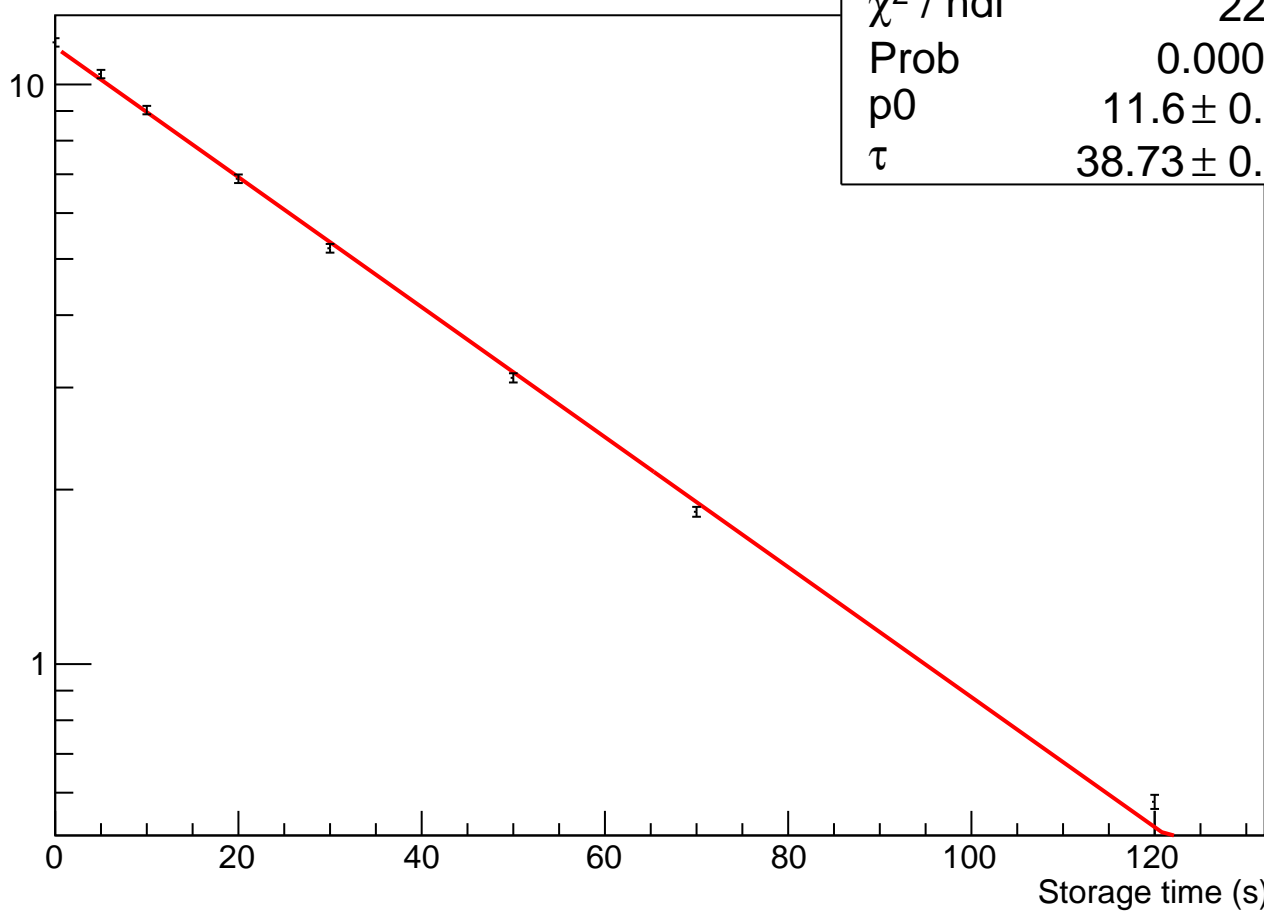


TCN18-042 (single exponential fit, with background subtracted, normalized to monitor detector)

