G25_O120_Ch0_PulseIn_20191119_114253.txt
amp_mean 38892.2
amp_sigm 119.1
abs_gain 165.1
abs_gErr 12.5

G60_O120_Ch0_PulseIn_20191119_114539.txt
amp_mean 76041.7
amp_sigm 266.1
abs_gain 322.9
abs_gErr 24.4

G55_O120_Ch(_ERROR__
amp_mean 71242.2
amp_sigm 296.9
abs_gain 302.5
abs_gErr 22.9

G55_O120_Ch(_ERROR__
amp_mean 399431
amp_sigm 2.47E+05
abs_gain 1696
abs_gErr 1.06E+03

G5_O120_Ch0_PulseIn_20191119_114149.txt
amp_mean 11069.9
amp_sigm 38.82
abs_gain 47
abs_gErr 3.55

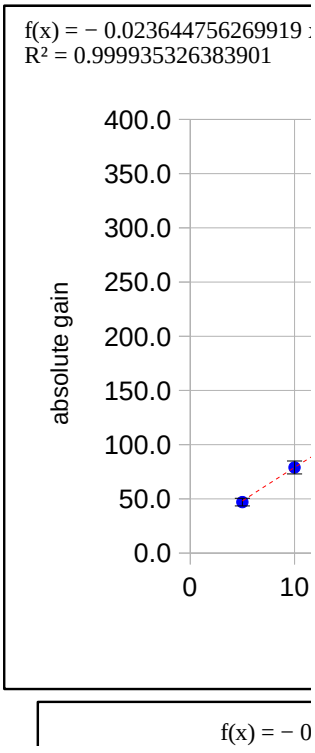
G40_O120_Ch0_PulseIn_20191119_114329.txt
amp_mean 56275.2
amp_sigm 184.6
abs_gain 238.9
abs_gErr 18.1

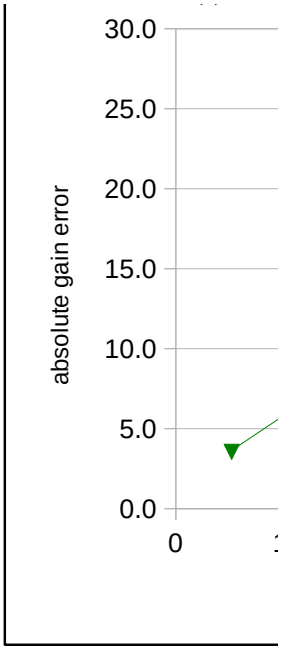
G35_O120_Ch0_PulseIn_20191119_114319.txt
amp_mean 50801.9
amp_sigm 160.6
abs_gain 215.7
abs_gErr 16.3

G25_O120_Ch0_PulseIn_20191119_114255.txt
amp_mean 38889.7
amp_sigm 122.6
abs_gain 165.1
abs_gErr 12.5

G55_O120_Ch(_ERROR__
amp_mean 227518
amp_sigm 1.29E+05

Gain	5	10	15	20
ampl mean	11069.9	18590.3	25722.7	32492.8
	11071.1	18595.5	25720.2	32486.9
	11067.3	18588.9	25723.9	32493.8
	11068.8	18592.3	25721.3	32481.4
	11069.3	***18591.8***	***25722.0***	***32488.7***
ampl sigma	38.82	59.78	86.01	100.9
	37.76	60.36	78.41	109.1
	37.85	59.85	80.82	98.74
	37.55	63.31	81.63	97.01
	38.0	***60.8***	***81.7***	***101.4***
abs gain	47	78.93	109.2	138
	47.01	78.96	109.2	137.9
	46.99	78.93	109.2	138
	47	78.94	109.2	137.9
	47.0	***78.9***	***109.2***	***138.0***
abs gain Err	3.55	5.97	8.26	10.4
	3.55	5.97	8.26	10.4
	3.55	5.97	8.26	10.4
	3.55	5.97	8.26	10.4
	3.6	***6.0***	***8.3***	***10.4***





abs_gain	966
abs_gErr	553

G30_O120_Ch0_PulseIn_20191119_114307.txt

amp_mean	44988.8
amp_sigm	143.8
abs_gain	191
abs_gErr	14.4

G35_O120_Ch0_PulseIn_20191119_114320.txt

amp_mean	50819.4
amp_sigm	159.1
abs_gain	215.8
abs_gErr	16.3

G30_O120_Ch0_PulseIn_20191119_114305.txt

amp_mean	44994.7
amp_sigm	141.6
abs_gain	191
abs_gErr	14.4

G35_O120_Ch0_PulseIn_20191119_114322.txt

amp_mean	50816.8
amp_sigm	160.1
abs_gain	215.8
abs_gErr	16.3

G25_O120_Ch0_PulseIn_20191119_114257.txt

amp_mean	38908.6
amp_sigm	120.3
abs_gain	165.2
abs_gErr	12.5

G30_O120_Ch0_PulseIn_20191119_114310.txt

amp_mean	45003.5
amp_sigm	142.4
abs_gain	191.1
abs_gErr	14.4

G10_O120_Ch0_PulseIn_20191119_114202.txt

amp_mean	18590.3
amp_sigm	59.78
abs_gain	78.93
abs_gErr	5.97

G63_O120_Ch0_PulseIn_20191119_114552.txt

amp_mean	78795.8
amp_sigm	275.6
abs_gain	334.6
abs_gErr	25.3

G45_O120_Ch0_PulseIn_20191119_114347.txt

amp_mean	61482.1

amp_sigm	212.3
abs_gain	261.1
abs_gErr	19.7

G50_O120_Ch0_PulseIn_20191119_114406.txt

amp_mean	66455
amp_sigm	198.6
abs_gain	282.2
abs_gErr	21.3

G15_O120_Ch0_PulseIn_20191119_114218.txt

amp_mean	25722.7
amp_sigm	86.01
abs_gain	109.2
abs_gErr	8.26

G50_O120_Ch0_PulseIn_20191119_114410.txt

amp_mean	66445.5
amp_sigm	211.7
abs_gain	282.1
abs_gErr	21.3

G45_O120_Ch0_PulseIn_20191119_114345.txt

amp_mean	61505.5
amp_sigm	190.8
abs_gain	261.2
abs_gErr	19.7

G50_O120_Ch0_PulseIn_20191119_114411.txt

amp_mean	66459.6
amp_sigm	208.2
abs_gain	282.2
abs_gErr	21.3

G15_O120_Ch0_PulseIn_20191119_114223.txt

amp_mean	25720.2
amp_sigm	78.41
abs_gain	109.2
abs_gErr	8.26

G63_O120_Ch0_PulseIn_20191119_114554.txt

amp_mean	78801.2
amp_sigm	262
abs_gain	334.6
abs_gErr	25.3

G10_O120_Ch0_PulseIn_20191119_114205.txt

amp_mean	18595.5
amp_sigm	60.36
abs_gain	78.96
abs_gErr	5.97

G15_O120_Ch0_PulseIn_20191119_114222.txt

amp_mean	25723.9
amp_sigm	80.82
abs_gain	109.2
abs_gErr	8.26

G15_O120_Ch0_PulseIn_20191119_114220.txt

amp_mean	25721.3
amp_sigm	81.63
abs_gain	109.2
abs_gErr	8.26

G10_O120_Ch0_PulseIn_20191119_114159.txt

amp_mean	18588.9
amp_sigm	59.85
abs_gain	78.93
abs_gErr	5.97

G63_O120_Ch0_PulseIn_20191119_114556.txt

amp_mean	78821.7
amp_sigm	278.2
abs_gain	334.7
abs_gErr	25.3

CF1_O120_Ch0_PulseIn_20191119_114712.txt

amp_mean	42192.8
amp_sigm	159.5
abs_gain	179.2
abs_gErr	13.6

CF1_O120_Ch0_PulseIn_20191119_114713.txt

amp_mean	42217.2
amp_sigm	157.2
abs_gain	179.3
abs_gErr	13.6

G20_O120_Ch0_PulseIn_20191119_114237.txt

amp_mean	32492.8
amp_sigm	100.9
abs_gain	138
abs_gErr	10.4

G20_O120_Ch0_PulseIn_20191119_114235.txt

amp_mean	32486.9
amp_sigm	109.1
abs_gain	137.9
abs_gErr	10.4

G63_O120_Ch0_PulseIn_20191119_114558.txt

amp_mean	78797.8
amp_sigm	260.7
abs_gain	334.6
abs_gErr	25.3

G60_O120_Ch0_PulseIn_20191119_114545.txt

amp_mean	76032.2
amp_sigm	259.2
abs_gain	322.8
abs_gErr	24.4

G10_O120_Ch0_PulseIn_20191119_114209.txt

amp_mean	18592.3
amp_sigm	63.31
abs_gain	78.94
abs_gErr	5.97

CF1_O120_Ch0_PulseIn_20191119_114710.txt

amp_mean	42192.4
amp_sigm	169.9
abs_gain	179.2
abs_gErr	13.6

G20_O120_Ch0_PulseIn_20191119_114234.txt

amp_mean	32493.8
amp_sigm	98.74
abs_gain	138
abs_gErr	10.4

G50_O120_Ch0_PulseIn_20191119_114408.txt

amp_mean	66455.2
amp_sigm	218.7
abs_gain	282.2
abs_gErr	21.3

G60_O120_Ch0_PulseIn_20191119_114541.txt

amp_mean	76029.3
amp_sigm	257.5
abs_gain	322.8
abs_gErr	24.4

G45_O120_Ch0_PulseIn_20191119_114348.txt

amp_mean	61495
amp_sigm	196.8
abs_gain	261.1
abs_gErr	19.7

CF1_O120_Ch0_PulseIn_20191119_114715.txt

amp_mean	42200.9
amp_sigm	161.3
abs_gain	179.2
abs_gErr	13.6

CF1_O120_Ch0_PulseIn_20191119_114717.txt

amp_mean	42211.8
amp_sigm	158
abs_gain	179.2
abs_gErr	13.6

CF1_O120_Ch0_PulseIn_20191119_114716.txt

amp_mean	42202.2
amp_sigm	155.2
abs_gain	179.2
abs_gErr	13.6

G20_O120_Ch0_PulseIn_20191119_114232.txt

amp_mean	32481.4
amp_sigm	97.01
abs_gain	137.9
abs_gErr	10.4

G30_O120_Ch0_PulseIn_20191119_114309.txt

amp_mean	45012.9
amp_sigm	145
abs_gain	191.1
abs_gErr	14.5

G5_O120_Ch0_PulseIn_20191119_114143.txt

amp_mean	11071.1
amp_sigm	37.76
abs_gain	47.01
abs_gErr	3.55

G55_O120_Ch(_ERROR__

amp_mean	3117.06
amp_sigm	3.49E+05
abs_gain	13.24
abs_gErr	1.48E+03

G55_O120_Ch(_ERROR__

amp_mean	-0.370337
amp_sigm	30.08
abs_gain	-0.001572
abs_gErr	0.128

G40_O120_Ch0_PulseIn_20191119_114334.txt

amp_mean	56267
amp_sigm	189.5
abs_gain	238.9
abs_gErr	18.1

G5_O120_Ch0_PulseIn_20191119_114141.txt

amp_mean	11067.3
amp_sigm	37.85
abs_gain	46.99
abs_gErr	3.55

G40_O120_Ch0_PulseIn_20191119_114331.txt

amp_mean	56280.8
amp_sigm	185
abs_gain	239

abs_gErr	18.1

G55_O120_Ch(_ERROR__

amp_mean	32690.6
amp_sigm	2680
abs_gain	138.8
abs_gErr	15.5

G60_O120_Ch0_PulseIn_20191119_114537.txt

amp_mean	76035.4
amp_sigm	254.8
abs_gain	322.8
abs_gErr	24.4

G35_O120_Ch0_PulseIn_20191119_114317.txt

amp_mean	50807.9
amp_sigm	163.5
abs_gain	215.7
abs_gErr	16.3

G60_O120_Ch0_PulseIn_20191119_114535.txt

amp_mean	76034.2
amp_sigm	258
abs_gain	322.8
abs_gErr	24.4

G55_O120_Ch(_ERROR__

amp_mean	518521
amp_sigm	1.70E+05
abs_gain	2202
abs_gErr	742

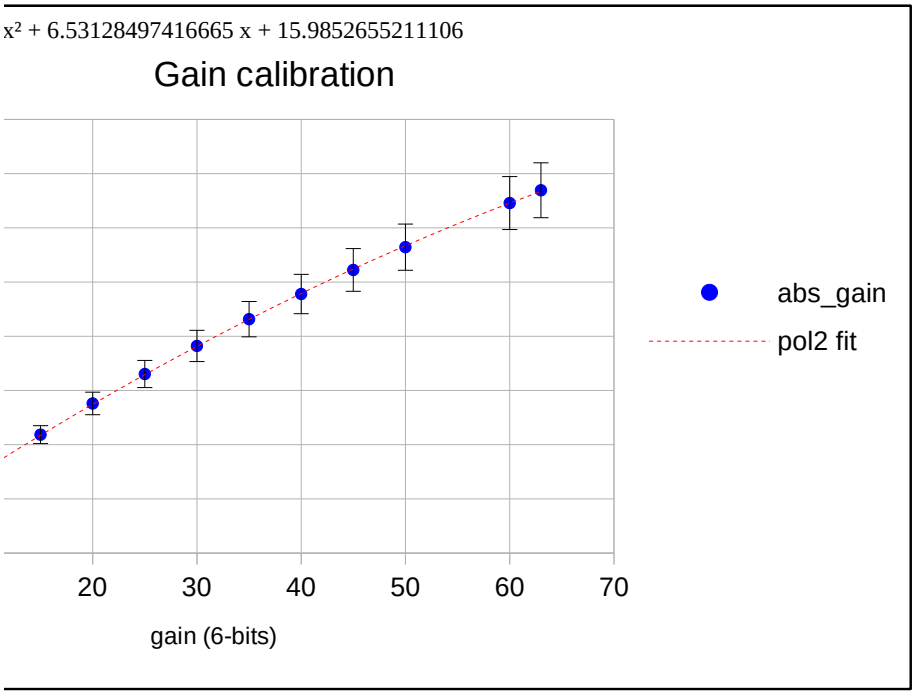
G5_O120_Ch0_PulseIn_20191119_114146.txt

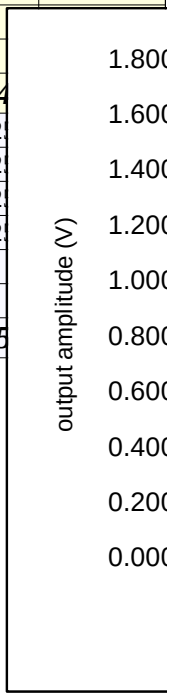
amp_mean	11068.8
amp_sigm	37.55
abs_gain	47
abs_gErr	3.55

G40_O120_Ch0_PulseIn_20191119_114333.txt

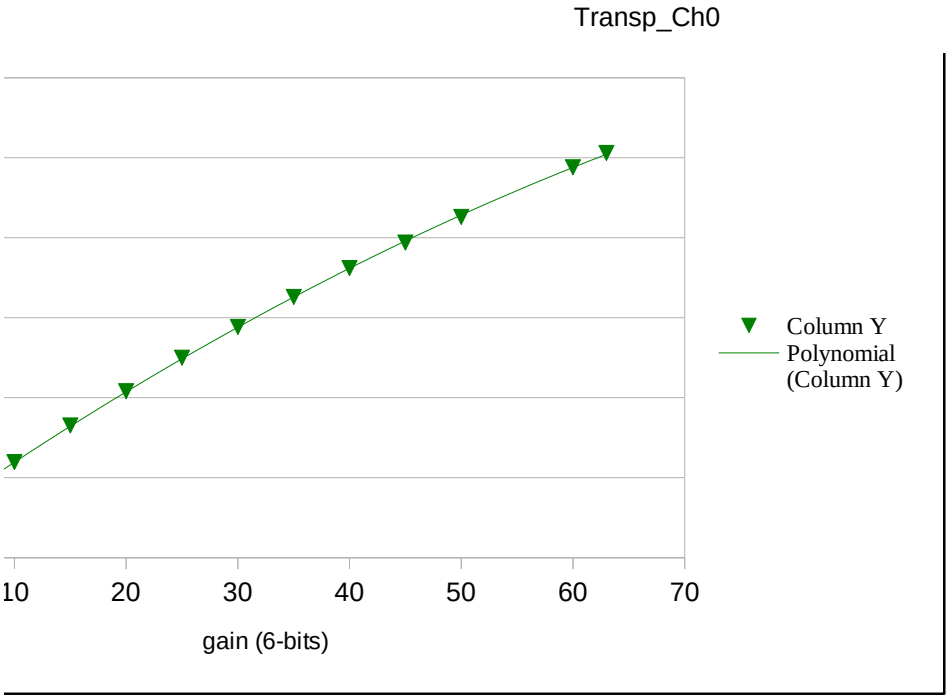
amp_mean	56288.9
amp_sigm	182.9
abs_gain	239
abs_gErr	18.1

25	30	35	40	45	50	55	60	63	CF1
38892.2	44988.8	50801.9	56275.2	61482.1	66455		76041.7	78795.8	42192.8
38889.7	44994.7	50819.4	56267	61505.5	66445.5		76032.2	78801.2	42217.2
38908.6	45003.5	50816.8	56280.8	61495	66459.6		76029.3	78821.7	42192.4
	45012.9	50807.9	56288.9		66455.2		76035.4	78797.8	42200.9
							76034.2		42211.8
									42202.2
38896.8	***45000.0***	***50811.5***	***56278.0***	***61494.2***	***66453.8***	***#DIV/0!***	***76034.6***	***78804.1***	***42202.9***
119.1	143.8	160.6	184.6	212.3	198.6		266.1	275.6	159.5
122.6	141.6	159.1	189.5	190.8	211.7		259.2	262	157.2
120.3	142.4	160.1	185	196.8	208.2		257.5	278.2	169.9
	145	163.5	182.9		218.7		254.8	260.7	161.3
							258		158
									155.2
120.7	***143.2***	***160.8***	***185.5***	***200.0***	***209.3***	***#DIV/0!***	***259.1***	***269.1***	***160.2***
165.1	191	215.7	238.9	261.1	282.2		322.9	334.6	179.2
165.1	191	215.8	238.9	261.2	282.1		322.8	334.6	179.3
165.2	191.1	215.8	239	261.1	282.2		322.8	334.7	179.2
	191.1	215.7	239		282.2		322.8	334.6	179.2
							322.8		
165.1	***191.1***	***215.8***	***239.0***	***261.1***	***282.2***	***#DIV/0!***	***322.8***	***334***	
12.5	14.4	16.3	18.1	19.7	21.3		24.4	2	
12.5	14.4	16.3	18.1	19.7	21.3		24.4	2	
12.5	14.4	16.3	18.1	19.7	21.3		24.4	2	
	14.5	16.3	18.1		21.3		24.4	2	
							24.4		
12.5	***14.4***	***16.3***	***18.1***	***19.7***	***21.3***	***#DIV/0!***	***24.4***	***25***	

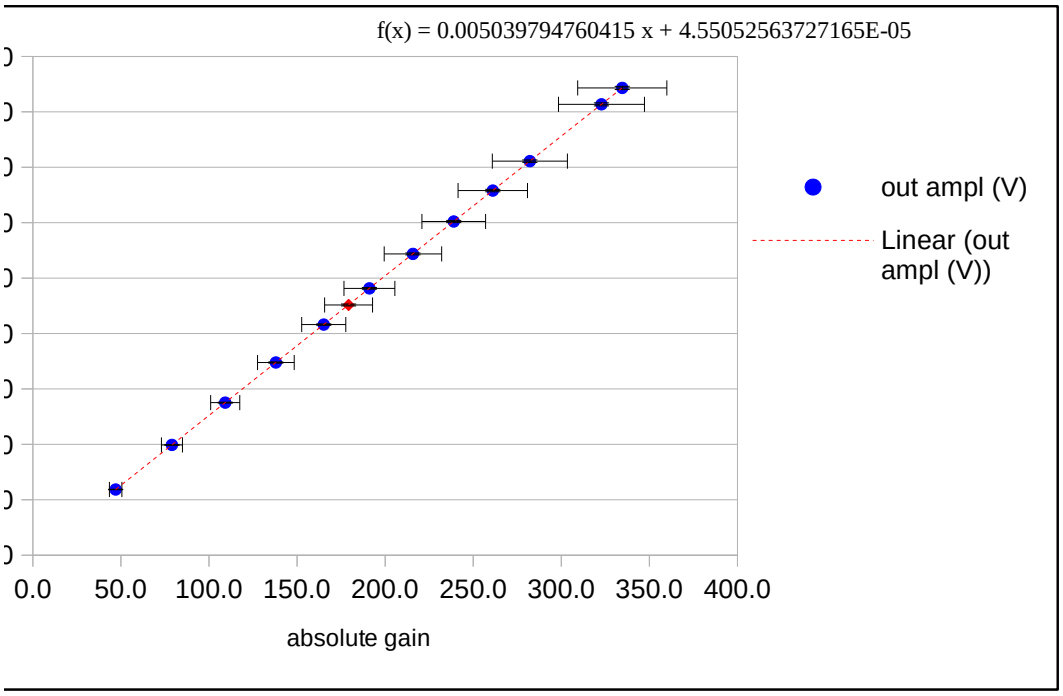




.001779538040032 x² + 0.493061684457771 x + 1.21365222050934


Transp_Ch0
10
20
30
40
50
60
70
gain (6-bits)
Column Y
Polynomial (Column Y)

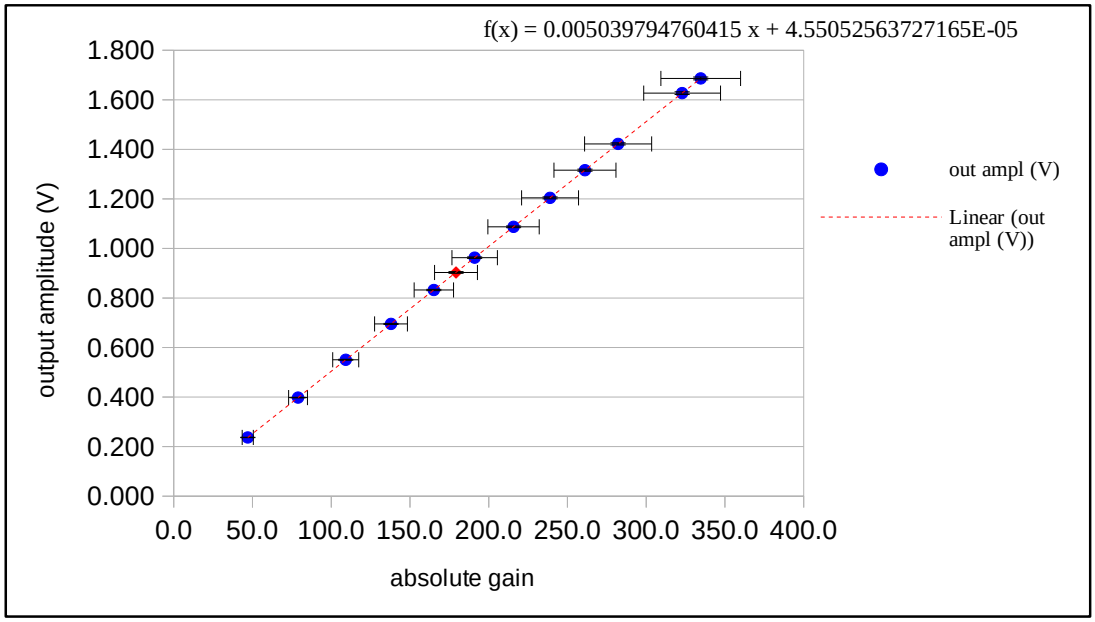
					1ADU=21.4uV
Gain(6bit)	out ampl (ADU)	out error (ADU)	abs_gain	abs_gainErr	out ampl (V)
5	11069.3	38.0	47.0	3.6	0.237
10	18591.8	60.8	78.9	6.0	0.398
15	25722.0	81.7	109.2	8.3	0.550
20	32488.7	101.4	138.0	10.4	0.695
25	38896.8	120.7	165.1	12.5	0.832
30	45000.0	143.2	191.1	14.4	0.963
35	50811.5	160.8	215.8	16.3	1.087
40	56278.0	185.5	239.0	18.1	1.204
45	61494.2	200.0	261.1	19.7	1.316
50	66453.8	209.3	282.2	21.3	1.422
55					
60	76034.6	259.1	322.8	24.4	1.627
63	78804.1	269.1	334.6	25.3	1.686
CF1	42202.9	160.2	179.2	13.6	0.903

