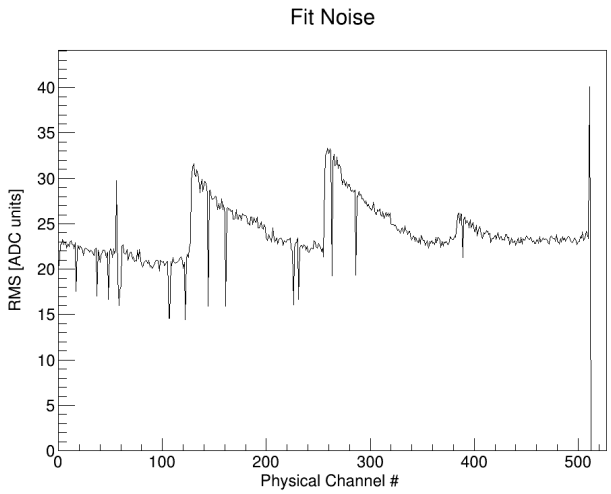
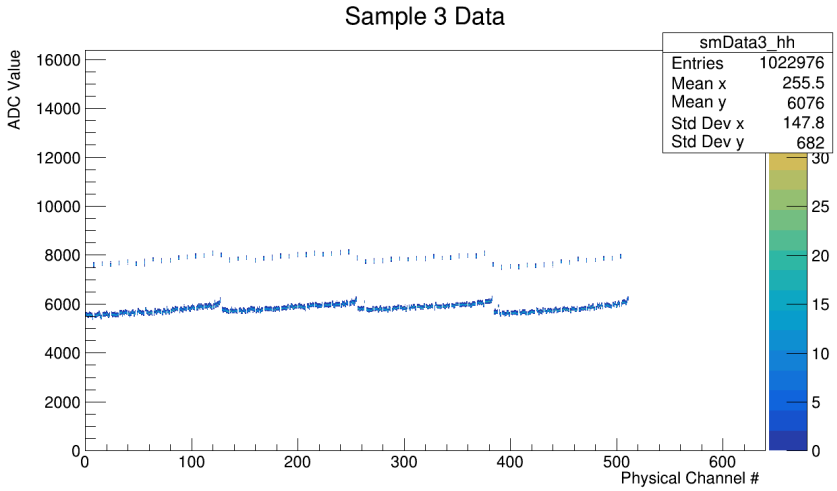
L0M01 Half-Module

50 V bias ENC:



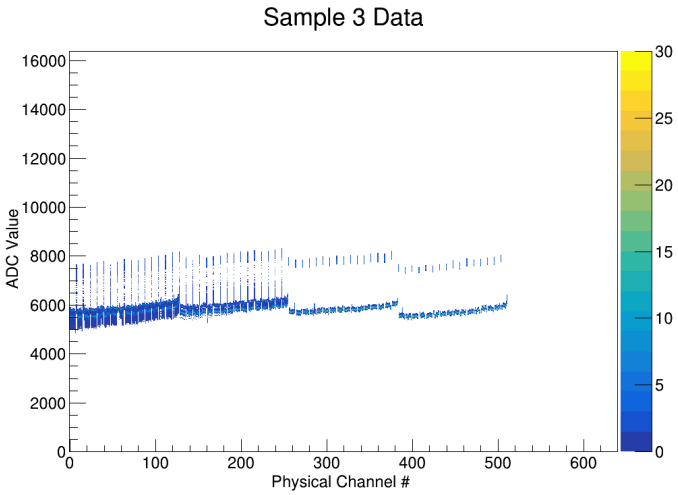
2019/03/22: 50V bias icalScan45



Bad Channel Table:

Sector B Sector A
pCH | apvCH | 128+apvCH | 2*128-apvCH-1| 128-apvCH-1
APV0
0 | 0 | 128 | 255 | 127
17 | 17 | 145 | 238 | 110
37 | 37 | 165 | 218 | 90
48 | 48 | 176 | 207 | 79
58 | 58 | 186 | 197 | 69
59 | 59 | 187 | 196 | 68
60 | 60 | 188 | 195 | 67
106 | 106 | 234 | 149 | 21
107 | 107 | 235 | 148 | 20
122 | 122 | 250 | 133 | 5
APV1
144 | 16 | 144 | 239 | 111
161 | 33 | 161 | 222 | 94
226 | 98 | 226 | 157 | 29
231 | 103 | 231 | 152 | 24
APV2
263 | 7 | 135 | 248 | 120
286 | 30 | 158 | 225 | 97
APV3
389 | 5 | 133 | 250 | 122

