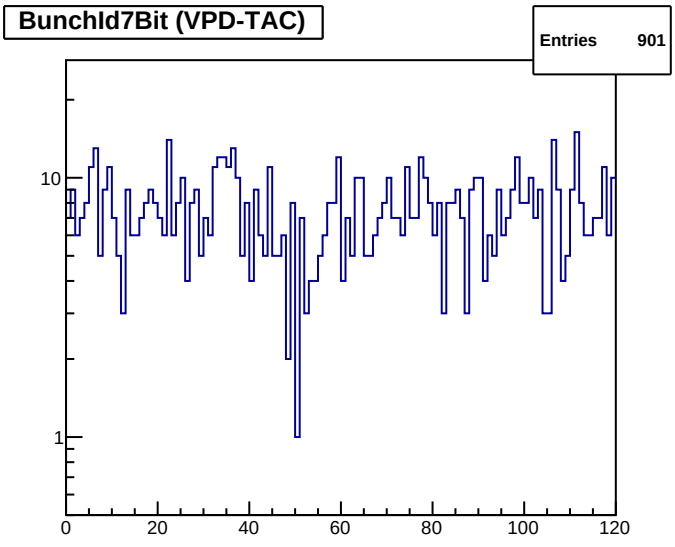
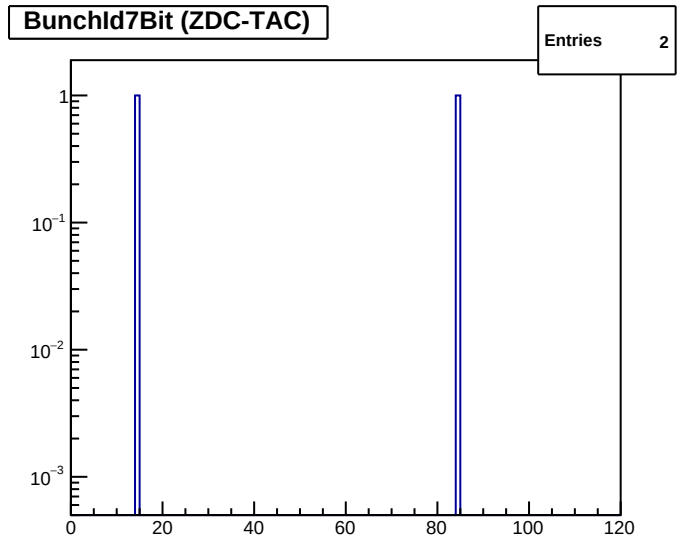
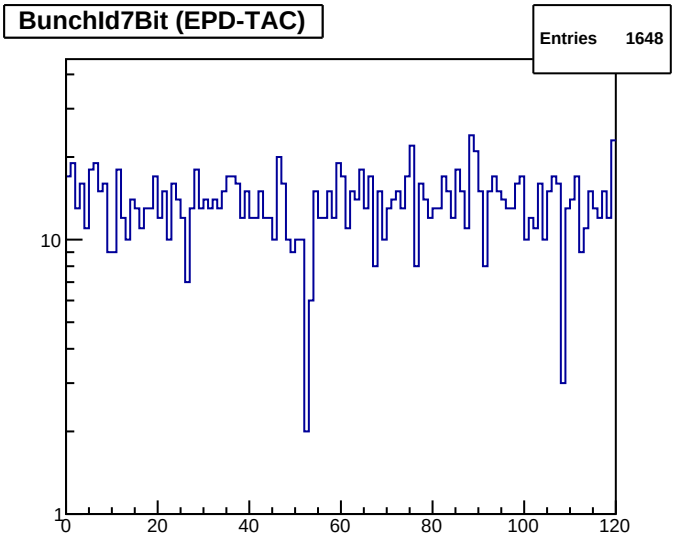
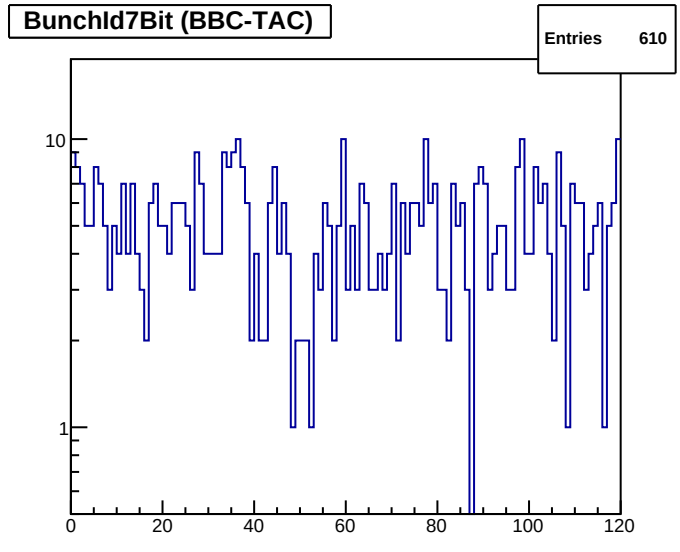
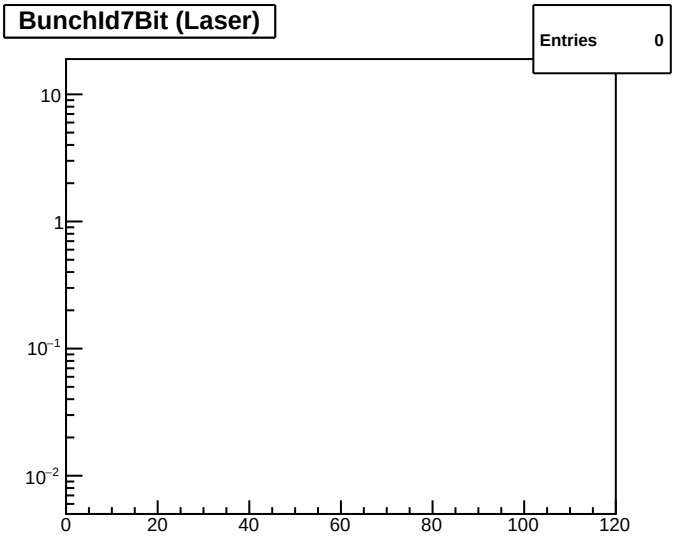
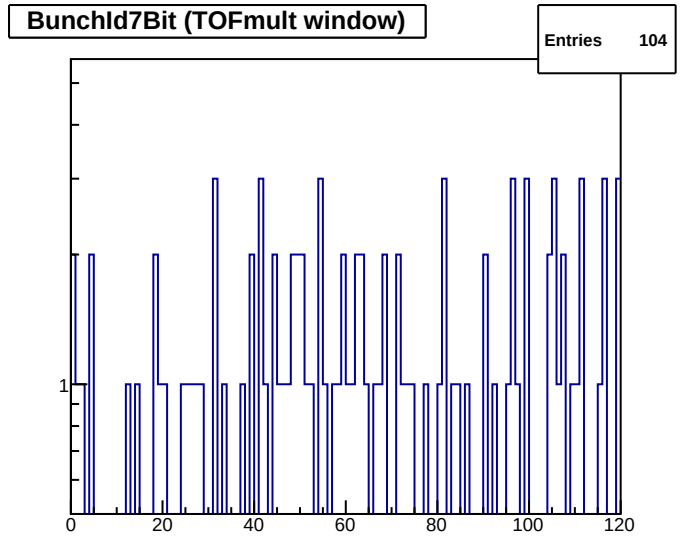

