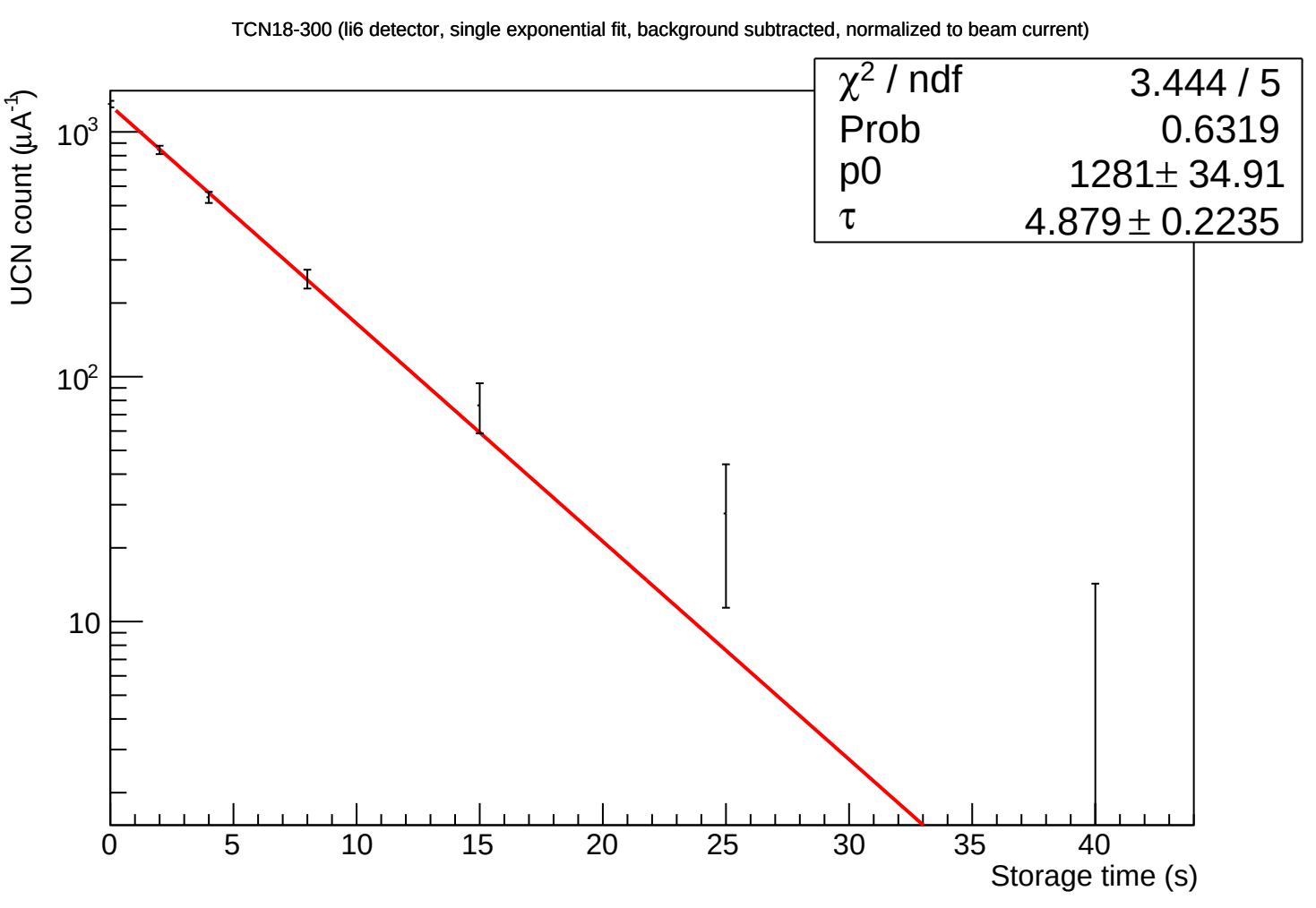
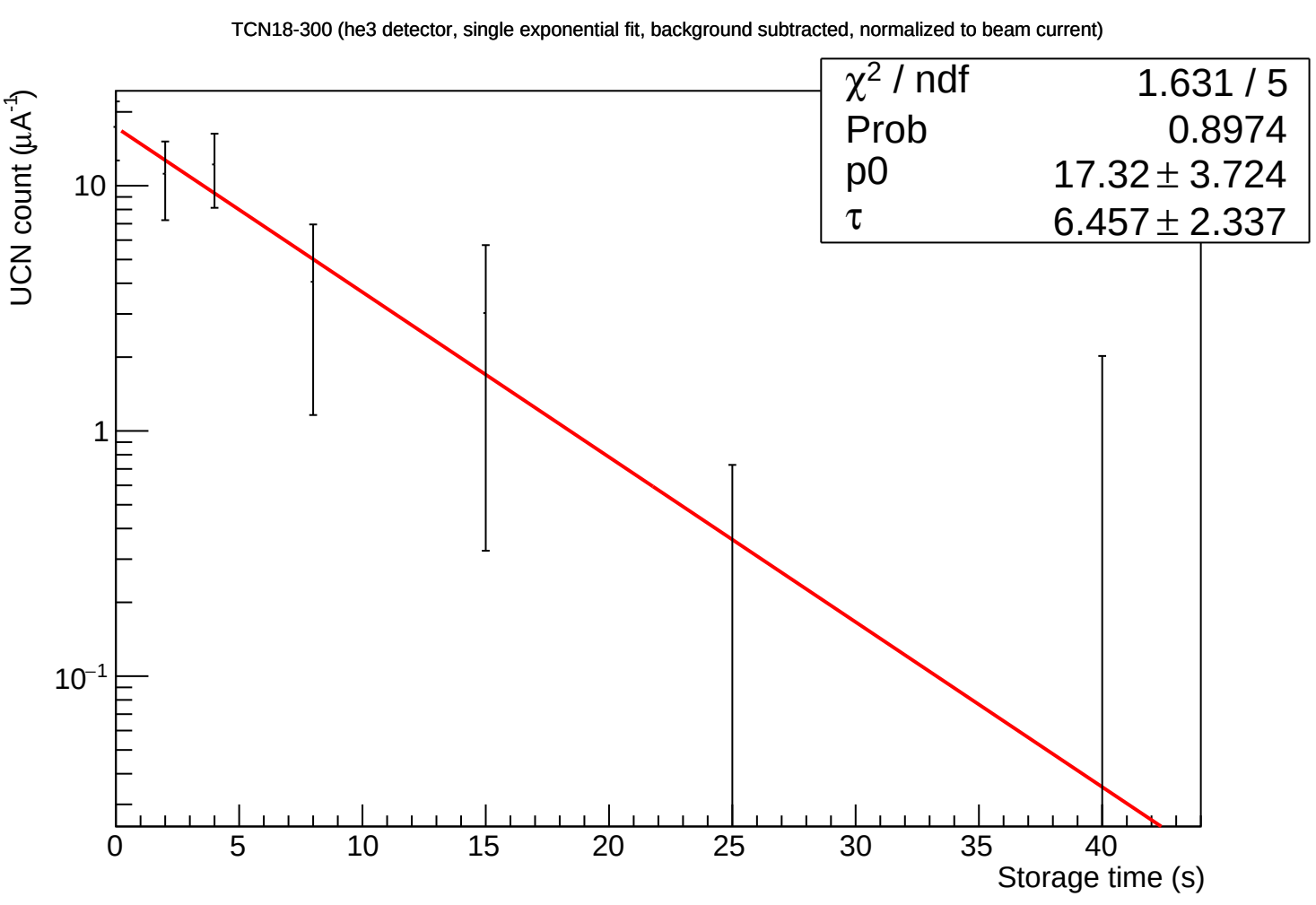
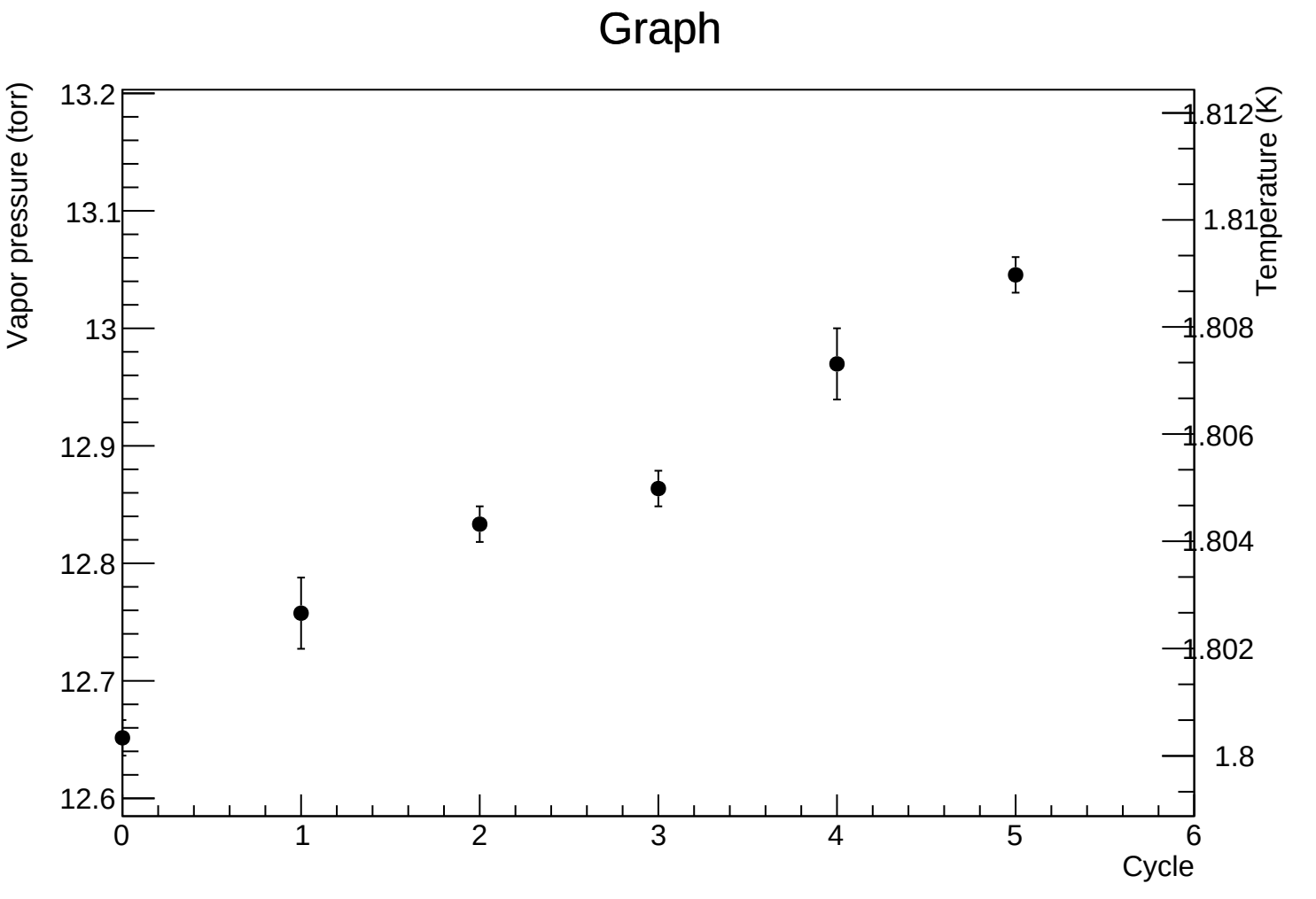
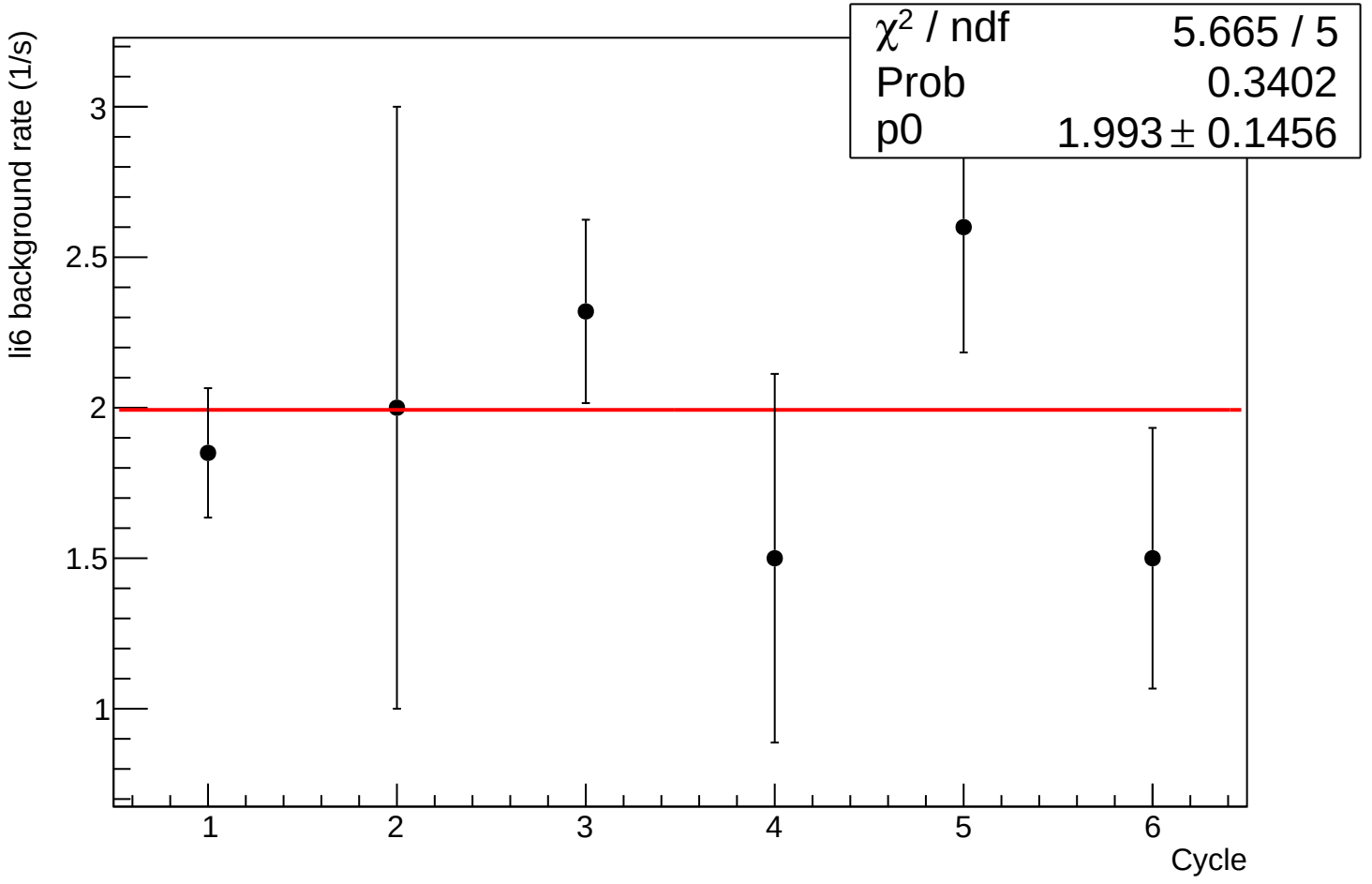
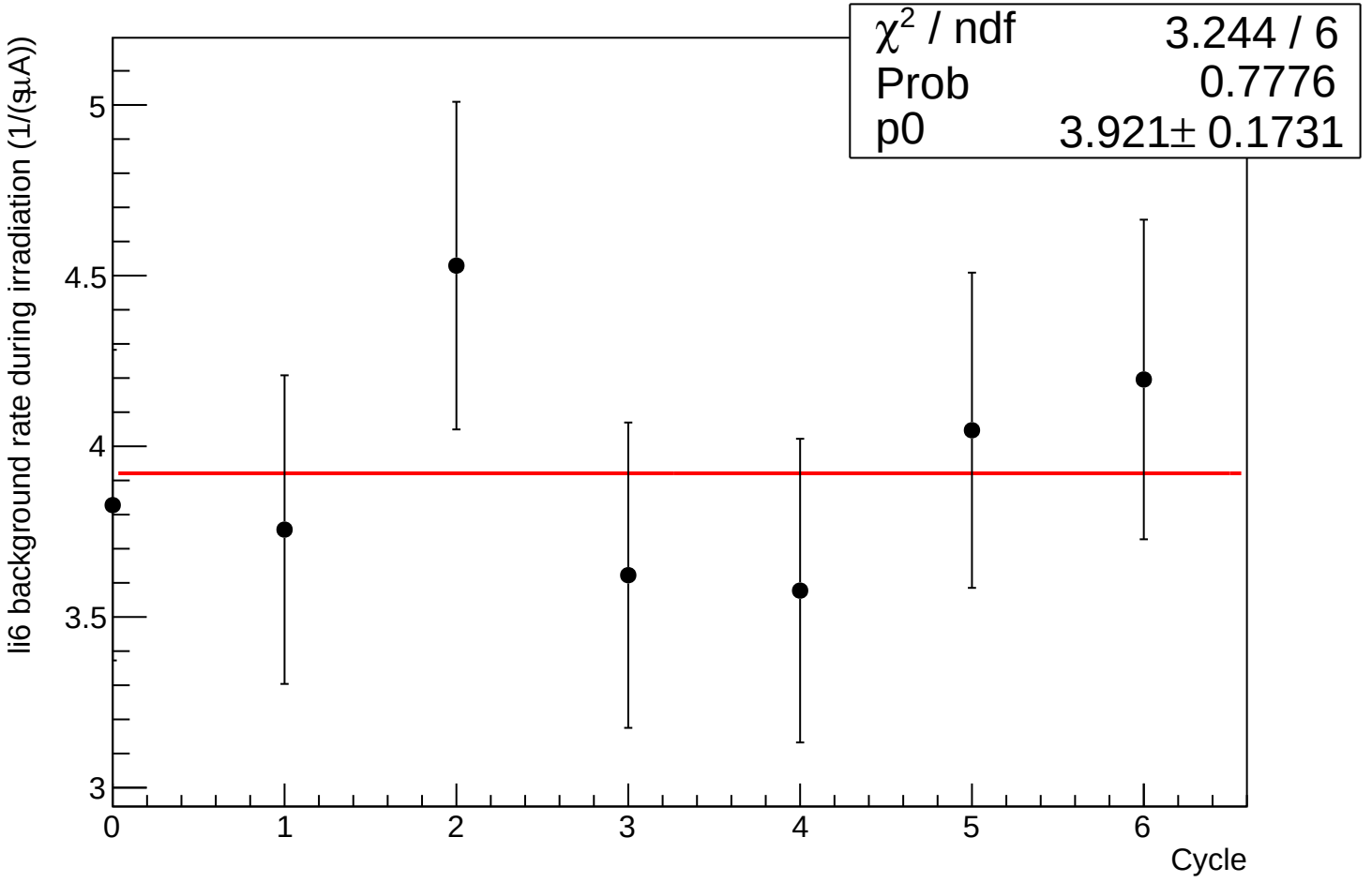
