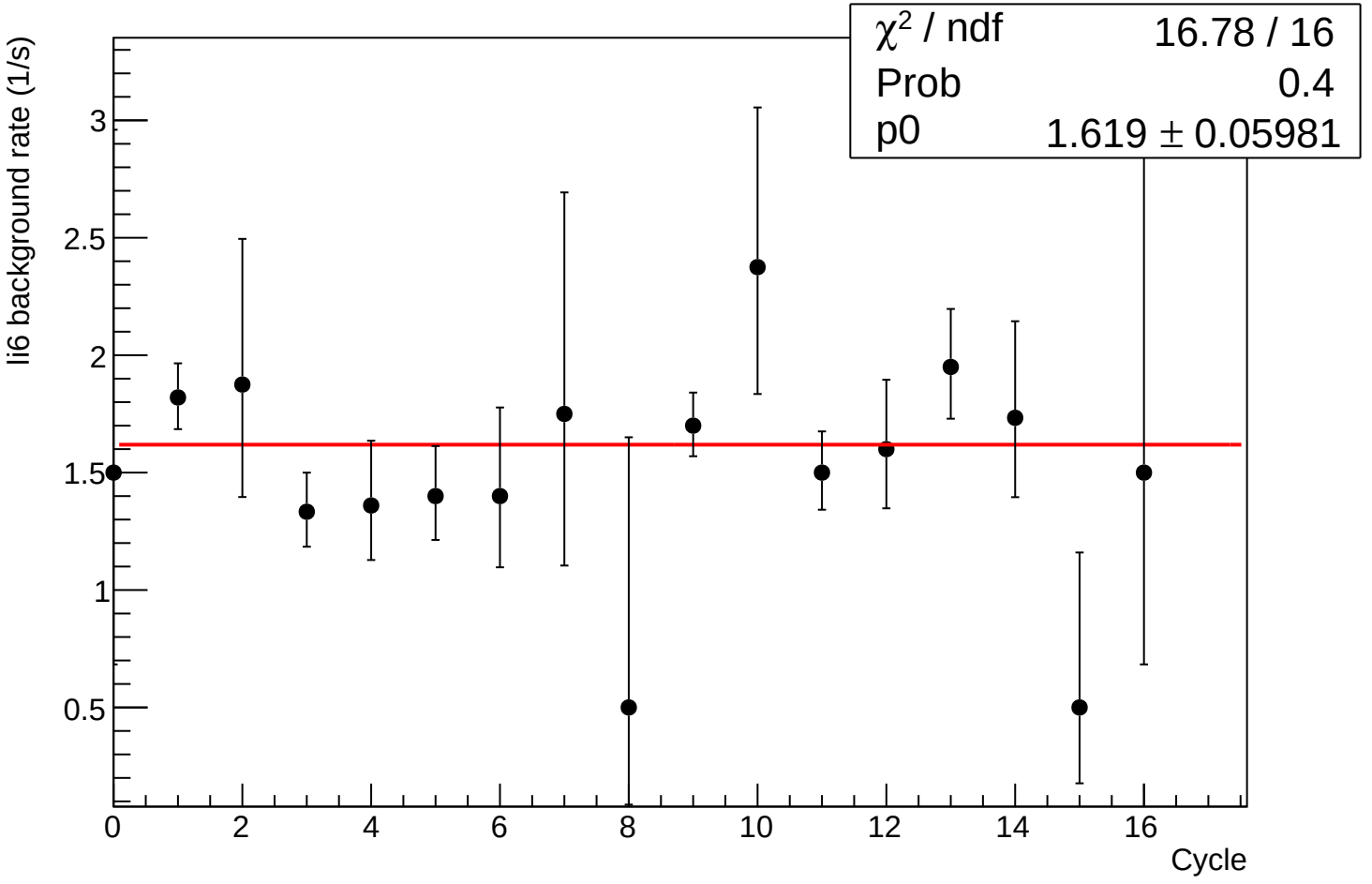
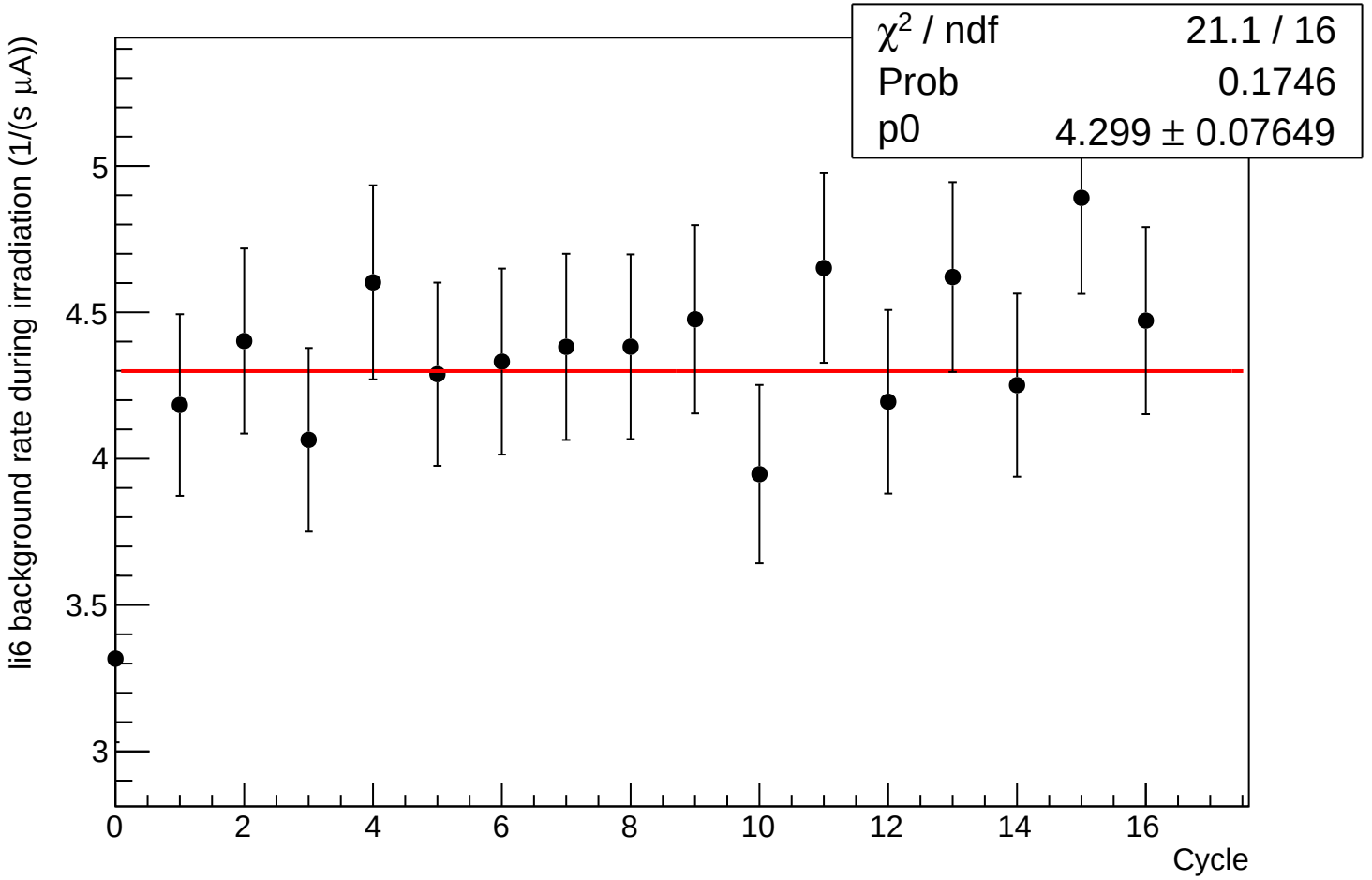
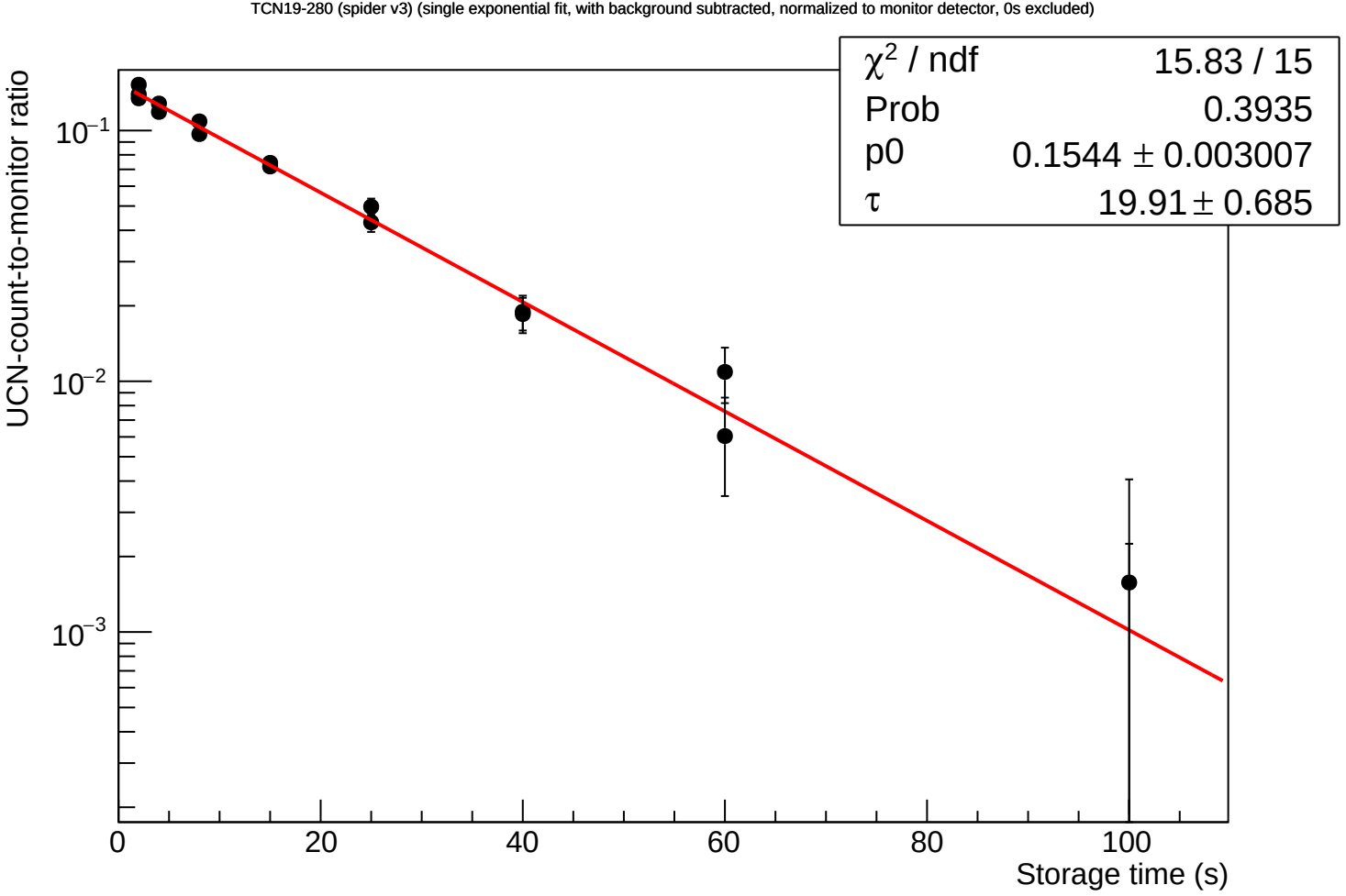
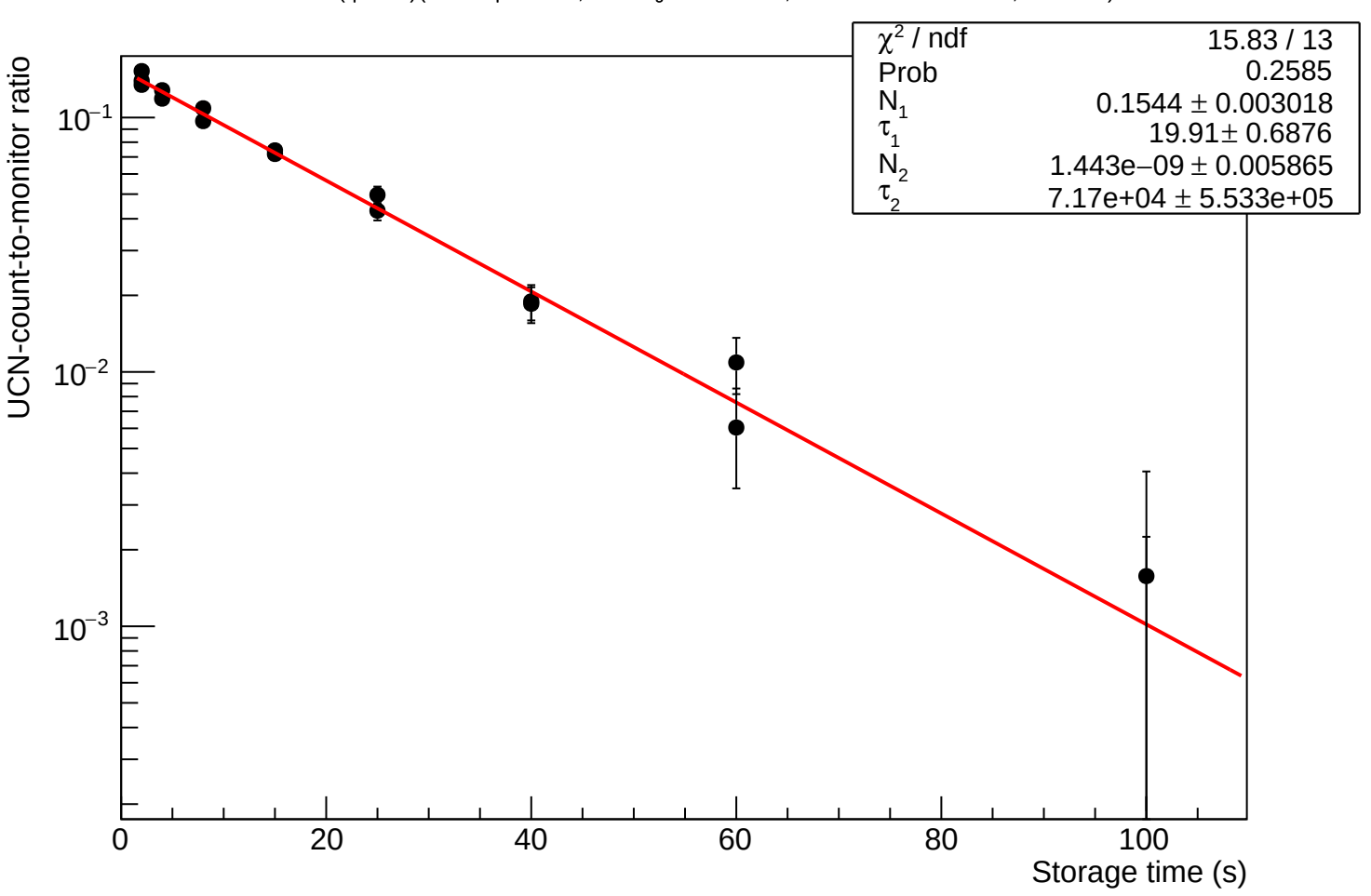
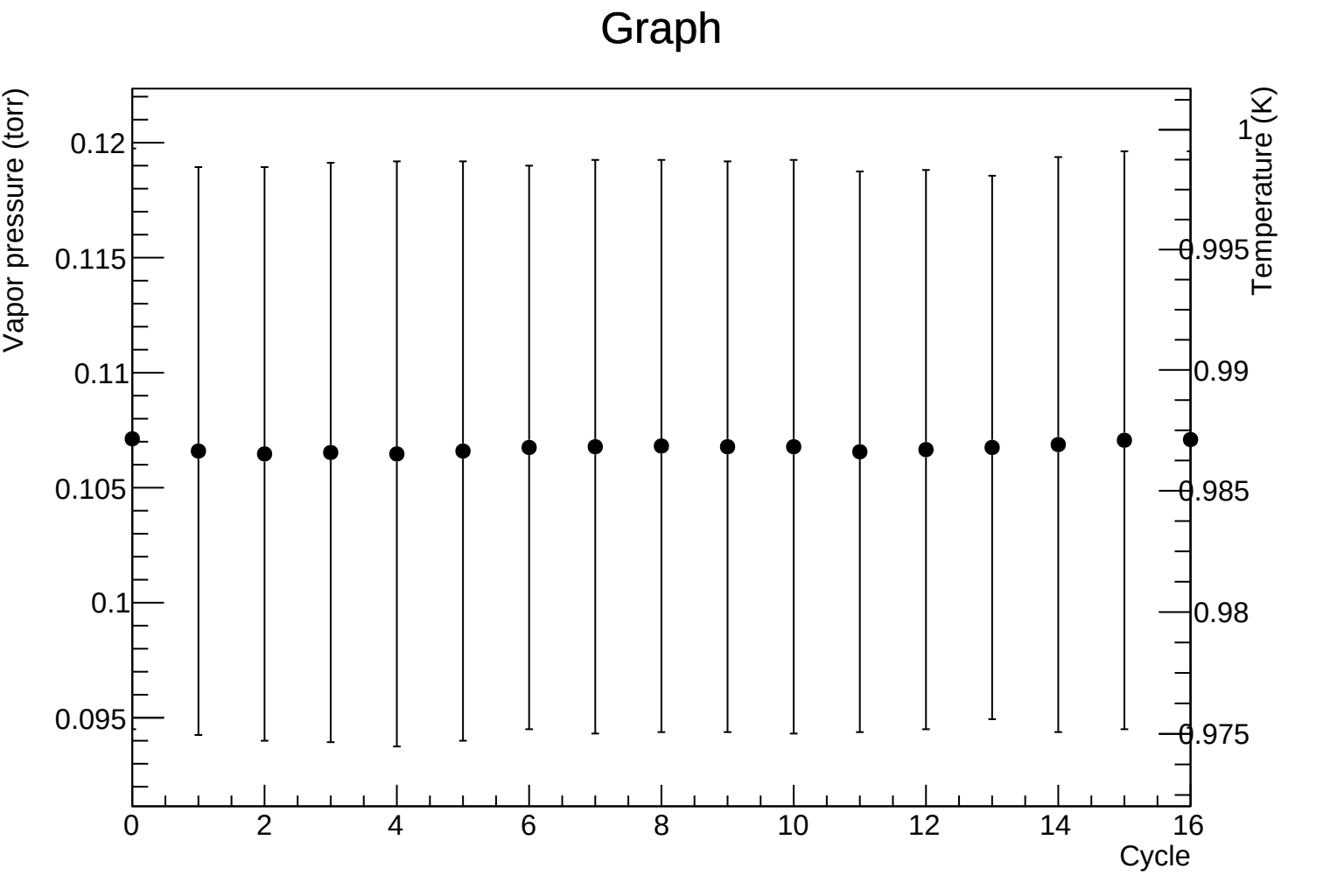
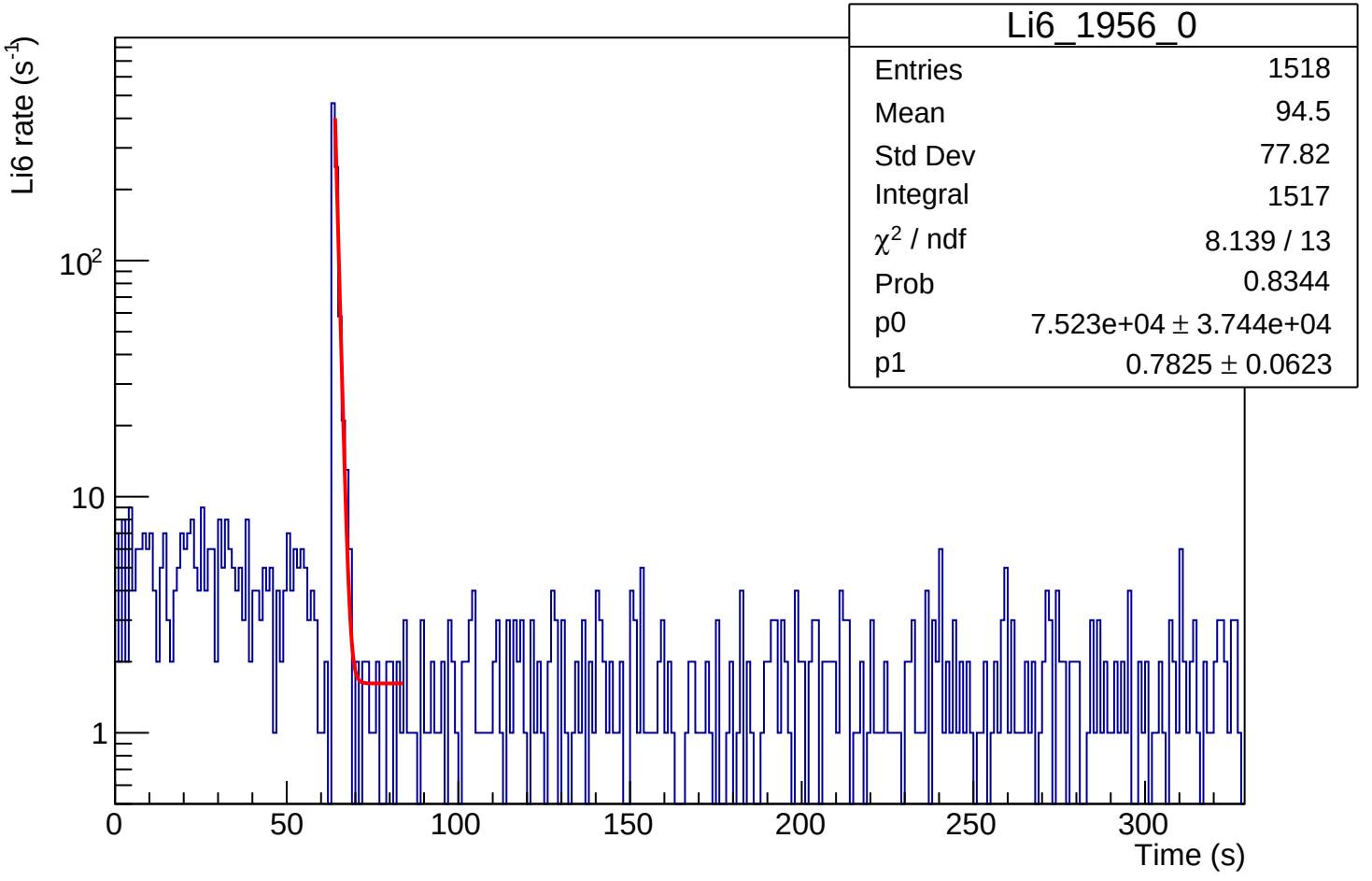