UCN-count-to-monitor ratio

| | |
|-----------------------|--------------------|
| χ^2 / ndf | 22.6 / 6 |
| Prob | 0.0009433 |
| p0 | 11.6 ± 0.1052 |
| τ | 38.73 ± 0.3328 |



UCN-count-to-monitor ratio

| | |
|-----------------------|--------------------|
| χ^2 / ndf | 20.83 / 5 |
| Prob | 0.0008736 |
| p0 | 11.51 ± 0.1236 |
| τ | 38.93 ± 0.3662 |

10

1

0

20

40

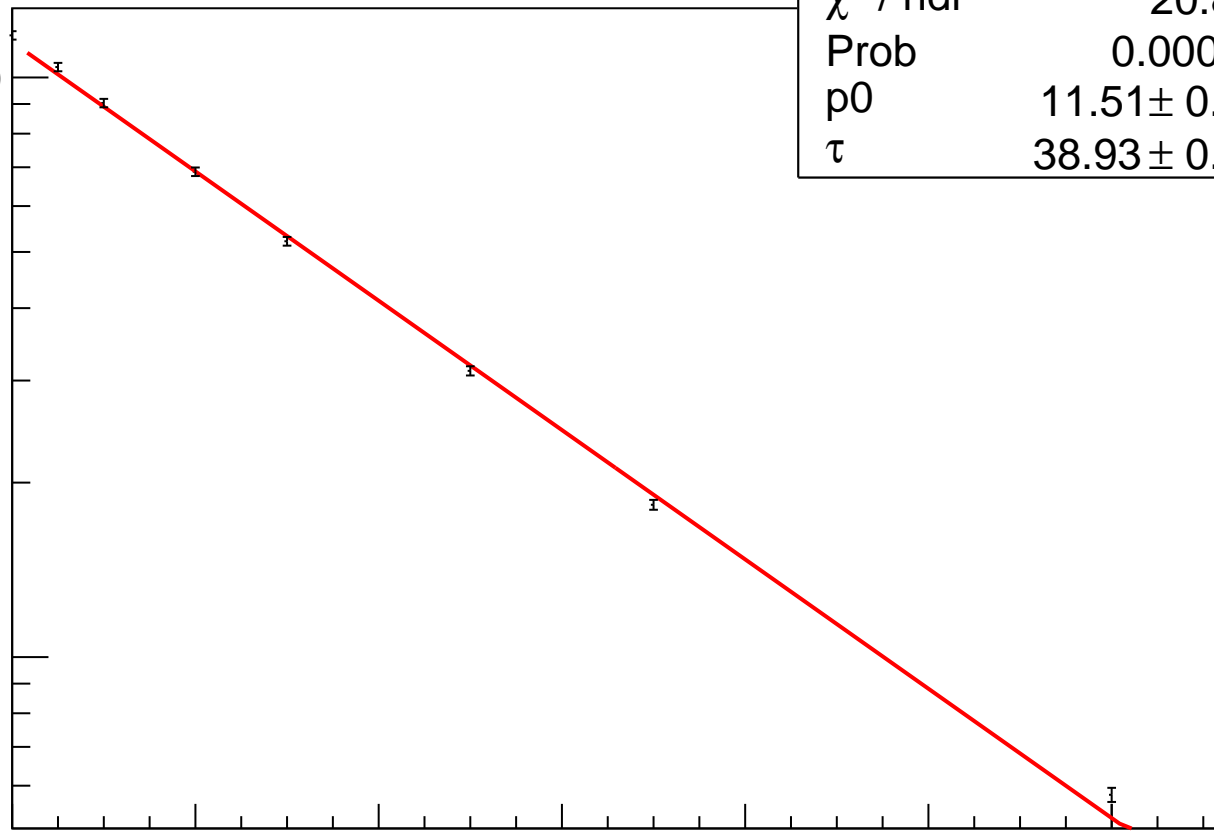
60

80

100

120

Storage time (s)



