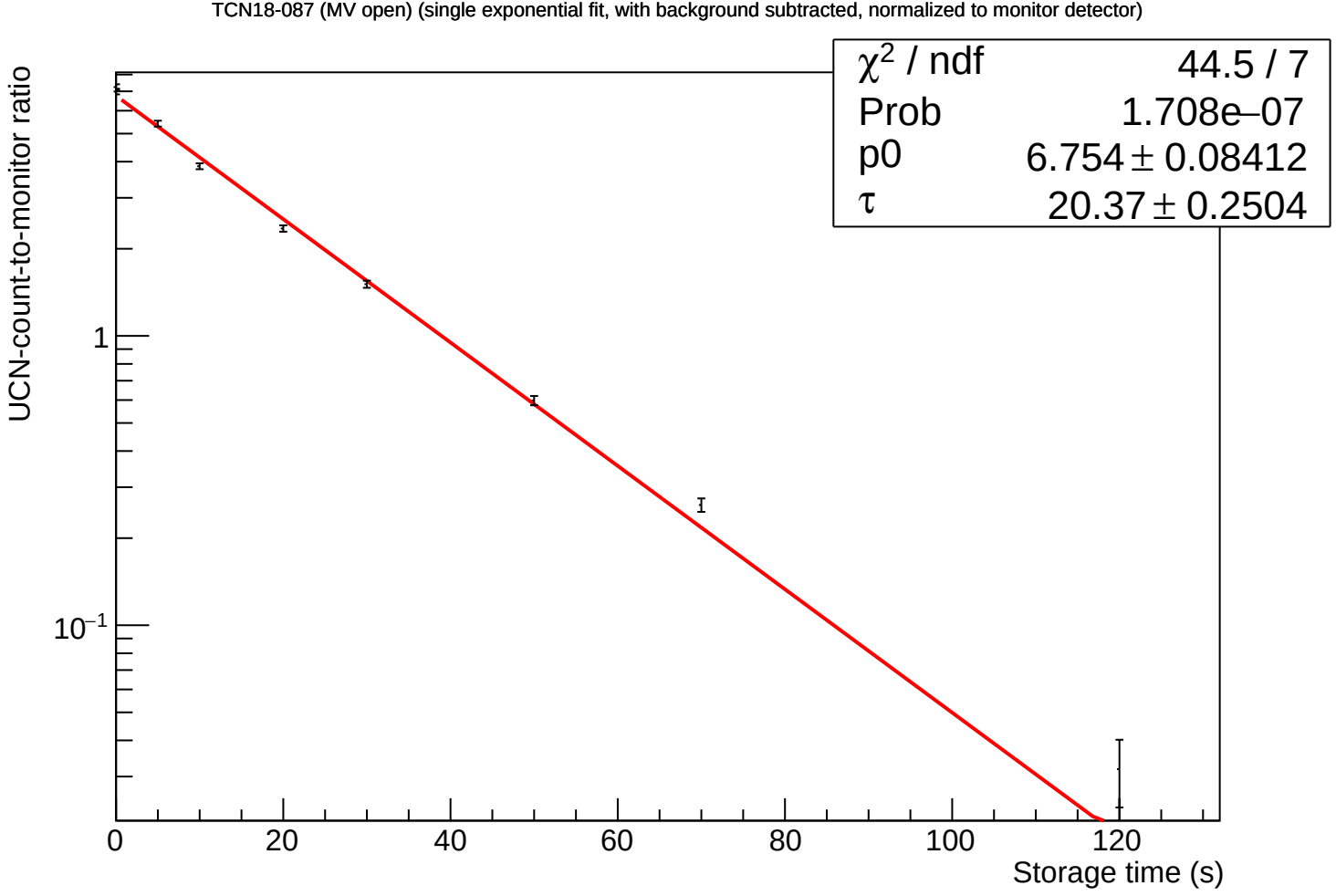
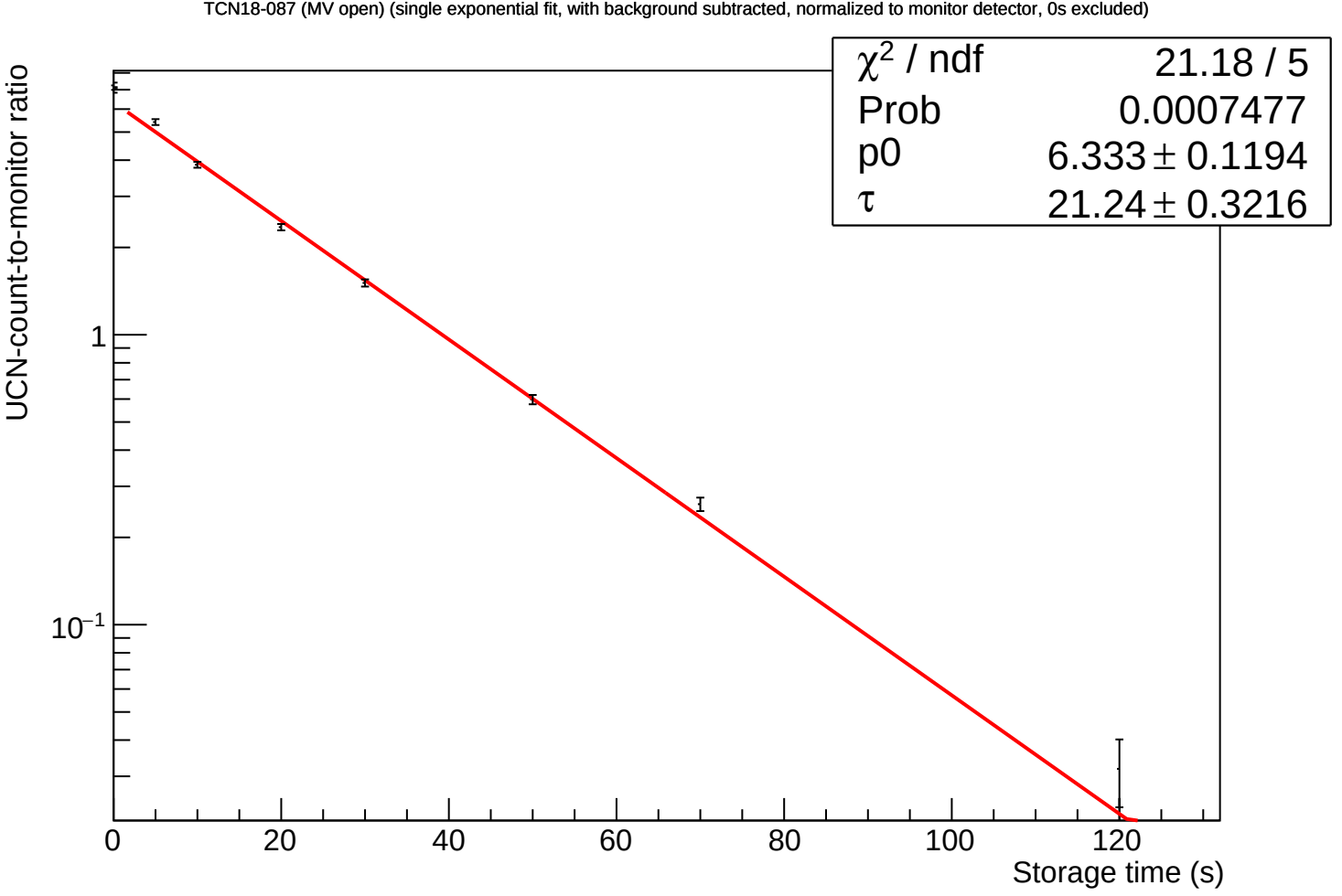
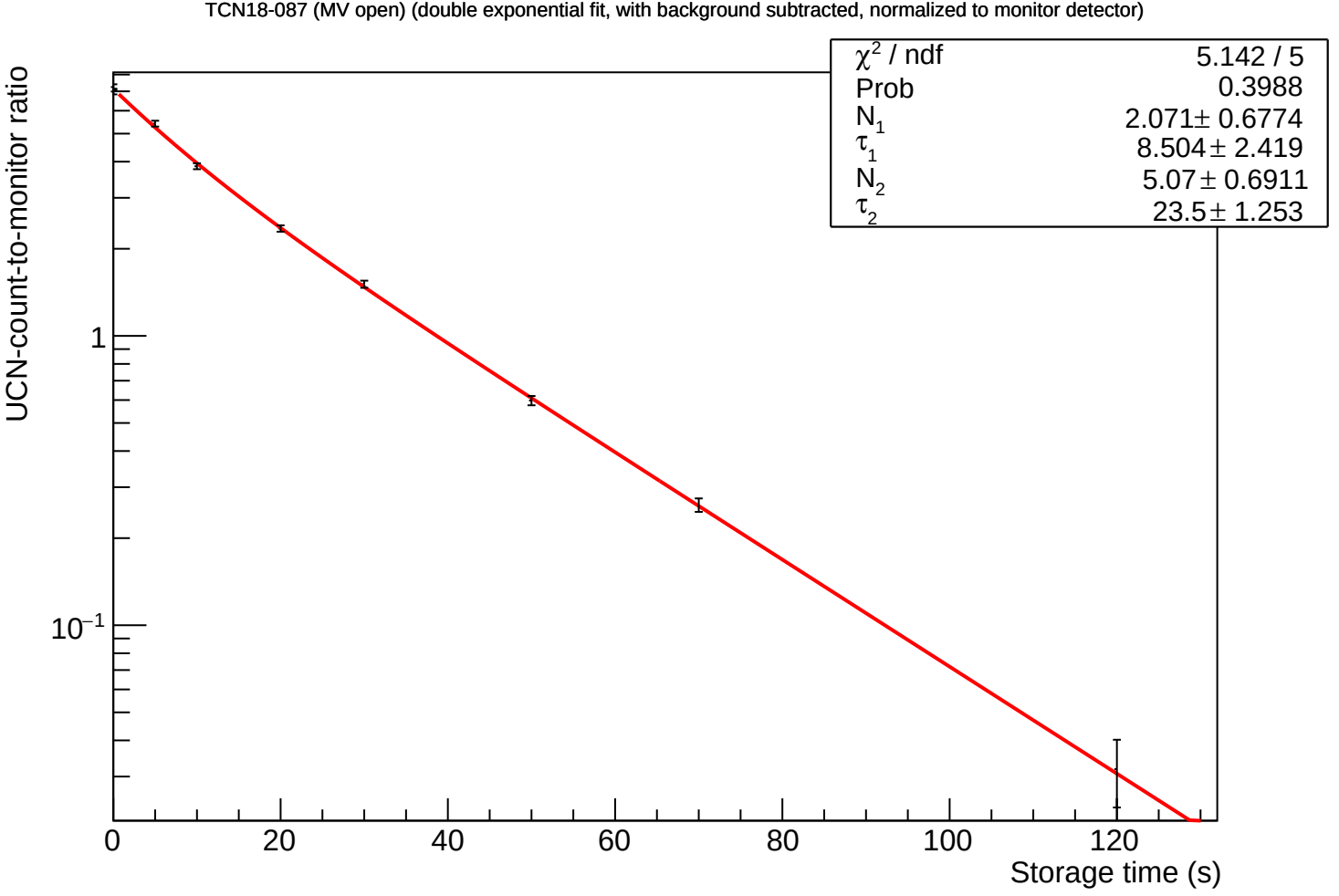
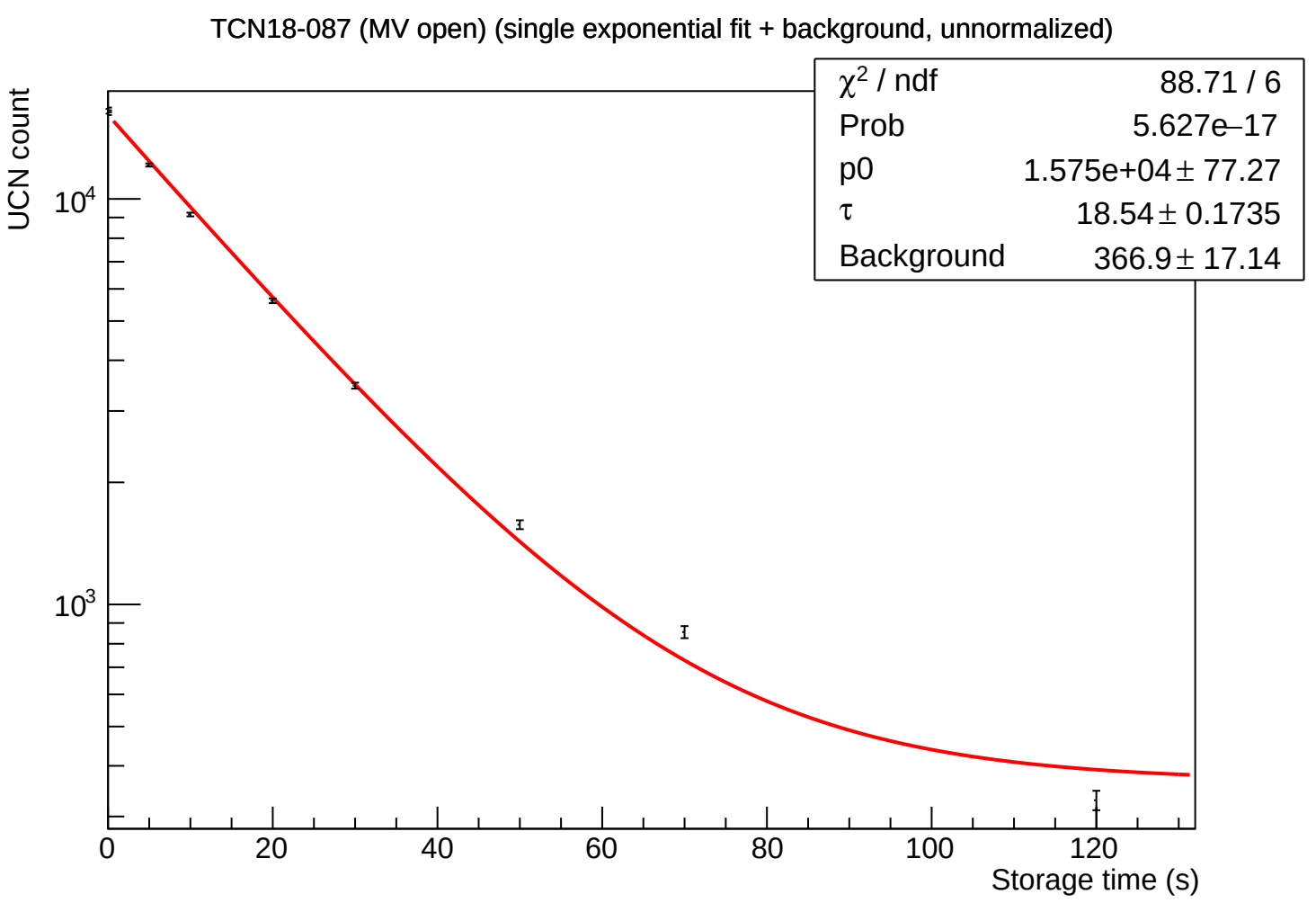
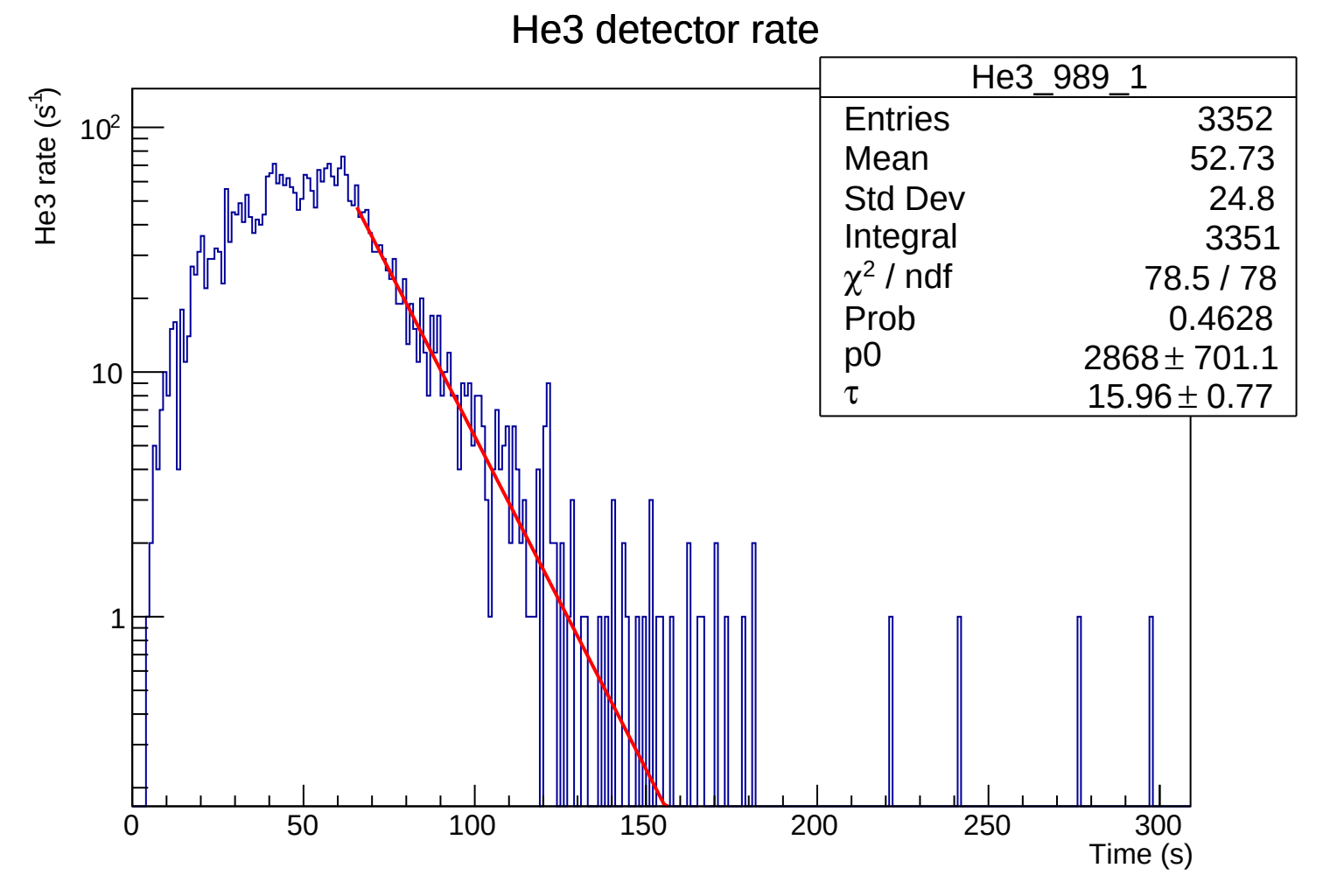
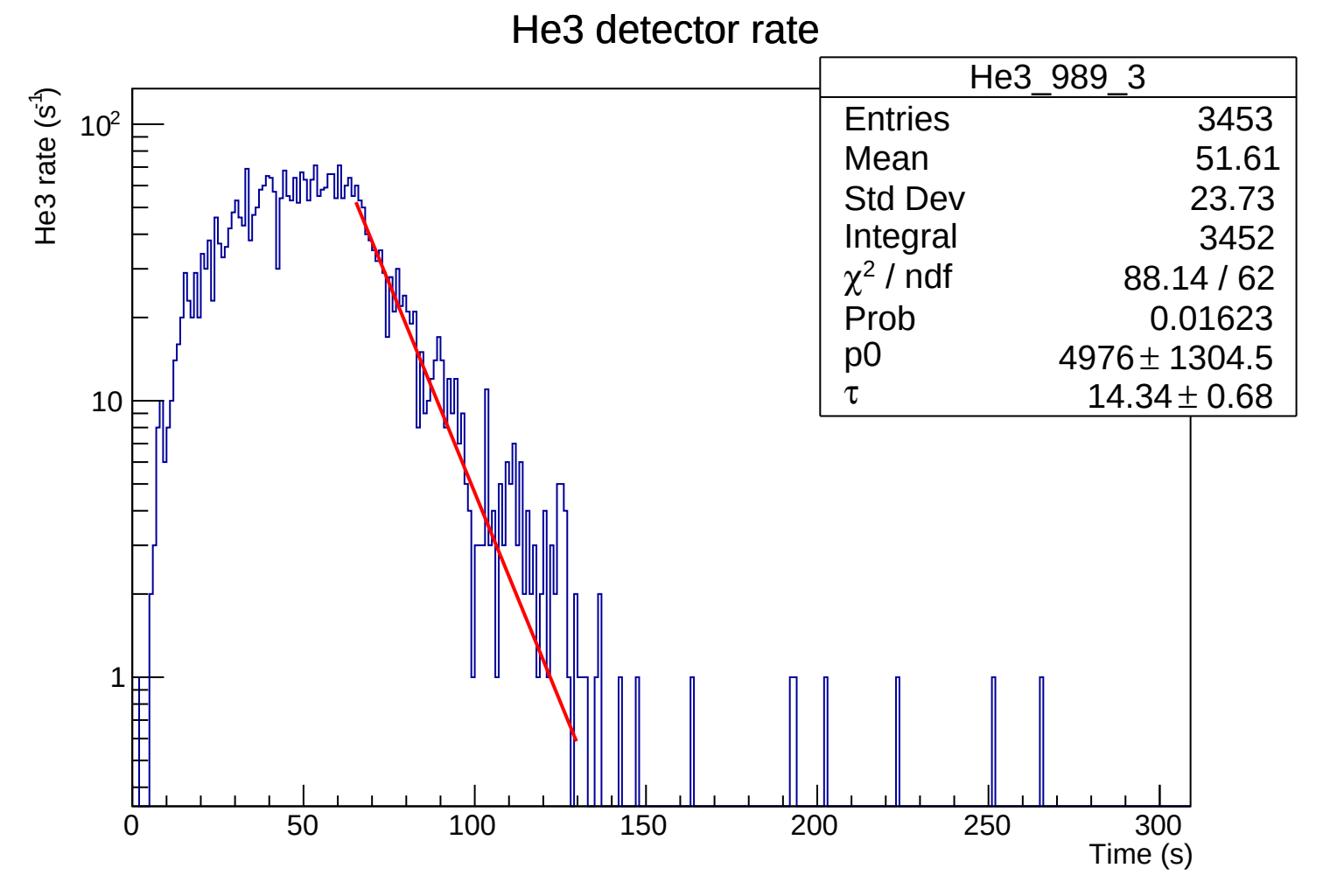

TCN18-087 (MV open) (single exponential fit, with background subtracted, normalized to monitor detector)
