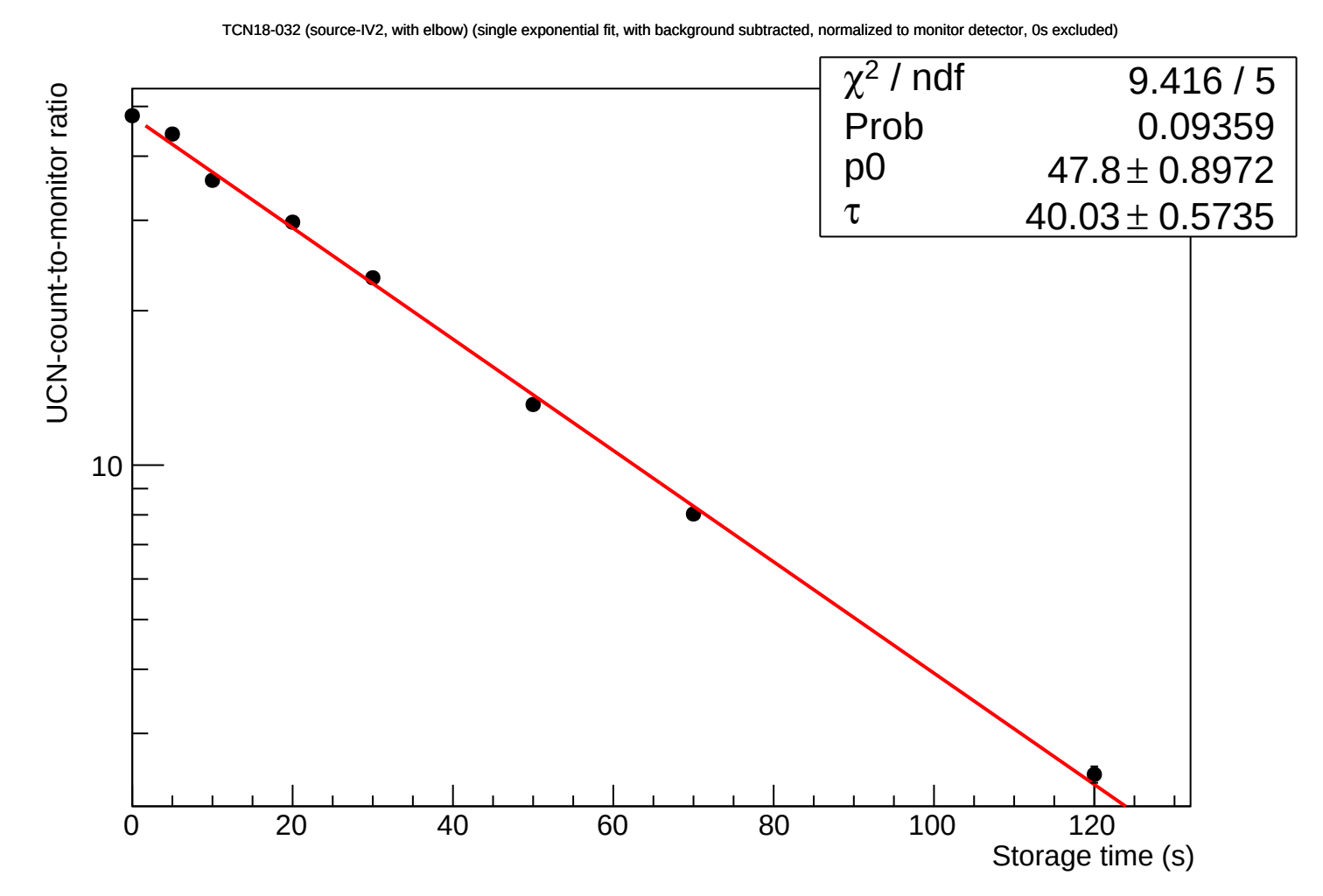
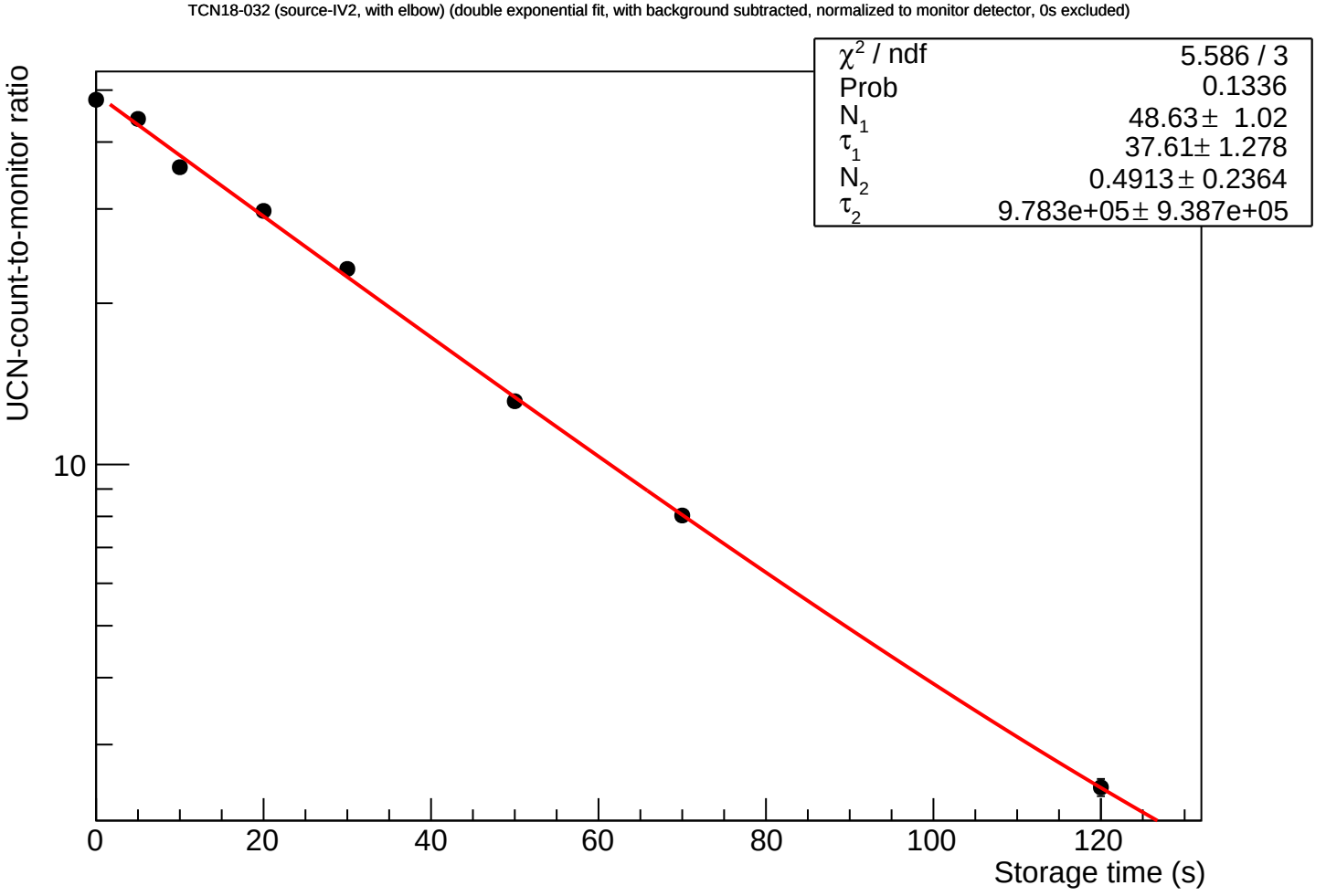
