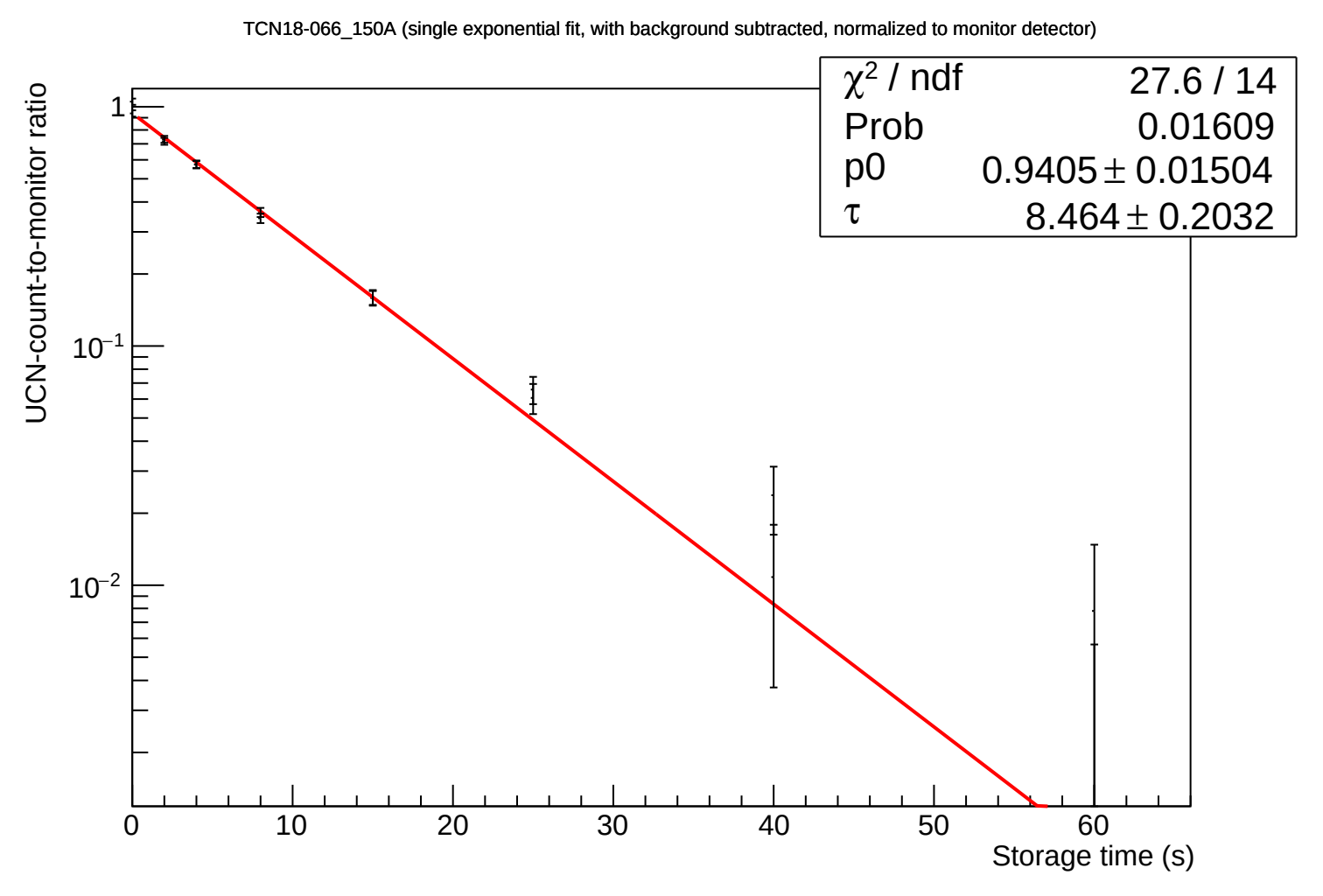
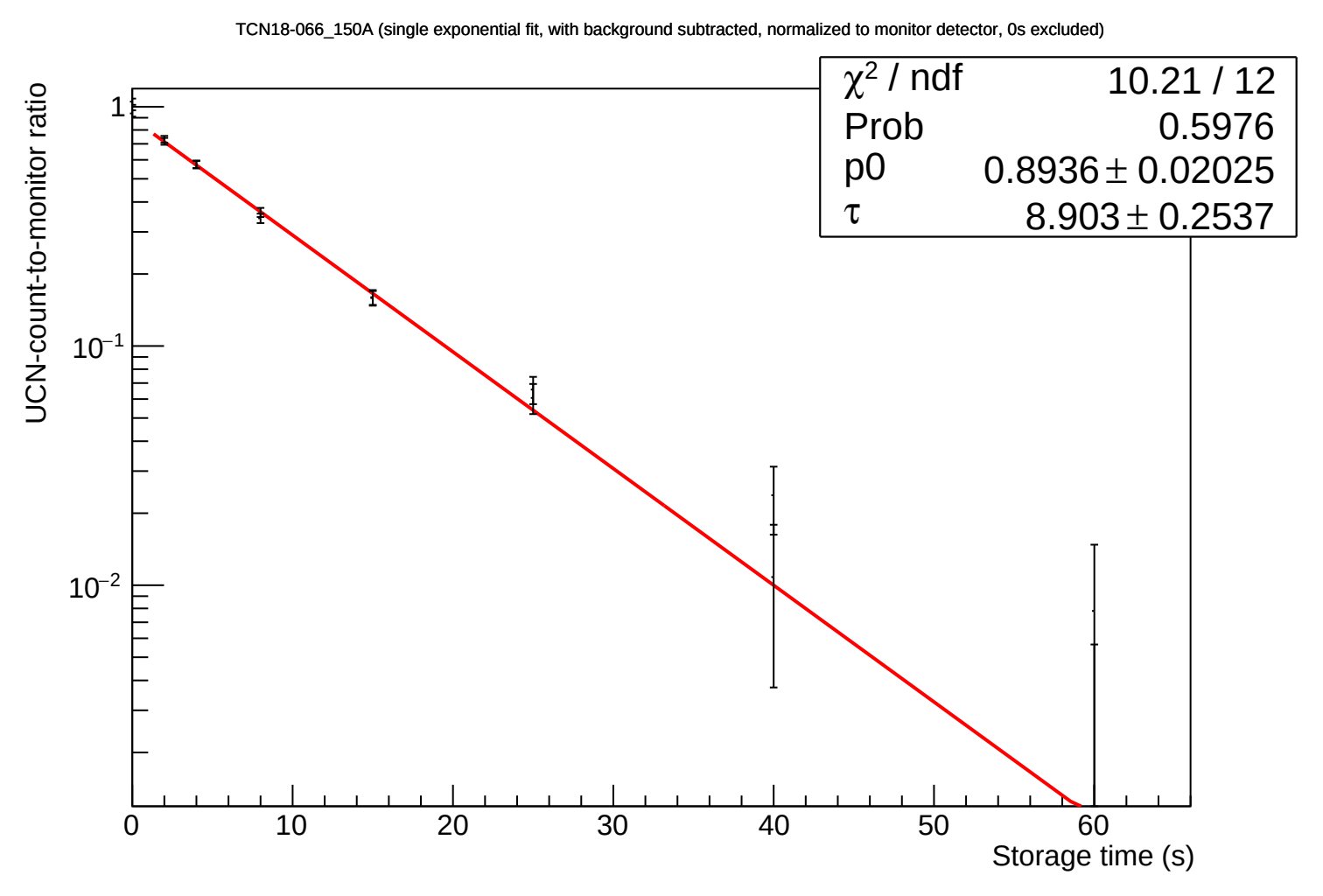
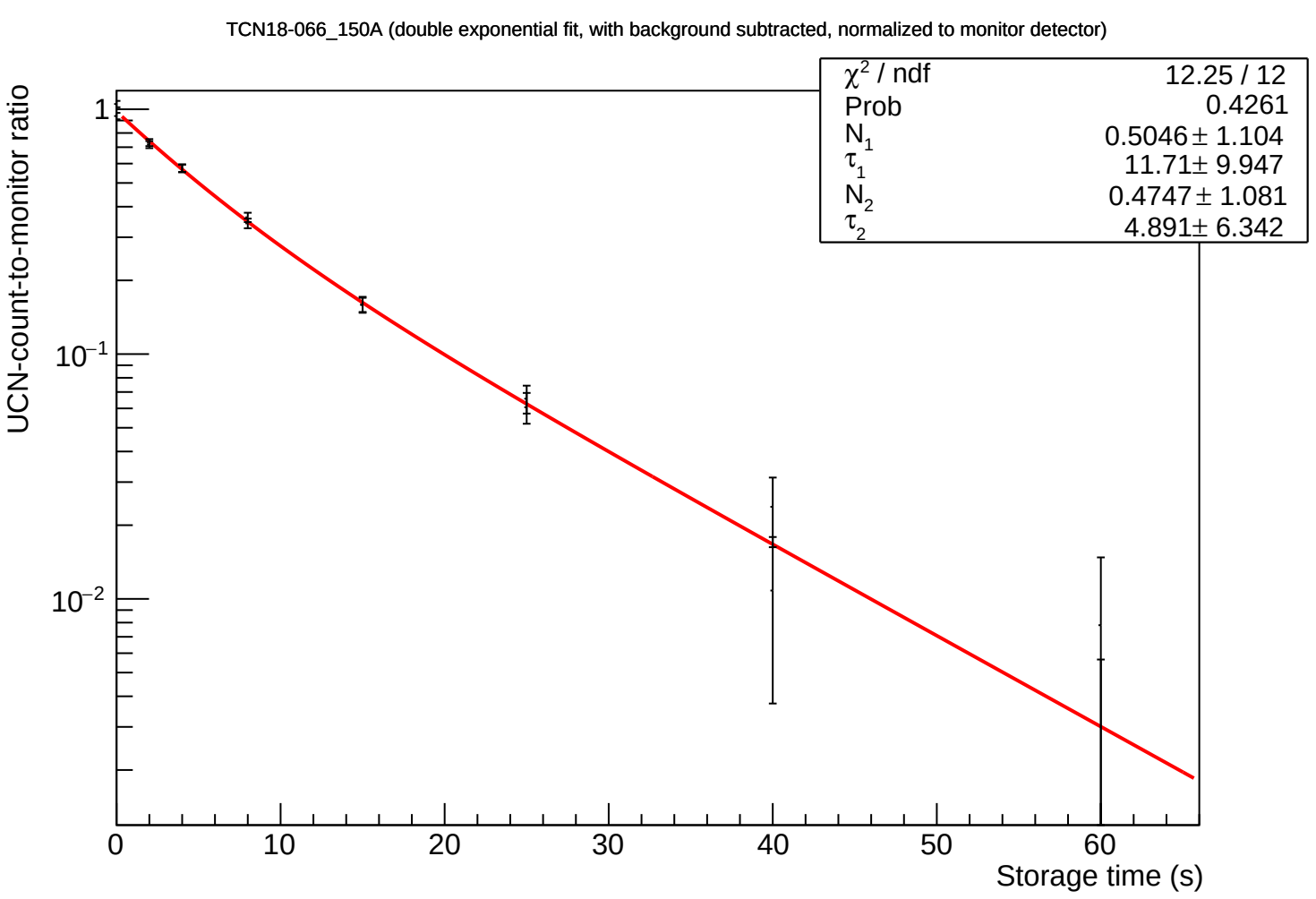
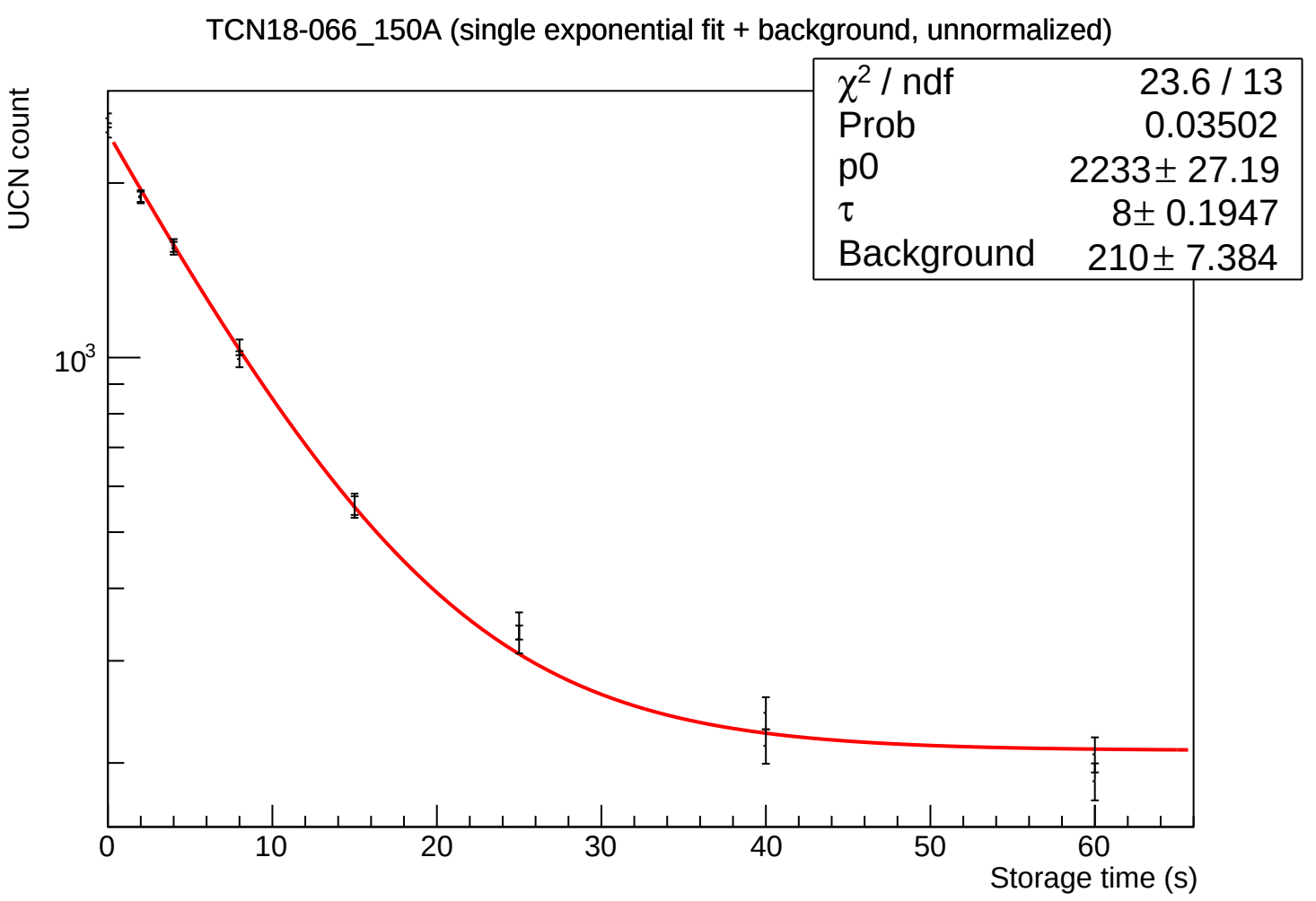
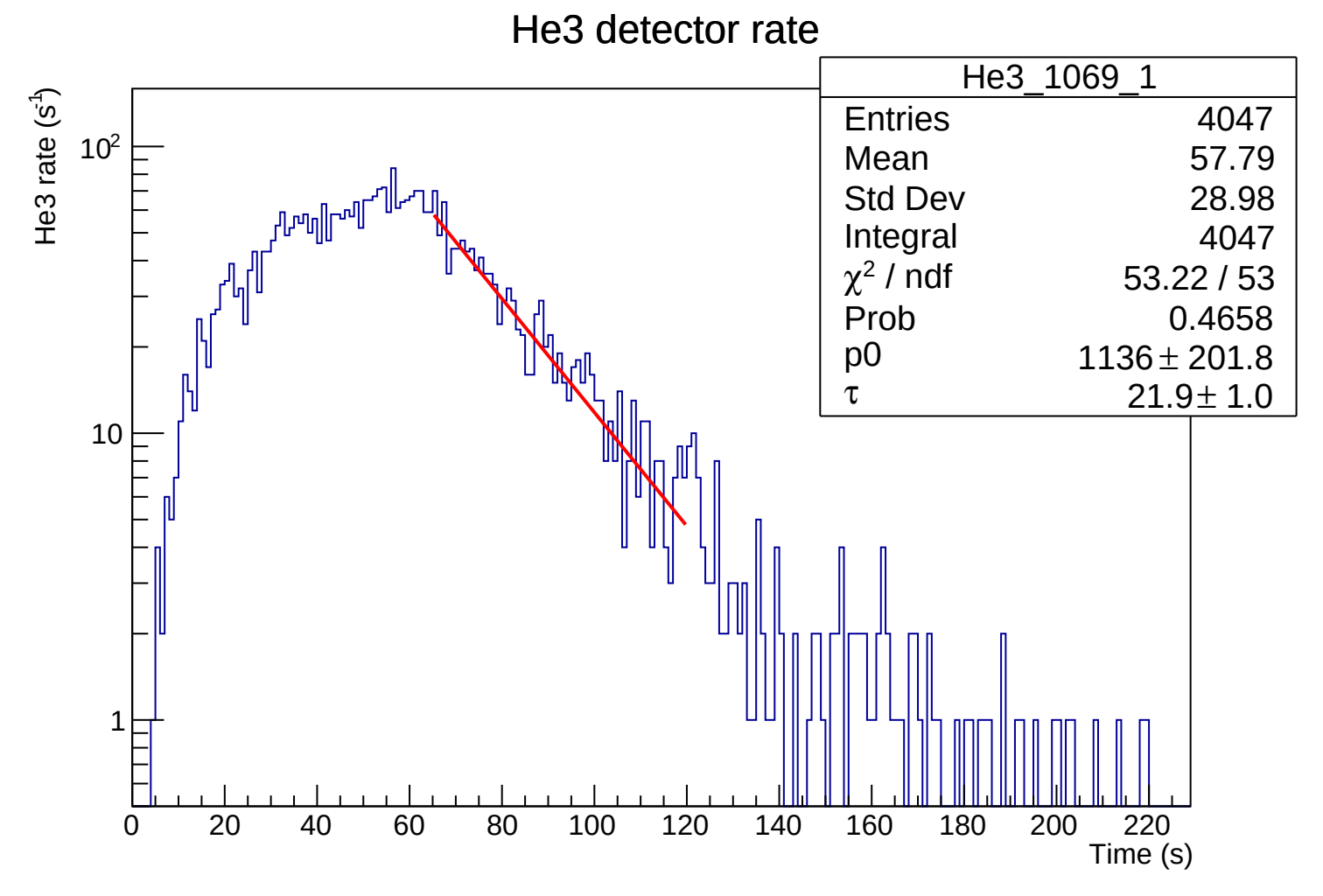
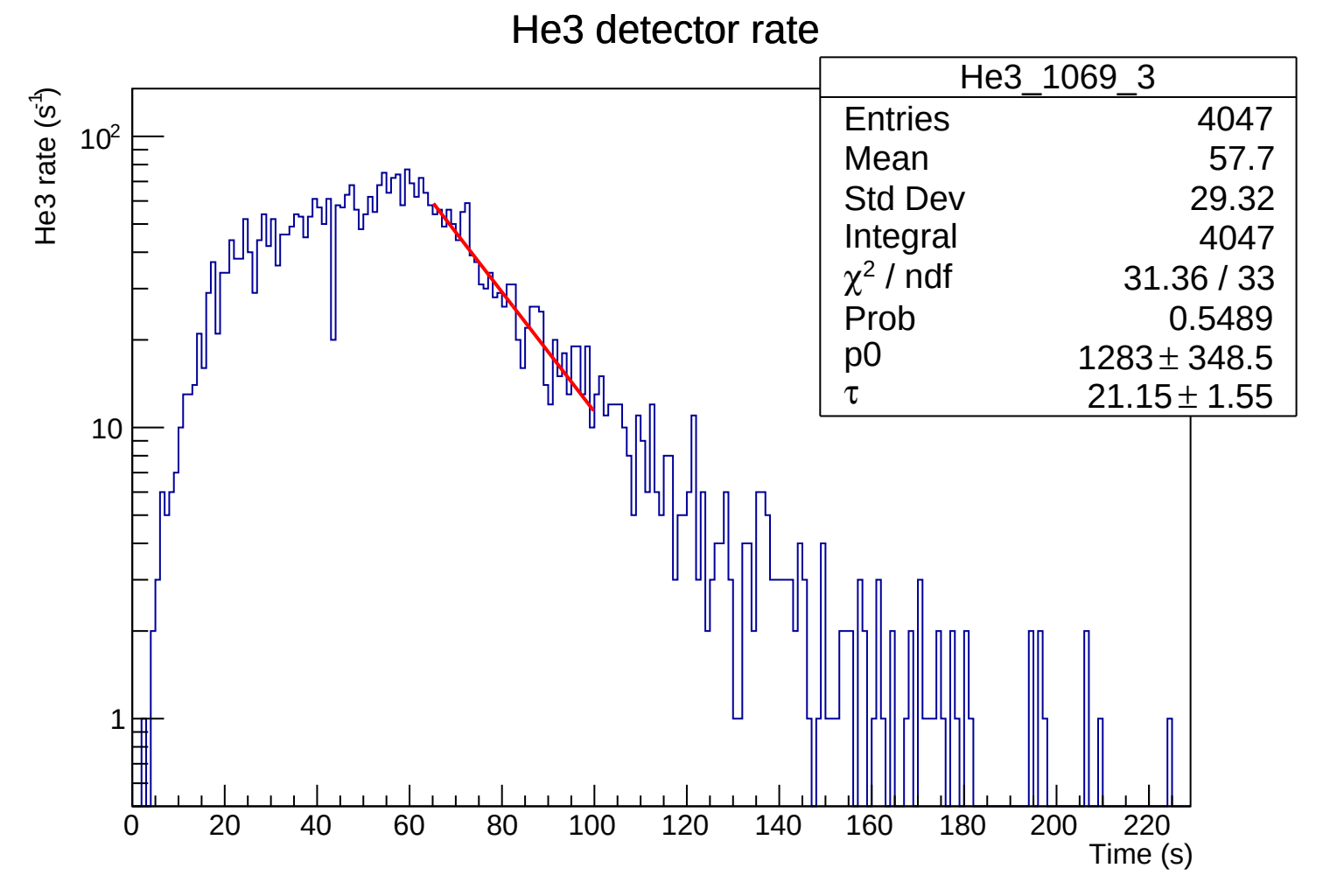

TCN18-066_150A (single exponential fit, with background subtracted, normalized to monitor detector)