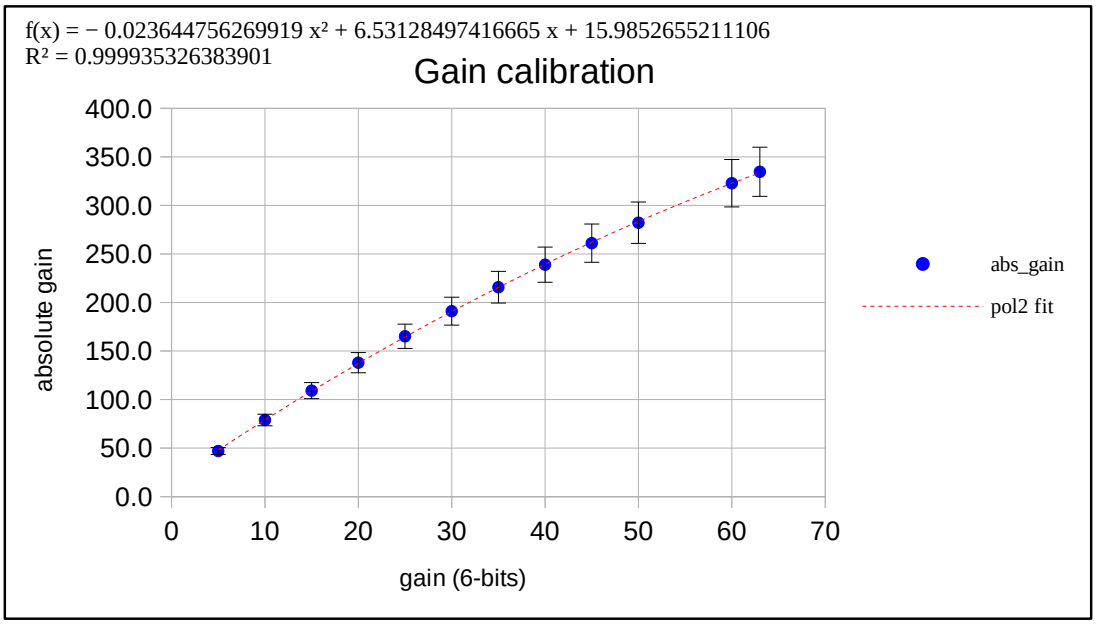


out error (V)
0.001
0.001
0.002
0.002
0.003
0.003
0.003
0.004
0.004
0.004
0.006
0.006
0.003

Transp_Ch0_results_20191119

					1ADU=21.4uV	
Gain(6bit)	out ampl (ADU)	out error (ADU)	abs_gain	abs_gainErr	out ampl (V)	out error (V)
5	11069.3	38.0	47.0	3.6	0.237	0.001
10	18591.8	60.8	78.9	6.0	0.398	0.001
15	25722.0	81.7	109.2	8.3	0.550	0.002
20	32488.7	101.4	138.0	10.4	0.695	0.002
25	38896.8	120.7	165.1	12.5	0.832	0.003
30	45000.0	143.2	191.1	14.4	0.963	0.003
35	50811.5	160.8	215.8	16.3	1.087	0.003
40	56278.0	185.5	239.0	18.1	1.204	0.004
45	61494.2	200.0	261.1	19.7	1.316	0.004
50	66453.8	209.3	282.2	21.3	1.422	0.004
55						
60	76034.6	259.1	322.8	24.4	1.627	0.006
63	78804.1	269.1	334.6	25.3	1.686	0.006
CF1	42202.9	160.2	179.2	13.6	0.903	0.003





CF1_O120_Ch1_PulseIn_20191119_114917.txt
amp_mean 45988.7
amp_sigm 188.9
abs_gain 195.3
abs_gErr 14.8

G35_O120_Ch1_PulseIn_20191119_115111.txt
amp_mean 50535.2
amp_sigm 173.3
abs_gain 214.6
abs_gErr 16.2

CF1_O120_Ch1_PulseIn_20191119_114916.txt
amp_mean 45994.8
amp_sigm 185.7
abs_gain 195.3
abs_gErr 14.8

G30_O120_Ch1_PulseIn_20191119_115057.txt
amp_mean 44847.1
amp_sigm 152
abs_gain 190.4
abs_gErr 14.4

G45_O120_Ch1_PulseIn_20191119_115138.txt
amp_mean 61130.8
amp_sigm 215.2
abs_gain 259.6
abs_gErr 19.6

CF1_O120_Ch1_PulseIn_20191119_114914.txt
amp_mean 46006.9
amp_sigm 187
abs_gain 195.3
abs_gErr 14.8

G5_O120_Ch1_PulseIn_20191119_114934.txt
amp_mean 11019.2
amp_sigm 40.74
abs_gain 46.79
abs_gErr 3.54

G35_O120_Ch1_PulseIn_20191119_115112.txt
amp_mean 50525.4
amp_sigm 179.5
abs_gain 214.5
abs_gErr 16.2

G40_O120_Ch1_PulseIn_20191119_115126.txt
amp_mean 55709.2
amp_sigm 194.5
abs_gain 236.5
abs_gErr 17.9

Gain	5	10	15
ampl mean	11019.2	18526.8	25640.3
	11019.1	18525.9	25643.9
	11014.9	18526.4	25639.9
	11021.1	18519	
	11018.6	***18524.5***	***25641.4***
ampl sigma	40.74	59.89	85.87
	41.71	60.99	84.62
	42.95	64.81	86.42
	42.54	60.31	
	42.0	***61.5***	***85.6***
abs gain	46.79	78.67	108.9
	46.79	78.66	108.9
	46.77	78.66	108.9
	46.8	78.63	
	46.8	***78.7***	***108.9***
abs gain Err	3.54	5.95	8.23
	3.54	5.95	8.23
	3.54	5.95	8.23
	3.54	5.95	
	3.5	***6.0***	***8.2***

G5_O120_Ch1_PulseIn_20191119_114931.txt

amp_mean	11019.1
amp_sigm	41.71
abs_gain	46.79
abs_gErr	3.54

G5_O120_Ch1_PulseIn_20191119_114930.txt

amp_mean	11014.9
amp_sigm	42.95
abs_gain	46.77
abs_gErr	3.54

G40_O120_Ch1_PulseIn_20191119_115125.txt

amp_mean	55716.3
amp_sigm	199
abs_gain	236.6
abs_gErr	17.9

G25_O120_Ch1_PulseIn_20191119_115048.txt

amp_mean	38773.5
amp_sigm	140.9
abs_gain	164.6
abs_gErr	12.5

G35_O120_Ch1_PulseIn_20191119_115114.txt

amp_mean	50526.8
amp_sigm	169.2
abs_gain	214.5
abs_gErr	16.2

G5_O120_Ch1_PulseIn_20191119_114933.txt

amp_mean	11021.1
amp_sigm	42.54
abs_gain	46.8
abs_gErr	3.54

G55_O120_Ch1_PulseIn_20191119_115206.txt

amp_mean	71371.2
amp_sigm	250.6
abs_gain	303
abs_gErr	22.9

G60_O120_Ch1_PulseIn_20191119_115220.txt

amp_mean	76205.2
amp_sigm	270.9
abs_gain	323.6
abs_gErr	24.5

G10_O120_Ch1_PulseIn_20191119_115008.txt

amp_mean	18526.8
amp_sigm	59.89
abs_gain	78.67

abs_gErr	5.95

G20_O120_Ch1_PulseIn_20191119_115034.txt

amp_mean	32373.7
amp_sigm	109.8
abs_gain	137.5
abs_gErr	10.4

G50_O120_Ch1_PulseIn_20191119_115156.txt

amp_mean	66374.1
amp_sigm	229.7
abs_gain	281.8
abs_gErr	21.3

G60_O120_Ch1_PulseIn_20191119_115221.txt

amp_mean	76181.3
amp_sigm	275.3
abs_gain	323.5
abs_gErr	24.5

G55_O120_Ch1_PulseIn_20191119_115207.txt

amp_mean	71420.2
amp_sigm	285.2
abs_gain	303.3
abs_gErr	22.9

G60_O120_Ch1_PulseIn_20191119_115223.txt

amp_mean	76201.8
amp_sigm	265.6
abs_gain	323.6
abs_gErr	24.5

G20_O120_Ch1_PulseIn_20191119_115036.txt

amp_mean	32360.5
amp_sigm	103.4
abs_gain	137.4
abs_gErr	10.4

G50_O120_Ch1_PulseIn_20191119_115155.txt

amp_mean	66369.3
amp_sigm	230.8
abs_gain	281.8
abs_gErr	21.3

G55_O120_Ch1_PulseIn_20191119_115204.txt

amp_mean	71386.1
amp_sigm	260.7
abs_gain	303.1
abs_gErr	22.9

G20_O120_Ch1_PulseIn_20191119_115033.txt

amp_mean	32356.6
amp_sigm	113.9

abs_gain	137.4
abs_gErr	10.4

G50_O120_Ch1_PulseIn_20191119_115150.txt

amp_mean	66360.9
amp_sigm	226.1
abs_gain	281.8
abs_gErr	21.3

G55_O120_Ch1_PulseIn_20191119_115203.txt

amp_mean	71407.6
amp_sigm	259.1
abs_gain	303.2
abs_gErr	22.9

G50_O120_Ch1_PulseIn_20191119_115152.txt

amp_mean	66371.5
amp_sigm	240
abs_gain	281.8
abs_gErr	21.3

G20_O120_Ch1_PulseIn_20191119_115031.txt

amp_mean	32372.7
amp_sigm	109.9
abs_gain	137.5
abs_gErr	10.4

G50_O120_Ch1_PulseIn_20191119_115153.txt

amp_mean	66378.5
amp_sigm	235.4
abs_gain	281.8
abs_gErr	21.3

G60_O120_Ch1_PulseIn_20191119_115218.txt

amp_mean	76186.5
amp_sigm	261.9
abs_gain	323.5
abs_gErr	24.5

G63_O120_Ch1_PulseIn_20191119_115234.txt

amp_mean	78997.8
amp_sigm	283.9
abs_gain	335.4
abs_gErr	25.4

G63_O120_Ch1_PulseIn_20191119_115236.txt

amp_mean	78966.9
amp_sigm	284.7
abs_gain	335.3
abs_gErr	25.4

G15_O120_Ch1_PulseIn_20191119_115019.txt

amp_mean	25640.3

amp_sigm	85.87
abs_gain	108.9
abs_gErr	8.23

G55_O120_Ch1_PulseIn_20191119_115209.txt

amp_mean	71386.4
amp_sigm	257.1
abs_gain	303.1
abs_gErr	22.9

G63_O120_Ch1_PulseIn_20191119_115233.txt

amp_mean	78979.8
amp_sigm	278.8
abs_gain	335.4
abs_gErr	25.4

G15_O120_Ch1_PulseIn_20191119_115020.txt

amp_mean	25643.9
amp_sigm	84.62
abs_gain	108.9
abs_gErr	8.23

G10_O120_Ch1_PulseIn_20191119_115007.txt

amp_mean	18525.9
amp_sigm	60.99
abs_gain	78.66
abs_gErr	5.95

G45_O120_Ch1_PulseIn_20191119_115140.txt

amp_mean	61120.6
amp_sigm	208.6
abs_gain	259.5
abs_gErr	19.6

G10_O120_Ch1_PulseIn_20191119_115010.txt

amp_mean	18526.4
amp_sigm	64.81
abs_gain	78.66
abs_gErr	5.95

G15_O120_Ch1_PulseIn_20191119_115022.txt

amp_mean	25639.9
amp_sigm	86.42
abs_gain	108.9
abs_gErr	8.23

G10_O120_Ch1_PulseIn_20191119_115005.txt

amp_mean	18519
amp_sigm	60.31
abs_gain	78.63
abs_gErr	5.95

G63_O120_Ch1_PulseIn_20191119_115231.txt

amp_mean	78945.5
amp_sigm	291.3
abs_gain	335.2
abs_gErr	25.4

G40_O120_Ch1_PulseIn_20191119_115129.txt

amp_mean	55702.8
amp_sigm	194.7
abs_gain	236.5
abs_gErr	17.9

G25_O120_Ch1_PulseIn_20191119_115044.txt

amp_mean	38765
amp_sigm	134
abs_gain	164.6
abs_gErr	12.4

G25_O120_Ch1_PulseIn_20191119_115045.txt

amp_mean	38780.4
amp_sigm	127.6
abs_gain	164.7
abs_gErr	12.5

G40_O120_Ch1_PulseIn_20191119_115128.txt

amp_mean	55709.3
amp_sigm	192.9
abs_gain	236.5
abs_gErr	17.9

G25_O120_Ch1_PulseIn_20191119_115047.txt

amp_mean	38769.5
amp_sigm	130
abs_gain	164.6
abs_gErr	12.4

G30_O120_Ch1_PulseIn_20191119_115100.txt

amp_mean	44849.2
amp_sigm	148
abs_gain	190.4
abs_gErr	14.4

G30_O120_Ch1_PulseIn_20191119_115101.txt

amp_mean	44847.4
amp_sigm	151
abs_gain	190.4
abs_gErr	14.4

CF1_O120_Ch1_PulseIn_20191119_114920.txt

amp_mean	45987.1
amp_sigm	179.9
abs_gain	195.3
abs_gErr	14.8

CF1_O120_Ch1_PulseIn_20191119_114918.txt

amp_mean	46000
amp_sigm	186.3
abs_gain	195.3
abs_gErr	14.8

G30_O120_Ch1_PulseIn_20191119_115058.txt

amp_mean	44845.7
amp_sigm	147.4
abs_gain	190.4
abs_gErr	14.4

G45_O120_Ch1_PulseIn_20191119_115137.txt

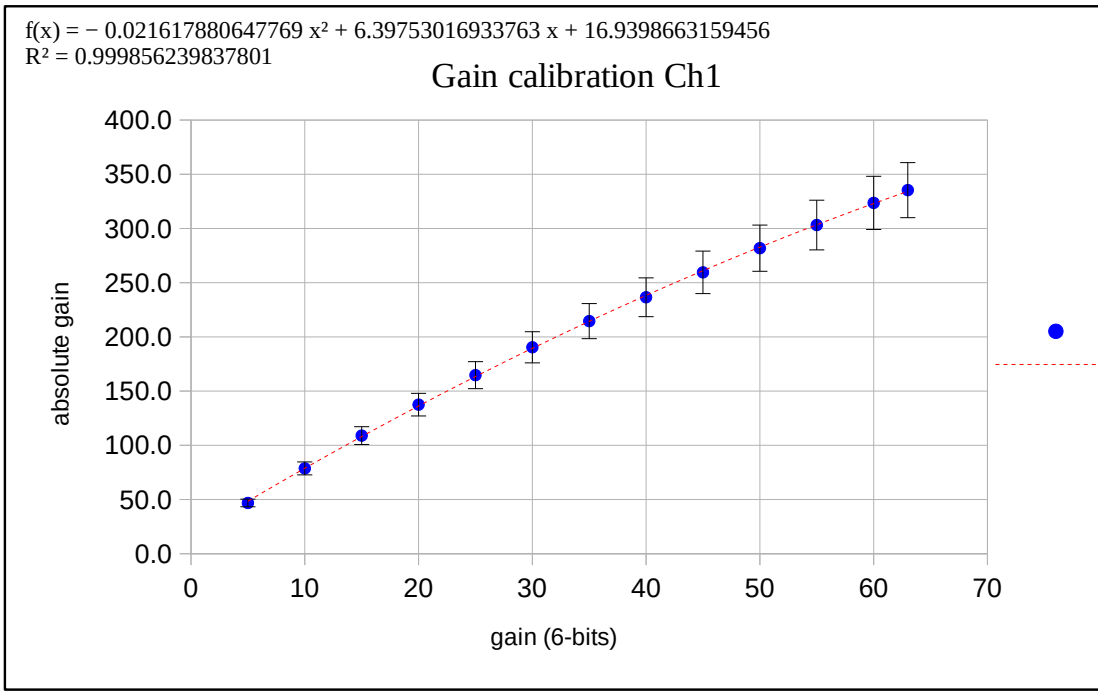
amp_mean	61099.4
amp_sigm	214.3
abs_gain	259.4
abs_gErr	19.6

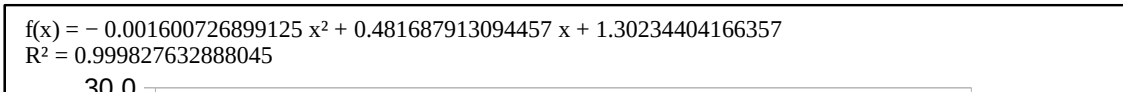
G35_O120_Ch1_PulseIn_20191119_115109.txt

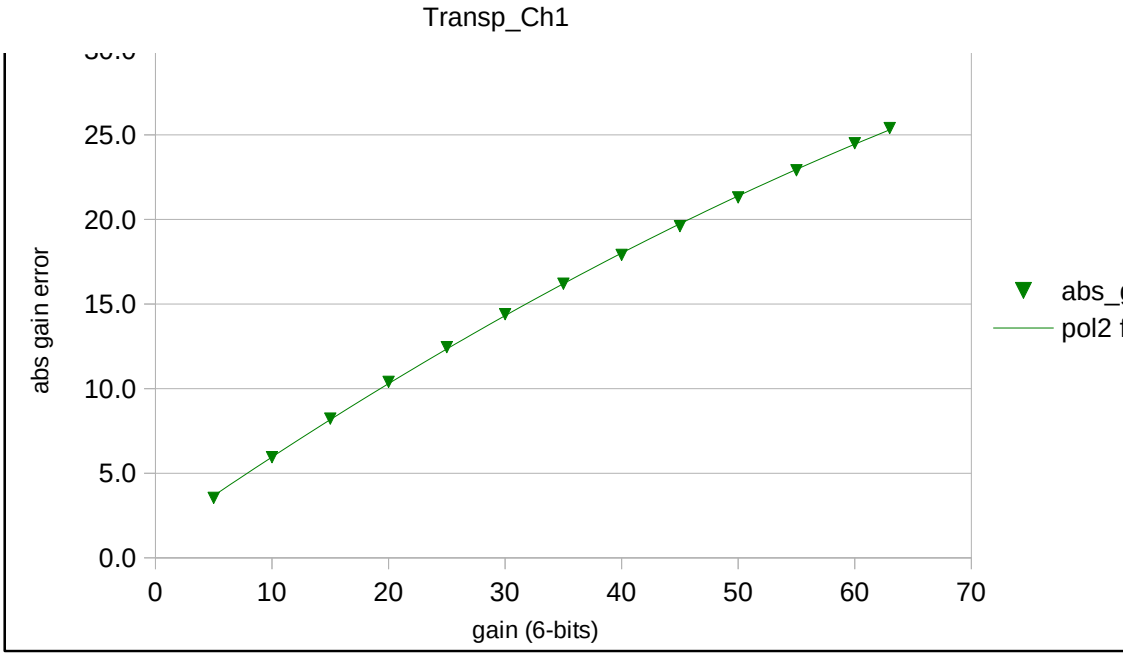
amp_mean	50535.2
amp_sigm	172.1
abs_gain	214.6
abs_gErr	16.2

Transp_Ch1

20	25	30	35	40	45	50	55	60	63
32373.7	38773.5	44847.1	50535.2	55709.2	61130.8	66374.1	71371.2	76205.2	78997.8
32360.5	38765	44849.2	50525.4	55716.3	61120.6	66369.3	71420.2	76181.3	78966.9
32356.6	38780.4	44847.4	50526.8	55702.8	61099.4	66360.9	71386.1	76201.8	78979.8
32372.7	38769.5	44845.7	50535.2	55709.3		66371.5	71407.6	76186.5	78945.5
						66378.5	71386.4		
32365.9	***38772.1***	***44847.4***	***50530.7***	***55709.4***	***61116.9***	***66370.9***	***71394.3***	***76193.7***	***78972.5***
109.8	140.9	152	173.3	194.5	215.2	229.7	250.6	270.9	283.9
103.4	134	148	179.5	199	208.6	230.8	285.2	275.3	284.7
113.9	127.6	151	169.2	194.7	214.3	226.1	260.7	265.6	278.8
109.9	130	147.4	172.1	192.9		240	259.1	261.9	291.3
						235.4	257.1		
109.3	***133.1***	***149.6***	***173.5***	***195.3***	***212.7***	***232.4***	***262.5***	***268.4***	***284.7***
137.5	164.6	190.4	214.6	236.5	259.6	281.8	303	323.6	335.4
137.4	164.6	190.4	214.5	236.6	259.5	281.8	303.3	323.5	335.3
137.4	164.7	190.4	214.5	236.5	259.4	281.8	303.1	323.6	335.4
137.5	164.6	190.4	214.6	236.5		281.8	303.2	323.5	335.2
						281.8	303.1		
137.5	***164.6***	***190.4***	***214.6***	***236.5***	***259.5***	***281.8***	***303.1***	***323.6***	***335.3***
10.4	12.5	14.4	16.2	17.9	19.6	21.3	22.9	24.5	25.4
10.4	12.4	14.4	16.2	17.9	19.6	21.3	22.9	24.5	25.4
10.4	12.5	14.4	16.2	17.9	19.6	21.3	22.9	24.5	25.4
10.4	12.4	14.4	16.2	17.9		21.3	22.9	24.5	25.4
						21.3	22.9		
10.4	***12.5***	***14.4***	***16.2***	***17.9***	***19.6***	***21.3***	***22.9***	***24.5***	***25.4***

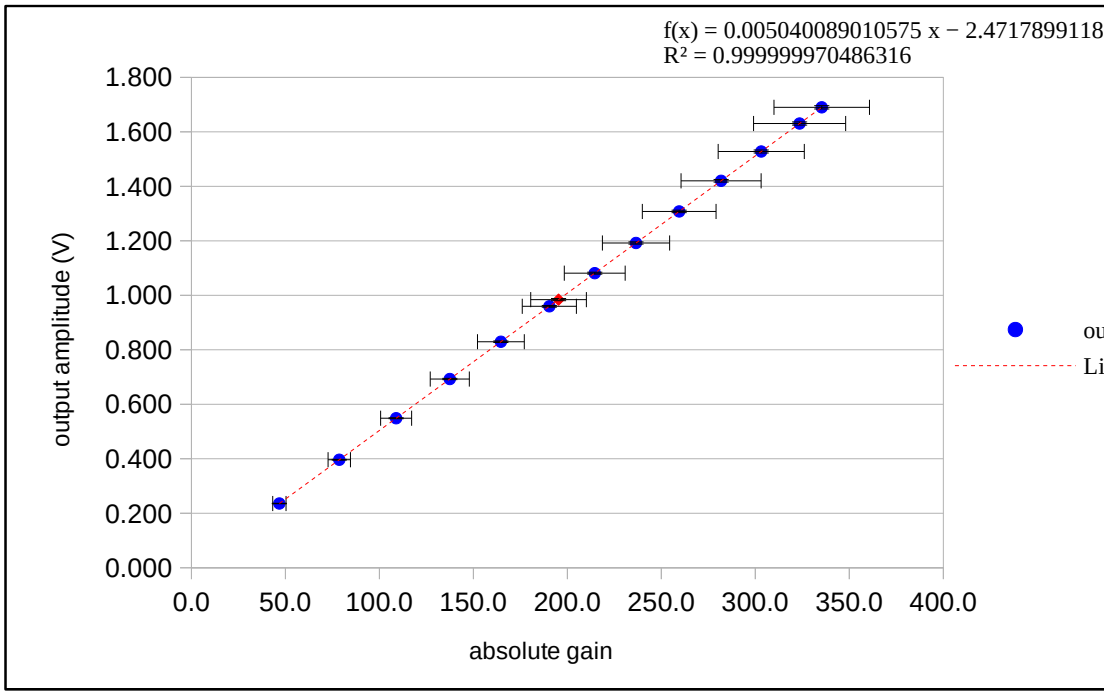


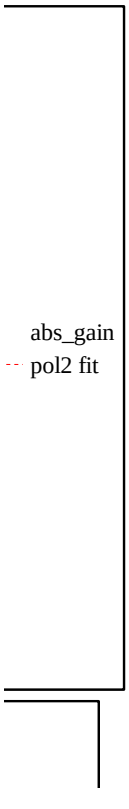



Transp_Ch1
25.0
20.0
15.0
10.0
5.0
0.0
abs gain error
0
10
20
30
40
50
60
70
gain (6-bits)
abs_
pol2

