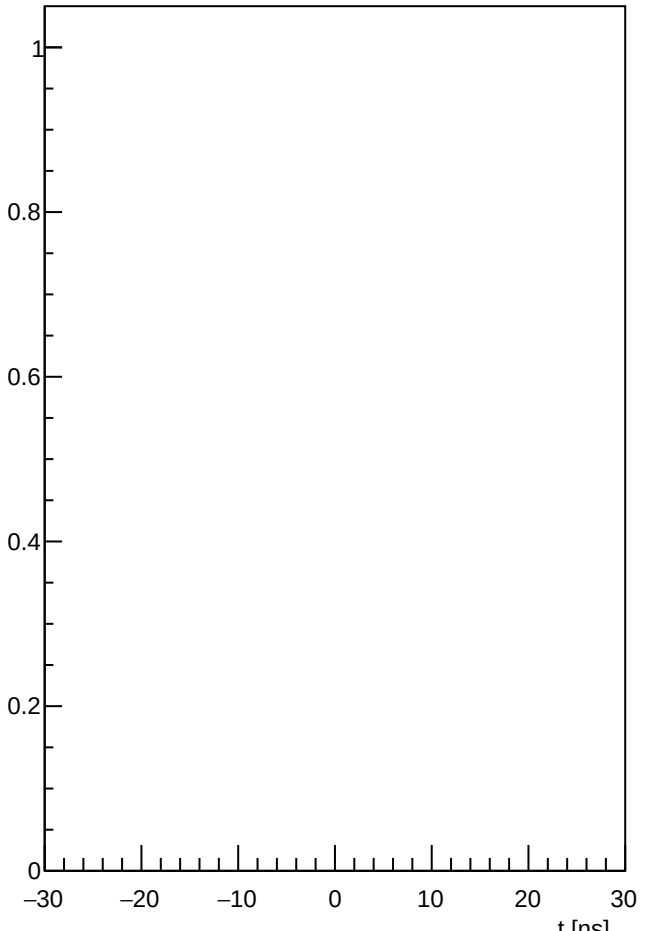
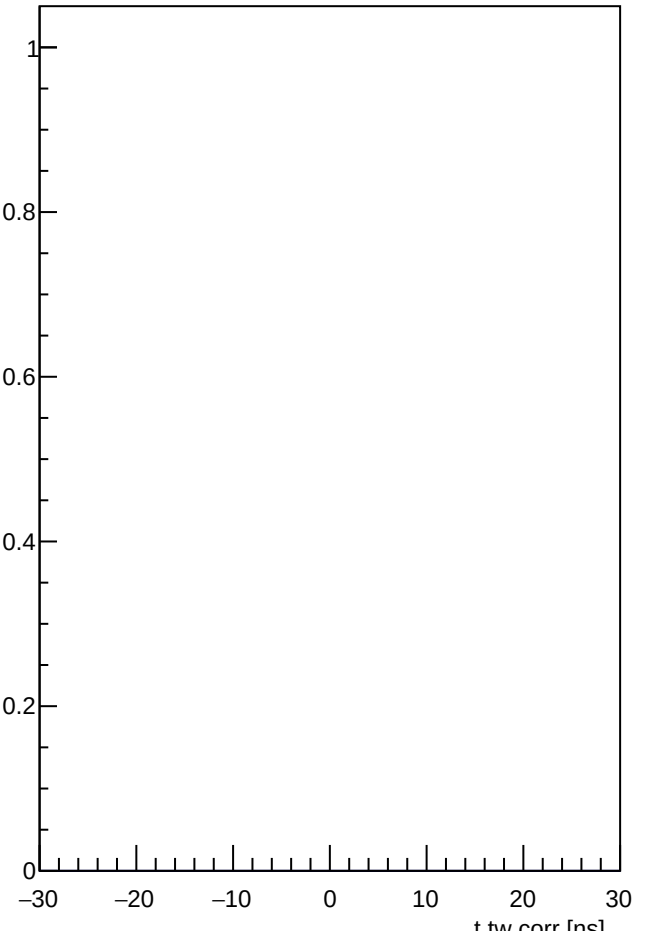
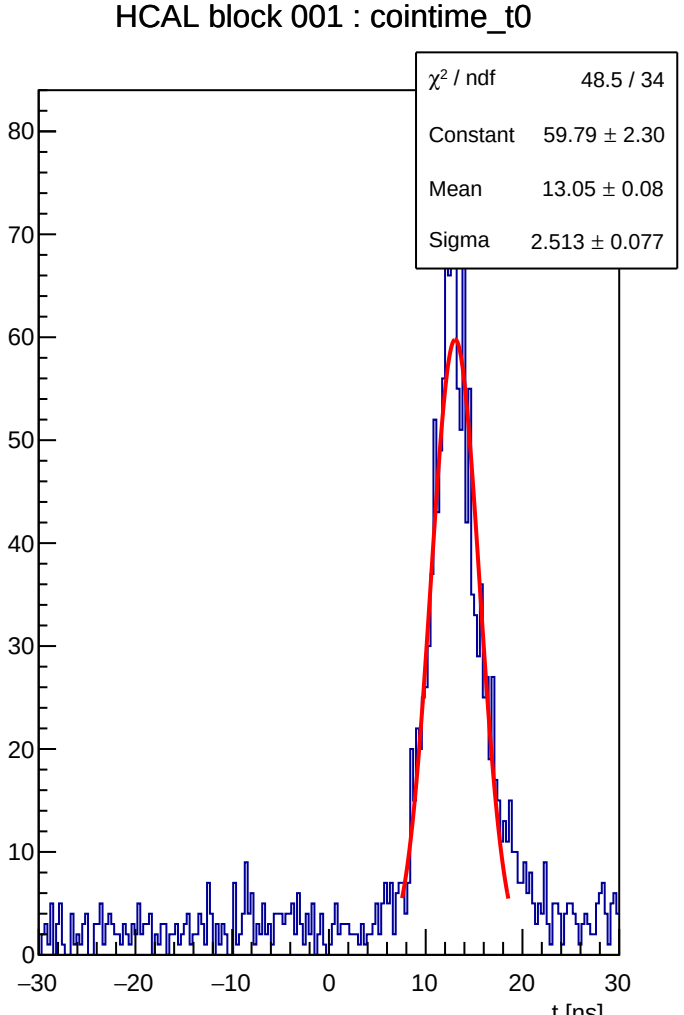
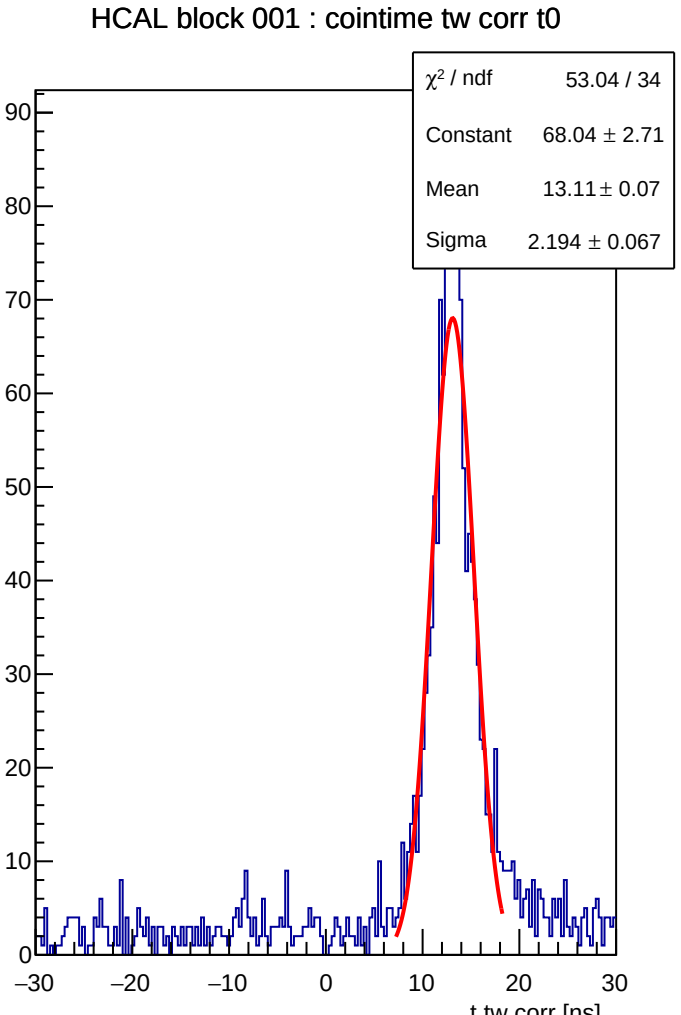
HCAL block 000 : cointime_t0

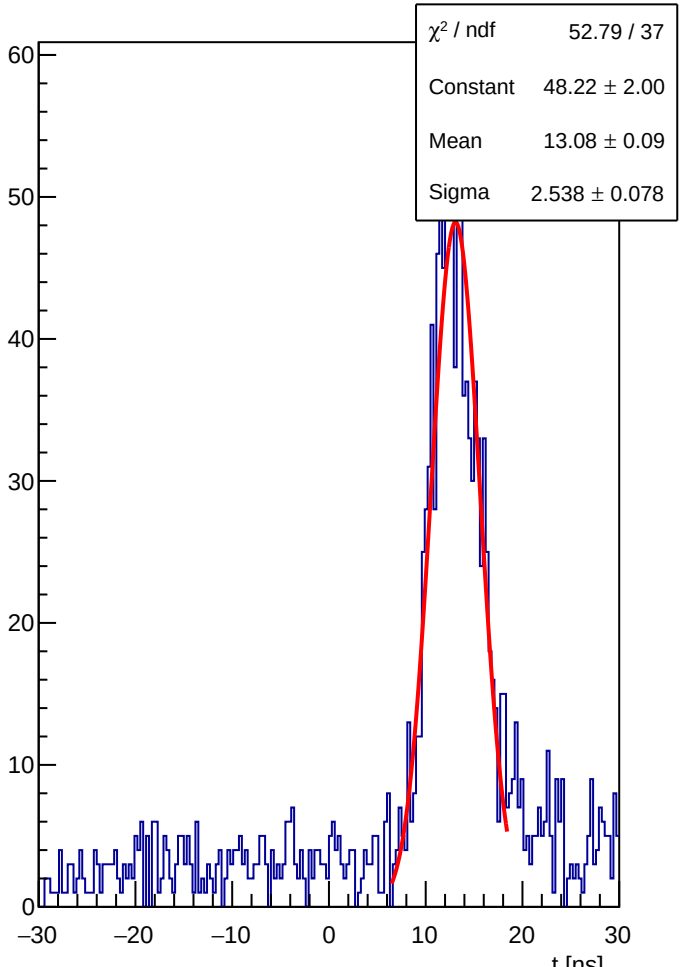


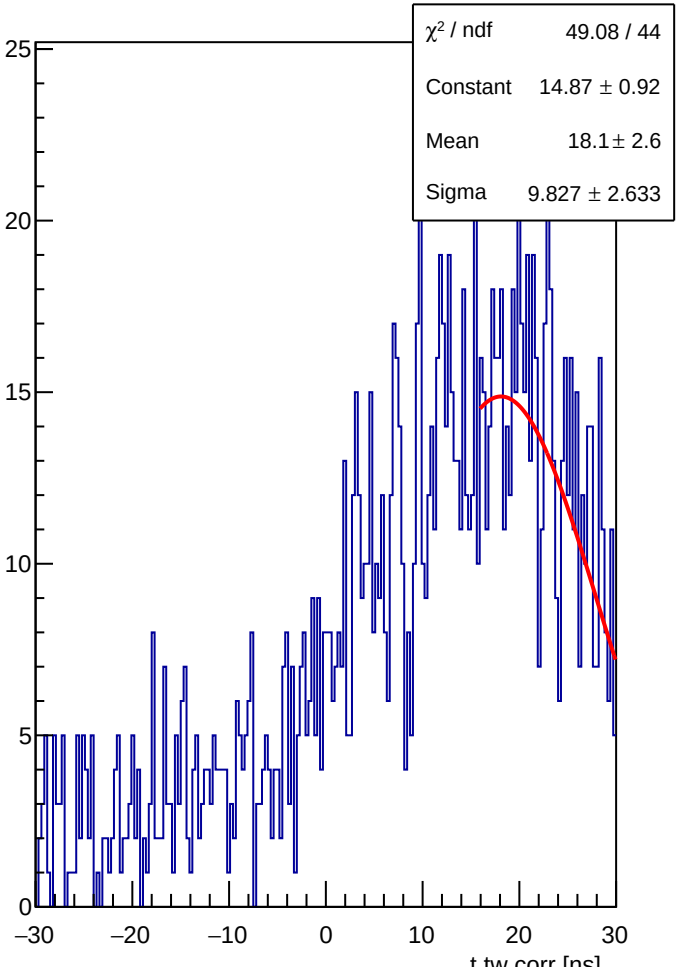
HCAL block 000 : cointime tw corr t0

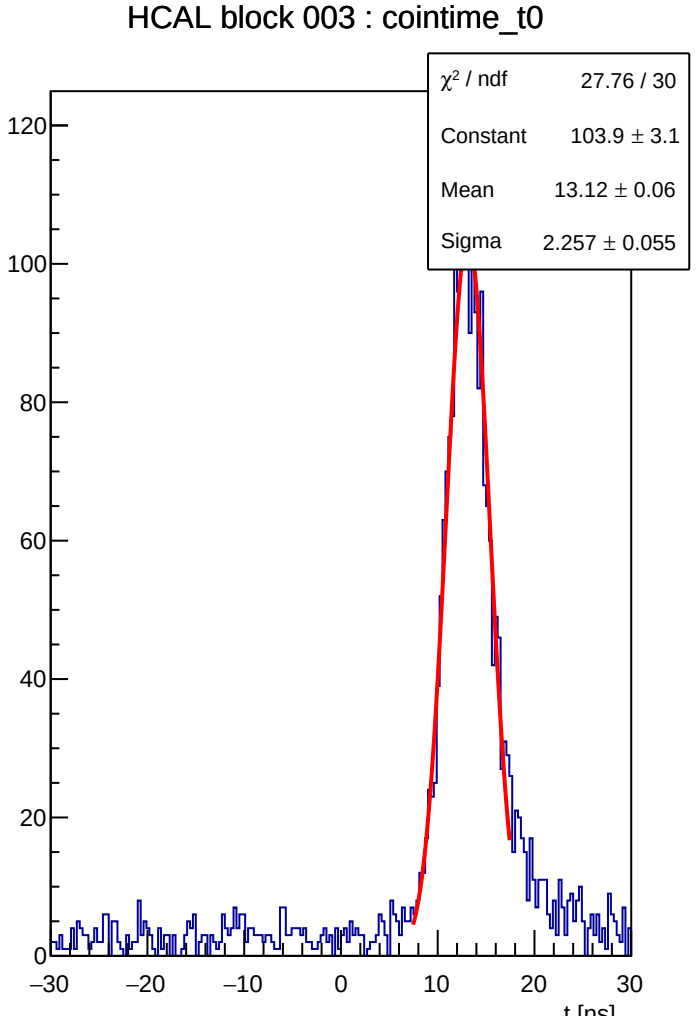


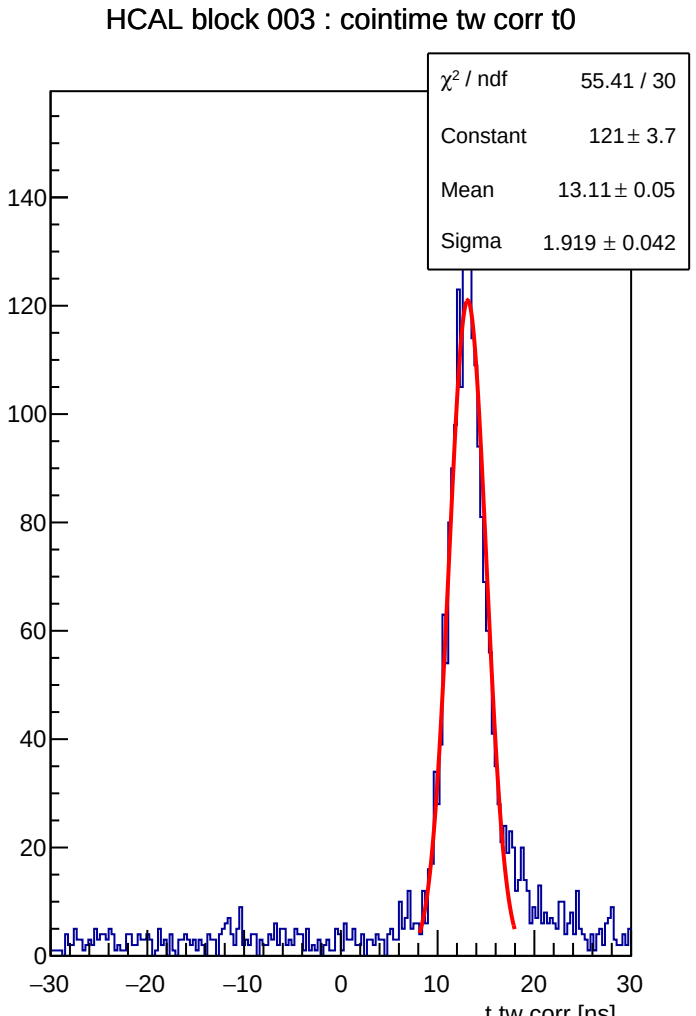

HCAL block 001 : cointime_t0
χ² / ndf 48.5 / 34
Constant 59.79 ± 2.30
Mean 13.05 ± 0.08
Sigma 2.513 ± 0.077
t [ns]

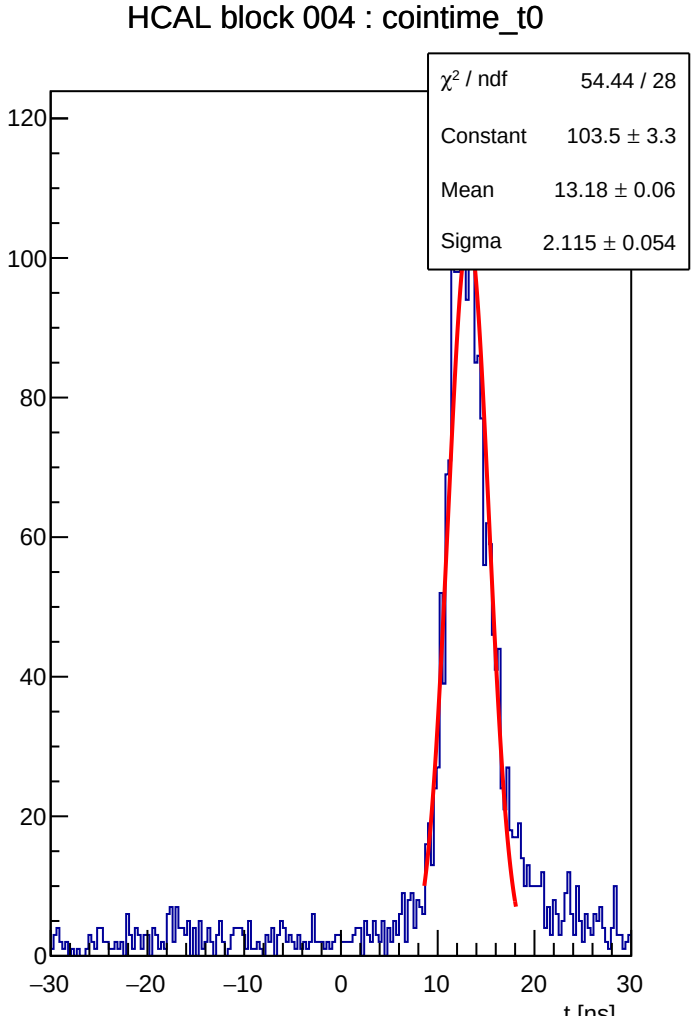

HCAL block 001 : cointime tw corr t0
χ² / ndf 53.04 / 34
Constant 68.04 ± 2.71
Mean 13.11 ± 0.07
Sigma 2.194 ± 0.067
t tw corr [ns]

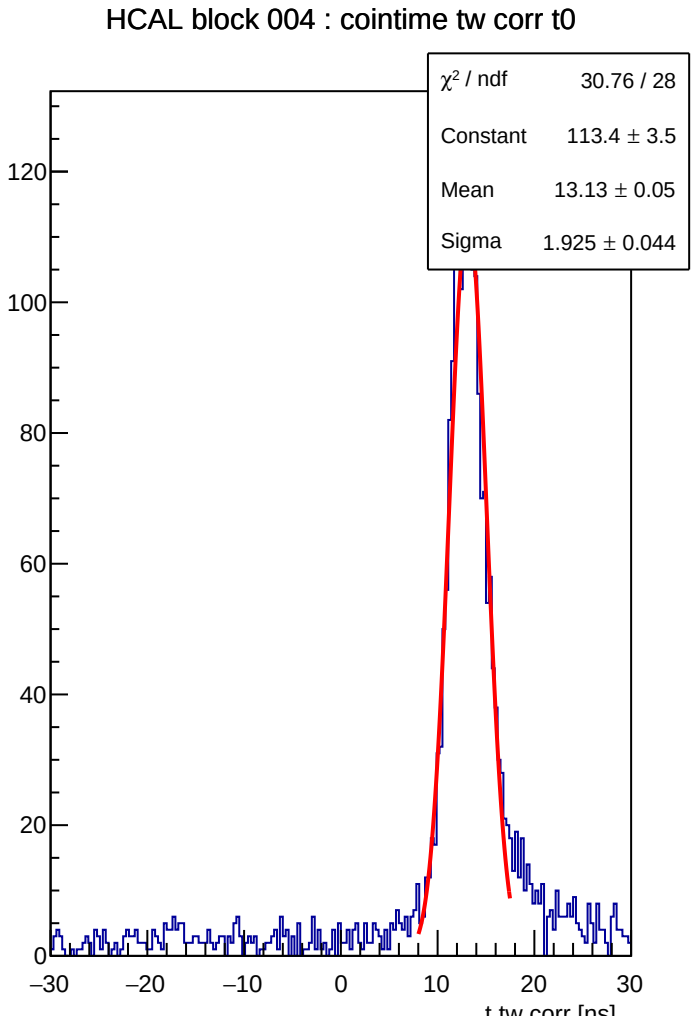

HCAL block 002 : cointime_t0
χ² / ndf 52.79 / 37
Constant 48.22 ± 2.00
Mean 13.08 ± 0.09
Sigma 2.538 ± 0.078
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t [ns]

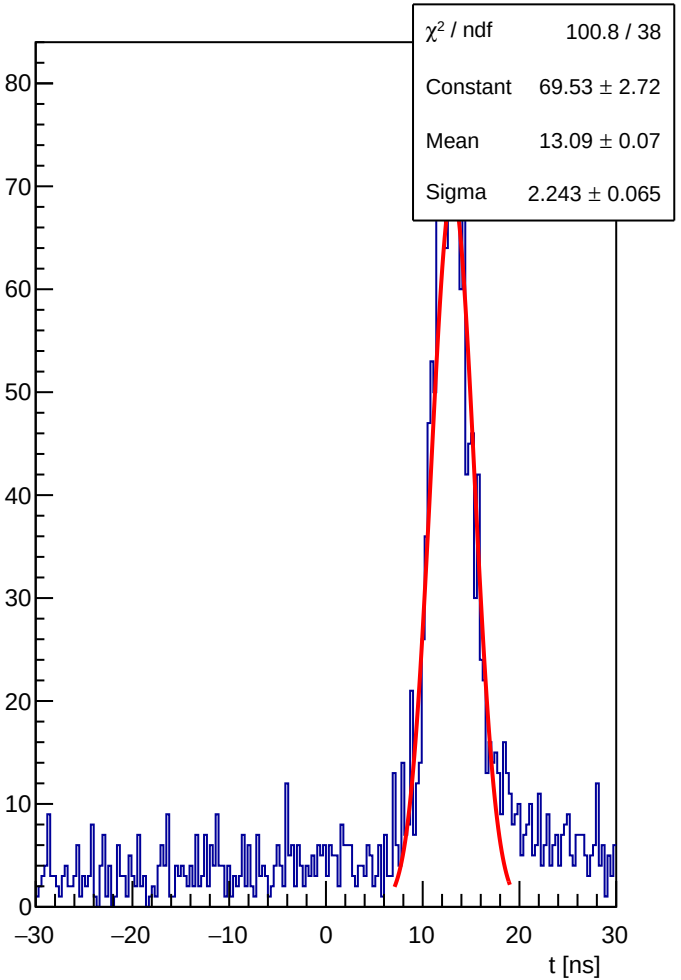

HCAL block 002 : cointime tw corr t0
χ² / ndf 49.08 / 44
Constant 14.87 ± 0.92
Mean 18.1 ± 2.6
Sigma 9.827 ± 2.633
25
20
15
10
5
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

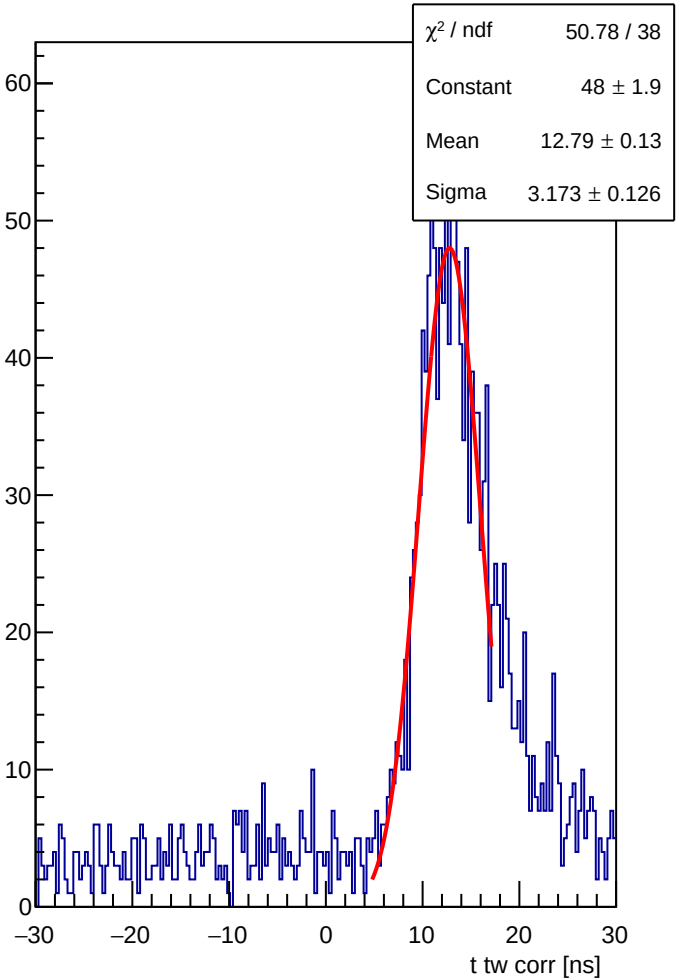

HCAL block 003 : cointime_t0
χ² / ndf 27.76 / 30
Constant 103.9 ± 3.1
Mean 13.12 ± 0.06
Sigma 2.257 ± 0.055
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

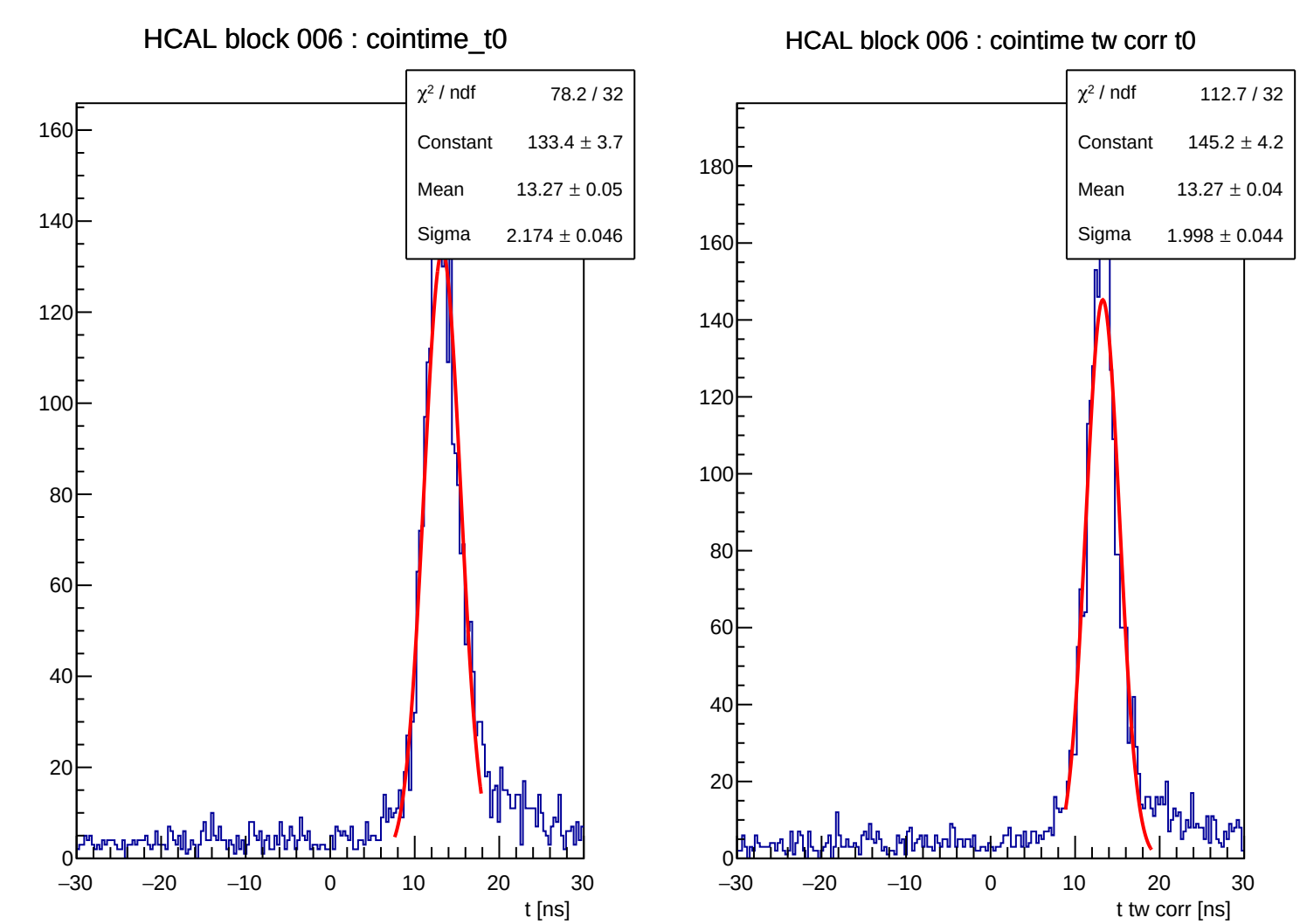

HCAL block 003 : cointime tw corr t0
χ² / ndf 55.41 / 30
Constant 121 ± 3.7
Mean 13.11 ± 0.05
Sigma 1.919 ± 0.042
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

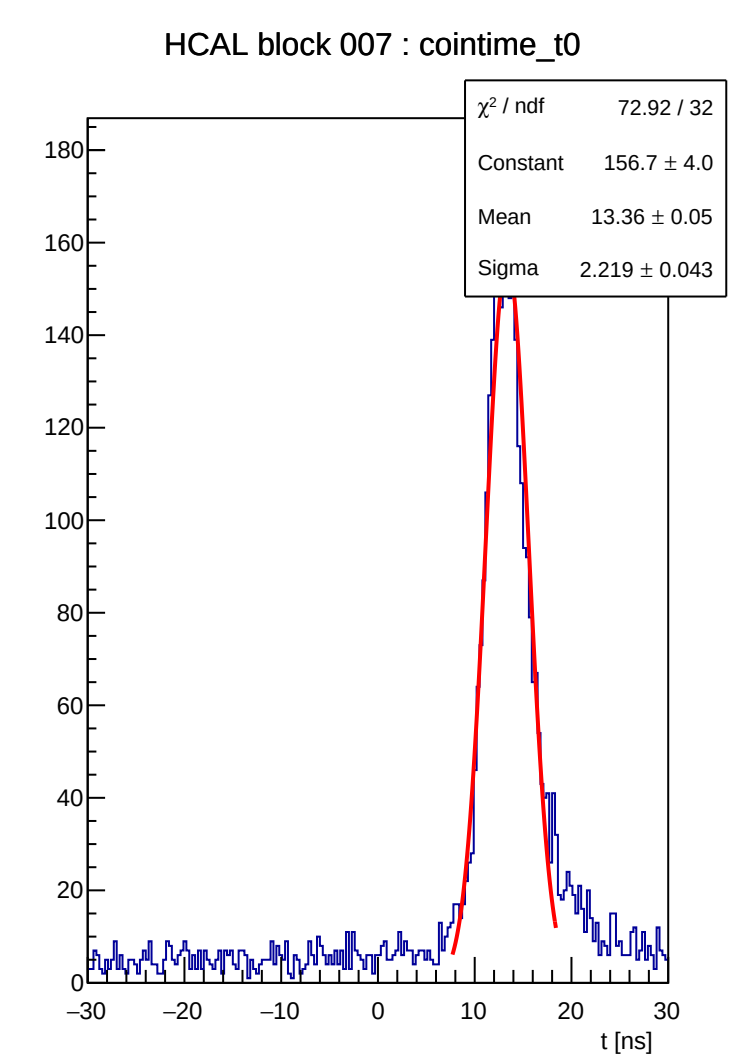

HCAL block 004 : cointime_t0
χ² / ndf 54.44 / 28
Constant 103.5 ± 3.3
Mean 13.18 ± 0.06
Sigma 2.115 ± 0.054
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

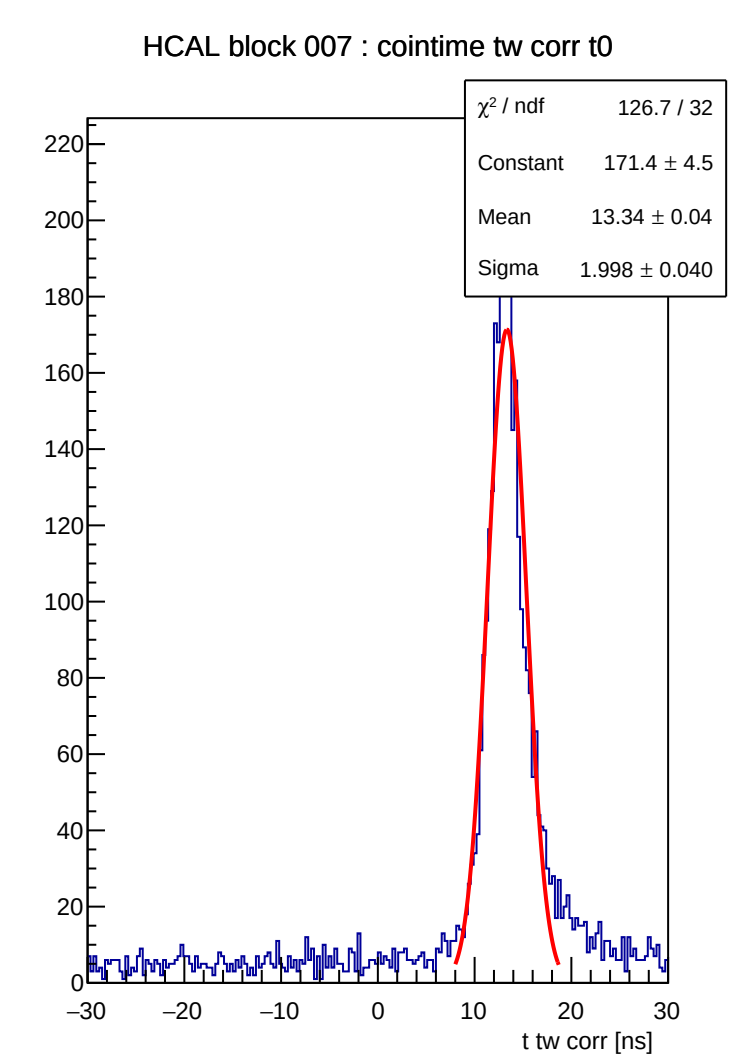

HCAL block 004 : cointime tw corr t0
χ² / ndf 30.76 / 28
Constant 113.4 ± 3.5
Mean 13.13 ± 0.05
Sigma 1.925 ± 0.044
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

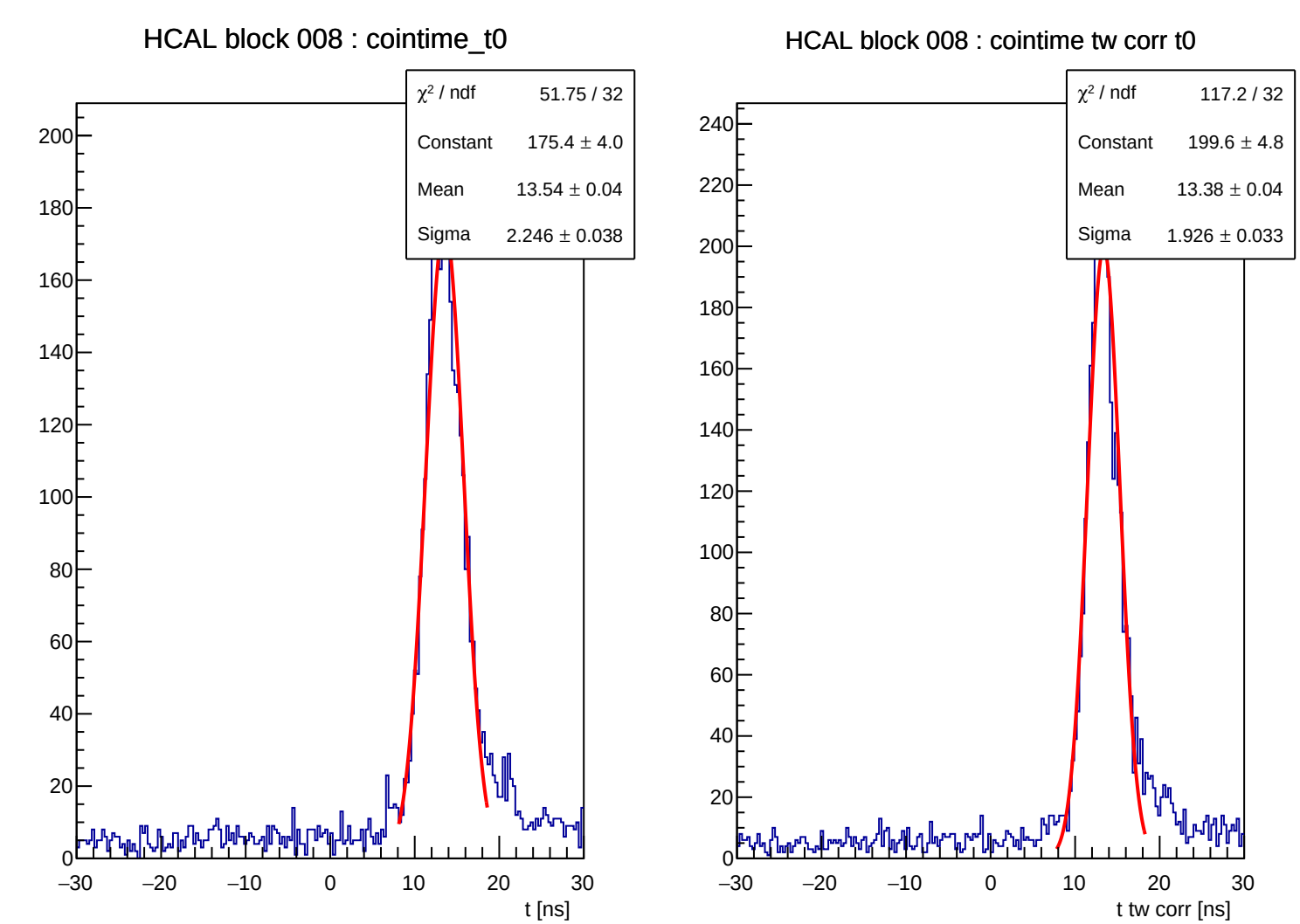

HCAL block 005 : cointime_t0
χ² / ndf 100.8 / 38
Constant 69.53 ± 2.72
Mean 13.09 ± 0.07
Sigma 2.243 ± 0.065
t [ns]

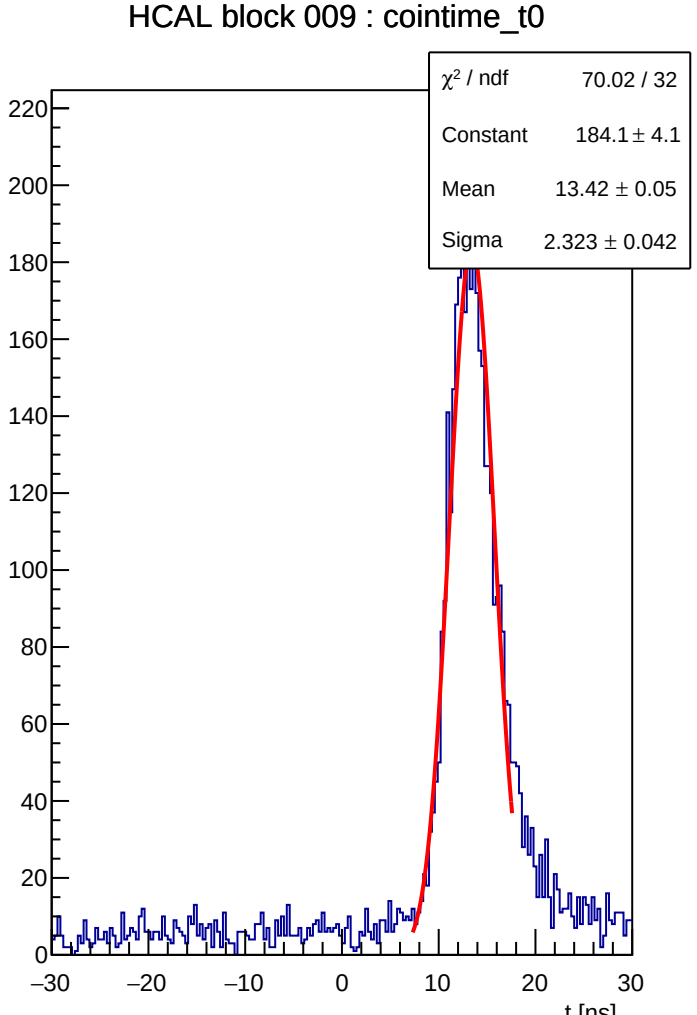

HCAL block 005 : cointime tw corr t0
χ² / ndf 50.78 / 38
Constant 48 ± 1.9
Mean 12.79 ± 0.13
Sigma 3.173 ± 0.126
t tw corr [ns]

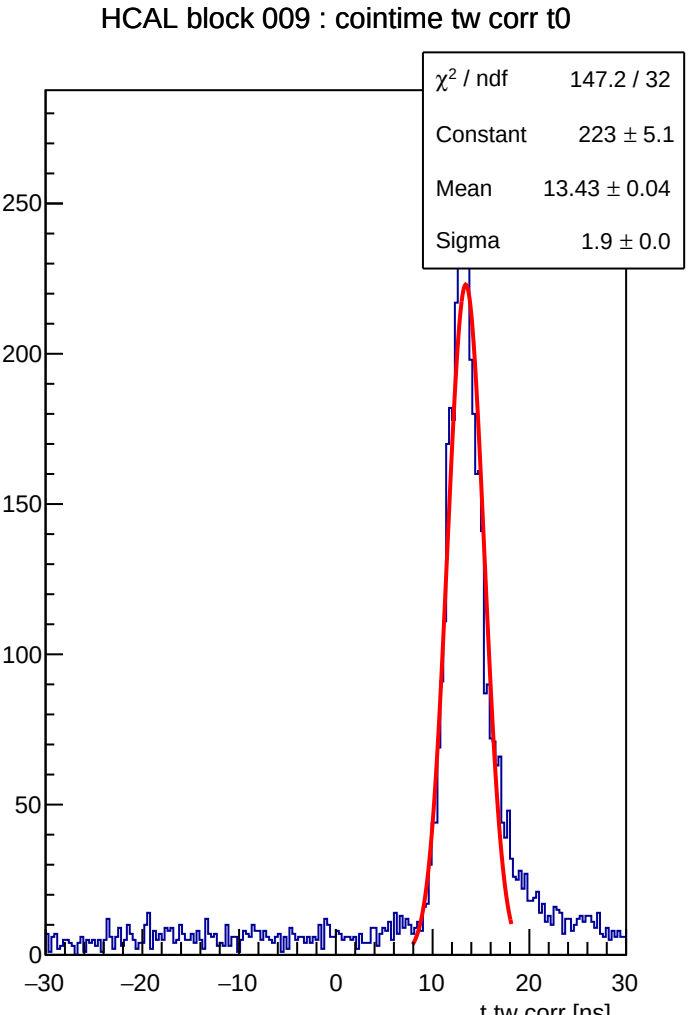

HCAL block 006 : cointime_t0
χ² / ndf 78.2 / 32
Constant 133.4 ± 3.7
Mean 13.27 ± 0.05
Sigma 2.174 ± 0.046
t [ns]
HCAL block 006 : cointime tw corr t0
χ² / ndf 112.7 / 32
Constant 145.2 ± 4.2
Mean 13.27 ± 0.04
Sigma 1.998 ± 0.044
t tw corr [ns]

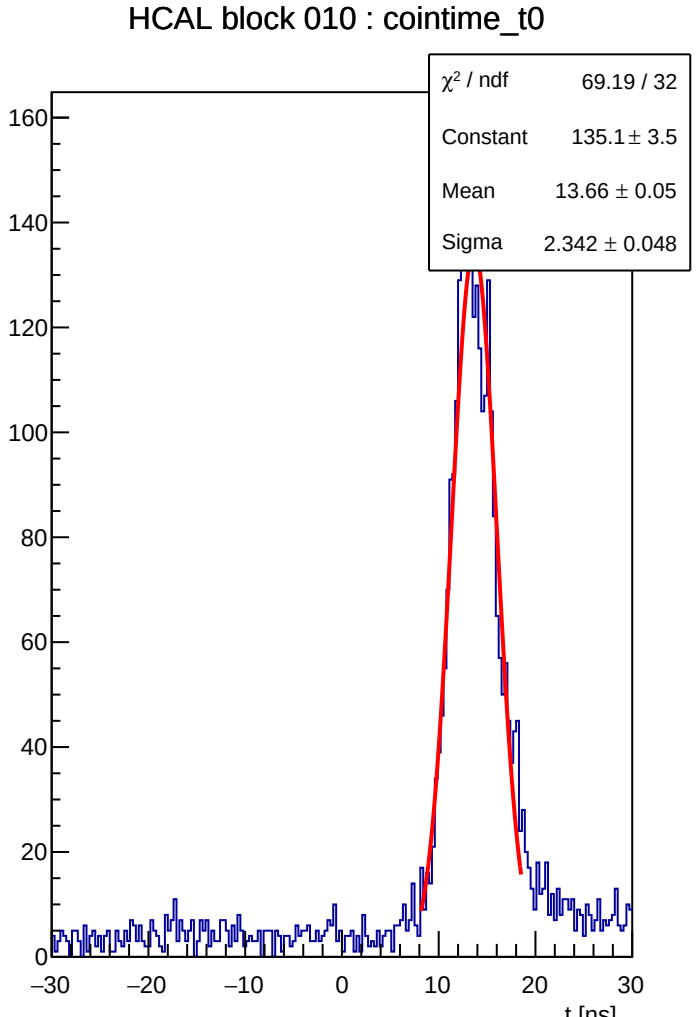

HCAL block 007 : cointime_t0
χ² / ndf 72.92 / 32
Constant 156.7 ± 4.0
Mean 13.36 ± 0.05
Sigma 2.219 ± 0.043
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

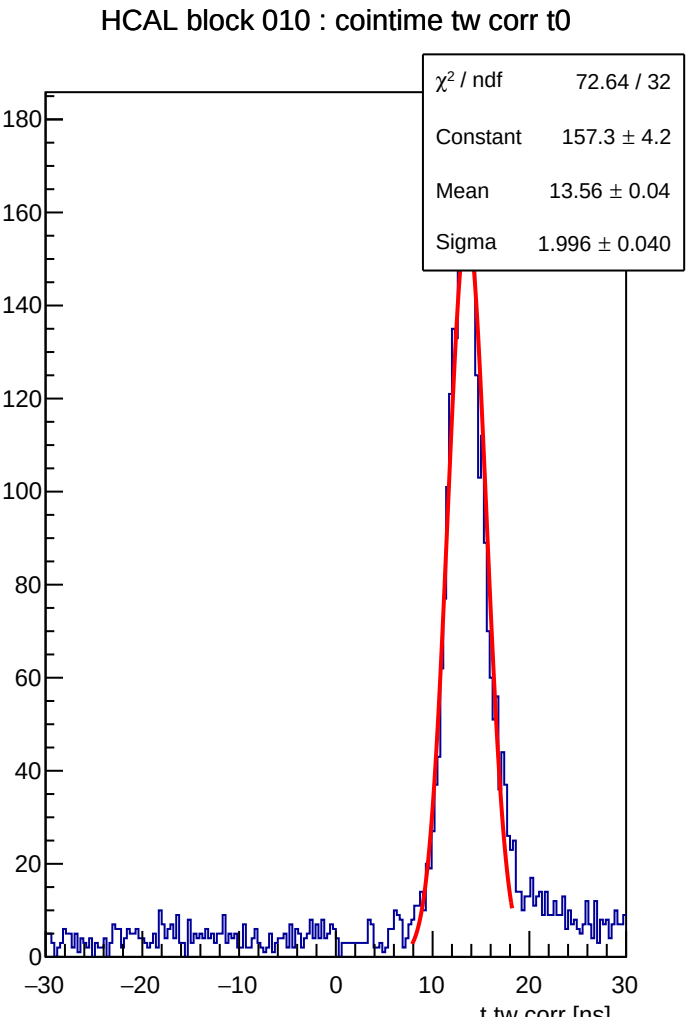

HCAL block 007 : cointime tw corr t0
χ² / ndf 126.7 / 32
Constant 171.4 ± 4.5
Mean 13.34 ± 0.04
Sigma 1.998 ± 0.040
220
200
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

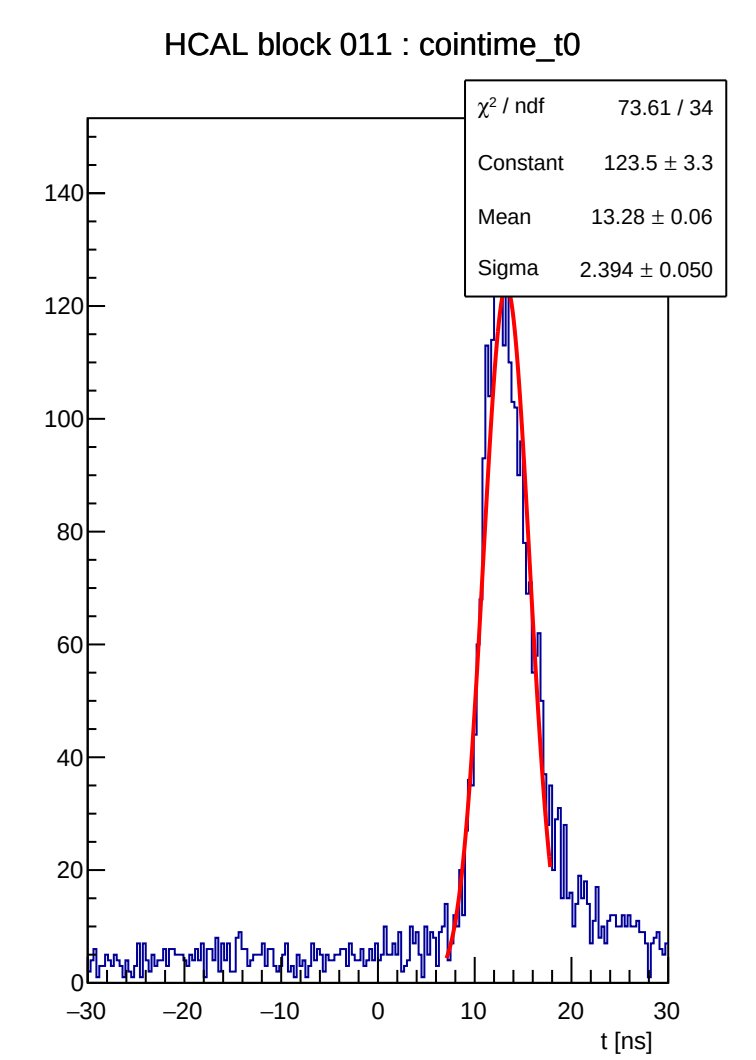

HCAL block 008 : cointime_t0
χ² / ndf 51.75 / 32
Constant 175.4 ± 4.0
Mean 13.54 ± 0.04
Sigma 2.246 ± 0.038
t [ns]
HCAL block 008 : cointime tw corr t0
χ² / ndf 117.2 / 32
Constant 199.6 ± 4.8
Mean 13.38 ± 0.04
Sigma 1.926 ± 0.033
t tw corr [ns]

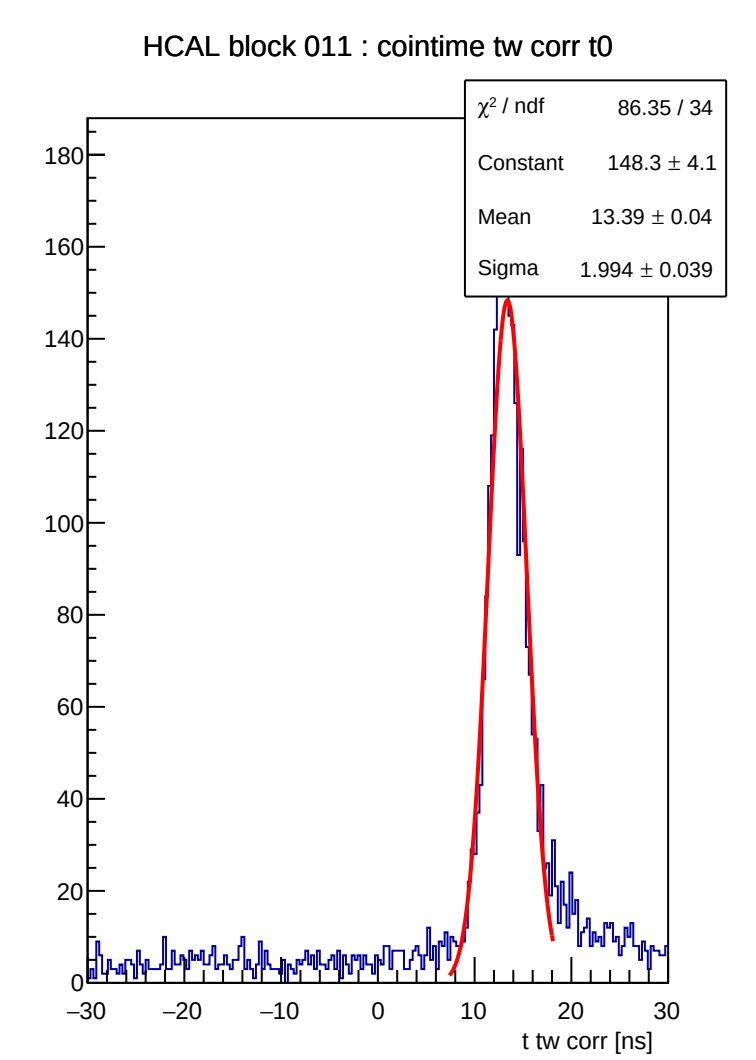

HCAL block 009 : cointime_t0
χ² / ndf 70.02 / 32
Constant 184.1 ± 4.1
Mean 13.42 ± 0.05
Sigma 2.323 ± 0.042
220
200
180
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

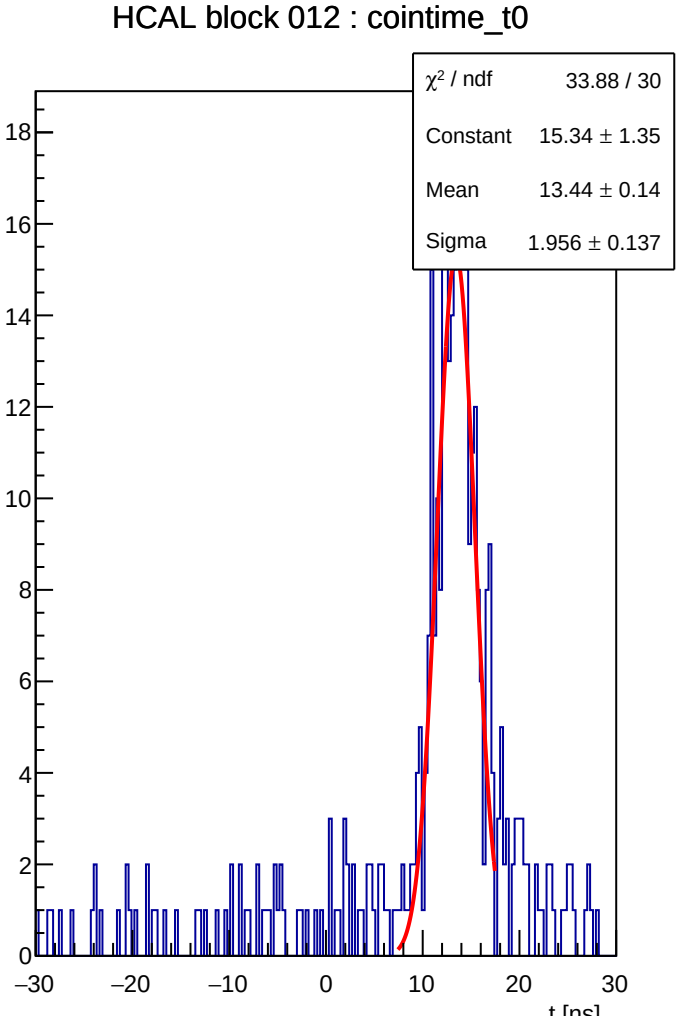

HCAL block 009 : cointime tw corr t0
χ² / ndf 147.2 / 32
Constant 223 ± 5.1
Mean 13.43 ± 0.04
Sigma 1.9 ± 0.0
250
200
150
100
50
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

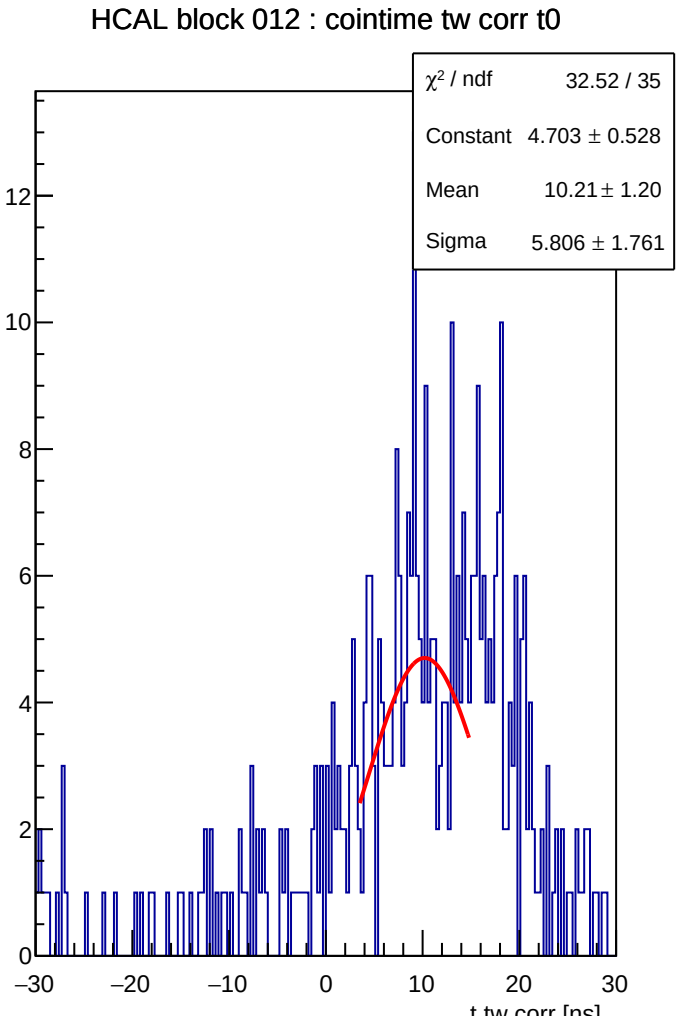

HCAL block 010 : cointime_t0
χ² / ndf 69.19 / 32
Constant 135.1 ± 3.5
Mean 13.66 ± 0.05
Sigma 2.342 ± 0.048
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

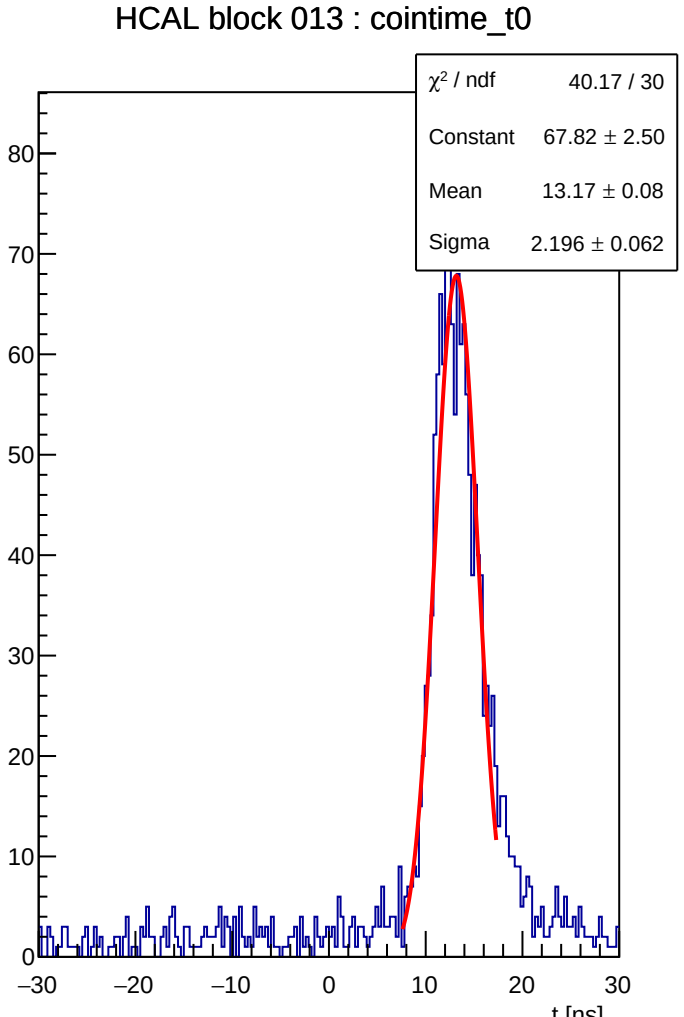

HCAL block 010 : cointime tw corr t0
χ² / ndf 72.64 / 32
Constant 157.3 ± 4.2
Mean 13.56 ± 0.04
Sigma 1.996 ± 0.040
180
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

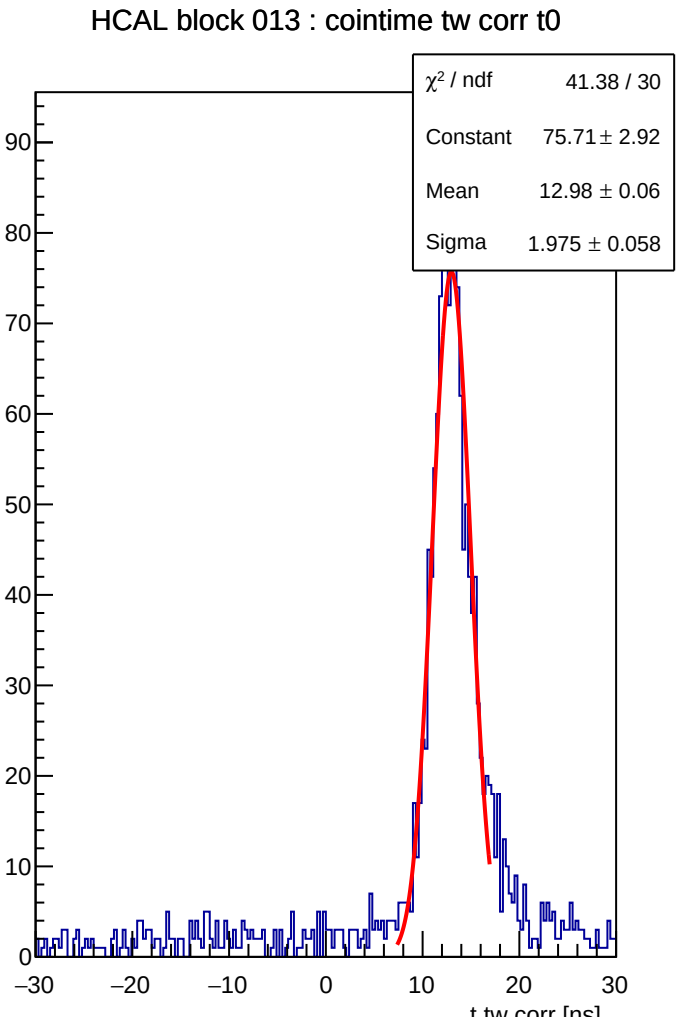

HCAL block 011 : cointime_t0
χ² / ndf 73.61 / 34
Constant 123.5 ± 3.3
Mean 13.28 ± 0.06
Sigma 2.394 ± 0.050
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

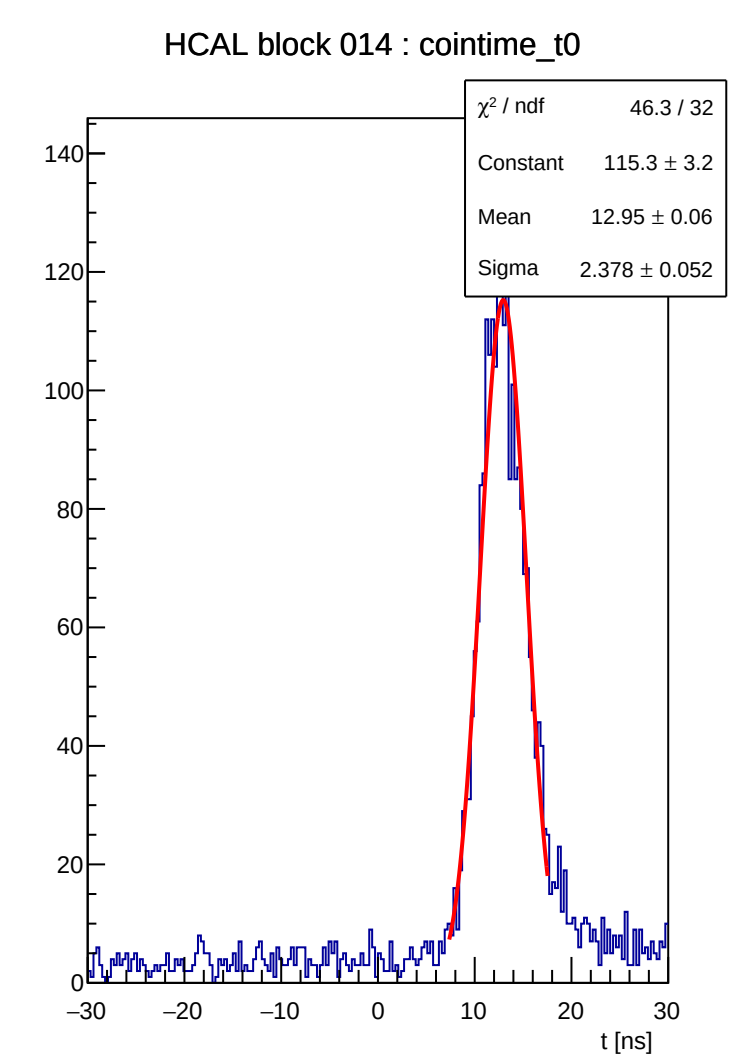

HCAL block 011 : cointime tw corr t0
χ² / ndf 86.35 / 34
Constant 148.3 ± 4.1
Mean 13.39 ± 0.04
Sigma 1.994 ± 0.039
180
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

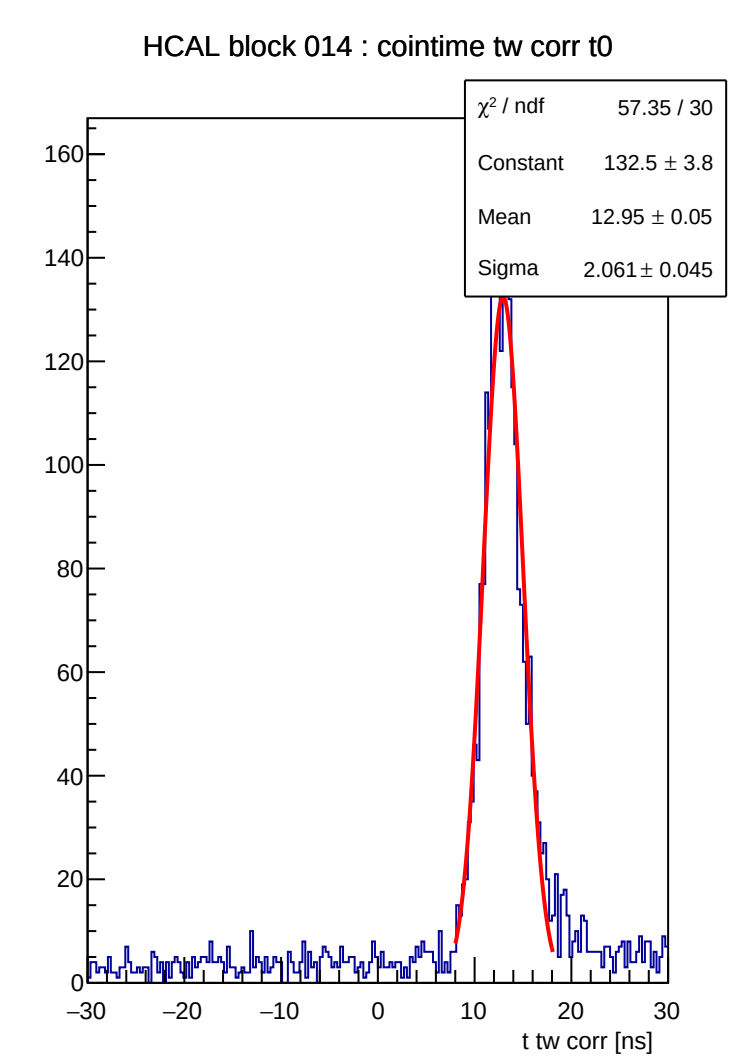

HCAL block 012 : cointime_t0
χ² / ndf 33.88 / 30
Constant 15.34 ± 1.35
Mean 13.44 ± 0.14
Sigma 1.956 ± 0.137
18
16
14
12
10
8
6
4
2
0
−30
−20
−10
0
10
20
30
t [ns]

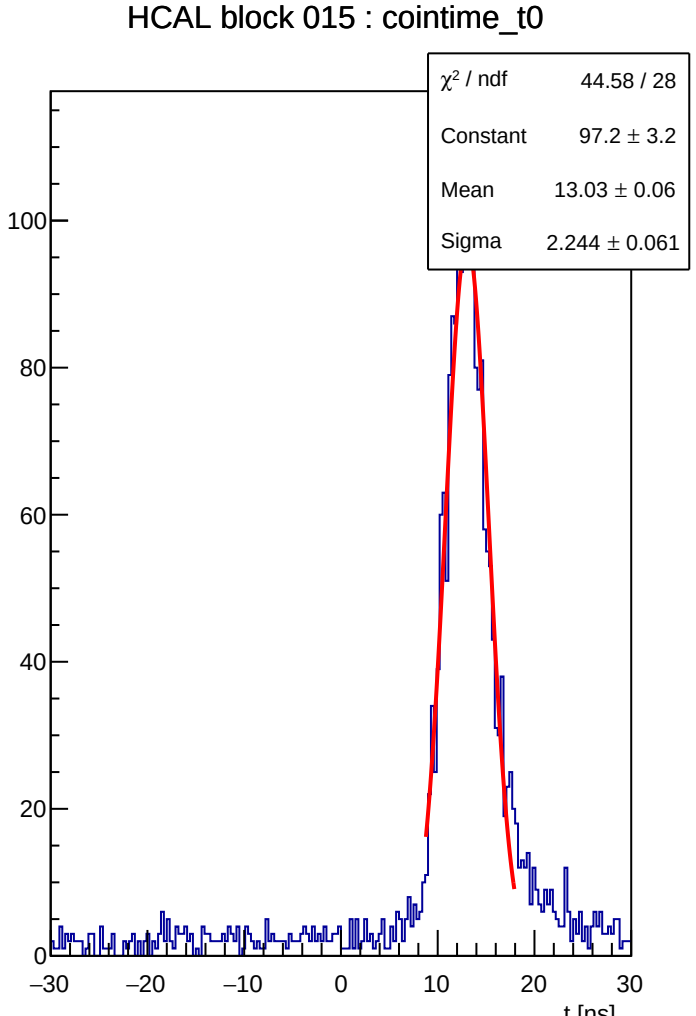

HCAL block 012 : cointime tw corr t0
χ² / ndf 32.52 / 35
Constant 4.703 ± 0.528
Mean 10.21 ± 1.20
Sigma 5.806 ± 1.761
12
10
8
6
4
2
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

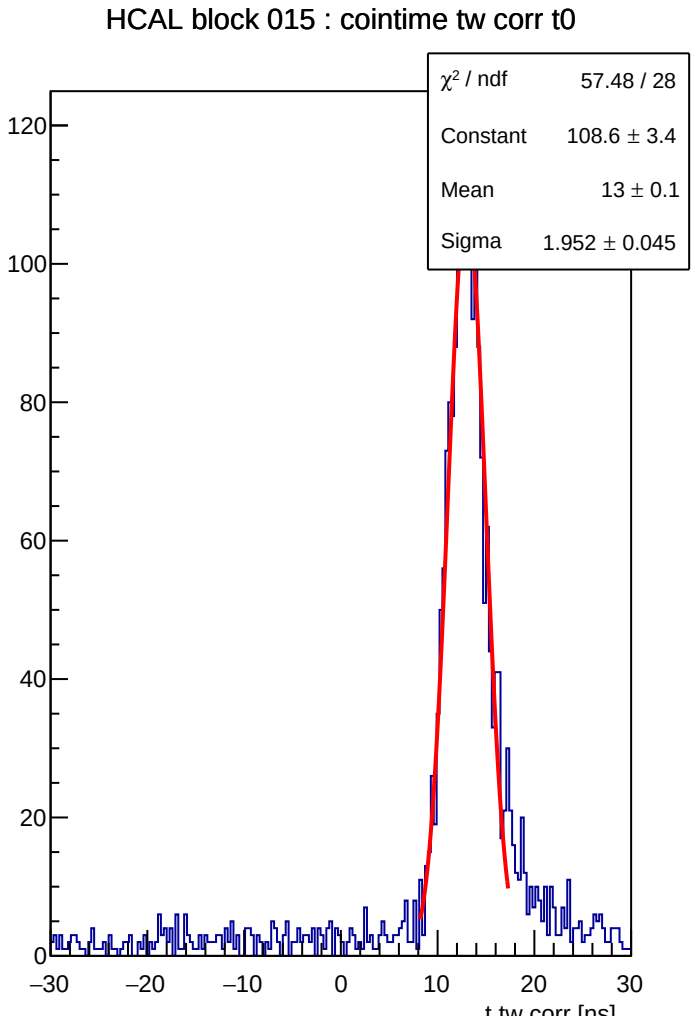

HCAL block 013 : cointime_t0
χ² / ndf 40.17 / 30
Constant 67.82 ± 2.50
Mean 13.17 ± 0.08
Sigma 2.196 ± 0.062
t [ns]

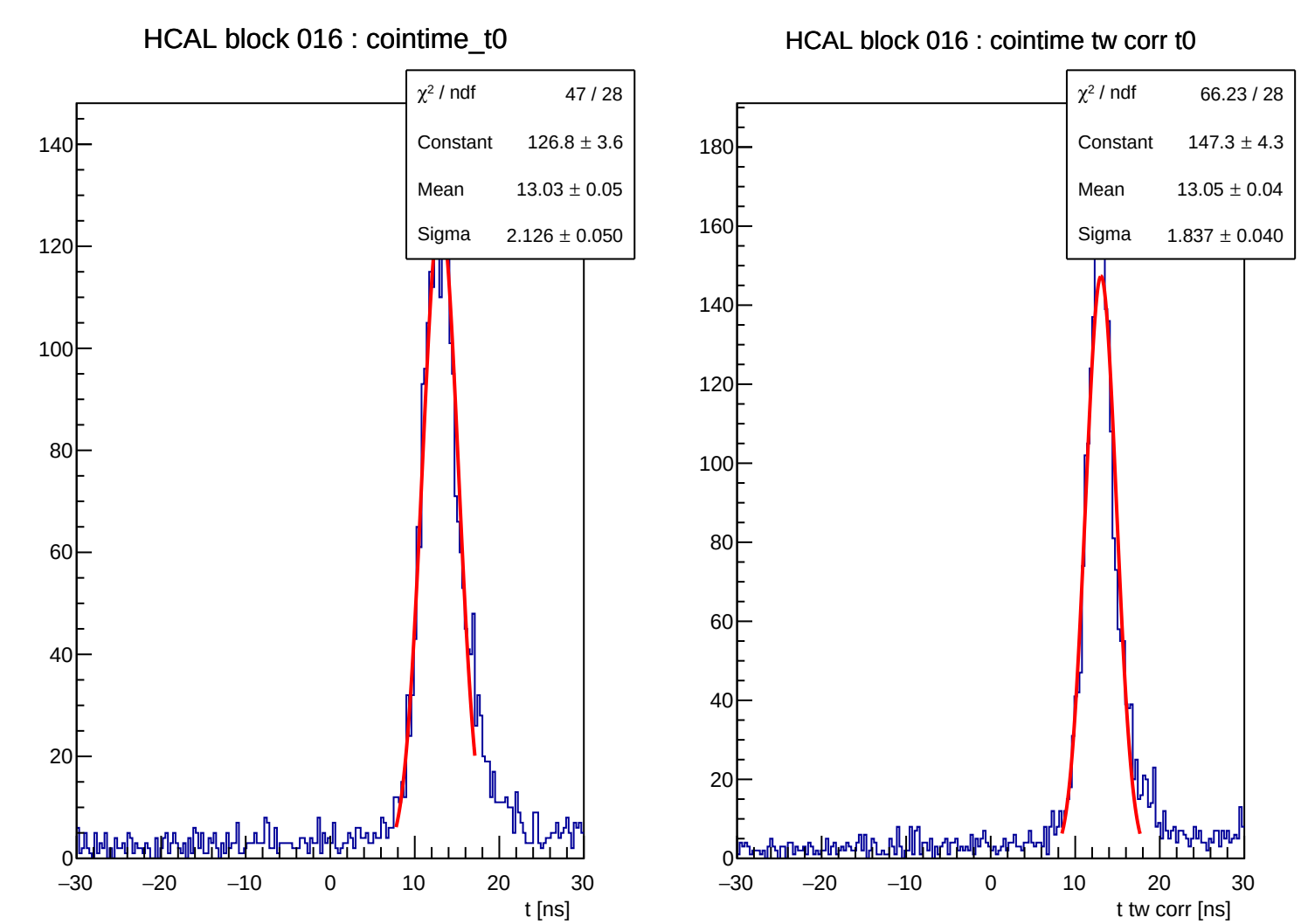

HCAL block 013 : cointime tw corr t0
χ² / ndf 41.38 / 30
Constant 75.71 ± 2.92
Mean 12.98 ± 0.06
Sigma 1.975 ± 0.058
t tw corr [ns]

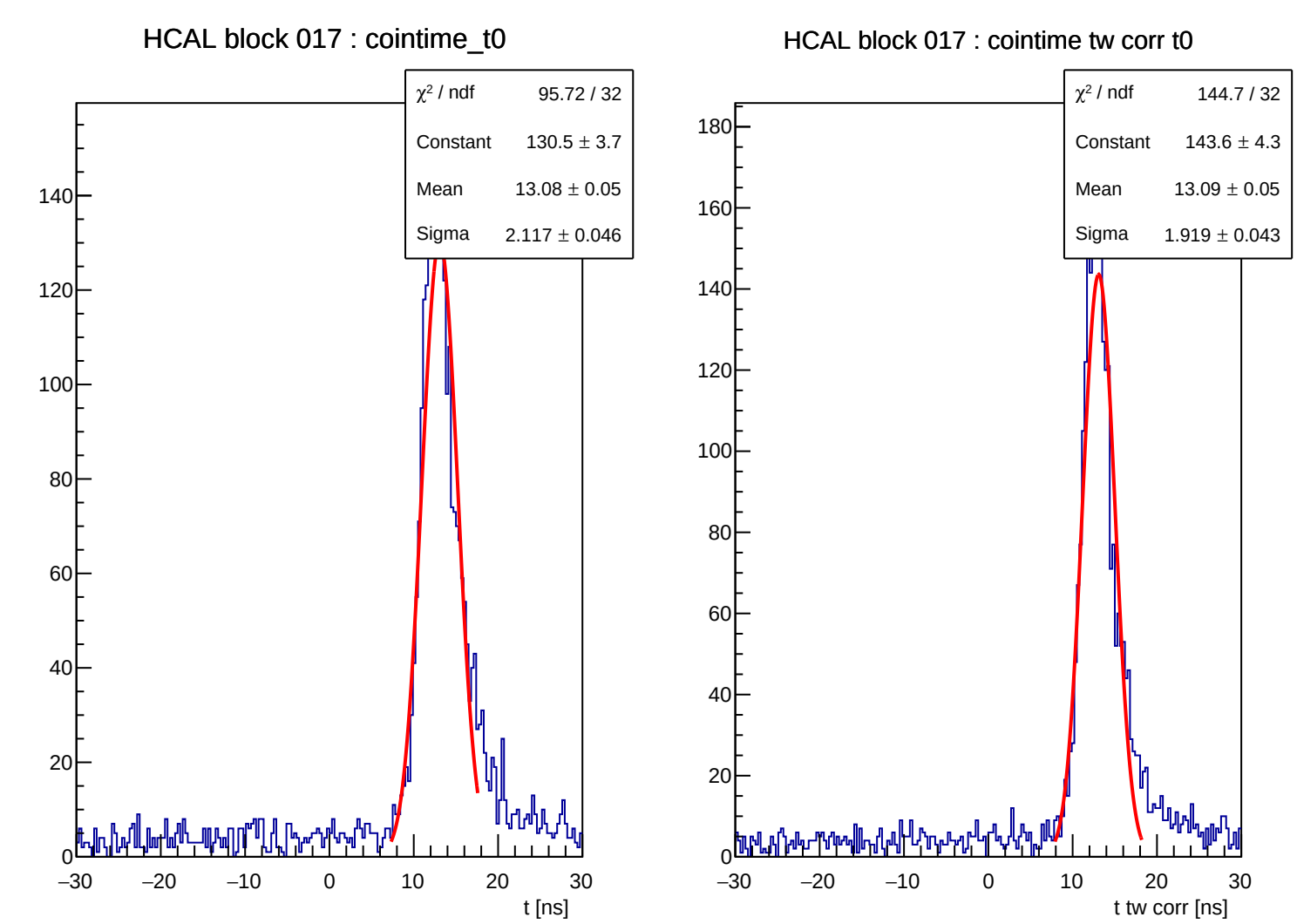

HCAL block 014 : cointime_t0
χ² / ndf 46.3 / 32
Constant 115.3 ± 3.2
Mean 12.95 ± 0.06
Sigma 2.378 ± 0.052
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

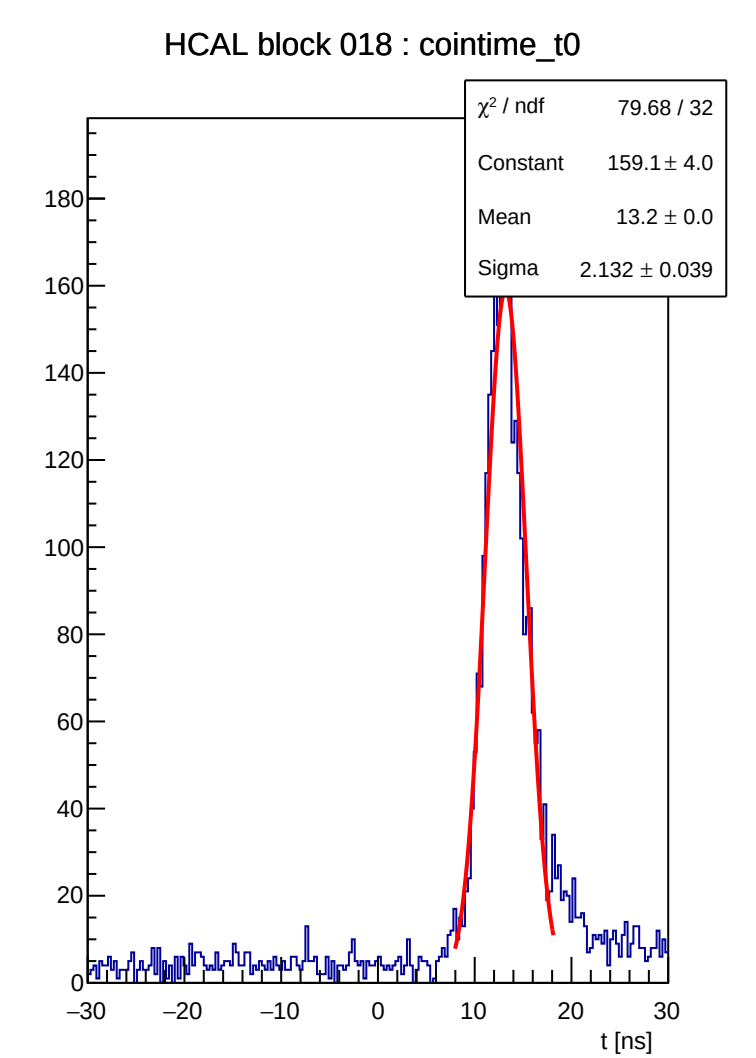

HCAL block 014 : cointime tw corr t0
χ² / ndf 57.35 / 30
Constant 132.5 ± 3.8
Mean 12.95 ± 0.05
Sigma 2.061 ± 0.045
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

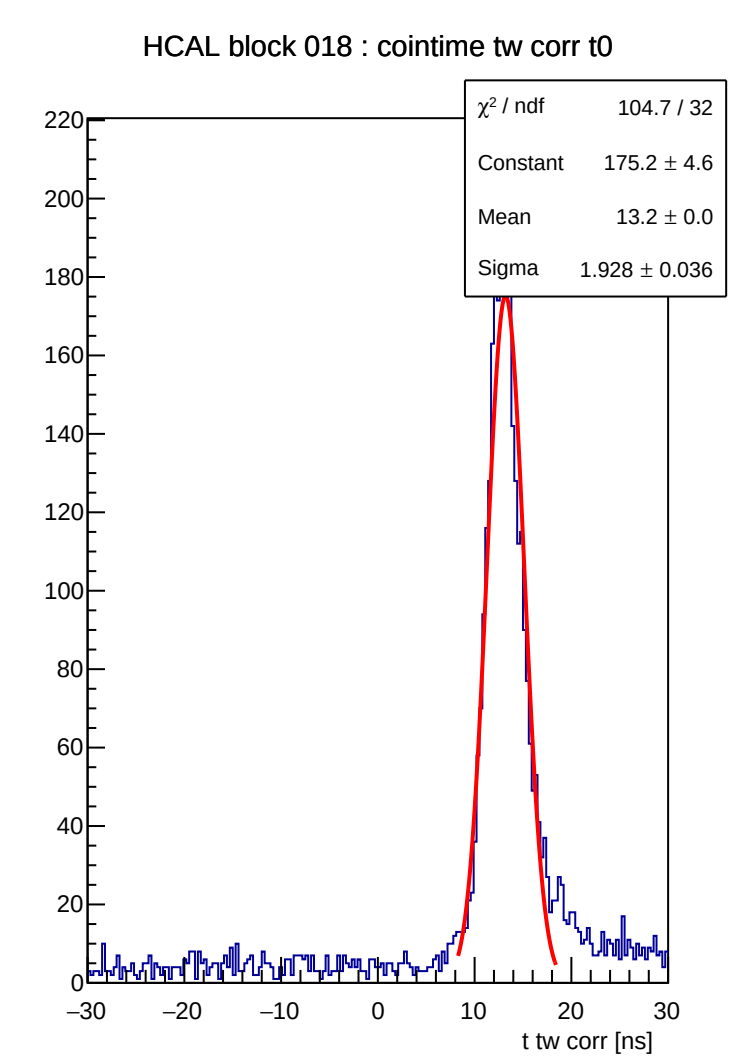

HCAL block 015 : cointime_t0
χ² / ndf 44.58 / 28
Constant 97.2 ± 3.2
Mean 13.03 ± 0.06
Sigma 2.244 ± 0.061
0
20
40
60
80
100
−30
−20
−10
0
10
20
30
t [ns]

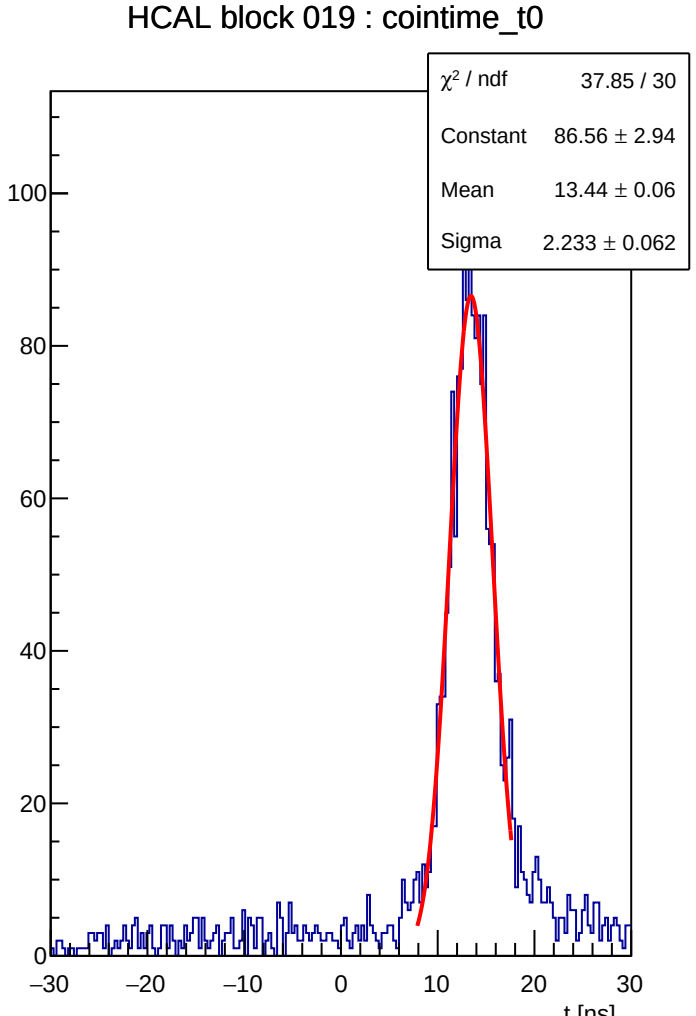

HCAL block 015 : cointime tw corr t0
χ² / ndf 57.48 / 28
Constant 108.6 ± 3.4
Mean 13 ± 0.1
Sigma 1.952 ± 0.045
0
20
40
60
80
100
120
−30
−20
−10
0
10
20
30
t tw corr [ns]

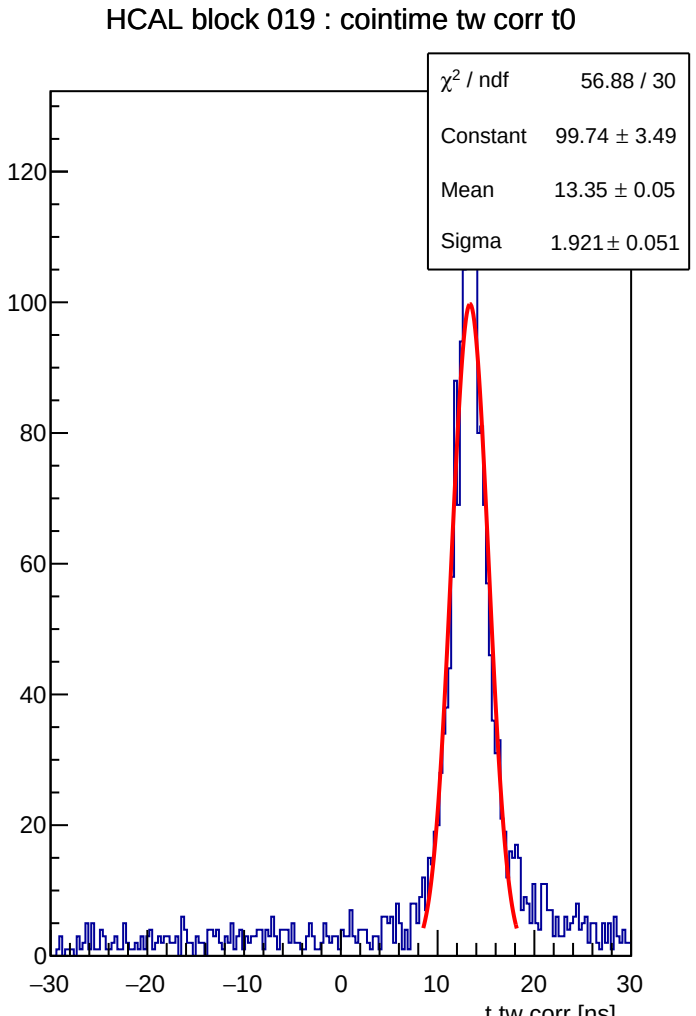

HCAL block 016 : cointime_t0
χ² / ndf 47 / 28
Constant 126.8 ± 3.6
Mean 13.03 ± 0.05
Sigma 2.126 ± 0.050
t [ns]
HCAL block 016 : cointime tw corr t0
χ² / ndf 66.23 / 28
Constant 147.3 ± 4.3
Mean 13.05 ± 0.04
Sigma 1.837 ± 0.040
t tw corr [ns]

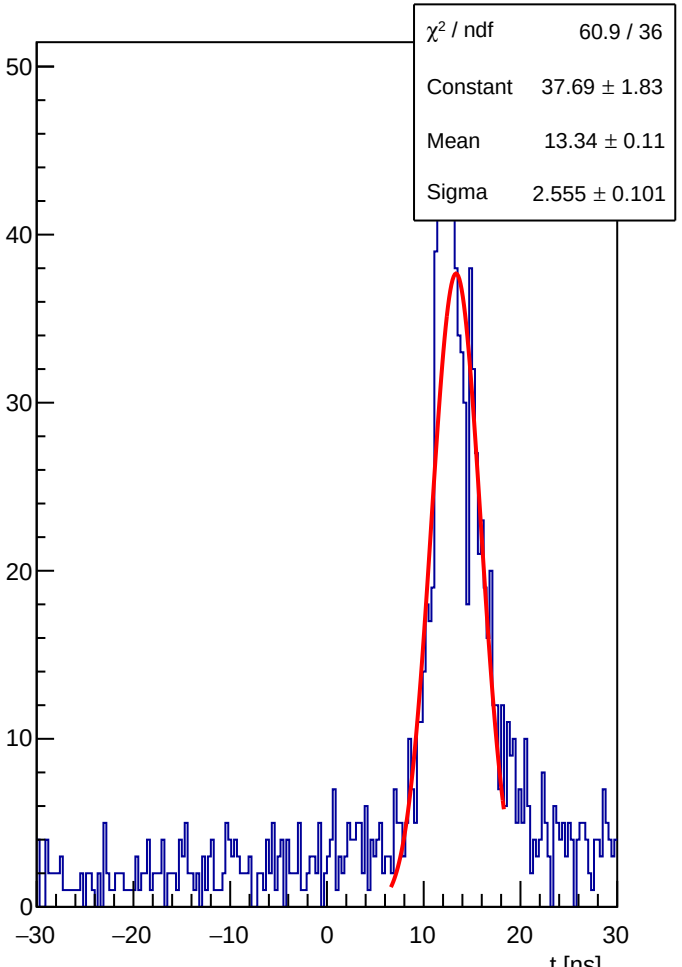

HCAL block 017 : cointime_t0
χ² / ndf 95.72 / 32
Constant 130.5 ± 3.7
Mean 13.08 ± 0.05
Sigma 2.117 ± 0.046
t [ns]
HCAL block 017 : cointime tw corr t0
χ² / ndf 144.7 / 32
Constant 143.6 ± 4.3
Mean 13.09 ± 0.05
Sigma 1.919 ± 0.043
t tw corr [ns]

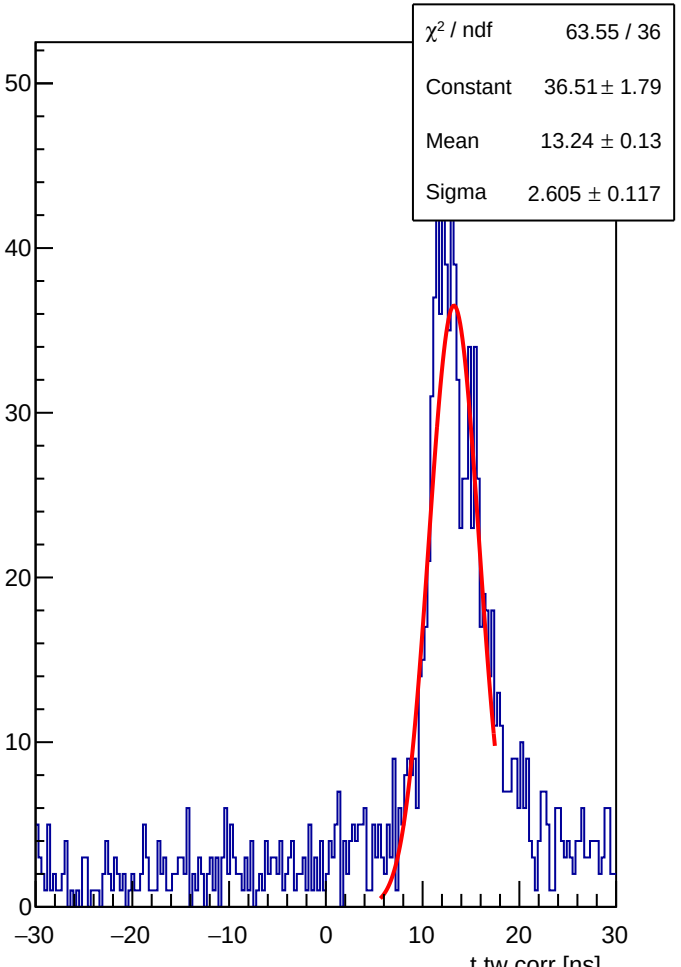

HCAL block 018 : cointime_t0
χ² / ndf 79.68 / 32
Constant 159.1 ± 4.0
Mean 13.2 ± 0.0
Sigma 2.132 ± 0.039
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

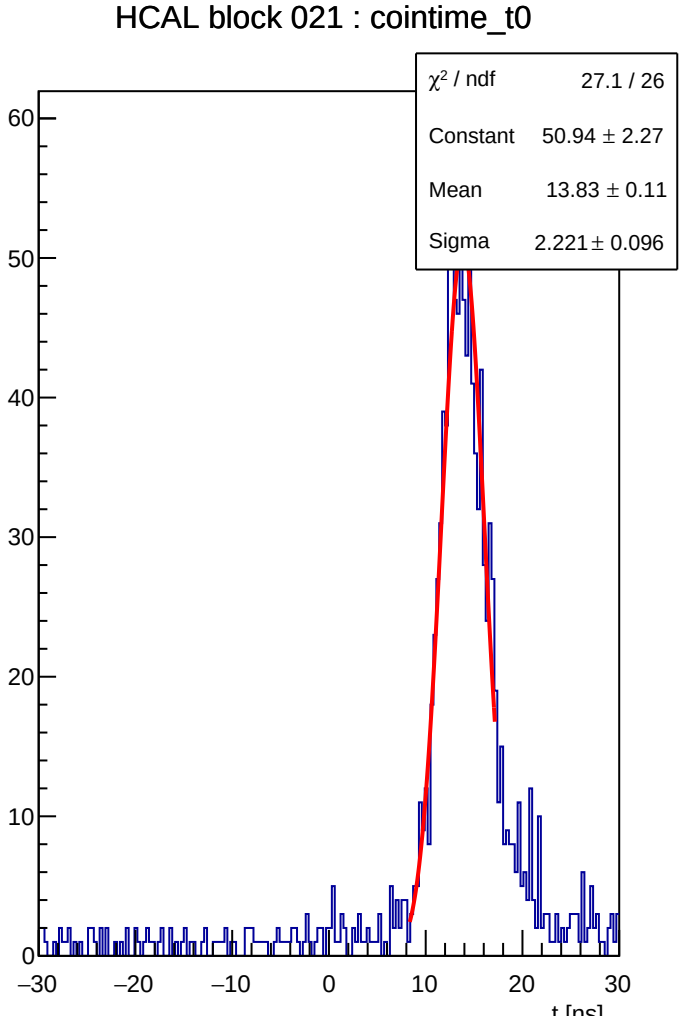

HCAL block 018 : cointime tw corr t0
χ² / ndf 104.7 / 32
Constant 175.2 ± 4.6
Mean 13.2 ± 0.0
Sigma 1.928 ± 0.036
220
200
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

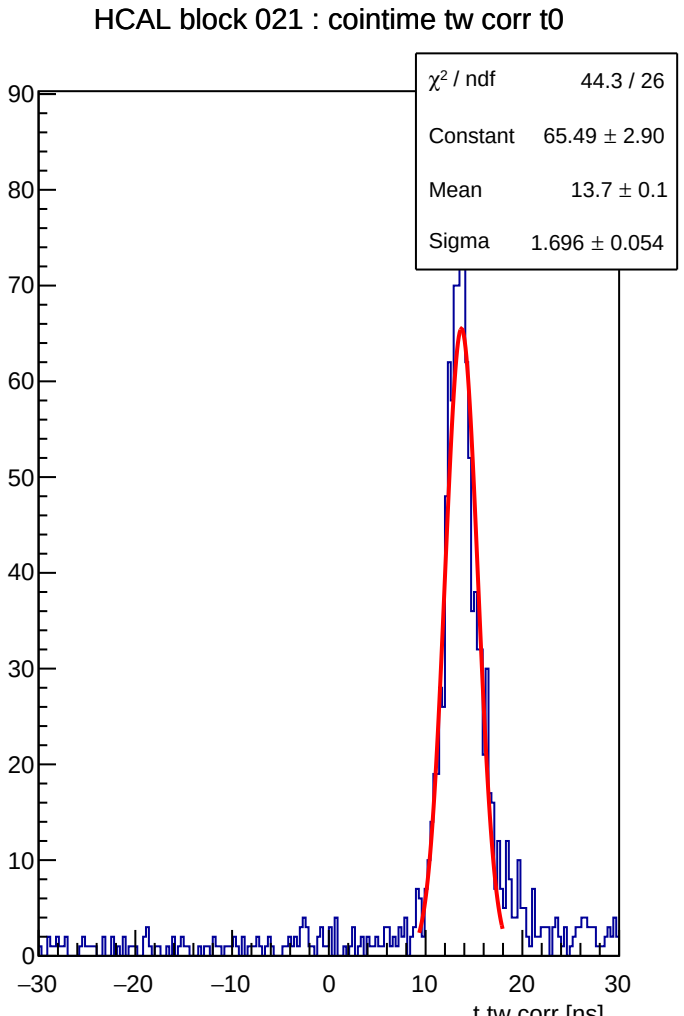

HCAL block 019 : cointime_t0
χ² / ndf 37.85 / 30
Constant 86.56 ± 2.94
Mean 13.44 ± 0.06
Sigma 2.233 ± 0.062
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

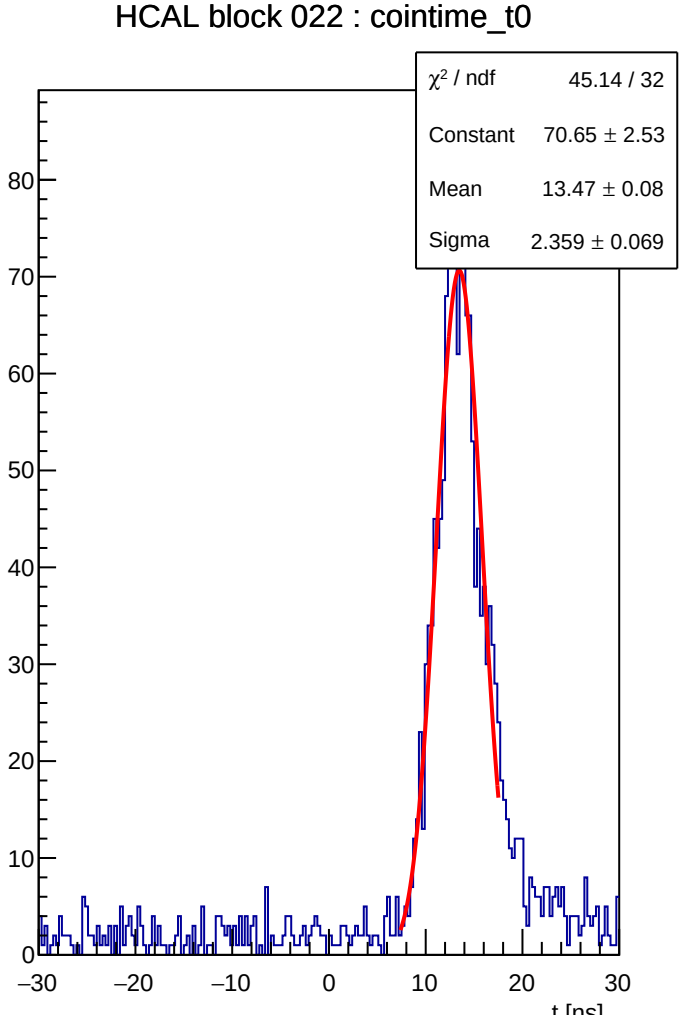

HCAL block 019 : cointime tw corr t0
χ² / ndf 56.88 / 30
Constant 99.74 ± 3.49
Mean 13.35 ± 0.05
Sigma 1.921 ± 0.051
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

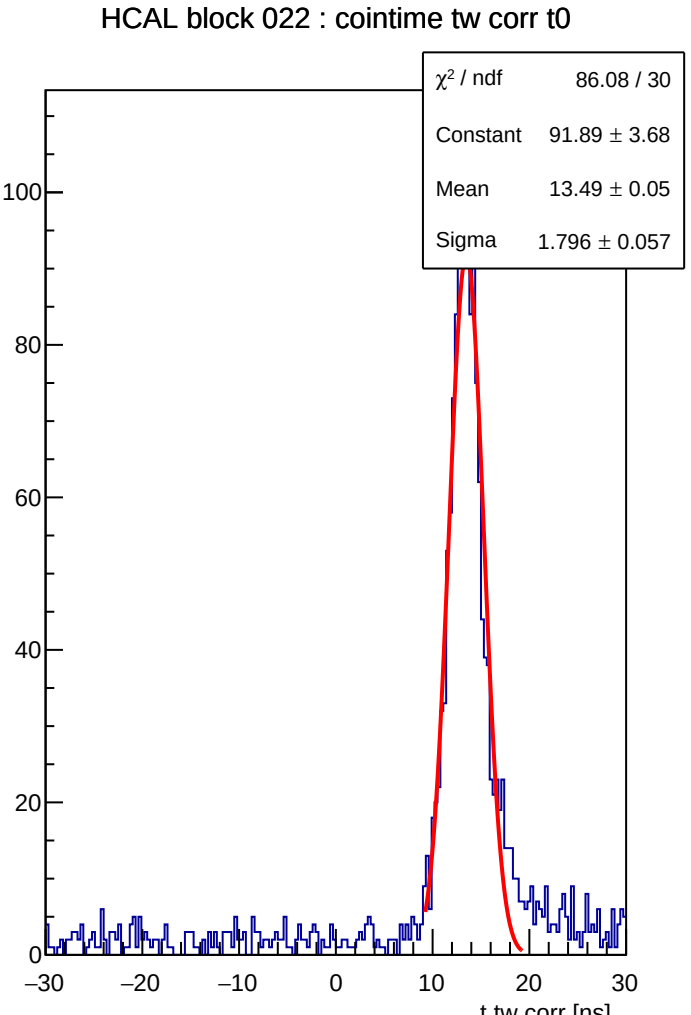

HCAL block 020 : cointime_t0
χ² / ndf 60.9 / 36
Constant 37.69 ± 1.83
Mean 13.34 ± 0.11
Sigma 2.555 ± 0.101
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t [ns]

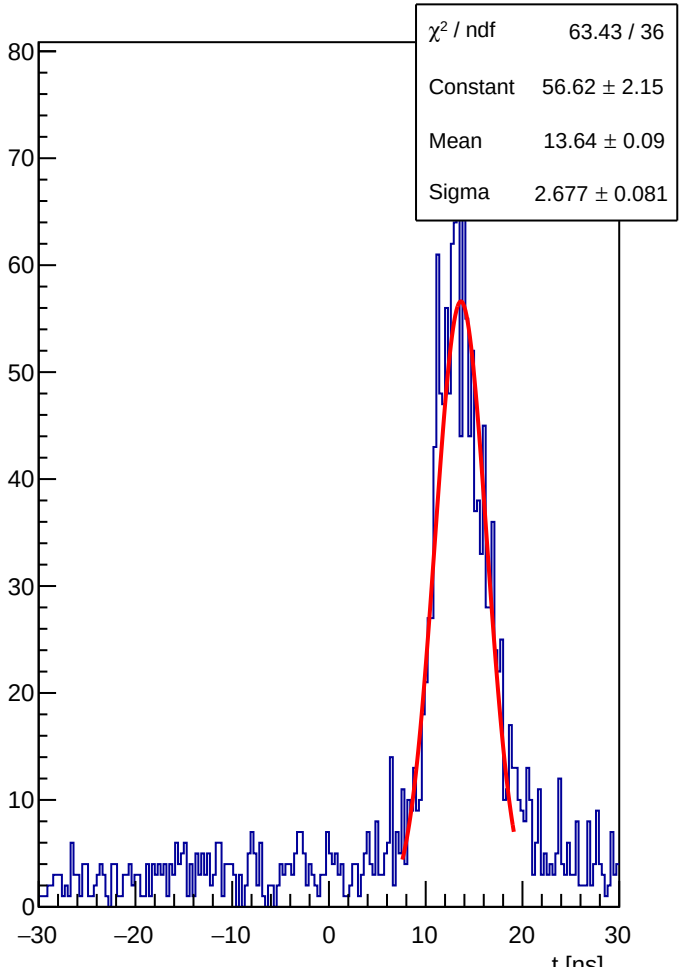

HCAL block 020 : cointime tw corr t0
χ² / ndf 63.55 / 36
Constant 36.51 ± 1.79
Mean 13.24 ± 0.13
Sigma 2.605 ± 0.117
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

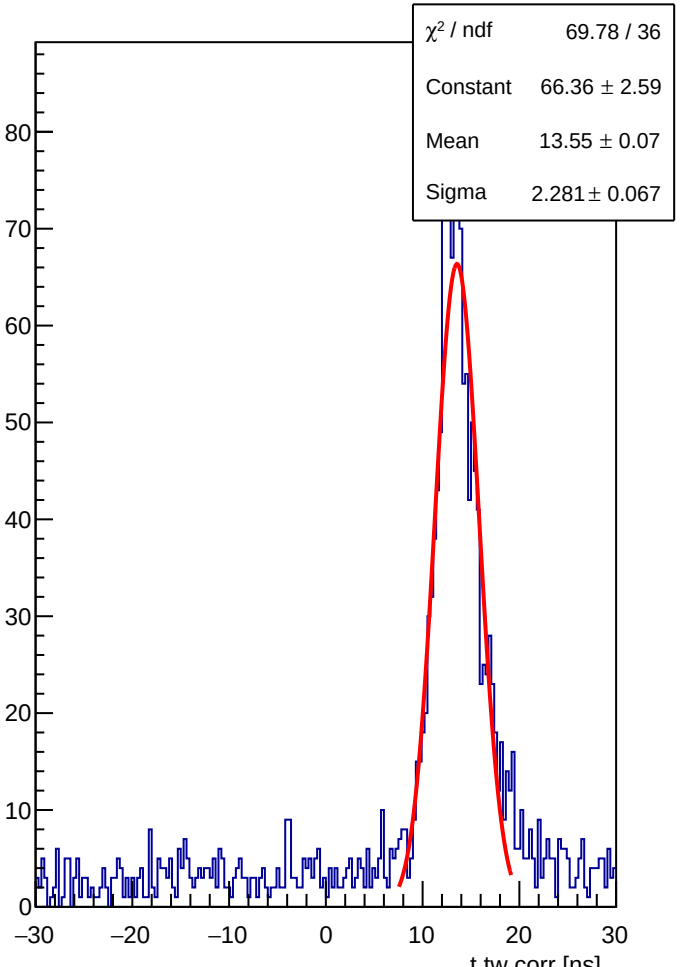

HCAL block 021 : cointime_t0
χ² / ndf 27.1 / 26
Constant 50.94 ± 2.27
Mean 13.83 ± 0.11
Sigma 2.221 ± 0.096
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t [ns]

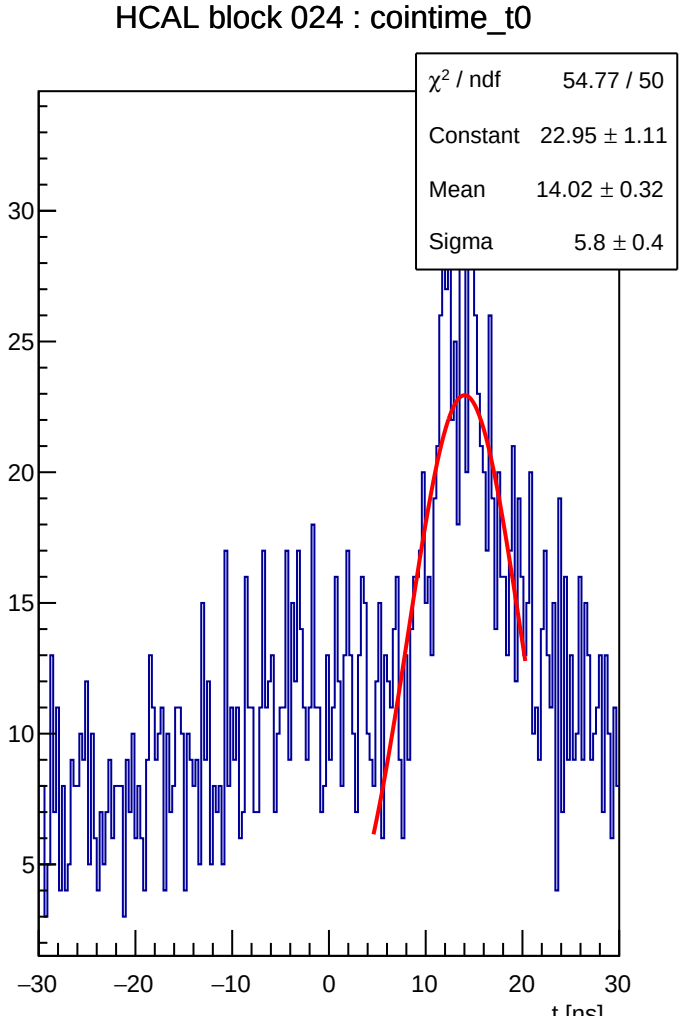

HCAL block 021 : cointime tw corr t0
χ² / ndf 44.3 / 26
Constant 65.49 ± 2.90
Mean 13.7 ± 0.1
Sigma 1.696 ± 0.054
90
80
70
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

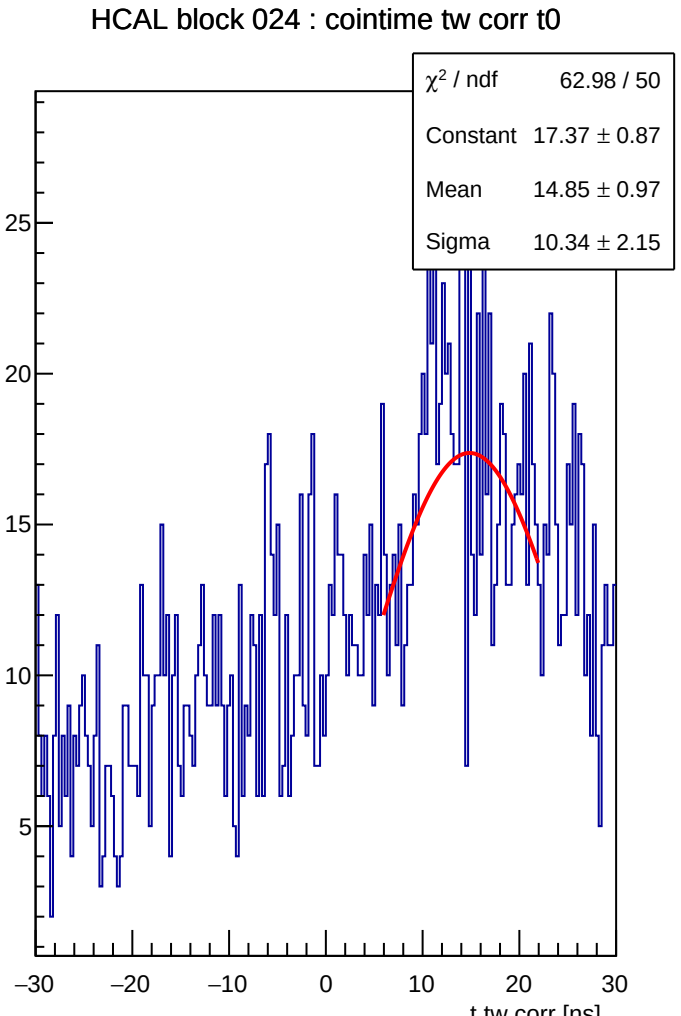

HCAL block 022 : cointime_t0
χ² / ndf 45.14 / 32
Constant 70.65 ± 2.53
Mean 13.47 ± 0.08
Sigma 2.359 ± 0.069
0
10
20
30
40
50
60
70
80
–30
–20
–10
0
10
20
30
t [ns]

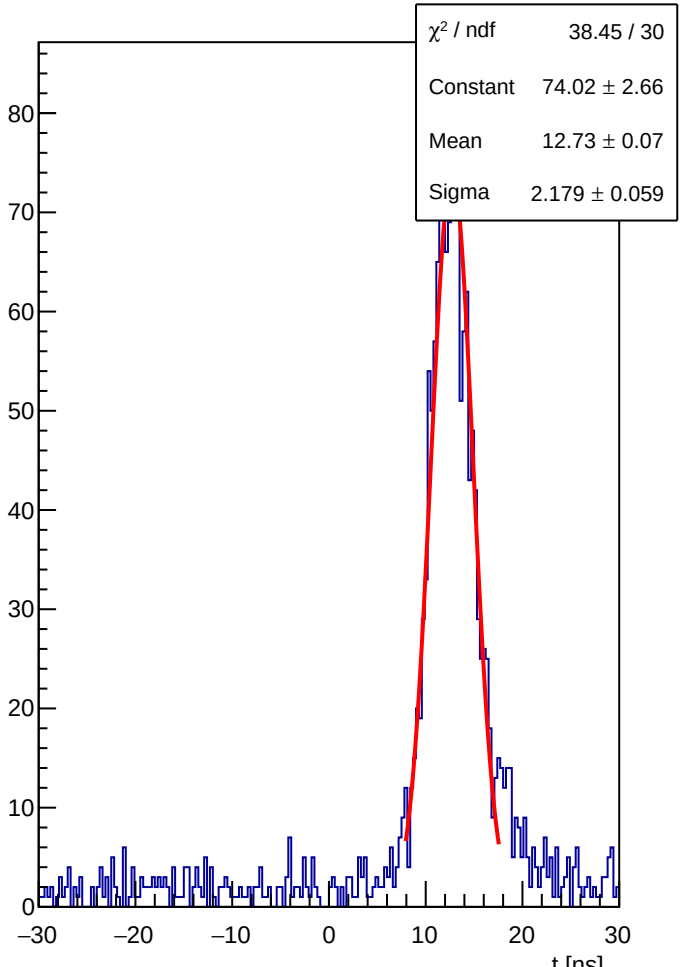

HCAL block 022 : cointime tw corr t0
χ² / ndf 86.08 / 30
Constant 91.89 ± 3.68
Mean 13.49 ± 0.05
Sigma 1.796 ± 0.057
0
20
40
60
80
100
–30
–20
–10
0
10
20
30
t tw corr [ns]

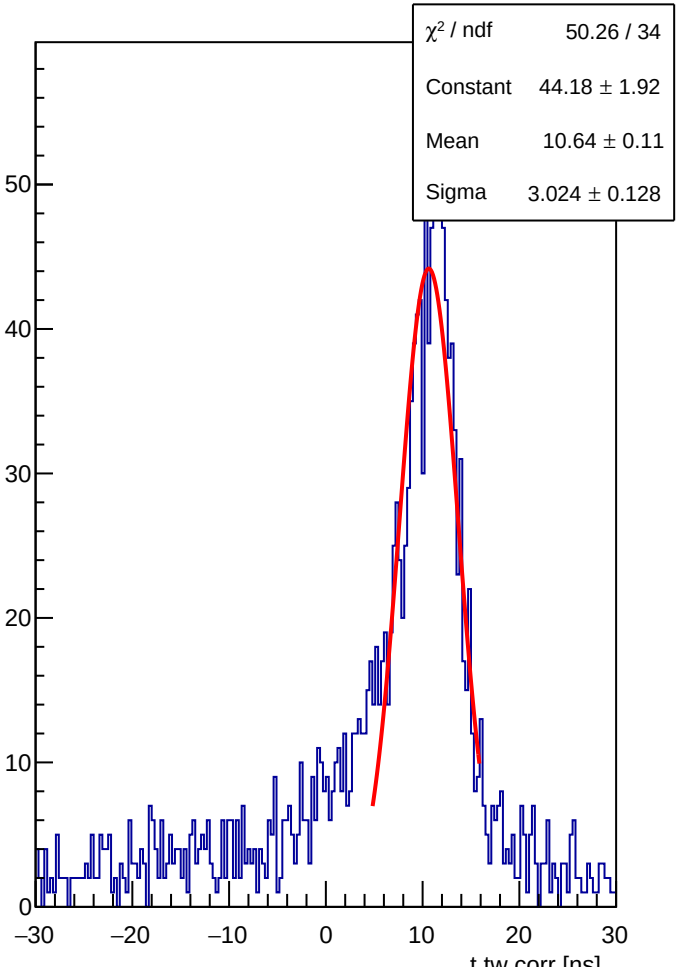

HCAL block 023 : cointime_t0
χ² / ndf 63.43 / 36
Constant 56.62 ± 2.15
Mean 13.64 ± 0.09
Sigma 2.677 ± 0.081
t [ns]

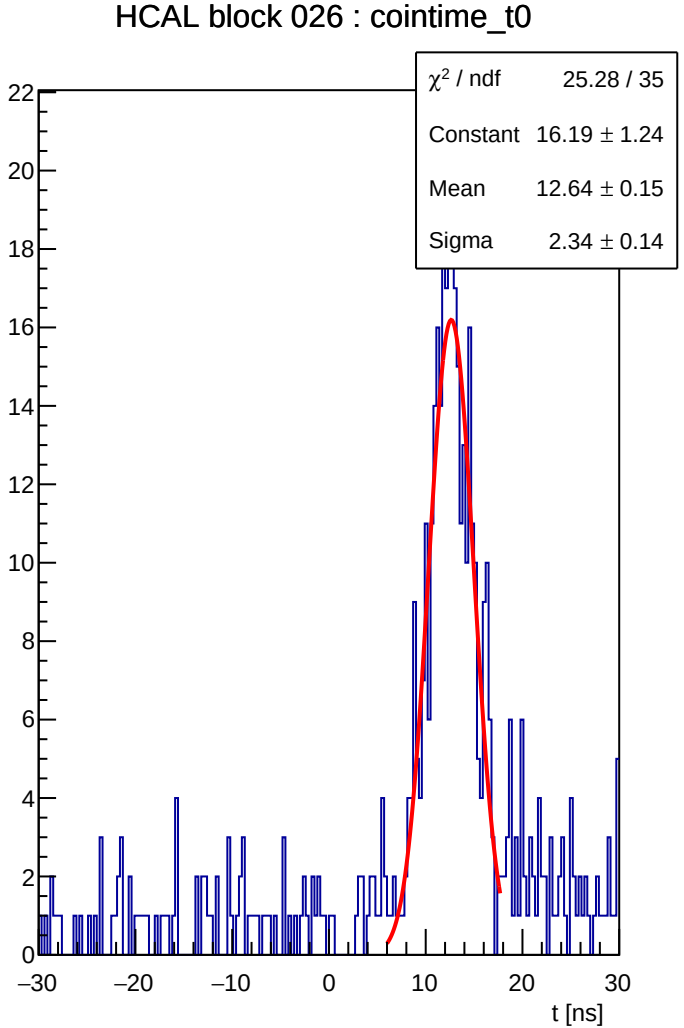

HCAL block 023 : cointime tw corr t0
χ² / ndf 69.78 / 36
Constant 66.36 ± 2.59
Mean 13.55 ± 0.07
Sigma 2.281 ± 0.067
t tw corr [ns]

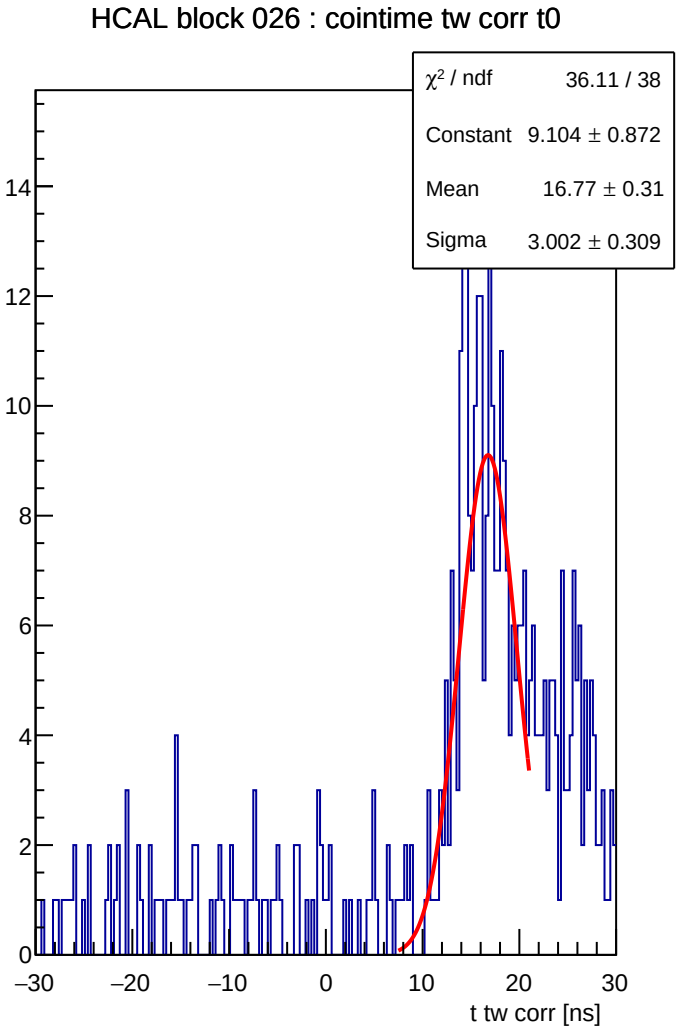

HCAL block 024 : cointime_t0
χ² / ndf 54.77 / 50
Constant 22.95 ± 1.11
Mean 14.02 ± 0.32
Sigma 5.8 ± 0.4
30
25
20
15
10
5
−30
−20
−10
0
10
20
30
t [ns]

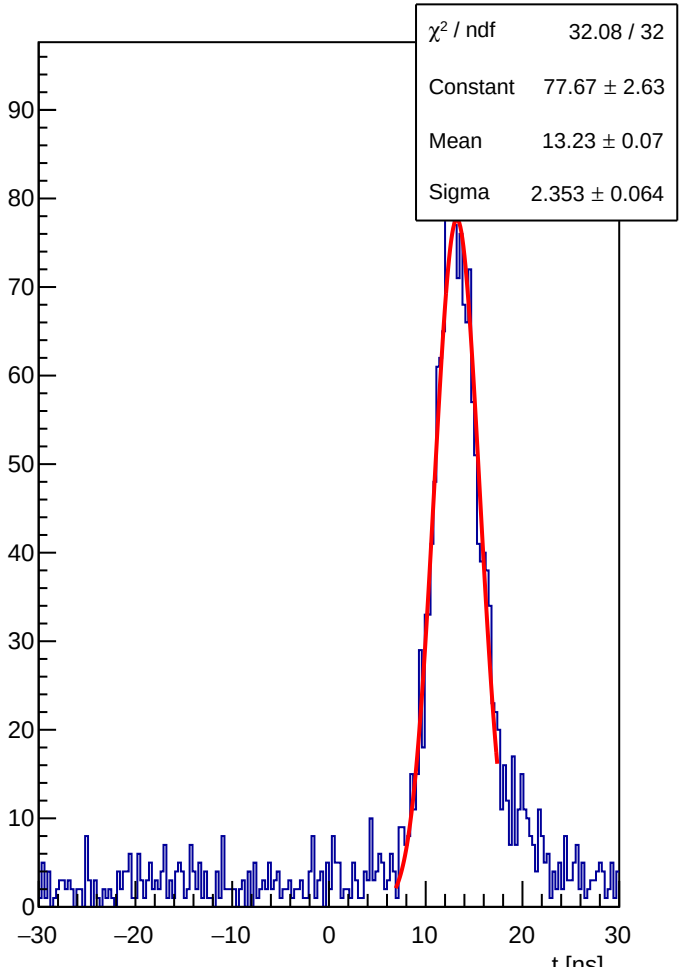

HCAL block 024 : cointime tw corr t0
χ² / ndf 62.98 / 50
Constant 17.37 ± 0.87
Mean 14.85 ± 0.97
Sigma 10.34 ± 2.15
25
20
15
10
5
−30
−20
−10
0
10
20
30
t tw corr [ns]

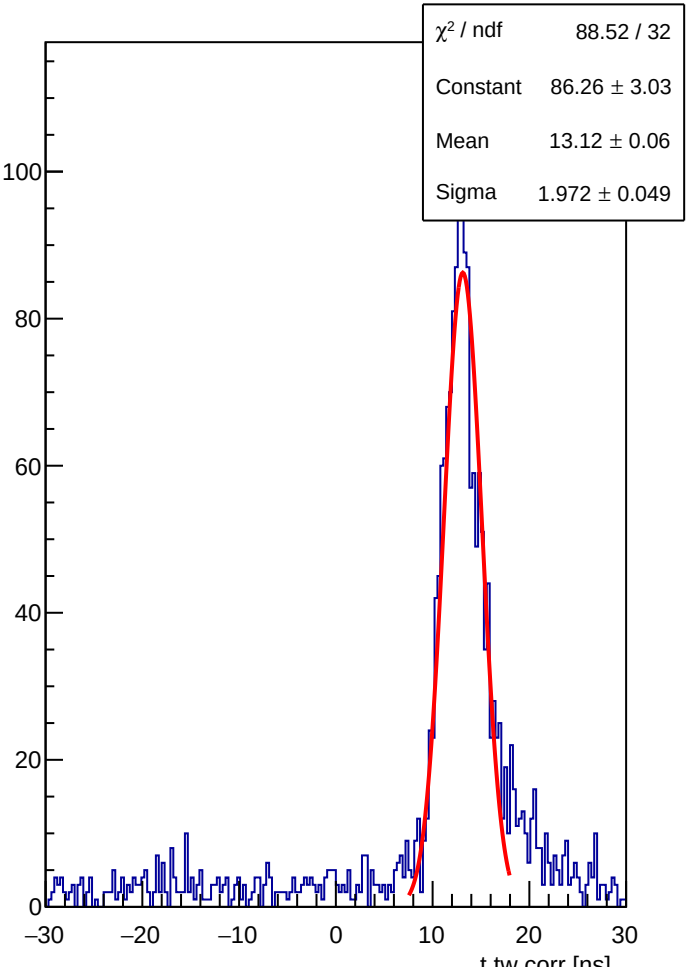

HCAL block 025 : cointime_t0
χ² / ndf 38.45 / 30
Constant 74.02 ± 2.66
Mean 12.73 ± 0.07
Sigma 2.179 ± 0.059
t [ns]

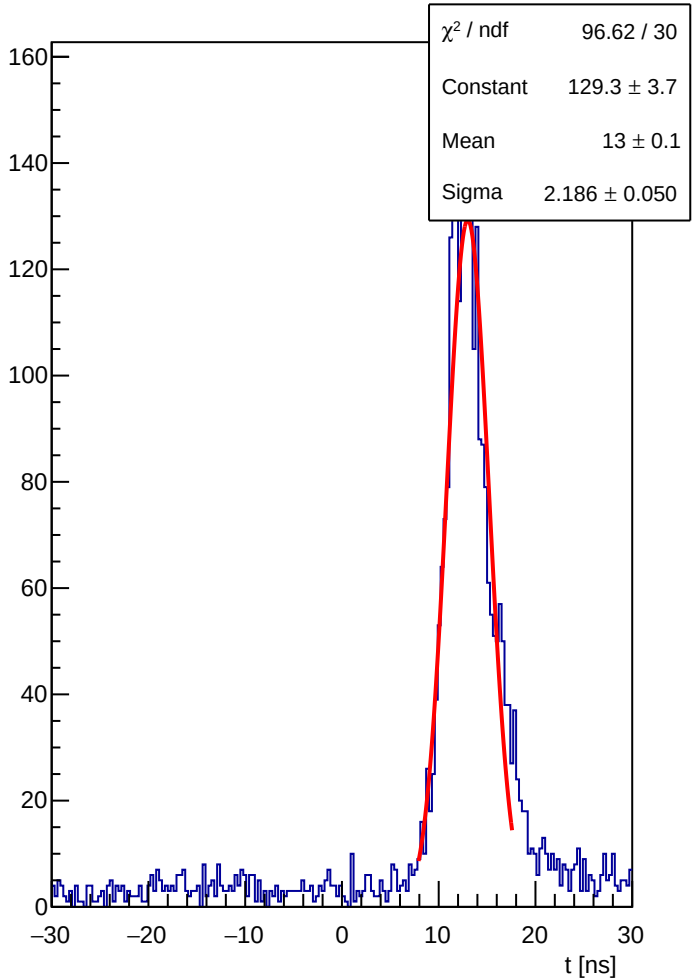

HCAL block 025 : cointime tw corr t0
χ² / ndf 50.26 / 34
Constant 44.18 ± 1.92
Mean 10.64 ± 0.11
Sigma 3.024 ± 0.128
t tw corr [ns]

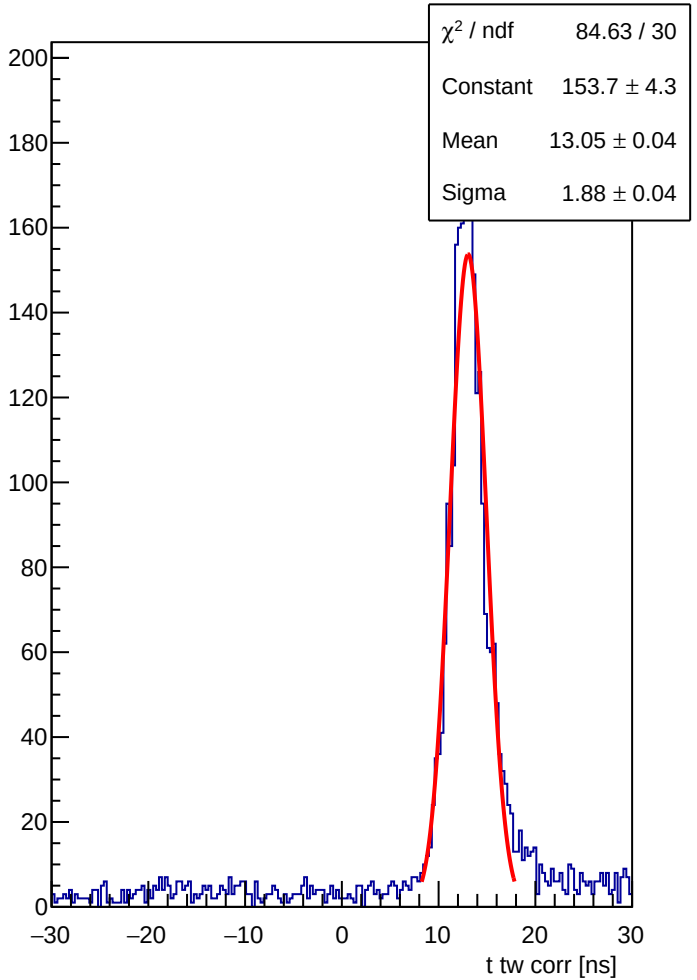

HCAL block 026 : cointime_t0
χ² / ndf 25.28 / 35
Constant 16.19 ± 1.24
Mean 12.64 ± 0.15
Sigma 2.34 ± 0.14
t [ns]

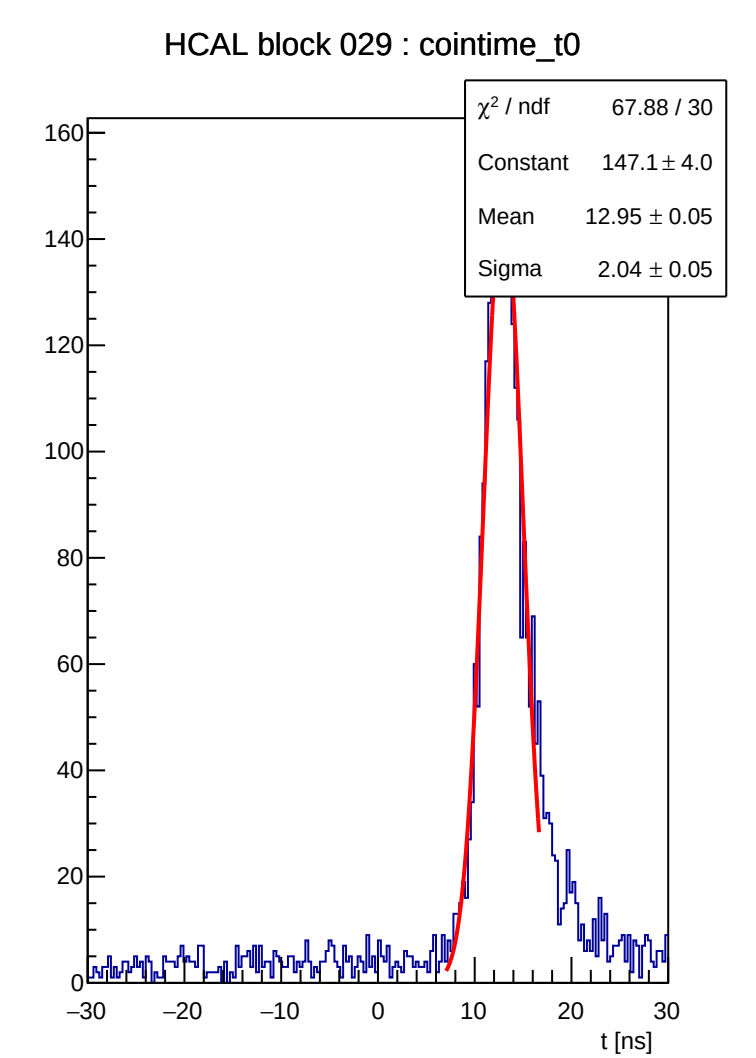

HCAL block 026 : cointime tw corr t0
χ² / ndf 36.11 / 38
Constant 9.104 ± 0.872
Mean 16.77 ± 0.31
Sigma 3.002 ± 0.309
t tw corr [ns]

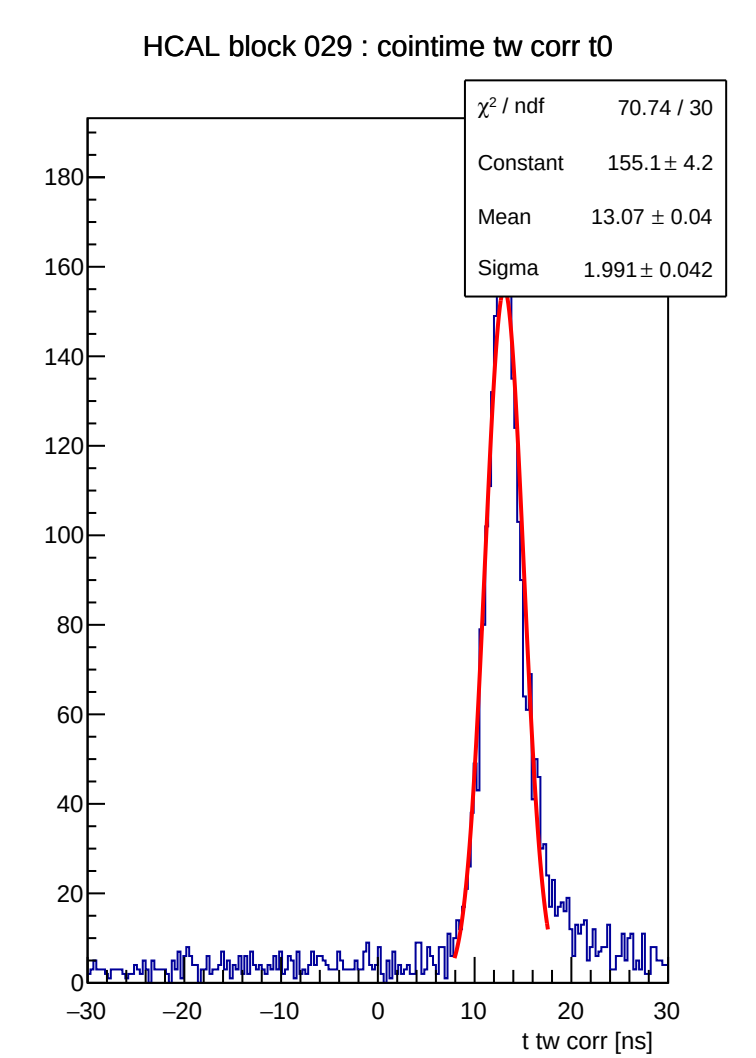

HCAL block 027 : cointime_t0
χ² / ndf 32.08 / 32
Constant 77.67 ± 2.63
Mean 13.23 ± 0.07
Sigma 2.353 ± 0.064
t [ns]

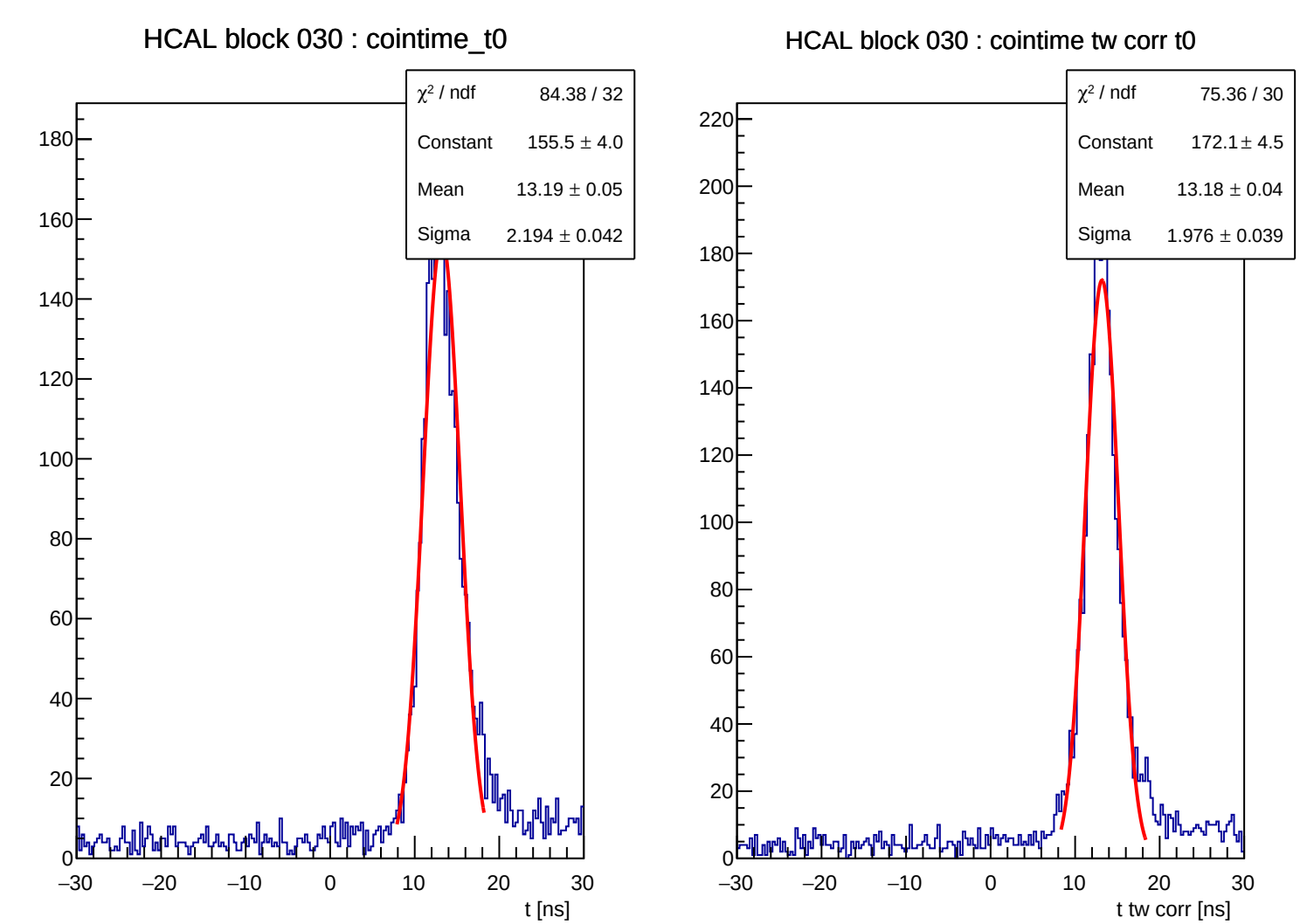

HCAL block 027 : cointime tw corr t0
χ² / ndf 88.52 / 32
Constant 86.26 ± 3.03
Mean 13.12 ± 0.06
Sigma 1.972 ± 0.049
t tw corr [ns]

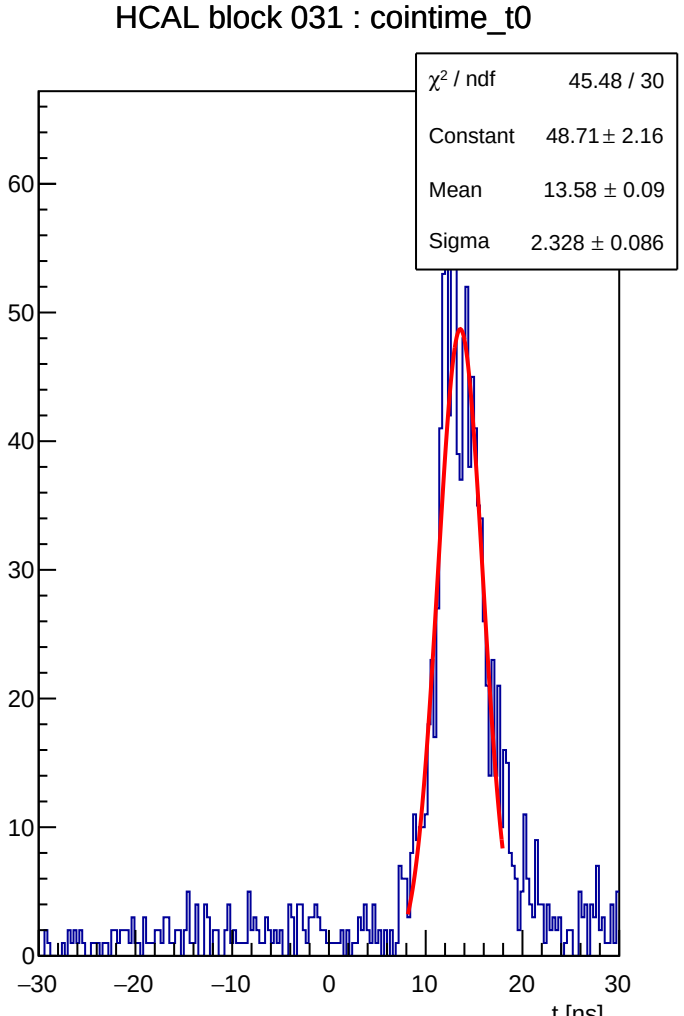

HCAL block 028 : cointime_t0
χ² / ndf 96.62 / 30
Constant 129.3 ± 3.7
Mean 13 ± 0.1
Sigma 2.186 ± 0.050
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

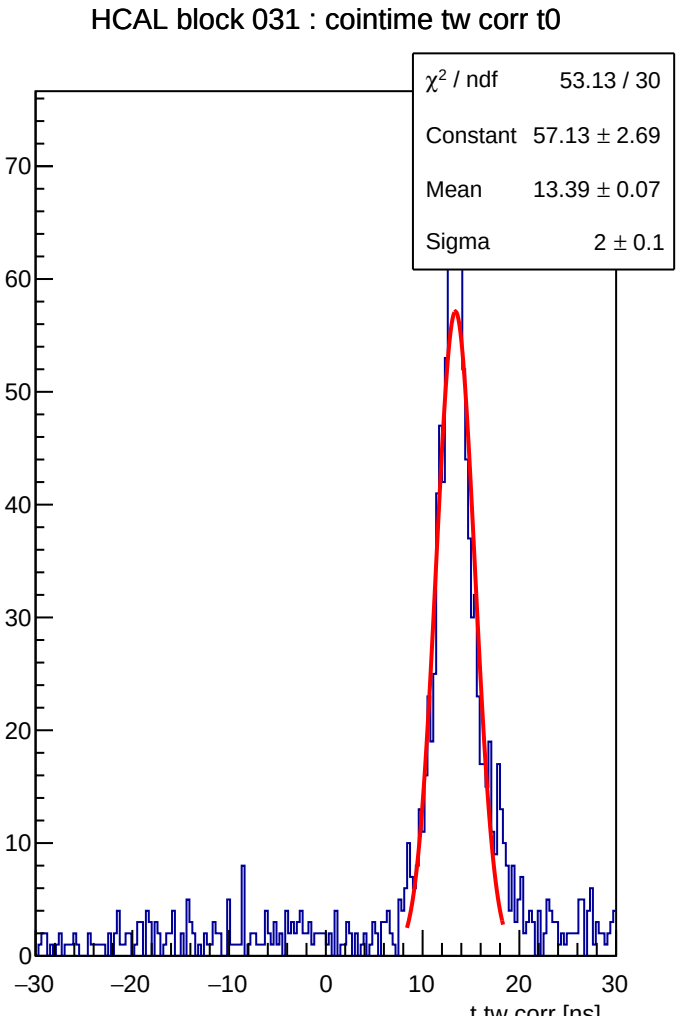

HCAL block 028 : cointime tw corr t0
χ² / ndf 84.63 / 30
Constant 153.7 ± 4.3
Mean 13.05 ± 0.04
Sigma 1.88 ± 0.04
200
180
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

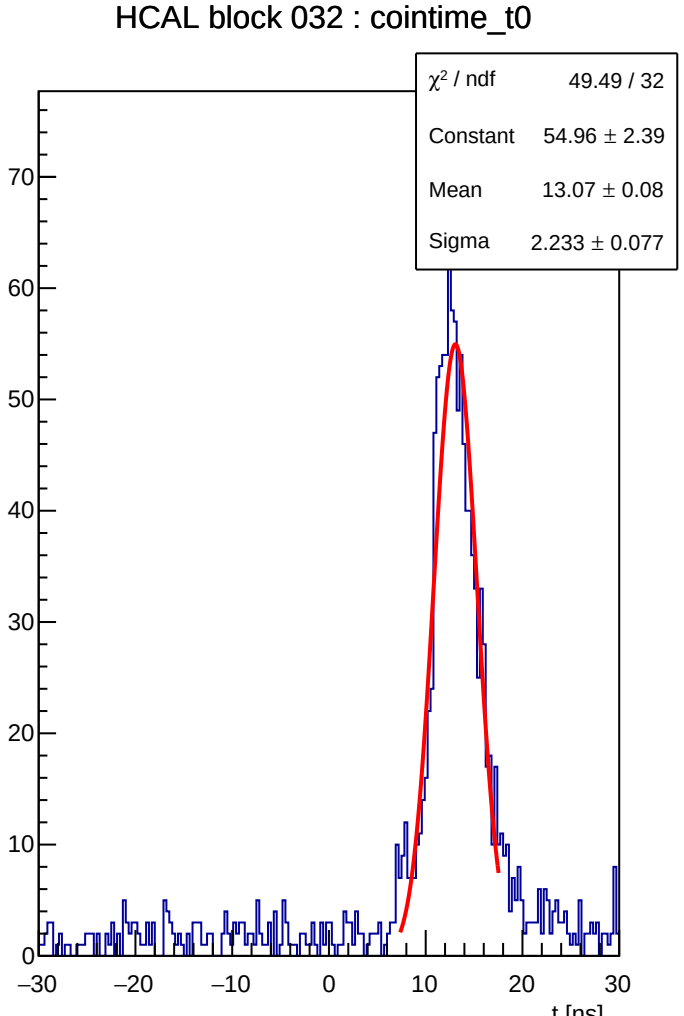

HCAL block 029 : cointime_t0
χ² / ndf 67.88 / 30
Constant 147.1 ± 4.0
Mean 12.95 ± 0.05
Sigma 2.04 ± 0.05
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

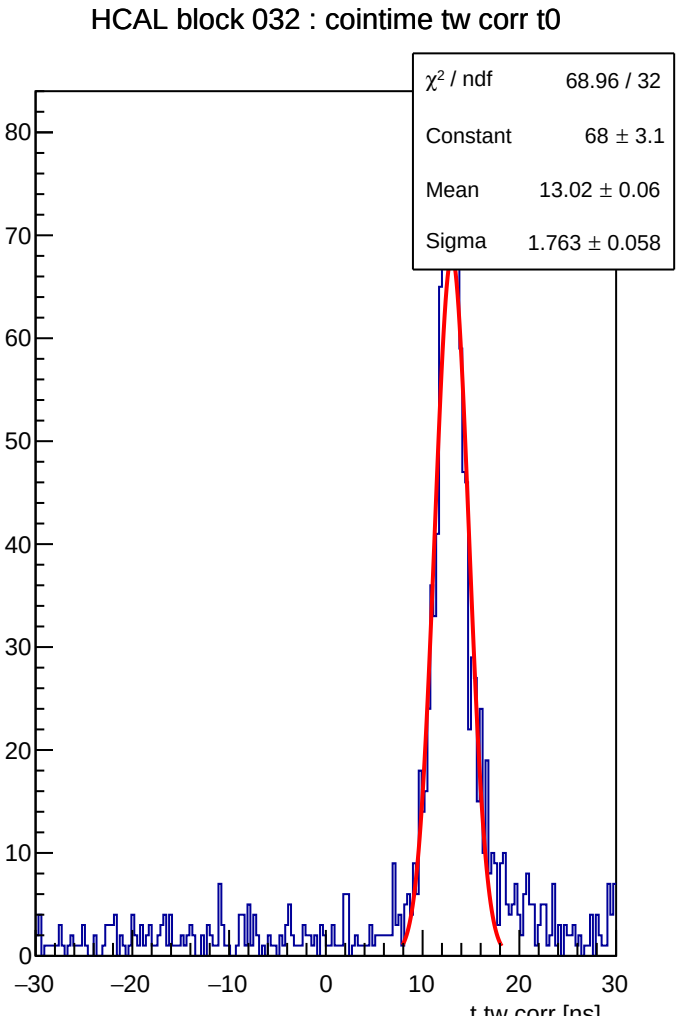

HCAL block 029 : cointime tw corr t0
χ² / ndf 70.74 / 30
Constant 155.1 ± 4.2
Mean 13.07 ± 0.04
Sigma 1.991 ± 0.042
180
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

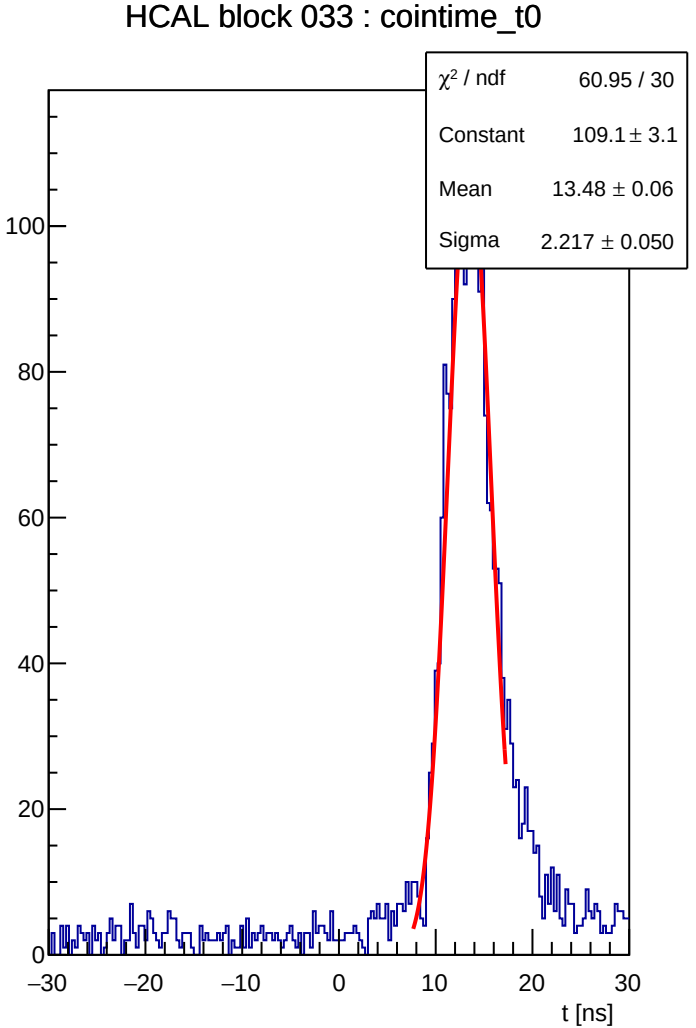

HCAL block 030 : cointime_t0
χ² / ndf 84.38 / 32
Constant 155.5 ± 4.0
Mean 13.19 ± 0.05
Sigma 2.194 ± 0.042
t [ns]
HCAL block 030 : cointime tw corr t0
χ² / ndf 75.36 / 30
Constant 172.1 ± 4.5
Mean 13.18 ± 0.04
Sigma 1.976 ± 0.039
t tw corr [ns]

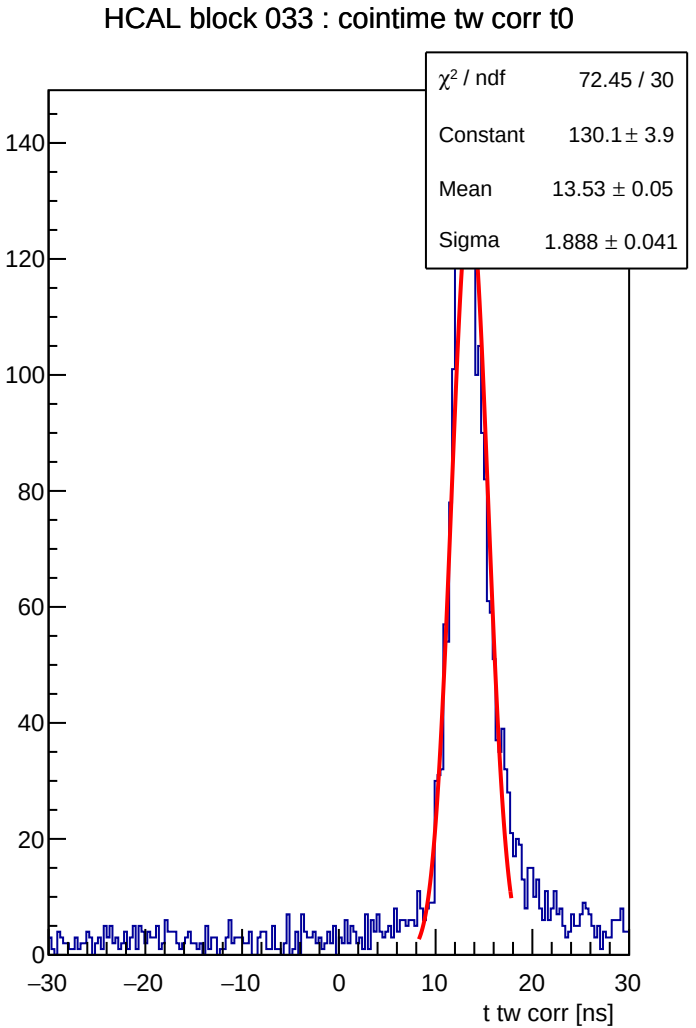

HCAL block 031 : cointime_t0
χ² / ndf 45.48 / 30
Constant 48.71 ± 2.16
Mean 13.58 ± 0.09
Sigma 2.328 ± 0.086
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t [ns]

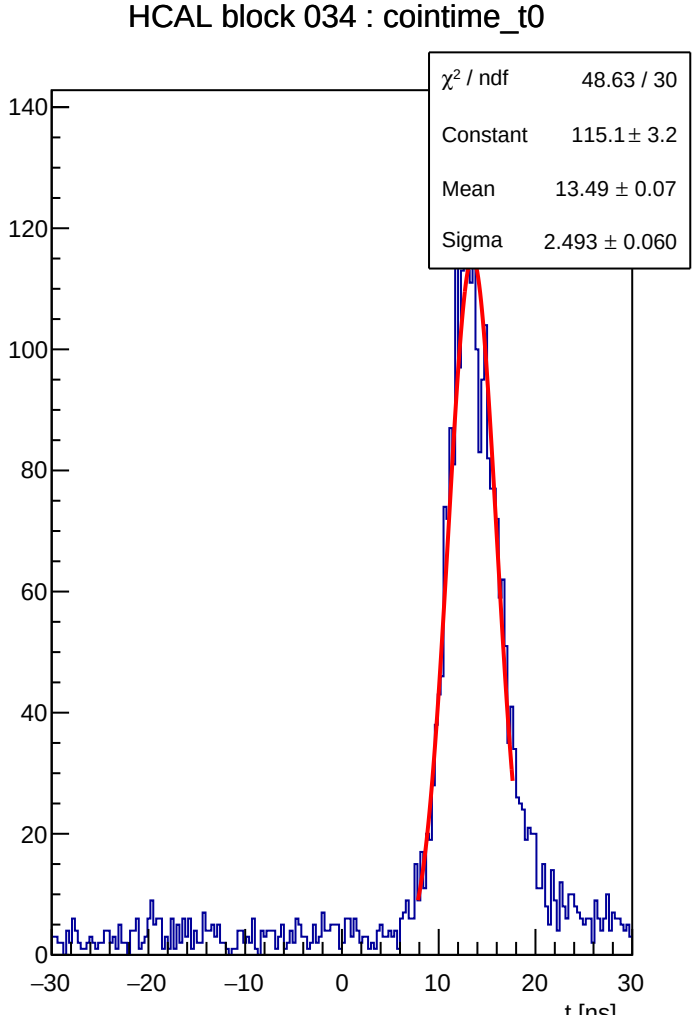

HCAL block 031 : cointime tw corr t0
χ² / ndf 53.13 / 30
Constant 57.13 ± 2.69
Mean 13.39 ± 0.07
Sigma 2 ± 0.1
70
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

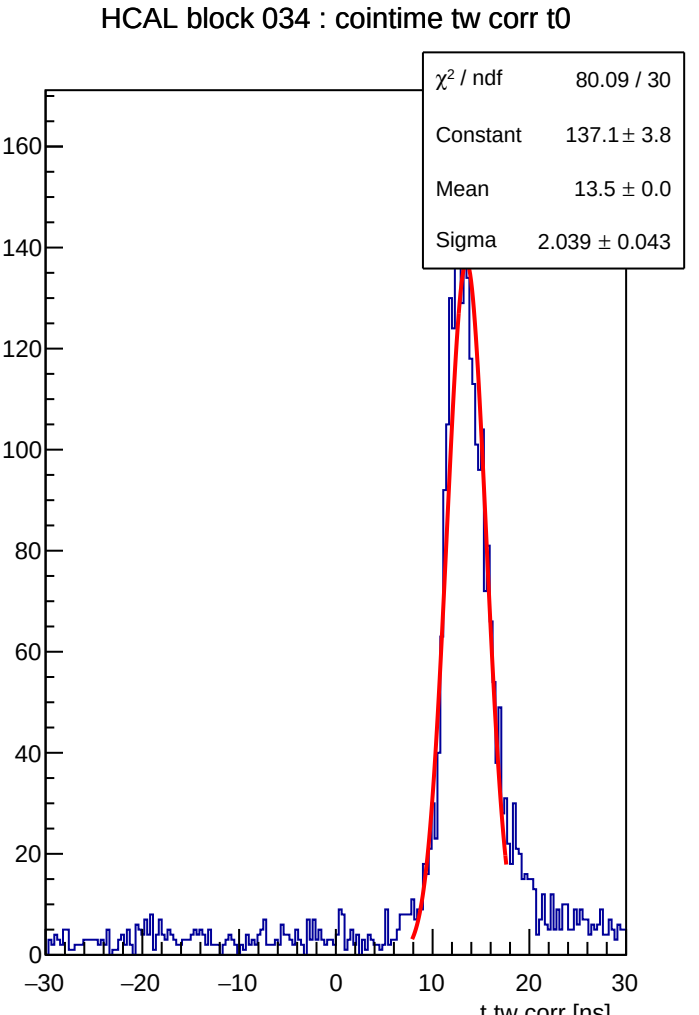

HCAL block 032 : cointime_t0
χ² / ndf 49.49 / 32
Constant 54.96 ± 2.39
Mean 13.07 ± 0.08
Sigma 2.233 ± 0.077
t [ns]

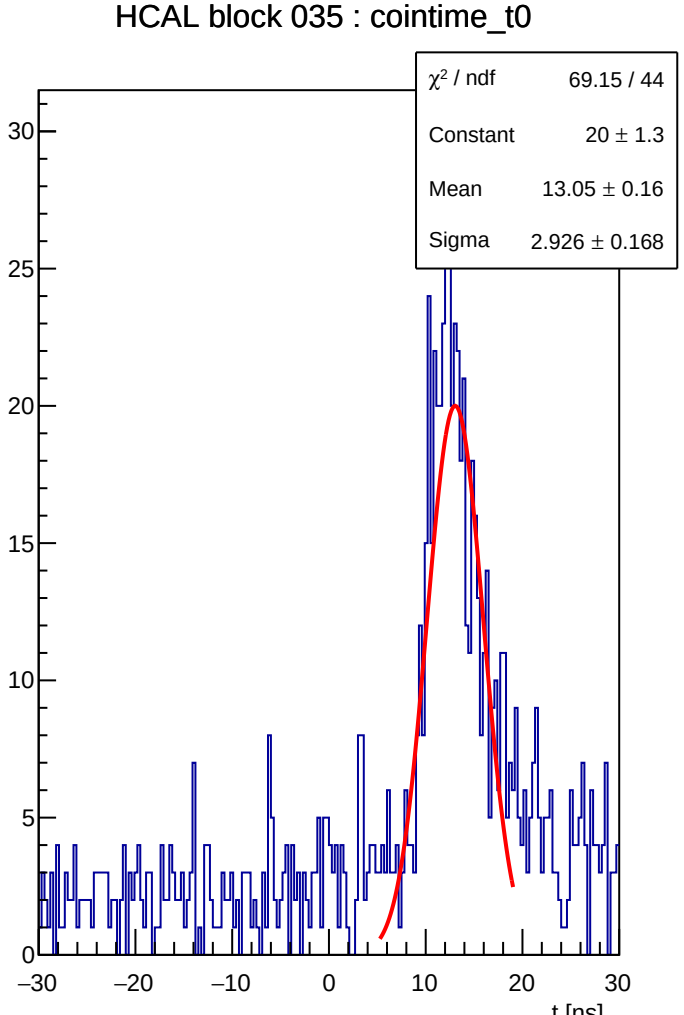

HCAL block 032 : cointime tw corr t0
χ² / ndf 68.96 / 32
Constant 68 ± 3.1
Mean 13.02 ± 0.06
Sigma 1.763 ± 0.058
t tw corr [ns]

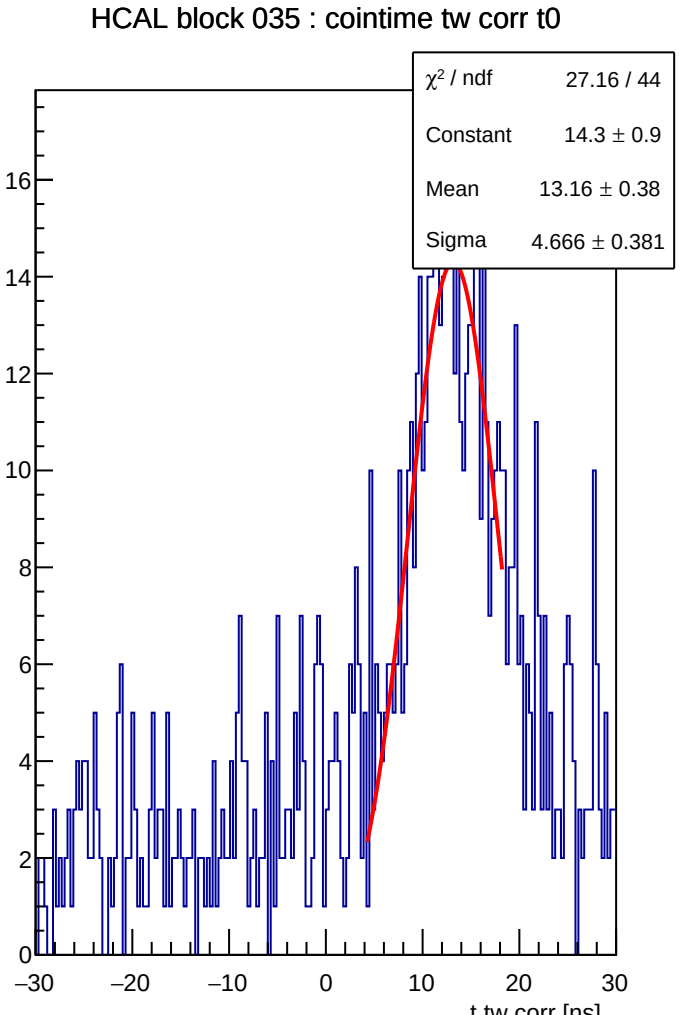

HCAL block 033 : cointime_t0
χ² / ndf 60.95 / 30
Constant 109.1 ± 3.1
Mean 13.48 ± 0.06
Sigma 2.217 ± 0.050
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