χ² / ndf 27.6 / 14
Prob 0.01609
p0 0.9405 ± 0.01504
τ 8.464 ± 0.2032
UCN-count-to-monitor ratio
1
10⁻¹
10⁻²
0
10
20
30
40
50
60
Storage time (s)

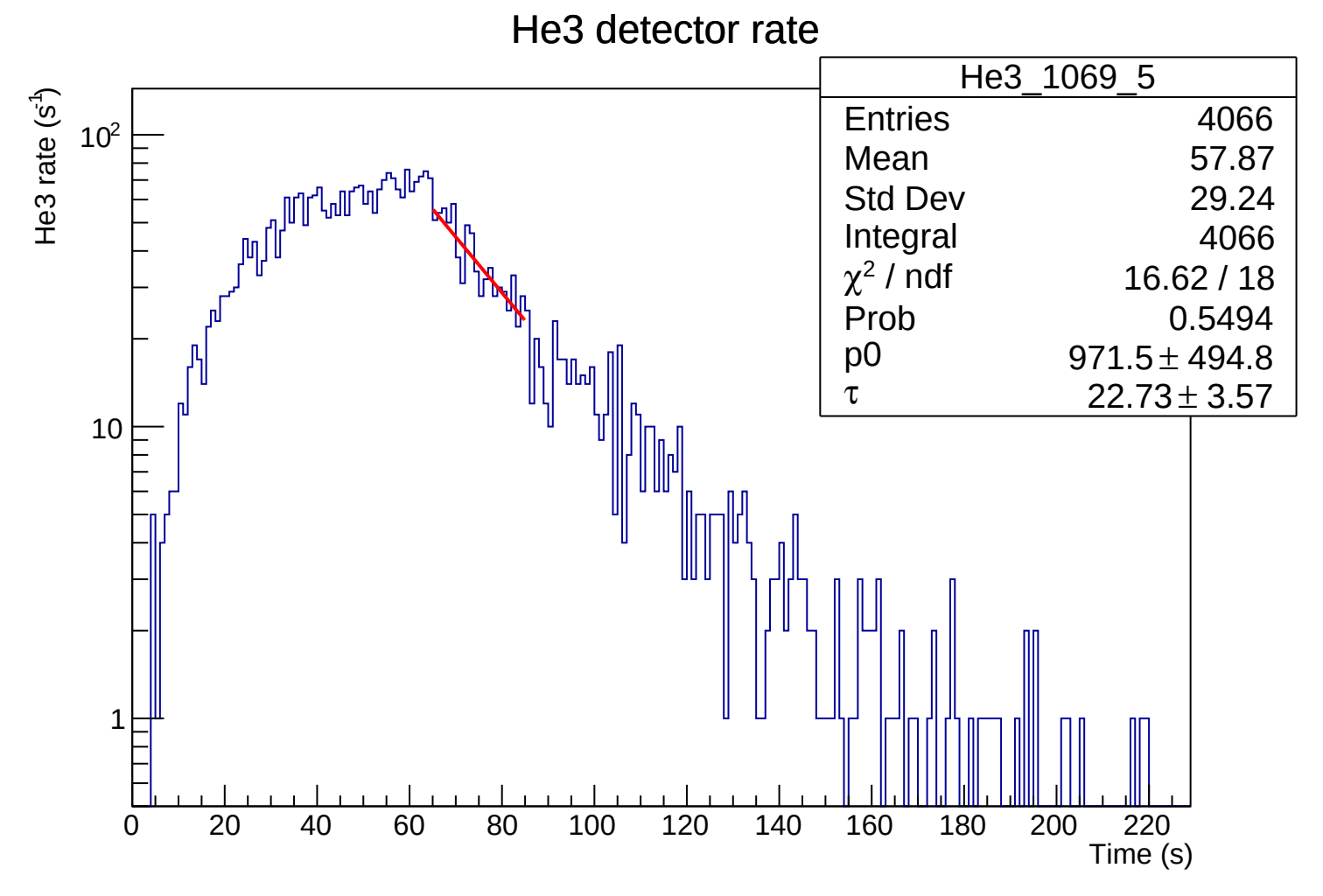

TCN18-066_150A (single exponential fit, with background subtracted, normalized to monitor detector, 0s excluded)
