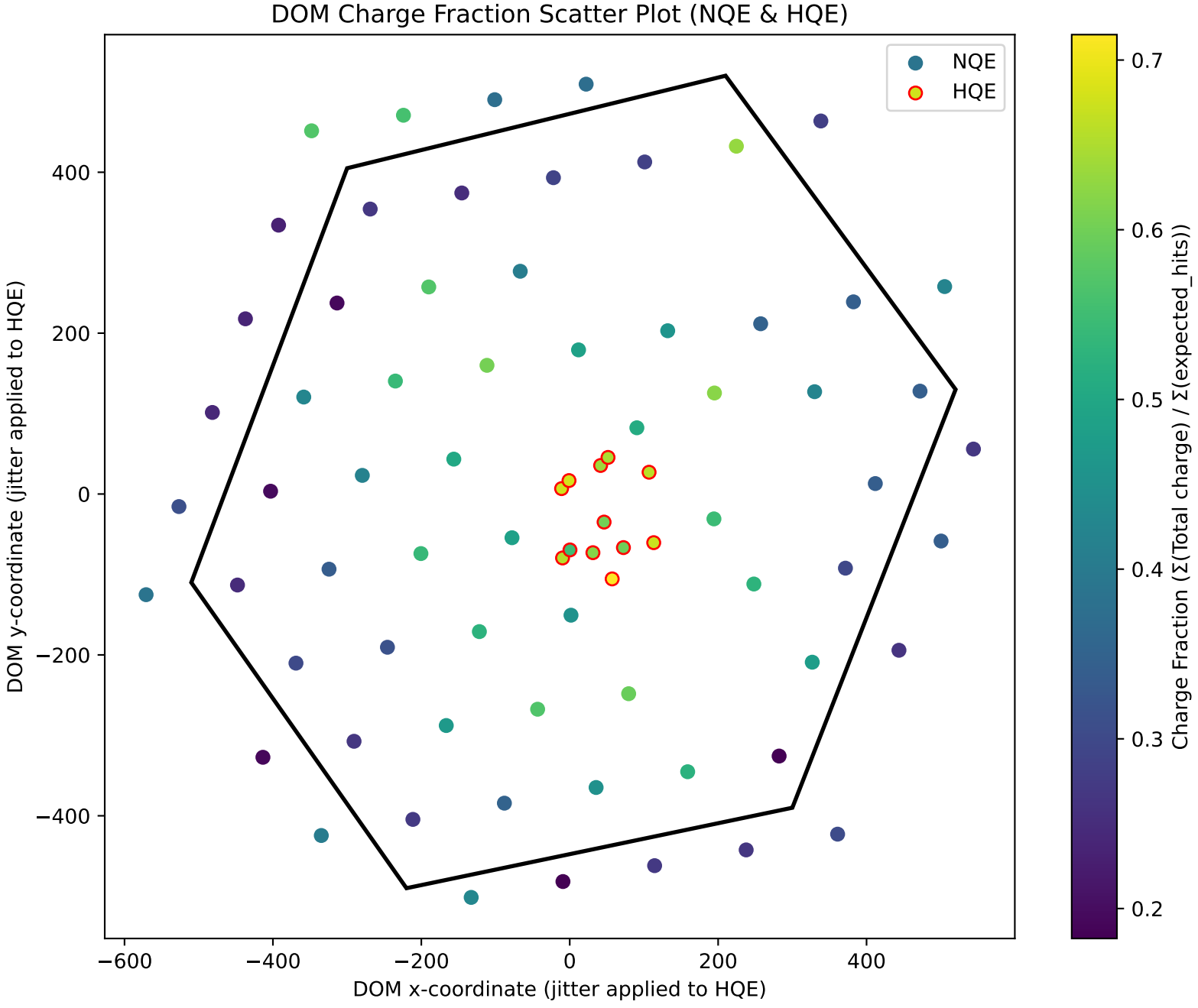
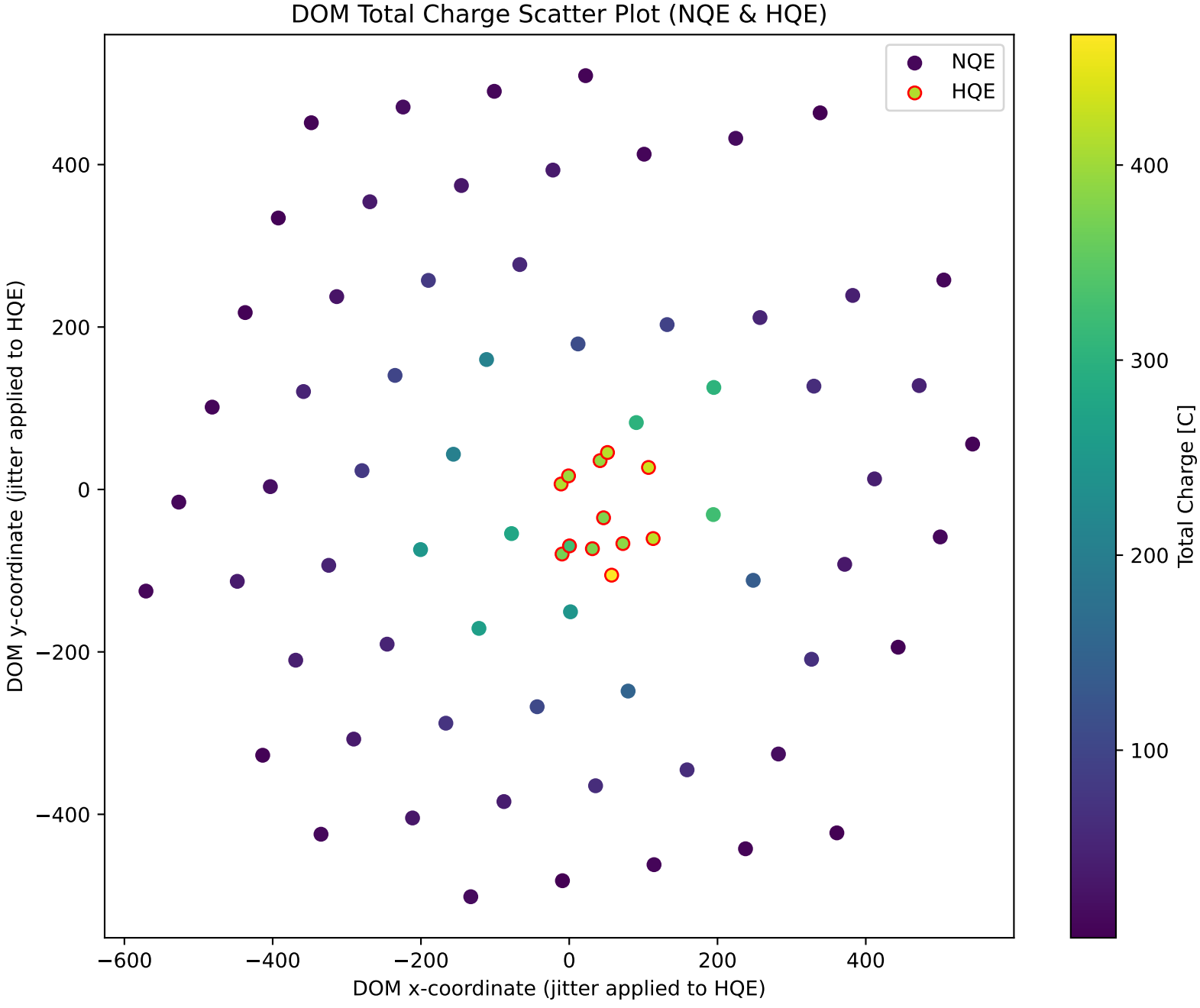
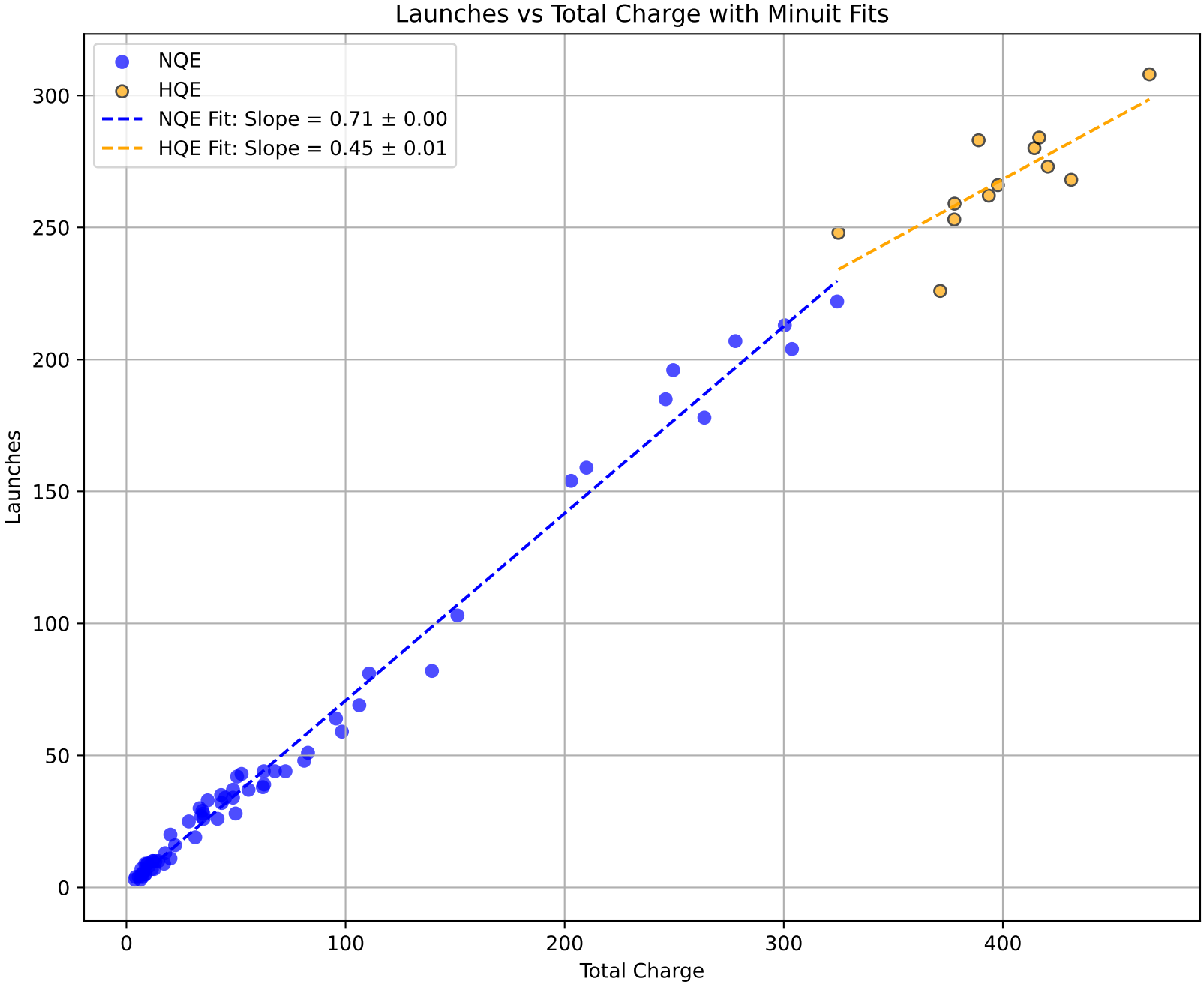
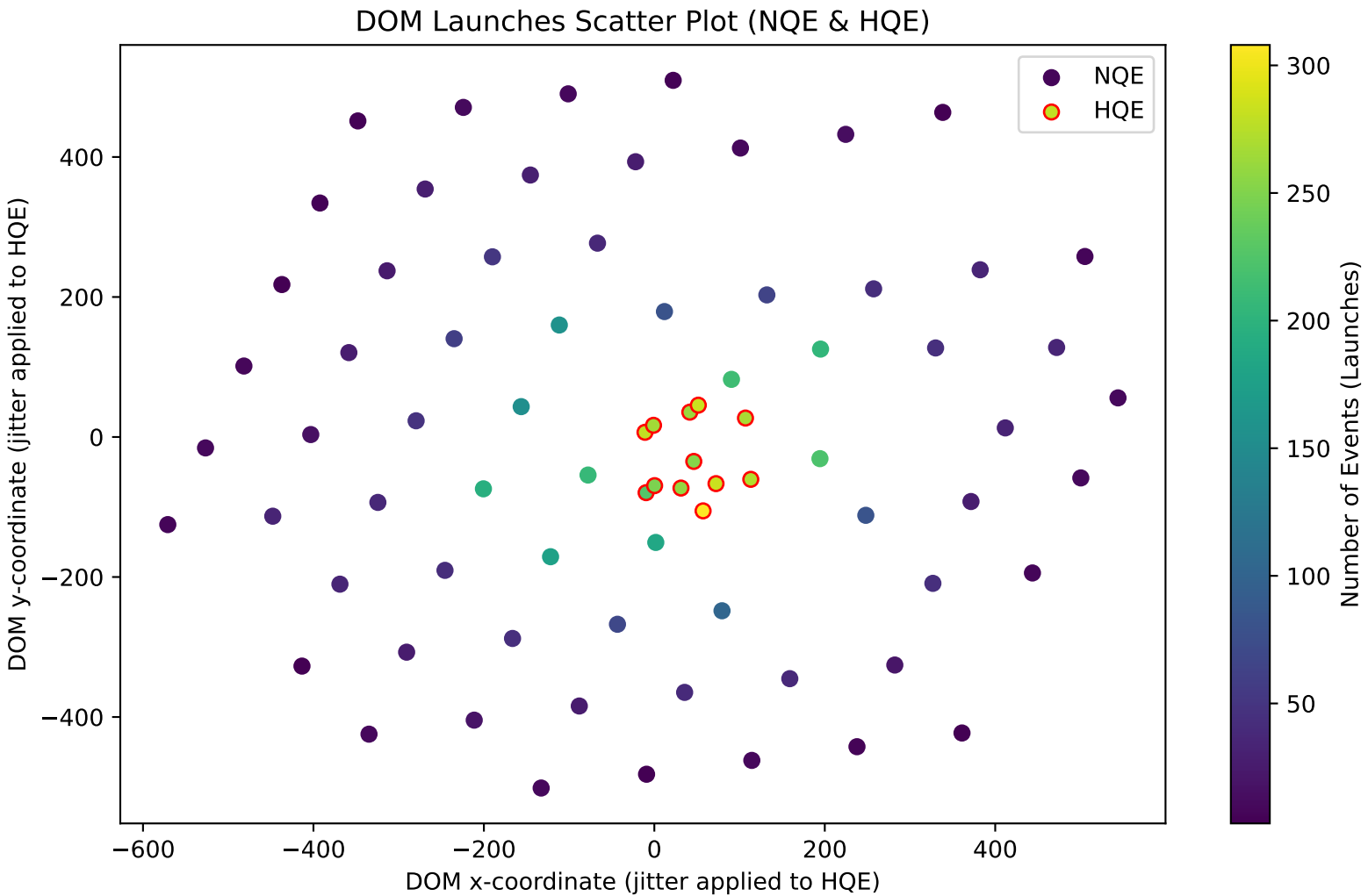
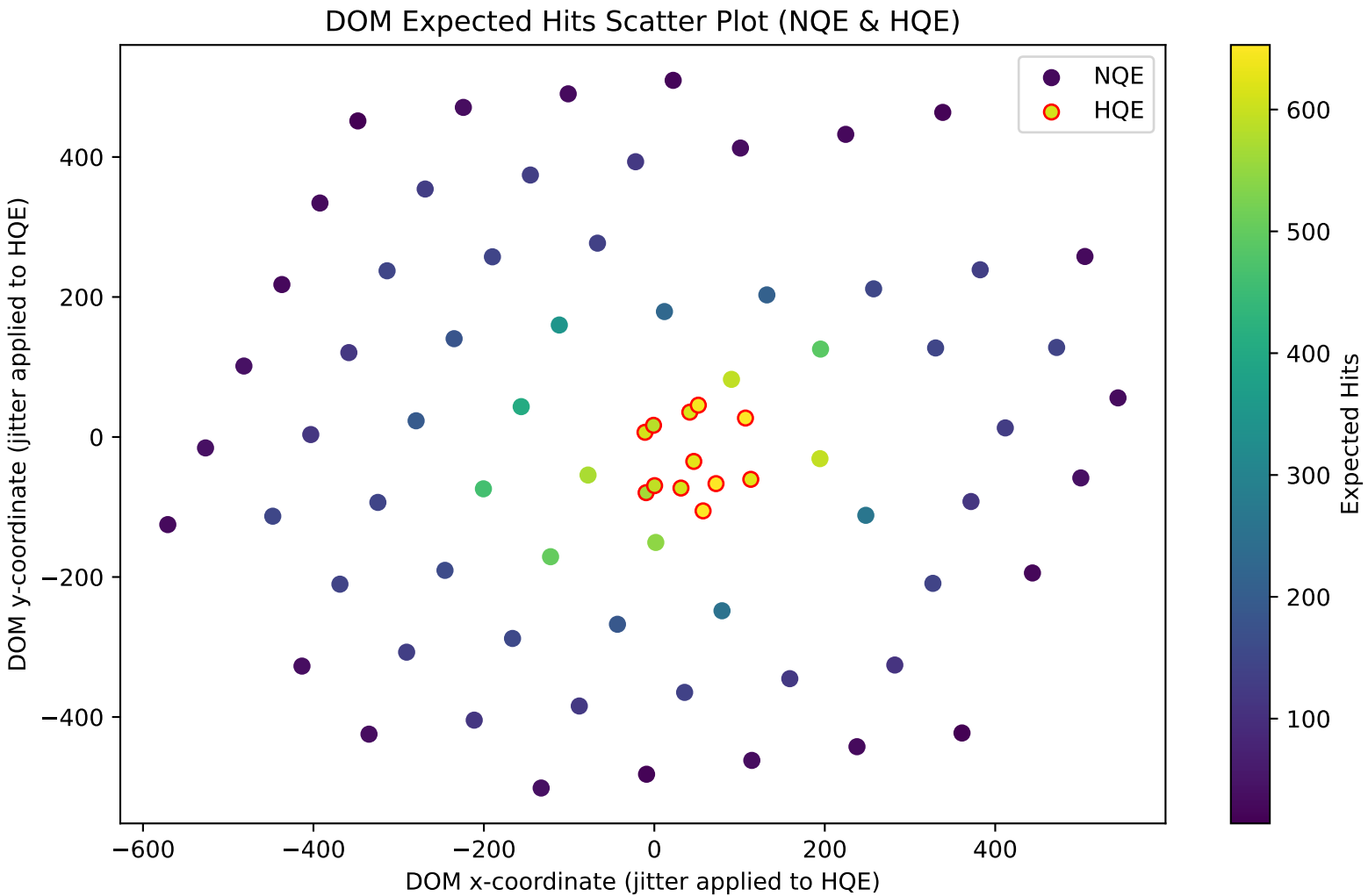
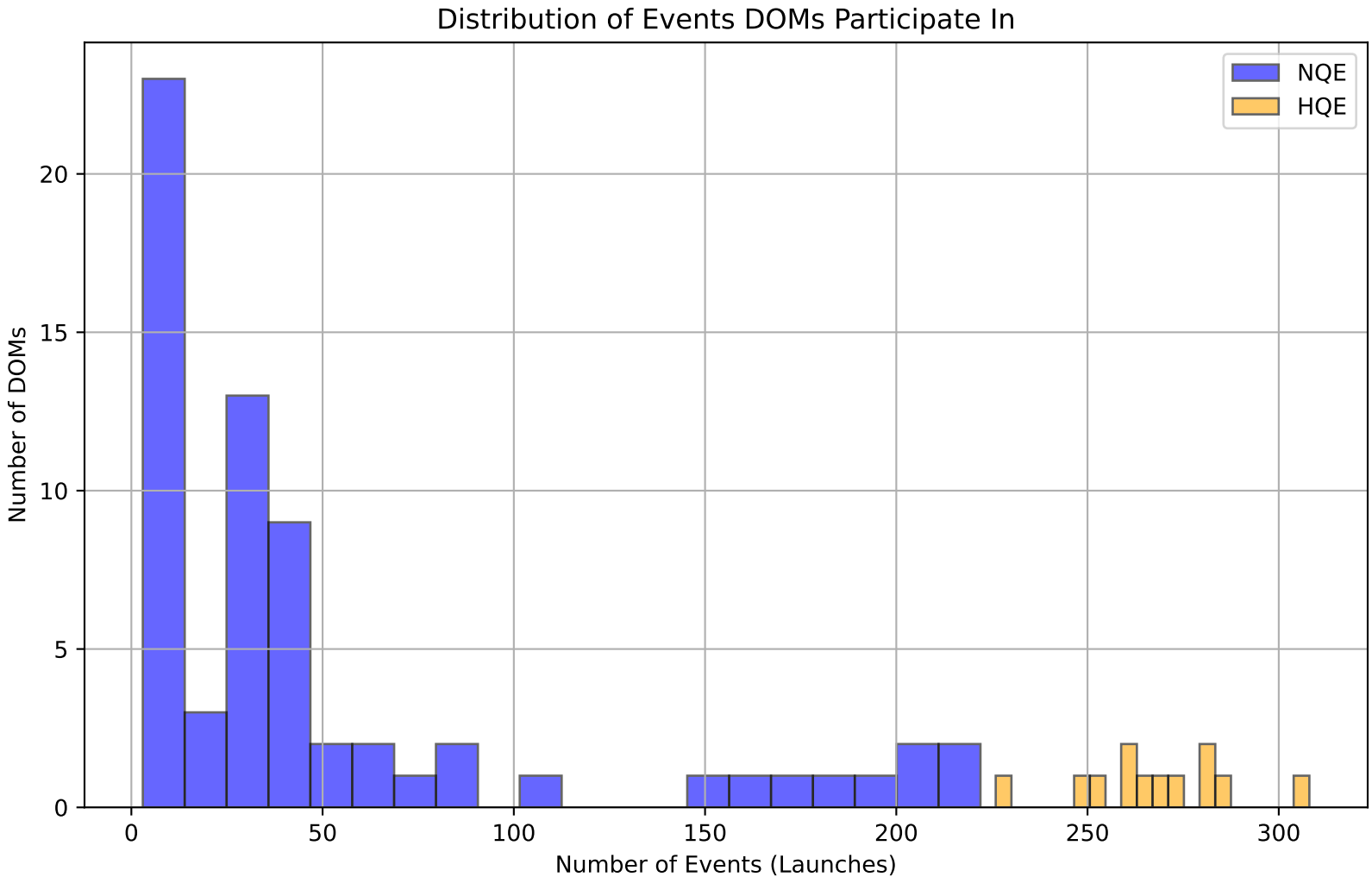