TCN18-042 (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

0.7762 / 4

Prob

0.9416

N_1

11.71 ± 0.1105

τ_1

36.08 ± 0.6109

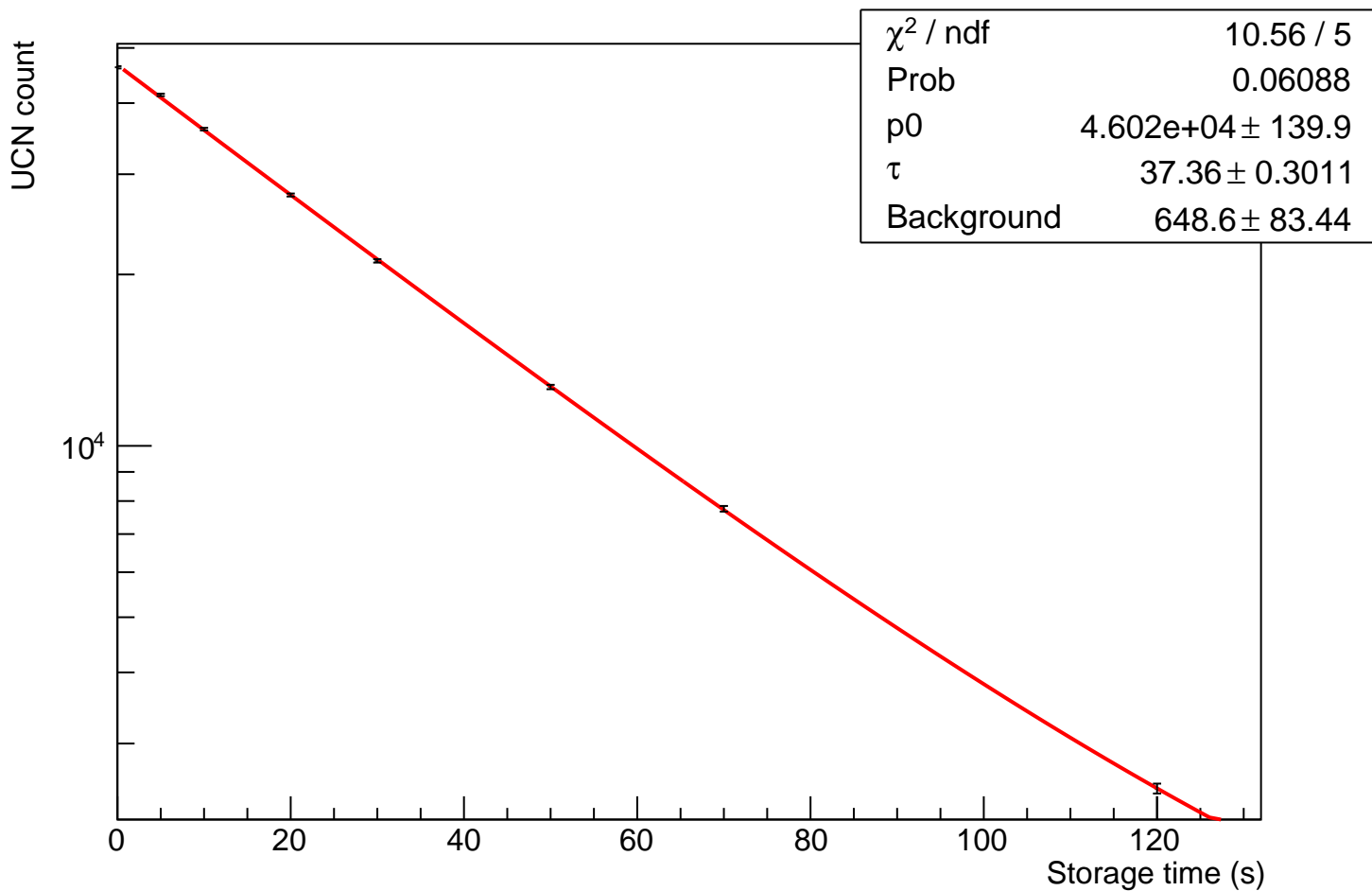
N_2

0.1575 ± 0.03342

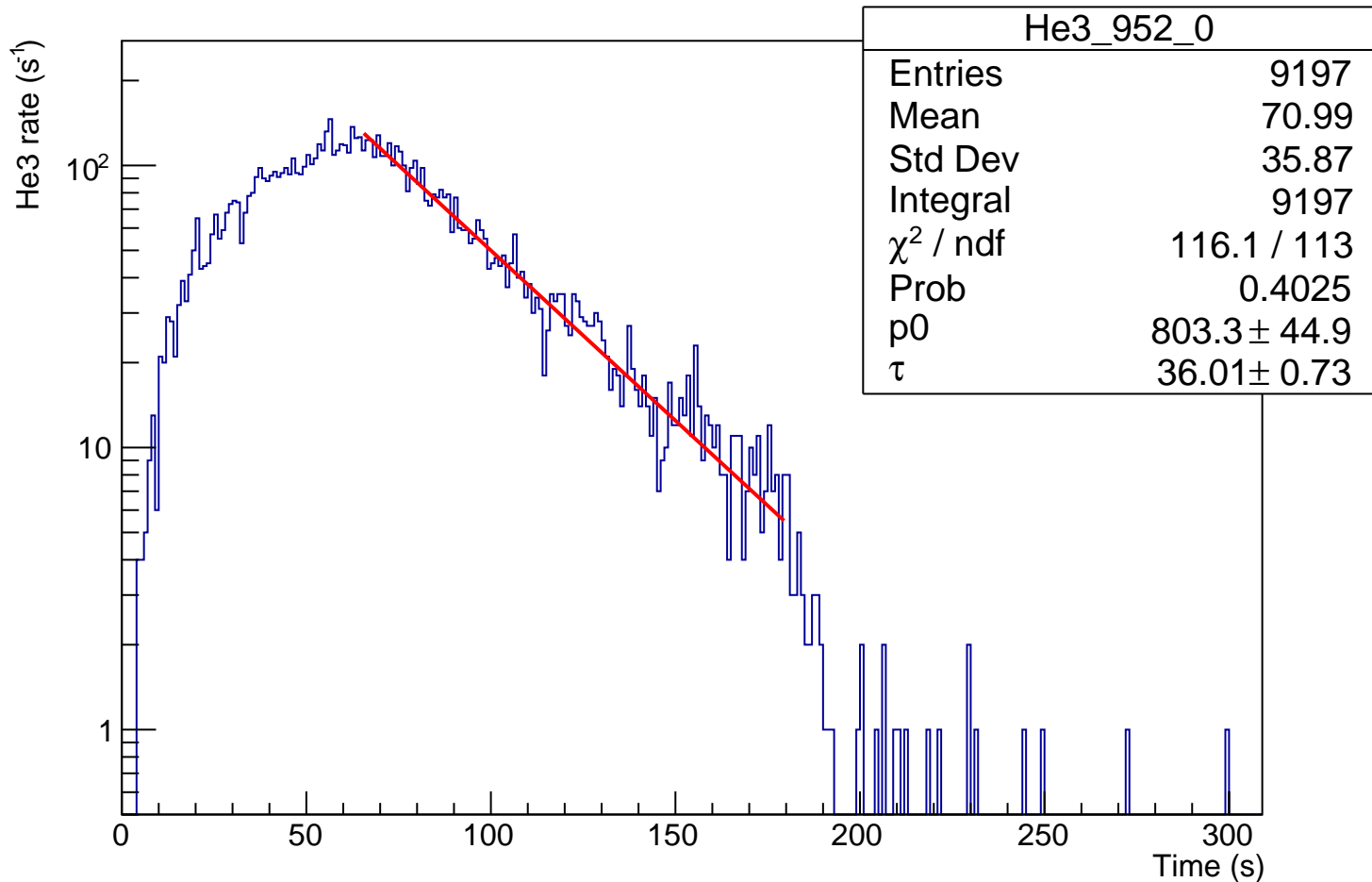
τ_2

