

TCN18-050 (single exponential fit, with background subtracted, normalized to monitor detector)

UCN-count-to-monitor ratio

χ^2 / ndf

36.2 / 7

Prob

6.643e-06

p0

13.16 ± 0.1268

τ

27.93 ± 0.2349

10

1

0

20

40

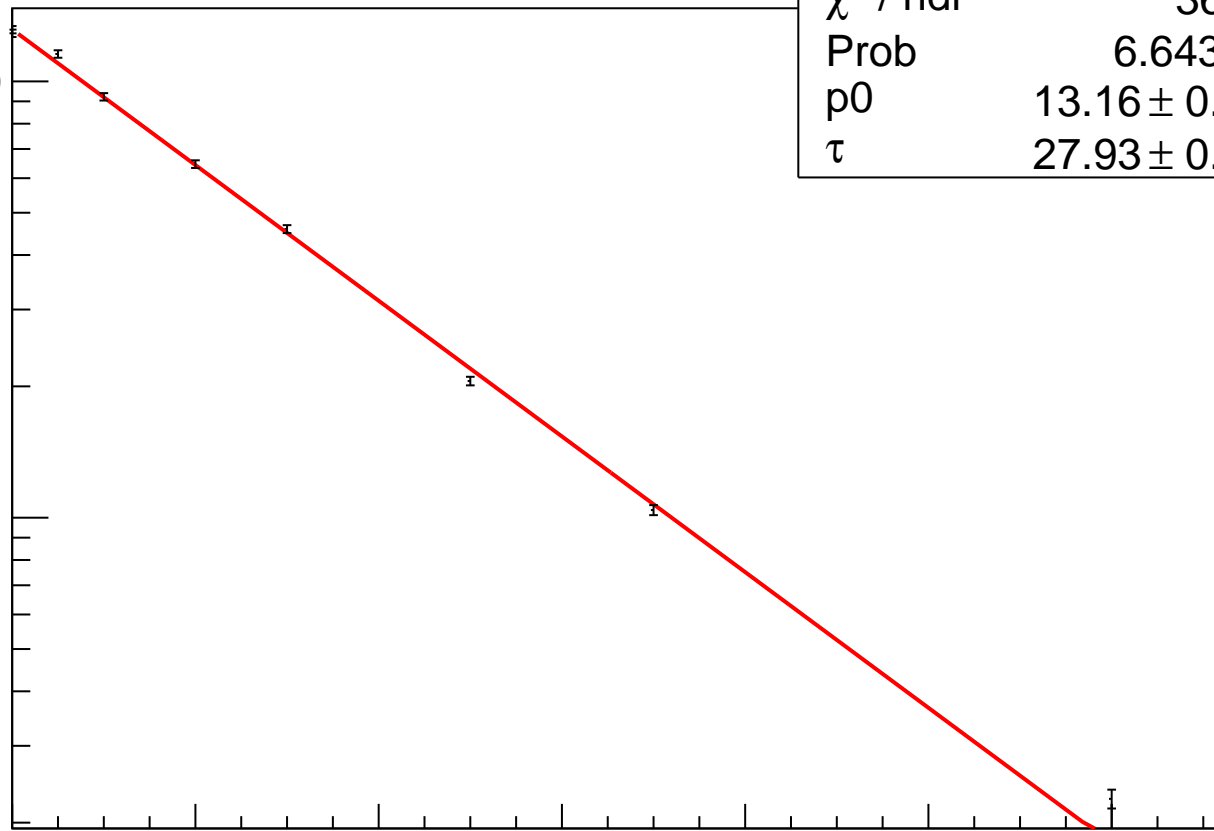
60

80

100

120

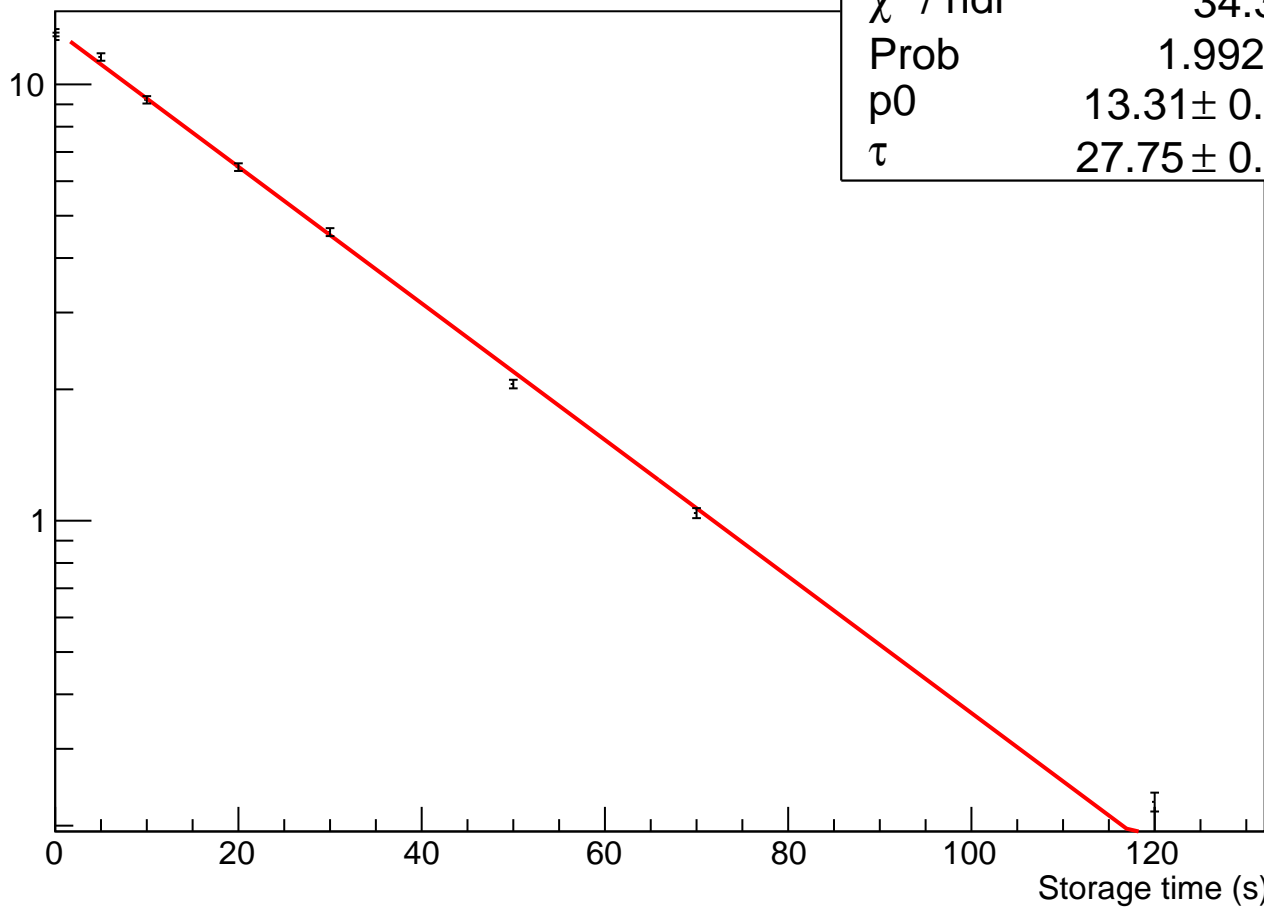
Storage time (s)



TCN18-050 (single exponential fit, with background subtracted, normalized to monitor detector, 0s excluded)

UCN-count-to-monitor ratio

χ^2 / ndf	34.39 / 5
Prob	1.992e-06
p0	13.31 ± 0.1816
τ	27.75 ± 0.2803



TCN18-050 (double exponential fit, with background subtracted, normalized to monitor detector)

UCN-count-to-monitor ratio

10

1

0

20

40

60

80

100

120

Storage time (s)