BunchId7Bit (VPD-TAC)
Entries 901
10
1
0 20 40 60 80 100 120

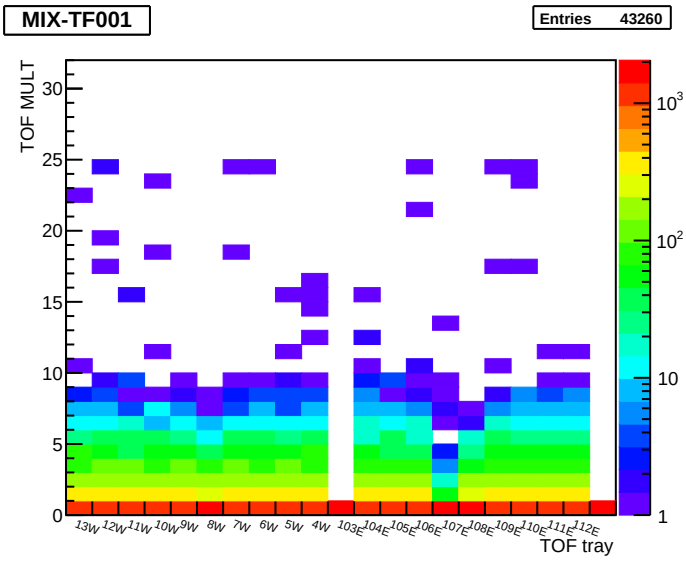

BunchId7Bit (ZDC-TAC)
Entries 2
1
10^{-1}
10^{-2}
10^{-3}
0 20 40 60 80 100 120

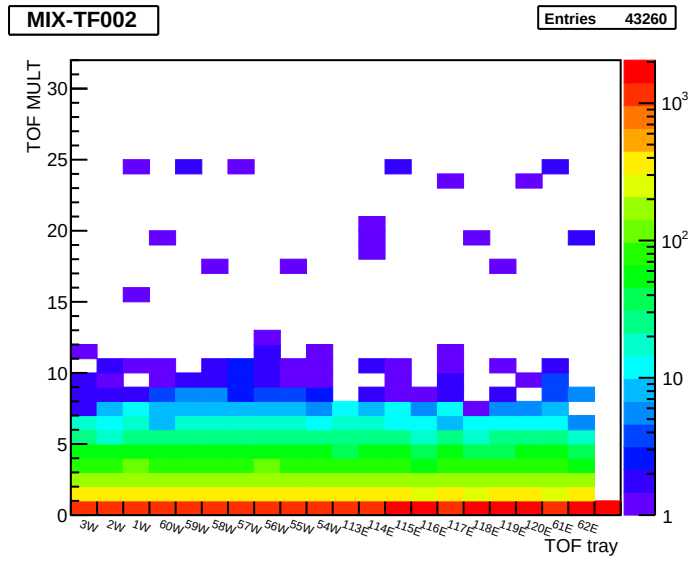

BunchId7Bit (EPD-TAC)
Entries 1648
10
1
0 20 40 60 80 100 120

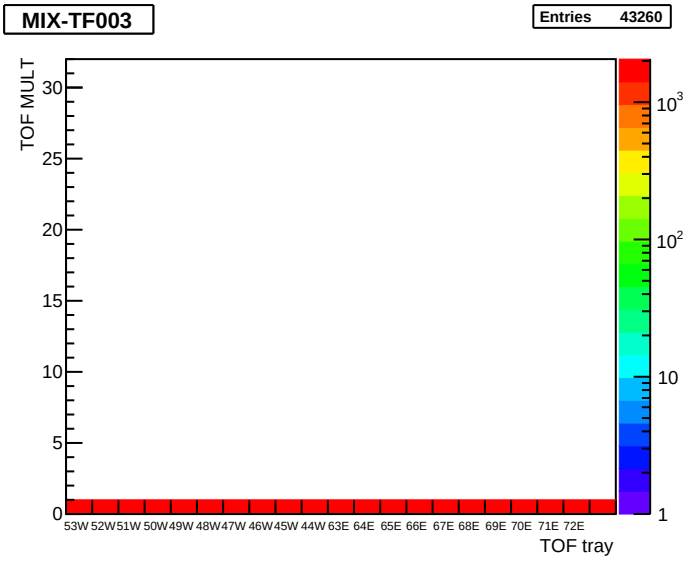

BunchId7Bit (BBC-TAC)
Entries 610
10
1
0 20 40 60 80 100 120

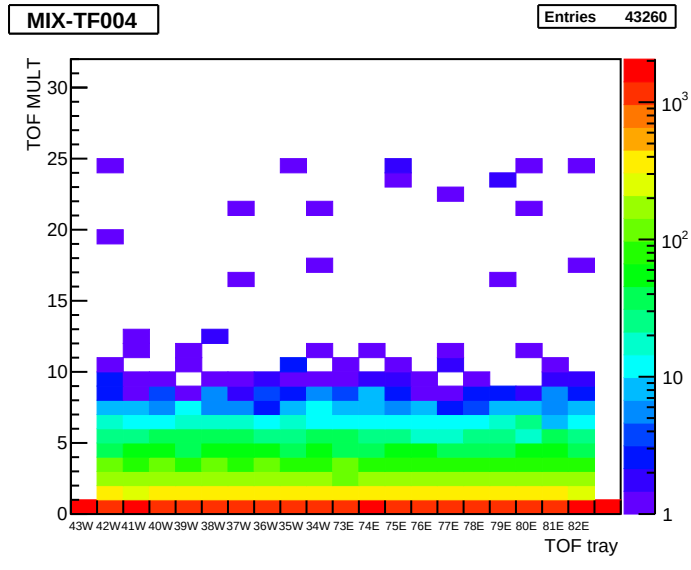

BunchId7Bit (Laser)
Entries 0
10
1
10^{-1}
10^{-2}
0 20 40 60 80 100 120

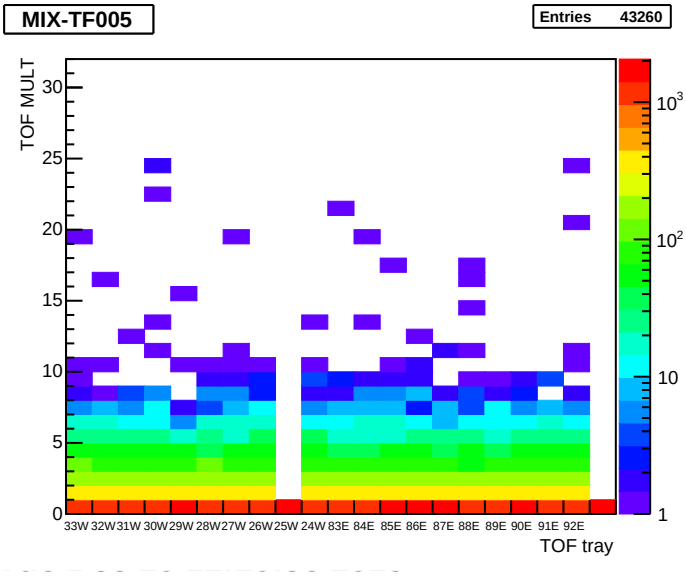

BunchId7Bit (TOFmult window)
Entries 104
1
0 20 40 60 80 100 120

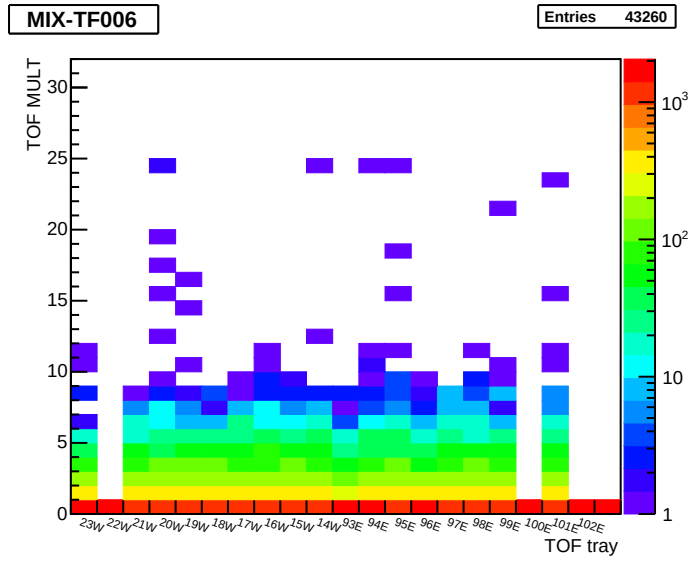

MIX-TF001
Entries 43260
TOF MULT
TOF tray

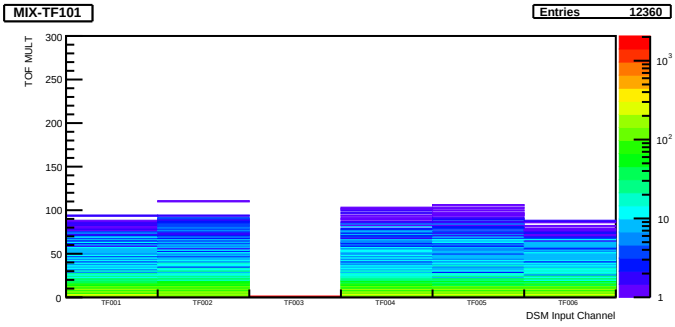

MIX-TF002
Entries 43260
TOF MULT
TOF tray

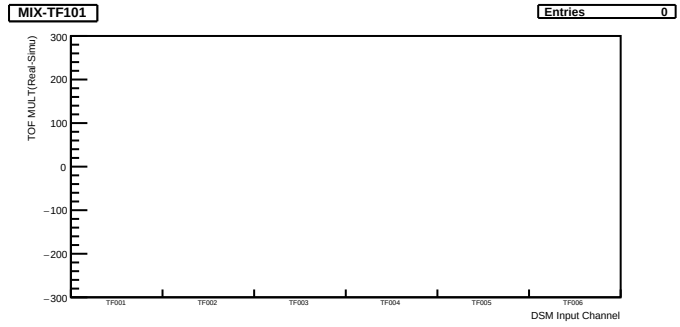

MIX-TF003
Entries 43260
TOF MULT
TOF tray

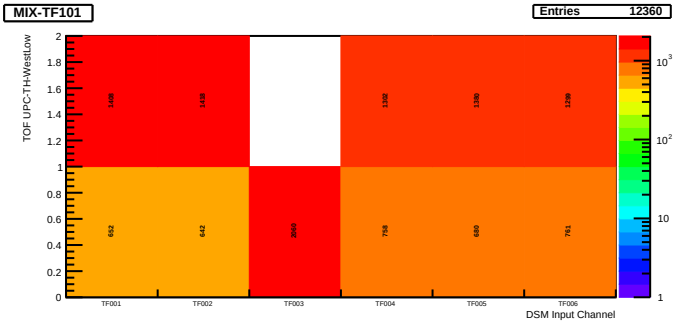

MIX-TF004
Entries 43260
TOF MULT
TOF tray

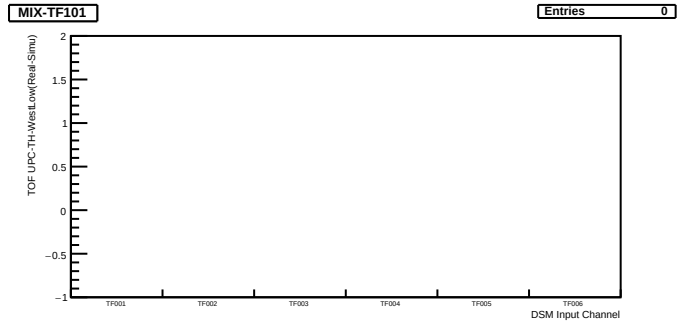

MIX-TF005
Entries 43260
TOF MULT
TOF tray

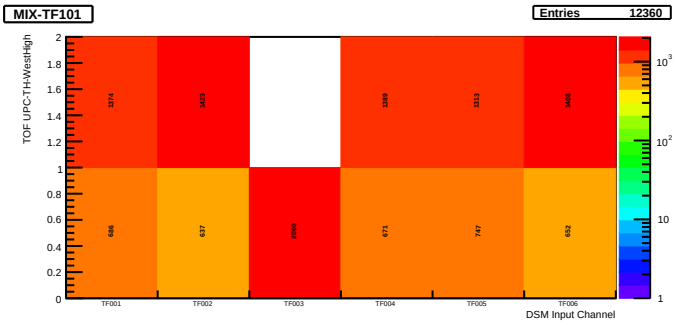

MIX-TF006
Entries 43260
TOF MULT
TOF tray

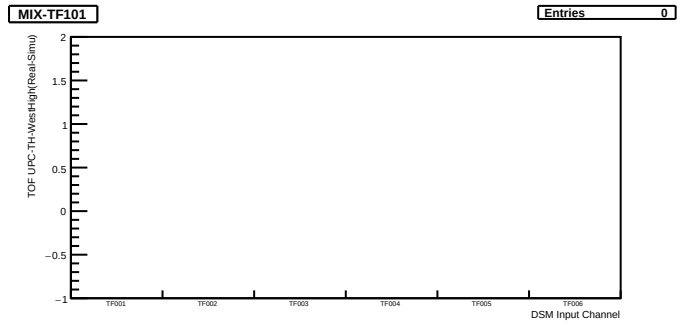

MIX-TF101
Entries 12360
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

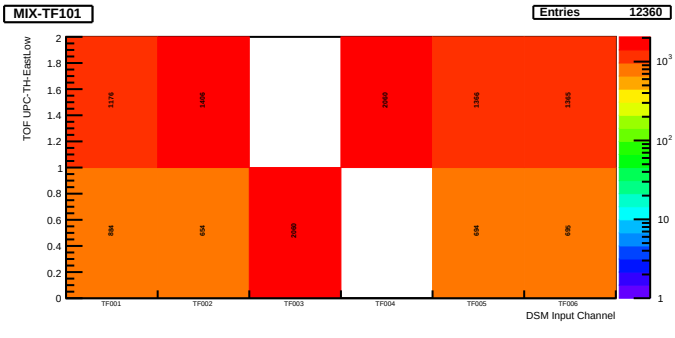

MIX-TF101
Entries 0
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

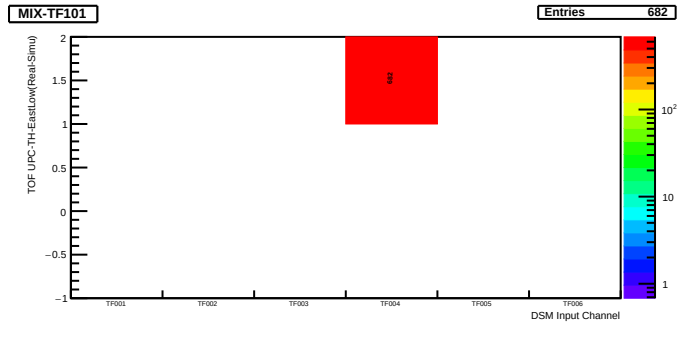

MIX-TF101
Entries 12360
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

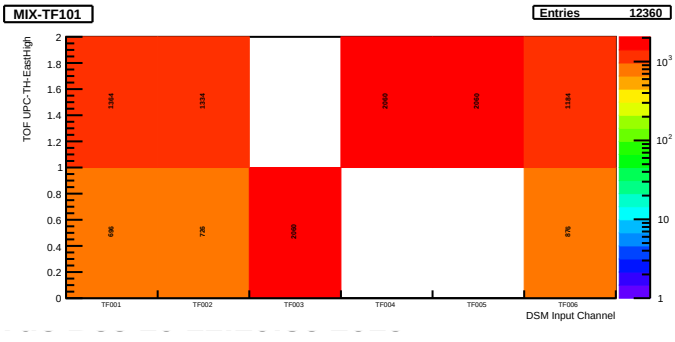

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

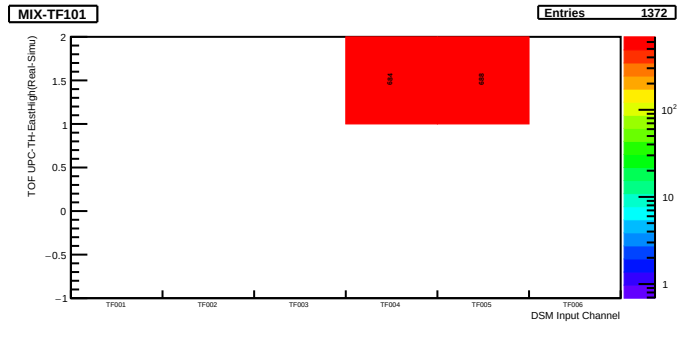

MIX-TF101
Entries 12360
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

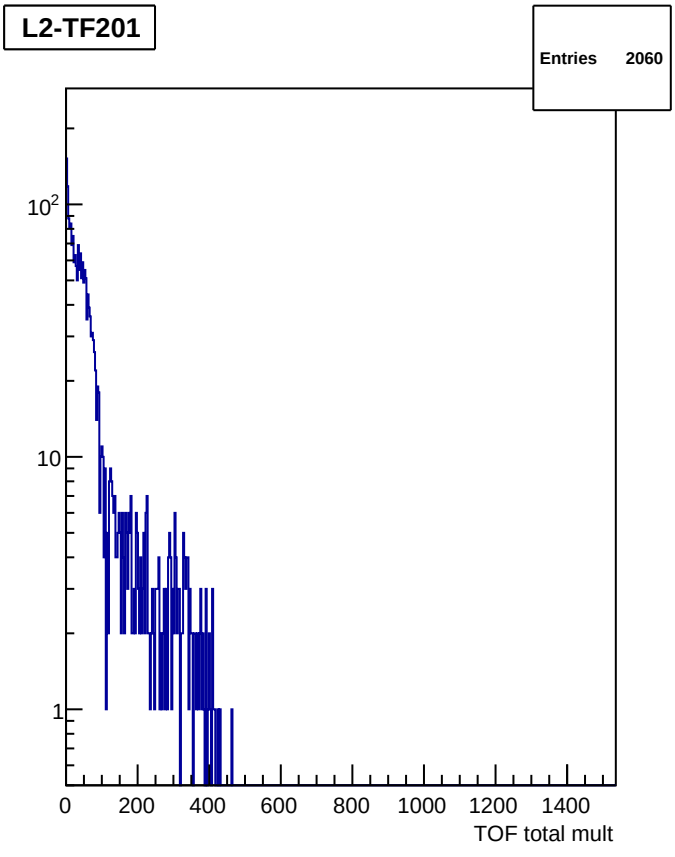

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

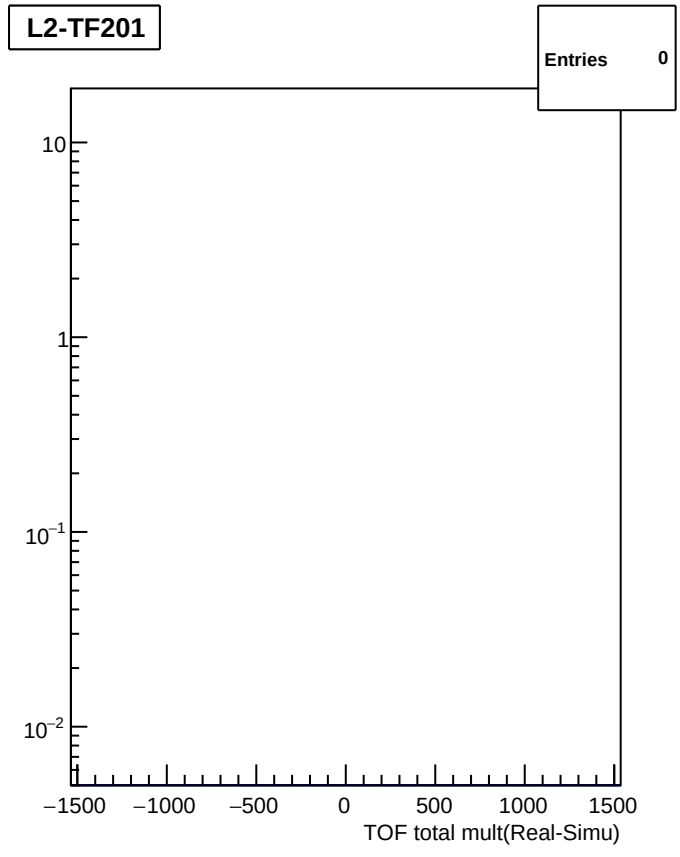

MIX-TF101
Entries 12360
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

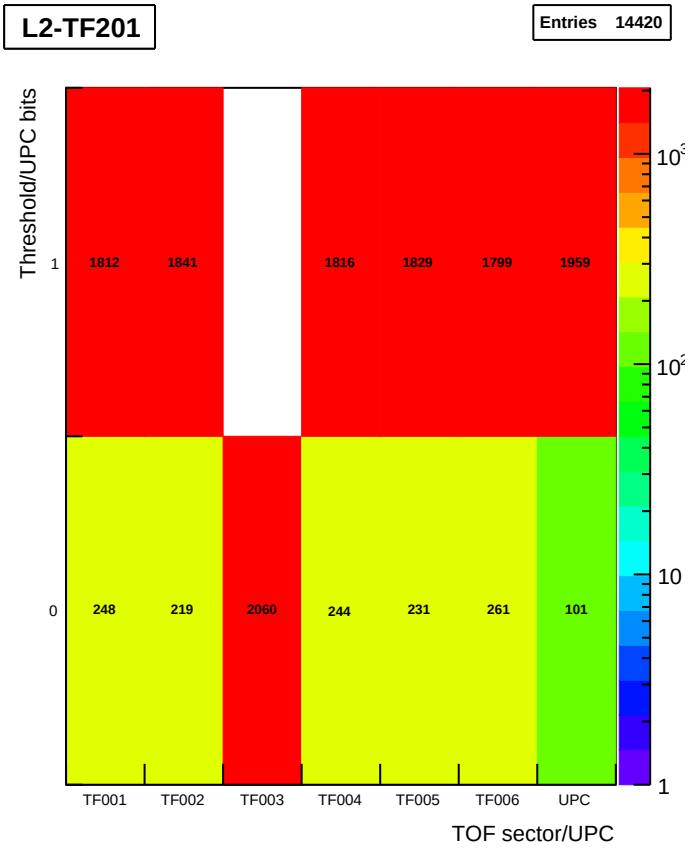

MIX-TF101
Entries 682
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

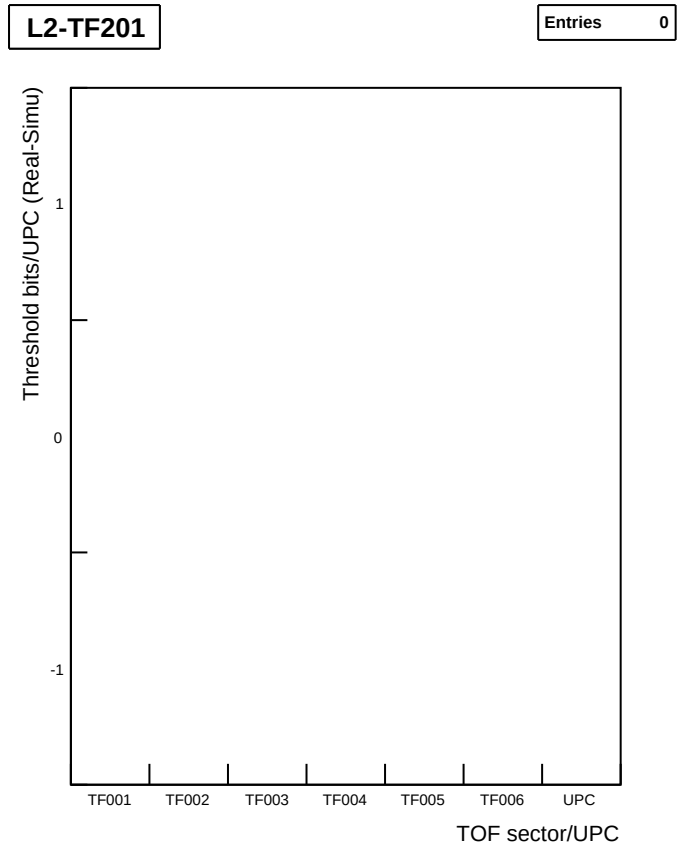

MIX-TF101
Entries 12360
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

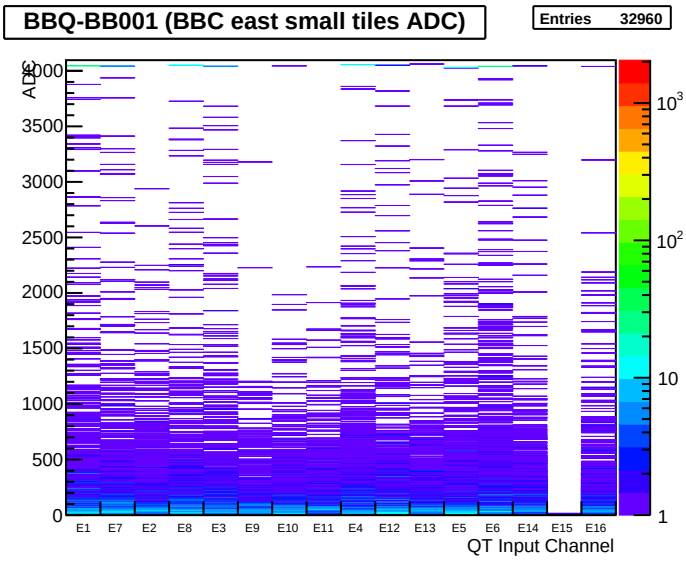

MIX-TF101
Entries 1372
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

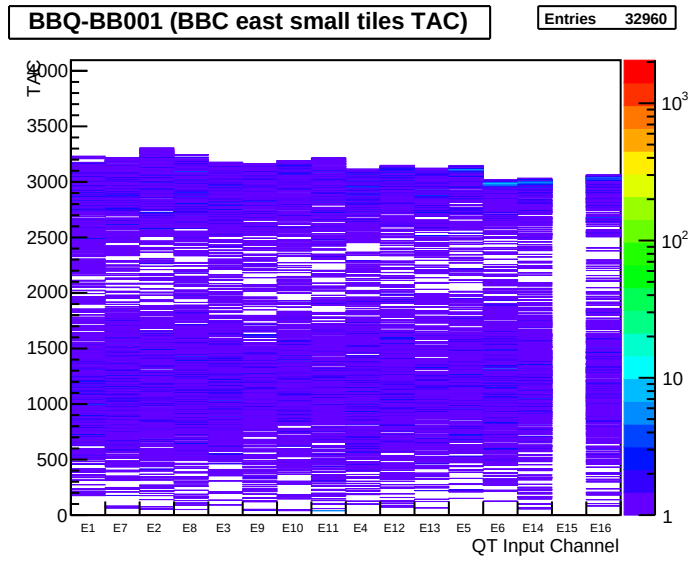

L2-TF201
Entries 2060
10^2
10
1
0
200
400
600
800
1000
1200
1400
TOF total mult

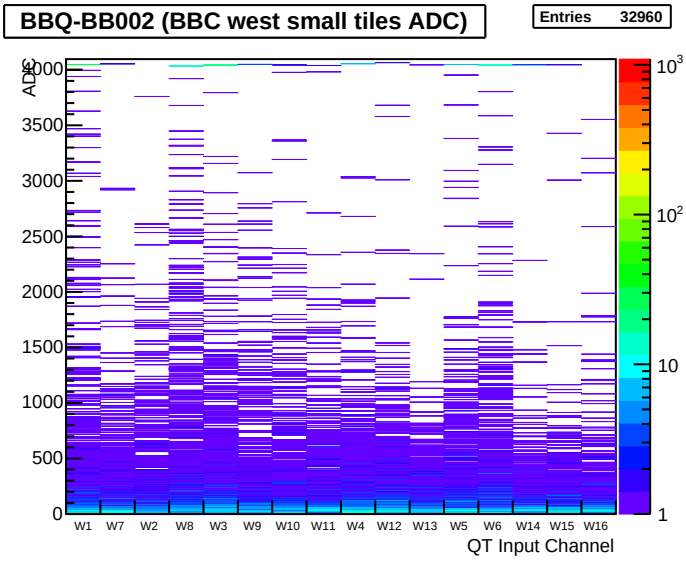

L2-TF201
Entries 0
10
1
10^{-1}
10^{-2}
−1500
−1000
−500
0
500
1000
1500
TOF total mult(Real-Simu)

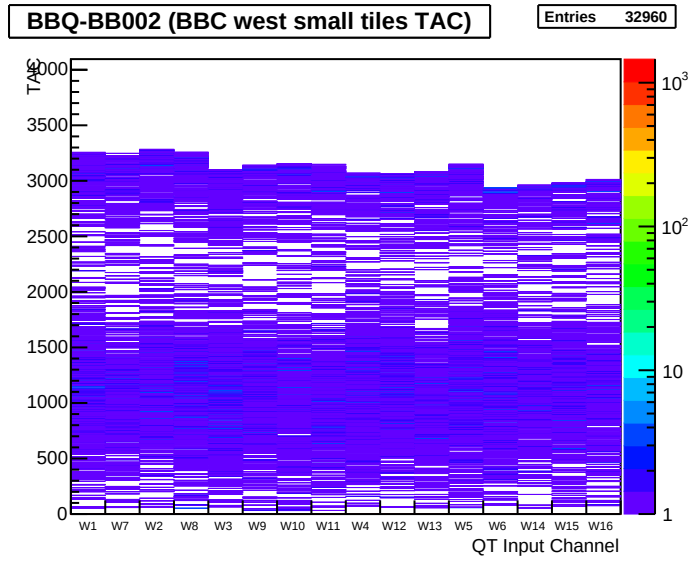

L2-TF201
Entries 14420
Threshold/UPC bits
1
0
1812
1841
1816
1829
1799
1959
248
219
2060
244
231
261
101
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC
10
1

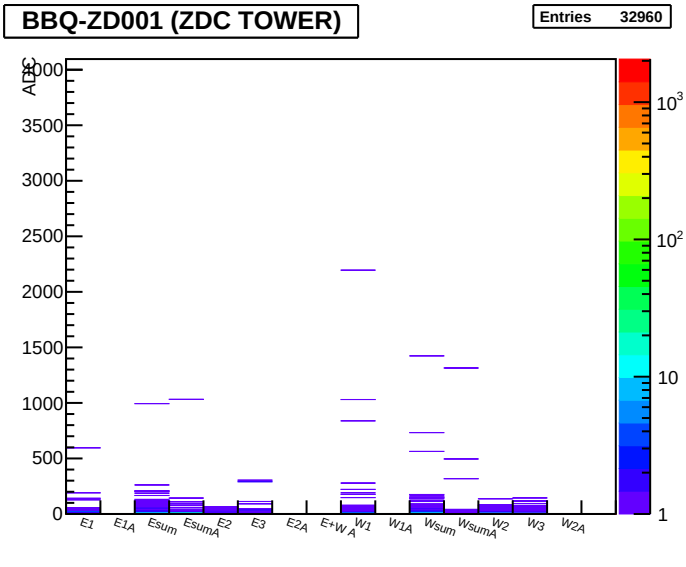

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
1
0
-1
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC

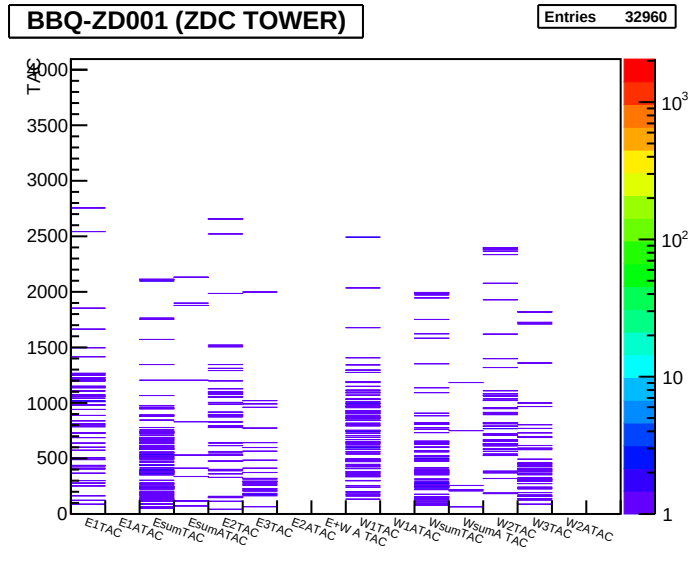

BBQ-BB001 (BBC east small tiles ADC)
Entries 32960
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

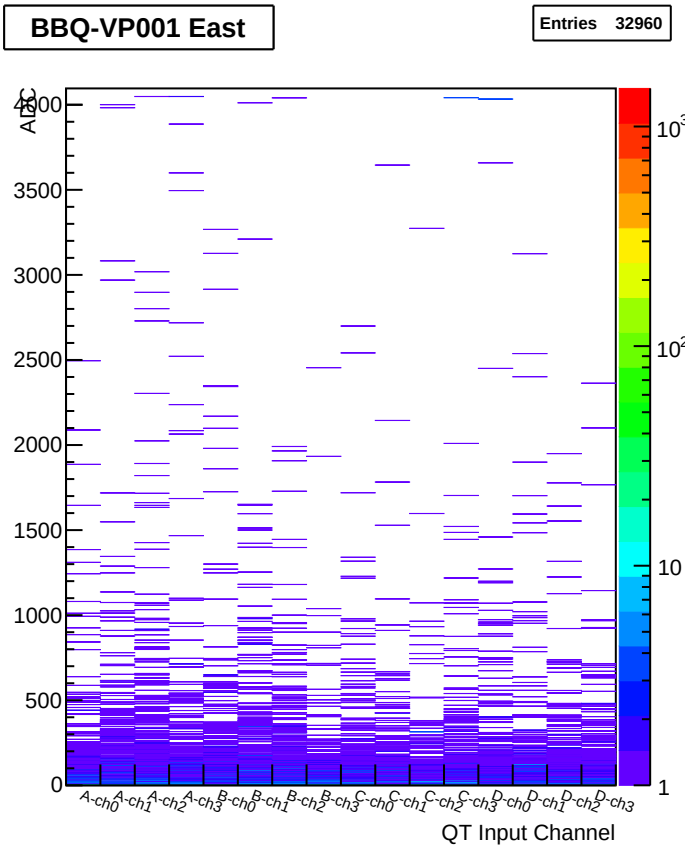

BBQ-BB001 (BBC east small tiles TAC)
Entries 32960
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

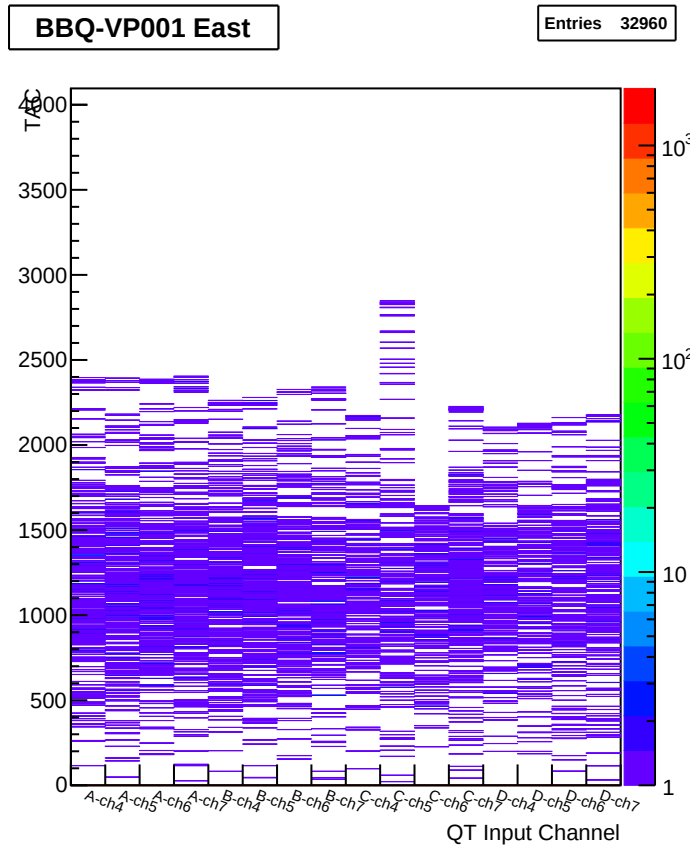

BBQ-BB002 (BBC west small tiles ADC)
Entries 32960
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

