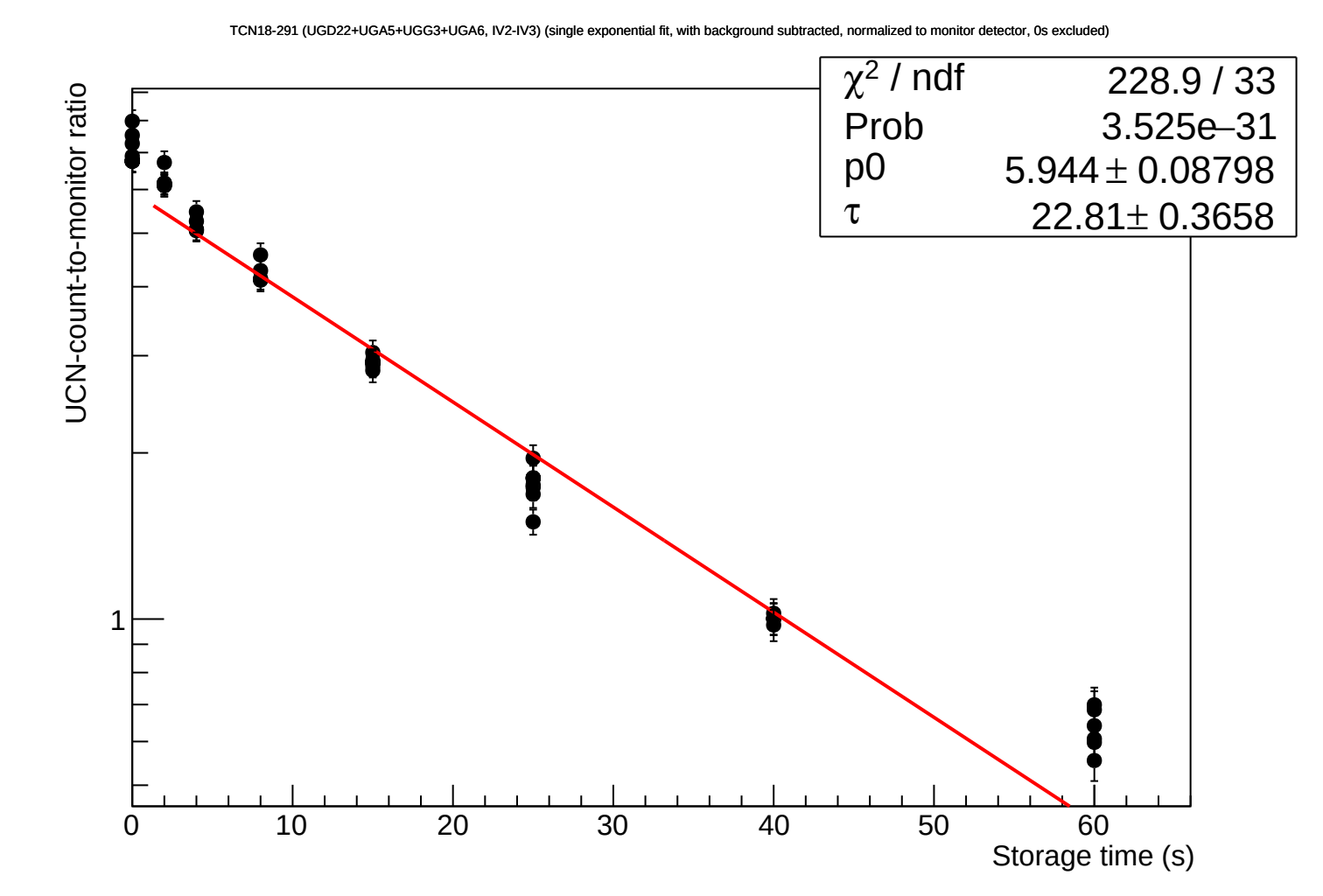
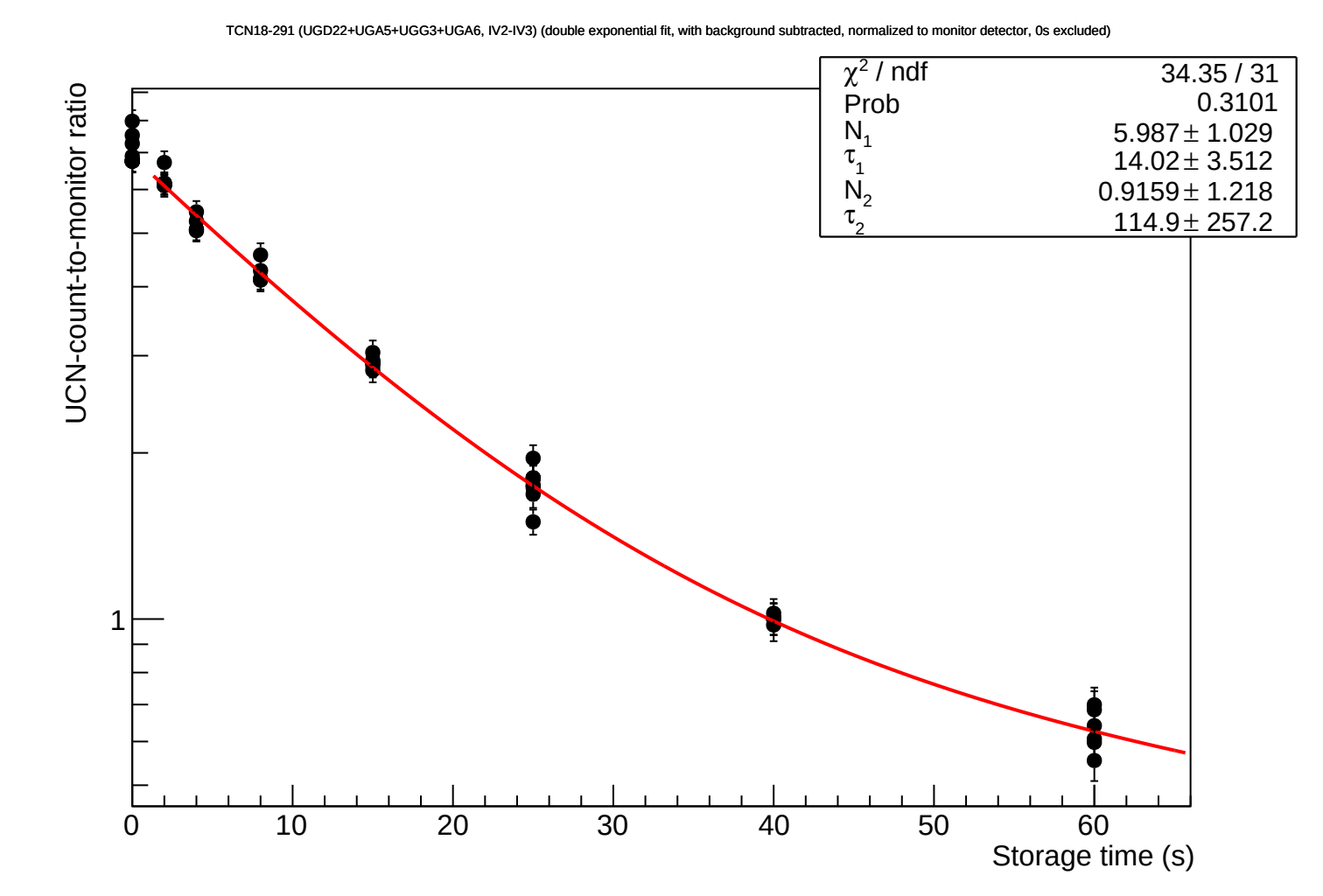
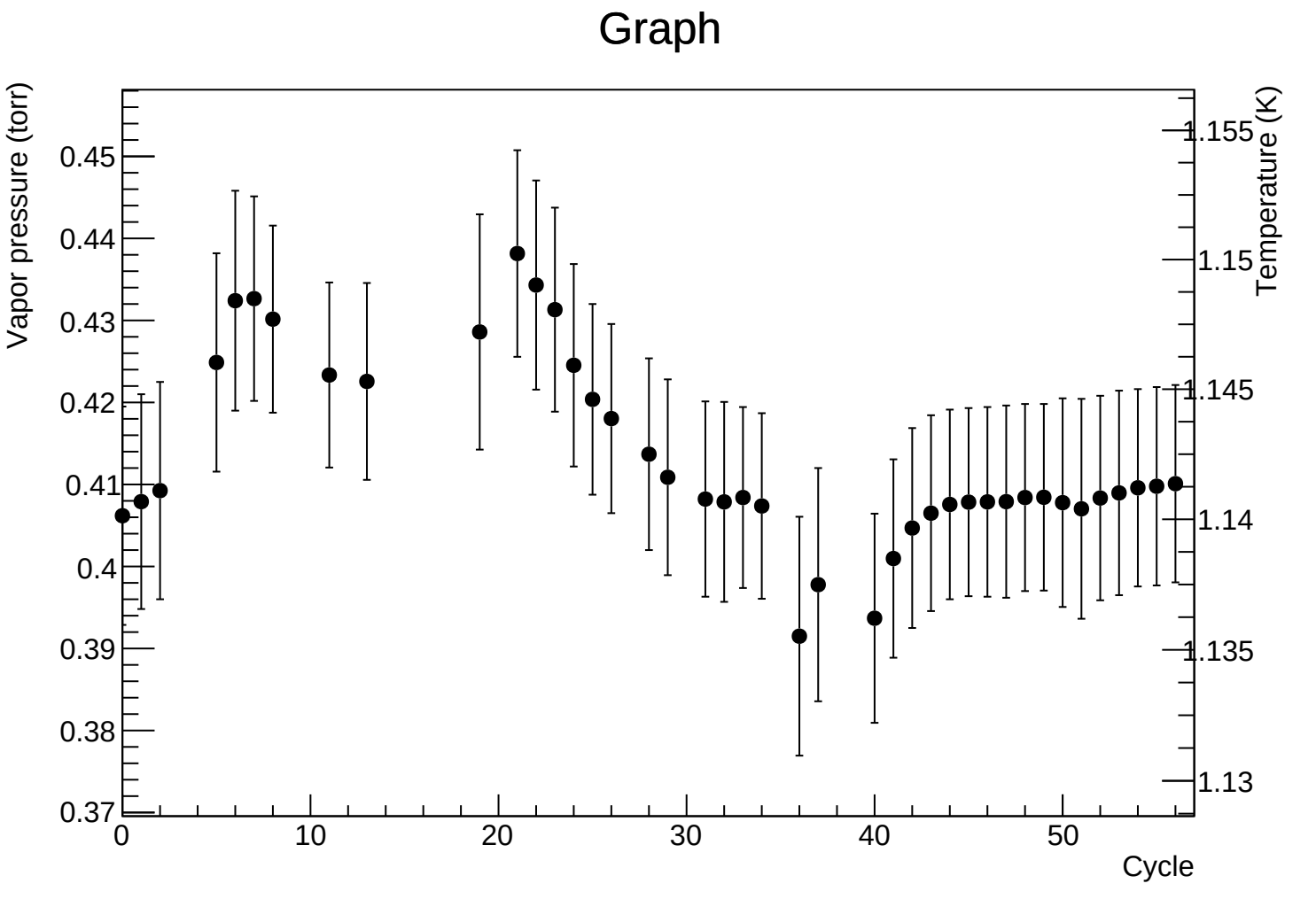