χ² / ndf 44.5 / 7
Prob 1.708e–07
p0 6.754 ± 0.08412
τ 20.37 ± 0.2504
UCN-count-to-monitor ratio
1
10⁻¹
0
20
40
60
80
100
120
Storage time (s)

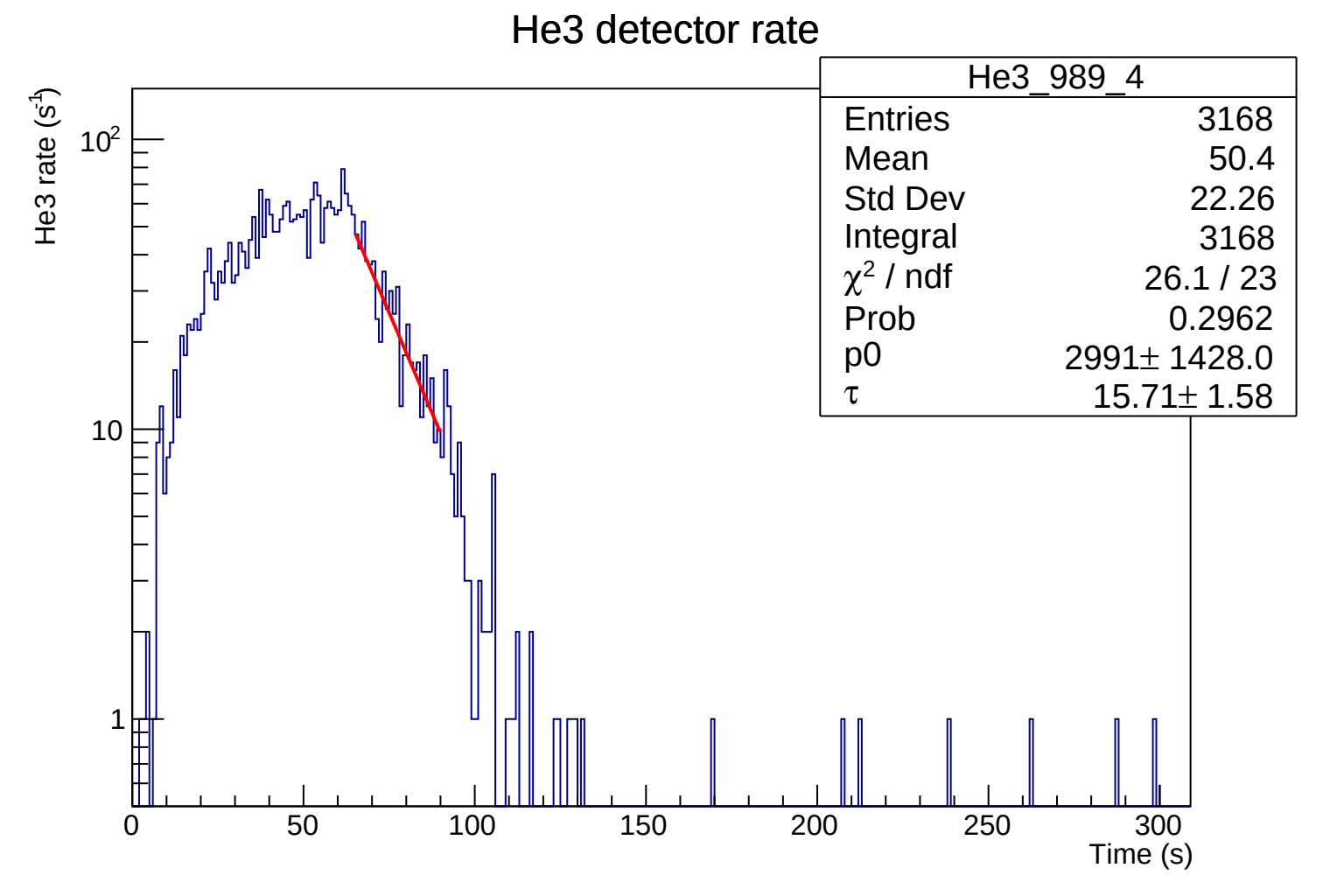

TCN18-087 (MV open) (single exponential fit, with background subtracted, normalized to monitor detector, 0s excluded)
