Calibrations checks

E12-11-112
Spring 2018

BPM

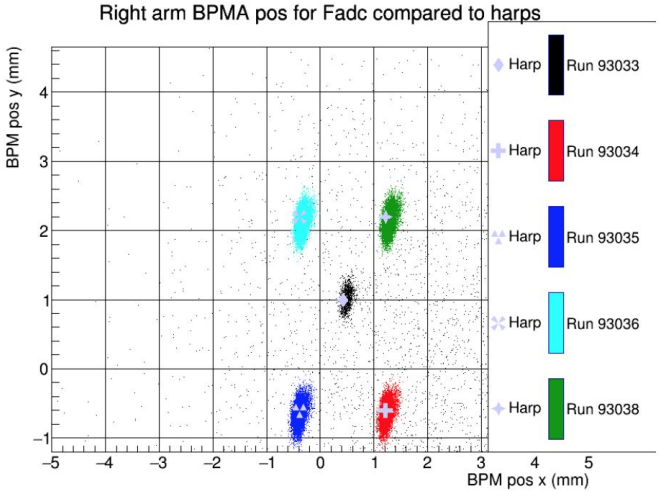
Courtesy of Jason Bane on May 3
Elog entry: https://hallaweb.jlab.org/dvcslog/H3/41

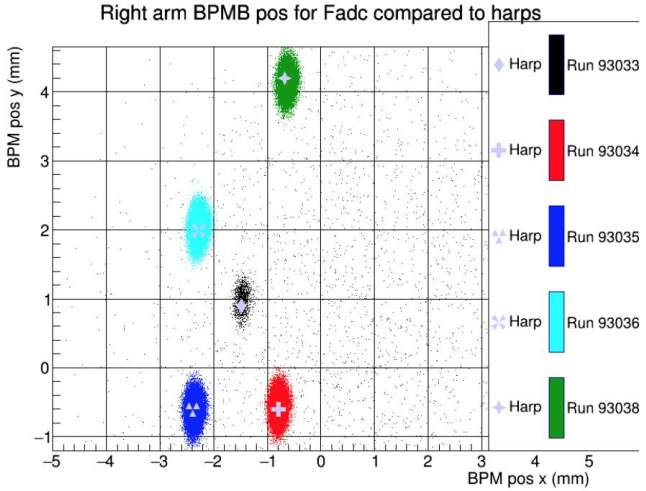
BPM constants
C_{00} C_{01} C_{10} C_{11} $Offset_x$ $Offset_y$

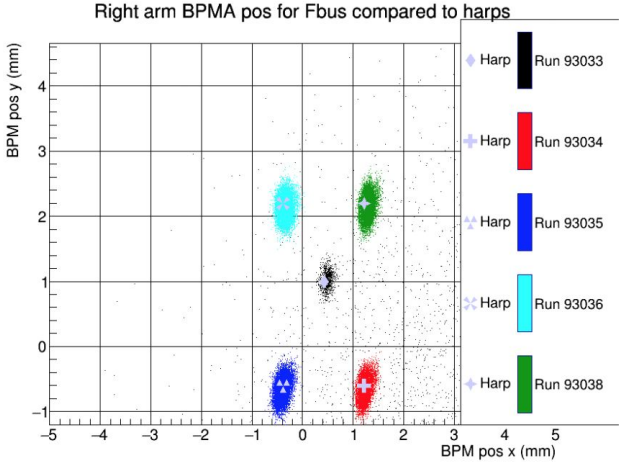
- L Fadc
  - L BPMA constants :
  - -0.804814 0.80711 0.872398 0.810044 0.00263141 -0.000194434
  - L BPMB constants :
  - -0.640675 0.765357 0.670615 0.726334 0.00118268 -0.000238111
- R Fadc
  - R BPMA constants:
  - -0.793517 0.798909 0.824759 0.819041 0.00225944 -0.000469102
  - R BPMB constants:
  - -0.635496 0.765382 0.644898 0.747345 0.000790814 0.000136863

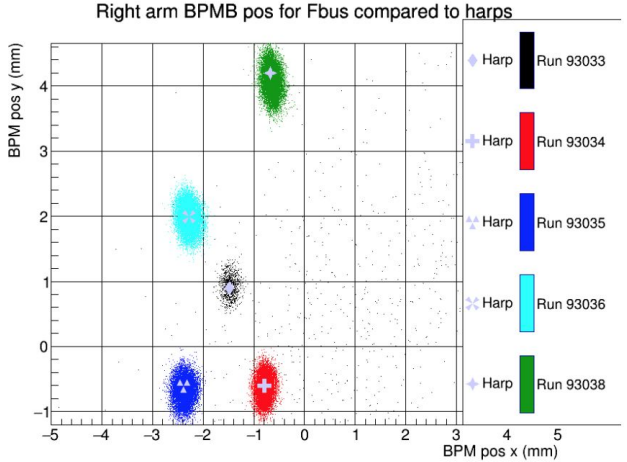
BPM constants
C_{00} C_{01} C_{10} C_{11} $Offset_x$ $Offset_y$

- L Fbus
  - L BPMA constants :
  - -0.818846 0.806577 0.885918 0.819651 0.00295069 -0.00165597
  - L BPMB constants :
  - -0.652203 0.768531 0.690694 0.738339 0.000733292 -0.00114943
- R Fbus
  - R BPMA constants:
  - -0.808394 0.81684 0.842124 0.837629 0.00219436 3.15774e-05
  - R BPMB constants:
  - -0.64922 0.774065 0.664776 0.75878 0.000272667 -0.000755106


Right arm BPMA pos for Fadc compared to harps
BPM pos y (mm)
BPM pos x (mm)
Harp Run 93033
Harp Run 93034
Harp Run 93035
Harp Run 93036
Harp Run 93038

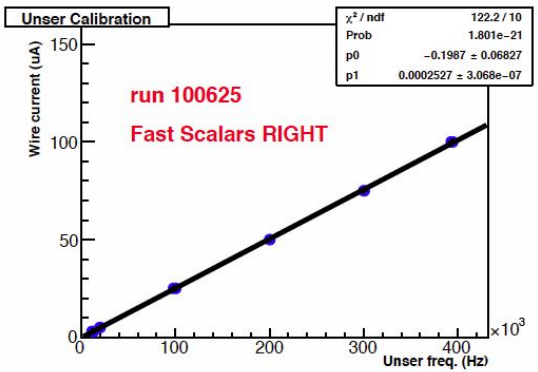

Right arm BPMB pos for Fadc compared to harps
BPM pos y (mm)
BPM pos x (mm)
Harp Run 93033
Harp Run 93034
Harp Run 93035
Harp Run 93036
Harp Run 93038

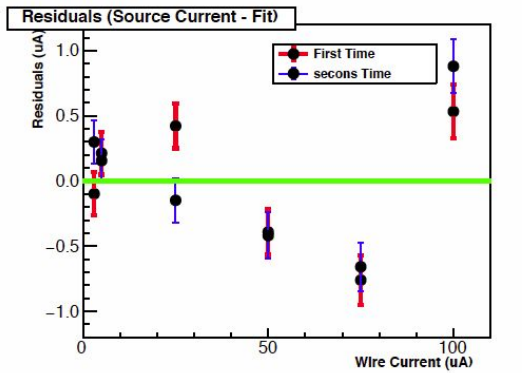

Right arm BPMA pos for Fbus compared to harps
BPM pos y (mm)
BPM pos x (mm)
Harp Run 93033
Harp Run 93034
Harp Run 93035
Harp Run 93036
Harp Run 93038

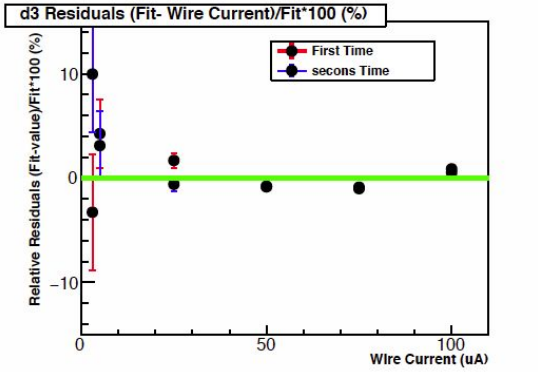

Right arm BPMB pos for Fbus compared to harps
BPM pos y (mm)
BPM pos x (mm)
Harp Run 93033
Harp Run 93034
Harp Run 93035
Harp Run 93036
Harp Run 93038

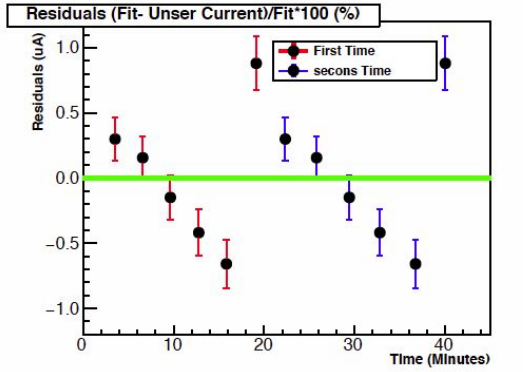
BCM

Unser Calibration



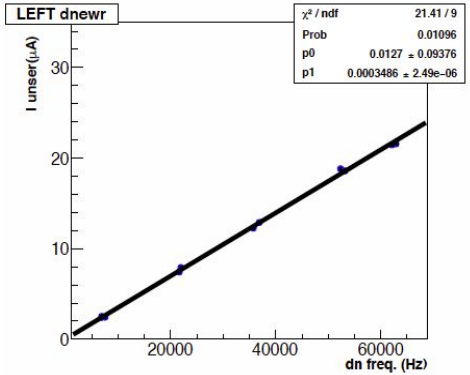


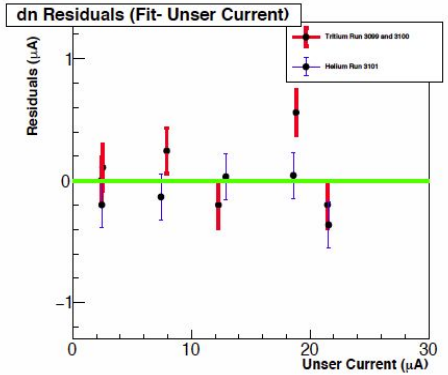


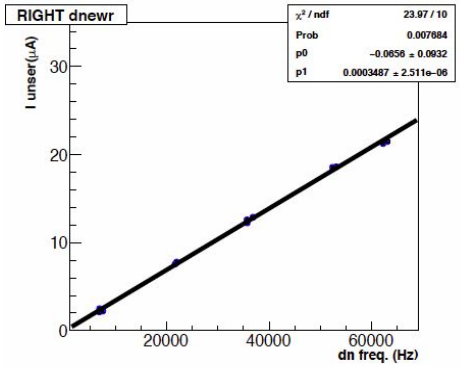


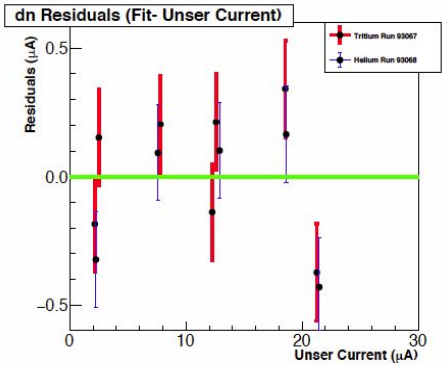
unew, d3,d10 and dnew calibration

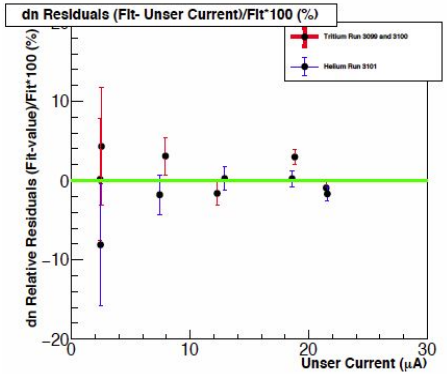
Run Numbers
Tritium 3099 and 3100
Helium 3101

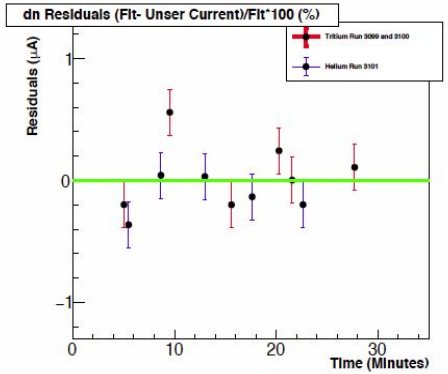


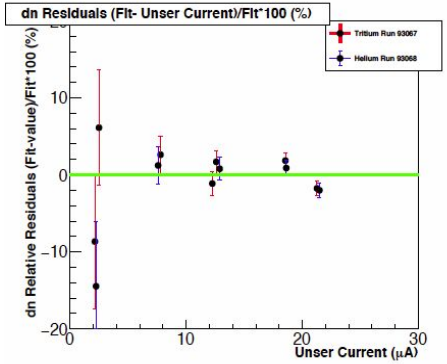


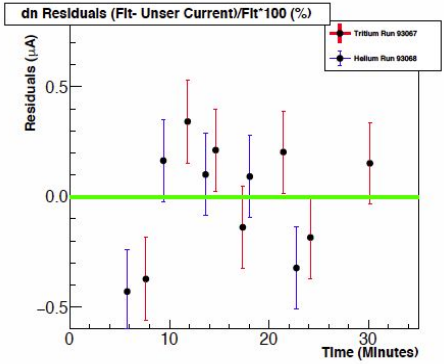


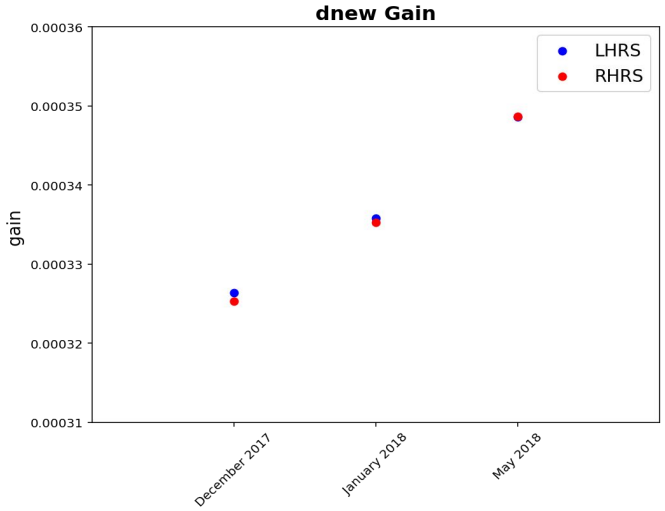


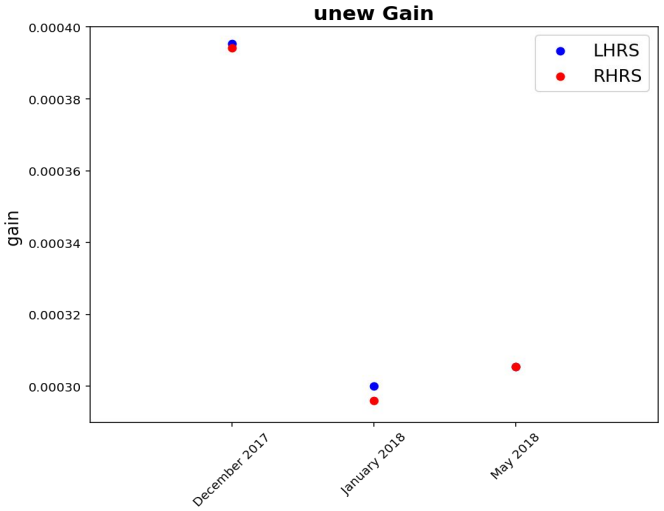


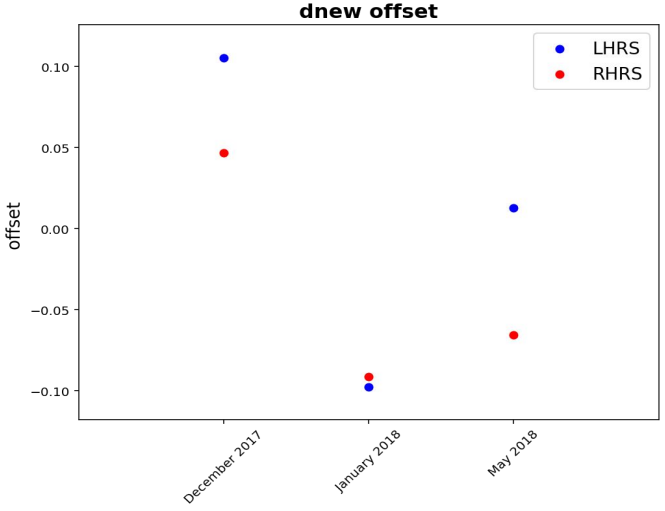


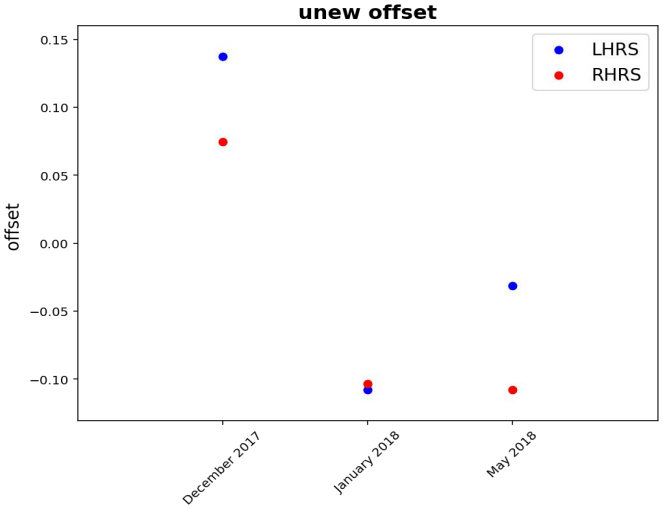





dnew Gain
LHRS
RHRS
gain
0.00036
0.00035
0.00034
0.00033
0.00032
0.00031
December 2017
January 2018
May 2018


unew Gain
LHRS
RHRS
gain
0.00040
0.00038
0.00036
0.00034
0.00032
0.00030
December 2017
January 2018
May 2018


dnew offset
LHRS
RHRS
offset
0.10
0.05
0.00
−0.05
−0.10
December 2017
January 2018
May 2018


unew offset
LHRS
RHRS
offset
0.15
0.10
0.05
0.00
−0.05
−0.10
December 2017
January 2018
May 2018

BCM Calibration Constants

Ld3_gain = 0.0001076
Ld3_gain_er = 1.244e-06
Ld3_offset = 0.1774
Ld3_offset_er = 0.2068]
Ld10_gain = 3.714e-05
Ld10_gain_er = 4.238e-07
Ld10_offset = 0.1175
Ld10_offset_er = 0.1772
Ldnew_gain=0.0003486
Ldnew_gain_er = 6,2.49e-06
Ldnew_offset=0.0127
Ldnew_offset_er = 0.09376
Lunew_gain=0.0003054
Lunew_gain_er =1.727e-6,2.237e-06
Lunew_offset=-0.03138
Lunew_offset_er=0.09432

Rd3_gain = 0.0001061
Rd3_gain_er = 1.241e-06
Rd3_offset = 0.3704]
Rd3_offset_er = 0.1718
Rd10_gain = 3.648e-05
Rd10_gain_er = 4.82e-07
Rd10_offset = 0.3508
Rd10_offset_er = 0.2028
Rdnew_gain=0.0003487
Rdnew_gain_er = 2.916e-6
Rdnew_offset=-0.0656
Rdnew_offset_er = 0.0932
Runew_gain=0.0003054
Runew_gain_er =0.09356
Runew_offset=-0.1081
Runew_offset_er=2.215e-06]

VDC Calibration

Last calibrated before E12-11-112:

The s0 signal are in the root files from fadc and flashbus, therefore a calibrations have to be done for both.