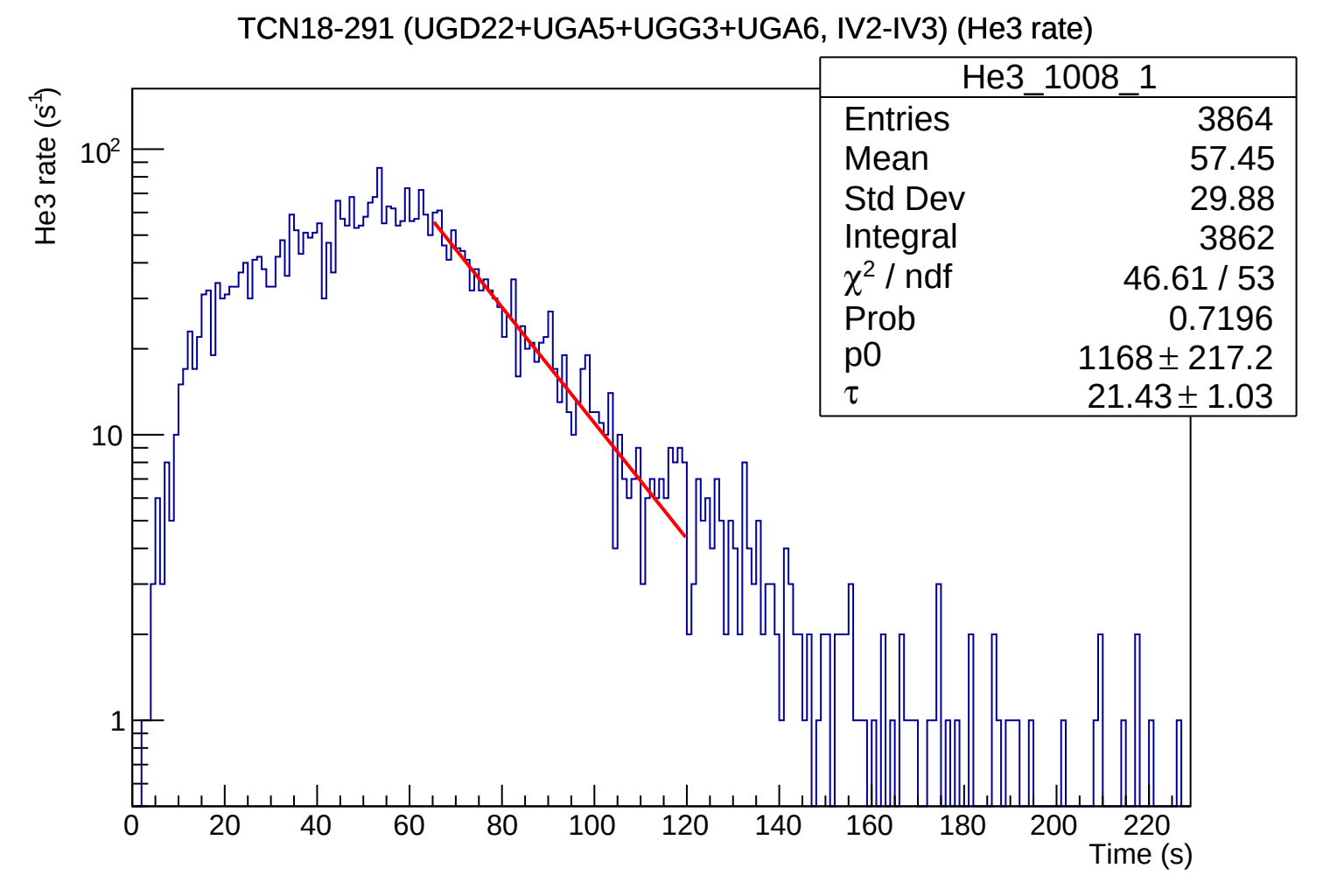
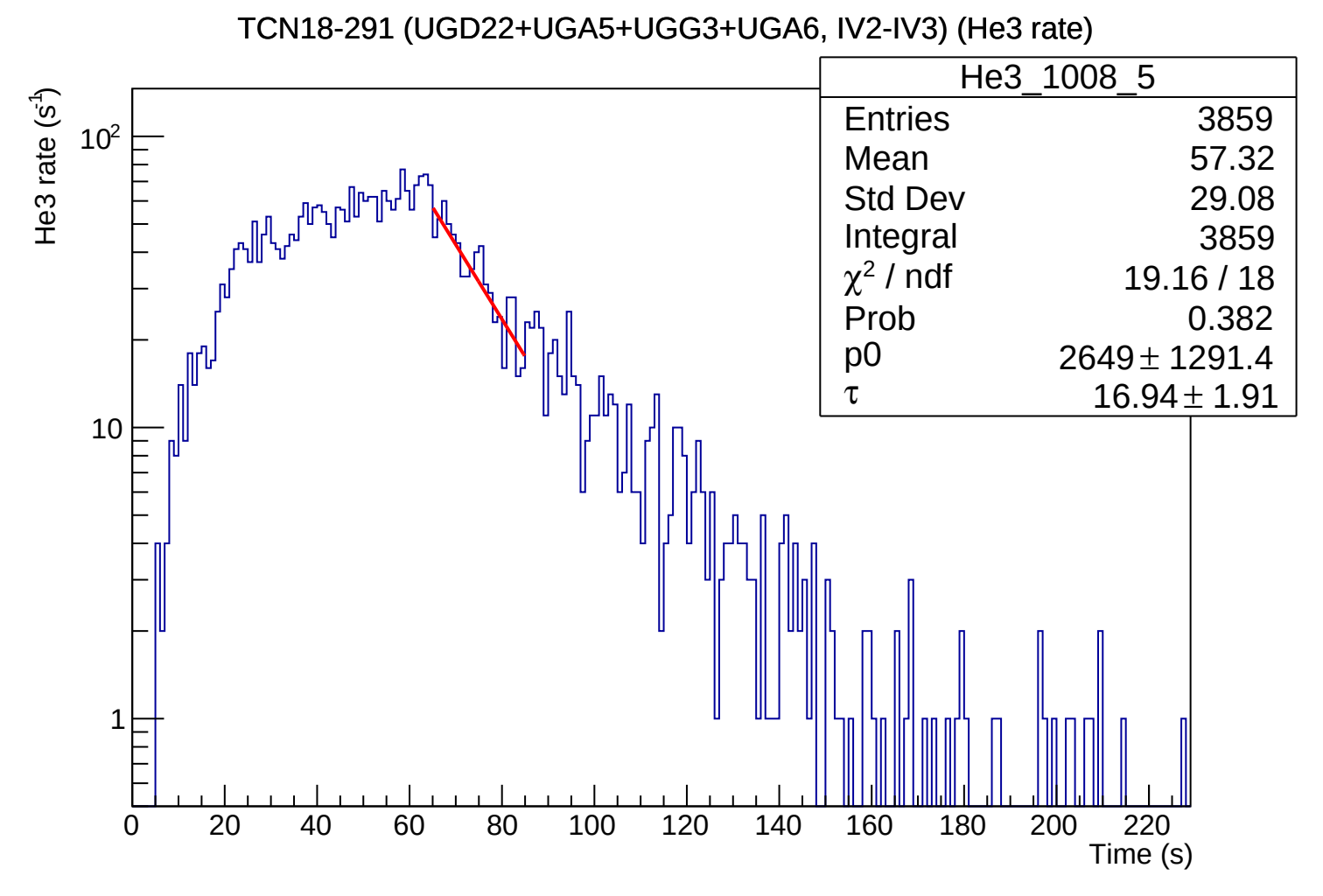
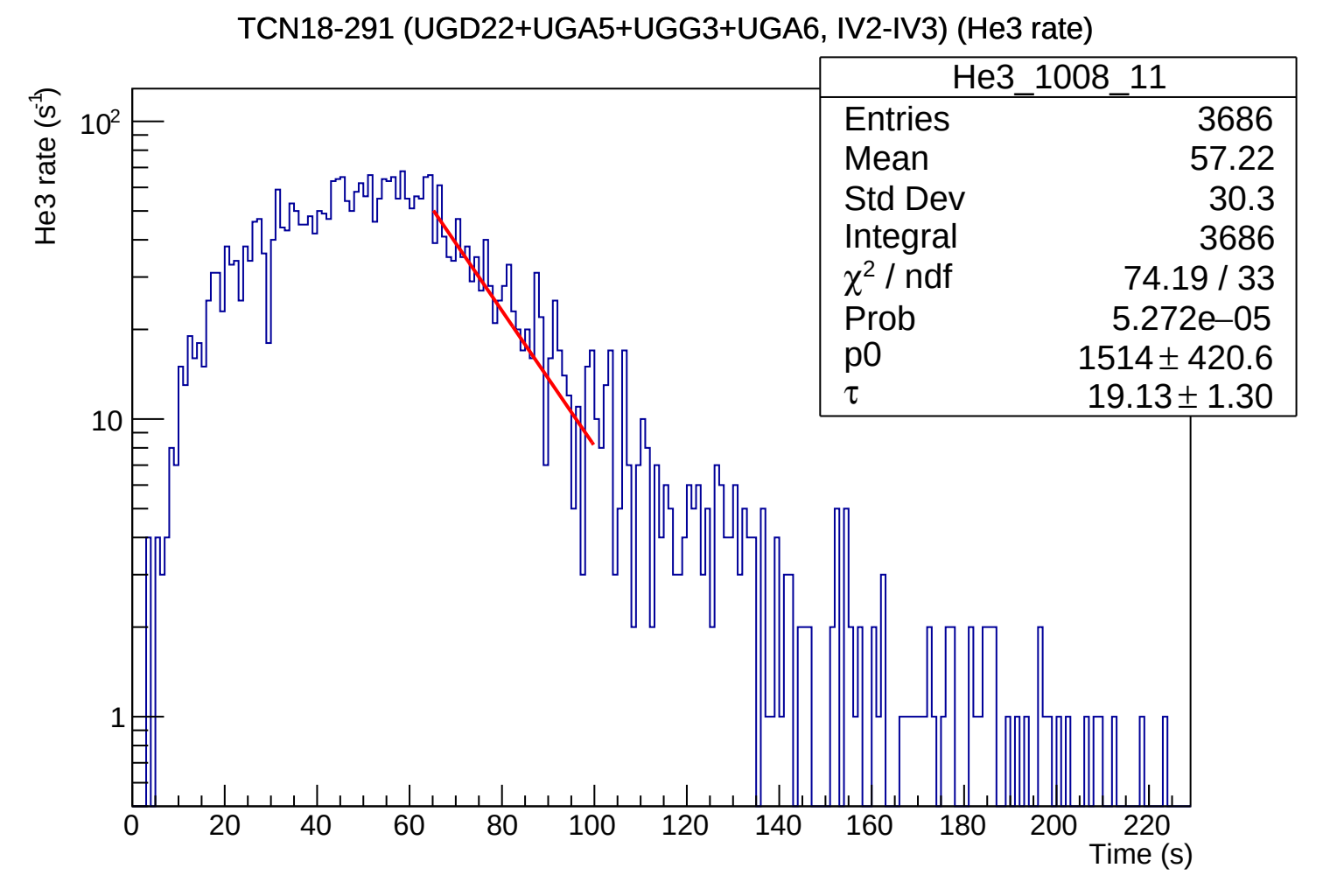

