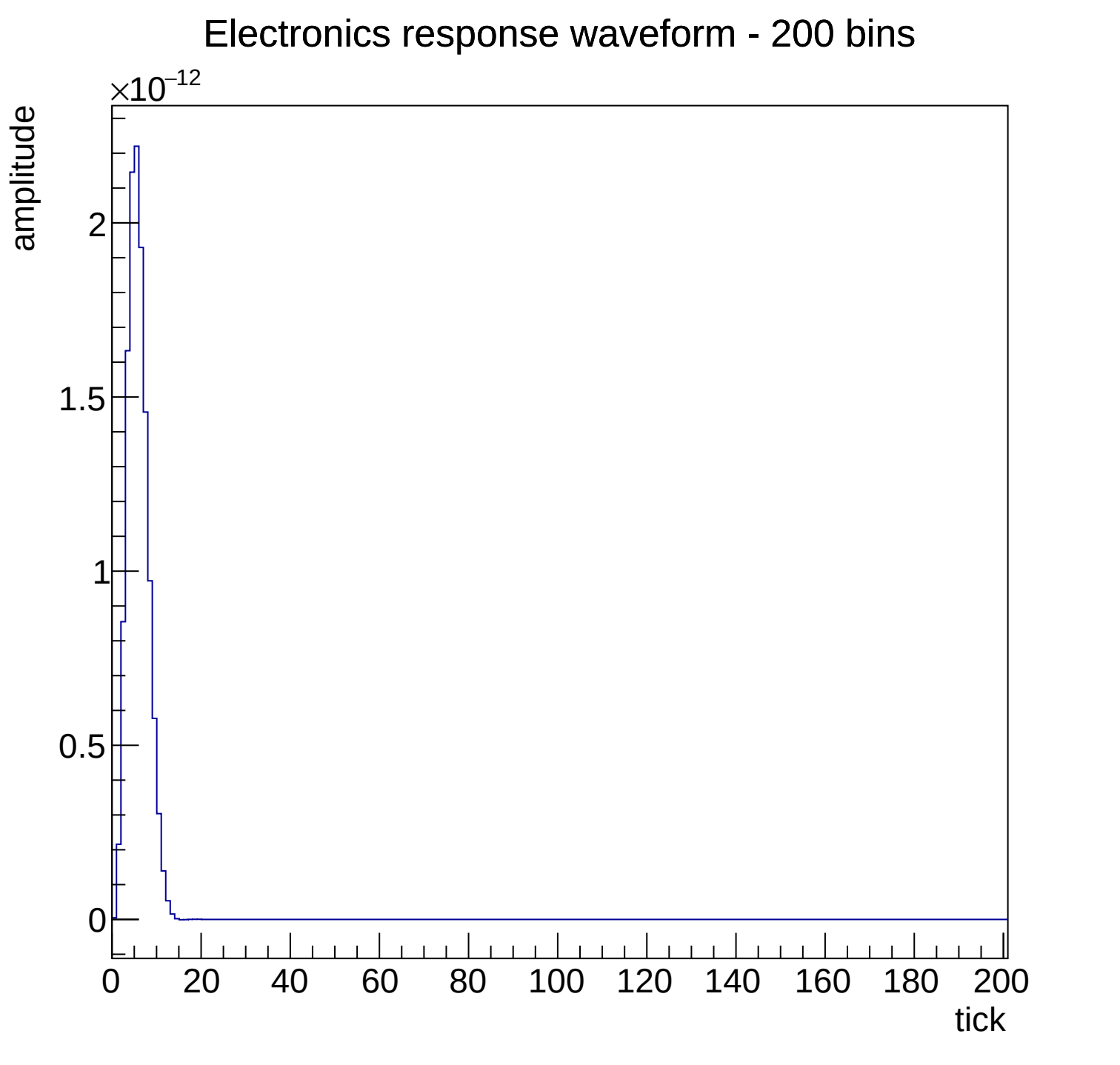
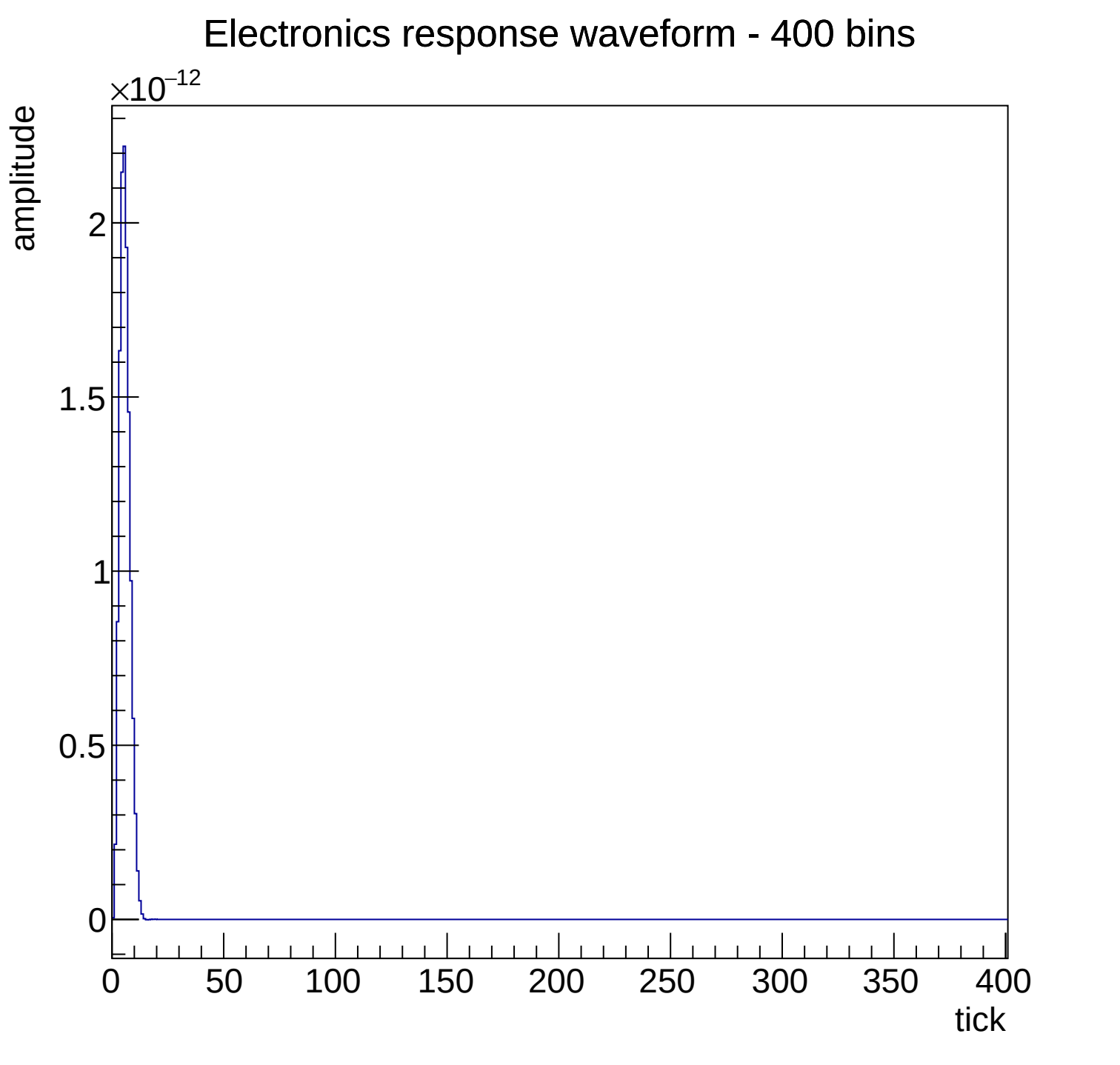
