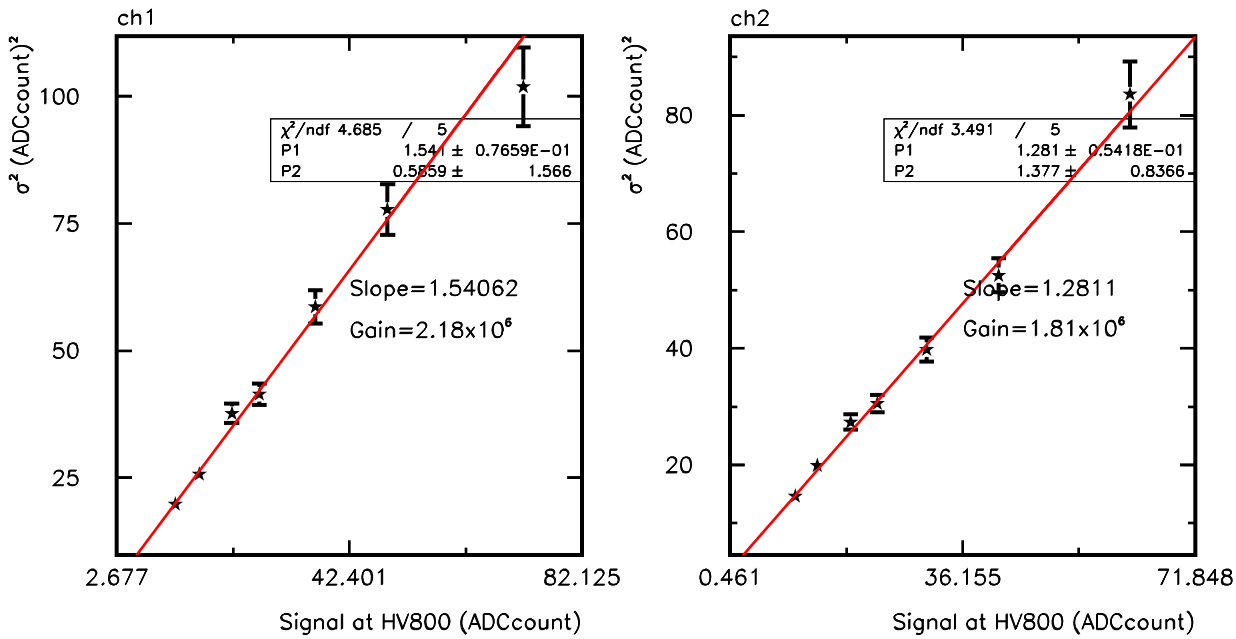
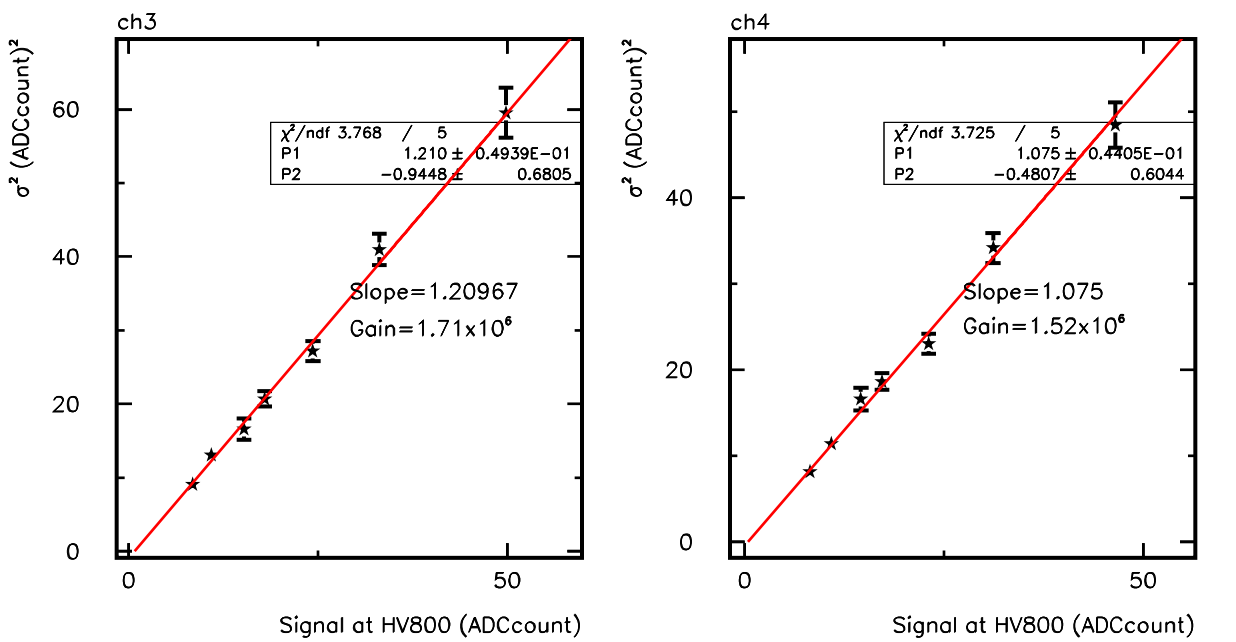