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (single exponential fit, with background subtracted, normalized to monitor detector, 0s excluded)
χ2 / ndf 228.9 / 33
Prob 3.525e−31
p0 5.944 ± 0.08798
τ 22.81 ± 0.3658
UCN-count-to-monitor ratio
1
0
10
20
30
40
50
60
Storage time (s)

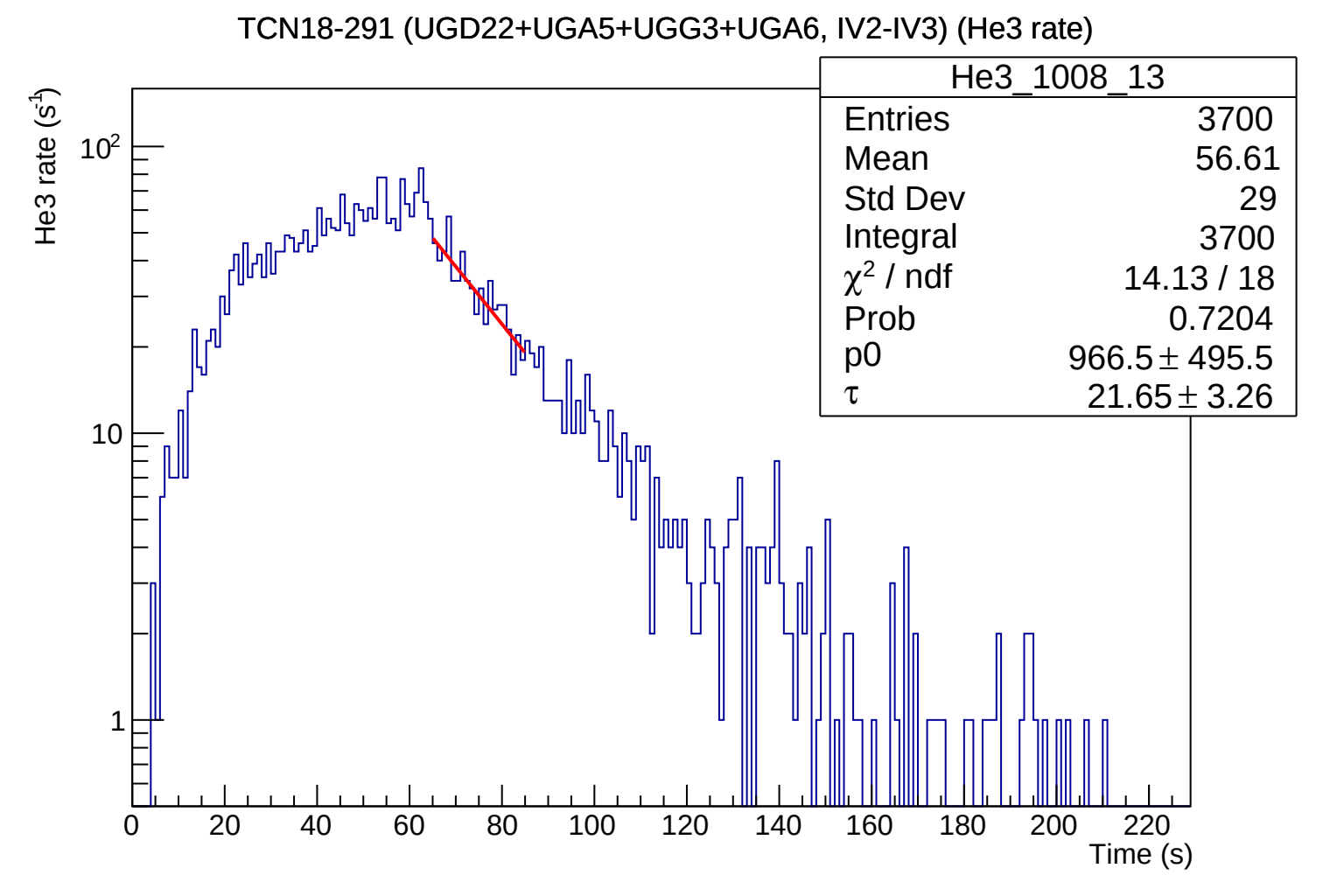

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (double exponential fit, with background subtracted, normalized to monitor detector, 0s excluded)
χ² / ndf 34.35 / 31
Prob 0.3101
N1 5.987 ± 1.029
τ1 14.02 ± 3.512
N2 0.9159 ± 1.218
τ2 114.9 ± 257.2
UCN-count-to-monitor ratio
1
0
10
20
30
40
50
60
Storage time (s)

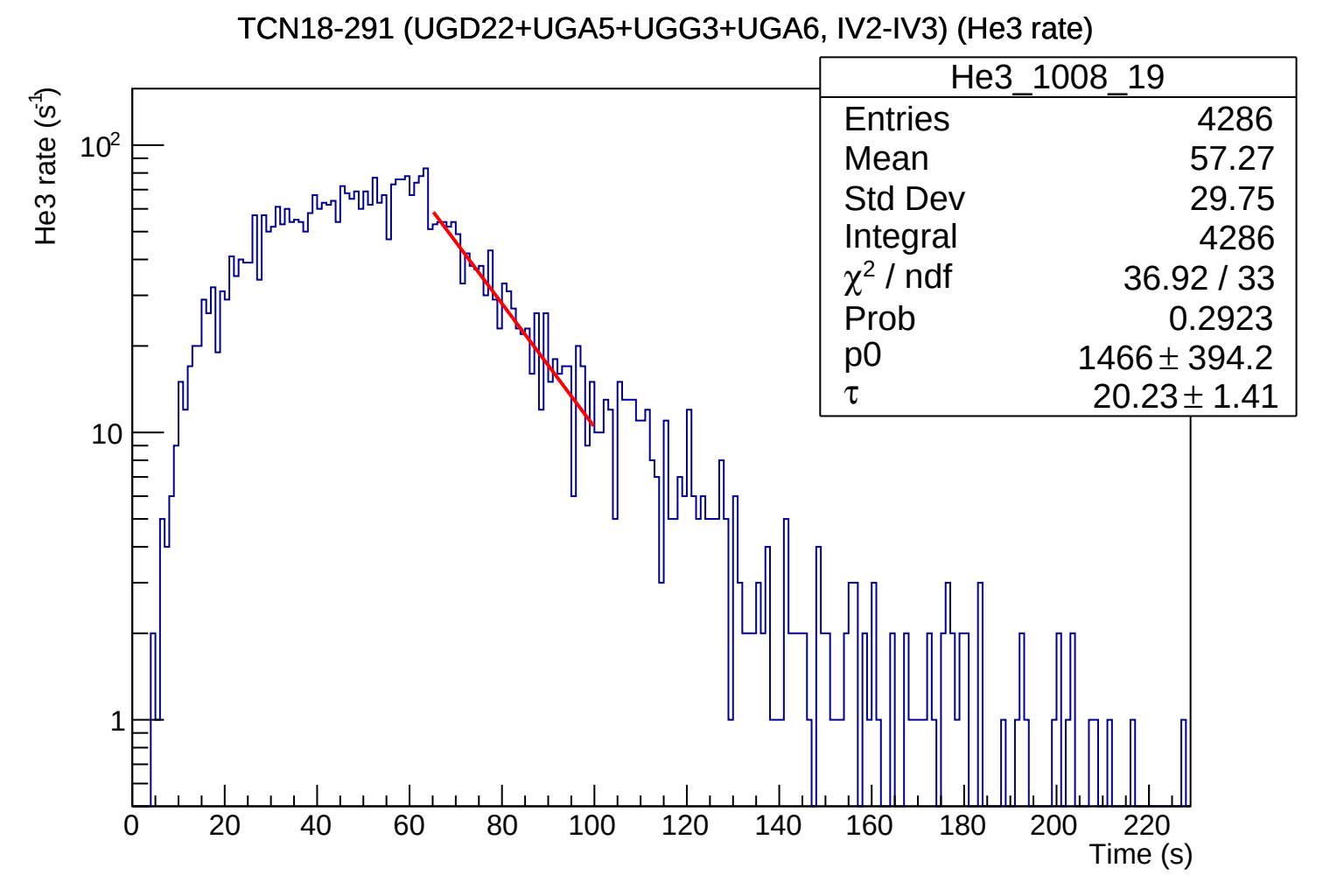

Graph
Vapor pressure (torr)
0.45
0.44
0.43
0.42
0.41
0.4
0.39
0.38
0.37
Temperature (K)
1.155
1.15
1.145
1.14
1.135
1.13
0
10
20
30
40
50
Cycle

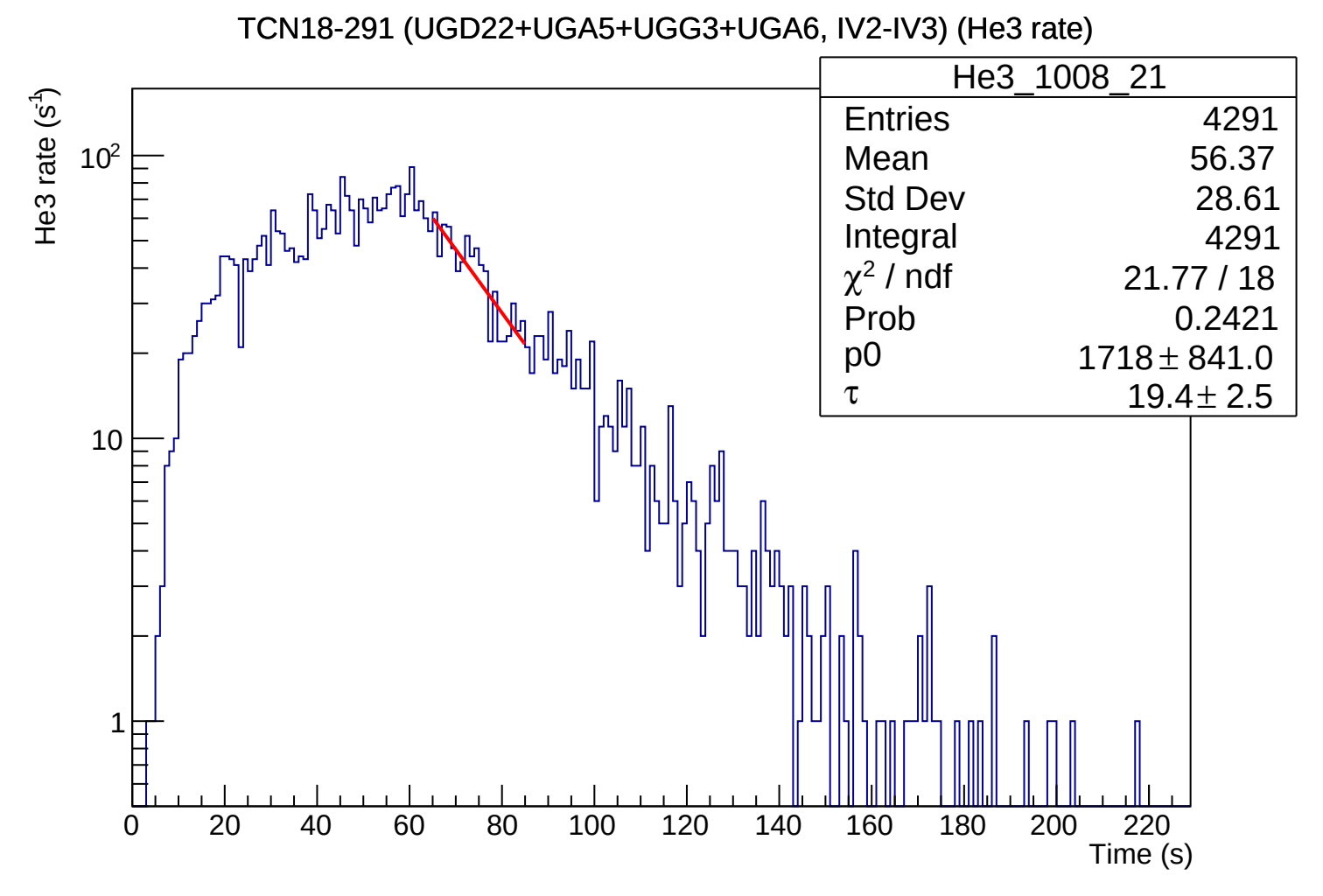

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_1
Entries 3864
Mean 57.45
Std Dev 29.88
Integral 3862
χ² / ndf 46.61 / 53
Prob 0.7196
p0 1168 ± 217.2
τ 21.43 ± 1.03
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