χ² / ndf 10.21 / 12
Prob 0.5976
p0 0.8936 ± 0.02025
τ 8.903 ± 0.2537
UCN-count-to-monitor ratio
1
10⁻¹
10⁻²
0
10
20
30
40
50
60
Storage time (s)

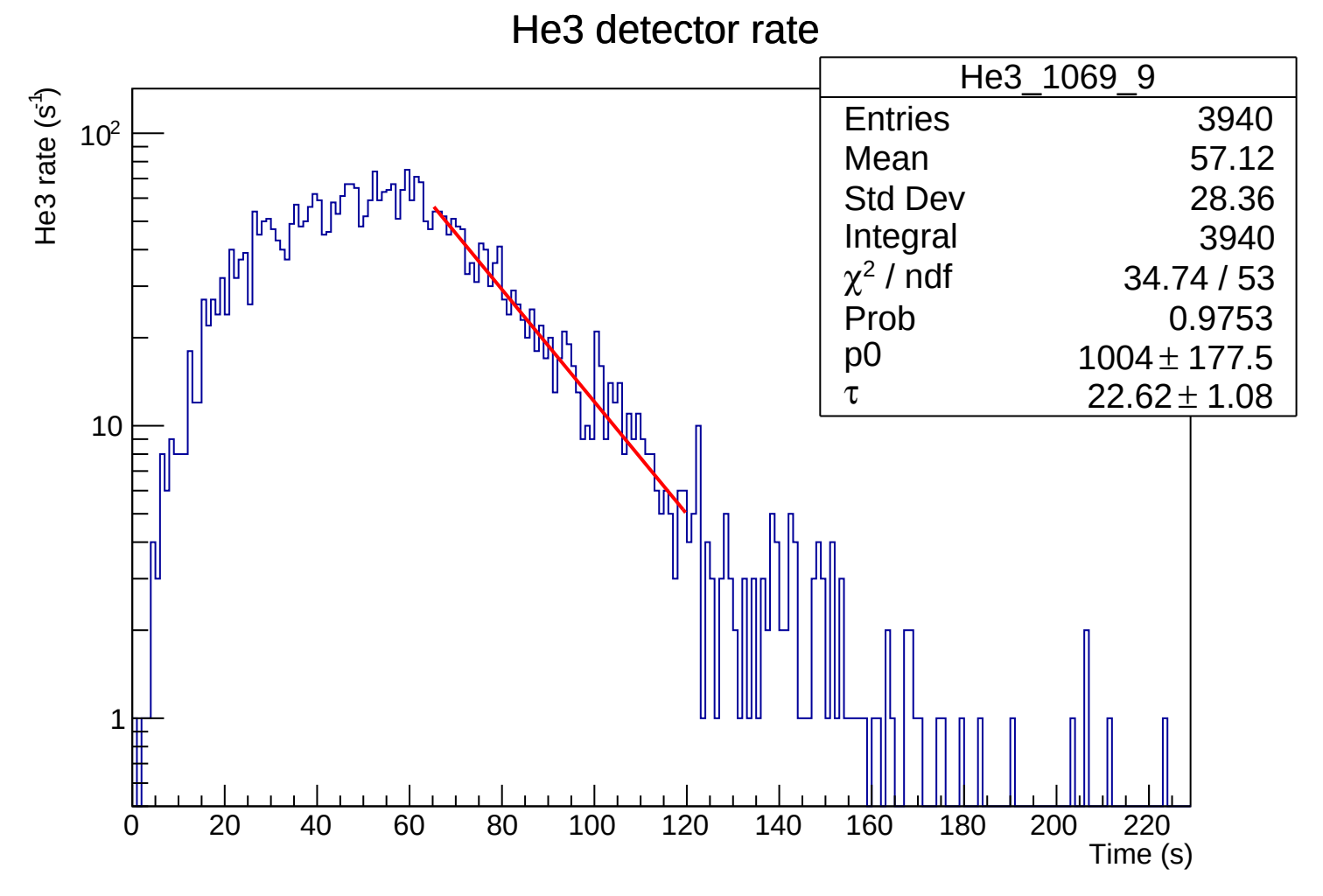

TCN18-066_150A (double exponential fit, with background subtracted, normalized to monitor detector)
χ² / ndf 12.25 / 12
