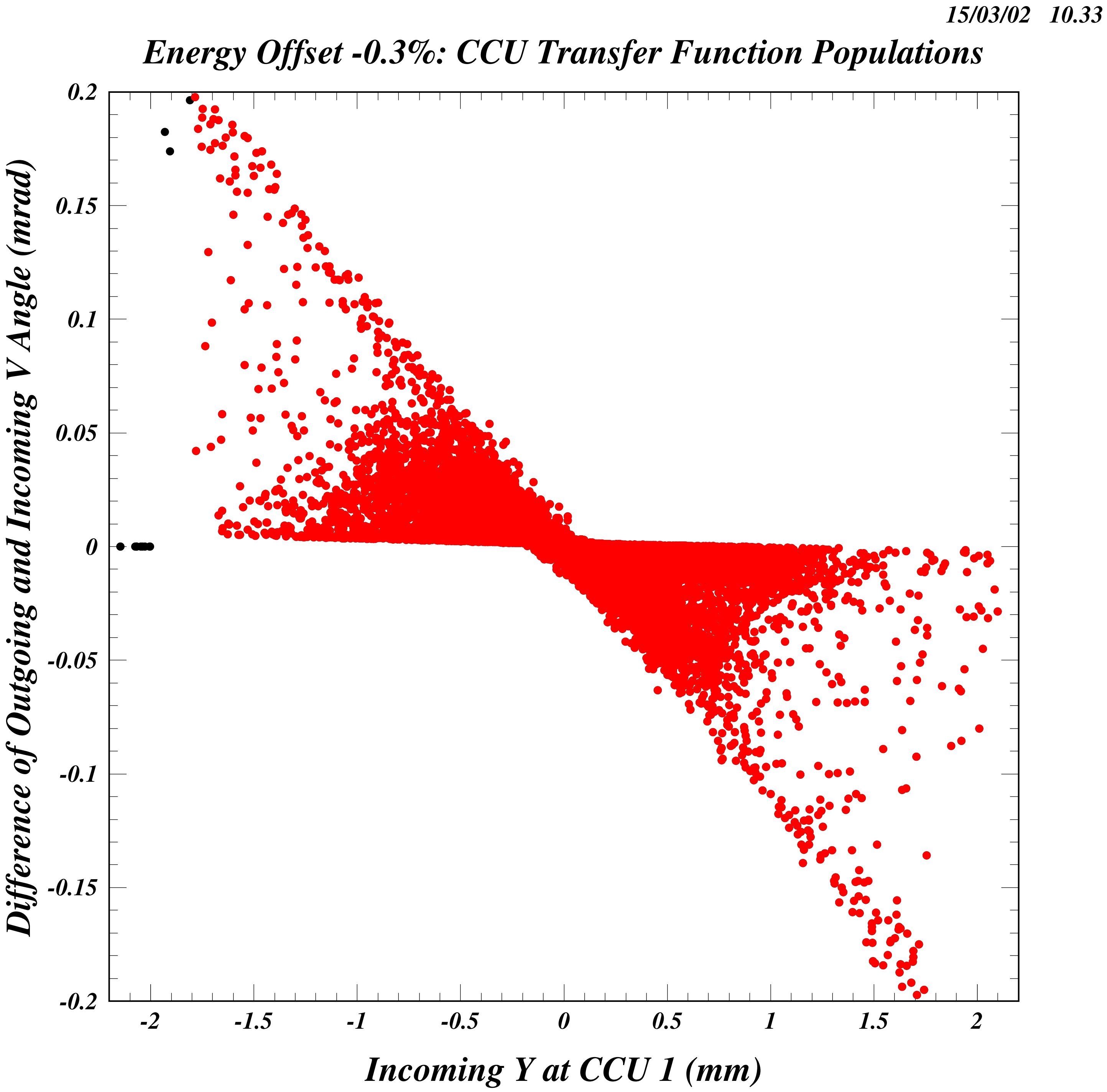
Energy Offset -0.3%: CCU Transfer Function Populations
Difference of Incoming and Outgoing X Angle (mrad)
Incoming X at CCU 1 (mm)
0.025
0.02
0.015
0.01
0.005
0
-0.005
-0.01
-0.015
-0.02
-0.025
-30
-20
-10
0
10
20
30

15/03/02 10.33


Energy Offset -0.3%: CCU Transfer Function Populations
0.4
0.3
0.2
0.1
0
-0.1
-0.2
-0.3
-0.4
Y_{out} - Y_{in} (mm)
-3
-2
-1
0
1
2
3
Incoming Y at CCU 1 (mm)