χ² / ndf 21.18 / 5
Prob 0.0007477
p0 6.333 ± 0.1194
τ 21.24 ± 0.3216
UCN-count-to-monitor ratio
1
10⁻¹
0
20
40
60
80
100
120
Storage time (s)

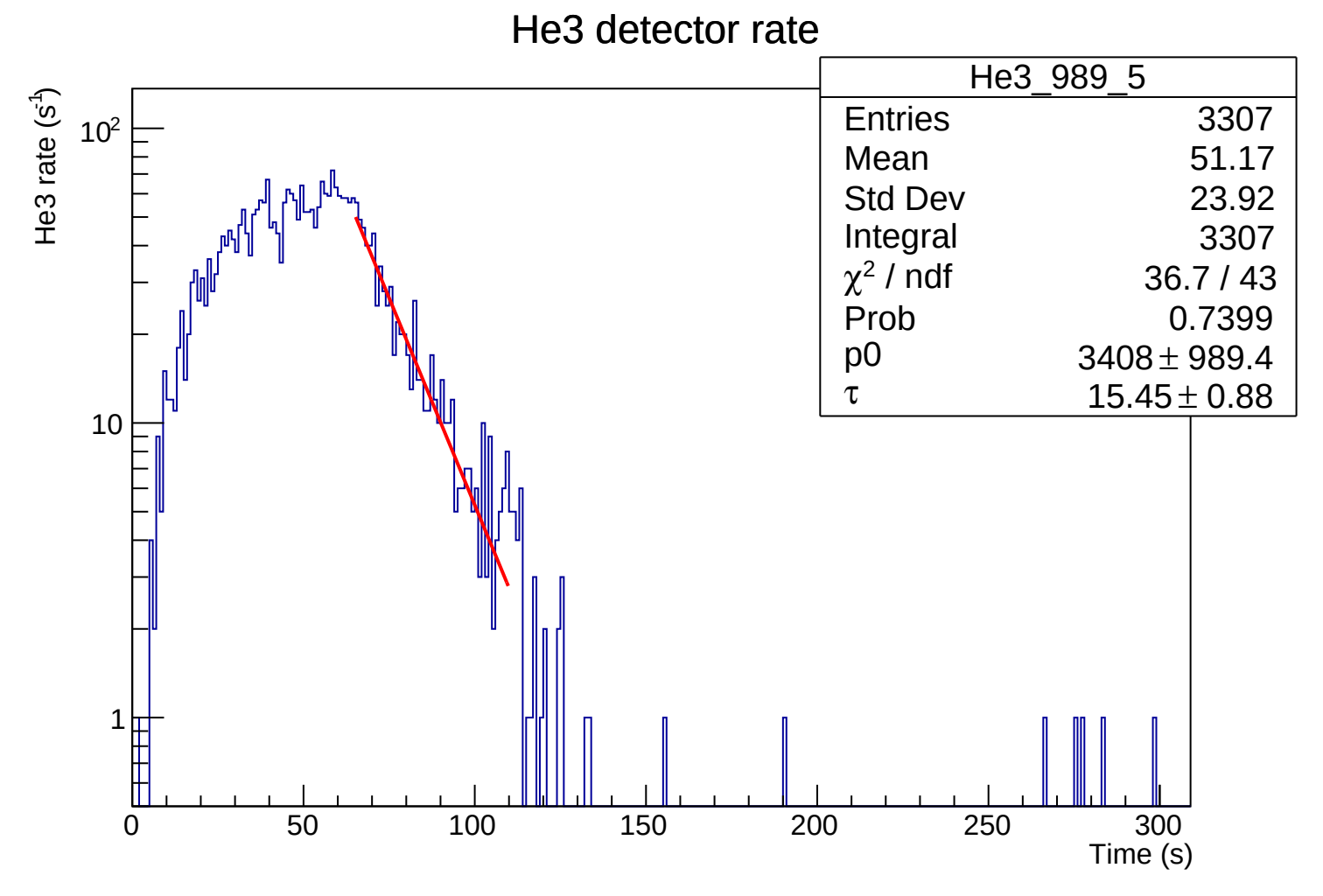

TCN18-087 (MV open) (double exponential fit, with background subtracted, normalized to monitor detector)
