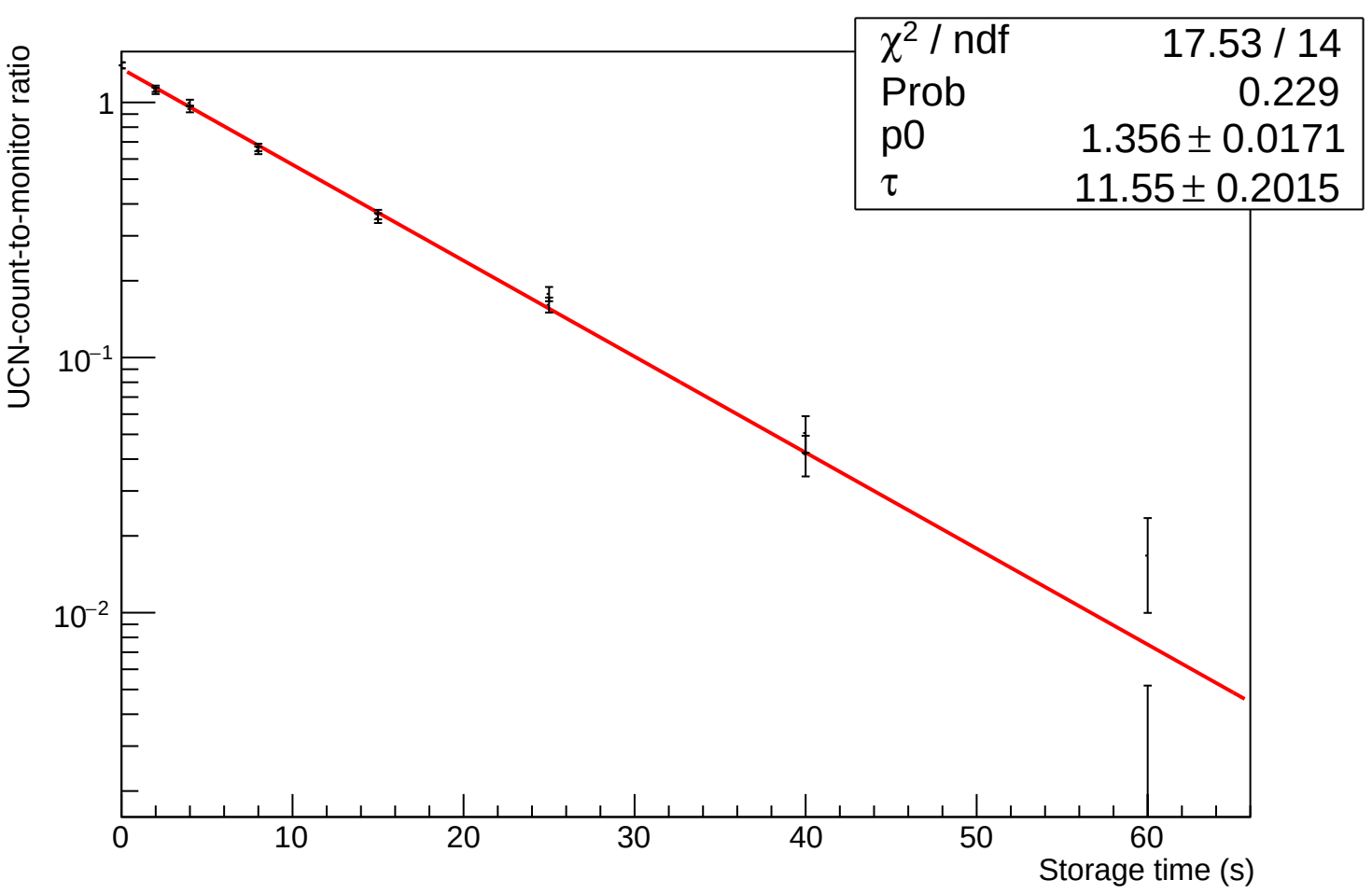
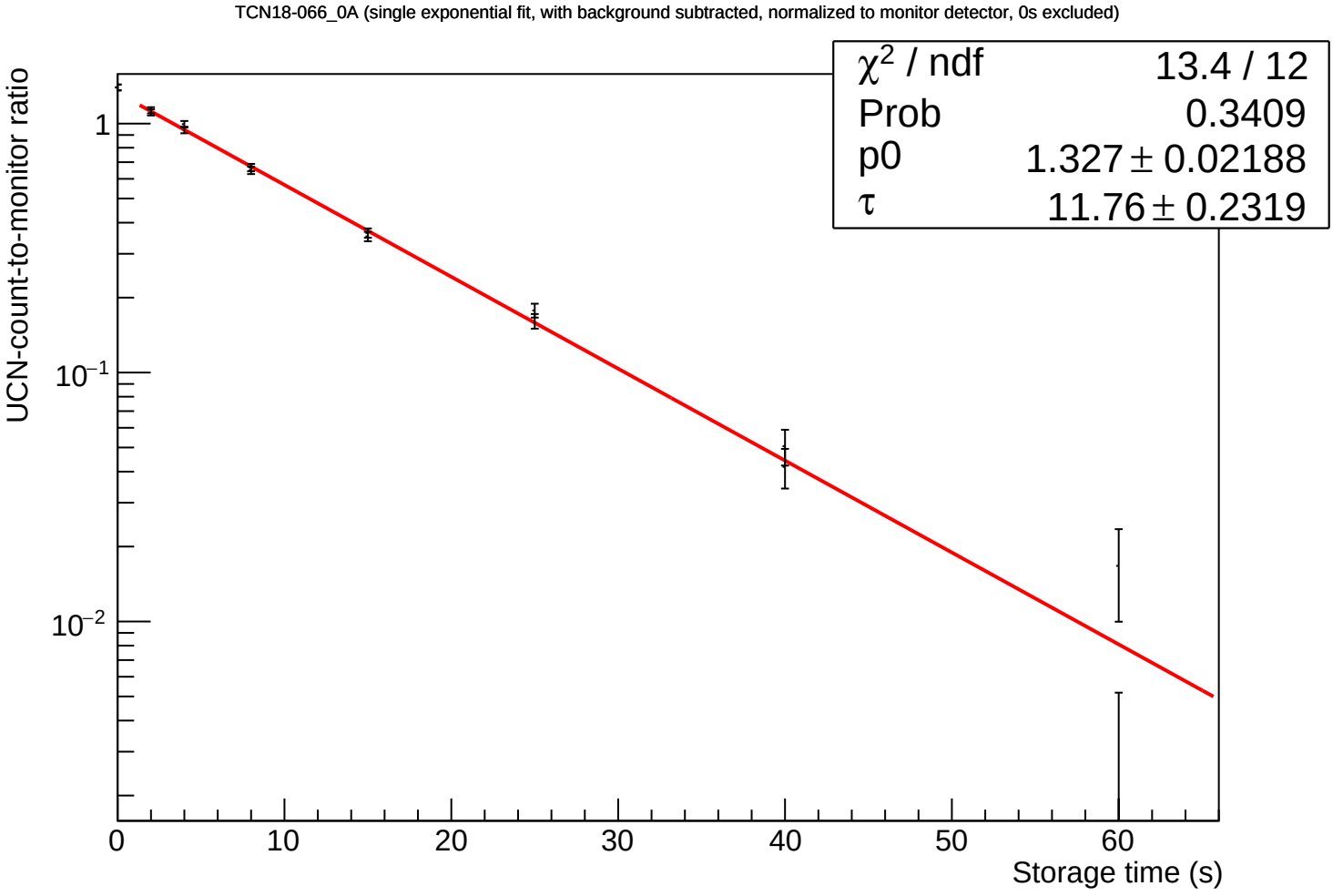