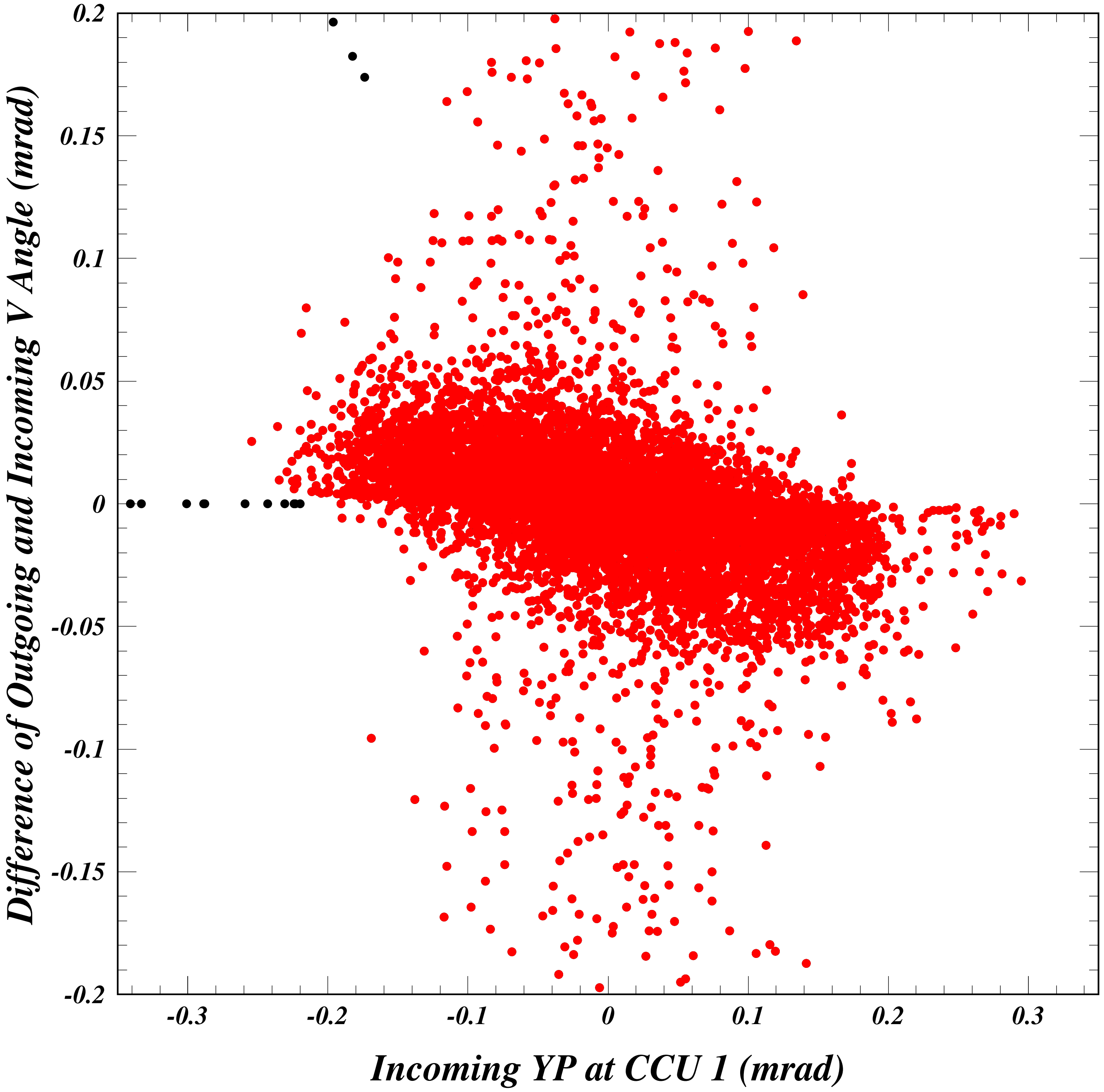
15/03/02 10.33


Energy Offset -0.3%: CCU Transfer Function Populations
0.02
0.015
0.01
0.005
0
-0.005
-0.01
-0.015
-0.02
Difference of Outgoing and Incoming H Angle (mrad)
-3
-2
-1
0
1
2
3
Incoming XP at CCU 1 (mrad)

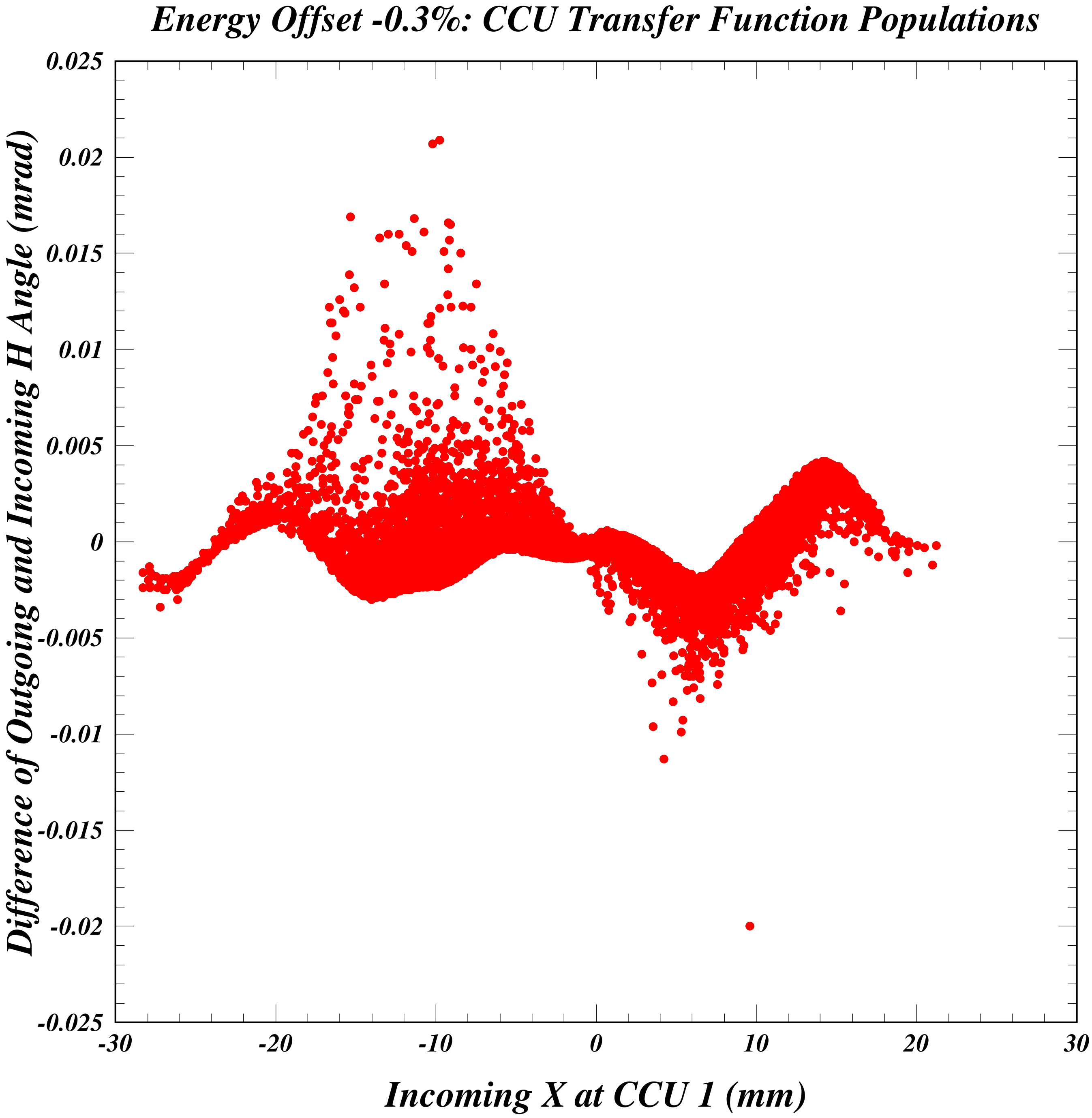

15/03/02 10.33
Energy Offset -0.3%: CCU Transfer Function Populations
Difference of Outgoing and Incoming V Angle (mrad)
0.2
0.15
0.1
0.05
0
-0.05
-0.1
-0.15
-0.2
-2
-1.5
-1
-0.5
0
0.5
1
1.5
2
Incoming Y at CCU 1 (mm)