χ² / ndf 5.142 / 5
Prob 0.3988
N1 2.071± 0.6774
τ1 8.504± 2.419
N2 5.07± 0.6911
τ2 23.5± 1.253
UCN-count-to-monitor ratio
1
10⁻¹
0
20
40
60
80
100
120
Storage time (s)

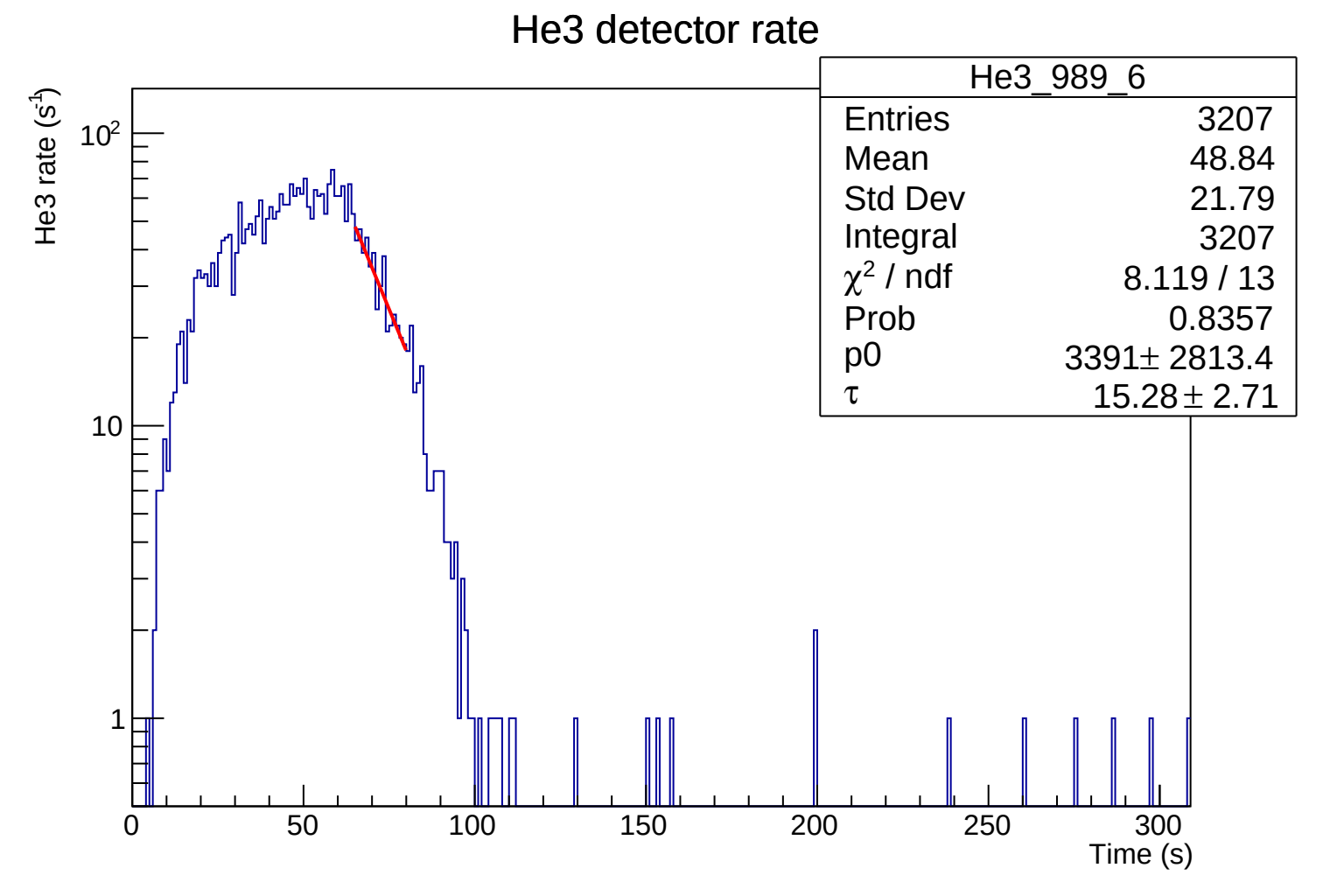

TCN18-087 (MV open) (single exponential fit + background, unnormalized)