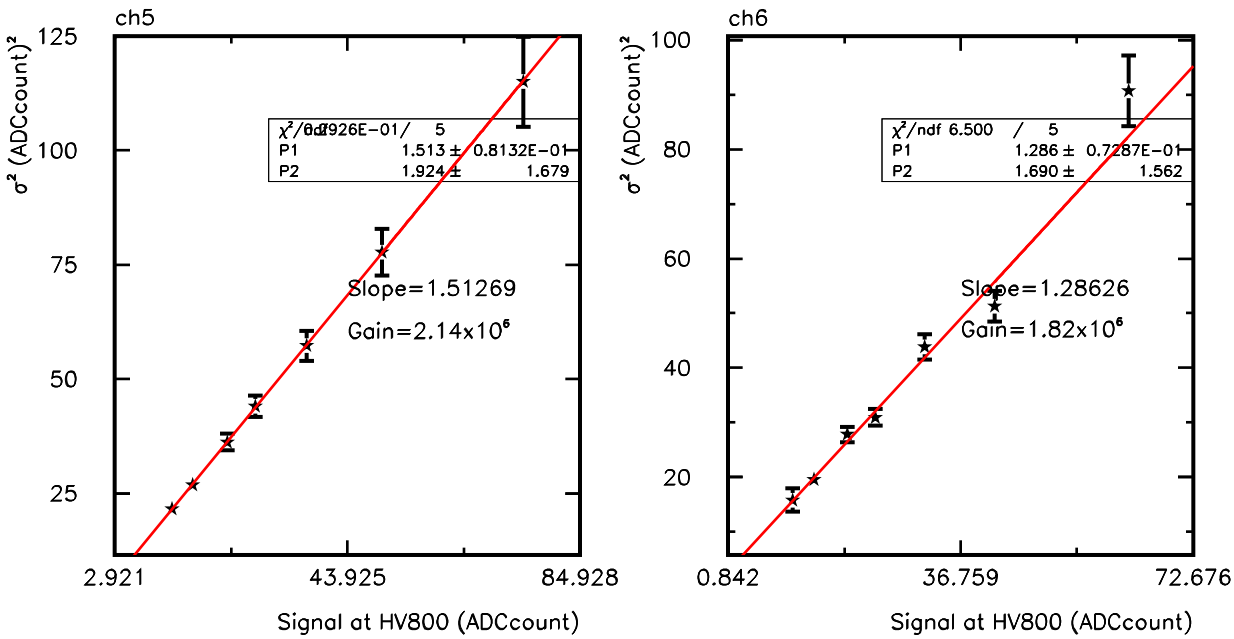