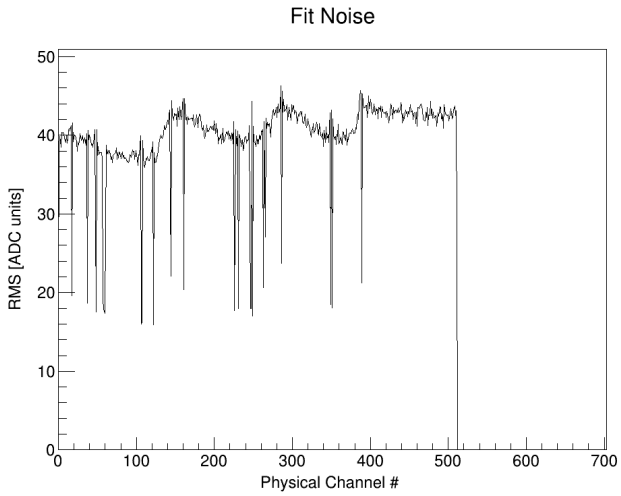
50V bias ical45_cg0:



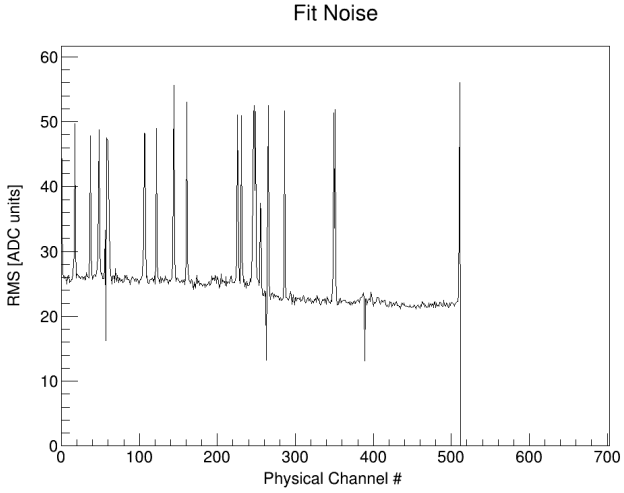
Sector A and B were accidentally swapped when pulling pinhole bonds.

Forest spent a day fixing it, here are the new results:

Baseline enc at 0V:

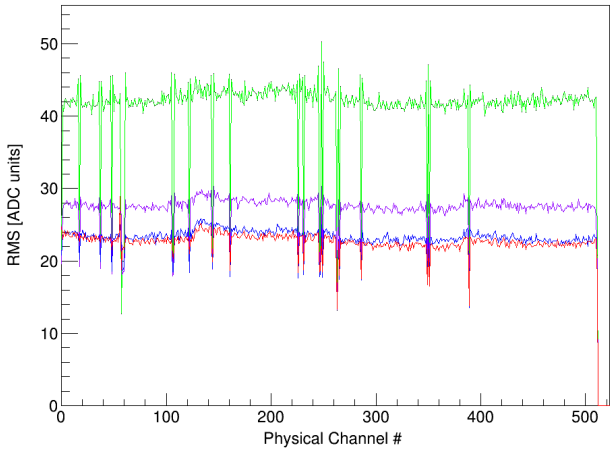


Baseline enc at 50V:



Bad channel table:

Sector B Sector A
pCH | apvCH | 128+apvCH | 2*128-apvCH-1| 128-apvCH-1
APV0
0 | 0 | 128 | 255 | 127
17 | 17 | 145 | 238 | 110
37 | 37 | 165 | 218 | 90
48 | 48 | 176 | 207 | 79
57 | 57 | 185 | 198 | 70
58 | 58 | 186 | 197 | 69
59 | 59 | 187 | 196 | 68
60 | 60 | 188 | 195 | 67
106 | 106 | 234 | 149 | 21
107 | 107 | 235 | 148 | 20
122 | 122 | 250 | 133 | 5
APV1
144 | 16 | 144 | 239 | 111
161 | 33 | 161 | 222 | 94
226 | 98 | 226 | 157 | 29
231 | 103 | 231 | 152 | 24
246 | 118 | 246 | 137 | 9
247 | 119 | 247 | 136 | 8
249 | 121 | 249 | 134 | 6
APV2
263 | 7 | 135 | 248 | 120
265 | 9 | 137 | 246 | 118
286 | 30 | 158 | 225 | 97
349 | 93 | 221 | 162 | 34
351 | 95 | 223 | 160 | 32
APV3
389 | 5 | 133 | 250 | 122
511 | 127 | 255 | 128 | 0
Nlow: 25



2019/04/04
L0M01

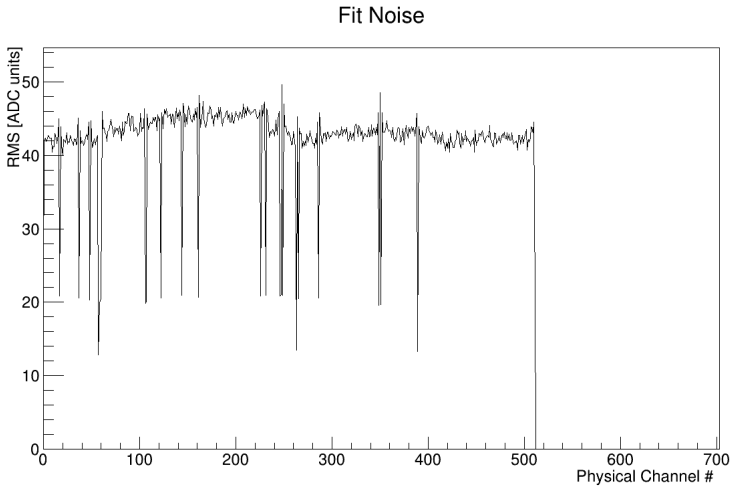
High Voltage Test
V/D:I/D
(V) (uA)
10 0.74
100 0.95
200 3.83
300 10.61
400 20.15

