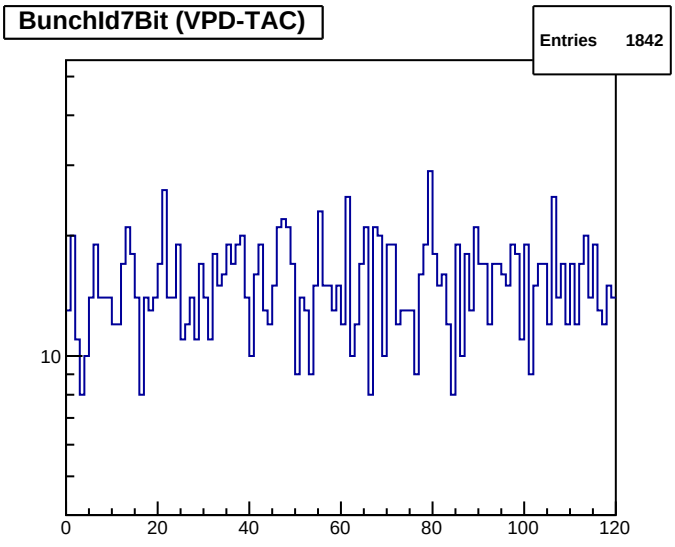
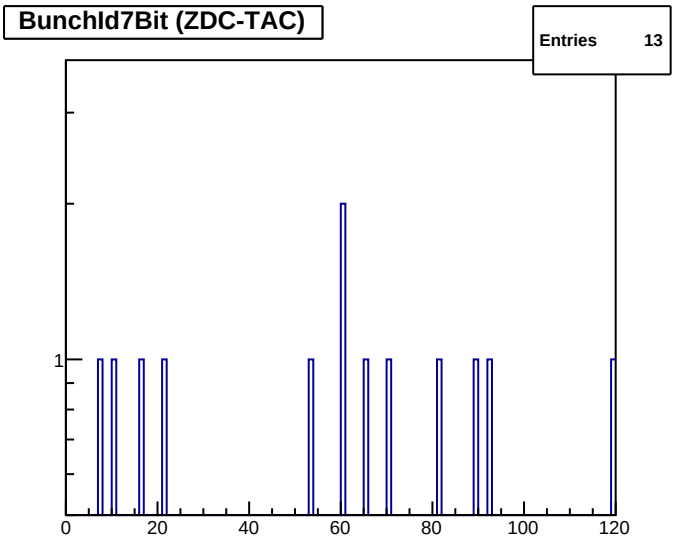
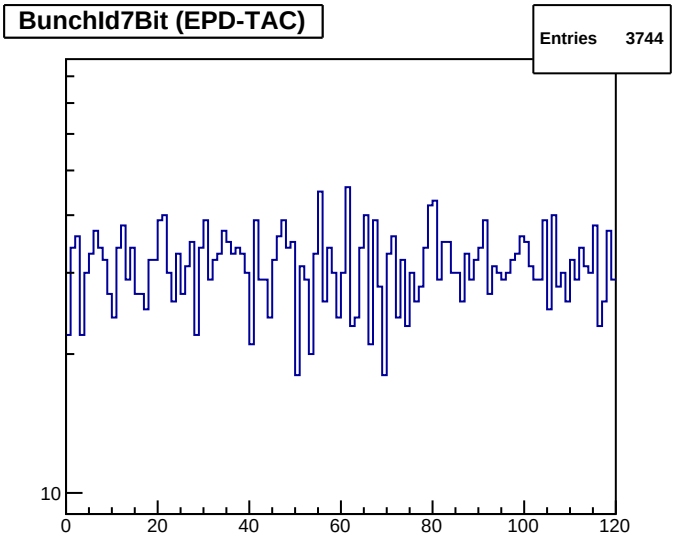
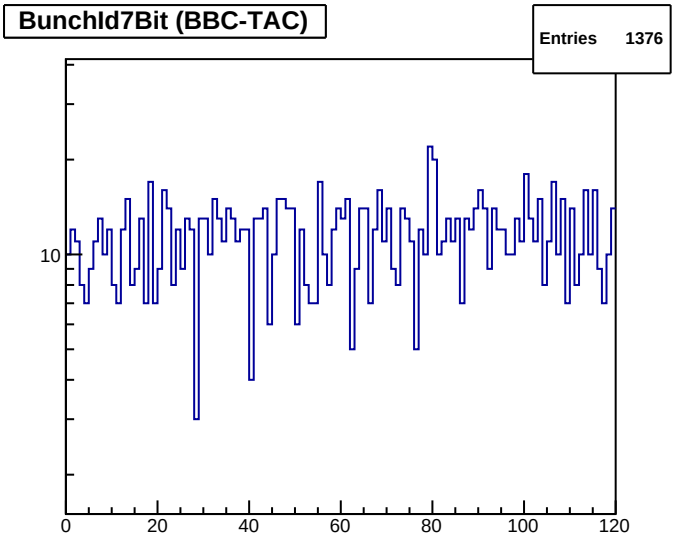
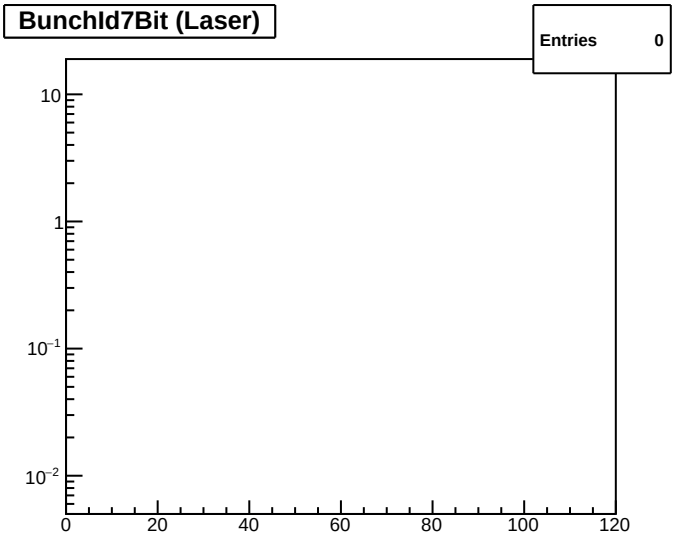
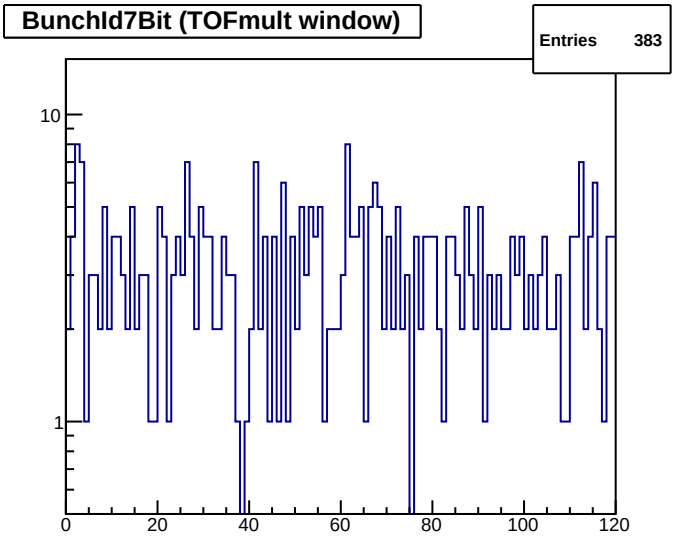