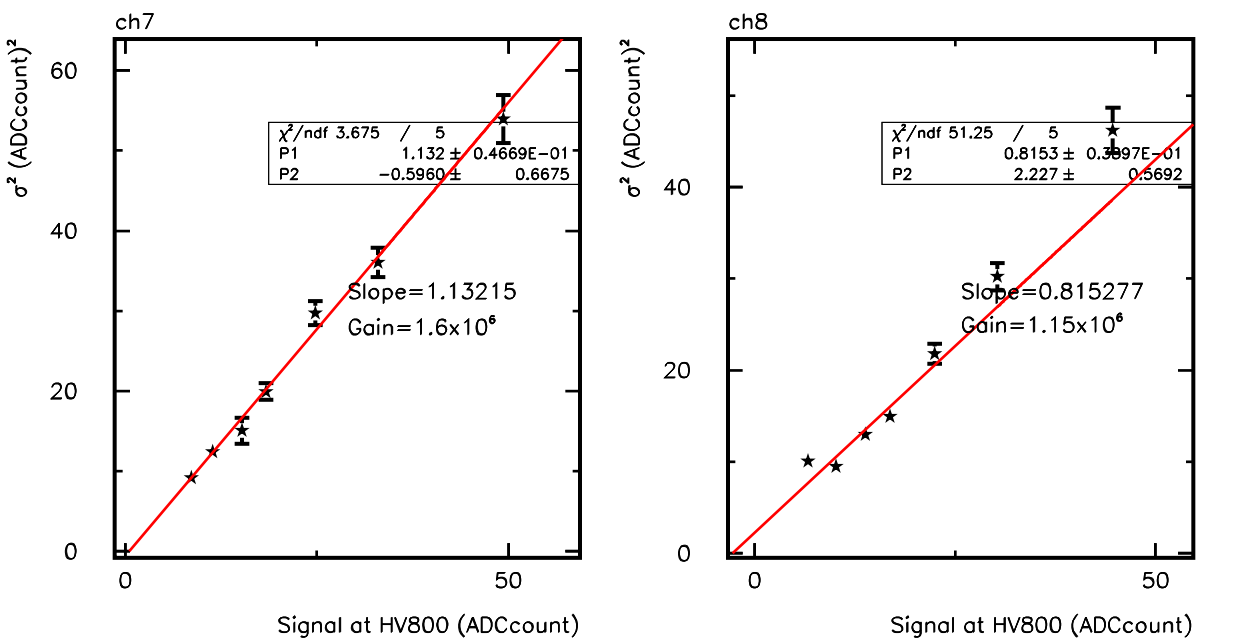
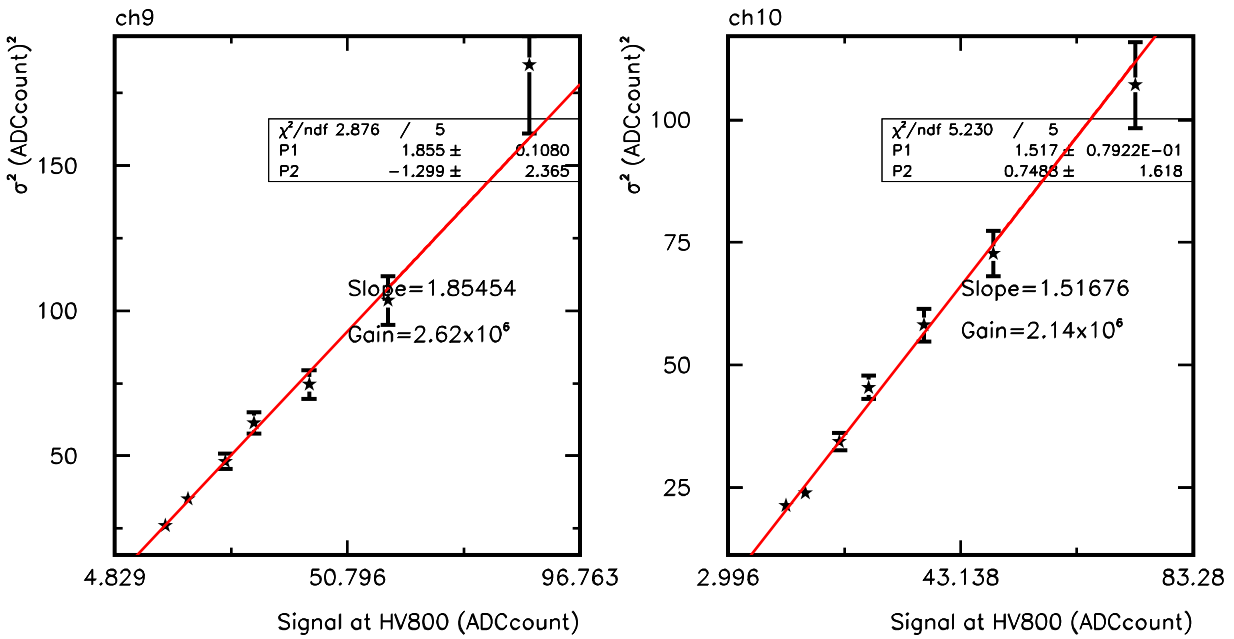