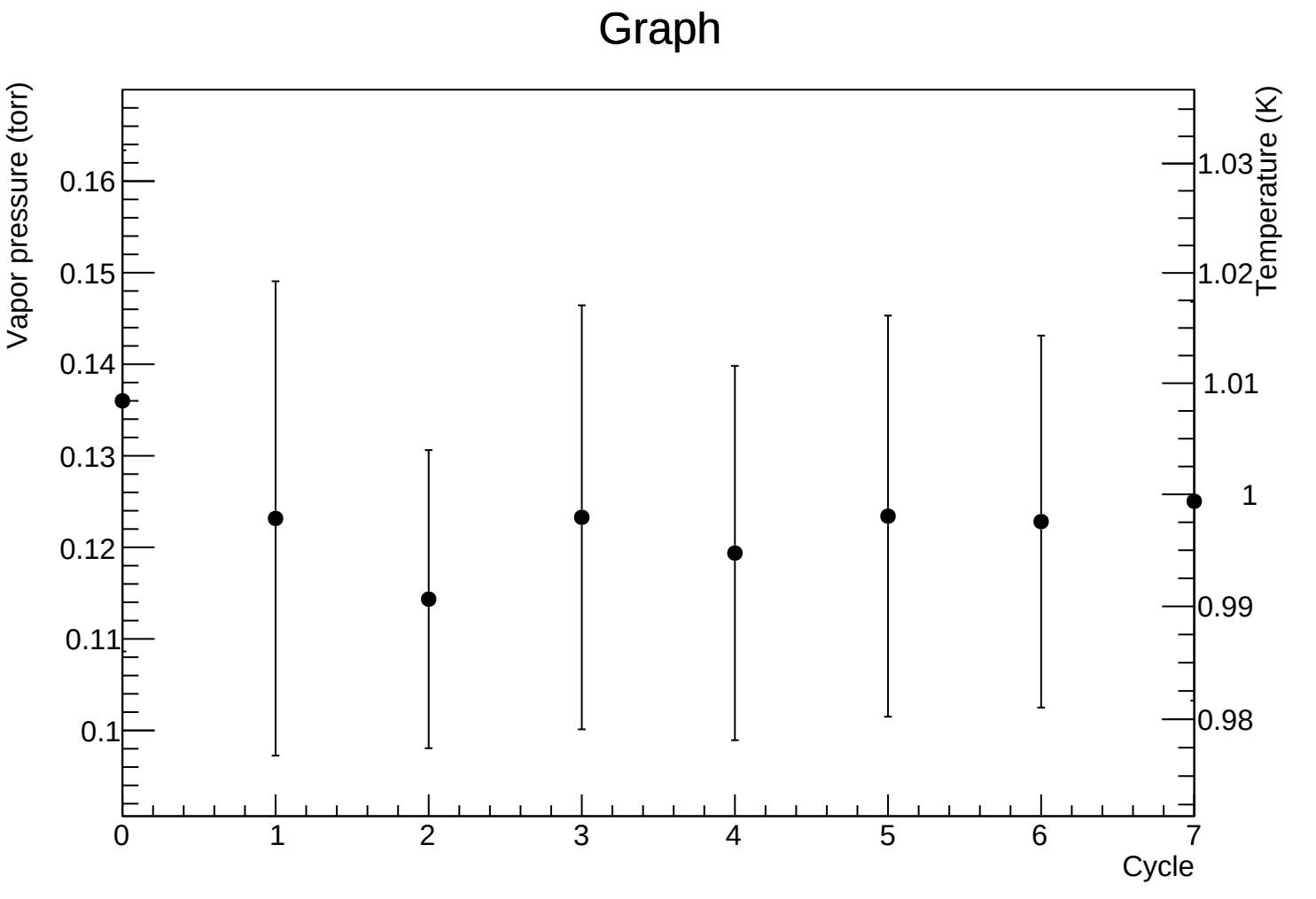