χ^2 / ndf

14.65 / 5

Prob

0.01196

N_1

0.0735 ± 0.01547

τ_1

$9.99\text{e}+05 \pm 6.937\text{e}+05$

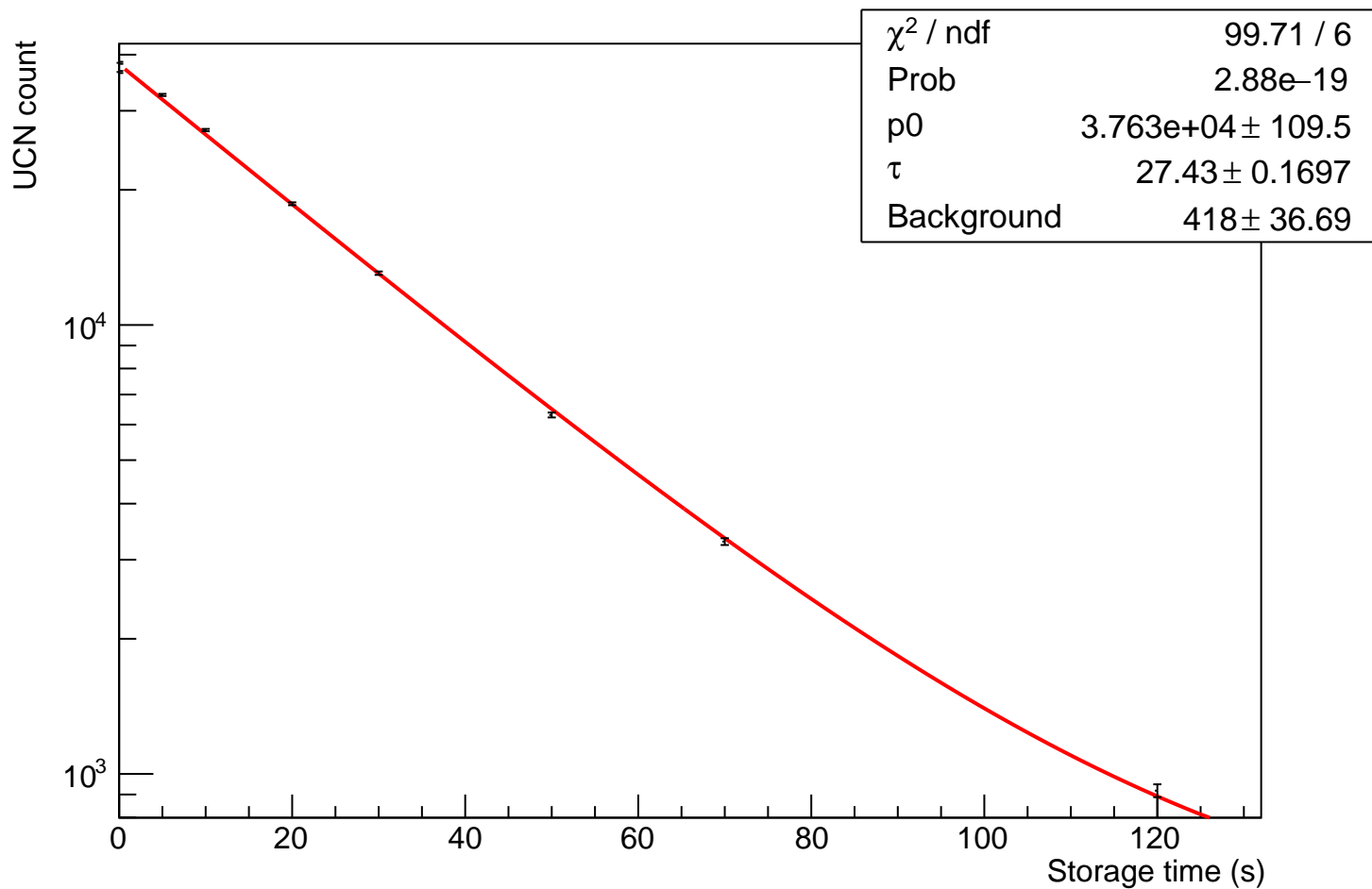
N_2

13.28 ± 0.13

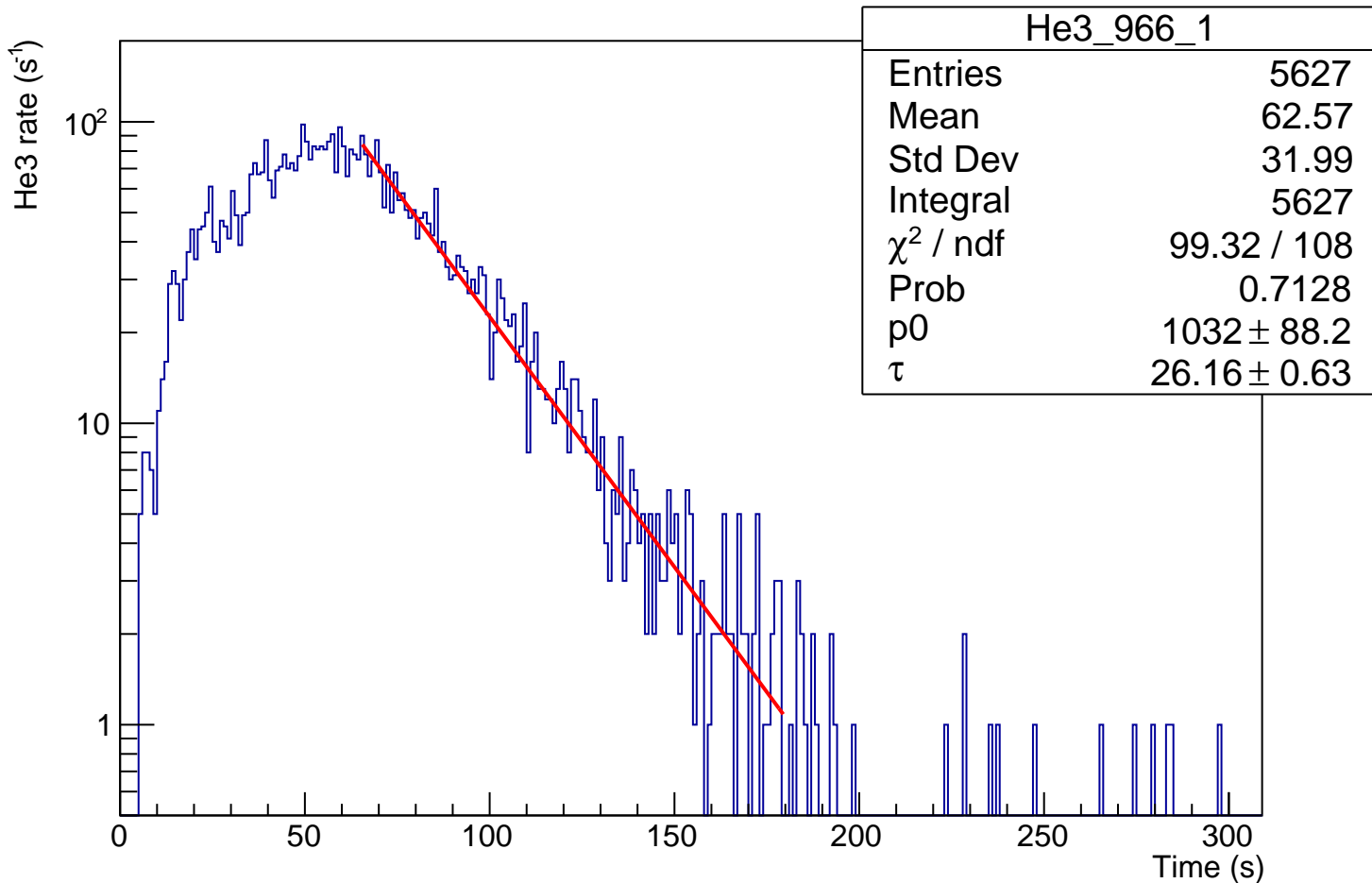
τ_2

26.8 ± 0.3234