χ^2 / ndf 16.78 / 16
Prob 0.4
p0 1.619 ± 0.05981
li6 background rate (1/s)
Cycle
0
2
4
6
8
10
12
14
16
0.5
1
1.5
2
2.5
3

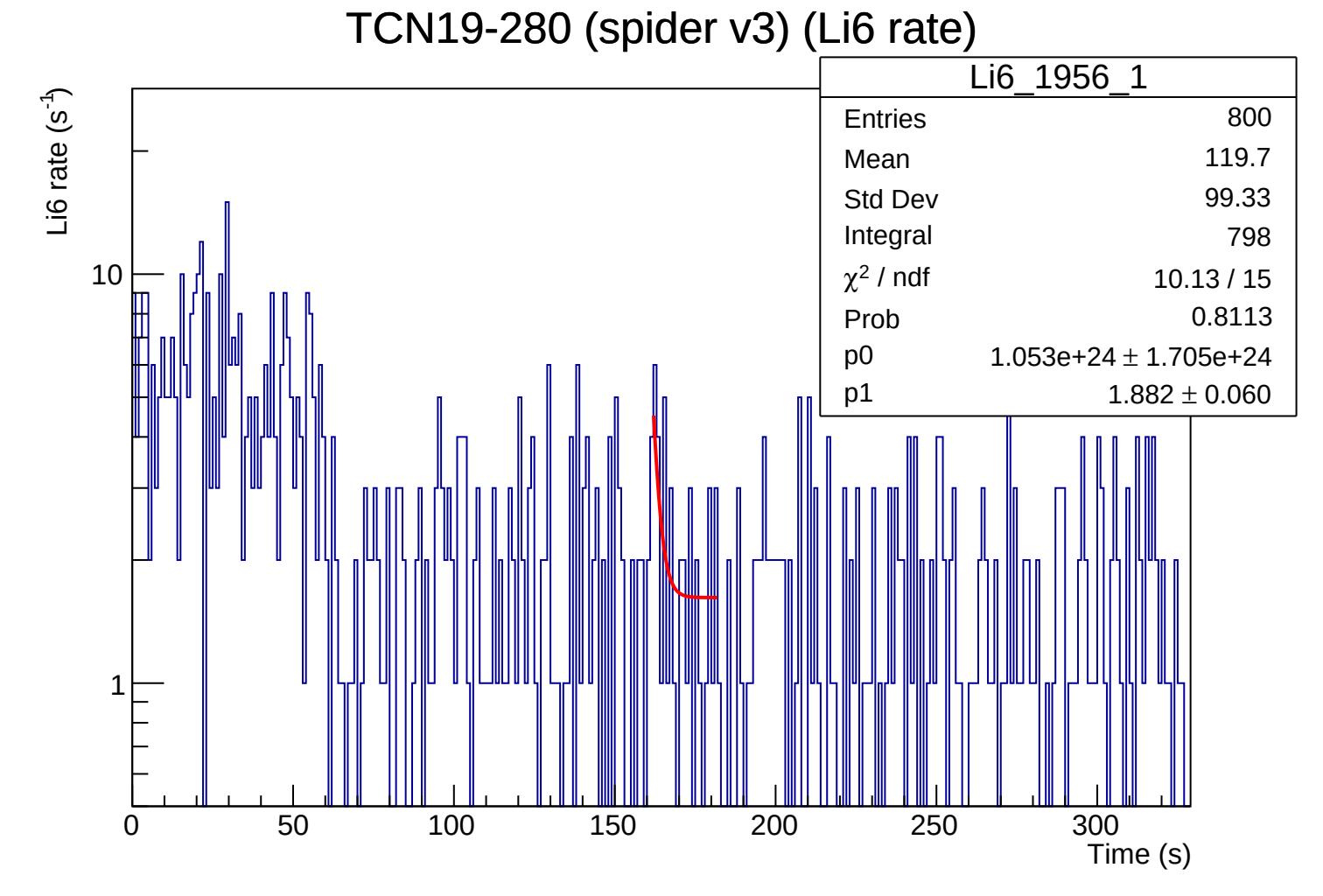

χ^2 / ndf 21.1 / 16
Prob 0.1746
p0 4.299 ± 0.07649
li6 background rate during irradiation (1/(s μA))
Cycle
5
4.5
4
3.5
3
0
2
4
6
8
10
12
14
16

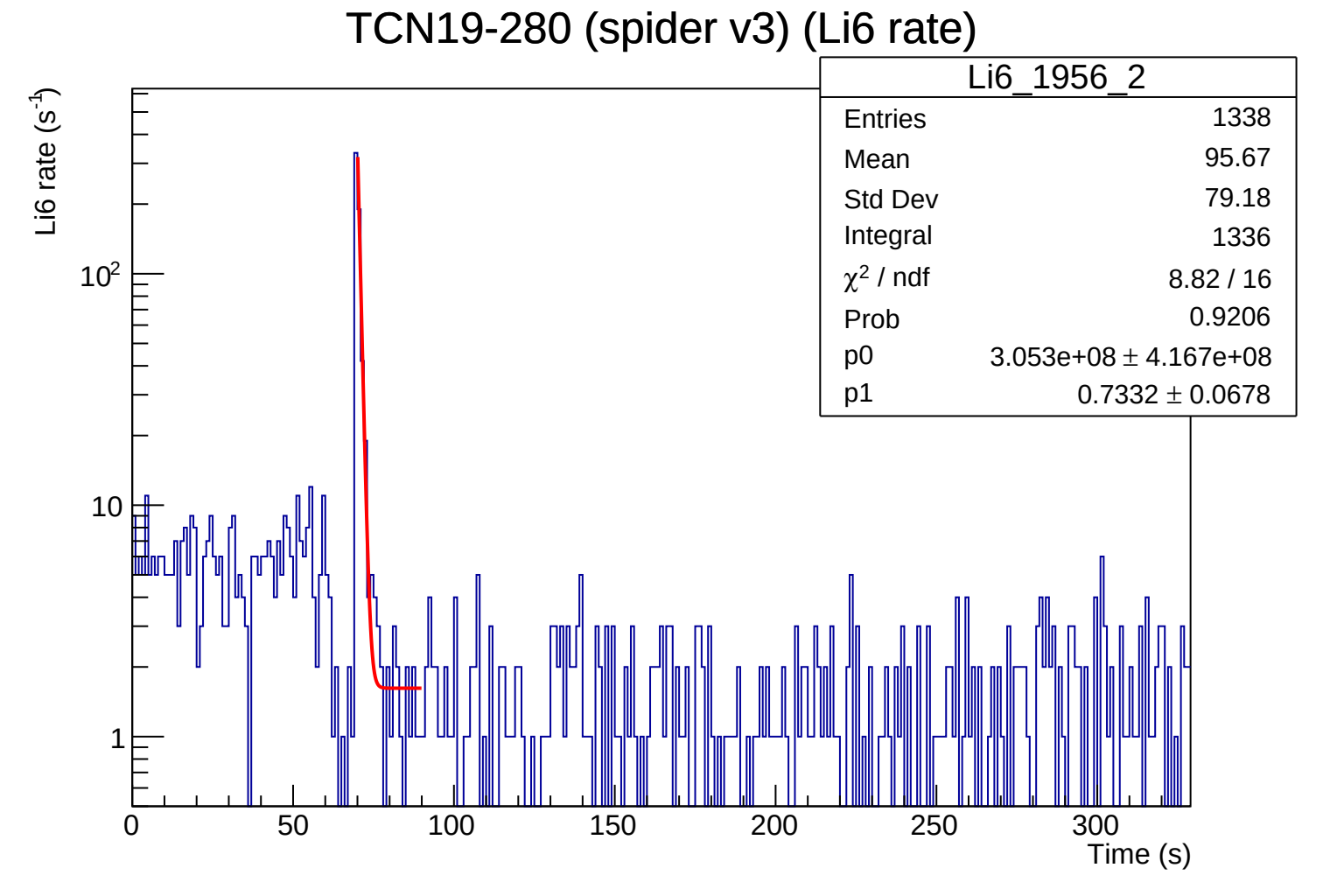

TCN19-280 (spider v3) (single exponential fit, with background subtracted, normalized to monitor detector, 0s excluded)
χ² / ndf 15.83 / 15
Prob 0.3935
p0 0.1544 ± 0.003007
τ 19.91 ± 0.685
UCN-count-to-monitor ratio
10⁻¹
10⁻²
10⁻³
0
20
40
60
80
100
Storage time (s)

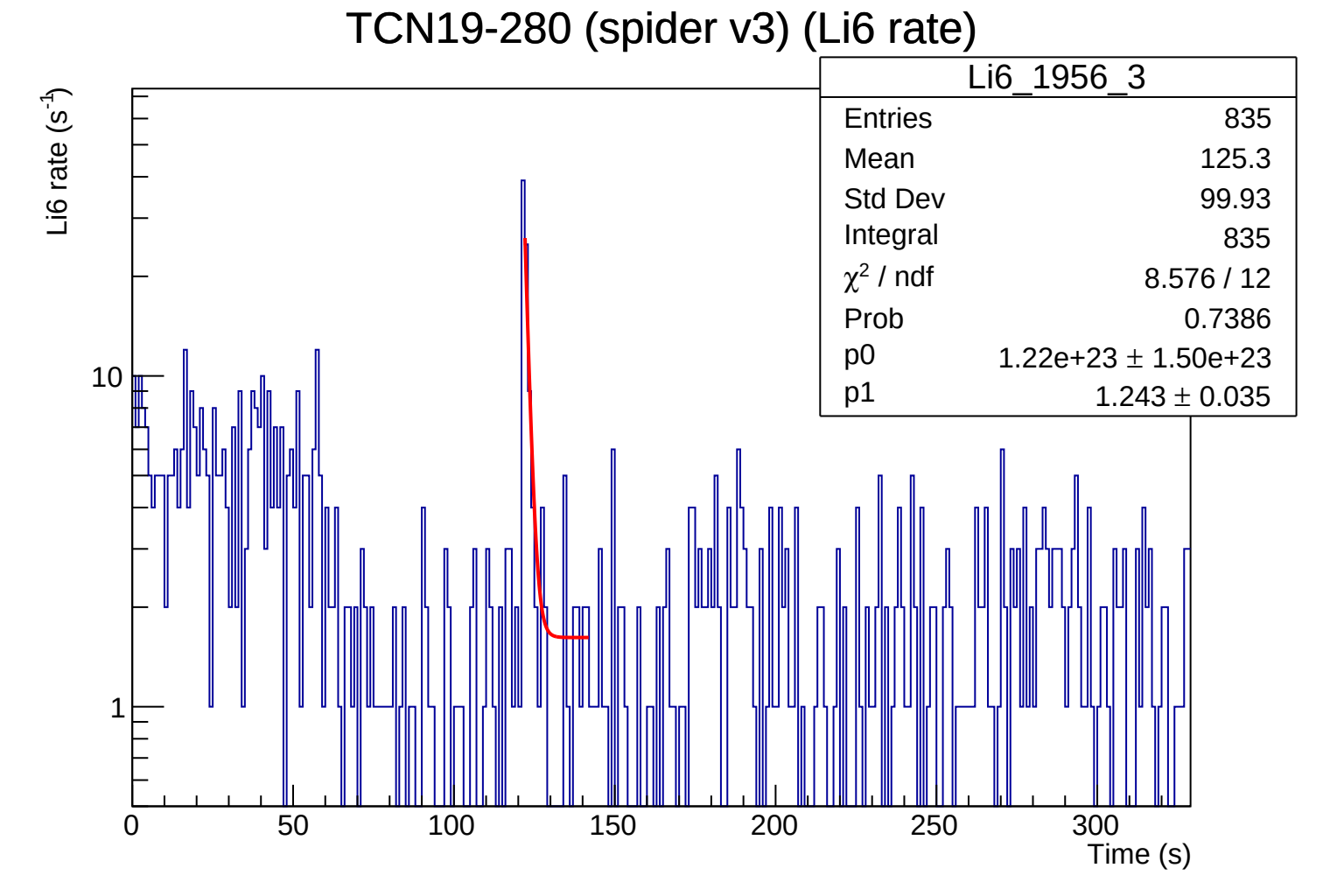

TCN19-280 (spider v3) (double exponential fit, with background subtracted, normalized to monitor detector, 0s excluded)
χ² / ndf 15.83 / 13
Prob 0.2585
N1 0.1544 ± 0.003018
τ1 19.91± 0.6876
N2 1.443e−09 ± 0.005865
τ2 7.17e+04 ± 5.533e+05
UCN-count-to-monitor ratio
10⁻¹
10⁻²
10⁻³
0
20
40
60
80
100
Storage time (s)

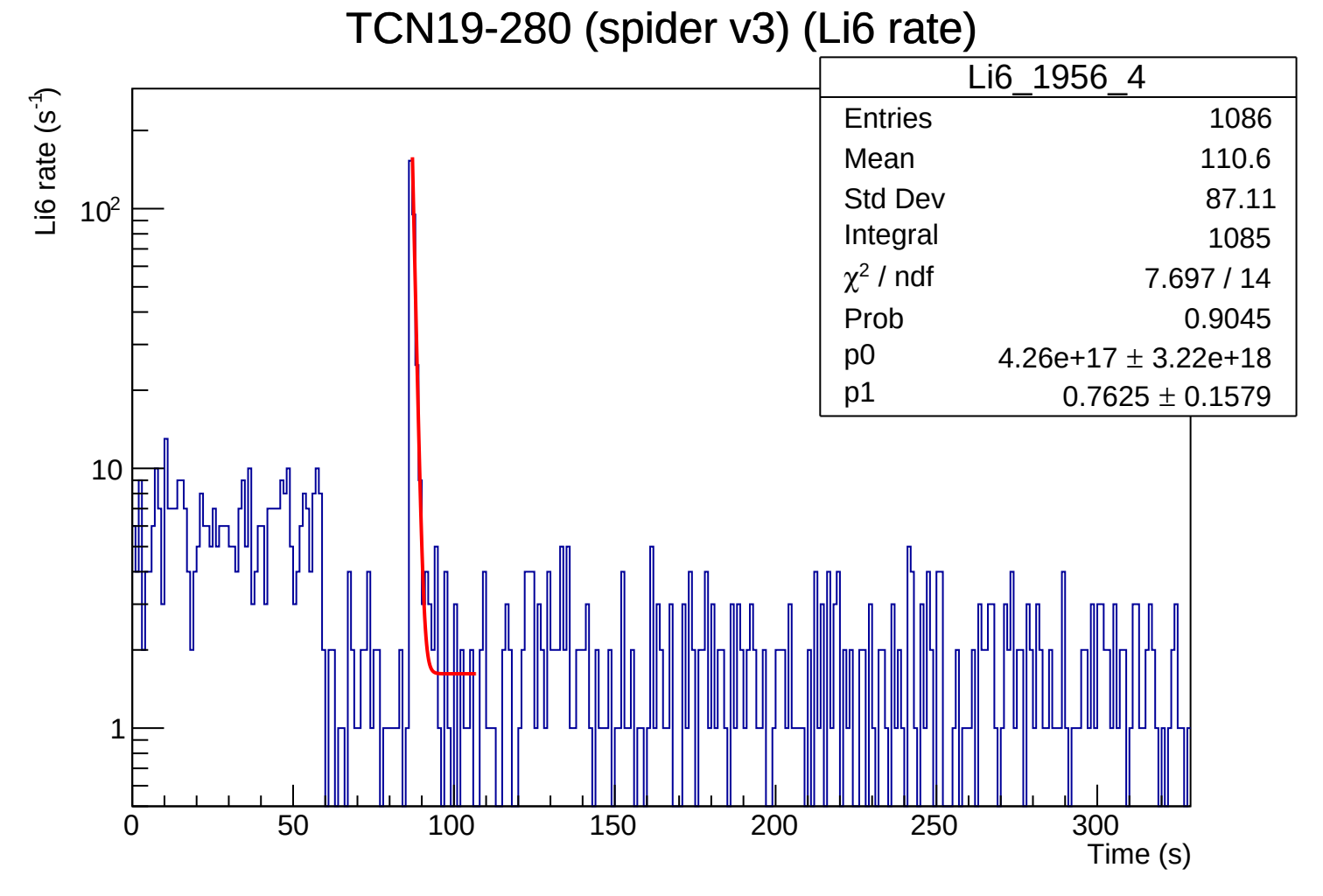

Graph
Vapor pressure (torr)
0.12
0.115
0.11
0.105
0.1
0.095
Temperature (K)
1
0.995
0.99
0.985
0.98
0.975
0
2
4
6
8
10
12
14
16
Cycle

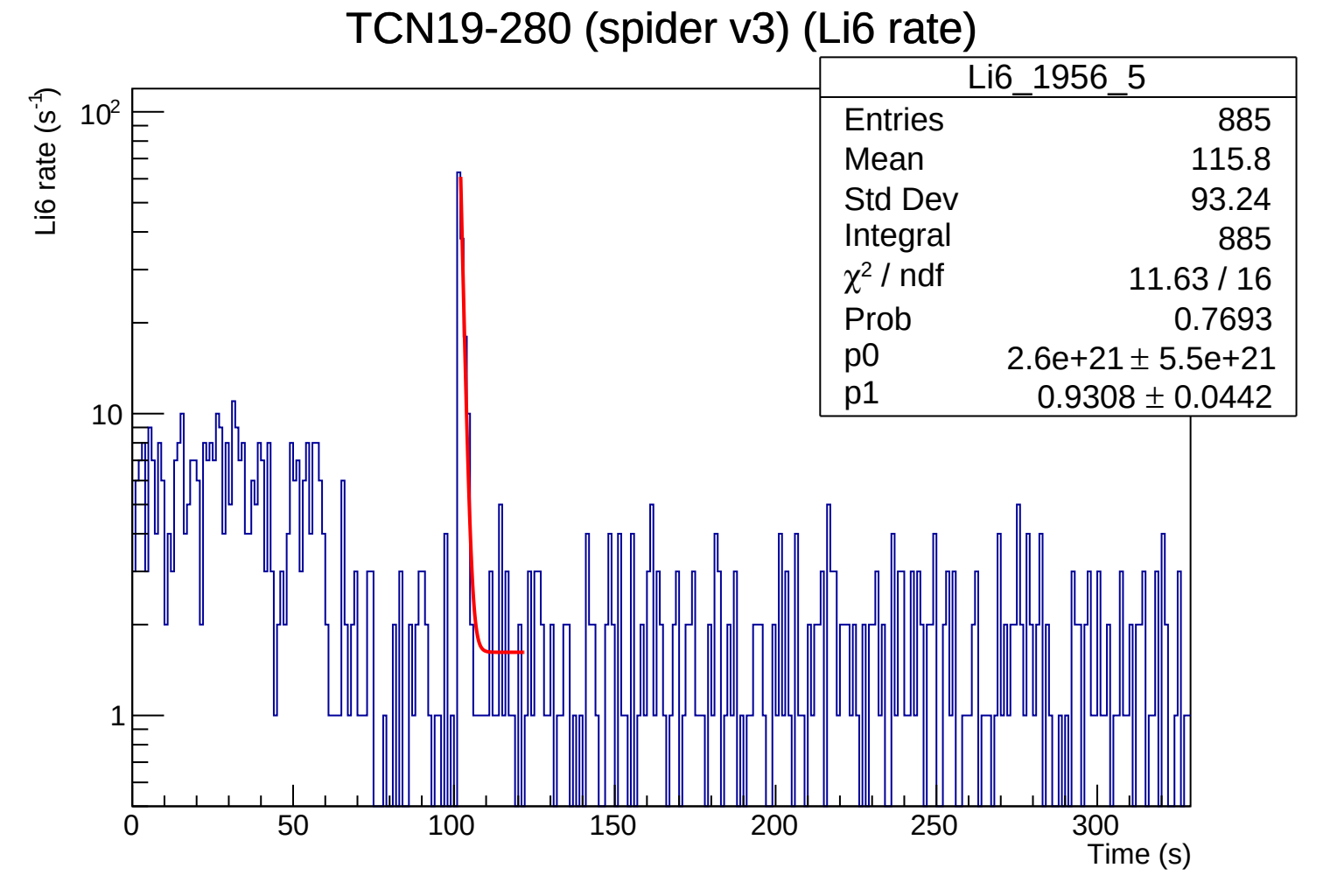

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_0
Entries 1518
Mean 94.5
Std Dev 77.82
Integral 1517
χ2 / ndf 8.139 / 13
Prob 0.8344
p0 7.523e+04 ± 3.744e+04
p1 0.7825 ± 0.0623
Li6 rate (s-1)
10^2
10
1
0
50
100
150
200
250
300
Time (s)