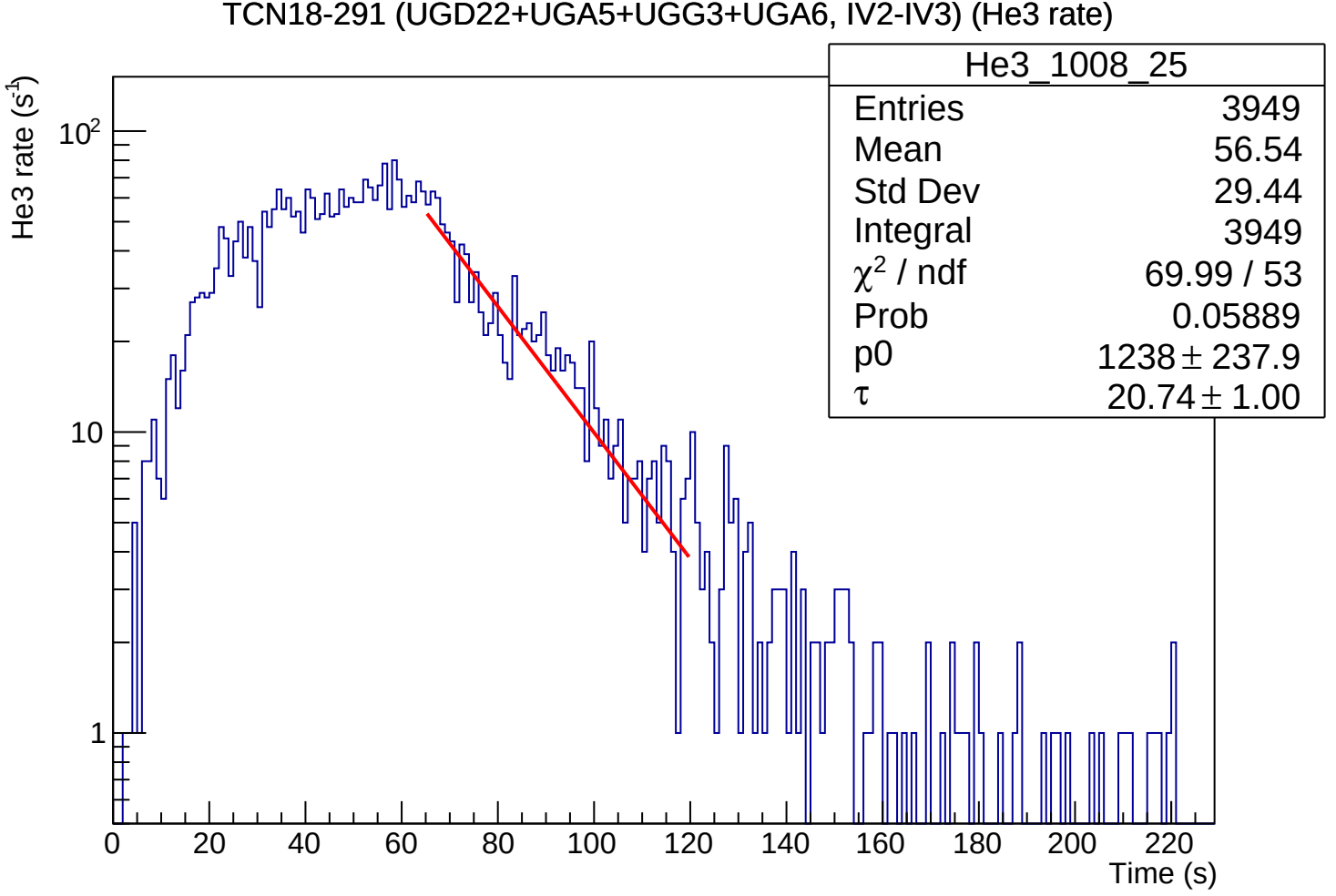

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_5
Entries 3859
Mean 57.32
Std Dev 29.08
Integral 3859
χ² / ndf 19.16 / 18
Prob 0.382
p0 2649 ± 1291.4
τ 16.94 ± 1.91
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

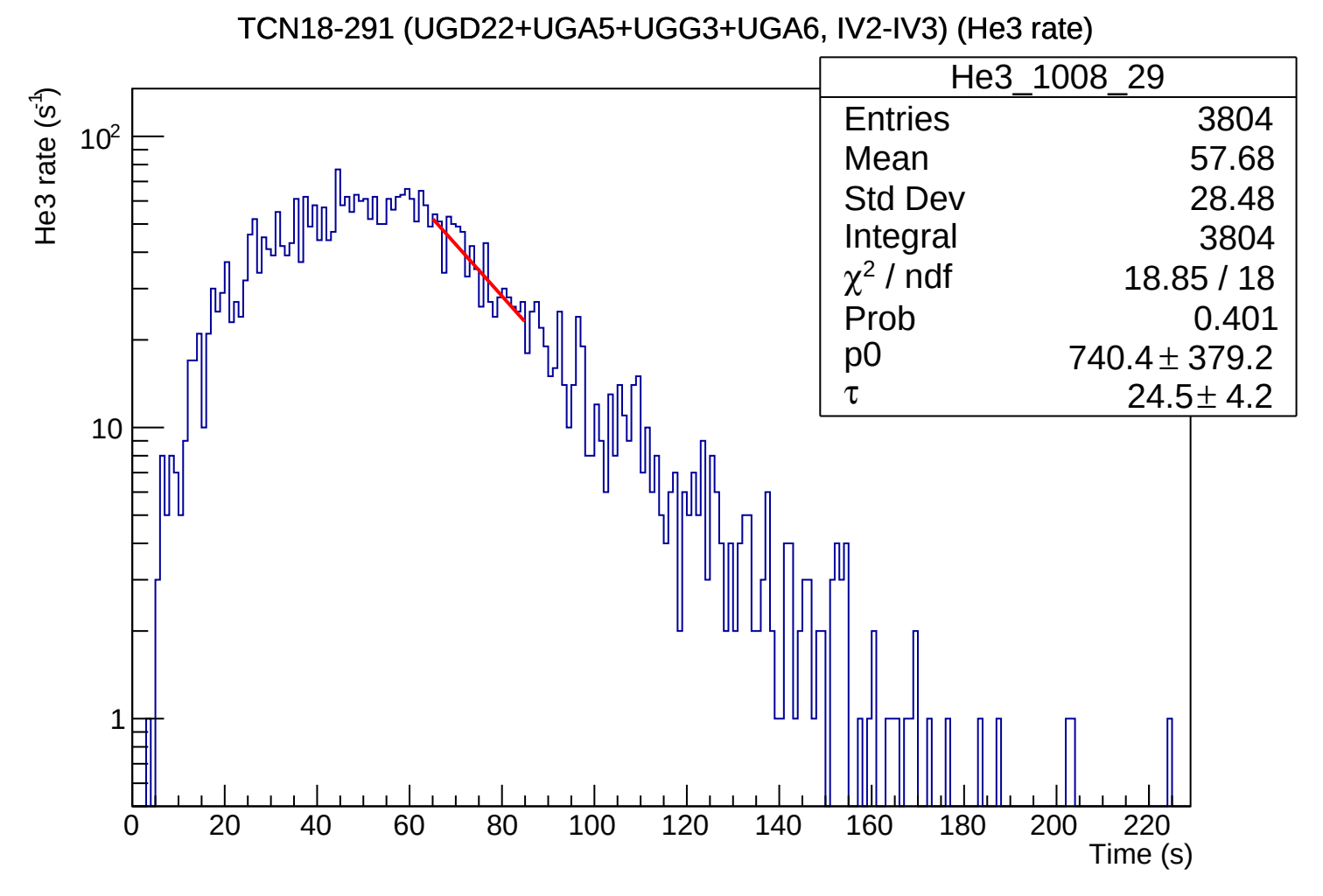

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_11
Entries 3686
Mean 57.22
Std Dev 30.3
Integral 3686
χ² / ndf 74.19 / 33
Prob 5.272e–05
p0 1514 ± 420.6
τ 19.13 ± 1.30
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

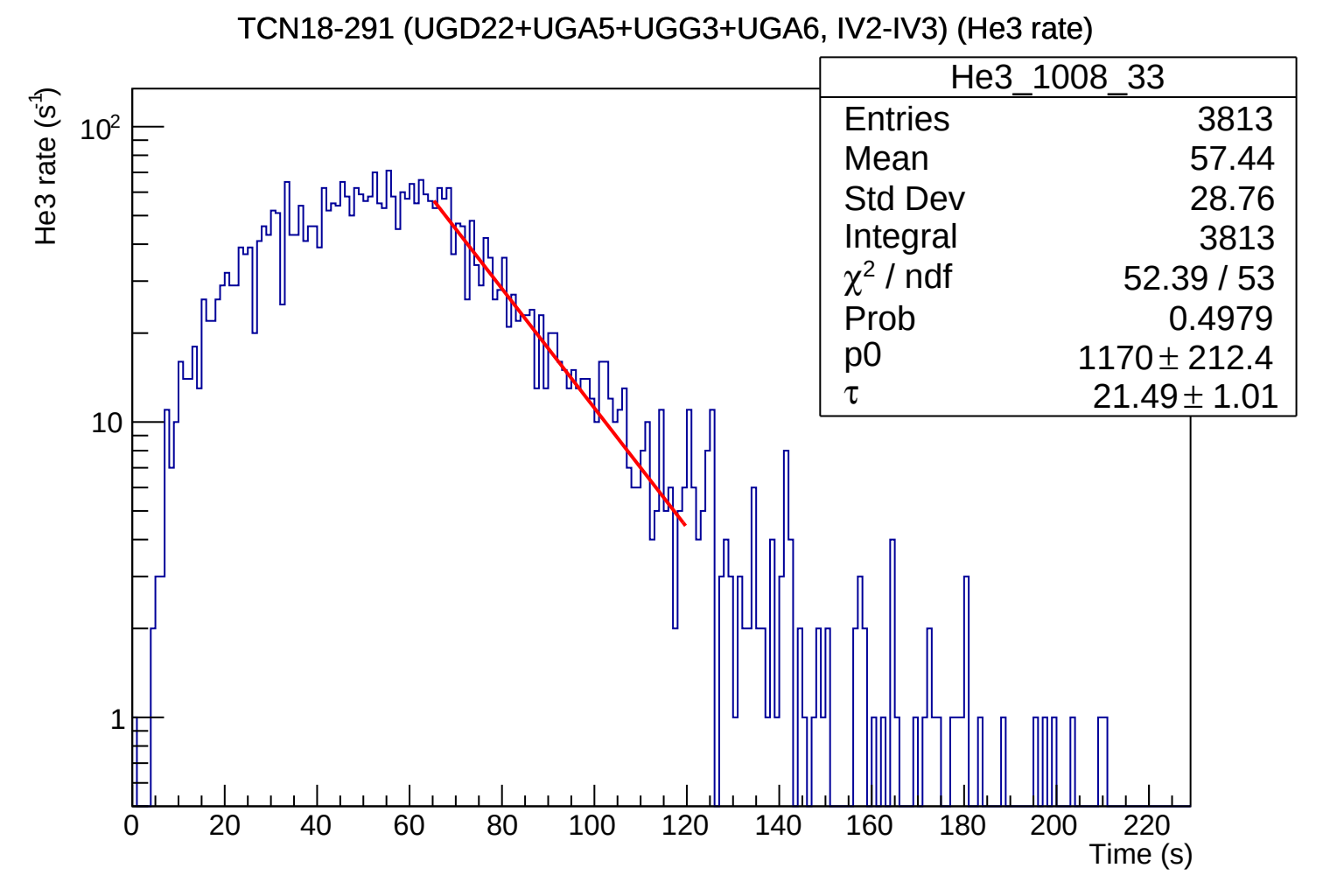

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_13
Entries 3700
Mean 56.61
Std Dev 29
Integral 3700
χ² / ndf 14.13 / 18
Prob 0.7204
p0 966.5 ± 495.5
τ 21.65 ± 3.26
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