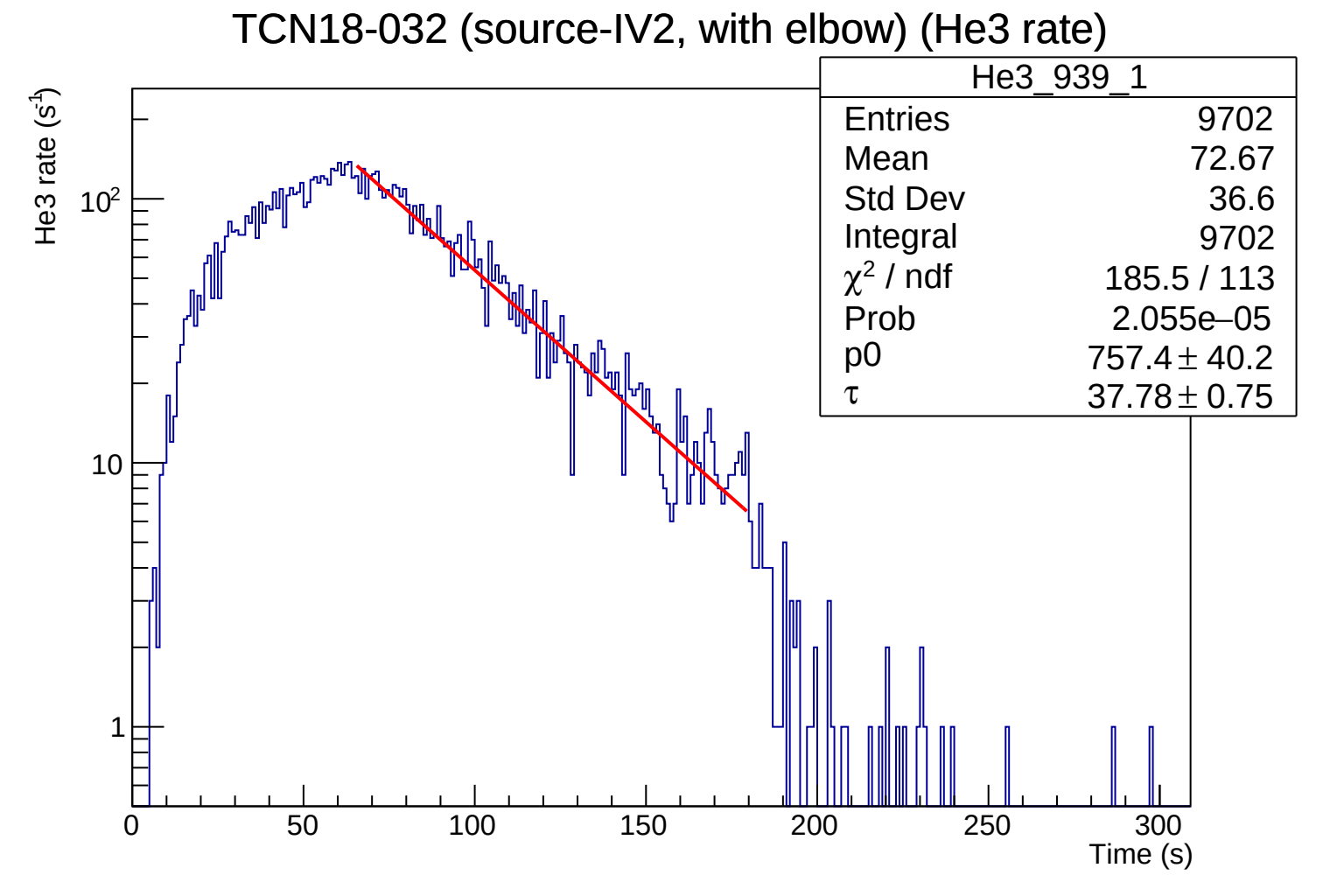
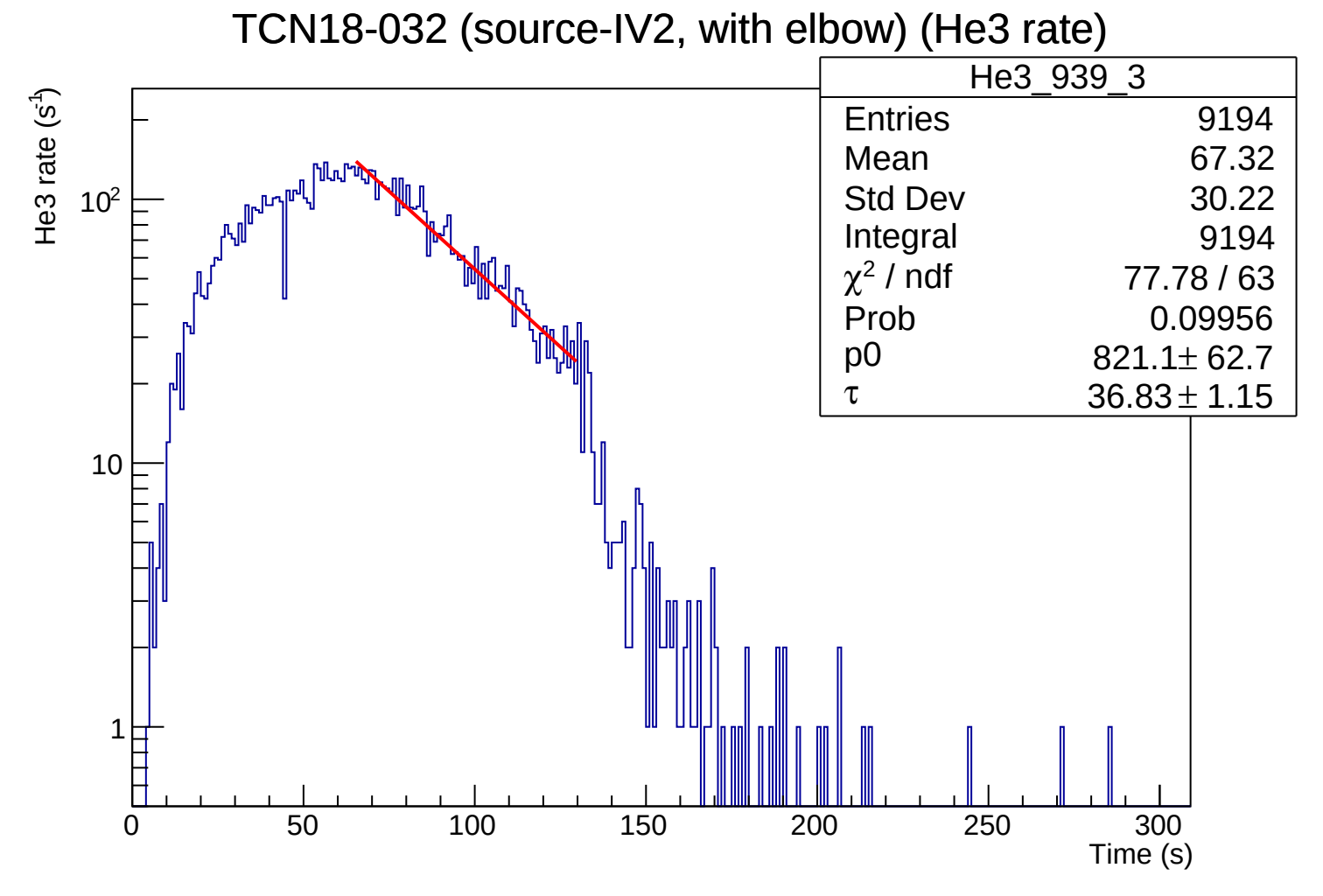
