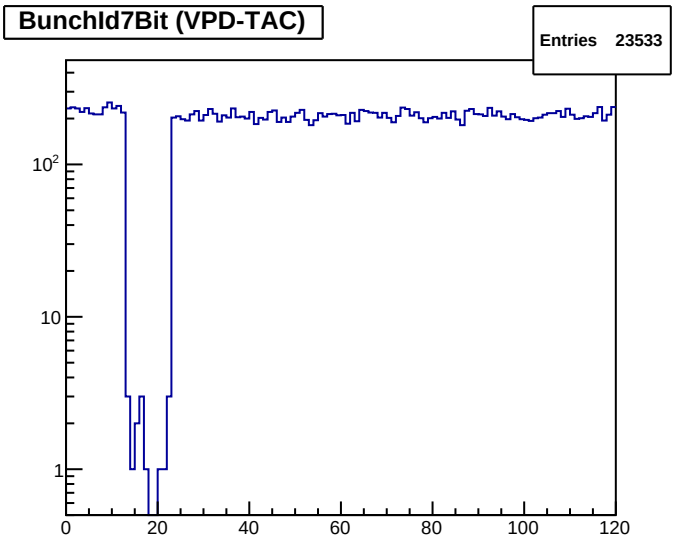
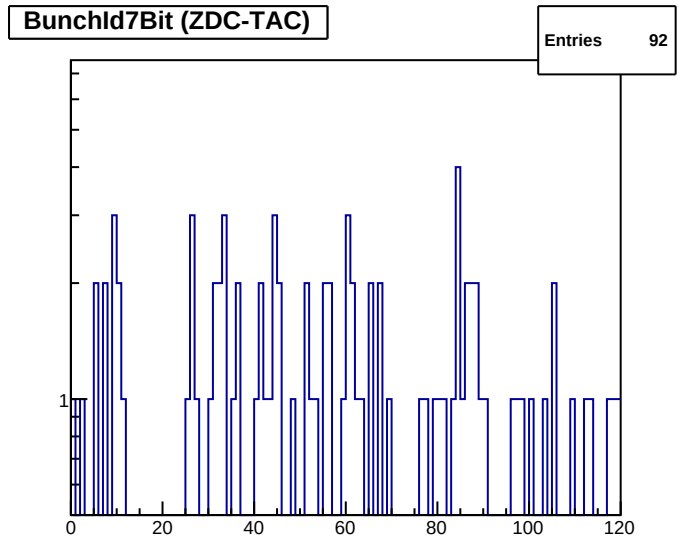
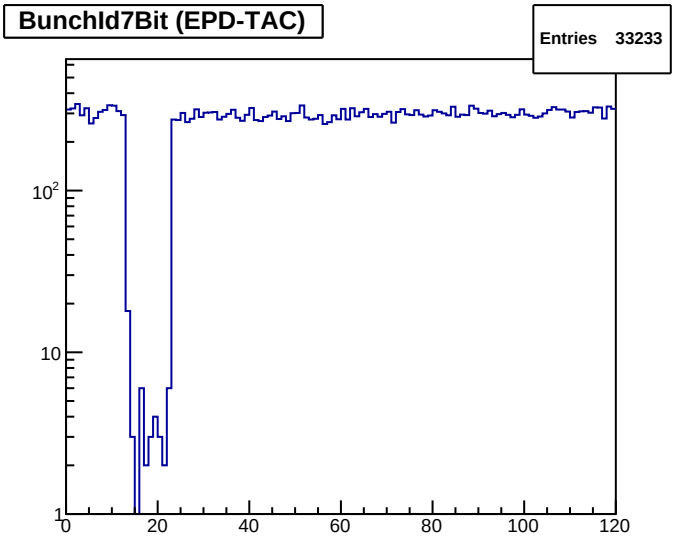
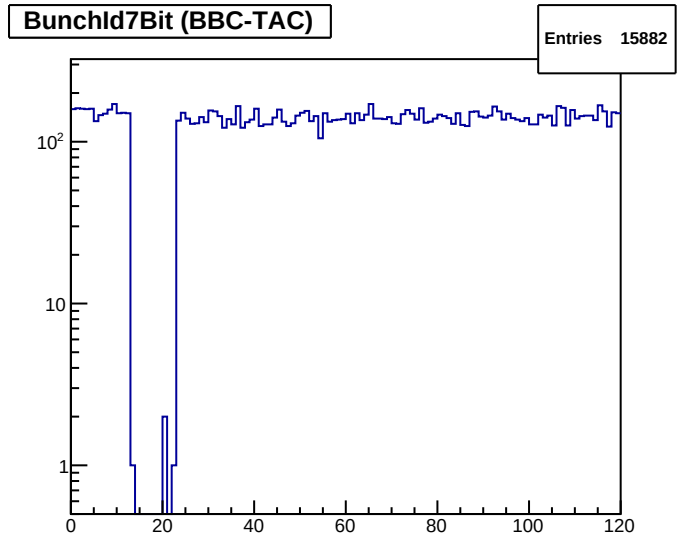
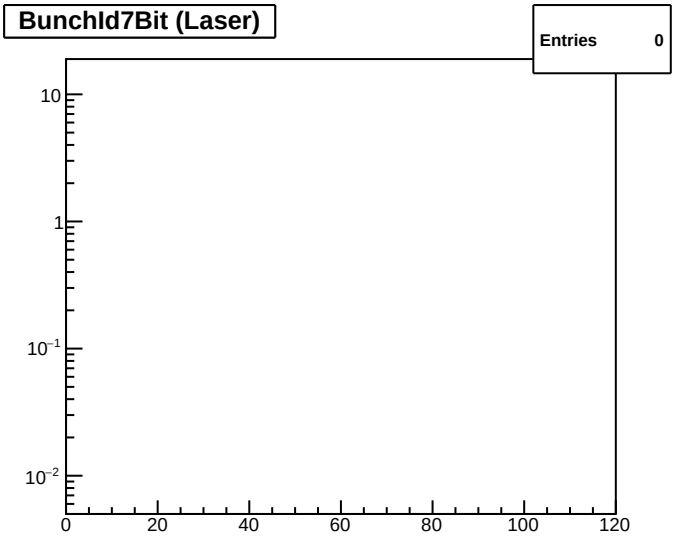
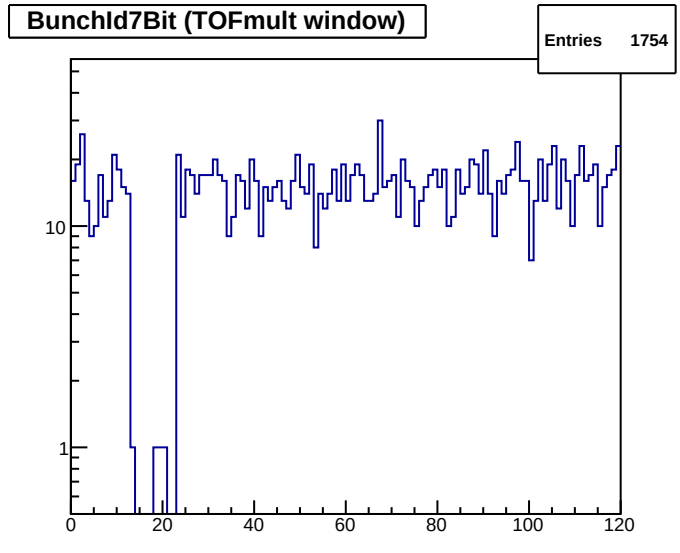