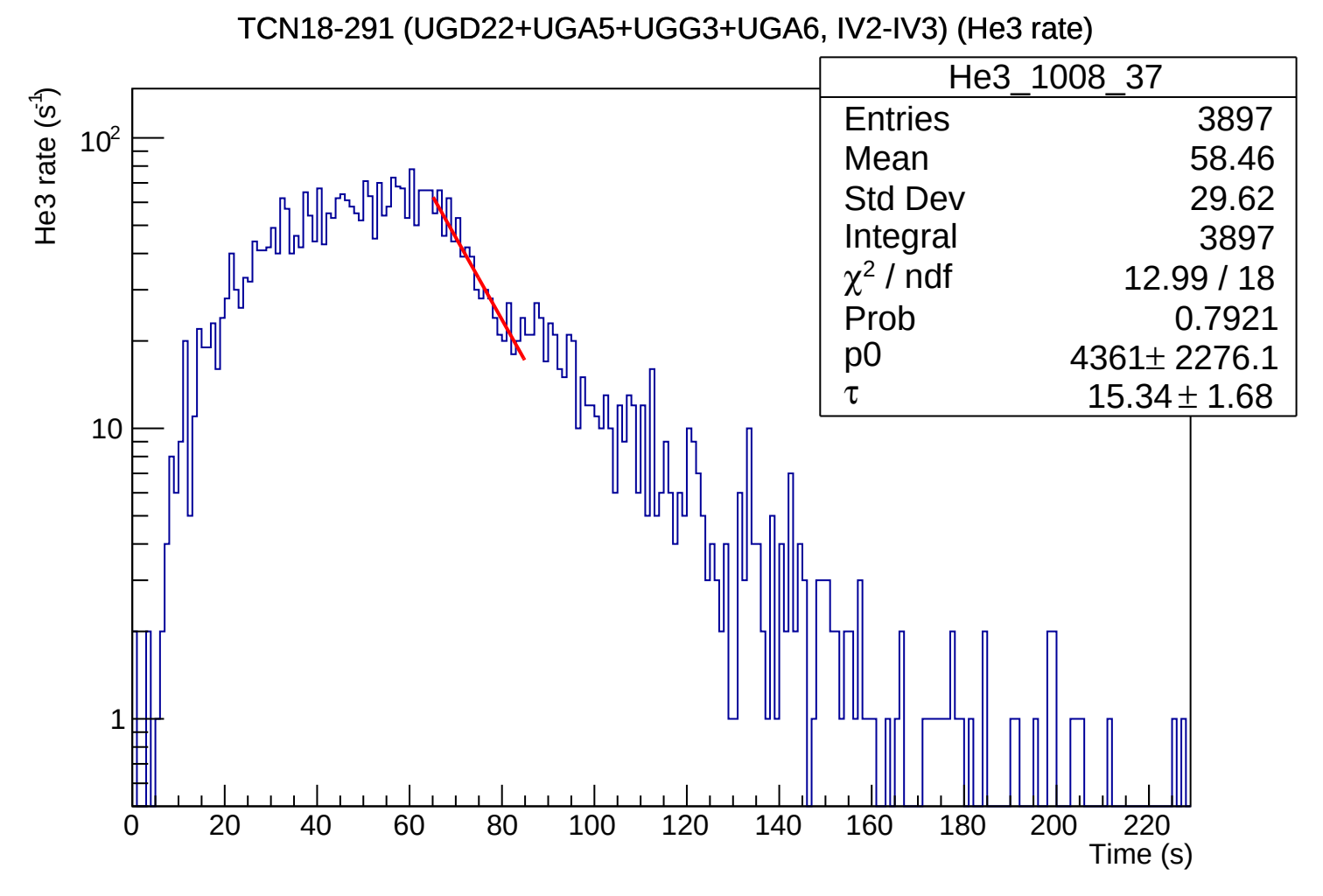

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_19
Entries 4286
Mean 57.27
Std Dev 29.75
Integral 4286
χ² / ndf 36.92 / 33
Prob 0.2923
p0 1466 ± 394.2
τ 20.23 ± 1.41
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

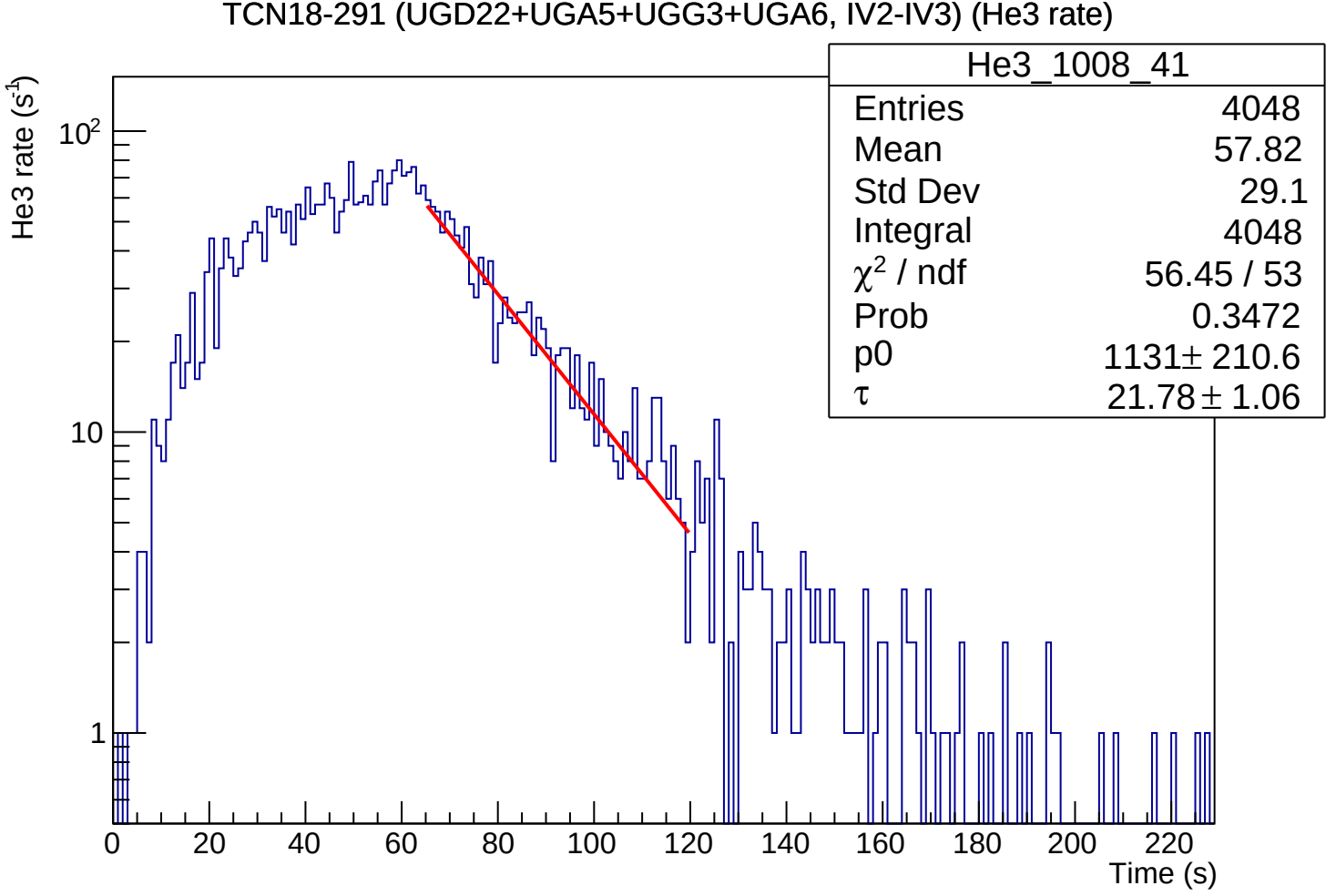

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_21
Entries 4291
Mean 56.37
Std Dev 28.61
Integral 4291
χ² / ndf 21.77 / 18
Prob 0.2421
p0 1718 ± 841.0
τ 19.4 ± 2.5
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

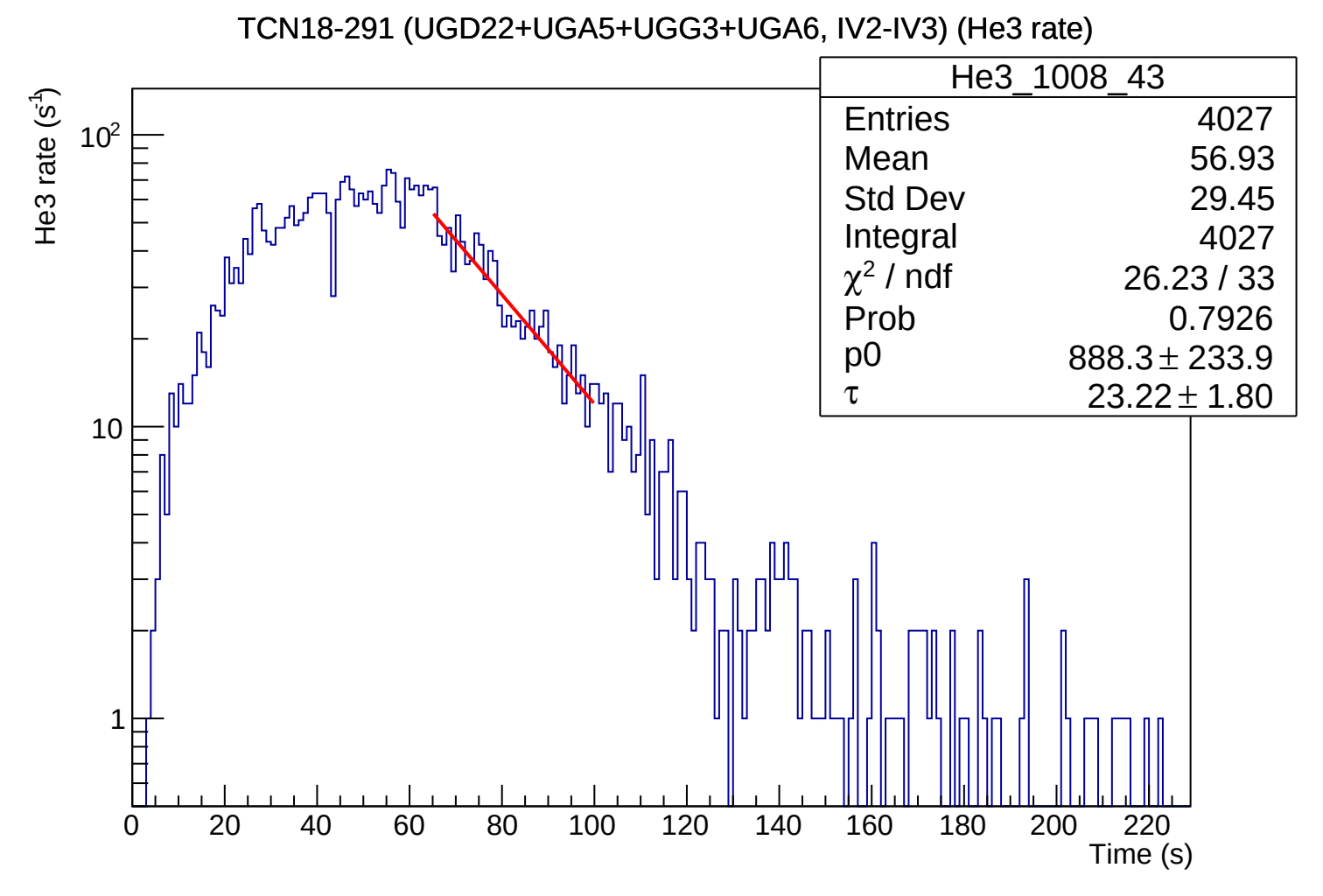

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_25
Entries 3949
Mean 56.54
Std Dev 29.44
Integral 3949
χ² / ndf 69.99 / 53
Prob 0.05889
p0 1238 ± 237.9
τ 20.74 ± 1.00
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

