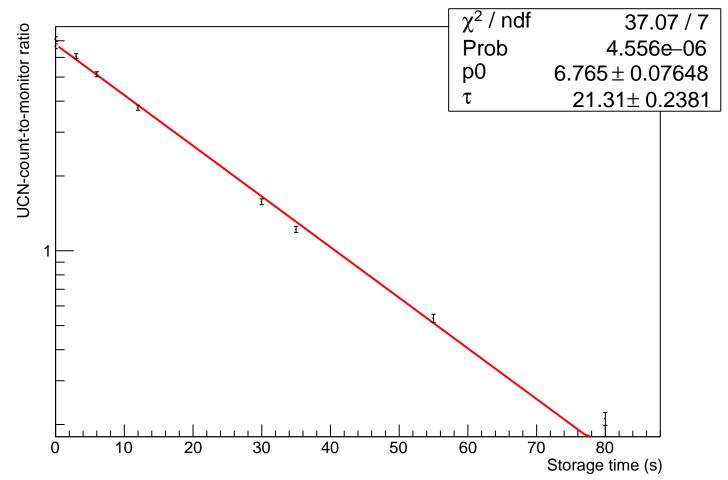
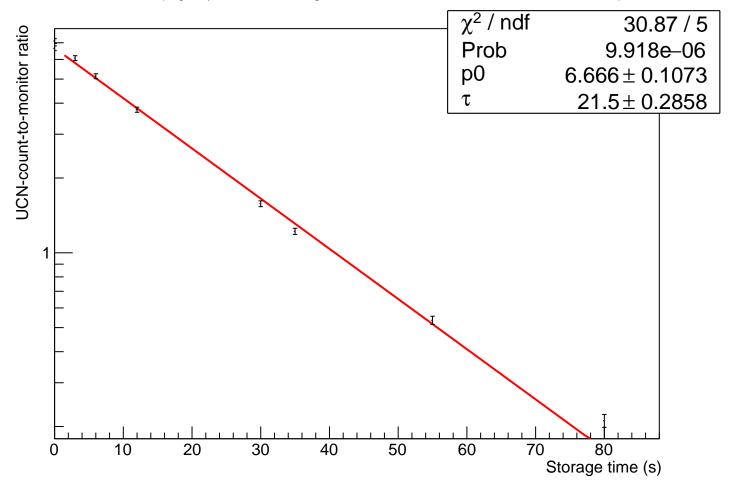
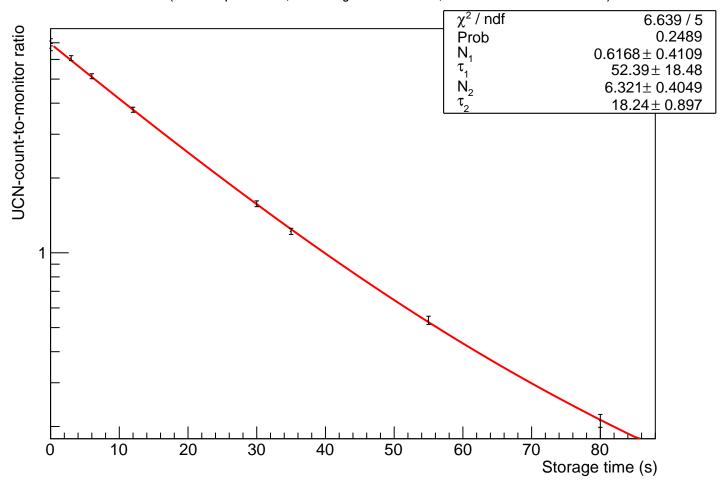
TCN18-062 (single exponential fit, with background subtracted, normalized to monitor detector)





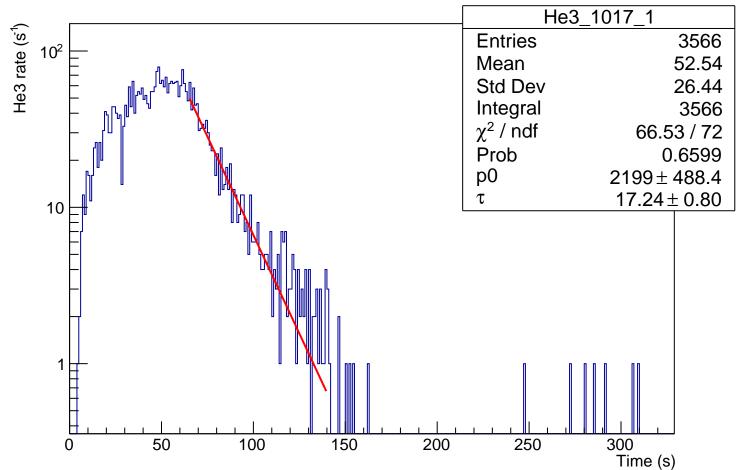
TCN18-062 (double exponential fit, with background subtracted, normalized to monitor detector)



TCN18-062 (single exponential fit + background, unnormalized)  $\chi^2$  / ndf 12.53 / 6 **UCN** count Prob 0.05109 p0 1.565e+04± 71.4  $19.49 \pm 0.2252$  $10^{4}$ Background  $505.9 \pm 33.4$ 10<sup>3</sup> 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  $\chi^2$  / ndf 74.78 / 48 Prob 0.007968 p0  $2247 \pm 529.9$  $17.14 \pm 0.86$ 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  $\chi^2$  / ndf 32.74 / 28 Prob 0.2456 p0  $2017 \pm 812.2$  $17.28 \pm 1.58$ 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  $\chi^2$  / ndf 20.18 / 23 Prob 0.6309 p0  $1825 \pm 786.9$  $17.86 \pm 1.83$ 10 50 100 150 200 250 300

Time (s)

## Average lifetime from He3 data:

 $\tau$  = 17.2578059405 +/- 0.0775626748902 s