DOM Charge Fraction Scatter Plot (NQE & HQE)
NQE
HQE
DOM y-coordinate (jitter applied to HQE)
DOM x-coordinate (jitter applied to HQE)
Charge Fraction (Σ(Total charge) / Σ(expected_hits))
400
200
0
−200
−400
−600
0.7
0.6
0.5
0.4
0.3
0.2

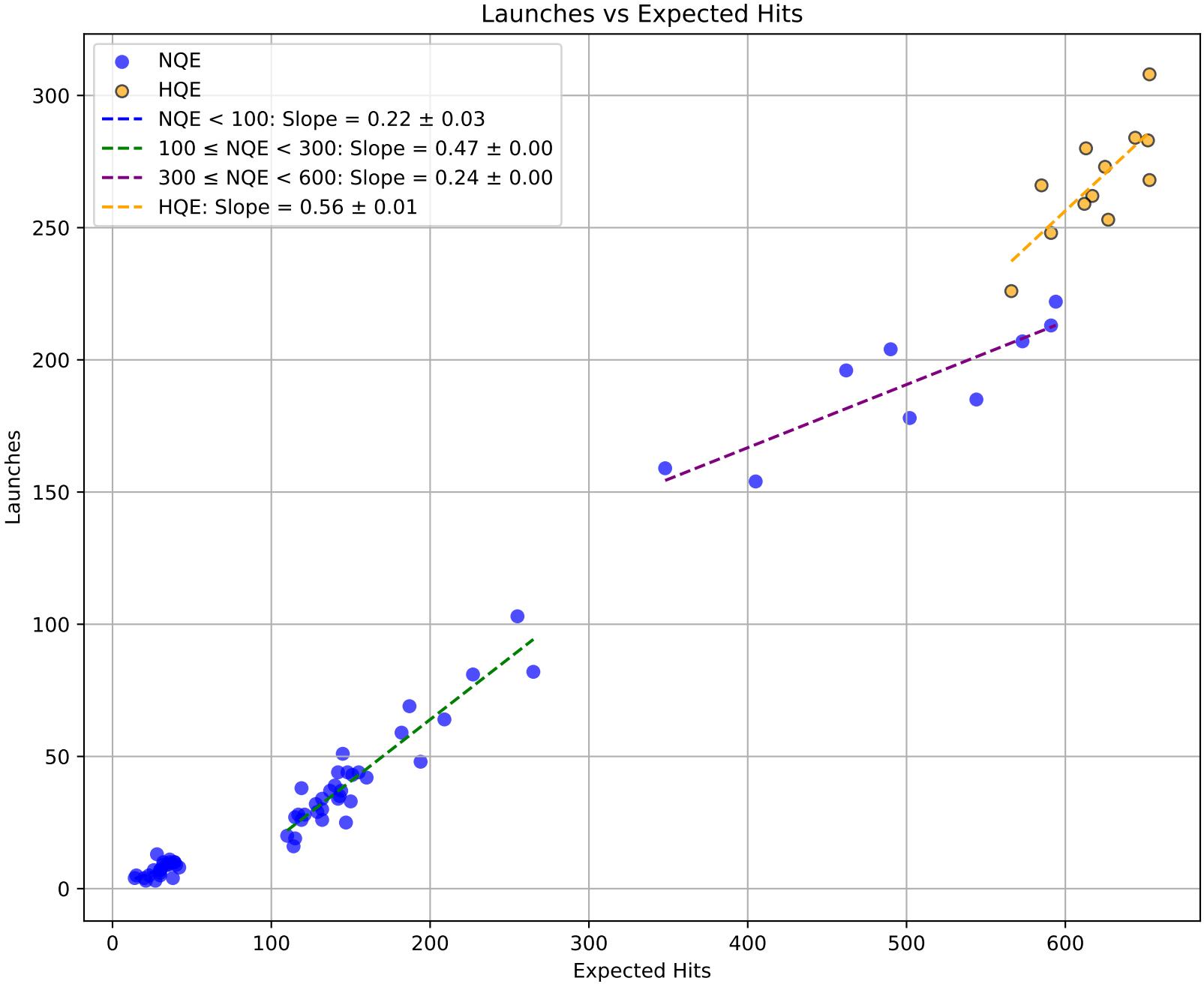

DOM Total Charge Scatter Plot (NQE & HQE)
NQE
HQE
DOM y-coordinate (jitter applied to HQE)
DOM x-coordinate (jitter applied to HQE)
Total Charge [C]
400
200
0
−200
−400
−600
−400
−200
0
200
400
100
200
300
400

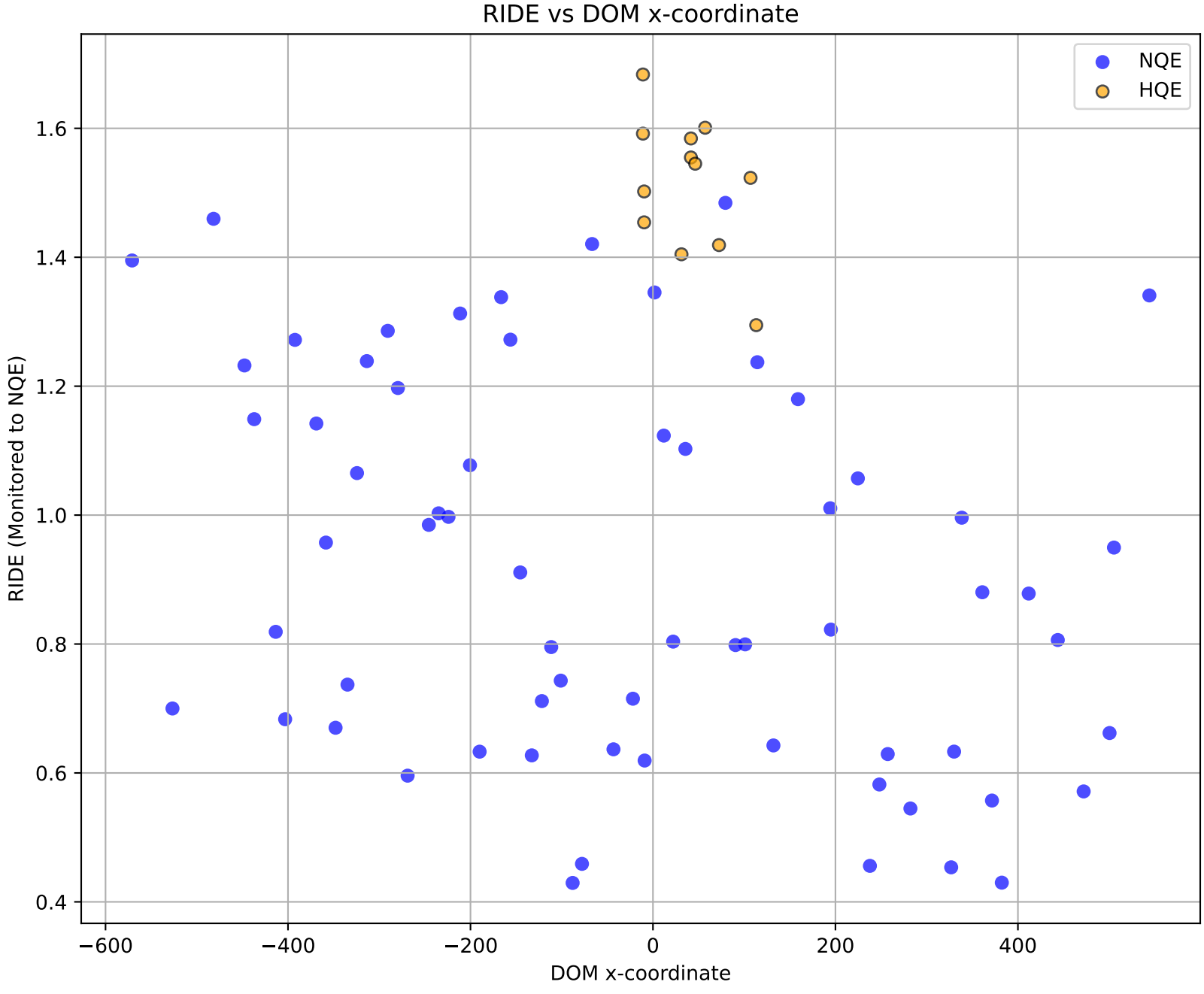

Launches vs Total Charge with Minuit Fits
NQE
HQE
NQE Fit: Slope = 0.71 ± 0.00
HQE Fit: Slope = 0.45 ± 0.01
Launches
Total Charge
0
50
100
150
200
250
300
0
100
200
300
400