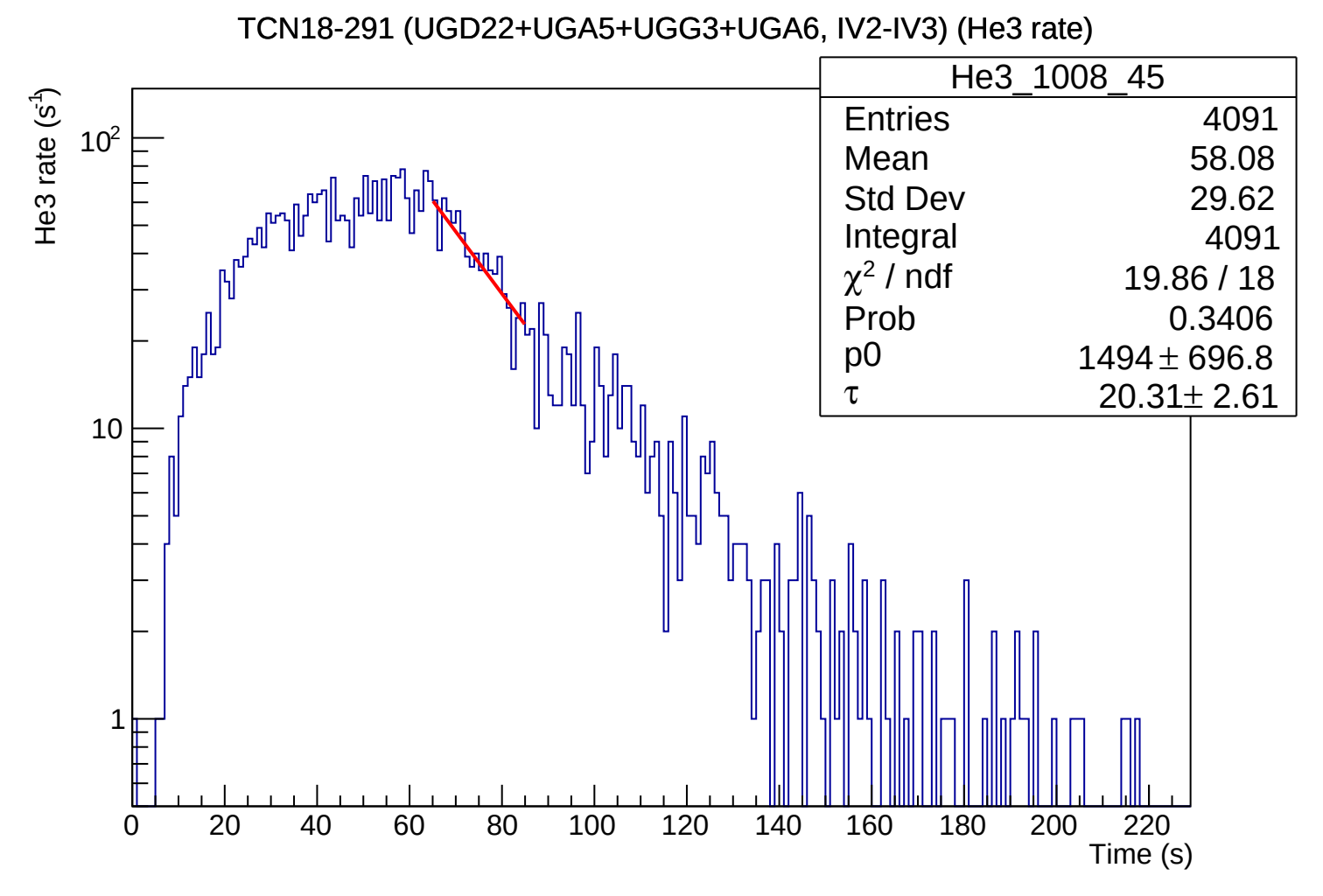

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_29
Entries 3804
Mean 57.68
Std Dev 28.48
Integral 3804
χ² / ndf 18.85 / 18
Prob 0.401
p0 740.4 ± 379.2
τ 24.5 ± 4.2
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

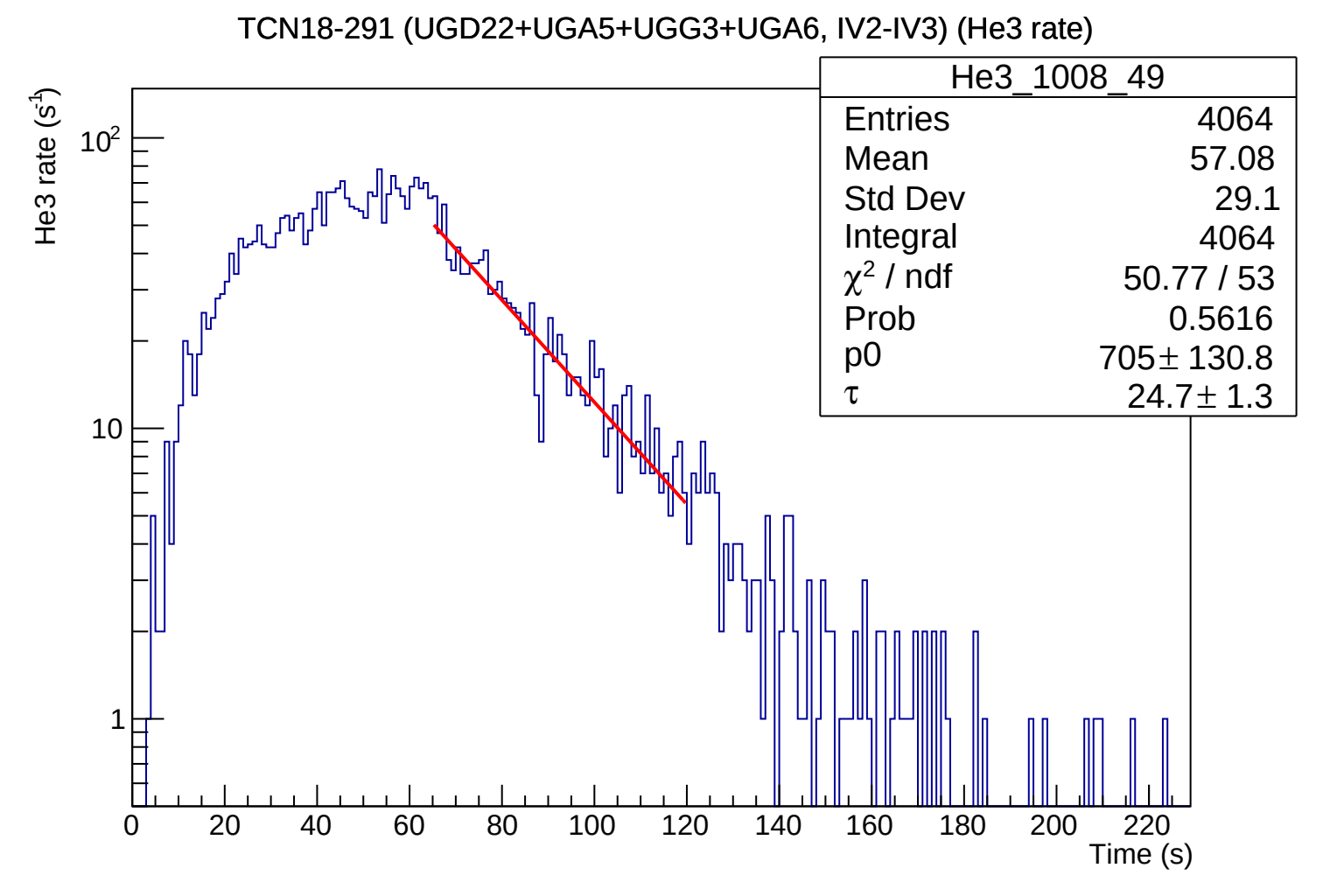

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_33
Entries 3813
Mean 57.44
Std Dev 28.76
Integral 3813
χ² / ndf 52.39 / 53
Prob 0.4979
p0 1170 ± 212.4
τ 21.49 ± 1.01
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

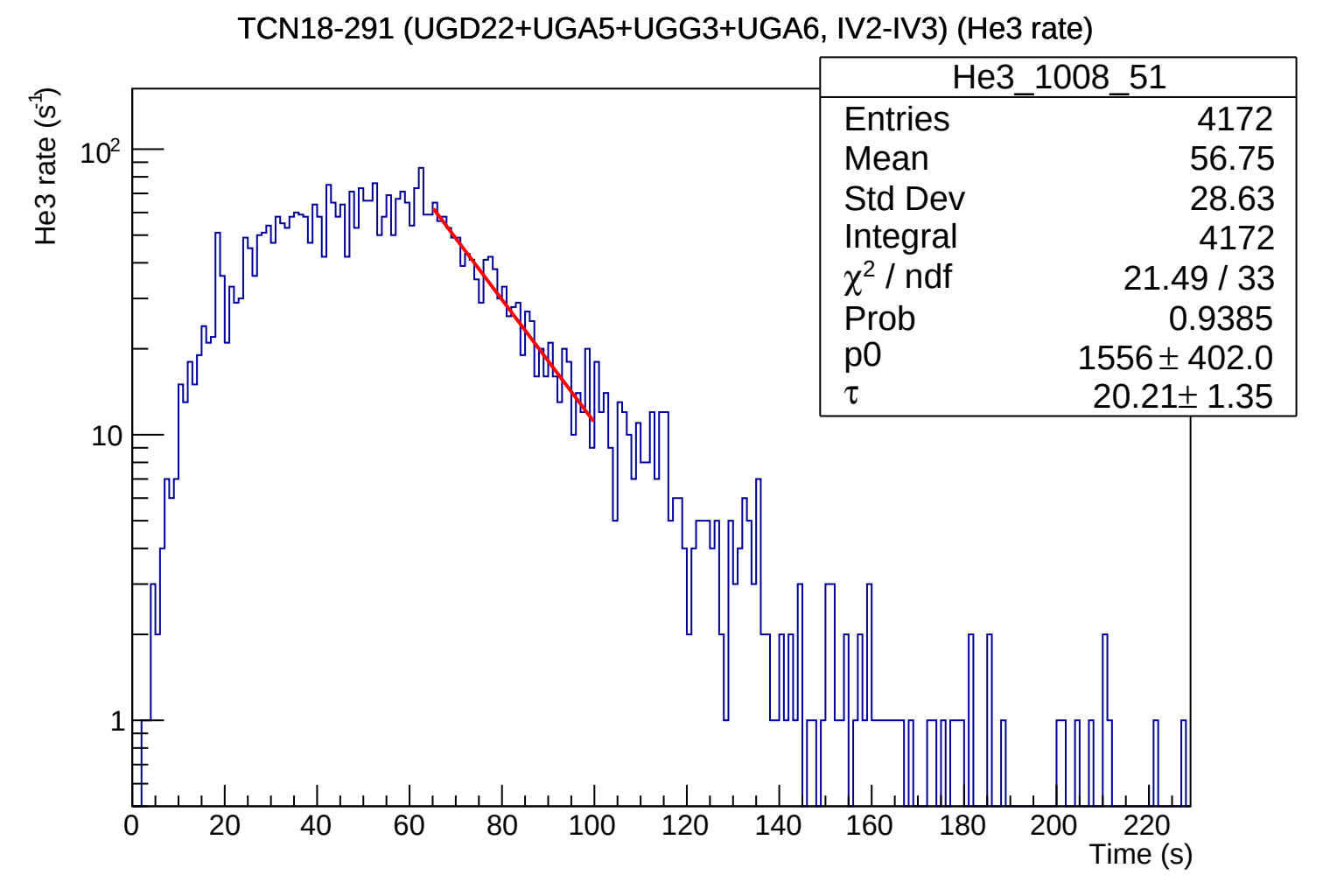

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_37
Entries 3897
Mean 58.46
Std Dev 29.62
Integral 3897
χ² / ndf 12.99 / 18
Prob 0.7921
p0 4361± 2276.1
τ 15.34 ± 1.68
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