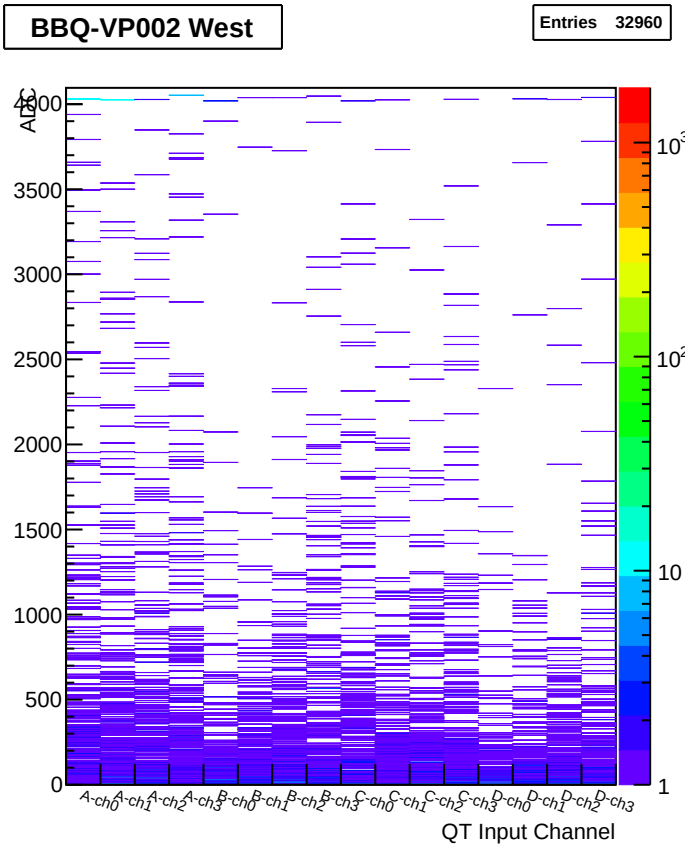

BBQ-BB002 (BBC west small tiles TAC)
Entries 32960
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

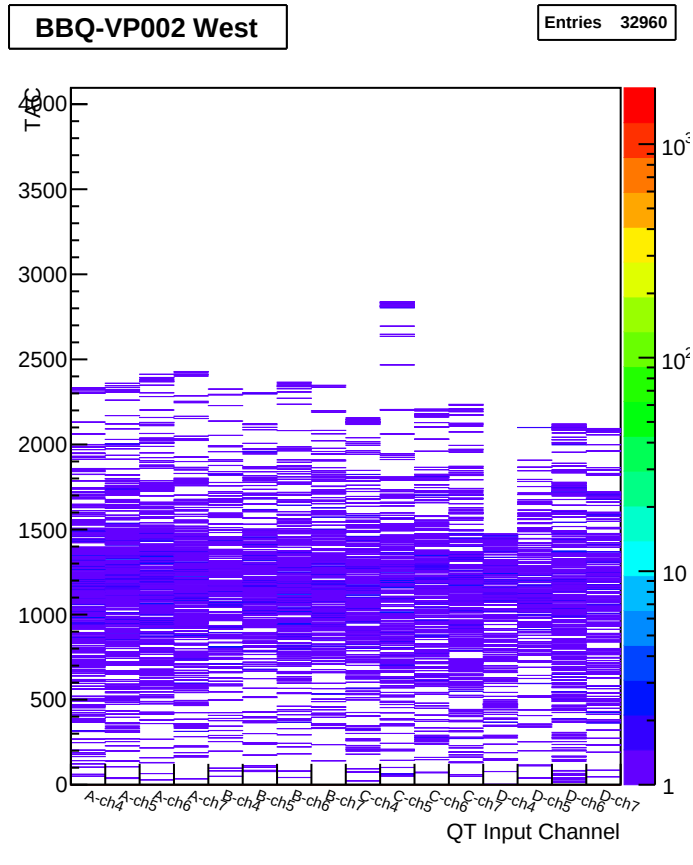

BBQ-ZD001 (ZDC TOWER)
Entries 32960
ADC
E1 E1A Esum EsumA E2 E3 E2A E+W A W1 W1A Wsum WsumA W2 W3 W2A

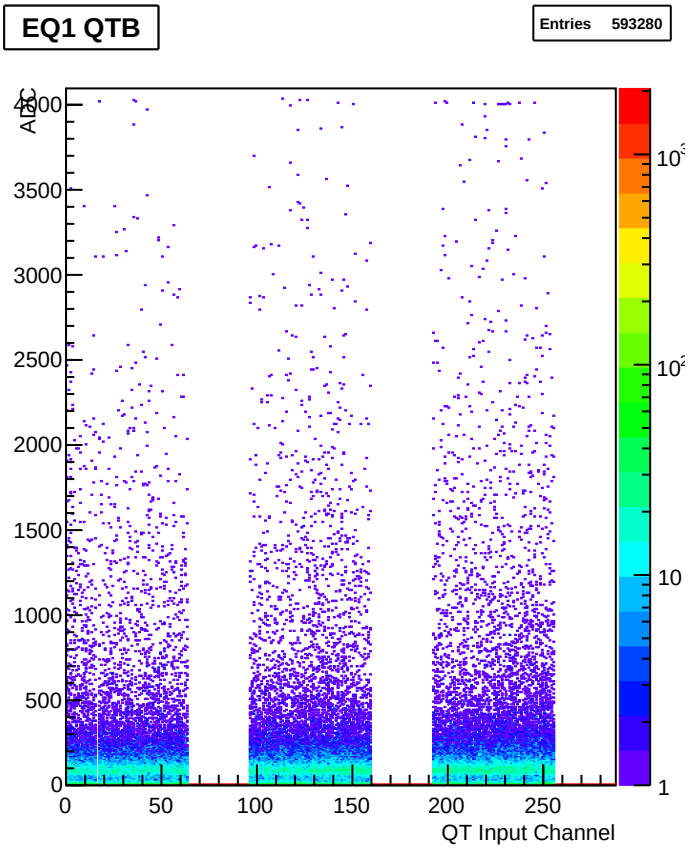

BBQ-ZD001 (ZDC TOWER)
Entries 32960
TAC
E1TAC E1ATAC EsumTAC EsumATAC E2TAC E3TAC E2ATAC E+W A TAC W1TAC W1ATAC WsumTAC WsumA TAC W2TAC W3TAC W2ATAC