LHRS Calibration using Run 3106

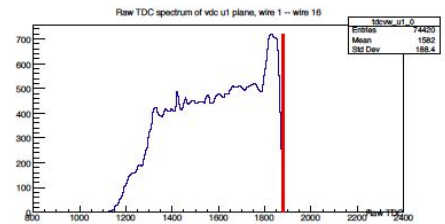
Beam Energy = 2.218 GeV
Scattering Angle = 21.778 degrees
Momentum =1.839 GeV

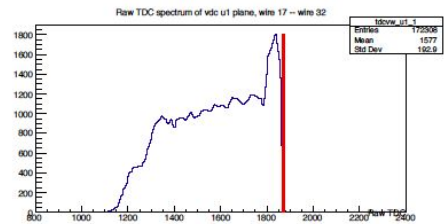
RHRS Calibration Runs 93050-93084

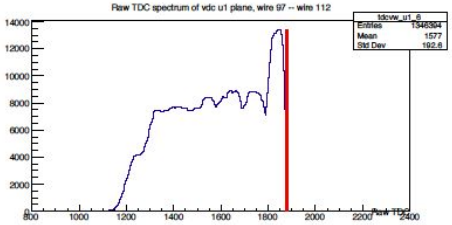
Beam Energy = 2.218 GeV
Scattering Angle = 42.025 degrees
Momentum =1.379 GeV

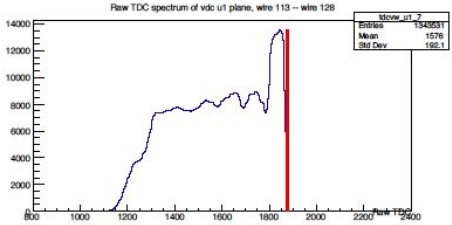
Codes and information Courtesy Shujie Li and gmp

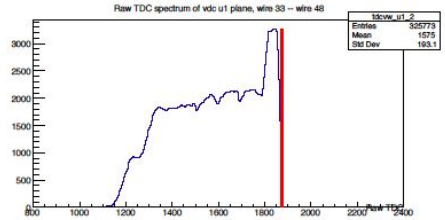
LHRS--------[2017-12-14 00:00:00 -0500]

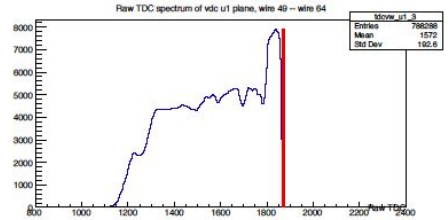


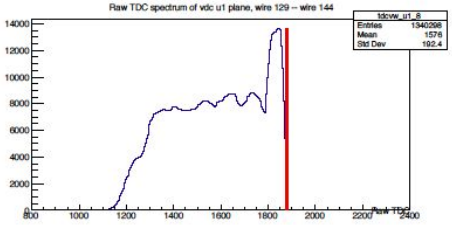


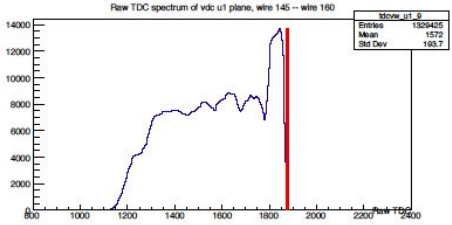


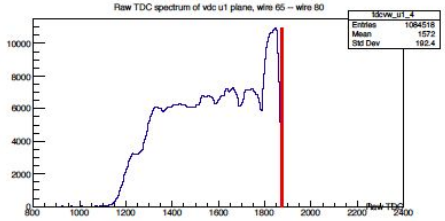


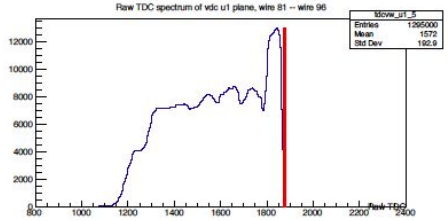


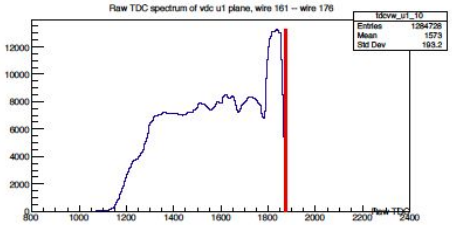


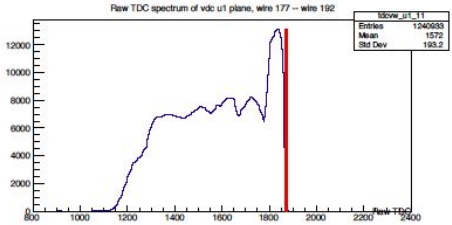


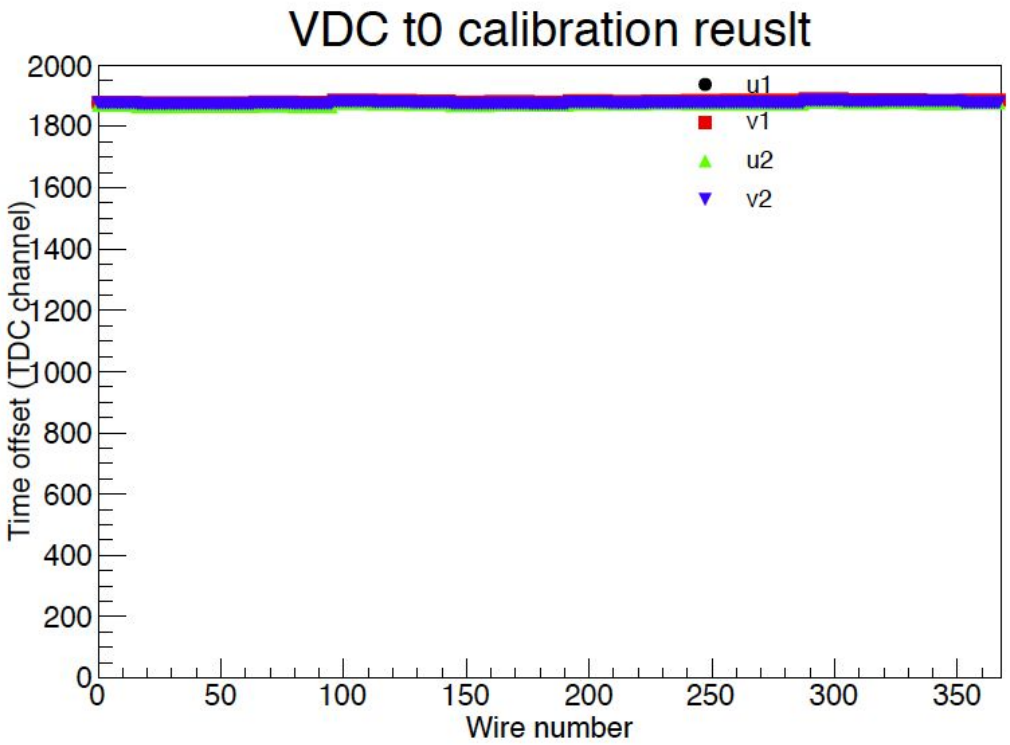


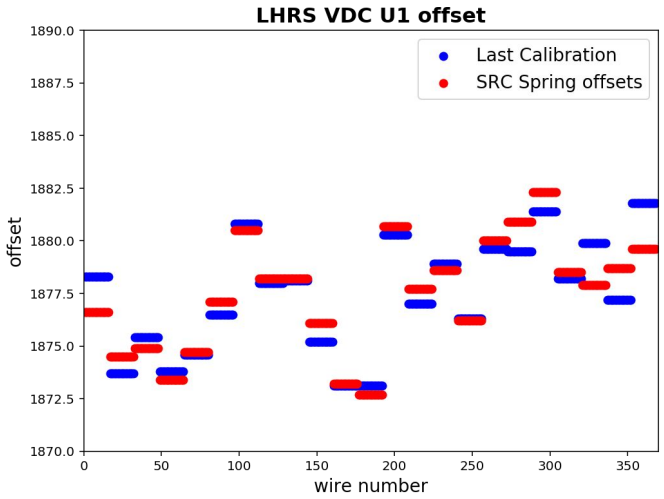









VDC t0 calibration reuslt
u1
v1
u2
v2
Time offset (TDC channel)
Wire number
0
200
400
600
800
1000
1200
1400
1600
1800
2000
0
50
100
150
200
250
300
350


LHRS VDC U1 offset
Last Calibration
SRC Spring offsets
offset
wire number
1890.0
1887.5
1885.0
1882.5
1880.0
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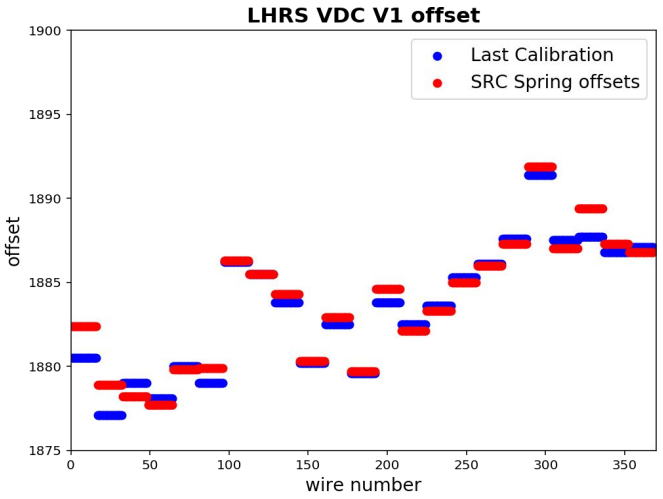
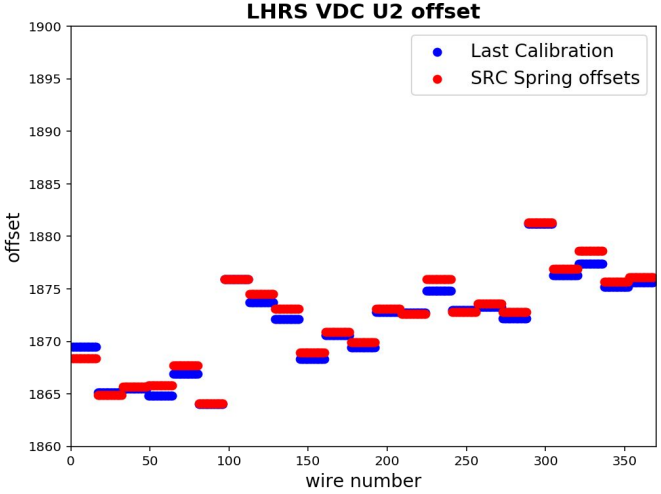
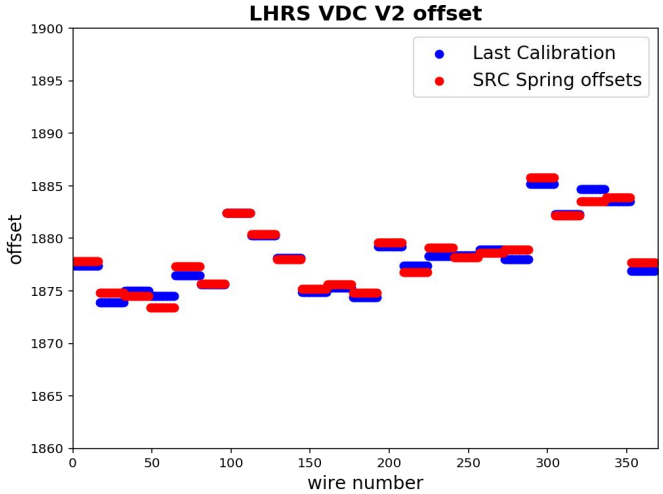
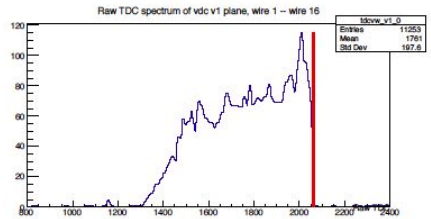
1872.5
1870.0
0
50
100
150
200
250
300
350

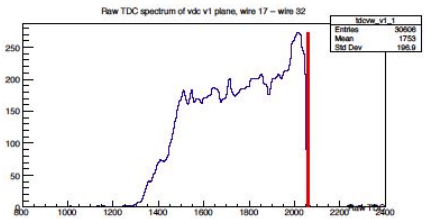

LHRS VDC V1 offset
Last Calibration
SRC Spring offsets
offset
wire number
1900
1895
1890
1885
1880
1875
0
50
100
150
200
250
300
350

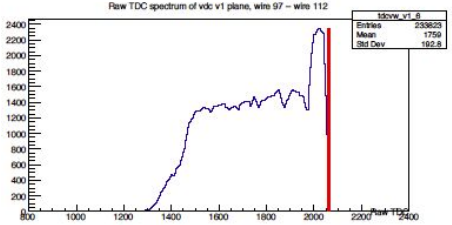

LHRS VDC U2 offset
Last Calibration
SRC Spring offsets
offset
wire number
1900
1895
1890
1885
1880
1875
1870
1865
1860
0
50
100
150
200
250
300
350

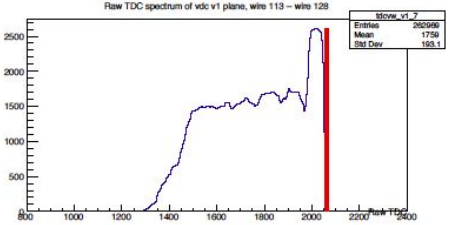

LHRS VDC V2 offset
Last Calibration
SRC Spring offsets
offset
wire number
1900
1895
1890
1885
1880
1875
1870
1865
1860
0
50
100
150
200
250
300
350

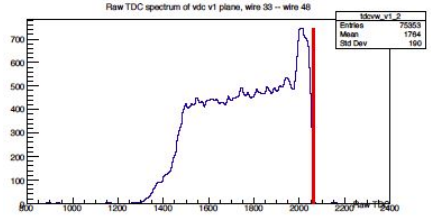
RHRS--------[2018-05-03 00:00:00 -0500]