BunchId7Bit (VPD-TAC)
Entries 1842
10
0 20 40 60 80 100 120

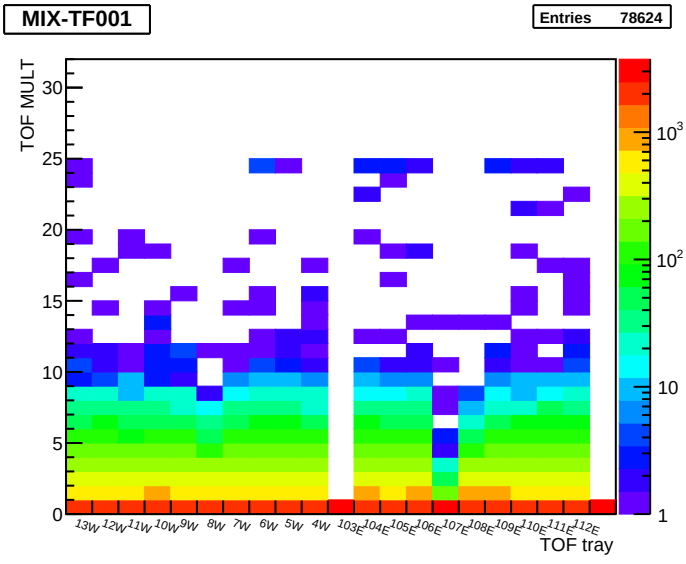

BunchId7Bit (ZDC-TAC)
Entries 13
1
0 20 40 60 80 100 120

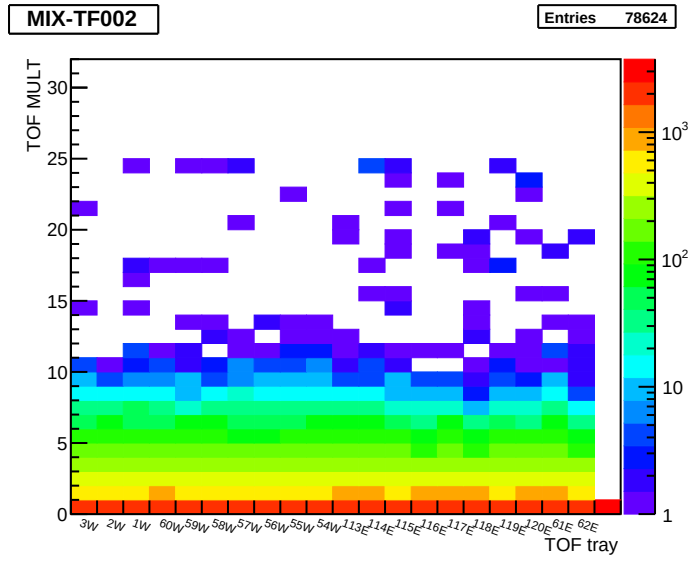

BunchId7Bit (EPD-TAC)
Entries 3744
10
0 20 40 60 80 100 120

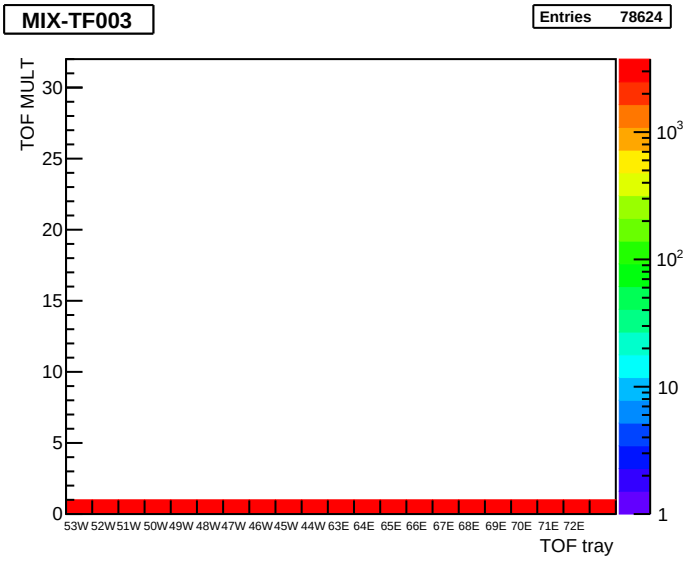

BunchId7Bit (BBC-TAC)
Entries 1376
10
0 20 40 60 80 100 120

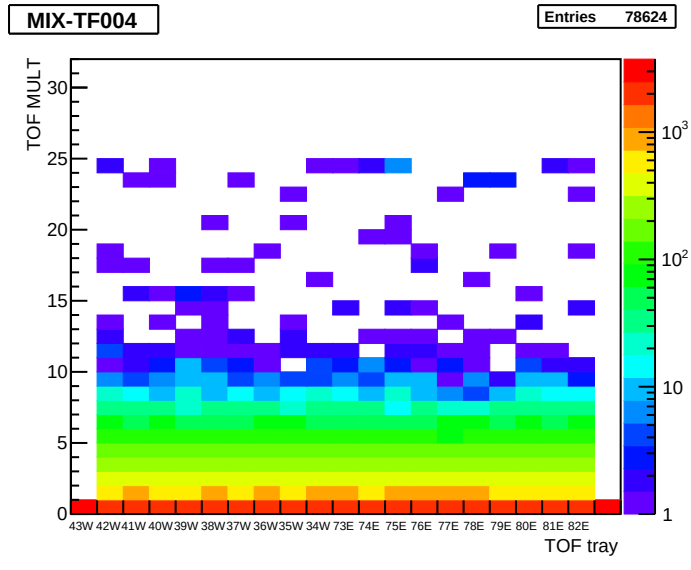

BunchId7Bit (Laser)
Entries 0
10
1
10⁻¹
10⁻²
0 20 40 60 80 100 120

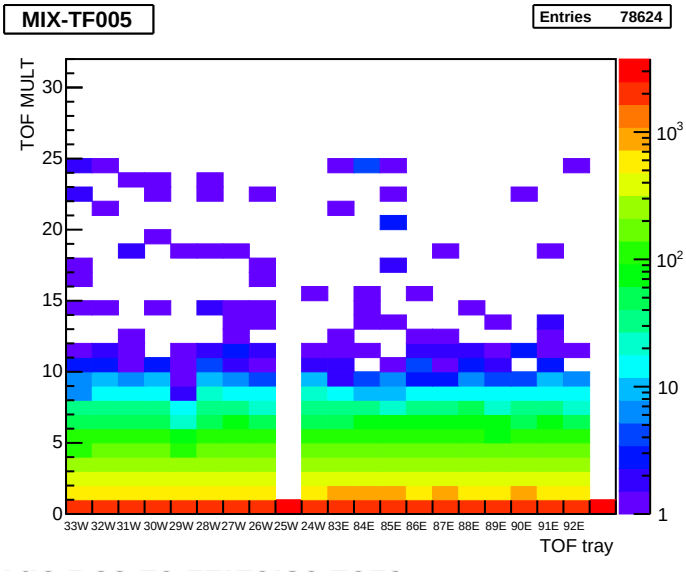

BunchId7Bit (TOFmult window)
Entries 383
10
1
0 20 40 60 80 100 120

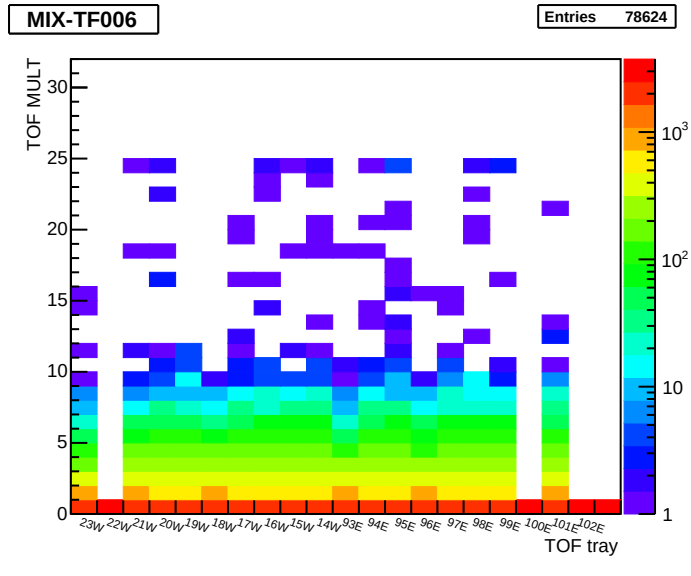

MIX-TF001
Entries 78624
TOF MULT
TOF tray

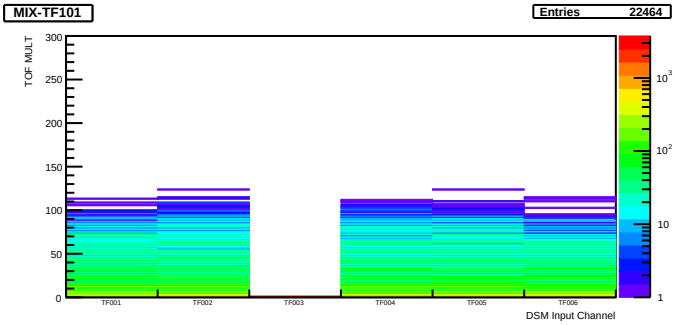

MIX-TF002
Entries 78624
TOF MULT
TOF tray

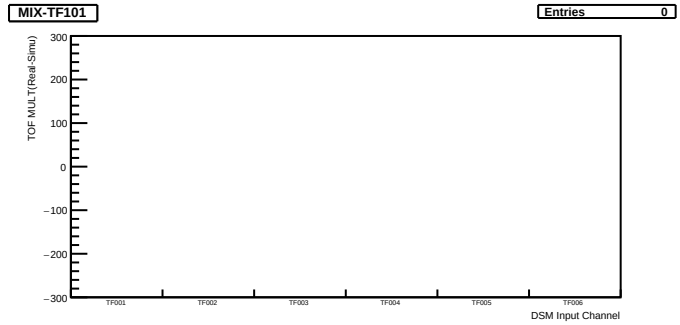

MIX-TF003
Entries 78624
TOF MULT
TOF tray

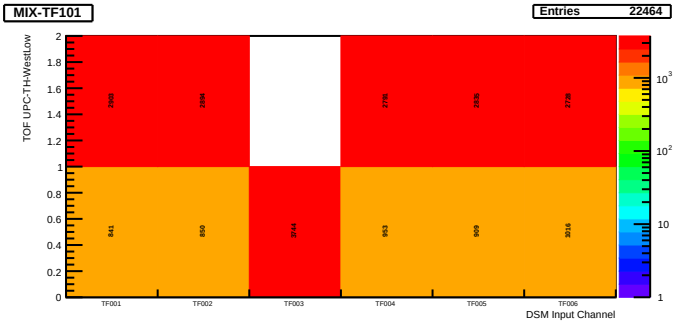

MIX-TF004
Entries 78624
TOF MULT
TOF tray

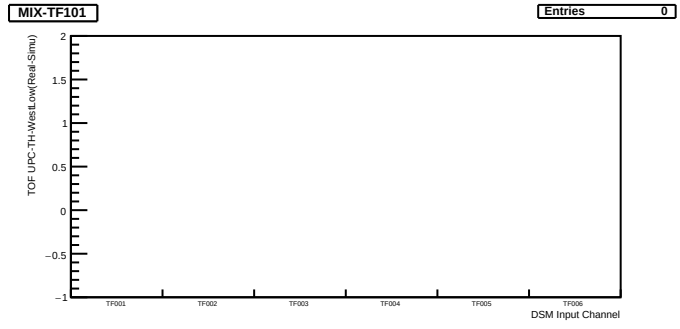

MIX-TF005
Entries 78624
TOF MULT
TOF tray

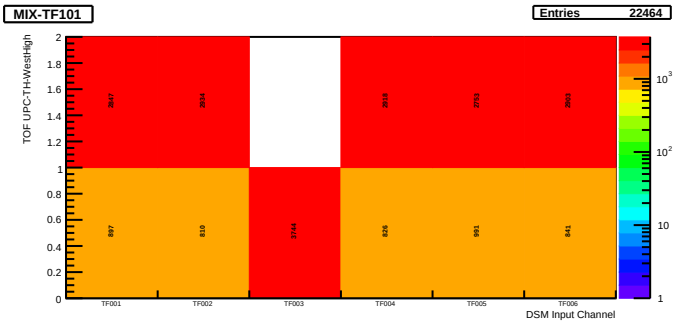

MIX-TF006
Entries 78624
TOF MULT
TOF tray

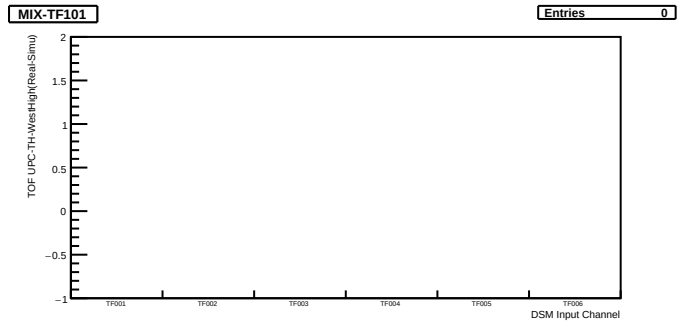

MIX-TF101
Entries 22464
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

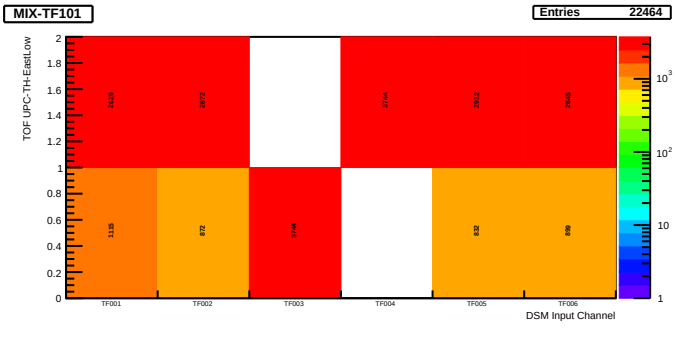

MIX-TF101
Entries 0
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

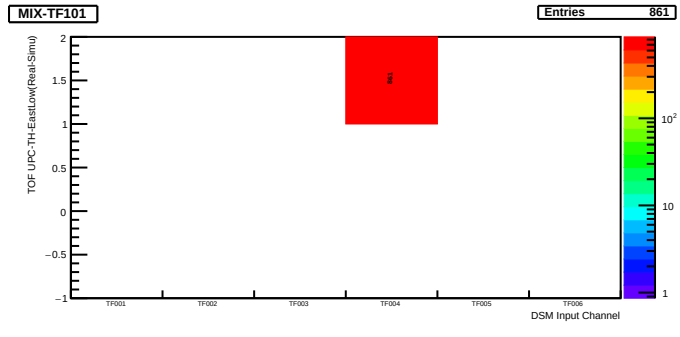

MIX-TF101
Entries 22464
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

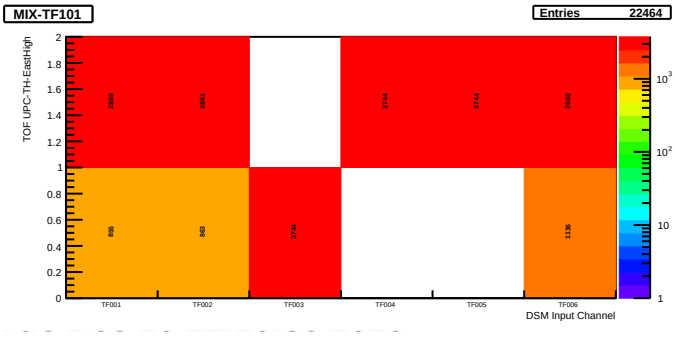

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

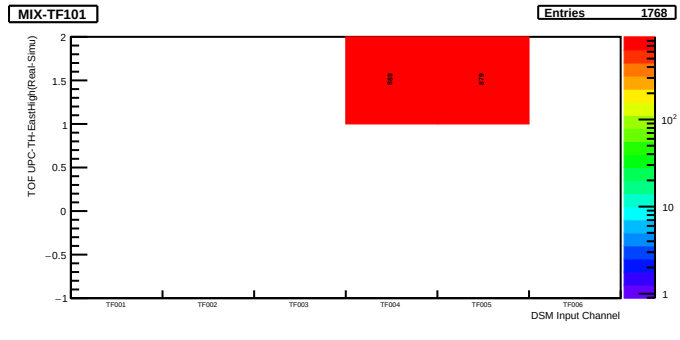

MIX-TF101
Entries 22464
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

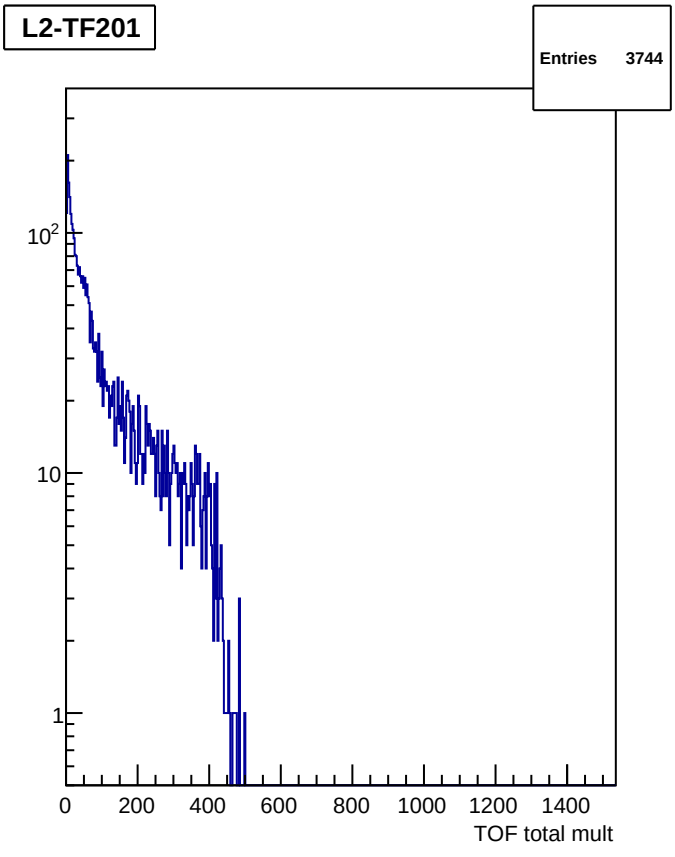

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

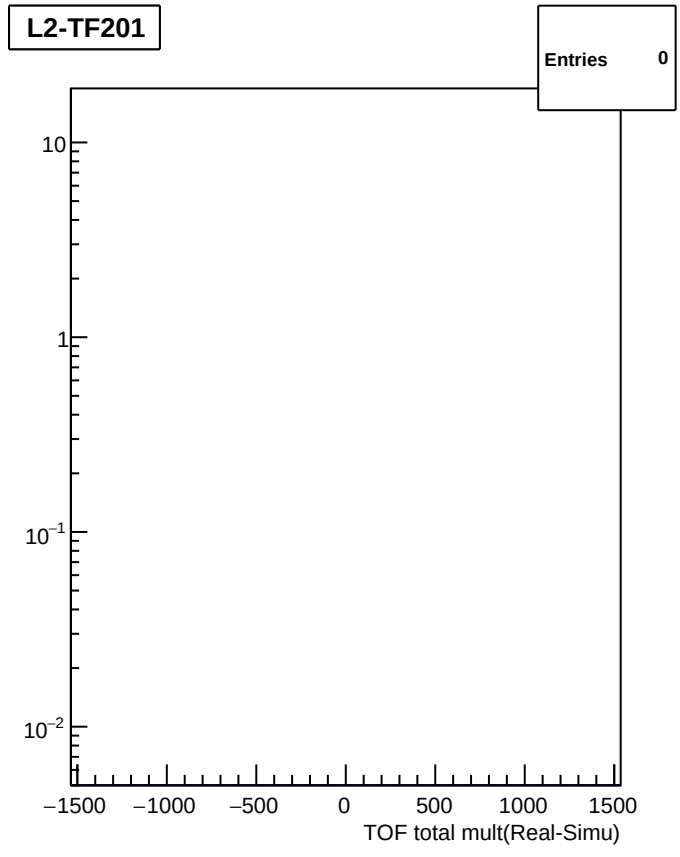

MIX-TF101
Entries 22464
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

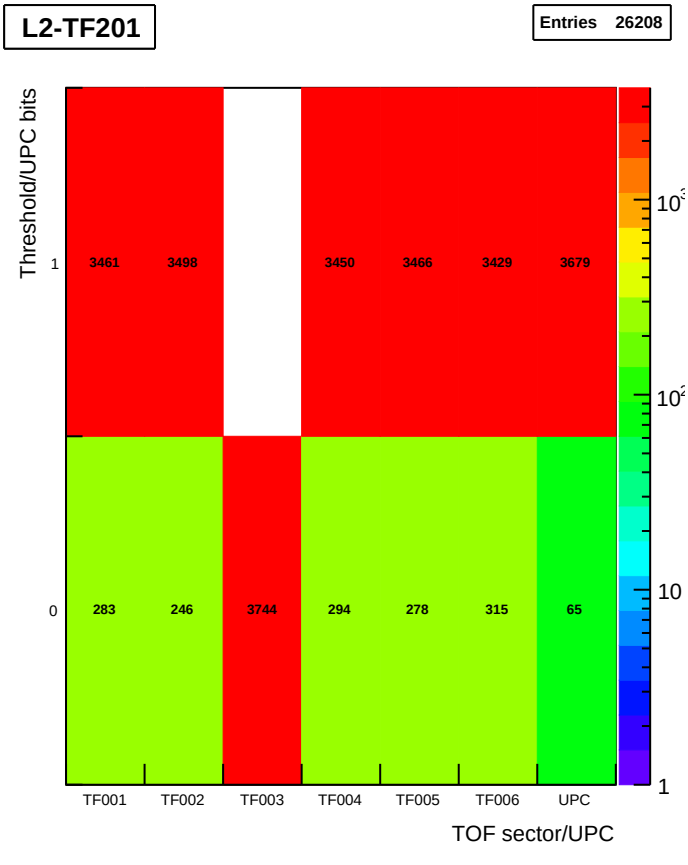

MIX-TF101
Entries 861
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

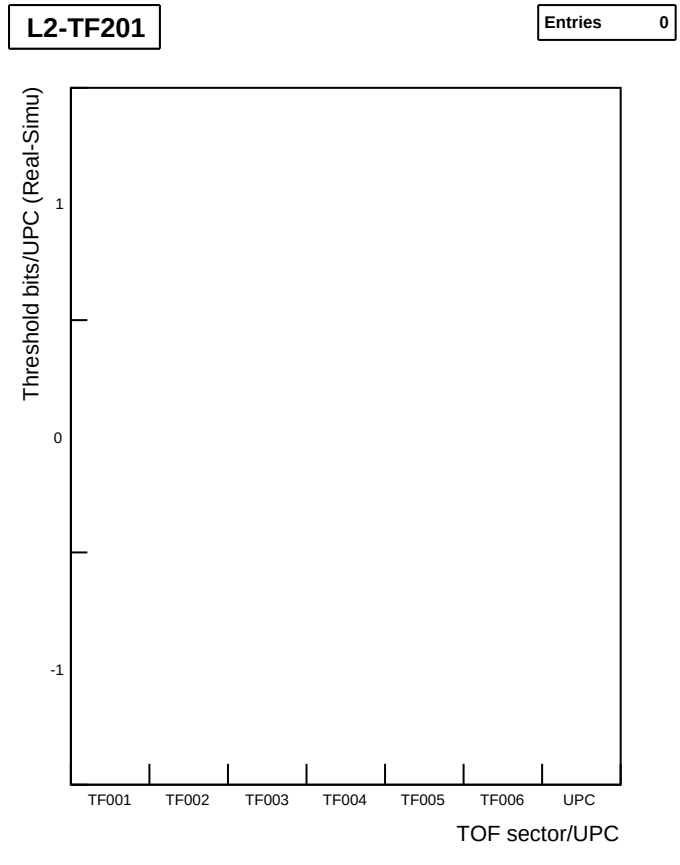

MIX-TF101
Entries 22464
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

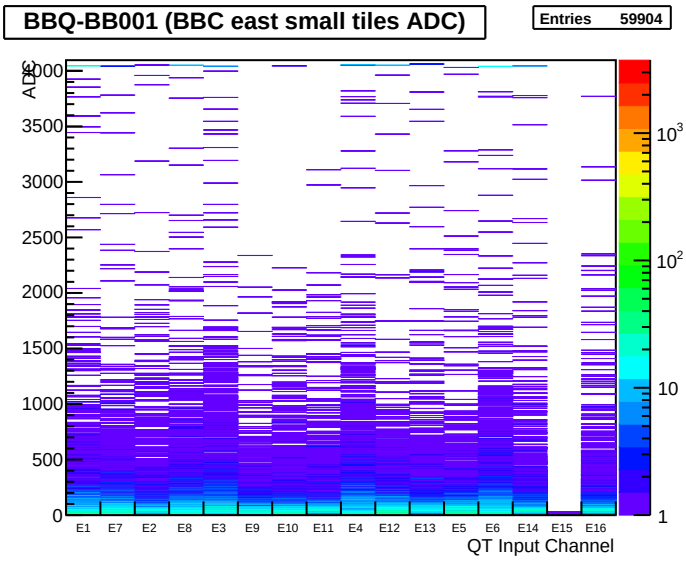

MIX-TF101
Entries 1768
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

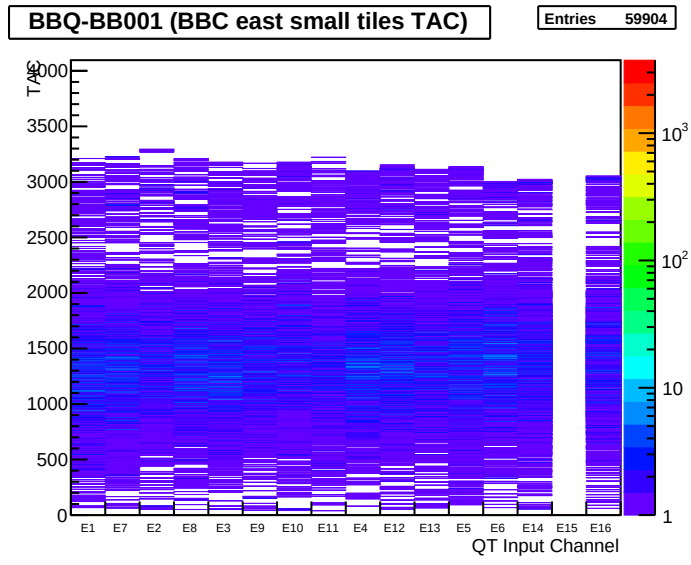

L2-TF201
Entries 3744
10^2
10
1
0
200
400
600
800
1000
1200
1400
TOF total mult

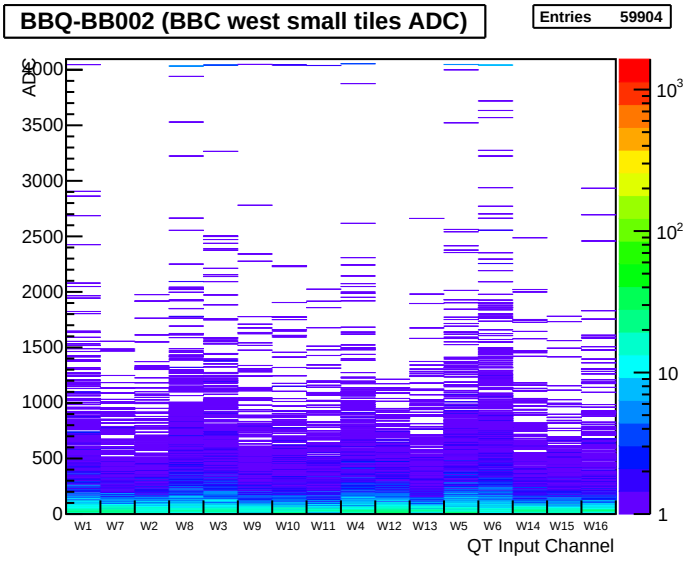

L2-TF201
Entries 0
10
1
10^{-1}
10^{-2}
−1500
−1000
−500
0
500
1000
1500
TOF total mult(Real-Simu)

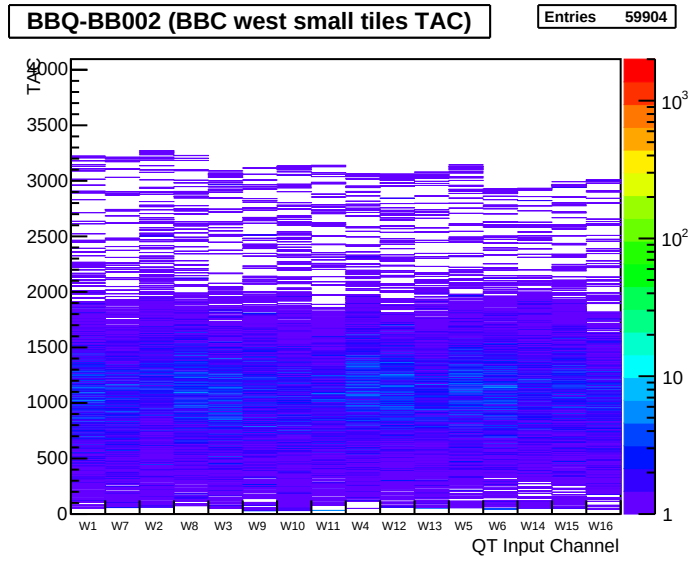

L2-TF201
Entries 26208
Threshold/UPC bits
1
0
3461
3498
3450
3466
3429
3679
283
246
3744
294
278
315
65
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC
10^3
10^2
10
1

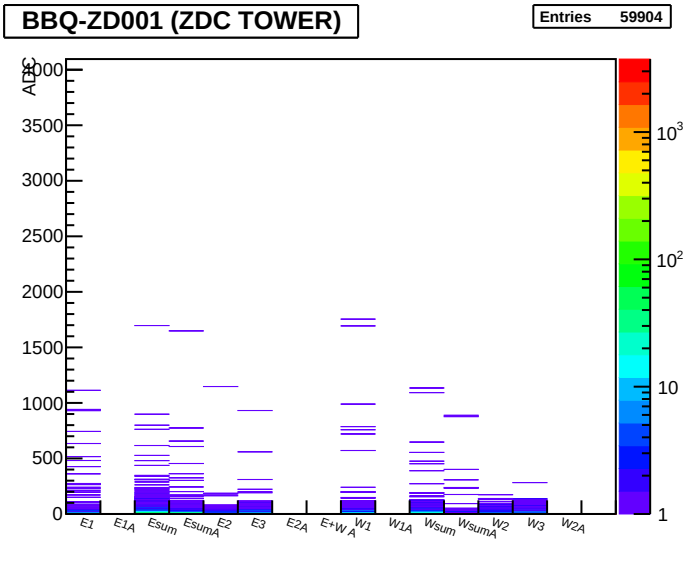

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
1
0
-1
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC

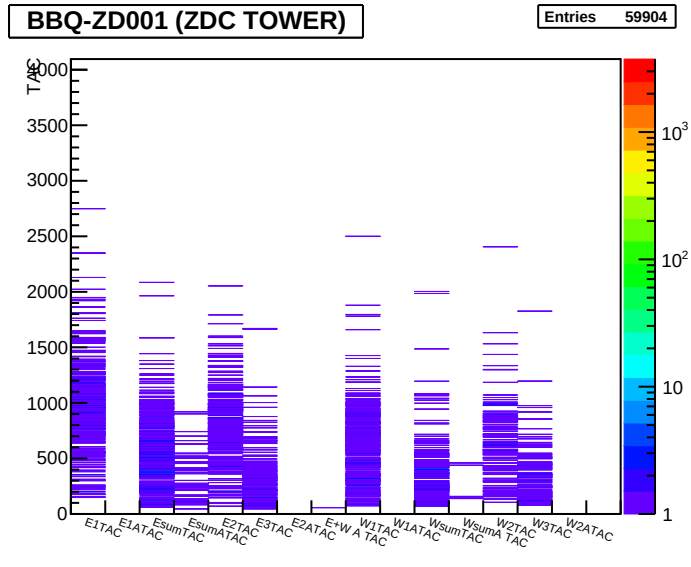

BBQ-BB001 (BBC east small tiles ADC)
Entries 59904
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

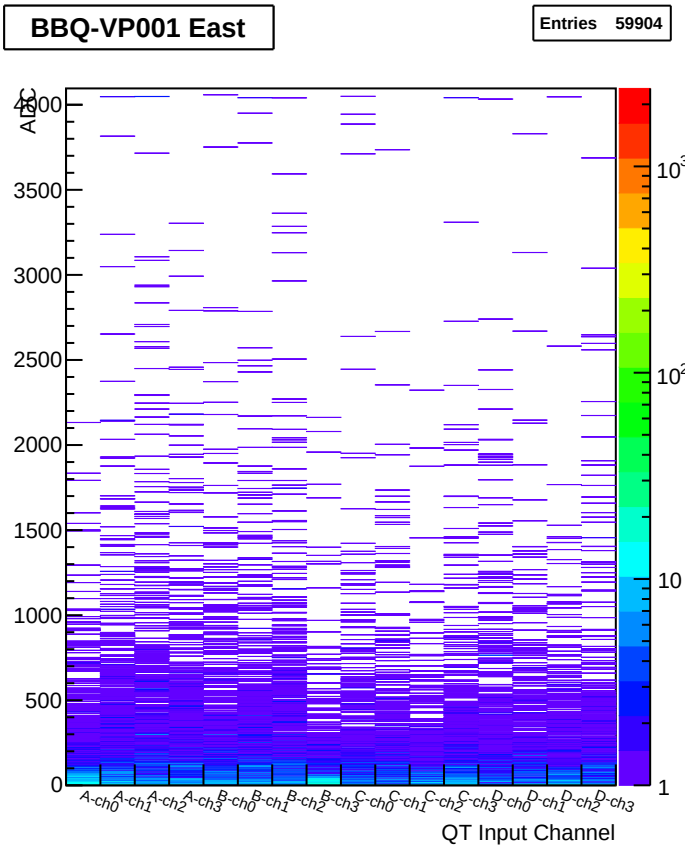

BBQ-BB001 (BBC east small tiles TAC)
Entries 59904
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

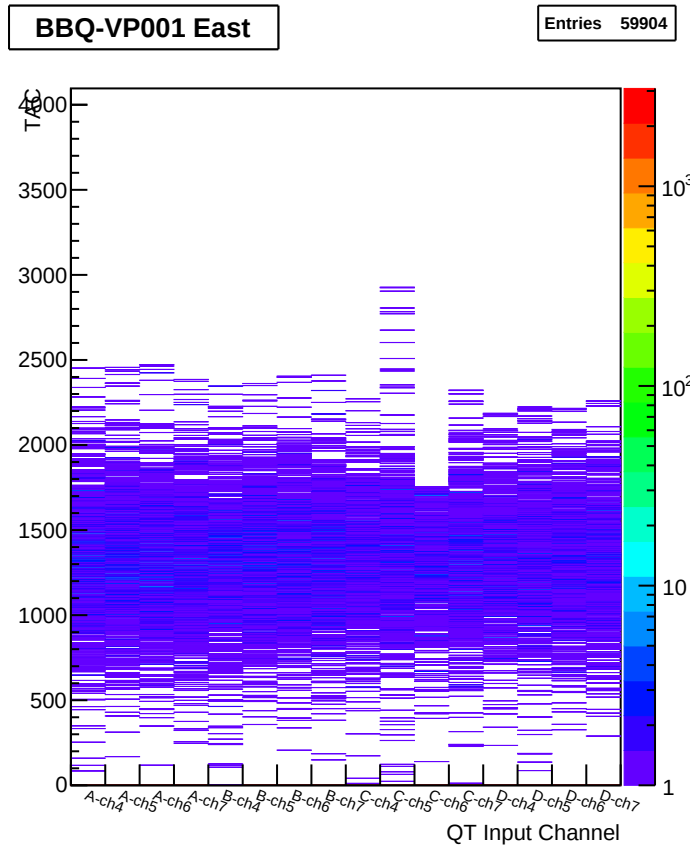

BBQ-BB002 (BBC west small tiles ADC)
Entries 59904
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