CF1
45988.7
45994.8
46006.9
45987.1
46000
45995.5
188.9
185.7
187
179.9
186.3
185.6
195.3
195.3
195.3
195.3
195.3
195.3
14.8
14.8
14.8
14.8
14.8
14.8

					1ADU=21.4uV
Gain(6bit)	out ampl (ADU)	out error (ADU)	abs_gain	abs_gainErr	out ampl (V)
5	11018.6	42.0	46.8	3.5	0.236
10	18524.5	61.5	78.7	6.0	0.396
15	25641.4	85.6	108.9	8.2	0.549
20	32365.9	109.3	137.5	10.4	0.693
25	38772.1	133.1	164.6	12.5	0.830
30	44847.4	149.6	190.4	14.4	0.960
35	50530.7	173.5	214.6	16.2	1.081
40	55709.4	195.3	236.5	17.9	1.192
45	61116.9	212.7	259.5	19.6	1.308
50	66370.9	232.4	281.8	21.3	1.420
55	71394.3	262.5	303.1	22.9	1.528
60	76193.7	268.4	323.6	24.5	1.631
63	78972.5	284.7	335.3	25.4	1.690
CF1	45995.5	185.6	195.3	14.8	0.984






gainErr
fit

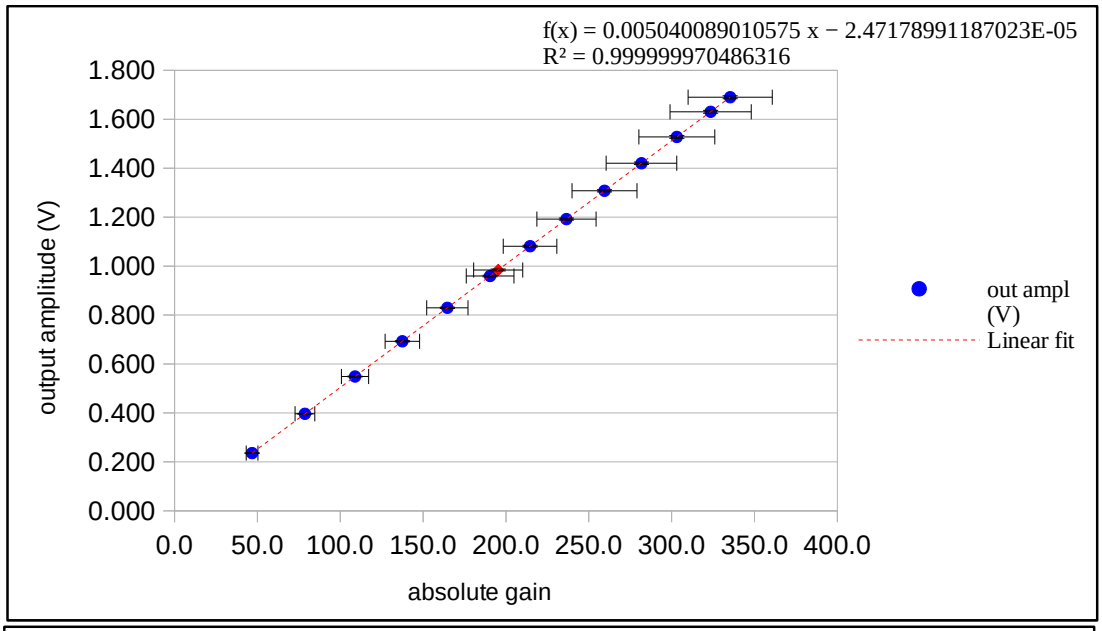
out error (V)
0.001
0.001
0.002
0.002
0.003
0.003
0.004
0.004
0.005
0.005
0.006
0.006
0.006
0.004

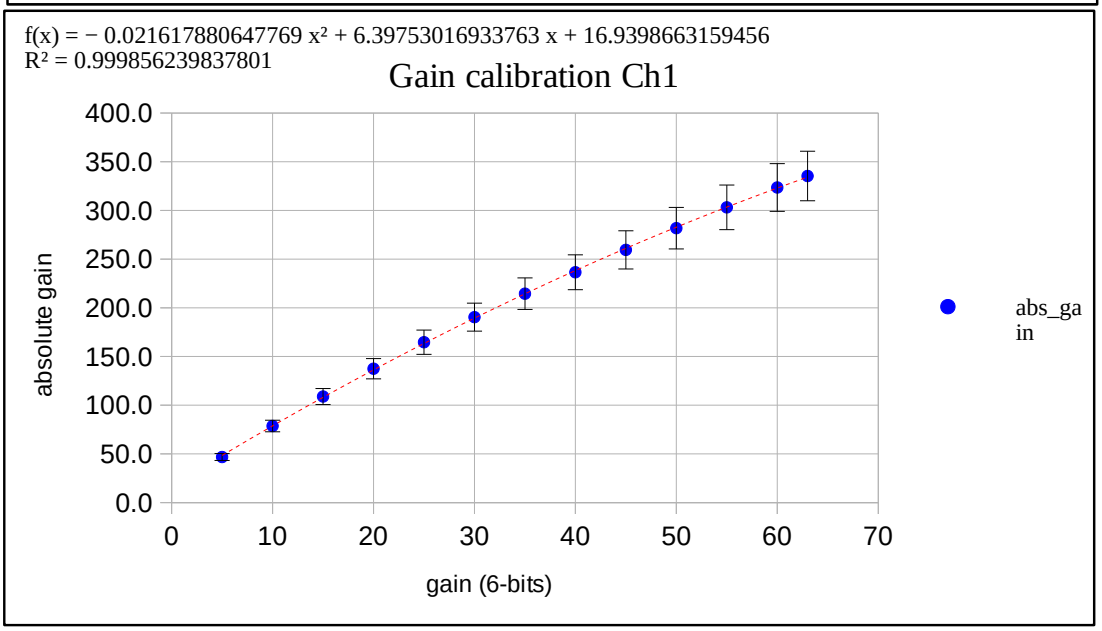
7023E-05

ıt ampl (V)
near fit

Transp_Ch1_results_20191119

					1ADU=21.4uV	
Gain(6bit)	out ampl (ADU)	out error (ADU)	abs_gain	abs_gainErr	out ampl (V)	out error (V)
5	11018.6	42.0	46.8	3.5	0.236	0.001
10	18524.5	61.5	78.7	6.0	0.396	0.001
15	25641.4	85.6	108.9	8.2	0.549	0.002
20	32365.9	109.3	137.5	10.4	0.693	0.002
25	38772.1	133.1	164.6	12.5	0.830	0.003
30	44847.4	149.6	190.4	14.4	0.960	0.003
35	50530.7	173.5	214.6	16.2	1.081	0.004
40	55709.4	195.3	236.5	17.9	1.192	0.004
45	61116.9	212.7	259.5	19.6	1.308	0.005
50	66370.9	232.4	281.8	21.3	1.420	0.005
55	71394.3	262.5	303.1	22.9	1.528	0.006
60	76193.7	268.4	323.6	24.5	1.631	0.006
63	78972.5	284.7	335.3	25.4	1.690	0.006
CF1	45995.5	185.6	195.3	14.8	0.984	0.004





G60_O120_Ch2_PulseIn_20191119_115703.txt	
amp_mean	76610.2
amp_sigm	250.5
abs_gain	325.3
abs_gErr	24.6
G5_O120_Ch2_PulseIn_20191119_115403.txt	
amp_mean	11033.6
amp_sigm	44.32
abs_gain	46.85
abs_gErr	3.54
G5_O120_Ch2_PulseIn_20191119_115359.txt	
amp_mean	11034.9
amp_sigm	45.02
abs_gain	46.85
abs_gErr	3.54
G5_O120_Ch2_PulseIn_20191119_115401.txt	
amp_mean	11033.9
amp_sigm	45.8
abs_gain	46.85
abs_gErr	3.54
G30_O120_Ch2_PulseIn_20191119_115529.txt	
amp_mean	44735.7
amp_sigm	161.3
abs_gain	189.9
abs_gErr	14.4
G5_O120_Ch2_PulseIn_20191119_115404.txt	
amp_mean	11036.2
amp_sigm	41.71
abs_gain	46.86
abs_gErr	3.54
G63_O120_Ch2_PulseIn_20191119_115731.txt	
amp_mean	79416.2
amp_sigm	276.1
abs_gain	337.2
abs_gErr	25.5
G60_O120_Ch2_PulseIn_20191119_115705.txt	
amp_mean	76618.5
amp_sigm	259.4
abs_gain	325.3
abs_gErr	24.6
G60_O120_Ch2_PulseIn_20191119_115659.txt	
amp_mean	76618.9
amp_sigm	262.5
abs_gain	325.3
abs_gErr	24.6

Gain	5	10	15
ampl mean	11033.6	18542.6	25673.9
	11034.9	18546.1	
	11033.9		
	11036.2		
	11034.7	***18544.4***	***25673.9***
ampl sigma	44.32	64.82	83.3
	45.02	64.95	
	45.8		
	41.71		
	44.2	***64.9***	***83.3***
abs gain	46.85	78.73	109
	46.85	78.75	
	46.85		
	46.86		
	46.9	***78.7***	***109.0***
abs gain Err	3.54	5.95	8.24
	3.54	5.96	
	3.54		
	3.54		
	3.5	***6.0***	***8.2***

G60_O120_Ch2_PulseIn_20191119_115658.txt	
amp_mean	76598.9
amp_sigm	260.5
abs_gain	325.2
abs_gErr	24.6
G63_O120_Ch2_PulseIn_20191119_115730.txt	
amp_mean	79413.8
amp_sigm	275.8
abs_gain	337.2
abs_gErr	25.5
G35_O120_Ch2_PulseIn_20191119_115546.txt	
amp_mean	50288.3
amp_sigm	165.8
abs_gain	213.5
abs_gErr	16.1
CF1_O120_Ch2_PulseIn_20191119_115333.txt	
amp_mean	49657.2
amp_sigm	181.2
abs_gain	210.8
abs_gErr	15.9
G10_O120_Ch2_PulseIn_20191119_115414.txt	
amp_mean	18542.6
amp_sigm	64.82
abs_gain	78.73
abs_gErr	5.95
G40_O120_Ch2_PulseIn_20191119_115601.txt	
amp_mean	55984.7
amp_sigm	204.4
abs_gain	237.7
abs_gErr	18
G10_O120_Ch2_PulseIn_20191119_115415.txt	
amp_mean	18546.1
amp_sigm	64.95
abs_gain	78.75
abs_gErr	5.96
G35_O120_Ch2_PulseIn_20191119_115551.txt	
amp_mean	50283.5
amp_sigm	164.9
abs_gain	213.5
abs_gErr	16.1
G10_O120_Ch2_PulseIn_20191119_115417.txt	
amp_mean	18549.2
amp_sigm	62.94
abs_gain	78.76

abs_gErr	5.96
G15_O120_Ch2_PulseIn_20191119_115430.txt	
amp_mean	25673.9
amp_sigm	83.3
abs_gain	109
abs_gErr	8.24
G15_O120_Ch2_PulseIn_20191119_115431.txt	
amp_mean	25667.8
amp_sigm	84.13
abs_gain	109
abs_gErr	8.24
CF1_O120_Ch2_PulseIn_20191119_115325.txt	
amp_mean	49643.6
amp_sigm	173.2
abs_gain	210.8
abs_gErr	15.9
CF1_O120_Ch2_PulseIn_20191119_115321.txt	
amp_mean	49659
amp_sigm	174.1
abs_gain	210.9
abs_gErr	15.9
G45_O120_Ch2_PulseIn_20191119_115608.txt	
amp_mean	61476.5
amp_sigm	211.1
abs_gain	261
abs_gErr	19.7
G40_O120_Ch2_PulseIn_20191119_115559.txt	
amp_mean	55975
amp_sigm	179.1
abs_gain	237.7
abs_gErr	18
G40_O120_Ch2_PulseIn_20191119_115558.txt	
amp_mean	55970.9
amp_sigm	180.5
abs_gain	237.7
abs_gErr	18
G55_O120_Ch2_PulseIn_20191119_115635.txt	
amp_mean	71787
amp_sigm	236.7
abs_gain	304.8
abs_gErr	23
G15_O120_Ch2_PulseIn_20191119_115434.txt	
amp_mean	25667.2
amp_sigm	90.57

abs_gain	109
abs_gErr	8.24
G63_O120_Ch2_PulseIn_20191119_115751.txt	
amp_mean	79413.9
amp_sigm	267.2
abs_gain	337.2
abs_gErr	25.5
G55_O120_Ch2_PulseIn_20191119_115637.txt	
amp_mean	71785.6
amp_sigm	249.5
abs_gain	304.8
abs_gErr	23
G63_O120_Ch2_PulseIn_20191119_115750.txt	
amp_mean	79426.9
amp_sigm	271.9
abs_gain	337.2
abs_gErr	25.5
G45_O120_Ch2_PulseIn_20191119_115613.txt	
amp_mean	61488.4
amp_sigm	206.7
abs_gain	261.1
abs_gErr	19.7
G10_O120_Ch2_PulseIn_20191119_115420.txt	
amp_mean	18536.1
amp_sigm	63.08
abs_gain	78.71
abs_gErr	5.95
G45_O120_Ch2_PulseIn_20191119_115610.txt	
amp_mean	61491.3
amp_sigm	204.5
abs_gain	261.1
abs_gErr	19.7
G50_O120_Ch2_PulseIn_20191119_115623.txt	
amp_mean	66723.4
amp_sigm	232.1
abs_gain	283.3
abs_gErr	21.4
G55_O120_Ch2_PulseIn_20191119_115638.txt	
amp_mean	71764.5
amp_sigm	251.4
abs_gain	304.7
abs_gErr	23
G45_O120_Ch2_PulseIn_20191119_115611.txt	
amp_mean	61484.7

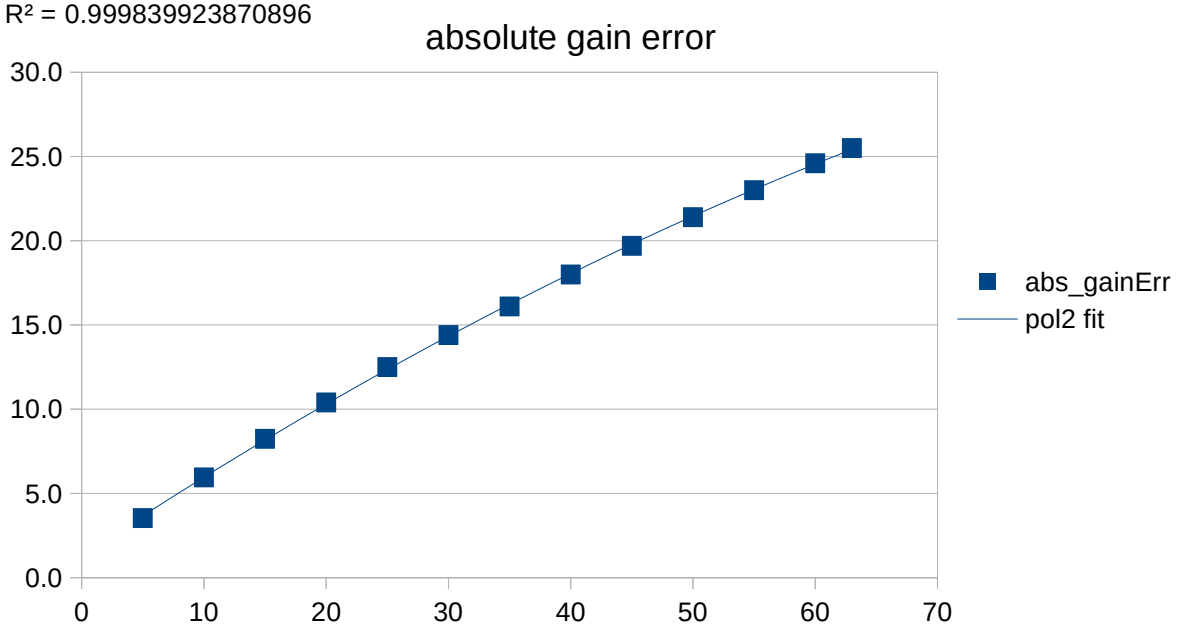
amp_sigm	210.9
abs_gain	261.1
abs_gErr	19.7
G35_O120_Ch2_PulseIn_20191119_115549.txt	
amp_mean	50286.4
amp_sigm	177.7
abs_gain	213.5
abs_gErr	16.1
CF1_O120_Ch2_PulseIn_20191119_115328.txt	
amp_mean	49665.6
amp_sigm	175.8
abs_gain	210.9
abs_gErr	15.9
G15_O120_Ch2_PulseIn_20191119_115428.txt	
amp_mean	25678.3
amp_sigm	86.74
abs_gain	109
abs_gErr	8.24
G35_O120_Ch2_PulseIn_20191119_115548.txt	
amp_mean	50308.9
amp_sigm	171.1
abs_gain	213.6
abs_gErr	16.2
G50_O120_Ch2_PulseIn_20191119_115625.txt	
amp_mean	66728.5
amp_sigm	229
abs_gain	283.3
abs_gErr	21.4
G50_O120_Ch2_PulseIn_20191119_115624.txt	
amp_mean	66723.9
amp_sigm	227.2
abs_gain	283.3
abs_gErr	21.4
G10_O120_Ch2_PulseIn_20191119_115419.txt	
amp_mean	18544.4
amp_sigm	64.11
abs_gain	78.74
abs_gErr	5.95
CF1_O120_Ch2_PulseIn_20191119_115316.txt	
amp_mean	49664.4
amp_sigm	169.5
abs_gain	210.9
abs_gErr	15.9
G60_O120_Ch2_PulseIn_20191119_115656.txt	

amp_mean	76588.9
amp_sigm	259.4
abs_gain	325.2
abs_gErr	24.6
G25_O120_Ch2_PulseIn_20191119_115511.txt	
amp_mean	38788.7
amp_sigm	124.4
abs_gain	164.7
abs_gErr	12.5
G20_O120_Ch2_PulseIn_20191119_115454.txt	
amp_mean	32390.1
amp_sigm	105
abs_gain	137.5
abs_gErr	10.4
G25_O120_Ch2_PulseIn_20191119_115513.txt	
amp_mean	38789.1
amp_sigm	126.2
abs_gain	164.7
abs_gErr	12.5
G20_O120_Ch2_PulseIn_20191119_115455.txt	
amp_mean	32397.2
amp_sigm	109.9
abs_gain	137.6
abs_gErr	10.4
G63_O120_Ch2_PulseIn_20191119_115728.txt	
amp_mean	79418.1
amp_sigm	262.6
abs_gain	337.2
abs_gErr	25.5
G25_O120_Ch2_PulseIn_20191119_115516.txt	
amp_mean	38792.6
amp_sigm	128.8
abs_gain	164.7
abs_gErr	12.5
G25_O120_Ch2_PulseIn_20191119_115517.txt	
amp_mean	38791.3
amp_sigm	137.3
abs_gain	164.7
abs_gErr	12.5
G20_O120_Ch2_PulseIn_20191119_115450.txt	
amp_mean	32375.8
amp_sigm	105.4
abs_gain	137.5
abs_gErr	10.4

G30_O120_Ch2_PulseIn_20191119_115530.txt	
amp_mean	44734.1
amp_sigm	153
abs_gain	189.9
abs_gErr	14.4
G30_O120_Ch2_PulseIn_20191119_115532.txt	
amp_mean	44738.2
amp_sigm	161.2
abs_gain	190
abs_gErr	14.4
G20_O120_Ch2_PulseIn_20191119_115452.txt	
amp_mean	32378
amp_sigm	107.4
abs_gain	137.5
abs_gErr	10.4
G25_O120_Ch2_PulseIn_20191119_115514.txt	
amp_mean	38789
amp_sigm	152.2
abs_gain	164.7
abs_gErr	12.5
G30_O120_Ch2_PulseIn_20191119_115533.txt	
amp_mean	44741.6
amp_sigm	164.3
abs_gain	190
abs_gErr	14.4

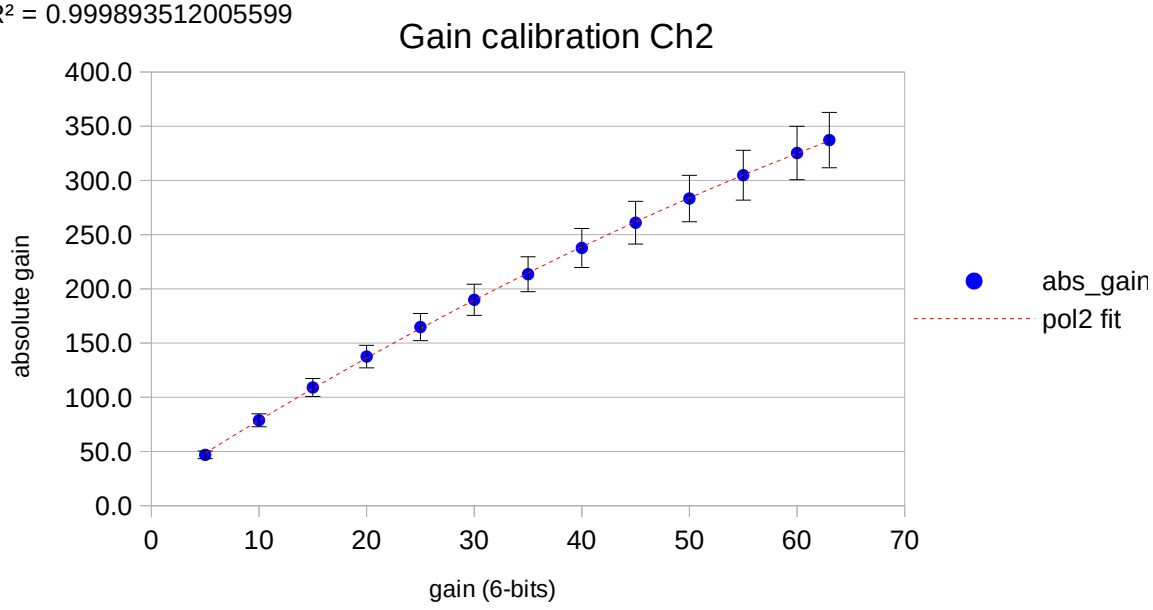
20	25	30	35	40	45	50	55	60	63	CF1
32390.1	38788.7	44735.7	50288.3	55984.7	61476.5	66723.4	71787	76610.2	79416.2	49657.2
			50283.5					76618.5	79413.8	
								76618.9		
								76598.9		
32390.1	***38788.7***	***44735.7***	***50285.9***	***55984.7***	***61476.5***	***66723.4***	***71787.0***	***76611.6***	***79415.0***	***49657.2***
105	124.4	161.3	165.8	204.4	211.1	232.1	236.7	250.5	276.1	181.2
			164.9					259.4	275.8	
								262.5		
								260.5		
105.0	***124.4***	***161.3***	***165.4***	***204.4***	***211.1***	***232.1***	***236.7***	***258.2***	***276.0***	***181.2***
137.5	164.7	189.9	213.5	237.7	261	283.3	304.8	325.3	337.2	210.8
			213.5					325.3	337.2	
								325.3		
								325.2		
137.5	***164.7***	***189.9***	***213.5***	***237.7***	***261.0***	***283.3***	***304.8***	***325.3***	***337.2***	***210.8***
10.4	12.5	14.4	16.1	18	19.7	21.4	23	24.6	25.5	15.9
			16.1					24.6	25.5	
								24.6		
								24.6		
10.4	***12.5***	***14.4***	***16.1***	***18.0***	***19.7***	***21.4***	***23.0***	***24.6***	***25.5***	***15.9***

f(x) = − 0.001561202908717 x² + 0.481116803070824 x + 1.30423460155858
R² = 0.999839923870896