15/03/02 10.33

Energy Offset -0.3%: CCU Transfer Function Populations

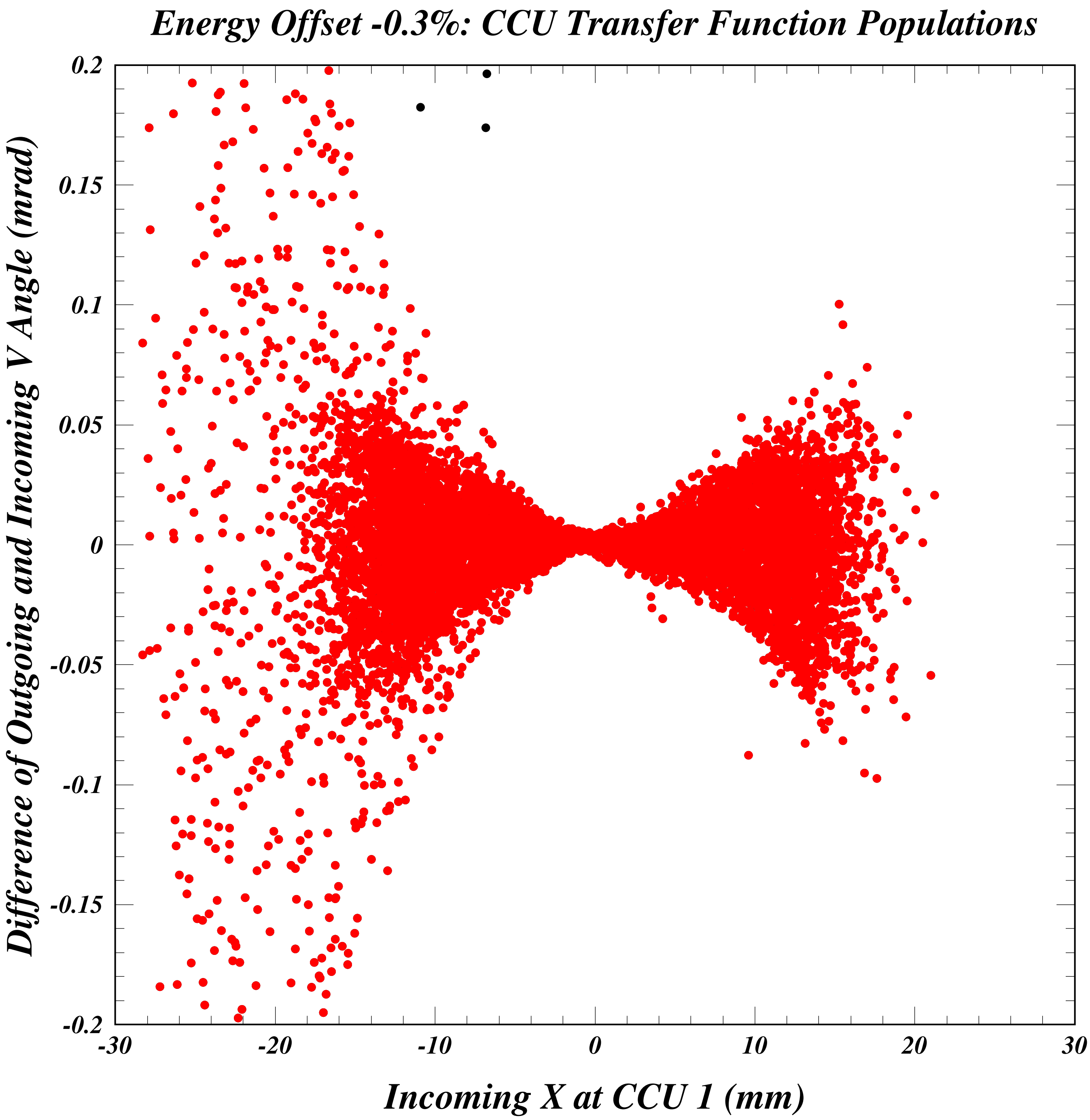


15/03/02 10.33

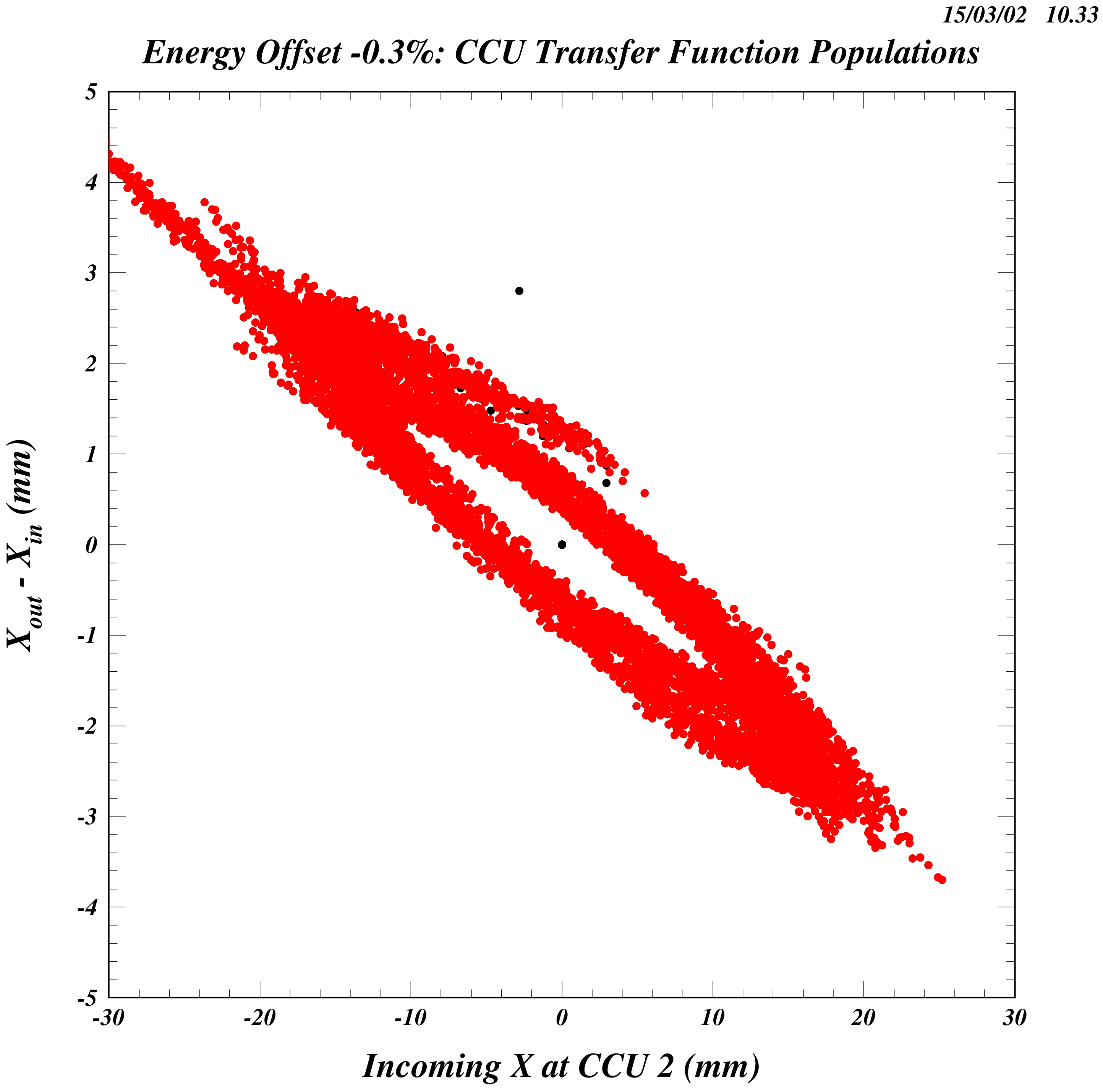


Energy Offset -0.3%: CCU Transfer Function Populations
0.025
0.02
0.015
0.01
0.005
0
-0.005
-0.01
-0.015
-0.02
-0.025
-30
-20
-10
0
10
20
30