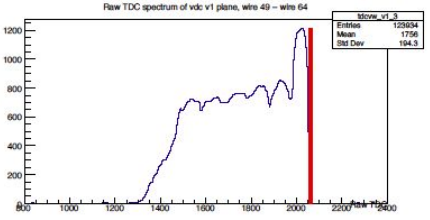


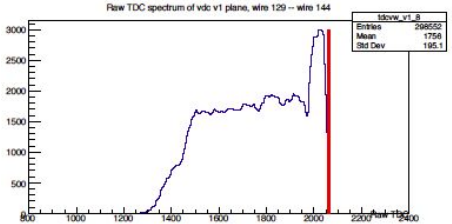


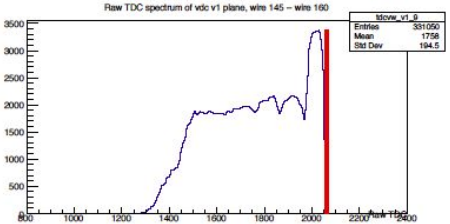


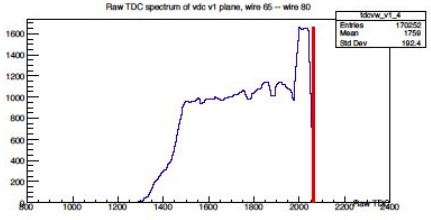


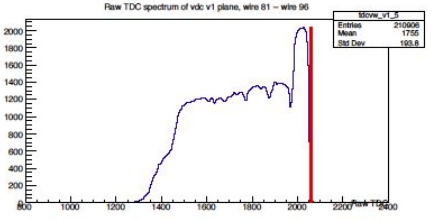


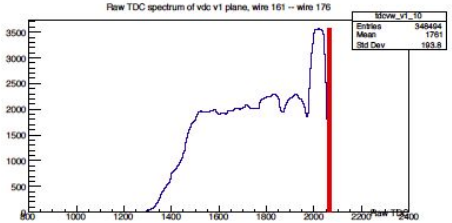


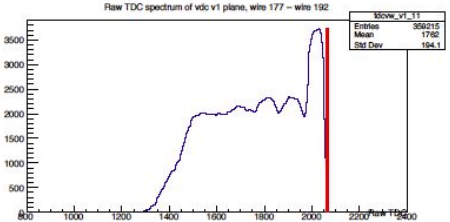


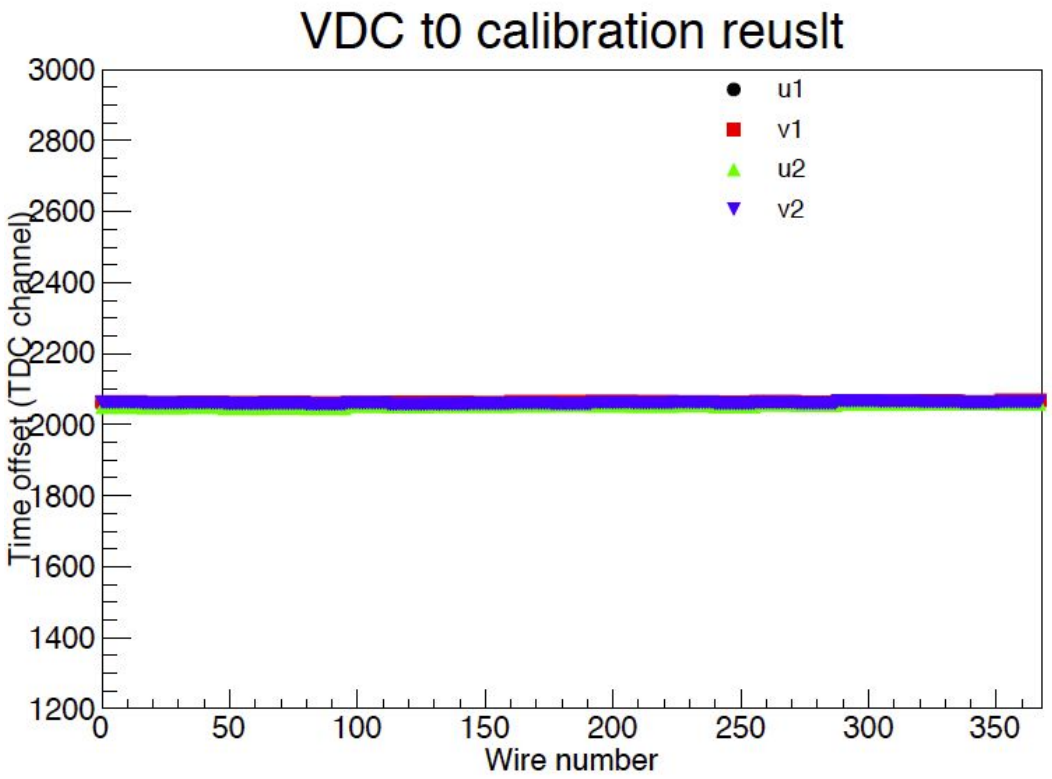


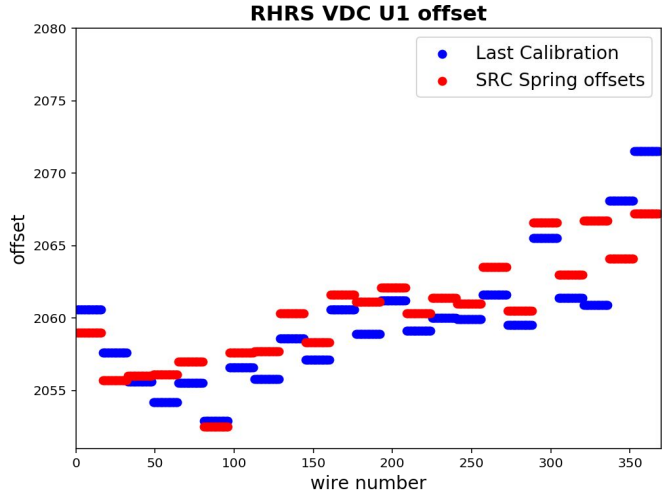


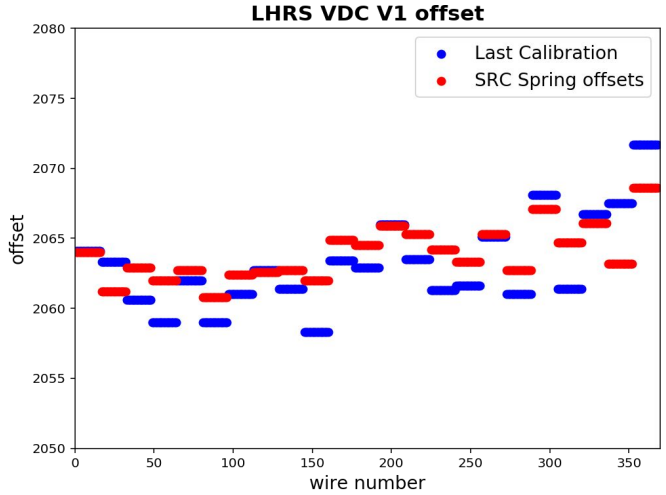


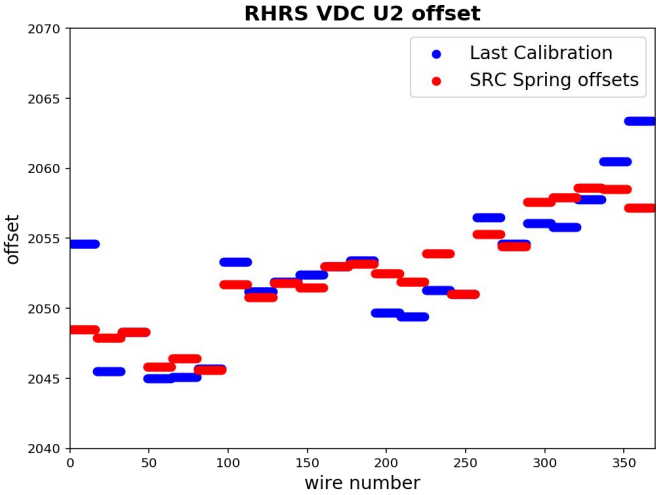


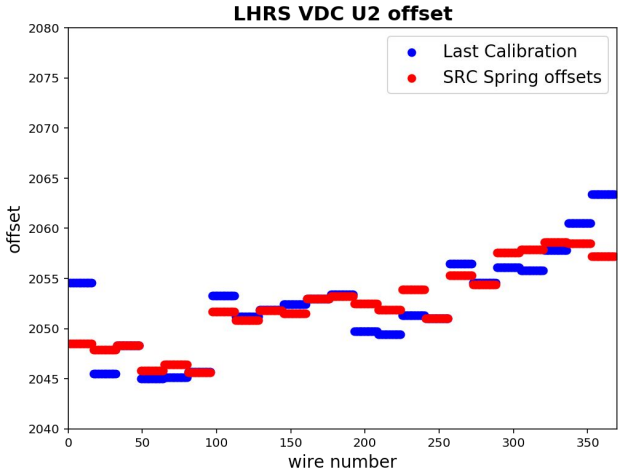



VDC t0 calibration reuslt
u1
v1
u2
v2
Time offset (TDC channel)
Wire number
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200
0
50
100
150
200
250
300
350


RHRS VDC U1 offset
Last Calibration
SRC Spring offsets
offset
wire number


LHRS VDC V1 offset
Last Calibration
SRC Spring offsets
offset
wire number


RHRS VDC U2 offset
Last Calibration
SRC Spring offsets
offset
wire number


LHRS VDC U2 offset
Last Calibration
SRC Spring offsets
offset
wire number

ADC Calibration

LHRS s2 FADC peak match to 300;
RHRS s2 FADC peak match to 170;
LHRS s0 FADC peak match to 400, and FastBus ADC to 250;
RHRS s0 FADC peak match to 900, and FastBUs ADC to 550;

Last calibrated before E12-11-112 in Marathon: --------[2018-01-11 00:00:00 -0500]

The s0 signal are in the root files from fadc and flashbus, therefore a calibrations have to be done for both.

LHRS Calibration using Run 3106

Beam Energy = 2.218 GeV
Scattering Angle = 21.778 degrees
Momentum =1.839 GeV

RHRS Calibration Runs 93050-93084

Beam Energy = 2.218 GeV
Scattering Angle = 42.025 degrees
Momentum =1.379 GeV

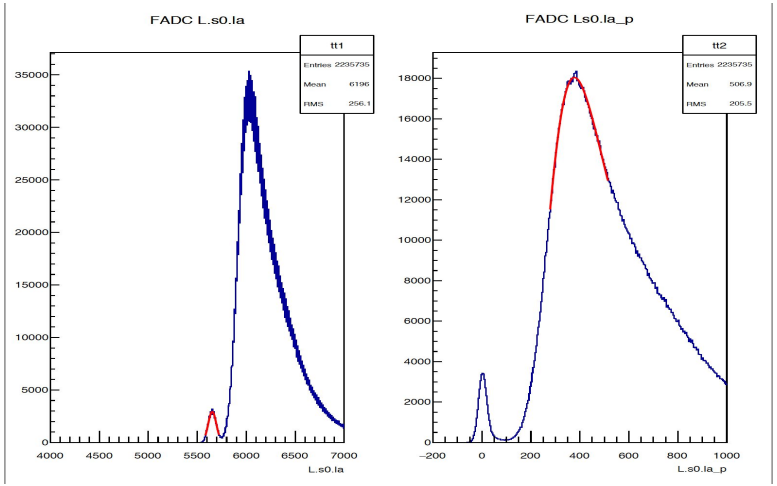
Codes and information Courtesy Hanjie Liu
https://hallaweb.jlab.org/dvcslog/H3/34

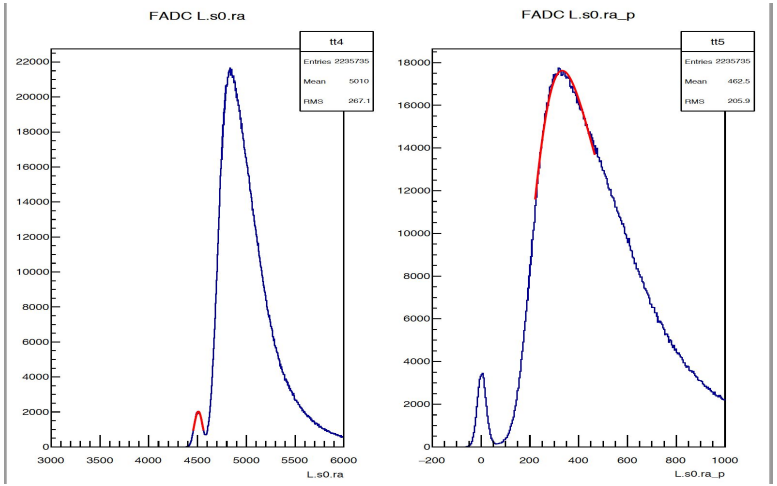
s0

LHRS s0:
FADC:
L.s0.L.ped = 5607.57
L.s0.R.ped = 4475.37
L.s0.L.gain = 0.92321
L.s0.R.gain = 1.27099
FastBus:
FbusL.s0.L.ped = 626.931
FbusL.s0.R.ped = 485.699
FbusL.s0.L.gain = 0.861574
FbusL.s0.R.gain = 1.32822

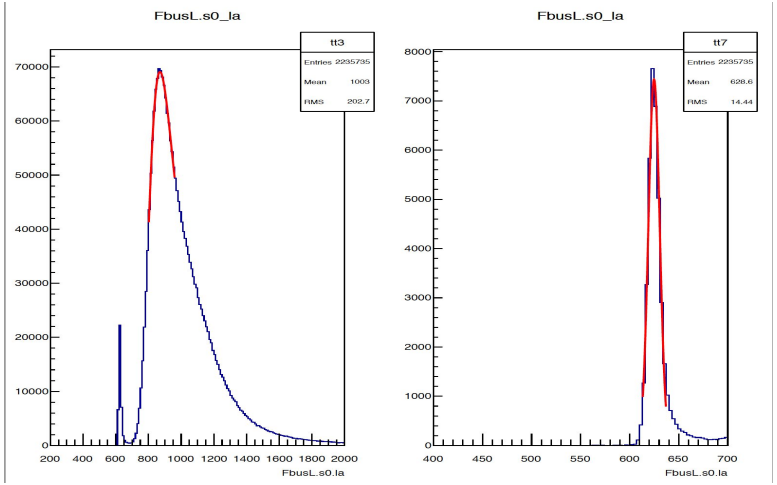
RHRS s0:
FADC:
R.s0.L.ped = 7313.33
R.s0.R.ped = 6757.89
R.s0.L.gain = 0.692365
R.s0.R.gain = 1.64307

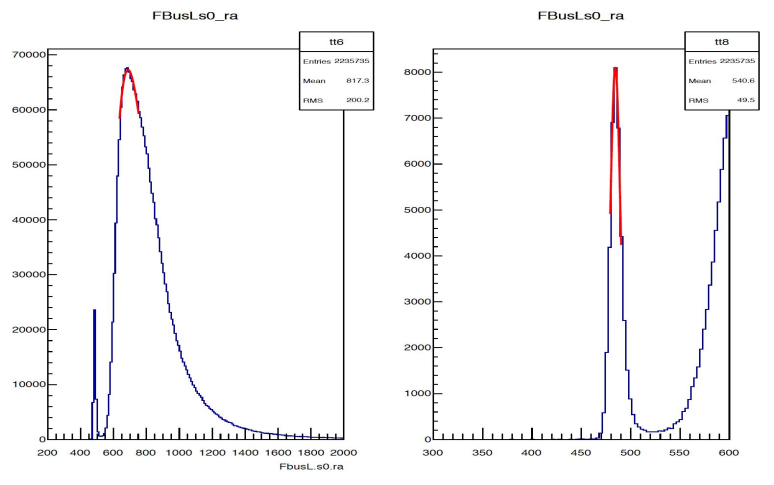
FastBus:
FbusR.s0.L.ped = 633.856
FbusR.s0.R.ped = 388.392
FbusR.s0.L.gain = 0.724374
FbusR.s0.R.gain = 1.70069

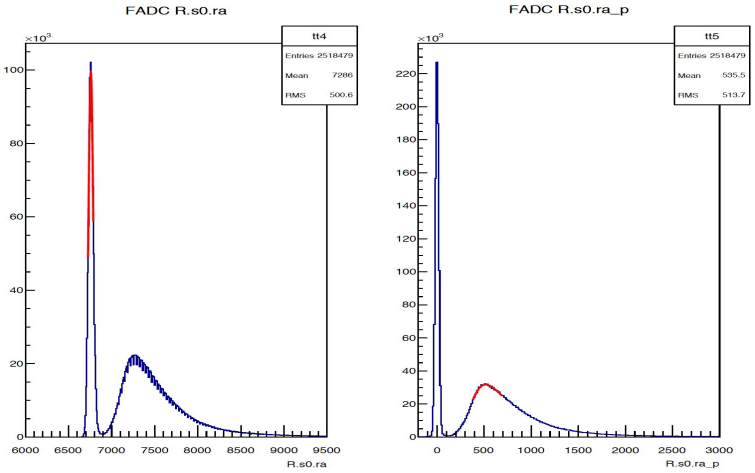

FADC L.s0.la
tt1
Entries 2235735
Mean 6196
RMS 256.1
L.s0.la
FADC Ls0.la_p
tt2
Entries 2235735
Mean 506.9
RMS 205.5
L.s0.la_p


FADC L.s0.ra
tt4
Entries 2235735
Mean 5010
RMS 267.1
L.s0.ra
FADC L.s0.ra_p
tt5
Entries 2235735
Mean 462.5
RMS 205.9
L.s0.ra_p

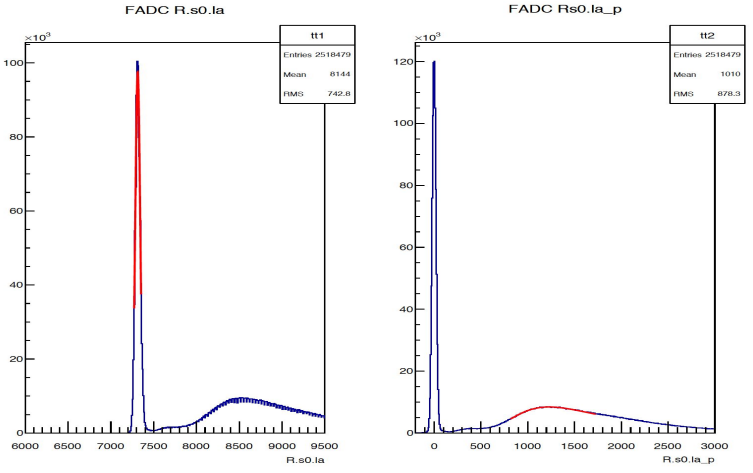
s0
LHRS


FbusL.s0_la
tt3
Entries 2235735
Mean 1003
RMS 202.7
FbusL.s0.la
FbusL.s0_la
tt7
Entries 2235735
Mean 628.6
RMS 14.44
FbusL.s0.la


FBusLs0_ra
tt6
Entries 2235735
Mean 817.3
RMS 200.2
FbusL.s0.ra
FBusLs0_ra
tt8
Entries 2235735
Mean 540.6
RMS 49.5