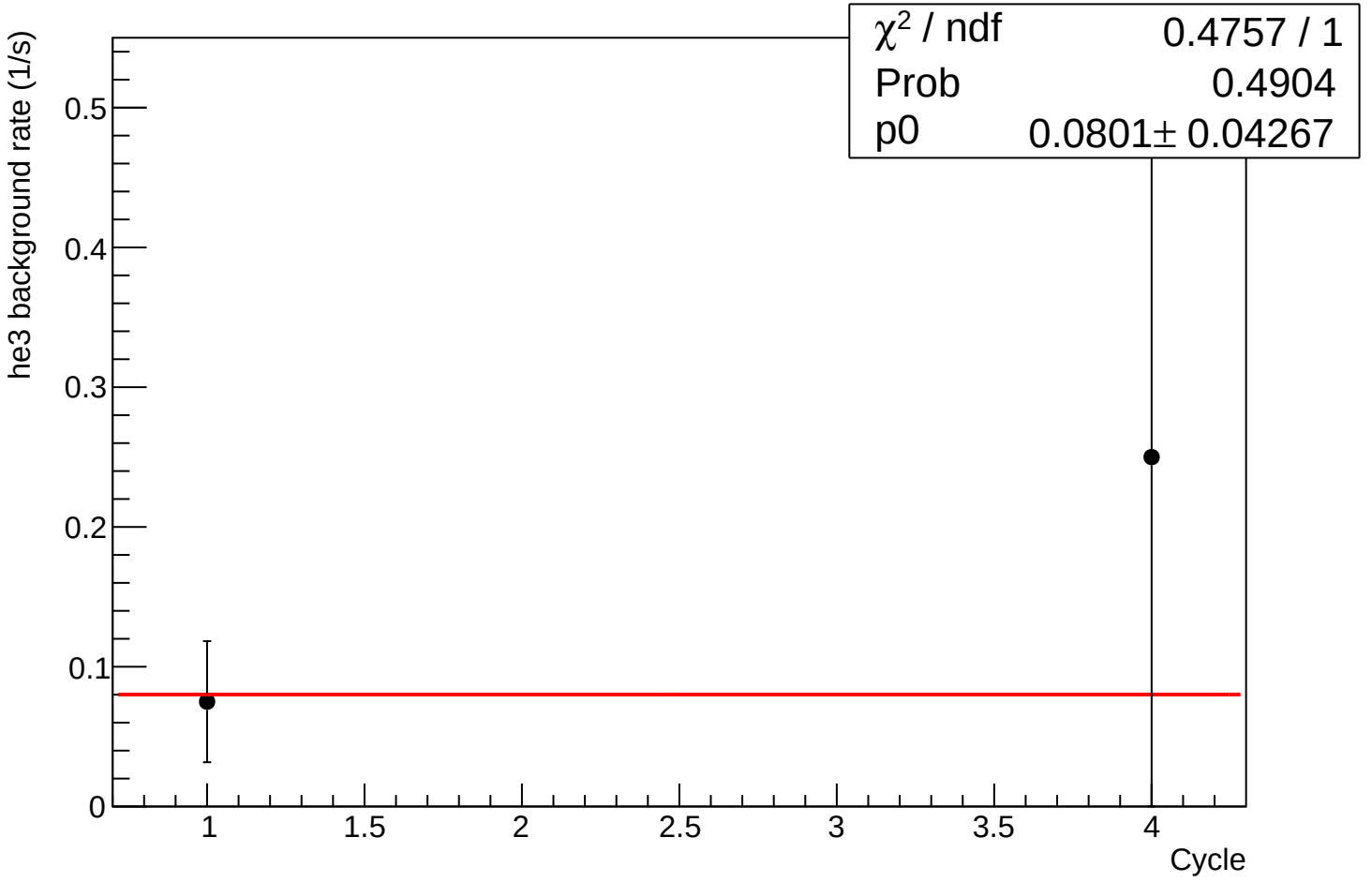

TCN18-300 (li6 detector, single exponential fit, background subtracted, normalized to beam current)
χ² / ndf 3.444 / 5
Prob 0.6319
p0 1281 ± 34.91