Difference of Outgoing and Incoming H Angle (mrad)
Incoming X at CCU 1 (mm)

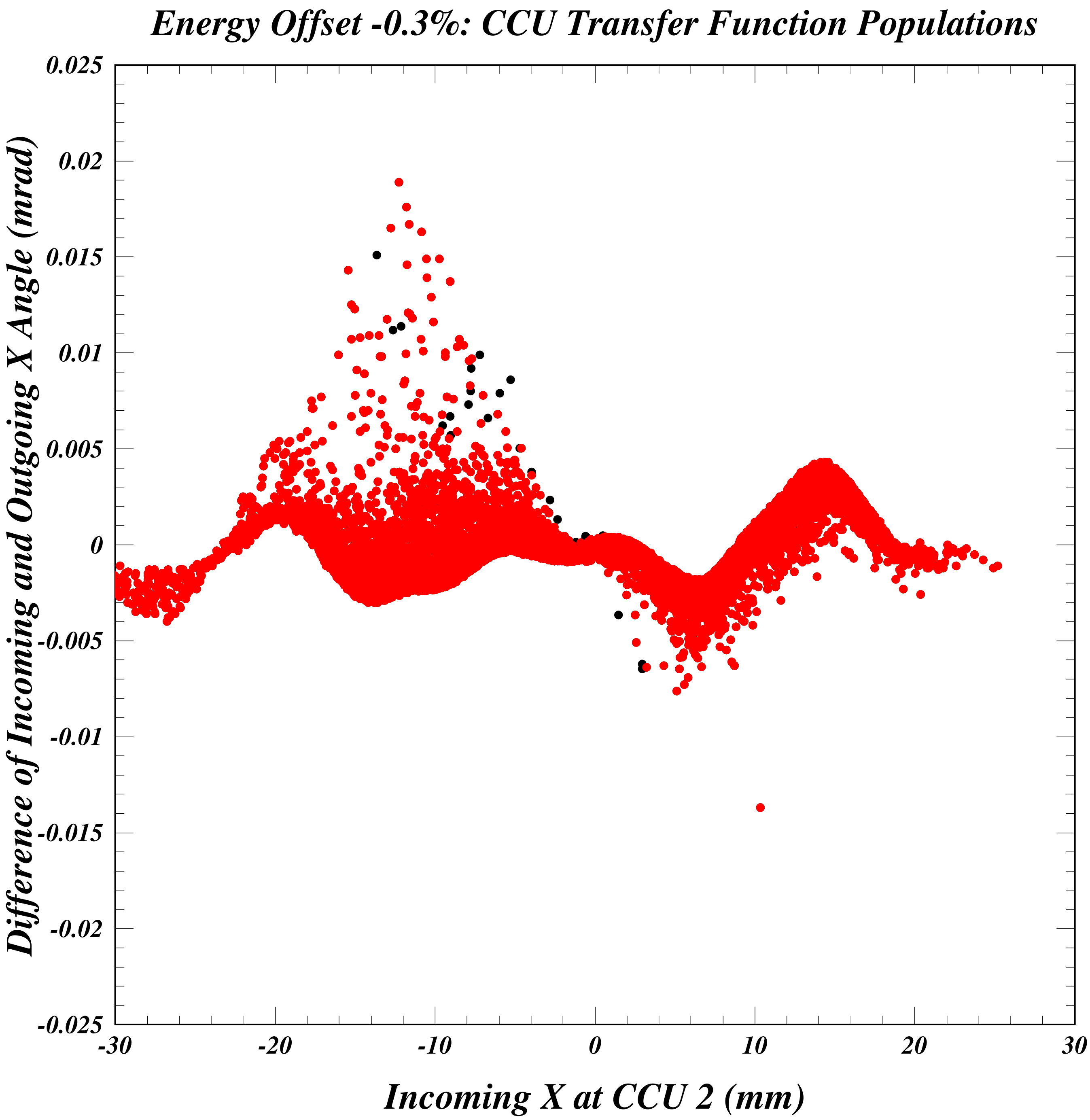
15/03/02 10.33



Energy Offset -0.3%: CCU Transfer Function Populations
Difference of Outgoing and Incoming V Angle (mrad)
0.2
0.15
0.1
0.05
0
-0.05
-0.1
-0.15
-0.2
-30
-20
-10
0
10
20
30
Incoming X at CCU 1 (mm)