BunchId7Bit (VPD-TAC)
Entries 23533
10^2
10
1
0
20
40
60
80
100
120

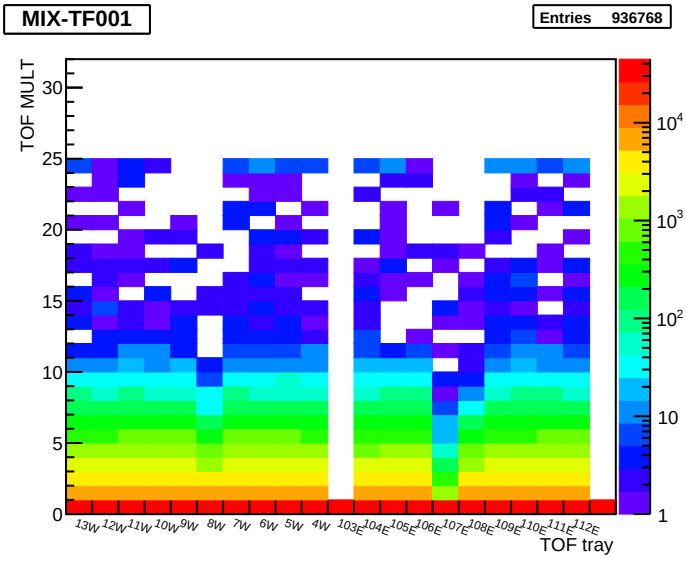

BunchId7Bit (ZDC-TAC)
Entries 92
1
0
20
40
60
80
100
120

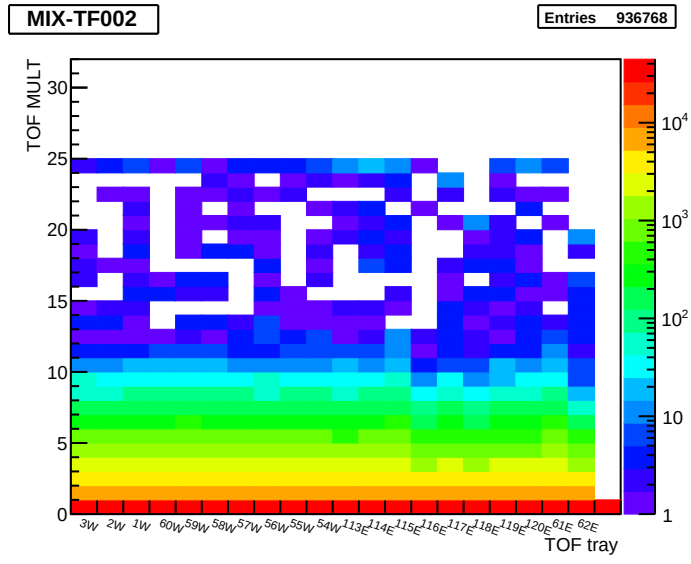

BunchId7Bit (EPD-TAC)
Entries 33233
10^2
10
1
0
20
40
60
80
100
120

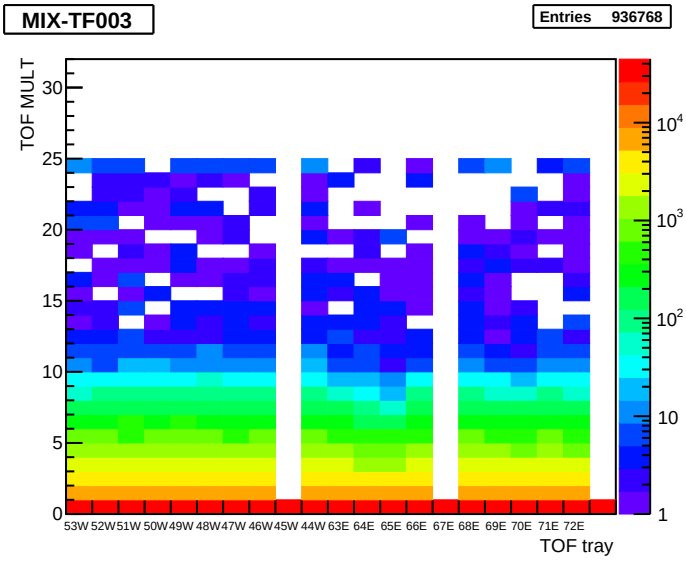

BunchId7Bit (BBC-TAC)
Entries 15882
10^2
10
1
0
20
40
60
80
100
120

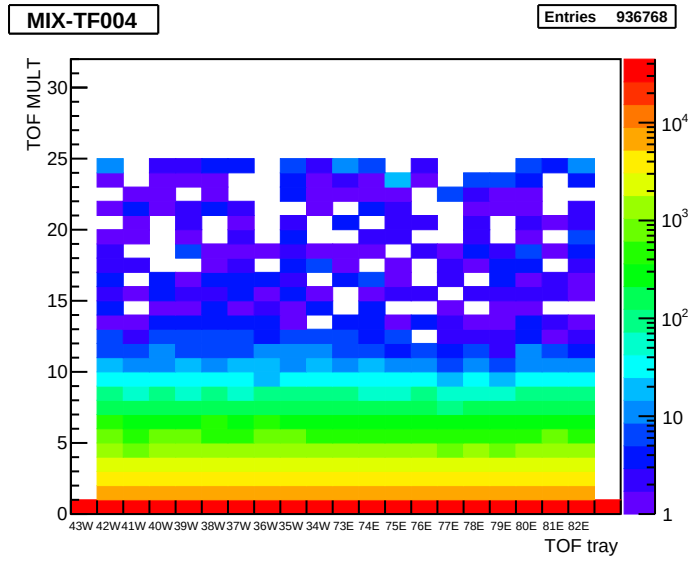

BunchId7Bit (Laser)
Entries 0
10
1
10^{-1}
10^{-2}
0
20
40
60
80
100
120

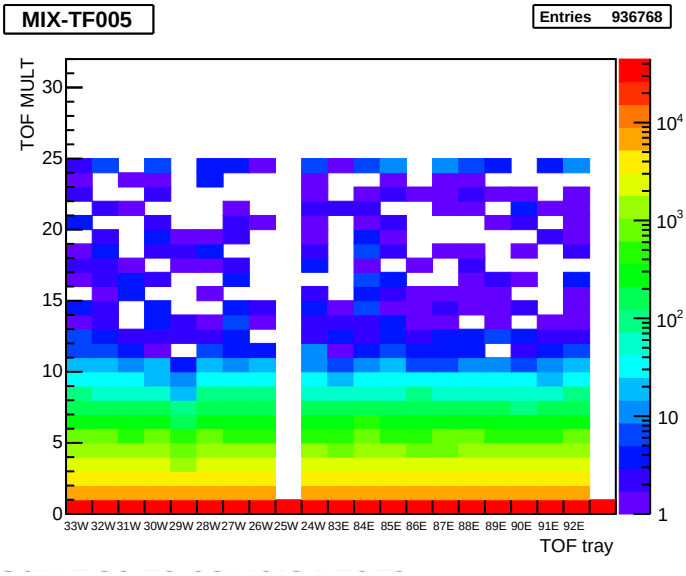

BunchId7Bit (TOFmult window)
Entries 1754
10
1
0
20
40
60
80
100
120

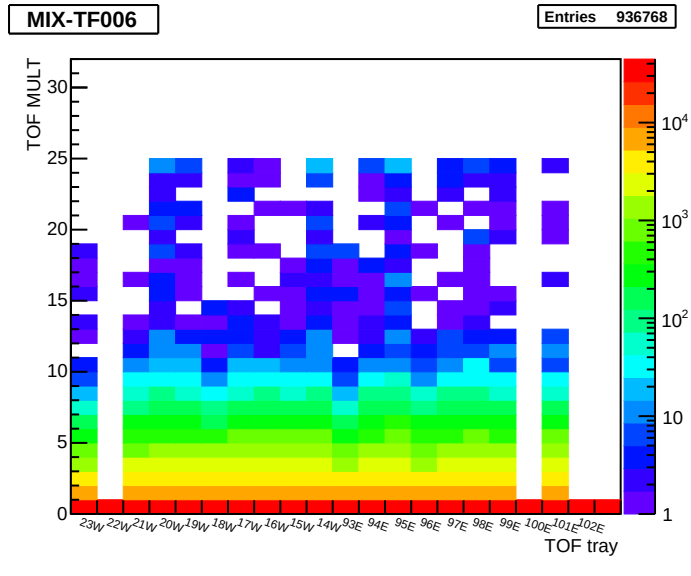

MIX-TF001
Entries 936768
TOF MULT
TOF tray

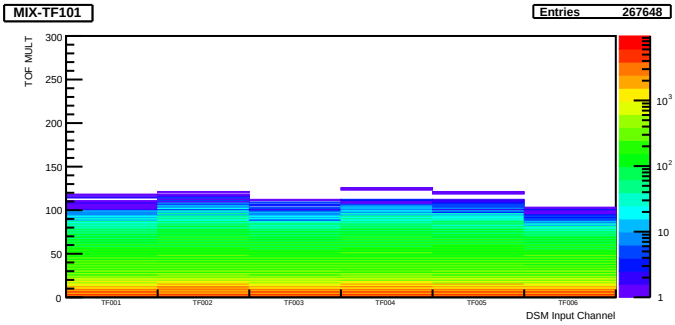

MIX-TF002
Entries 936768
TOF MULT
TOF tray

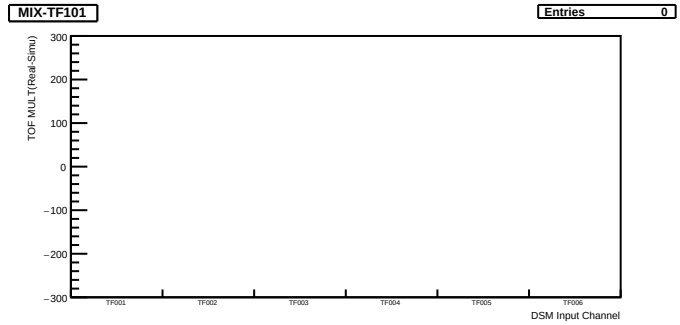

MIX-TF003
Entries 936768
TOF MULT
TOF tray

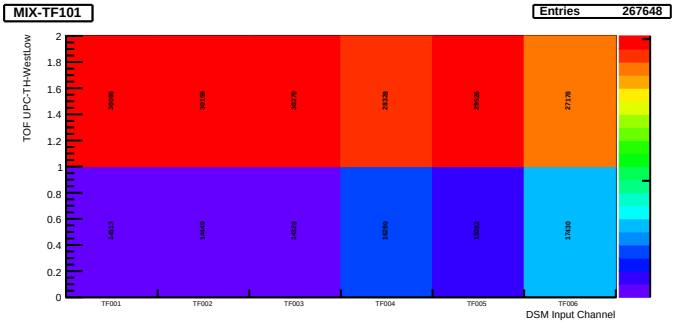

MIX-TF004
Entries 936768
TOF MULT
TOF tray

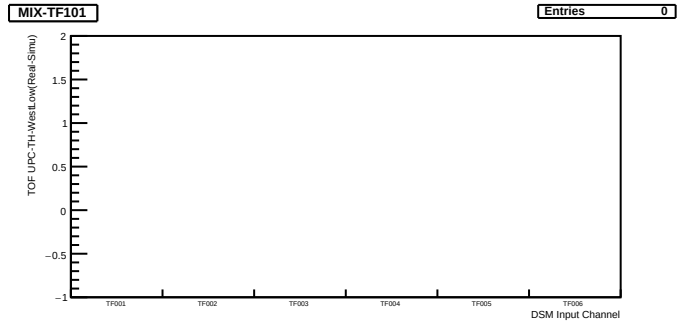

MIX-TF005
Entries 936768
TOF MULT
TOF tray

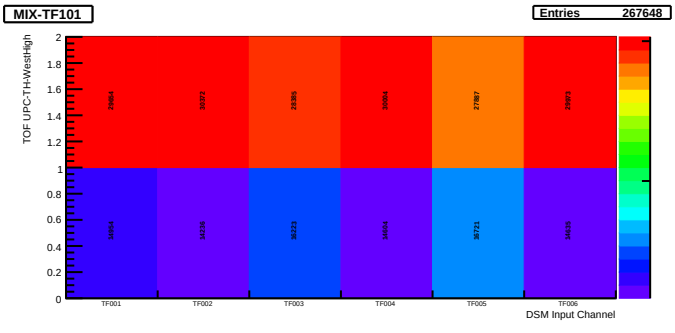

MIX-TF006
Entries 936768
TOF MULT
TOF tray

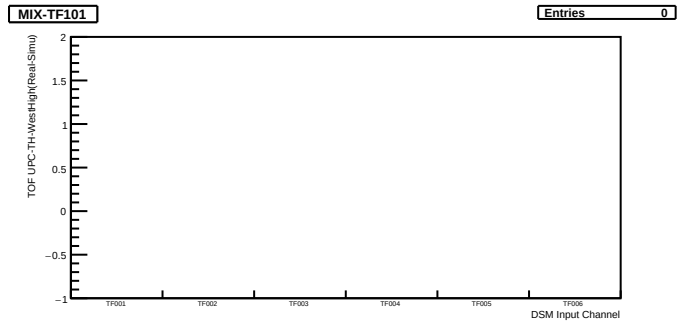

MIX-TF101
Entries 267648
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

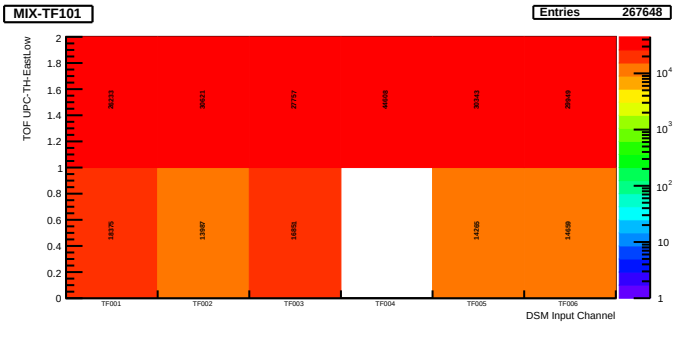

MIX-TF101
Entries 0
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

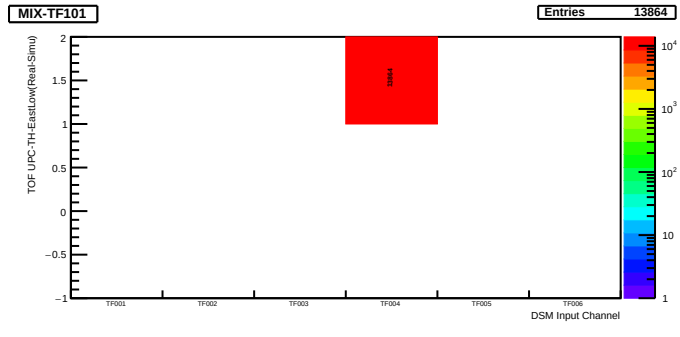

MIX-TF101
Entries 267648
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

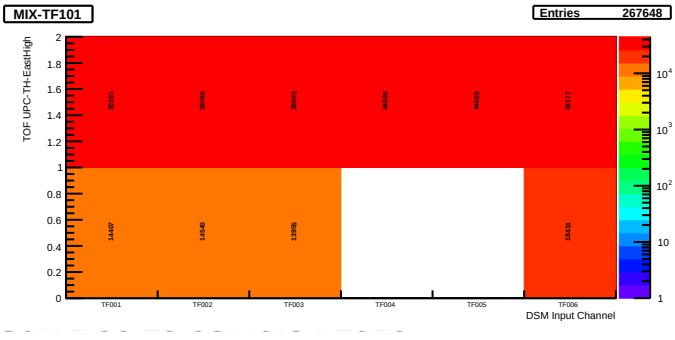

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

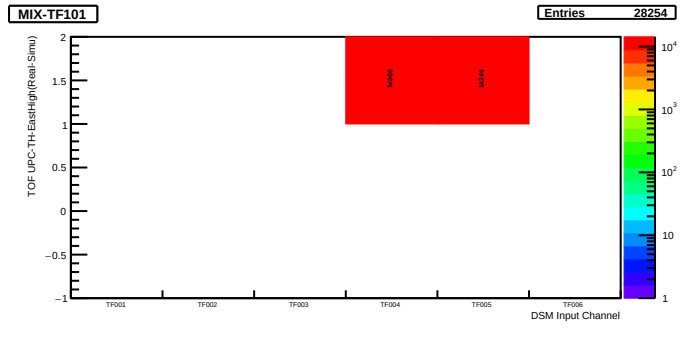

MIX-TF101
Entries 267648
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

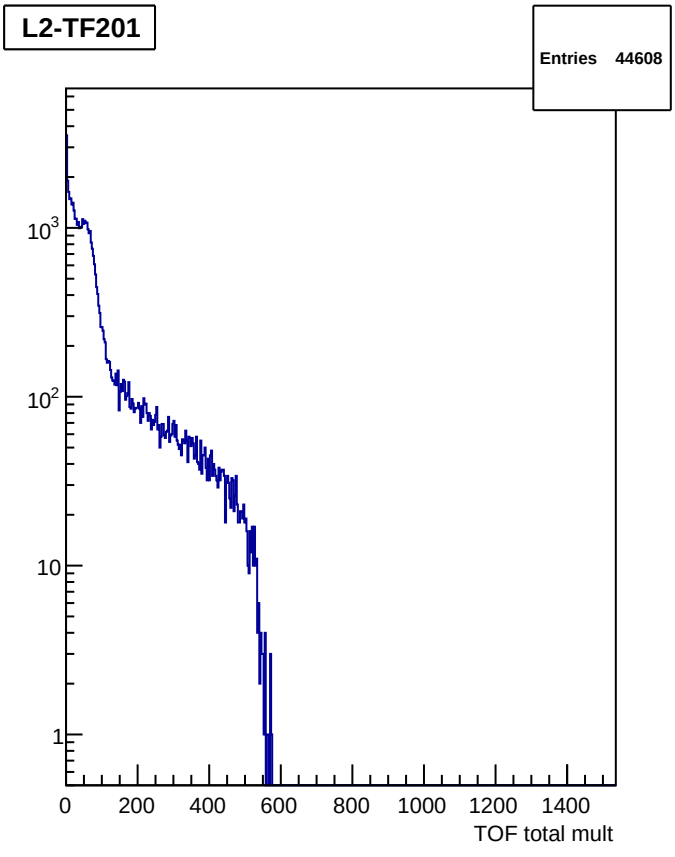

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

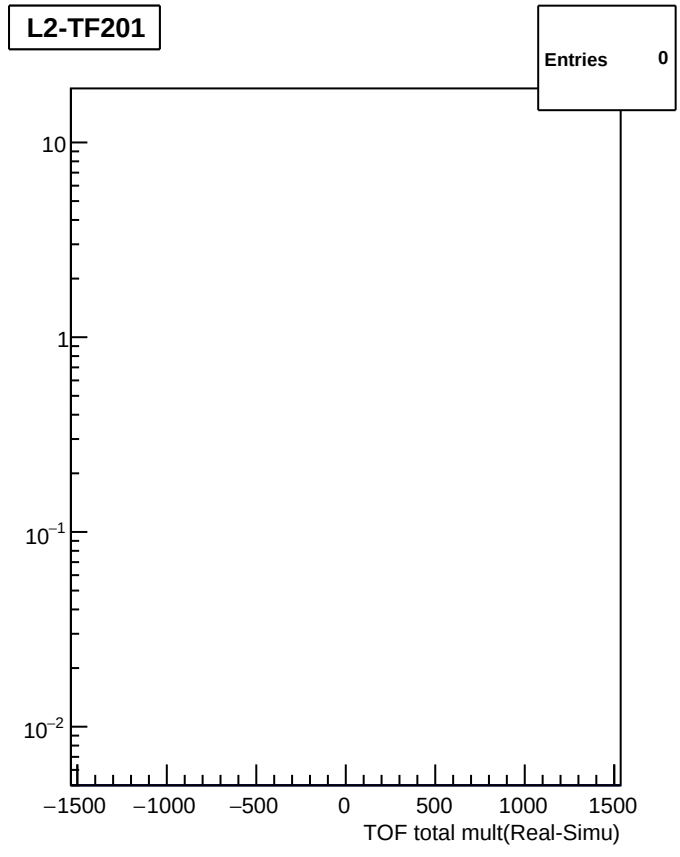

MIX-TF101
Entries 267648
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

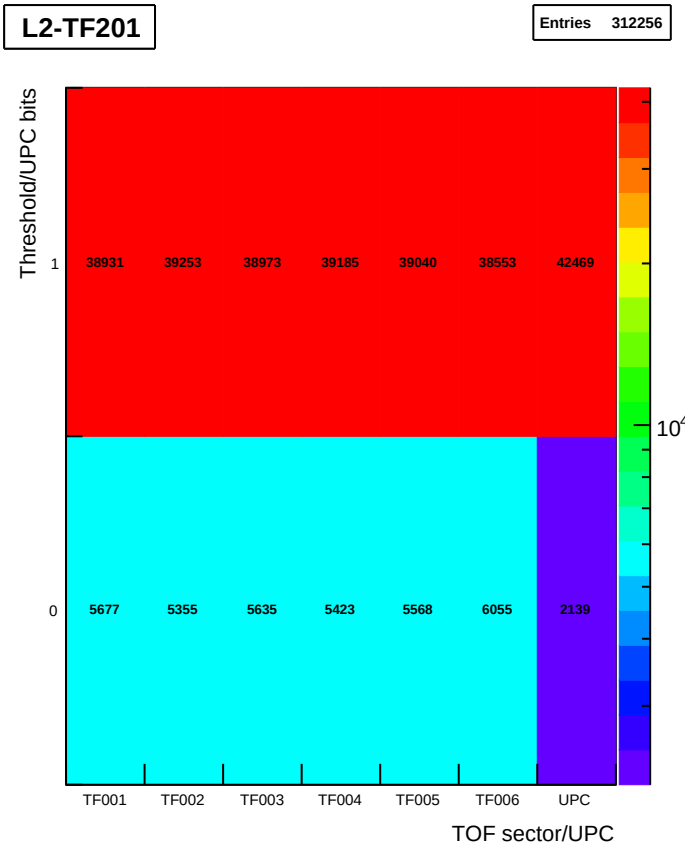

MIX-TF101
Entries 13864
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

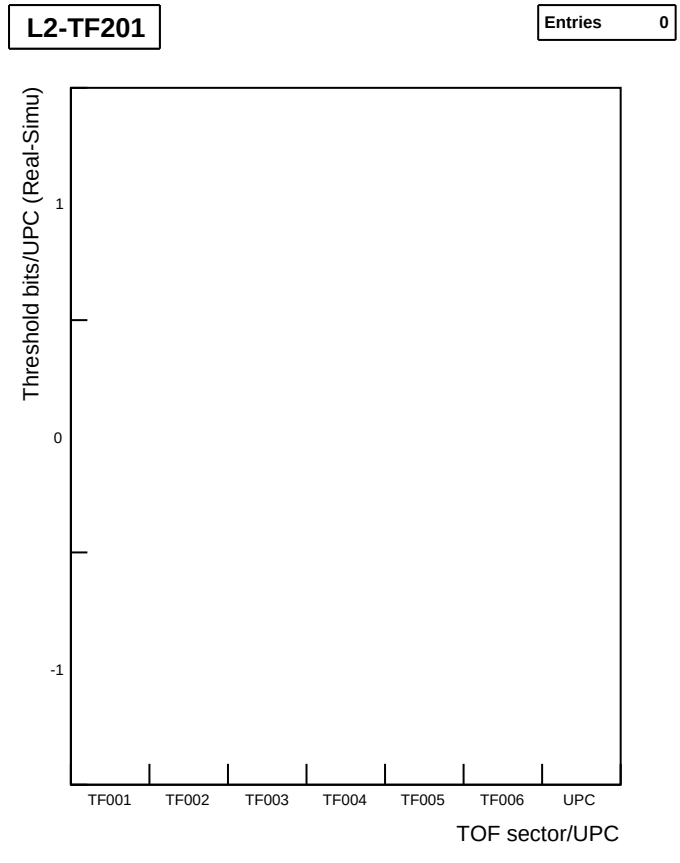

MIX-TF101
Entries 267648
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

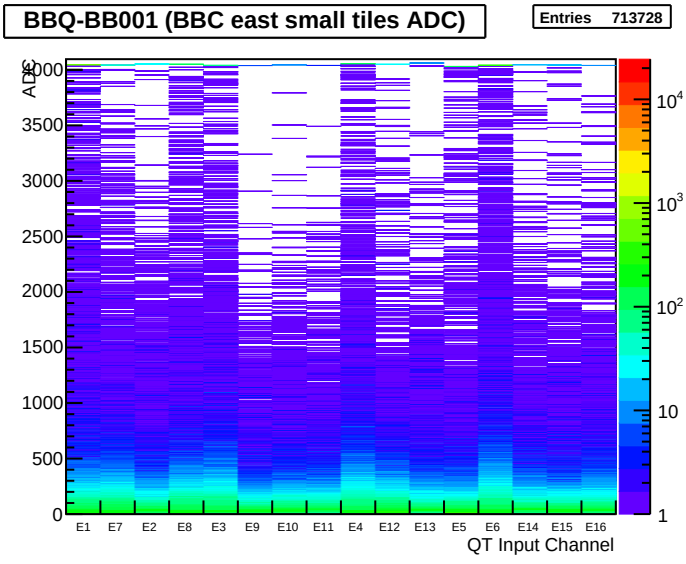

MIX-TF101
Entries 28254
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

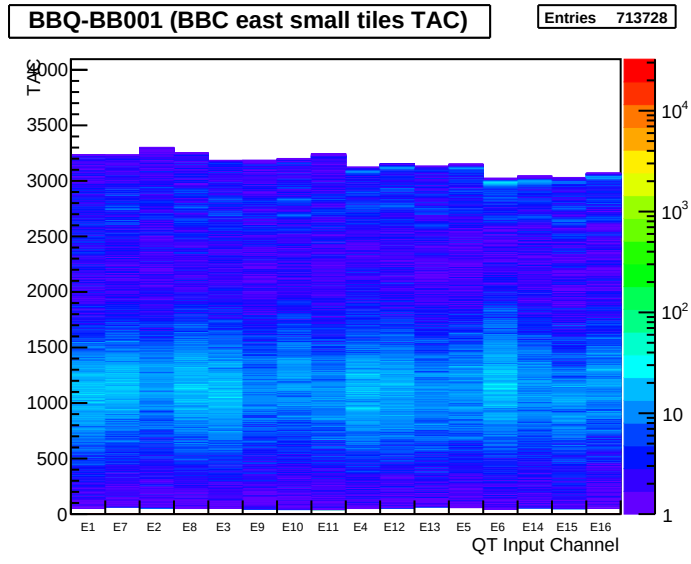

L2-TF201
Entries 44608
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
TOF total mult

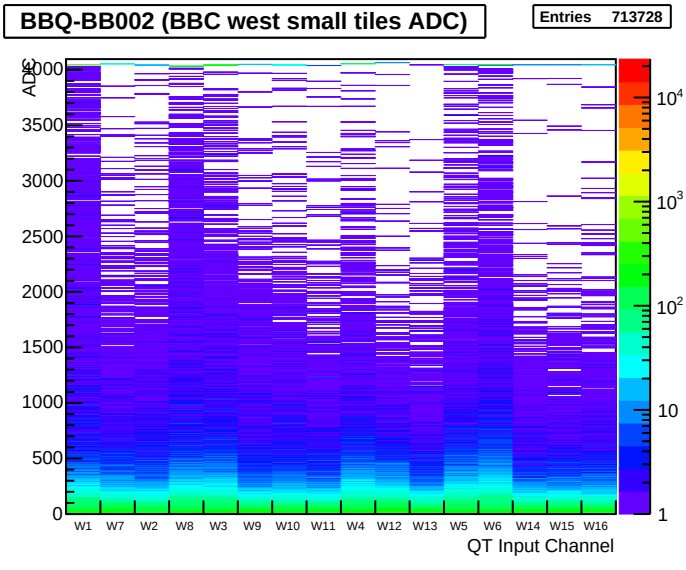

L2-TF201
Entries 0
10
1
10^{-1}
10^{-2}
−1500
−1000
−500
0
500
1000
1500
TOF total mult(Real-Simu)

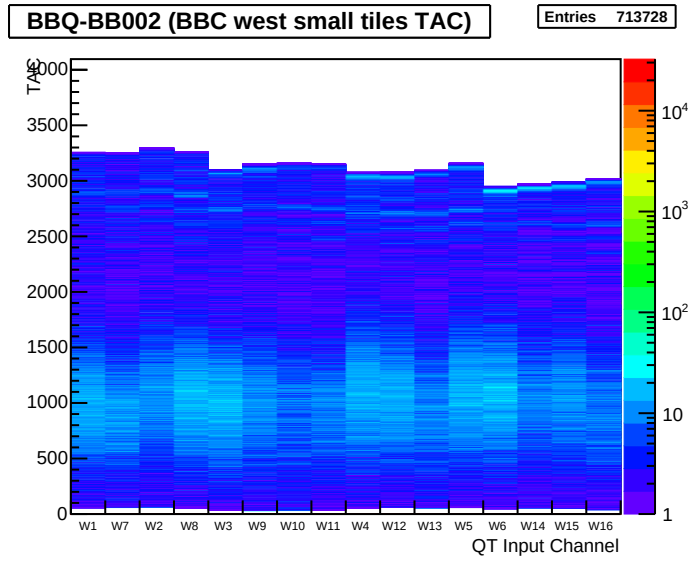

L2-TF201
Entries 312256
Threshold/UPC bits
1
0
38931
39253
38973
39185
39040
38553
42469
5677
5355
5635
5423
5568
6055
2139
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC

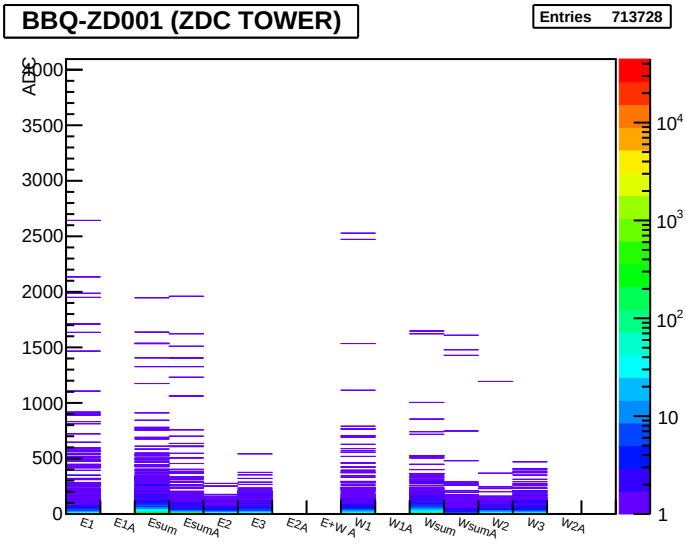

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
1
0
-1
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC

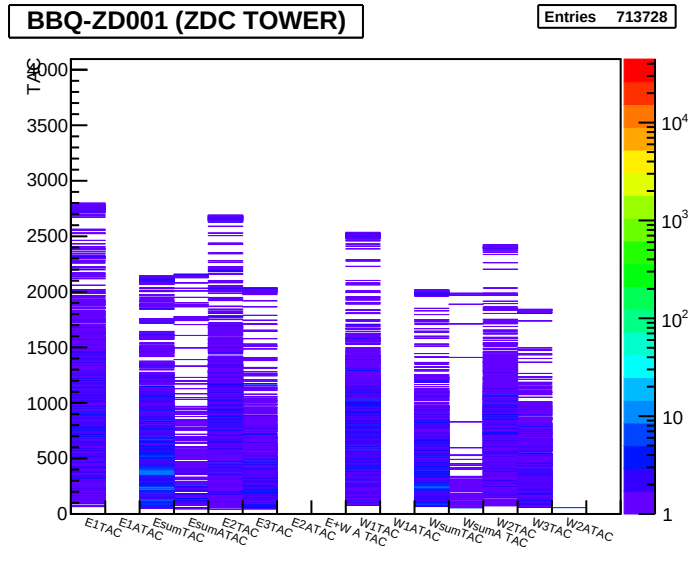

BBQ-BB001 (BBC east small tiles ADC)
Entries 713728
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

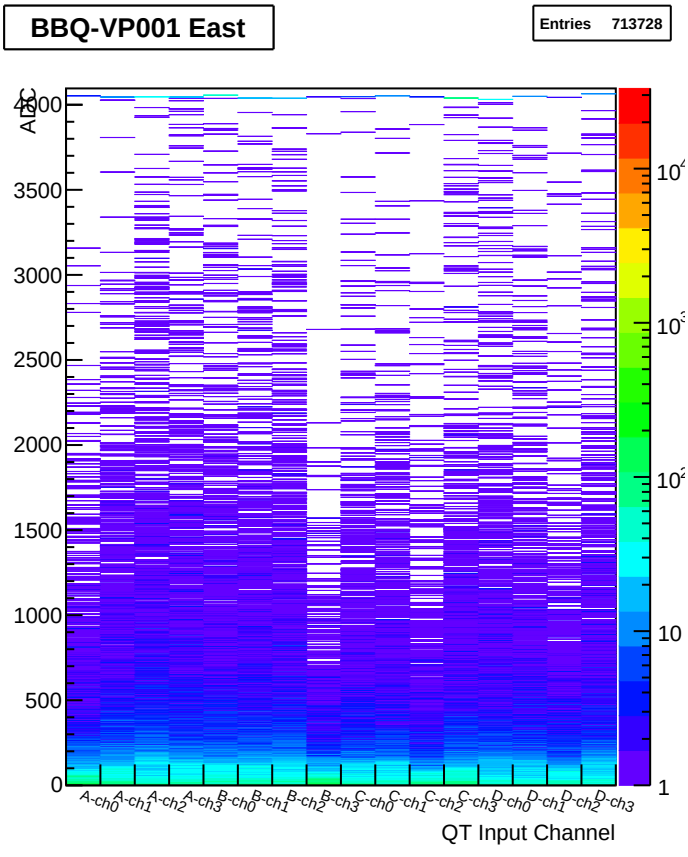

BBQ-BB001 (BBC east small tiles TAC)
Entries 713728
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

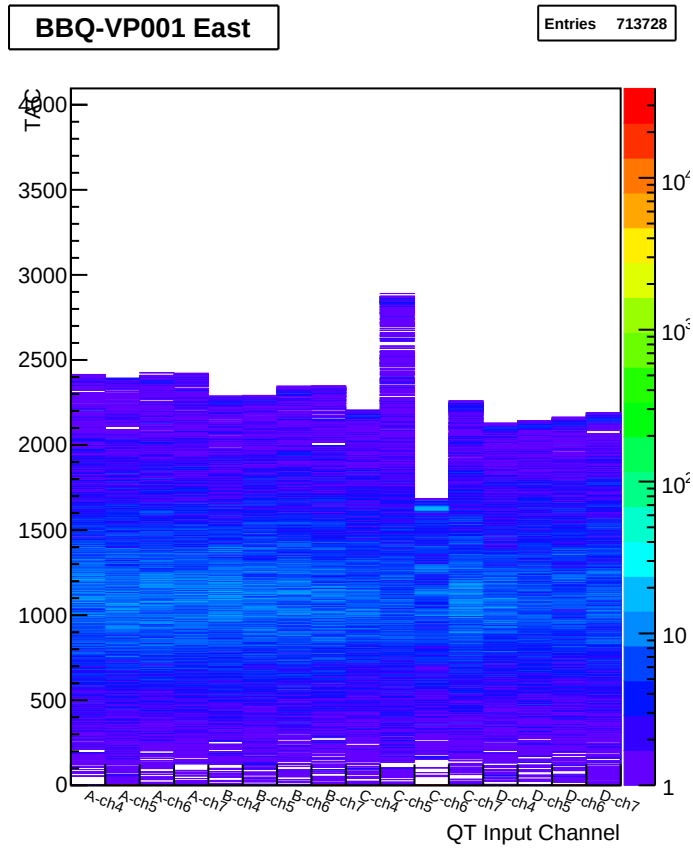

BBQ-BB002 (BBC west small tiles ADC)
Entries 713728
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

