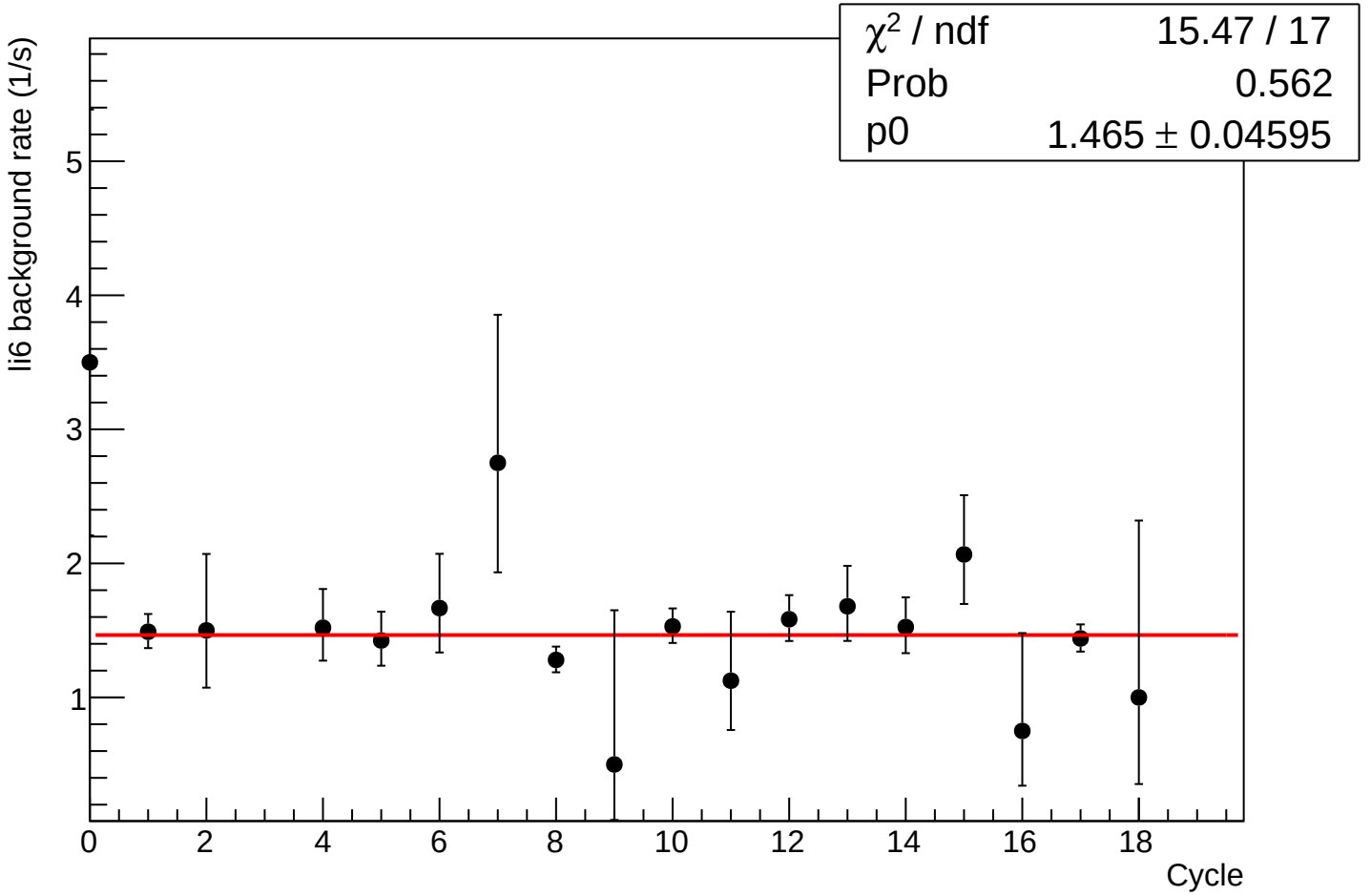
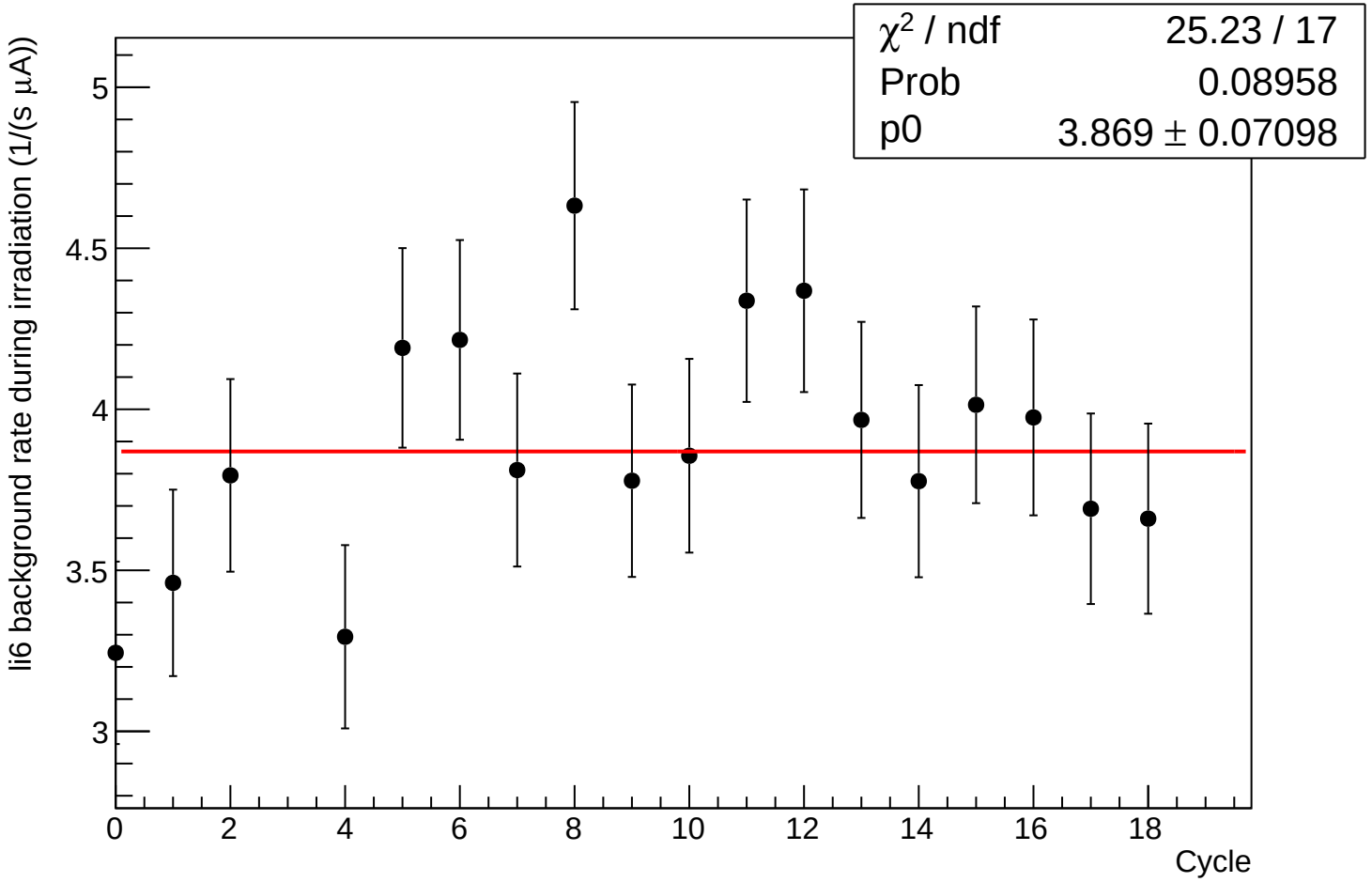
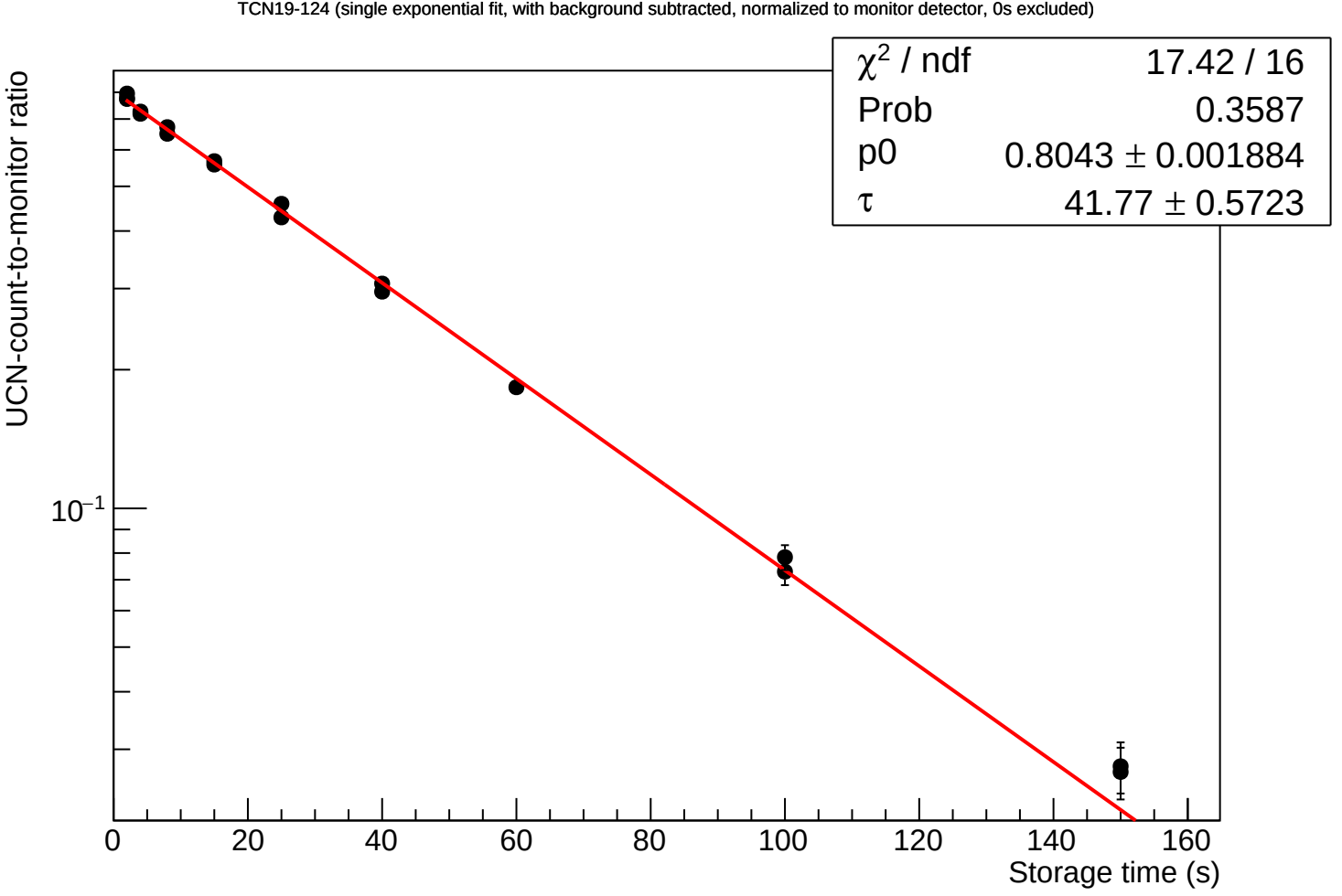
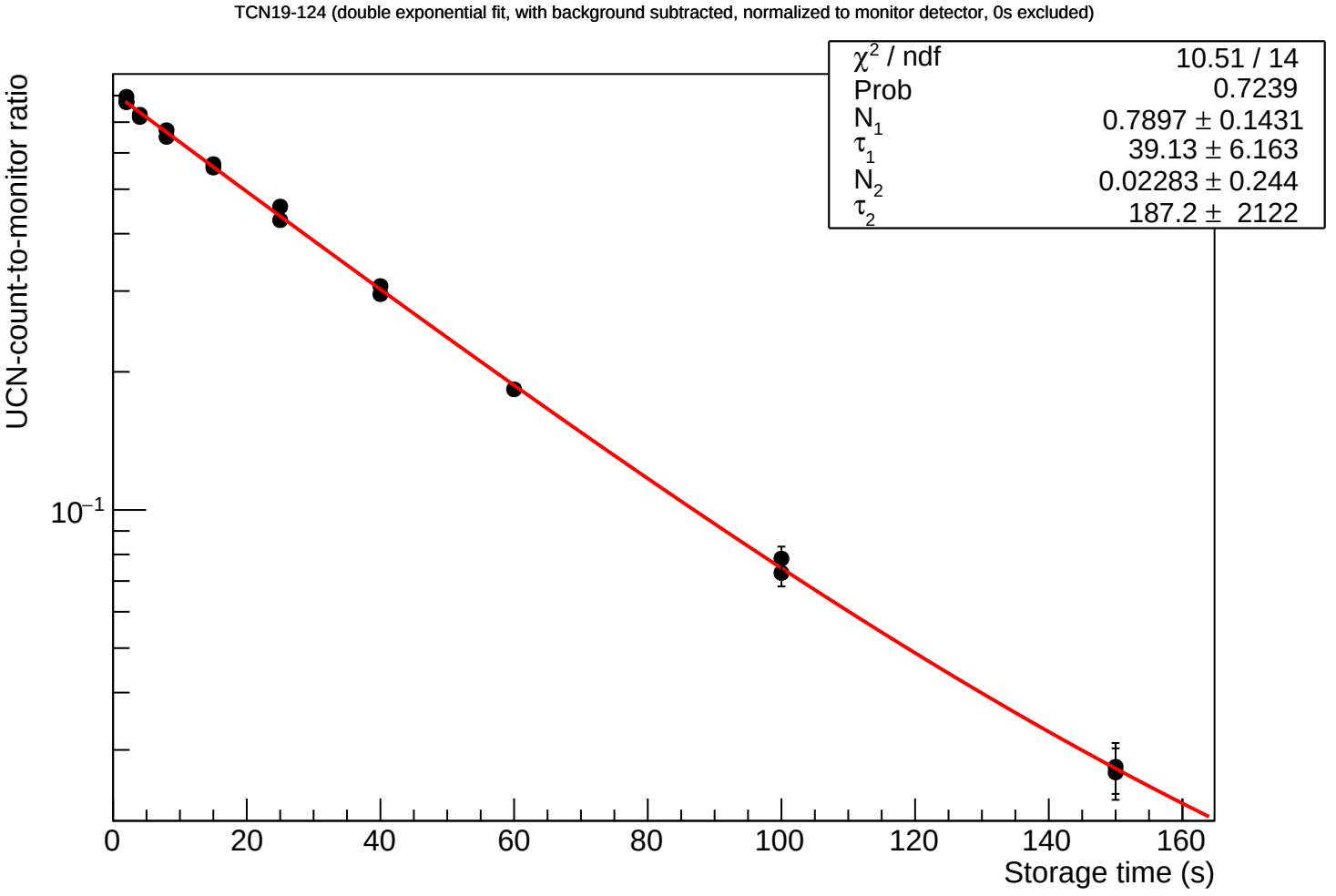
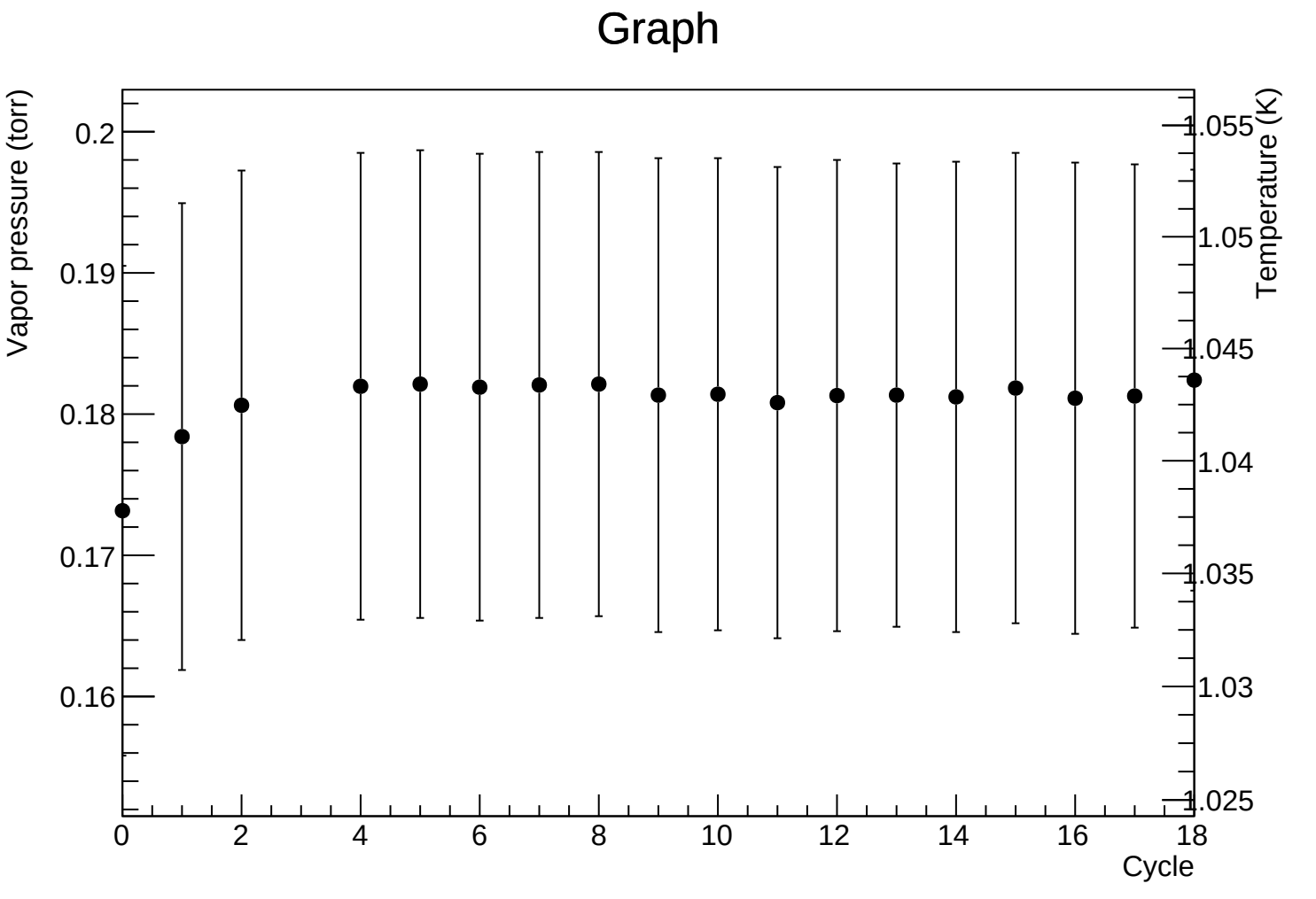
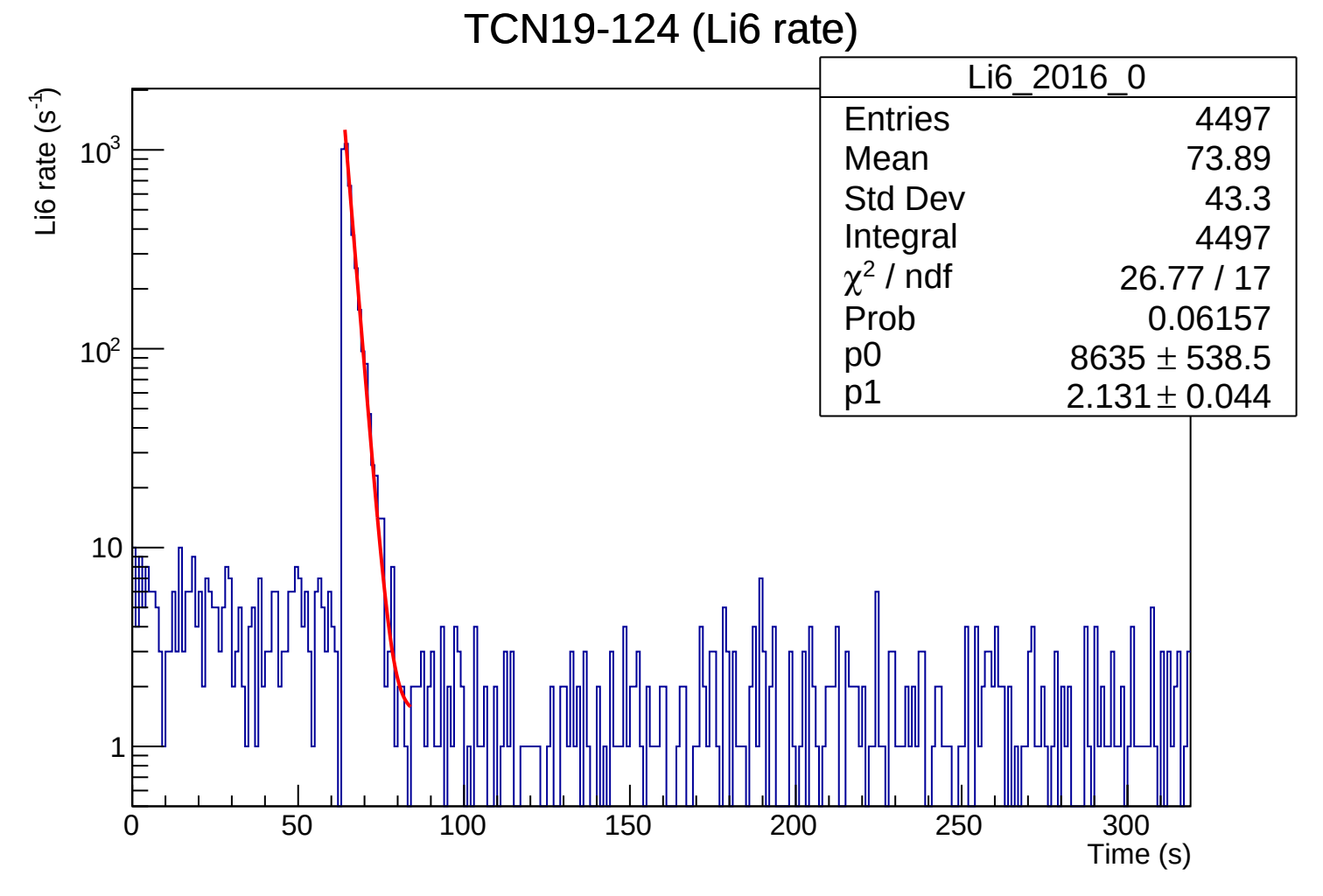