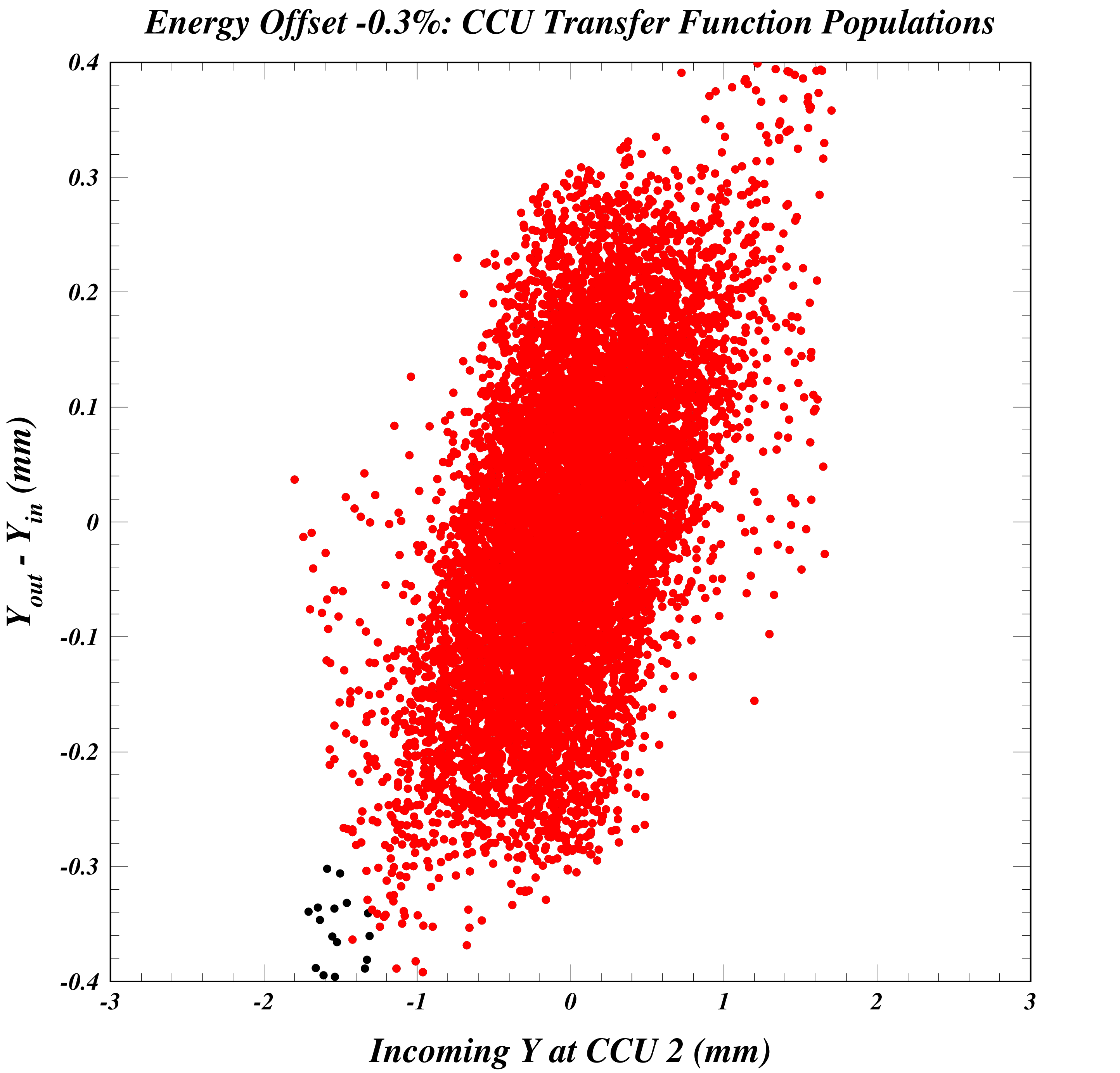


15/03/02 10.33
Energy Offset -0.3%: CCU Transfer Function Populations
5
4
3
2
1
0
-1
-2
-3
-4
-5
-30
-20
-10
0
10
20
30
X_{out} - X_{in} (mm)
Incoming X at CCU 2 (mm)