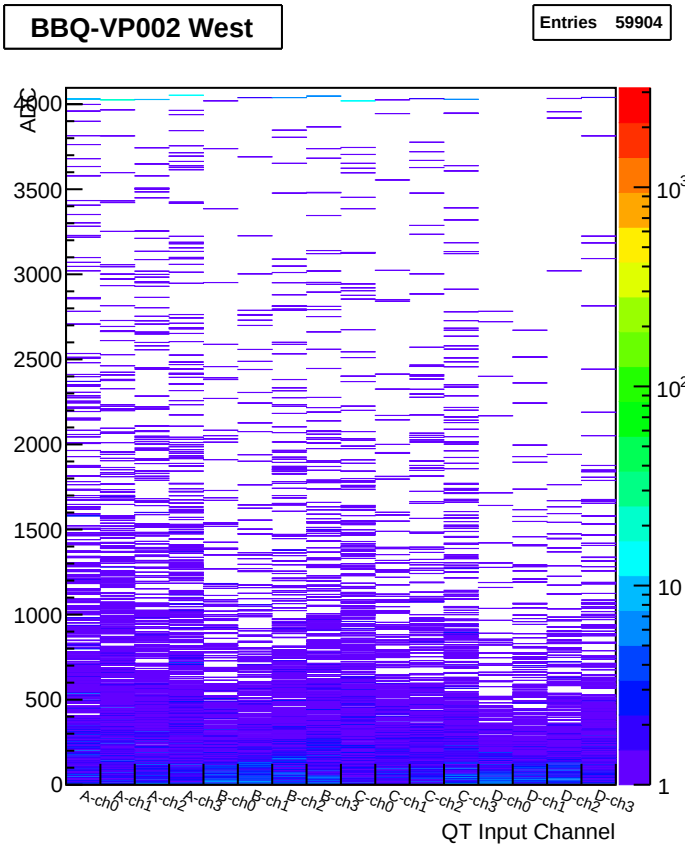

BBQ-BB002 (BBC west small tiles TAC)
Entries 59904
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

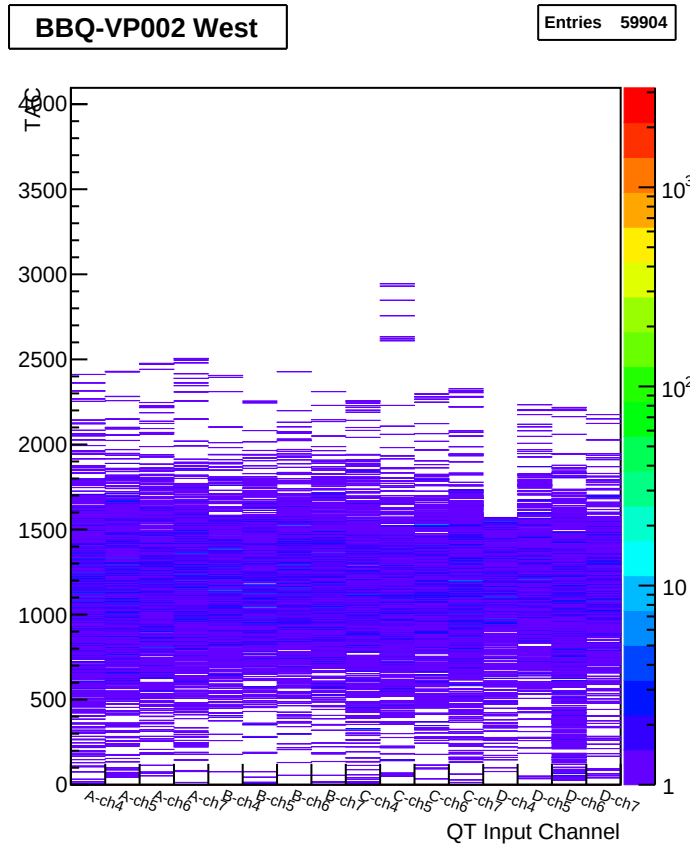

BBQ-ZD001 (ZDC TOWER)
Entries 59904
ADC
E1 E1A Esum EsumA E2 E3 E2A E+W A W1 W1A Wsum WsumA W2 W3 W2A

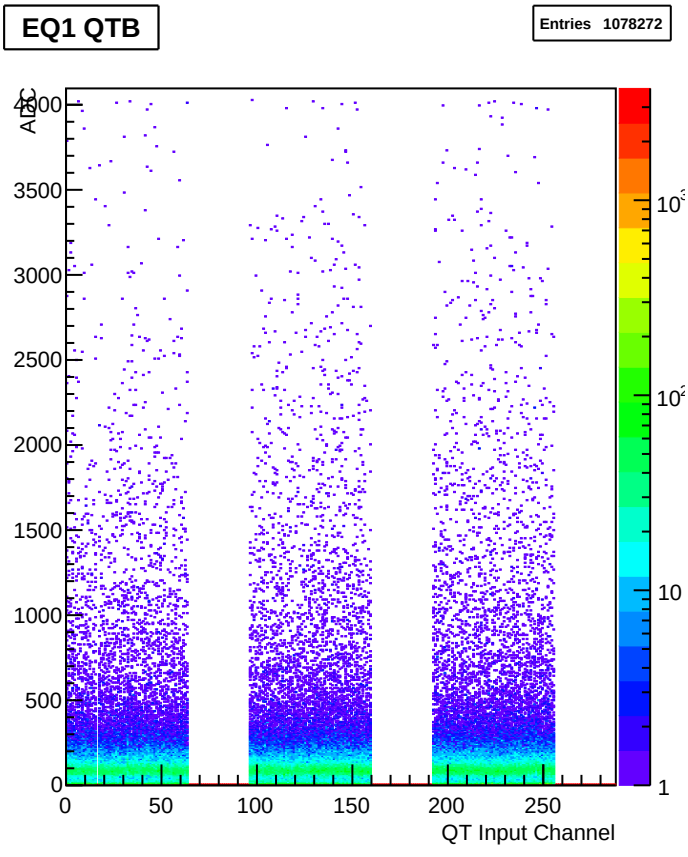

BBQ-ZD001 (ZDC TOWER)
Entries 59904
TAC
E1TAC E1ATAC EsumTAC EsumATAC E2TAC E3TAC E2ATAC E+W A TAC W1TAC W1ATAC WsumTAC WsumA TAC W2TAC W3TAC W2ATAC