Channel 2						
					1ADU=21.4uV	
Gain(6bit)	out ampl (ADU)	out error (ADU)	abs_gain	abs_gainErr	out ampl (V)	out error (V)
5	11034.7	44.2	46.9	3.5	0.236	0.001
10	18544.4	64.9	78.7	6.0	0.397	0.001
15	25673.9	83.3	109.0	8.2	0.549	0.002
20	32390.1	105.0	137.5	10.4	0.693	0.002
25	38788.7	124.4	164.7	12.5	0.830	0.003
30	44735.7	161.3	189.9	14.4	0.957	0.003
35	50285.9	165.4	213.5	16.1	1.076	0.004
40	55984.7	204.4	237.7	18.0	1.198	0.004
45	61476.5	211.1	261.0	19.7	1.316	0.005
50	66723.4	232.1	283.3	21.4	1.428	0.005
55	71787.0	236.7	304.8	23.0	1.536	0.005
60	76611.6	258.2	325.3	24.6	1.639	0.006
63	79415.0	276.0	337.2	25.5	1.699	0.006
CF1	49657.2	181.2	210.8	15.9	1.063	0.004

$f(x) = -0.020526319228963\,x^2 + 6.36017666064346\,x + 17.1791631706855$
$R^2 = 0.999893512005599$



G35_O120_Ch3_PulseIn_20191119_121145.txt	
amp_mean	50013.4
amp_sigm	176.7
abs_gain	212.4
abs_gErr	16.1
G45_O120_Ch3_PulseIn_20191119_121231.txt	
amp_mean	61138.3
amp_sigm	204.5
abs_gain	259.6
abs_gErr	19.6
G40_O120_Ch3_PulseIn_20191119_121217.txt	
amp_mean	55686.5
amp_sigm	190.5
abs_gain	236.4
abs_gErr	17.9
G15_O120_Ch3_PulseIn_20191119_121031.txt	
amp_mean	25529.5
amp_sigm	87.87
abs_gain	108.4
abs_gErr	8.2
G35_O120_Ch3_PulseIn_20191119_121144.txt	
amp_mean	49991.7
amp_sigm	166.5
abs_gain	212.3
abs_gErr	16.1
G15_O120_Ch3_PulseIn_20191119_121033.txt	
amp_mean	25527.1
amp_sigm	85.97
abs_gain	108.4
abs_gErr	8.2
G40_O120_Ch3_PulseIn_20191119_121215.txt	
amp_mean	55656.2
amp_sigm	197.4
abs_gain	236.3
abs_gErr	17.9
G45_O120_Ch3_PulseIn_20191119_121233.txt	
amp_mean	61120.9
amp_sigm	213.5
abs_gain	259.5
abs_gErr	19.6
G60_O120_Ch3_PulseIn_20191119_121349.txt	
amp_mean	76071
amp_sigm	263.7
abs_gain	323

Gain	5	10	15
ampl mean	10966.2	18442.1	25529.5
	10966.2	***18442.1***	***25529.5***
ampl sigma	39.95	62.14	87.87
	40.0	***62.1***	***87.9***
abs gain	46.56	78.31	108.4
	46.6	***78.3***	***108.4***
abs gain Err	3.52	5.92	8.2
	3.5	***5.9***	***8.2***

abs_gErr	24.4
G35_O120_Ch3_PulseIn_20191119_121147.txt	
amp_mean	50016
amp_sigm	177.4
abs_gain	212.4
abs_gErr	16.1
G15_O120_Ch3_PulseIn_20191119_121036.txt	
amp_mean	25515.5
amp_sigm	84.43
abs_gain	108.3
abs_gErr	8.19
G45_O120_Ch3_PulseIn_20191119_121236.txt	
amp_mean	61134.2
amp_sigm	210
abs_gain	259.6
abs_gErr	19.6
G63_O120_Ch3_PulseIn_20191119_121408.txt	
amp_mean	78892
amp_sigm	281.7
abs_gain	335
abs_gErr	25.3
G15_O120_Ch3_PulseIn_20191119_121035.txt	
amp_mean	25528.3
amp_sigm	85.57
abs_gain	108.4
abs_gErr	8.2
G45_O120_Ch3_PulseIn_20191119_121234.txt	
amp_mean	61135.2
amp_sigm	218.6
abs_gain	259.6
abs_gErr	19.6
G55_O120_Ch3_PulseIn_20191119_121332.txt	
amp_mean	71343
amp_sigm	238.7
abs_gain	302.9
abs_gErr	22.9
G20_O120_Ch3_PulseIn_20191119_121048.txt	
amp_mean	32200.2
amp_sigm	110.5
abs_gain	136.7
abs_gErr	10.3
G30_O120_Ch3_PulseIn_20191119_121114.txt	
amp_mean	44302.6
amp_sigm	171

abs_gain	188.1
abs_gErr	14.2
G55_O120_Ch3_PulseIn_20191119_121331.txt	
amp_mean	71314.4
amp_sigm	244.8
abs_gain	302.8
abs_gErr	22.9
G30_O120_Ch3_PulseIn_20191119_121116.txt	
amp_mean	44305.9
amp_sigm	165.3
abs_gain	188.1
abs_gErr	14.2
G55_O120_Ch3_PulseIn_20191119_121334.txt	
amp_mean	71329
amp_sigm	245.1
abs_gain	302.9
abs_gErr	22.9
G30_O120_Ch3_PulseIn_20191119_121113.txt	
amp_mean	44307.2
amp_sigm	175
abs_gain	188.1
abs_gErr	14.2
G5_O120_Ch3_PulseIn_20191119_121007.txt	
amp_mean	10965.2
amp_sigm	41.87
abs_gain	46.56
abs_gErr	3.52
G55_O120_Ch3_PulseIn_20191119_121335.txt	
amp_mean	71339.8
amp_sigm	256
abs_gain	302.9
abs_gErr	22.9
G5_O120_Ch3_PulseIn_20191119_121010.txt	
amp_mean	10966.6
amp_sigm	40.83
abs_gain	46.56
abs_gErr	3.52
G5_O120_Ch3_PulseIn_20191119_121004.txt	
amp_mean	10963.7
amp_sigm	39.99
abs_gain	46.55
abs_gErr	3.52
G50_O120_Ch3_PulseIn_20191119_121320.txt	
amp_mean	66358.2

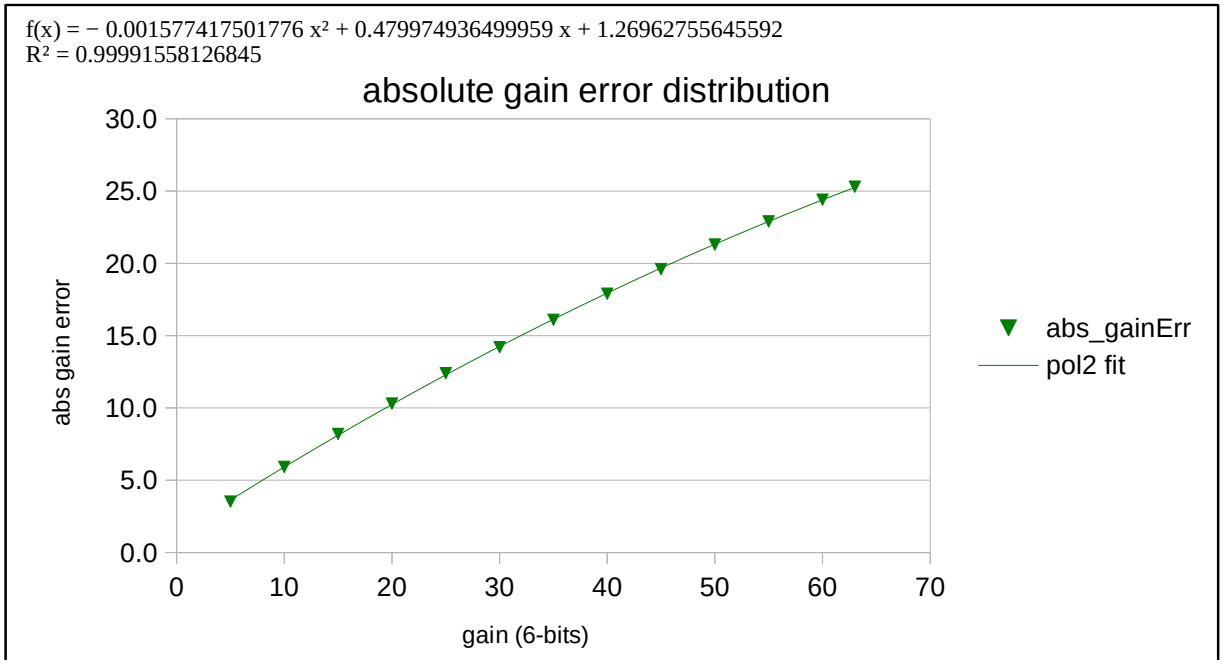
amp_sigm	228.7
abs_gain	281.8
abs_gErr	21.3
G5_O120_Ch3_PulseIn_20191119_121008.txt	
amp_mean	10966.2
amp_sigm	39.95
abs_gain	46.56
abs_gErr	3.52
G50_O120_Ch3_PulseIn_20191119_121321.txt	
amp_mean	66344.4
amp_sigm	232
abs_gain	281.7
abs_gErr	21.3
G50_O120_Ch3_PulseIn_20191119_121323.txt	
amp_mean	66323
amp_sigm	241.7
abs_gain	281.6
abs_gErr	21.3
G25_O120_Ch3_PulseIn_20191119_121104.txt	
amp_mean	38549.6
amp_sigm	128.5
abs_gain	163.7
abs_gErr	12.4
G25_O120_Ch3_PulseIn_20191119_121059.txt	
amp_mean	38532.3
amp_sigm	133
abs_gain	163.6
abs_gErr	12.4
G25_O120_Ch3_PulseIn_20191119_121101.txt	
amp_mean	38560.9
amp_sigm	133.8
abs_gain	163.7
abs_gErr	12.4
G20_O120_Ch3_PulseIn_20191119_121047.txt	
amp_mean	32195.3
amp_sigm	106.5
abs_gain	136.7
abs_gErr	10.3
G20_O120_Ch3_PulseIn_20191119_121045.txt	
amp_mean	32191.2
amp_sigm	113.2
abs_gain	136.7
abs_gErr	10.3
G25_O120_Ch3_PulseIn_20191119_121102.txt	

amp_mean	38551
amp_sigm	130.1
abs_gain	163.7
abs_gErr	12.4
G30_O120_Ch3_PulseIn_20191119_121118.txt	
amp_mean	44313
amp_sigm	168.8
abs_gain	188.2
abs_gErr	14.2
G50_O120_Ch3_PulseIn_20191119_121318.txt	
amp_mean	66347.5
amp_sigm	245
abs_gain	281.7
abs_gErr	21.3
G10_O120_Ch3_PulseIn_20191119_121022.txt	
amp_mean	18442.1
amp_sigm	62.14
abs_gain	78.31
abs_gErr	5.92
G10_O120_Ch3_PulseIn_20191119_121023.txt	
amp_mean	18441.8
amp_sigm	63.56
abs_gain	78.3
abs_gErr	5.92
G63_O120_Ch3_PulseIn_20191119_121405.txt	
amp_mean	78886.6
amp_sigm	270.3
abs_gain	335
abs_gErr	25.3
G40_O120_Ch3_PulseIn_20191119_121220.txt	
amp_mean	55680.4
amp_sigm	207
abs_gain	236.4
abs_gErr	17.9
G10_O120_Ch3_PulseIn_20191119_121020.txt	
amp_mean	18449.6
amp_sigm	61.83
abs_gain	78.34
abs_gErr	5.92
G63_O120_Ch3_PulseIn_20191119_121406.txt	
amp_mean	78904.6
amp_sigm	291.5
abs_gain	335
abs_gErr	25.3

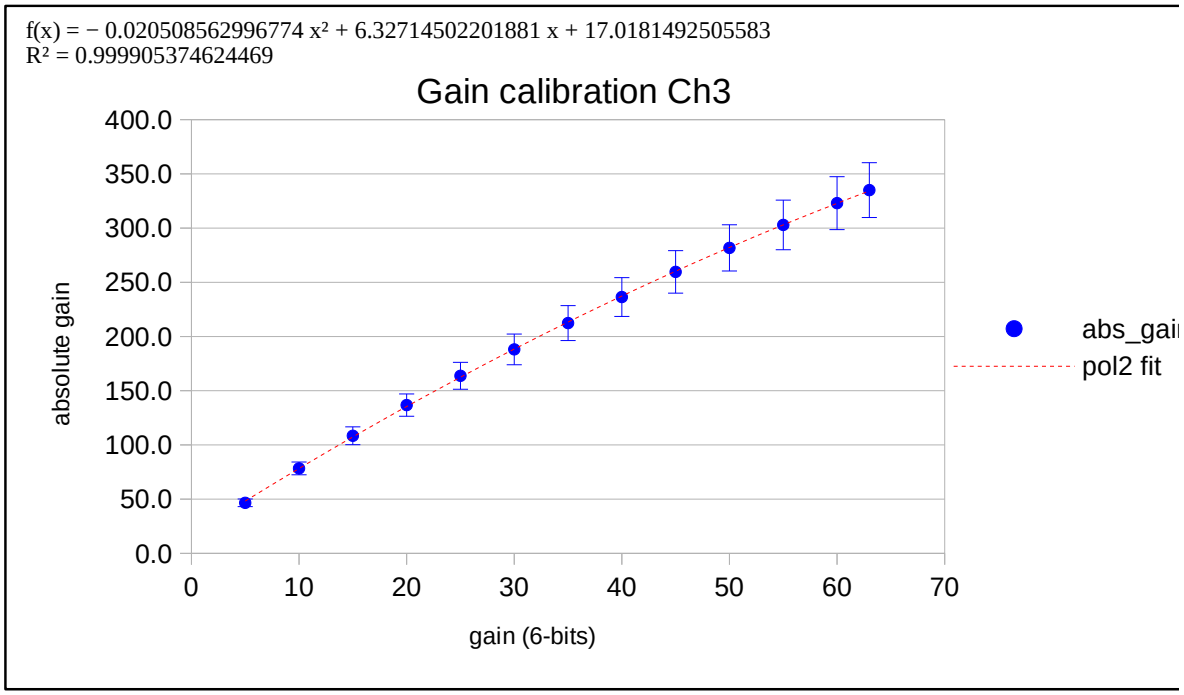
G60_O120_Ch3_PulseIn_20191119_121350.txt	
amp_mean	76101.6
amp_sigm	254.5
abs_gain	323.1
abs_gErr	24.4
G63_O120_Ch3_PulseIn_20191119_121402.txt	
amp_mean	78891.1
amp_sigm	291.9
abs_gain	335
abs_gErr	25.3
G10_O120_Ch3_PulseIn_20191119_121018.txt	
amp_mean	18442.1
amp_sigm	61.82
abs_gain	78.31
abs_gErr	5.92
G40_O120_Ch3_PulseIn_20191119_121218.txt	
amp_mean	55679.2
amp_sigm	180.9
abs_gain	236.4
abs_gErr	17.9
G63_O120_Ch3_PulseIn_20191119_121403.txt	
amp_mean	78853.3
amp_sigm	277.9
abs_gain	334.8
abs_gErr	25.3
G60_O120_Ch3_PulseIn_20191119_121347.txt	
amp_mean	76116.3
amp_sigm	266.1
abs_gain	323.2
abs_gErr	24.4
G60_O120_Ch3_PulseIn_20191119_121353.txt	
amp_mean	76097.4
amp_sigm	263
abs_gain	323.1
abs_gErr	24.4
G63_O120_Ch3_PulseIn_20191119_121400.txt	
amp_mean	78917.7
amp_sigm	286.4
abs_gain	335.1
abs_gErr	25.3
G60_O120_Ch3_PulseIn_20191119_121352.txt	
amp_mean	76108.3
amp_sigm	260
abs_gain	323.2
abs_gErr	24.4

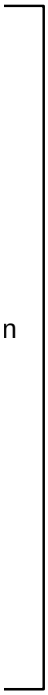
G60_O120_Ch3_PulseIn_20191119_121346.txt	
amp_mean	76101.9
amp_sigm	251.5
abs_gain	323.1
abs_gErr	24.4
G35_O120_Ch3_PulseIn_20191119_121148.txt	
amp_mean	50012.2
amp_sigm	163.8
abs_gain	212.4
abs_gErr	16.1

20	25	30	35	40	45	50	55	60	63	CF1
32200.2	38549.6	44302.6	50013.4	55686.5	61138.3	66344.4	71343	76071	78892	
32200.2	***38549.6***	***44302.6***	***50013.4***	***55686.5***	***61138.3***	***66344.4***	***71343.0***	***76071.0***	***78892.0***	***#DIV/0!***
110.5	128.5	171	176.7	190.5	204.5	232	238.7	263.7	281.7	
110.5	***128.5***	***171.0***	***176.7***	***190.5***	***204.5***	***232.0***	***238.7***	***263.7***	***281.7***	***#DIV/0!***
136.7	163.7	188.1	212.4	236.4	259.6	281.7	302.9	323	335	
136.7	***163.7***	***188.1***	***212.4***	***236.4***	***259.6***	***281.7***	***302.9***	***323.0***	***335.0***	***#DIV/0!***
10.3	12.4	14.2	16.1	17.9	19.6	21.3	22.9	24.4	25.3	
10.3	***12.4***	***14.2***	***16.1***	***17.9***	***19.6***	***21.3***	***22.9***	***24.4***	***25.3***	***#DIV/0!***



Channel 3						
					1ADU=21.4uV	
Gain(6bit)	out ampl (ADU)	out error (ADU)	abs_gain	abs_gainErr	out ampl (V)	out error (V)
5	10966.2	40.0	46.6	3.5	0.235	0.001
10	18442.1	62.1	78.3	5.9	0.395	0.001
15	25529.5	87.9	108.4	8.2	0.546	0.002
20	32200.2	110.5	136.7	10.3	0.689	0.002
25	38549.6	128.5	163.7	12.4	0.825	0.003
30	44302.6	171.0	188.1	14.2	0.948	0.004
35	50013.4	176.7	212.4	16.1	1.070	0.004
40	55686.5	190.5	236.4	17.9	1.192	0.004
45	61138.3	204.5	259.6	19.6	1.308	0.004
50	66344.4	232.0	281.7	21.3	1.420	0.005
55	71343.0	238.7	302.9	22.9	1.527	0.005
60	76071.0	263.7	323.0	24.4	1.628	0.006
63	78892.0	281.7	335.0	25.3	1.688	0.006
CF1						




n

G15_RC5_O120_Ch0_DSI_PulseIn_20191119_135051.txt
amp_mean 52576.1
amp_sigm 35.31
RCtconst 0.487
RCtmcErr 0.052

G15_RC5_O120_Ch0_DSI_PulseIn_20191119_135052.txt
amp_mean 52571.1
amp_sigm 34.61
RCtconst 0.487
RCtmcErr 0.052

G15_RC9_O120_Ch0_DSI_PulseIn_20191119_135108.txt
amp_mean 65484.8
amp_sigm 55.71
RCtconst 0.391
RCtmcErr 0.042

G15_RC9_O120_Ch0_DSI_PulseIn_20191119_135109.txt
amp_mean 65485.7
amp_sigm 54.71
RCtconst 0.391
RCtmcErr 0.042

G15_RC7_O120_Ch0_DSI_PulseIn_20191119_135059.txt
amp_mean 56001.8
amp_sigm 39.26
RCtconst 0.457
RCtmcErr 0.049

G15_RC7_O120_Ch0_DSI_PulseIn_20191119_135101.txt
amp_mean 56001.9
amp_sigm 39.11
RCtconst 0.457
RCtmcErr 0.049

G15_RC7_O120_Ch0_DSI_PulseIn_20191119_135100.txt
amp_mean 55998.1
amp_sigm 38.25
RCtconst 0.457
RCtmcErr 0.049

G15_RC11_O120_Ch0_DSI_PulseIn_20191119_135118.txt
amp_mean 68792.7
amp_sigm 62.85
RCtconst 0.372
RCtmcErr 0.04

G15_RC19_O120_Ch0_DSI_PulseIn_20191119_135230.txt
amp_mean 88216.3
amp_sigm 106.3
RCtconst 0.29
RCtmcErr 0.031

RC	1	3
amp mean	44315.4	47930.7
	44312	47925
	44311.5	47927.1
	44313.0	***47927.6***
amp sigma	28.2	28.96
	28.25	28.2
	27.98	28.21
	28.1	***28.5***
RC	0.577	0.534
	0.577	0.534
	0.577	0.534
	0.577	***0.534***
Rcerr	0.062	0.057
	0.062	0.057
	0.062	0.057
	0.062	***0.057***

G15_RC25_O120_Ch0_DSI_PulseIn_20191119_135302.txt
amp_mean 103796
amp_sigm 155.1
RCtconst 0.246
RCtmcErr 0.026

G15_RC1_O120_Ch0_DSI_PulseIn_20191119_135024.txt
amp_mean 44315.4
amp_sigm 28.2
RCtconst 0.577
RCtmcErr 0.062

G15_RC1_O120_Ch0_DSI_PulseIn_20191119_135025.txt
amp_mean 44312
amp_sigm 28.25
RCtconst 0.577
RCtmcErr 0.062

G15_RC25_O120_Ch0_DSI_PulseIn_20191119_135303.txt
amp_mean 103785
amp_sigm 156.3
RCtconst 0.247
RCtmcErr 0.026

G15_RC27_O120_Ch0_DSI_PulseIn_20191119_135309.txt
amp_mean 106845
amp_sigm 166.5
RCtconst 0.239
RCtmcErr 0.026

G15_RC19_O120_Ch0_DSI_PulseIn_20191119_135231.txt
amp_mean 88225.3
amp_sigm 108.7
RCtconst 0.29
RCtmcErr 0.031

G15_RC19_O120_Ch0_DSI_PulseIn_20191119_135227.txt
amp_mean 88219.7
amp_sigm 105.7
RCtconst 0.29
RCtmcErr 0.031

G15_RC3_O120_Ch0_DSI_PulseIn_20191119_135039.txt
amp_mean 47930.7
amp_sigm 28.96
RCtconst 0.534
RCtmcErr 0.057

G15_RC23_O120_Ch0_DSI_PulseIn_20191119_135255.txt
amp_mean 95287.4
amp_sigm 125.2
RCtconst 0.269