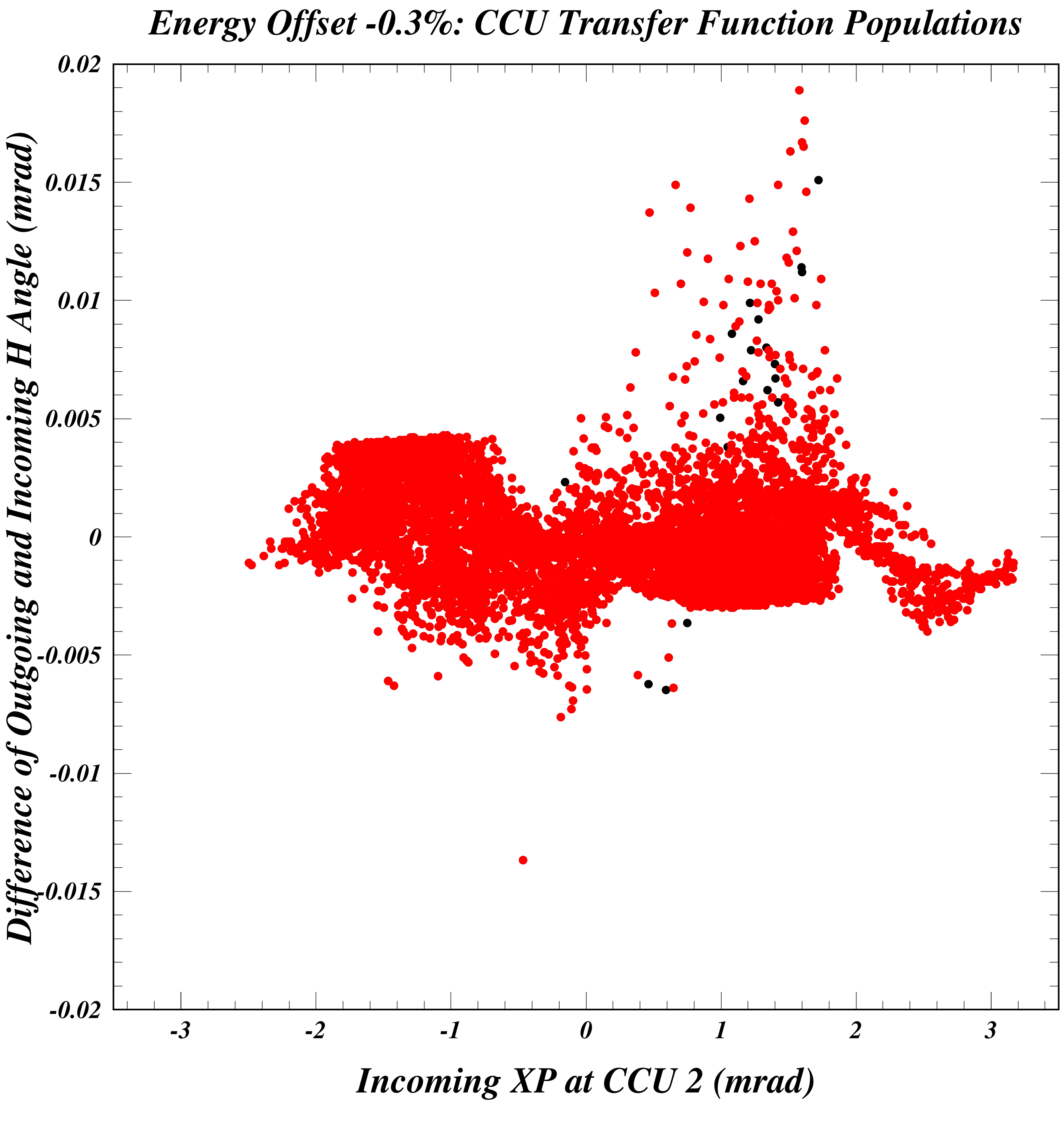


Energy Offset -0.3%: CCU Transfer Function Populations
Difference of Incoming and Outgoing X Angle (mrad)
0.025
0.02
0.015
0.01
0.005
0
-0.005
-0.01
-0.015
-0.02
-0.025
-30
-20
-10
0
10
20
30
Incoming X at CCU 2 (mm)

15/03/02 10.33



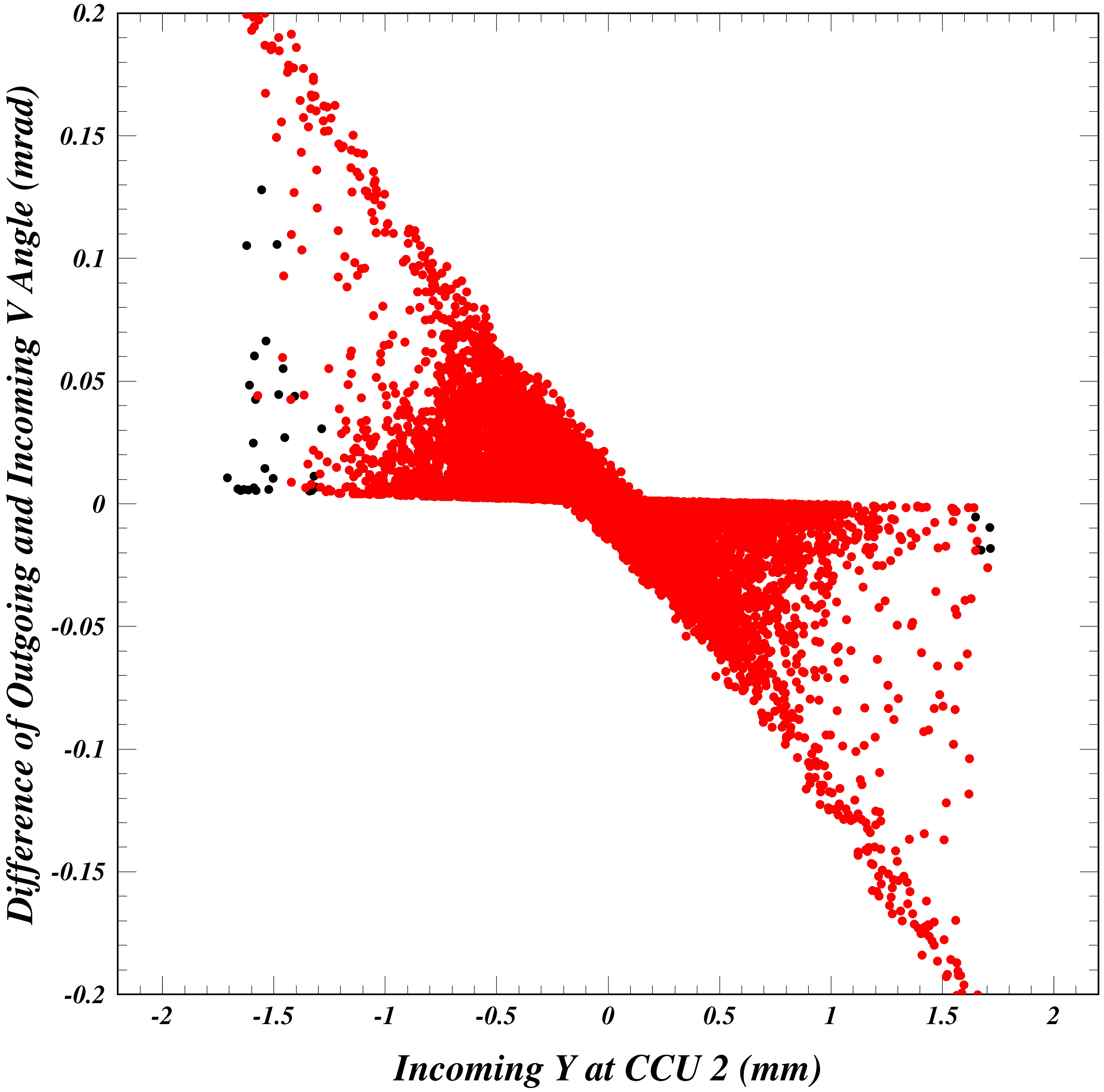
Energy Offset -0.3%: CCU Transfer Function Populations
0.4
0.3
0.2
0.1
0
-0.1
-0.2
-0.3
-0.4
-3
-2
-1
0
1
2
3
$Y_{out} - Y_{in}$ (mm)
Incoming Y at CCU 2 (mm)