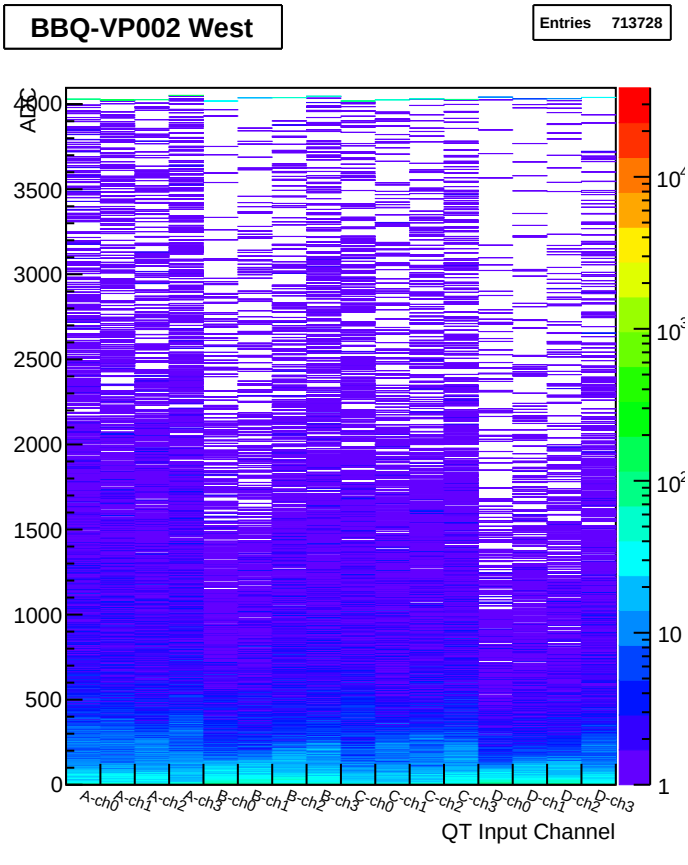

BBQ-BB002 (BBC west small tiles TAC)
Entries 713728
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

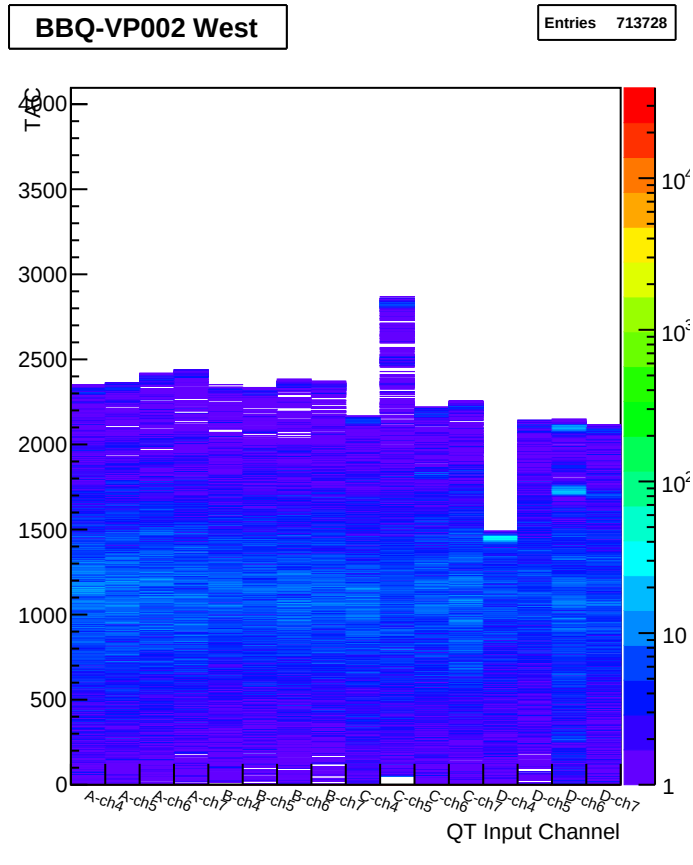

BBQ-ZD001 (ZDC TOWER)
Entries 713728
ADC
E1 E1A Esum EsumA E2 E3 E2A E+W A W1 W1A Wsum WsumA W2 W3 W2A

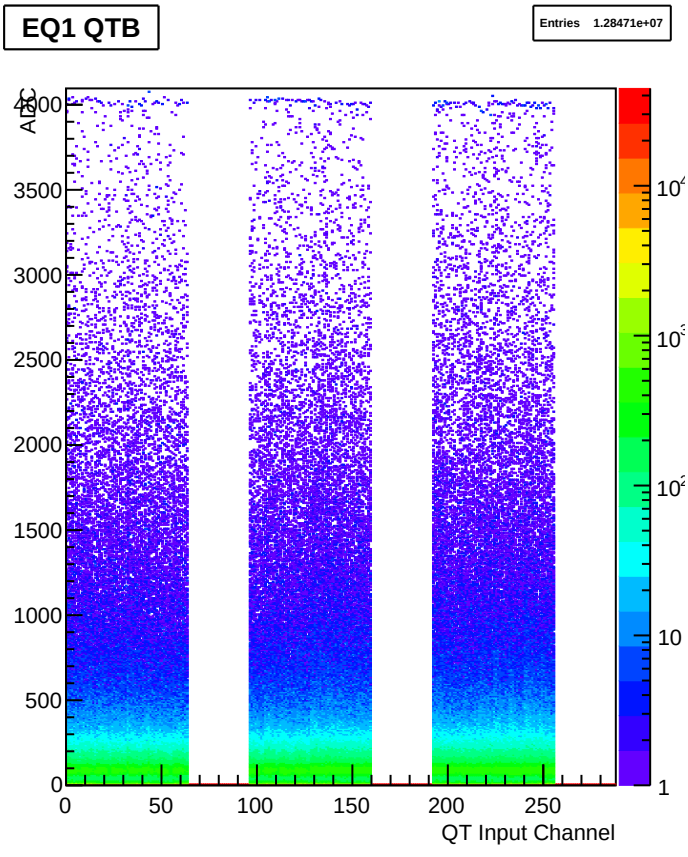

BBQ-ZD001 (ZDC TOWER)
Entries 713728
TAC
E1TAC E1ATAC EsumTAC EsumATAC E2TAC E3TAC E2ATAC E+W A TAC W1TAC W1ATAC WsumTAC WsumA TAC W2TAC W3TAC W2ATAC