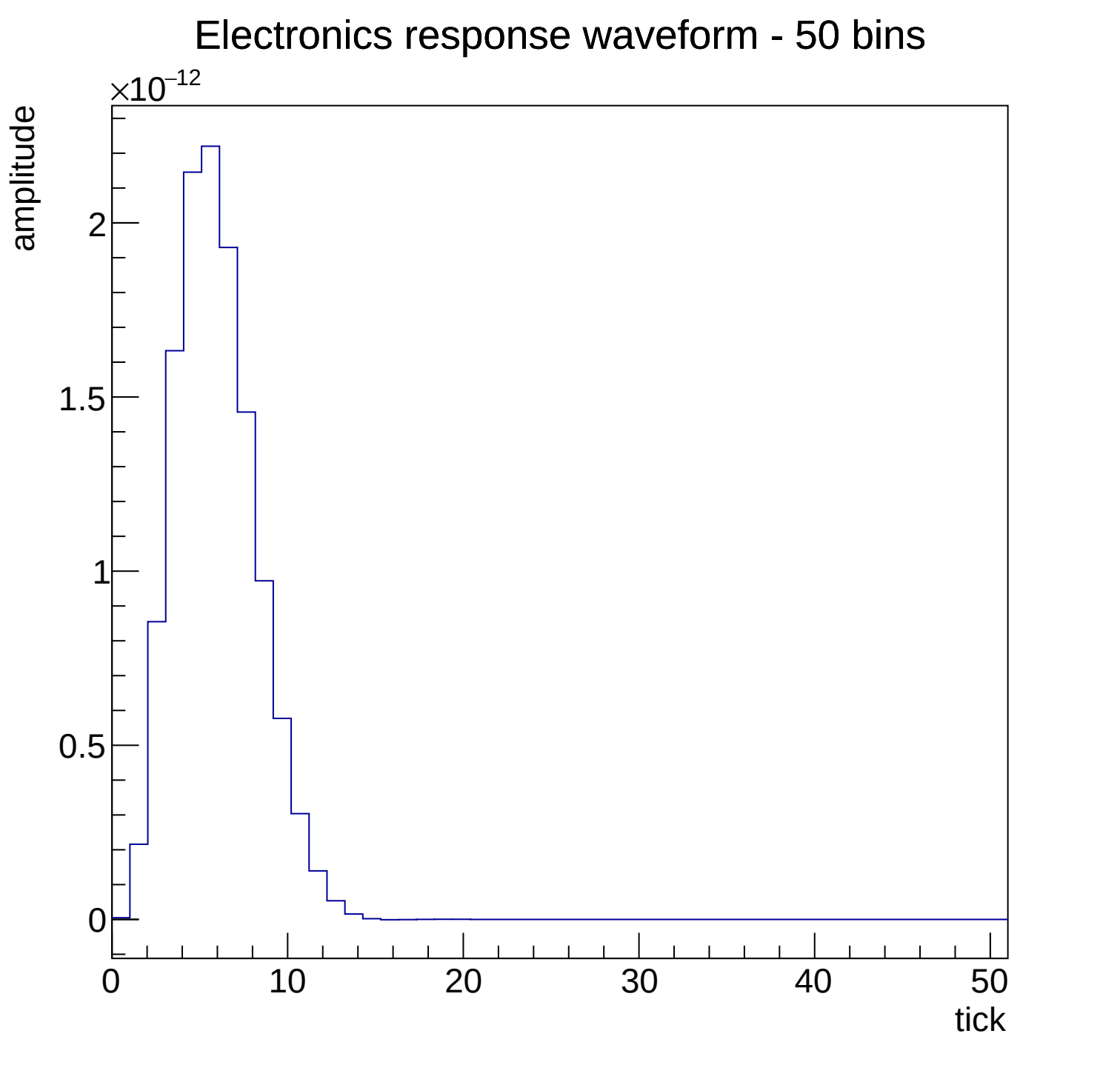