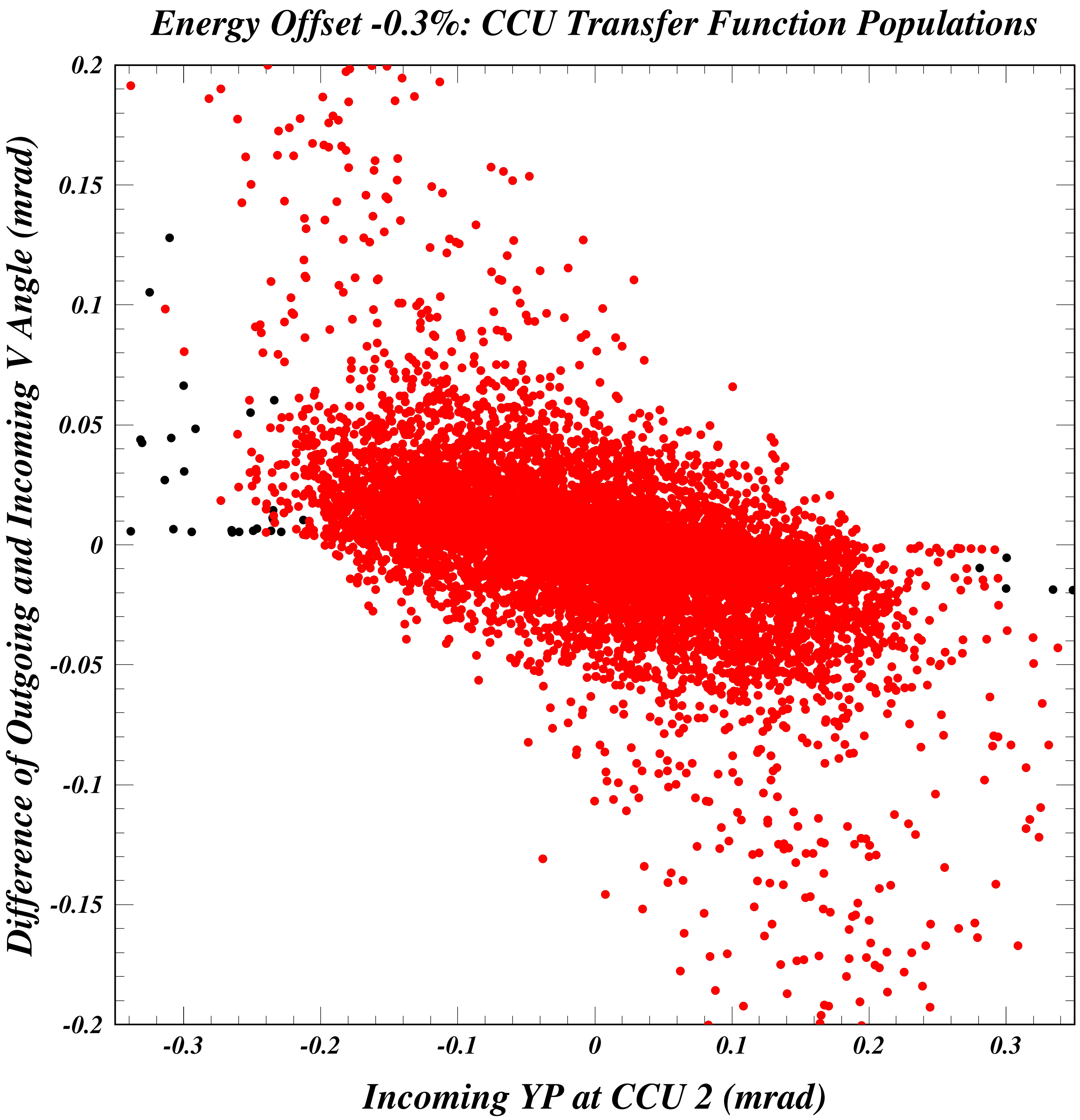
Energy Offset -0.3%: CCU Transfer Function Populations
0.02
0.015
0.01
0.005
0
-0.005
-0.01
-0.015
-0.02
Difference of Outgoing and Incoming H Angle (mrad)
-3
-2
-1
0
1
2
3
Incoming XP at CCU 2 (mrad)