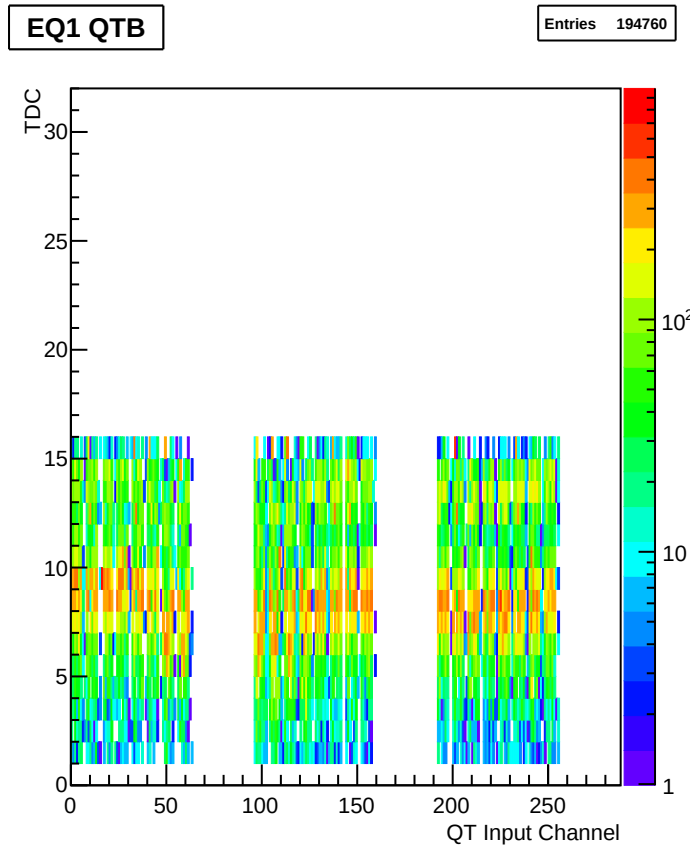

BBQ-VP001 East
Entries 32960
ADC
QT Input Channel

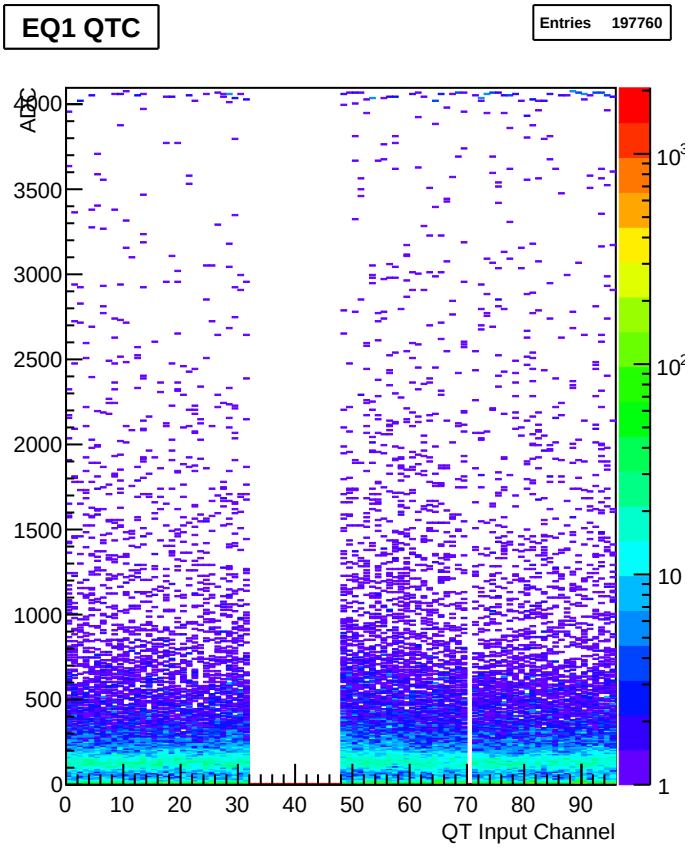

BBQ-VP001 East
Entries 32960
TADC
QT Input Channel

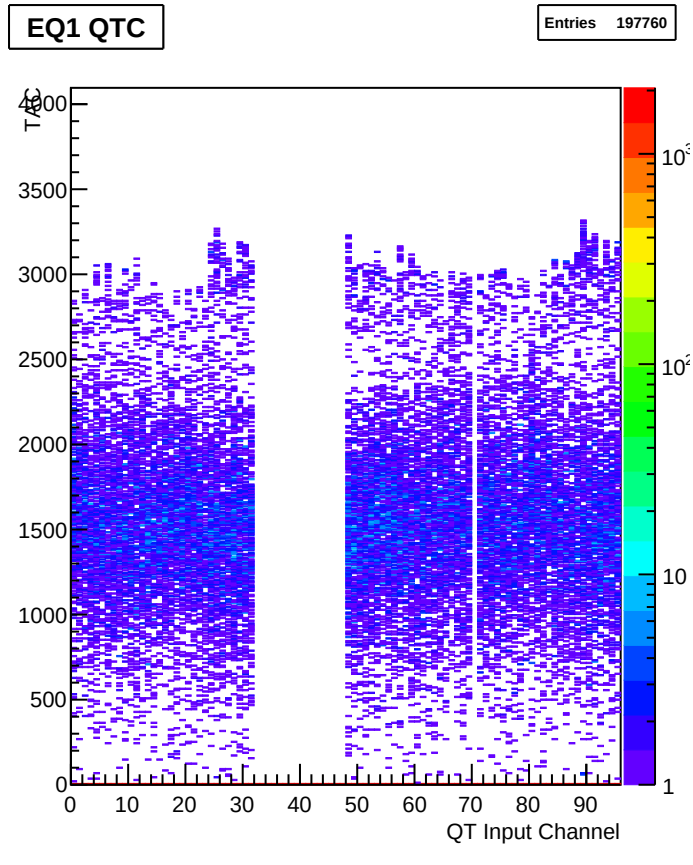

BBQ-VP002 West
Entries 32960
ADC
QT Input Channel

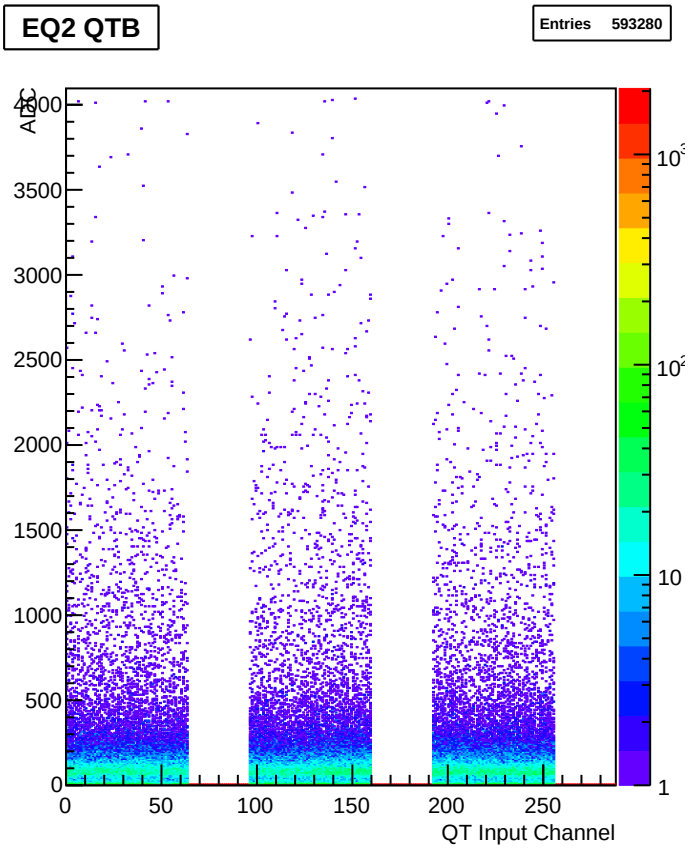

BBQ-VP002 West
Entries 32960
TADC
QT Input Channel

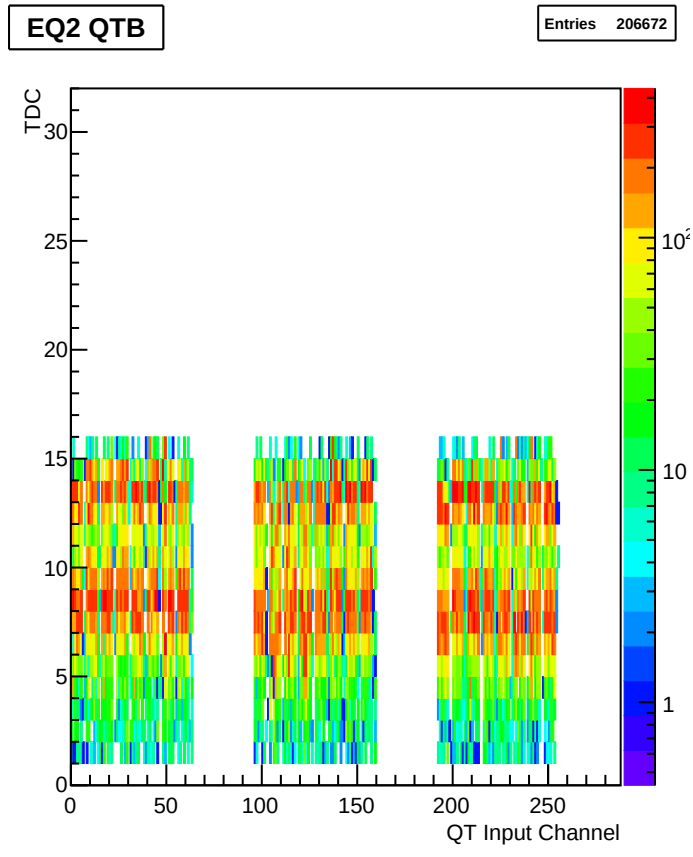

EQ1 QTB
Entries 593280
ADC
QT Input Channel

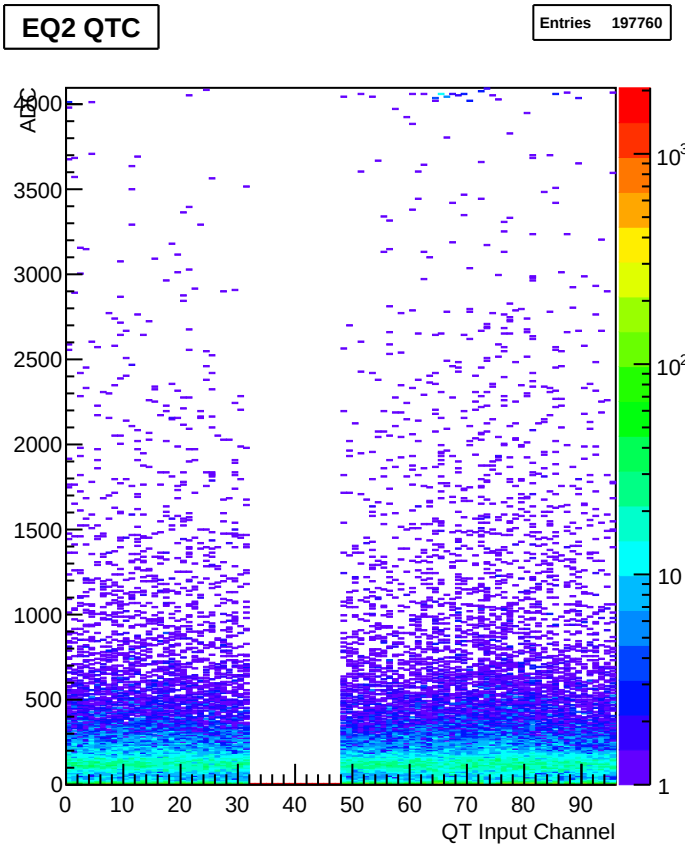

EQ1 QTB
Entries 194760
TDC
QT Input Channel

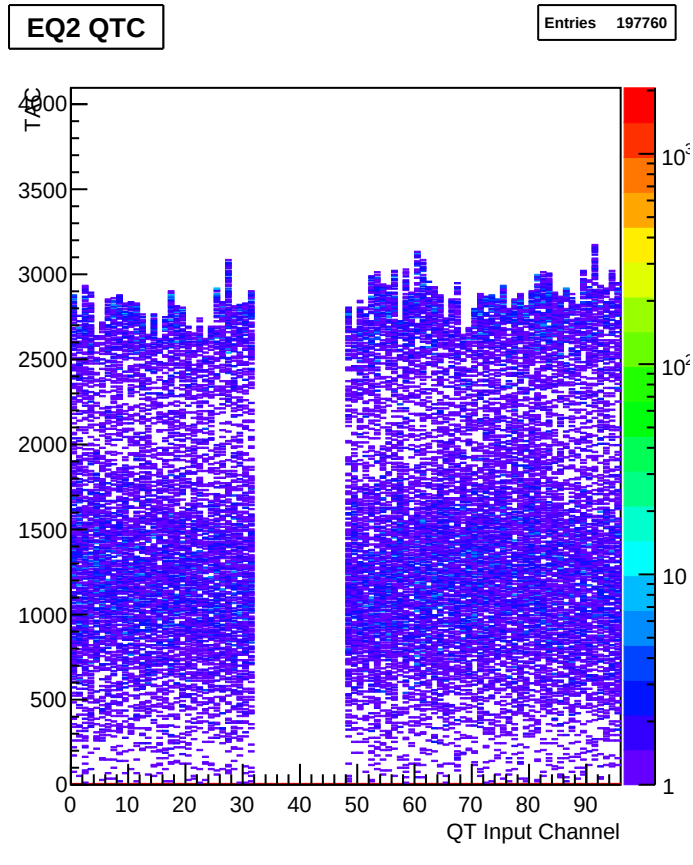

EQ1 QTC
Entries 197760
ADC
QT Input Channel

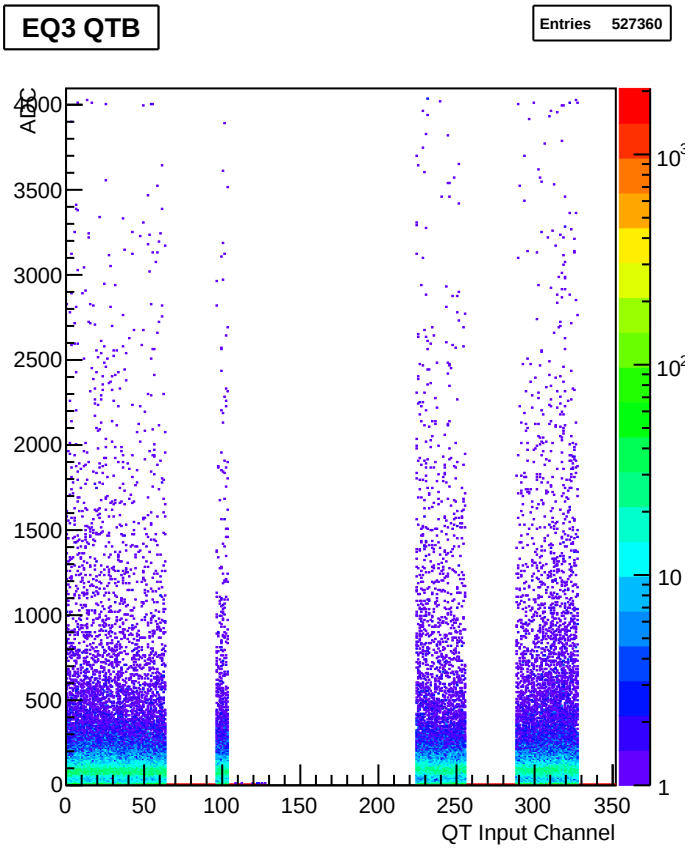

EQ1 QTC
Entries 197760
TADC
QT Input Channel

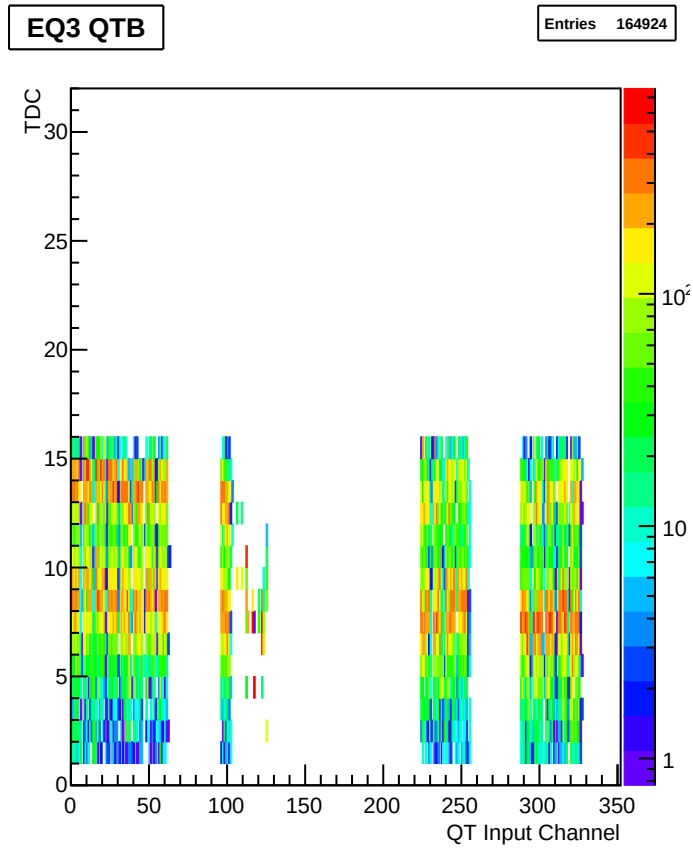

EQ2 QTB
Entries 593280
ADC
QT Input Channel

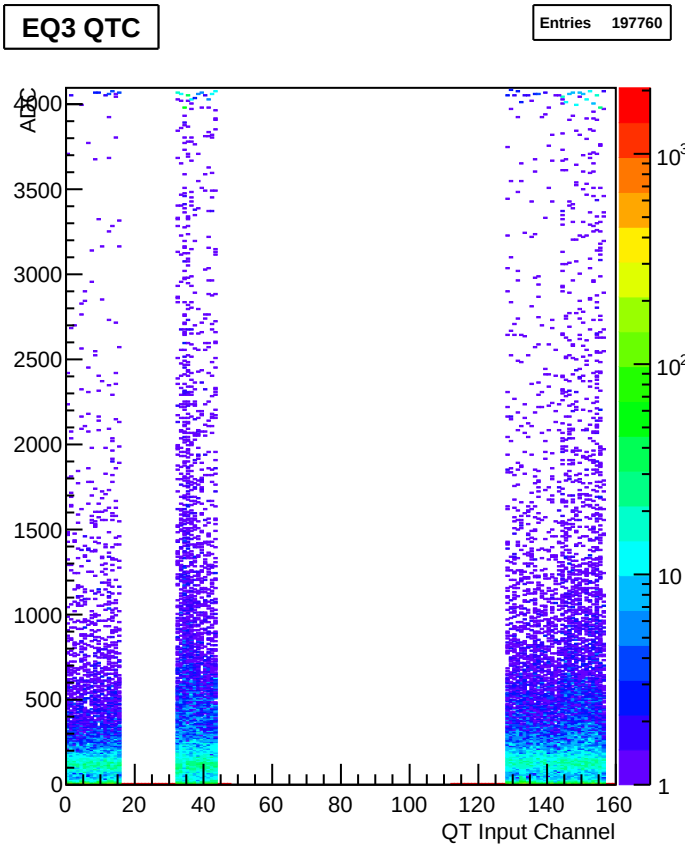

EQ2 QTB
Entries 206672
TDC
QT Input Channel

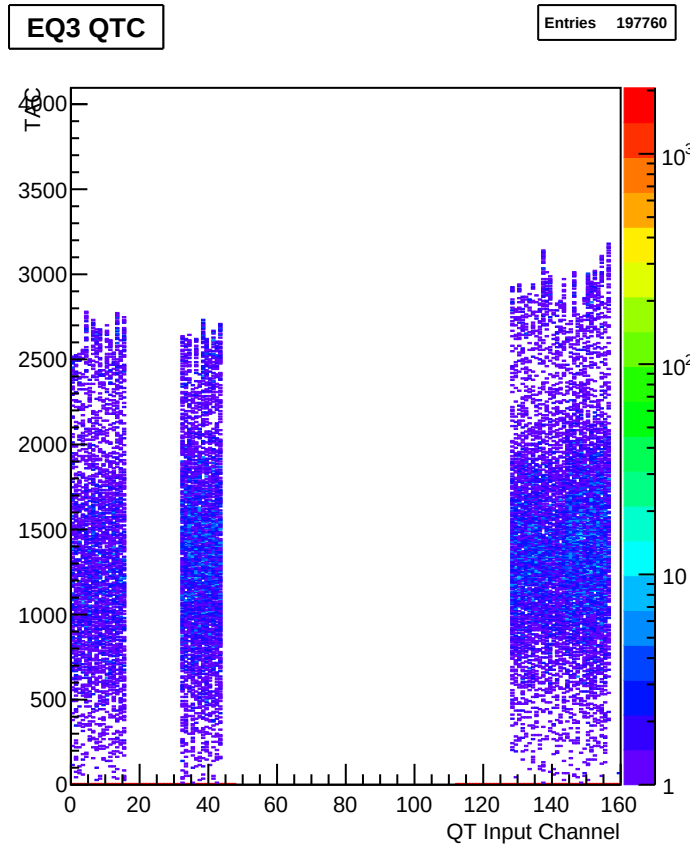

EQ2 QTC
Entries 197760
ADC
QT Input Channel

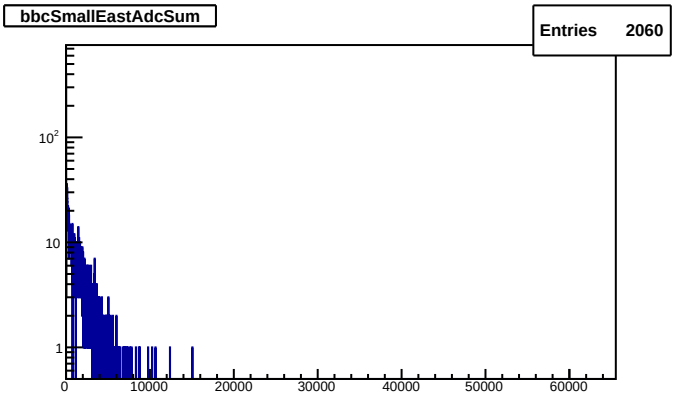

EQ2 QTC
Entries 197760
TADC
QT Input Channel

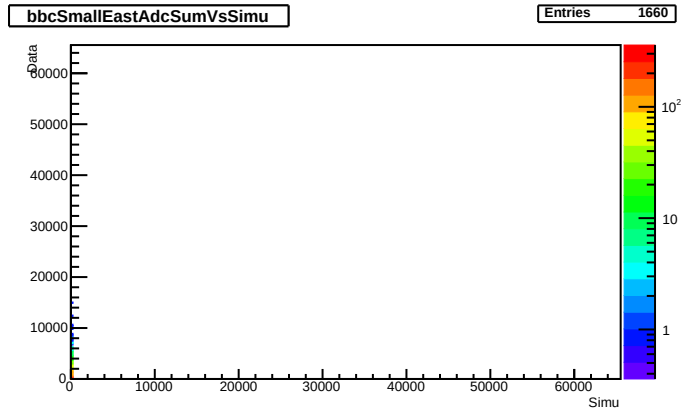

EQ3 QTB
Entries 527360
ADC
QT Input Channel

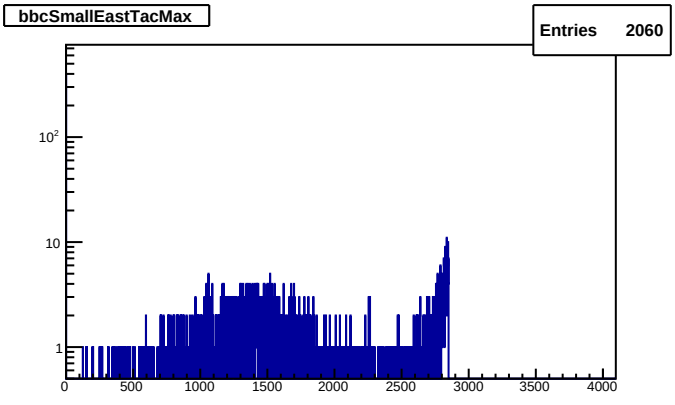

EQ3 QTB
Entries 164924
TDC
QT Input Channel

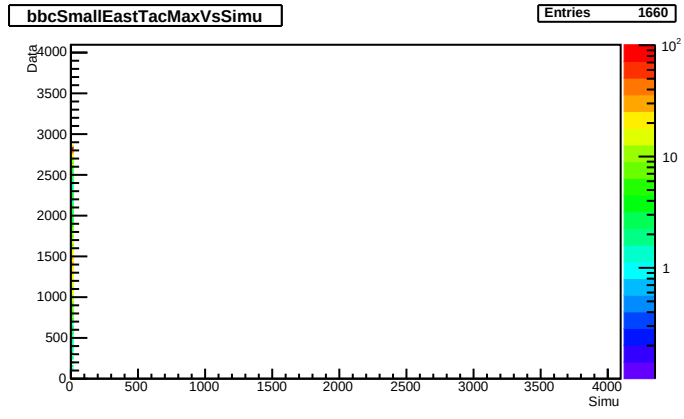

EQ3 QTC
Entries 197760
ADC
QT Input Channel

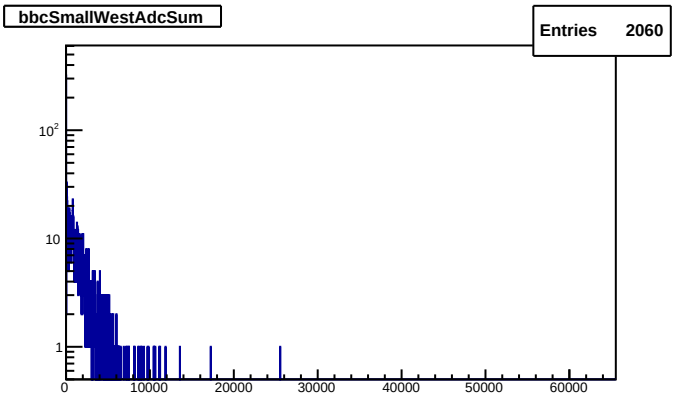

EQ3 QTC
Entries 197760
TADC
QT Input Channel

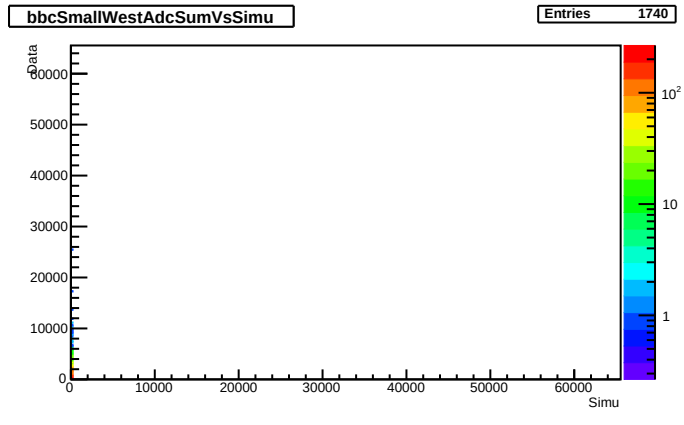

bbcSmallEastAdcSum
Entries 2060

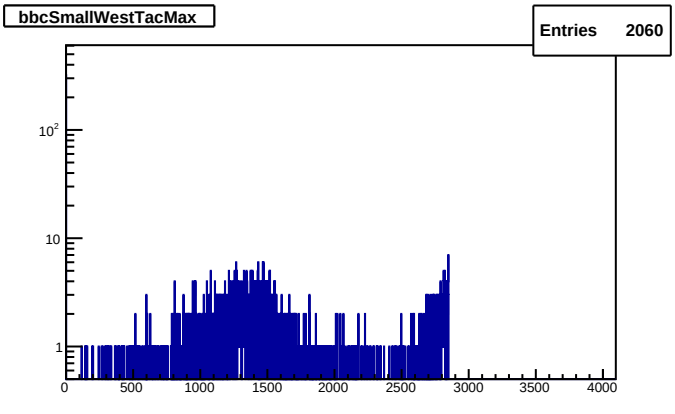

bbcSmallEastAdcSumVsSimu
Entries 1660
Data
Simu

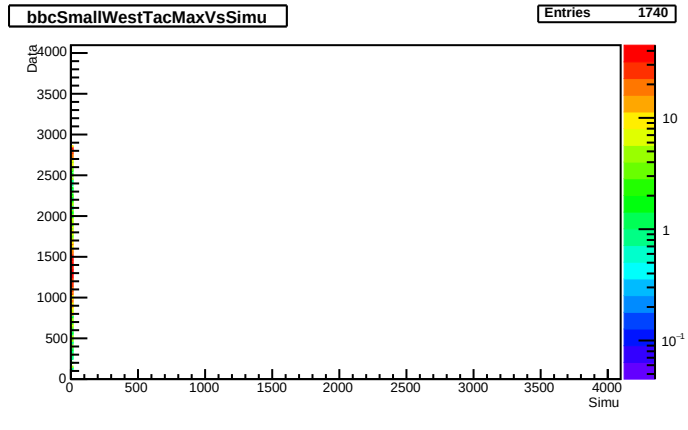

bbcSmallEastTacMax
Entries 2060

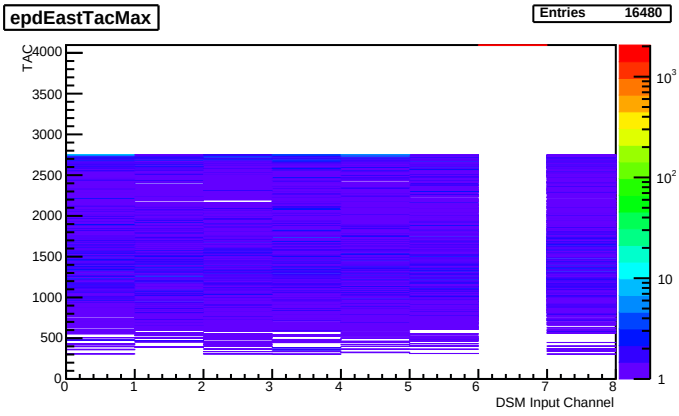

bbcSmallEastTacMaxVsSimu
Entries 1660
Data
Simu

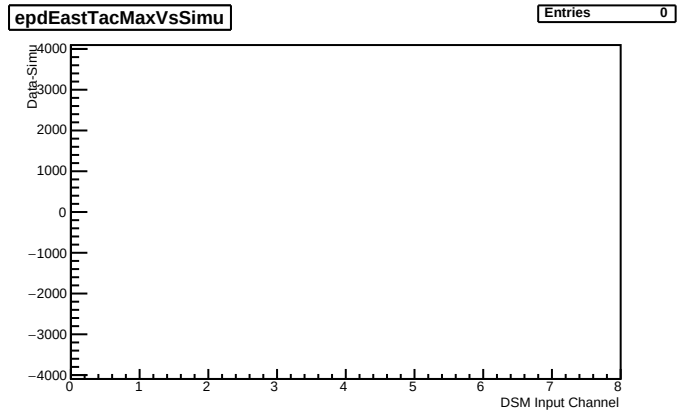

bbcSmallWestAdcSum
Entries 2060

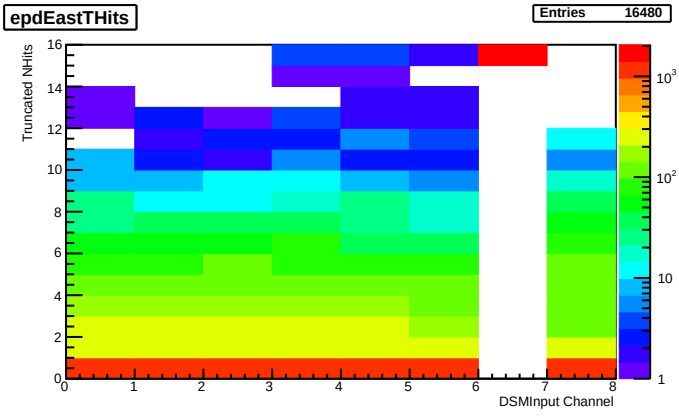

bbcSmallWestAdcSumVsSimu
Entries 1740
Data
Simu

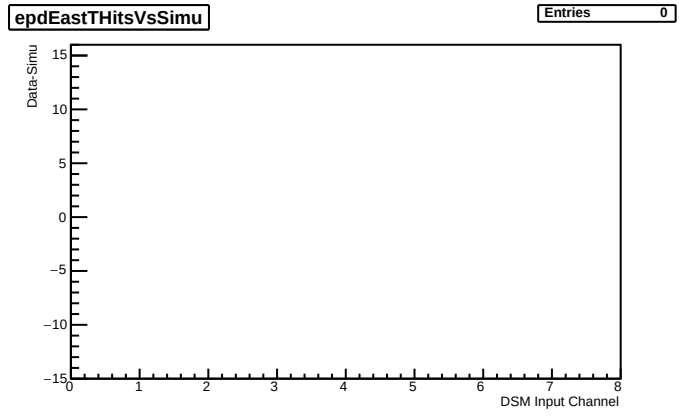

bbcSmallWestTacMax
Entries 2060

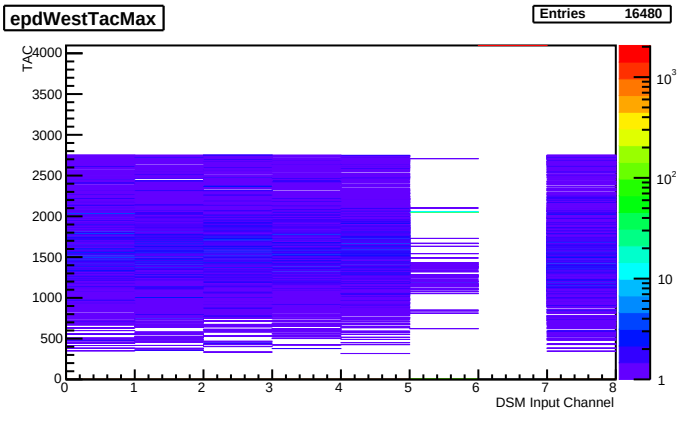

bbcSmallWestTacMaxVsSimu
Entries 1740
Data
Simu

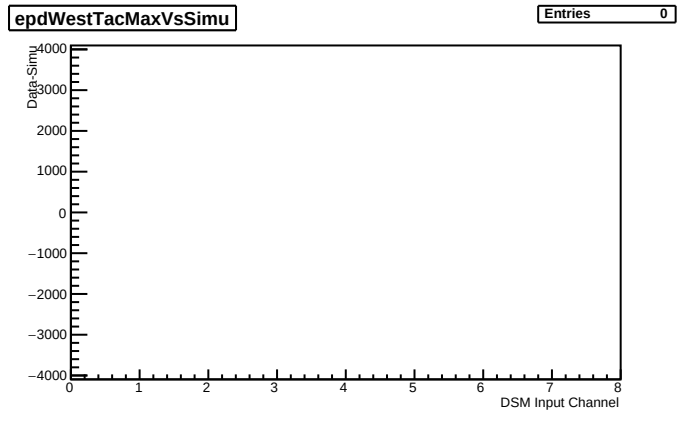

epdEastTacMax