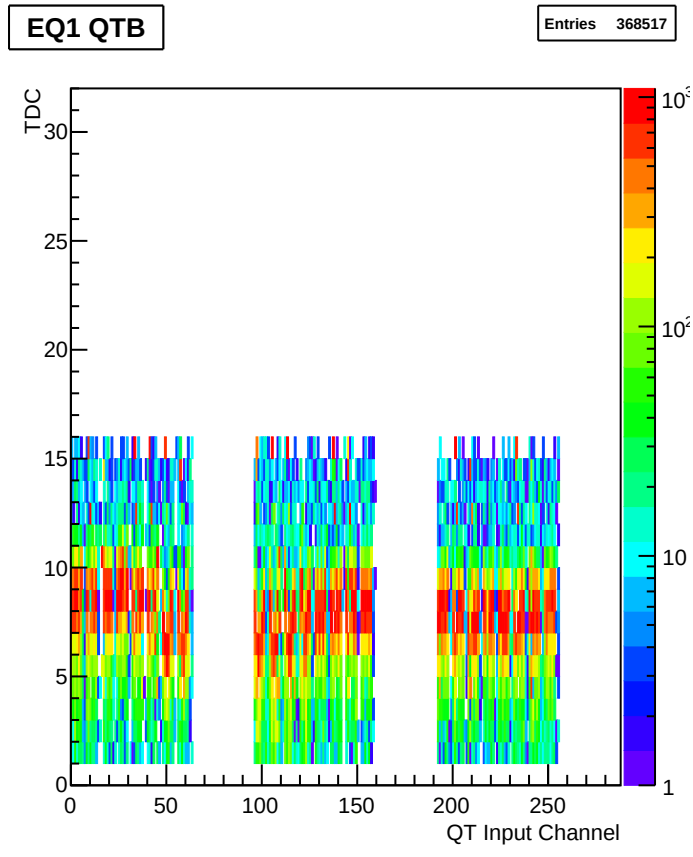

BBQ-VP001 East
Entries 59904
ADC
QT Input Channel

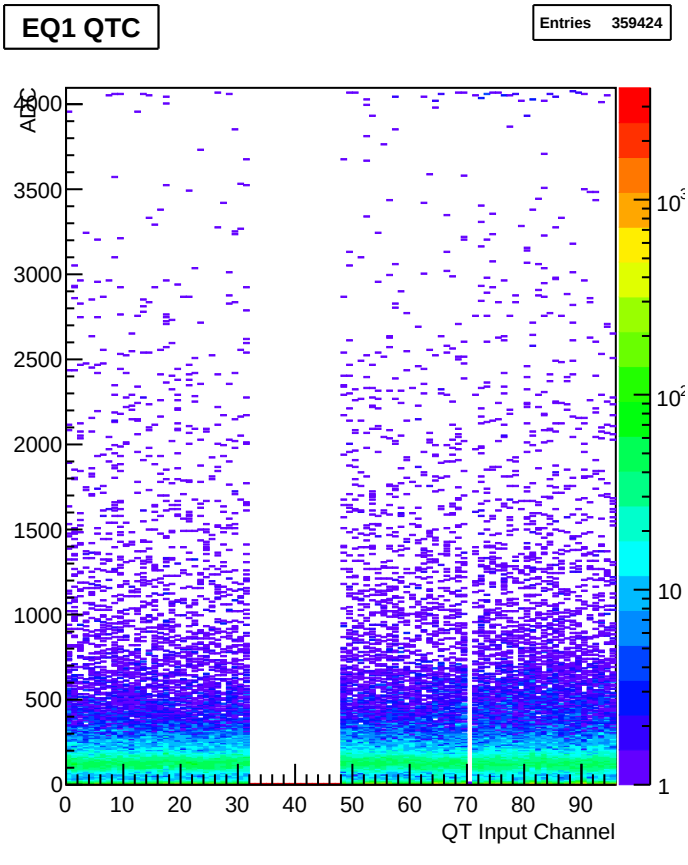

BBQ-VP001 East
Entries 59904
TADC
QT Input Channel

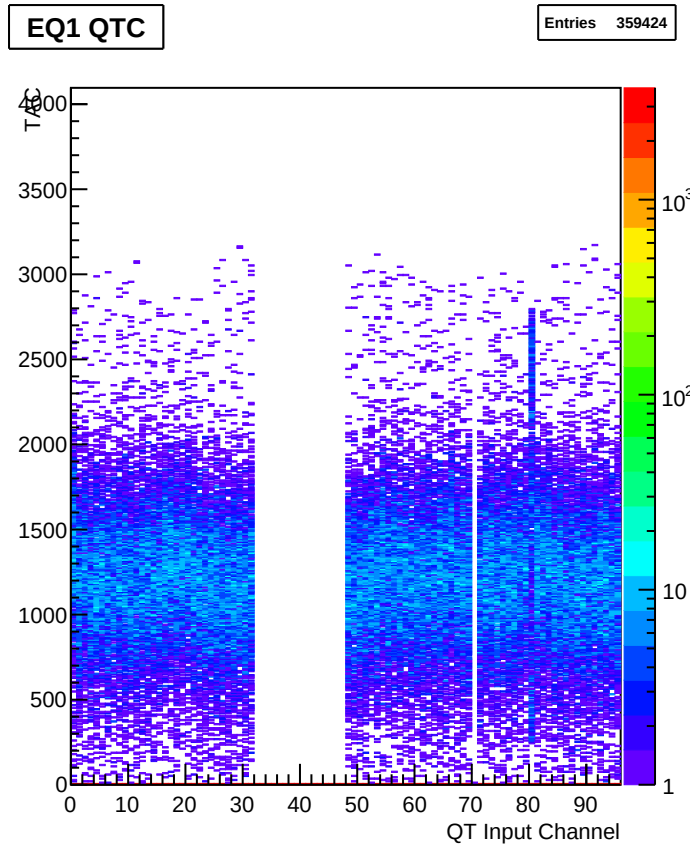

BBQ-VP002 West
Entries 59904
ADC
QT Input Channel

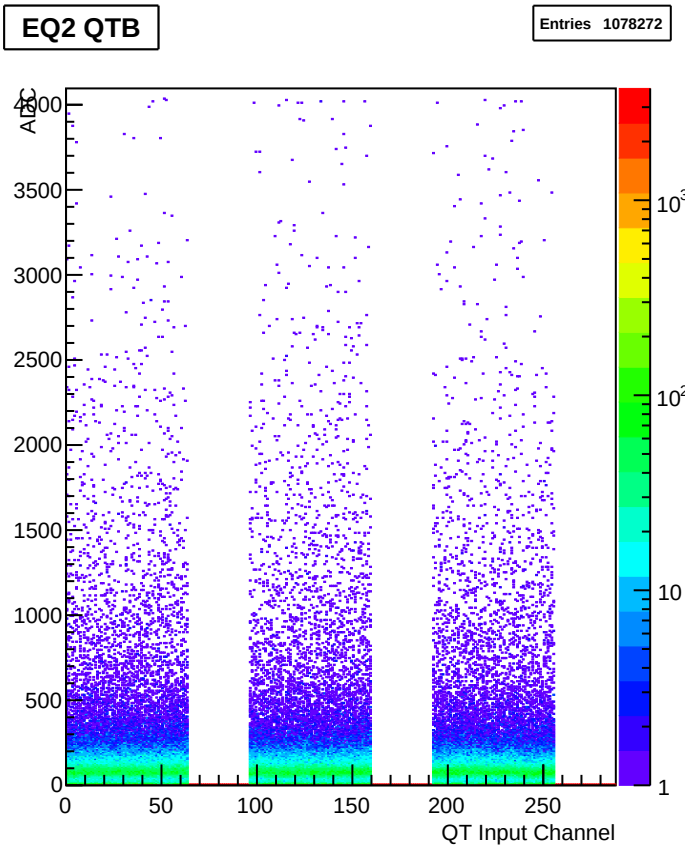

BBQ-VP002 West
Entries 59904
TADC
QT Input Channel

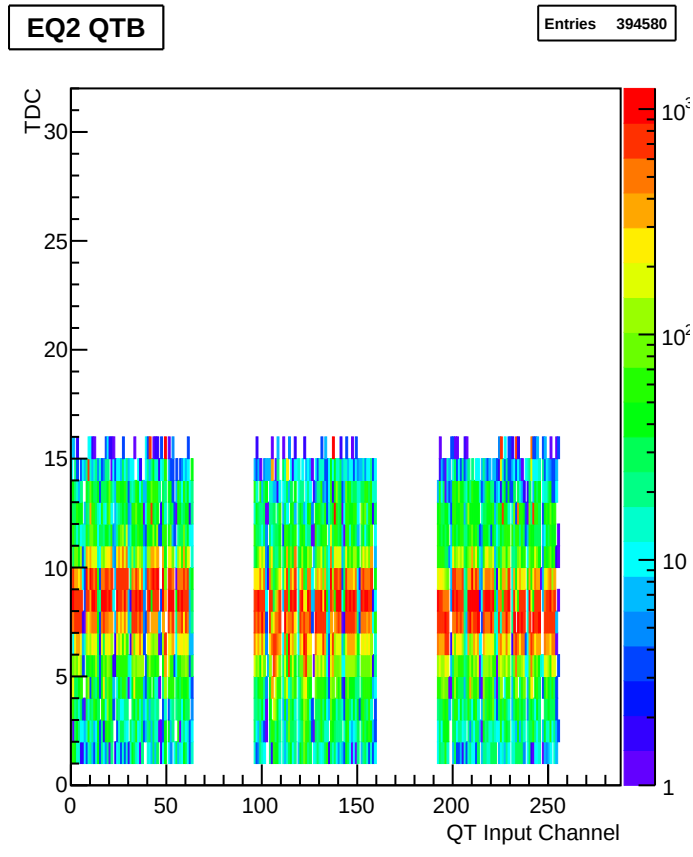

EQ1 QTB
Entries 1078272
ADC
QT Input Channel

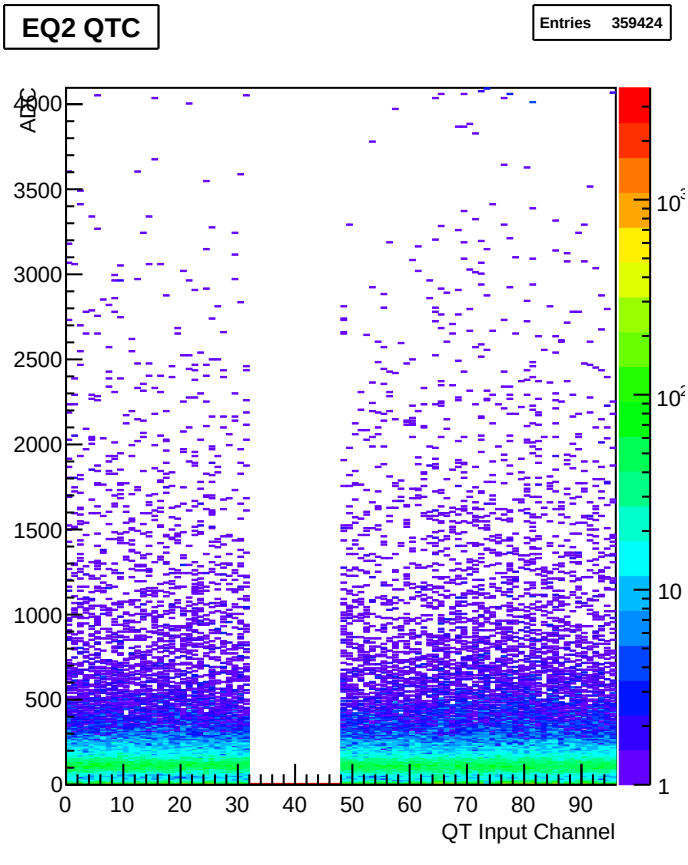

EQ1 QTB
Entries 368517
TDC
QT Input Channel

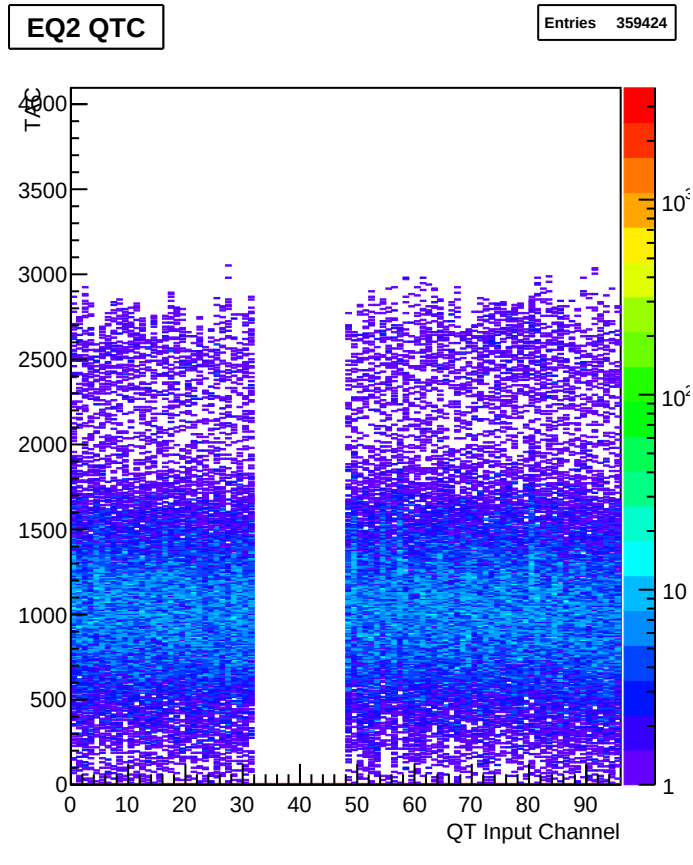

EQ1 QTC
Entries 359424
ADC
QT Input Channel

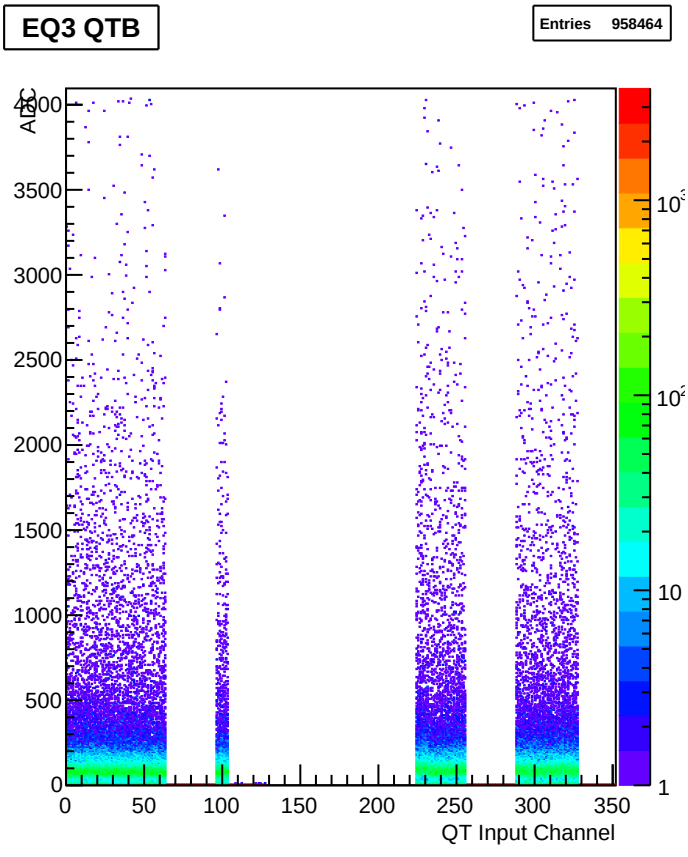

EQ1 QTC
Entries 359424
TADC
QT Input Channel

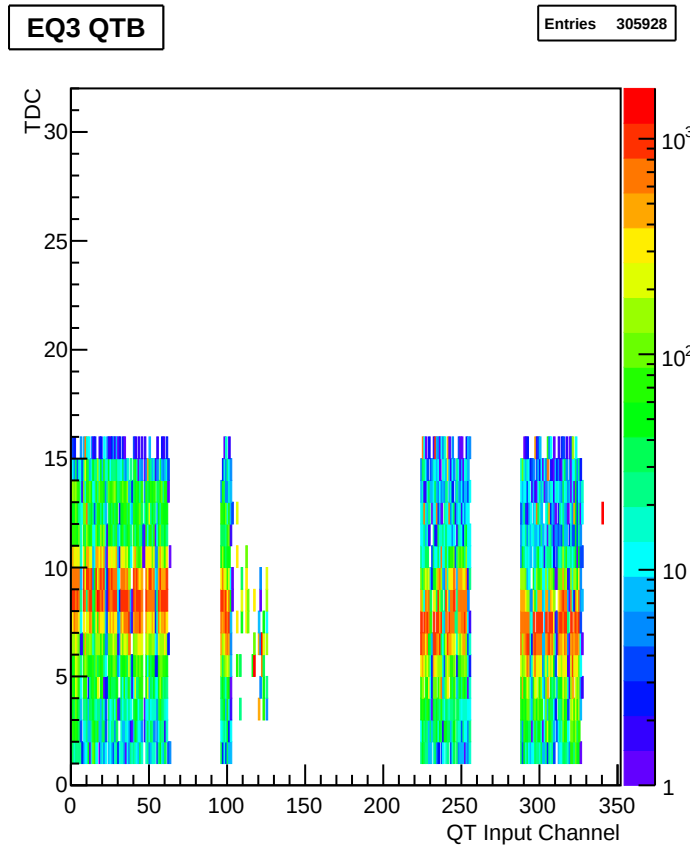

EQ2 QTB
Entries 1078272
ADC
QT Input Channel

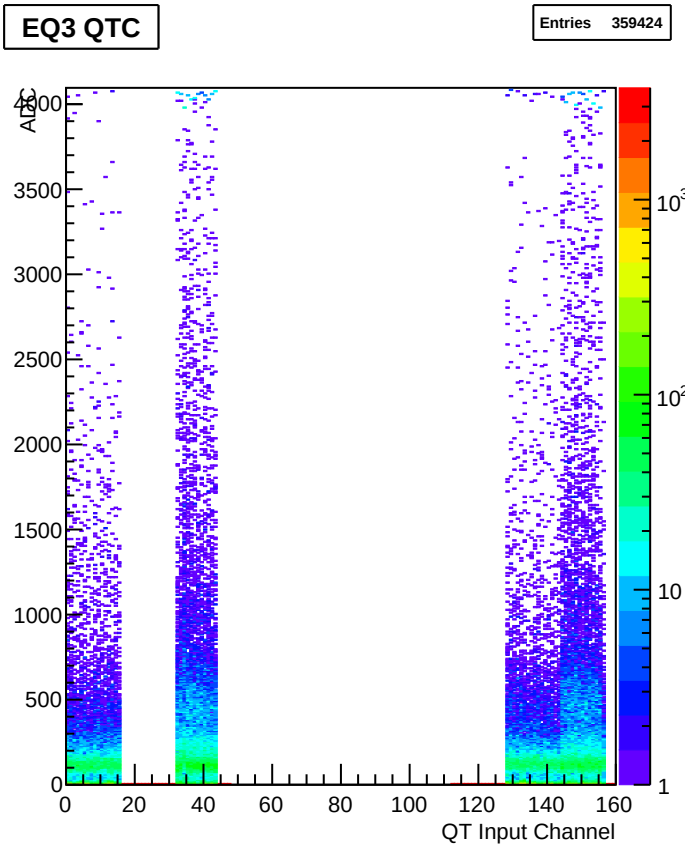

EQ2 QTB
Entries 394580
TDC
QT Input Channel

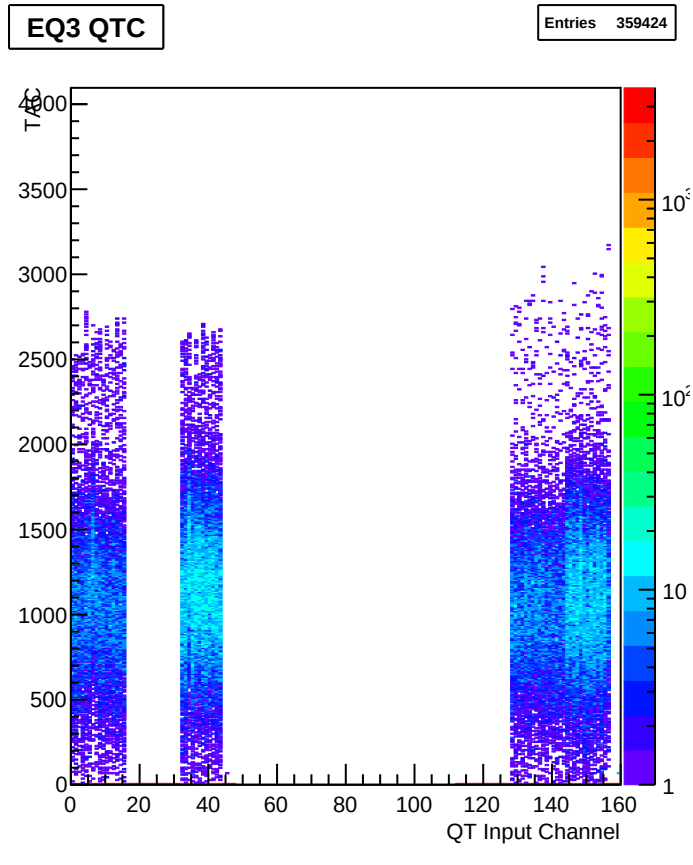

EQ2 QTC
Entries 359424
ADC
QT Input Channel

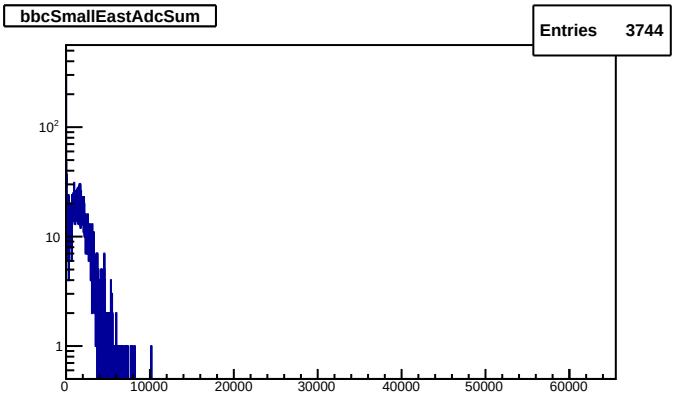

EQ2 QTC
Entries 359424
TADC
QT Input Channel

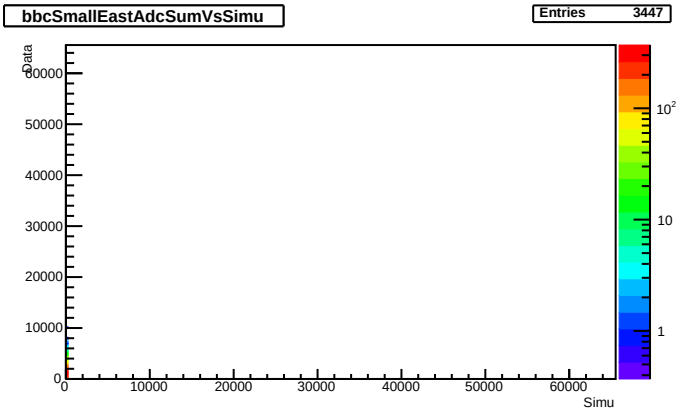

EQ3 QTB
Entries 958464
ADC
QT Input Channel

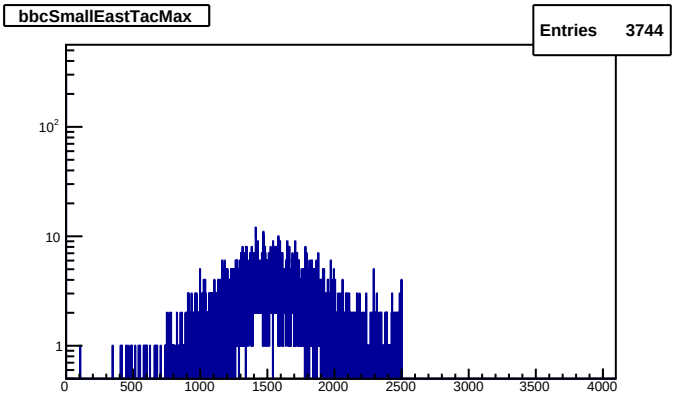

EQ3 QTB
Entries 305928
TDC
QT Input Channel

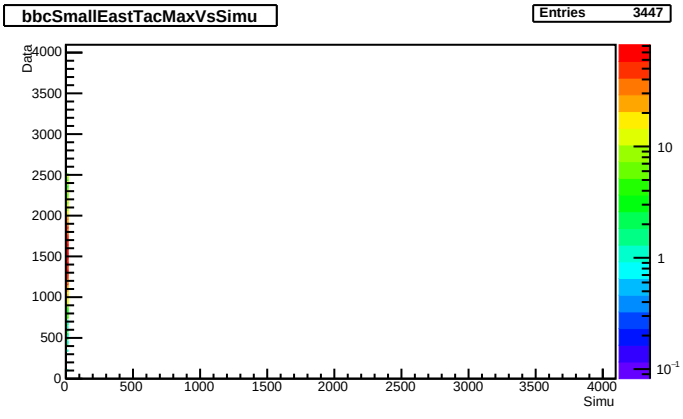

EQ3 QTC
Entries 359424
ADC
QT Input Channel

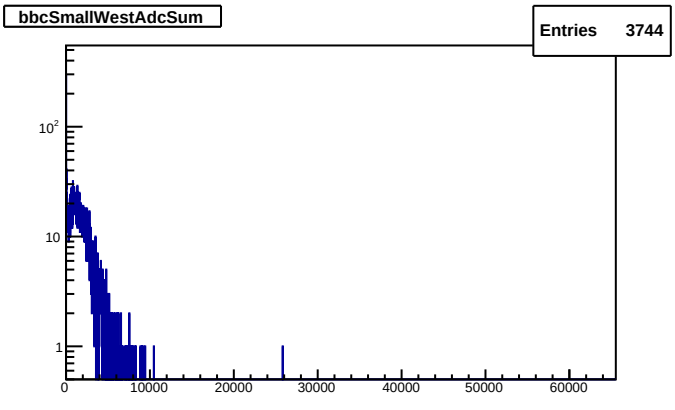

EQ3 QTC
Entries 359424
TADC
QT Input Channel

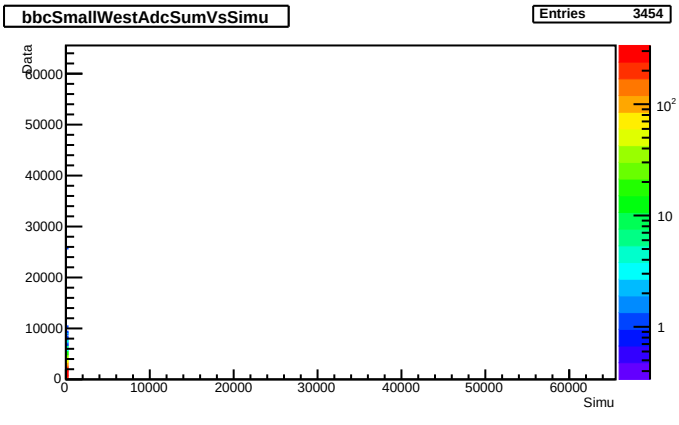

bbcSmallEastAdcSum
Entries 3744

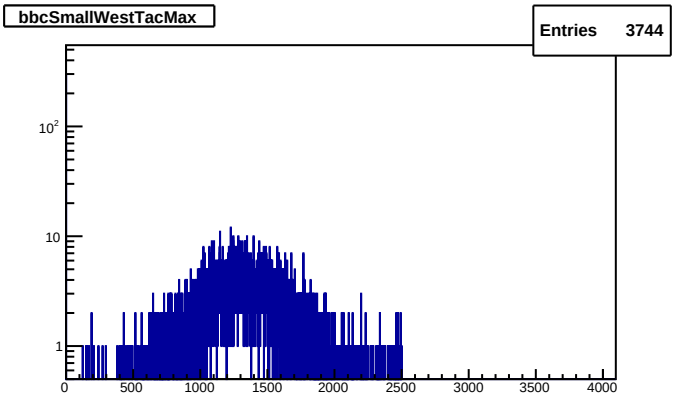

bbcSmallEastAdcSumVsSimu
Entries 3447
Data
Simu

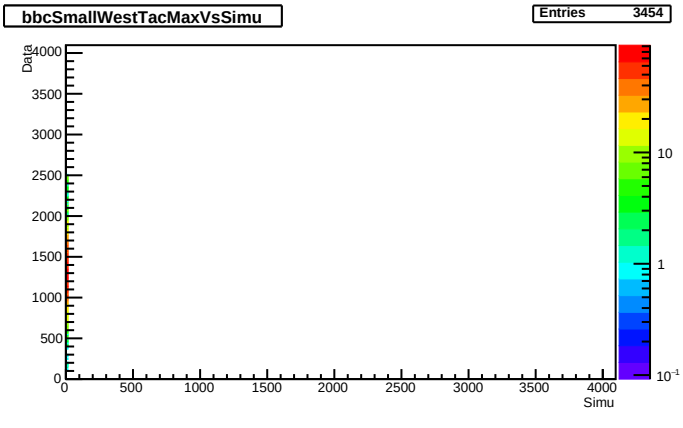

bbcSmallEastTacMax
Entries 3744

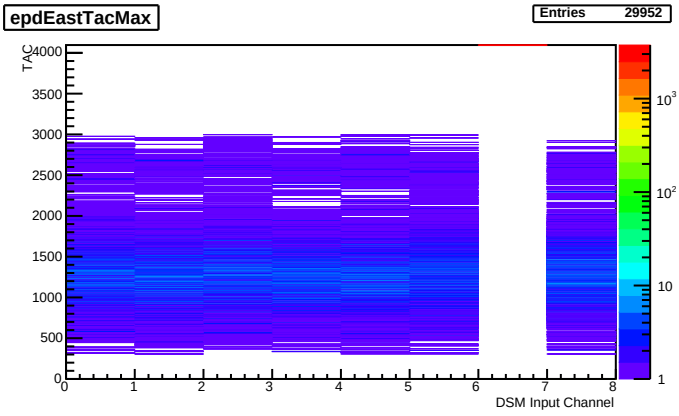

bbcSmallEastTacMaxVsSimu
Entries 3447
Data
Simu

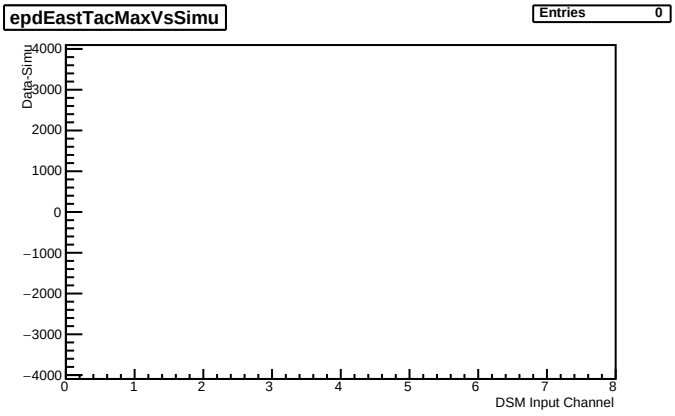

bbcSmallWestAdcSum
Entries 3744

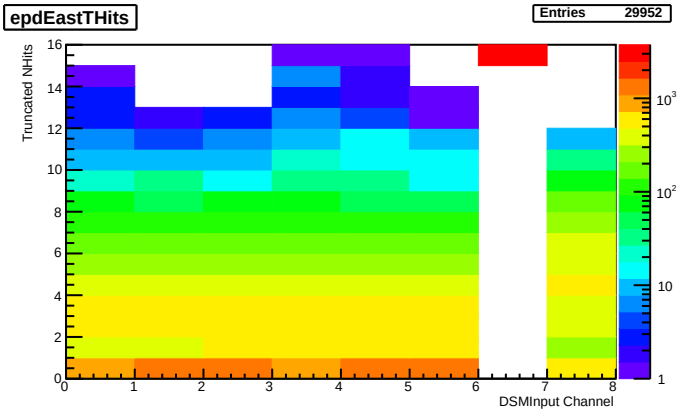

bbcSmallWestAdcSumVsSimu
Entries 3454
Data
Simu

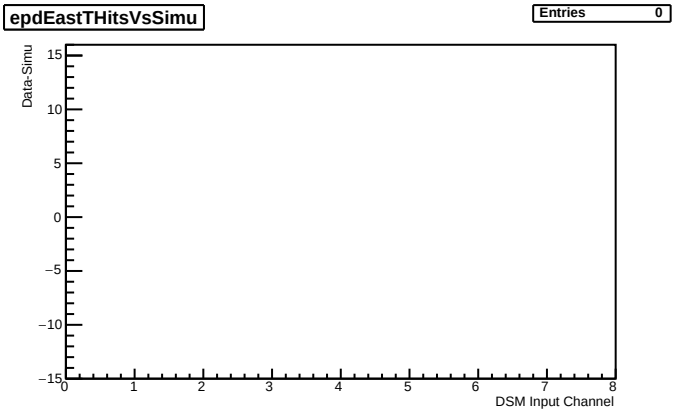

bbcSmallWestTacMax
Entries 3744

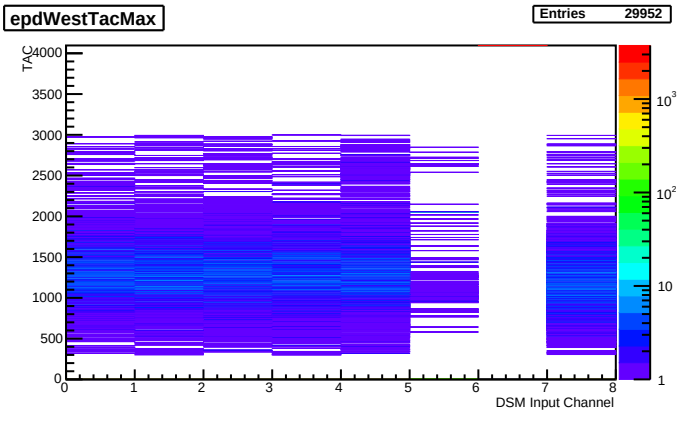

bbcSmallWestTacMaxVsSimu
Entries 3454
Data
Simu

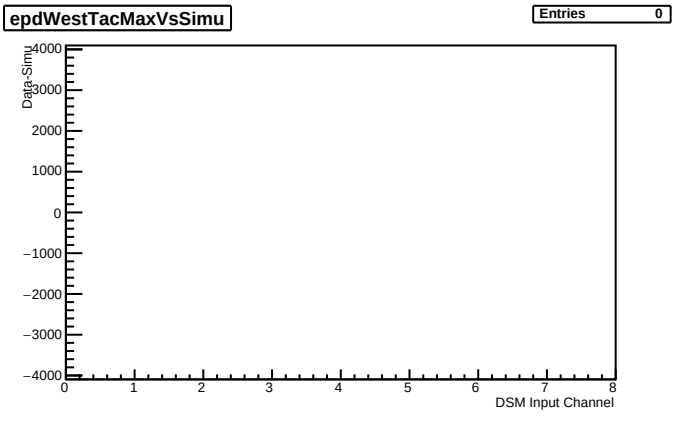

epdEastTacMax
