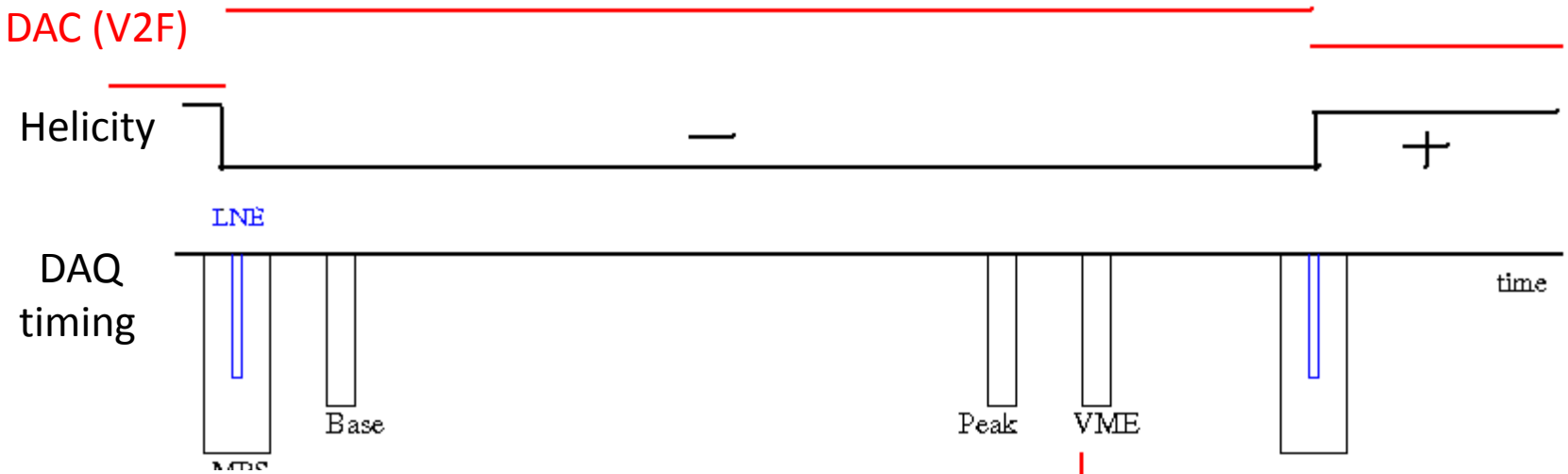
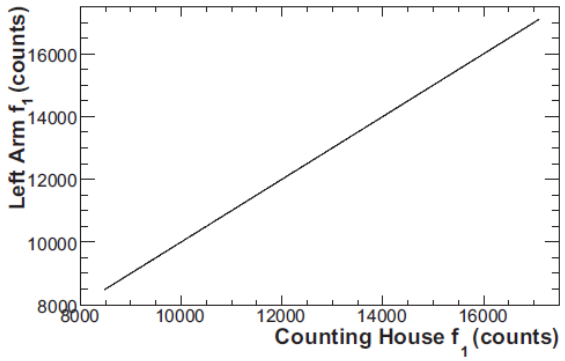
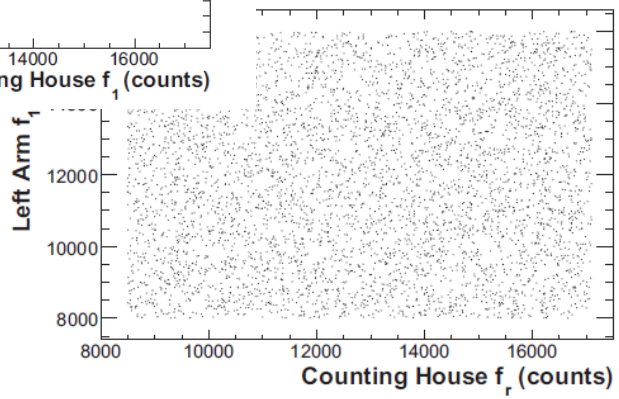