ch1
σ² (ADCcount)²
χ²/ndf 4.685 / 5
P1 1.541 ± 0.7659E-01
P2 0.5859 ± 1.566
Slope=1.54062
Gain=2.18x10⁶
100
75
50
25
2.677
42.401
82.125
Signal at HV800 (ADCcount)
ch2
σ² (ADCcount)²
χ²/ndf 3.491 / 5
P1 1.281 ± 0.5418E-01
P2 1.377 ± 0.8366
Slope=1.2811
Gain=1.81x10⁶
80
60
40
20
0.461
36.155
71.848
Signal at HV800 (ADCcount)

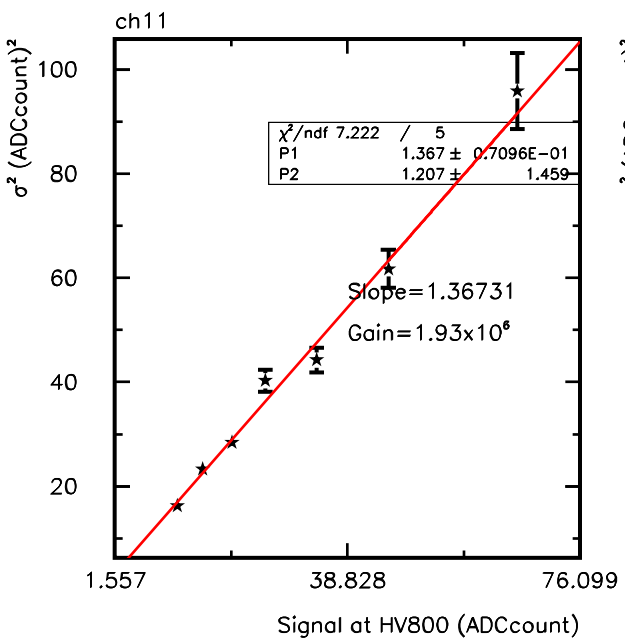

ch3
σ² (ADCcount)²
χ²/ndf 3.768 / 5
P1 1.210 ± 0.4939E-01
P2 −0.9448 ± 0.6805
Slope=1.20967
Gain=1.71x10⁶
60
40
20
0
0
50
Signal at HV800 (ADCcount)
ch4
σ² (ADCcount)²
χ²/ndf 3.725 / 5
P1 1.075 ± 0.4405E-01
P2 −0.4807 ± 0.6044
Slope=1.075
Gain=1.52x10⁶
40
20
0
0
50
Signal at HV800 (ADCcount)

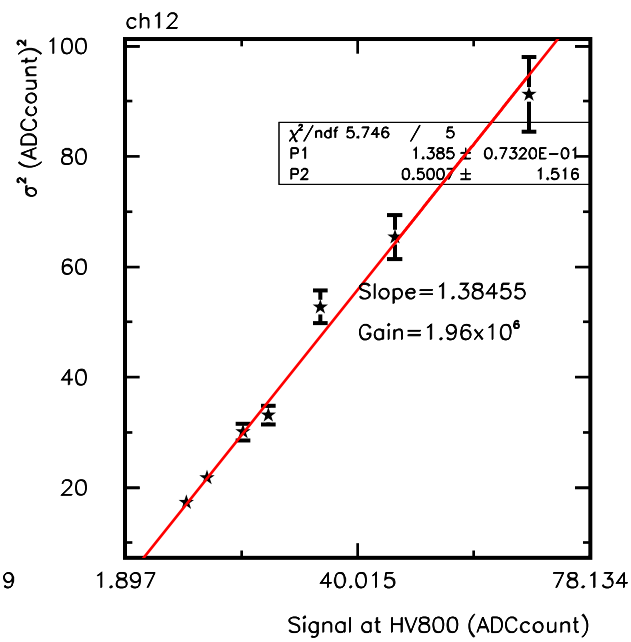

ch5
σ² (ADCcount)²
125
100
75
50
25
χ²/ndf 1.926E-01 / 5
P1 1.513 ± 0.8132E-01
P2 1.924 ± 1.679
Slope=1.51269
Gain=2.14x10⁶
2.921
43.925
84.928
Signal at HV800 (ADCcount)
ch6
σ² (ADCcount)²
100
80
60
40
20
χ²/ndf 6.500 / 5
P1 1.286 ± 0.7287E-01
P2 1.690 ± 1.562
Slope=1.28626
Gain=1.82x10⁶
0.842
36.759
72.676
Signal at HV800 (ADCcount)

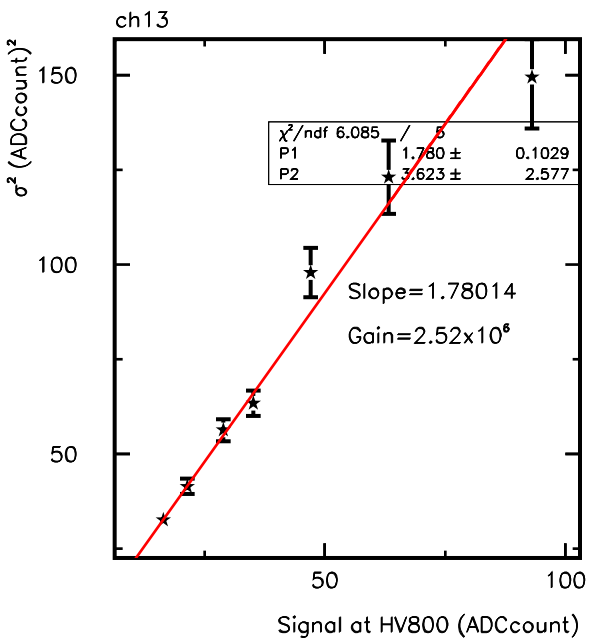

ch7
σ² (ADCcount)²
60
40
20
0
χ²/ndf 3.675 / 5
P1 1.132 ± 0.4669E-01
P2 -0.5960 ± 0.6675
Slope=1.13215
Gain=1.6x10⁶
0
50
Signal at HV800 (ADCcount)
ch8
σ² (ADCcount)²
40
20
0
χ²/ndf 51.25 / 5
P1 0.8153 ± 0.3897E-01
P2 2.227 ± 0.5692
Slope=0.815277
Gain=1.15x10⁶
0
50
Signal at HV800 (ADCcount)