Entries 29952
TAC
DSM Input Channel

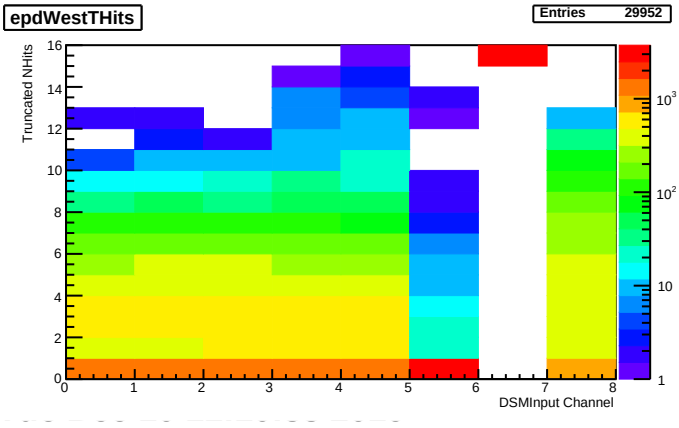

epdEastTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel

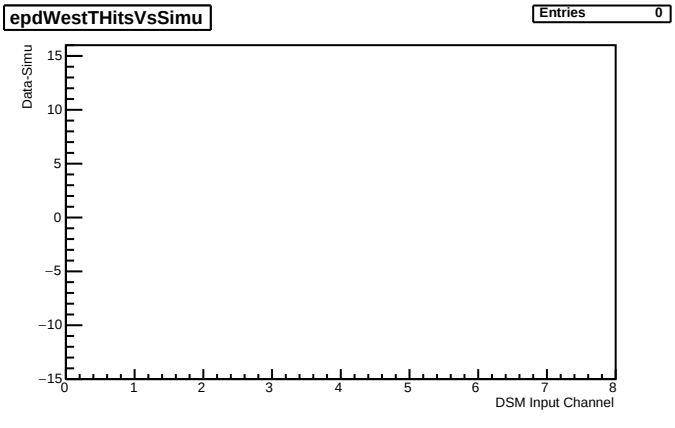

epdEastTHits
Entries 29952
Truncated NHits
DSMInput Channel

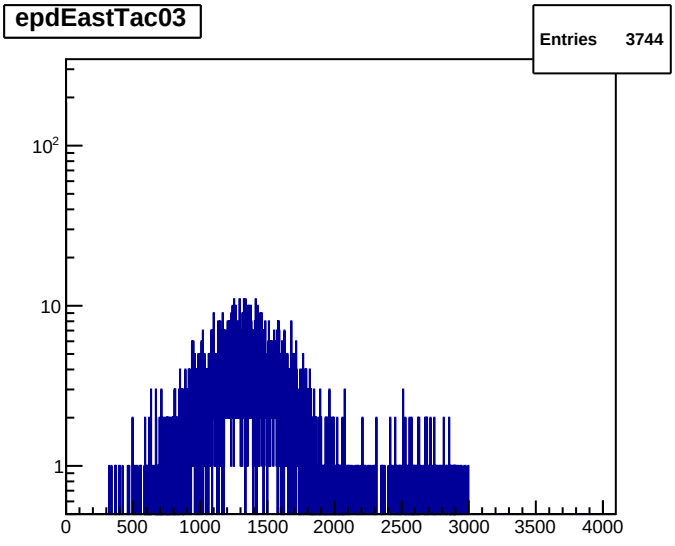

epdEastTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel

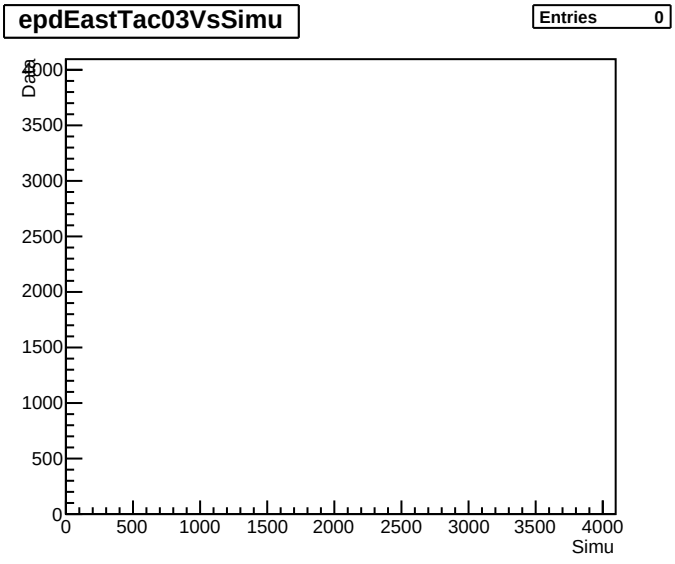

epdWestTacMax
Entries 29952
TAC
DSM Input Channel

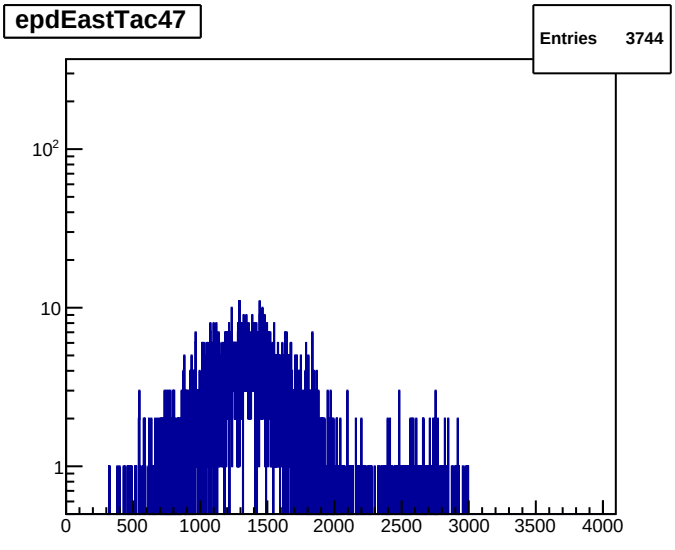

epdWestTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel

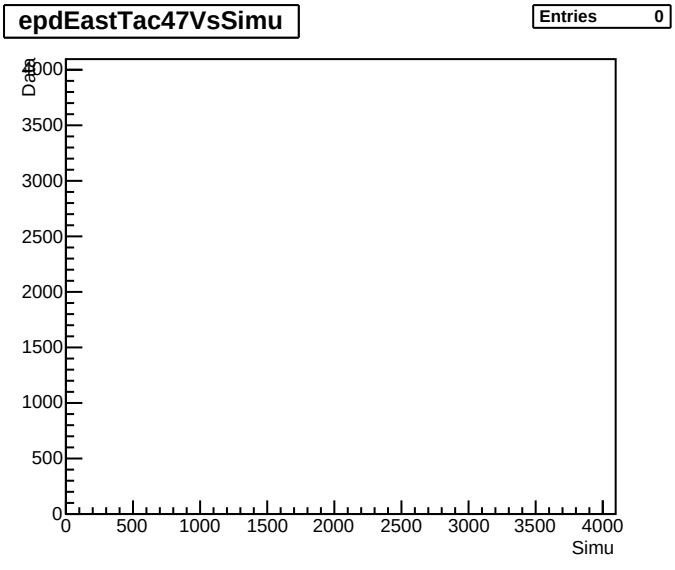

epdWestTHits
Entries 29952
Truncated NHits
DSMInput Channel

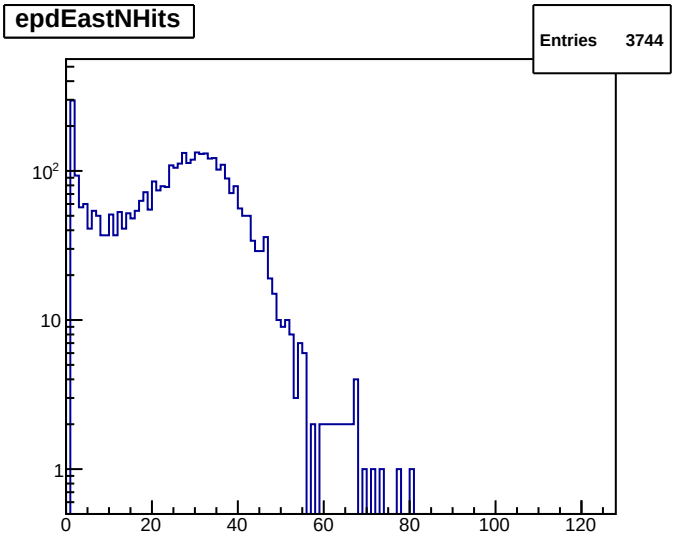

epdWestTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel

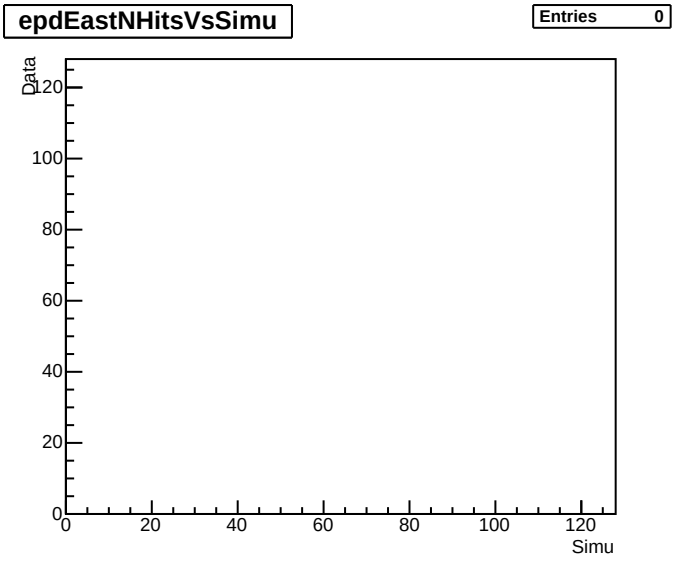

epdEastTac03
Entries 3744
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

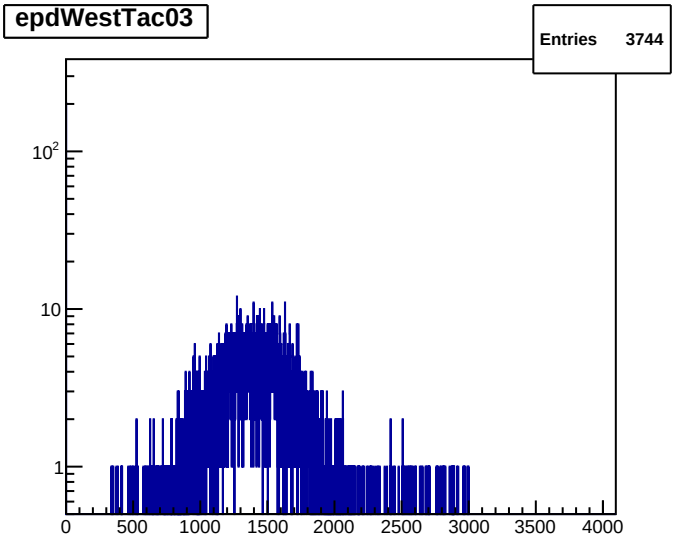

epdEastTac03VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

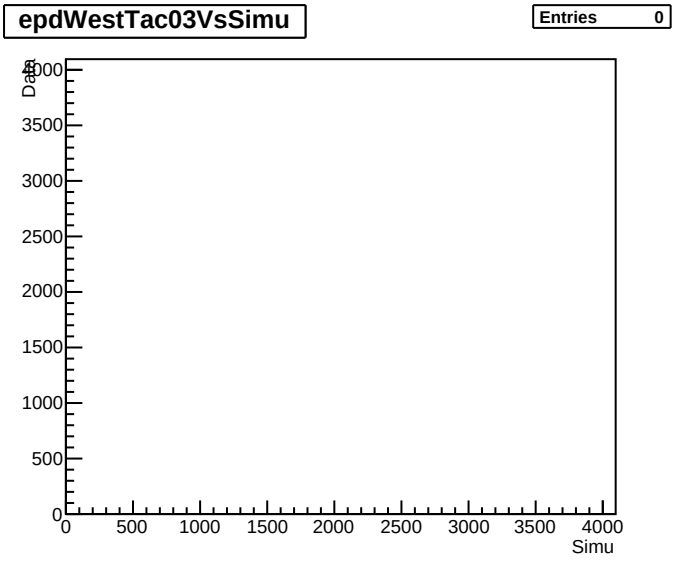

epdEastTac47
Entries 3744
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

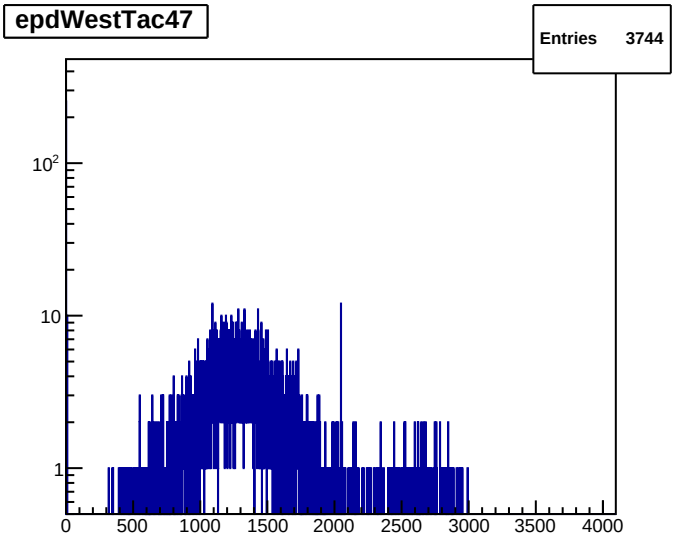

epdEastTac47VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

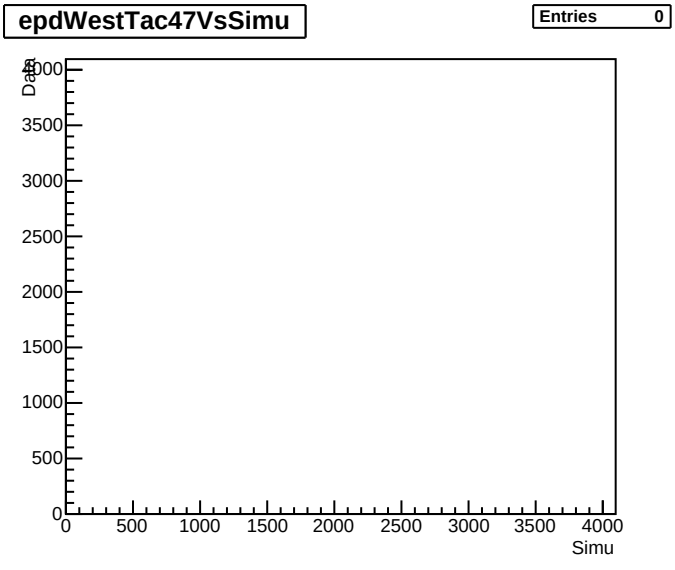

epdEastNHits
Entries 3744
10^2
10
1
0 20 40 60 80 100 120

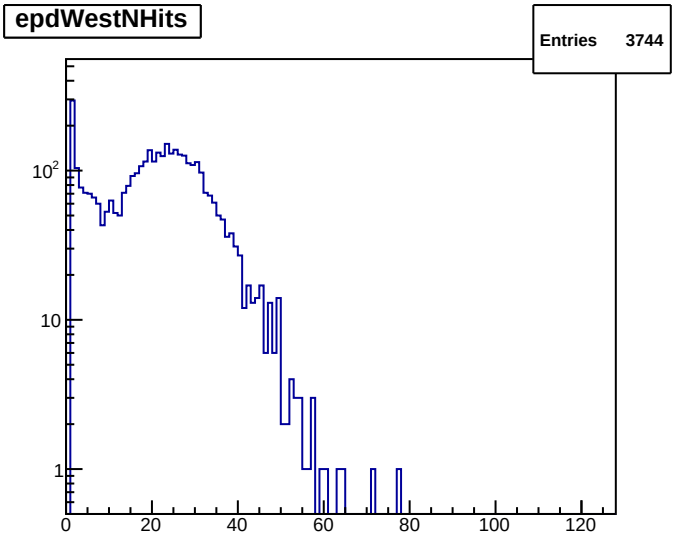

epdEastNHitsVsSimu
Entries 0
Data
120 100 80 60 40 20 0
0 20 40 60 80 100 120
Simu

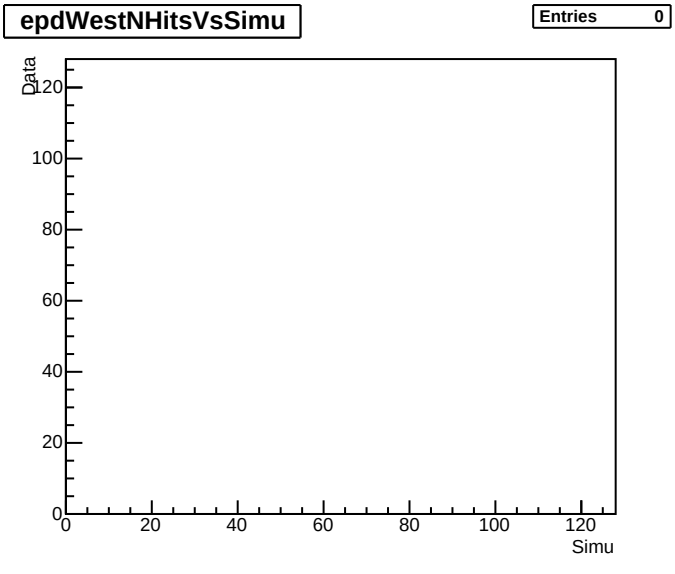

epdWestTac03
Entries 3744
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

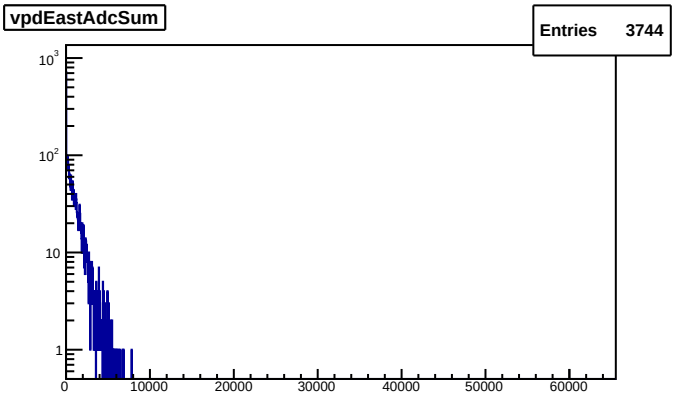

epdWestTac03VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

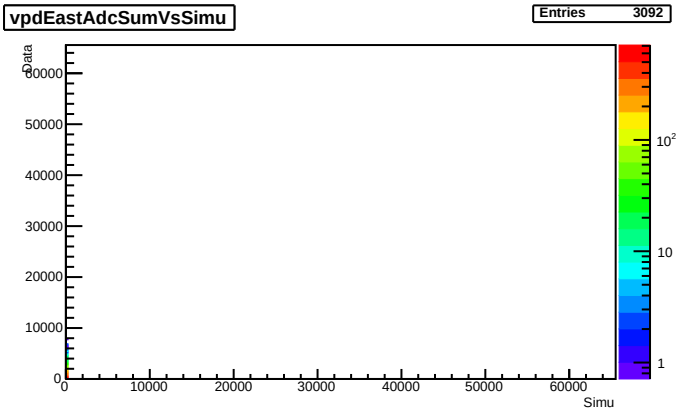

epdWestTac47
Entries 3744
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

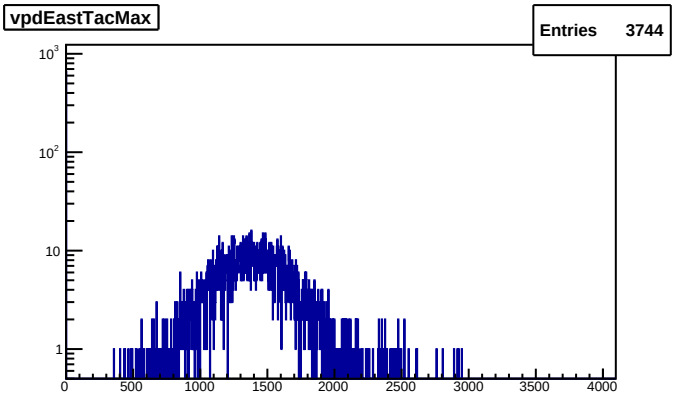

epdWestTac47VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

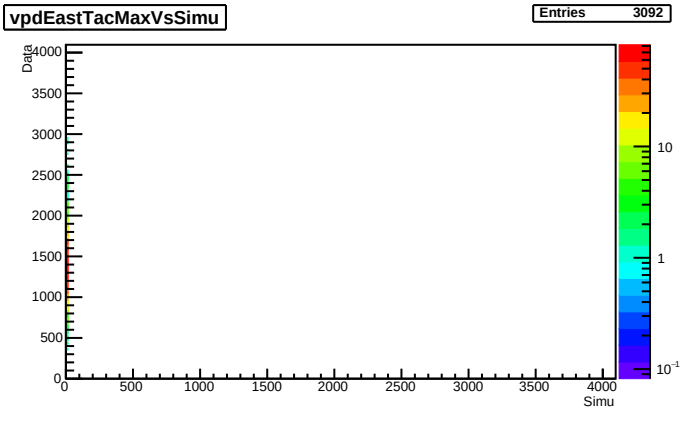

epdWestNHits
Entries 3744
10^2
10
1
0 20 40 60 80 100 120

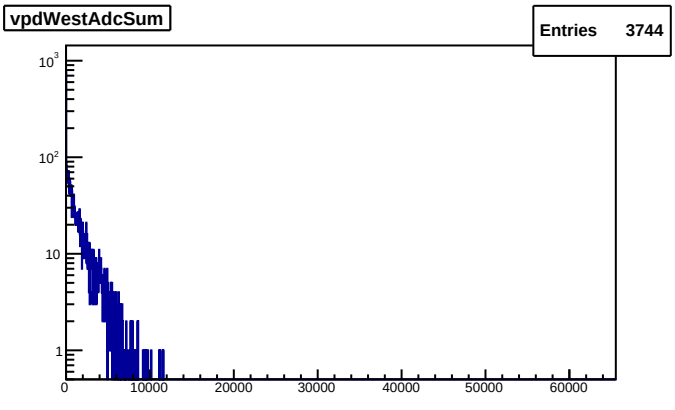

epdWestNHitsVsSimu
Entries 0
Data
120 100 80 60 40 20 0
0 20 40 60 80 100 120
Simu