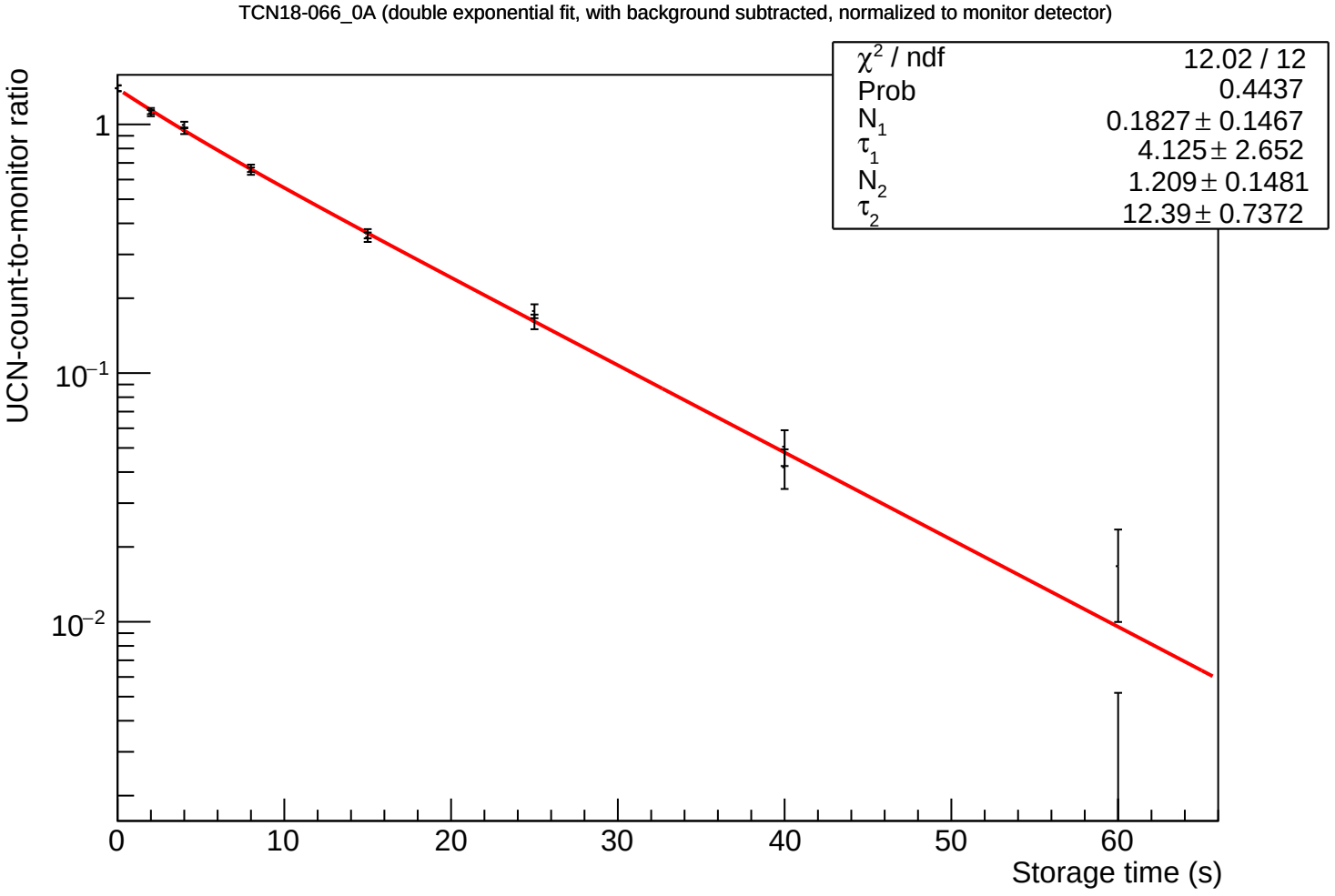