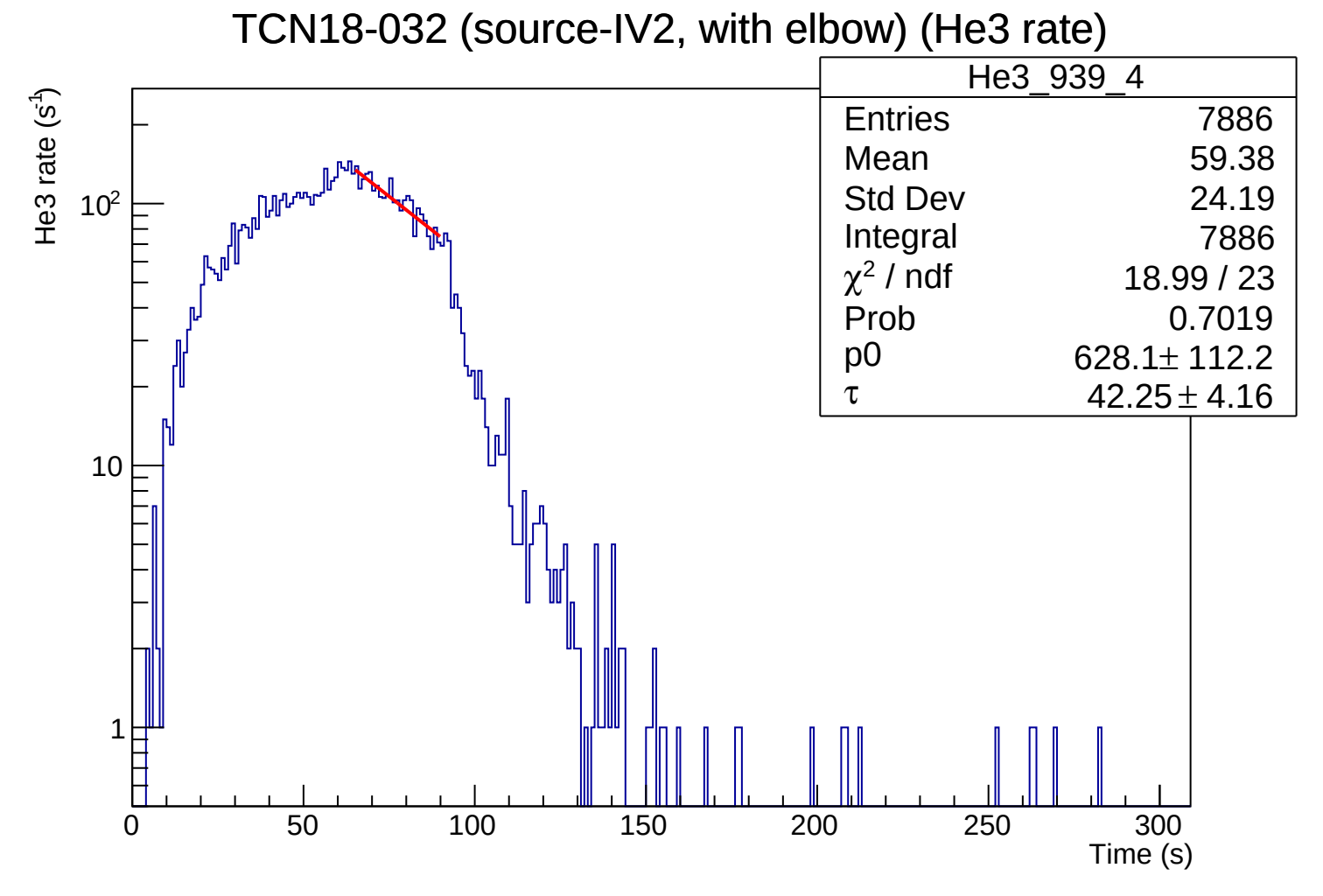