RCtmcErr	0.029

G15_RC23_O120_Ch0_DSI_PulseIn_20191119_135254.txt

amp_mean	95292
amp_sigm	130
RCtconst	0.268
RCtmcErr	0.029

G15_RC25_O120_Ch0_DSI_PulseIn_20191119_135300.txt

amp_mean	103786
amp_sigm	165.2
RCtconst	0.247
RCtmcErr	0.026

G15_RC17_O120_Ch0_DSI_PulseIn_20191119_135212.txt

amp_mean	85114.1
amp_sigm	97.77
RCtconst	0.301
RCtmcErr	0.032

G15_RC23_O120_Ch0_DSI_PulseIn_20191119_135251.txt

amp_mean	95291.6
amp_sigm	124.2
RCtconst	0.268
RCtmcErr	0.029

G15_RC1_O120_Ch0_DSI_PulseIn_20191119_135023.txt

amp_mean	44311.5
amp_sigm	27.98
RCtconst	0.577
RCtmcErr	0.062

G15_RC17_O120_Ch0_DSI_PulseIn_20191119_135213.txt

amp_mean	85120.1
amp_sigm	100.6
RCtconst	0.301
RCtmcErr	0.032

G15_RC17_O120_Ch0_DSI_PulseIn_20191119_135211.txt

amp_mean	85108.6
amp_sigm	102.1
RCtconst	0.301
RCtmcErr	0.032

G15_RC23_O120_Ch0_DSI_PulseIn_20191119_135253.txt

amp_mean	95299.8
amp_sigm	122.2
RCtconst	0.268
RCtmcErr	0.029

G15_RC21_O120_Ch0_DSI_PulseIn_20191119_135241.txt

amp_mean	92293.8
amp_sigm	114.8

RCtconst	0.277
RCtmcErr	0.03

G15_RC15_O120_Ch0_DSI_PulseIn_20191119_135203.txt

amp_mean	76402.9
amp_sigm	79.53
RCtconst	0.335
RCtmcErr	0.036

G15_RC29_O120_Ch0_DSI_PulseIn_20191119_135318.txt

amp_mean	110871
amp_sigm	181.4
RCtconst	0.231
RCtmcErr	0.025

G15_RC31_O120_Ch0_DSI_PulseIn_20191119_135334.txt

amp_mean	113849
amp_sigm	187.2
RCtconst	0.225
RCtmcErr	0.024

G15_RC15_O120_Ch0_DSI_PulseIn_20191119_135201.txt

amp_mean	76410.1
amp_sigm	78.89
RCtconst	0.335
RCtmcErr	0.036

G15_RC21_O120_Ch0_DSI_PulseIn_20191119_135243.txt

amp_mean	92291.5
amp_sigm	111.4
RCtconst	0.277
RCtmcErr	0.03

G15_RC31_O120_Ch0_DSI_PulseIn_20191119_135331.txt

amp_mean	113857
amp_sigm	185.2
RCtconst	0.225
RCtmcErr	0.024

G15_RC27_O120_Ch0_DSI_PulseIn_20191119_135313.txt

amp_mean	106848
amp_sigm	169.7
RCtconst	0.239
RCtmcErr	0.026

G15_RC15_O120_Ch0_DSI_PulseIn_20191119_135204.txt

amp_mean	76398.1
amp_sigm	79.73
RCtconst	0.335
RCtmcErr	0.036

G15_RC27_O120_Ch0_DSI_PulseIn_20191119_135312.txt

amp_mean	106842

amp_sigm	168
RCtconst	0.239
RCtmcErr	0.026

G15_RC31_O120_Ch0_DSI_PulseIn_20191119_135330.txt

amp_mean	113859
amp_sigm	191.7
RCtconst	0.225
RCtmcErr	0.024

G15_RC29_O120_Ch0_DSI_PulseIn_20191119_135320.txt

amp_mean	110863
amp_sigm	180.4
RCtconst	0.231
RCtmcErr	0.025

G15_RC21_O120_Ch0_DSI_PulseIn_20191119_135244.txt

amp_mean	92303.2
amp_sigm	121.6
RCtconst	0.277
RCtmcErr	0.03

G15_RC27_O120_Ch0_DSI_PulseIn_20191119_135310.txt

amp_mean	106847
amp_sigm	166.9
RCtconst	0.239
RCtmcErr	0.026

G15_RC21_O120_Ch0_DSI_PulseIn_20191119_135245.txt

amp_mean	92295.3
amp_sigm	121.1
RCtconst	0.277
RCtmcErr	0.03

G15_RC31_O120_Ch0_DSI_PulseIn_20191119_135333.txt

amp_mean	113856
amp_sigm	193.5
RCtconst	0.225
RCtmcErr	0.024

G15_RC19_O120_Ch0_DSI_PulseIn_20191119_135229.txt

amp_mean	88218.8
amp_sigm	107.9
RCtconst	0.29
RCtmcErr	0.031

G15_RC29_O120_Ch0_DSI_PulseIn_20191119_135321.txt

amp_mean	110857
amp_sigm	186.6
RCtconst	0.231
RCtmcErr	0.025

G15_RC11_O120_Ch0_DSI_PulseIn_20191119_135115.txt

amp_mean	68797.7
amp_sigm	62.95
RCtconst	0.372
RCtmcErr	0.04

G15_RC11_O120_Ch0_DSI_PulseIn_20191119_135117.txt

amp_mean	68798.9
amp_sigm	63.28
RCtconst	0.372
RCtmcErr	0.04

G15_RC3_O120_Ch0_DSI_PulseIn_20191119_135042.txt

amp_mean	47925
amp_sigm	28.2
RCtconst	0.534
RCtmcErr	0.057

G15_RC13_O120_Ch0_DSI_PulseIn_20191119_135124.txt

amp_mean	73175.8
amp_sigm	74.38
RCtconst	0.35
RCtmcErr	0.037

G15_RC13_O120_Ch0_DSI_PulseIn_20191119_135125.txt

amp_mean	73167.3
amp_sigm	76.38
RCtconst	0.35
RCtmcErr	0.037

G15_RC5_O120_Ch0_DSI_PulseIn_20191119_135049.txt

amp_mean	52571.9
amp_sigm	34.81
RCtconst	0.487
RCtmcErr	0.052

G15_RC9_O120_Ch0_DSI_PulseIn_20191119_135107.txt

amp_mean	65487.1
amp_sigm	54.64
RCtconst	0.391
RCtmcErr	0.042

G15_RC13_O120_Ch0_DSI_PulseIn_20191119_135126.txt

amp_mean	73171.3
amp_sigm	74.67
RCtconst	0.35
RCtmcErr	0.037

G15_RC3_O120_Ch0_DSI_PulseIn_20191119_135040.txt

amp_mean	47927.1
amp_sigm	28.21
RCtconst	0.534
RCtmcErr	0.057

5	7	9	11	13	15	17	19	21	23	25
52576.1	56001.8	65484.8	68792.7	73175.8	76402.9	85114.1	88216.3	92293.8	95287.4	103796
52571.1	56001.9	65485.7	68797.7	73167.3	76410.1	85120.1	88225.3	92291.5	95292	103785
52571.9	55998.1	65487.1	68798.9	73171.3	76398.1	85108.6	88219.7	92303.2	95291.6	103786
							88218.8	92295.3	95299.8	
52573.0	***56000.6***	***65485.9***	***68796.4***	***73171.5***	***76403.7***	***85114.3***	***88220.0***	***92296.0***	***95292.7***	***103789.0***
35.31	39.26	55.71	62.85	74.38	79.53	97.77	106.3	114.8	125.2	155.1
34.61	39.11	54.71	62.95	76.38	78.89	100.6	108.7	111.4	130	156.3
34.81	38.25	54.64	63.28	74.67	79.73	102.1	105.7	121.6	124.2	165.2
							107.9	121.1	122.2	
34.9	***38.9***	***55.0***	***63.0***	***75.1***	***79.4***	***100.2***	***107.2***	***117.2***	***125.4***	***158.9***
0.487	0.457	0.391	0.372	0.35	0.335	0.301	0.29	0.277	0.269	0.246
0.487	0.457	0.391	0.372	0.35	0.335	0.301	0.29	0.277	0.268	0.247
0.487	0.457	0.391	0.372	0.35	0.335	0.301	0.29	0.277	0.268	0.247
							0.29	0.277	0.268	
0.487	***0.457***	***0.391***	***0.372***	***0.35***	***0.335***	***0.301***	***0.29***	***0.277***	***0.26825***	***0.247***
0.052	0.049	0.042	0.04	0.037	0.036	0.032	0.031	0.03	0.029	0.026
0.052	0.049	0.042	0.04	0.037	0.036	0.032	0.031	0.03	0.029	0.026
0.052	0.049	0.042	0.04	0.037	0.036	0.032	0.031	0.03	0.029	0.026
							0.031	0.03	0.029	
0.052	***0.049***	***0.042***	***0.04***	***0.037***	***0.036***	***0.032***	***0.031***	***0.03***	***0.029***	***0.026***

27	29	31
106845	110871	113849
106848	110863	113857
106842	110857	113859
106847		113856
106845.5	***110863.7***	***113855.3***
166.5	181.4	187.2
169.7	180.4	185.2
168	186.6	191.7
166.9		193.5
167.8	***182.8***	***189.4***
0.239	0.231	0.225
0.239	0.231	0.225
0.239	0.231	0.225
0.239		0.225
0.239	***0.231***	***0.225***
0.026	0.025	0.024
0.026	0.025	0.024
0.026	0.025	0.024
0.026		0.024
0.026	***0.025***	***0.024***

			Gain = 15
RC (6-bit)	out mean (ADU)	out sigma (ADU)	RC meas (us)
1	44313.0	28.1	0.58
3	47927.6	28.5	0.53
5	52573.0	34.9	0.49
7	56000.6	38.9	0.46
9	65485.9	55.0	0.39
11	68796.4	63.0	0.37
13	73171.5	75.1	0.35
15	76403.7	79.4	0.34
17	85114.3	100.2	0.30
19	88220.0	107.2	0.29
21	92296.0	117.2	0.28
23	95292.7	125.4	0.27
25	103789.0	158.9	0.25
27	106845.5	167.8	0.24
29	110863.7	182.8	0.23
31	113855.3	189.4	0.23

	1ADU=21.4uV	
RC err (us)	out ampl (V)	out err (V)
0.06	0.948	0.001
0.06	1.026	0.001
0.05	1.125	0.001
0.05	1.198	0.001
0.04	1.401	0.001
0.04	1.472	0.001
0.04	1.566	0.002
0.04	1.635	0.002
0.03	1.821	0.002
0.03	1.888	0.002
0.03	1.975	0.003
0.03	2.039	0.003
0.03	2.221	0.003
0.03	2.286	0.004
0.03	2.372	0.004
0.02	2.437	0.004

G30_RC5_O120_Ch0_DSI_PulseIn_20191119_135431.txt
amp_mean 61727.4
amp_sigm 46.07
RCtconst 0.727
RCtmcErr 0.078

G30_RC5_O120_Ch0_DSI_PulseIn_20191119_135430.txt
amp_mean 61733.1
amp_sigm 47.22
RCtconst 0.727
RCtmcErr 0.078

G30_RC5_O120_Ch0_DSI_PulseIn_20191119_135432.txt
amp_mean 61730.8
amp_sigm 47.37
RCtconst 0.727
RCtmcErr 0.078

G30_RC11_O120_Ch0_DSI_PulseIn_20191119_135458.txt
amp_mean 90971.1
amp_sigm 102.8
RCtconst 0.494
RCtmcErr 0.053

G30_RC7_O120_Ch0_DSI_PulseIn_20191119_135438.txt
amp_mean 67958.2
amp_sigm 58.02
RCtconst 0.661
RCtmcErr 0.071

G30_RC7_O120_Ch0_DSI_PulseIn_20191119_135439.txt
amp_mean 67968.8
amp_sigm 60.26
RCtconst 0.661
RCtmcErr 0.071

G30_RC15_O120_Ch0_DSI_PulseIn_20191119_135517.txt
amp_mean 104548
amp_sigm 134
RCtconst 0.429
RCtmcErr 0.046

G30_RC15_O120_Ch0_DSI_PulseIn_20191119_135516.txt
amp_mean 104548
amp_sigm 138.9
RCtconst 0.429
RCtmcErr 0.046

G30_RC13_O120_Ch0_DSI_PulseIn_20191119_135508.txt
amp_mean 98621.5
amp_sigm 115
RCtconst 0.455
RCtmcErr 0.049

RC	1	3
amp mean	46583.4	53238.8
	46582	53235.2
	46582.2	53233
	46582.5	***53235.7***
amp sigma	28.39	32.84
	28.06	33.93
	28.71	33.21
	28.4	***33.3***
RC	0.964	0.843
	0.964	0.843
	0.964	0.843
	0.96	***0.84***
Rcerr	0.1	0.09
	0.1	0.09
	0.1	0.09
	0.10	***0.09***

G30_RC13_O120_Ch0_DSI_PulseIn_20191119_135509.txt
amp_mean 98618
amp_sigm 119.2
RCtconst 0.455
RCtmcErr 0.049

G30_RC9_O120_Ch0_DSI_PulseIn_20191119_135447.txt
amp_mean 85062.6
amp_sigm 89.84
RCtconst 0.528
RCtmcErr 0.056

G30_RC9_O120_Ch0_DSI_PulseIn_20191119_135449.txt
amp_mean 85065.7
amp_sigm 92.62
RCtconst 0.528
RCtmcErr 0.056

G30_RC17_O120_Ch0_DSI_PulseIn_20191119_135559.txt
amp_mean 120567
amp_sigm 170.7
RCtconst 0.372
RCtmcErr 0.04

G30_RC9_O120_Ch0_DSI_PulseIn_20191119_135448.txt
amp_mean 85061.7
amp_sigm 87.86
RCtconst 0.528
RCtmcErr 0.056

G30_RC19_O120_Ch0_DSI_PulseIn_20191119_135621.txt
amp_mean 125914
amp_sigm 181.3
RCtconst 0.357
RCtmcErr 0.038

G30_RC19_O120_Ch0_DSI_PulseIn_20191119_135619.txt
amp_mean 125931
amp_sigm 178.1
RCtconst 0.357
RCtmcErr 0.038

G30_RC17_O120_Ch0_DSI_PulseIn_20191119_135601.txt
amp_mean 120572
amp_sigm 182.9
RCtconst 0.372
RCtmcErr 0.04

G30_RC19_O120_Ch0_DSI_PulseIn_20191119_135618.txt
amp_mean 125918
amp_sigm 180.1
RCtconst 0.357

RCtmcErr	0.038

G30_RC17_O120_Ch0_DSI_PulseIn_20191119_135602.txt

amp_mean	120576
amp_sigm	174.1
RCtconst	0.372
RCtmcErr	0.04

G30_RC7_O120_Ch0_DSI_PulseIn_20191119_135440.txt

amp_mean	67962.6
amp_sigm	56.99
RCtconst	0.661
RCtmcErr	0.071

G30_RC1_O120_Ch0_DSI_PulseIn_20191119_135412.txt

amp_mean	46583.4
amp_sigm	28.39
RCtconst	0.964
RCtmcErr	0.1

G30_RC13_O120_Ch0_DSI_PulseIn_20191119_135510.txt

amp_mean	98614.6
amp_sigm	120.2
RCtconst	0.455
RCtmcErr	0.049

G30_RC3_O120_Ch0_DSI_PulseIn_20191119_135424.txt

amp_mean	53238.8
amp_sigm	32.84
RCtconst	0.843
RCtmcErr	0.09

G30_RC15_O120_Ch0_DSI_PulseIn_20191119_135519.txt

amp_mean	104554
amp_sigm	135.6
RCtconst	0.429
RCtmcErr	0.046

G30_RC1_O120_Ch0_DSI_PulseIn_20191119_135413.txt

amp_mean	46582
amp_sigm	28.06
RCtconst	0.964
RCtmcErr	0.1

G30_RC3_O120_Ch0_DSI_PulseIn_20191119_135423.txt

amp_mean	53235.2
amp_sigm	33.93
RCtconst	0.843
RCtmcErr	0.09

G30_RC1_O120_Ch0_DSI_PulseIn_20191119_135415.txt

amp_mean	46582.2
amp_sigm	28.71

RCtconst	0.964
RCtmcErr	0.1

G30_RC11_O120_Ch0_DSI_PulseIn_20191119_135457.txt

amp_mean	90955
amp_sigm	105.5
RCtconst	0.494
RCtmcErr	0.053

G30_RC3_O120_Ch0_DSI_PulseIn_20191119_135421.txt

amp_mean	53233
amp_sigm	33.21
RCtconst	0.843
RCtmcErr	0.09

G30_RC11_O120_Ch0_DSI_PulseIn_20191119_135456.txt

amp_mean	90953.8
amp_sigm	100.2
RCtconst	0.494
RCtmcErr	0.053

G30_RC15_O120_Ch0_DSI_PulseIn_20191119_135520.txt

amp_mean	104548
amp_sigm	135.8
RCtconst	0.429
RCtmcErr	0.046

5	7	9	11	13	15	17	19
61727.4	67958.2	85062.6	90971.1	98621.5	104548	120567	125914
61733.1	67968.8	85065.7	90955	98618	104548	120572	125931
61730.8	67962.6	85061.7	90953.8	98614.6	104554	120576	125918
					104548		
61730.4	***67963.2***	***85063.3***	***90960.0***	***98618.0***	***104549.5***	***120571.7***	***125921.0***
46.07	58.02	89.84	102.8	115	134	170.7	181.3
47.22	60.26	92.62	105.5	119.2	138.9	182.9	178.1
47.37	56.99	87.86	100.2	120.2	135.6	174.1	180.1
					135.8		
46.9	***58.4***	***90.1***	***102.8***	***118.1***	***136.1***	***175.9***	***179.8***
0.727	0.661	0.528	0.494	0.455	0.429	0.372	0.357
0.727	0.661	0.528	0.494	0.455	0.429	0.372	0.357
0.727	0.661	0.528	0.494	0.455	0.429	0.372	0.357
					0.429		
0.73	***0.66***	***0.53***	***0.49***	***0.46***	***0.43***	***0.37***	***0.36***
0.078	0.071	0.056	0.053	0.049	0.046	0.04	0.038
0.078	0.071	0.056	0.053	0.049	0.046	0.04	0.038
0.078	0.071	0.056	0.053	0.049	0.046	0.04	0.038
					0.046		
0.08	***0.07***	***0.06***	***0.05***	***0.05***	***0.05***	***0.04***	***0.04***

RC (6-bit)
1
3
5
7
9
11
13
15
17
19

Gain = 30					
				1ADU=21.4uV	
out mean (ADU)	out sigma (ADU)	RC meas (us)	RC err (us)	out ampl (V)	out err (V)
46582.5	28.4	0.96	0.10	0.997	0.001
53235.7	33.3	0.84	0.09	1.139	0.001
61730.4	46.9	0.73	0.08	1.321	0.001
67963.2	58.4	0.66	0.07	1.454	0.001
85063.3	90.1	0.53	0.06	1.820	0.002
90960.0	102.8	0.49	0.05	1.947	0.002
98618.0	118.1	0.46	0.05	2.110	0.003
104549.5	136.1	0.43	0.05	2.237	0.003
120571.7	175.9	0.37	0.04	2.580	0.004
125921.0	179.8	0.36	0.04	2.695	0.004

G45_RC7_O120_Ch0_DSI_PulseIn_20191119_135740.txt

amp_mean	79803.2
amp_sigm	80.17
RCtconst	0.773
RCtmcErr	0.083

G45_RC7_O120_Ch0_DSI_PulseIn_20191119_135741.txt

amp_mean	79802.7
amp_sigm	80.21
RCtconst	0.773
RCtmcErr	0.083

G45_RC7_O120_Ch0_DSI_PulseIn_20191119_135742.txt

amp_mean	79803.5
amp_sigm	79.1
RCtconst	0.773
RCtmcErr	0.083

G45_RC11_O120_Ch0_DSI_PulseIn_20191119_135805.txt

amp_mean	113101
amp_sigm	152.3
RCtconst	0.546
RCtmcErr	0.058

G45_RC11_O120_Ch0_DSI_PulseIn_20191119_135804.txt

amp_mean	113111
amp_sigm	155.4
RCtconst	0.546
RCtmcErr	0.058

G45_RC11_O120_Ch0_DSI_PulseIn_20191119_135806.txt

amp_mean	113102
amp_sigm	154.3
RCtconst	0.546
RCtmcErr	0.058

G45_RC3_O120_Ch0_DSI_PulseIn_20191119_135721.txt

amp_mean	58517.8
amp_sigm	42.02
RCtconst	1.05
RCtmcErr	0.11

G45_RC1_O120_Ch0_DSI_PulseIn_20191119_135648.txt

amp_mean	48852.7
amp_sigm	29.24
RCtconst	1.26
RCtmcErr	0.14

G45_RC3_O120_Ch0_DSI_PulseIn_20191119_135722.txt

amp_mean	58518.8
amp_sigm	41.01
RCtconst	1.05
RCtmcErr	0.11

RC	1	3
amp mean	48852.7	58517.8
	48855.1	58518.8
	48850.2	58520.9
	48852.7	58519.2
amp sigma	29.24	42.02
	29.65	41.01
	29.35	40.55
	29.4	41.2
RC	1.26	1.05
	1.26	1.05
	1.26	1.05
	1.26	1.05
Rcerr	0.14	0.11
	0.14	0.11
	0.14	0.11
	0.14	0.11

G45_RC3_O120_Ch0_DSI_PulseIn_20191119_135723.txt

amp_mean	58520.9
amp_sigm	40.55
RCtconst	1.05
RCtmcErr	0.11

G45_RC5_O120_Ch0_DSI_PulseIn_20191119_135732.txt

amp_mean	70821.6
amp_sigm	60.97
RCtconst	0.871
RCtmcErr	0.093

G45_RC13_O120_Ch0_DSI_PulseIn_20191119_135813.txt

amp_mean	124391
amp_sigm	165.3
RCtconst	0.496
RCtmcErr	0.053

G45_RC1_O120_Ch0_DSI_PulseIn_20191119_135645.txt

amp_mean	48855.1
amp_sigm	29.65
RCtconst	1.26
RCtmcErr	0.14

G45_RC5_O120_Ch0_DSI_PulseIn_20191119_135731.txt

amp_mean	70818.4
amp_sigm	60.14
RCtconst	0.871
RCtmcErr	0.093

G45_RC1_O120_Ch0_DSI_PulseIn_20191119_135646.txt

amp_mean	48850.2
amp_sigm	29.35
RCtconst	1.26
RCtmcErr	0.14

G45_RC5_O120_Ch0_DSI_PulseIn_20191119_135734.txt

amp_mean	70822.7
amp_sigm	63.12
RCtconst	0.871
RCtmcErr	0.093

G45_RC13_O120_Ch0_DSI_PulseIn_20191119_135814.txt

amp_mean	124382
amp_sigm	171.5
RCtconst	0.496
RCtmcErr	0.053

G45_RC13_O120_Ch0_DSI_PulseIn_20191119_135815.txt

amp_mean	124375
amp_sigm	164.5
RCtconst	0.496

RCtmcErr	0.053

G45_RC9_O120_Ch0_DSI_PulseIn_20191119_135754.txt

amp_mean	104305
amp_sigm	134.6
RCtconst	0.592
RCtmcErr	0.063

G45_RC9_O120_Ch0_DSI_PulseIn_20191119_135752.txt

amp_mean	104306
amp_sigm	134.5
RCtconst	0.592
RCtmcErr	0.063

G45_RC9_O120_Ch0_DSI_PulseIn_20191119_135753.txt

amp_mean	104310
amp_sigm	132.9
RCtconst	0.592
RCtmcErr	0.063

5	7	9	11	13
70821.6	79803.2	104305	113101	124391
70818.4	79802.7	104306	113111	124382
70822.7	79803.5	104310	113102	124375
70820.9	79803.1	104307.0	113104.7	124382.7
60.97	80.17	134.6	152.3	165.3
60.14	80.21	134.5	155.4	171.5
63.12	79.1	132.9	154.3	164.5
61.4	79.8	134.0	154.0	167.1
0.871	0.773	0.592	0.546	0.496
0.871	0.773	0.592	0.546	0.496
0.871	0.773	0.592	0.546	0.496
0.87	0.77	0.59	0.55	0.50
0.093	0.083	0.063	0.058	0.053
0.093	0.083	0.063	0.058	0.053
0.093	0.083	0.063	0.058	0.053
0.09	0.08	0.06	0.06	0.05

