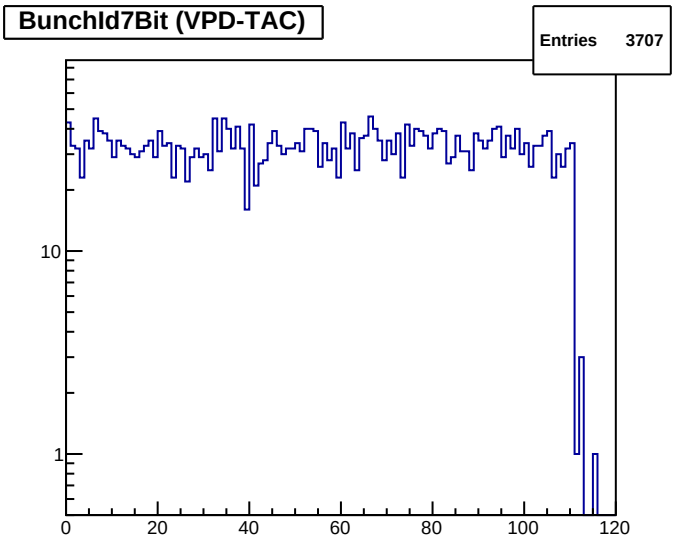
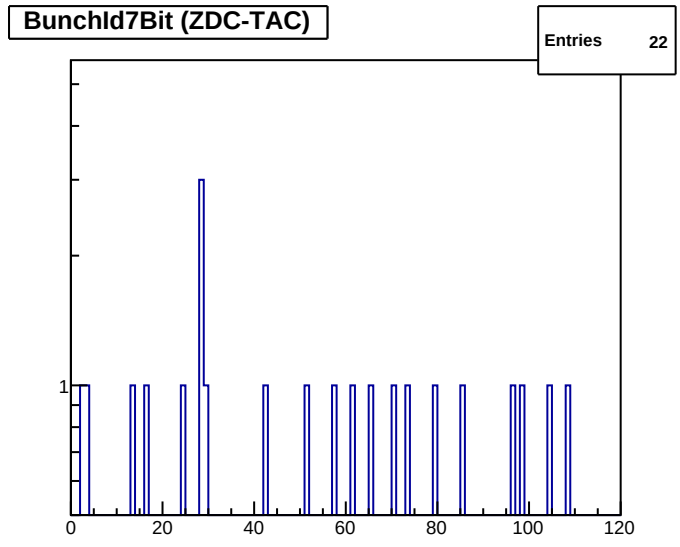
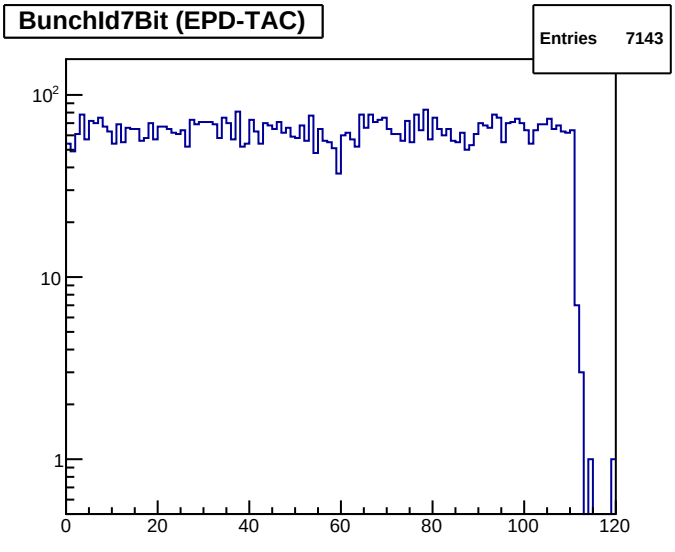
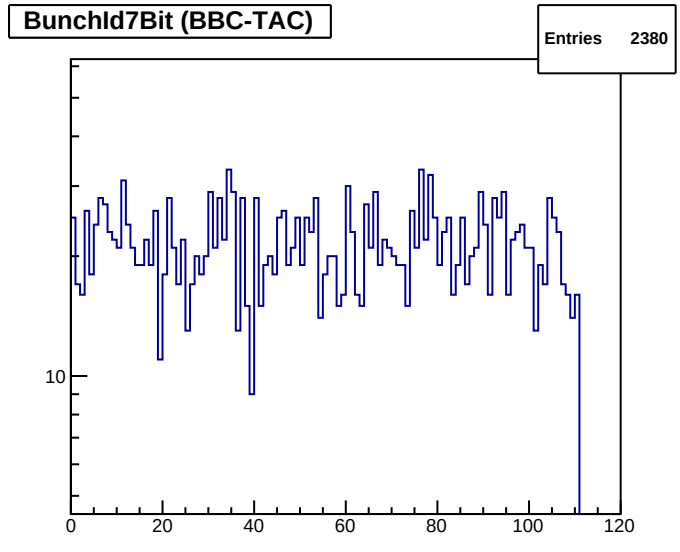
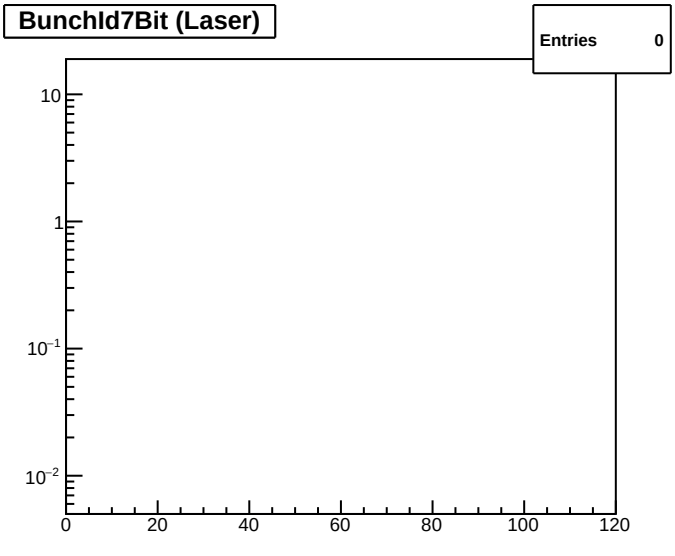
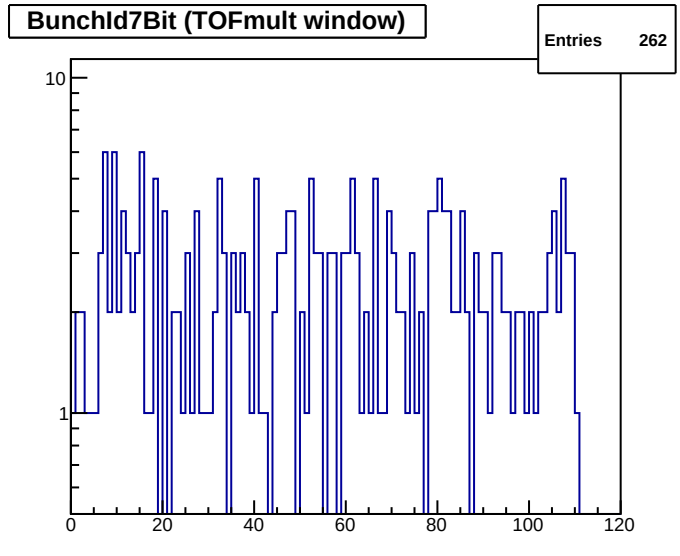

BunchId7Bit (VPD-TAC)
Entries 3707
10
1
0
20
40
60
80
100
120

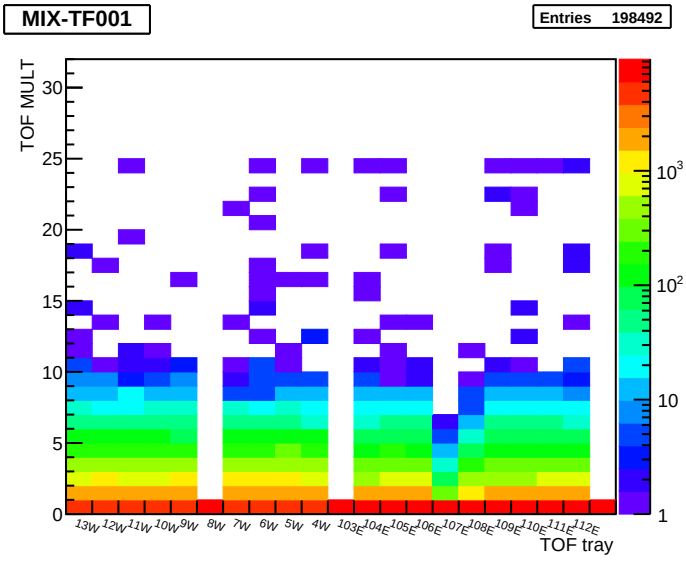

BunchId7Bit (ZDC-TAC)
Entries 22
1
0
20
40
60
80
100
120

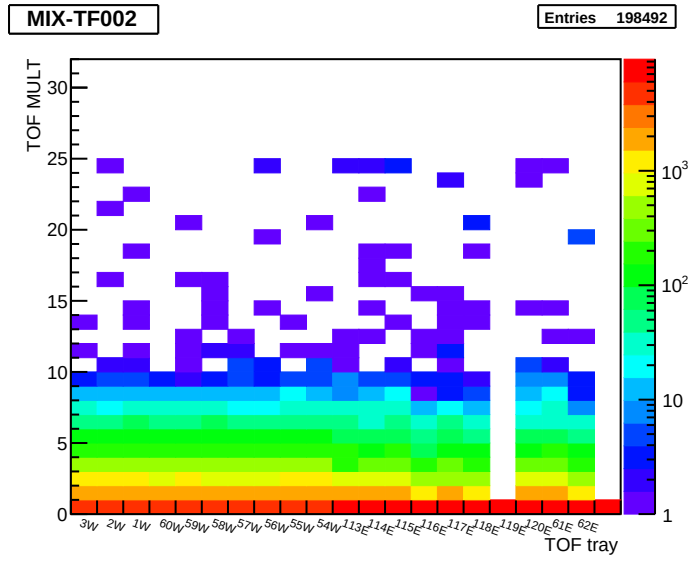

BunchId7Bit (EPD-TAC)
Entries 7143
10^2
10
1
0
20
40
60
80
100
120

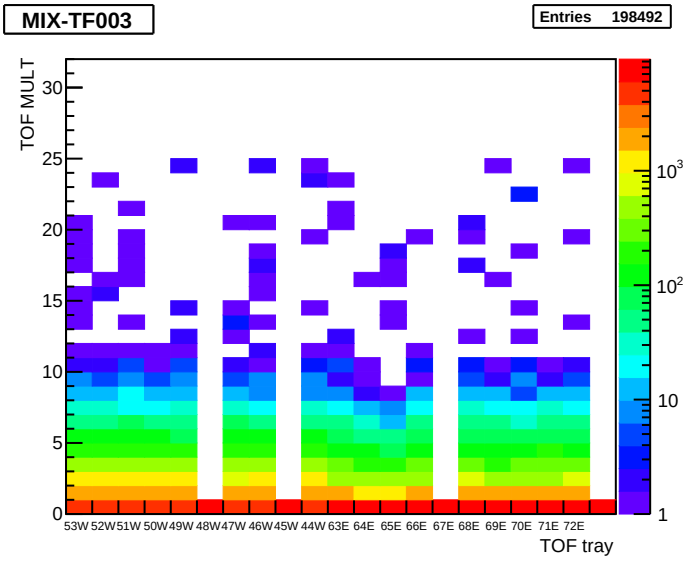

BunchId7Bit (BBC-TAC)
Entries 2380
10
0
20
40
60
80
100
120

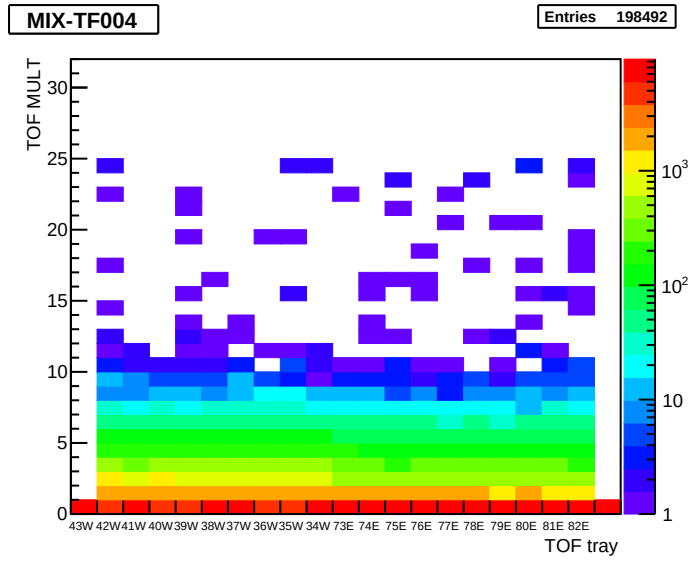

BunchId7Bit (Laser)
Entries 0
10
1
10^{-1}
10^{-2}
0
20
40
60
80
100
120

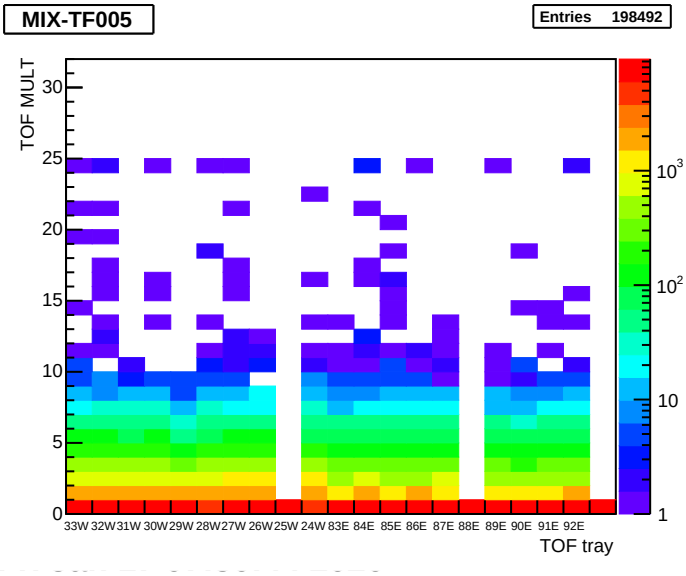

BunchId7Bit (TOFmult window)
Entries 262
10
1
0
20
40
60
80
100
120

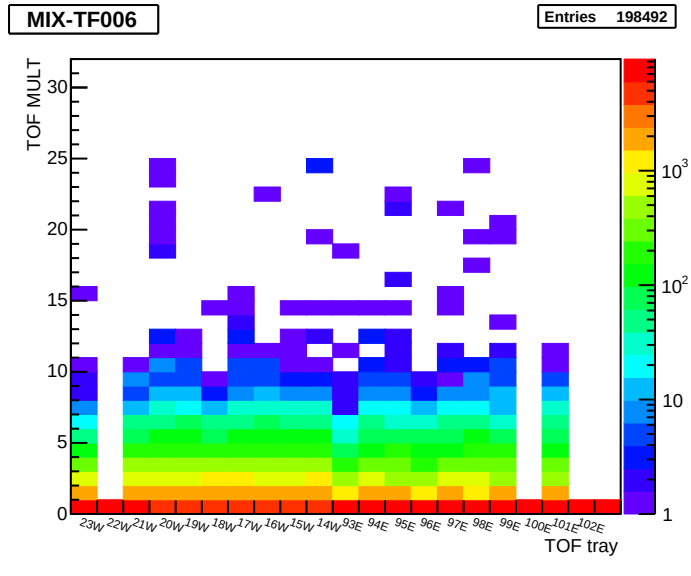

MIX-TF001
Entries 198492
TOF MULT
TOF tray

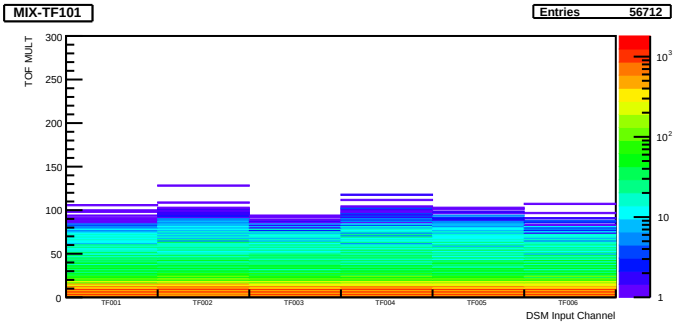

MIX-TF002
Entries 198492
TOF MULT
TOF tray

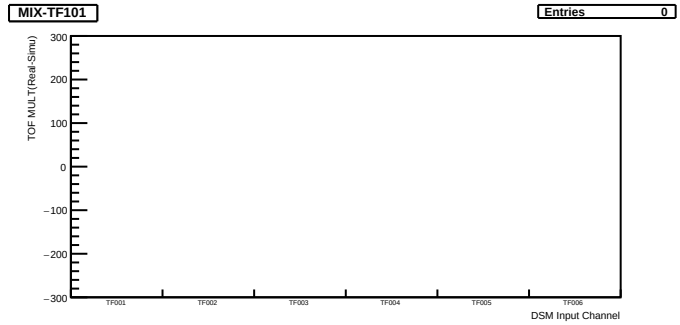

MIX-TF003
Entries 198492
TOF MULT
TOF tray

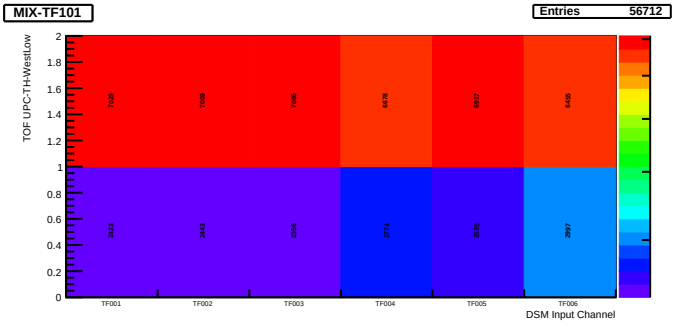

MIX-TF004
Entries 198492
TOF MULT
TOF tray

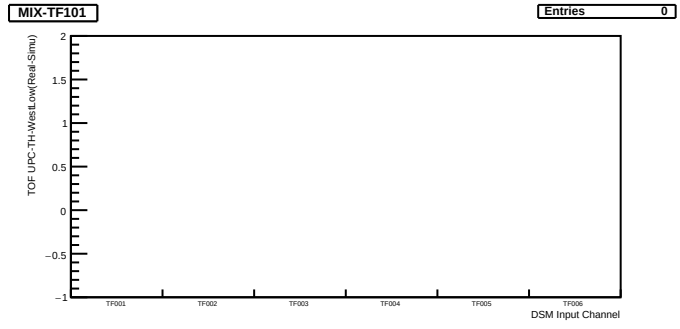

MIX-TF005
Entries 198492
TOF MULT
TOF tray

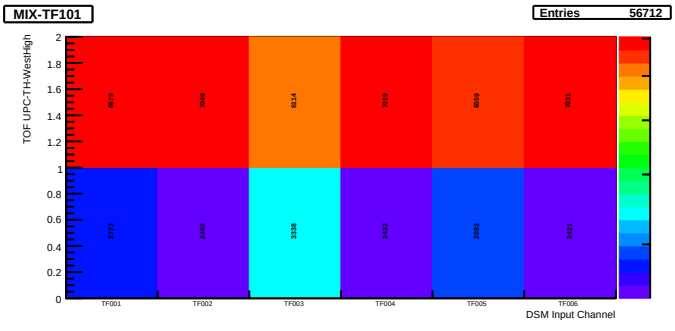

MIX-TF006
Entries 198492
TOF MULT
TOF tray

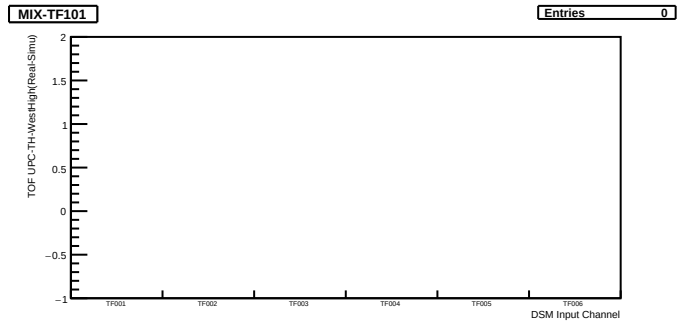

MIX-TF101
Entries 56712
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

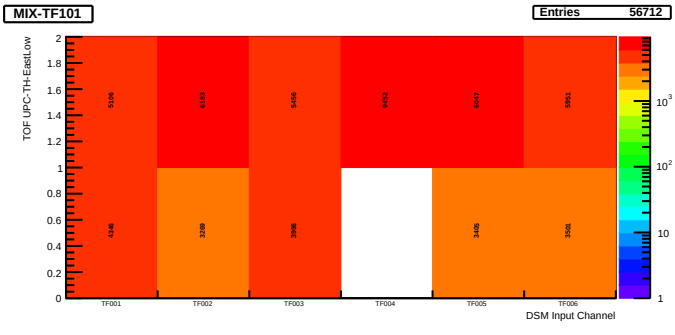

MIX-TF101
Entries 0
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

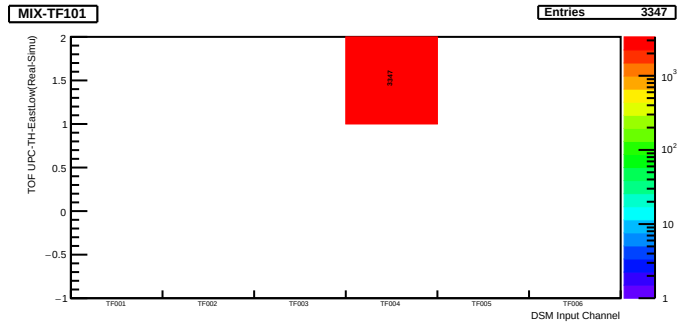

MIX-TF101
Entries 56712
TOF UPC-TH-WestLow
7639
7609
7706
6678
6937
6446
3023
3443
3256
2771
2335
2997
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