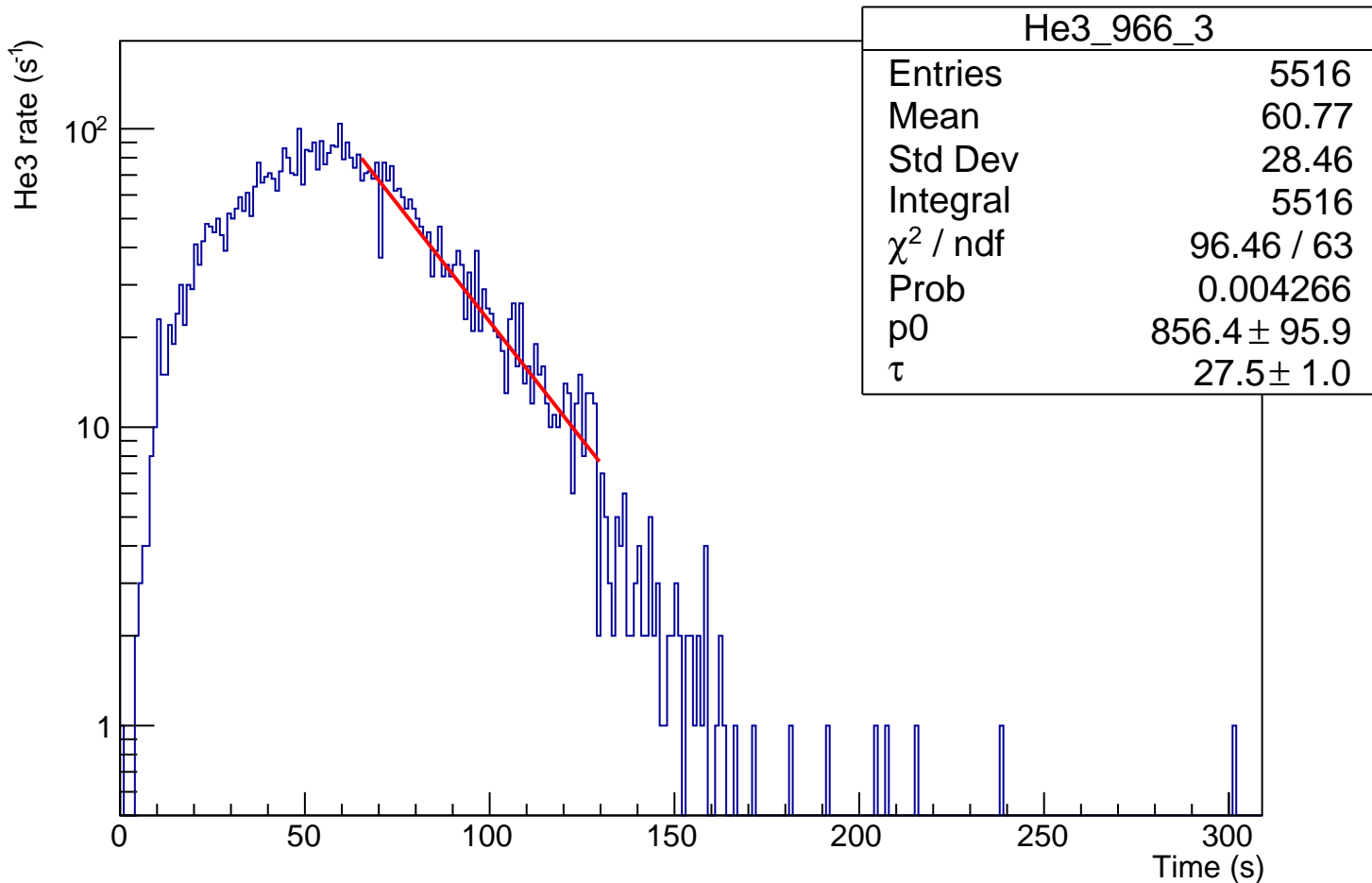
TCN18-050 (single exponential fit + background, unnormalized)