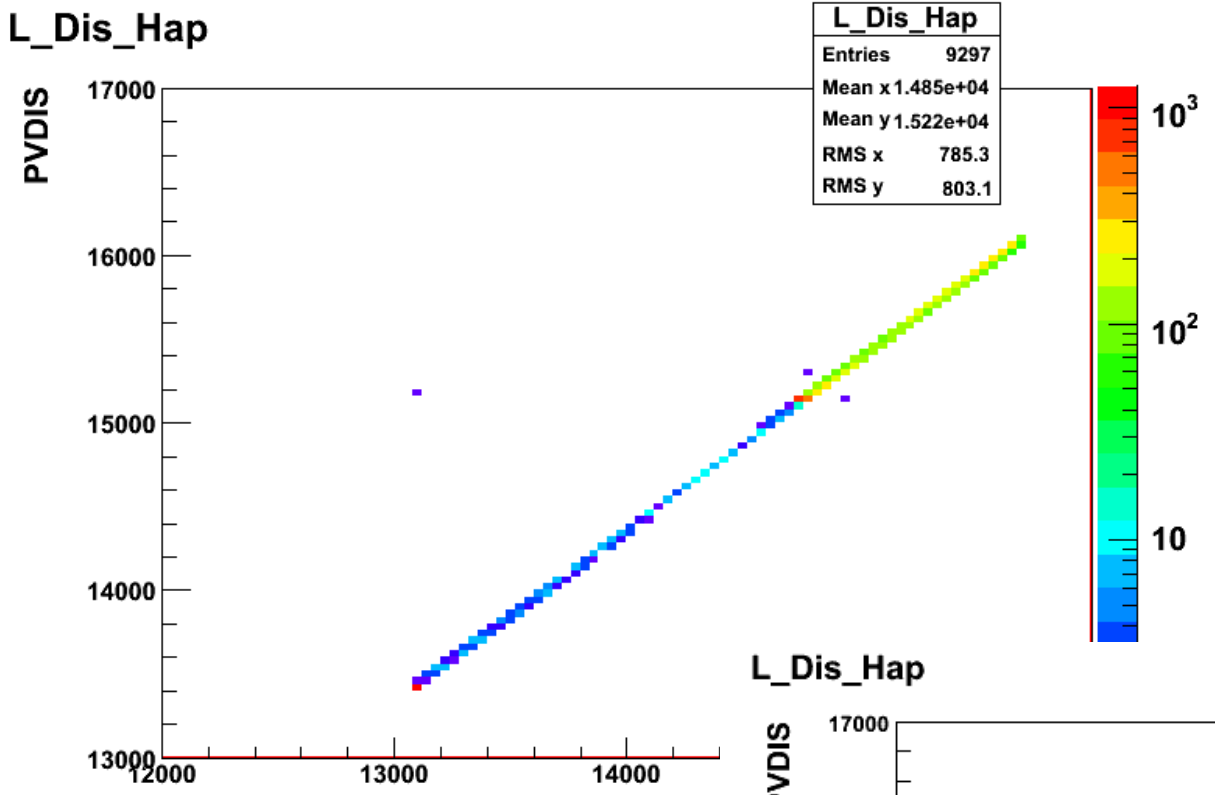
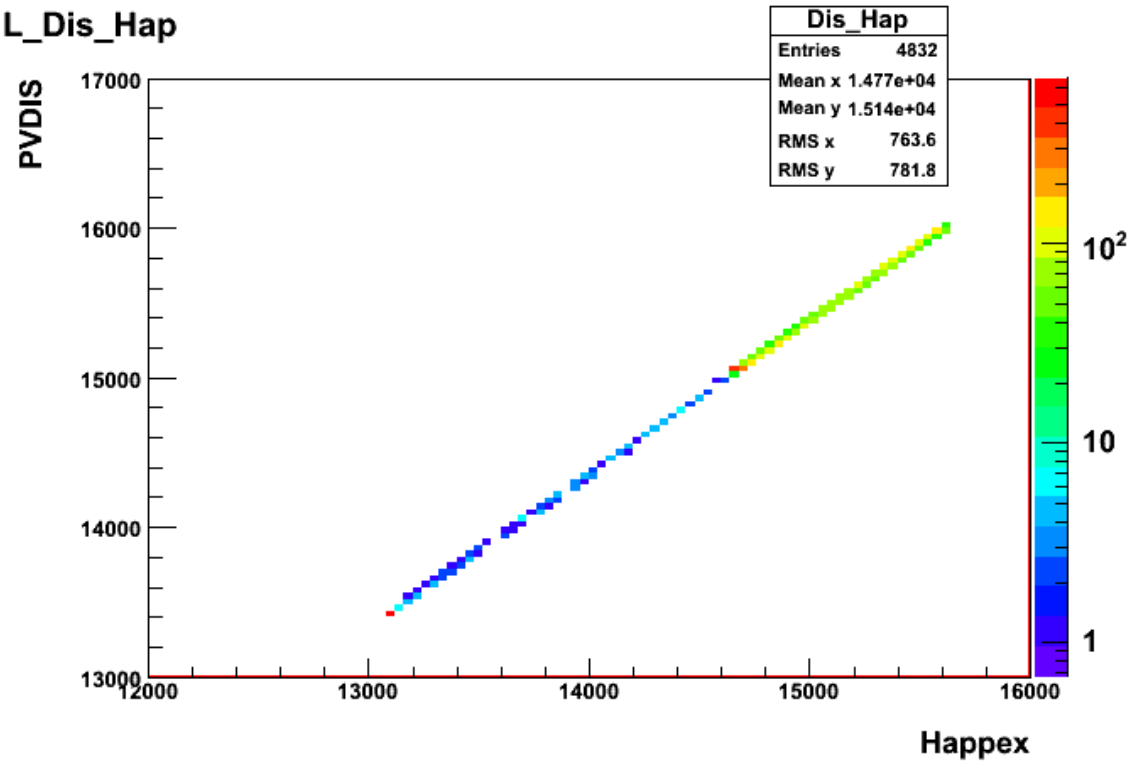
Synchronization work for PVDIS DAQ timing