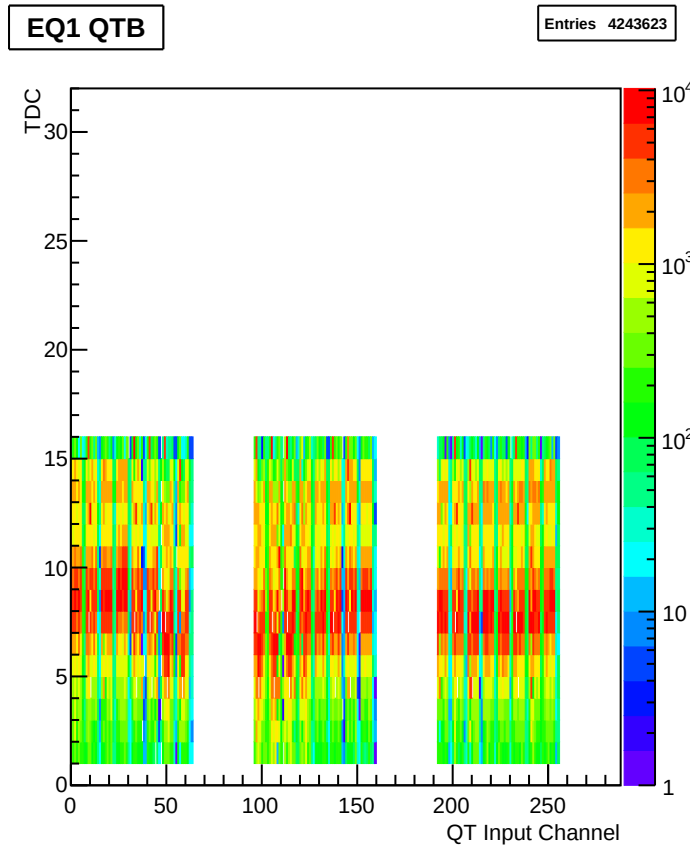

BBQ-VP001 East
Entries 713728
ADC
QT Input Channel

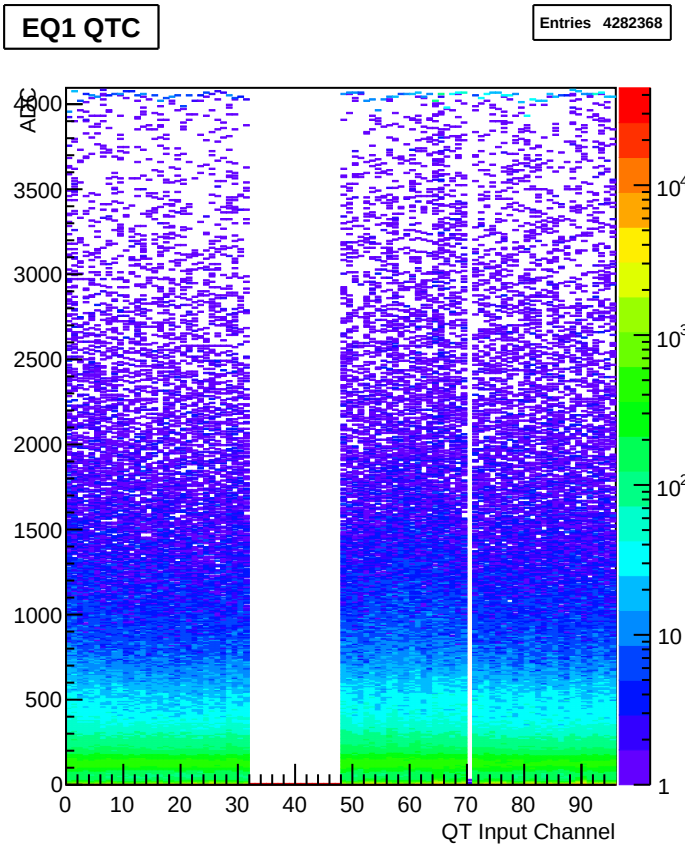

BBQ-VP001 East
Entries 713728
TADC
QT Input Channel

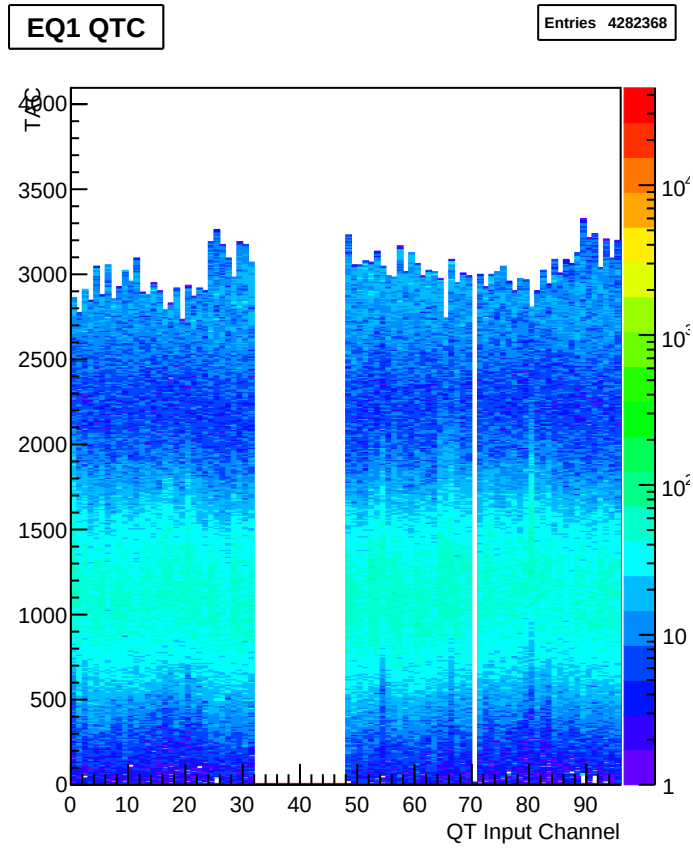

BBQ-VP002 West
Entries 713728
ADC
QT Input Channel

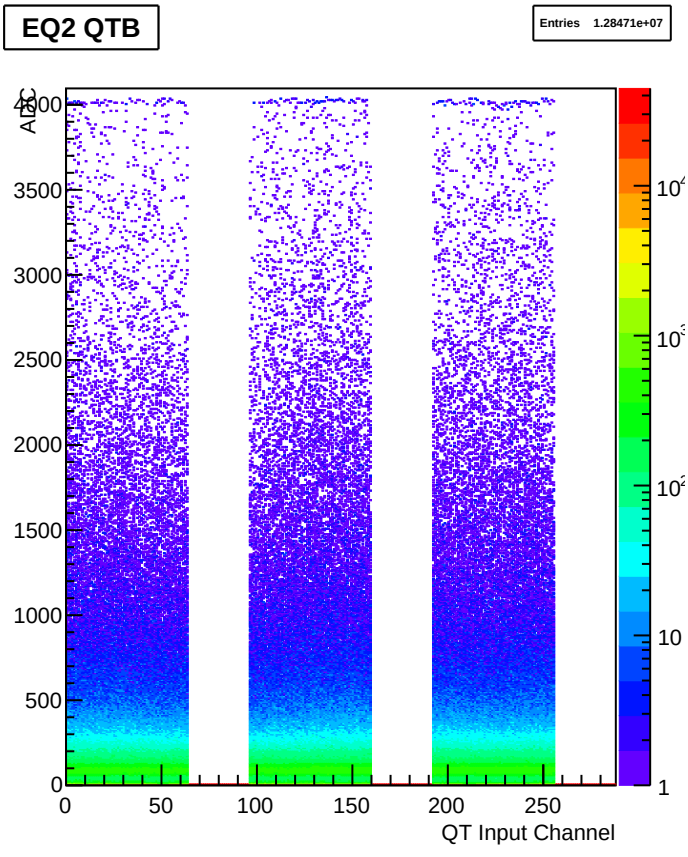

BBQ-VP002 West
Entries 713728
TADC
QT Input Channel

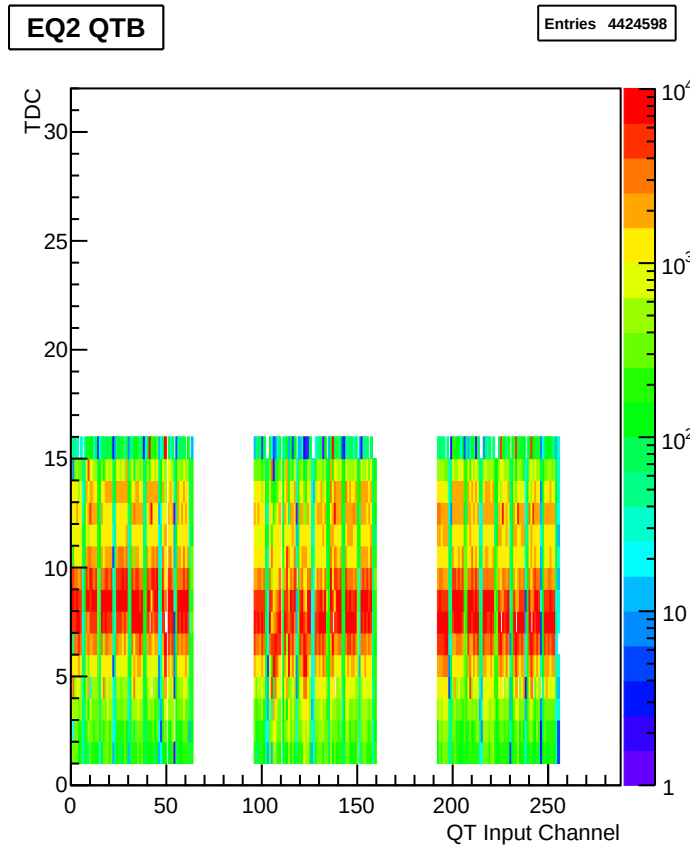

EQ1 QTB
Entries 1.28471e+07
ADC
QT Input Channel

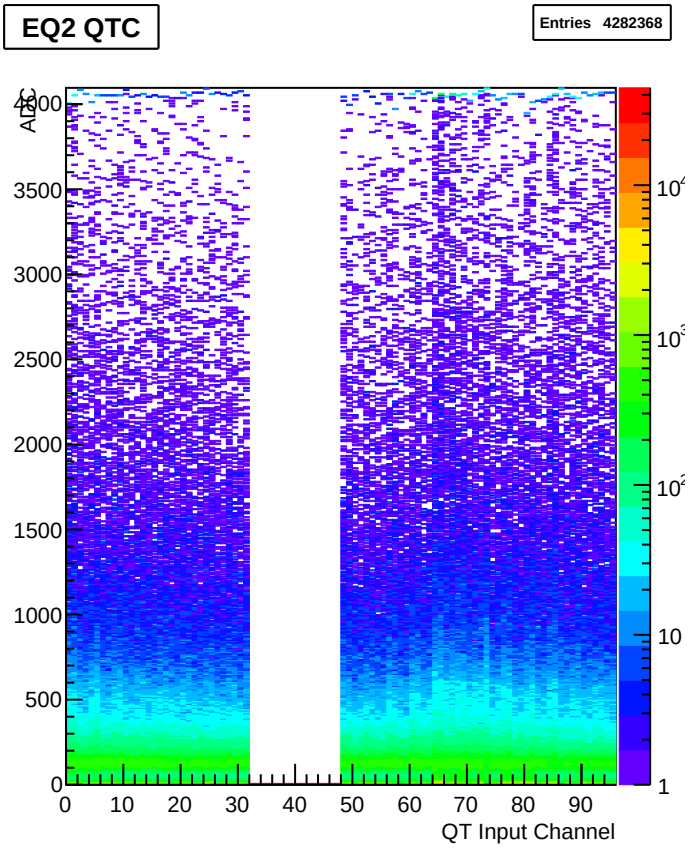

EQ1 QTB
Entries 4243623
TDC
QT Input Channel

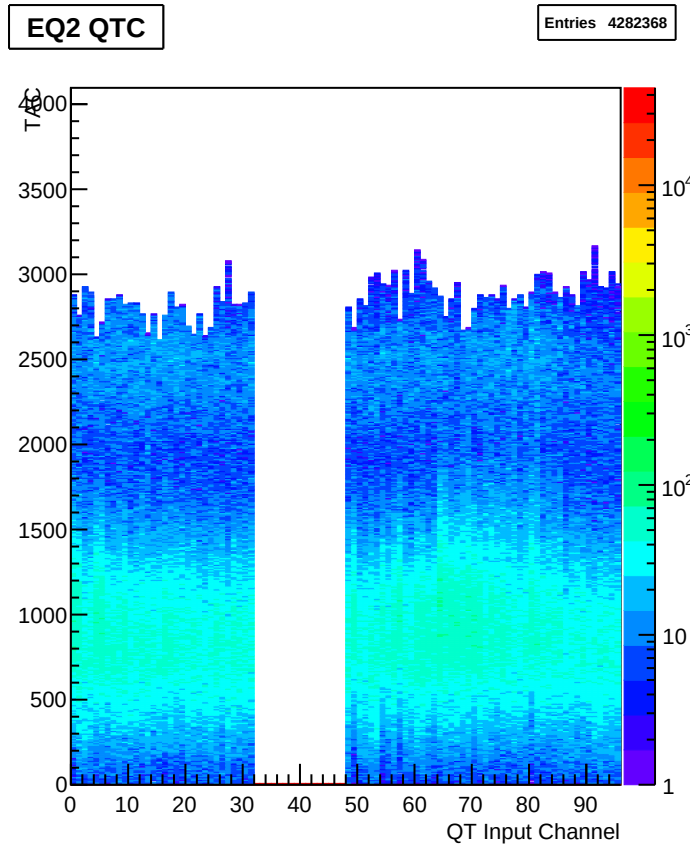

EQ1 QTC
Entries 4282368
ADC
QT Input Channel

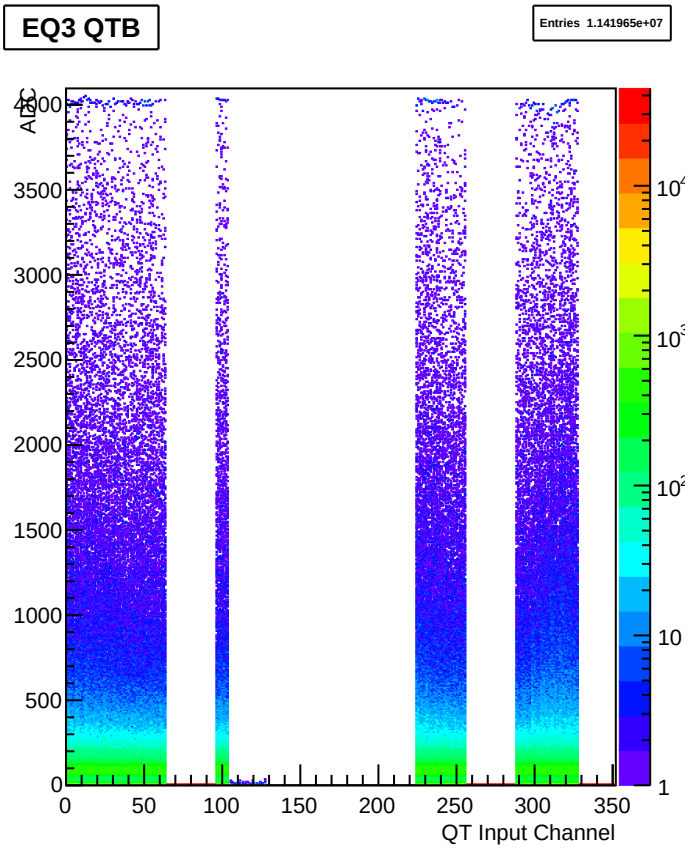

EQ1 QTC
Entries 4282368
TADC
QT Input Channel

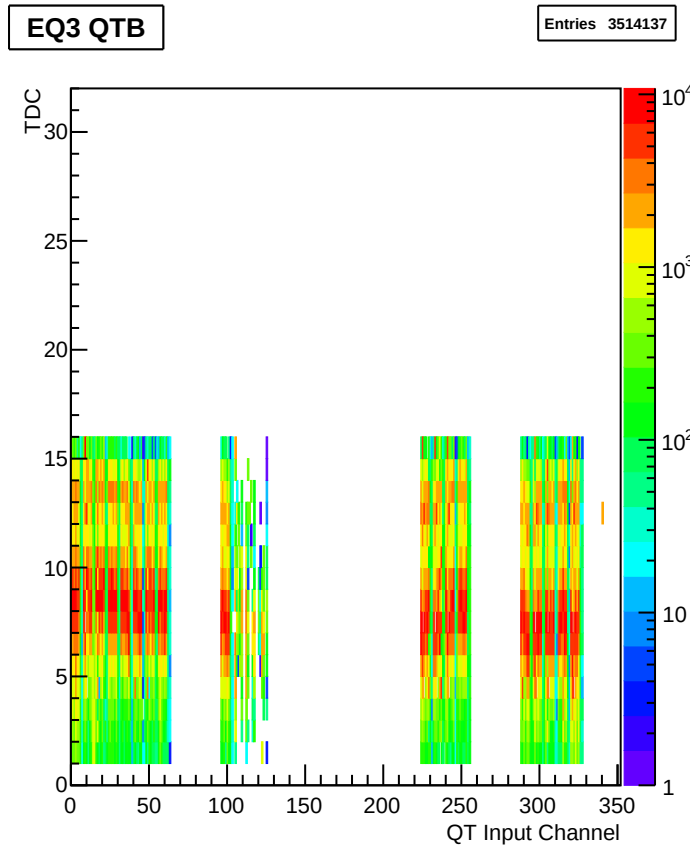

EQ2 QTB
Entries 1.28471e+07
ADC
QT Input Channel

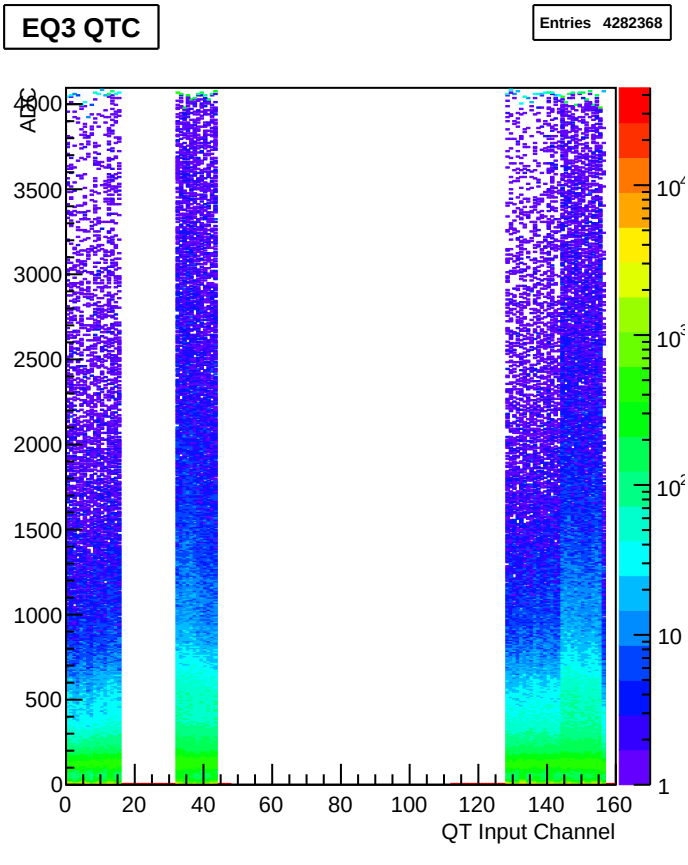

EQ2 QTB
Entries 4424598
TDC
QT Input Channel

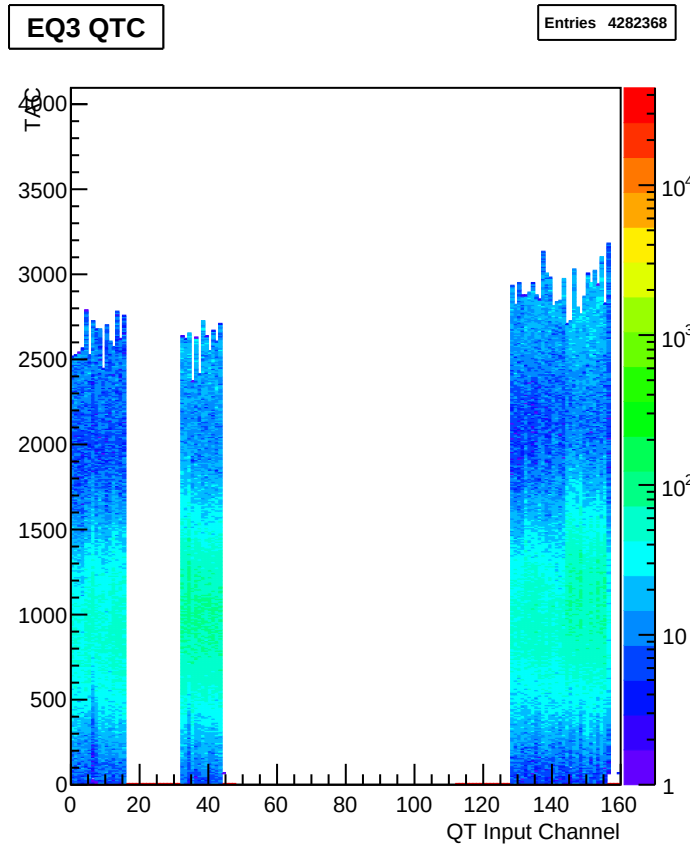

EQ2 QTC
Entries 4282368
ADC
QT Input Channel

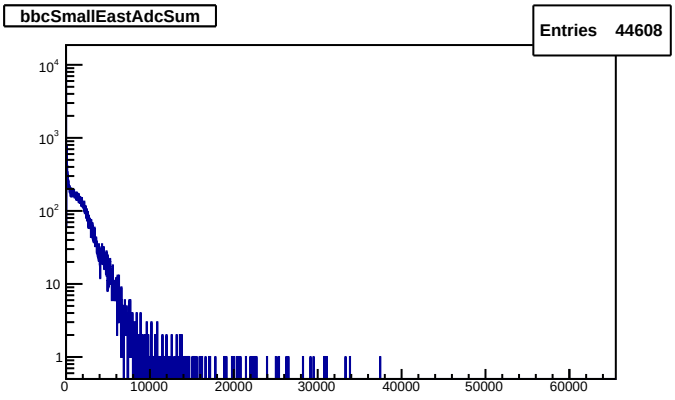

EQ2 QTC
Entries 4282368
TADC
QT Input Channel

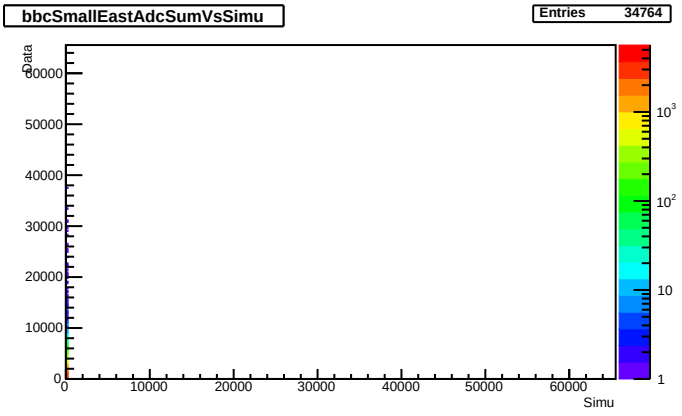

EQ3 QTB
Entries 1.141965e+07
ADC
QT Input Channel

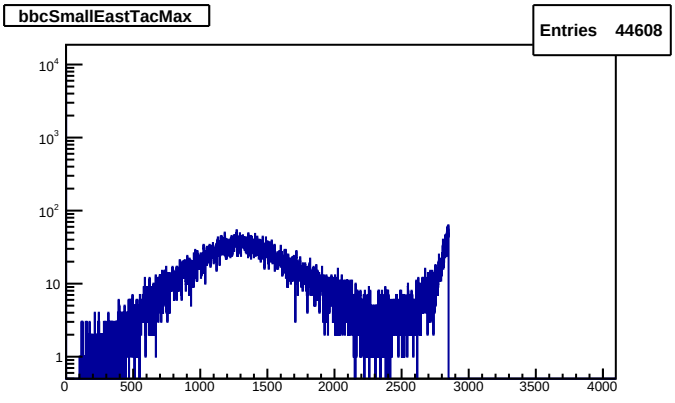

EQ3 QTB
Entries 3514137
TDC
QT Input Channel

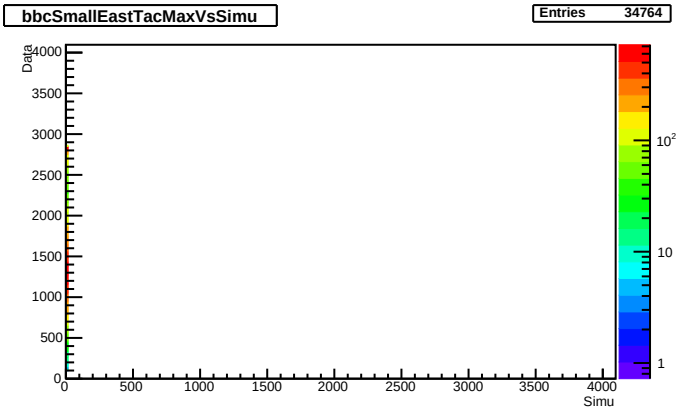

EQ3 QTC
Entries 4282368
ADC
QT Input Channel

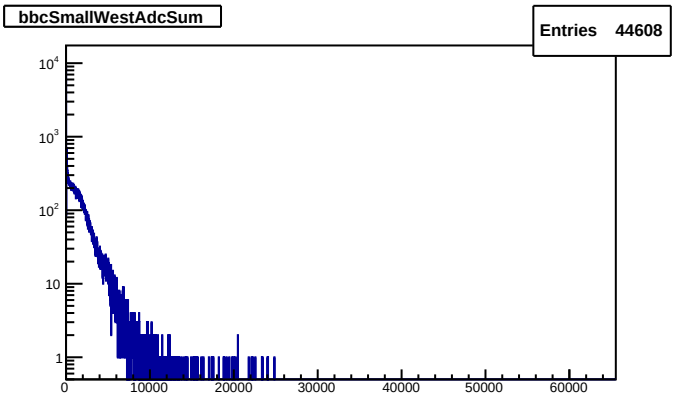

EQ3 QTC
Entries 4282368
TADC
QT Input Channel

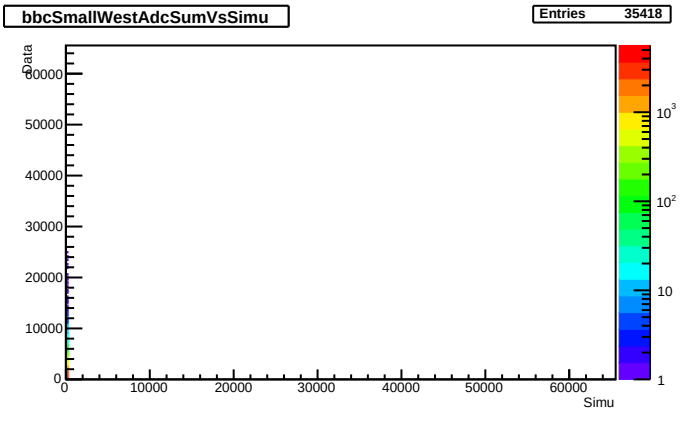

bbcSmallEastAdcSum
Entries 44608

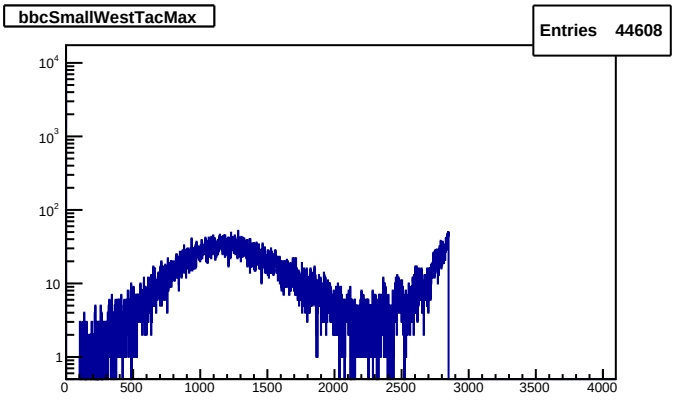

bbcSmallEastAdcSumVsSimu
Entries 34764
Data
Simu

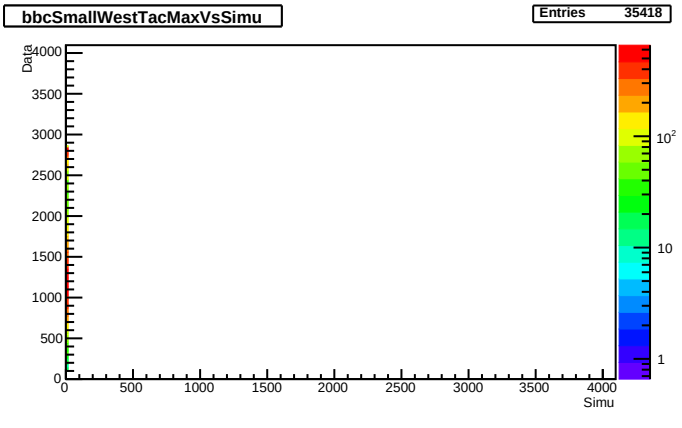

bbcSmallEastTacMax
Entries 44608

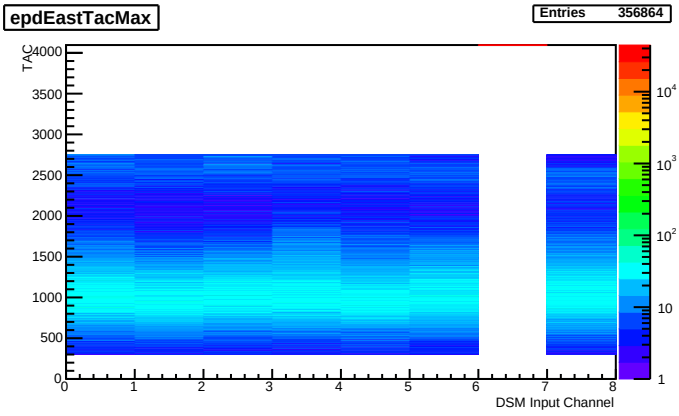

bbcSmallEastTacMaxVsSimu
Entries 34764
Data
Simu

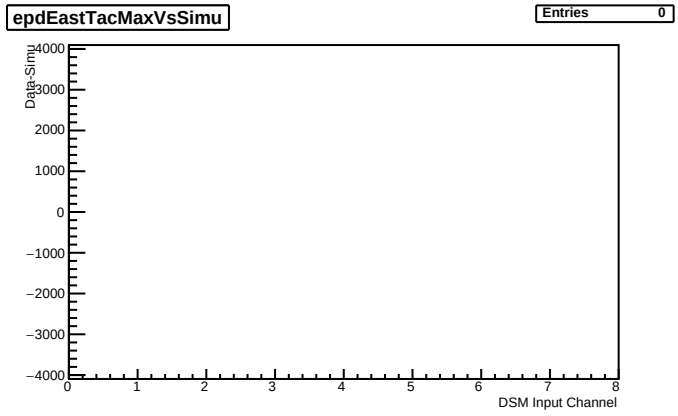