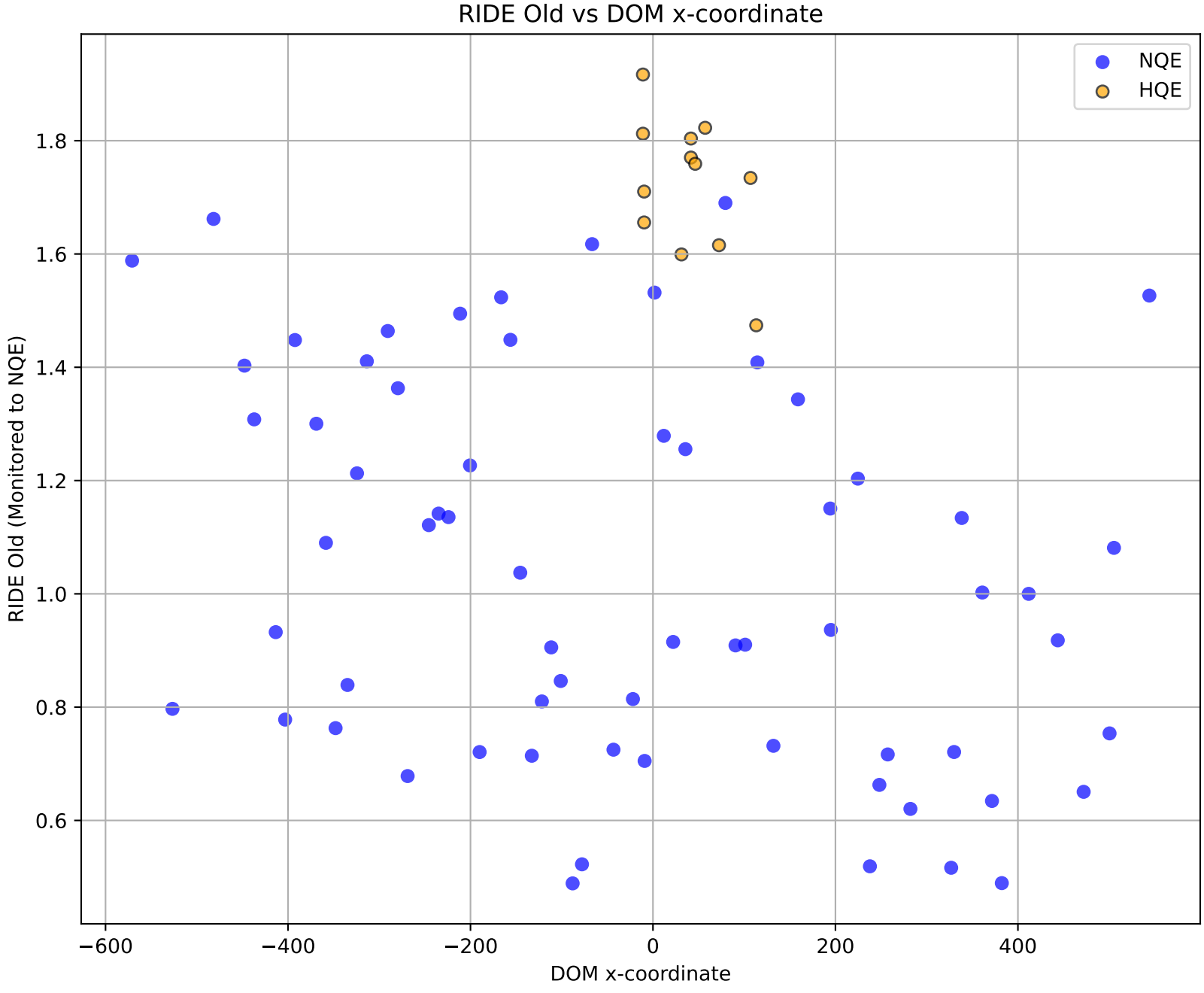

DOM Launches Scatter Plot (NQE & HQE)
NQE
HQE
DOM y-coordinate (jitter applied to HQE)
DOM x-coordinate (jitter applied to HQE)
Number of Events (Launches)
400
200
0
−200
−400
−600
−400
−200
0
200
400
300
250
200
150
100
50

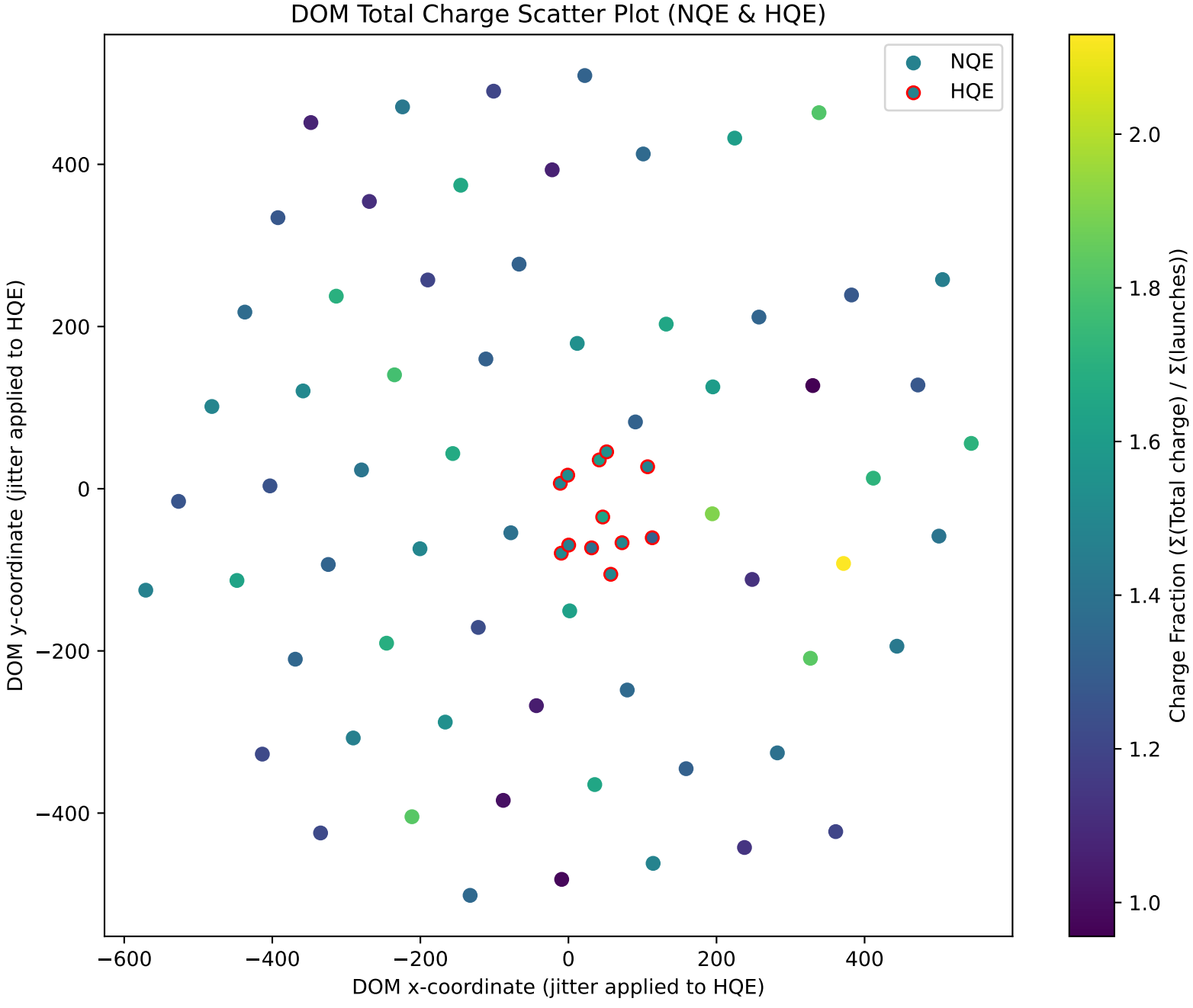

DOM Expected Hits Scatter Plot (NQE & HQE)
NQE
HQE
DOM y-coordinate (jitter applied to HQE)
DOM x-coordinate (jitter applied to HQE)
Expected Hits
400
200
0
−200
−400
−600
−400
−200
0
200
400
600
500
400
300
200
100

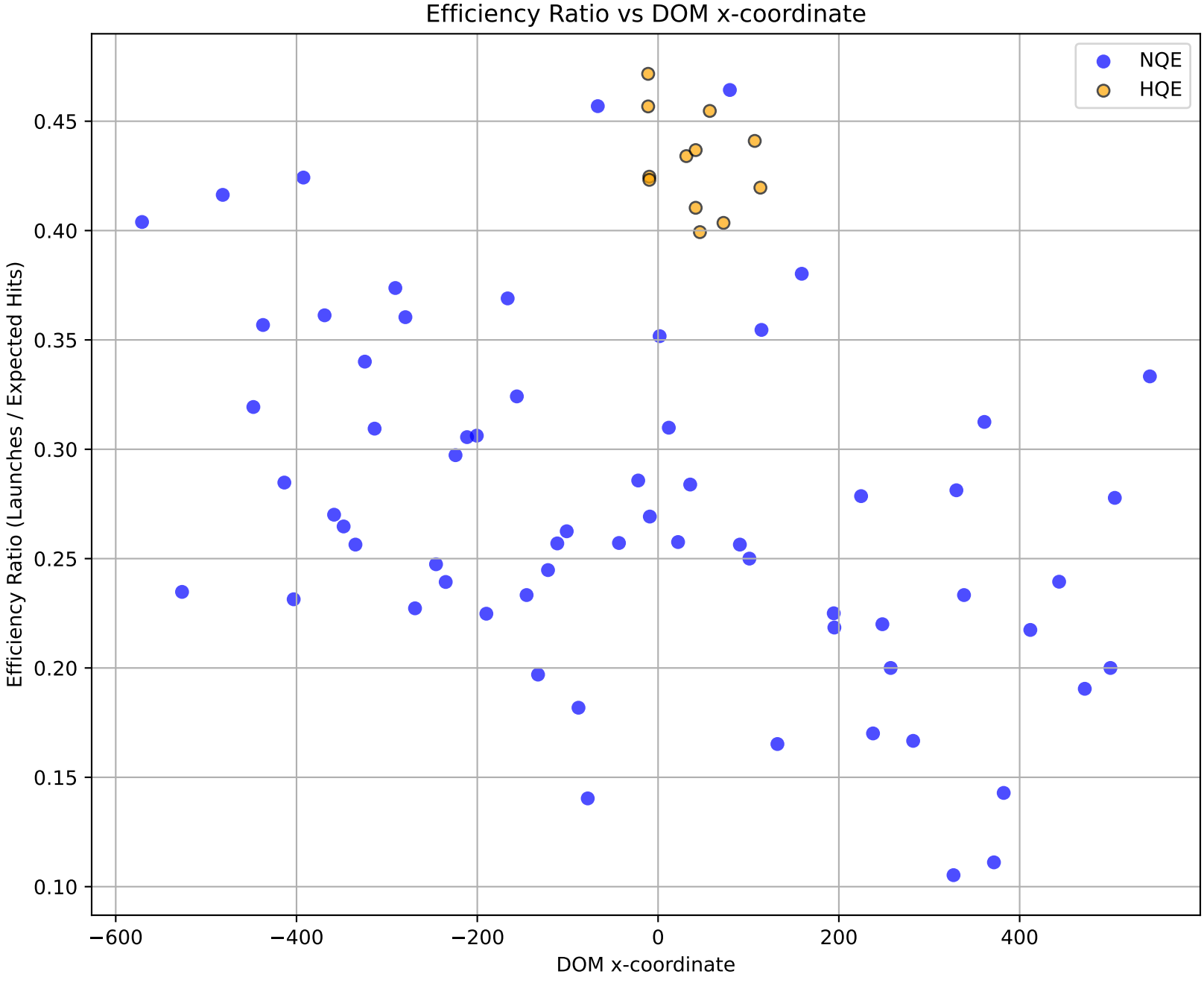

Distribution of Events DOMs Participate In
NQE
HQE
Number of DOMs
0
5
10
15
20
0
50
100
150
200
250
300
Number of Events (Launches)