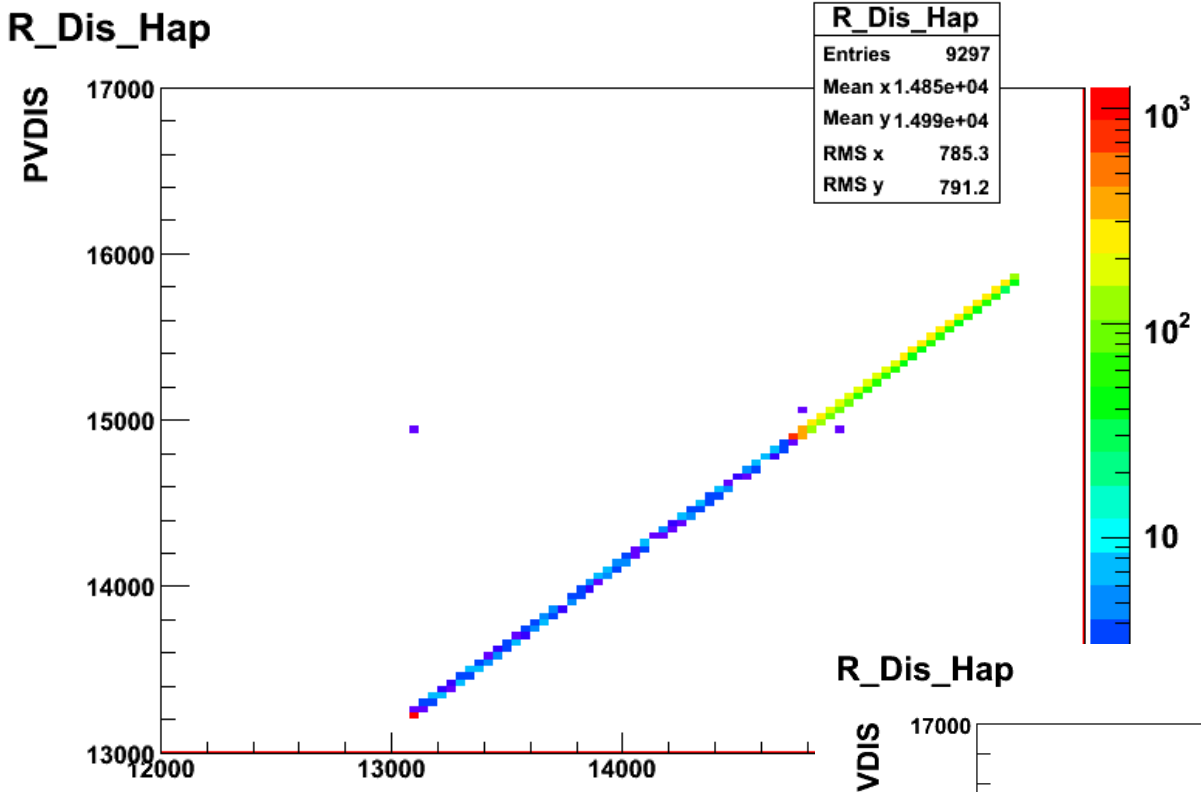


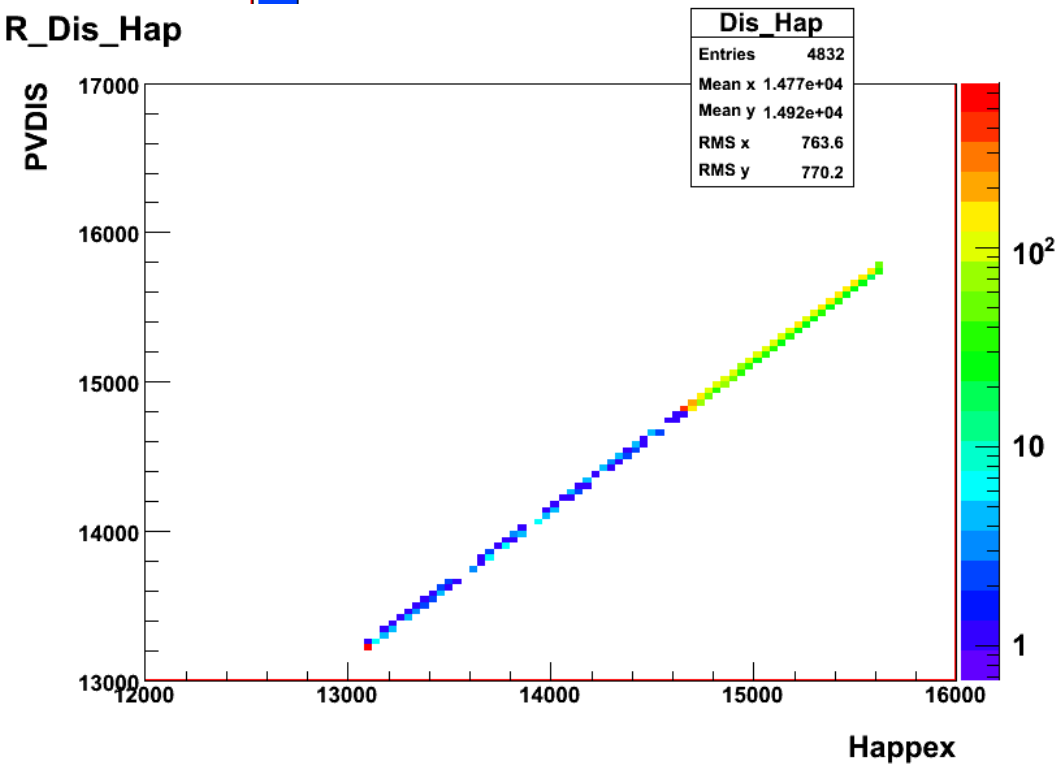




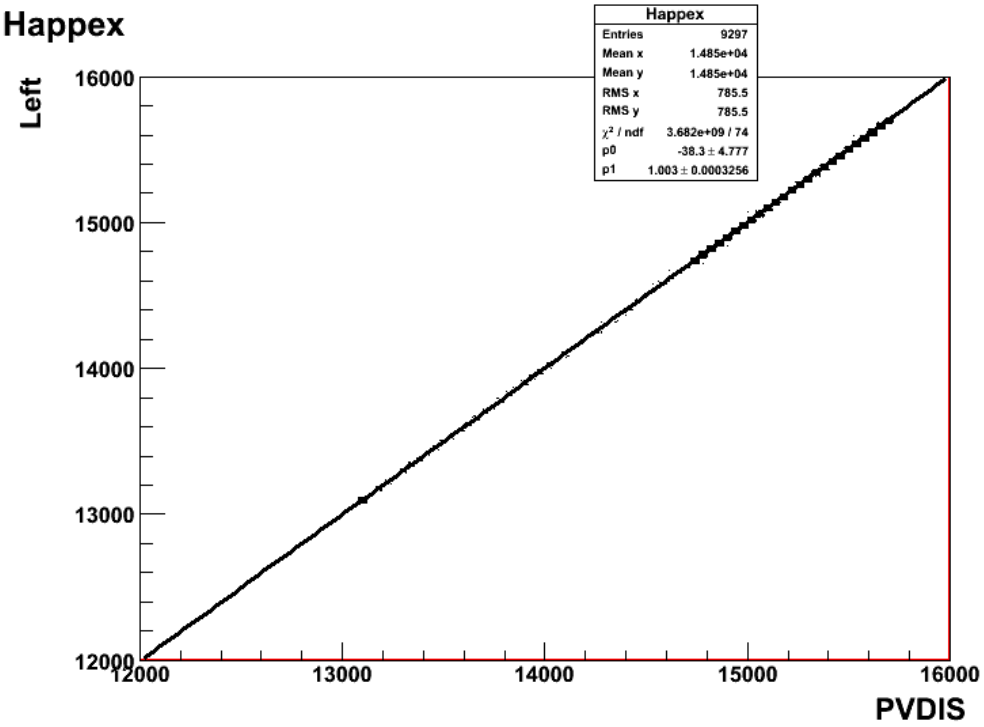

L_Dis_Hap
L_Dis_Hap
Entries 9297
Mean x 1.485e+04
Mean y 1.522e+04
RMS x 785.3
RMS y 803.1
PVDIS
17000
16000
15000
14000
13000
12000
13000
14000
10^3
10^2
10

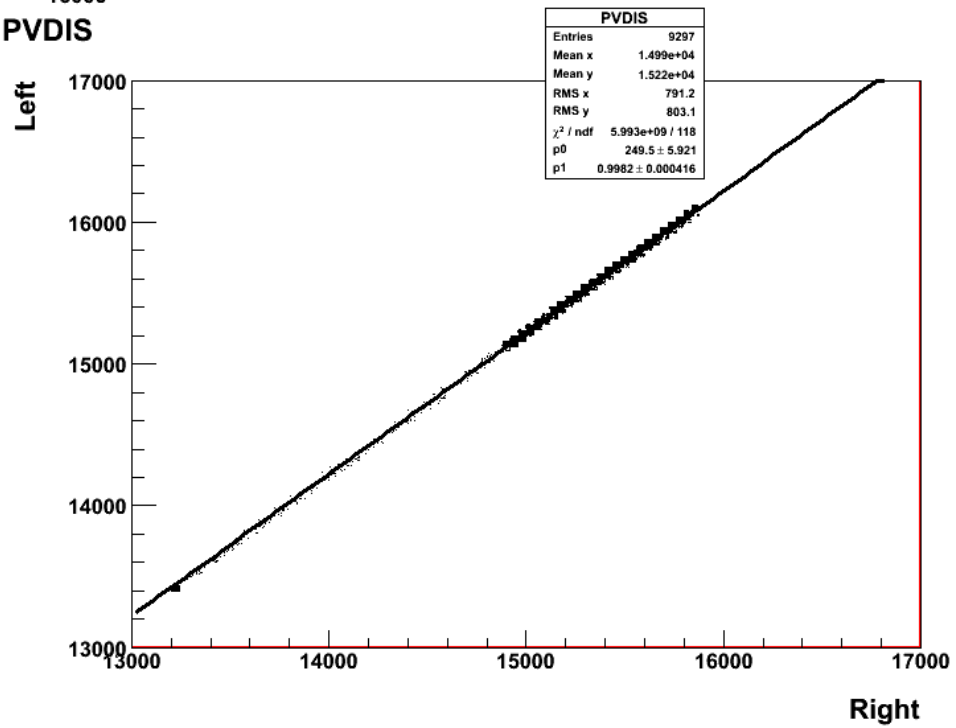

L_Dis_Hap
Dis_Hap
Entries 4832
Mean x 1.477e+04
Mean y 1.514e+04
RMS x 763.6
RMS y 781.8
PVDIS
17000
16000
15000
14000
13000
12000
13000
14000
15000
16000
Happex
10^2
10
1


R_Dis_Hap
R_Dis_Hap
Entries 9297
Mean x 1.485e+04
Mean y 1.499e+04
RMS x 785.3
RMS y 791.2
PVDIS
17000
16000
15000
14000
13000
12000
13000
14000
10^3
10^2
10