bbcSmallWestAdcSum
Entries 44608

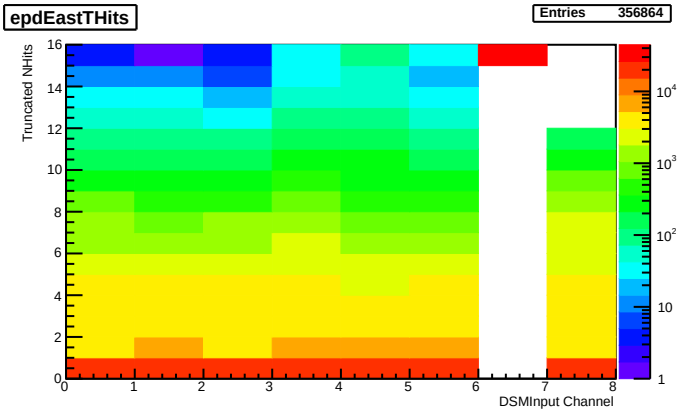

bbcSmallWestAdcSumVsSimu
Entries 35418
Data
Simu

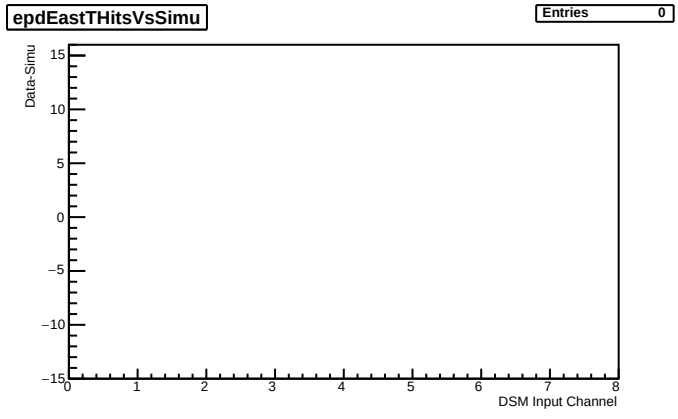

bbcSmallWestTacMax
Entries 44608

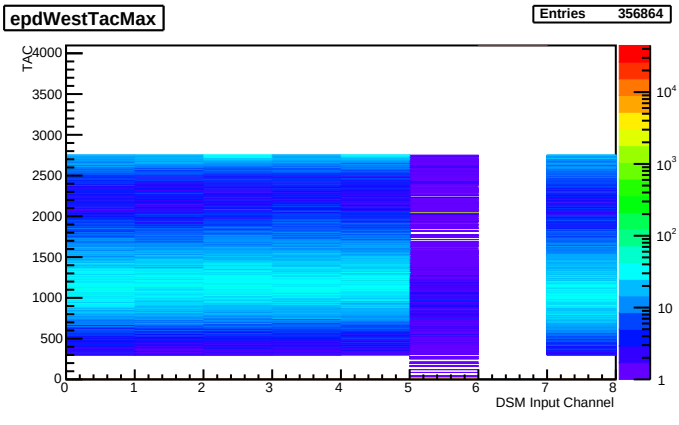

bbcSmallWestTacMaxVsSimu
Entries 35418
Data
Simu

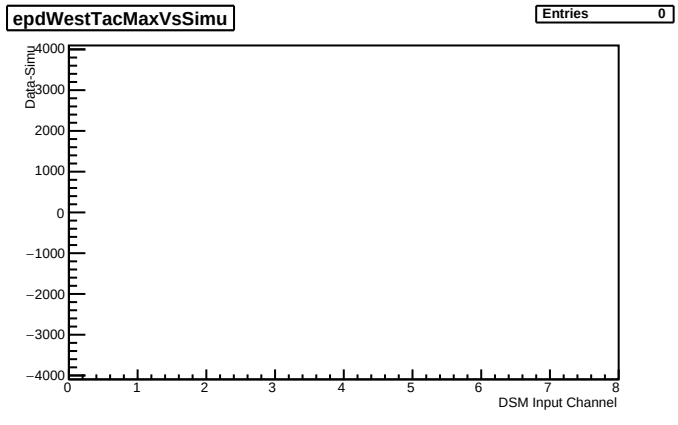

epdEastTacMax
Entries 356864
TAC
DSM Input Channel

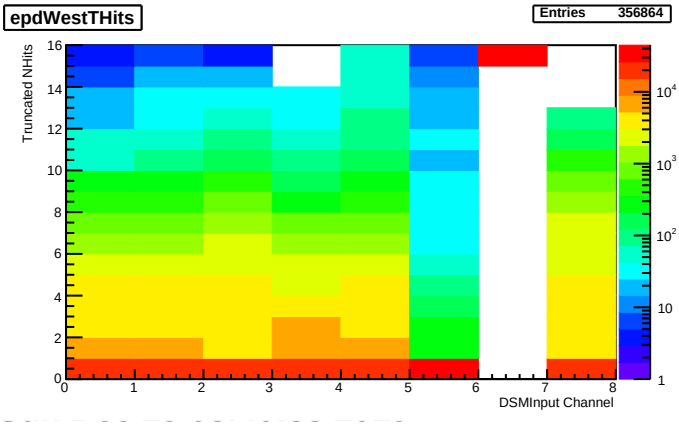

epdEastTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel

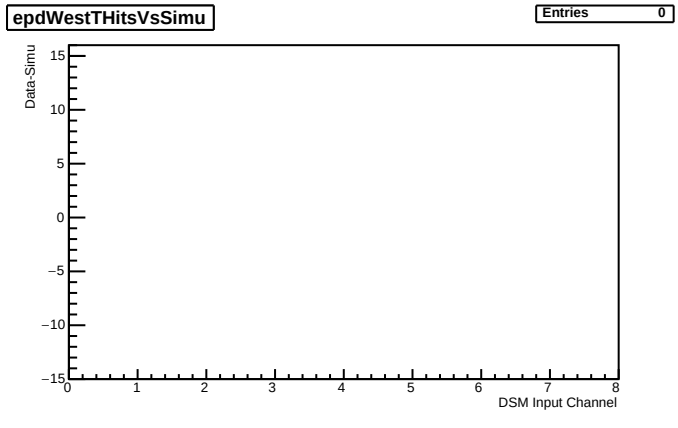

epdEastTHits
Entries 356864
Truncated NHits
DSMInput Channel

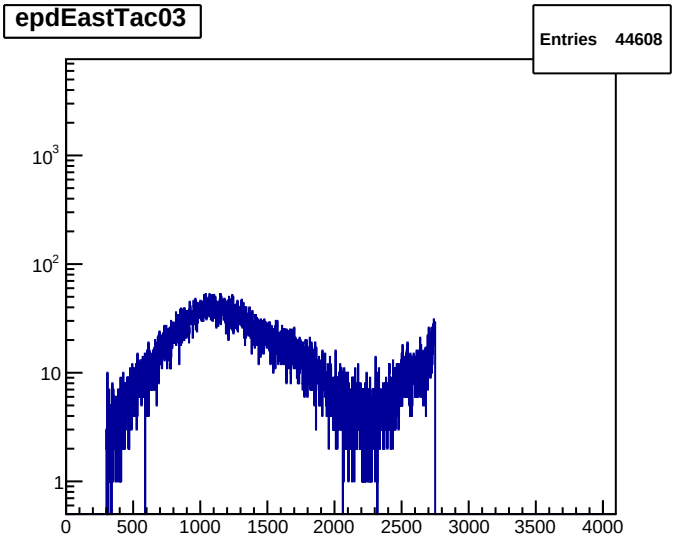

epdEastTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel

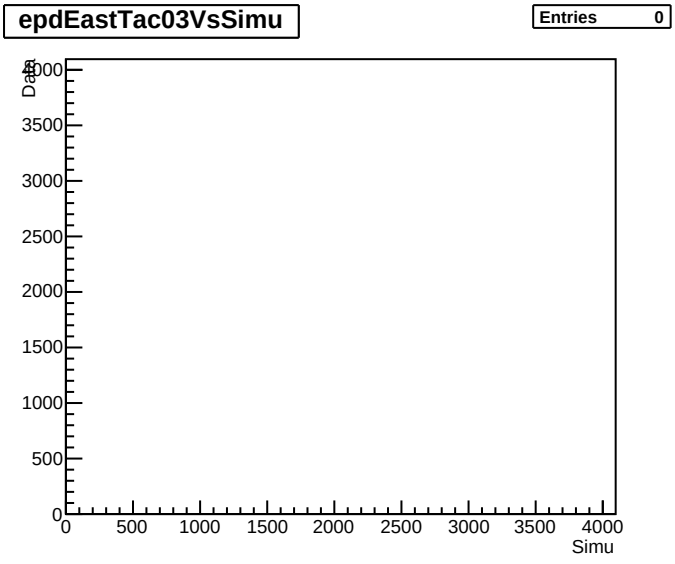

epdWestTacMax
Entries 356864
TAC
DSM Input Channel

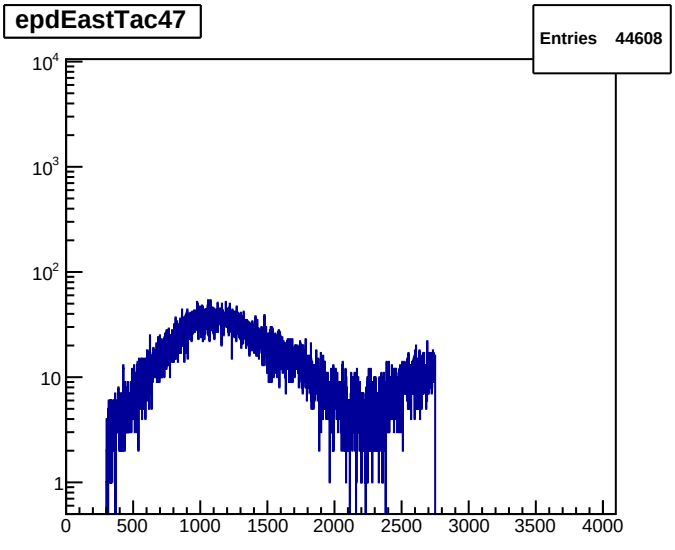

epdWestTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel

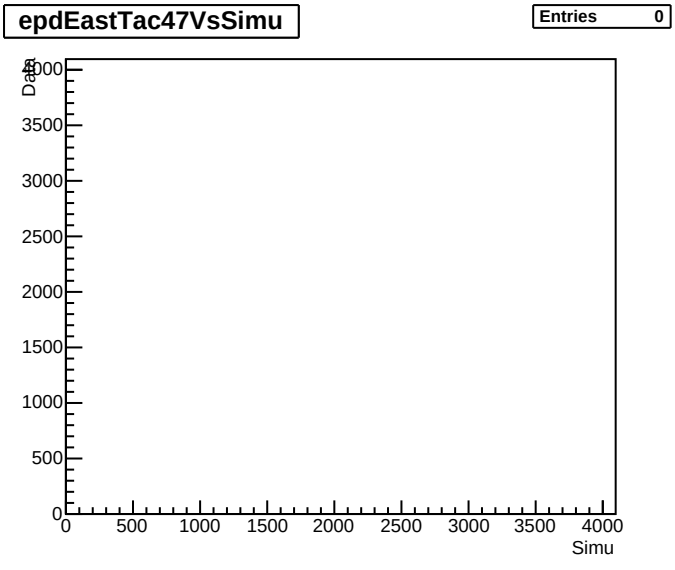

epdWestTHits
Entries 356864
Truncated NHits
DSMInput Channel

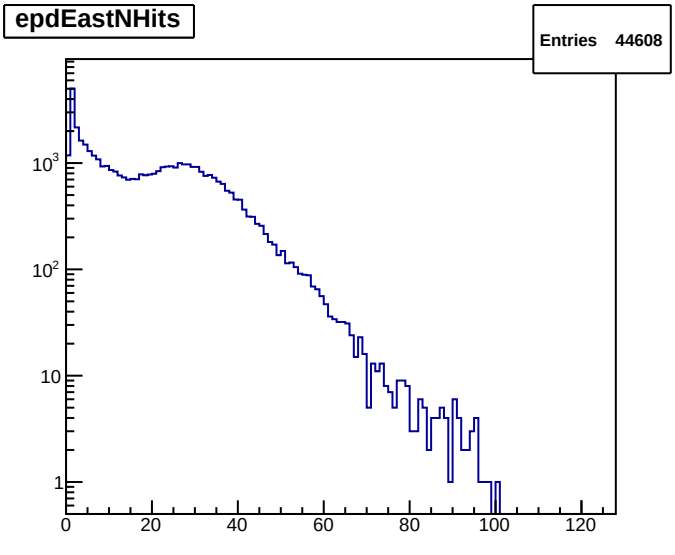

epdWestTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel

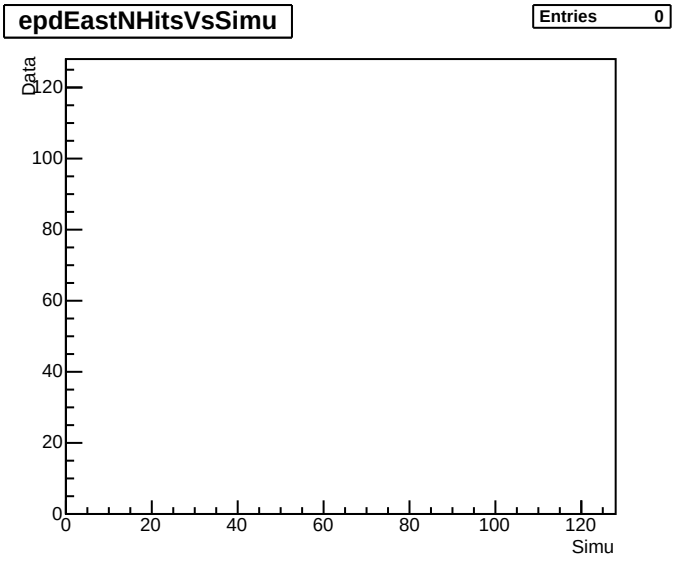

epdEastTac03
Entries 44608
10^3
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

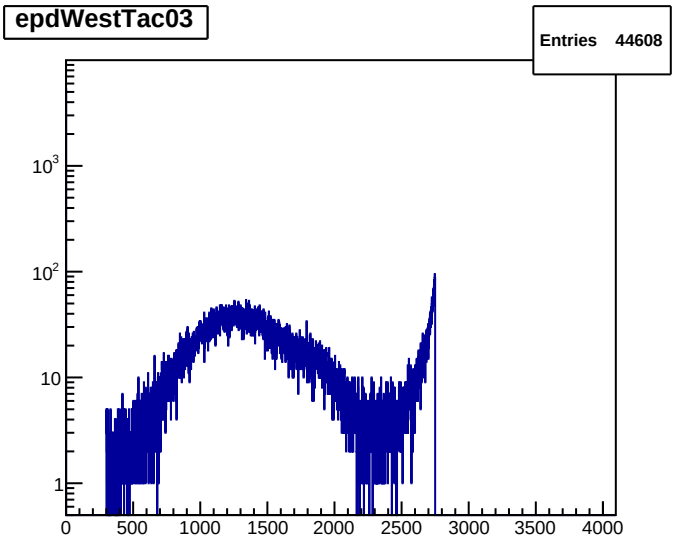

epdEastTac03VsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

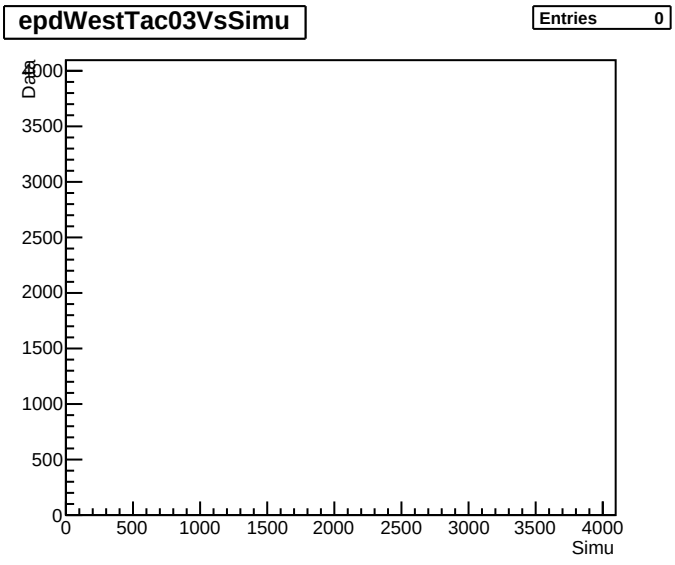

epdEastTac47
Entries 44608
10^4
10^3
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

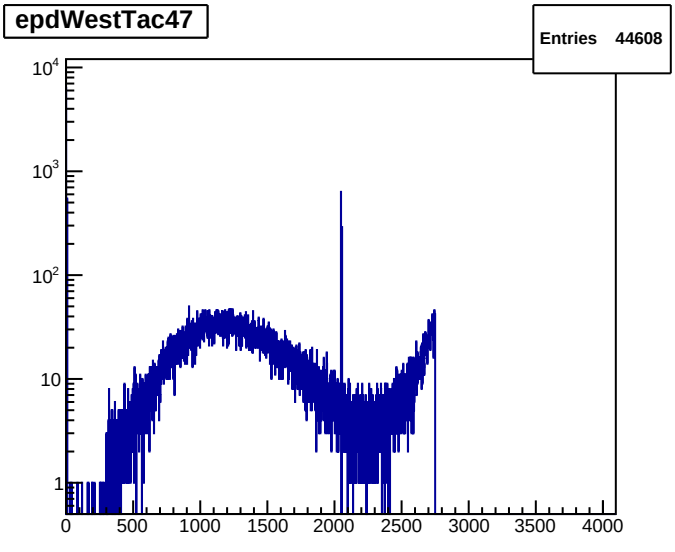

epdEastTac47VsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

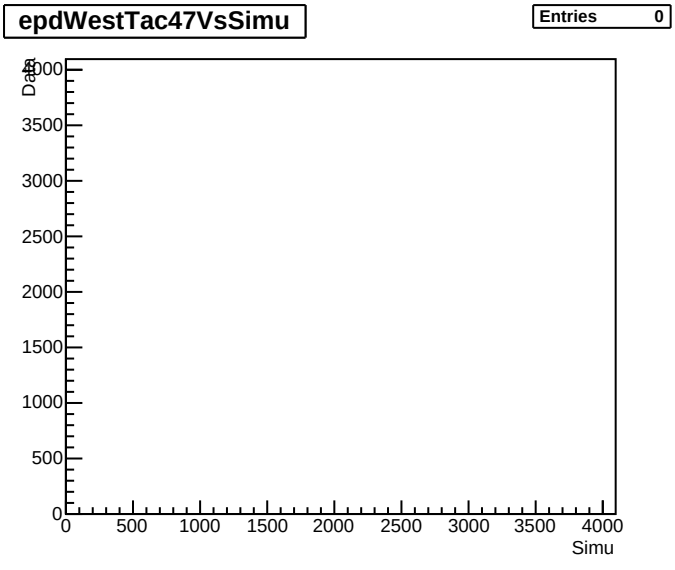

epdEastNHits
Entries 44608
10^3
10^2
10
1
0 20 40 60 80 100 120

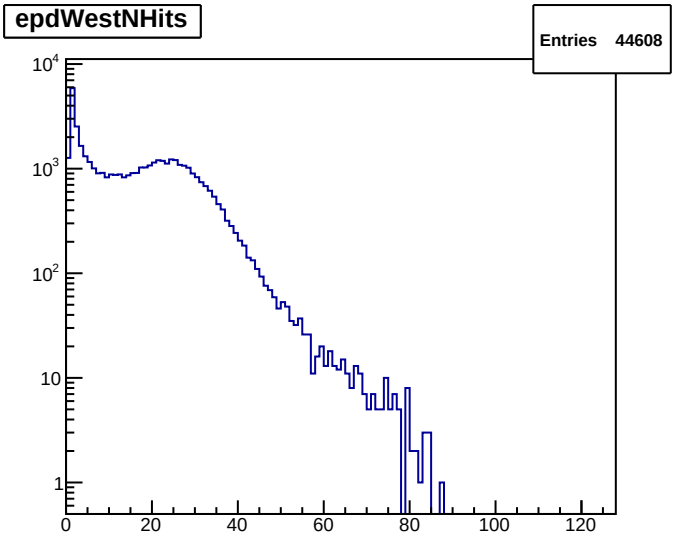

epdEastNHitsVsSimu
Entries 0
Data
120
100
80
60
40
20
0
0 20 40 60 80 100 120
Simu