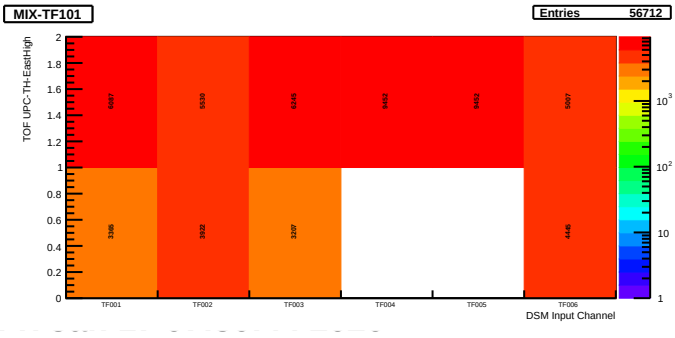

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

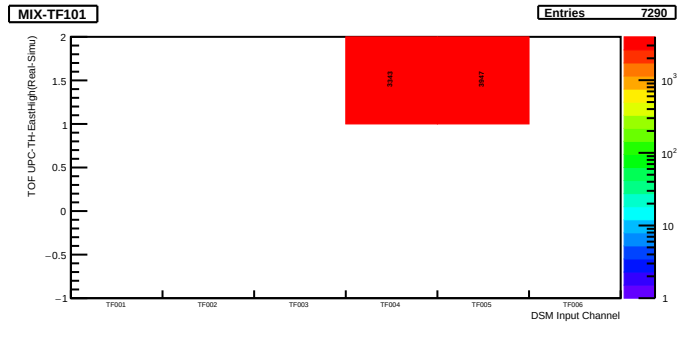

MIX-TF101
Entries 56712
TOF UPC-TH-WestHigh
6679
7049
6114
7019
6559
7031
2773
2403
3338
2433
2893
2421
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

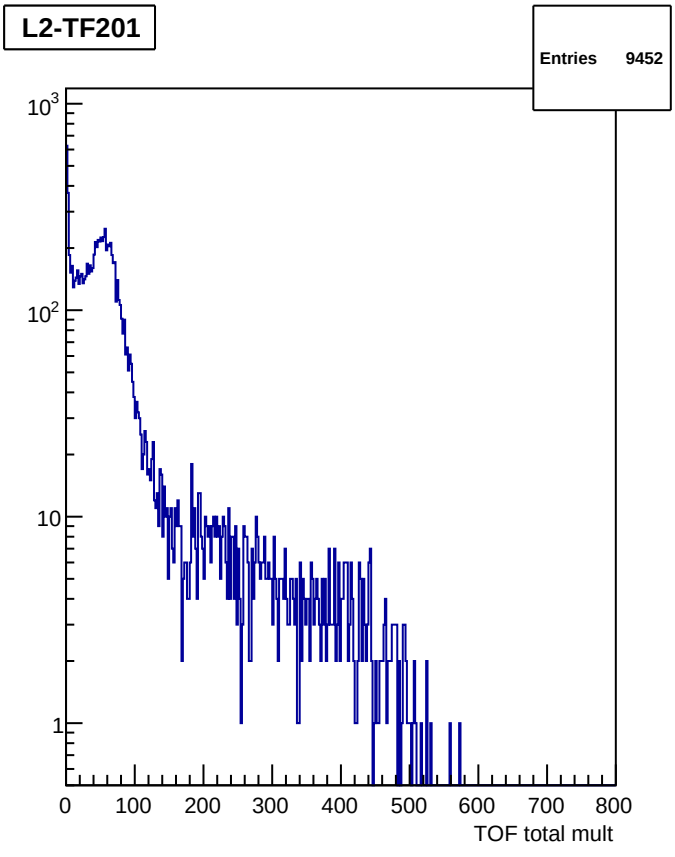

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

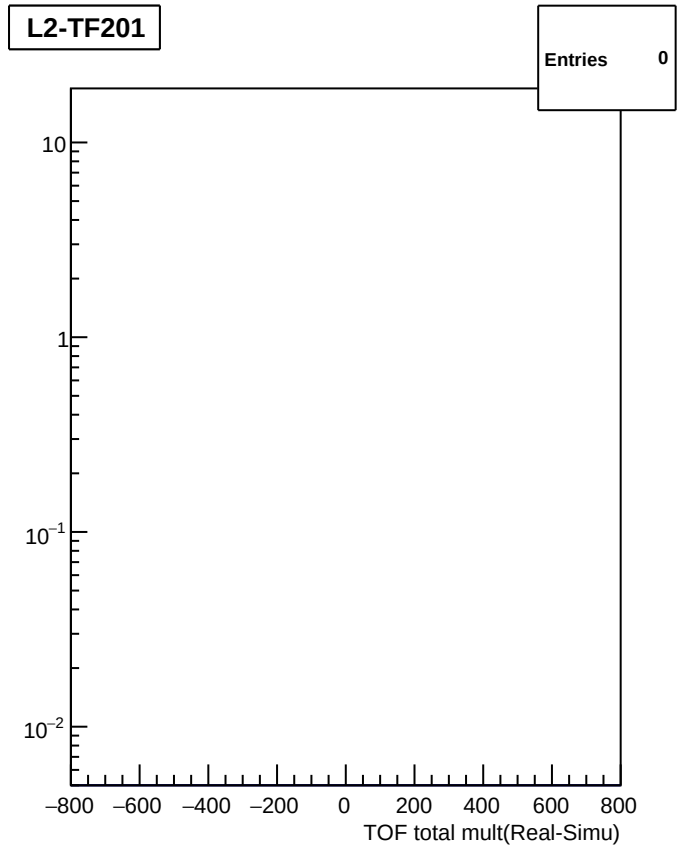

MIX-TF101
Entries 56712
TOF UPC-TH-EastLow
5106
6183
5456
8452
6047
5951
4346
3269
3996
3405
3501
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

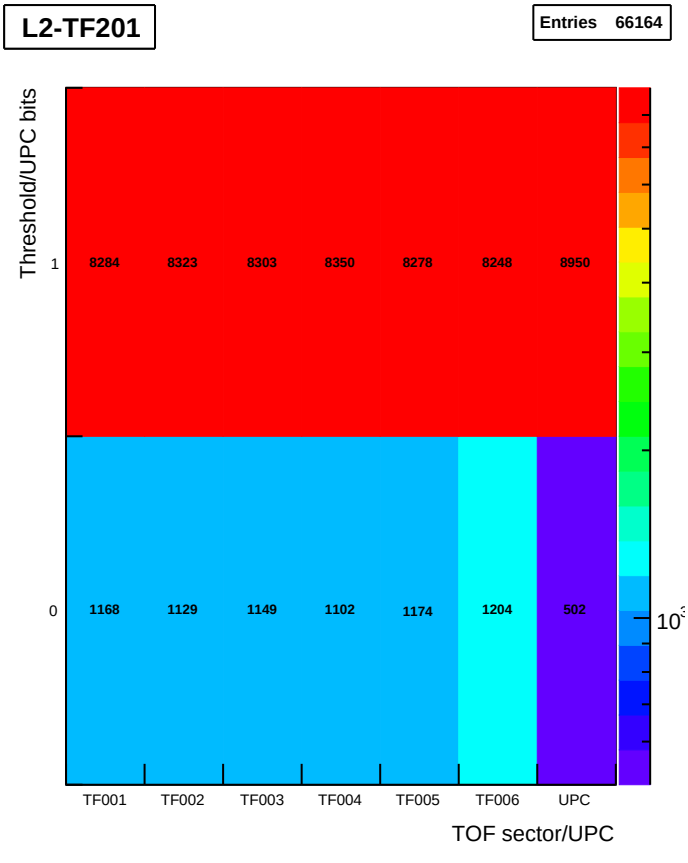

MIX-TF101
Entries 3347
TOF UPC-TH-EastLow(Real-Simu)
3347
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

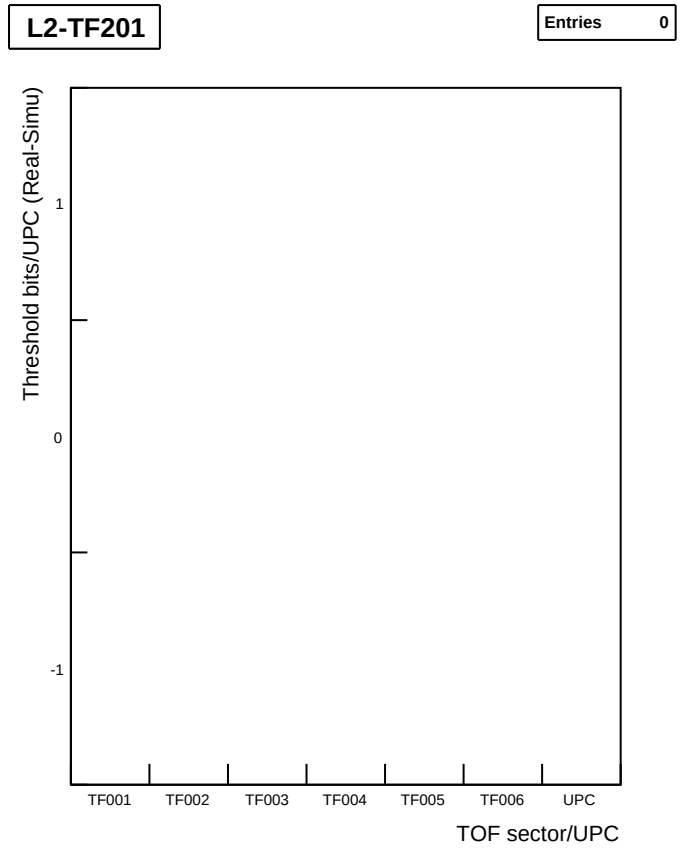

MIX-TF101
Entries 56712
TOF UPC-TH-EastHigh
6087
5530
6245
8452
8452
5907
3385
3922
3207
4445
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

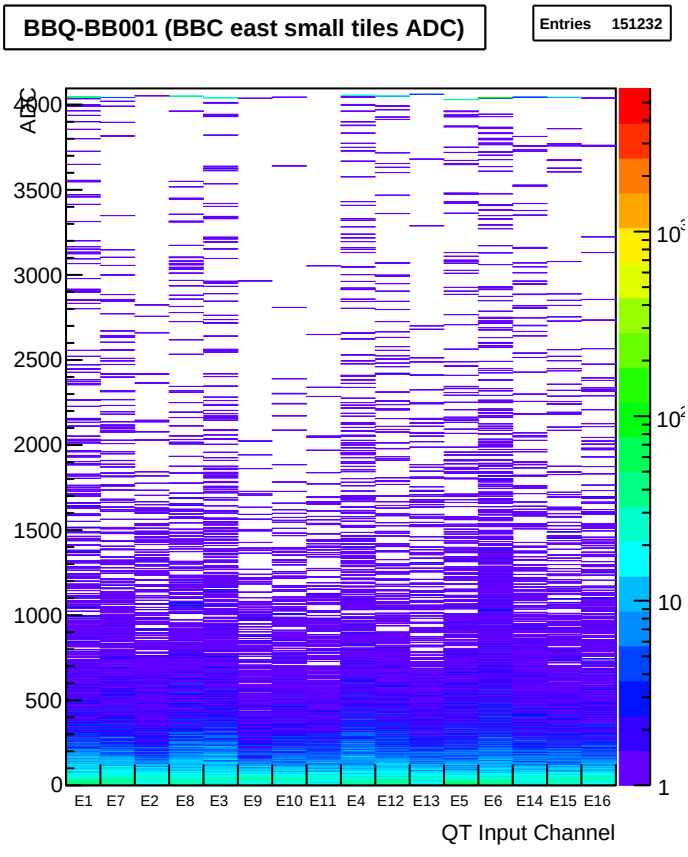

MIX-TF101
Entries 7290
TOF UPC-TH-EastHigh(Real-Simu)
3343
3347
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

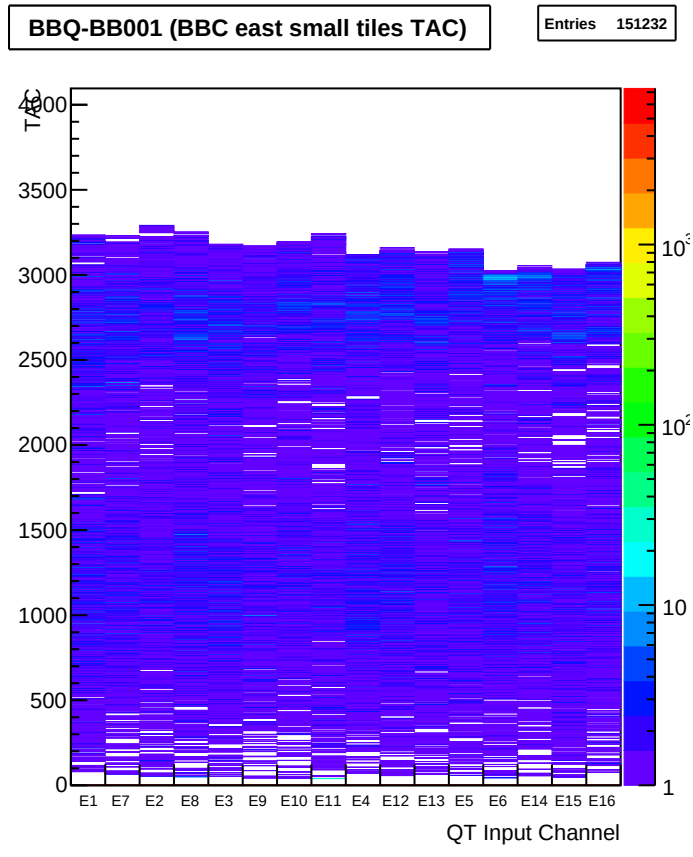

L2-TF201
Entries 9452
TOF total mult

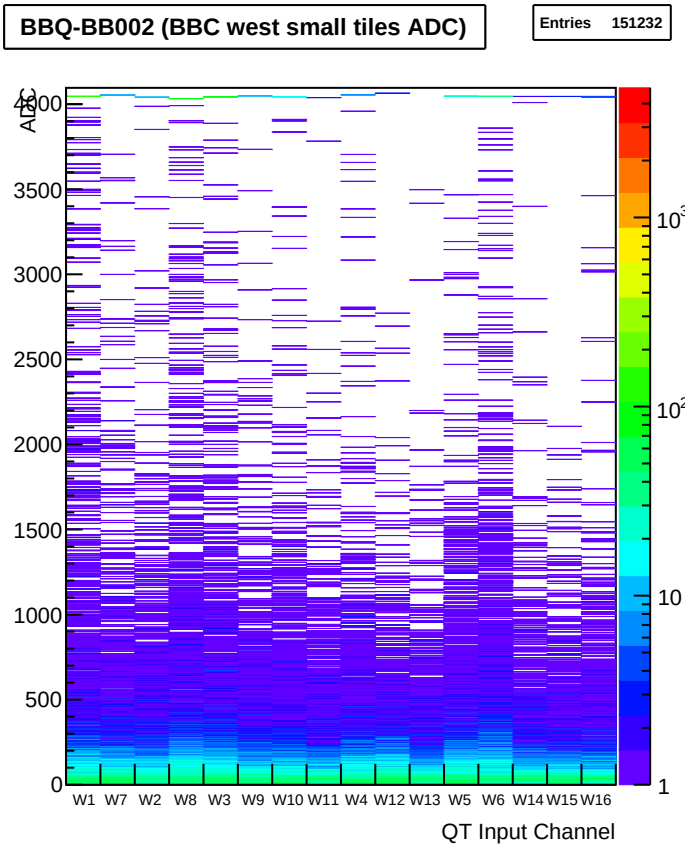

L2-TF201
Entries 0
TOF total mult(Real-Simu)

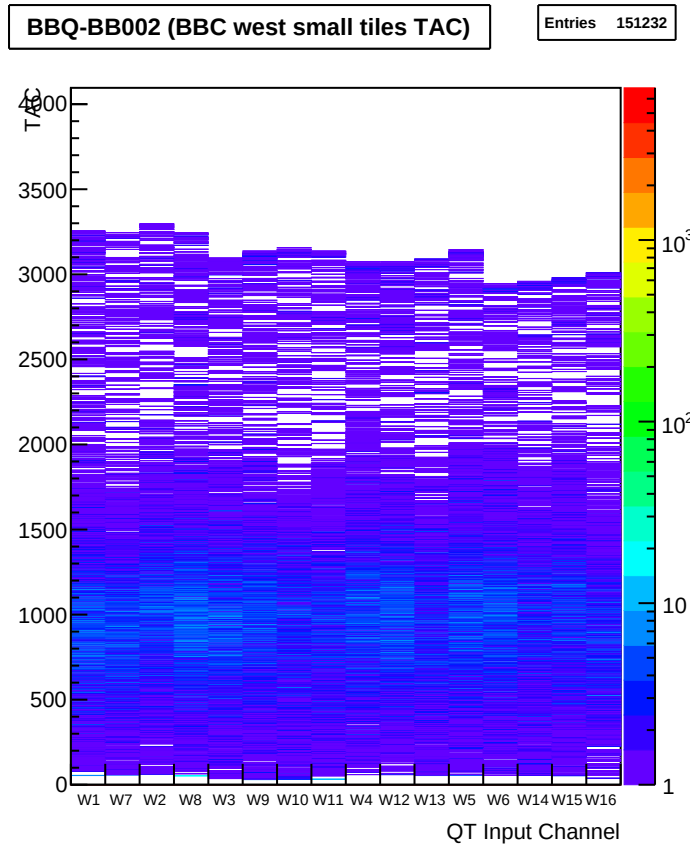

L2-TF201
Entries 66164
Threshold/UPC bits
8284 8323 8303 8350 8278 8248 8950
1168 1129 1149 1102 1174 1204 502
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

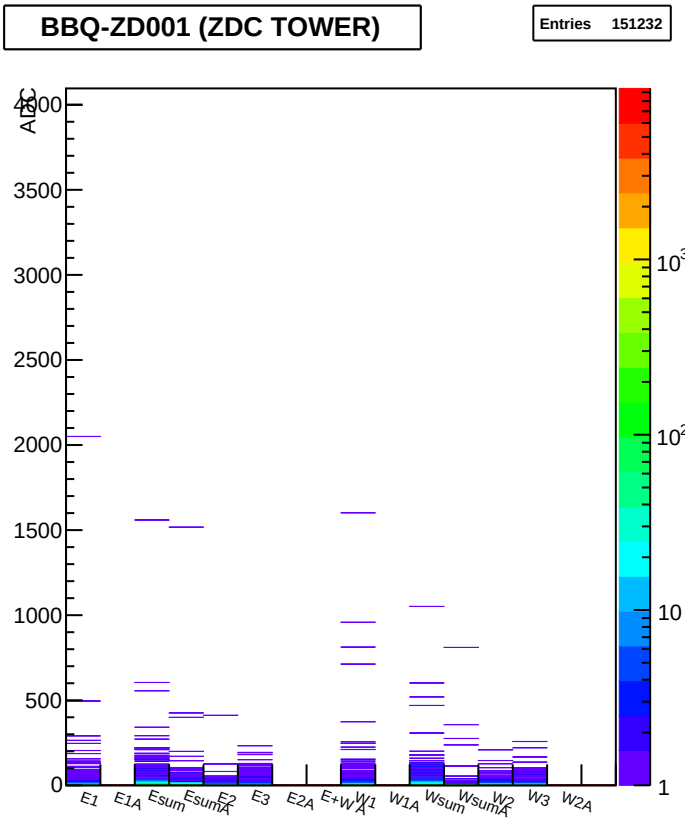

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

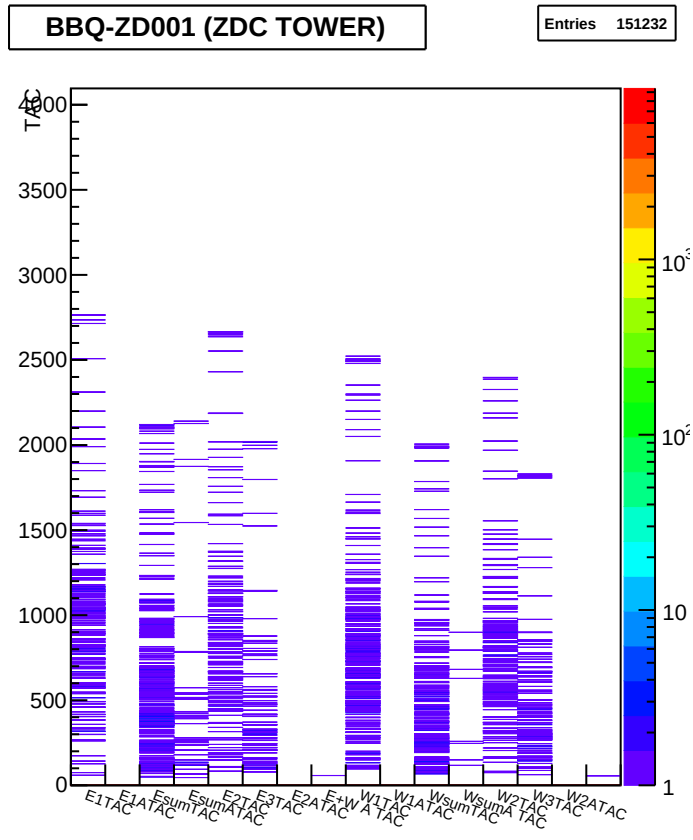

BBQ-BB001 (BBC east small tiles ADC)
Entries 151232
ADC
0
500
1000
1500
2000
2500
3000
3500
4000
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16
QT Input Channel
1
10
10²
10³