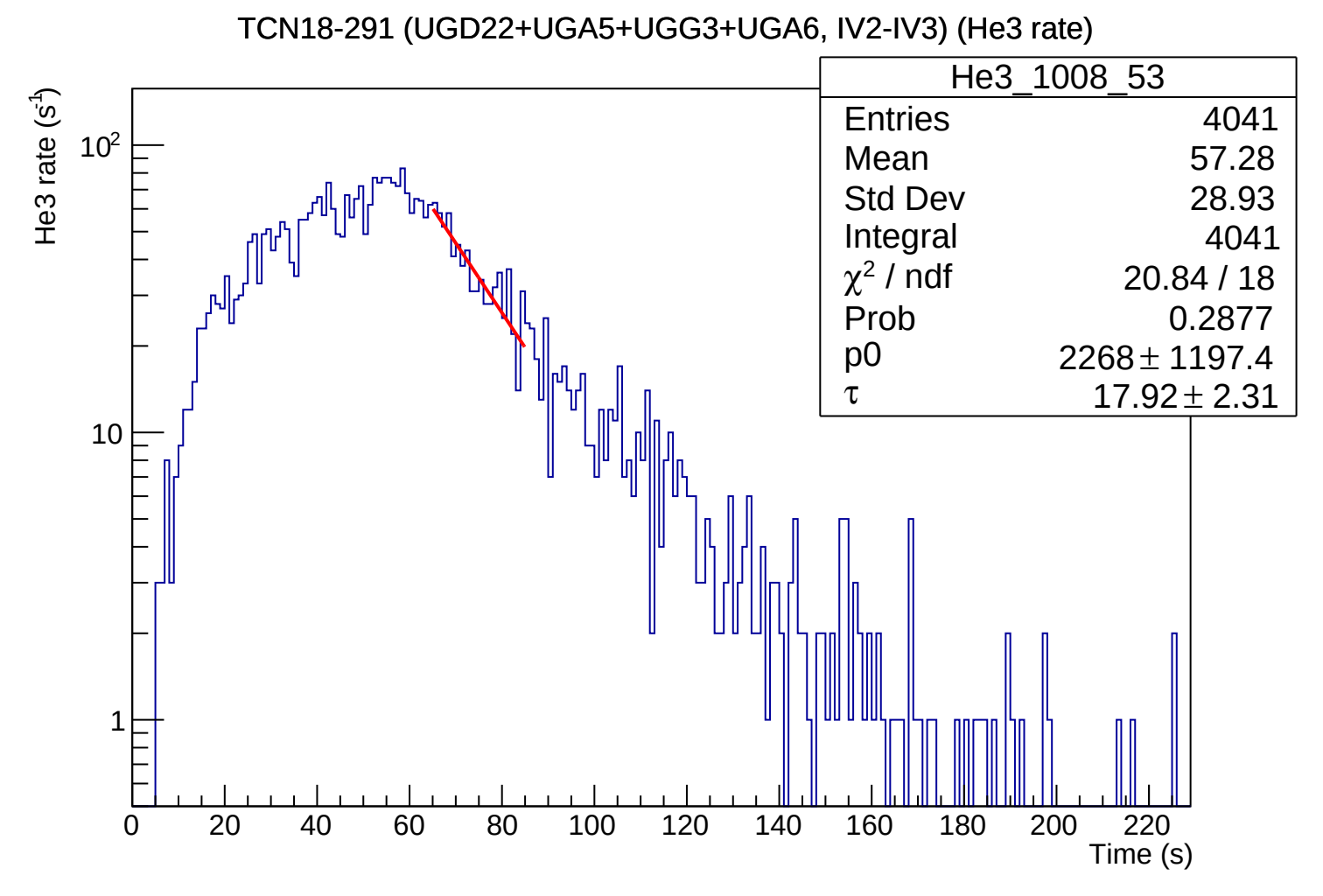

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_41
Entries 4048
Mean 57.82
Std Dev 29.1
Integral 4048
χ² / ndf 56.45 / 53
Prob 0.3472
p0 1131± 210.6
τ 21.78 ± 1.06
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

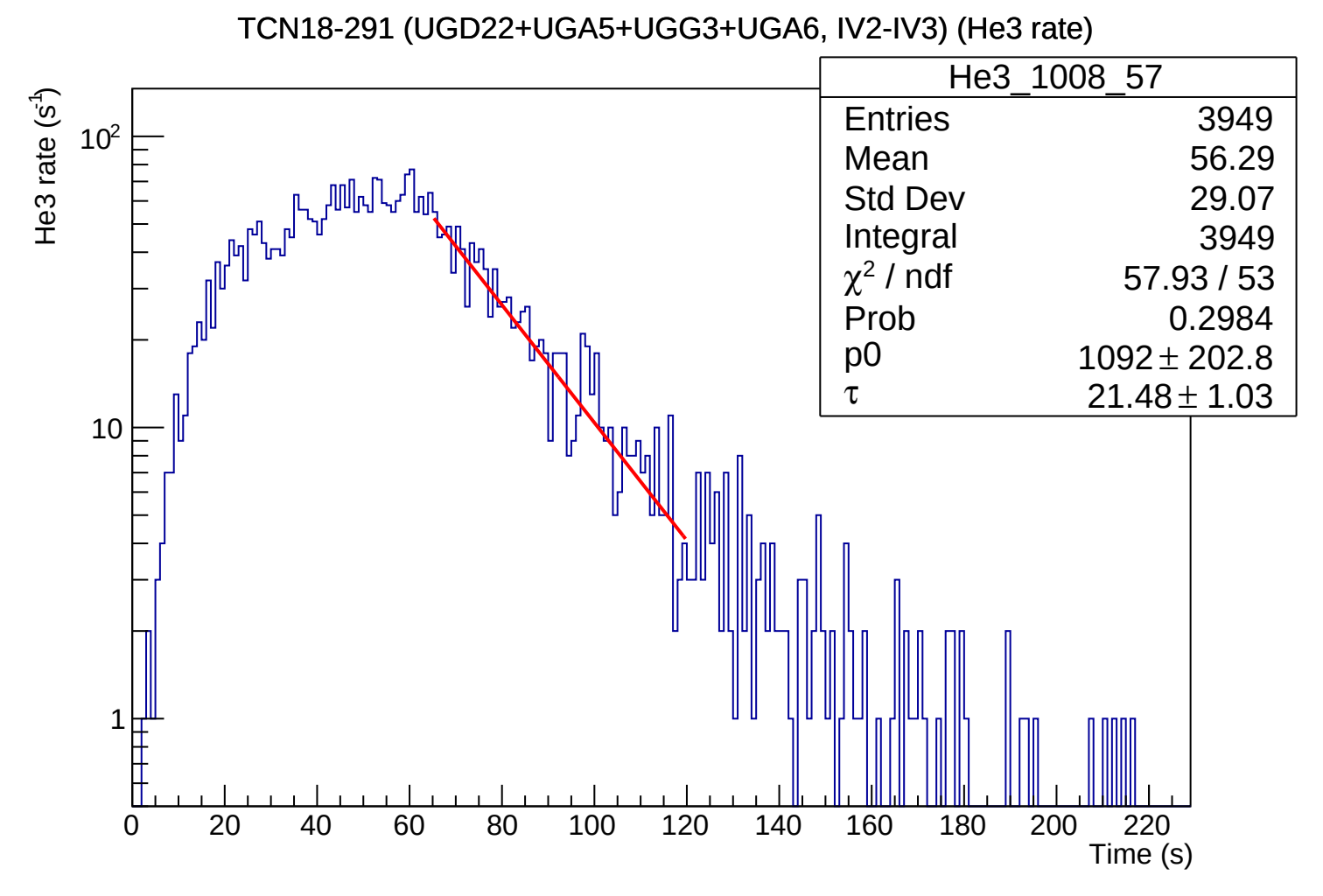

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_43
Entries 4027
Mean 56.93
Std Dev 29.45
Integral 4027
χ² / ndf 26.23 / 33
Prob 0.7926
p0 888.3 ± 233.9
τ 23.22 ± 1.80
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

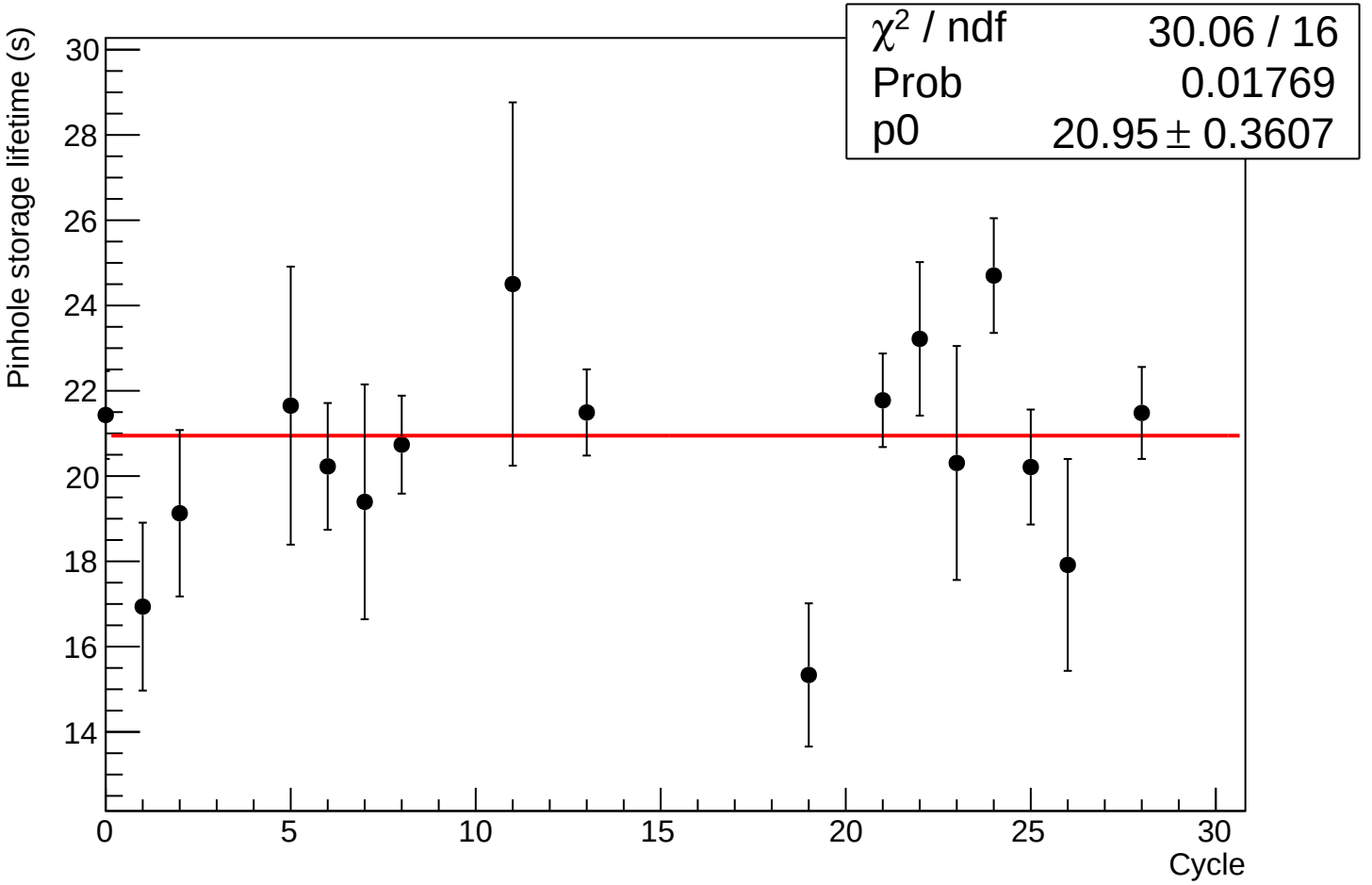

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_45
Entries 4091
Mean 58.08
Std Dev 29.62
Integral 4091
χ² / ndf 19.86 / 18
Prob 0.3406
p0 1494 ± 696.8
τ 20.31 ± 2.61
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