TCN18-032 (source-IV2, with elbow) (single exponential fit, with background subtracted, normalized to monitor detector, 0s excluded)
χ² / ndf 9.416 / 5
Prob 0.09359
p0 47.8 ± 0.8972
τ 40.03 ± 0.5735
UCN-count-to-monitor ratio
10
0
20
40
60
80
100
120
Storage time (s)

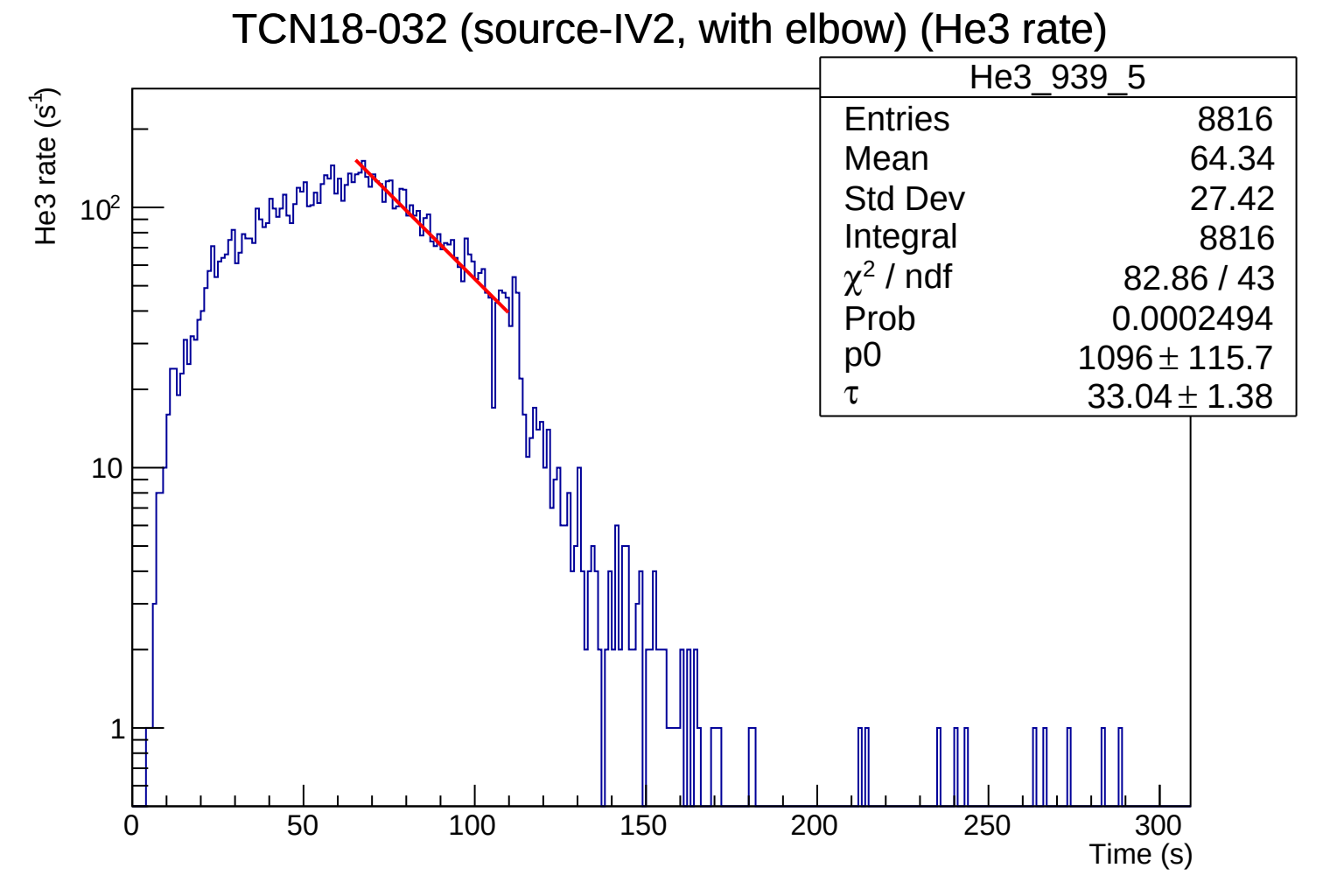

TCN18-032 (source-IV2, with elbow) (double exponential fit, with background subtracted, normalized to monitor detector, 0s excluded)
χ² / ndf 5.586 / 3
Prob 0.1336
N1 48.63 ± 1.02
τ1 37.61 ± 1.278
N2 0.4913 ± 0.2364
τ2 9.783e+05 ± 9.387e+05
UCN-count-to-monitor ratio
10
0
20
40
60
80
100
120
Storage time (s)

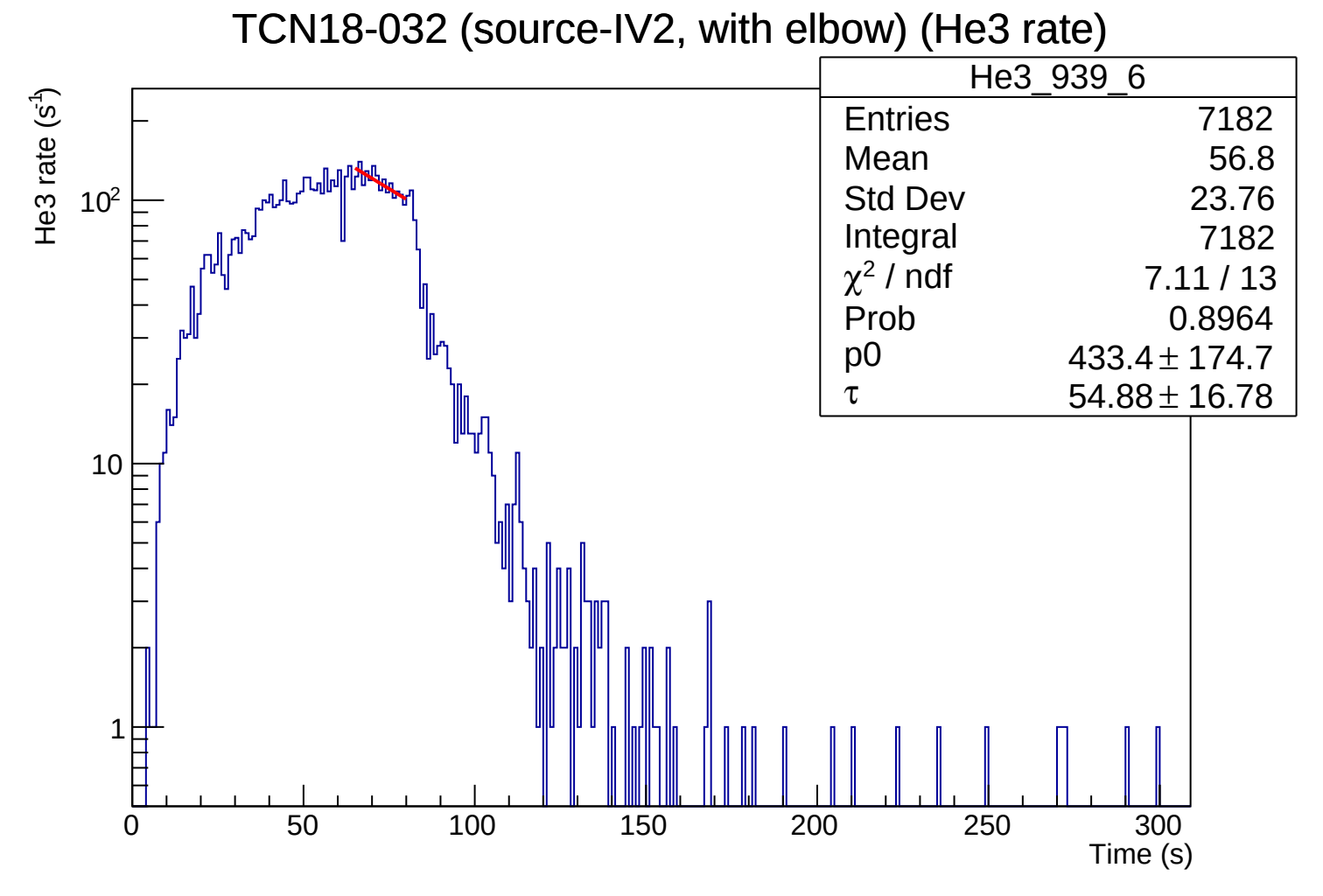

Graph
Vapor pressure (torr)
0.16
0.15
0.14
0.13
0.12
0.11
0.1
Temperature (K)
1.03
1.02
1.01
1
0.99
0.98
0
1
2
3
4
5
6
7
Cycle