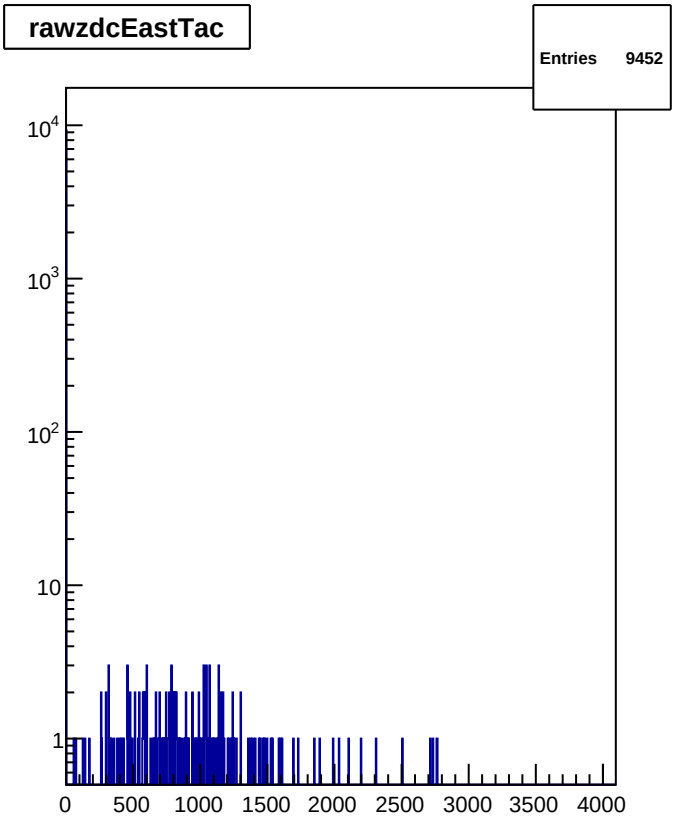

BBQ-BB001 (BBC east small tiles TAC)
Entries 151232
TAC
0
500
1000
1500
2000
2500
3000
3500
4000
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16
QT Input Channel
1
10
10²
10³

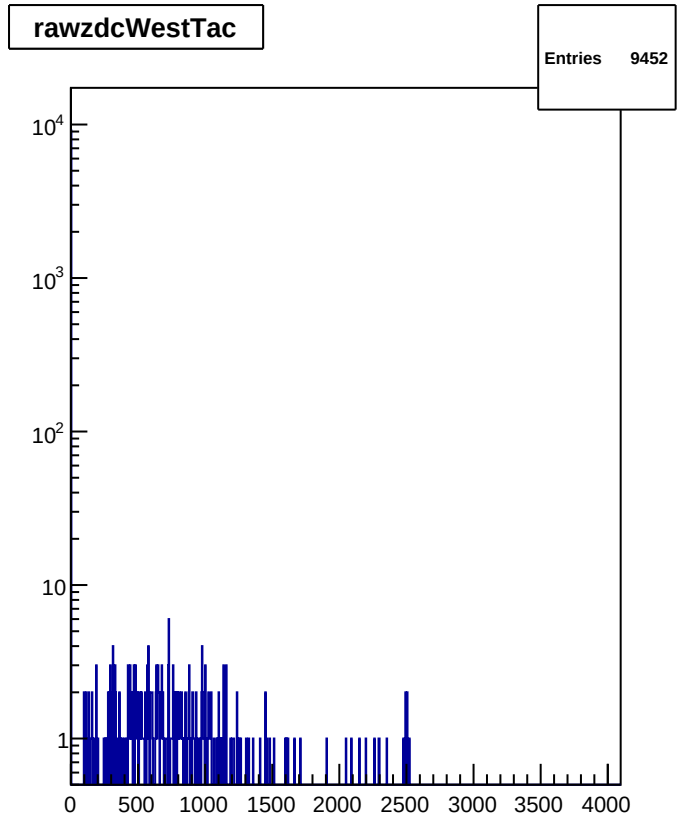

BBQ-BB002 (BBC west small tiles ADC)
Entries 151232
ADC
0
500
1000
1500
2000
2500
3000
3500
4000
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16
QT Input Channel
1
10
10²
10³

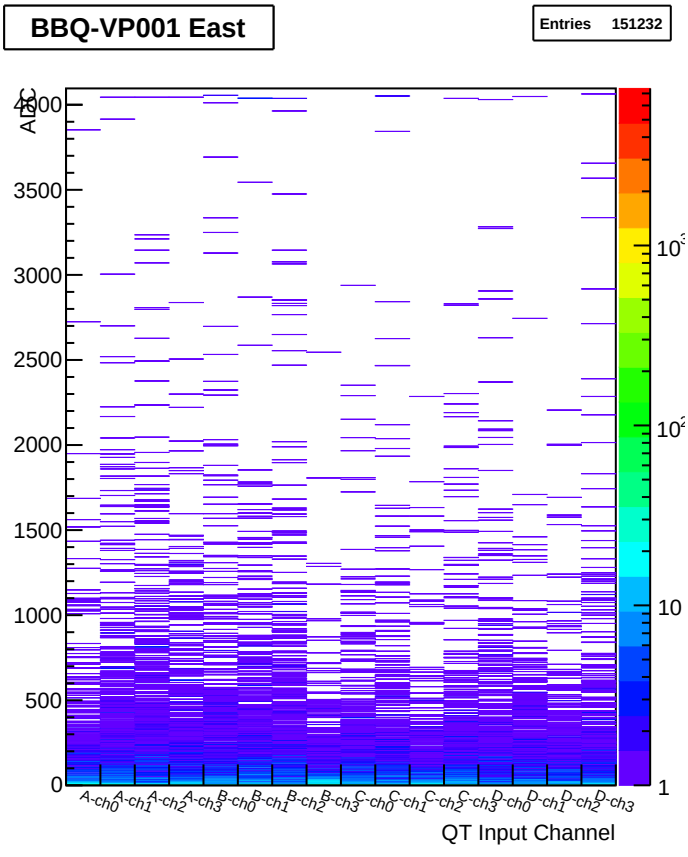

BBQ-BB002 (BBC west small tiles TAC)
Entries 151232
TAC
0
500
1000
1500
2000
2500
3000
3500
4000
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16
QT Input Channel
1
10
10²
10³

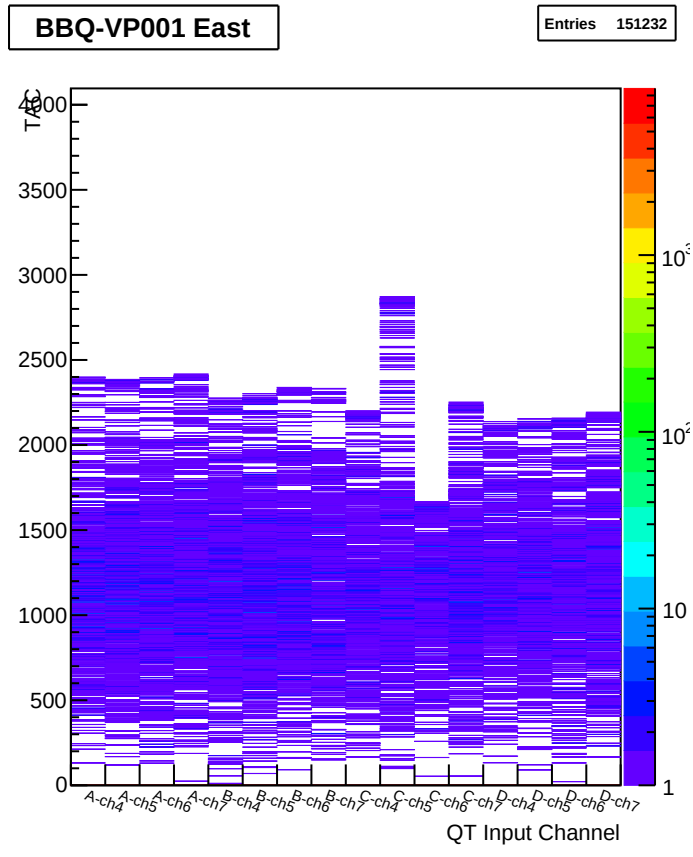

BBQ-ZD001 (ZDC TOWER)
Entries 151232
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
E1
E1A
Esum
EsumA
E2
E3
E2A
E+W A
W1
W1A
Wsum
WsumA
W2
W3
W2A
10
1

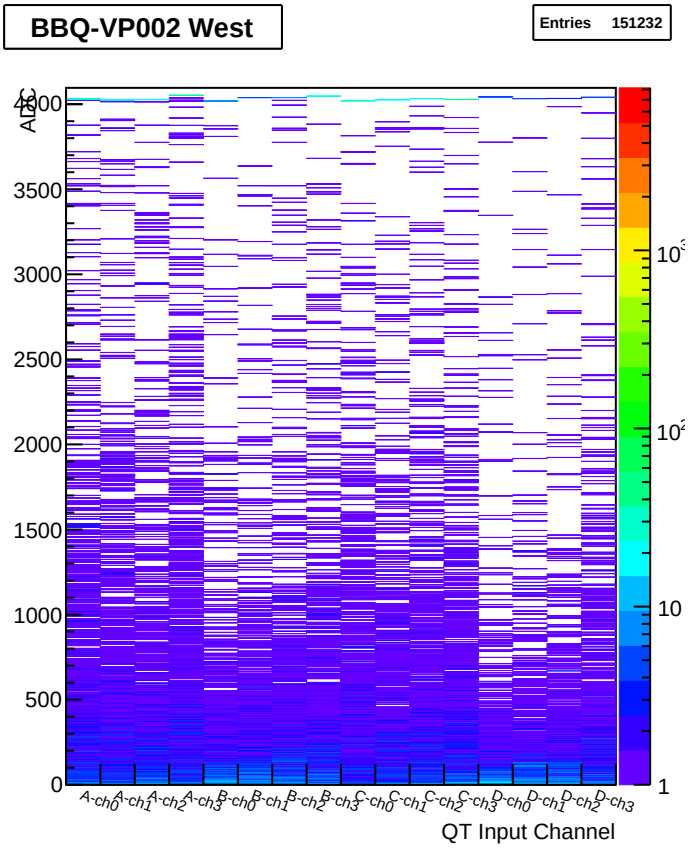

BBQ-ZD001 (ZDC TOWER)
Entries 151232
TAC
4000
3500
3000
2500
2000
1500
1000
500
0
E1TAC
E1ATAC
EsumTAC
EsumATAC
E2TAC
E3TAC
E2ATAC
E+W A TAC
W1TAC
W1ATAC
WsumTAC
WsumA TAC
W2TAC
W3TAC
W2ATAC
10
1

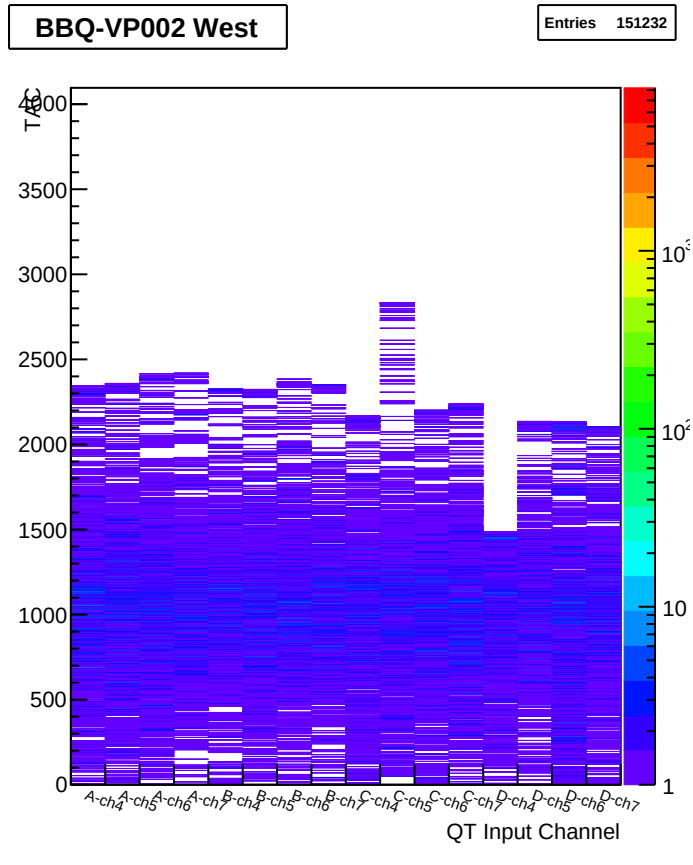

rawzdcEastTac
Entries 9452
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
3000
3500
4000

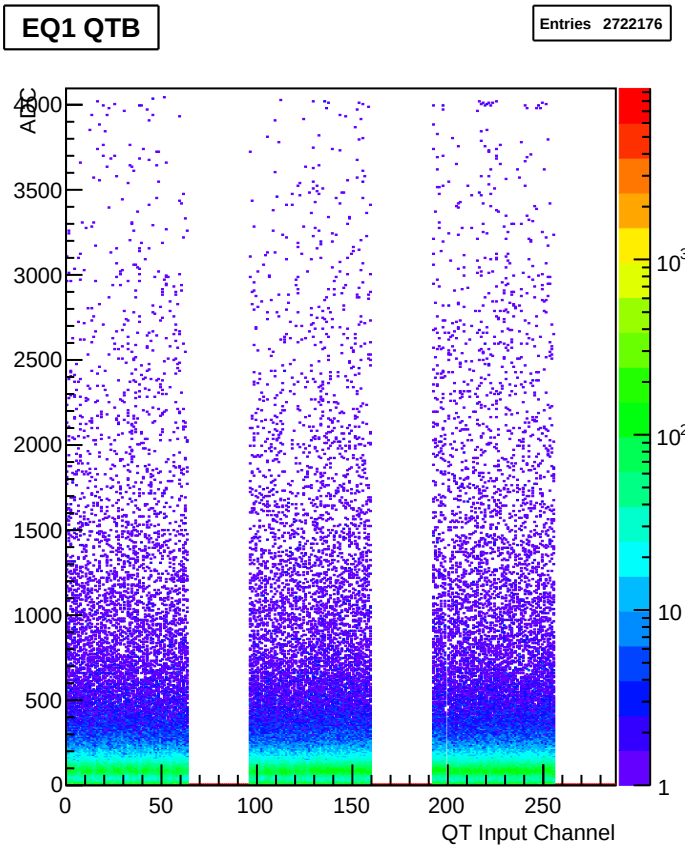

rawzdcWestTac
Entries 9452
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
3000
3500
4000