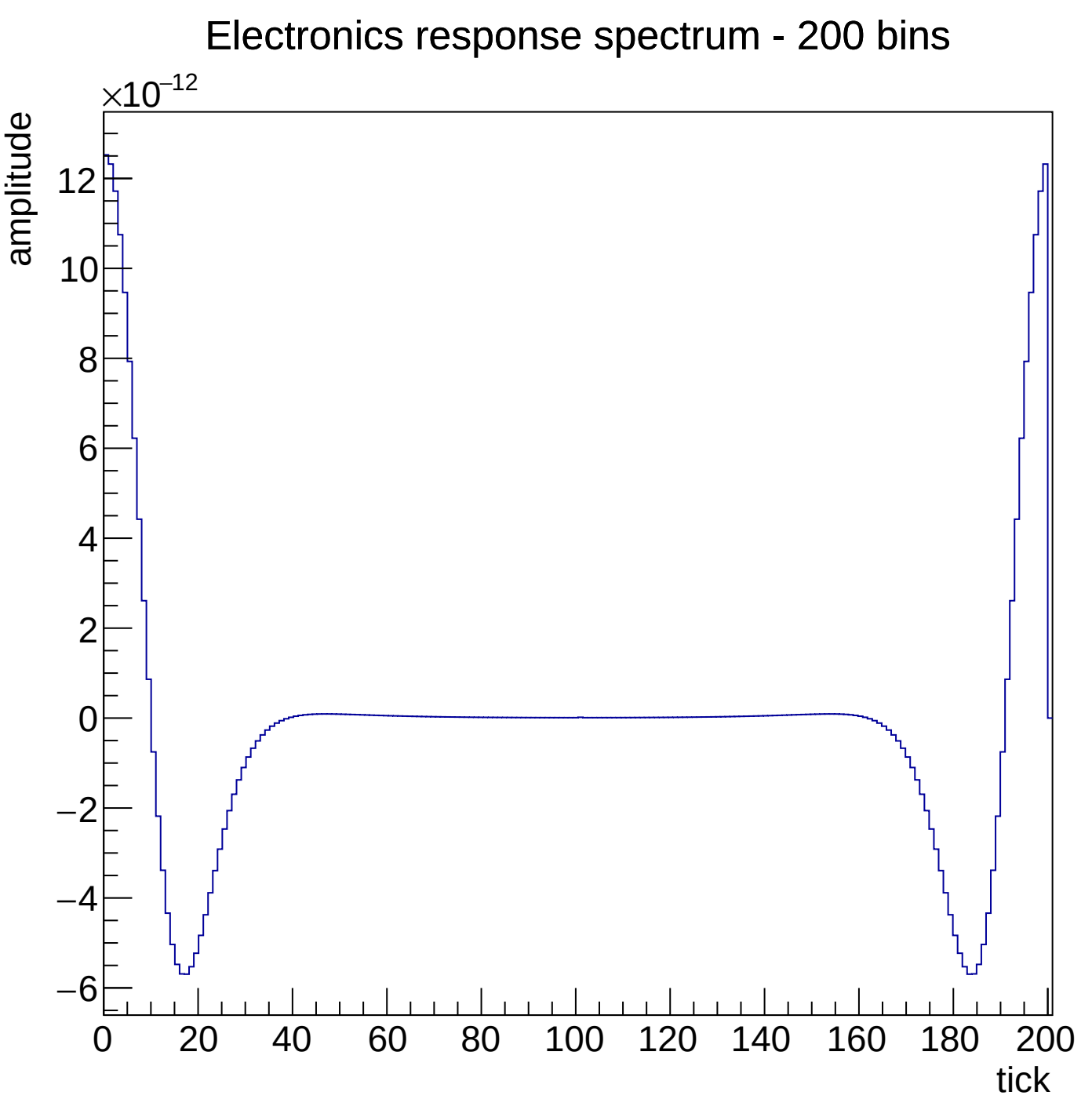
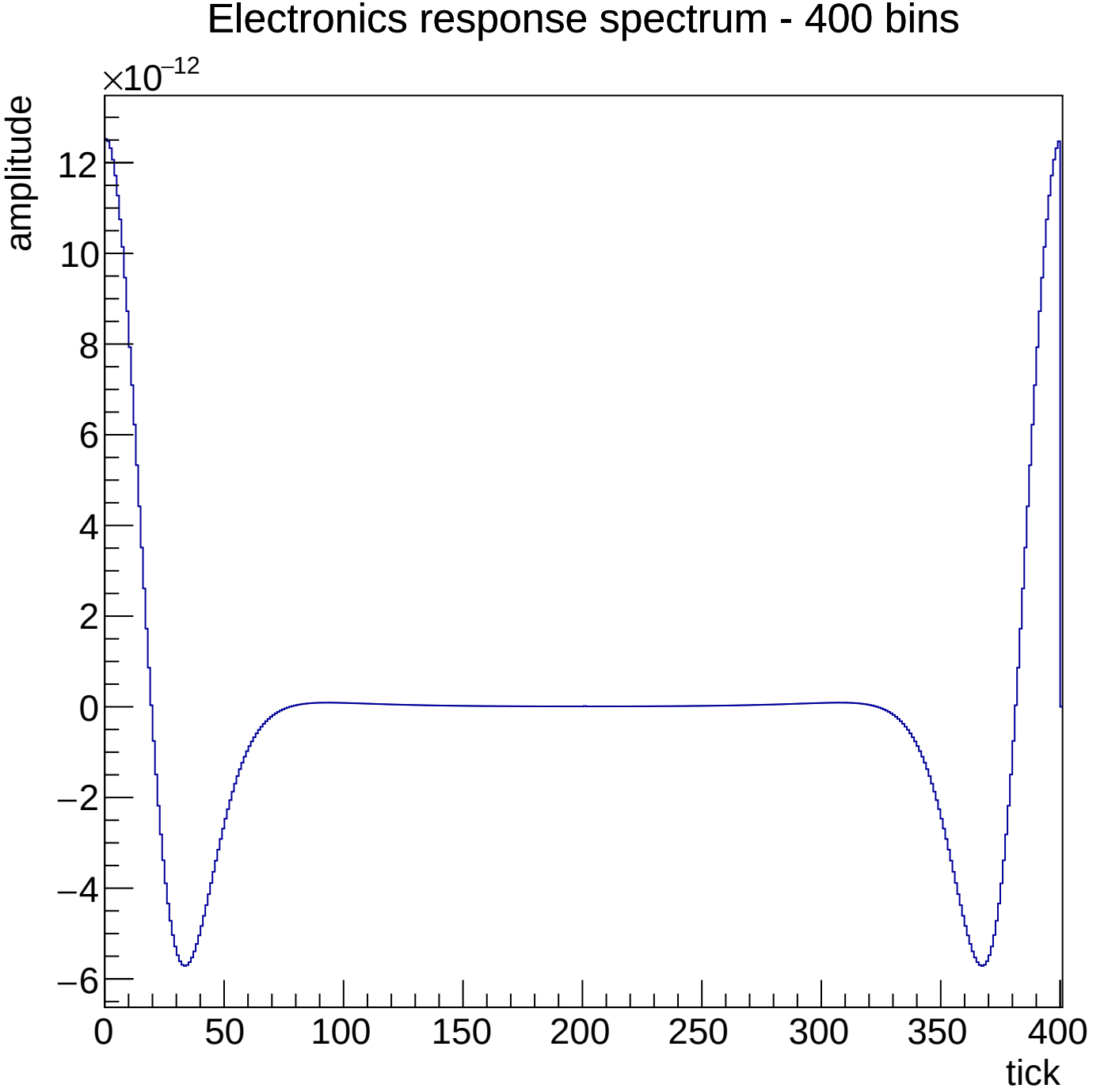