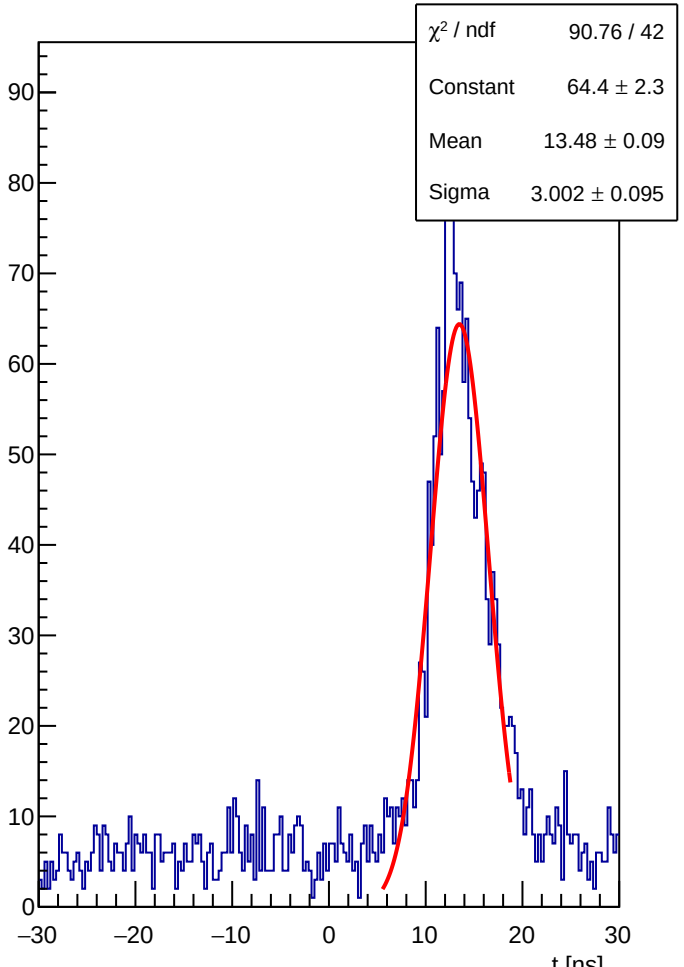

HCAL block 033 : cointime tw corr t0
χ² / ndf 72.45 / 30
Constant 130.1 ± 3.9
Mean 13.53 ± 0.05
Sigma 1.888 ± 0.041
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

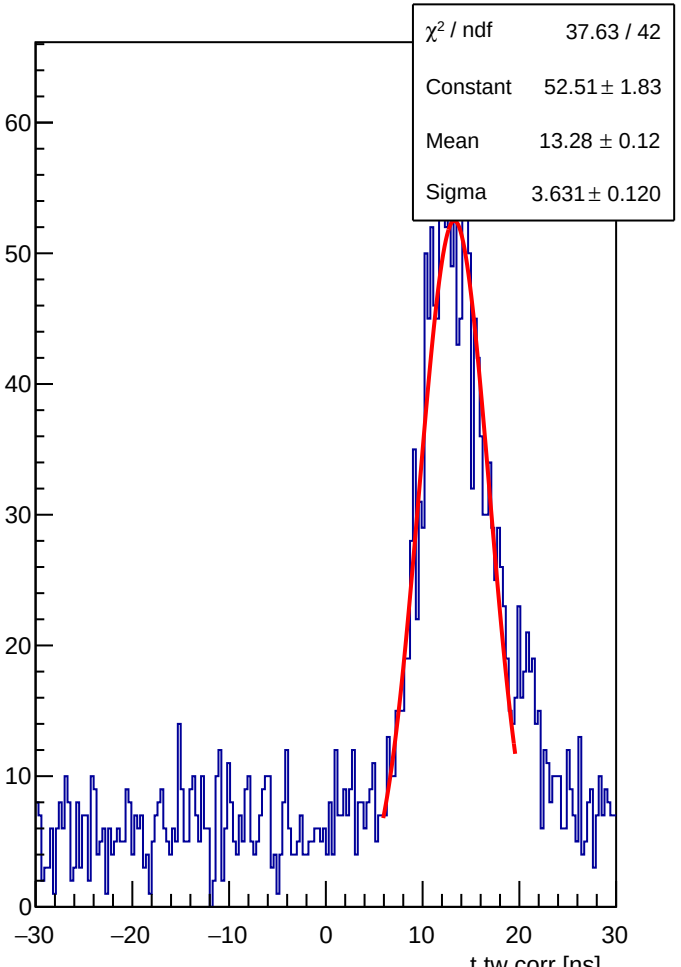

HCAL block 034 : cointime_t0
χ² / ndf 48.63 / 30
Constant 115.1 ± 3.2
Mean 13.49 ± 0.07
Sigma 2.493 ± 0.060
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

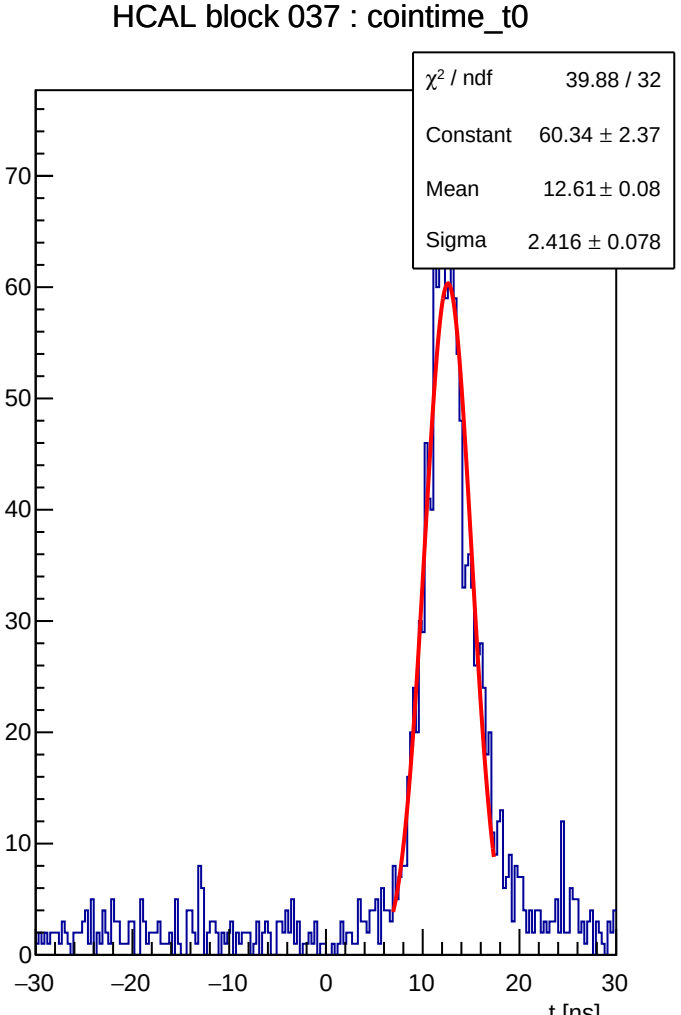

HCAL block 034 : cointime tw corr t0
χ² / ndf 80.09 / 30
Constant 137.1 ± 3.8
Mean 13.5 ± 0.0
Sigma 2.039 ± 0.043
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

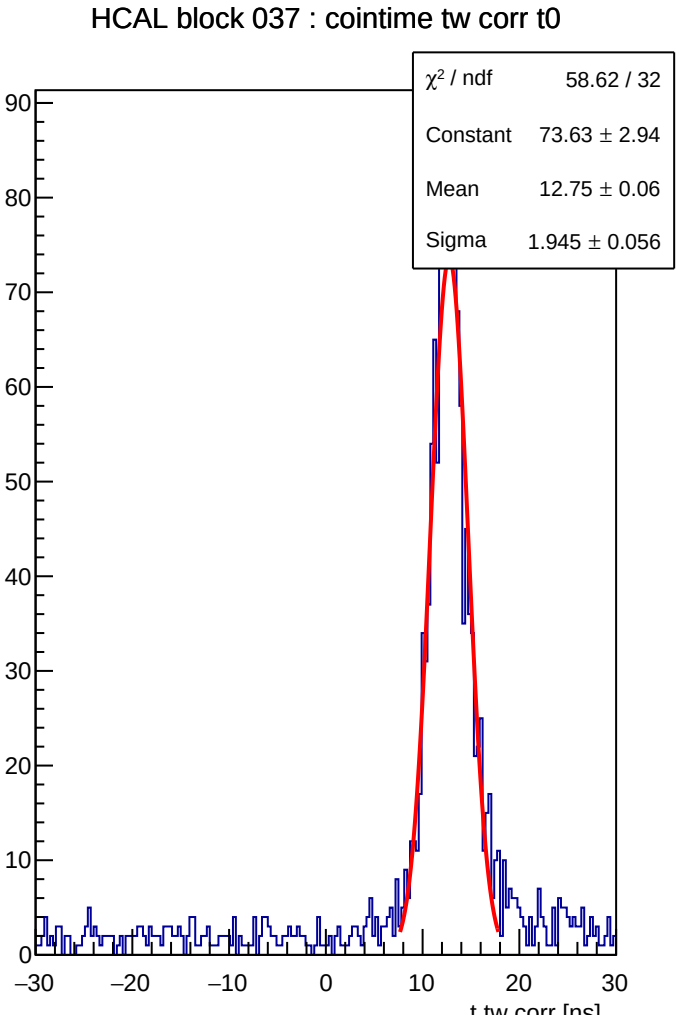

HCAL block 035 : cointime_t0
χ² / ndf 69.15 / 44
Constant 20 ± 1.3
Mean 13.05 ± 0.16
Sigma 2.926 ± 0.168
30
25
20
15
10
5
0
–30
–20
–10
0
10
20
30
t [ns]

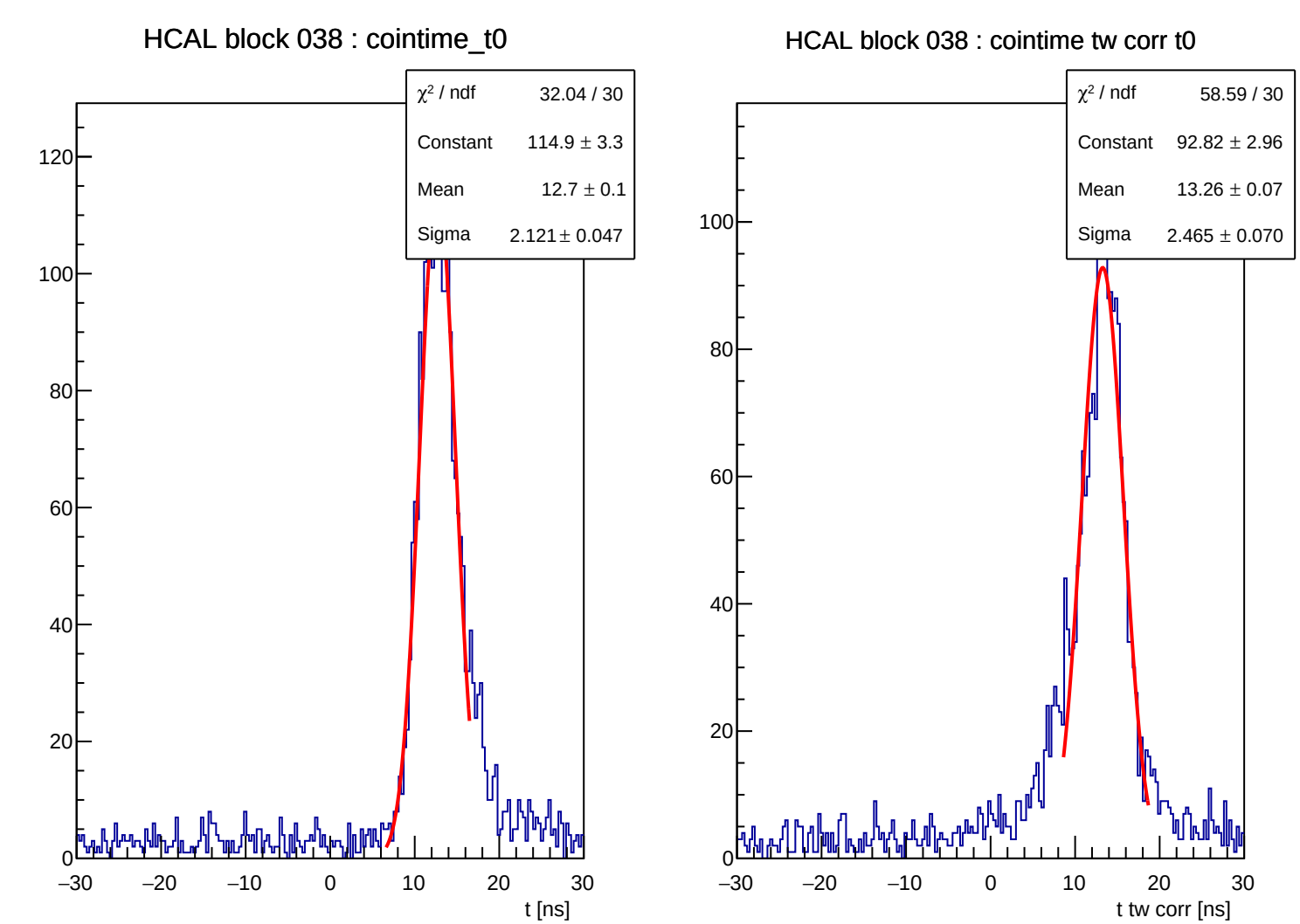

HCAL block 035 : cointime tw corr t0
χ² / ndf 27.16 / 44
Constant 14.3 ± 0.9
Mean 13.16 ± 0.38
Sigma 4.666 ± 0.381
16
14
12
10
8
6
4
2
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

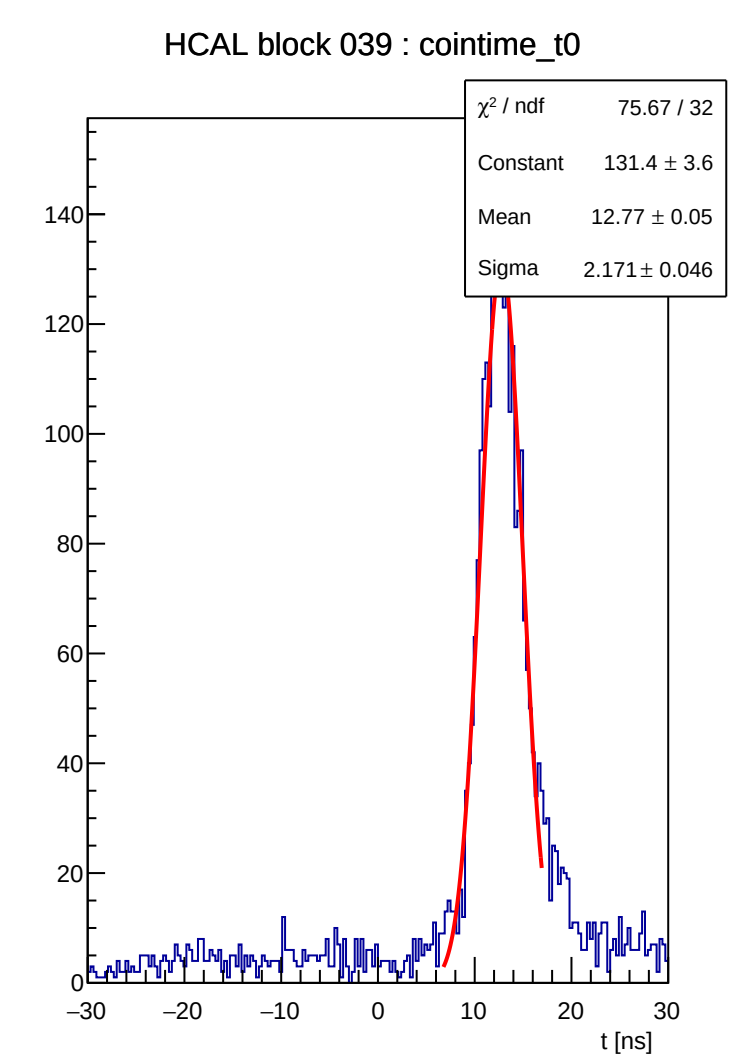

HCAL block 036 : cointime_t0
χ² / ndf 90.76 / 42
Constant 64.4 ± 2.3
Mean 13.48 ± 0.09
Sigma 3.002 ± 0.095
t [ns]

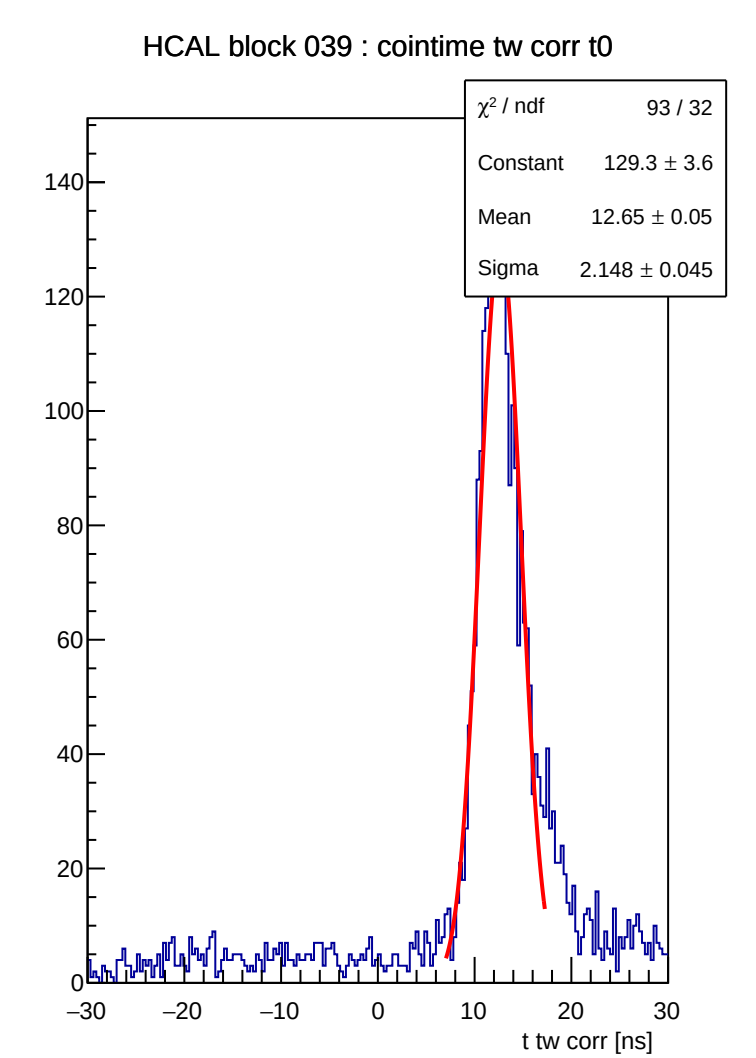

HCAL block 036 : cointime tw corr t0
χ² / ndf 37.63 / 42
Constant 52.51 ± 1.83
Mean 13.28 ± 0.12
Sigma 3.631 ± 0.120
t tw corr [ns]

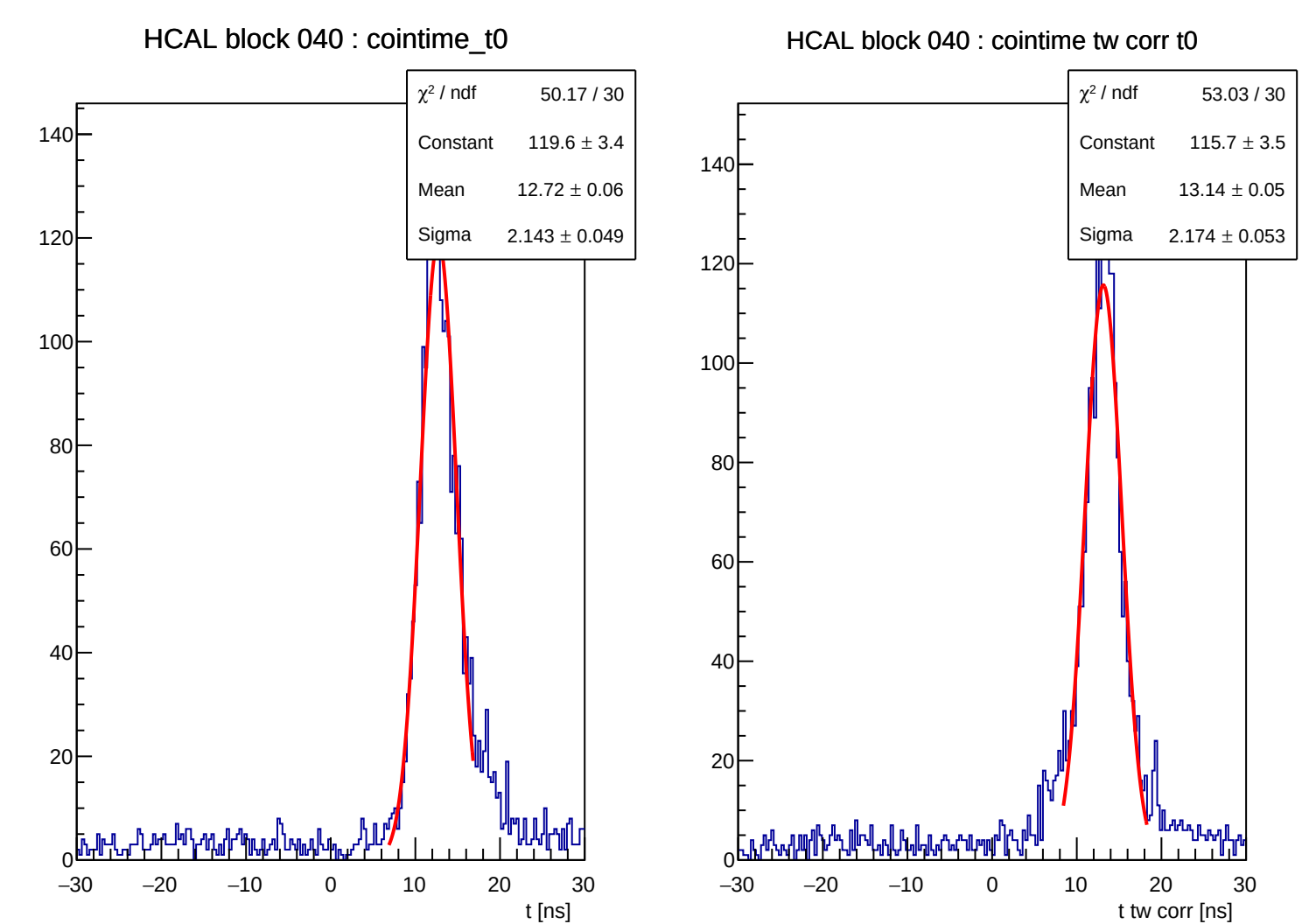

HCAL block 037 : cointime_t0
χ² / ndf 39.88 / 32
Constant 60.34 ± 2.37
Mean 12.61 ± 0.08
Sigma 2.416 ± 0.078
0
10
20
30
40
50
60
70
–30
–20
–10
0
10
20
30
t [ns]

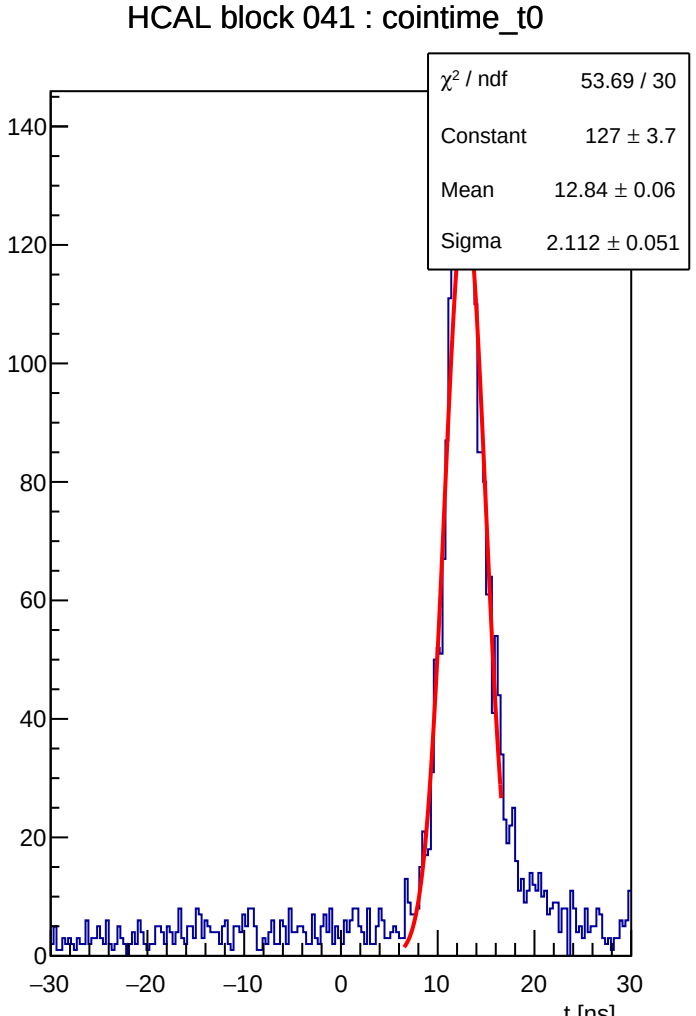

HCAL block 037 : cointime tw corr t0
χ² / ndf 58.62 / 32
Constant 73.63 ± 2.94
Mean 12.75 ± 0.06
Sigma 1.945 ± 0.056
0
10
20
30
40
50
60
70
80
90
–30
–20
–10
0
10
20
30
t tw corr [ns]

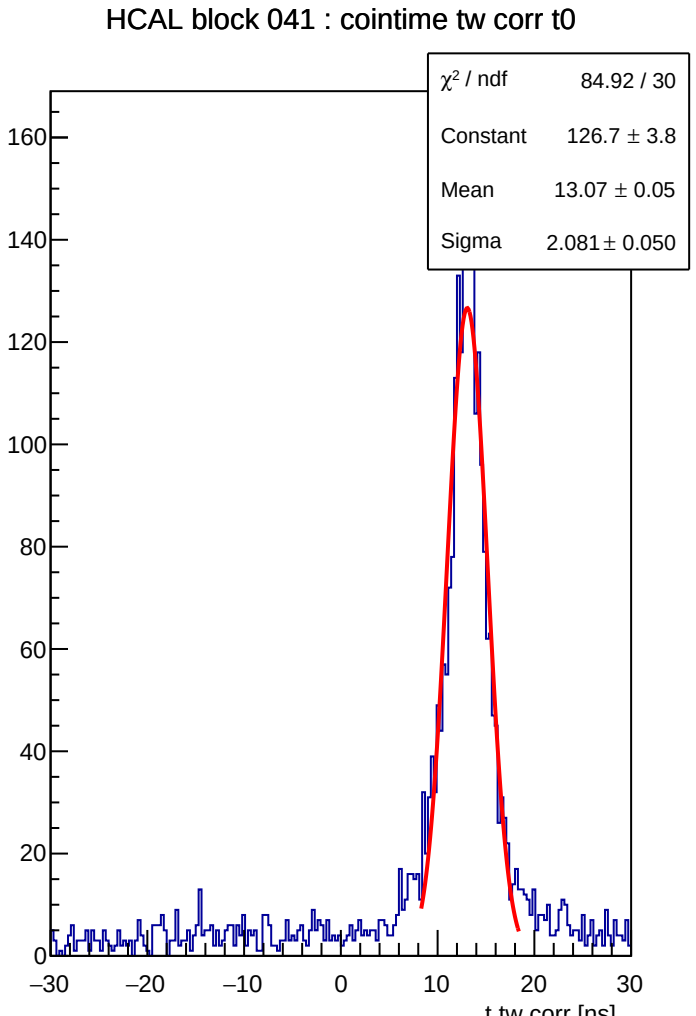

HCAL block 038 : cointime_t0
χ² / ndf 32.04 / 30
Constant 114.9 ± 3.3
Mean 12.7 ± 0.1
Sigma 2.121 ± 0.047
t [ns]
HCAL block 038 : cointime tw corr t0
χ² / ndf 58.59 / 30
Constant 92.82 ± 2.96
Mean 13.26 ± 0.07
Sigma 2.465 ± 0.070
t tw corr [ns]

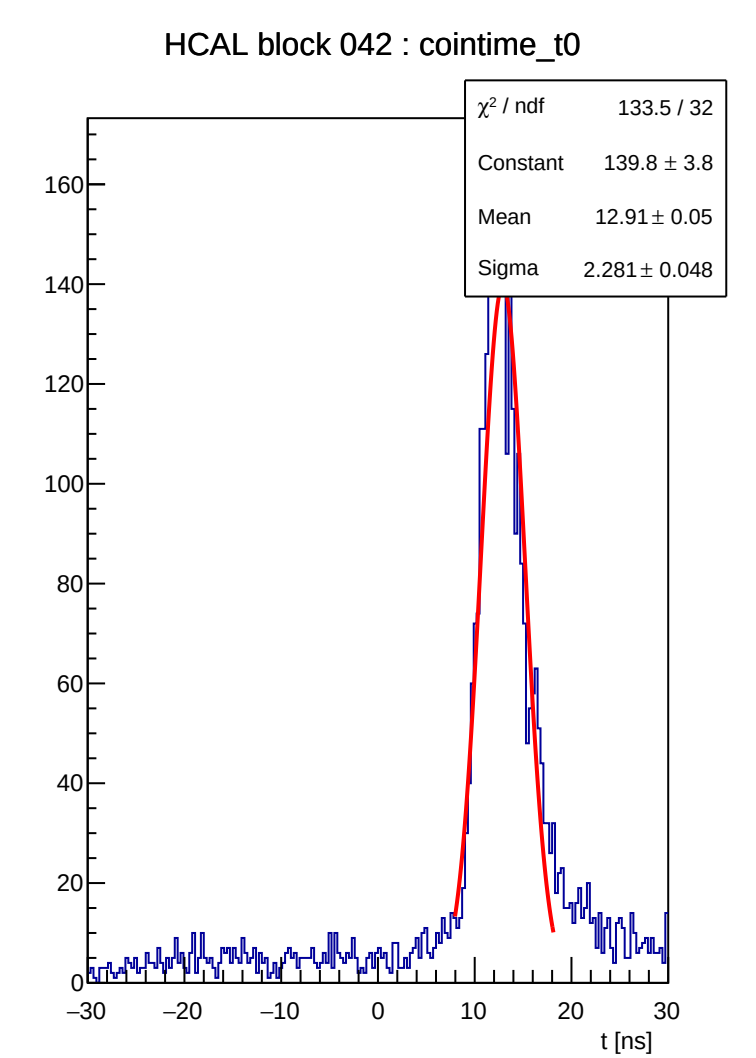

HCAL block 039 : cointime_t0
χ² / ndf 75.67 / 32
Constant 131.4 ± 3.6
Mean 12.77 ± 0.05
Sigma 2.171 ± 0.046
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

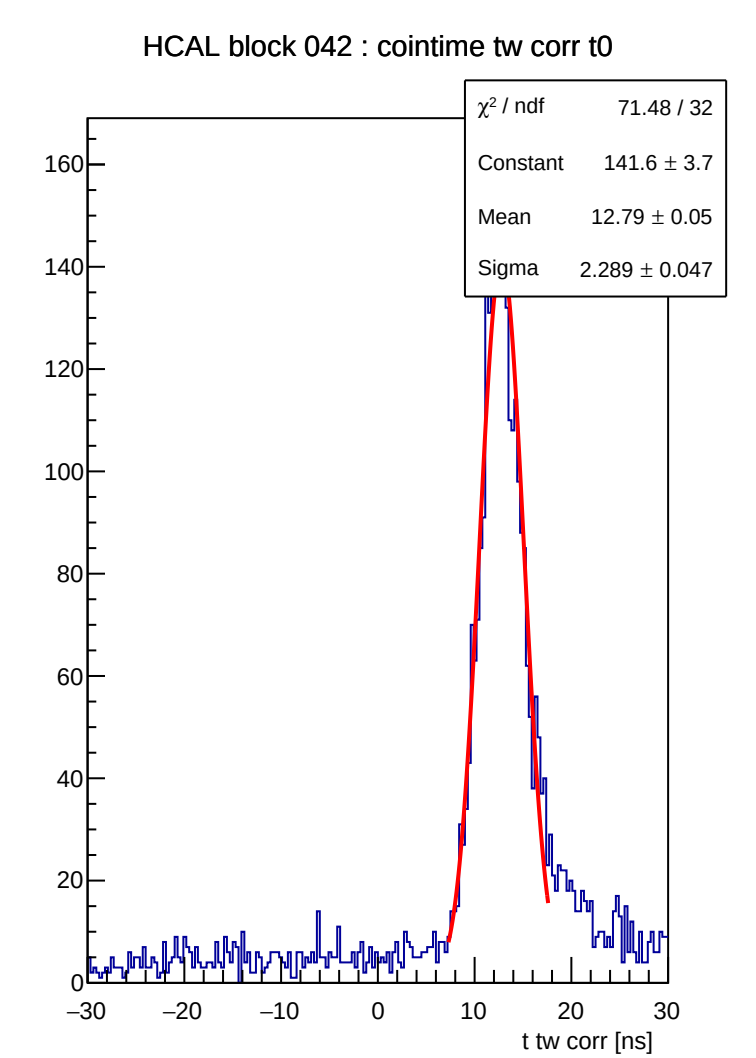

HCAL block 039 : cointime tw corr t0
χ² / ndf 93 / 32
Constant 129.3 ± 3.6
Mean 12.65 ± 0.05
Sigma 2.148 ± 0.045
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

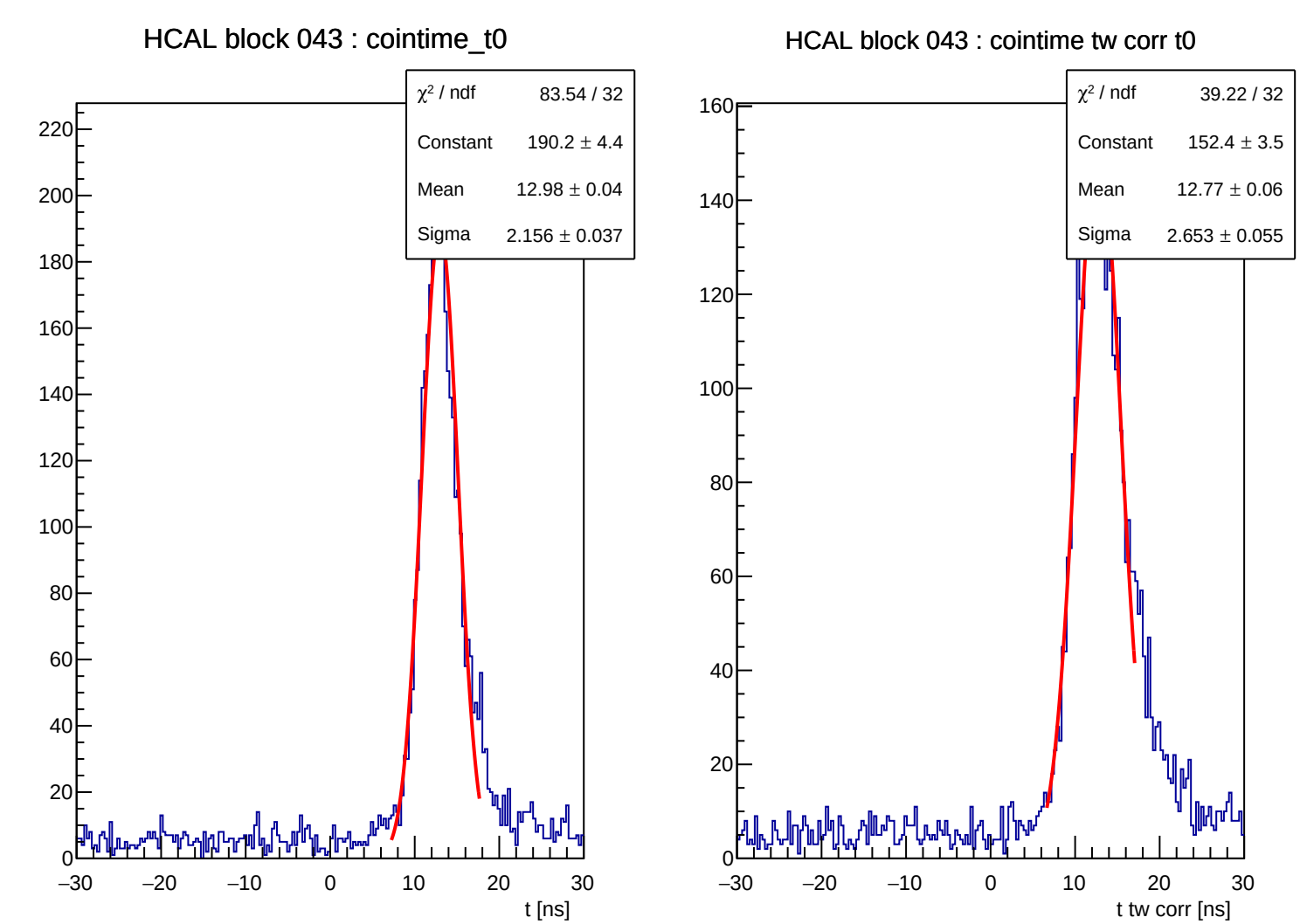

HCAL block 040 : cointime_t0
χ² / ndf 50.17 / 30
Constant 119.6 ± 3.4
Mean 12.72 ± 0.06
Sigma 2.143 ± 0.049
t [ns]
HCAL block 040 : cointime tw corr t0
χ² / ndf 53.03 / 30
Constant 115.7 ± 3.5
Mean 13.14 ± 0.05
Sigma 2.174 ± 0.053
t tw corr [ns]

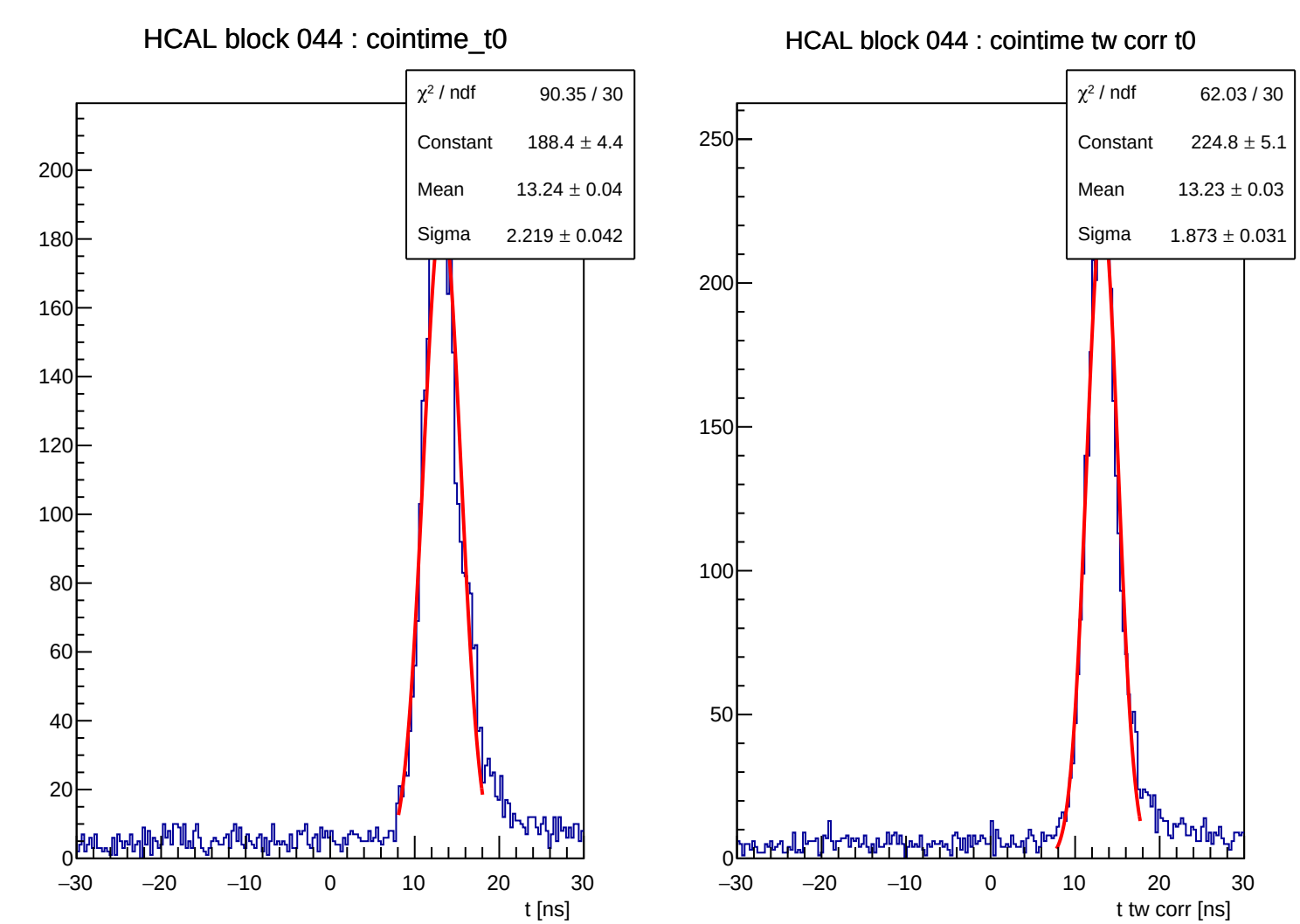

HCAL block 041 : cointime_t0
χ² / ndf 53.69 / 30
Constant 127 ± 3.7
Mean 12.84 ± 0.06
Sigma 2.112 ± 0.051
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

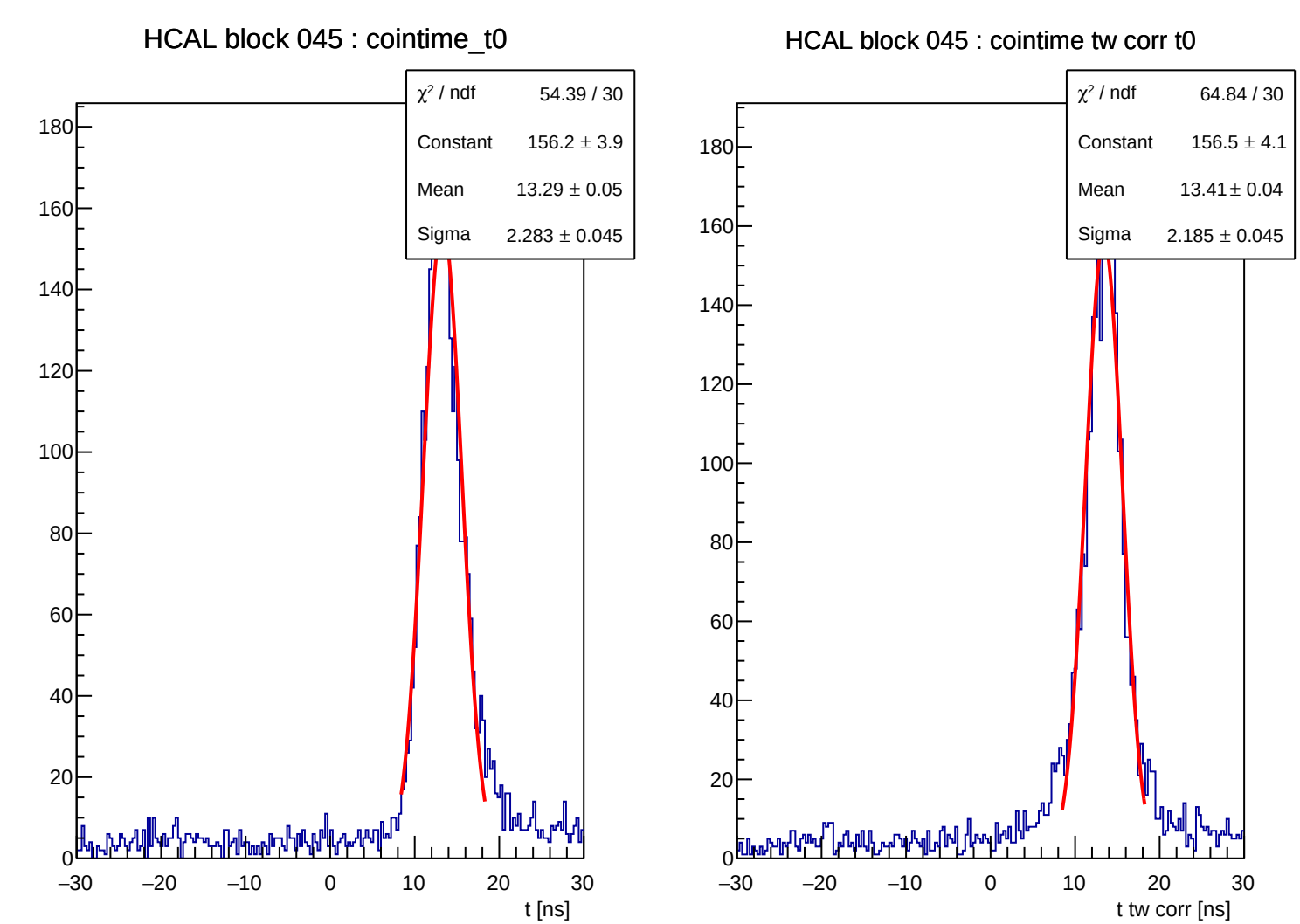

HCAL block 041 : cointime tw corr t0
χ² / ndf 84.92 / 30
Constant 126.7 ± 3.8
Mean 13.07 ± 0.05
Sigma 2.081 ± 0.050
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

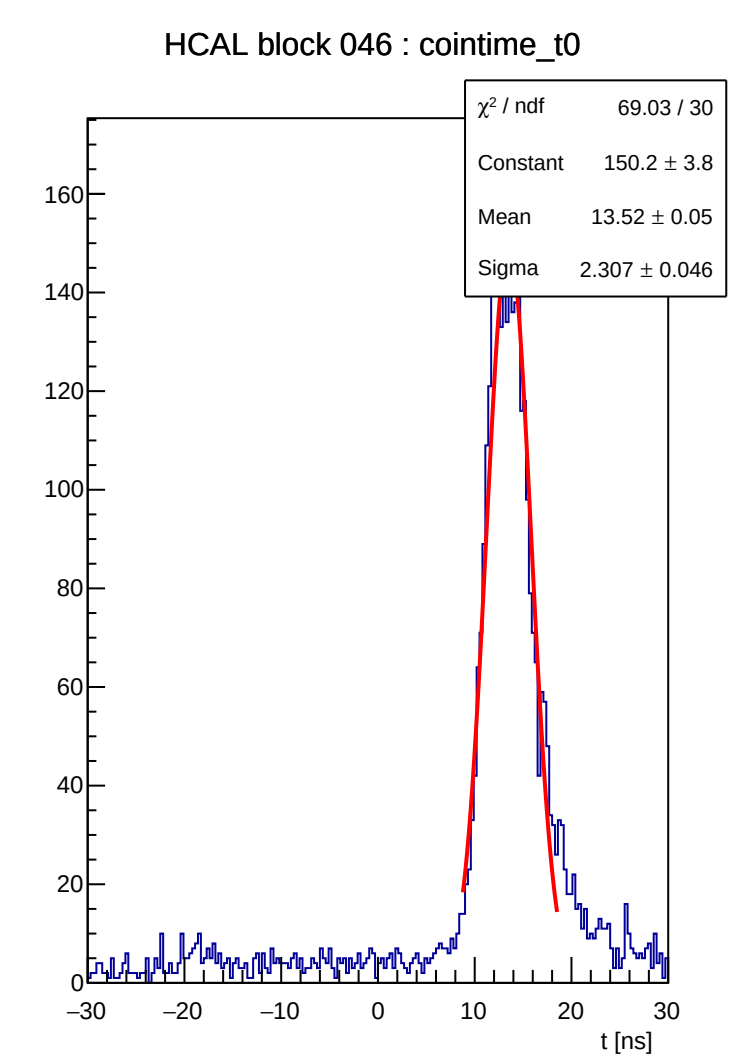

HCAL block 042 : cointime_t0
χ² / ndf 133.5 / 32
Constant 139.8 ± 3.8
Mean 12.91 ± 0.05
Sigma 2.281 ± 0.048
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

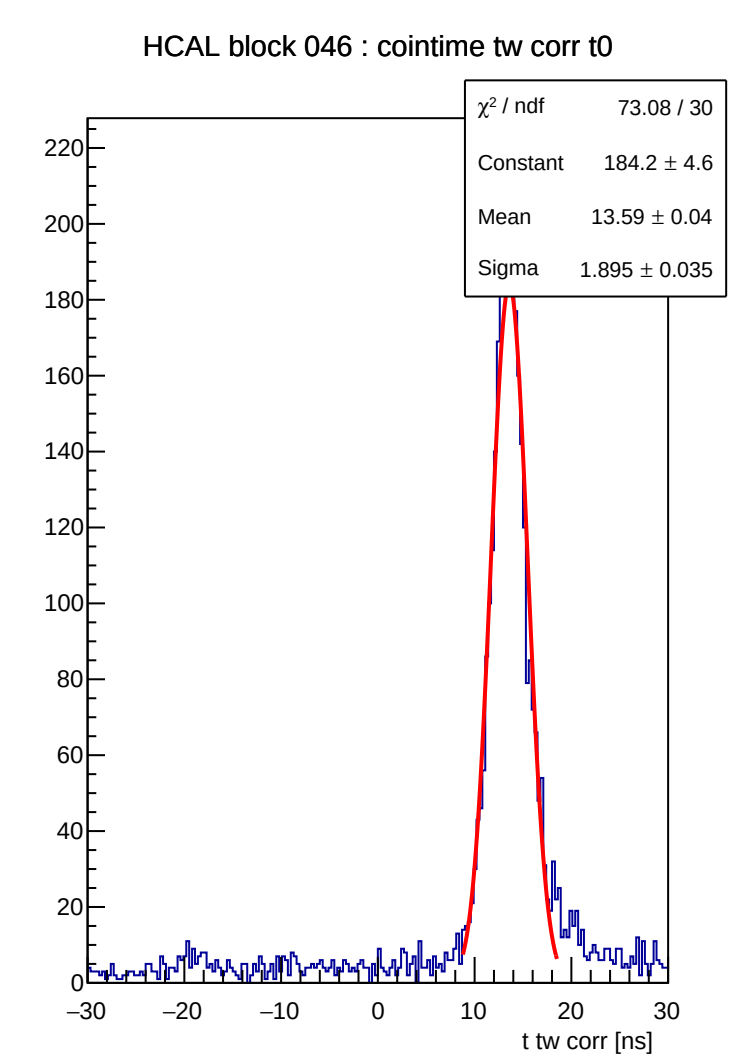

HCAL block 042 : cointime tw corr t0
χ² / ndf 71.48 / 32
Constant 141.6 ± 3.7
Mean 12.79 ± 0.05
Sigma 2.289 ± 0.047
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

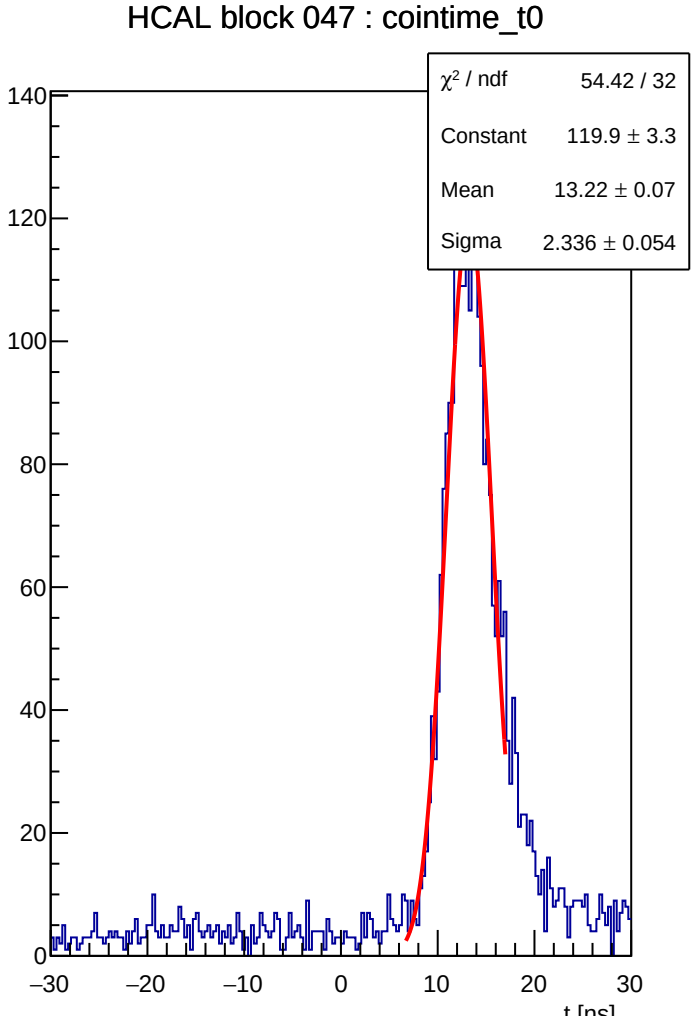

HCAL block 043 : cointime_t0
χ² / ndf 83.54 / 32
Constant 190.2 ± 4.4
Mean 12.98 ± 0.04
Sigma 2.156 ± 0.037
t [ns]
HCAL block 043 : cointime tw corr t0
χ² / ndf 39.22 / 32
Constant 152.4 ± 3.5
Mean 12.77 ± 0.06
Sigma 2.653 ± 0.055
t tw corr [ns]

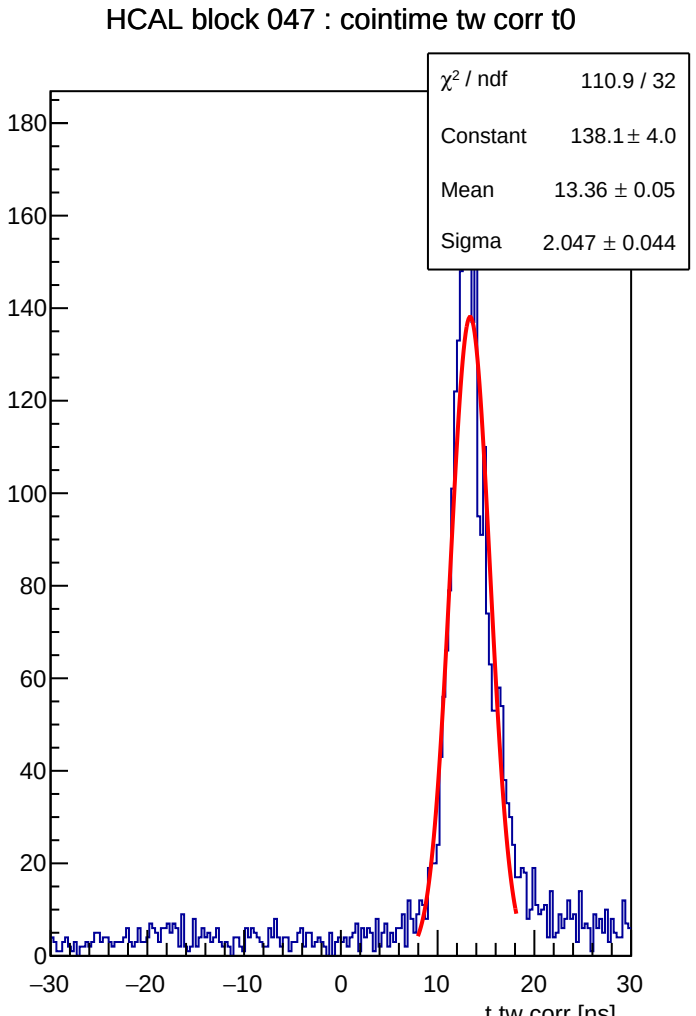

HCAL block 044 : cointime_t0
χ² / ndf 90.35 / 30
Constant 188.4 ± 4.4
Mean 13.24 ± 0.04
Sigma 2.219 ± 0.042
t [ns]
HCAL block 044 : cointime tw corr t0
χ² / ndf 62.03 / 30
Constant 224.8 ± 5.1
Mean 13.23 ± 0.03
Sigma 1.873 ± 0.031
t tw corr [ns]

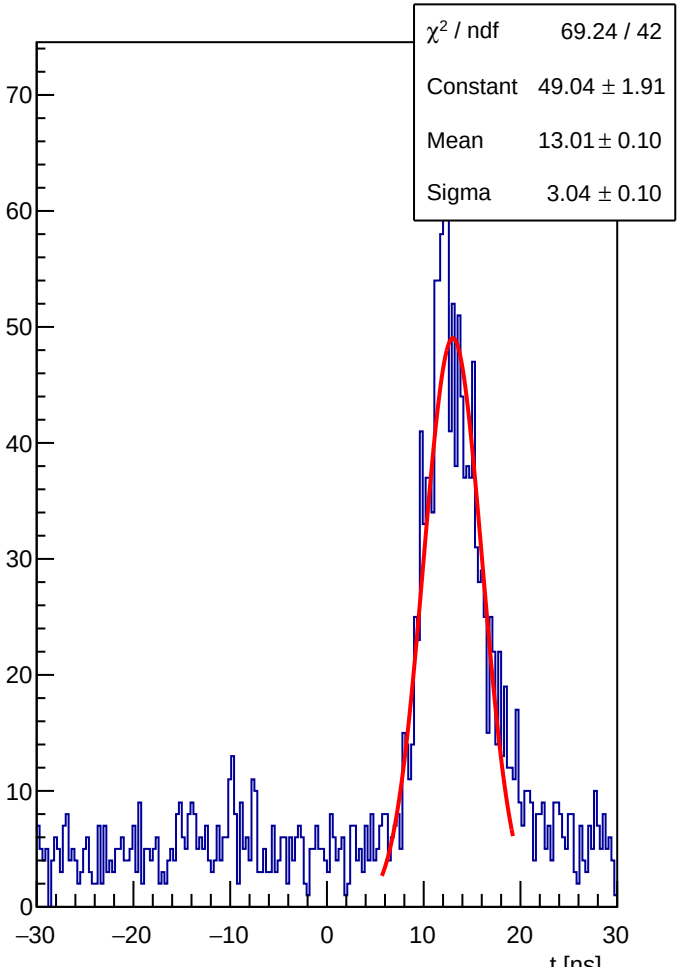

HCAL block 045 : cointime_t0
χ² / ndf 54.39 / 30
Constant 156.2 ± 3.9
Mean 13.29 ± 0.05
Sigma 2.283 ± 0.045
t [ns]
HCAL block 045 : cointime tw corr t0
χ² / ndf 64.84 / 30
Constant 156.5 ± 4.1
Mean 13.41 ± 0.04
Sigma 2.185 ± 0.045
t tw corr [ns]

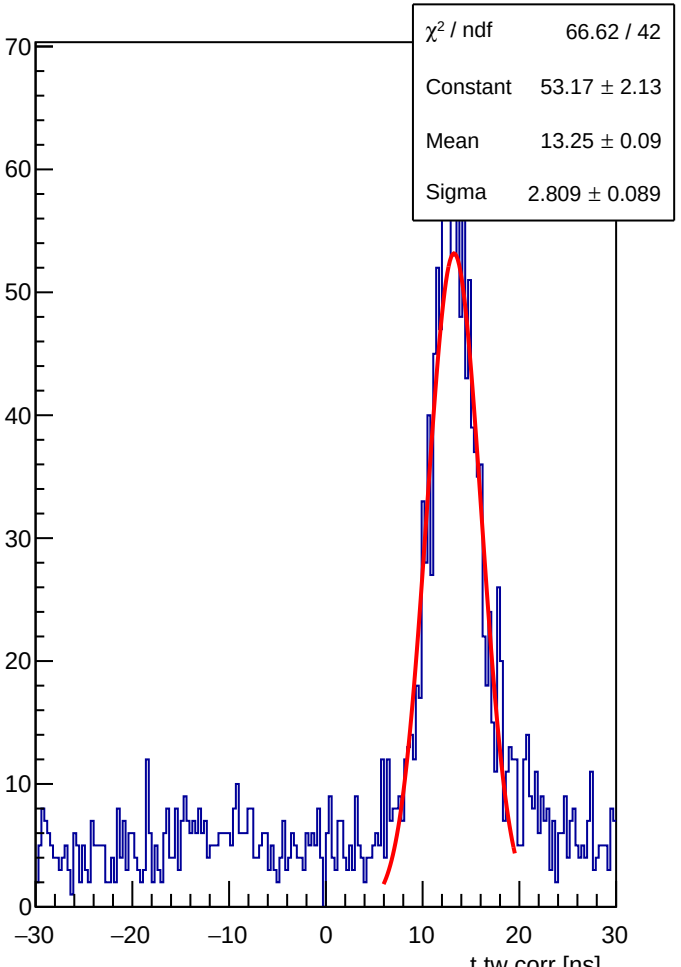

HCAL block 046 : cointime_t0
χ² / ndf 69.03 / 30
Constant 150.2 ± 3.8
Mean 13.52 ± 0.05
Sigma 2.307 ± 0.046
t [ns]

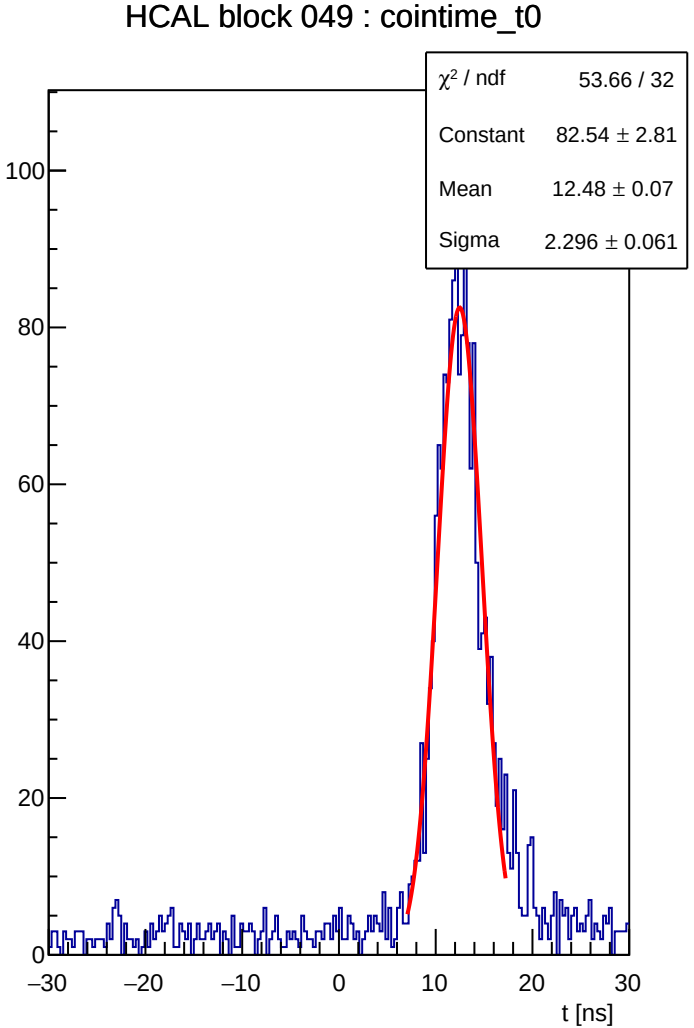

HCAL block 046 : cointime tw corr t0
χ² / ndf 73.08 / 30
Constant 184.2 ± 4.6
Mean 13.59 ± 0.04
Sigma 1.895 ± 0.035
t tw corr [ns]

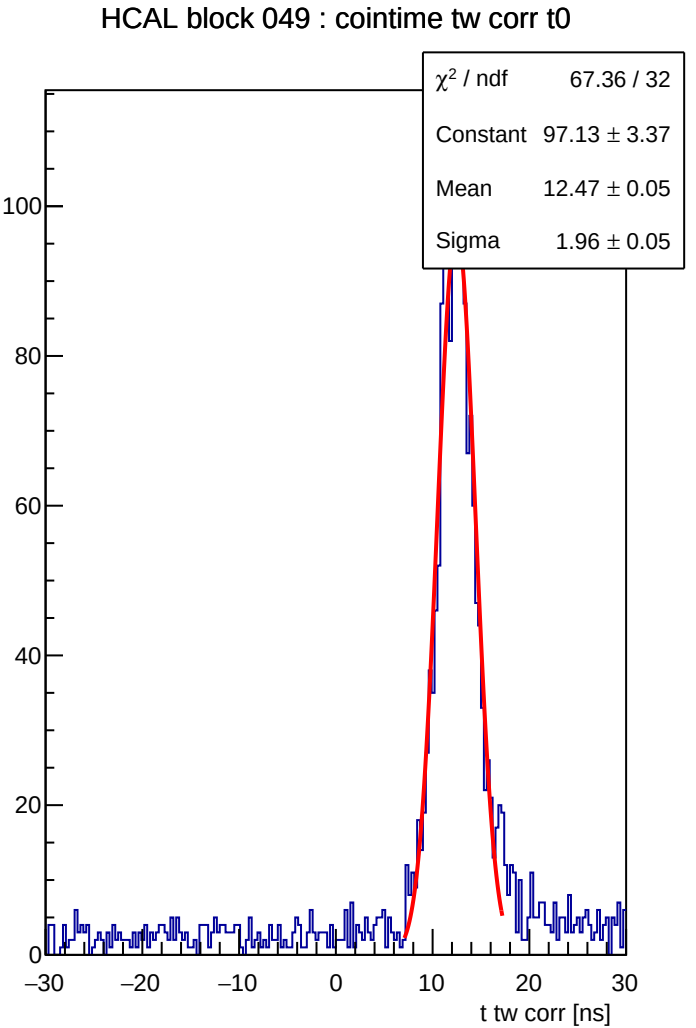

HCAL block 047 : cointime_t0
χ² / ndf 54.42 / 32
Constant 119.9 ± 3.3
Mean 13.22 ± 0.07
Sigma 2.336 ± 0.054
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

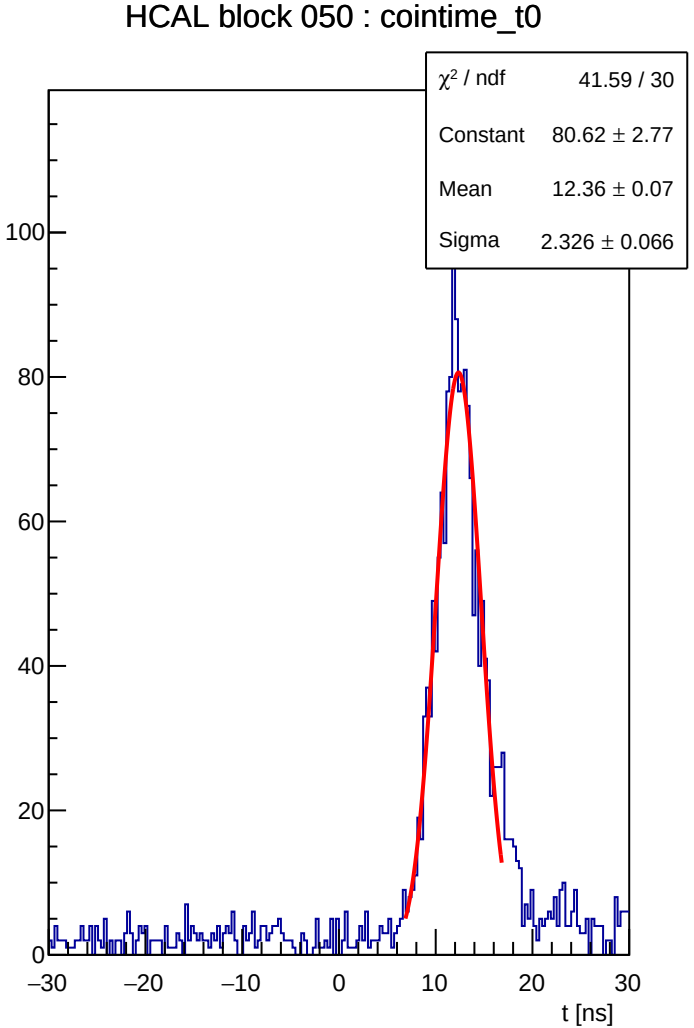

HCAL block 047 : cointime tw corr t0
χ² / ndf 110.9 / 32
Constant 138.1 ± 4.0
Mean 13.36 ± 0.05
Sigma 2.047 ± 0.044
180
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

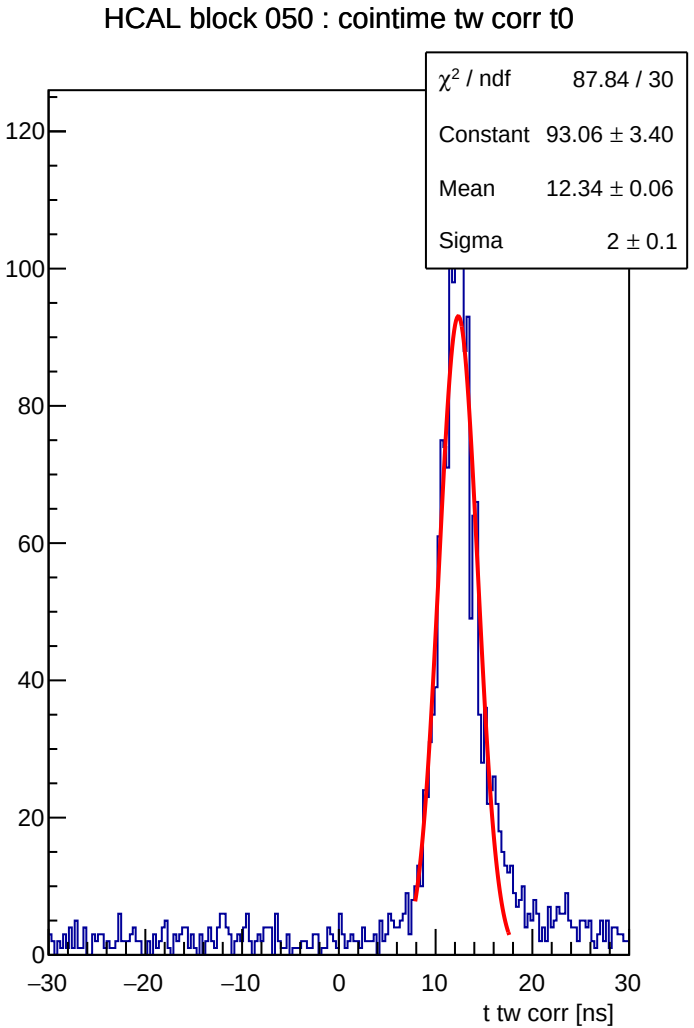

HCAL block 048 : cointime_t0
χ² / ndf 69.24 / 42
Constant 49.04 ± 1.91
Mean 13.01 ± 0.10
Sigma 3.04 ± 0.10
70
60
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t [ns]

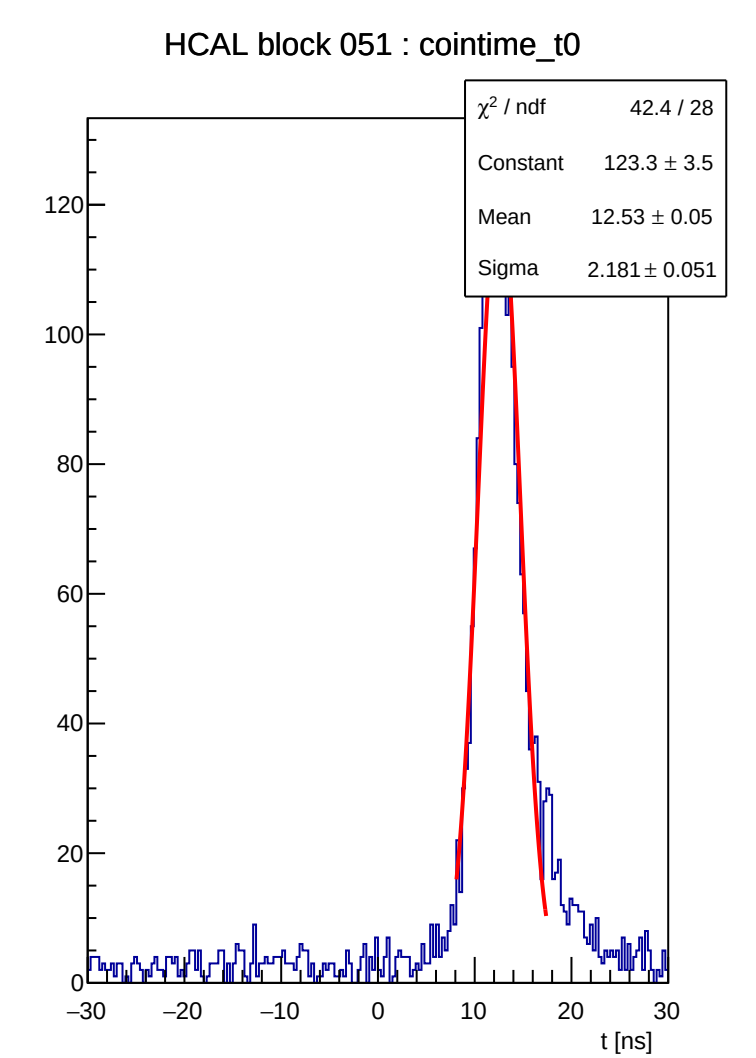

HCAL block 048 : cointime tw corr t0
χ² / ndf 66.62 / 42
Constant 53.17 ± 2.13
Mean 13.25 ± 0.09
Sigma 2.809 ± 0.089
70
60
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

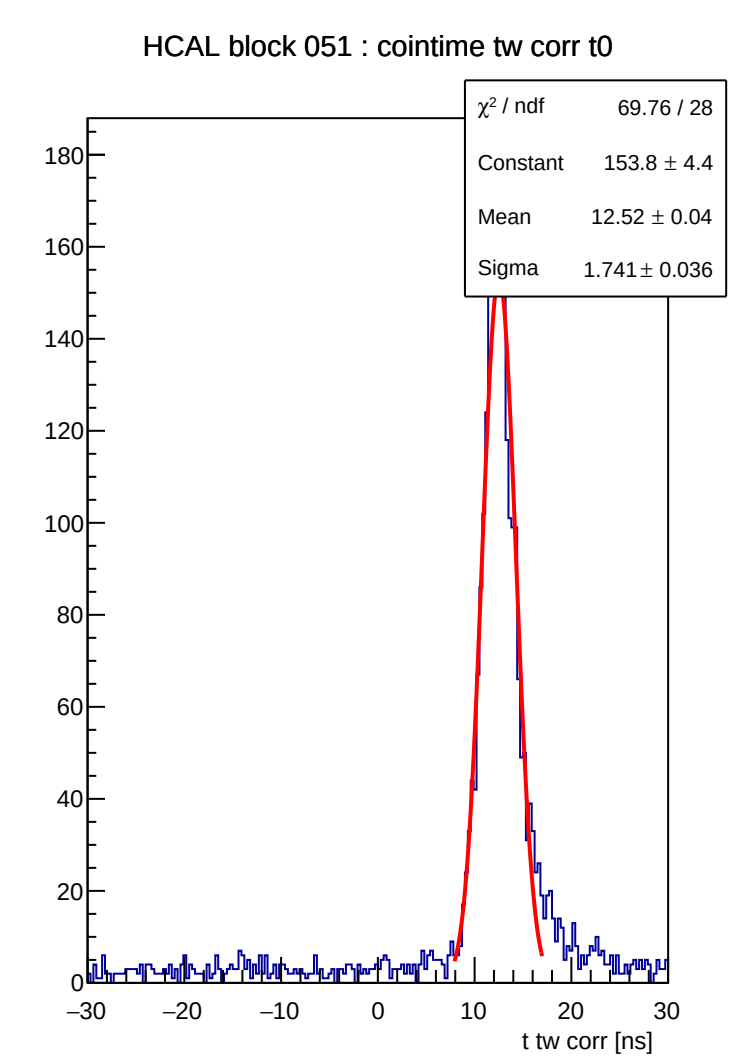

HCAL block 049 : cointime_t0
χ² / ndf 53.66 / 32
Constant 82.54 ± 2.81
Mean 12.48 ± 0.07
Sigma 2.296 ± 0.061
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

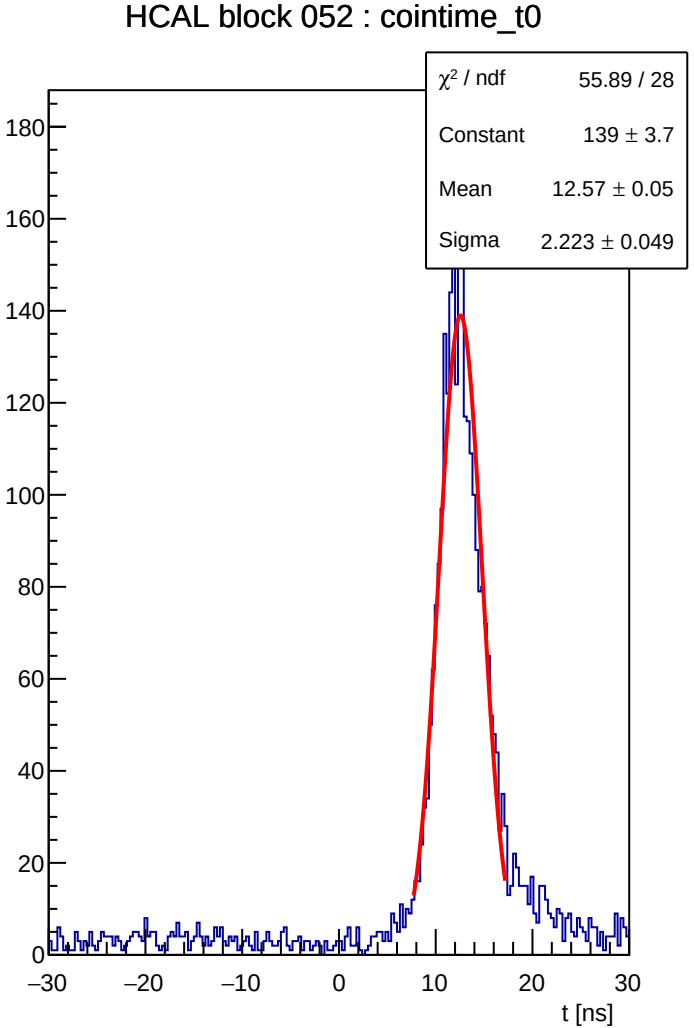

HCAL block 049 : cointime tw corr t0
χ² / ndf 67.36 / 32
Constant 97.13 ± 3.37
Mean 12.47 ± 0.05
Sigma 1.96 ± 0.05
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

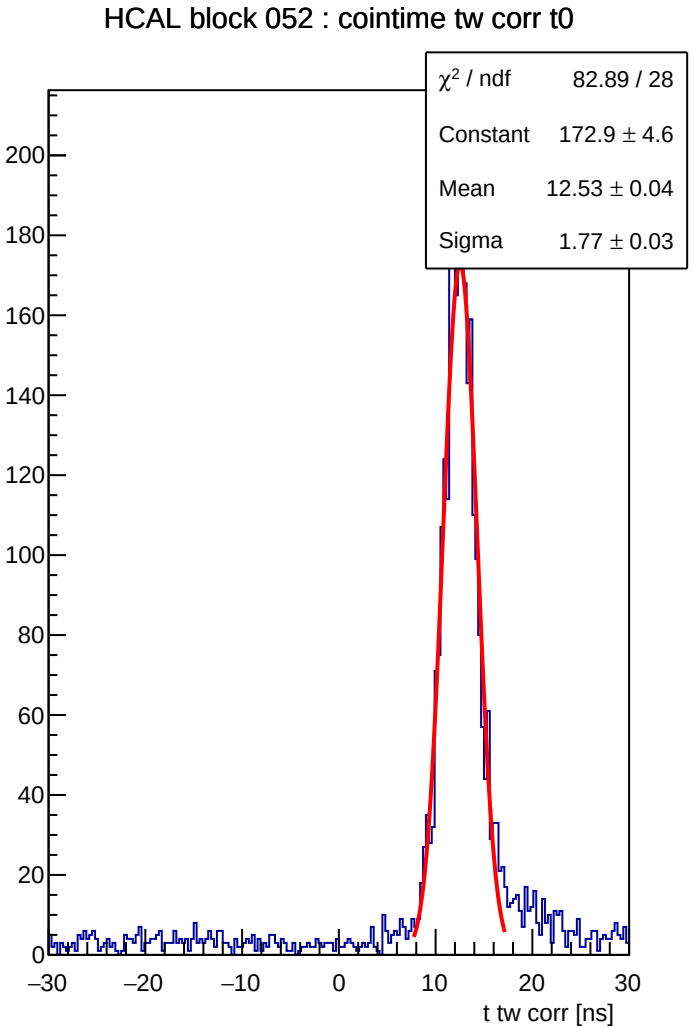

HCAL block 050 : cointime_t0
χ² / ndf 41.59 / 30
Constant 80.62 ± 2.77
Mean 12.36 ± 0.07
Sigma 2.326 ± 0.066
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

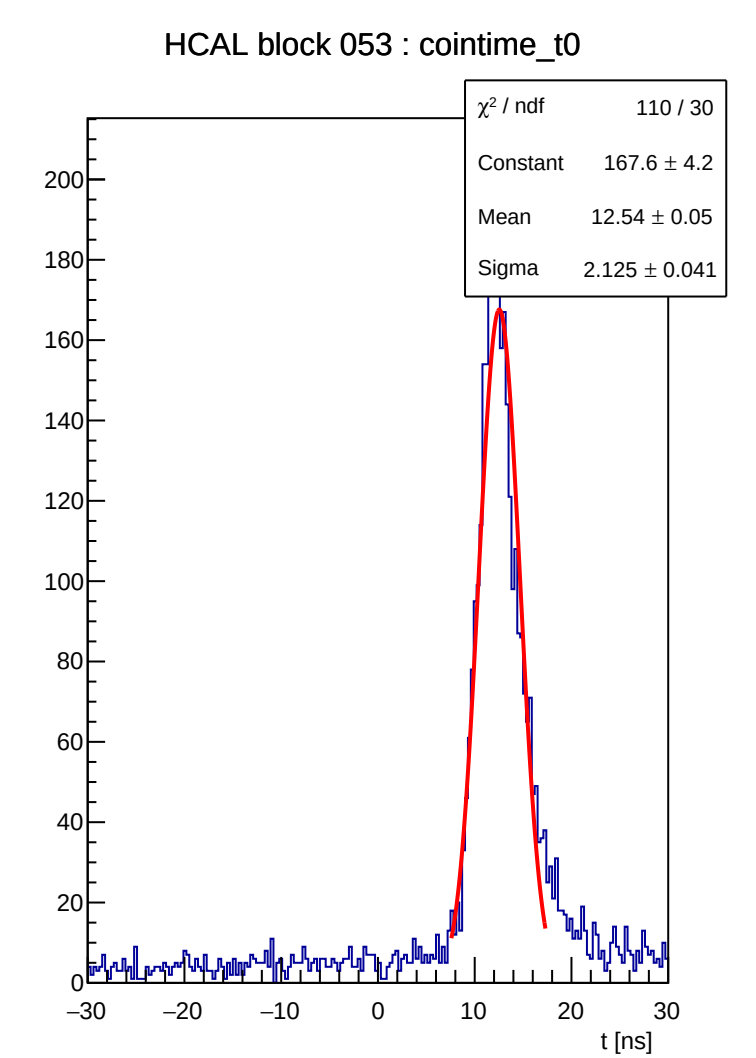

HCAL block 050 : cointime tw corr t0
χ² / ndf 87.84 / 30
Constant 93.06 ± 3.40
Mean 12.34 ± 0.06
Sigma 2 ± 0.1
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

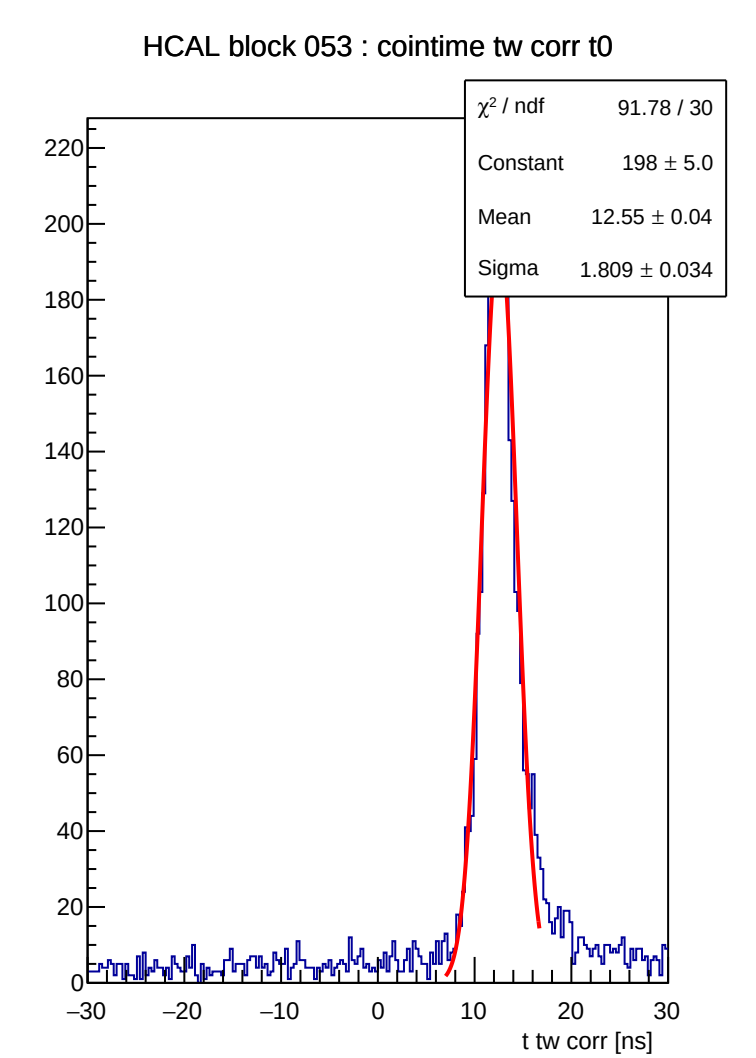

HCAL block 051 : cointime_t0
χ² / ndf 42.4 / 28
Constant 123.3 ± 3.5
Mean 12.53 ± 0.05
Sigma 2.181 ± 0.051
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

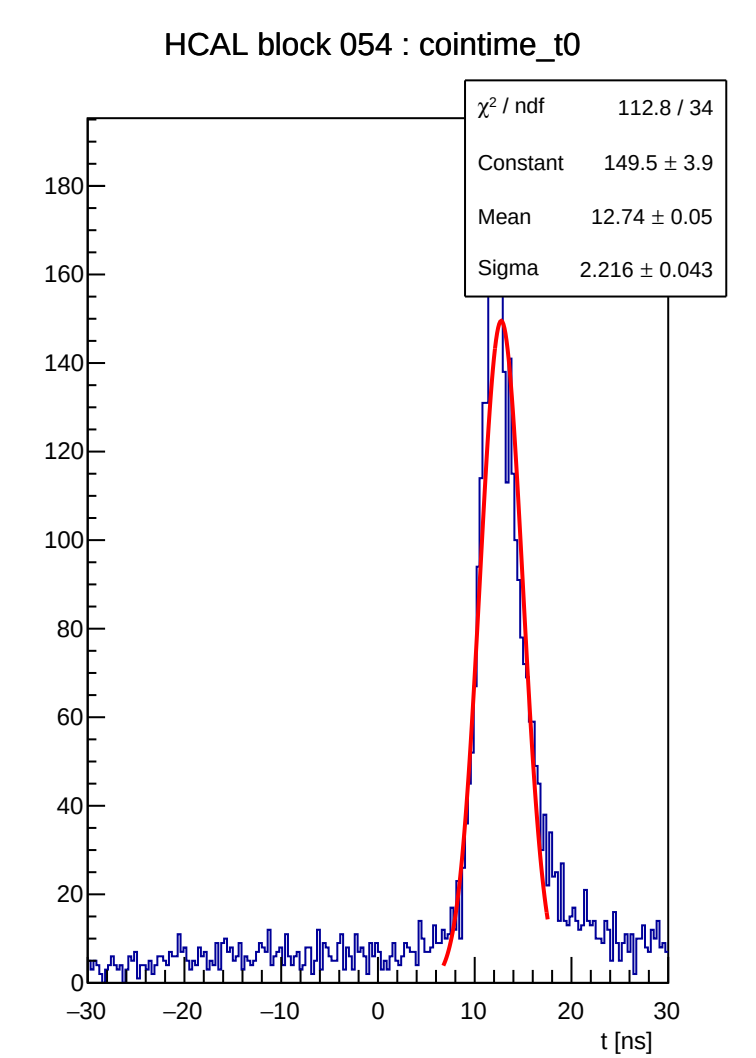

HCAL block 051 : cointime tw corr t0
χ² / ndf 69.76 / 28
Constant 153.8 ± 4.4
Mean 12.52 ± 0.04
Sigma 1.741 ± 0.036
180
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

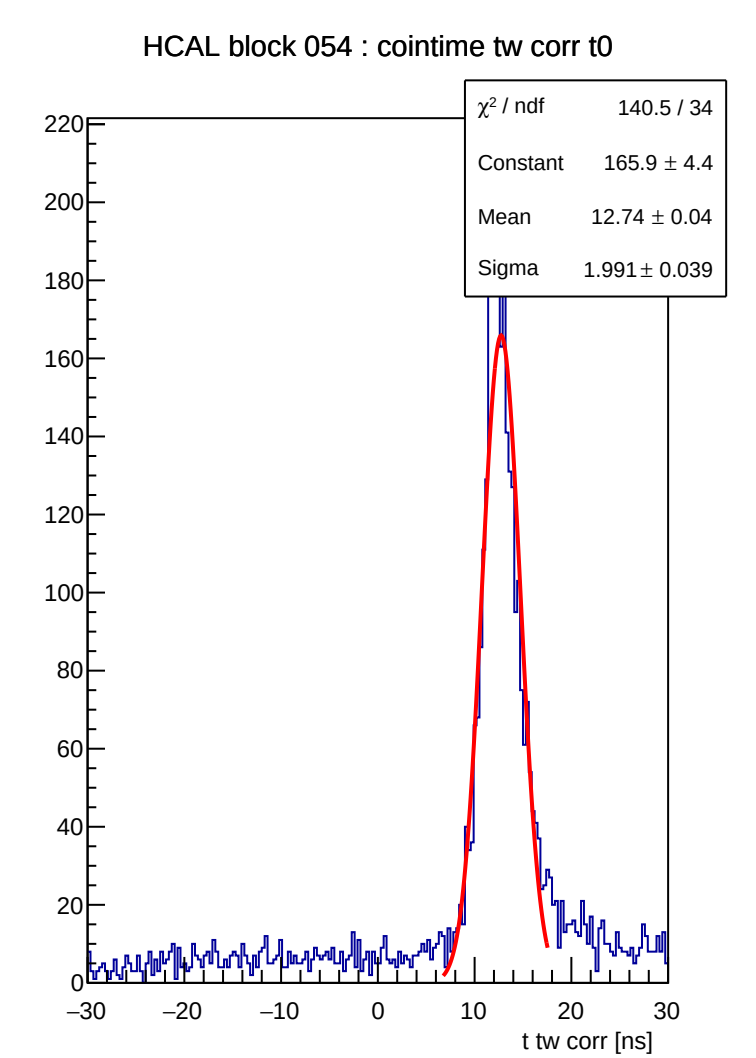

HCAL block 052 : cointime_t0
χ² / ndf 55.89 / 28
Constant 139 ± 3.7
Mean 12.57 ± 0.05
Sigma 2.223 ± 0.049
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

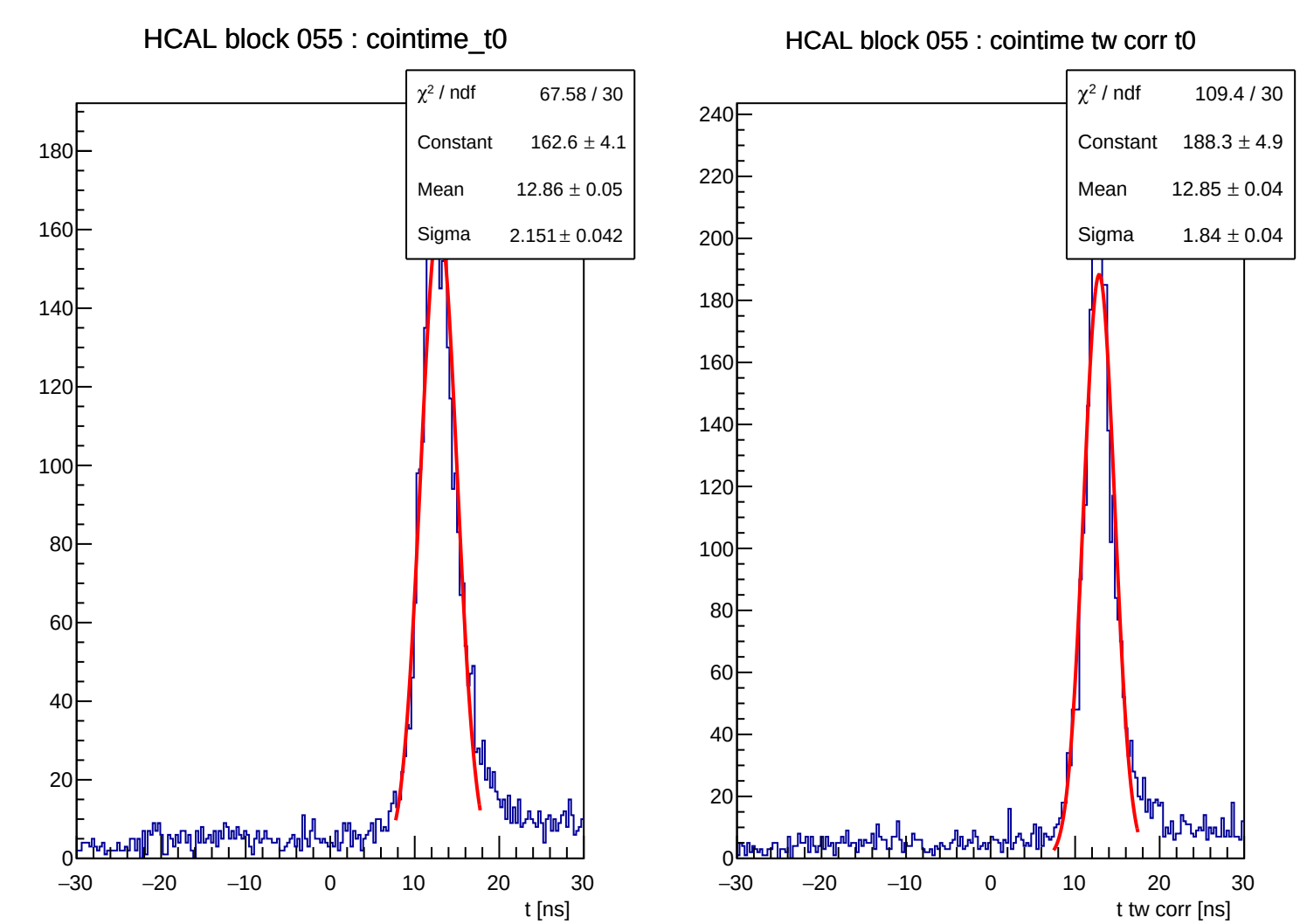

HCAL block 052 : cointime tw corr t0
χ² / ndf 82.89 / 28
Constant 172.9 ± 4.6
Mean 12.53 ± 0.04
Sigma 1.77 ± 0.03
200
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

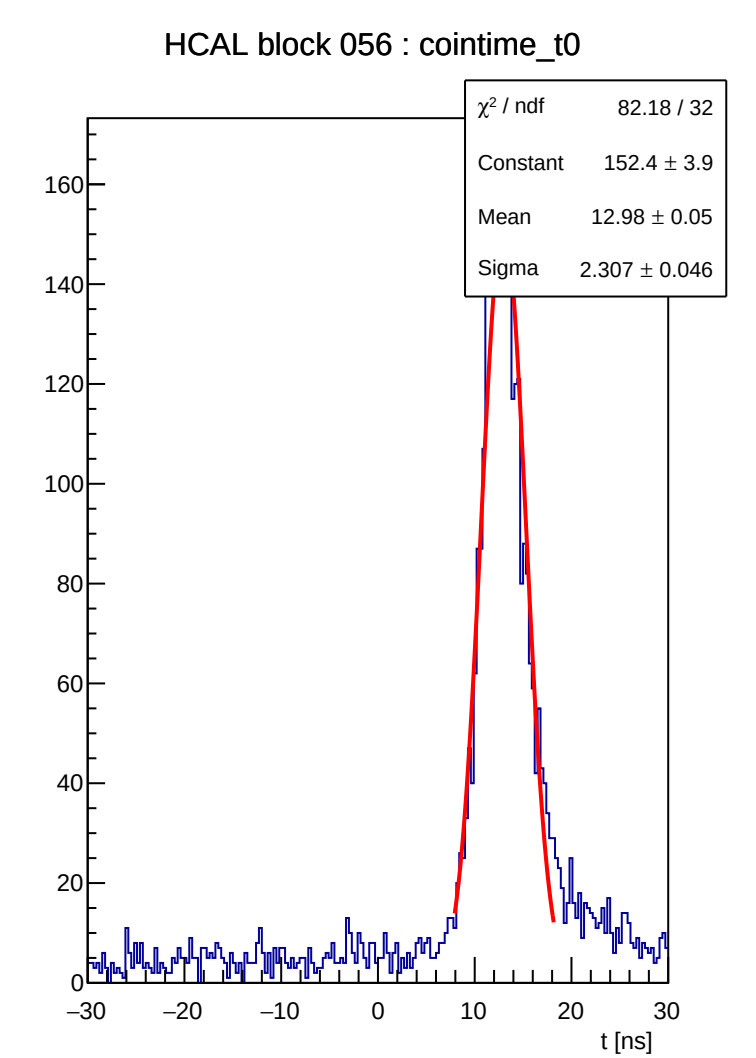

HCAL block 053 : cointime_t0
χ² / ndf 110 / 30
Constant 167.6 ± 4.2
Mean 12.54 ± 0.05
Sigma 2.125 ± 0.041
t [ns]

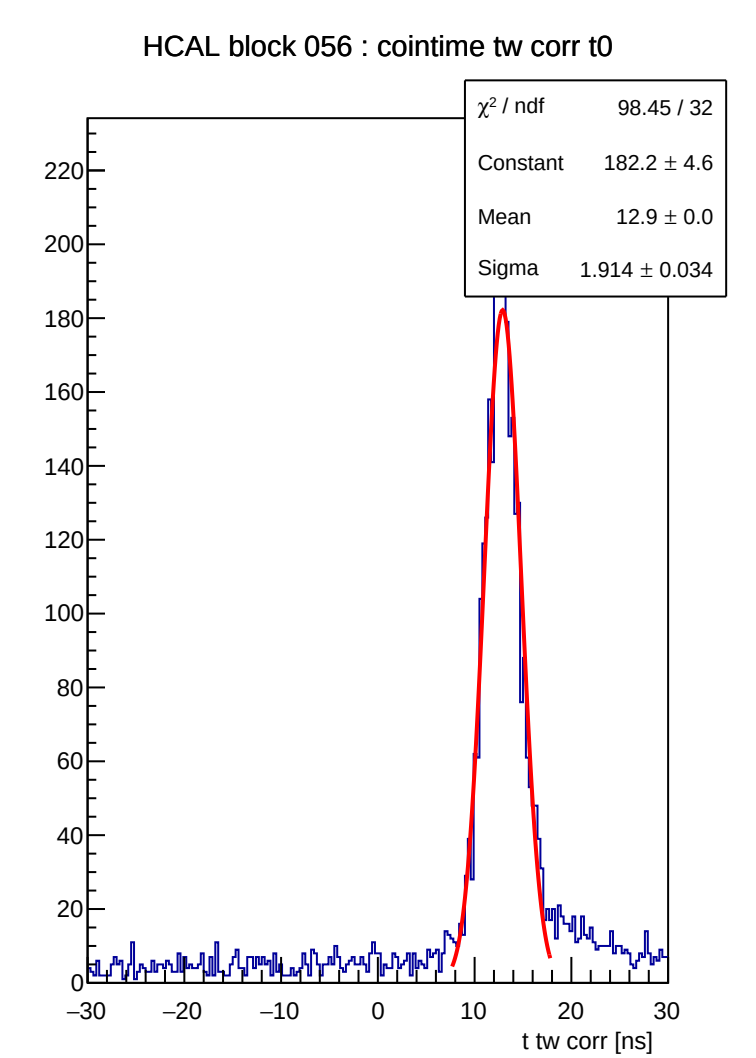

HCAL block 053 : cointime tw corr t0
χ² / ndf 91.78 / 30
Constant 198 ± 5.0
Mean 12.55 ± 0.04
Sigma 1.809 ± 0.034
t tw corr [ns]

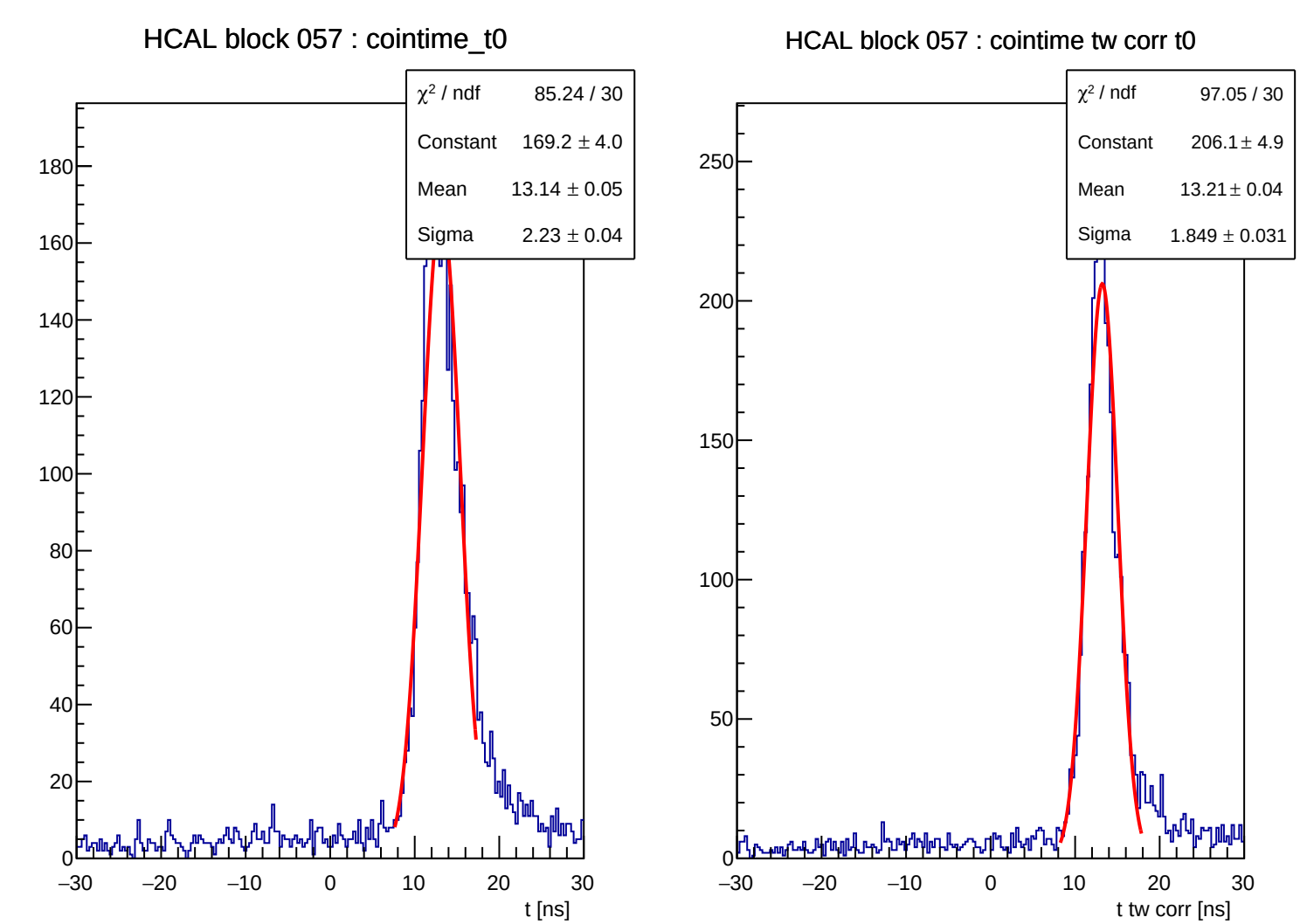

HCAL block 054 : cointime_t0
χ² / ndf 112.8 / 34
Constant 149.5 ± 3.9
Mean 12.74 ± 0.05
Sigma 2.216 ± 0.043
t [ns]

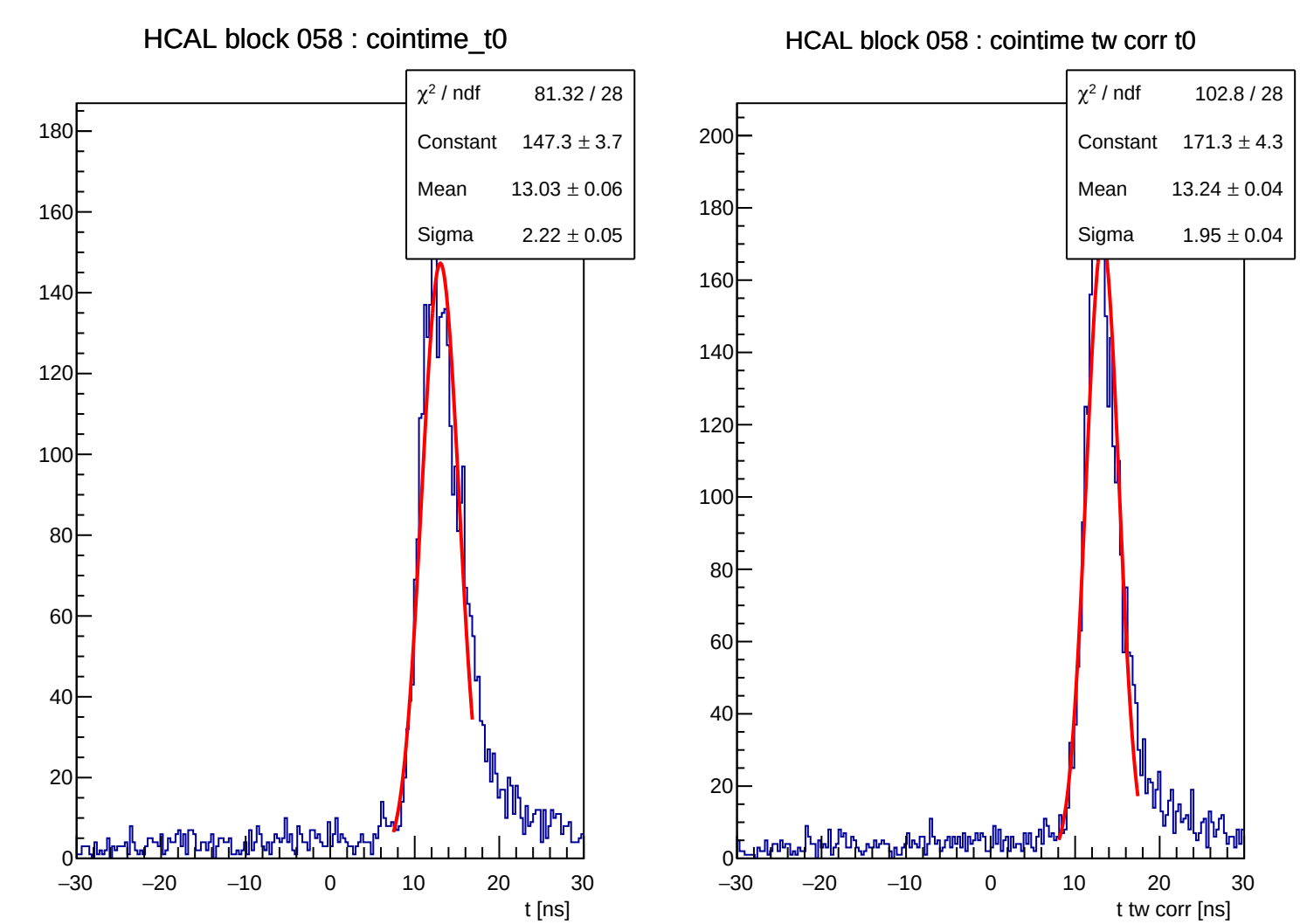

HCAL block 054 : cointime tw corr t0
χ² / ndf 140.5 / 34
Constant 165.9 ± 4.4
Mean 12.74 ± 0.04
Sigma 1.991 ± 0.039
t tw corr [ns]

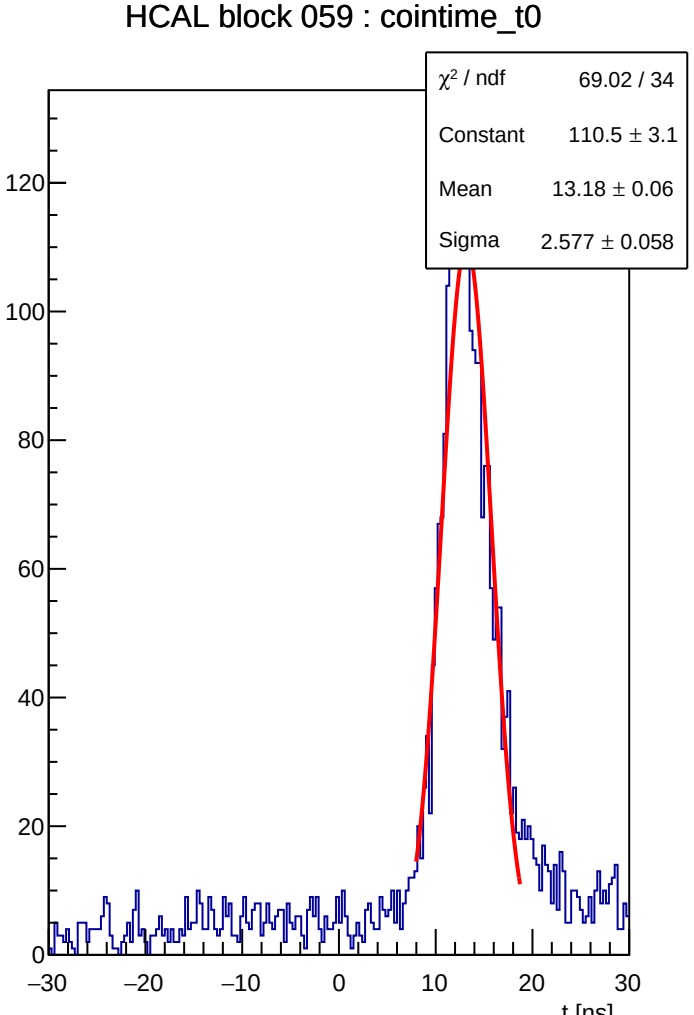

HCAL block 055 : cointime_t0
χ² / ndf 67.58 / 30
Constant 162.6 ± 4.1
Mean 12.86 ± 0.05
Sigma 2.151 ± 0.042
t [ns]
HCAL block 055 : cointime tw corr t0
χ² / ndf 109.4 / 30
Constant 188.3 ± 4.9
Mean 12.85 ± 0.04
Sigma 1.84 ± 0.04
t tw corr [ns]

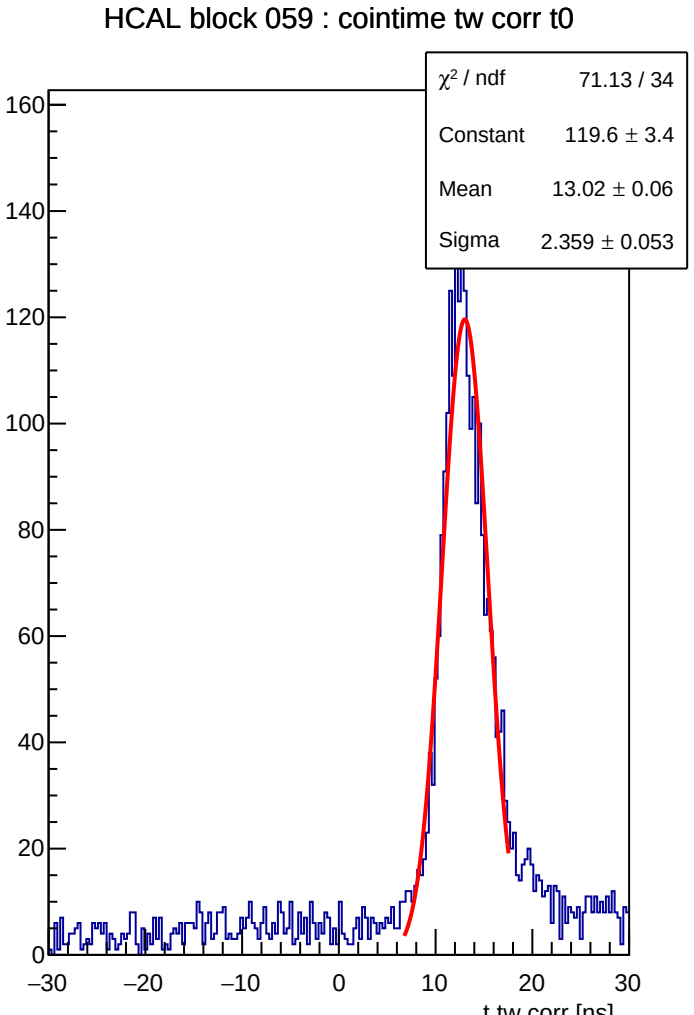

HCAL block 056 : cointime_t0
χ² / ndf 82.18 / 32
Constant 152.4 ± 3.9
Mean 12.98 ± 0.05
Sigma 2.307 ± 0.046
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

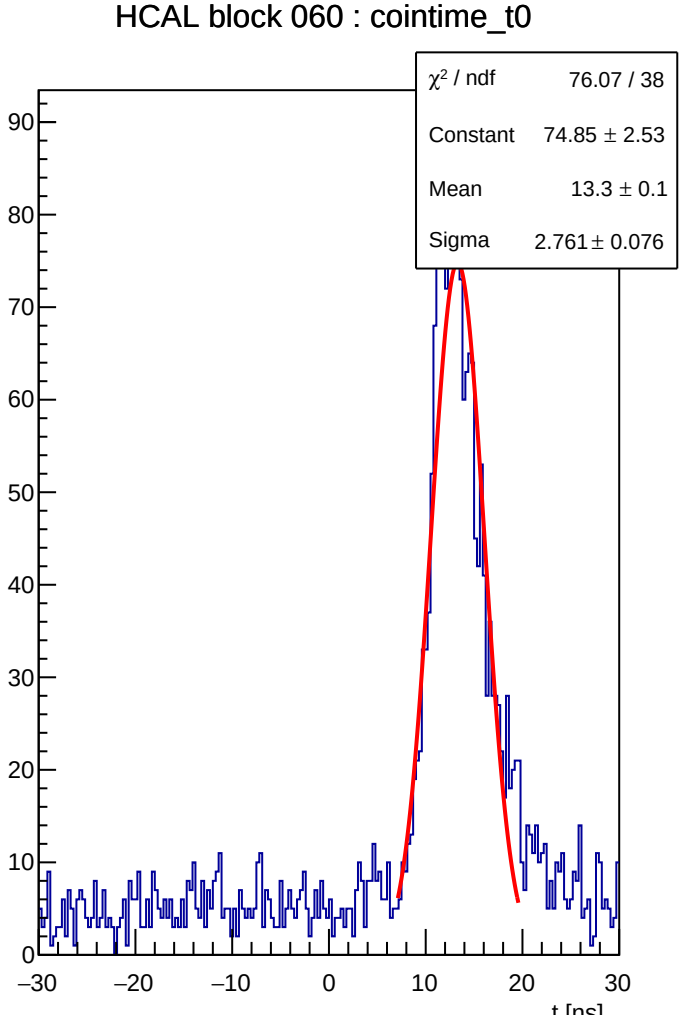

HCAL block 056 : cointime tw corr t0
χ² / ndf 98.45 / 32
Constant 182.2 ± 4.6
Mean 12.9 ± 0.0
Sigma 1.914 ± 0.034
220
200
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

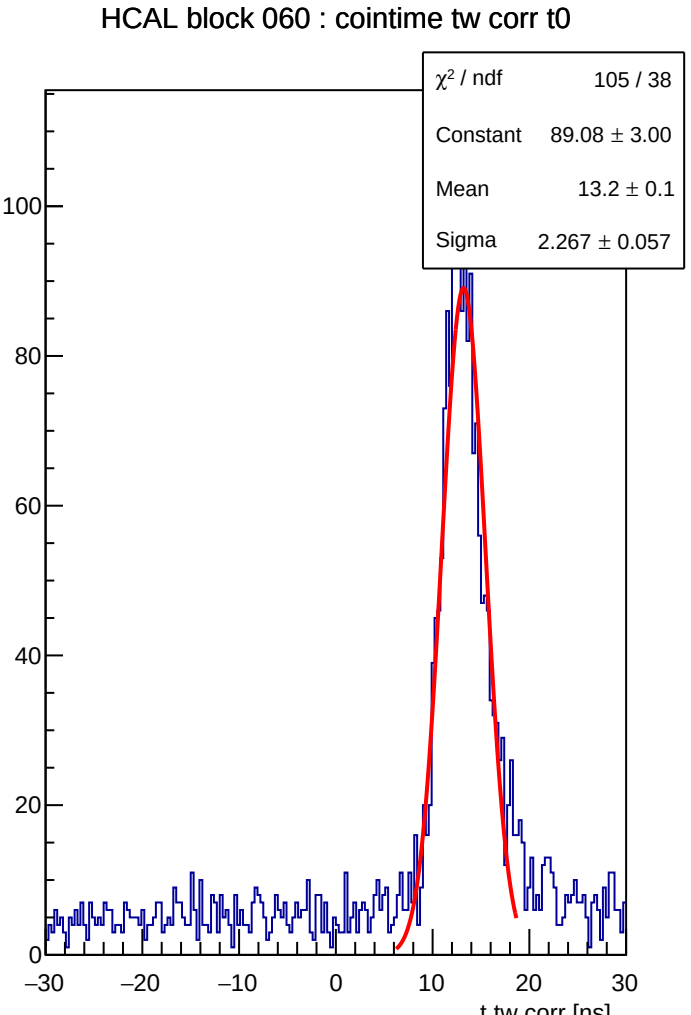

HCAL block 057 : cointime_t0
χ² / ndf 85.24 / 30
Constant 169.2 ± 4.0
Mean 13.14 ± 0.05
Sigma 2.23 ± 0.04
t [ns]
HCAL block 057 : cointime tw corr t0
χ² / ndf 97.05 / 30
Constant 206.1 ± 4.9
Mean 13.21 ± 0.04
Sigma 1.849 ± 0.031
t tw corr [ns]

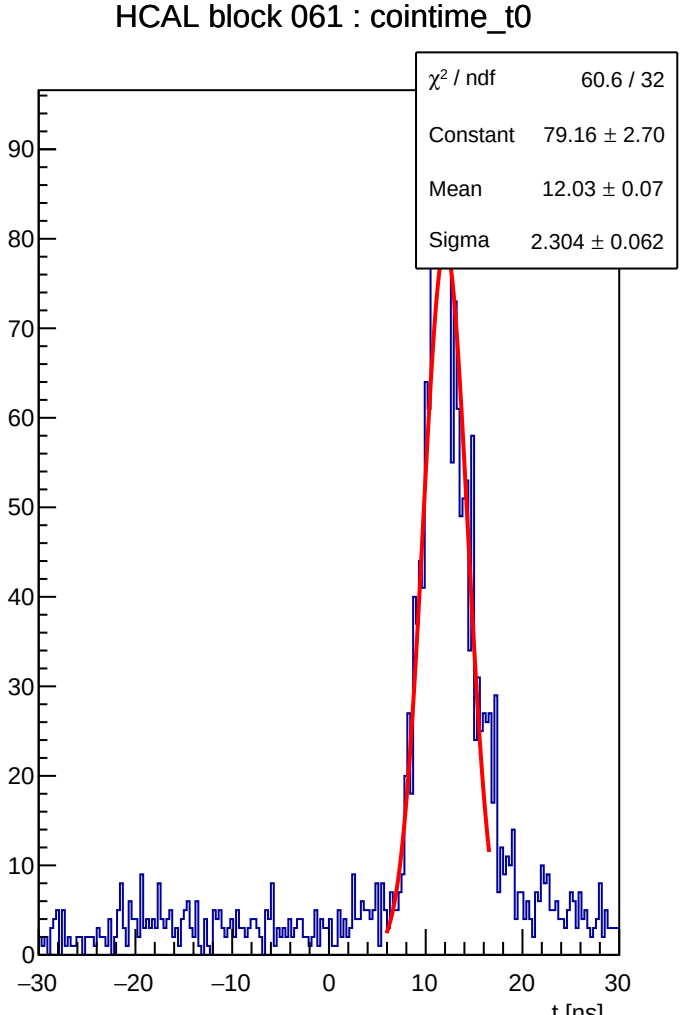

HCAL block 058 : cointime_t0
χ² / ndf 81.32 / 28
Constant 147.3 ± 3.7
Mean 13.03 ± 0.06
Sigma 2.22 ± 0.05
t [ns]
HCAL block 058 : cointime tw corr t0
χ² / ndf 102.8 / 28
Constant 171.3 ± 4.3
Mean 13.24 ± 0.04
Sigma 1.95 ± 0.04
t tw corr [ns]

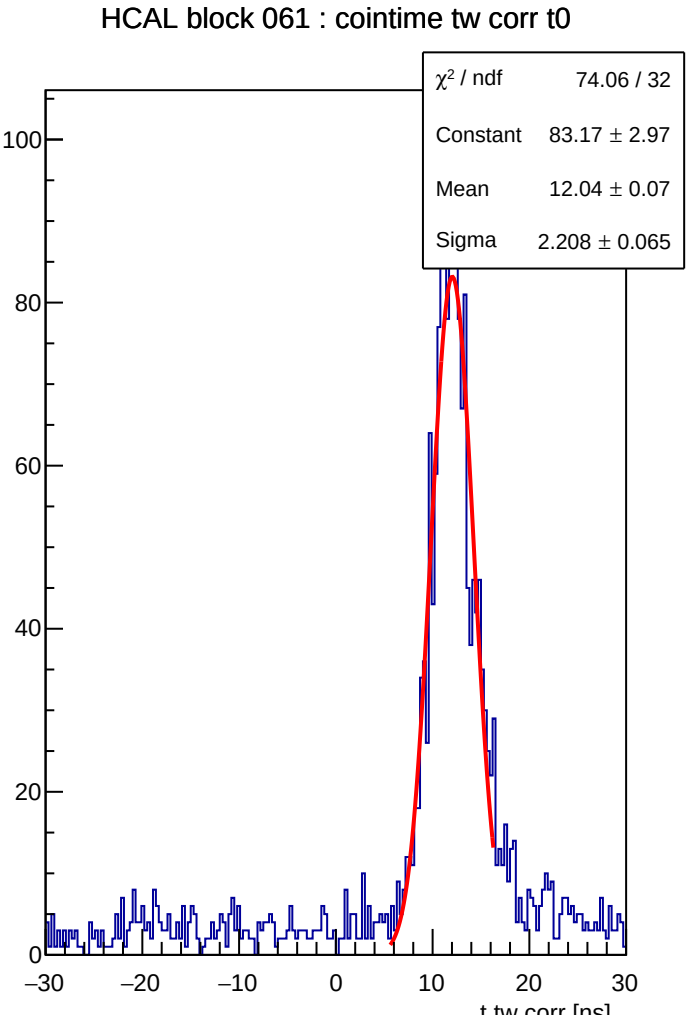

HCAL block 059 : cointime_t0
χ² / ndf 69.02 / 34
Constant 110.5 ± 3.1
Mean 13.18 ± 0.06
Sigma 2.577 ± 0.058
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

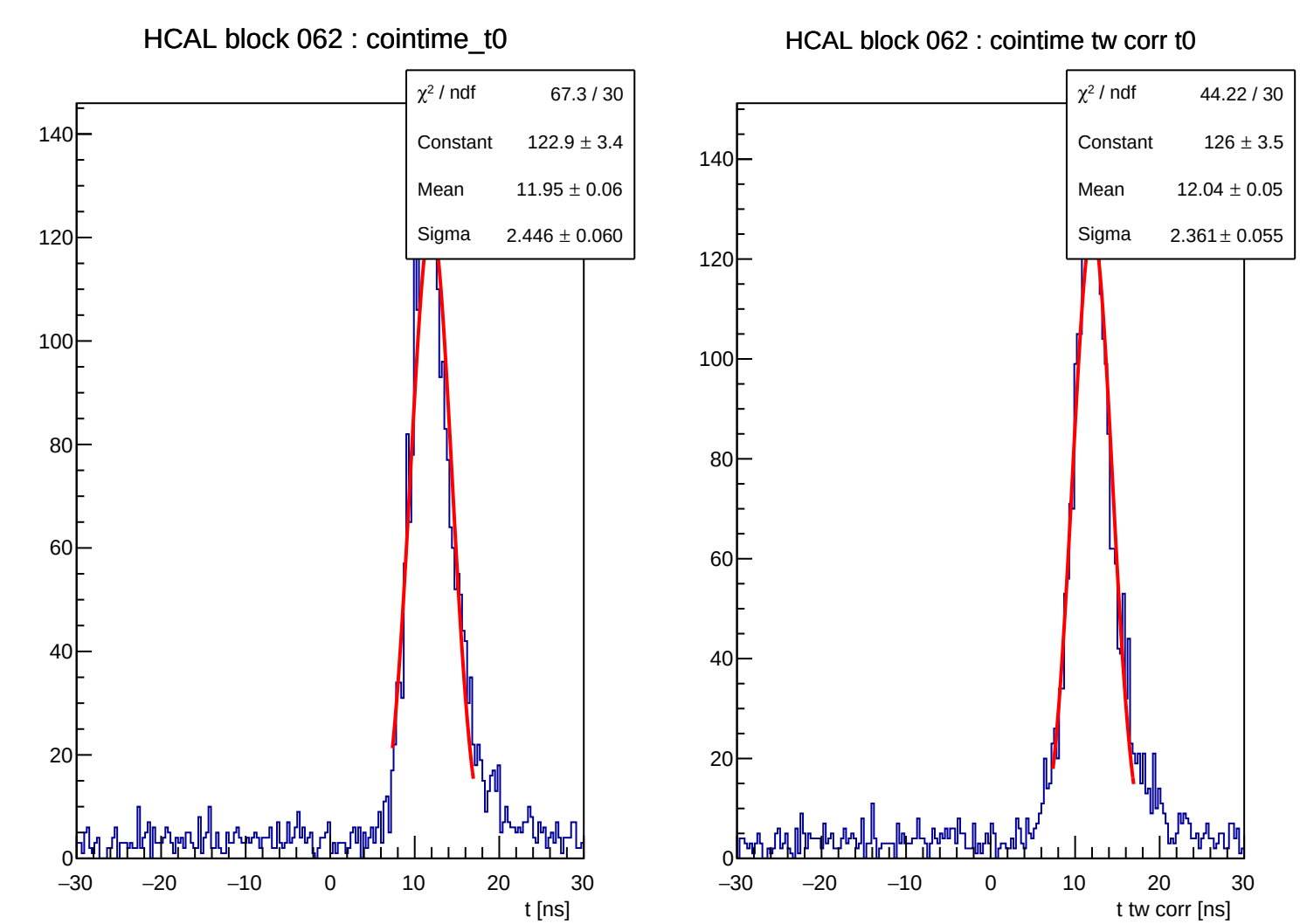

HCAL block 059 : cointime tw corr t0
χ² / ndf 71.13 / 34
Constant 119.6 ± 3.4
Mean 13.02 ± 0.06
Sigma 2.359 ± 0.053
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

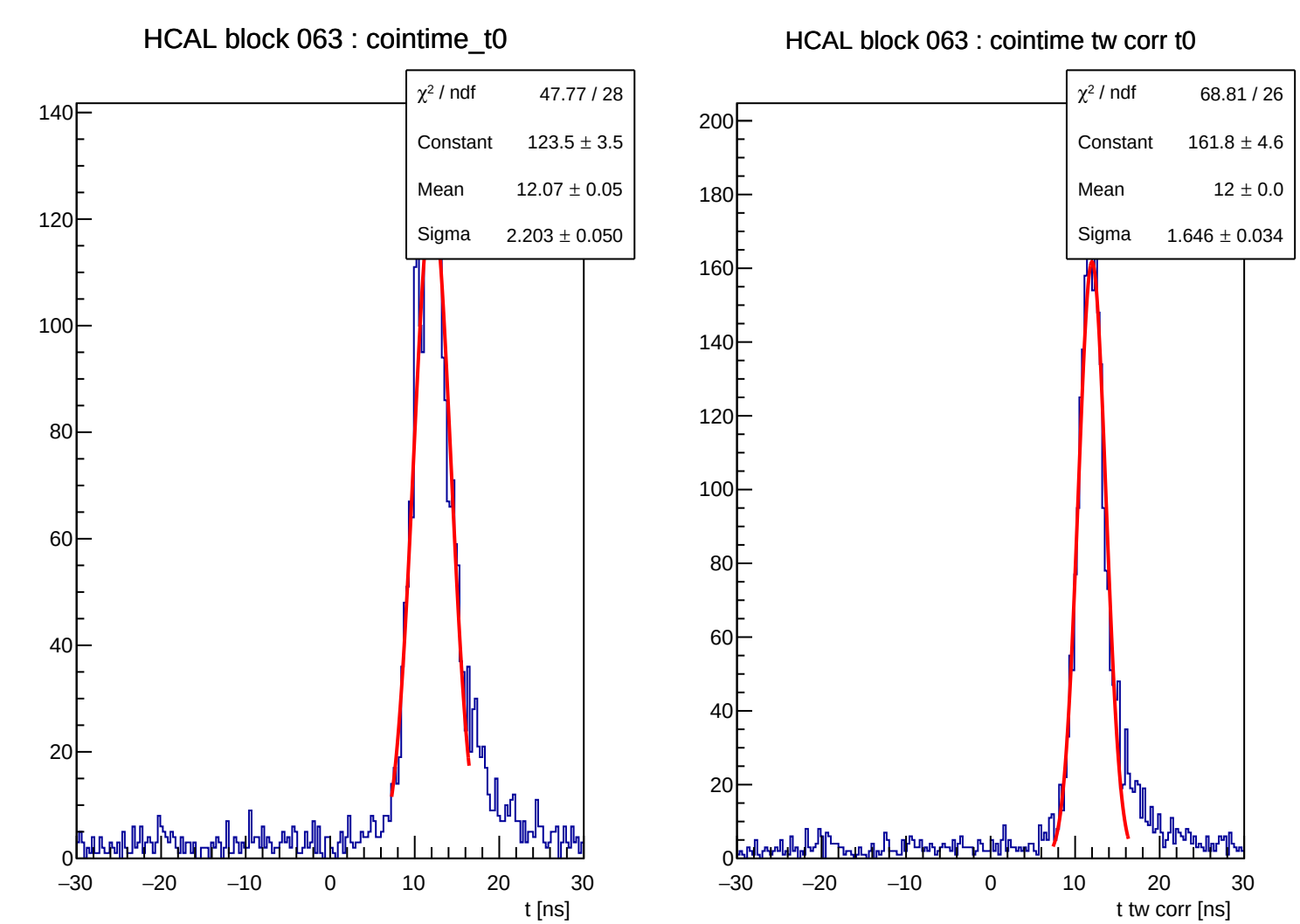

HCAL block 060 : cointime_t0
χ² / ndf 76.07 / 38
Constant 74.85 ± 2.53
Mean 13.3 ± 0.1
Sigma 2.761 ± 0.076
t [ns]

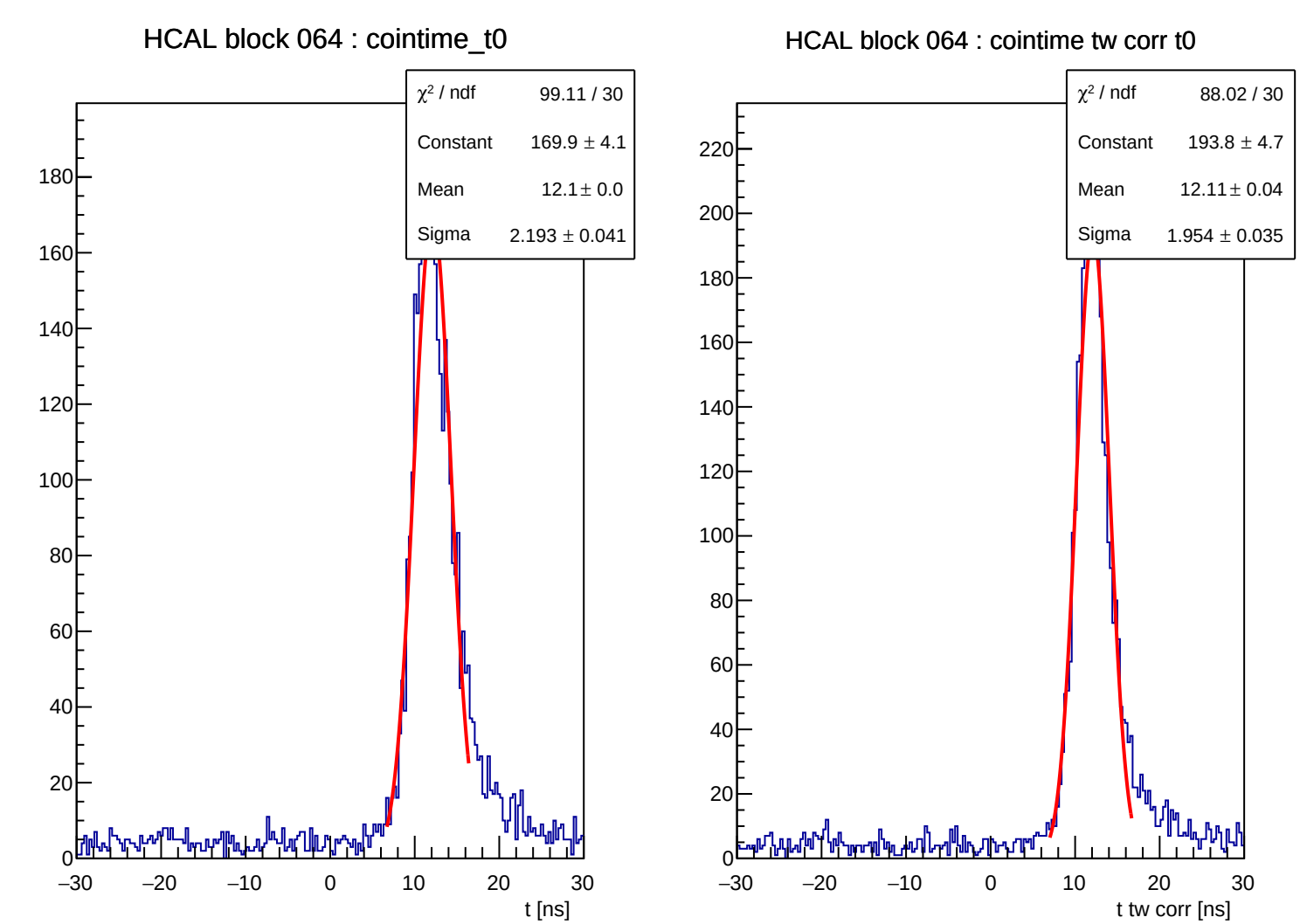

HCAL block 060 : cointime tw corr t0
χ² / ndf 105 / 38
Constant 89.08 ± 3.00
Mean 13.2 ± 0.1
Sigma 2.267 ± 0.057
t tw corr [ns]

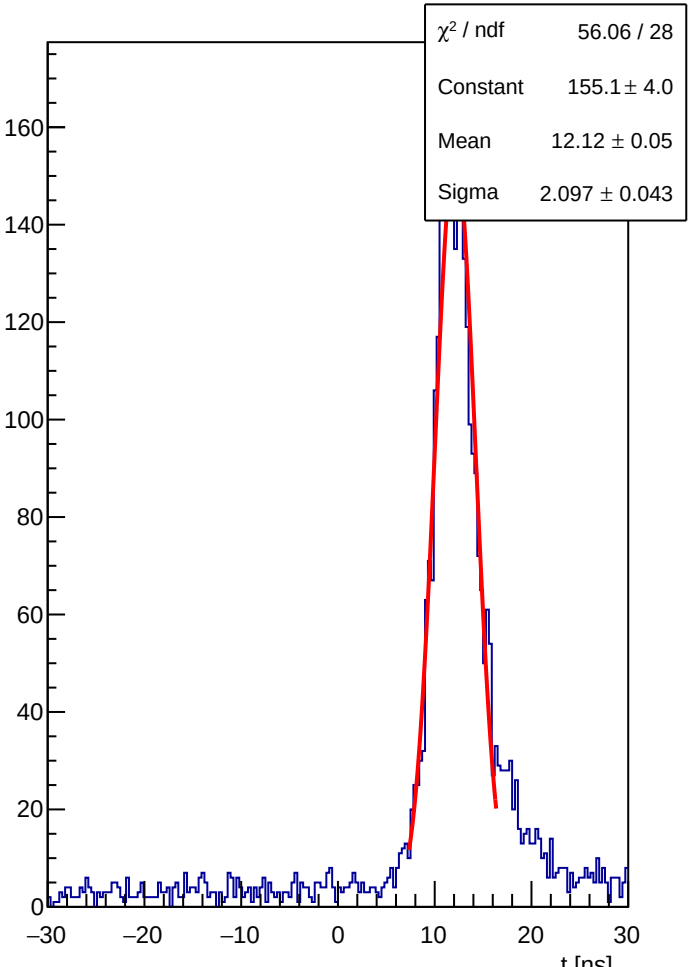

HCAL block 061 : cointime_t0
χ² / ndf 60.6 / 32
Constant 79.16 ± 2.70
Mean 12.03 ± 0.07
Sigma 2.304 ± 0.062
t [ns]

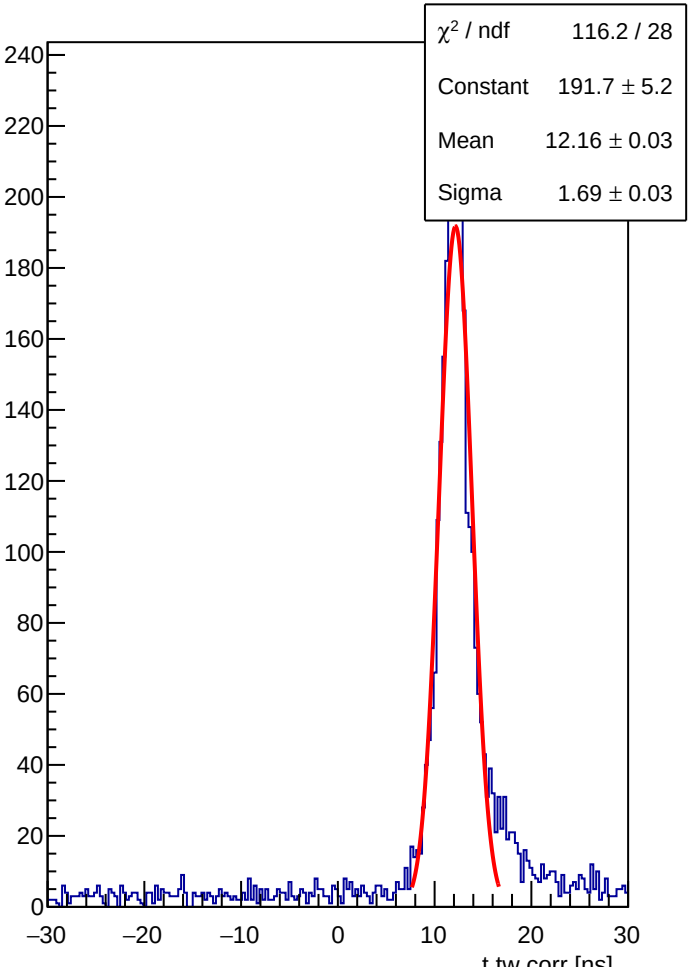

HCAL block 061 : cointime tw corr t0
χ² / ndf 74.06 / 32
Constant 83.17 ± 2.97
Mean 12.04 ± 0.07
Sigma 2.208 ± 0.065
t tw corr [ns]

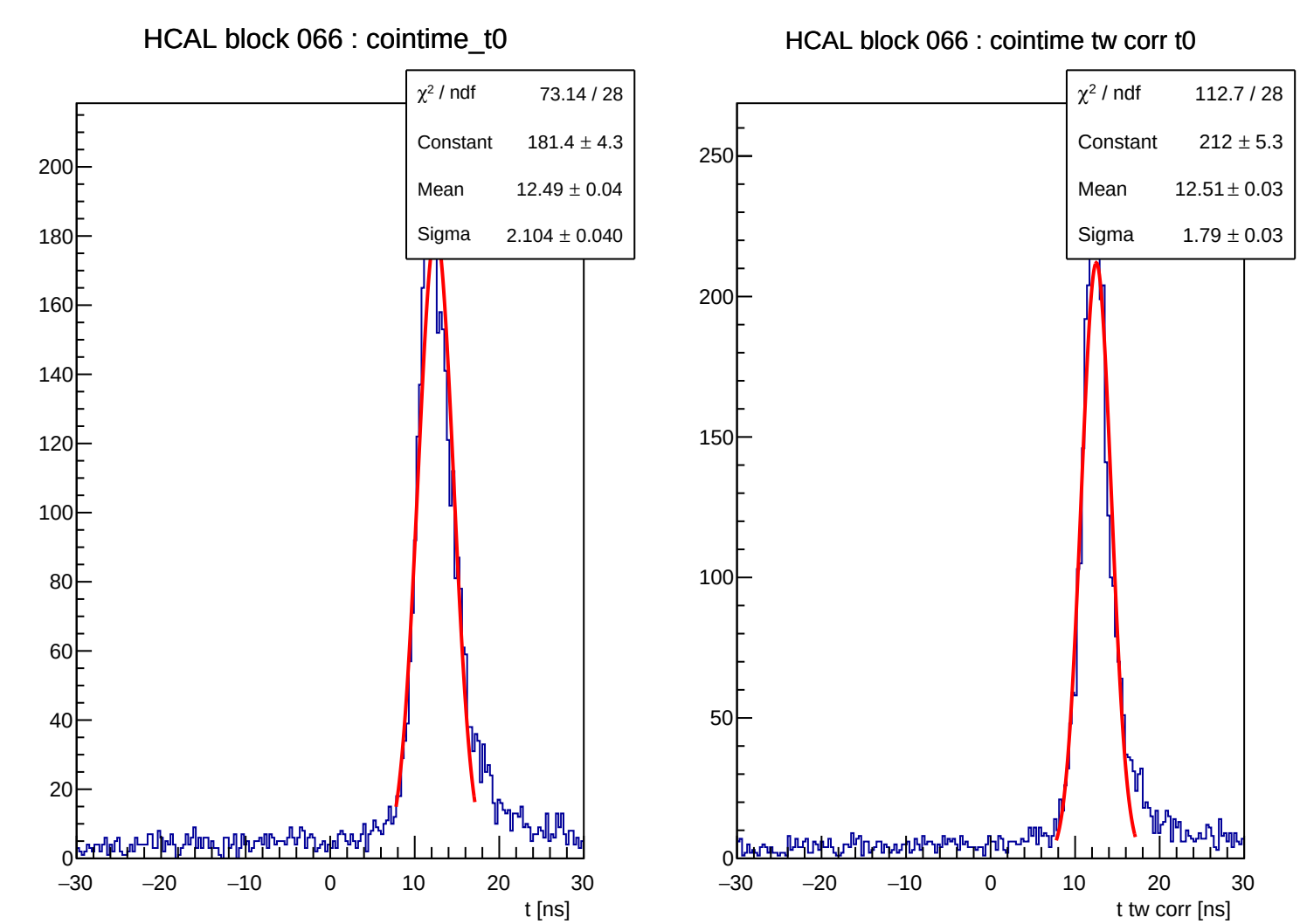

HCAL block 062 : cointime_t0
χ² / ndf 67.3 / 30
Constant 122.9 ± 3.4
Mean 11.95 ± 0.06
Sigma 2.446 ± 0.060
t [ns]
HCAL block 062 : cointime tw corr t0
χ² / ndf 44.22 / 30
Constant 126 ± 3.5
Mean 12.04 ± 0.05
Sigma 2.361 ± 0.055
t tw corr [ns]

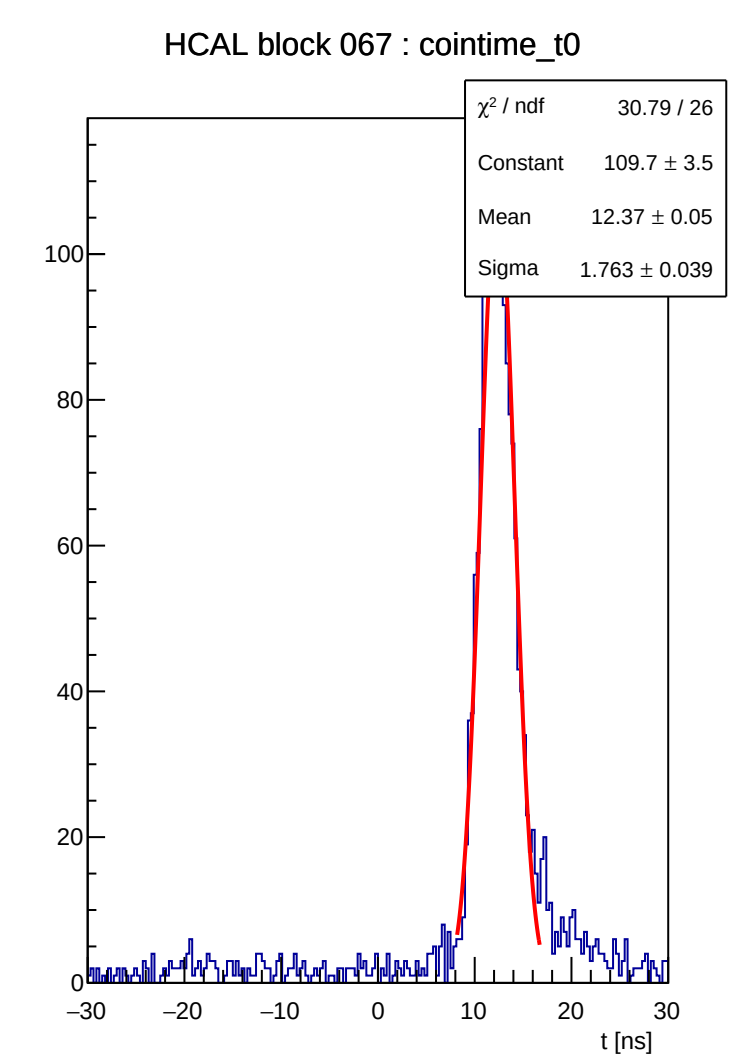

HCAL block 063 : cointime_t0
χ² / ndf 47.77 / 28
Constant 123.5 ± 3.5
Mean 12.07 ± 0.05
Sigma 2.203 ± 0.050
t [ns]
HCAL block 063 : cointime tw corr t0
χ² / ndf 68.81 / 26
Constant 161.8 ± 4.6
Mean 12 ± 0.0
Sigma 1.646 ± 0.034
t tw corr [ns]

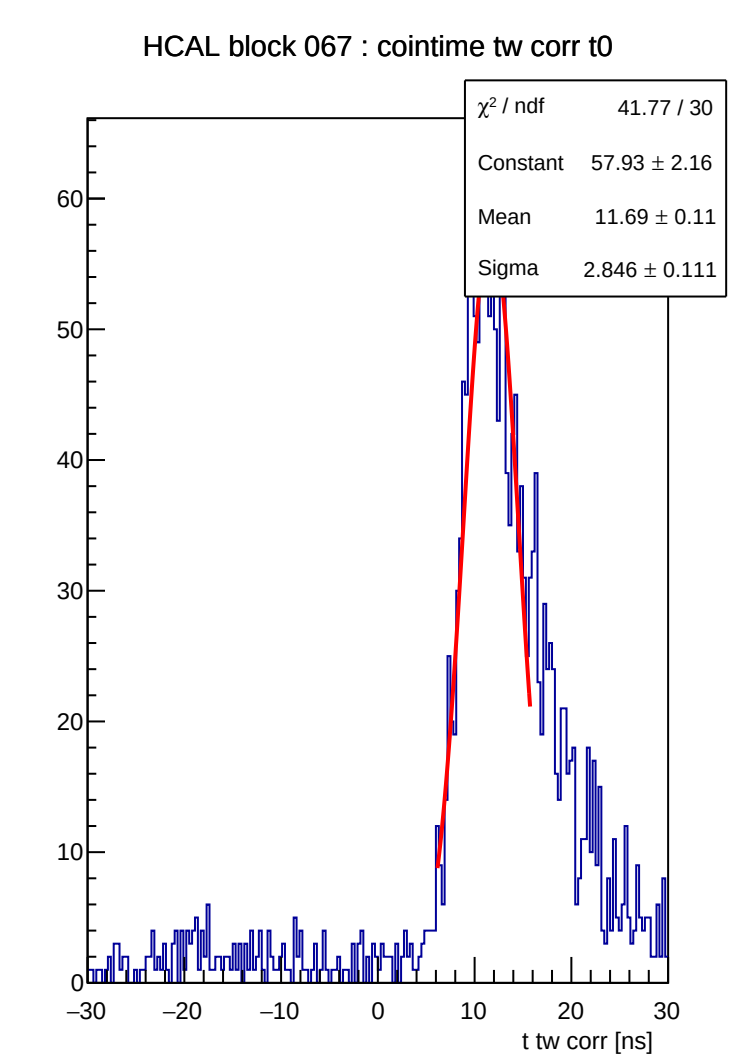

HCAL block 064 : cointime_t0
χ² / ndf 99.11 / 30
Constant 169.9 ± 4.1
Mean 12.1 ± 0.0
Sigma 2.193 ± 0.041
t [ns]
HCAL block 064 : cointime tw corr t0
χ² / ndf 88.02 / 30
Constant 193.8 ± 4.7
Mean 12.11 ± 0.04
Sigma 1.954 ± 0.035
t tw corr [ns]

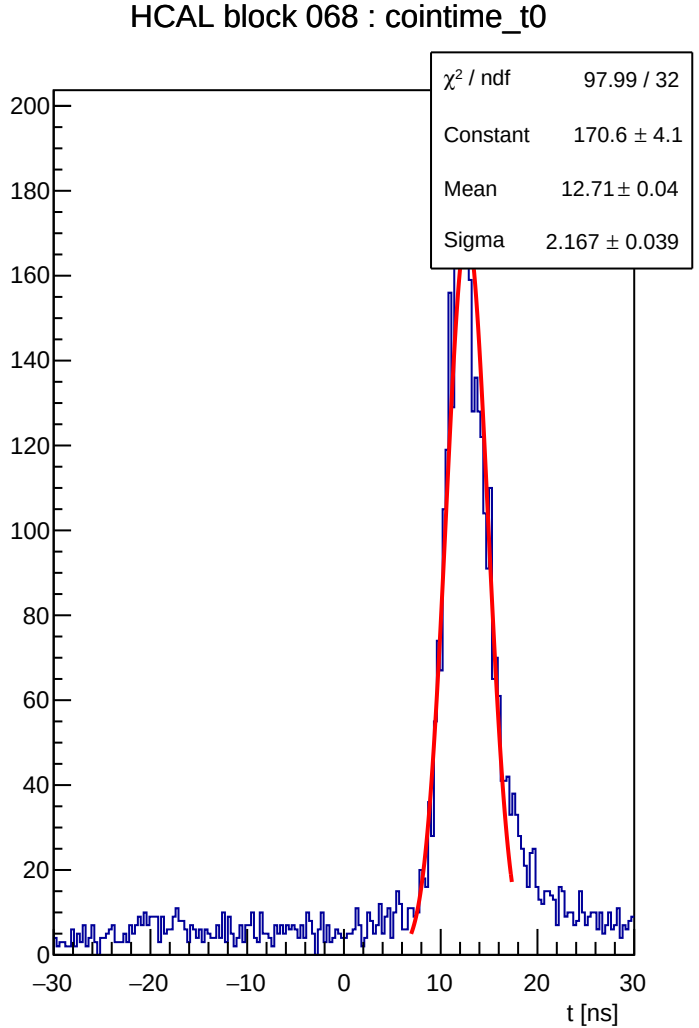

HCAL block 065 : cointime_t0
χ² / ndf 56.06 / 28
Constant 155.1 ± 4.0
Mean 12.12 ± 0.05
Sigma 2.097 ± 0.043
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

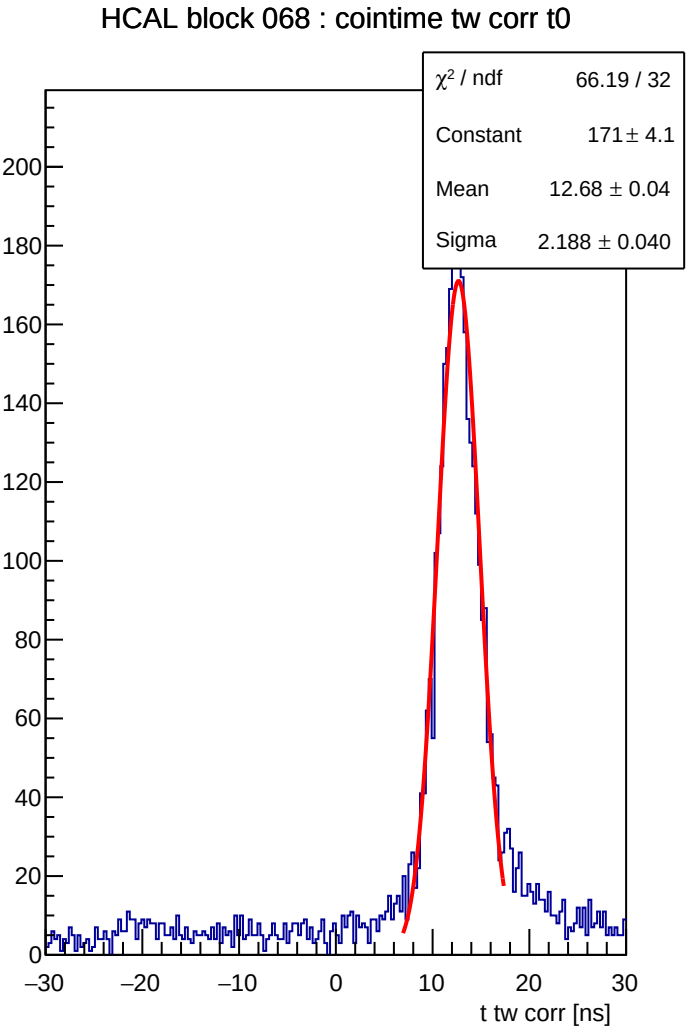

HCAL block 065 : cointime tw corr t0
χ² / ndf 116.2 / 28
Constant 191.7 ± 5.2
Mean 12.16 ± 0.03
Sigma 1.69 ± 0.03
240
220
200
180
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

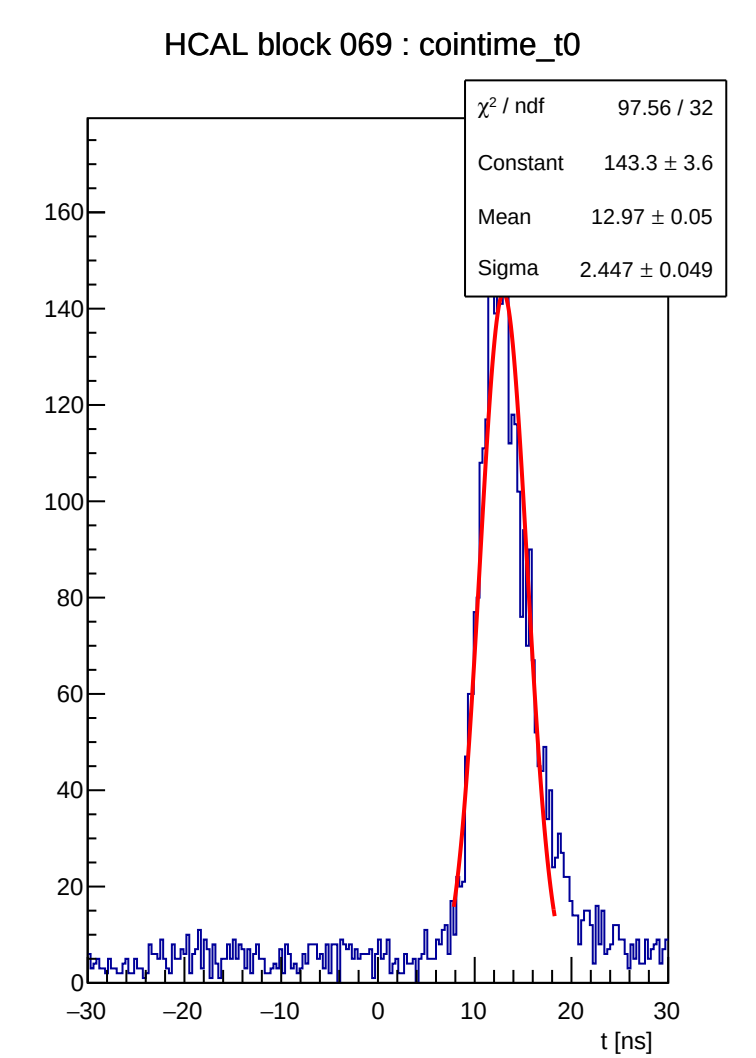

HCAL block 066 : cointime_t0
χ² / ndf 73.14 / 28
Constant 181.4 ± 4.3
Mean 12.49 ± 0.04
Sigma 2.104 ± 0.040
t [ns]
HCAL block 066 : cointime tw corr t0
χ² / ndf 112.7 / 28
Constant 212 ± 5.3
Mean 12.51 ± 0.03
Sigma 1.79 ± 0.03
t tw corr [ns]

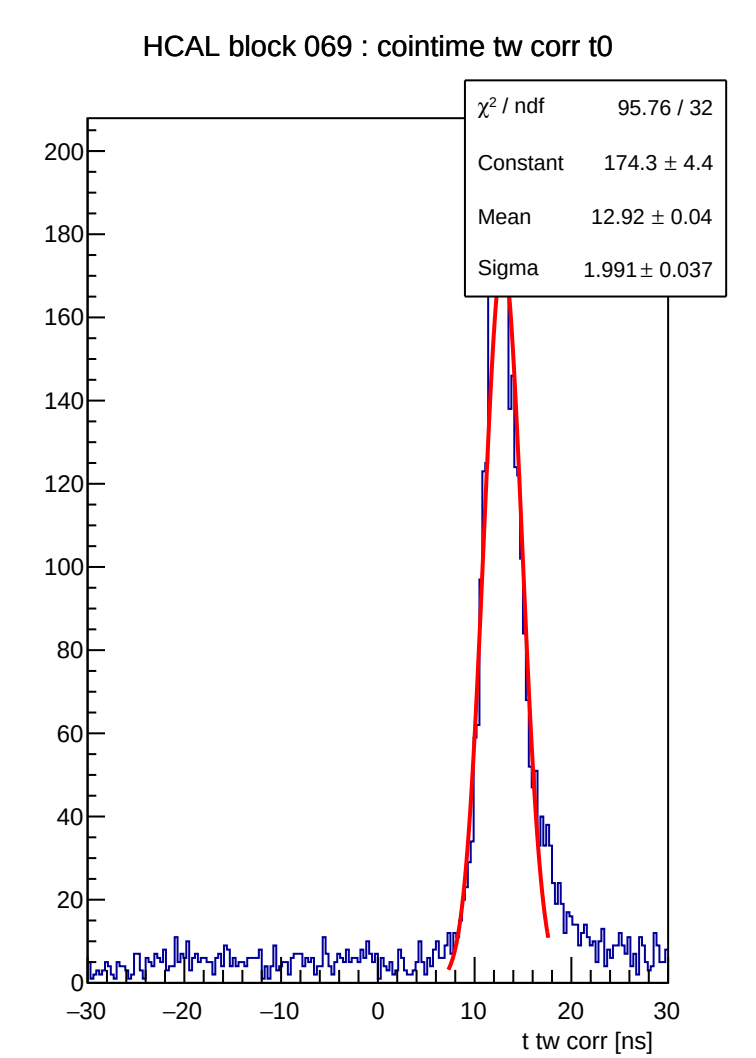

HCAL block 067 : cointime_t0
χ² / ndf 30.79 / 26
Constant 109.7 ± 3.5
Mean 12.37 ± 0.05
Sigma 1.763 ± 0.039
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

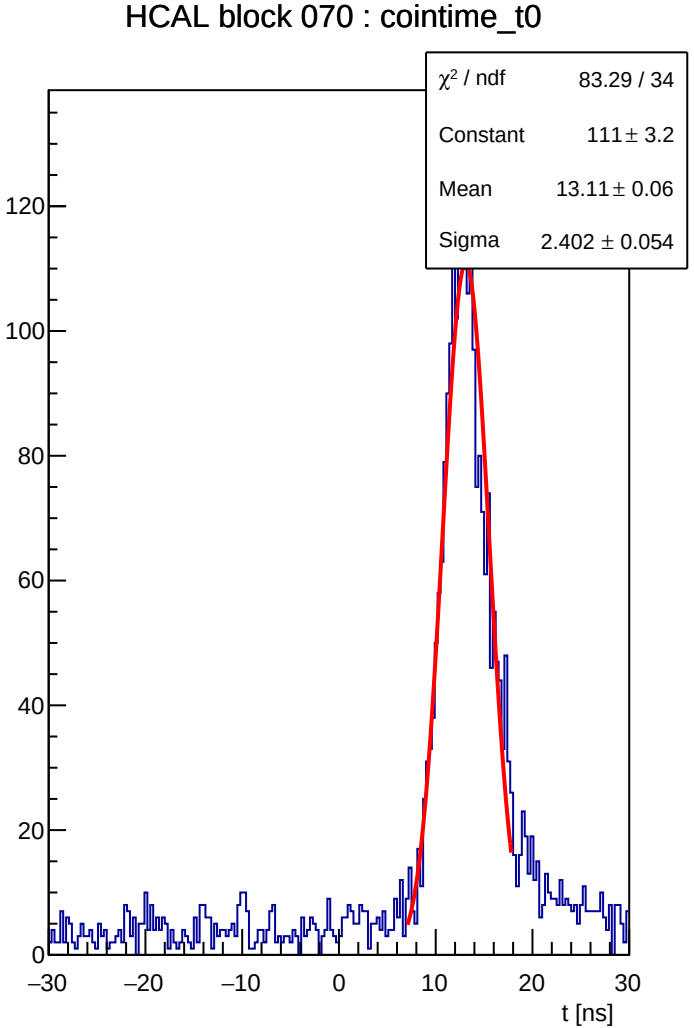

HCAL block 067 : cointime tw corr t0
χ² / ndf 41.77 / 30
Constant 57.93 ± 2.16
Mean 11.69 ± 0.11
Sigma 2.846 ± 0.111
60
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

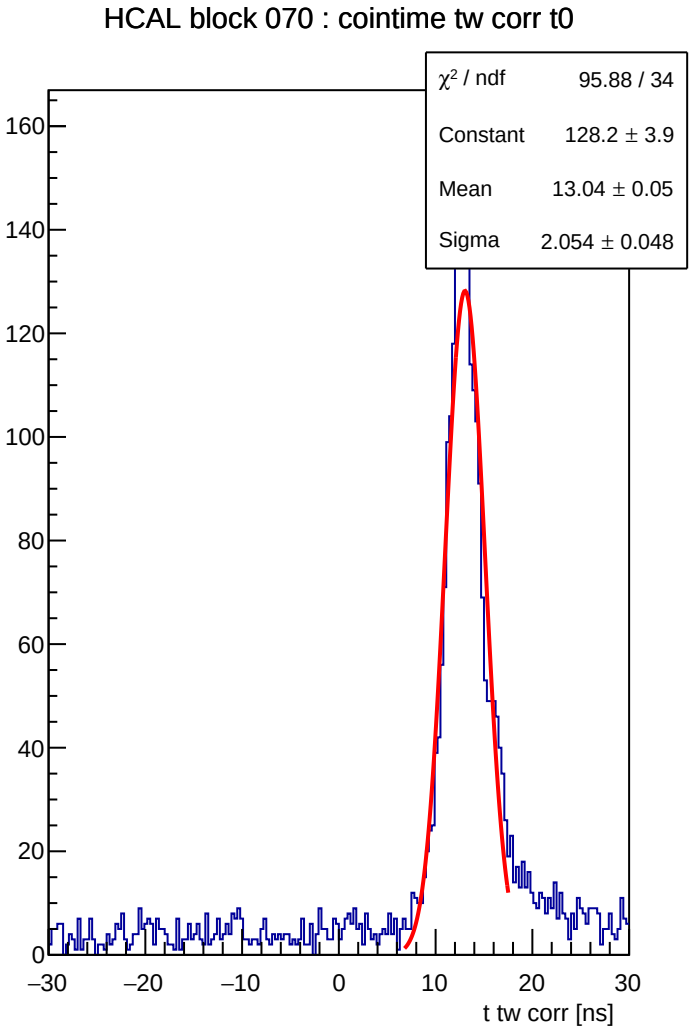

HCAL block 068 : cointime_t0
χ² / ndf 97.99 / 32
Constant 170.6 ± 4.1
Mean 12.71 ± 0.04
Sigma 2.167 ± 0.039
200
180
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

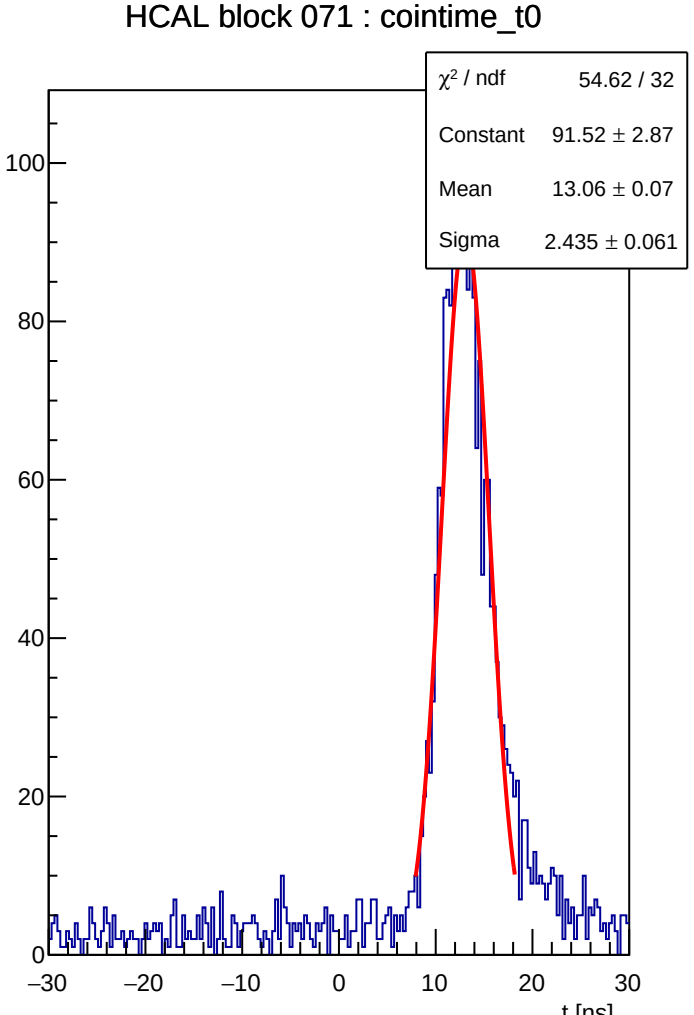

HCAL block 068 : cointime tw corr t0
χ² / ndf 66.19 / 32
Constant 171 ± 4.1
Mean 12.68 ± 0.04
Sigma 2.188 ± 0.040
200
180
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

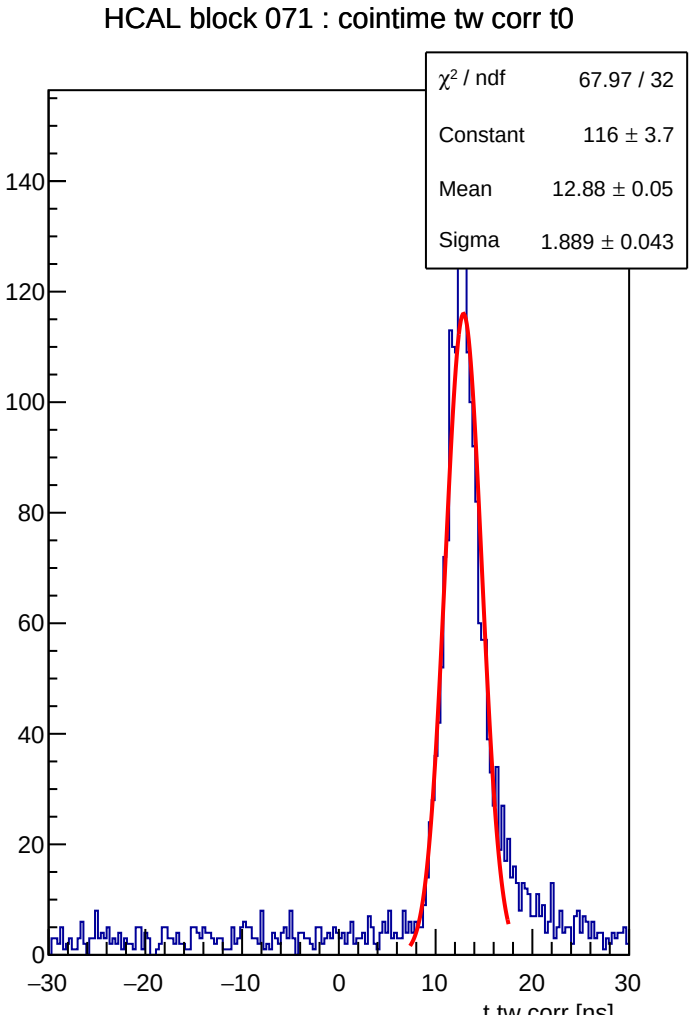

HCAL block 069 : cointime_t0
χ² / ndf 97.56 / 32
Constant 143.3 ± 3.6
Mean 12.97 ± 0.05
Sigma 2.447 ± 0.049
t [ns]

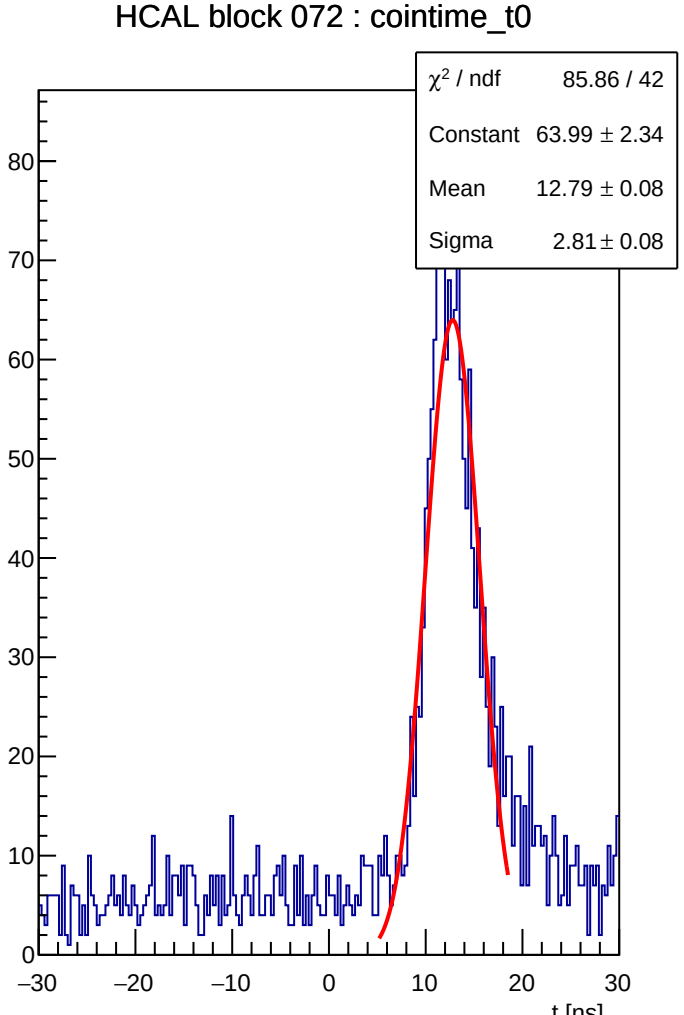

HCAL block 069 : cointime tw corr t0
χ² / ndf 95.76 / 32
Constant 174.3 ± 4.4
Mean 12.92 ± 0.04
Sigma 1.991 ± 0.037
t tw corr [ns]