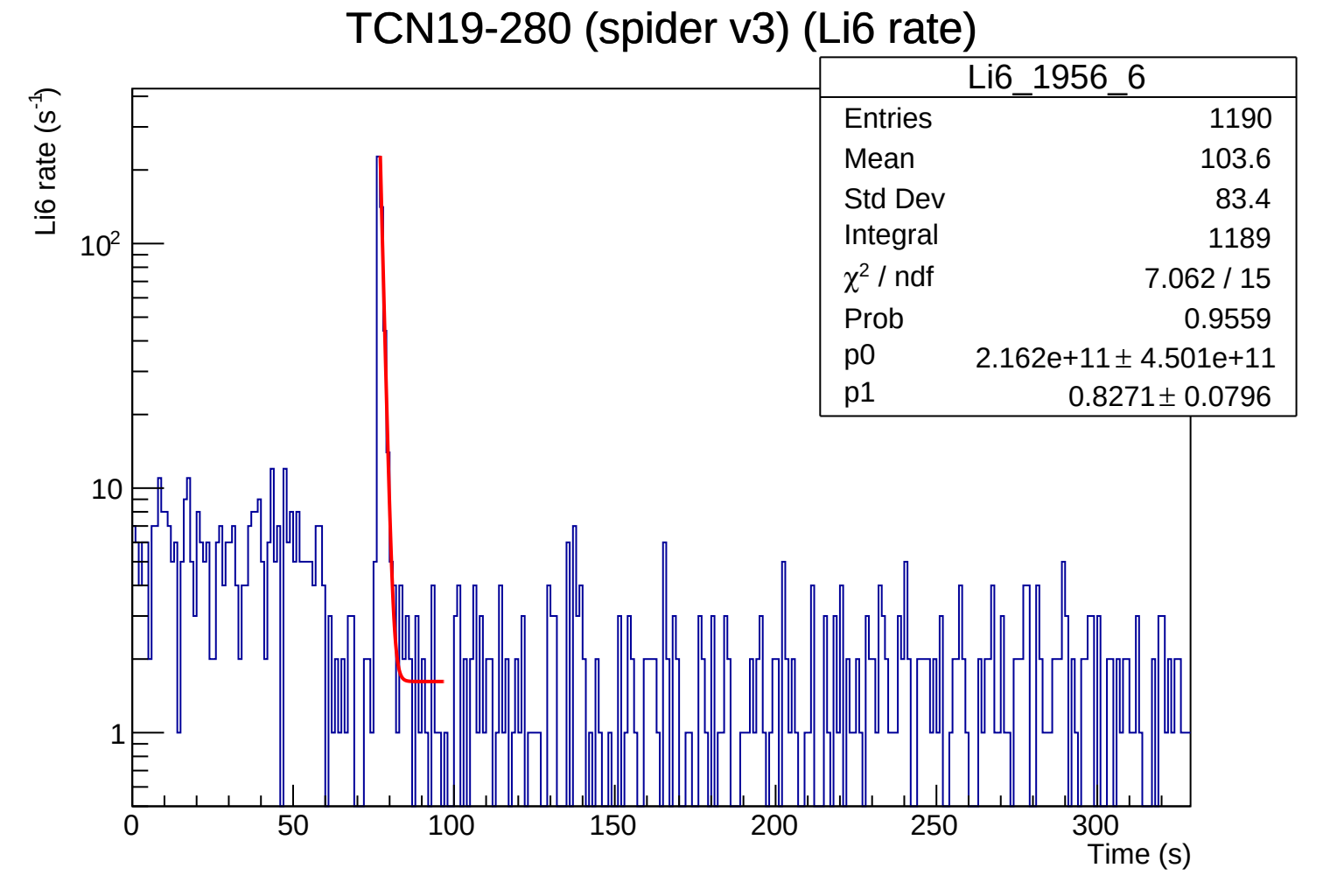

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_1
Entries 800
Mean 119.7
Std Dev 99.33
Integral 798
χ² / ndf 10.13 / 15
Prob 0.8113
p0 1.053e+24 ± 1.705e+24
p1 1.882 ± 0.060
Li6 rate (s⁻¹)
10
1
0
50
100
150
200
250
300
Time (s)

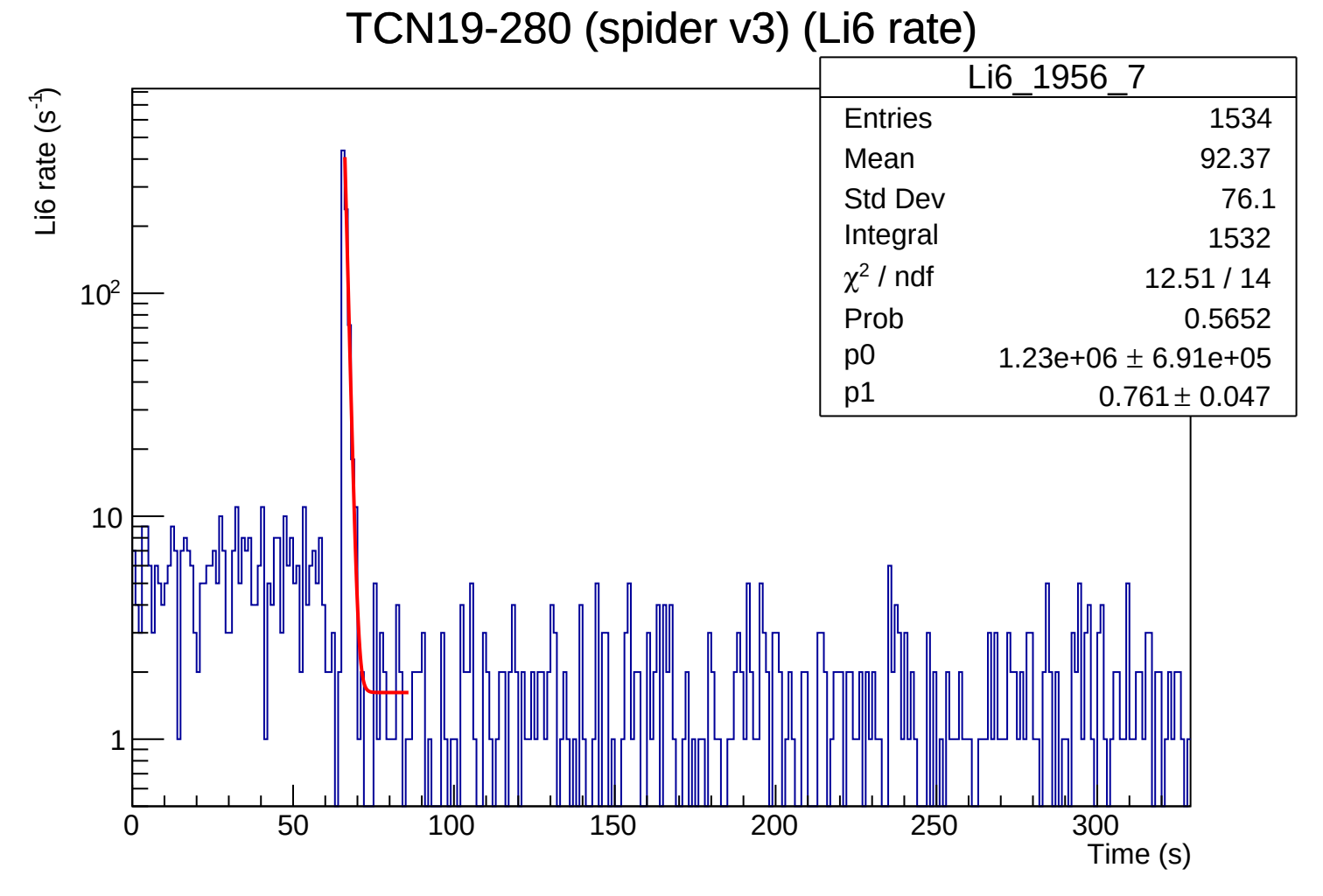

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_2
Entries 1338
Mean 95.67
Std Dev 79.18
Integral 1336
χ2 / ndf 8.82 / 16
Prob 0.9206
p0 3.053e+08 ± 4.167e+08
p1 0.7332 ± 0.0678
Li6 rate (s-1)
10^2
10
1
0
50
100
150
200
250
300
Time (s)

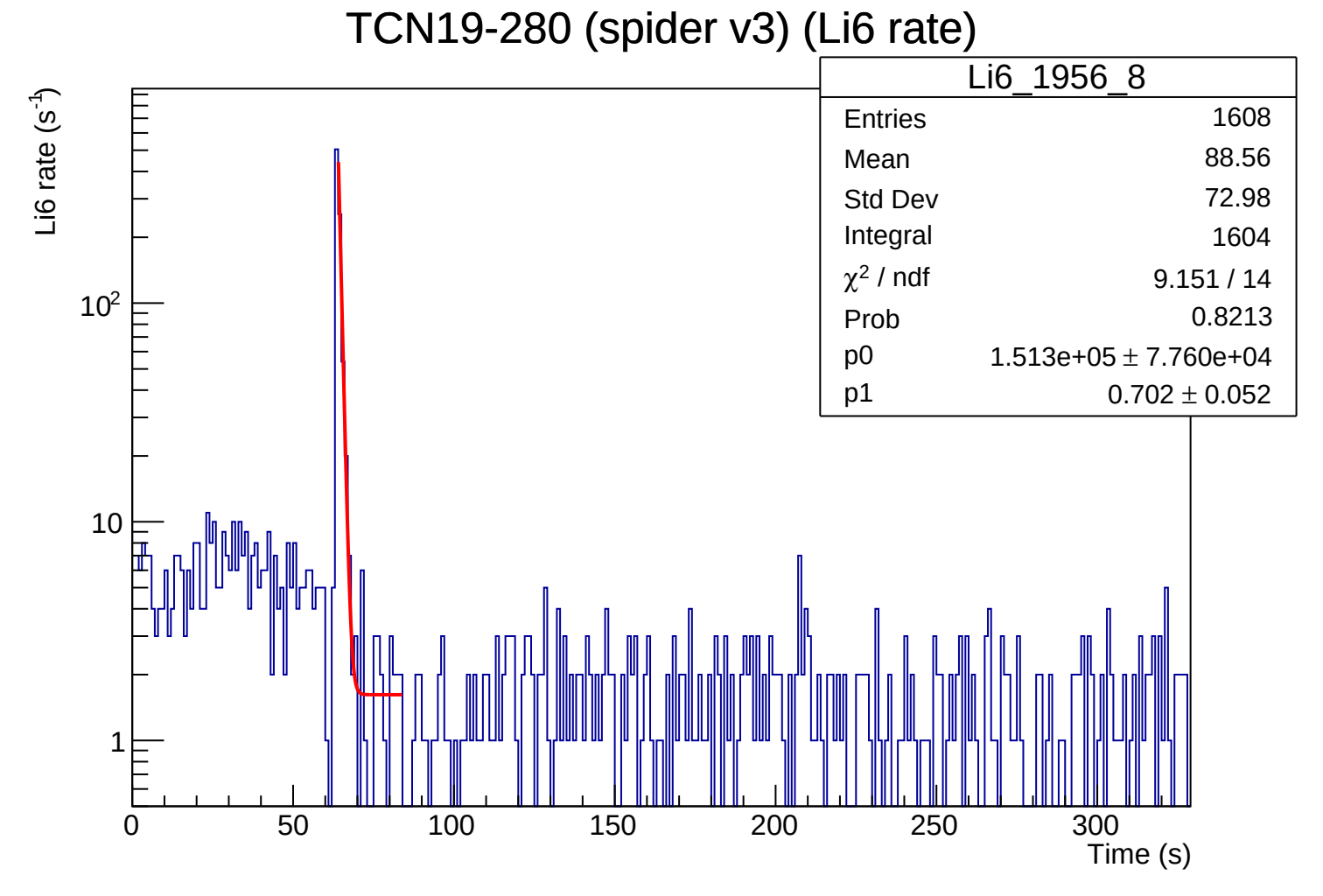

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_3
Entries 835
Mean 125.3
Std Dev 99.93
Integral 835
χ² / ndf 8.576 / 12
Prob 0.7386
p0 1.22e+23 ± 1.50e+23
p1 1.243 ± 0.035
Li6 rate (s⁻¹)
10
1
0
50
100
150
200
250
300
Time (s)

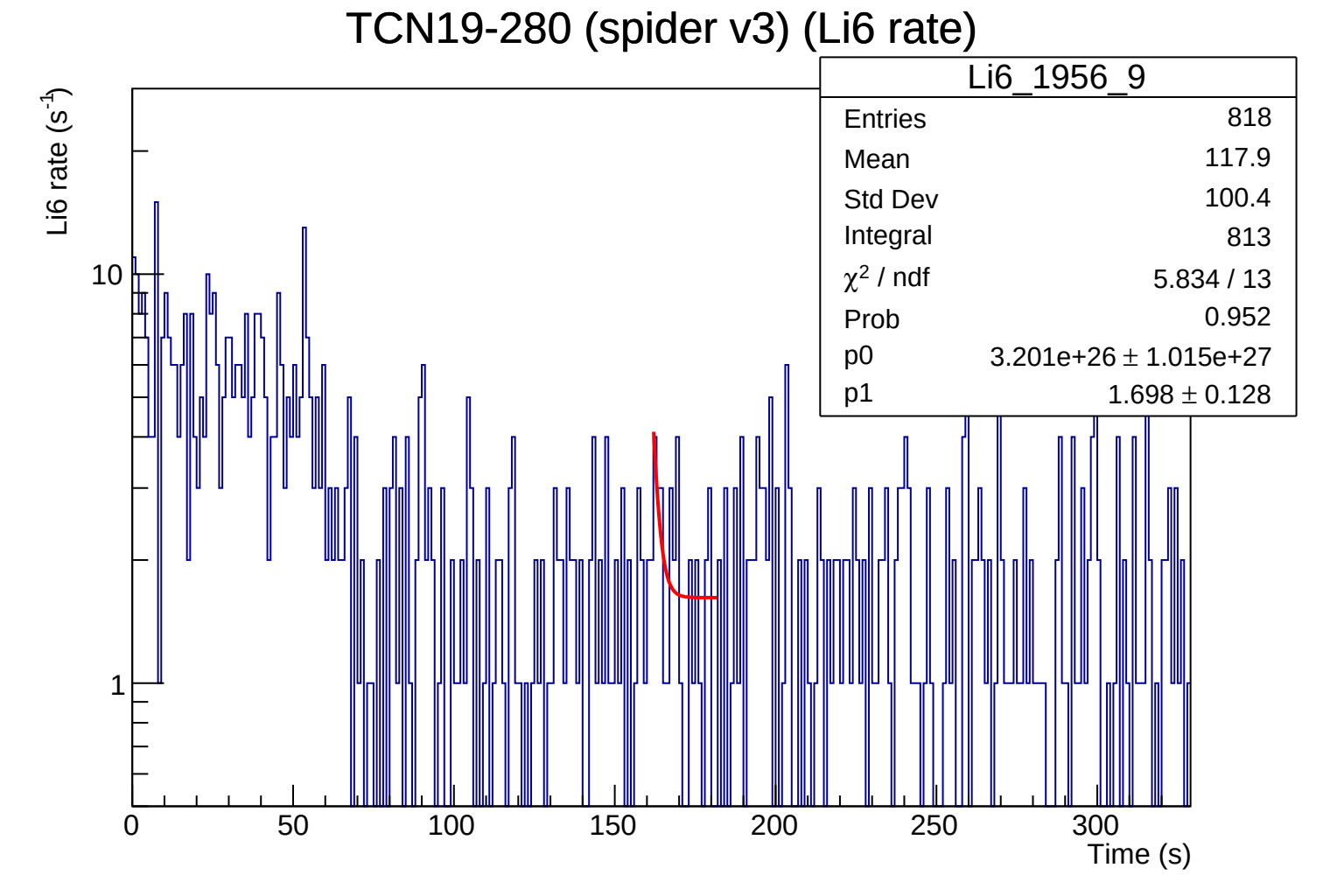

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_4
Entries 1086
Mean 110.6
Std Dev 87.11
Integral 1085
χ² / ndf 7.697 / 14
Prob 0.9045
p0 4.26e+17 ± 3.22e+18
p1 0.7625 ± 0.1579
Li6 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

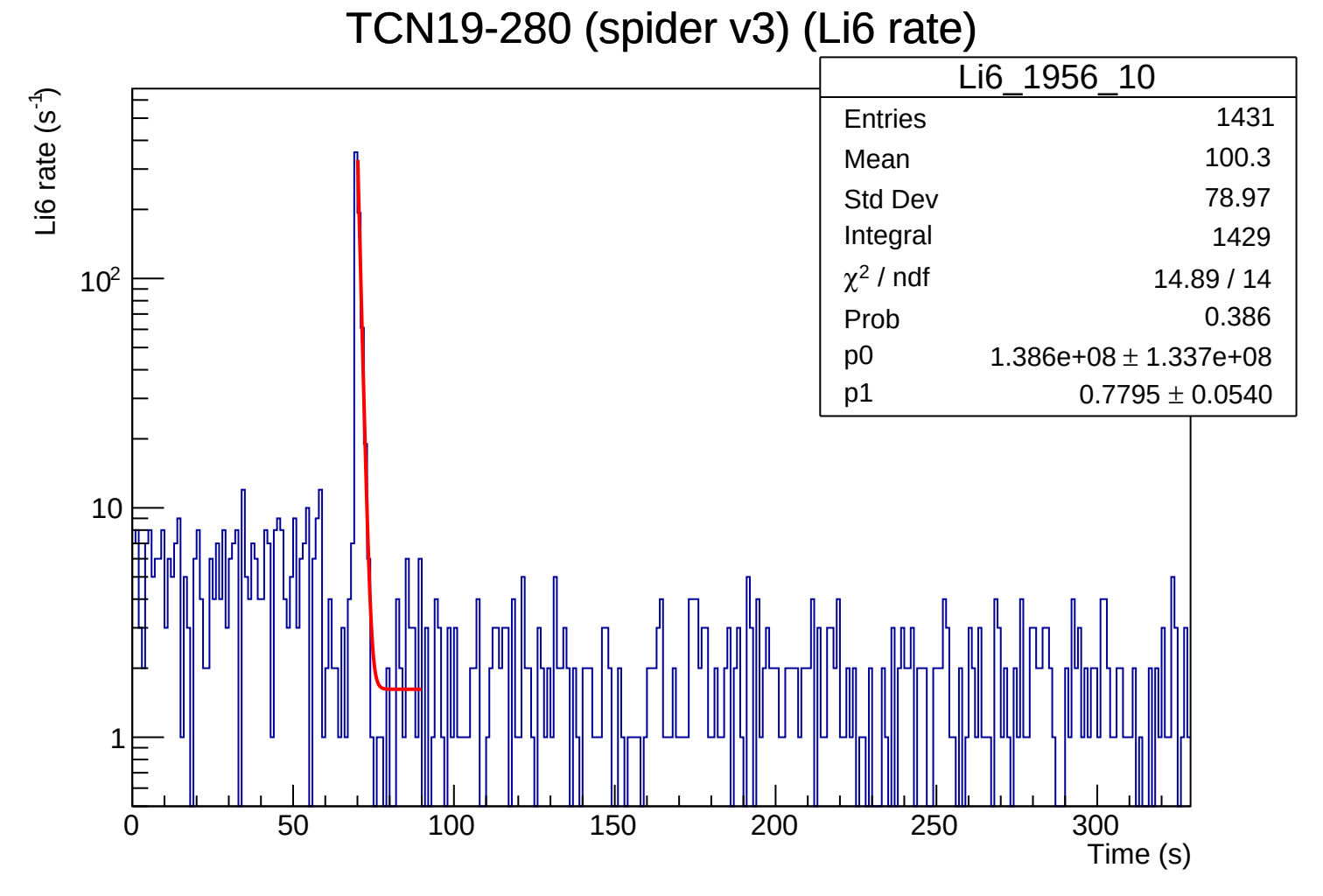

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_5
Entries 885
Mean 115.8
Std Dev 93.24
Integral 885
χ² / ndf 11.63 / 16
Prob 0.7693
p0 2.6e+21 ± 5.5e+21
p1 0.9308 ± 0.0442
Li6 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