χ² / ndf 15.47 / 17
Prob 0.562
p0 1.465 ± 0.04595
li6 background rate (1/s)
Cycle
0
2
4
6
8
10
12
14
16
18
1
2
3
4
5

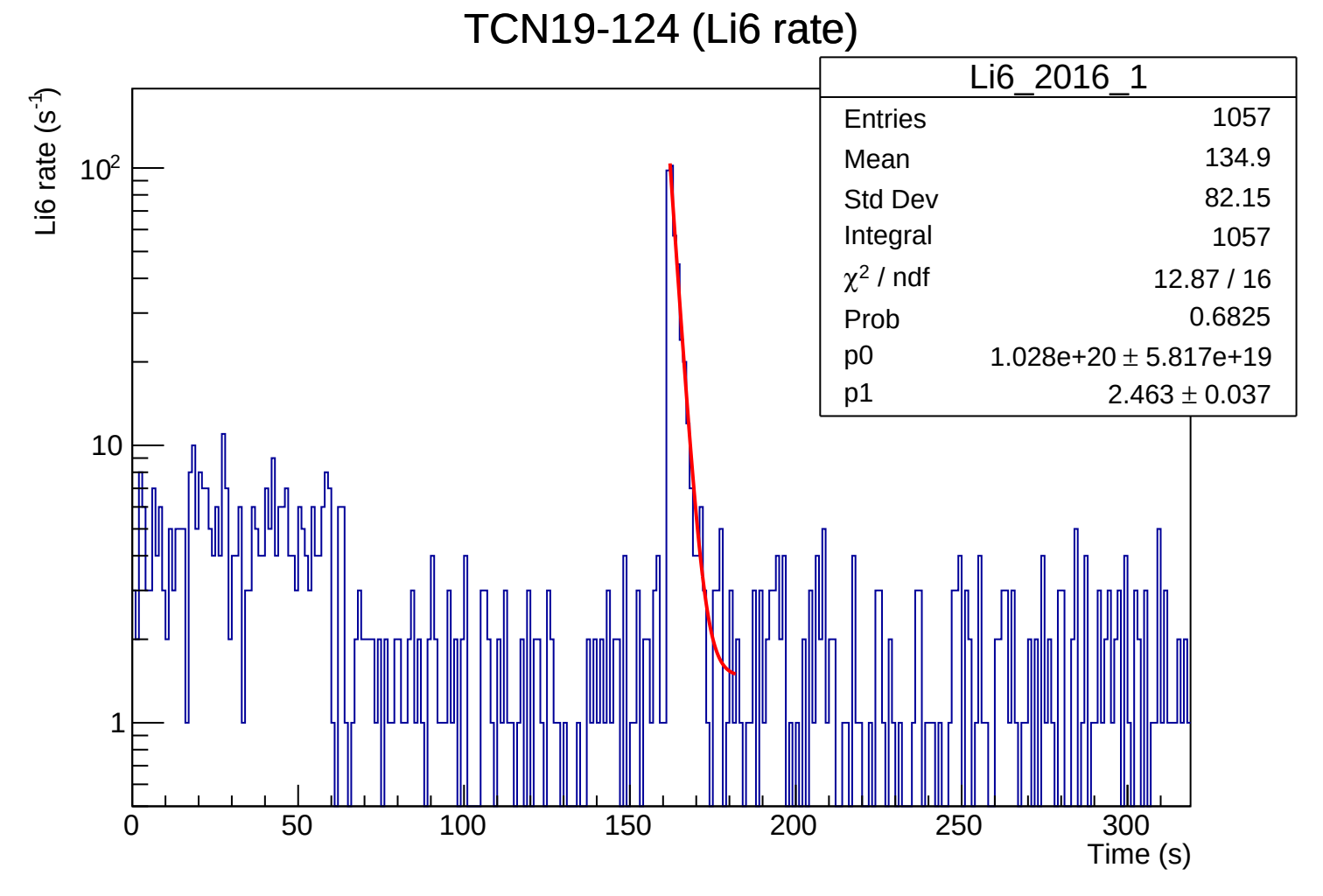

χ^2 / ndf 25.23 / 17
Prob 0.08958
p0 3.869 ± 0.07098
li6 background rate during irradiation (1/(s μA))
Cycle
5
4.5
4
3.5
3
0
2
4
6
8
10
12
14
16
18

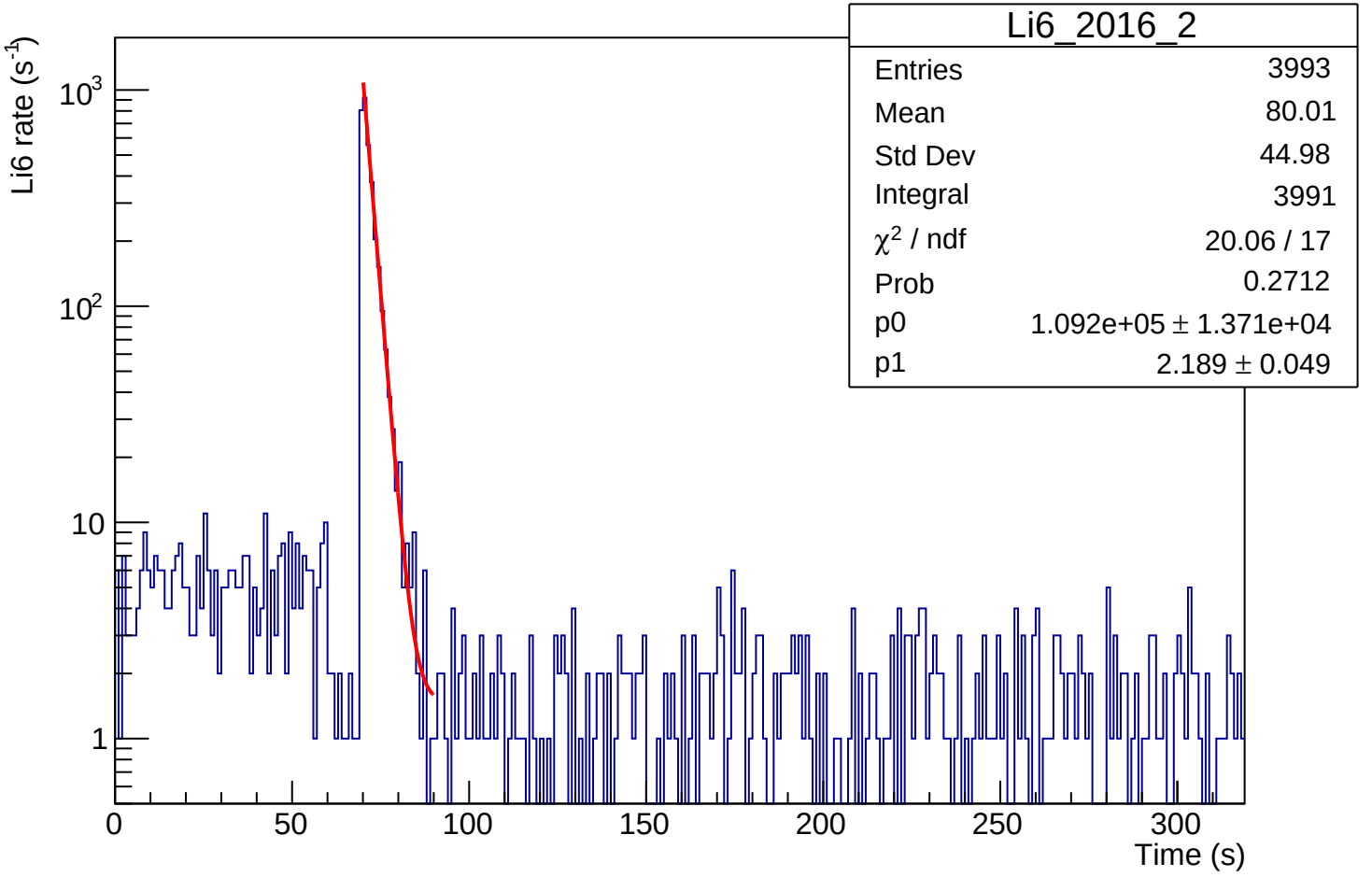

TCN19-124 (single exponential fit, with background subtracted, normalized to monitor detector, 0s excluded)
χ² / ndf 17.42 / 16
Prob 0.3587
p0 0.8043 ± 0.001884
τ 41.77 ± 0.5723
UCN-count-to-monitor ratio
10⁻¹
0
20
40
60
80
100
120
140
160
Storage time (s)

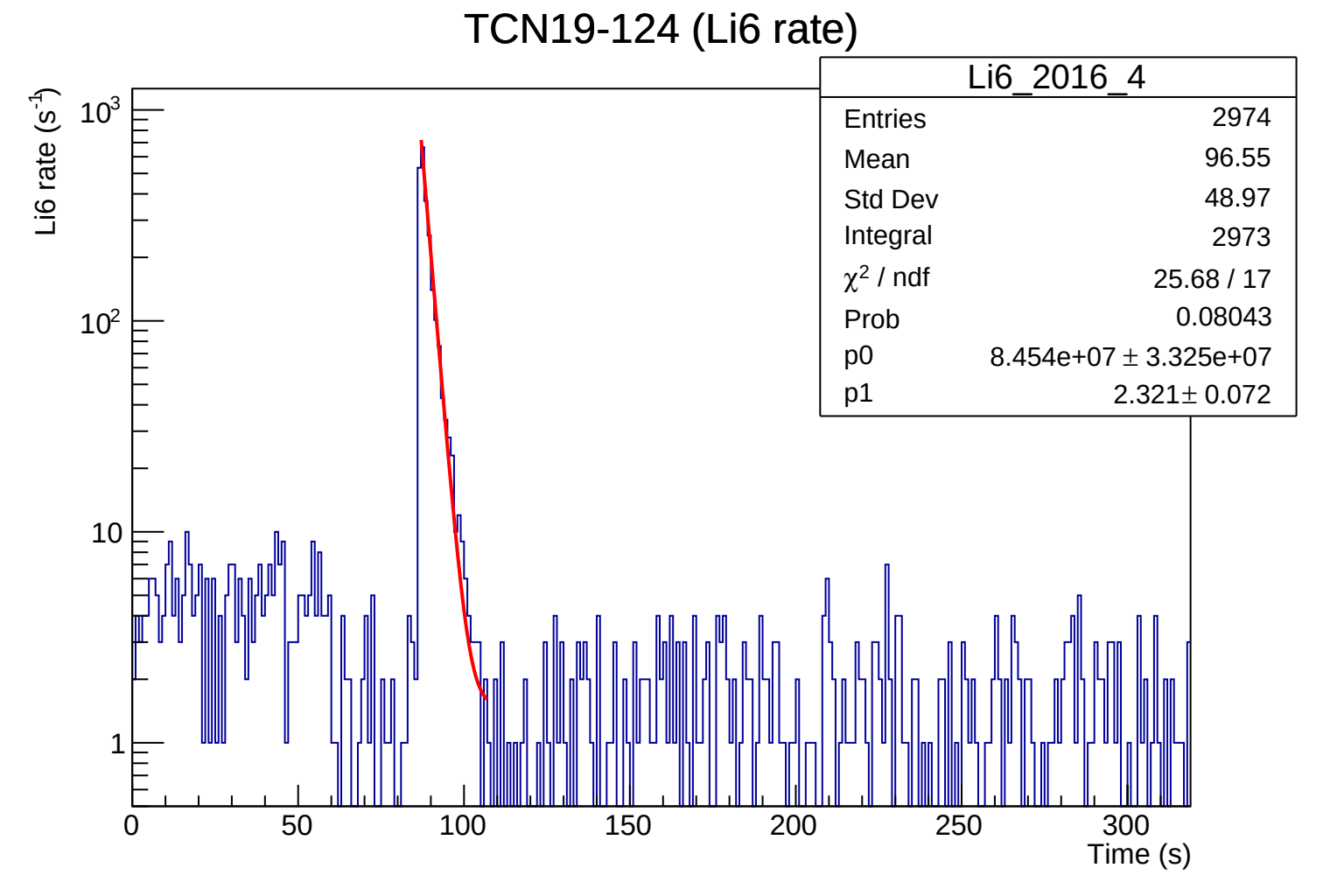

TCN19-124 (double exponential fit, with background subtracted, normalized to monitor detector, 0s excluded)
χ² / ndf 10.51 / 14
Prob 0.7239
N1 0.7897 ± 0.1431
τ1 39.13 ± 6.163
N2 0.02283 ± 0.244
τ2 187.2 ± 2122
UCN-count-to-monitor ratio
10⁻¹
0
20
40
60
80
100
120
140
160
Storage time (s)

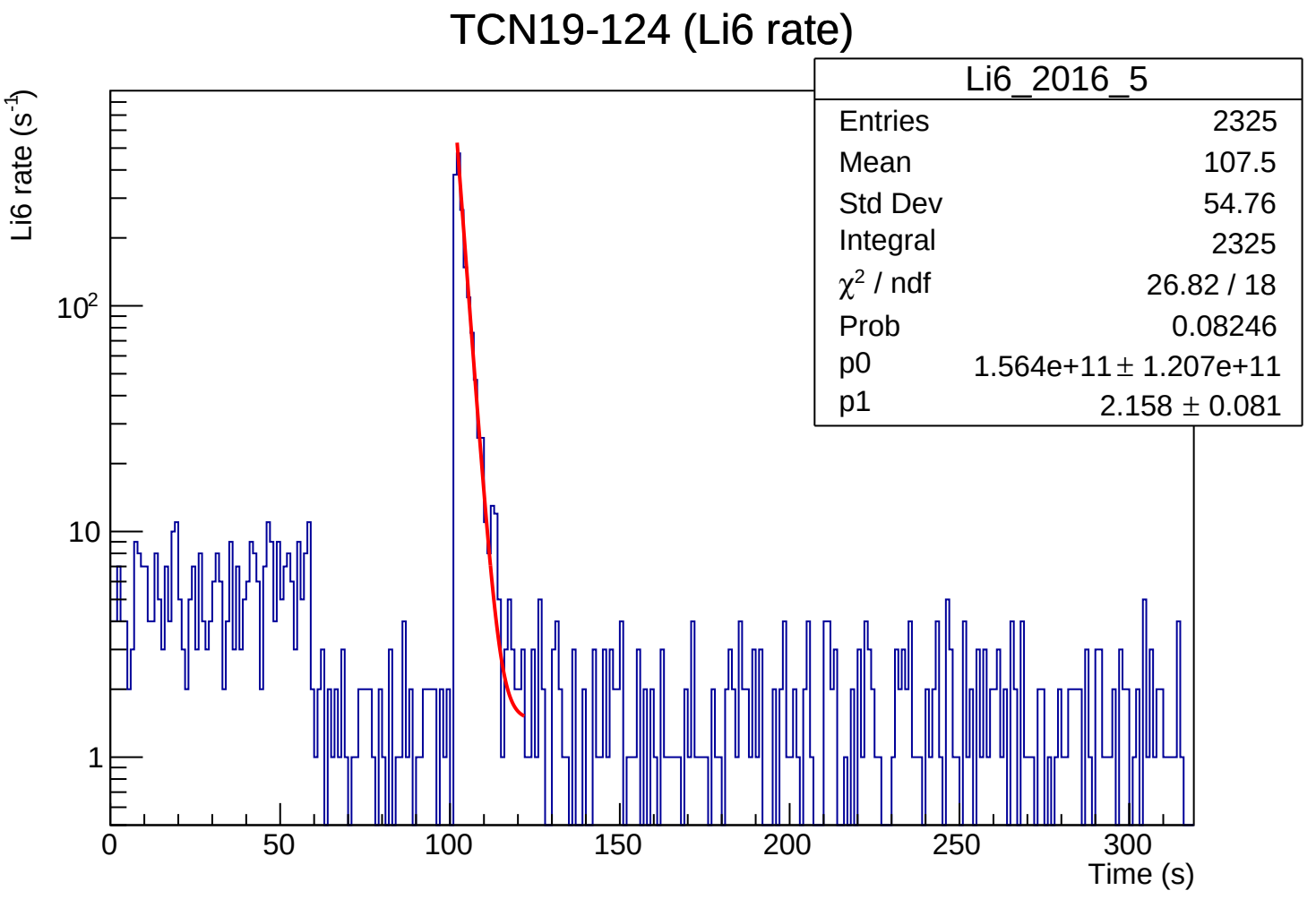

Graph
Vapor pressure (torr)
0.2
0.19
0.18
0.17
0.16
Temperature (K)
1.055
1.05
1.045
1.04
1.035
1.03
1.025
0
2
4
6
8
10
12
14
16
18
Cycle

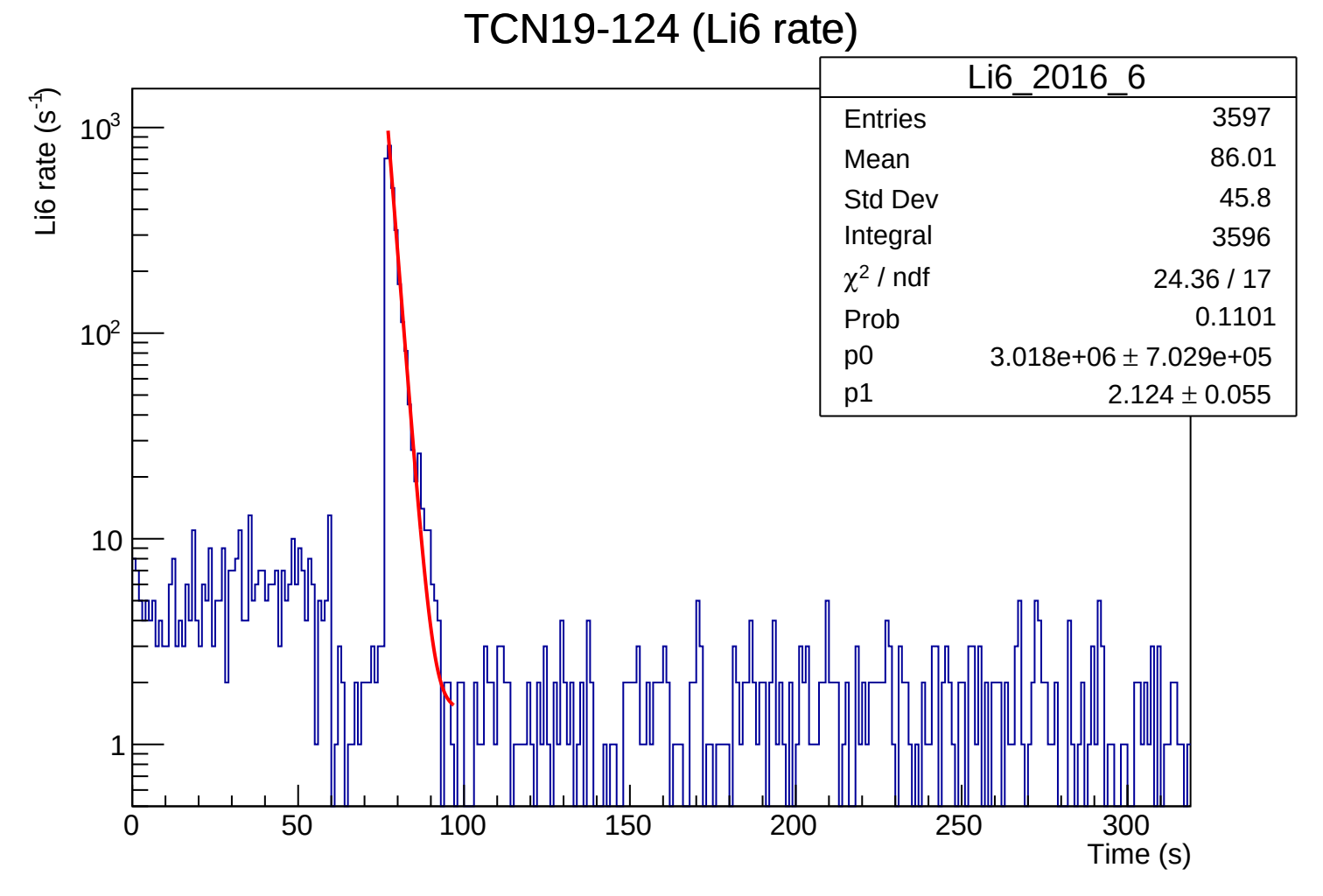

TCN19-124 (Li6 rate)
Li6_2016_0
Entries 4497
Mean 73.89
Std Dev 43.3
Integral 4497
χ² / ndf 26.77 / 17
Prob 0.06157
p0 8635 ± 538.5
p1 2.131 ± 0.044
Li6 rate (s⁻¹)
10³
10²
10
1
0
50
100
150
200
250
300
Time (s)