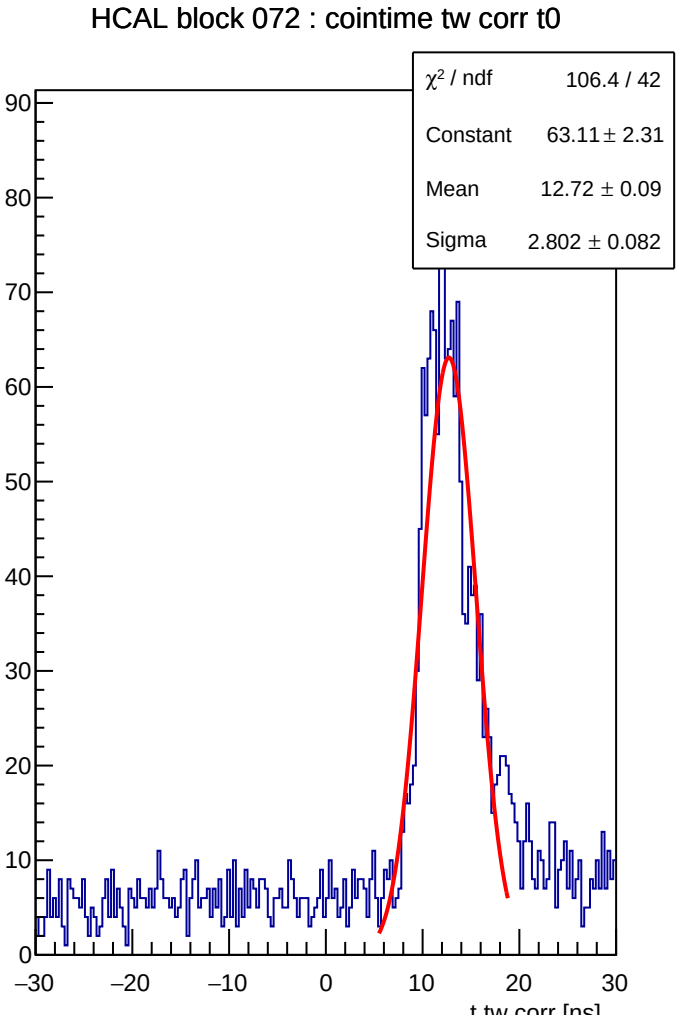

HCAL block 070 : cointime_t0
χ² / ndf 83.29 / 34
Constant 111 ± 3.2
Mean 13.11 ± 0.06
Sigma 2.402 ± 0.054
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

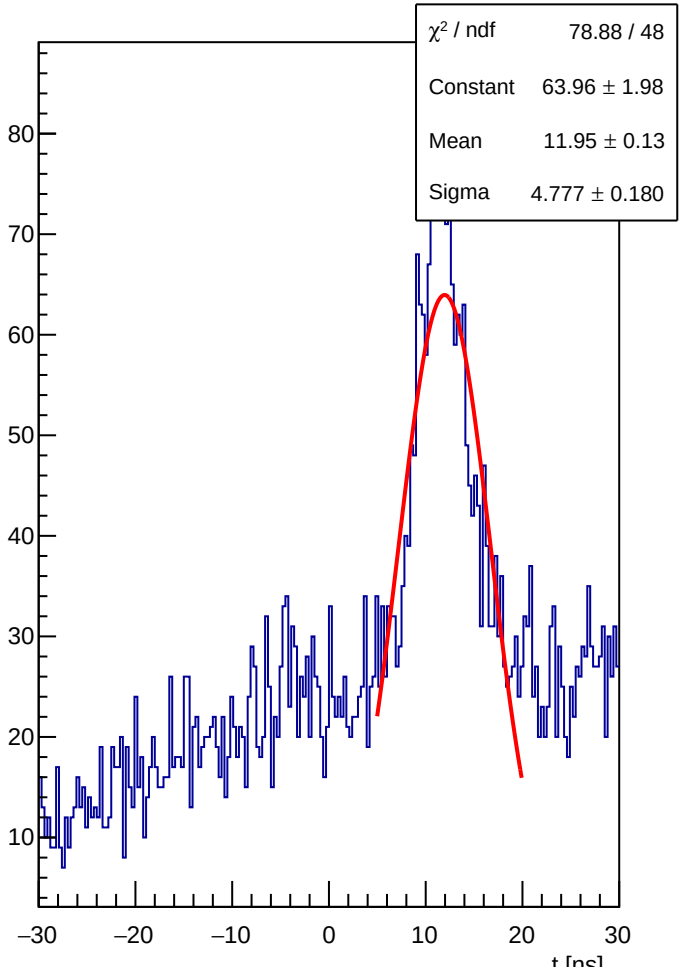

HCAL block 070 : cointime tw corr t0
χ² / ndf 95.88 / 34
Constant 128.2 ± 3.9
Mean 13.04 ± 0.05
Sigma 2.054 ± 0.048
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

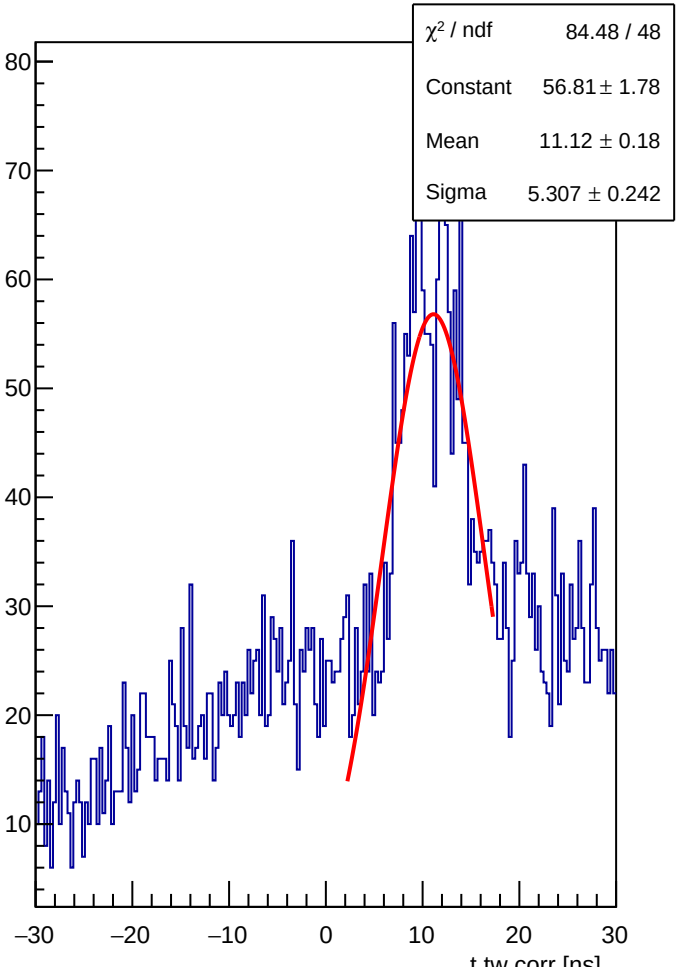

HCAL block 071 : cointime_t0
χ² / ndf 54.62 / 32
Constant 91.52 ± 2.87
Mean 13.06 ± 0.07
Sigma 2.435 ± 0.061
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

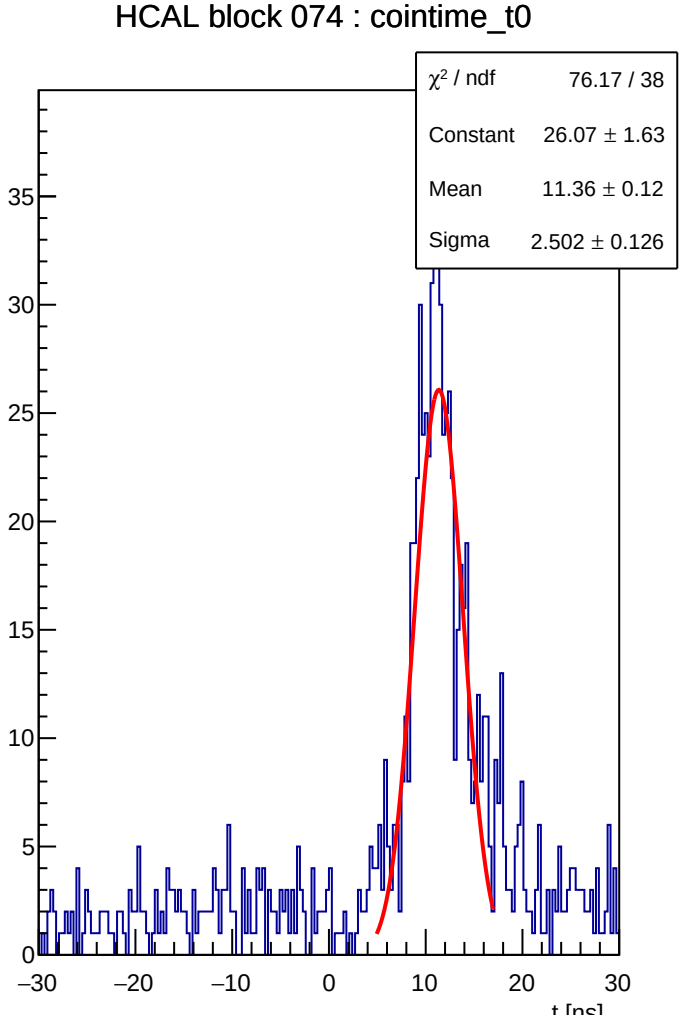

HCAL block 071 : cointime tw corr t0
χ² / ndf 67.97 / 32
Constant 116 ± 3.7
Mean 12.88 ± 0.05
Sigma 1.889 ± 0.043
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

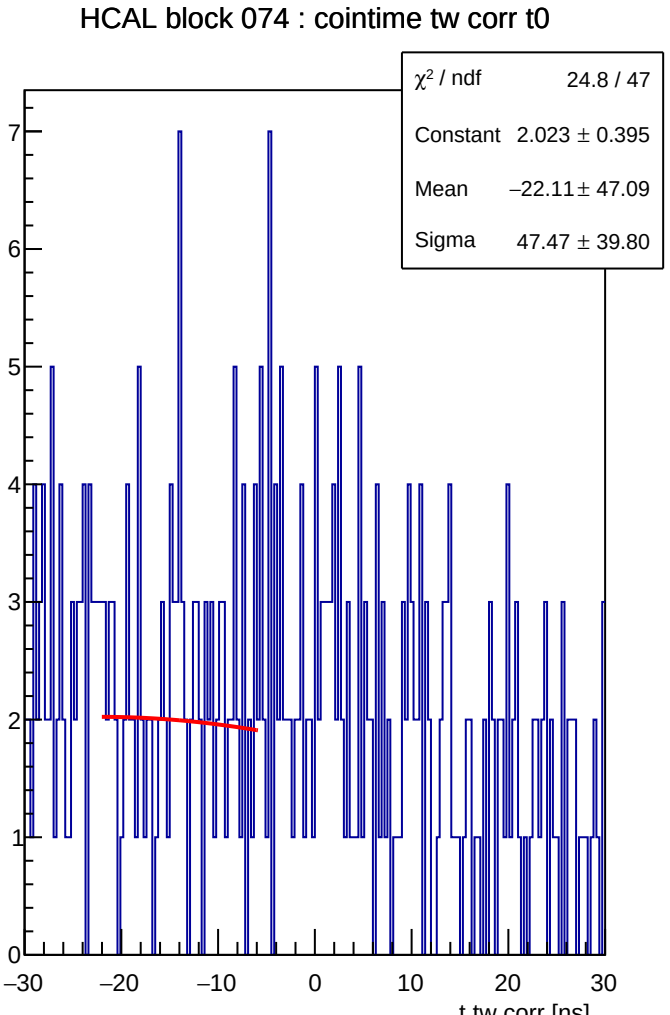

HCAL block 072 : cointime_t0
χ² / ndf 85.86 / 42
Constant 63.99 ± 2.34
Mean 12.79 ± 0.08
Sigma 2.81 ± 0.08
t [ns]

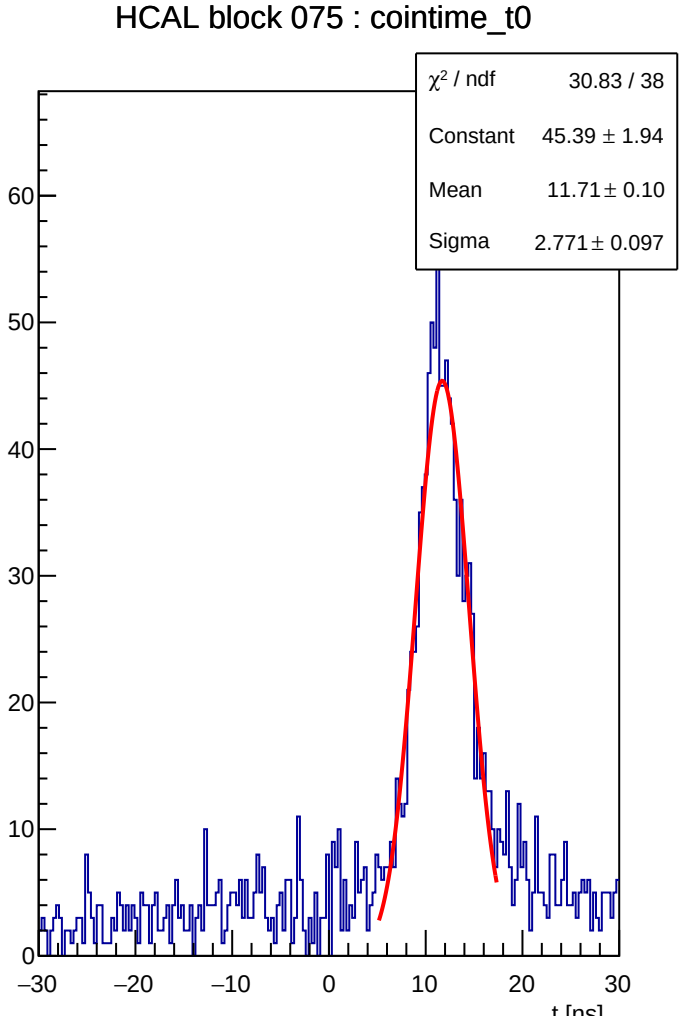

HCAL block 072 : cointime tw corr t0
χ² / ndf 106.4 / 42
Constant 63.11 ± 2.31
Mean 12.72 ± 0.09
Sigma 2.802 ± 0.082
t tw corr [ns]

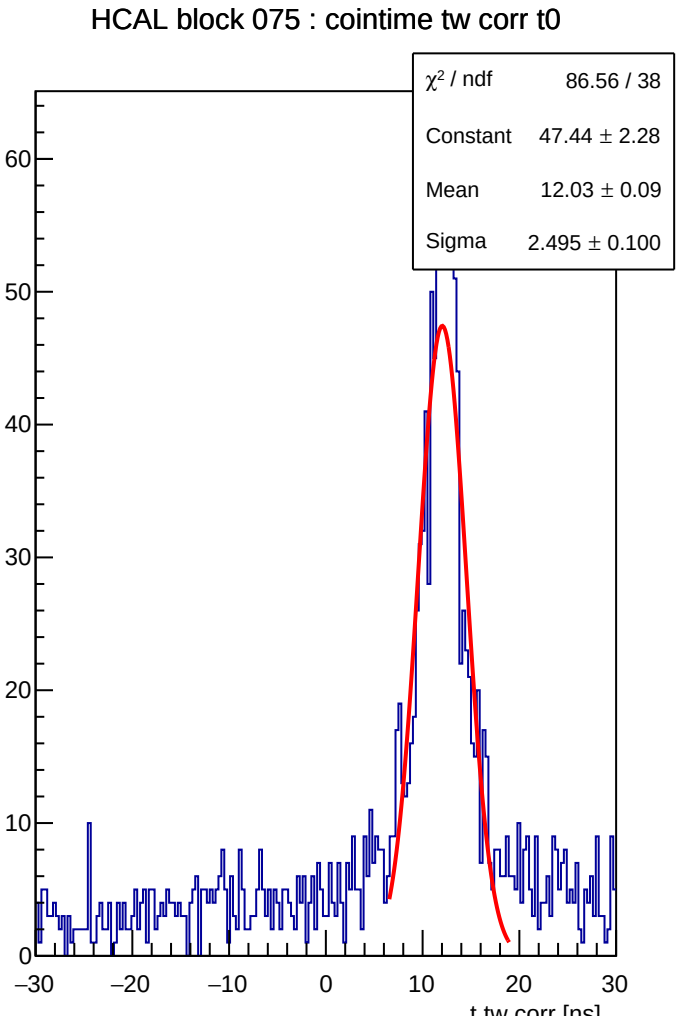

HCAL block 073 : cointime_t0
χ² / ndf 78.88 / 48
Constant 63.96 ± 1.98
Mean 11.95 ± 0.13
Sigma 4.777 ± 0.180
80
70
60
50
40
30
20
10
–30
–20
–10
0
10
20
30
t [ns]

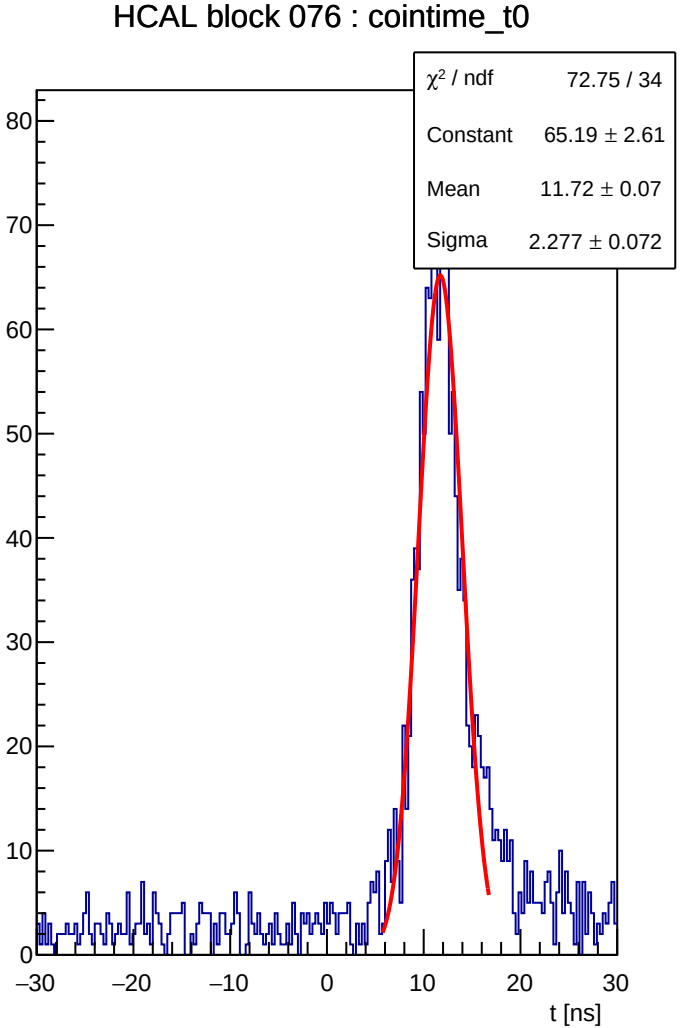

HCAL block 073 : cointime tw corr t0
χ² / ndf 84.48 / 48
Constant 56.81 ± 1.78
Mean 11.12 ± 0.18
Sigma 5.307 ± 0.242
80
70
60
50
40
30
20
10
–30
–20
–10
0
10
20
30
t tw corr [ns]

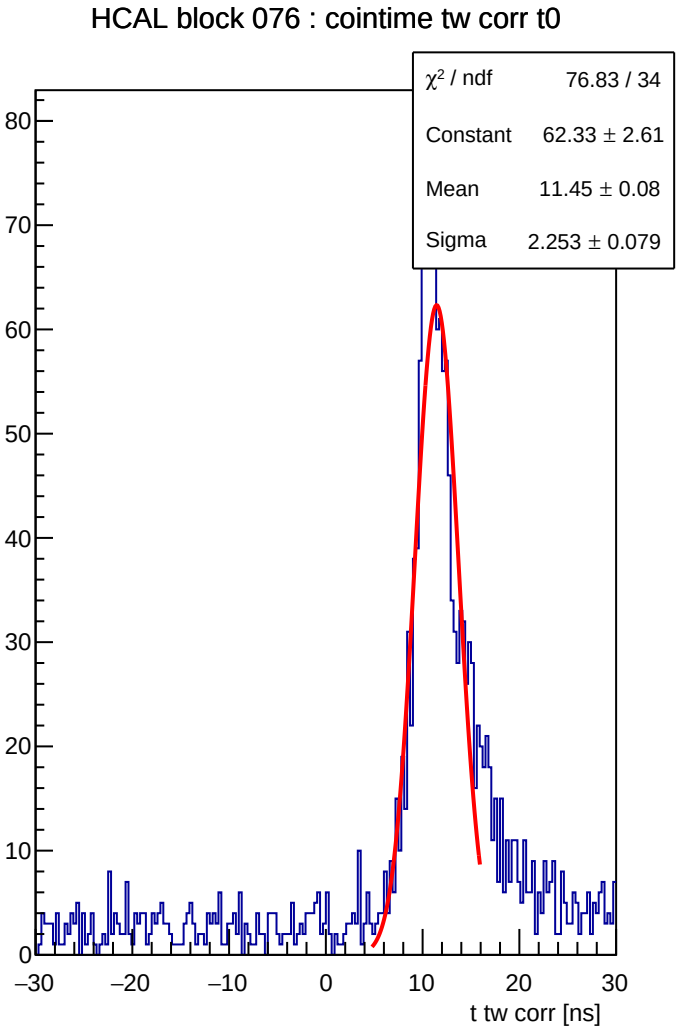

HCAL block 074 : cointime_t0
χ² / ndf 76.17 / 38
Constant 26.07 ± 1.63
Mean 11.36 ± 0.12
Sigma 2.502 ± 0.126
35
30
25
20
15
10
5
0
–30
–20
–10
0
10
20
30
t [ns]

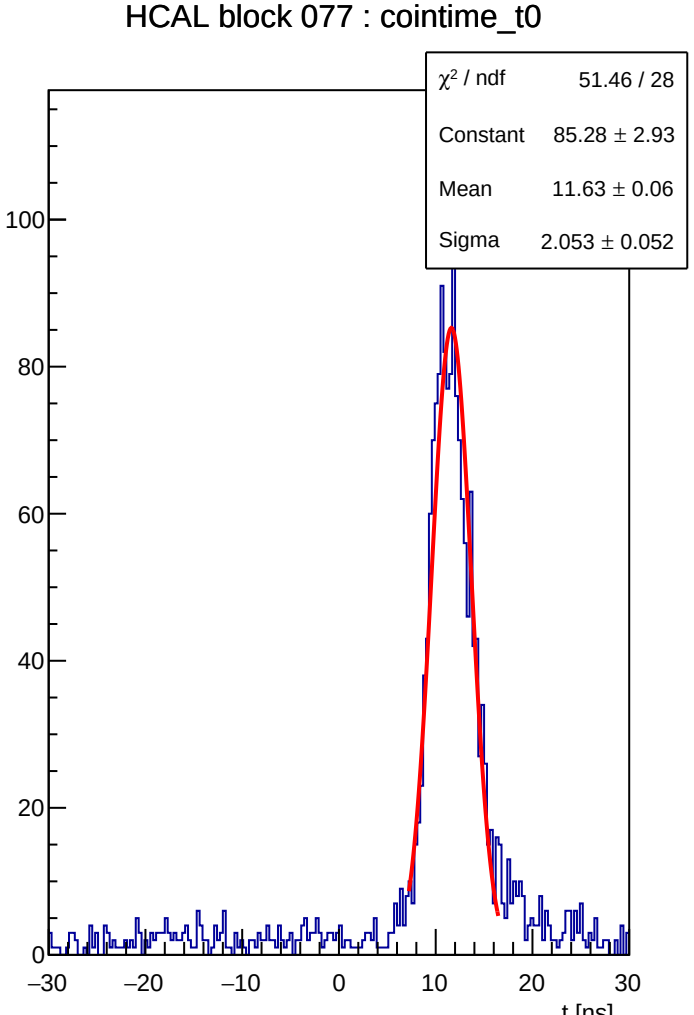

HCAL block 074 : cointime tw corr t0
χ² / ndf 24.8 / 47
Constant 2.023 ± 0.395
Mean –22.11 ± 47.09
Sigma 47.47 ± 39.80
7
6
5
4
3
2
1
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

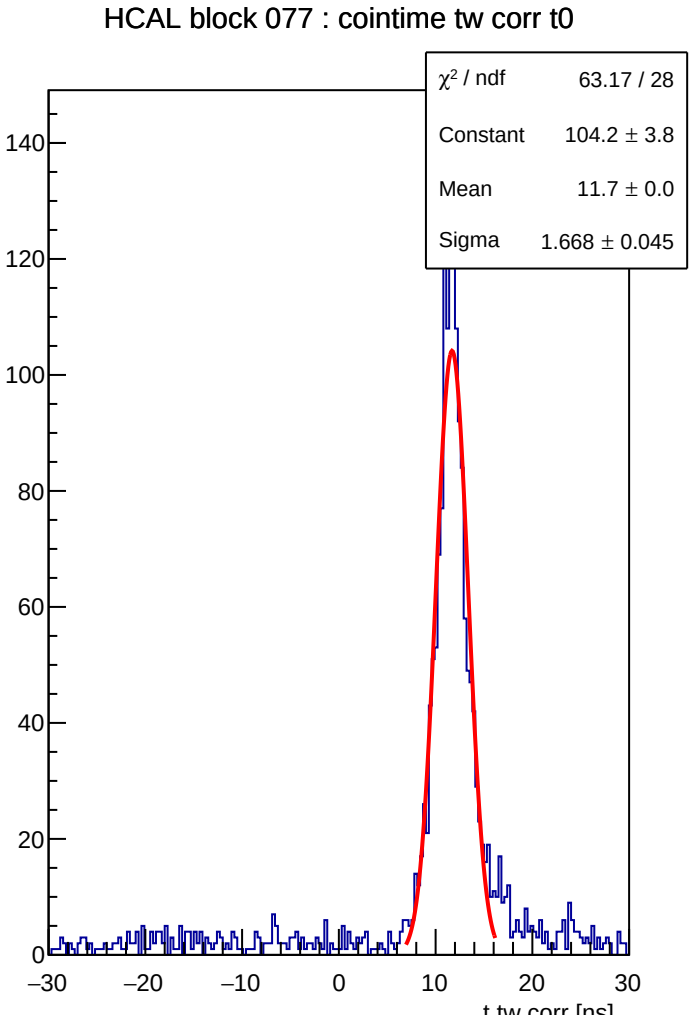

HCAL block 075 : cointime_t0
χ² / ndf 30.83 / 38
Constant 45.39 ± 1.94
Mean 11.71 ± 0.10
Sigma 2.771 ± 0.097
60
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t [ns]

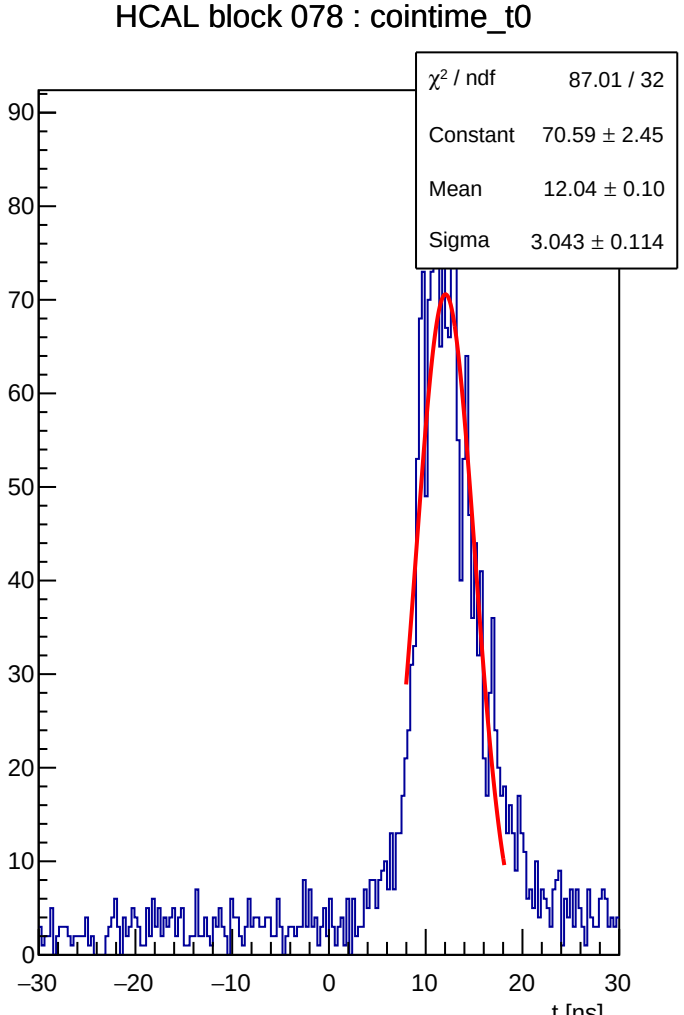

HCAL block 075 : cointime tw corr t0
χ² / ndf 86.56 / 38
Constant 47.44 ± 2.28
Mean 12.03 ± 0.09
Sigma 2.495 ± 0.100
60
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

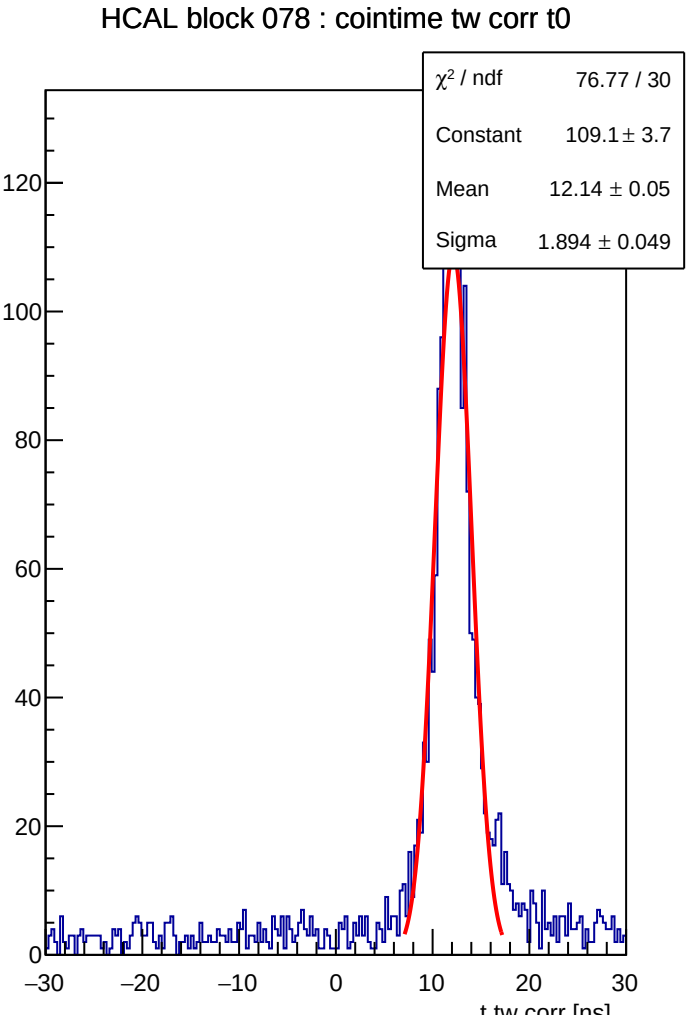

HCAL block 076 : cointime_t0
χ² / ndf 72.75 / 34
Constant 65.19 ± 2.61
Mean 11.72 ± 0.07
Sigma 2.277 ± 0.072
80
70
60
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t [ns]

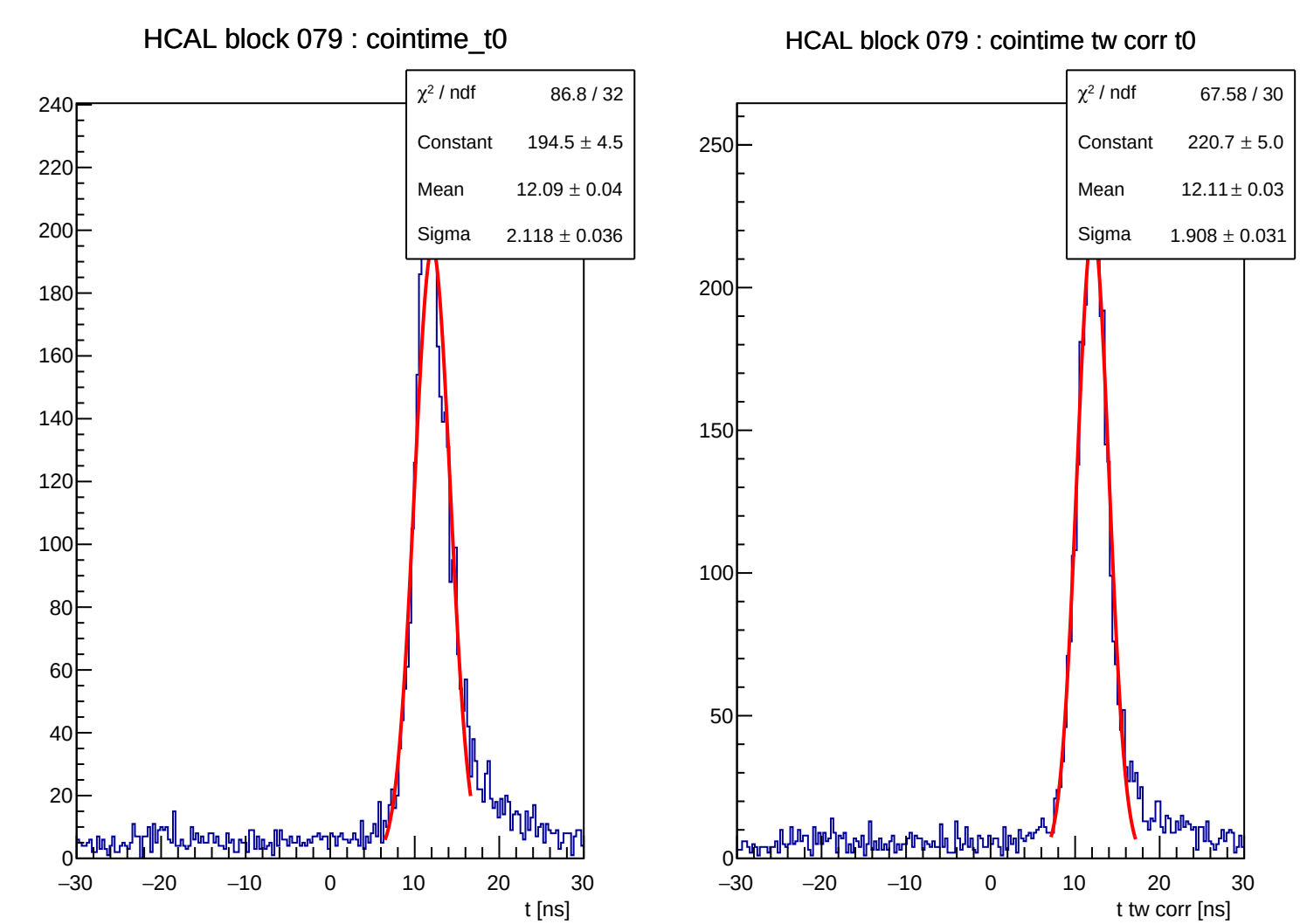

HCAL block 076 : cointime tw corr t0
χ² / ndf 76.83 / 34
Constant 62.33 ± 2.61
Mean 11.45 ± 0.08
Sigma 2.253 ± 0.079
80
70
60
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

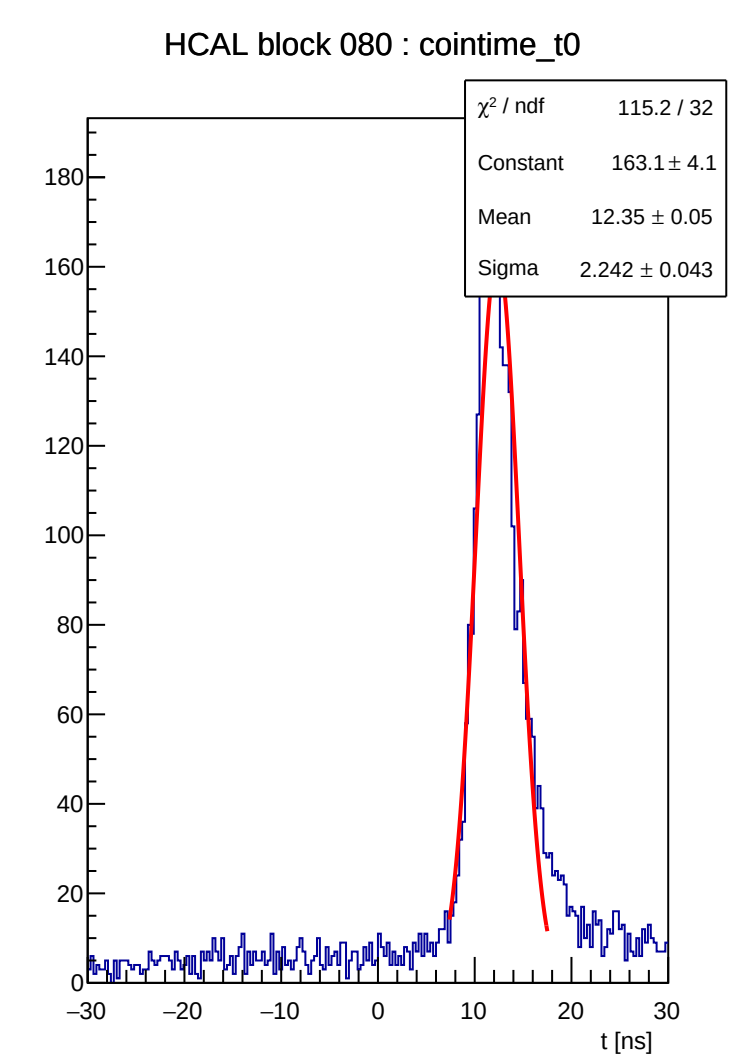

HCAL block 077 : cointime_t0
χ² / ndf 51.46 / 28
Constant 85.28 ± 2.93
Mean 11.63 ± 0.06
Sigma 2.053 ± 0.052
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

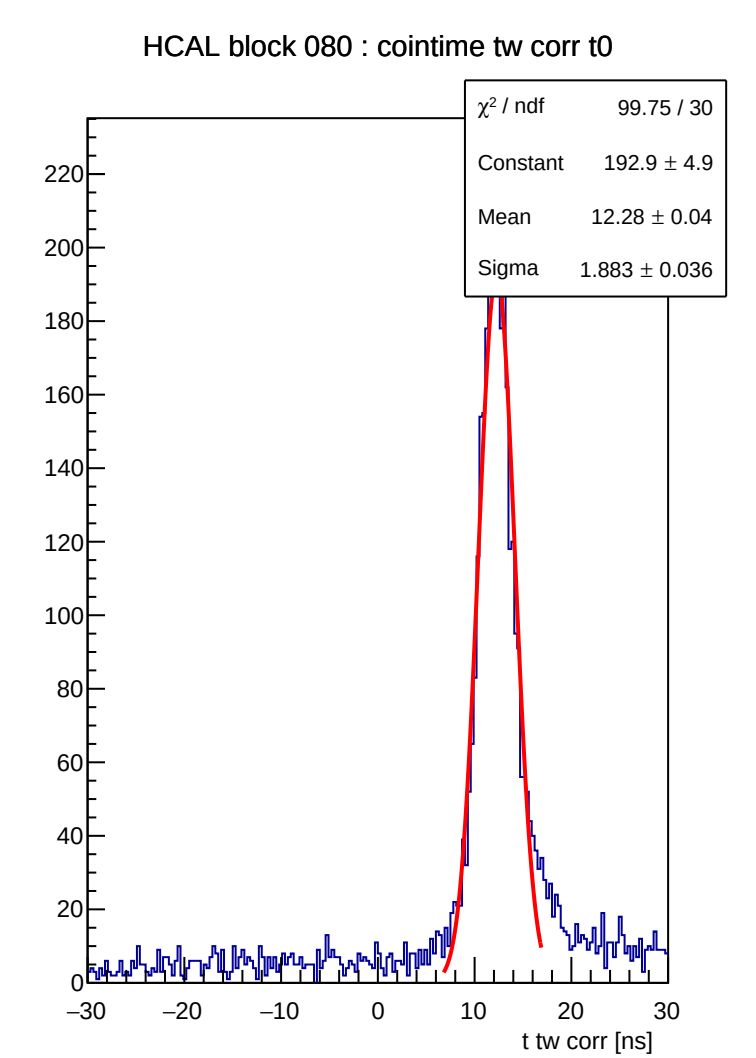

HCAL block 077 : cointime tw corr t0
χ² / ndf 63.17 / 28
Constant 104.2 ± 3.8
Mean 11.7 ± 0.0
Sigma 1.668 ± 0.045
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

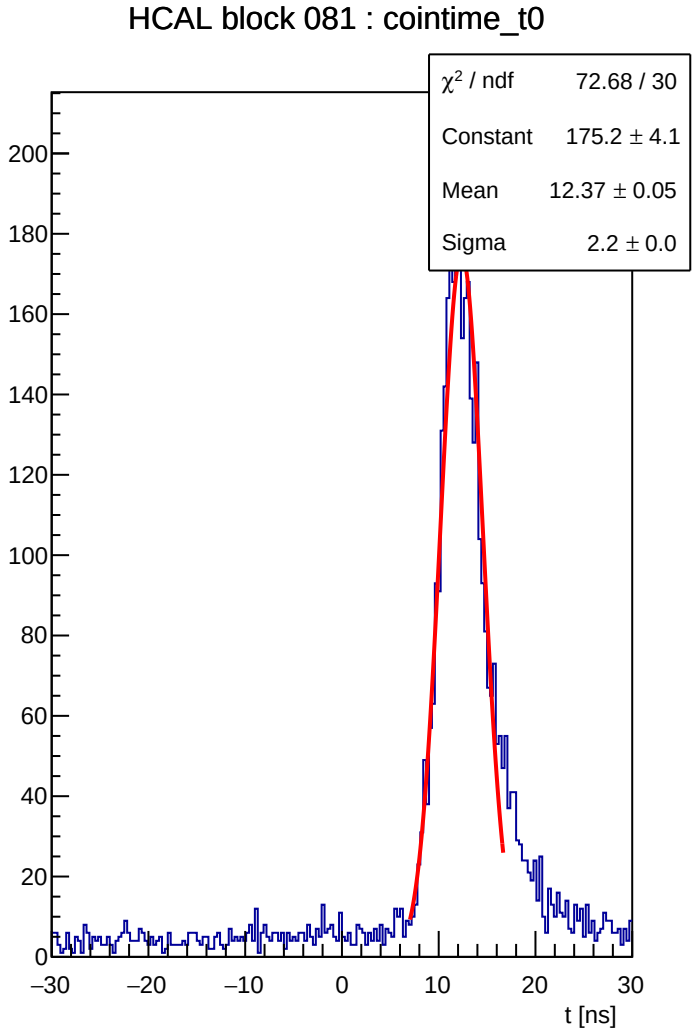

HCAL block 078 : cointime_t0
χ² / ndf 87.01 / 32
Constant 70.59 ± 2.45
Mean 12.04 ± 0.10
Sigma 3.043 ± 0.114
t [ns]

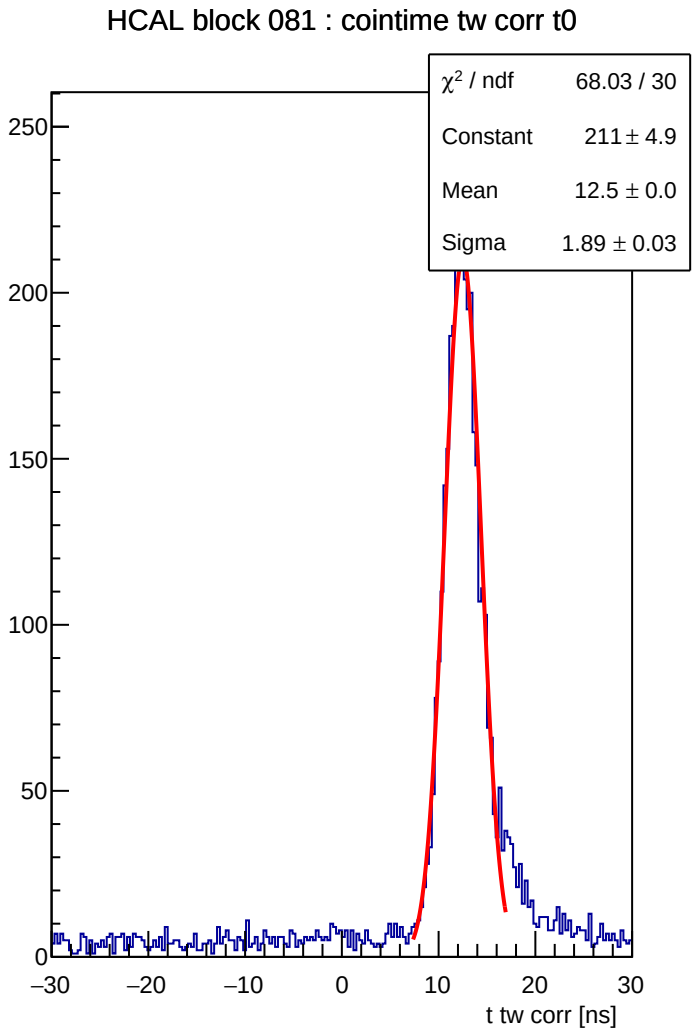

HCAL block 078 : cointime tw corr t0
χ² / ndf 76.77 / 30
Constant 109.1 ± 3.7
Mean 12.14 ± 0.05
Sigma 1.894 ± 0.049
t tw corr [ns]

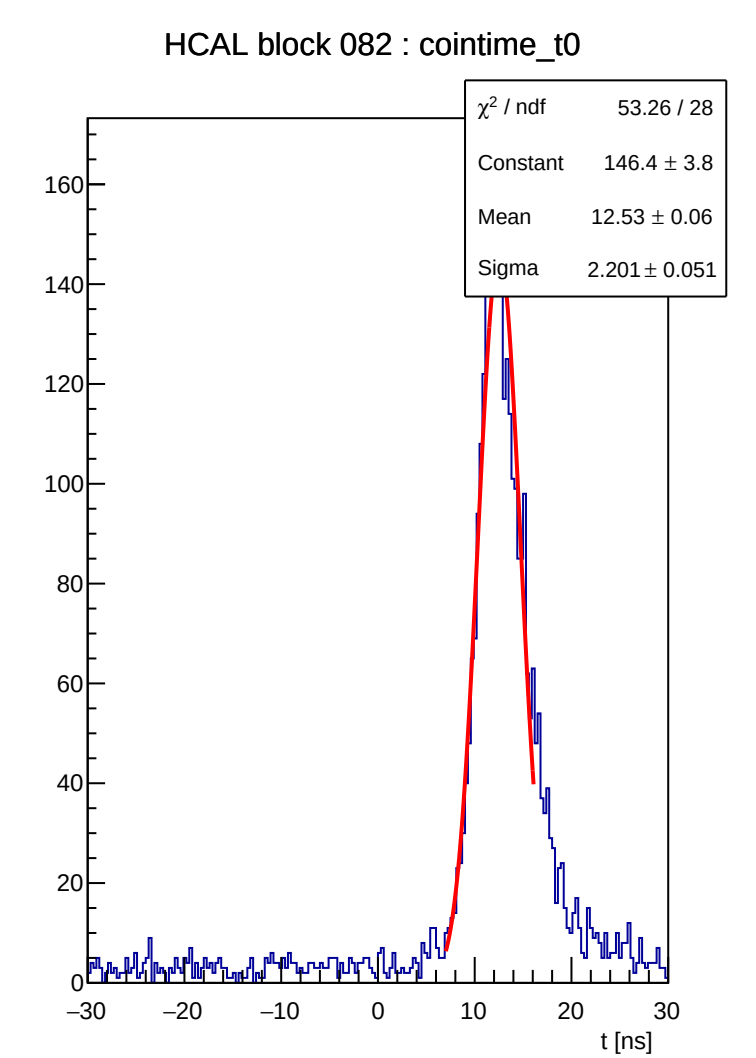

HCAL block 079 : cointime_t0
χ² / ndf 86.8 / 32
Constant 194.5 ± 4.5
Mean 12.09 ± 0.04
Sigma 2.118 ± 0.036
t [ns]
HCAL block 079 : cointime tw corr t0
χ² / ndf 67.58 / 30
Constant 220.7 ± 5.0
Mean 12.11 ± 0.03
Sigma 1.908 ± 0.031
t tw corr [ns]

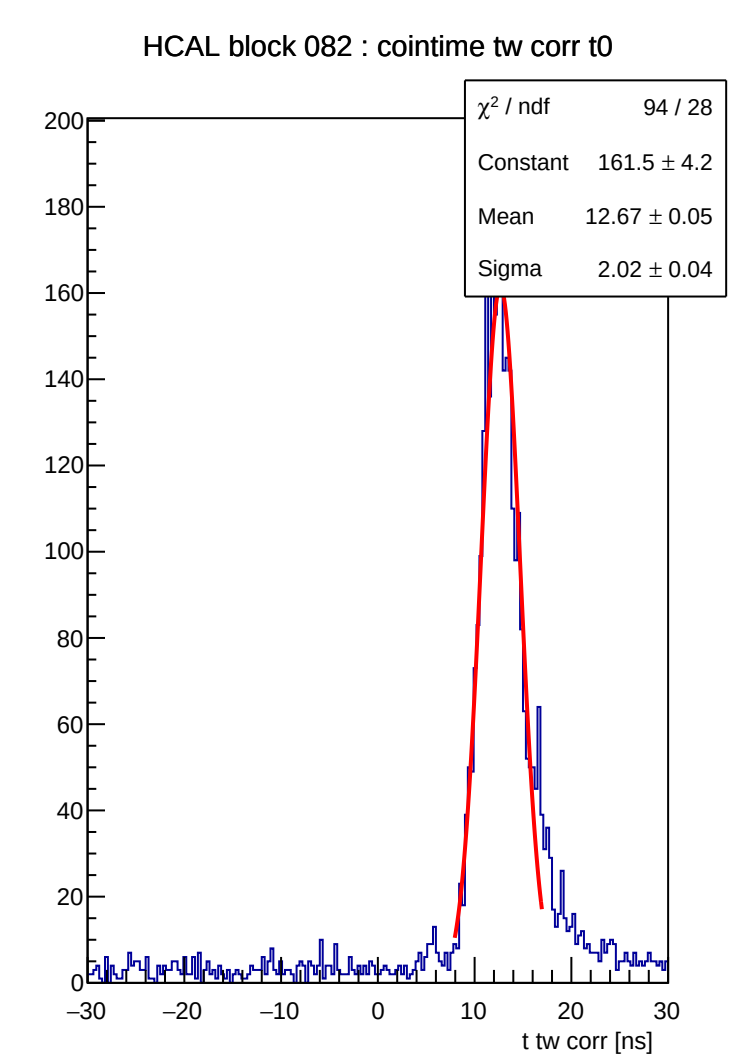

HCAL block 080 : cointime_t0
χ² / ndf 115.2 / 32
Constant 163.1 ± 4.1
Mean 12.35 ± 0.05
Sigma 2.242 ± 0.043
t [ns]

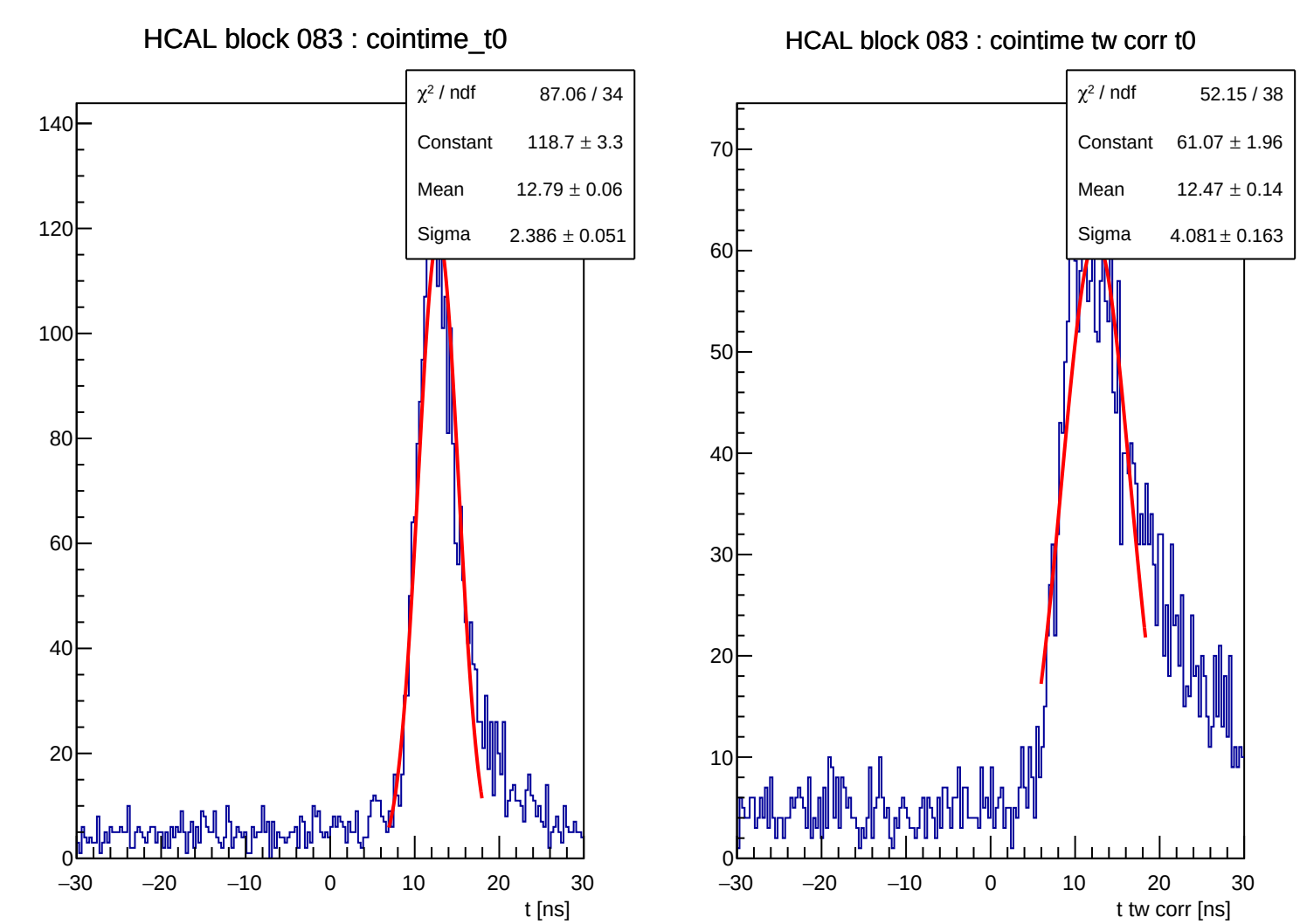

HCAL block 080 : cointime tw corr t0
χ² / ndf 99.75 / 30
Constant 192.9 ± 4.9
Mean 12.28 ± 0.04
Sigma 1.883 ± 0.036
t tw corr [ns]

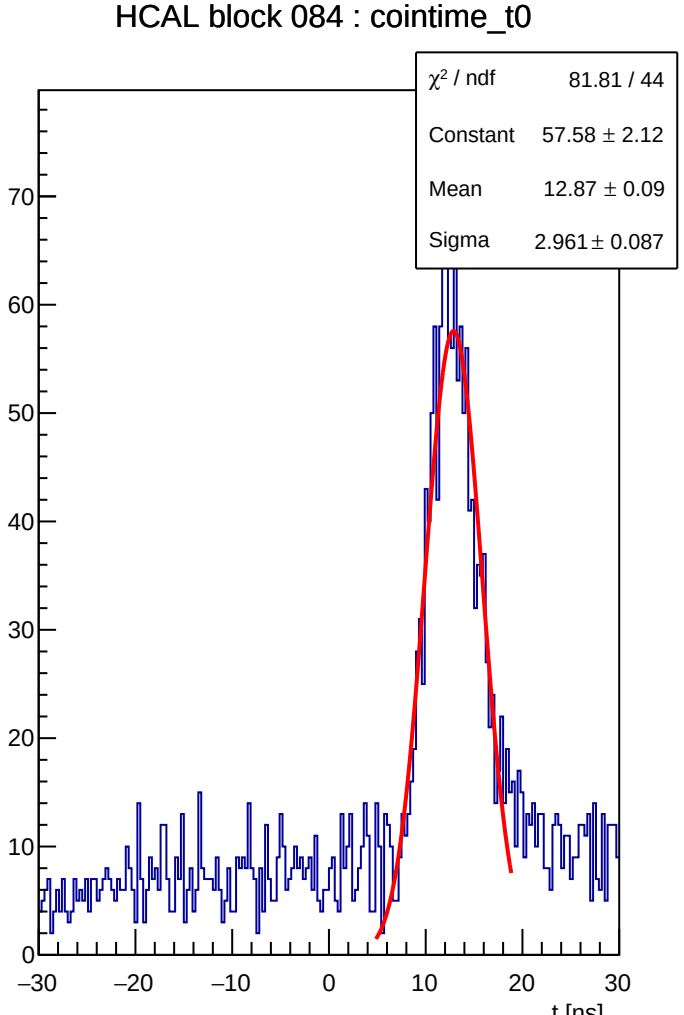

HCAL block 081 : cointime_t0
χ² / ndf 72.68 / 30
Constant 175.2 ± 4.1
Mean 12.37 ± 0.05
Sigma 2.2 ± 0.0
200
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

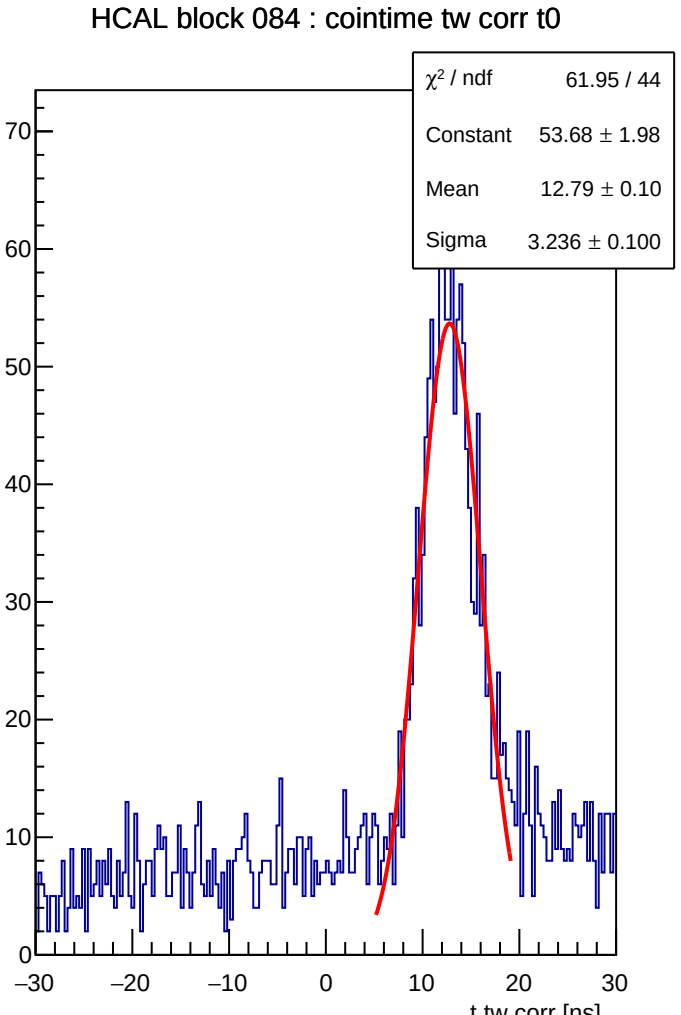

HCAL block 081 : cointime tw corr t0
χ² / ndf 68.03 / 30
Constant 211 ± 4.9
Mean 12.5 ± 0.0
Sigma 1.89 ± 0.03
250
200
150
100
50
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

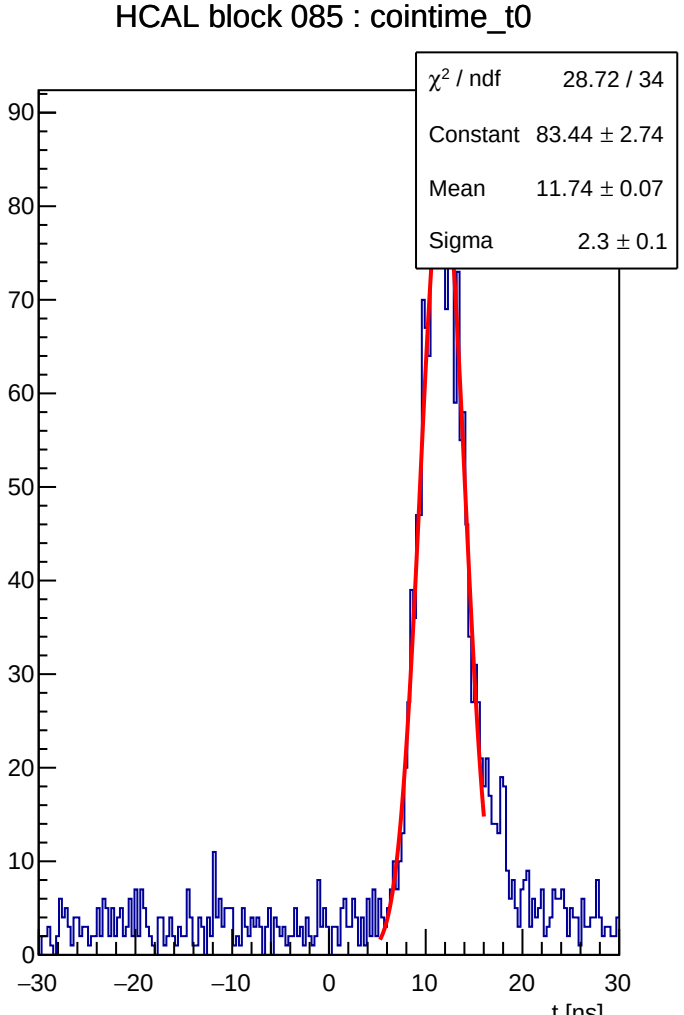

HCAL block 082 : cointime_t0
χ² / ndf 53.26 / 28
Constant 146.4 ± 3.8
Mean 12.53 ± 0.06
Sigma 2.201 ± 0.051
t [ns]

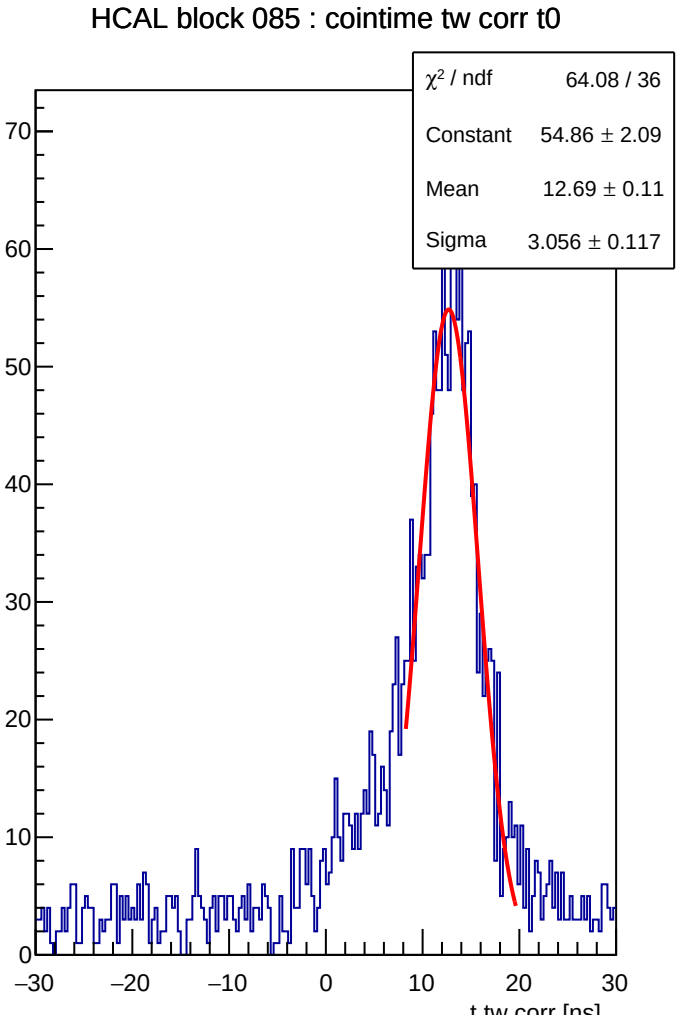

HCAL block 082 : cointime tw corr t0
χ² / ndf 94 / 28
Constant 161.5 ± 4.2
Mean 12.67 ± 0.05
Sigma 2.02 ± 0.04
t tw corr [ns]

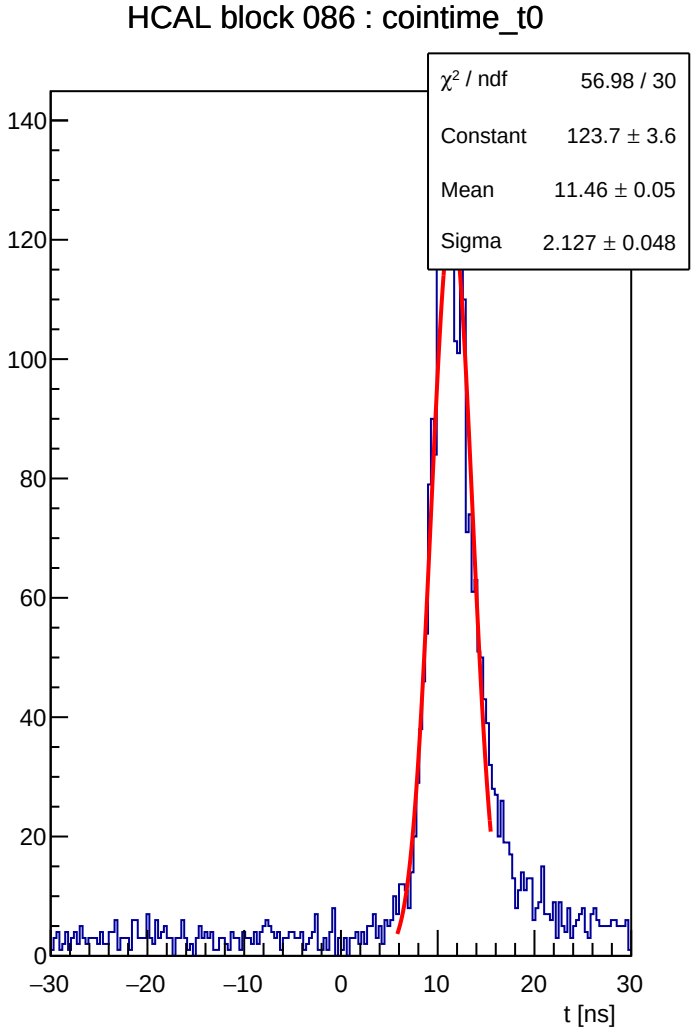

HCAL block 083 : cointime_t0
χ² / ndf 87.06 / 34
Constant 118.7 ± 3.3
Mean 12.79 ± 0.06
Sigma 2.386 ± 0.051
t [ns]
HCAL block 083 : cointime tw corr t0
χ² / ndf 52.15 / 38
Constant 61.07 ± 1.96
Mean 12.47 ± 0.14
Sigma 4.081 ± 0.163
t tw corr [ns]

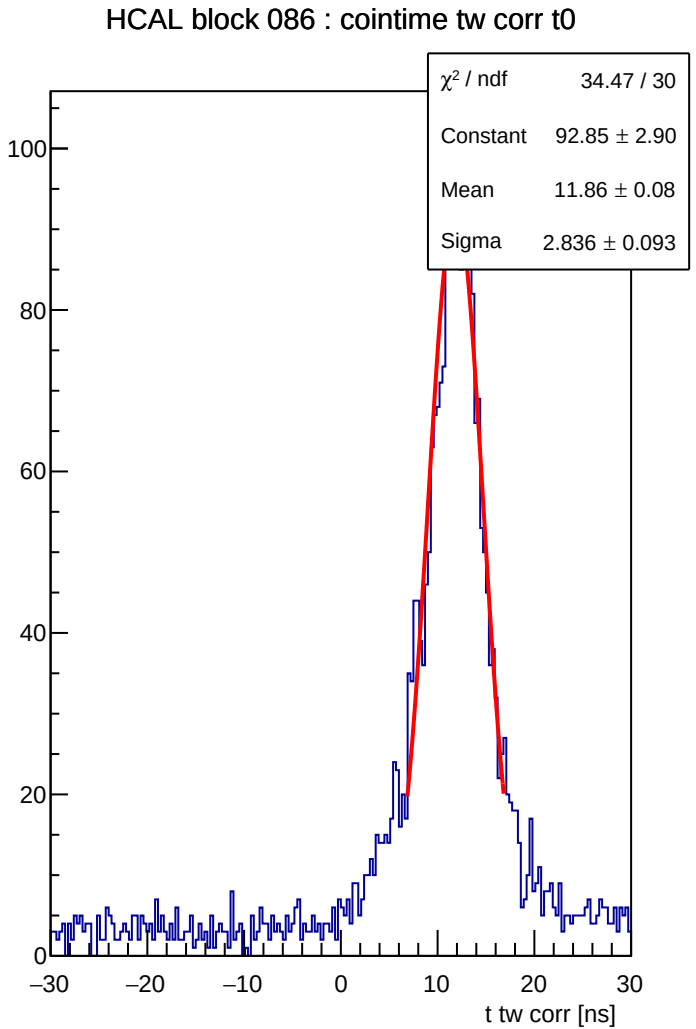

HCAL block 084 : cointime_t0
χ² / ndf 81.81 / 44
Constant 57.58 ± 2.12
Mean 12.87 ± 0.09
Sigma 2.961 ± 0.087
t [ns]

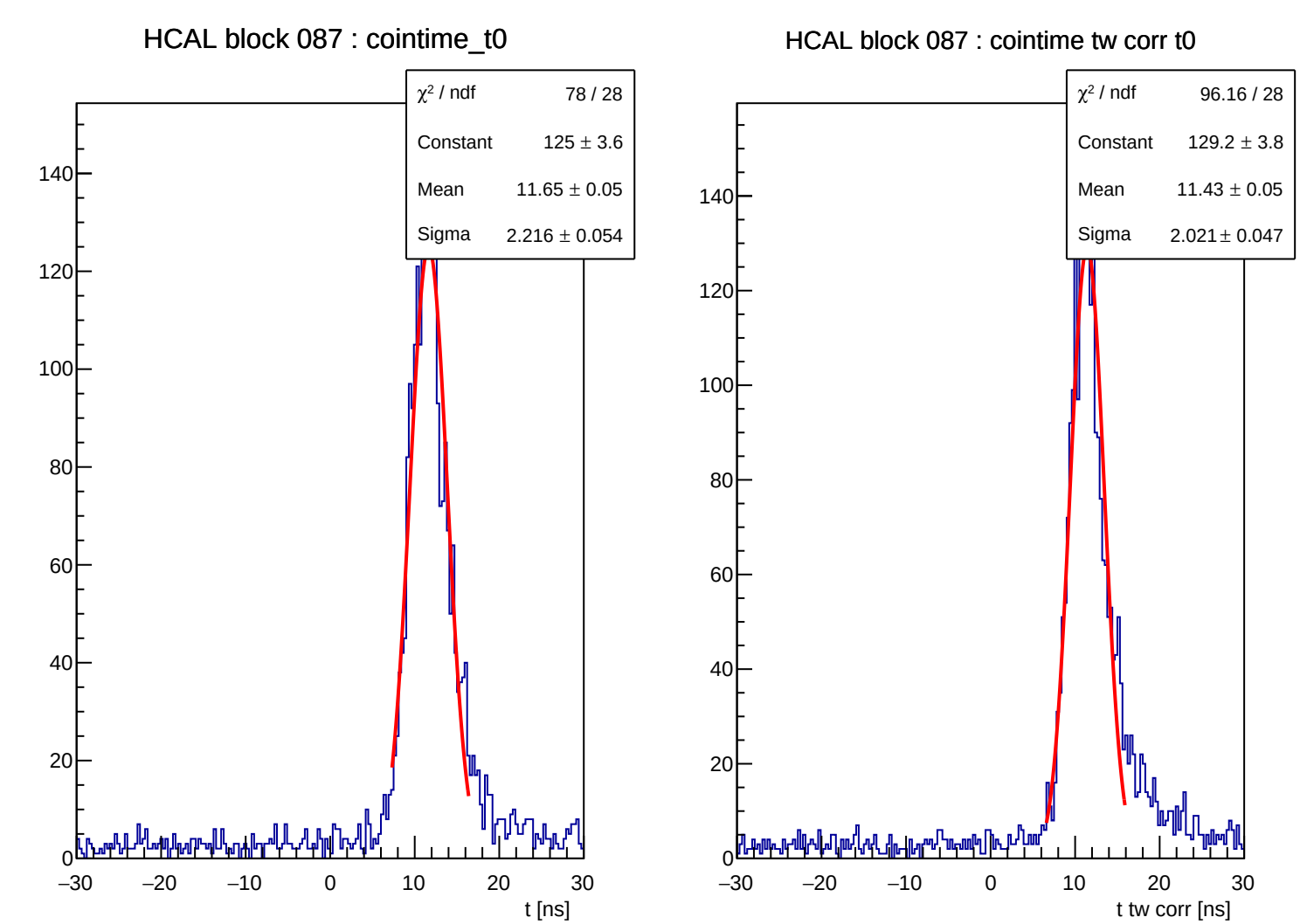

HCAL block 084 : cointime tw corr t0
χ² / ndf 61.95 / 44
Constant 53.68 ± 1.98
Mean 12.79 ± 0.10
Sigma 3.236 ± 0.100
t tw corr [ns]

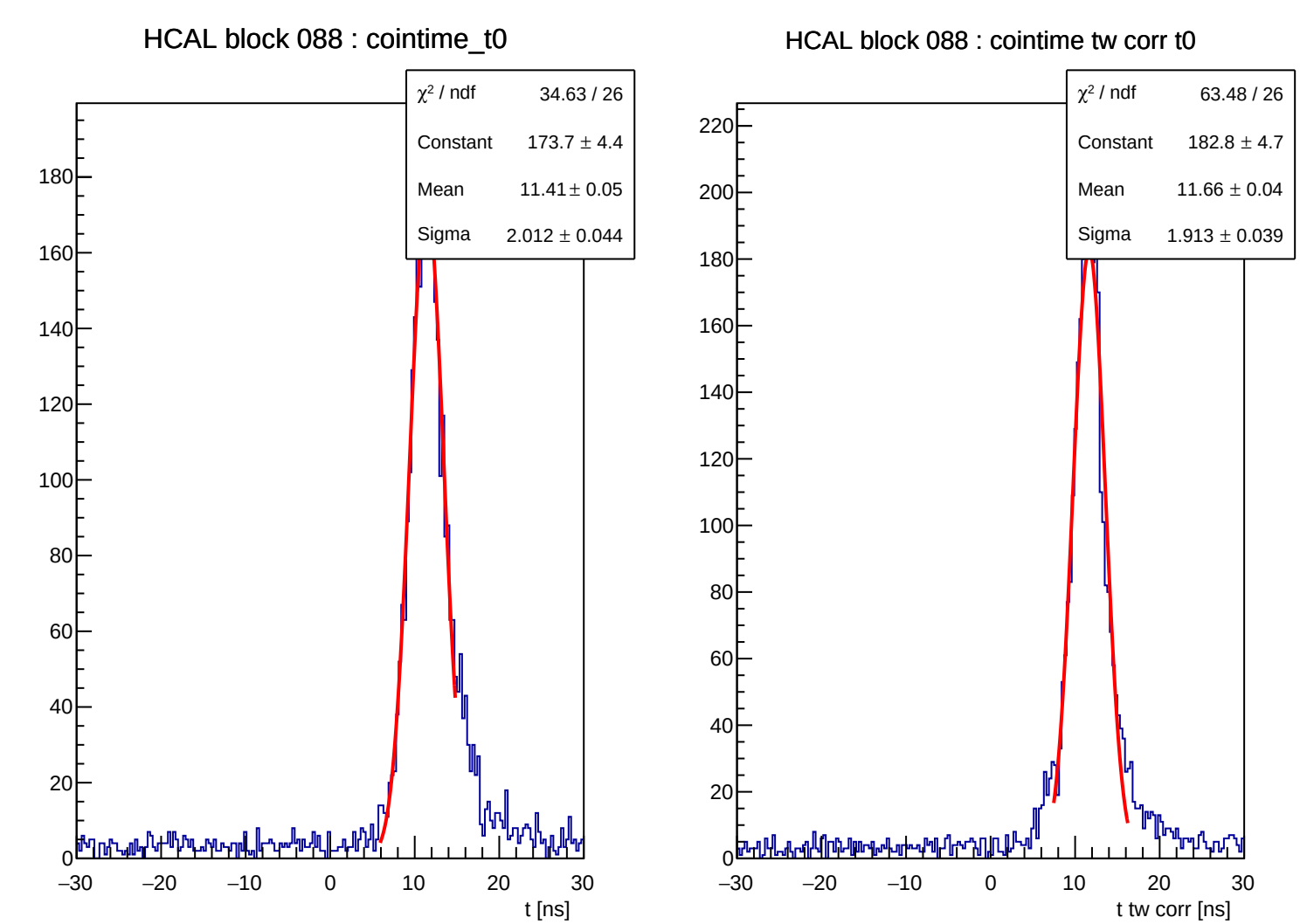

HCAL block 085 : cointime_t0
χ² / ndf 28.72 / 34
Constant 83.44 ± 2.74
Mean 11.74 ± 0.07
Sigma 2.3 ± 0.1
t [ns]

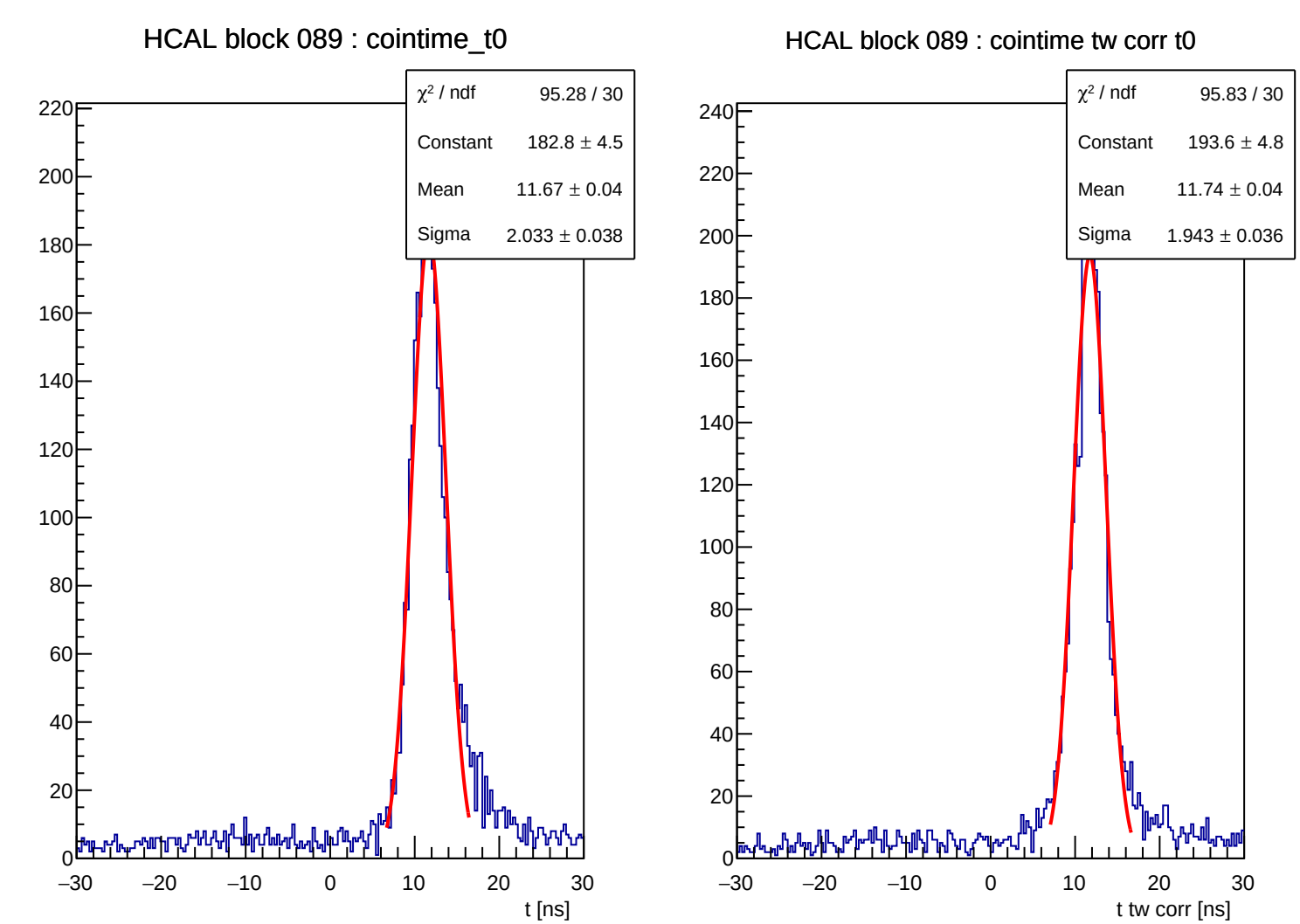

HCAL block 085 : cointime tw corr t0
χ² / ndf 64.08 / 36
Constant 54.86 ± 2.09
Mean 12.69 ± 0.11
Sigma 3.056 ± 0.117
t tw corr [ns]

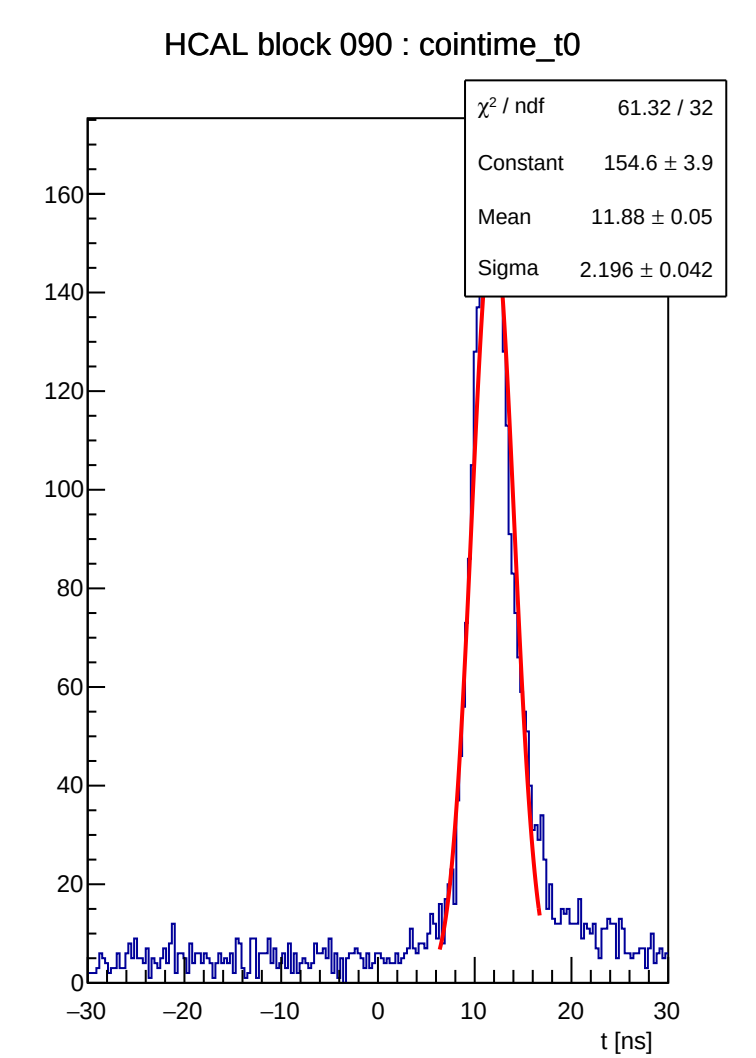

HCAL block 086 : cointime_t0
χ² / ndf 56.98 / 30
Constant 123.7 ± 3.6
Mean 11.46 ± 0.05
Sigma 2.127 ± 0.048
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

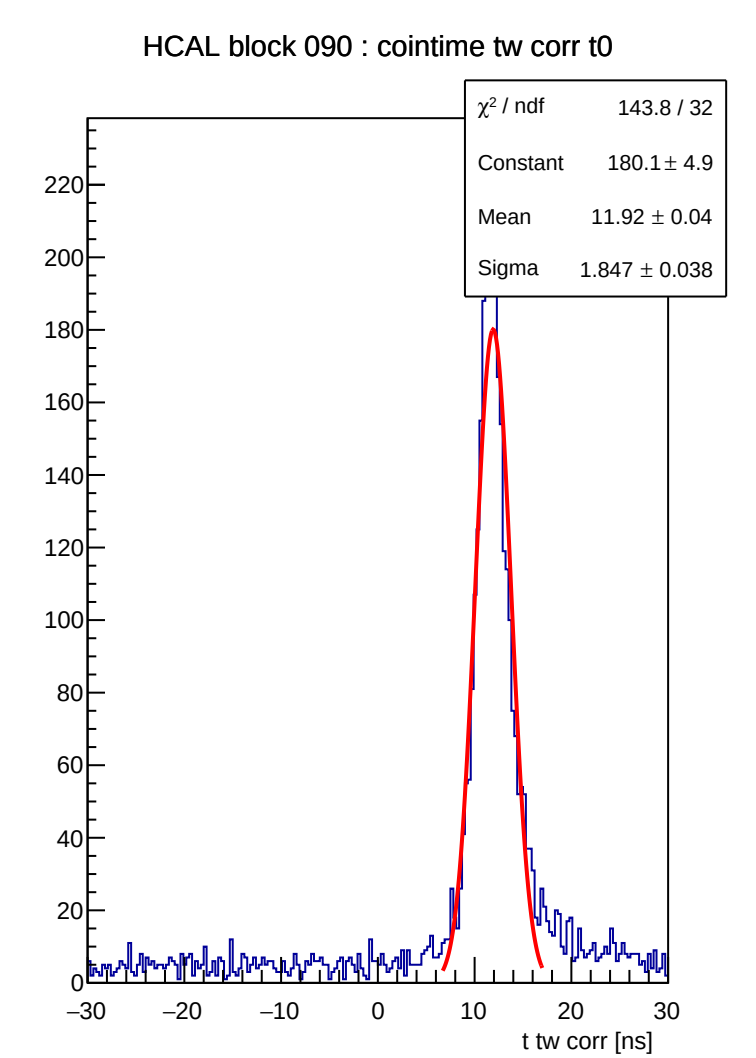

HCAL block 086 : cointime tw corr t0
χ² / ndf 34.47 / 30
Constant 92.85 ± 2.90
Mean 11.86 ± 0.08
Sigma 2.836 ± 0.093
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

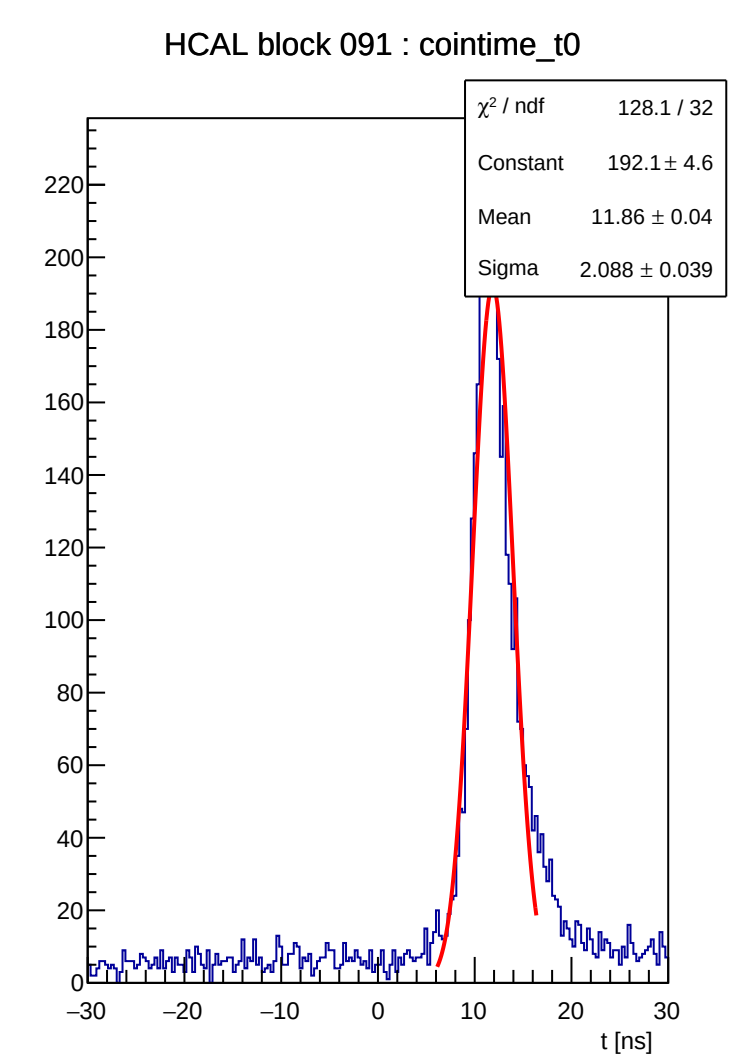

HCAL block 087 : cointime_t0
χ² / ndf 78 / 28
Constant 125 ± 3.6
Mean 11.65 ± 0.05
Sigma 2.216 ± 0.054
t [ns]
HCAL block 087 : cointime tw corr t0
χ² / ndf 96.16 / 28
Constant 129.2 ± 3.8
Mean 11.43 ± 0.05
Sigma 2.021 ± 0.047
t tw corr [ns]

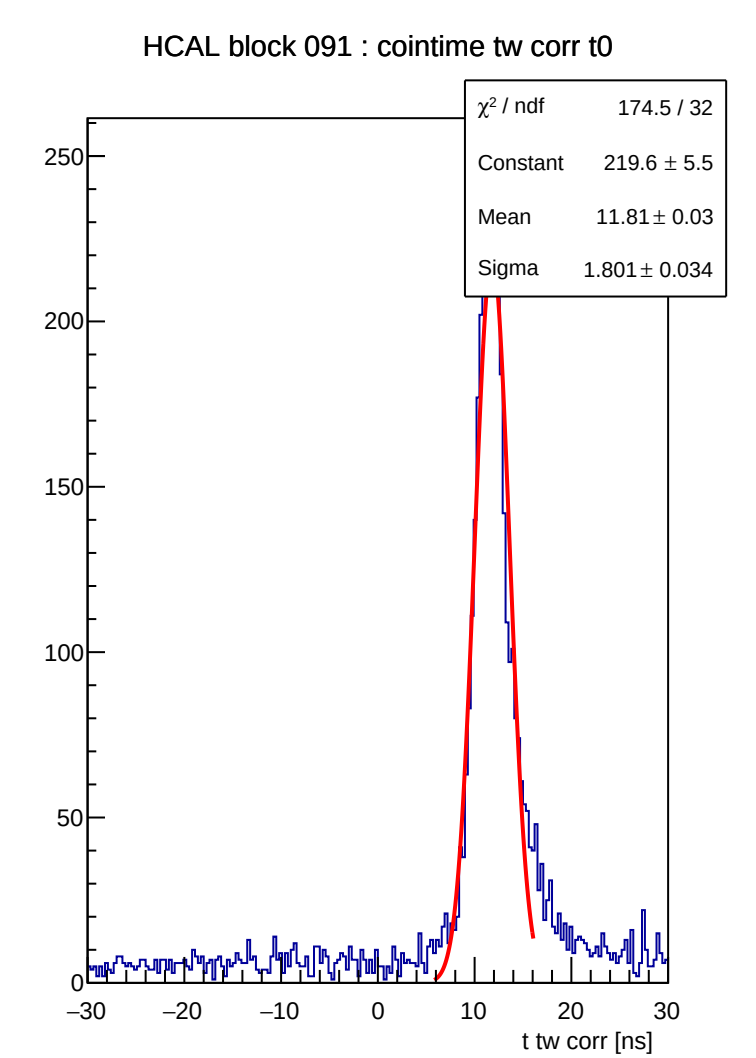

HCAL block 088 : cointime_t0
χ² / ndf 34.63 / 26
Constant 173.7 ± 4.4
Mean 11.41 ± 0.05
Sigma 2.012 ± 0.044
t [ns]
HCAL block 088 : cointime tw corr t0
χ² / ndf 63.48 / 26
Constant 182.8 ± 4.7
Mean 11.66 ± 0.04
Sigma 1.913 ± 0.039
t tw corr [ns]

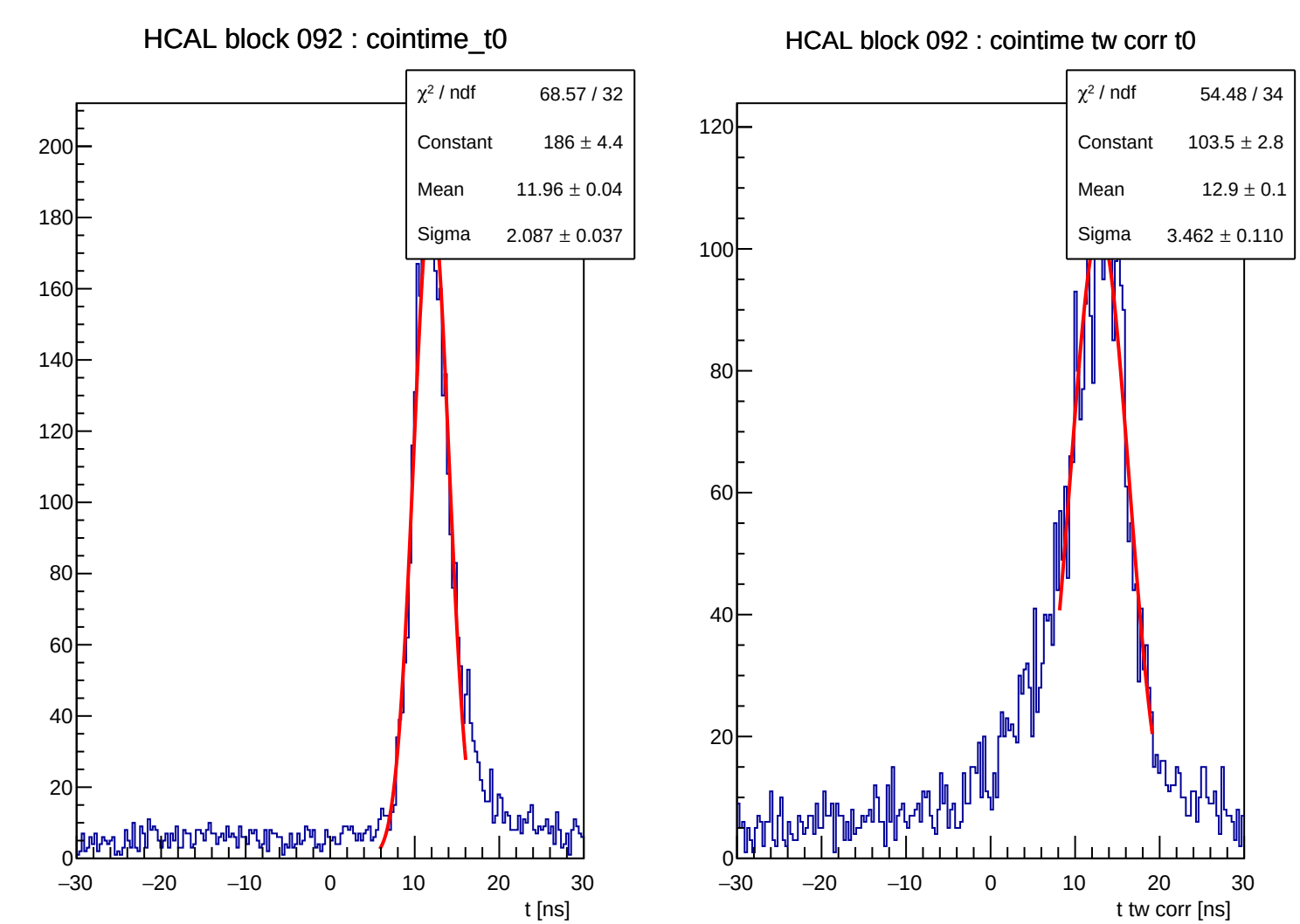

HCAL block 089 : cointime_t0
χ² / ndf 95.28 / 30
Constant 182.8 ± 4.5
Mean 11.67 ± 0.04
Sigma 2.033 ± 0.038
t [ns]
HCAL block 089 : cointime tw corr t0
χ² / ndf 95.83 / 30
Constant 193.6 ± 4.8
Mean 11.74 ± 0.04
Sigma 1.943 ± 0.036
t tw corr [ns]

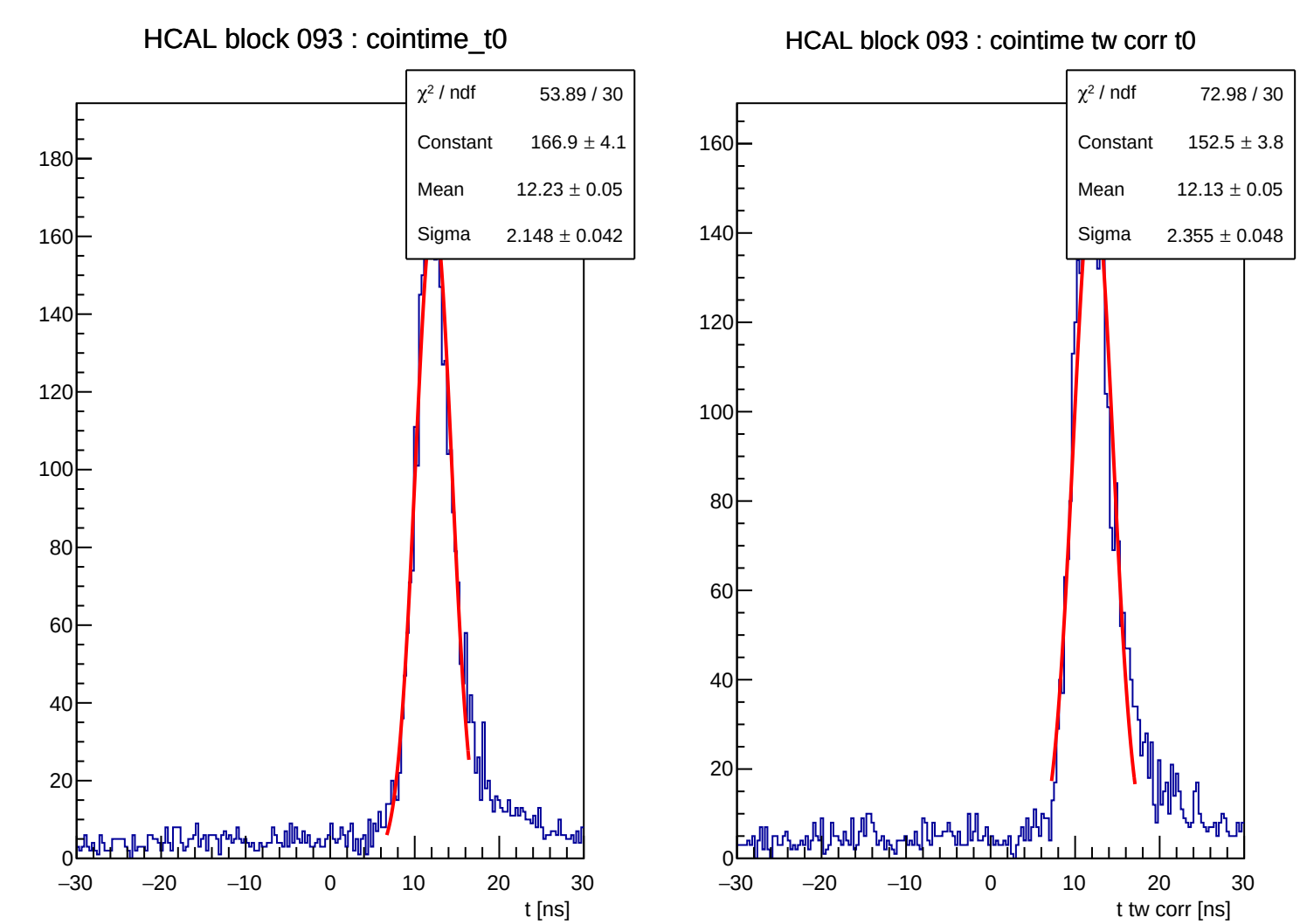

HCAL block 090 : cointime_t0
χ² / ndf 61.32 / 32
Constant 154.6 ± 3.9
Mean 11.88 ± 0.05
Sigma 2.196 ± 0.042
t [ns]

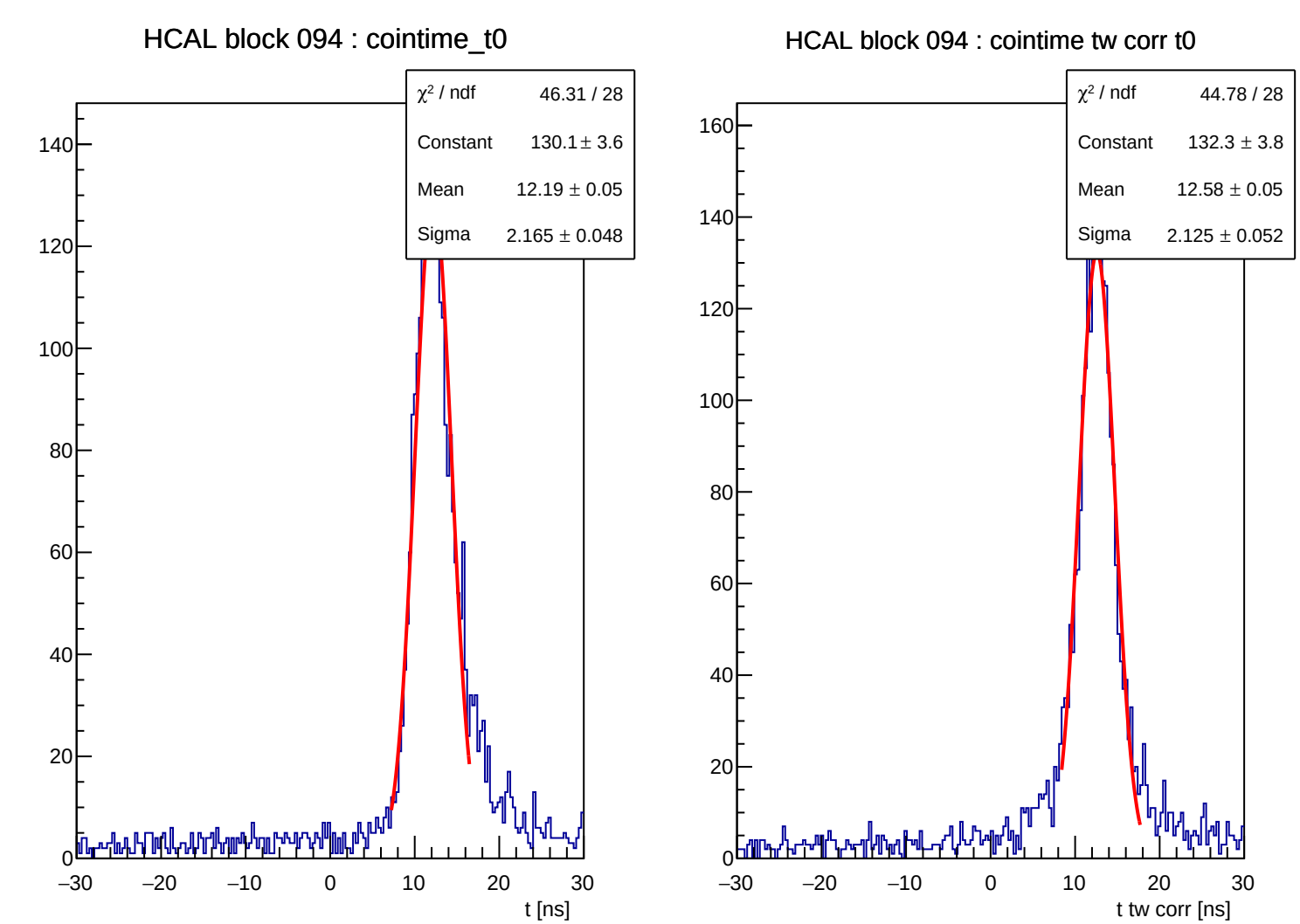

HCAL block 090 : cointime tw corr t0
χ² / ndf 143.8 / 32
Constant 180.1 ± 4.9
Mean 11.92 ± 0.04
Sigma 1.847 ± 0.038
t tw corr [ns]

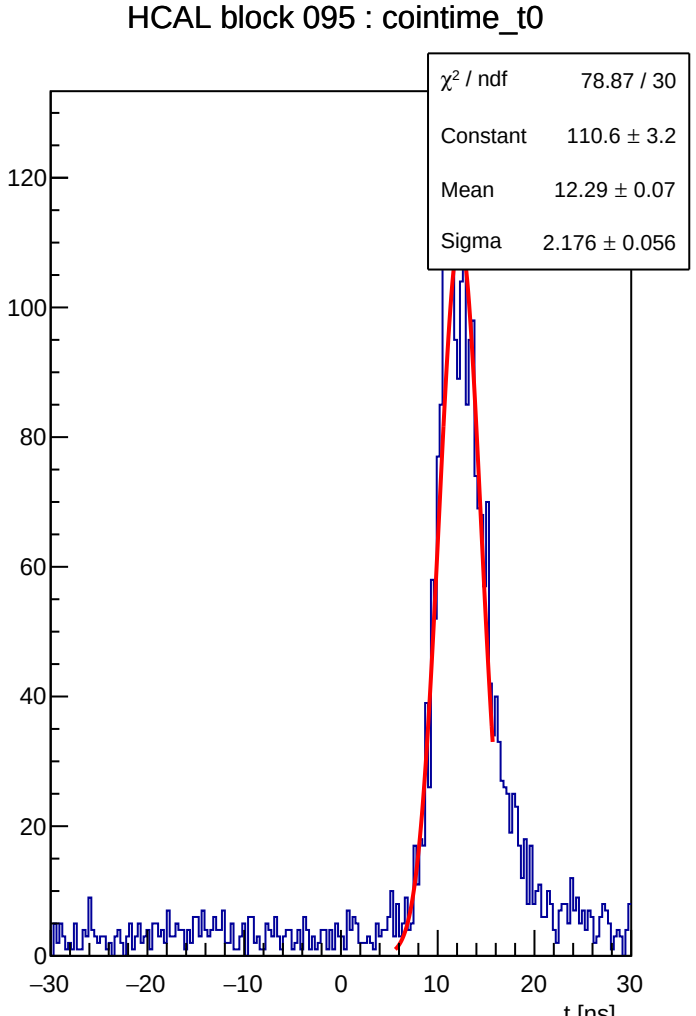

HCAL block 091 : cointime_t0
χ² / ndf 128.1 / 32
Constant 192.1 ± 4.6
Mean 11.86 ± 0.04
Sigma 2.088 ± 0.039
t [ns]

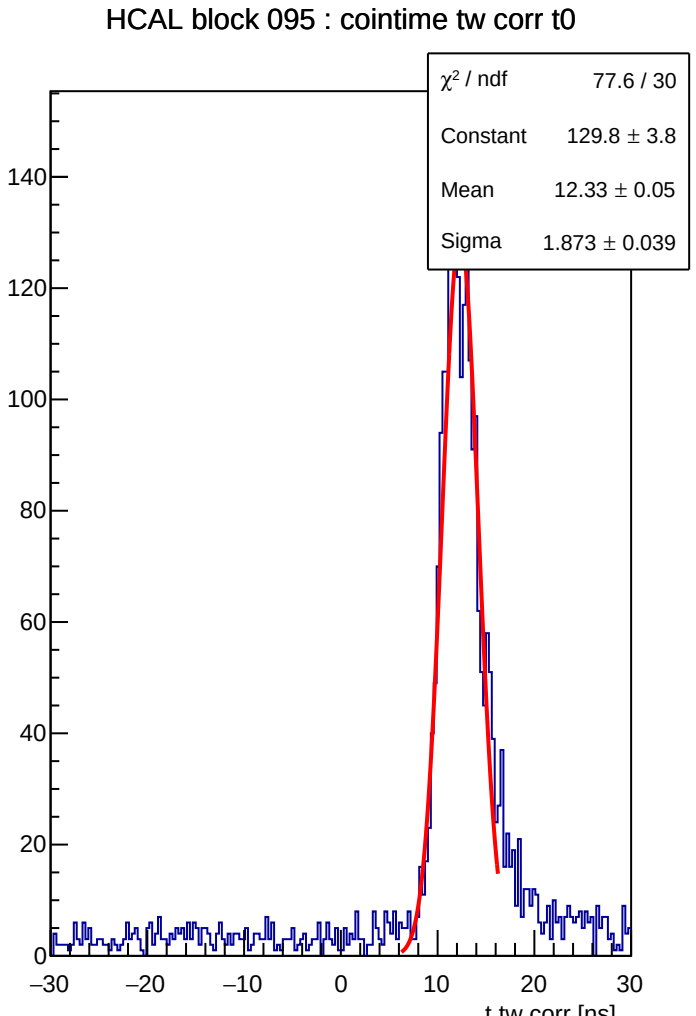

HCAL block 091 : cointime tw corr t0
χ² / ndf 174.5 / 32
Constant 219.6 ± 5.5
Mean 11.81 ± 0.03
Sigma 1.801 ± 0.034
t tw corr [ns]

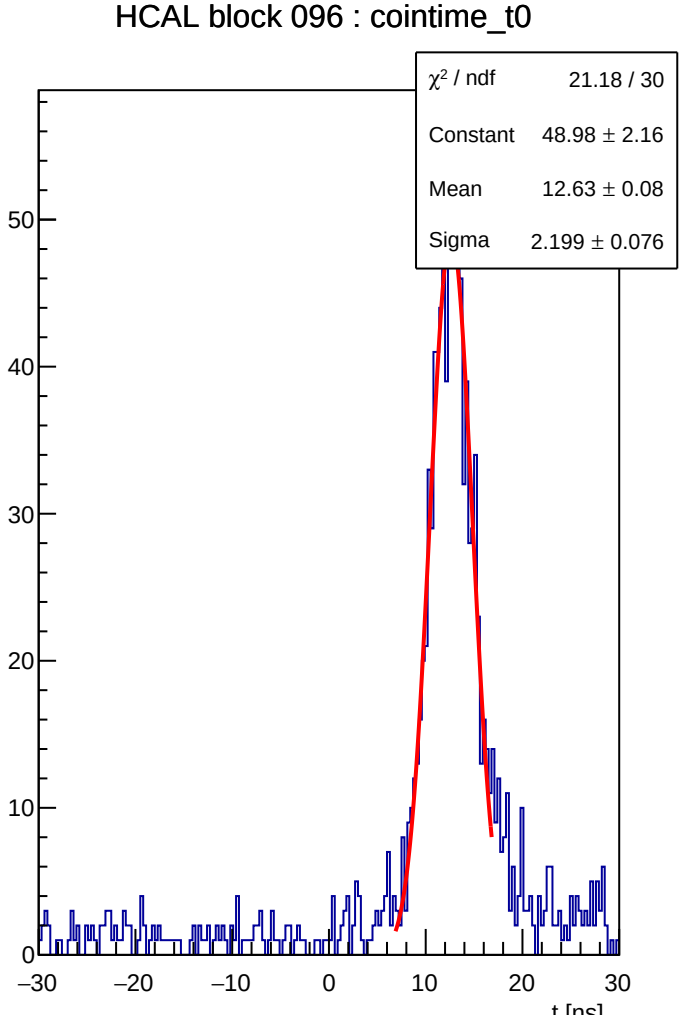

HCAL block 092 : cointime_t0
χ² / ndf 68.57 / 32
Constant 186 ± 4.4
Mean 11.96 ± 0.04
Sigma 2.087 ± 0.037
t [ns]
HCAL block 092 : cointime tw corr t0
χ² / ndf 54.48 / 34
Constant 103.5 ± 2.8
Mean 12.9 ± 0.1
Sigma 3.462 ± 0.110
t tw corr [ns]

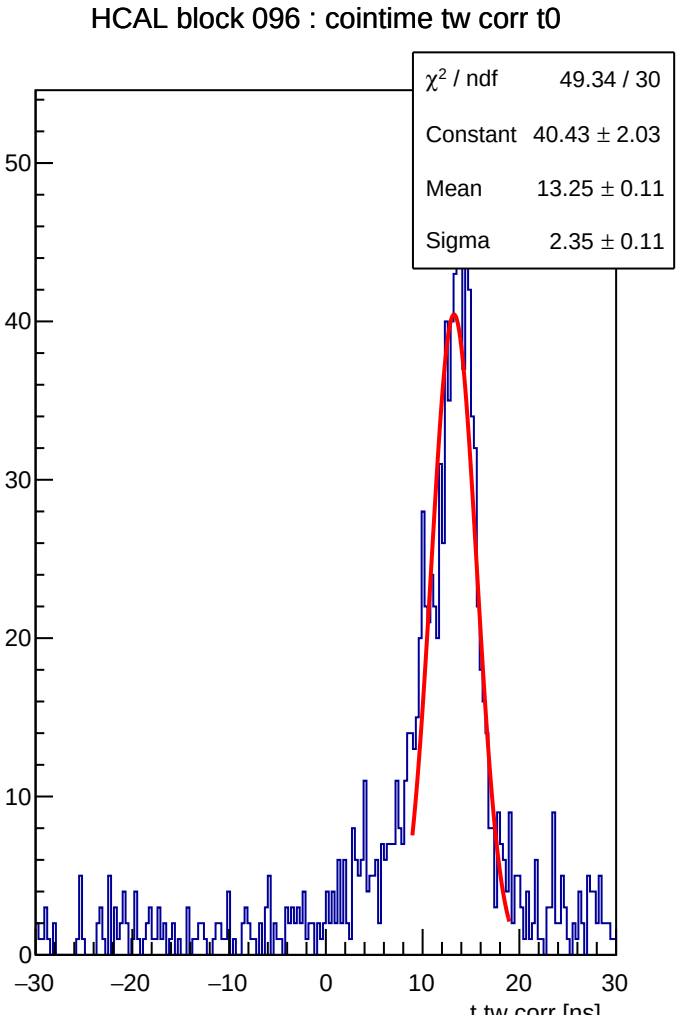

HCAL block 093 : cointime_t0
χ² / ndf 53.89 / 30
Constant 166.9 ± 4.1
Mean 12.23 ± 0.05
Sigma 2.148 ± 0.042
t [ns]
HCAL block 093 : cointime tw corr t0
χ² / ndf 72.98 / 30
Constant 152.5 ± 3.8
Mean 12.13 ± 0.05
Sigma 2.355 ± 0.048
t tw corr [ns]

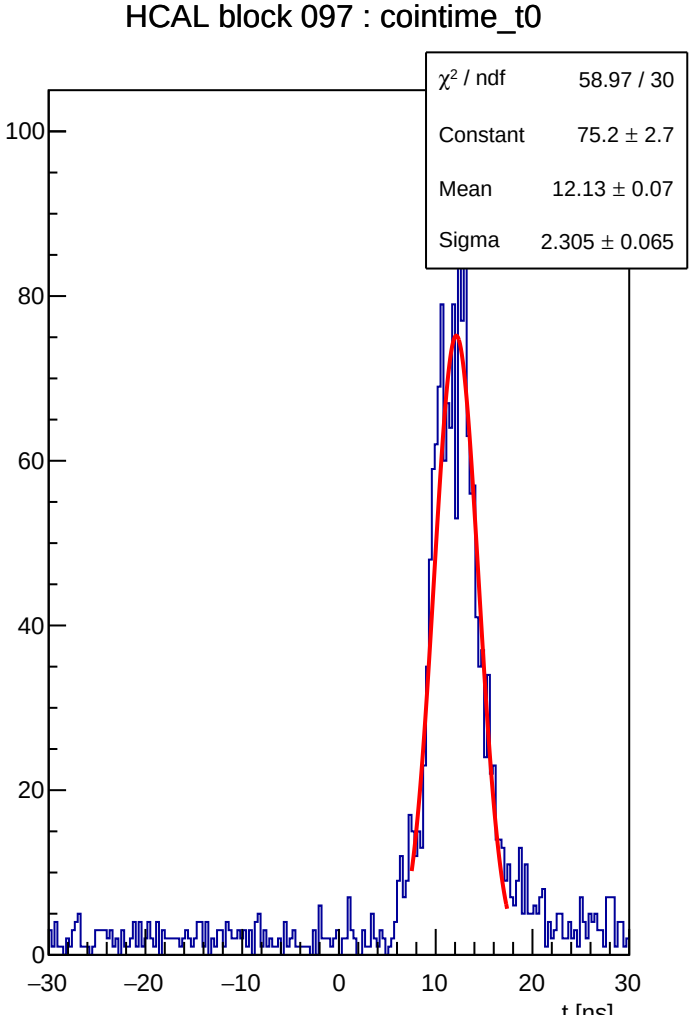

HCAL block 094 : cointime_t0
χ² / ndf 46.31 / 28
Constant 130.1 ± 3.6
Mean 12.19 ± 0.05
Sigma 2.165 ± 0.048
t [ns]
HCAL block 094 : cointime tw corr t0
χ² / ndf 44.78 / 28
Constant 132.3 ± 3.8
Mean 12.58 ± 0.05
Sigma 2.125 ± 0.052
t tw corr [ns]

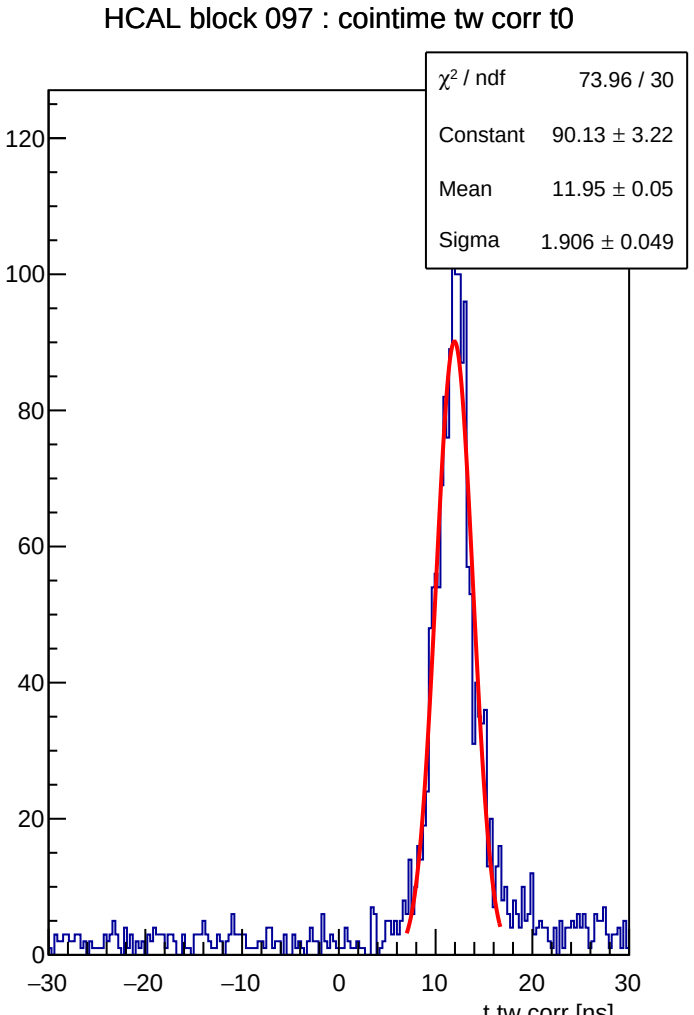

HCAL block 095 : cointime_t0
χ² / ndf 78.87 / 30
Constant 110.6 ± 3.2
Mean 12.29 ± 0.07
Sigma 2.176 ± 0.056
0
20
40
60
80
100
120
–30
–20
–10
0
10
20
30
t [ns]

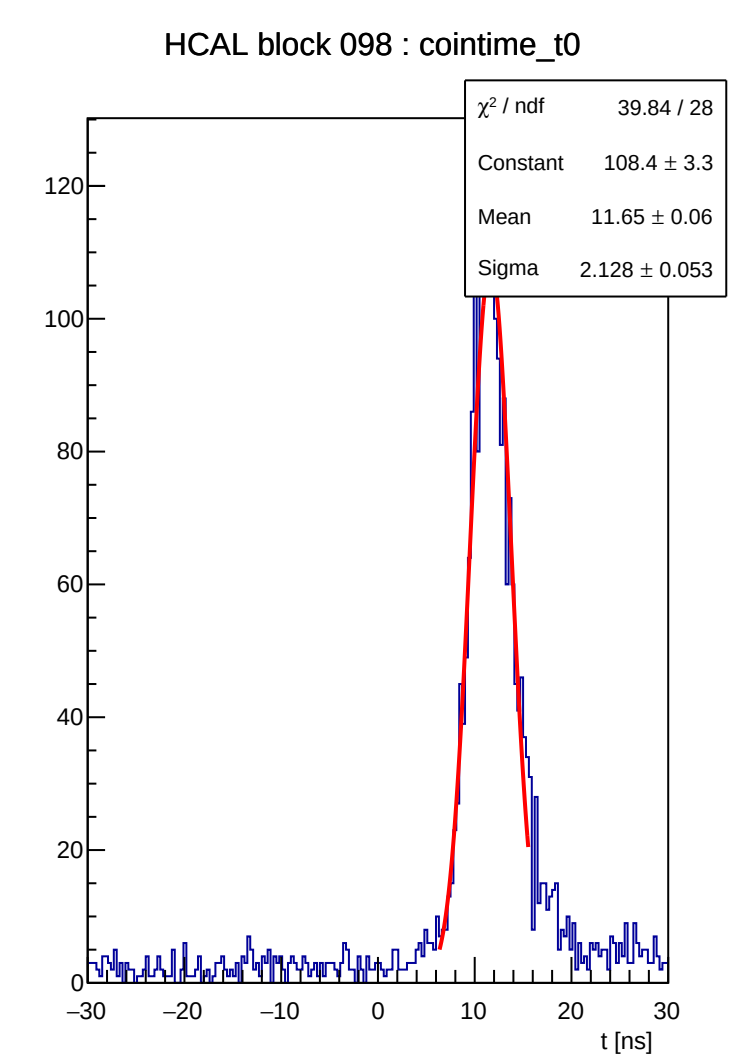

HCAL block 095 : cointime tw corr t0
χ² / ndf 77.6 / 30
Constant 129.8 ± 3.8
Mean 12.33 ± 0.05
Sigma 1.873 ± 0.039
0
20
40
60
80
100
120
140
–30
–20
–10
0
10
20
30
t tw corr [ns]

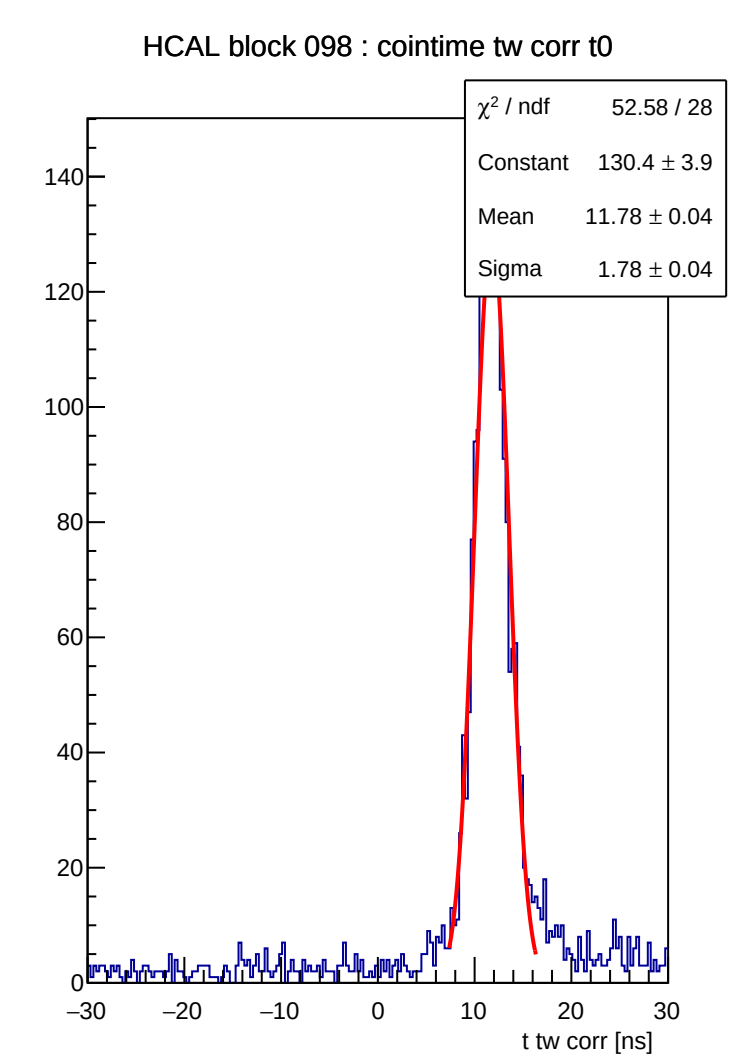

HCAL block 096 : cointime_t0
χ² / ndf 21.18 / 30
Constant 48.98 ± 2.16
Mean 12.63 ± 0.08
Sigma 2.199 ± 0.076
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t [ns]

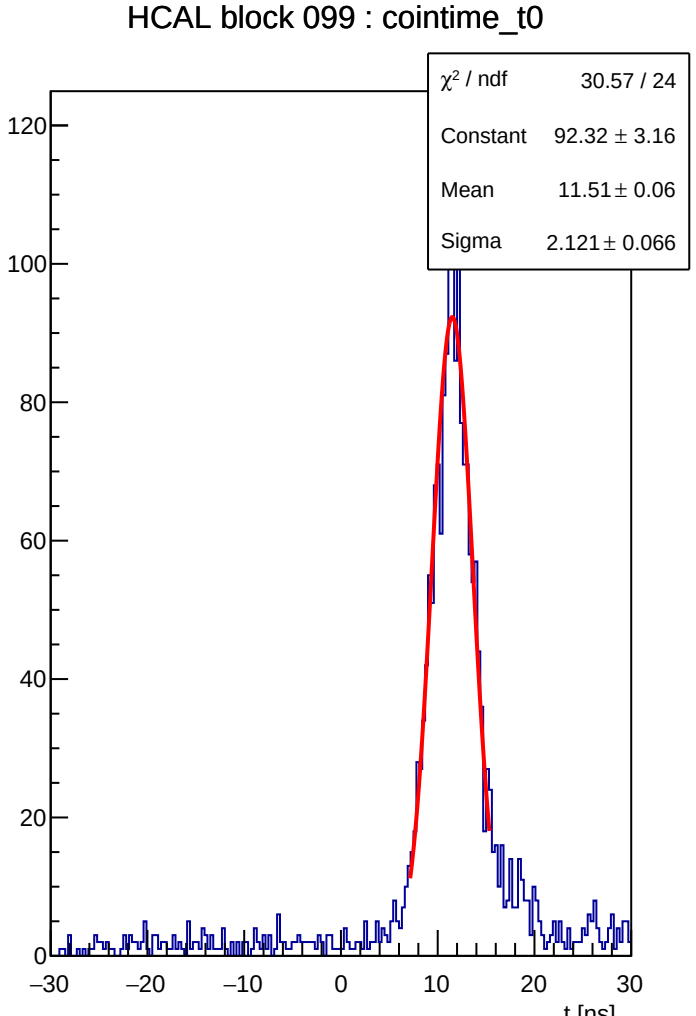

HCAL block 096 : cointime tw corr t0
χ² / ndf 49.34 / 30
Constant 40.43 ± 2.03
Mean 13.25 ± 0.11
Sigma 2.35 ± 0.11
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

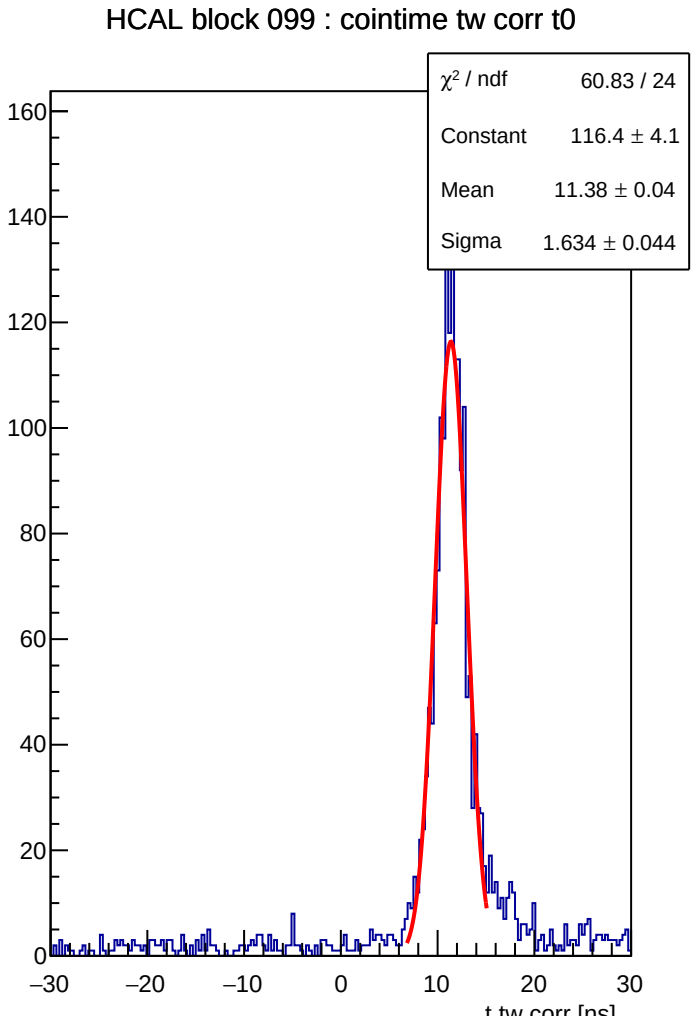

HCAL block 097 : cointime_t0
χ² / ndf 58.97 / 30
Constant 75.2 ± 2.7
Mean 12.13 ± 0.07
Sigma 2.305 ± 0.065
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

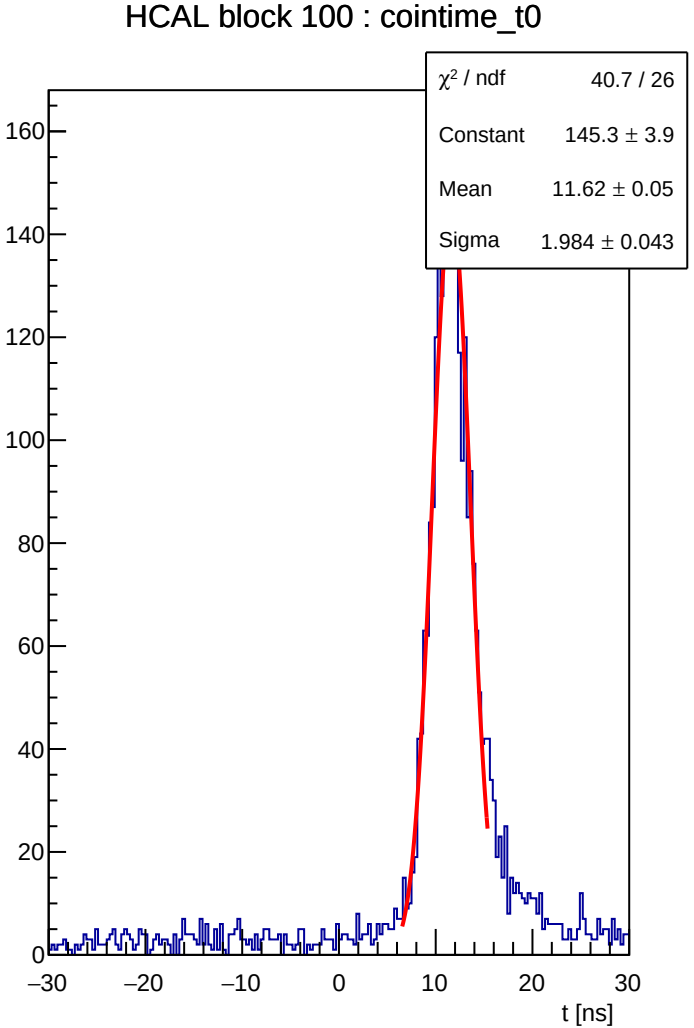

HCAL block 097 : cointime tw corr t0
χ² / ndf 73.96 / 30
Constant 90.13 ± 3.22
Mean 11.95 ± 0.05
Sigma 1.906 ± 0.049
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

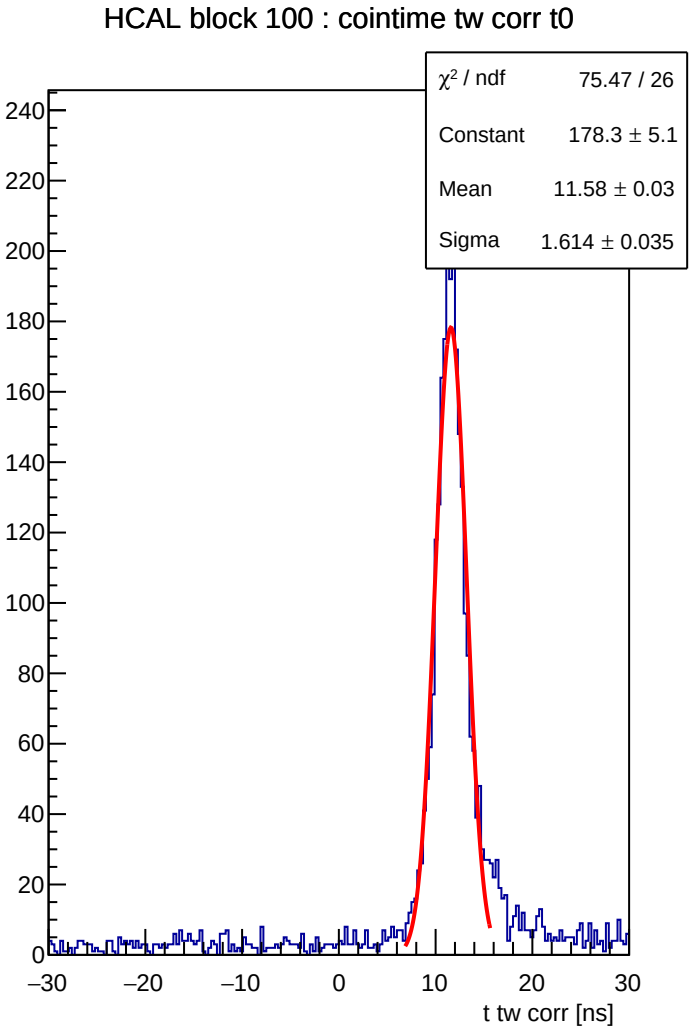

HCAL block 098 : cointime_t0
χ² / ndf 39.84 / 28
Constant 108.4 ± 3.3
Mean 11.65 ± 0.06
Sigma 2.128 ± 0.053
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

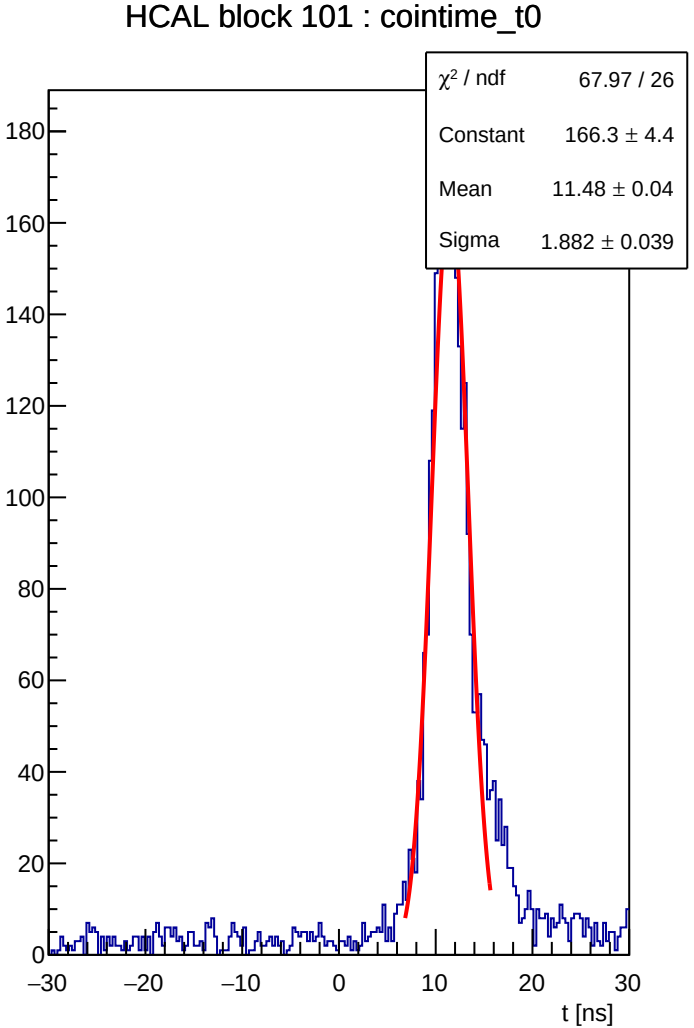

HCAL block 098 : cointime tw corr t0
χ² / ndf 52.58 / 28
Constant 130.4 ± 3.9
Mean 11.78 ± 0.04
Sigma 1.78 ± 0.04
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

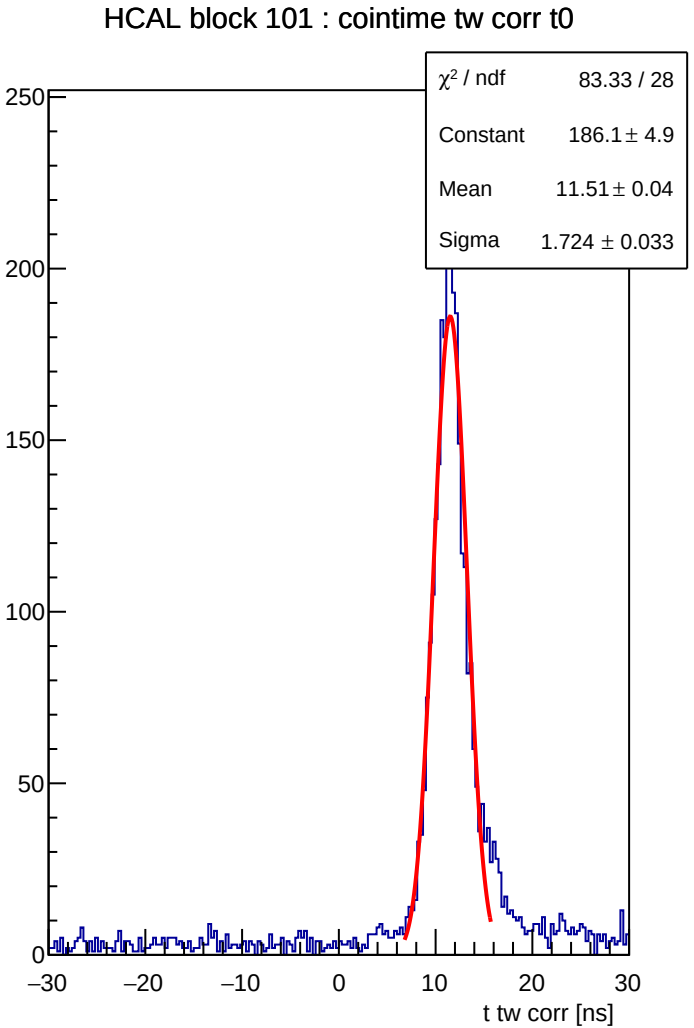

HCAL block 099 : cointime_t0
χ² / ndf 30.57 / 24
Constant 92.32 ± 3.16
Mean 11.51 ± 0.06
Sigma 2.121 ± 0.066
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

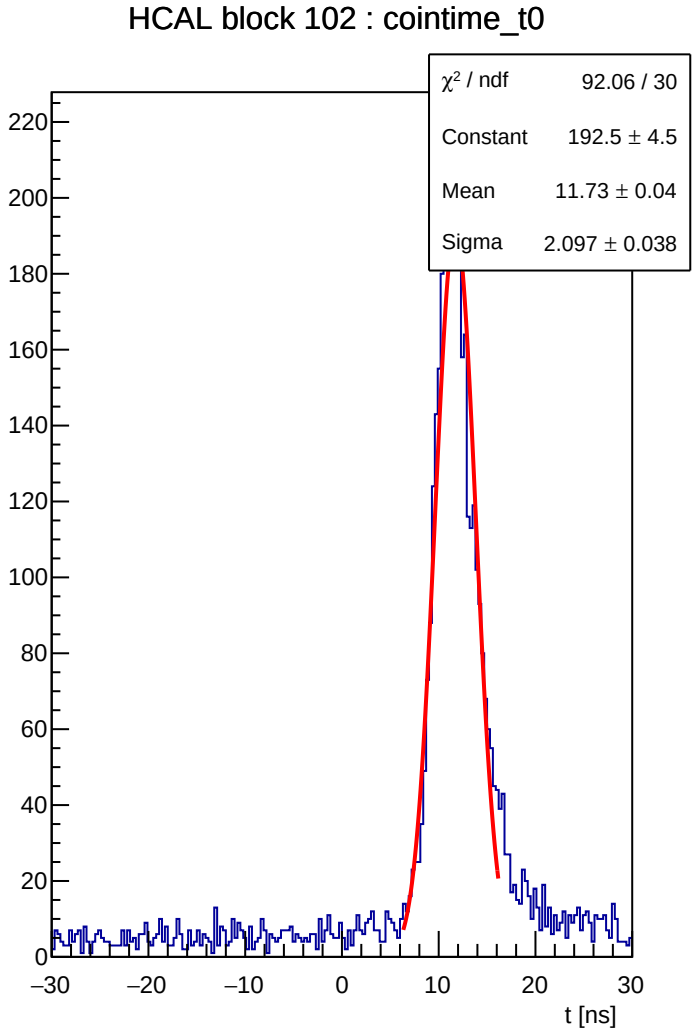

HCAL block 099 : cointime tw corr t0
χ² / ndf 60.83 / 24
Constant 116.4 ± 4.1
Mean 11.38 ± 0.04
Sigma 1.634 ± 0.044
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

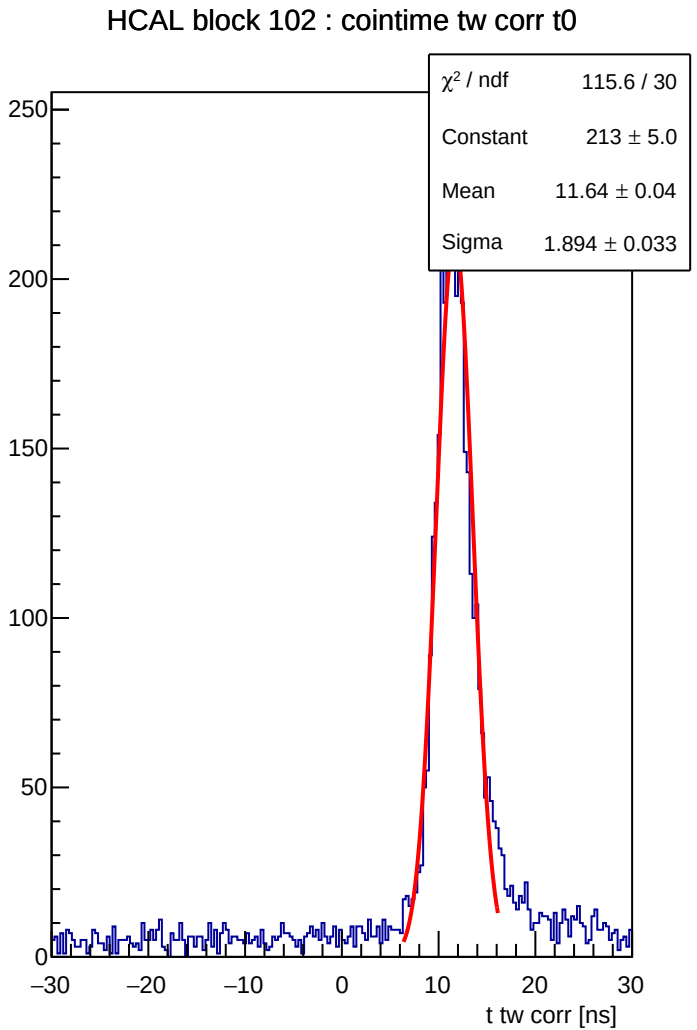

HCAL block 100 : cointime_t0
χ² / ndf 40.7 / 26
Constant 145.3 ± 3.9
Mean 11.62 ± 0.05
Sigma 1.984 ± 0.043
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

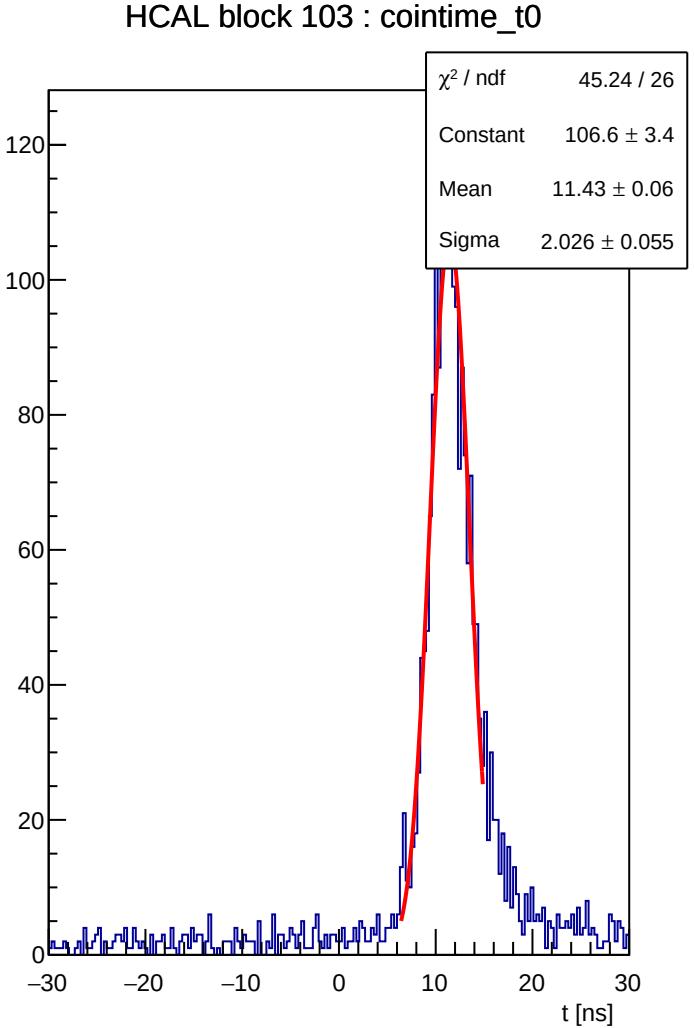

HCAL block 100 : cointime tw corr t0
χ² / ndf 75.47 / 26
Constant 178.3 ± 5.1
Mean 11.58 ± 0.03
Sigma 1.614 ± 0.035
240
220
200
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

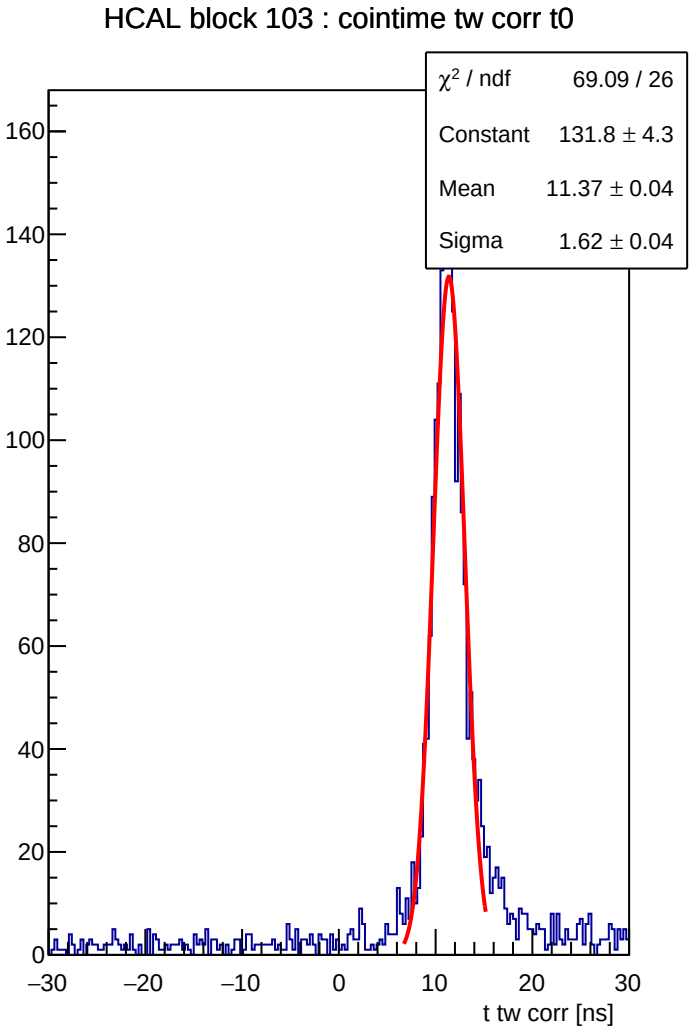

HCAL block 101 : cointime_t0
χ² / ndf 67.97 / 26
Constant 166.3 ± 4.4
Mean 11.48 ± 0.04
Sigma 1.882 ± 0.039
180
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

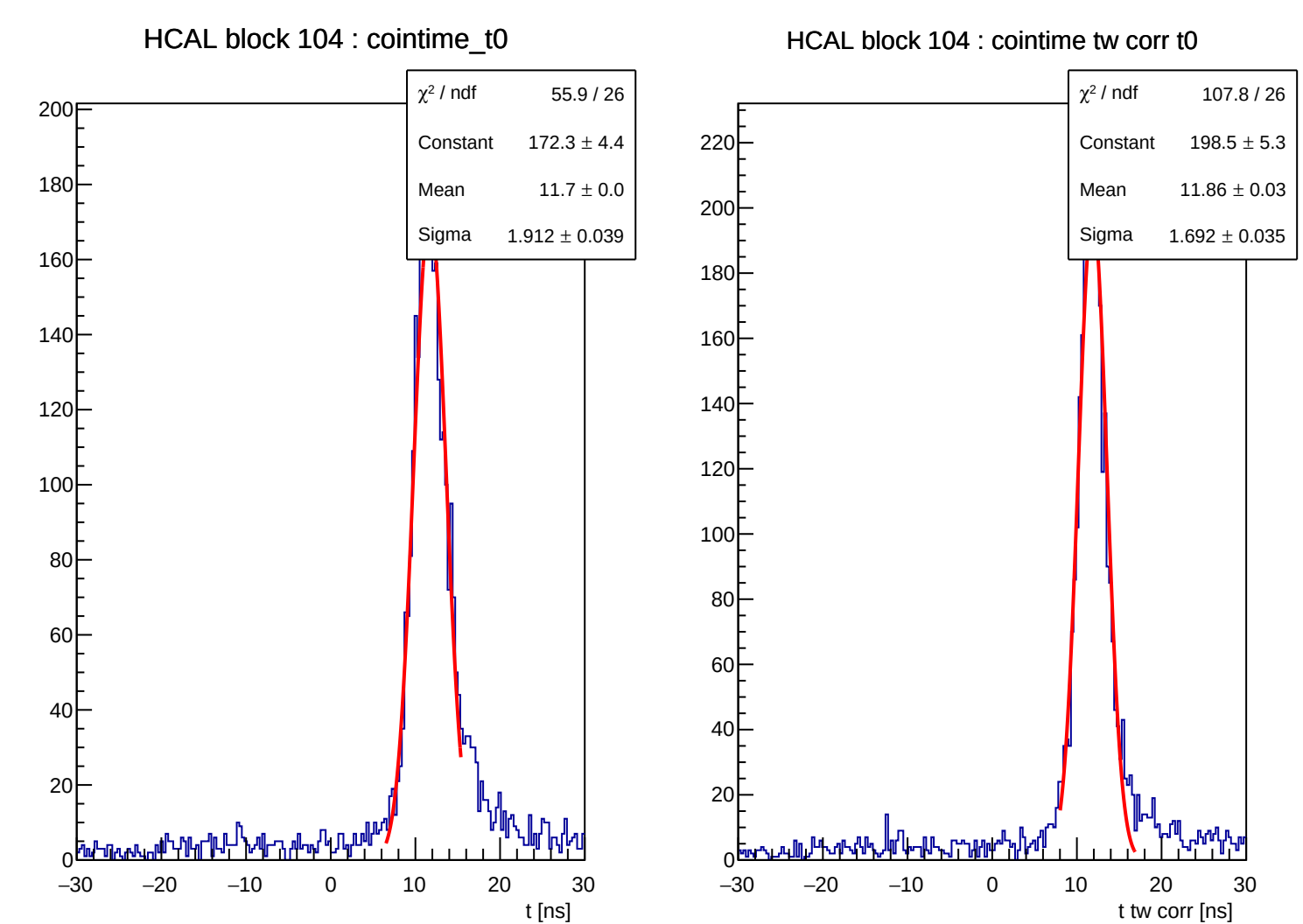

HCAL block 101 : cointime tw corr t0
χ² / ndf 83.33 / 28
Constant 186.1 ± 4.9
Mean 11.51 ± 0.04
Sigma 1.724 ± 0.033
250
200
150
100
50
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

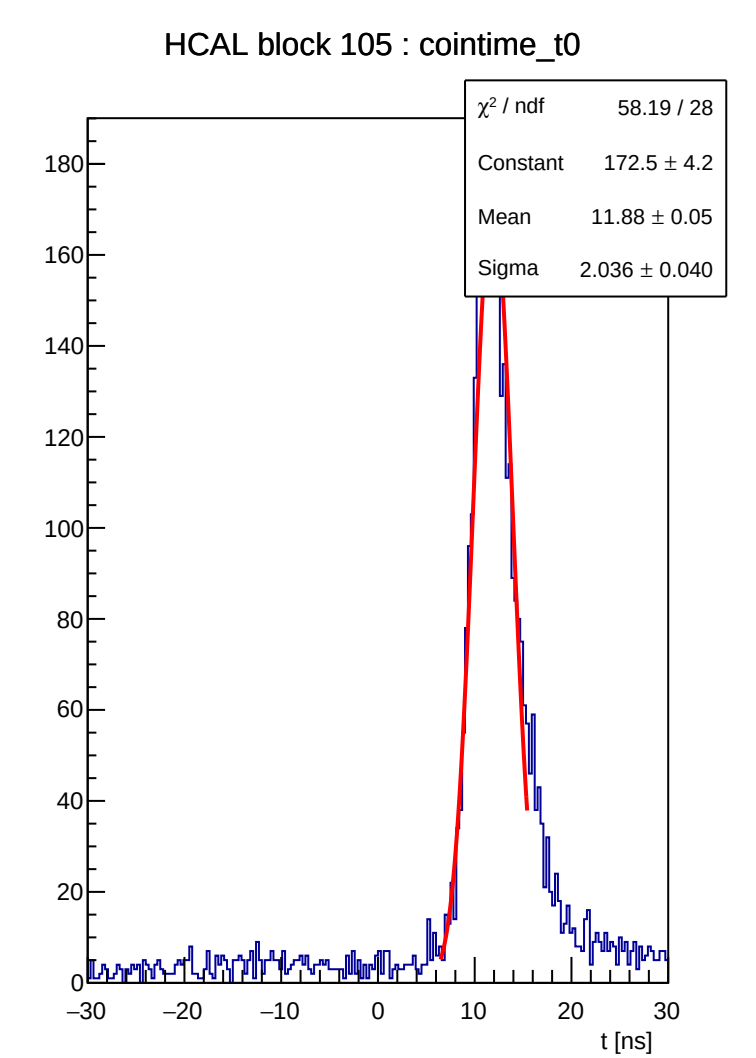

HCAL block 102 : cointime_t0
χ² / ndf 92.06 / 30
Constant 192.5 ± 4.5
Mean 11.73 ± 0.04
Sigma 2.097 ± 0.038
t [ns]

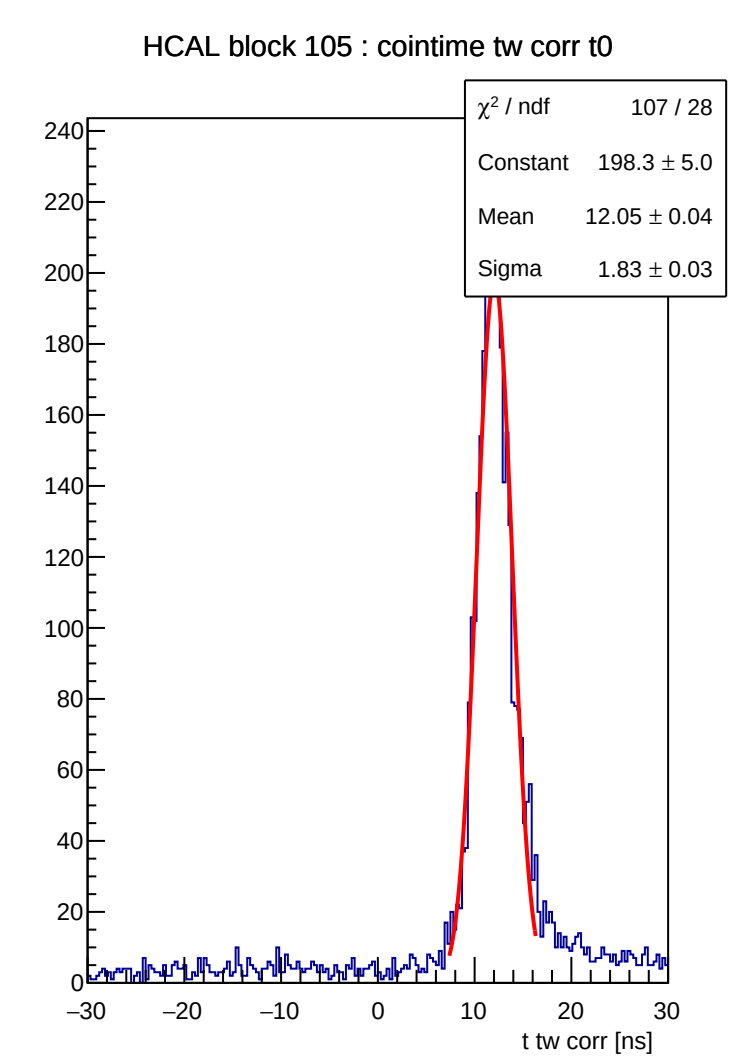

HCAL block 102 : cointime tw corr t0
χ² / ndf 115.6 / 30
Constant 213 ± 5.0
Mean 11.64 ± 0.04
Sigma 1.894 ± 0.033
t tw corr [ns]

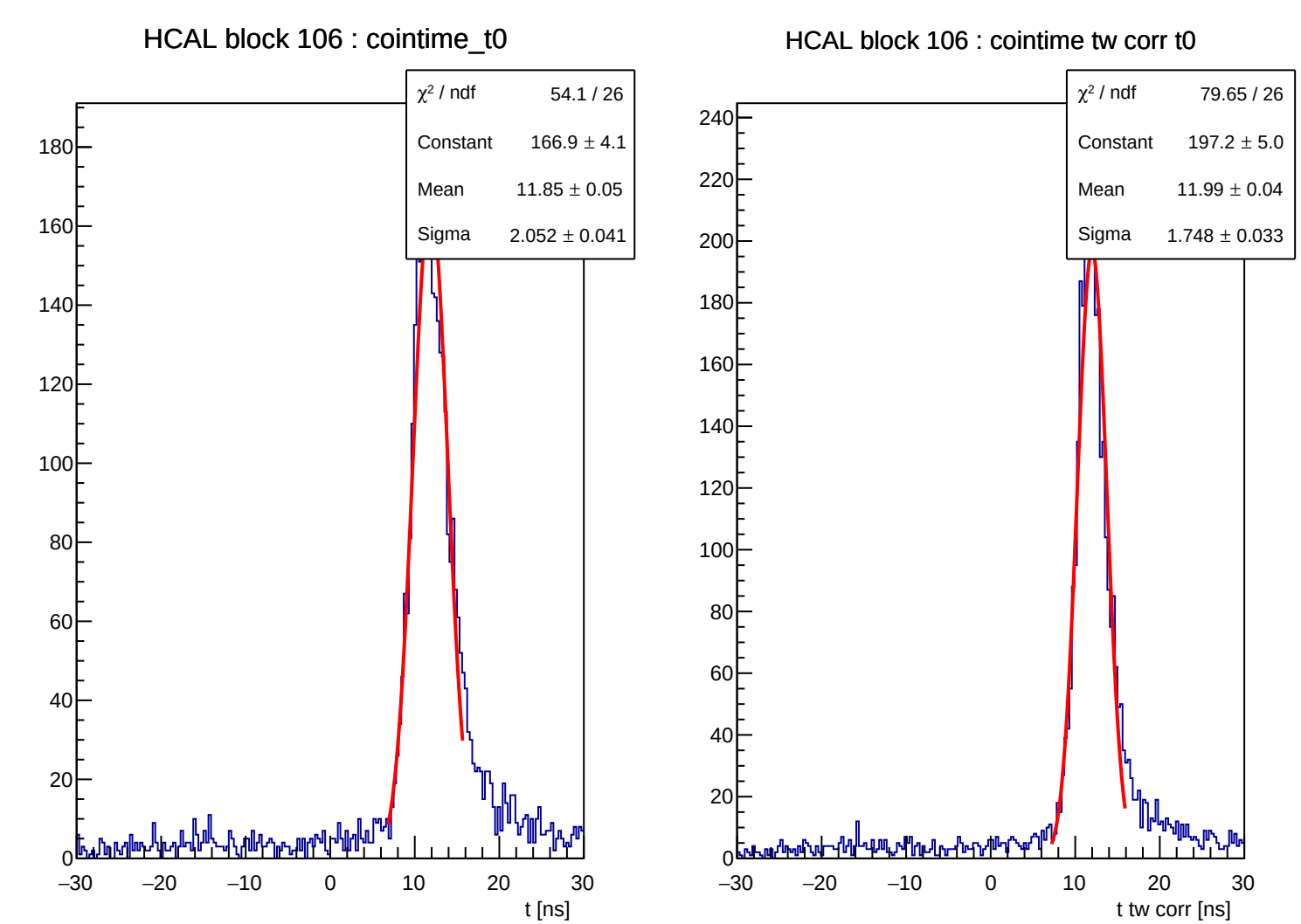

HCAL block 103 : cointime_t0
χ² / ndf 45.24 / 26
Constant 106.6 ± 3.4
Mean 11.43 ± 0.06
Sigma 2.026 ± 0.055
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

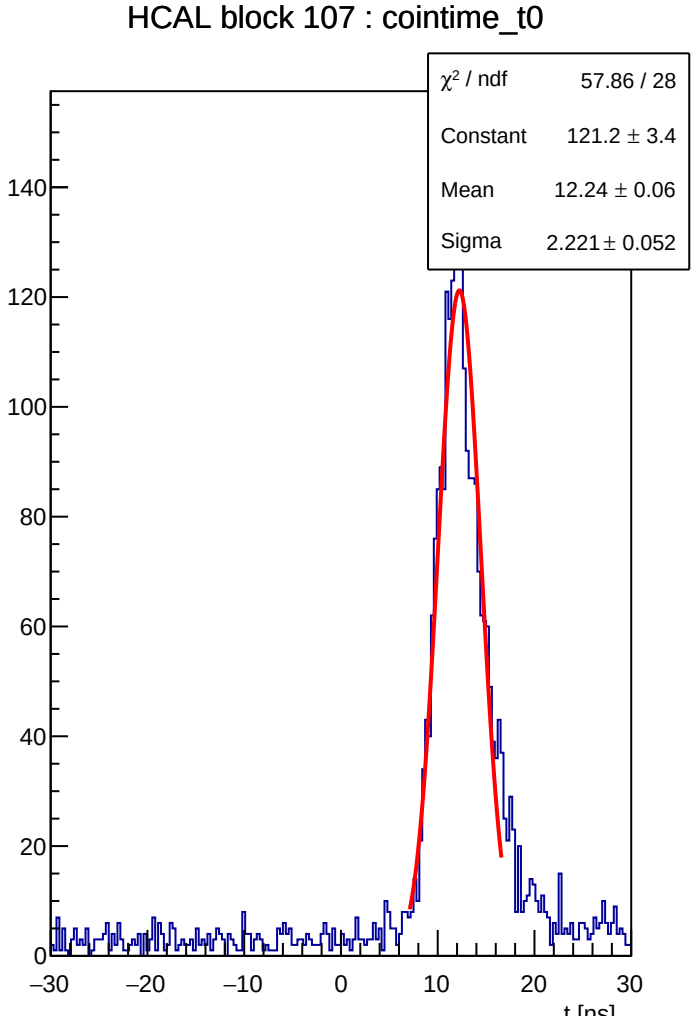

HCAL block 103 : cointime tw corr t0
χ² / ndf 69.09 / 26
Constant 131.8 ± 4.3
Mean 11.37 ± 0.04
Sigma 1.62 ± 0.04
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

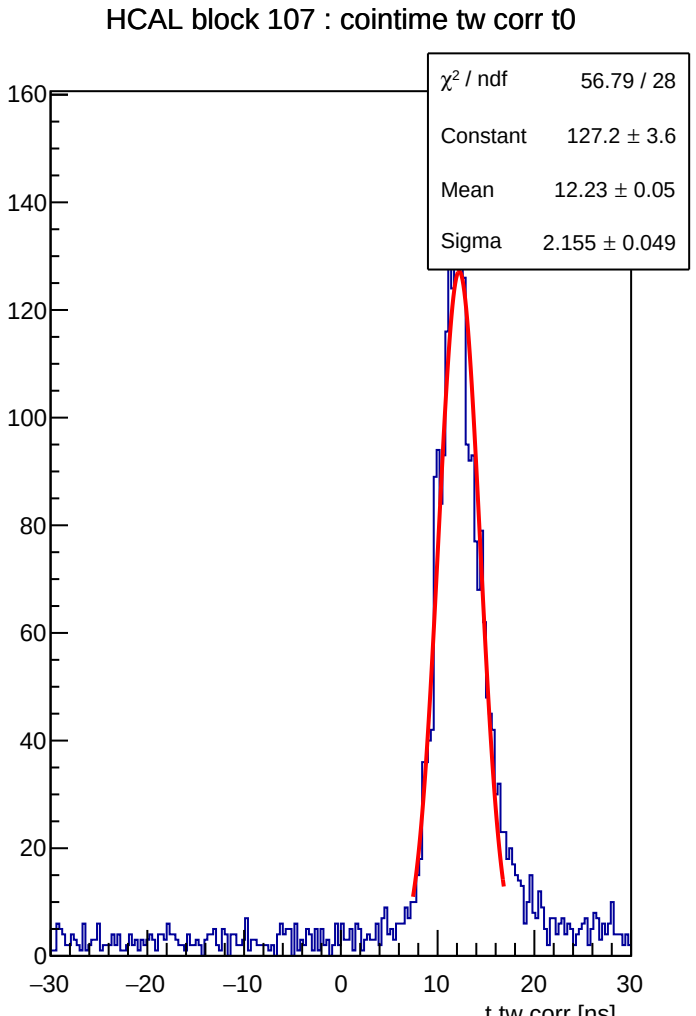

HCAL block 104 : cointime_t0
χ² / ndf 55.9 / 26
Constant 172.3 ± 4.4
Mean 11.7 ± 0.0
Sigma 1.912 ± 0.039
t [ns]
HCAL block 104 : cointime tw corr t0
χ² / ndf 107.8 / 26
Constant 198.5 ± 5.3
Mean 11.86 ± 0.03
Sigma 1.692 ± 0.035
t tw corr [ns]

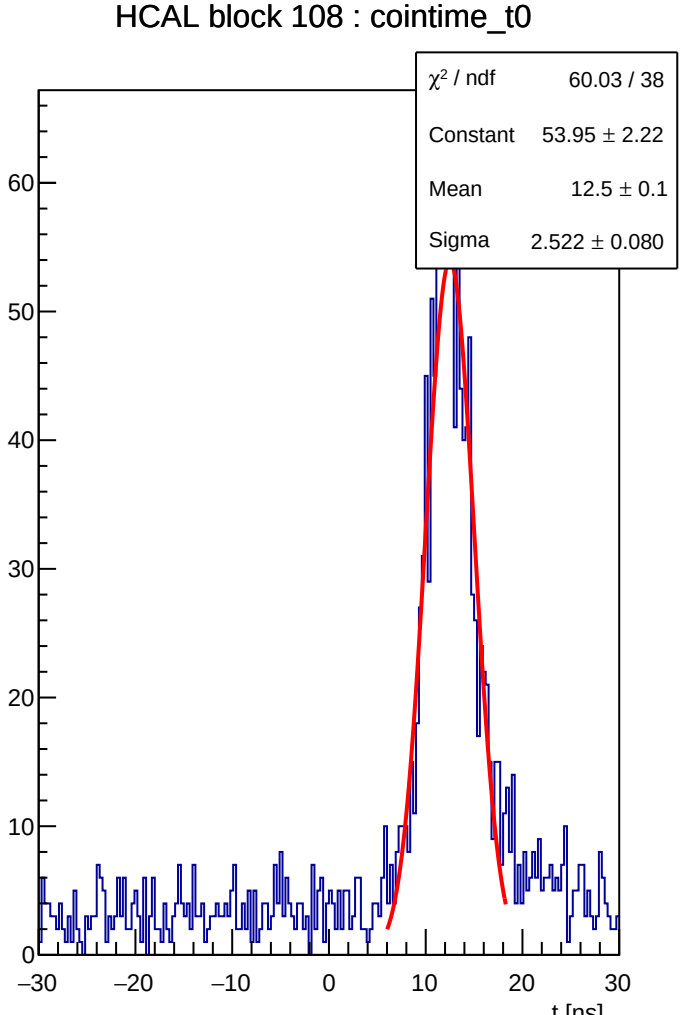

HCAL block 105 : cointime_t0
χ² / ndf 58.19 / 28
Constant 172.5 ± 4.2
Mean 11.88 ± 0.05
Sigma 2.036 ± 0.040
t [ns]