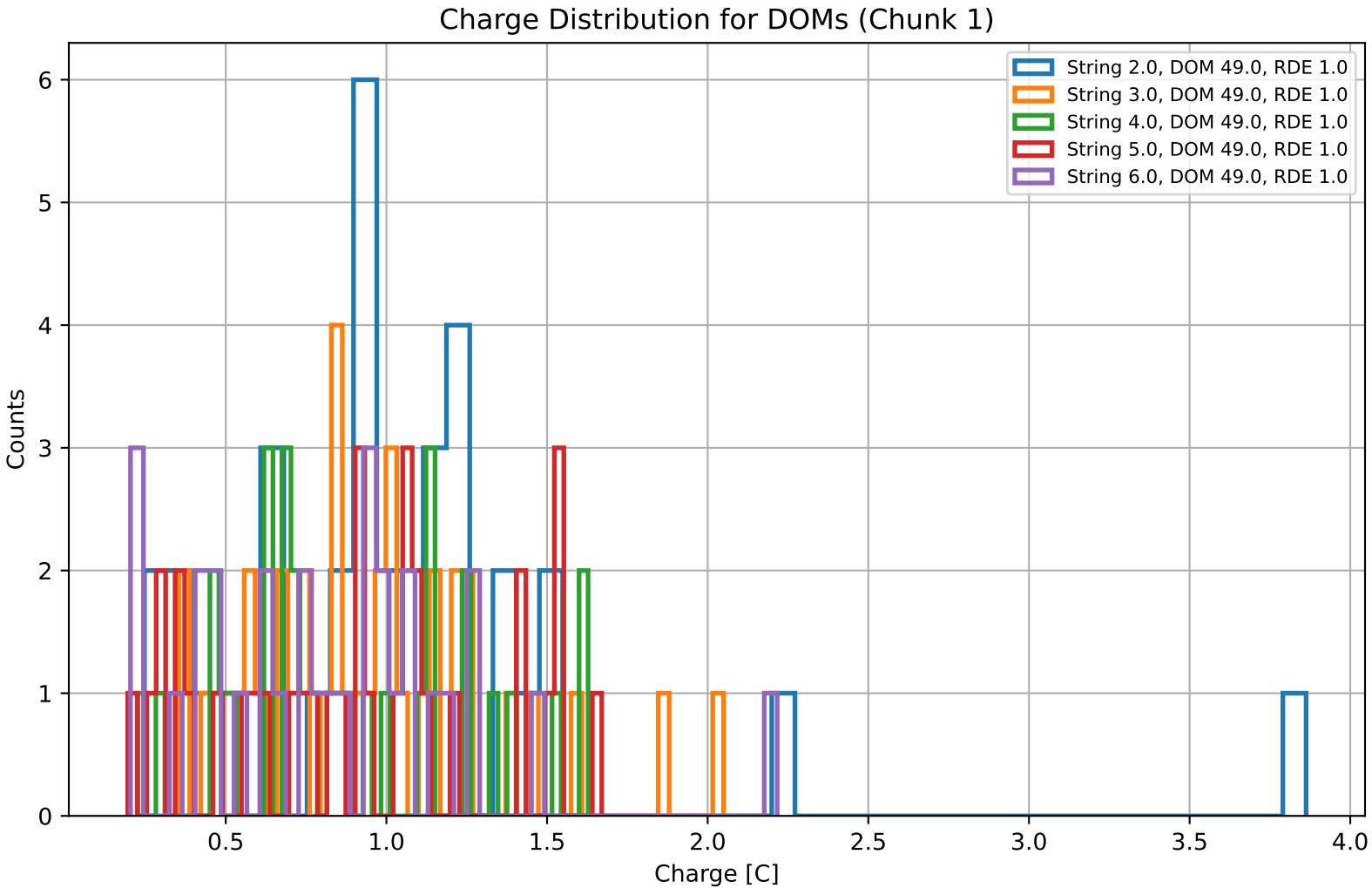

Launches vs Expected Hits
NQE
HQE
NQE < 100: Slope = 0.22 ± 0.03
100 ≤ NQE < 300: Slope = 0.47 ± 0.00
300 ≤ NQE < 600: Slope = 0.24 ± 0.00
HQE: Slope = 0.56 ± 0.01
Launches
Expected Hits
0
50
100
150
200
250
300
0
100
200
300
400
500
600

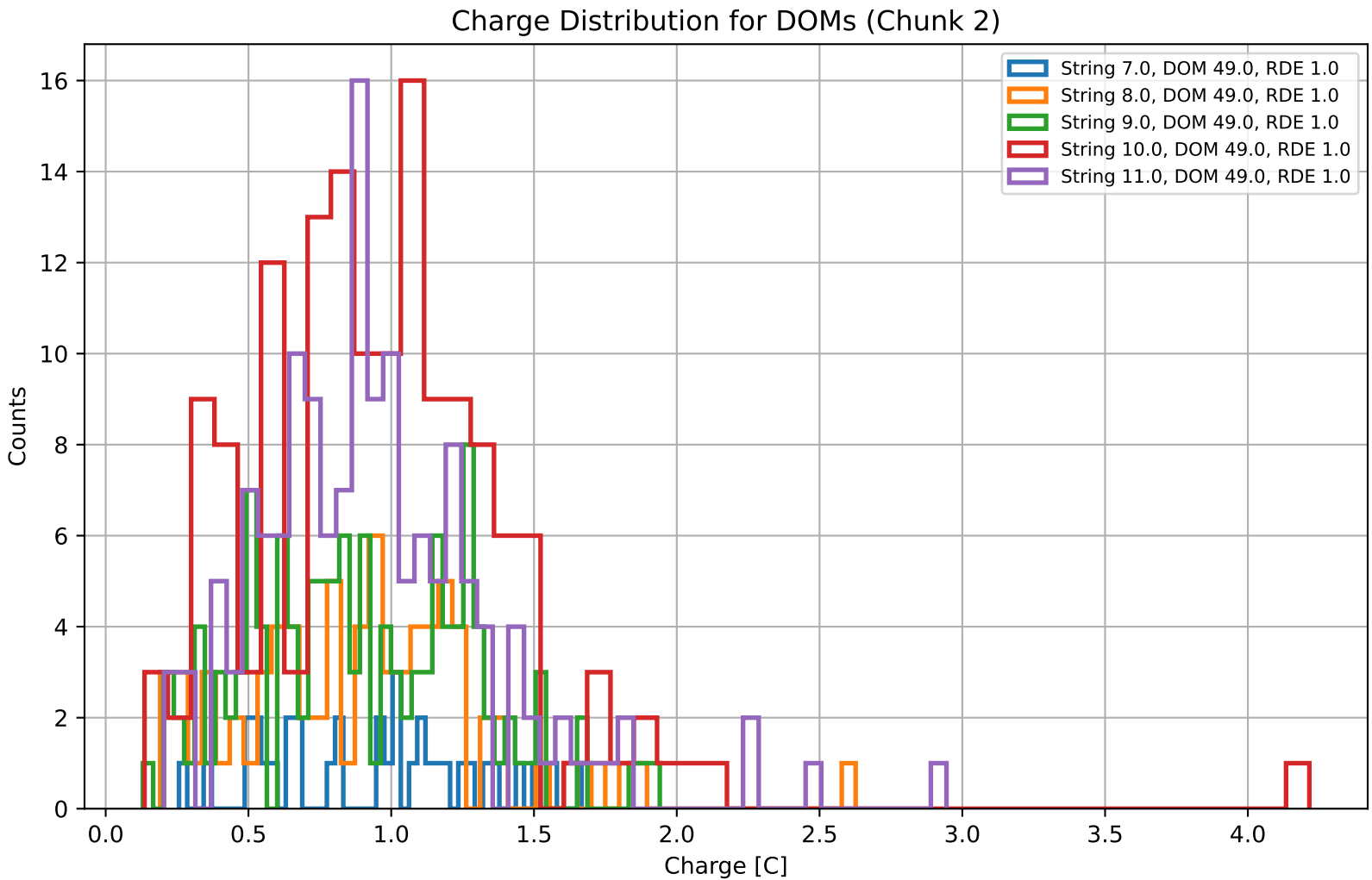

RIDE vs DOM x-coordinate
NQE
HQE
RIDE (Monitored to NQE)
DOM x-coordinate
1.6
1.4
1.2
1.0
0.8
0.6
0.4
−600
−400
−200
0
200
400

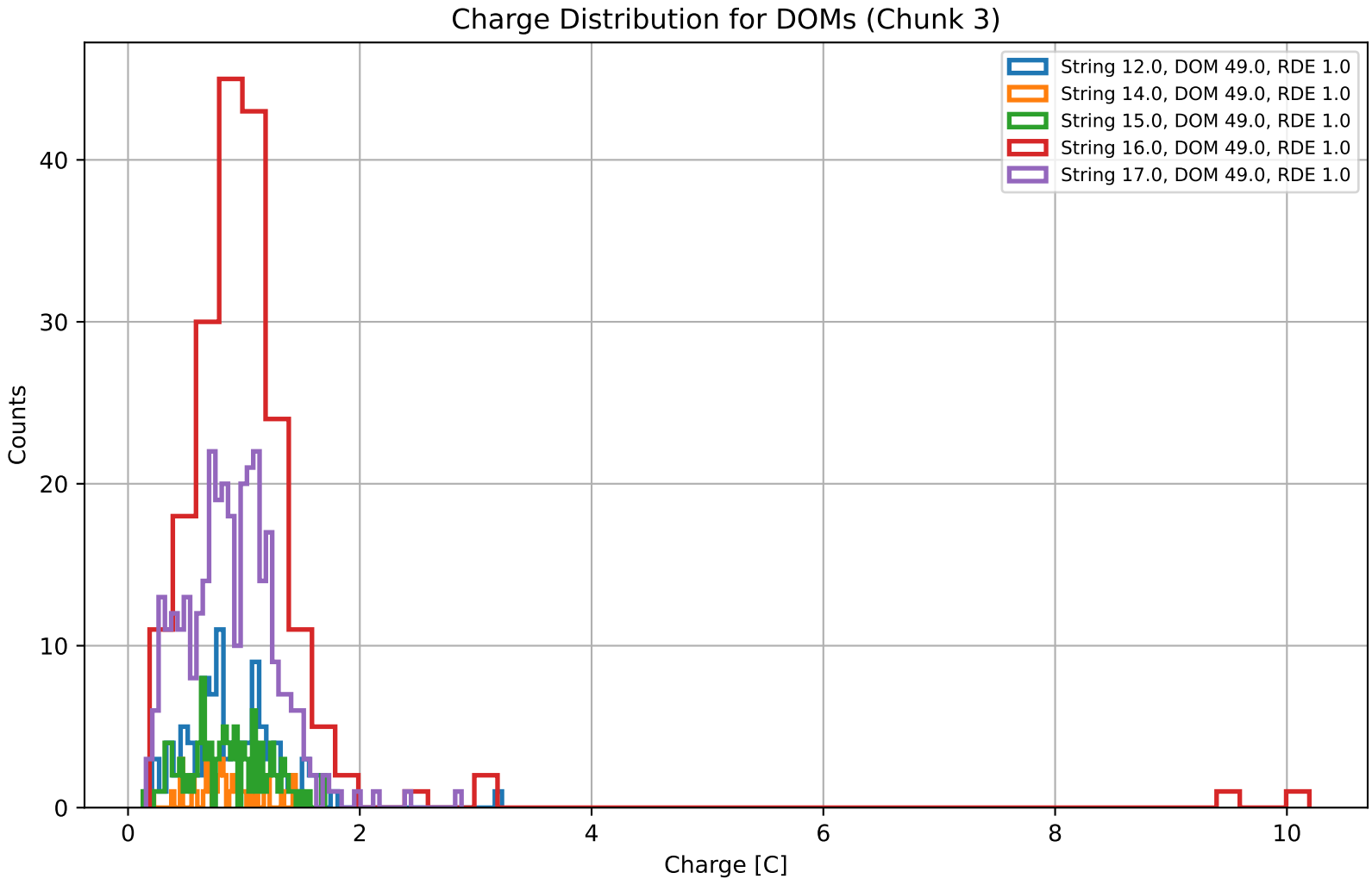

RIDE Old vs DOM x-coordinate
NQE
HQE
RIDE Old (Monitored to NQE)
DOM x-coordinate
1.8
1.6
1.4
1.2
1.0
0.8
0.6
−600
−400
−200
0
200
400

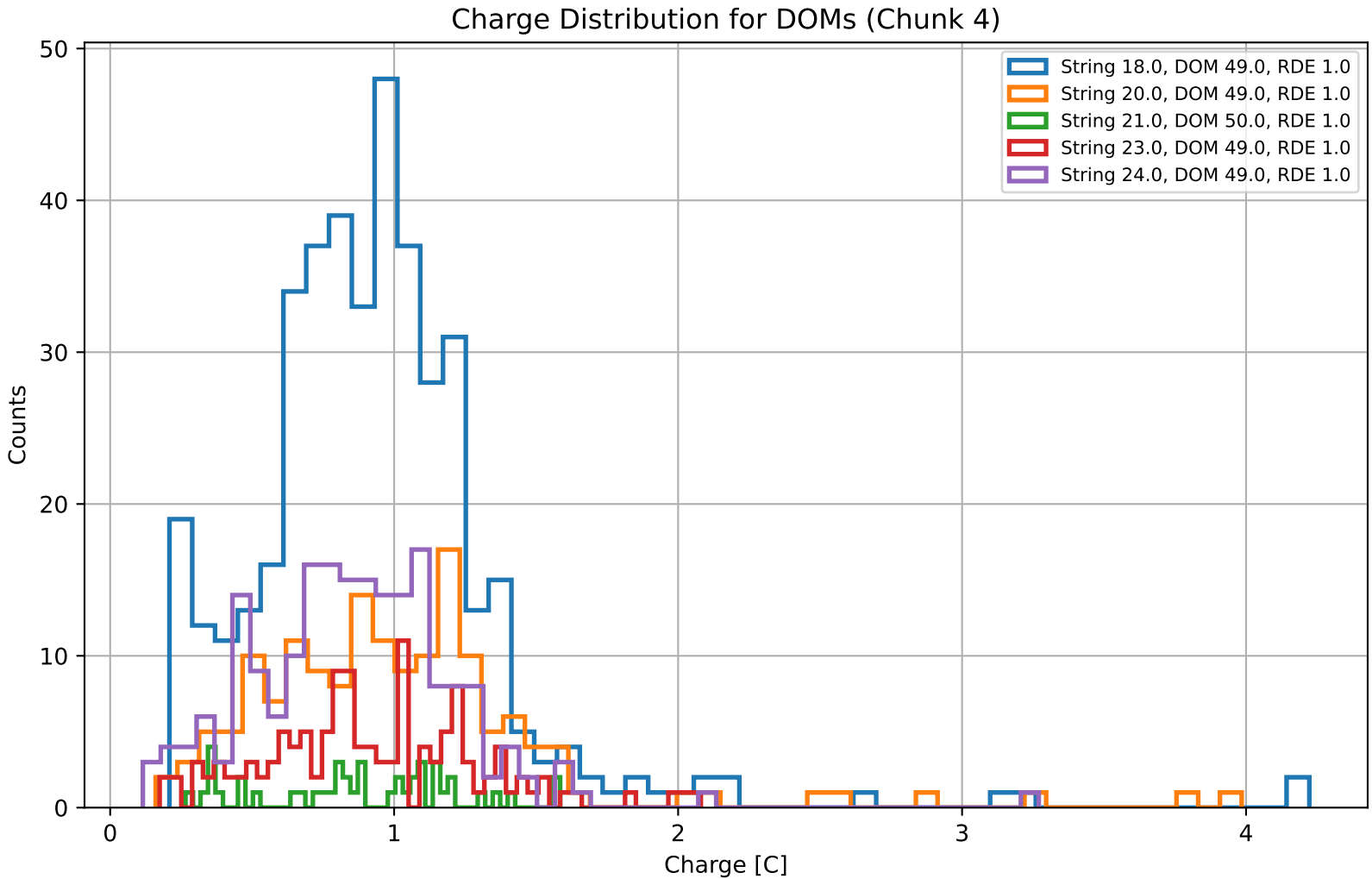

DOM Total Charge Scatter Plot (NQE & HQE)
NQE
HQE
DOM y-coordinate (jitter applied to HQE)
DOM x-coordinate (jitter applied to HQE)
Charge Fraction (Σ(Total charge) / Σ(launches))
400
200
0
−200
−400
−600
2.0
1.8
1.6
1.4
1.2
1.0