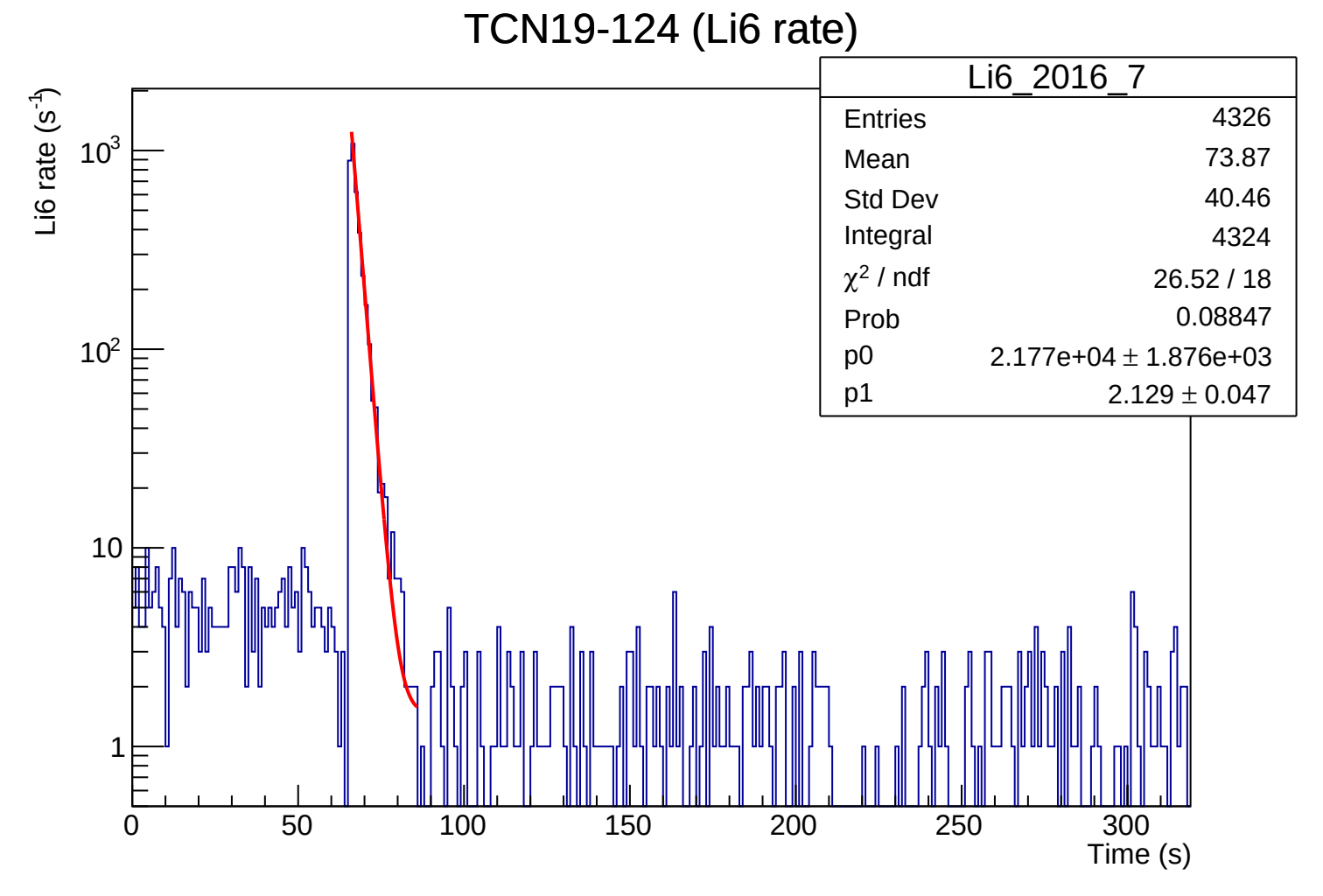

TCN19-124 (Li6 rate)
Li6_2016_1
Entries 1057
Mean 134.9
Std Dev 82.15
Integral 1057
χ² / ndf 12.87 / 16
Prob 0.6825
p0 1.028e+20 ± 5.817e+19
p1 2.463 ± 0.037
Li6 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

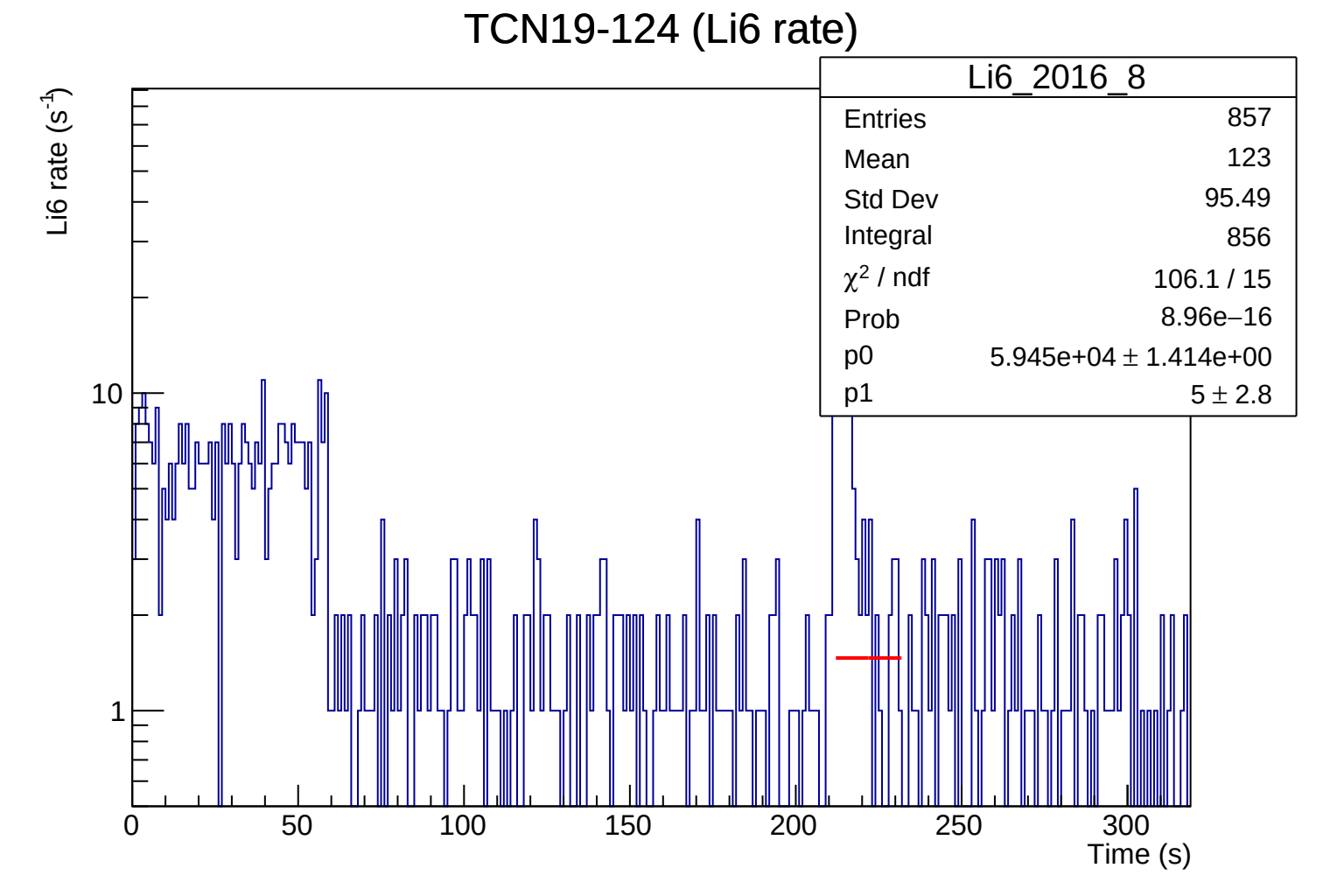

TCN19-124 (Li6 rate)
Li6_2016_2
Entries 3993
Mean 80.01
Std Dev 44.98
Integral 3991
χ2 / ndf 20.06 / 17
Prob 0.2712
p0 1.092e+05 ± 1.371e+04
p1 2.189 ± 0.049
Li6 rate (s-1)
10^3
10^2
10
1
0
50
100
150
200
250
300
Time (s)

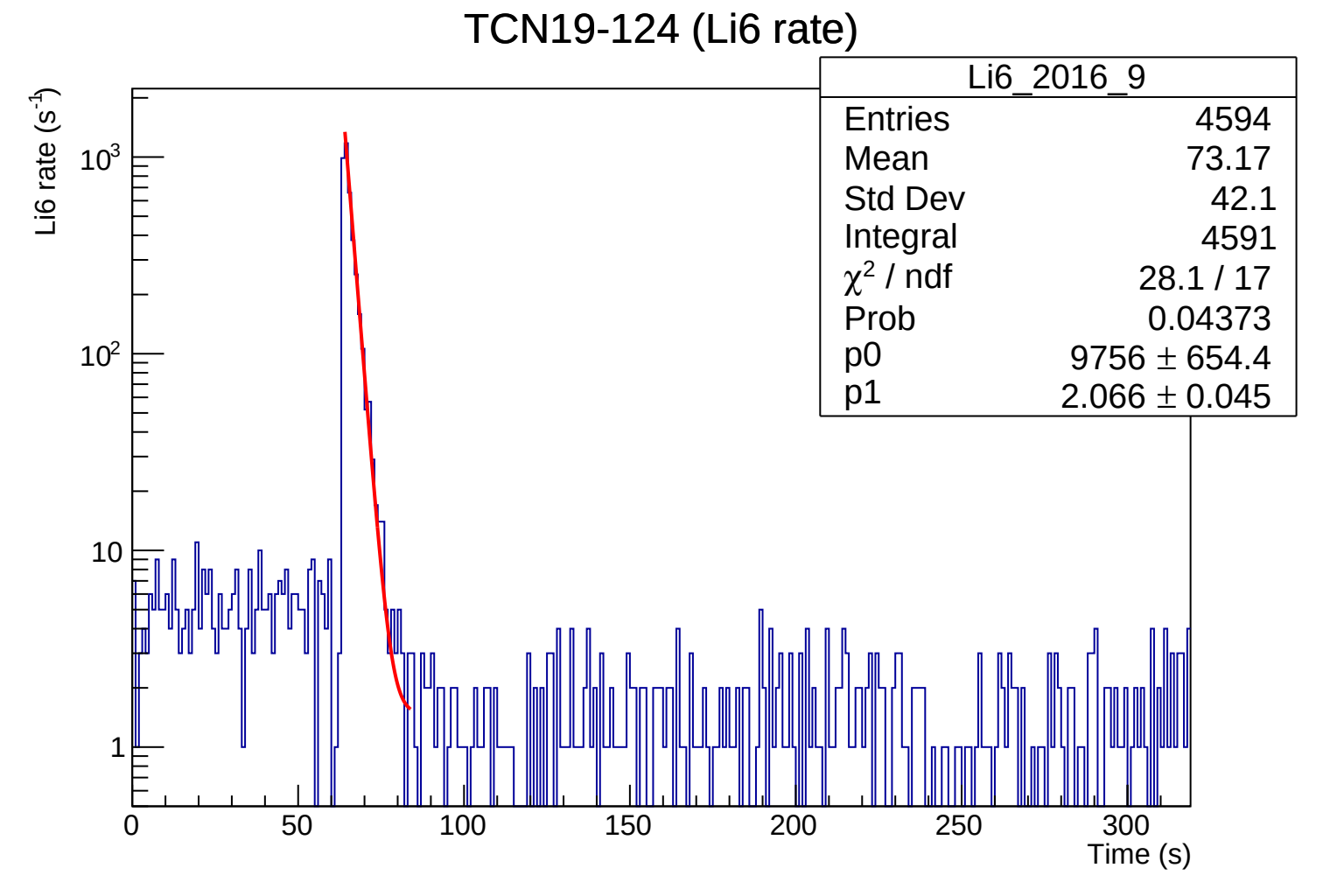

TCN19-124 (Li6 rate)
Li6_2016_4
Entries 2974
Mean 96.55
Std Dev 48.97
Integral 2973
χ² / ndf 25.68 / 17
Prob 0.08043
p0 8.454e+07 ± 3.325e+07
p1 2.321± 0.072
Li6 rate (s⁻¹)
10³
10²
10
1
0
50
100
150
200
250
300
Time (s)

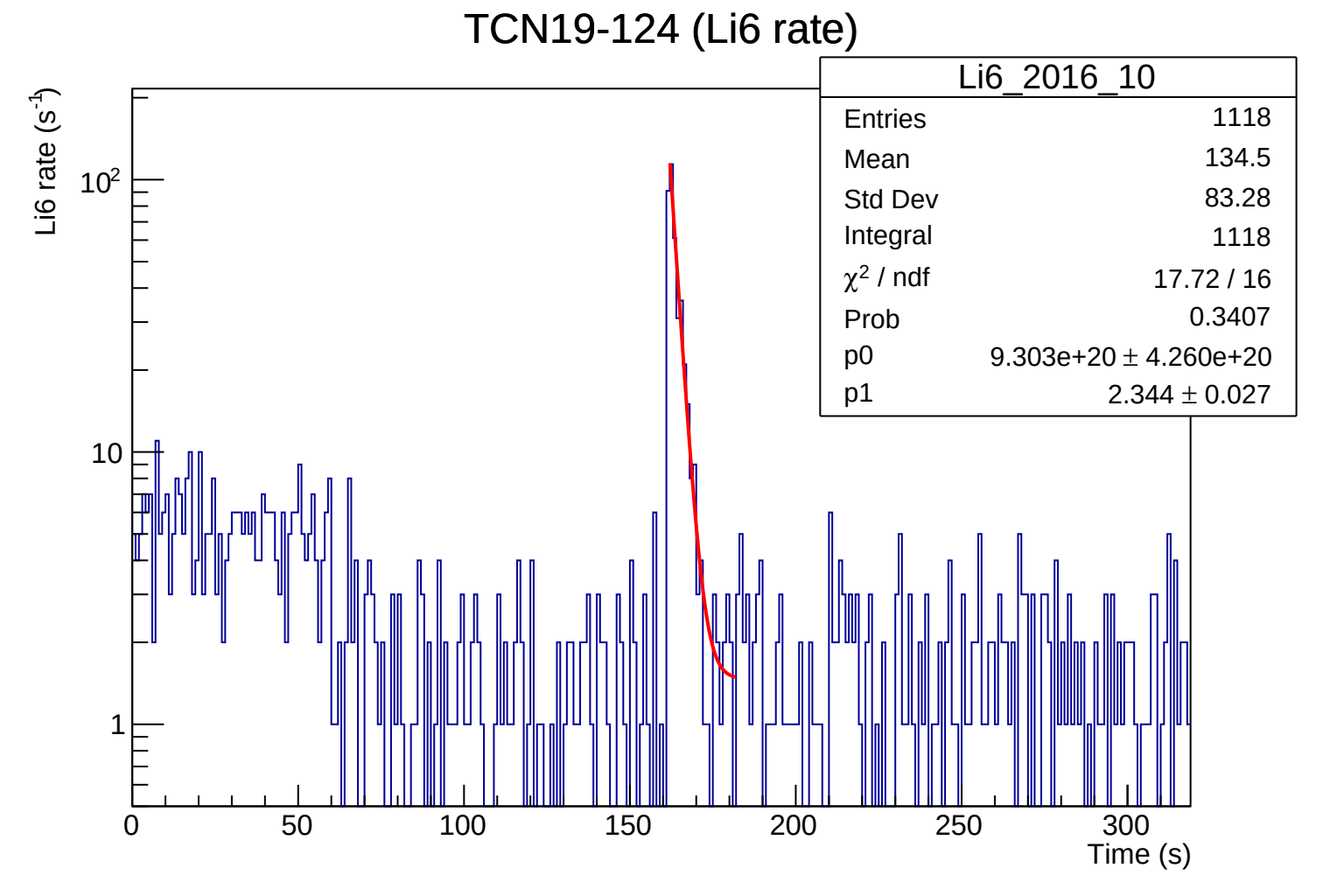

TCN19-124 (Li6 rate)
Li6_2016_5
Entries 2325
Mean 107.5
Std Dev 54.76
Integral 2325
χ² / ndf 26.82 / 18
Prob 0.08246
p0 1.564e+11 ± 1.207e+11
p1 2.158 ± 0.081
Li6 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

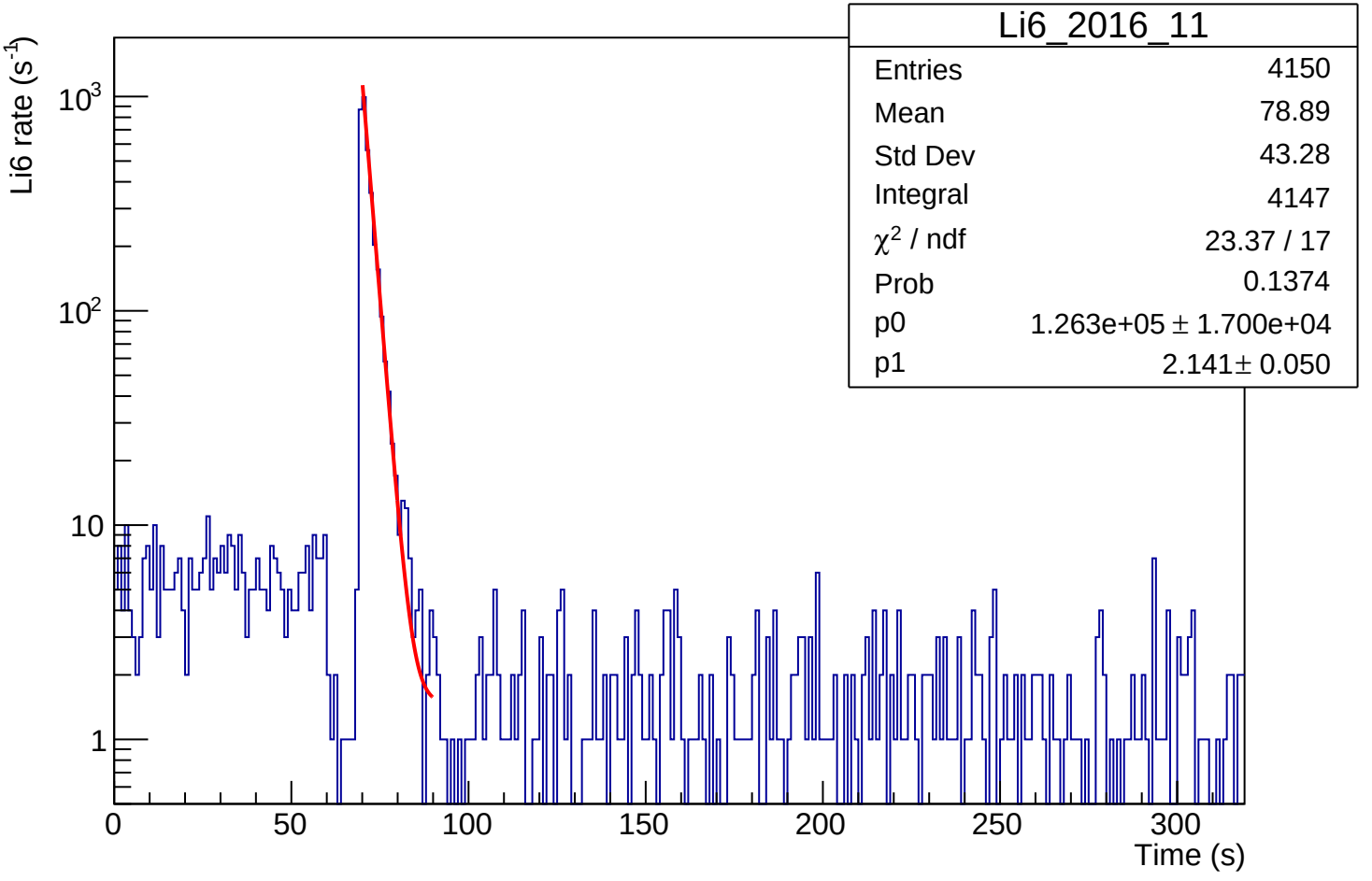

TCN19-124 (Li6 rate)
Li6_2016_6
Entries 3597
Mean 86.01
Std Dev 45.8
Integral 3596
χ² / ndf 24.36 / 17
Prob 0.1101
p0 3.018e+06 ± 7.029e+05
p1 2.124 ± 0.055
Li6 rate (s⁻¹)
10³
10²
10
1
0
50
100
150
200
250
300
Time (s)

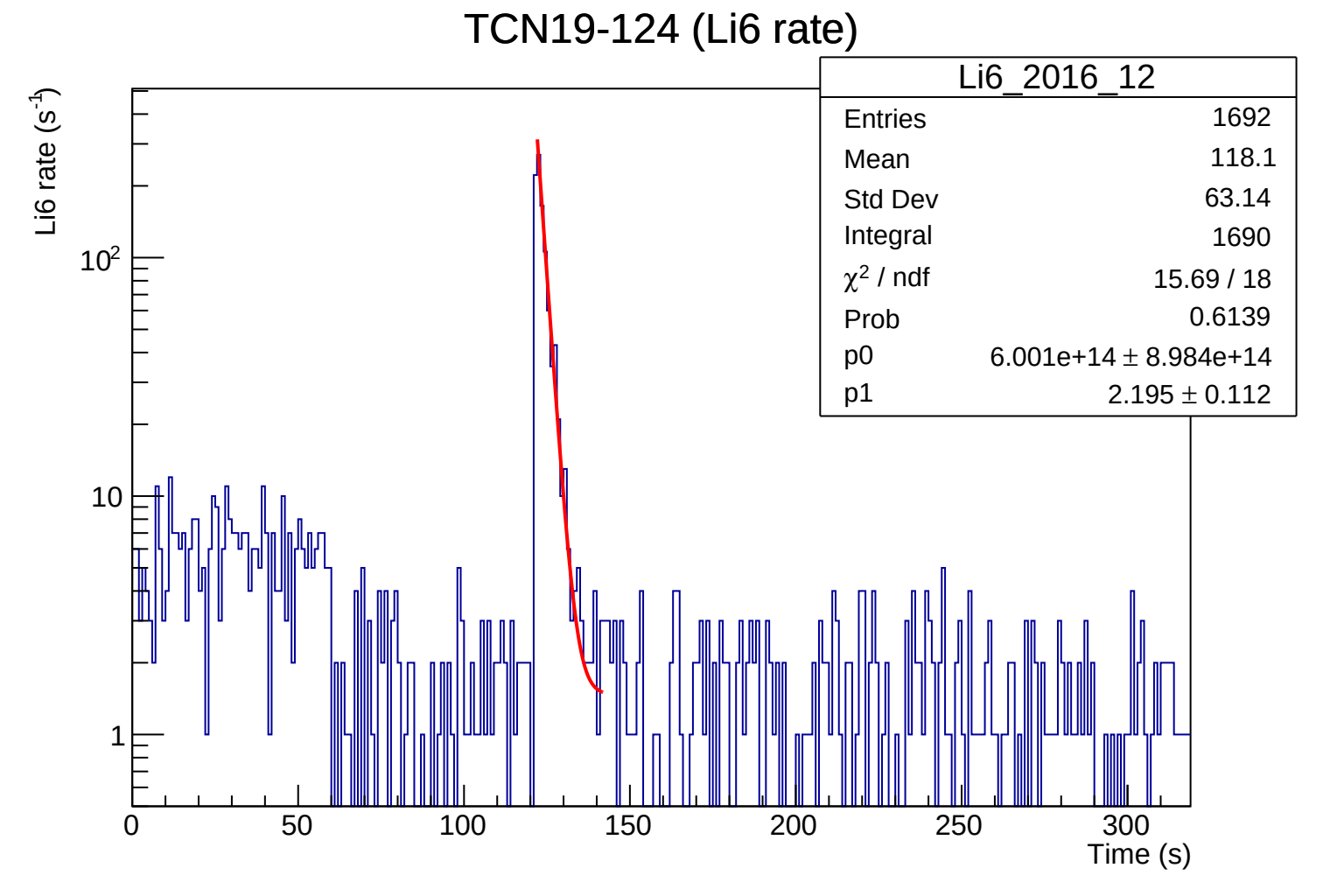

TCN19-124 (Li6 rate)
Li6_2016_7
Entries 4326
Mean 73.87
Std Dev 40.46
Integral 4324
χ² / ndf 26.52 / 18
Prob 0.08847
p0 2.177e+04 ± 1.876e+03
p1 2.129 ± 0.047
Li6 rate (s⁻¹)
10³
10²
10
1
0
50
100
150
200
250
300
Time (s)