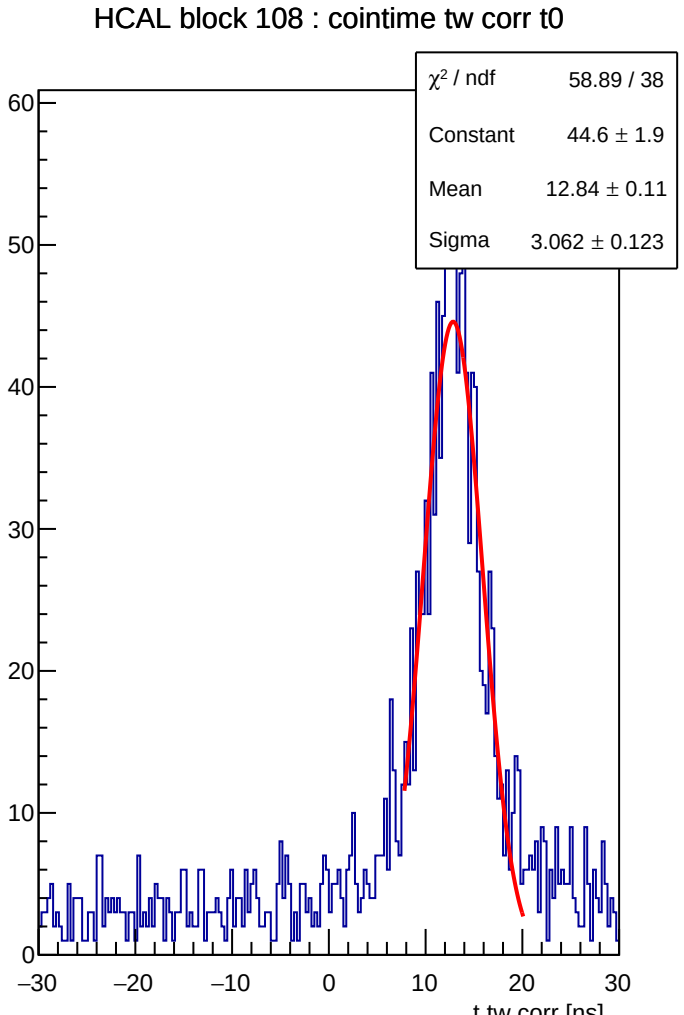

HCAL block 105 : cointime tw corr t0
χ² / ndf 107 / 28
Constant 198.3 ± 5.0
Mean 12.05 ± 0.04
Sigma 1.83 ± 0.03
t tw corr [ns]

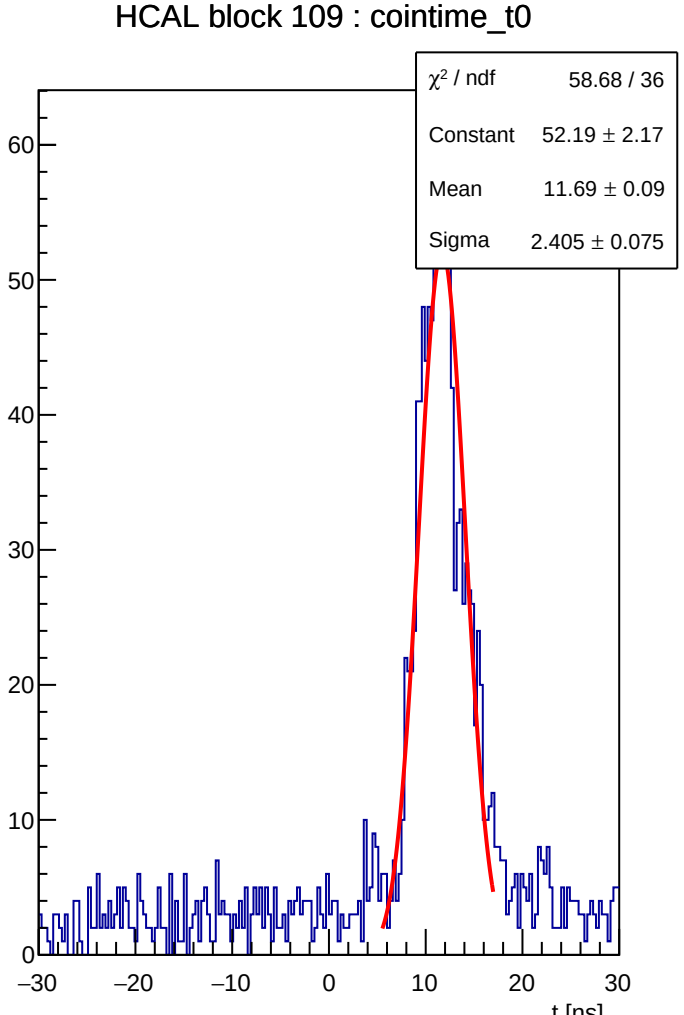

HCAL block 106 : cointime_t0
χ² / ndf 54.1 / 26
Constant 166.9 ± 4.1
Mean 11.85 ± 0.05
Sigma 2.052 ± 0.041
t [ns]
HCAL block 106 : cointime tw corr t0
χ² / ndf 79.65 / 26
Constant 197.2 ± 5.0
Mean 11.99 ± 0.04
Sigma 1.748 ± 0.033
t tw corr [ns]

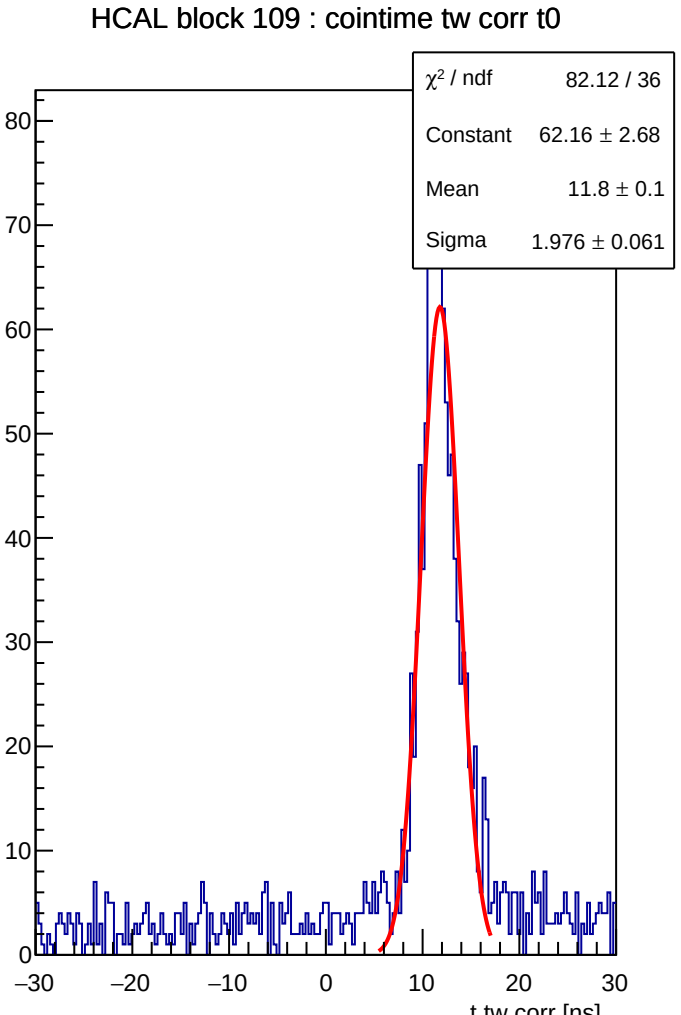

HCAL block 107 : cointime_t0
χ² / ndf 57.86 / 28
Constant 121.2 ± 3.4
Mean 12.24 ± 0.06
Sigma 2.221 ± 0.052
t [ns]

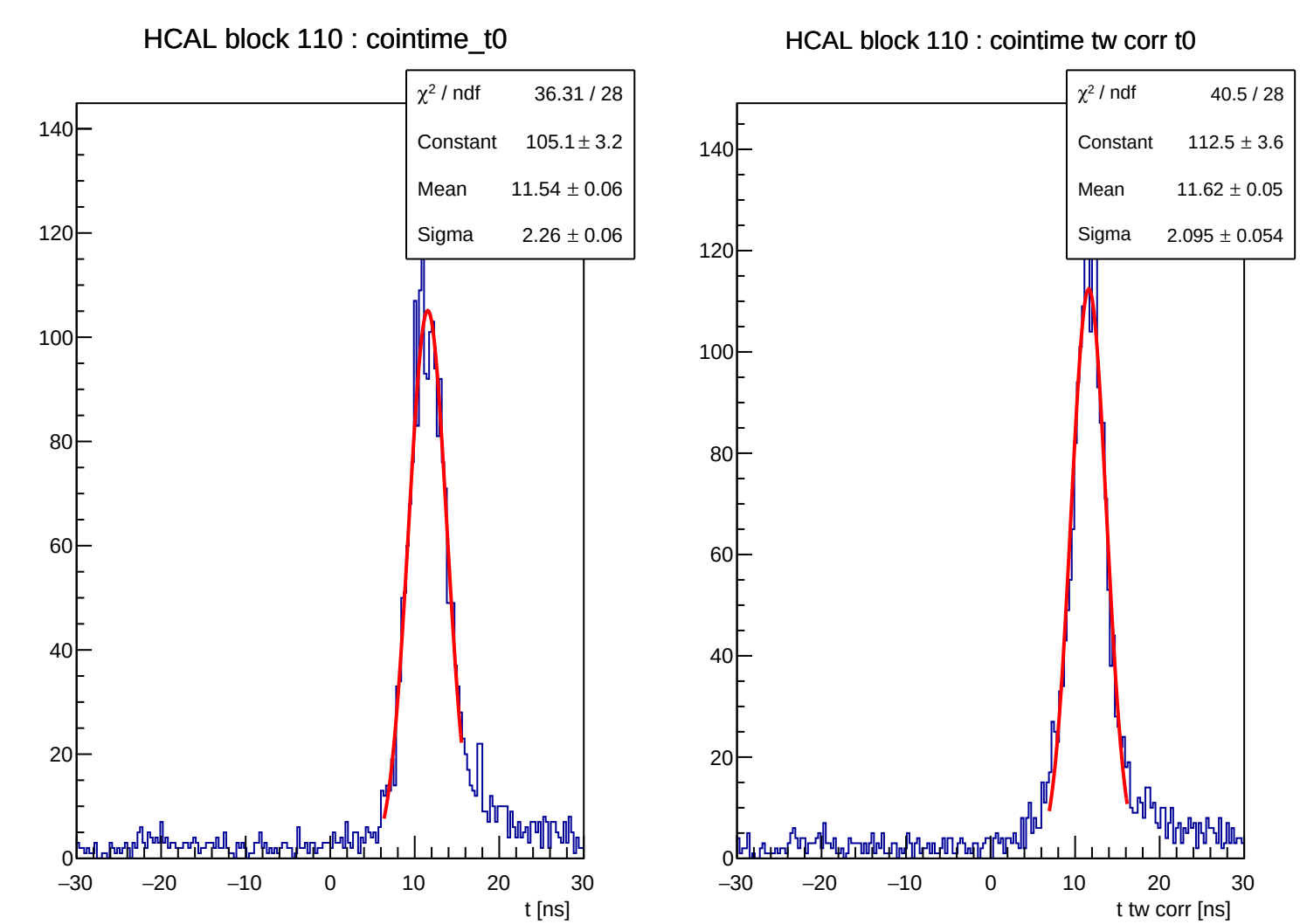

HCAL block 107 : cointime tw corr t0
χ² / ndf 56.79 / 28
Constant 127.2 ± 3.6
Mean 12.23 ± 0.05
Sigma 2.155 ± 0.049
t tw corr [ns]

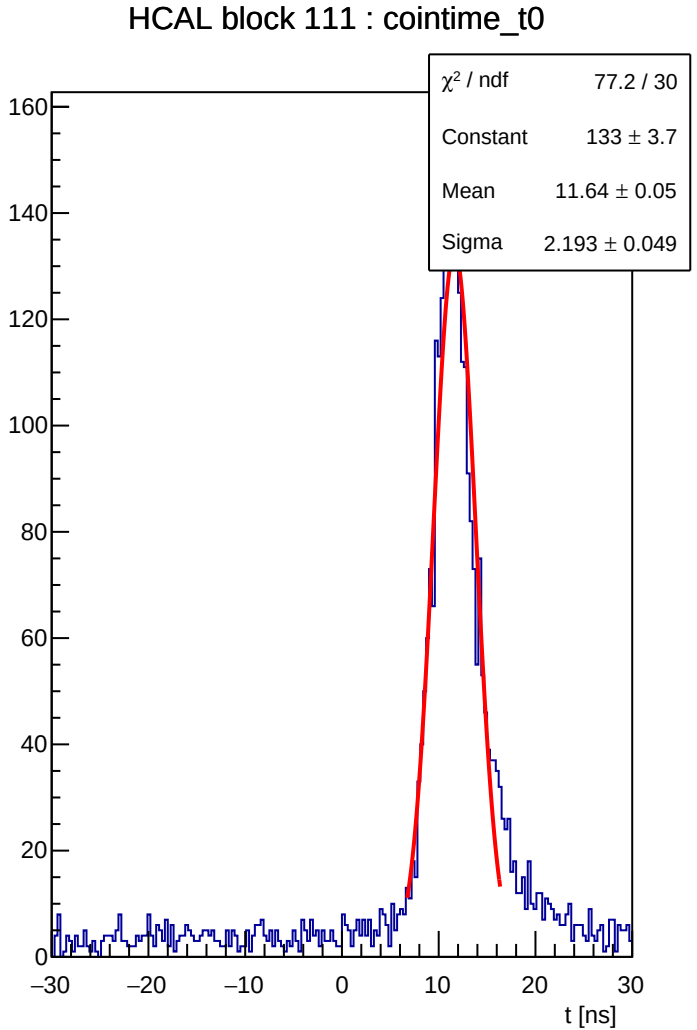

HCAL block 108 : cointime_t0
χ² / ndf 60.03 / 38
Constant 53.95 ± 2.22
Mean 12.5 ± 0.1
Sigma 2.522 ± 0.080
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t [ns]

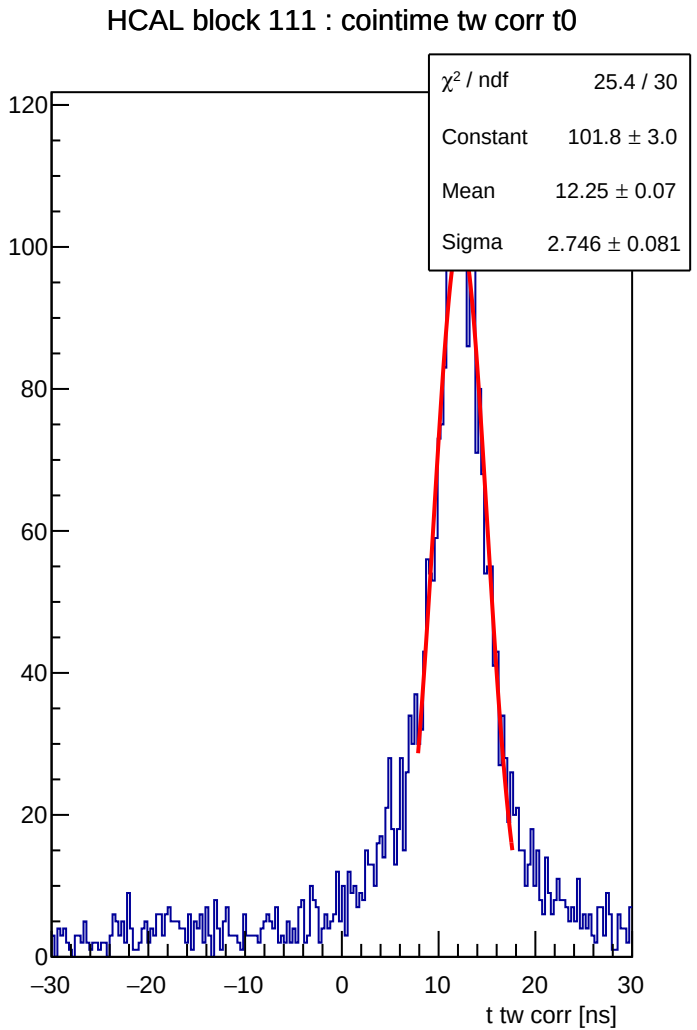

HCAL block 108 : cointime tw corr t0
χ² / ndf 58.89 / 38
Constant 44.6 ± 1.9
Mean 12.84 ± 0.11
Sigma 3.062 ± 0.123
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

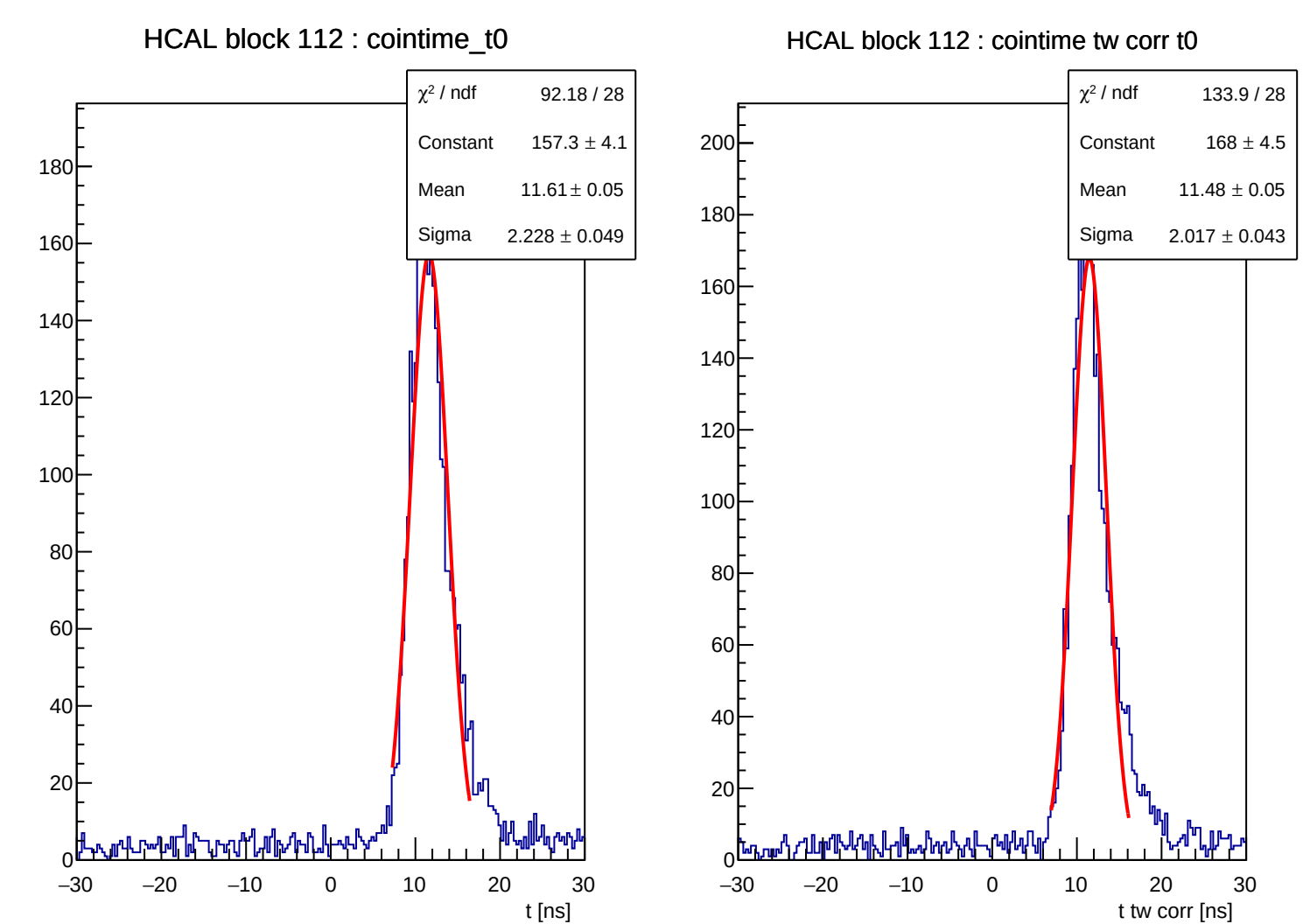

HCAL block 109 : cointime_t0
χ² / ndf 58.68 / 36
Constant 52.19 ± 2.17
Mean 11.69 ± 0.09
Sigma 2.405 ± 0.075
t [ns]

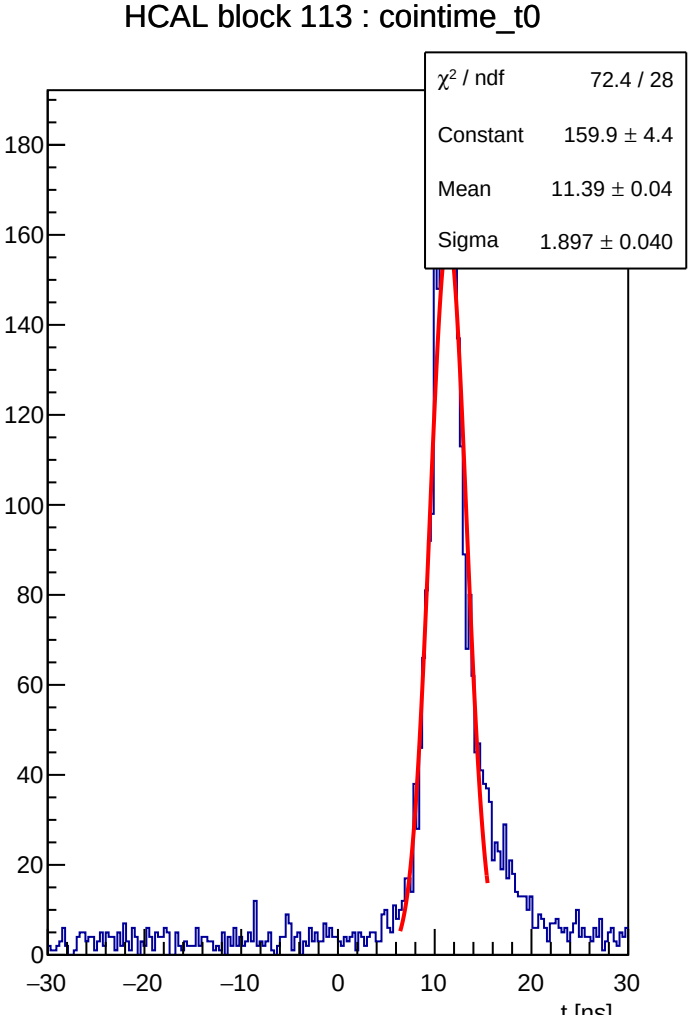

HCAL block 109 : cointime tw corr t0
χ² / ndf 82.12 / 36
Constant 62.16 ± 2.68
Mean 11.8 ± 0.1
Sigma 1.976 ± 0.061
t tw corr [ns]

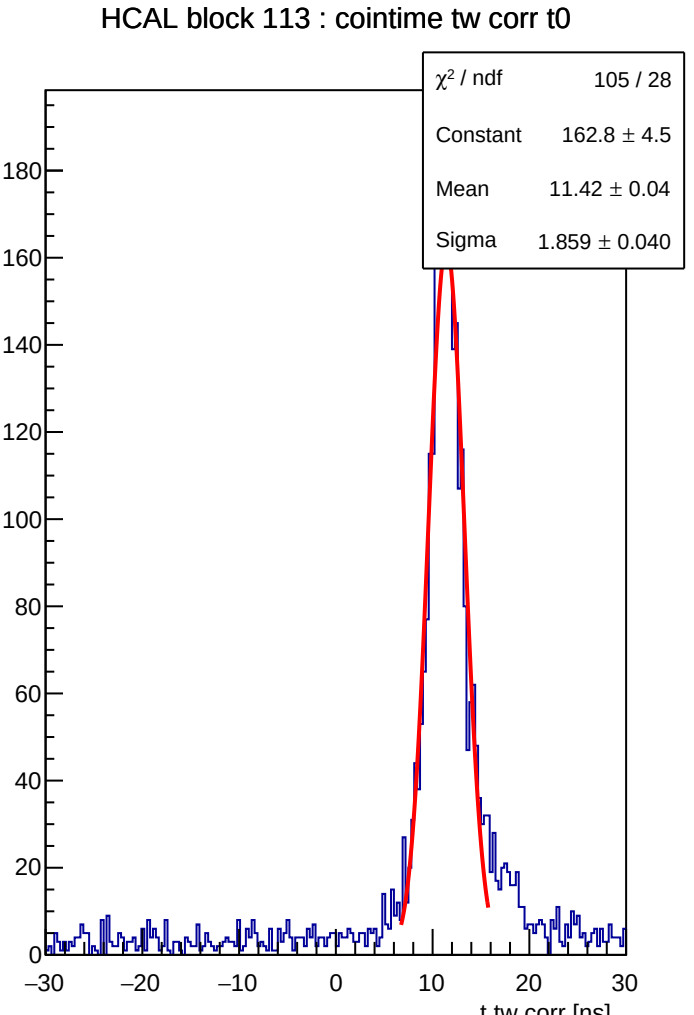

HCAL block 110 : cointime_t0
χ² / ndf 36.31 / 28
Constant 105.1 ± 3.2
Mean 11.54 ± 0.06
Sigma 2.26 ± 0.06
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]
HCAL block 110 : cointime tw corr t0
χ² / ndf 40.5 / 28
Constant 112.5 ± 3.6
Mean 11.62 ± 0.05
Sigma 2.095 ± 0.054
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

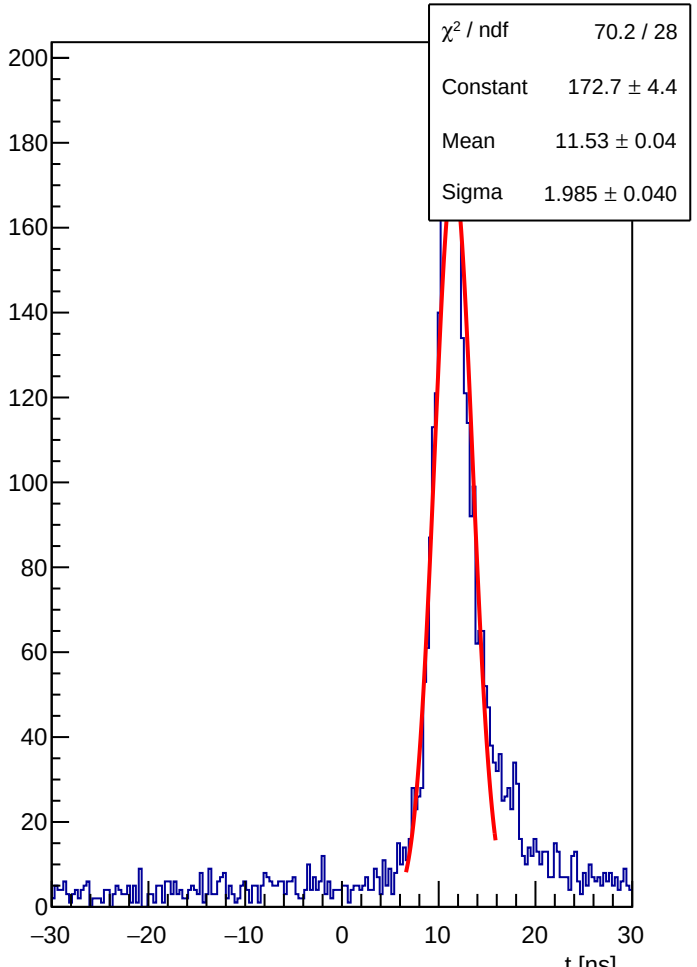

HCAL block 111 : cointime_t0
χ² / ndf 77.2 / 30
Constant 133 ± 3.7
Mean 11.64 ± 0.05
Sigma 2.193 ± 0.049
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

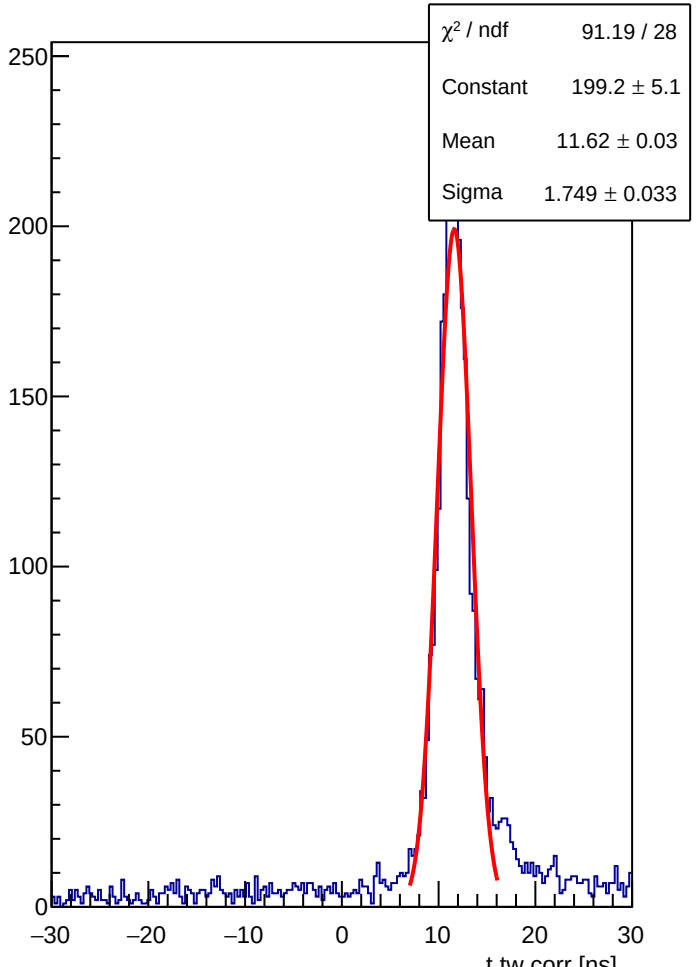

HCAL block 111 : cointime tw corr t0
χ² / ndf 25.4 / 30
Constant 101.8 ± 3.0
Mean 12.25 ± 0.07
Sigma 2.746 ± 0.081
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

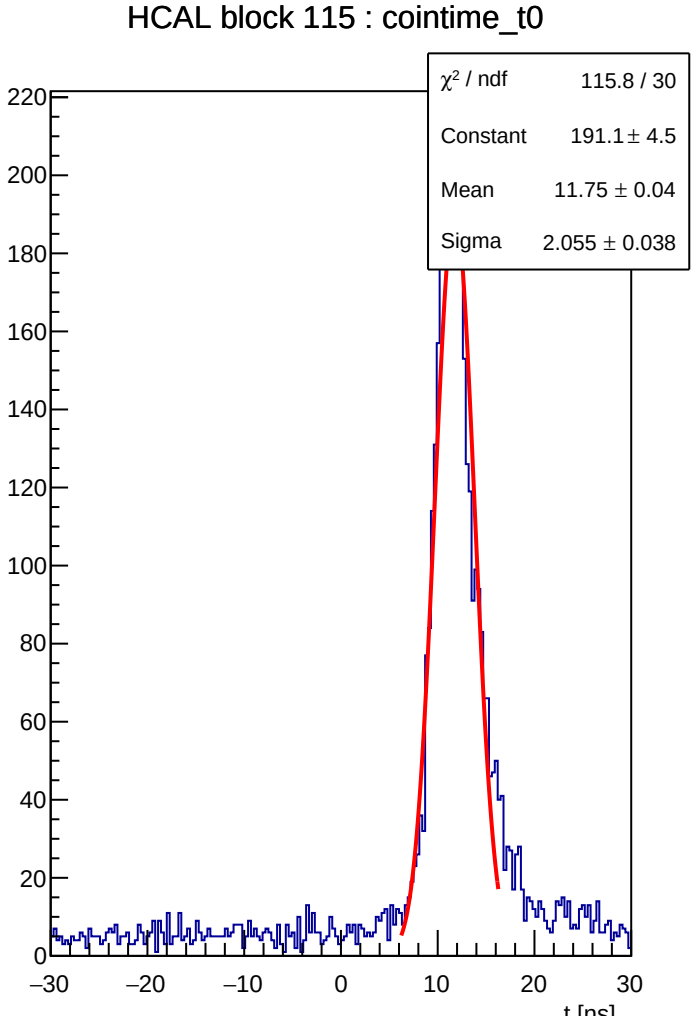

HCAL block 112 : cointime_t0
χ² / ndf 92.18 / 28
Constant 157.3 ± 4.1
Mean 11.61 ± 0.05
Sigma 2.228 ± 0.049
t [ns]
HCAL block 112 : cointime tw corr t0
χ² / ndf 133.9 / 28
Constant 168 ± 4.5
Mean 11.48 ± 0.05
Sigma 2.017 ± 0.043
t tw corr [ns]

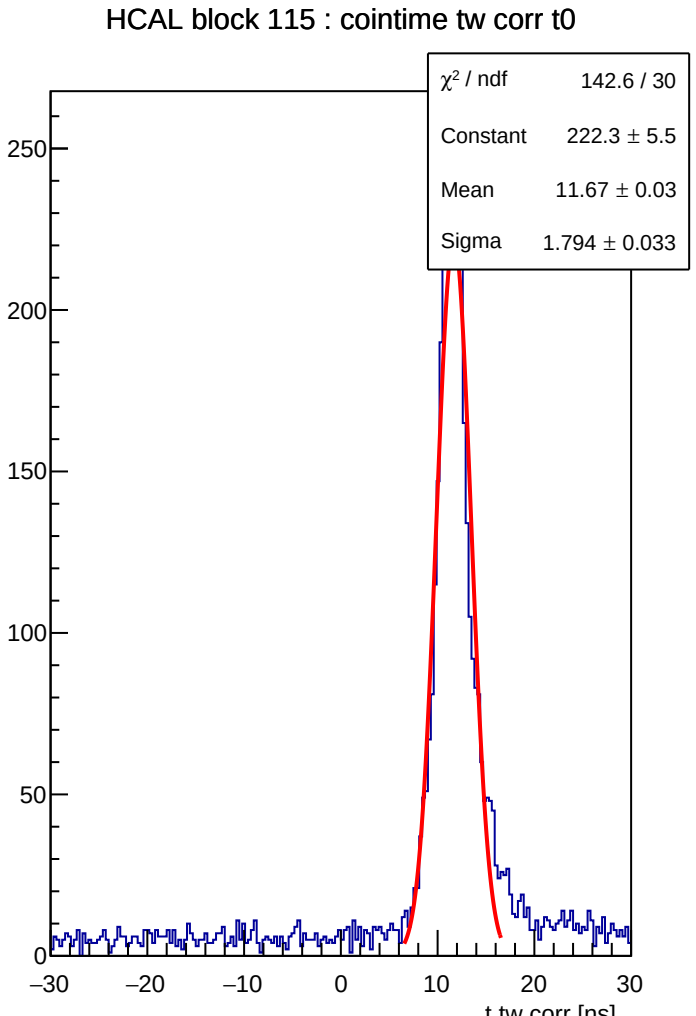

HCAL block 113 : cointime_t0
χ² / ndf 72.4 / 28
Constant 159.9 ± 4.4
Mean 11.39 ± 0.04
Sigma 1.897 ± 0.040
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

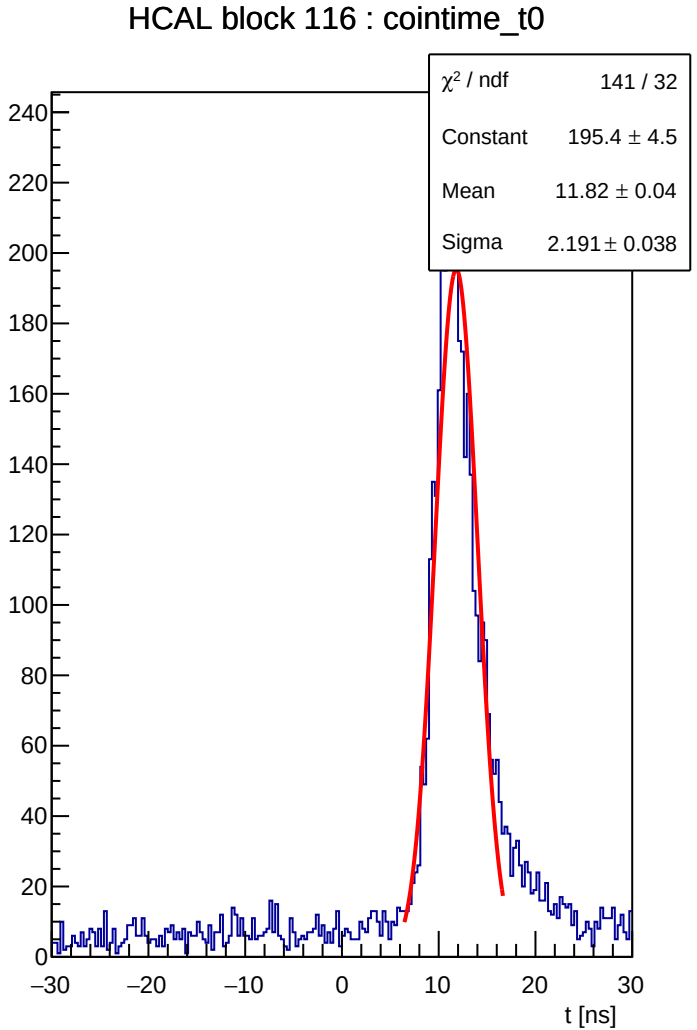

HCAL block 113 : cointime tw corr t0
χ² / ndf 105 / 28
Constant 162.8 ± 4.5
Mean 11.42 ± 0.04
Sigma 1.859 ± 0.040
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

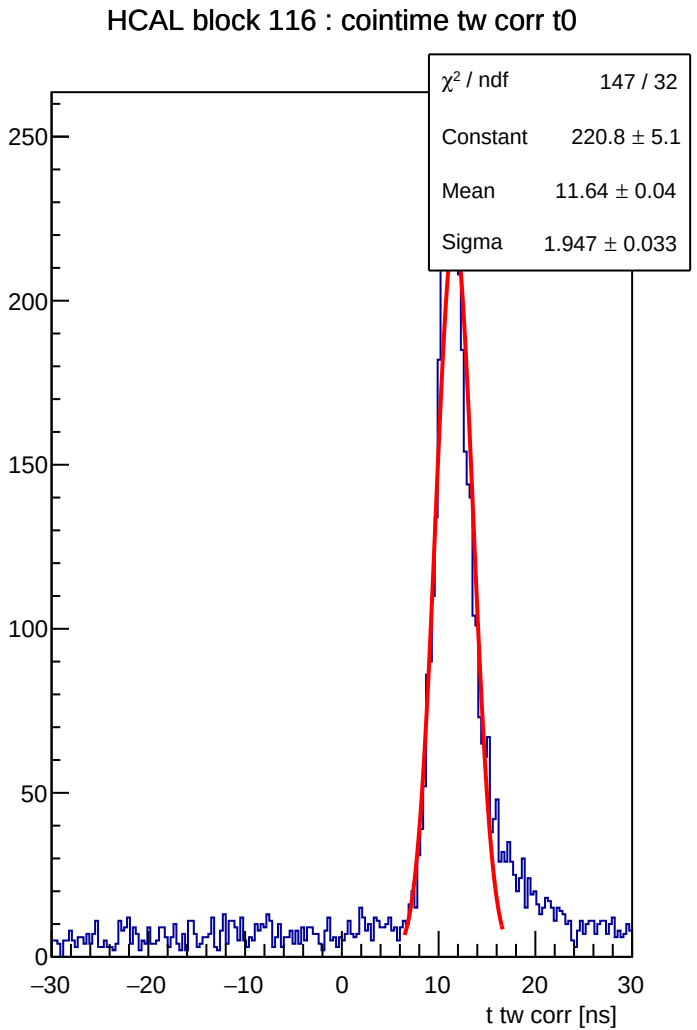

HCAL block 114 : cointime_t0
χ² / ndf 70.2 / 28
Constant 172.7 ± 4.4
Mean 11.53 ± 0.04
Sigma 1.985 ± 0.040
200
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

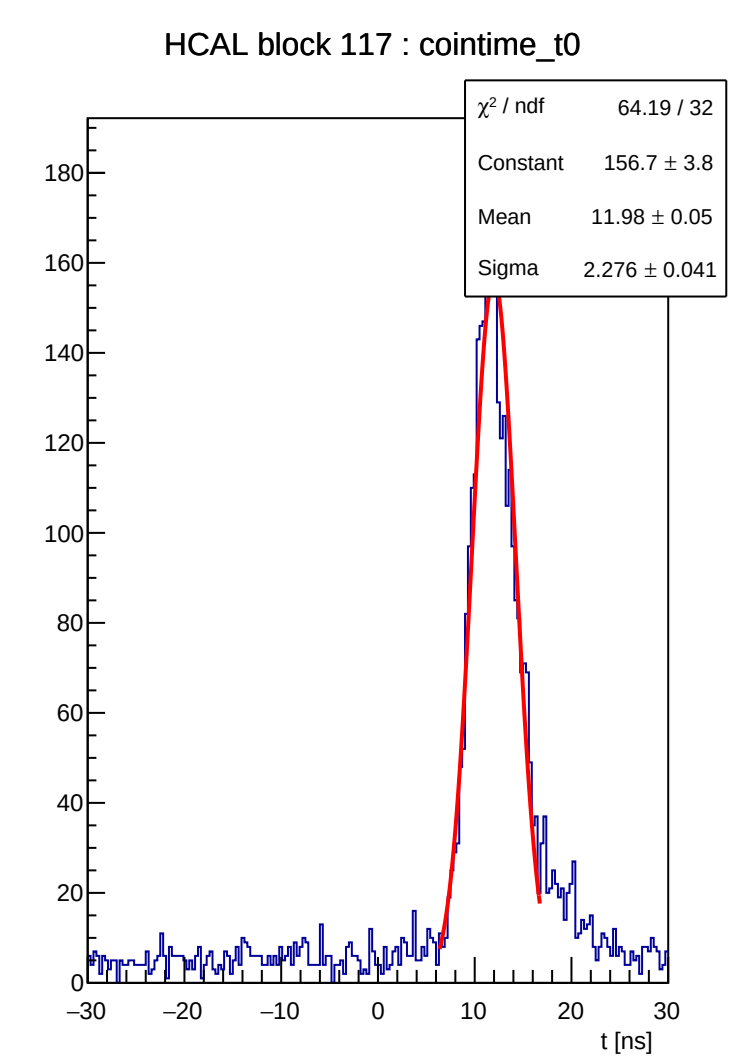

HCAL block 114 : cointime tw corr t0
χ² / ndf 91.19 / 28
Constant 199.2 ± 5.1
Mean 11.62 ± 0.03
Sigma 1.749 ± 0.033
250
200
150
100
50
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

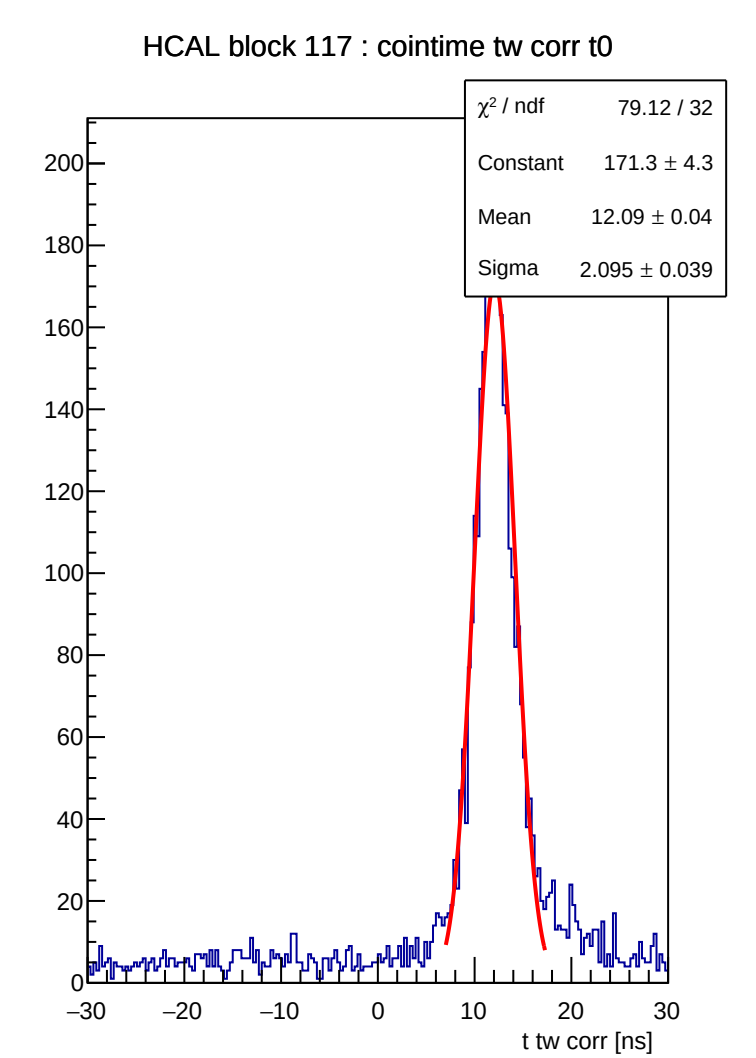

HCAL block 115 : cointime_t0
χ² / ndf 115.8 / 30
Constant 191.1 ± 4.5
Mean 11.75 ± 0.04
Sigma 2.055 ± 0.038
220
200
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

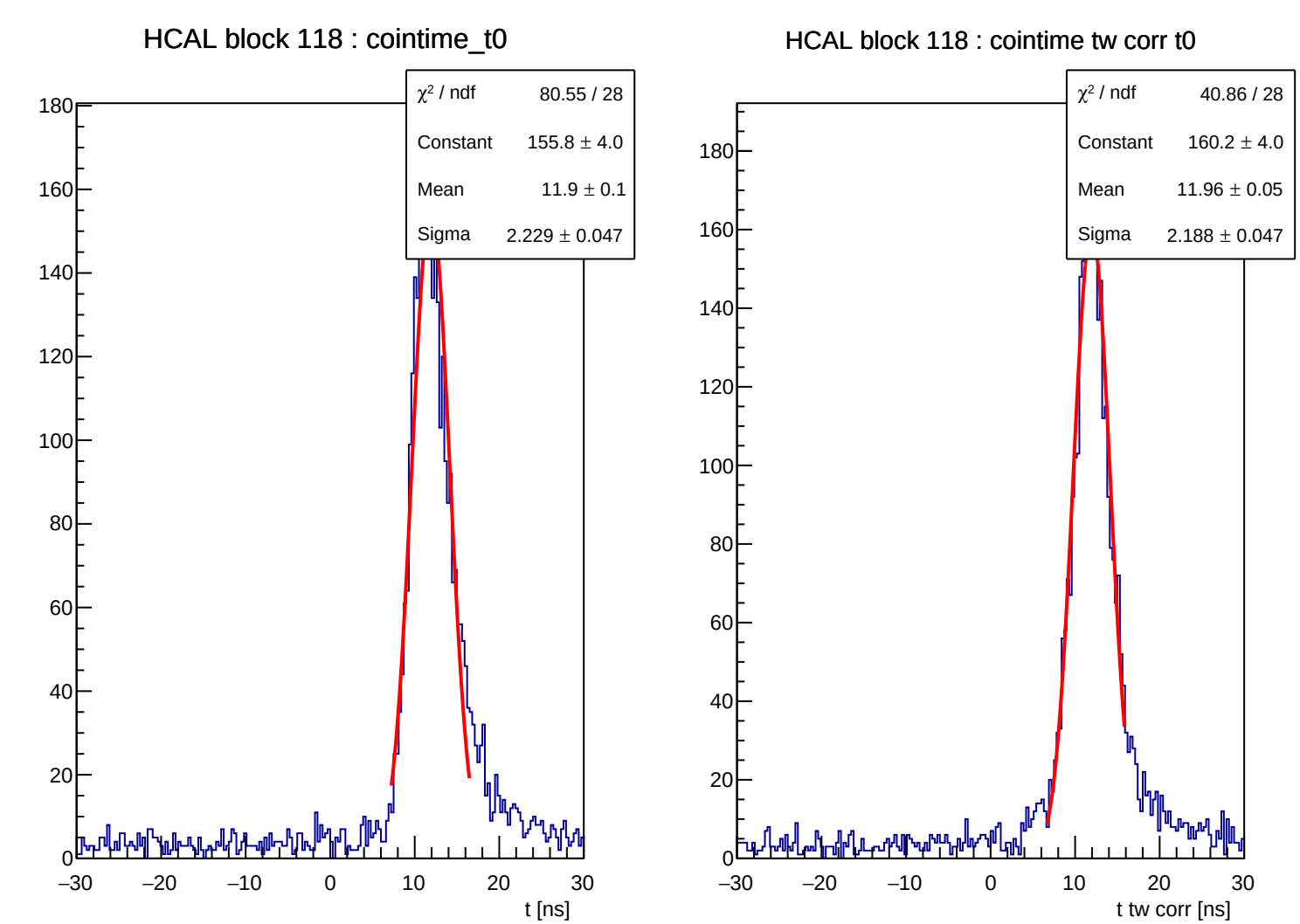

HCAL block 115 : cointime tw corr t0
χ² / ndf 142.6 / 30
Constant 222.3 ± 5.5
Mean 11.67 ± 0.03
Sigma 1.794 ± 0.033
250
200
150
100
50
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

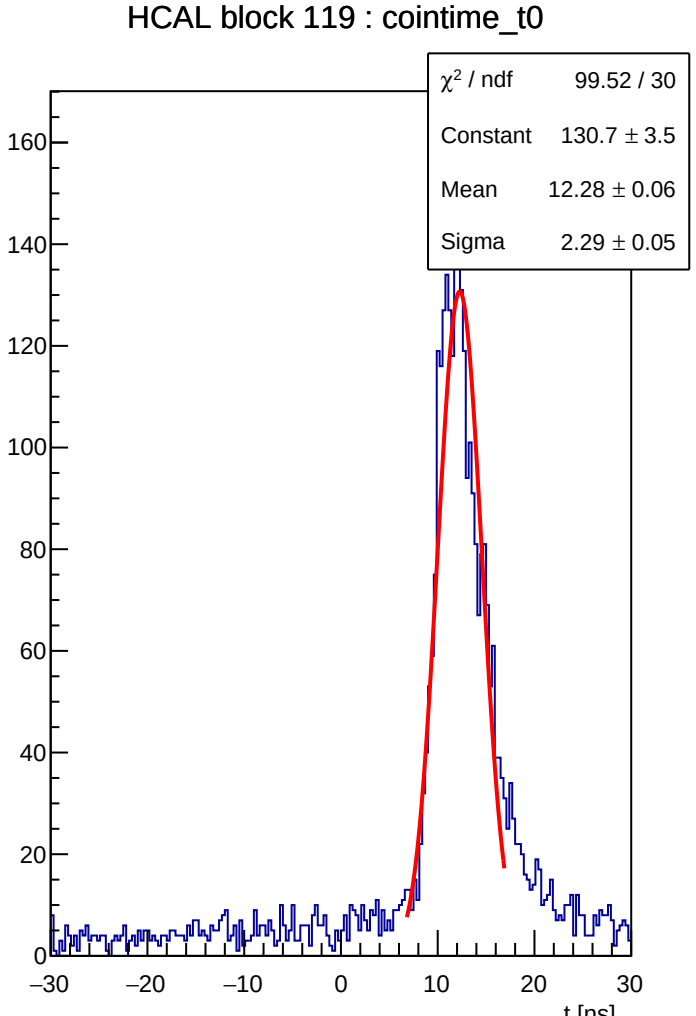

HCAL block 116 : cointime_t0
χ² / ndf 141 / 32
Constant 195.4 ± 4.5
Mean 11.82 ± 0.04
Sigma 2.191 ± 0.038
t [ns]

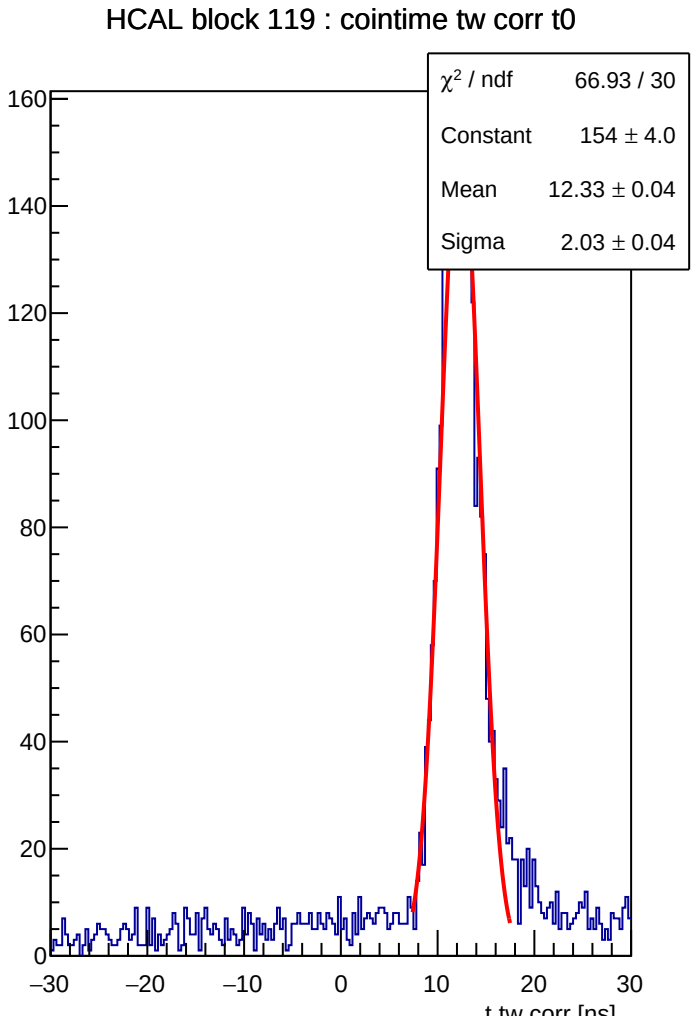

HCAL block 116 : cointime tw corr t0
χ² / ndf 147 / 32
Constant 220.8 ± 5.1
Mean 11.64 ± 0.04
Sigma 1.947 ± 0.033
t tw corr [ns]

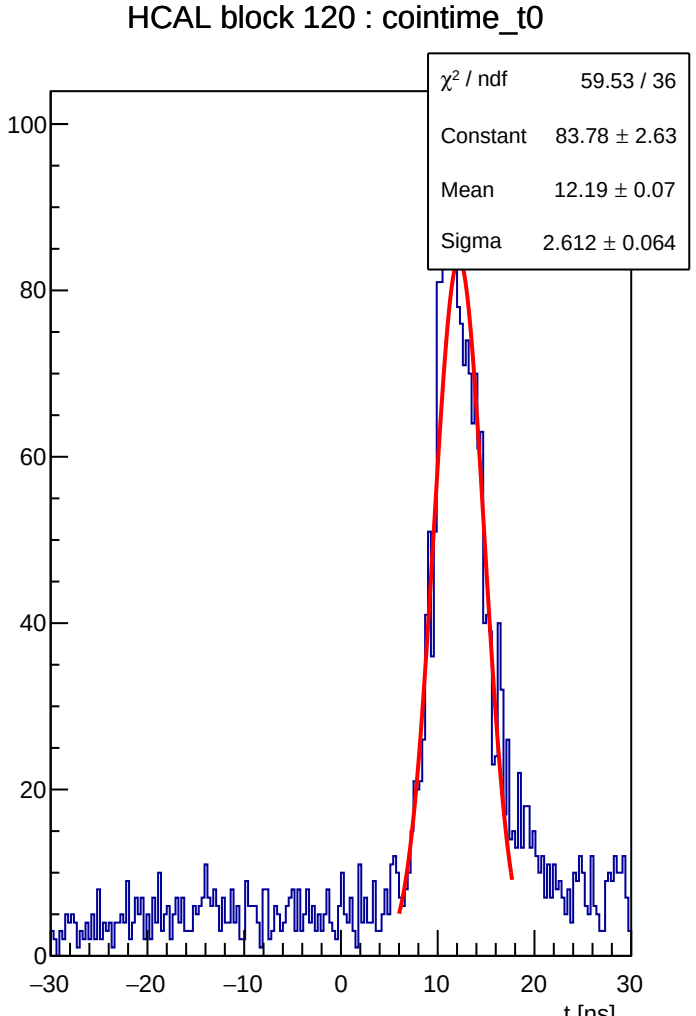

HCAL block 117 : cointime_t0
χ² / ndf 64.19 / 32
Constant 156.7 ± 3.8
Mean 11.98 ± 0.05
Sigma 2.276 ± 0.041
t [ns]

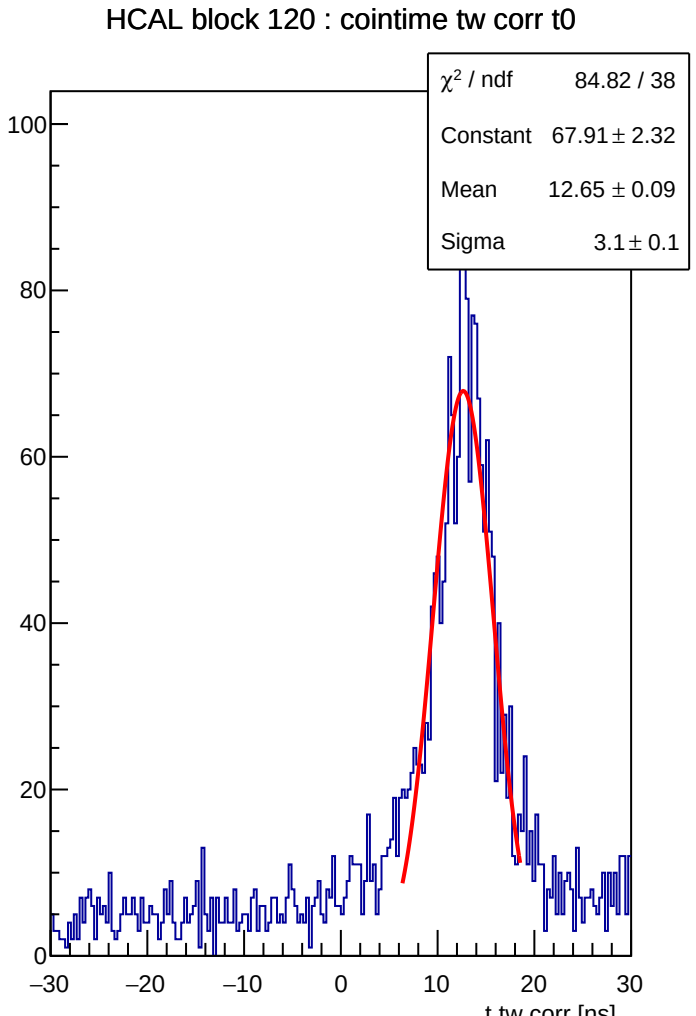

HCAL block 117 : cointime tw corr t0
χ² / ndf 79.12 / 32
Constant 171.3 ± 4.3
Mean 12.09 ± 0.04
Sigma 2.095 ± 0.039
t tw corr [ns]

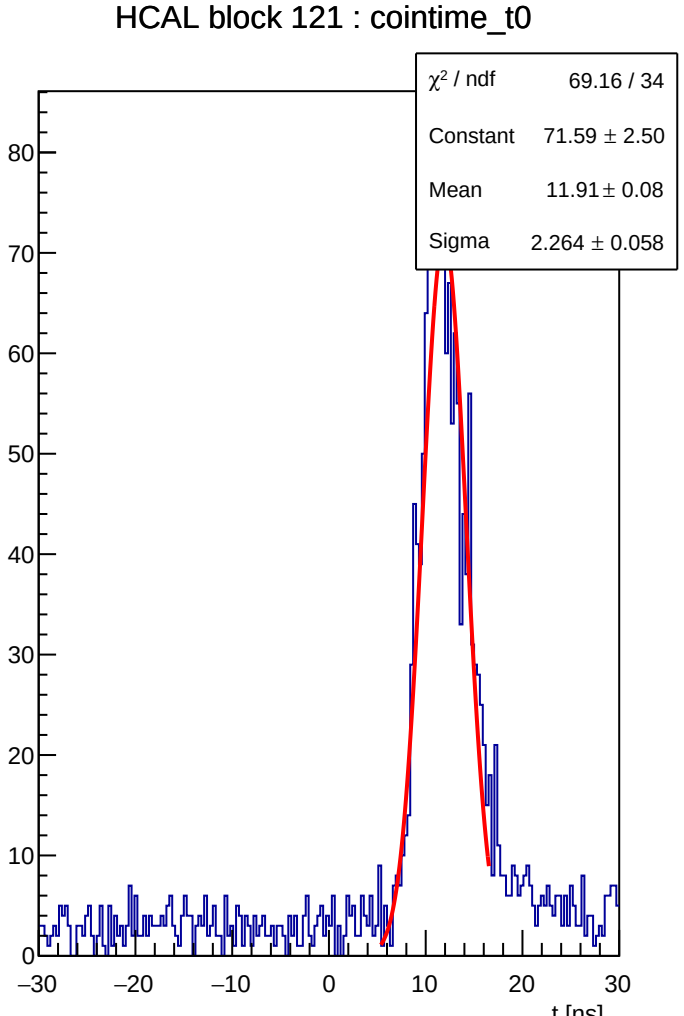

HCAL block 118 : cointime_t0
χ² / ndf 80.55 / 28
Constant 155.8 ± 4.0
Mean 11.9 ± 0.1
Sigma 2.229 ± 0.047
t [ns]
HCAL block 118 : cointime tw corr t0
χ² / ndf 40.86 / 28
Constant 160.2 ± 4.0
Mean 11.96 ± 0.05
Sigma 2.188 ± 0.047
t tw corr [ns]

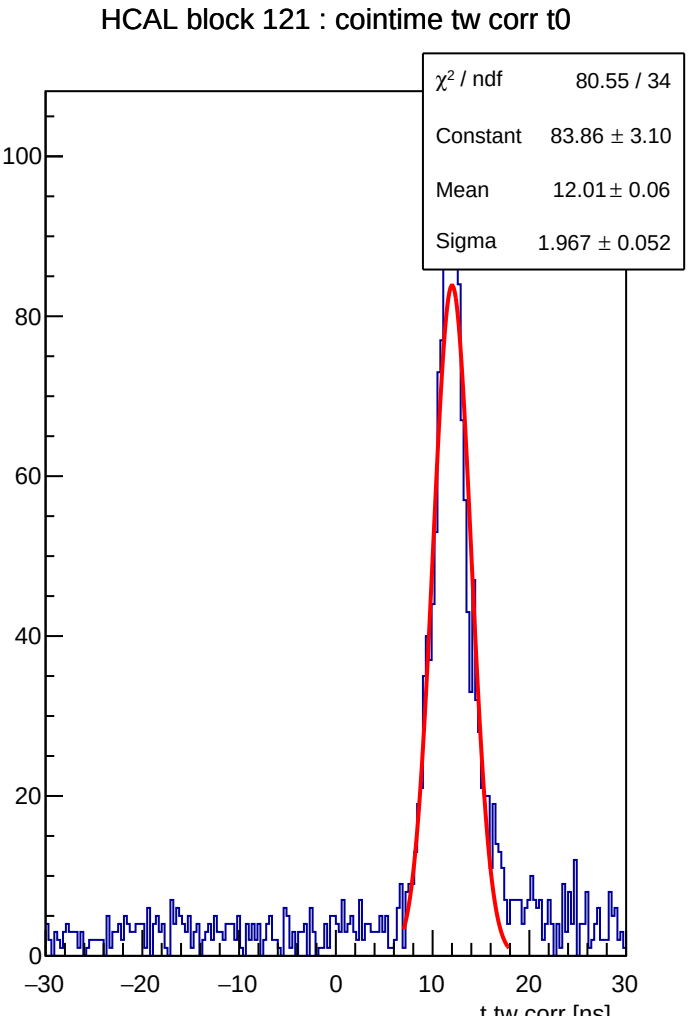

HCAL block 119 : cointime_t0
χ² / ndf 99.52 / 30
Constant 130.7 ± 3.5
Mean 12.28 ± 0.06
Sigma 2.29 ± 0.05
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

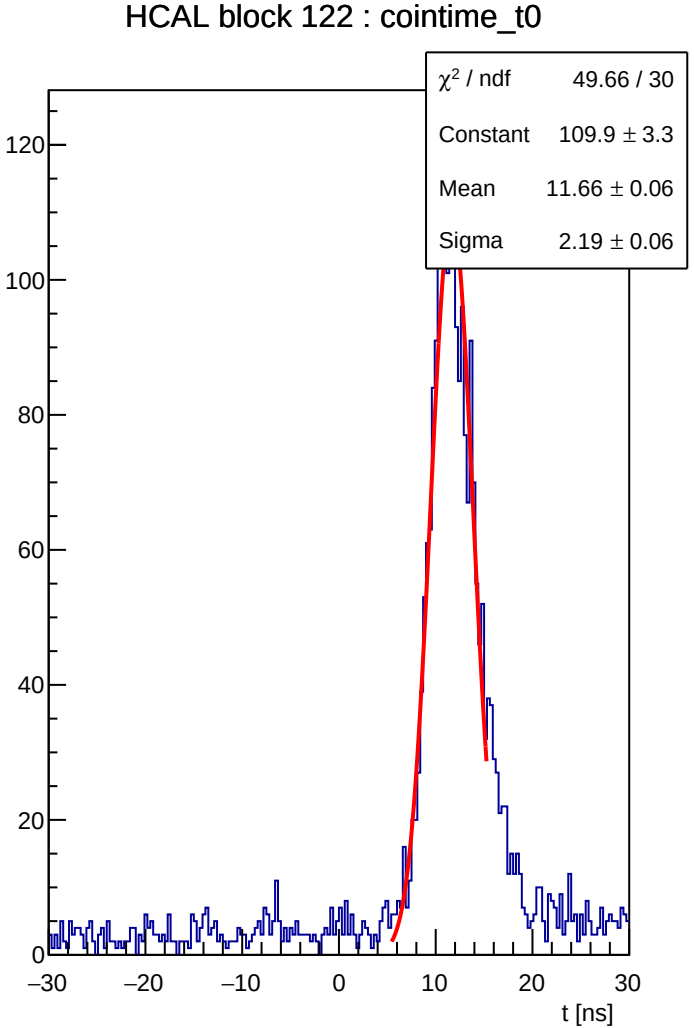

HCAL block 119 : cointime tw corr t0
χ² / ndf 66.93 / 30
Constant 154 ± 4.0
Mean 12.33 ± 0.04
Sigma 2.03 ± 0.04
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

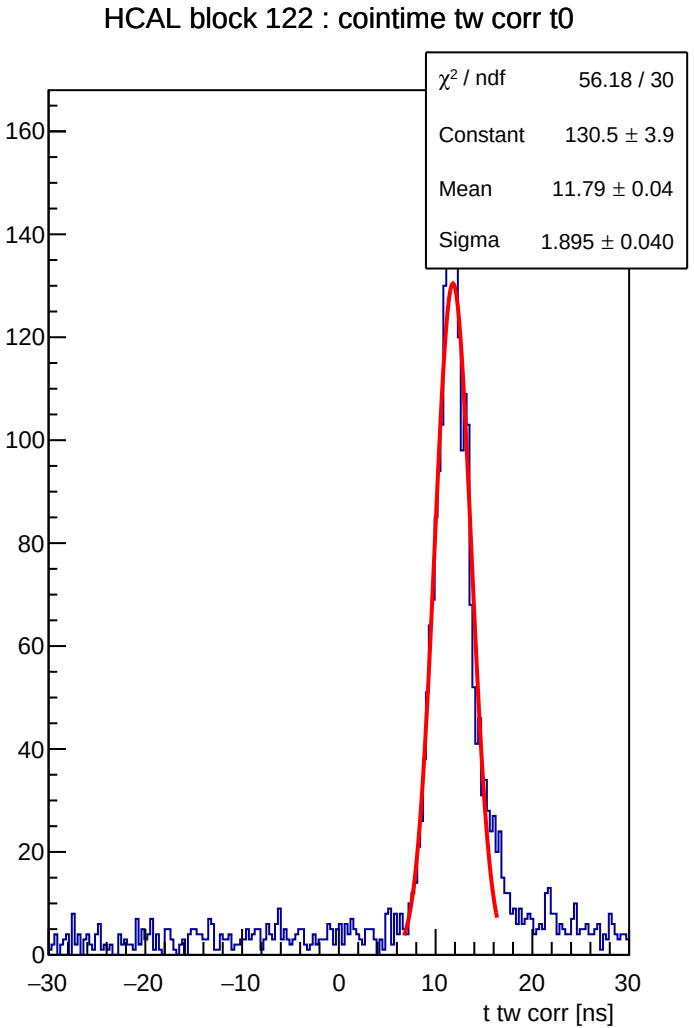

HCAL block 120 : cointime_t0
χ² / ndf 59.53 / 36
Constant 83.78 ± 2.63
Mean 12.19 ± 0.07
Sigma 2.612 ± 0.064
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

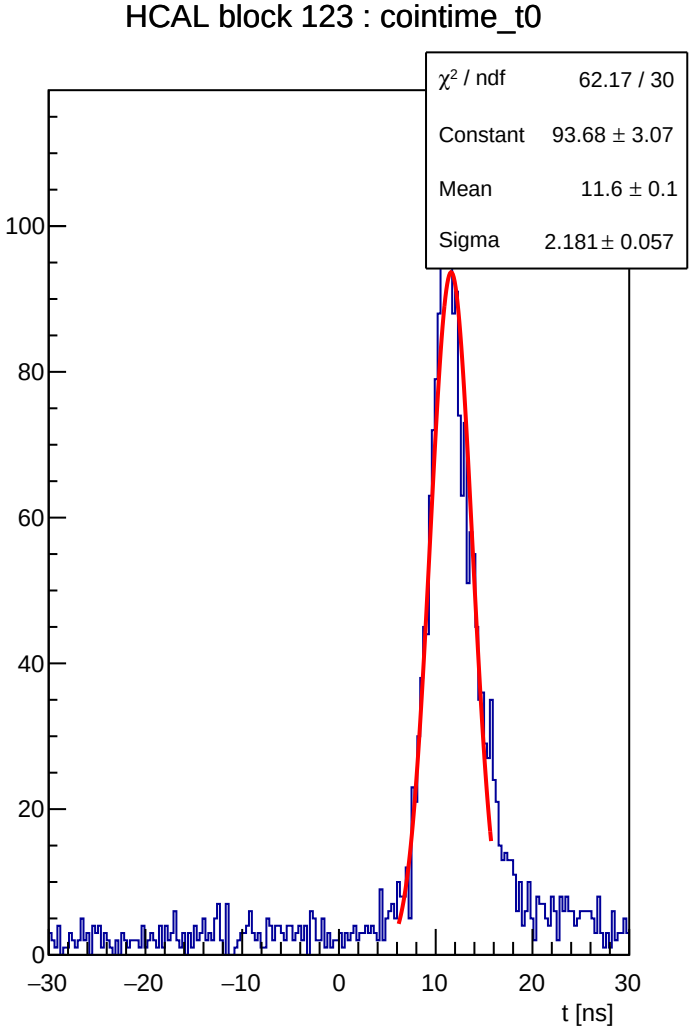

HCAL block 120 : cointime tw corr t0
χ² / ndf 84.82 / 38
Constant 67.91 ± 2.32
Mean 12.65 ± 0.09
Sigma 3.1 ± 0.1
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

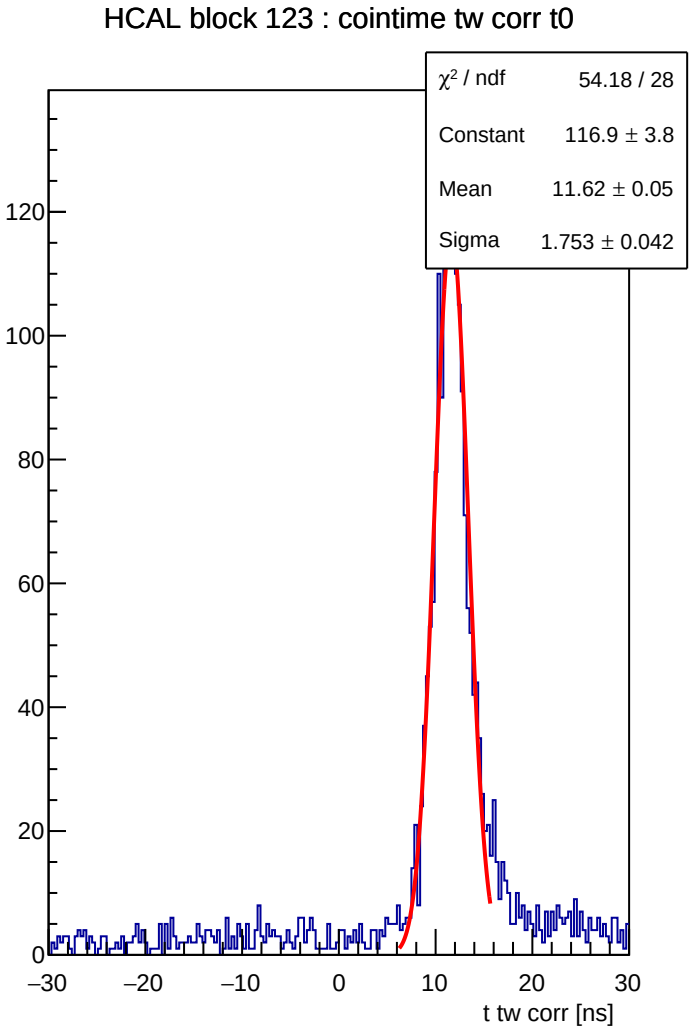

HCAL block 121 : cointime_t0
χ² / ndf 69.16 / 34
Constant 71.59 ± 2.50
Mean 11.91 ± 0.08
Sigma 2.264 ± 0.058
t [ns]

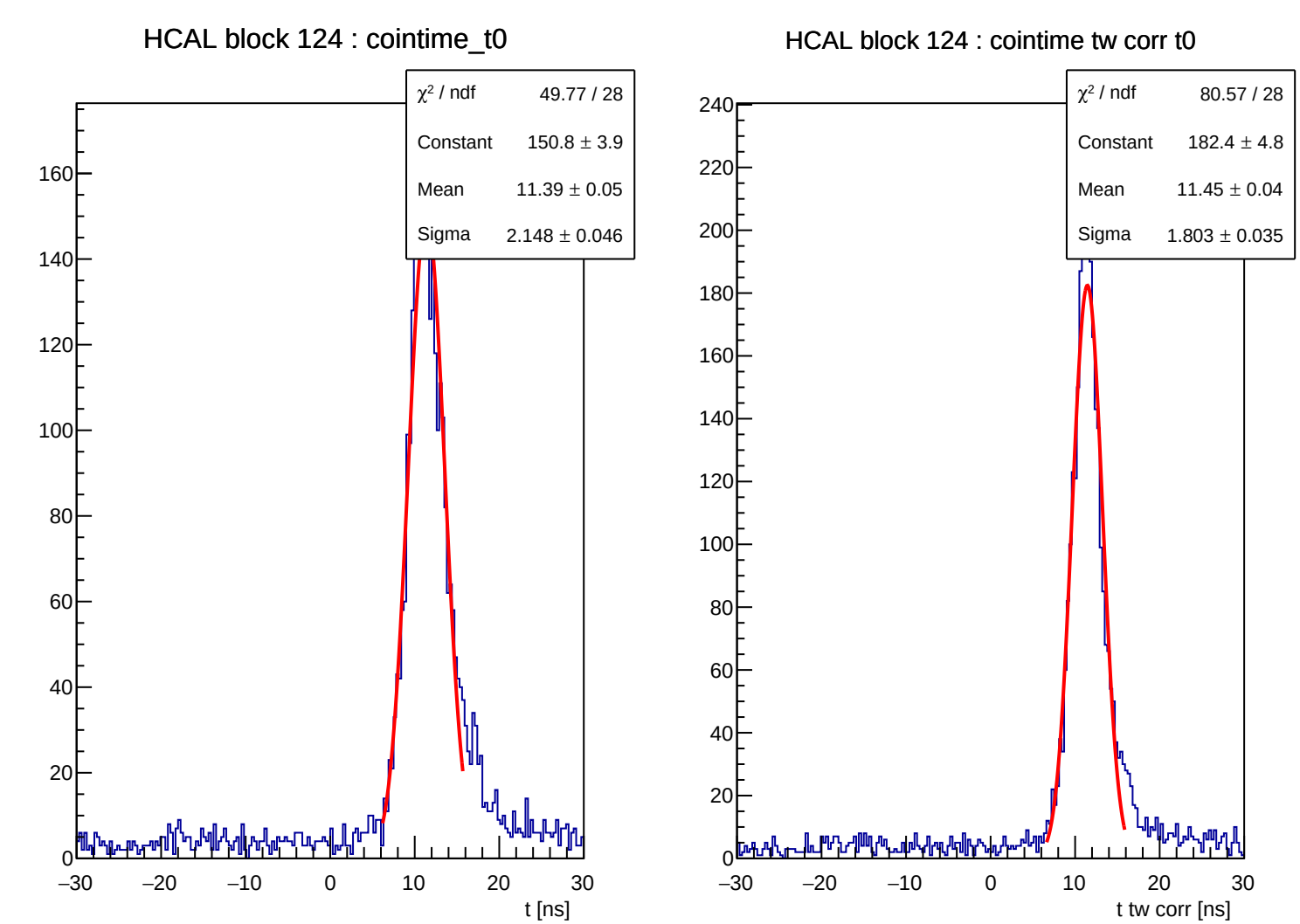

HCAL block 121 : cointime tw corr t0
χ² / ndf 80.55 / 34
Constant 83.86 ± 3.10
Mean 12.01 ± 0.06
Sigma 1.967 ± 0.052
t tw corr [ns]

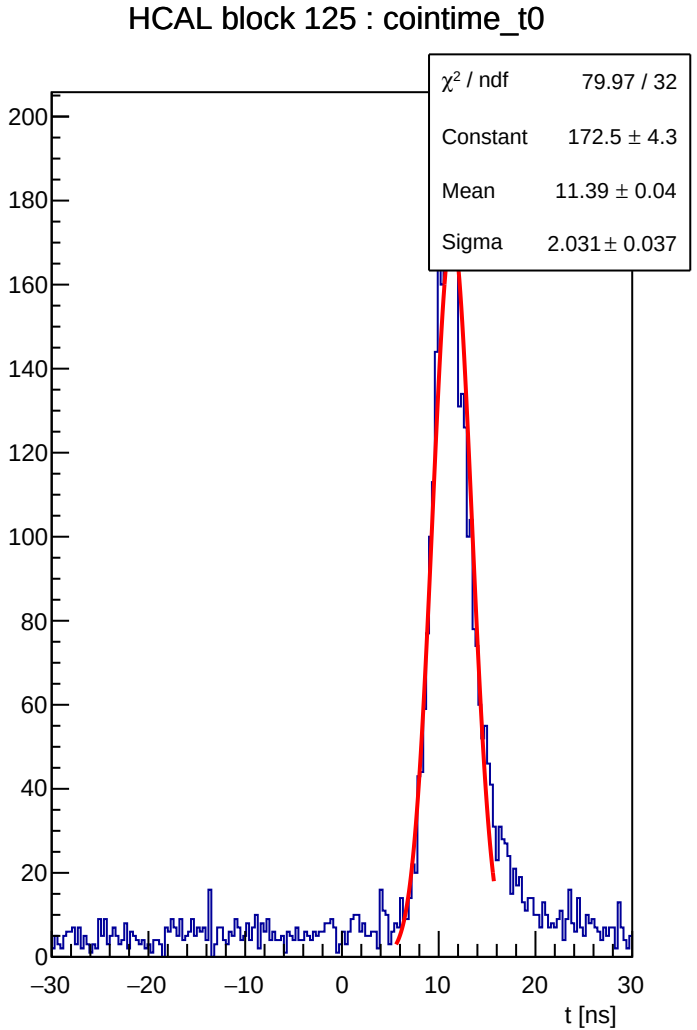

HCAL block 122 : cointime_t0
χ² / ndf 49.66 / 30
Constant 109.9 ± 3.3
Mean 11.66 ± 0.06
Sigma 2.19 ± 0.06
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

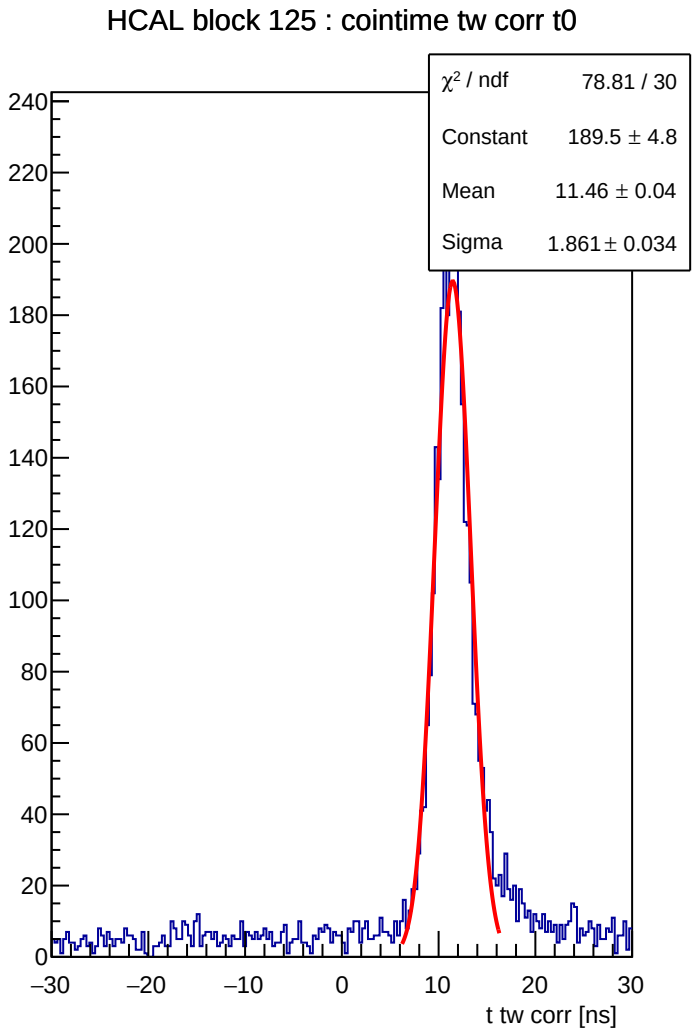

HCAL block 122 : cointime tw corr t0
χ² / ndf 56.18 / 30
Constant 130.5 ± 3.9
Mean 11.79 ± 0.04
Sigma 1.895 ± 0.040
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

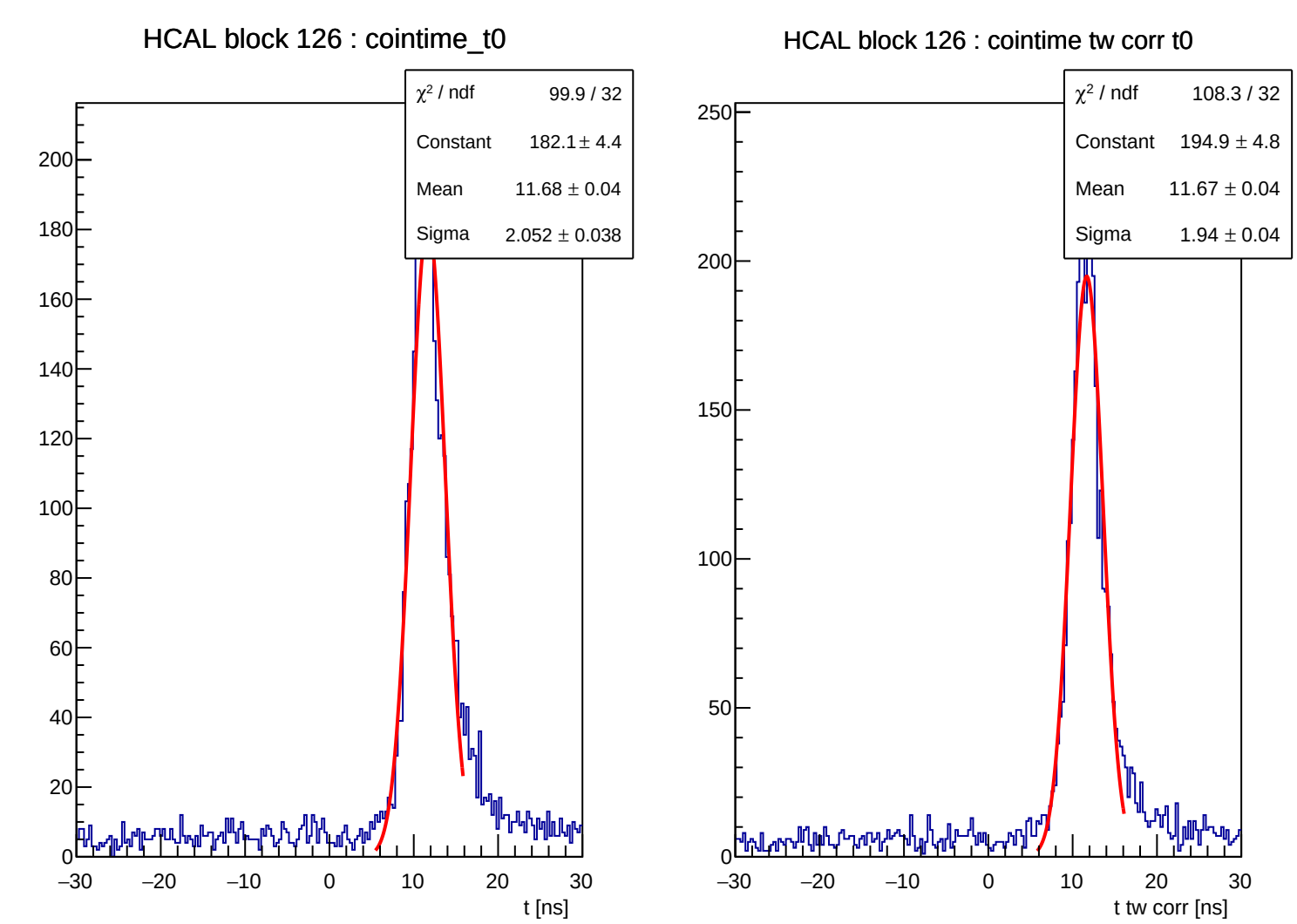

HCAL block 123 : cointime_t0
χ² / ndf 62.17 / 30
Constant 93.68 ± 3.07
Mean 11.6 ± 0.1
Sigma 2.181 ± 0.057
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

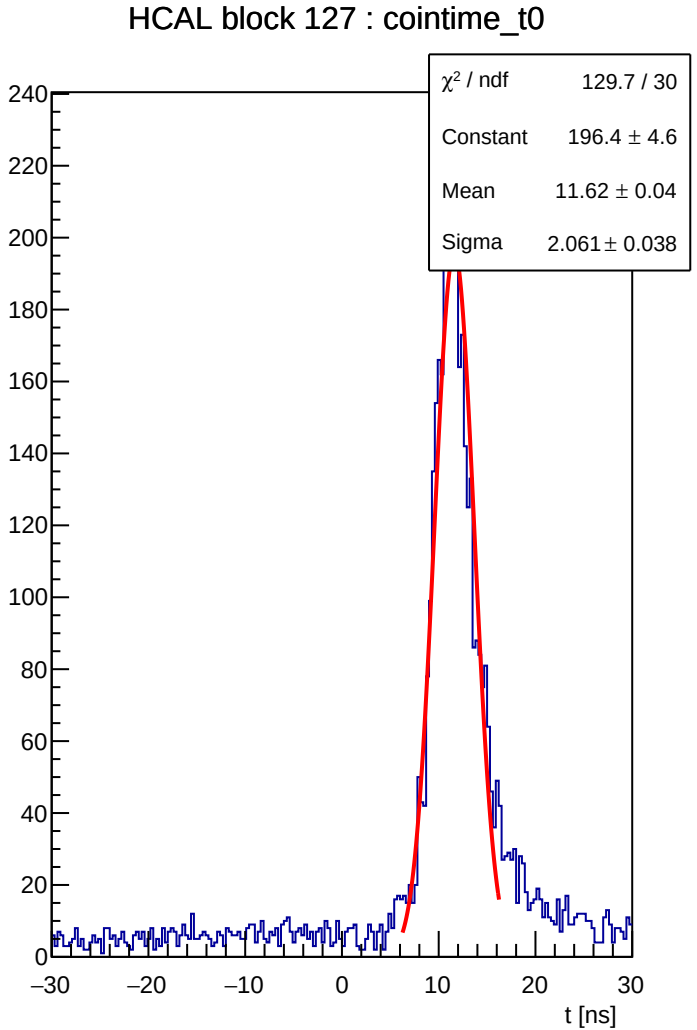

HCAL block 123 : cointime tw corr t0
χ² / ndf 54.18 / 28
Constant 116.9 ± 3.8
Mean 11.62 ± 0.05
Sigma 1.753 ± 0.042
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

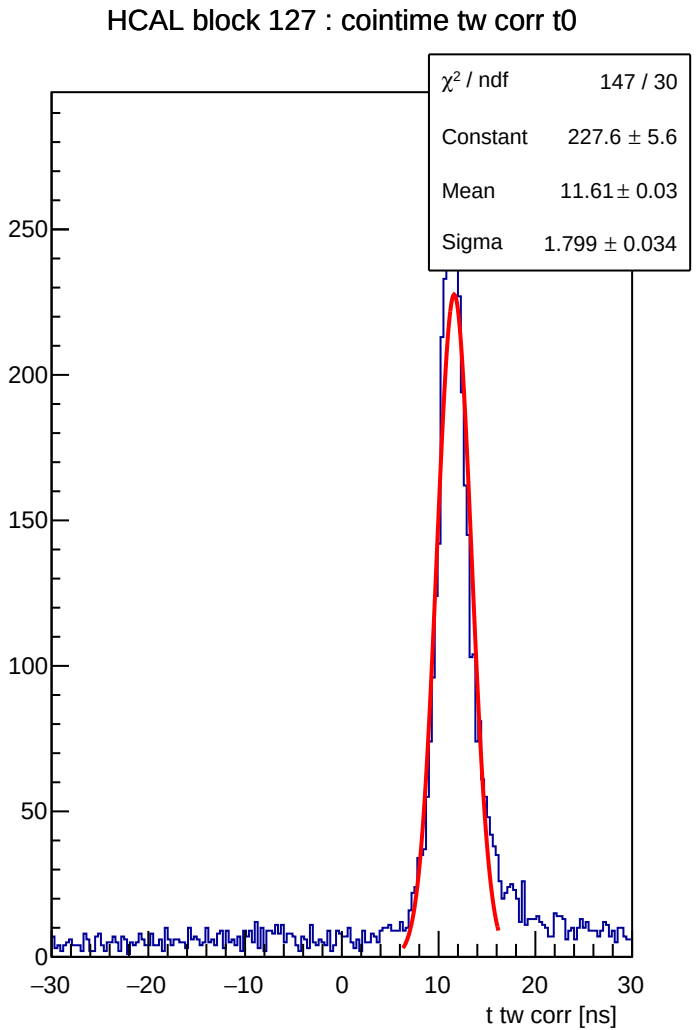

HCAL block 124 : cointime_t0
χ² / ndf 49.77 / 28
Constant 150.8 ± 3.9
Mean 11.39 ± 0.05
Sigma 2.148 ± 0.046
t [ns]
HCAL block 124 : cointime tw corr t0
χ² / ndf 80.57 / 28
Constant 182.4 ± 4.8
Mean 11.45 ± 0.04
Sigma 1.803 ± 0.035
t tw corr [ns]

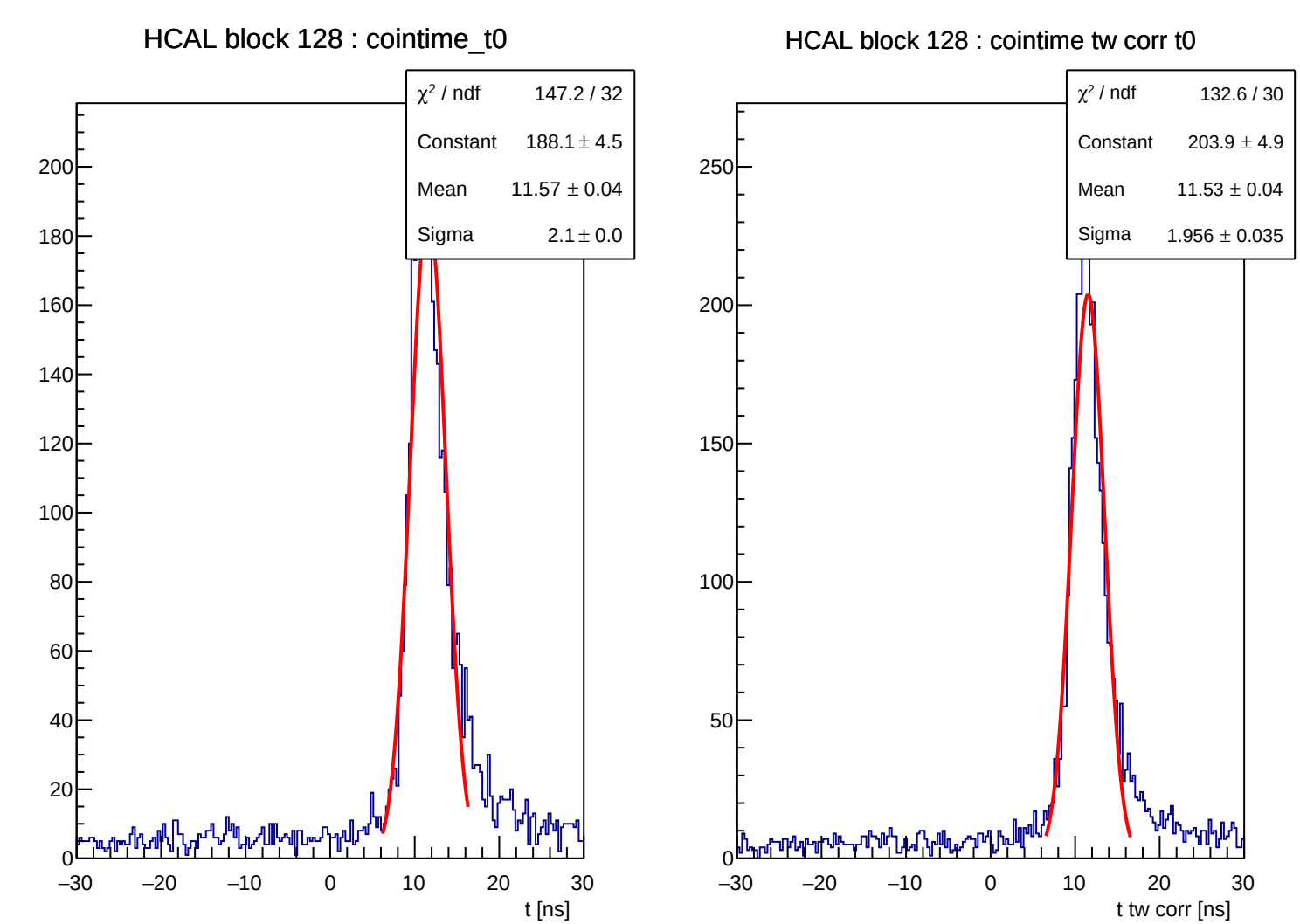

HCAL block 125 : cointime_t0
χ² / ndf 79.97 / 32
Constant 172.5 ± 4.3
Mean 11.39 ± 0.04
Sigma 2.031 ± 0.037
t [ns]

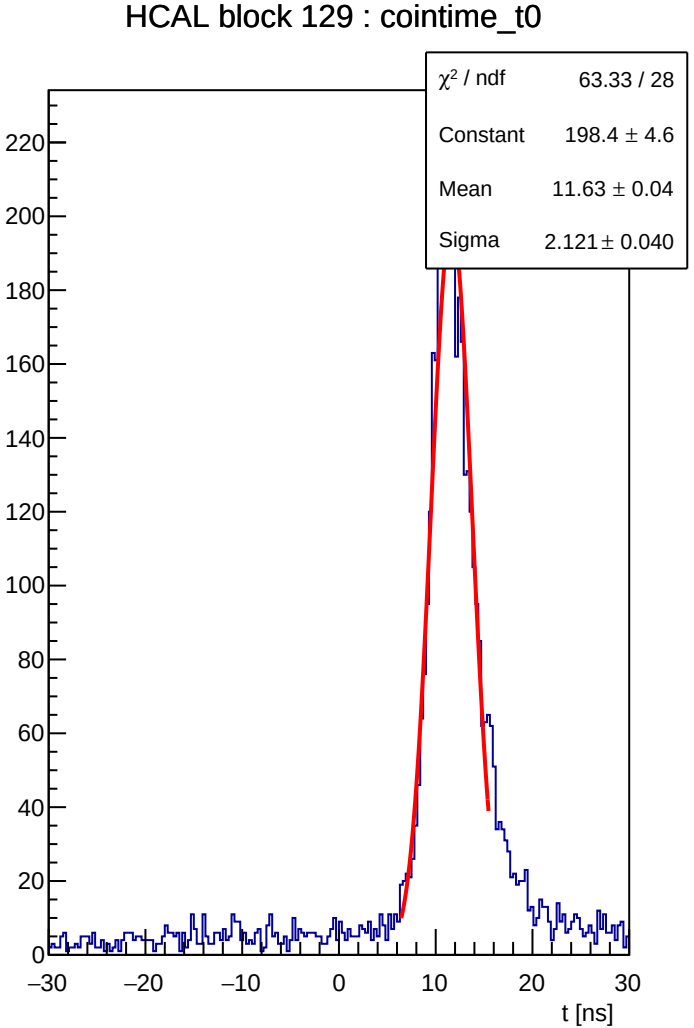

HCAL block 125 : cointime tw corr t0
χ² / ndf 78.81 / 30
Constant 189.5 ± 4.8
Mean 11.46 ± 0.04
Sigma 1.861 ± 0.034
t tw corr [ns]

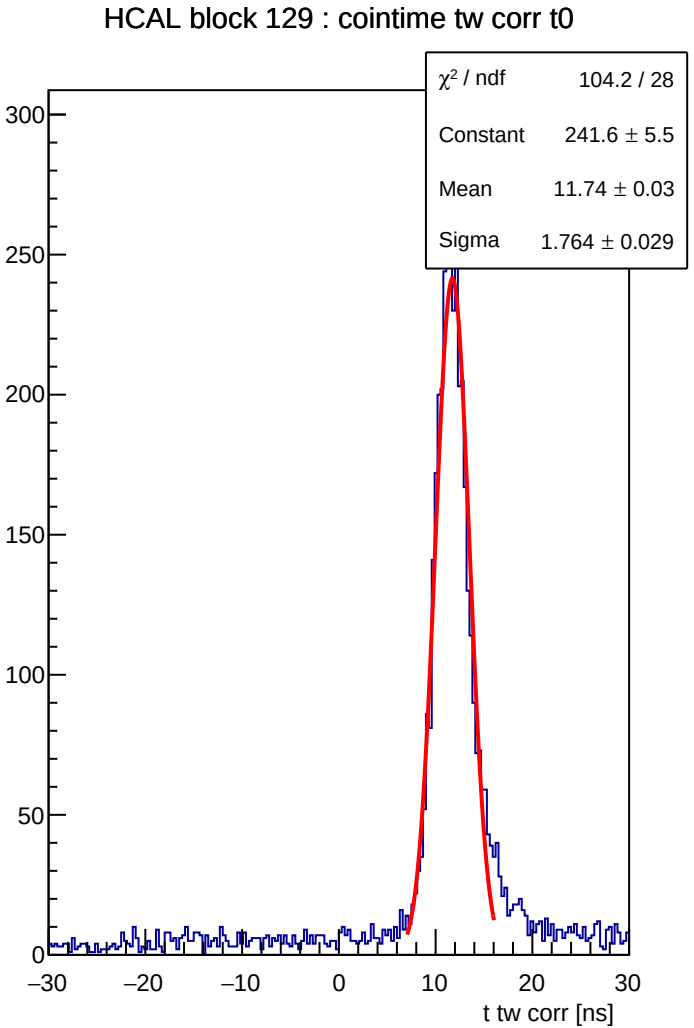

HCAL block 126 : cointime_t0
χ² / ndf 99.9 / 32
Constant 182.1 ± 4.4
Mean 11.68 ± 0.04
Sigma 2.052 ± 0.038
t [ns]
HCAL block 126 : cointime tw corr t0
χ² / ndf 108.3 / 32
Constant 194.9 ± 4.8
Mean 11.67 ± 0.04
Sigma 1.94 ± 0.04
t tw corr [ns]

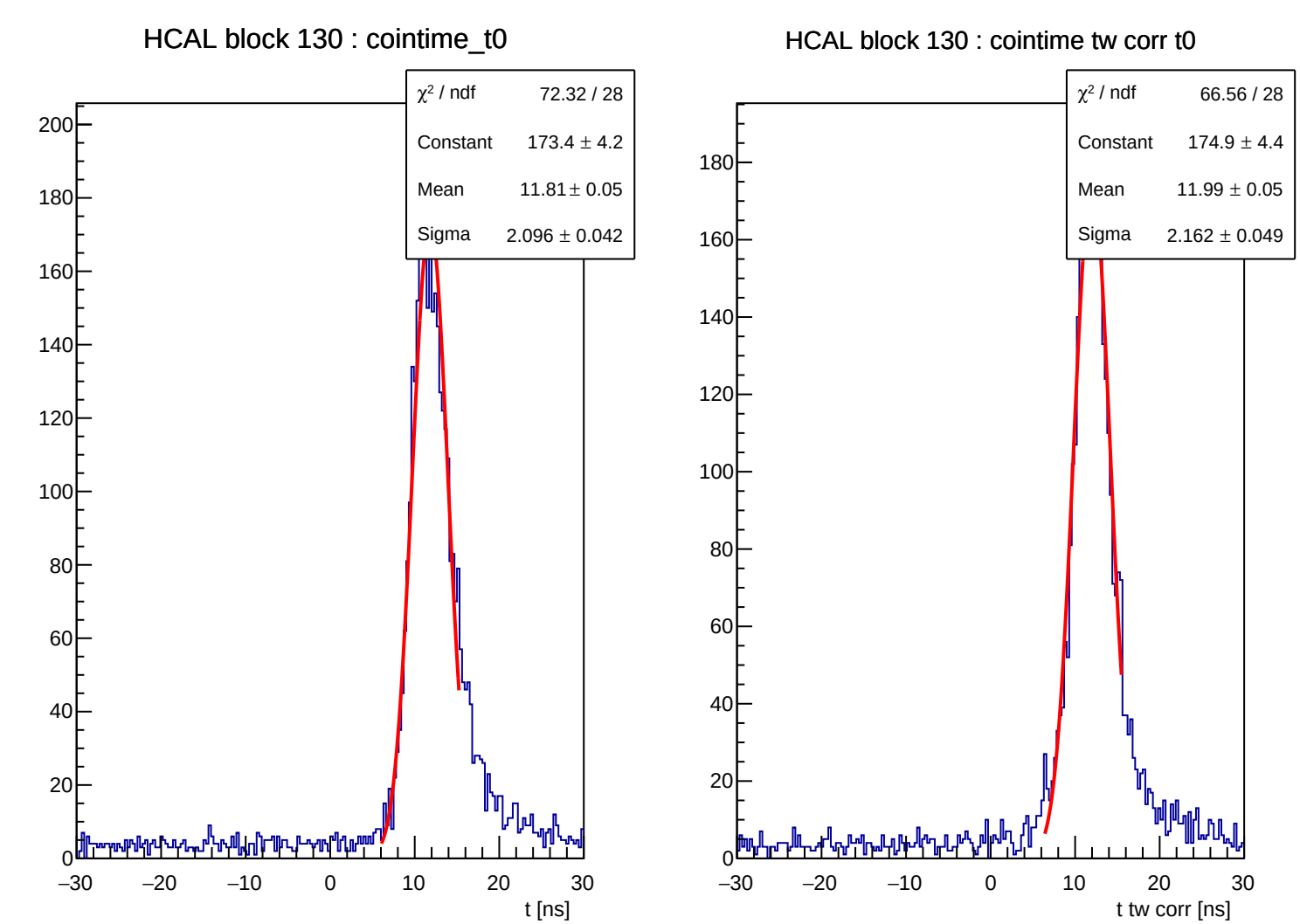

HCAL block 127 : cointime_t0
χ² / ndf 129.7 / 30
Constant 196.4 ± 4.6
Mean 11.62 ± 0.04
Sigma 2.061 ± 0.038
240
220
200
180
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

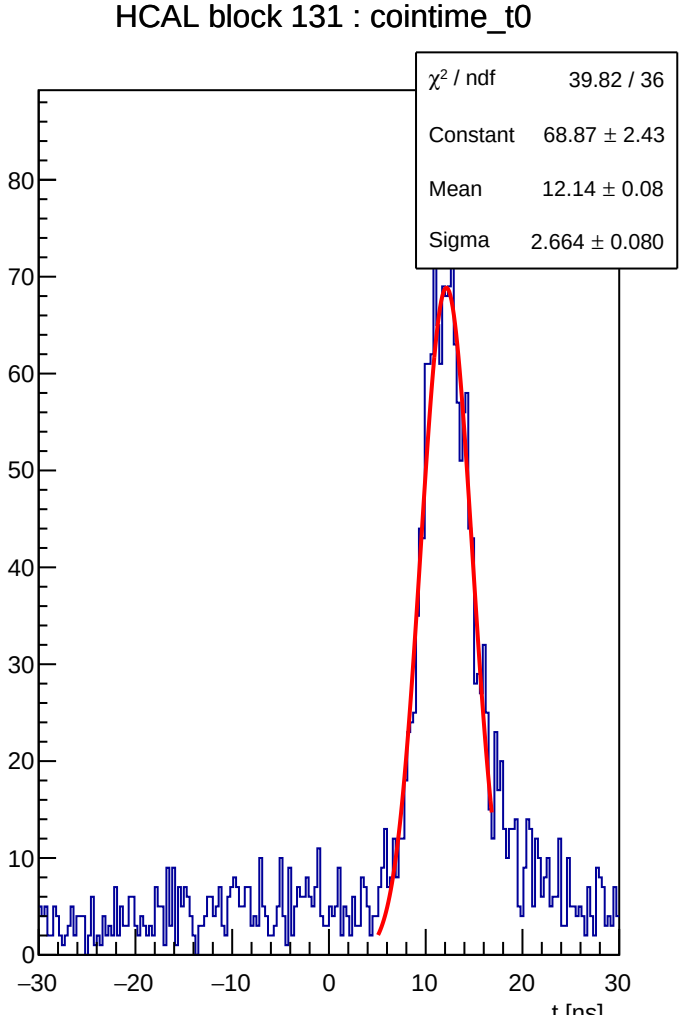

HCAL block 127 : cointime tw corr t0
χ² / ndf 147 / 30
Constant 227.6 ± 5.6
Mean 11.61 ± 0.03
Sigma 1.799 ± 0.034
250
200
150
100
50
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

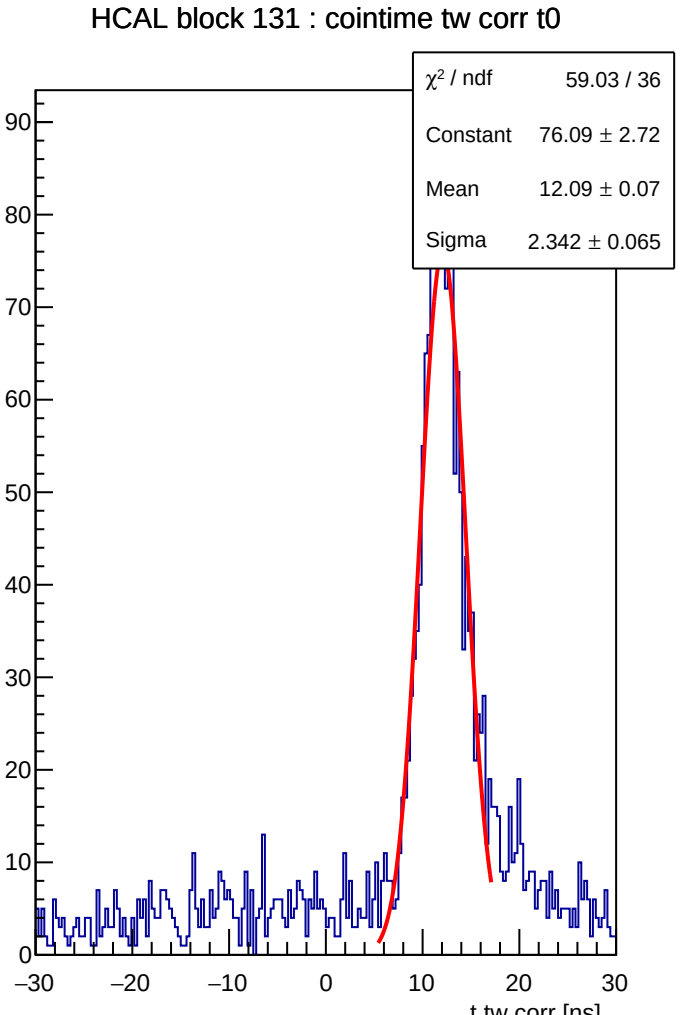

HCAL block 128 : cointime_t0
χ² / ndf 147.2 / 32
Constant 188.1 ± 4.5
Mean 11.57 ± 0.04
Sigma 2.1 ± 0.0
t [ns]
HCAL block 128 : cointime tw corr t0
χ² / ndf 132.6 / 30
Constant 203.9 ± 4.9
Mean 11.53 ± 0.04
Sigma 1.956 ± 0.035
t tw corr [ns]

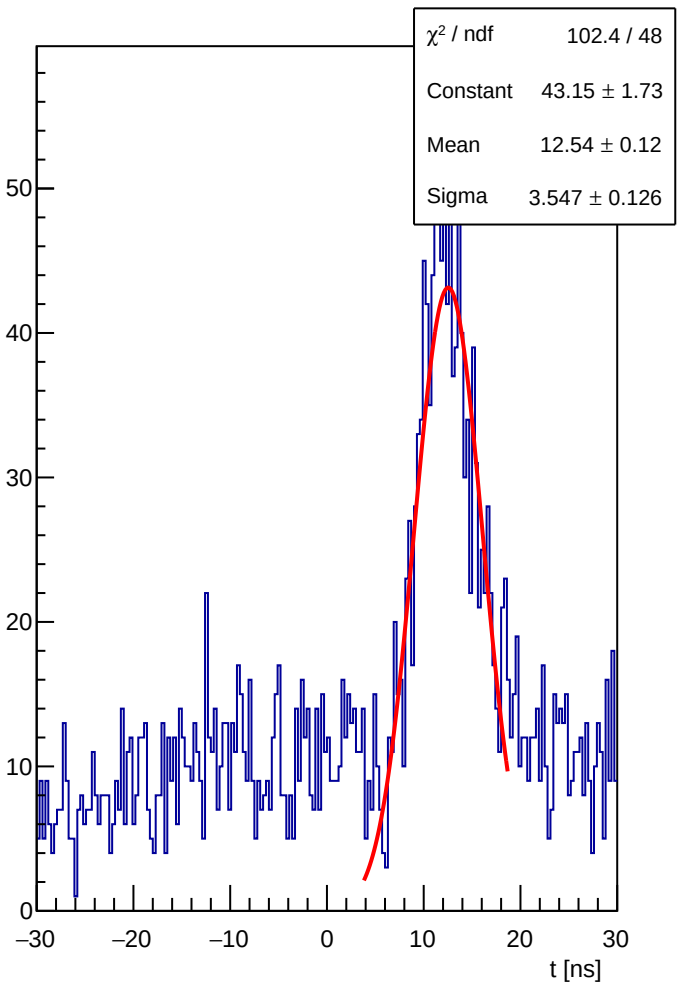

HCAL block 129 : cointime_t0
χ² / ndf 63.33 / 28
Constant 198.4 ± 4.6
Mean 11.63 ± 0.04
Sigma 2.121 ± 0.040
t [ns]

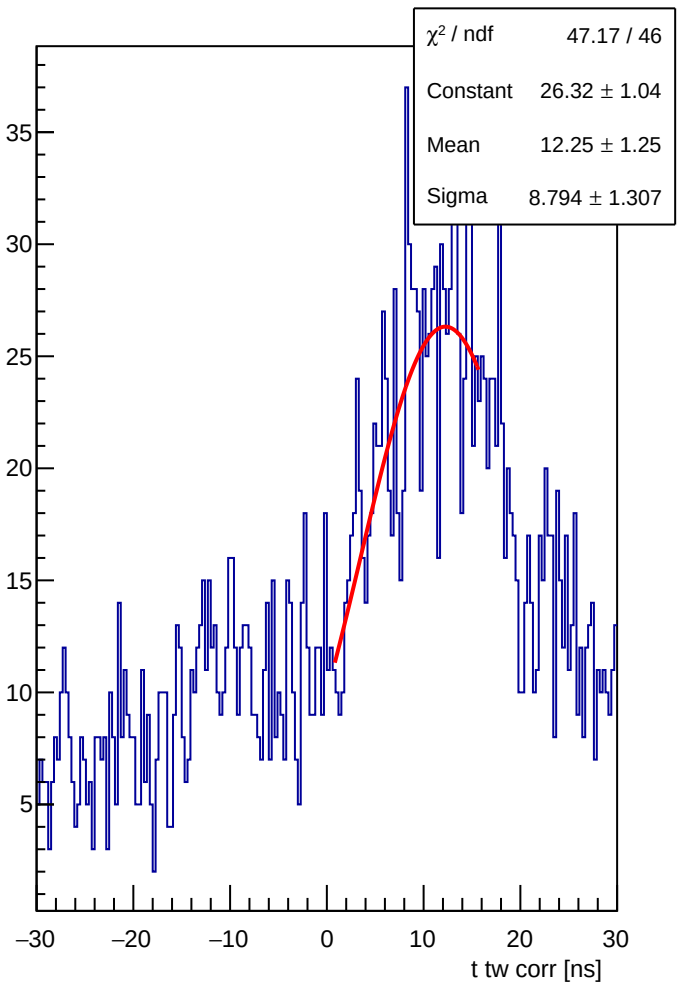

HCAL block 129 : cointime tw corr t0
χ² / ndf 104.2 / 28
Constant 241.6 ± 5.5
Mean 11.74 ± 0.03
Sigma 1.764 ± 0.029
t tw corr [ns]

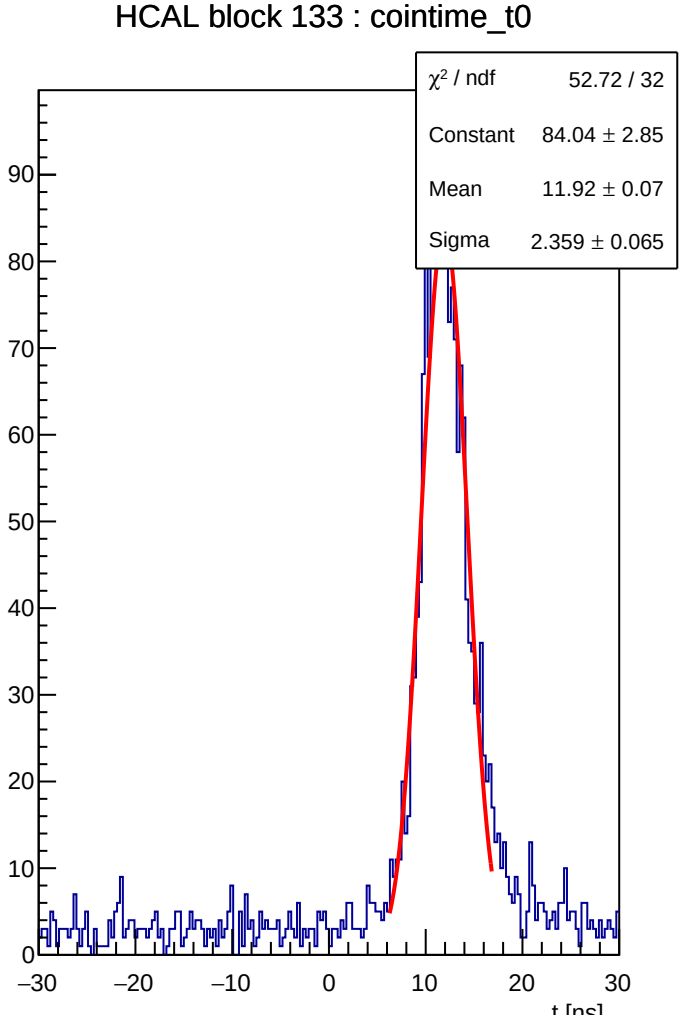

HCAL block 130 : cointime_t0
χ² / ndf 72.32 / 28
Constant 173.4 ± 4.2
Mean 11.81 ± 0.05
Sigma 2.096 ± 0.042
t [ns]
HCAL block 130 : cointime tw corr t0
χ² / ndf 66.56 / 28
Constant 174.9 ± 4.4
Mean 11.99 ± 0.05
Sigma 2.162 ± 0.049
t tw corr [ns]

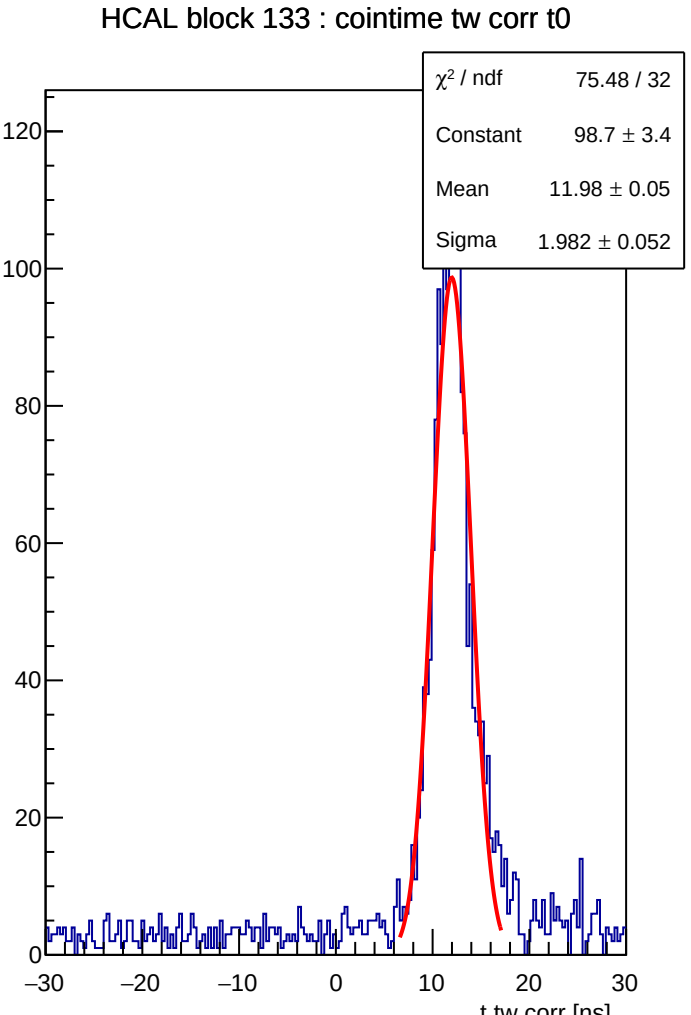

HCAL block 131 : cointime_t0
χ² / ndf 39.82 / 36
Constant 68.87 ± 2.43
Mean 12.14 ± 0.08
Sigma 2.664 ± 0.080
t [ns]

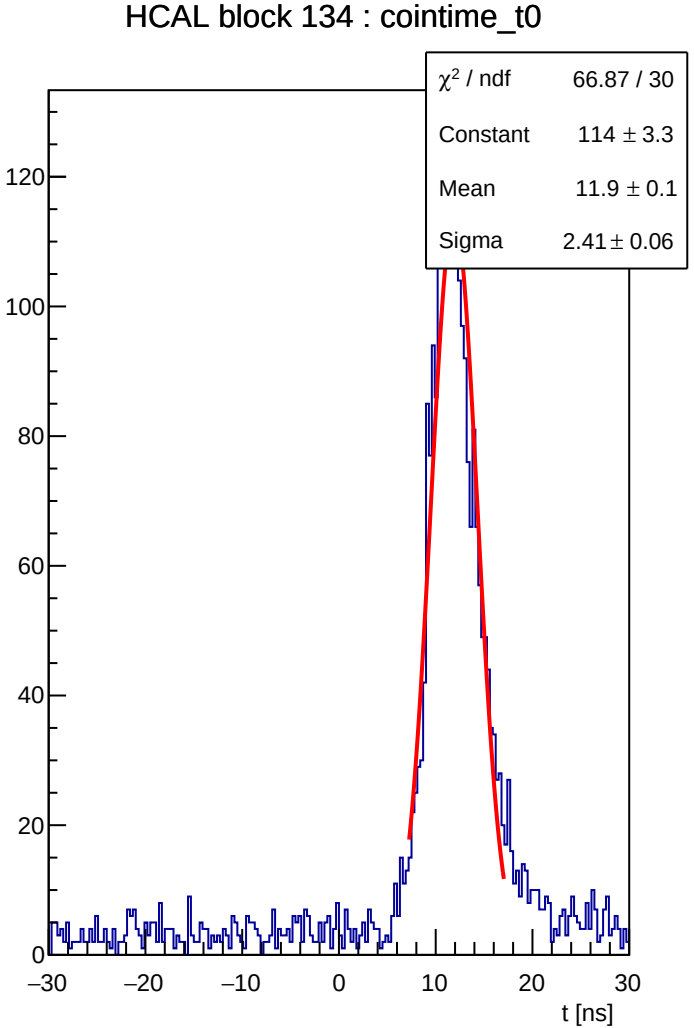

HCAL block 131 : cointime tw corr t0
χ² / ndf 59.03 / 36
Constant 76.09 ± 2.72
Mean 12.09 ± 0.07
Sigma 2.342 ± 0.065
t tw corr [ns]

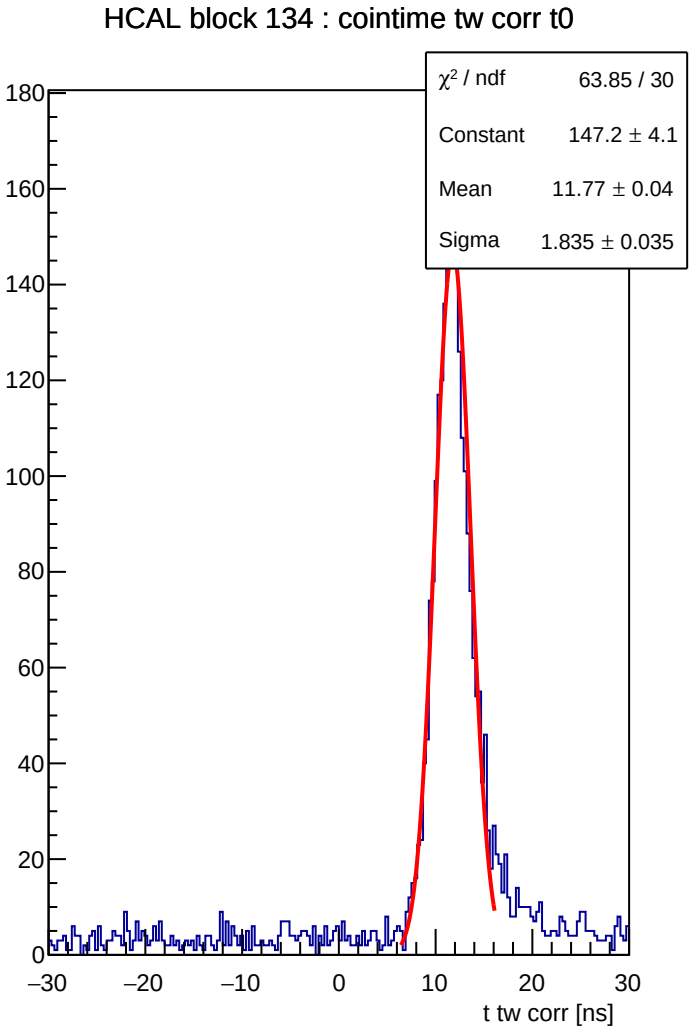

HCAL block 132 : cointime_t0
χ² / ndf 102.4 / 48
Constant 43.15 ± 1.73
Mean 12.54 ± 0.12
Sigma 3.547 ± 0.126
t [ns]

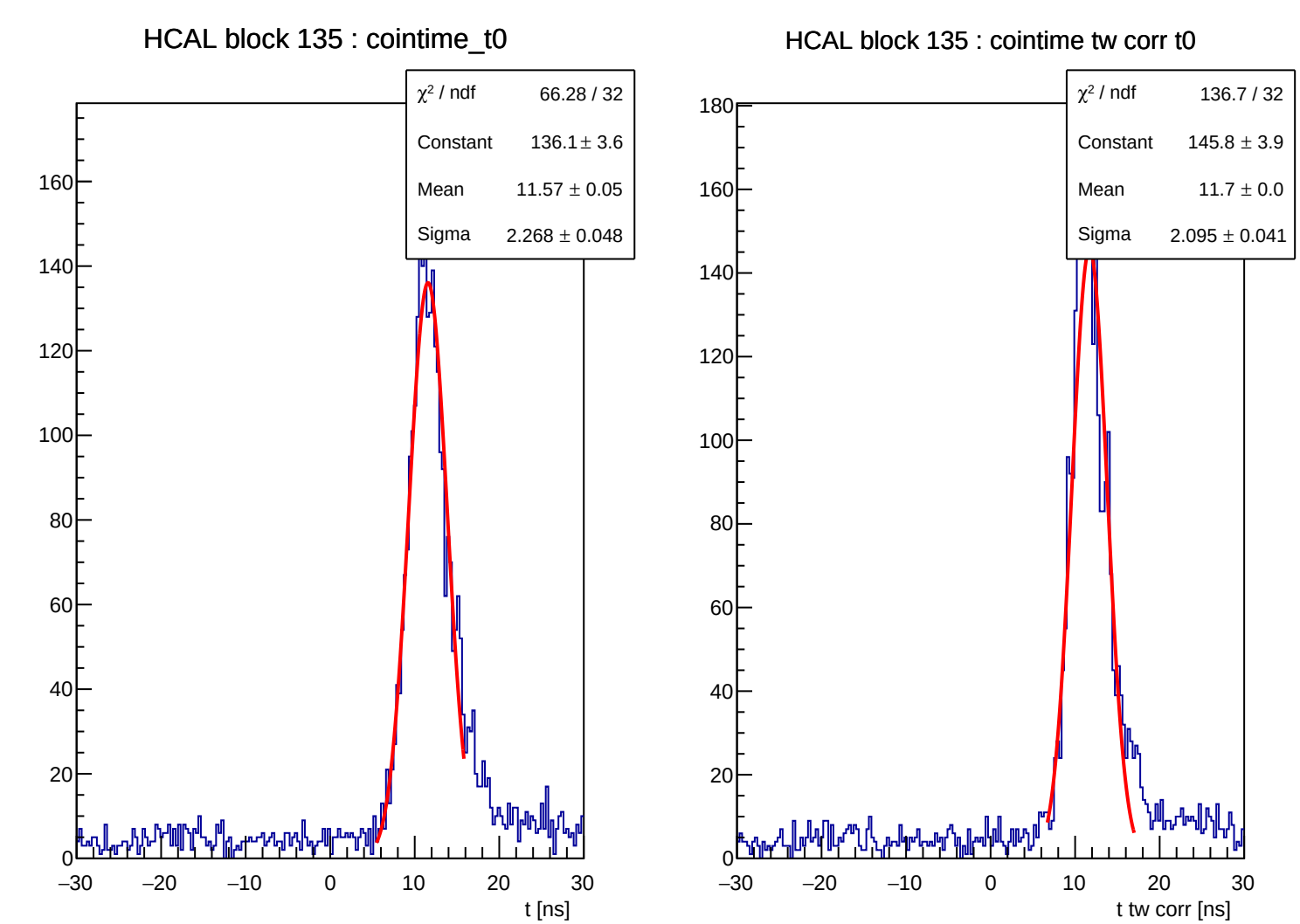

HCAL block 132 : cointime tw corr t0
χ² / ndf 47.17 / 46
Constant 26.32 ± 1.04
Mean 12.25 ± 1.25
Sigma 8.794 ± 1.307
t tw corr [ns]

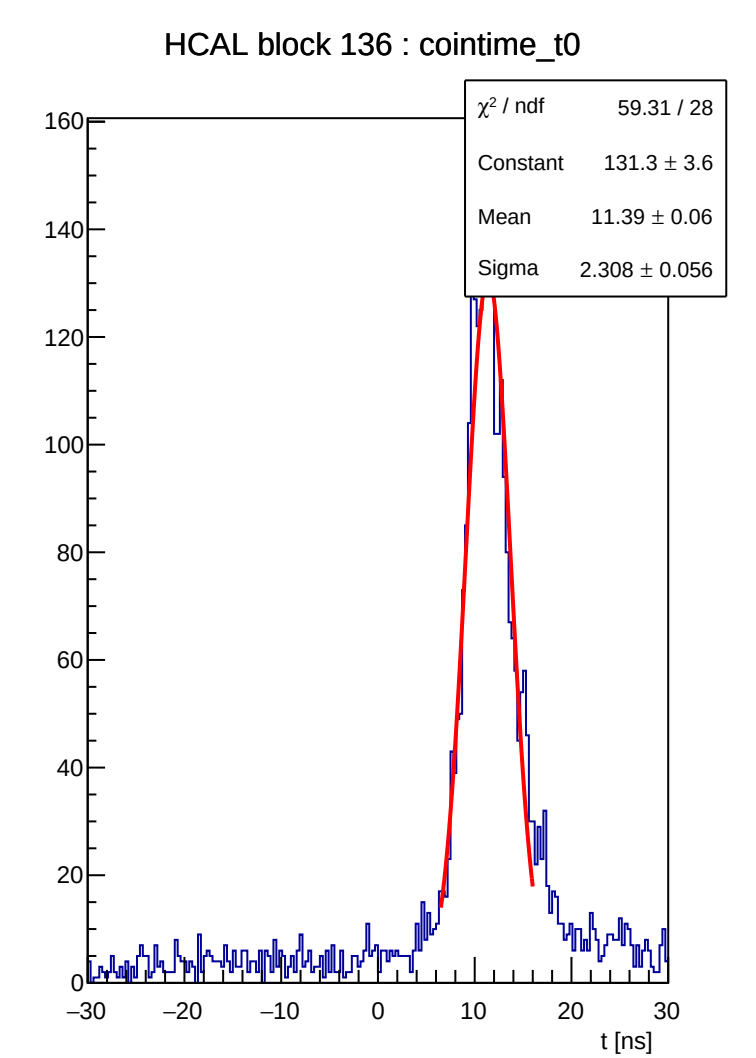

HCAL block 133 : cointime_t0
χ² / ndf 52.72 / 32
Constant 84.04 ± 2.85
Mean 11.92 ± 0.07
Sigma 2.359 ± 0.065
t [ns]

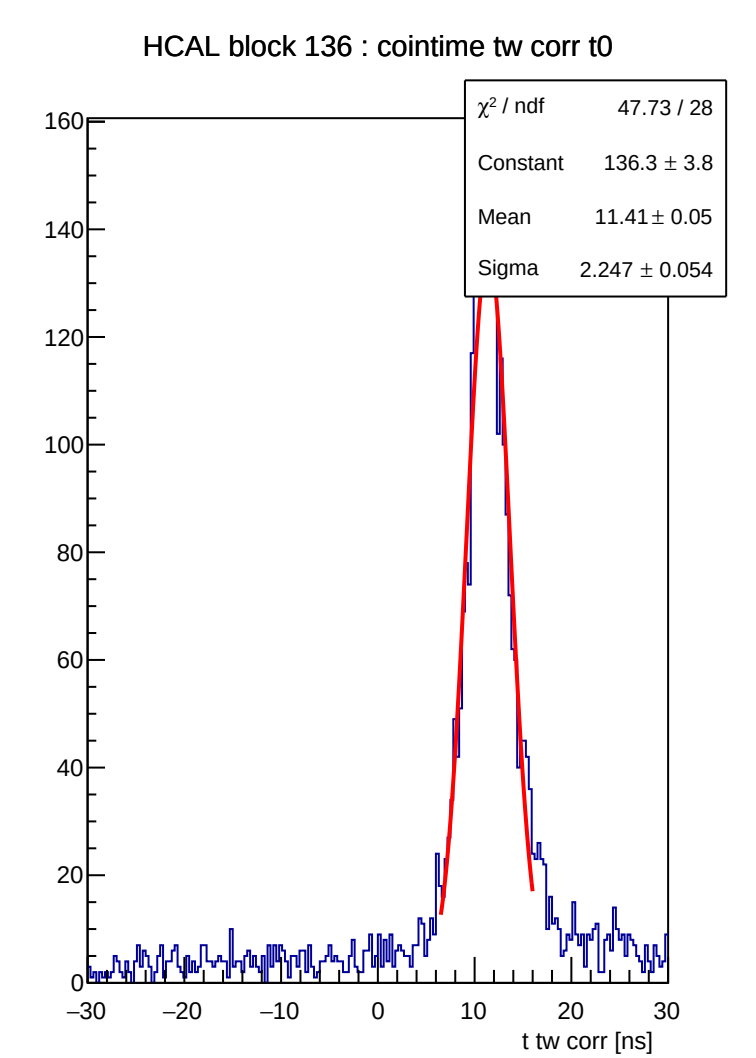

HCAL block 133 : cointime tw corr t0
χ² / ndf 75.48 / 32
Constant 98.7 ± 3.4
Mean 11.98 ± 0.05
Sigma 1.982 ± 0.052
t tw corr [ns]

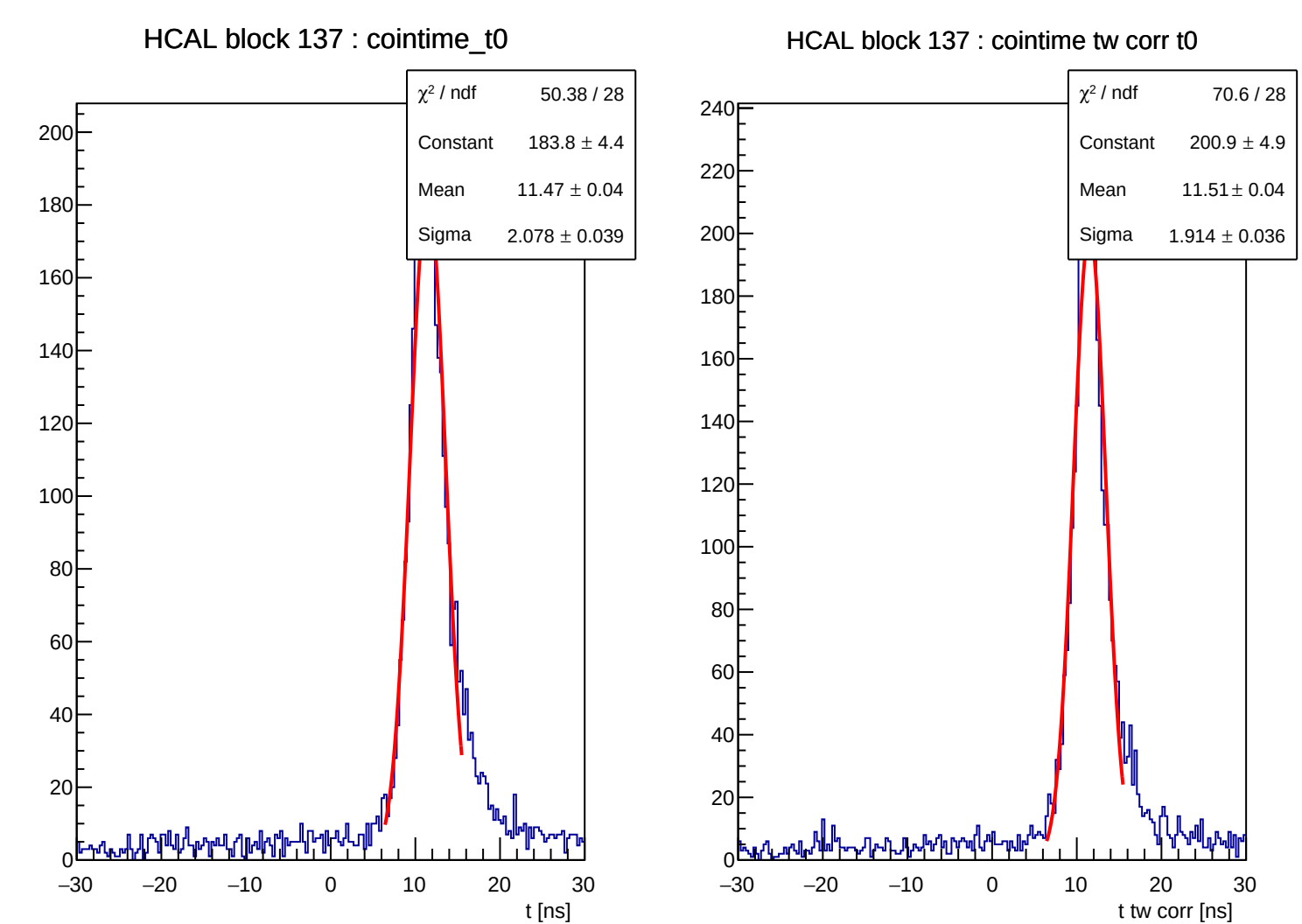

HCAL block 134 : cointime_t0
χ² / ndf 66.87 / 30
Constant 114 ± 3.3
Mean 11.9 ± 0.1
Sigma 2.41 ± 0.06
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

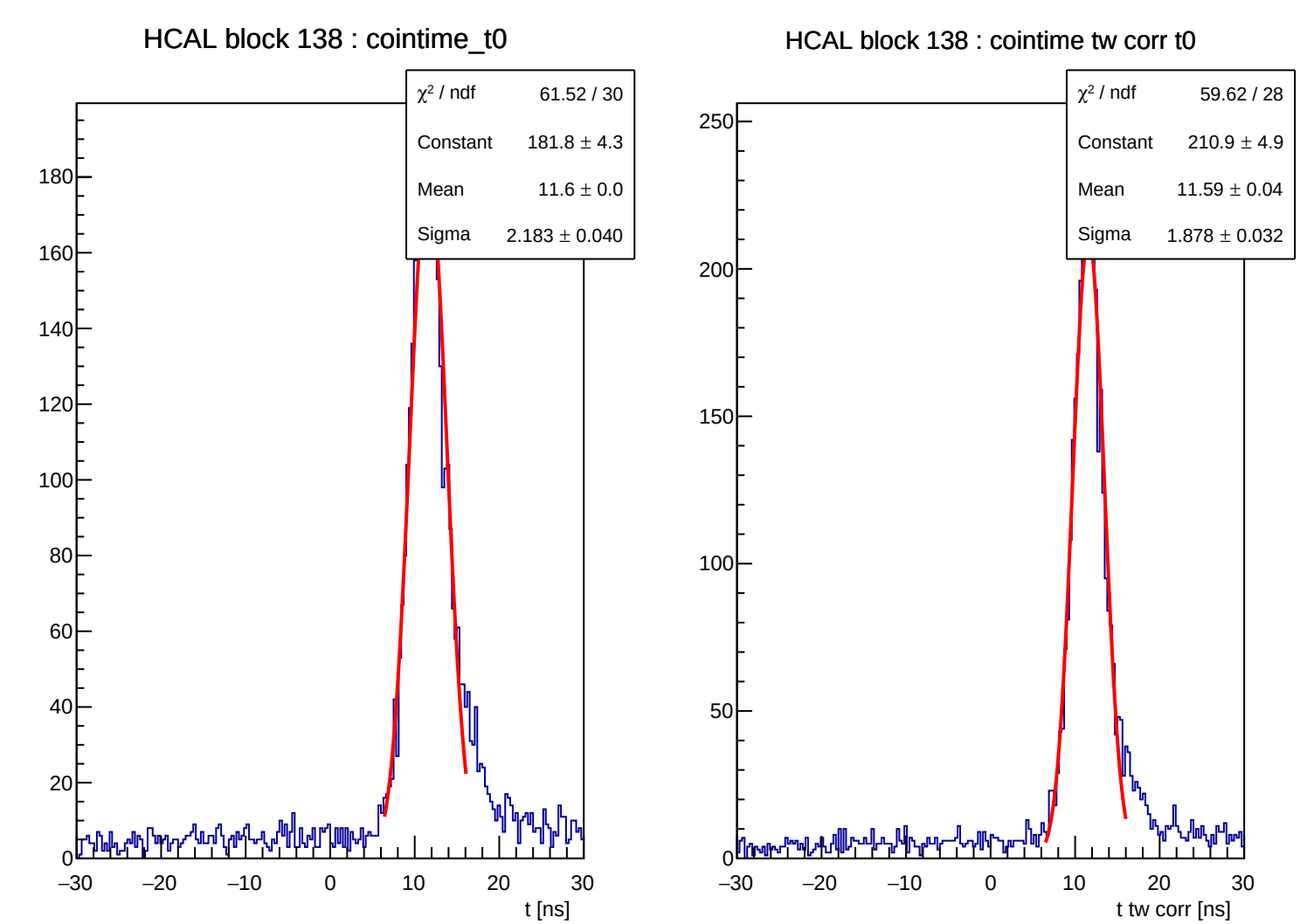

HCAL block 134 : cointime tw corr t0
χ² / ndf 63.85 / 30
Constant 147.2 ± 4.1
Mean 11.77 ± 0.04
Sigma 1.835 ± 0.035
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

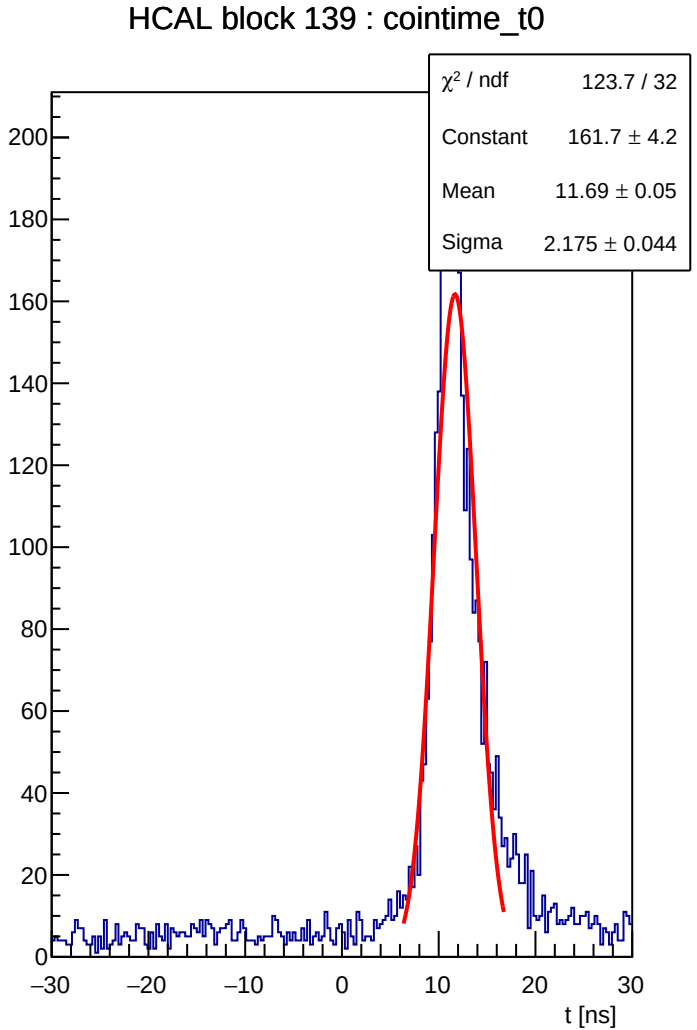

HCAL block 135 : cointime_t0
χ² / ndf 66.28 / 32
Constant 136.1 ± 3.6
Mean 11.57 ± 0.05
Sigma 2.268 ± 0.048
t [ns]
HCAL block 135 : cointime tw corr t0
χ² / ndf 136.7 / 32
Constant 145.8 ± 3.9
Mean 11.7 ± 0.0
Sigma 2.095 ± 0.041
t tw corr [ns]

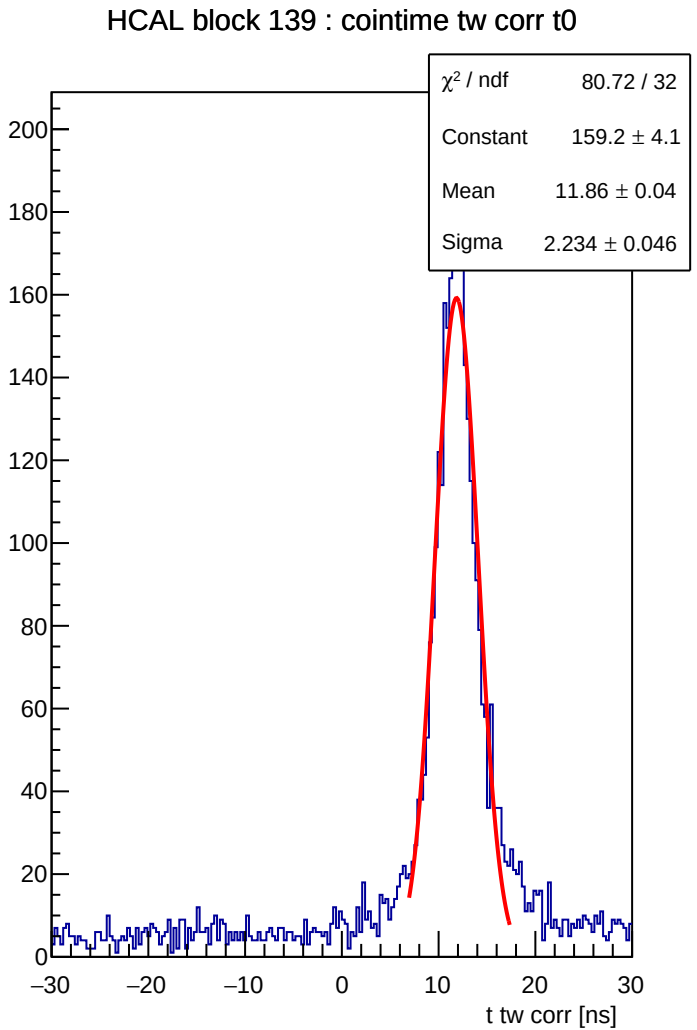

HCAL block 136 : cointime_t0
χ² / ndf 59.31 / 28
Constant 131.3 ± 3.6
Mean 11.39 ± 0.06
Sigma 2.308 ± 0.056
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

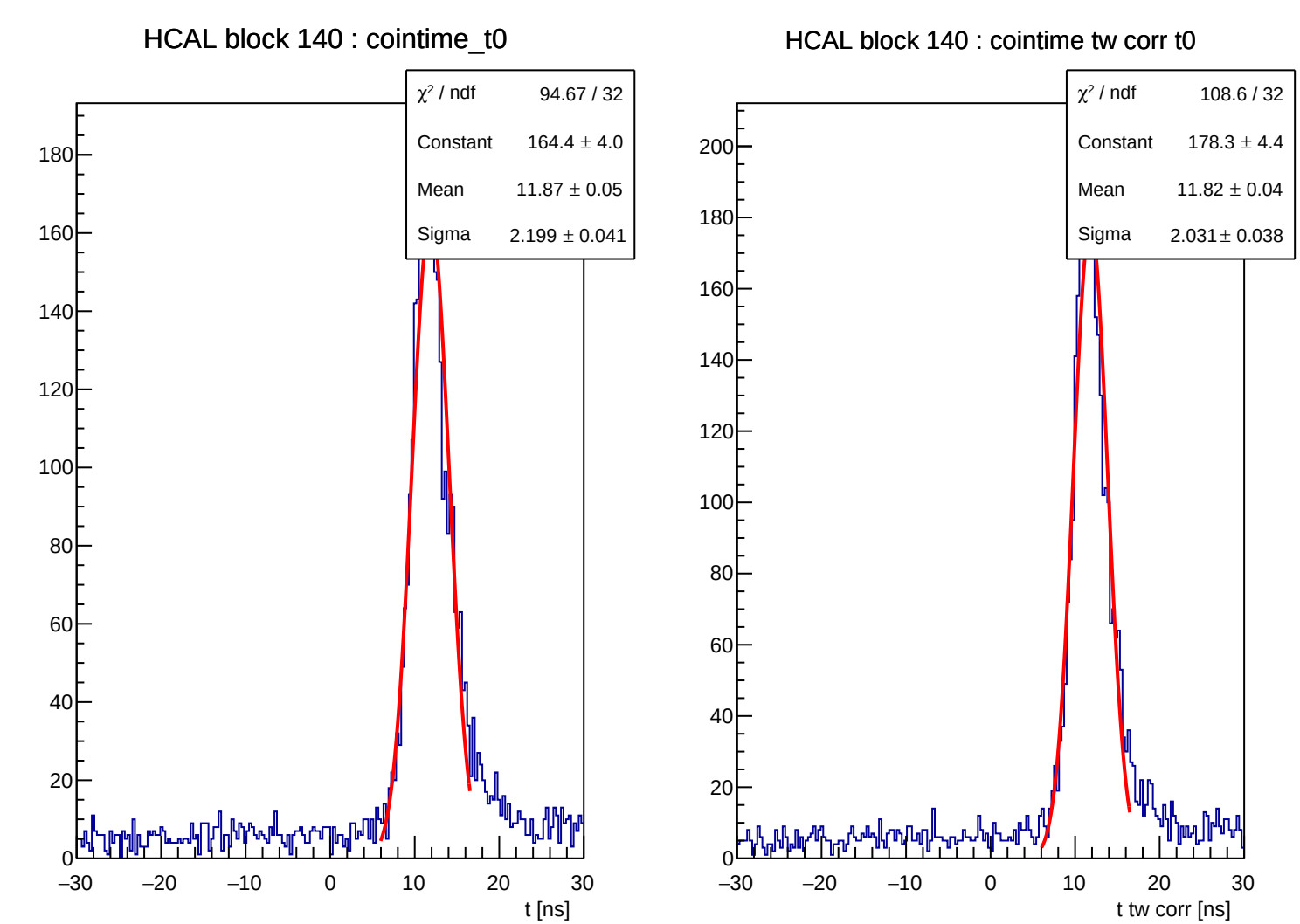

HCAL block 136 : cointime tw corr t0
χ² / ndf 47.73 / 28
Constant 136.3 ± 3.8
Mean 11.41 ± 0.05
Sigma 2.247 ± 0.054
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

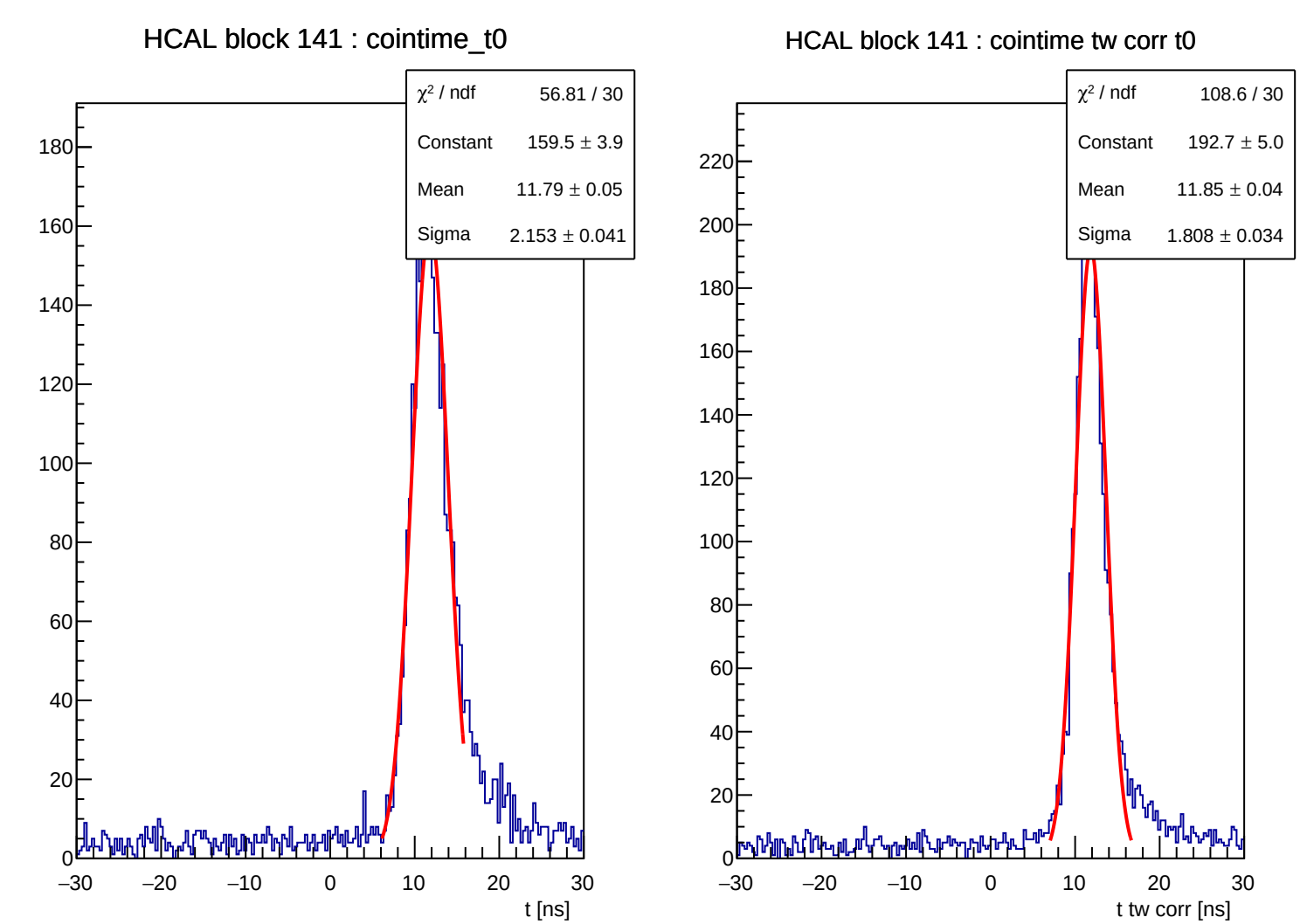

HCAL block 137 : cointime_t0
χ² / ndf 50.38 / 28
Constant 183.8 ± 4.4
Mean 11.47 ± 0.04
Sigma 2.078 ± 0.039
t [ns]
HCAL block 137 : cointime tw corr t0
χ² / ndf 70.6 / 28
Constant 200.9 ± 4.9
Mean 11.51 ± 0.04
Sigma 1.914 ± 0.036
t tw corr [ns]

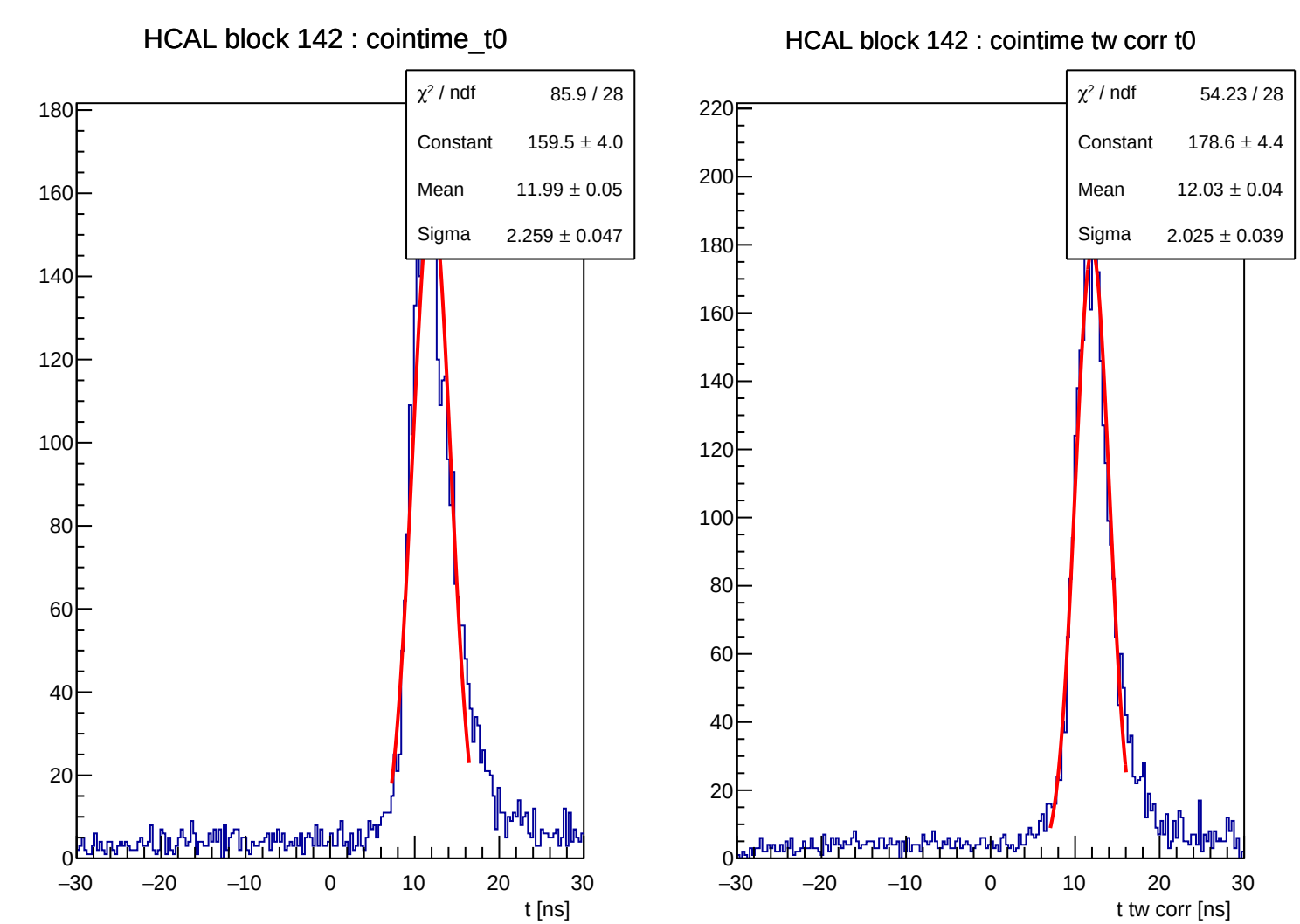

HCAL block 138 : cointime_t0
χ² / ndf 61.52 / 30
Constant 181.8 ± 4.3
Mean 11.6 ± 0.0
Sigma 2.183 ± 0.040
t [ns]
HCAL block 138 : cointime tw corr t0
χ² / ndf 59.62 / 28
Constant 210.9 ± 4.9
Mean 11.59 ± 0.04
Sigma 1.878 ± 0.032
t tw corr [ns]

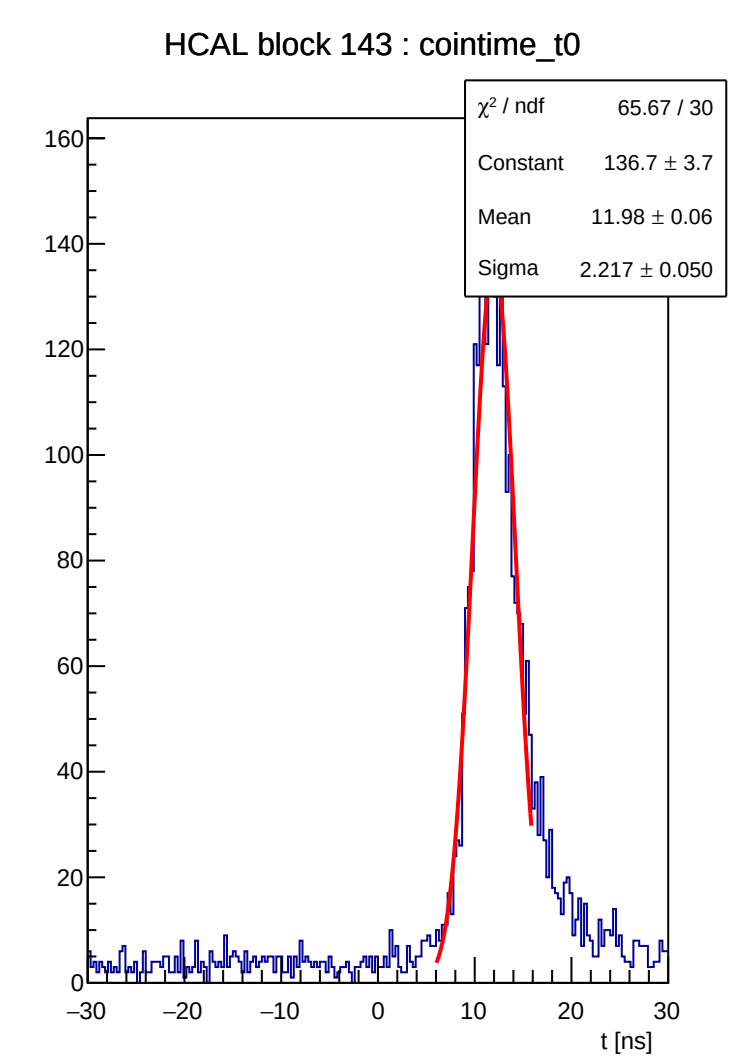

HCAL block 139 : cointime_t0
χ² / ndf 123.7 / 32
Constant 161.7 ± 4.2
Mean 11.69 ± 0.05
Sigma 2.175 ± 0.044
200
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

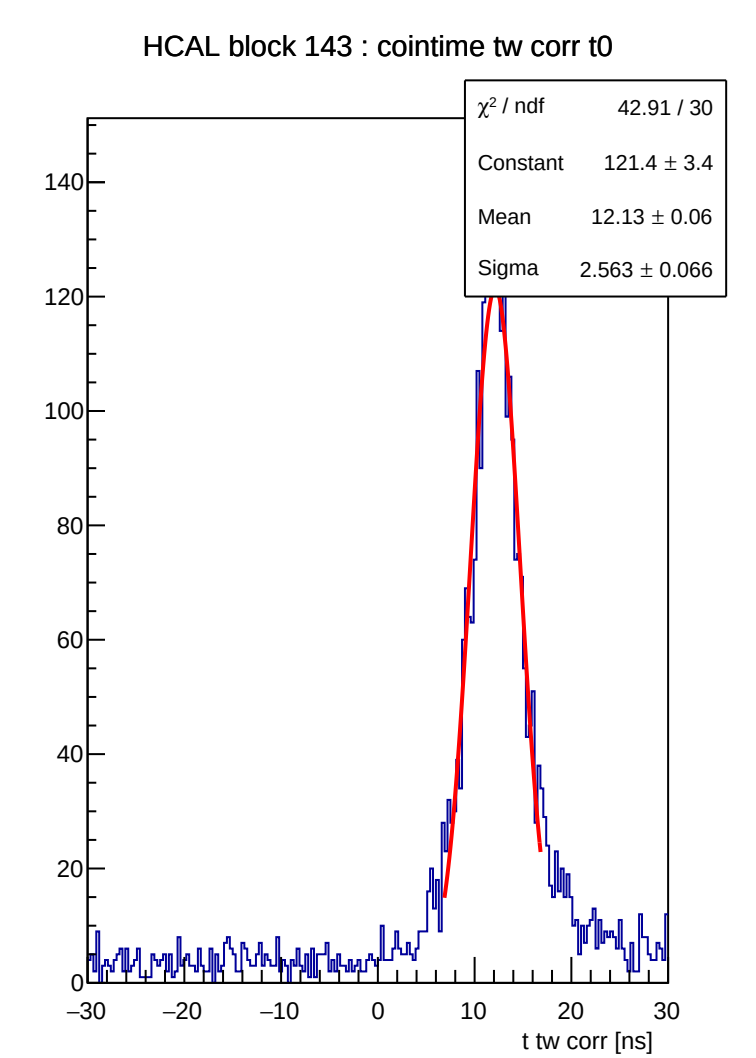

HCAL block 139 : cointime tw corr t0
χ² / ndf 80.72 / 32
Constant 159.2 ± 4.1
Mean 11.86 ± 0.04
Sigma 2.234 ± 0.046
200
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

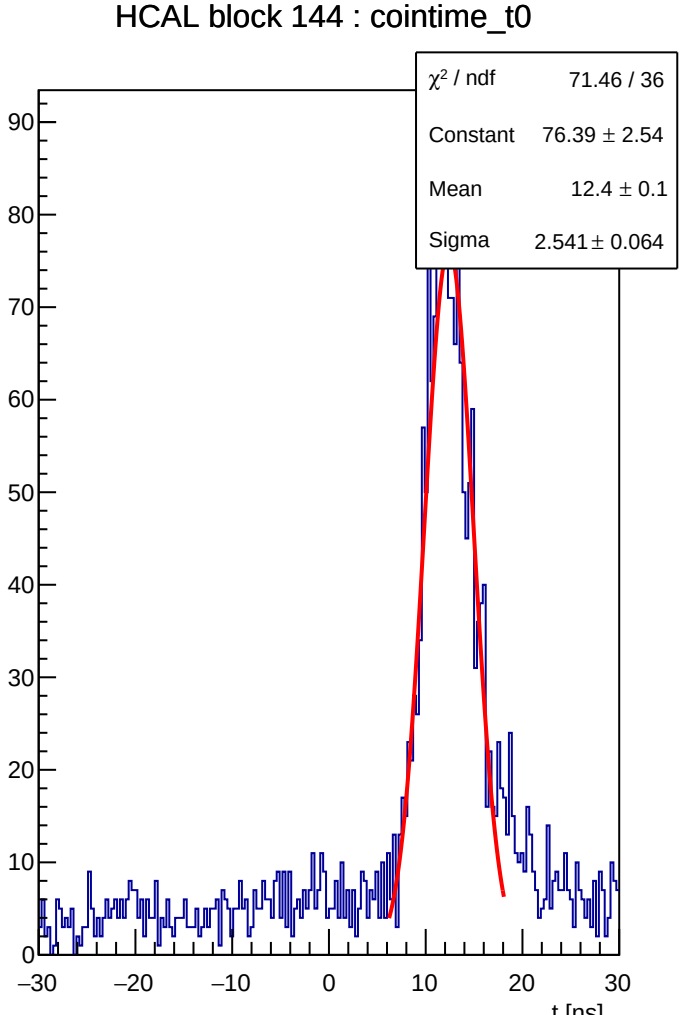

HCAL block 140 : cointime_t0
χ² / ndf 94.67 / 32
Constant 164.4 ± 4.0
Mean 11.87 ± 0.05
Sigma 2.199 ± 0.041
t [ns]
HCAL block 140 : cointime tw corr t0
χ² / ndf 108.6 / 32
Constant 178.3 ± 4.4
Mean 11.82 ± 0.04
Sigma 2.031 ± 0.038
t tw corr [ns]

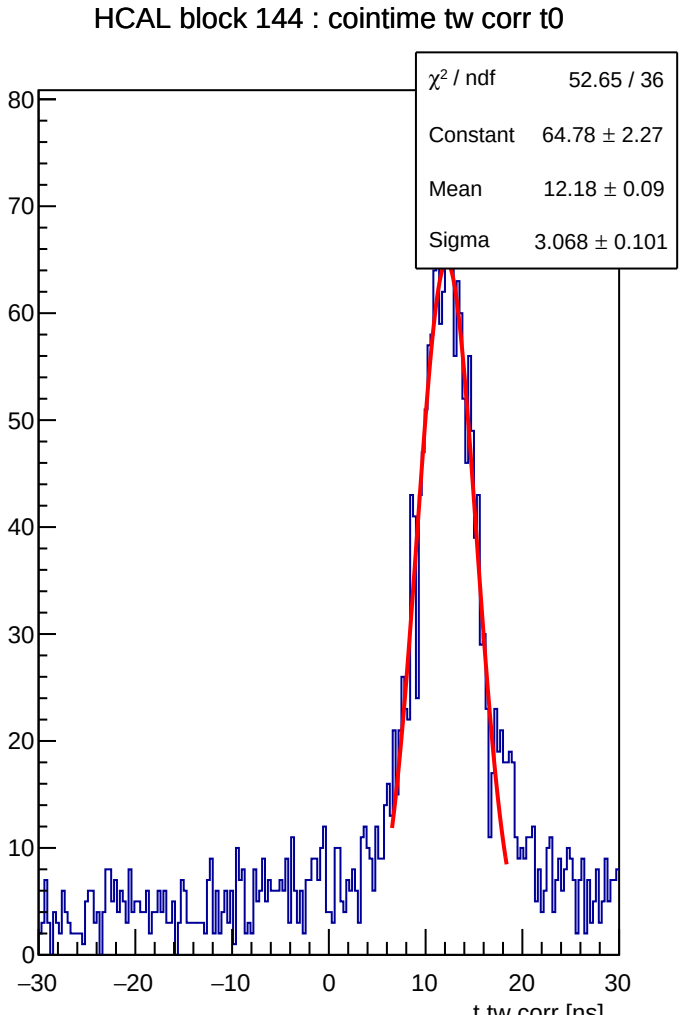

HCAL block 141 : cointime_t0
χ² / ndf 56.81 / 30
Constant 159.5 ± 3.9
Mean 11.79 ± 0.05
Sigma 2.153 ± 0.041
t [ns]
HCAL block 141 : cointime tw corr t0
χ² / ndf 108.6 / 30
Constant 192.7 ± 5.0
Mean 11.85 ± 0.04
Sigma 1.808 ± 0.034
t tw corr [ns]

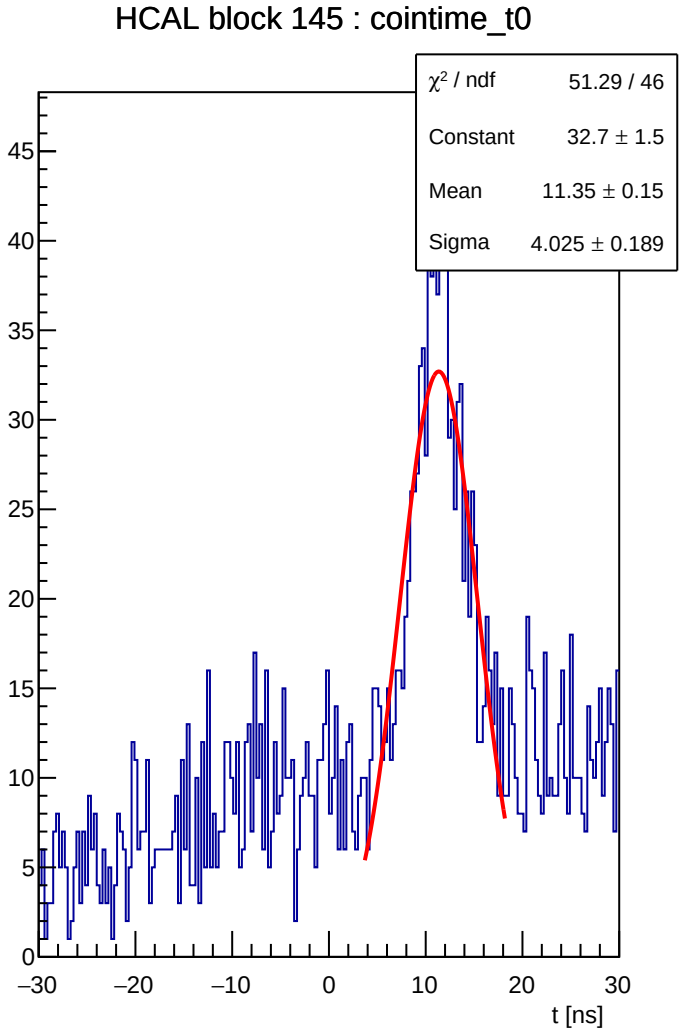

HCAL block 142 : cointime_t0
χ² / ndf 85.9 / 28
Constant 159.5 ± 4.0
Mean 11.99 ± 0.05
Sigma 2.259 ± 0.047
t [ns]
HCAL block 142 : cointime tw corr t0
χ² / ndf 54.23 / 28
Constant 178.6 ± 4.4
Mean 12.03 ± 0.04
Sigma 2.025 ± 0.039
t tw corr [ns]