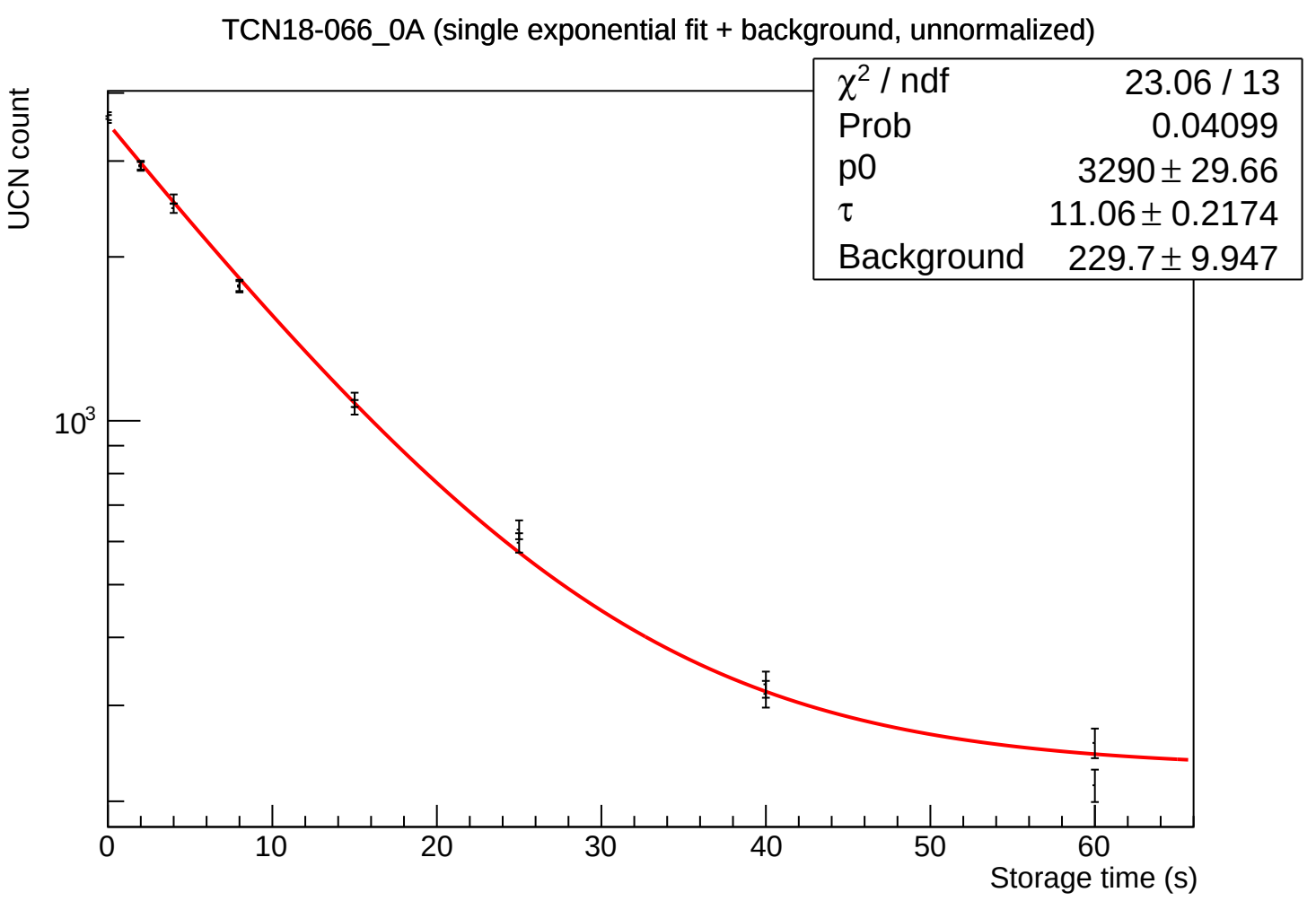
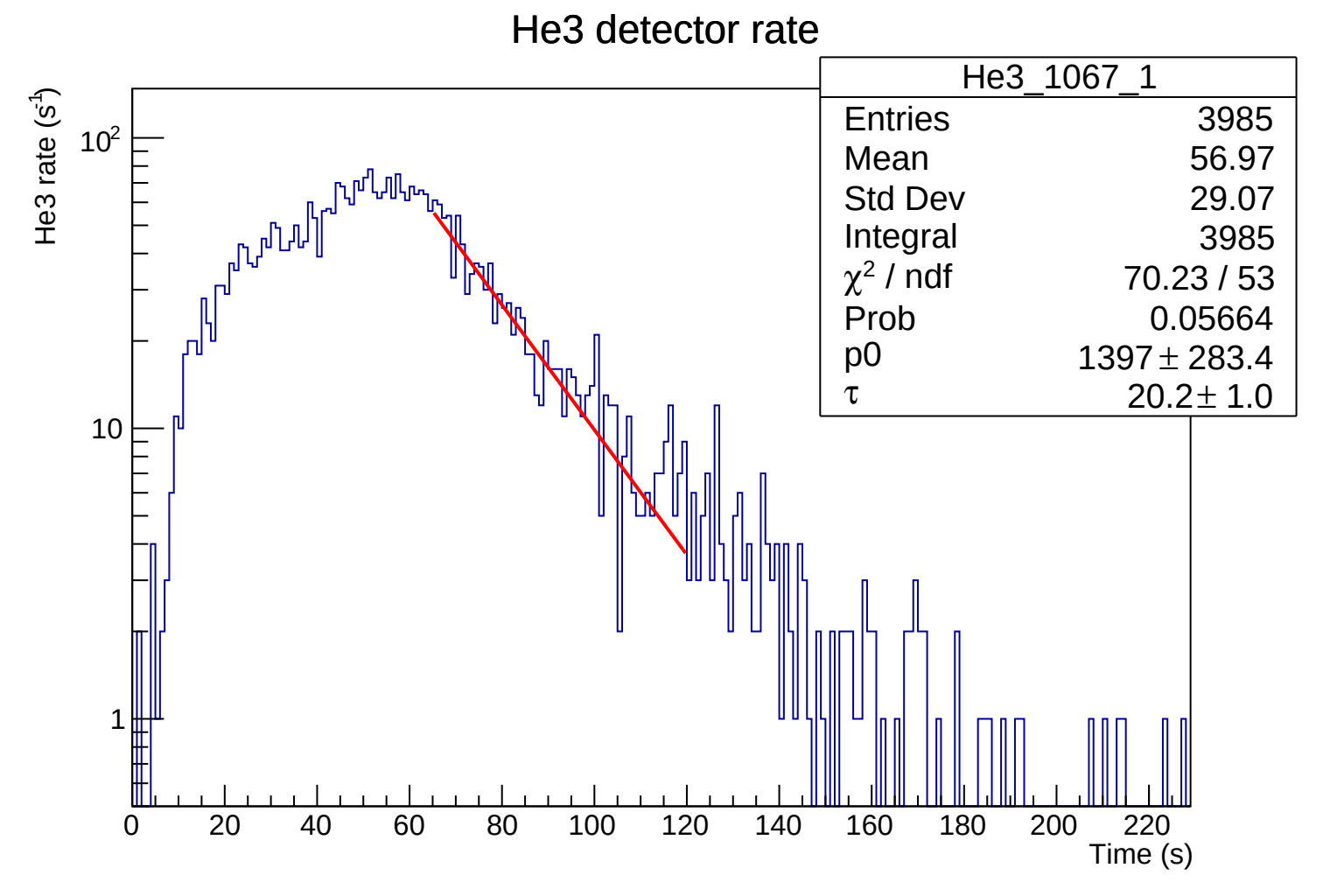