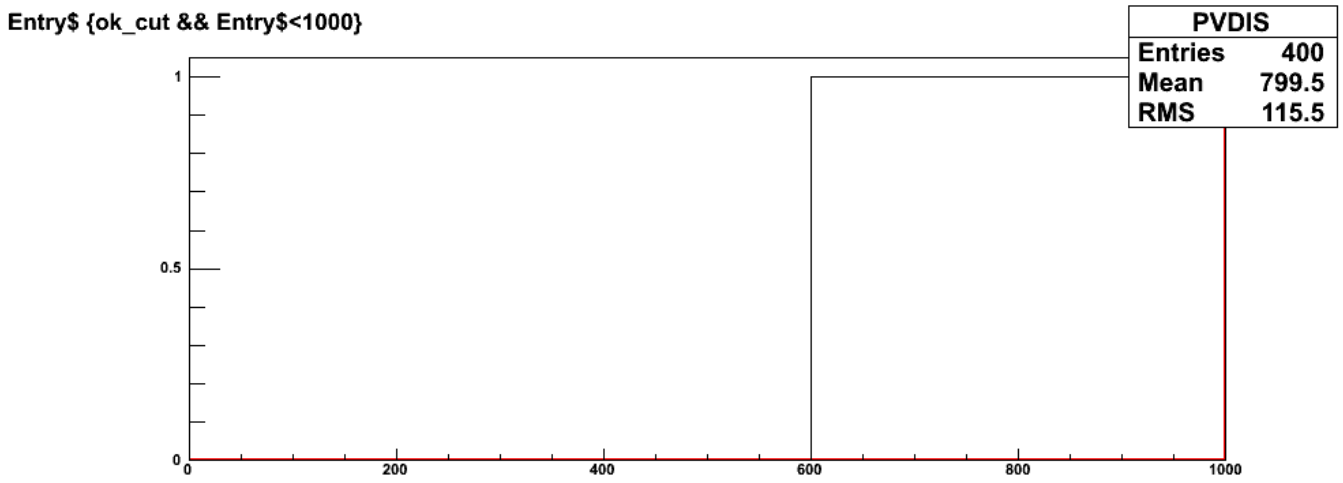

R_Dis_Hap
Dis_Hap
Entries 4832
Mean x 1.477e+04
Mean y 1.492e+04
RMS x 763.6
RMS y 770.2
PVDIS
17000
16000
15000
14000
13000
12000
13000
14000
15000
16000
Happex
10^2
10
1

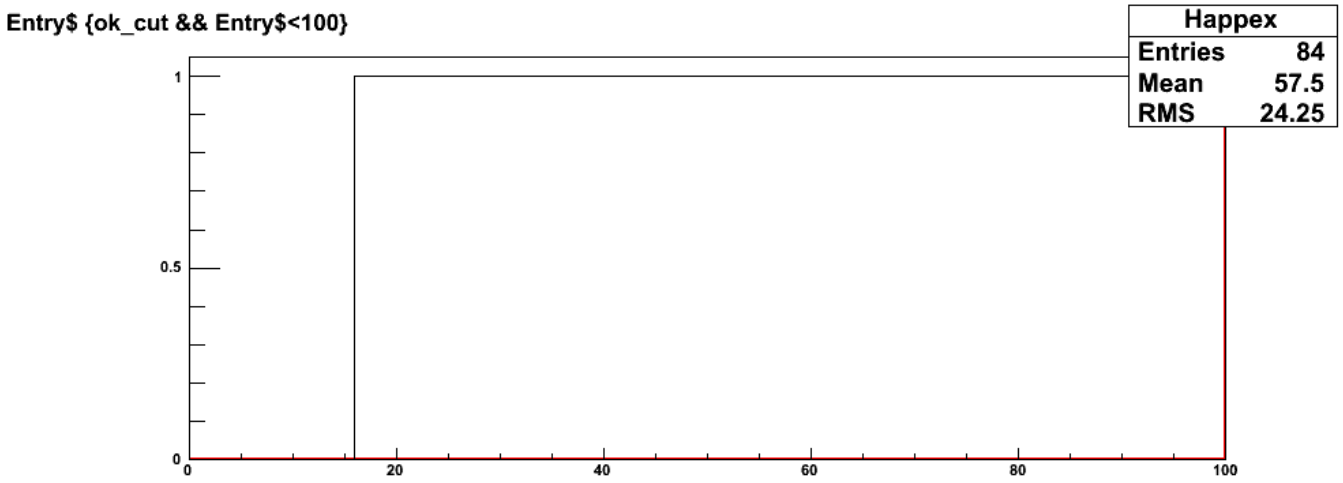
Happex


Happex
Entries 9297
Mean x 1.485e+04
Mean y 1.485e+04
RMS x 785.5
RMS y 785.5
χ² / ndf 3.682e+09 / 74
p0 -38.3 ± 4.777
p1 1.003 ± 0.0003256
Left
PVDIS
16000
15000
14000
13000
12000
12000
13000
14000
15000
16000