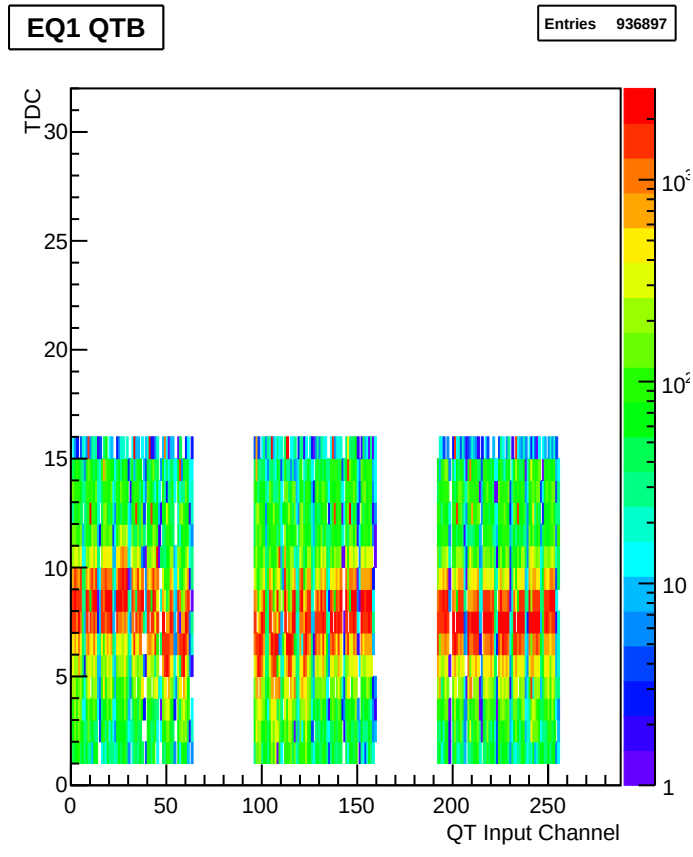

BBQ-VP001 East
Entries 151232
ADC
QT Input Channel

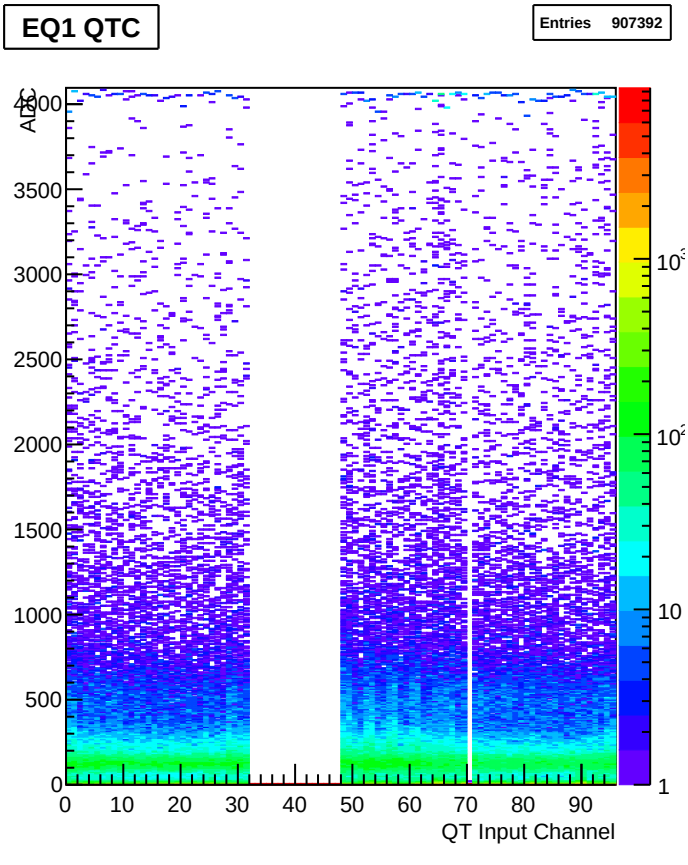

BBQ-VP001 East
Entries 151232
TADC
QT Input Channel

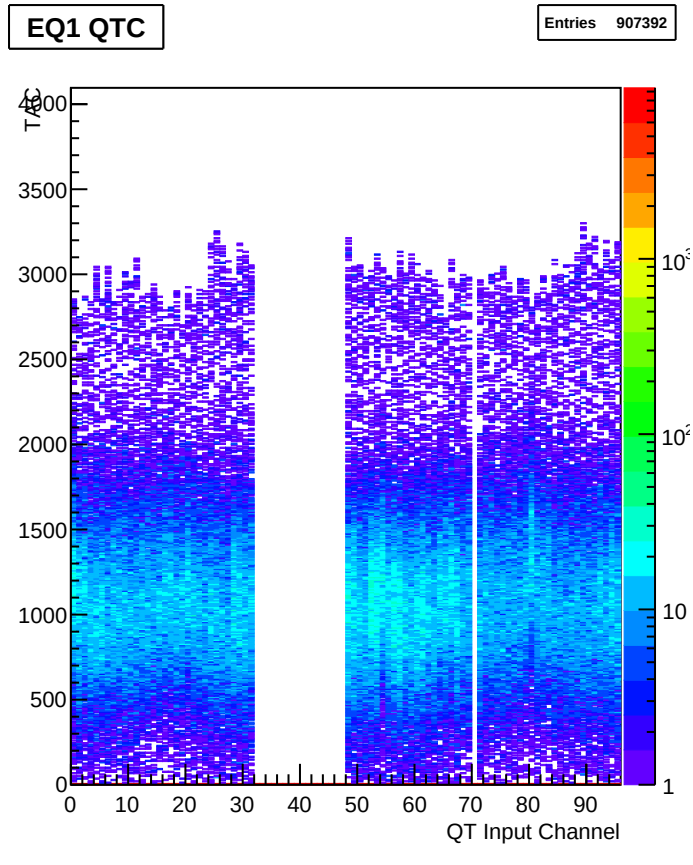

BBQ-VP002 West
Entries 151232
ADC
QT Input Channel

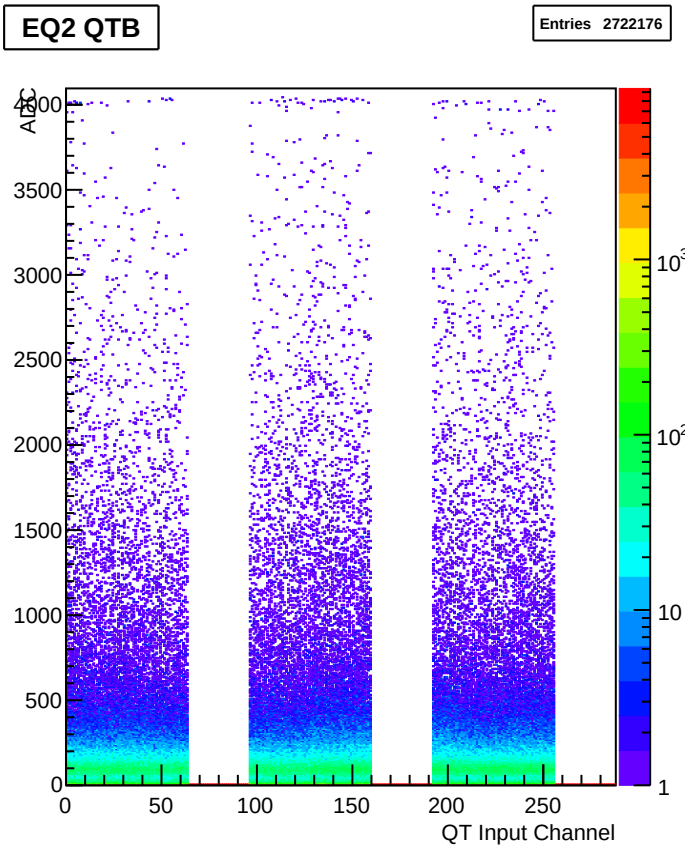

BBQ-VP002 West
Entries 151232
TADC
QT Input Channel

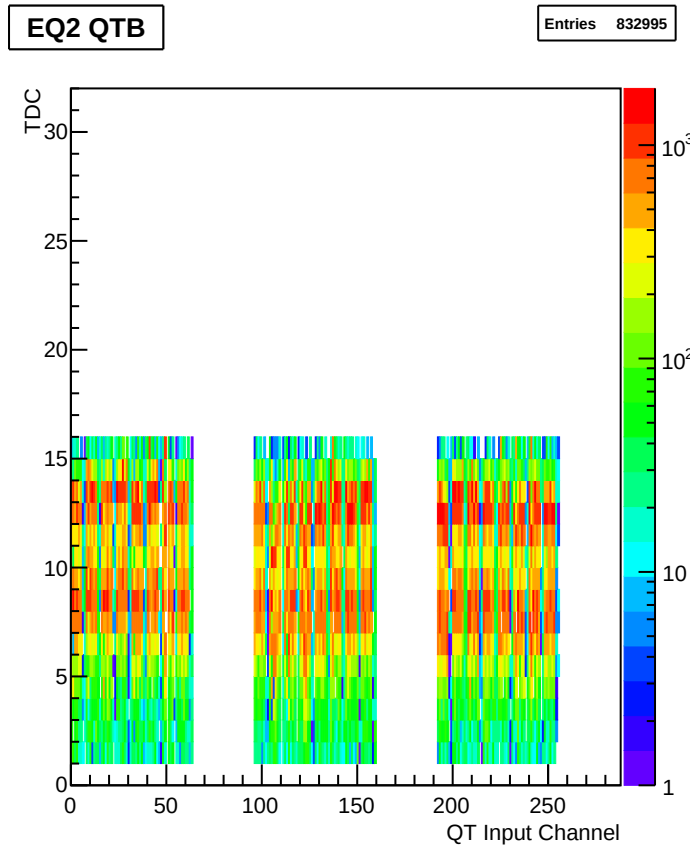

EQ1 QTB
Entries 2722176
ADC
QT Input Channel

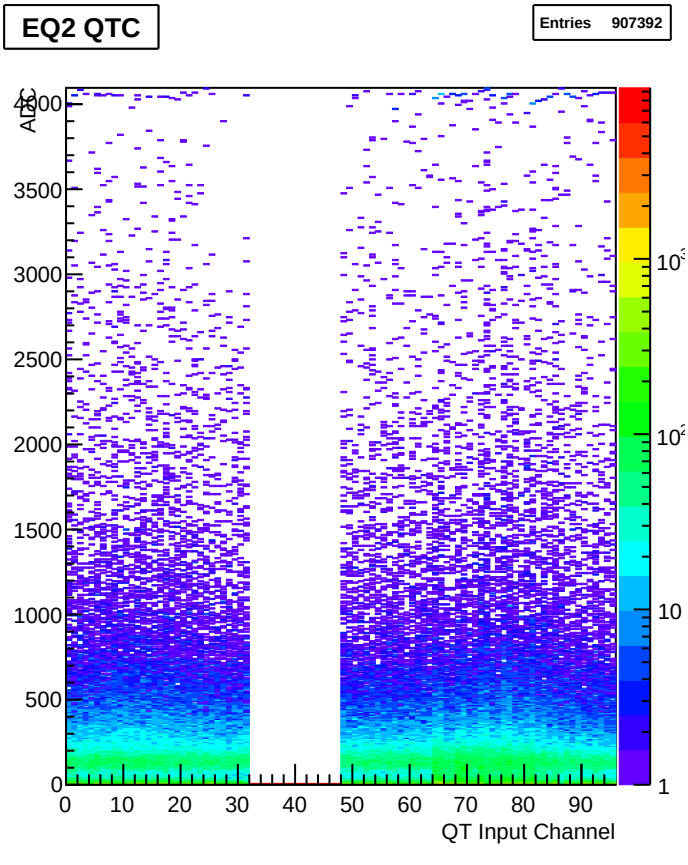

EQ1 QTB
Entries 936897
TDC
QT Input Channel

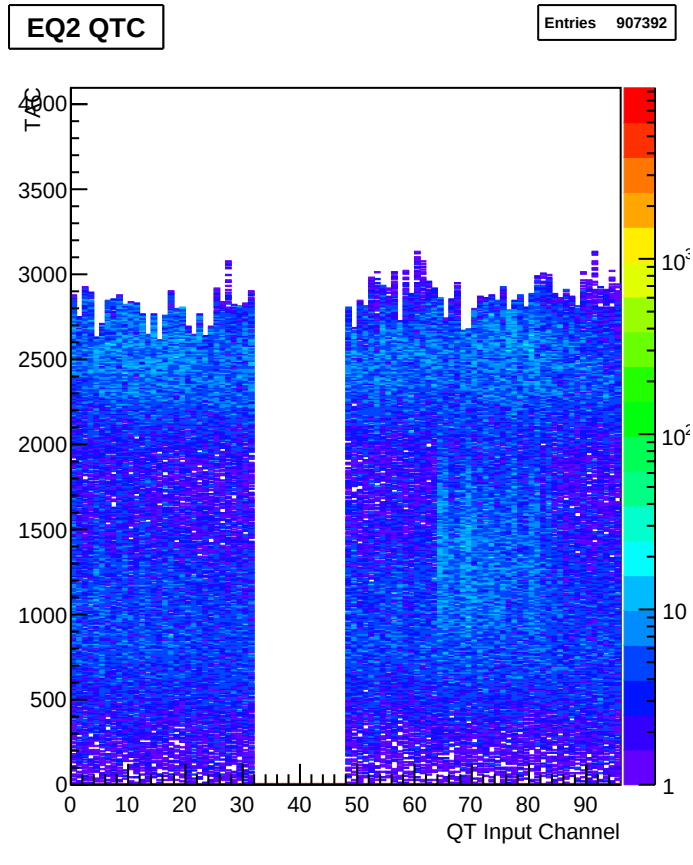

EQ1 QTC
Entries 907392
ADC
QT Input Channel

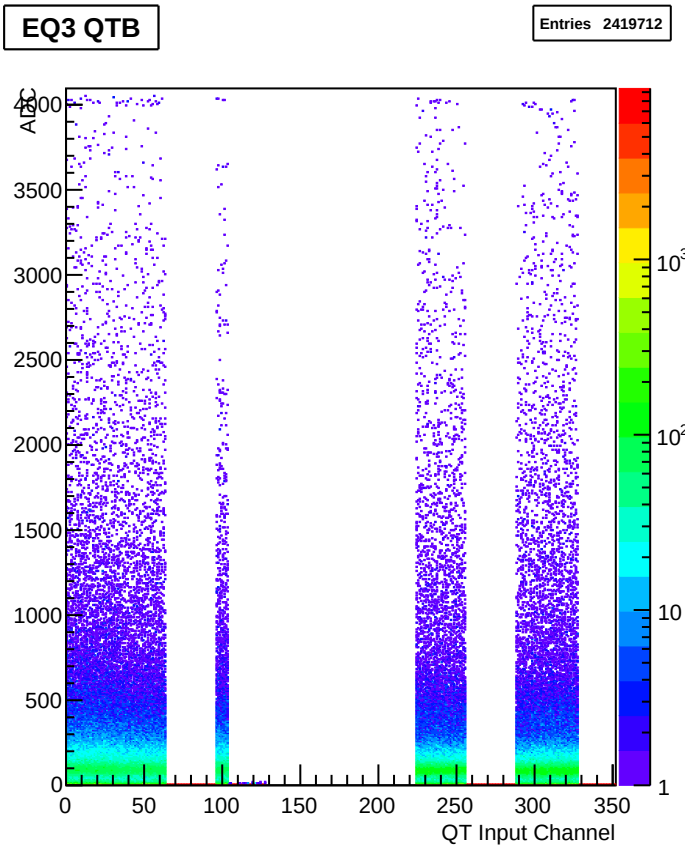

EQ1 QTC
Entries 907392
TADC
QT Input Channel

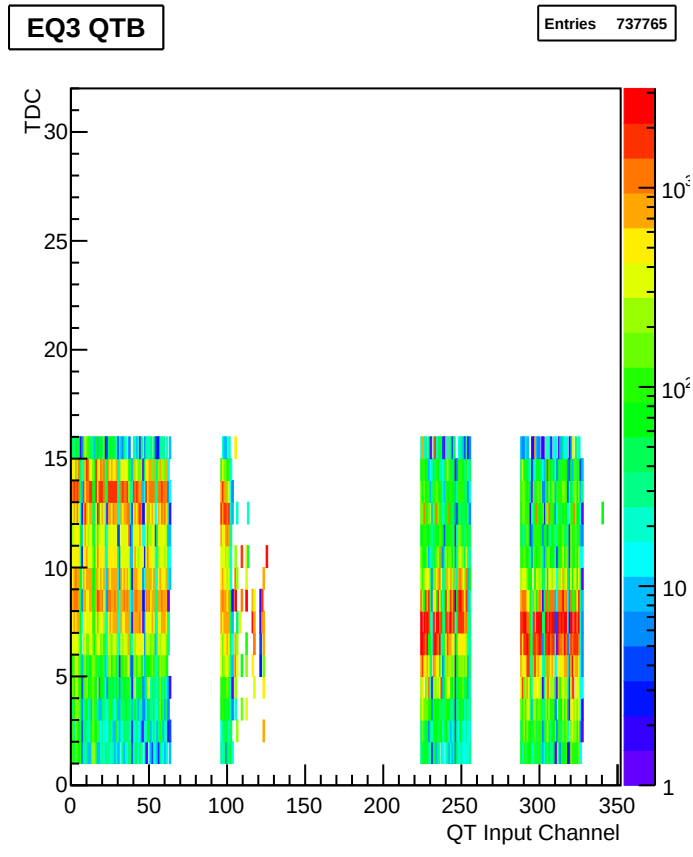

EQ2 QTB
Entries 2722176
ADC
QT Input Channel

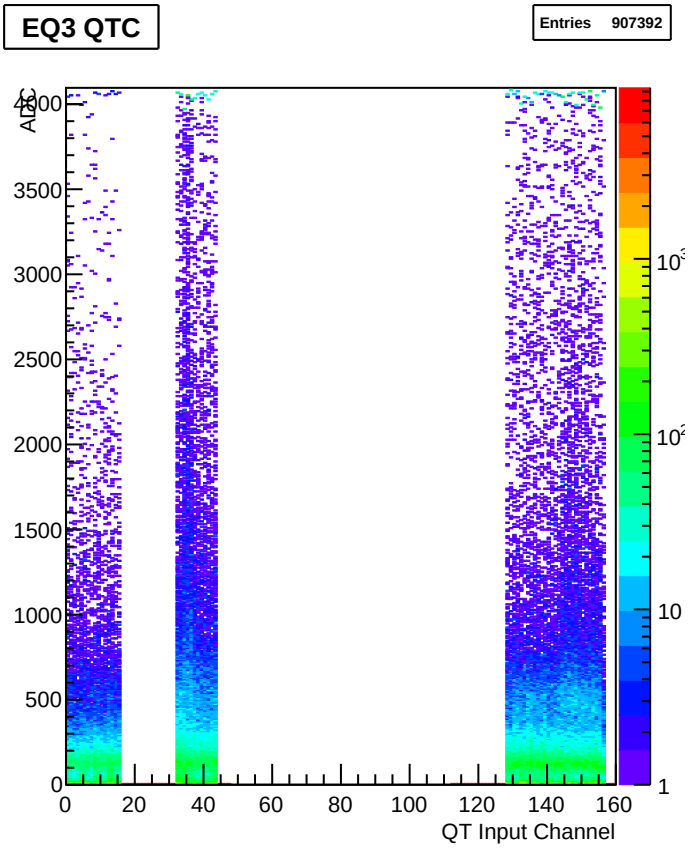

EQ2 QTB
Entries 832995
TDC
QT Input Channel

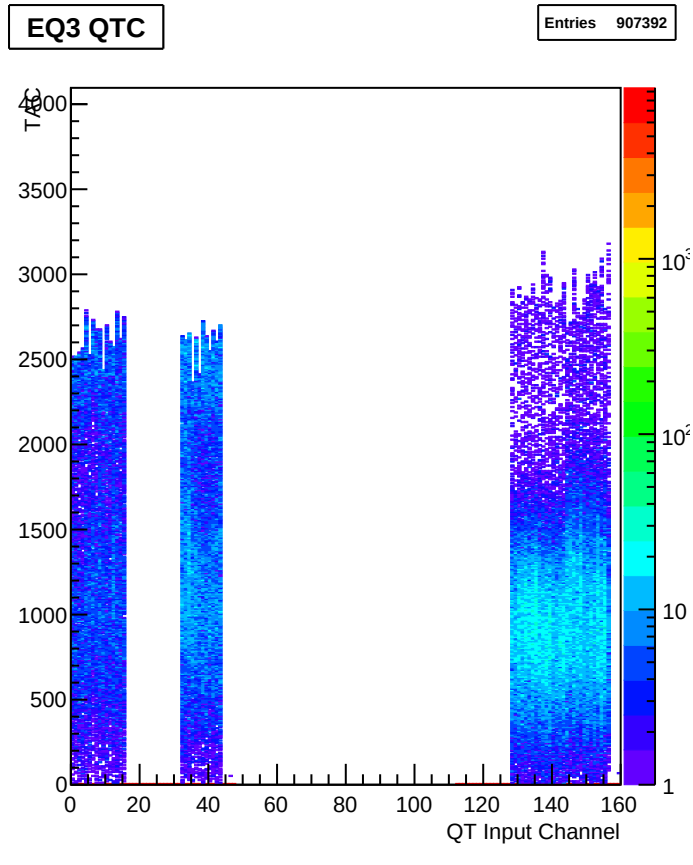

EQ2 QTC
Entries 907392
ADC
QT Input Channel

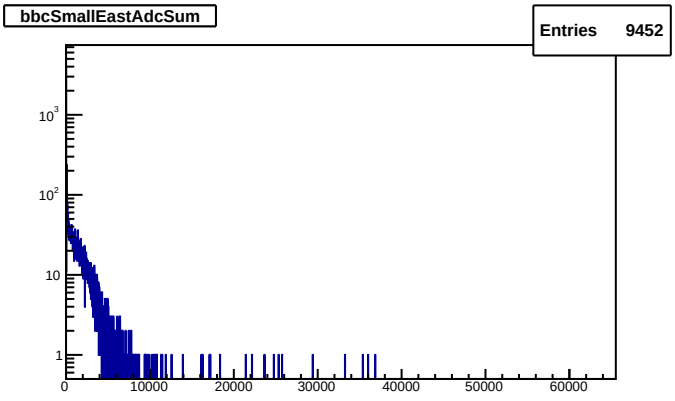

EQ2 QTC
Entries 907392
TADC
QT Input Channel

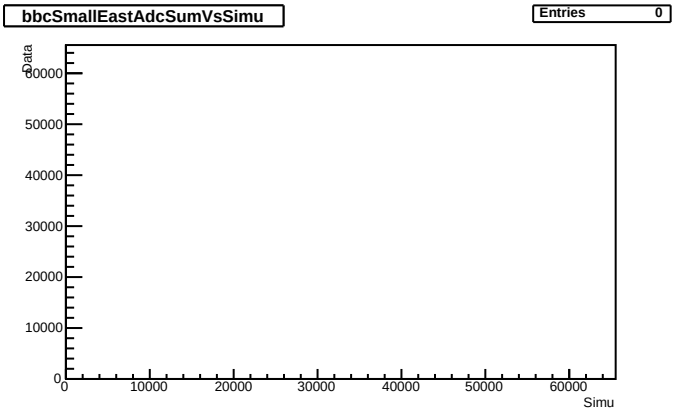

EQ3 QTB
Entries 2419712
ADC
QT Input Channel

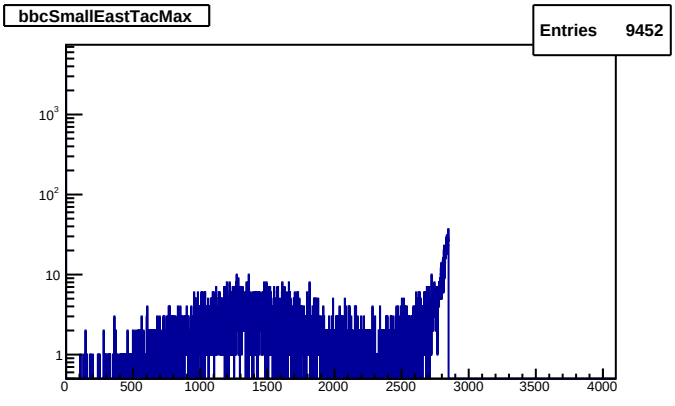

EQ3 QTB
Entries 737765
TDC
QT Input Channel

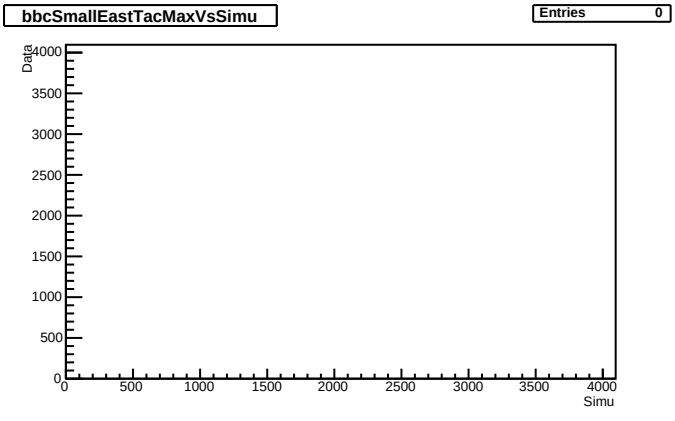

EQ3 QTC
Entries 907392
ADC
QT Input Channel

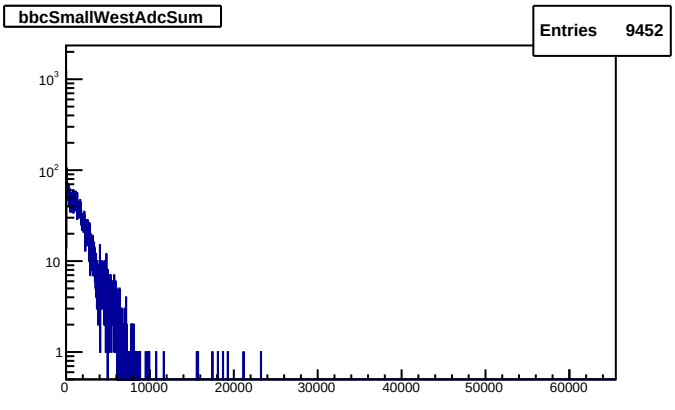

EQ3 QTC
Entries 907392
TADC
QT Input Channel

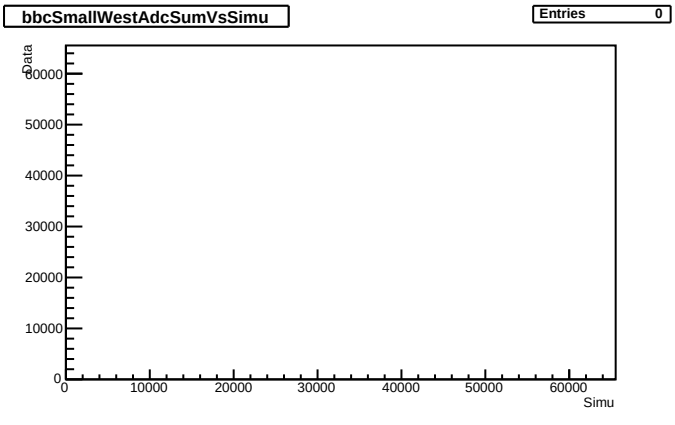

bbcSmallEastAdcSum
Entries 9452


bbcSmallEastAdcSumVsSimu
Entries 0
Data
Simu


bbcSmallEastTacMax
Entries 9452


bbcSmallEastTacMaxVsSimu
Entries 0
Data
Simu


bbcSmallWestAdcSum
Entries 9452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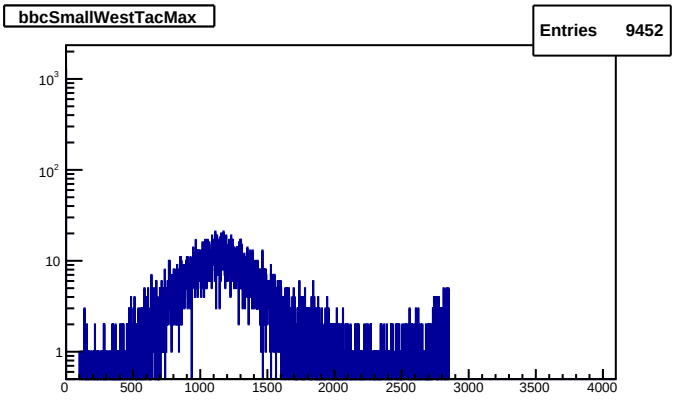
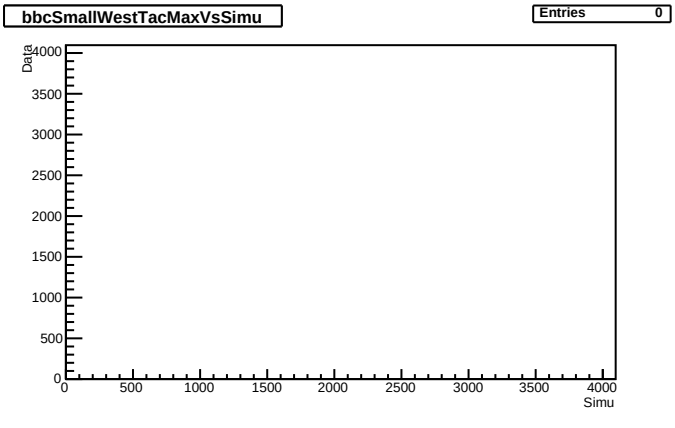
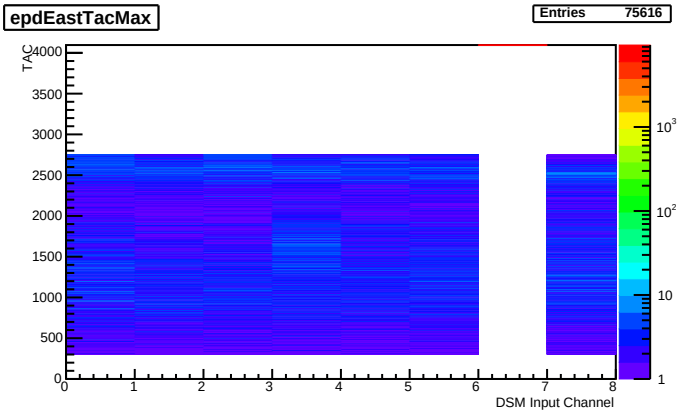
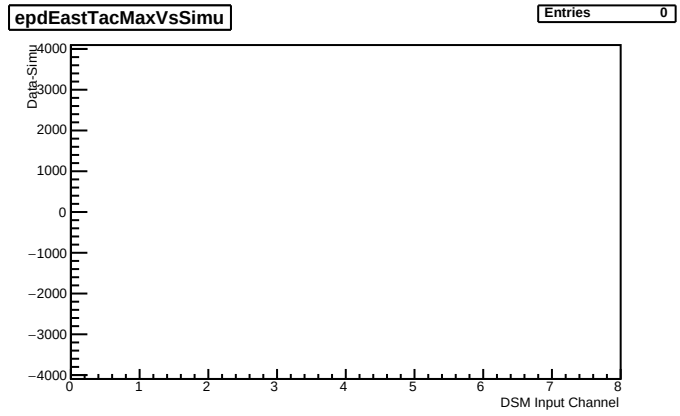
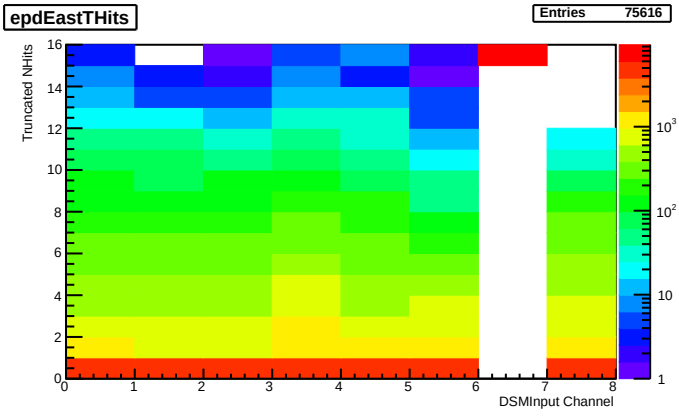
Entries 0
Data
Simu