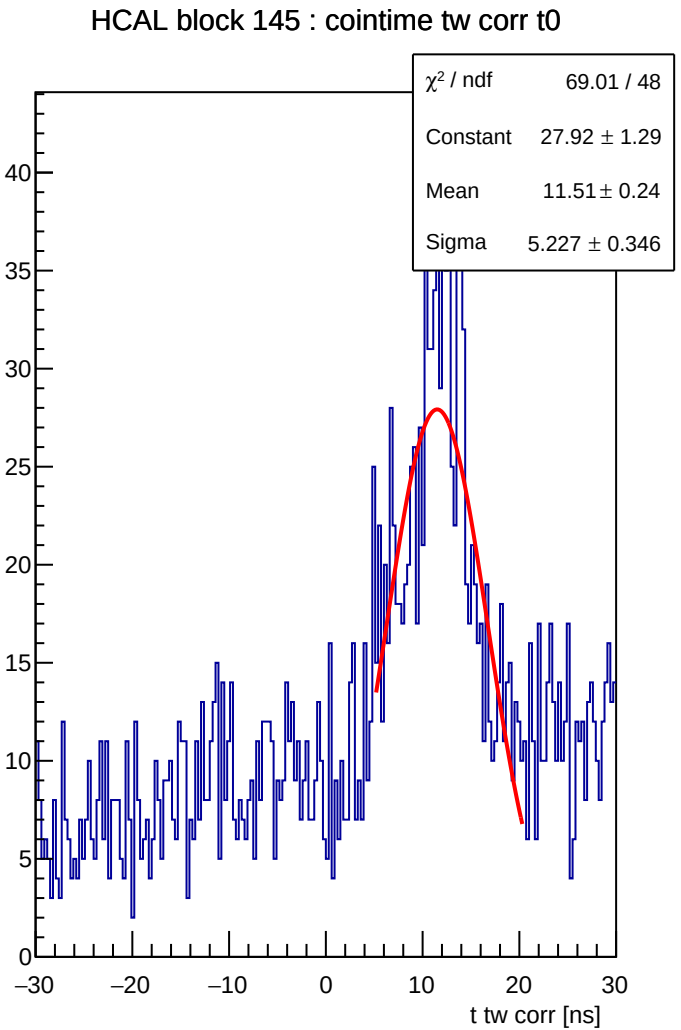

HCAL block 143 : cointime_t0
χ² / ndf 65.67 / 30
Constant 136.7 ± 3.7
Mean 11.98 ± 0.06
Sigma 2.217 ± 0.050
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

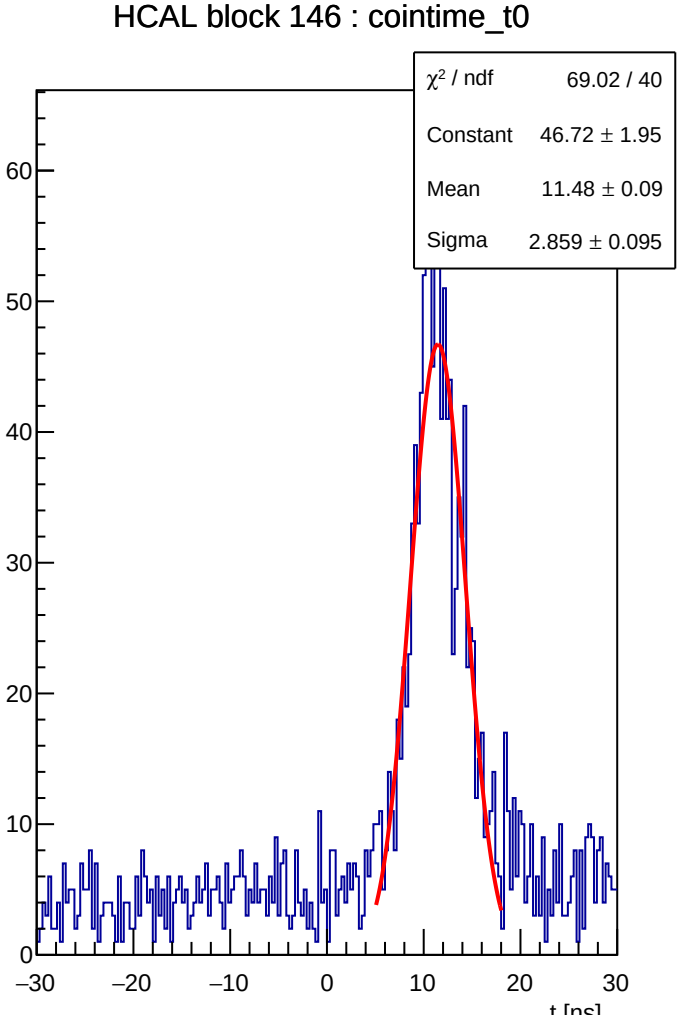

HCAL block 143 : cointime tw corr t0
χ² / ndf 42.91 / 30
Constant 121.4 ± 3.4
Mean 12.13 ± 0.06
Sigma 2.563 ± 0.066
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

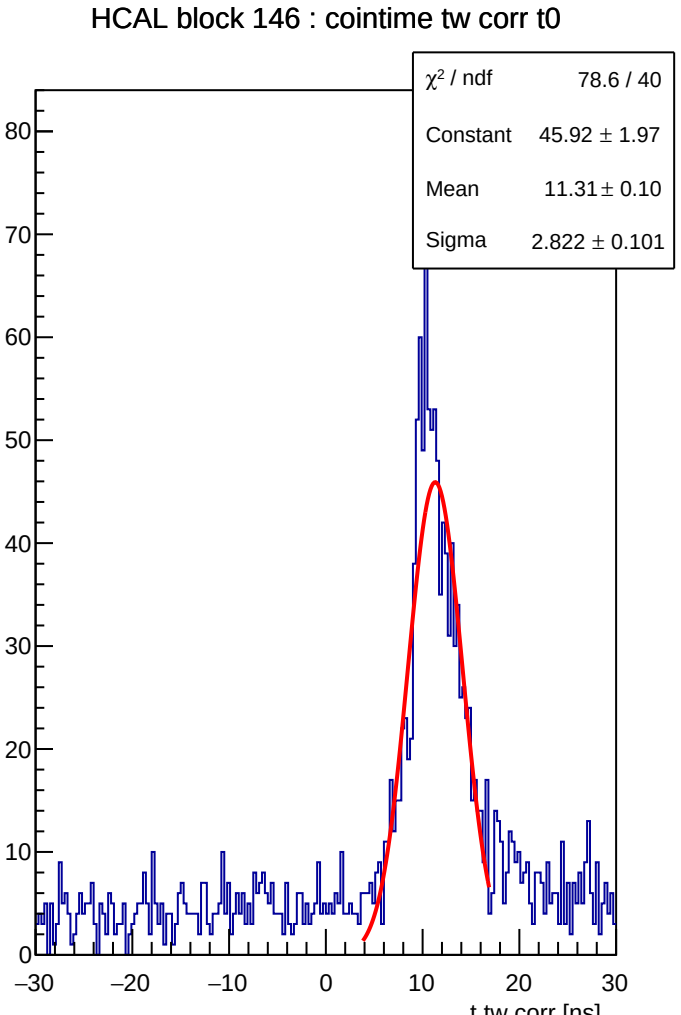

HCAL block 144 : cointime_t0
χ² / ndf 71.46 / 36
Constant 76.39 ± 2.54
Mean 12.4 ± 0.1
Sigma 2.541 ± 0.064
t [ns]

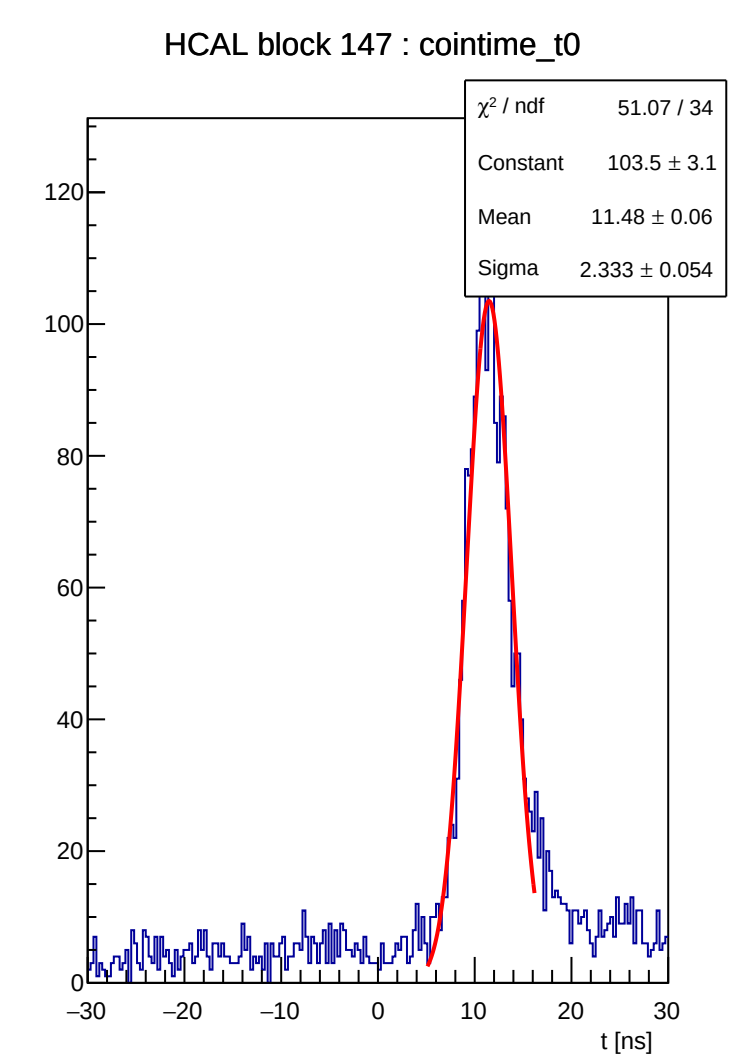

HCAL block 144 : cointime tw corr t0
χ² / ndf 52.65 / 36
Constant 64.78 ± 2.27
Mean 12.18 ± 0.09
Sigma 3.068 ± 0.101
t tw corr [ns]

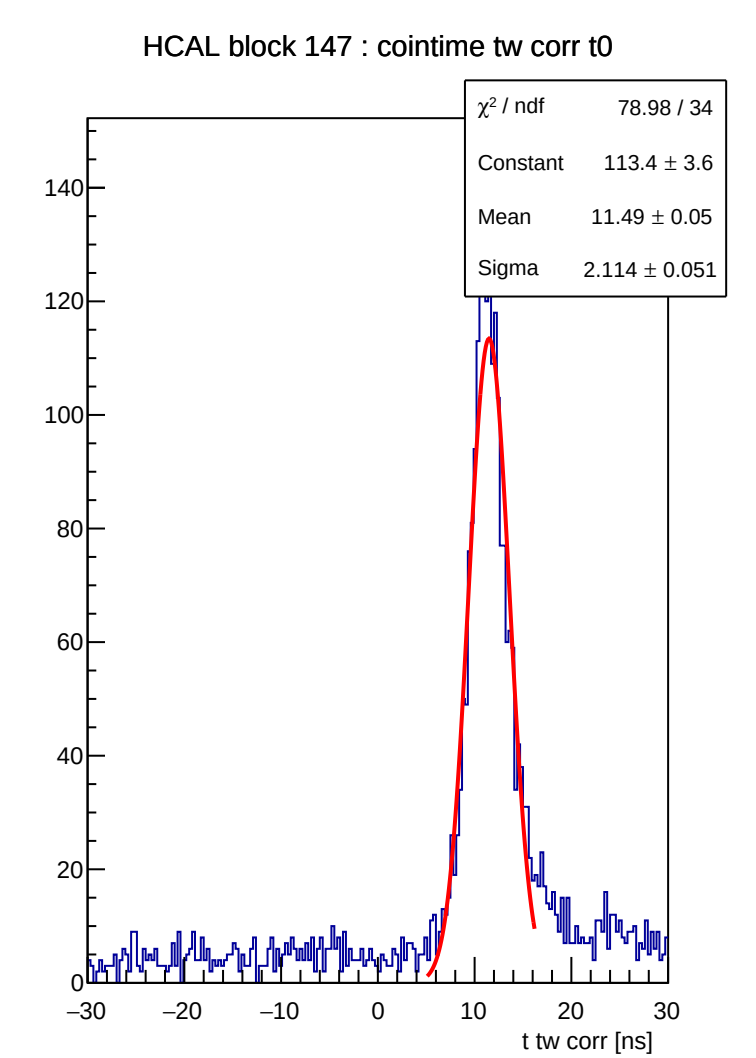

HCAL block 145 : cointime_t0
χ² / ndf 51.29 / 46
Constant 32.7 ± 1.5
Mean 11.35 ± 0.15
Sigma 4.025 ± 0.189
t [ns]

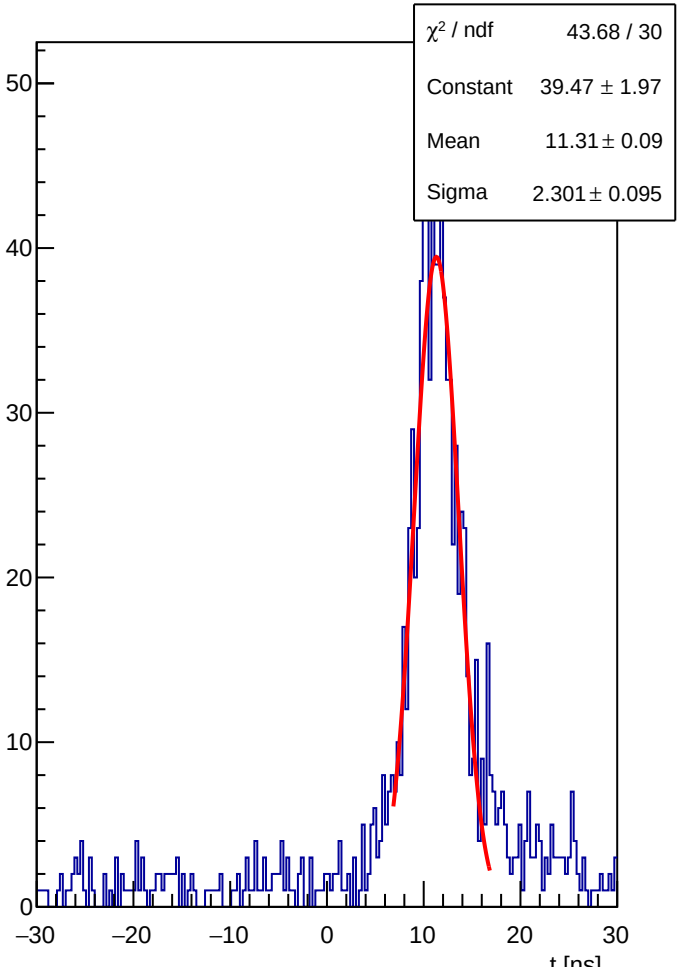

HCAL block 145 : cointime tw corr t0
χ² / ndf 69.01 / 48
Constant 27.92 ± 1.29
Mean 11.51 ± 0.24
Sigma 5.227 ± 0.346
t tw corr [ns]

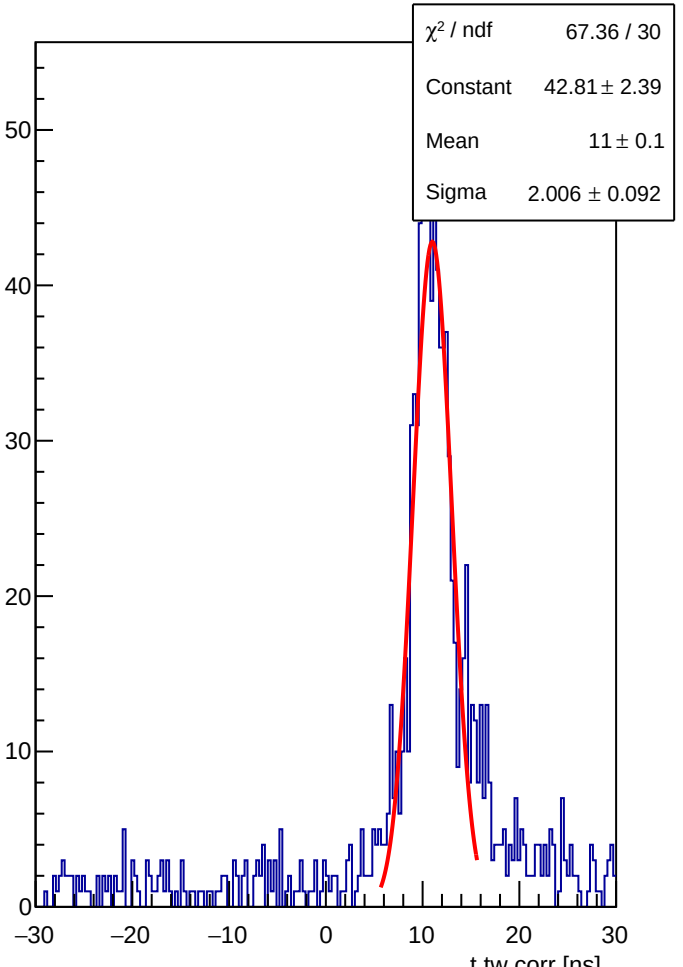

HCAL block 146 : cointime_t0
χ² / ndf 69.02 / 40
Constant 46.72 ± 1.95
Mean 11.48 ± 0.09
Sigma 2.859 ± 0.095
t [ns]

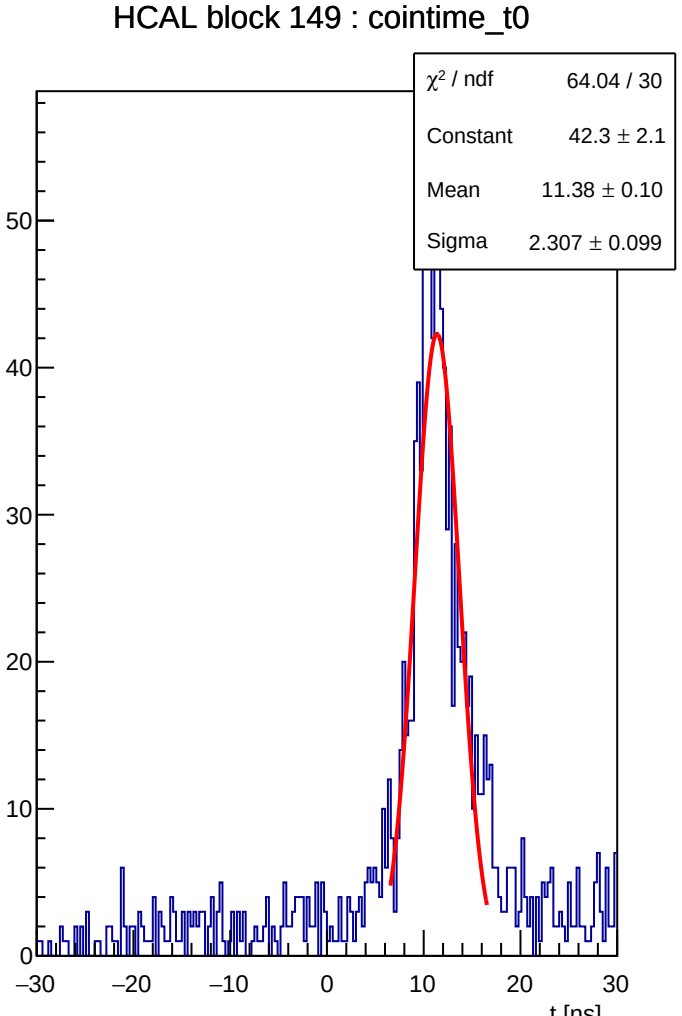

HCAL block 146 : cointime tw corr t0
χ² / ndf 78.6 / 40
Constant 45.92 ± 1.97
Mean 11.31 ± 0.10
Sigma 2.822 ± 0.101
t tw corr [ns]

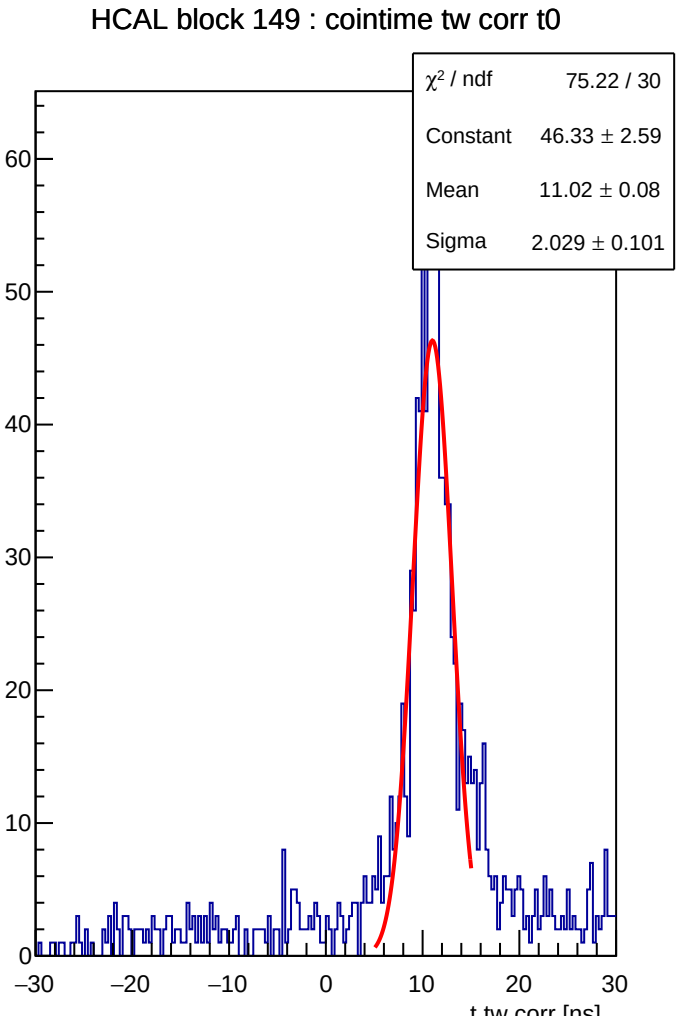

HCAL block 147 : cointime_t0
χ² / ndf 51.07 / 34
Constant 103.5 ± 3.1
Mean 11.48 ± 0.06
Sigma 2.333 ± 0.054
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

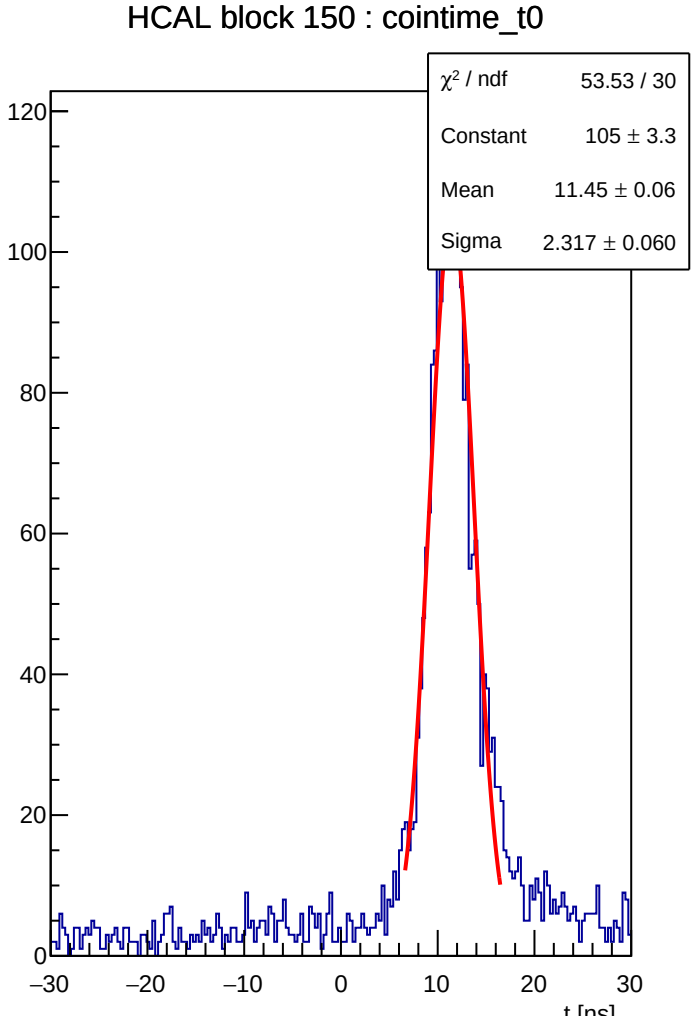

HCAL block 147 : cointime tw corr t0
χ² / ndf 78.98 / 34
Constant 113.4 ± 3.6
Mean 11.49 ± 0.05
Sigma 2.114 ± 0.051
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

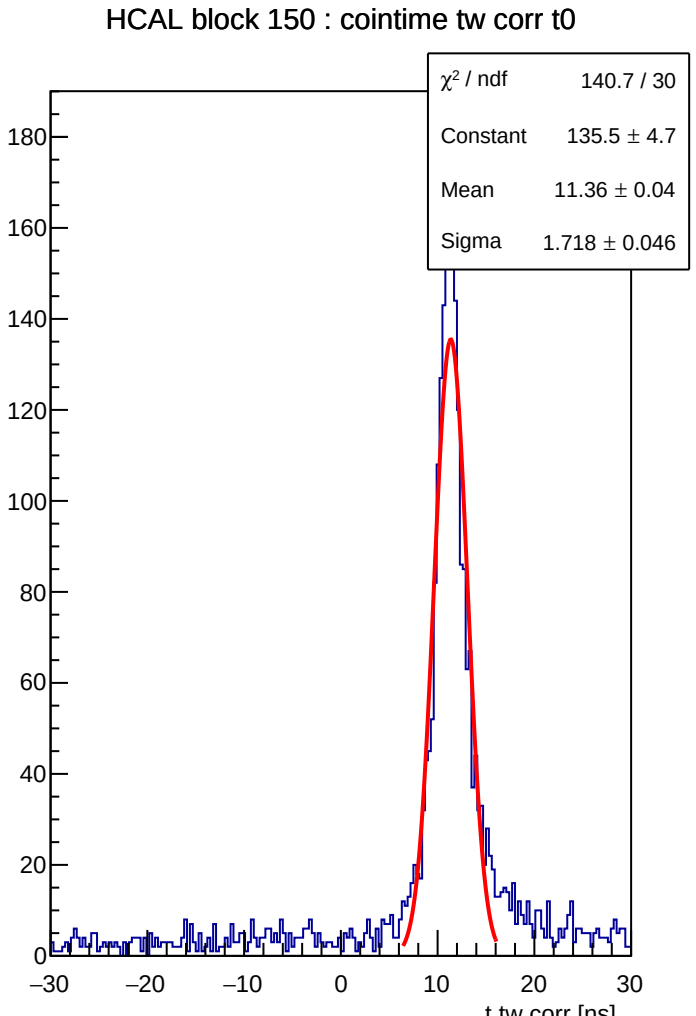

HCAL block 148 : cointime_t0
χ² / ndf 43.68 / 30
Constant 39.47 ± 1.97
Mean 11.31 ± 0.09
Sigma 2.301 ± 0.095
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t [ns]

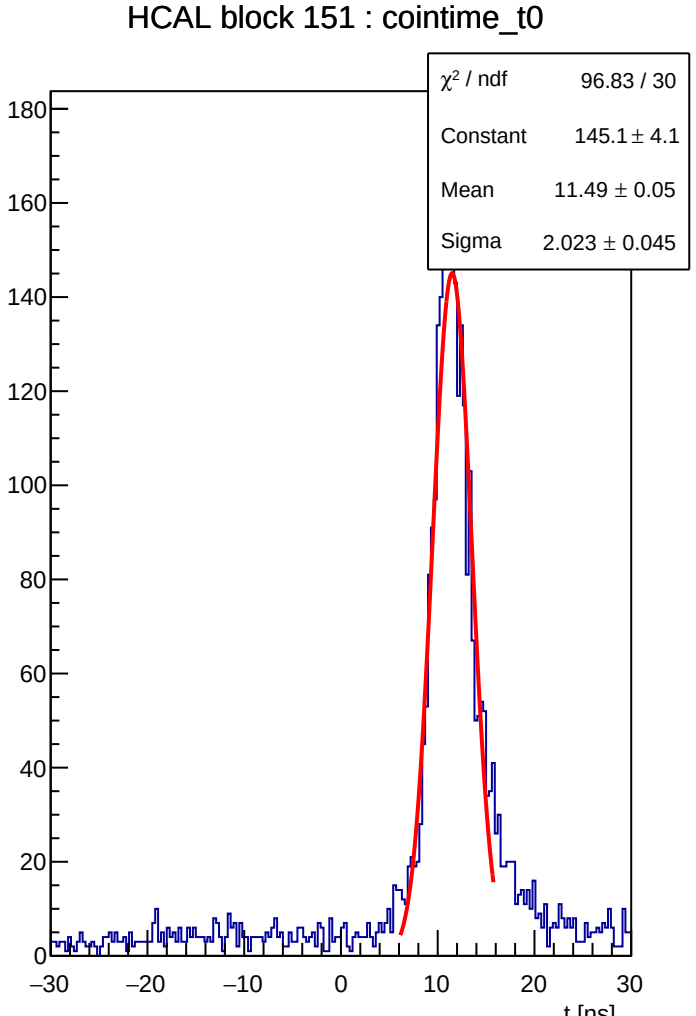

HCAL block 148 : cointime tw corr t0
χ² / ndf 67.36 / 30
Constant 42.81 ± 2.39
Mean 11 ± 0.1
Sigma 2.006 ± 0.092
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

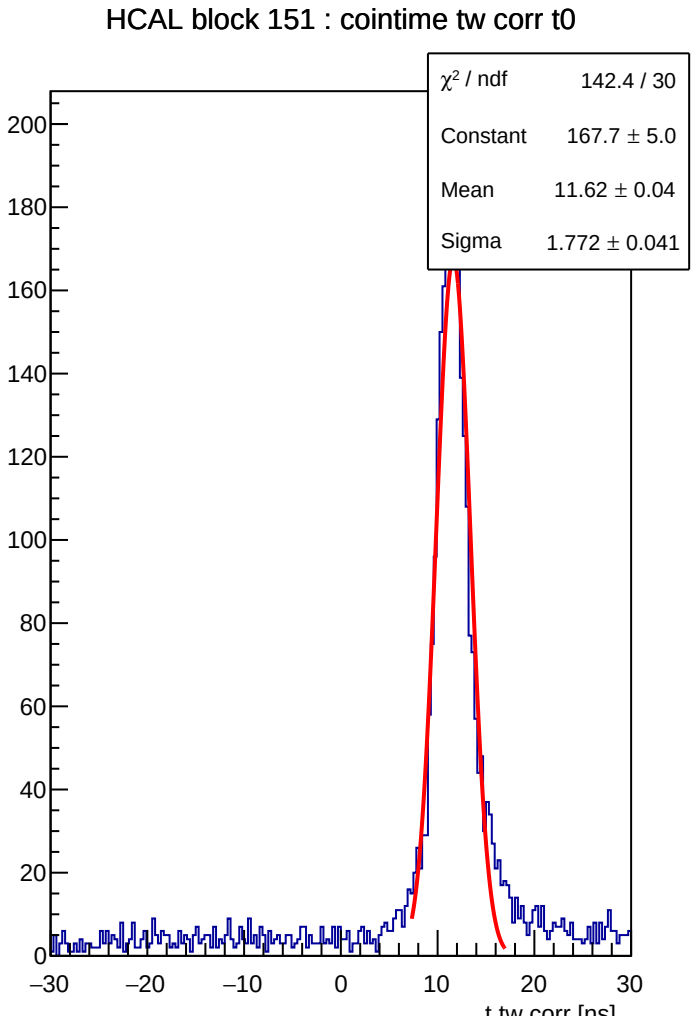

HCAL block 149 : cointime_t0
χ² / ndf 64.04 / 30
Constant 42.3 ± 2.1
Mean 11.38 ± 0.10
Sigma 2.307 ± 0.099
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t [ns]

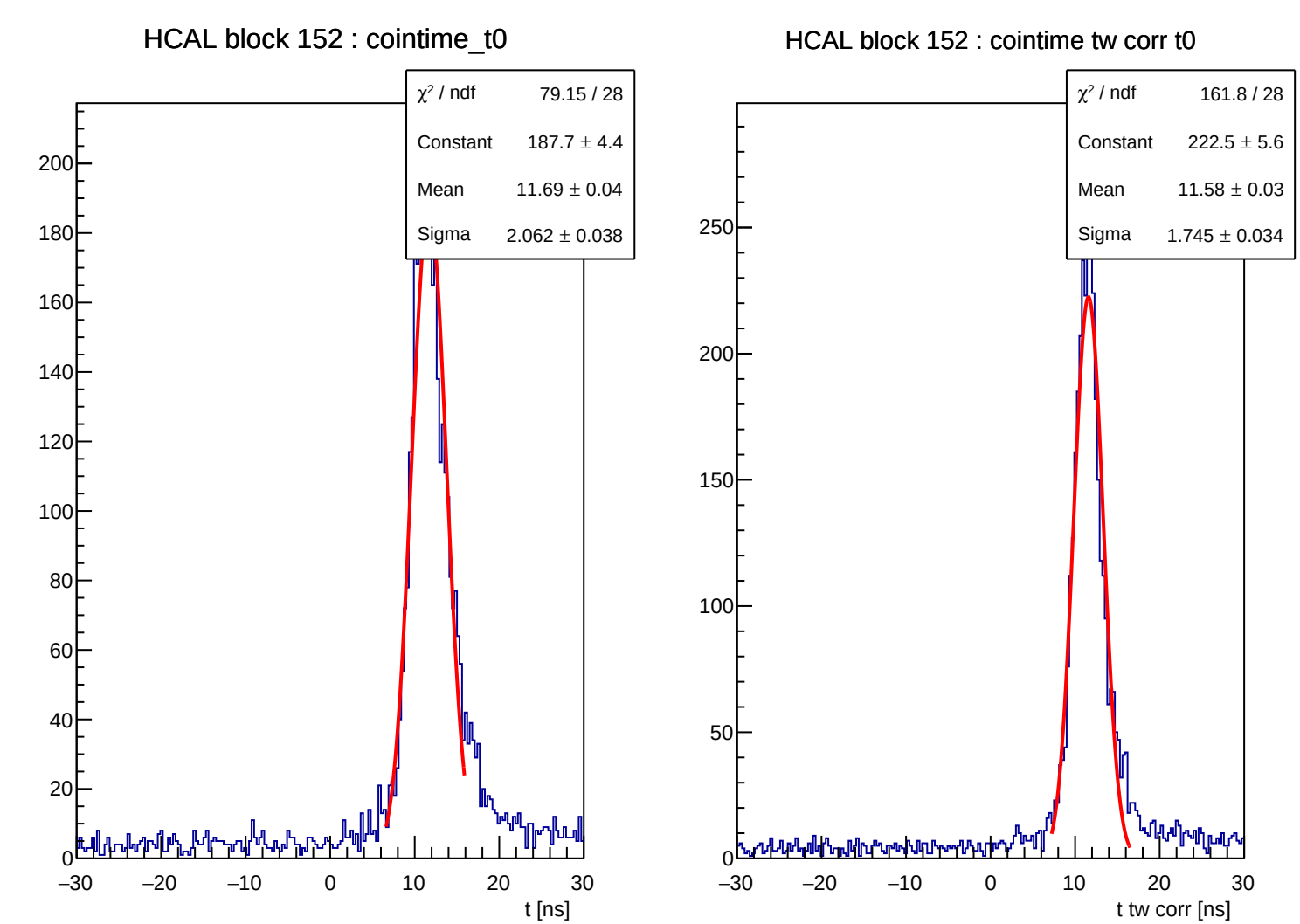

HCAL block 149 : cointime tw corr t0
χ² / ndf 75.22 / 30
Constant 46.33 ± 2.59
Mean 11.02 ± 0.08
Sigma 2.029 ± 0.101
60
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

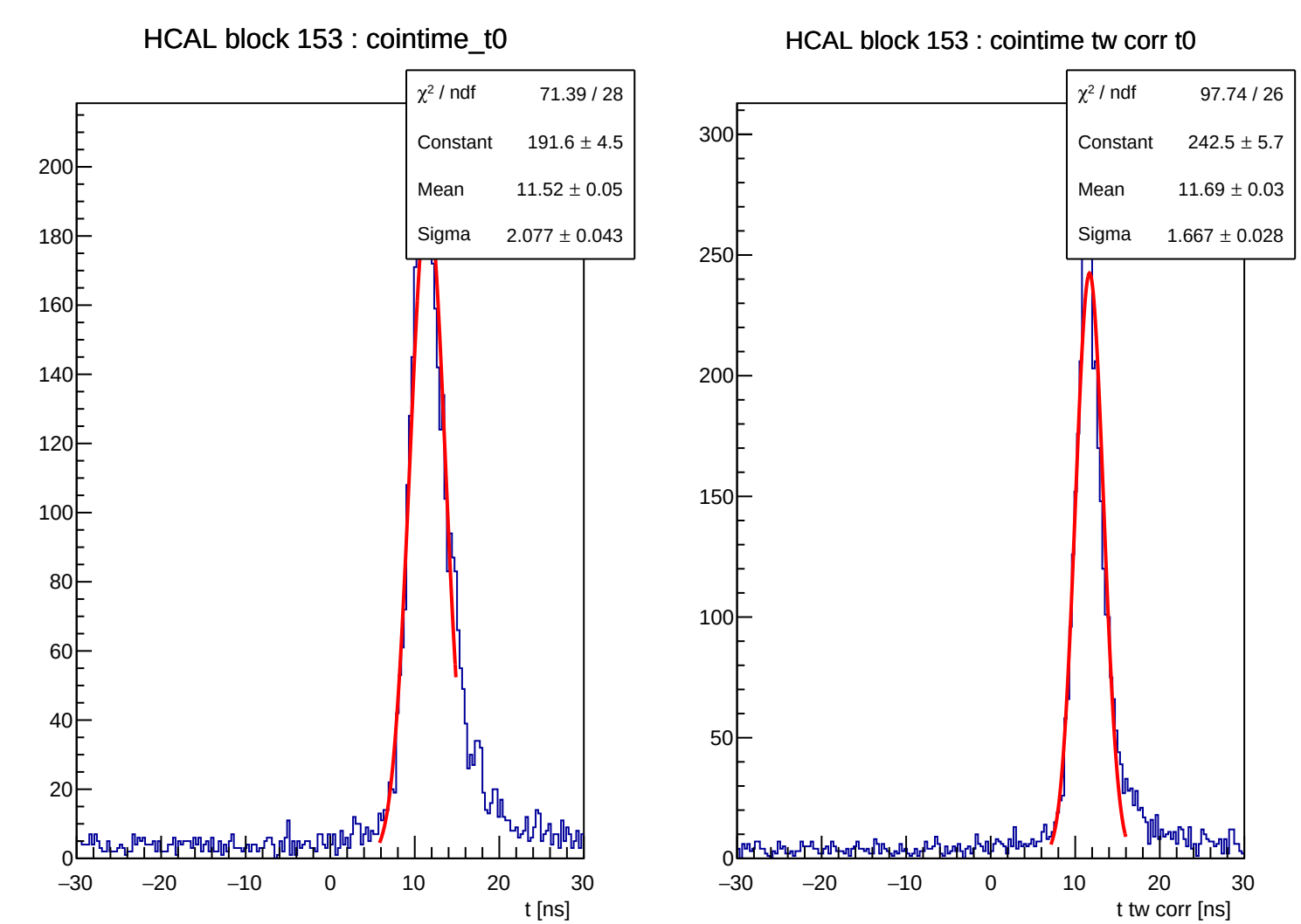

HCAL block 150 : cointime_t0
χ² / ndf 53.53 / 30
Constant 105 ± 3.3
Mean 11.45 ± 0.06
Sigma 2.317 ± 0.060
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

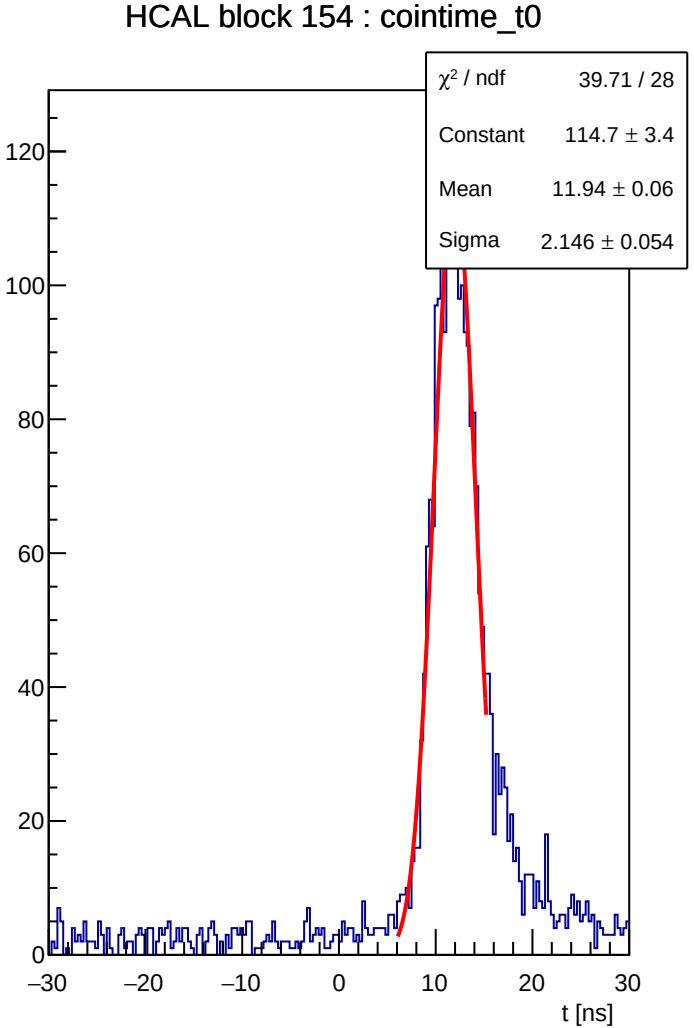

HCAL block 150 : cointime tw corr t0
χ² / ndf 140.7 / 30
Constant 135.5 ± 4.7
Mean 11.36 ± 0.04
Sigma 1.718 ± 0.046
180
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

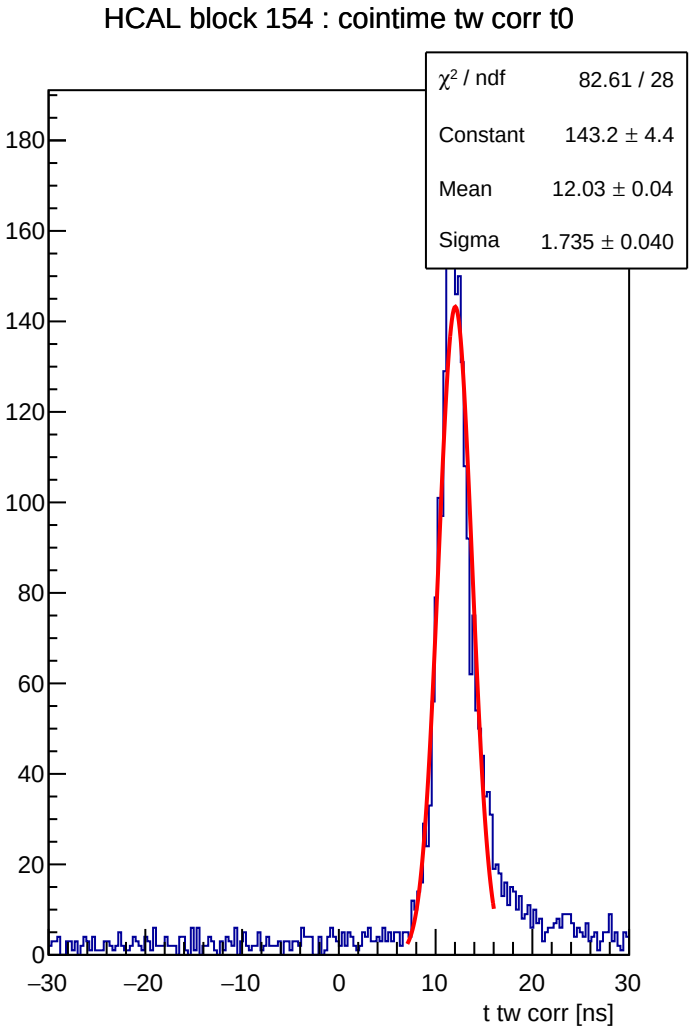

HCAL block 151 : cointime_t0
χ² / ndf 96.83 / 30
Constant 145.1 ± 4.1
Mean 11.49 ± 0.05
Sigma 2.023 ± 0.045
t [ns]

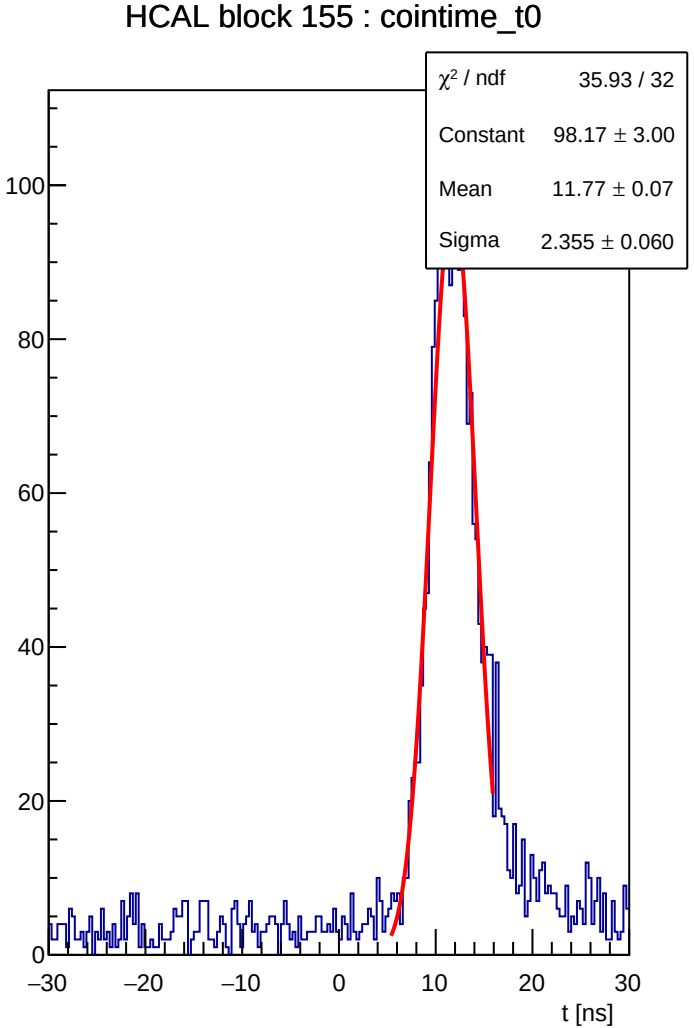

HCAL block 151 : cointime tw corr t0
χ² / ndf 142.4 / 30
Constant 167.7 ± 5.0
Mean 11.62 ± 0.04
Sigma 1.772 ± 0.041
t tw corr [ns]

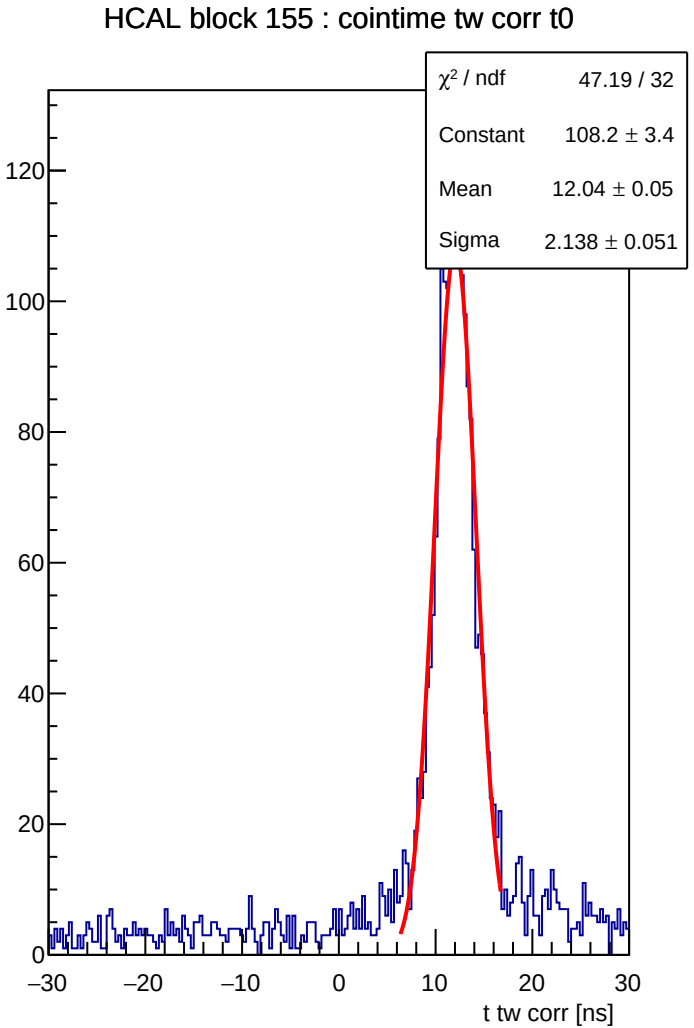

HCAL block 152 : cointime_t0
χ² / ndf 79.15 / 28
Constant 187.7 ± 4.4
Mean 11.69 ± 0.04
Sigma 2.062 ± 0.038
t [ns]
HCAL block 152 : cointime tw corr t0
χ² / ndf 161.8 / 28
Constant 222.5 ± 5.6
Mean 11.58 ± 0.03
Sigma 1.745 ± 0.034
t tw corr [ns]

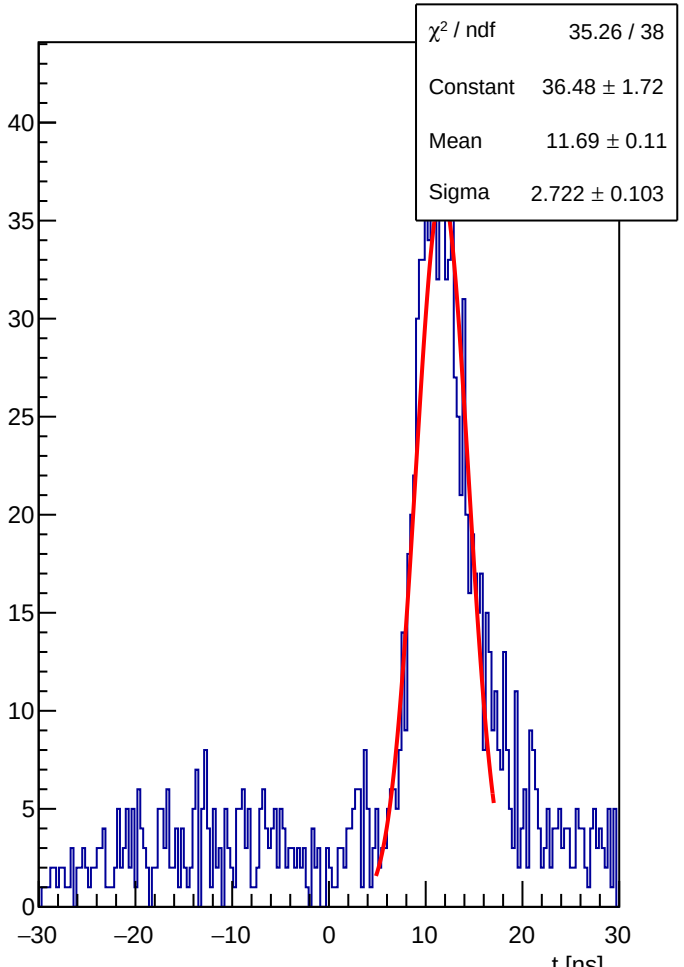

HCAL block 153 : cointime_t0
χ² / ndf 71.39 / 28
Constant 191.6 ± 4.5
Mean 11.52 ± 0.05
Sigma 2.077 ± 0.043
t [ns]
HCAL block 153 : cointime tw corr t0
χ² / ndf 97.74 / 26
Constant 242.5 ± 5.7
Mean 11.69 ± 0.03
Sigma 1.667 ± 0.028
t tw corr [ns]

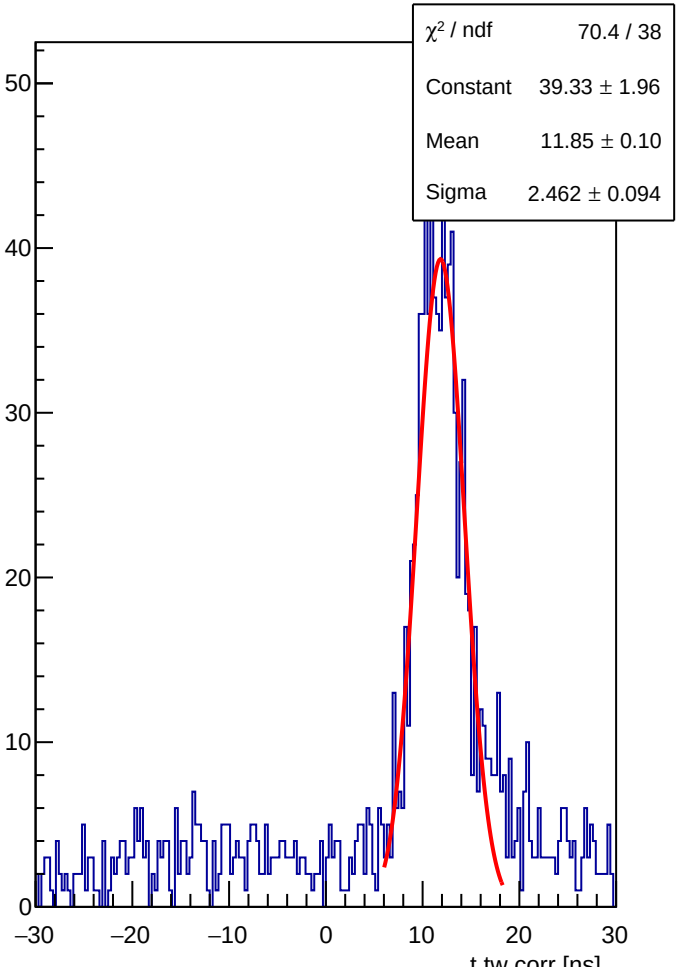

HCAL block 154 : cointime_t0
χ² / ndf 39.71 / 28
Constant 114.7 ± 3.4
Mean 11.94 ± 0.06
Sigma 2.146 ± 0.054
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

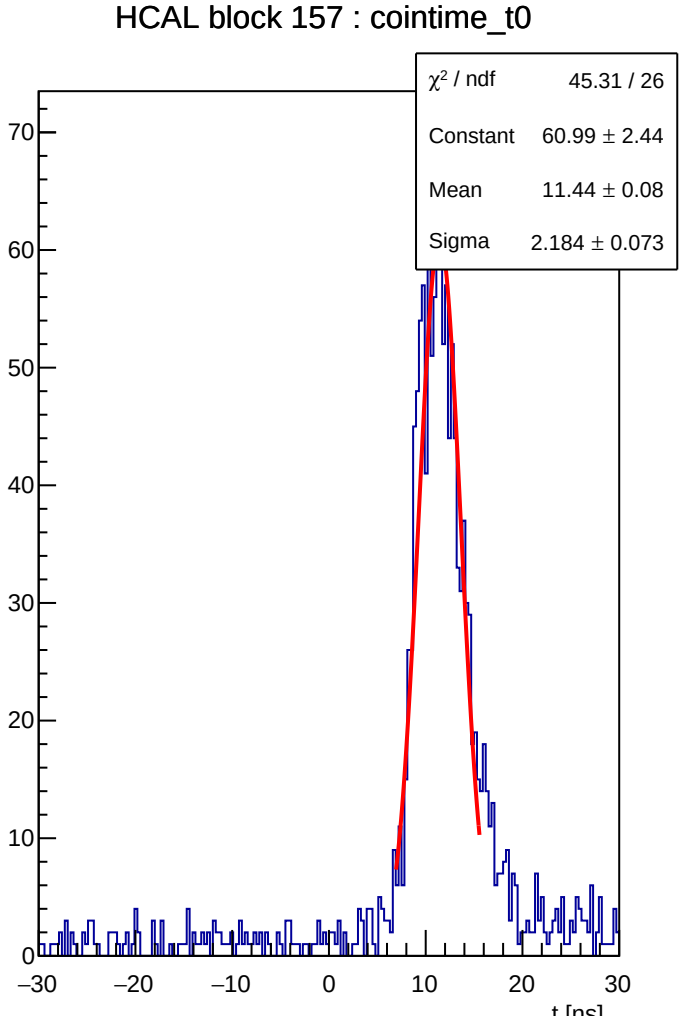

HCAL block 154 : cointime tw corr t0
χ² / ndf 82.61 / 28
Constant 143.2 ± 4.4
Mean 12.03 ± 0.04
Sigma 1.735 ± 0.040
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

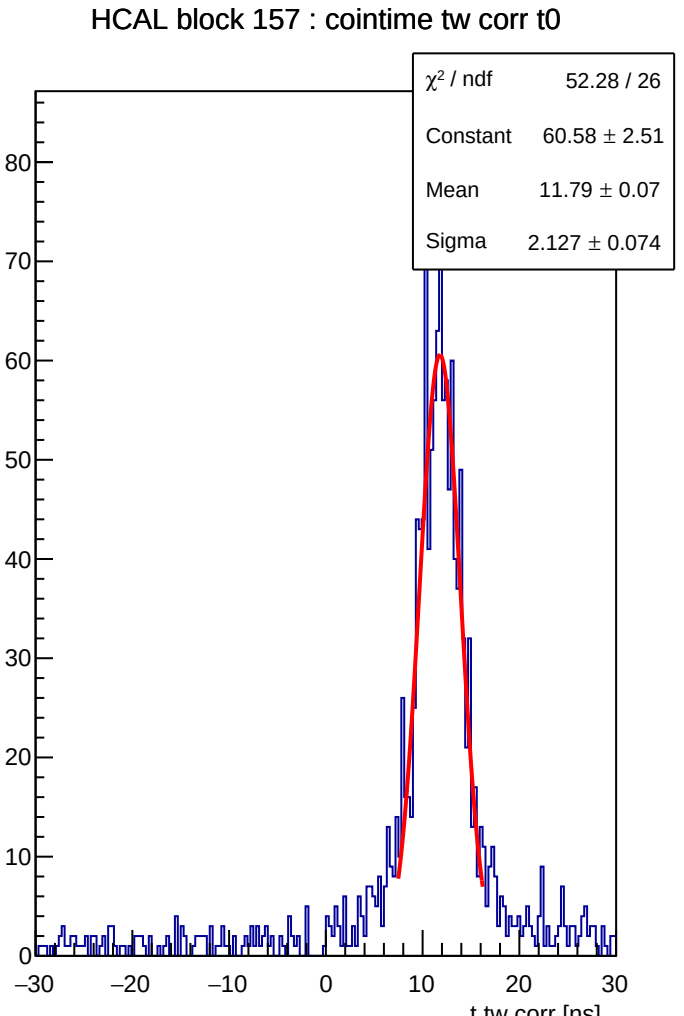

HCAL block 155 : cointime_t0
χ² / ndf 35.93 / 32
Constant 98.17 ± 3.00
Mean 11.77 ± 0.07
Sigma 2.355 ± 0.060
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

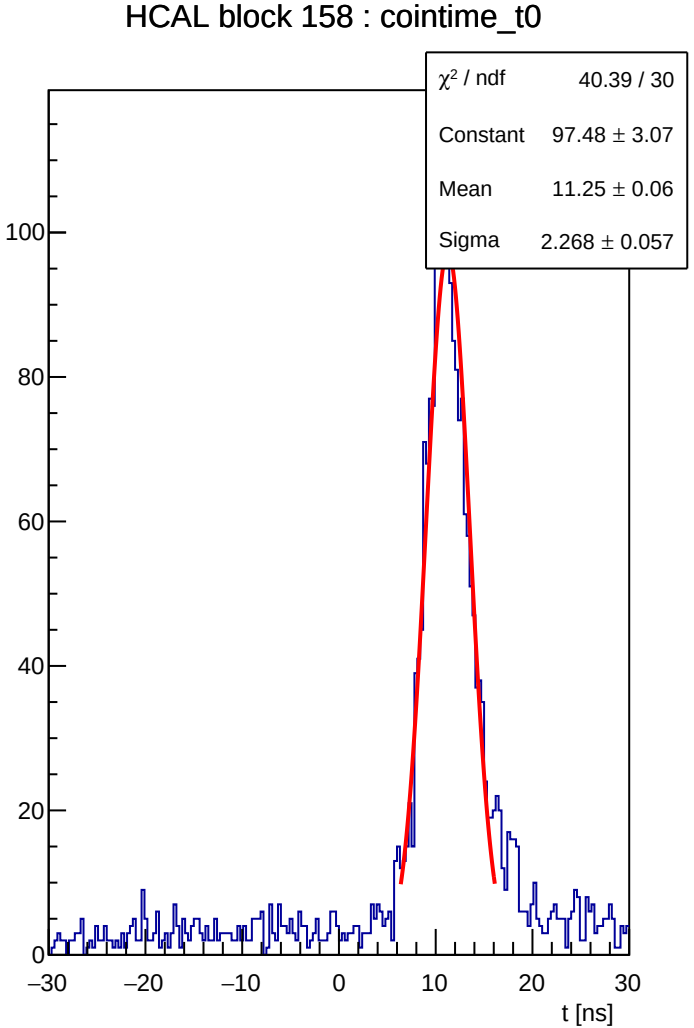

HCAL block 155 : cointime tw corr t0
χ² / ndf 47.19 / 32
Constant 108.2 ± 3.4
Mean 12.04 ± 0.05
Sigma 2.138 ± 0.051
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

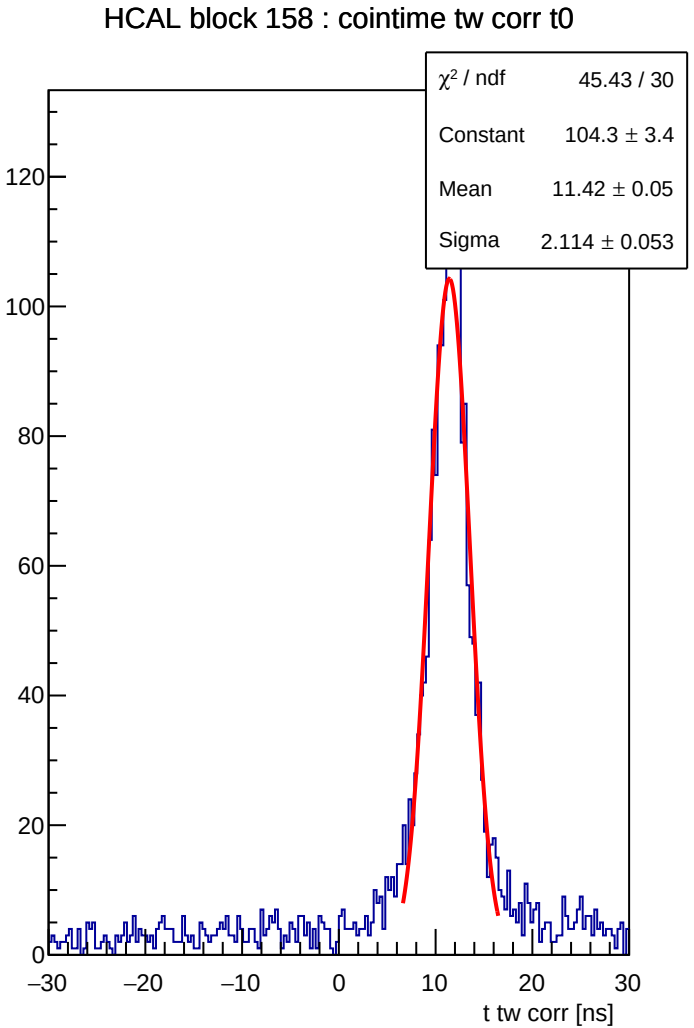

HCAL block 156 : cointime_t0
χ² / ndf 35.26 / 38
Constant 36.48 ± 1.72
Mean 11.69 ± 0.11
Sigma 2.722 ± 0.103
t [ns]

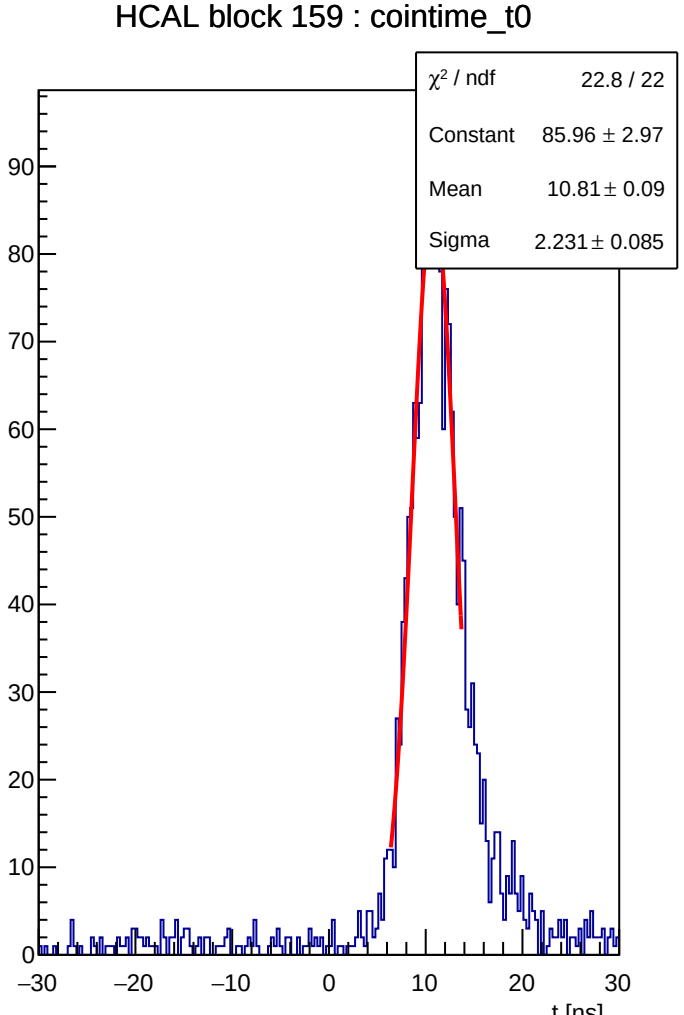

HCAL block 156 : cointime tw corr t0
χ² / ndf 70.4 / 38
Constant 39.33 ± 1.96
Mean 11.85 ± 0.10
Sigma 2.462 ± 0.094
t tw corr [ns]

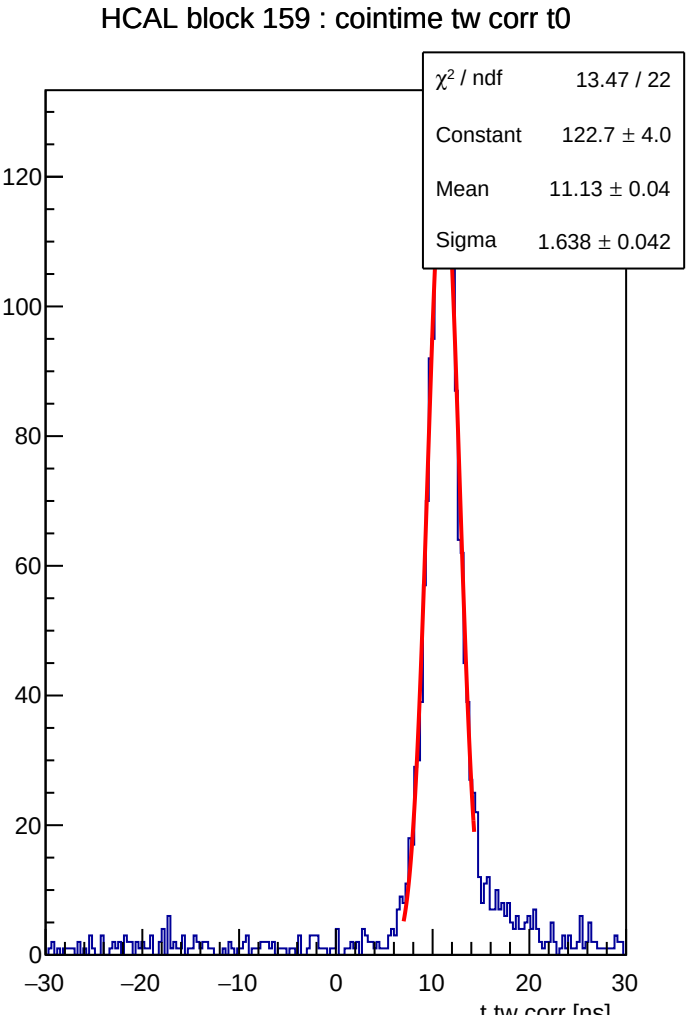

HCAL block 157 : cointime_t0
χ² / ndf 45.31 / 26
Constant 60.99 ± 2.44
Mean 11.44 ± 0.08
Sigma 2.184 ± 0.073
70
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t [ns]

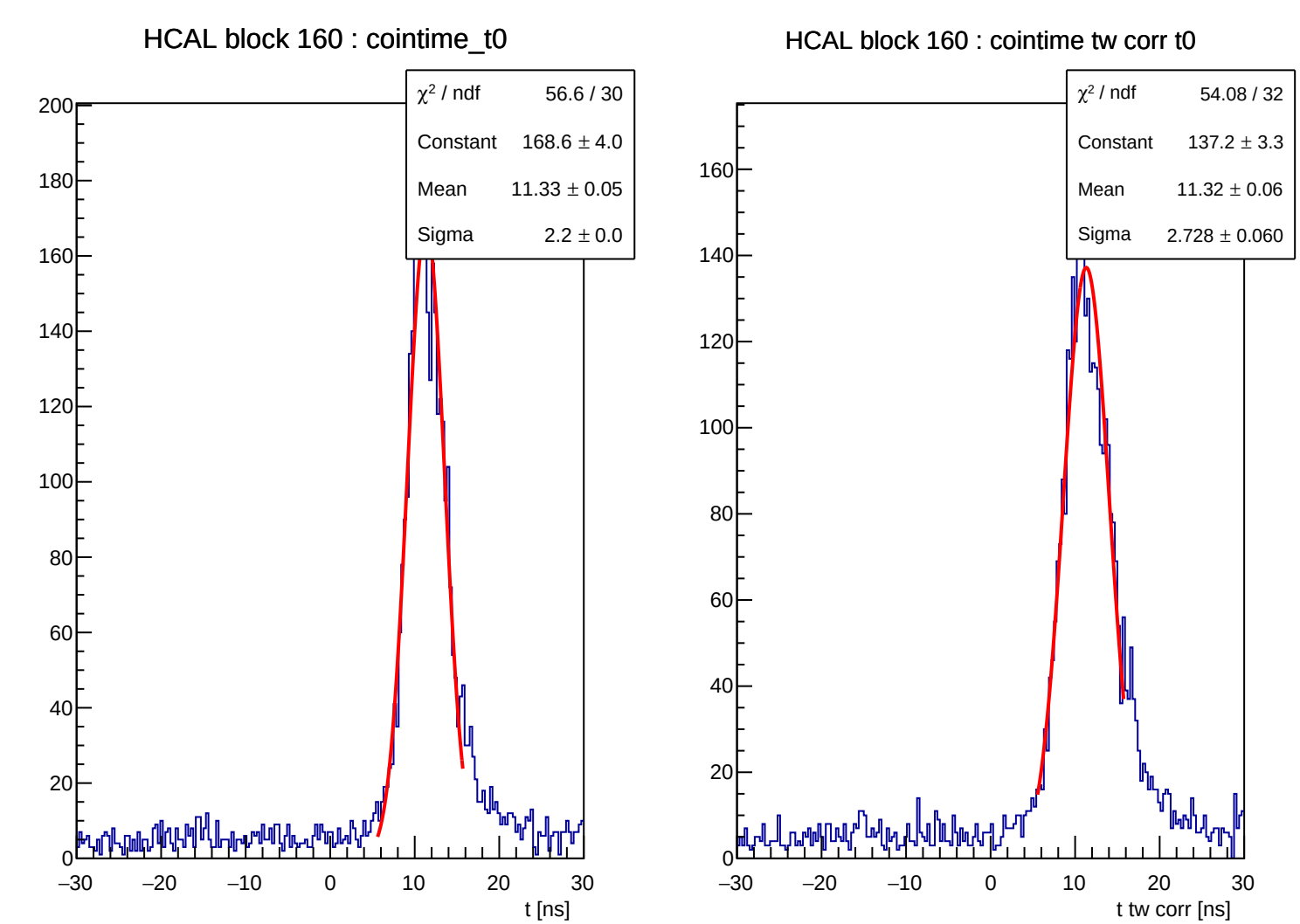

HCAL block 157 : cointime tw corr t0
χ² / ndf 52.28 / 26
Constant 60.58 ± 2.51
Mean 11.79 ± 0.07
Sigma 2.127 ± 0.074
80
70
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

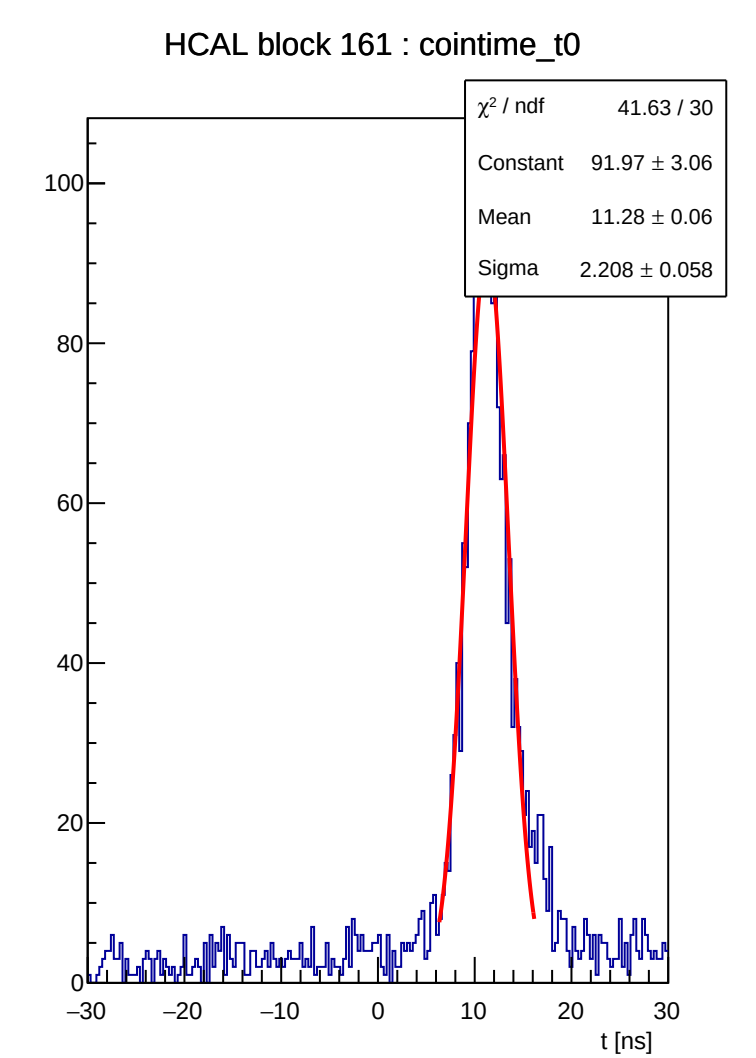

HCAL block 158 : cointime_t0
χ² / ndf 40.39 / 30
Constant 97.48 ± 3.07
Mean 11.25 ± 0.06
Sigma 2.268 ± 0.057
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

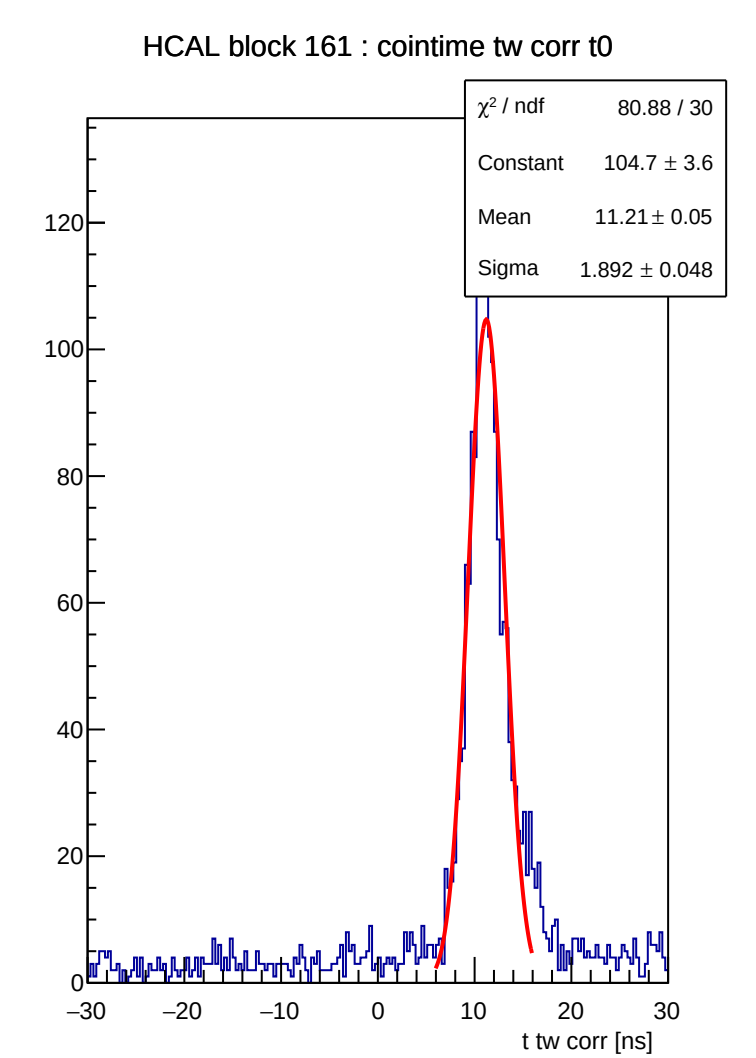

HCAL block 158 : cointime tw corr t0
χ² / ndf 45.43 / 30
Constant 104.3 ± 3.4
Mean 11.42 ± 0.05
Sigma 2.114 ± 0.053
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

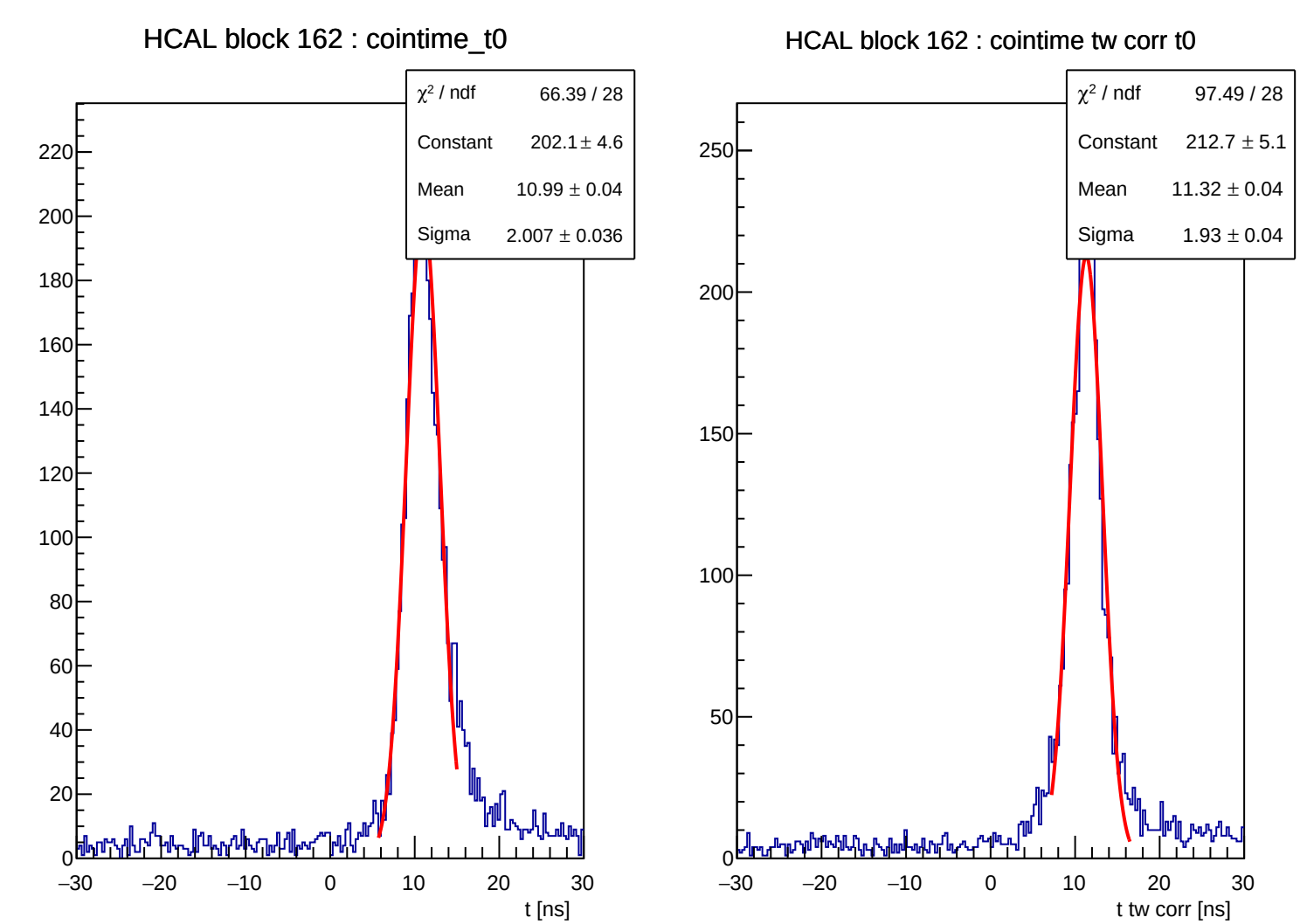

HCAL block 159 : cointime_t0
χ² / ndf 22.8 / 22
Constant 85.96 ± 2.97
Mean 10.81 ± 0.09
Sigma 2.231 ± 0.085
t [ns]

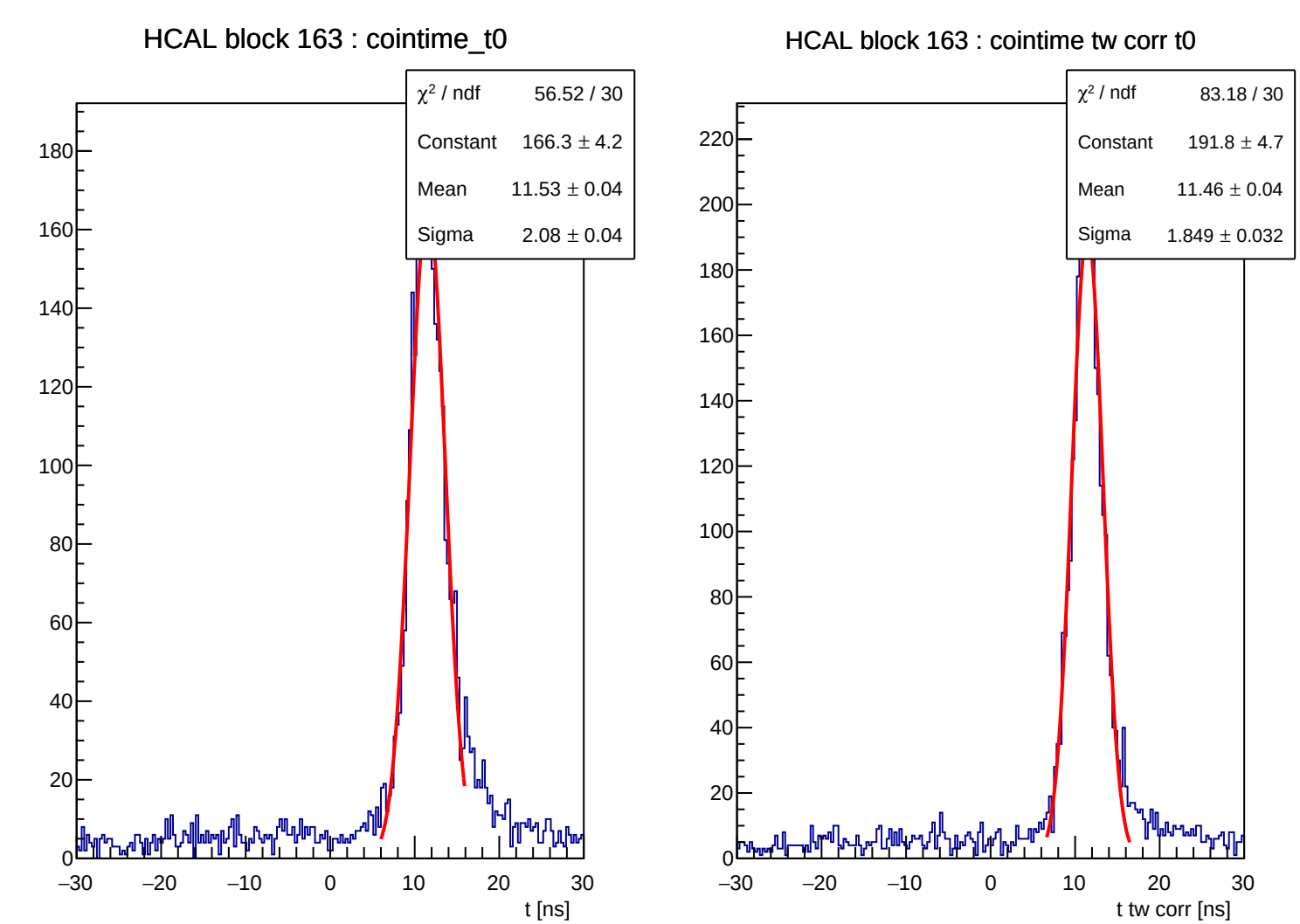

HCAL block 159 : cointime tw corr t0
χ² / ndf 13.47 / 22
Constant 122.7 ± 4.0
Mean 11.13 ± 0.04
Sigma 1.638 ± 0.042
t tw corr [ns]

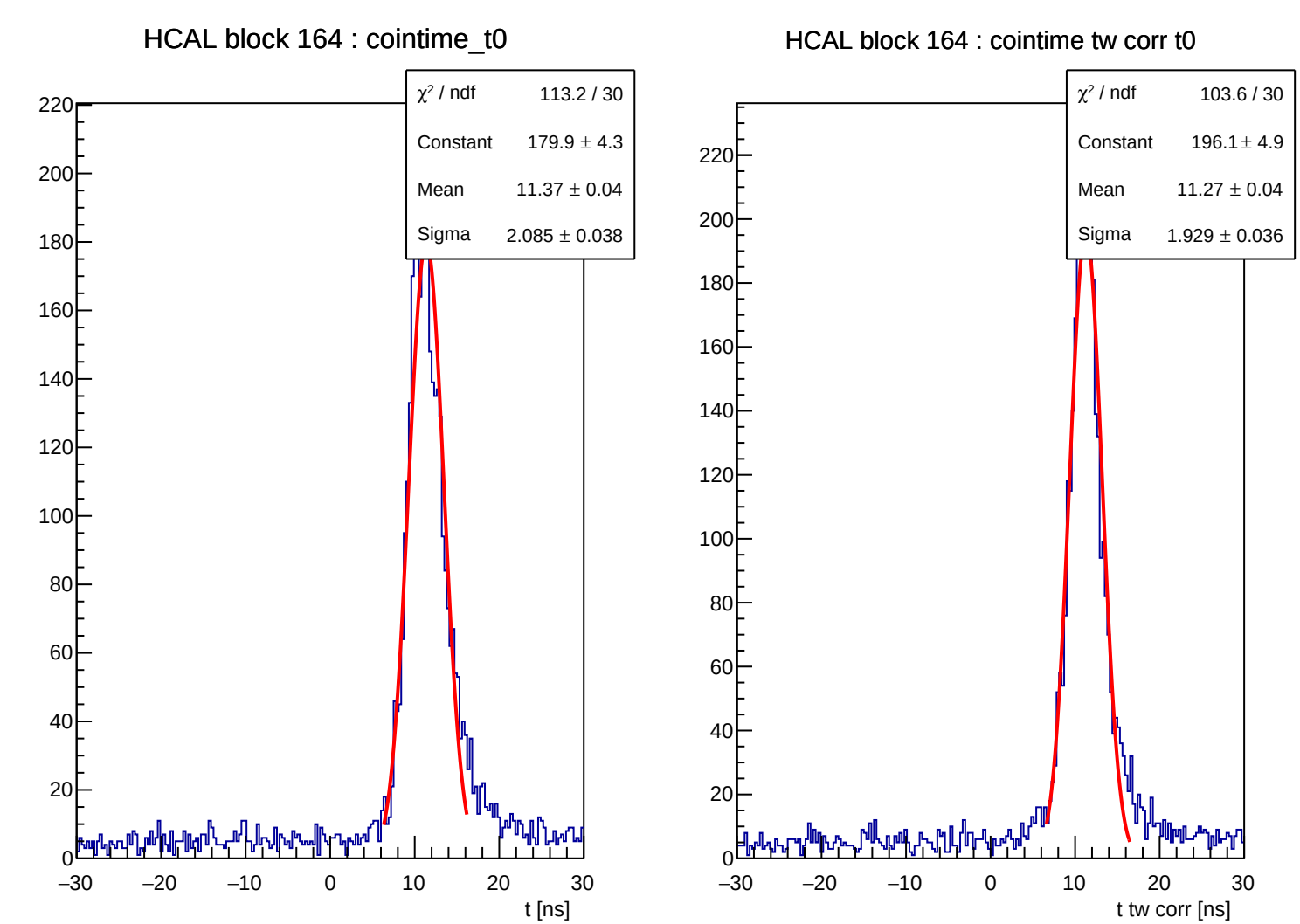

HCAL block 160 : cointime_t0
χ² / ndf 56.6 / 30
Constant 168.6 ± 4.0
Mean 11.33 ± 0.05
Sigma 2.2 ± 0.0
t [ns]
HCAL block 160 : cointime tw corr t0
χ² / ndf 54.08 / 32
Constant 137.2 ± 3.3
Mean 11.32 ± 0.06
Sigma 2.728 ± 0.060
t tw corr [ns]

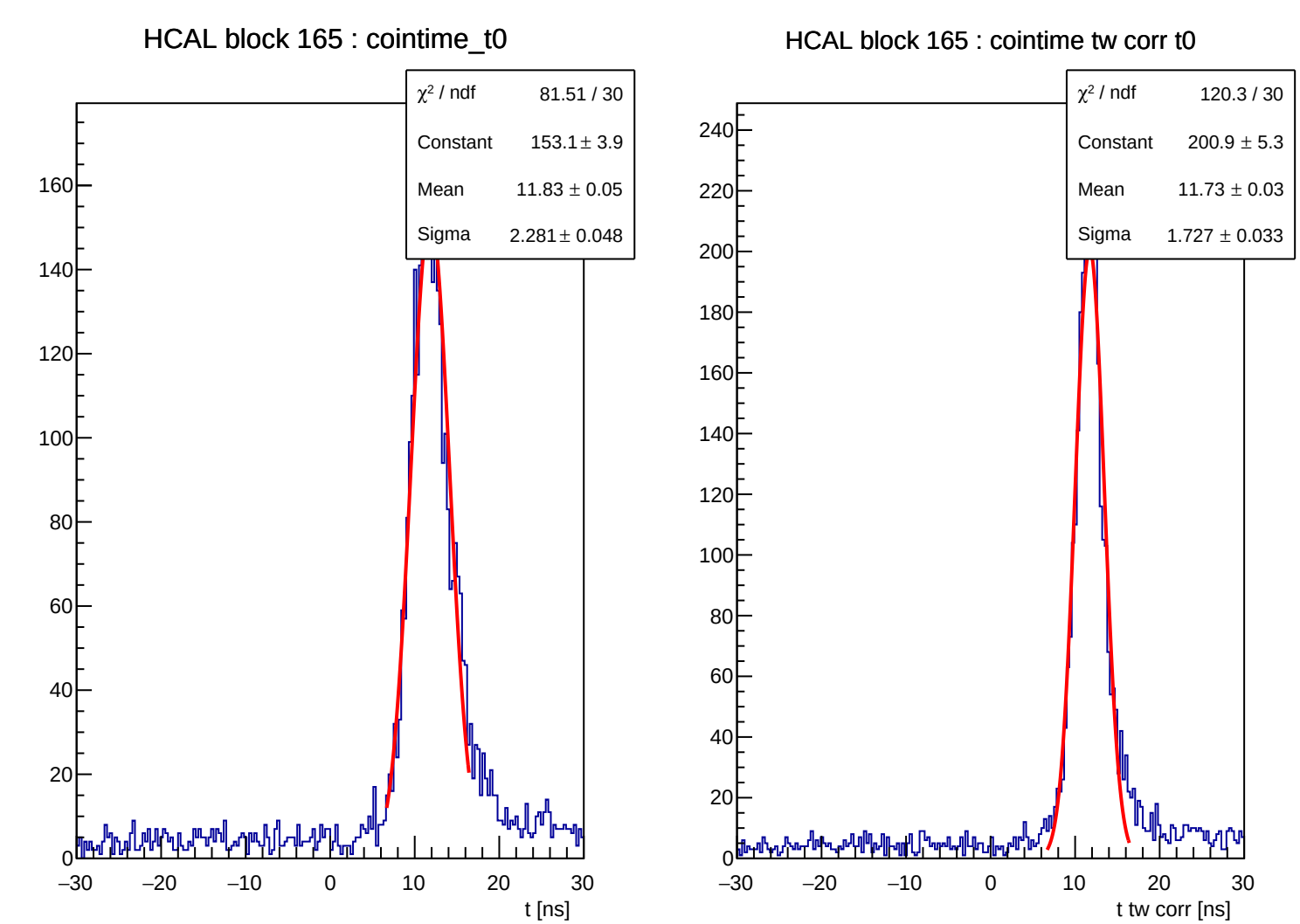

HCAL block 161 : cointime_t0
χ² / ndf 41.63 / 30
Constant 91.97 ± 3.06
Mean 11.28 ± 0.06
Sigma 2.208 ± 0.058
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

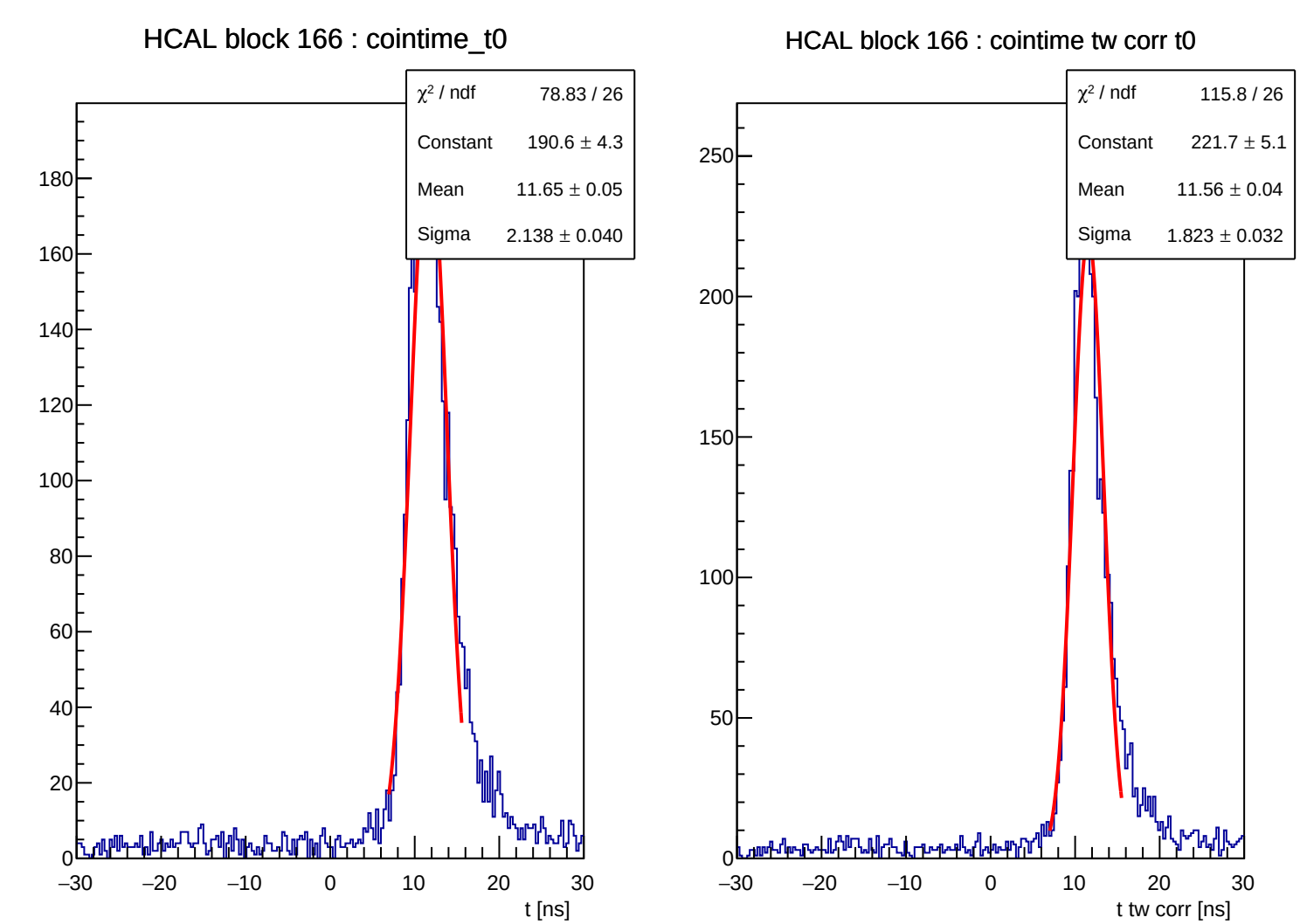

HCAL block 161 : cointime tw corr t0
χ² / ndf 80.88 / 30
Constant 104.7 ± 3.6
Mean 11.21 ± 0.05
Sigma 1.892 ± 0.048
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

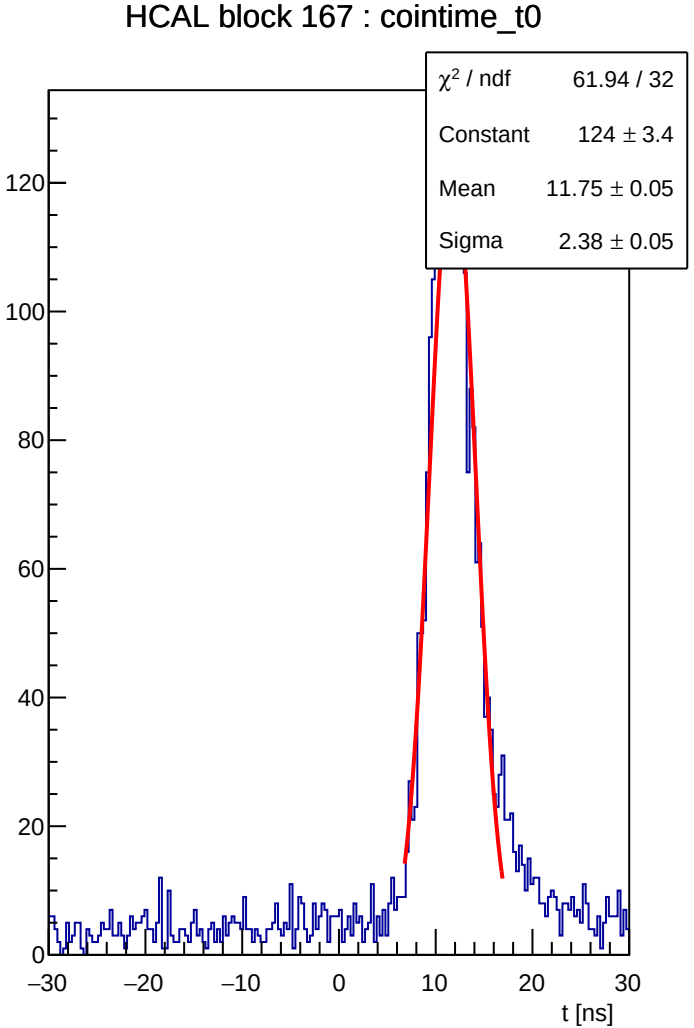

HCAL block 162 : cointime_t0
χ² / ndf 66.39 / 28
Constant 202.1 ± 4.6
Mean 10.99 ± 0.04
Sigma 2.007 ± 0.036
t [ns]
HCAL block 162 : cointime tw corr t0
χ² / ndf 97.49 / 28
Constant 212.7 ± 5.1
Mean 11.32 ± 0.04
Sigma 1.93 ± 0.04
t tw corr [ns]

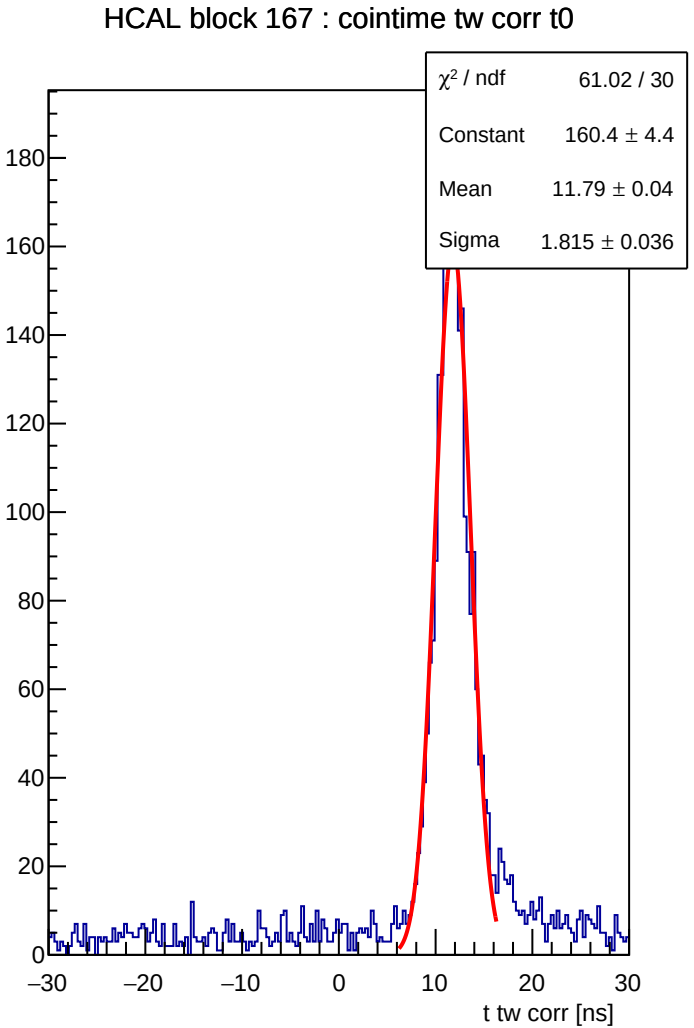

HCAL block 163 : cointime_t0
χ² / ndf 56.52 / 30
Constant 166.3 ± 4.2
Mean 11.53 ± 0.04
Sigma 2.08 ± 0.04
t [ns]
HCAL block 163 : cointime tw corr t0
χ² / ndf 83.18 / 30
Constant 191.8 ± 4.7
Mean 11.46 ± 0.04
Sigma 1.849 ± 0.032
t tw corr [ns]

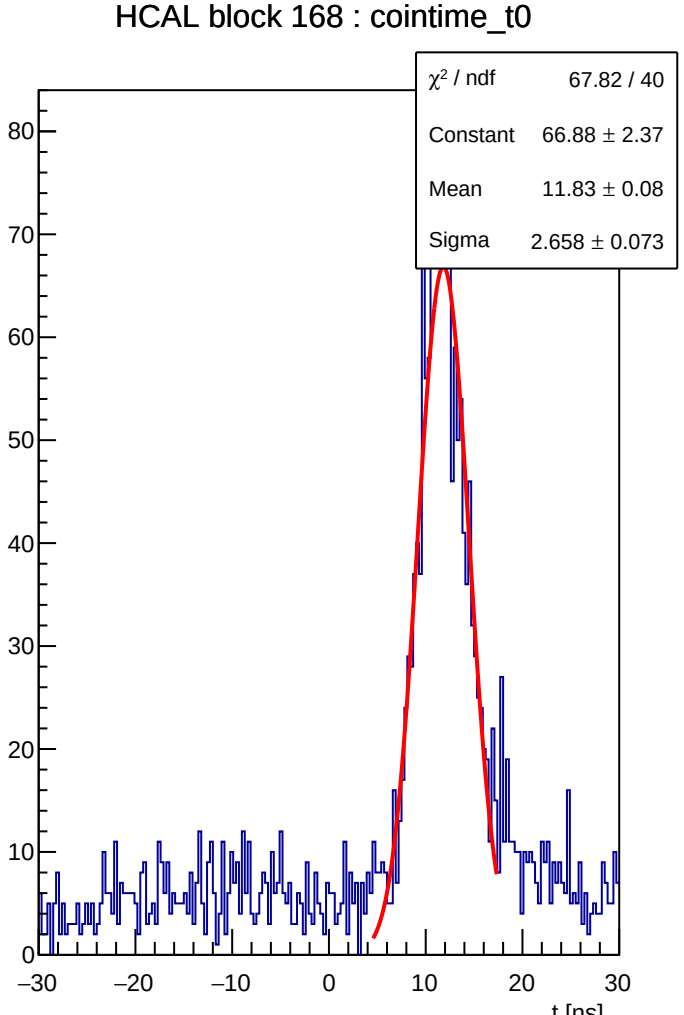

HCAL block 164 : cointime_t0
χ² / ndf 113.2 / 30
Constant 179.9 ± 4.3
Mean 11.37 ± 0.04
Sigma 2.085 ± 0.038
t [ns]
HCAL block 164 : cointime tw corr t0
χ² / ndf 103.6 / 30
Constant 196.1 ± 4.9
Mean 11.27 ± 0.04
Sigma 1.929 ± 0.036
t tw corr [ns]

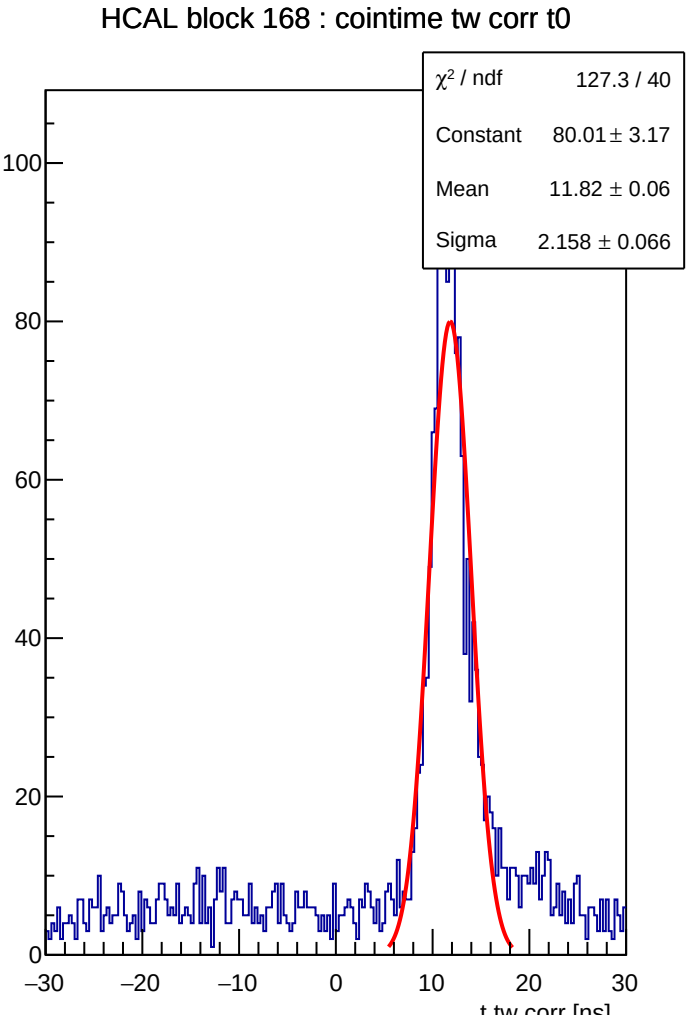

HCAL block 165 : cointime_t0
χ² / ndf 81.51 / 30
Constant 153.1 ± 3.9
Mean 11.83 ± 0.05
Sigma 2.281 ± 0.048
t [ns]
HCAL block 165 : cointime tw corr t0
χ² / ndf 120.3 / 30
Constant 200.9 ± 5.3
Mean 11.73 ± 0.03
Sigma 1.727 ± 0.033
t tw corr [ns]

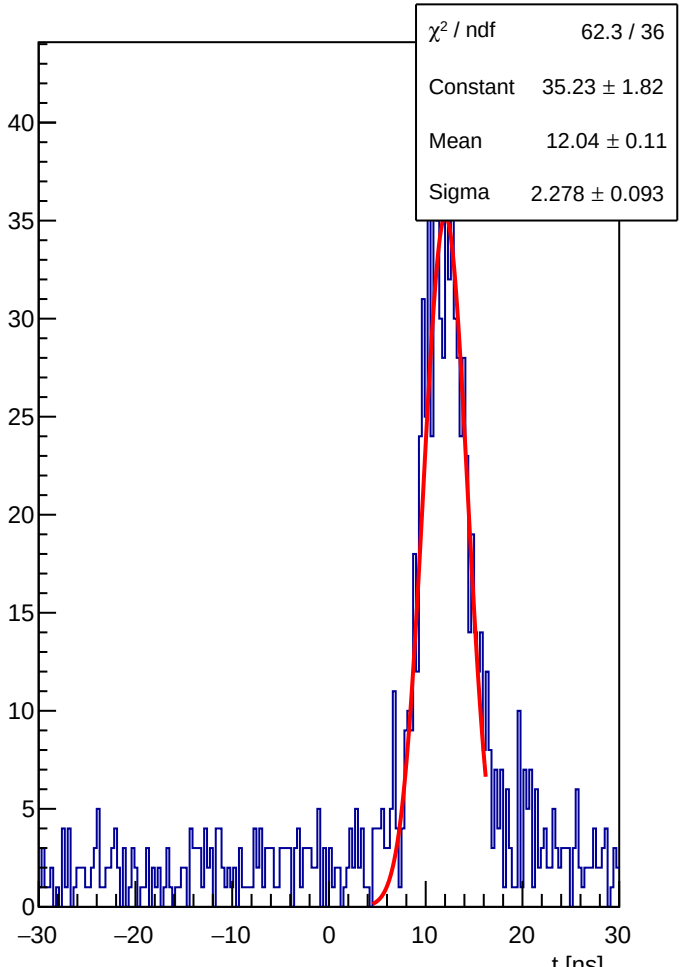

HCAL block 166 : cointime_t0
χ² / ndf 78.83 / 26
Constant 190.6 ± 4.3
Mean 11.65 ± 0.05
Sigma 2.138 ± 0.040
t [ns]
HCAL block 166 : cointime tw corr t0
χ² / ndf 115.8 / 26
Constant 221.7 ± 5.1
Mean 11.56 ± 0.04
Sigma 1.823 ± 0.032
t tw corr [ns]

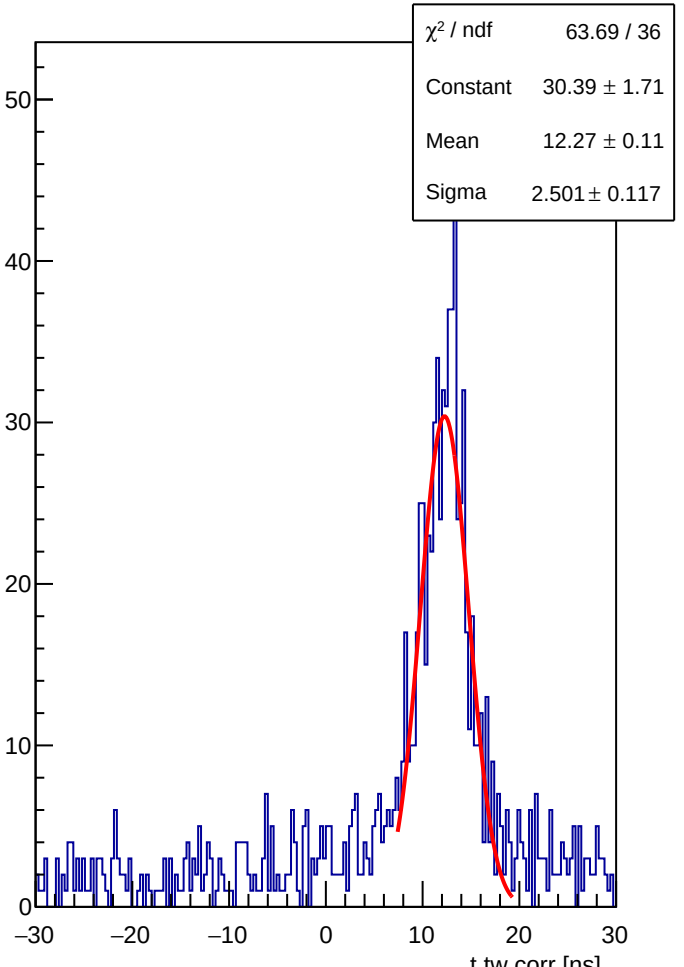

HCAL block 167 : cointime_t0
χ² / ndf 61.94 / 32
Constant 124 ± 3.4
Mean 11.75 ± 0.05
Sigma 2.38 ± 0.05
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

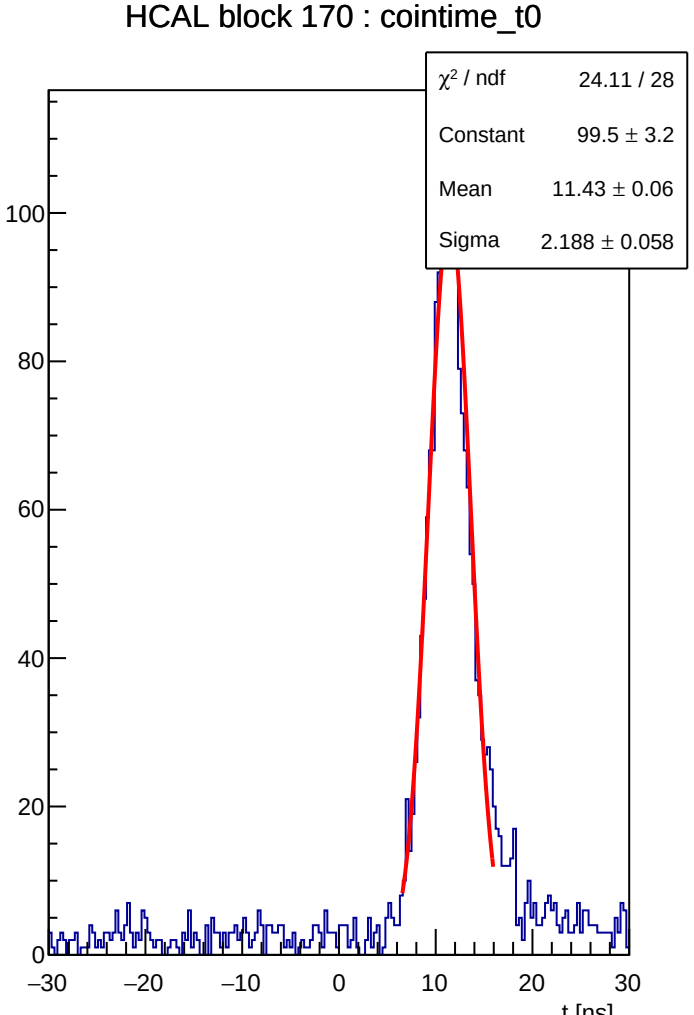

HCAL block 167 : cointime tw corr t0
χ² / ndf 61.02 / 30
Constant 160.4 ± 4.4
Mean 11.79 ± 0.04
Sigma 1.815 ± 0.036
180
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

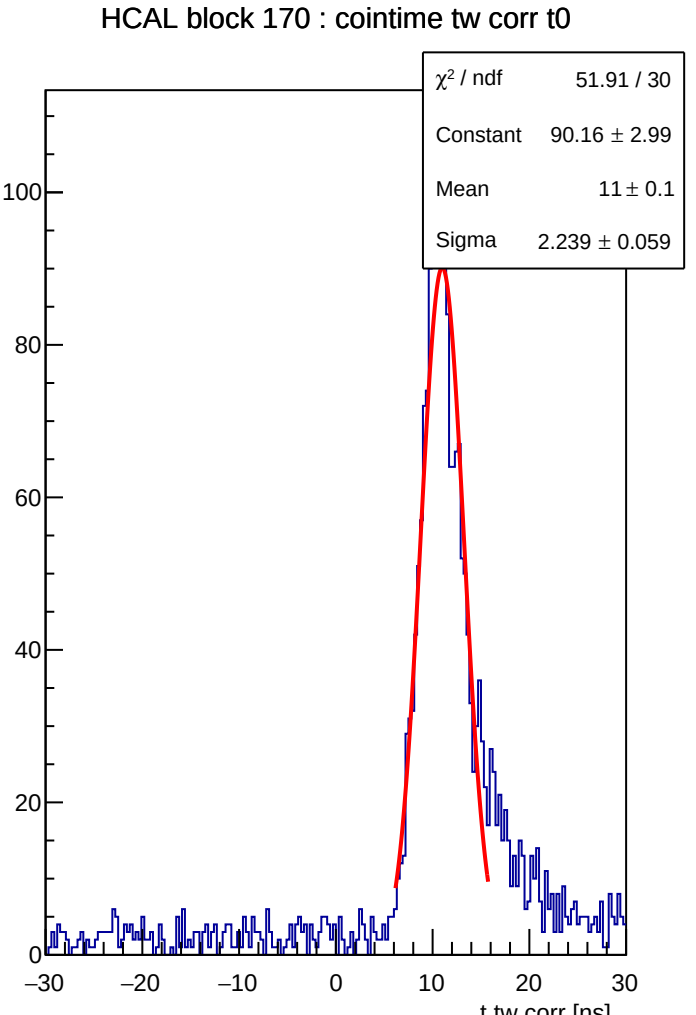

HCAL block 168 : cointime_t0
χ² / ndf 67.82 / 40
Constant 66.88 ± 2.37
Mean 11.83 ± 0.08
Sigma 2.658 ± 0.073
t [ns]

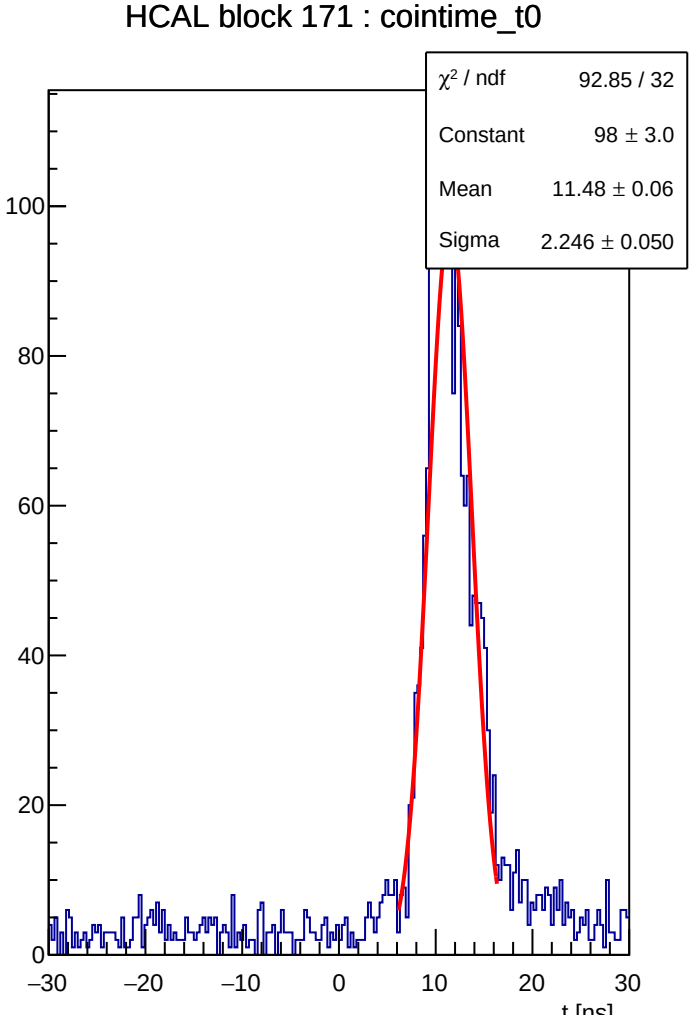

HCAL block 168 : cointime tw corr t0
χ² / ndf 127.3 / 40
Constant 80.01 ± 3.17
Mean 11.82 ± 0.06
Sigma 2.158 ± 0.066
t tw corr [ns]

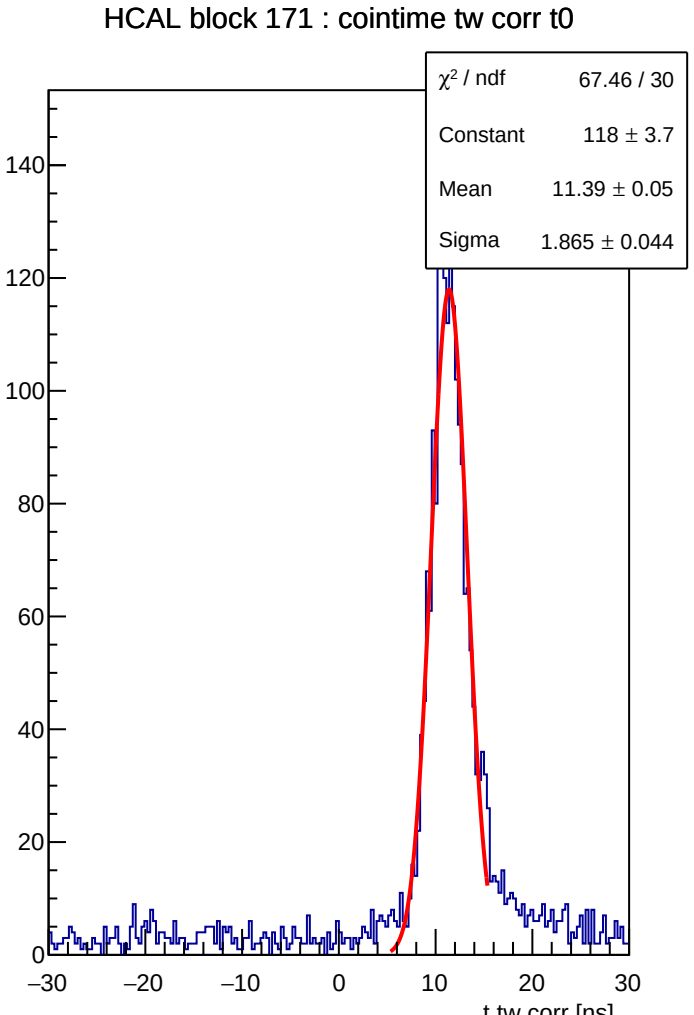

HCAL block 169 : cointime_t0
χ² / ndf 62.3 / 36
Constant 35.23 ± 1.82
Mean 12.04 ± 0.11
Sigma 2.278 ± 0.093
t [ns]

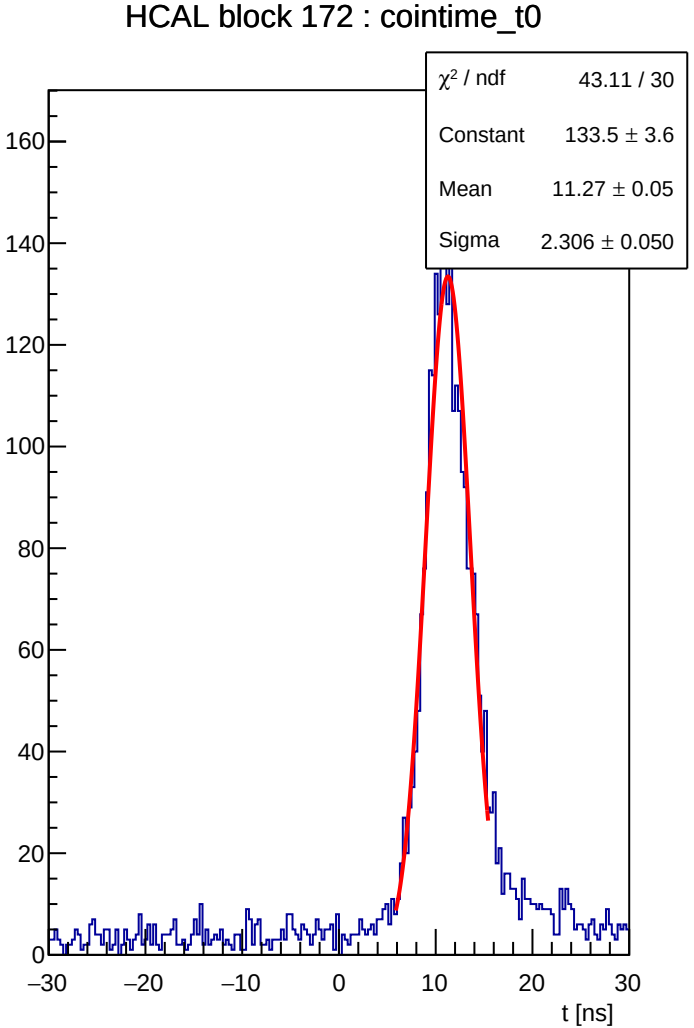

HCAL block 169 : cointime tw corr t0
χ² / ndf 63.69 / 36
Constant 30.39 ± 1.71
Mean 12.27 ± 0.11
Sigma 2.501 ± 0.117
t tw corr [ns]

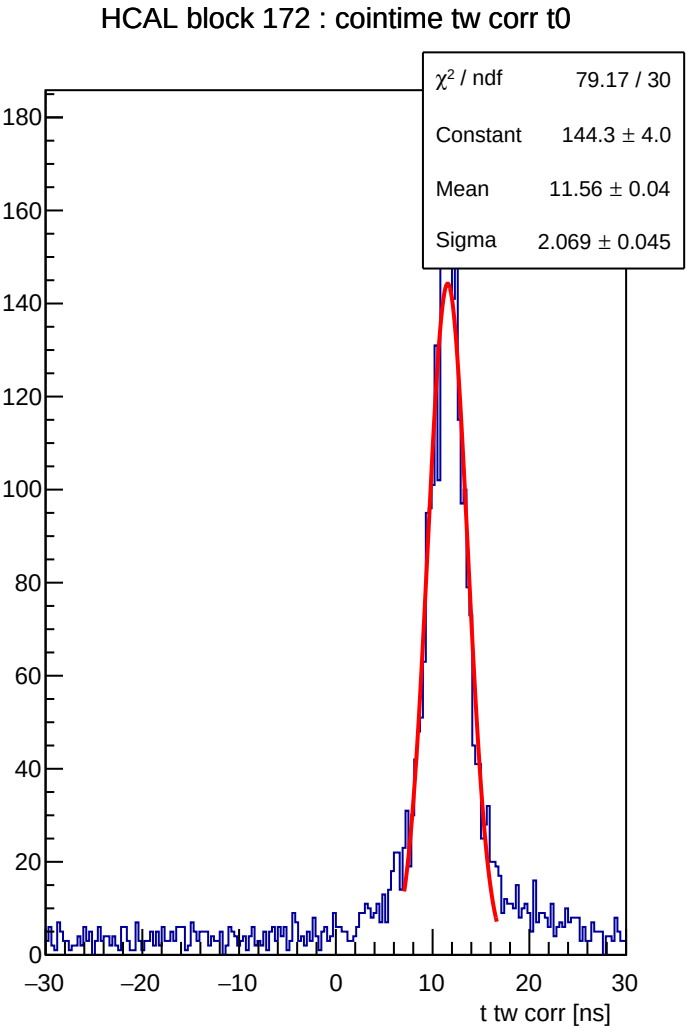

HCAL block 170 : cointime_t0
χ² / ndf 24.11 / 28
Constant 99.5 ± 3.2
Mean 11.43 ± 0.06
Sigma 2.188 ± 0.058
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

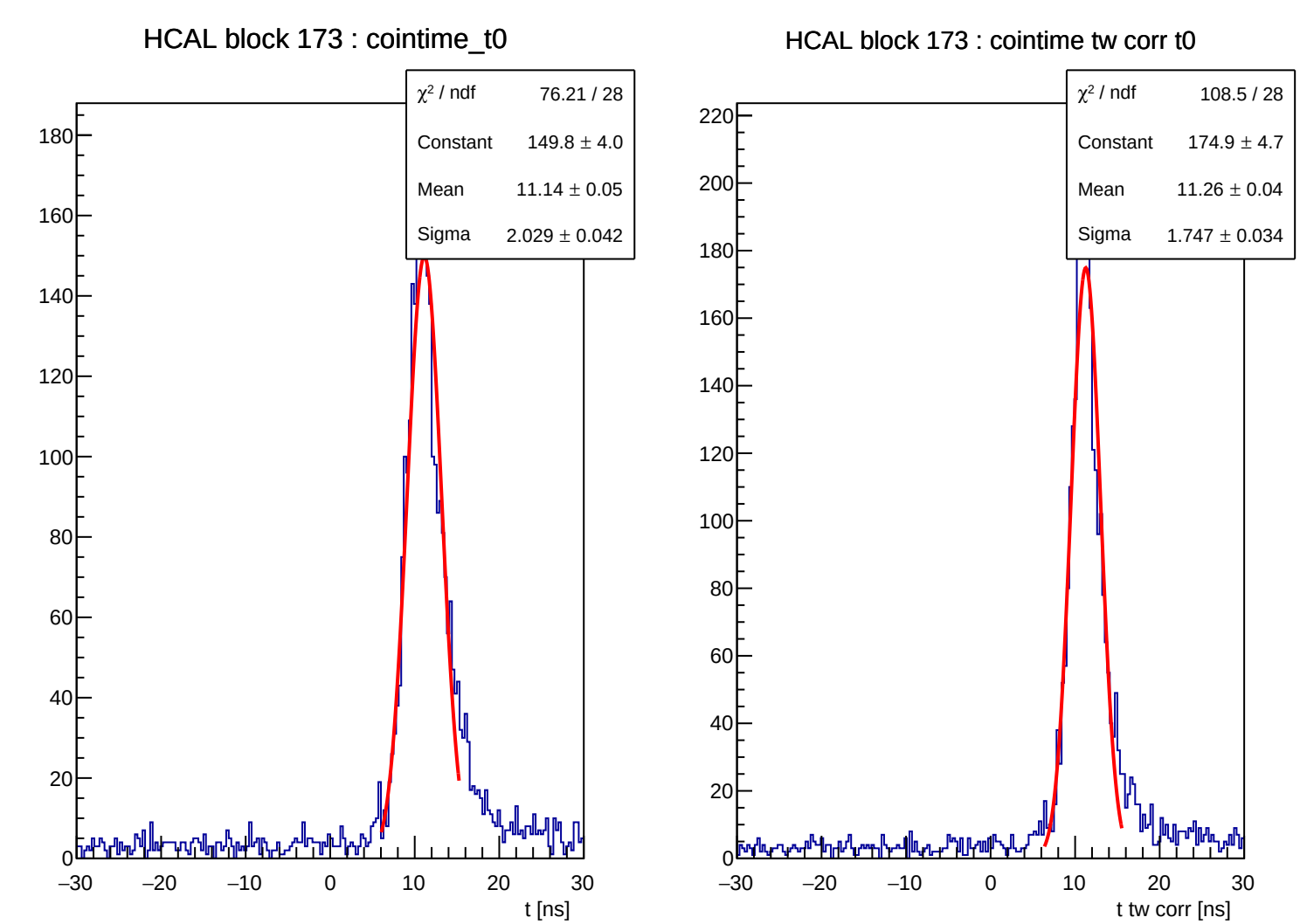

HCAL block 170 : cointime tw corr t0
χ² / ndf 51.91 / 30
Constant 90.16 ± 2.99
Mean 11 ± 0.1
Sigma 2.239 ± 0.059
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

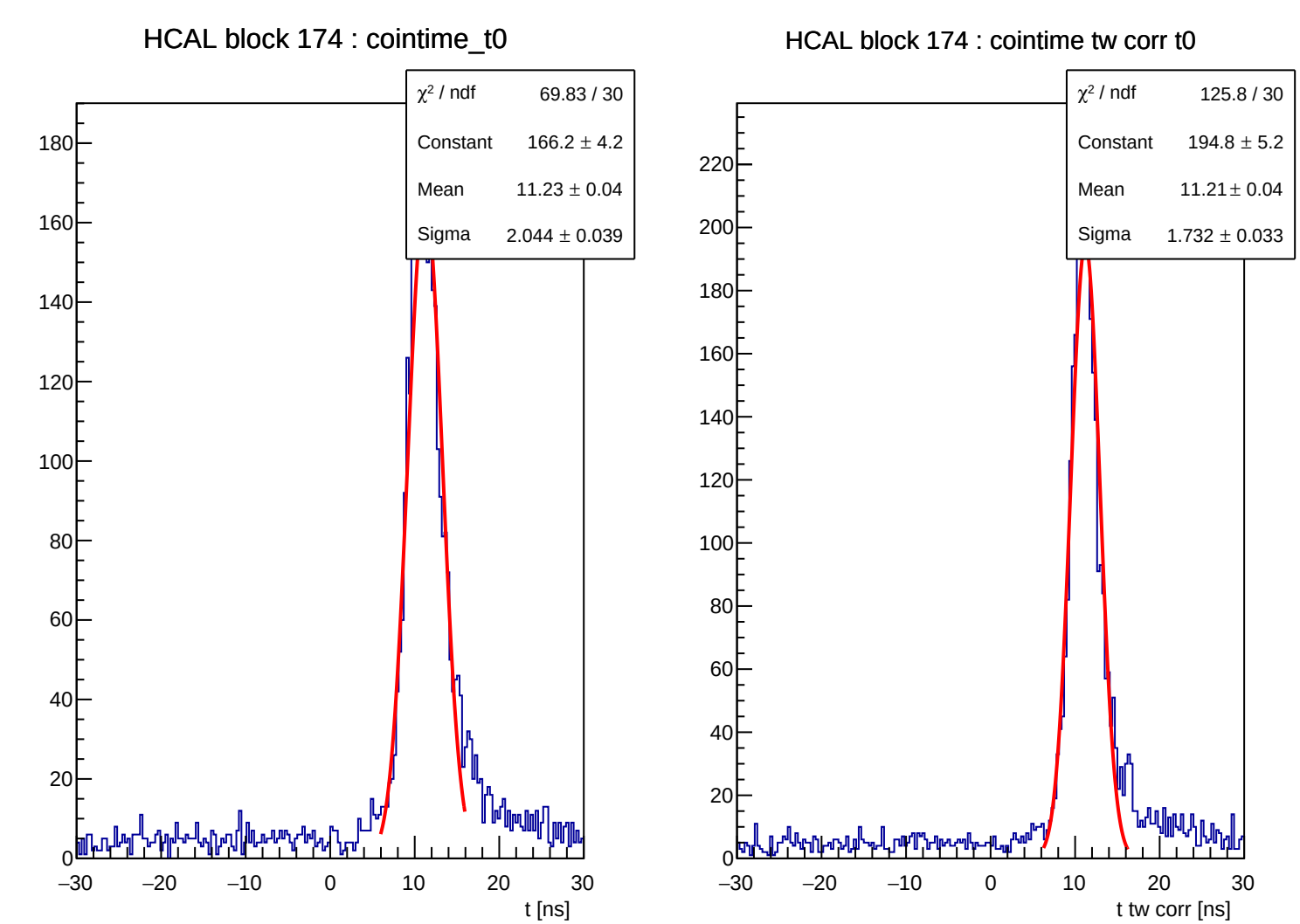

HCAL block 171 : cointime_t0
χ² / ndf 92.85 / 32
Constant 98 ± 3.0
Mean 11.48 ± 0.06
Sigma 2.246 ± 0.050
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

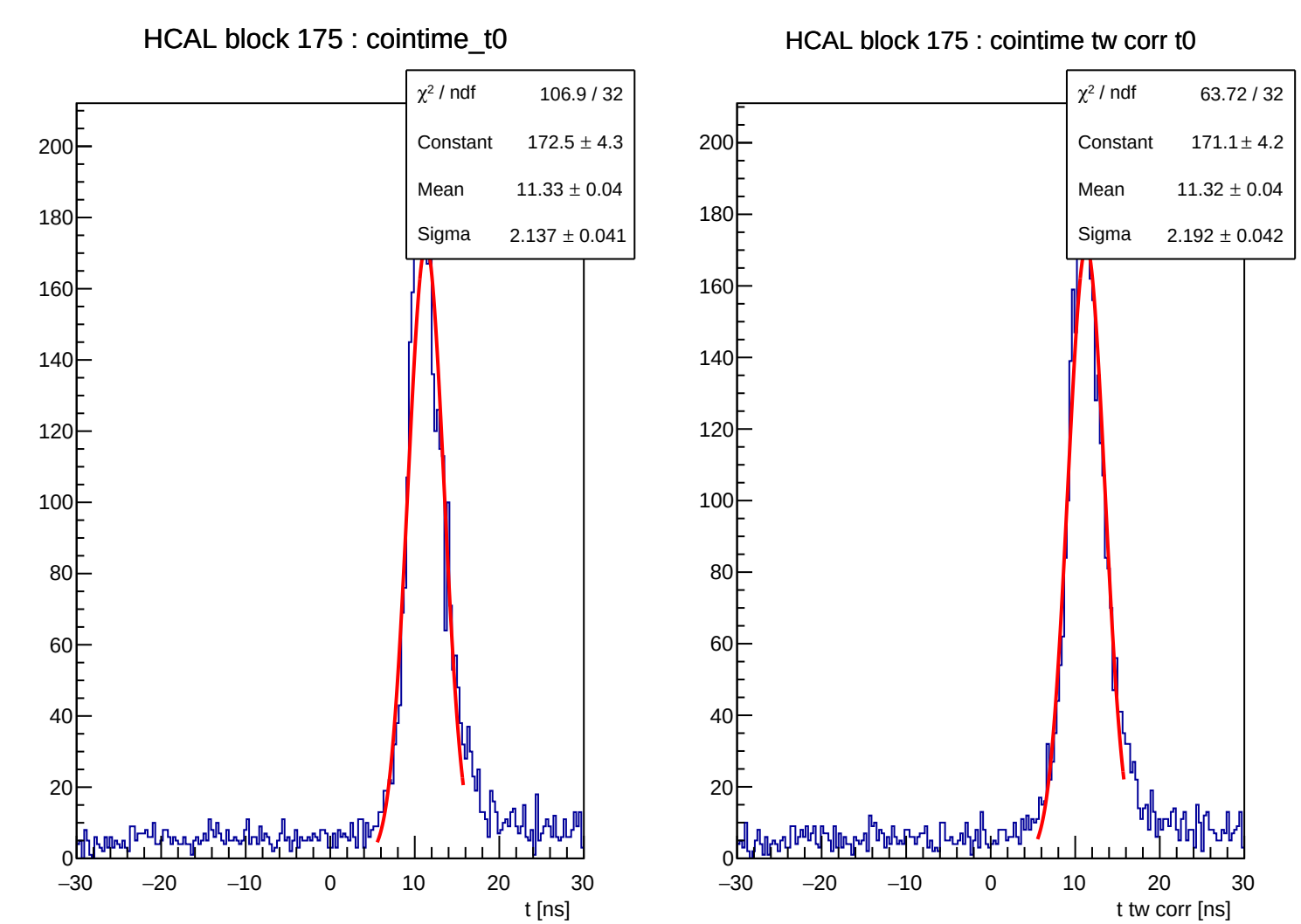

HCAL block 171 : cointime tw corr t0
χ² / ndf 67.46 / 30
Constant 118 ± 3.7
Mean 11.39 ± 0.05
Sigma 1.865 ± 0.044
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

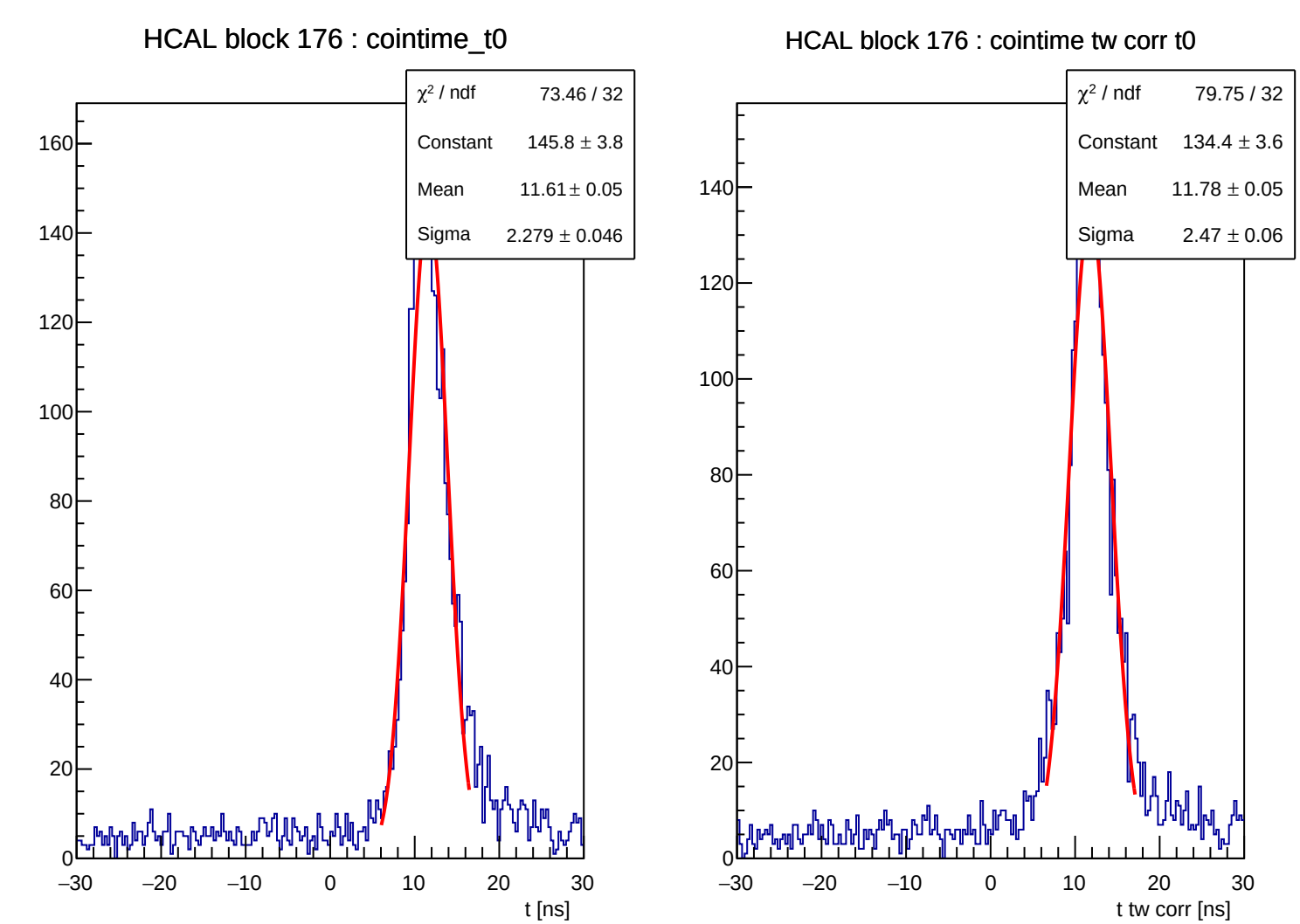

HCAL block 172 : cointime_t0
χ² / ndf 43.11 / 30
Constant 133.5 ± 3.6
Mean 11.27 ± 0.05
Sigma 2.306 ± 0.050
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

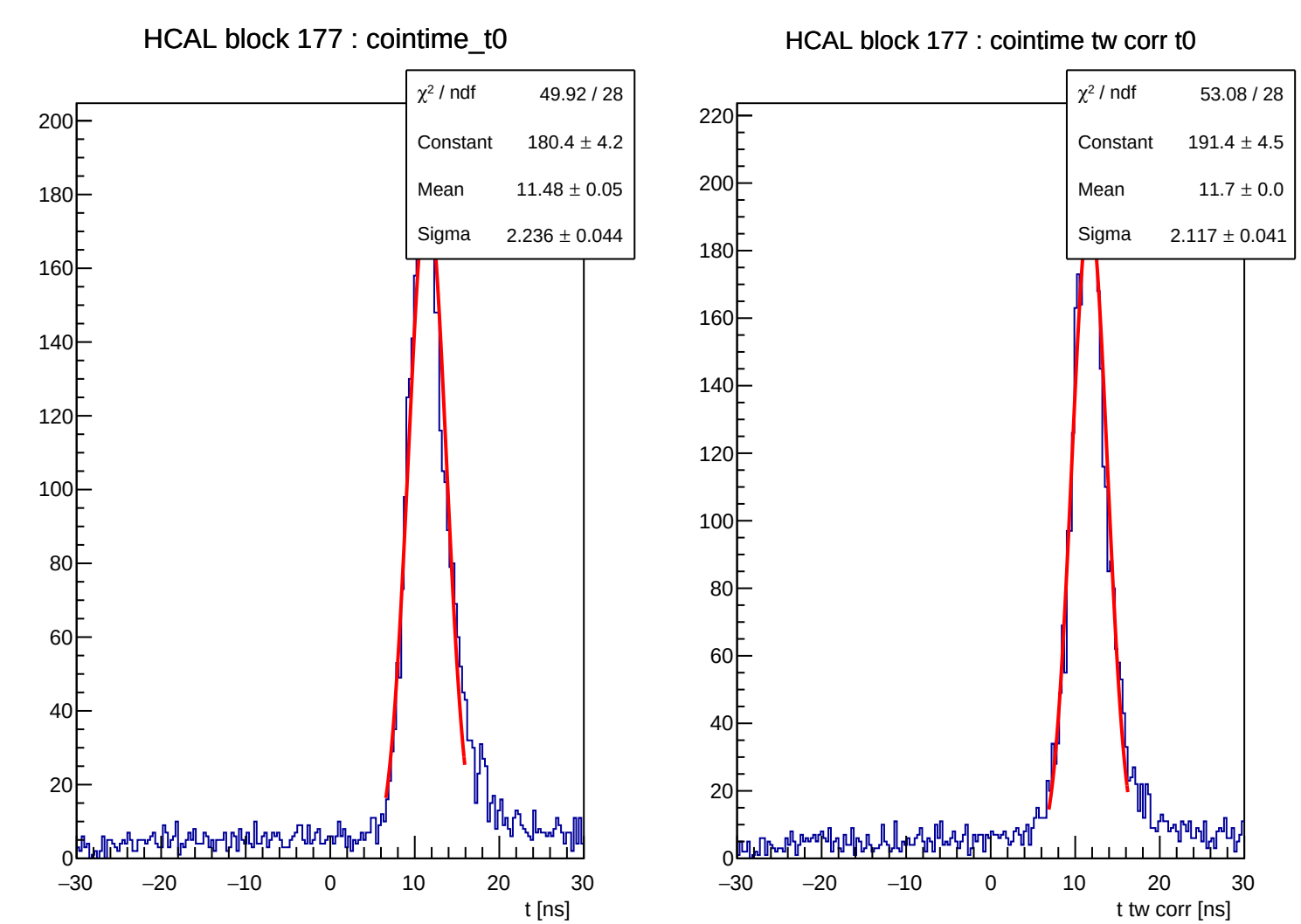

HCAL block 172 : cointime tw corr t0
χ² / ndf 79.17 / 30
Constant 144.3 ± 4.0
Mean 11.56 ± 0.04
Sigma 2.069 ± 0.045
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

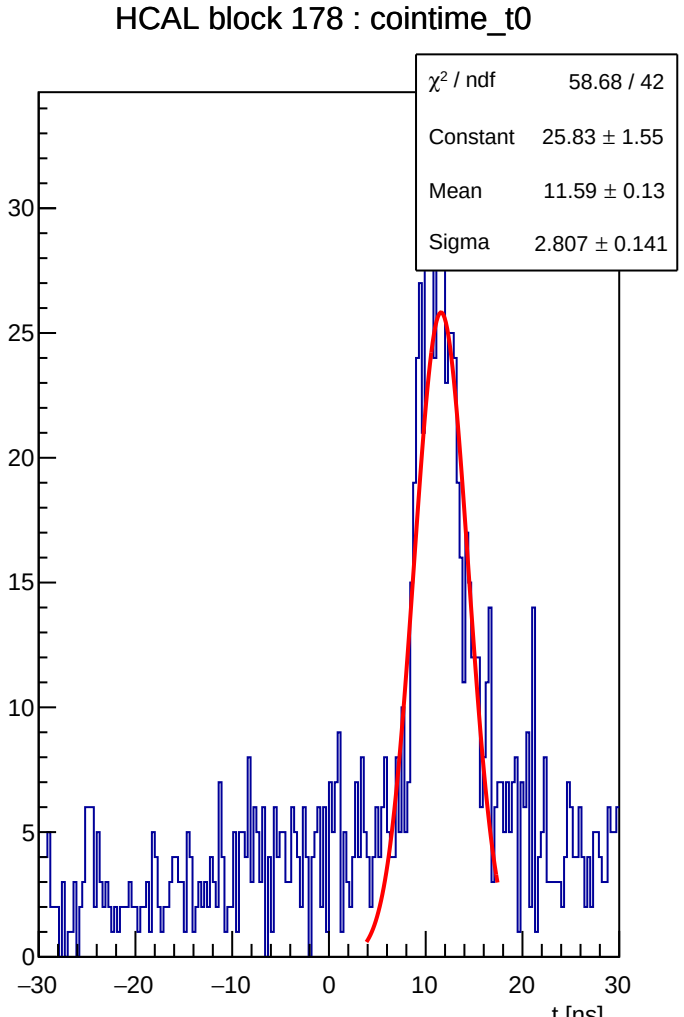

HCAL block 173 : cointime_t0
χ² / ndf 76.21 / 28
Constant 149.8 ± 4.0
Mean 11.14 ± 0.05
Sigma 2.029 ± 0.042
t [ns]
HCAL block 173 : cointime tw corr t0
χ² / ndf 108.5 / 28
Constant 174.9 ± 4.7
Mean 11.26 ± 0.04
Sigma 1.747 ± 0.034
t tw corr [ns]

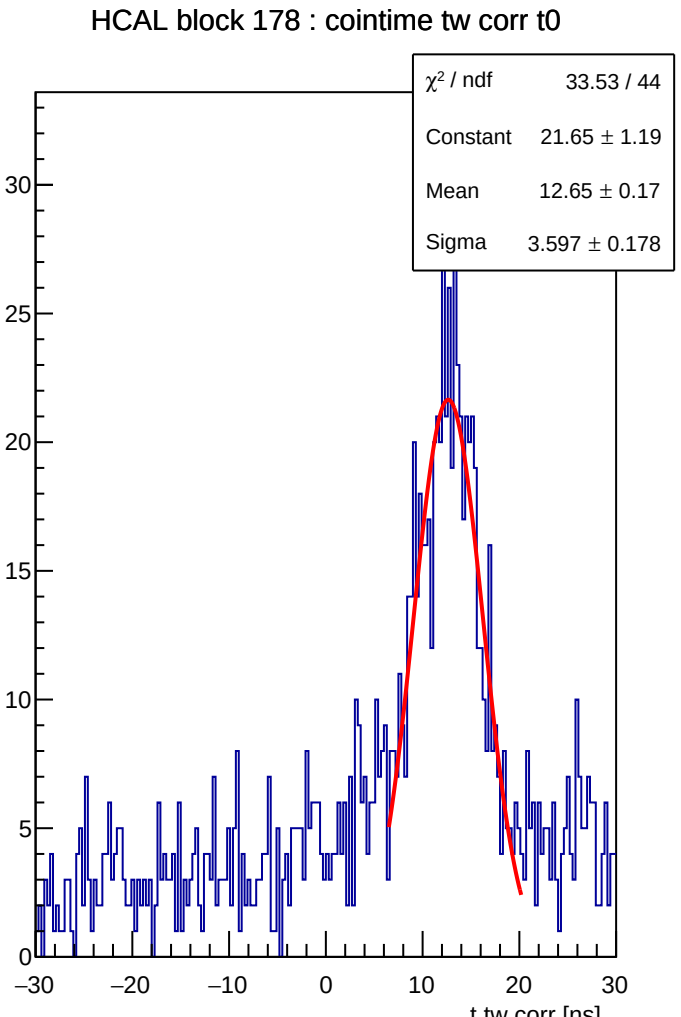

HCAL block 174 : cointime_t0
χ² / ndf 69.83 / 30
Constant 166.2 ± 4.2
Mean 11.23 ± 0.04
Sigma 2.044 ± 0.039
t [ns]
HCAL block 174 : cointime tw corr t0
χ² / ndf 125.8 / 30
Constant 194.8 ± 5.2
Mean 11.21 ± 0.04
Sigma 1.732 ± 0.033
t tw corr [ns]

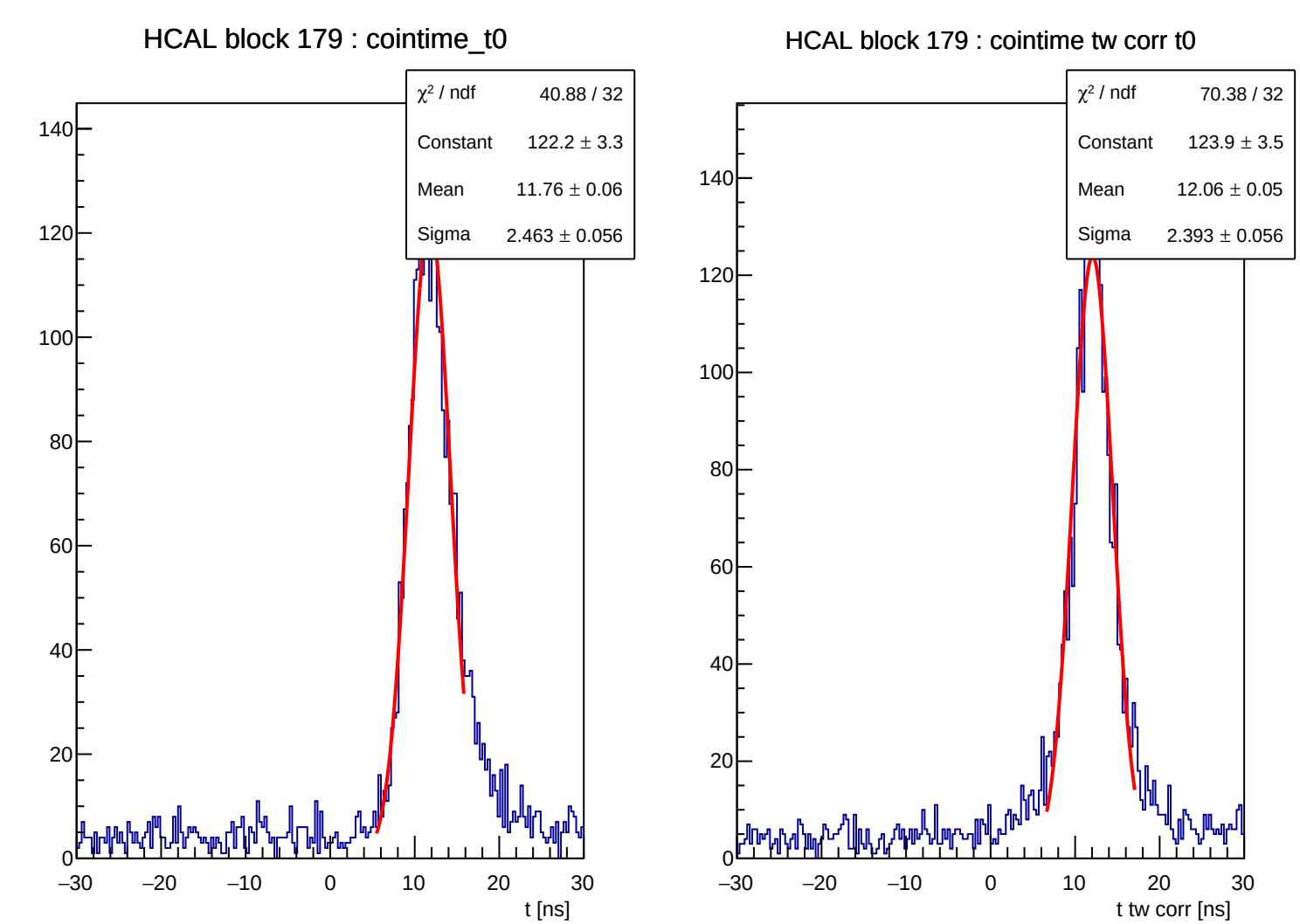

HCAL block 175 : cointime_t0
χ² / ndf 106.9 / 32
Constant 172.5 ± 4.3
Mean 11.33 ± 0.04
Sigma 2.137 ± 0.041
t [ns]
HCAL block 175 : cointime tw corr t0
χ² / ndf 63.72 / 32
Constant 171.1 ± 4.2
Mean 11.32 ± 0.04
Sigma 2.192 ± 0.042
t tw corr [ns]

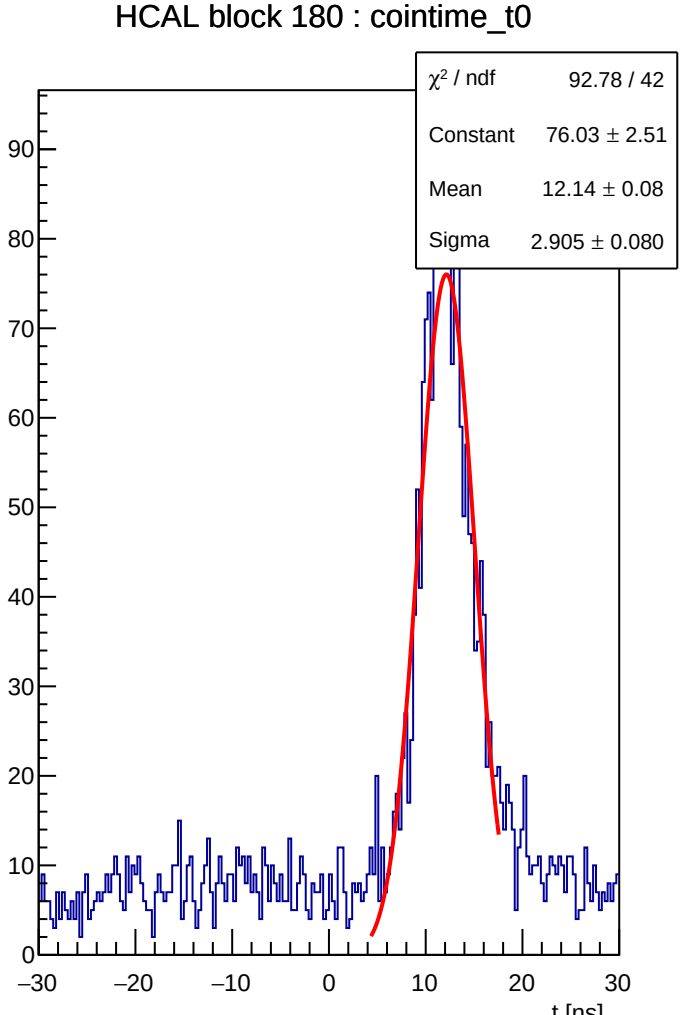

HCAL block 176 : cointime_t0
χ² / ndf 73.46 / 32
Constant 145.8 ± 3.8
Mean 11.61 ± 0.05
Sigma 2.279 ± 0.046
t [ns]
HCAL block 176 : cointime tw corr t0
χ² / ndf 79.75 / 32
Constant 134.4 ± 3.6
Mean 11.78 ± 0.05
Sigma 2.47 ± 0.06
t tw corr [ns]

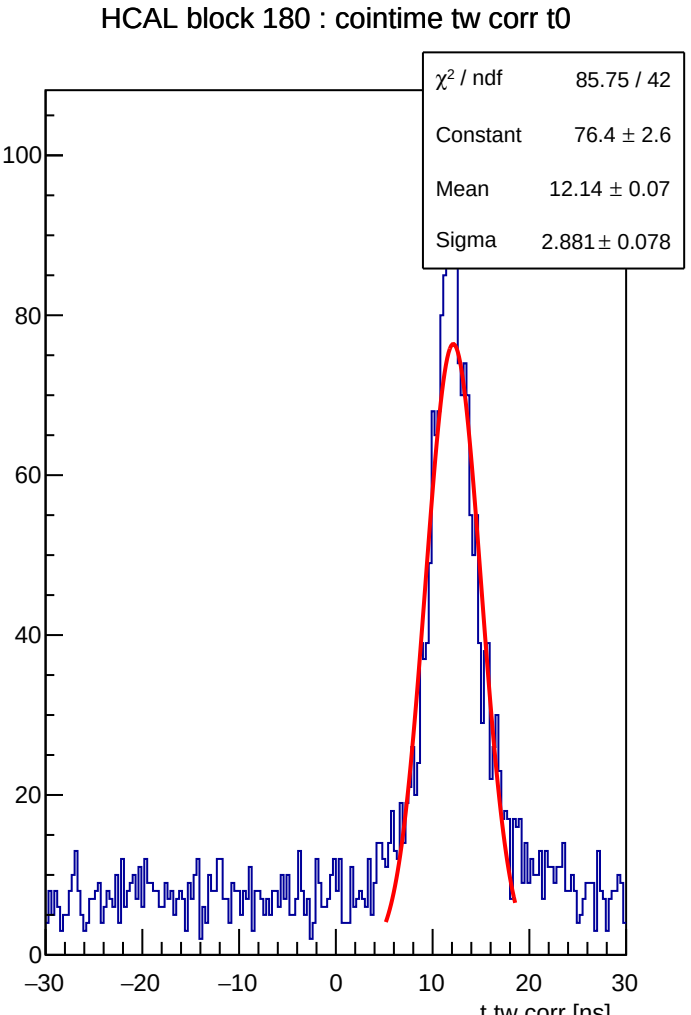

HCAL block 177 : cointime_t0
χ² / ndf 49.92 / 28
Constant 180.4 ± 4.2
Mean 11.48 ± 0.05
Sigma 2.236 ± 0.044
t [ns]
HCAL block 177 : cointime tw corr t0
χ² / ndf 53.08 / 28
Constant 191.4 ± 4.5
Mean 11.7 ± 0.0
Sigma 2.117 ± 0.041
t tw corr [ns]

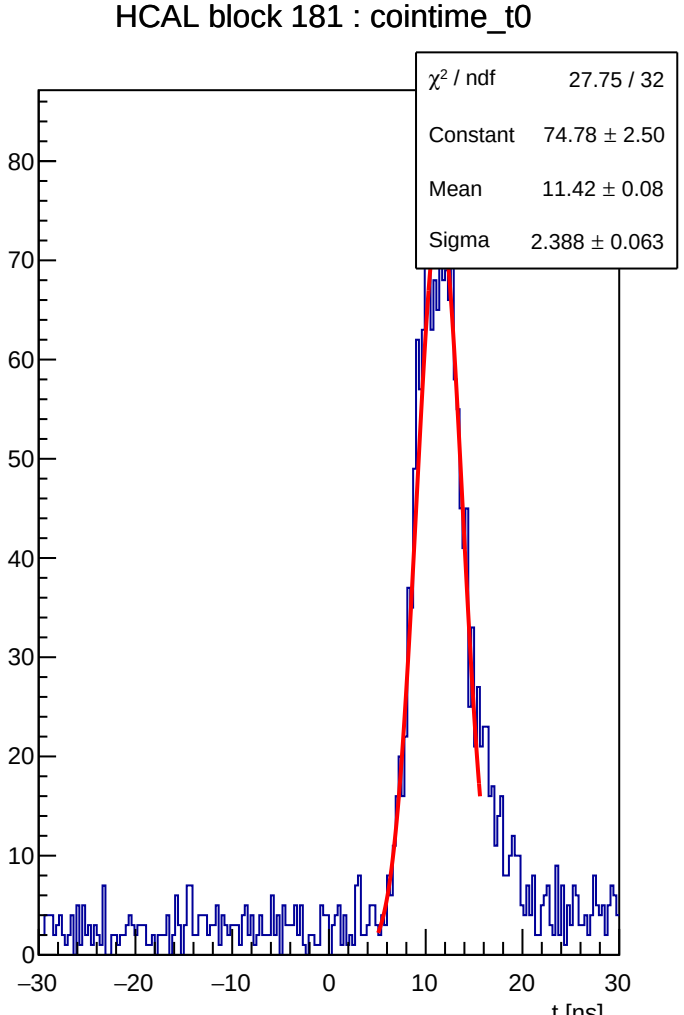

HCAL block 178 : cointime_t0
χ² / ndf 58.68 / 42
Constant 25.83 ± 1.55
Mean 11.59 ± 0.13
Sigma 2.807 ± 0.141
30
25
20
15
10
5
0
–30
–20
–10
0
10
20
30
t [ns]

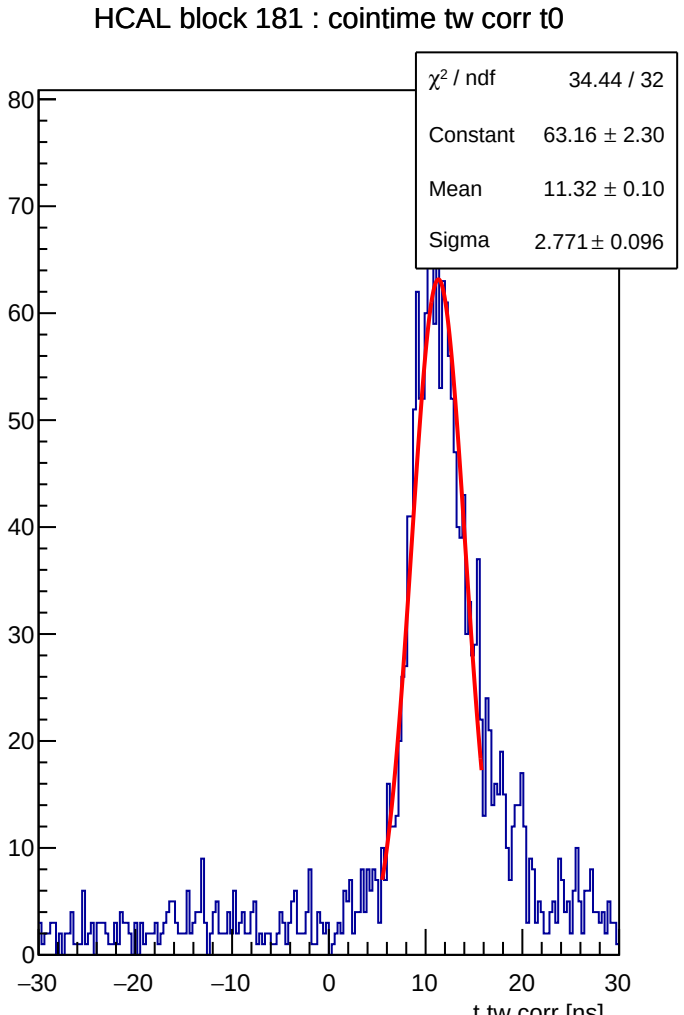

HCAL block 178 : cointime tw corr t0
χ² / ndf 33.53 / 44
Constant 21.65 ± 1.19
Mean 12.65 ± 0.17
Sigma 3.597 ± 0.178
30
25
20
15
10
5
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

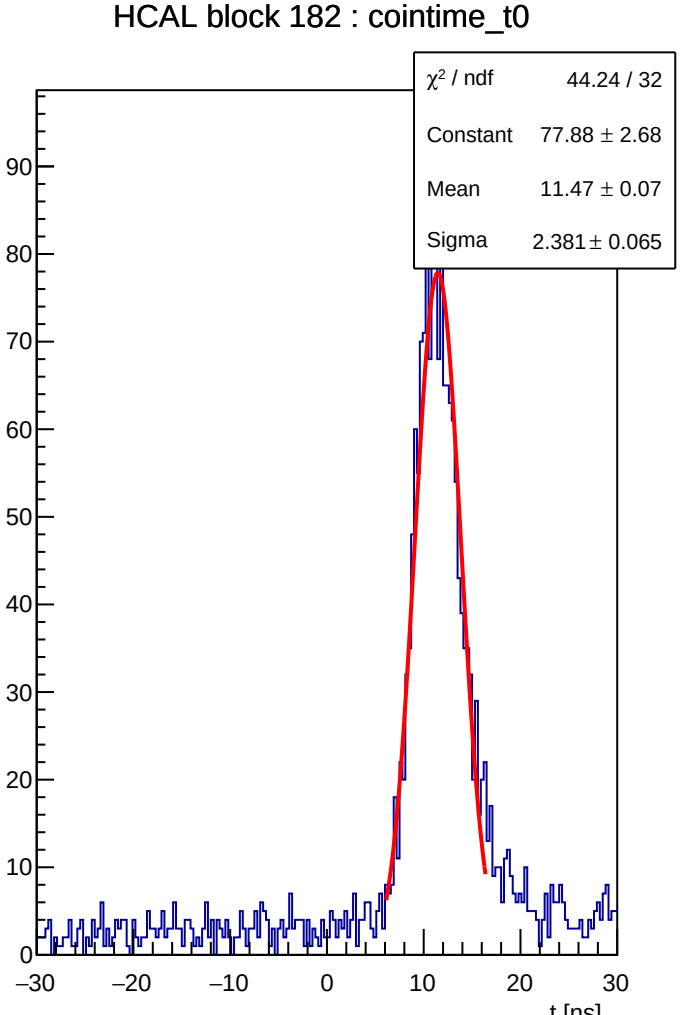

HCAL block 179 : cointime_t0
χ² / ndf 40.88 / 32
Constant 122.2 ± 3.3
Mean 11.76 ± 0.06
Sigma 2.463 ± 0.056
t [ns]
HCAL block 179 : cointime tw corr t0
χ² / ndf 70.38 / 32
Constant 123.9 ± 3.5
Mean 12.06 ± 0.05
Sigma 2.393 ± 0.056
t tw corr [ns]

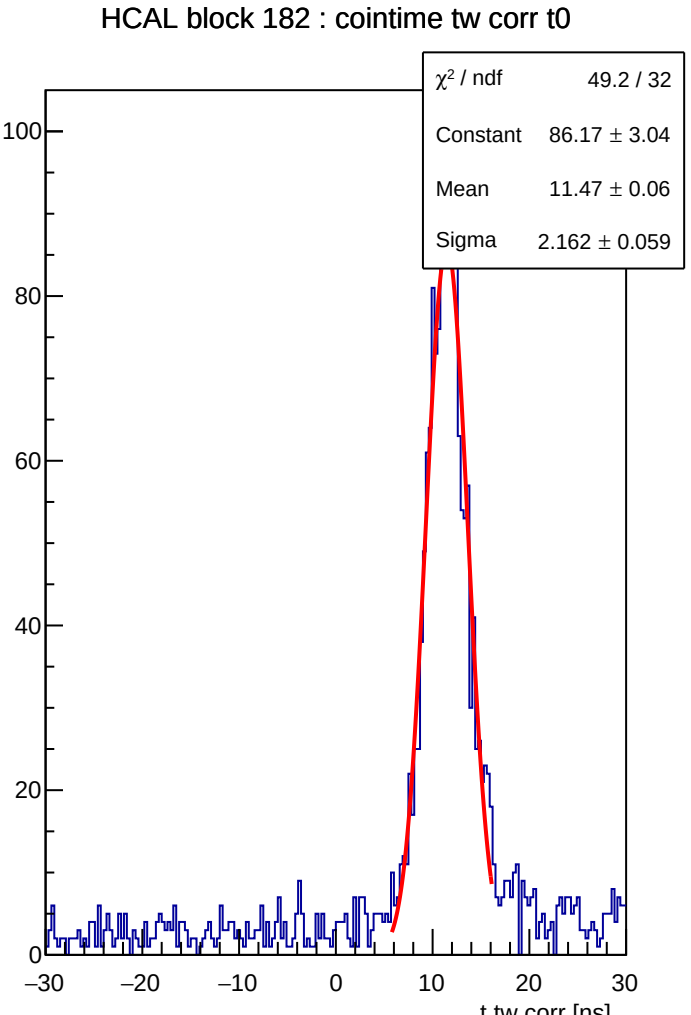

HCAL block 180 : cointime_t0
χ² / ndf 92.78 / 42
Constant 76.03 ± 2.51
Mean 12.14 ± 0.08
Sigma 2.905 ± 0.080
t [ns]