Prob 0.4261
N1 0.5046 ± 1.104
τ1 11.71 ± 9.947
N2 0.4747 ± 1.081
τ2 4.891 ± 6.342
UCN-count-to-monitor ratio
1
10⁻¹
10⁻²
0
10
20
30
40
50
60
Storage time (s)

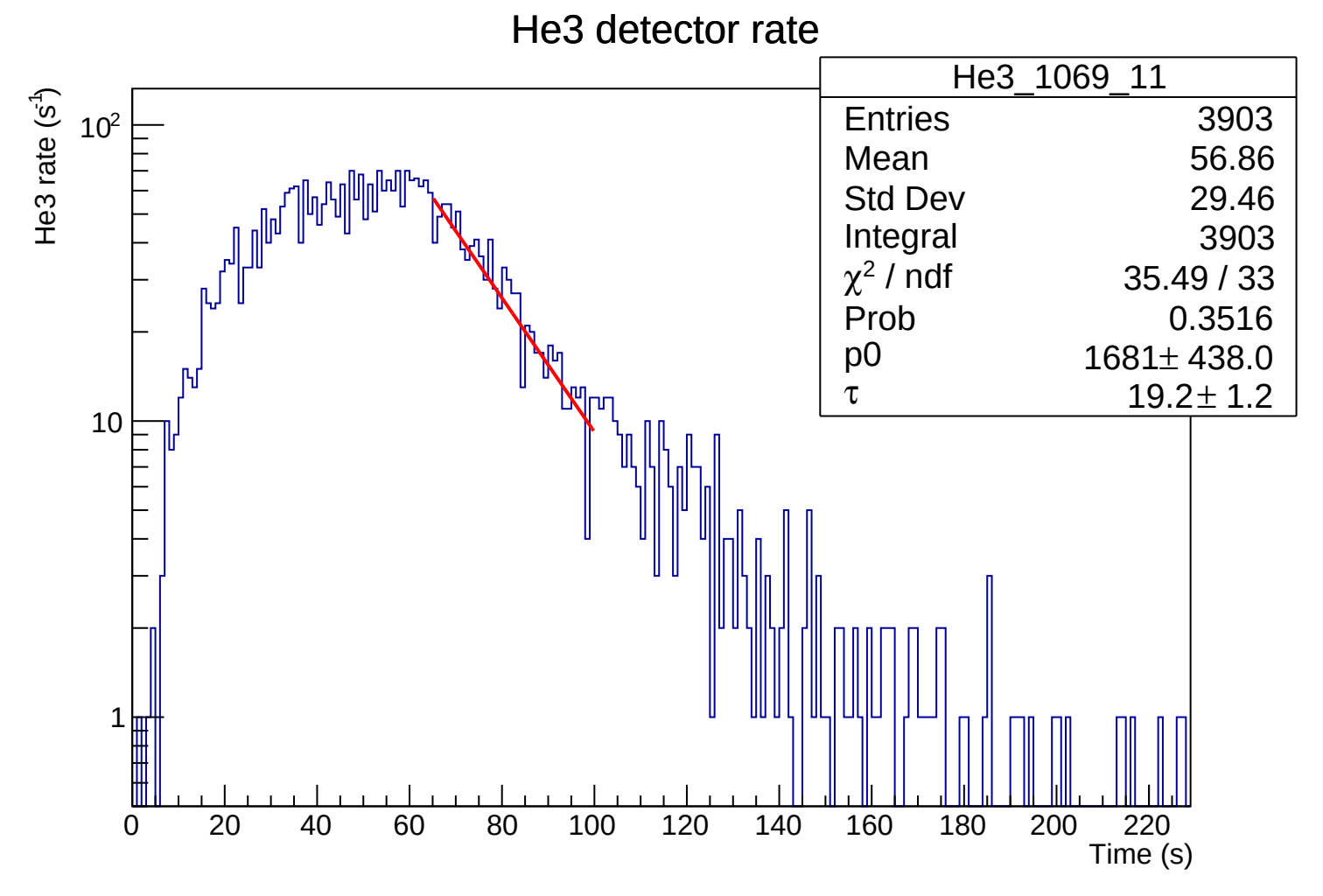

TCN18-066_150A (single exponential fit + background, unnormalized)
χ² / ndf 23.6 / 13
Prob 0.03502
p0 2233 ± 27.19