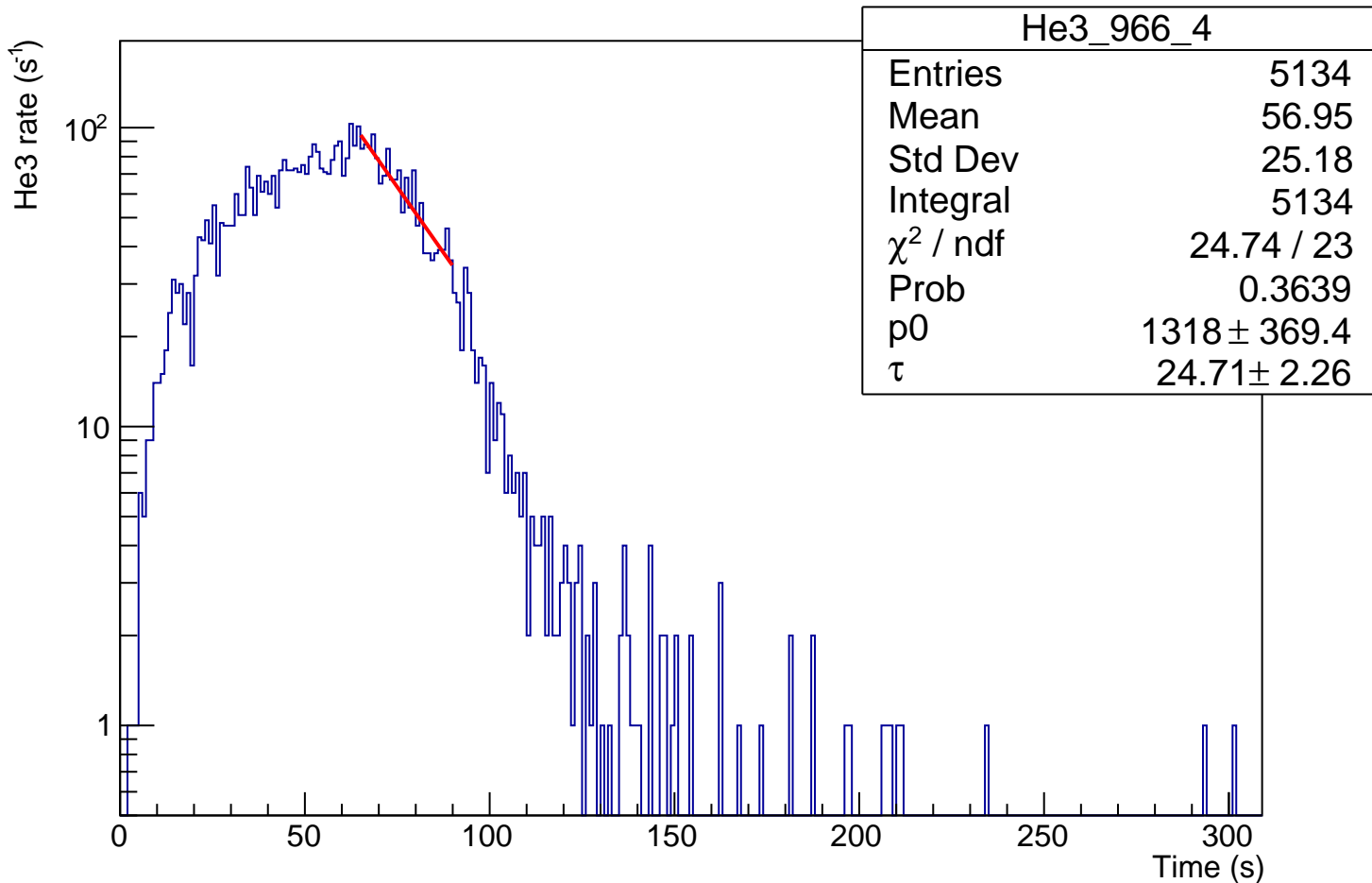
He3 detector rate



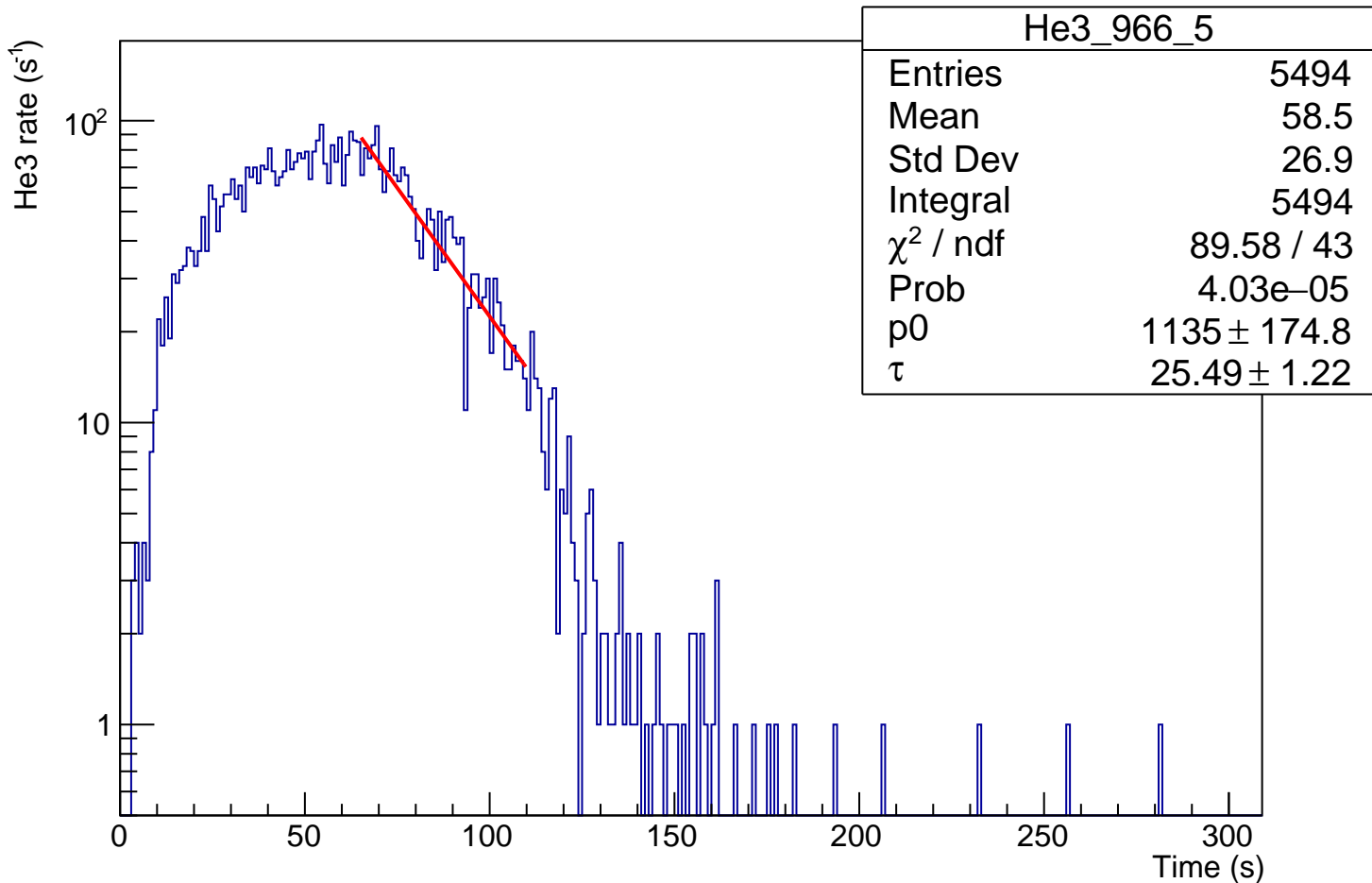