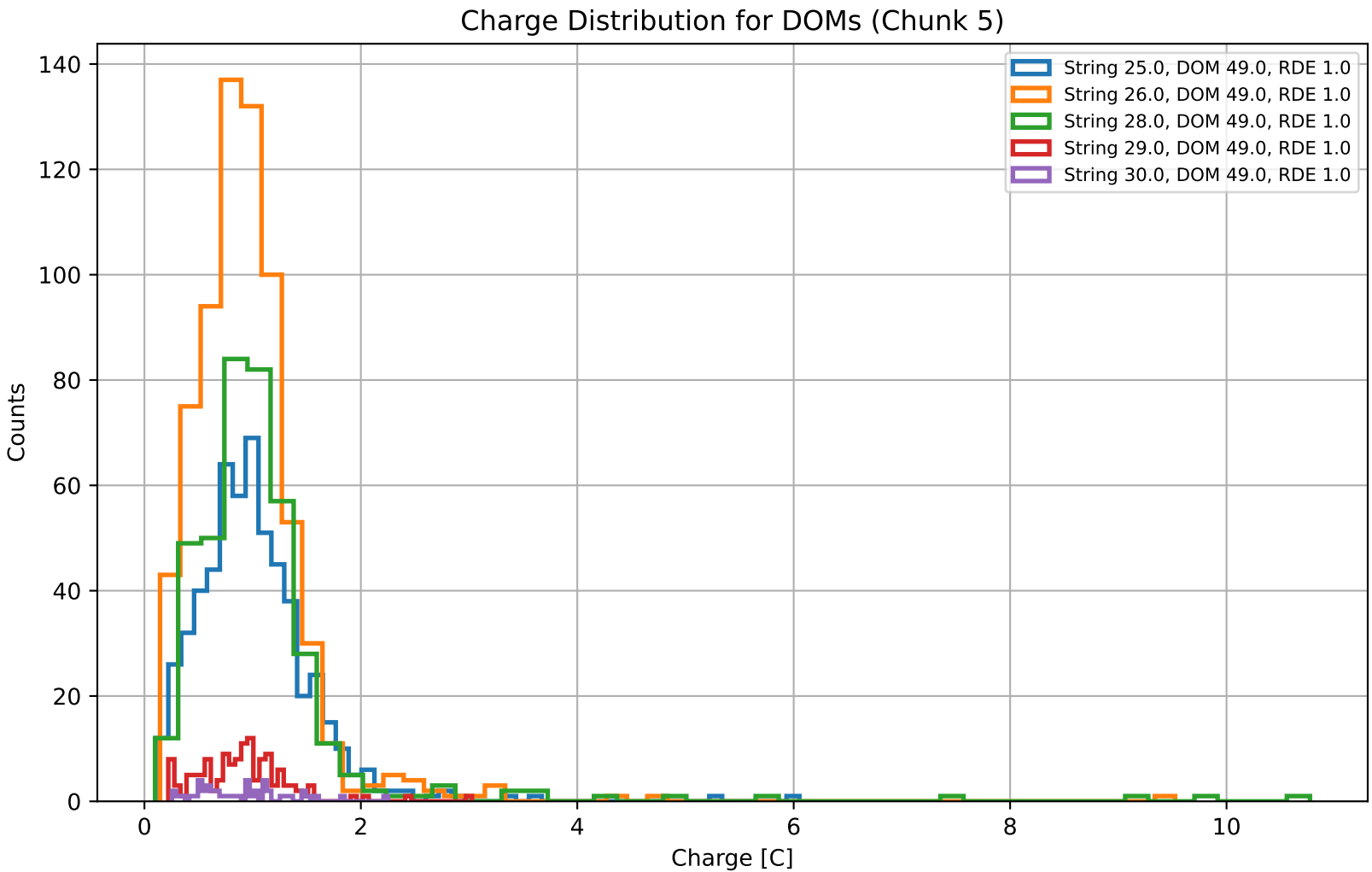

Efficiency Ratio vs DOM x-coordinate
NQE
HQE
Efficiency Ratio (Launches / Expected Hits)
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
−600
−400
−200
0
200
400
DOM x-coordinate

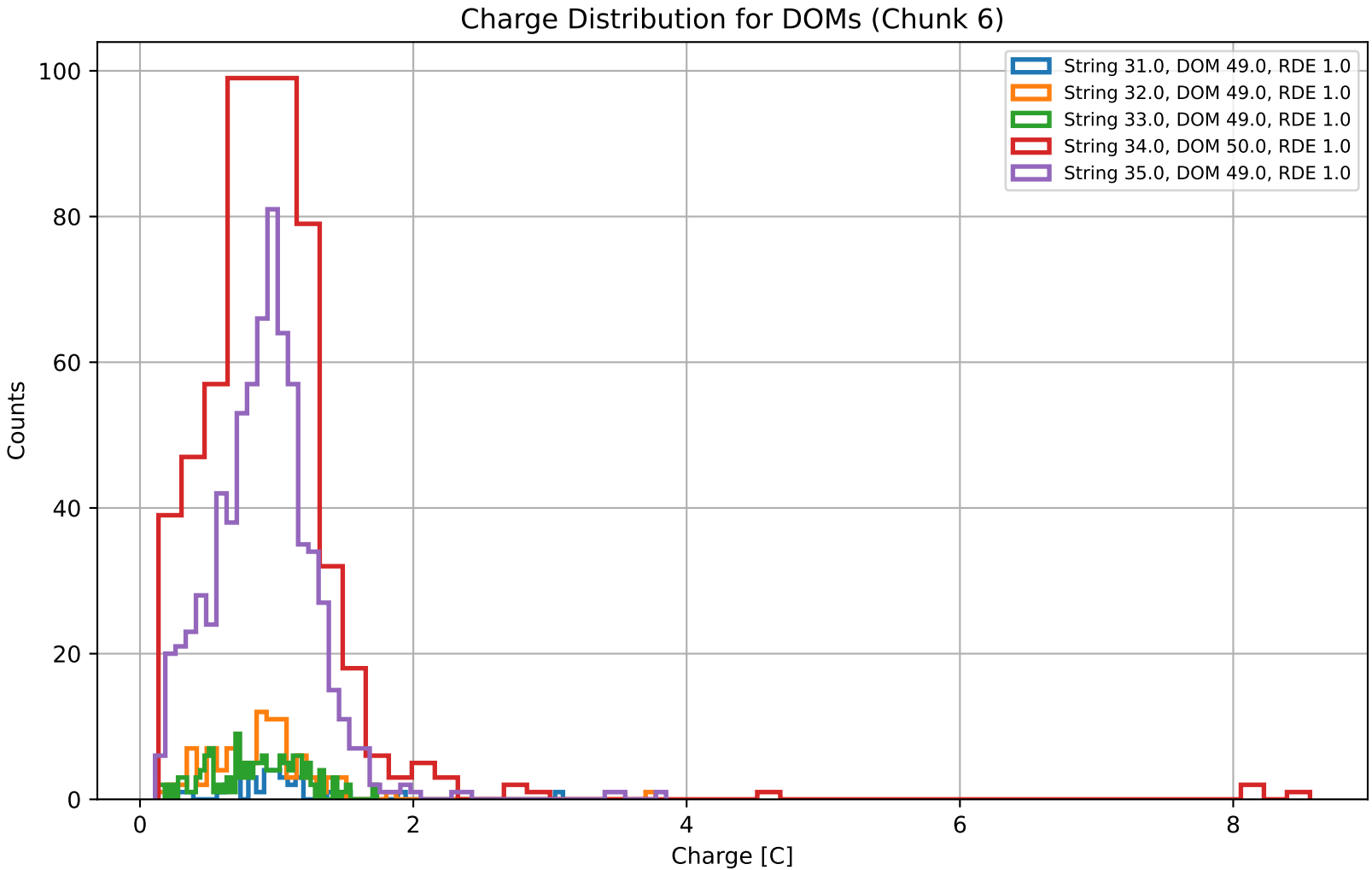

Charge Distribution for DOMs (Chunk 1)
String 2.0, DOM 49.0, RDE 1.0
String 3.0, DOM 49.0, RDE 1.0
String 4.0, DOM 49.0, RDE 1.0
String 5.0, DOM 49.0, RDE 1.0
String 6.0, DOM 49.0, RDE 1.0
Counts
0
1
2
3
4
5
6
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
Charge [C]

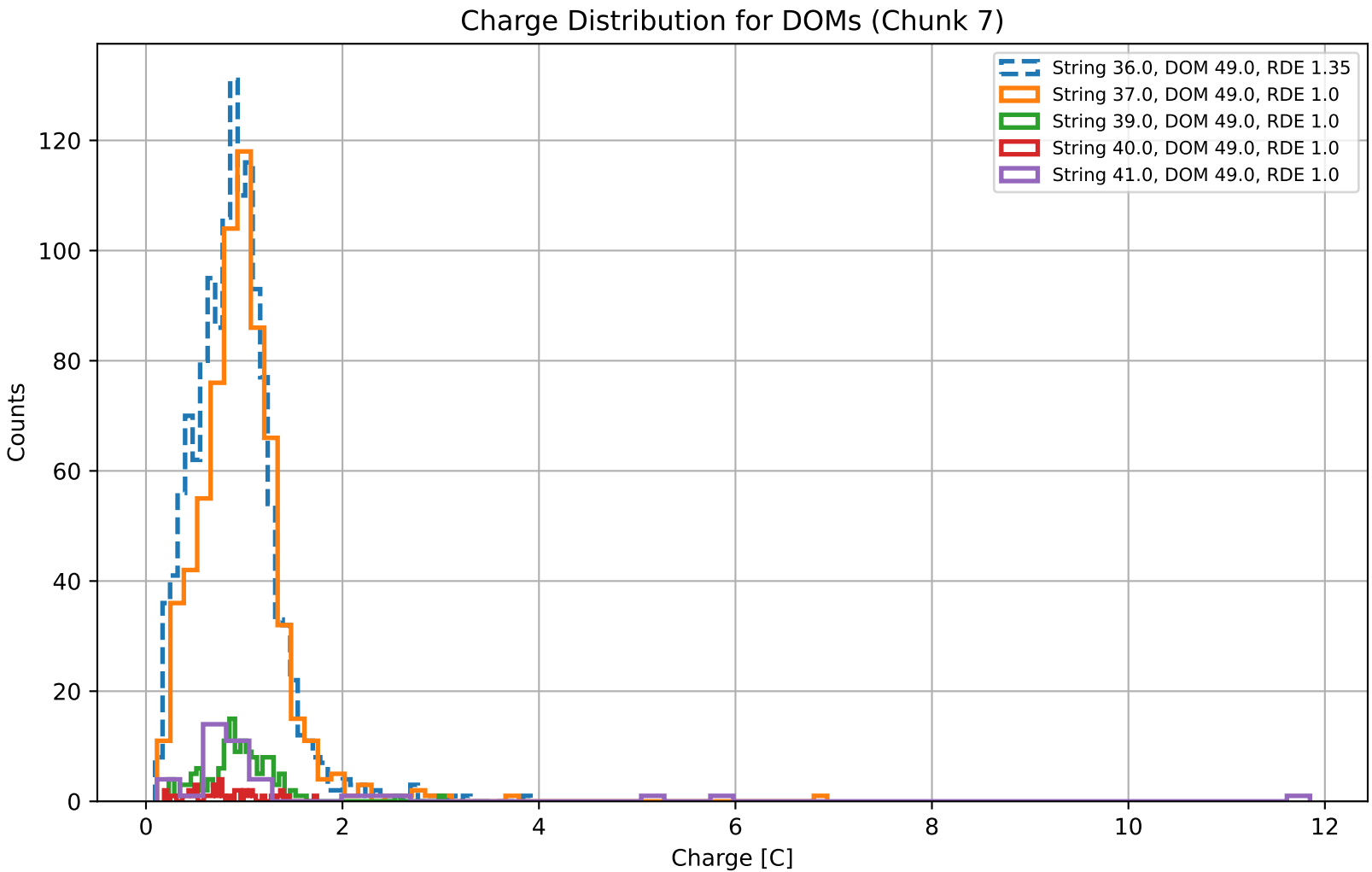

Charge Distribution for DOMs (Chunk 2)
String 7.0, DOM 49.0, RDE 1.0
String 8.0, DOM 49.0, RDE 1.0
String 9.0, DOM 49.0, RDE 1.0
String 10.0, DOM 49.0, RDE 1.0
String 11.0, DOM 49.0, RDE 1.0
Counts
Charge [C]
0
2
4
6
8
10
12
14
16
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0

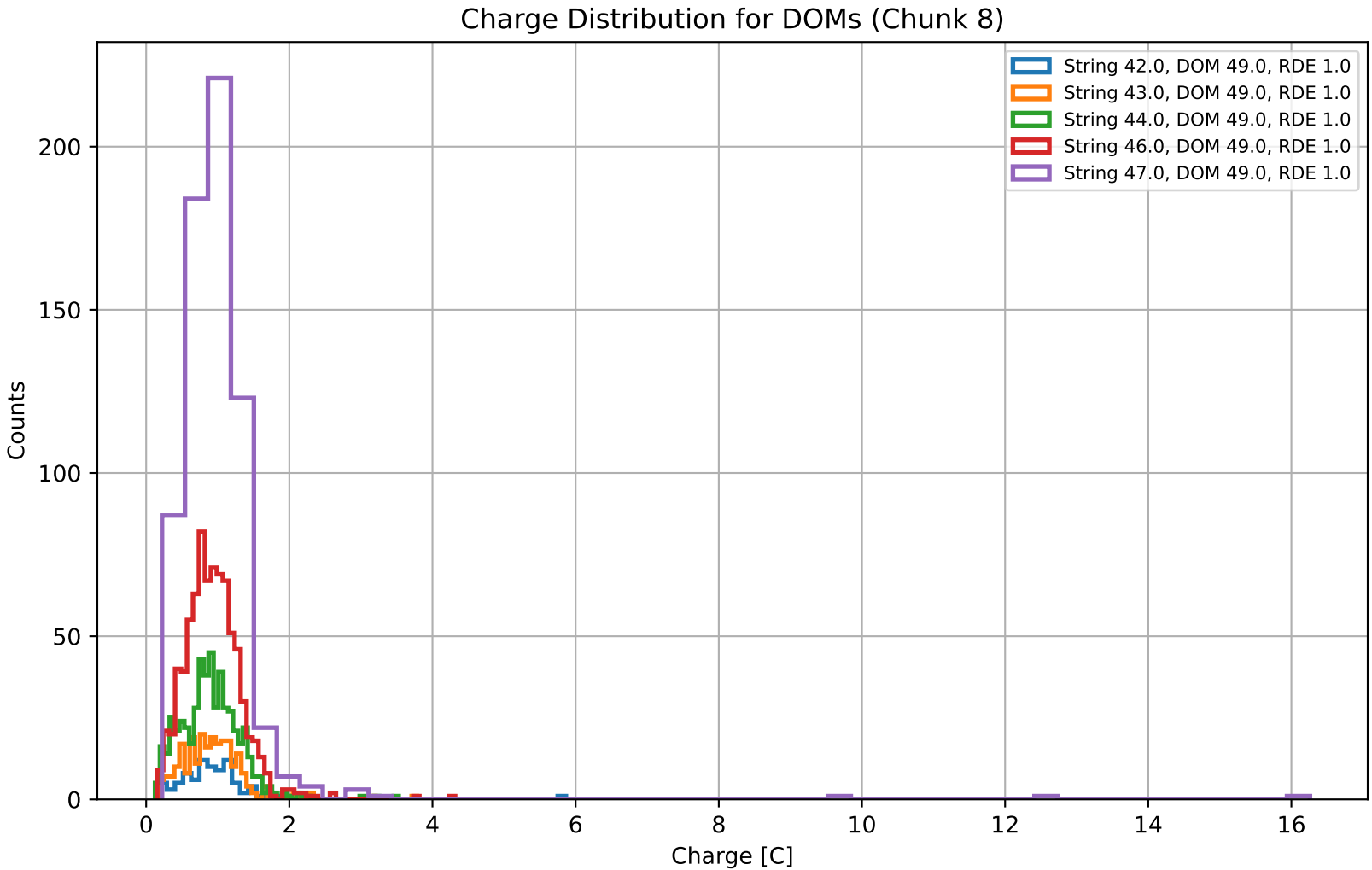

Charge Distribution for DOMs (Chunk 3)
String 12.0, DOM 49.0, RDE 1.0
String 14.0, DOM 49.0, RDE 1.0
String 15.0, DOM 49.0, RDE 1.0
String 16.0, DOM 49.0, RDE 1.0
String 17.0, DOM 49.0, RDE 1.0
Counts
0
10
20
30
40
0
2
4
6
8
10
Charge [C]