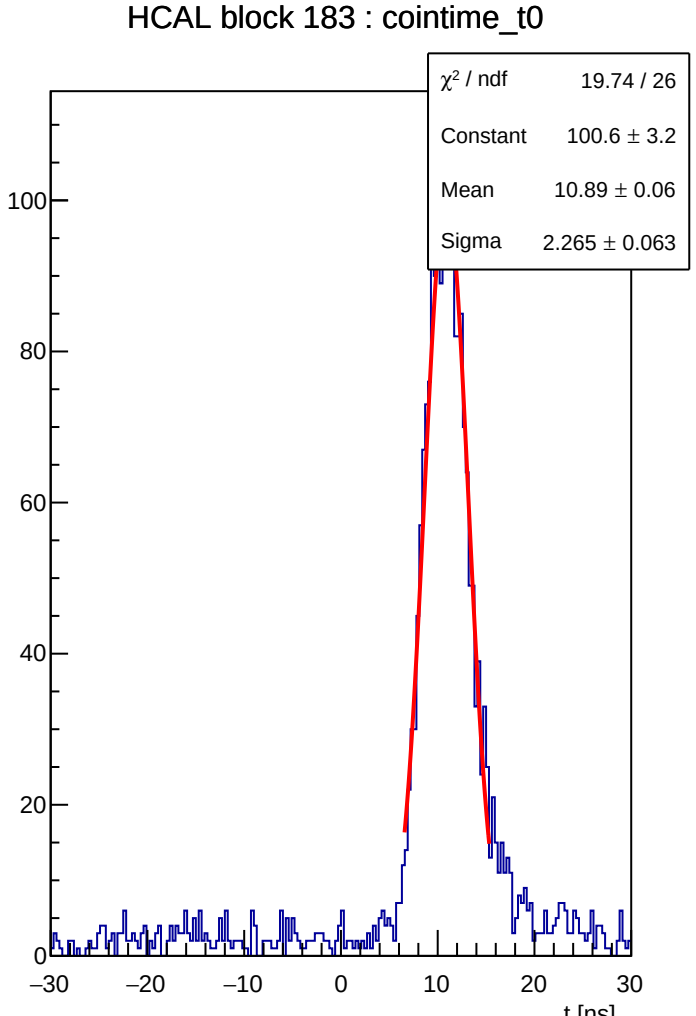

HCAL block 180 : cointime tw corr t0
χ² / ndf 85.75 / 42
Constant 76.4 ± 2.6
Mean 12.14 ± 0.07
Sigma 2.881 ± 0.078
t tw corr [ns]

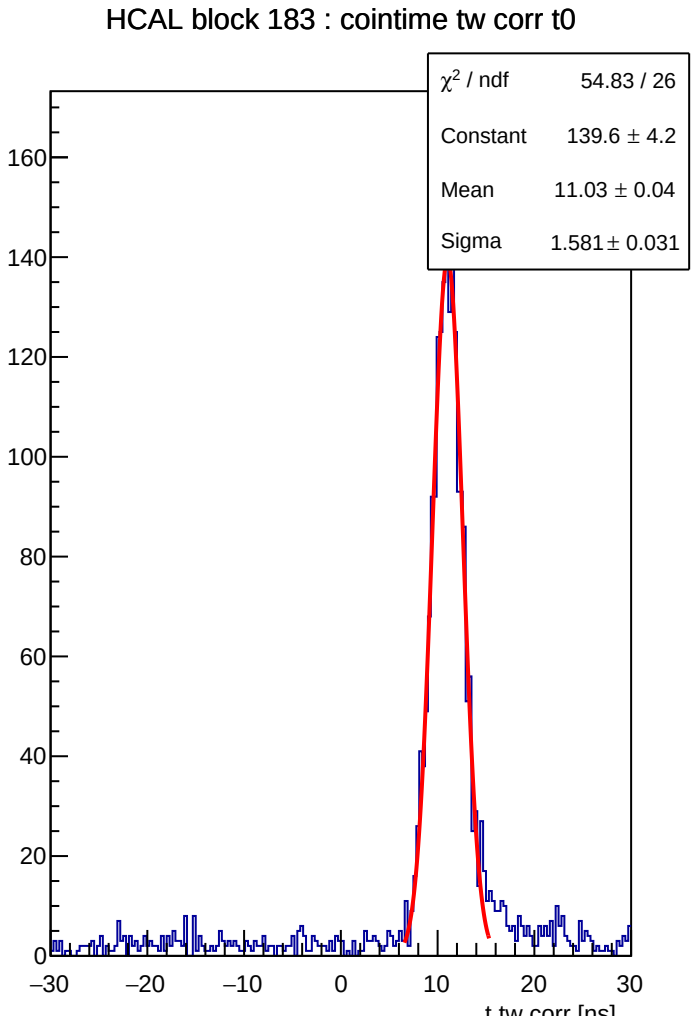

HCAL block 181 : cointime_t0
χ² / ndf 27.75 / 32
Constant 74.78 ± 2.50
Mean 11.42 ± 0.08
Sigma 2.388 ± 0.063
t [ns]

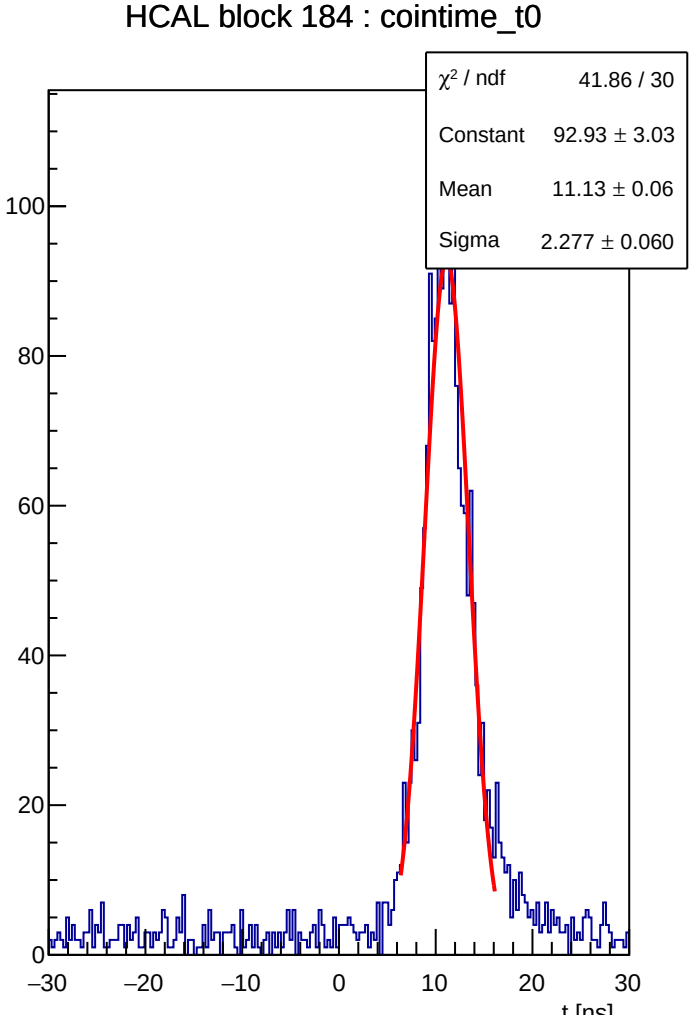

HCAL block 181 : cointime tw corr t0
χ² / ndf 34.44 / 32
Constant 63.16 ± 2.30
Mean 11.32 ± 0.10
Sigma 2.771 ± 0.096
t tw corr [ns]

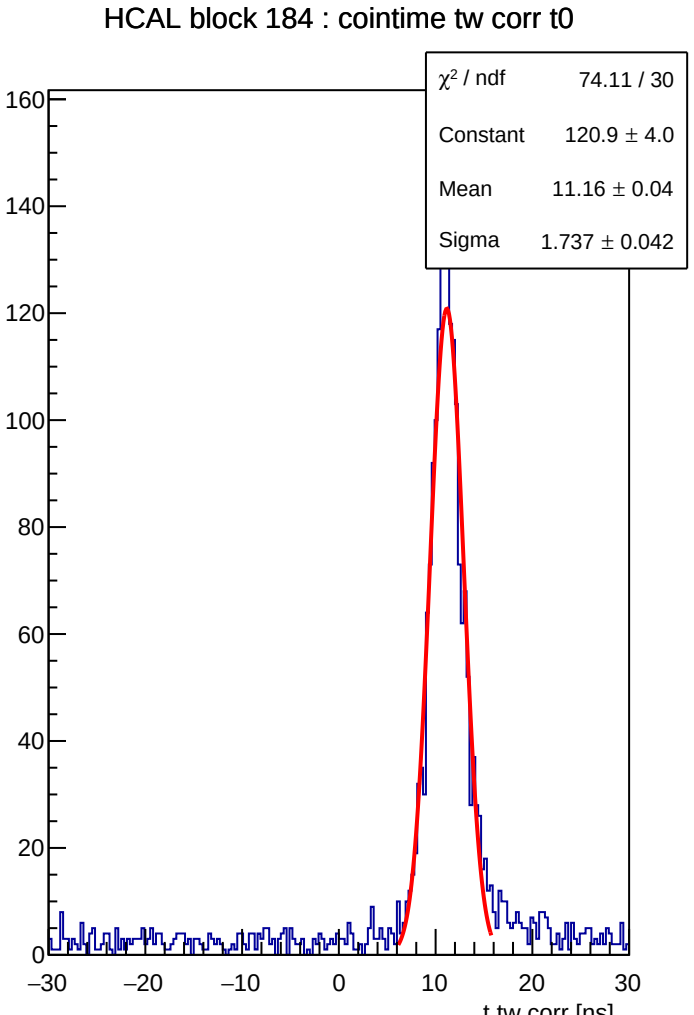

HCAL block 182 : cointime_t0
χ² / ndf 44.24 / 32
Constant 77.88 ± 2.68
Mean 11.47 ± 0.07
Sigma 2.381 ± 0.065
t [ns]

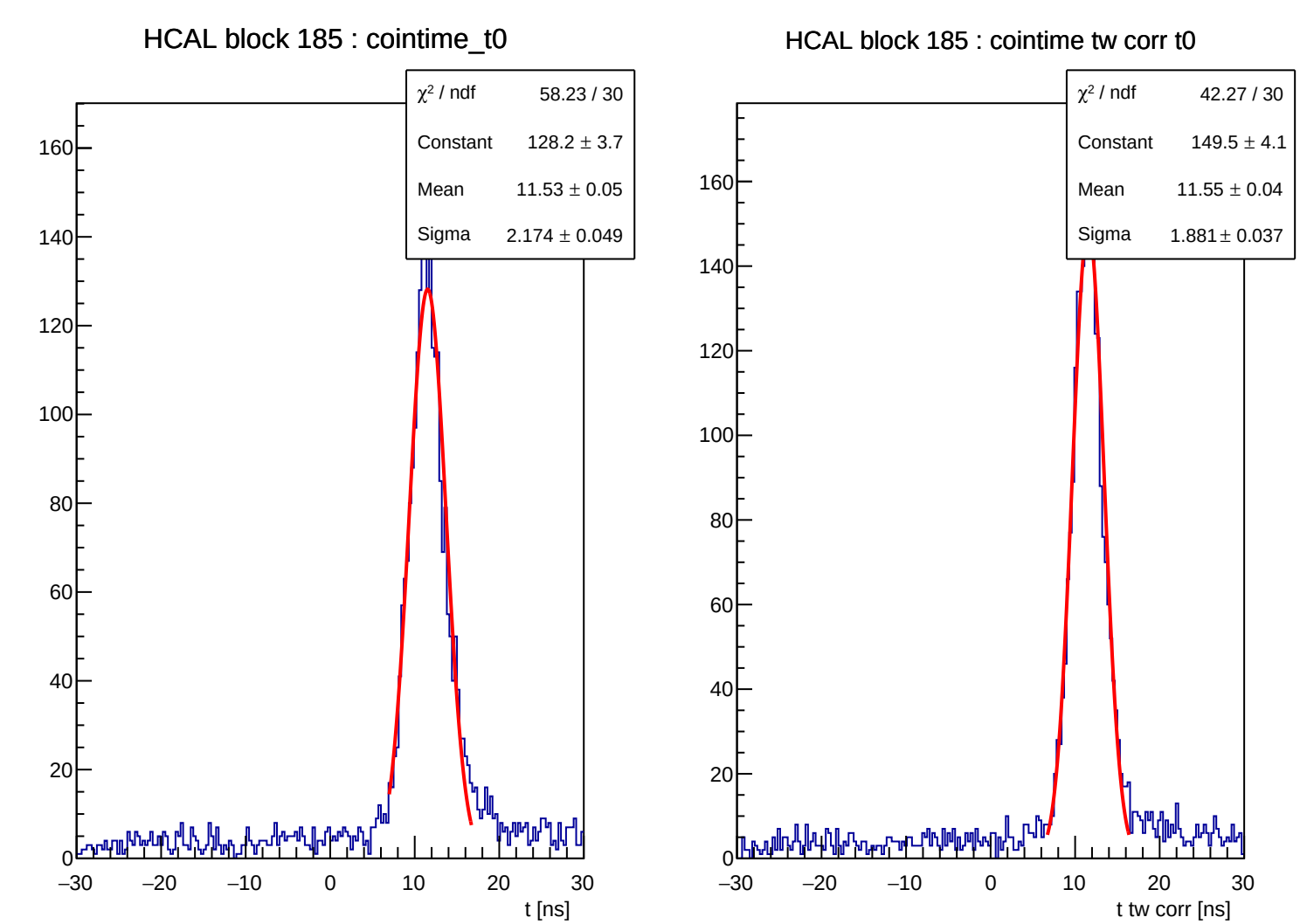

HCAL block 182 : cointime tw corr t0
χ² / ndf 49.2 / 32
Constant 86.17 ± 3.04
Mean 11.47 ± 0.06
Sigma 2.162 ± 0.059
t tw corr [ns]

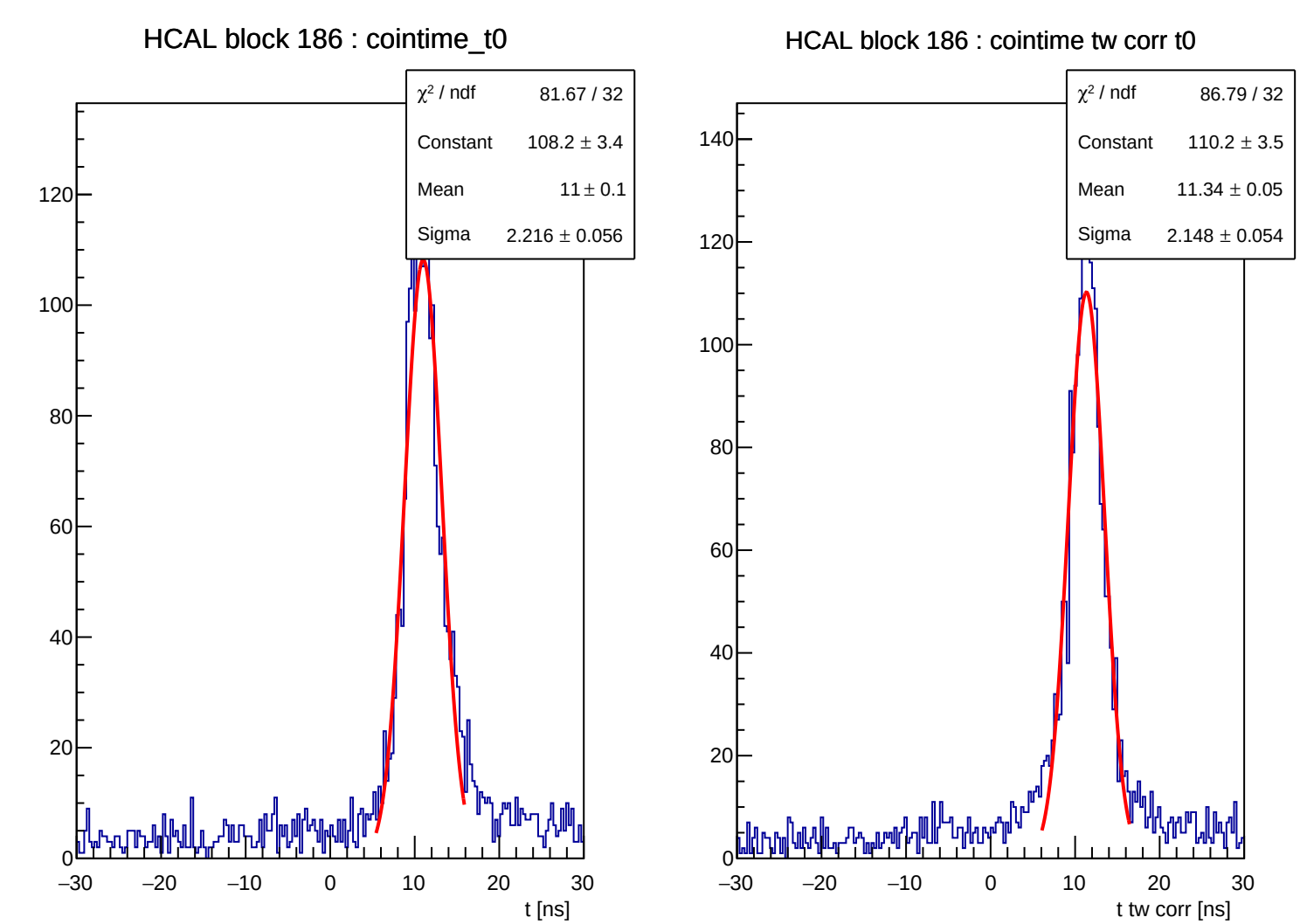

HCAL block 183 : cointime_t0
χ² / ndf 19.74 / 26
Constant 100.6 ± 3.2
Mean 10.89 ± 0.06
Sigma 2.265 ± 0.063
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

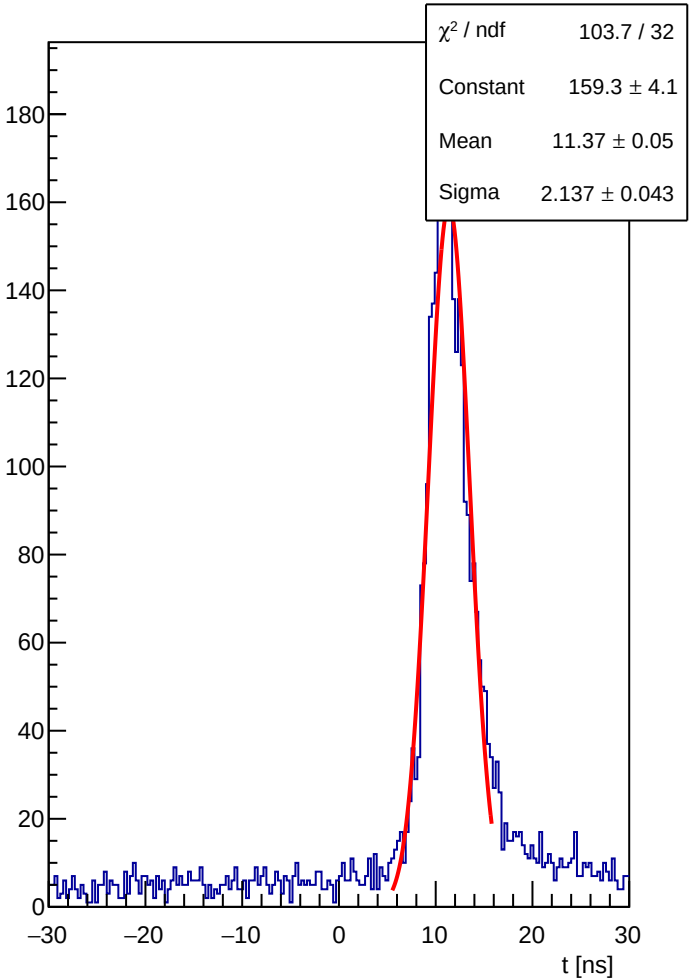

HCAL block 183 : cointime tw corr t0
χ² / ndf 54.83 / 26
Constant 139.6 ± 4.2
Mean 11.03 ± 0.04
Sigma 1.581 ± 0.031
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

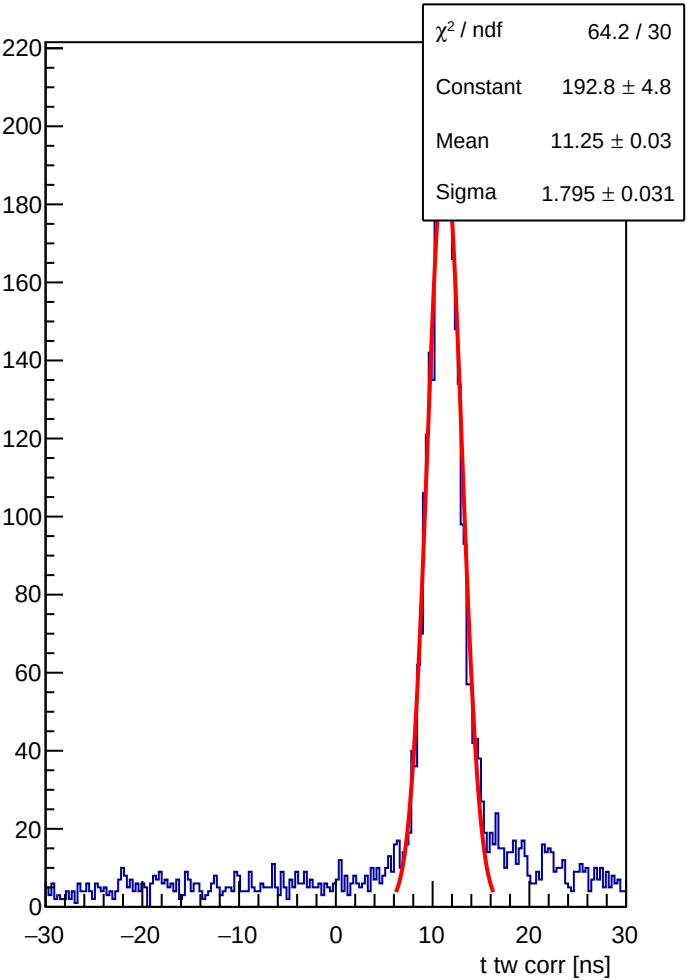

HCAL block 184 : cointime_t0
χ² / ndf 41.86 / 30
Constant 92.93 ± 3.03
Mean 11.13 ± 0.06
Sigma 2.277 ± 0.060
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

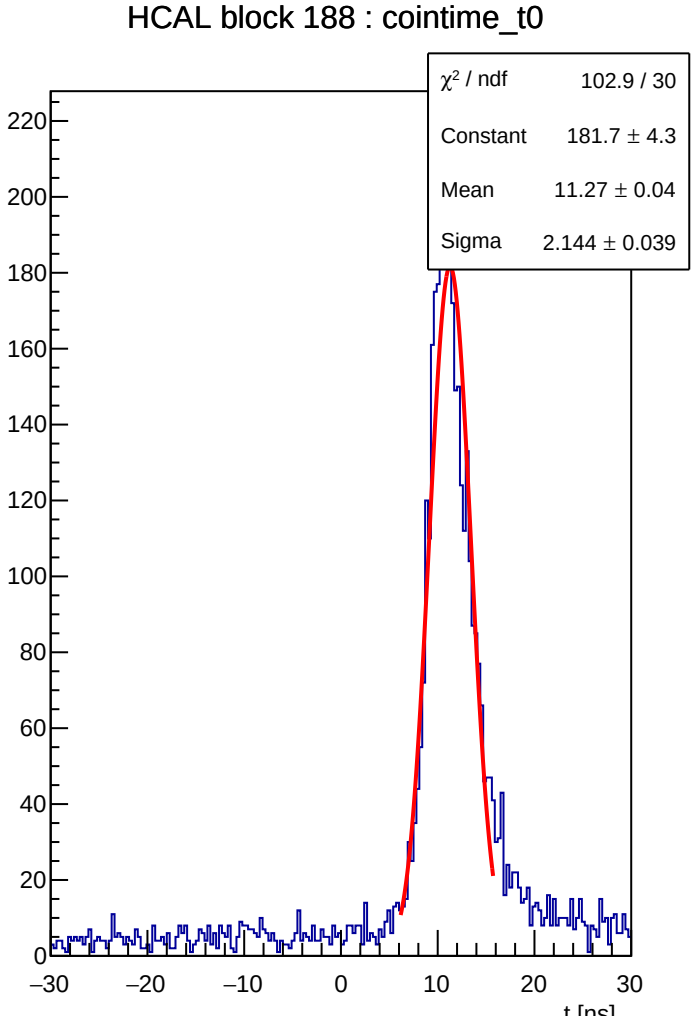

HCAL block 184 : cointime tw corr t0
χ² / ndf 74.11 / 30
Constant 120.9 ± 4.0
Mean 11.16 ± 0.04
Sigma 1.737 ± 0.042
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

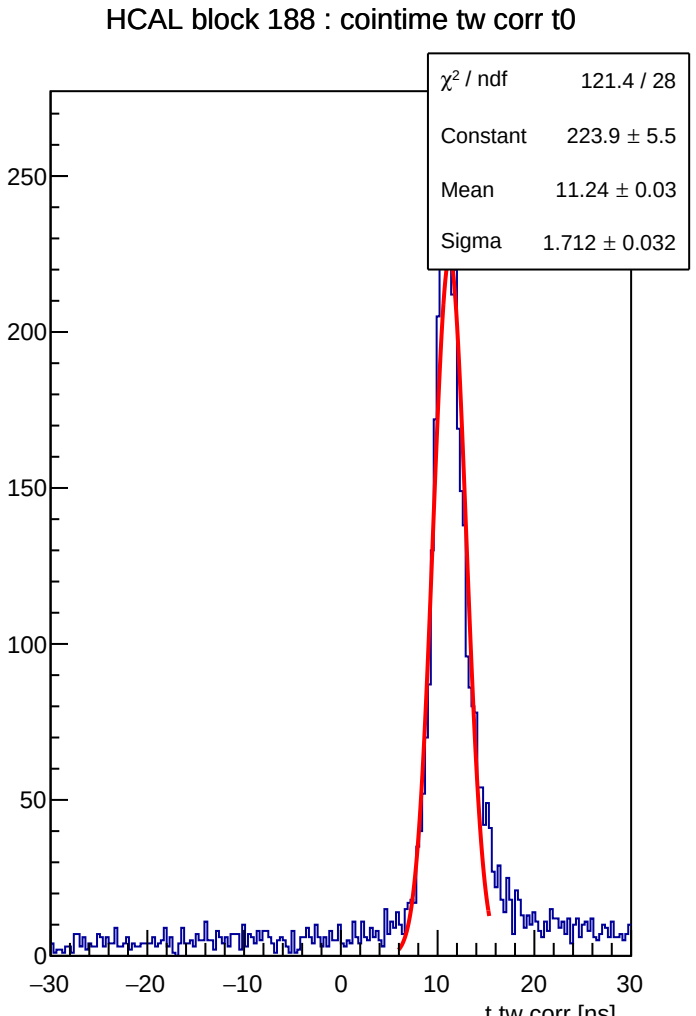

HCAL block 185 : cointime_t0
χ² / ndf 58.23 / 30
Constant 128.2 ± 3.7
Mean 11.53 ± 0.05
Sigma 2.174 ± 0.049
t [ns]
HCAL block 185 : cointime tw corr t0
χ² / ndf 42.27 / 30
Constant 149.5 ± 4.1
Mean 11.55 ± 0.04
Sigma 1.881 ± 0.037
t tw corr [ns]

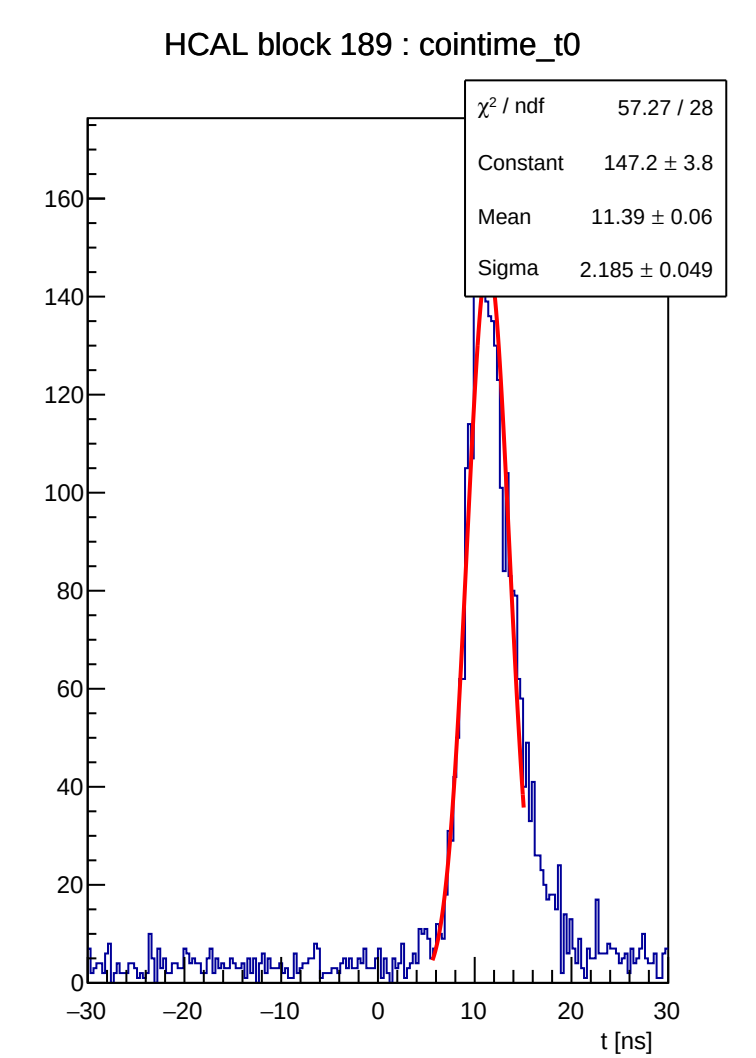

HCAL block 186 : cointime_t0
χ² / ndf 81.67 / 32
Constant 108.2 ± 3.4
Mean 11 ± 0.1
Sigma 2.216 ± 0.056
t [ns]
HCAL block 186 : cointime tw corr t0
χ² / ndf 86.79 / 32
Constant 110.2 ± 3.5
Mean 11.34 ± 0.05
Sigma 2.148 ± 0.054
t tw corr [ns]

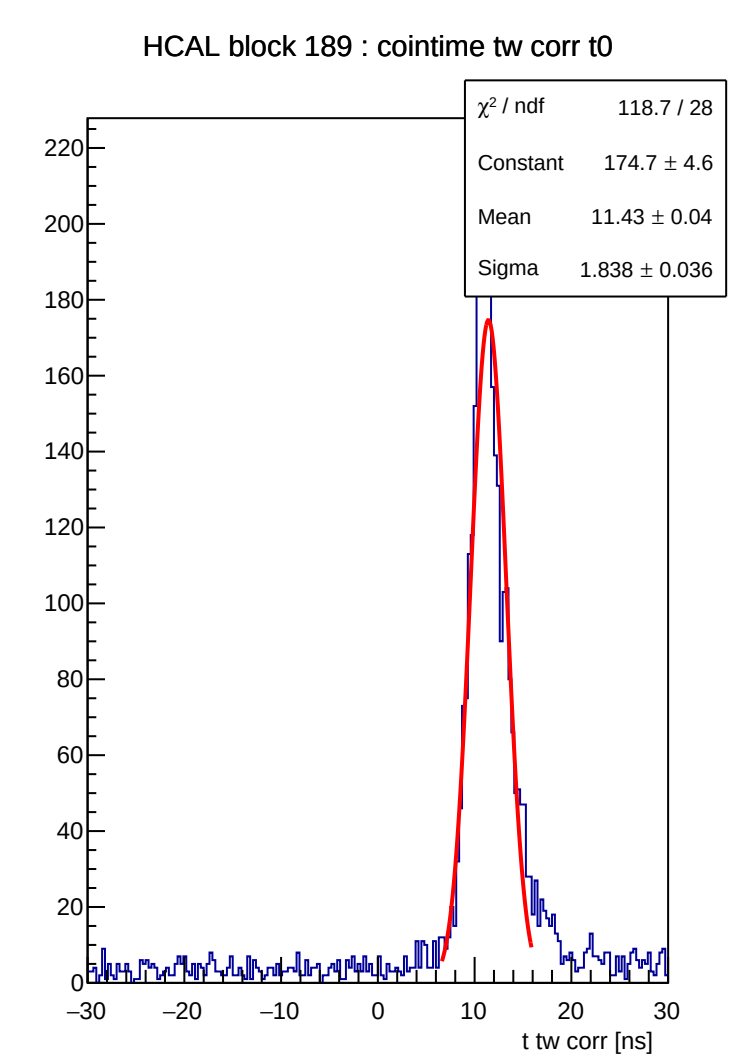

HCAL block 187 : cointime_t0
χ² / ndf 103.7 / 32
Constant 159.3 ± 4.1
Mean 11.37 ± 0.05
Sigma 2.137 ± 0.043
t [ns]

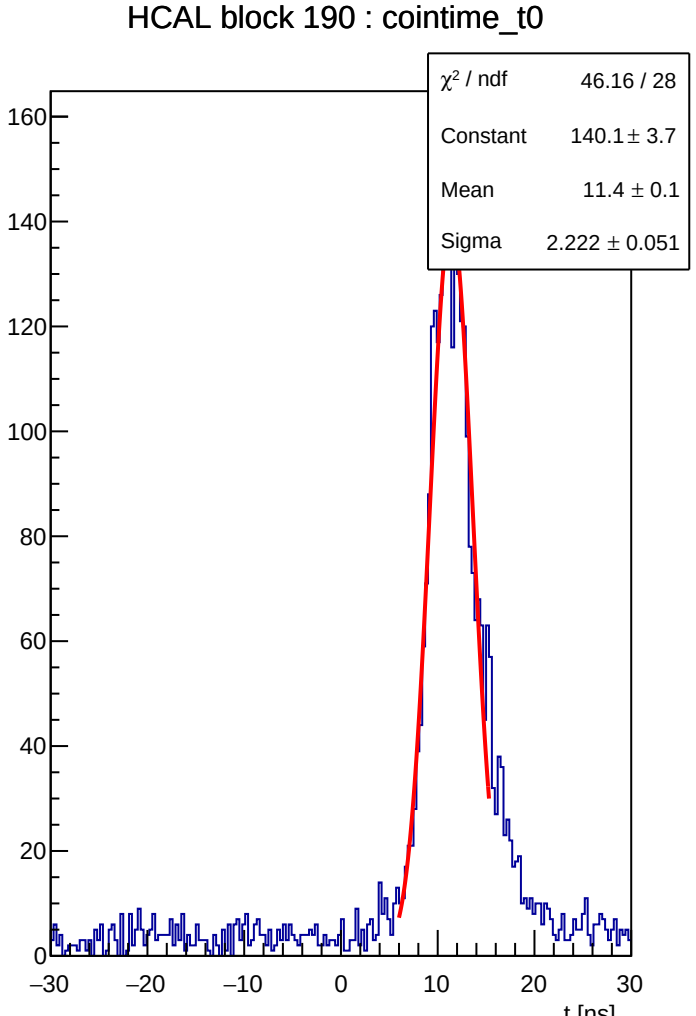

HCAL block 187 : cointime tw corr t0
χ² / ndf 64.2 / 30
Constant 192.8 ± 4.8
Mean 11.25 ± 0.03
Sigma 1.795 ± 0.031
t tw corr [ns]

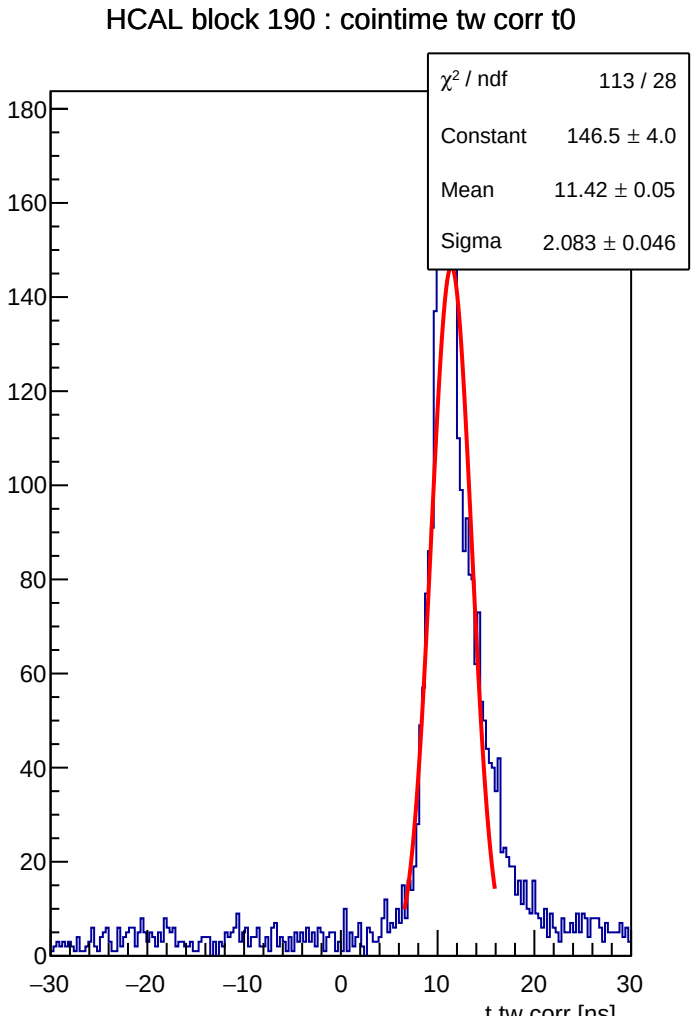

HCAL block 188 : cointime_t0
χ² / ndf 102.9 / 30
Constant 181.7 ± 4.3
Mean 11.27 ± 0.04
Sigma 2.144 ± 0.039
220
200
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

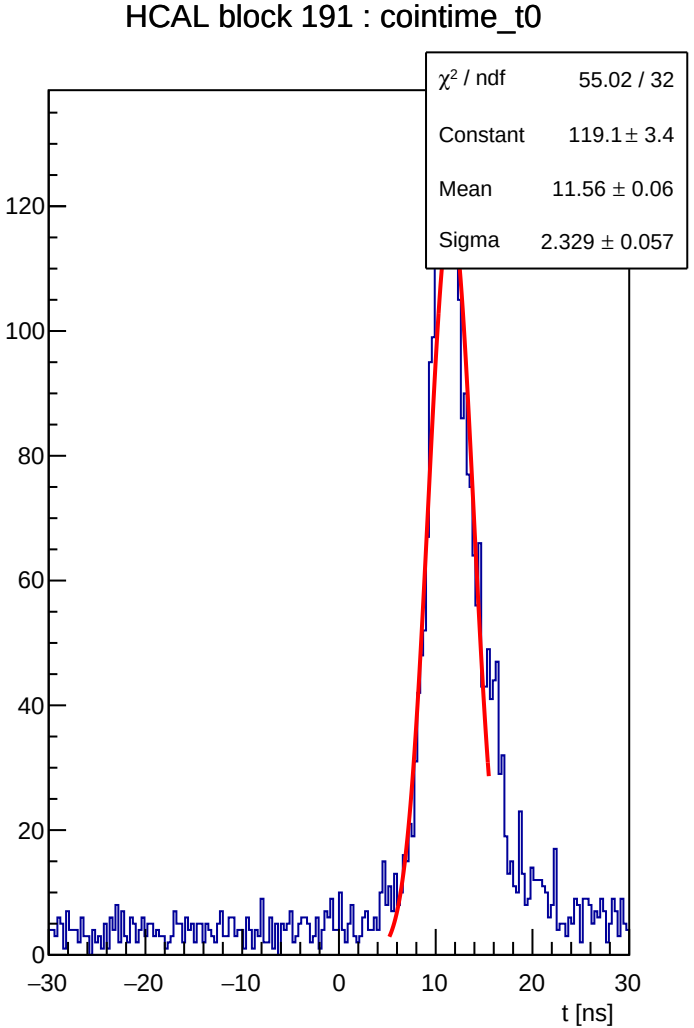

HCAL block 188 : cointime tw corr t0
χ² / ndf 121.4 / 28
Constant 223.9 ± 5.5
Mean 11.24 ± 0.03
Sigma 1.712 ± 0.032
250
200
150
100
50
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

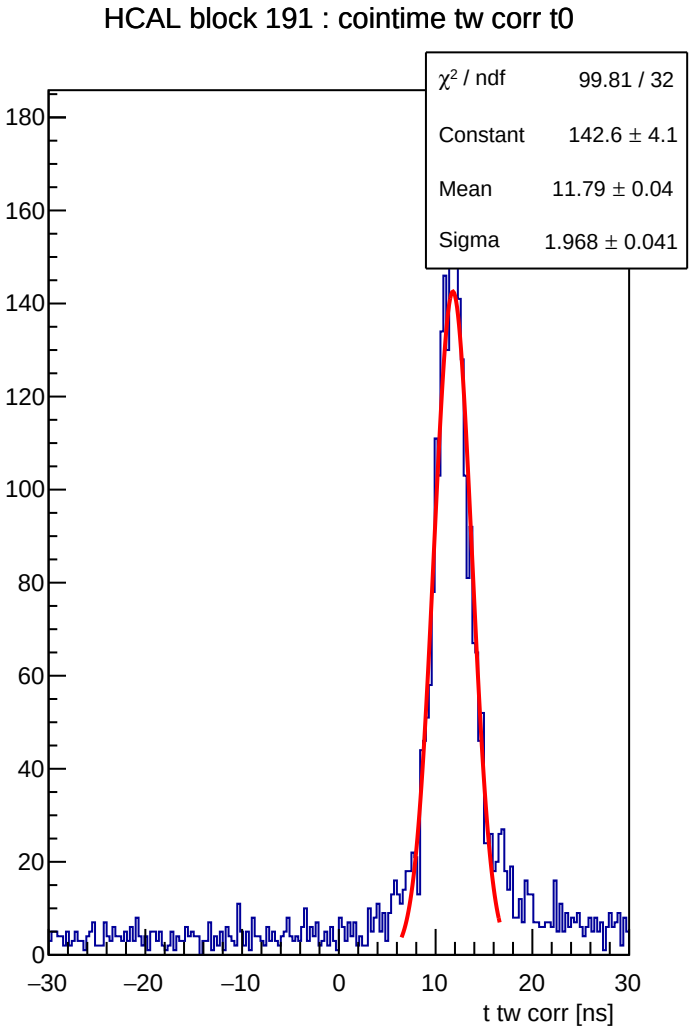

HCAL block 189 : cointime_t0
χ² / ndf 57.27 / 28
Constant 147.2 ± 3.8
Mean 11.39 ± 0.06
Sigma 2.185 ± 0.049
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

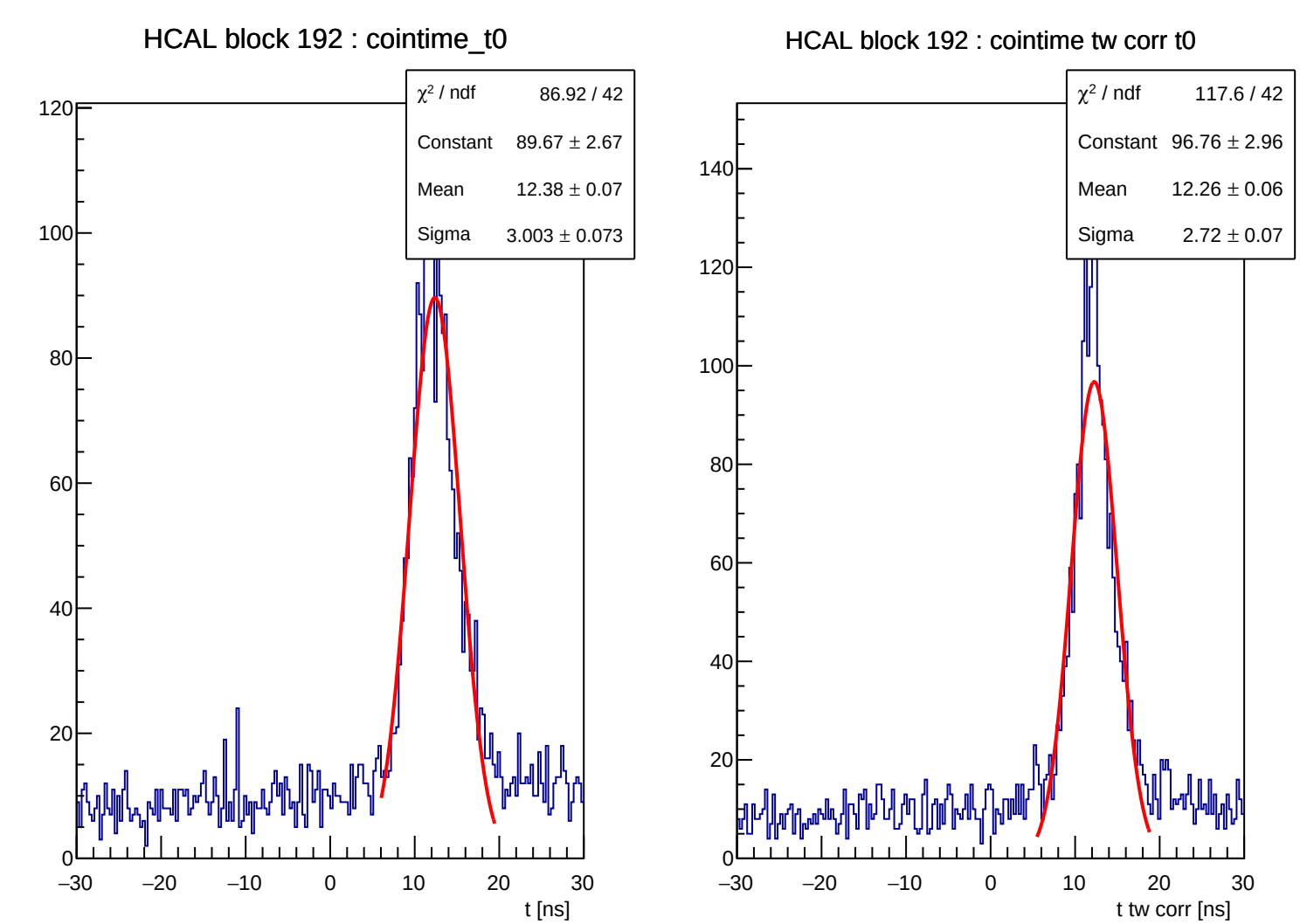

HCAL block 189 : cointime tw corr t0
χ² / ndf 118.7 / 28
Constant 174.7 ± 4.6
Mean 11.43 ± 0.04
Sigma 1.838 ± 0.036
220
200
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

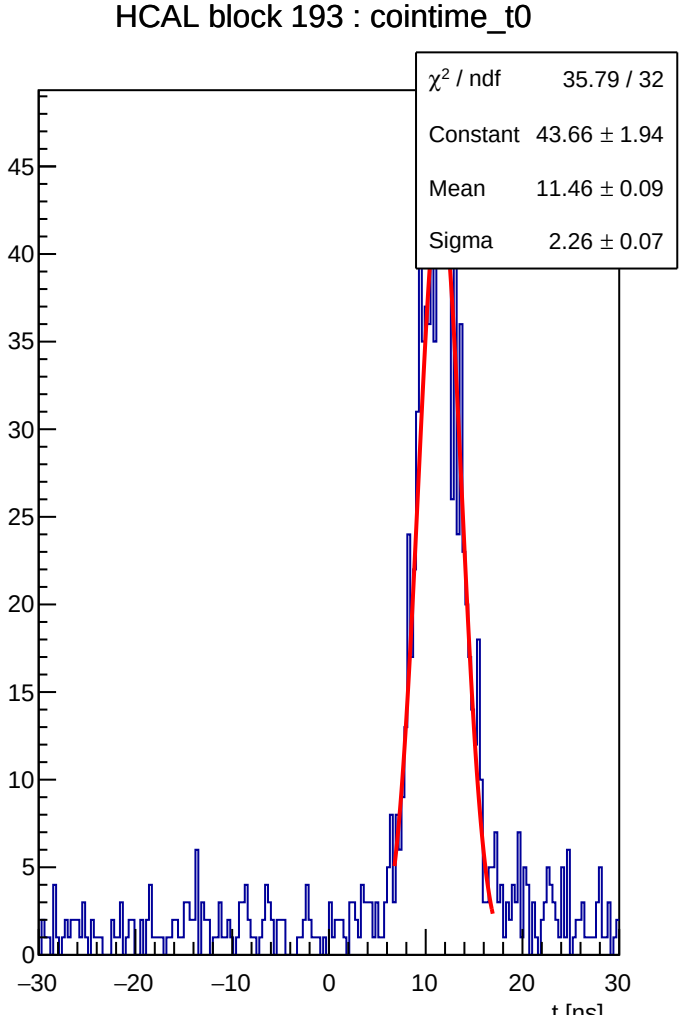

HCAL block 190 : cointime_t0
χ² / ndf 46.16 / 28
Constant 140.1 ± 3.7
Mean 11.4 ± 0.1
Sigma 2.222 ± 0.051
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

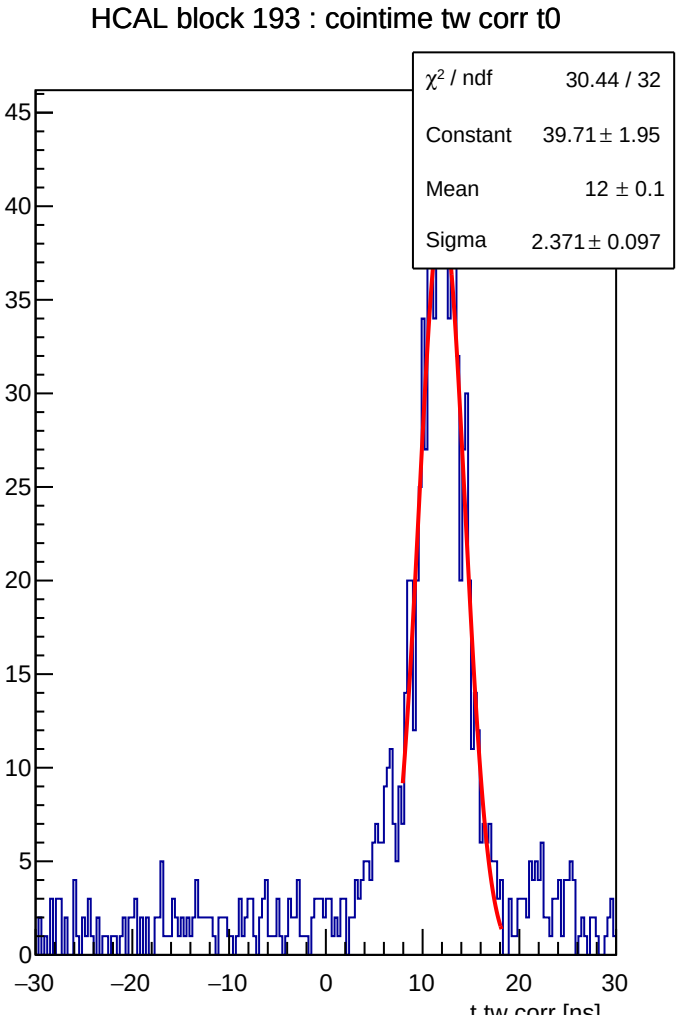

HCAL block 190 : cointime tw corr t0
χ² / ndf 113 / 28
Constant 146.5 ± 4.0
Mean 11.42 ± 0.05
Sigma 2.083 ± 0.046
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

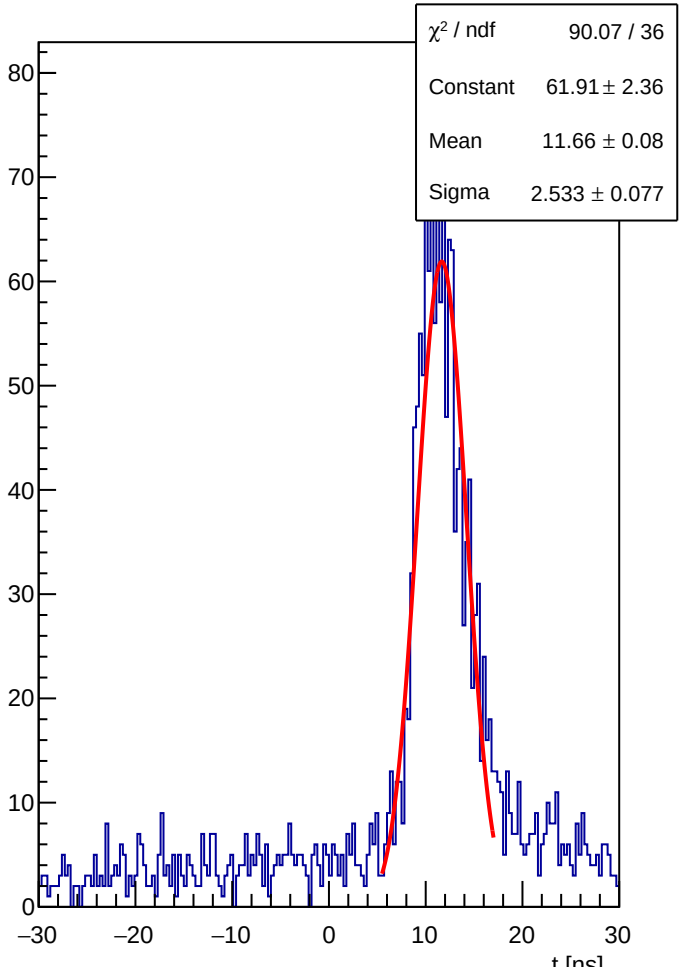

HCAL block 191 : cointime_t0
χ² / ndf 55.02 / 32
Constant 119.1 ± 3.4
Mean 11.56 ± 0.06
Sigma 2.329 ± 0.057
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

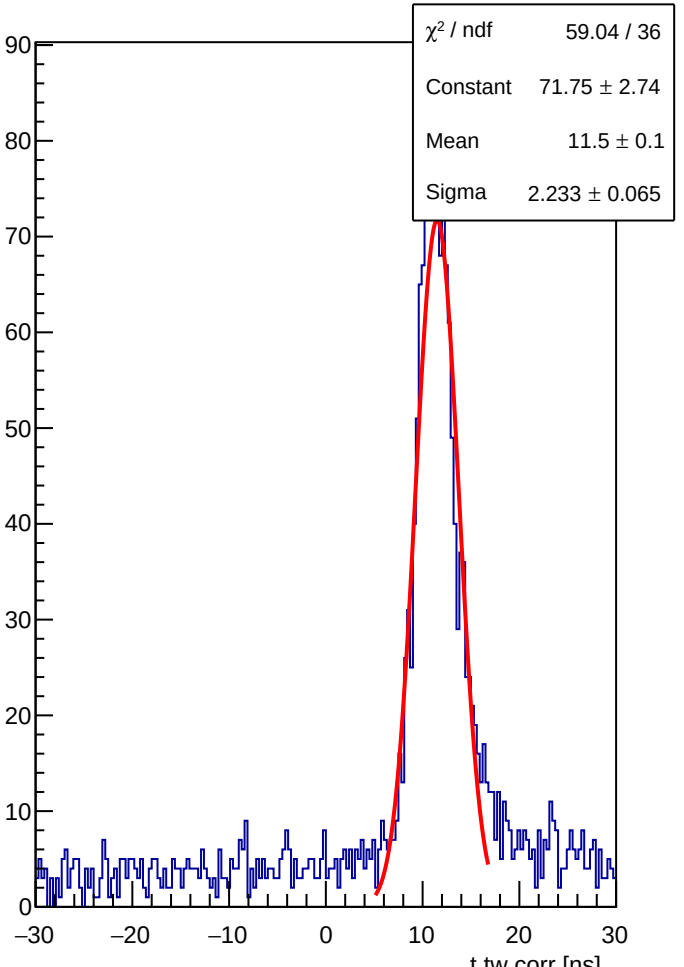

HCAL block 191 : cointime tw corr t0
χ² / ndf 99.81 / 32
Constant 142.6 ± 4.1
Mean 11.79 ± 0.04
Sigma 1.968 ± 0.041
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

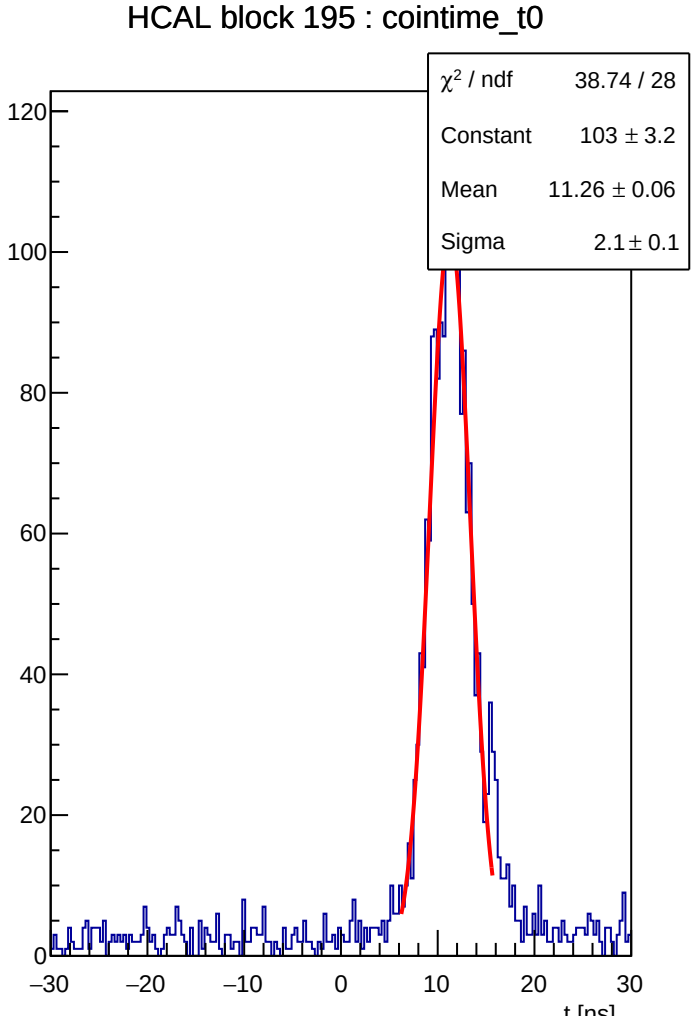

HCAL block 192 : cointime_t0
χ² / ndf 86.92 / 42
Constant 89.67 ± 2.67
Mean 12.38 ± 0.07
Sigma 3.003 ± 0.073
t [ns]
HCAL block 192 : cointime tw corr t0
χ² / ndf 117.6 / 42
Constant 96.76 ± 2.96
Mean 12.26 ± 0.06
Sigma 2.72 ± 0.07
t tw corr [ns]

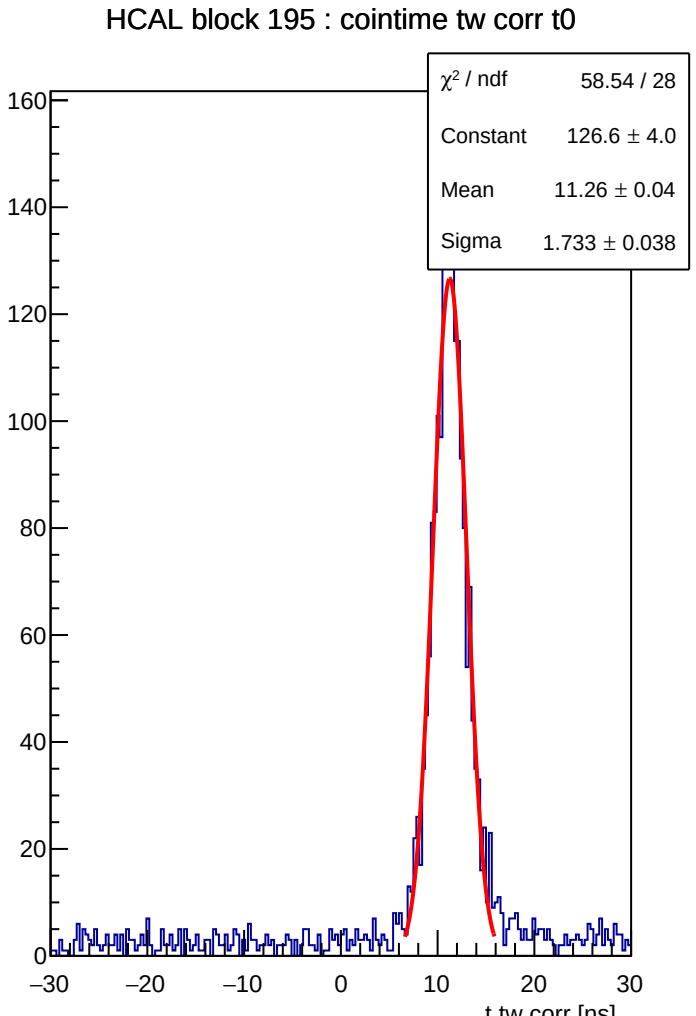

HCAL block 193 : cointime_t0
χ² / ndf 35.79 / 32
Constant 43.66 ± 1.94
Mean 11.46 ± 0.09
Sigma 2.26 ± 0.07
t [ns]

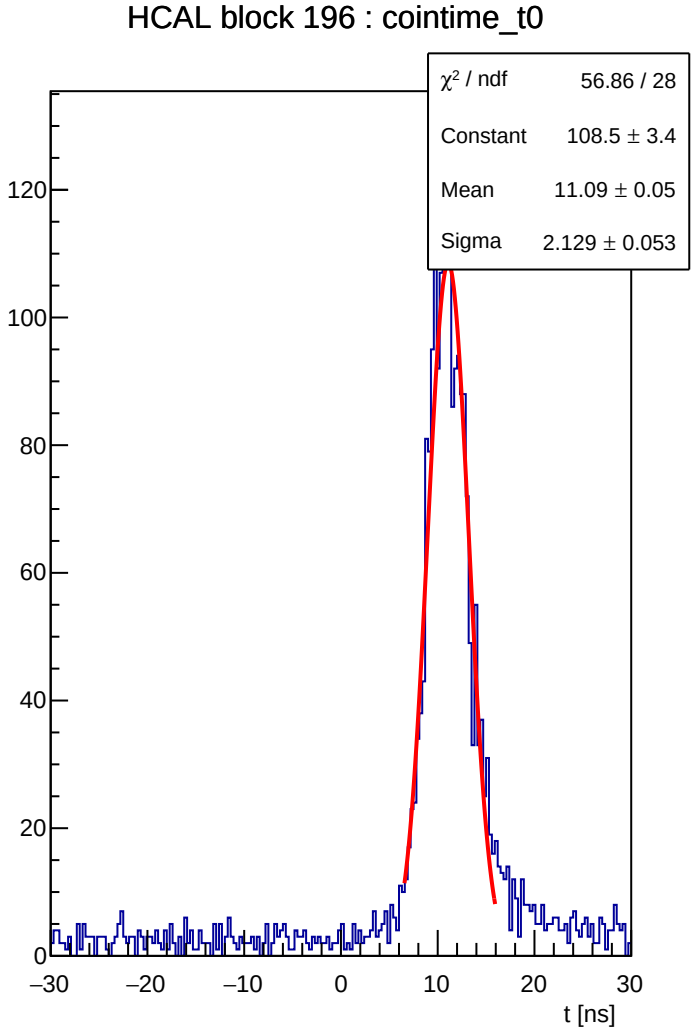

HCAL block 193 : cointime tw corr t0
χ² / ndf 30.44 / 32
Constant 39.71 ± 1.95
Mean 12 ± 0.1
Sigma 2.371 ± 0.097
t tw corr [ns]

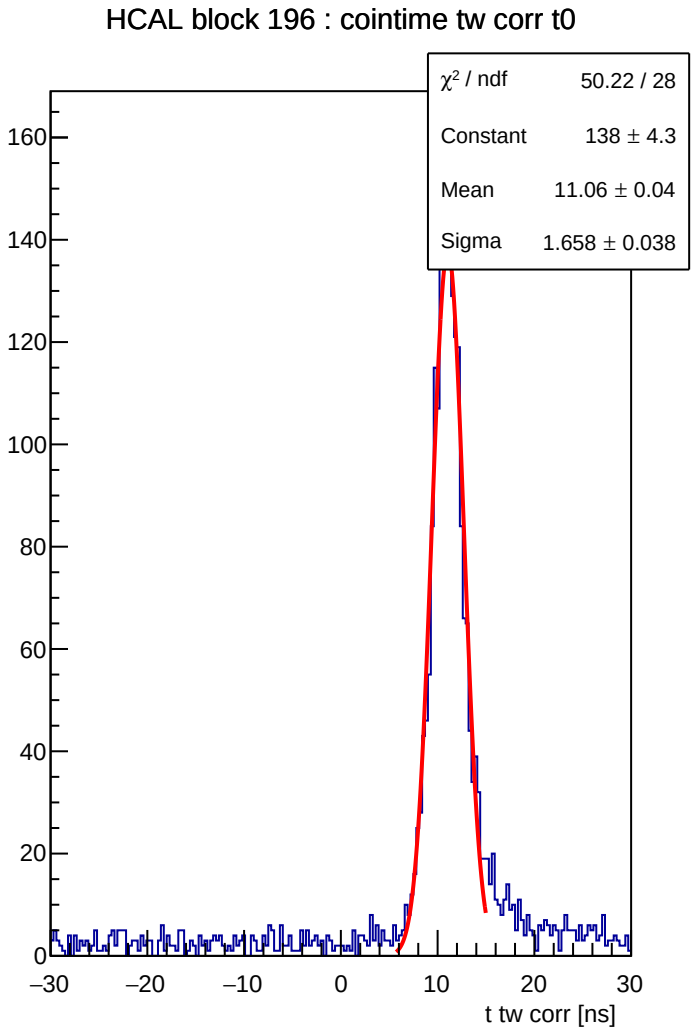

HCAL block 194 : cointime_t0
χ² / ndf 90.07 / 36
Constant 61.91 ± 2.36
Mean 11.66 ± 0.08
Sigma 2.533 ± 0.077
t [ns]

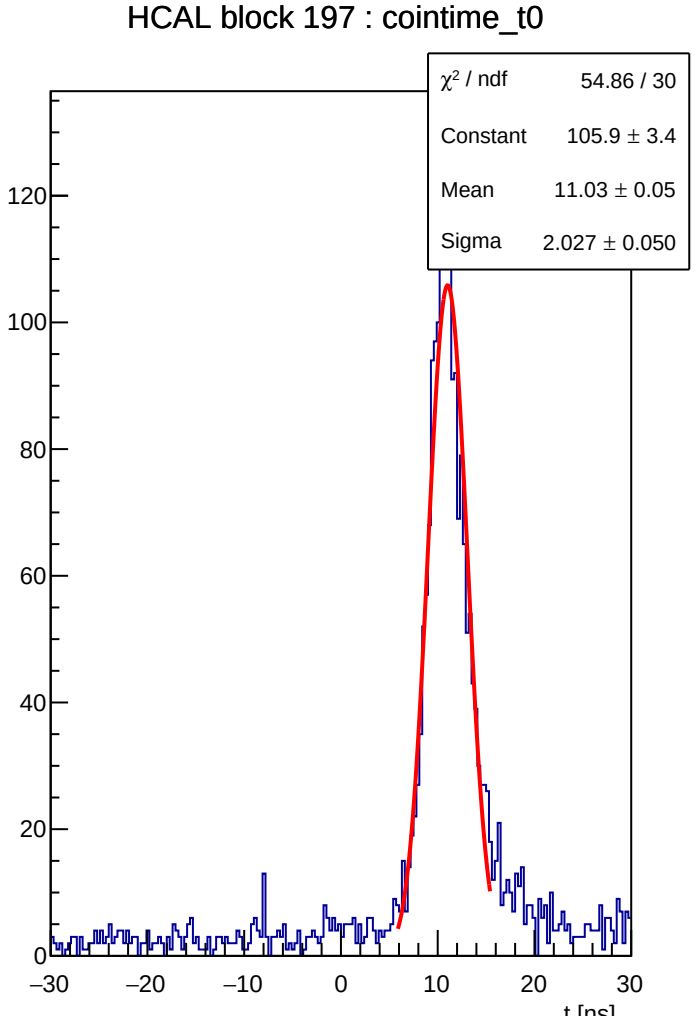

HCAL block 194 : cointime tw corr t0
χ² / ndf 59.04 / 36
Constant 71.75 ± 2.74
Mean 11.5 ± 0.1
Sigma 2.233 ± 0.065
t tw corr [ns]

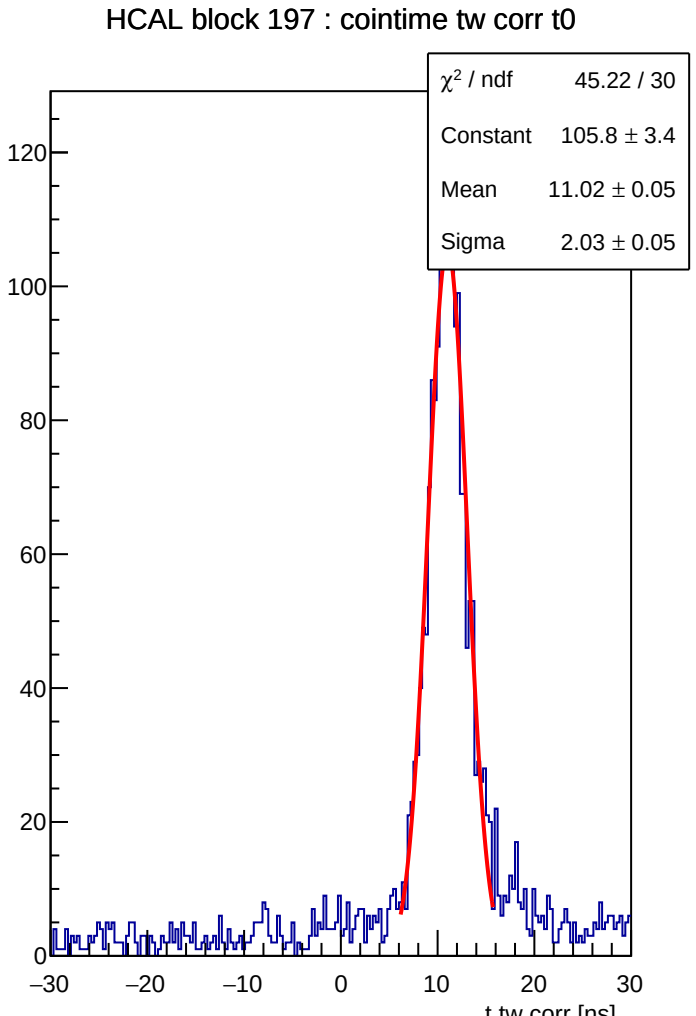

HCAL block 195 : cointime_t0
χ² / ndf 38.74 / 28
Constant 103 ± 3.2
Mean 11.26 ± 0.06
Sigma 2.1 ± 0.1
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

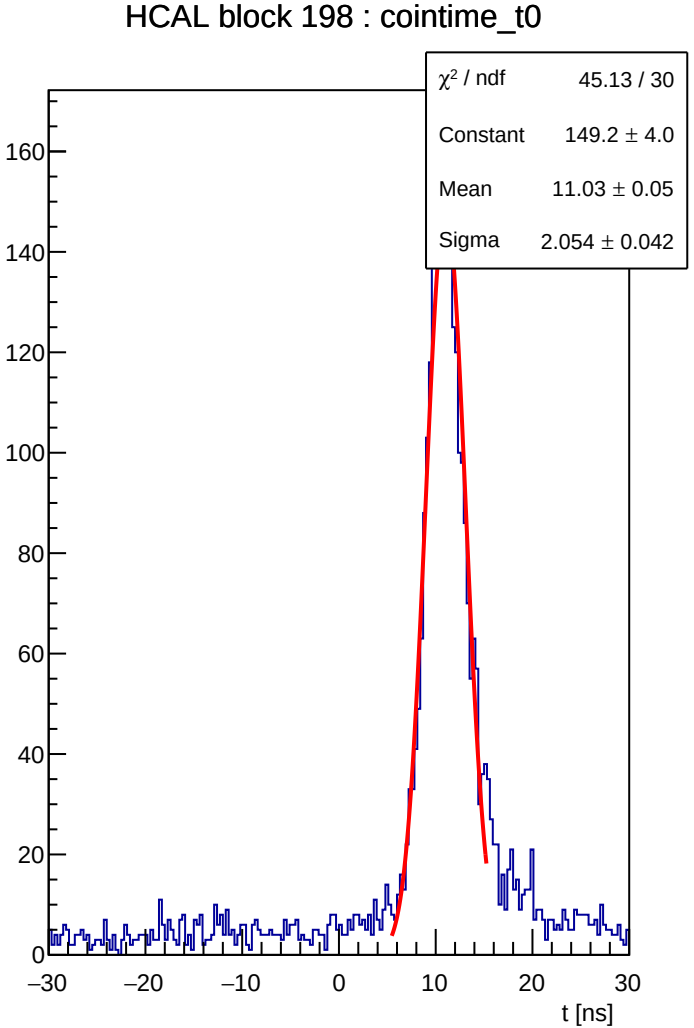

HCAL block 195 : cointime tw corr t0
χ² / ndf 58.54 / 28
Constant 126.6 ± 4.0
Mean 11.26 ± 0.04
Sigma 1.733 ± 0.038
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

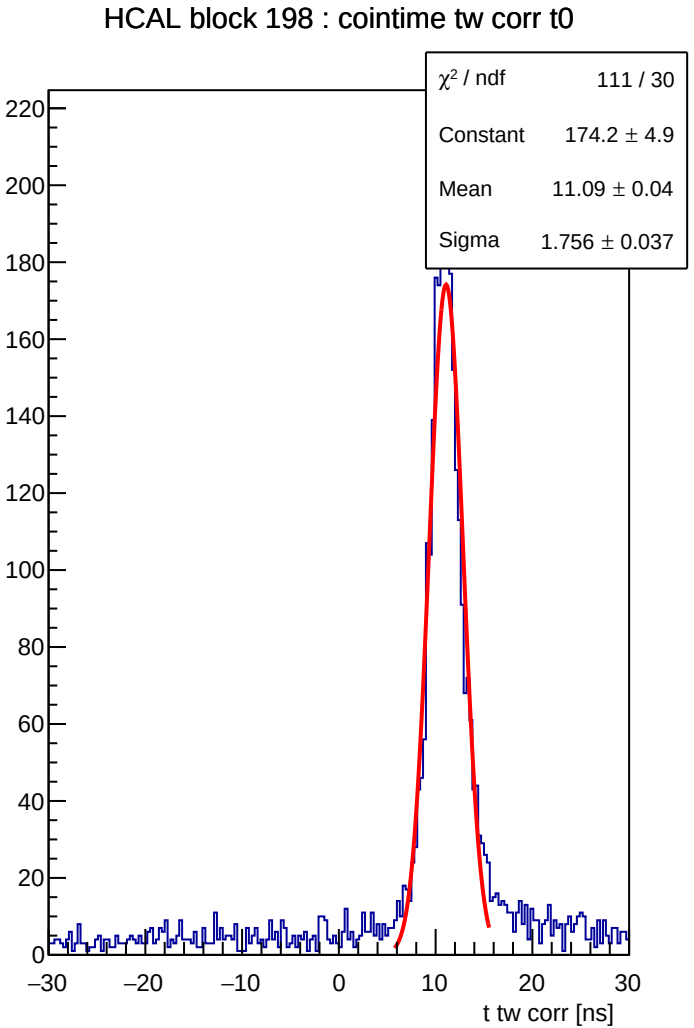

HCAL block 196 : cointime_t0
χ² / ndf 56.86 / 28
Constant 108.5 ± 3.4
Mean 11.09 ± 0.05
Sigma 2.129 ± 0.053
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

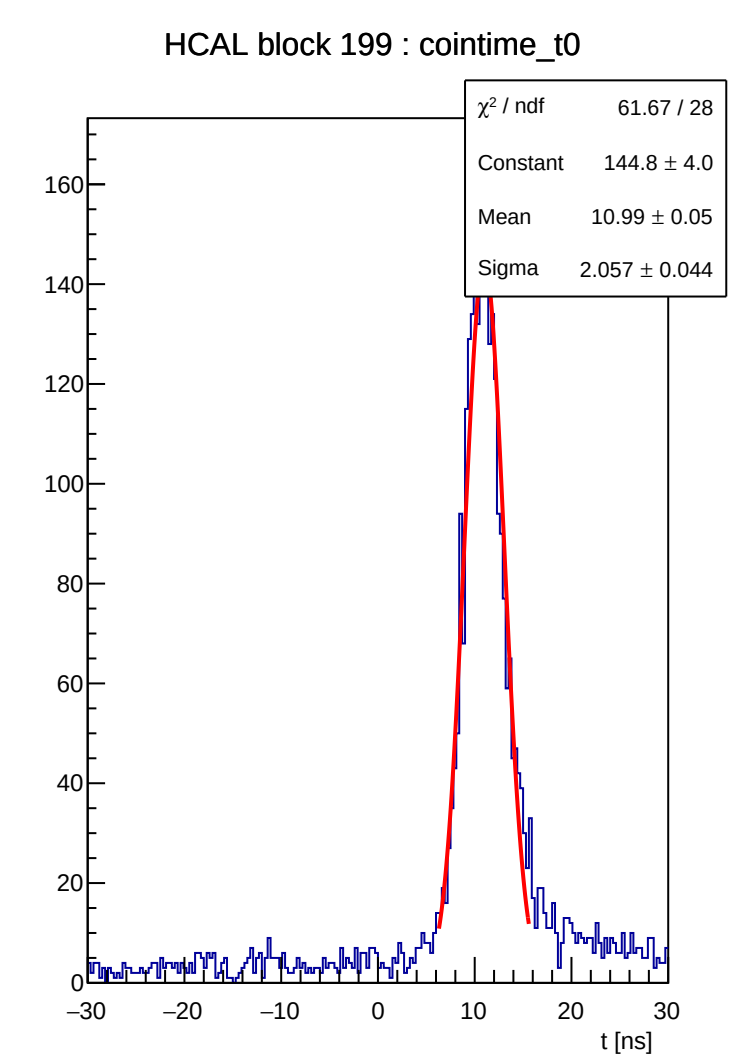

HCAL block 196 : cointime tw corr t0
χ² / ndf 50.22 / 28
Constant 138 ± 4.3
Mean 11.06 ± 0.04
Sigma 1.658 ± 0.038
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

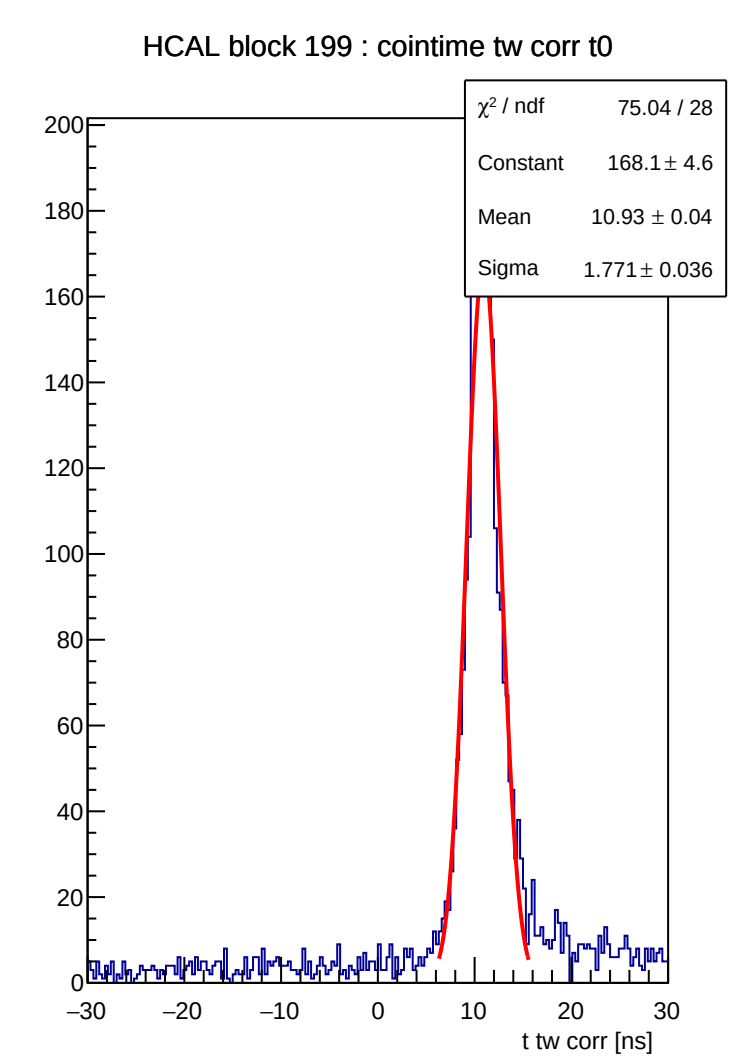

HCAL block 197 : cointime_t0
χ² / ndf 54.86 / 30
Constant 105.9 ± 3.4
Mean 11.03 ± 0.05
Sigma 2.027 ± 0.050
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

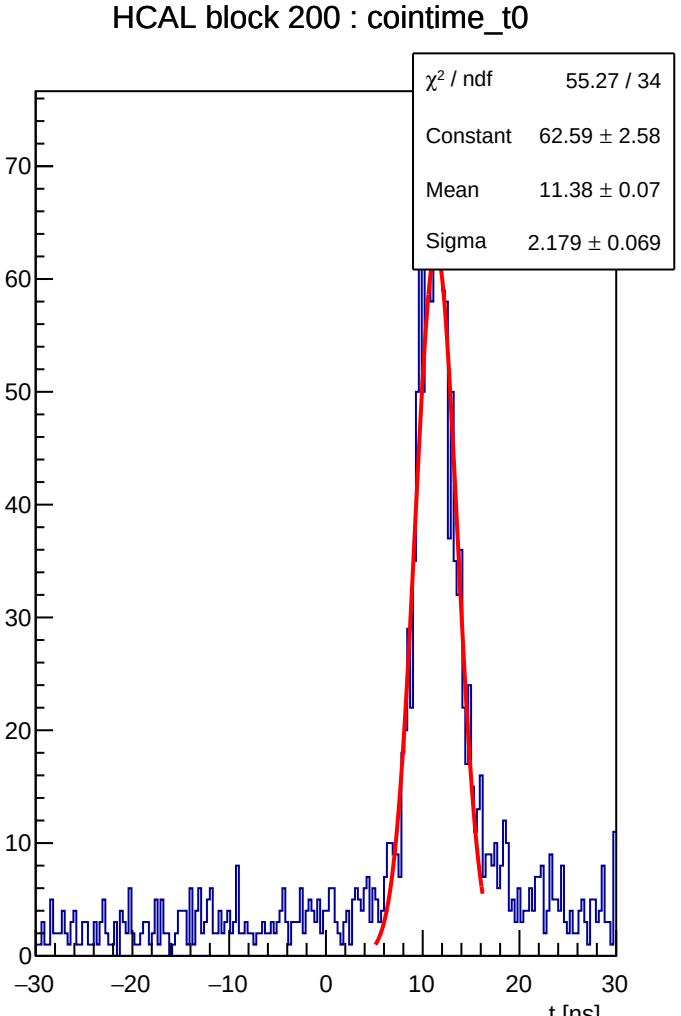

HCAL block 197 : cointime tw corr t0
χ² / ndf 45.22 / 30
Constant 105.8 ± 3.4
Mean 11.02 ± 0.05
Sigma 2.03 ± 0.05
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

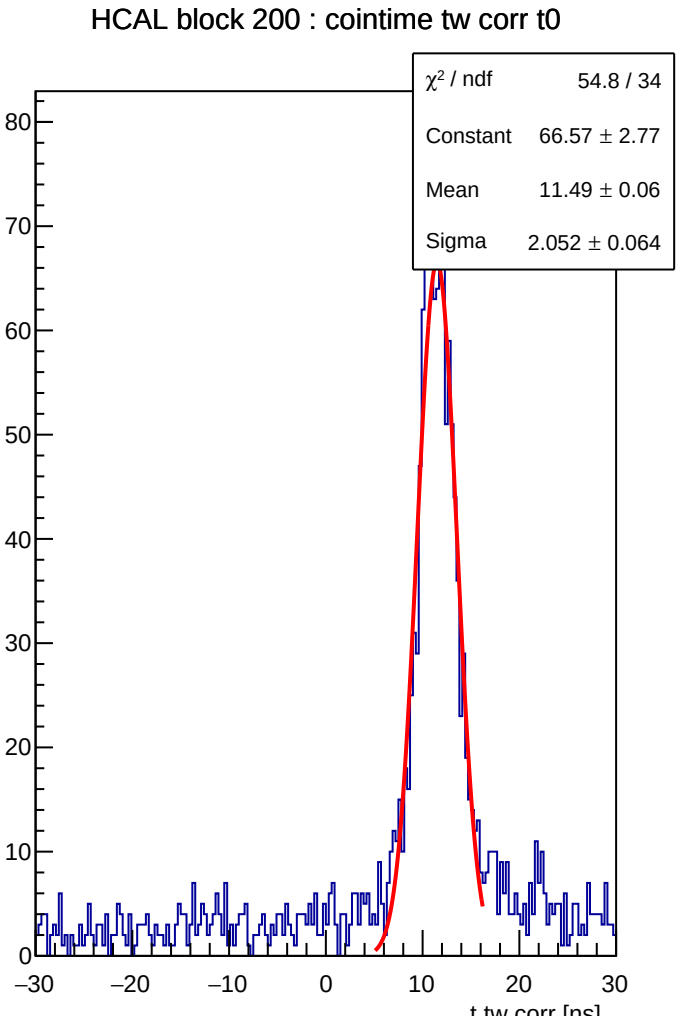

HCAL block 198 : cointime_t0
χ² / ndf 45.13 / 30
Constant 149.2 ± 4.0
Mean 11.03 ± 0.05
Sigma 2.054 ± 0.042
t [ns]

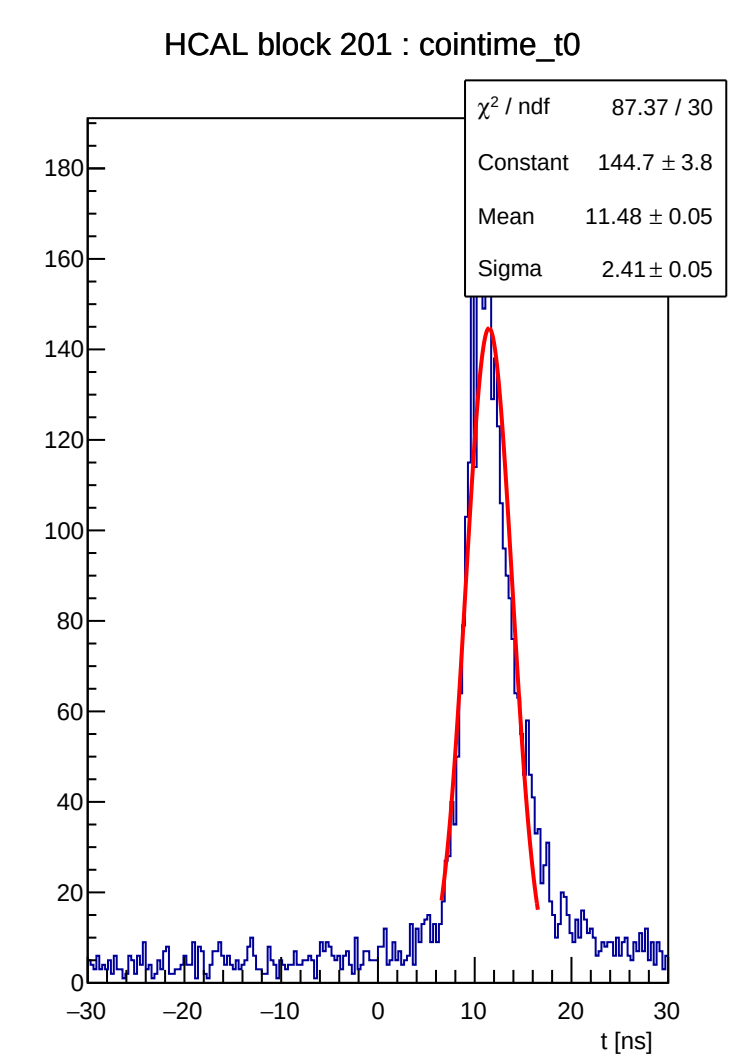

HCAL block 198 : cointime tw corr t0
χ² / ndf 111 / 30
Constant 174.2 ± 4.9
Mean 11.09 ± 0.04
Sigma 1.756 ± 0.037
t tw corr [ns]

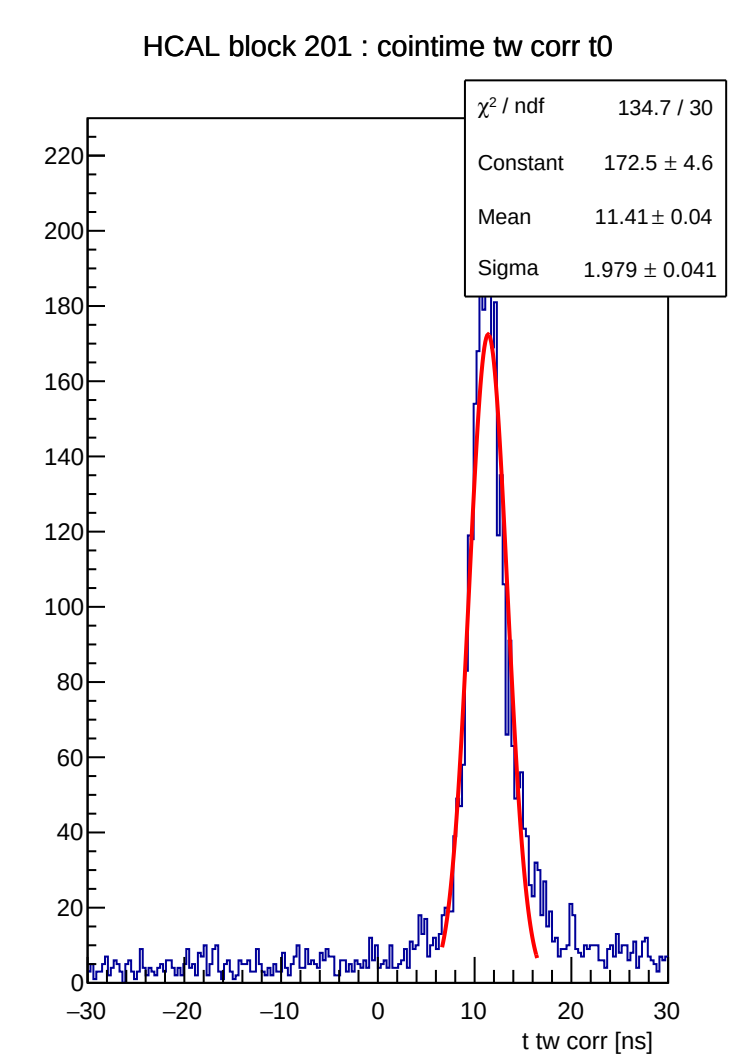

HCAL block 199 : cointime_t0
χ² / ndf 61.67 / 28
Constant 144.8 ± 4.0
Mean 10.99 ± 0.05
Sigma 2.057 ± 0.044
t [ns]

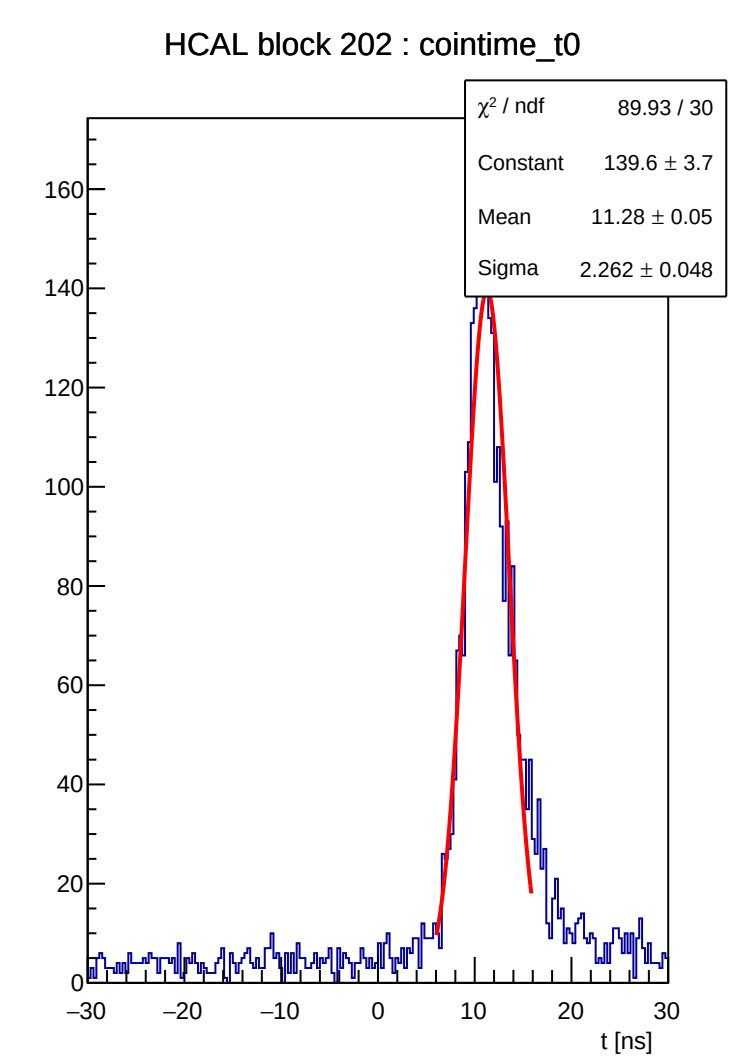

HCAL block 199 : cointime tw corr t0
χ² / ndf 75.04 / 28
Constant 168.1 ± 4.6
Mean 10.93 ± 0.04
Sigma 1.771 ± 0.036
t tw corr [ns]

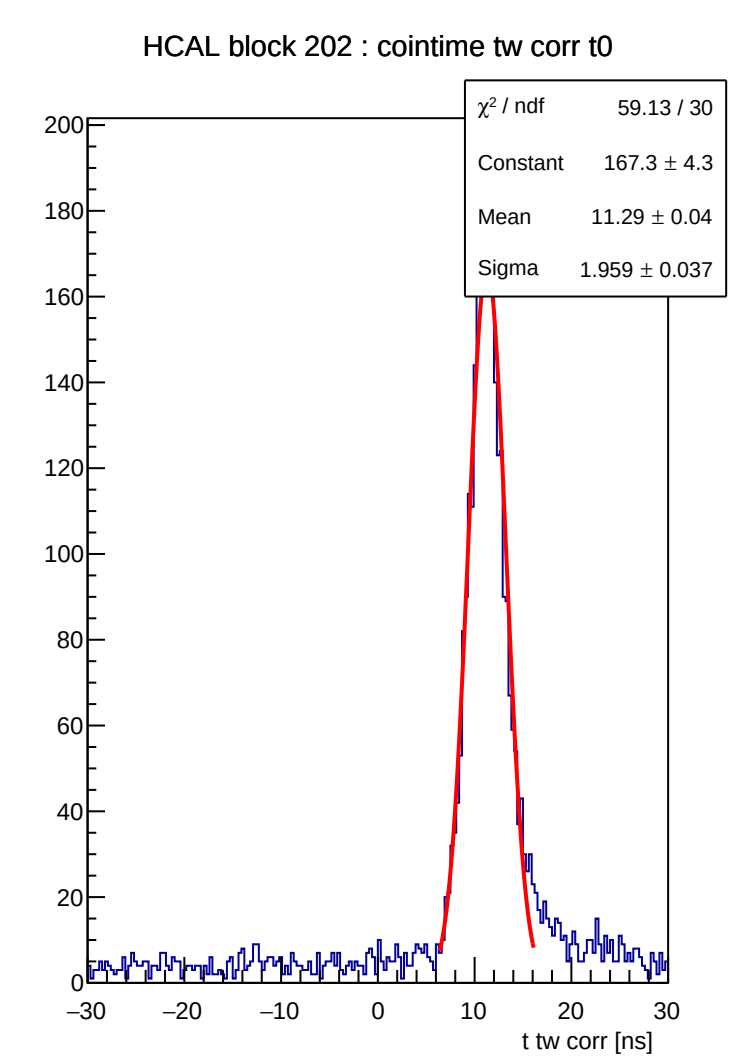

HCAL block 200 : cointime_t0
χ² / ndf 55.27 / 34
Constant 62.59 ± 2.58
Mean 11.38 ± 0.07
Sigma 2.179 ± 0.069
70
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t [ns]

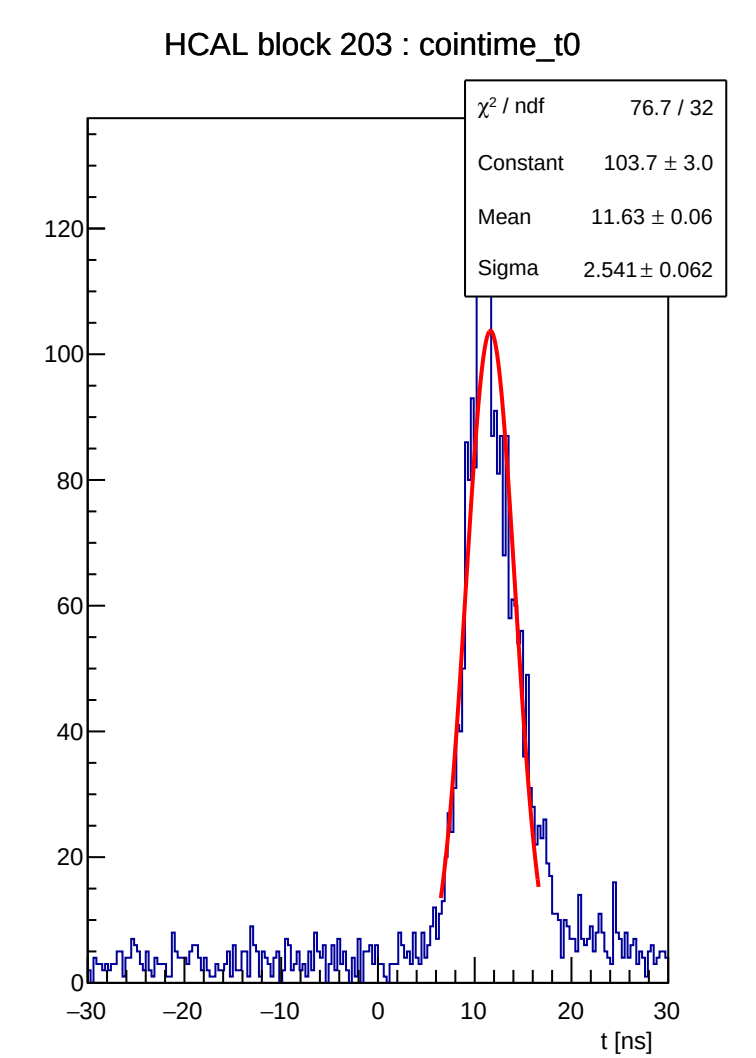

HCAL block 200 : cointime tw corr t0
χ² / ndf 54.8 / 34
Constant 66.57 ± 2.77
Mean 11.49 ± 0.06
Sigma 2.052 ± 0.064
80
70
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

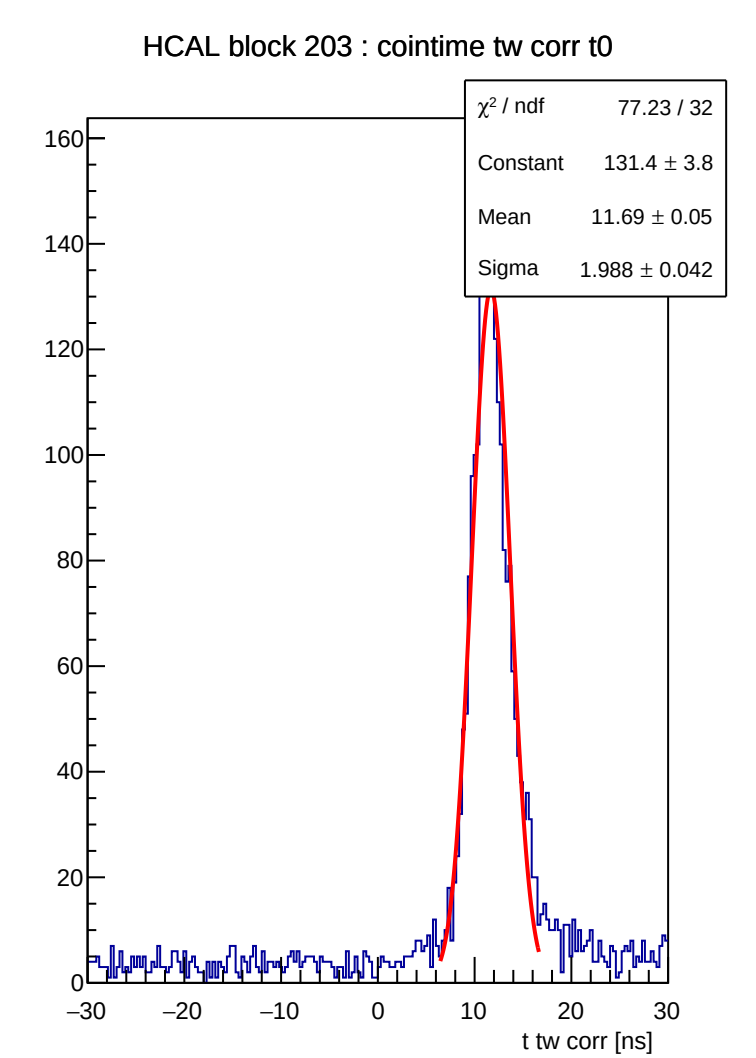

HCAL block 201 : cointime_t0
χ² / ndf 87.37 / 30
Constant 144.7 ± 3.8
Mean 11.48 ± 0.05
Sigma 2.41 ± 0.05
t [ns]

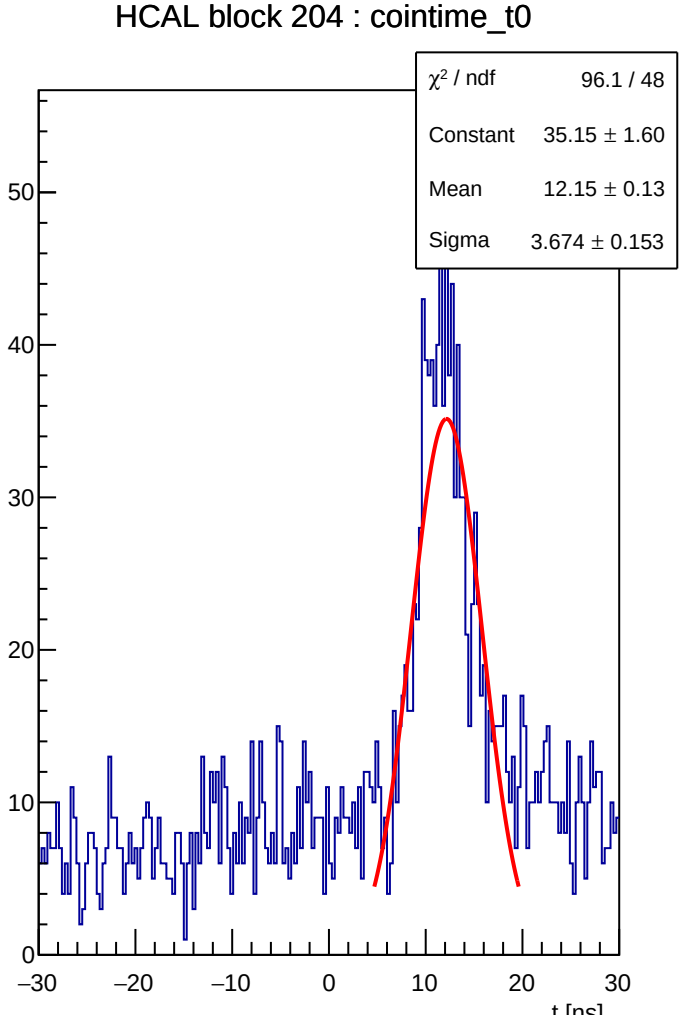

HCAL block 201 : cointime tw corr t0
χ² / ndf 134.7 / 30
Constant 172.5 ± 4.6
Mean 11.41 ± 0.04
Sigma 1.979 ± 0.041
t tw corr [ns]

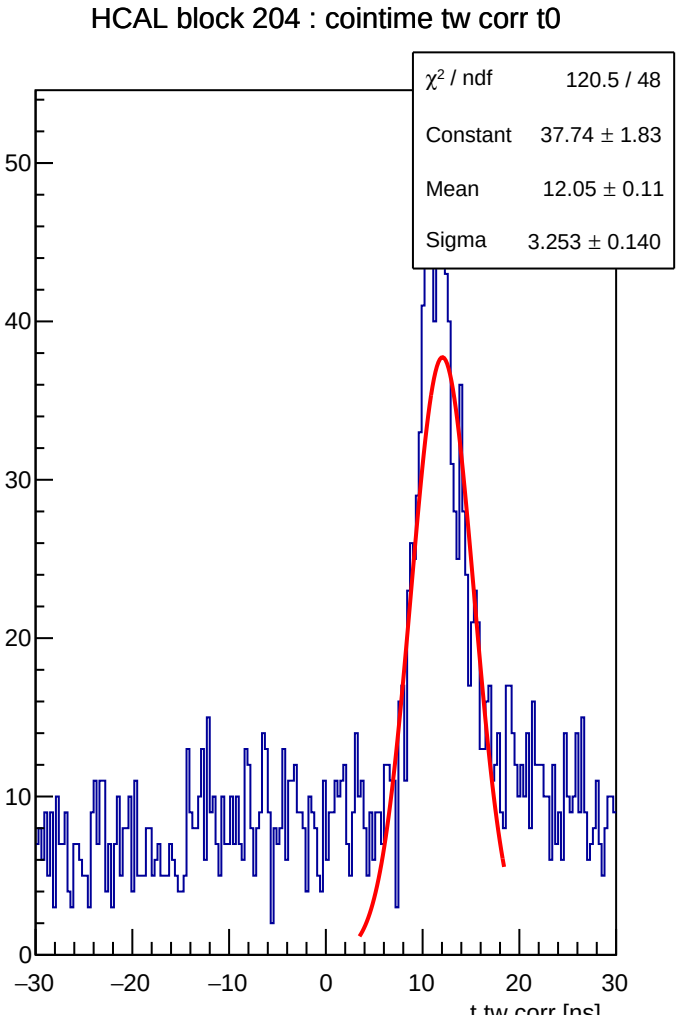

HCAL block 202 : cointime_t0
χ² / ndf 89.93 / 30
Constant 139.6 ± 3.7
Mean 11.28 ± 0.05
Sigma 2.262 ± 0.048
t [ns]

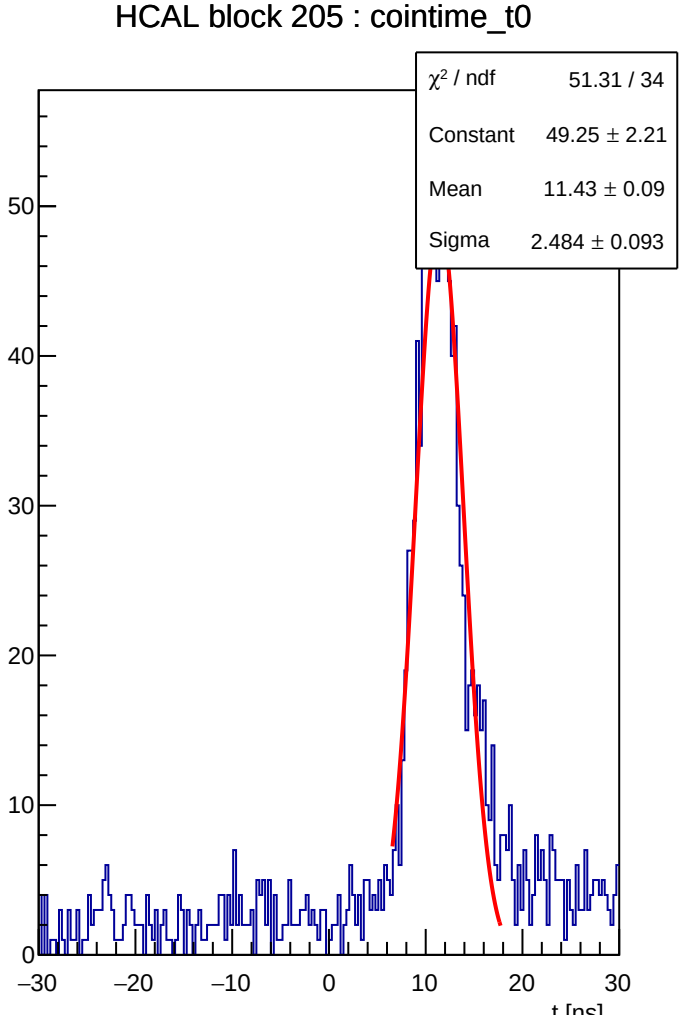

HCAL block 202 : cointime tw corr t0
χ² / ndf 59.13 / 30
Constant 167.3 ± 4.3
Mean 11.29 ± 0.04
Sigma 1.959 ± 0.037
t tw corr [ns]

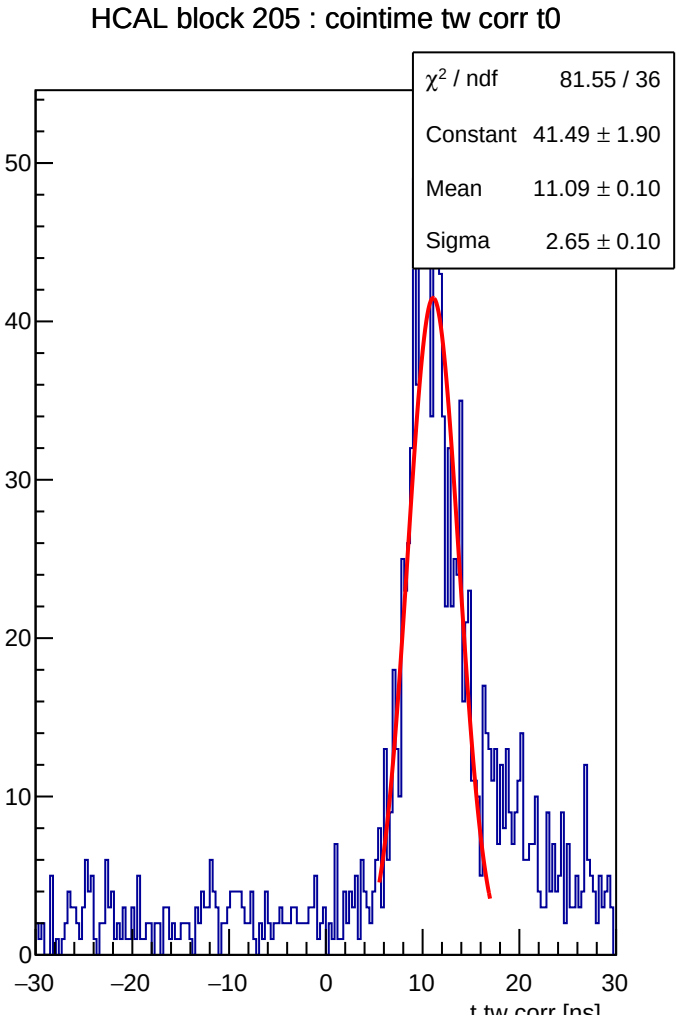

HCAL block 203 : cointime_t0
χ² / ndf 76.7 / 32
Constant 103.7 ± 3.0
Mean 11.63 ± 0.06
Sigma 2.541 ± 0.062
0
20
40
60
80
100
120
−30
−20
−10
0
10
20
30
t [ns]

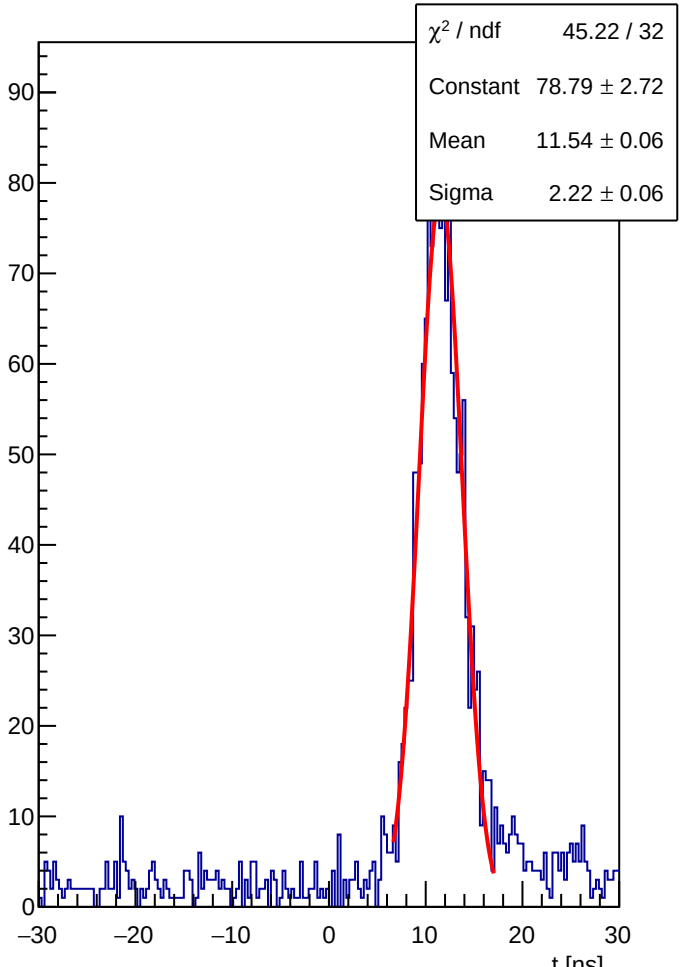

HCAL block 203 : cointime tw corr t0
χ² / ndf 77.23 / 32
Constant 131.4 ± 3.8
Mean 11.69 ± 0.05
Sigma 1.988 ± 0.042
0
20
40
60
80
100
120
140
160
−30
−20
−10
0
10
20
30
t tw corr [ns]

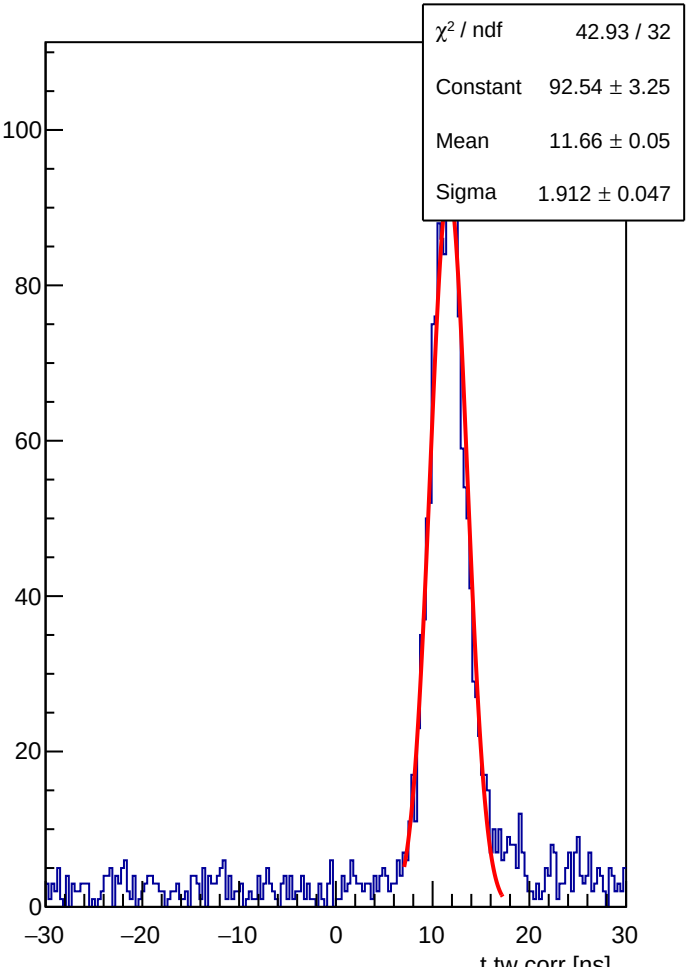

HCAL block 204 : cointime_t0
χ² / ndf 96.1 / 48
Constant 35.15 ± 1.60
Mean 12.15 ± 0.13
Sigma 3.674 ± 0.153
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t [ns]

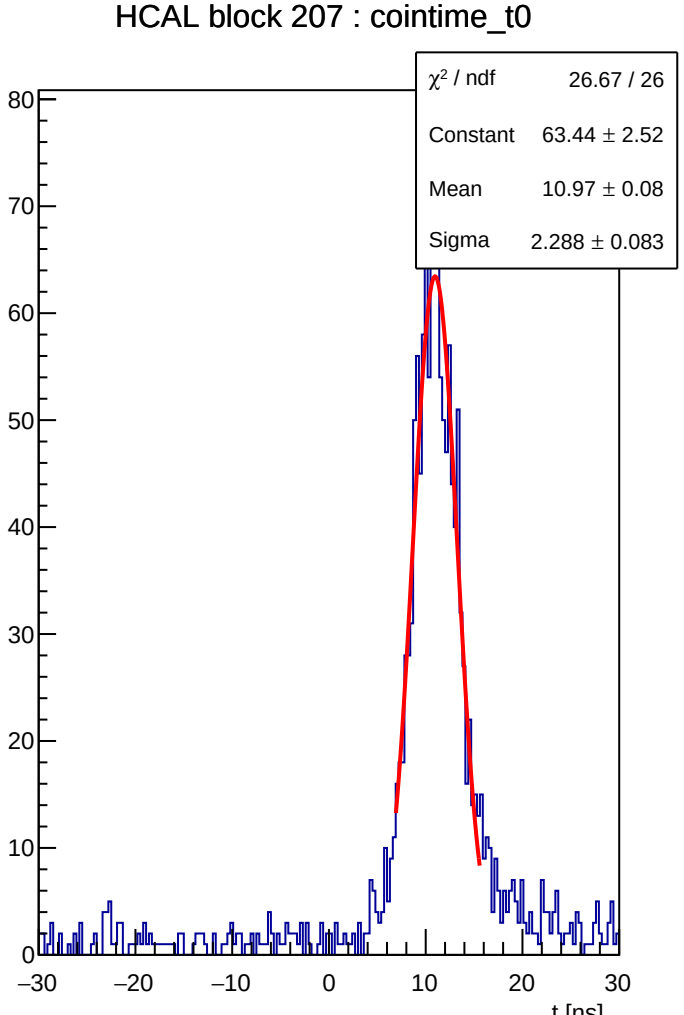

HCAL block 204 : cointime tw corr t0
χ² / ndf 120.5 / 48
Constant 37.74 ± 1.83
Mean 12.05 ± 0.11
Sigma 3.253 ± 0.140
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

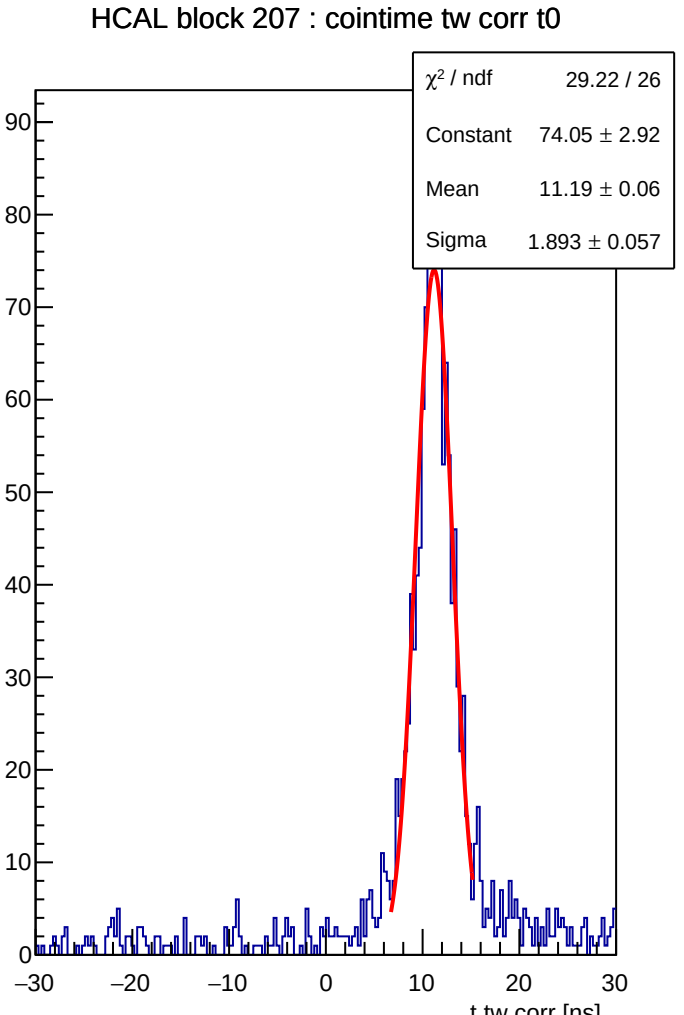

HCAL block 205 : cointime_t0
χ² / ndf 51.31 / 34
Constant 49.25 ± 2.21
Mean 11.43 ± 0.09
Sigma 2.484 ± 0.093
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t [ns]

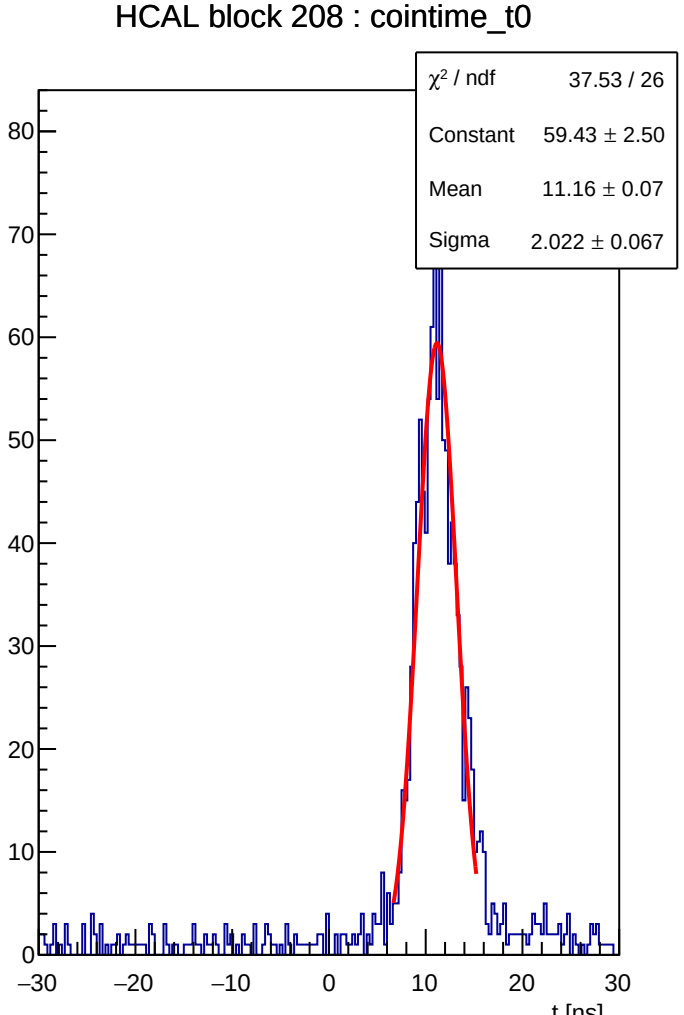

HCAL block 205 : cointime tw corr t0
χ² / ndf 81.55 / 36
Constant 41.49 ± 1.90
Mean 11.09 ± 0.10
Sigma 2.65 ± 0.10
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

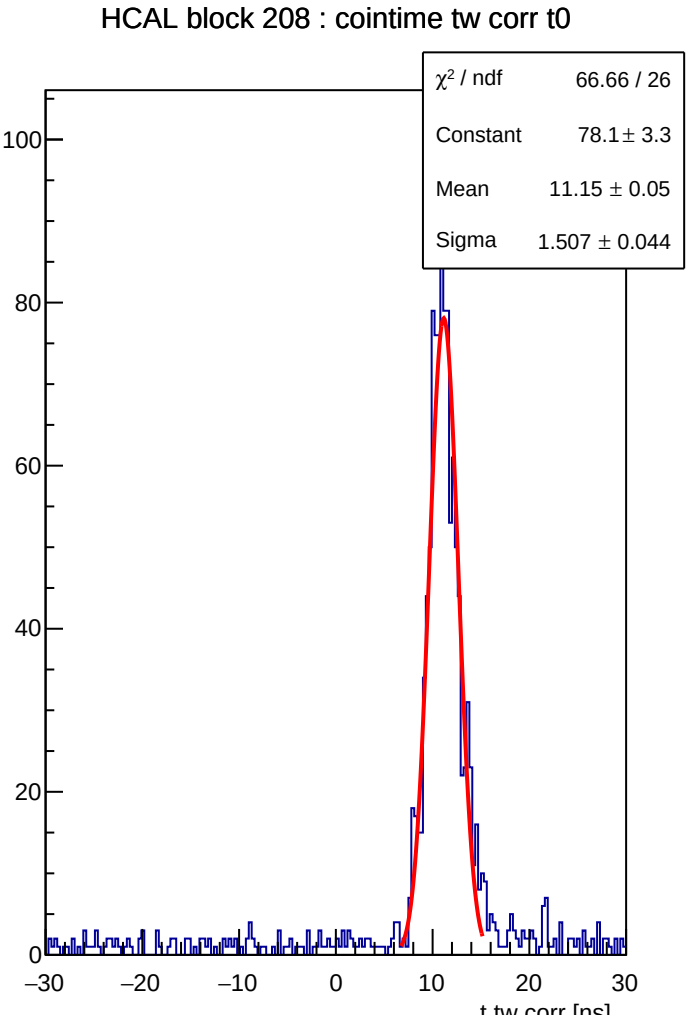

HCAL block 206 : cointime_t0
χ² / ndf 45.22 / 32
Constant 78.79 ± 2.72
Mean 11.54 ± 0.06
Sigma 2.22 ± 0.06
t [ns]

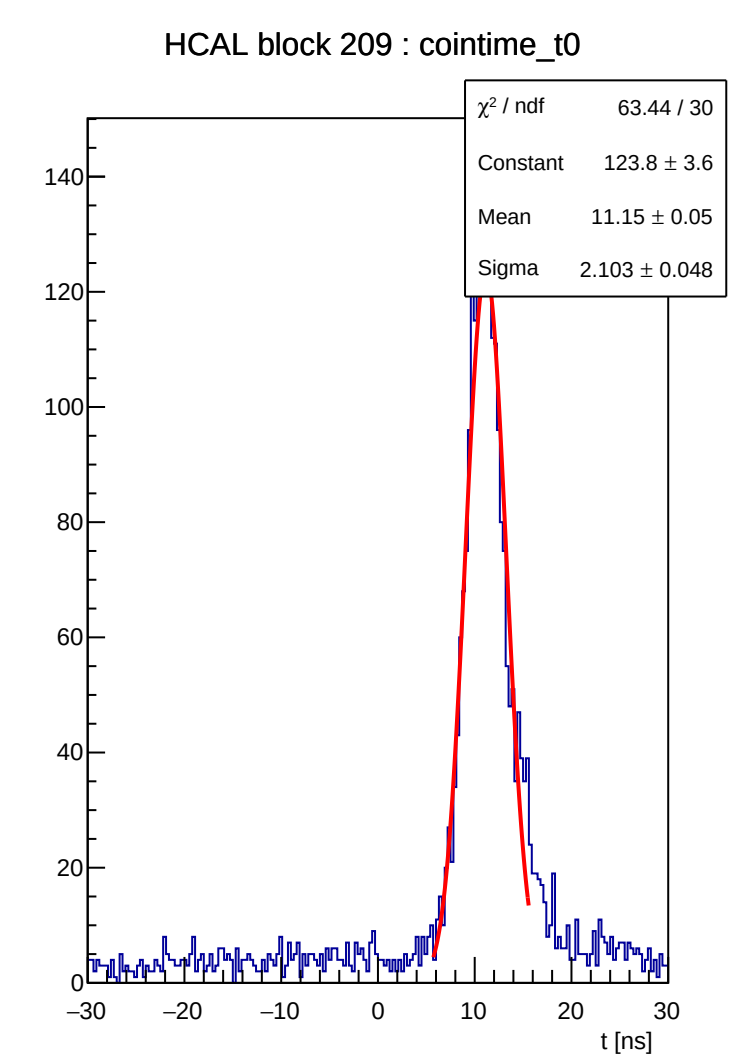

HCAL block 206 : cointime tw corr t0
χ² / ndf 42.93 / 32
Constant 92.54 ± 3.25
Mean 11.66 ± 0.05
Sigma 1.912 ± 0.047
t tw corr [ns]

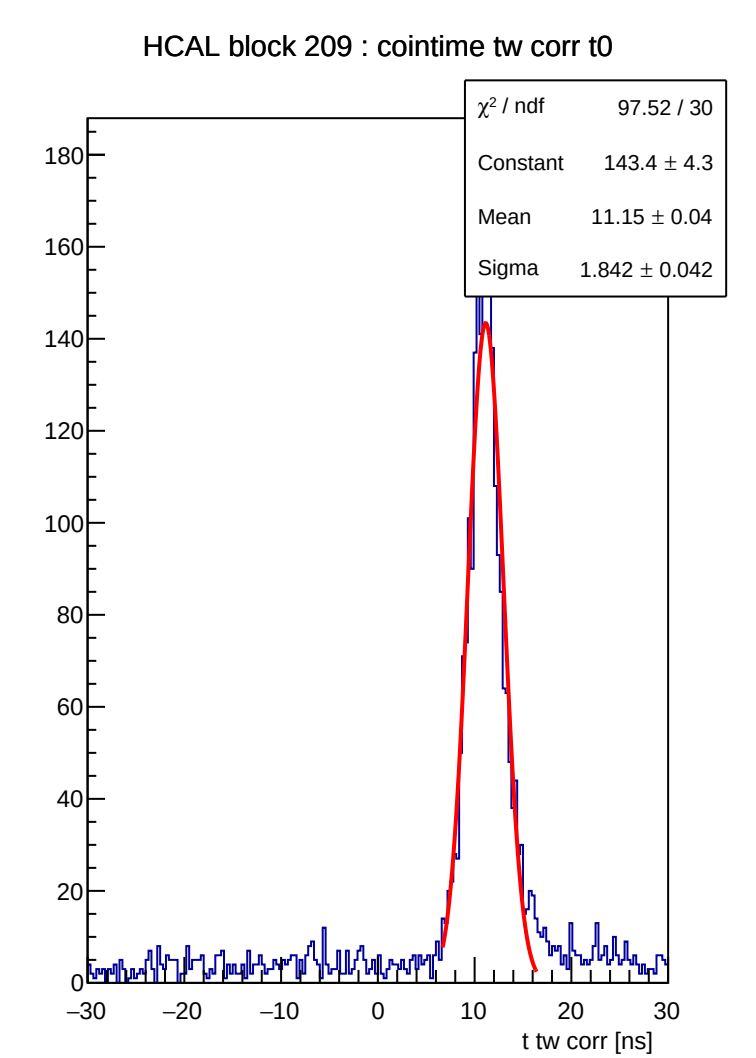

HCAL block 207 : cointime_t0
χ² / ndf 26.67 / 26
Constant 63.44 ± 2.52
Mean 10.97 ± 0.08
Sigma 2.288 ± 0.083
t [ns]

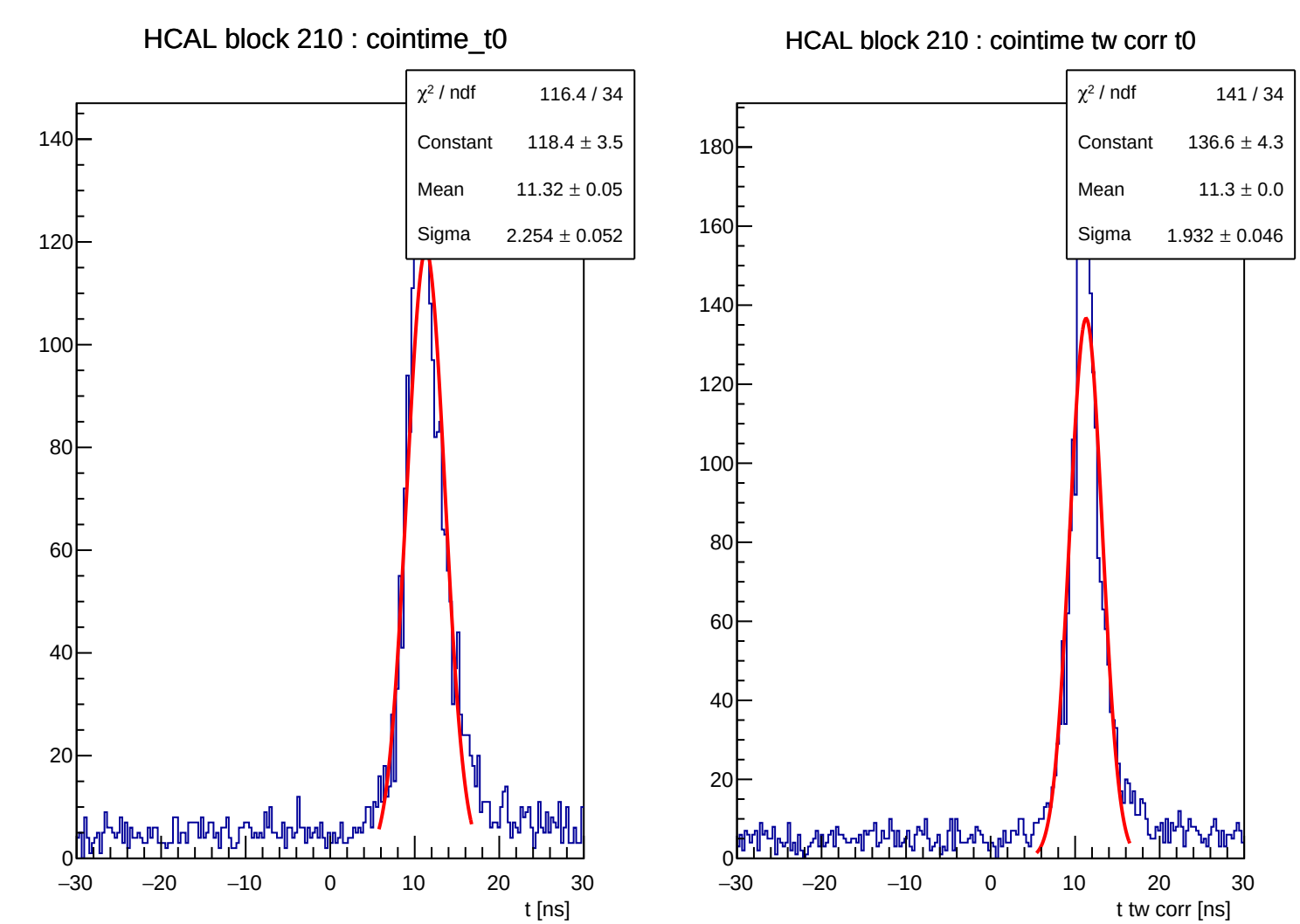

HCAL block 207 : cointime tw corr t0
χ² / ndf 29.22 / 26
Constant 74.05 ± 2.92
Mean 11.19 ± 0.06
Sigma 1.893 ± 0.057
t tw corr [ns]

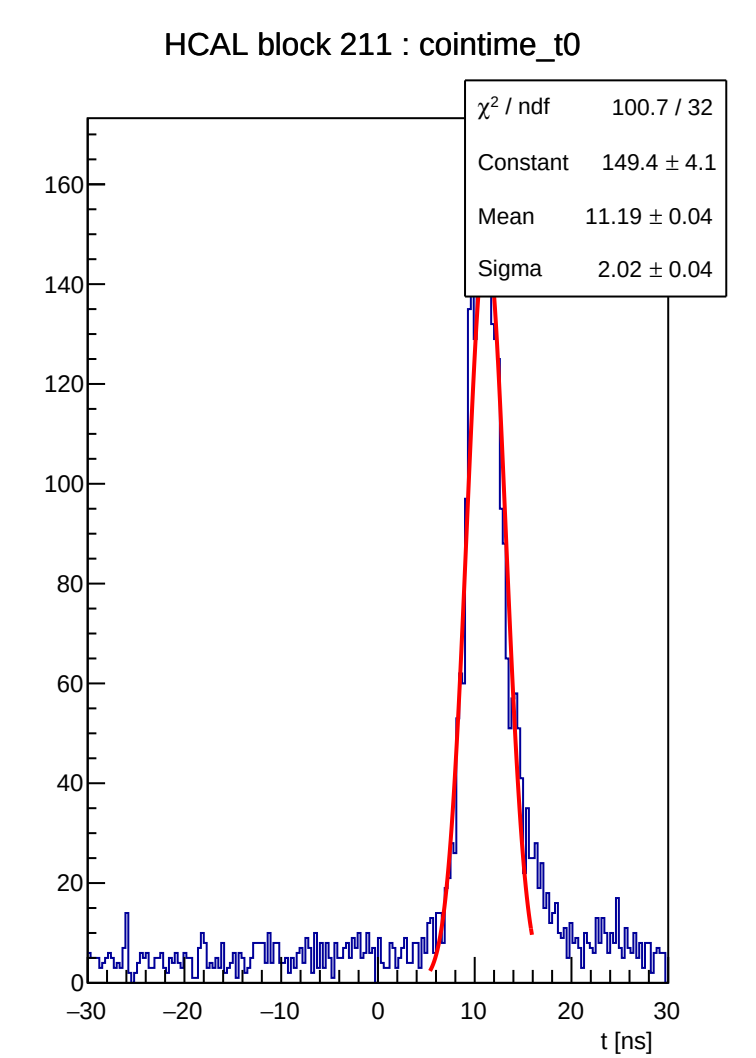

HCAL block 208 : cointime_t0
χ² / ndf 37.53 / 26
Constant 59.43 ± 2.50
Mean 11.16 ± 0.07
Sigma 2.022 ± 0.067
80
70
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t [ns]

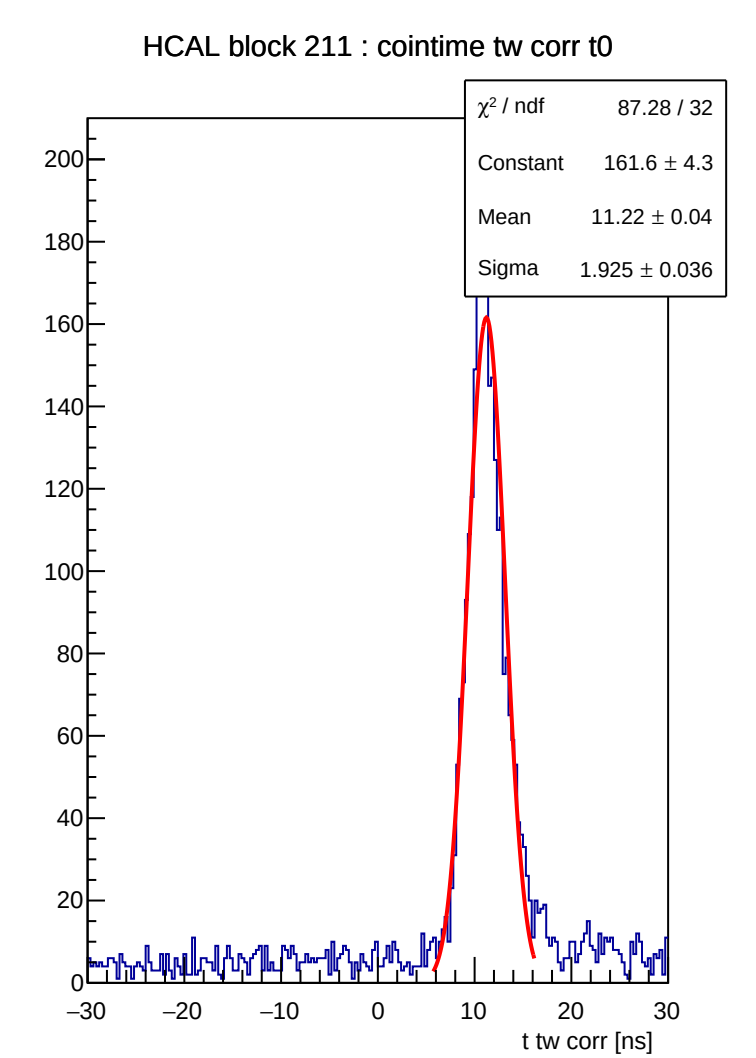

HCAL block 208 : cointime tw corr t0
χ² / ndf 66.66 / 26
Constant 78.1 ± 3.3
Mean 11.15 ± 0.05
Sigma 1.507 ± 0.044
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

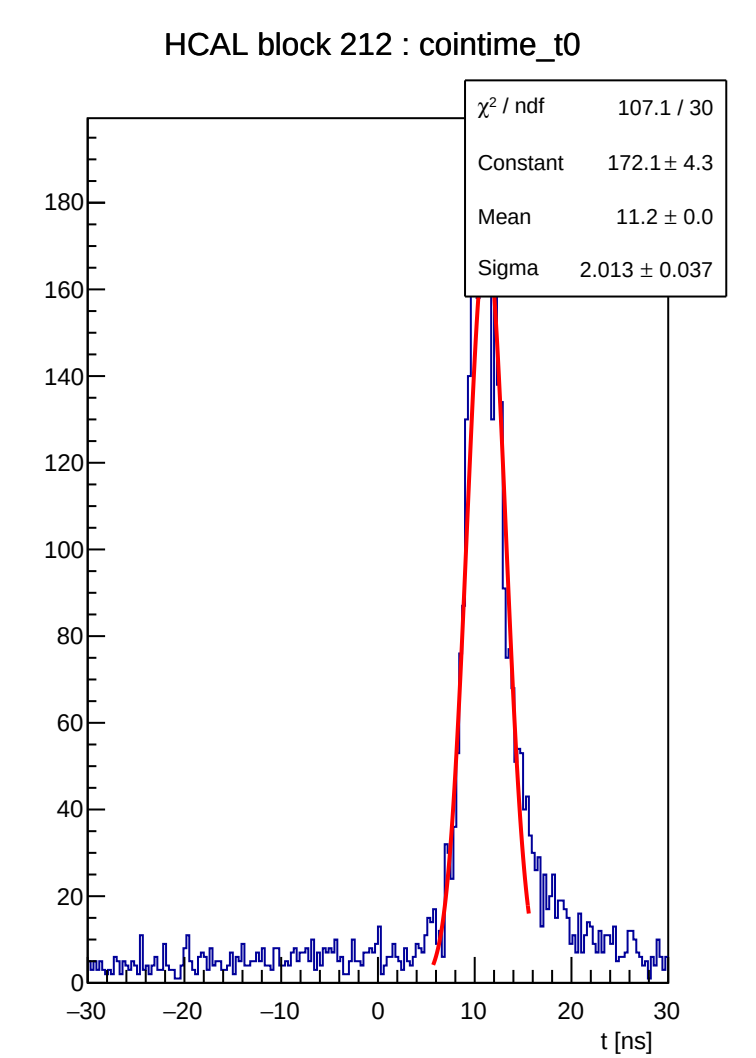

HCAL block 209 : cointime_t0
χ² / ndf 63.44 / 30
Constant 123.8 ± 3.6
Mean 11.15 ± 0.05
Sigma 2.103 ± 0.048
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

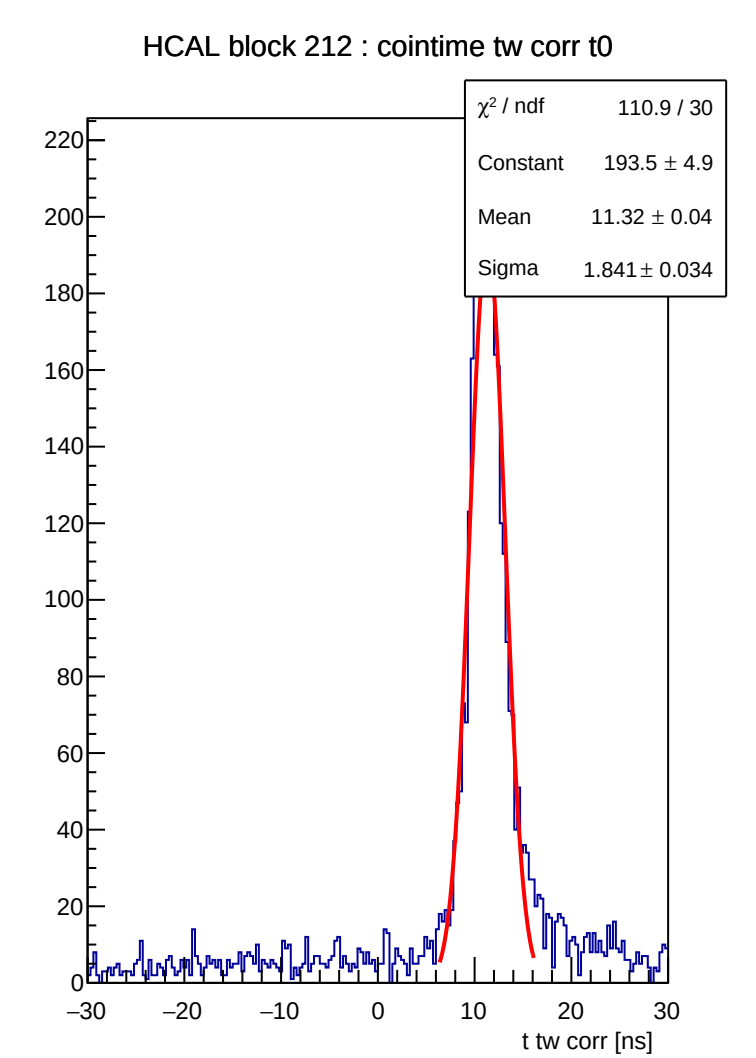

HCAL block 209 : cointime tw corr t0
χ² / ndf 97.52 / 30
Constant 143.4 ± 4.3
Mean 11.15 ± 0.04
Sigma 1.842 ± 0.042
180
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

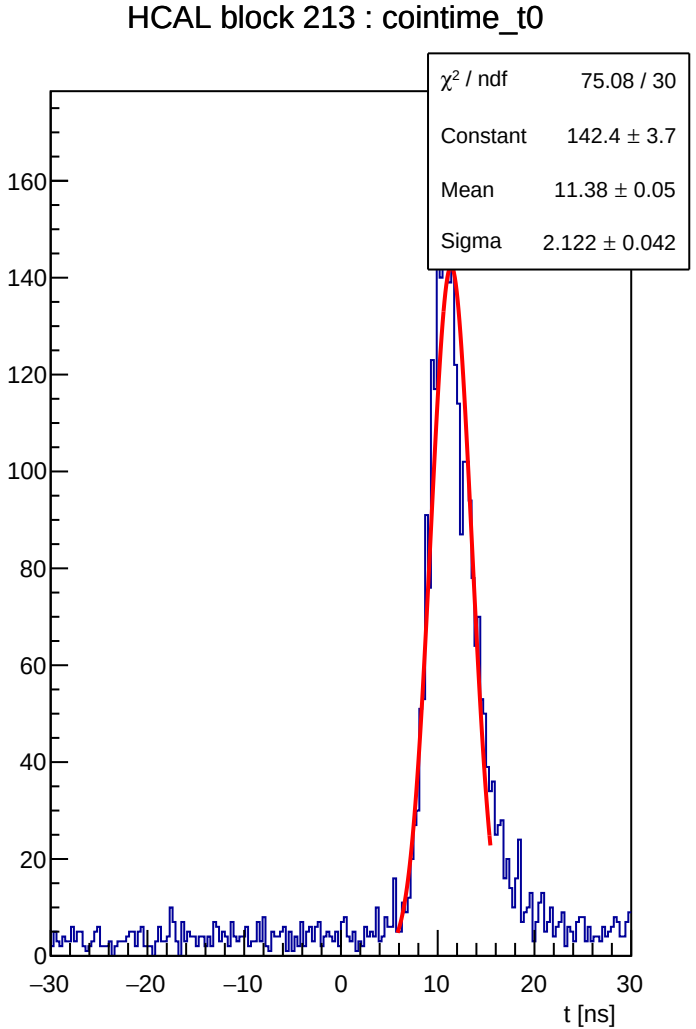

HCAL block 210 : cointime_t0
χ² / ndf 116.4 / 34
Constant 118.4 ± 3.5
Mean 11.32 ± 0.05
Sigma 2.254 ± 0.052
t [ns]
HCAL block 210 : cointime tw corr t0
χ² / ndf 141 / 34
Constant 136.6 ± 4.3
Mean 11.3 ± 0.0
Sigma 1.932 ± 0.046
t tw corr [ns]

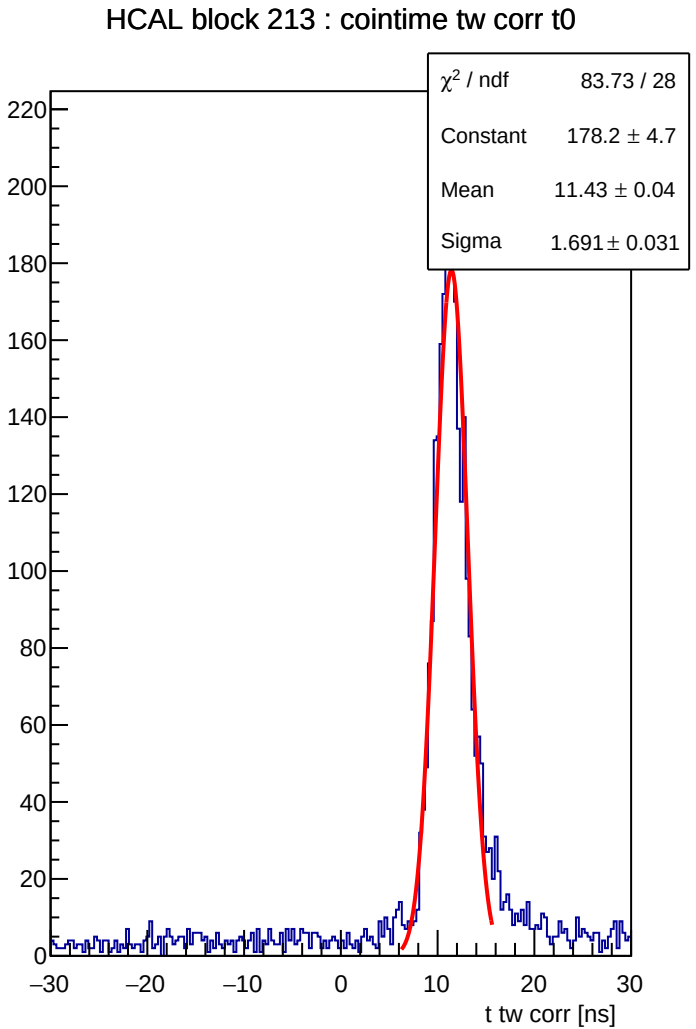

HCAL block 211 : cointime_t0
χ² / ndf 100.7 / 32
Constant 149.4 ± 4.1
Mean 11.19 ± 0.04
Sigma 2.02 ± 0.04
t [ns]

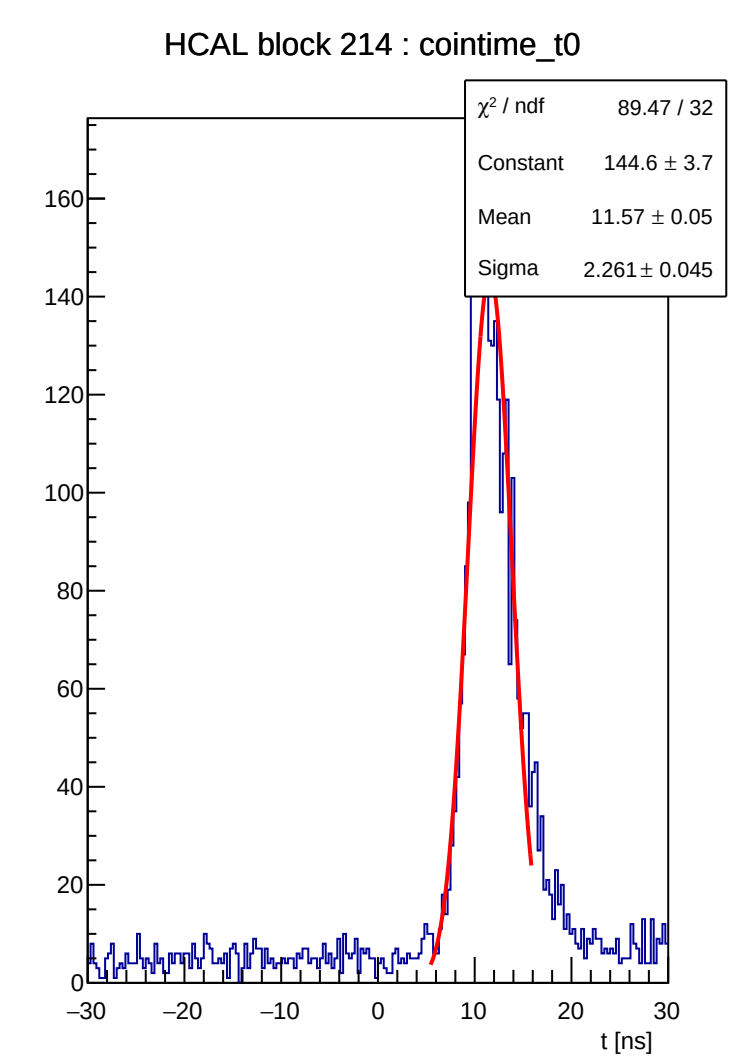

HCAL block 211 : cointime tw corr t0
χ² / ndf 87.28 / 32
Constant 161.6 ± 4.3
Mean 11.22 ± 0.04
Sigma 1.925 ± 0.036
t tw corr [ns]

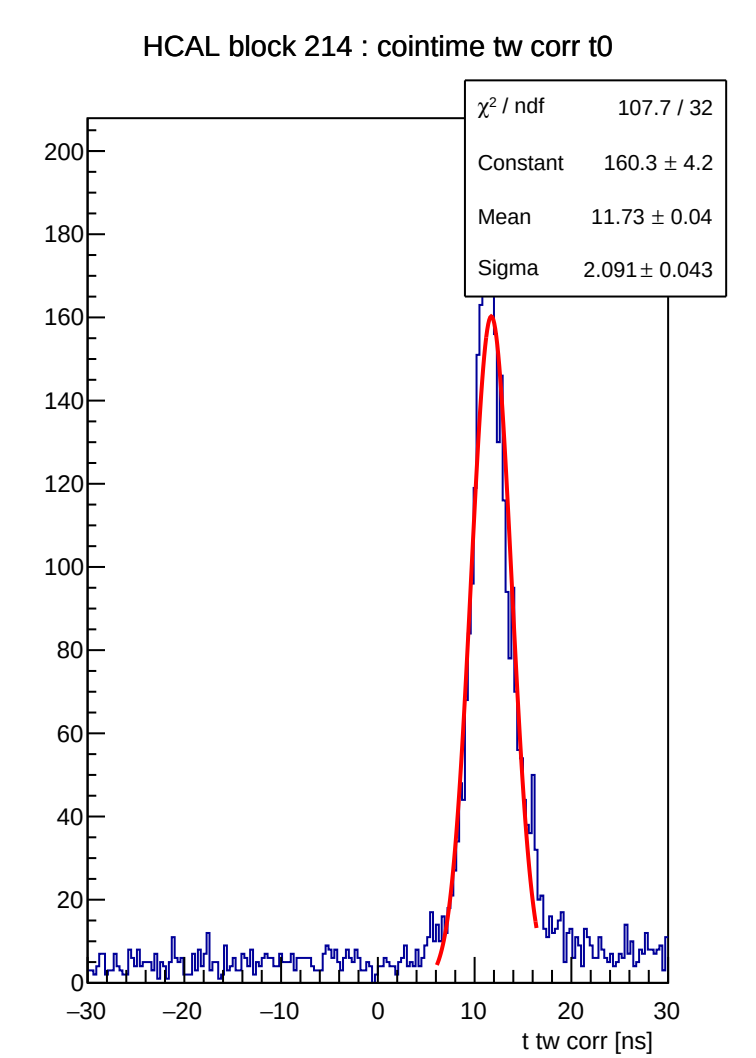

HCAL block 212 : cointime_t0
χ² / ndf 107.1 / 30
Constant 172.1 ± 4.3
Mean 11.2 ± 0.0
Sigma 2.013 ± 0.037
t [ns]

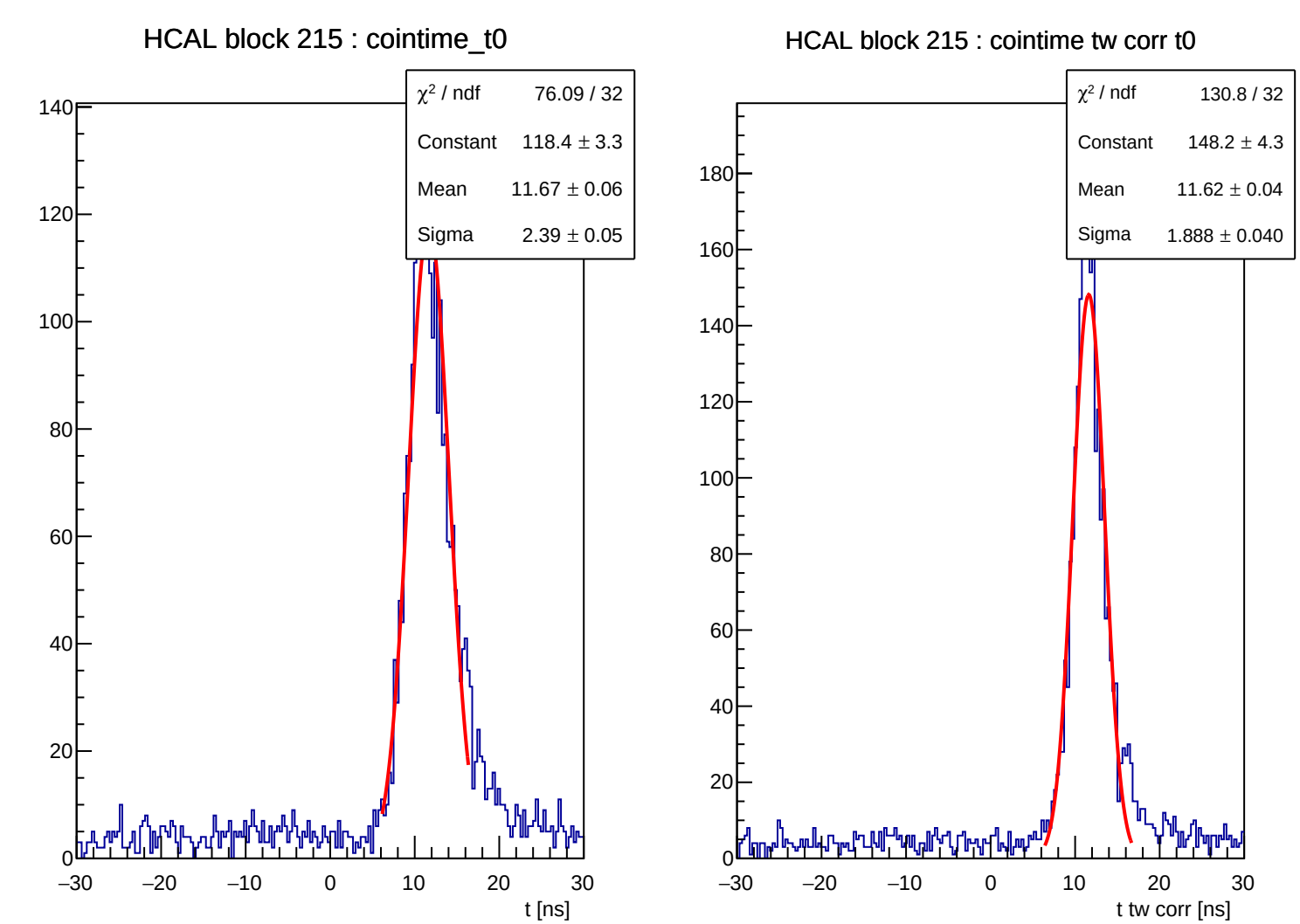

HCAL block 212 : cointime tw corr t0
χ² / ndf 110.9 / 30
Constant 193.5 ± 4.9
Mean 11.32 ± 0.04
Sigma 1.841 ± 0.034
t tw corr [ns]

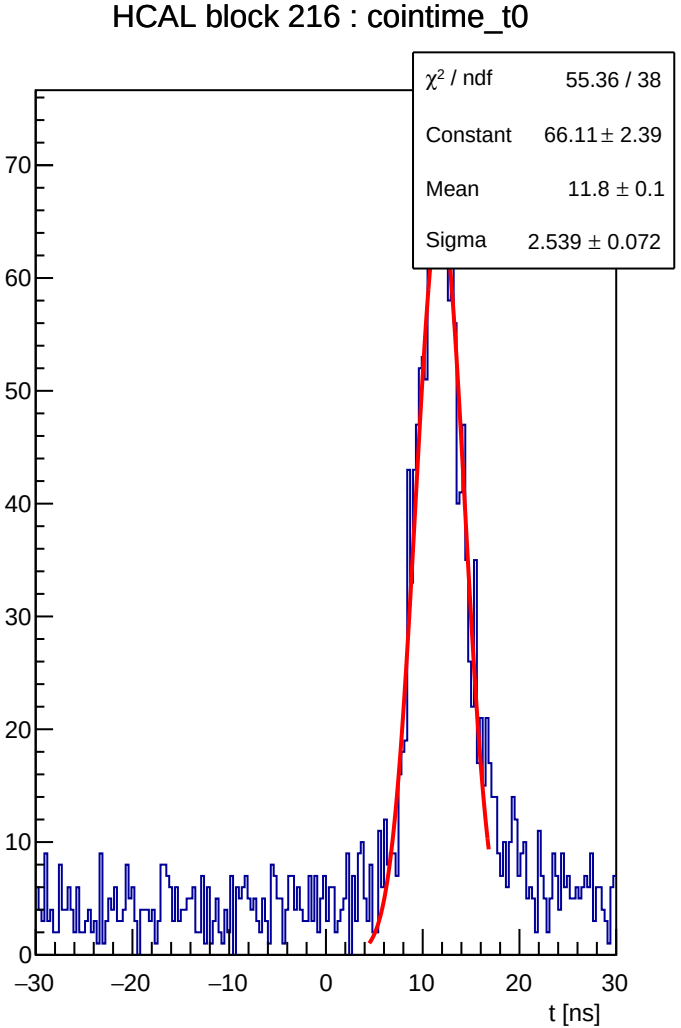

HCAL block 213 : cointime_t0
χ² / ndf 75.08 / 30
Constant 142.4 ± 3.7
Mean 11.38 ± 0.05
Sigma 2.122 ± 0.042
t [ns]

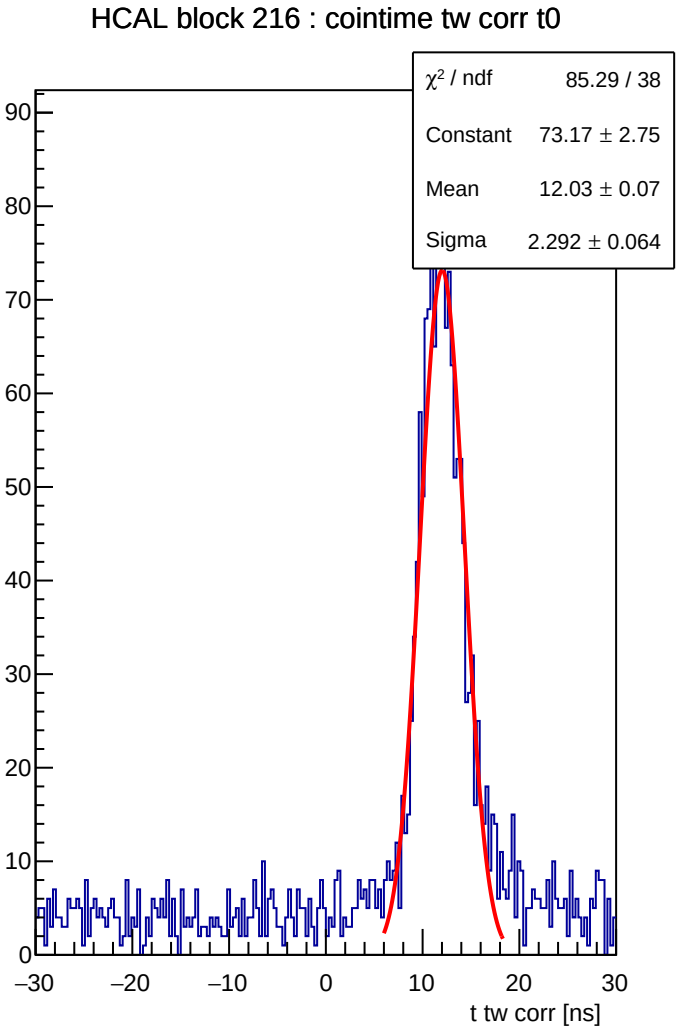

HCAL block 213 : cointime tw corr t0
χ² / ndf 83.73 / 28
Constant 178.2 ± 4.7
Mean 11.43 ± 0.04
Sigma 1.691 ± 0.031
t tw corr [ns]

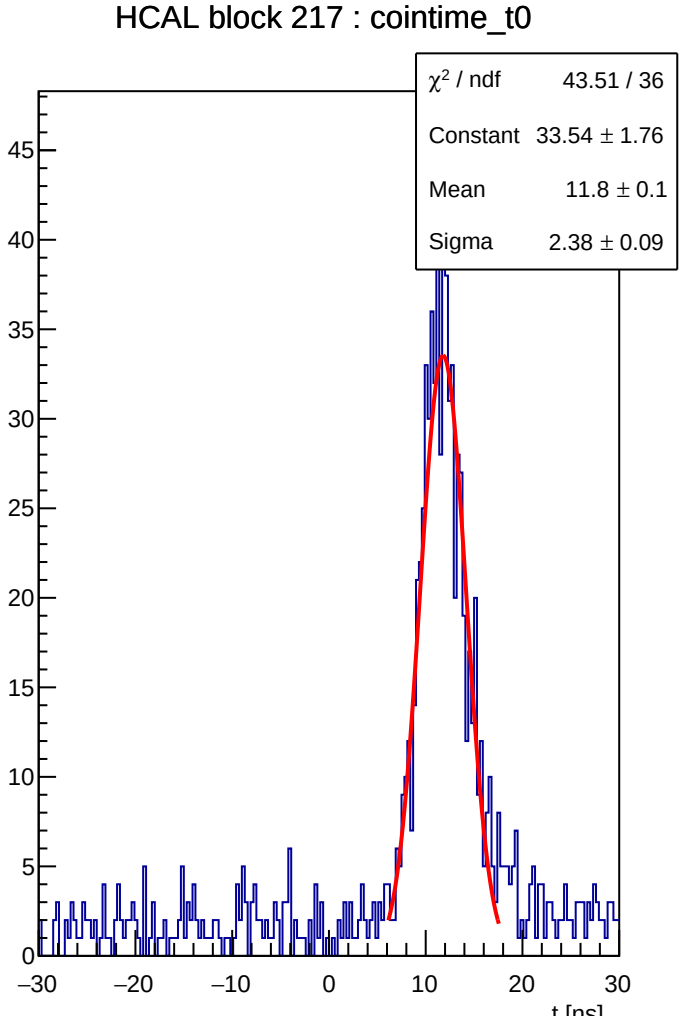

HCAL block 214 : cointime_t0
χ² / ndf 89.47 / 32
Constant 144.6 ± 3.7
Mean 11.57 ± 0.05
Sigma 2.261 ± 0.045
t [ns]

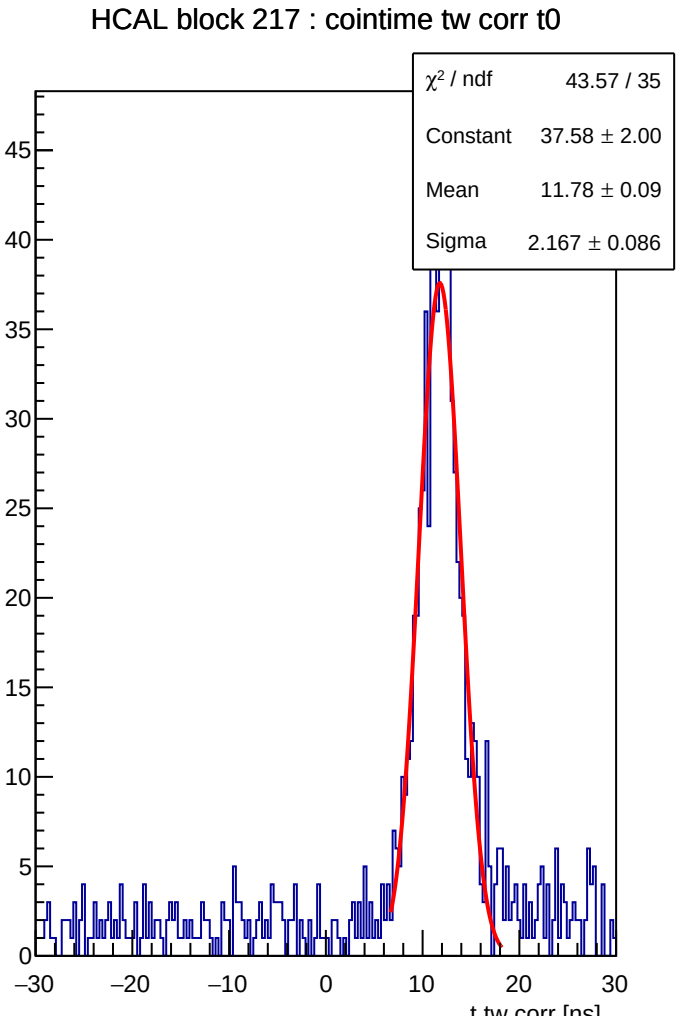

HCAL block 214 : cointime tw corr t0
χ² / ndf 107.7 / 32
Constant 160.3 ± 4.2
Mean 11.73 ± 0.04
Sigma 2.091 ± 0.043
t tw corr [ns]

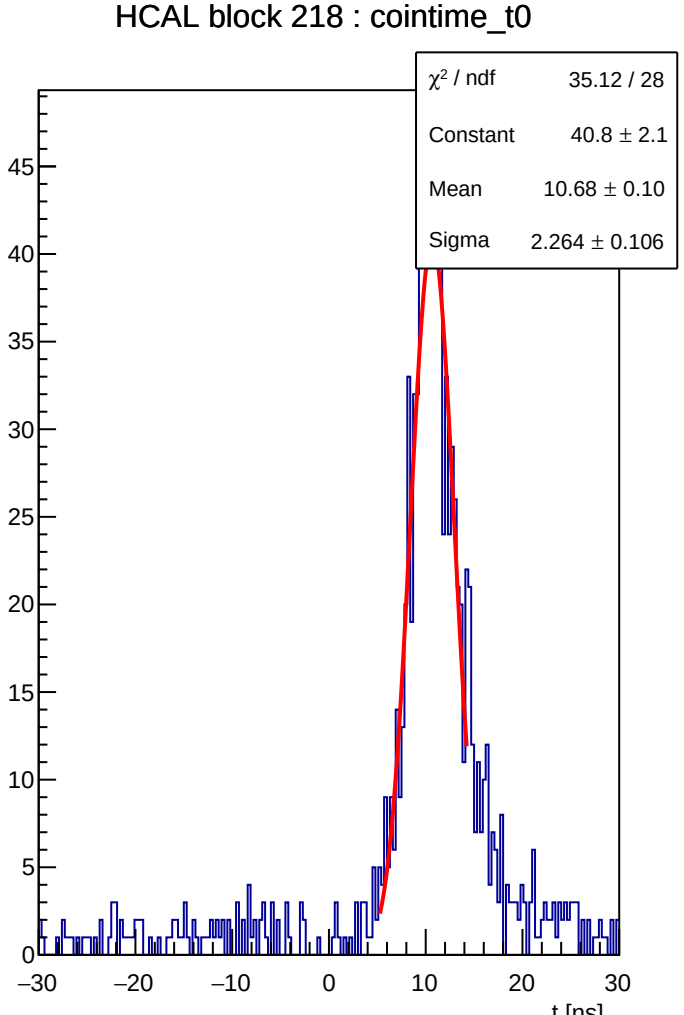

HCAL block 215 : cointime_t0
χ² / ndf 76.09 / 32
Constant 118.4 ± 3.3
Mean 11.67 ± 0.06
Sigma 2.39 ± 0.05
t [ns]
HCAL block 215 : cointime tw corr t0
χ² / ndf 130.8 / 32
Constant 148.2 ± 4.3
Mean 11.62 ± 0.04
Sigma 1.888 ± 0.040
t tw corr [ns]