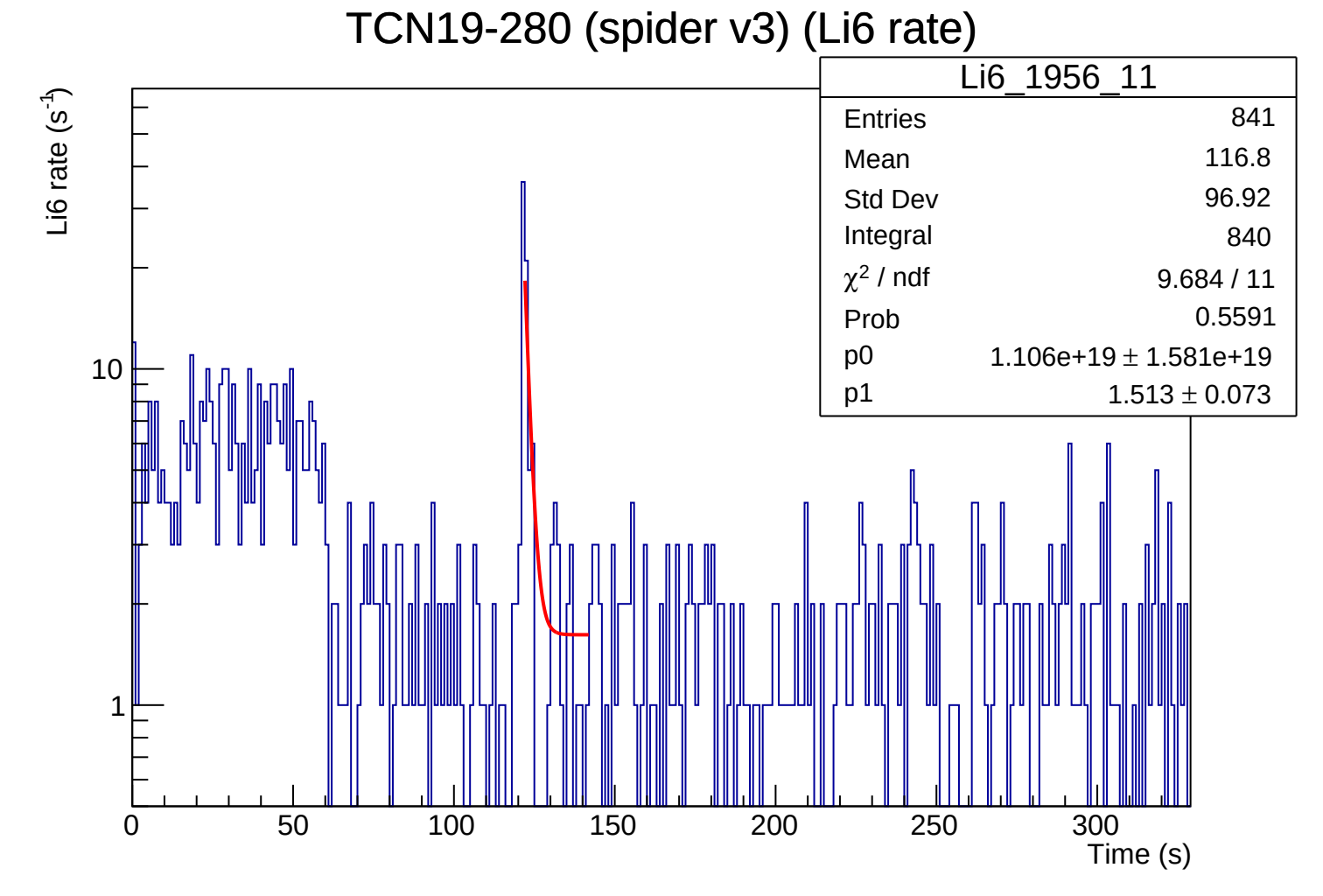

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_6
Entries 1190
Mean 103.6
Std Dev 83.4
Integral 1189
χ² / ndf 7.062 / 15
Prob 0.9559
p0 2.162e+11 ± 4.501e+11
p1 0.8271 ± 0.0796
Li6 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

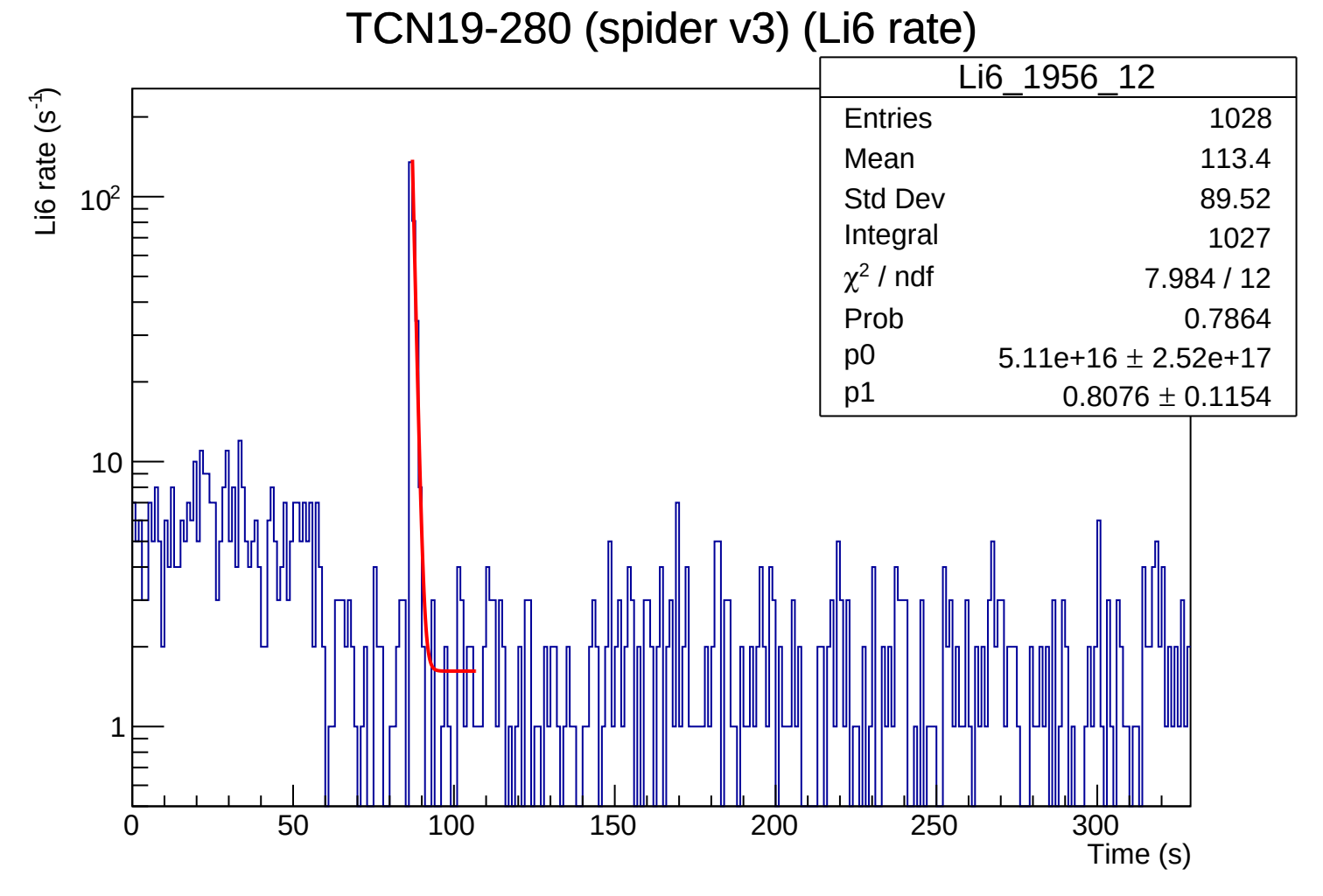

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_7
Entries 1534
Mean 92.37
Std Dev 76.1
Integral 1532
χ² / ndf 12.51 / 14
Prob 0.5652
p0 1.23e+06 ± 6.91e+05
p1 0.761 ± 0.047
Li6 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

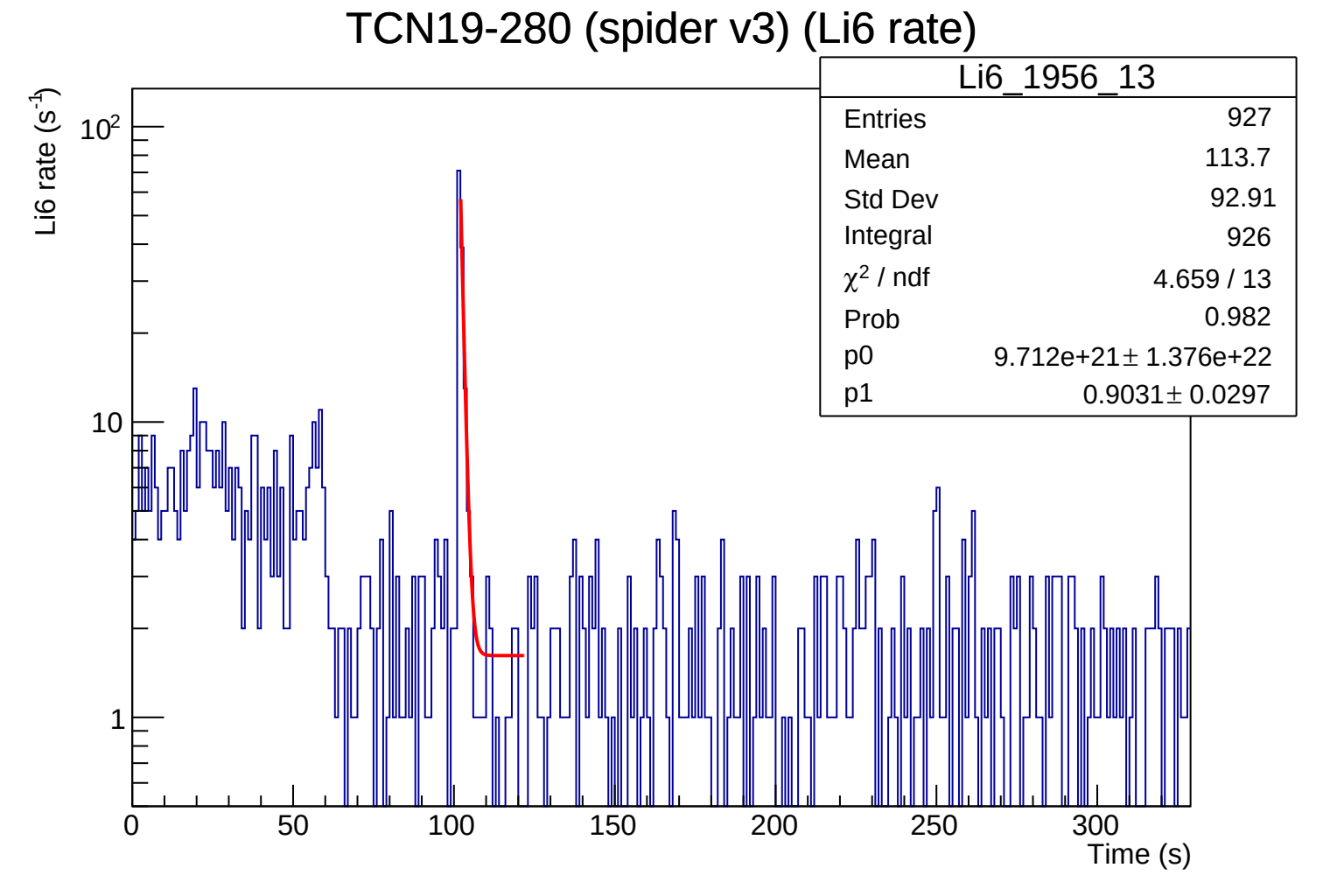

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_8
Entries 1608
Mean 88.56
Std Dev 72.98
Integral 1604
χ2 / ndf 9.151 / 14
Prob 0.8213
p0 1.513e+05 ± 7.760e+04
p1 0.702 ± 0.052
Li6 rate (s-1)
10^2
10
1
0
50
100
150
200
250
300
Time (s)

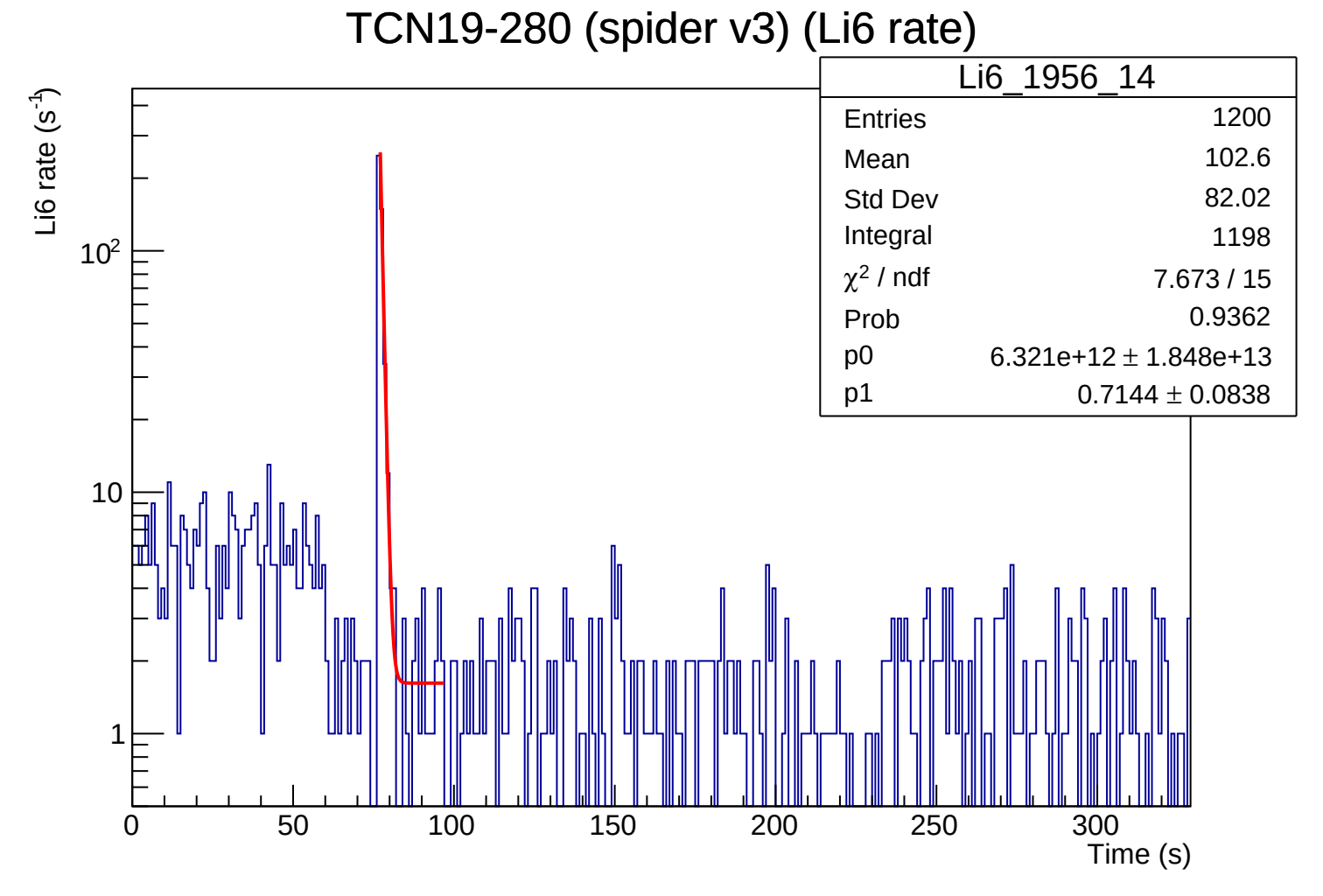

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_9
Entries 818
Mean 117.9
Std Dev 100.4
Integral 813
χ2 / ndf 5.834 / 13
Prob 0.952
p0 3.201e+26 ± 1.015e+27
p1 1.698 ± 0.128
Li6 rate (s-1)
10
1
0
50
100
150
200
250
300
Time (s)

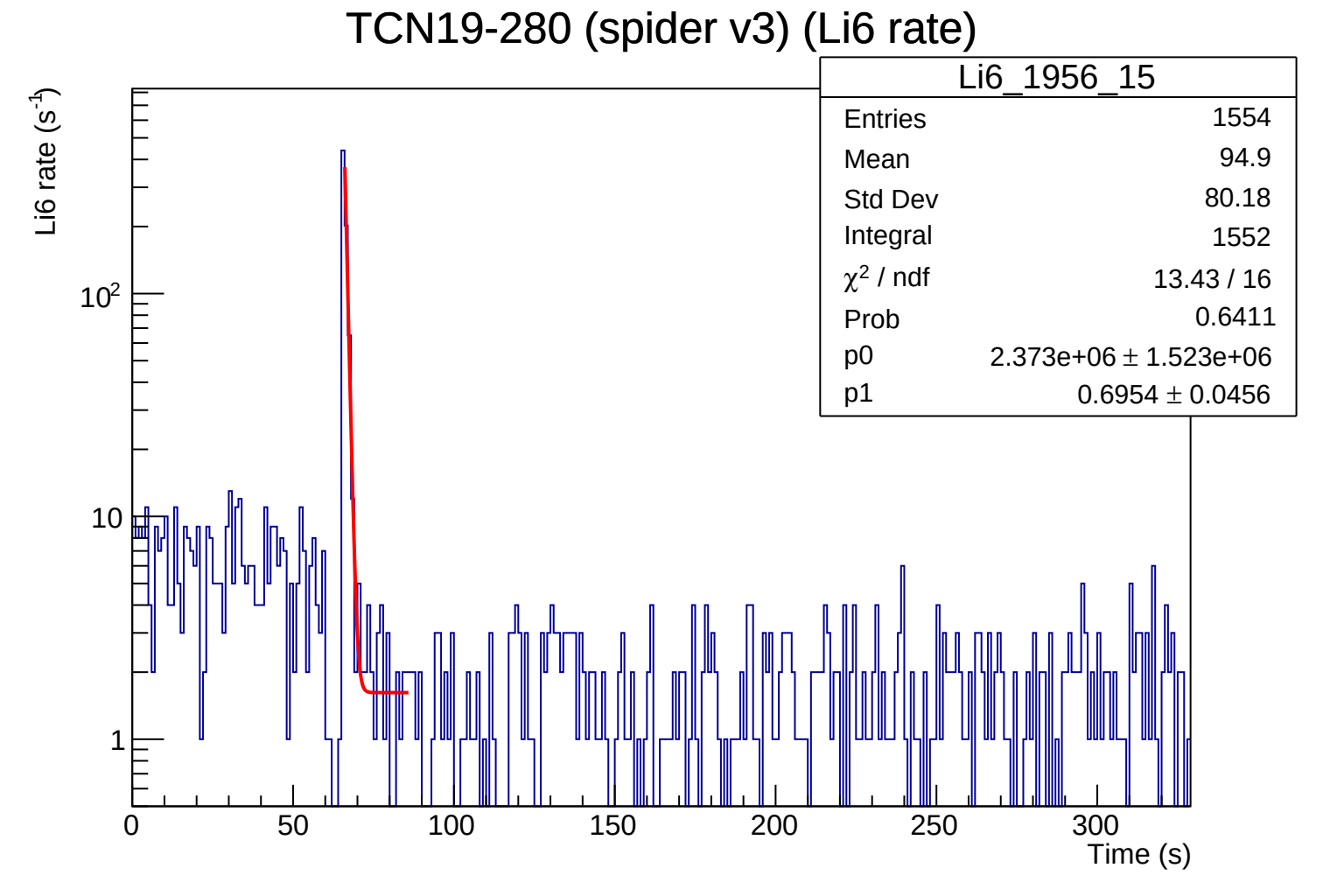

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_10
Entries 1431
Mean 100.3
Std Dev 78.97
Integral 1429
χ2 / ndf 14.89 / 14
Prob 0.386
p0 1.386e+08 ± 1.337e+08
p1 0.7795 ± 0.0540
Li6 rate (s-1)
10^2
10
1
0
50
100
150
200
250
300
Time (s)