τ 8 ± 0.1947
Background 210 ± 7.384
UCN count
10³
0
10
20
30
40
50
60
Storage time (s)

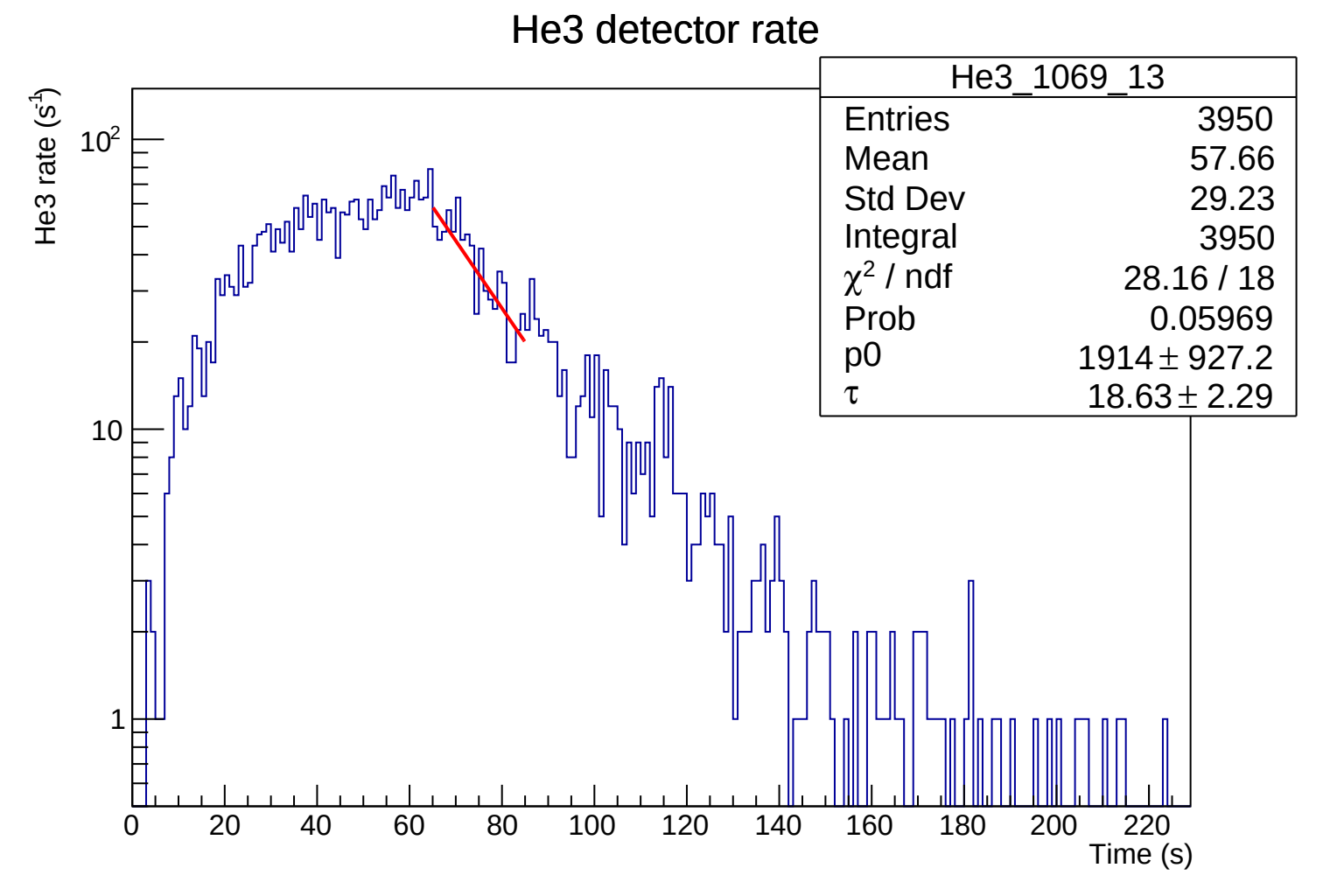

He3 detector rate
He3_1069_1
Entries 4047
Mean 57.79
Std Dev 28.98
Integral 4047
χ² / ndf 53.22 / 53
Prob 0.4658
p0 1136 ± 201.8
τ 21.9 ± 1.0
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)


He3 detector rate
He3_1069_3
Entries 4047
Mean 57.7
Std Dev 29.32
Integral 4047
χ² / ndf 31.36 / 33
Prob 0.5489
p0 1283 ± 348.5
τ 21.15 ± 1.55
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_1069_5
Entries 4066
Mean 57.87
Std Dev 29.24
Integral 4066
χ² / ndf 16.62 / 18
Prob 0.5494
p0 971.5 ± 494.8
τ 22.73 ± 3.57
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_1069_9
Entries 3940
Mean 57.12
Std Dev 28.36
Integral 3940
χ² / ndf 34.74 / 53
Prob 0.9753
p0 1004 ± 177.5
τ 22.62 ± 1.08
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_1069_11
Entries 3903
Mean 56.86
Std Dev 29.46
Integral 3903
χ² / ndf 35.49 / 33
Prob 0.3516
p0 1681± 438.0
τ 19.2± 1.2
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_1069_13
Entries 3950
Mean 57.66
Std Dev 29.23
Integral 3950
χ² / ndf 28.16 / 18
Prob 0.05969
p0 1914 ± 927.2
τ 18.63 ± 2.29
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 = 21.2521707198 +/- 0.100586991435 s