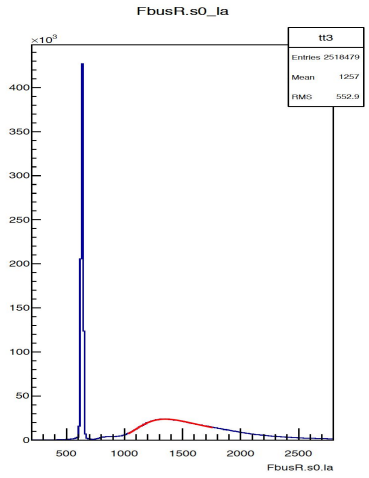

FADC R.s0.ra
tt4
Entries 2518479
Mean 7286
RMS 500.6
R.s0.ra

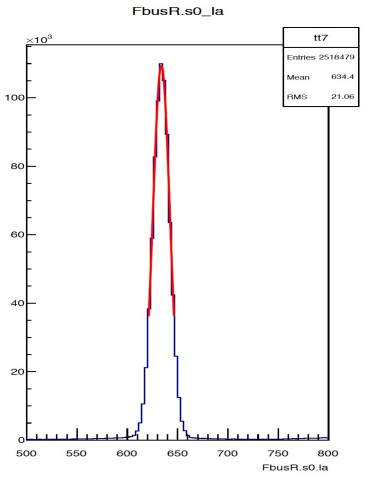
FADC R.s0.ra_p
tt5
Entries 2518479
Mean 535.5
RMS 513.7
R.s0.ra_p

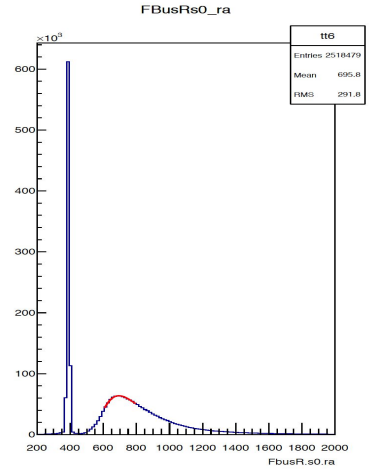

FADC R.s0.la
tt1
Entries 2518479
Mean 8144
RMS 742.8
R.s0.la

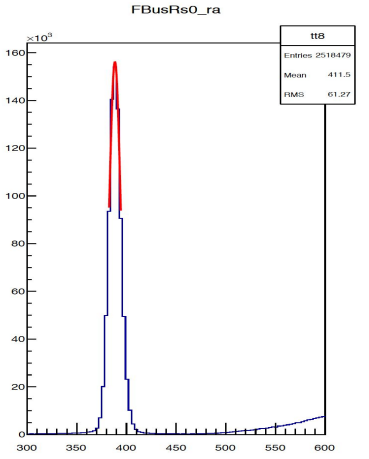
FADC Rs0.la_p
tt2
Entries 2518479
Mean 1010
RMS 878.3
R.s0.la_p

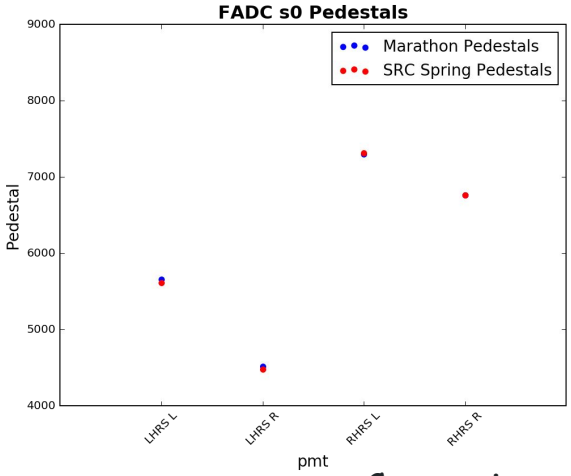
s0
RHRS

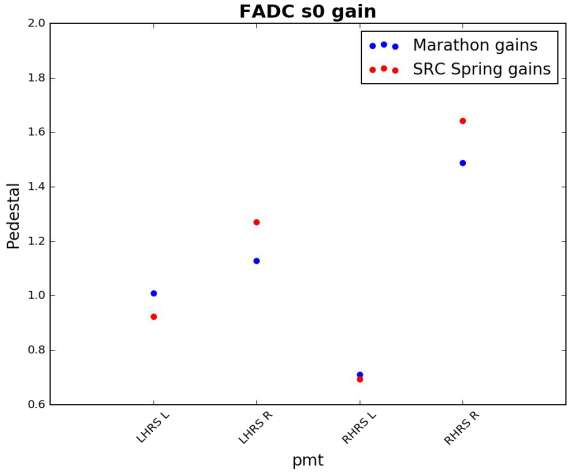

FbusR.s0_la
tt3
Entries 2518479
Mean 1257
RMS 552.9
FbusR.s0.la


FbusR.s0_la
tt7
Entries 2518479
Mean 634.4
RMS 21.06
FbusR.s0.la

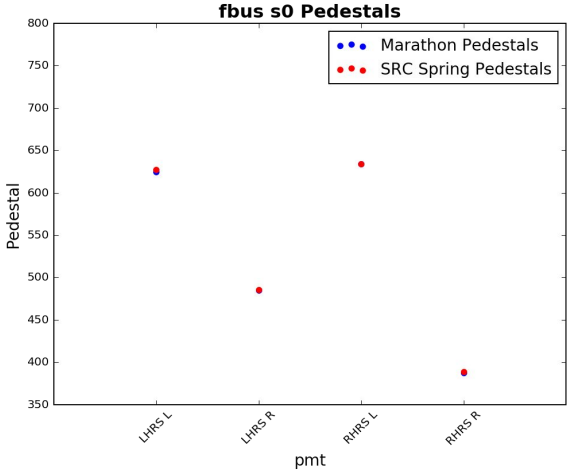

FBusRs0_ra
tt6
Entries 2518479
Mean 695.8
RMS 291.8
FbusR.s0.ra

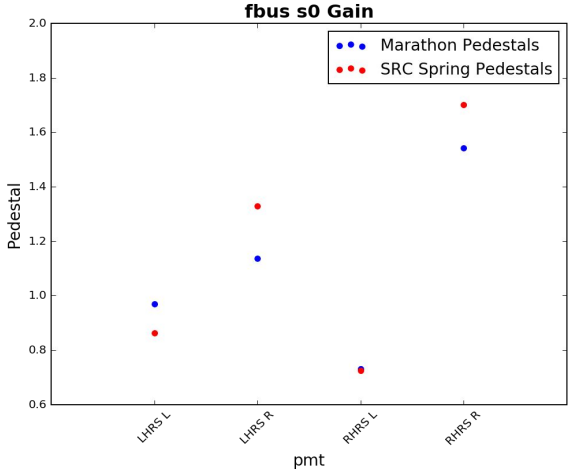

FBusRs0_ra
tt8
Entries 2518479
Mean 411.5
RMS 61.27





Comparing with the previous calibration



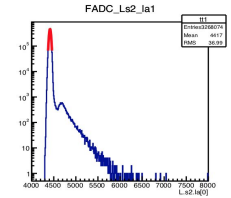
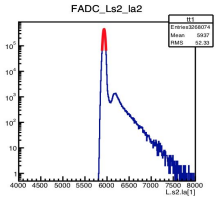
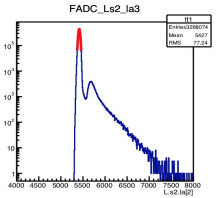
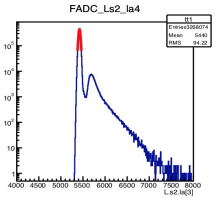
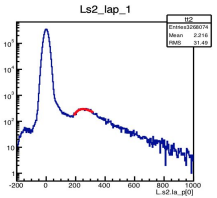
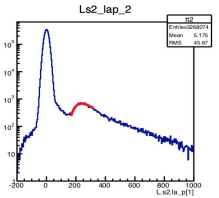
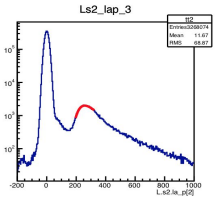
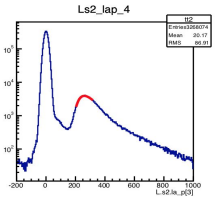
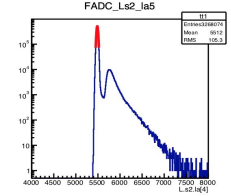
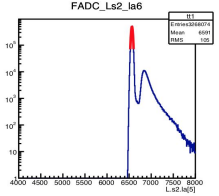
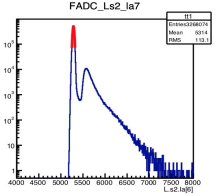
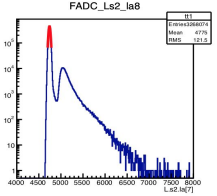
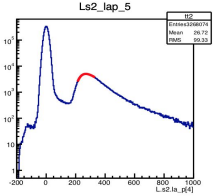
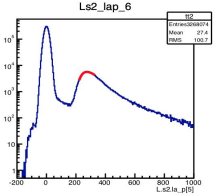
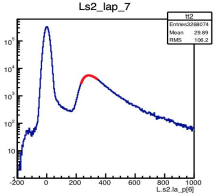
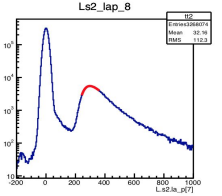
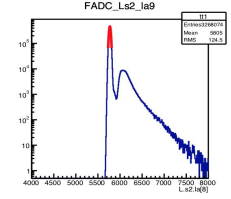
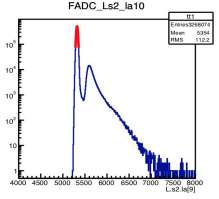
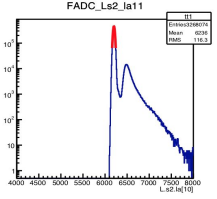
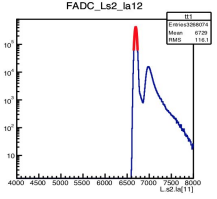
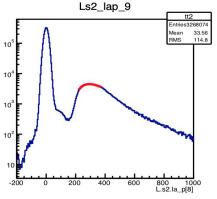
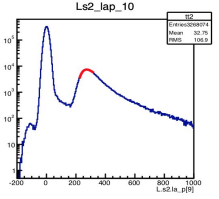


s2

LHRS S2:
L.s2.L.ped = 4415.45 5932.94 5415.57
5420.33 5485.68 6564.02 5284.72 4741.88
5770.60 5321.22 6201.25 6693.48 6070.49
6686.23 5327.38 5437.58
L.s2.R.ped = 4611.06 5949.24 4134.33
4476.17 6758.90 6160.81 4234.36 5069.91
5965.92 5240.59 5735.44 4340.61 6668.51
5762.35 5623.59 5037.67
L.s2.L.gain = 1.15335 1.20724 1.12454
1.11833 1.07899 1.05992 1.02359 0.97770
0.97612 1.07072 1.05051 1.03558 1.02897
1.02319 1.02964 1.01389
L.s2.R.gain = 1.34028 1.21992 1.18607
1.07927 1.18050 1.14166 1.05432 0.97565
1.29538 1.09011 1.02355 1.22380 1.08020
1.08172 1.02686 0.94550

RHRS s2:
R.s2.L.ped = 3753.54 4262.60 1776.20
4776.61 5462.55 3074.52 3550.37 2941.41
3709.47 5504.36 3740.50 3255.48 4128.54
2692.48 3830.96 3265.46
R.s2.R.ped = 4488.63 4638.93 3327.31
3018.80 3745.85 4395.85 3995.31 3522.93
2906.09 5144.96 3063.35 3535.71 2902.79
5460.19 4597.10 2753.03
R.s2.L.gain = 1.16257 1.14823 1.05432
1.07932 1.08696 0.99514 0.97829 1.08515
1.03184 1.04918 1.01170 0.99974 1.37499
1.13748 1.18719 1.04205
R.s2.R.gain = 1.16803 1.07321 1.06296
1.09512 1.08507 1.12829 1.17131 1.10286
1.08942 1.07778 1.02356 1.08751 1.12579
1.05706 1.11505 1.10563

s2 LHRS-I


FADC_Ls2_la1

FADC_Ls2_la2

FADC_Ls2_la3

FADC_Ls2_la4

Ls2_lap_1

Ls2_lap_2

Ls2_lap_3

Ls2_lap_4

FADC_Ls2_la5

FADC_Ls2_la6

FADC_Ls2_la7

FADC_Ls2_la8

Ls2_lap_5

Ls2_lap_6

Ls2_lap_7

Ls2_lap_8

FADC_Ls2_la9

FADC_Ls2_la10

FADC_Ls2_la11

FADC_Ls2_la12

Ls2_lap_9

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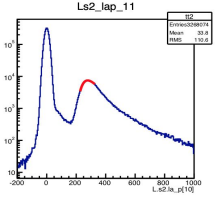
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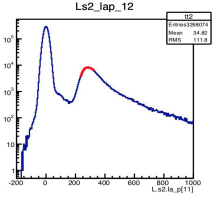
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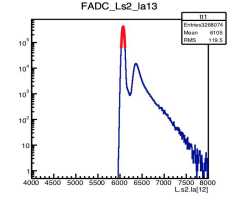
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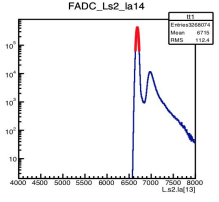
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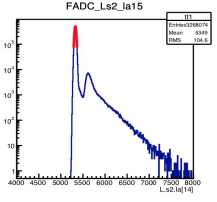
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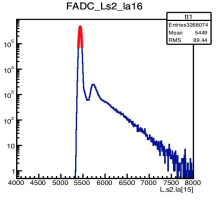
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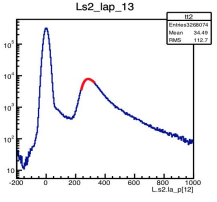
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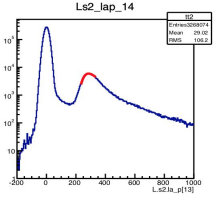
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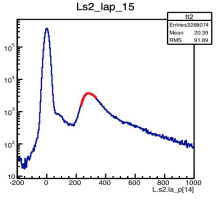
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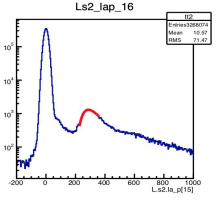
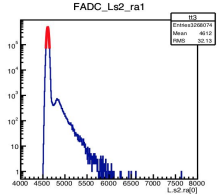