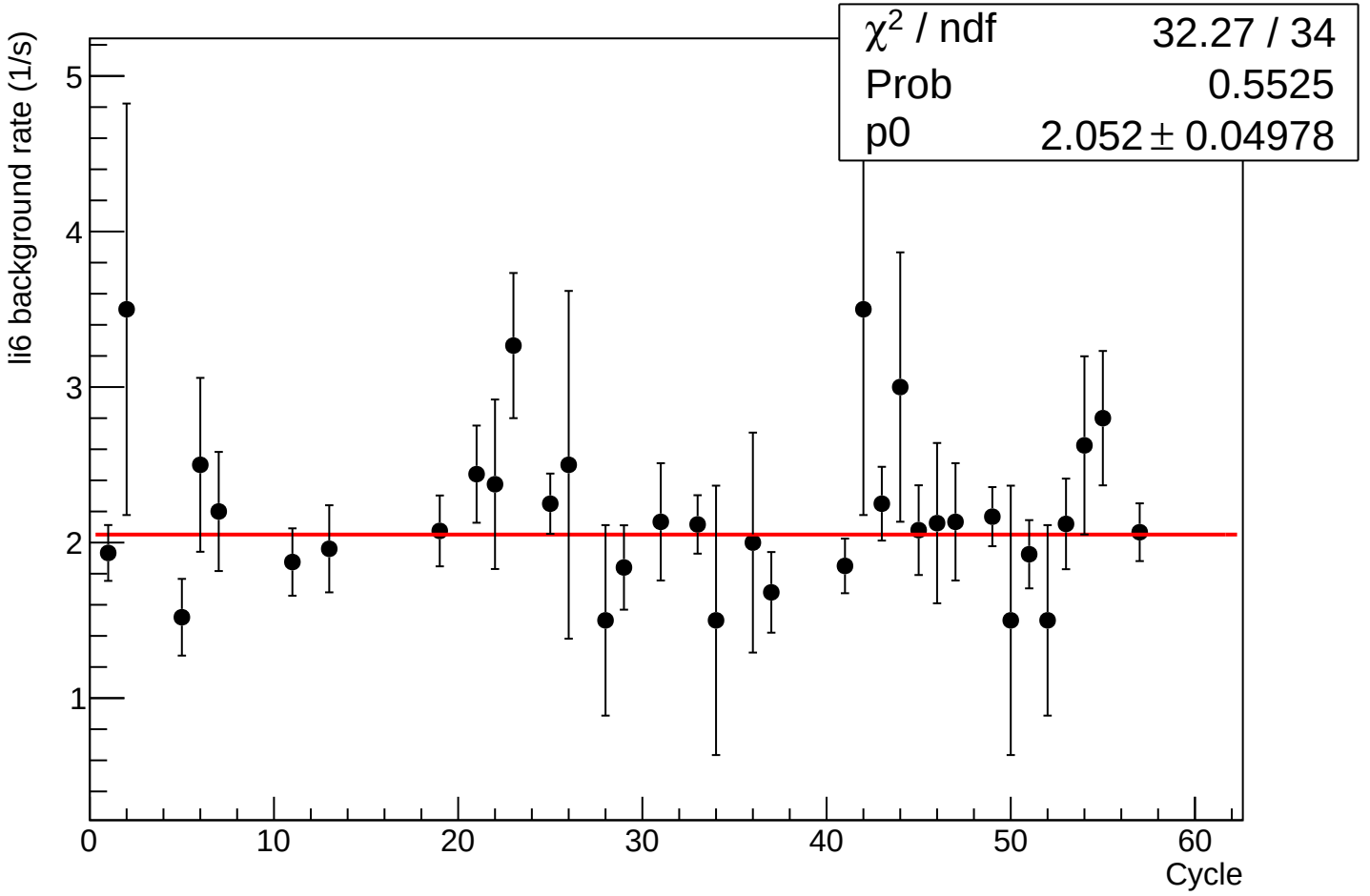

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_49
Entries 4064
Mean 57.08
Std Dev 29.1
Integral 4064
χ² / ndf 50.77 / 53
Prob 0.5616
p0 705 ± 130.8
τ 24.7 ± 1.3
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

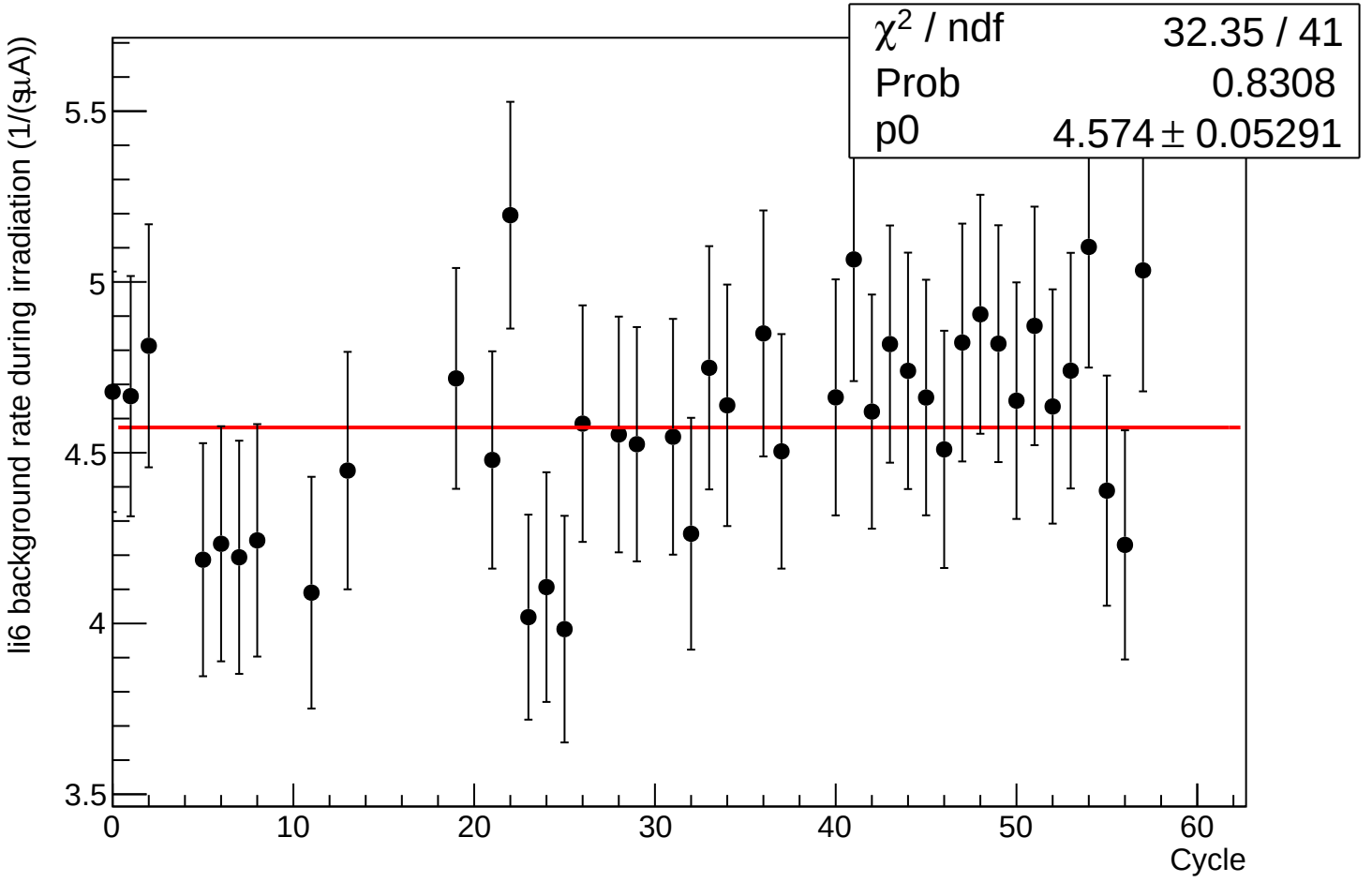

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_51
Entries 4172
Mean 56.75
Std Dev 28.63
Integral 4172
χ² / ndf 21.49 / 33
Prob 0.9385
p0 1556 ± 402.0
τ 20.21 ± 1.35
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)

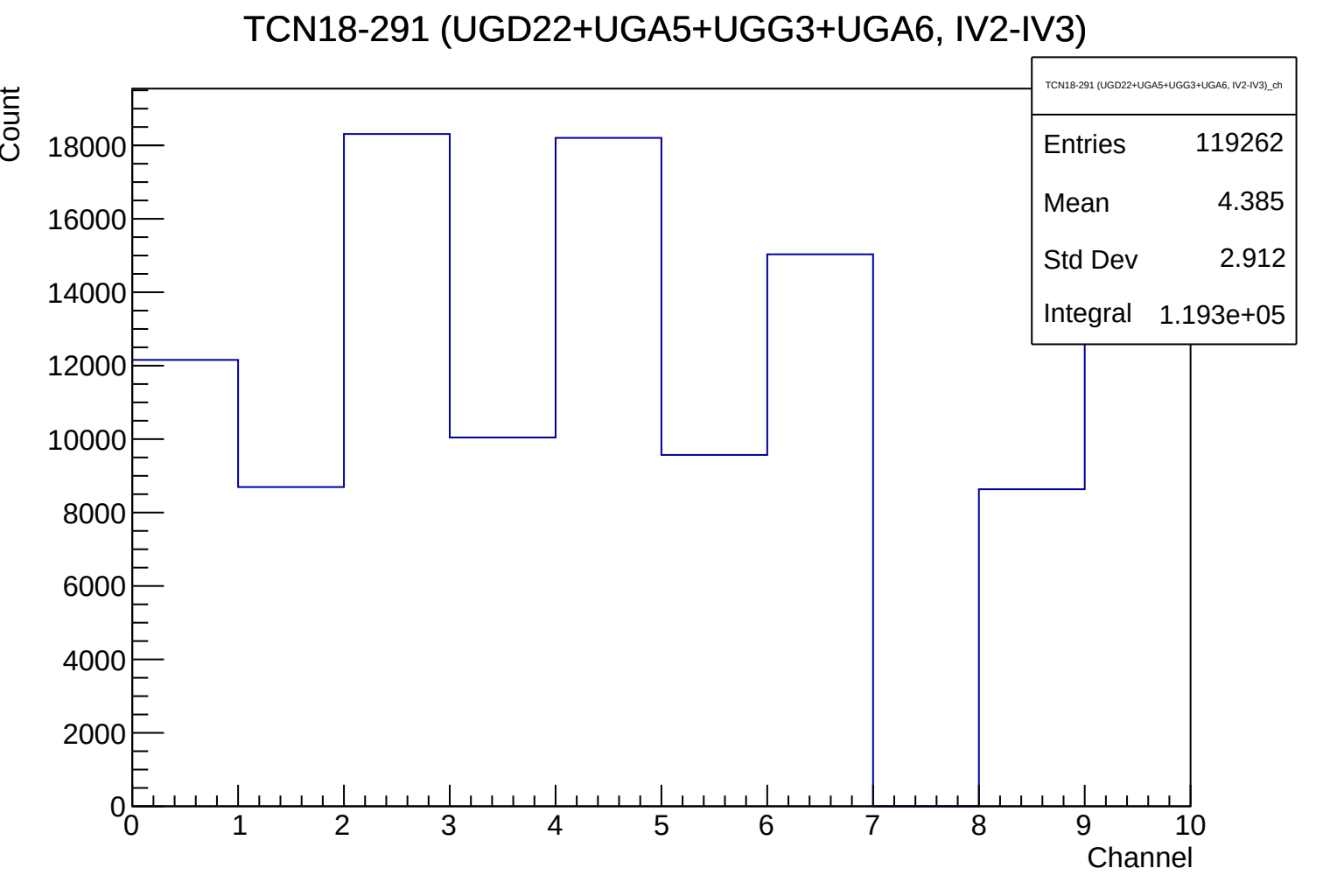

TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_53
Entries 4041
Mean 57.28
Std Dev 28.93
Integral 4041
χ² / ndf 20.84 / 18
Prob 0.2877
p0 2268 ± 1197.4
τ 17.92 ± 2.31
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)


TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3) (He3 rate)
He3_1008_57
Entries 3949
Mean 56.29
Std Dev 29.07
Integral 3949
χ² / ndf 57.93 / 53
Prob 0.2984
p0 1092 ± 202.8
τ 21.48 ± 1.03
He3 rate (s⁻¹)
10²
10
1
0
20
40
60
80
100
120
140
160
180
200
220
Time (s)


χ^2 / ndf 30.06 / 16
Prob 0.01769
p0 20.95 ± 0.3607
Pinhole storage lifetime (s)
30
28
26
24
22
20
18
16
14
0
5
10
15
20
25
30
Cycle


χ^2 / ndf 32.27 / 34
Prob 0.5525
p0 2.052 ± 0.04978
li6 background rate (1/s)
Cycle
0
10
20
30
40
50
60
1
2
3
4
5


χ² / ndf 32.35 / 41
Prob 0.8308
p0 4.574 ± 0.05291
li6 background rate during irradiation (1/(μA))
Cycle
5.5
5
4.5
4
3.5
0
10
20
30
40
50
60


TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3)
TCN18-291 (UGD22+UGA5+UGG3+UGA6, IV2-IV3)_ch
Entries 119262
Mean 4.385
Std Dev 2.912
Integral 1.193e+05
Count
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
1
2
3
4
5
6
7
8
9
10
Channel