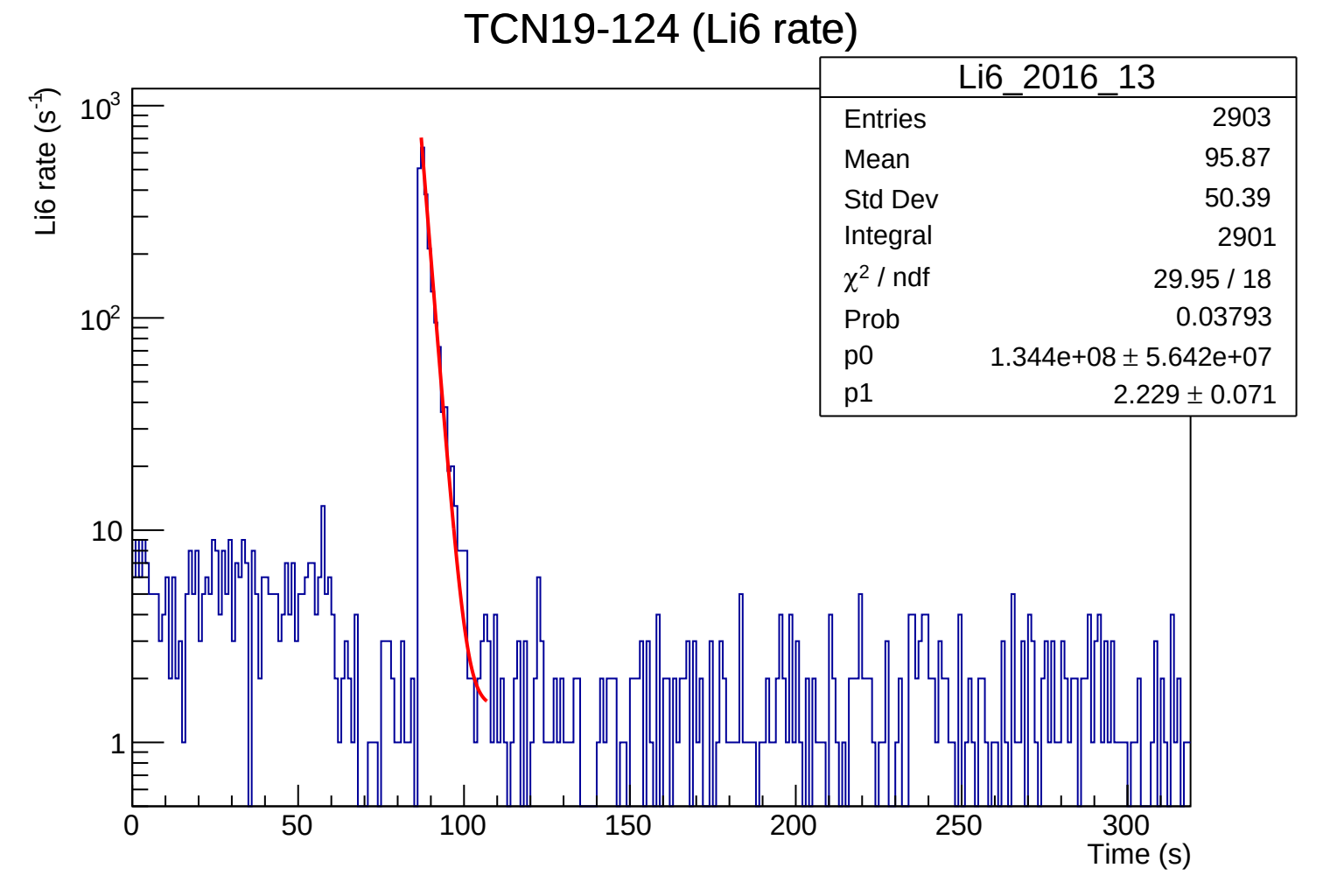

TCN19-124 (Li6 rate)
Li6_2016_8
Entries 857
Mean 123
Std Dev 95.49
Integral 856
χ² / ndf 106.1 / 15
Prob 8.96e−16
p0 5.945e+04 ± 1.414e+00
p1 5 ± 2.8
Li6 rate (s⁻¹)
10
1
0
50
100
150
200
250
300
Time (s)

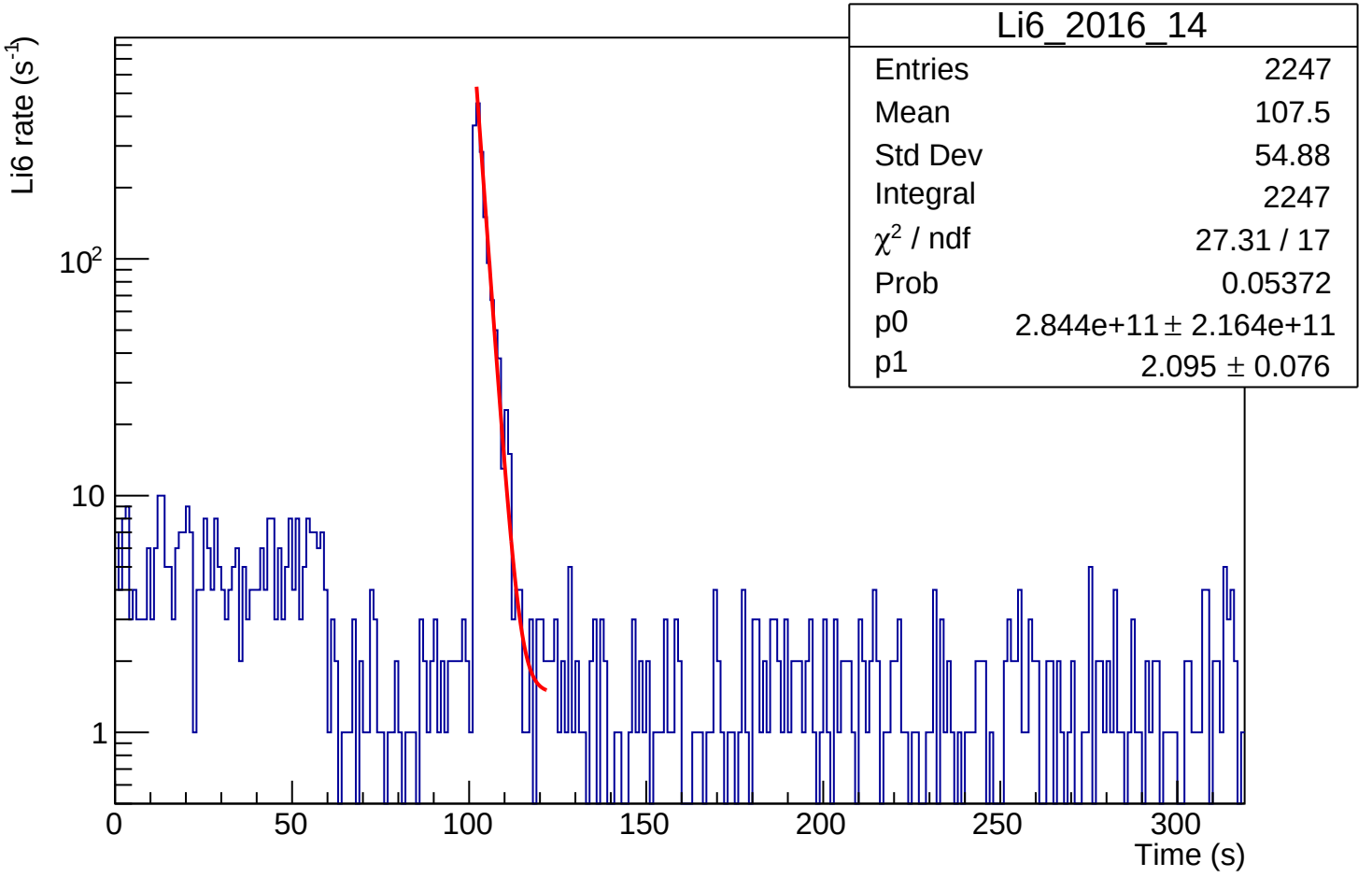

TCN19-124 (Li6 rate)
Li6_2016_9
Entries 4594
Mean 73.17
Std Dev 42.1
Integral 4591
χ² / ndf 28.1 / 17
Prob 0.04373
p0 9756 ± 654.4
p1 2.066 ± 0.045
Li6 rate (s⁻¹)
10³
10²
10
1
0
50
100
150
200
250
300
Time (s)

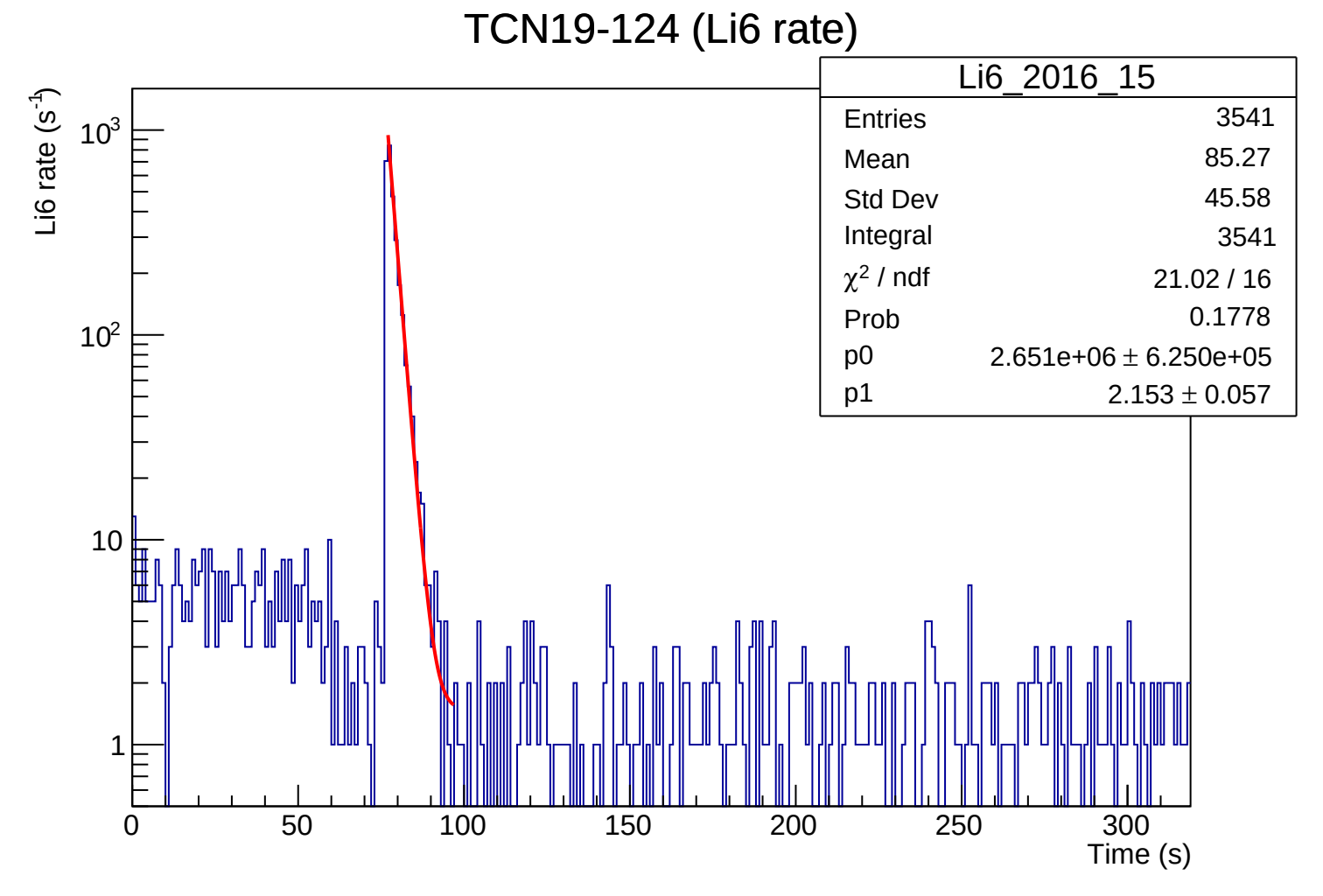

TCN19-124 (Li6 rate)
Li6_2016_10
Entries 1118
Mean 134.5
Std Dev 83.28
Integral 1118
χ2 / ndf 17.72 / 16
Prob 0.3407
p0 9.303e+20 ± 4.260e+20
p1 2.344 ± 0.027
Li6 rate (s-1)
10^2
10
1
0
50
100
150
200
250
300
Time (s)

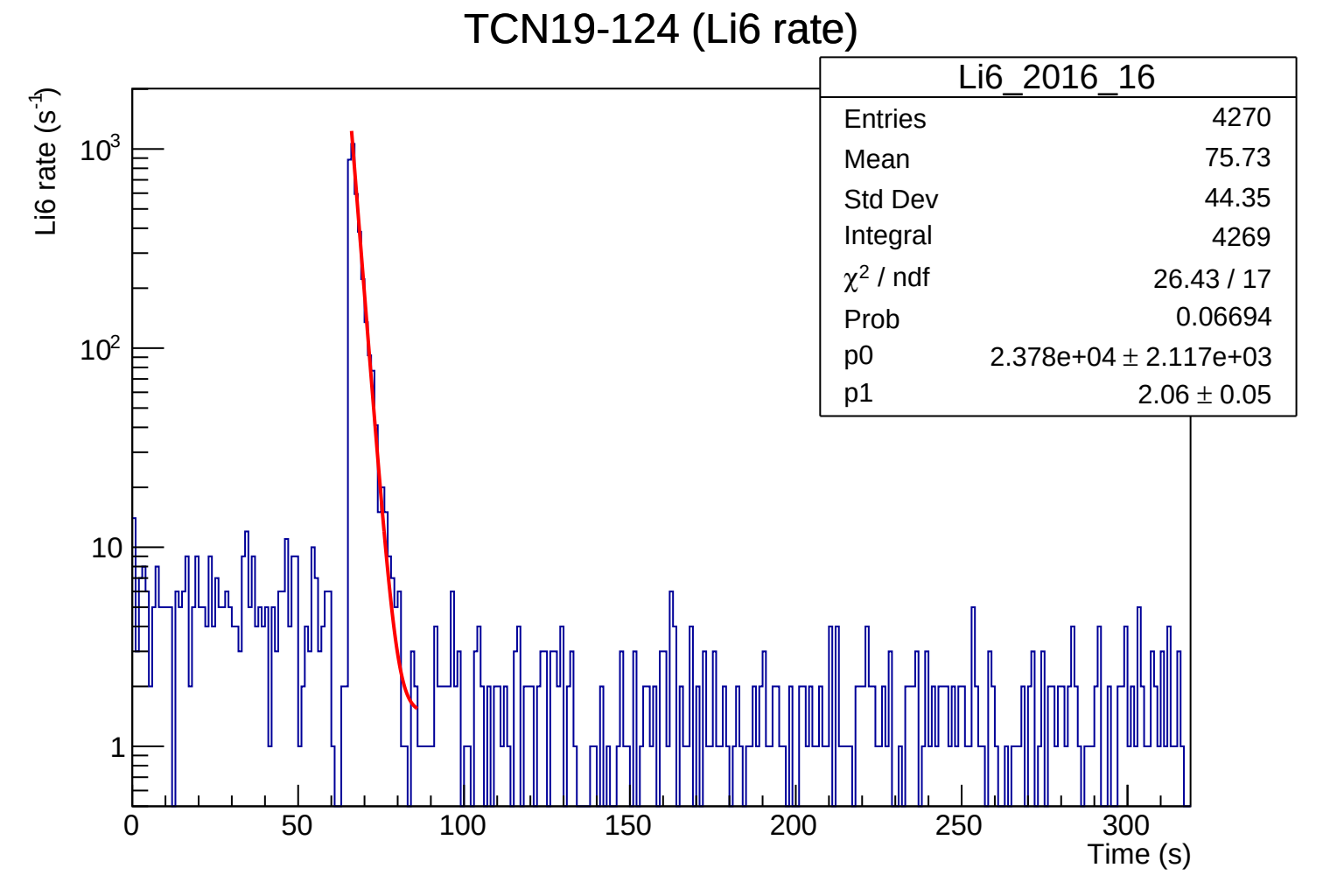

TCN19-124 (Li6 rate)
Li6_2016_11
Entries 4150
Mean 78.89
Std Dev 43.28
Integral 4147
χ² / ndf 23.37 / 17
Prob 0.1374
p0 1.263e+05 ± 1.700e+04
p1 2.141± 0.050
Li6 rate (s⁻¹)
10³
10²
10
1
0
50
100
150
200
250
300
Time (s)

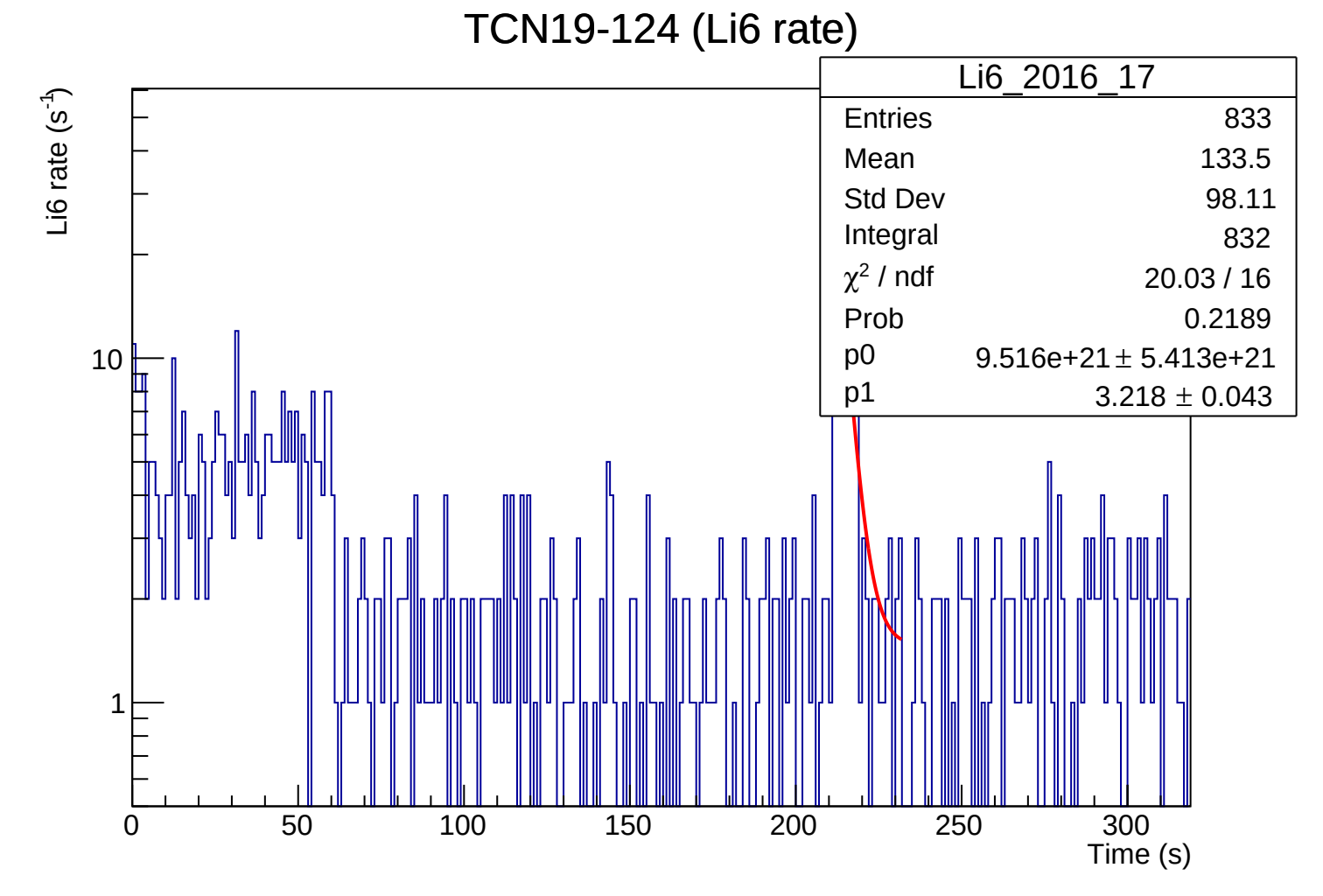

TCN19-124 (Li6 rate)
Li6_2016_12
Entries 1692
Mean 118.1
Std Dev 63.14
Integral 1690
χ² / ndf 15.69 / 18
Prob 0.6139
p0 6.001e+14 ± 8.984e+14
p1 2.195 ± 0.112
Li6 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