Ls2_lap_16

s2 LHRS-r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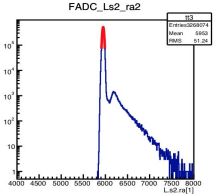
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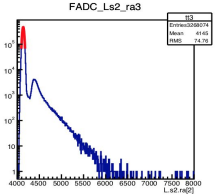
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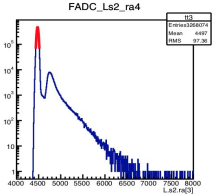
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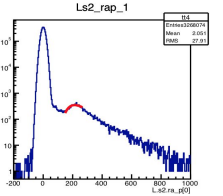
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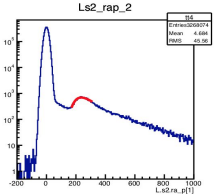
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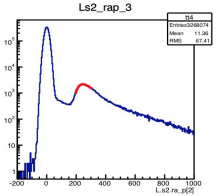
Ls2.ra_p[1]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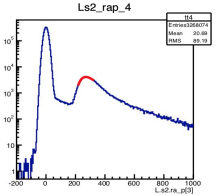
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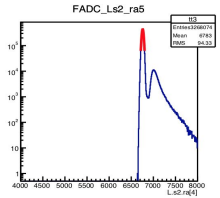
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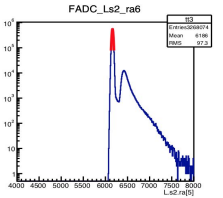
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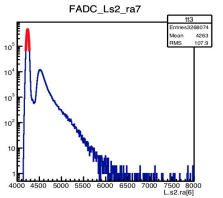
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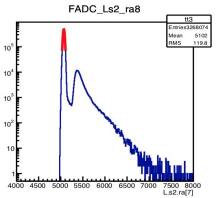
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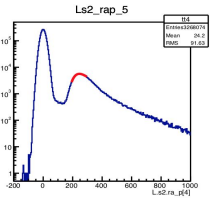
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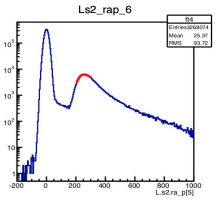
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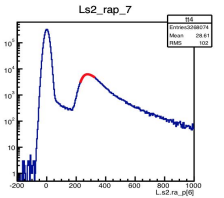
Ls2.ra_p[5]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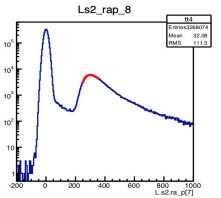
Ls2.ra_p[6]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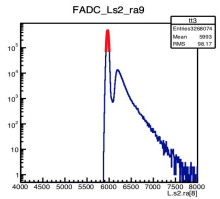
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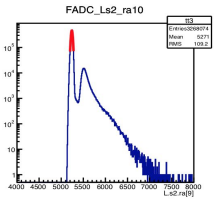
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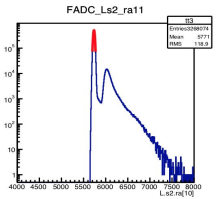
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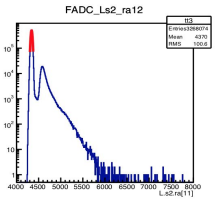
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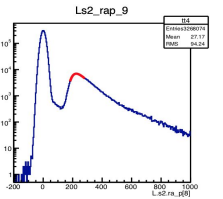
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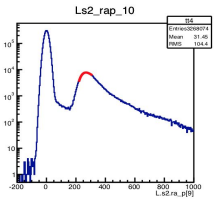
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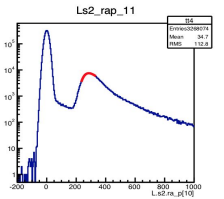
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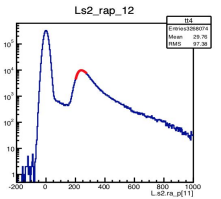
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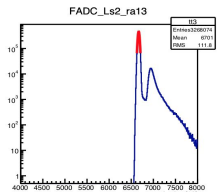
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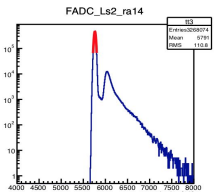
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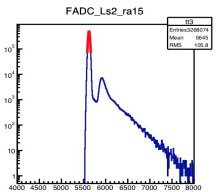
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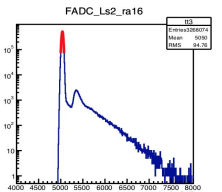
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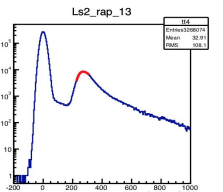
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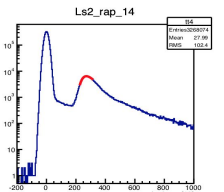
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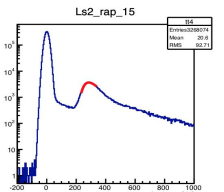
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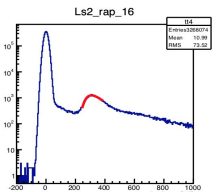
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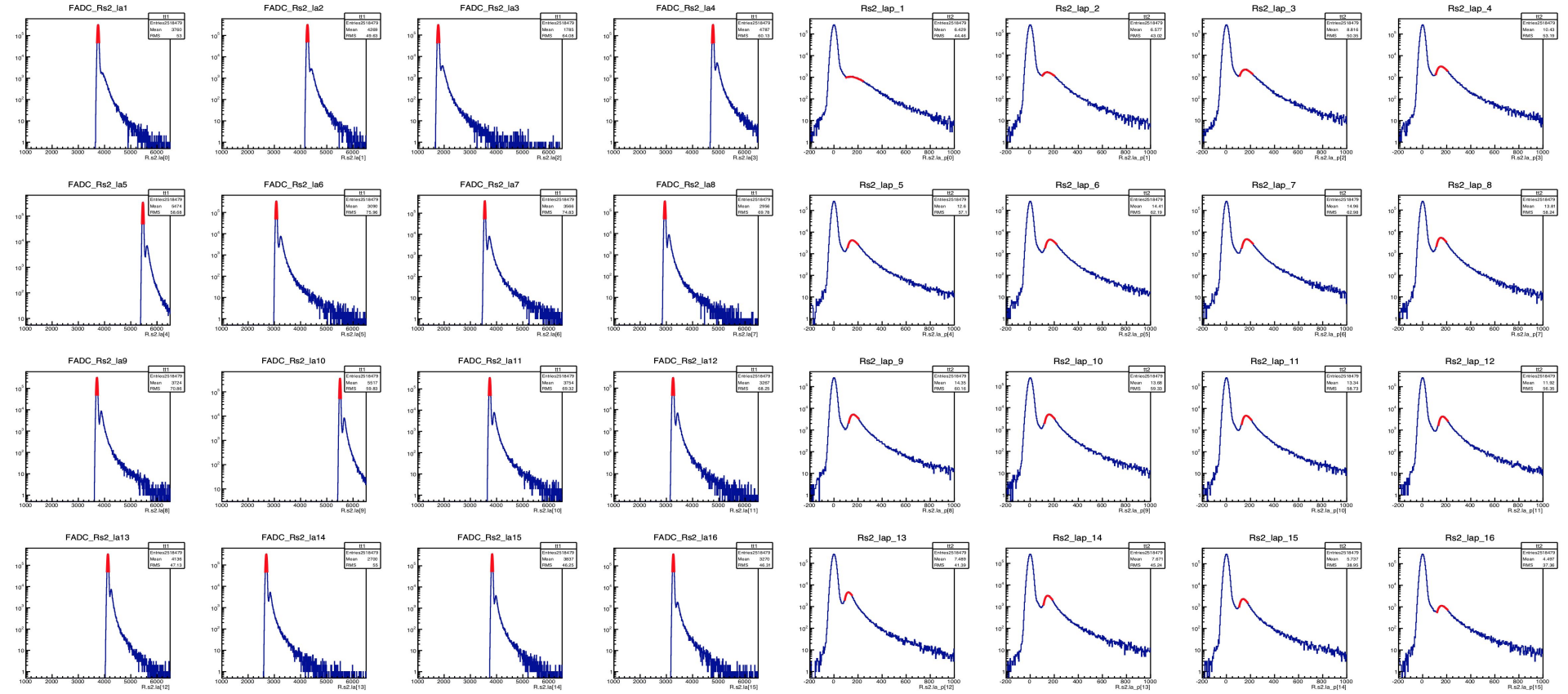
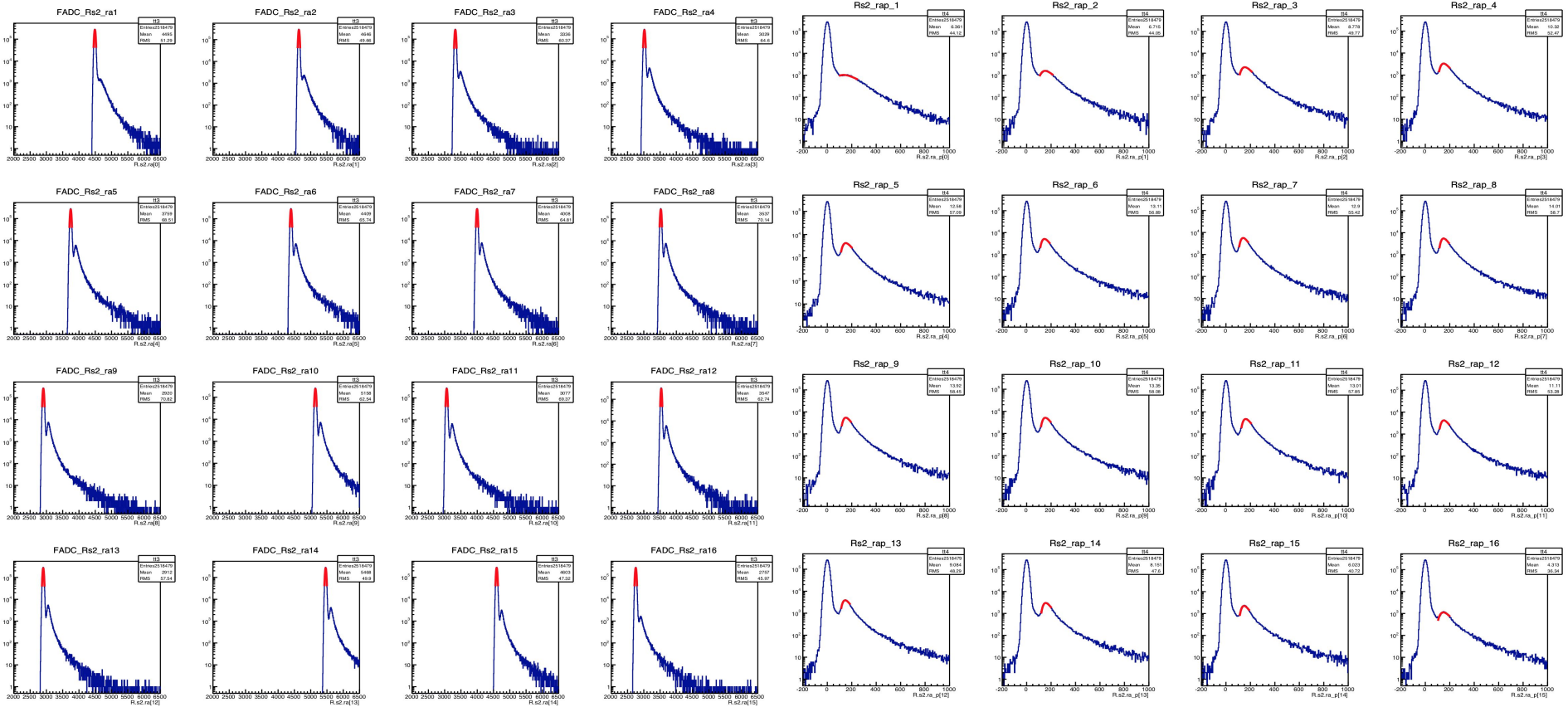
s2 RHRS-I


FADC_Rs2_la1
FADC_Rs2_la2
FADC_Rs2_la3
FADC_Rs2_la4
Rs2_lap_1
Rs2_lap_2
Rs2_lap_3
Rs2_lap_4
FADC_Rs2_la5
FADC_Rs2_la6
FADC_Rs2_la7
FADC_Rs2_la8
Rs2_lap_5
Rs2_lap_6
Rs2_lap_7
Rs2_lap_8
FADC_Rs2_la9
FADC_Rs2_la10
FADC_Rs2_la11
FADC_Rs2_la12
Rs2_lap_9
Rs2_lap_10
Rs2_lap_11
Rs2_lap_12
FADC_Rs2_la13
FADC_Rs2_la14
FADC_Rs2_la15
FADC_Rs2_la16
Rs2_lap_13
Rs2_lap_14
Rs2_lap_15
Rs2_lap_16

s2 RHRS-r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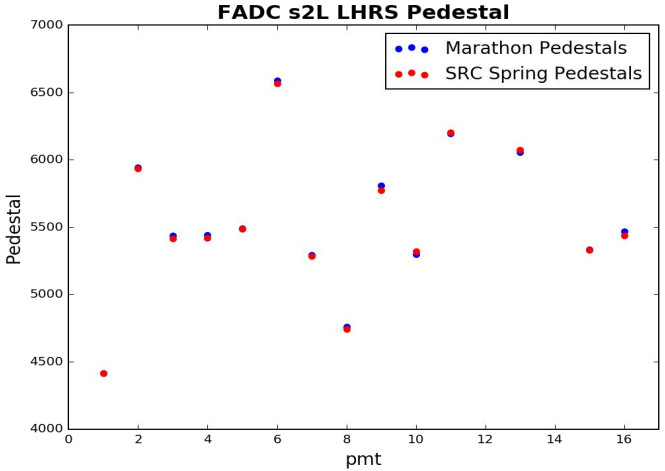
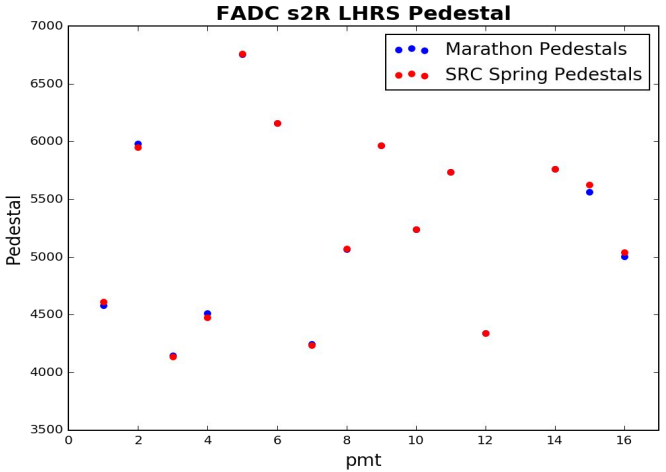
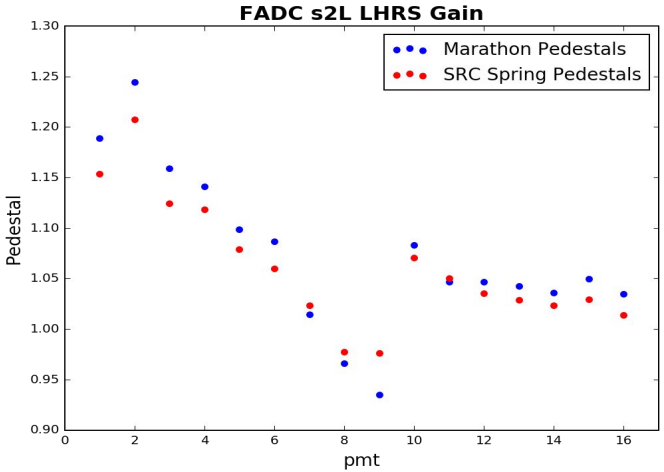
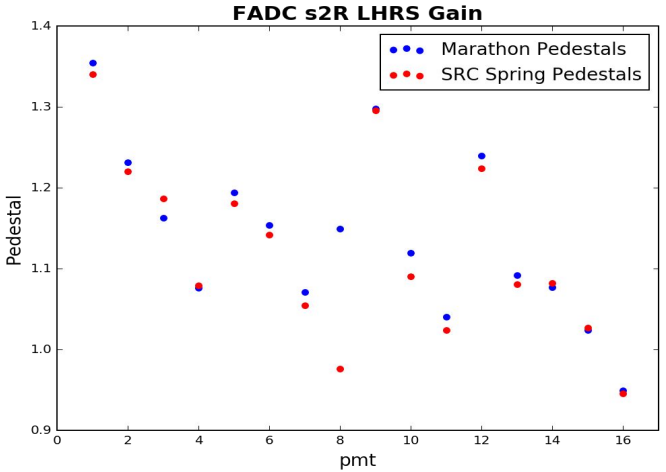
FADC_Rs2_ra2
FADC_Rs2_ra3
FADC_Rs2_ra4
Rs2_rap_1
Rs2_rap_2
Rs2_rap_3
Rs2_rap_4
FADC_Rs2_ra5
FADC_Rs2_ra6
FADC_Rs2_ra7
FADC_Rs2_ra8
Rs2_rap_5
Rs2_rap_6
Rs2_rap_7
Rs2_rap_8
FADC_Rs2_ra9
FADC_Rs2_ra10
FADC_Rs2_ra11
FADC_Rs2_ra12
Rs2_rap_9
Rs2_rap_10
Rs2_rap_11
Rs2_rap_12
FADC_Rs2_ra13
FADC_Rs2_ra14
FADC_Rs2_ra15
FADC_Rs2_ra16
Rs2_rap_13
Rs2_rap_14
Rs2_rap_15
Rs2_rap_16

Comparing LHRS with the previous calibration

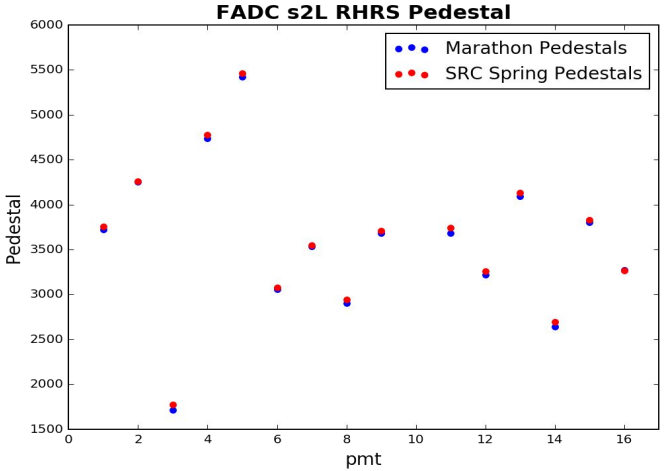


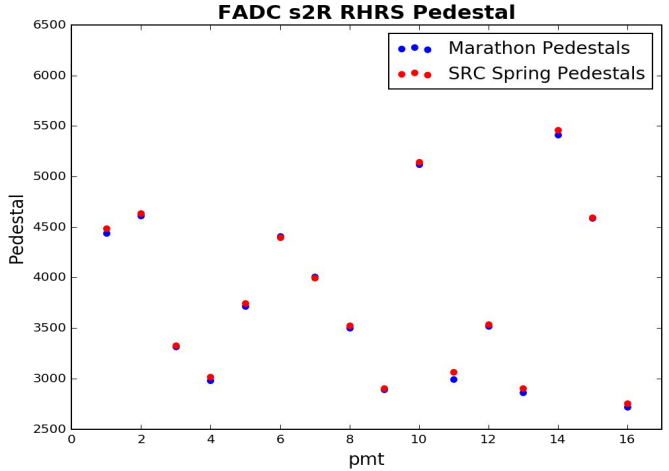


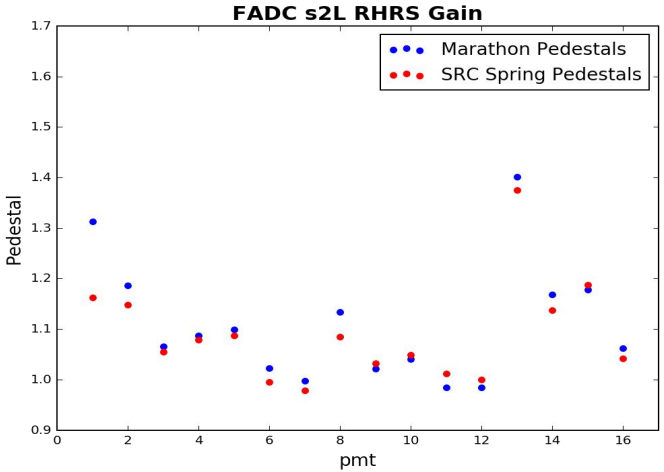


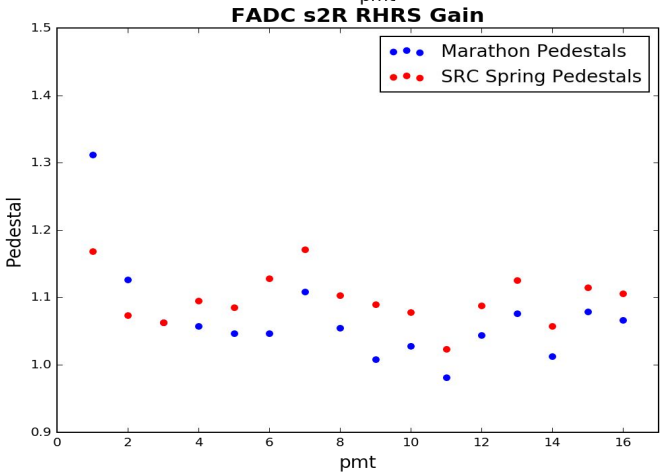


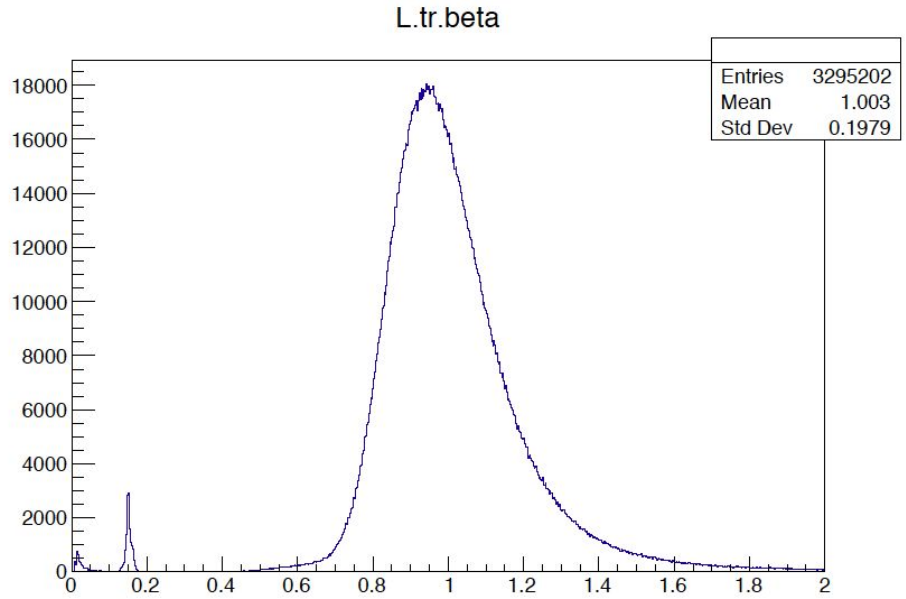
Comparing RHRS with the previous calibration