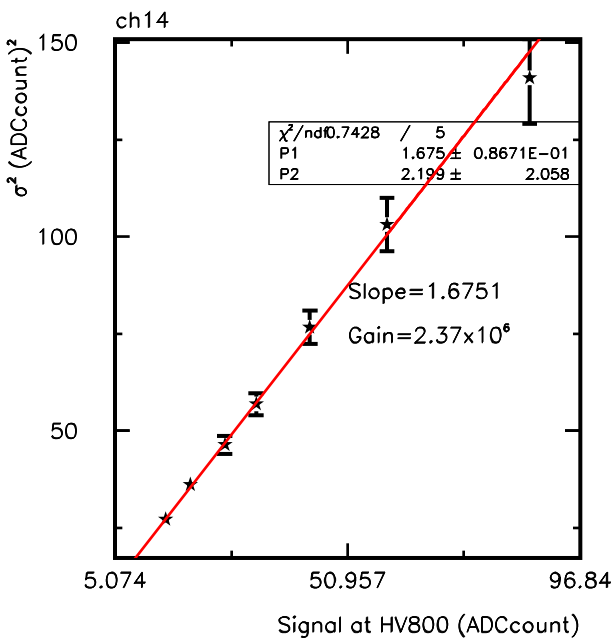

ch9
σ² (ADCcount)²
χ²/ndf 2.876 / 5
P1 1.855 ± 0.1080
P2 −1.299 ± 2.365
Slope=1.85454
Gain=2.62x10⁶
150
100
50
4.829
50.796
96.763
Signal at HV800 (ADCcount)

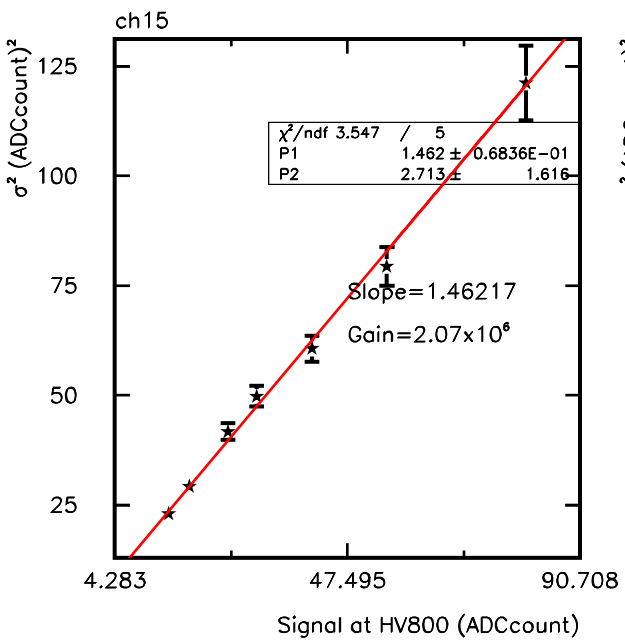
ch10
σ² (ADCcount)²
χ²/ndf 5.230 / 5
P1 1.517 ± 0.7922E-01
P2 0.7483 ± 1.618
Slope=1.51676
Gain=2.14x10⁶
100
75
50
25
2.996
43.138
83.28
Signal at HV800 (ADCcount)

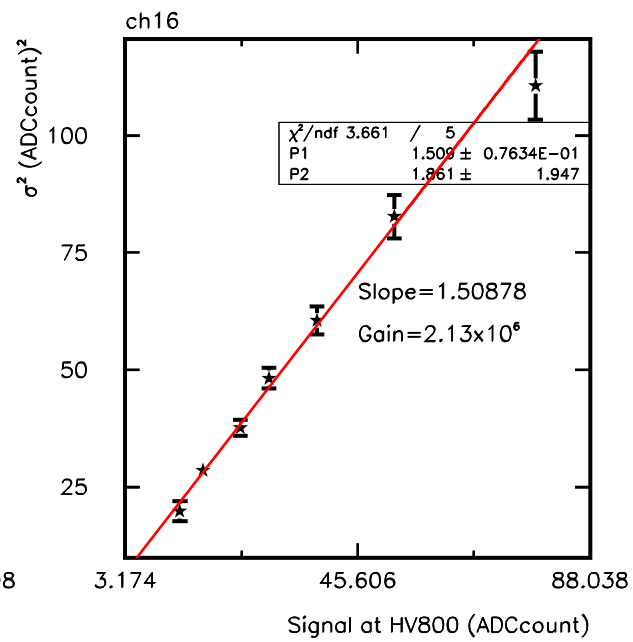

ch11
σ² (ADCcount)²
χ²/ndf 7.222 / 5
P1 1.367 ± 0.7096E-01
P2 1.207 ± 1.459
Slope=1.36731
Gain=1.93x10⁶
100
80
60
40
20
1.557
38.828
76.099
Signal at HV800 (ADCcount)