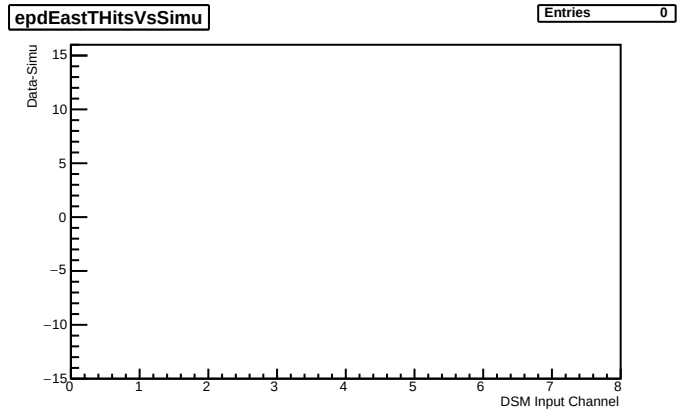

bbcSmallWestTacMax
Entries 9452

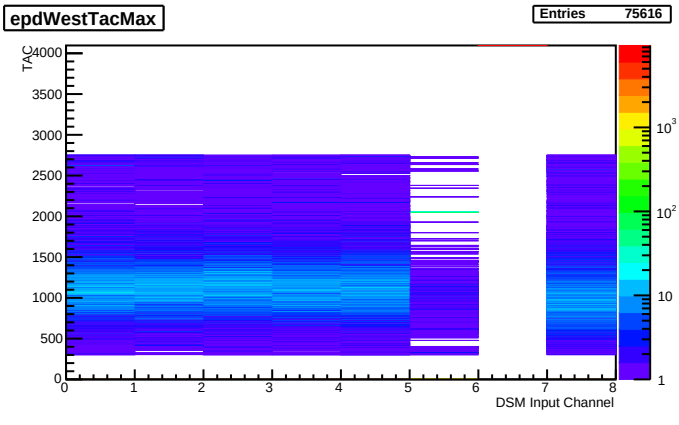

bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu

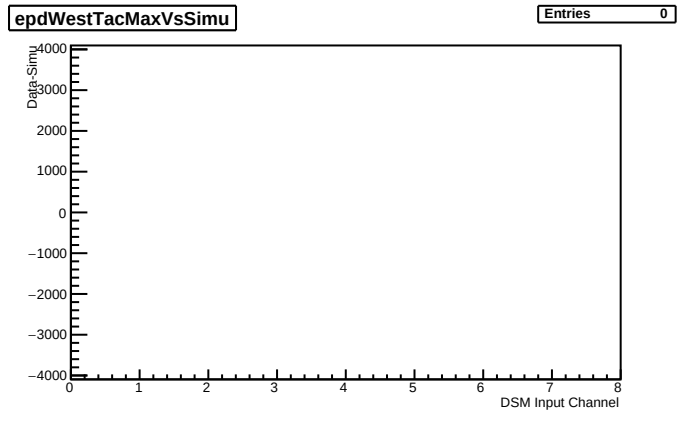

epdEastTacMax
Entries 75616
TAC
DSM Input Channel


epdEastTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel


epdEastTHits
Entries 75616
Truncated NHits
DSMInput Channel


epdEastTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel


epdWestTacMax
Entries 75616
TAC
DSM Input Channel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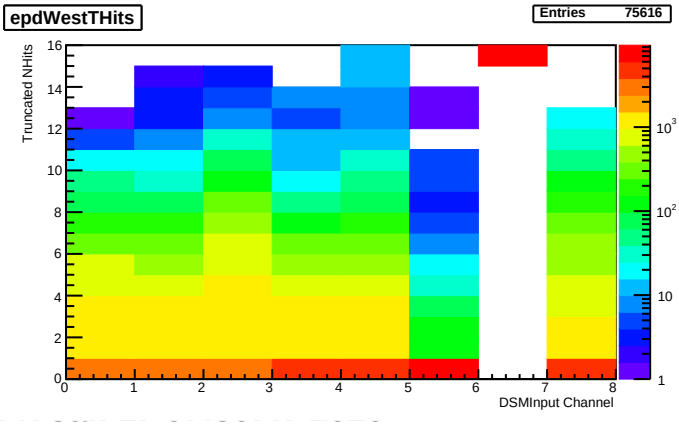
Entries 0
Data-Simu
DSM Input Channel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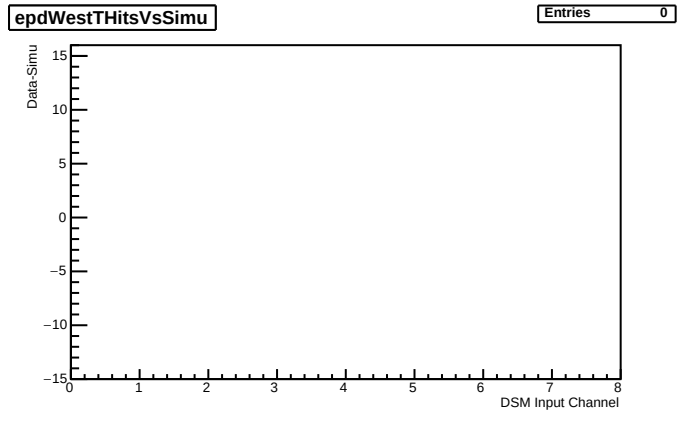
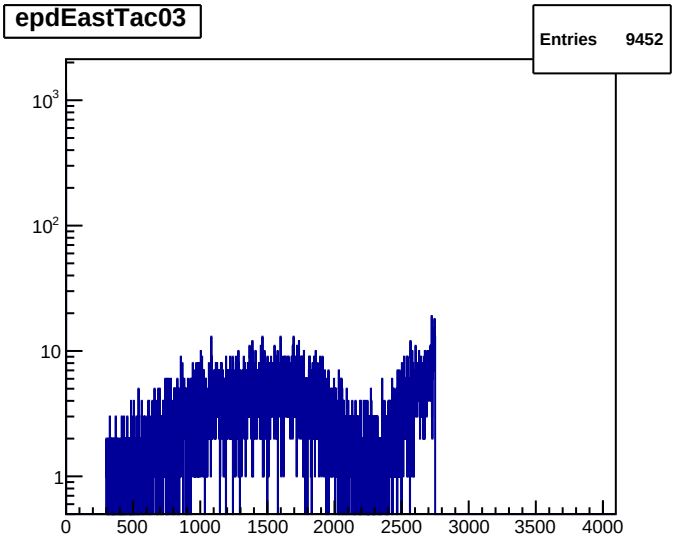
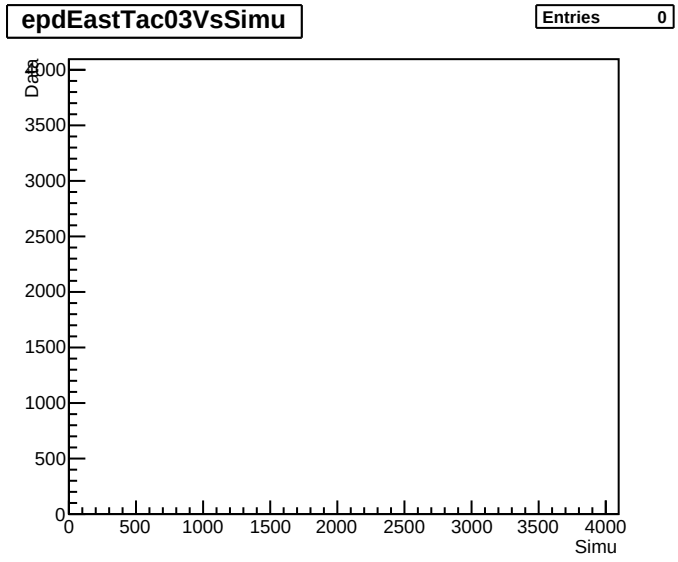
Truncated NHits
DSMInput Channel


epdWestTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel


epdEastTac03
Entries 9452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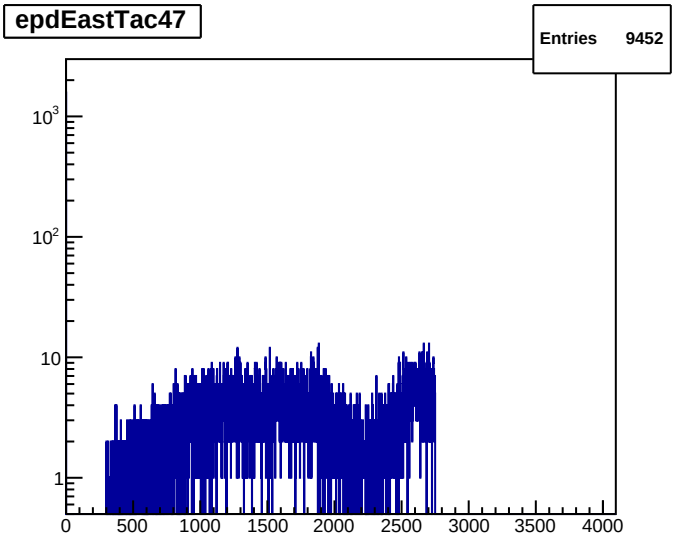
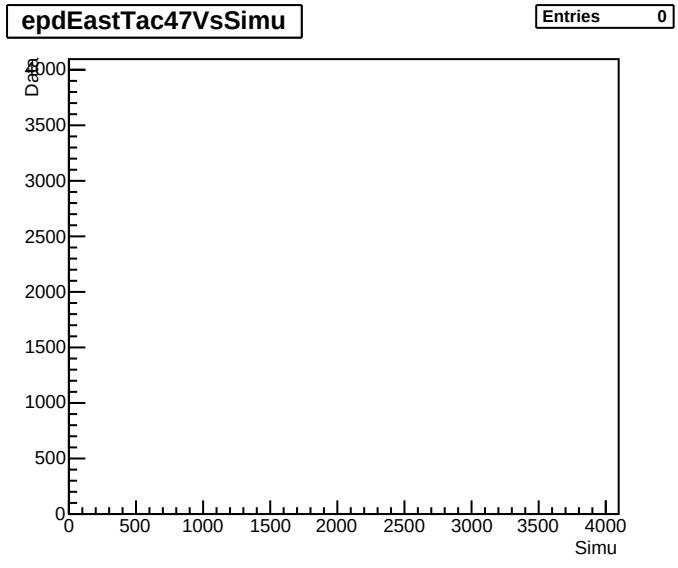
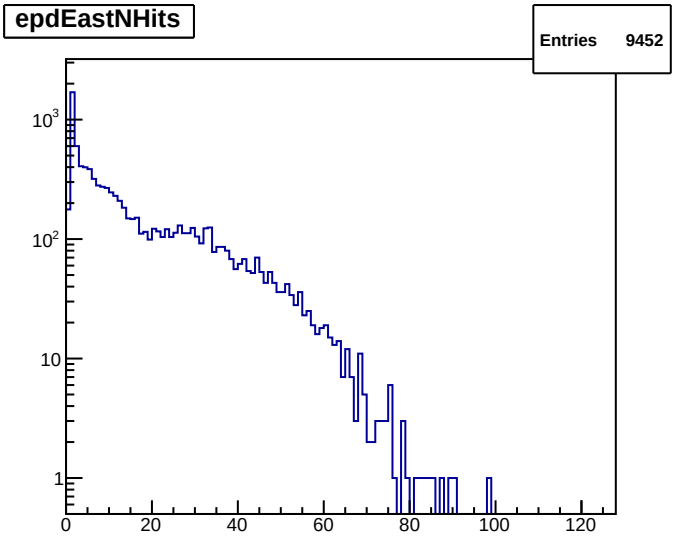
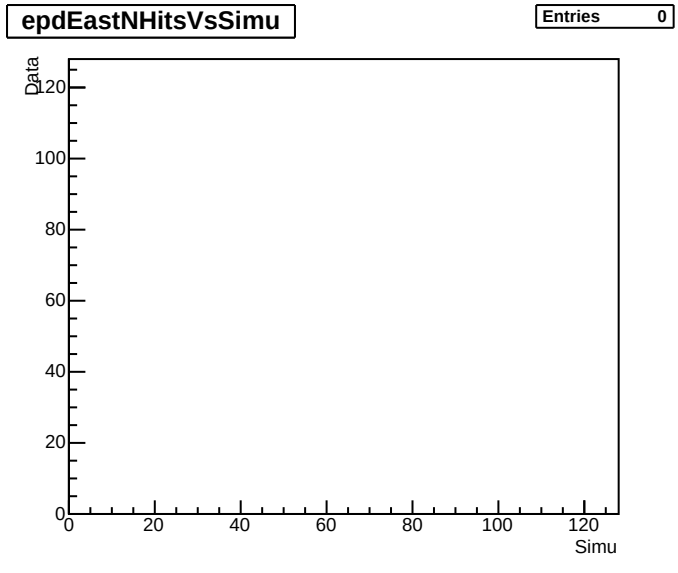
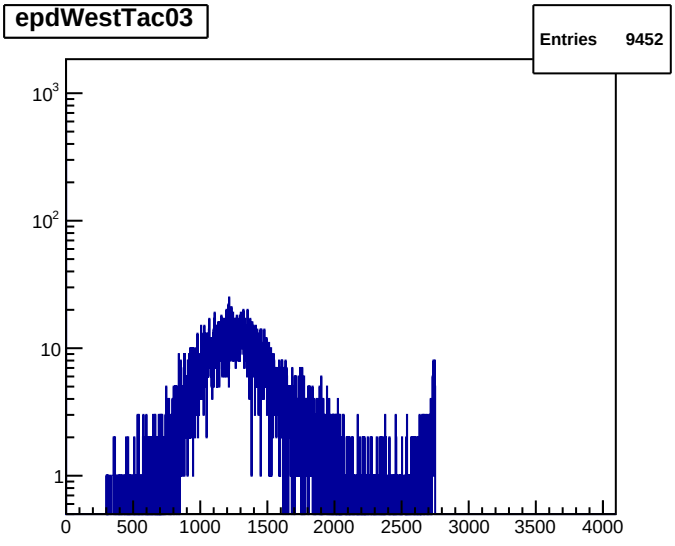
Entries 0
Data
Simu

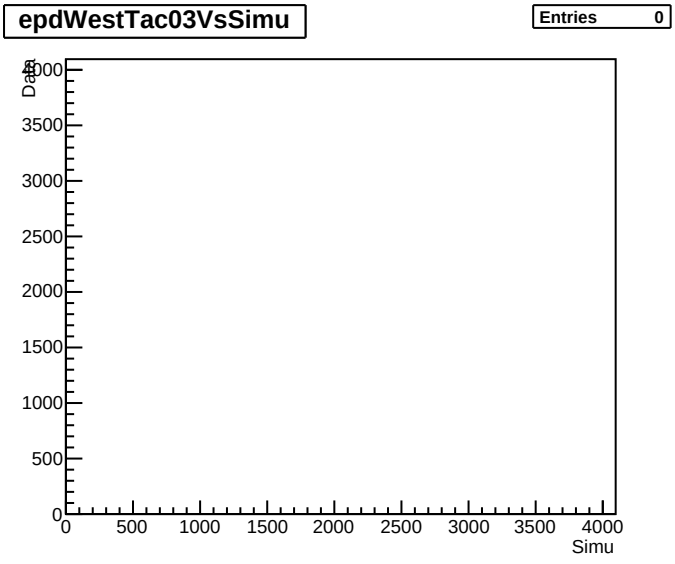

epdEastTac47
Entries 9452


epdEastTac47VsSimu
Entries 0
Data
Simu


epdEastNHits
Entries 9452


epdEastNHitsVsSimu
Entries 0
Data
Simu


epdWestTac03
Entries 9452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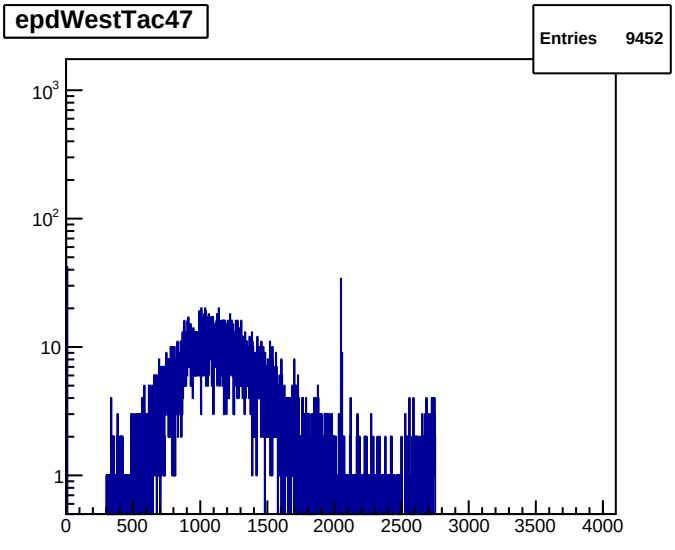
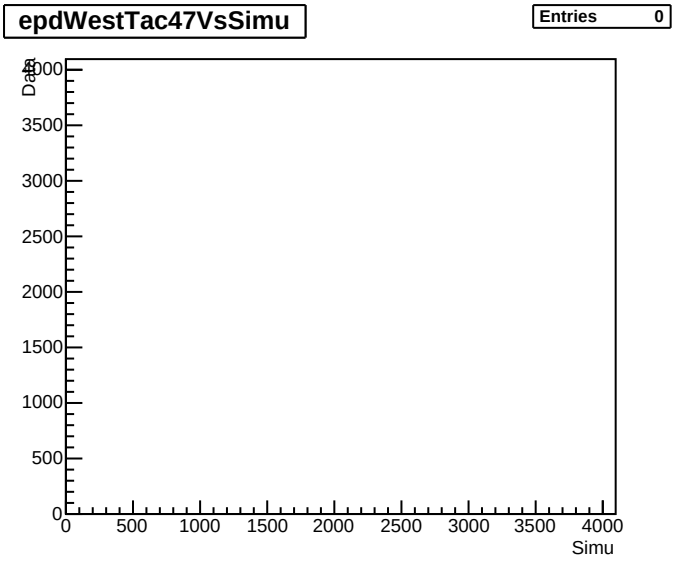
Entries 0
Data
Simu


epdWestTac47
Entries 9452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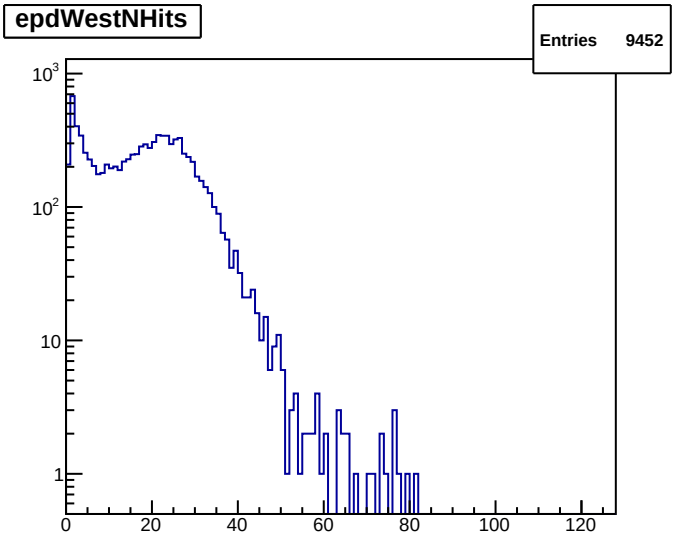
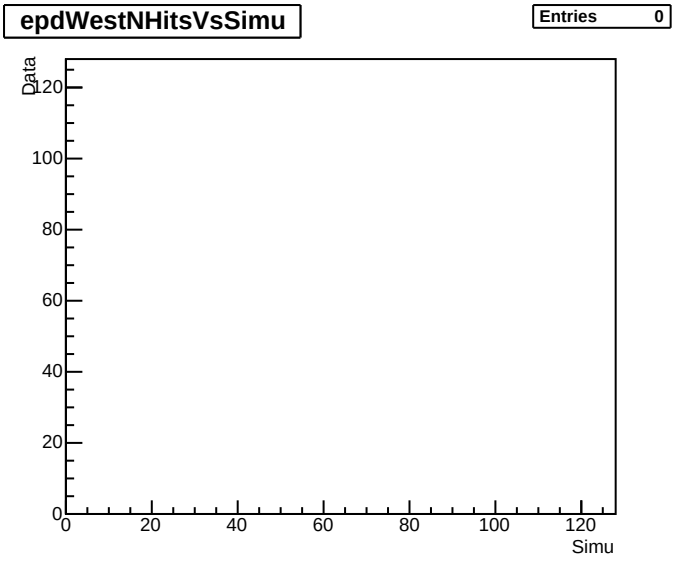
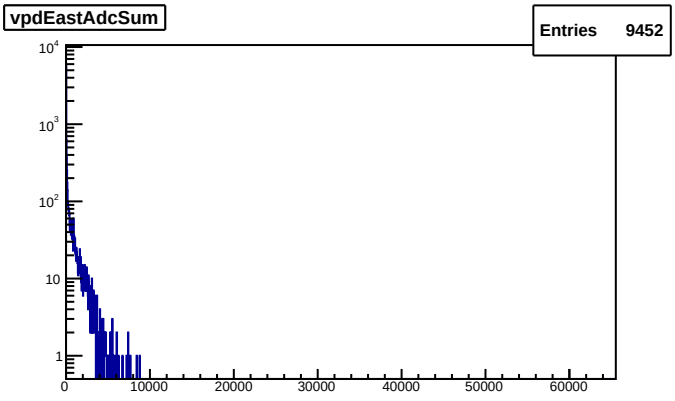
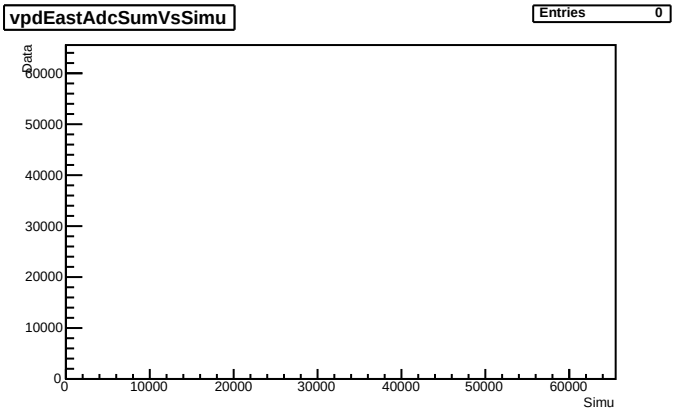
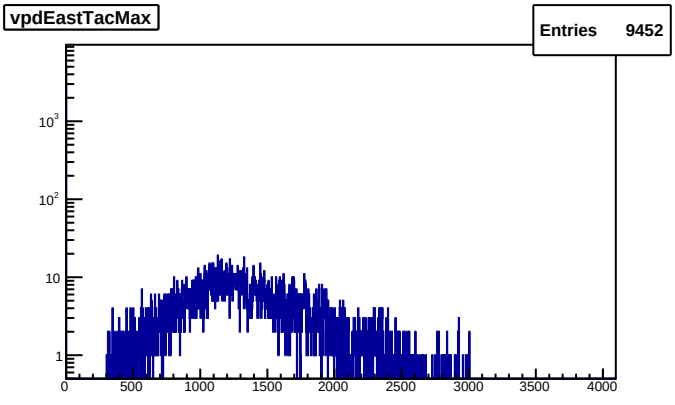
Entries 0
Data
Simu

