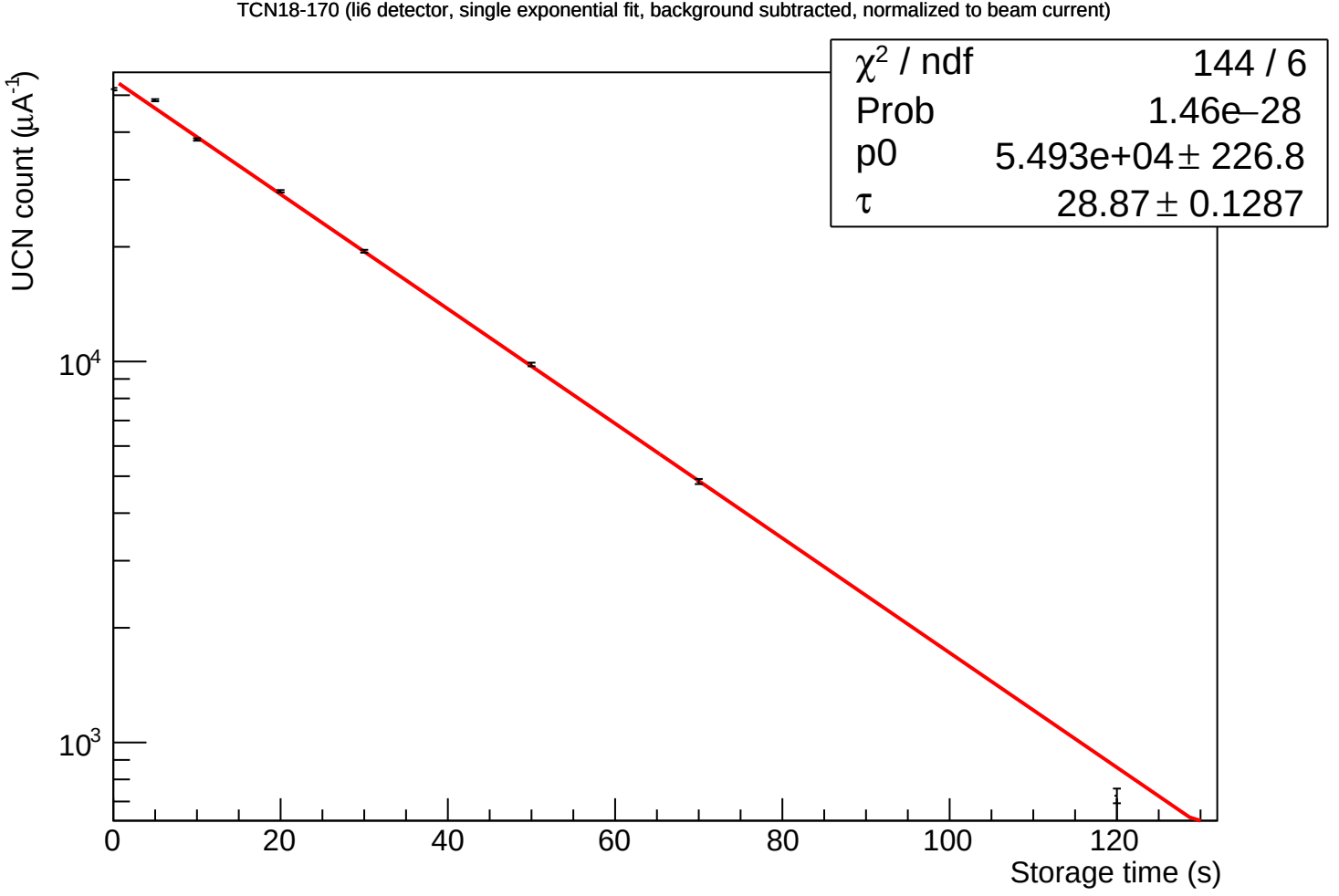
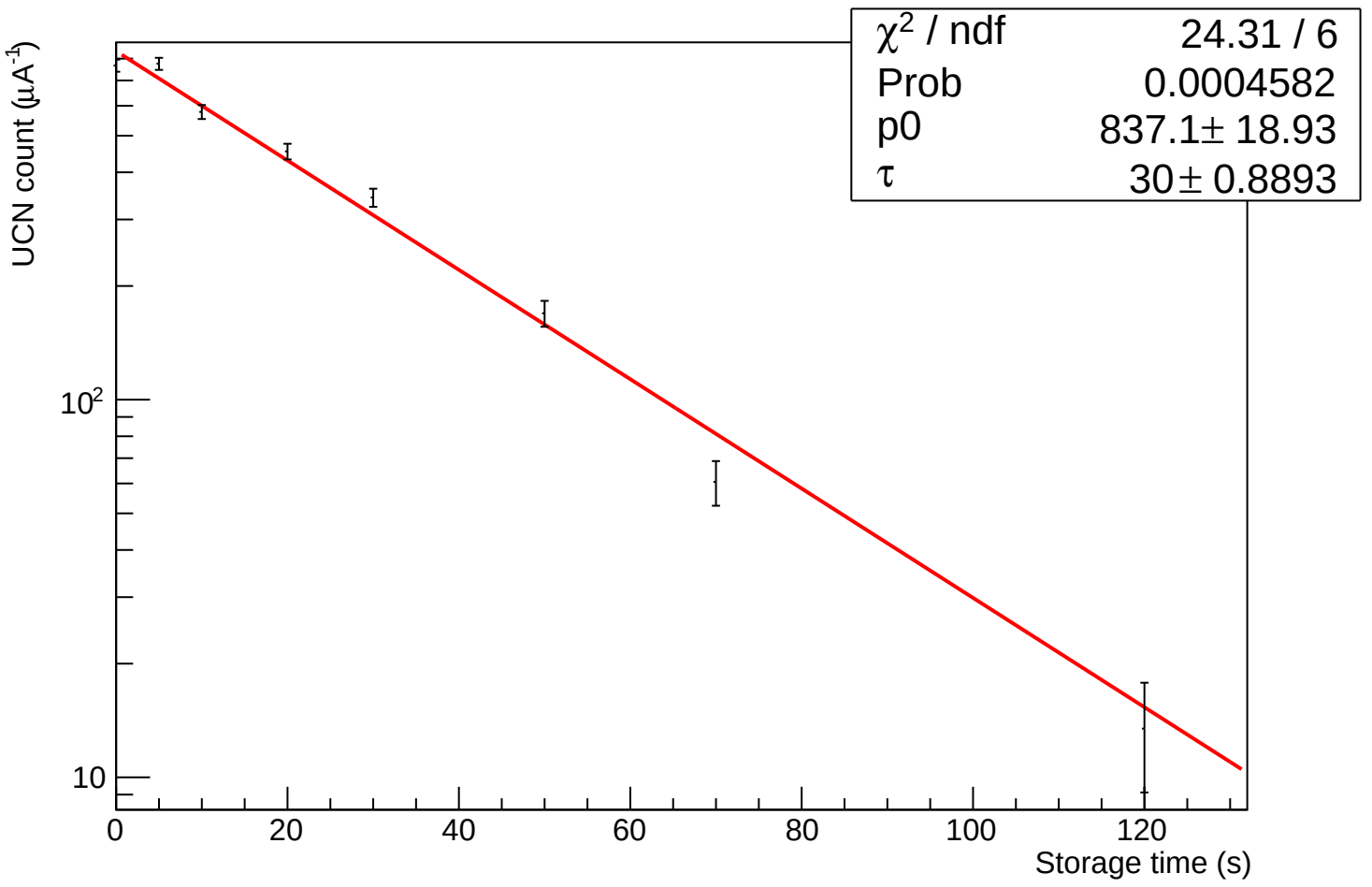
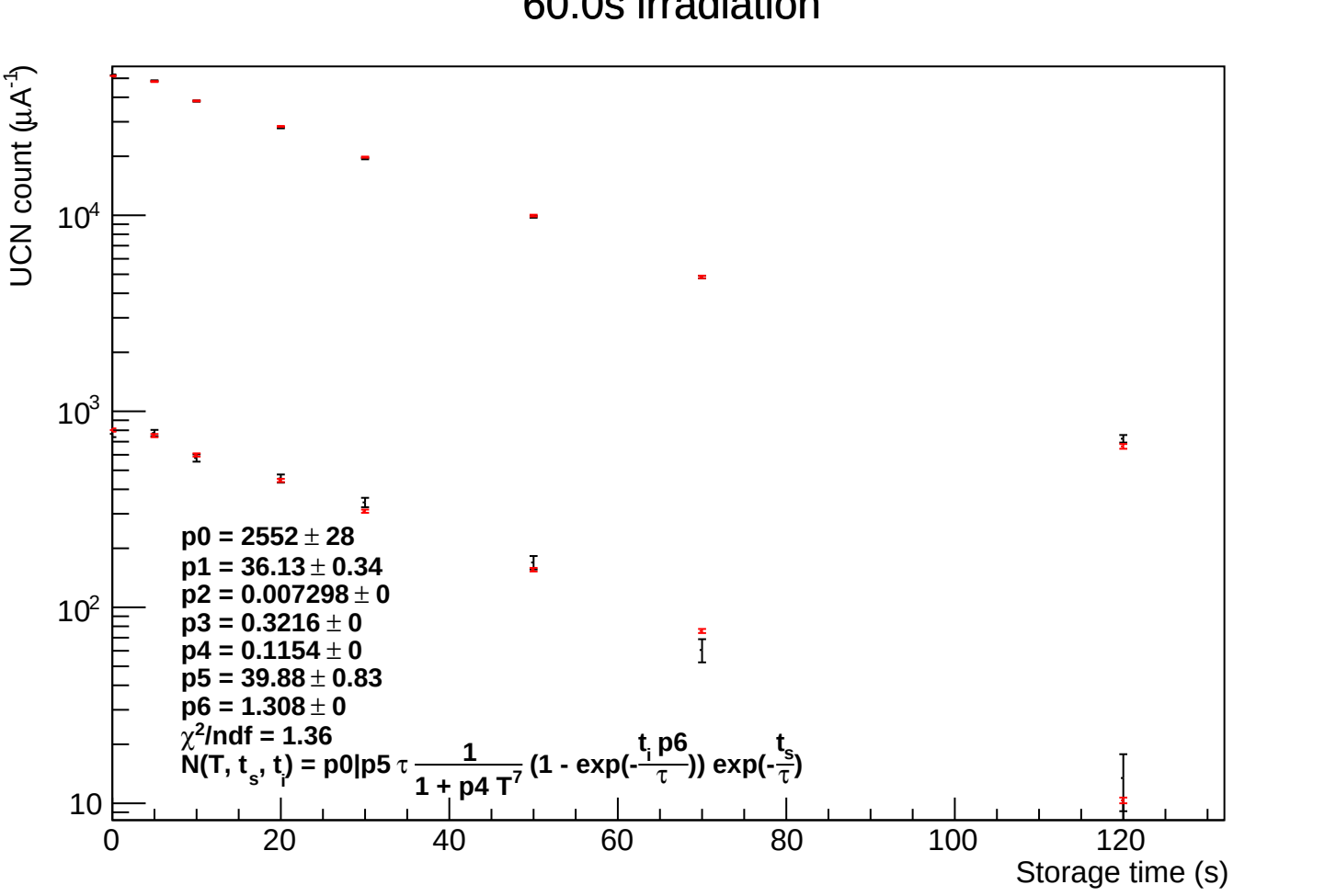
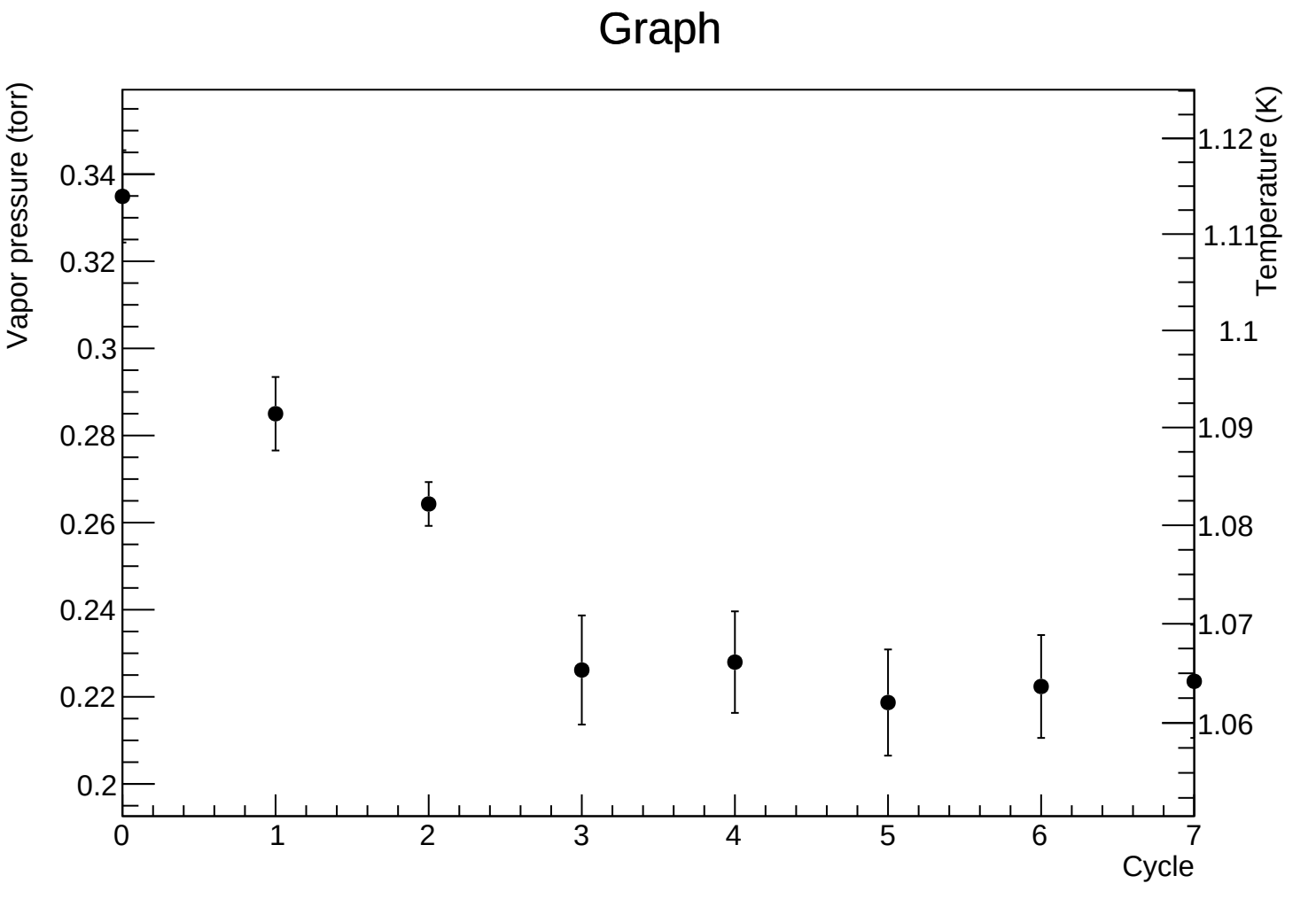
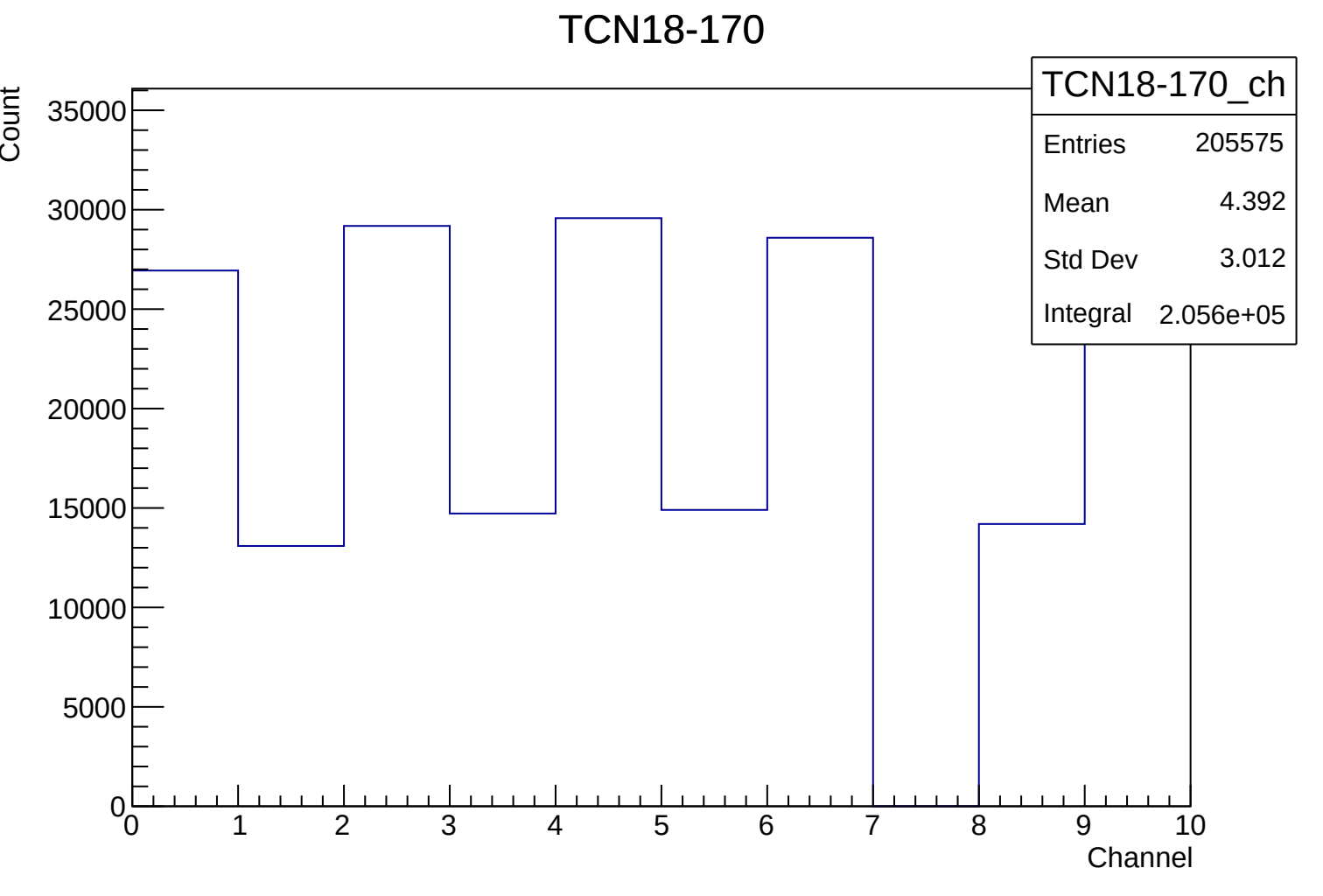

TCN18-170 (li6 detector, single exponential