ch12
σ² (ADCcount)²
χ²/ndf 5.746 / 5
P1 1.385 ± 0.7320E-01
P2 0.5007 ± 1.516
Slope=1.38455
Gain=1.96x10⁶
100
80
60
40
20
1.897
40.015
78.134
Signal at HV800 (ADCcount)


ch13
σ² (ADCcount)²
150
100
50
50
100
χ²/ndf 6.085 / 5
P1 1.780 ± 0.1029
P2 3.623 ± 2.577
Slope=1.78014
Gain=2.52x10⁶
Signal at HV800 (ADCcount)


ch14
σ² (ADCcount)²
150
100
50
5.074
50.957
96.84
χ²/ndf 0.7428 / 5
P1 1.675 ± 0.8671E-01
P2 2.199 ± 2.058
Slope=1.6751
Gain=2.37x10⁶
Signal at HV800 (ADCcount)


ch15
σ² (ADCcount)²
125
100
75
50
25
4.283
47.495
90.708
χ²/ndf 3.547 / 5
P1 1.462 ± 0.6836E-01
P2 2.713 ± 1.616
Slope=1.46217
Gain=2.07x10⁶
Signal at HV800 (ADCcount)

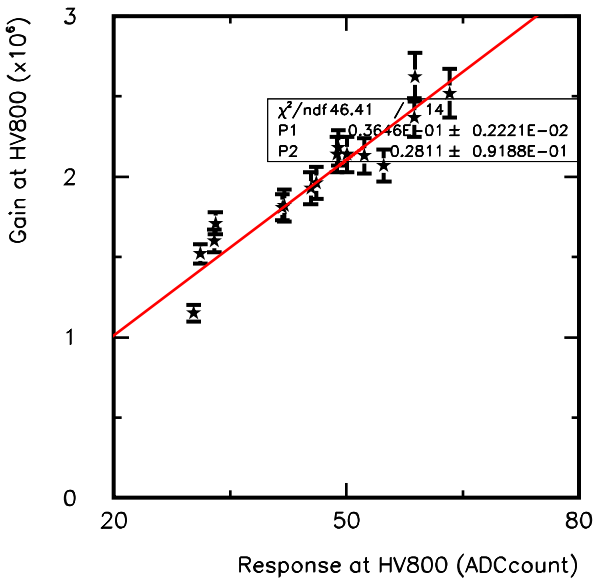

ch16
σ² (ADCcount)²
100
75
50
25
3.174
45.606
88.038
χ²/ndf 3.661 / 5
P1 1.509 ± 0.7634E-01
P2 1.861 ± 1.947
Slope=1.50878
Gain=2.13x10⁶
Signal at HV800 (ADCcount)