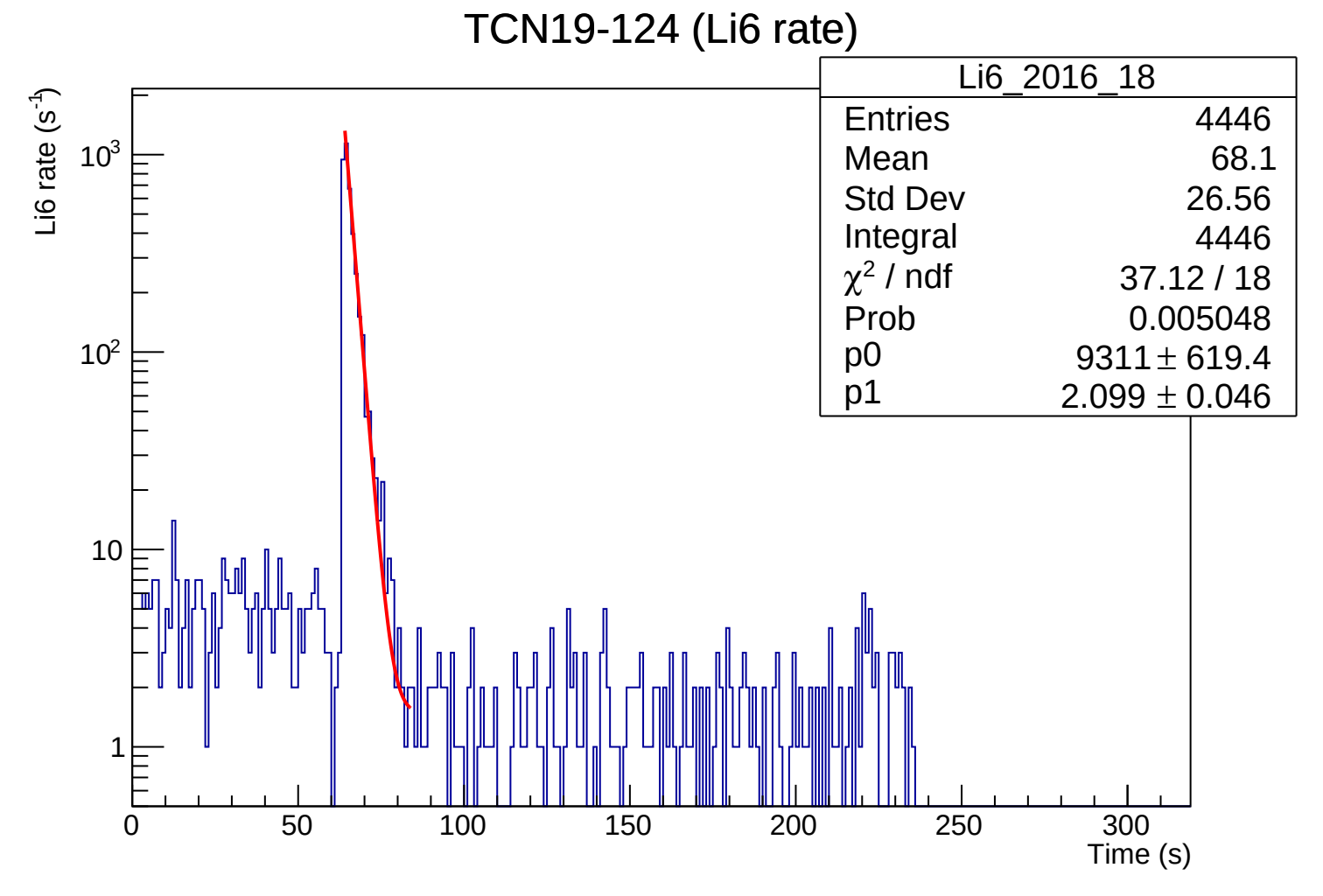

TCN19-124 (Li6 rate)
Li6_2016_13
Entries 2903
Mean 95.87
Std Dev 50.39
Integral 2901
χ² / ndf 29.95 / 18
Prob 0.03793
p0 1.344e+08 ± 5.642e+07
p1 2.229 ± 0.071
Li6 rate (s⁻¹)
10³
10²
10
1
0
50
100
150
200
250
300
Time (s)

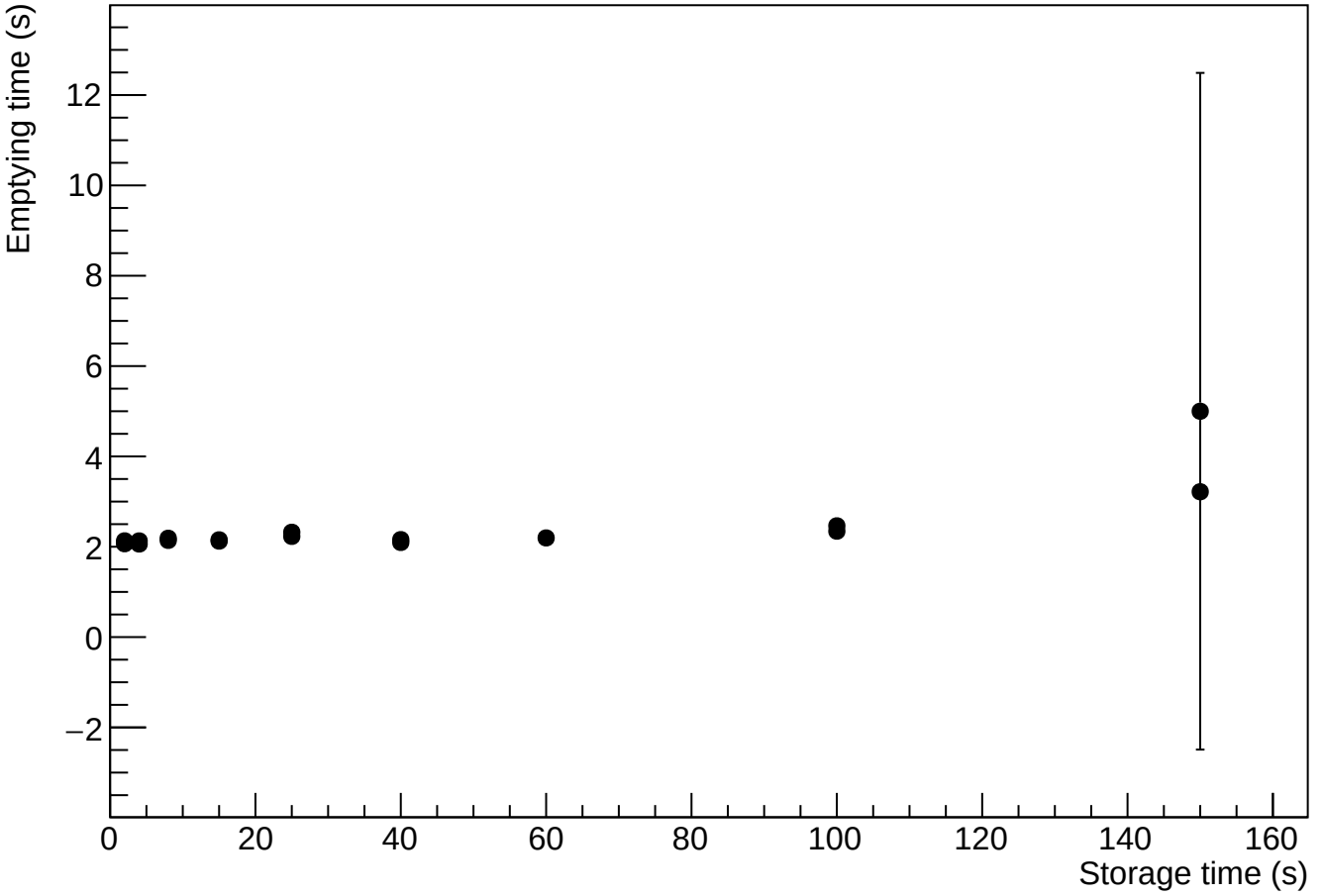

TCN19-124 (Li6 rate)
Li6_2016_14
Entries 2247
Mean 107.5
Std Dev 54.88
Integral 2247
χ² / ndf 27.31 / 17
Prob 0.05372
p0 2.844e+11 ± 2.164e+11
p1 2.095 ± 0.076
Li6 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

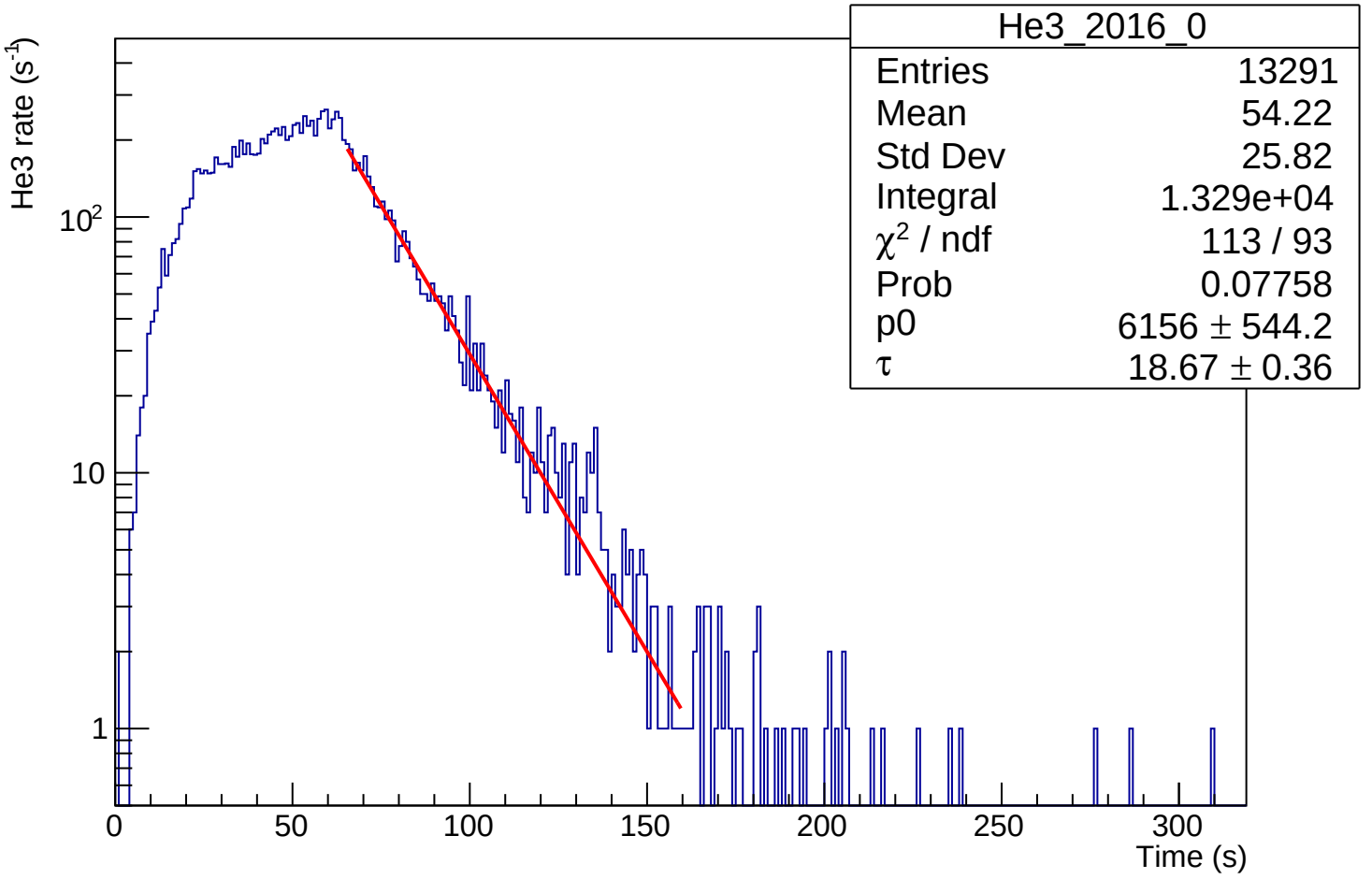

TCN19-124 (Li6 rate)
Li6_2016_15
Entries 3541
Mean 85.27
Std Dev 45.58
Integral 3541
χ² / ndf 21.02 / 16
Prob 0.1778
p0 2.651e+06 ± 6.250e+05
p1 2.153 ± 0.057
Li6 rate (s⁻¹)
10³
10²
10
1
0
50
100
150
200
250
300
Time (s)

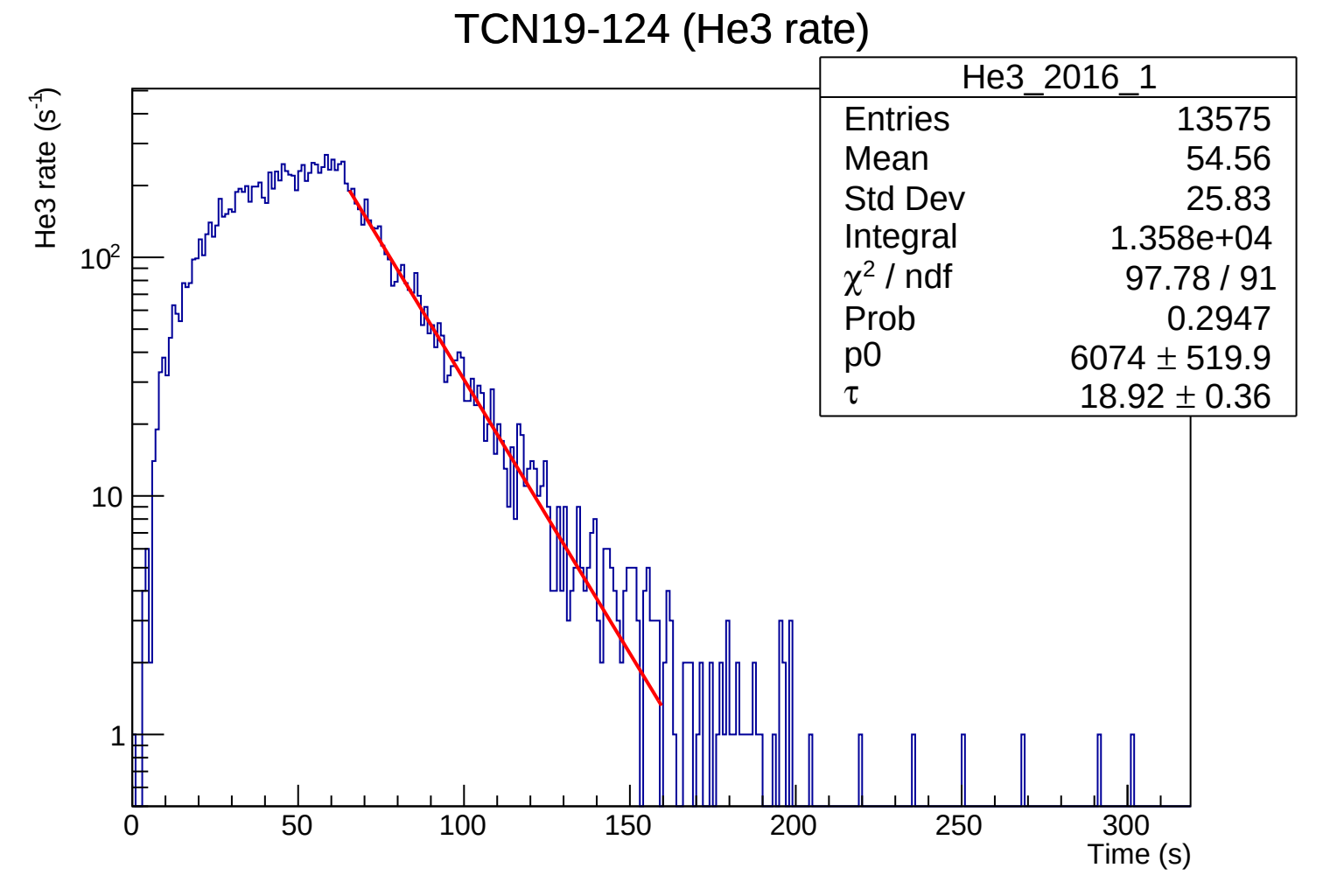

TCN19-124 (Li6 rate)
Li6_2016_16
Entries 4270
Mean 75.73
Std Dev 44.35
Integral 4269
χ2 / ndf 26.43 / 17
Prob 0.06694
p0 2.378e+04 ± 2.117e+03
p1 2.06 ± 0.05
Li6 rate (s-1)
10^3
10^2
10
1
0
50
100
150
200
250
300
Time (s)

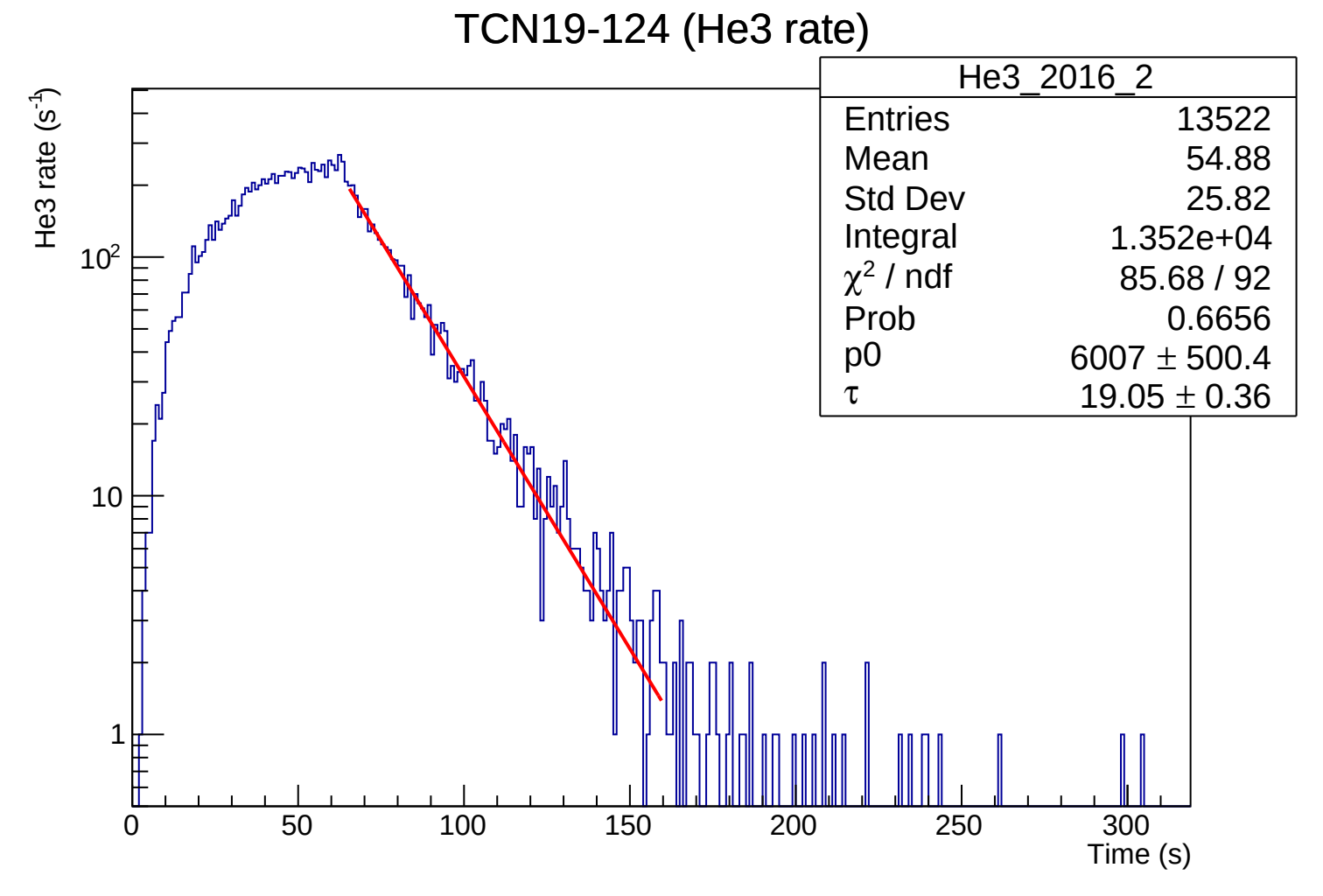

TCN19-124 (Li6 rate)
Li6_2016_17
Entries 833
Mean 133.5
Std Dev 98.11
Integral 832
χ² / ndf 20.03 / 16
Prob 0.2189
p0 9.516e+21 ± 5.413e+21
p1 3.218 ± 0.043
Li6 rate (s⁻¹)
10
1
0
50
100
150
200
250
300
Time (s)

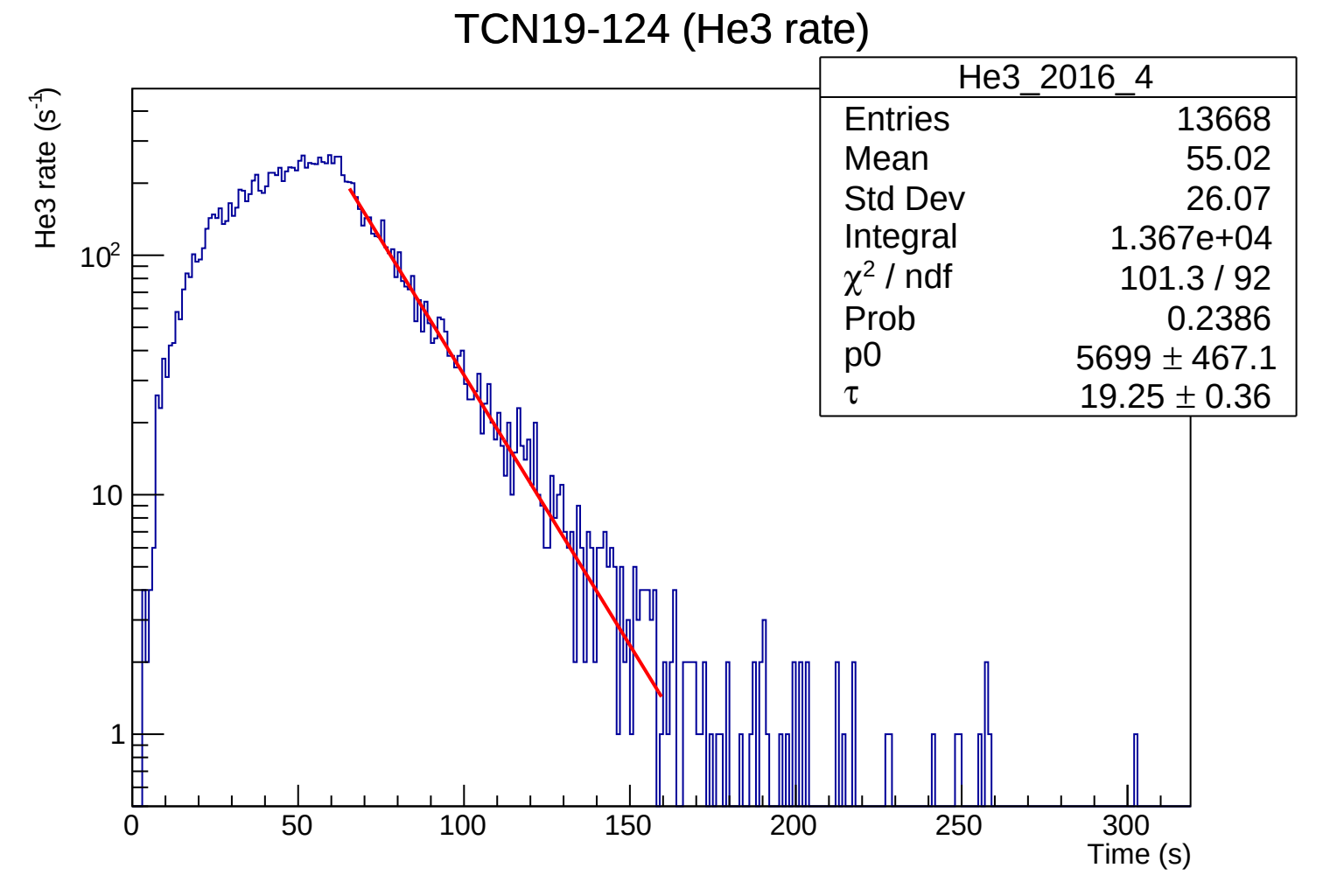

TCN19-124 (Li6 rate)
Li6_2016_18
Entries 4446
Mean 68.1
Std Dev 26.56
Integral 4446
χ² / ndf 37.12 / 18
Prob 0.005048
p0 9311 ± 619.4
p1 2.099 ± 0.046
Li6 rate (s⁻¹)
10³
10²
10
1
0
50
100
150
200
250
300
Time (s)