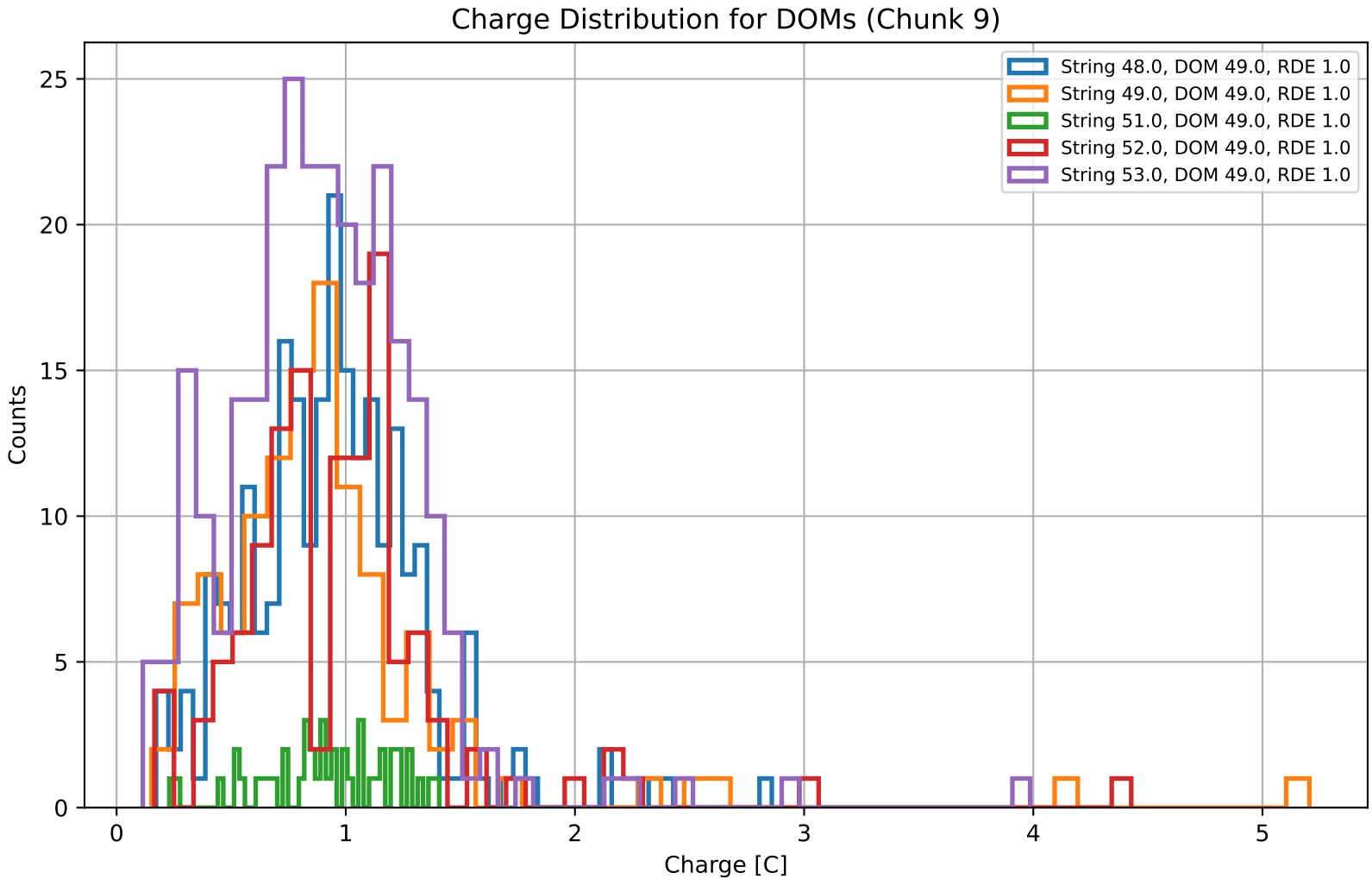

Charge Distribution for DOMs (Chunk 4)
String 18.0, DOM 49.0, RDE 1.0
String 20.0, DOM 49.0, RDE 1.0
String 21.0, DOM 50.0, RDE 1.0
String 23.0, DOM 49.0, RDE 1.0
String 24.0, DOM 49.0, RDE 1.0
Counts
Charge [C]
0
10
20
30
40
50
0
1
2
3
4

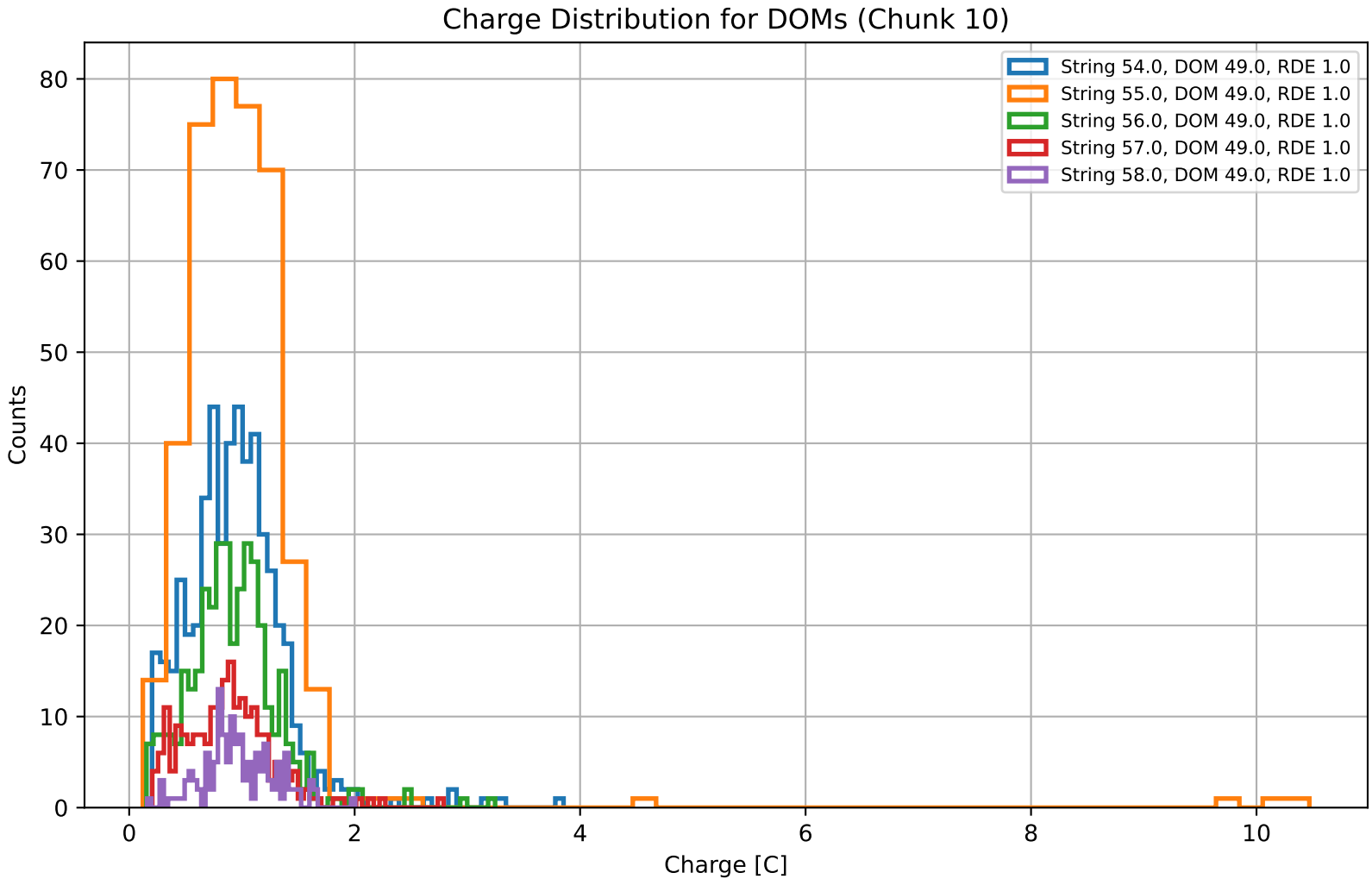

Charge Distribution for DOMs (Chunk 5)
String 25.0, DOM 49.0, RDE 1.0
String 26.0, DOM 49.0, RDE 1.0
String 28.0, DOM 49.0, RDE 1.0
String 29.0, DOM 49.0, RDE 1.0
String 30.0, DOM 49.0, RDE 1.0
Counts
Charge [C]
0
20
40
60
80
100
120
140
0
2
4
6
8
10

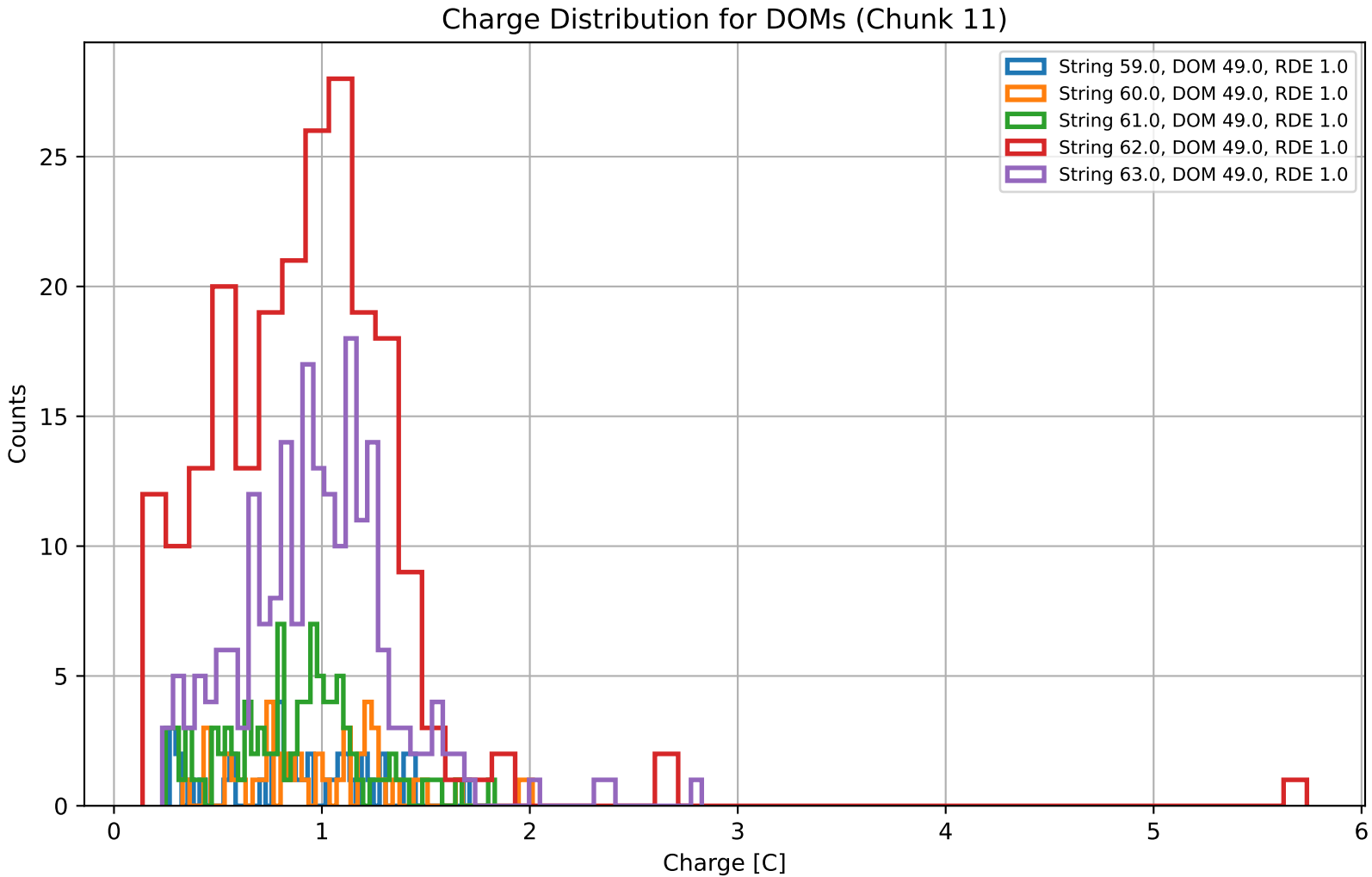

Charge Distribution for DOMs (Chunk 6)
String 31.0, DOM 49.0, RDE 1.0
String 32.0, DOM 49.0, RDE 1.0
String 33.0, DOM 49.0, RDE 1.0
String 34.0, DOM 50.0, RDE 1.0
String 35.0, DOM 49.0, RDE 1.0
Counts
Charge [C]
0
20
40
60
80
100
0
2
4
6
8