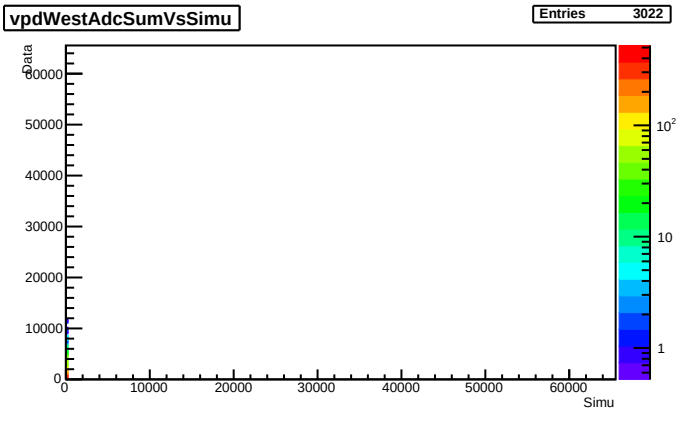

vpdEastAdcSum
Entries 3744

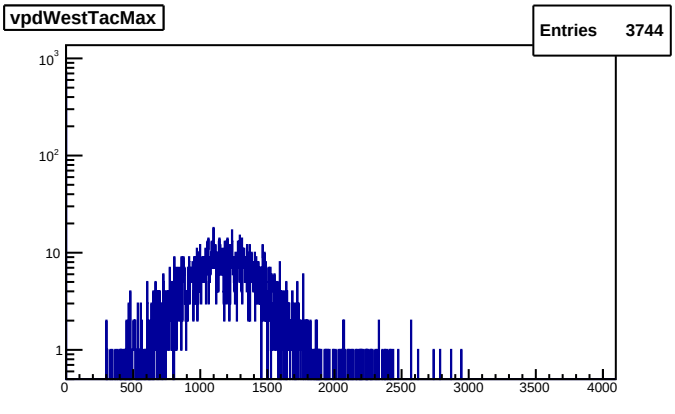

vpdEastAdcSumVsSimu
Entries 3092
Data
Simu

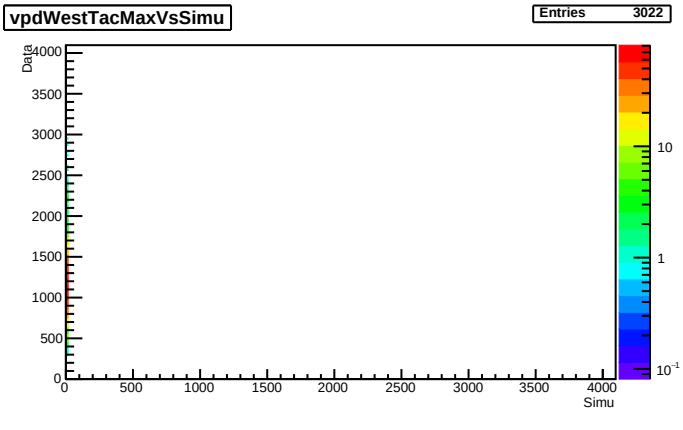

vpdEastTacMax
Entries 3744

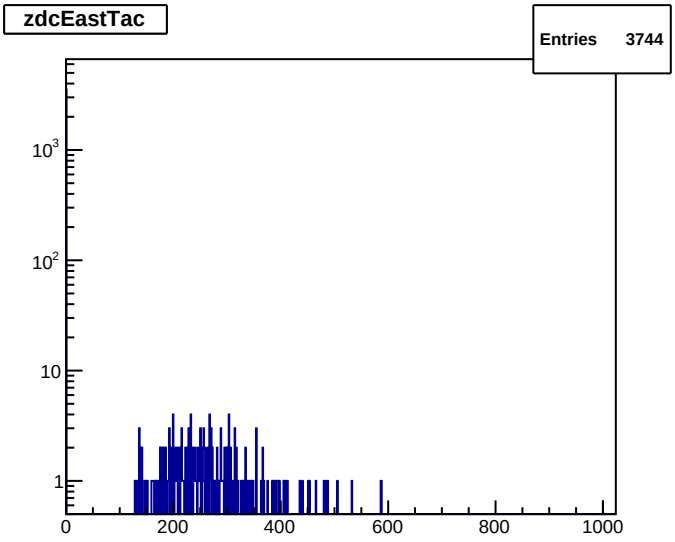

vpdEastTacMaxVsSimu
Entries 3092
Data
Simu

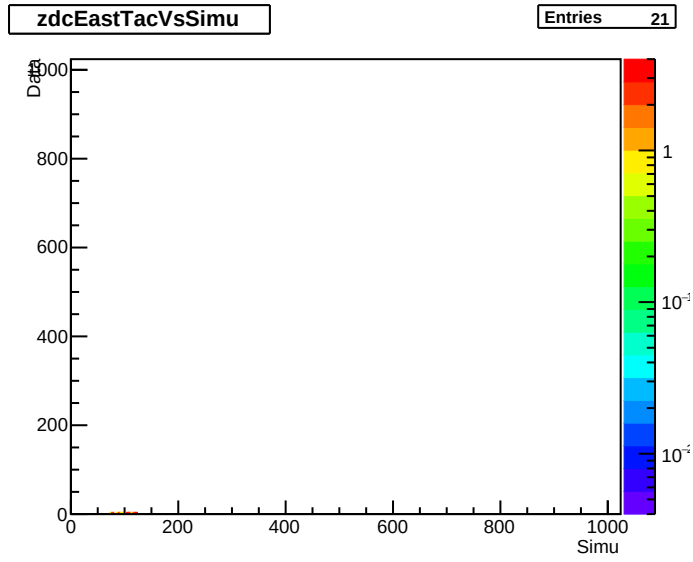

vpdWestAdcSum
Entries 3744

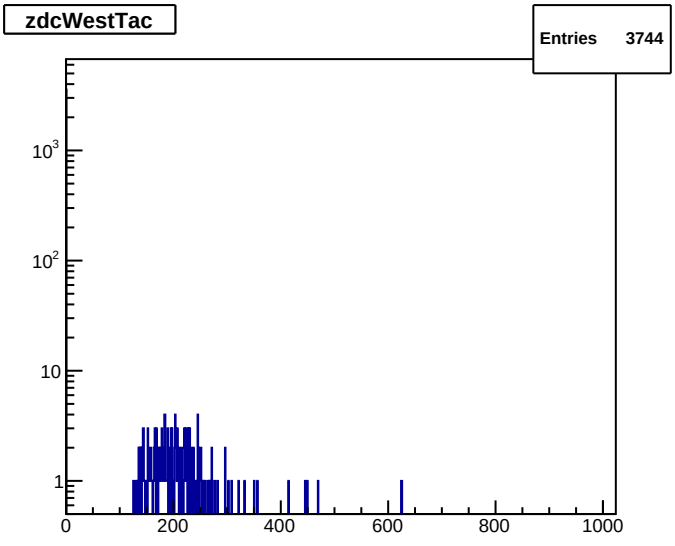

vpdWestAdcSumVsSimu
Entries 3022
Data
Simu

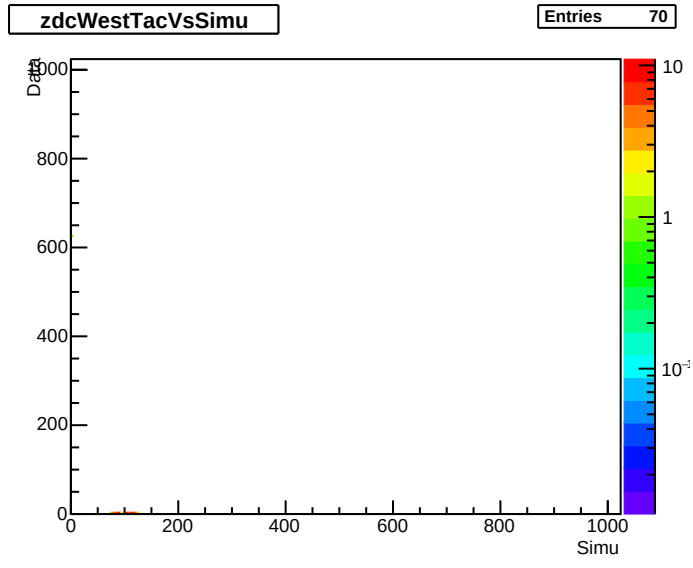

vpdWestTacMax
Entries 3744

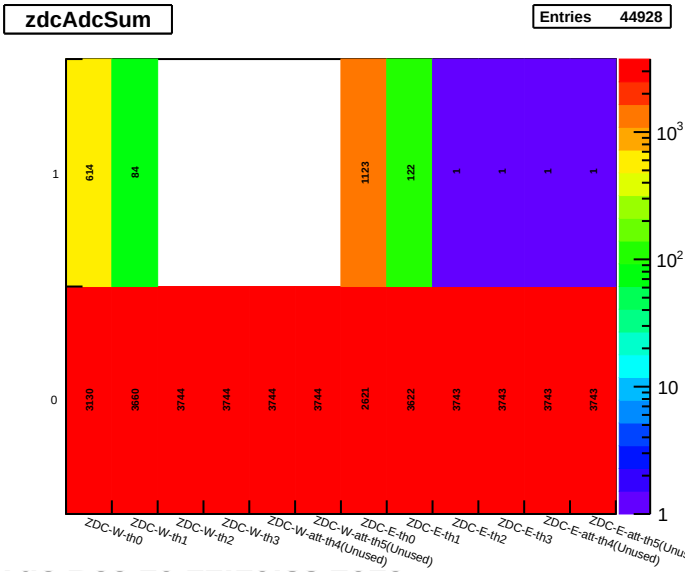

vpdWestTacMaxVsSimu
Entries 3022
Data
Simu

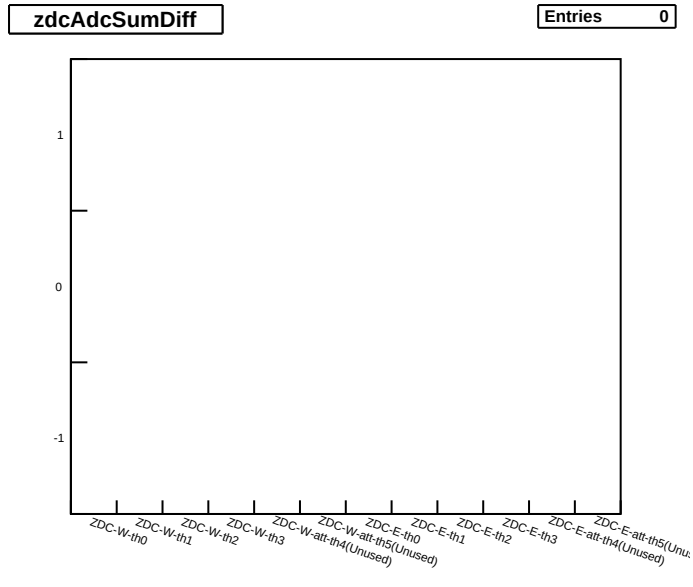

zdcEastTac
Entries 3744
10^3
10^2
10
1
0
200
400
600
800
1000

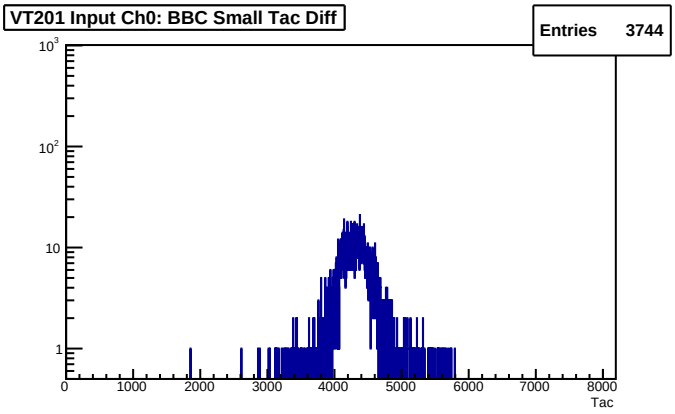

zdcEastTacVsSimu
Entries 21
Data
1000
800
600
400
200
0
Simu
1
10^{-1}

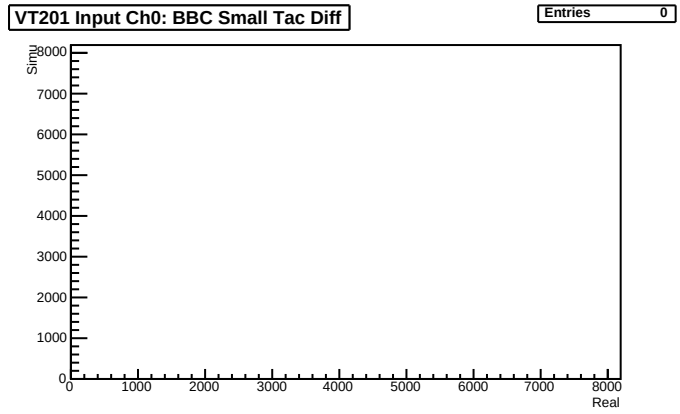

zdcWestTac
Entries 3744
10^3
10^2
10
1
0
200
400
600
800
1000

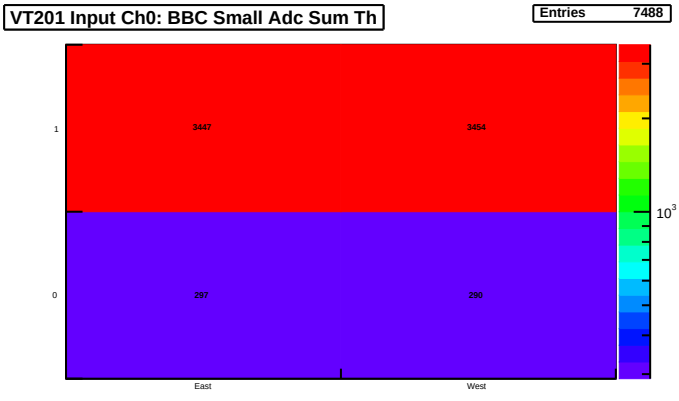

zdcWestTacVsSimu
Entries 70
Data
1000
800
600
400
200
0
Simu
10
1
10^{-1}

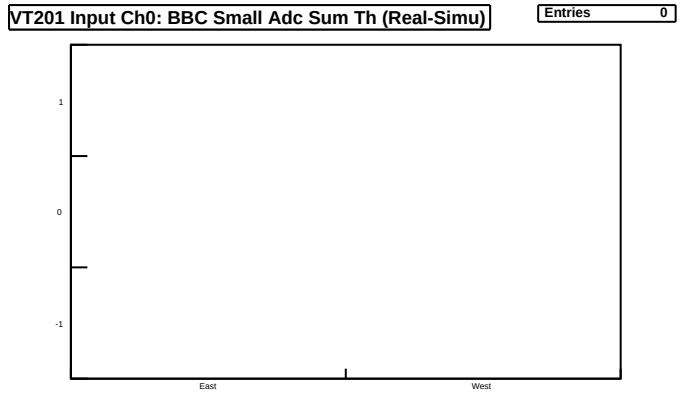

zdcAdcSum
Entries 44928
1
0
614
84
1123
122
1
1
1
1
3130
3660
3744
3744
3744
3744
2621
3622
3743
3743
3743
3743
10^3
10^2
10
1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

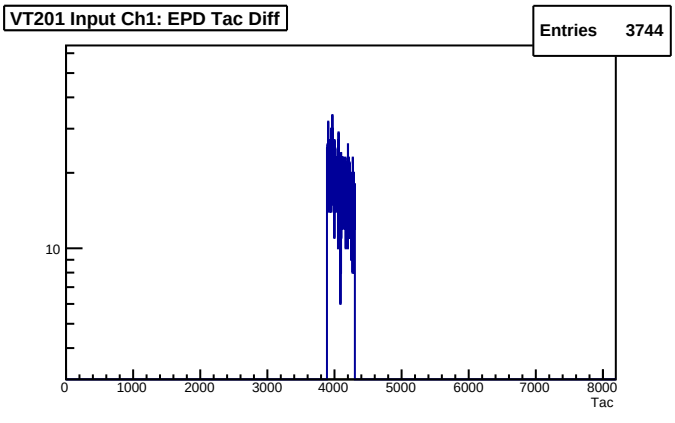

zdcAdcSumDiff
Entries 0
1
0
-1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

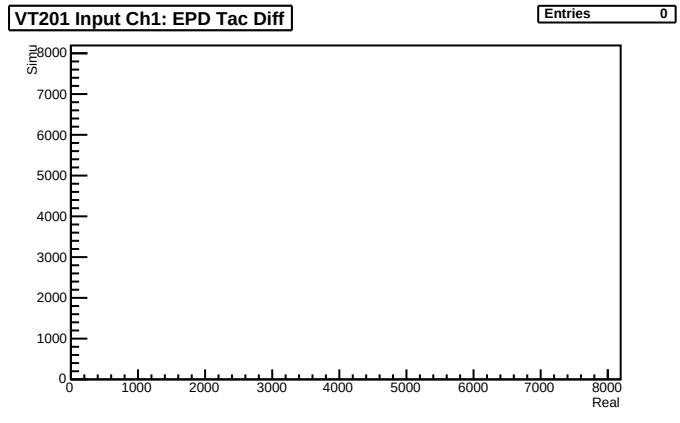

VT201 Input Ch0: BBC Small Tac Diff
Entries 3744
Tac

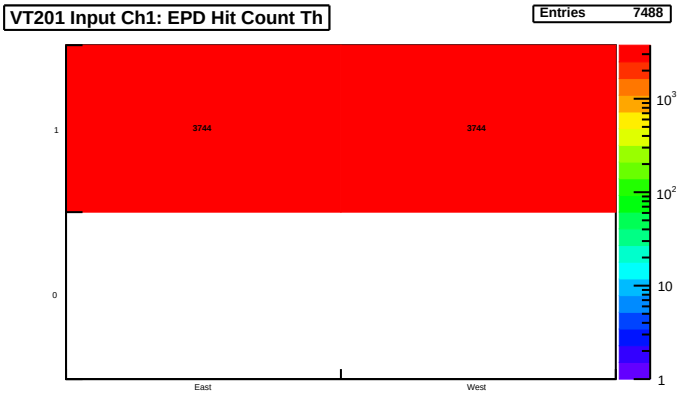

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

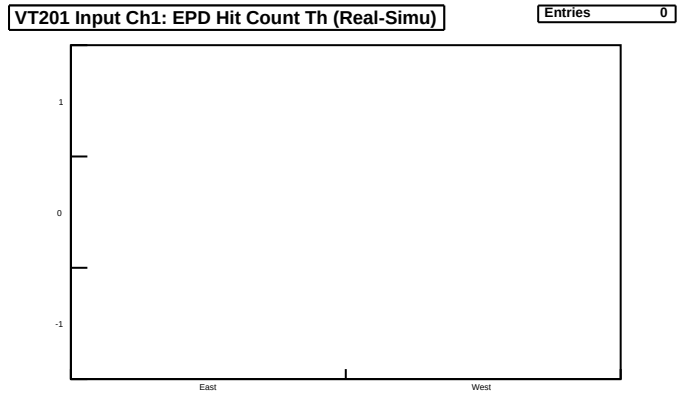

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 7488
3447
3454
297
290
East
West