χ² / ndf 88.71 / 6
Prob 5.627e−17
p0 1.575e+04 ± 77.27
τ 18.54 ± 0.1735
Background 366.9 ± 17.14
UCN count
10⁴
10³
0
20
40
60
80
100
120
Storage time (s)


He3 detector rate
He3_989_1
Entries 3352
Mean 52.73
Std Dev 24.8
Integral 3351
χ² / ndf 78.5 / 78
Prob 0.4628
p0 2868 ± 701.1
τ 15.96 ± 0.77
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)


He3 detector rate
He3_989_3
Entries 3453
Mean 51.61
Std Dev 23.73
Integral 3452
χ² / ndf 88.14 / 62
Prob 0.01623
p0 4976 ± 1304.5
τ 14.34 ± 0.68
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)


He3 detector rate
He3_989_4
Entries 3168
Mean 50.4
Std Dev 22.26
Integral 3168
χ² / ndf 26.1 / 23
Prob 0.2962
p0 2991± 1428.0
τ 15.71± 1.58
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)


He3 detector rate
He3_989_5
Entries 3307
Mean 51.17
Std Dev 23.92
Integral 3307
χ² / ndf 36.7 / 43
Prob 0.7399
p0 3408 ± 989.4
τ 15.45 ± 0.88
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)


He3 detector rate
He3_989_6
Entries 3207
Mean 48.84
Std Dev 21.79
Integral 3207
χ² / ndf 8.119 / 13
Prob 0.8357
p0 3391± 2813.4
τ 15.28± 2.71
He3 rate (s⁻¹)
10²
10
1
0
50
100
150
200
250
300
Time (s)

Average lifetime from He3 data:

τ = 15.1905176277 +/- 0.0309959074007 s