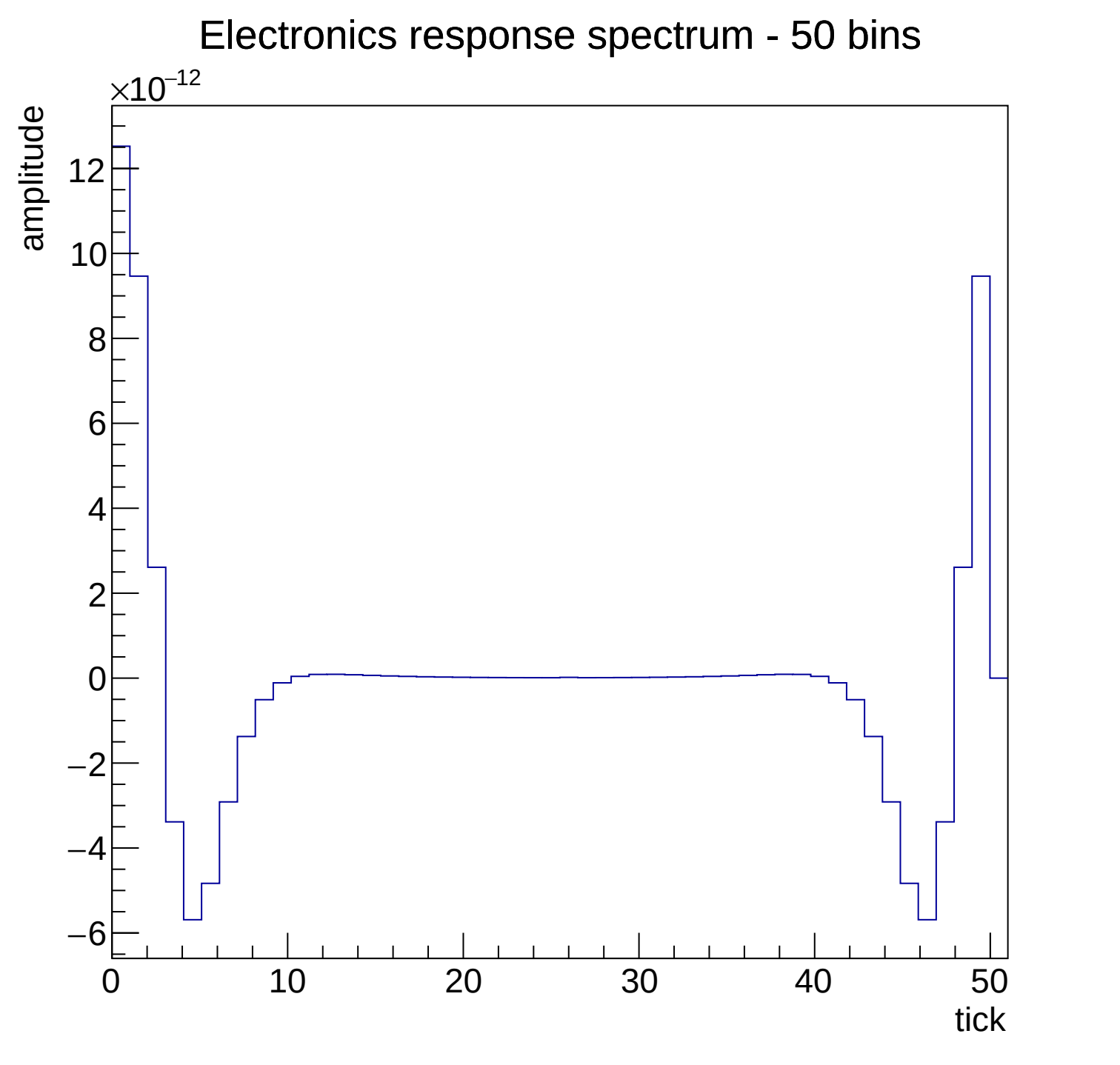