τ 4.879 ± 0.2235
UCN count (μA⁻¹)
10³
10²
10
0
5
10
15
20
25
30
35
40
Storage time (s)

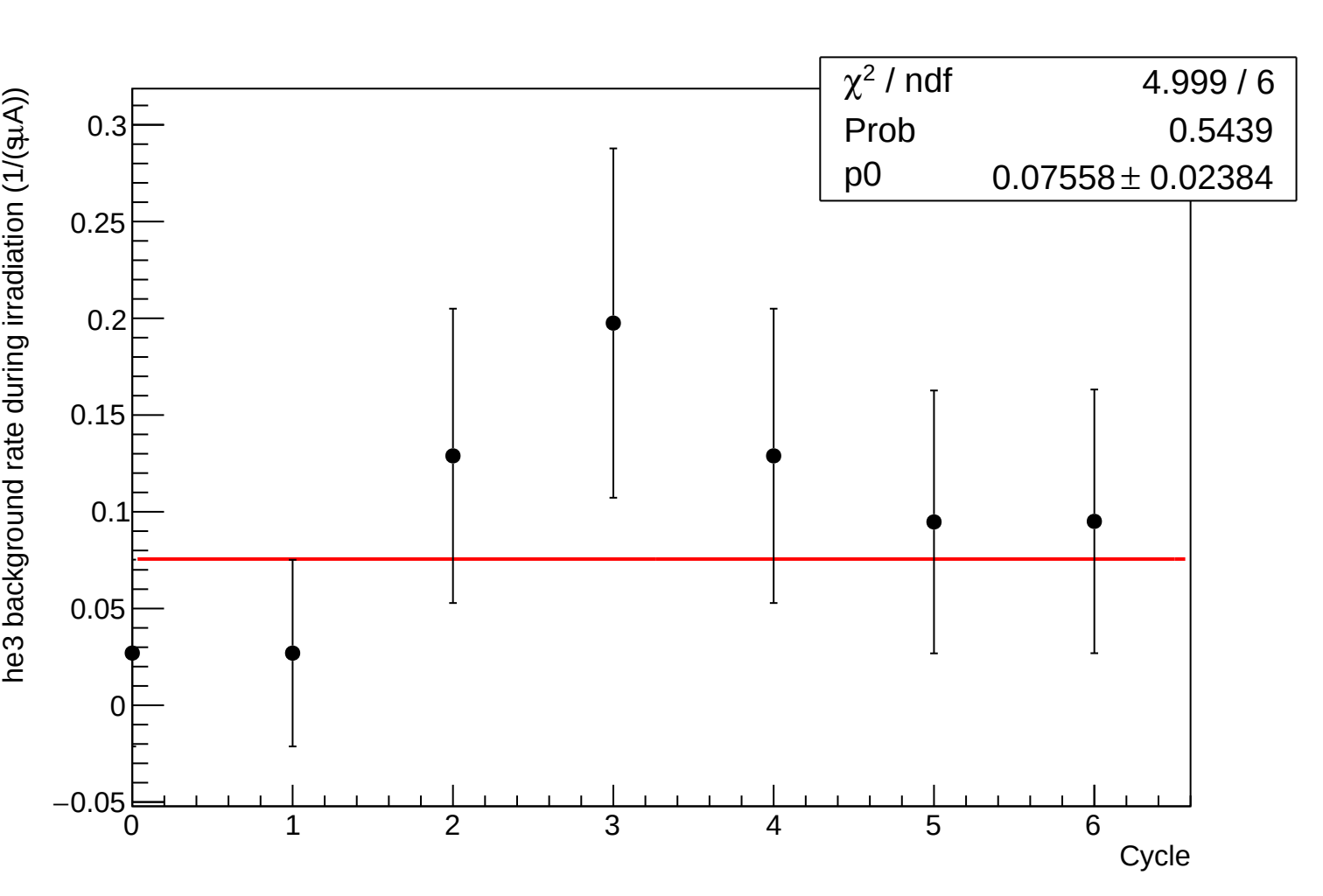

TCN18-300 (he3 detector, single exponential fit, background subtracted, normalized to beam current)