$6.282\text{e}+05 \pm 5.532\text{e}+05$

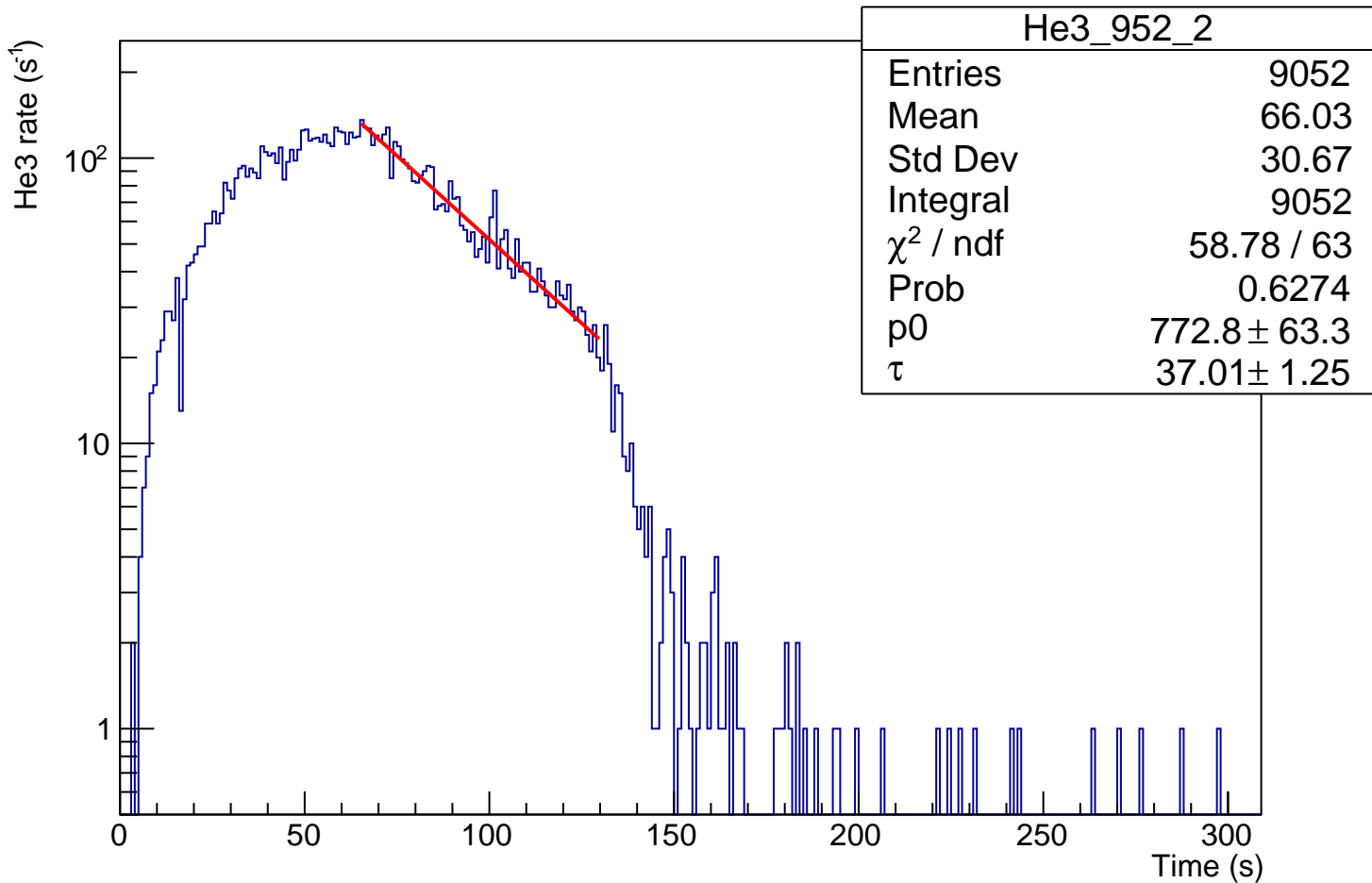
TCN18-042 (single exponential fit + background, unnormalized)