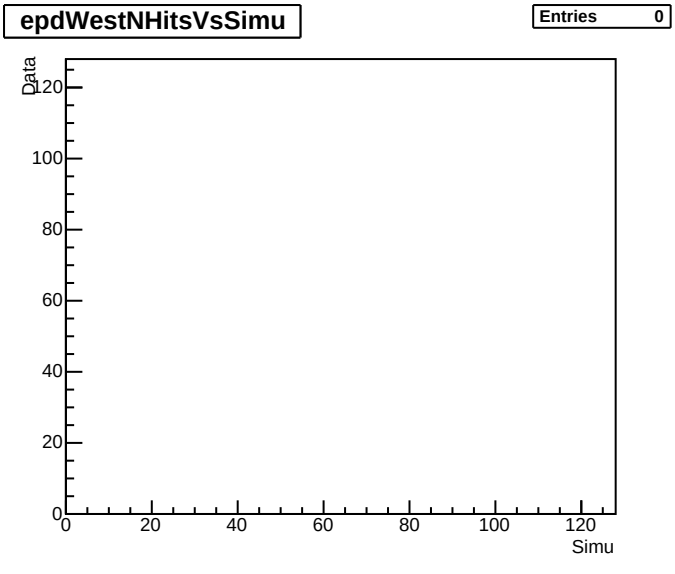

epdWestTac03
Entries 44608

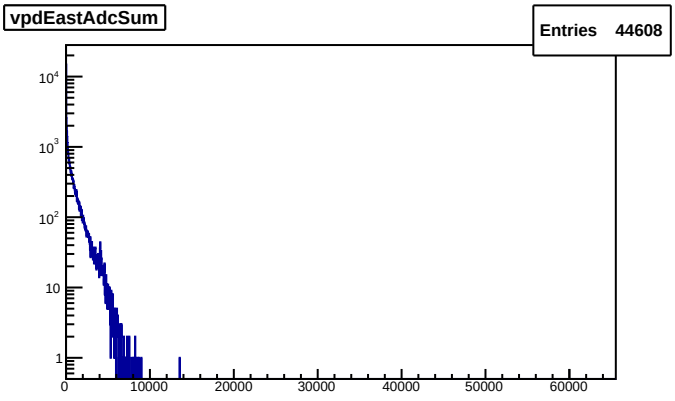

epdWestTac03VsSimu
Entries 0
Data
Simu

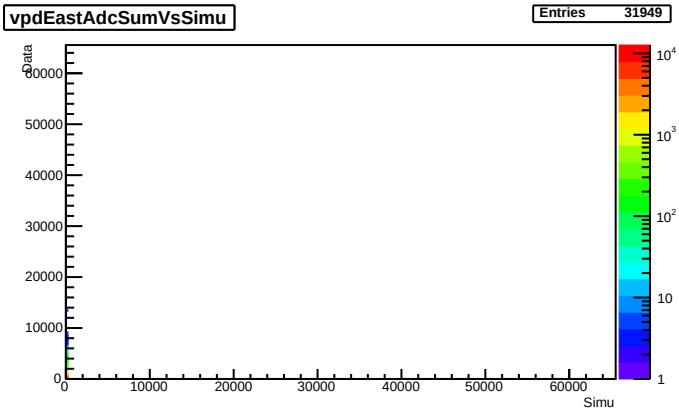

epdWestTac47
Entries 44608

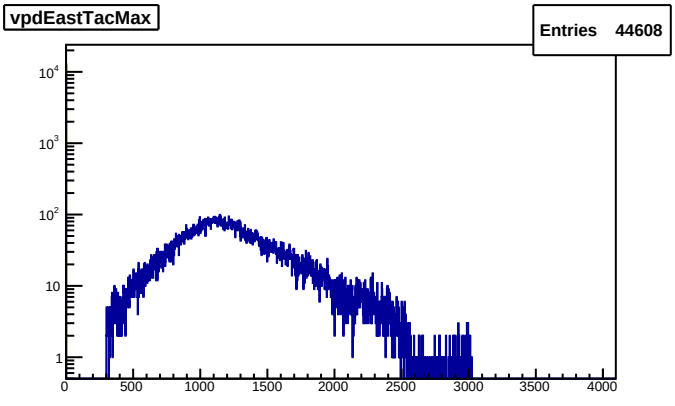

epdWestTac47VsSimu
Entries 0
Data
Simu

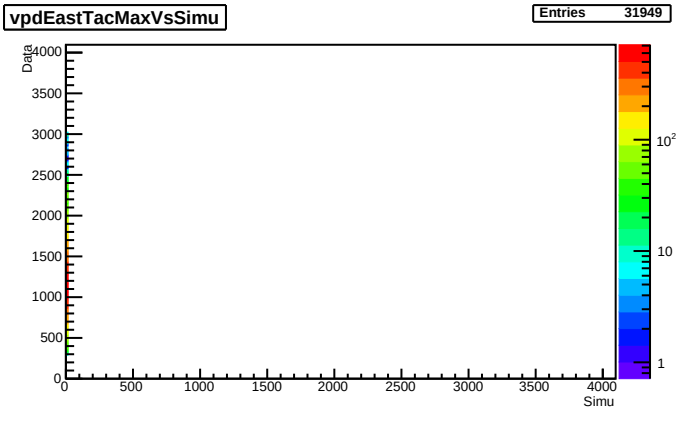

epdWestNHits
Entries 44608

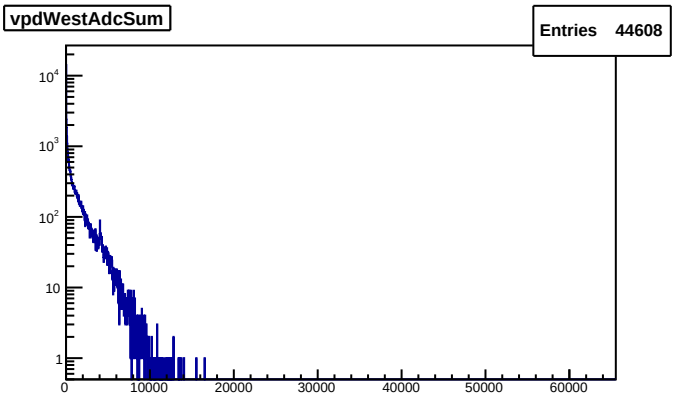

epdWestNHitsVsSimu
Entries 0
Data
Simu

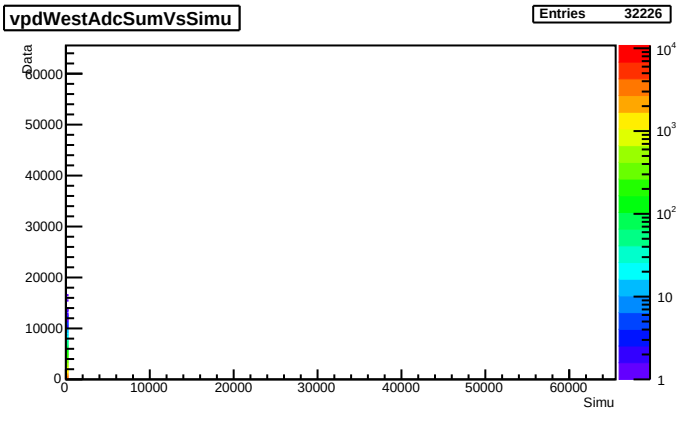

vpdEastAdcSum
Entries 44608

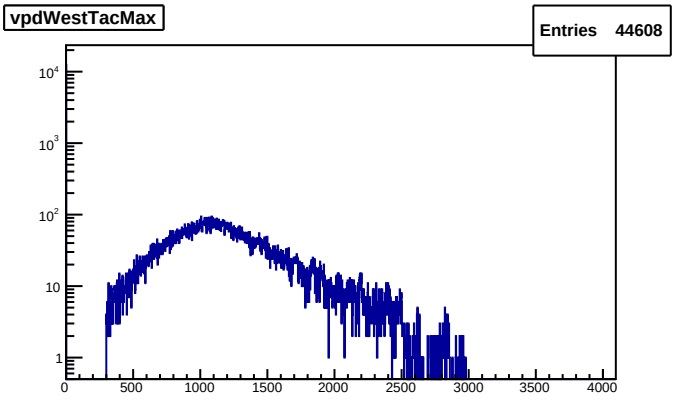

vpdEastAdcSumVsSimu
Entries 31949
Data
Simu

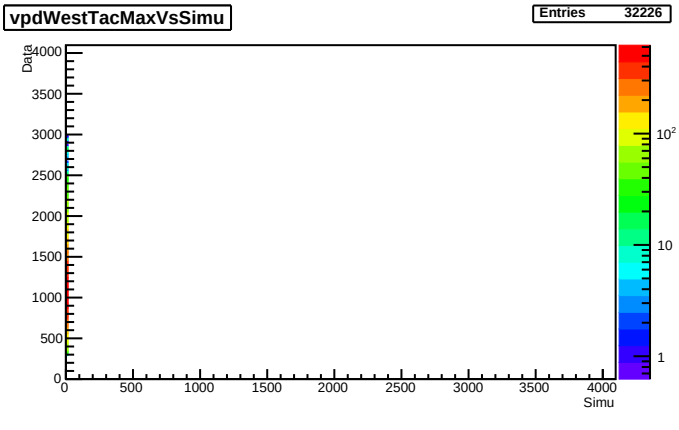

vpdEastTacMax
Entries 44608

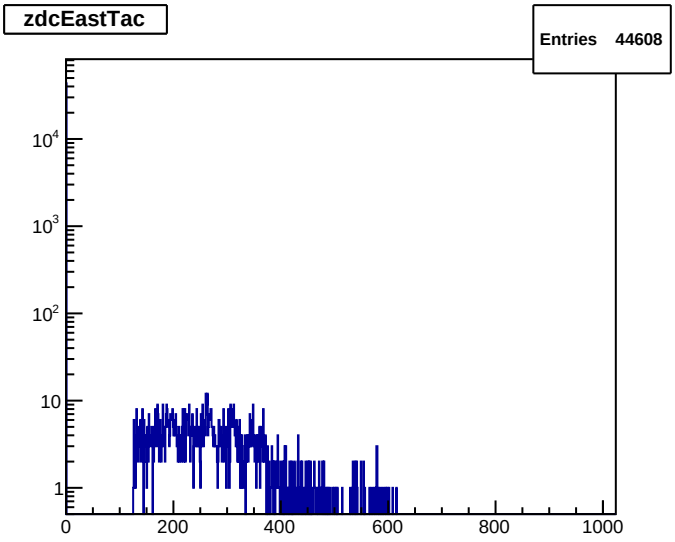

vpdEastTacMaxVsSimu
Entries 31949
Data
Simu

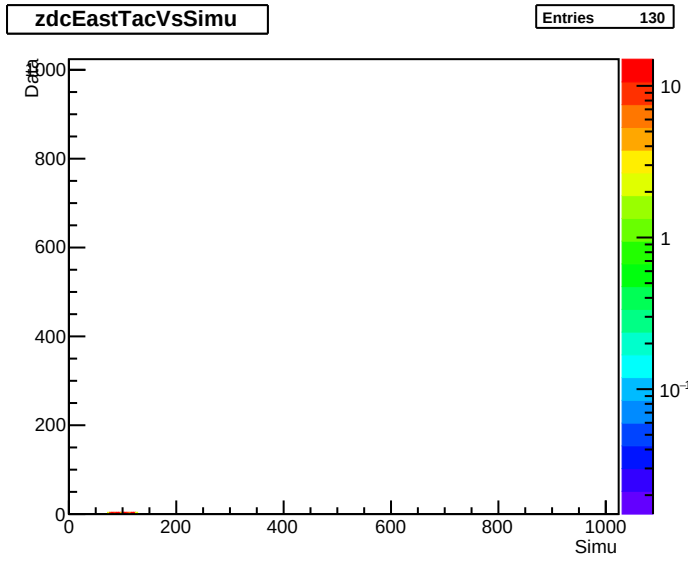

vpdWestAdcSum
Entries 44608

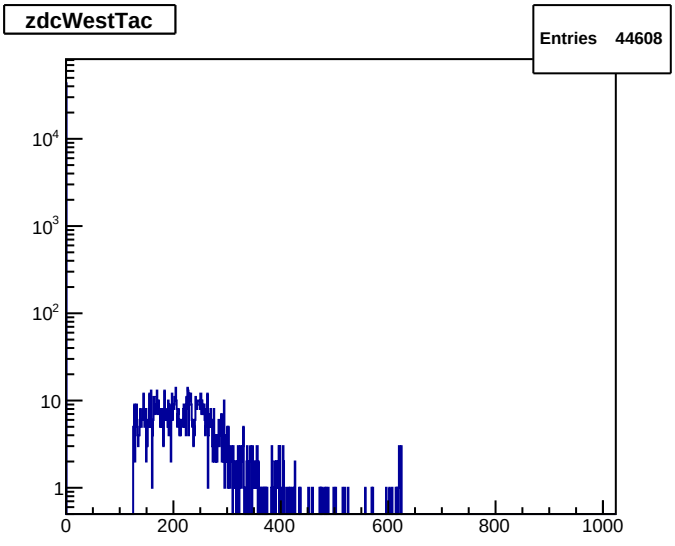

vpdWestAdcSumVsSimu
Entries 32226
Data
Simu

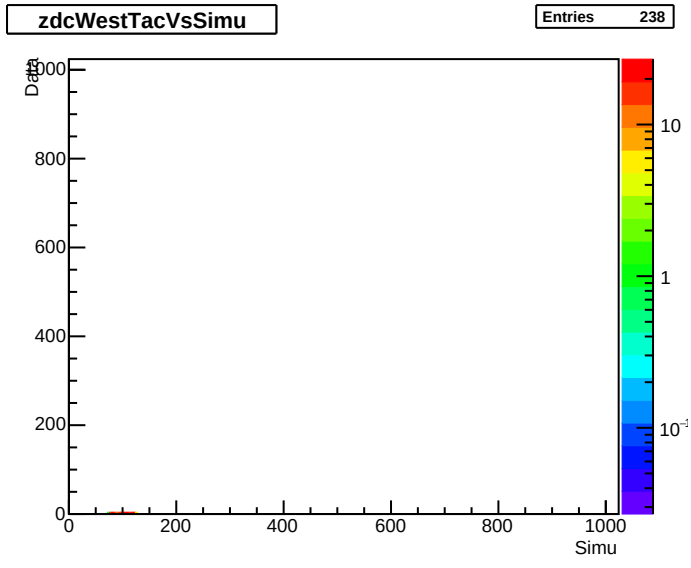

vpdWestTacMax
Entries 44608

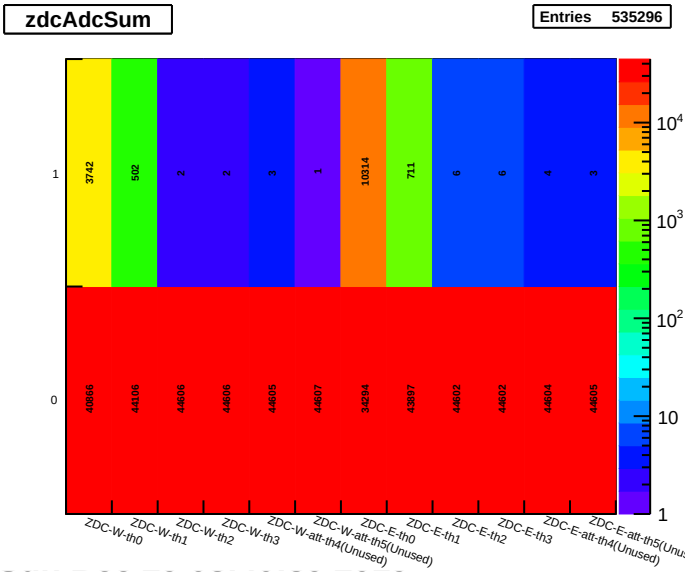

vpdWestTacMaxVsSimu
Entries 32226
Data
Simu

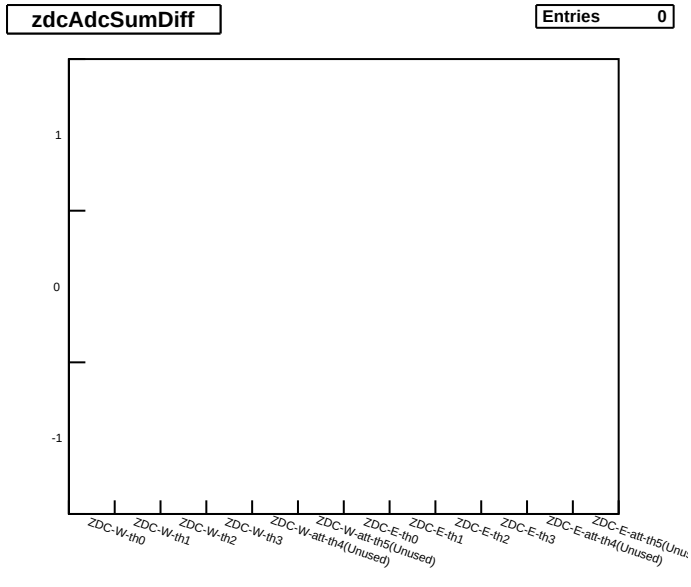

zdcEastTac
Entries 44608

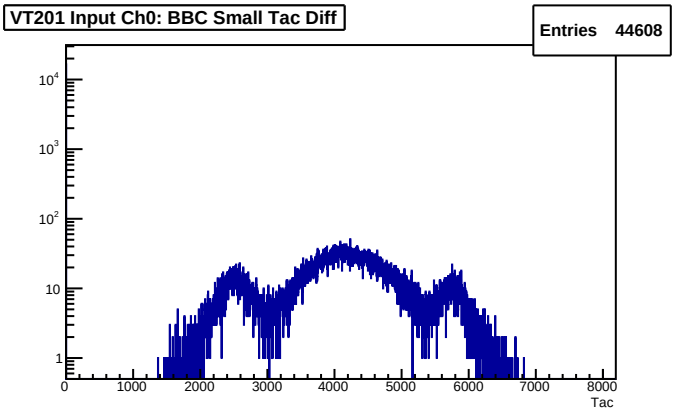

zdcEastTacVsSimu
Entries 130
Data
Simu

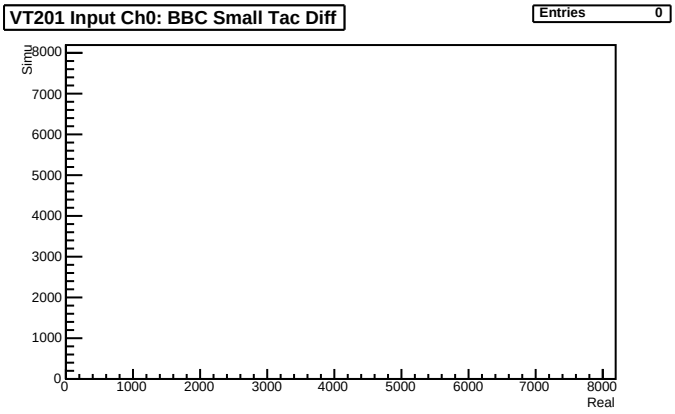

zdcWestTac
Entries 44608

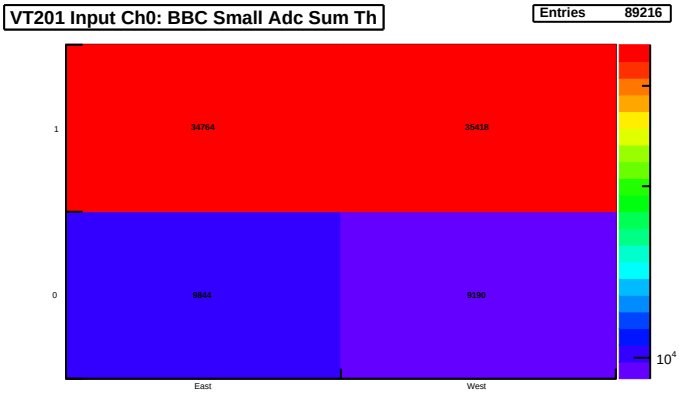

zdcWestTacVsSimu
Entries 238
Data
Simu

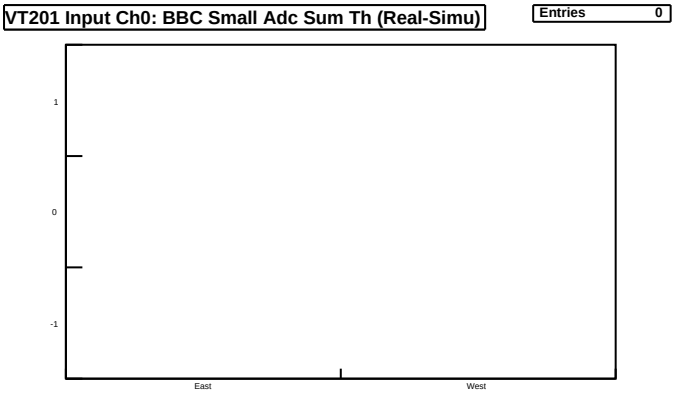

zdcAdcSum
Entries 535296
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

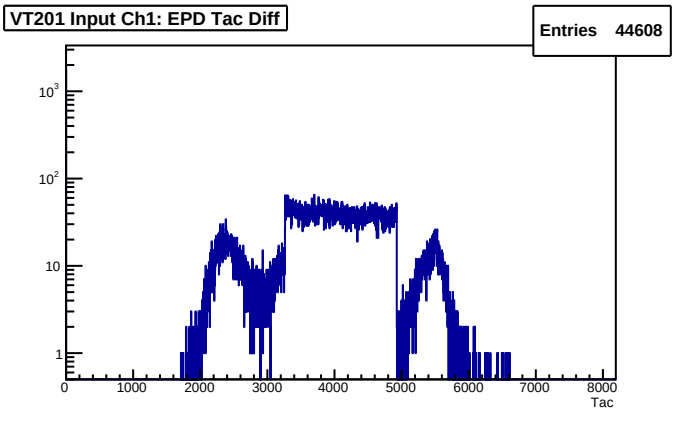

zdcAdcSumDiff
Entries 0
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

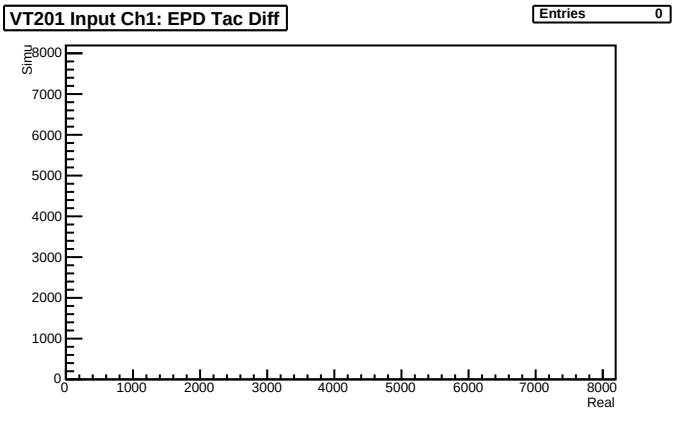

VT201 Input Ch0: BBC Small Tac Diff
Entries 44608
Tac

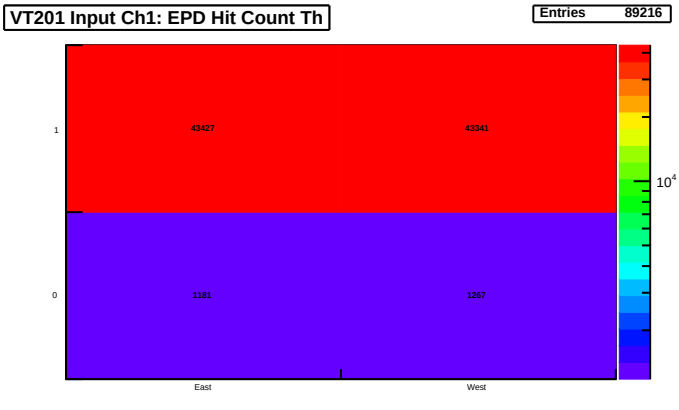

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

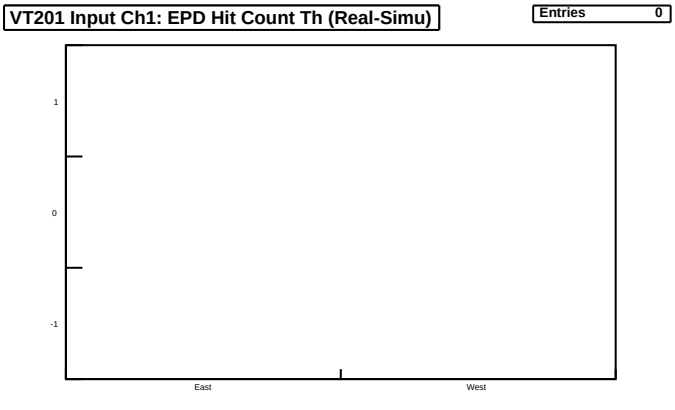

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 89216
34764
35418
9844
9190
East
West