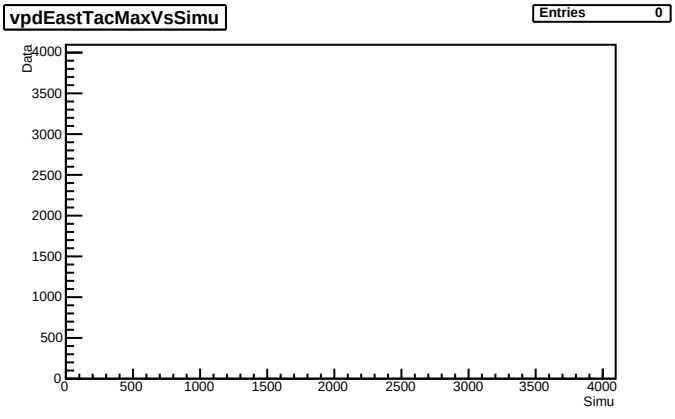

epdWestNHits
Entries 9452

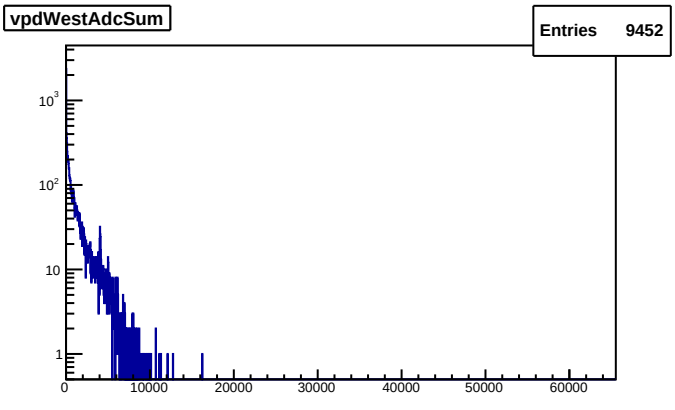

epdWestNHitsVsSimu
Entries 0
Data
Simu

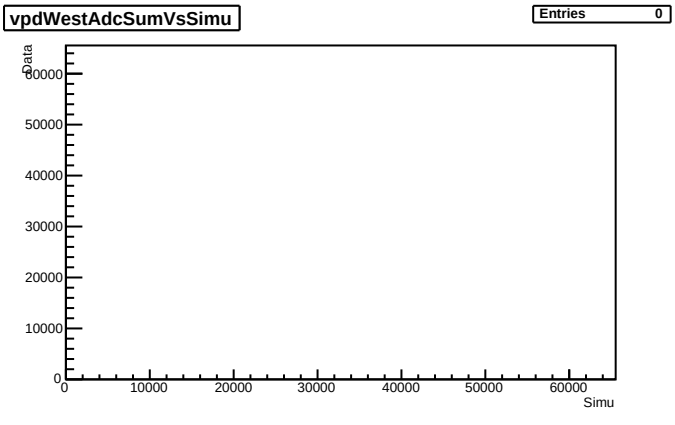

vpdEastAdcSum
Entries 9452

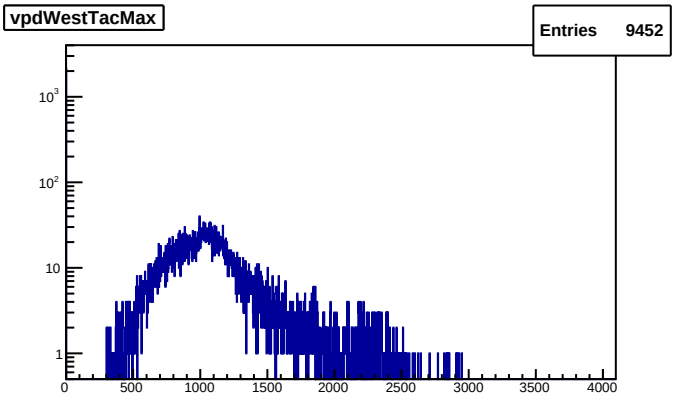

vpdEastAdcSumVsSimu
Entries 0
Data
Simu

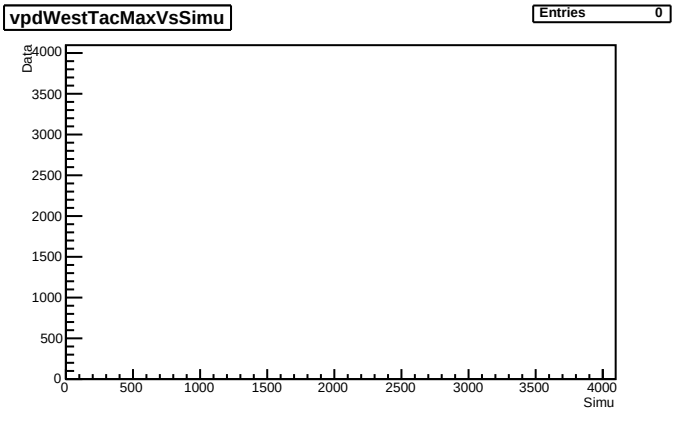

vpdEastTacMax
Entries 9452

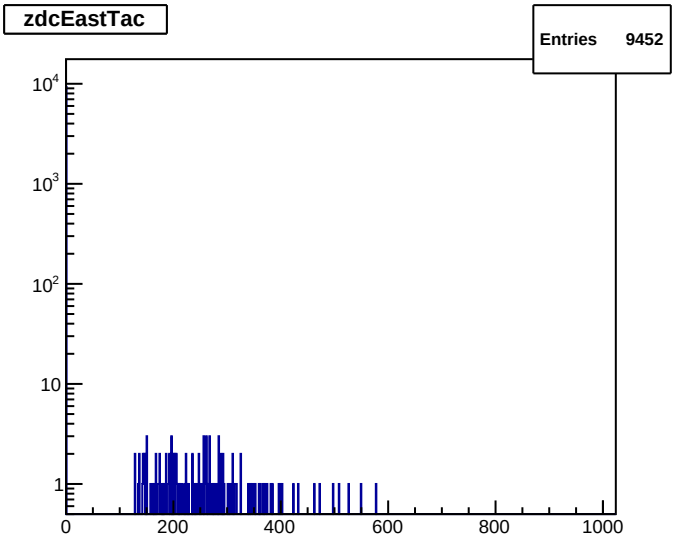

vpdEastTacMaxVsSimu
Entries 0
Data
Simu

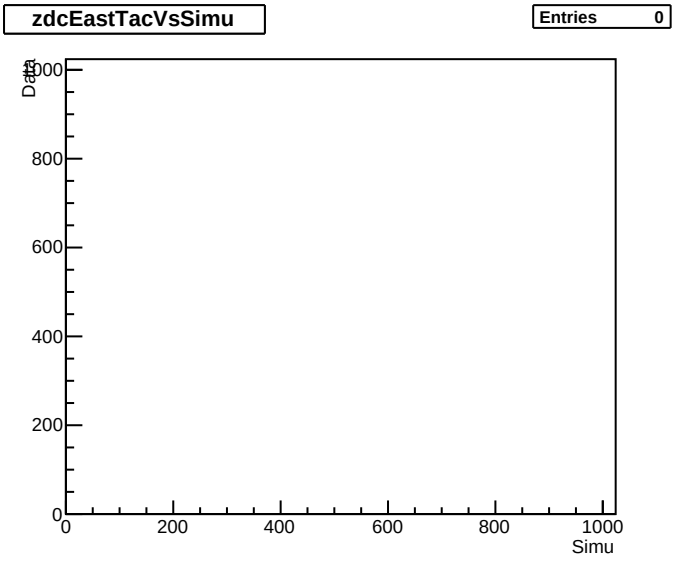

vpdWestAdcSum
Entries 9452

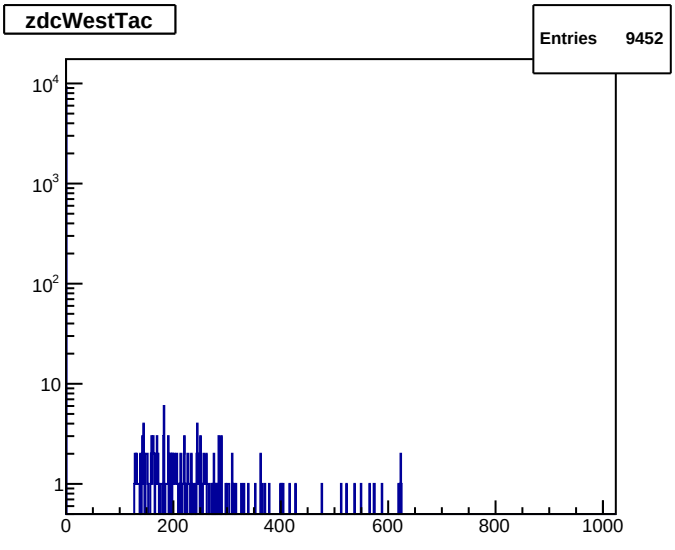

vpdWestAdcSumVsSimu
Entries 0
Data
Simu

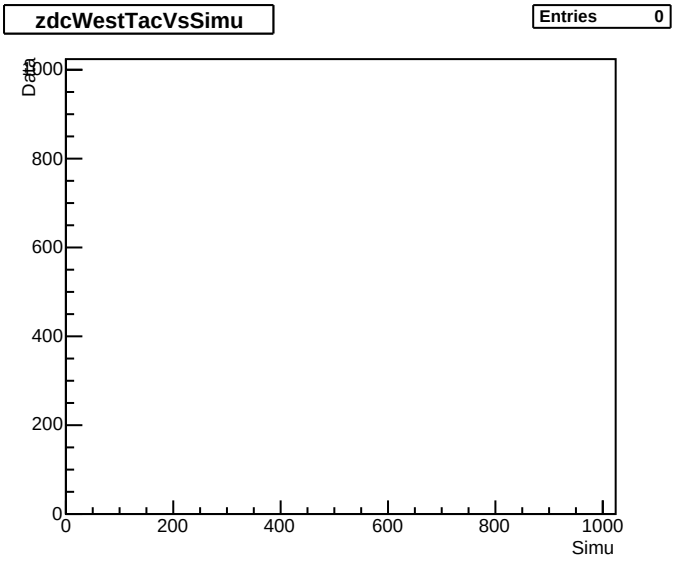

vpdWestTacMax
Entries 9452

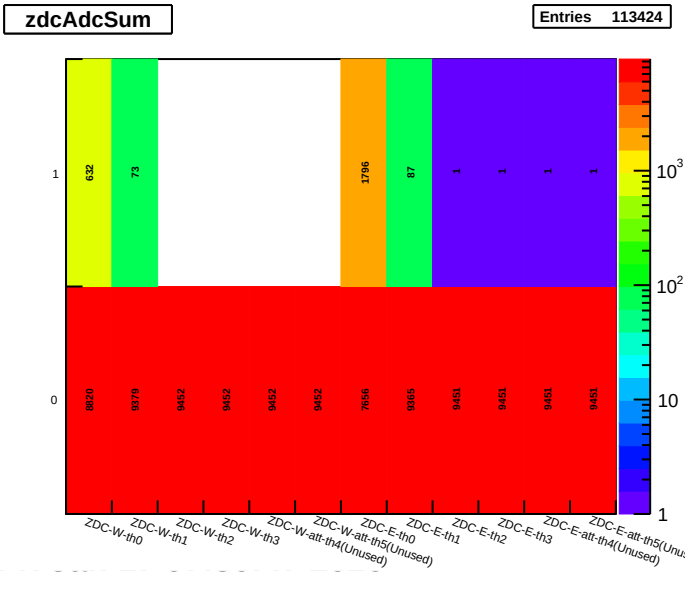

vpdWestTacMaxVsSimu
Entries 0
Data
Simu

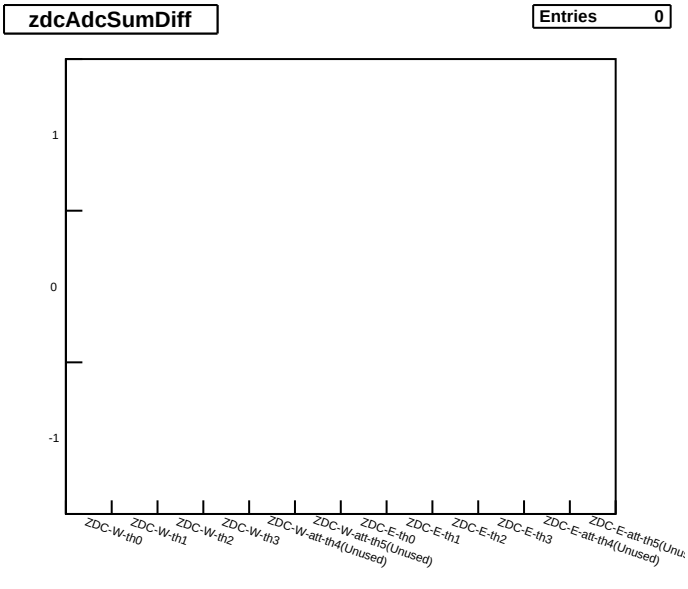

zdcEastTac
Entries 9452
10^4
10^3
10^2
10
1
0
200
400
600
800
1000

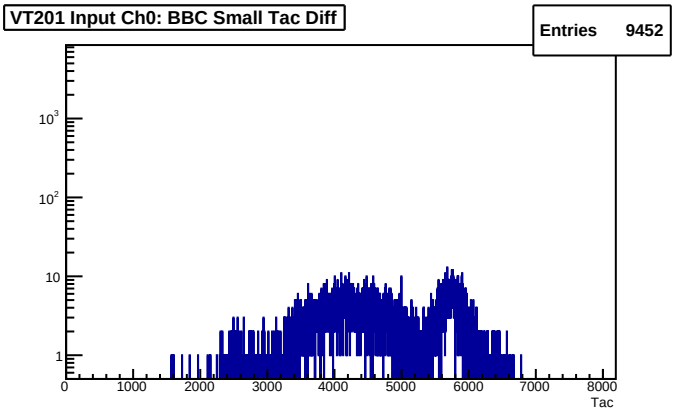

zdcEastTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

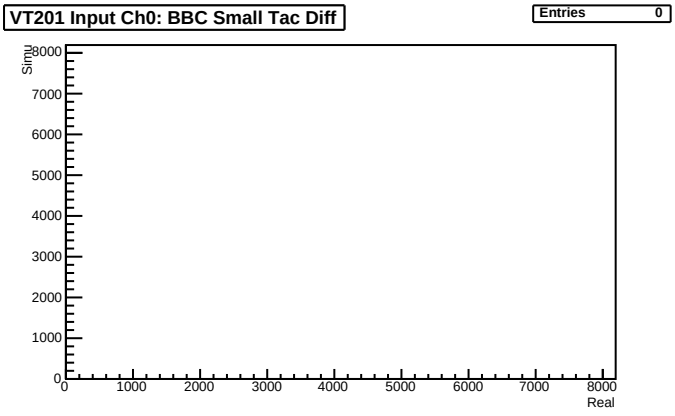

zdcWestTac
Entries 9452
10^4
10^3
10^2
10
1
0
200
400
600
800
1000

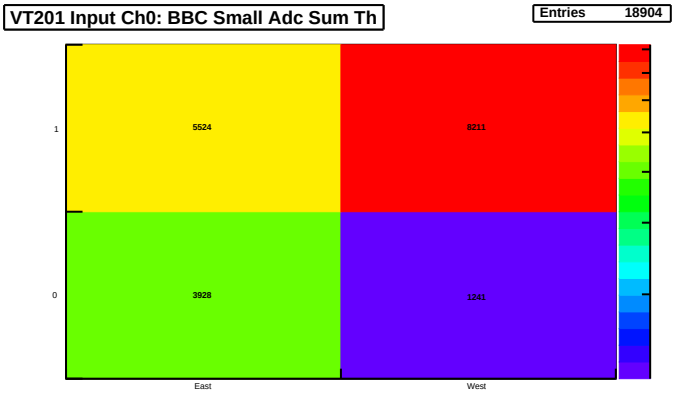

zdcWestTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

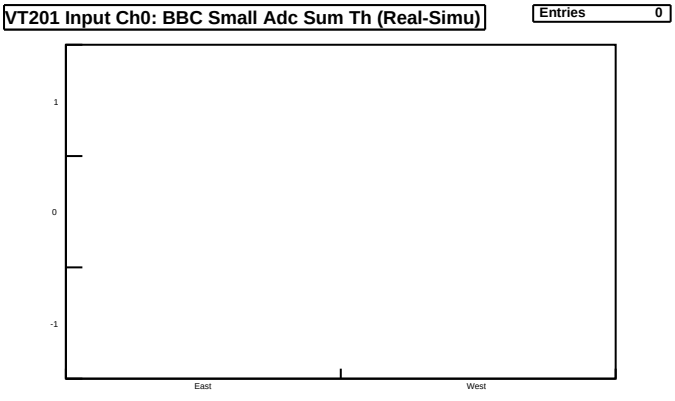

zdcAdcSum
Entries 113424
1
0
632
73
1796
87
1
1
1
1
8820
8379
9452
9452
9452
9452
7656
8365
9451
9451
9451
9451
10^3
10^2
10
1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

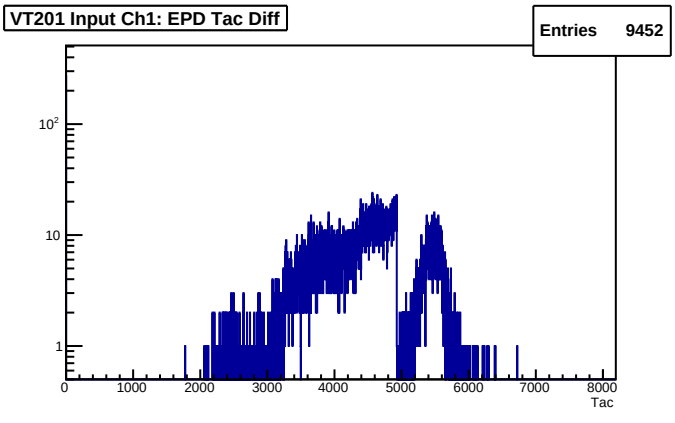

zdcAdcSumDiff
Entries 0
1
0
-1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

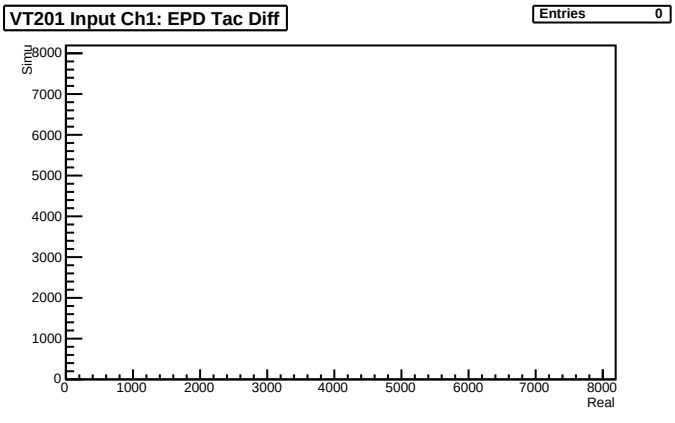

VT201 Input Ch0: BBC Small Tac Diff
Entries 9452
Tac

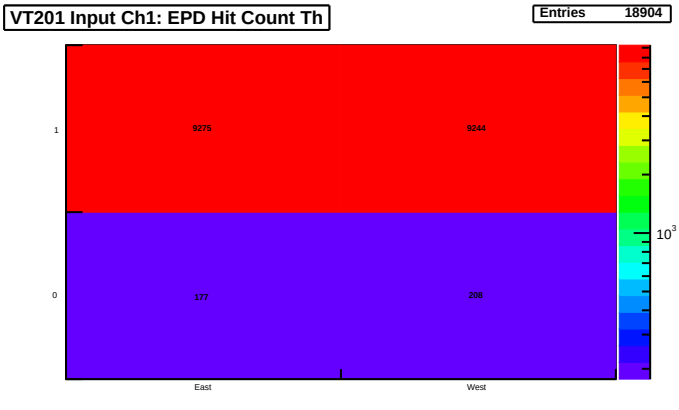

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

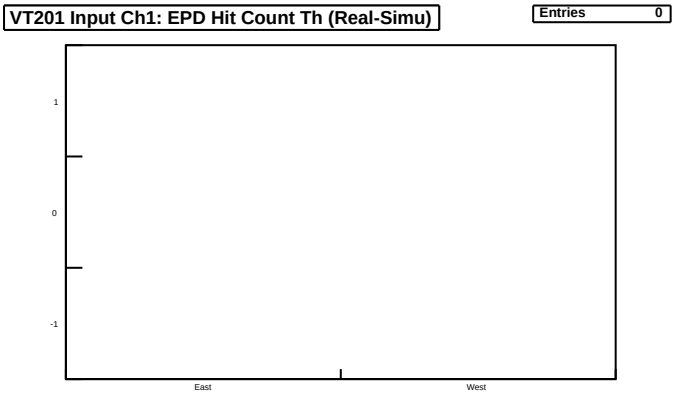

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 18904
5524
8211
3928
1241
East
West