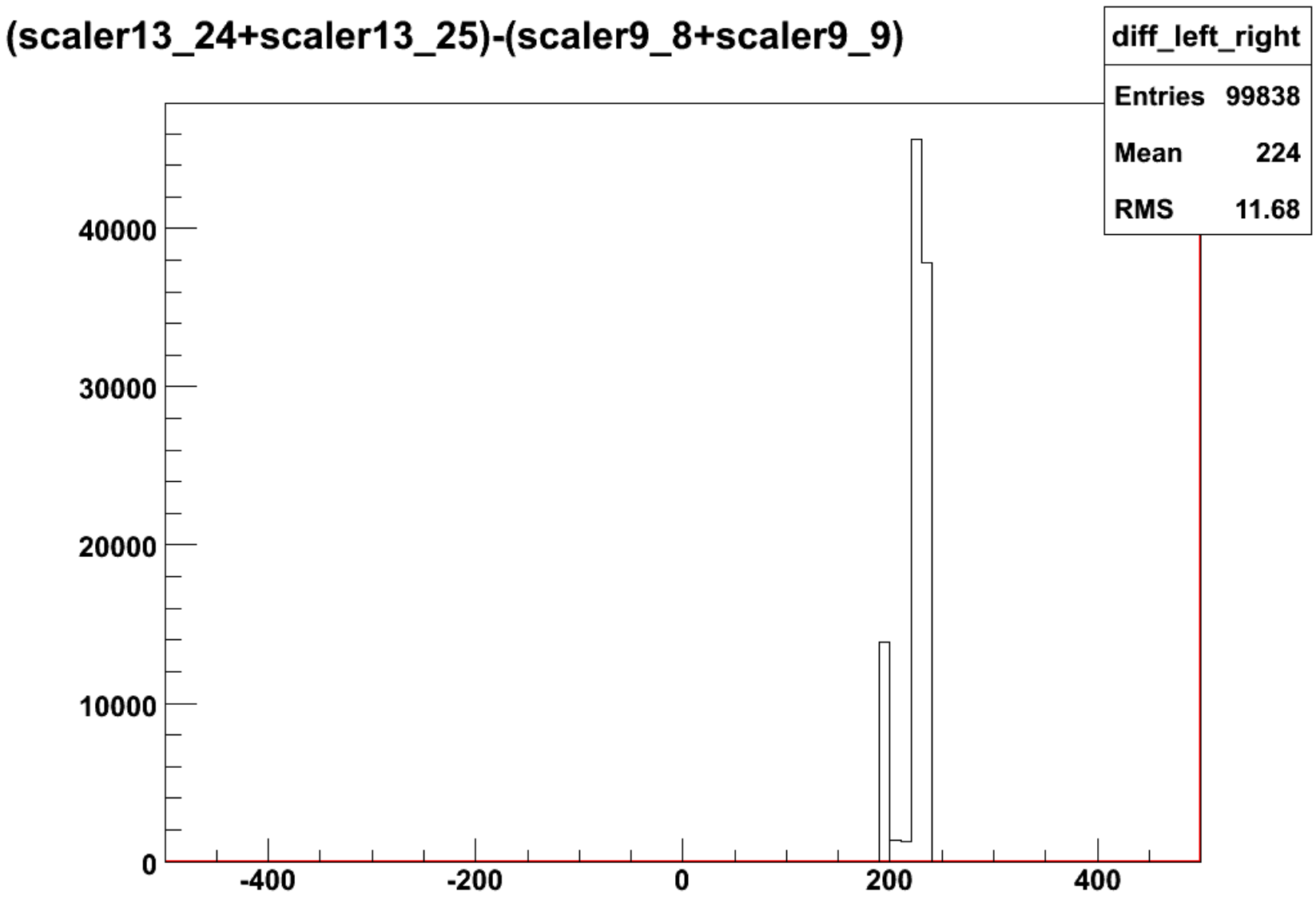

PVDIS
Entries 9297
Mean x 1.499e+04
Mean y 1.522e+04
RMS x 791.2
RMS y 803.1
χ² / ndf 5.993e+09 / 118
p0 249.5 ± 5.921
p1 0.9982 ± 0.000416
Left
Right
17000
16000
15000
14000
13000
13000
14000
15000
16000
17000