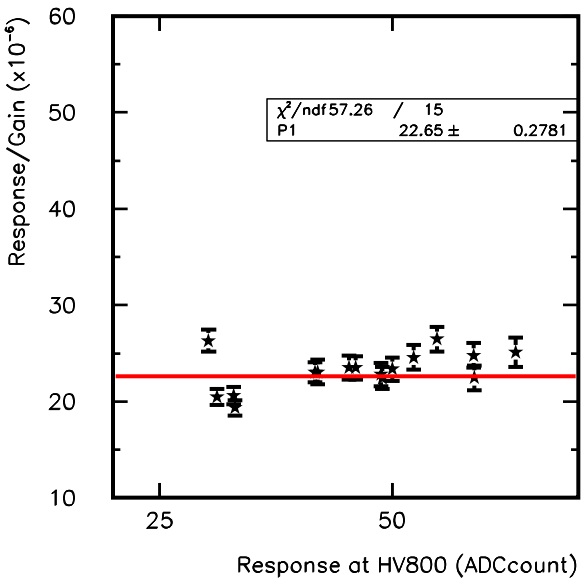
sa0416.gain.uniformity

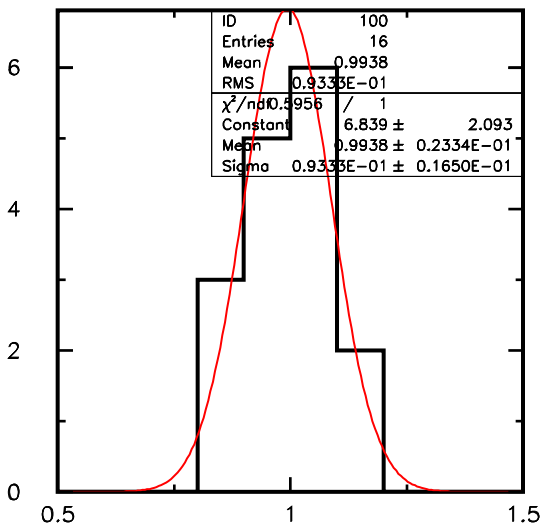
ch1 ADC=48.91±0.33 normADC=1.05 --- GAIN =(2.18±0.11)x10^6 normGAIN=1.1	ch2 41.7±0.25 0.9 --- (1.81±0.08)x10^6 0.91	ch3 33.07±0.22 0.71 --- (1.71±0.07)x10^6 0.86	ch4 31.16±0.21 0.67 --- (1.52±0.06)x10^6 0.76
ch5 50.04±0.34 1.08 --- (2.14±0.11)x10^6 1.08	ch6 41.99±0.25 0.9 --- (1.82±0.1)x10^6 0.91	ch7 32.97±0.21 0.71 --- (1.6±0.07)x10^6 0.8	ch8 30.26±0.19 0.65 --- (1.15±0.05)x10^6 0.58
ch9 58.82±0.42 1.27 --- (2.62±0.15)x10^6 1.32	ch10 48.78±0.32 1.05 --- (2.14±0.11)x10^6 1.08	ch11 45.38±0.29 0.98 --- (1.93±0.1)x10^6 0.97	ch12 46.08±0.3 0.99 --- (1.96±0.1)x10^6 0.99
ch13 63.29±0.43 1.37 --- (2.52±0.15)x10^6 1.27	ch14 58.76±0.37 1.27 --- (2.36±0.12)x10^6 1.19	ch15 54.83±0.3 1.18 --- (2.07±0.1)x10^6 1.04	ch16 52.32±0.3 1.13 --- (2.13±0.11)x10^6 1.07

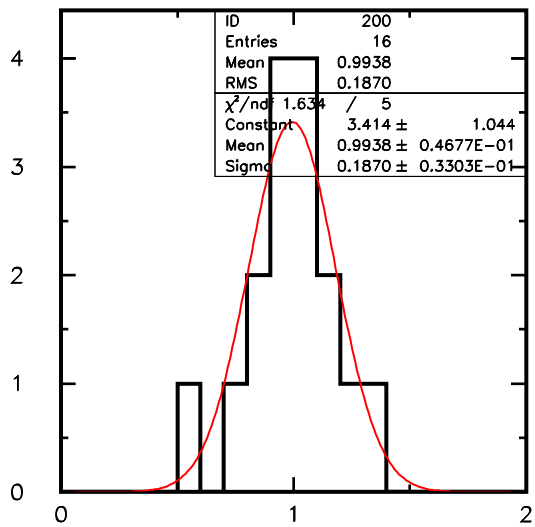
meanGAIN=(1.97±0.1)x10^6
hamaGAIN=1.4x10^6