Electronics response waveform - 200 bins
×10−12
amplitude
2
1.5
1
0.5
0
0
20
40
60
80
100
120
140
160
180
200
tick

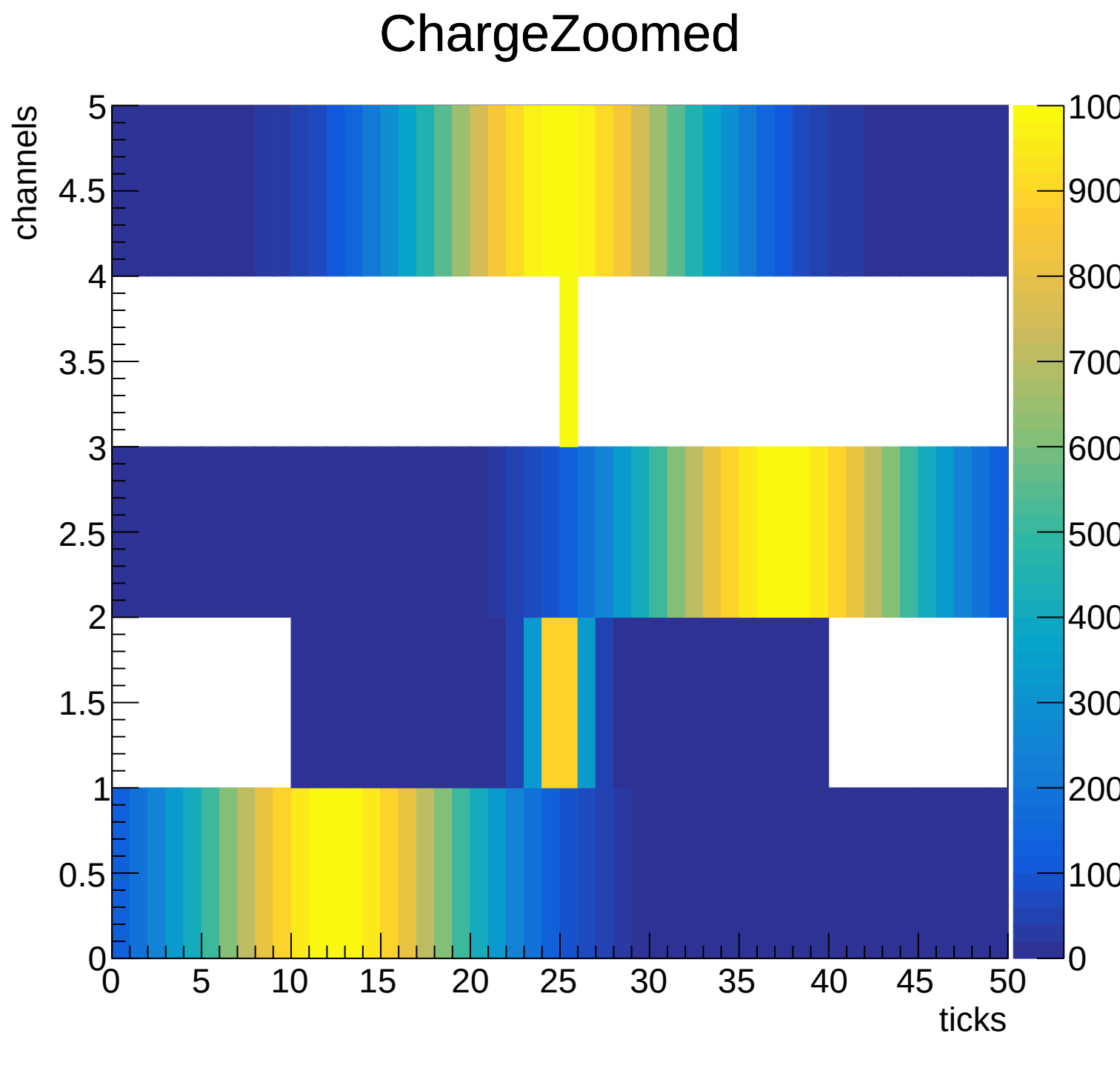

Electronics response waveform - 400 bins
×10−12
amplitude
2
1.5
1
0.5
0
0
50
100
150
200
250
300
350
400
tick

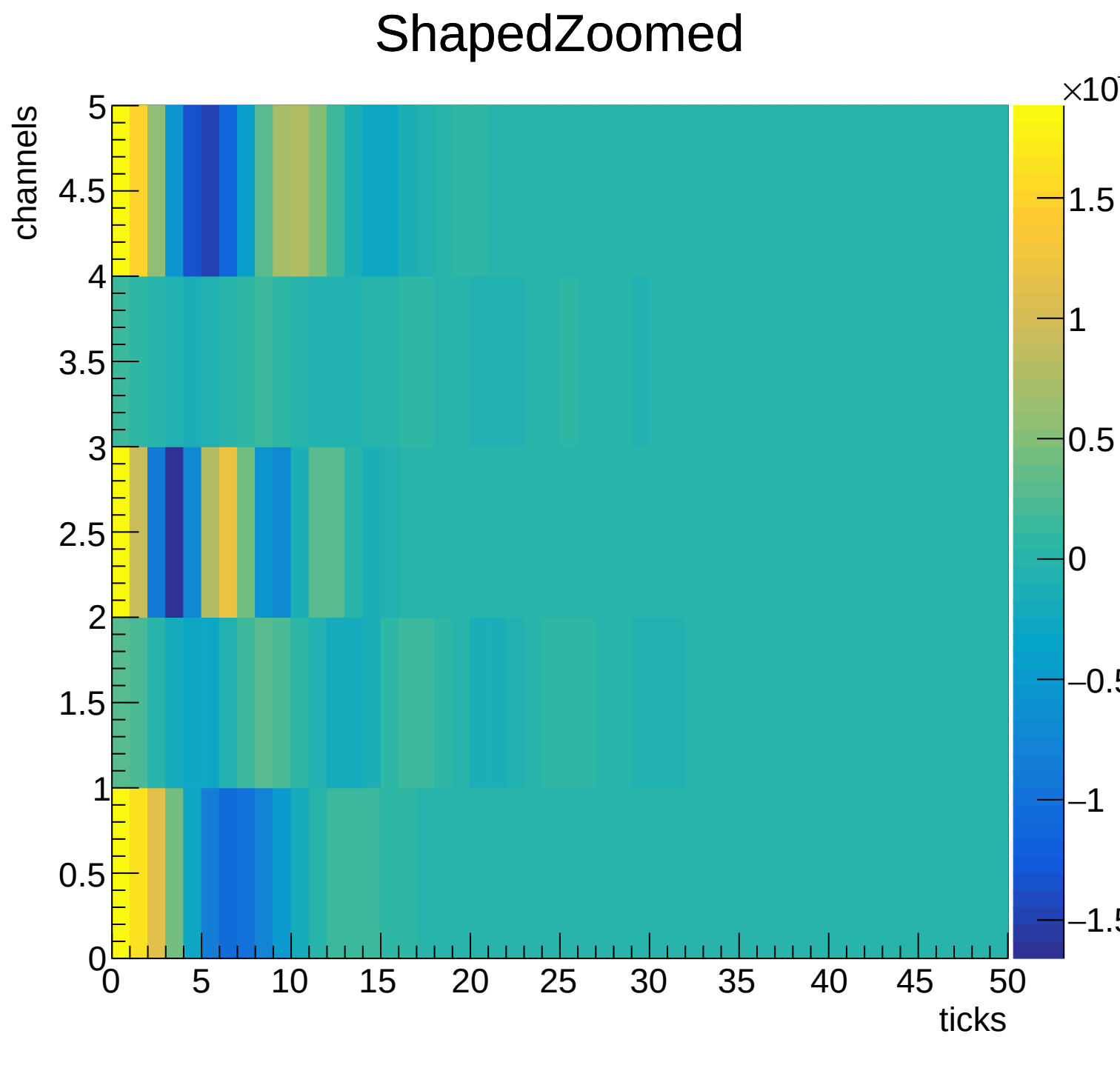

Electronics response waveform - 50 bins
×10−12
amplitude
2
1.5
1
0.5
0
0
10
20
30
40
50
tick