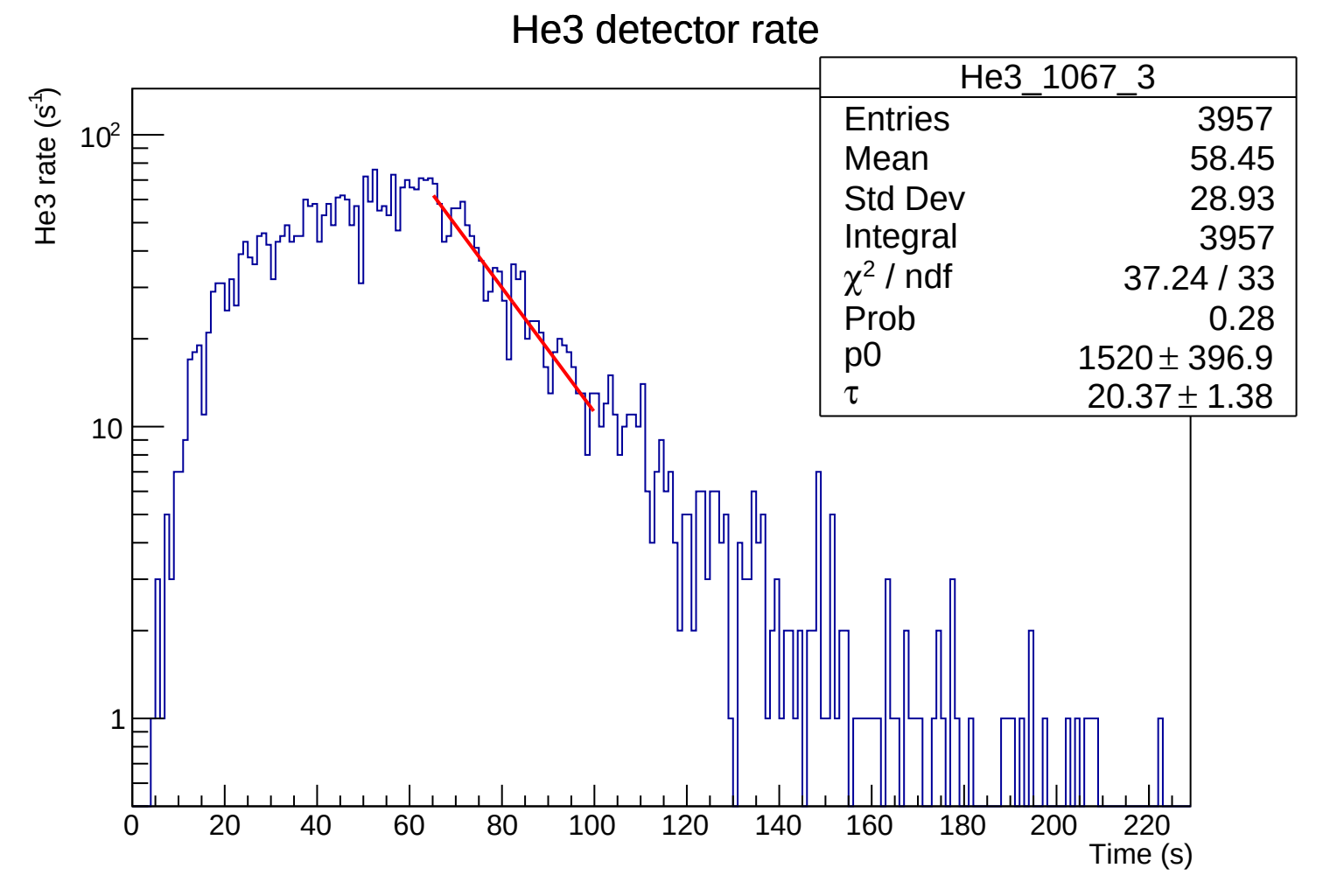