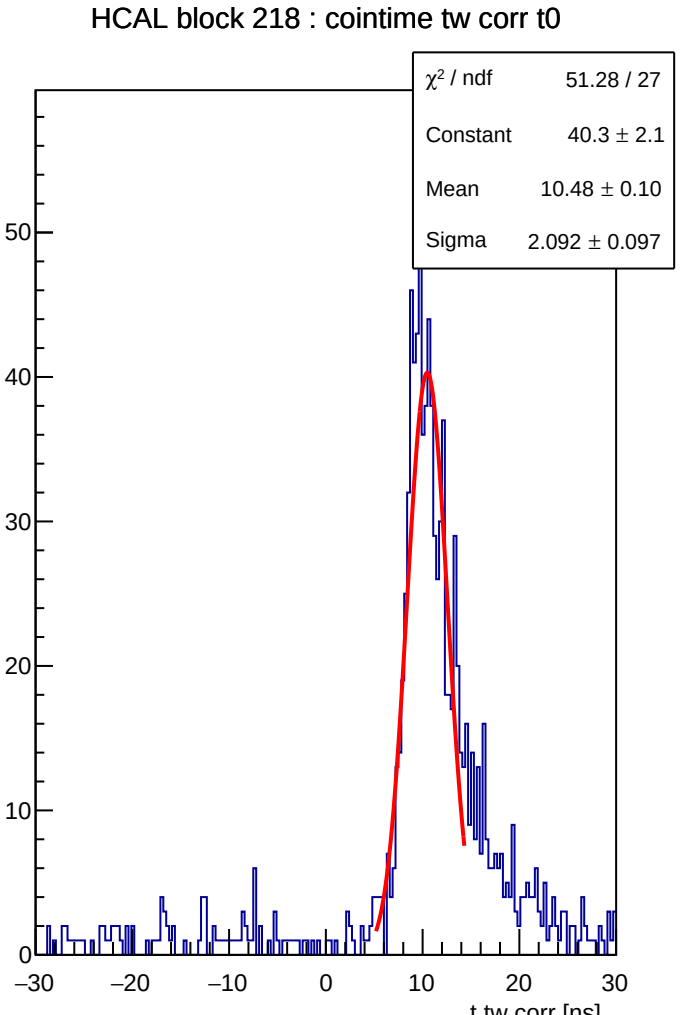

HCAL block 216 : cointime_t0
χ² / ndf 55.36 / 38
Constant 66.11 ± 2.39
Mean 11.8 ± 0.1
Sigma 2.539 ± 0.072
t [ns]

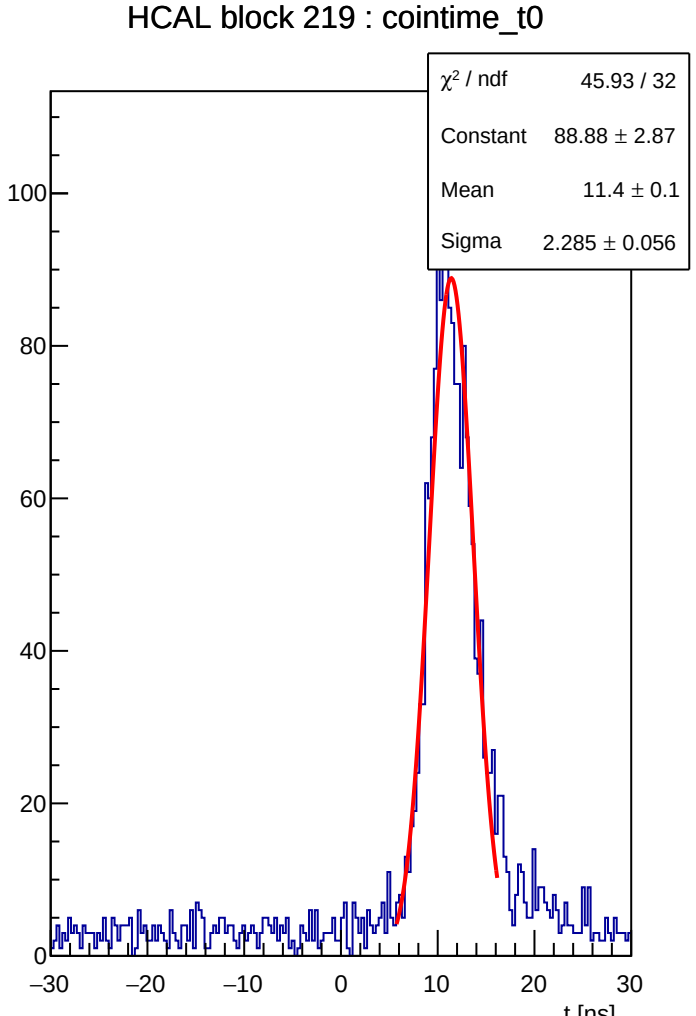

HCAL block 216 : cointime tw corr t0
χ² / ndf 85.29 / 38
Constant 73.17 ± 2.75
Mean 12.03 ± 0.07
Sigma 2.292 ± 0.064
t tw corr [ns]

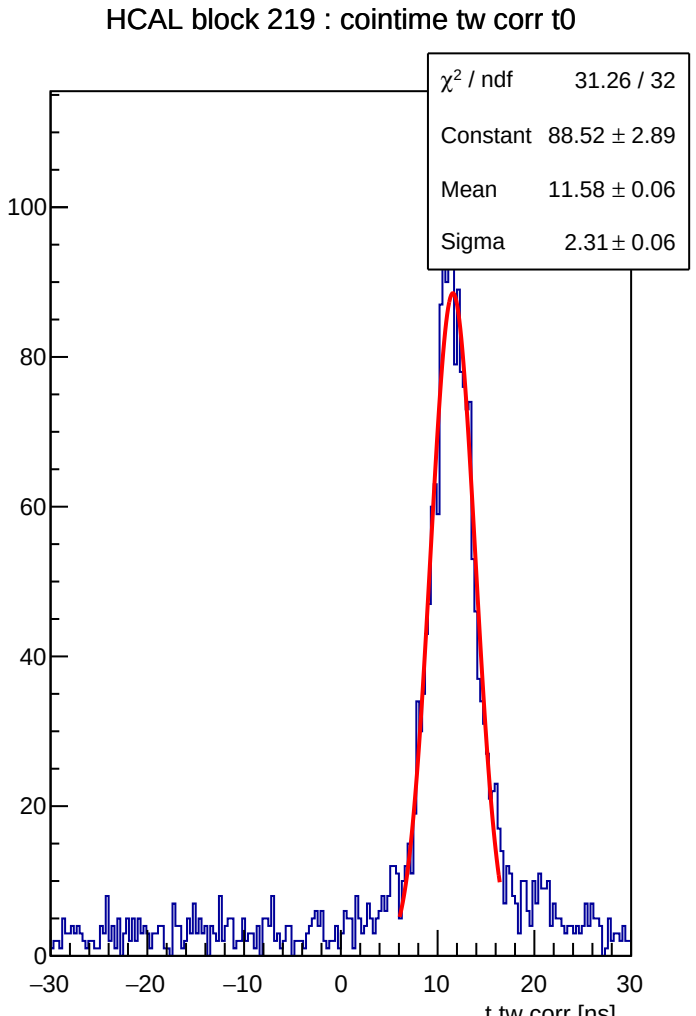

HCAL block 217 : cointime_t0
χ² / ndf 43.51 / 36
Constant 33.54 ± 1.76
Mean 11.8 ± 0.1
Sigma 2.38 ± 0.09
45
40
35
30
25
20
15
10
5
0
−30
−20
−10
0
10
20
30
t [ns]

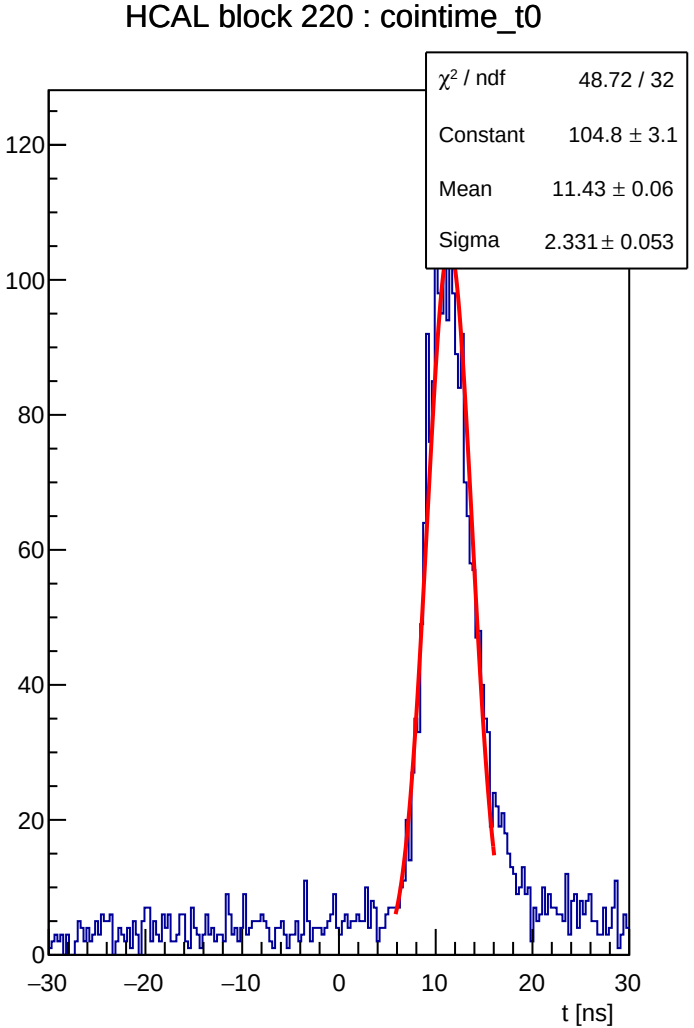

HCAL block 217 : cointime tw corr t0
χ² / ndf 43.57 / 35
Constant 37.58 ± 2.00
Mean 11.78 ± 0.09
Sigma 2.167 ± 0.086
45
40
35
30
25
20
15
10
5
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

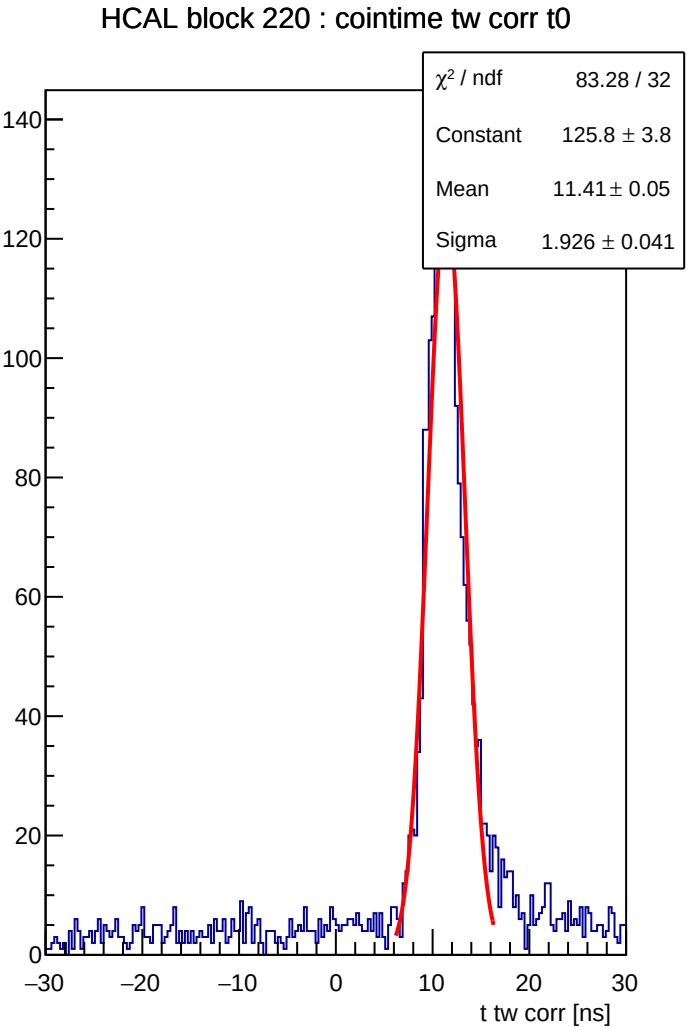

HCAL block 218 : cointime_t0
χ² / ndf 35.12 / 28
Constant 40.8 ± 2.1
Mean 10.68 ± 0.10
Sigma 2.264 ± 0.106
t [ns]

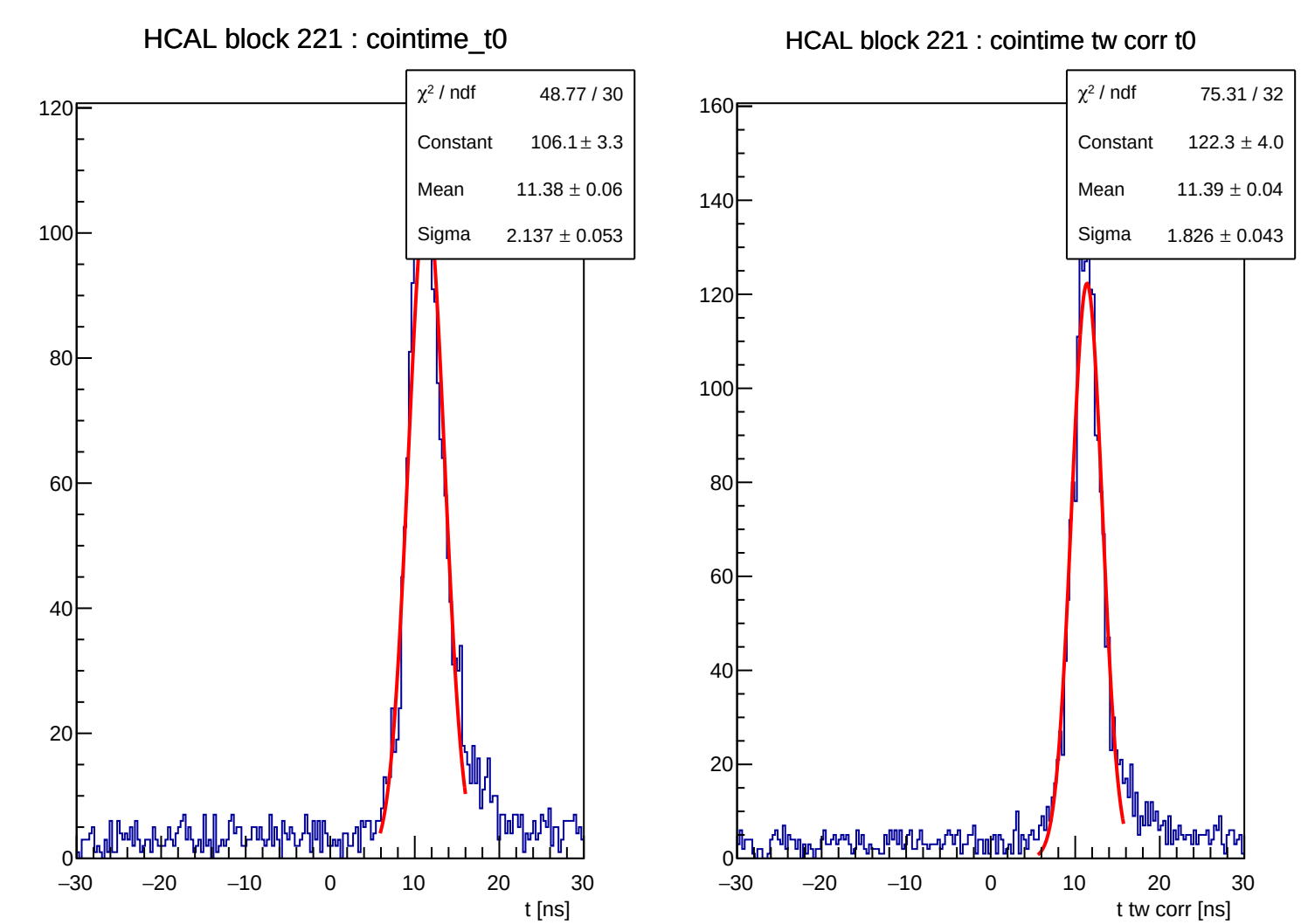

HCAL block 218 : cointime tw corr t0
χ² / ndf 51.28 / 27
Constant 40.3 ± 2.1
Mean 10.48 ± 0.10
Sigma 2.092 ± 0.097
t tw corr [ns]

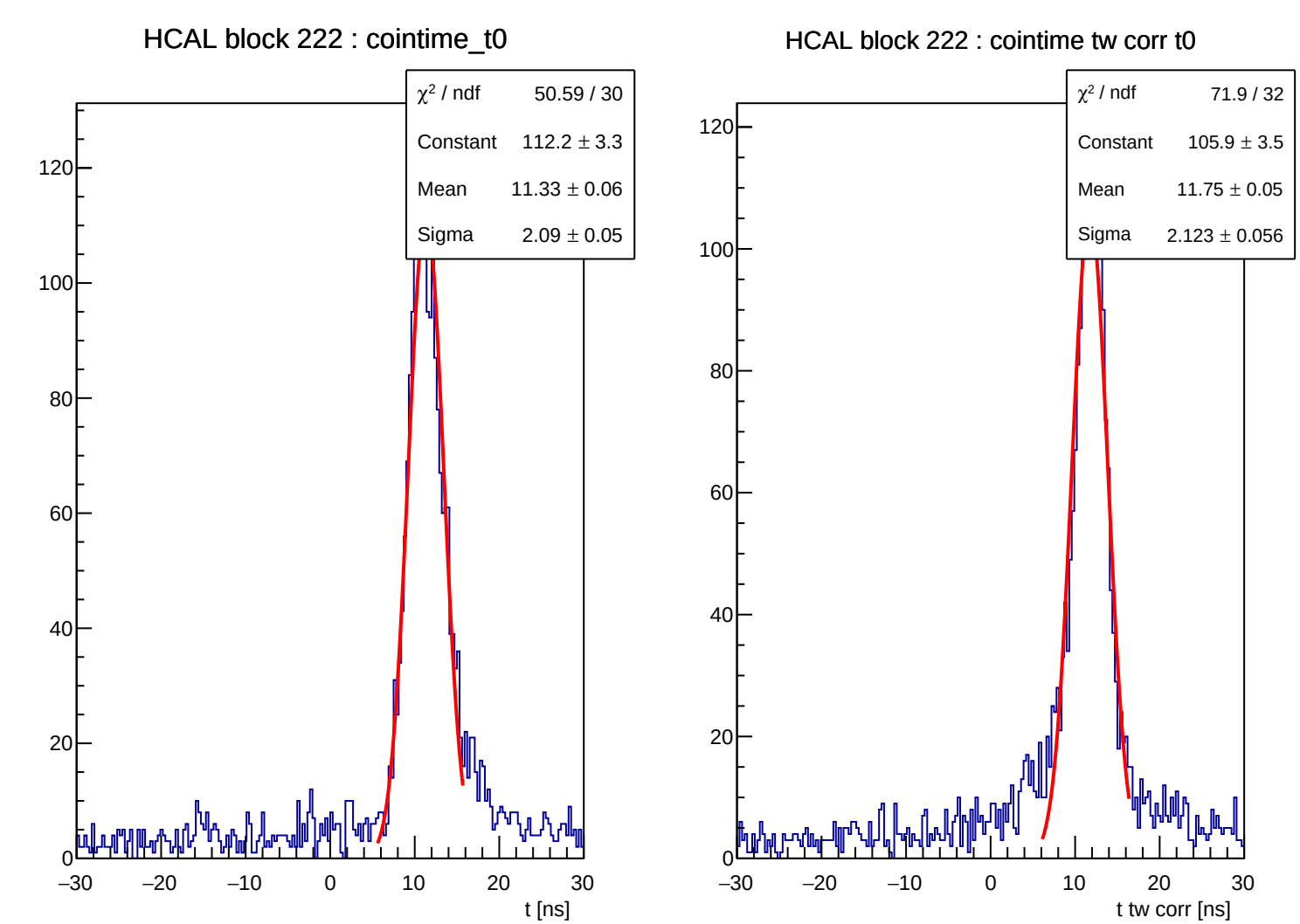

HCAL block 219 : cointime_t0
χ² / ndf 45.93 / 32
Constant 88.88 ± 2.87
Mean 11.4 ± 0.1
Sigma 2.285 ± 0.056
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

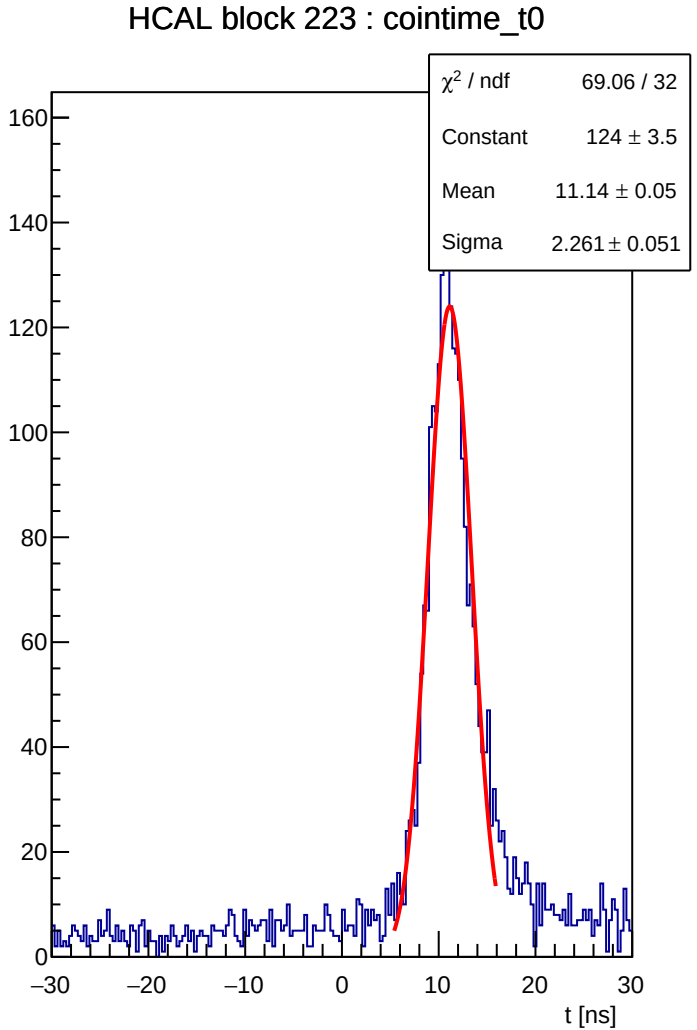

HCAL block 219 : cointime tw corr t0
χ² / ndf 31.26 / 32
Constant 88.52 ± 2.89
Mean 11.58 ± 0.06
Sigma 2.31 ± 0.06
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

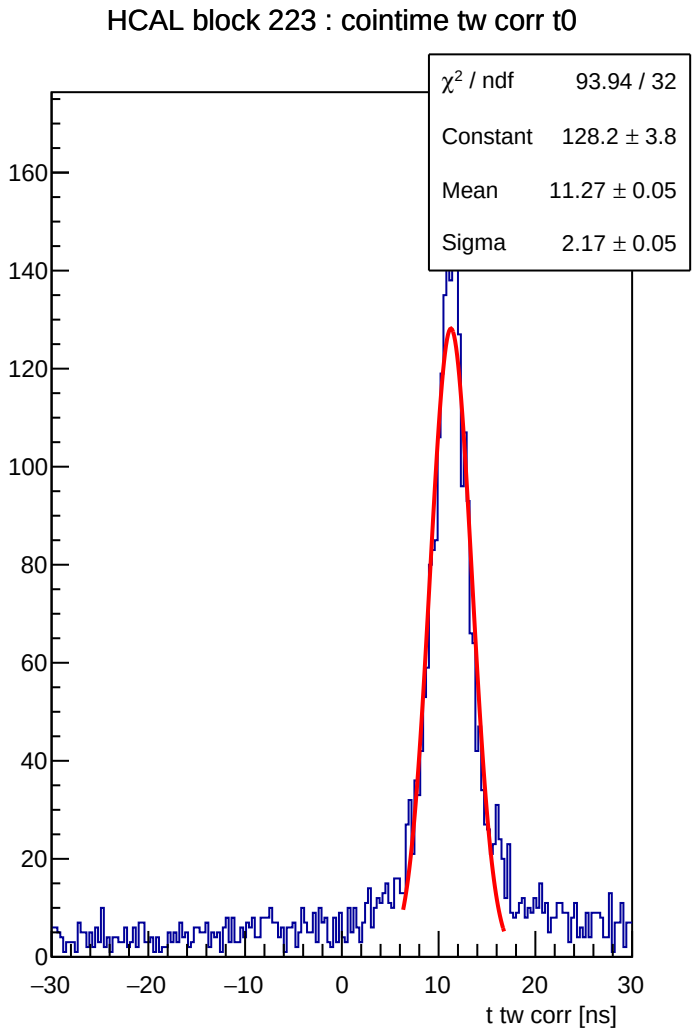

HCAL block 220 : cointime_t0
χ² / ndf 48.72 / 32
Constant 104.8 ± 3.1
Mean 11.43 ± 0.06
Sigma 2.331 ± 0.053
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

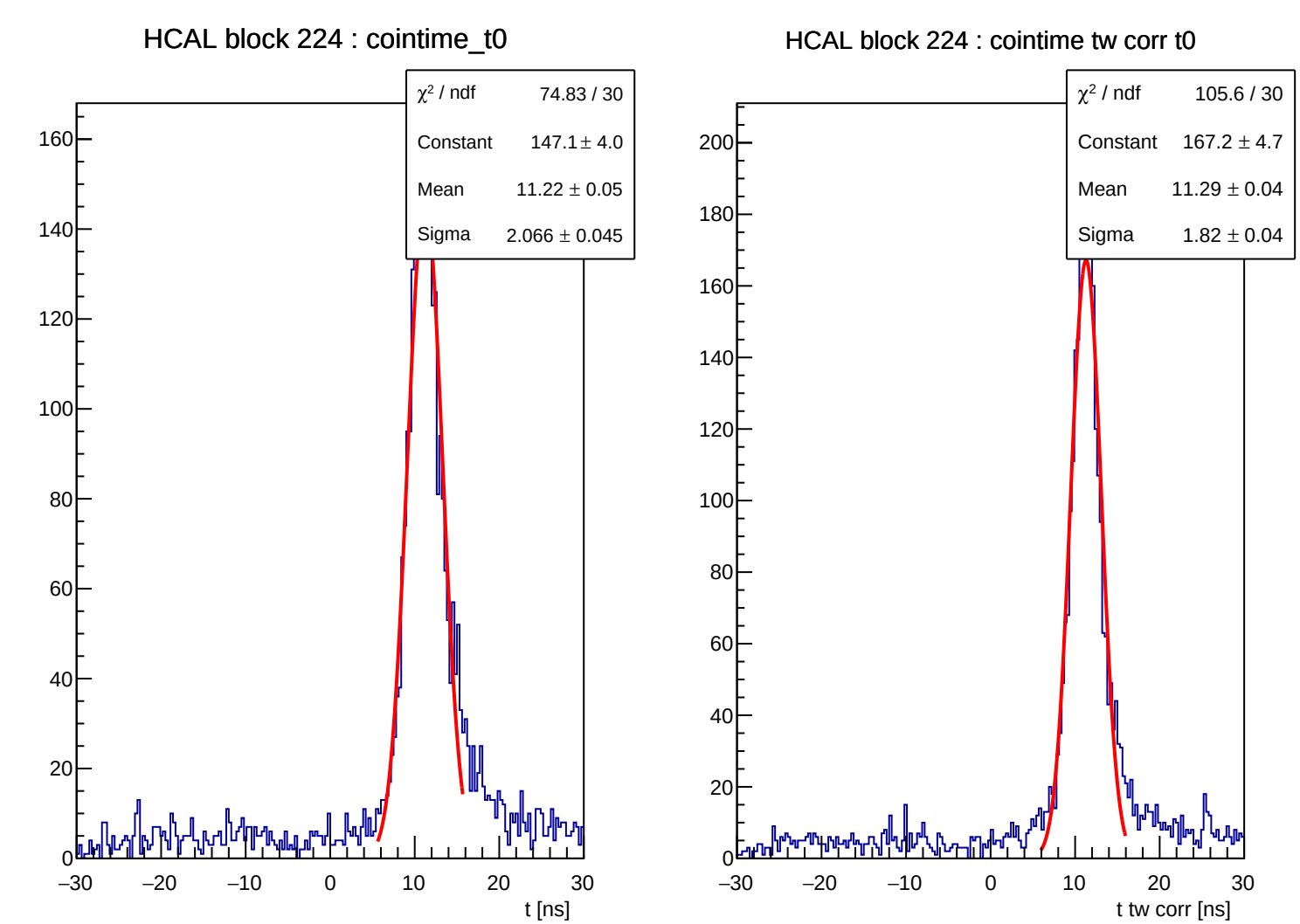

HCAL block 220 : cointime tw corr t0
χ² / ndf 83.28 / 32
Constant 125.8 ± 3.8
Mean 11.41 ± 0.05
Sigma 1.926 ± 0.041
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

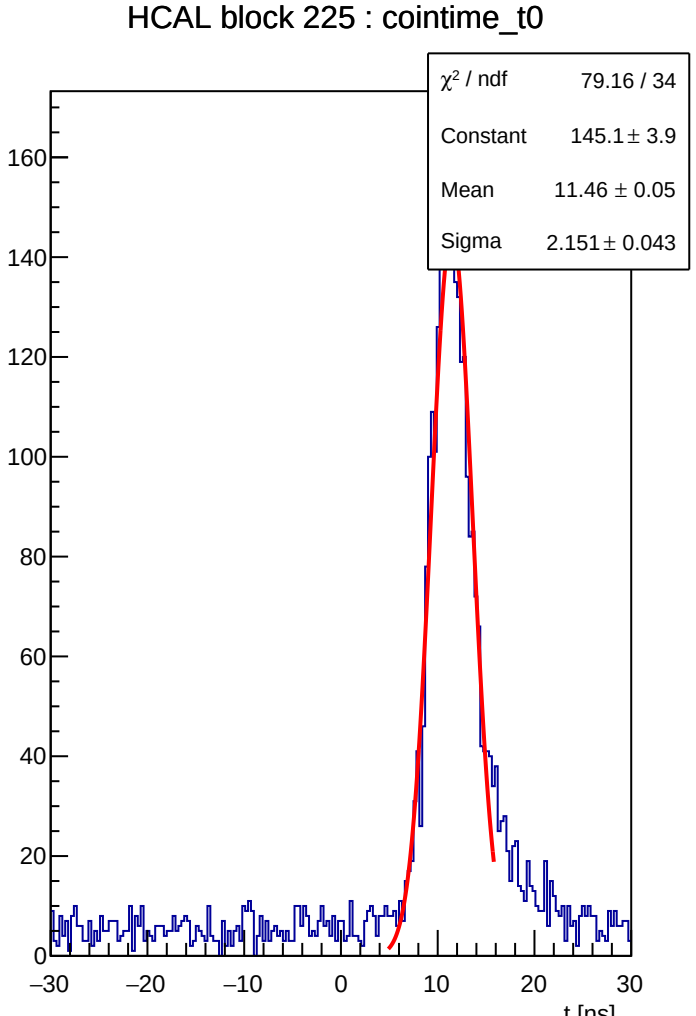

HCAL block 221 : cointime_t0
χ² / ndf 48.77 / 30
Constant 106.1 ± 3.3
Mean 11.38 ± 0.06
Sigma 2.137 ± 0.053
t [ns]
HCAL block 221 : cointime tw corr t0
χ² / ndf 75.31 / 32
Constant 122.3 ± 4.0
Mean 11.39 ± 0.04
Sigma 1.826 ± 0.043
t tw corr [ns]

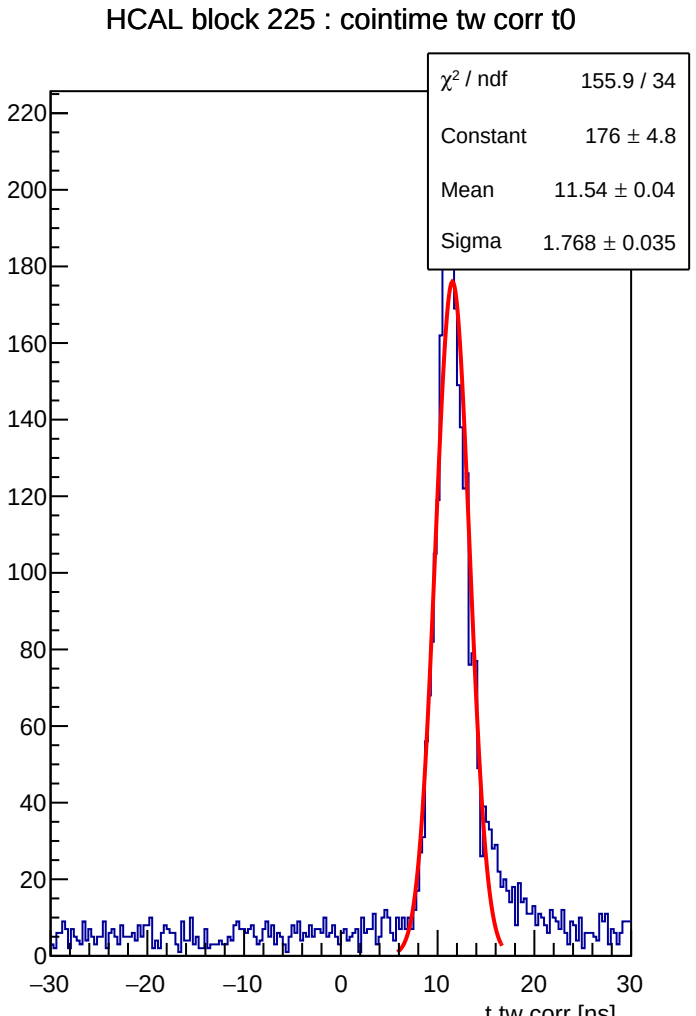

HCAL block 222 : cointime_t0
χ² / ndf 50.59 / 30
Constant 112.2 ± 3.3
Mean 11.33 ± 0.06
Sigma 2.09 ± 0.05
t [ns]
HCAL block 222 : cointime tw corr t0
χ² / ndf 71.9 / 32
Constant 105.9 ± 3.5
Mean 11.75 ± 0.05
Sigma 2.123 ± 0.056
t tw corr [ns]

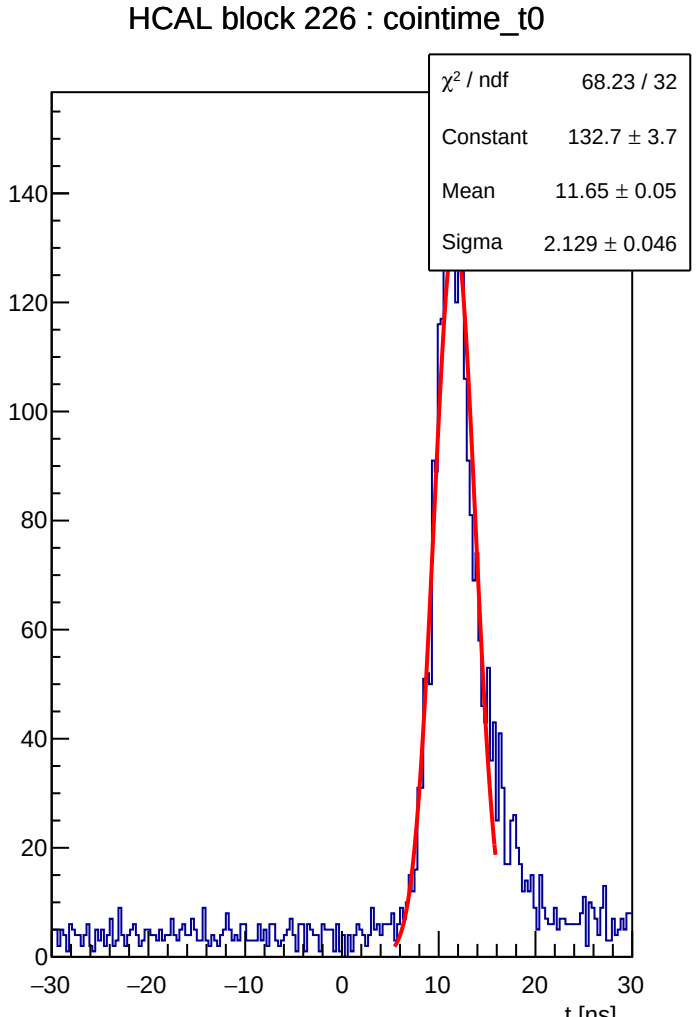

HCAL block 223 : cointime_t0
χ² / ndf 69.06 / 32
Constant 124 ± 3.5
Mean 11.14 ± 0.05
Sigma 2.261 ± 0.051
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

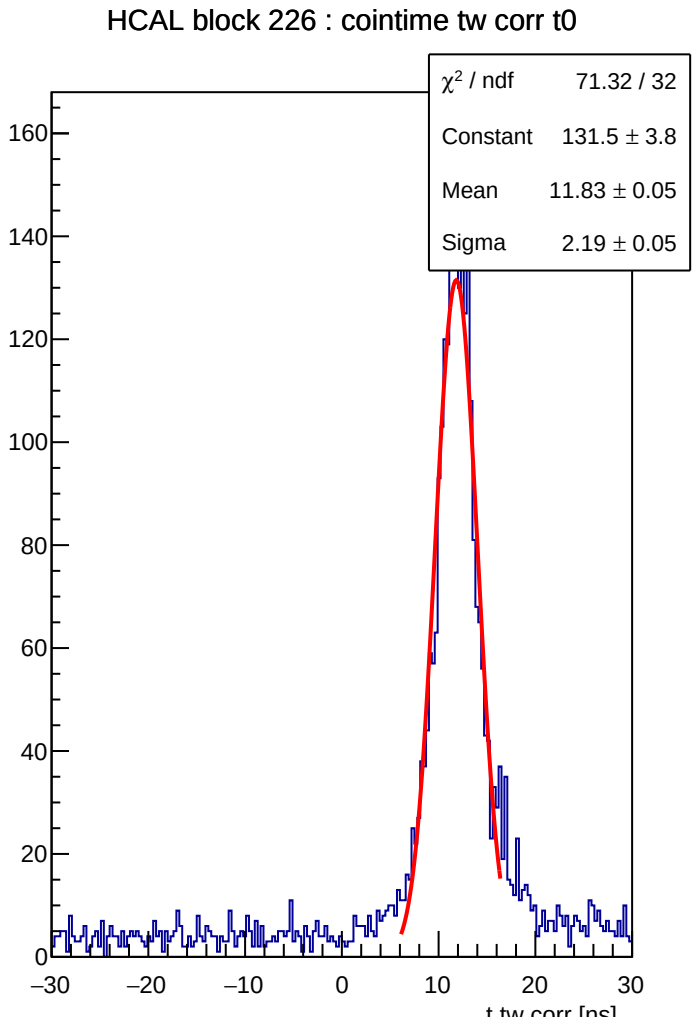

HCAL block 223 : cointime tw corr t0
χ² / ndf 93.94 / 32
Constant 128.2 ± 3.8
Mean 11.27 ± 0.05
Sigma 2.17 ± 0.05
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

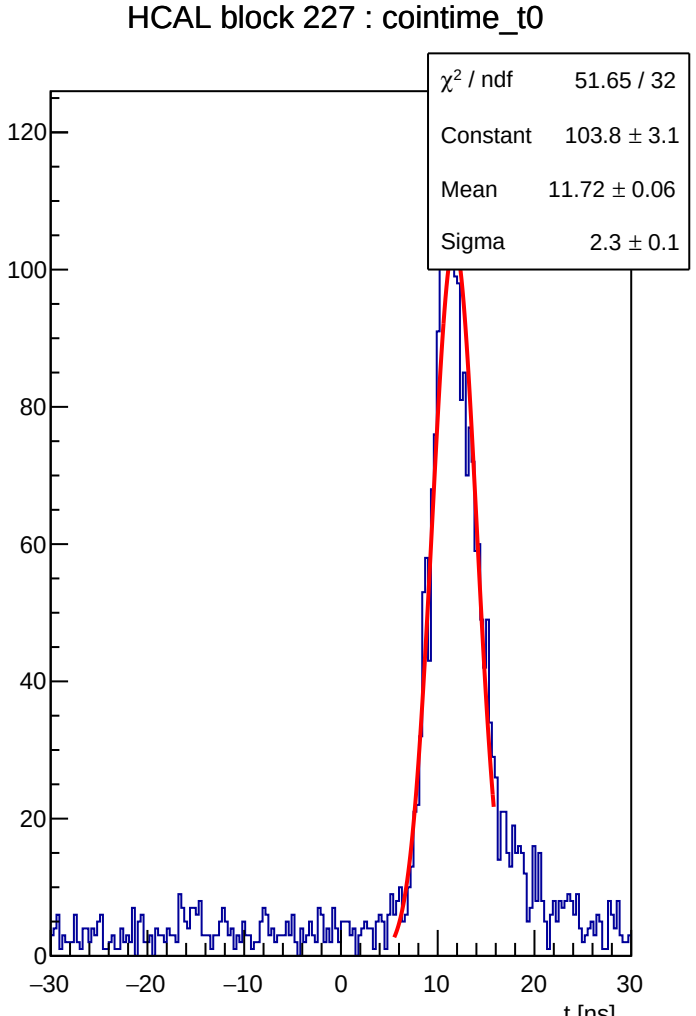

HCAL block 224 : cointime_t0
χ² / ndf 74.83 / 30
Constant 147.1 ± 4.0
Mean 11.22 ± 0.05
Sigma 2.066 ± 0.045
t [ns]
HCAL block 224 : cointime tw corr t0
χ² / ndf 105.6 / 30
Constant 167.2 ± 4.7
Mean 11.29 ± 0.04
Sigma 1.82 ± 0.04
t tw corr [ns]

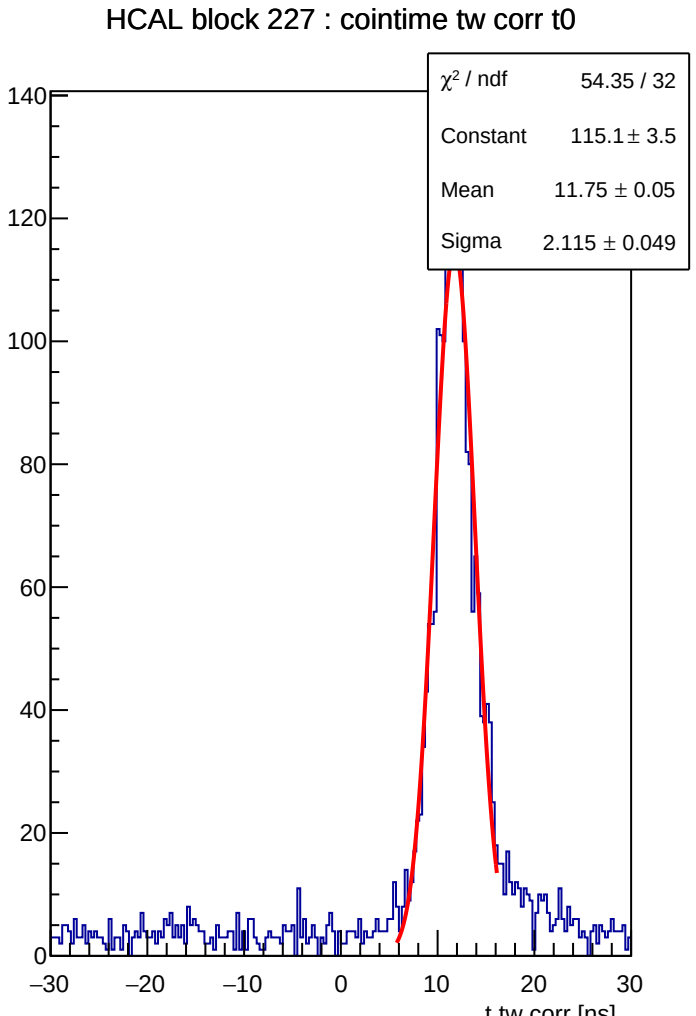

HCAL block 225 : cointime_t0
χ² / ndf 79.16 / 34
Constant 145.1 ± 3.9
Mean 11.46 ± 0.05
Sigma 2.151 ± 0.043
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

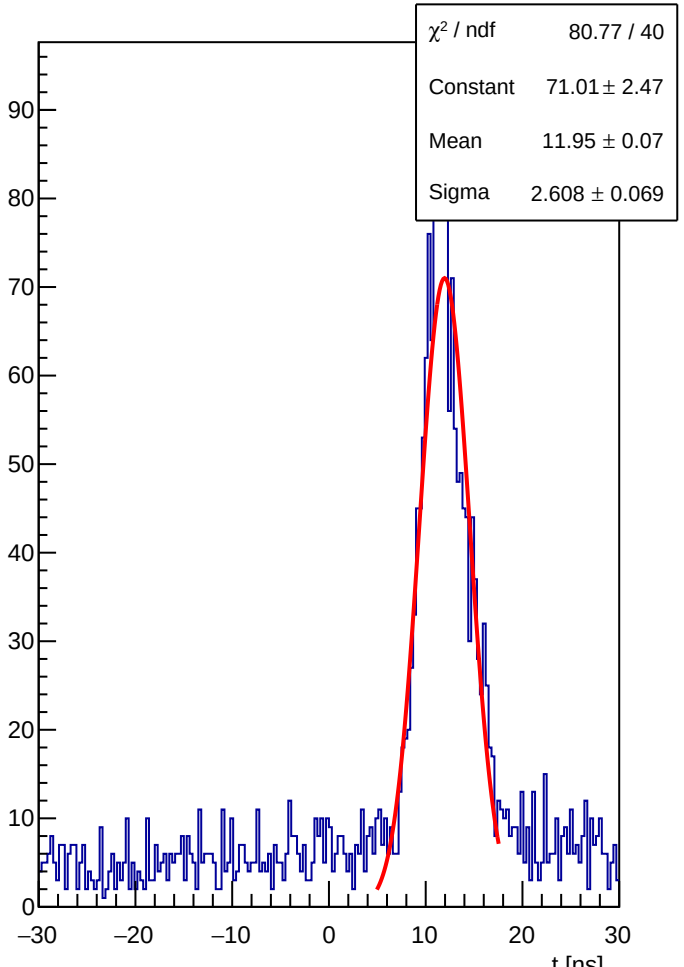

HCAL block 225 : cointime tw corr t0
χ² / ndf 155.9 / 34
Constant 176 ± 4.8
Mean 11.54 ± 0.04
Sigma 1.768 ± 0.035
220
200
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

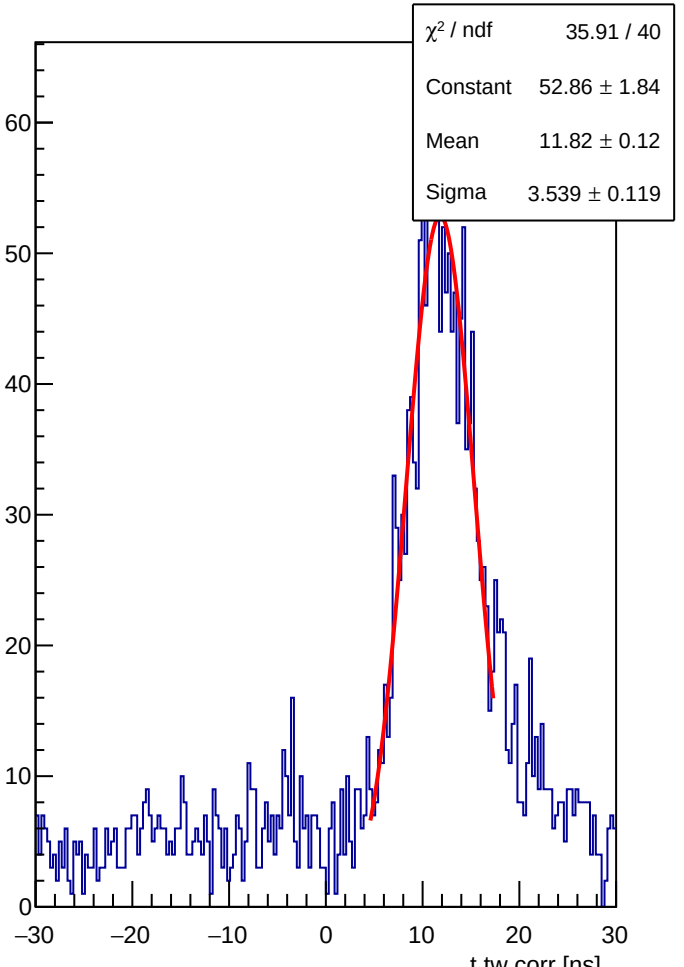

HCAL block 226 : cointime_t0
χ² / ndf 68.23 / 32
Constant 132.7 ± 3.7
Mean 11.65 ± 0.05
Sigma 2.129 ± 0.046
t [ns]

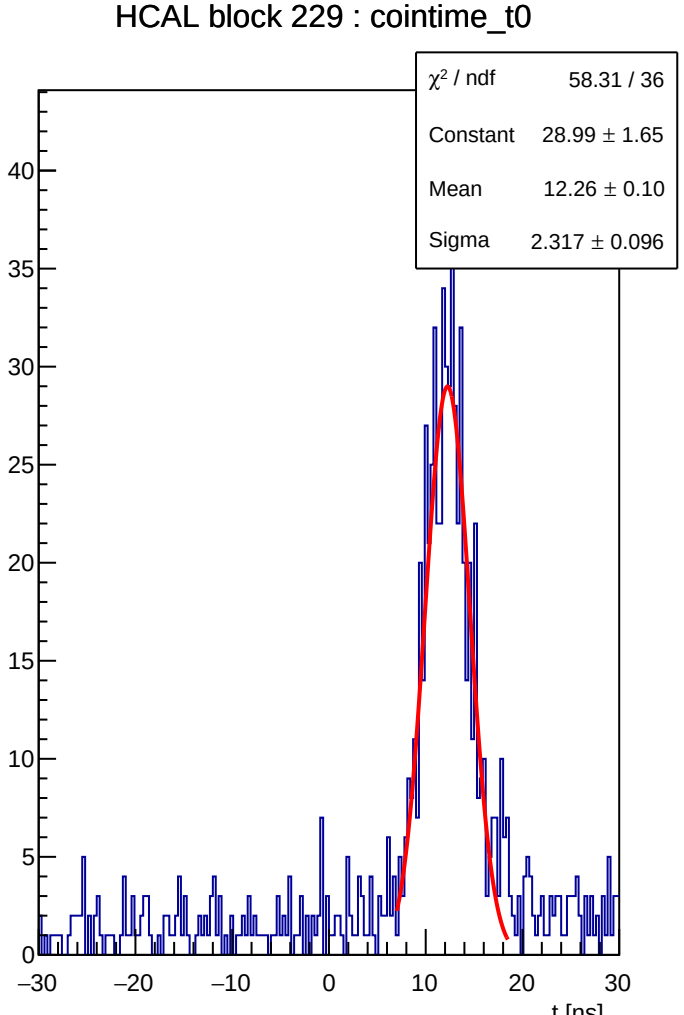

HCAL block 226 : cointime tw corr t0
χ² / ndf 71.32 / 32
Constant 131.5 ± 3.8
Mean 11.83 ± 0.05
Sigma 2.19 ± 0.05
t tw corr [ns]

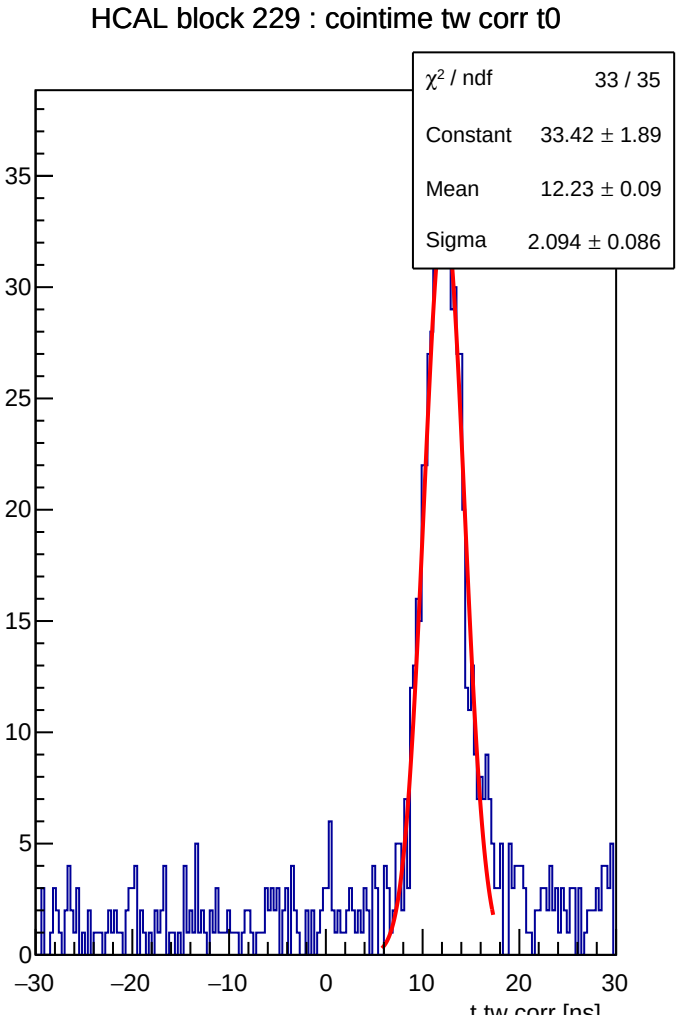

HCAL block 227 : cointime_t0
χ² / ndf 51.65 / 32
Constant 103.8 ± 3.1
Mean 11.72 ± 0.06
Sigma 2.3 ± 0.1
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

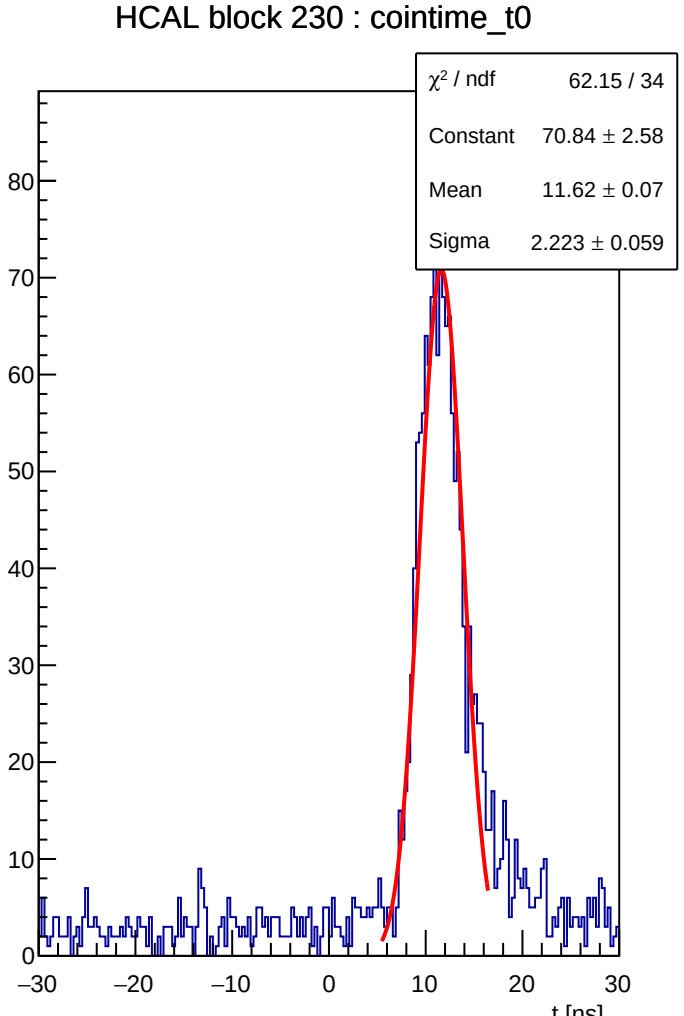

HCAL block 227 : cointime tw corr t0
χ² / ndf 54.35 / 32
Constant 115.1 ± 3.5
Mean 11.75 ± 0.05
Sigma 2.115 ± 0.049
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

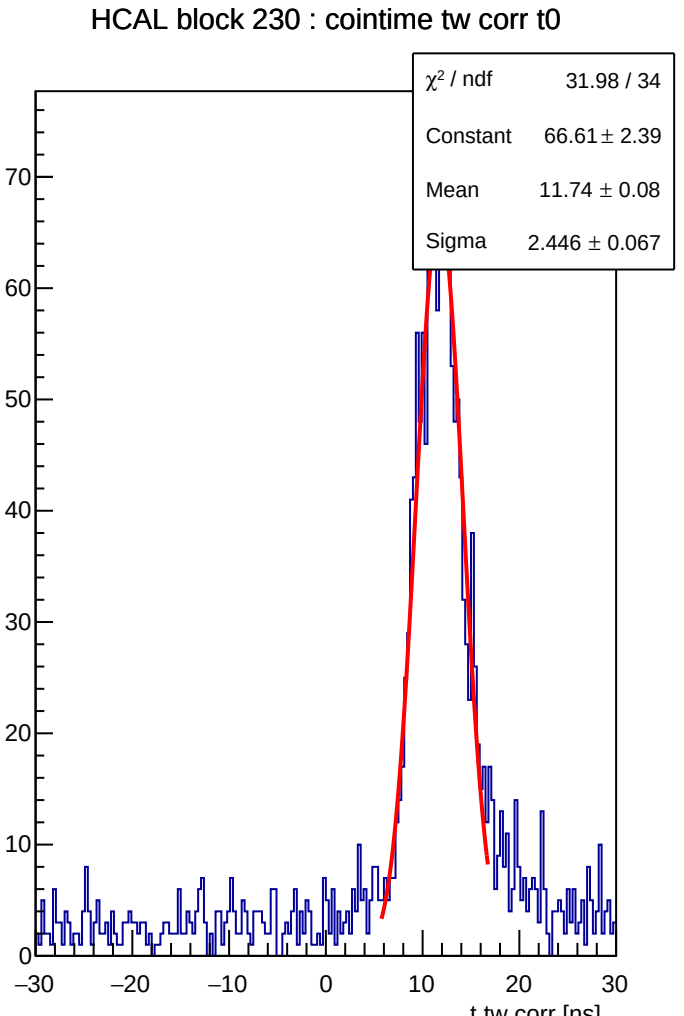

HCAL block 228 : cointime_t0
χ² / ndf 80.77 / 40
Constant 71.01 ± 2.47
Mean 11.95 ± 0.07
Sigma 2.608 ± 0.069
t [ns]

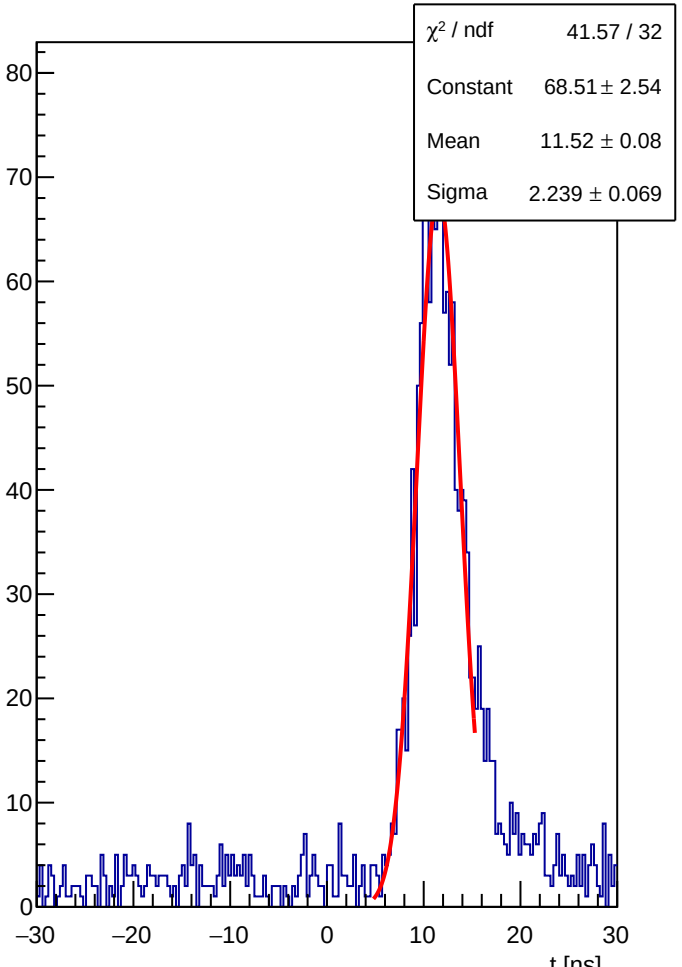

HCAL block 228 : cointime tw corr t0
χ² / ndf 35.91 / 40
Constant 52.86 ± 1.84
Mean 11.82 ± 0.12
Sigma 3.539 ± 0.119
t tw corr [ns]

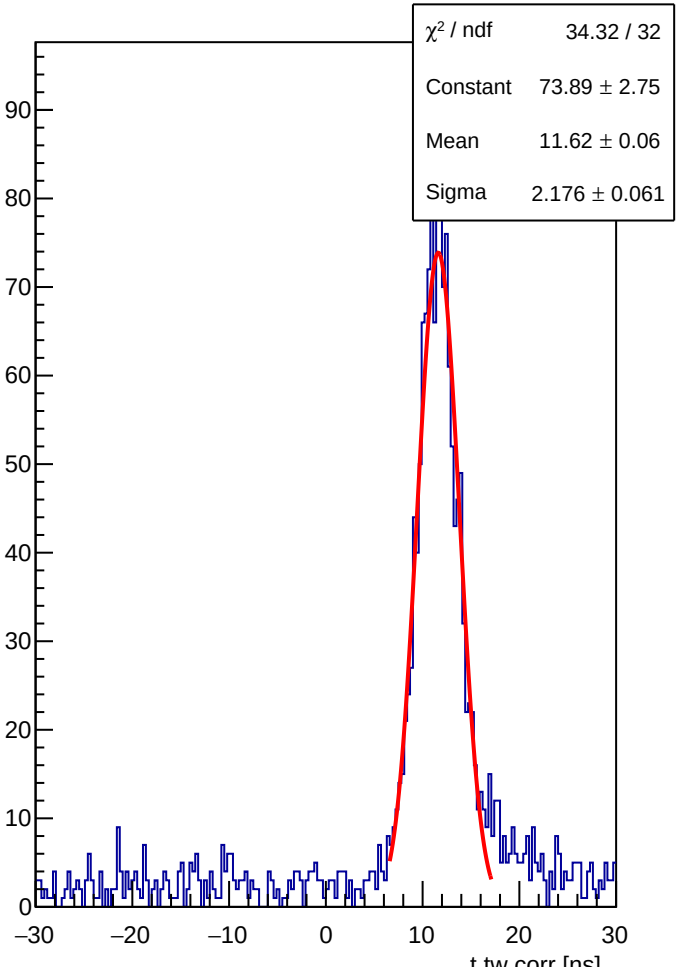

HCAL block 229 : cointime_t0
χ² / ndf 58.31 / 36
Constant 28.99 ± 1.65
Mean 12.26 ± 0.10
Sigma 2.317 ± 0.096
40
35
30
25
20
15
10
5
0
–30
–20
–10
0
10
20
30
t [ns]

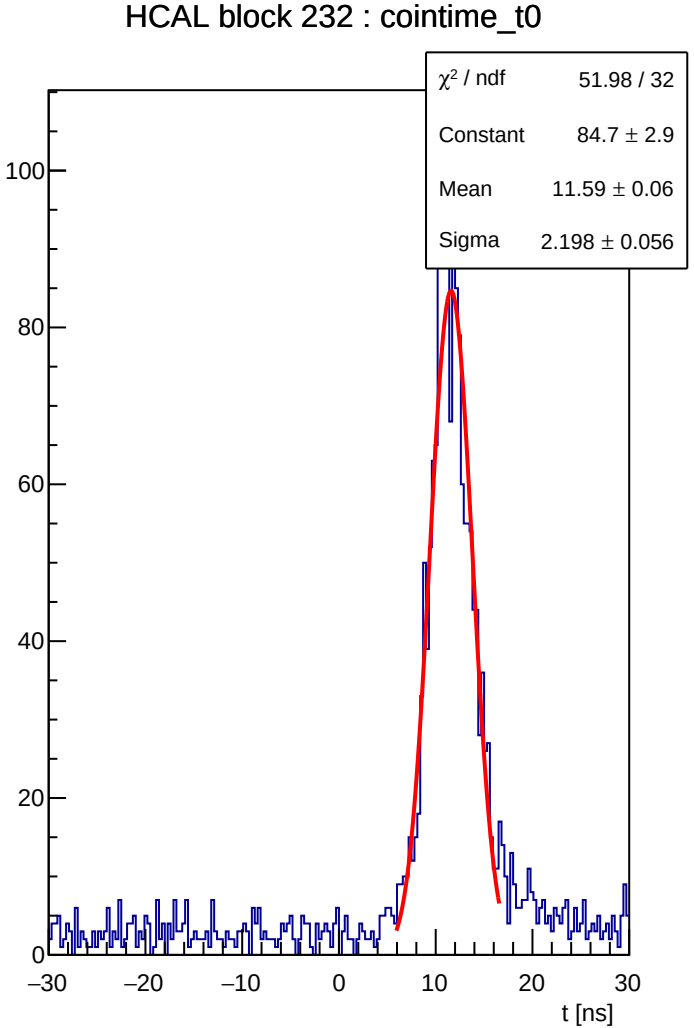

HCAL block 229 : cointime tw corr t0
χ² / ndf 33 / 35
Constant 33.42 ± 1.89
Mean 12.23 ± 0.09
Sigma 2.094 ± 0.086
35
30
25
20
15
10
5
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

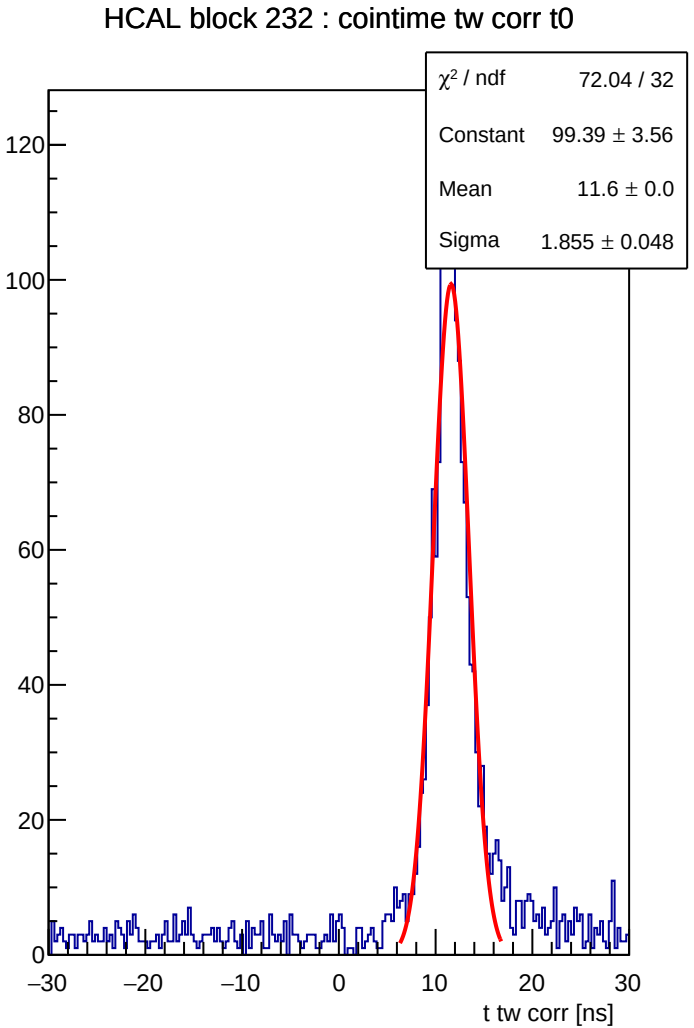

HCAL block 230 : cointime_t0
χ² / ndf 62.15 / 34
Constant 70.84 ± 2.58
Mean 11.62 ± 0.07
Sigma 2.223 ± 0.059
t [ns]

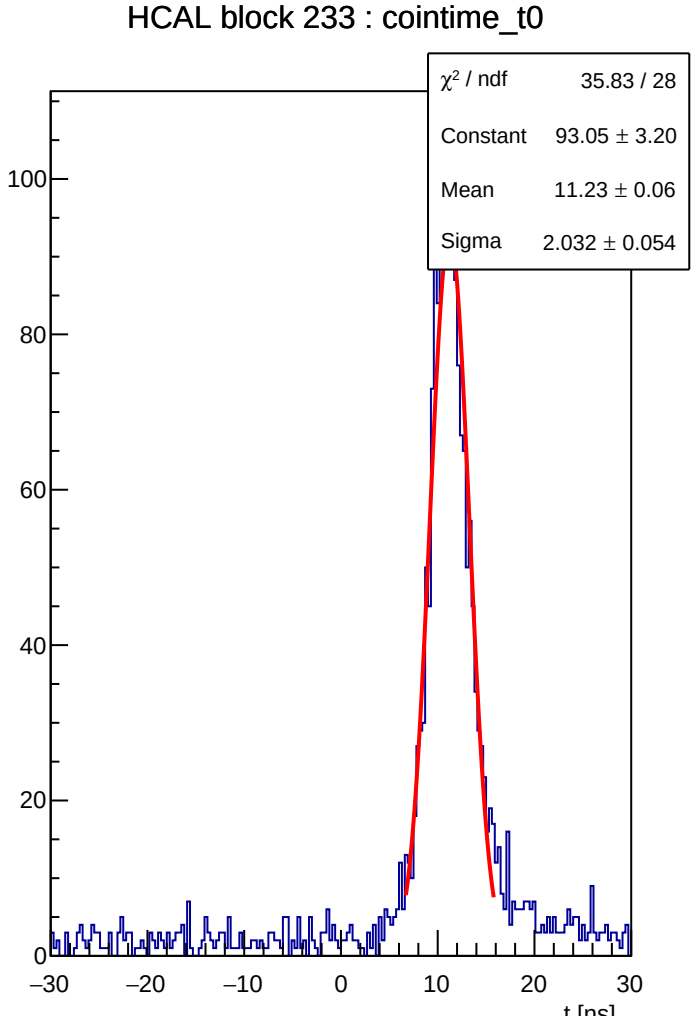

HCAL block 230 : cointime tw corr t0
χ² / ndf 31.98 / 34
Constant 66.61 ± 2.39
Mean 11.74 ± 0.08
Sigma 2.446 ± 0.067
t tw corr [ns]

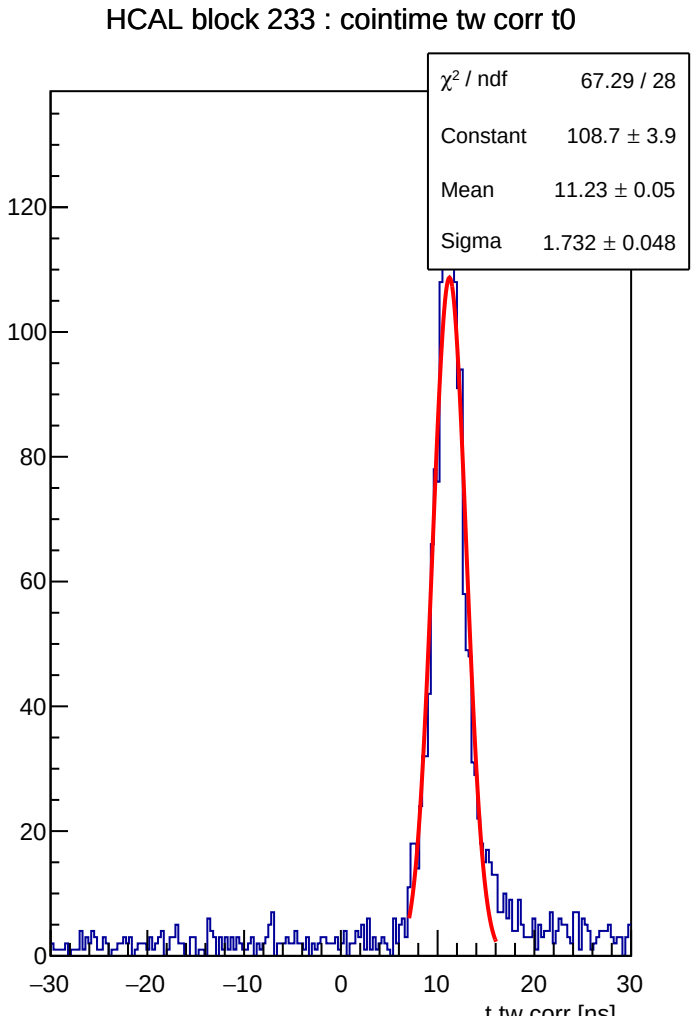

HCAL block 231 : cointime_t0
χ² / ndf 41.57 / 32
Constant 68.51 ± 2.54
Mean 11.52 ± 0.08
Sigma 2.239 ± 0.069
t [ns]

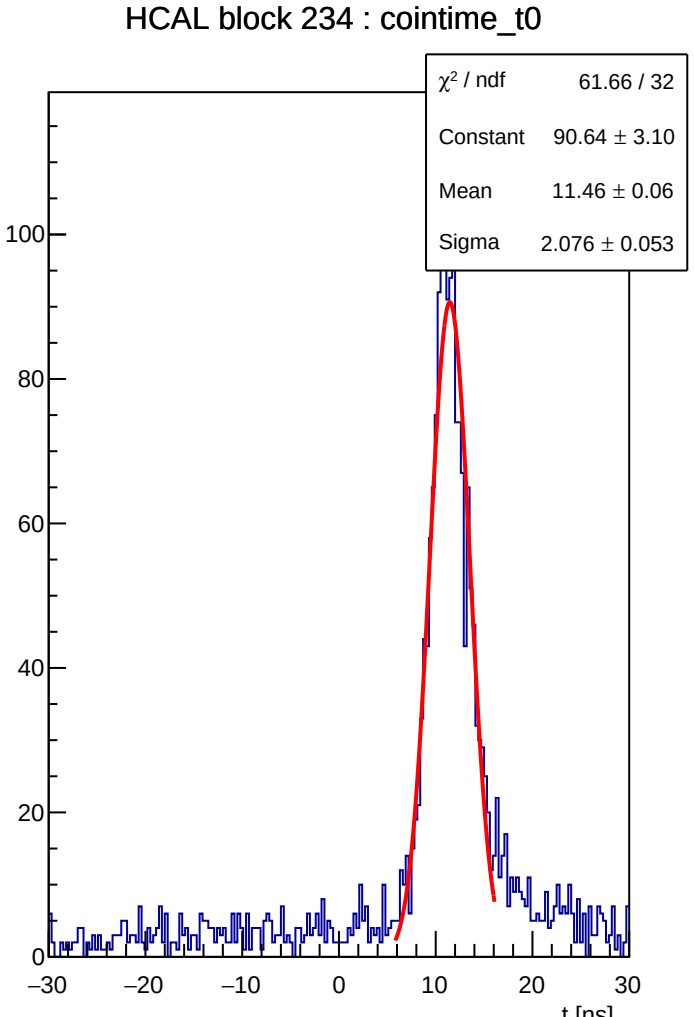

HCAL block 231 : cointime tw corr t0
χ² / ndf 34.32 / 32
Constant 73.89 ± 2.75
Mean 11.62 ± 0.06
Sigma 2.176 ± 0.061
t tw corr [ns]

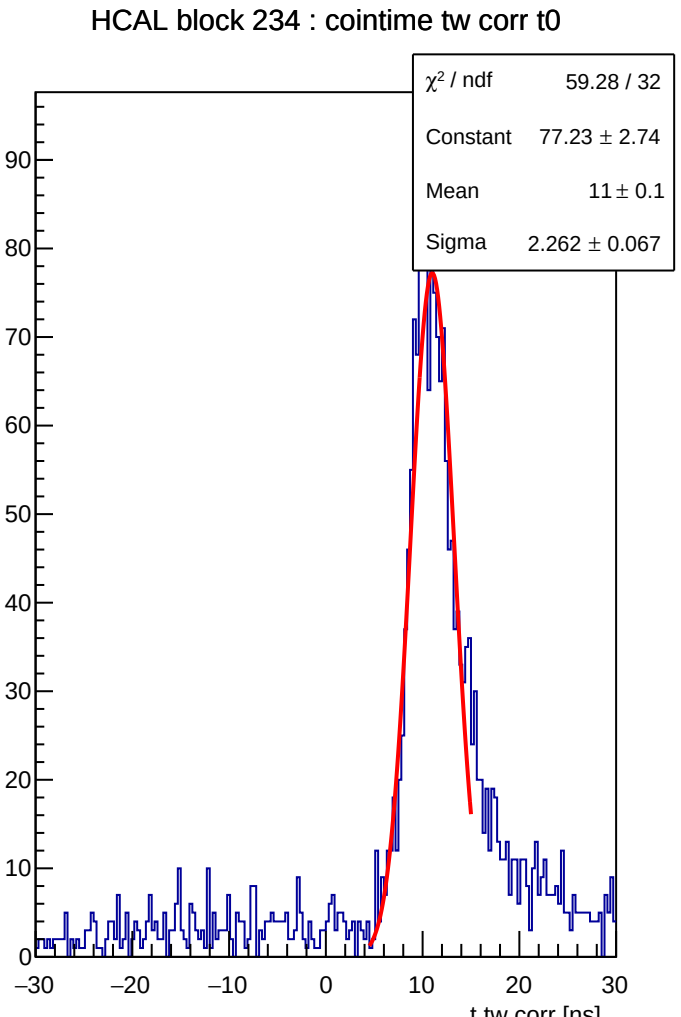

HCAL block 232 : cointime_t0
χ² / ndf 51.98 / 32
Constant 84.7 ± 2.9
Mean 11.59 ± 0.06
Sigma 2.198 ± 0.056
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

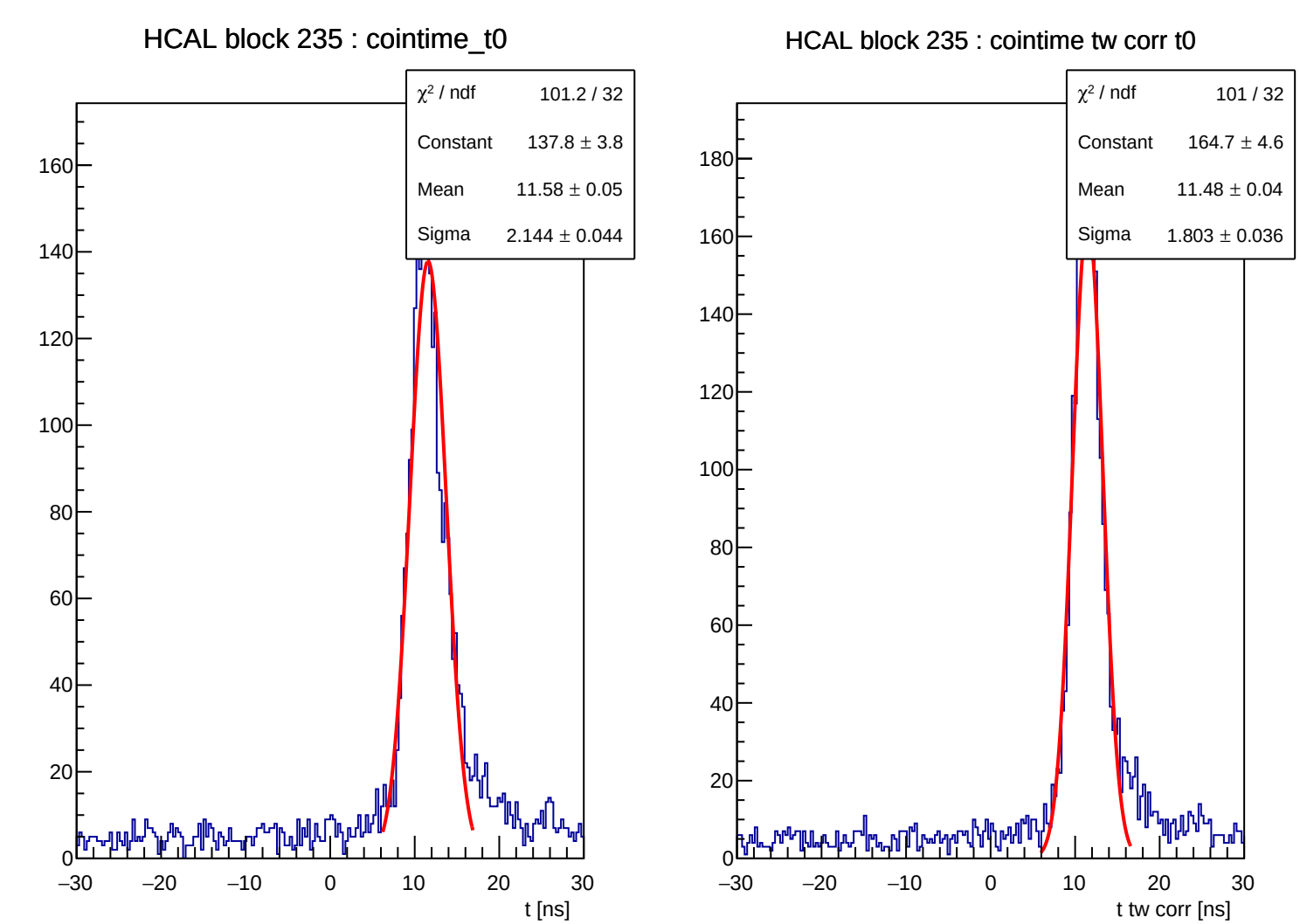

HCAL block 232 : cointime tw corr t0
χ² / ndf 72.04 / 32
Constant 99.39 ± 3.56
Mean 11.6 ± 0.0
Sigma 1.855 ± 0.048
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

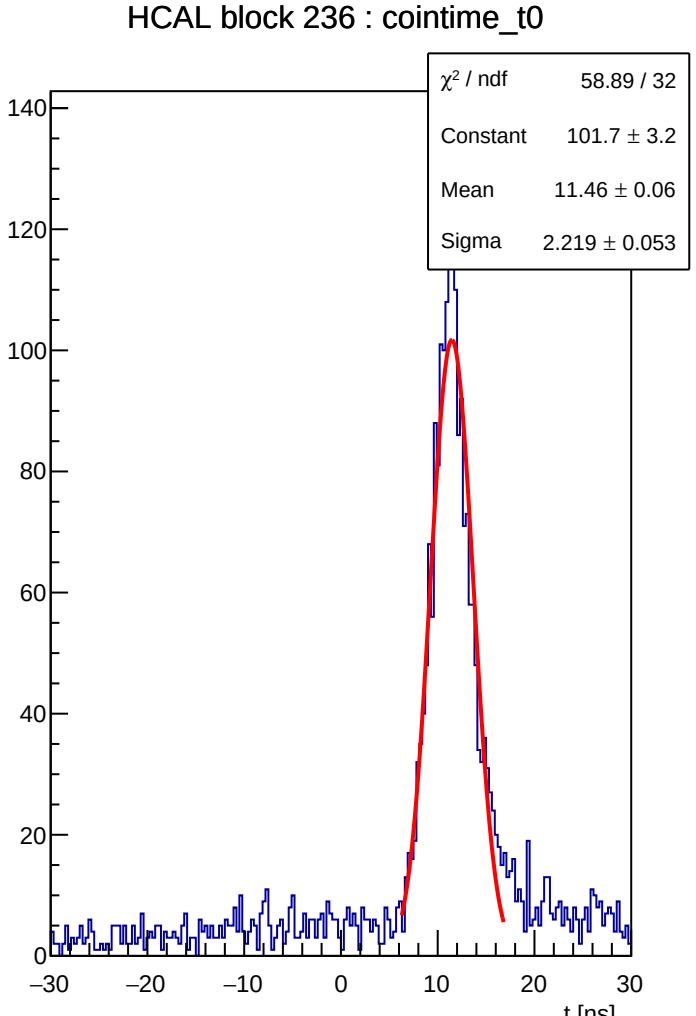

HCAL block 233 : cointime_t0
χ² / ndf 35.83 / 28
Constant 93.05 ± 3.20
Mean 11.23 ± 0.06
Sigma 2.032 ± 0.054
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

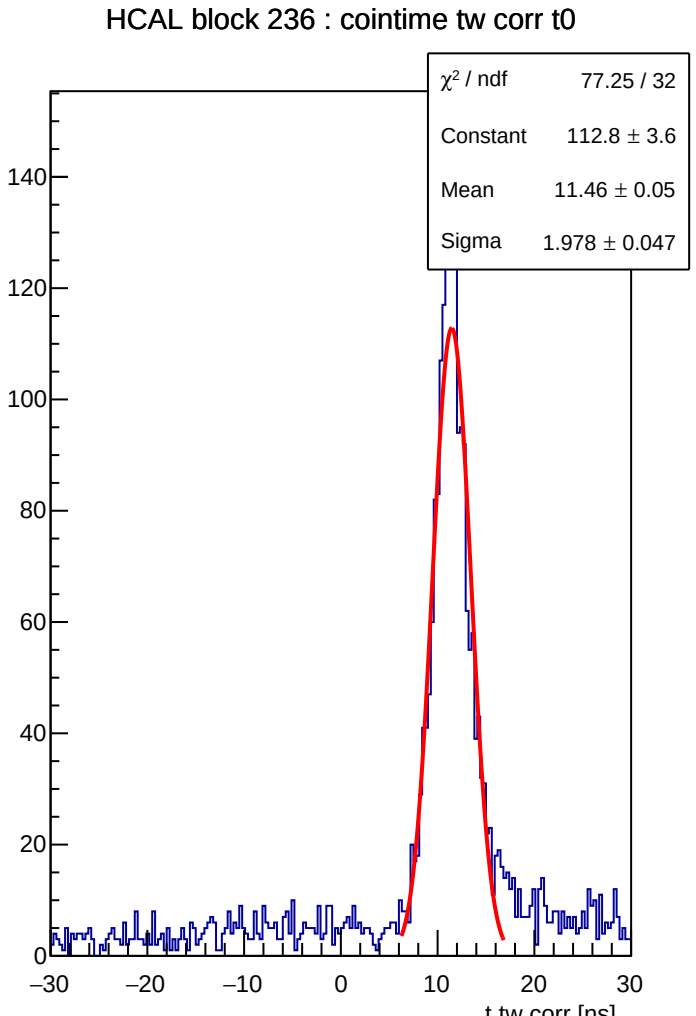

HCAL block 233 : cointime tw corr t0
χ² / ndf 67.29 / 28
Constant 108.7 ± 3.9
Mean 11.23 ± 0.05
Sigma 1.732 ± 0.048
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

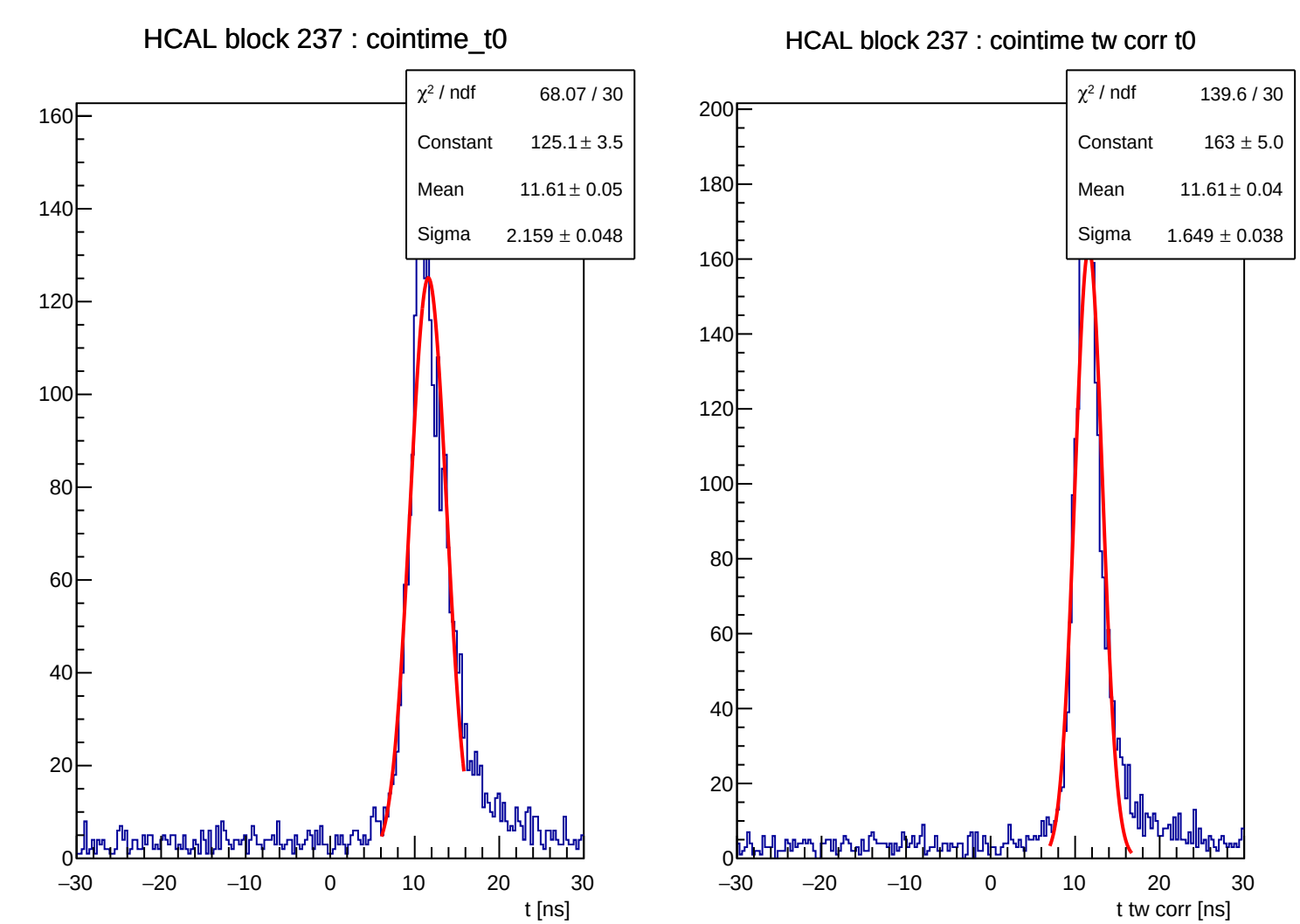

HCAL block 234 : cointime_t0
χ² / ndf 61.66 / 32
Constant 90.64 ± 3.10
Mean 11.46 ± 0.06
Sigma 2.076 ± 0.053
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

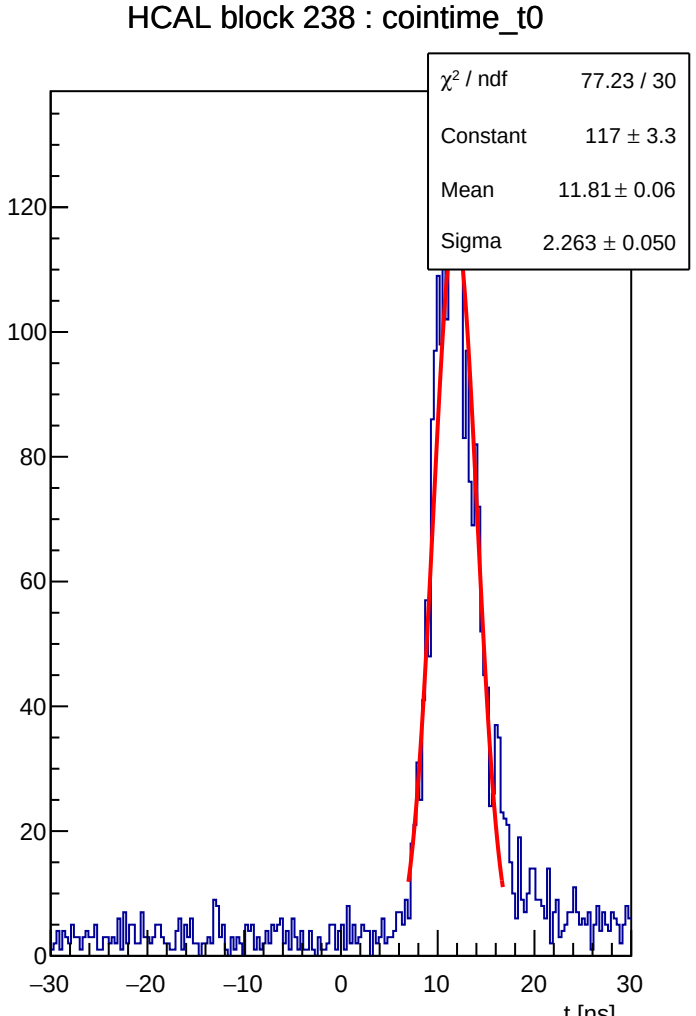

HCAL block 234 : cointime tw corr t0
χ² / ndf 59.28 / 32
Constant 77.23 ± 2.74
Mean 11 ± 0.1
Sigma 2.262 ± 0.067
90
80
70
60
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

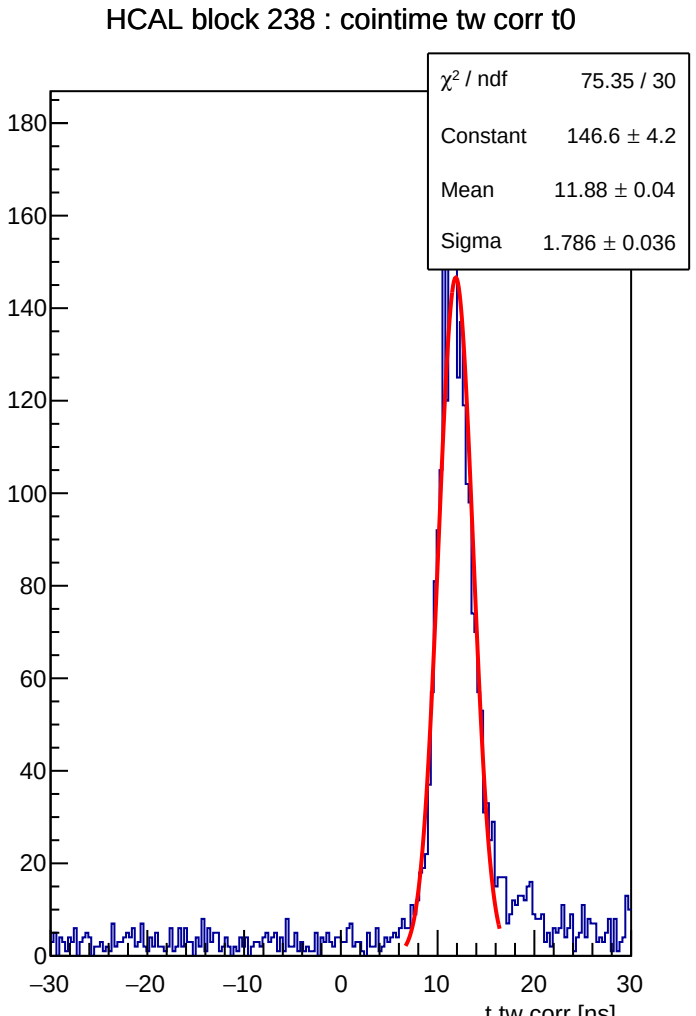

HCAL block 235 : cointime_t0
χ² / ndf 101.2 / 32
Constant 137.8 ± 3.8
Mean 11.58 ± 0.05
Sigma 2.144 ± 0.044
t [ns]
HCAL block 235 : cointime tw corr t0
χ² / ndf 101 / 32
Constant 164.7 ± 4.6
Mean 11.48 ± 0.04
Sigma 1.803 ± 0.036
t tw corr [ns]

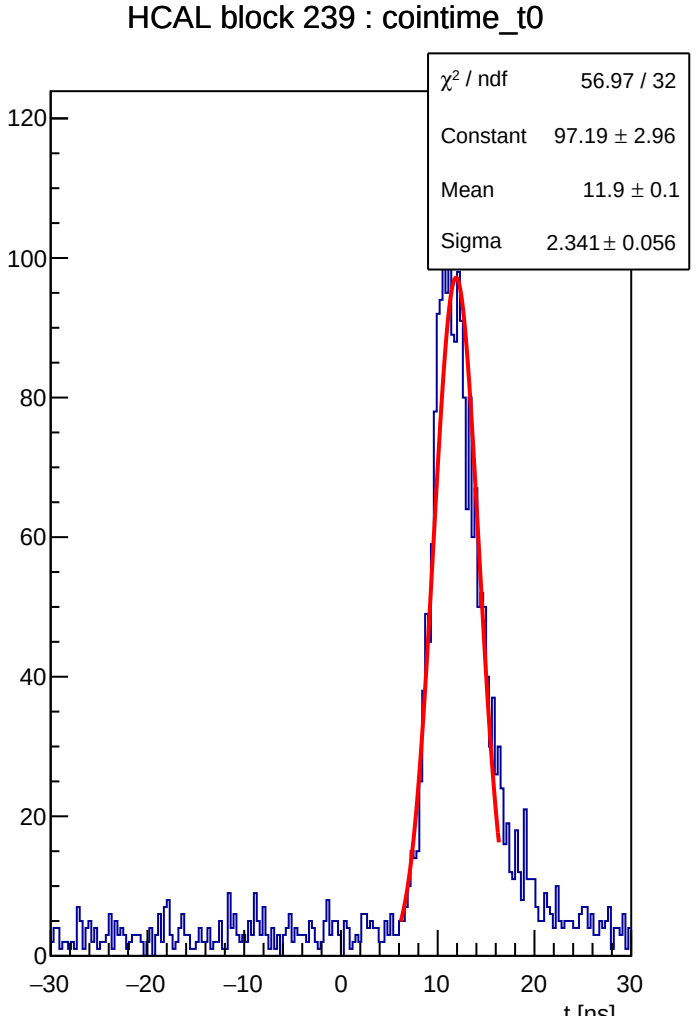

HCAL block 236 : cointime_t0
χ² / ndf 58.89 / 32
Constant 101.7 ± 3.2
Mean 11.46 ± 0.06
Sigma 2.219 ± 0.053
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

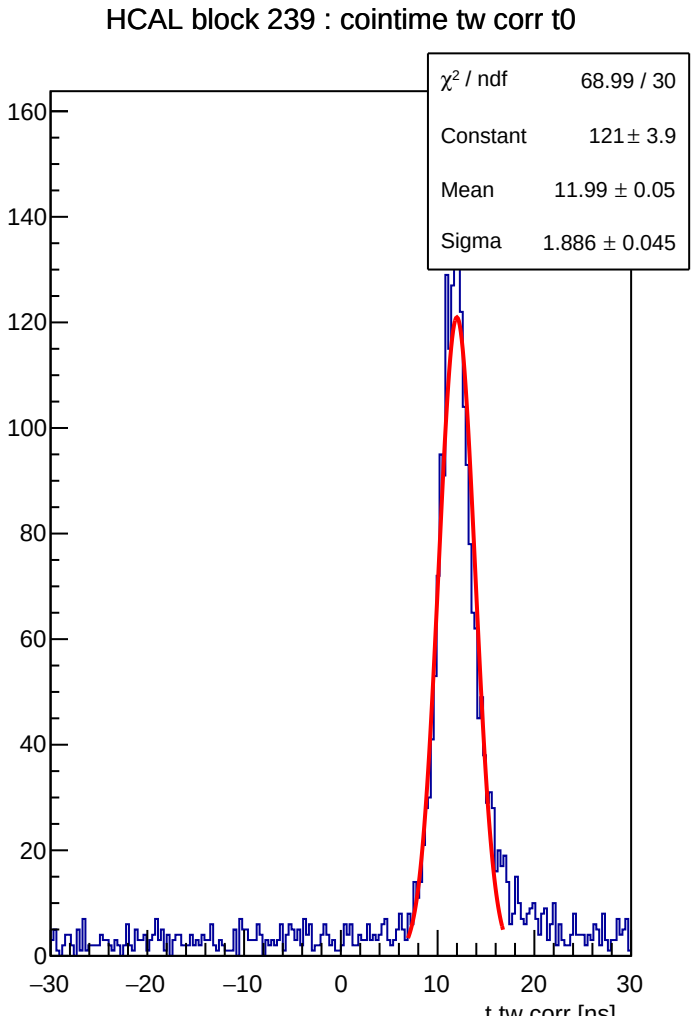

HCAL block 236 : cointime tw corr t0
χ² / ndf 77.25 / 32
Constant 112.8 ± 3.6
Mean 11.46 ± 0.05
Sigma 1.978 ± 0.047
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

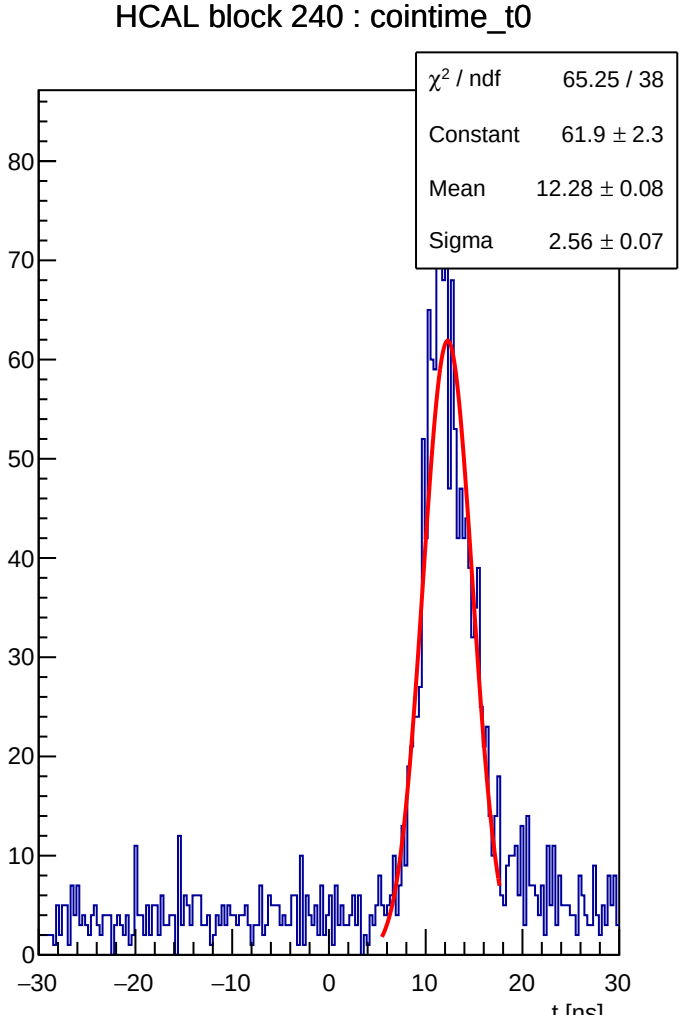

HCAL block 237 : cointime_t0
χ² / ndf 68.07 / 30
Constant 125.1 ± 3.5
Mean 11.61 ± 0.05
Sigma 2.159 ± 0.048
t [ns]
HCAL block 237 : cointime tw corr t0
χ² / ndf 139.6 / 30
Constant 163 ± 5.0
Mean 11.61 ± 0.04
Sigma 1.649 ± 0.038
t tw corr [ns]

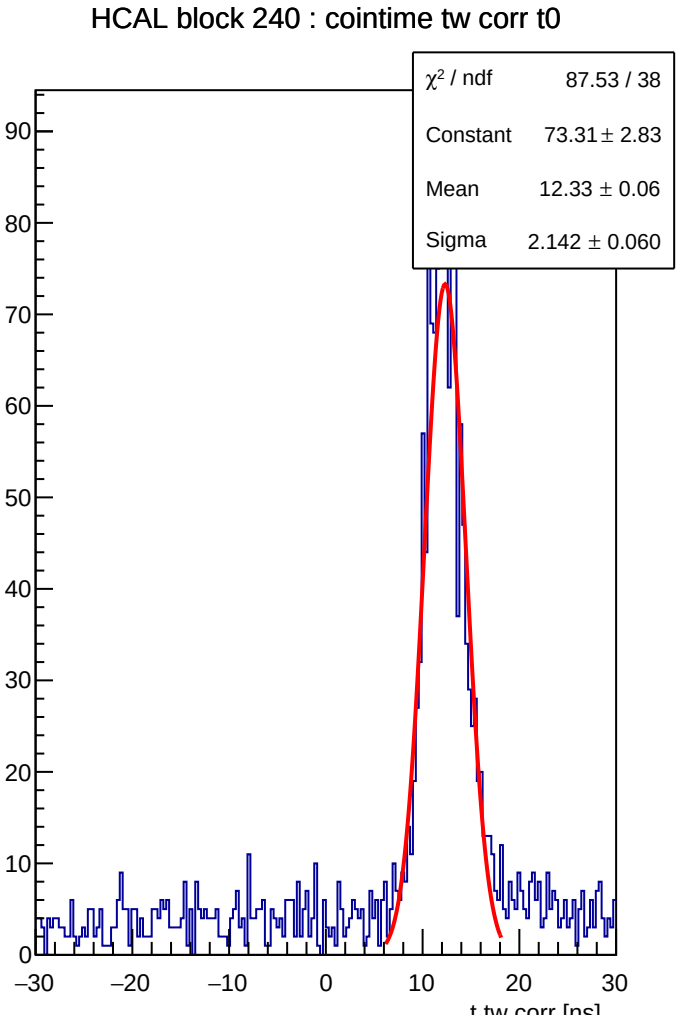

HCAL block 238 : cointime_t0
χ² / ndf 77.23 / 30
Constant 117 ± 3.3
Mean 11.81 ± 0.06
Sigma 2.263 ± 0.050
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

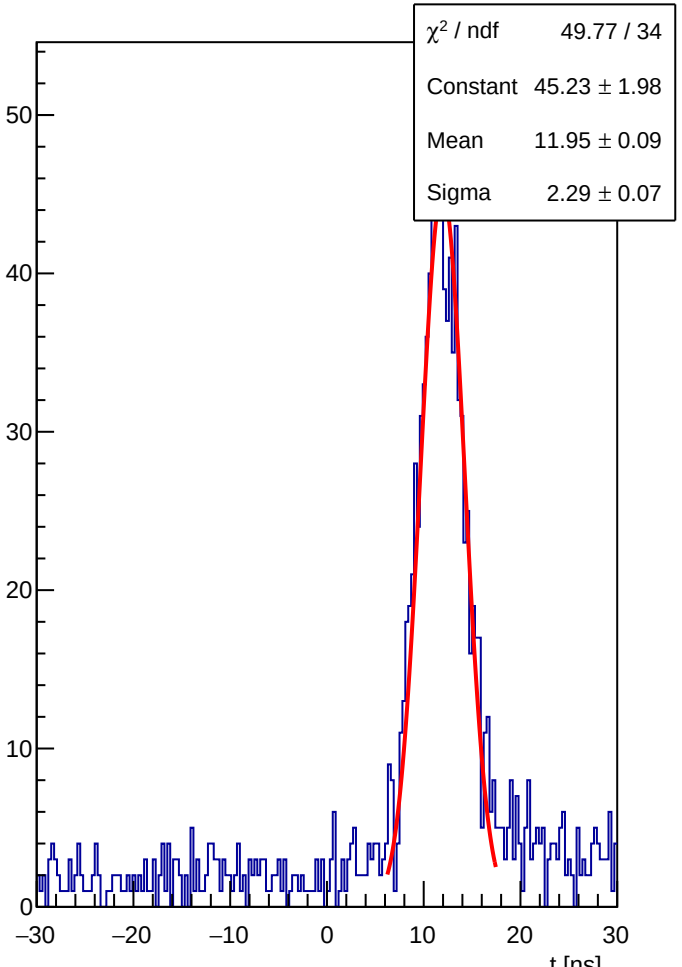

HCAL block 238 : cointime tw corr t0
χ² / ndf 75.35 / 30
Constant 146.6 ± 4.2
Mean 11.88 ± 0.04
Sigma 1.786 ± 0.036
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

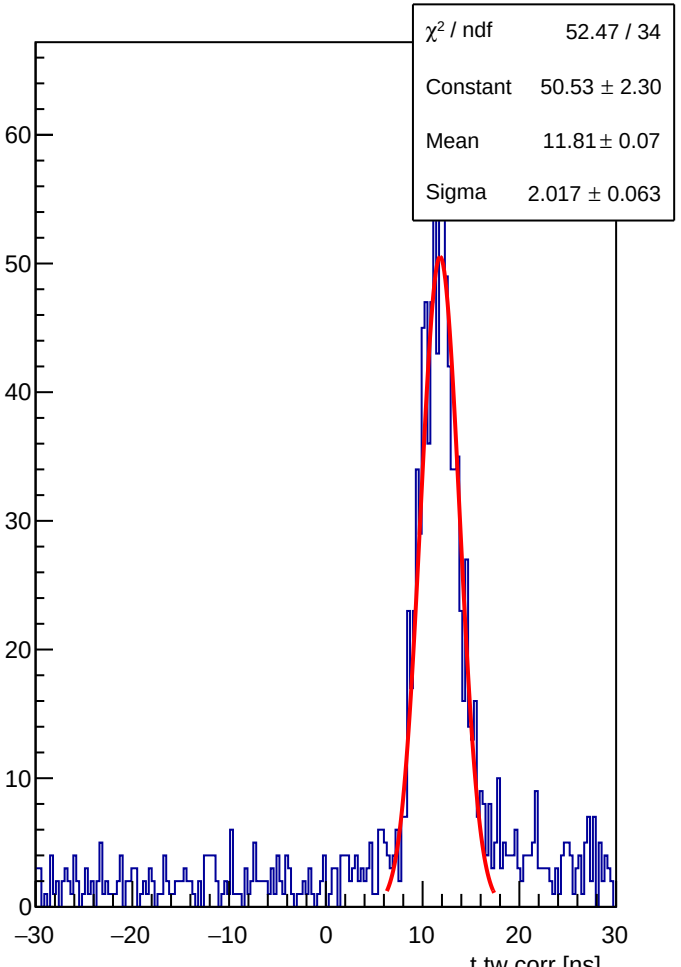

HCAL block 239 : cointime_t0
χ² / ndf 56.97 / 32
Constant 97.19 ± 2.96
Mean 11.9 ± 0.1
Sigma 2.341 ± 0.056
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

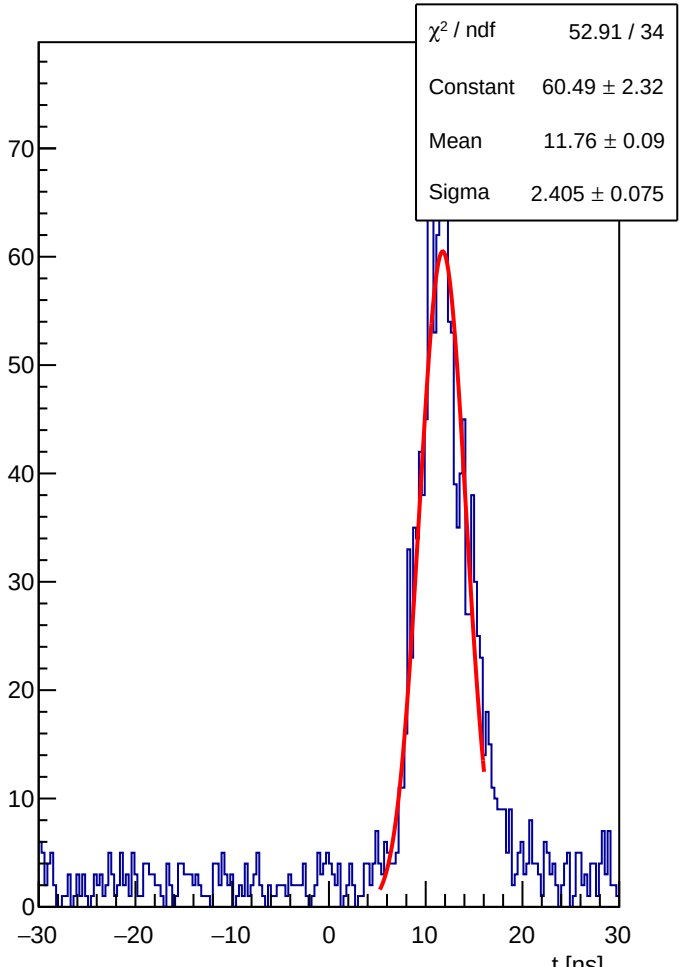

HCAL block 239 : cointime tw corr t0
χ² / ndf 68.99 / 30
Constant 121 ± 3.9
Mean 11.99 ± 0.05
Sigma 1.886 ± 0.045
160
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

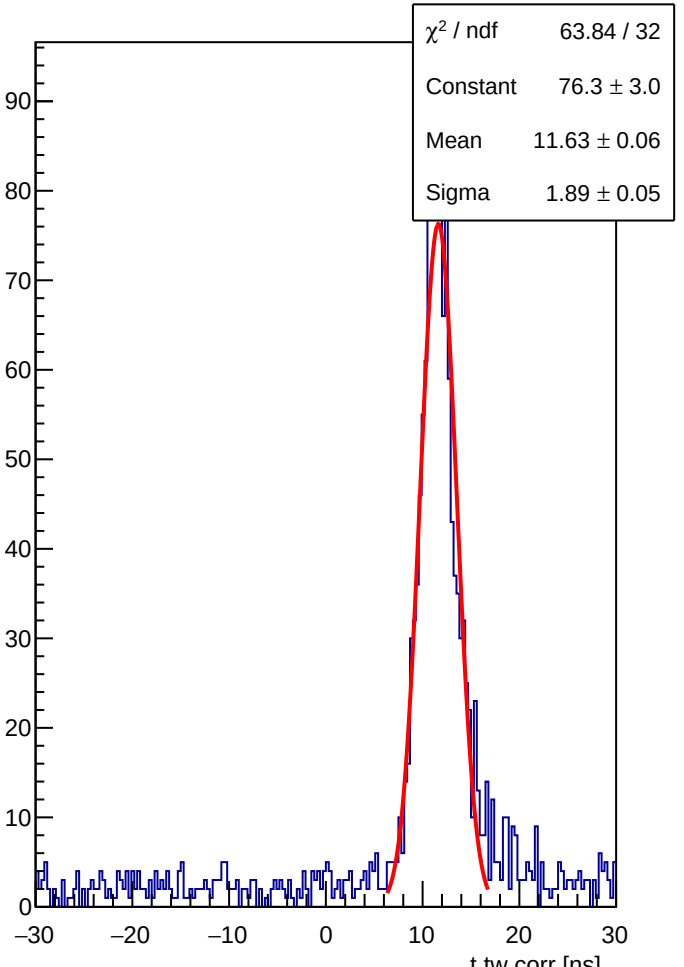

HCAL block 240 : cointime_t0
χ² / ndf 65.25 / 38
Constant 61.9 ± 2.3
Mean 12.28 ± 0.08
Sigma 2.56 ± 0.07
t [ns]

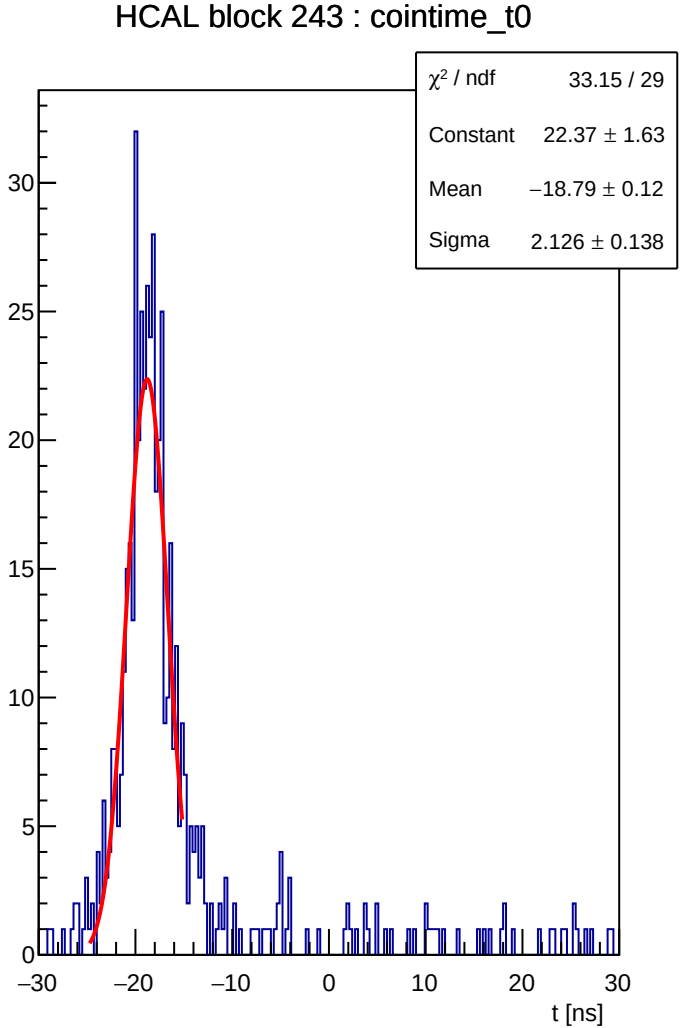

HCAL block 240 : cointime tw corr t0
χ² / ndf 87.53 / 38
Constant 73.31 ± 2.83
Mean 12.33 ± 0.06
Sigma 2.142 ± 0.060
t tw corr [ns]

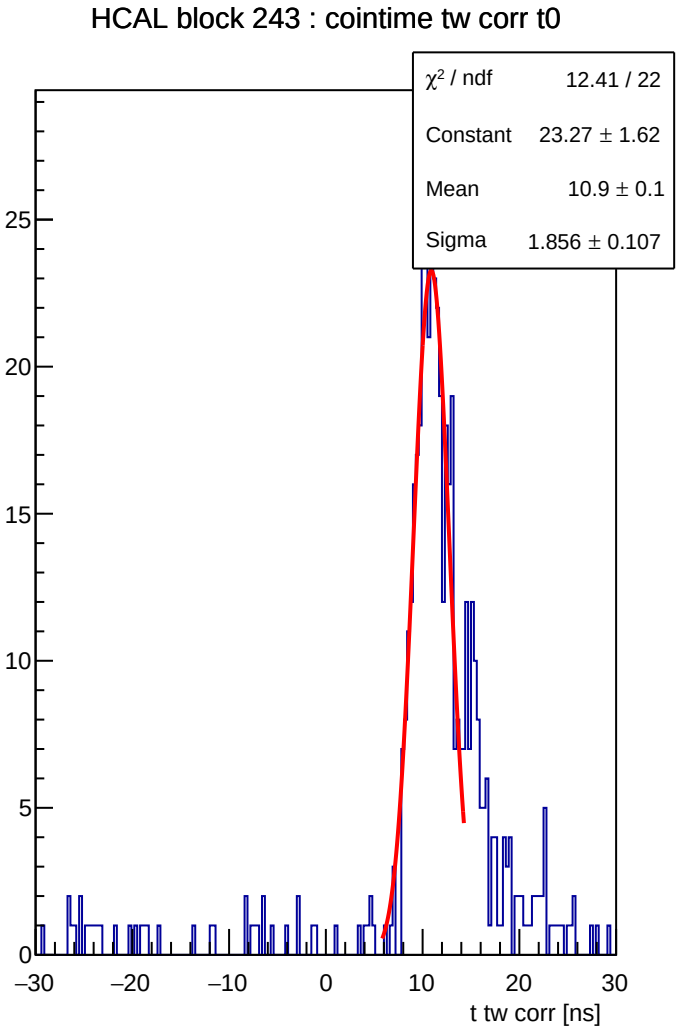

HCAL block 241 : cointime_t0
χ² / ndf 49.77 / 34
Constant 45.23 ± 1.98
Mean 11.95 ± 0.09
Sigma 2.29 ± 0.07
t [ns]

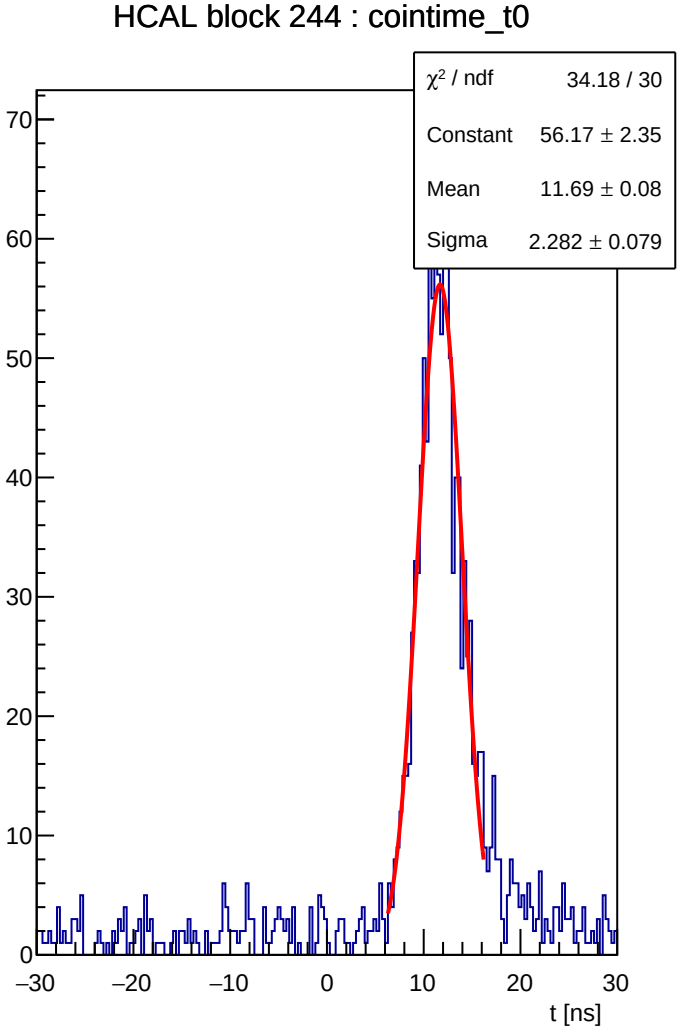

HCAL block 241 : cointime tw corr t0
χ² / ndf 52.47 / 34
Constant 50.53 ± 2.30
Mean 11.81 ± 0.07
Sigma 2.017 ± 0.063
t tw corr [ns]

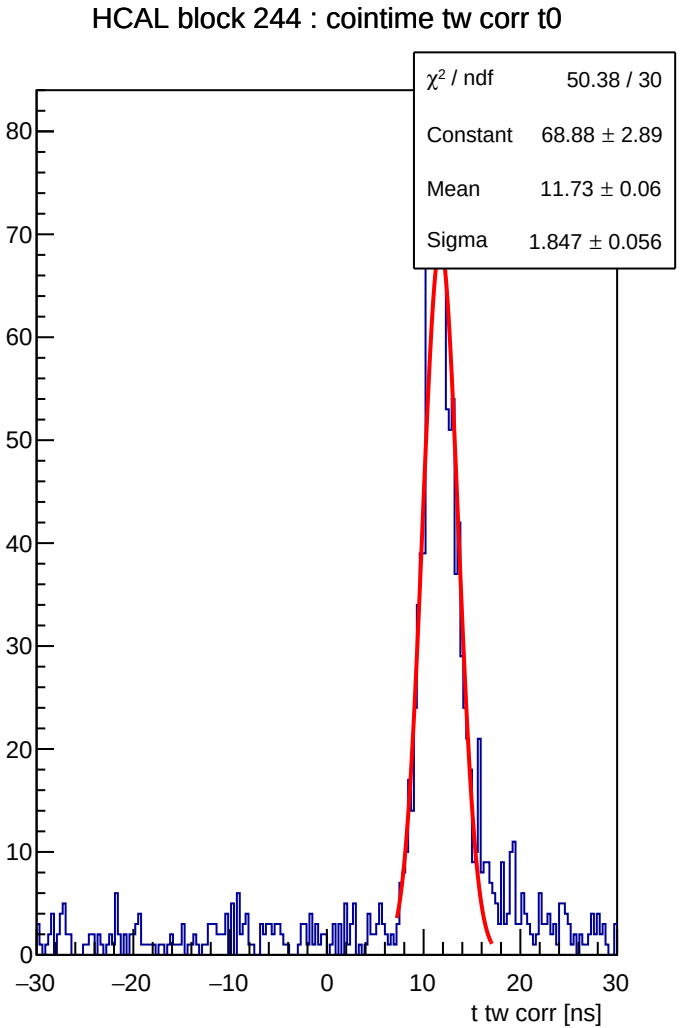

HCAL block 242 : cointime_t0
χ² / ndf 52.91 / 34
Constant 60.49 ± 2.32
Mean 11.76 ± 0.09
Sigma 2.405 ± 0.075
0
10
20
30
40
50
60
70
–30
–20
–10
0
10
20
30
t [ns]

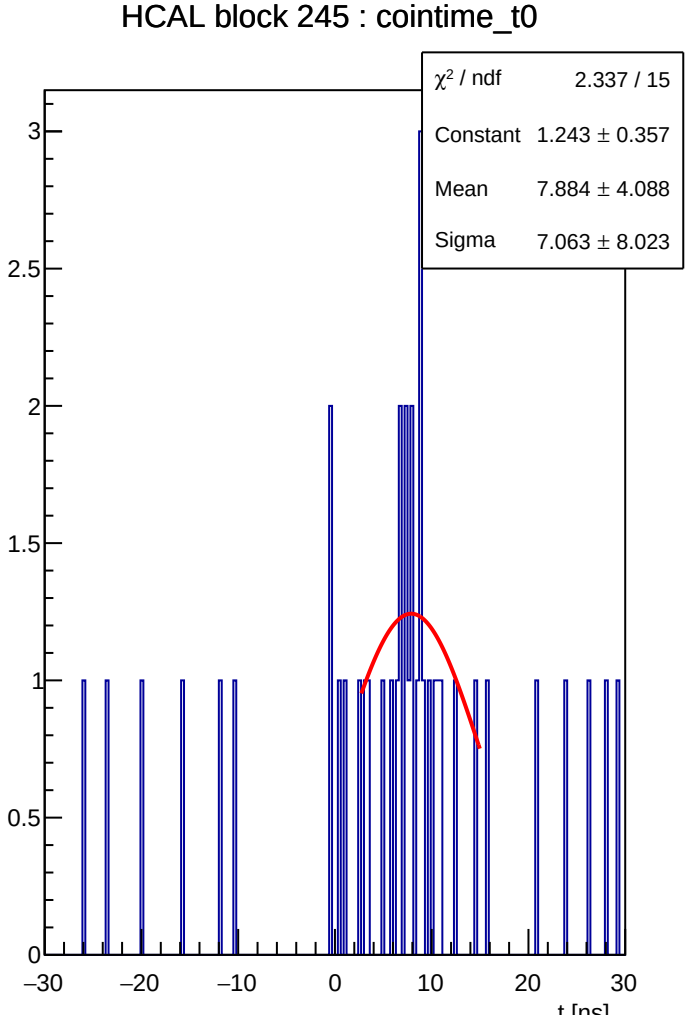

HCAL block 242 : cointime tw corr t0
χ² / ndf 63.84 / 32
Constant 76.3 ± 3.0
Mean 11.63 ± 0.06
Sigma 1.89 ± 0.05
0
10
20
30
40
50
60
70
80
90
–30
–20
–10
0
10
20
30
t tw corr [ns]

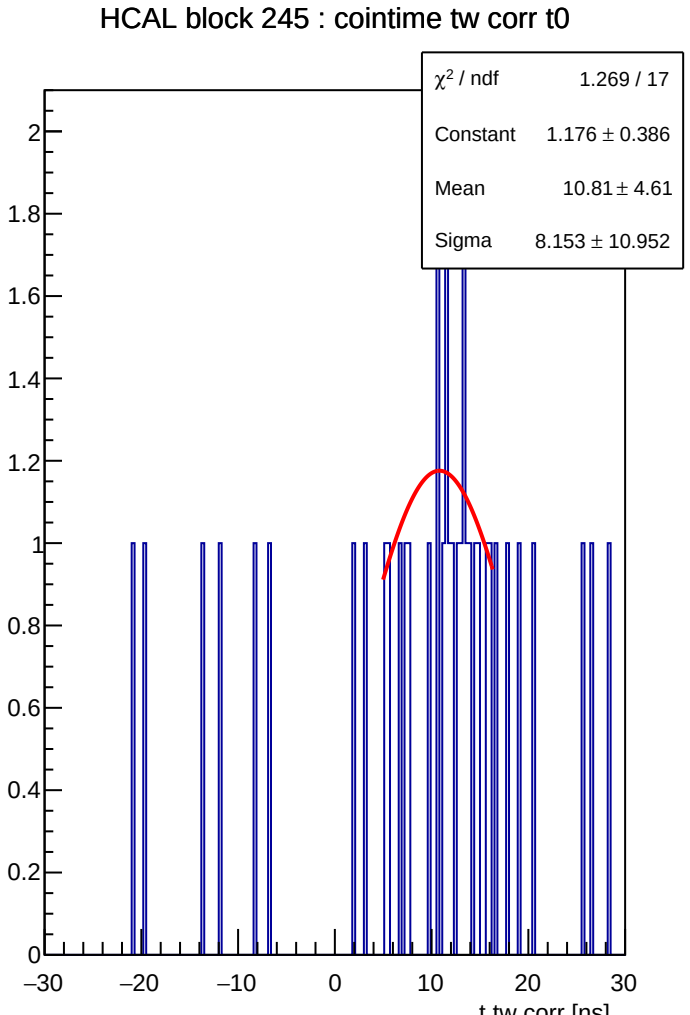

HCAL block 243 : cointime_t0
χ² / ndf 33.15 / 29
Constant 22.37 ± 1.63
Mean −18.79 ± 0.12
Sigma 2.126 ± 0.138
30
25
20
15
10
5
0
−30
−20
−10
0
10
20
30
t [ns]

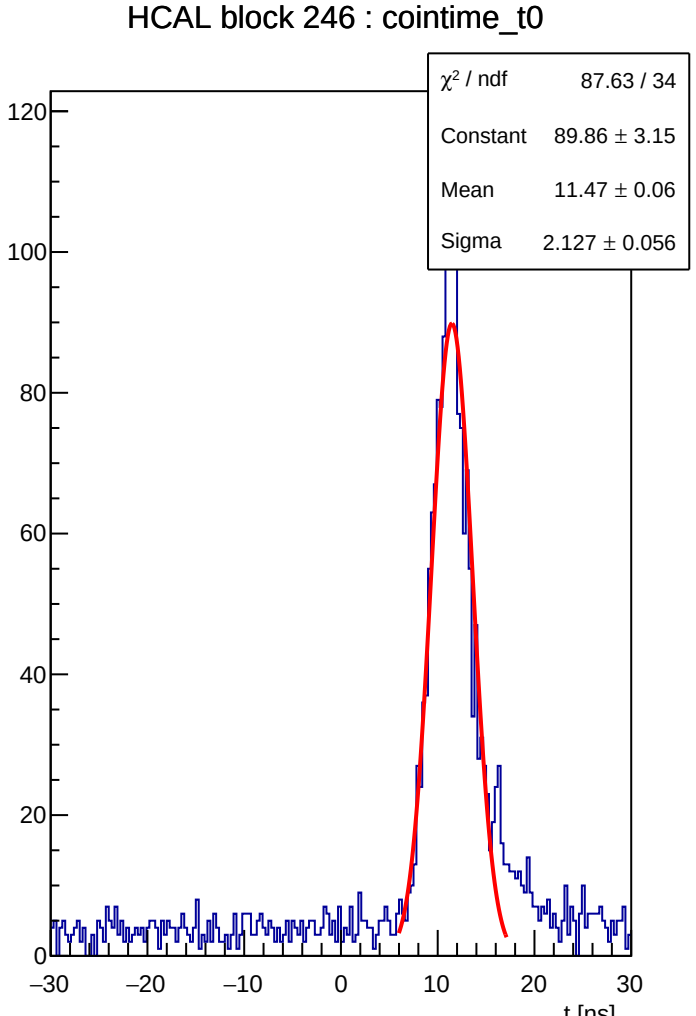

HCAL block 243 : cointime tw corr t0
χ² / ndf 12.41 / 22
Constant 23.27 ± 1.62
Mean 10.9 ± 0.1
Sigma 1.856 ± 0.107
25
20
15
10
5
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

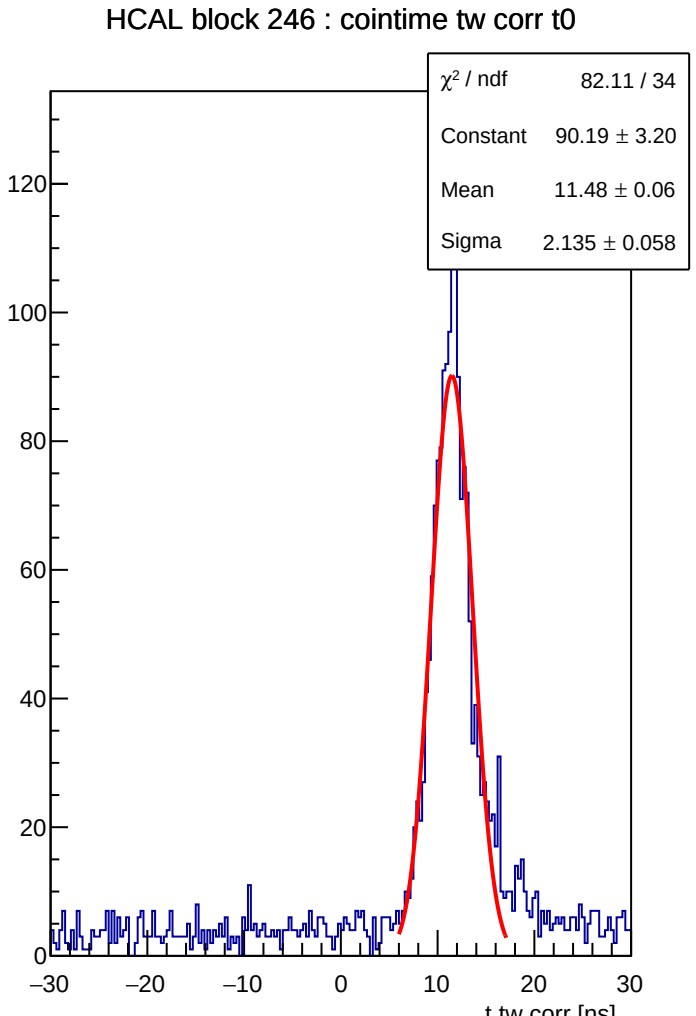

HCAL block 244 : cointime_t0
χ² / ndf 34.18 / 30
Constant 56.17 ± 2.35
Mean 11.69 ± 0.08
Sigma 2.282 ± 0.079
70
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t [ns]

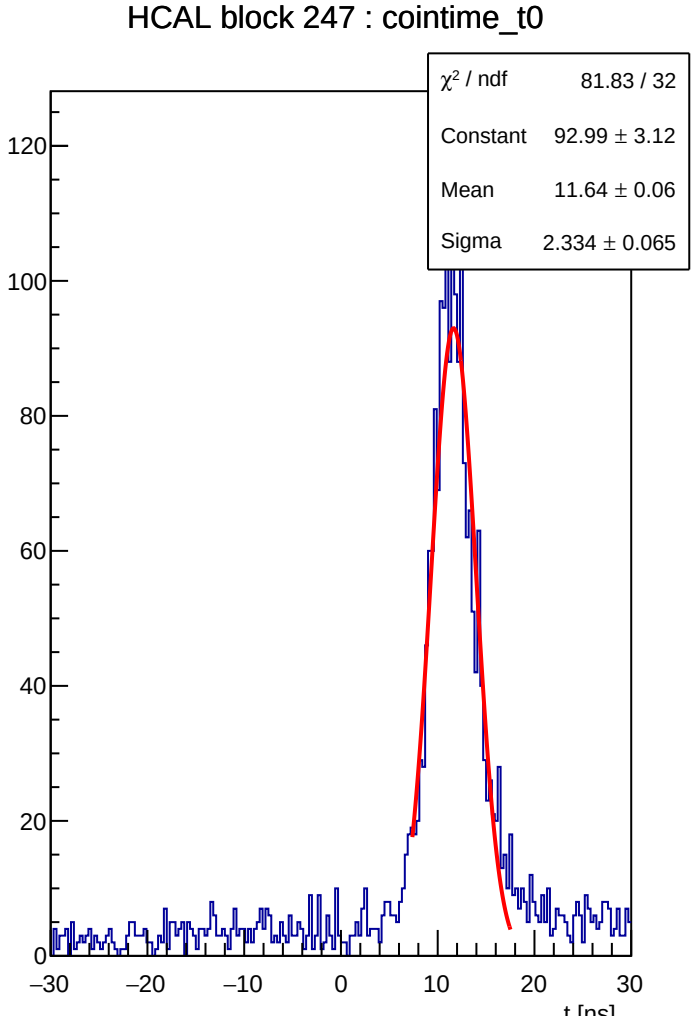

HCAL block 244 : cointime tw corr t0
χ² / ndf 50.38 / 30
Constant 68.88 ± 2.89
Mean 11.73 ± 0.06
Sigma 1.847 ± 0.056
80
70
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

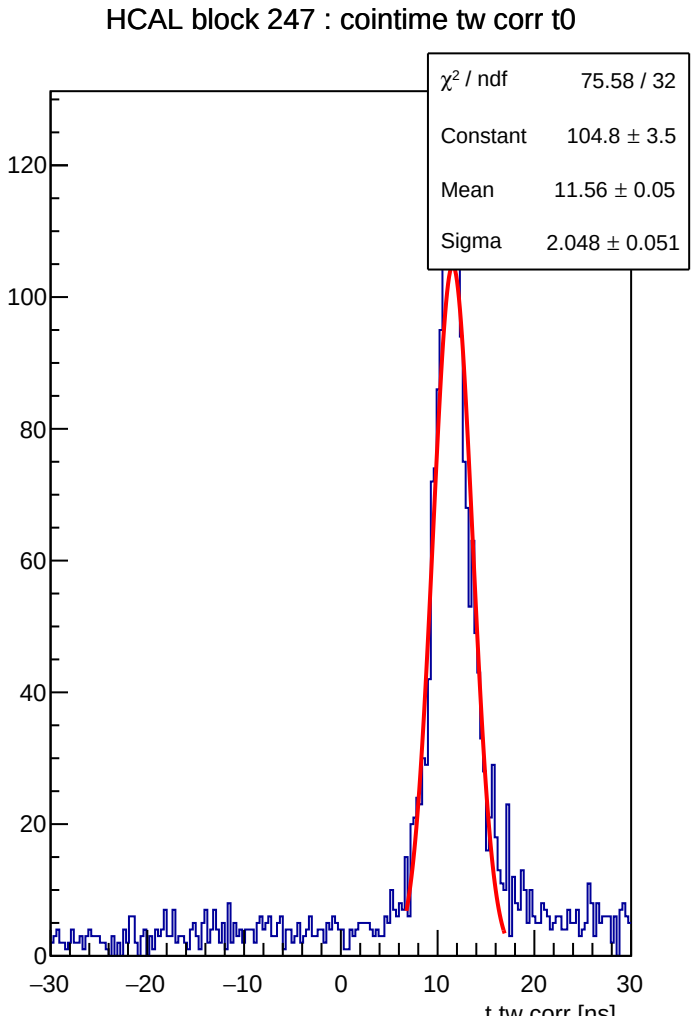

HCAL block 245 : cointime_t0
χ² / ndf 2.337 / 15
Constant 1.243 ± 0.357
Mean 7.884 ± 4.088
Sigma 7.063 ± 8.023
t [ns]

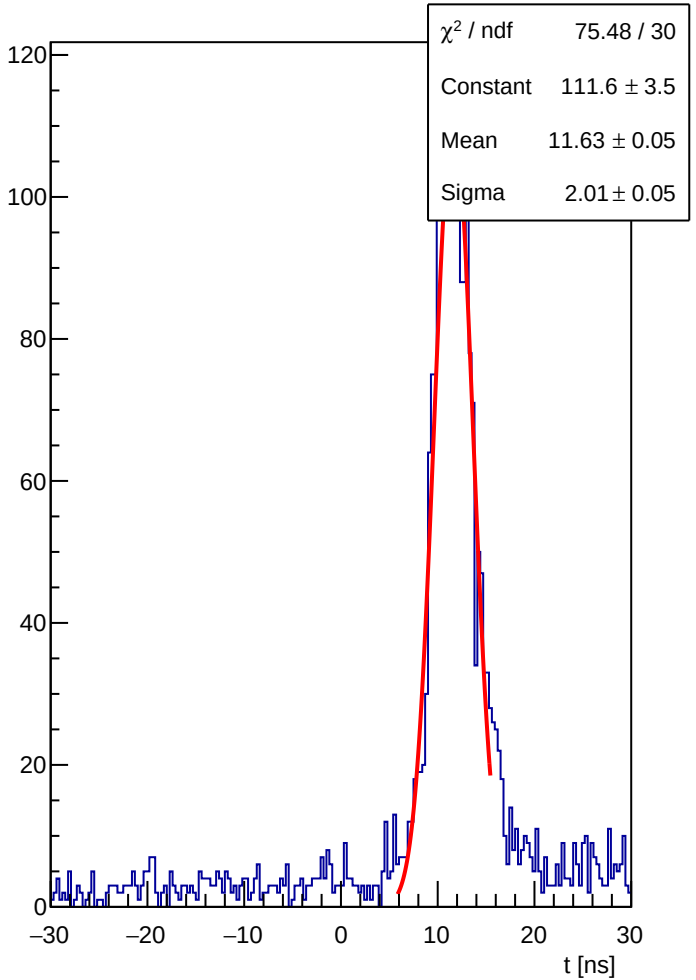

HCAL block 245 : cointime tw corr t0
χ² / ndf 1.269 / 17
Constant 1.176 ± 0.386
Mean 10.81 ± 4.61
Sigma 8.153 ± 10.952
t tw corr [ns]

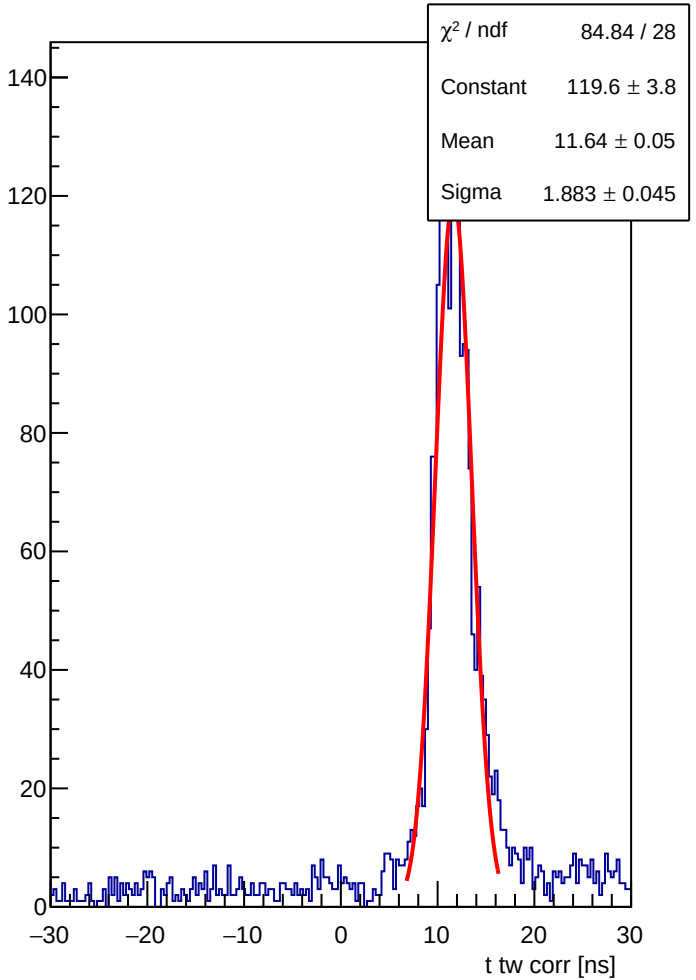

HCAL block 246 : cointime_t0
χ² / ndf 87.63 / 34
Constant 89.86 ± 3.15
Mean 11.47 ± 0.06
Sigma 2.127 ± 0.056
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

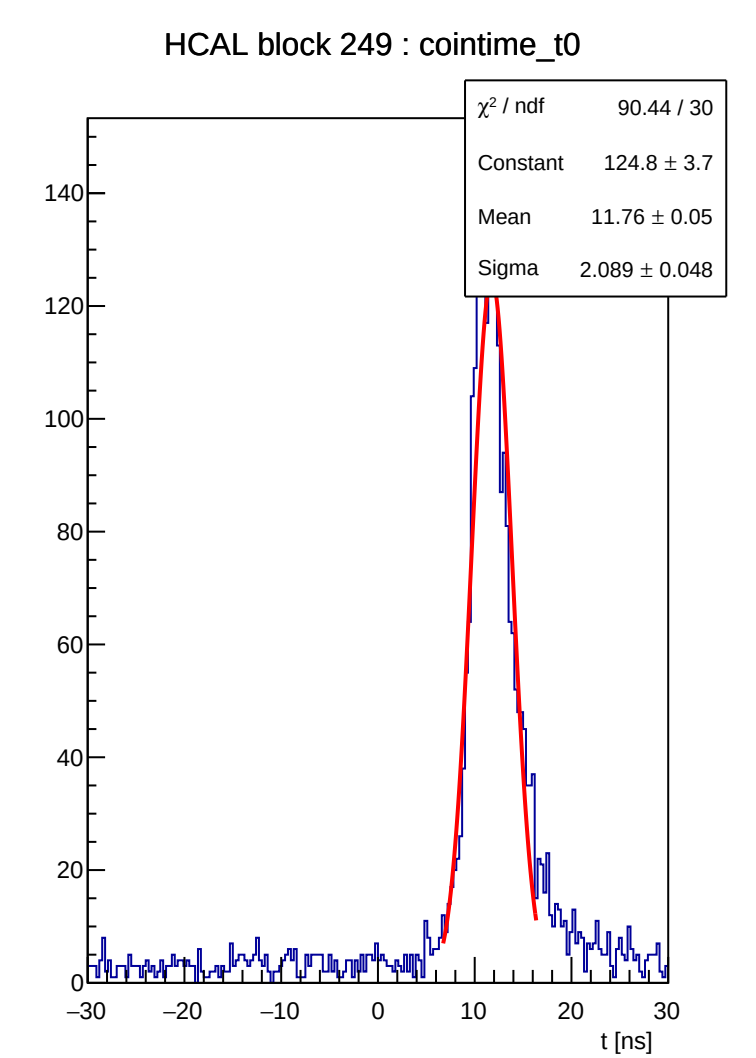

HCAL block 246 : cointime tw corr t0
χ² / ndf 82.11 / 34
Constant 90.19 ± 3.20
Mean 11.48 ± 0.06
Sigma 2.135 ± 0.058
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

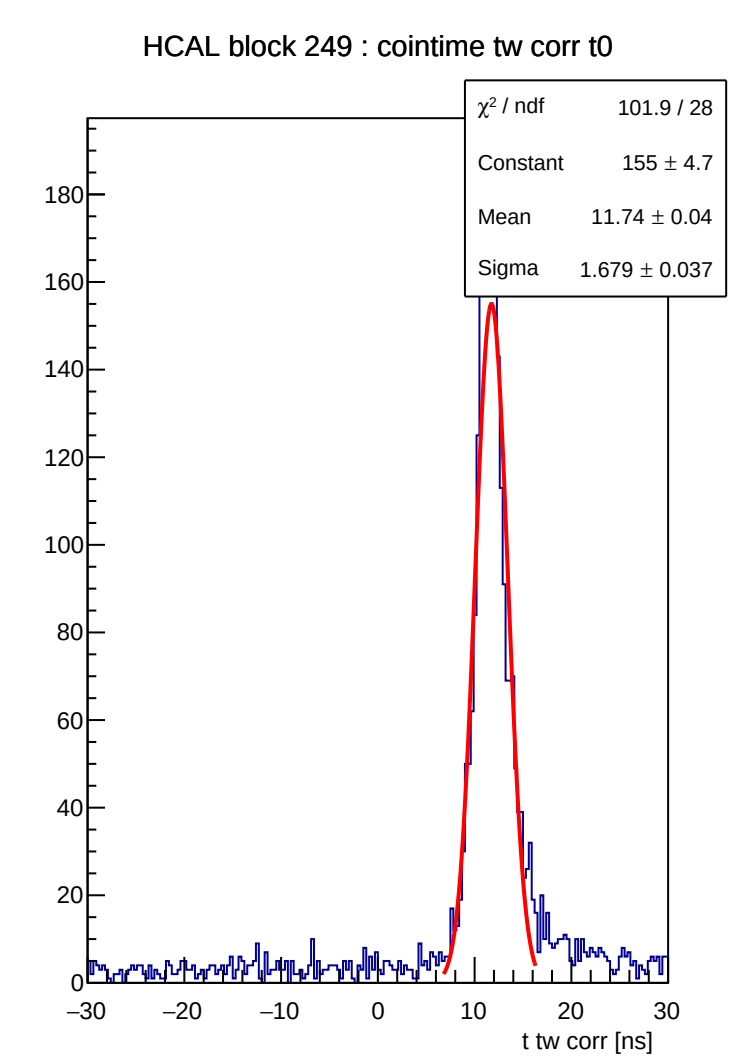

HCAL block 247 : cointime_t0
χ² / ndf 81.83 / 32
Constant 92.99 ± 3.12
Mean 11.64 ± 0.06
Sigma 2.334 ± 0.065
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

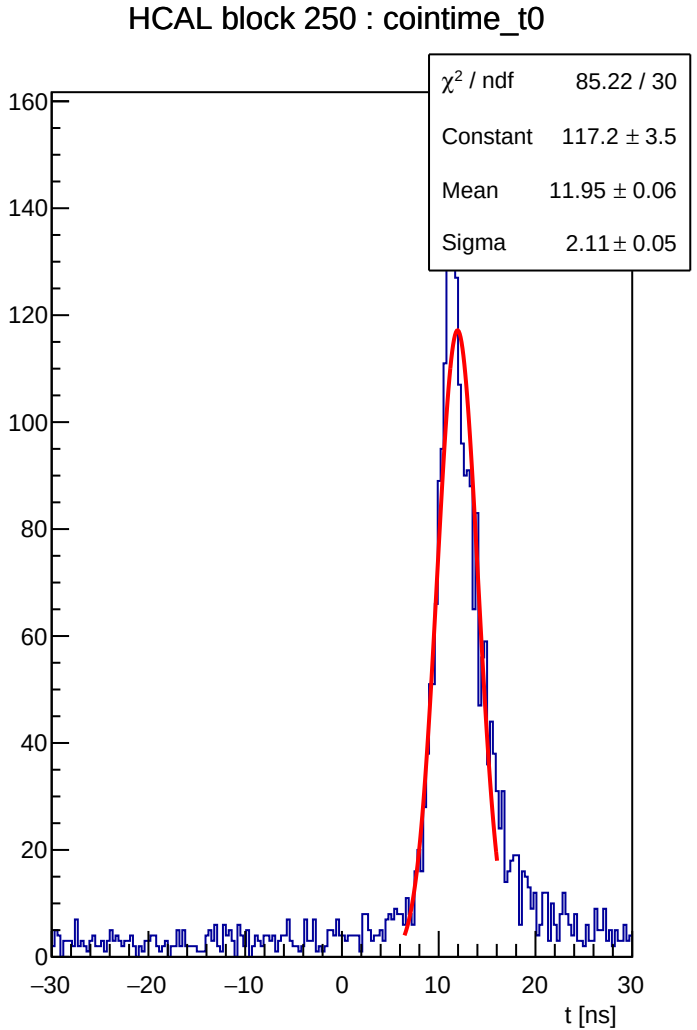

HCAL block 247 : cointime tw corr t0
χ² / ndf 75.58 / 32
Constant 104.8 ± 3.5
Mean 11.56 ± 0.05
Sigma 2.048 ± 0.051
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

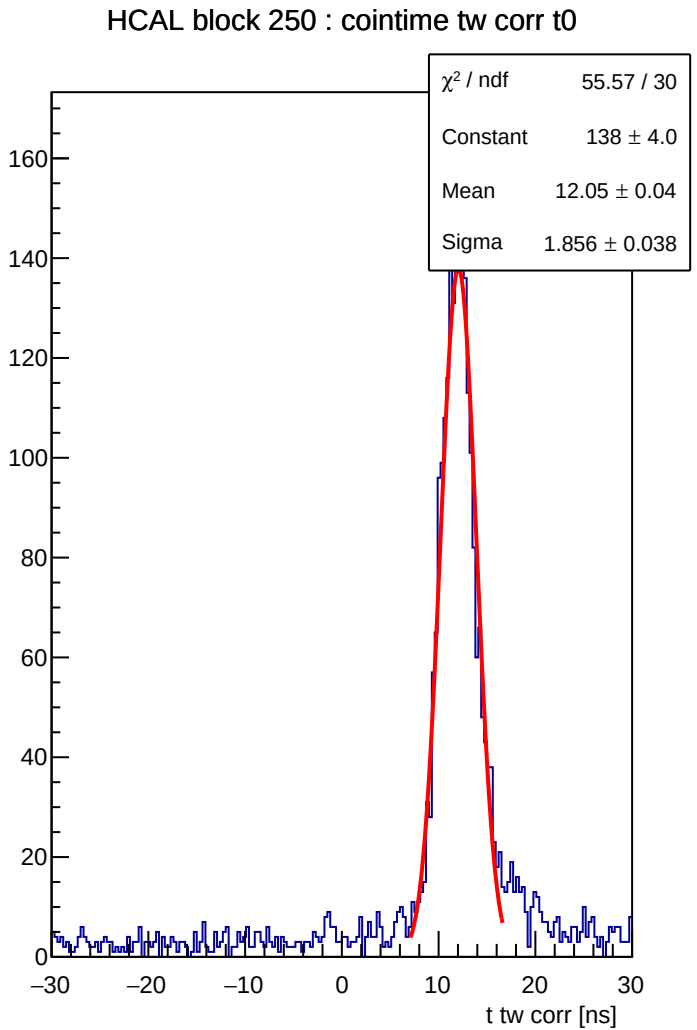

HCAL block 248 : cointime_t0
χ² / ndf 75.48 / 30
Constant 111.6 ± 3.5
Mean 11.63 ± 0.05
Sigma 2.01 ± 0.05
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

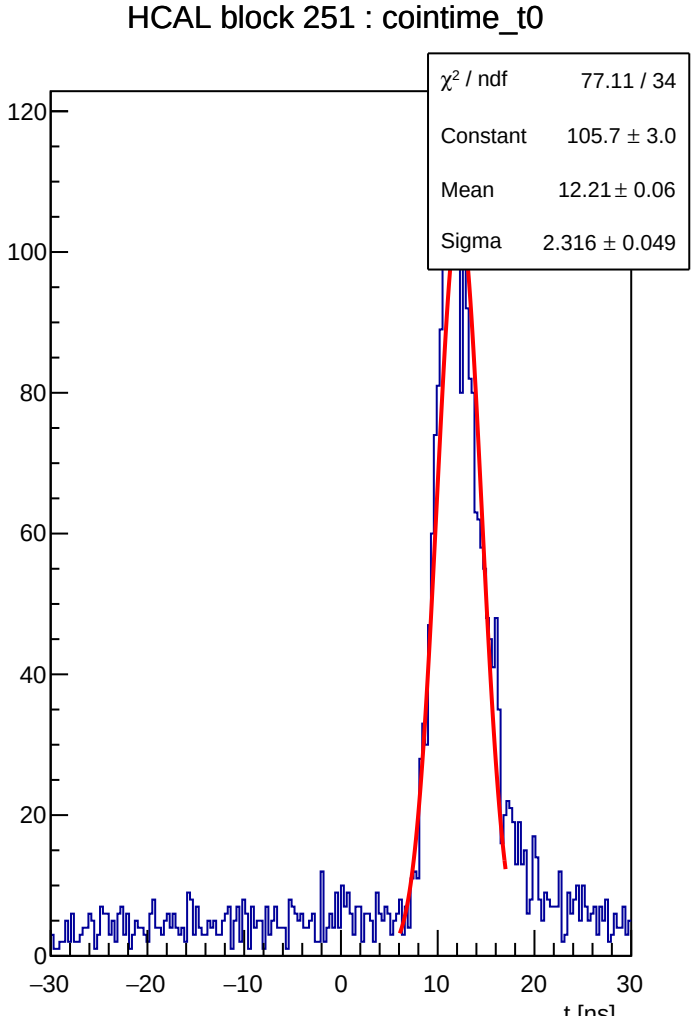

HCAL block 248 : cointime tw corr t0
χ² / ndf 84.84 / 28
Constant 119.6 ± 3.8
Mean 11.64 ± 0.05
Sigma 1.883 ± 0.045
140
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

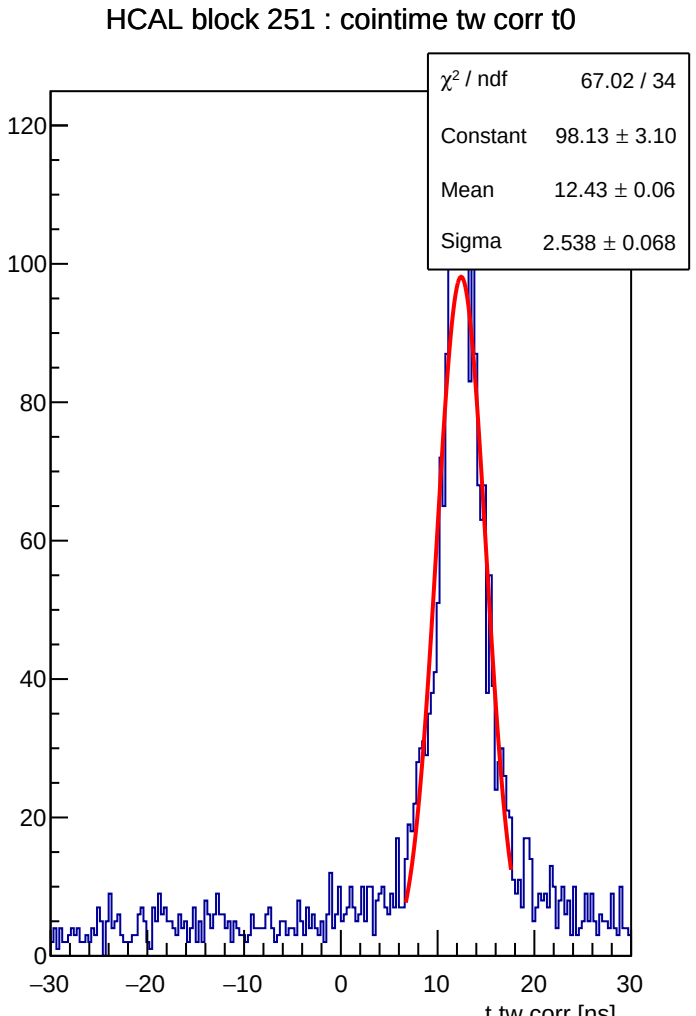

HCAL block 249 : cointime_t0
χ² / ndf 90.44 / 30
Constant 124.8 ± 3.7
Mean 11.76 ± 0.05
Sigma 2.089 ± 0.048
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

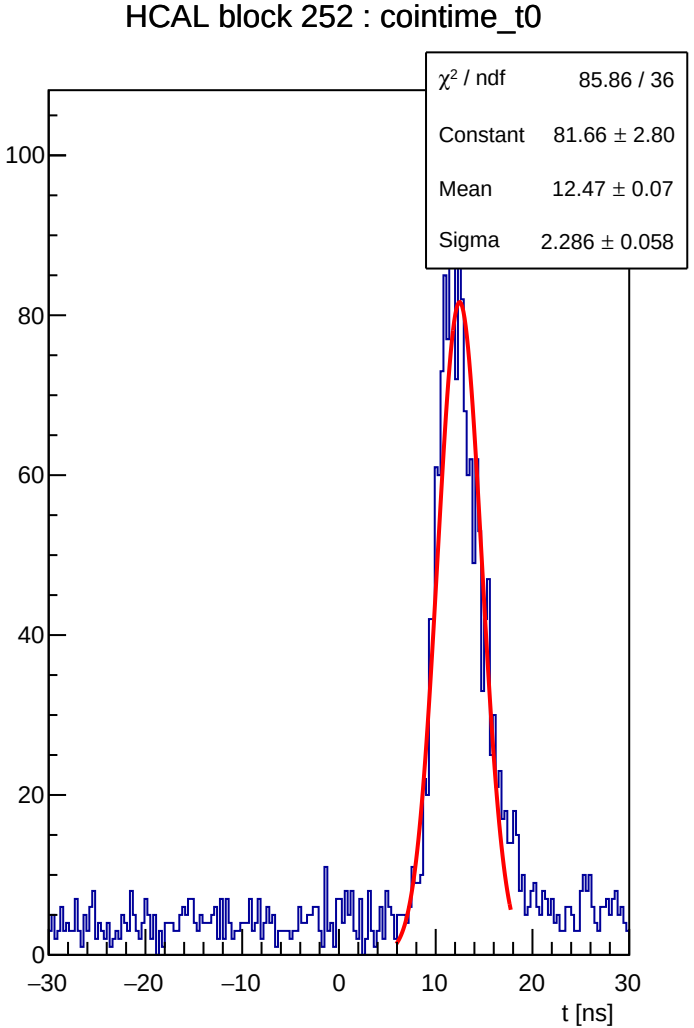

HCAL block 249 : cointime tw corr t0
χ² / ndf 101.9 / 28
Constant 155 ± 4.7
Mean 11.74 ± 0.04
Sigma 1.679 ± 0.037
180
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

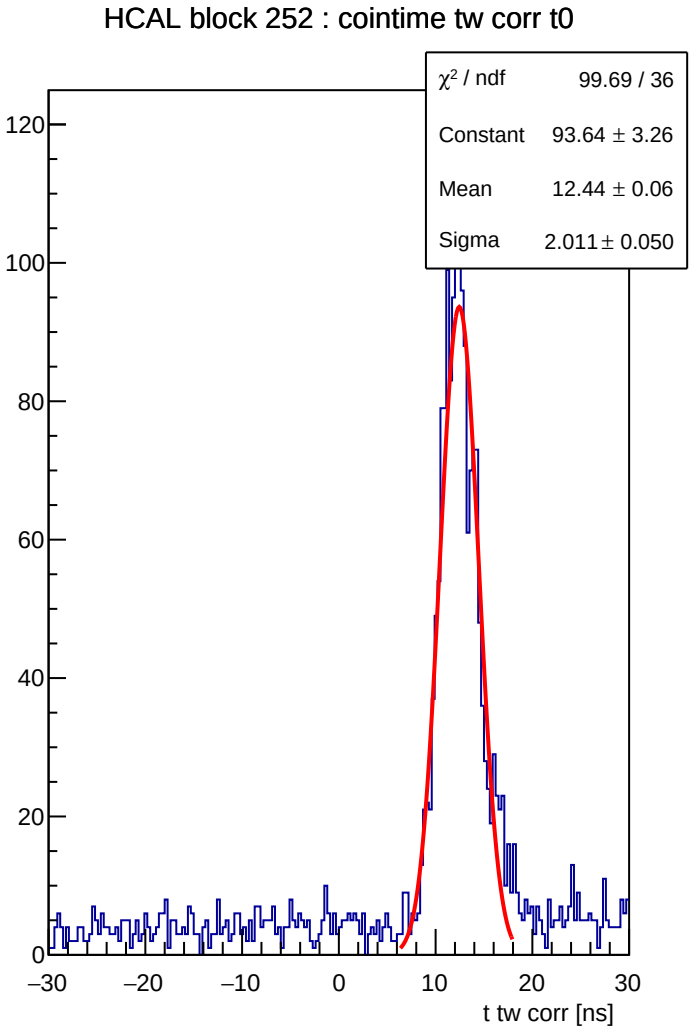

HCAL block 250 : cointime_t0
χ² / ndf 85.22 / 30
Constant 117.2 ± 3.5
Mean 11.95 ± 0.06
Sigma 2.11 ± 0.05
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

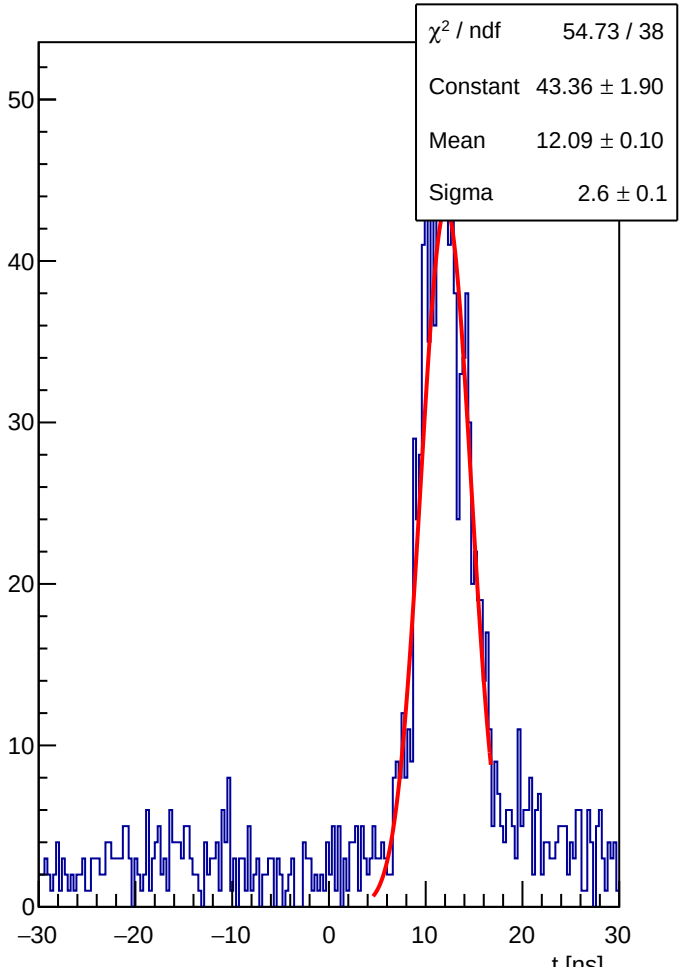

HCAL block 250 : cointime tw corr t0
χ² / ndf 55.57 / 30
Constant 138 ± 4.0
Mean 12.05 ± 0.04
Sigma 1.856 ± 0.038
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

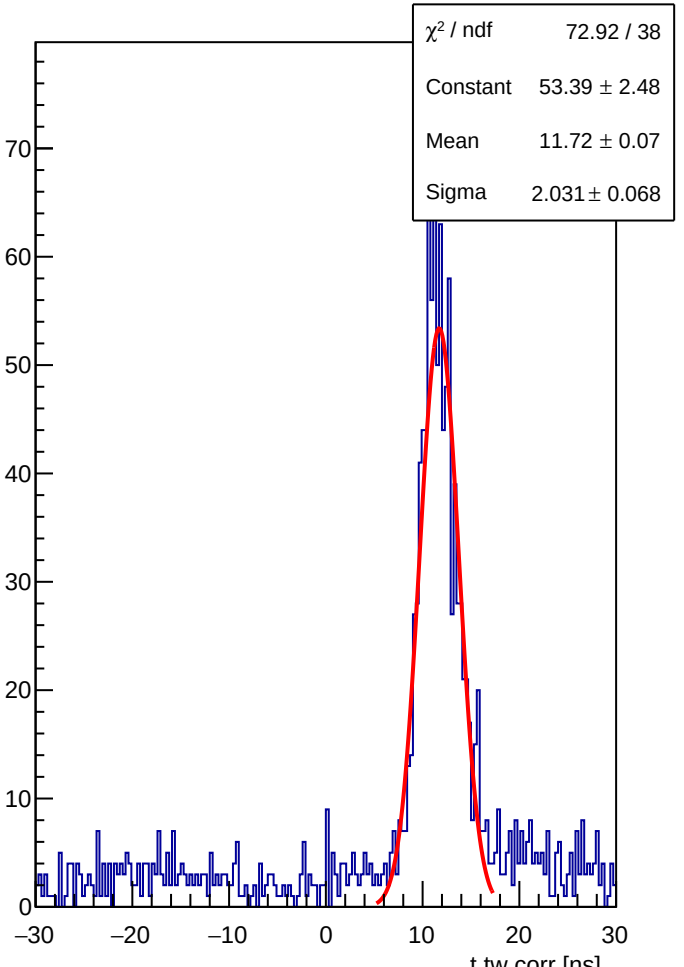

HCAL block 251 : cointime_t0
χ² / ndf 77.11 / 34
Constant 105.7 ± 3.0
Mean 12.21 ± 0.06
Sigma 2.316 ± 0.049
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

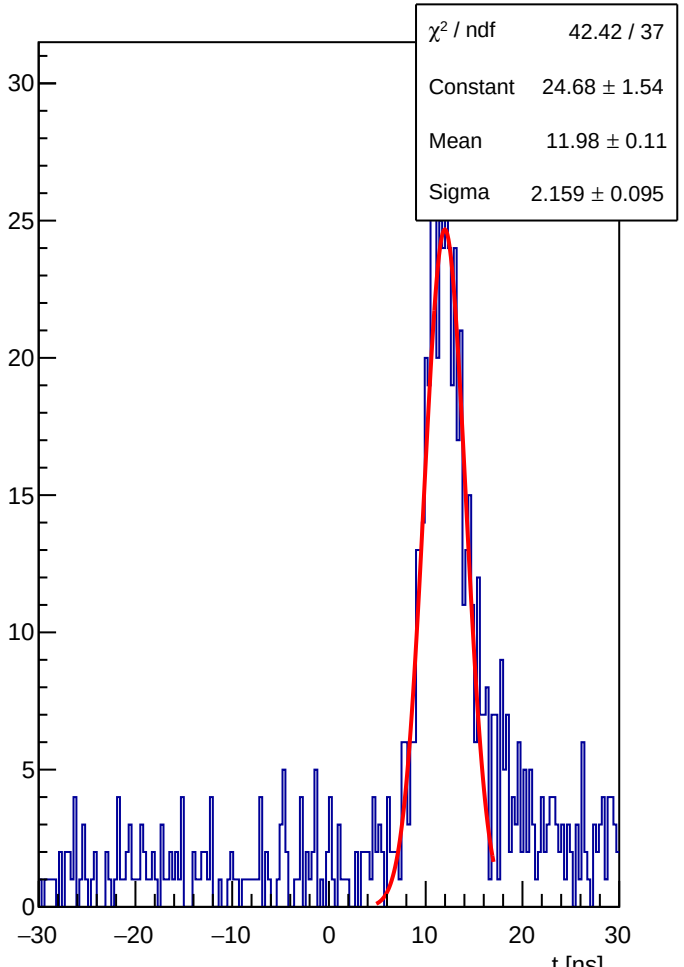

HCAL block 251 : cointime tw corr t0
χ² / ndf 67.02 / 34
Constant 98.13 ± 3.10
Mean 12.43 ± 0.06
Sigma 2.538 ± 0.068
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