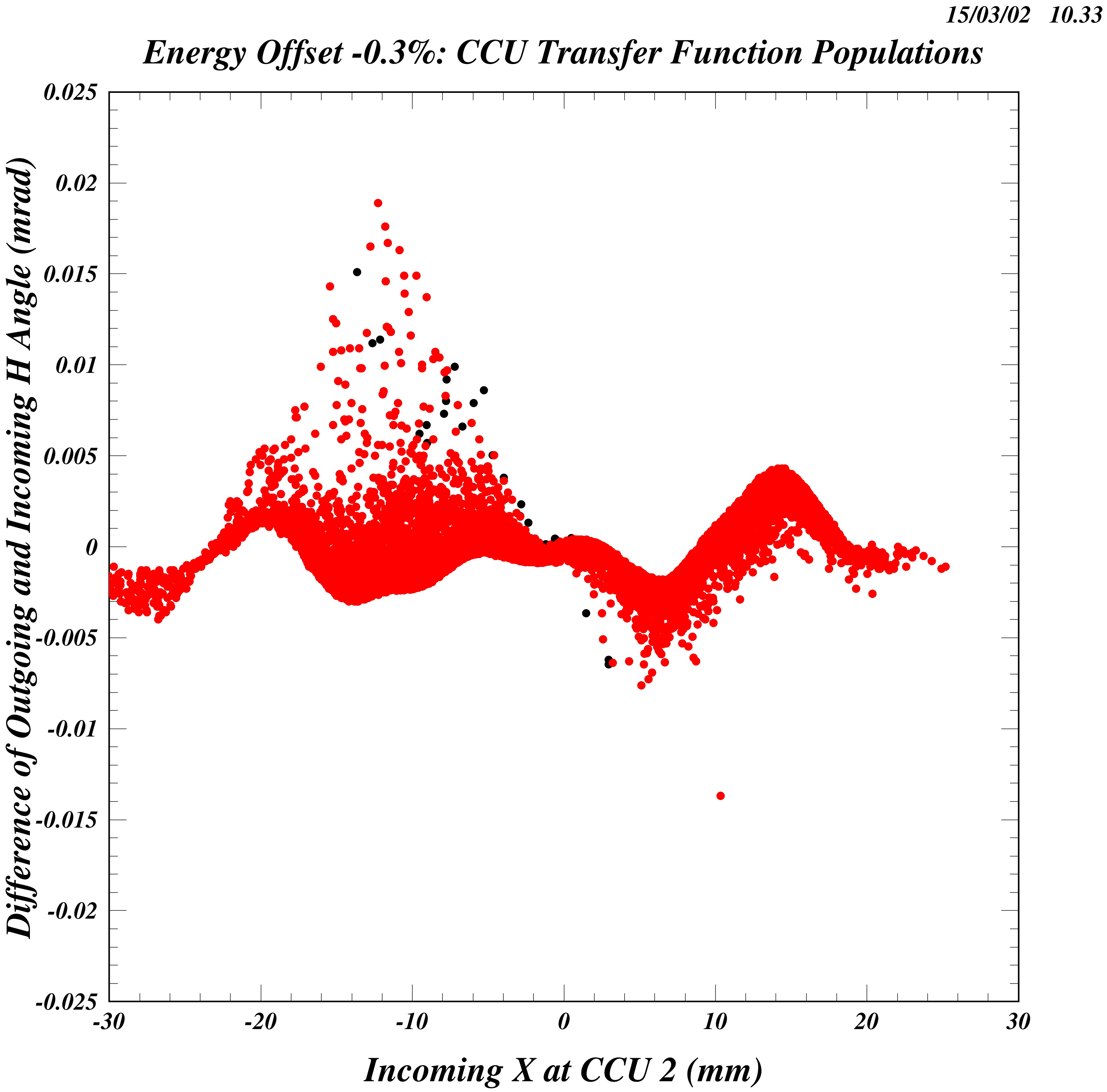
15/03/02 10.33

Energy Offset -0.3%: CCU Transfer Function Populations



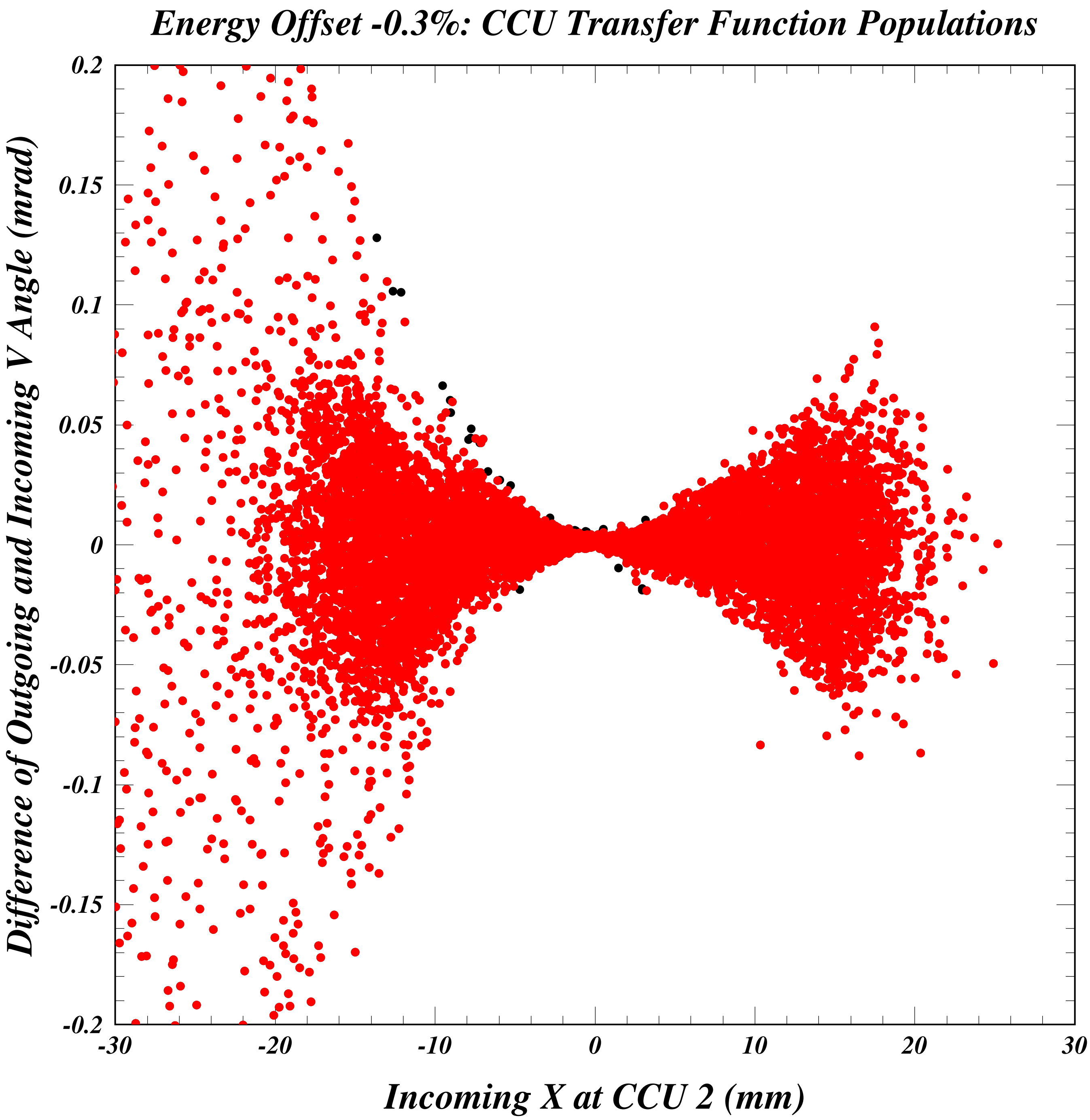
15/03/02 10.33


Energy Offset -0.3%: CCU Transfer Function Populations
0.2
0.15
0.1
0.05
0
-0.05
-0.1
-0.15
-0.2
Difference of Outgoing and Incoming V Angle (mrad)
-0.3
-0.2
-0.1
0
0.1
0.2
0.3
Incoming YP at CCU 2 (mrad)



15/03/02 10.33
Energy Offset -0.3%: CCU Transfer Function Populations
Difference of Outgoing and Incoming H Angle (mrad)
Incoming X at CCU 2 (mm)
0.025
0.02
0.015
0.01
0.005
0
-0.005
-0.01
-0.015
-0.02
-0.025
-30
-20
-10
0
10
20
30

15/03/02 10.33



Energy Offset -0.3%: CCU Transfer Function Populations
Difference of Outgoing and Incoming V Angle (mrad)
Incoming X at CCU 2 (mm)
0.2
0.15
0.1
0.05
0
-0.05
-0.1
-0.15
-0.2
-30
-20
-10
0
10
20
30