TCN18-066_0A (single exponential fit, with background subtracted, normalized to monitor detector)
χ² / ndf 17.53 / 14
Prob 0.229
p0 1.356 ± 0.0171
τ 11.55 ± 0.2015
UCN-count-to-monitor ratio
1
10⁻¹
10⁻²
0
10
20
30
40
50
60
Storage time (s)

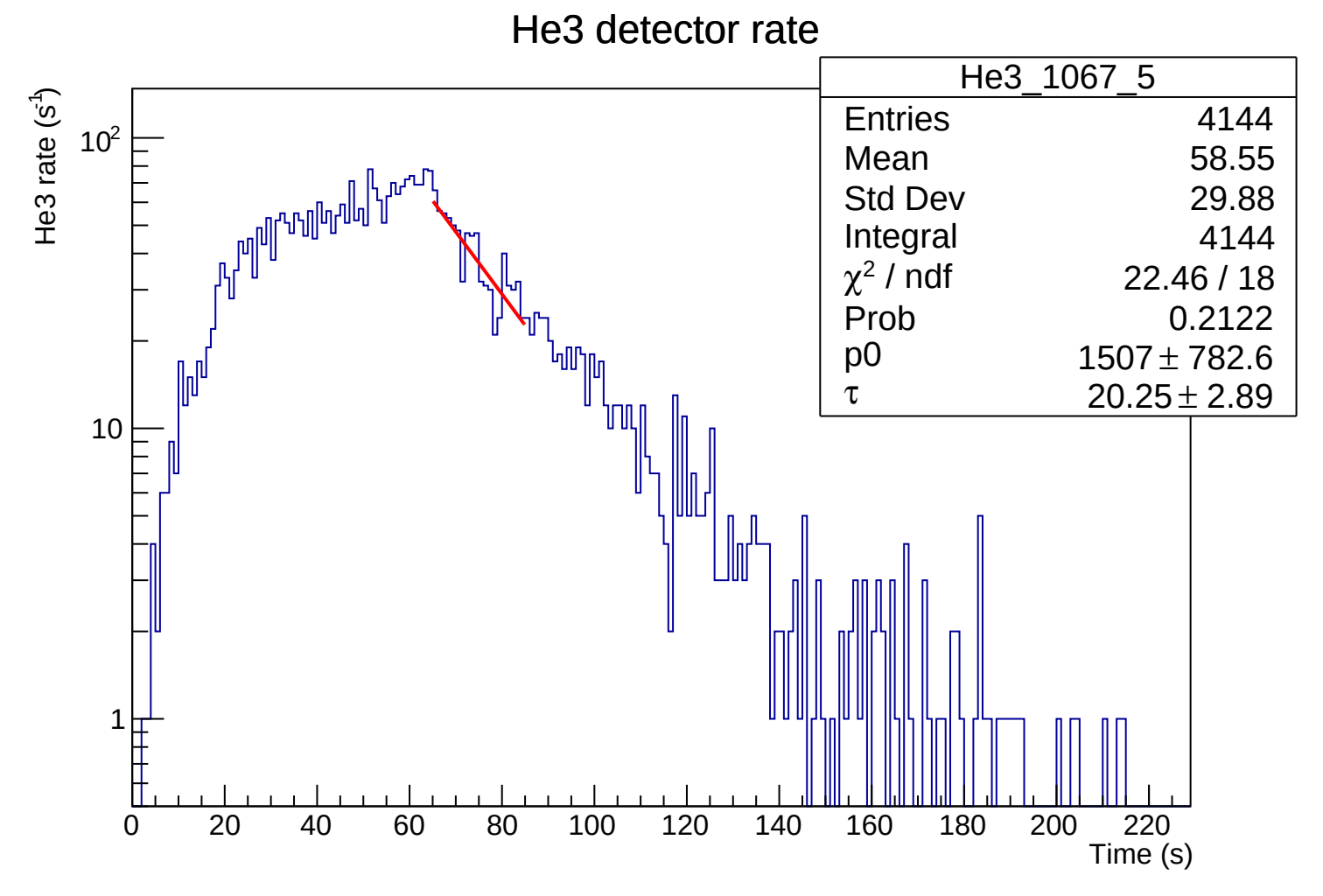

TCN18-066_0A (single exponential fit, with background subtracted, normalized to monitor detector, 0s excluded)
χ² / ndf 13.4 / 12
Prob 0.3409