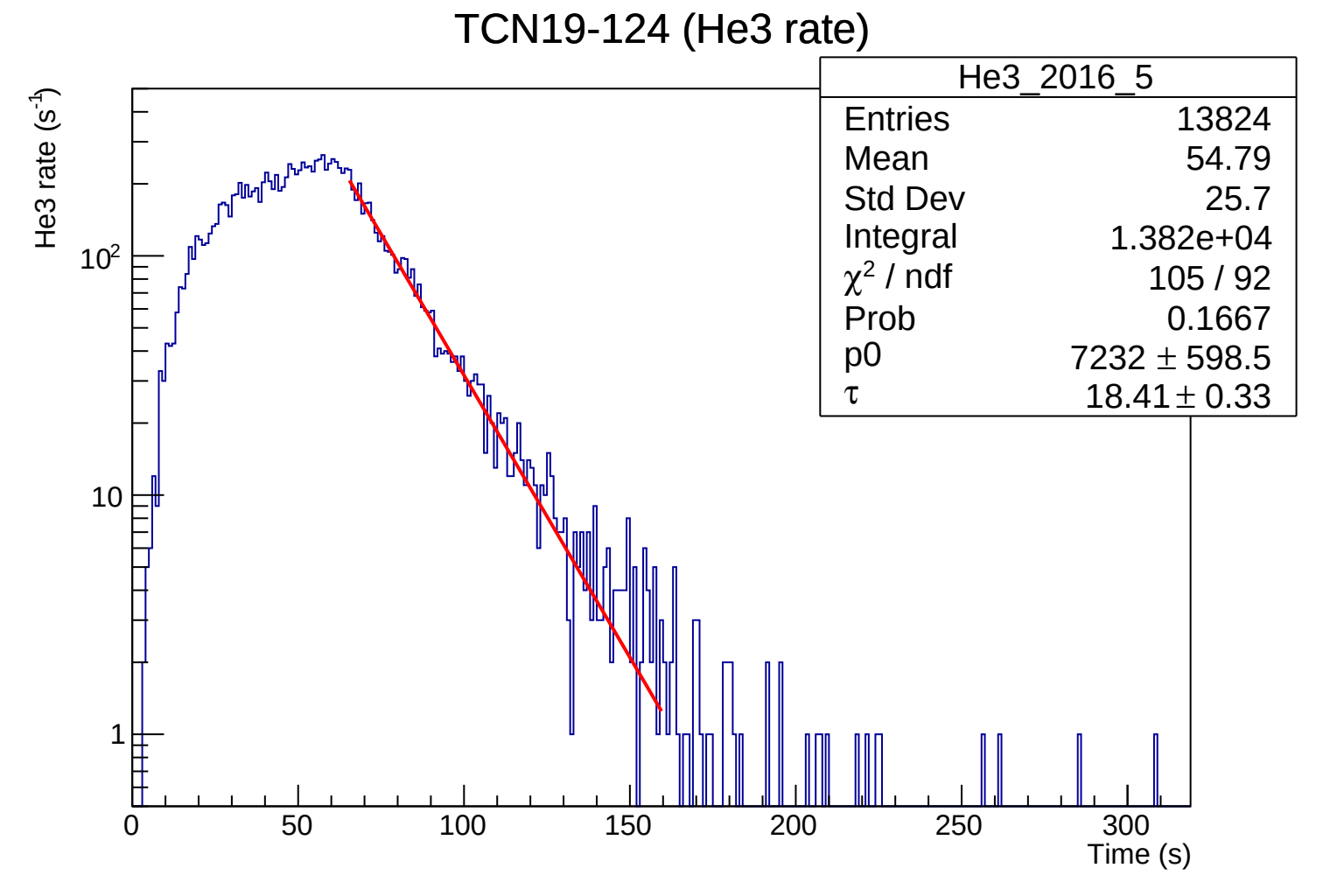

Emptying time (s)
12
10
8
6
4
2
0
−2
0
20
40
60
80
100
120
140
160
Storage time (s)

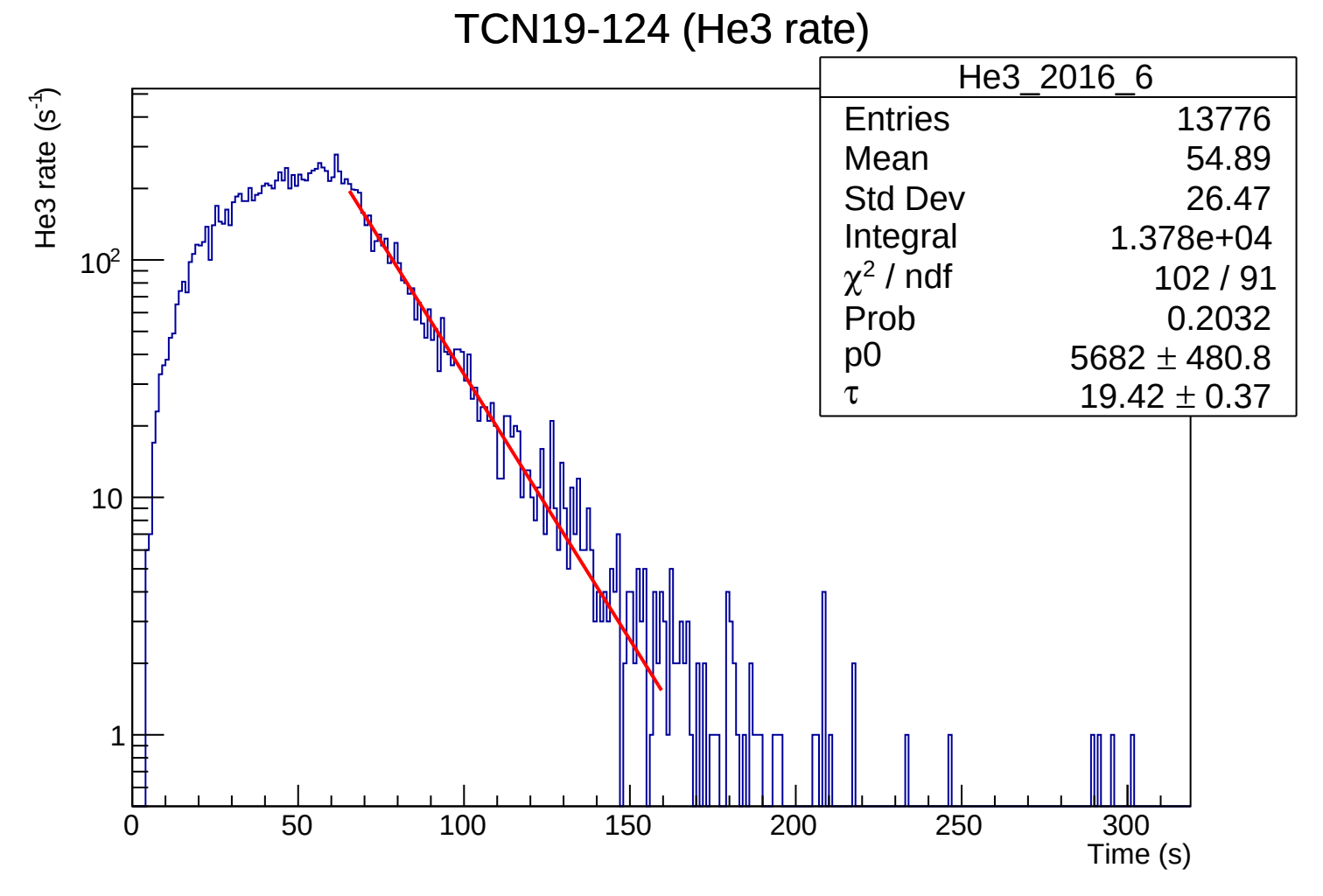

TCN19-124 (He3 rate)
He3_2016_0
Entries 13291
Mean 54.22
Std Dev 25.82
Integral 1.329e+04
χ² / ndf 113 / 93
Prob 0.07758
p0 6156 ± 544.2
τ 18.67 ± 0.36
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

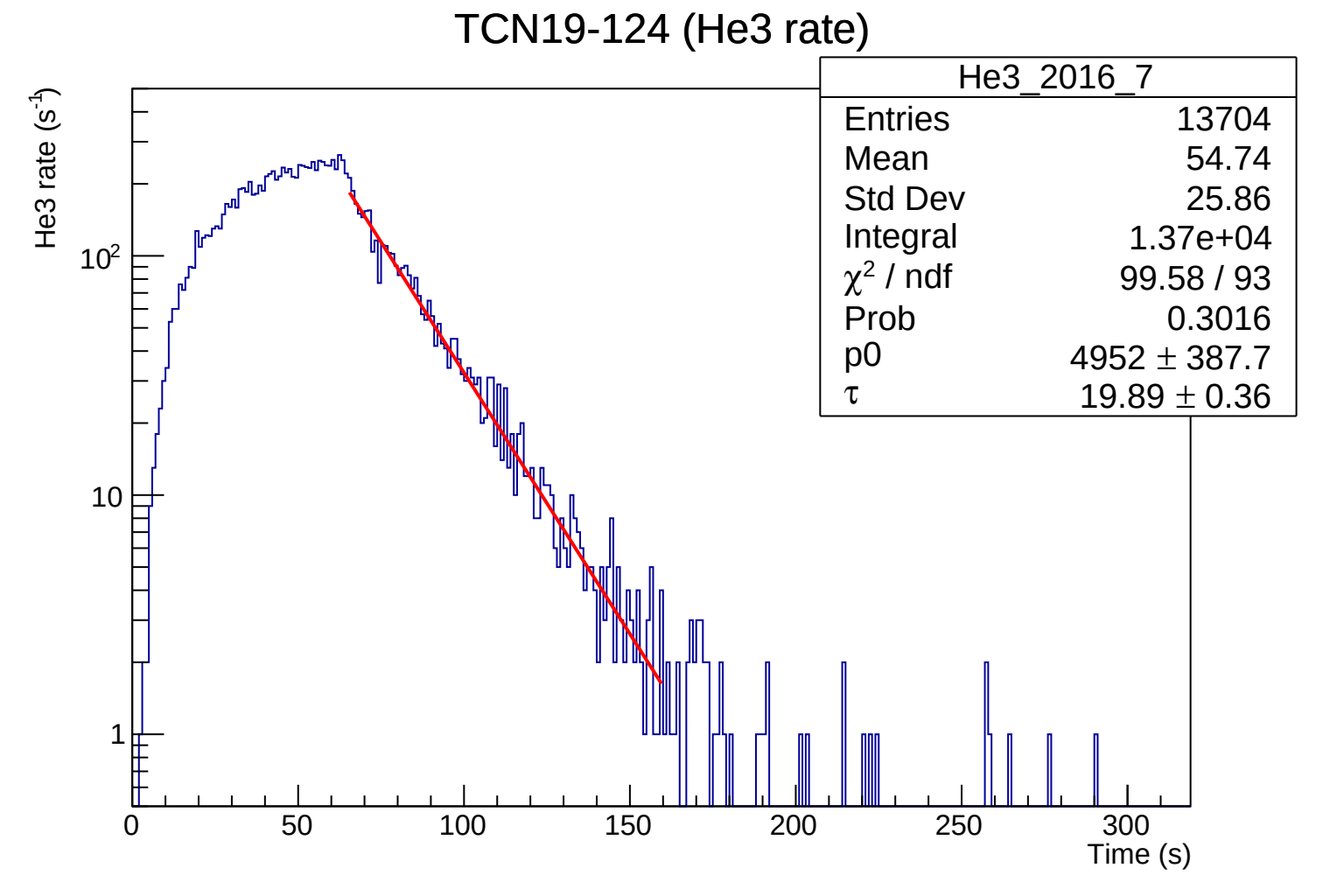

TCN19-124 (He3 rate)
He3_2016_1
Entries 13575
Mean 54.56
Std Dev 25.83
Integral 1.358e+04
χ² / ndf 97.78 / 91
Prob 0.2947
p0 6074 ± 519.9
τ 18.92 ± 0.36
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

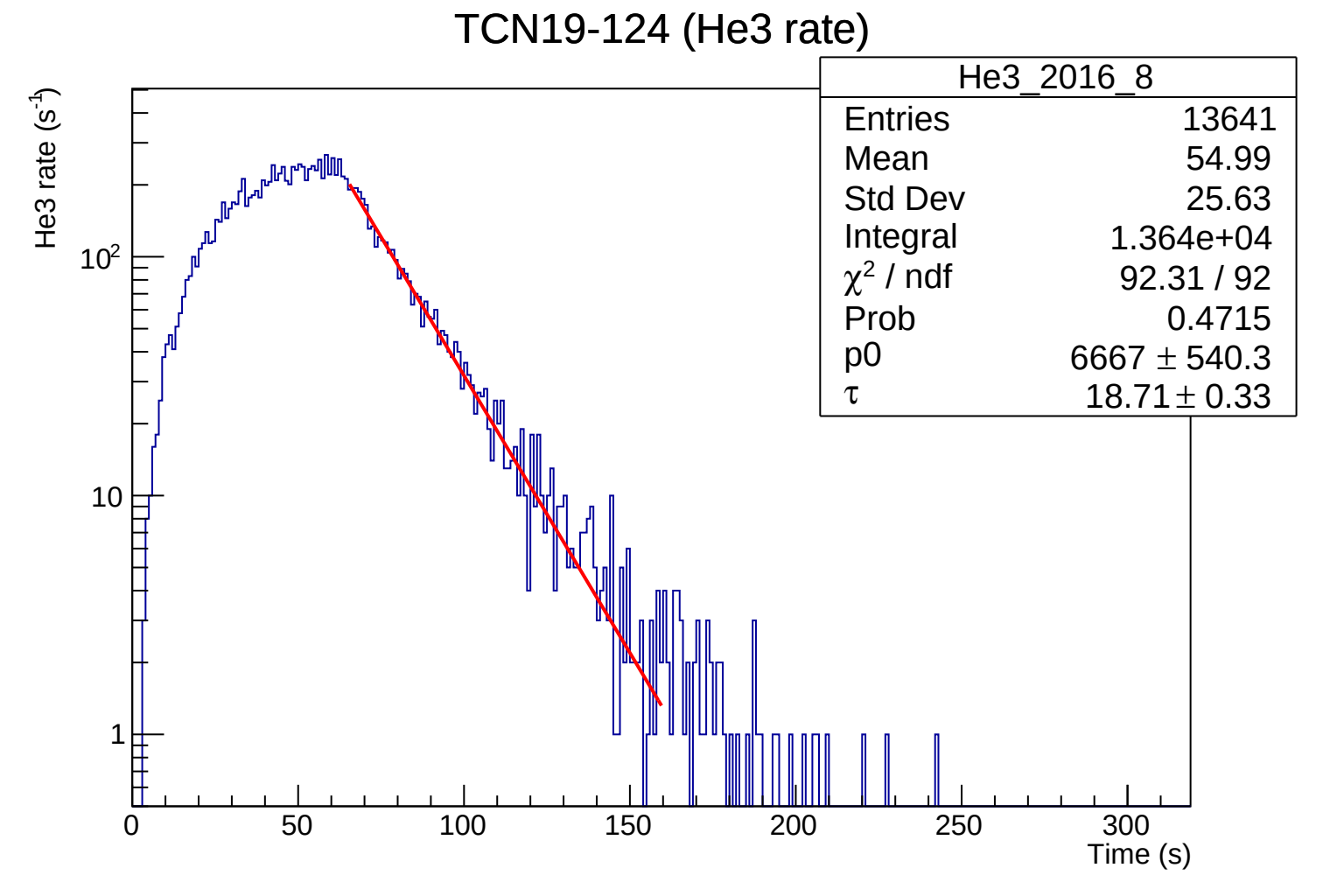

TCN19-124 (He3 rate)
He3_2016_2
Entries 13522
Mean 54.88
Std Dev 25.82
Integral 1.352e+04
χ² / ndf 85.68 / 92
Prob 0.6656
p0 6007 ± 500.4
τ 19.05 ± 0.36
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

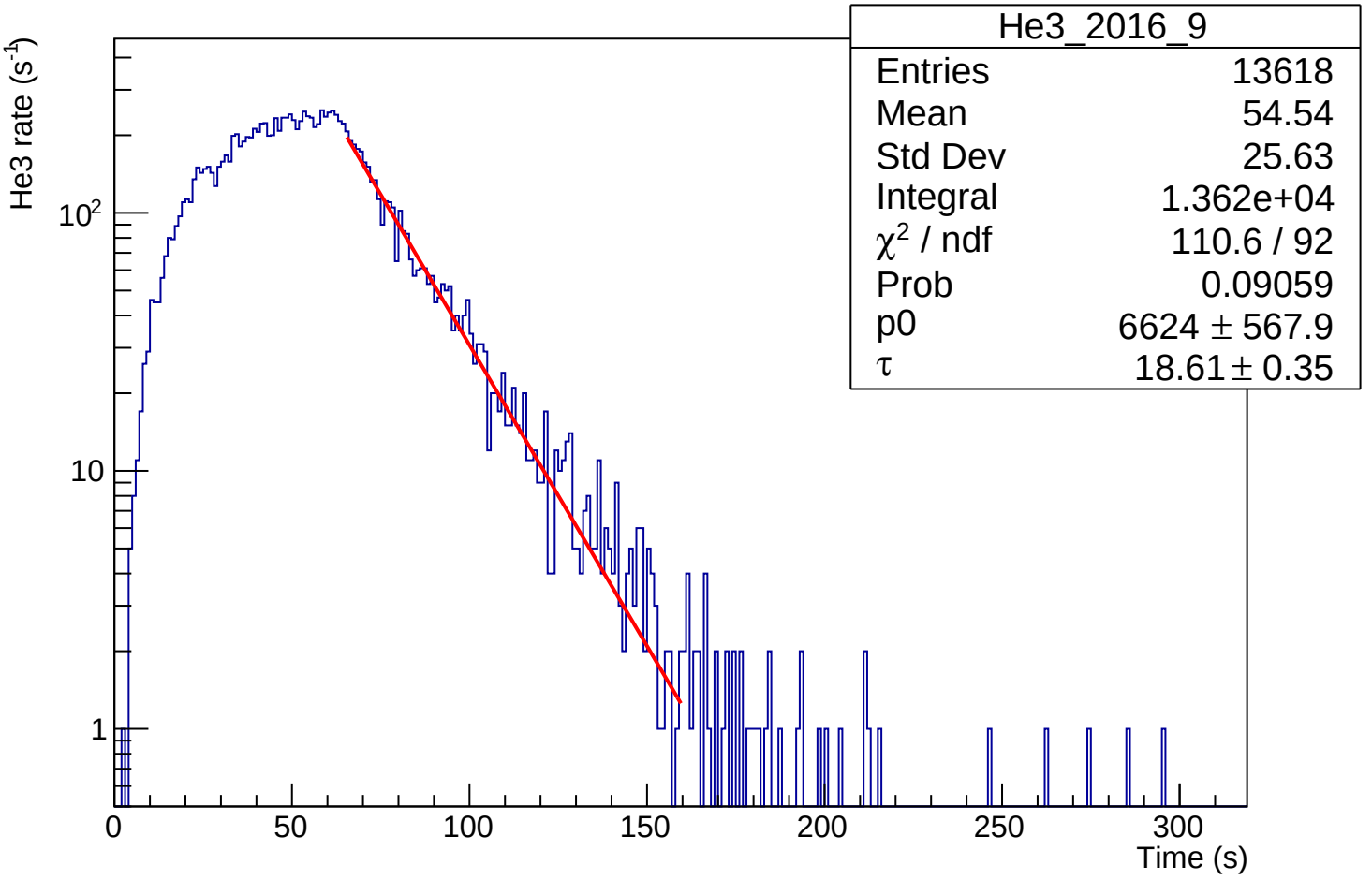

TCN19-124 (He3 rate)
He3_2016_4
Entries 13668
Mean 55.02
Std Dev 26.07
Integral 1.367e+04
χ² / ndf 101.3 / 92
Prob 0.2386
p0 5699 ± 467.1
τ 19.25 ± 0.36
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