Entries 16480
TAC
DSM Input Channel

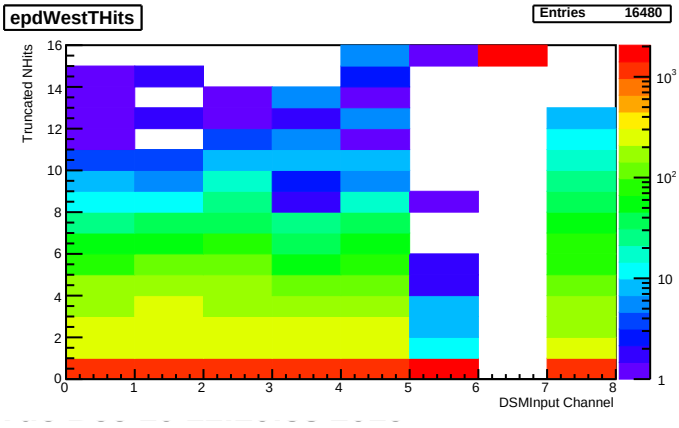

epdEastTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel

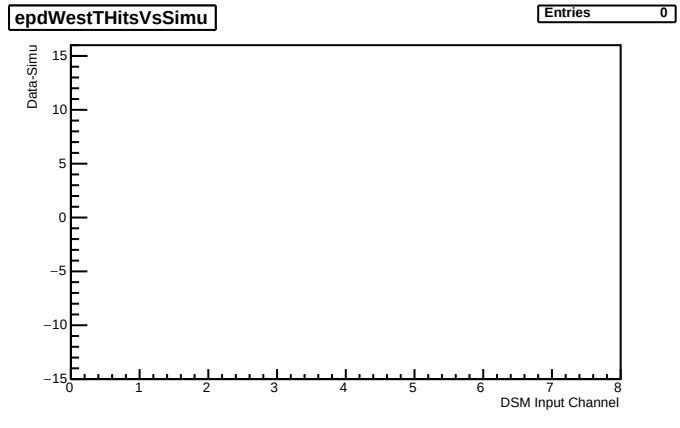

epdEastTHits
Entries 16480
Truncated NHits
DSMInput Channel

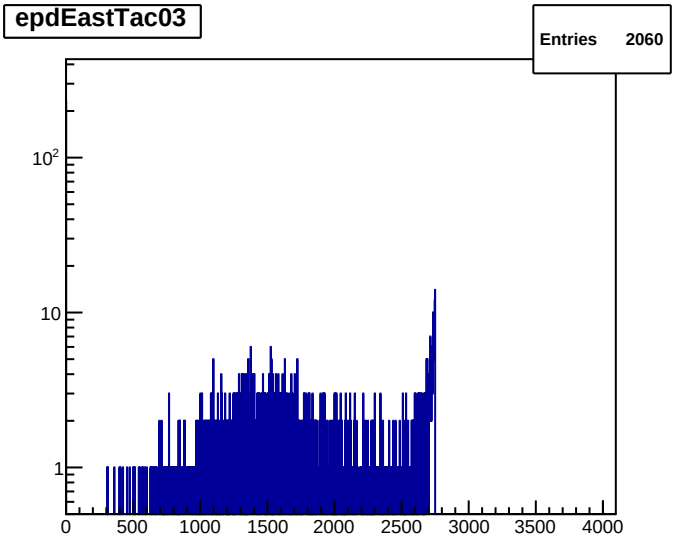

epdEastTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel

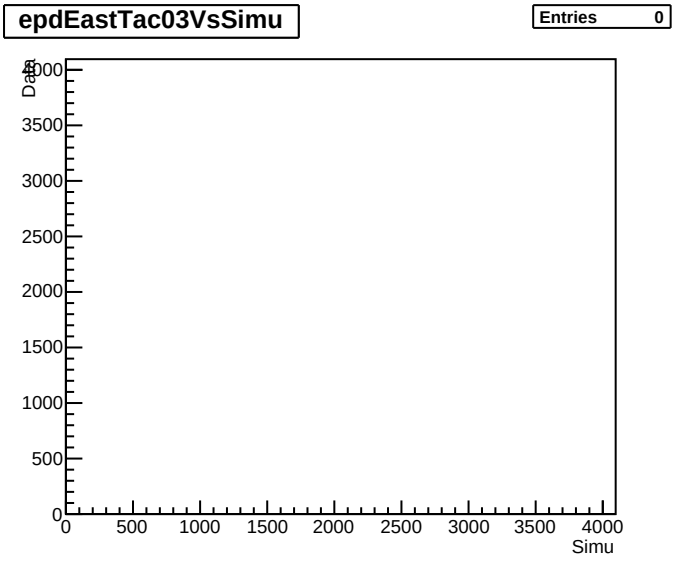

epdWestTacMax
Entries 16480
TAC
DSM Input Channel

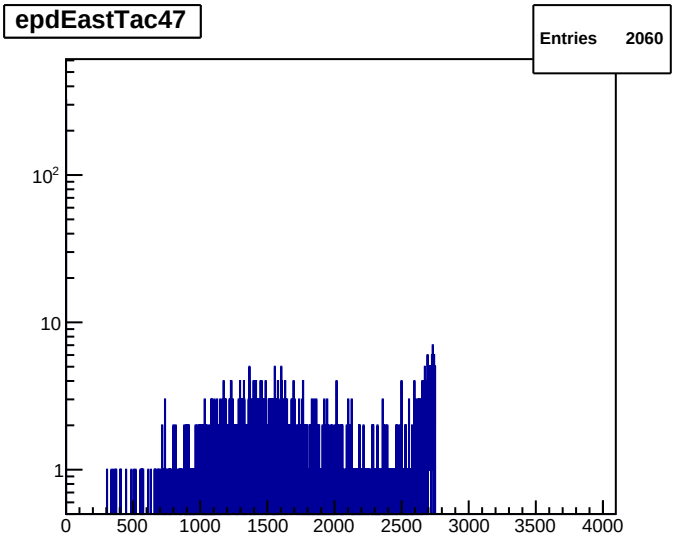

epdWestTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel

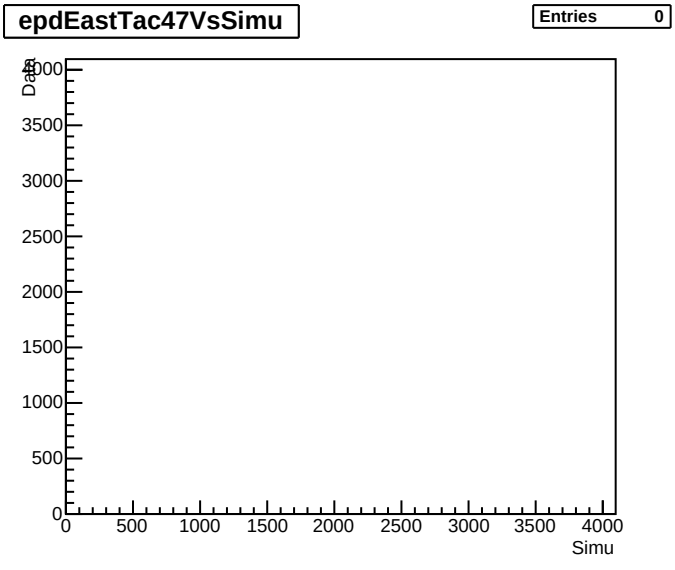

epdWestTHits
Entries 16480
Truncated NHits
DSMInput Channel

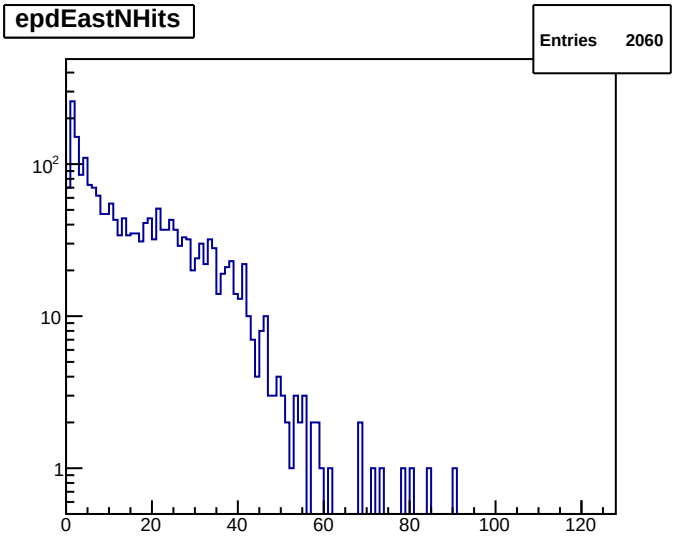

epdWestTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel

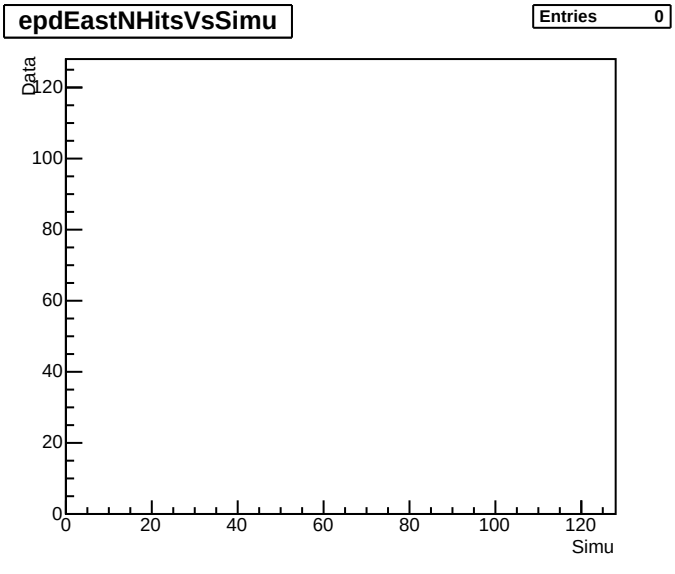

epdEastTac03
Entries 2060
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

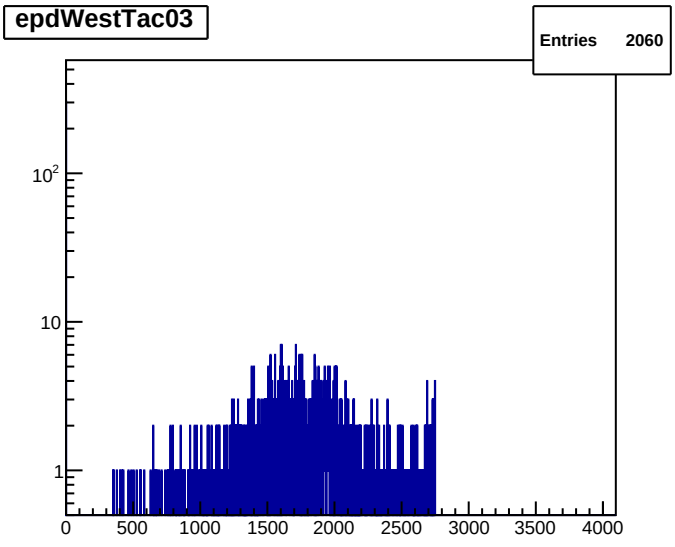

epdEastTac03VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

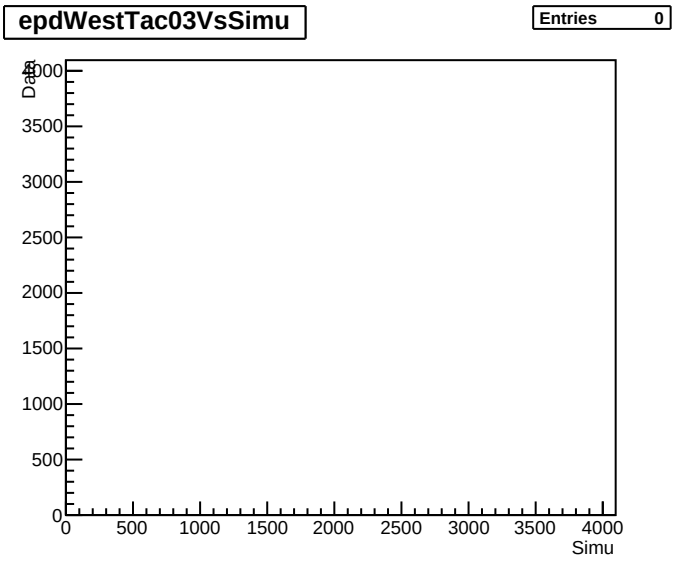

epdEastTac47
Entries 2060
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

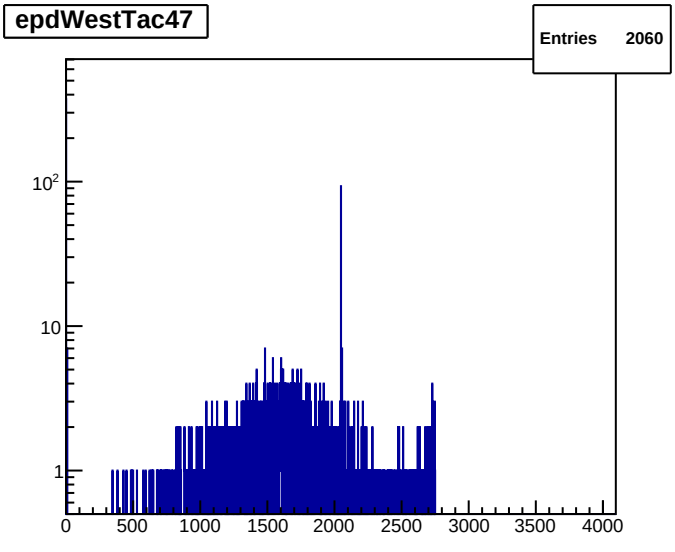

epdEastTac47VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

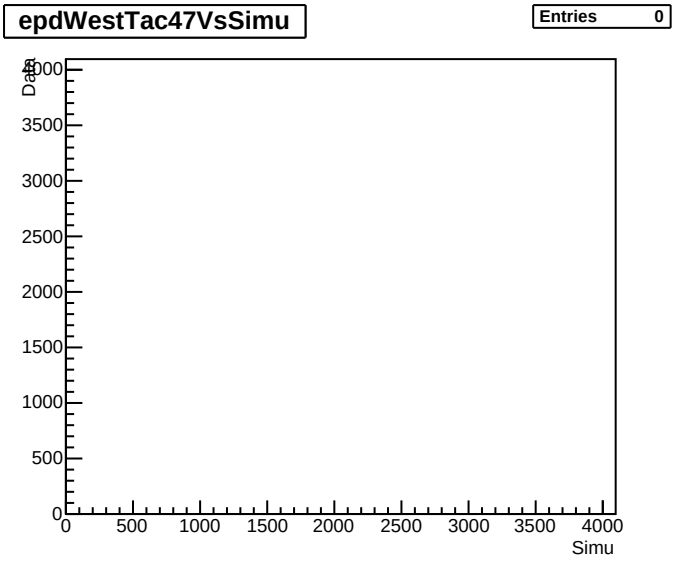

epdEastNHits
Entries 2060
10^2
10
1
0 20 40 60 80 100 120

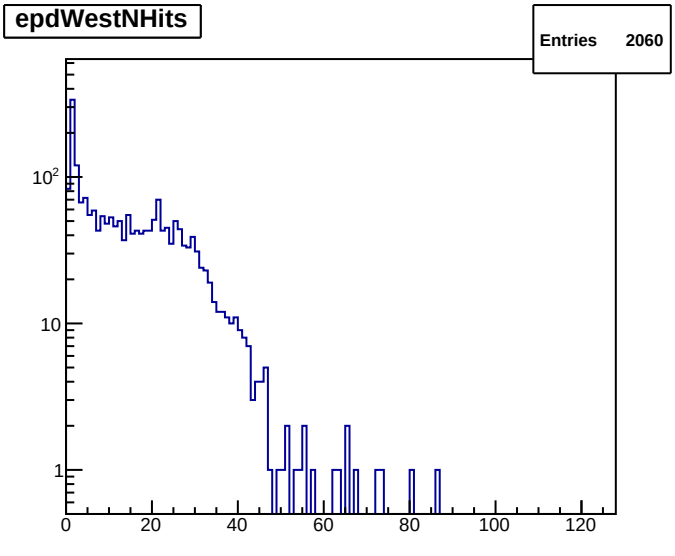

epdEastNHitsVsSimu
Entries 0
Data
120 100 80 60 40 20 0
0 20 40 60 80 100 120
Simu

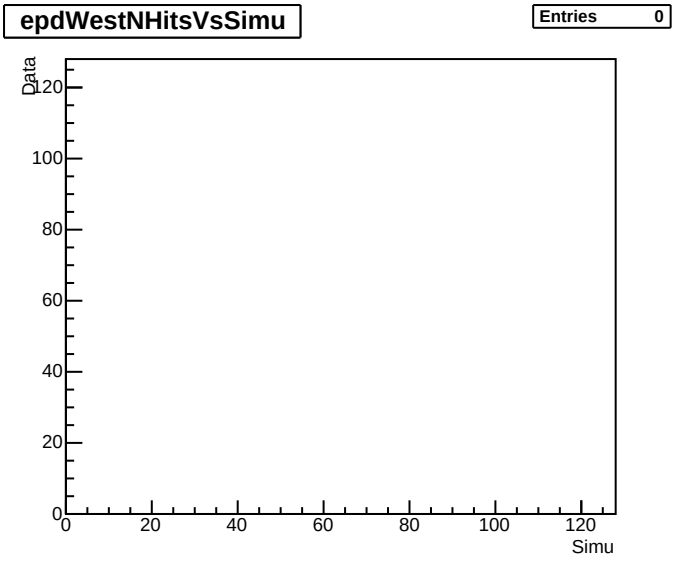

epdWestTac03
Entries 2060
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

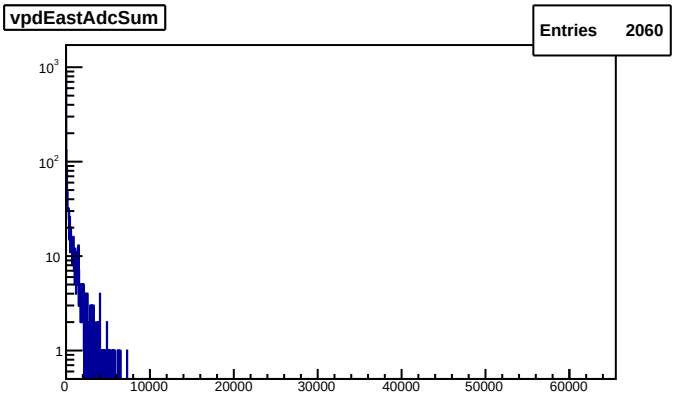

epdWestTac03VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

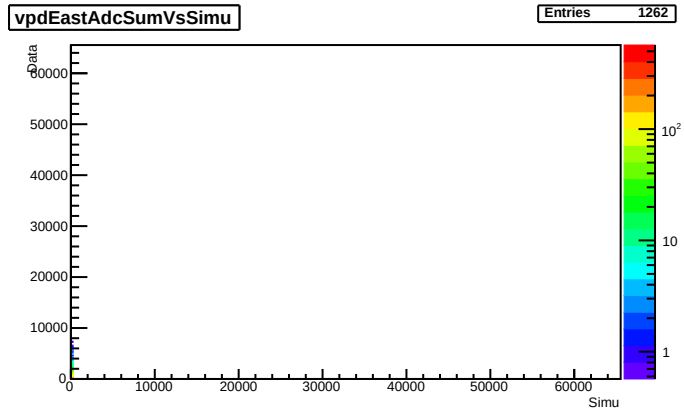

epdWestTac47
Entries 2060
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

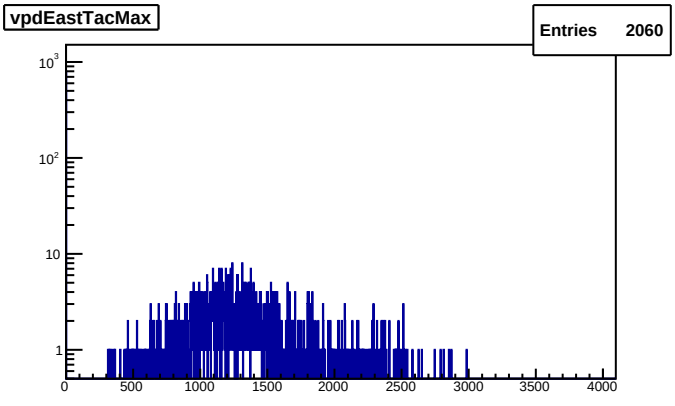

epdWestTac47VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

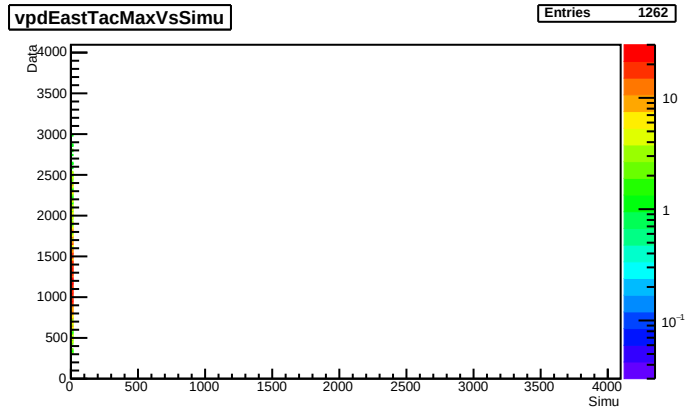

epdWestNHits
Entries 2060
10^2
10
1
0 20 40 60 80 100 120

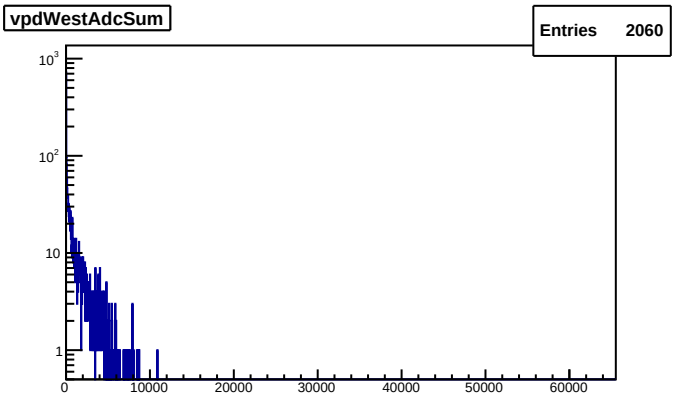

epdWestNHitsVsSimu
Entries 0
Data
120 100 80 60 40 20 0
0 20 40 60 80 100 120
Simu