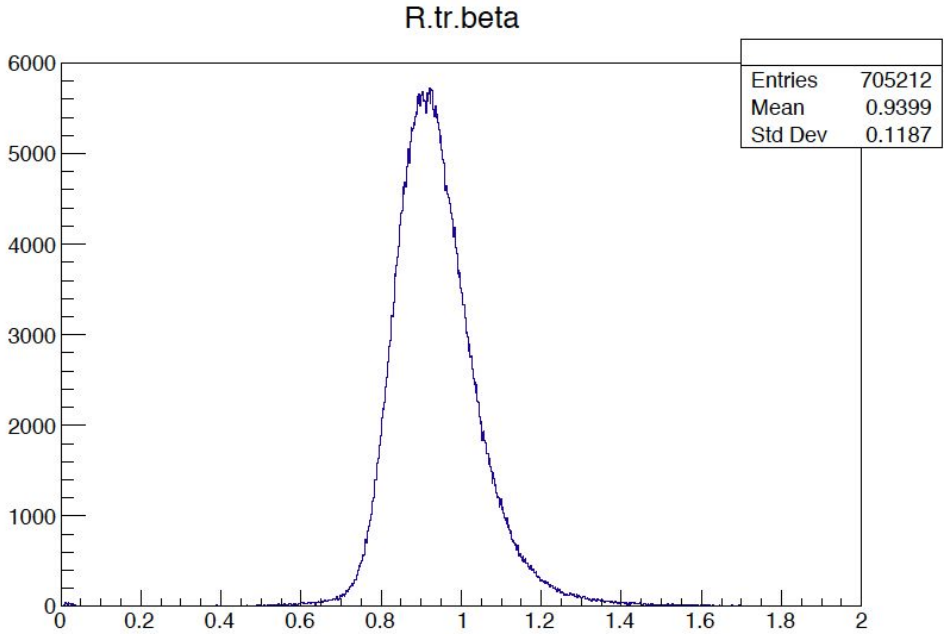









L.tr.beta
Entries 3295202
Mean 1.003
Std Dev 0.1979
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2


R.tr.beta
Entries 705212
Mean 0.9399
Std Dev 0.1187
6000
5000
4000
3000
2000
1000
0
0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2

Timing Calibration

Last calibrated before E12-11-112 in Marathon: --------[2018-01-11 00:00:00 -0500]

The s0 signal are in the root files from fadc and flashbus, therefore a calibrations have to be done for both.

LHRS Calibration using Run 3106

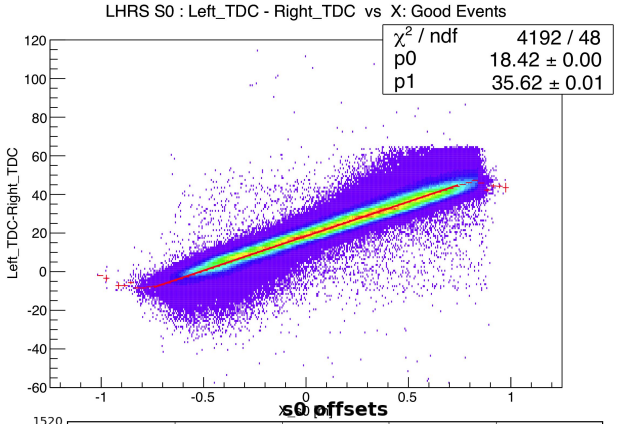
Beam Energy = 2.218 GeV
Scattering Angle = 21.778 degrees
Momentum =1.839 GeV

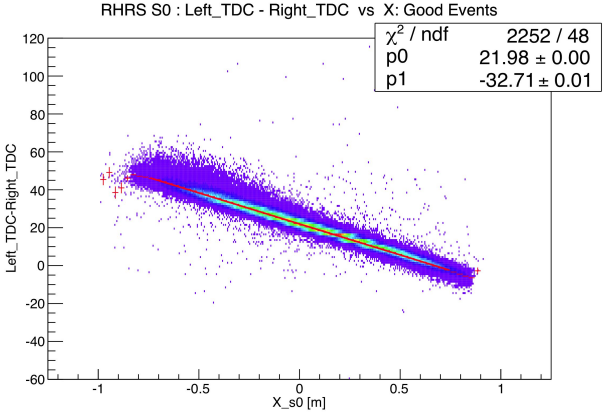
RHRS Calibration Runs 93050-93084

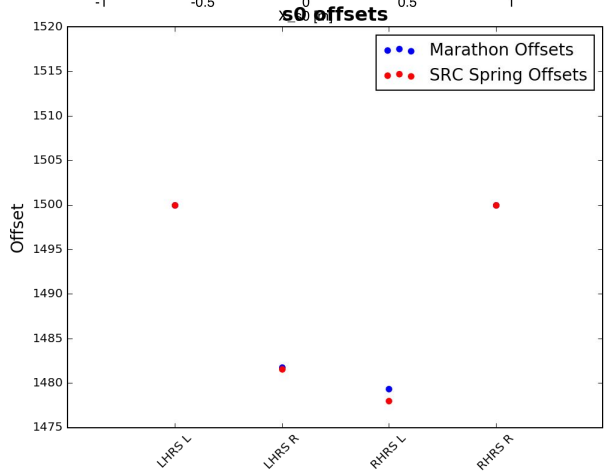
Beam Energy = 2.218 GeV
Scattering Angle = 42.025 degrees
Momentum =1.379 GeV

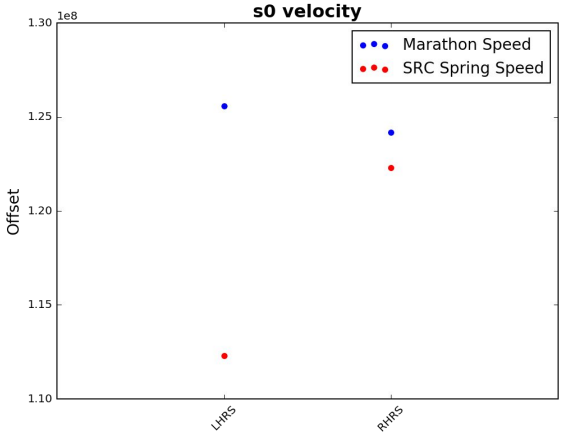
Codes and information Courtesy Tong Su
https://hallaweb.jlab.org/dvcslog/H3/30

S0 -> Determination of offsets and speed of light

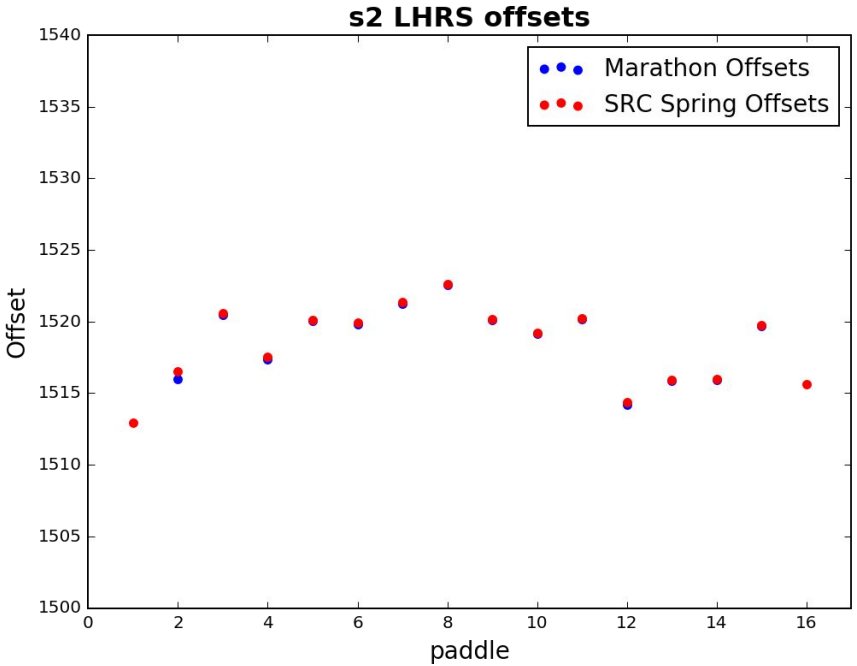


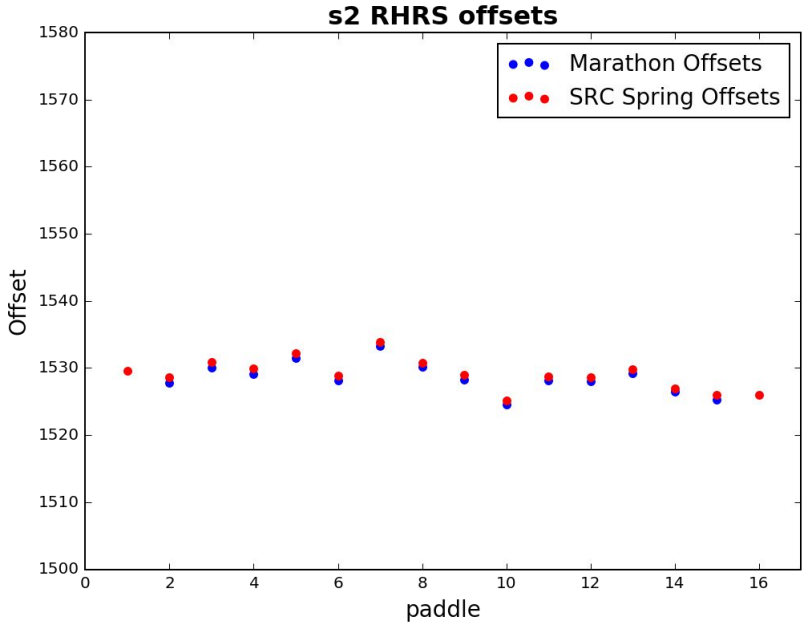






S2 -> Offsets


s2 LHRS offsets
Marathon Offsets
SRC Spring Offsets
Offset
paddle
1540
1535
1530
1525
1520
1515
1510
1505
1500
0
2
4
6
8
10
12
14
16


s2 RHRS offsets
Marathon Offsets
SRC Spring Offsets
Offset
paddle
1580
1570
1560
1550
1540
1530
1520
1510
1500
0
2
4
6
8
10
12
14
16

Cherenkov Detector

FADC---SPE=ch 300
Fbus---SPE=ch 100-

Last calibrated before E12-11-112 in Marathon: --------[2018-1-23 00:00:00 -0500]

The Cherenkov signal are in the root files from fadc and flashbus, therefore a calibrations have to be done for both.

LHRS Calibration using Run 3106

Beam Energy = 2.218 GeV
Scattering Angle = 21.778 degrees
Momentum =1.839 GeV

RHRS Calibration Runs 93050-93084

Beam Energy = 2.218 GeV
Scattering Angle = 42.025 degrees
Momentum =1.379 GeV

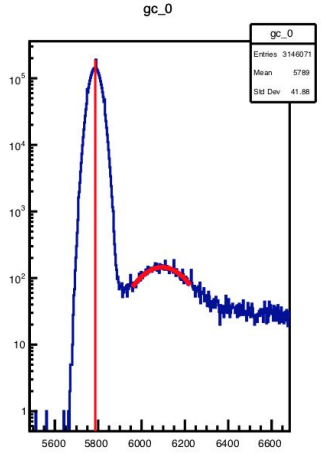
Codes and information Courtesy of Shujie Li and Hanjie Liu
https://hallaweb.jlab.org/dvcslog/H3/13
https://hallaweb.jlab.org/dvcslog/H3/24

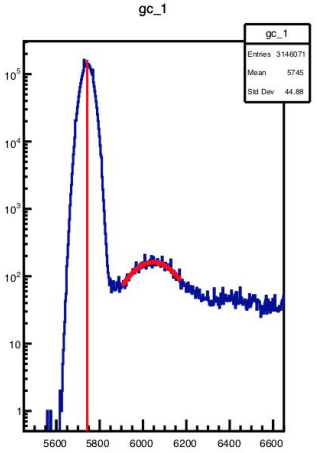
LHRS

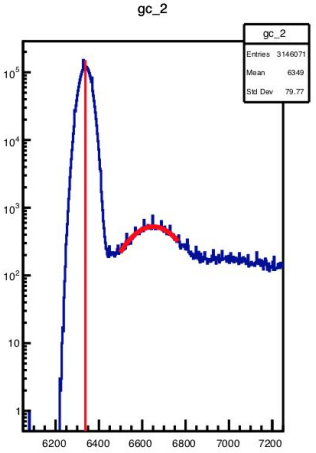
----------FADC---SPE=ch 300----------

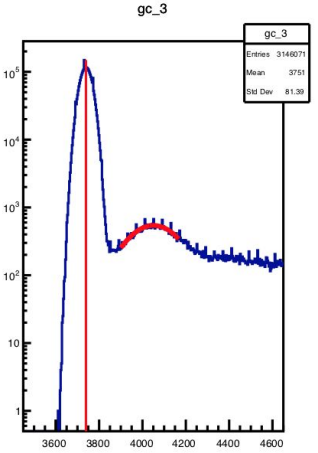
L.cer.adc.pedestals = 5786.55 5742.56 6337.8 3739.15 6231.44 4051.26 5583.43 3679.19 5976.22 4887.11
L.cer.adc.gains = 0.973566 0.984787 0.960089 0.96275 0.87566 0.797971 1.08449 0.919679 0.994483 1.06921

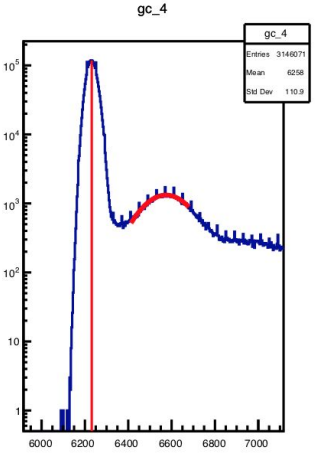
----------Fbus---SPE=ch 100----------
FbusL.cer.adc.pedestals = 485.820 444.827 478.743 465.983 585.116 558.076 581.645 513.352 519.503 492.5766
FbusL.cer.adc.gains = 1.04372 1.08502 1.00931 1.02979 0.942899 0.835145 1.15115 0.977579 1.10097 1.15586