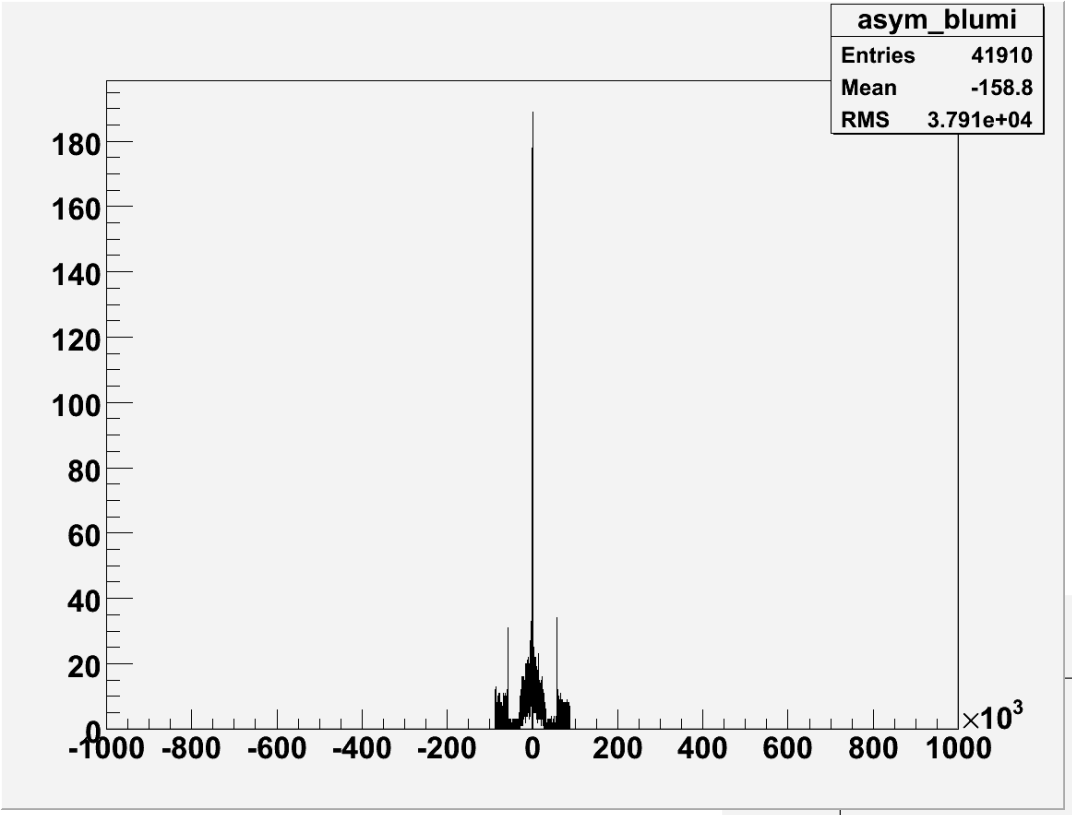
Question 1

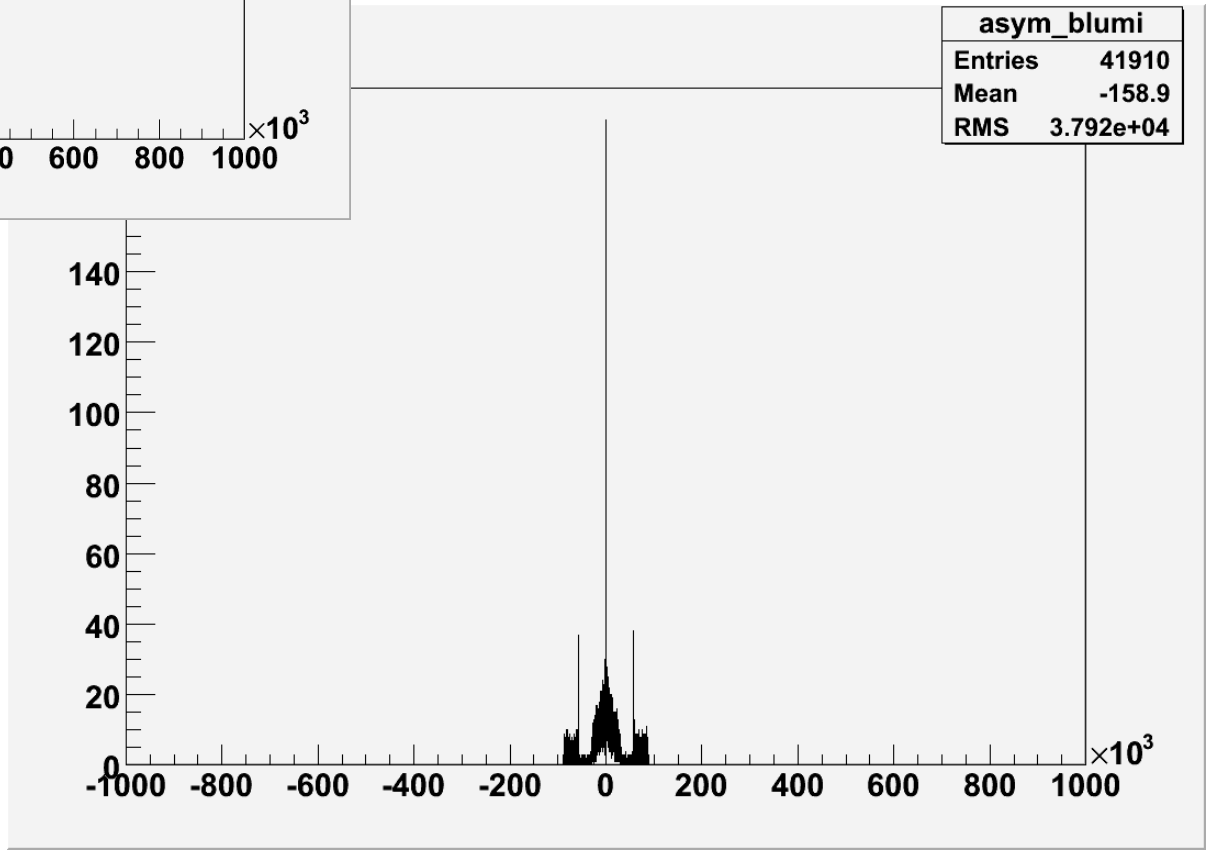

Entry$ {ok_cut && Entry$<1000}
PVDIS
Entries 400
Mean 799.5
RMS 115.5
1
0.5
0
0
200
400
600
800
1000


Entry$ {ok_cut && Entry$<100}
Happex
Entries 84
Mean 57.5
RMS 24.25
1
0.5
0
0
20
40
60
80
100