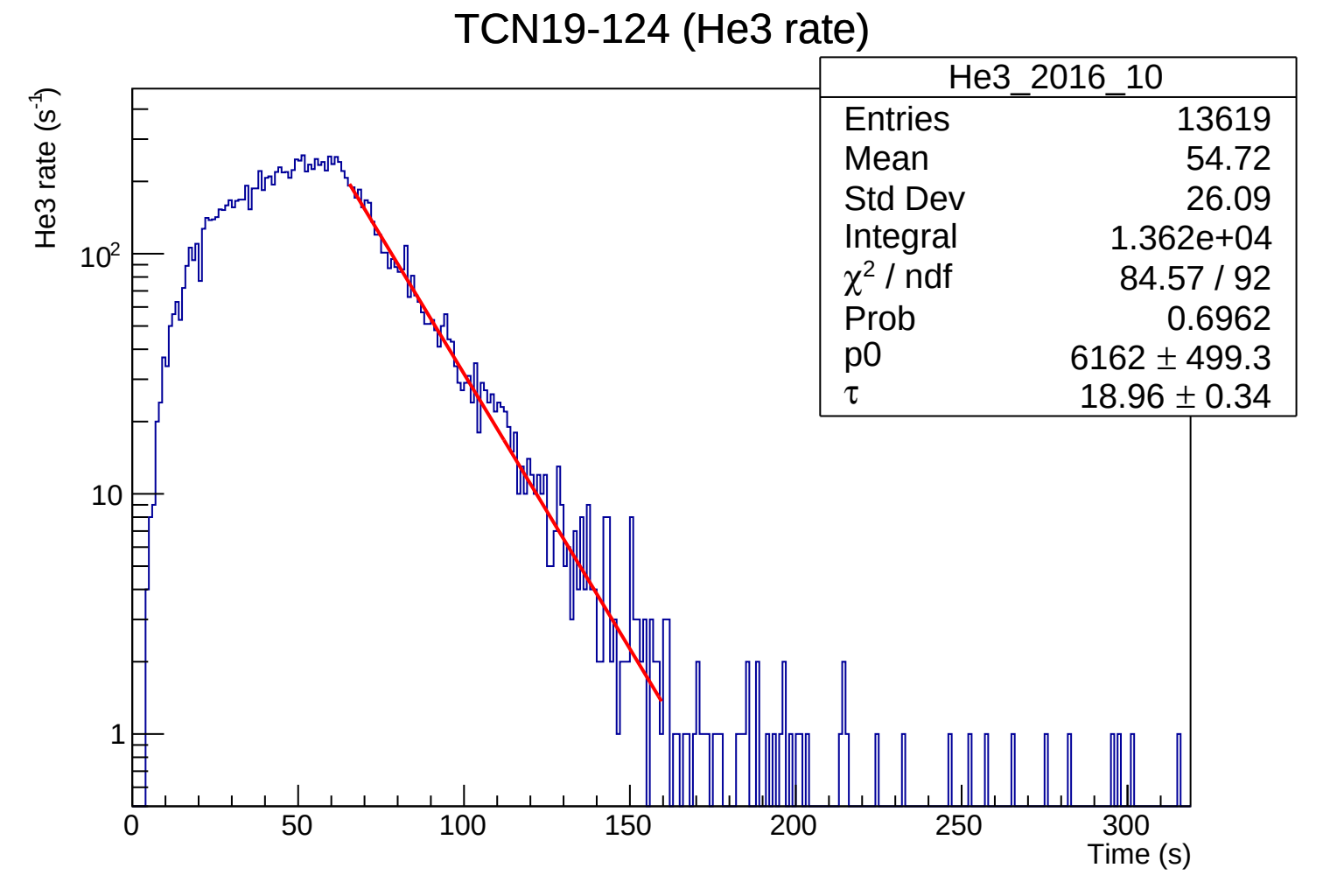

TCN19-124 (He3 rate)
He3_2016_5
Entries 13824
Mean 54.79
Std Dev 25.7
Integral 1.382e+04
χ² / ndf 105 / 92
Prob 0.1667
p0 7232 ± 598.5
τ 18.41 ± 0.33
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

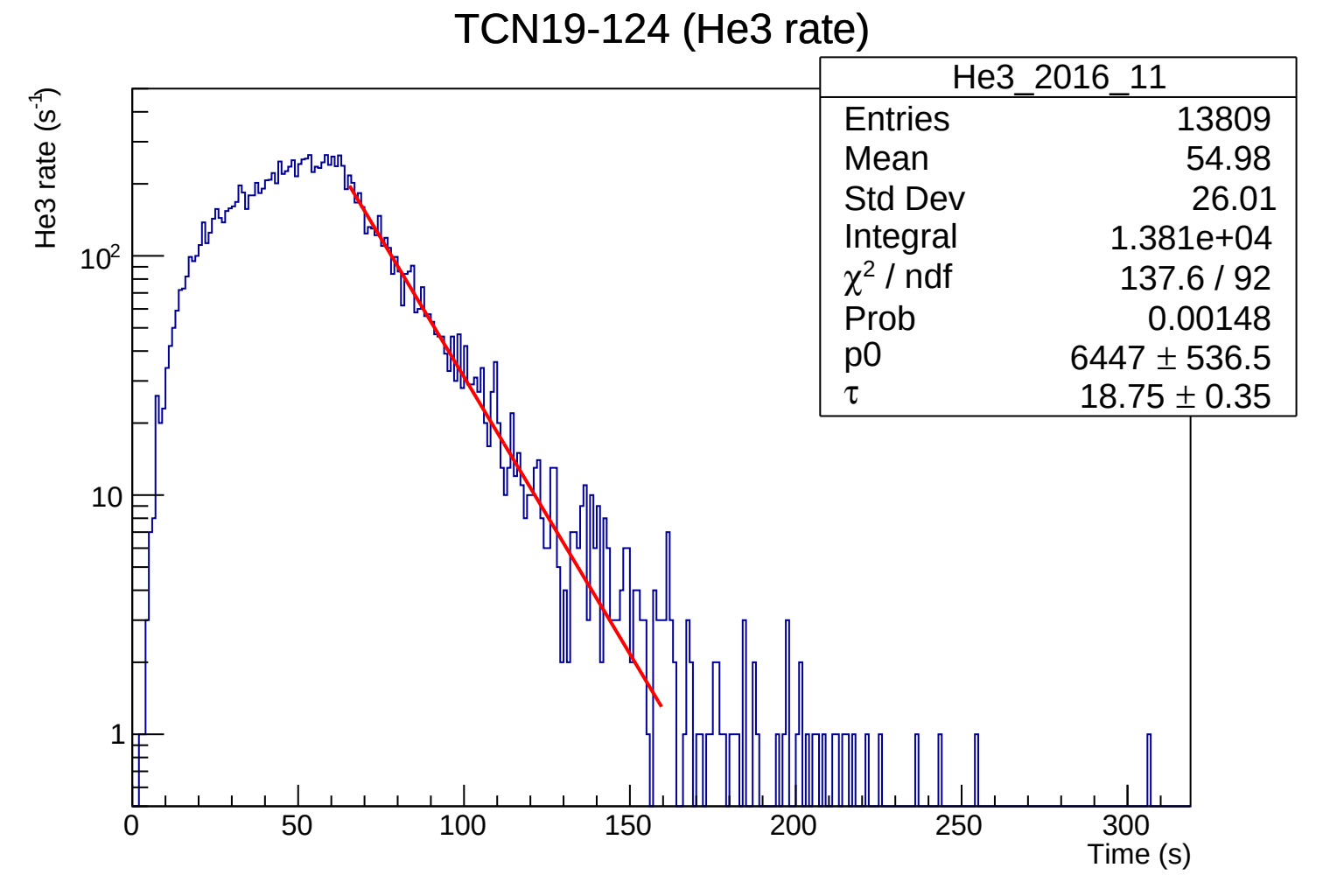

TCN19-124 (He3 rate)
He3_2016_6
Entries 13776
Mean 54.89
Std Dev 26.47
Integral 1.378e+04
χ² / ndf 102 / 91
Prob 0.2032
p0 5682 ± 480.8
τ 19.42 ± 0.37
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

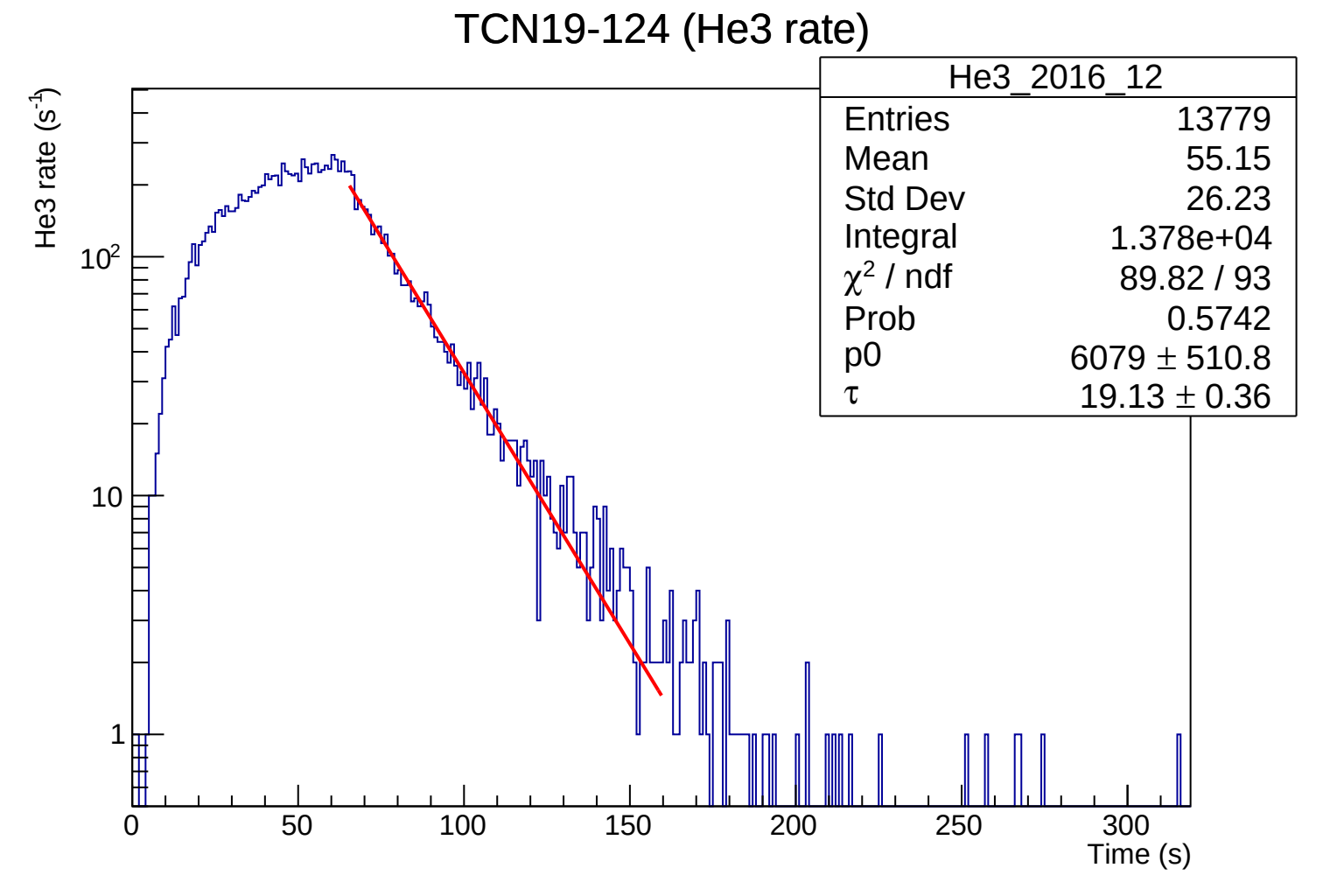

TCN19-124 (He3 rate)
He3_2016_7
Entries 13704
Mean 54.74
Std Dev 25.86
Integral 1.37e+04
χ² / ndf 99.58 / 93
Prob 0.3016
p0 4952 ± 387.7
τ 19.89 ± 0.36
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

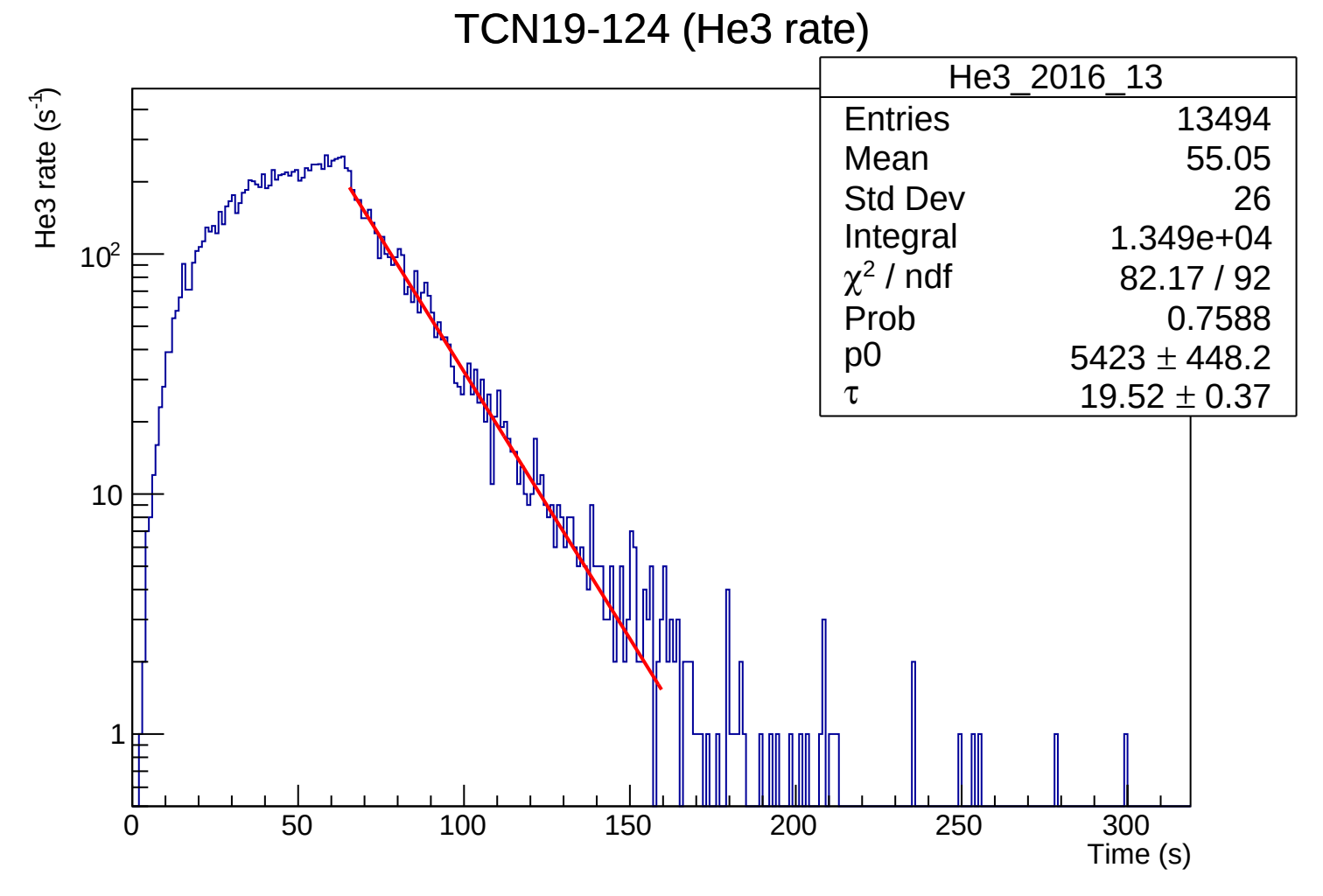

TCN19-124 (He3 rate)
He3_2016_8
Entries 13641
Mean 54.99
Std Dev 25.63
Integral 1.364e+04
χ² / ndf 92.31 / 92
Prob 0.4715
p0 6667 ± 540.3
τ 18.71 ± 0.33
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

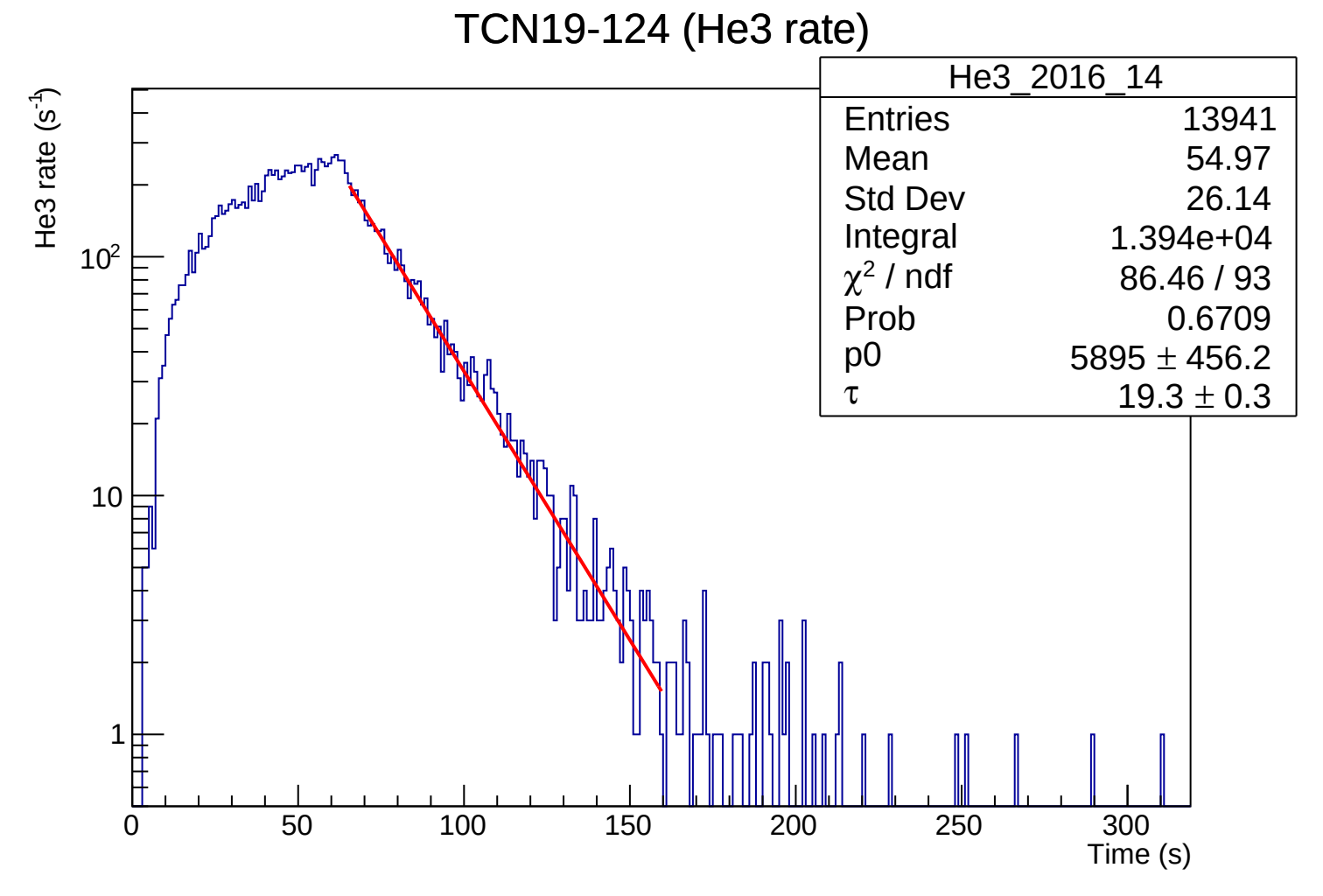

TCN19-124 (He3 rate)
He3_2016_9
Entries 13618
Mean 54.54
Std Dev 25.63
Integral 1.362e+04
χ² / ndf 110.6 / 92
Prob 0.09059
p0 6624 ± 567.9
τ 18.61 ± 0.35
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

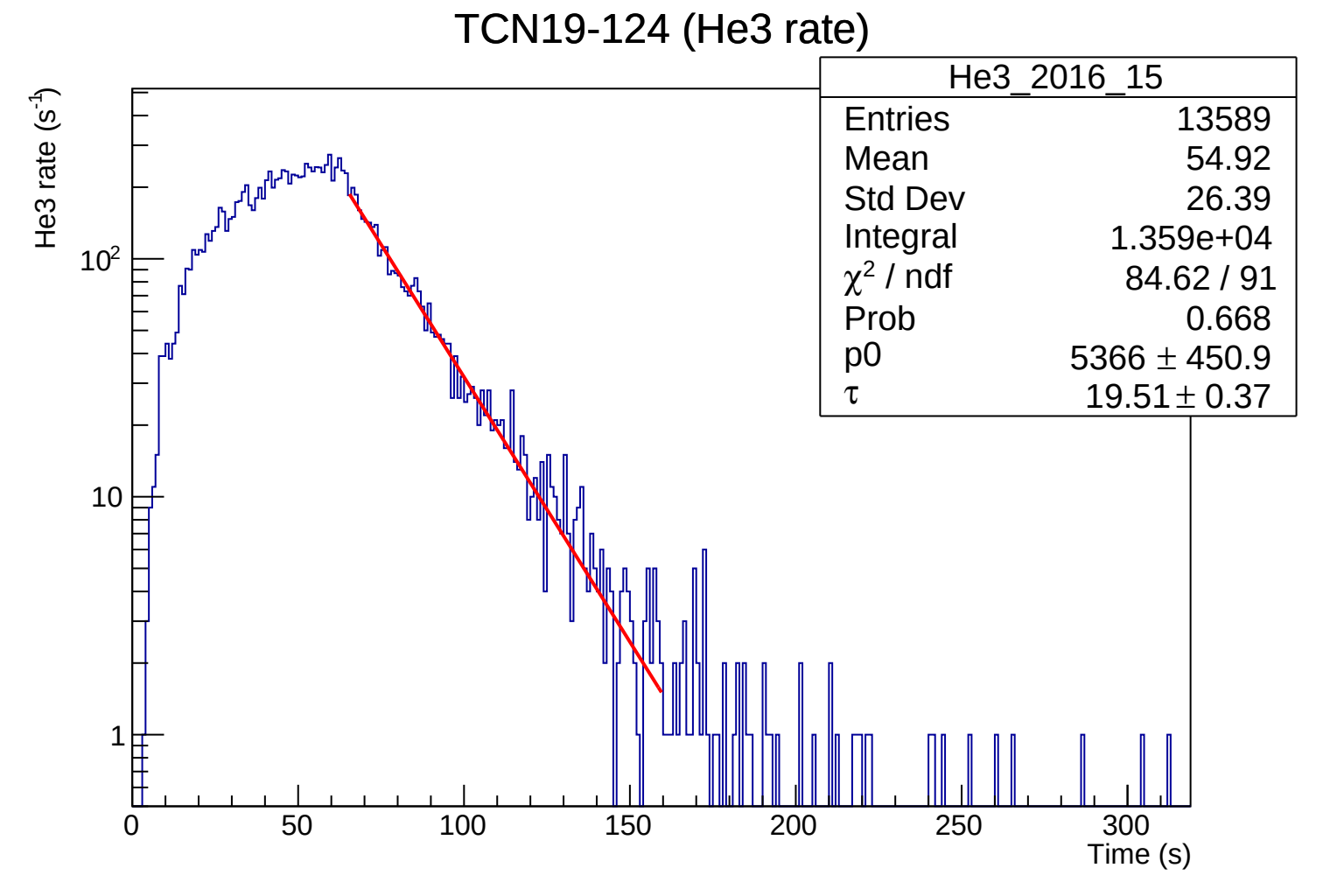

TCN19-124 (He3 rate)
He3_2016_10
Entries 13619
Mean 54.72
Std Dev 26.09
Integral 1.362e+04
χ² / ndf 84.57 / 92
Prob 0.6962
p0 6162 ± 499.3
τ 18.96 ± 0.34
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