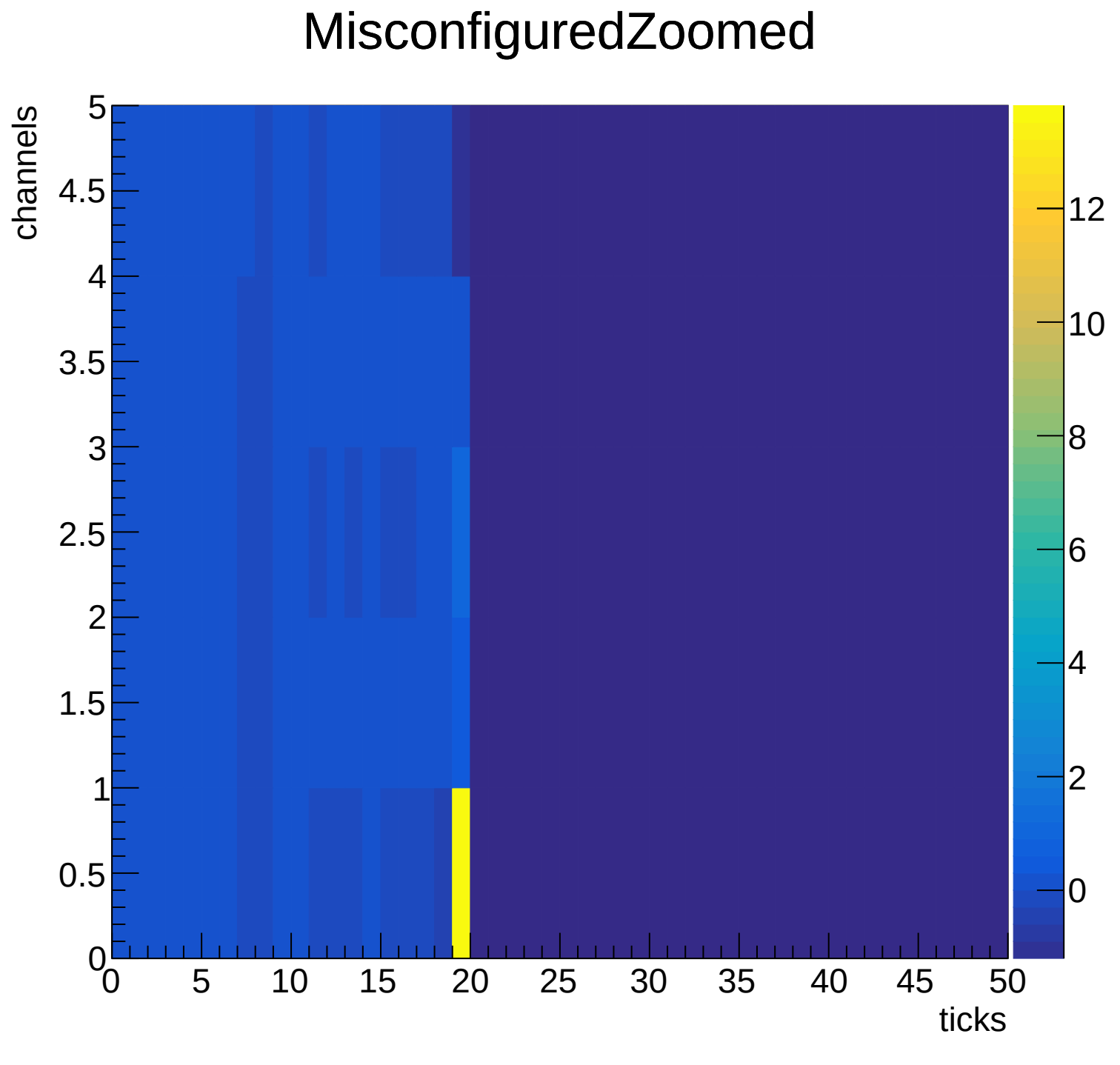

Electronics response spectrum - 200 bins
×10−12
amplitude
12
10
8
6
4
2
0
−2
−4
−6
0
20
40
60
80
100
120
140
160
180
200
tick

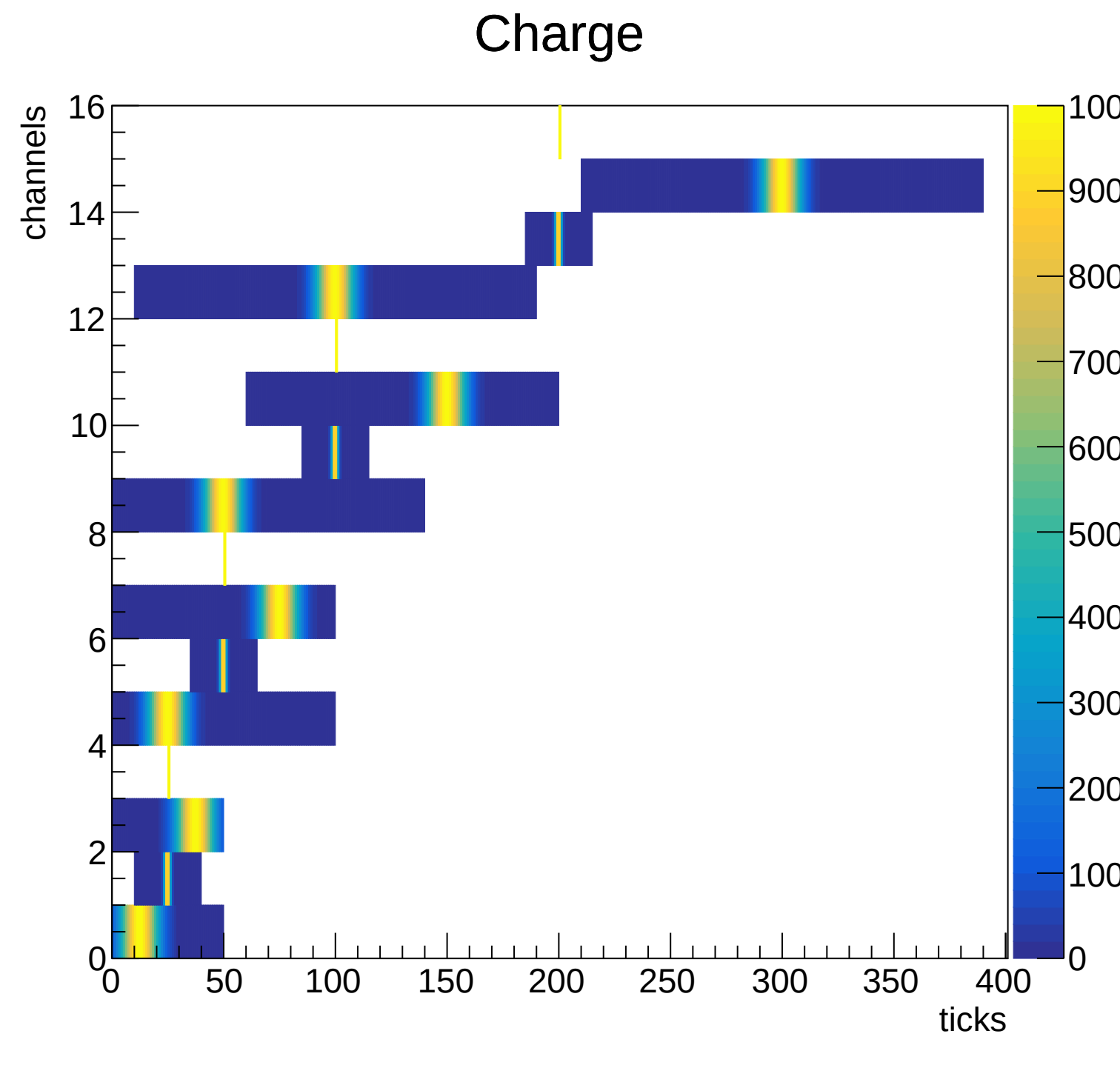

Electronics response spectrum - 400 bins
×10−12
amplitude
12
10
8
6
4
2
0
−2
−4
−6
0
50
100
150
200
250
300
350
400
tick