p0 1.327 ± 0.02188
τ 11.76 ± 0.2319
UCN-count-to-monitor ratio
1
10⁻¹
10⁻²
0
10
20
30
40
50
60
Storage time (s)

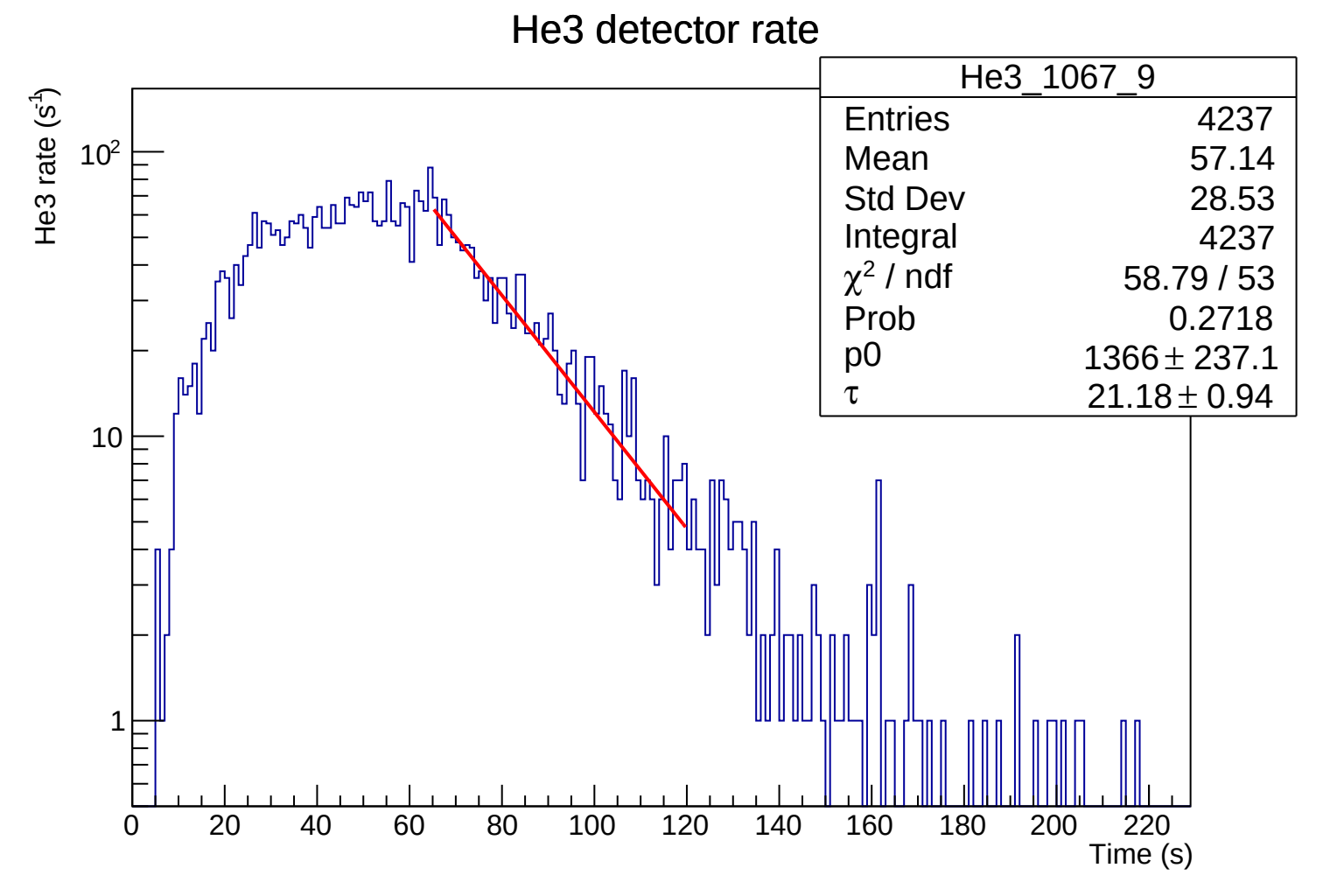

TCN18-066_0A (double exponential fit, with background subtracted, normalized to monitor detector)
χ² / ndf 12.02 / 12
Prob 0.4437
N1 0.1827 ± 0.1467
τ1 4.125 ± 2.652
N2 1.209 ± 0.1481
τ2 12.39 ± 0.7372
UCN-count-to-monitor ratio
1
10⁻¹
10⁻²
0
10
20
30
40
50
60
Storage time (s)