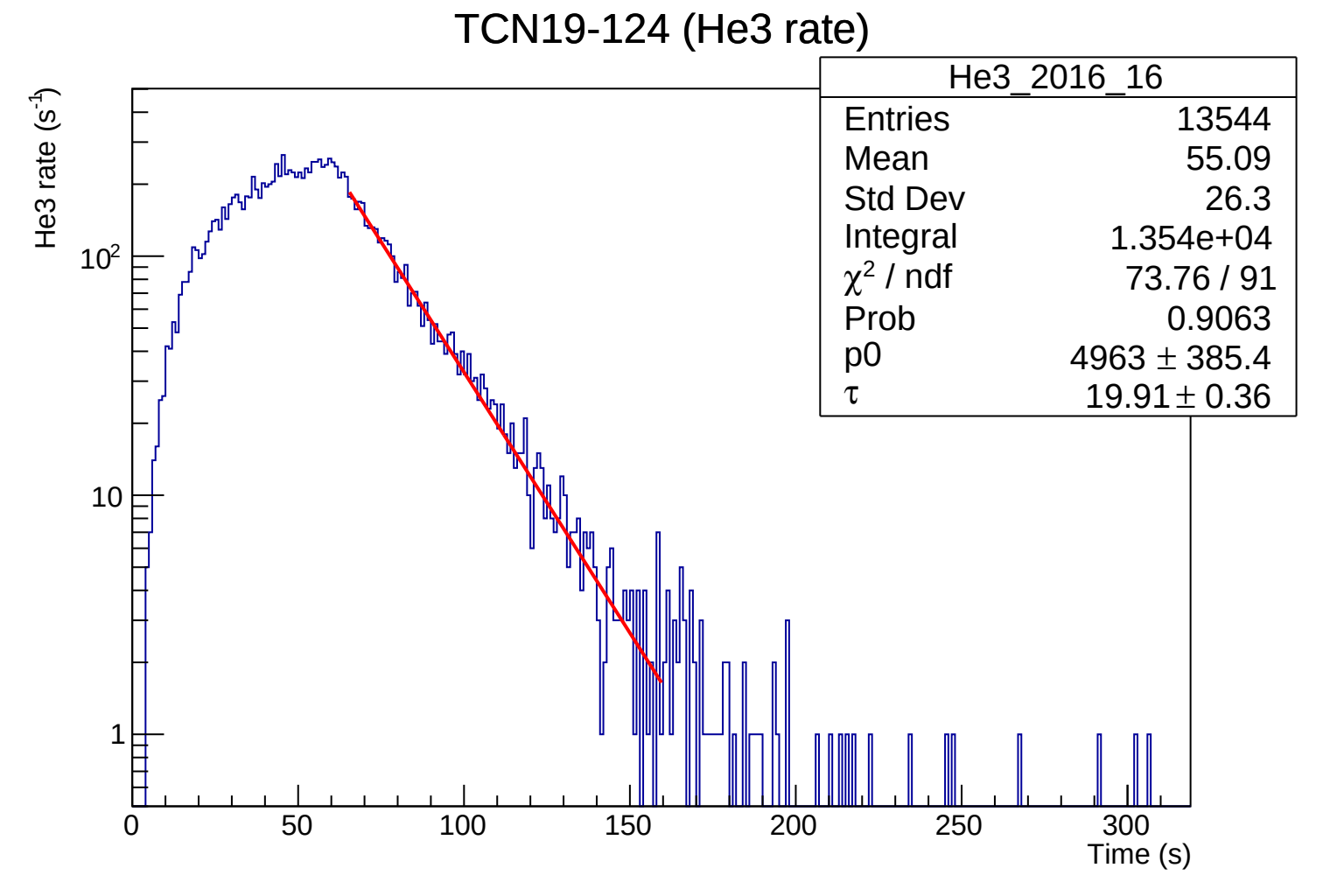

TCN19-124 (He3 rate)
He3_2016_11
Entries 13809
Mean 54.98
Std Dev 26.01
Integral 1.381e+04
χ² / ndf 137.6 / 92
Prob 0.00148
p0 6447 ± 536.5
τ 18.75 ± 0.35
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

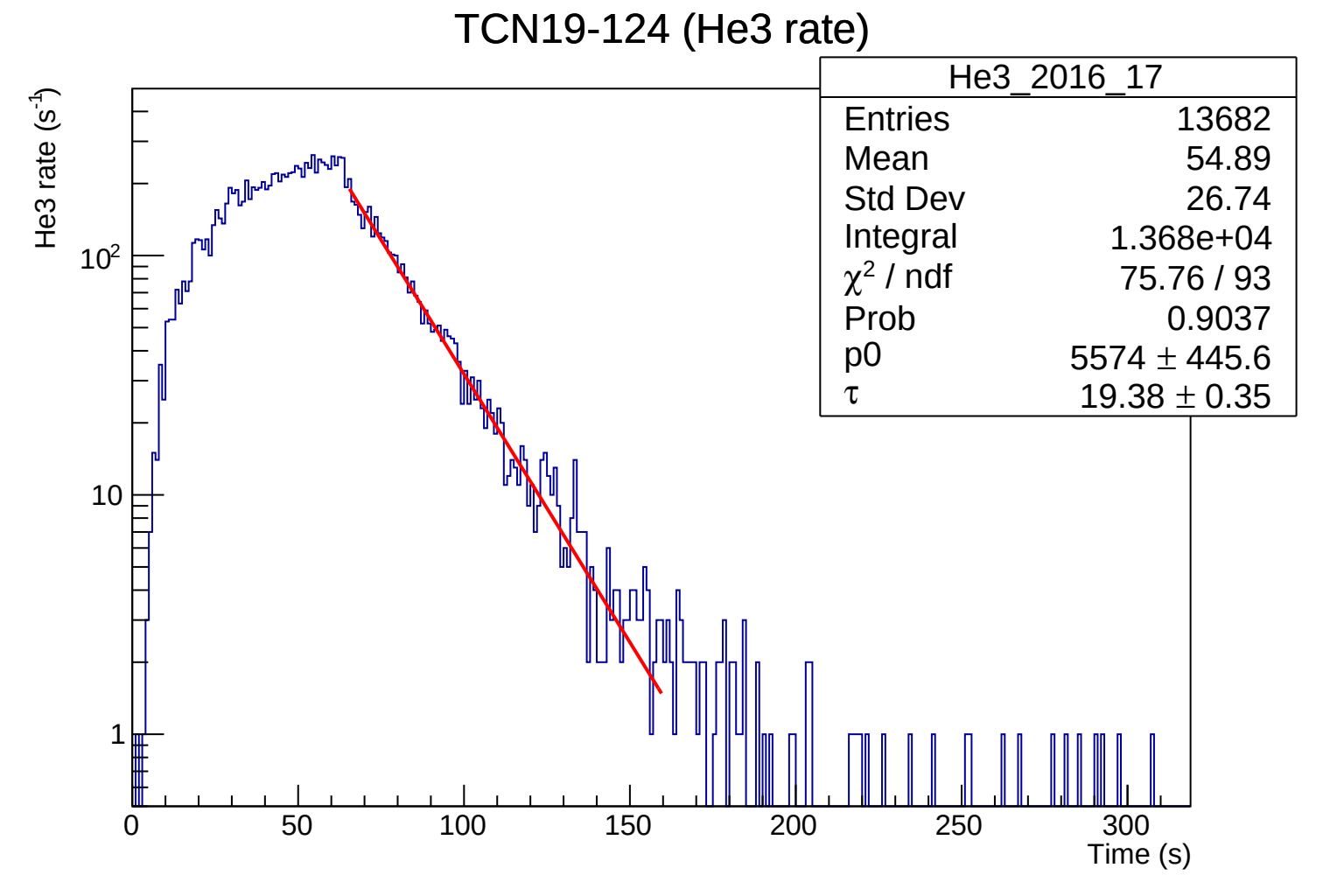

TCN19-124 (He3 rate)
He3_2016_12
Entries 13779
Mean 55.15
Std Dev 26.23
Integral 1.378e+04
χ² / ndf 89.82 / 93
Prob 0.5742
p0 6079 ± 510.8
τ 19.13 ± 0.36
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

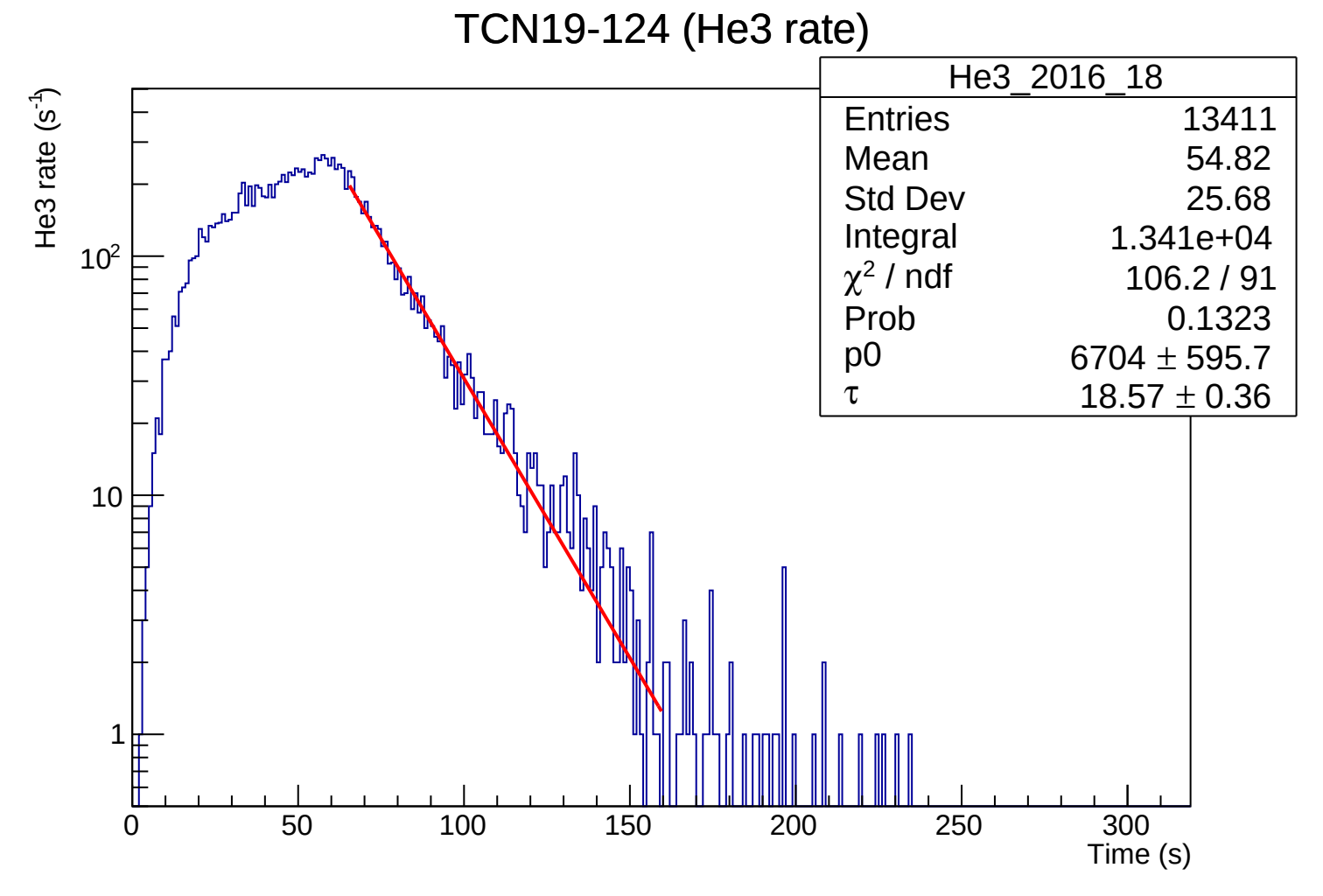

TCN19-124 (He3 rate)
He3_2016_13
Entries 13494
Mean 55.05
Std Dev 26
Integral 1.349e+04
χ² / ndf 82.17 / 92
Prob 0.7588
p0 5423 ± 448.2
τ 19.52 ± 0.37
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

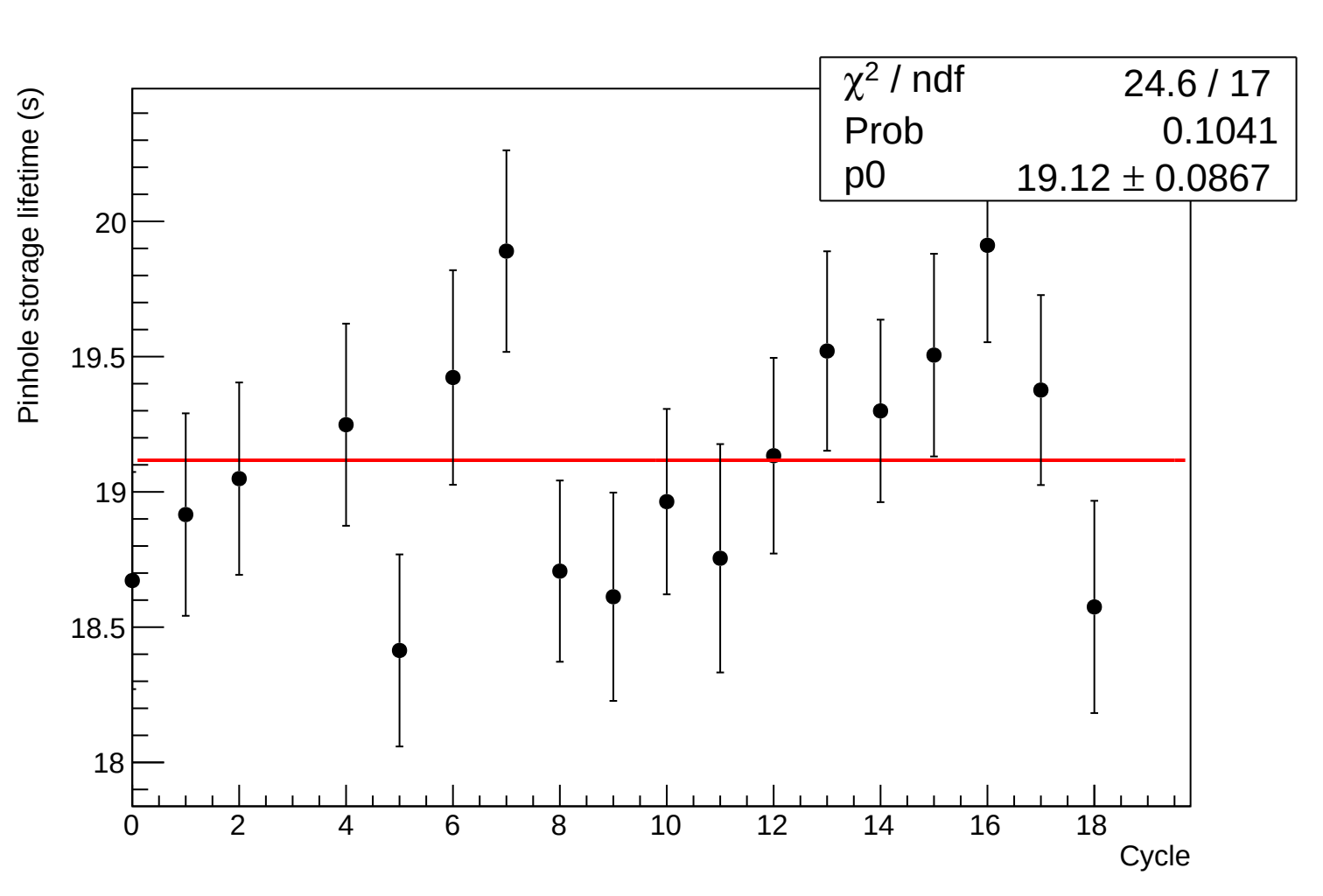

TCN19-124 (He3 rate)
He3_2016_14
Entries 13941
Mean 54.97
Std Dev 26.14
Integral 1.394e+04
χ² / ndf 86.46 / 93
Prob 0.6709
p0 5895 ± 456.2
τ 19.3 ± 0.3
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

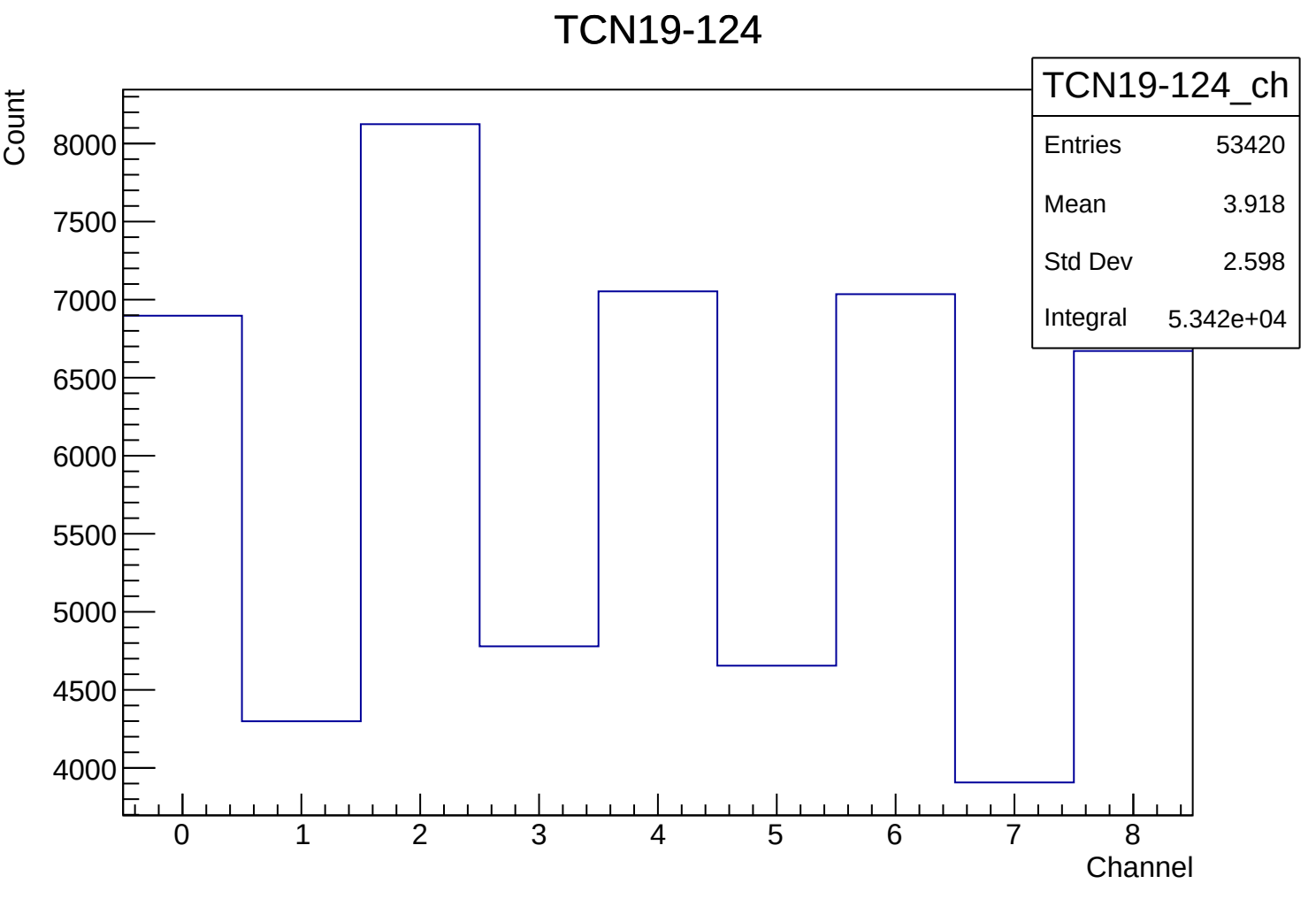

TCN19-124 (He3 rate)
He3_2016_15
Entries 13589
Mean 54.92
Std Dev 26.39
Integral 1.359e+04
χ² / ndf 84.62 / 91
Prob 0.668
p0 5366 ± 450.9
τ 19.51 ± 0.37
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)


TCN19-124 (He3 rate)
He3_2016_16
Entries 13544
Mean 55.09
Std Dev 26.3
Integral 1.354e+04
χ² / ndf 73.76 / 91
Prob 0.9063
p0 4963 ± 385.4
τ 19.91 ± 0.36
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)


TCN19-124 (He3 rate)
He3_2016_17
Entries 13682
Mean 54.89
Std Dev 26.74
Integral 1.368e+04
χ² / ndf 75.76 / 93
Prob 0.9037
p0 5574 ± 445.6
τ 19.38 ± 0.35
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)


TCN19-124 (He3 rate)
He3_2016_18
Entries 13411
Mean 54.82
Std Dev 25.68
Integral 1.341e+04
χ² / ndf 106.2 / 91
Prob 0.1323
p0 6704 ± 595.7
τ 18.57 ± 0.36
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)


χ^2 / ndf 24.6 / 17
Prob 0.1041
p0 19.12 ± 0.0867
Pinhole storage lifetime (s)
20
19.5
19
18.5
18
0
2
4
6
8
10
12
14
16
18
Cycle


TCN19-124
TCN19-124_ch
Entries 53420
Mean 3.918
Std Dev 2.598
Integral 5.342e+04
Count
8000
7500
7000
6500
6000
5500
5000
4500
4000
0
1
2
3
4
5
6
7
8
Channel