RC (6-bit)	out mean (ADU)
1	48852.7
3	58519.2
5	70820.9
7	79803.1
9	104307.0
11	113104.7
13	124382.7

Gain = 45				
			1ADU=21.4uV	
out sigma (ADU)	RC meas (us)	RC err (us)	out ampl (V)	out err (V)
29.4	1.26	0.14	1.045	0.001
41.2	1.05	0.11	1.252	0.001
61.4	0.87	0.09	1.516	0.001
79.8	0.77	0.08	1.708	0.002
134.0	0.59	0.06	2.232	0.003
154.0	0.55	0.06	2.420	0.003
167.1	0.50	0.05	2.662	0.004

G63_RC1_O120_Ch0_DSI_PulseIn_20191119_135839.txt

amp_mean	51597.9
amp_sigm	31.89
RCtconst	1.52
RCtmcErr	0.16

G63_RC7_O120_Ch0_DSI_PulseIn_20191119_135944.txt

amp_mean	93754.3
amp_sigm	104.1
RCtconst	0.838
RCtmcErr	0.09

G63_RC7_O120_Ch0_DSI_PulseIn_20191119_135943.txt

amp_mean	93754.9
amp_sigm	103.7
RCtconst	0.838
RCtmcErr	0.09

G63_RC7_O120_Ch0_DSI_PulseIn_20191119_135942.txt

amp_mean	93755
amp_sigm	103.6
RCtconst	0.838
RCtmcErr	0.09

G63_RC3_O120_Ch0_DSI_PulseIn_20191119_135919.txt

amp_mean	64857.9
amp_sigm	51.56
RCtconst	1.21
RCtmcErr	0.13

G63_RC3_O120_Ch0_DSI_PulseIn_20191119_135921.txt

amp_mean	64858.8
amp_sigm	52.29
RCtconst	1.21
RCtmcErr	0.13

G63_RC3_O120_Ch0_DSI_PulseIn_20191119_135922.txt

amp_mean	64861.9
amp_sigm	52.16
RCtconst	1.21
RCtmcErr	0.13

G63_RC3_O120_Ch0_DSI_PulseIn_20191119_135923.txt

amp_mean	64863.6
amp_sigm	51.1
RCtconst	1.21
RCtmcErr	0.13

G63_RC5_O120_Ch0_DSI_PulseIn_20191119_135932.txt

amp_mean	81630.9
amp_sigm	81.19
RCtconst	0.963
RCtmcErr	0.1

RC	1
amp mean	51597.9
	51593.1
	51594.3
	51595.1
amp sigma	31.89
	32.68
	31.22
	31.93
RC	1.52
	1.52
	1.52

	1.52
Rcerr	0.16
	0.16
	0.16
	0.16

G63_RC1_O120_Ch0_DSI_PulseIn_20191119_135842.txt
amp_mean 51593.1
amp_sigm 32.68
RCtconst 1.52
RCtmcErr 0.16

G63_RC5_O120_Ch0_DSI_PulseIn_20191119_135934.txt
amp_mean 81635.4
amp_sigm 79.28
RCtconst 0.962
RCtmcErr 0.1

G63_RC5_O120_Ch0_DSI_PulseIn_20191119_135935.txt
amp_mean 81637.8
amp_sigm 81.89
RCtconst 0.962
RCtmcErr 0.1

G63_RC5_O120_Ch0_DSI_PulseIn_20191119_135936.txt
amp_mean 81631
amp_sigm 80.51
RCtconst 0.963
RCtmcErr 0.1

G63_RC1_O120_Ch0_DSI_PulseIn_20191119_135840.txt
amp_mean 51594.3
amp_sigm 31.22
RCtconst 1.52
RCtmcErr 0.16

G63_RC9_O120_Ch0_DSI_PulseIn_20191119_135954.txt
amp_mean 127465
amp_sigm 176.1
RCtconst 0.616
RCtmcErr 0.066

G63_RC9_O120_Ch0_DSI_PulseIn_20191119_135951.txt
amp_mean 127468
amp_sigm 185
RCtconst 0.616
RCtmcErr 0.066

G63_RC9_O120_Ch0_DSI_PulseIn_20191119_135950.txt
amp_mean 127474
amp_sigm 177.6
RCtconst 0.616
RCtmcErr 0.066

G63_RC9_O120_Ch0_DSI_PulseIn_20191119_135952.txt
amp_mean 127460
amp_sigm 178.7
RCtconst 0.616

RCtmcErr	0.066

3	5	7	9
64857.9	81630.9	93754.3	127465
64858.8	81635.4	93754.9	127468
64861.9	81637.8	93755	127474
64863.6	81631		127460
64860.55	81633.775	93754.733333	127466.75
51.56	81.19	104.1	176.1
52.29	79.28	103.7	185
52.16	81.89	103.6	177.6
51.1	80.51		178.7
51.7775	80.7175	103.8	179.35
1.21	0.963	0.838	0.616
1.21	0.962	0.838	0.616
1.21	0.962	0.838	0.616
	0.963		0.616

RC (6-bit)	out mean (ADU)
1	51595.1
3	64860.6
5	81633.8
7	93754.7
9	127466.8

DSI_Ch0_Gain63

1.21	0.96	0.84	0.62
0.13	0.1	0.09	0.066
0.13	0.1	0.09	0.066
0.13	0.1	0.09	0.066
0.13	0.1		0.066
0.13	0.1	0.09	0.066

Gain = 63				
			1ADU=21.4uV	
out sigma (ADU)	RC meas (us)	RC err (us)	out ampl (V)	out err (V)
31.9	1.52	0.16	1.104	0.001
51.8	1.21	0.13	1.388	0.001
80.7	0.96	0.10	1.747	0.002
103.8	0.84	0.09	2.006	0.002
179.4	0.62	0.07	2.728	0.004

CF1_RC9_O120_Ch0_DSI_PulseIn_20191119_140108.txt	
amp_mean	81543.5
amp_sigm	132.6
RCtconst	0.518
RCtmcErr	0.055
CF1_RC21_O120_Ch0_DSI_PulseIn_20191119_140325.txt	
amp_mean	126253
amp_sigm	311.2
RCtconst	0.334
RCtmcErr	0.036
CF1_RC21_O120_Ch0_DSI_PulseIn_20191119_140324.txt	
amp_mean	126259
amp_sigm	303.7
RCtconst	0.334
RCtmcErr	0.036
CF1_RC5_O120_Ch0_DSI_PulseIn_20191119_140040.txt	
amp_mean	59922.8
amp_sigm	64.64
RCtconst	0.704
RCtmcErr	0.075
CF1_RC5_O120_Ch0_DSI_PulseIn_20191119_140042.txt	
amp_mean	59931
amp_sigm	63.82
RCtconst	0.704
RCtmcErr	0.075
CF1_RC7_O120_Ch0_DSI_PulseIn_20191119_140048.txt	
amp_mean	65700.1
amp_sigm	83.07
RCtconst	0.642
RCtmcErr	0.069
CF1_RC21_O120_Ch0_DSI_PulseIn_20191119_140326.txt	
amp_mean	126240
amp_sigm	320.9
RCtconst	0.334
RCtmcErr	0.036
CF1_RC7_O120_Ch0_DSI_PulseIn_20191119_140049.txt	
amp_mean	65701.5
amp_sigm	79.86
RCtconst	0.642
RCtmcErr	0.069
CF1_RC13_O120_Ch0_DSI_PulseIn_20191119_140243.txt	
amp_mean	94198.7
amp_sigm	178.4
RCtconst	0.448
RCtmcErr	0.048

RC	1	3
amp mean	45972.6	52063.4
	45972.6	***52063.4***
amp sigma	29.33	41.99
	29.3	***42.0***
RC	0.918	0.811
	0.918	***0.811***
Rcerr	0.098	0.087
	0.098	***0.087***

CF1_RC1_O120_Ch0_DSI_PulseIn_20191119_140019.txt	
amp_mean	45972.6
amp_sigm	29.33
RCtconst	0.918
RCtmcErr	0.098
CF1_RC19_O120_Ch0_DSI_PulseIn_20191119_140313.txt	
amp_mean	119618
amp_sigm	292.9
RCtconst	0.353
RCtmcErr	0.038
CF1_RC1_O120_Ch0_DSI_PulseIn_20191119_140020.txt	
amp_mean	45968.8
amp_sigm	29.98
RCtconst	0.918
RCtmcErr	0.098
CF1_RC13_O120_Ch0_DSI_PulseIn_20191119_140244.txt	
amp_mean	94194.1
amp_sigm	190.7
RCtconst	0.448
RCtmcErr	0.048
CF1_RC19_O120_Ch0_DSI_PulseIn_20191119_140316.txt	
amp_mean	119637
amp_sigm	299.6
RCtconst	0.353
RCtmcErr	0.038
CF1_RC19_O120_Ch0_DSI_PulseIn_20191119_140317.txt	
amp_mean	119629
amp_sigm	286.8
RCtconst	0.353
RCtmcErr	0.038
CF1_RC1_O120_Ch0_DSI_PulseIn_20191119_140021.txt	
amp_mean	45961.9
amp_sigm	29.44
RCtconst	0.918
RCtmcErr	0.098
CF1_RC1_O120_Ch0_DSI_PulseIn_20191119_140023.txt	
amp_mean	45960.3
amp_sigm	30.67
RCtconst	0.918
RCtmcErr	0.098
CF1_RC13_O120_Ch0_DSI_PulseIn_20191119_140247.txt	
amp_mean	94175.4
amp_sigm	176.8
RCtconst	0.448

RCtmcErr	0.048
CF1_RC3_O120_Ch0_DSI_PulseIn_20191119_140029.txt	
amp_mean	52067.8
amp_sigm	41.34
RCtconst	0.811
RCtmcErr	0.087
CF1_RC3_O120_Ch0_DSI_PulseIn_20191119_140028.txt	
amp_mean	52063.4
amp_sigm	41.99
RCtconst	0.811
RCtmcErr	0.087
CF1_RC19_O120_Ch0_DSI_PulseIn_20191119_140314.txt	
amp_mean	119627
amp_sigm	289.2
RCtconst	0.353
RCtmcErr	0.038
CF1_RC13_O120_Ch0_DSI_PulseIn_20191119_140246.txt	
amp_mean	94184.2
amp_sigm	175.7
RCtconst	0.448
RCtmcErr	0.048
CF1_RC5_O120_Ch0_DSI_PulseIn_20191119_140039.txt	
amp_mean	59931.6
amp_sigm	62.52
RCtconst	0.704
RCtmcErr	0.075
CF1_RC3_O120_Ch0_DSI_PulseIn_20191119_140030.txt	
amp_mean	52060.9
amp_sigm	40.51
RCtconst	0.811
RCtmcErr	0.087
CF1_RC15_O120_Ch0_DSI_PulseIn_20191119_140256.txt	
amp_mean	99420.1
amp_sigm	210.9
RCtconst	0.425
RCtmcErr	0.045
CF1_RC15_O120_Ch0_DSI_PulseIn_20191119_140254.txt	
amp_mean	99409.2
amp_sigm	211.2
RCtconst	0.425
RCtmcErr	0.045
CF1_RC3_O120_Ch0_DSI_PulseIn_20191119_140032.txt	
amp_mean	52058.4
amp_sigm	39.99

RCtconst	0.811
RCtmcErr	0.087
CF1_RC3_O120_Ch0_DSI_PulseIn_20191119_140033.txt	
amp_mean	52061.7
amp_sigm	40.05
RCtconst	0.811
RCtmcErr	0.087
CF1_RC15_O120_Ch0_DSI_PulseIn_20191119_140255.txt	
amp_mean	99422.2
amp_sigm	213.4
RCtconst	0.424
RCtmcErr	0.045
CF1_RC17_O120_Ch0_DSI_PulseIn_20191119_140307.txt	
amp_mean	114332
amp_sigm	276.9
RCtconst	0.369
RCtmcErr	0.04
CF1_RC15_O120_Ch0_DSI_PulseIn_20191119_140251.txt	
amp_mean	99429.5
amp_sigm	211.7
RCtconst	0.424
RCtmcErr	0.045
CF1_RC17_O120_Ch0_DSI_PulseIn_20191119_140304.txt	
amp_mean	114310
amp_sigm	278.4
RCtconst	0.369
RCtmcErr	0.04
CF1_RC17_O120_Ch0_DSI_PulseIn_20191119_140305.txt	
amp_mean	114330
amp_sigm	276.3
RCtconst	0.369
RCtmcErr	0.04
CF1_RC7_O120_Ch0_DSI_PulseIn_20191119_140051.txt	
amp_mean	65699.9
amp_sigm	79.03
RCtconst	0.642
RCtmcErr	0.069
CF1_RC21_O120_Ch0_DSI_PulseIn_20191119_140328.txt	
amp_mean	126238
amp_sigm	298.8
RCtconst	0.334
RCtmcErr	0.036
CF1_RC7_O120_Ch0_DSI_PulseIn_20191119_140052.txt	
amp_mean	65697.6

amp_sigm	85.09
RCtconst	0.642
RCtmcErr	0.069
CF1_RC11_O120_Ch0_DSI_PulseIn_20191119_140152.txt	
amp_mean	87019.2
amp_sigm	152.9
RCtconst	0.485
RCtmcErr	0.052
CF1_RC9_O120_Ch0_DSI_PulseIn_20191119_140107.txt	
amp_mean	81535.6
amp_sigm	135.5
RCtconst	0.518
RCtmcErr	0.055
CF1_RC11_O120_Ch0_DSI_PulseIn_20191119_140151.txt	
amp_mean	87013.4
amp_sigm	152.7
RCtconst	0.485
RCtmcErr	0.052
CF1_RC11_O120_Ch0_DSI_PulseIn_20191119_140150.txt	
amp_mean	87020.6
amp_sigm	152
RCtconst	0.485
RCtmcErr	0.052
CF1_RC9_O120_Ch0_DSI_PulseIn_20191119_140110.txt	
amp_mean	81528.6
amp_sigm	132.7
RCtconst	0.518
RCtmcErr	0.055

5	7	9	11	13	15	17	19	21
59922.8	65700.1	81543.5	87019.2	94198.7	99420.1	114332	119618	126253
59931								126259
59926.9	***65700.1***	***81543.5***	***87019.2***	***94198.7***	***99420.1***	***114332.0***	***119618.0***	***126256.0***
64.64	83.07	132.6	152.9	178.4	210.9	276.9	292.9	311.2
63.82								303.7
64.2	***83.1***	***132.6***	***152.9***	***178.4***	***210.9***	***276.9***	***292.9***	***307.5***
0.704	0.642	0.518	0.485	0.448	0.425	0.369	0.353	0.334
0.704								0.334
0.704	***0.642***	***0.518***	***0.485***	***0.448***	***0.425***	***0.369***	***0.353***	***0.334***
0.075	0.069	0.055	0.052	0.048	0.045	0.04	0.038	0.036
0.075								0.036
0.075	***0.069***	***0.055***	***0.052***	***0.048***	***0.045***	***0.04***	***0.038***	***0.036***

RC (6-bit)
1
3
5
7
9
11
13
15
17
19
21

CF1					
				1ADU=21.4uV	
out mean (ADU)	out sigma (ADU)	RC meas (us)	RC err (us)	out ampl (V)	out err (V)
45972.6	29.3	0.92	0.10	0.984	0.001
52063.4	42.0	0.81	0.09	1.114	0.001
59926.9	64.2	0.70	0.08	1.282	0.001
65700.1	83.1	0.64	0.07	1.406	0.002
81543.5	132.6	0.52	0.06	1.745	0.003
87019.2	152.9	0.49	0.05	1.862	0.003
94198.7	178.4	0.45	0.05	2.016	0.004
99420.1	210.9	0.43	0.05	2.128	0.005
114332.0	276.9	0.37	0.04	2.447	0.006
119618.0	292.9	0.35	0.04	2.560	0.006
126256.0	307.5	0.33	0.04	2.702	0.007

Gain = 63						
					1ADU=21.4uV	
RC (6-bit)	out mean (ADU)	out sigma (ADU)	RC meas (us)	RC err (us)	out ampl (V)	out err (V)
1	51595.1	31.9	1.52	0.16	1.104	0.001
3	64860.6	51.8	1.21	0.13	1.388	0.001
5	81633.8	80.7	0.96	0.10	1.747	0.002
7	93754.7	103.8	0.84	0.09	2.006	0.002
9	127466.8	179.4	0.62	0.07	2.728	0.004

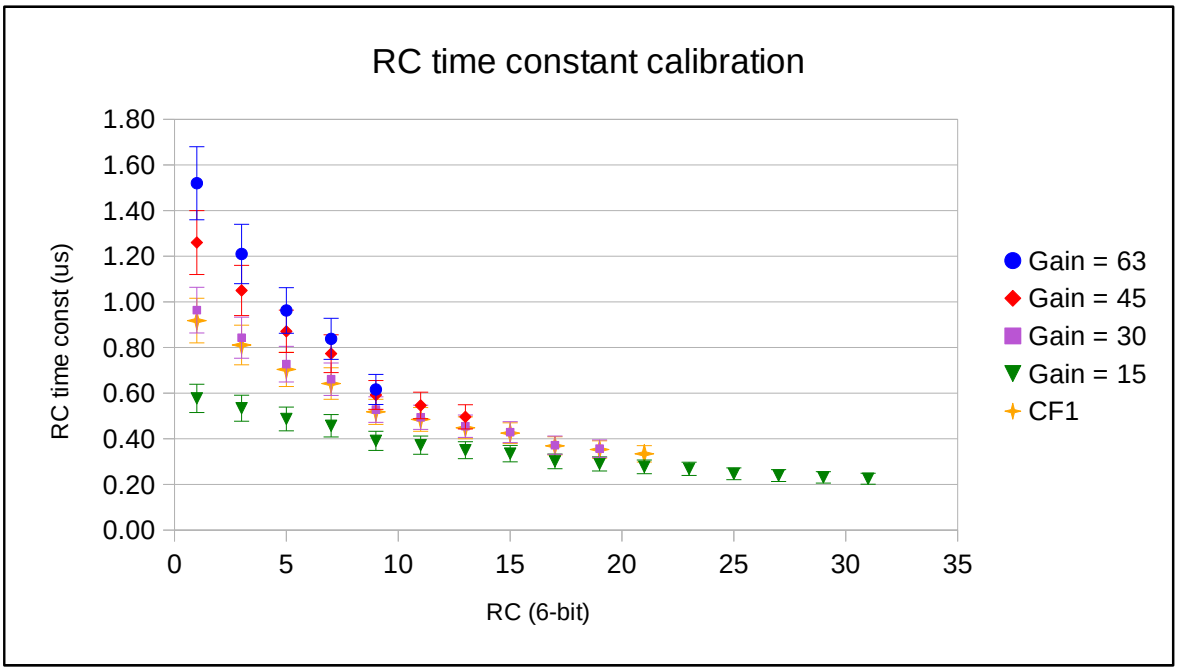
Gain = 45						
					1ADU=21.4uV	
RC (6-bit)	out mean (ADU)	out sigma (ADU)	RC meas (us)	RC err (us)	out ampl (V)	out err (V)
1	48852.7	29.4	1.26	0.14	1.045	0.001
3	58519.2	41.2	1.05	0.11	1.252	0.001
5	70820.9	61.4	0.87	0.09	1.516	0.001
7	79803.1	79.8	0.77	0.08	1.708	0.002
9	104307.0	134.0	0.59	0.06	2.232	0.003
11	113104.7	154.0	0.55	0.06	2.420	0.003
13	124382.7	167.1	0.50	0.05	2.662	0.004

Gain = 30						
					1ADU=21.4uV	
RC (6-bit)	out mean (ADU)	out sigma (ADU)	RC meas (us)	RC err (us)	out ampl (V)	out err (V)
1	46582.5	28.4	0.96	0.10	0.997	0.001
3	53235.7	33.3	0.84	0.09	1.139	0.001
5	61730.4	46.9	0.73	0.08	1.321	0.001
7	67963.2	58.4	0.66	0.07	1.454	0.001
9	85063.3	90.1	0.53	0.06	1.820	0.002
11	90960.0	102.8	0.49	0.05	1.947	0.002
13	98618.0	118.1	0.46	0.05	2.110	0.003
15	104549.5	136.1	0.43	0.05	2.237	0.003
17	120571.7	175.9	0.37	0.04	2.580	0.004
19	125921.0	179.8	0.36	0.04	2.695	0.004

Gain = 15						
					1ADU=21.4uV	
RC (6-bit)	out mean (ADU)	out sigma (ADU)	RC meas (us)	RC err (us)	out ampl (V)	out err (V)
1	44313.0	28.1	0.58	0.06	0.948	0.001
3	47927.6	28.5	0.53	0.06	1.026	0.001
5	52573.0	34.9	0.49	0.05	1.125	0.001
7	56000.6	38.9	0.46	0.05	1.198	0.001
9	65485.9	55.0	0.39	0.04	1.401	0.001
11	68796.4	63.0	0.37	0.04	1.472	0.001
13	73171.5	75.1	0.35	0.04	1.566	0.002
15	76403.7	79.4	0.34	0.04	1.635	0.002
17	85114.3	100.2	0.30	0.03	1.821	0.002
19	88220.0	107.2	0.29	0.03	1.888	0.002
21	92296.0	117.2	0.28	0.03	1.975	0.003
23	95292.7	125.4	0.27	0.03	2.039	0.003
25	103789.0	158.9	0.25	0.03	2.221	0.003
27	106845.5	167.8	0.24	0.03	2.286	0.004
29	110863.7	182.8	0.23	0.03	2.372	0.004
31	113855.3	189.4	0.23	0.02	2.437	0.004

DSI_Ch0_results

CF1						
					1ADU=21.4uV	
RC (6-bit)	out mean (ADU)	out sigma (ADU)	RC meas (us)	RC err (us)	out ampl (V)	out err (V)
1	45972.6	29.3	0.92	0.10	0.984	0.001
3	52063.4	42.0	0.81	0.09	1.114	0.001
5	59926.9	64.2	0.70	0.08	1.282	0.001
7	65700.1	83.1	0.64	0.07	1.406	0.002
9	81543.5	132.6	0.52	0.06	1.745	0.003
11	87019.2	152.9	0.49	0.05	1.862	0.003
13	94198.7	178.4	0.45	0.05	2.016	0.004
15	99420.1	210.9	0.43	0.05	2.128	0.005
17	114332.0	276.9	0.37	0.04	2.447	0.006
19	119618.0	292.9	0.35	0.04	2.560	0.006
21	126256.0	307.5	0.33	0.04	2.702	0.007



Gain	RC
15	1
	5
	9
	13
	17
	21
	25
	29
	33
	40
	50
	63
30	1
	5
	9
	13
	17
	21
	25
	29
	33
	40
	50
	63
45	1
	5
	9
	13
	40
	63
63	1
	5
	9
	13
	40
	63
CF1	1
	5
	9
	13
	17
	21
	25
	40
	63