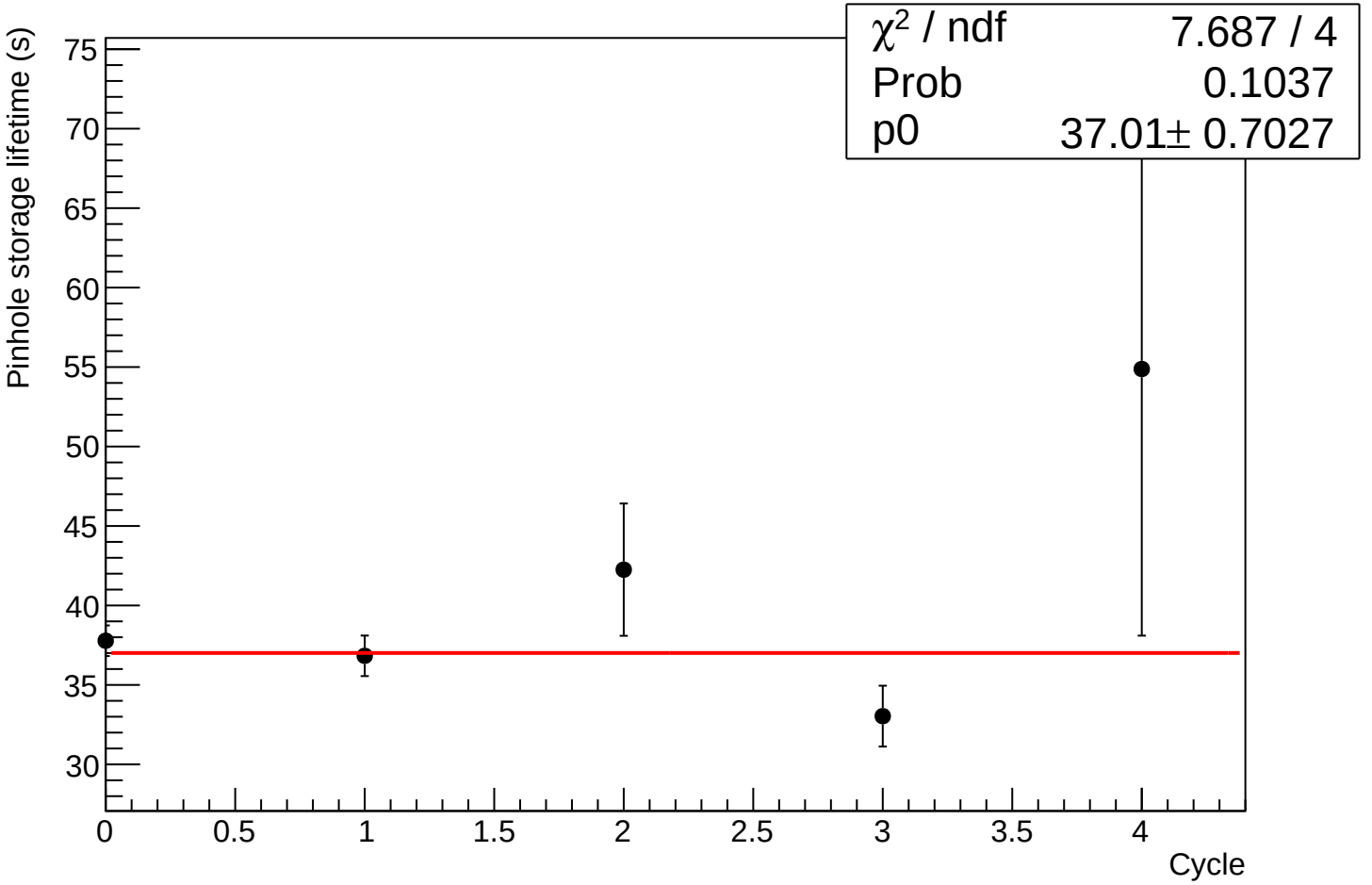

TCN18-032 (source-IV2, with elbow) (He3 rate)
He3_939_1
Entries 9702
Mean 72.67
Std Dev 36.6
Integral 9702
χ² / ndf 185.5 / 113
Prob 2.055e–05
p0 757.4 ± 40.2
τ 37.78 ± 0.75
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