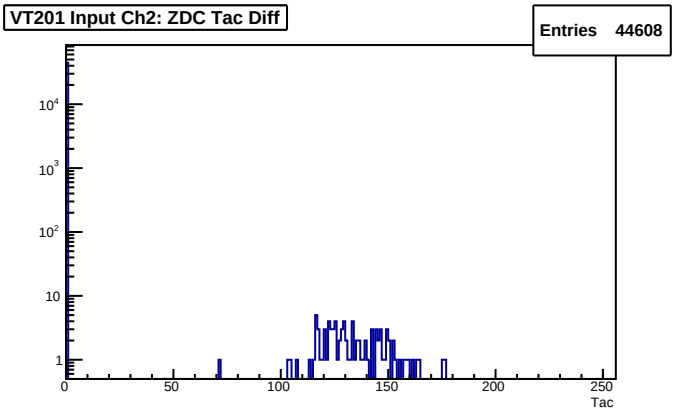

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

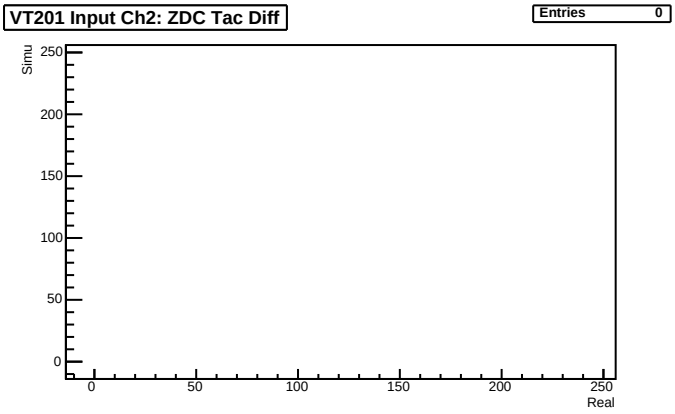

VT201 Input Ch1: EPD Tac Diff
Entries 44608
Tac

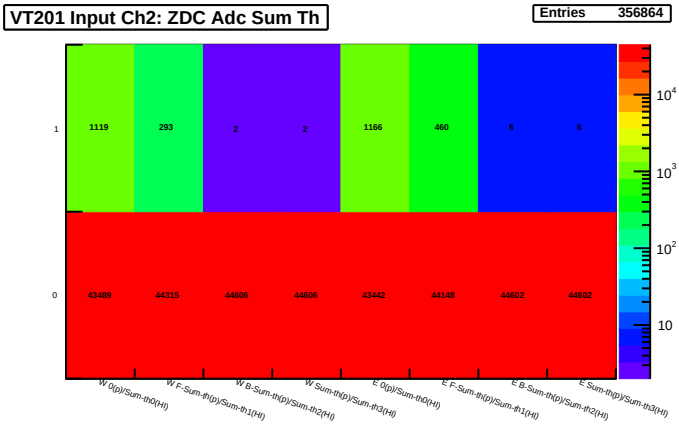

VT201 Input Ch1: EPD Tac Diff
Entries 0
Simu
Real

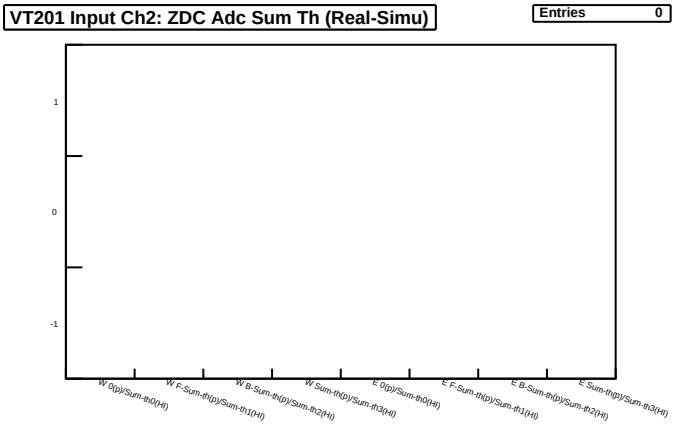

VT201 Input Ch1: EPD Hit Count Th
Entries 89216
43427
43341
1181
1267
East
West

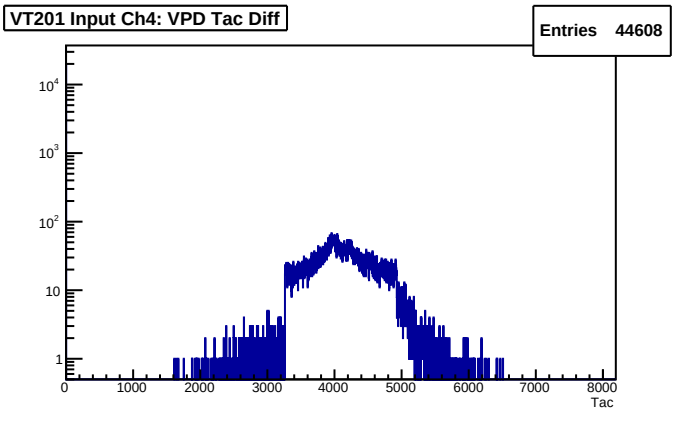

VT201 Input Ch1: EPD Hit Count Th (Real-Simu)
Entries 0
East
West

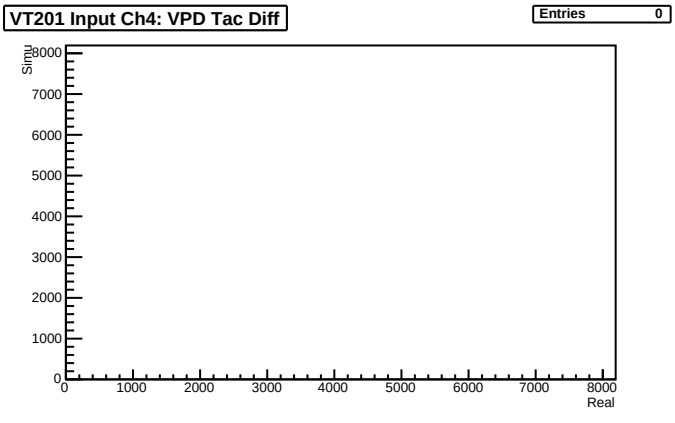

VT201 Input Ch2: ZDC Tac Diff
Entries 44608
Tac

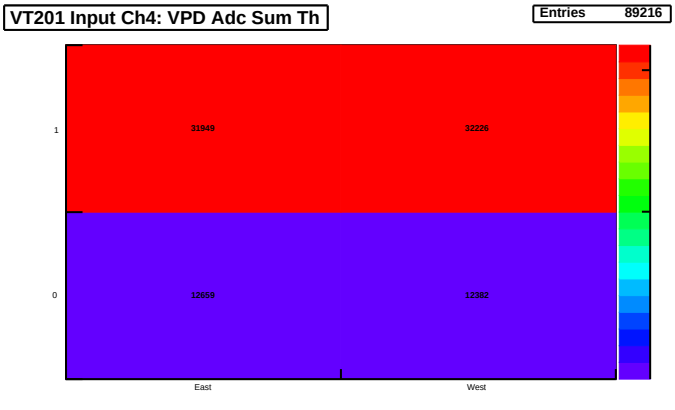

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

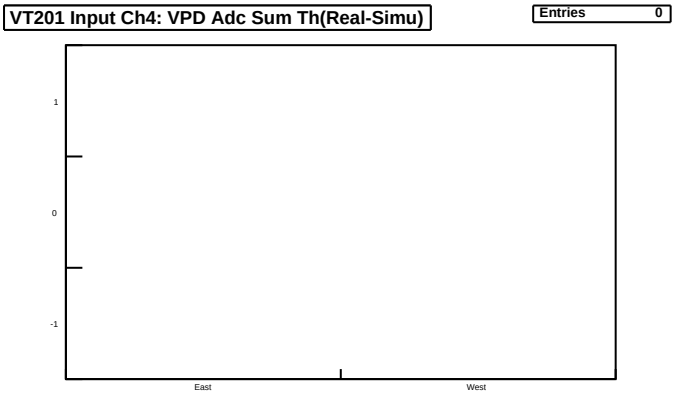

VT201 Input Ch2: ZDC Adc Sum Th
Entries 356864
1119
293
2
2
1166
460
6
6
43489
44315
44606
44606
43442
44148
44602
44602
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
E 0(p)/Sum-th0(Hl)
E F-Sum-th(p)/Sum-th1(Hl)
E B-Sum-th(p)/Sum-th2(Hl)
E Sum-th(p)/Sum-th3(Hl)

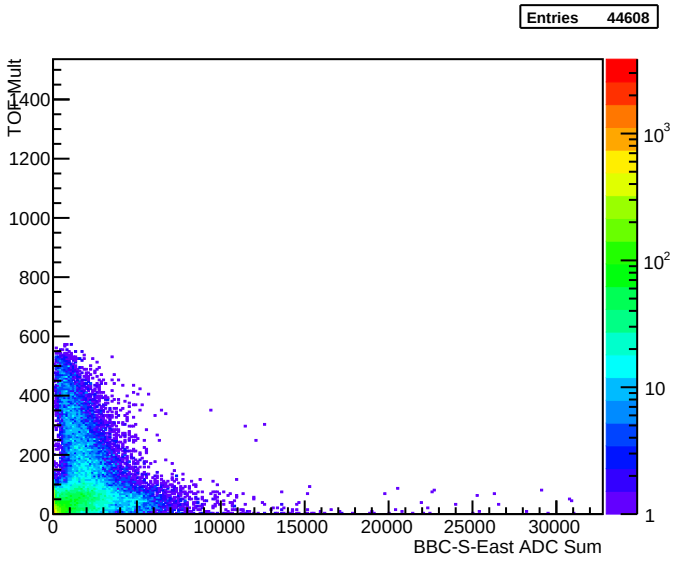

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
E 0(p)/Sum-th0(Hl)
E F-Sum-th(p)/Sum-th1(Hl)
E B-Sum-th(p)/Sum-th2(Hl)
E Sum-th(p)/Sum-th3(Hl)