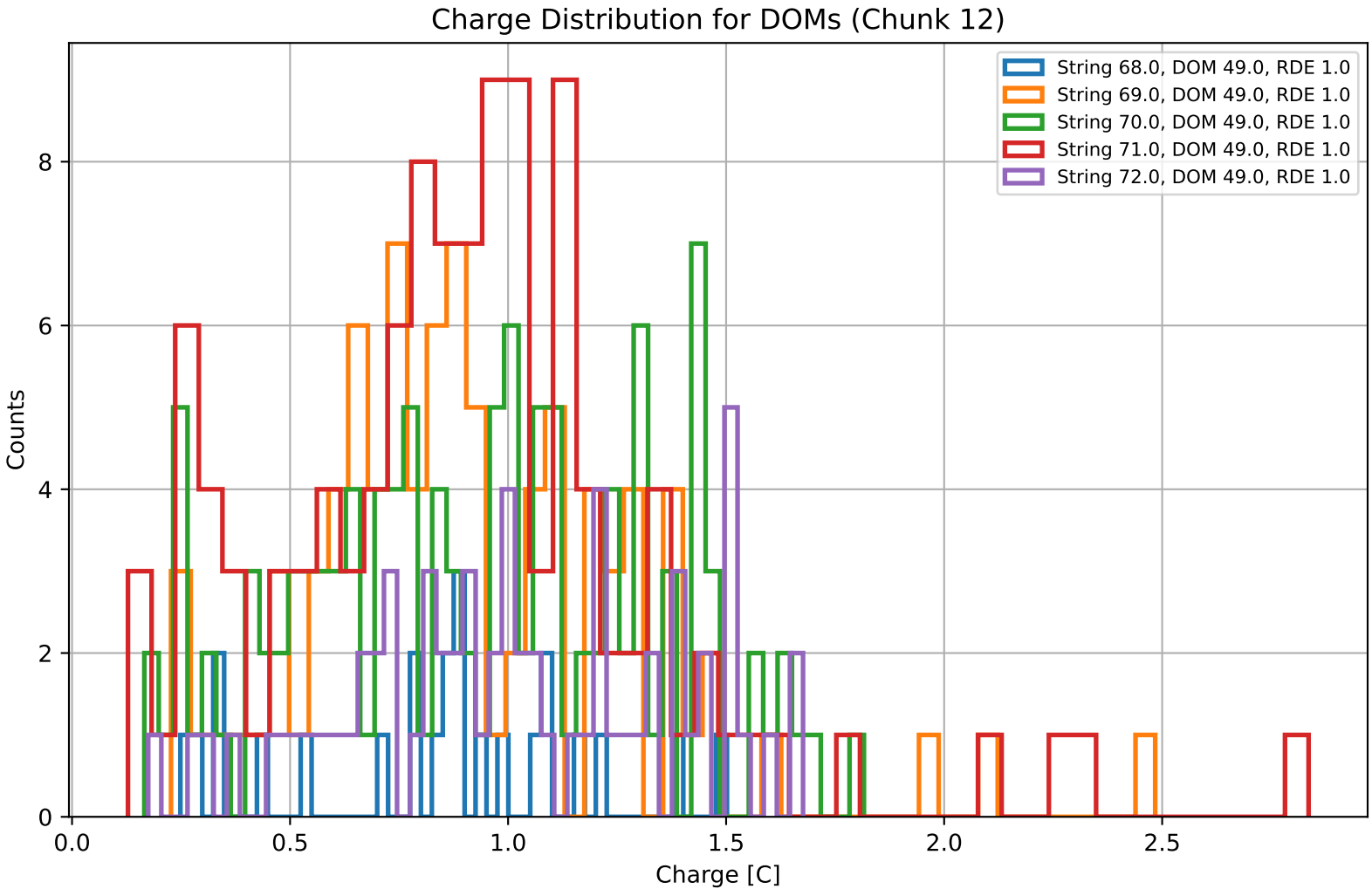

Charge Distribution for DOMs (Chunk 7)
String 36.0, DOM 49.0, RDE 1.35
String 37.0, DOM 49.0, RDE 1.0
String 39.0, DOM 49.0, RDE 1.0
String 40.0, DOM 49.0, RDE 1.0
String 41.0, DOM 49.0, RDE 1.0
Counts
0
20
40
60
80
100
120
0
2
4
6
8
10
12
Charge [C]

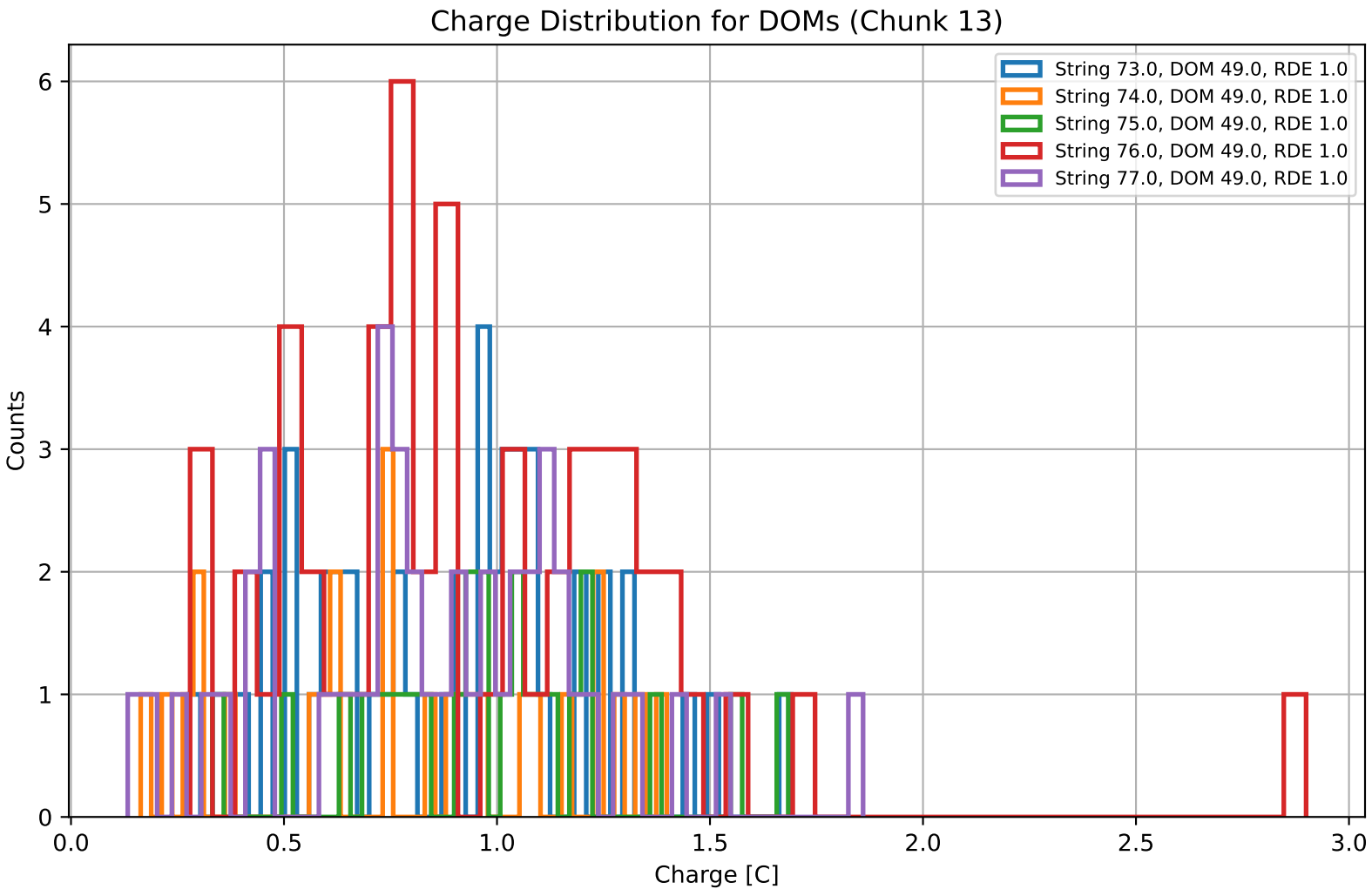

Charge Distribution for DOMs (Chunk 8)
String 42.0, DOM 49.0, RDE 1.0
String 43.0, DOM 49.0, RDE 1.0
String 44.0, DOM 49.0, RDE 1.0
String 46.0, DOM 49.0, RDE 1.0
String 47.0, DOM 49.0, RDE 1.0
Counts
0
50
100
150
200
0
2
4
6
8
10
12
14
16
Charge [C]

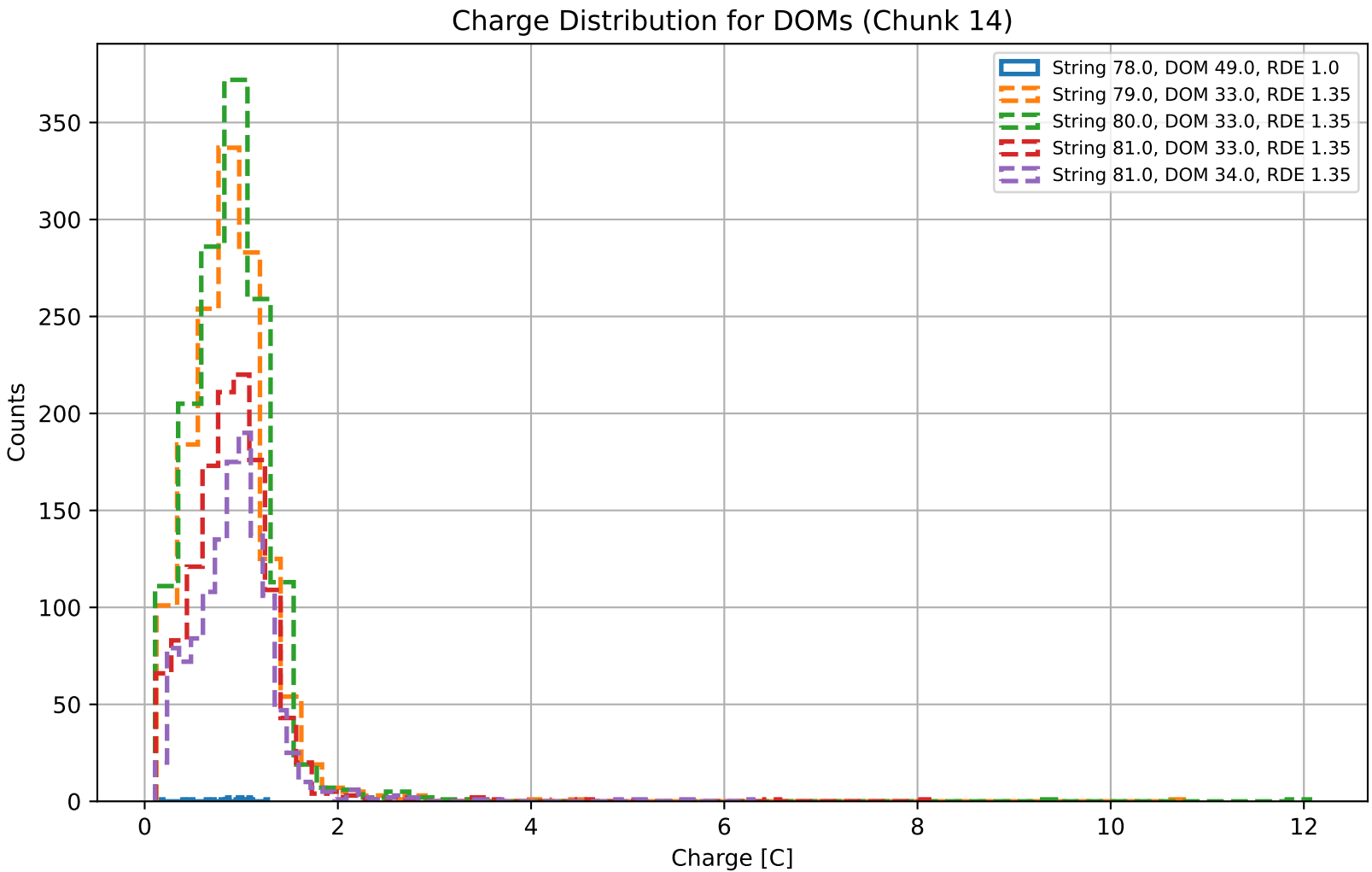

Charge Distribution for DOMs (Chunk 9)
String 48.0, DOM 49.0, RDE 1.0
String 49.0, DOM 49.0, RDE 1.0
String 51.0, DOM 49.0, RDE 1.0
String 52.0, DOM 49.0, RDE 1.0
String 53.0, DOM 49.0, RDE 1.0
Counts
Charge [C]
0
5
10
15
20
25
0
1
2
3
4
5

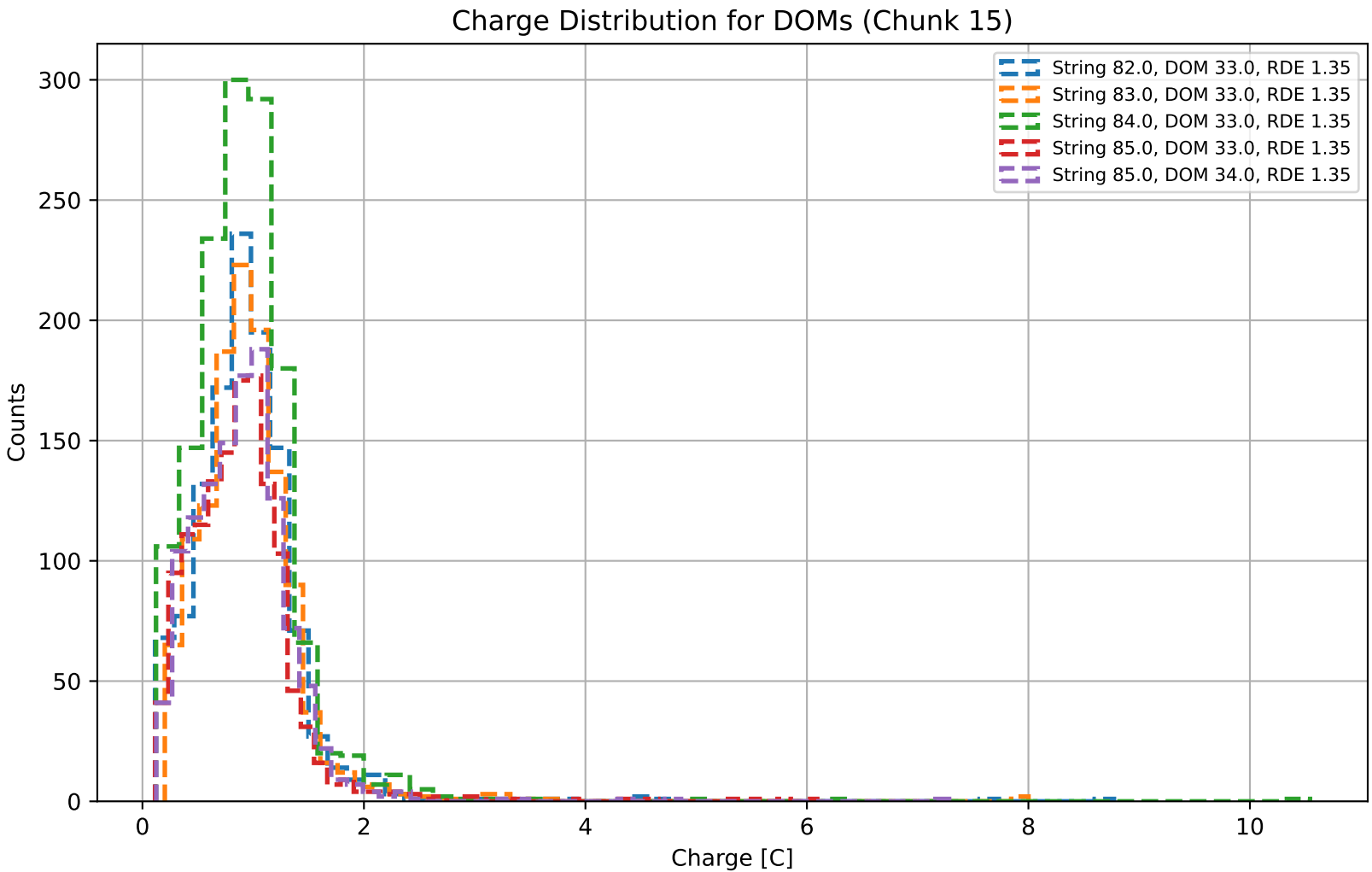

Charge Distribution for DOMs (Chunk 10)
String 54.0, DOM 49.0, RDE 1.0
String 55.0, DOM 49.0, RDE 1.0
String 56.0, DOM 49.0, RDE 1.0
String 57.0, DOM 49.0, RDE 1.0
String 58.0, DOM 49.0, RDE 1.0
Counts
Charge [C]
0
10
20
30
40
50
60
70
80
0
2
4
6
8
10

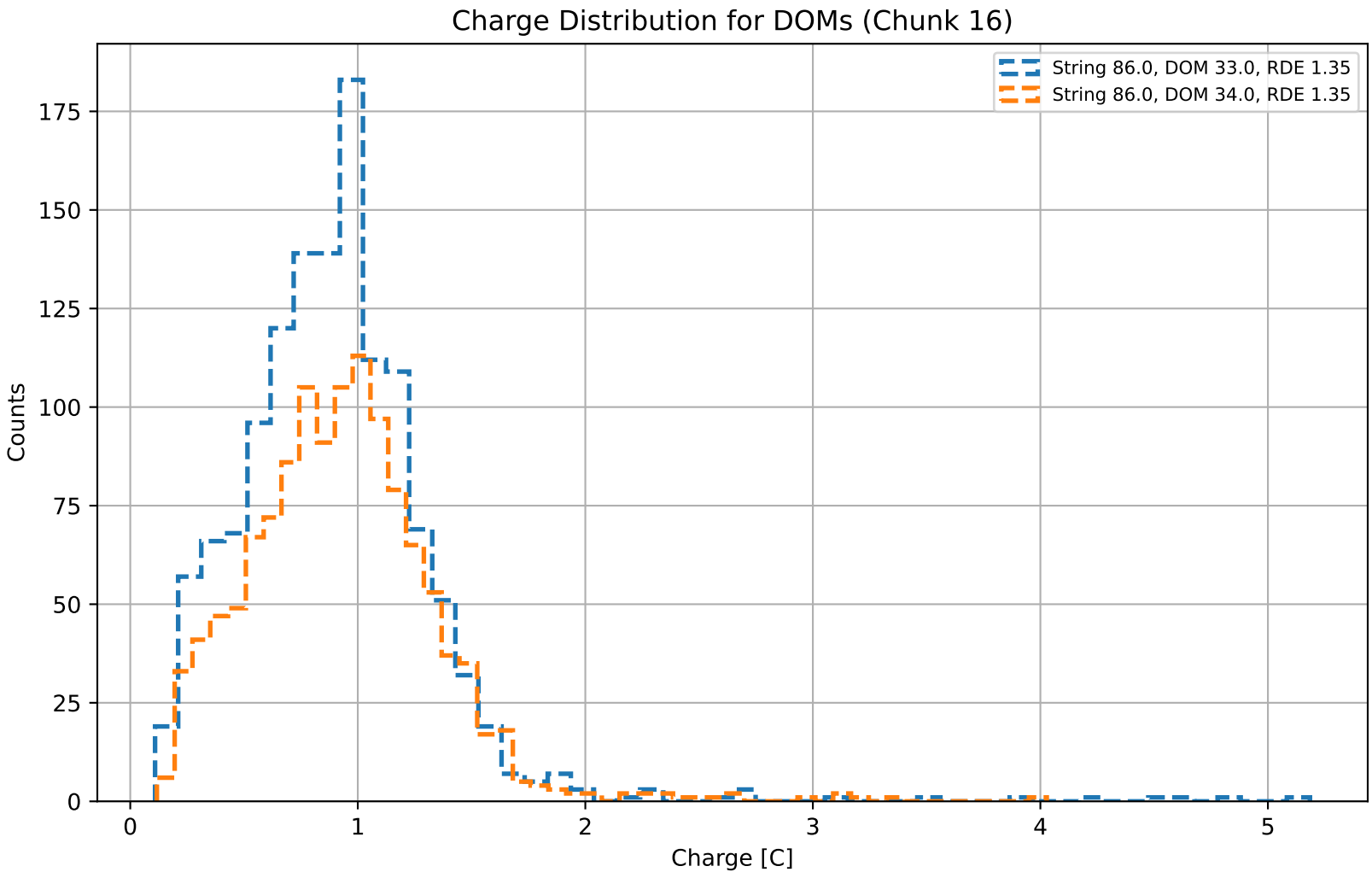

Charge Distribution for DOMs (Chunk 11)
String 59.0, DOM 49.0, RDE 1.0
String 60.0, DOM 49.0, RDE 1.0
String 61.0, DOM 49.0, RDE 1.0
String 62.0, DOM 49.0, RDE 1.0
String 63.0, DOM 49.0, RDE 1.0
Counts
0
5
10
15
20
25
0
1
2
3
4
5
6
Charge [C]

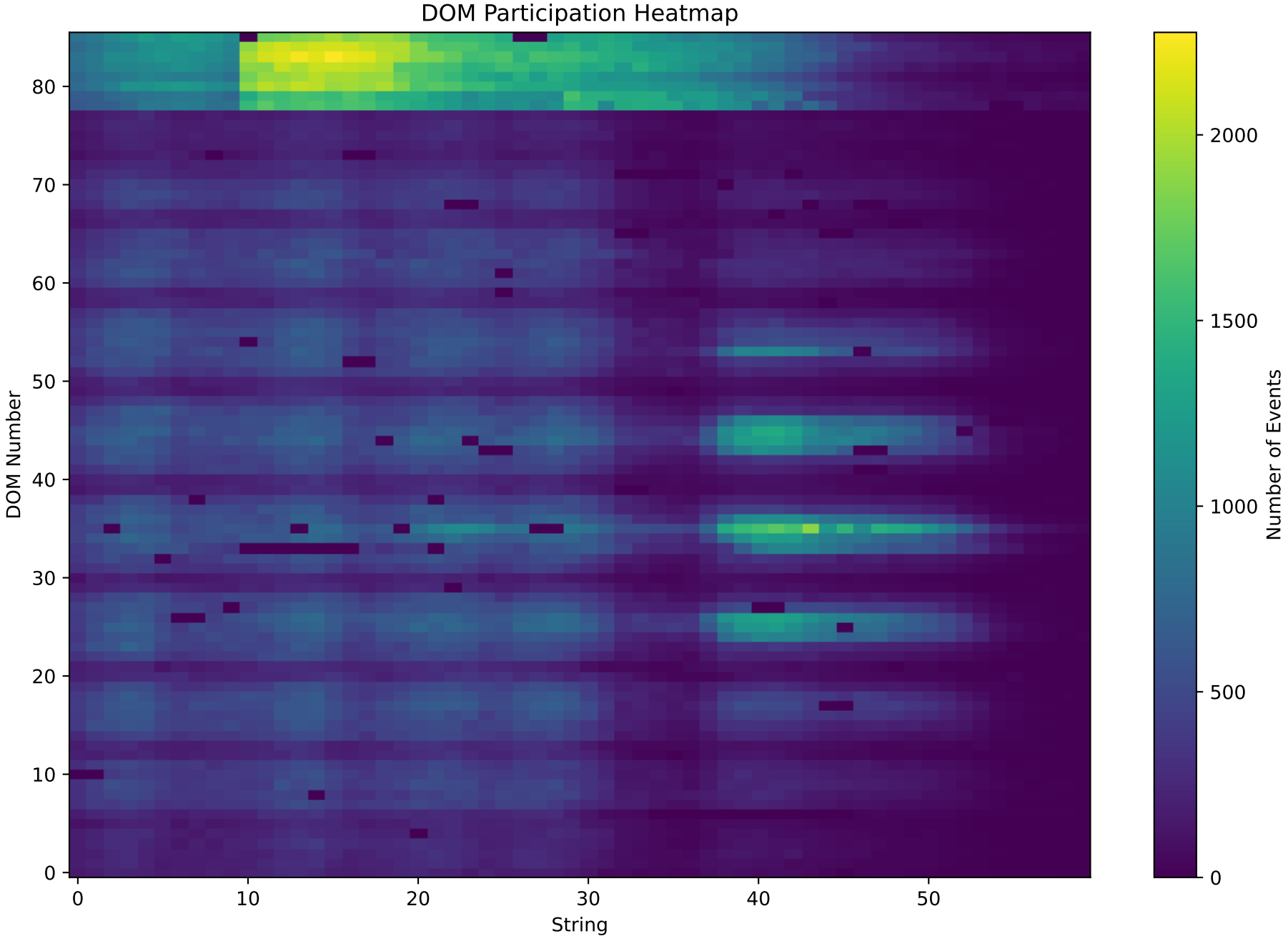

Charge Distribution for DOMs (Chunk 12)
String 68.0, DOM 49.0, RDE 1.0
String 69.0, DOM 49.0, RDE 1.0
String 70.0, DOM 49.0, RDE 1.0
String 71.0, DOM 49.0, RDE 1.0
String 72.0, DOM 49.0, RDE 1.0
Counts
0
2
4
6
8
0.0
0.5
1.0
1.5
2.0
2.5
Charge [C]

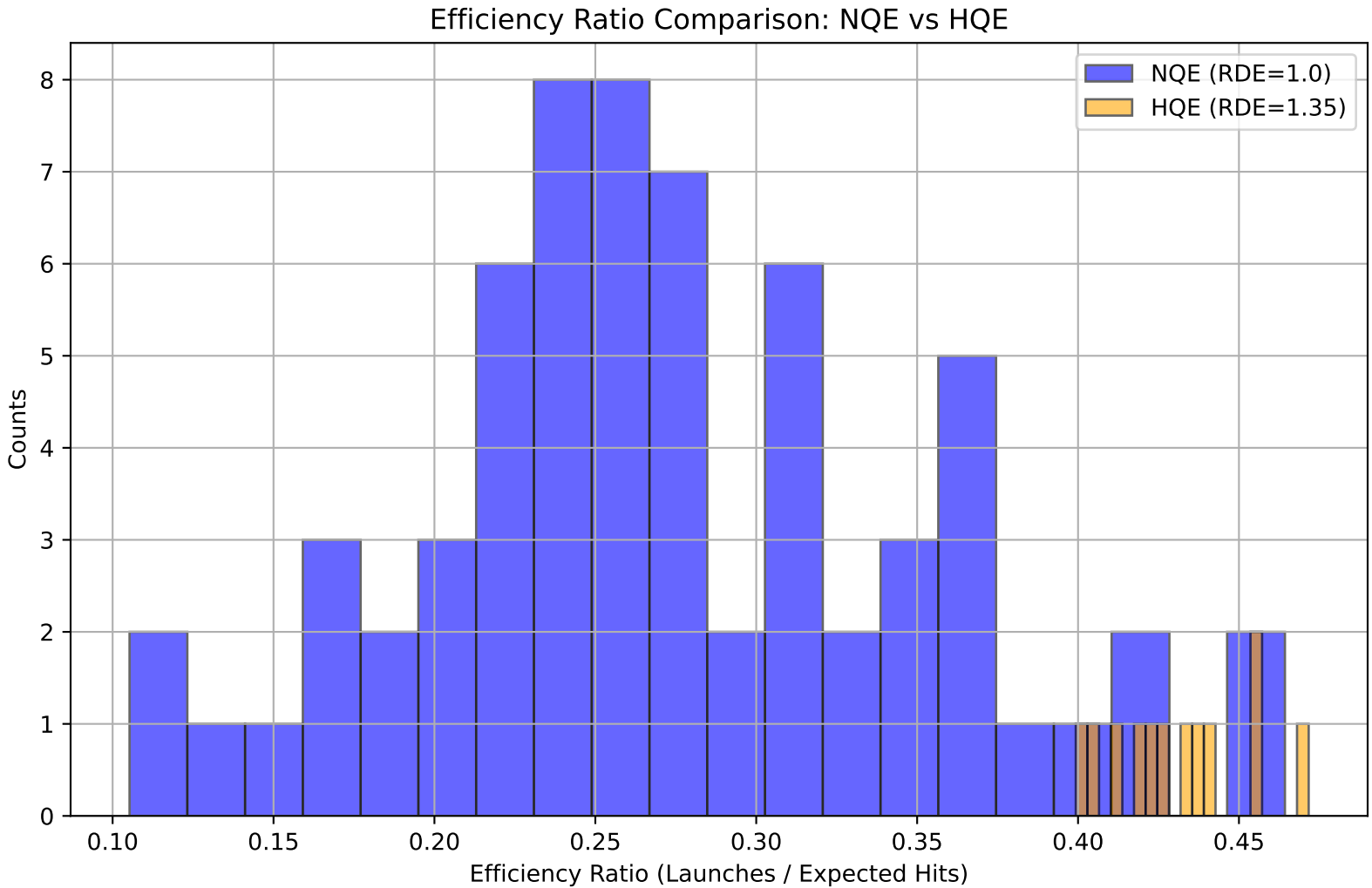

Charge Distribution for DOMs (Chunk 13)
String 73.0, DOM 49.0, RDE 1.0
String 74.0, DOM 49.0, RDE 1.0
String 75.0, DOM 49.0, RDE 1.0
String 76.0, DOM 49.0, RDE 1.0
String 77.0, DOM 49.0, RDE 1.0
Counts
Charge [C]
0
1
2
3
4
5
6
0.0
0.5
1.0
1.5
2.0
2.5
3.0


Charge Distribution for DOMs (Chunk 14)
String 78.0, DOM 49.0, RDE 1.0
String 79.0, DOM 33.0, RDE 1.35
String 80.0, DOM 33.0, RDE 1.35
String 81.0, DOM 33.0, RDE 1.35
String 81.0, DOM 34.0, RDE 1.35
Counts
0
50
100
150
200
250
300
350
0
2
4
6
8
10
12
Charge [C]


Charge Distribution for DOMs (Chunk 15)
String 82.0, DOM 33.0, RDE 1.35
String 83.0, DOM 33.0, RDE 1.35
String 84.0, DOM 33.0, RDE 1.35
String 85.0, DOM 33.0, RDE 1.35
String 85.0, DOM 34.0, RDE 1.35
Counts
Charge [C]
0
50
100
150
200
250
300
0
2
4
6
8
10


Charge Distribution for DOMs (Chunk 16)
String 86.0, DOM 33.0, RDE 1.35
String 86.0, DOM 34.0, RDE 1.35
Counts
Charge [C]
0
25
50
75
100
125
150
175
0
1
2
3
4
5


DOM Participation Heatmap
DOM Number
String
Number of Events
0
10
20
30
40
50
60
70
80
0
500
1000
1500
2000


Efficiency Ratio Comparison: NQE vs HQE
NQE (RDE=1.0)
HQE (RDE=1.35)
Counts
0
1
2
3
4
5
6
7
8
0.10
0.15
0.20
0.25
0.30
0.35
0.40
0.45
Efficiency Ratio (Launches / Expected Hits)