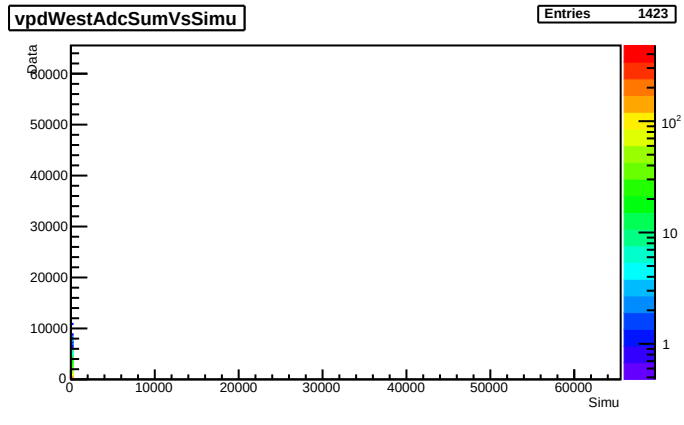

vpdEastAdcSum
Entries 2060

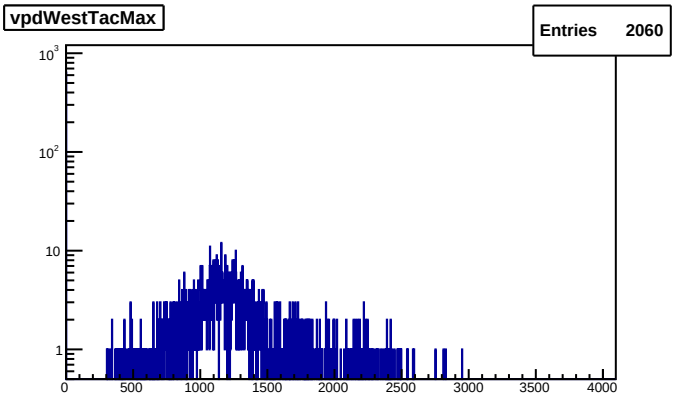

vpdEastAdcSumVsSimu
Entries 1262
Data
Simu

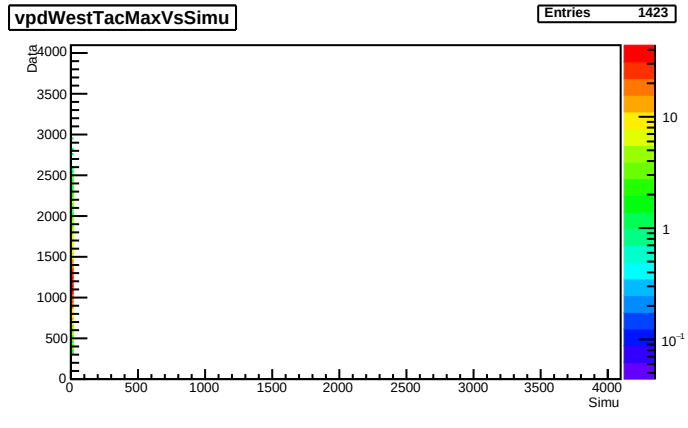

vpdEastTacMax
Entries 2060

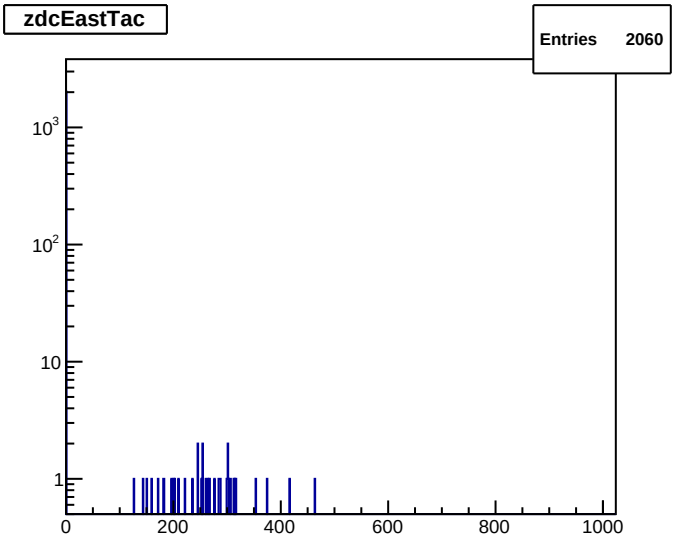

vpdEastTacMaxVsSimu
Entries 1262
Data
Simu

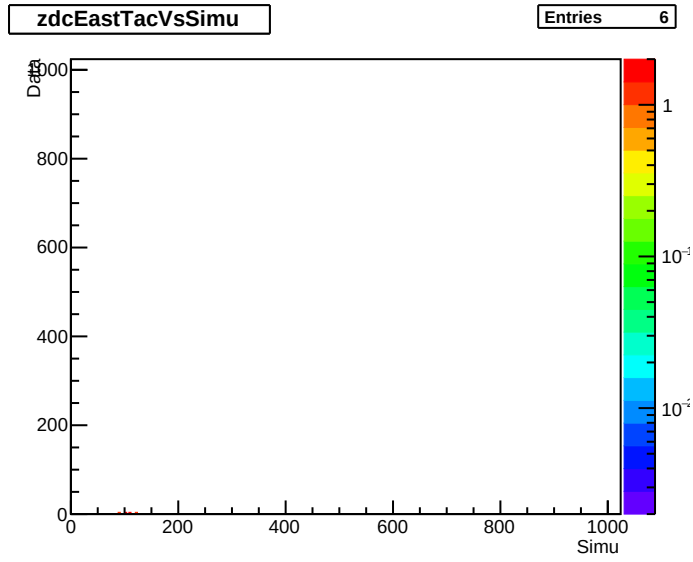

vpdWestAdcSum
Entries 2060

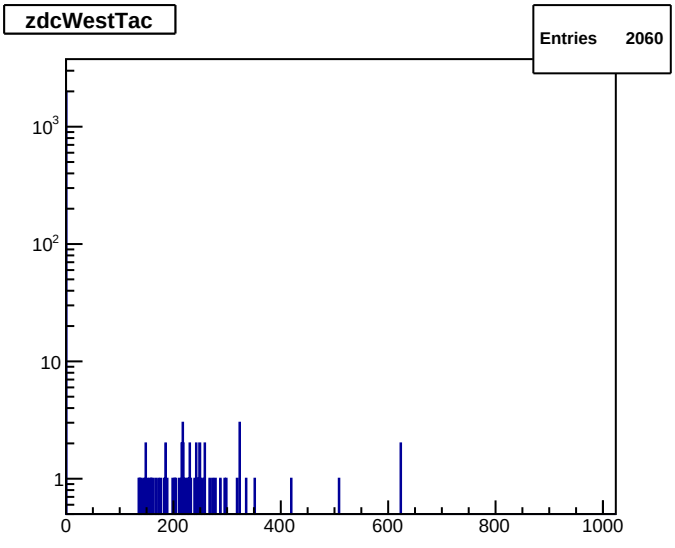

vpdWestAdcSumVsSimu
Entries 1423
Data
Simu

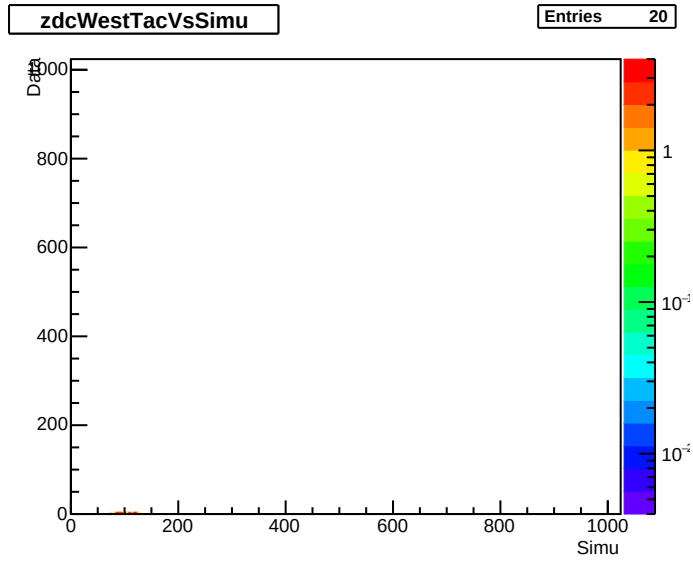

vpdWestTacMax
Entries 2060

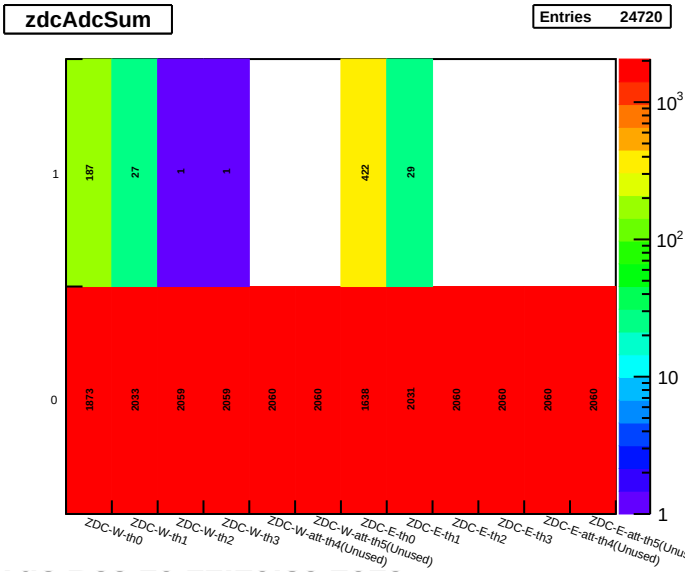

vpdWestTacMaxVsSimu
Entries 1423
Data
Simu

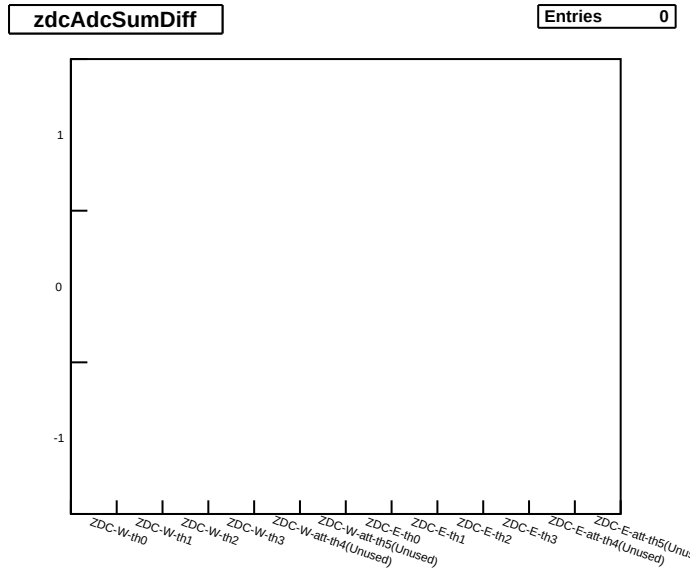

zdcEastTac
Entries 2060
10^3
10^2
10
1
0
200
400
600
800
1000

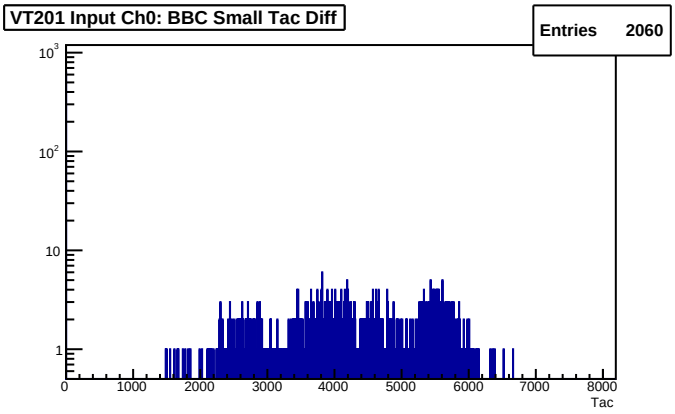

zdcEastTacVsSimu
Entries 6
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu
1

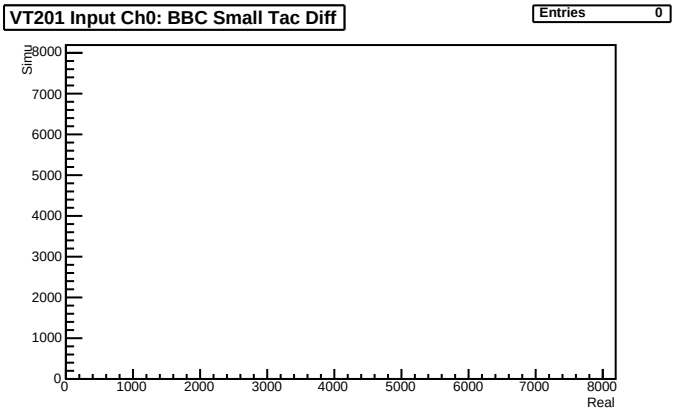

zdcWestTac
Entries 2060
10^3
10^2
10
1
0
200
400
600
800
1000

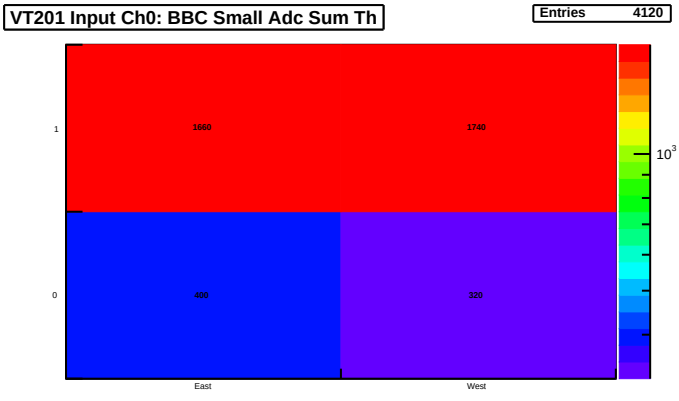

zdcWestTacVsSimu
Entries 20
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu
1

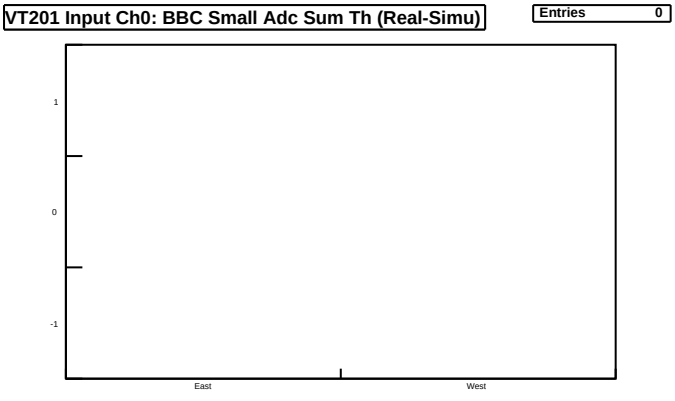

zdcAdcSum
Entries 24720
1
0
187
27
1
1
422
29
1873
2033
2059
2059
2060
2060
1638
2031
2060
2060
2060
2060
10^3
10^2
10
1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

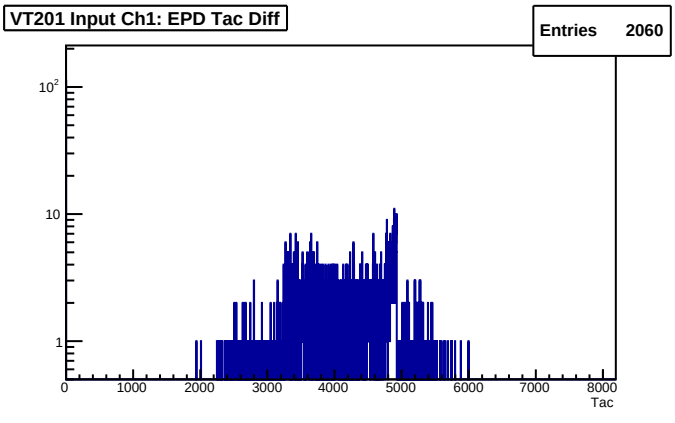

zdcAdcSumDiff
Entries 0
1
0
-1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

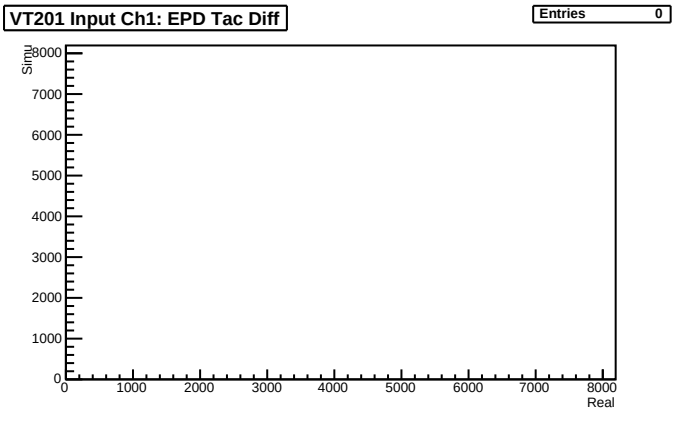

VT201 Input Ch0: BBC Small Tac Diff
Entries 2060
Tac

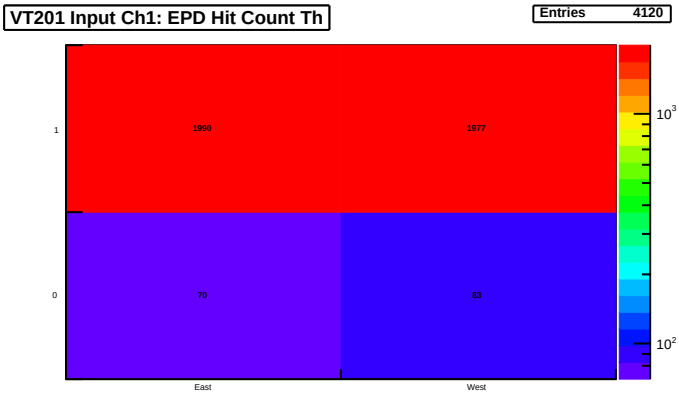

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

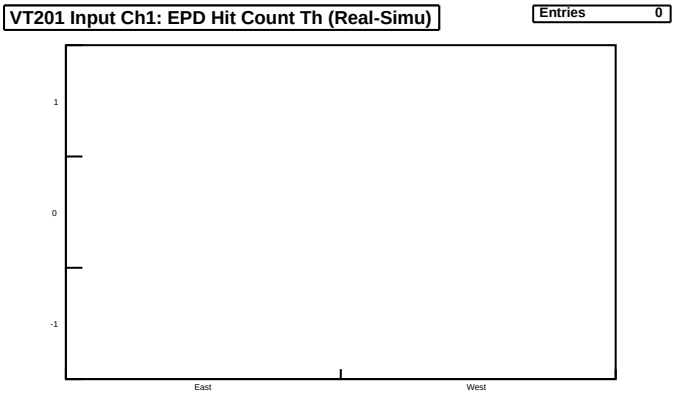

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 4120
1660
1740
400
320
East
West