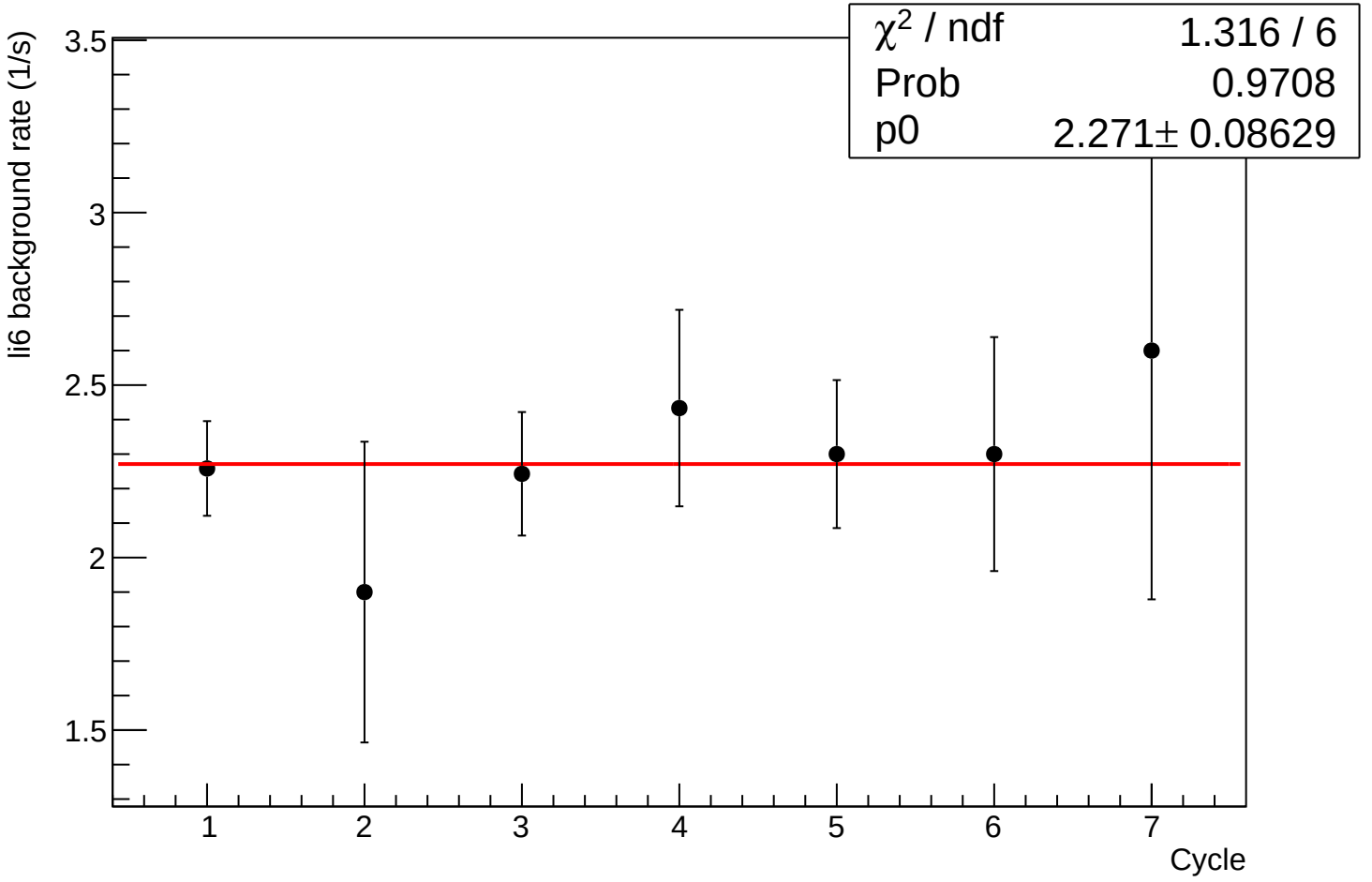

TCN18-032 (source-IV2, with elbow) (He3 rate)
He3_939_3
Entries 9194
Mean 67.32
Std Dev 30.22
Integral 9194
χ² / ndf 77.78 / 63
Prob 0.09956
p0 821.1± 62.7
τ 36.83 ± 1.15
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

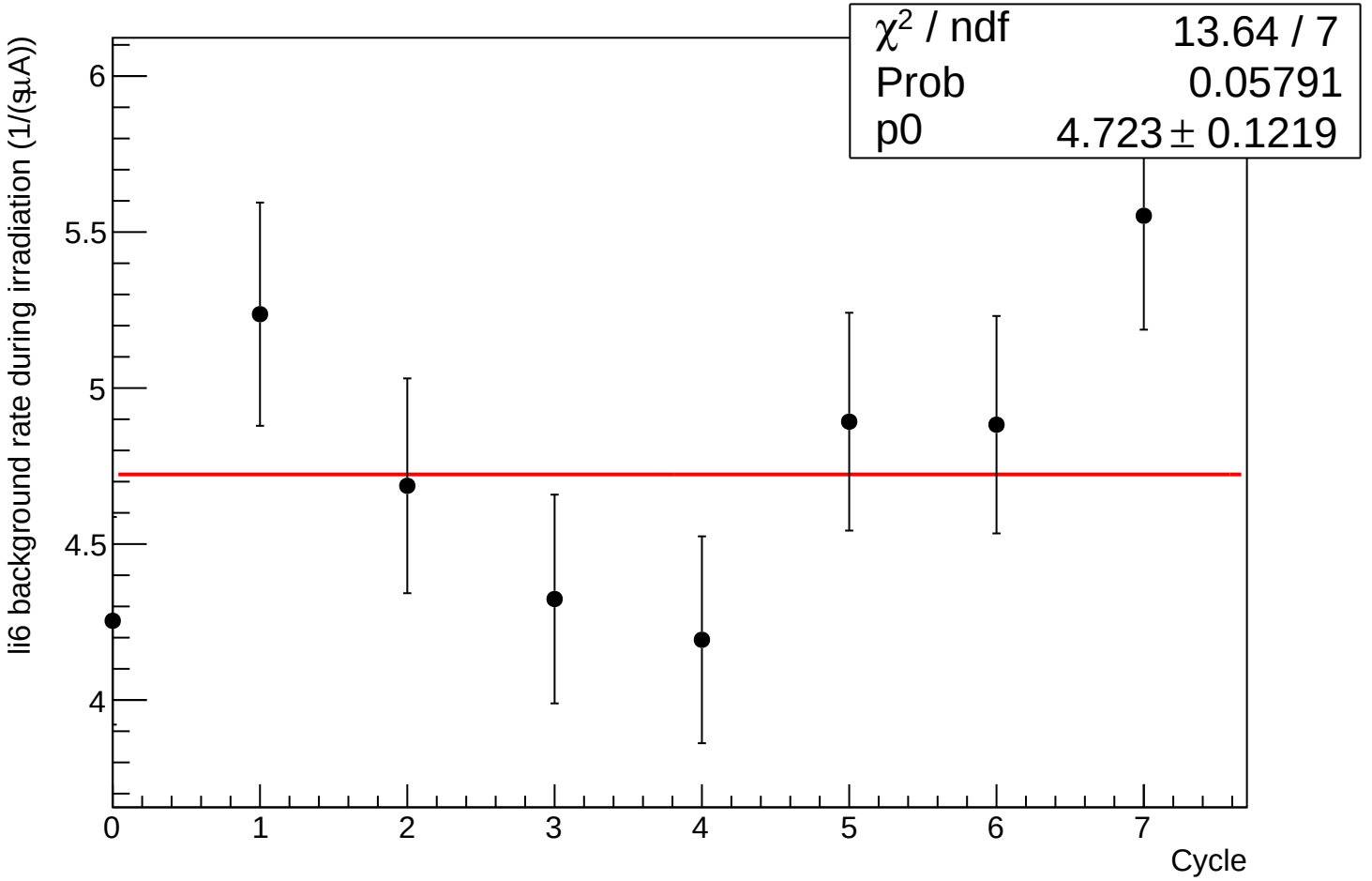

TCN18-032 (source-IV2, with elbow) (He3 rate)
He3_939_4
Entries 7886
Mean 59.38
Std Dev 24.19
Integral 7886
χ² / ndf 18.99 / 23
Prob 0.7019
p0 628.1± 112.2
τ 42.25 ± 4.16
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