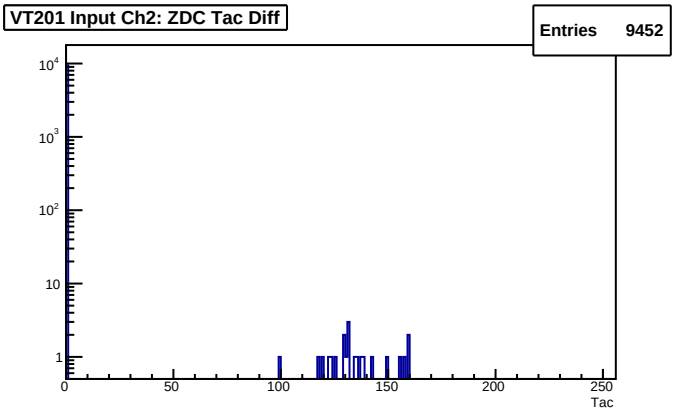

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

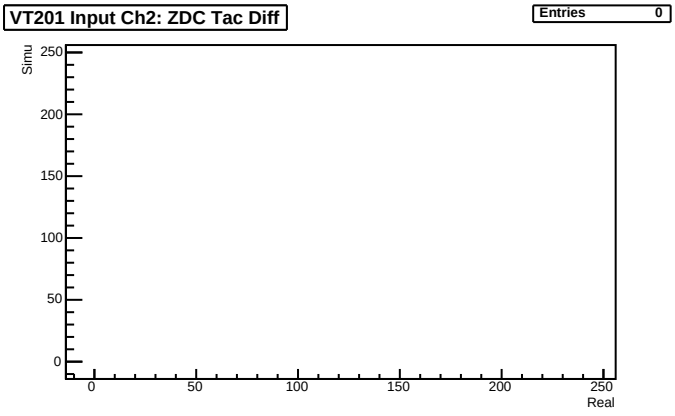

VT201 Input Ch1: EPD Tac Diff
Entries 9452
Tac

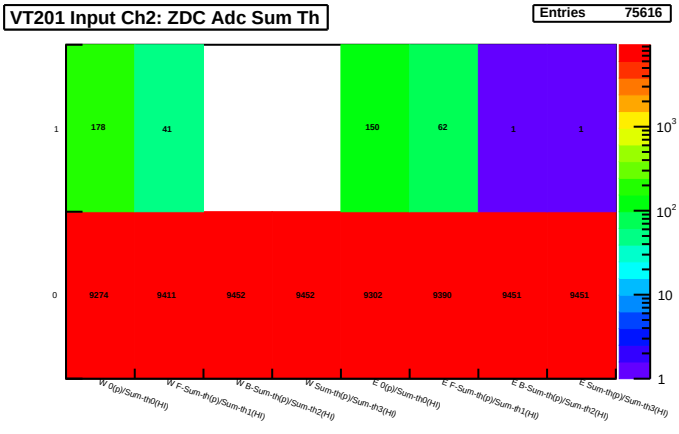

VT201 Input Ch1: EPD Tac Diff
Entries 0
Simu
Real

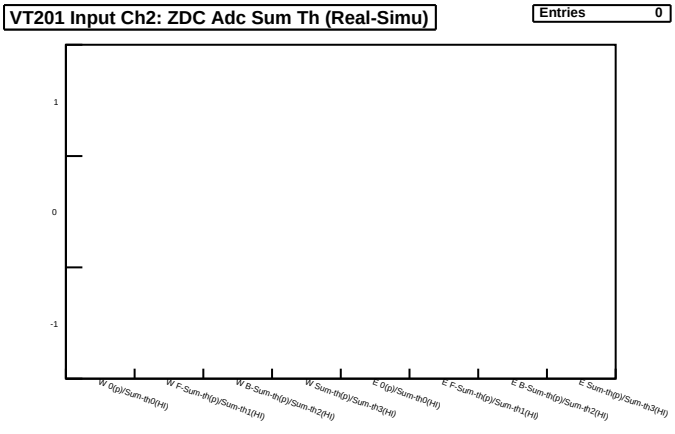

VT201 Input Ch1: EPD Hit Count Th
Entries 18904
9275
9244
177
208
East
West

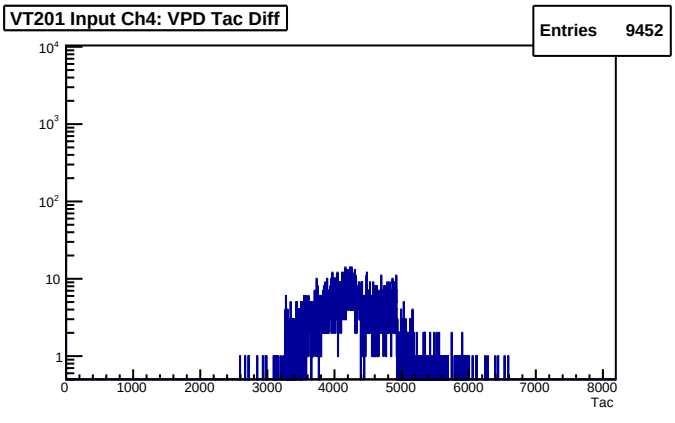

VT201 Input Ch1: EPD Hit Count Th (Real-Simu)
Entries 0
East
West

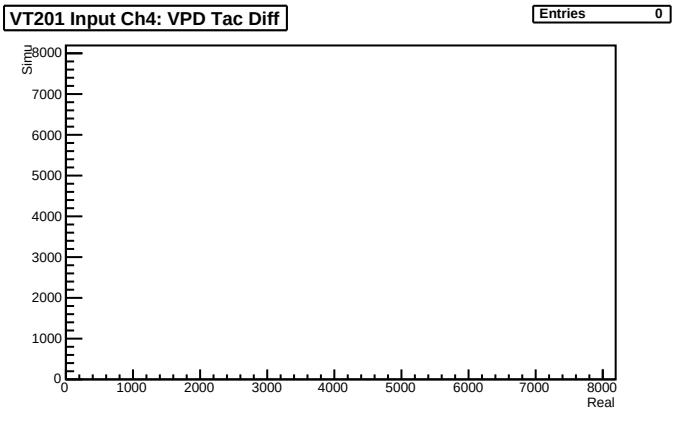

VT201 Input Ch2: ZDC Tac Diff
Entries 9452
Tac

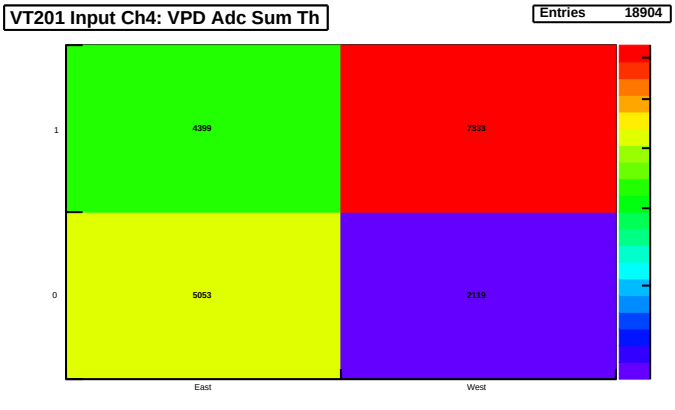

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

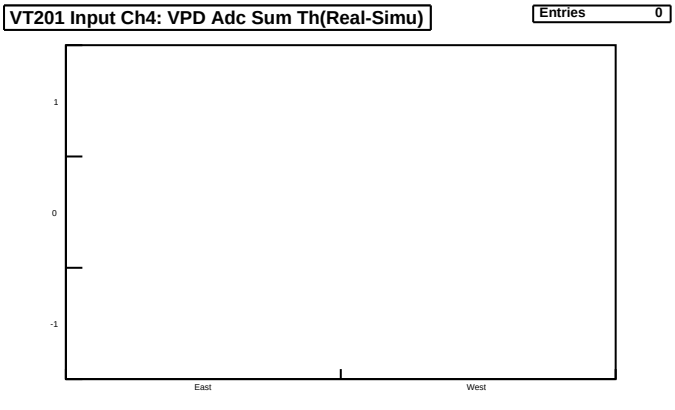

VT201 Input Ch2: ZDC Adc Sum Th
Entries 75616
178
41
150
62
1
1
9274
9411
9452
9452
9302
9390
9451
9451
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