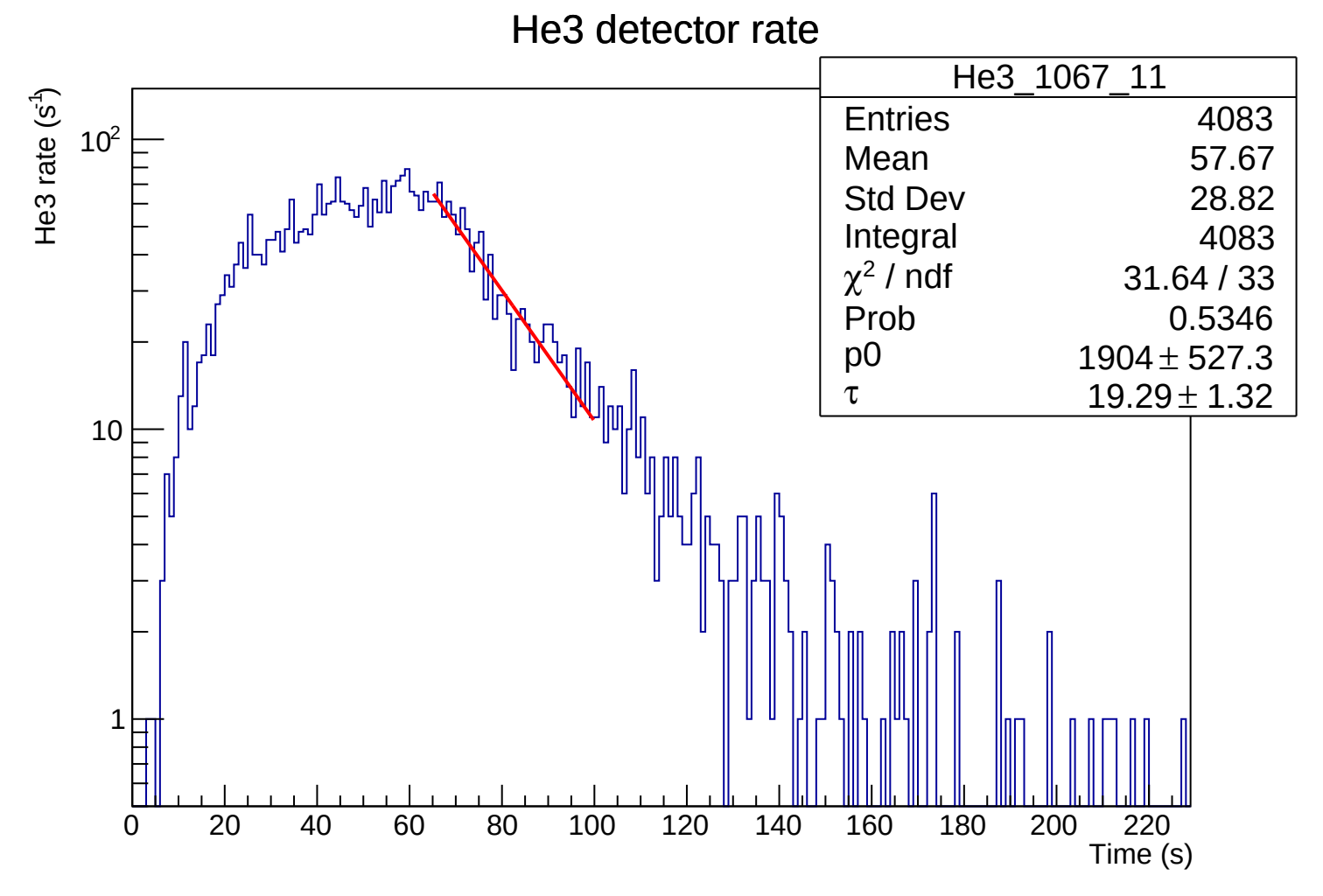

TCN18-066_0A (single exponential fit + background, unnormalized)
χ^2 / ndf 23.06 / 13
Prob 0.04099
p0 3290 ± 29.66
τ 11.06 ± 0.2174
Background 229.7 ± 9.947
UCN count
10^3
0
10
20
30
40
50
60
Storage time (s)