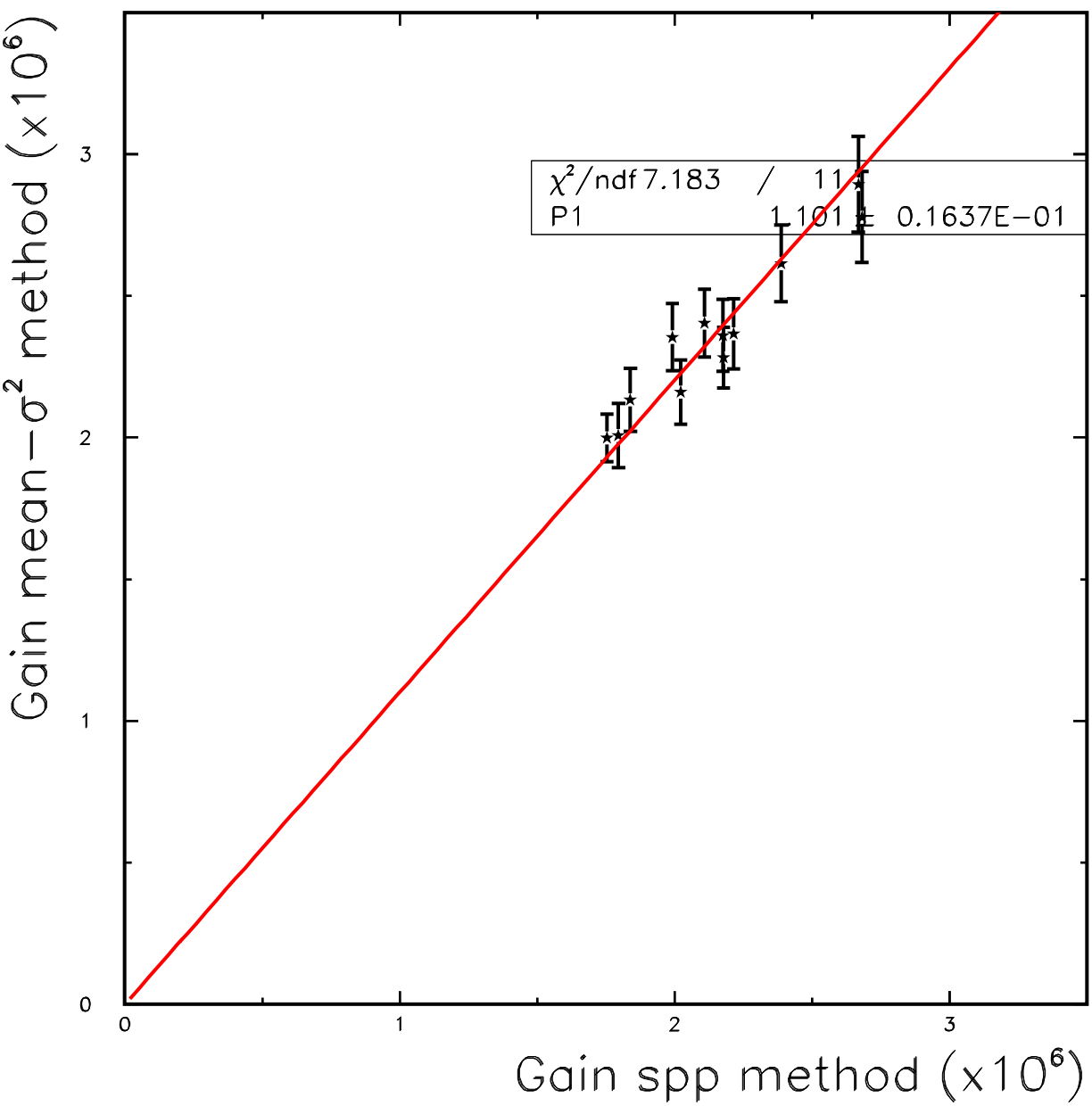
sa0416.Response−Gain.correlation

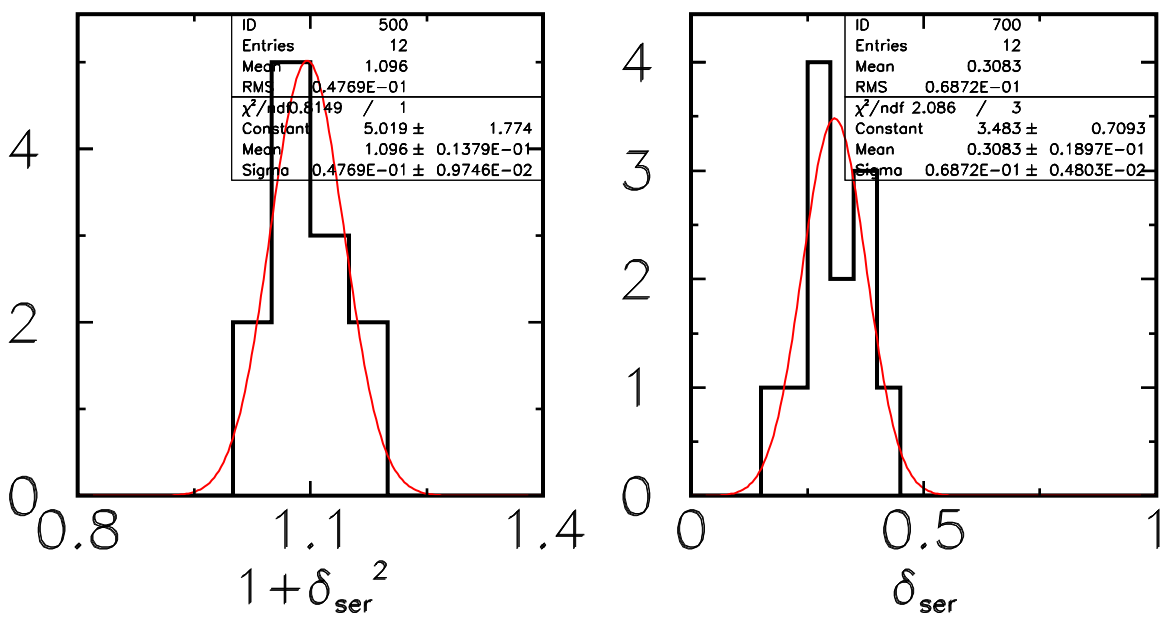









Gain mean−σ² method (x10⁶)
Gain spp method (x10⁶)
χ²/ndf 7.183 / 11
P1 1.101 ± 0.1637E−01
0
1
2
3


ID 500
Entries 12
Mean 1.096
RMS 0.4769E-01
χ²/ndf 0.8149 / 1
Constant 5.019 ± 1.774
Mean 1.096 ± 0.1379E-01
Sigma 0.4769E-01 ± 0.9746E-02
0
2
4
0.8
1.1
1.4
1+δser 2
ID 700
Entries 12
Mean 0.3083
RMS 0.6872E-01
χ²/ndf 2.086 / 3
Constant 3.483 ± 0.7093
Mean 0.3083 ± 0.1897E-01
Sigma 0.6872E-01 ± 0.4803E-02
0
1
2
3
4
0
0.5
1
δser