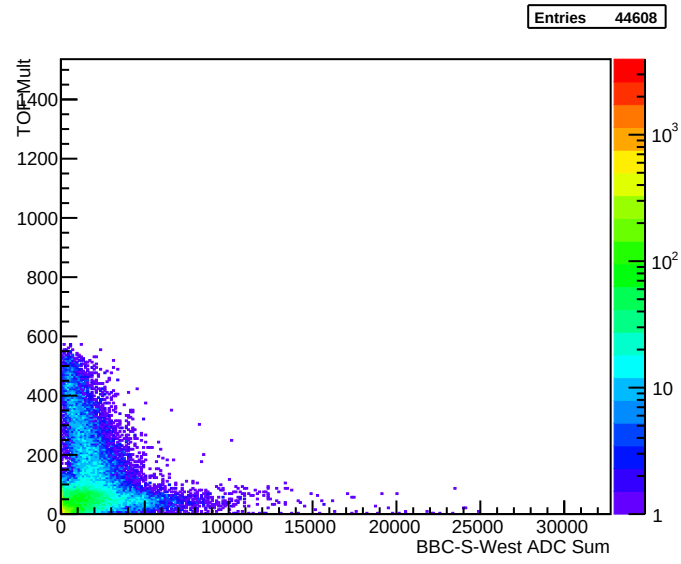

VT201 Input Ch4: VPD Tac Diff
Entries 44608
Tac

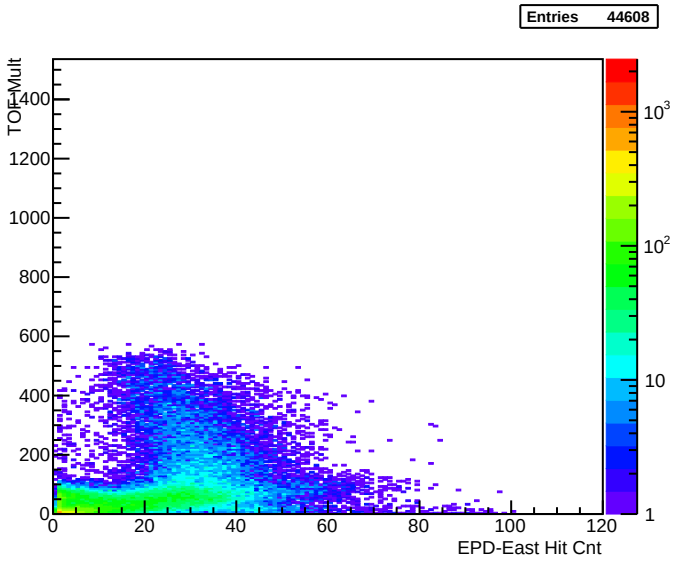

VT201 Input Ch4: VPD Tac Diff
Entries 0
Simu
Real

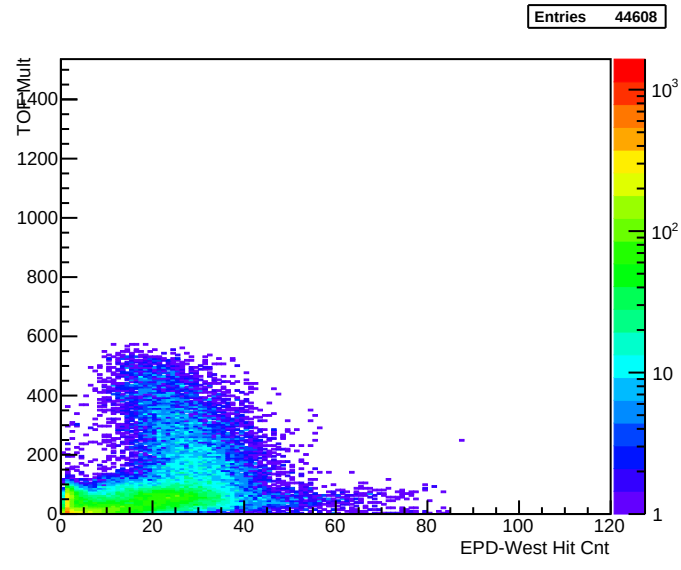

VT201 Input Ch4: VPD Adc Sum Th
Entries 89216
31949
32226
12659
12382
East
West

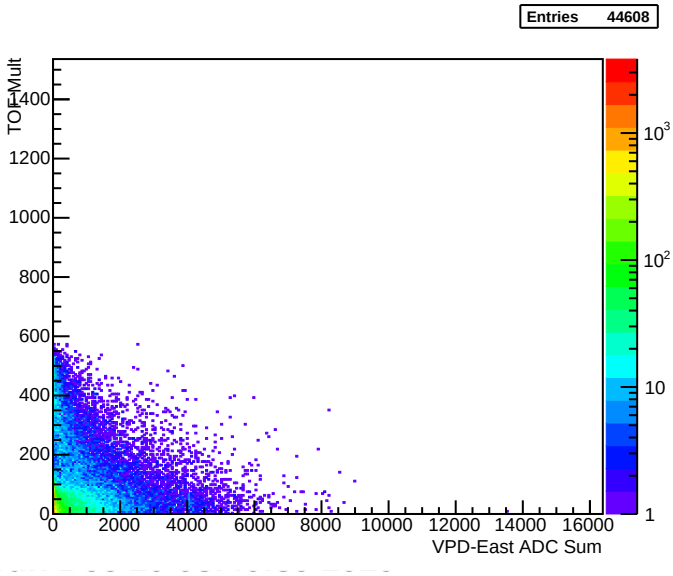

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 0
East
West

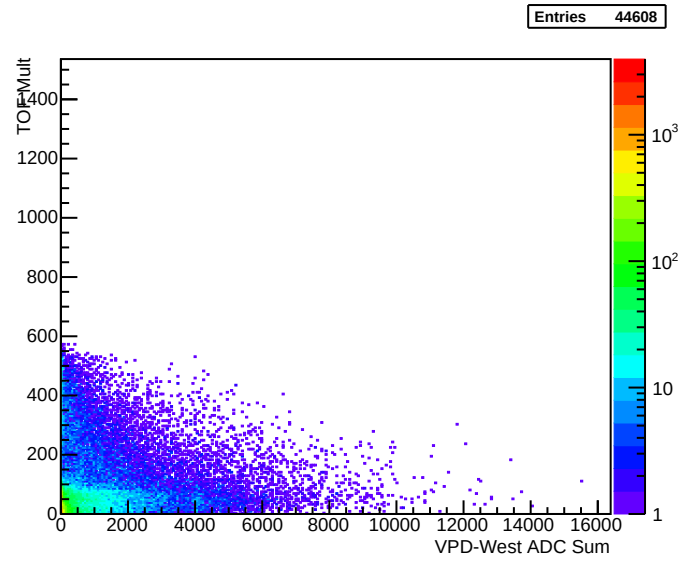

Entries 44608
TOF-Mult
BBC-S-East ADC Sum

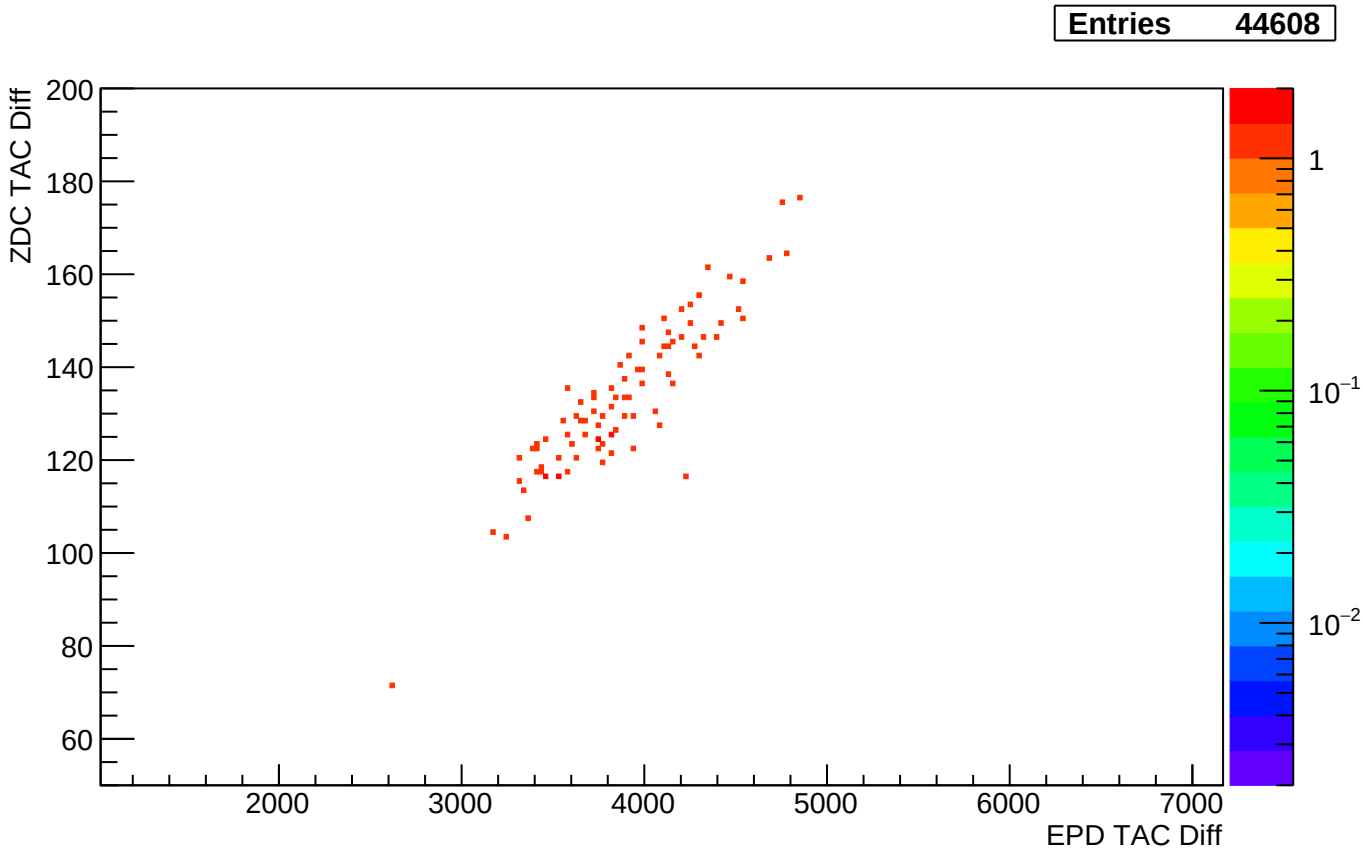

Entries 44608
TOF-Mult
BBC-S-West ADC Sum

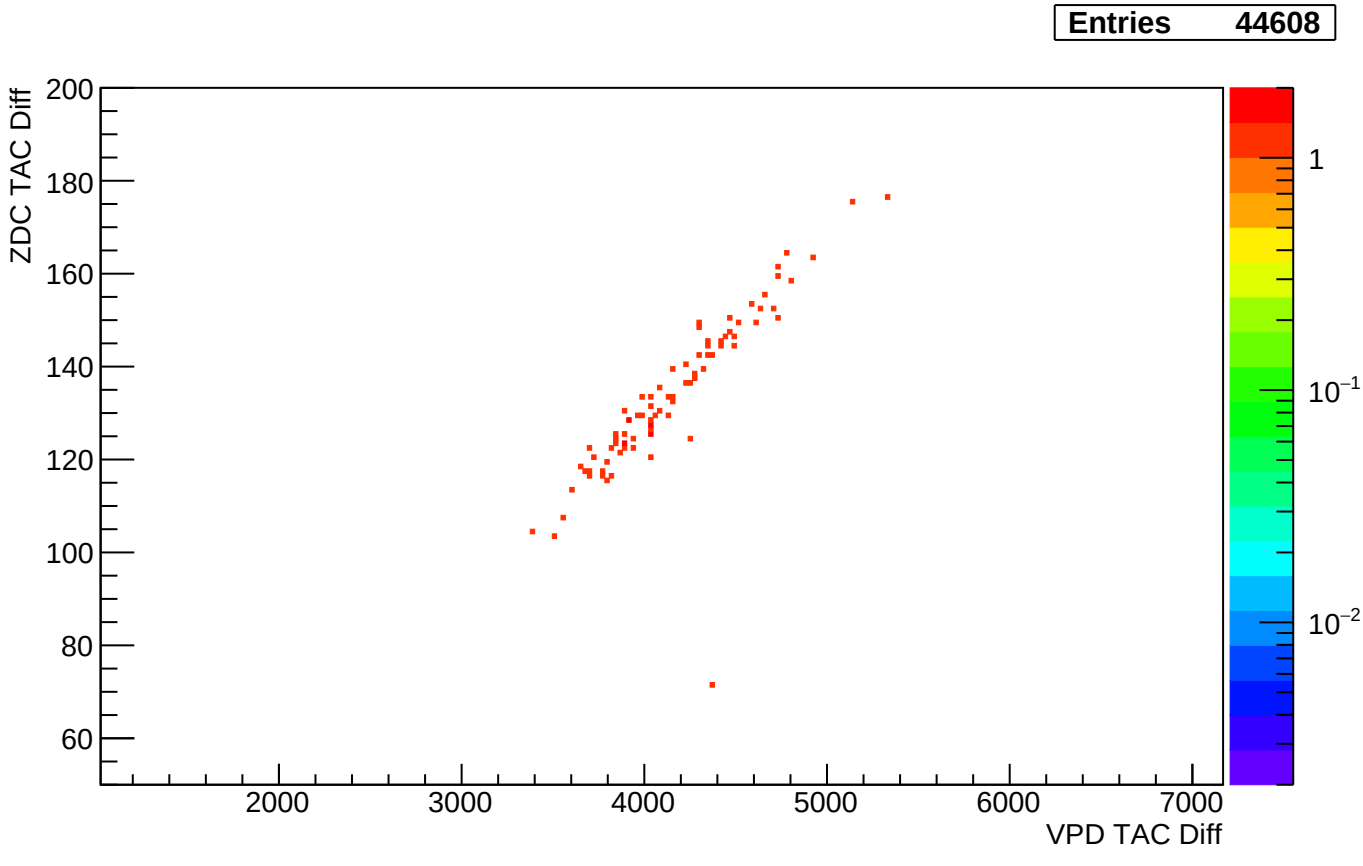

Entries 44608
TOF-Mult
EPD-East Hit Cnt

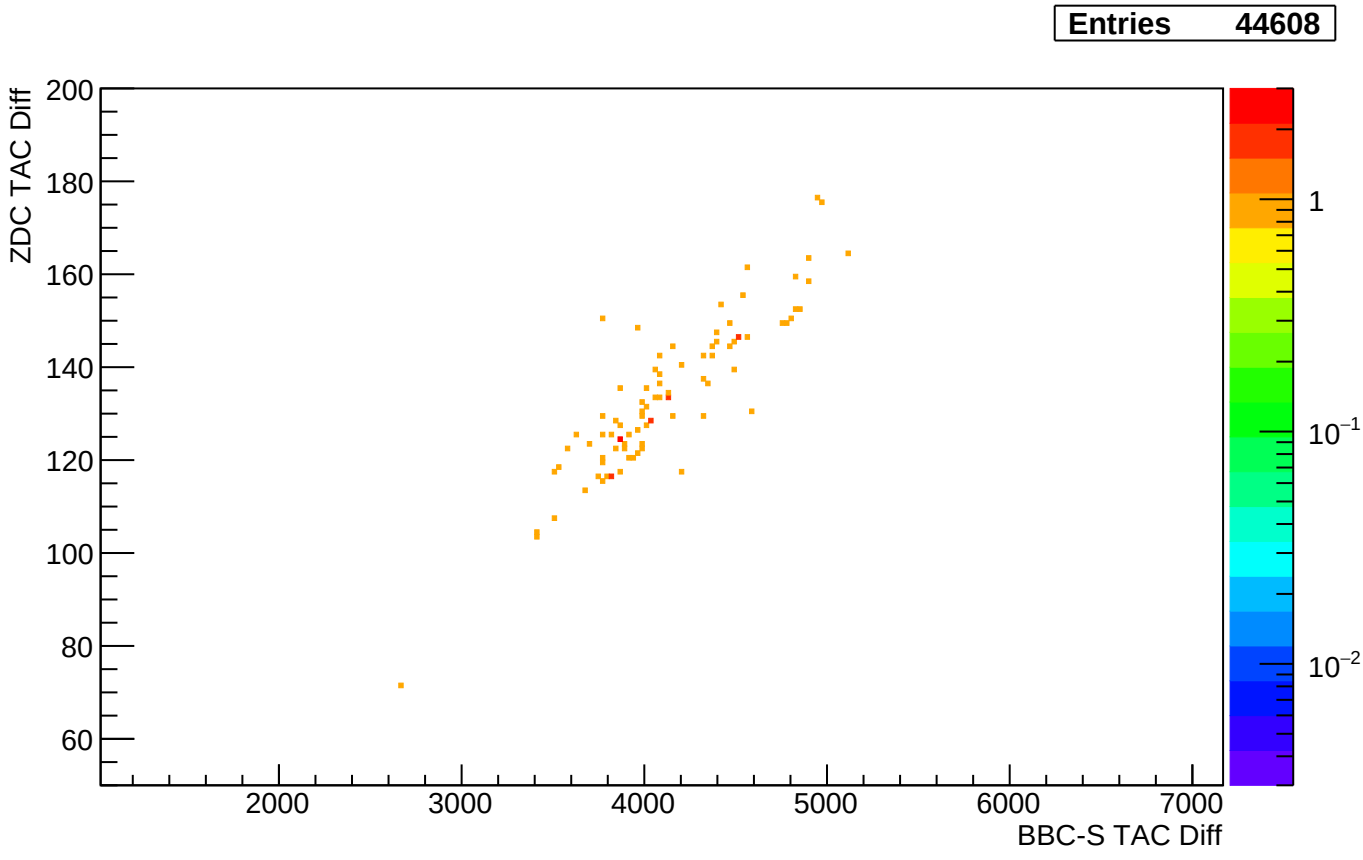

Entries 44608
TOF-Mult
EPD-West Hit Cnt

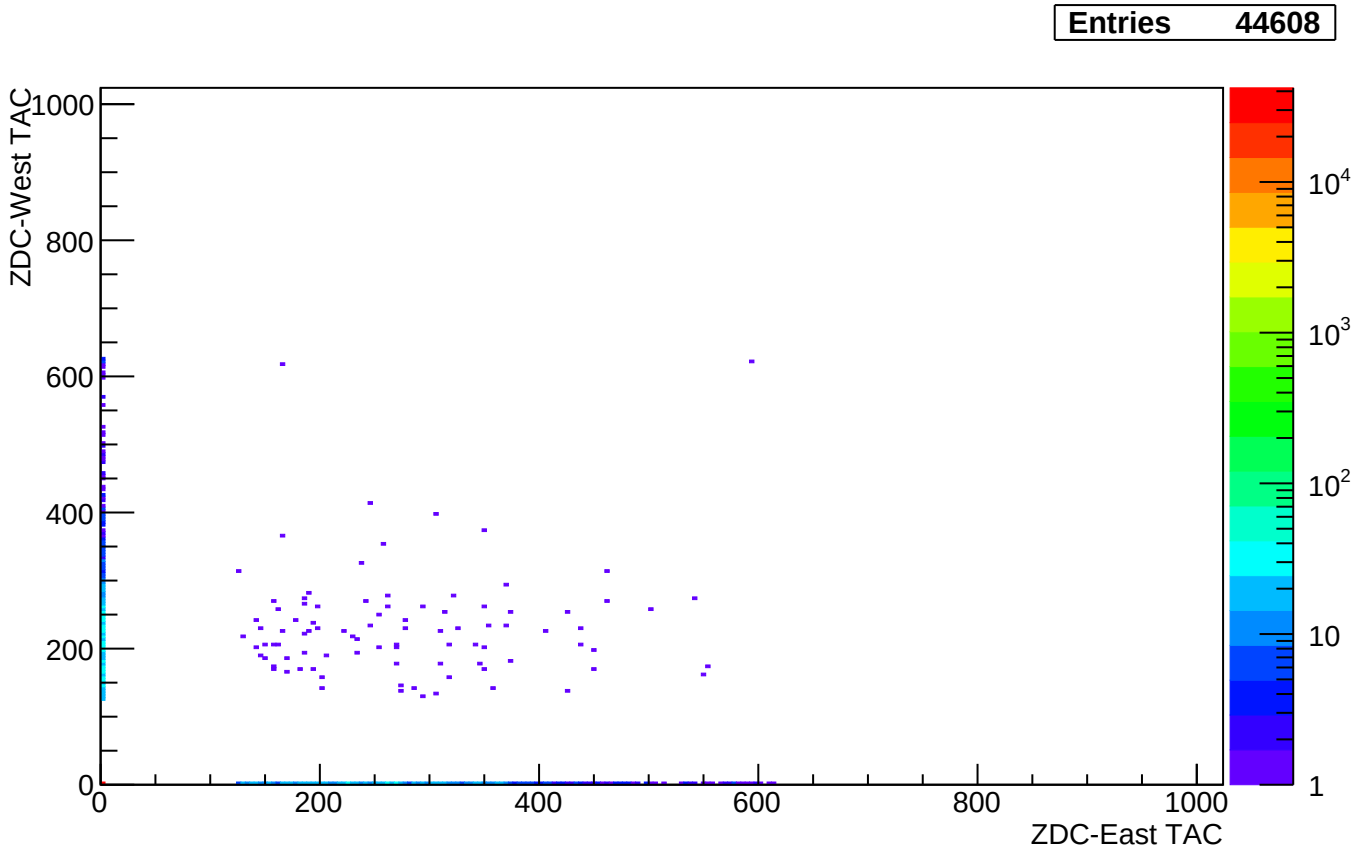

Entries 44608
TOF-Mult
VPD-East ADC Sum

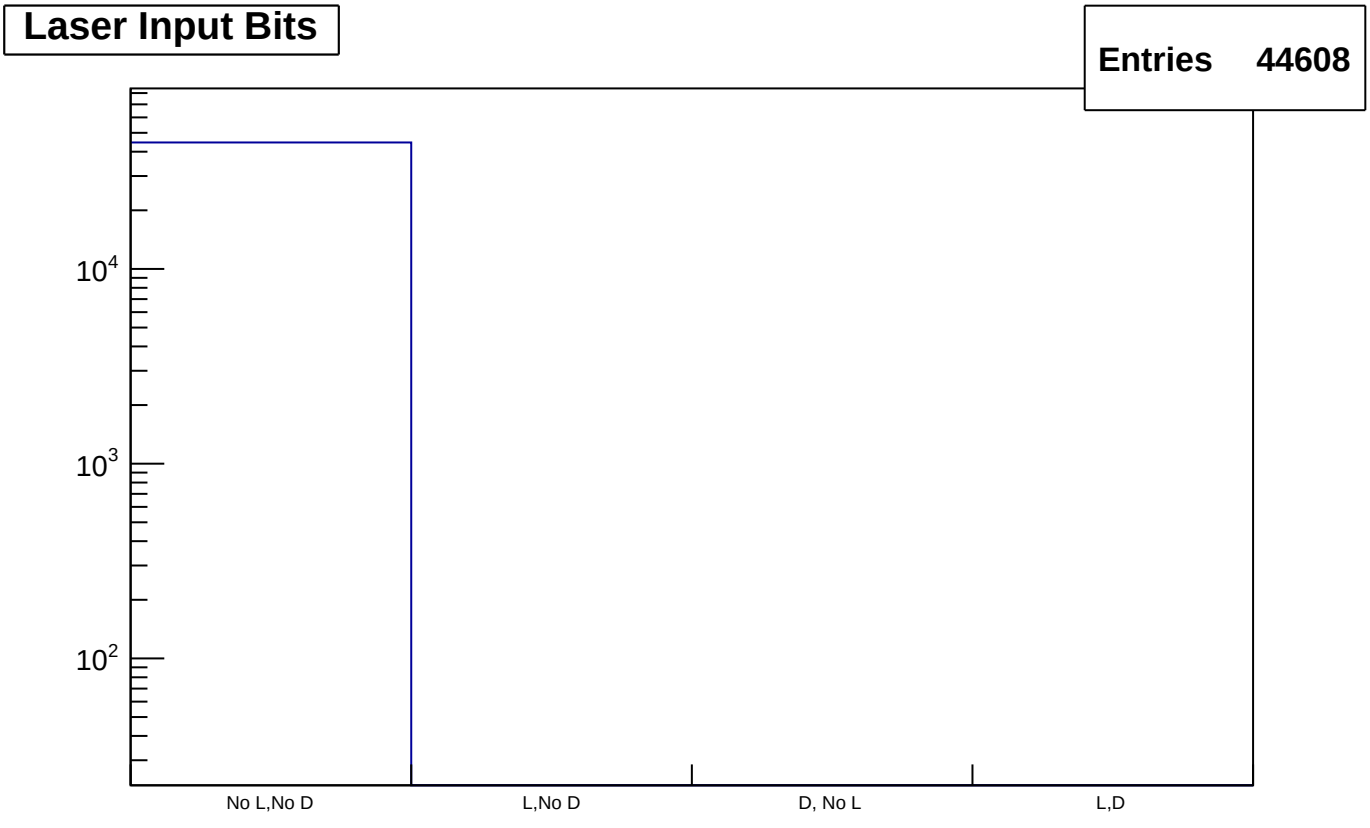

Entries 44608
TOF-Mult
VPD-West ADC Sum

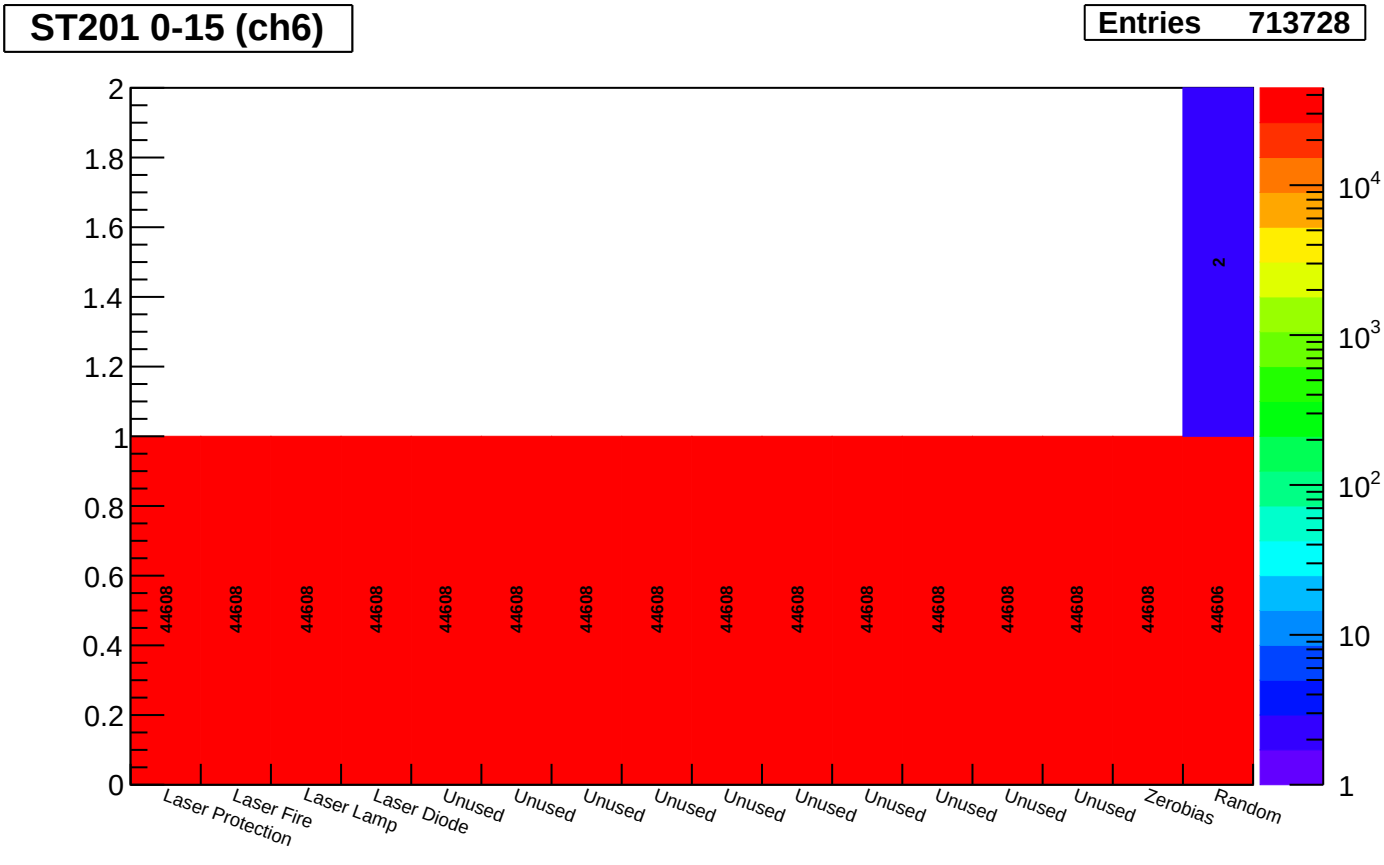

Entries 44608
ZDC TAC Diff
200
180
160
140
120
100
80
60
2000
3000
4000
5000
6000
7000
EPD TAC Diff
1
10^{-1}
10^{-2}

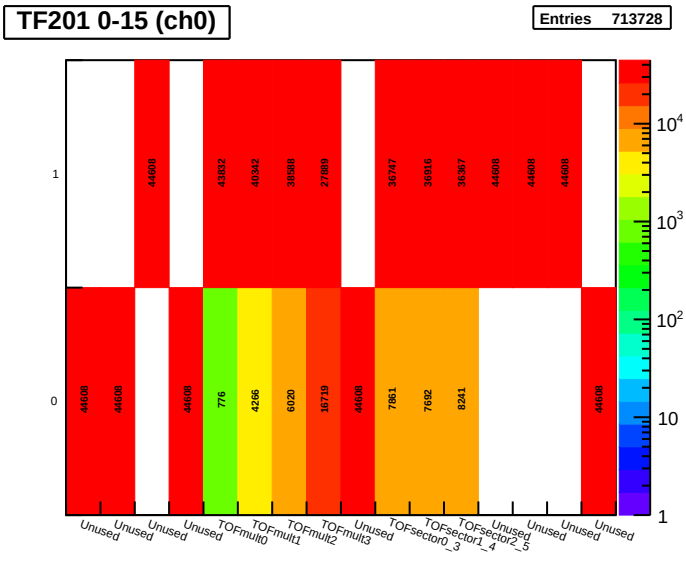

Entries 44608
ZDC TAC Diff
200
180
160
140
120
100
80
60
2000
3000
4000
5000
6000
7000
VPD TAC Diff
1
10^{-1}
10^{-2}

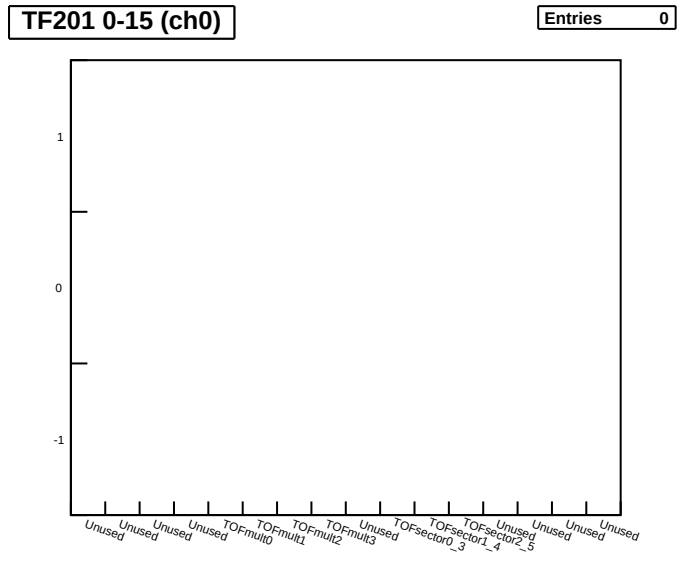

Entries 44608
ZDC TAC Diff
BBC-S TAC Diff
200
180
160
140
120
100
80
60
2000
3000
4000
5000
6000
7000
1
10^{-1}
10^{-2}

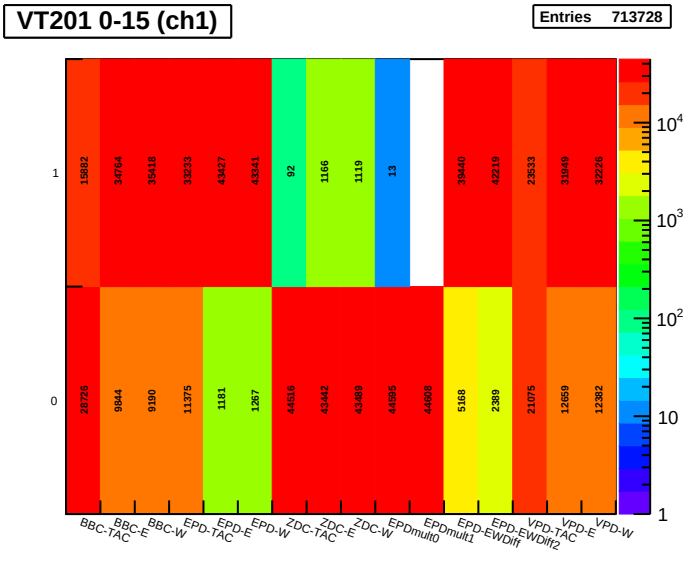

Entries 44608
ZDC-West TAC
ZDC-East TAC
1000
800
600
400
200
0
0
200
400
600
800
1000
10^4
10^3
10^2
10
1

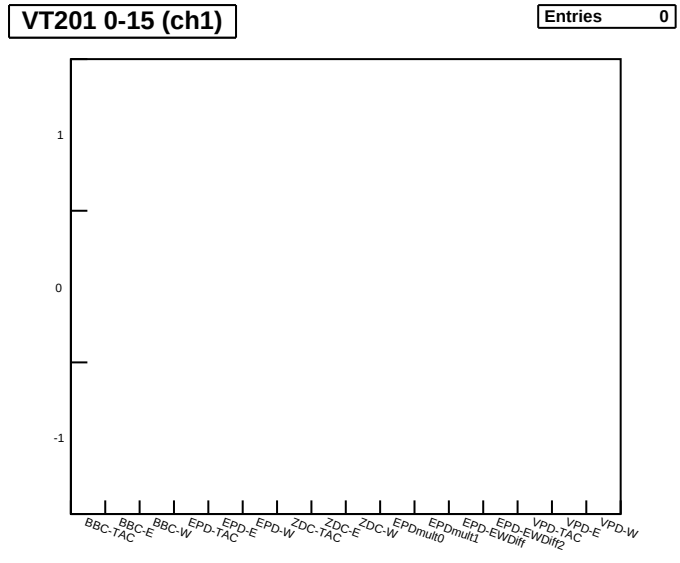

Laser Input Bits
Entries 44608
10^4
10^3
10^2
No L,No D
L,No D
D, No L
L,D

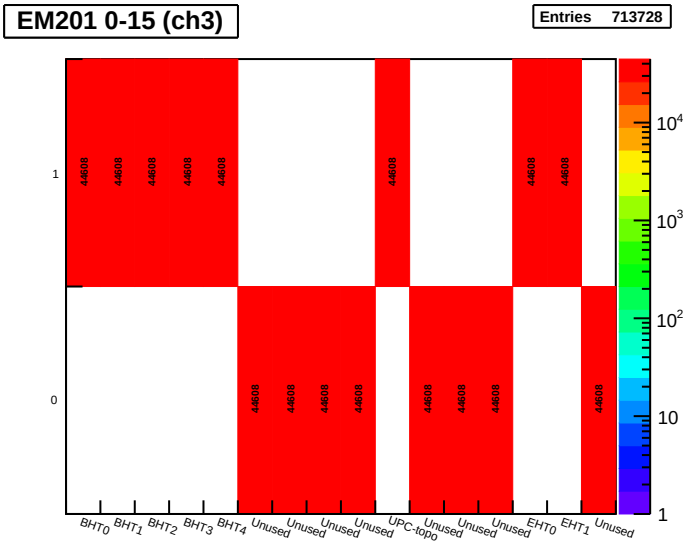

ST201 0-15 (ch6)
Entries 713728
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
44608
44606
2
10^4
10^3
10^2
10
1
Laser Protection
Laser Fire
Laser Lamp
Laser Diode
Unused
Zerobias
Random

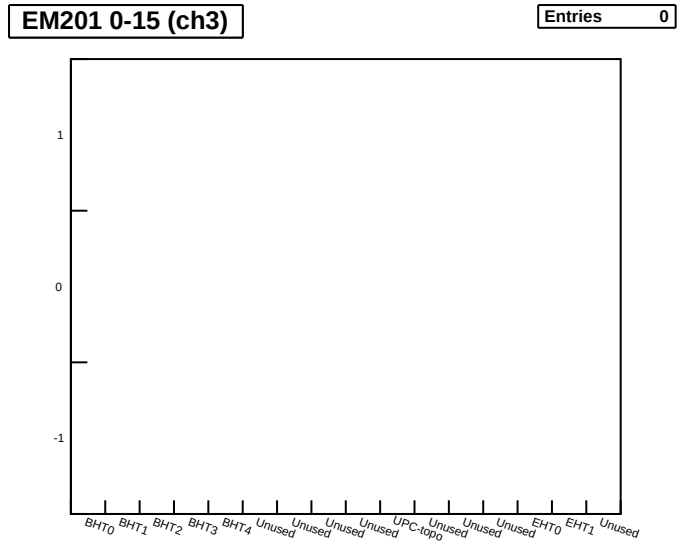

TF201 0-15 (ch0)
Entries 713728
1
0
44608 43832 40342 38588 27889 36747 36916 36367 44608 44608 44608
44608 44608 44608 776 4266 6020 16719 44608 7861 7692 8241 44608
Unused Unused Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 Unused TOFsector0_3 TOFsector1_4 TOFsector2_5 Unused Unused Unused Unused
10^4
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 Unused


VT201 0-15 (ch1)
Entries 713728
1
0
15882 34764 35418 33233 43427 43341 92 1166 1119 13 39440 42219 23533 31949 32226
28726 9844 9190 11375 1181 1257 44516 43442 43489 44595 44608 5168 2389 21075 12659 12382
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
10^4
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 713728
1
0
44608 44608 44608 44608 44608 44608 44608 44608
44608 44608 44608 44608 44608 44608 44608 44608
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused
10^4
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