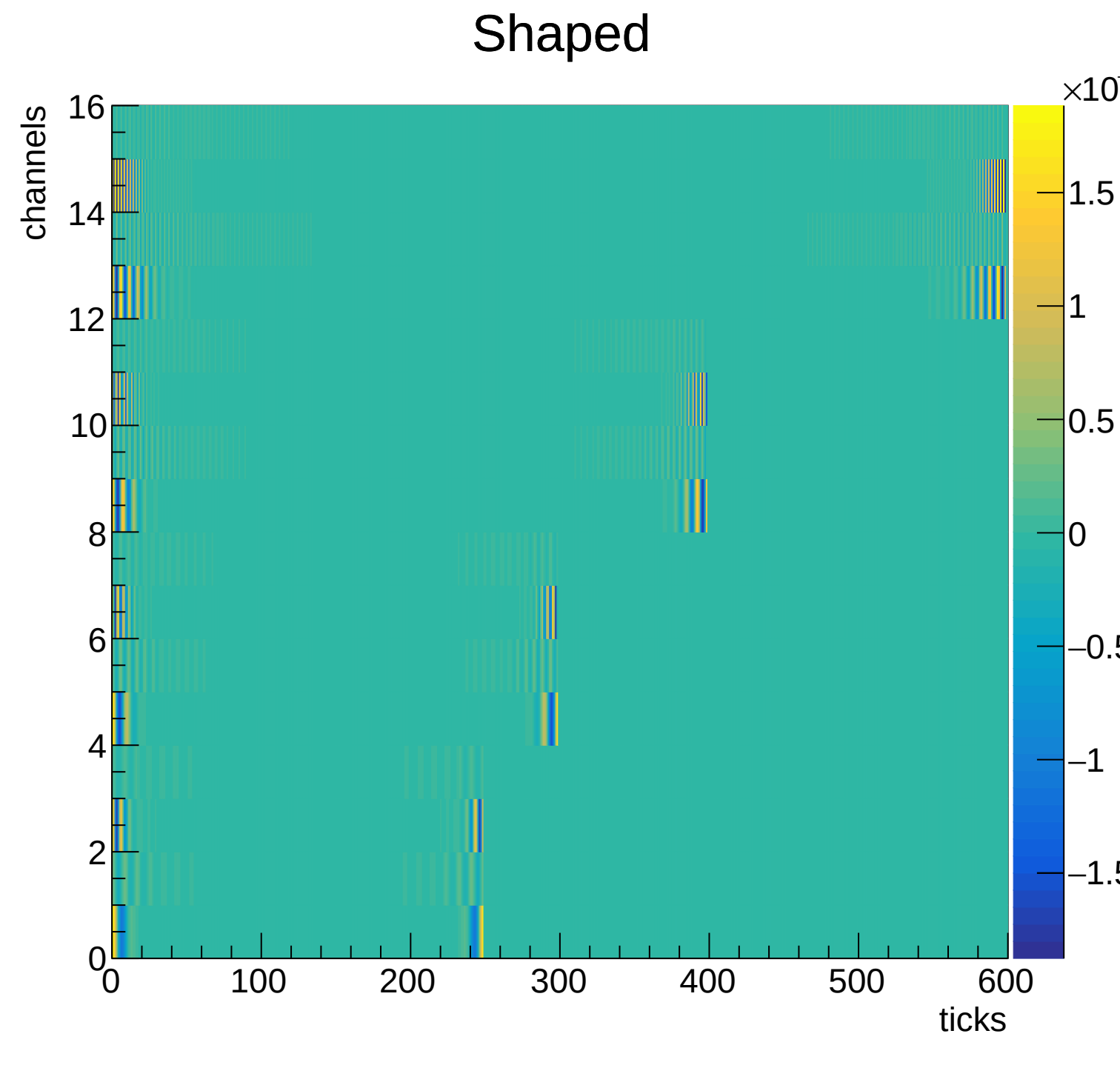

Electronics response spectrum - 50 bins
×10−12
amplitude
12
10
8
6
4
2
0
−2
−4
−6
0
10
20
30
40
50
tick