He3 detector rate



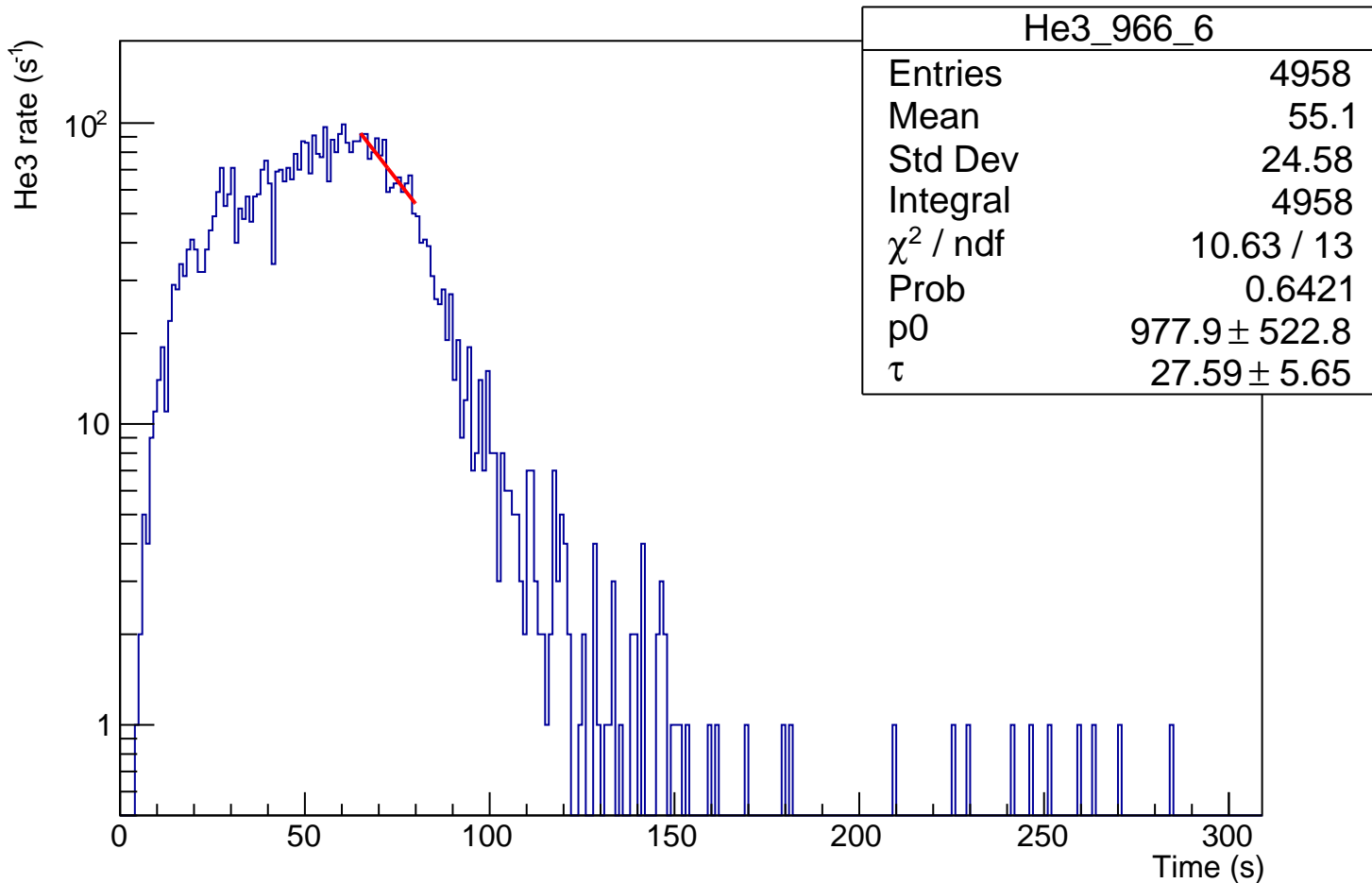
He3 detector rate



He3 detector rate



He3 detector rate



Average lifetime from He3 data:

$$\tau = 26.3263801392 \pm 0.050256266 \text{ s}$$