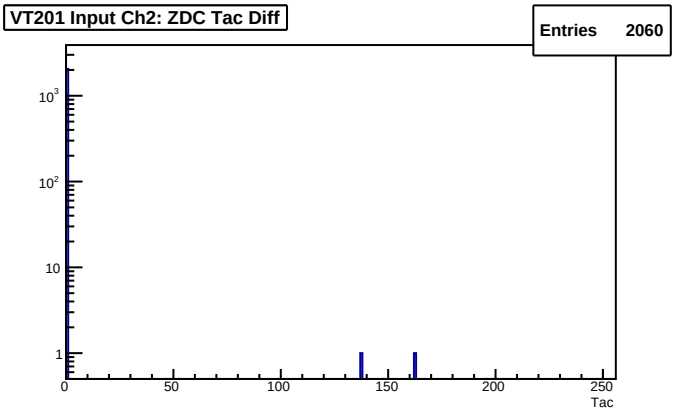

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

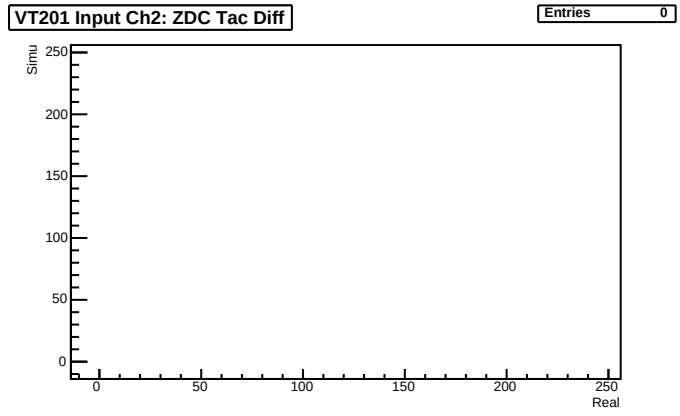

VT201 Input Ch1: EPD Tac Diff
Entries 2060
Tac

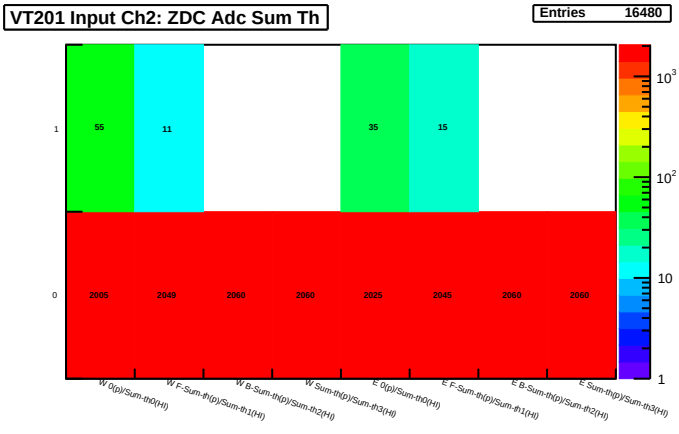

VT201 Input Ch1: EPD Tac Diff
Entries 0
Simu
Real

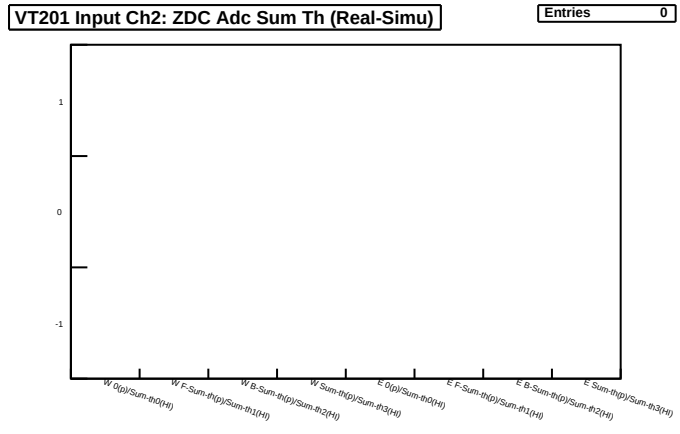

VT201 Input Ch1: EPD Hit Count Th
Entries 4120
1930
1977
70
83
East
West

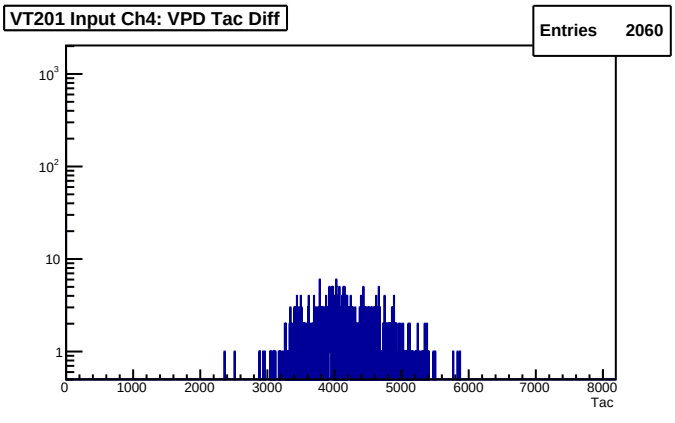

VT201 Input Ch1: EPD Hit Count Th (Real-Simu)
Entries 0
East
West

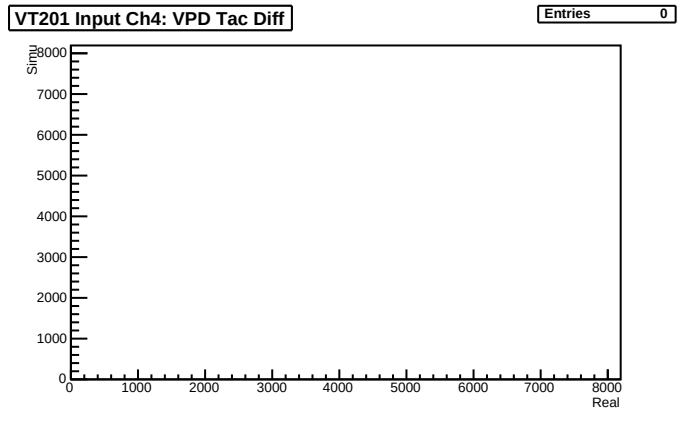

VT201 Input Ch2: ZDC Tac Diff
Entries 2060
Tac

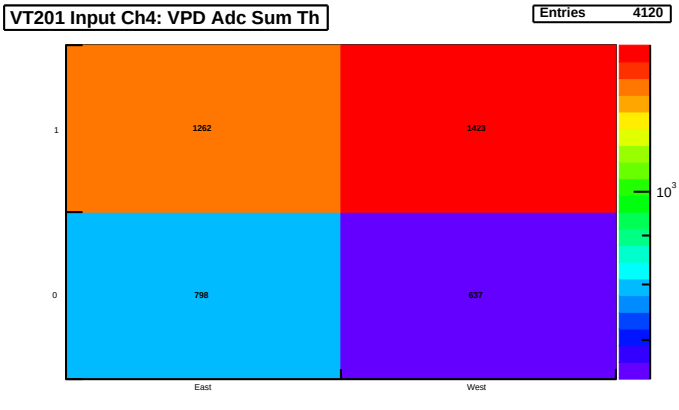

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

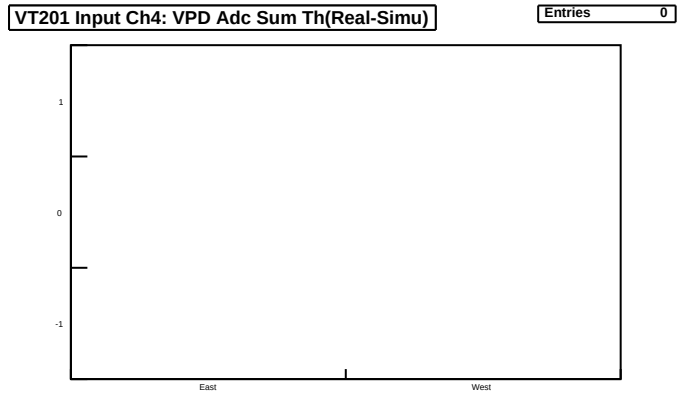

VT201 Input Ch2: ZDC Adc Sum Th
Entries 16480
55
11
35
15
2005
2049
2060
2060
2025
2045
2060
2060
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
E 0(p)/Sum-th0(Hl)
E F-Sum-th(p)/Sum-th1(Hl)
E B-Sum-th(p)/Sum-th2(Hl)
E Sum-th(p)/Sum-th3(Hl)

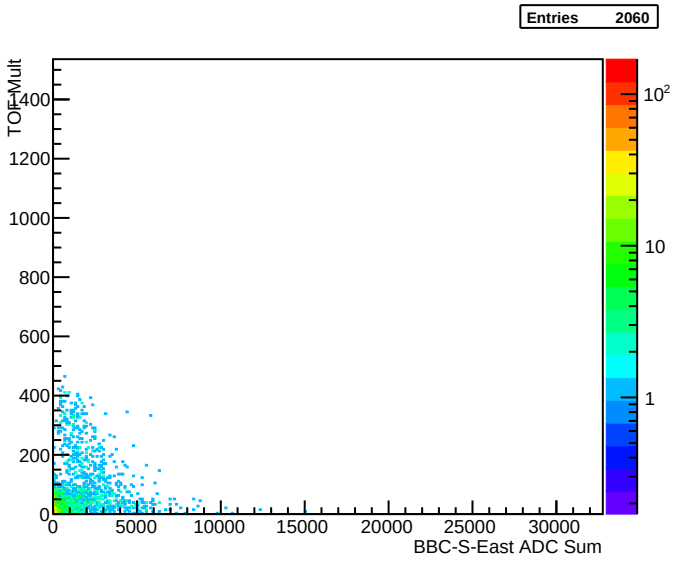

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
E 0(p)/Sum-th0(Hl)
E F-Sum-th(p)/Sum-th1(Hl)
E B-Sum-th(p)/Sum-th2(Hl)
E Sum-th(p)/Sum-th3(Hl)