DSI_NOISE_Ch0_Gain15

RC	1	5	9	13	17

21	25	29	33	40	50

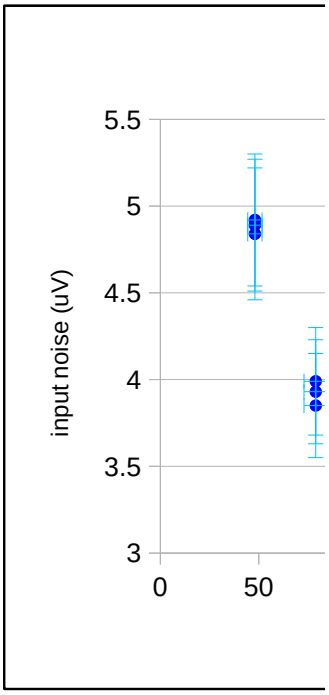
Gain = 63

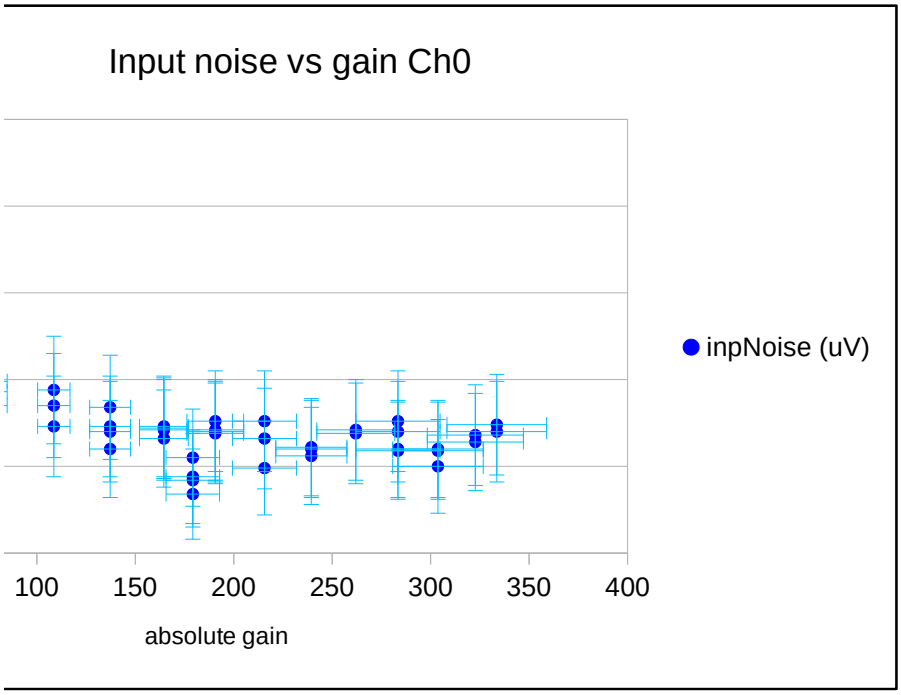
RC	1	5	9	13	40

63

NOISE_Transparent_Ch0

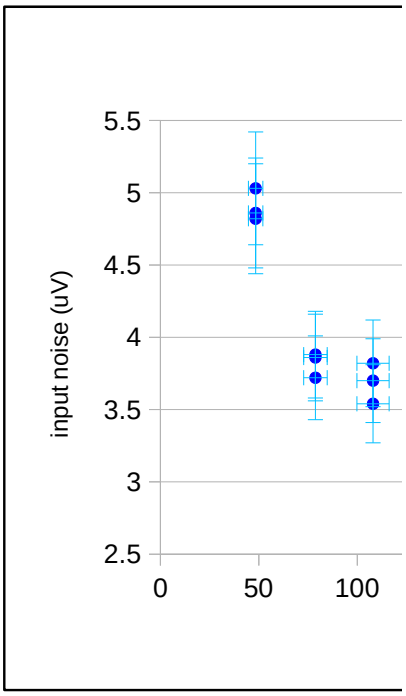
abs_gain	abs_gainErr	inpNoise (uV)	InpNoiseErr (uV)
179.2	13.6	3.44	0.27
137.2	10.4	3.73	0.29
164.5	12.4	3.72	0.29
190.6	14.4	3.71	0.29
164.5	12.4	3.73	0.29
239.4	18.1	3.6	0.28
283.4	21.4	3.59	0.28
179.2	13.6	3.42	0.27
48.05	3.63	4.84	0.38
164.5	12.4	3.71	0.29
190.6	14.4	3.69	0.29
164.5	12.4	3.66	0.28
48.05	3.63	4.92	0.38
190.6	14.4	3.76	0.29
179.2	13.6	3.34	0.26
215.6	16.3	3.49	0.27
215.6	16.3	3.66	0.29
333.6	25.3	3.74	0.29
303.7	23	3.59	0.28
78.93	5.97	3.85	0.3
215.6	16.3	3.76	0.29
262	19.8	3.69	0.29
303.7	23	3.6	0.28
108.6	8.21	3.85	0.3
303.7	23	3.5	0.27
108.6	8.21	3.94	0.31
108.6	8.21	3.73	0.29
262	19.8	3.71	0.29
78.93	5.97	3.93	0.3
322.7	24.4	3.68	0.29
333.6	25.3	3.7	0.29
78.93	5.97	3.99	0.31
322.7	24.4	3.64	0.28
48.05	3.63	4.89	0.38
137.2	10.4	3.6	0.28
190.6	14.4	3.7	0.29
283.4	21.4	3.7	0.29
137.2	10.4	3.84	0.3
179.2	13.6	3.55	0.28
137.2	10.4	3.7	0.29
239.4	18.1	3.56	0.28
283.4	21.4	3.6	0.28
239.4	18.1	3.61	0.28
283.4	21.4	3.76	0.29

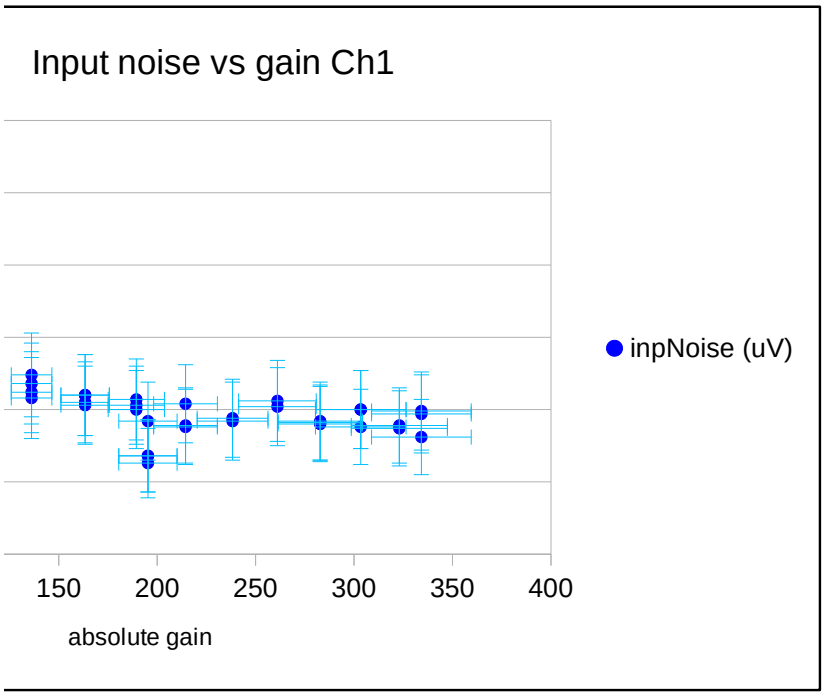



Input noise vs gain Ch0
100
150
200
250
300
350
400
absolute gain
inpNoise (uV)

NOISE_Transparent_Ch1

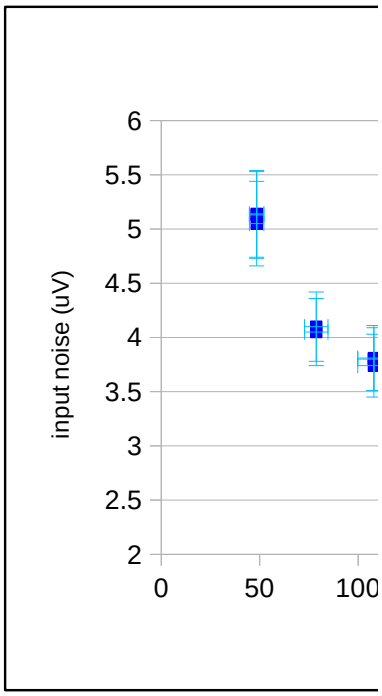
abs_gain	abs_gainErr	inpNoise (uV)	InpNoiseErr (uV)
195.3	14.8	3.18	0.25
136.2	10.3	3.68	0.28
163.4	12.3	3.6	0.28
189.4	14.3	3.53	0.27
163.4	12.3	3.6	0.28
195.3	14.8	3.13	0.24
48.39	3.67	5.03	0.39
163.4	12.3	3.53	0.27
189.4	14.3	3.57	0.28
163.4	12.3	3.55	0.28
48.39	3.67	4.82	0.38
189.4	14.3	3.5	0.27
195.3	14.8	3.42	0.27
214.4	16.2	3.54	0.27
334.2	25.3	3.49	0.27
78.75	5.96	3.72	0.29
334.2	25.3	3.47	0.27
303.4	23	3.38	0.26
214.4	16.2	3.39	0.26
261.1	19.7	3.52	0.27
214.4	16.2	3.38	0.26
303.4	23	3.5	0.27
108	8.17	3.7	0.29
303.4	23	3.5	0.27
108	8.17	3.82	0.3
108	8.17	3.54	0.27
261.1	19.7	3.56	0.28
78.75	5.96	3.88	0.3
323	24.4	3.39	0.26
334.2	25.3	3.31	0.26
78.75	5.96	3.86	0.3
323	24.4	3.37	0.26
48.39	3.67	4.86	0.38
136.2	10.3	3.62	0.28
282.8	21.4	3.4	0.26
136.2	10.3	3.74	0.29
195.3	14.8	3.18	0.25
136.2	10.3	3.58	0.28
238.3	18	3.42	0.27
282.8	21.4	3.41	0.26
238.3	18	3.44	0.27
282.8	21.4	3.42	0.27

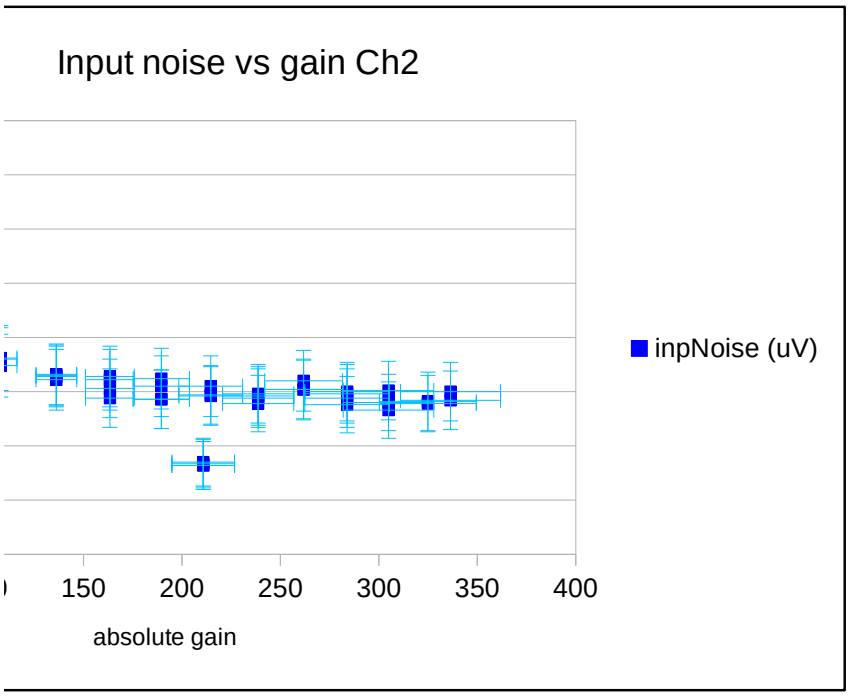



Input noise vs gain Ch1
150
200
250
300
350
400
absolute gain
inpNoise (uV)

NOISE_Transparent_Ch2

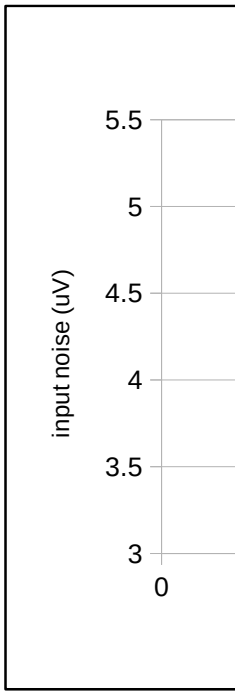
abs_gain	abs_gainErr	inpNoise (uV)	InpNoiseErr (uV)
210.8	15.9	2.84	0.22
136.2	10.3	3.65	0.28
163.4	12.4	3.53	0.27
189.5	14.3	3.55	0.28
163.4	12.4	3.44	0.27
238.7	18.1	3.39	0.26
283.9	21.5	3.48	0.27
210.8	15.9	2.82	0.22
48.47	3.67	5.14	0.4
163.4	12.4	3.61	0.28
189.5	14.3	3.43	0.27
163.4	12.4	3.64	0.28
48.47	3.67	5.05	0.39
189.5	14.3	3.43	0.27
210.8	15.9	2.85	0.22
214.6	16.2	3.47	0.27
261.8	19.8	3.6	0.28
214.6	16.2	3.55	0.28
336.4	25.4	3.5	0.27
304.9	23	3.4	0.26
304.9	23	3.33	0.26
214.6	16.2	3.46	0.27
261.8	19.8	3.52	0.27
304.9	23	3.51	0.27
108	8.17	3.8	0.29
108	8.17	3.81	0.3
108	8.17	3.74	0.29
261.8	19.8	3.52	0.28
78.73	5.96	4.1	0.32
324.9	24.6	3.39	0.26
336.4	25.4	3.42	0.27
78.73	5.96	4.05	0.31
324.9	24.6	3.41	0.27
48.47	3.67	5.13	0.4
136.2	10.3	3.66	0.28
189.5	14.3	3.62	0.28
238.7	18.1	3.46	0.27
283.9	21.5	3.5	0.27
136.2	10.3	3.64	0.28
210.8	15.9	2.82	0.22
136.2	10.3	3.61	0.28
238.7	18.1	3.44	0.27
283.9	21.5	3.38	0.26
238.7	18.1	3.48	0.27
283.9	21.5	3.44	0.27

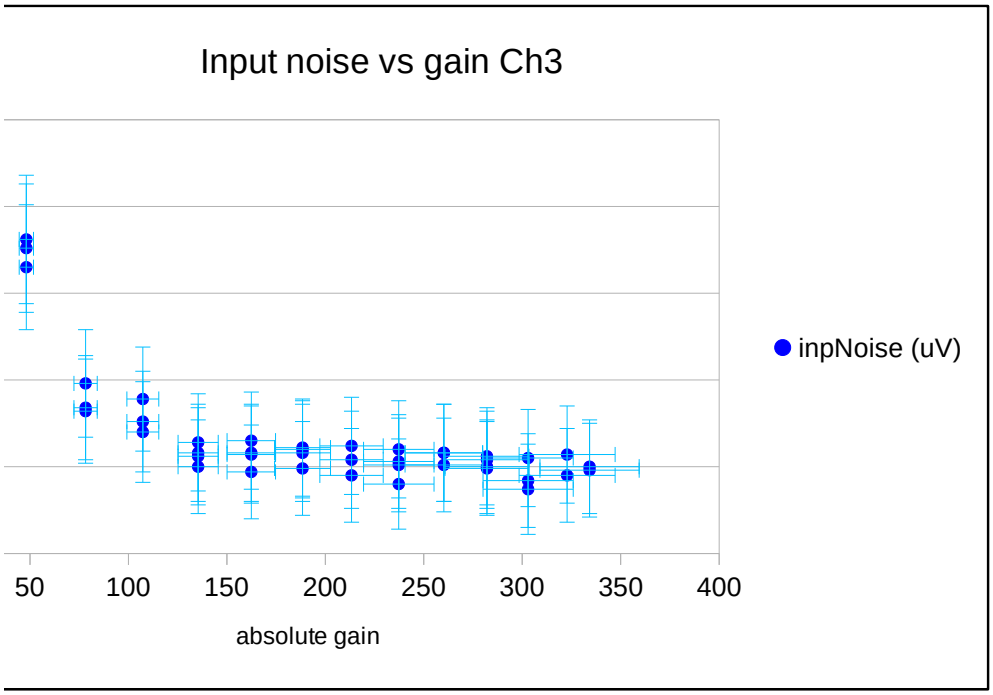


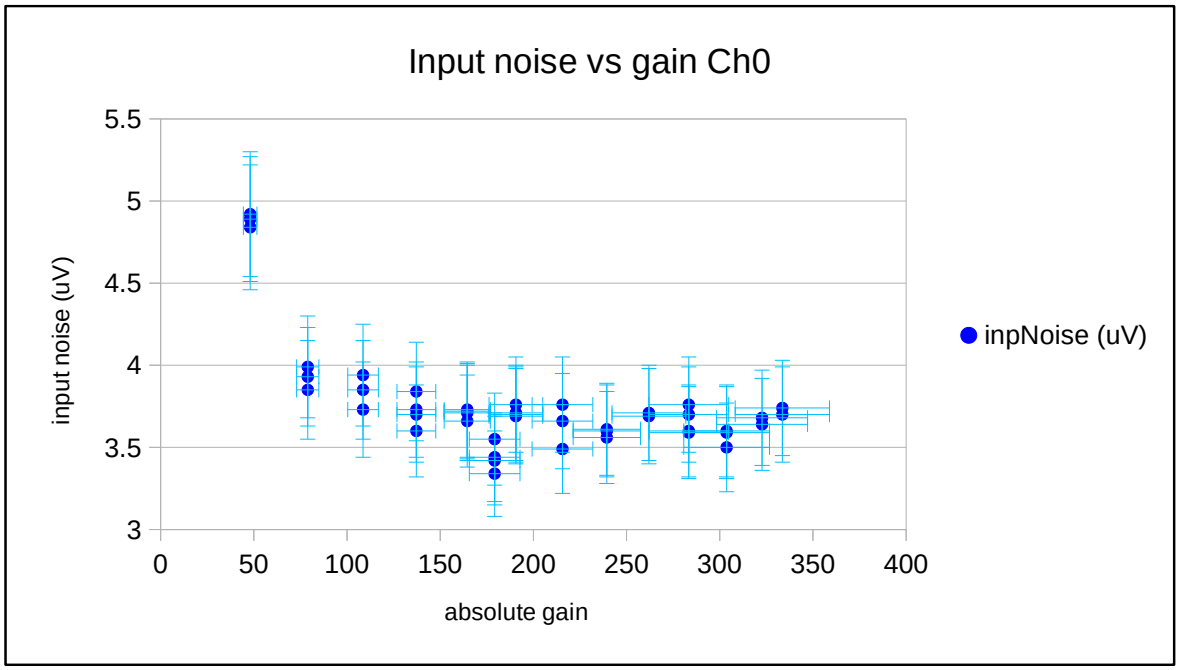

Input noise vs gain Ch2
150
200
250
300
350
400
absolute gain
inpNoise (uV)

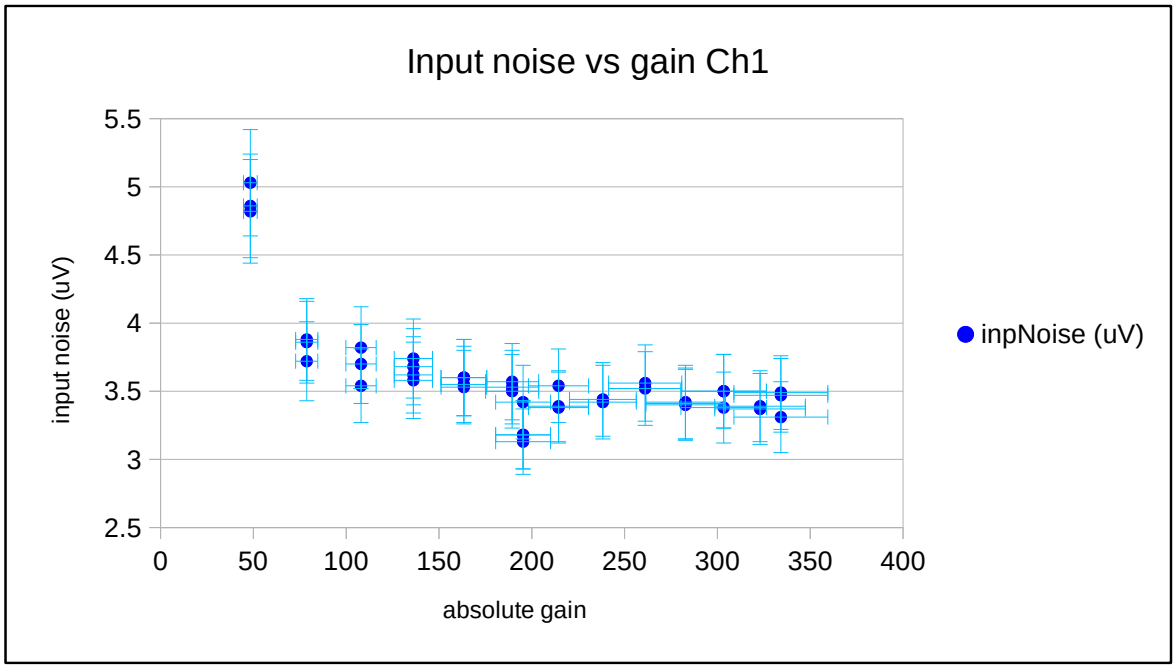
NOISE_Transparent_Ch3

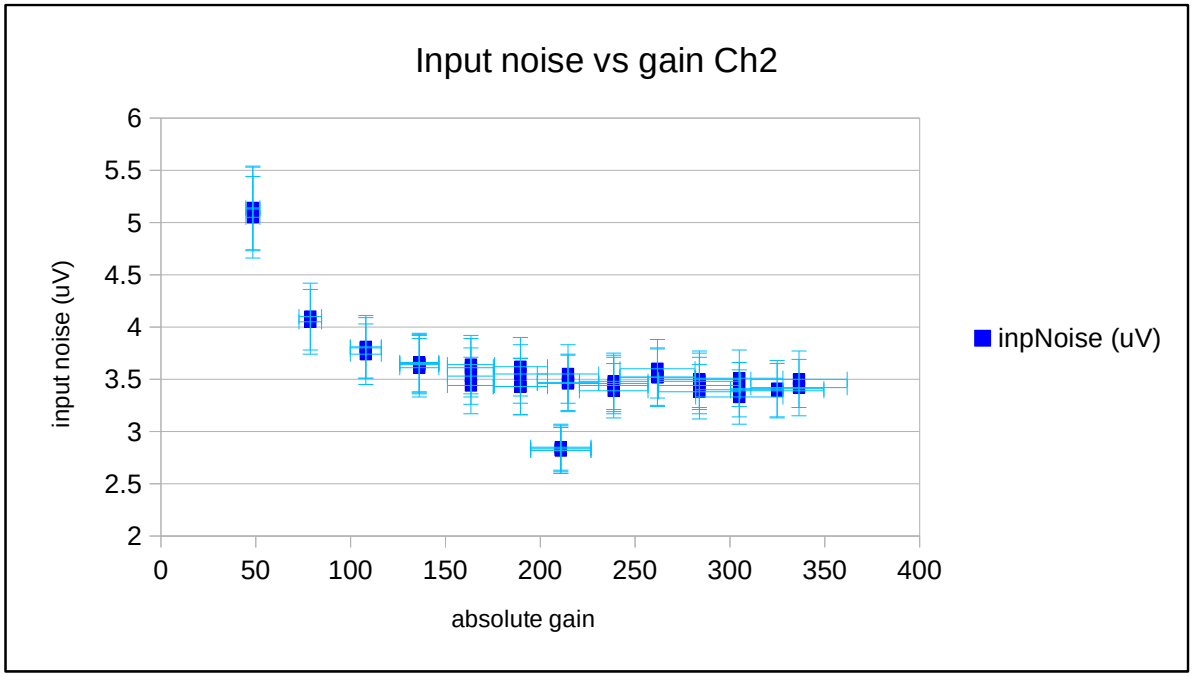
abs_gain	abs_gainErr	inpNoise (uV)	InpNoiseErr (uV)
135.4	10.2	3.56	0.28
162.4	12.3	3.47	0.27
188.4	14.2	3.6	0.28
162.4	12.3	3.58	0.28
237.3	17.9	3.4	0.26
282.1	21.3	3.54	0.28
48.14	3.63	4.65	0.36
162.4	12.3	3.65	0.28
188.4	14.2	3.61	0.28
162.4	12.3	3.57	0.28
48.14	3.63	4.76	0.37
188.4	14.2	3.49	0.27
213.3	16.1	3.45	0.27
260.2	19.7	3.58	0.28
213.3	16.1	3.62	0.28
78.24	5.91	3.98	0.31
334.2	25.2	3.5	0.27
303	22.9	3.37	0.26
213.3	16.1	3.54	0.28
260.2	19.7	3.58	0.28
303	22.9	3.42	0.27
107.3	8.11	3.76	0.29
303	22.9	3.55	0.28
107.3	8.11	3.89	0.3
322.8	24.4	3.57	0.28
107.3	8.11	3.7	0.29
260.2	19.7	3.51	0.27
78.24	5.91	3.84	0.3
322.8	24.4	3.45	0.27
334.2	25.2	3.48	0.27
78.24	5.91	3.82	0.3
48.14	3.63	4.81	0.37
135.4	10.2	3.58	0.28
188.4	14.2	3.58	0.28
237.3	17.9	3.6	0.28
282.1	21.3	3.5	0.27
135.4	10.2	3.64	0.28
135.4	10.2	3.5	0.27
237.3	17.9	3.51	0.27
282.1	21.3	3.49	0.27
237.3	17.9	3.53	0.27
282.1	21.3	3.56	0.28