gc_0
gc_0
Entries 3146071
Mean 5789
Std Dev 41.88

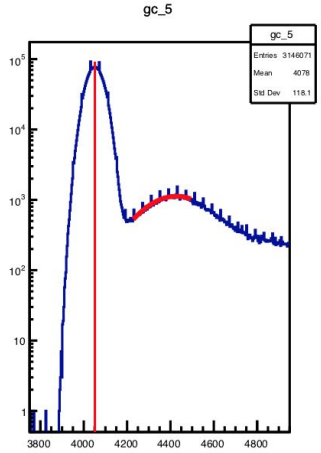

gc_1
gc_1
Entries 3146071
Mean 5745
Std Dev 44.88

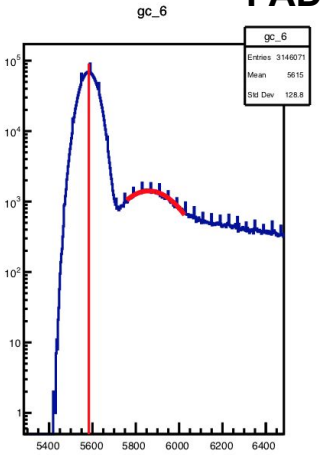

gc_2
gc_2
Entries 3146071
Mean 6349
Std Dev 79.77

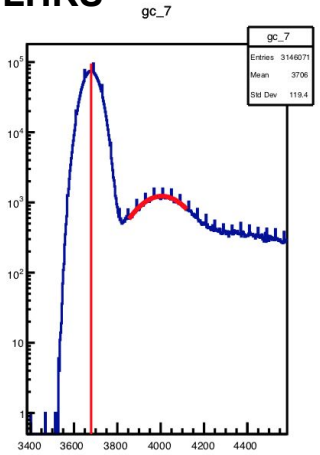

gc_3
gc_3
Entries 3146071
Mean 3751
Std Dev 81.39

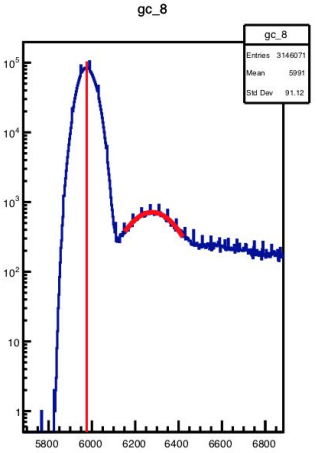

gc_4
gc_4
Entries 3146071
Mean 6258
Std Dev 110.9

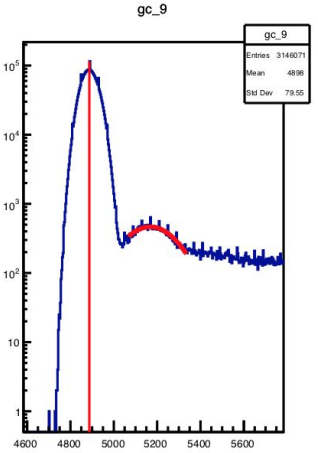
FADC LHRS

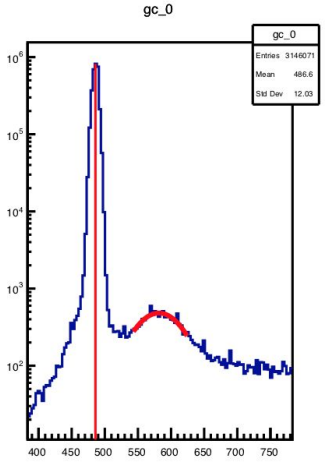

gc_5
gc_5
Entries 3146071
Mean 4078
Std Dev 118.1

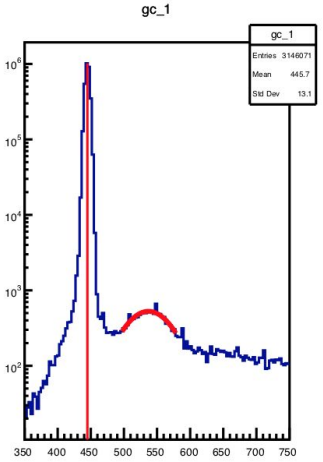

gc_6
gc_6
Entries 3146071
Mean 5615
Std Dev 128.8

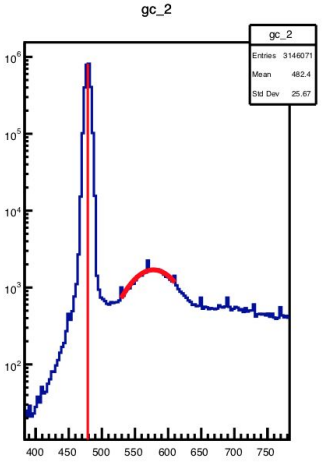

gc_7
gc_7
Entries 3146071
Mean 3706
Std Dev 119.4

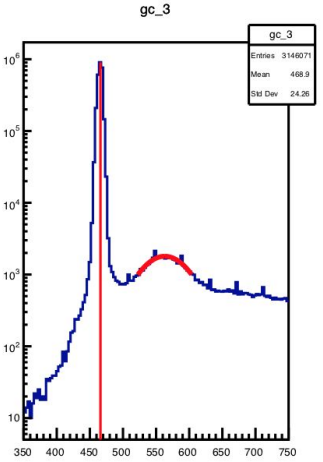

gc_8
gc_8
Entries 3146071
Mean 5991
Std Dev 91.12

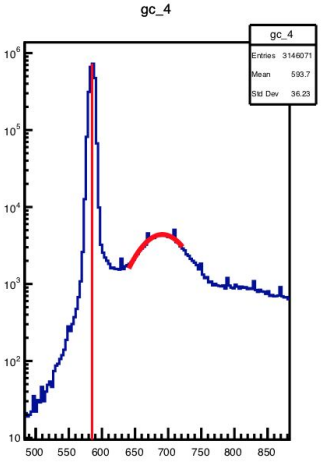

gc_9
gc_9
Entries 3146071
Mean 4898
Std Dev 79.55


gc_0
gc_0
Entries 3146071
Mean 486.6
Std Dev 12.03

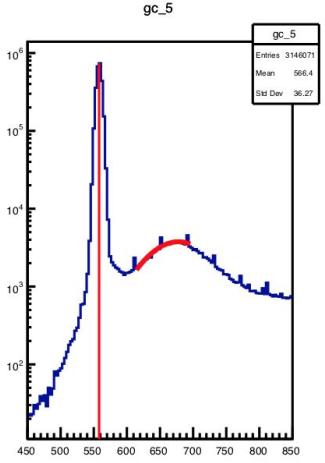

gc_1
gc_1
Entries 3146071
Mean 445.7
Std Dev 13.1

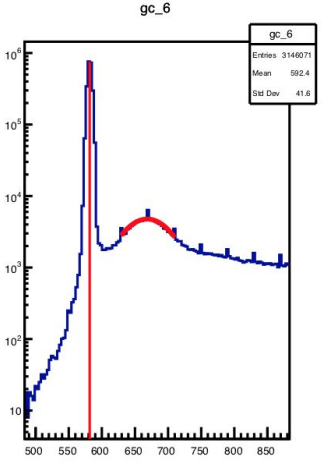

gc_2
gc_2
Entries 3146071
Mean 482.4
Std Dev 25.67

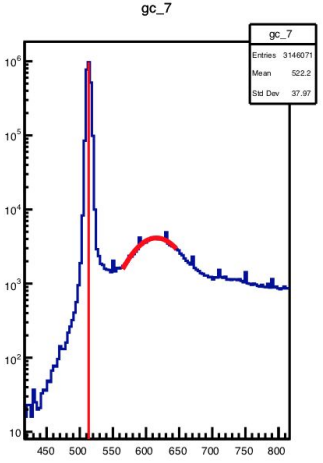

gc_3
gc_3
Entries 3146071
Mean 468.9
Std Dev 24.26

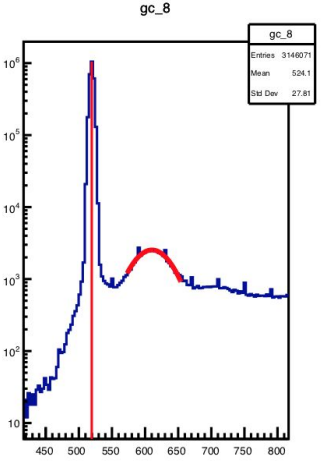

gc_4
gc_4
Entries 3146071
Mean 593.7
Std Dev 36.23

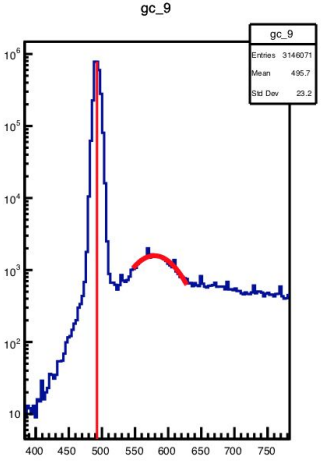
fbus LHRS


gc_5
gc_5
Entries 3146071
Mean 566.4
Std Dev 36.27

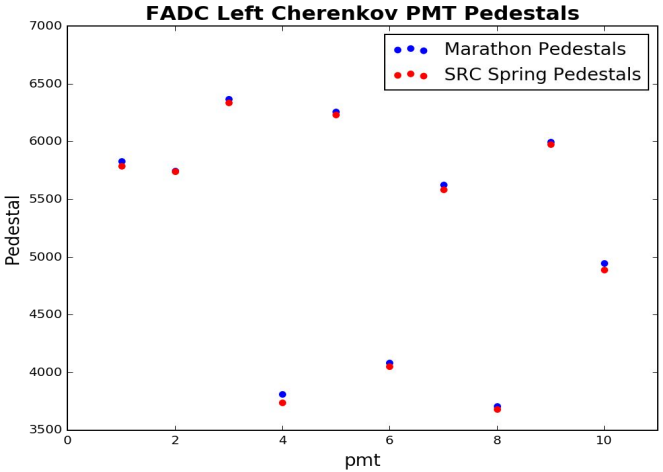

gc_6
gc_6
Entries 3146071
Mean 592.4
Std Dev 41.6

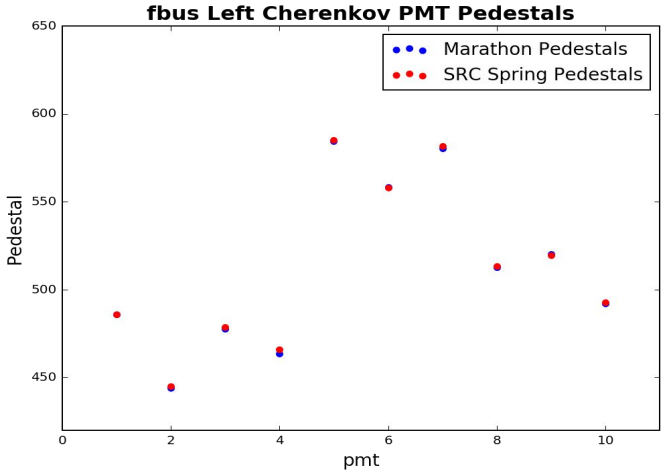

gc_7
gc_7
Entries 3146071
Mean 522.2
Std Dev 37.97

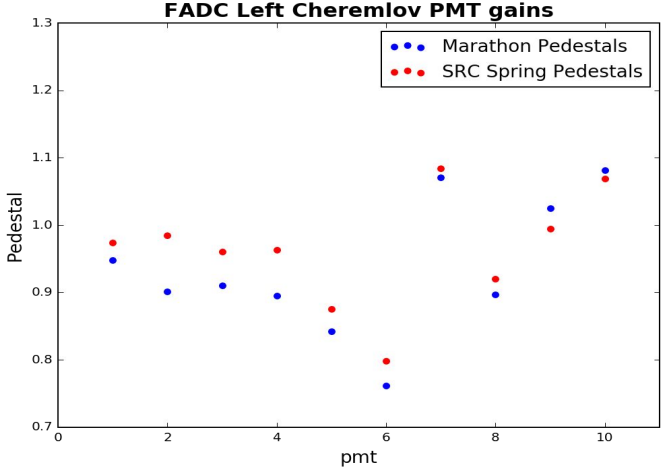

gc_8
gc_8
Entries 3146071
Mean 524.1
Std Dev 27.81

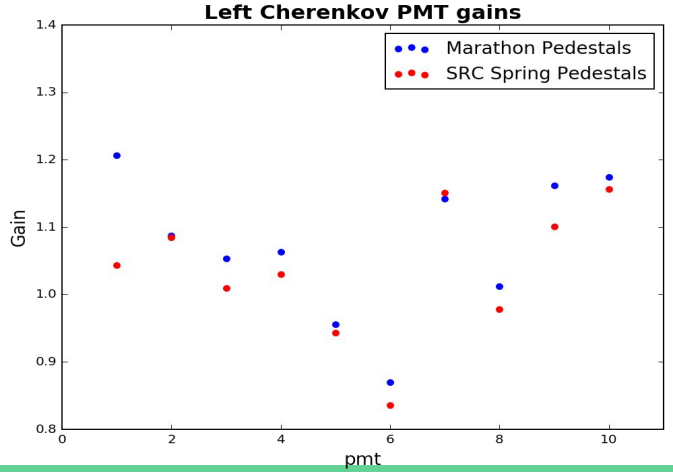

gc_9
gc_9
Entries 3146071
Mean 495.7
Std Dev 29.2

Comparing LHRS with the previous calibration





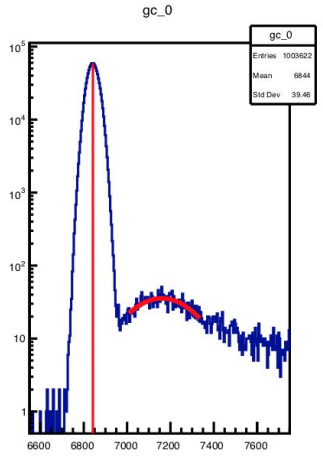


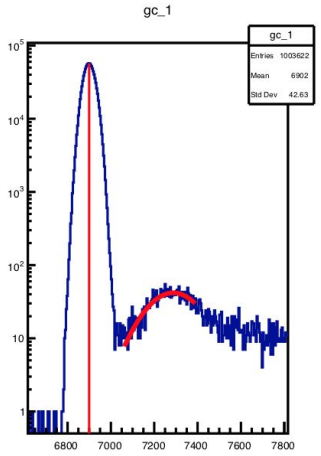


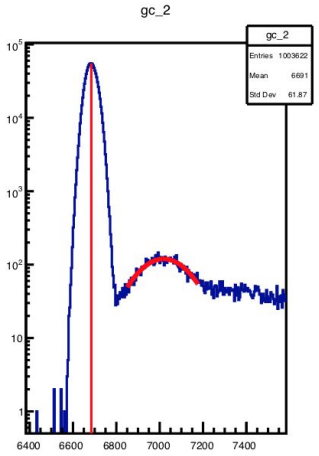
RHRS

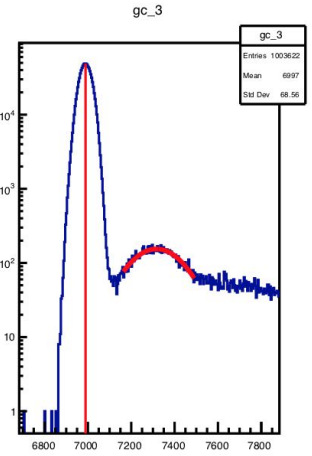
----------FADC---SPE=ch 300----------
R.cer.adc.pedestals = 6842.19 6899.77 6684.66 6989.11 6443.06 6556.42 6499.1 7161.65 7101.72 5991.28
R.cer.adc.gains = 0.94418 0.772785 0.899128 0.915852 0.97665 0.918707 0.921524 0.970746 0.90399 0.894755

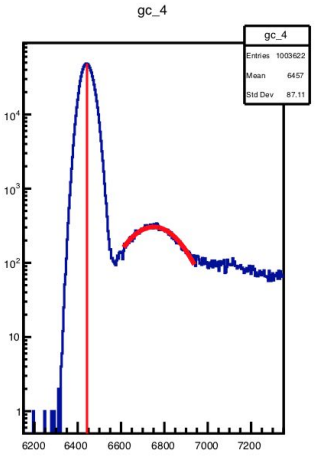
----------Fbus---SPE=ch 100----------
FbusR.cer.adc.pedestals = 440.371 384.468 351.621 488.256 554.709 553.635 557.726 485.733 232.393 470.705
FbusR.cer.adc.gains = 1.05943 0.860543 1.03372 1.00812 1.09509 0.988836 1.00583 1.07302 0.982699 0.986526