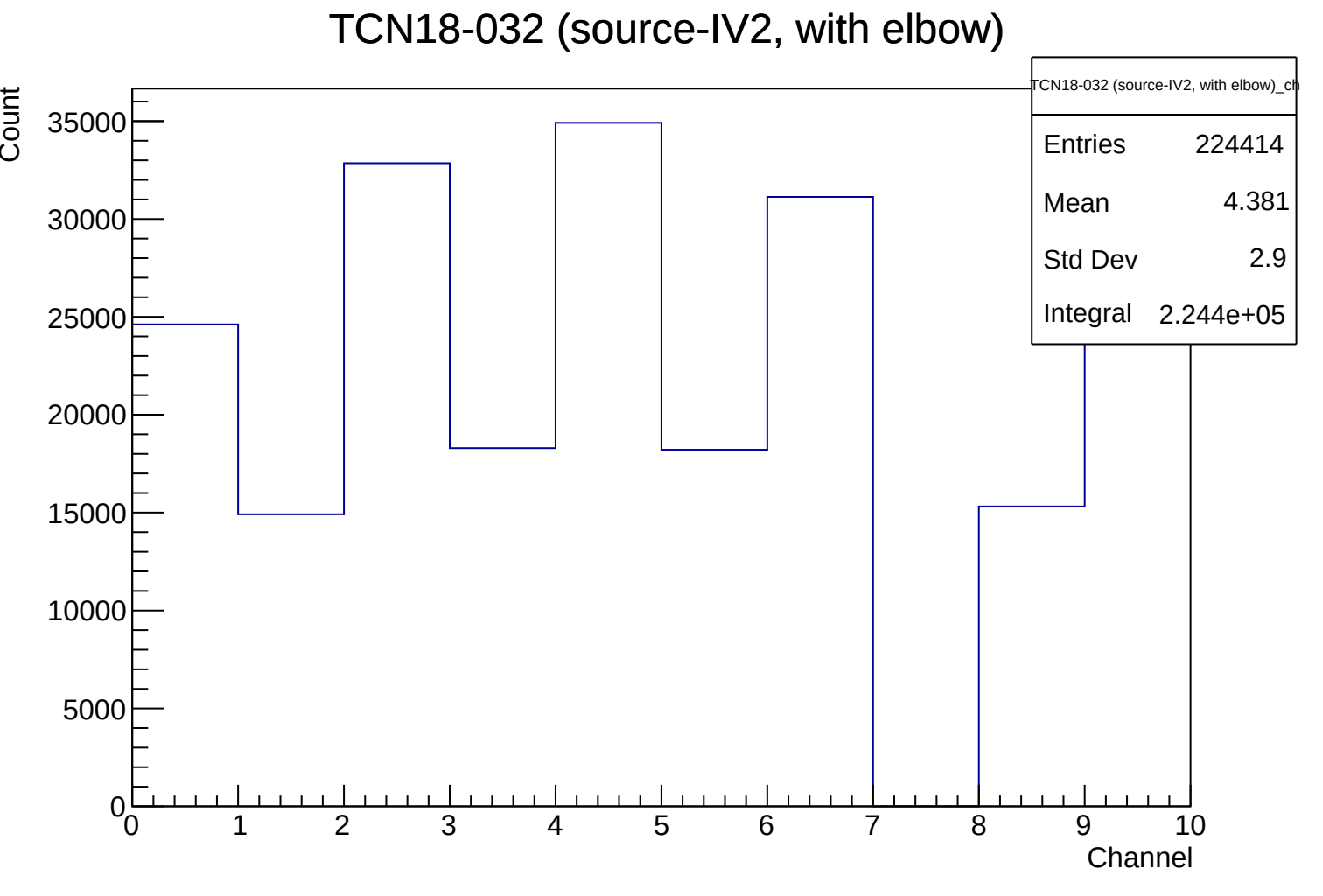

TCN18-032 (source-IV2, with elbow) (He3 rate)
He3_939_5
Entries 8816
Mean 64.34
Std Dev 27.42
Integral 8816
χ² / ndf 82.86 / 43
Prob 0.0002494
p0 1096 ± 115.7
τ 33.04 ± 1.38
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)


TCN18-032 (source-IV2, with elbow) (He3 rate)
He3_939_6
Entries 7182
Mean 56.8
Std Dev 23.76
Integral 7182
χ² / ndf 7.11 / 13
Prob 0.8964
p0 433.4 ± 174.7
τ 54.88 ± 16.78
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)


χ^2 / ndf 7.687 / 4
Prob 0.1037
p0 37.01± 0.7027
Pinhole storage lifetime (s)
75
70
65
60
55
50
45
40
35
30
0
0.5
1
1.5
2
2.5
3
3.5
4
Cycle


li6 background rate (1/s)
3.5
3
2.5
2
1.5
1
2
3
4
5
6
7
Cycle
χ² / ndf 1.316 / 6
Prob 0.9708
p0 2.271± 0.08629


χ² / ndf 13.64 / 7
Prob 0.05791
p0 4.723 ± 0.1219
li6 background rate during irradiation (1/(μA))
Cycle
6
5.5
5
4.5
4
0
1
2
3
4
5
6
7


TCN18-032 (source-IV2, with elbow)
TCN18-032 (source-IV2, with elbow)_ch
Entries 224414
Mean 4.381
Std Dev 2.9
Integral 2.244e+05
Count
35000
30000
25000
20000
15000
10000
5000
0
0 1 2 3 4 5 6 7 8 9 10
Channel