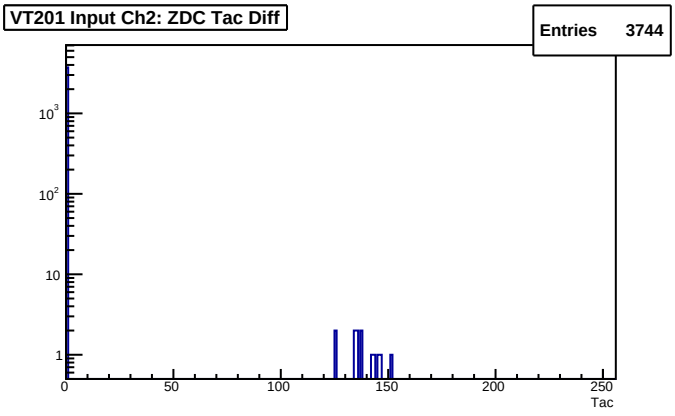

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

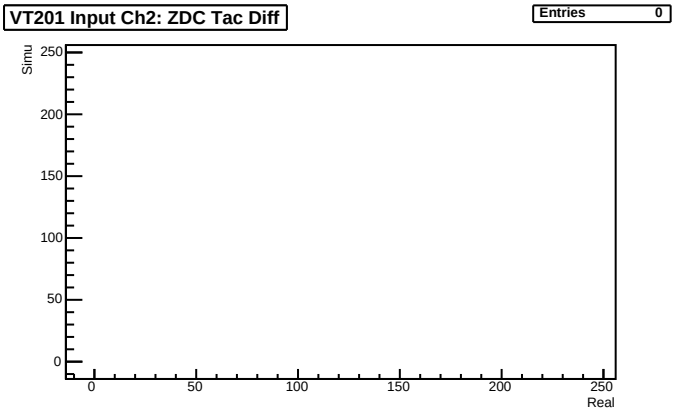

VT201 Input Ch1: EPD Tac Diff
Entries 3744
Tac

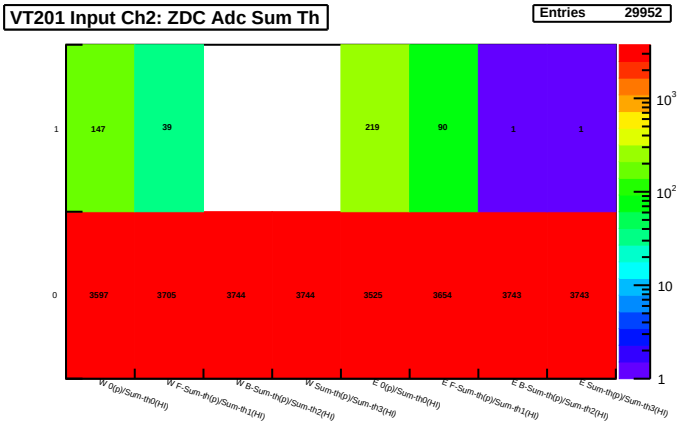

VT201 Input Ch1: EPD Tac Diff
Entries 0
Simu
Real

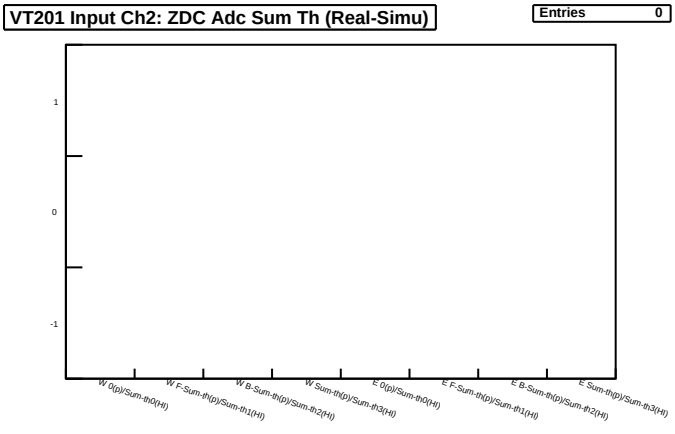

VT201 Input Ch1: EPD Hit Count Th
Entries 7488
3744
3744
East
West

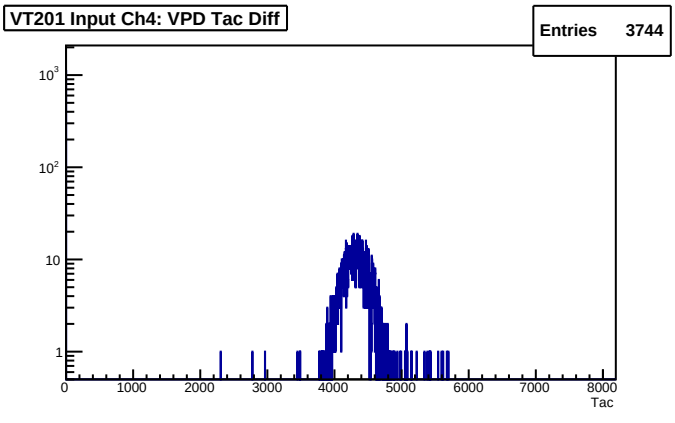

VT201 Input Ch1: EPD Hit Count Th (Real-Simu)
Entries 0
East
West

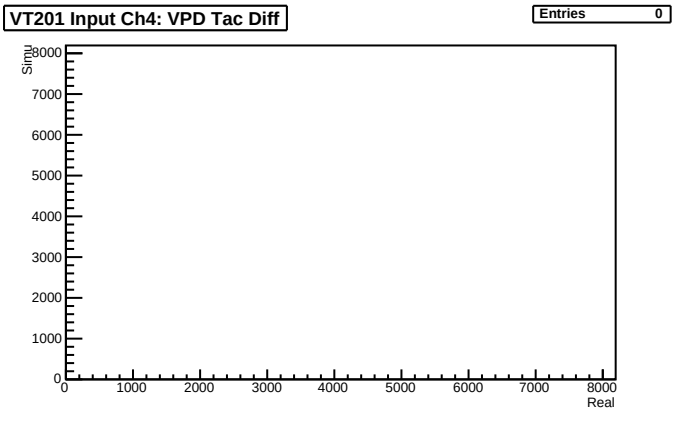

VT201 Input Ch2: ZDC Tac Diff
Entries 3744
Tac

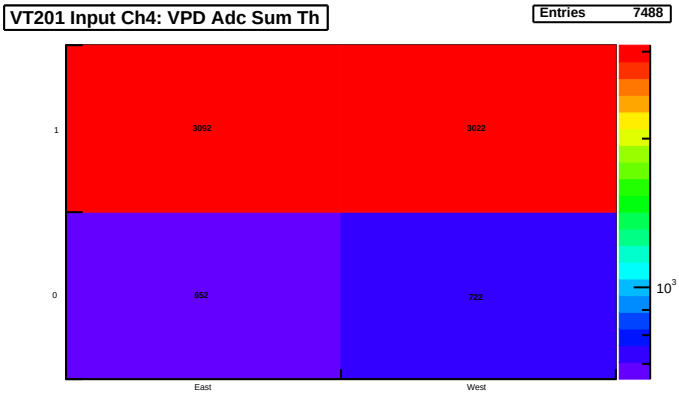

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

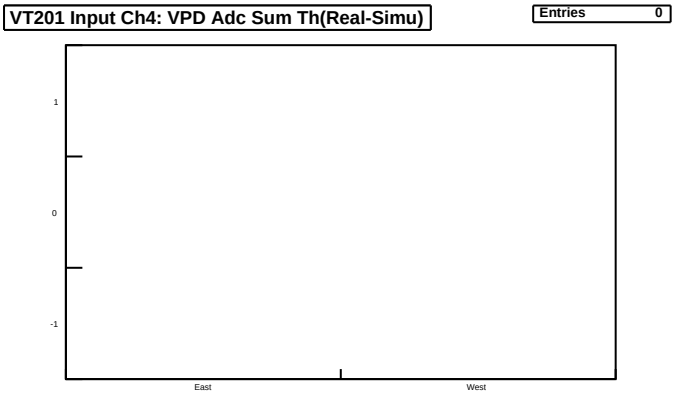

VT201 Input Ch2: ZDC Adc Sum Th
Entries 29952
147
39
219
90
1
1
3597
3705
3744
3744
3525
3654
3743
3743
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