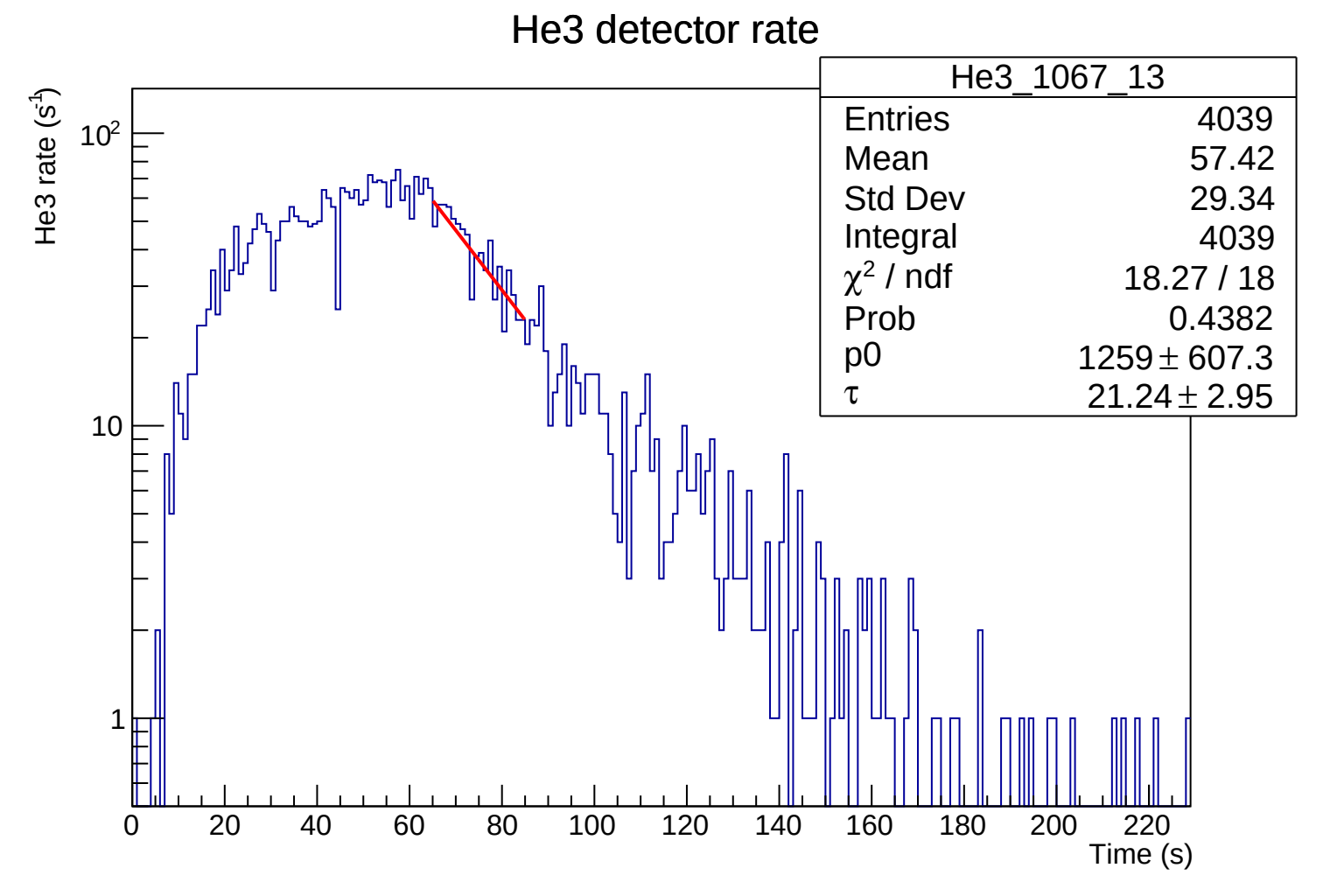

He3 detector rate
He3_1067_1
Entries 3985
Mean 56.97
Std Dev 29.07
Integral 3985
χ² / ndf 70.23 / 53
Prob 0.05664
p0 1397 ± 283.4
τ 20.2 ± 1.0
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)


He3 detector rate
He3_1067_3
Entries 3957
Mean 58.45
Std Dev 28.93
Integral 3957
χ² / ndf 37.24 / 33
Prob 0.28
p0 1520 ± 396.9
τ 20.37 ± 1.38
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)


He3 detector rate
He3_1067_5
Entries 4144
Mean 58.55
Std Dev 29.88
Integral 4144
χ² / ndf 22.46 / 18
Prob 0.2122
p0 1507 ± 782.6
τ 20.25 ± 2.89
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)


He3 detector rate
He3_1067_9
Entries 4237
Mean 57.14
Std Dev 28.53
Integral 4237
χ² / ndf 58.79 / 53
Prob 0.2718
p0 1366 ± 237.1
τ 21.18 ± 0.94
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)


He3 detector rate
He3_1067_11
Entries 4083
Mean 57.67
Std Dev 28.82
Integral 4083
χ² / ndf 31.64 / 33
Prob 0.5346
p0 1904 ± 527.3
τ 19.29 ± 1.32
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)


He3 detector rate
He3_1067_13
Entries 4039
Mean 57.42
Std Dev 29.34
Integral 4039
χ² / ndf 18.27 / 18
Prob 0.4382
p0 1259 ± 607.3
τ 21.24 ± 2.95
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

Average lifetime from He3 data:

τ = 20.4314258688 +/- 0.083973514734 s