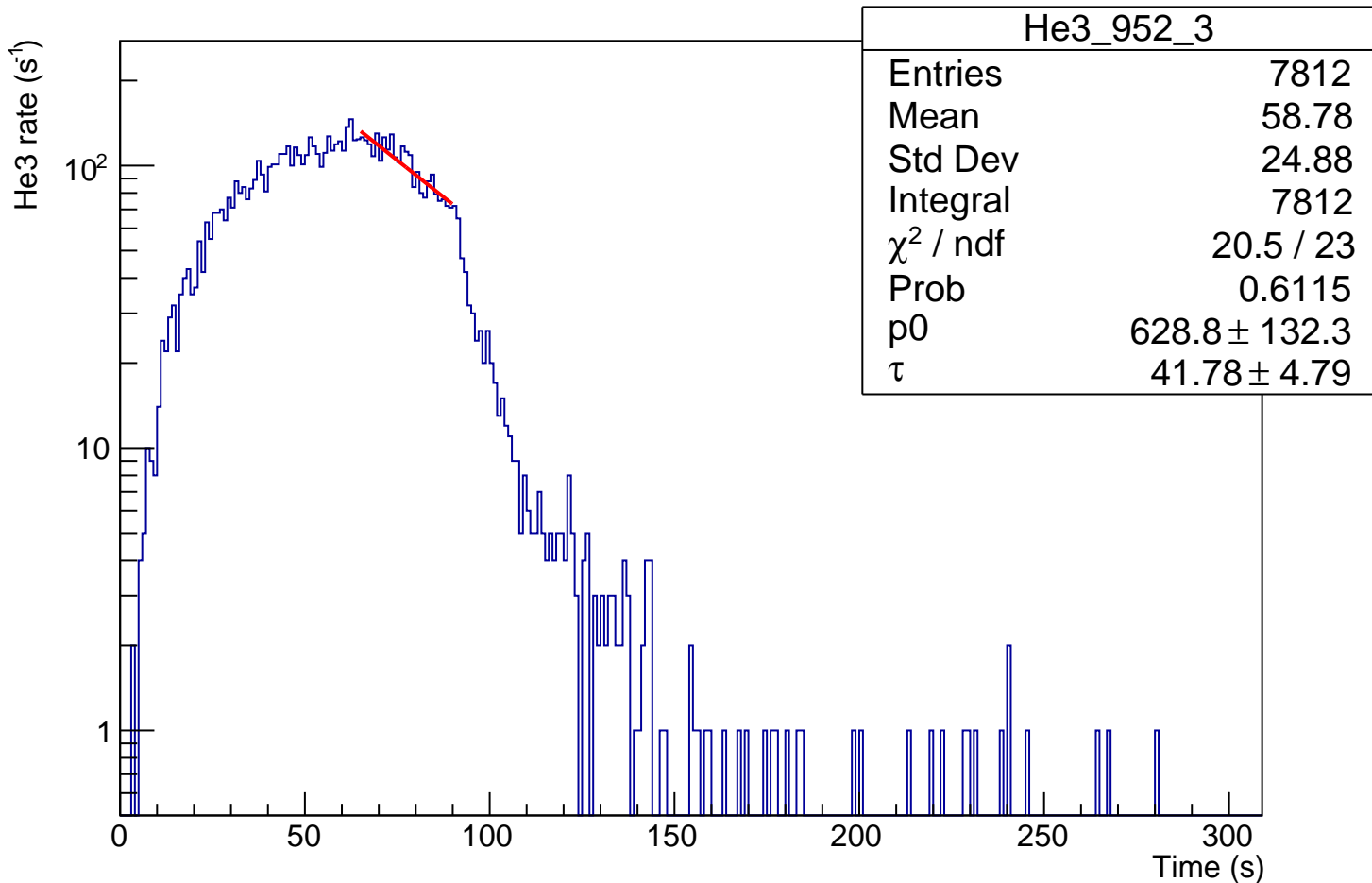
He3 detector rate



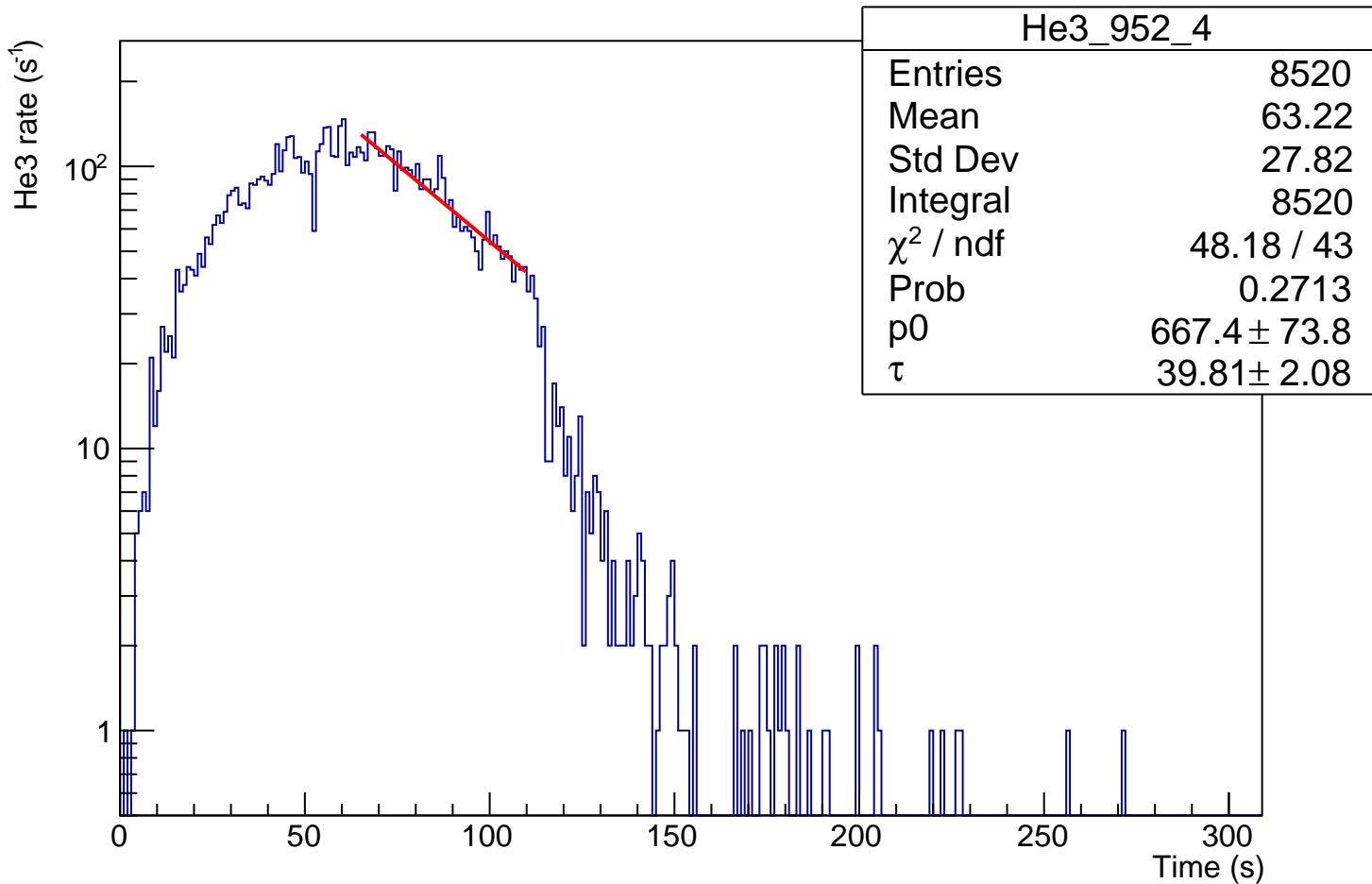