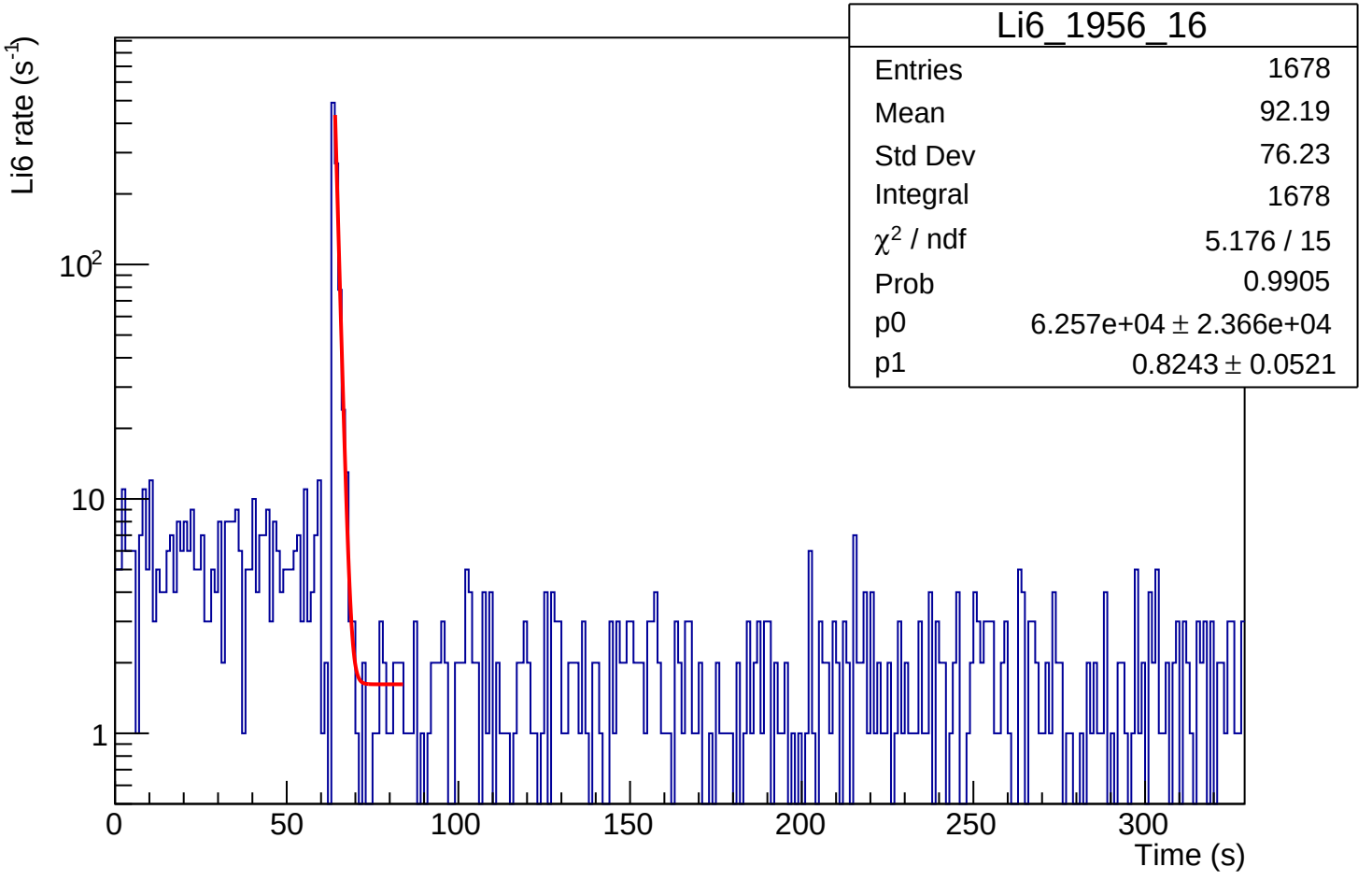

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_11
Entries 841
Mean 116.8
Std Dev 96.92
Integral 840
χ2 / ndf 9.684 / 11
Prob 0.5591
p0 1.106e+19 ± 1.581e+19
p1 1.513 ± 0.073
Li6 rate (s-1)
10
1
0
50
100
150
200
250
300
Time (s)

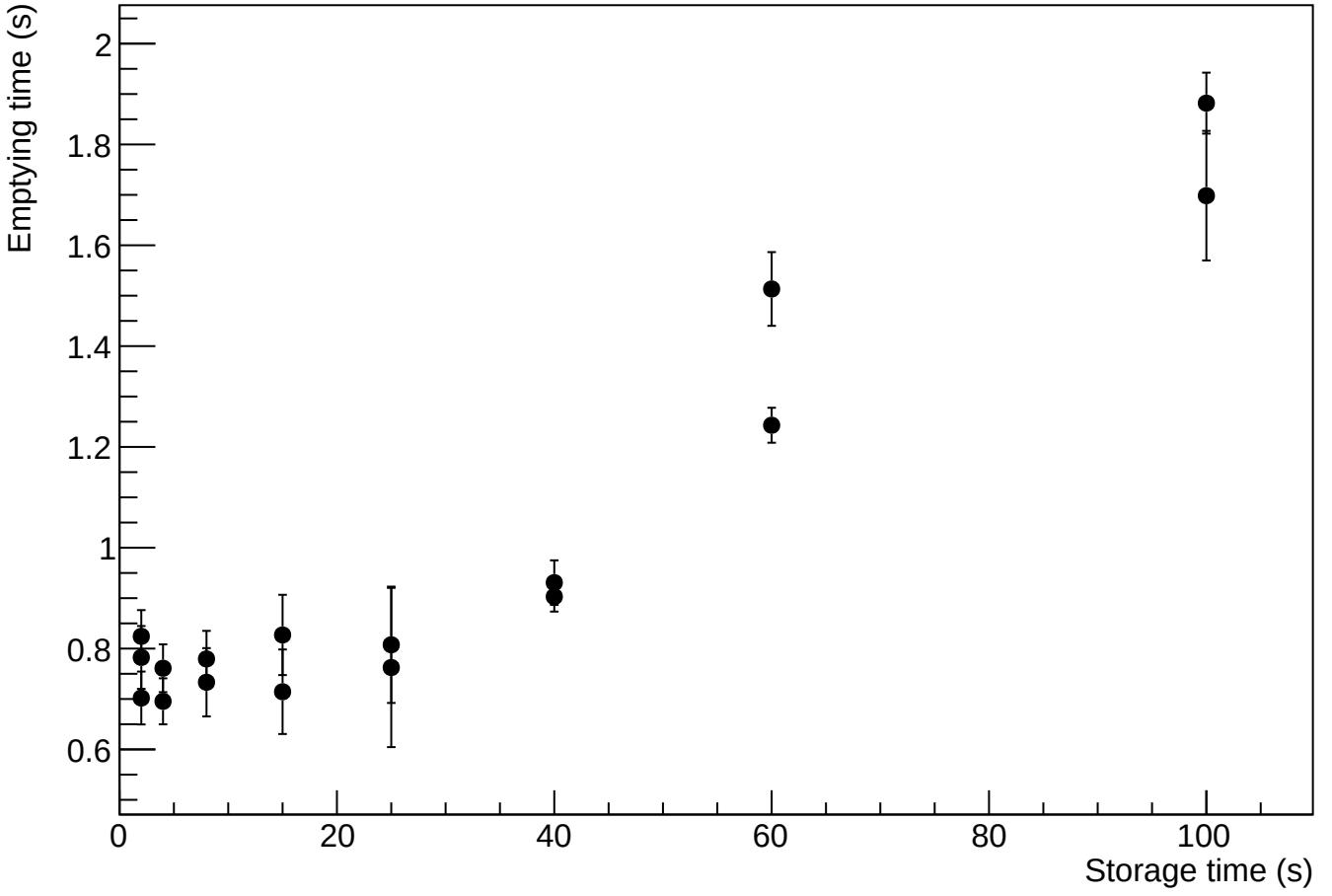

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_12
Entries 1028
Mean 113.4
Std Dev 89.52
Integral 1027
χ² / ndf 7.984 / 12
Prob 0.7864
p0 5.11e+16 ± 2.52e+17
p1 0.8076 ± 0.1154
Li6 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

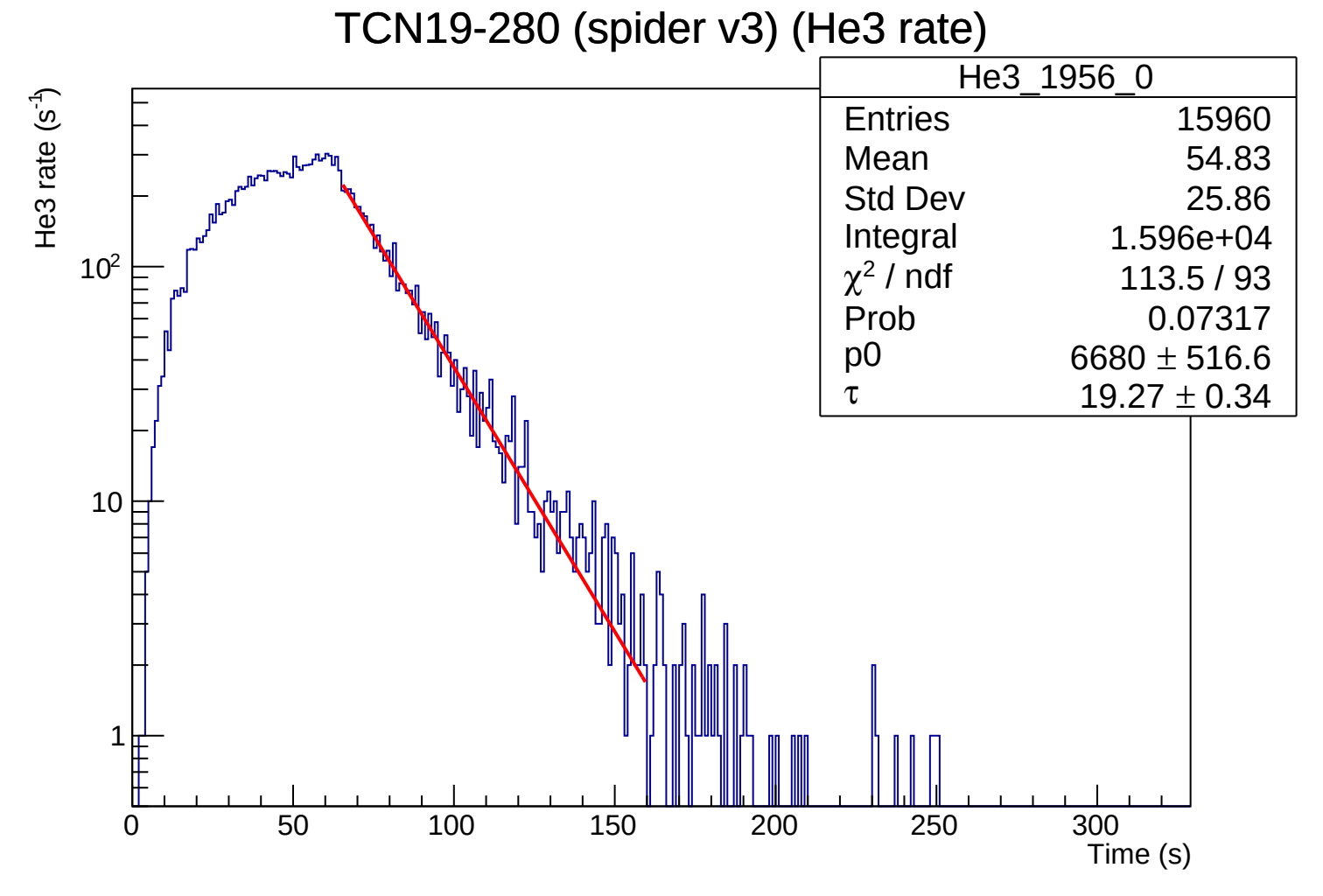

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_13
Entries 927
Mean 113.7
Std Dev 92.91
Integral 926
χ² / ndf 4.659 / 13
Prob 0.982
p0 9.712e+21 ± 1.376e+22
p1 0.9031 ± 0.0297
Li6 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

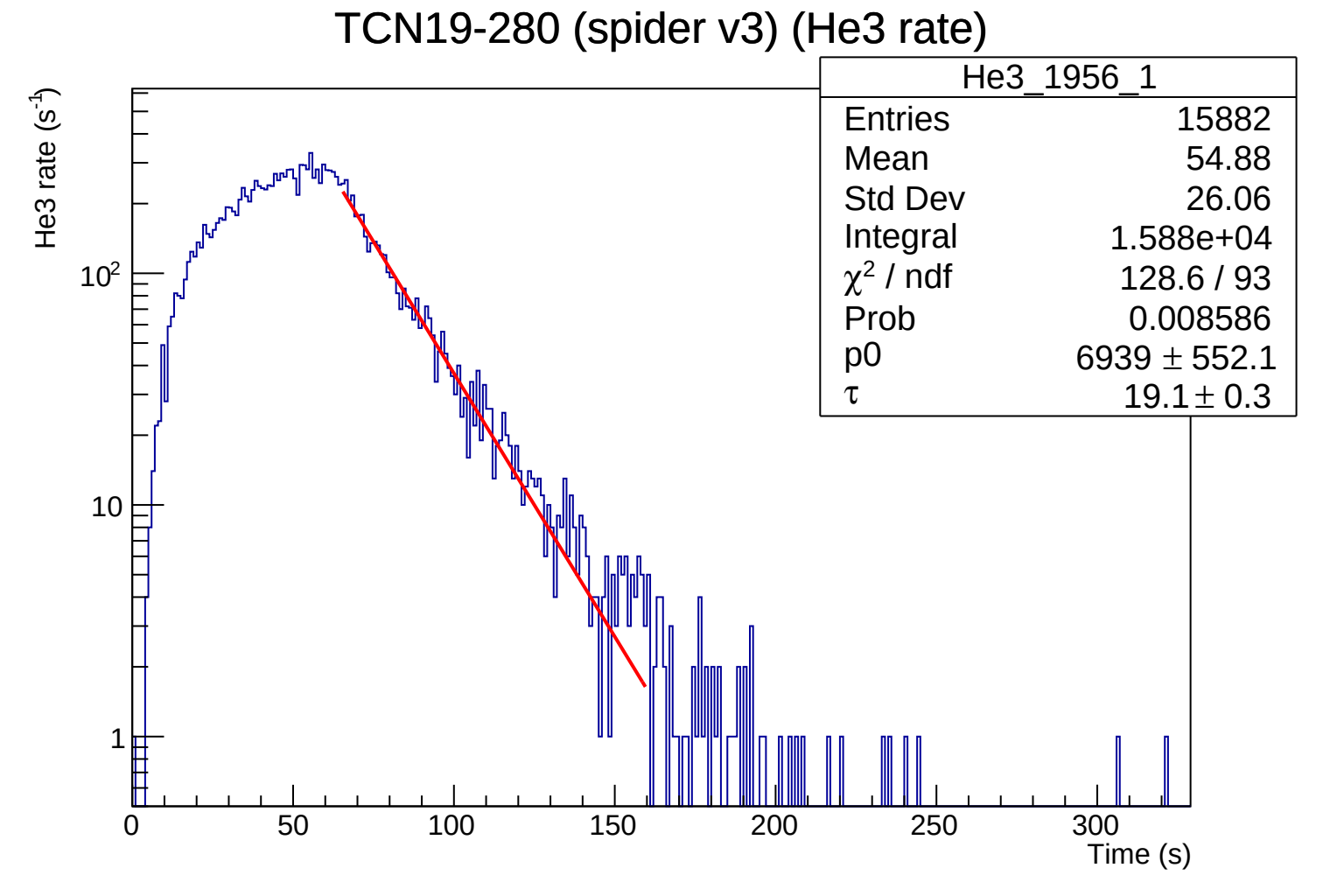

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_14
Entries 1200
Mean 102.6
Std Dev 82.02
Integral 1198
χ2 / ndf 7.673 / 15
Prob 0.9362
p0 6.321e+12 ± 1.848e+13
p1 0.7144 ± 0.0838
Li6 rate (s-1)
10^2
10
1
0
50
100
150
200
250
300
Time (s)

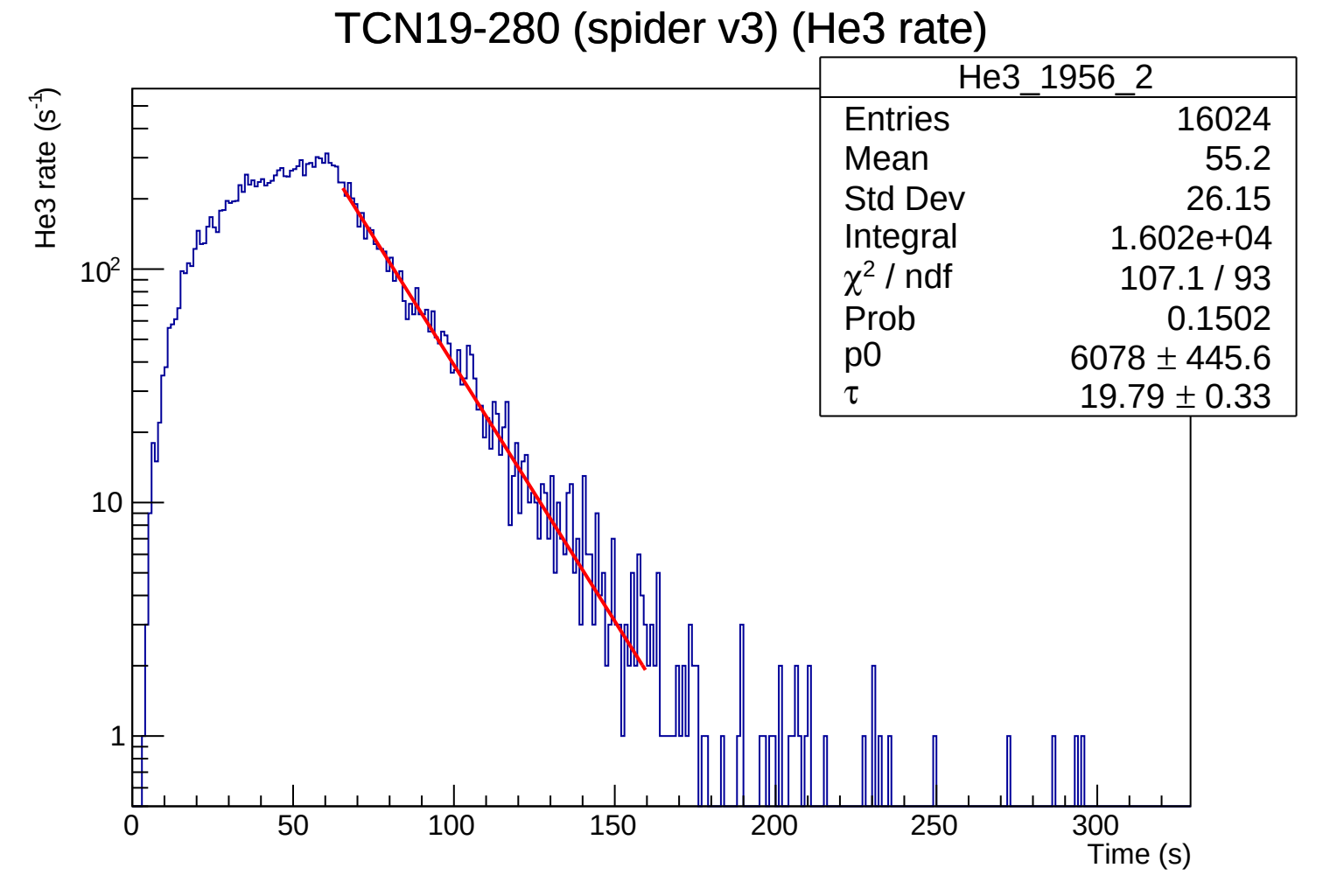

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_15
Entries 1554
Mean 94.9
Std Dev 80.18
Integral 1552
χ² / ndf 13.43 / 16
Prob 0.6411
p0 2.373e+06 ± 1.523e+06
p1 0.6954 ± 0.0456
Li6 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

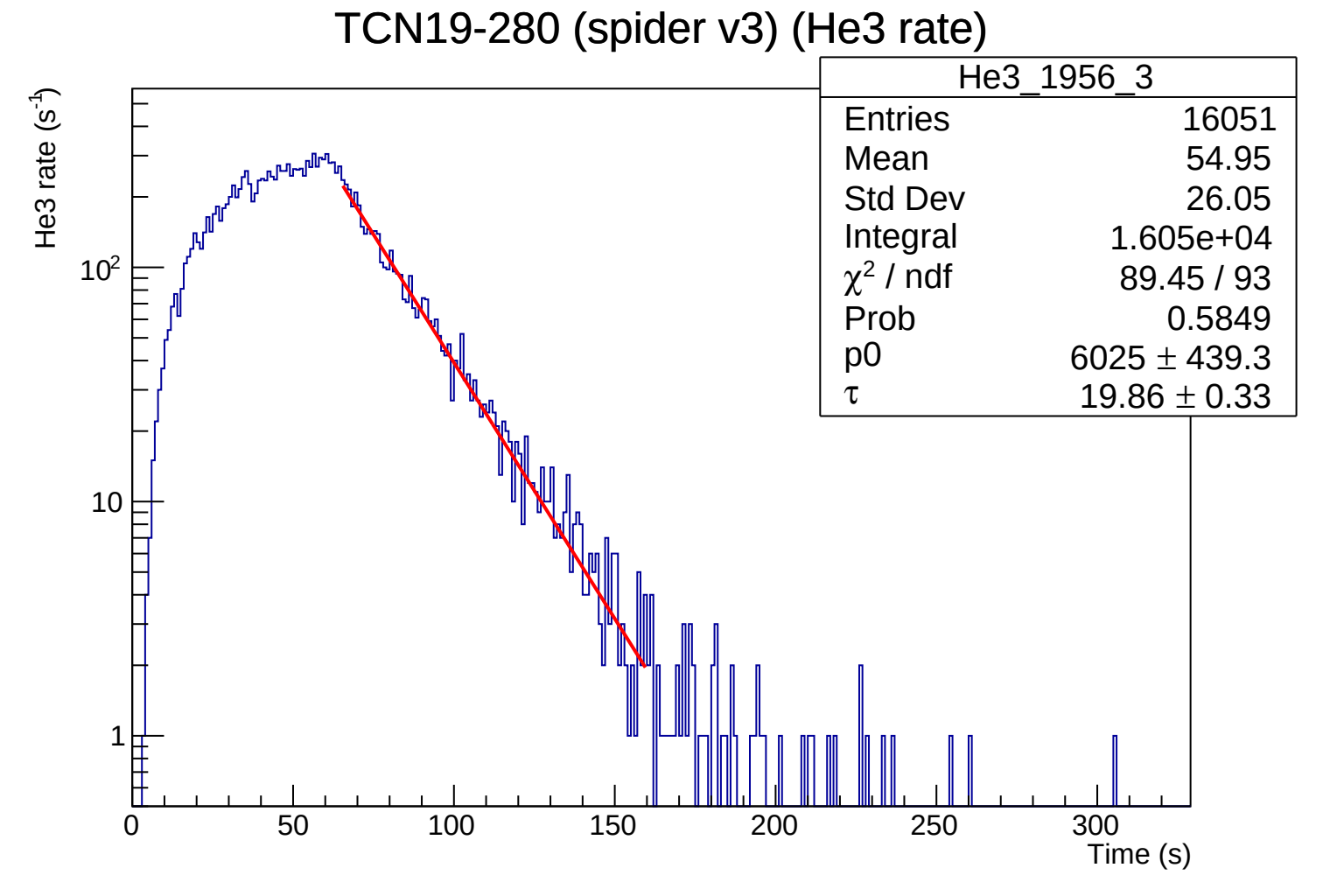

TCN19-280 (spider v3) (Li6 rate)
Li6_1956_16
Entries 1678
Mean 92.19
Std Dev 76.23
Integral 1678
χ2 / ndf 5.176 / 15
Prob 0.9905
p0 6.257e+04 ± 2.366e+04
p1 0.8243 ± 0.0521
Li6 rate (s-1)
10^2
10
1
0
50
100
150
200
250
300
Time (s)