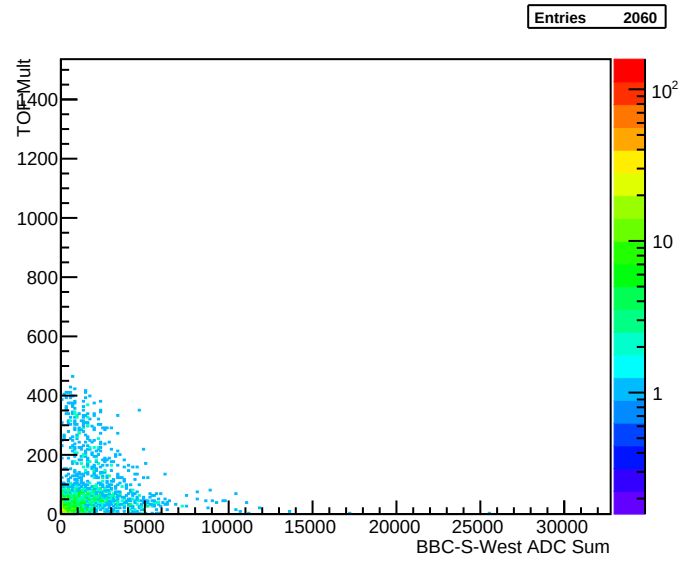

VT201 Input Ch4: VPD Tac Diff
Entries 2060
Tac

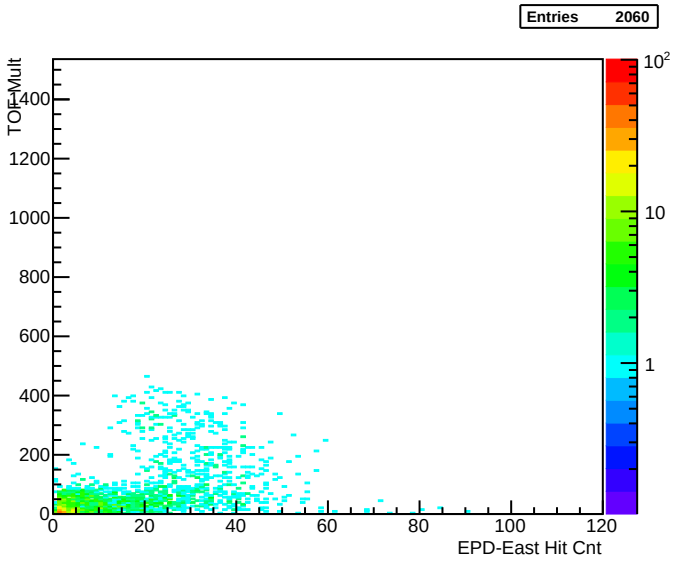

VT201 Input Ch4: VPD Tac Diff
Entries 0
Simu
Real

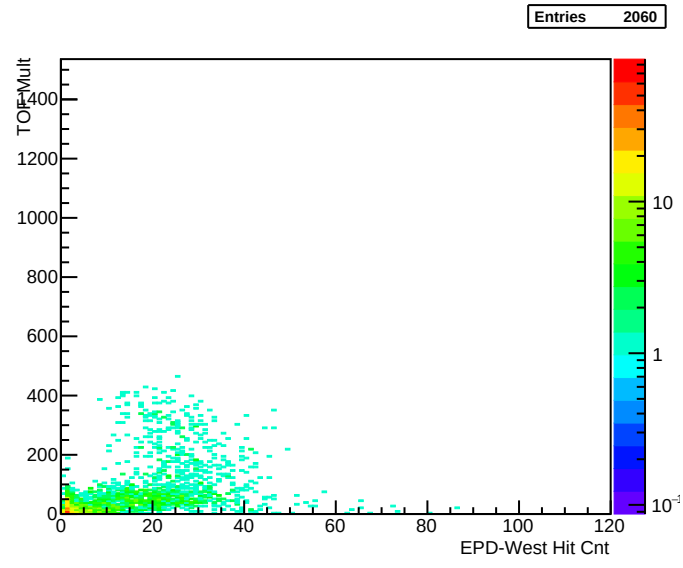

VT201 Input Ch4: VPD Adc Sum Th
Entries 4120
1262
1423
798
637
East
West

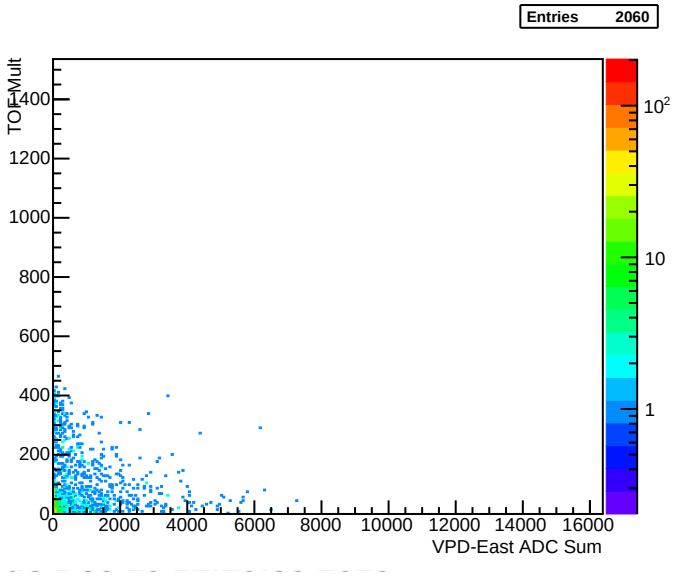

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 0
East
West

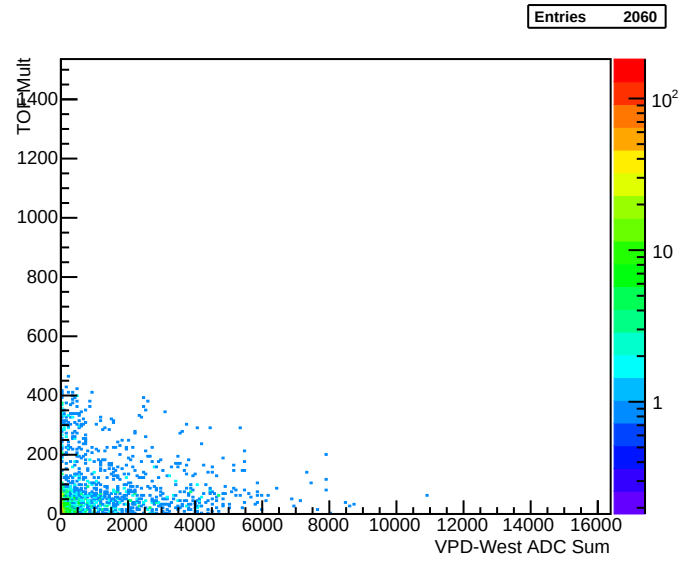

Entries 2060
TOF-Mult
BBC-S-East ADC Sum

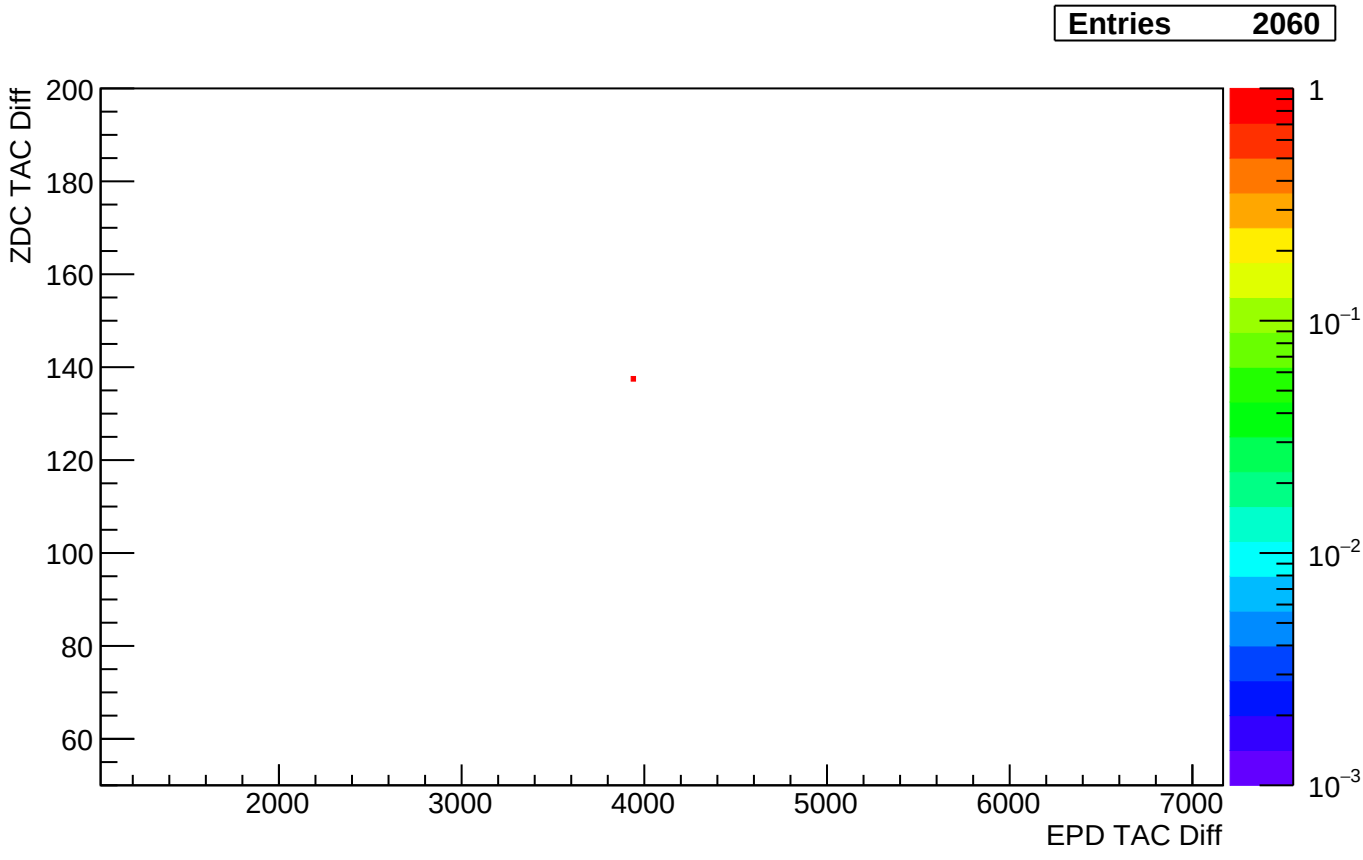

Entries 2060
TOF-Mult
BBC-S-West ADC Sum

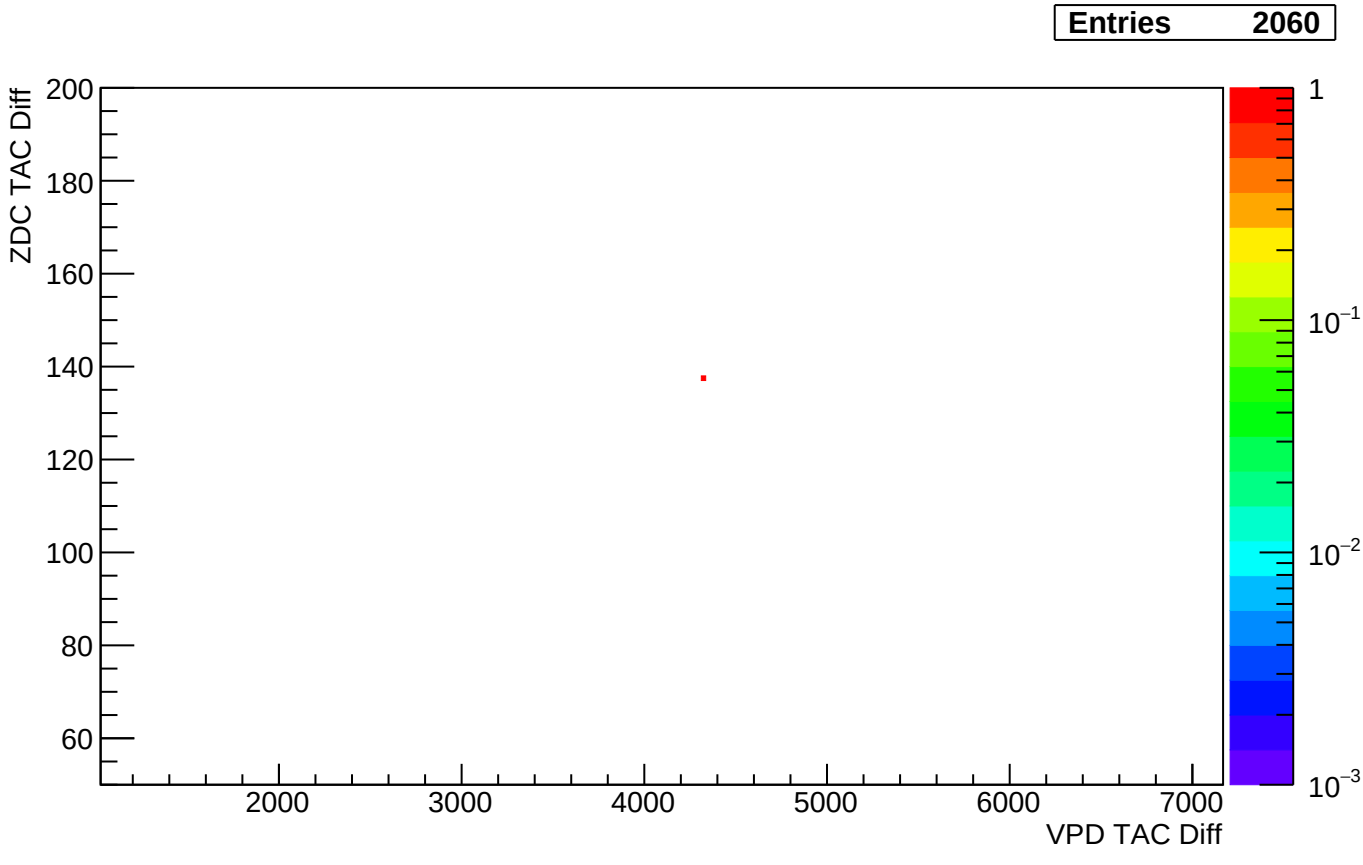

Entries 2060
TOF-Mult
EPD-East Hit Cnt

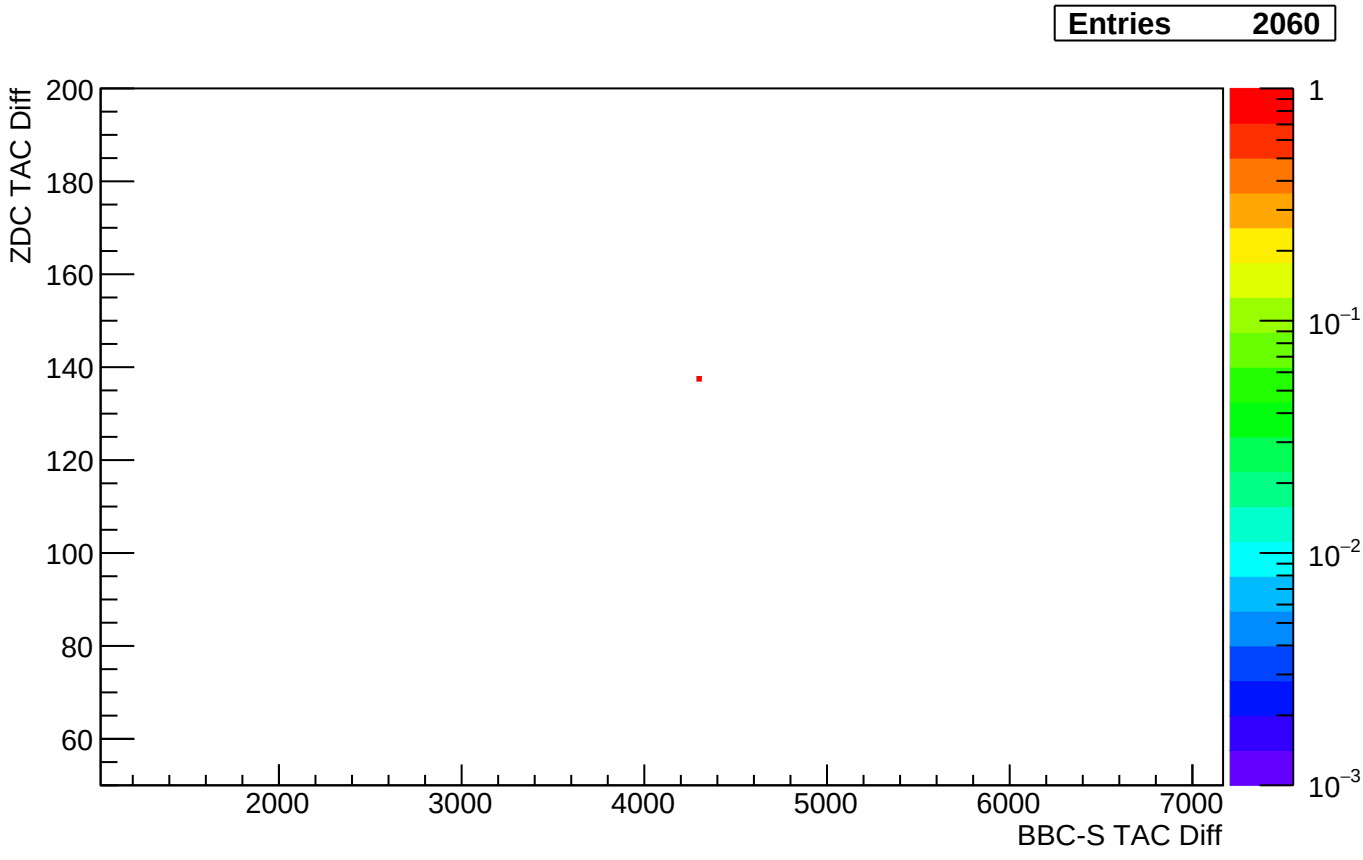

Entries 2060
TOF-Mult
EPD-West Hit Cnt

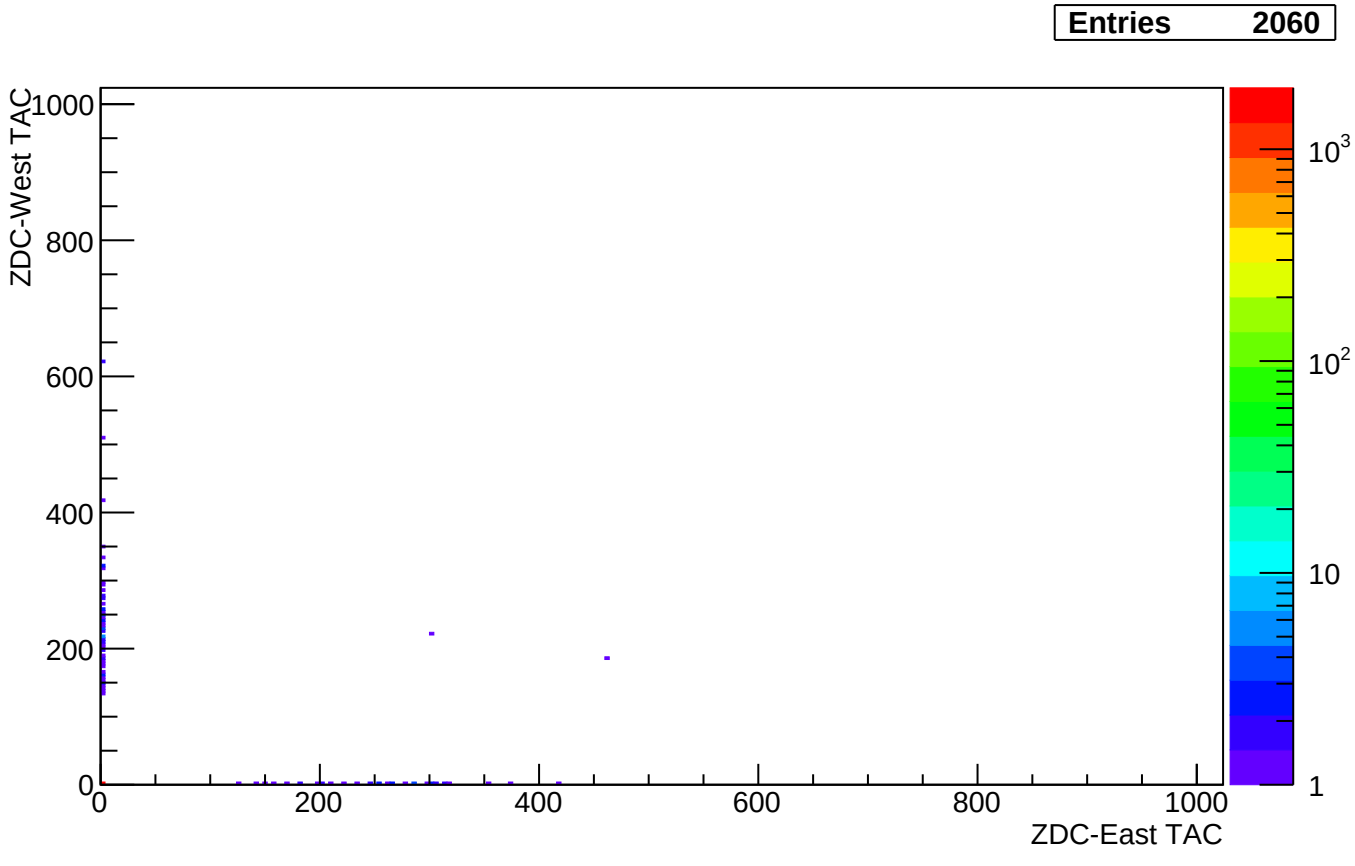

Entries 2060
TOF-Mult
VPD-East ADC Sum

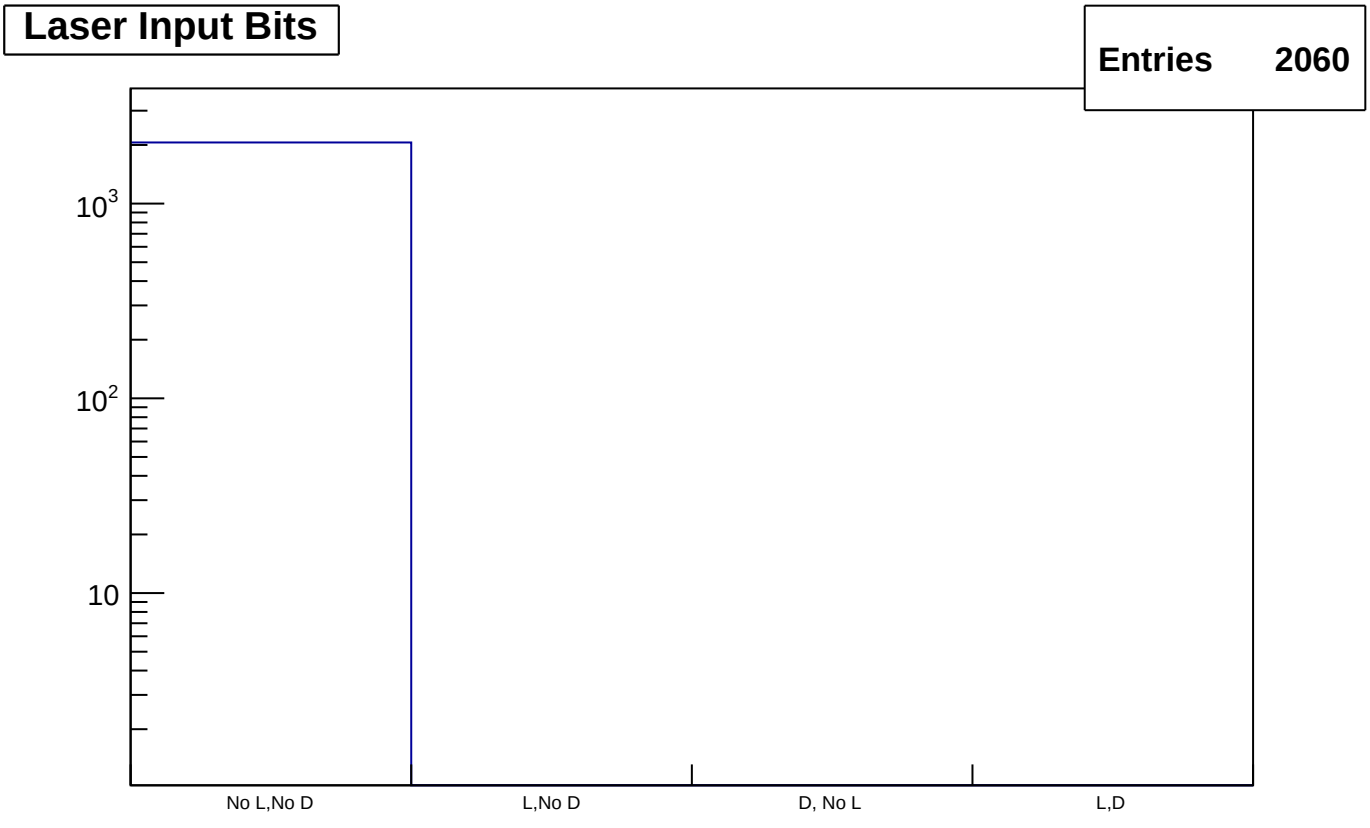

Entries 2060
TOF-Mult
VPD-West ADC Sum

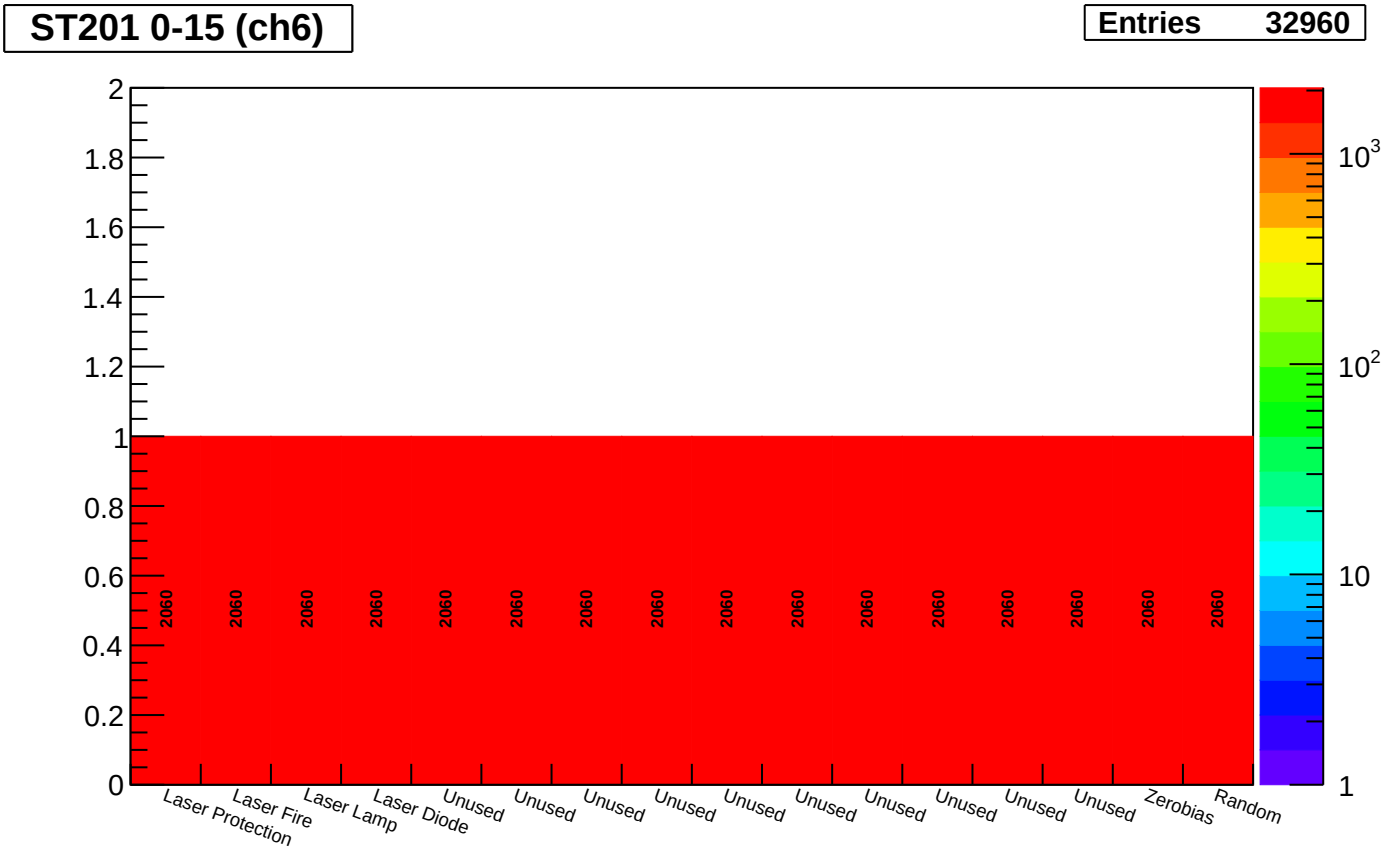

Entries 2060
ZDC TAC Diff
200
180
160
140
120
100
80
60
2000
3000
4000
5000
6000
7000
EPD TAC Diff
1
10^{-1}
10^{-2}
10^{-3}

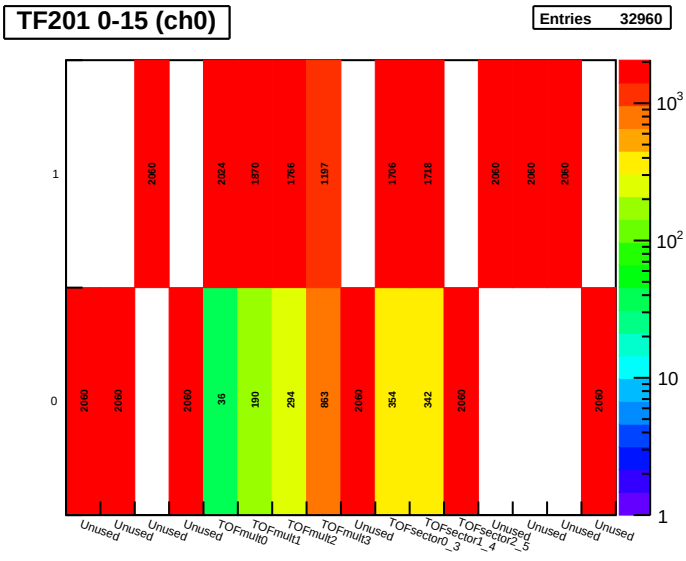

Entries 2060
ZDC TAC Diff
200
180
160
140
120
100
80
60
2000
3000
4000
5000
6000
7000
VPD TAC Diff
1
10^{-1}
10^{-2}
10^{-3}

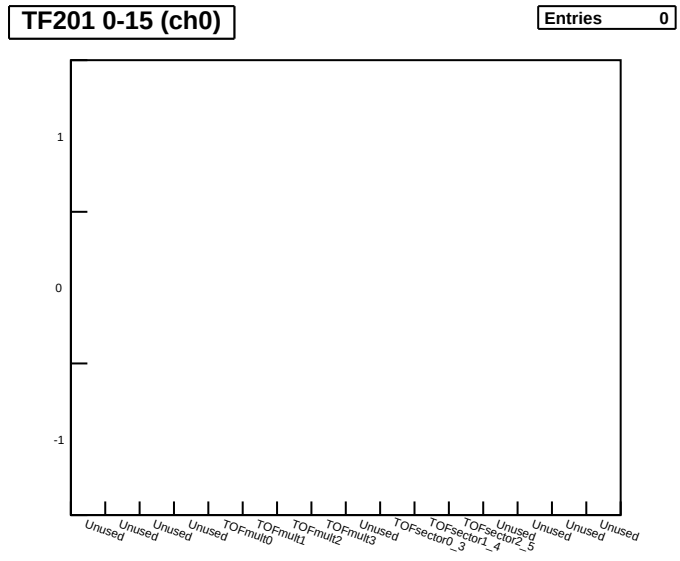

Entries 2060
ZDC TAC Diff
200
180
160
140
120
100
80
60
2000
3000
4000
5000
6000
7000
BBC-S TAC Diff
1
10^{-1}
10^{-2}
10^{-3}

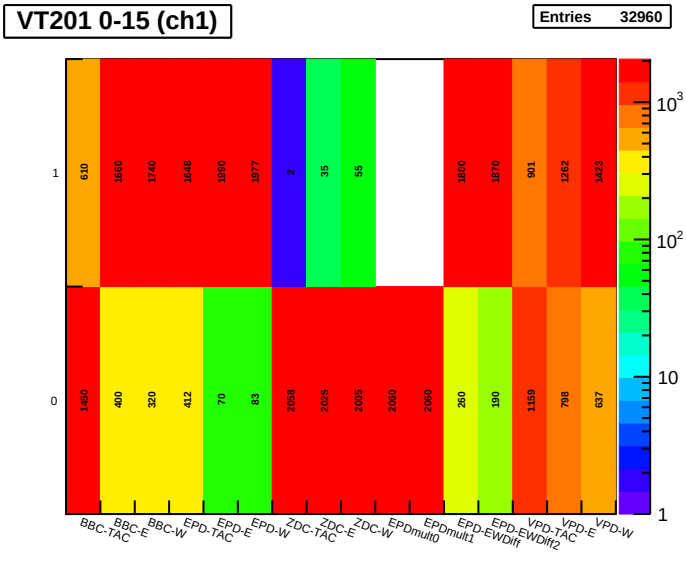

Entries 2060
ZDC-West TAC
1000
800
600
400
200
0
0
200
400
600
800
1000
ZDC-East TAC
10^{3}
10^{2}
10
1

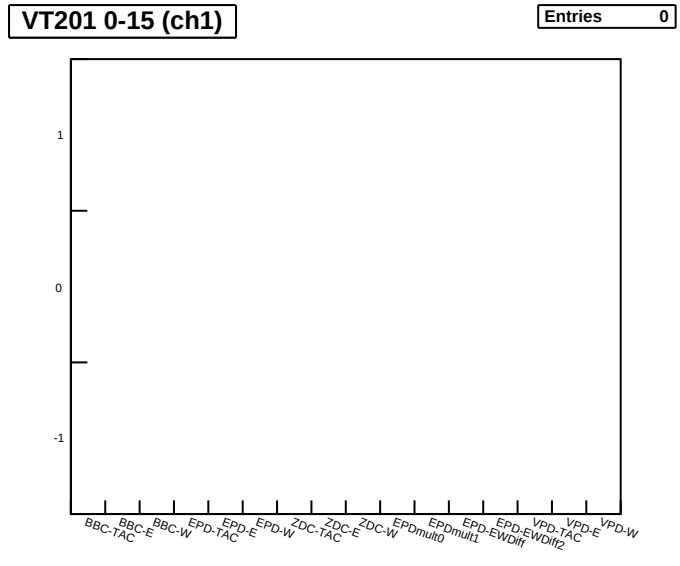

Laser Input Bits
Entries 2060
10^3
10^2
10
No L,No D
L,No D
D, No L
L,D

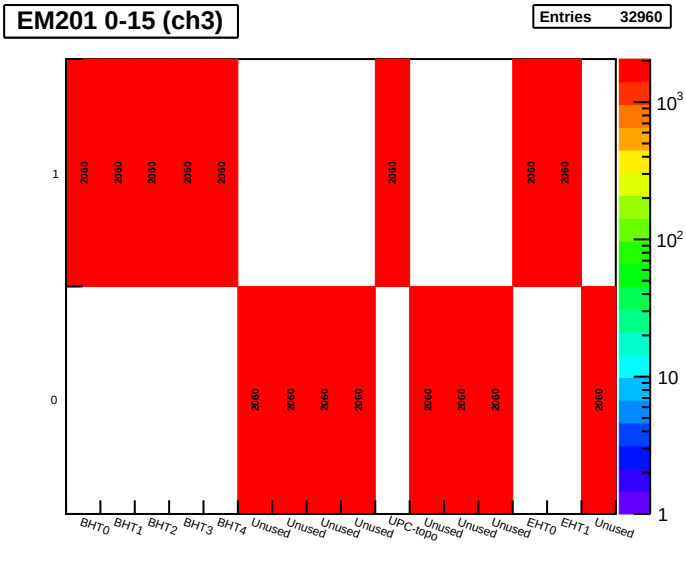

ST201 0-15 (ch6)
Entries 32960
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2060
Laser Protection
Laser Fire
Laser Lamp
Laser Diode
Unused
Zerobias
Random
10^3
10^2
10
1

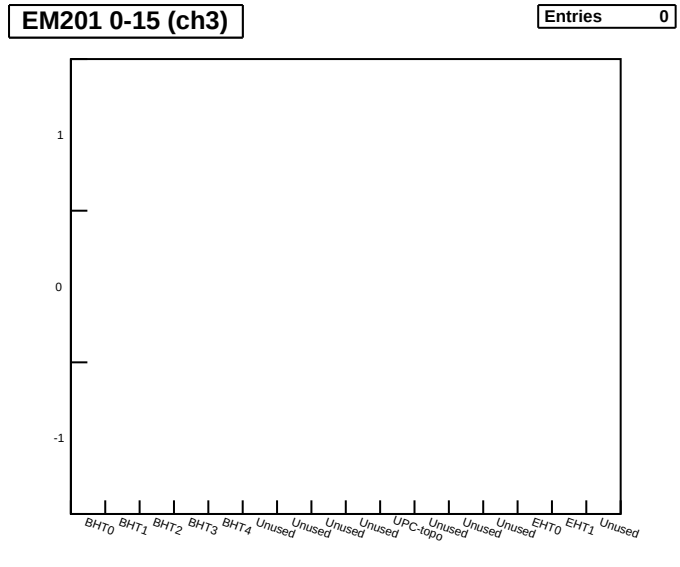

TF201 0-15 (ch0)
Entries 32960
1
0
2060 2024 1870 1766 1197 1706 1718 2060 2060 2060
2060 2060 2060 36 190 294 863 2060 354 342 2060 2060
Unused Unused Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 Unused TOFsector0_3 TOFsector1_4 TOFsector2_5 Unused Unused Unused Unused
10^3
10^2
10
1


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 32960
1
0
610 1660 1740 1648 1990 1977 2 35 55 1800 1870 901 1262 1423
1450 400 320 412 70 83 2058 2025 2005 2060 2060 260 190 1159 798 637
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 32960
1
0
2060 2060 2060 2060 2060 2060 2060 2060
2060 2060 2060 2060 2060 2060 2060 2060
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