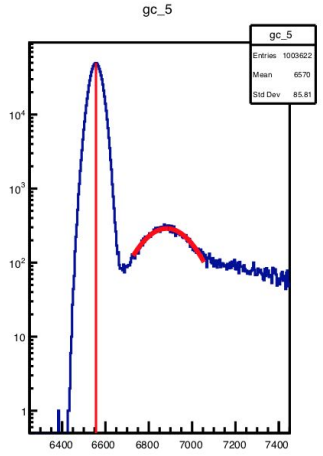

gc_0
gc_0
Entries 1003622
Mean 6844
Std Dev 39.46

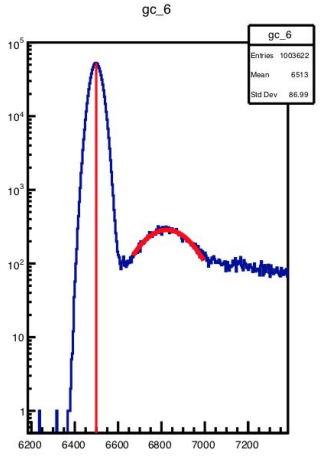

gc_1
gc_1
Entries 1003622
Mean 6902
Std Dev 42.63

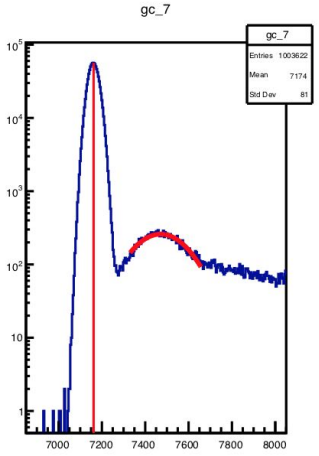

gc_2
gc_2
Entries 1003622
Mean 6691
Std Dev 61.87

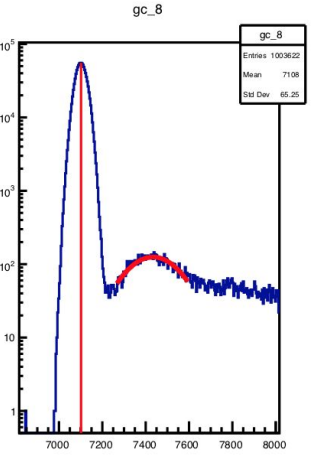

gc_3
gc_3
Entries 1003622
Mean 6997
Std Dev 68.56

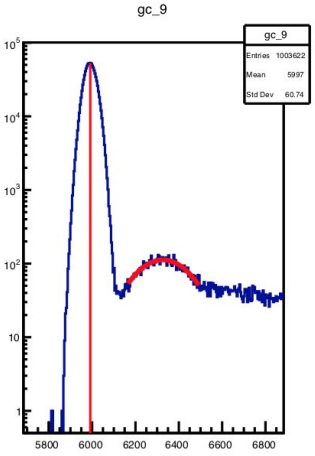

gc_4
gc_4
Entries 1003622
Mean 6457
Std Dev 87.11

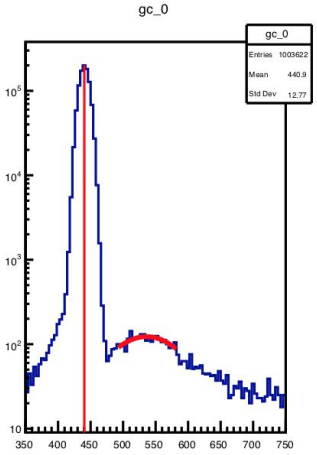

gc_5
gc_5
Entries 1003622
Mean 6570
Std Dev 85.81

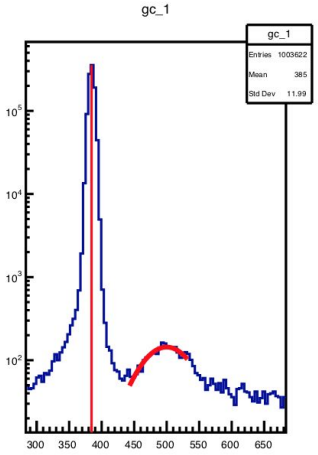

gc_6
gc_6
Entries 1003622
Mean 6513
Std Dev 86.99

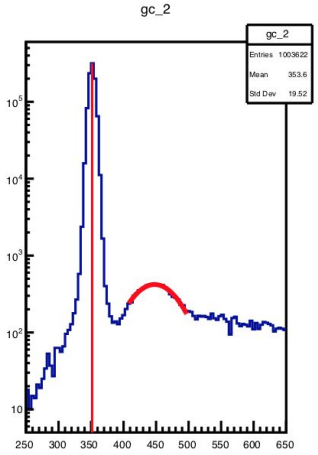

gc_7
gc_7
Entries 1003622
Mean 7174
Std Dev 81

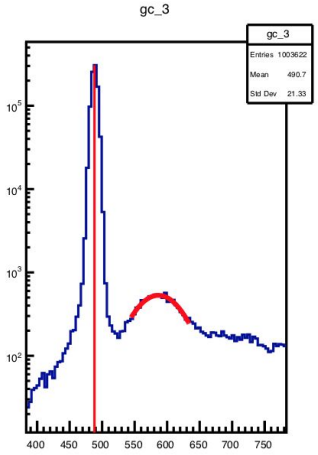

gc_8
gc_8
Entries 1003622
Mean 7108
Std Dev 65.25

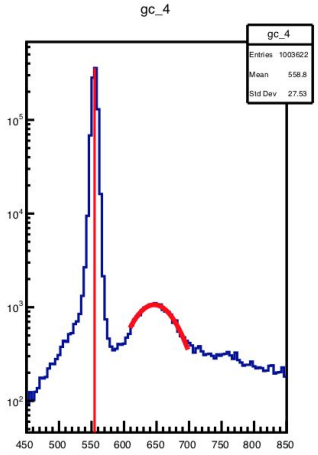

gc_9
gc_9
Entries 1003622
Mean 5997
Std Dev 60.74

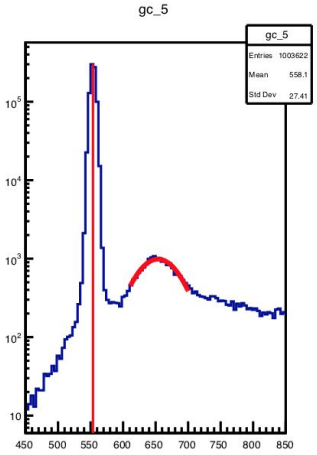

gc_0
gc_0
Entries 1003622
Mean 440.9
Std Dev 12.77

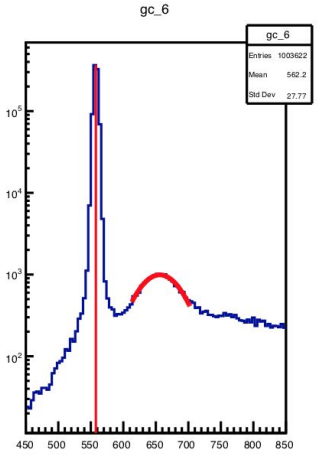

gc_1
gc_1
Entries 1003622
Mean 385
Std Dev 11.99

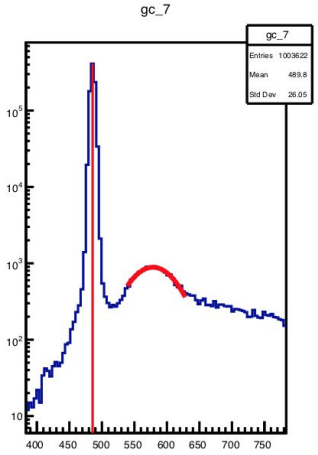

gc_2
gc_2
Entries 1003622
Mean 353.6
Std Dev 19.52

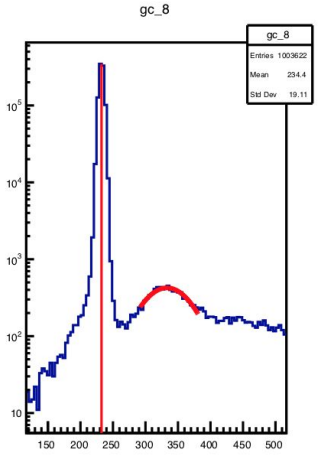

gc_3
gc_3
Entries 1003622
Mean 490.7
Std Dev 21.33

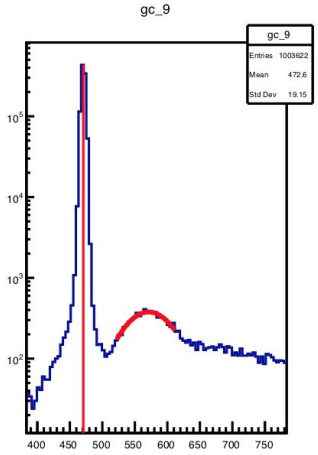

gc_4
gc_4
Entries 1003622
Mean 558.8
Std Dev 27.53


gc_5
gc_5
Entries 1003622
Mean 558.1
Std Dev 27.41

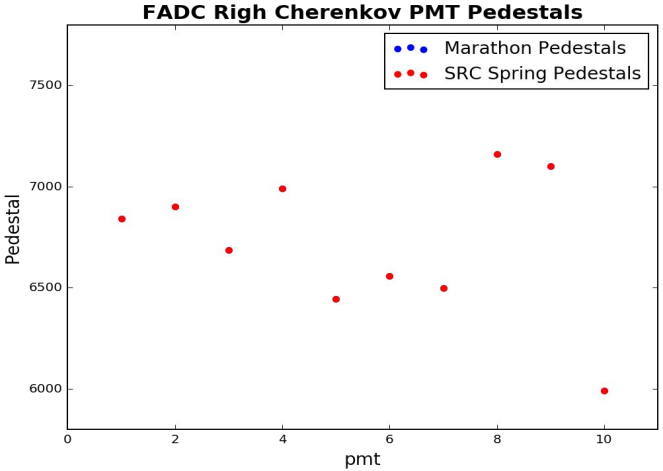

gc_6
gc_6
Entries 1003622
Mean 562.2
Std Dev 27.77

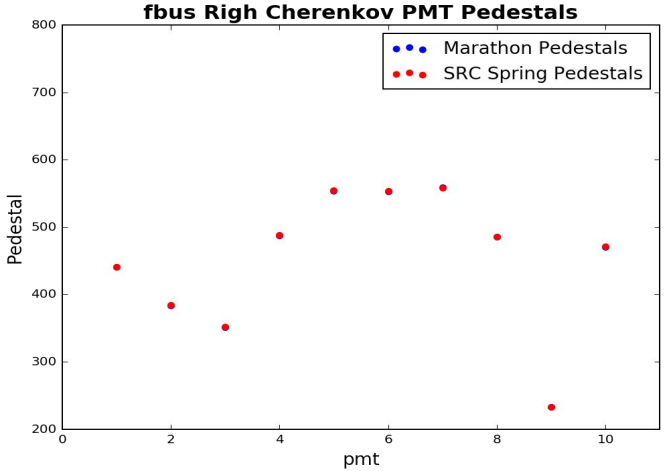

gc_7
gc_7
Entries 1003622
Mean 489.8
Std Dev 26.05

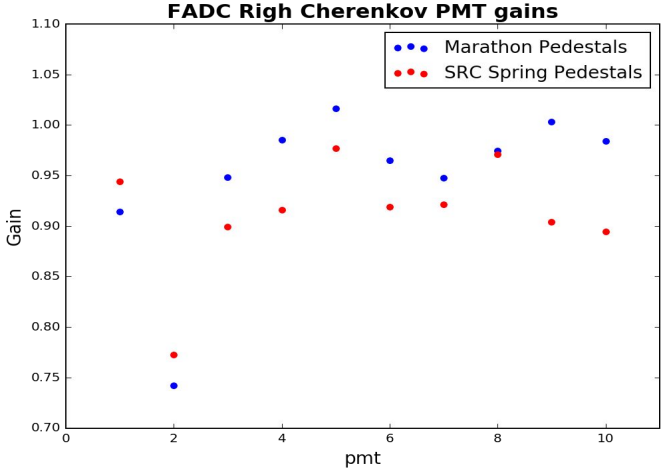

gc_8
gc_8
Entries 1003622
Mean 234.4
Std Dev 19.11

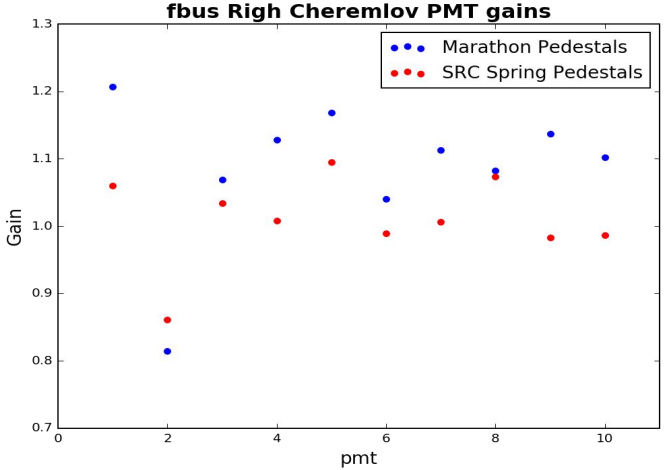

gc_9
gc_9
Entries 1003622
Mean 472.6
Std Dev 19.15

Comparing RHRS with the previous calibration









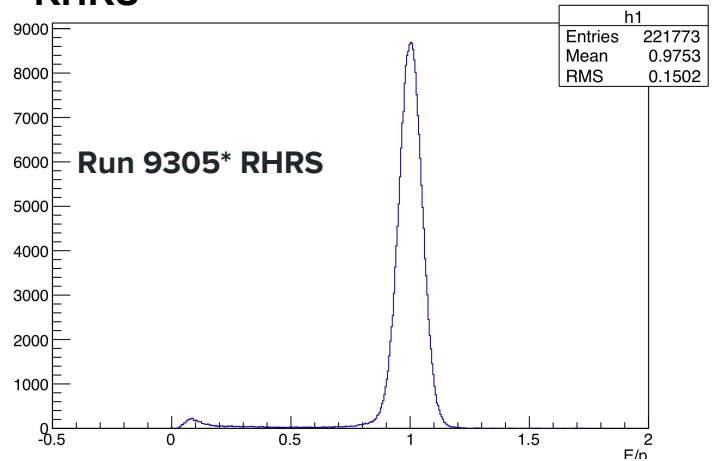
Calorimeters

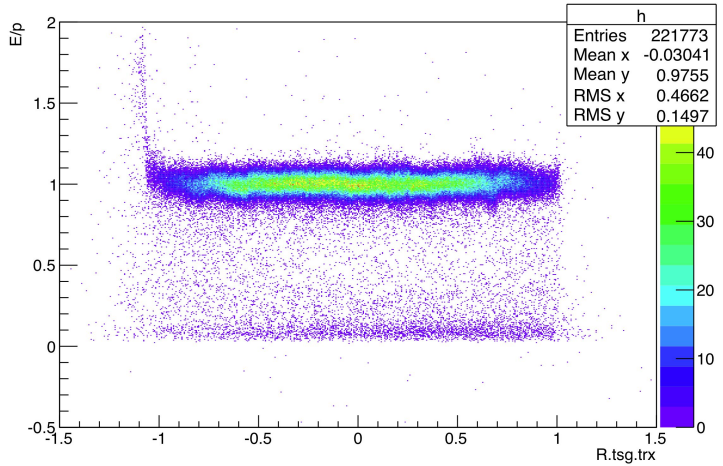
Codes and information Courtesy of Tyler Kutz Tong Su and Michael Nycz

https://hallaweb.jlab.org/dvcslog/H3/20

https://hallaweb.jlab.org/dvcslog/H3/35

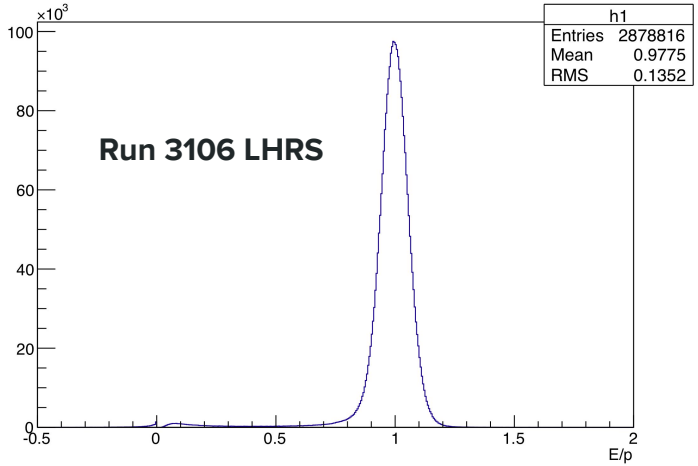
RHRS

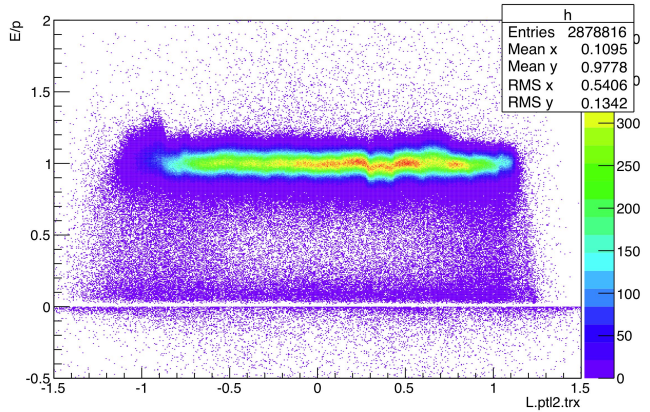




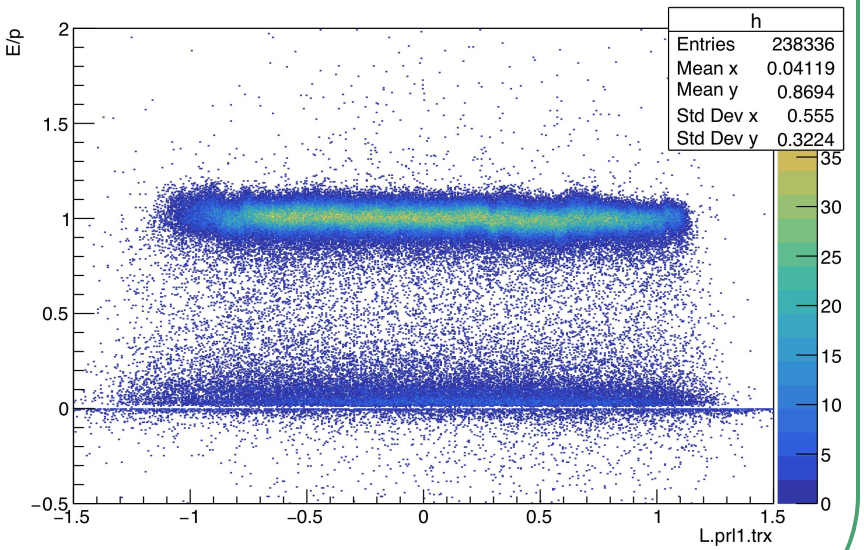
tr.n = 1
Trig 2 LHRS and Trig 5 RHRS
cer.asum_c>2000

LHRS

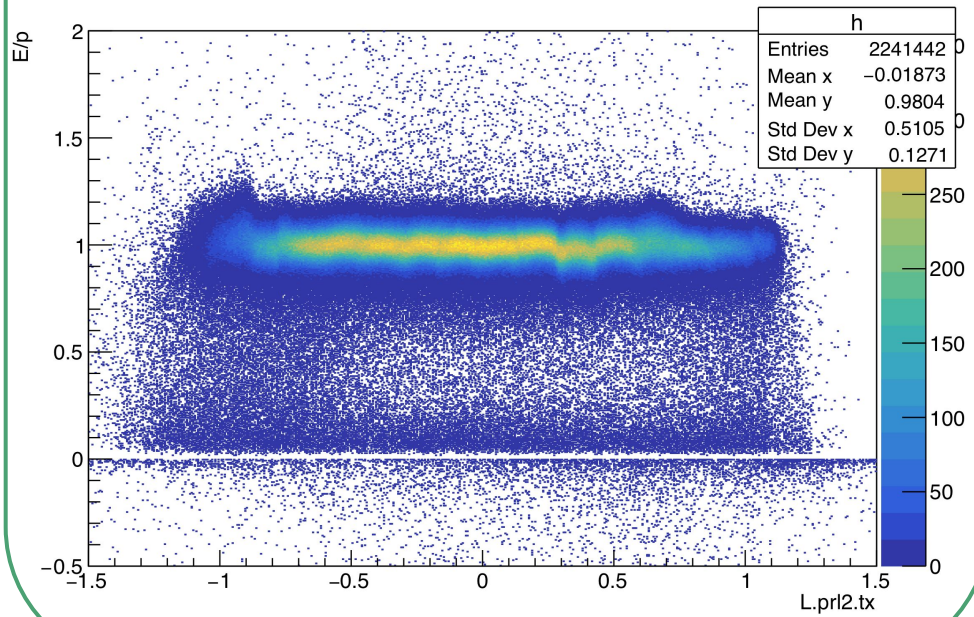




Marathon Runs: 1348, 1354, 1355



src run: 3097, 3098



To do:

*Raster Calibration in its final stage and courtesy of Tyler Hague.

*Recalibrate pion rejector (LHRS)