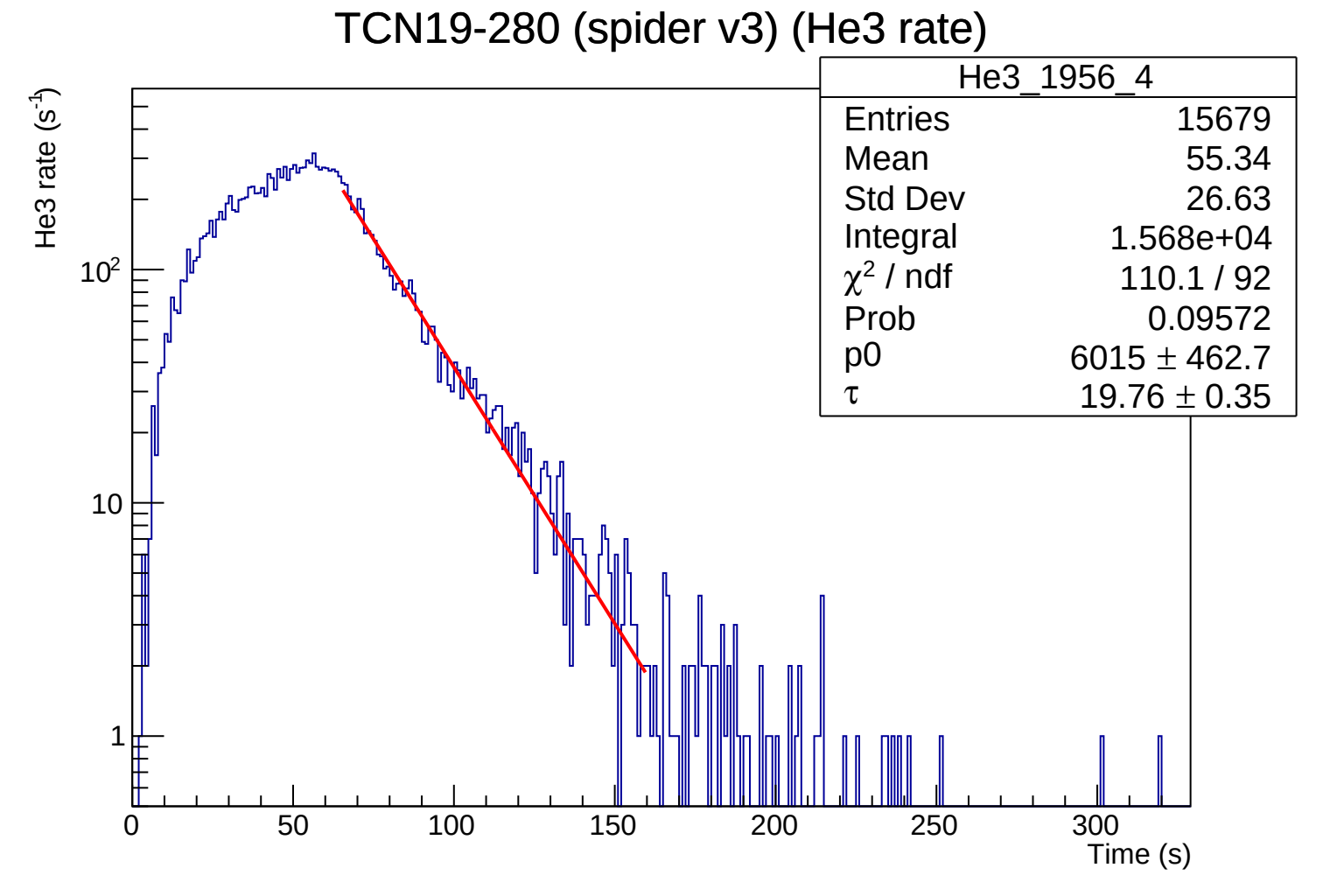

Emptying time (s)
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0
20
40
60
80
100
Storage time (s)

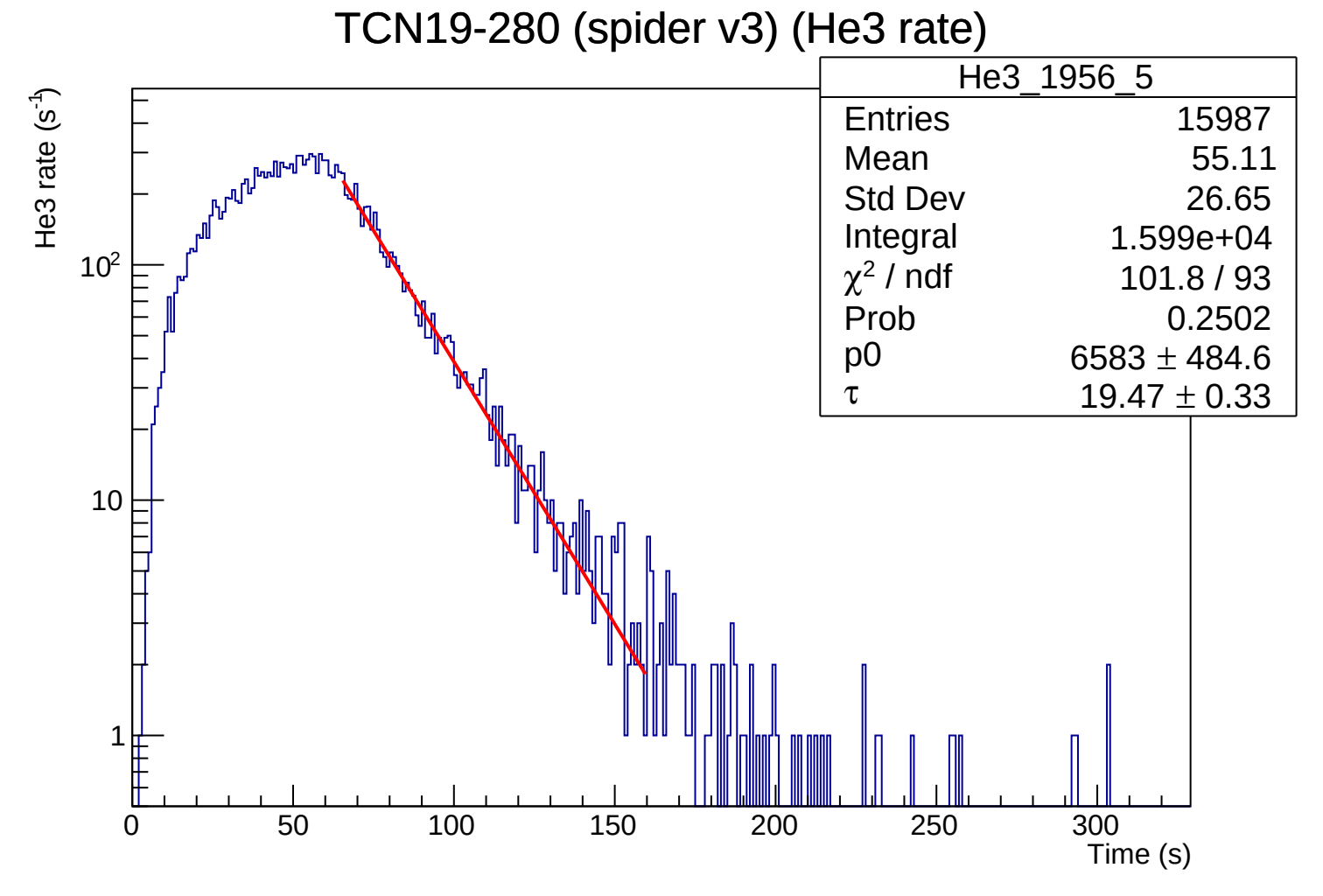

TCN19-280 (spider v3) (He3 rate)
He3_1956_0
Entries 15960
Mean 54.83
Std Dev 25.86
Integral 1.596e+04
χ² / ndf 113.5 / 93
Prob 0.07317
p0 6680 ± 516.6
τ 19.27 ± 0.34
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

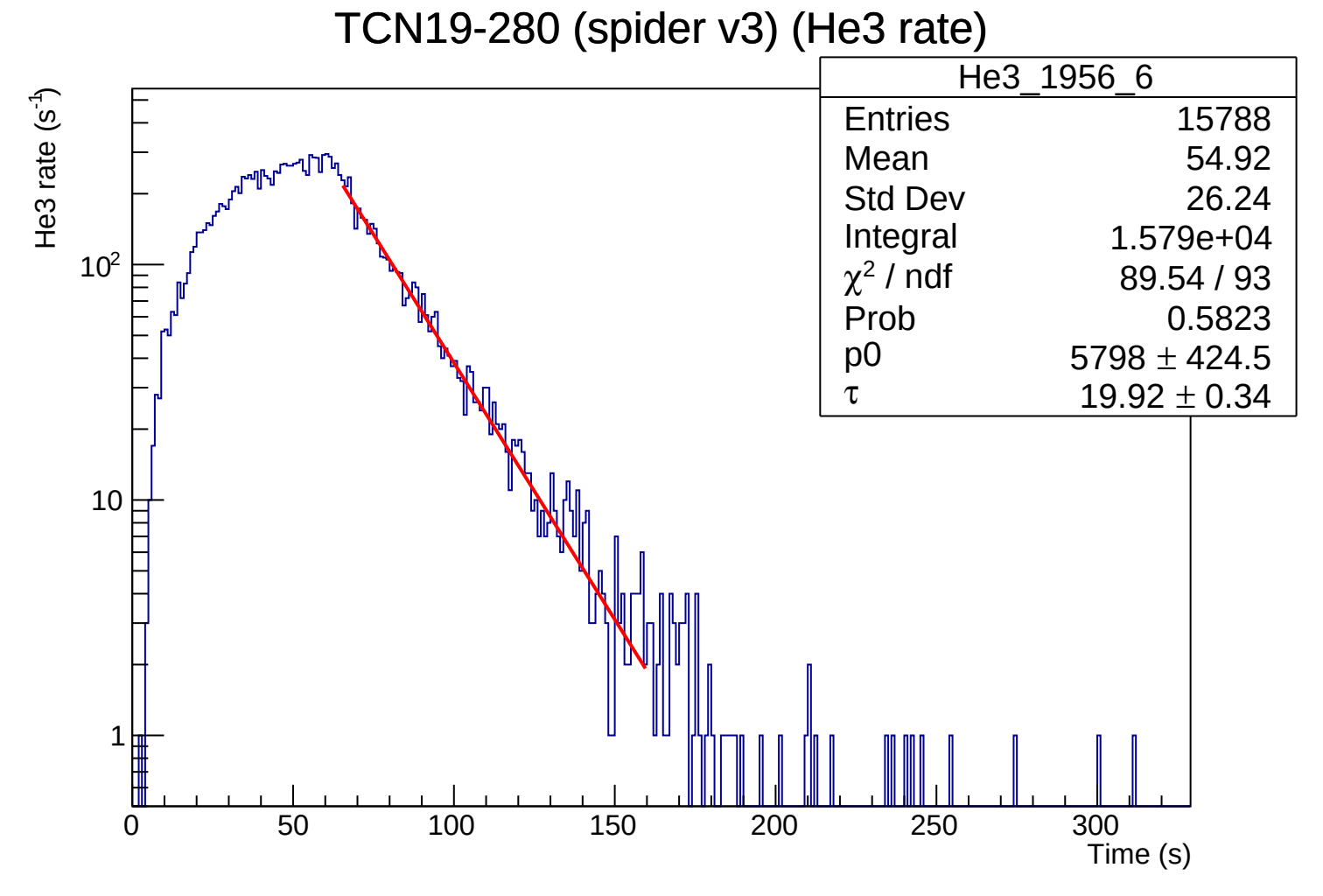

TCN19-280 (spider v3) (He3 rate)
He3_1956_1
Entries 15882
Mean 54.88
Std Dev 26.06
Integral 1.588e+04
χ² / ndf 128.6 / 93
Prob 0.008586
p0 6939 ± 552.1
τ 19.1 ± 0.3
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

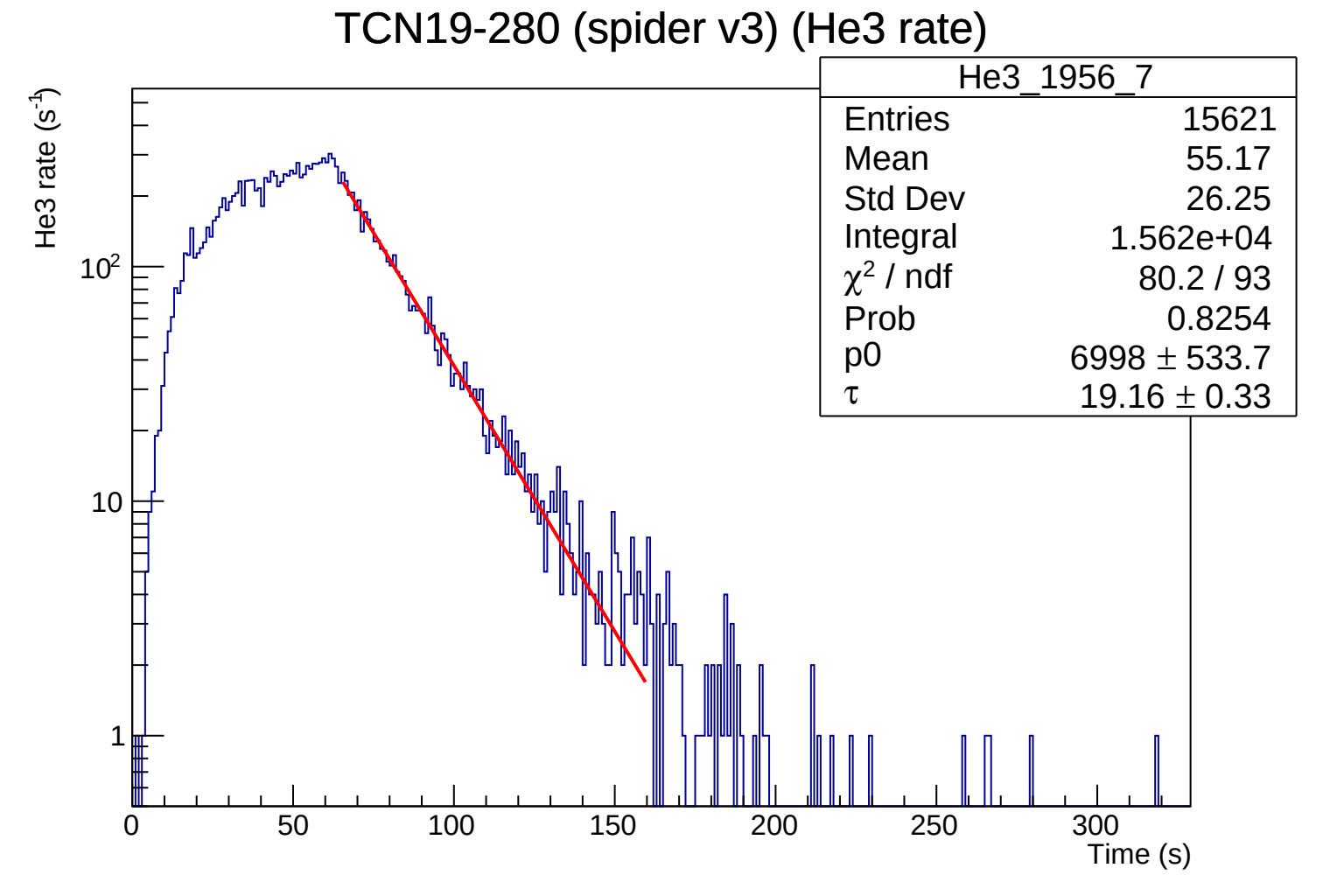

TCN19-280 (spider v3) (He3 rate)
He3_1956_2
Entries 16024
Mean 55.2
Std Dev 26.15
Integral 1.602e+04
χ² / ndf 107.1 / 93
Prob 0.1502
p0 6078 ± 445.6
τ 19.79 ± 0.33
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

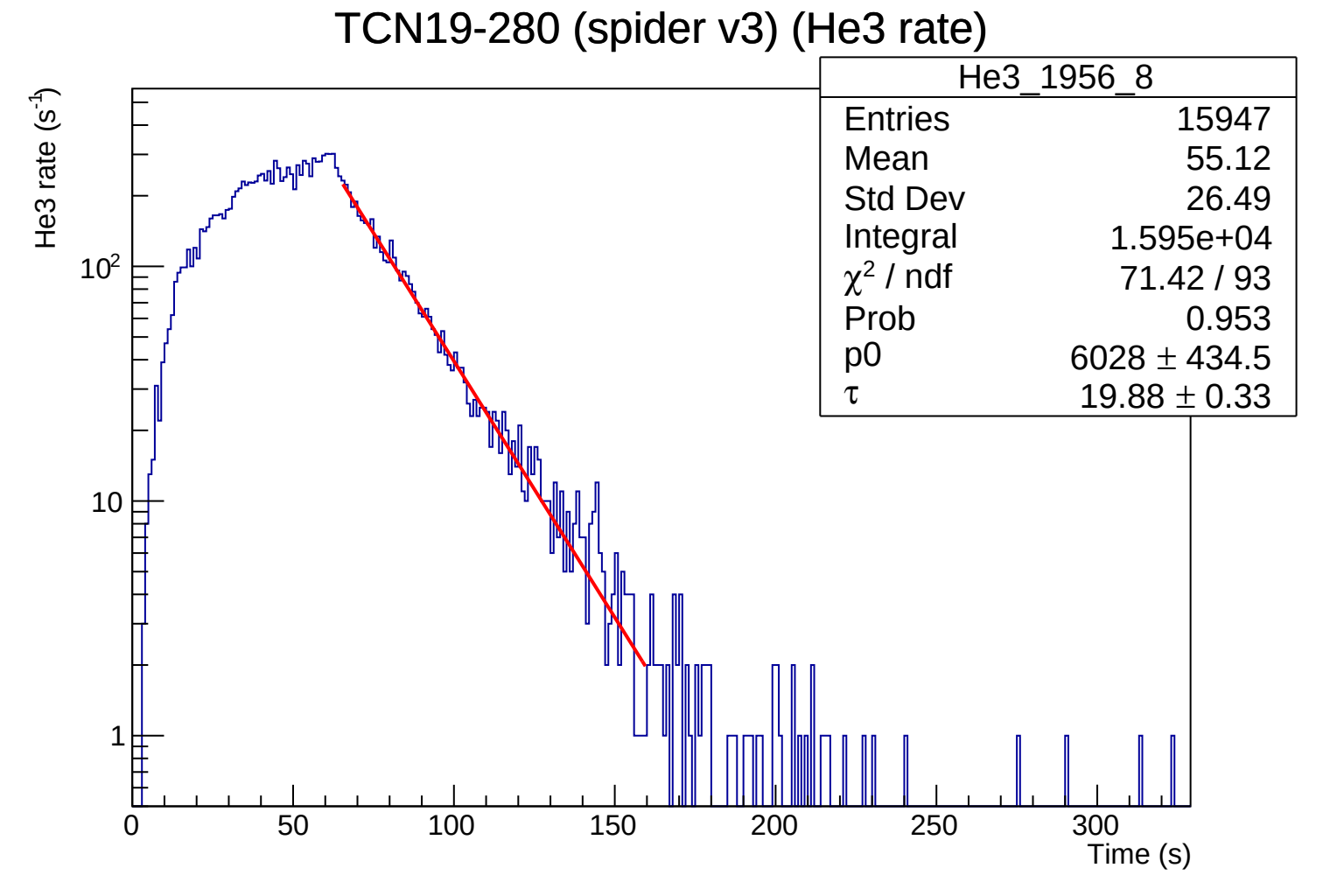

TCN19-280 (spider v3) (He3 rate)
He3_1956_3
Entries 16051
Mean 54.95
Std Dev 26.05
Integral 1.605e+04
χ² / ndf 89.45 / 93
Prob 0.5849
p0 6025 ± 439.3
τ 19.86 ± 0.33
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