χ² / ndf 1.631 / 5
Prob 0.8974
p0 17.32 ± 3.724
τ 6.457 ± 2.337
UCN count (μA⁻¹)
10
1
10⁻¹
0
5
10
15
20
25
30
35
40
Storage time (s)

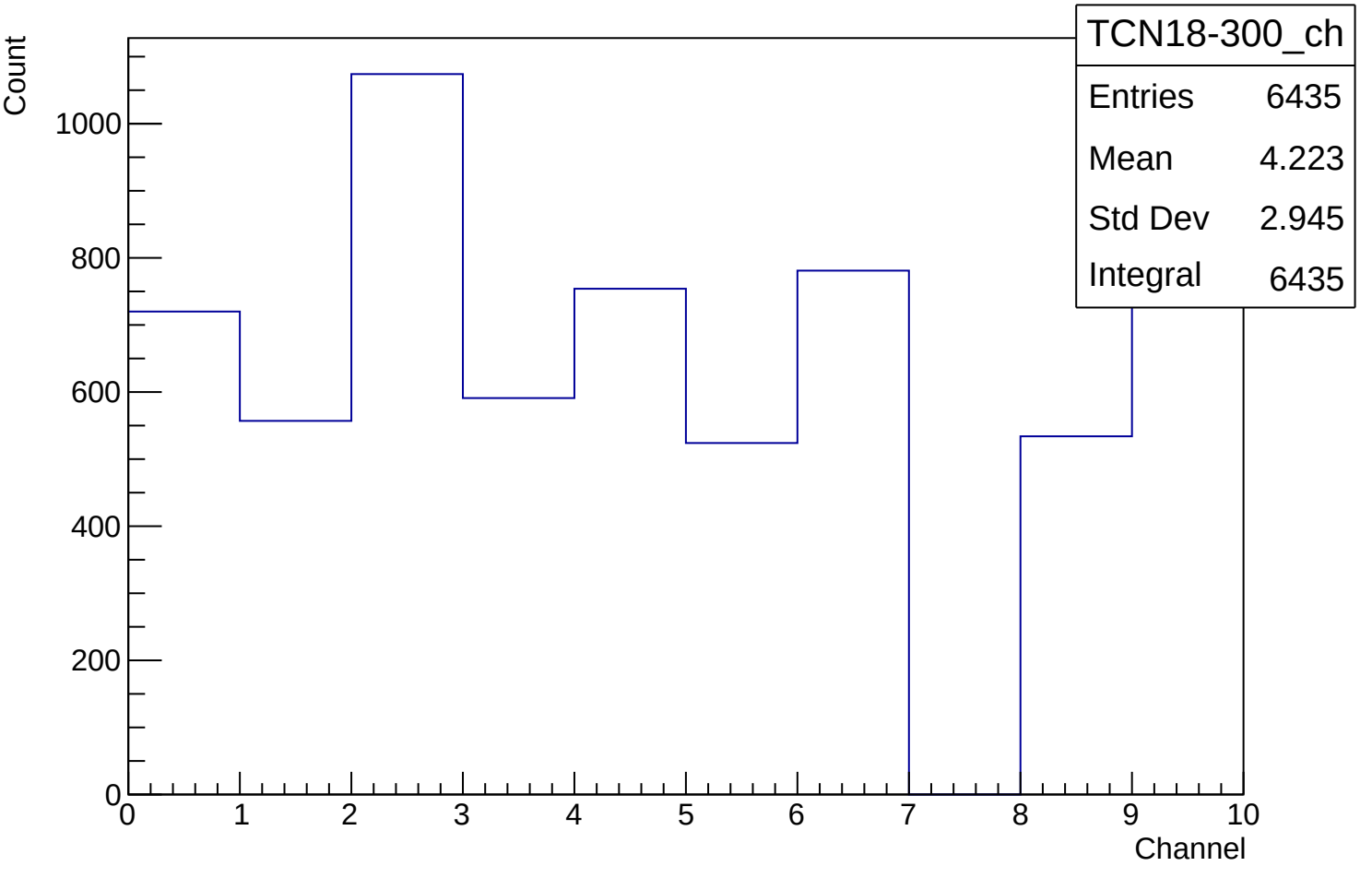