He3 detector rate



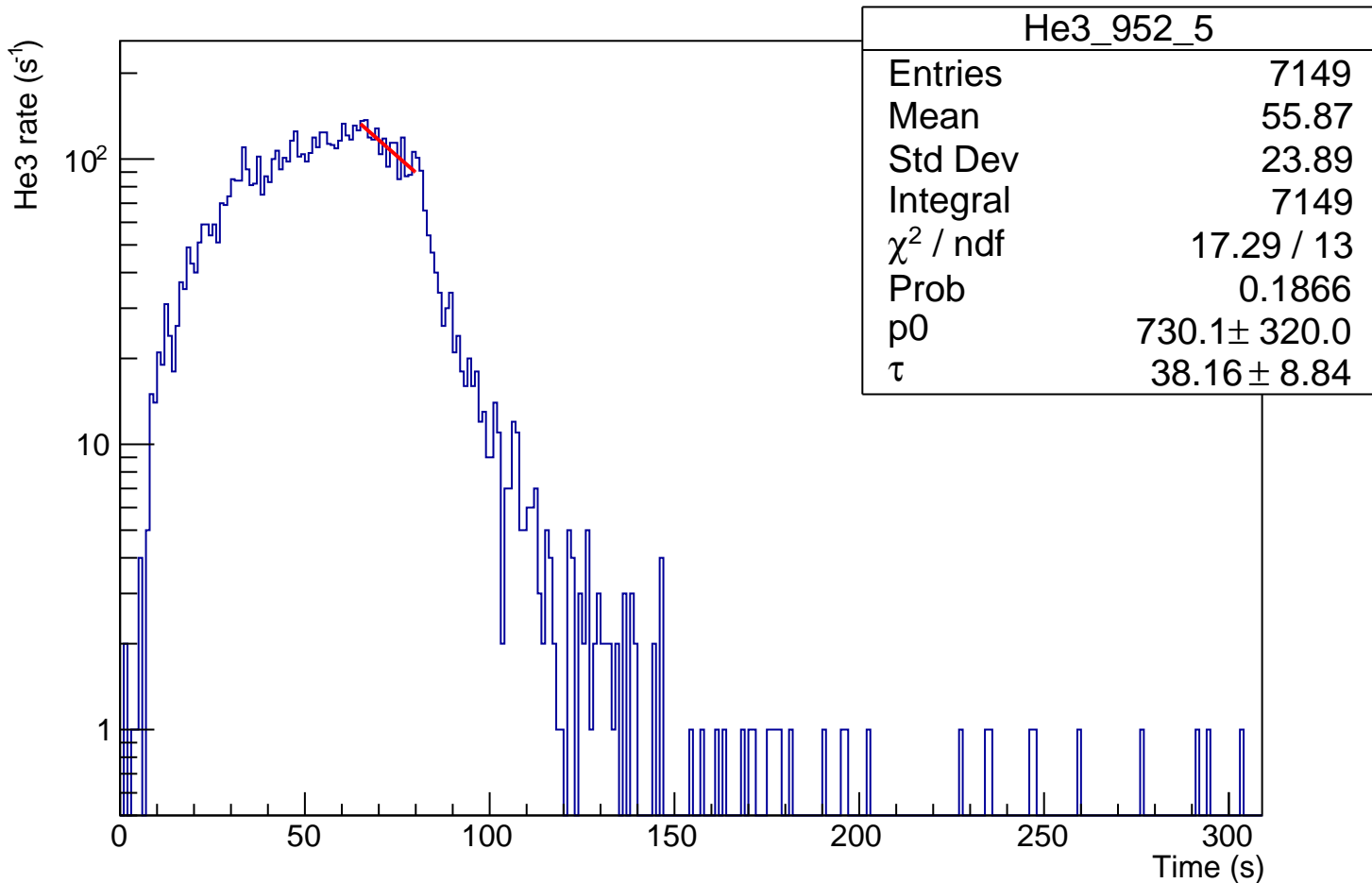
He3 detector rate



He3 detector rate



He3 detector rate



Average lifetime from He3 data:

$$\tau = 36.6455786802 \pm 0.125395152081 \text{ s}$$