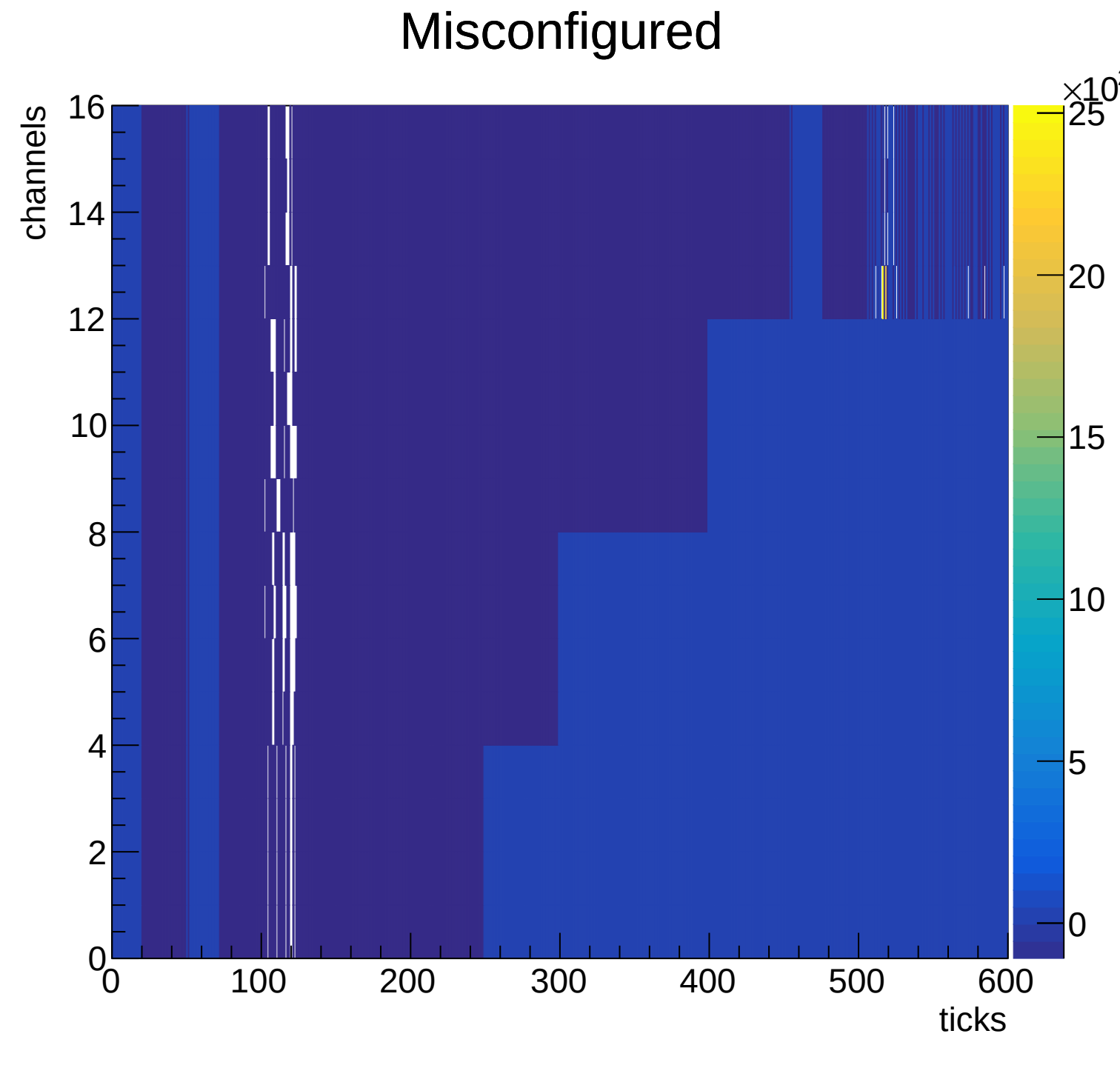

ChargeZoomed
channels
ticks
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
0
5
10
15
20
25
30
35
40
45
50
0
100
200
300
400
500
600
700
800
900
1000

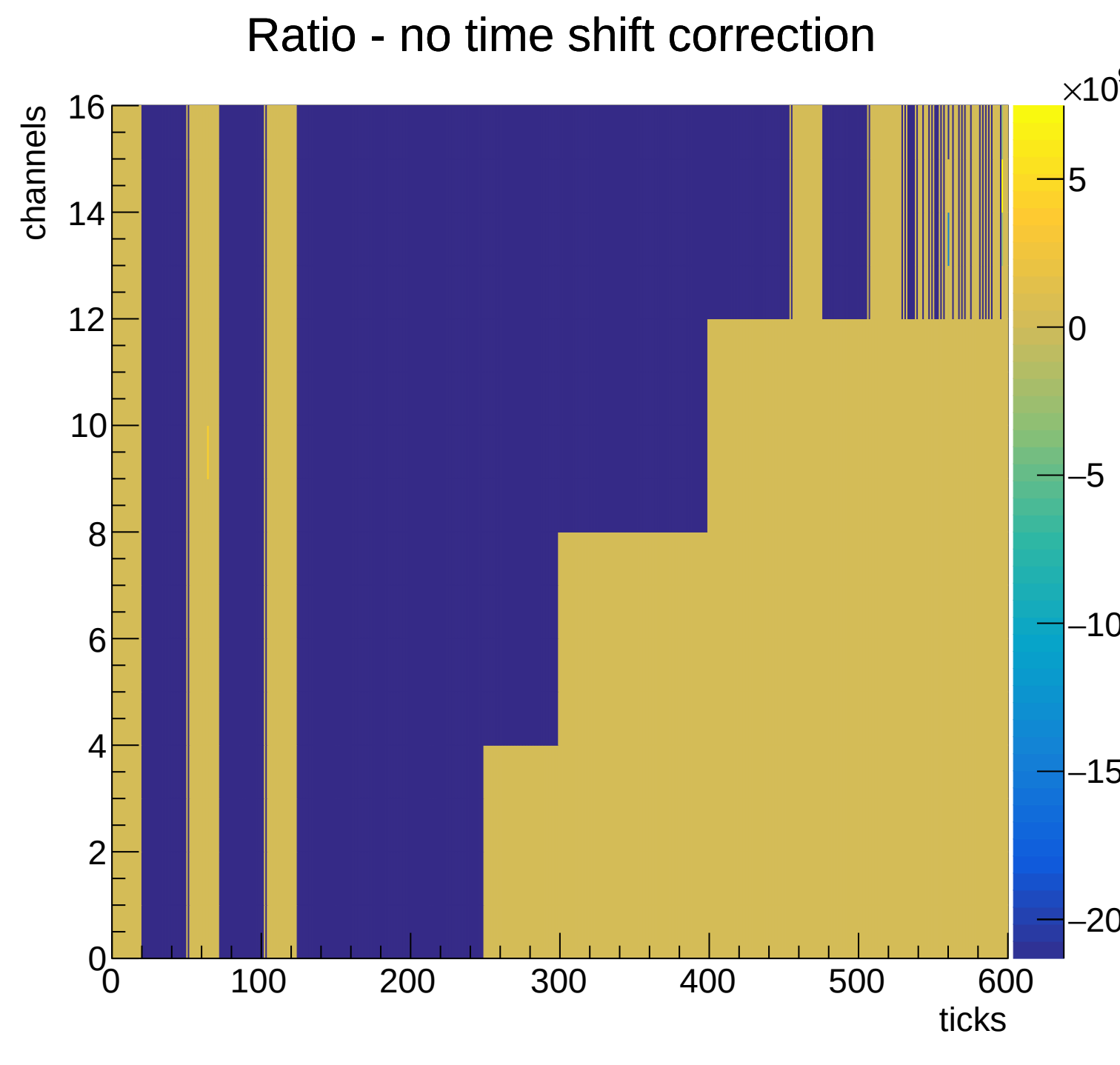

ShapedZoomed
channels
ticks
×10
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
0
5
10
15
20
25
30
35
40
45
50
1.5
1
0.5
0
–0.5
–1
–1.5


MisconfiguredZoomed
channels
ticks
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
0
5
10
15
20
25
30
35
40
45
50
0
2
4
6
8
10
12


Charge
channels
16
14
12
10
8
6
4
2
0
0
50
100
150
200
250
300
350
400
ticks
100
900
800
700
600
500
400
300
200
100
0


Shaped
channels
16
14
12
10
8
6
4
2
0
0
100
200
300
400
500
600
ticks
×10
1.5
1
0.5
0
–0.5
–1
–1.5


Misconfigured
channels
16
14
12
10
8
6
4
2
0
0
100
200
300
400
500
600
ticks
×10
25
20
15
10
5
0


Ratio - no time shift correction
channels
ticks
0
2
4
6
8
10
12
14
16
0
100
200
300
400
500
600
×10
5
0
−5
−10
−15
−20