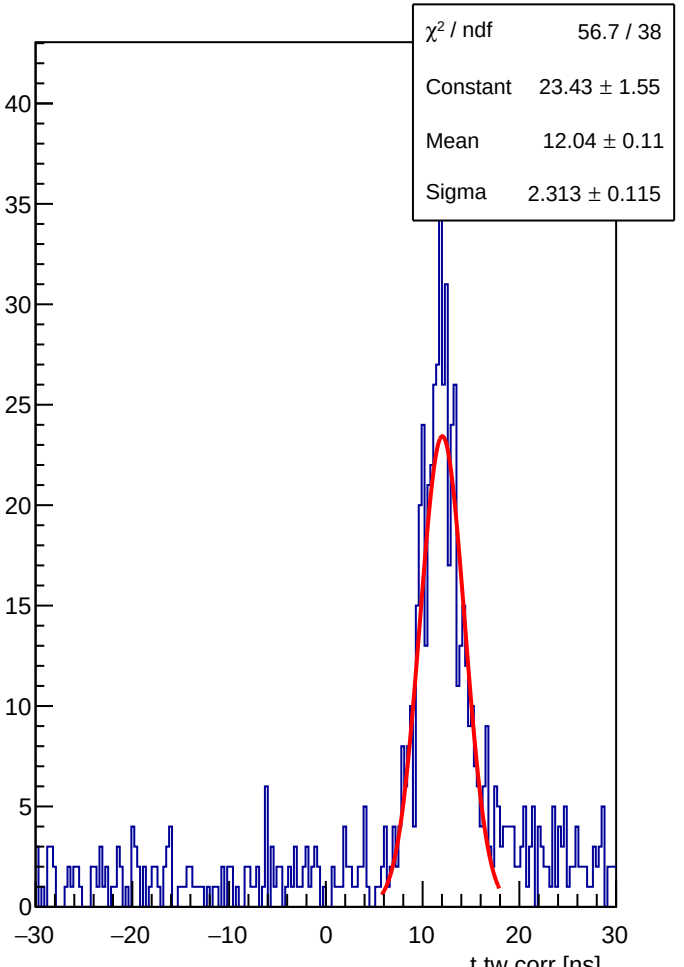

HCAL block 252 : cointime_t0
χ² / ndf 85.86 / 36
Constant 81.66 ± 2.80
Mean 12.47 ± 0.07
Sigma 2.286 ± 0.058
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

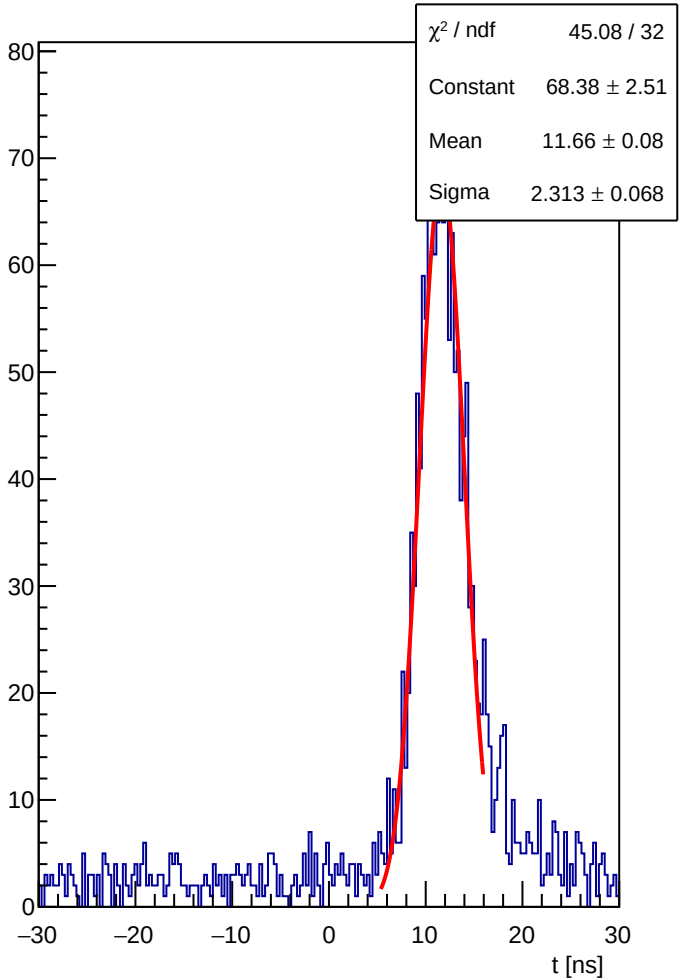

HCAL block 252 : cointime tw corr t0
χ² / ndf 99.69 / 36
Constant 93.64 ± 3.26
Mean 12.44 ± 0.06
Sigma 2.011 ± 0.050
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

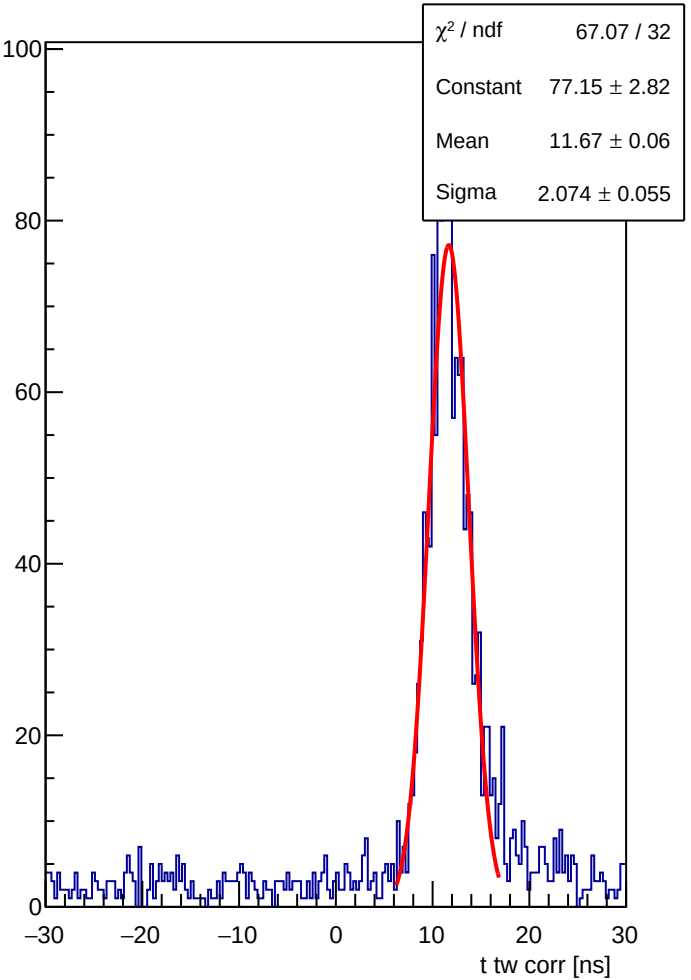

HCAL block 253 : cointime_t0
χ² / ndf 54.73 / 38
Constant 43.36 ± 1.90
Mean 12.09 ± 0.10
Sigma 2.6 ± 0.1
t [ns]

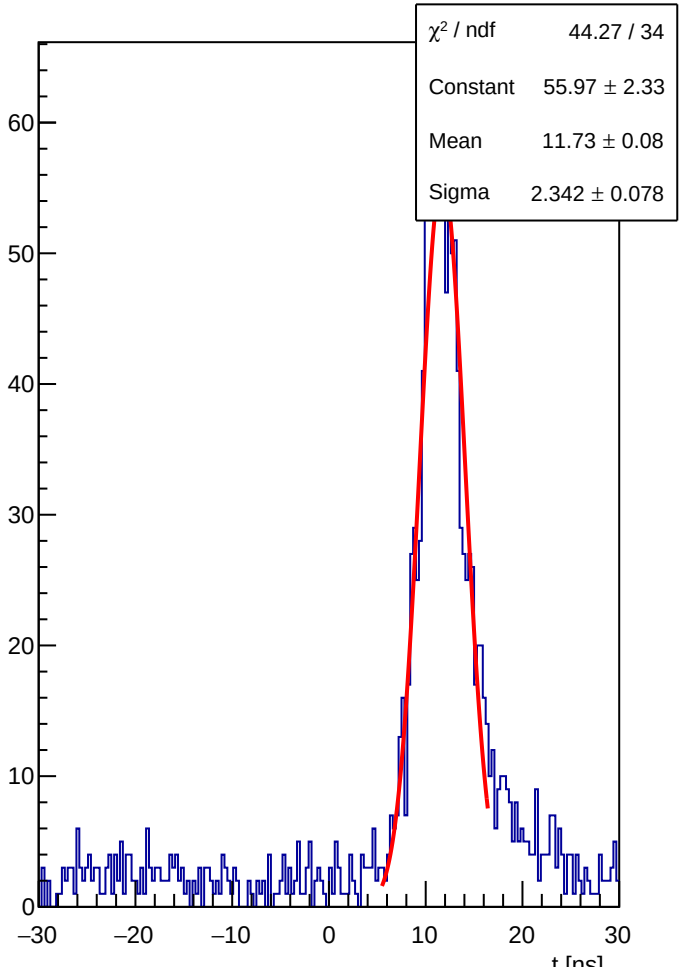

HCAL block 253 : cointime tw corr t0
χ² / ndf 72.92 / 38
Constant 53.39 ± 2.48
Mean 11.72 ± 0.07
Sigma 2.031 ± 0.068
t tw corr [ns]

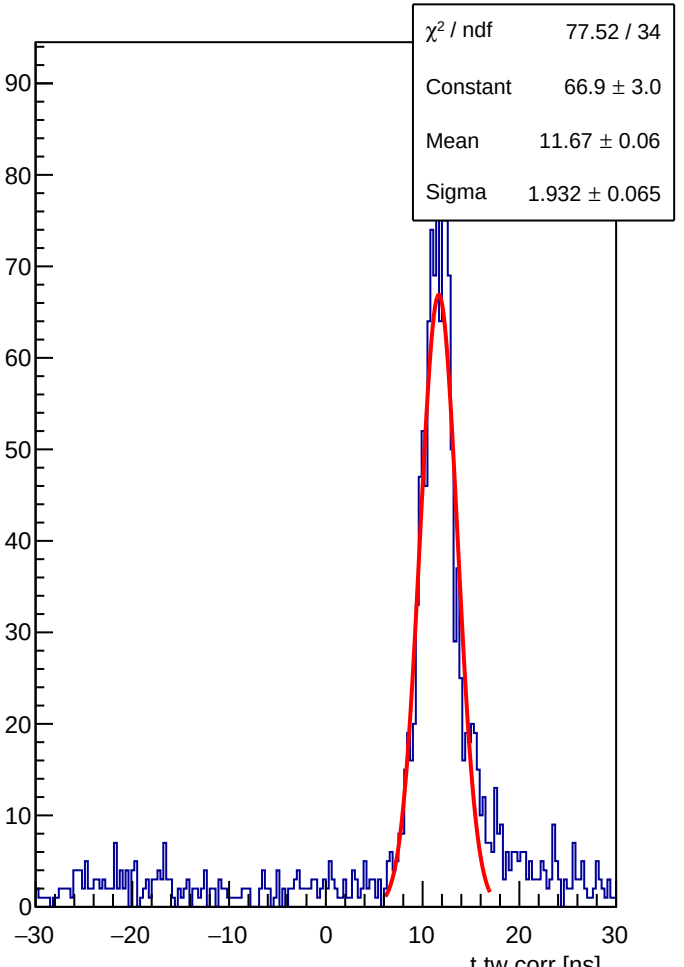

HCAL block 254 : cointime_t0
χ² / ndf 42.42 / 37
Constant 24.68 ± 1.54
Mean 11.98 ± 0.11
Sigma 2.159 ± 0.095
30
25
20
15
10
5
0
–30
–20
–10
0
10
20
30
t [ns]

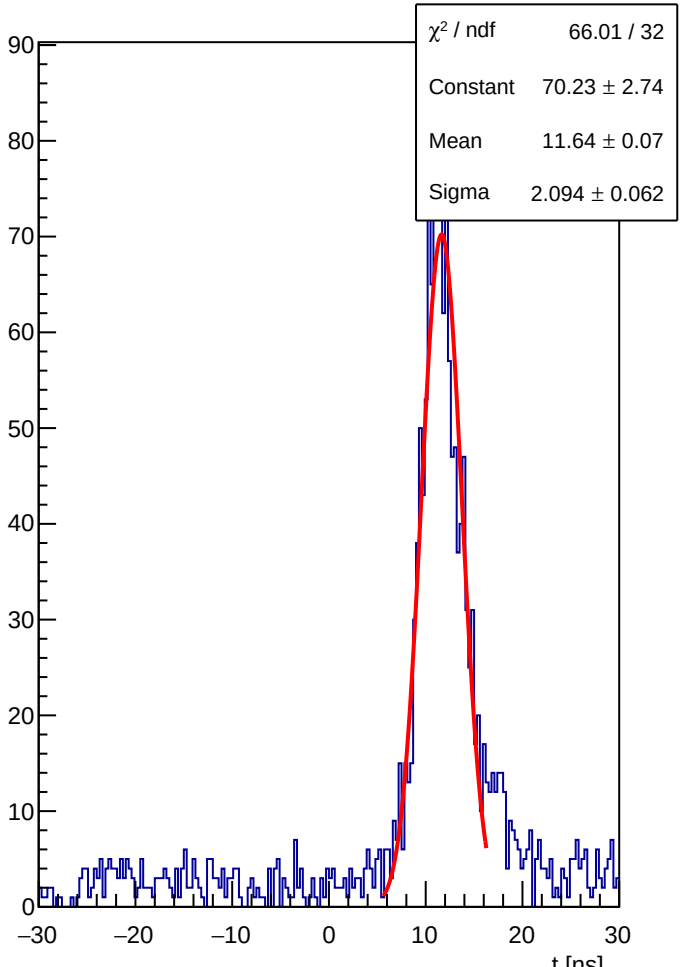

HCAL block 254 : cointime tw corr t0
χ² / ndf 56.7 / 38
Constant 23.43 ± 1.55
Mean 12.04 ± 0.11
Sigma 2.313 ± 0.115
40
35
30
25
20
15
10
5
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

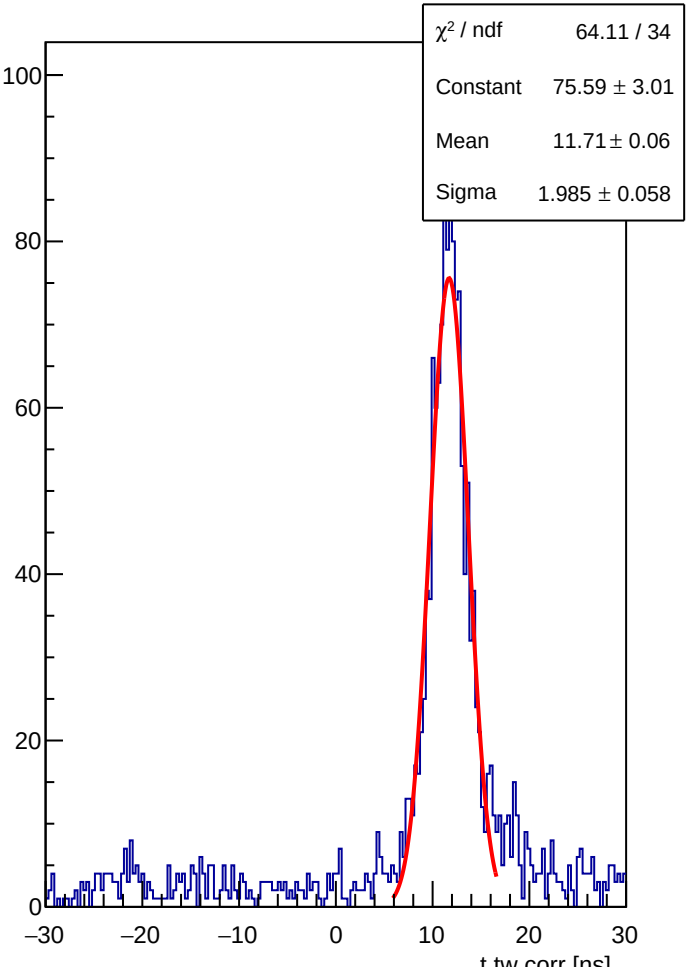

HCAL block 255 : cointime_t0
χ² / ndf 45.08 / 32
Constant 68.38 ± 2.51
Mean 11.66 ± 0.08
Sigma 2.313 ± 0.068
80
70
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t [ns]

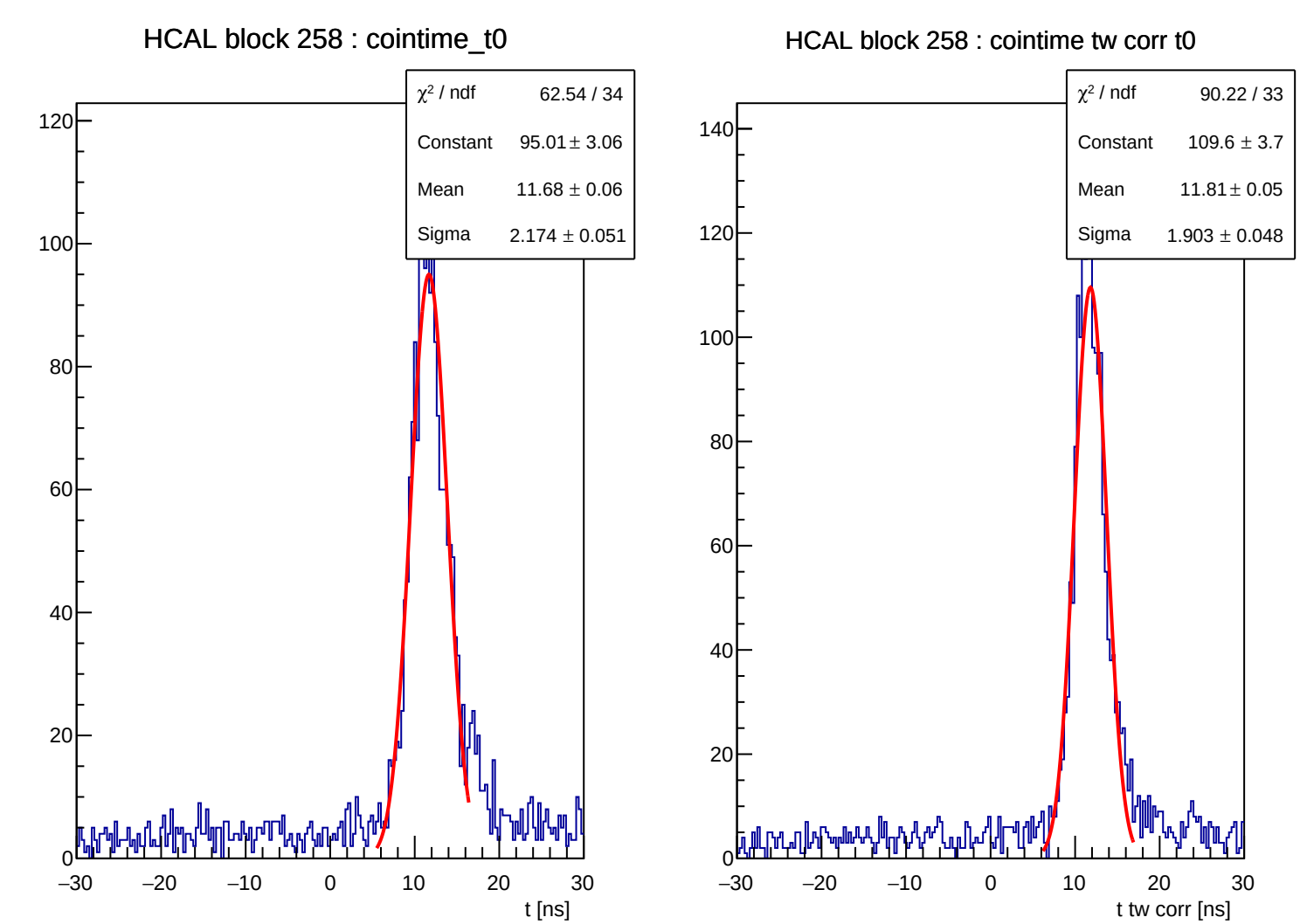

HCAL block 255 : cointime tw corr t0
χ² / ndf 67.07 / 32
Constant 77.15 ± 2.82
Mean 11.67 ± 0.06
Sigma 2.074 ± 0.055
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

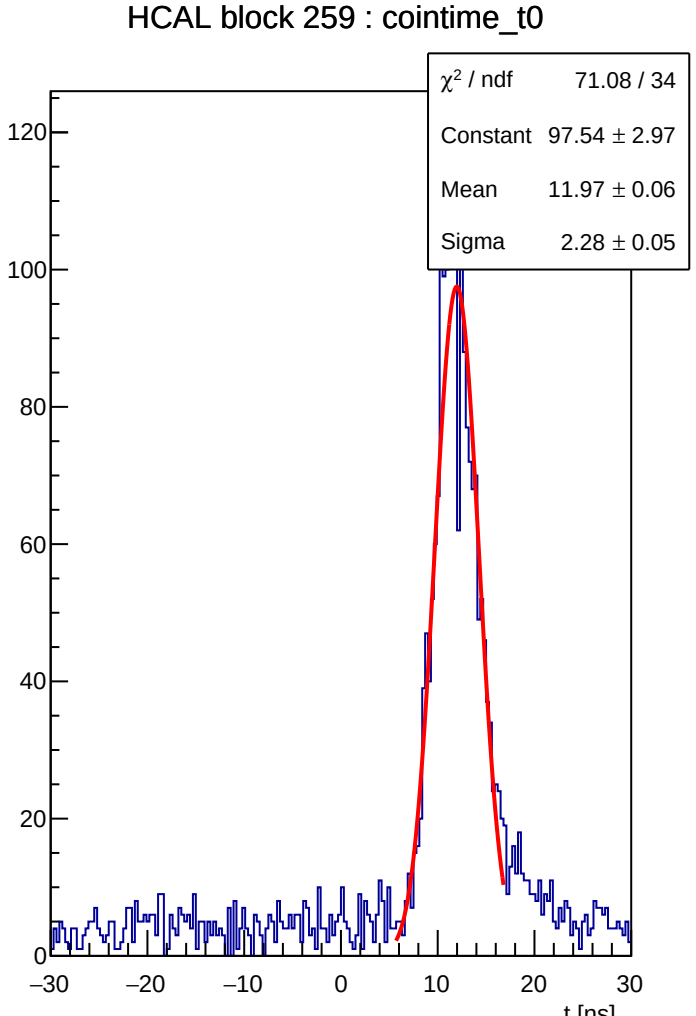

HCAL block 256 : cointime_t0
χ² / ndf 44.27 / 34
Constant 55.97 ± 2.33
Mean 11.73 ± 0.08
Sigma 2.342 ± 0.078
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t [ns]

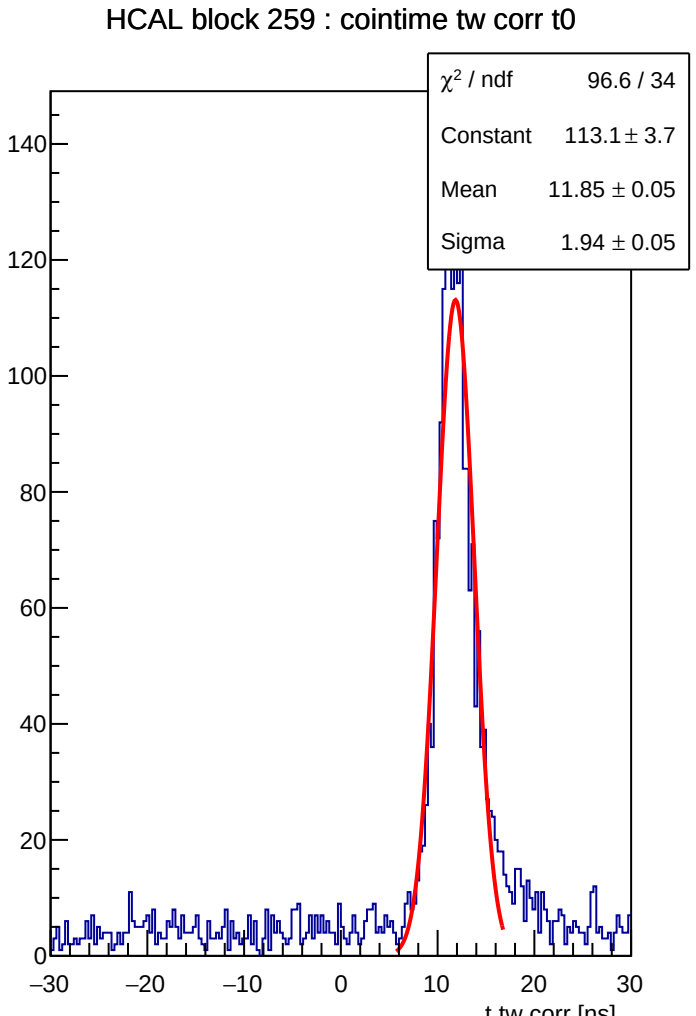

HCAL block 256 : cointime tw corr t0
χ² / ndf 77.52 / 34
Constant 66.9 ± 3.0
Mean 11.67 ± 0.06
Sigma 1.932 ± 0.065
90
80
70
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

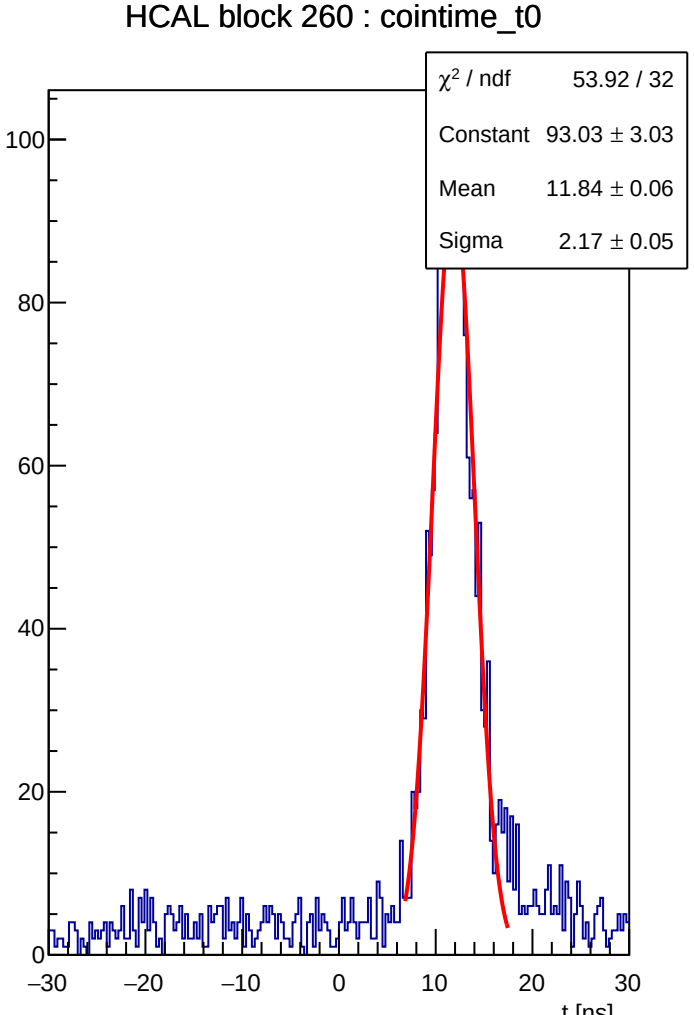

HCAL block 257 : cointime_t0
χ² / ndf 66.01 / 32
Constant 70.23 ± 2.74
Mean 11.64 ± 0.07
Sigma 2.094 ± 0.062
t [ns]

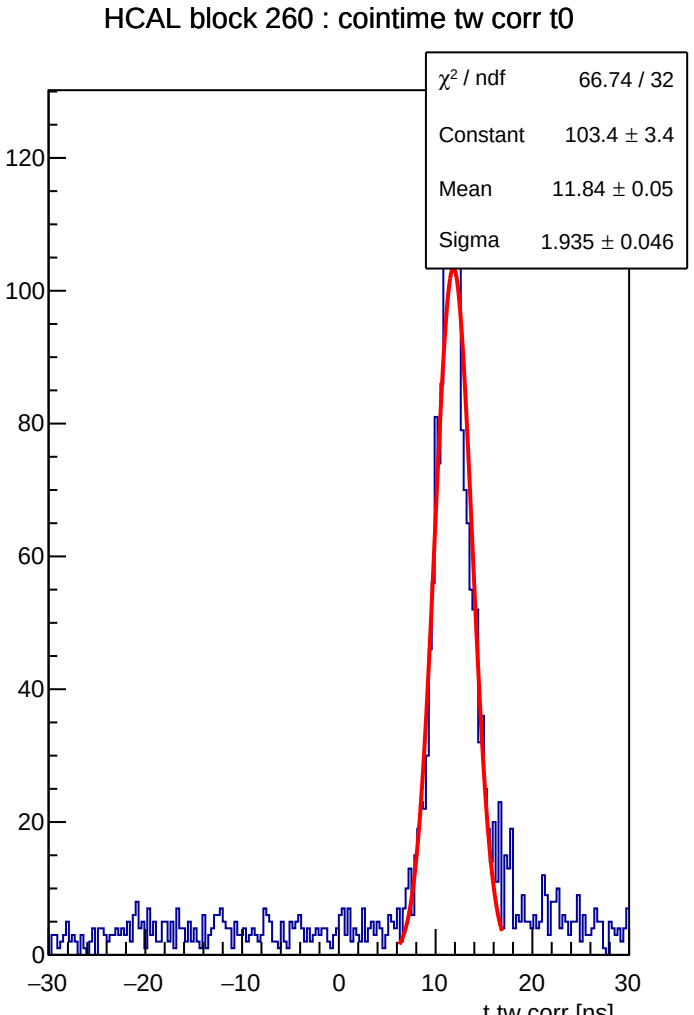

HCAL block 257 : cointime tw corr t0
χ² / ndf 64.11 / 34
Constant 75.59 ± 3.01
Mean 11.71 ± 0.06
Sigma 1.985 ± 0.058
t tw corr [ns]

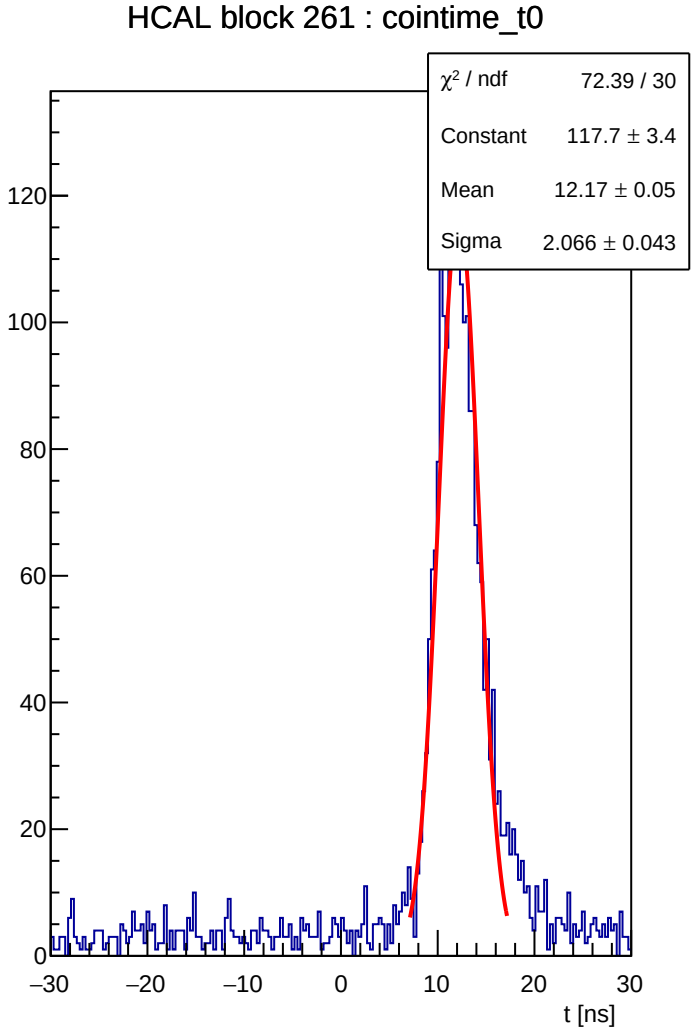

HCAL block 258 : cointime_t0
χ² / ndf 62.54 / 34
Constant 95.01 ± 3.06
Mean 11.68 ± 0.06
Sigma 2.174 ± 0.051
t [ns]
HCAL block 258 : cointime tw corr t0
χ² / ndf 90.22 / 33
Constant 109.6 ± 3.7
Mean 11.81 ± 0.05
Sigma 1.903 ± 0.048
t tw corr [ns]

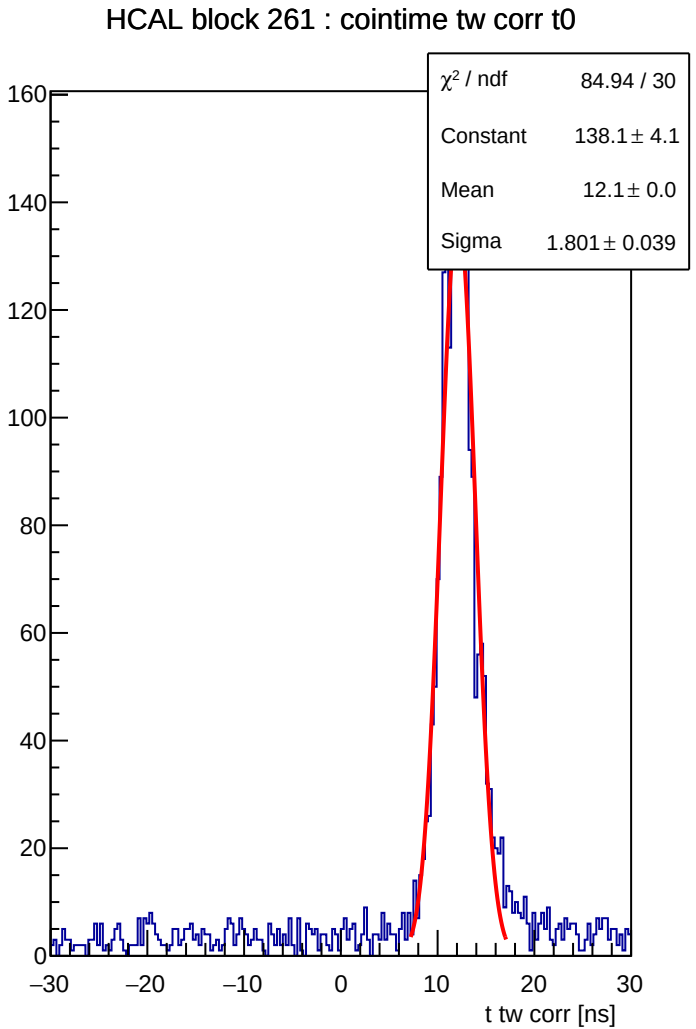

HCAL block 259 : cointime_t0
χ² / ndf 71.08 / 34
Constant 97.54 ± 2.97
Mean 11.97 ± 0.06
Sigma 2.28 ± 0.05
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

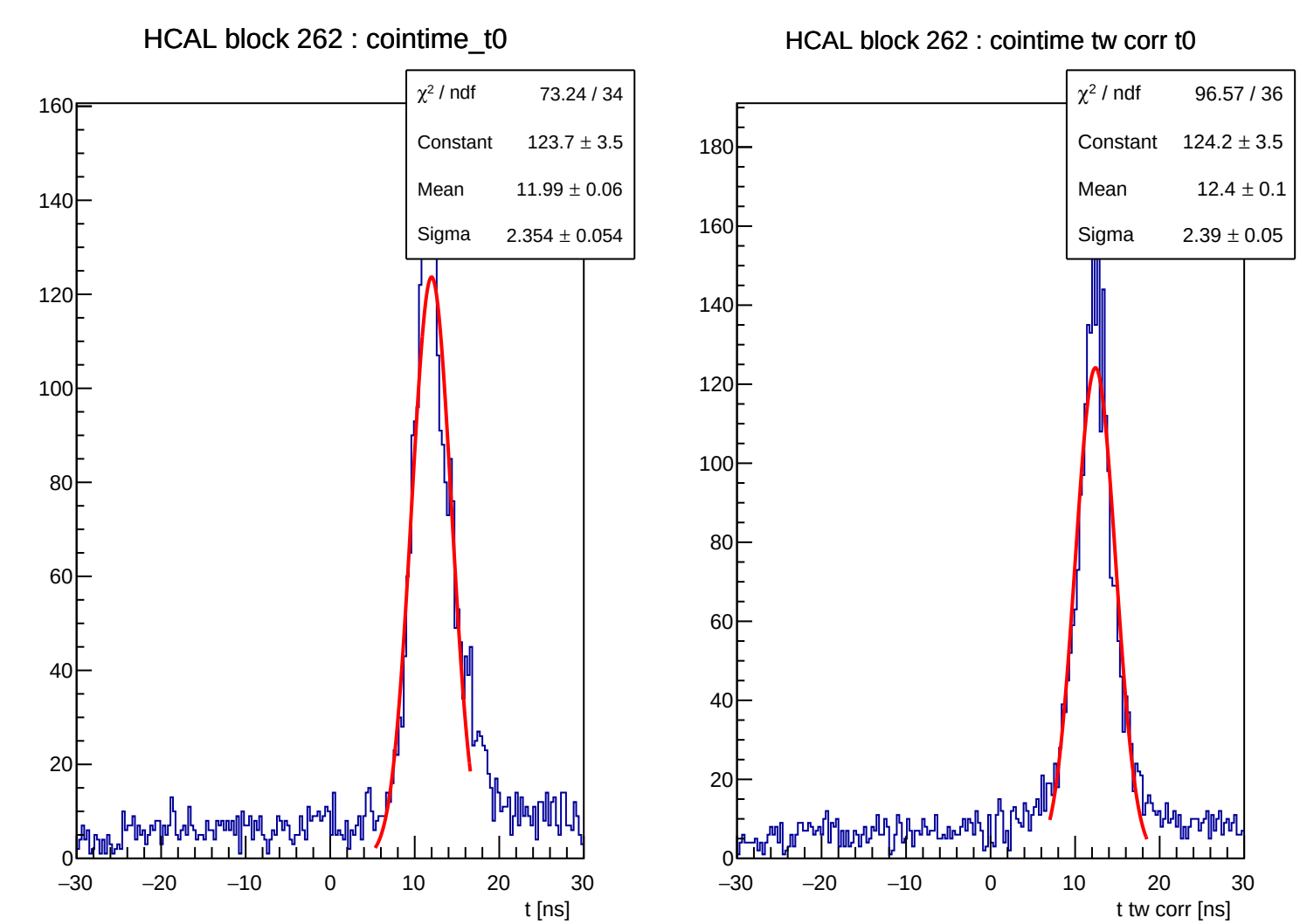

HCAL block 259 : cointime tw corr t0
χ² / ndf 96.6 / 34
Constant 113.1 ± 3.7
Mean 11.85 ± 0.05
Sigma 1.94 ± 0.05
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

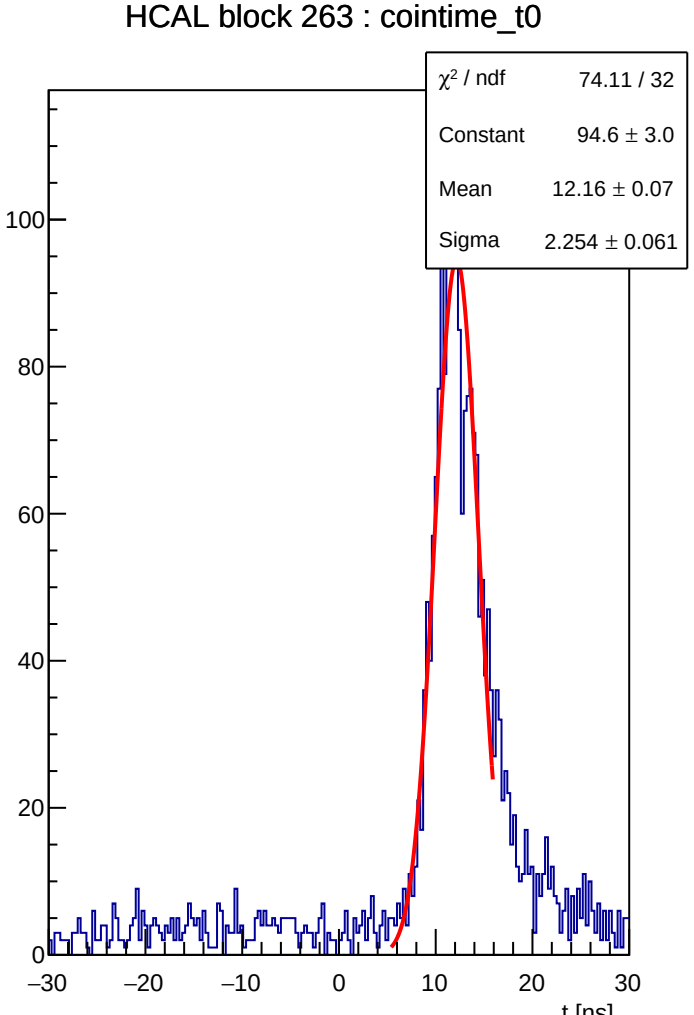

HCAL block 260 : cointime_t0
χ² / ndf 53.92 / 32
Constant 93.03 ± 3.03
Mean 11.84 ± 0.06
Sigma 2.17 ± 0.05
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

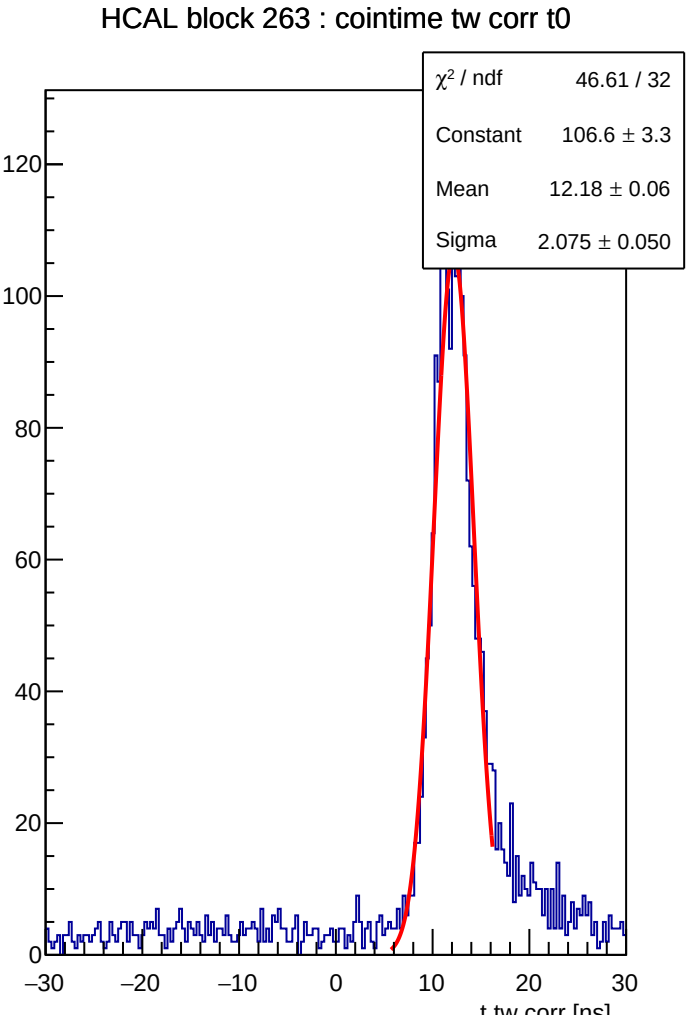

HCAL block 260 : cointime tw corr t0
χ² / ndf 66.74 / 32
Constant 103.4 ± 3.4
Mean 11.84 ± 0.05
Sigma 1.935 ± 0.046
120
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

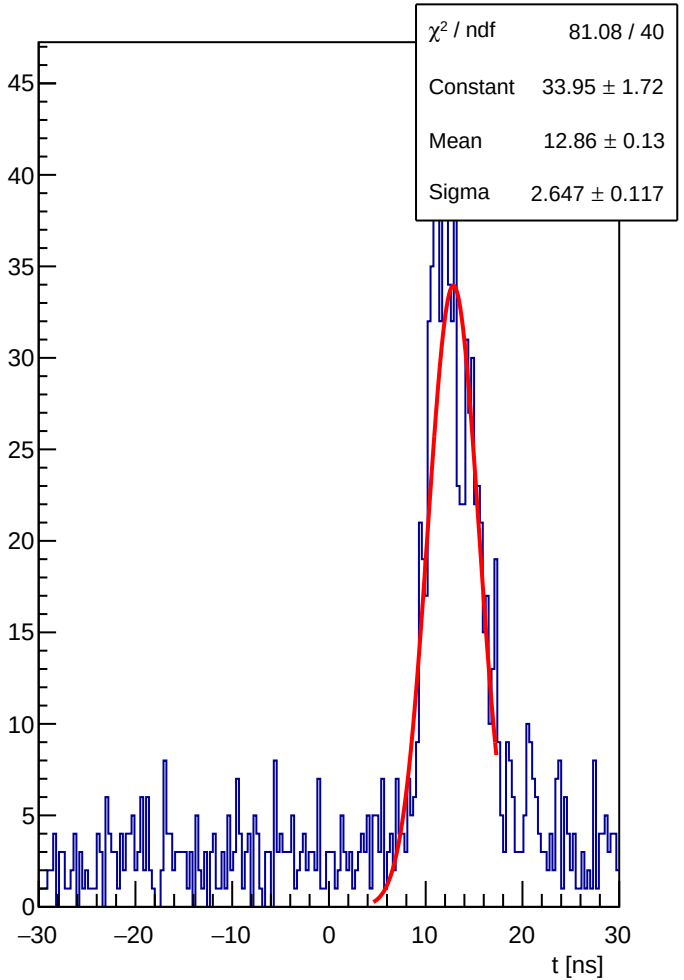

HCAL block 261 : cointime_t0
χ² / ndf 72.39 / 30
Constant 117.7 ± 3.4
Mean 12.17 ± 0.05
Sigma 2.066 ± 0.043
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t [ns]

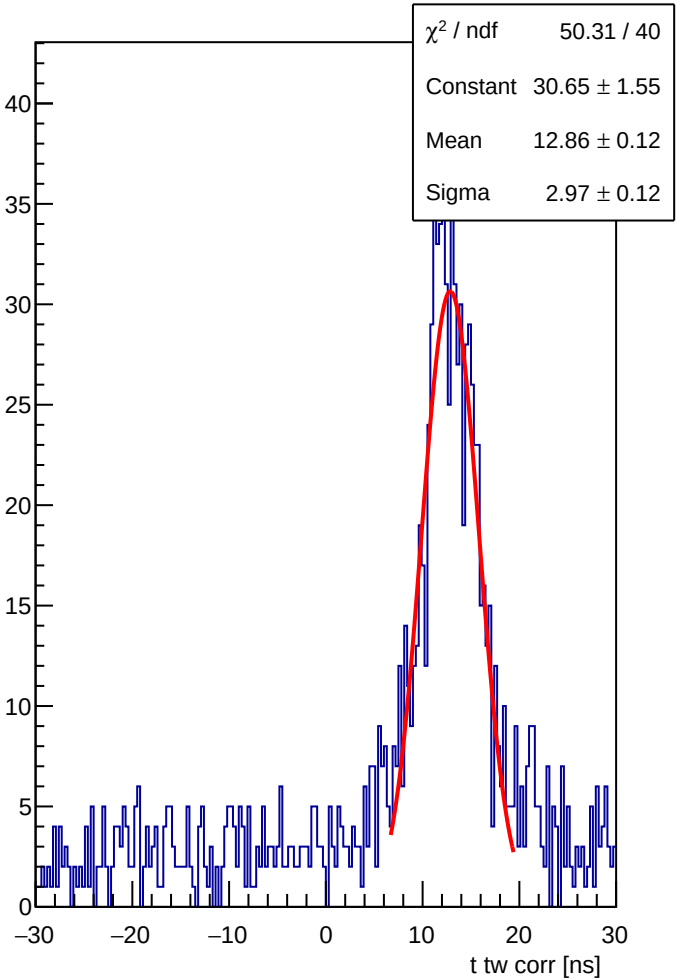

HCAL block 261 : cointime tw corr t0
χ² / ndf 84.94 / 30
Constant 138.1 ± 4.1
Mean 12.1 ± 0.0
Sigma 1.801 ± 0.039
160
140
120
100
80
60
40
20
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

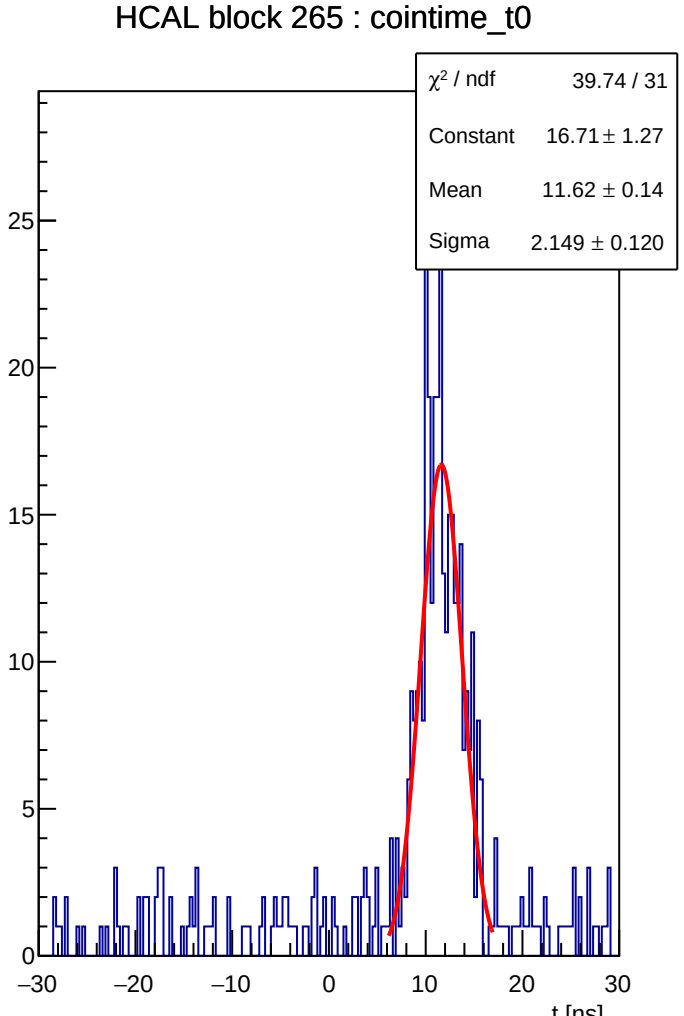

HCAL block 262 : cointime_t0
χ² / ndf 73.24 / 34
Constant 123.7 ± 3.5
Mean 11.99 ± 0.06
Sigma 2.354 ± 0.054
t [ns]
HCAL block 262 : cointime tw corr t0
χ² / ndf 96.57 / 36
Constant 124.2 ± 3.5
Mean 12.4 ± 0.1
Sigma 2.39 ± 0.05
t tw corr [ns]

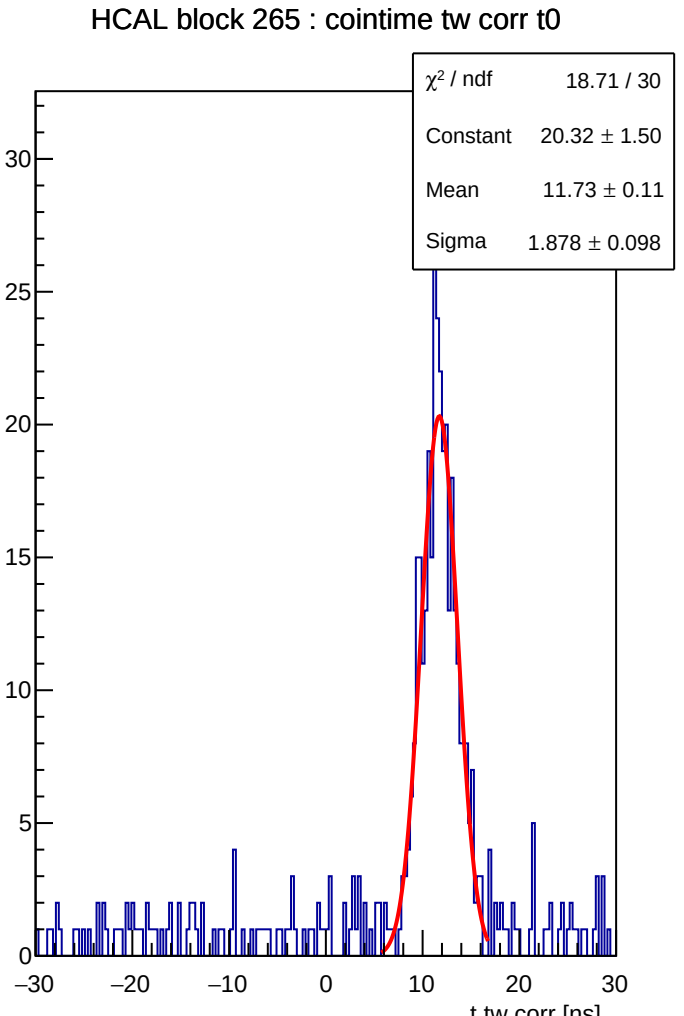

HCAL block 263 : cointime_t0
χ² / ndf 74.11 / 32
Constant 94.6 ± 3.0
Mean 12.16 ± 0.07
Sigma 2.254 ± 0.061
0
20
40
60
80
100
–30
–20
–10
0
10
20
30
t [ns]

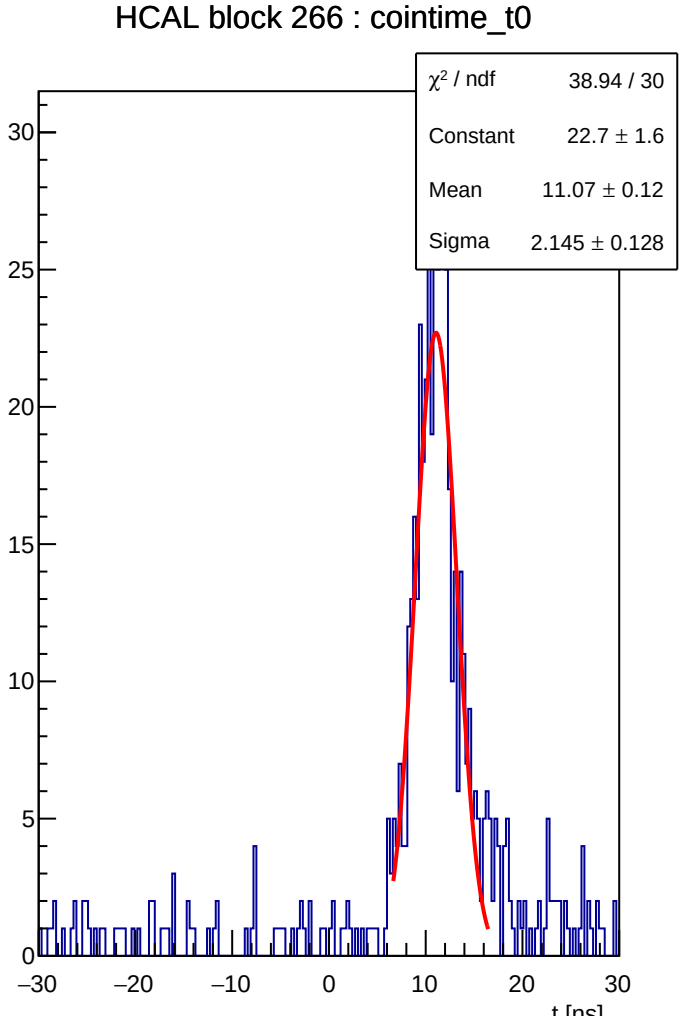

HCAL block 263 : cointime tw corr t0
χ² / ndf 46.61 / 32
Constant 106.6 ± 3.3
Mean 12.18 ± 0.06
Sigma 2.075 ± 0.050
0
20
40
60
80
100
120
–30
–20
–10
0
10
20
30
t tw corr [ns]

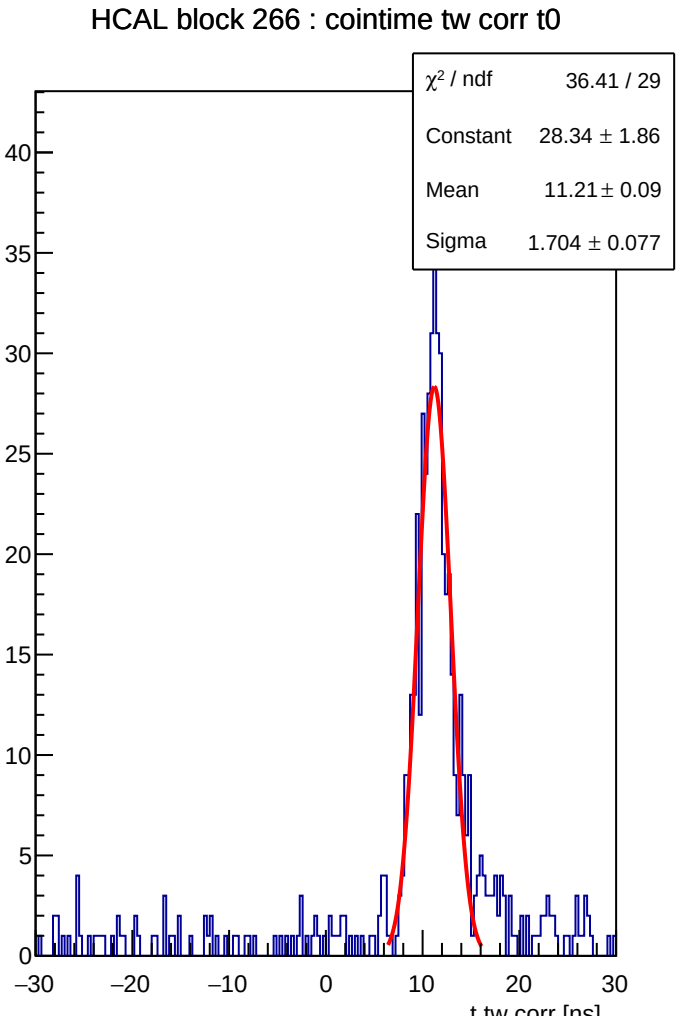

HCAL block 264 : cointime_t0
χ² / ndf 81.08 / 40
Constant 33.95 ± 1.72
Mean 12.86 ± 0.13
Sigma 2.647 ± 0.117
t [ns]

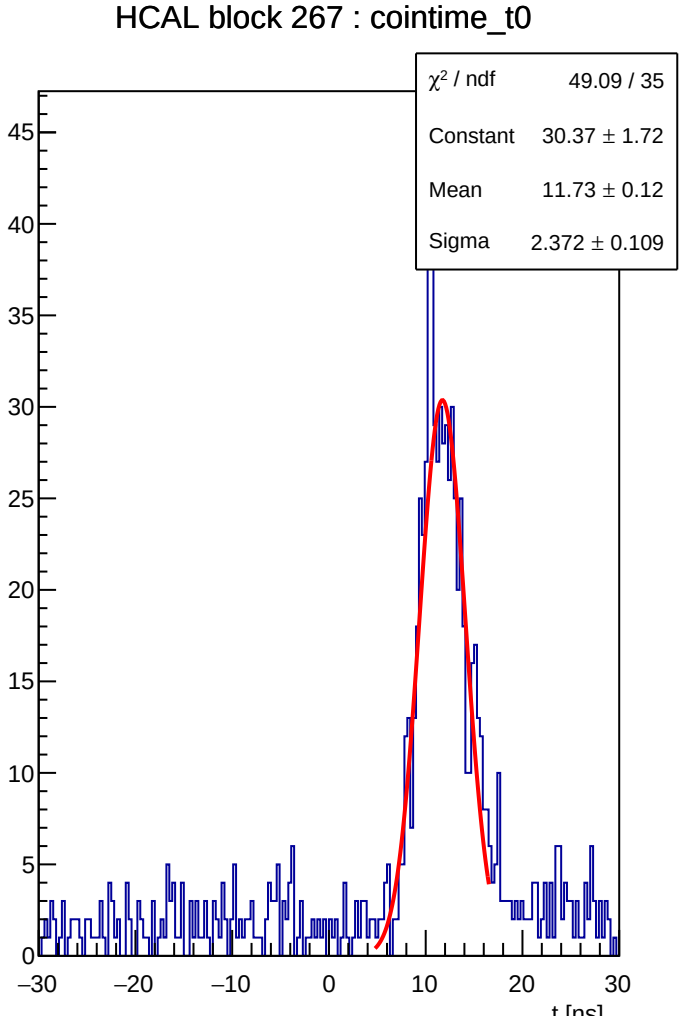

HCAL block 264 : cointime tw corr t0
χ² / ndf 50.31 / 40
Constant 30.65 ± 1.55
Mean 12.86 ± 0.12
Sigma 2.97 ± 0.12
t tw corr [ns]

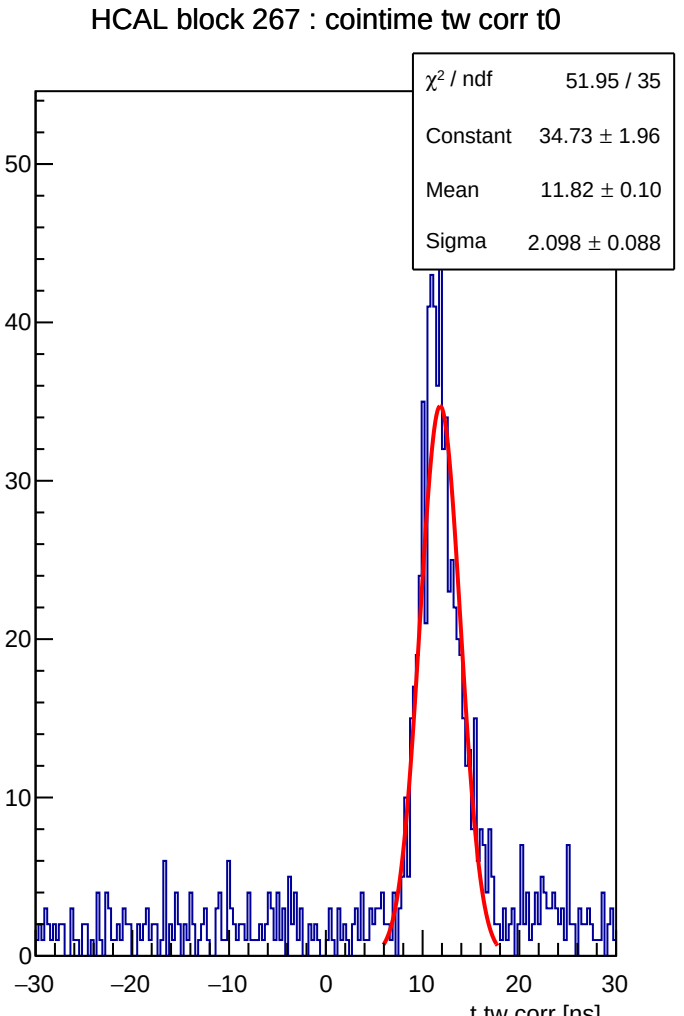

HCAL block 265 : cointime_t0
χ² / ndf 39.74 / 31
Constant 16.71 ± 1.27
Mean 11.62 ± 0.14
Sigma 2.149 ± 0.120
25
20
15
10
5
0
−30
−20
−10
0
10
20
30
t [ns]

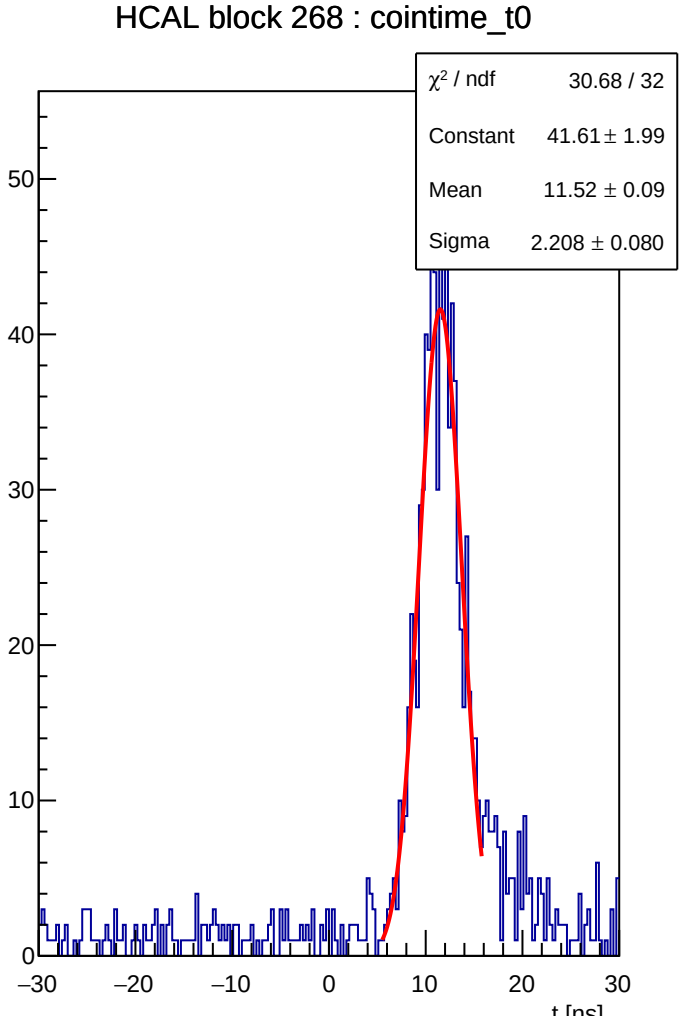

HCAL block 265 : cointime tw corr t0
χ² / ndf 18.71 / 30
Constant 20.32 ± 1.50
Mean 11.73 ± 0.11
Sigma 1.878 ± 0.098
30
25
20
15
10
5
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

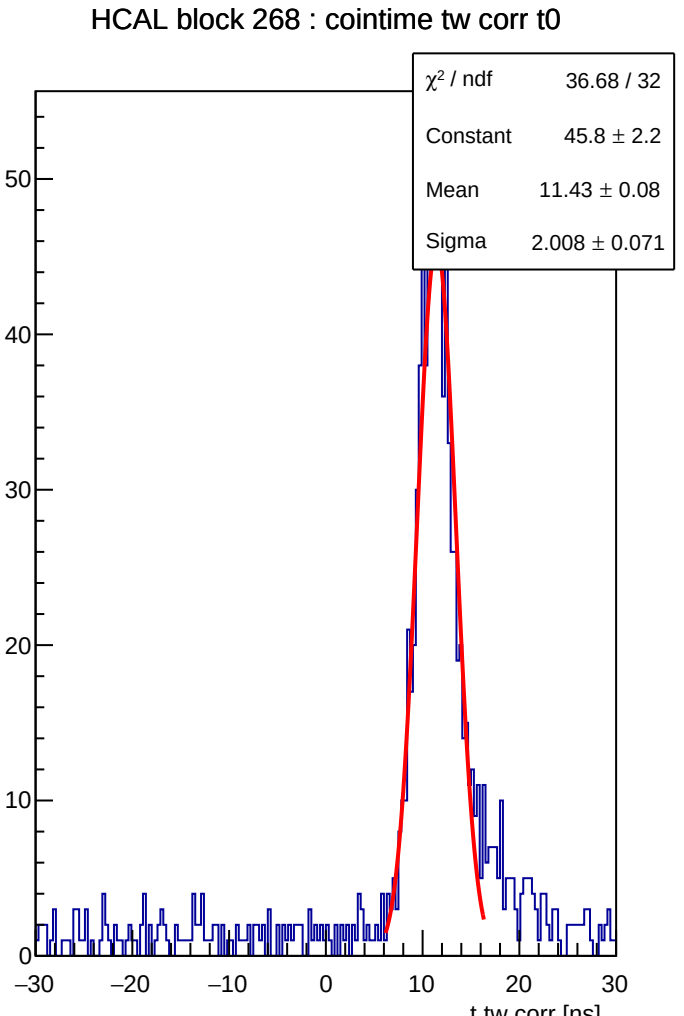

HCAL block 266 : cointime_t0
χ² / ndf 38.94 / 30
Constant 22.7 ± 1.6
Mean 11.07 ± 0.12
Sigma 2.145 ± 0.128
30
25
20
15
10
5
0
–30
–20
–10
0
10
20
30
t [ns]

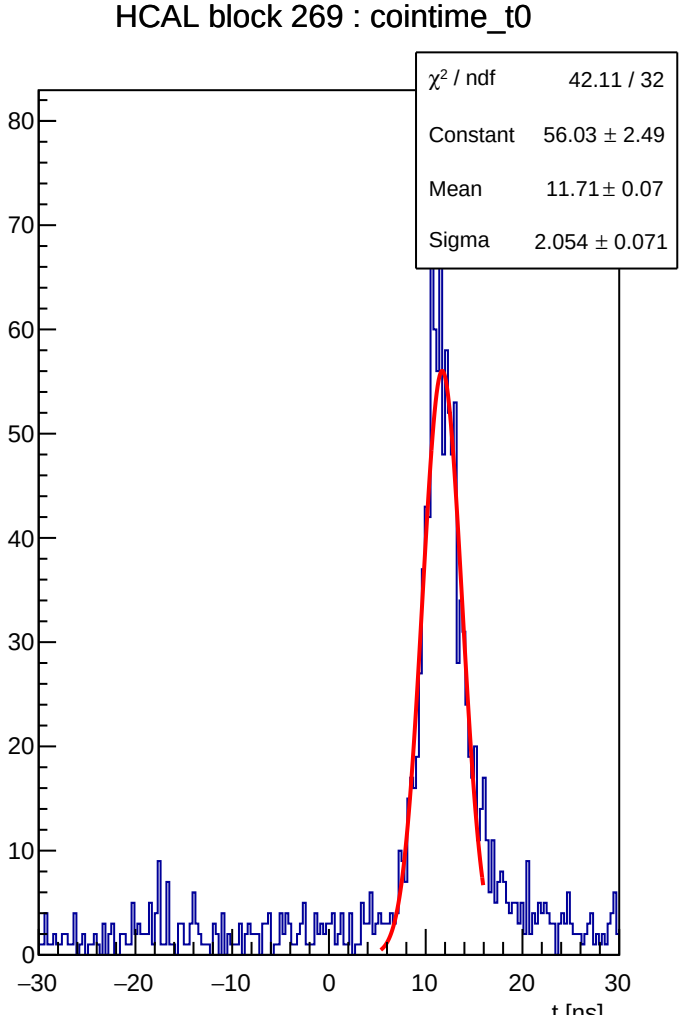

HCAL block 266 : cointime tw corr t0
χ² / ndf 36.41 / 29
Constant 28.34 ± 1.86
Mean 11.21 ± 0.09
Sigma 1.704 ± 0.077
40
35
30
25
20
15
10
5
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

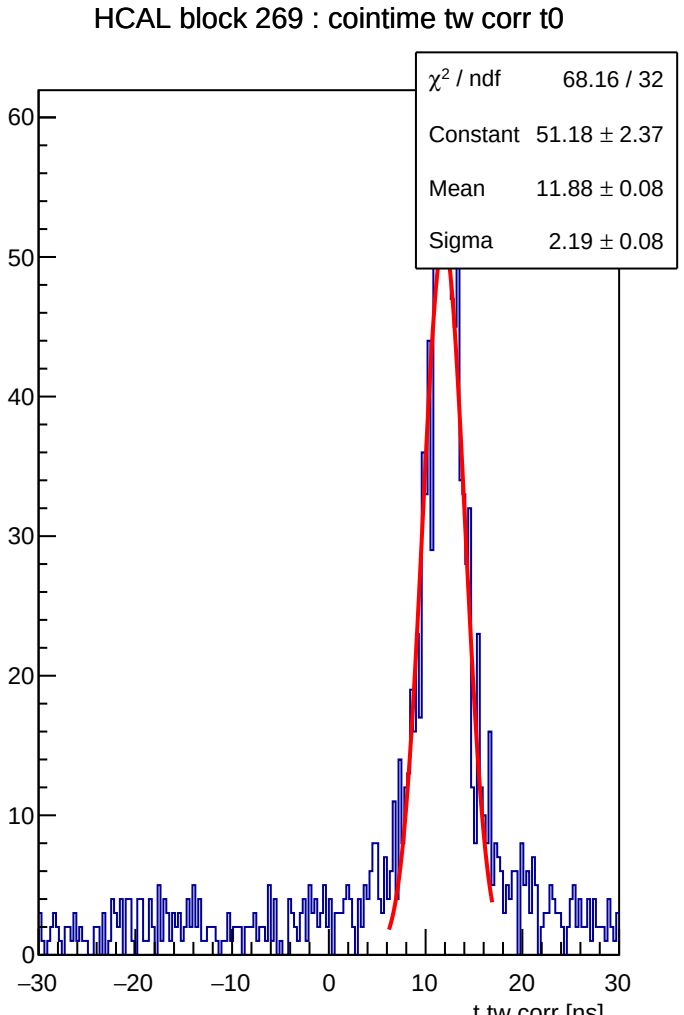

HCAL block 267 : cointime_t0
χ² / ndf 49.09 / 35
Constant 30.37 ± 1.72
Mean 11.73 ± 0.12
Sigma 2.372 ± 0.109
45
40
35
30
25
20
15
10
5
0
–30
–20
–10
0
10
20
30
t [ns]

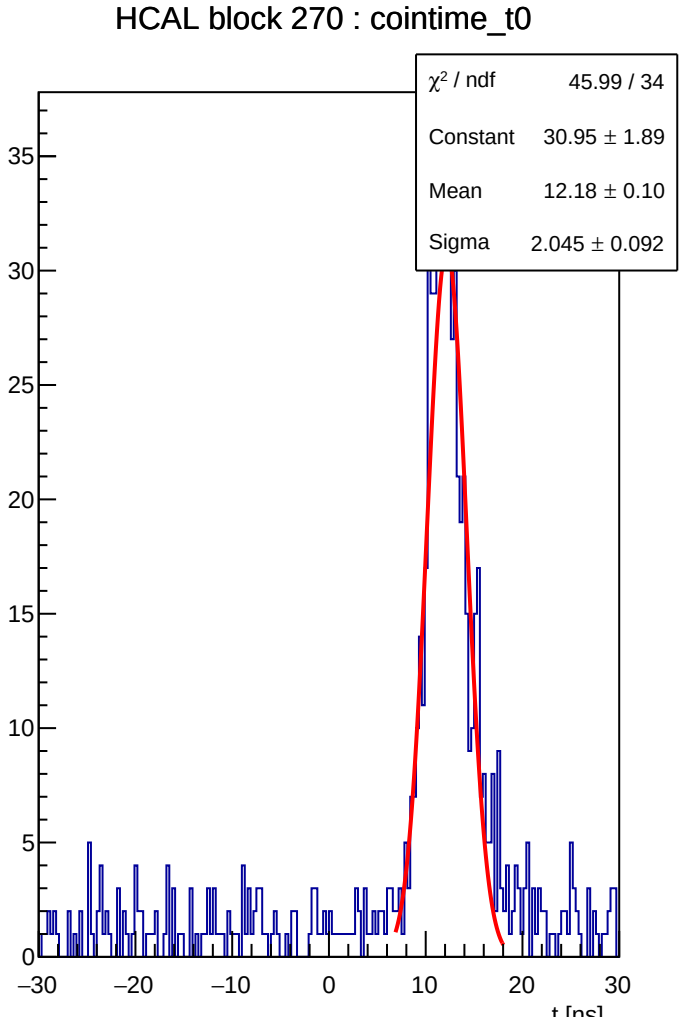

HCAL block 267 : cointime tw corr t0
χ² / ndf 51.95 / 35
Constant 34.73 ± 1.96
Mean 11.82 ± 0.10
Sigma 2.098 ± 0.088
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

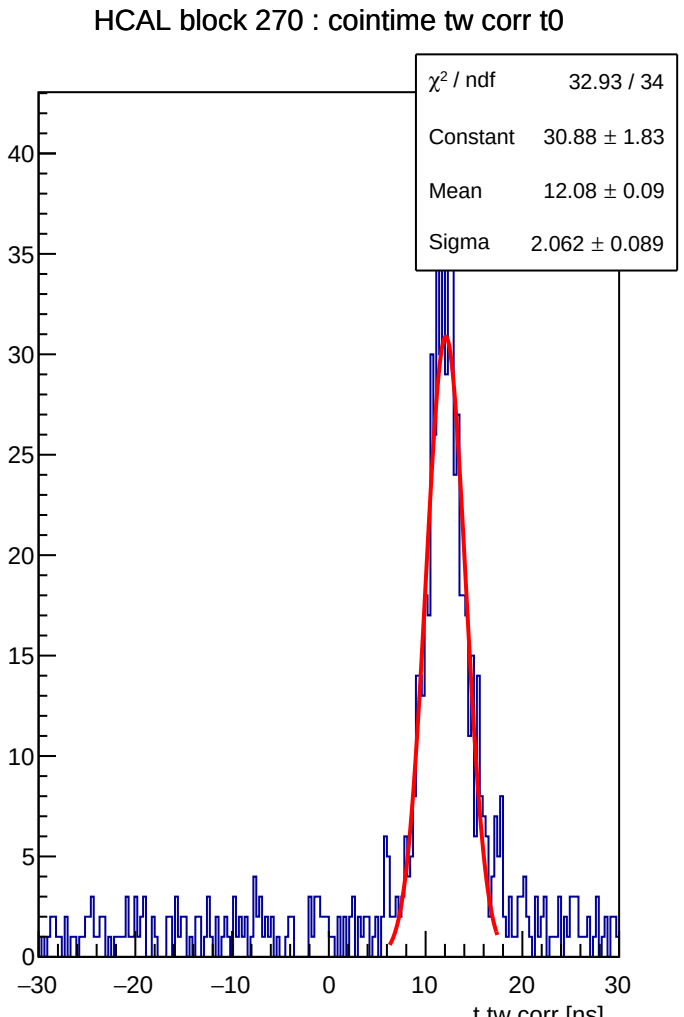

HCAL block 268 : cointime_t0
χ² / ndf 30.68 / 32
Constant 41.61 ± 1.99
Mean 11.52 ± 0.09
Sigma 2.208 ± 0.080
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t [ns]

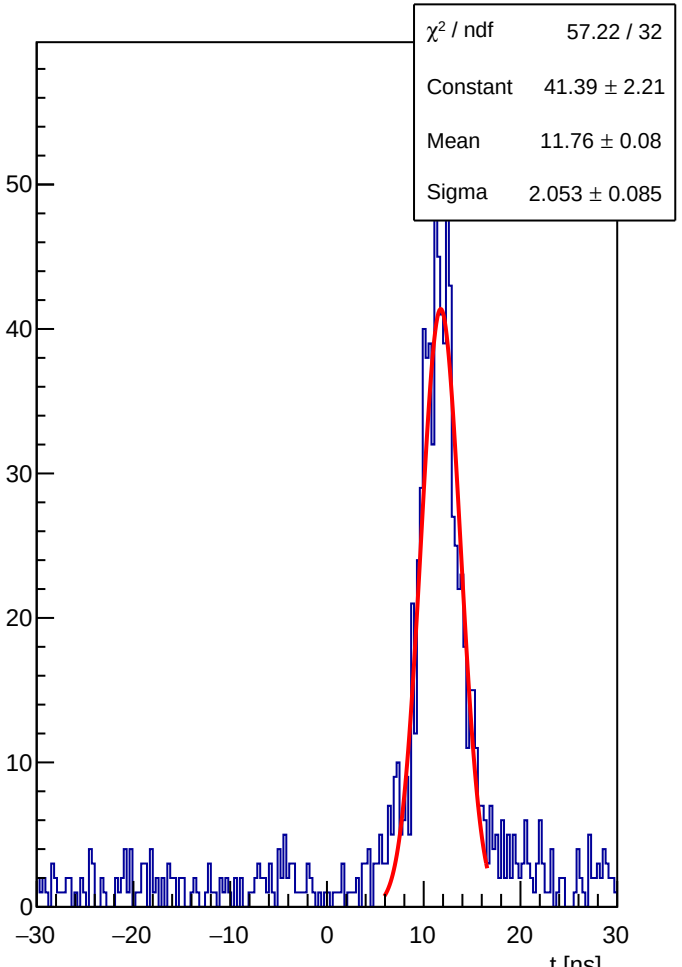

HCAL block 268 : cointime tw corr t0
χ² / ndf 36.68 / 32
Constant 45.8 ± 2.2
Mean 11.43 ± 0.08
Sigma 2.008 ± 0.071
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

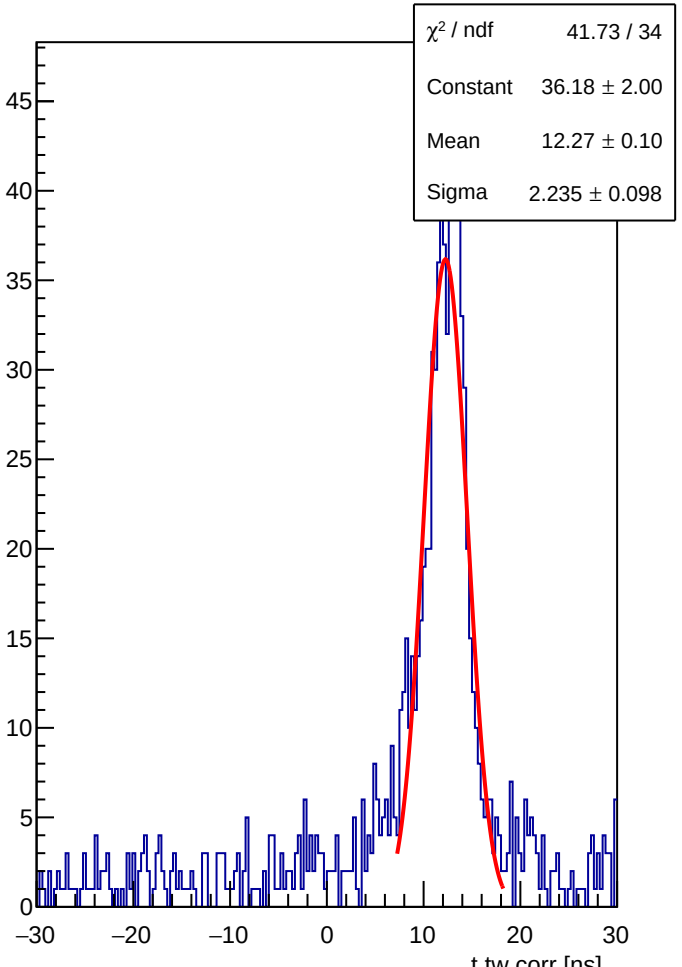

HCAL block 269 : cointime_t0
χ² / ndf 42.11 / 32
Constant 56.03 ± 2.49
Mean 11.71 ± 0.07
Sigma 2.054 ± 0.071
t [ns]

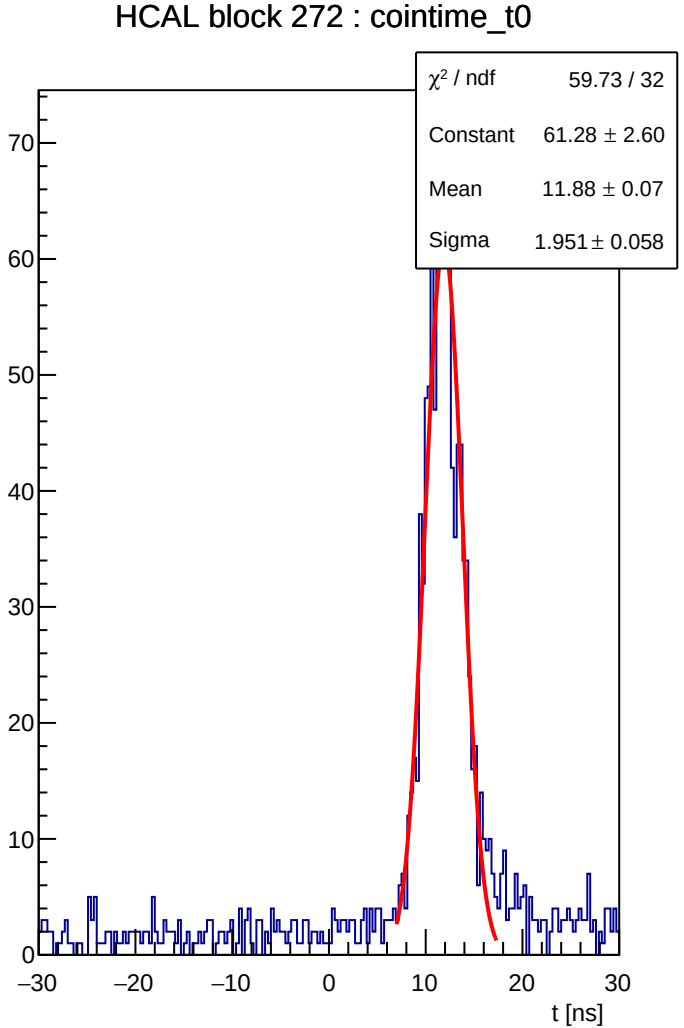

HCAL block 269 : cointime tw corr t0
χ² / ndf 68.16 / 32
Constant 51.18 ± 2.37
Mean 11.88 ± 0.08
Sigma 2.19 ± 0.08
t tw corr [ns]

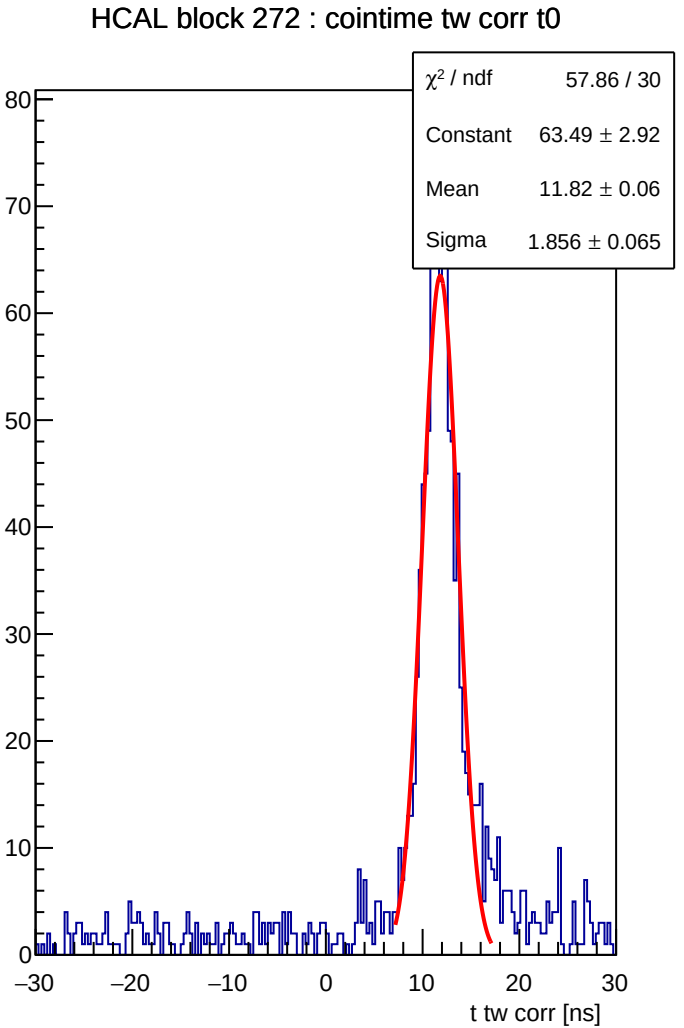

HCAL block 270 : cointime_t0
χ² / ndf 45.99 / 34
Constant 30.95 ± 1.89
Mean 12.18 ± 0.10
Sigma 2.045 ± 0.092
t [ns]

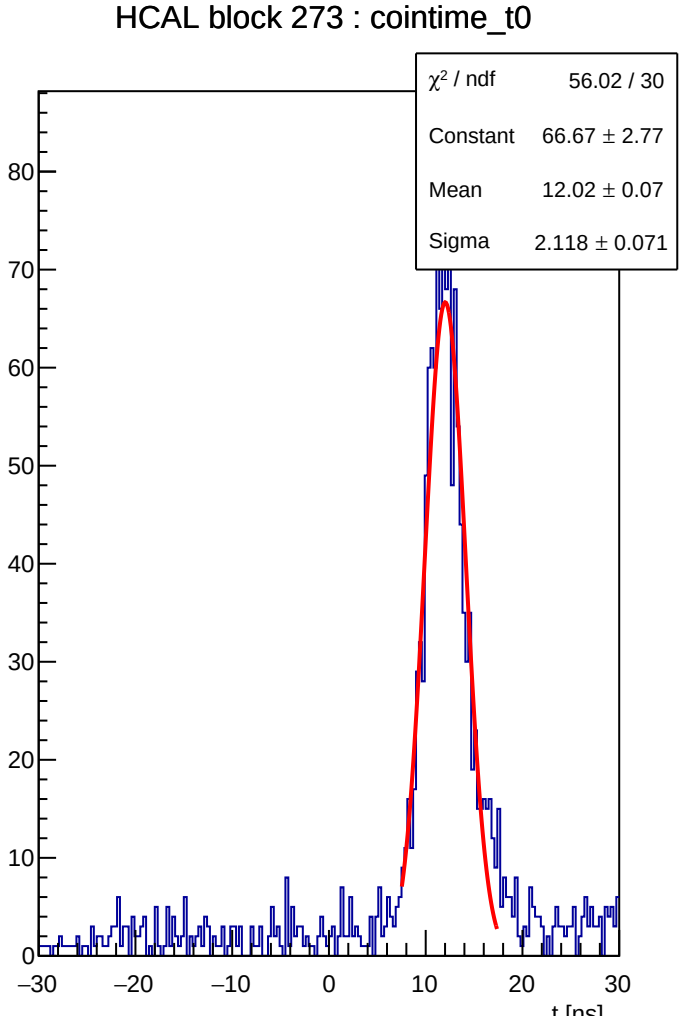

HCAL block 270 : cointime tw corr t0
χ² / ndf 32.93 / 34
Constant 30.88 ± 1.83
Mean 12.08 ± 0.09
Sigma 2.062 ± 0.089
t tw corr [ns]

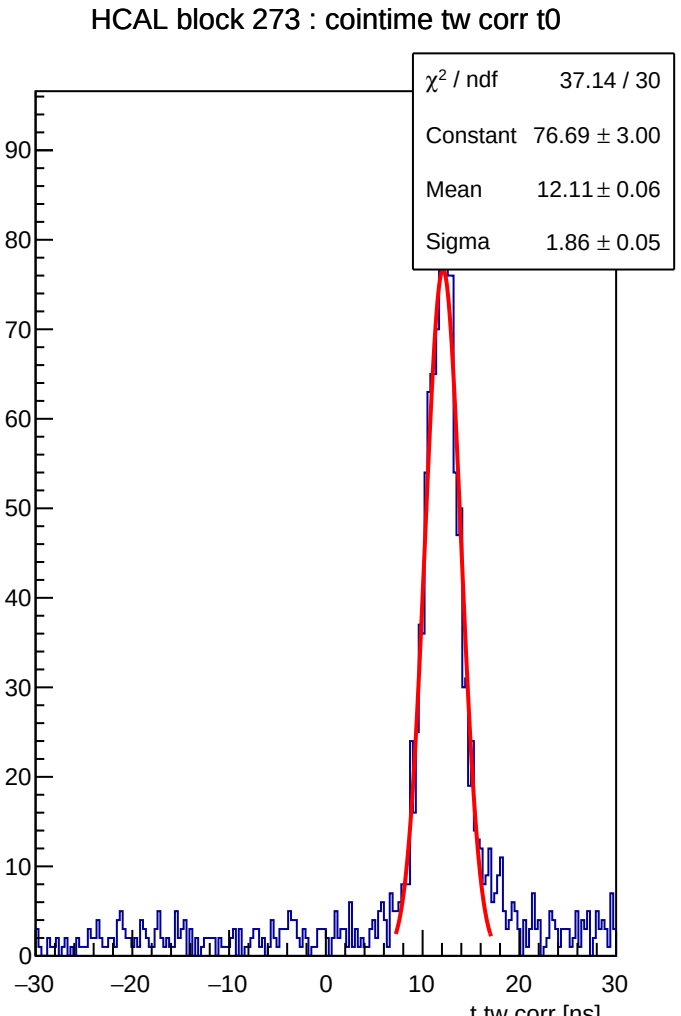

HCAL block 271 : cointime_t0
χ² / ndf 57.22 / 32
Constant 41.39 ± 2.21
Mean 11.76 ± 0.08
Sigma 2.053 ± 0.085
t [ns]

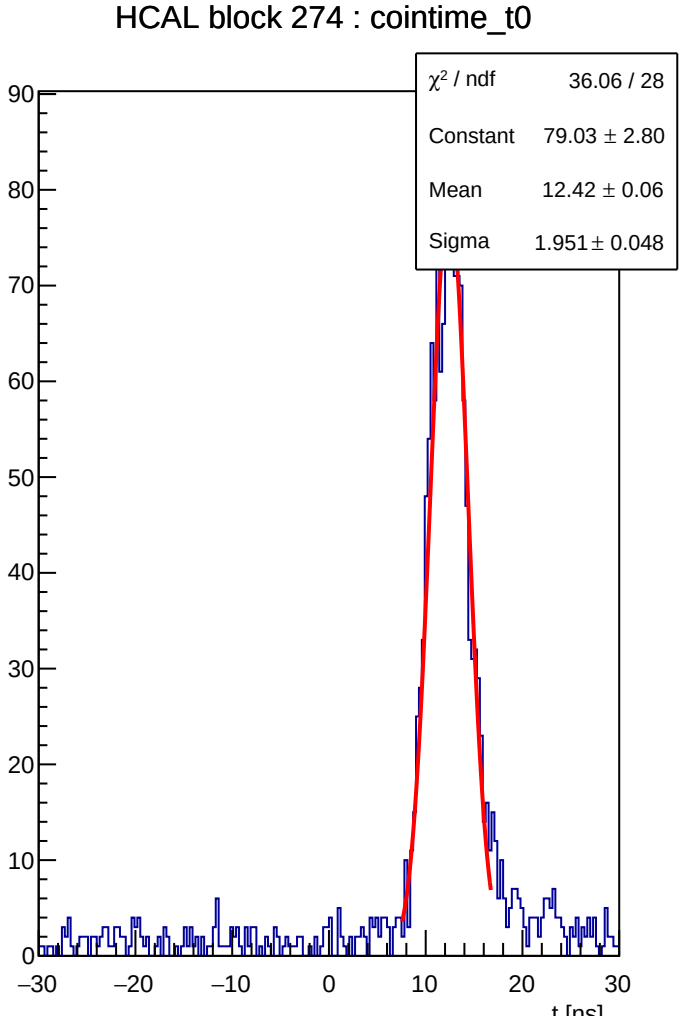

HCAL block 271 : cointime tw corr t0
χ² / ndf 41.73 / 34
Constant 36.18 ± 2.00
Mean 12.27 ± 0.10
Sigma 2.235 ± 0.098
t tw corr [ns]

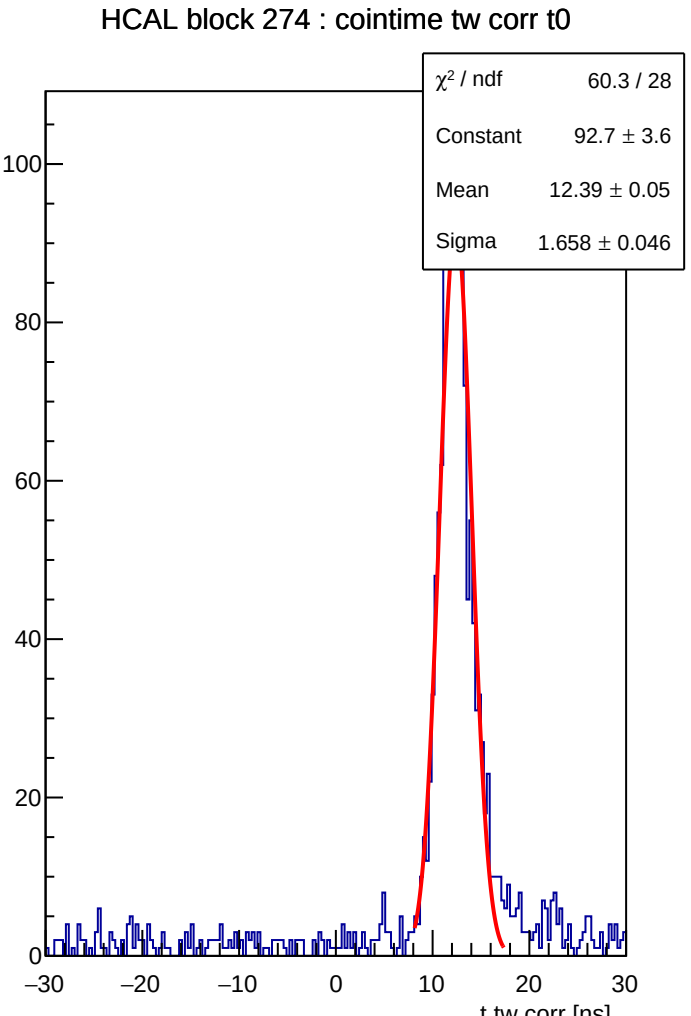

HCAL block 272 : cointime_t0
χ² / ndf 59.73 / 32
Constant 61.28 ± 2.60
Mean 11.88 ± 0.07
Sigma 1.951 ± 0.058
70
60
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t [ns]

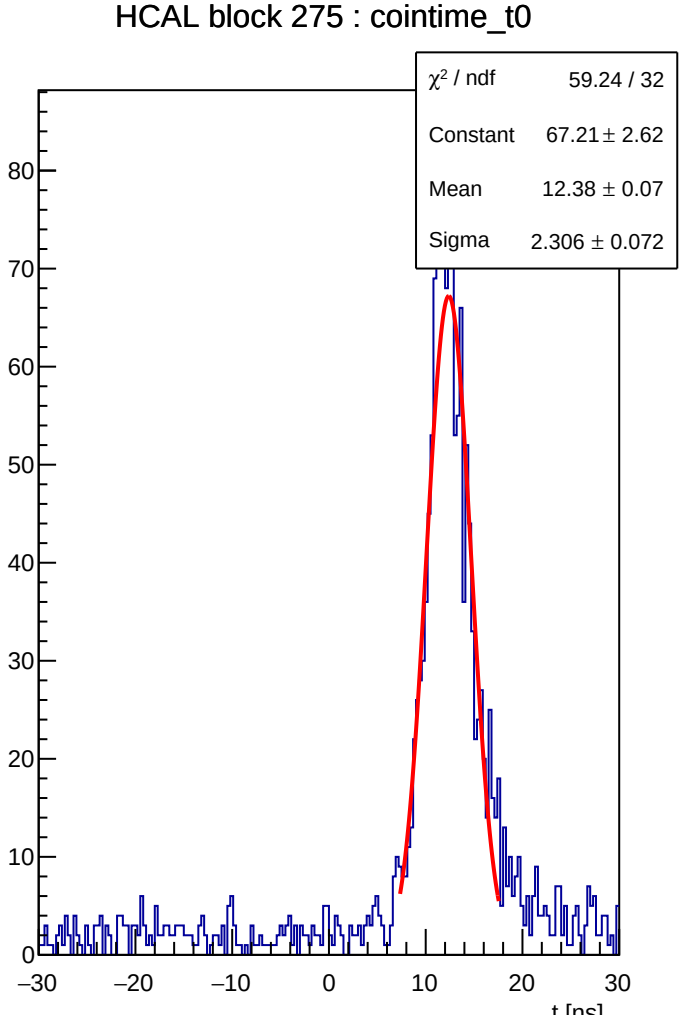

HCAL block 272 : cointime tw corr t0
χ² / ndf 57.86 / 30
Constant 63.49 ± 2.92
Mean 11.82 ± 0.06
Sigma 1.856 ± 0.065
80
70
60
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

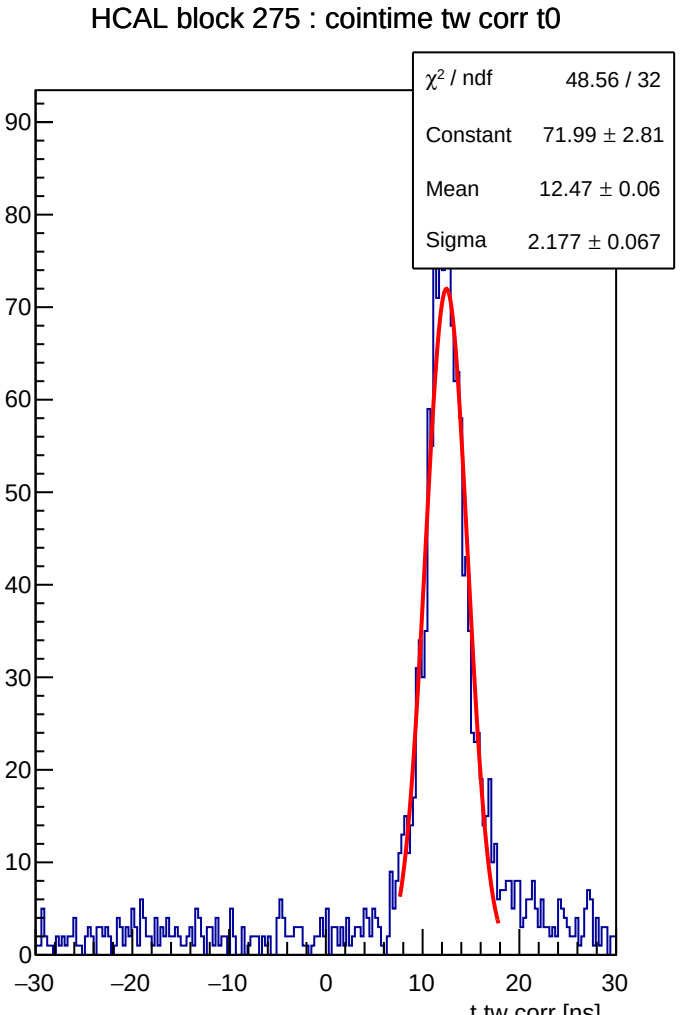

HCAL block 273 : cointime_t0
χ² / ndf 56.02 / 30
Constant 66.67 ± 2.77
Mean 12.02 ± 0.07
Sigma 2.118 ± 0.071
t [ns]

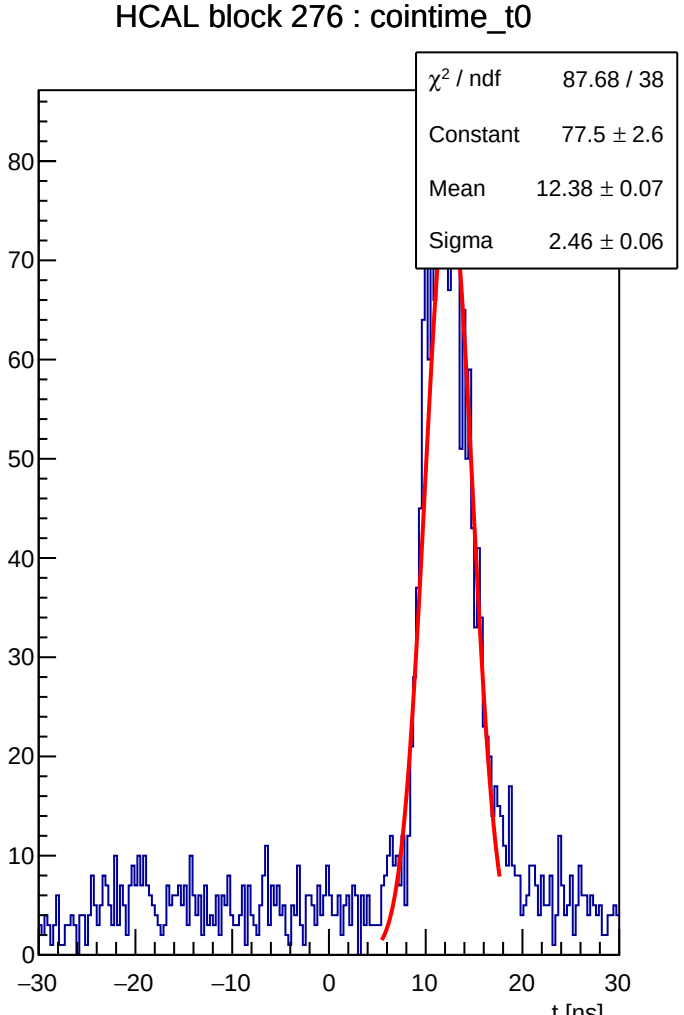

HCAL block 273 : cointime tw corr t0
χ² / ndf 37.14 / 30
Constant 76.69 ± 3.00
Mean 12.11 ± 0.06
Sigma 1.86 ± 0.05
t tw corr [ns]

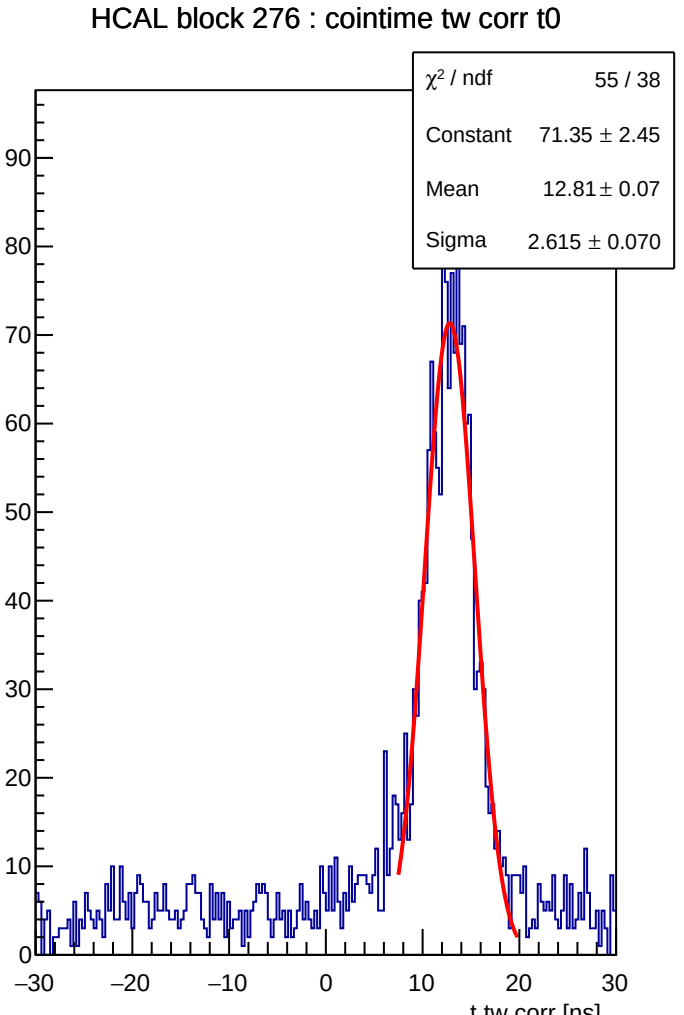

HCAL block 274 : cointime_t0
χ² / ndf 36.06 / 28
Constant 79.03 ± 2.80
Mean 12.42 ± 0.06
Sigma 1.951 ± 0.048
t [ns]

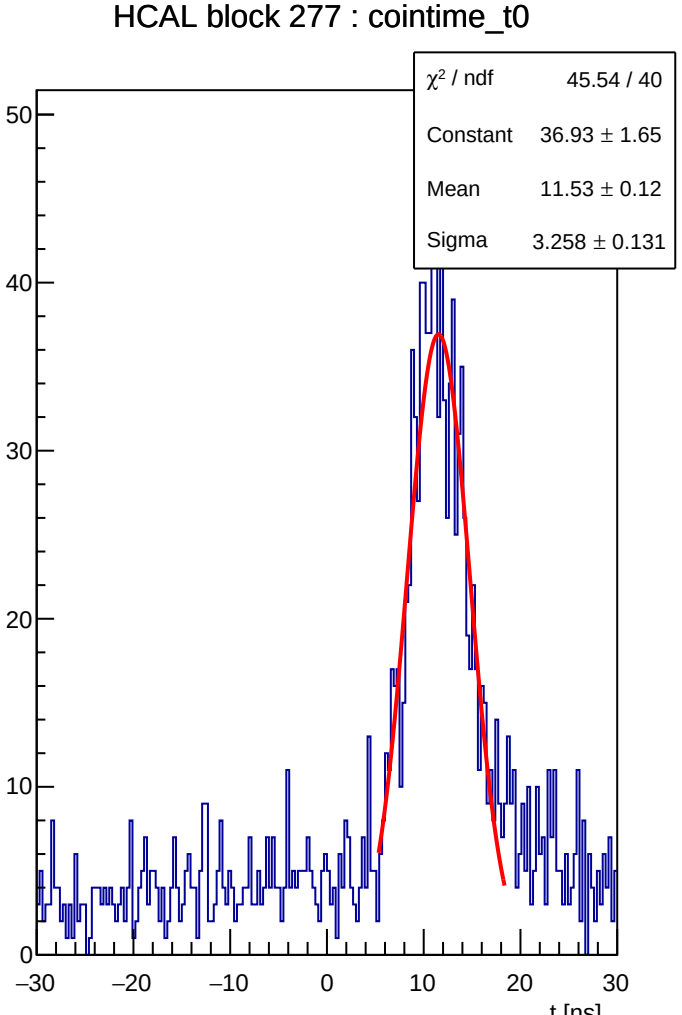

HCAL block 274 : cointime tw corr t0
χ² / ndf 60.3 / 28
Constant 92.7 ± 3.6
Mean 12.39 ± 0.05
Sigma 1.658 ± 0.046
t tw corr [ns]

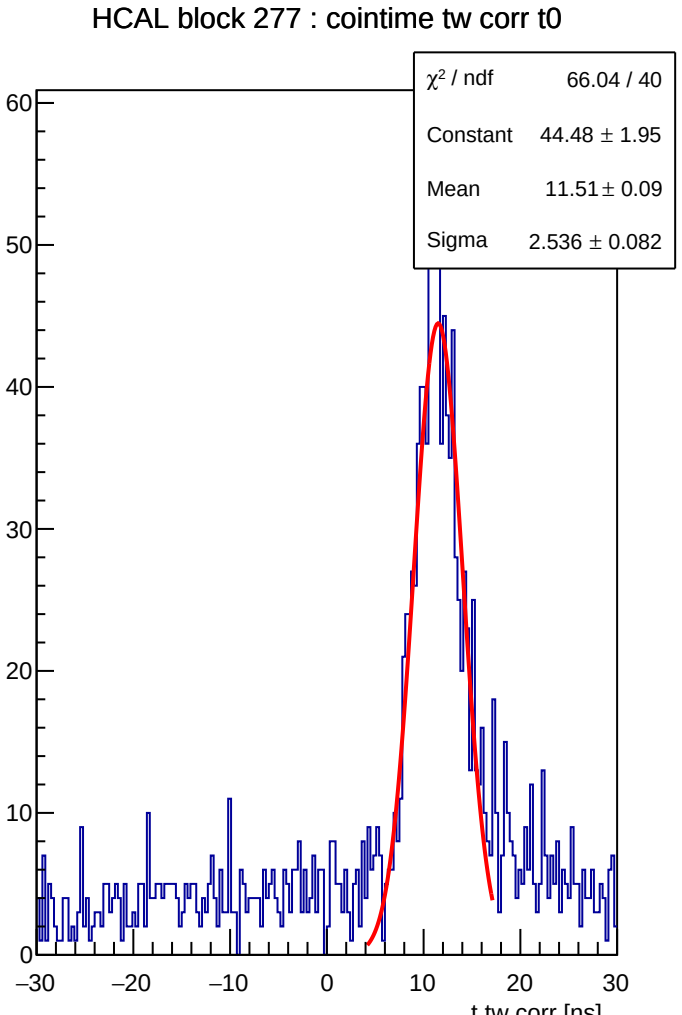

HCAL block 275 : cointime_t0
χ² / ndf 59.24 / 32
Constant 67.21 ± 2.62
Mean 12.38 ± 0.07
Sigma 2.306 ± 0.072
t [ns]

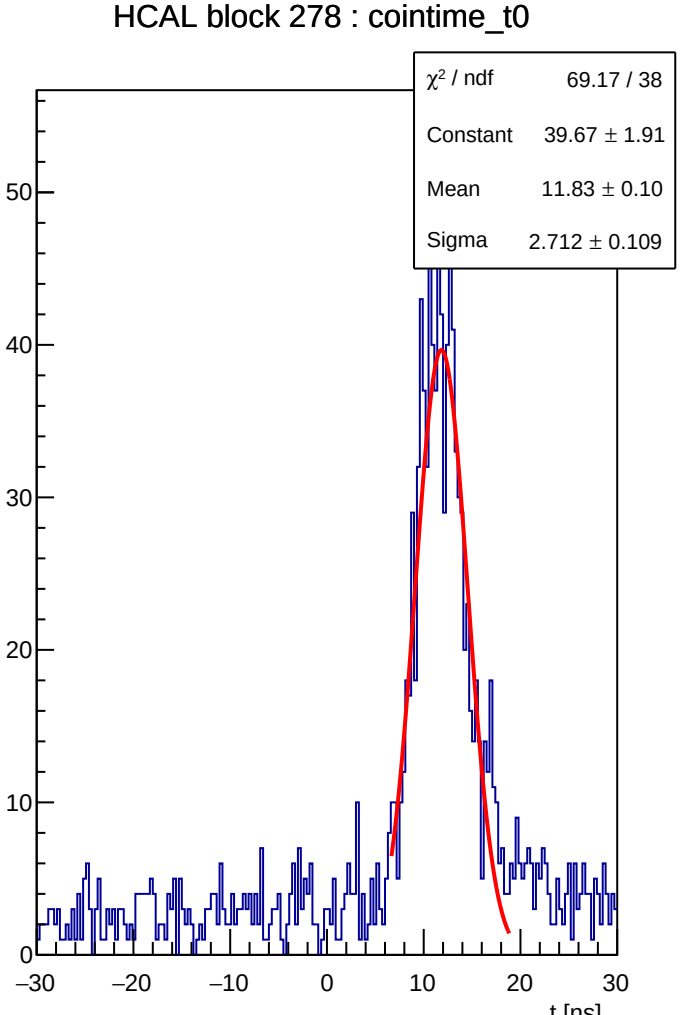

HCAL block 275 : cointime tw corr t0
χ² / ndf 48.56 / 32
Constant 71.99 ± 2.81
Mean 12.47 ± 0.06
Sigma 2.177 ± 0.067
t tw corr [ns]

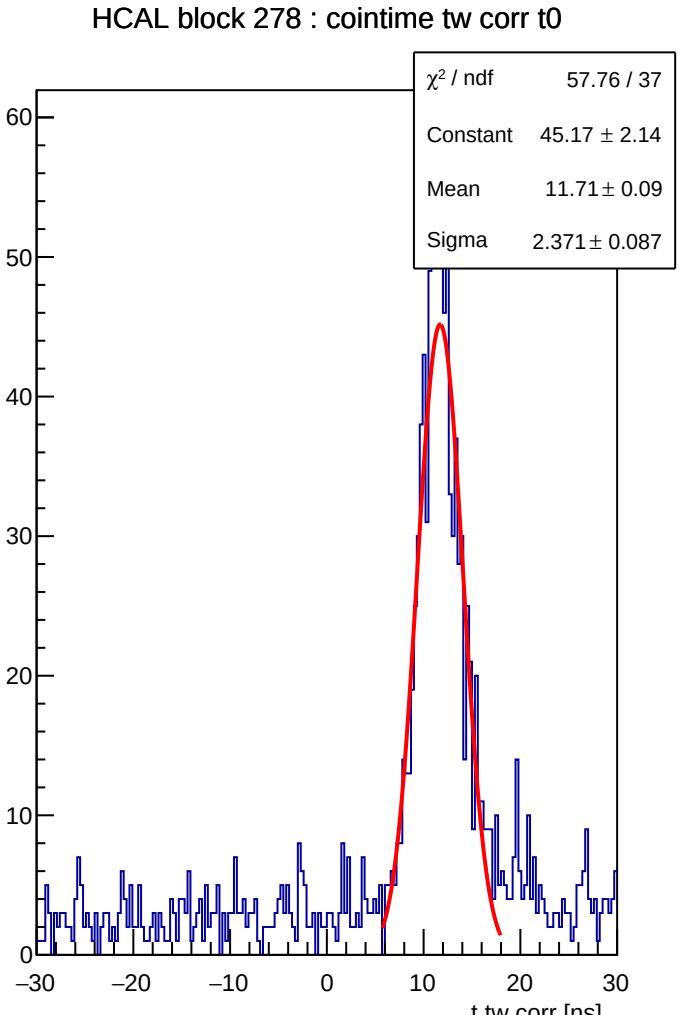

HCAL block 276 : cointime_t0
χ² / ndf 87.68 / 38
Constant 77.5 ± 2.6
Mean 12.38 ± 0.07
Sigma 2.46 ± 0.06
t [ns]

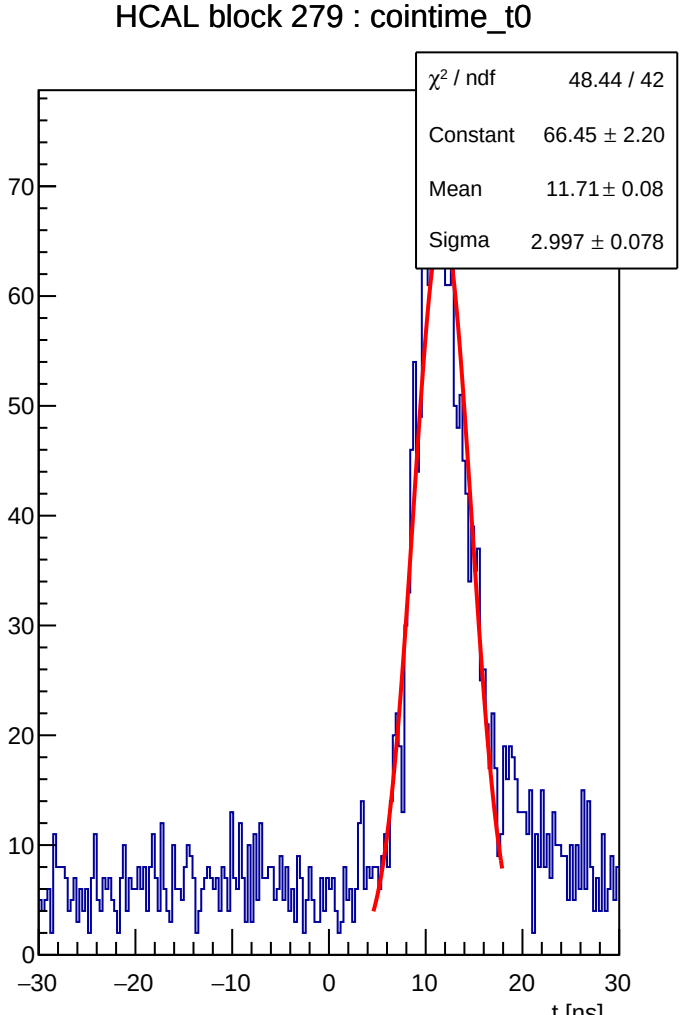

HCAL block 276 : cointime tw corr t0
χ² / ndf 55 / 38
Constant 71.35 ± 2.45
Mean 12.81 ± 0.07
Sigma 2.615 ± 0.070
t tw corr [ns]

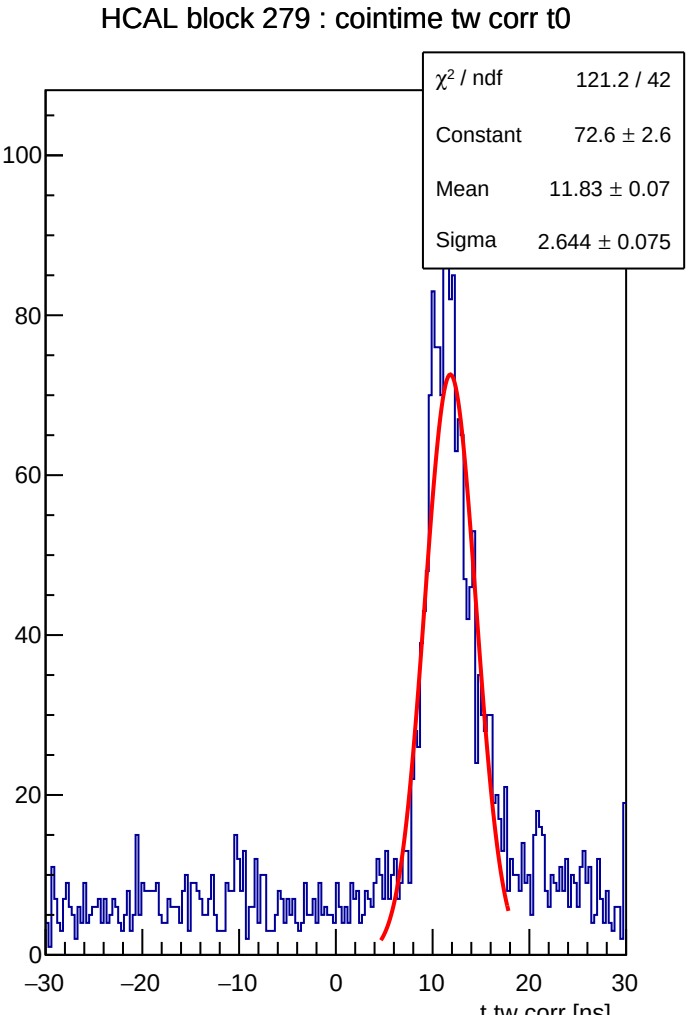

HCAL block 277 : cointime_t0
χ² / ndf 45.54 / 40
Constant 36.93 ± 1.65
Mean 11.53 ± 0.12
Sigma 3.258 ± 0.131
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t [ns]

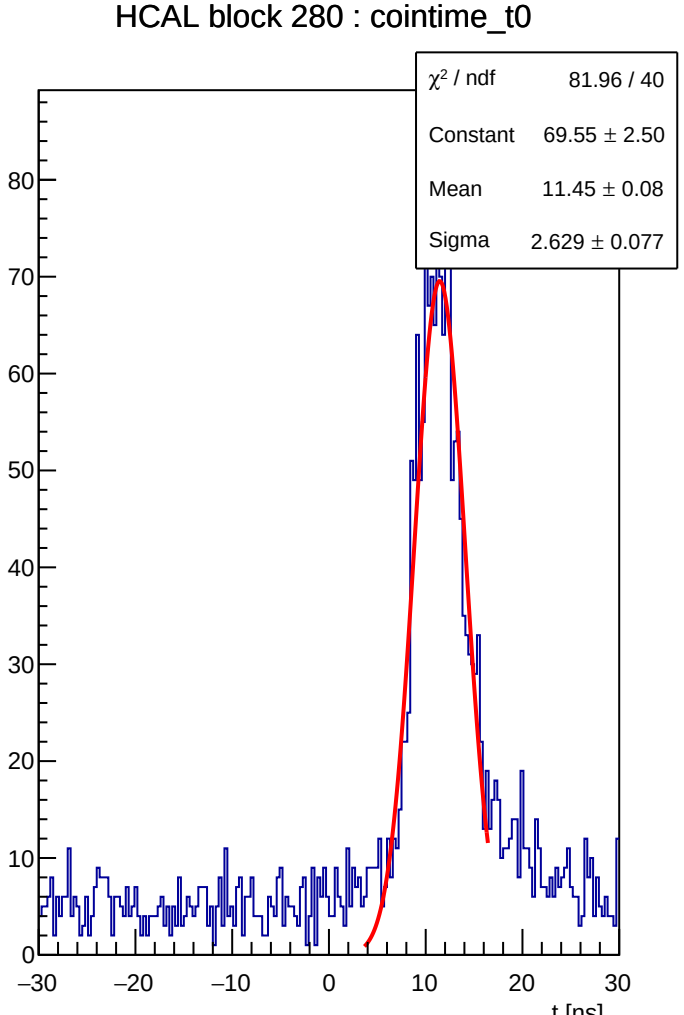

HCAL block 277 : cointime tw corr t0
χ² / ndf 66.04 / 40
Constant 44.48 ± 1.95
Mean 11.51 ± 0.09
Sigma 2.536 ± 0.082
60
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

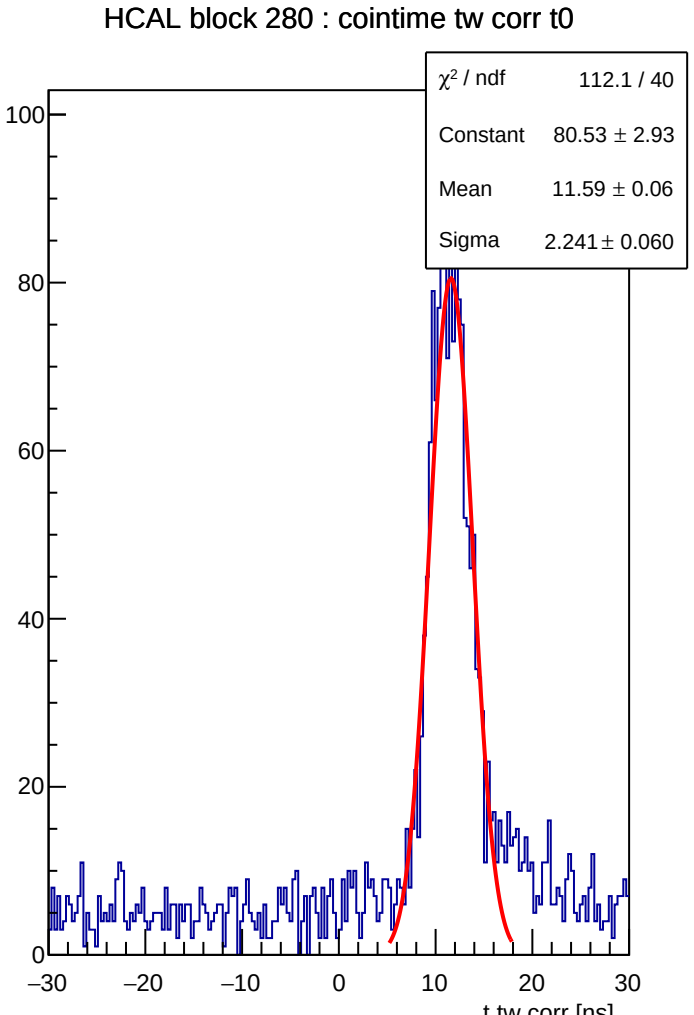

HCAL block 278 : cointime_t0
χ² / ndf 69.17 / 38
Constant 39.67 ± 1.91
Mean 11.83 ± 0.10
Sigma 2.712 ± 0.109
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t [ns]

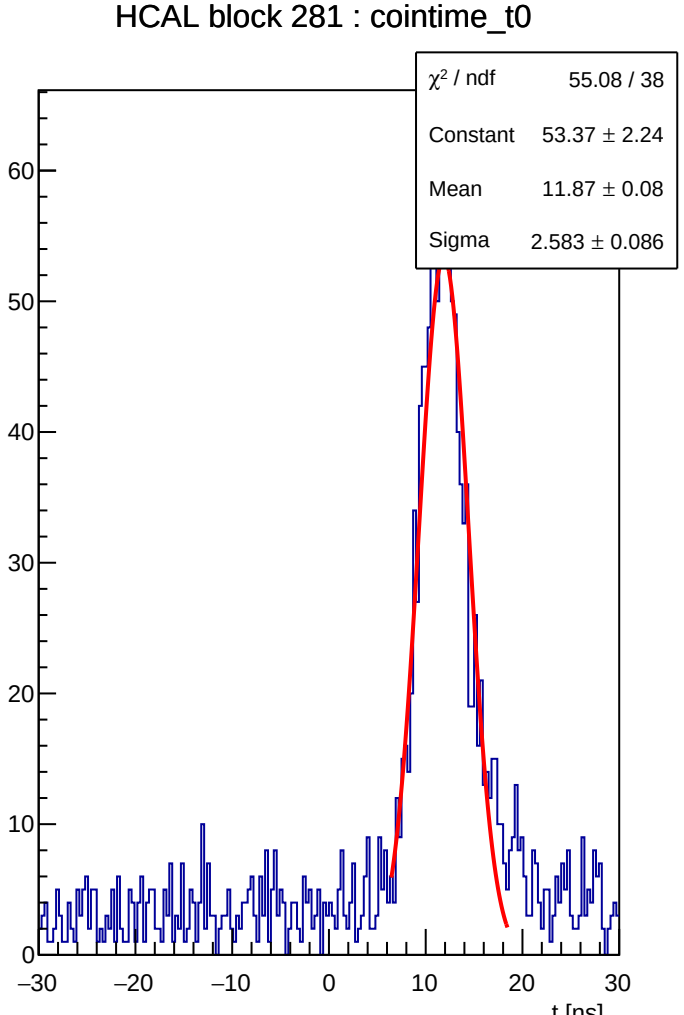

HCAL block 278 : cointime tw corr t0
χ² / ndf 57.76 / 37
Constant 45.17 ± 2.14
Mean 11.71 ± 0.09
Sigma 2.371 ± 0.087
60
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

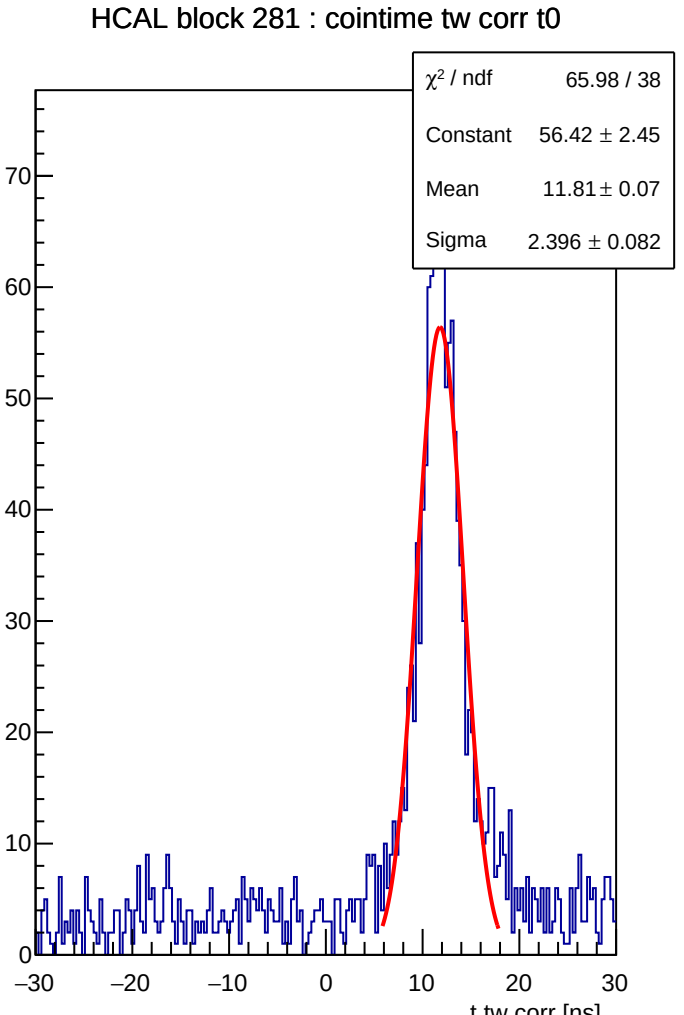

HCAL block 279 : cointime_t0
χ² / ndf 48.44 / 42
Constant 66.45 ± 2.20
Mean 11.71 ± 0.08
Sigma 2.997 ± 0.078
t [ns]

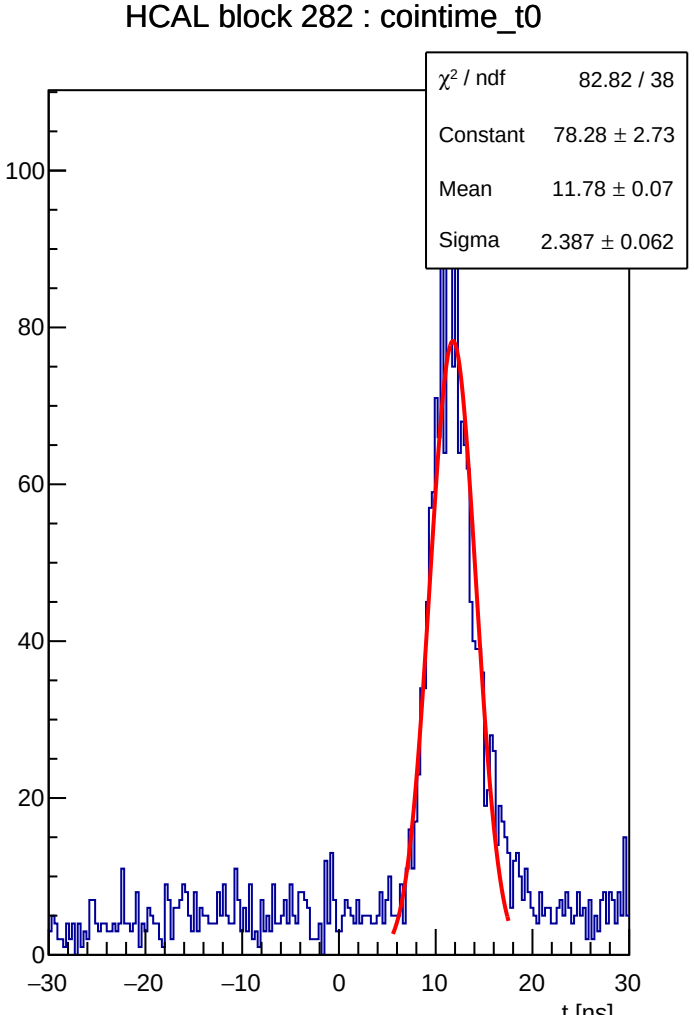

HCAL block 279 : cointime tw corr t0
χ² / ndf 121.2 / 42
Constant 72.6 ± 2.6
Mean 11.83 ± 0.07
Sigma 2.644 ± 0.075
t tw corr [ns]

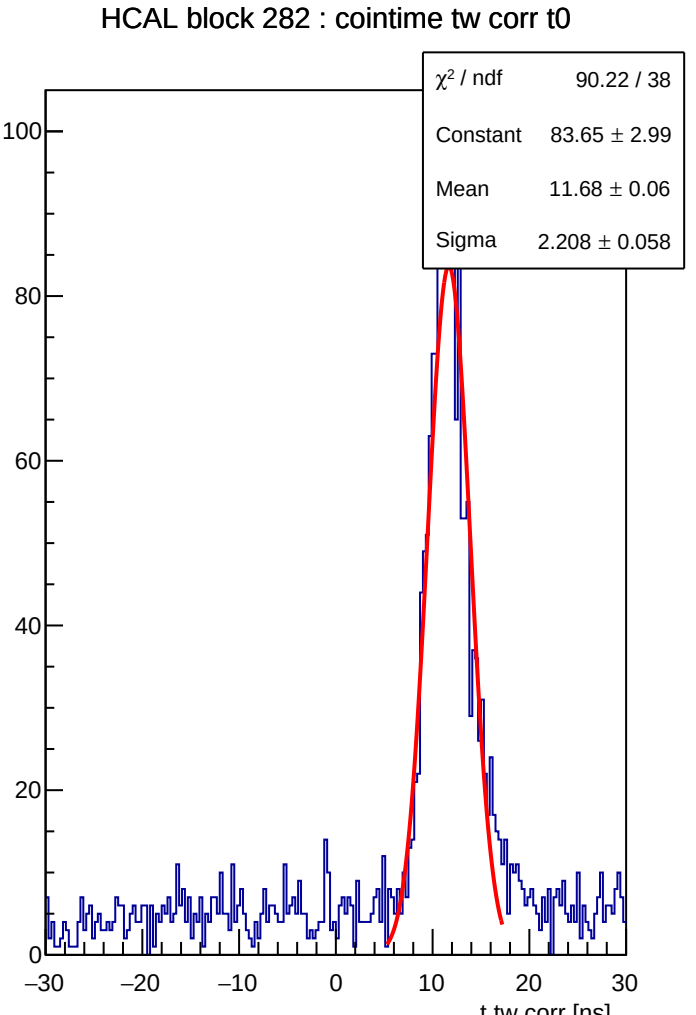

HCAL block 280 : cointime_t0
χ² / ndf 81.96 / 40
Constant 69.55 ± 2.50
Mean 11.45 ± 0.08
Sigma 2.629 ± 0.077
t [ns]

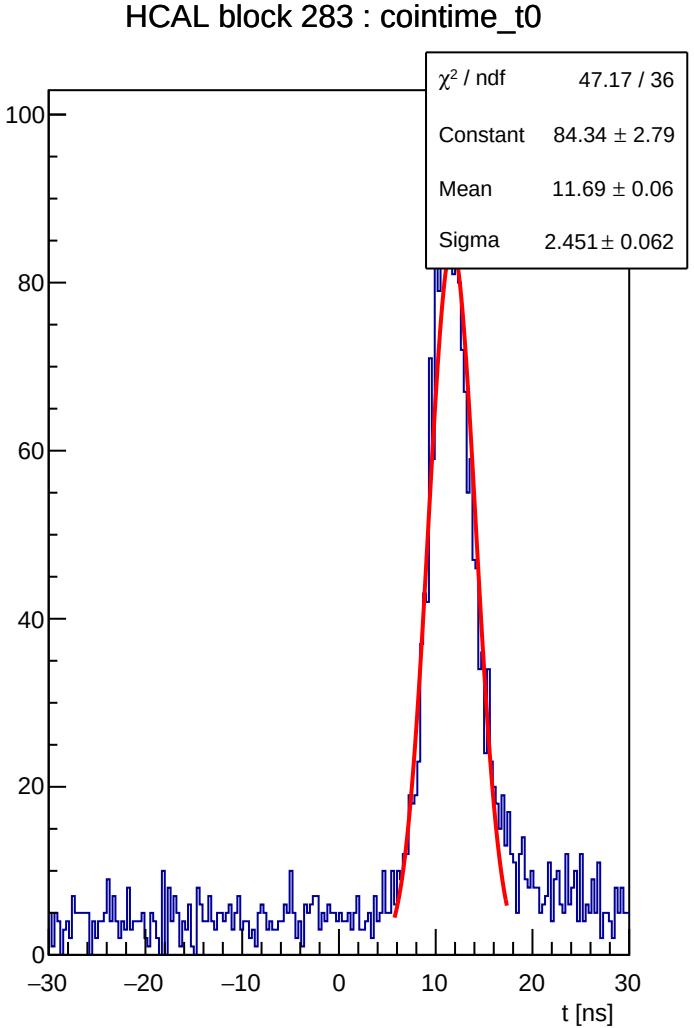

HCAL block 280 : cointime tw corr t0
χ² / ndf 112.1 / 40
Constant 80.53 ± 2.93
Mean 11.59 ± 0.06
Sigma 2.241 ± 0.060
t tw corr [ns]

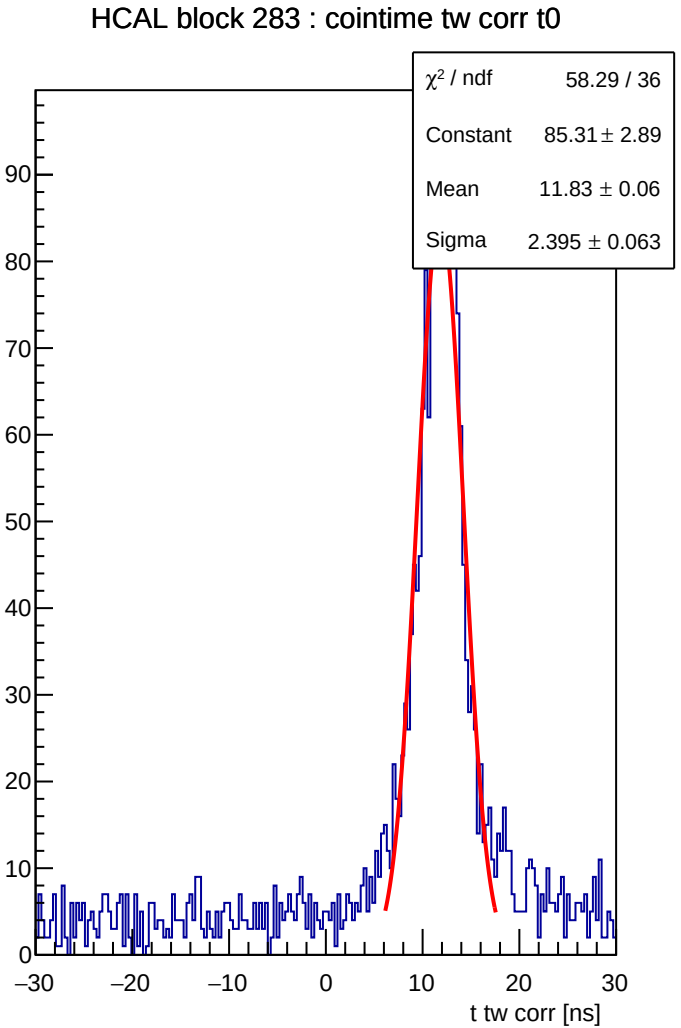

HCAL block 281 : cointime_t0
χ² / ndf 55.08 / 38
Constant 53.37 ± 2.24
Mean 11.87 ± 0.08
Sigma 2.583 ± 0.086
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t [ns]

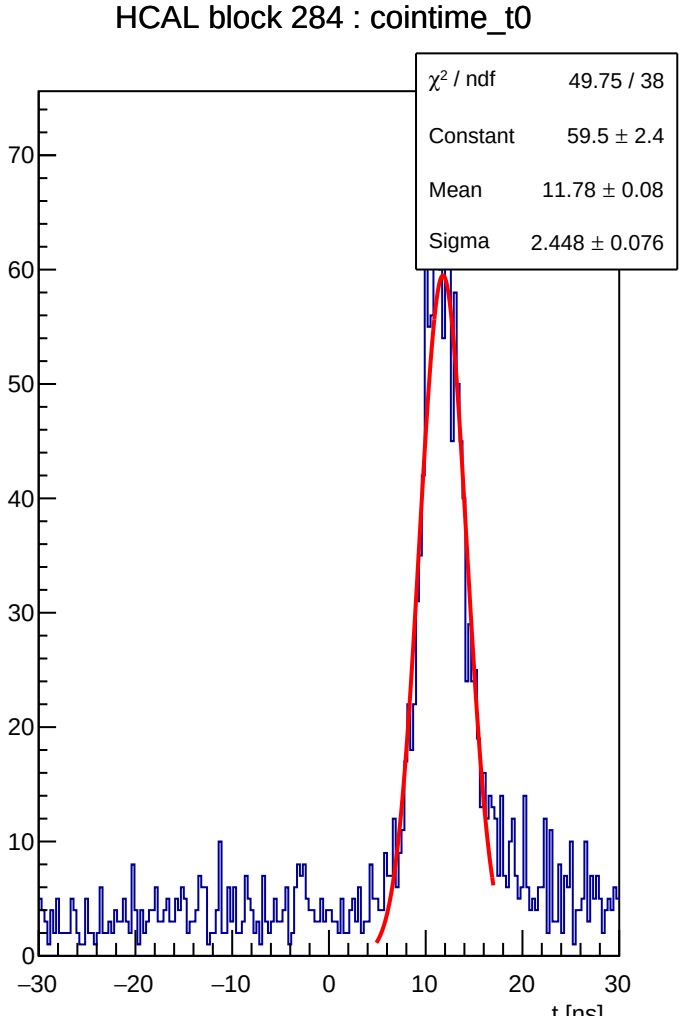

HCAL block 281 : cointime tw corr t0
χ² / ndf 65.98 / 38
Constant 56.42 ± 2.45
Mean 11.81 ± 0.07
Sigma 2.396 ± 0.082
70
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

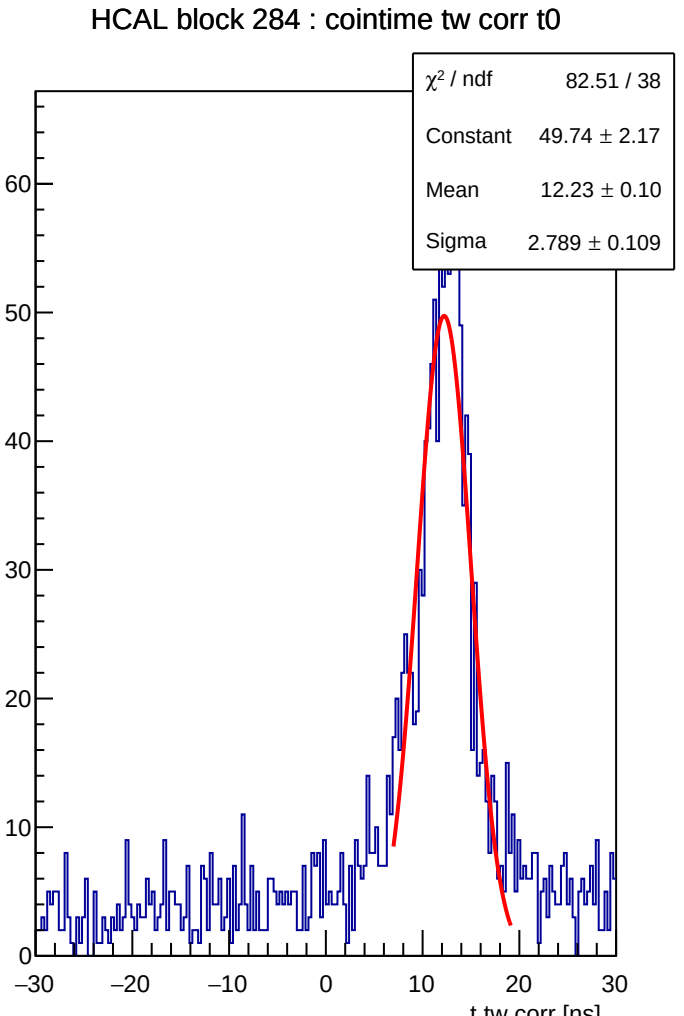

HCAL block 282 : cointime_t0
χ² / ndf 82.82 / 38
Constant 78.28 ± 2.73
Mean 11.78 ± 0.07
Sigma 2.387 ± 0.062
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

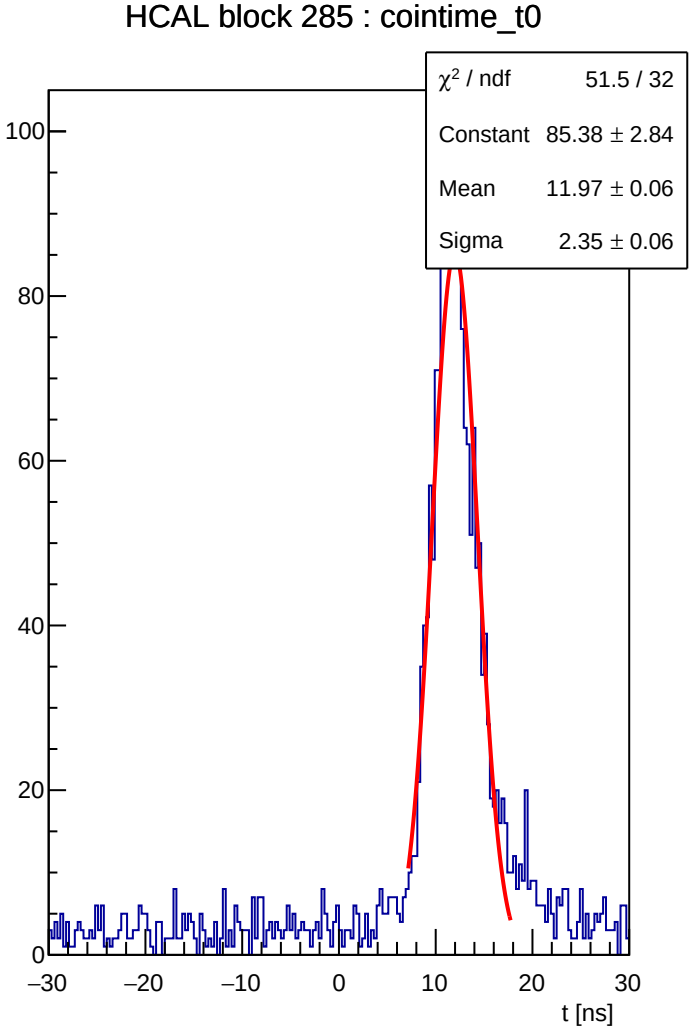

HCAL block 282 : cointime tw corr t0
χ² / ndf 90.22 / 38
Constant 83.65 ± 2.99
Mean 11.68 ± 0.06
Sigma 2.208 ± 0.058
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

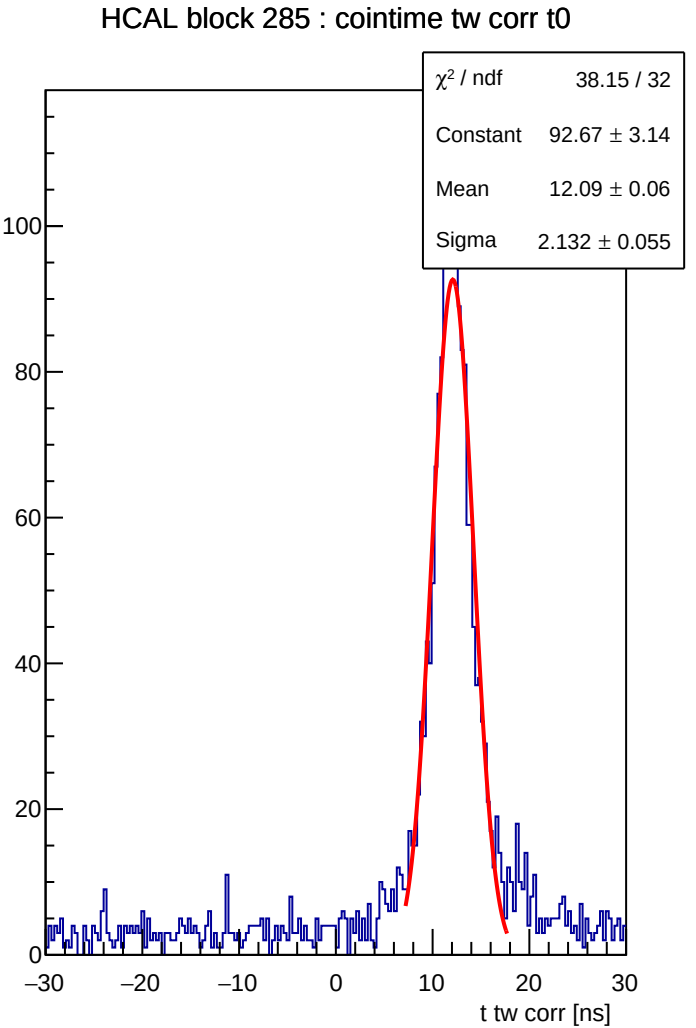

HCAL block 283 : cointime_t0
χ² / ndf 47.17 / 36
Constant 84.34 ± 2.79
Mean 11.69 ± 0.06
Sigma 2.451 ± 0.062
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

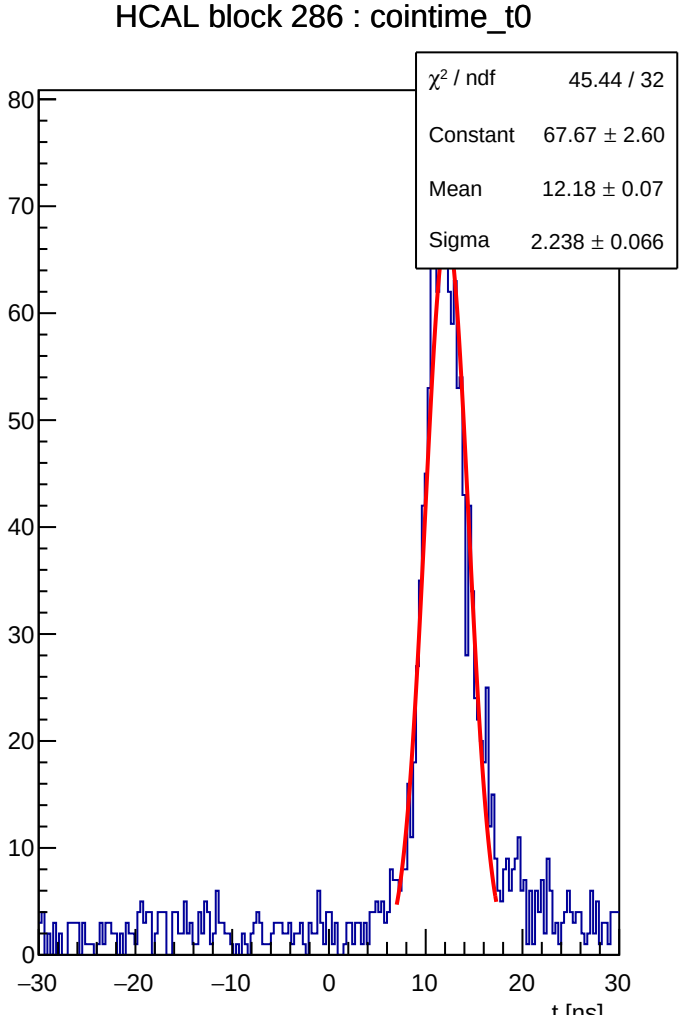

HCAL block 283 : cointime tw corr t0
χ² / ndf 58.29 / 36
Constant 85.31 ± 2.89
Mean 11.83 ± 0.06
Sigma 2.395 ± 0.063
90
80
70
60
50
40
30
20
10
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

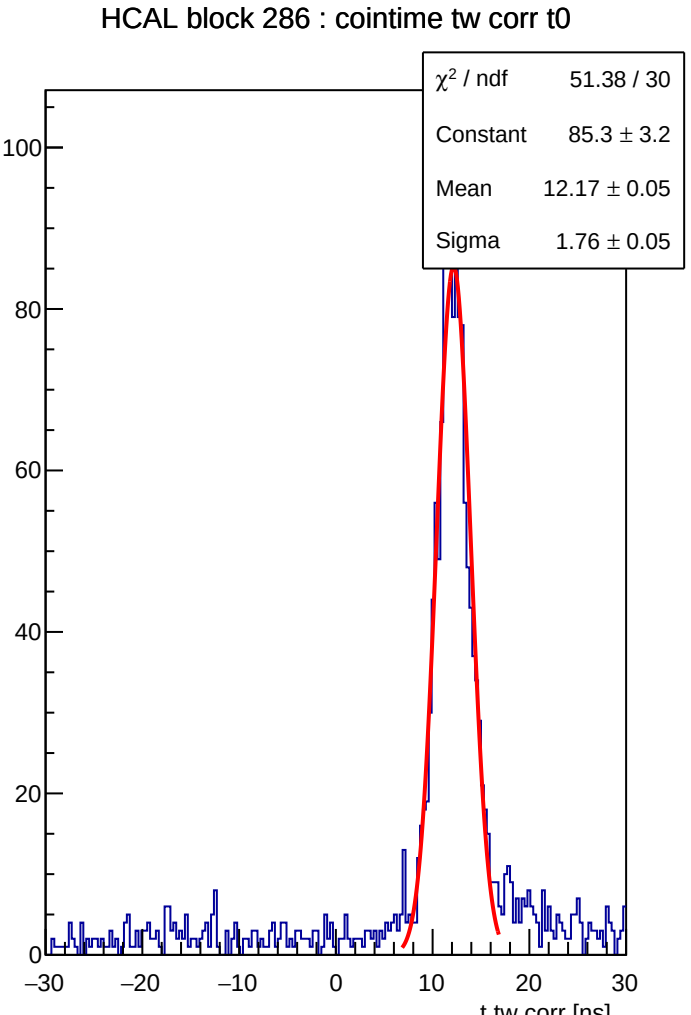

HCAL block 284 : cointime_t0
χ² / ndf 49.75 / 38
Constant 59.5 ± 2.4
Mean 11.78 ± 0.08
Sigma 2.448 ± 0.076
70
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t [ns]

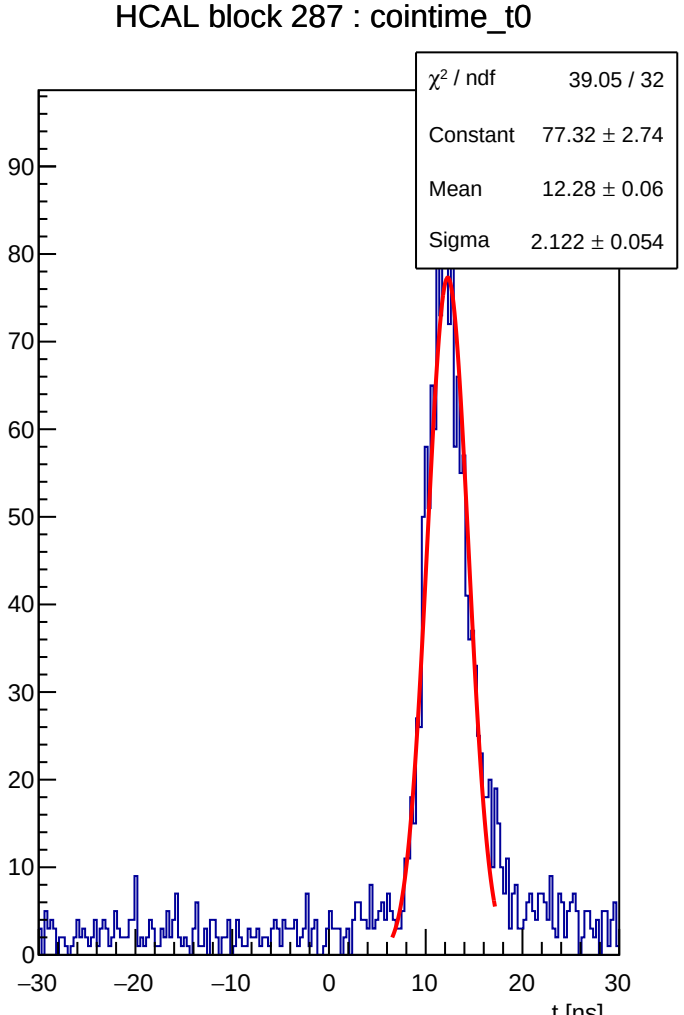

HCAL block 284 : cointime tw corr t0
χ² / ndf 82.51 / 38
Constant 49.74 ± 2.17
Mean 12.23 ± 0.10
Sigma 2.789 ± 0.109
60
50
40
30
20
10
0
–30
–20
–10
0
10
20
30
t tw corr [ns]

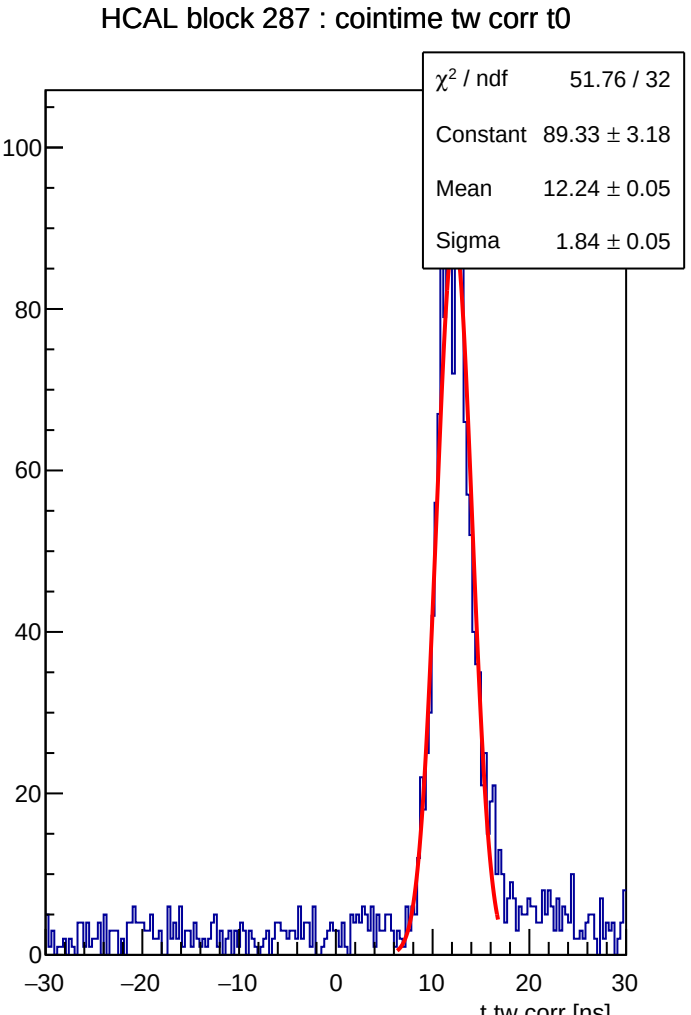

HCAL block 285 : cointime_t0
χ² / ndf 51.5 / 32
Constant 85.38 ± 2.84
Mean 11.97 ± 0.06
Sigma 2.35 ± 0.06
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t [ns]

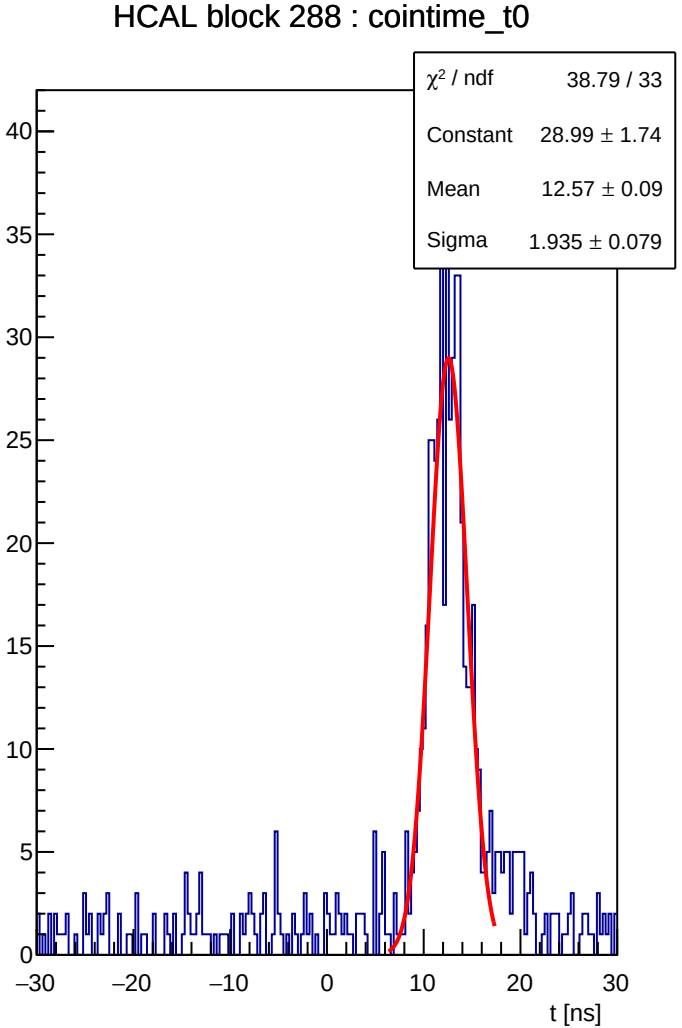

HCAL block 285 : cointime tw corr t0
χ² / ndf 38.15 / 32
Constant 92.67 ± 3.14
Mean 12.09 ± 0.06
Sigma 2.132 ± 0.055
100
80
60
40
20
0
−30
−20
−10
0
10
20
30
t tw corr [ns]

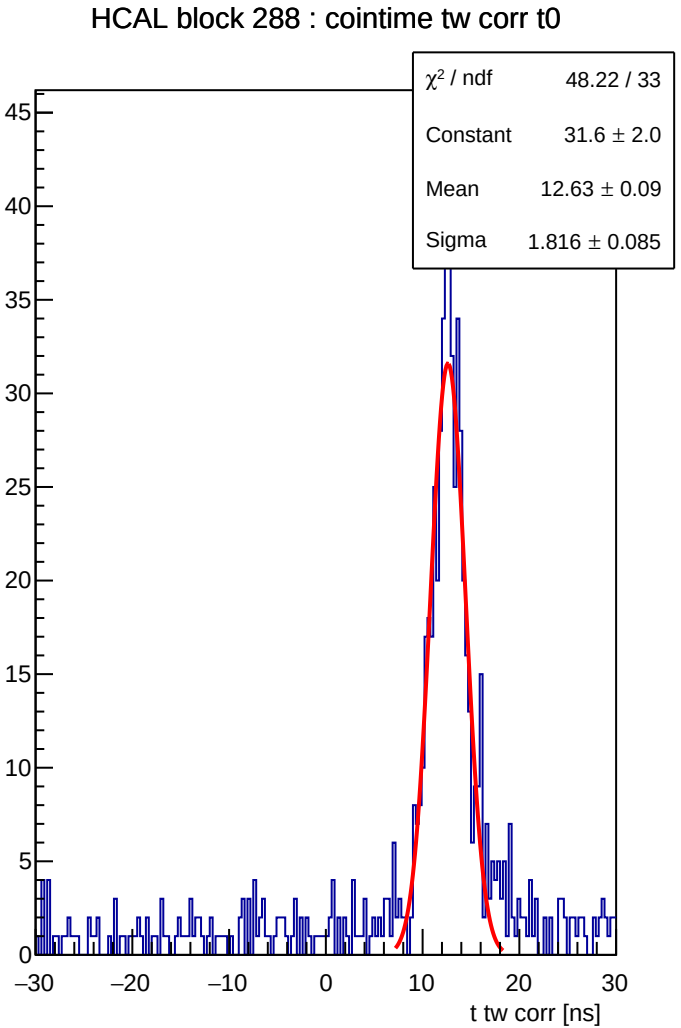

HCAL block 286 : cointime_t0
χ² / ndf 45.44 / 32
Constant 67.67 ± 2.60
Mean 12.18 ± 0.07
Sigma 2.238 ± 0.066
t [ns]

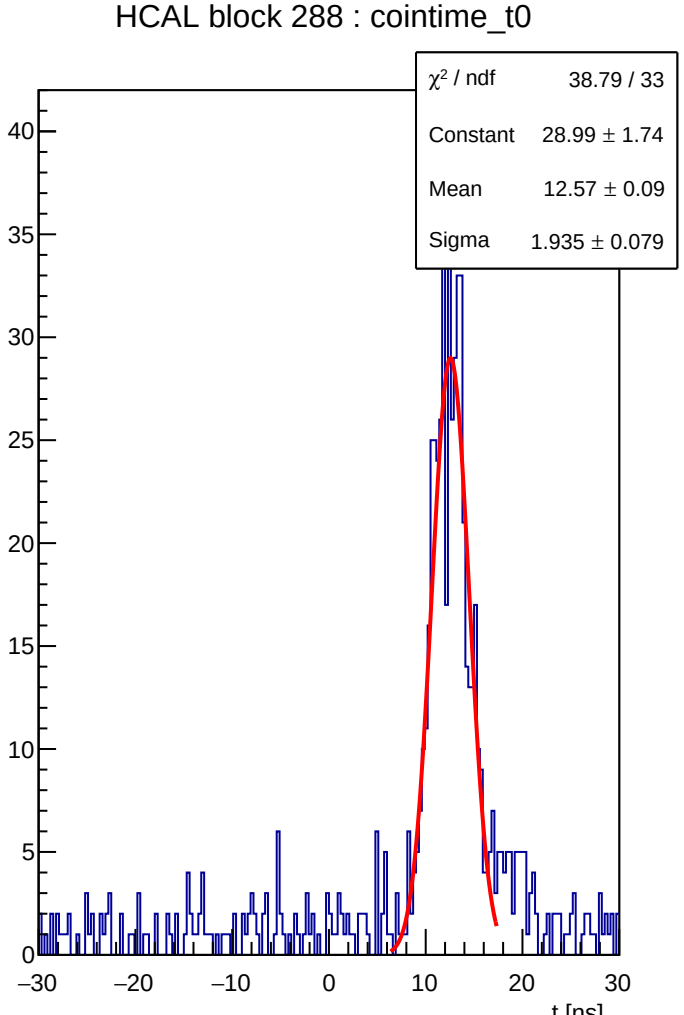

HCAL block 286 : cointime tw corr t0
χ² / ndf 51.38 / 30
Constant 85.3 ± 3.2
Mean 12.17 ± 0.05
Sigma 1.76 ± 0.05
t tw corr [ns]

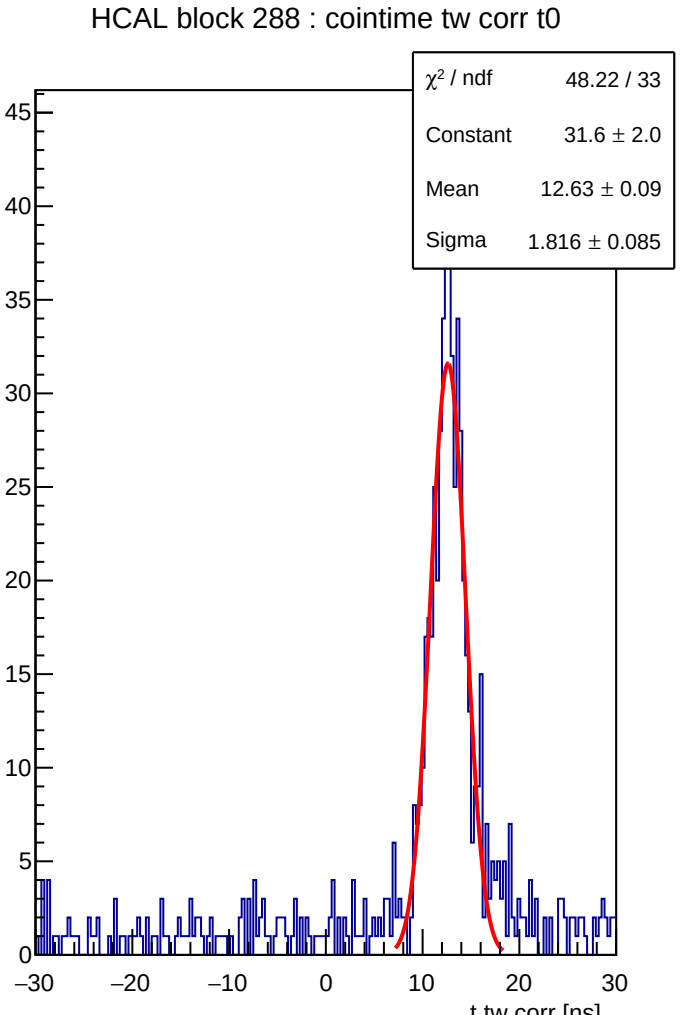

HCAL block 287 : cointime_t0
χ² / ndf 39.05 / 32
Constant 77.32 ± 2.74
Mean 12.28 ± 0.06
Sigma 2.122 ± 0.054
t [ns]


HCAL block 287 : cointime tw corr t0
χ² / ndf 51.76 / 32
Constant 89.33 ± 3.18
Mean 12.24 ± 0.05
Sigma 1.84 ± 0.05
t tw corr [ns]


HCAL block 288 : cointime_t0
χ² / ndf 38.79 / 33
Constant 28.99 ± 1.74
Mean 12.57 ± 0.09
Sigma 1.935 ± 0.079
t [ns]


HCAL block 288 : cointime tw corr t0
χ² / ndf 48.22 / 33
Constant 31.6 ± 2.0
Mean 12.63 ± 0.09
Sigma 1.816 ± 0.085
t tw corr [ns]


HCAL block 288 : cointime_t0
χ² / ndf 38.79 / 33
Constant 28.99 ± 1.74
Mean 12.57 ± 0.09
Sigma 1.935 ± 0.079
t [ns]


HCAL block 288 : cointime tw corr t0
χ² / ndf 48.22 / 33
Constant 31.6 ± 2.0
Mean 12.63 ± 0.09
Sigma 1.816 ± 0.085
t tw corr [ns]