fit, background subtracted, normalized to beam current)
χ² / ndf 144 / 6
Prob 1.46e–28
p0 5.493e+04 ± 226.8
τ 28.87 ± 0.1287
UCN count (μA⁻¹)
10⁴
10³
0
20
40
60
80
100
120
Storage time (s)


TCN18-170 (he3 detector, single exponential fit, background subtracted, normalized to beam current)
χ2 / ndf 24.31 / 6
Prob 0.0004582
p0 837.1± 18.93
τ 30± 0.8893
UCN count (μA-1)
10
10^2
0
20
40
60
80
100
120
Storage time (s)


60.0s irradiation
UCN count (μA-1)
Storage time (s)
p0 = 2552 ± 28
p1 = 36.13 ± 0.34
p2 = 0.007298 ± 0
p3 = 0.3216 ± 0
p4 = 0.1154 ± 0
p5 = 39.88 ± 0.83
p6 = 1.308 ± 0
χ2/ndf = 1.36
N(T, ts, ti) = p0|p5 τ 1/(1 + p4 T7) (1 - exp(-ti p6/τ)) exp(-ts/τ)


Graph
Vapor pressure (torr)
0.34
0.32
0.3
0.28
0.26
0.24
0.22
0.2
Temperature (K)
1.12
1.11
1.1
1.09
1.08
1.07
1.06
0
1
2
3
4
5
6
7
Cycle


TCN18-170
TCN18-170_ch
Entries 205575
Mean 4.392
Std Dev 3.012
Integral 2.056e+05
Count
35000
30000
25000
20000
15000
10000
5000
0
0 1 2 3 4 5 6 7 8 9 10
Channel