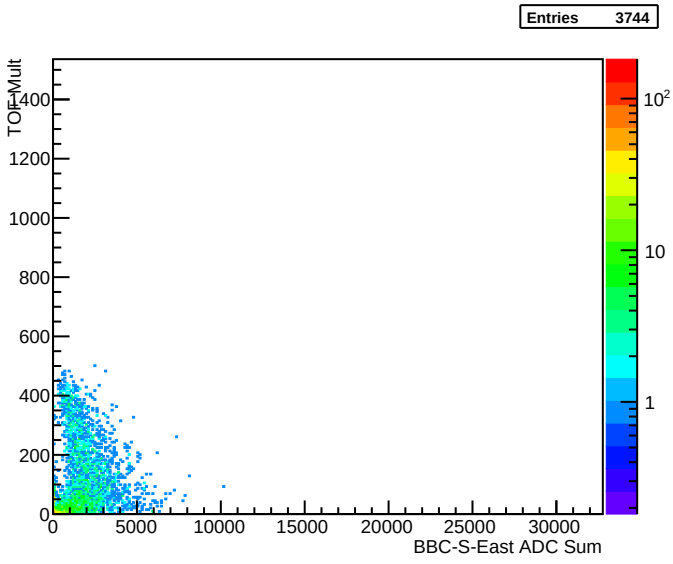

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

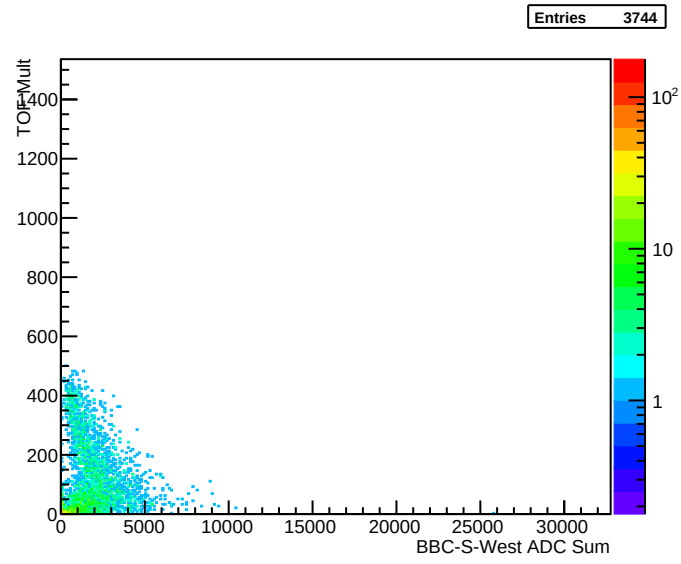

VT201 Input Ch4: VPD Tac Diff
Entries 3744
Tac

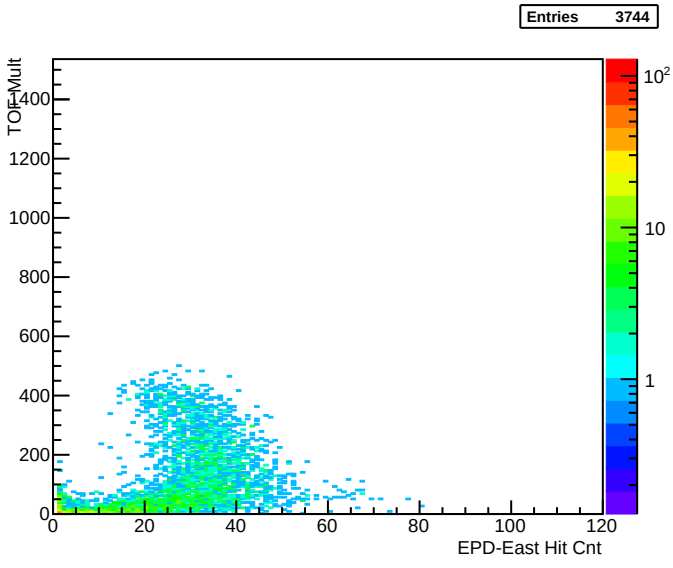

VT201 Input Ch4: VPD Tac Diff
Entries 0
Simu
Real

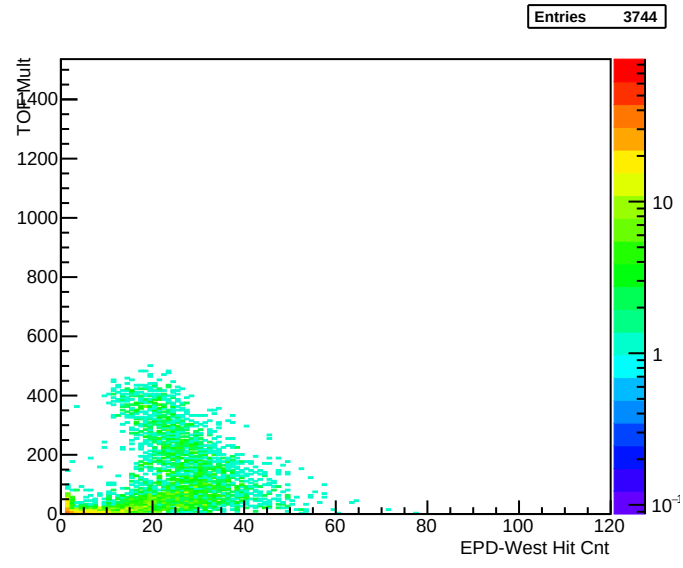

VT201 Input Ch4: VPD Adc Sum Th
Entries 7488
3092
3022
652
722
East
West

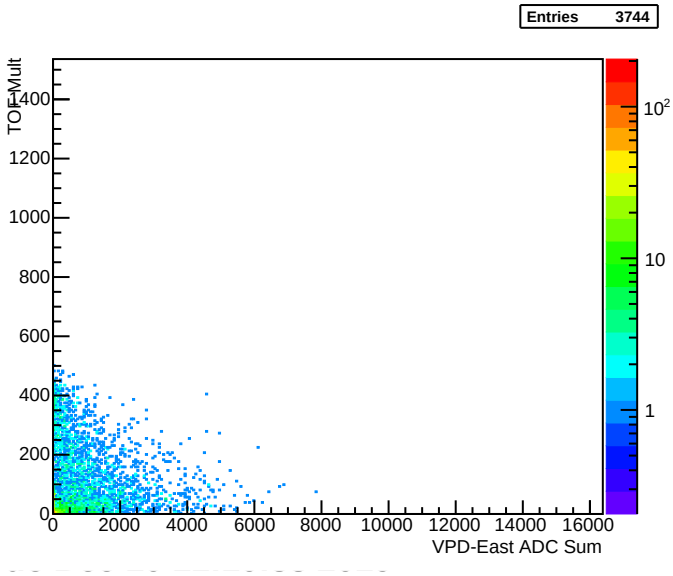

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 0
East
West

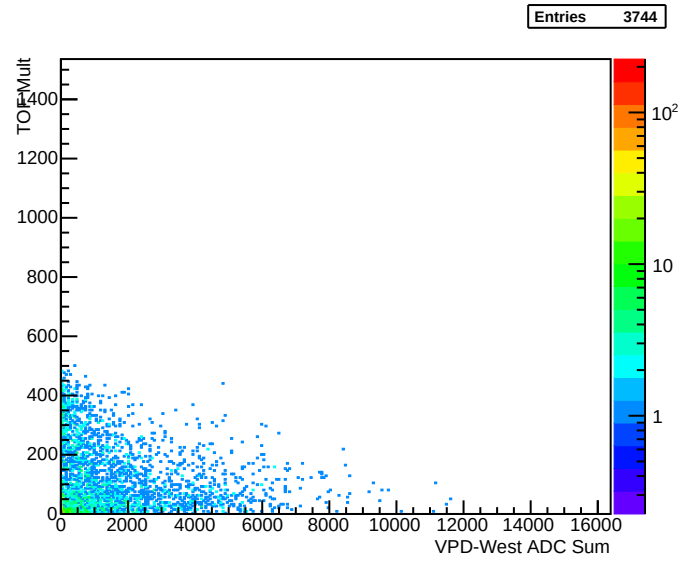

Entries 3744
TOF-Mult
BBC-S-East ADC Sum

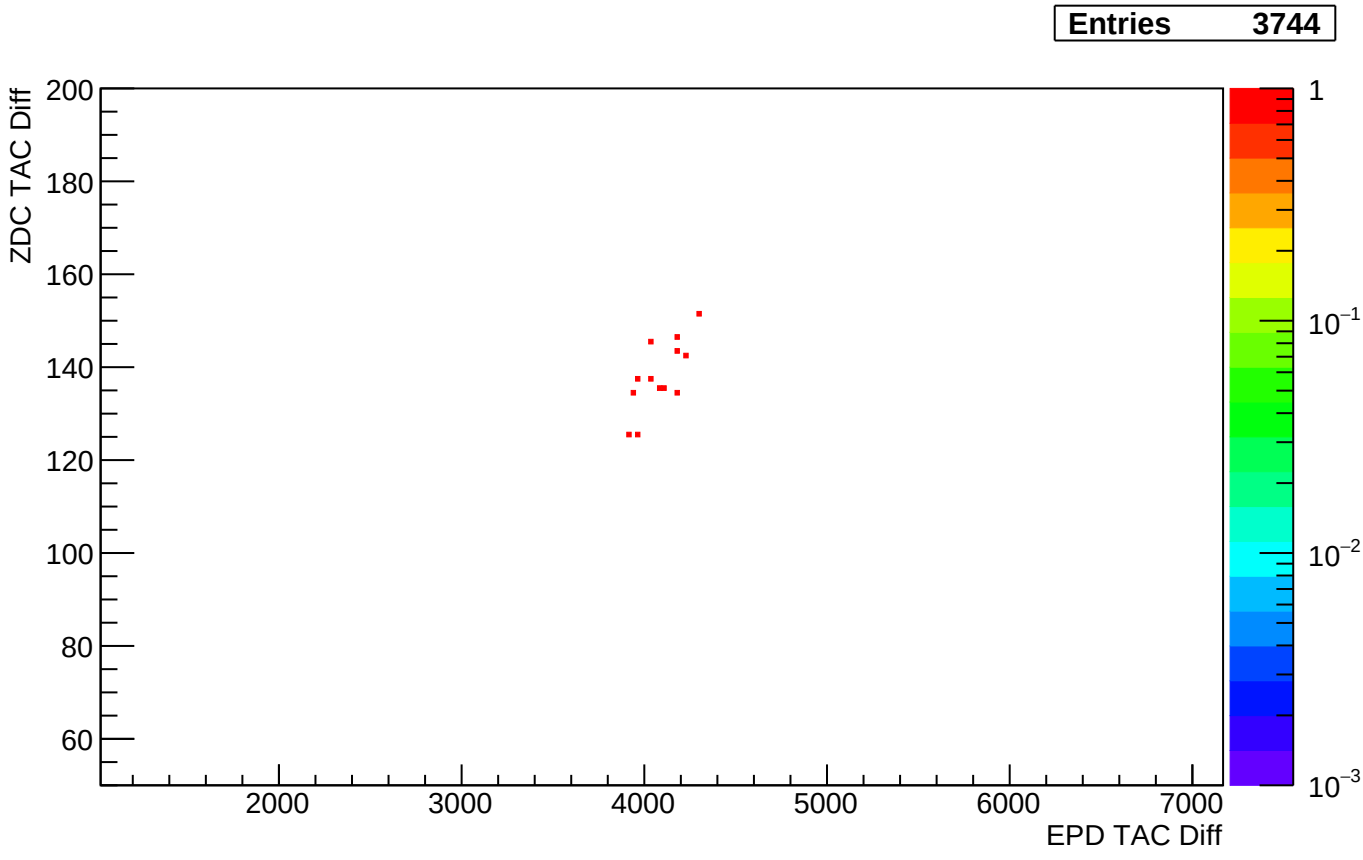

Entries 3744
TOF-Mult
BBC-S-West ADC Sum

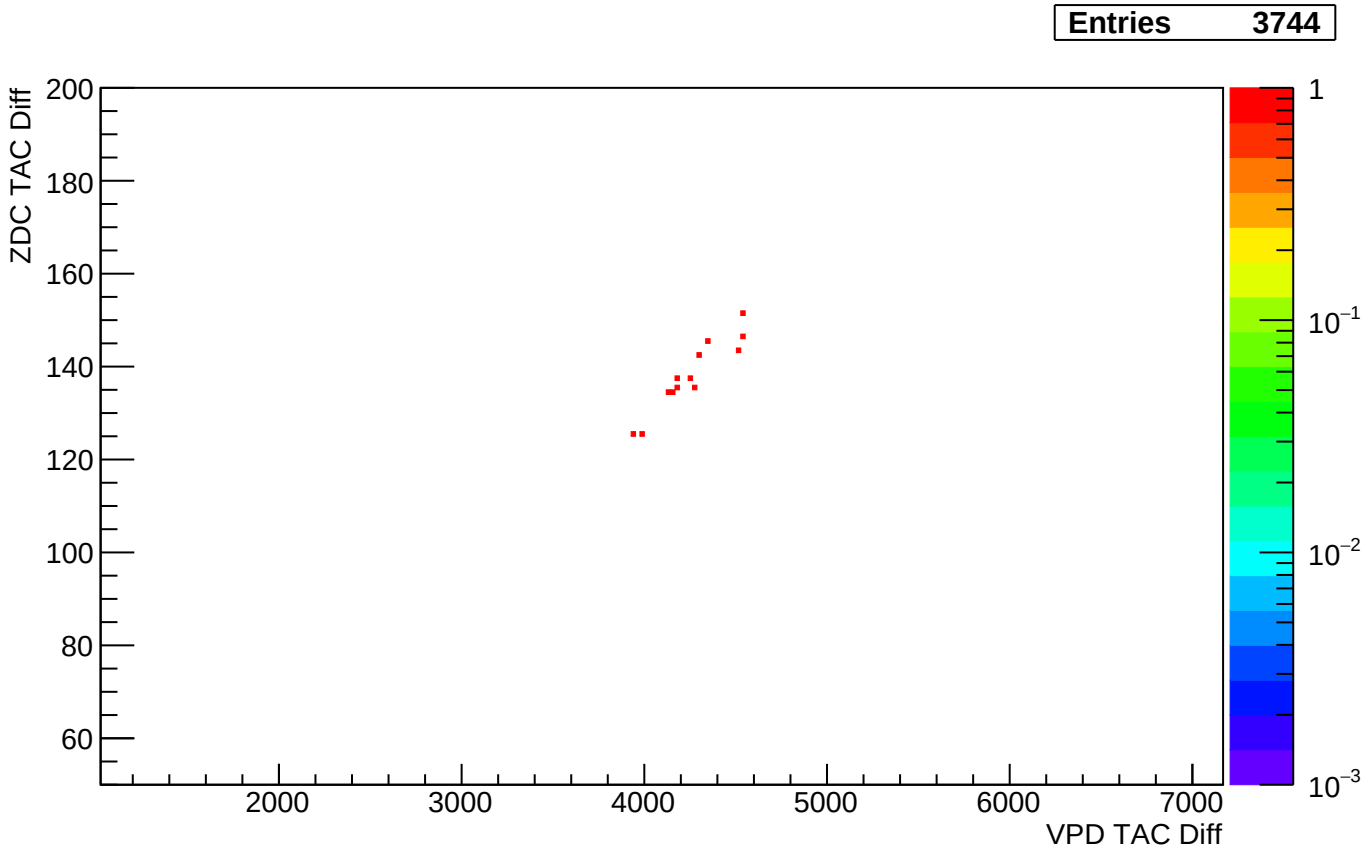

Entries 3744
TOF-Mult
EPD-East Hit Cnt

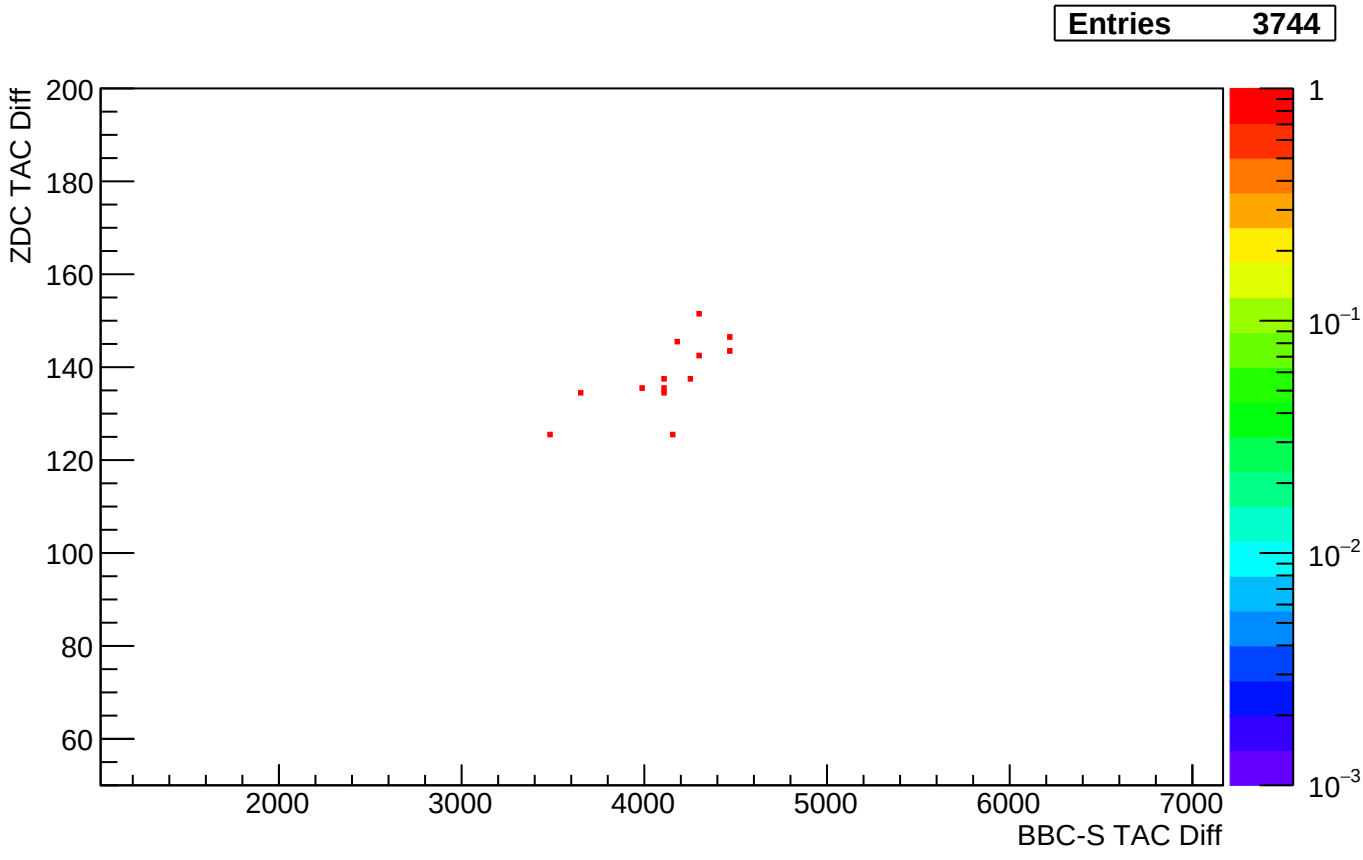

Entries 3744
TOF-Mult
EPD-West Hit Cnt

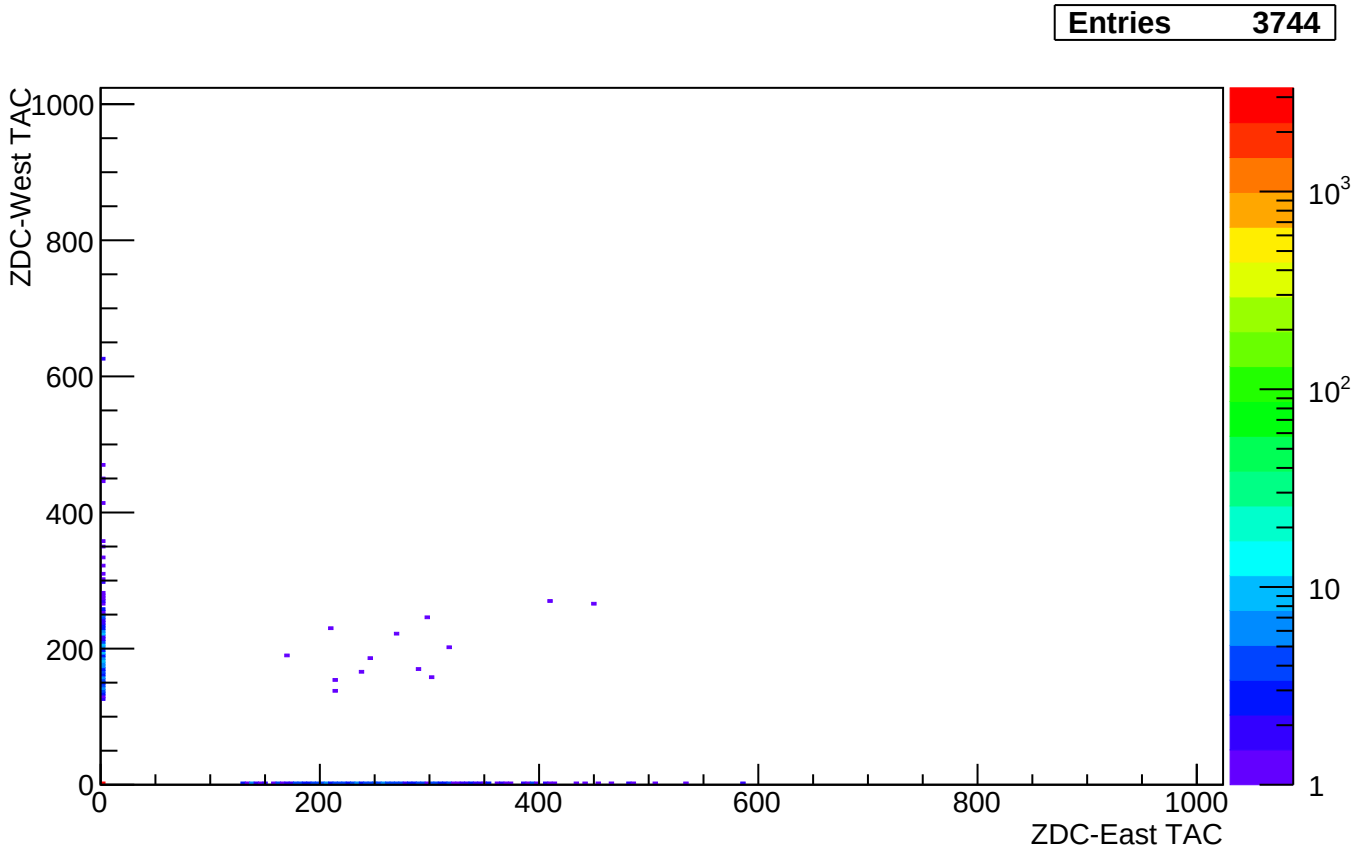

Entries 3744
TOF-Mult
VPD-East ADC Sum

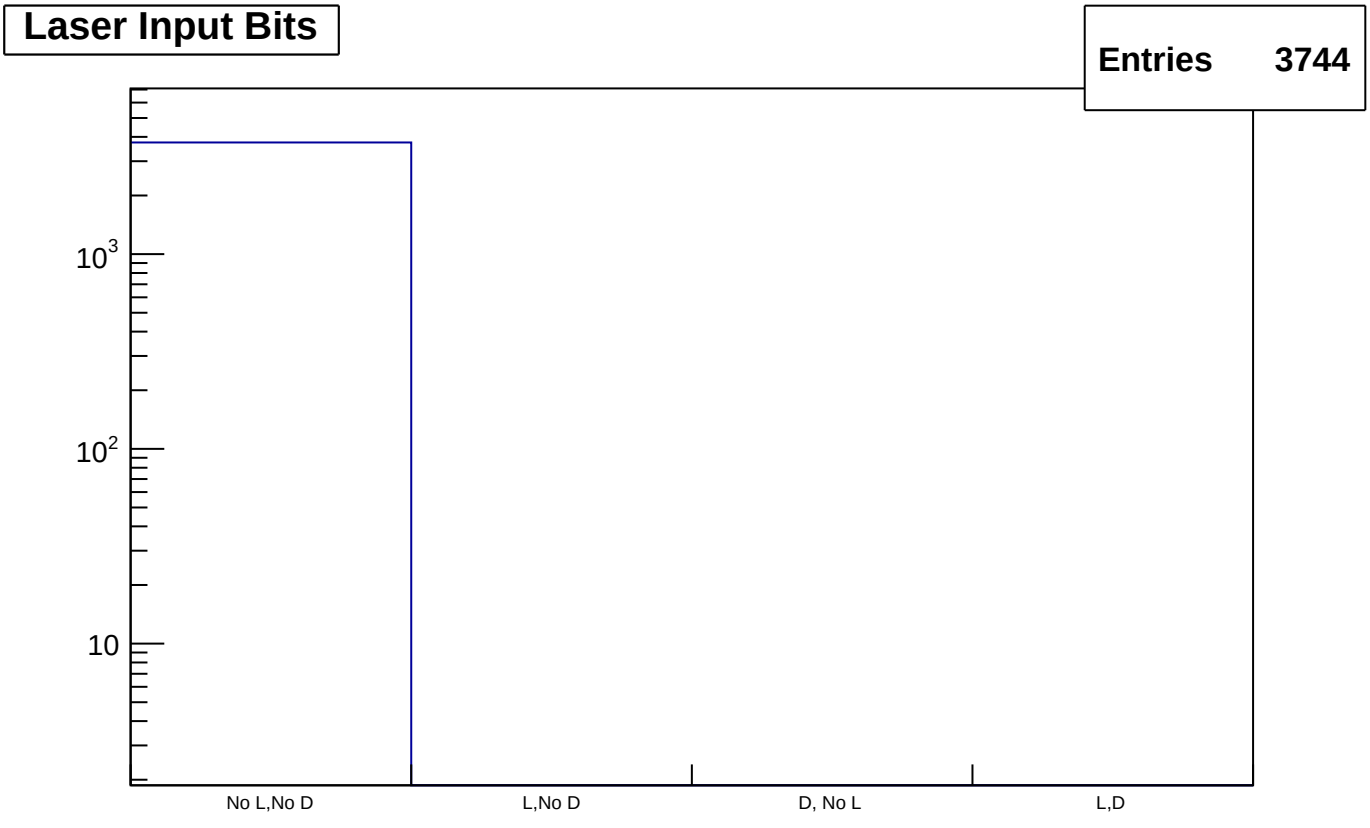

Entries 3744
TOF-Mult
VPD-West ADC Sum

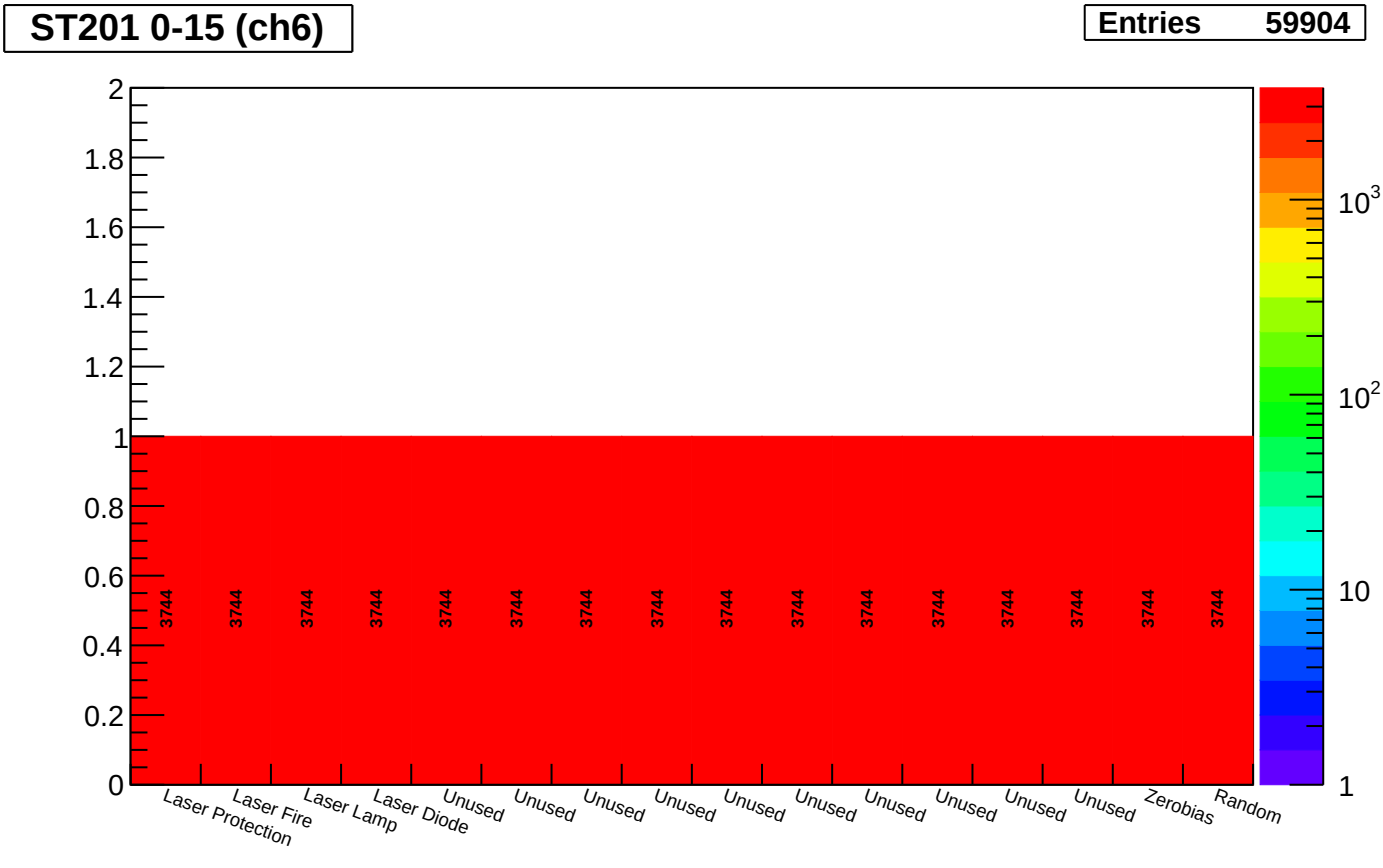

Entries 3744
ZDC TAC Diff
200
180
160
140
120
100
80
60
2000
3000
4000
5000
6000
7000
EPD TAC Diff
1
10^{-1}
10^{-2}
10^{-3}

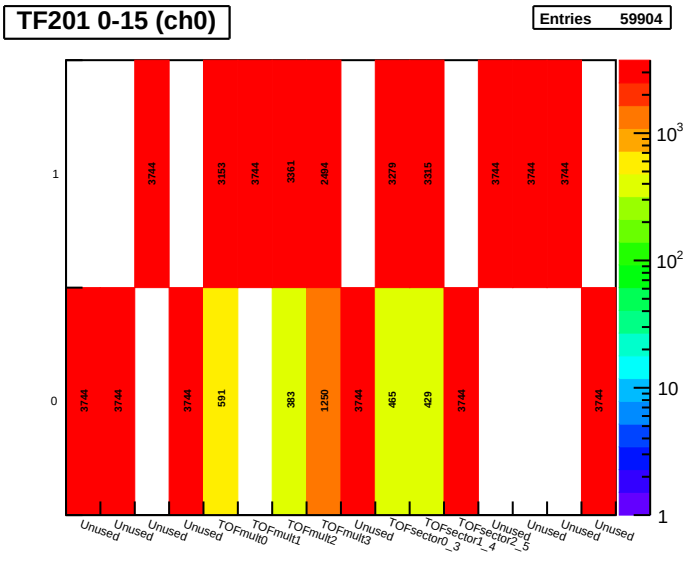

Entries 3744
ZDC TAC Diff
200
180
160
140
120
100
80
60
2000
3000
4000
5000
6000
7000
VPD TAC Diff
1
10^{-1}
10^{-2}
10^{-3}

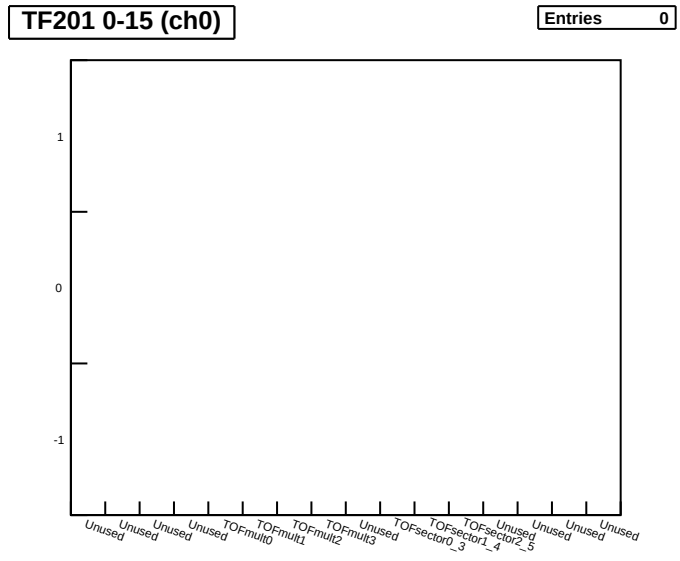

Entries 3744
ZDC TAC Diff
BBC-S TAC Diff
200
180
160
140
120
100
80
60
2000
3000
4000
5000
6000
7000
1
10^{-1}
10^{-2}
10^{-3}

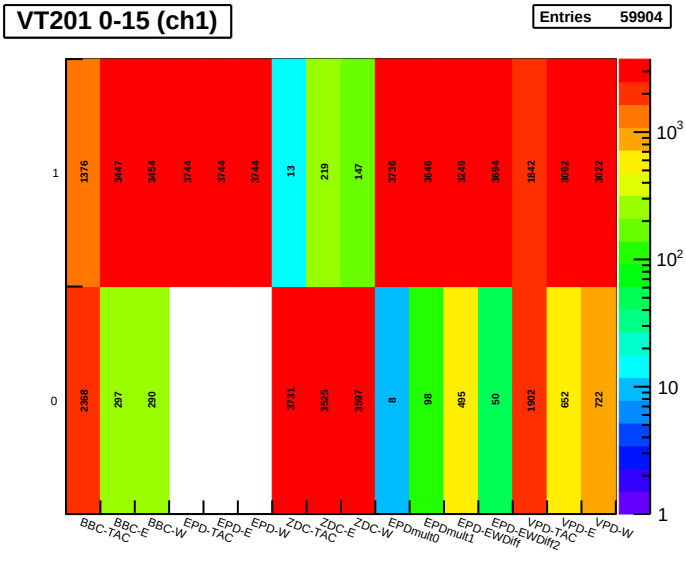

Entries 3744
ZDC-West TAC
ZDC-East TAC
1000
800
600
400
200
0
0
200
400
600
800
1000
10^3
10^2
10
1

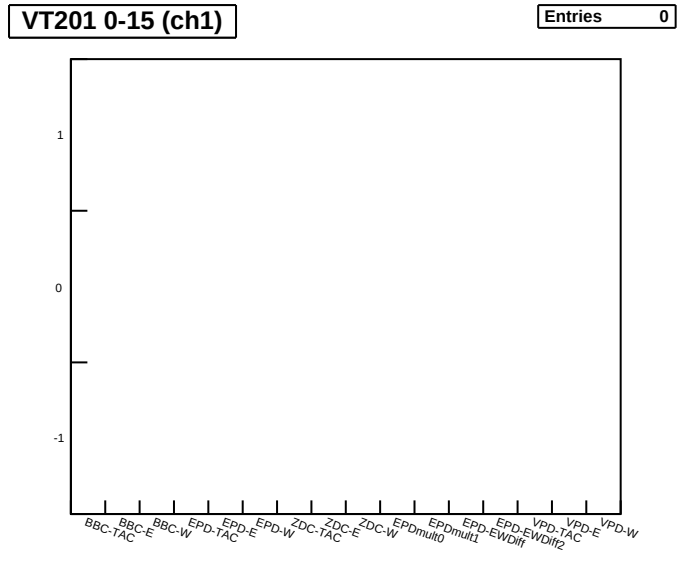

Laser Input Bits
Entries 3744
10^3
10^2
10
No L,No D
L,No D
D, No L
L,D

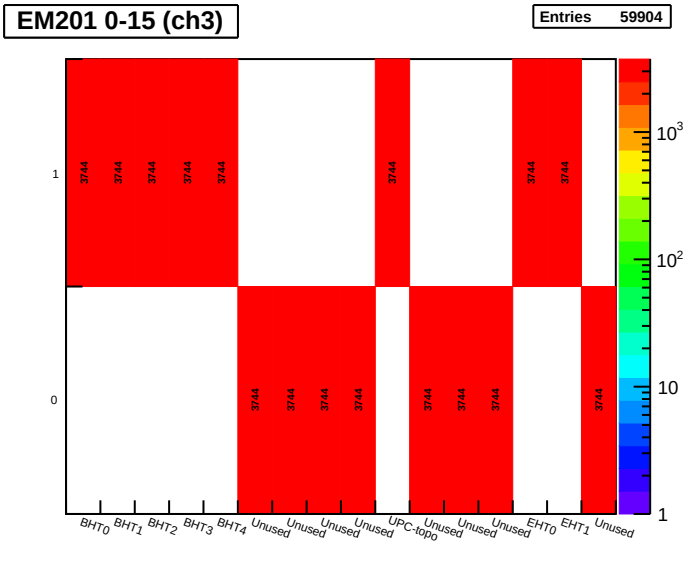

ST201 0-15 (ch6)
Entries 59904
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
3744
Laser Protection
Laser Fire
Laser Lamp
Laser Diode
Unused
Zerobias
Random
10^3
10^2
10
1

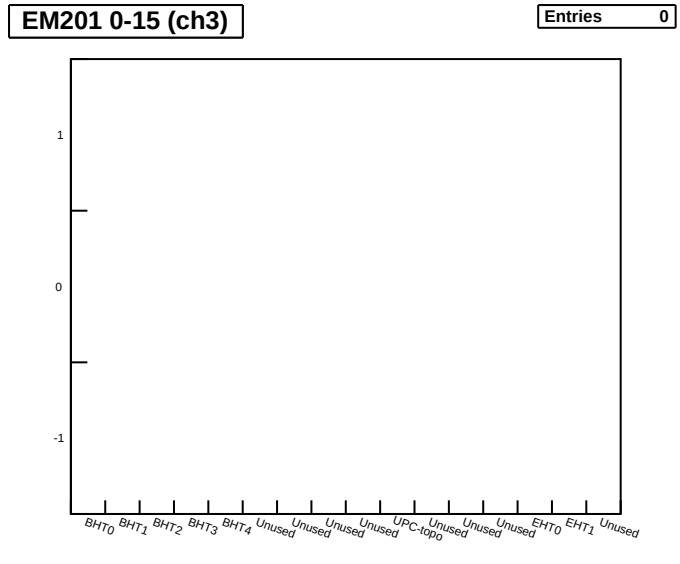

TF201 0-15 (ch0)
Entries 59904
1
0
3744 3744 3744 3744 3153 3744 3361 2494 3279 3315 3744 3744 3744
3744 3744 3744 591 383 1250 3744 465 429 3744 3744
Unused Unused Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 Unused TOFsector0_3 TOFsector1_4 TOFsector2_5 Unused Unused Unused
10^3
10^2
10
1


TF201 0-15 (ch0)
Entries 0
1
0
-1
Unused Unused Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 Unused TOFsector0_3 TOFsector1_4 TOFsector2_5 Unused Unused Unused


VT201 0-15 (ch1)
Entries 59904
1
0
1376 3447 3454 3744 3744 3744 13 219 147 3736 3646 3249 3694 1842 3092 3022
2368 297 290 3731 3525 3587 8 98 495 50 1902 652 722
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W EPDmult0 EPDmult1 EPD-EWDiff EPD-EWDiff2 VPD-TAC VPD-E VPD-W
10^3
10^2
10
1


VT201 0-15 (ch1)
Entries 0
1
0
-1
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W EPDmult0 EPDmult1 EPD-EWDiff EPD-EWDiff2 VPD-TAC VPD-E VPD-W


EM201 0-15 (ch3)
Entries 59904
1
0
3744 3744 3744 3744 3744 3744 3744 3744
3744 3744 3744 3744 3744 3744 3744 3744
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused
10^3
10^2
10
1


EM201 0-15 (ch3)
Entries 0
1
0
-1
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused