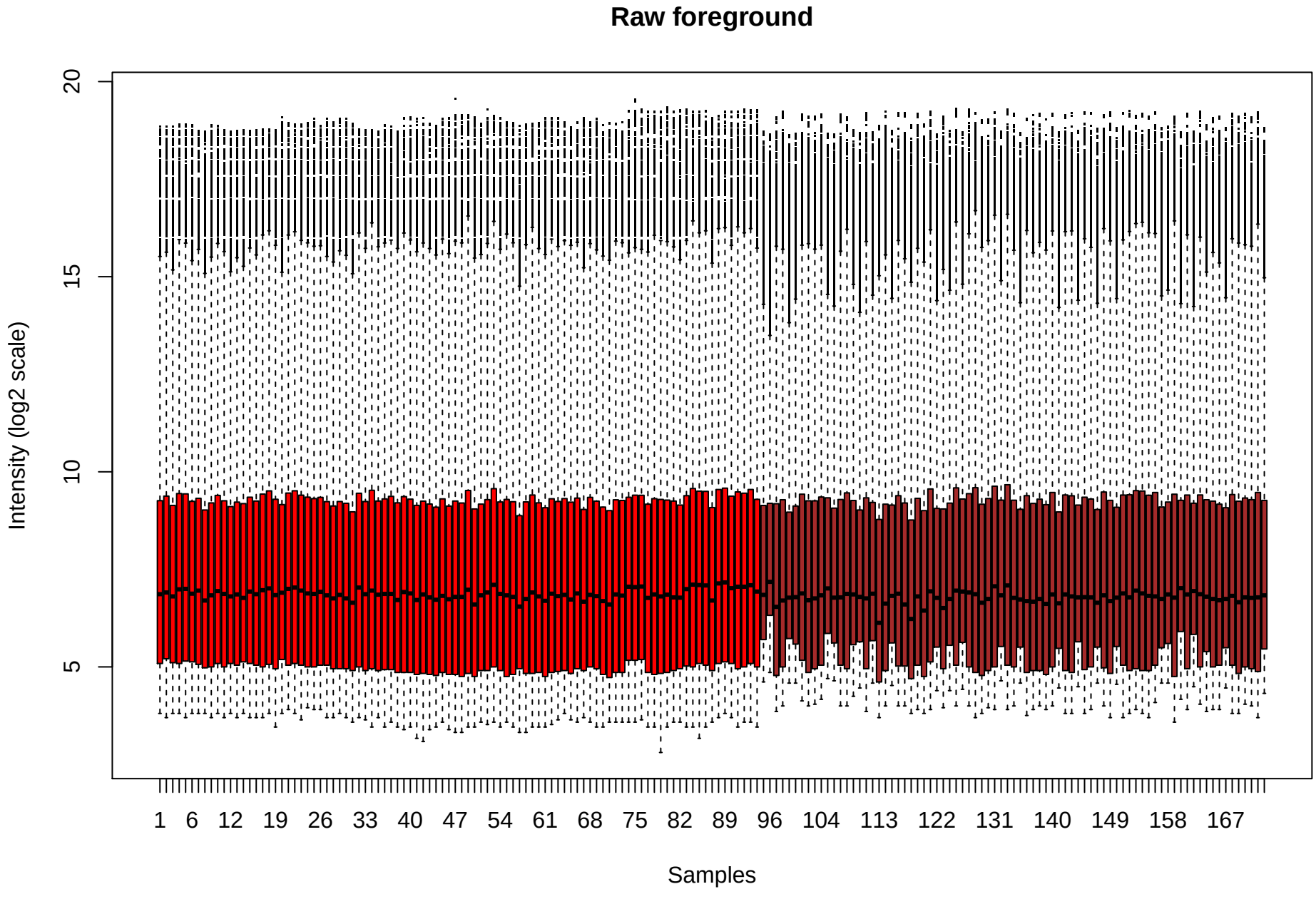
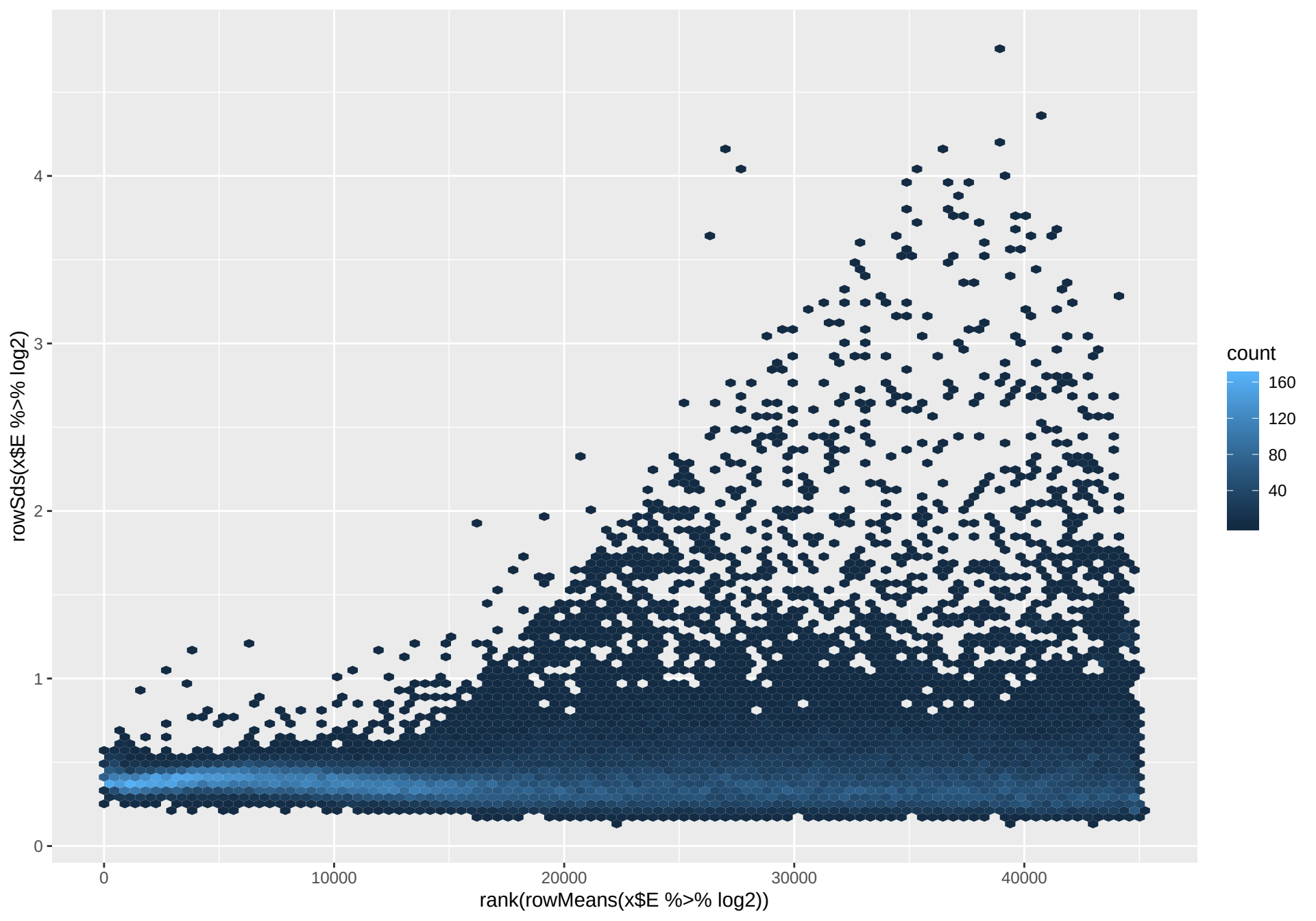
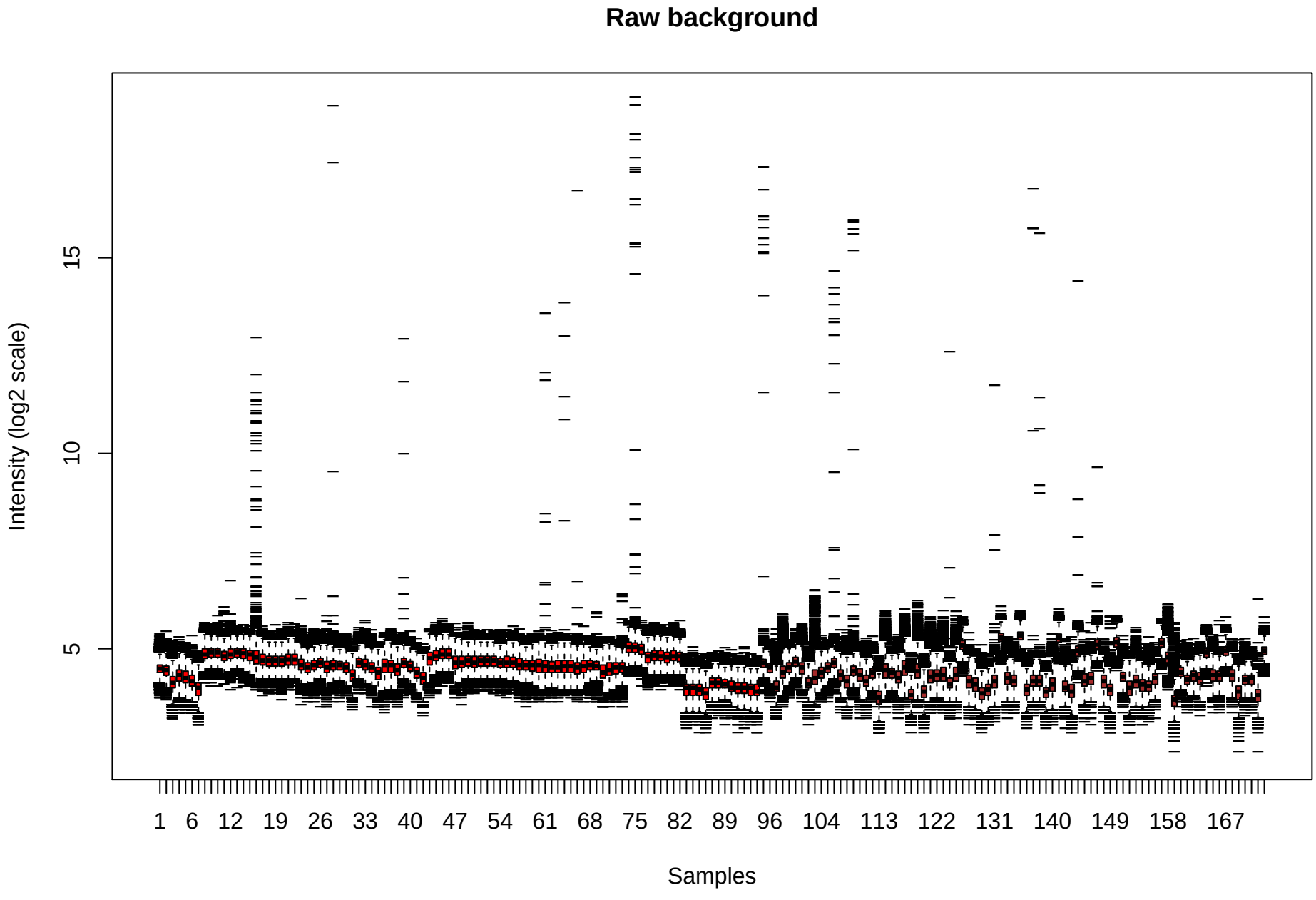
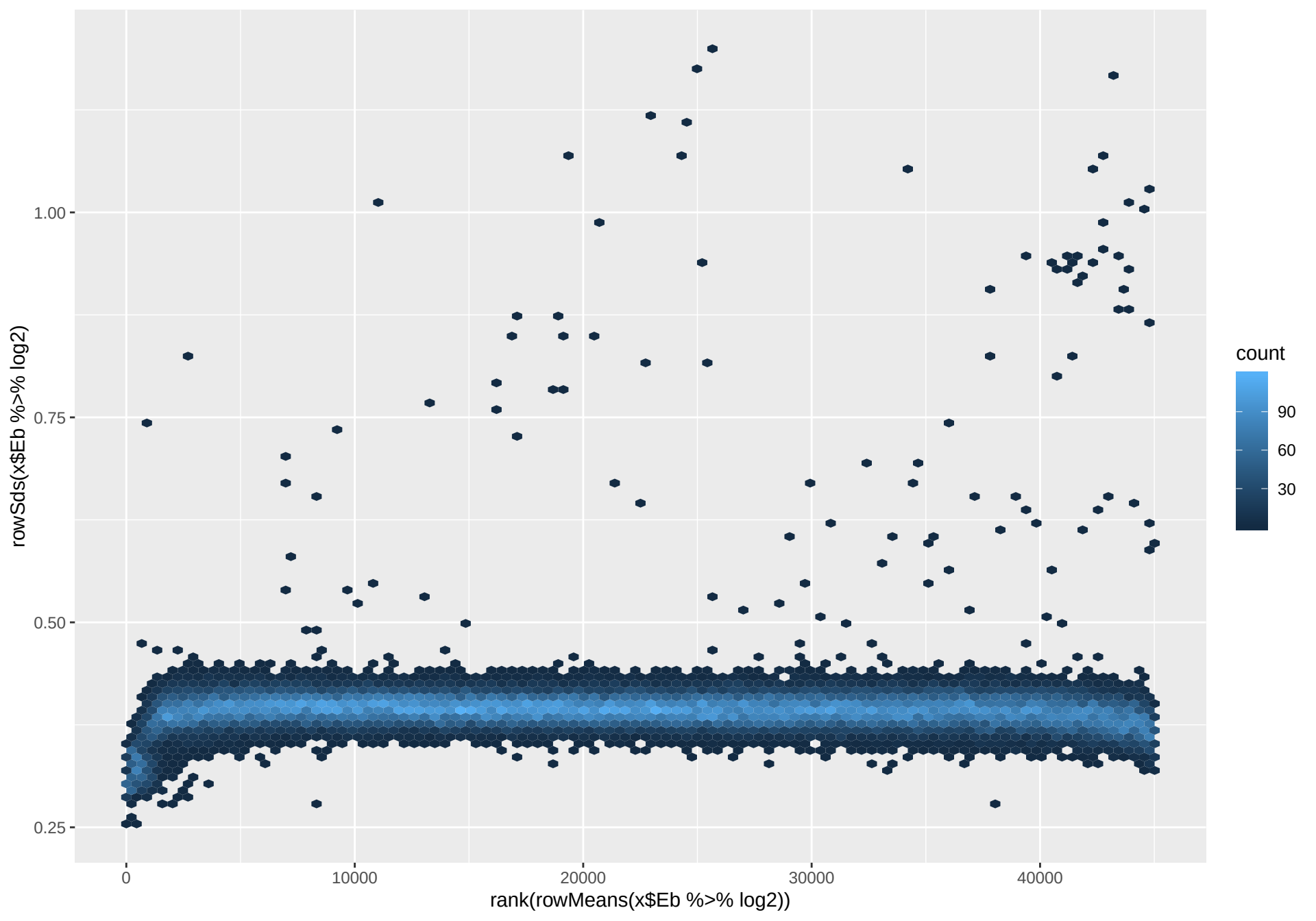
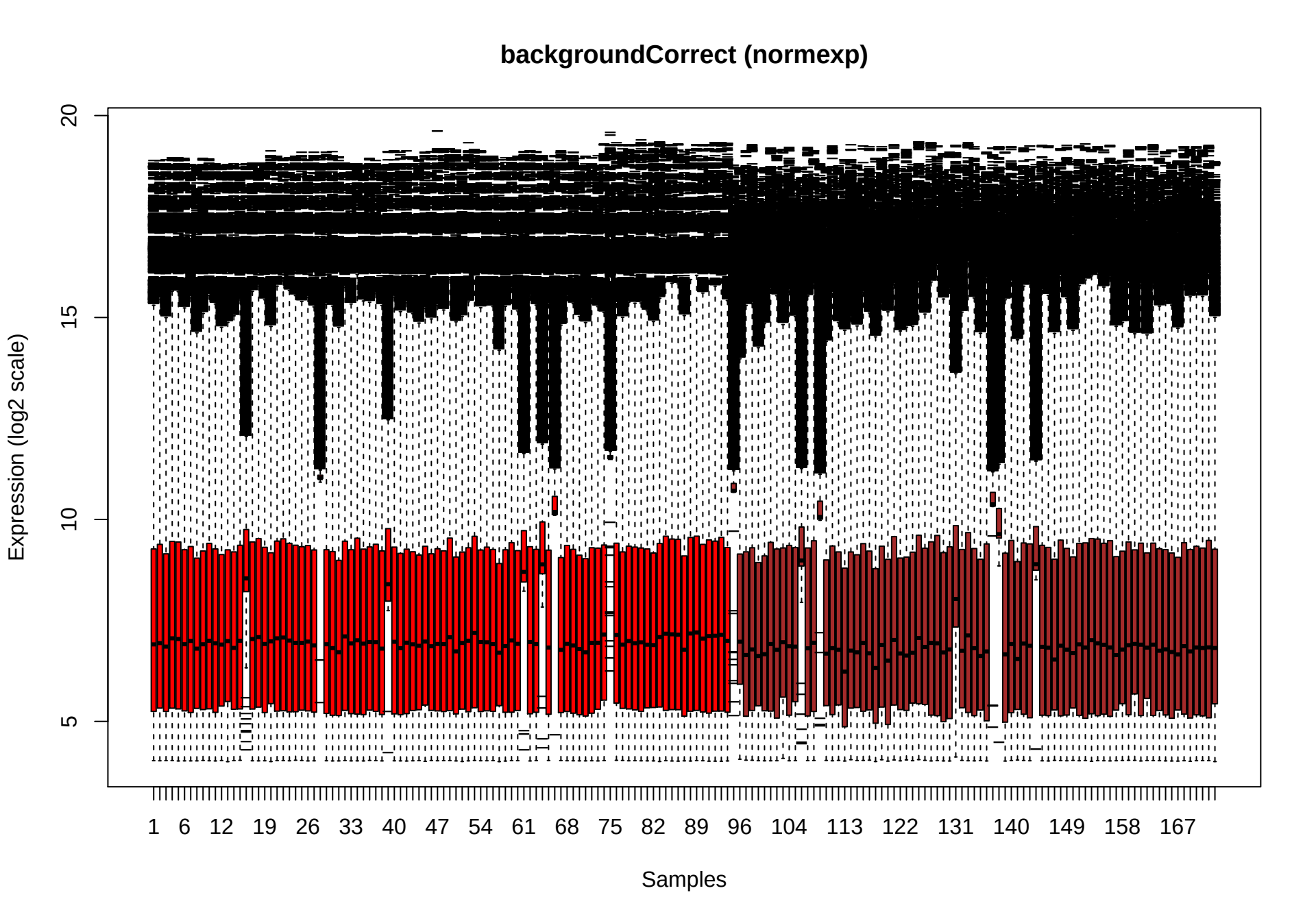
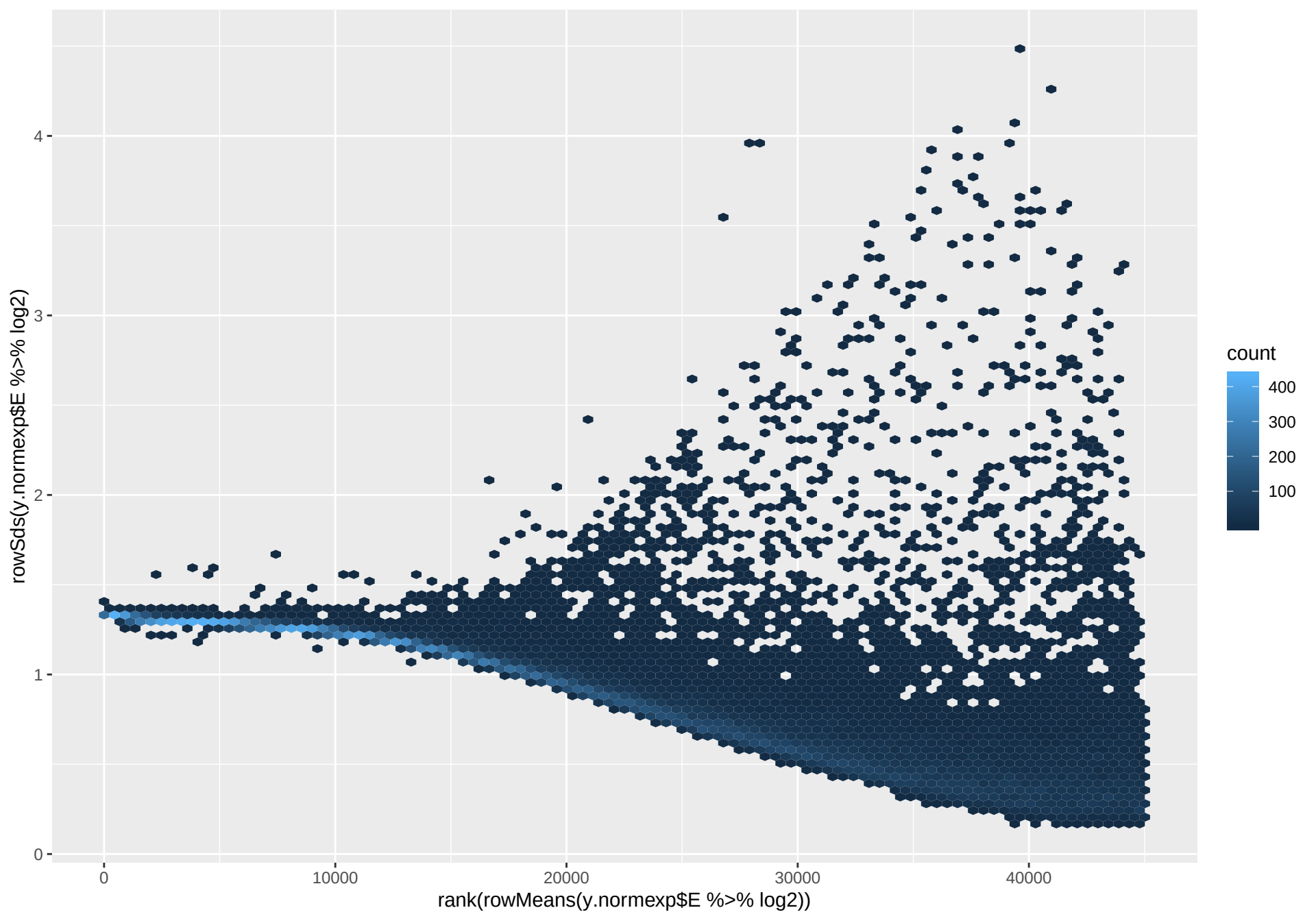

Raw foreground
Intensity (log2 scale)
20
15
10
5
1 6 12 19 26 33 40 47 54 61 68 75 82 89 96 104 113 122 131 140 149 158 167
Samples

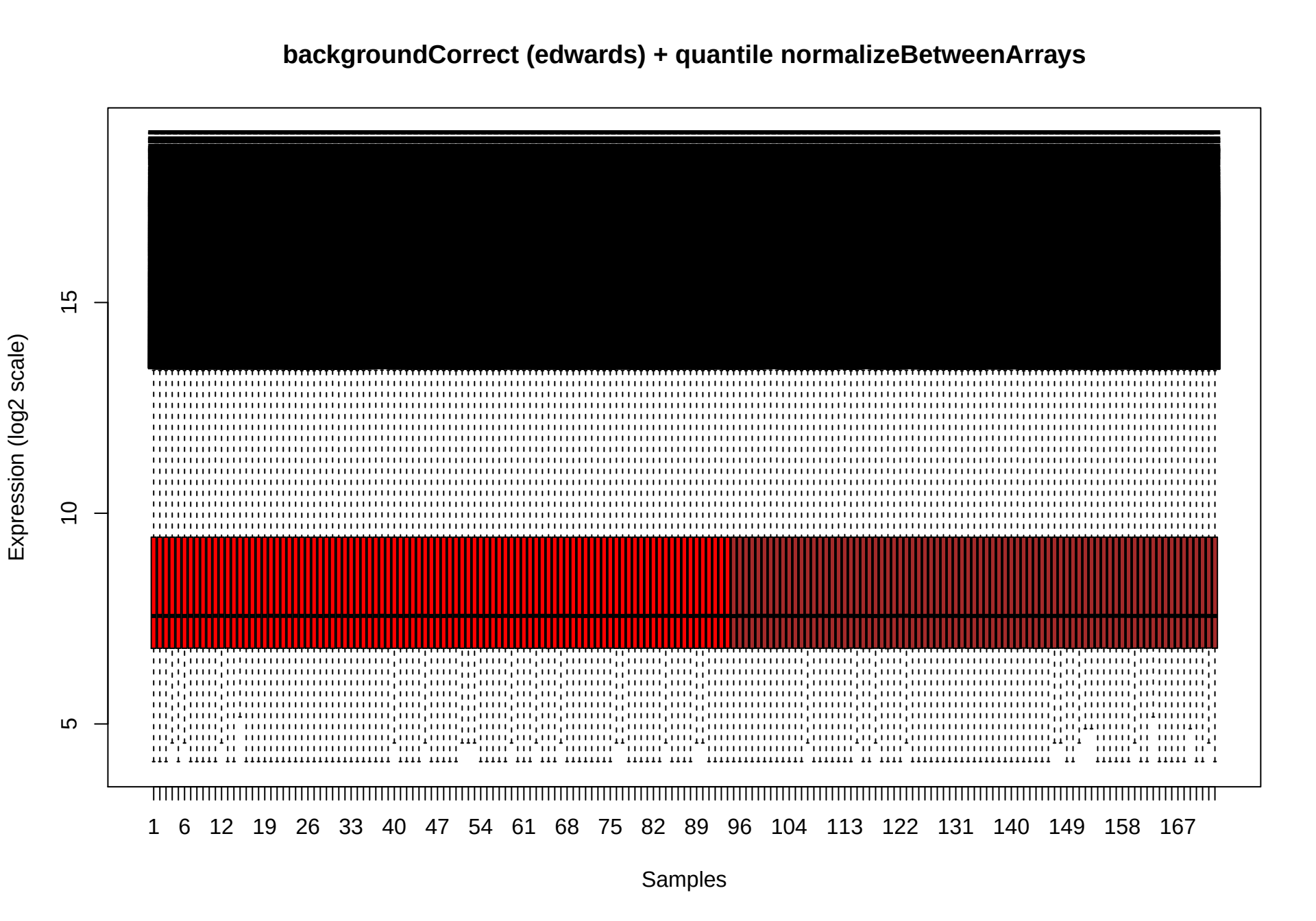

rowSds(x$E %>% log2)
rank(rowMeans(x$E %>% log2))
0
1
2
3
4
0
10000
20000
30000
40000
count
160
120
80
40

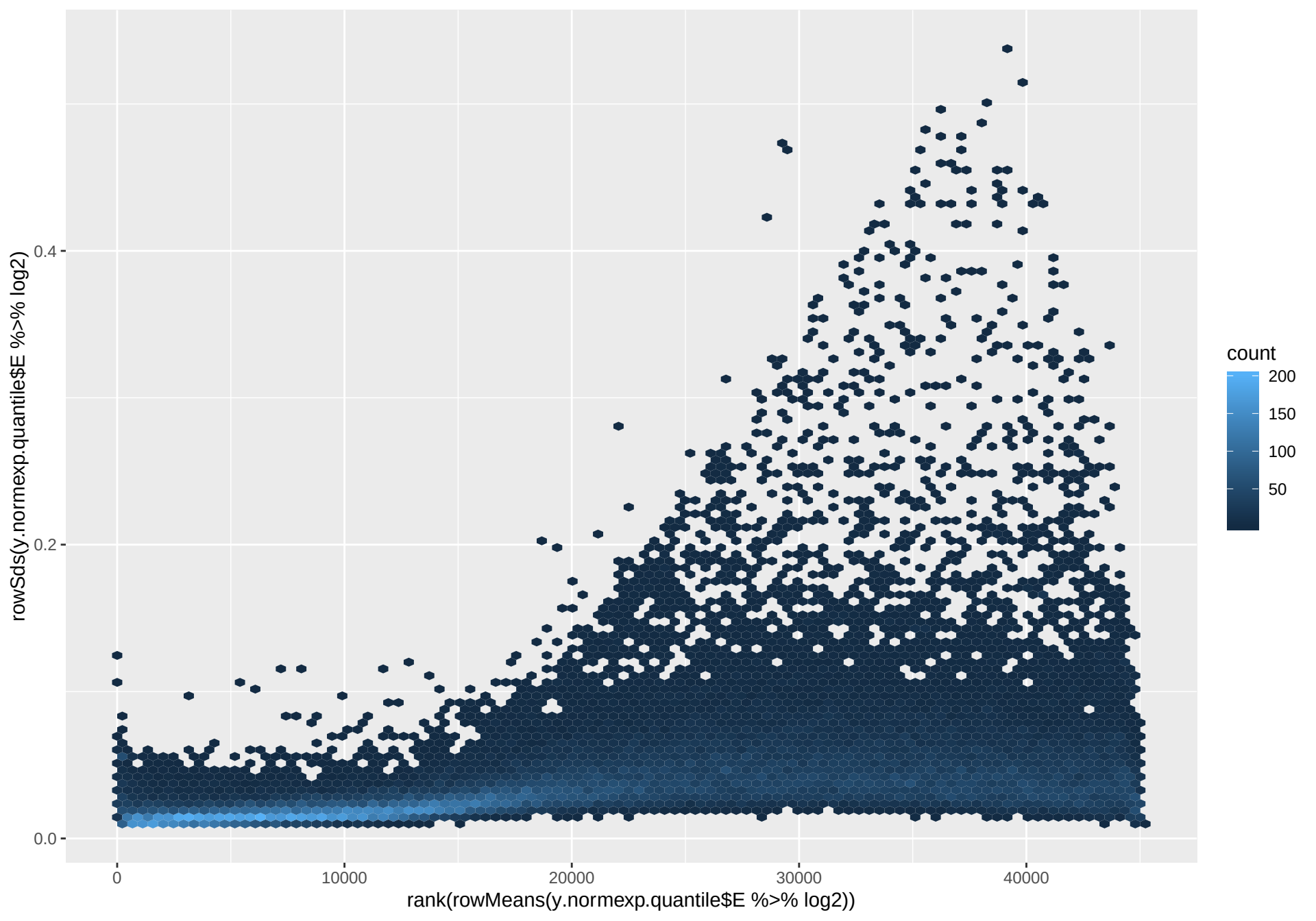

Raw background
Intensity (log2 scale)
5
10
15
1 6 12 19 26 33 40 47 54 61 68 75 82 89 96 104 113 122 131 140 149 158 167
Samples

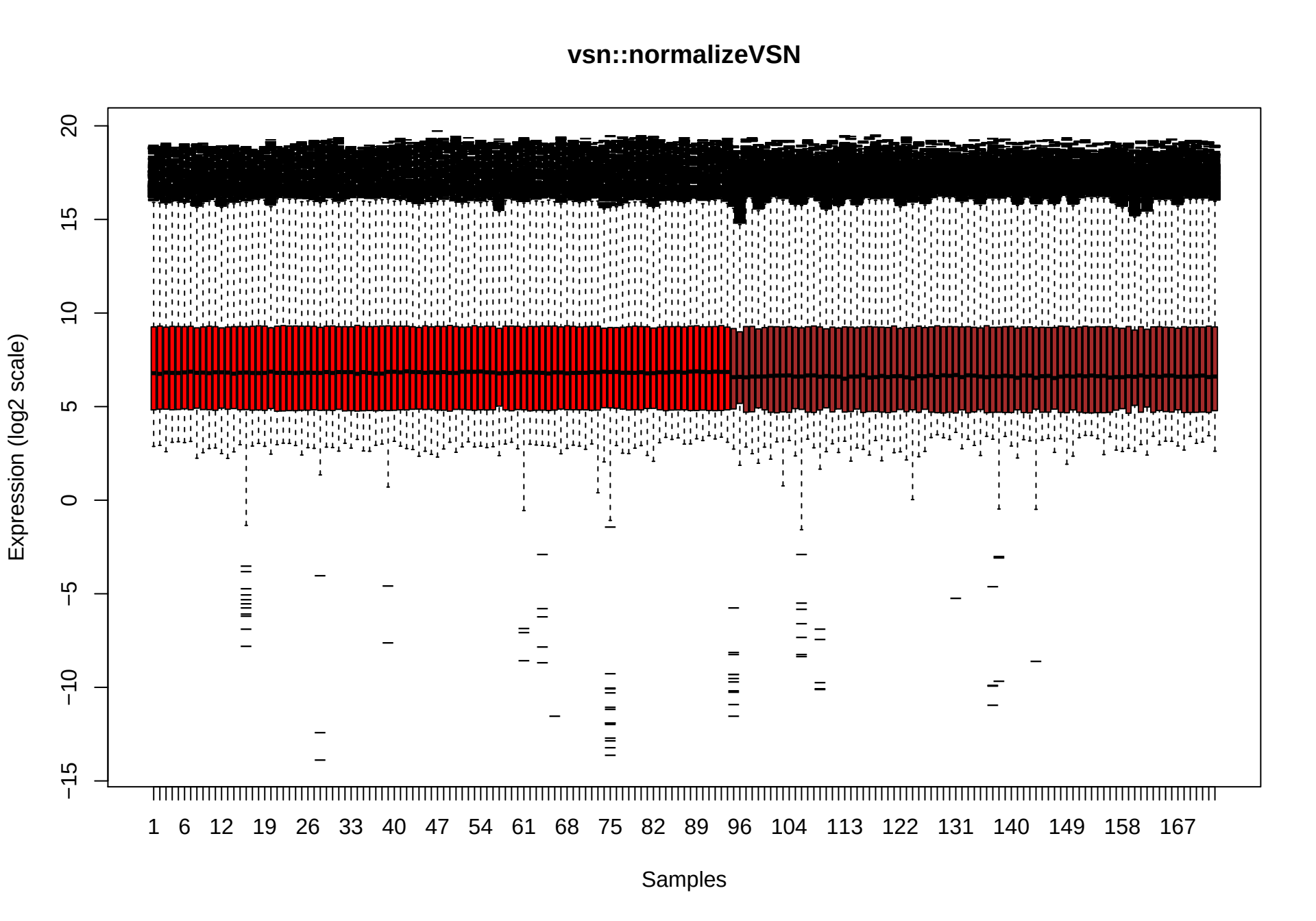

1.00
0.75
0.50
0.25
rowSds(x$Eb %>% log2)
0
10000
20000
30000
40000
rank(rowMeans(x$Eb %>% log2))
count
90
60
30

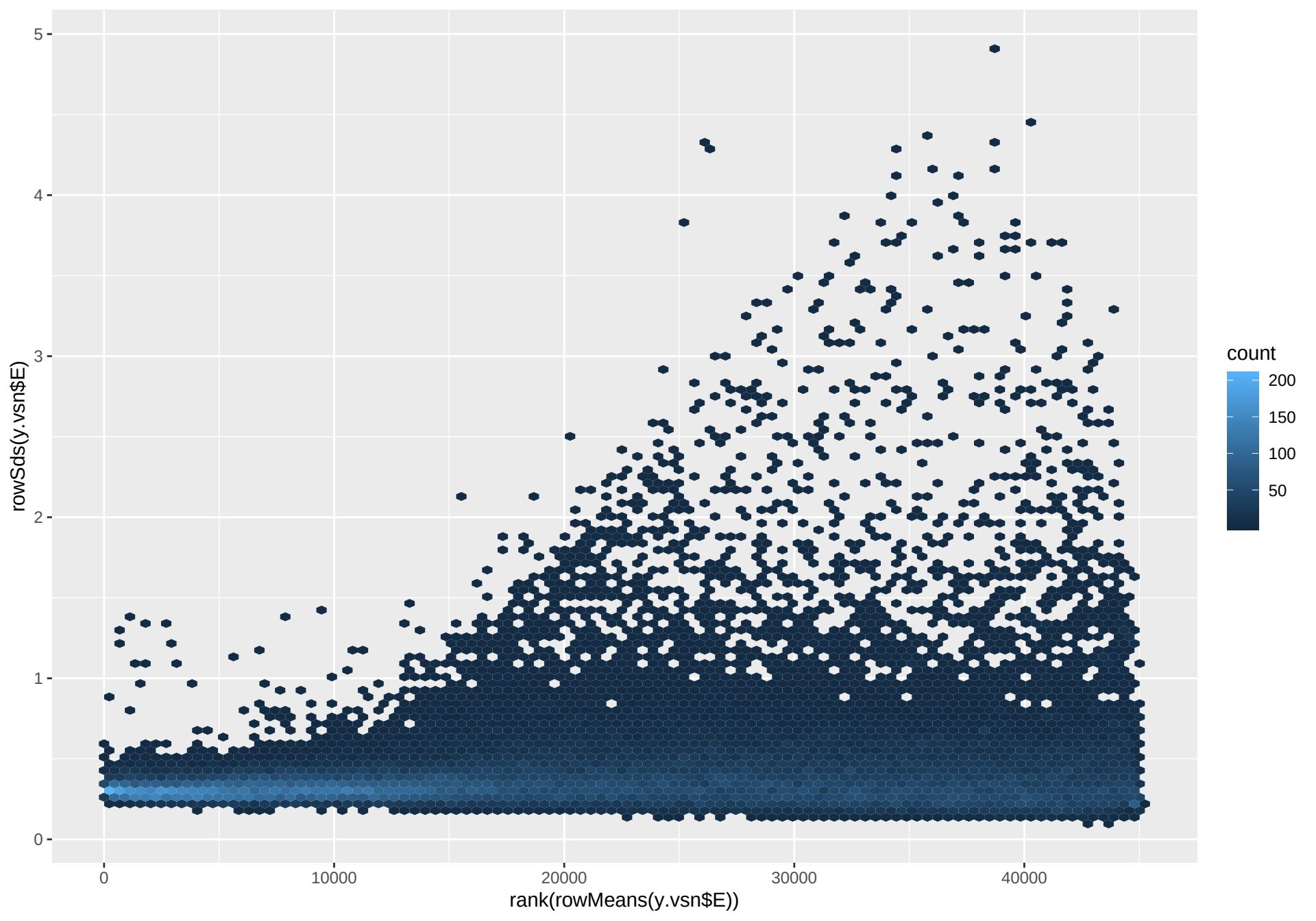

backgroundCorrect (normexp)
Expression (log2 scale)
20
15
10
5
1 6 12 19 26 33 40 47 54 61 68 75 82 89 96 104 113 122 131 140 149 158 167
Samples


rowSds(y.normexp$E %>% log2)
rank(rowMeans(y.normexp$E %>% log2))
count
400
300
200
100
0
1
2
3
4
0
10000
20000
30000
40000


backgroundCorrect (edwards) + quantile normalizeBetweenArrays
Expression (log2 scale)
15
10
5
1 6 12 19 26 33 40 47 54 61 68 75 82 89 96 104 113 122 131 140 149 158 167
Samples


rowSds(y.normexp.quantile$E %>% log2)
0.4
0.2
0.0
0
10000
20000
30000
40000
rank(rowMeans(y.normexp.quantile$E %>% log2))
count
200
150
100
50


vsn::normalizeVSN
Expression (log2 scale)
20
15
10
5
0
−5
−10
−15
1 6 12 19 26 33 40 47 54 61 68 75 82 89 96 104 113 122 131 140 149 158 167
Samples


rowSds(y.vsn$E)
rank(rowMeans(y.vsn$E))
count
200
150
100
50
0
1
2
3
4
5
0
10000
20000
30000
40000