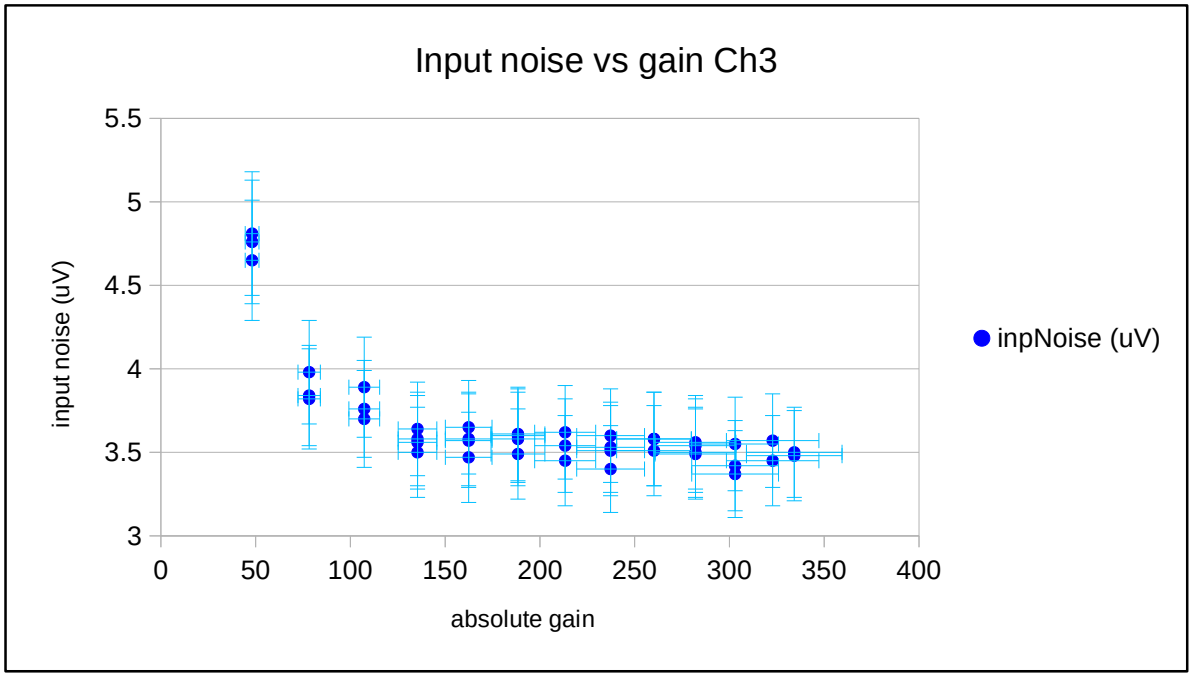



Input noise vs gain Ch3
50
100
150
200
250
300
350
400
absolute gain
inpNoise (uV)


Input noise vs gain Ch0
input noise (uV)
5.5
5
4.5
4
3.5
3
0
50
100
150
200
250
300
350
400
absolute gain
inpNoise (uV)


Input noise vs gain Ch1
input noise (uV)
5.5
5
4.5
4
3.5
3
2.5
0
50
100
150
200
250
300
350
400
absolute gain
inpNoise (uV)


Input noise vs gain Ch2
input noise (uV)
6
5.5
5
4.5
4
3.5
3
2.5
2
0
50
100
150
200
250
300
350
400
absolute gain
inpNoise (uV)


Input noise vs gain Ch3
input noise (uV)
5.5
5
4.5
4
3.5
3
0
50
100
150
200
250
300
350
400
absolute gain
inpNoise (uV)

Gain calibration 4-channels transparent mode

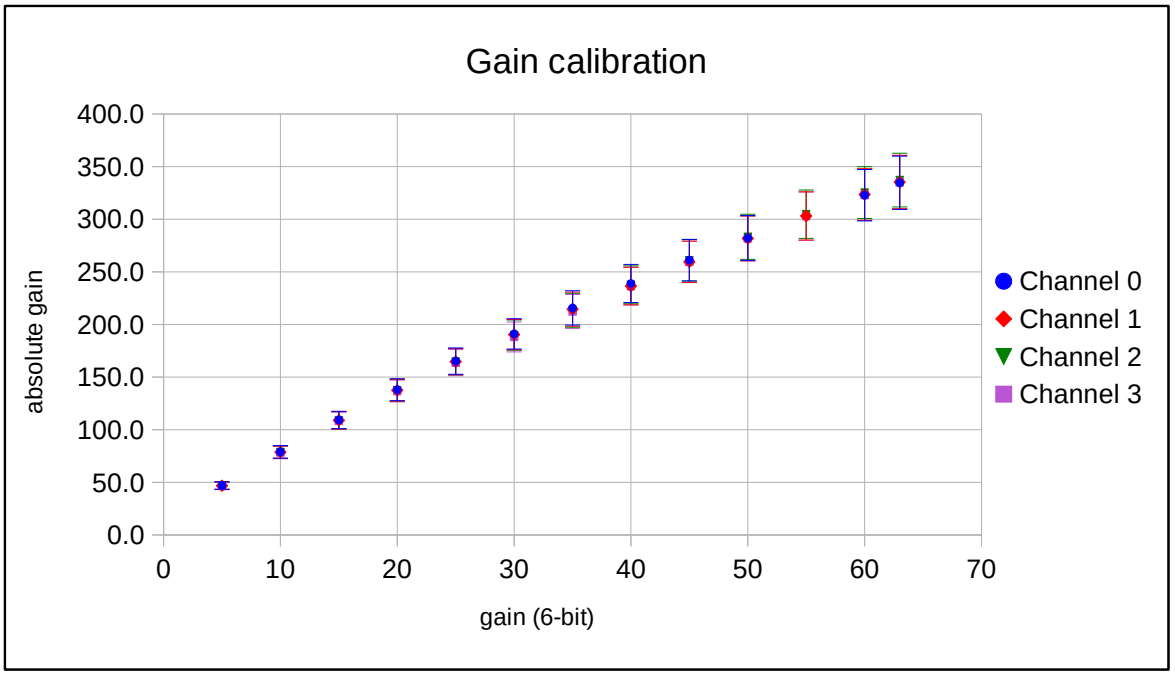
Channel 0						
					1ADU=21.4uV	
Gain(6bit)	out ampl (ADU)	out error (ADU)	abs_gain	abs_gainErr	out ampl (V)	out error (V)
5	11069.3	38.0	47.0	3.6	0.237	0.001
10	18591.8	60.8	78.9	6.0	0.398	0.001
15	25722.0	81.7	109.2	8.3	0.550	0.002
20	32488.7	101.4	138.0	10.4	0.695	0.002
25	38896.8	120.7	165.1	12.5	0.832	0.003
30	45000.0	143.2	191.1	14.4	0.963	0.003
35	50811.5	160.8	215.8	16.3	1.087	0.003
40	56278.0	185.5	239.0	18.1	1.204	0.004
45	61494.2	200.0	261.1	19.7	1.316	0.004
50	66453.8	209.3	282.2	21.3	1.422	0.004
55						
60	76034.6	259.1	322.8	24.4	1.627	0.006
63	78804.1	269.1	334.6	25.3	1.686	0.006
CF1	42202.9	160.2	179.2	13.6	0.903	0.003

Channel 1						
					1ADU=21.4uV	
Gain(6bit)	out ampl (ADU)	out error (ADU)	abs_gain	abs_gainErr	out ampl (V)	out error (V)
5	11018.6	42.0	46.8	3.5	0.236	0.001
10	18524.5	61.5	78.7	6.0	0.396	0.001
15	25641.4	85.6	108.9	8.2	0.549	0.002
20	32365.9	109.3	137.5	10.4	0.693	0.002
25	38772.1	133.1	164.6	12.5	0.830	0.003
30	44847.4	149.6	190.4	14.4	0.960	0.003
35	50530.7	173.5	214.6	16.2	1.081	0.004
40	55709.4	195.3	236.5	17.9	1.192	0.004
45	61116.9	212.7	259.5	19.6	1.308	0.005
50	66370.9	232.4	281.8	21.3	1.420	0.005
55	71394.3	262.5	303.1	22.9	1.528	0.006
60	76193.7	268.4	323.6	24.5	1.631	0.006
63	78972.5	284.7	335.3	25.4	1.690	0.006
CF1	45995.5	185.6	195.3	14.8	0.984	0.004

Channel 2						
					1ADU=21.4uV	
Gain(6bit)	out ampl (ADU)	out error (ADU)	abs_gain	abs_gainErr	out ampl (V)	out error (V)
5	11034.7	44.2	46.9	3.5	0.236	0.001
10	18544.4	64.9	78.7	6.0	0.397	0.001
15	25673.9	83.3	109.0	8.2	0.549	0.002
20	32390.1	105.0	137.5	10.4	0.693	0.002
25	38788.7	124.4	164.7	12.5	0.830	0.003
30	44735.7	161.3	189.9	14.4	0.957	0.003
35	50285.9	165.4	213.5	16.1	1.076	0.004
40	55984.7	204.4	237.7	18.0	1.198	0.004
45	61476.5	211.1	261.0	19.7	1.316	0.005
50	66723.4	232.1	283.3	21.4	1.428	0.005
55	71787.0	236.7	304.8	23.0	1.536	0.005
60	76611.6	258.2	325.3	24.6	1.639	0.006
63	79415.0	276.0	337.2	25.5	1.699	0.006
CF1	49657.2	181.2	210.8	15.9	1.063	0.004

Gain calibration 4-channels transparent mode

Channel 3						
					1ADU=21.4uV	
Gain(6bit)	out ampl (ADU)	out error (ADU)	abs_gain	abs_gainErr	out ampl (V)	out error (V)
5	10966.2	40.0	46.6	3.5	0.235	0.001
10	18442.1	62.1	78.3	5.9	0.395	0.001
15	25529.5	87.9	108.4	8.2	0.546	0.002
20	32200.2	110.5	136.7	10.3	0.689	0.002
25	38549.6	128.5	163.7	12.4	0.825	0.003
30	44302.6	171.0	188.1	14.2	0.948	0.004
35	50013.4	176.7	212.4	16.1	1.070	0.004
40	55686.5	190.5	236.4	17.9	1.192	0.004
45	61138.3	204.5	259.6	19.6	1.308	0.004
50	66344.4	232.0	281.7	21.3	1.420	0.005
55	71343.0	238.7	302.9	22.9	1.527	0.005
60	76071.0	263.7	323.0	24.4	1.628	0.006
63	78892.0	281.7	335.0	25.3	1.688	0.006
CF1						



Gain calibration 4-channels transparent mode

date 11 – December – 2019

Brief check with the oscilloscope		
gain(6-bit)	CROCout oscilloscope (V)	**abs_gain**
5	0.252	**50.4**
10	0.404	**80.8**
20	0.705	**141.0**
30	0.973	**194.6**
40	1.240	**248.0**
50	1.438	**287.6**
63	1.711	**342.2**

input pulse	5	mV
Channel	0	
Offset	120	
POL=POLIB	127	
old test board		

In good agreement with the calibration results.

NOISE_Transparent_ALL corrected

Channel 0			
abs_gain	gainErr	noise	noiseErr
179.2	13.6	3.52	0.27
137.2	10.4	3.47	0.26
164.5	12.4	3.45	0.26
190.6	14.4	3.47	0.26
164.5	12.4	3.46	0.26
239.4	18.1	3.33	0.25
283.4	21.4	3.32	0.25
179.2	13.6	3.52	0.27
48.05	3.63	5.63	0.43
164.5	12.4	3.41	0.26
190.6	14.4	3.44	0.26
164.5	12.4	3.42	0.26
48.05	3.63	5.65	0.43
190.6	14.4	3.49	0.27
179.2	13.6	3.49	0.27
215.6	16.3	3.32	0.25
262	19.8	3.39	0.26
215.6	16.3	3.34	0.25
333.6	25.3	3.4	0.26
303.7	23	3.32	0.25
78.93	5.97	3.86	0.29
333.6	25.3	3.45	0.26
303.7	23	3.33	0.25
215.6	16.3	3.35	0.26
262	19.8	3.4	0.26
215.6	16.3	3.35	0.25
303.7	23	3.32	0.25
108.6	8.21	3.6	0.27
303.7	23	3.27	0.25
108.6	8.21	3.7	0.28
322.7	24.4	3.34	0.25
108.6	8.21	3.65	0.28
262	19.8	3.41	0.26
78.93	5.97	3.92	0.3
322.7	24.4	3.4	0.26
333.6	25.3	3.41	0.26
78.93	5.97	3.91	0.3
322.7	24.4	3.32	0.25
48.05	3.63	5.64	0.43
137.2	10.4	3.47	0.26
190.6	14.4	3.41	0.26
283.4	21.4	3.37	0.26
137.2	10.4	3.49	0.27
179.2	13.6	3.48	0.27
137.2	10.4	3.51	0.27
239.4	18.1	3.3	0.25
283.4	21.4	3.38	0.26
239.4	18.1	3.35	0.25
283.4	21.4	3.4	0.26

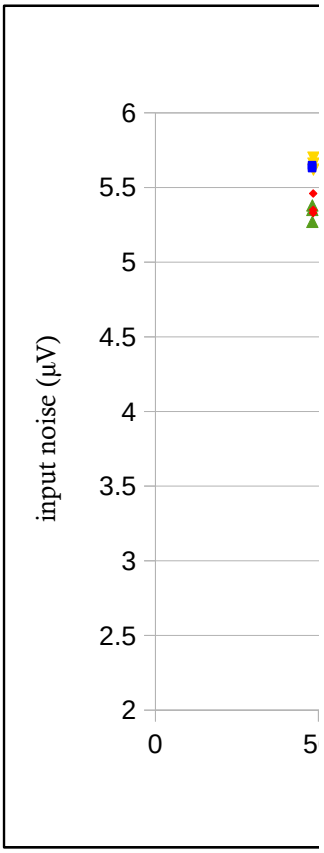
Channel 1			
abs_gain	gainErr	noise	noiseErr
195.3	14.8	3.37	0.26
136.2	10.3	3.28	0.25
163.4	12.3	3.26	0.25
189.4	14.3	3.22	0.24
163.4	12.3	3.22	0.24
238.3	18	3.08	0.23
282.8	21.4	3.07	0.23
195.3	14.8	3.35	0.26
48.39	3.67	5.46	0.42
163.4	12.3	3.23	0.25
189.4	14.3	3.21	0.24
163.4	12.3	3.24	0.25
48.39	3.67	5.33	0.41
189.4	14.3	3.17	0.24
195.3	14.8	3.38	0.26
214.4	16.2	3.09	0.23
261.1	19.7	3.14	0.24
214.4	16.2	3.13	0.24
334.2	25.3	3.13	0.24
303.4	23	3.13	0.24
78.75	5.96	3.76	0.29
334.2	25.3	3.14	0.24
303.4	23	3.13	0.24
214.4	16.2	3.1	0.24
261.1	19.7	3.13	0.24
214.4	16.2	3.11	0.24
303.4	23	3.11	0.24
108	8.17	3.54	0.27
303.4	23	3.12	0.24
108	8.17	3.51	0.27
323	24.4	3.04	0.23
108	8.17	3.44	0.26
261.1	19.7	3.18	0.24
78.75	5.96	3.8	0.29
323	24.4	3.13	0.24
334.2	25.3	3.08	0.23
78.75	5.96	3.87	0.29
323	24.4	3.1	0.24
48.39	3.67	5.35	0.41
136.2	10.3	3.3	0.25
189.4	14.3	3.17	0.24
282.8	21.4	3.12	0.24
136.2	10.3	3.34	0.25
195.3	14.8	3.35	0.26
136.2	10.3	3.3	0.25
238.3	18	3.12	0.24
282.8	21.4	3.12	0.24
238.3	18	3.14	0.24
282.8	21.4	3.09	0.24

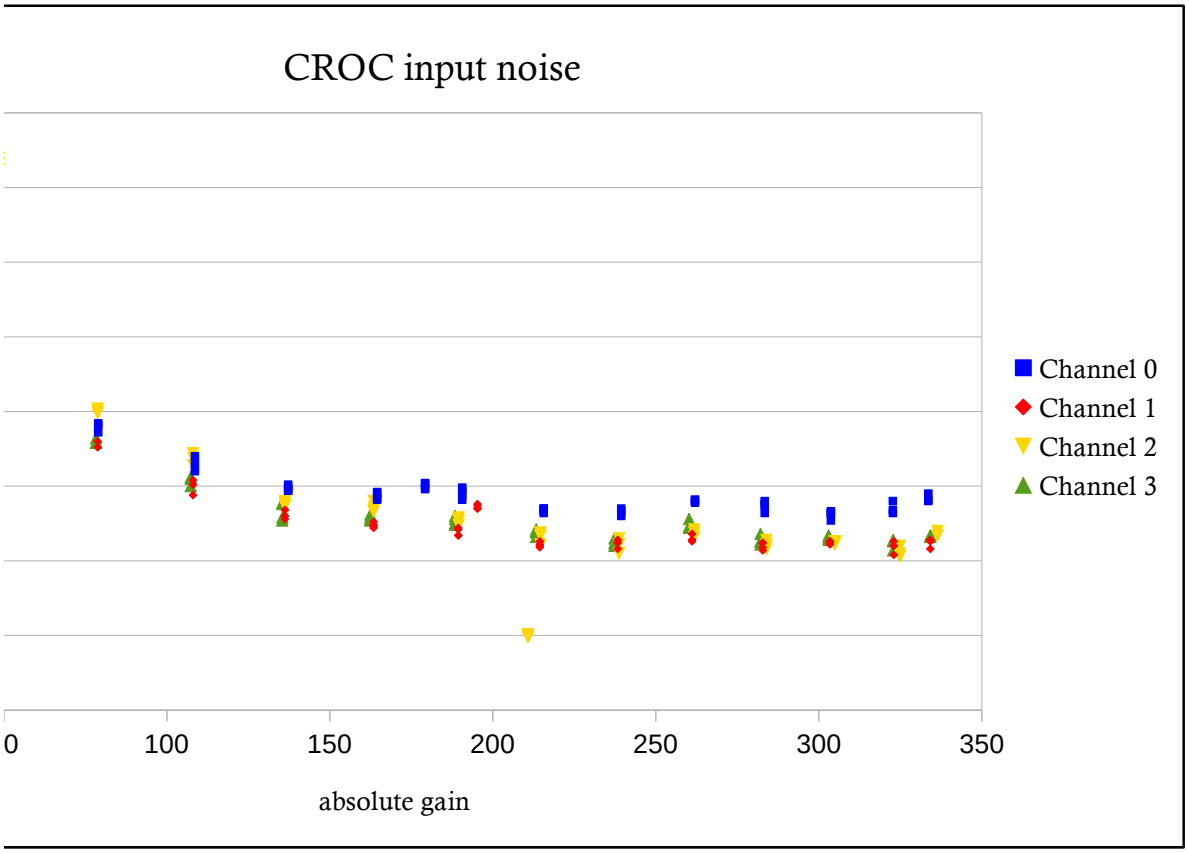
abs_gain
210.8
136.2
163.4
189.5
163.4
238.7
283.9
210.8
48.47
163.4
189.5
163.4
48.47
189.5
210.8
214.6
261.8
214.6
336.4
304.9
78.73
336.4
304.9
214.6
261.8
214.6
304.9
108
304.9
108
324.9
108
261.8
78.73
324.9
336.4
78.73
324.9
48.47
136.2
189.5
283.9
136.2
210.8
136.2
238.7
283.9
238.7
283.9

NOISE_Transparent_ALL corrected

Channel 2		
gainErr	noise	noiseErr
15.9	2.49	0.19
10.3	3.37	0.26
12.4	3.34	0.25
14.3	3.27	0.25
12.4	3.33	0.25
18.1	3.05	0.23
21.5	3.08	0.23
15.9	2.51	0.19
3.67	5.66	0.43
12.4	3.36	0.26
14.3	3.29	0.25
12.4	3.4	0.26
3.67	5.62	0.43
14.3	3.24	0.25
15.9	2.5	0.19
16.2	3.11	0.24
19.8	3.21	0.24
16.2	3.17	0.24
25.4	3.17	0.24
23	3.11	0.24
5.96	3.99	0.3
25.4	3.17	0.24
23	3.12	0.24
16.2	3.17	0.24
19.8	3.19	0.24
16.2	3.19	0.24
23	3.13	0.24
8.17	3.72	0.28
23	3.13	0.24
8.17	3.69	0.28
24.6	3.03	0.23
8.17	3.64	0.28
19.8	3.16	0.24
5.96	4.02	0.31
24.6	3.1	0.24
25.4	3.2	0.24
5.96	4	0.3
24.6	3.05	0.23
3.67	5.7	0.43
10.3	3.39	0.26
14.3	3.27	0.25
21.5	3.14	0.24
10.3	3.37	0.26
15.9	2.49	0.19
10.3	3.4	0.26
18.1	3.11	0.24
21.5	3.1	0.24
18.1	3.15	0.24
21.5	3.11	0.24

Channel 3			
abs_gain	gainErr	noise	noiseErr
135.4	10.2	3.29	0.25
162.4	12.3	3.28	0.25
188.4	14.2	3.24	0.25
162.4	12.3	3.31	0.25
237.3	17.9	3.1	0.24
282.1	21.3	3.11	0.24
48.14	3.63	5.38	0.41
162.4	12.3	3.29	0.25
188.4	14.2	3.28	0.25
162.4	12.3	3.27	0.25
48.14	3.63	5.35	0.41
188.4	14.2	3.3	0.25
213.3	16.1	3.16	0.24
260.2	19.7	3.28	0.25
213.3	16.1	3.21	0.24
334.2	25.2	3.17	0.24
303	22.9	3.14	0.24
78.24	5.91	3.82	0.29
334.2	25.2	3.16	0.24
303	22.9	3.15	0.24
213.3	16.1	3.2	0.24
260.2	19.7	3.23	0.25
213.3	16.1	3.19	0.24
303	22.9	3.16	0.24
107.3	8.11	3.5	0.27
303	22.9	3.17	0.24
107.3	8.11	3.56	0.27
322.8	24.4	3.07	0.23
107.3	8.11	3.55	0.27
260.2	19.7	3.22	0.24
78.24	5.91	3.79	0.29
322.8	24.4	3.14	0.24
334.2	25.2	3.16	0.24
78.24	5.91	3.79	0.29
322.8	24.4	3.13	0.24
48.14	3.63	5.27	0.4
135.4	10.2	3.38	0.26
188.4	14.2	3.25	0.25
282.1	21.3	3.13	0.24
135.4	10.2	3.39	0.26
135.4	10.2	3.27	0.25
237.3	17.9	3.12	0.24
282.1	21.3	3.13	0.24
237.3	17.9	3.15	0.24
282.1	21.3	3.18	0.24




CROC input noise
0
100
150
200
250
300
350
absolute gain
Channel 0
Channel 1
Channel 2
Channel 3