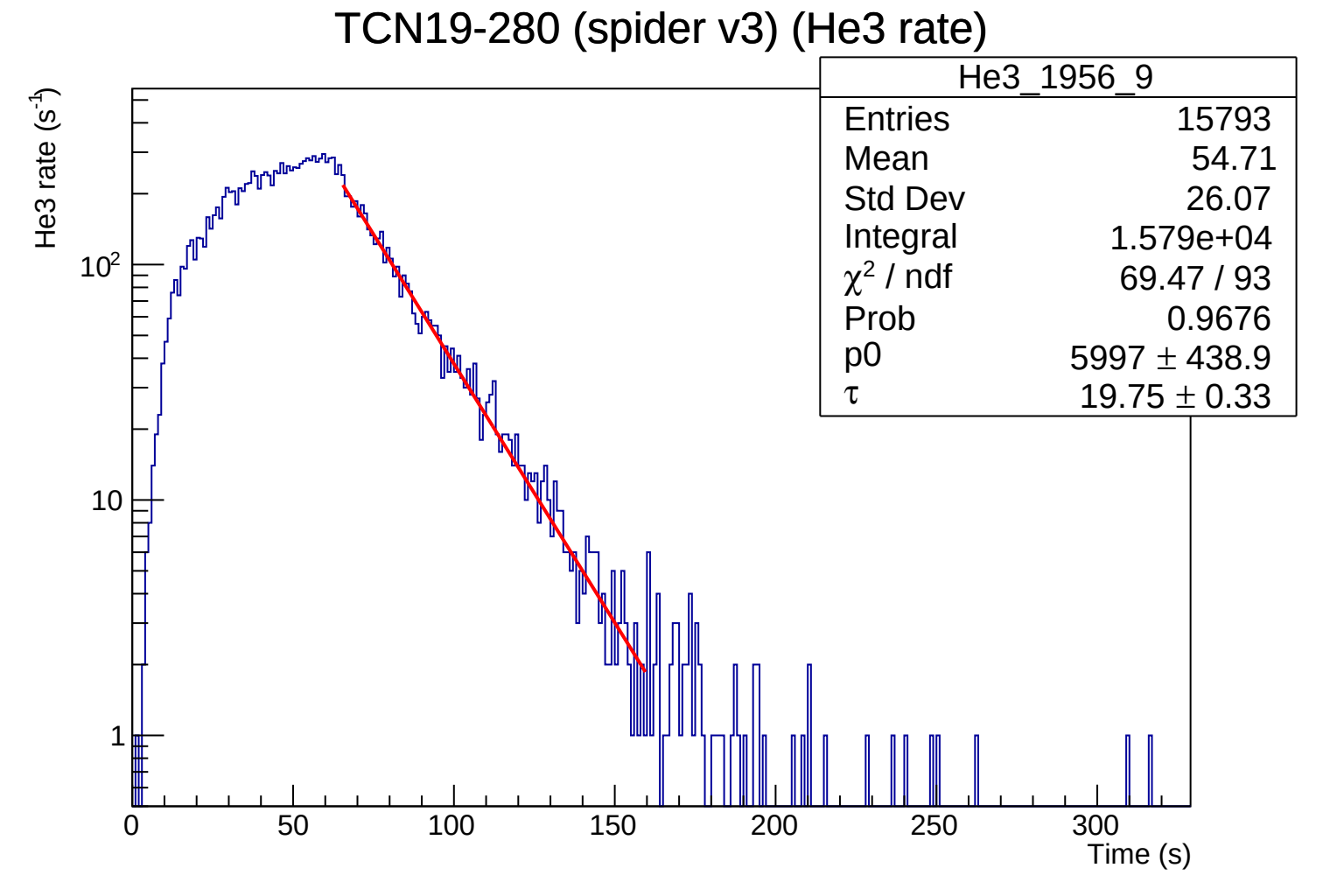

TCN19-280 (spider v3) (He3 rate)
He3_1956_4
Entries 15679
Mean 55.34
Std Dev 26.63
Integral 1.568e+04
χ² / ndf 110.1 / 92
Prob 0.09572
p0 6015 ± 462.7
τ 19.76 ± 0.35
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

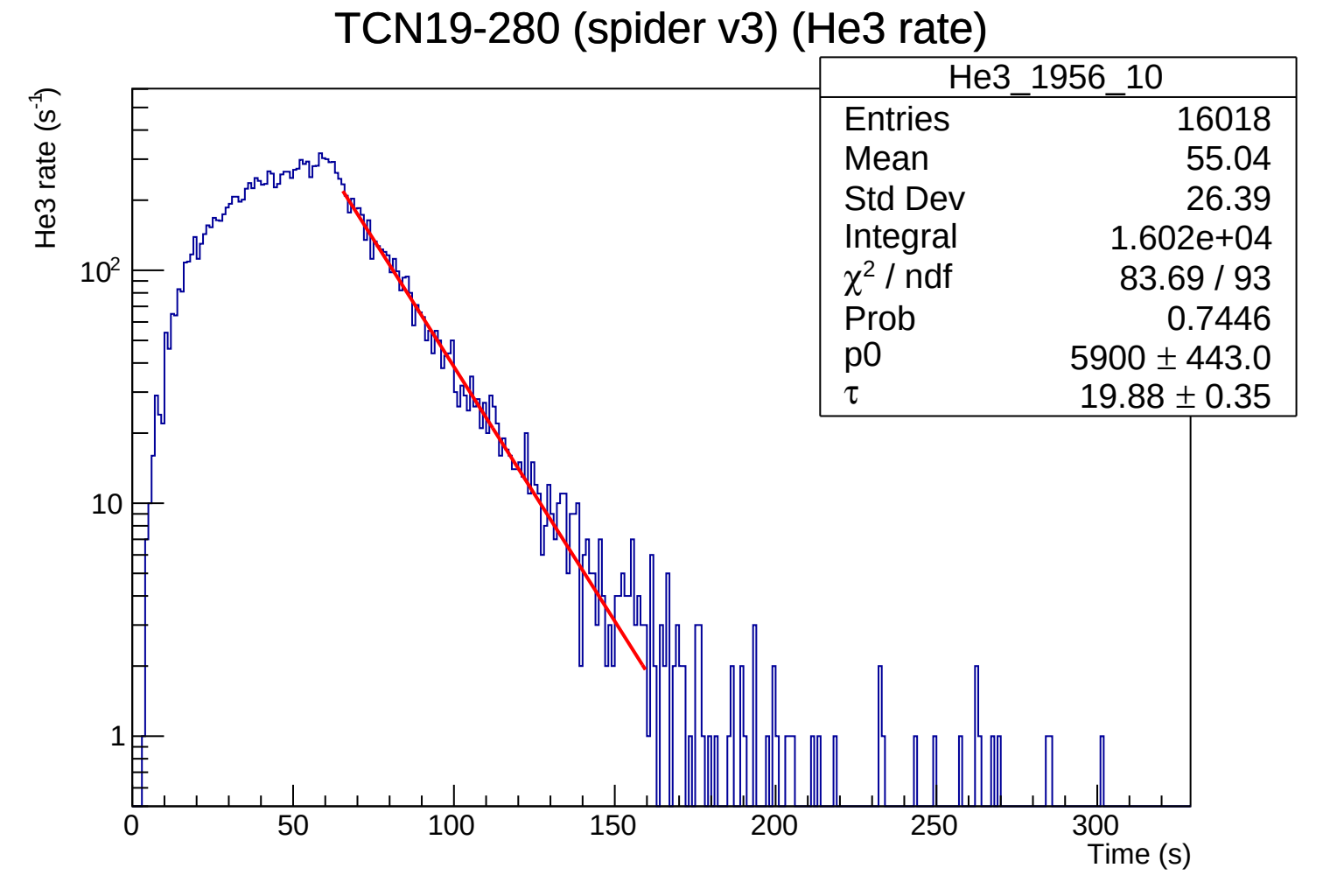

TCN19-280 (spider v3) (He3 rate)
He3_1956_5
Entries 15987
Mean 55.11
Std Dev 26.65
Integral 1.599e+04
χ² / ndf 101.8 / 93
Prob 0.2502
p0 6583 ± 484.6
τ 19.47 ± 0.33
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

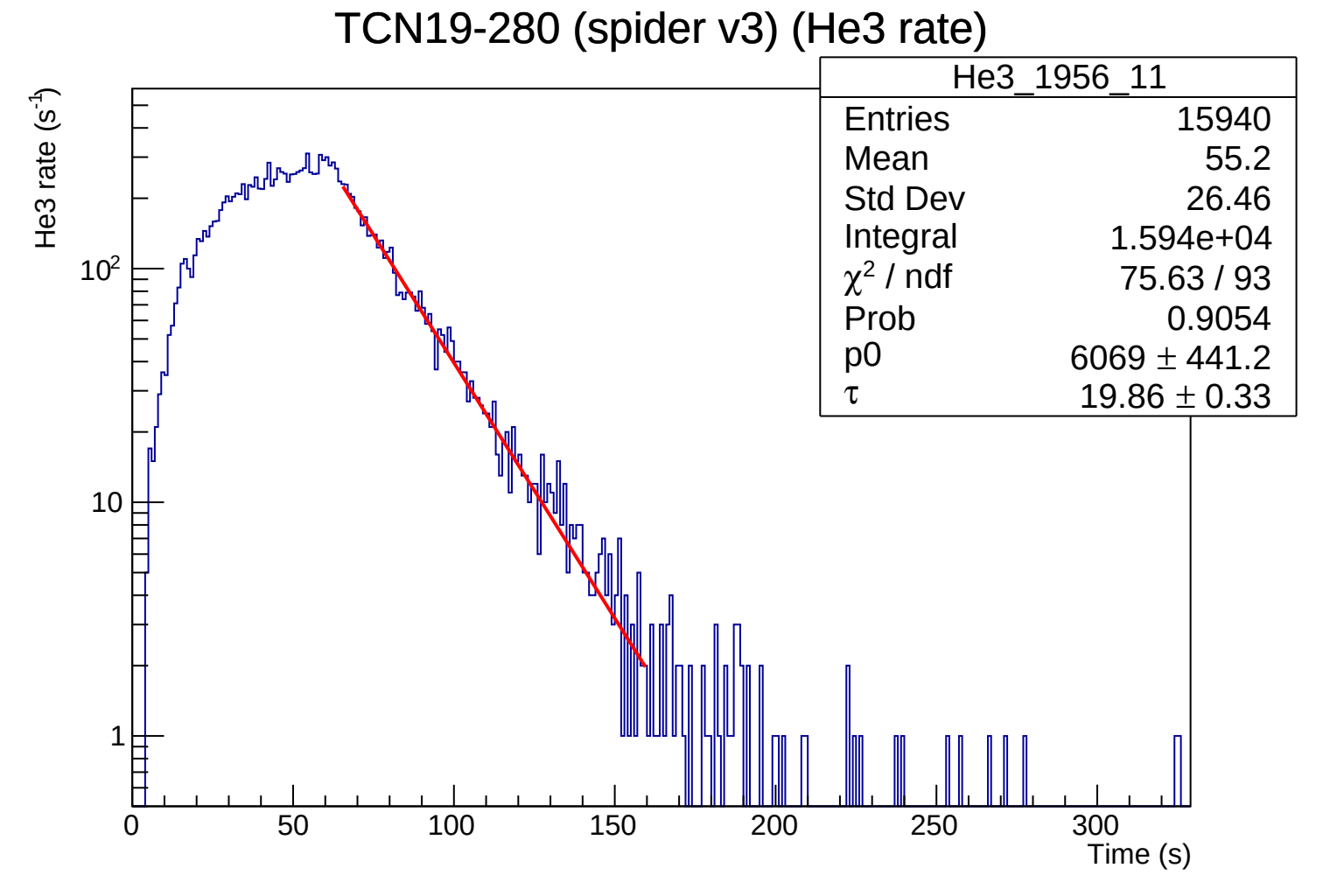

TCN19-280 (spider v3) (He3 rate)
He3_1956_6
Entries 15788
Mean 54.92
Std Dev 26.24
Integral 1.579e+04
χ² / ndf 89.54 / 93
Prob 0.5823
p0 5798 ± 424.5
τ 19.92 ± 0.34
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

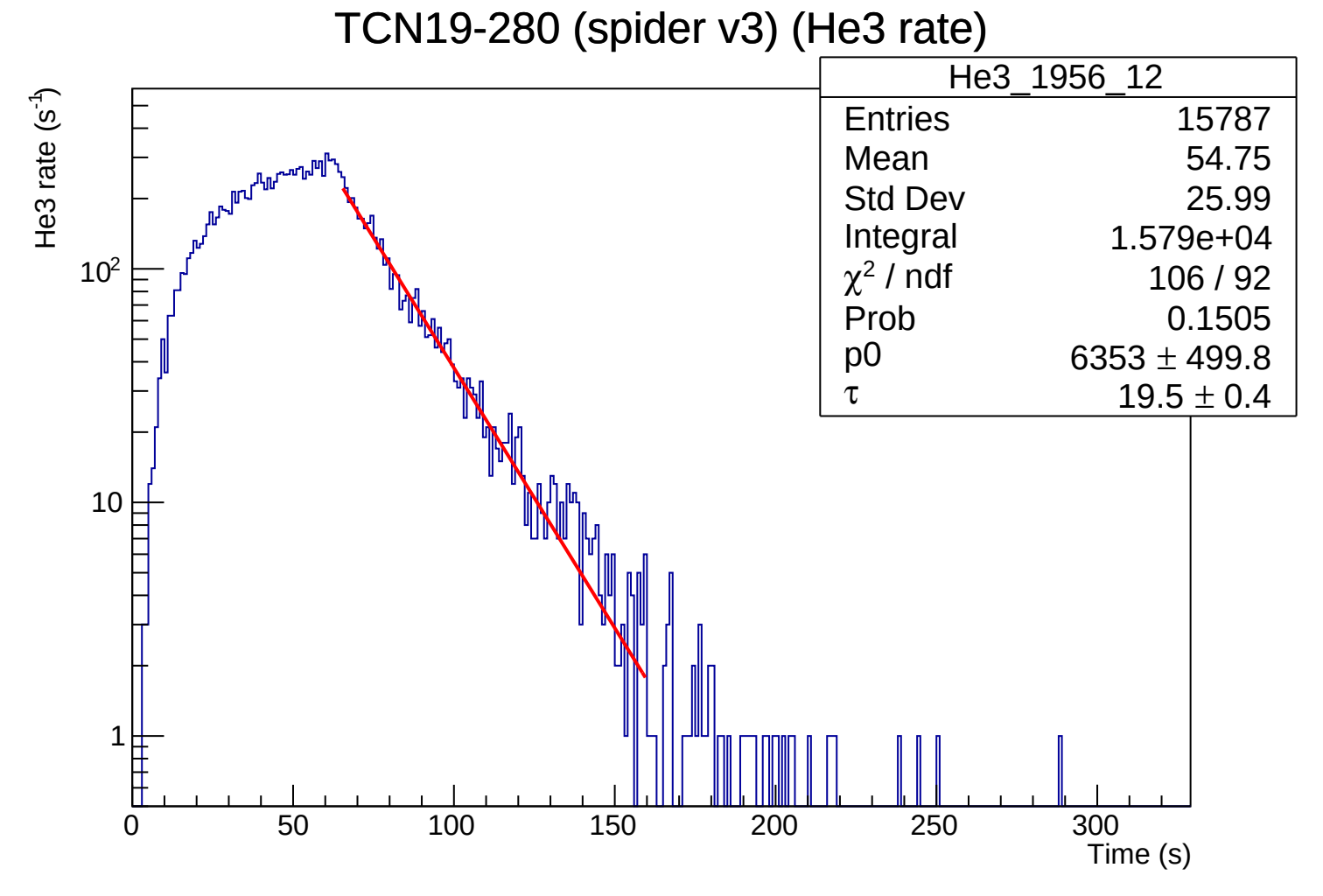

TCN19-280 (spider v3) (He3 rate)
He3_1956_7
Entries 15621
Mean 55.17
Std Dev 26.25
Integral 1.562e+04
χ² / ndf 80.2 / 93
Prob 0.8254
p0 6998 ± 533.7
τ 19.16 ± 0.33
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

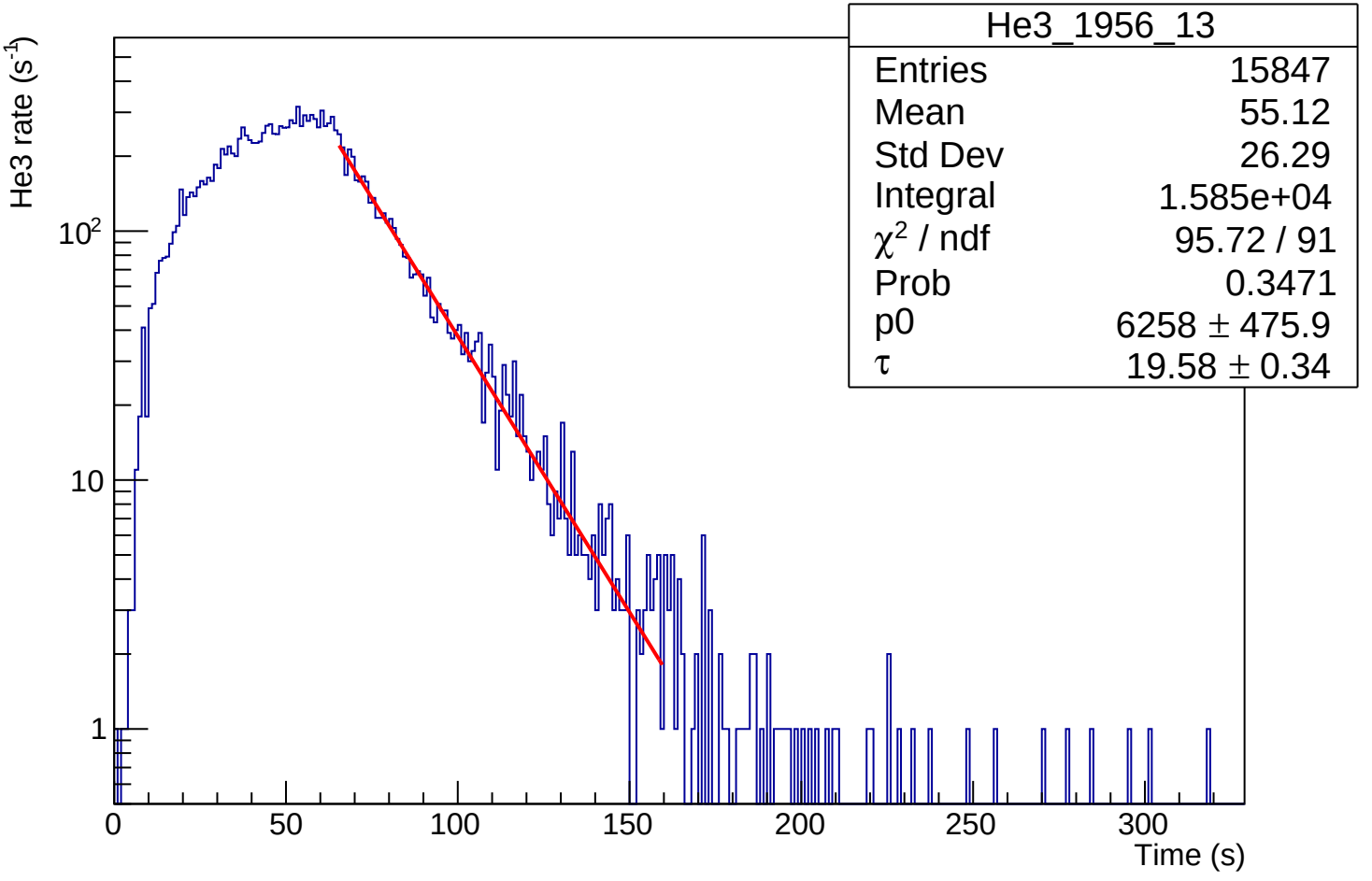

TCN19-280 (spider v3) (He3 rate)
He3_1956_8
Entries 15947
Mean 55.12
Std Dev 26.49
Integral 1.595e+04
χ² / ndf 71.42 / 93
Prob 0.953
p0 6028 ± 434.5
τ 19.88 ± 0.33
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