Graph
Vapor pressure (torr)
13.2
13.1
13
12.9
12.8
12.7
12.6
Temperature (K)
1.812
1.81
1.808
1.806
1.804
1.802
1.8
0
1
2
3
4
5
6
Cycle


li6 background rate (1/s)
3
2.5
2
1.5
1
1
2
3
4
5
6
Cycle
χ² / ndf 5.665 / 5
Prob 0.3402
p0 1.993 ± 0.1456


χ^2 / ndf 3.244 / 6
Prob 0.7776
p0 3.921± 0.1731
li6 background rate during irradiation (1/(μA))
5
4.5
4
3.5
3
0
1
2
3
4
5
6
Cycle


χ² / ndf 0.4757 / 1
Prob 0.4904
p0 0.0801± 0.04267
he3 background rate (1/s)
0.5
0.4
0.3
0.2
0.1
0
1
1.5
2
2.5
3
3.5
4
Cycle


χ² / ndf 4.999 / 6
Prob 0.5439
p0 0.07558 ± 0.02384
he3 background rate during irradiation (1/(μA))
0.3
0.25
0.2
0.15
0.1
0.05
0
−0.05
0
1
2
3
4
5
6
Cycle


TCN18-300
TCN18-300_ch
Entries 6435
Mean 4.223
Std Dev 2.945
Integral 6435
Count
0
200
400
600
800
1000
0
1
2
3
4
5
6
7
8
9
10
Channel