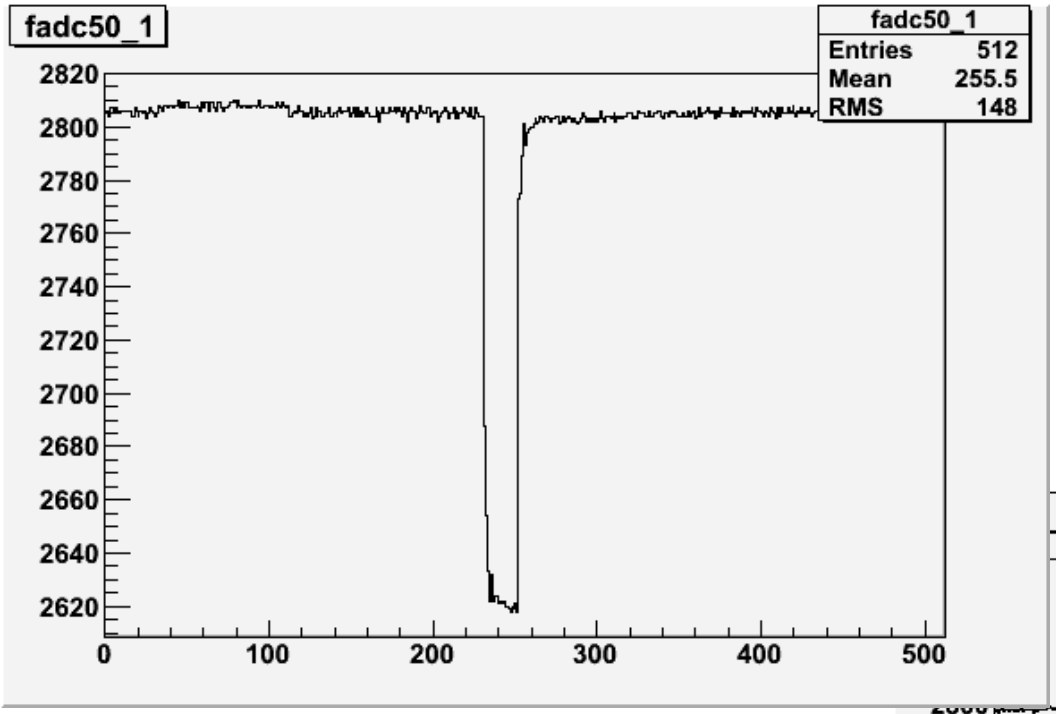
Question 2

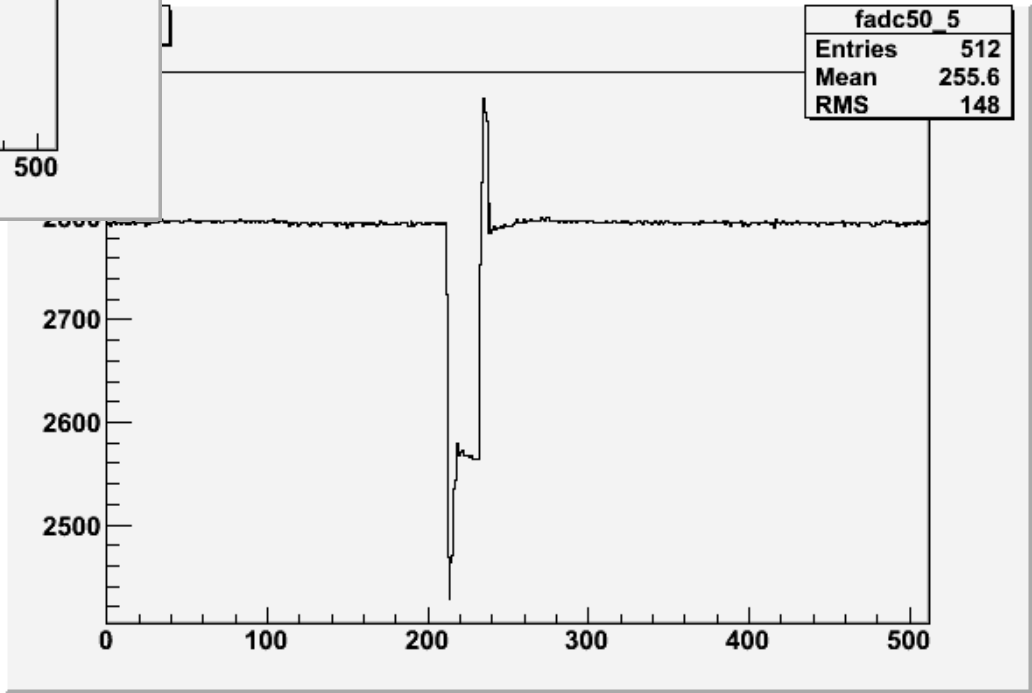

(scaler13_24+scaler13_25)-(scaler9_8+scaler9_9)
diff_left_right
Entries 99838
Mean 224
RMS 11.68
40000
30000
20000
10000
0
-400
-200
0
200
400


asym_blumi
Entries 41910
Mean -158.8
RMS 3.791e+04
180
160
140
120
100
80
60
40
20
0
-1000 -800 -600 -400 -200 0 200 400 600 800 1000
×10^3


asym_blumi
Entries 41910
Mean -158.9
RMS 3.792e+04
140
120
100
80
60
40
20
0
-1000 -800 -600 -400 -200 0 200 400 600 800 1000
×10^3

Question 3


fadc50_1
fadc50_1
Entries 512
Mean 255.5
RMS 148
2820
2800
2780
2760
2740
2720
2700
2680
2660
2640
2620
0
100
200
300
400
500


fadc50_5
Entries 512
Mean 255.6
RMS 148
2700
2600
2500
0
100
200
300
400
500