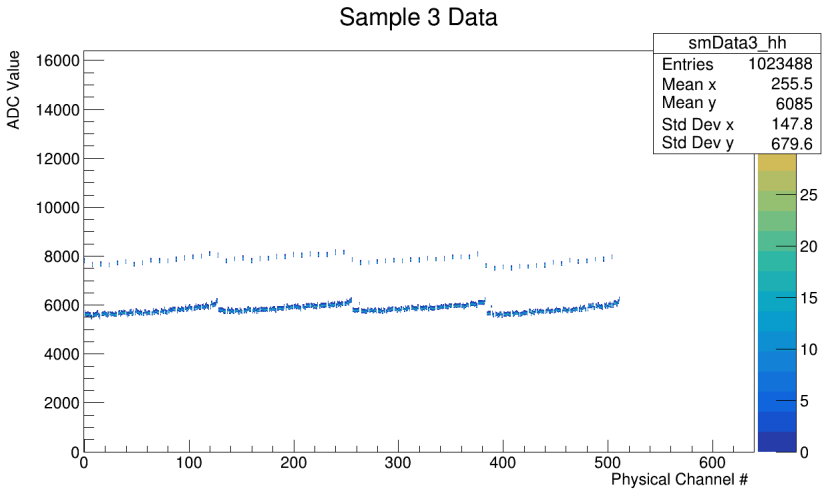
Low Voltage Test
Pre-Config
V/D:I/D
(V) (A)
AVDD: 2.50 0.107
DVDD: 2.50 0.253
V125: 1.25 0.000

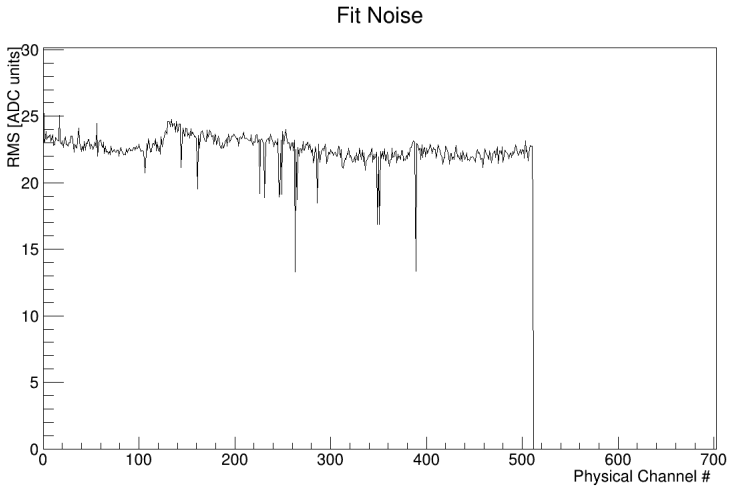
Post-Config
V/D:I/D
(V) (A)
AVDD: 2.50 0.269
DVDD: 2.50 0.245
V125: 1.25 0.232

Sector B Sector A
pCH | apvCH | 128+apvCH | 2*128-apvCH-1| 128-apvCH-1
APV0
0 | 0 | 128 | 255 | 127
17 | 17 | 145 | 238 | 110
37 | 37 | 165 | 218 | 90
48 | 48 | 176 | 207 | 79
57 | 57 | 185 | 198 | 70
58 | 58 | 186 | 197 | 69
59 | 59 | 187 | 196 | 68
60 | 60 | 188 | 195 | 67
106 | 106 | 234 | 149 | 21
107 | 107 | 235 | 148 | 20
122 | 122 | 250 | 133 | 5
APV1
144 | 16 | 144 | 239 | 111
161 | 33 | 161 | 222 | 94
226 | 98 | 226 | 157 | 29
231 | 103 | 231 | 152 | 24
246 | 118 | 246 | 137 | 9
247 | 119 | 247 | 136 | 8
249 | 121 | 249 | 134 | 6
APV2
263 | 7 | 135 | 248 | 120
265 | 9 | 137 | 246 | 118
286 | 30 | 158 | 225 | 97
349 | 93 | 221 | 162 | 34
351 | 95 | 223 | 160 | 32
APV3
389 | 5 | 133 | 250 | 122
511 | 127 | 255 | 128 | 0
Nlow: 25

0V baseline Noise




Sample 3 Data
smData3_hh
Entries 1023488
Mean x 255.5
Mean y 6085
Std Dev x 147.8
Std Dev y 679.6
ADC Value
Physical Channel #


Fit Noise
RMS [ADC units]
Physical Channel #