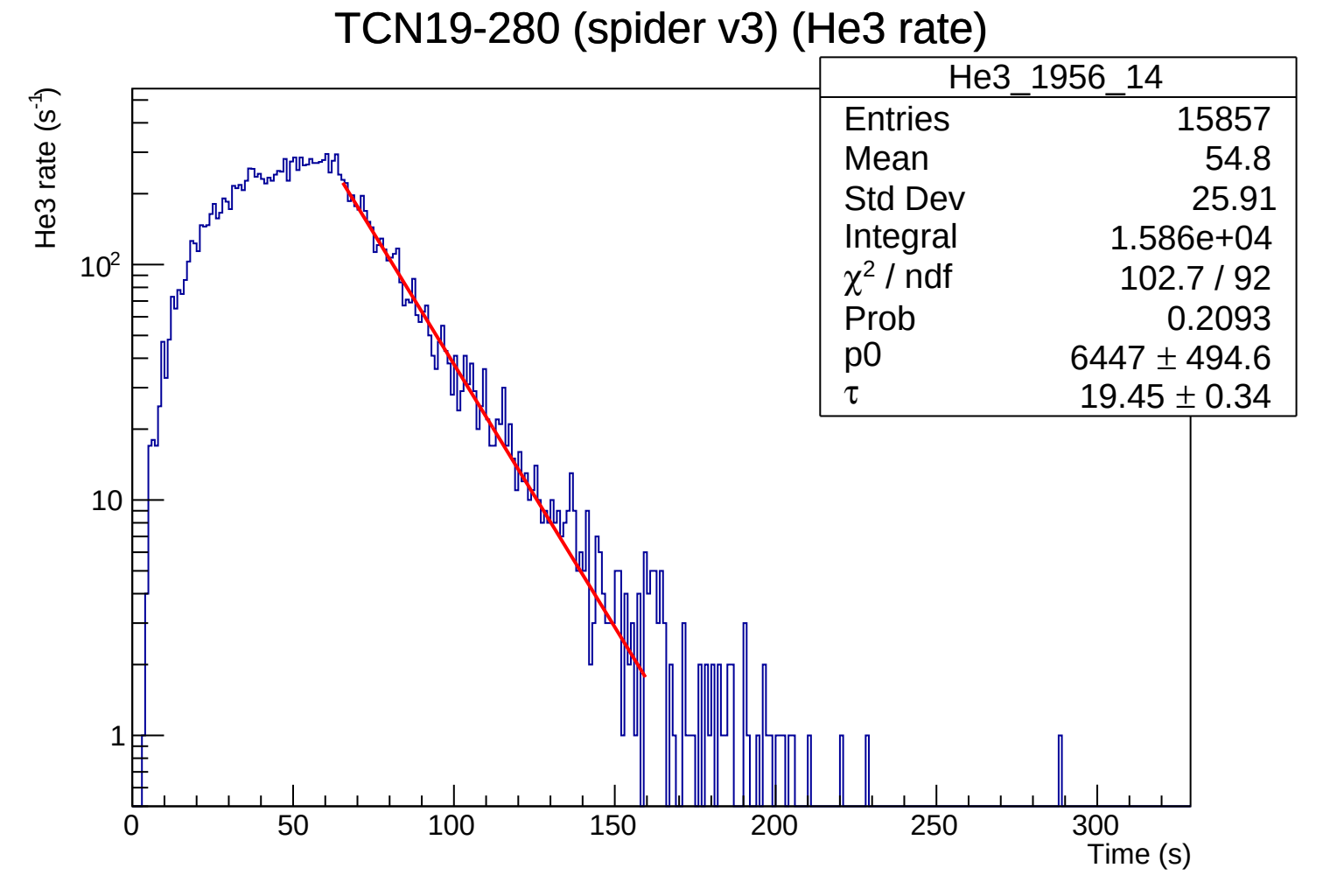

TCN19-280 (spider v3) (He3 rate)
He3_1956_9
Entries 15793
Mean 54.71
Std Dev 26.07
Integral 1.579e+04
χ² / ndf 69.47 / 93
Prob 0.9676
p0 5997 ± 438.9
τ 19.75 ± 0.33
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

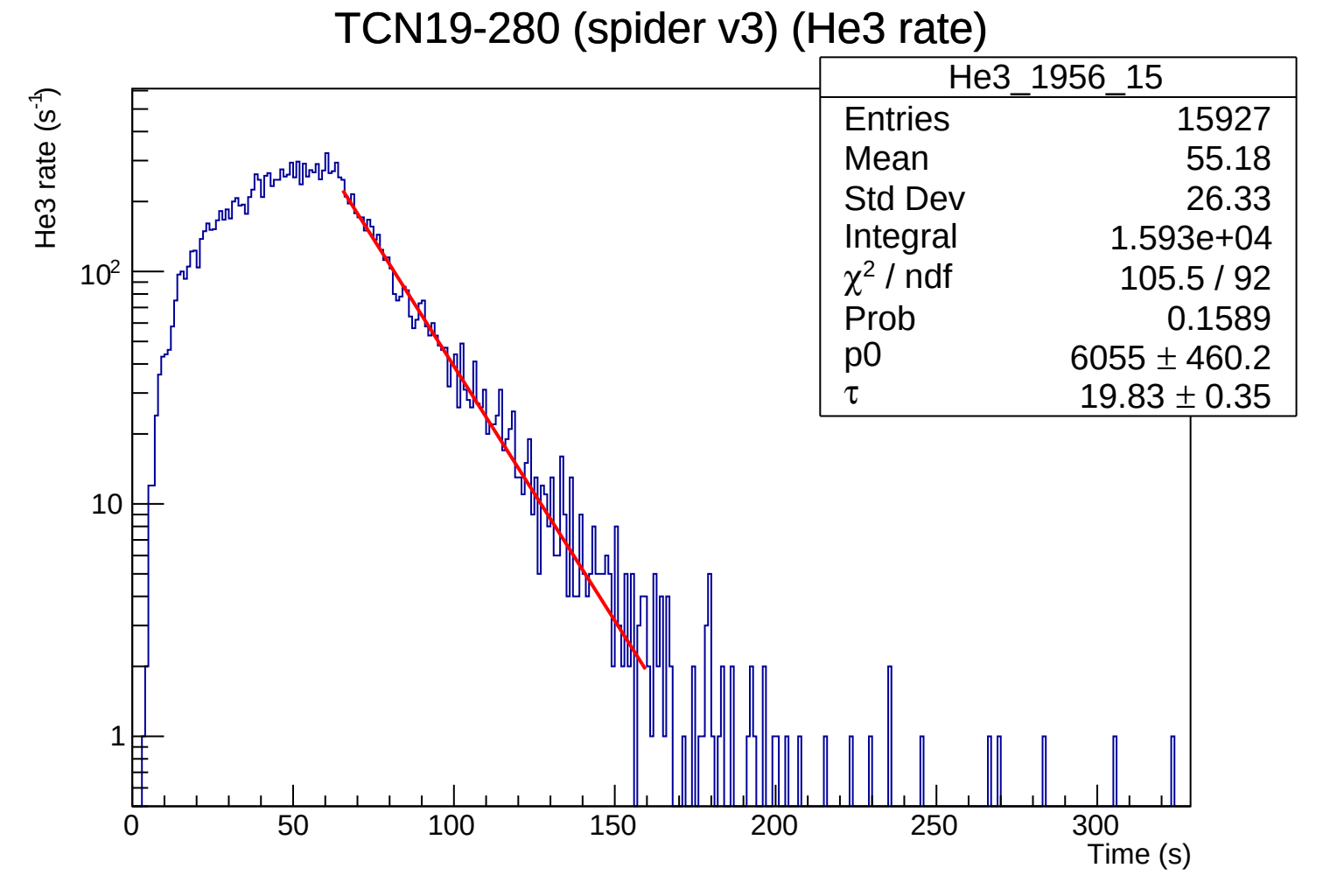

TCN19-280 (spider v3) (He3 rate)
He3_1956_10
Entries 16018
Mean 55.04
Std Dev 26.39
Integral 1.602e+04
χ² / ndf 83.69 / 93
Prob 0.7446
p0 5900 ± 443.0
τ 19.88 ± 0.35
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

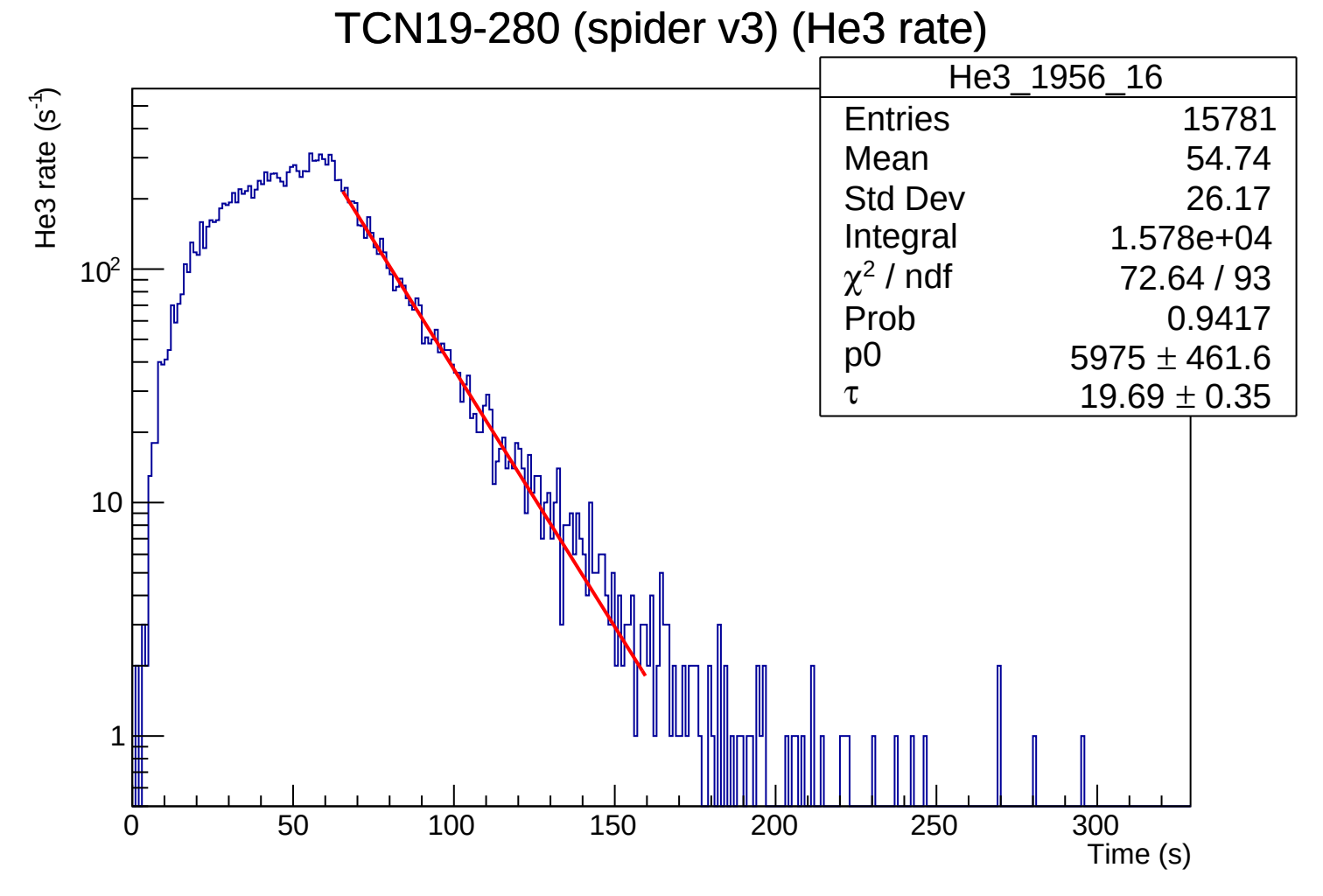

TCN19-280 (spider v3) (He3 rate)
He3_1956_11
Entries 15940
Mean 55.2
Std Dev 26.46
Integral 1.594e+04
χ² / ndf 75.63 / 93
Prob 0.9054
p0 6069 ± 441.2
τ 19.86 ± 0.33
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

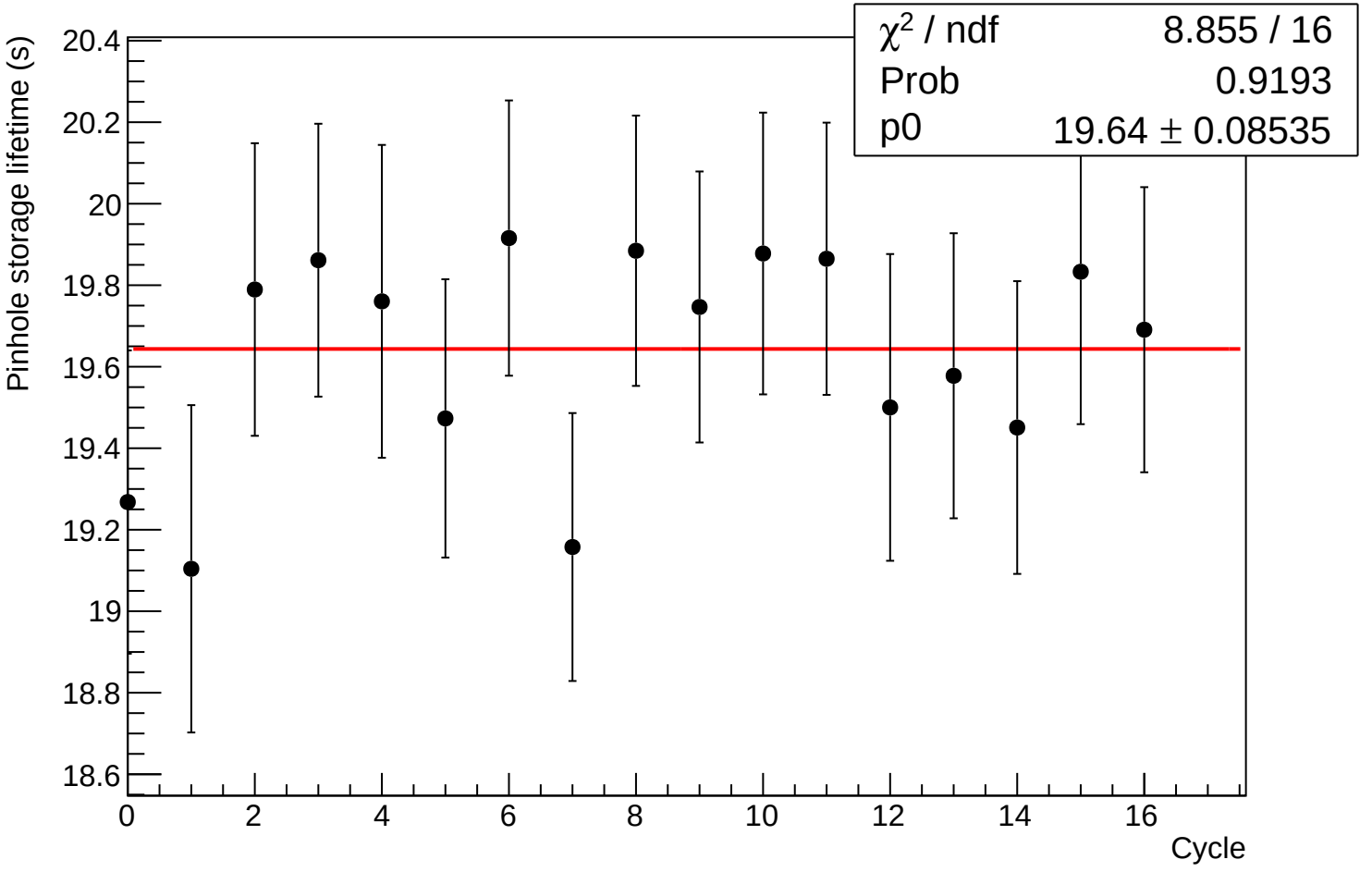

TCN19-280 (spider v3) (He3 rate)
He3_1956_12
Entries 15787
Mean 54.75
Std Dev 25.99
Integral 1.579e+04
χ² / ndf 106 / 92
Prob 0.1505
p0 6353 ± 499.8
τ 19.5 ± 0.4
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

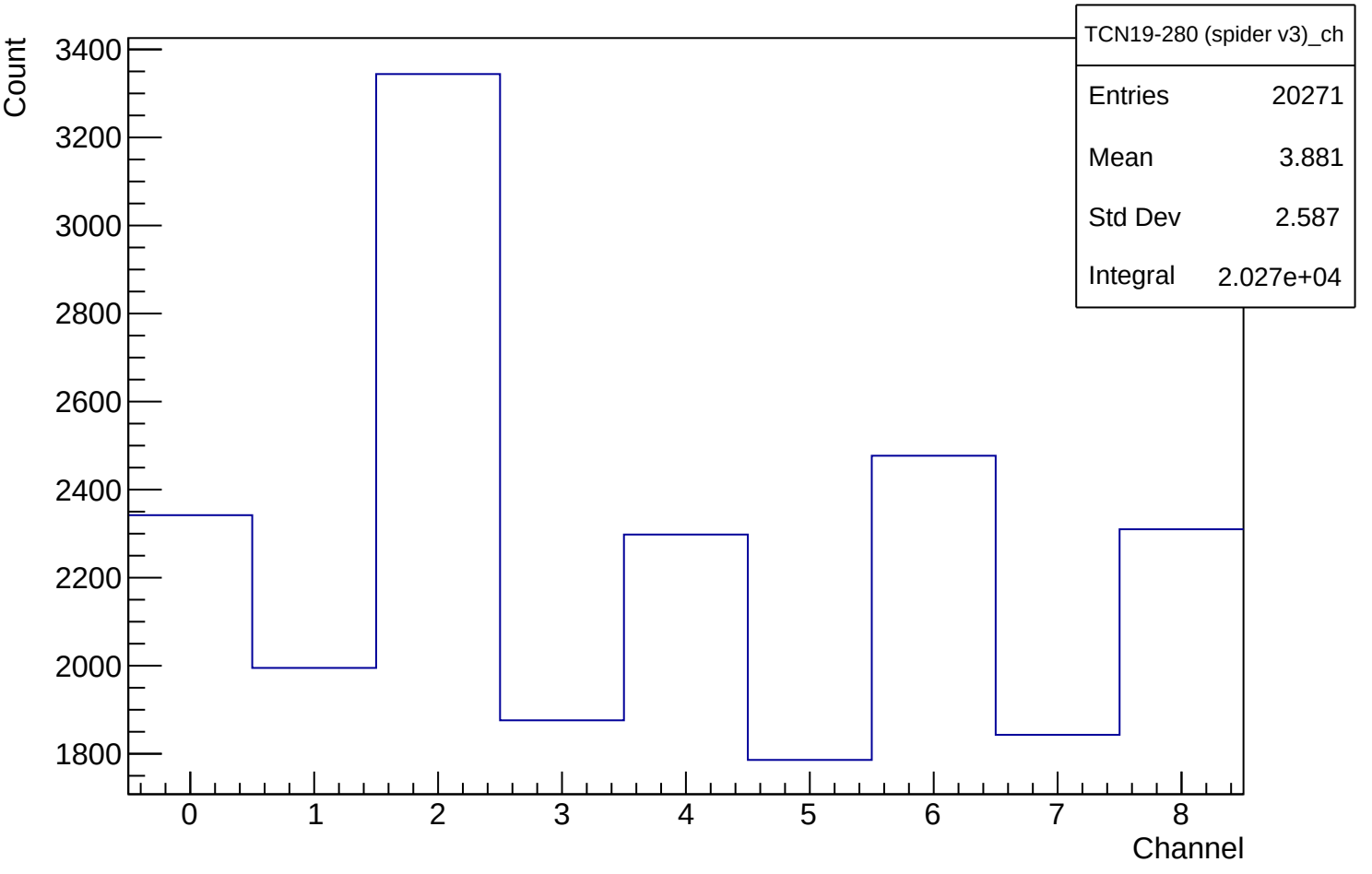

TCN19-280 (spider v3) (He3 rate)
He3_1956_13
Entries 15847
Mean 55.12
Std Dev 26.29
Integral 1.585e+04
χ² / ndf 95.72 / 91
Prob 0.3471
p0 6258 ± 475.9
τ 19.58 ± 0.34
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)


TCN19-280 (spider v3) (He3 rate)
He3_1956_14
Entries 15857
Mean 54.8
Std Dev 25.91
Integral 1.586e+04
χ² / ndf 102.7 / 92
Prob 0.2093
p0 6447 ± 494.6
τ 19.45 ± 0.34
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)


TCN19-280 (spider v3) (He3 rate)
He3_1956_15
Entries 15927
Mean 55.18
Std Dev 26.33
Integral 1.593e+04
χ² / ndf 105.5 / 92
Prob 0.1589
p0 6055 ± 460.2
τ 19.83 ± 0.35
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)


TCN19-280 (spider v3) (He3 rate)
He3_1956_16
Entries 15781
Mean 54.74
Std Dev 26.17
Integral 1.578e+04
χ² / ndf 72.64 / 93
Prob 0.9417
p0 5975 ± 461.6
τ 19.69 ± 0.35
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)


χ^2 / ndf 8.855 / 16
Prob 0.9193
p0 19.64 ± 0.08535
Pinhole storage lifetime (s)
20.4
20.2
20
19.8
19.6
19.4
19.2
19
18.8
18.6
0
2
4
6
8
10
12
14
16
Cycle


TCN19-280 (spider v3)
TCN19-280 (spider v3)_ch
Entries 20271
Mean 3.881
Std Dev 2.587
Integral 2.027e+04
Count
3400
3200
3000
2800
2600
2400
2200
2000
1800
0
1
2
3
4
5
6
7
8
Channel