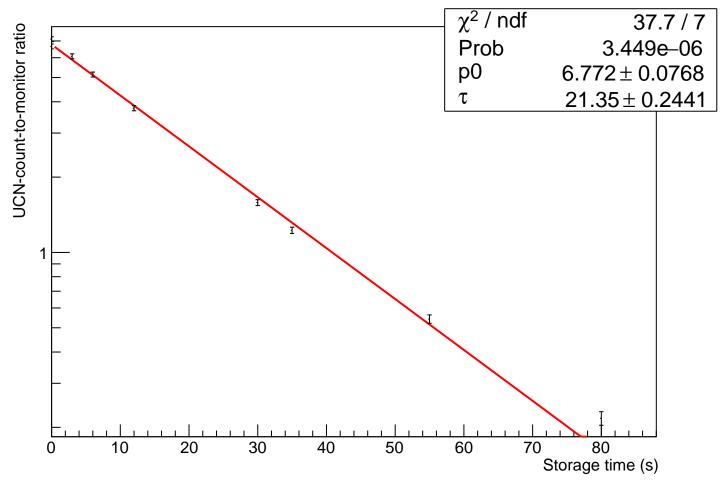
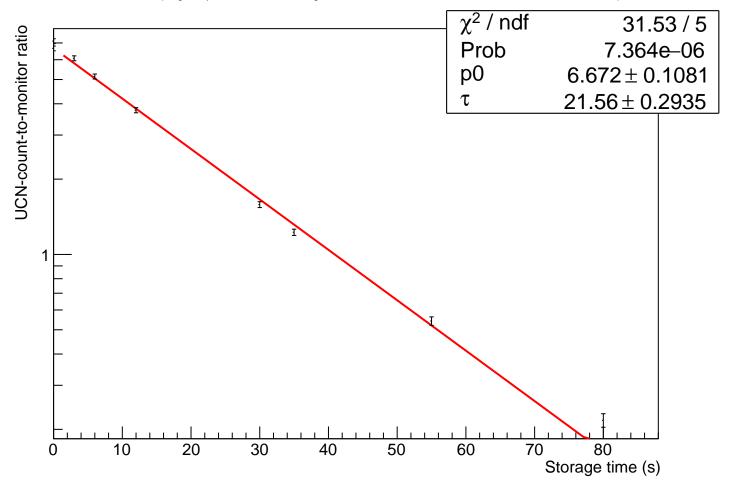
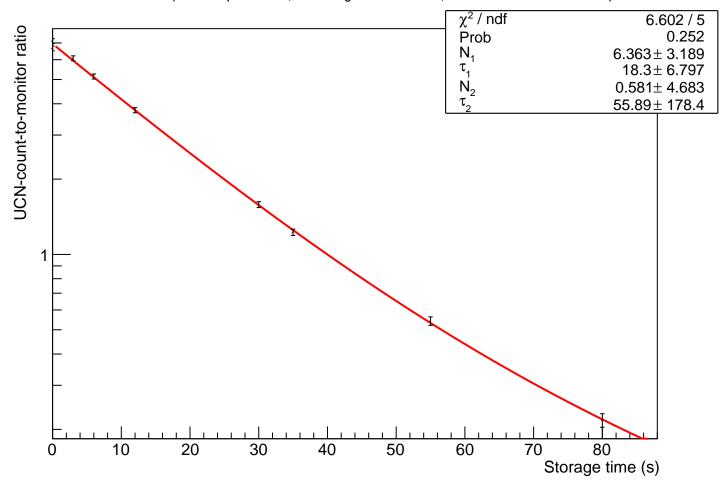
TCN18-062 (single exponential fit, with background subtracted, normalized to monitor detector)





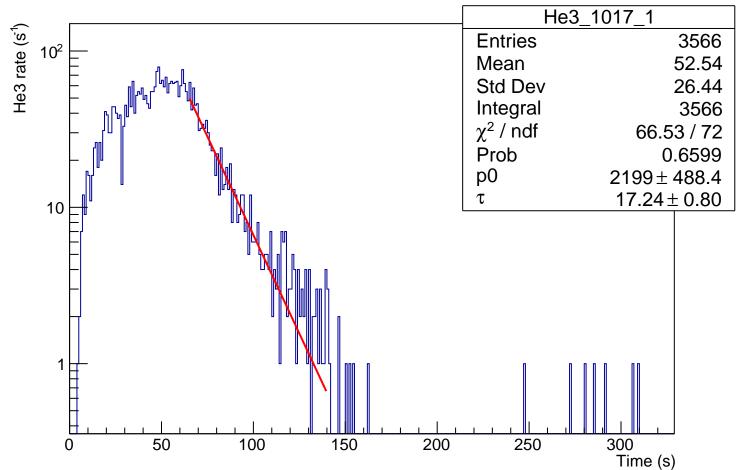
TCN18-062 (double exponential fit, with background subtracted, normalized to monitor detector)



TCN18-062 (single exponential fit + background, unnormalized) χ^2 / ndf 12.53 / 6 **UCN** count Prob 0.05109 p0 1.565e+04± 71.4 19.49 ± 0.2252 10^{4} Background 505.9 ± 33.4 10³ 80 10 20 30 40 50 60 70

Storage time (s)

He3 detector rate



He3 detector rate He3_1017_3 He3 rate (\bar{s}^1) **Entries** 3511 10^{2} Mean 53.31 Std Dev 25.29 Integral 3511 χ^2 / ndf 74.78 / 48 Prob 0.007968 p0 2247 ± 529.9 17.14 ± 0.86 10 250

150

200

300

Time (s)

50

100

He3 detector rate He3_1017_5 He3 rate (\bar{s}^1) **Entries** 3401 10^{2} Mean 50.8 Std Dev 22.32 Integral 3401 χ^2 / ndf 32.74 / 28 Prob 0.2456 p0 2017 ± 812.2 17.28 ± 1.58 10 150 200 50 100 250 300

Time (s)

He3 detector rate He3_1017_7 He3 rate (s¹) **Entries** 3440 10^{2} Mean 50.17 Std Dev 21.92 Integral 3440 χ^2 / ndf 20.18 / 23 Prob 0.6309 p0 1825 ± 786.9 17.86 ± 1.83 10 50 100 150 200 250 300

Time (s)

Average lifetime from He3 data:

 τ = 17.2578059405 +/- 0.0775626748902 s