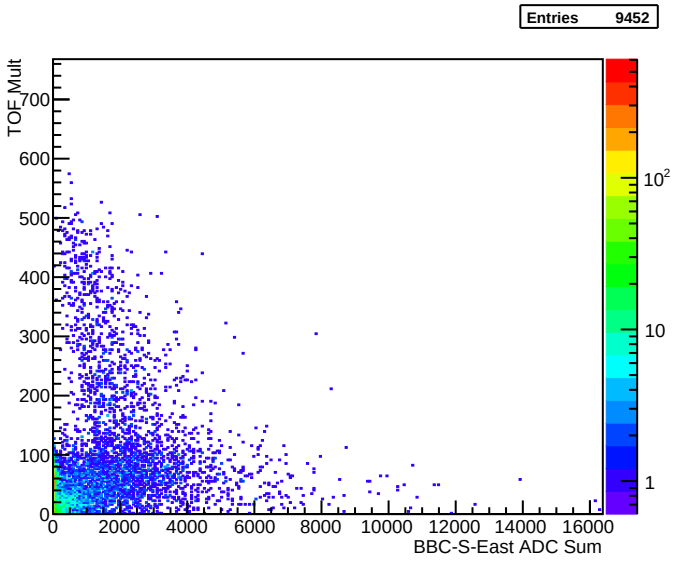

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

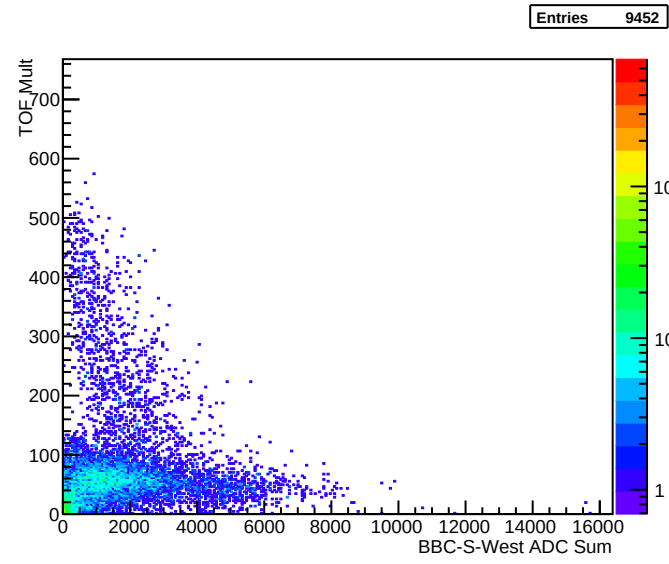

VT201 Input Ch4: VPD Tac Diff
Entries 9452
Tac

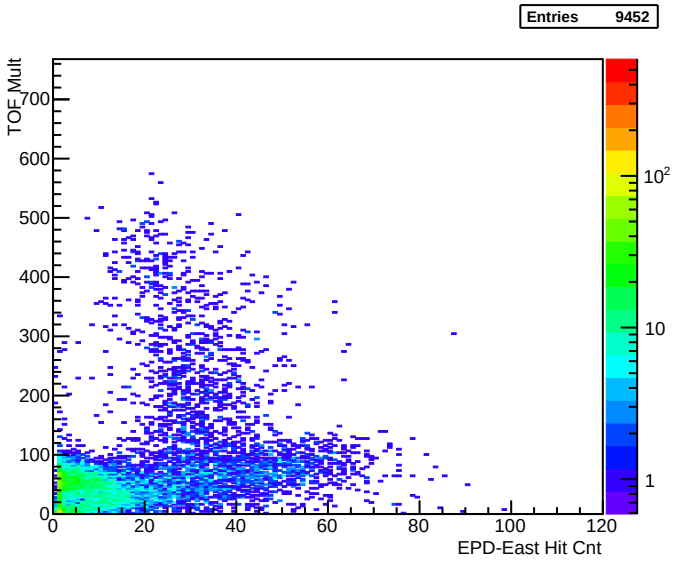

VT201 Input Ch4: VPD Tac Diff
Entries 0
Simu
Real

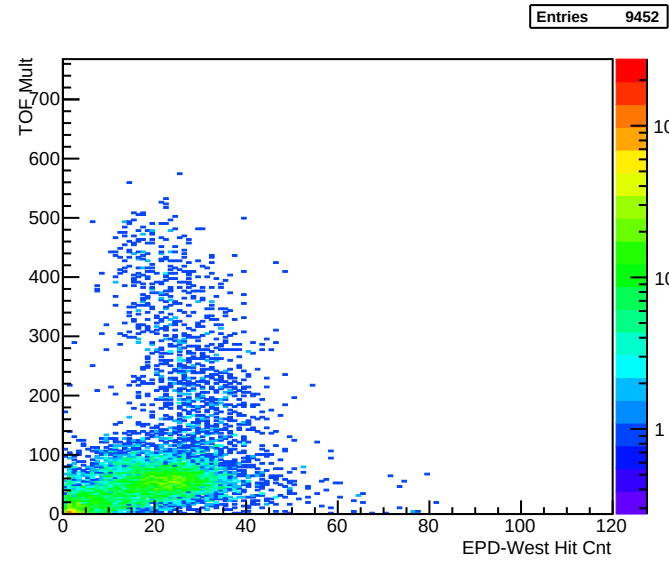

VT201 Input Ch4: VPD Adc Sum Th
Entries 18904
4399
7333
5053
2119
East
West

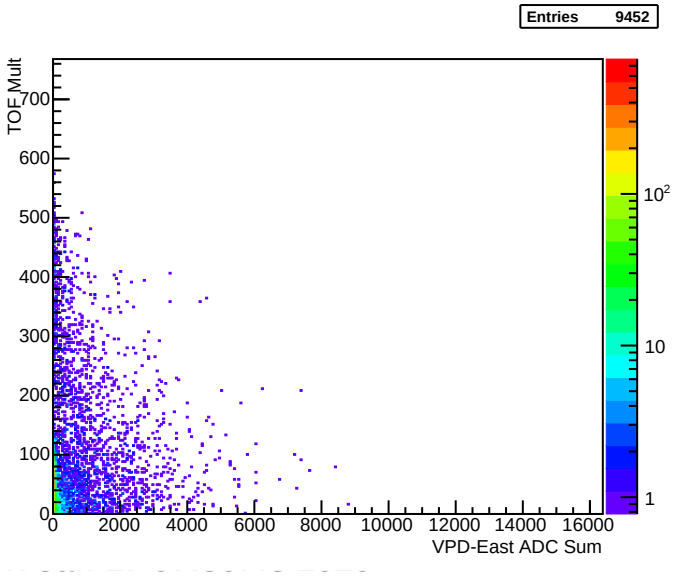

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 0
East
West

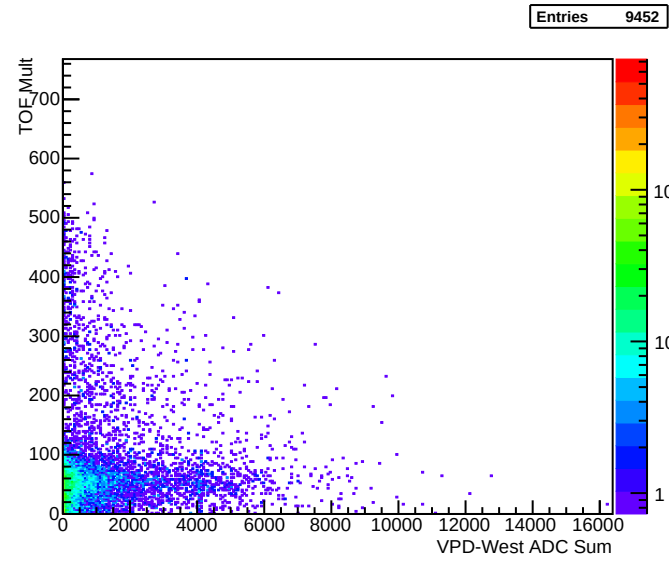

Entries 9452
TOF_Mult
BBC-S-East ADC Sum

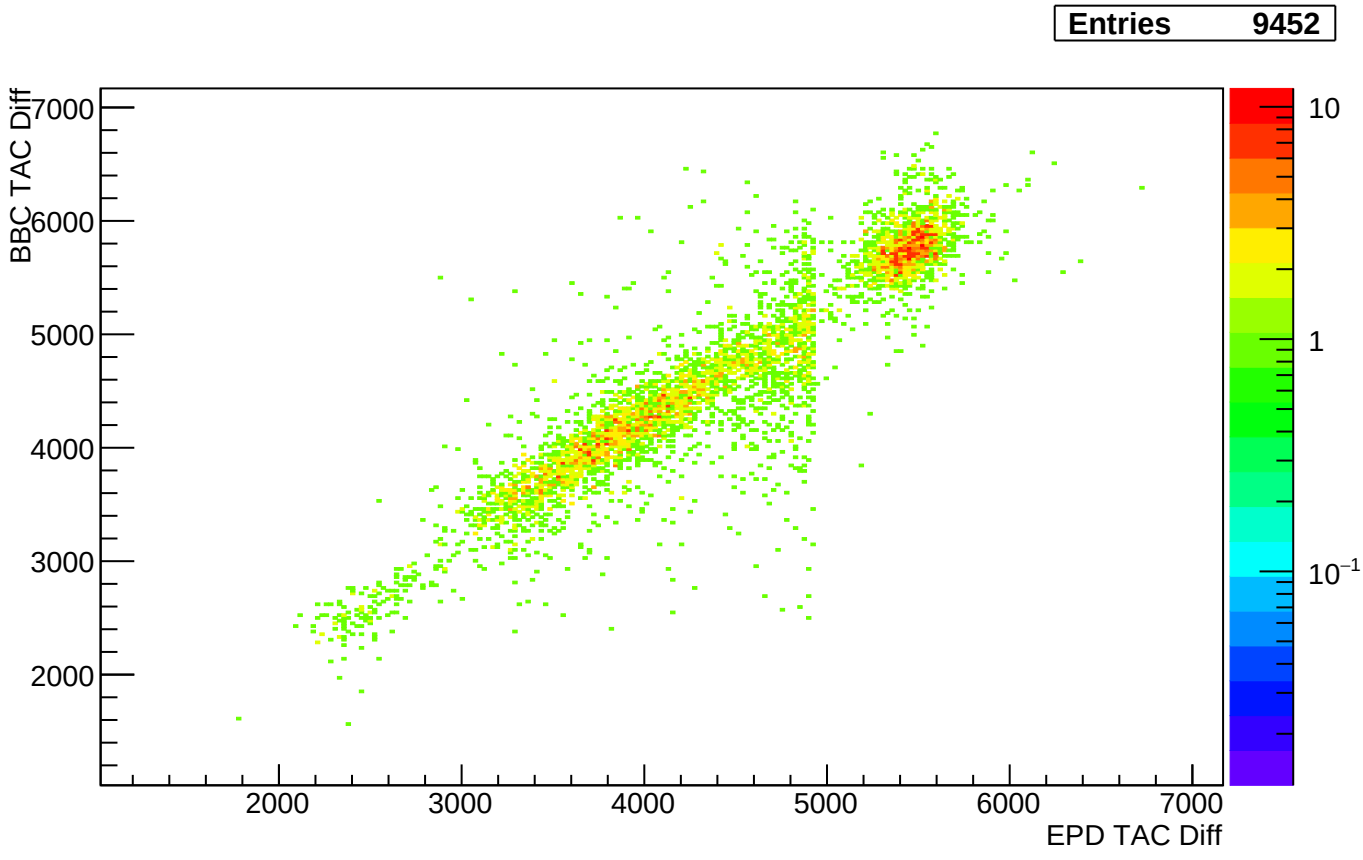

Entries 9452
TOF_Mult
BBC-S-West ADC Sum

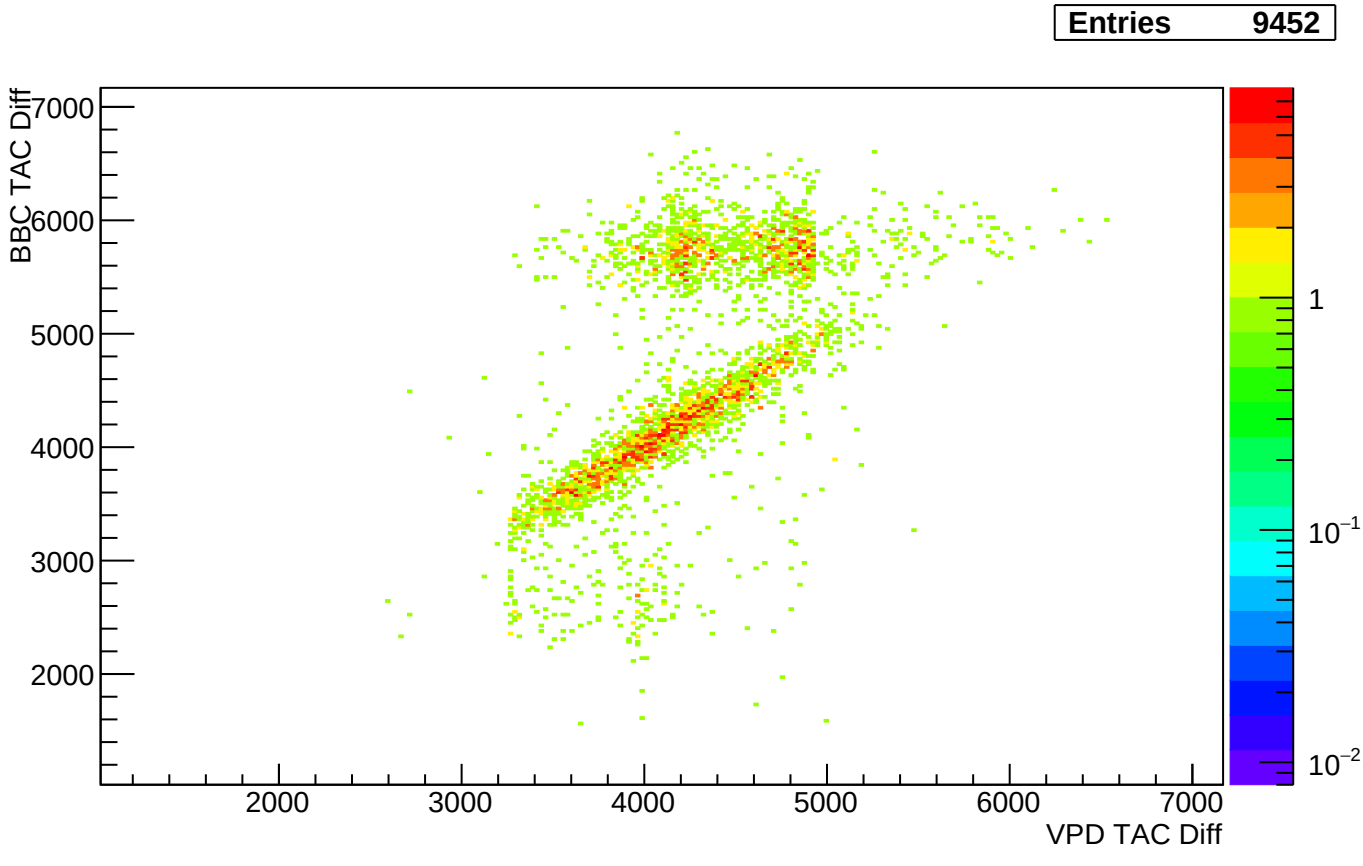

Entries 9452
TOF_Mult
EPD-East Hit Cnt

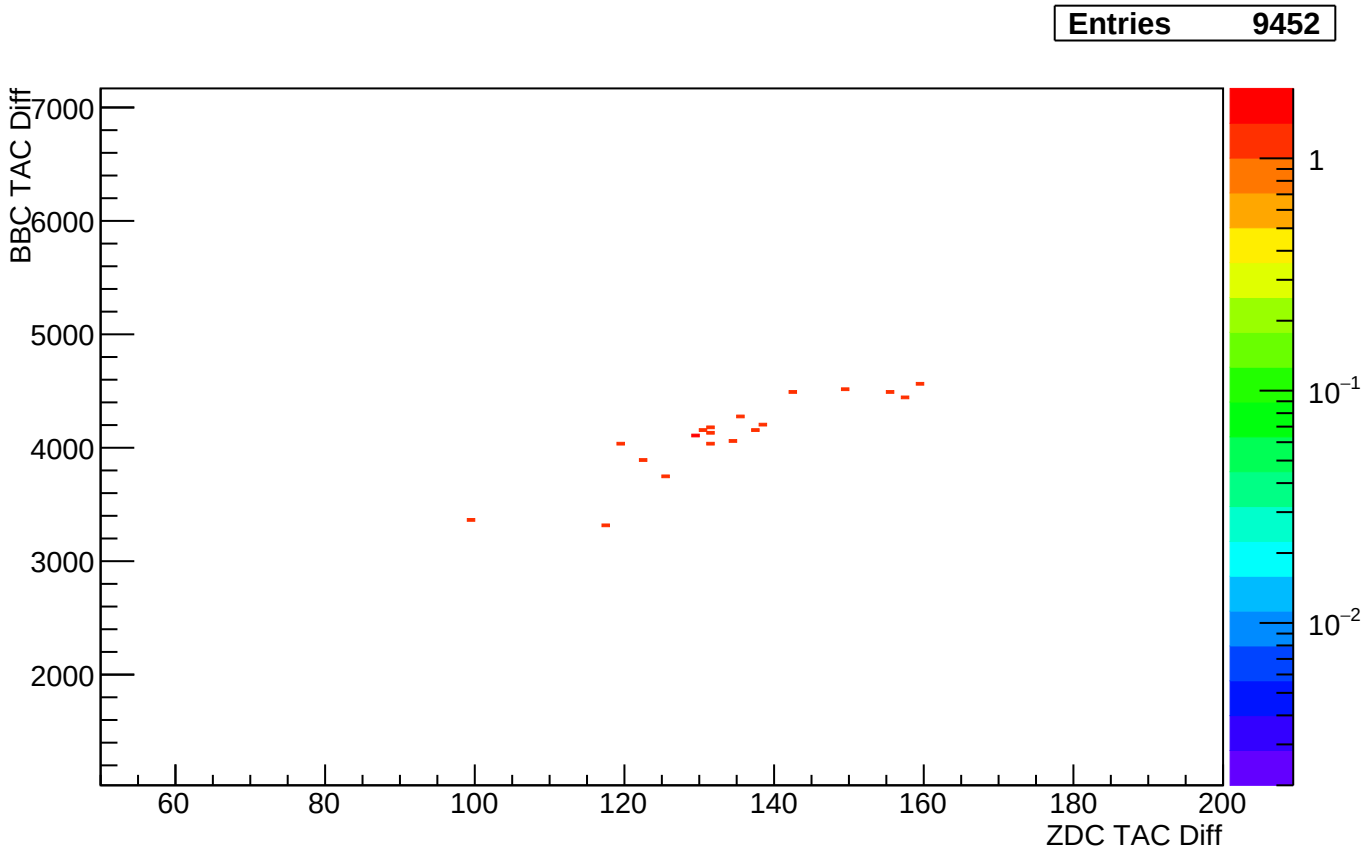

Entries 9452
TOF_Mult
EPD-West Hit Cnt

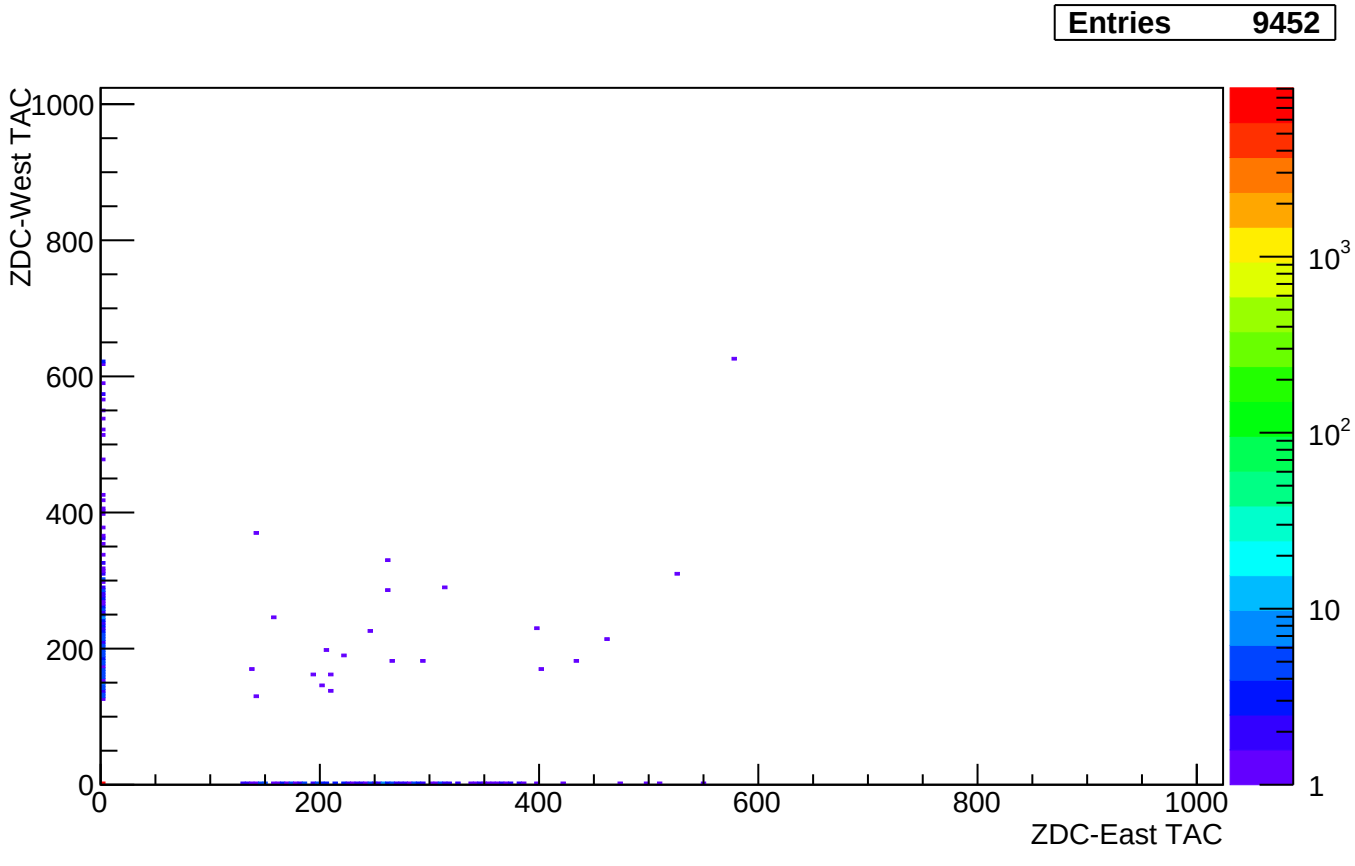

Entries 9452
TOF_Mult
VPD-East ADC Sum

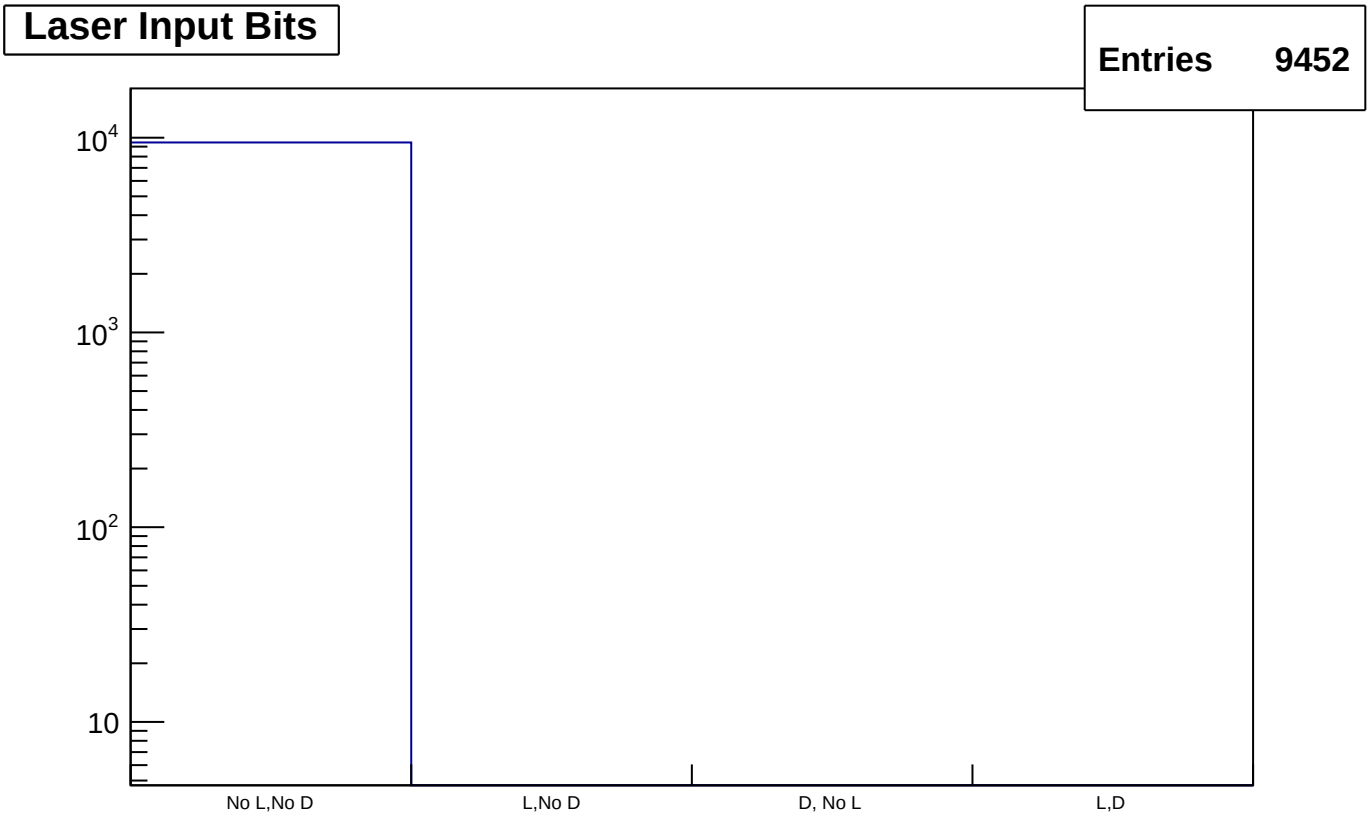

Entries 9452
TOF_Mult
VPD-West ADC Sum

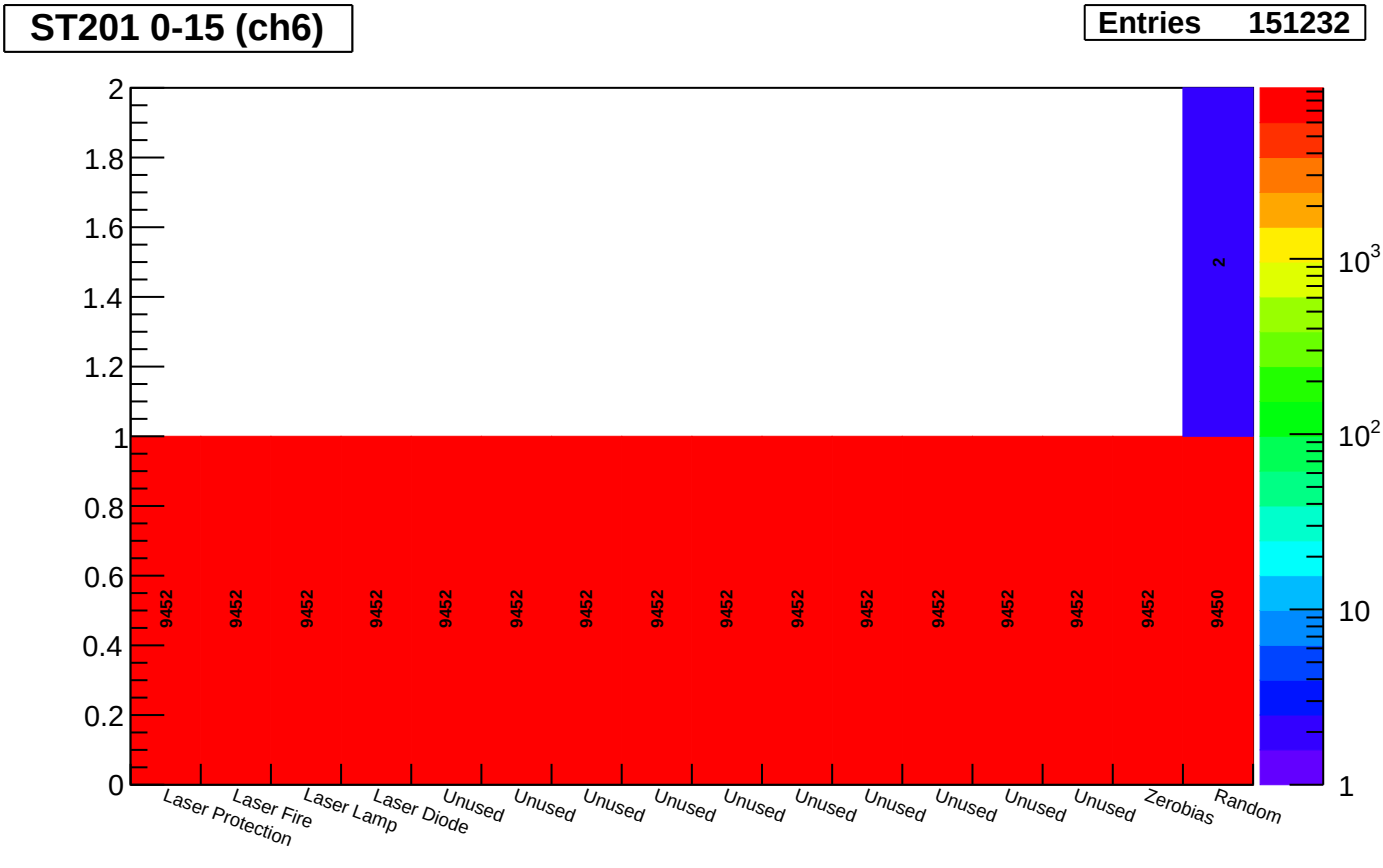

Entries 9452
BBC TAC Diff
7000
6000
5000
4000
3000
2000
2000
3000
4000
5000
6000
7000
EPD TAC Diff
10
1
10^{-1}

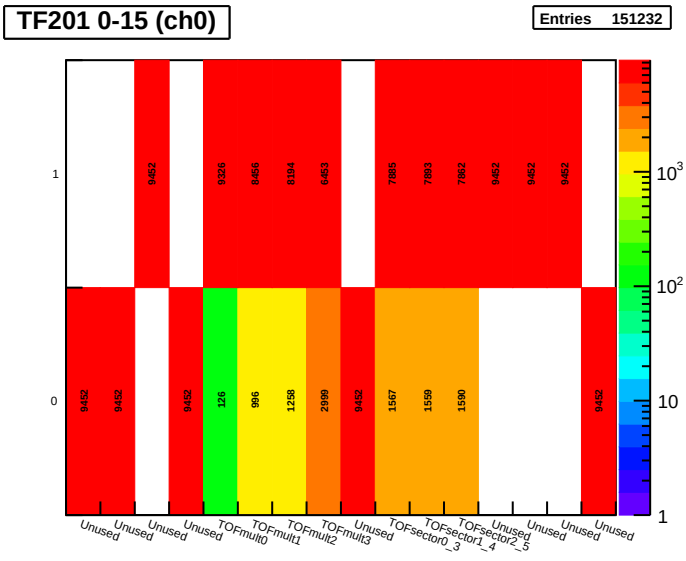

Entries 9452
BBC TAC Diff
7000
6000
5000
4000
3000
2000
2000
3000
4000
5000
6000
7000
VPD TAC Diff
1
10^{-1}
10^{-2}

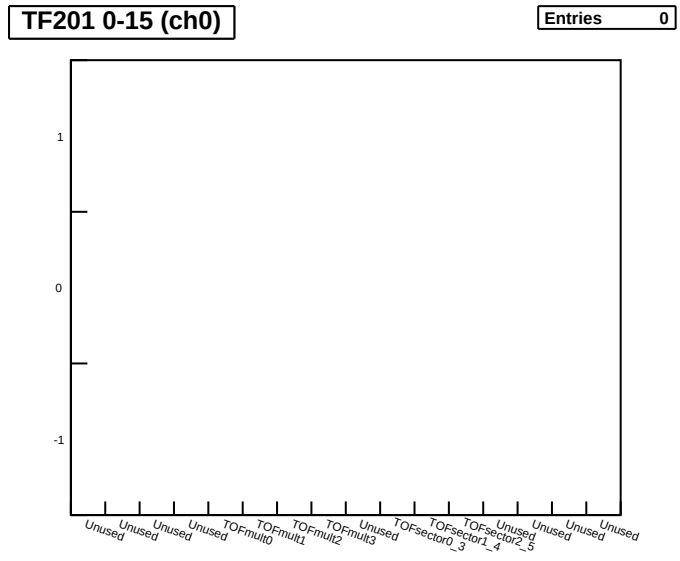

Entries 9452
BBC TAC Diff
7000
6000
5000
4000
3000
2000
60
80
100
120
140
160
180
200
ZDC TAC Diff
1
10^{-1}
10^{-2}

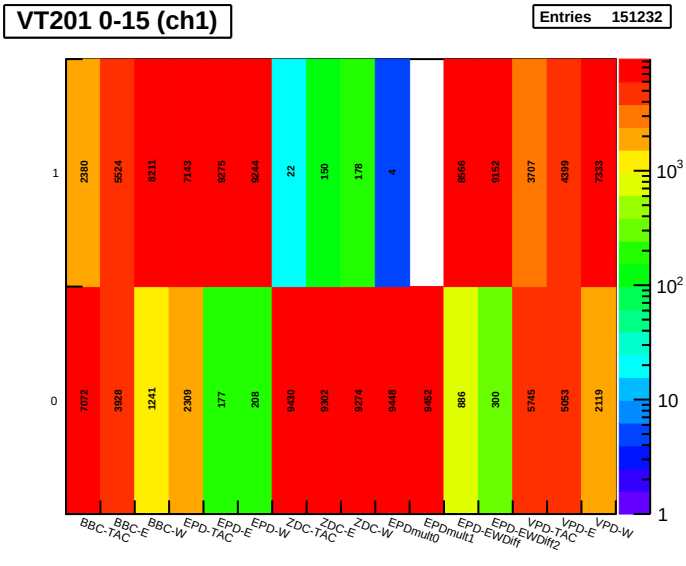

Entries 9452
ZDC-West TAC
1000
800
600
400
200
0
0
200
400
600
800
1000
ZDC-East TAC
10^3
10^2
10
1

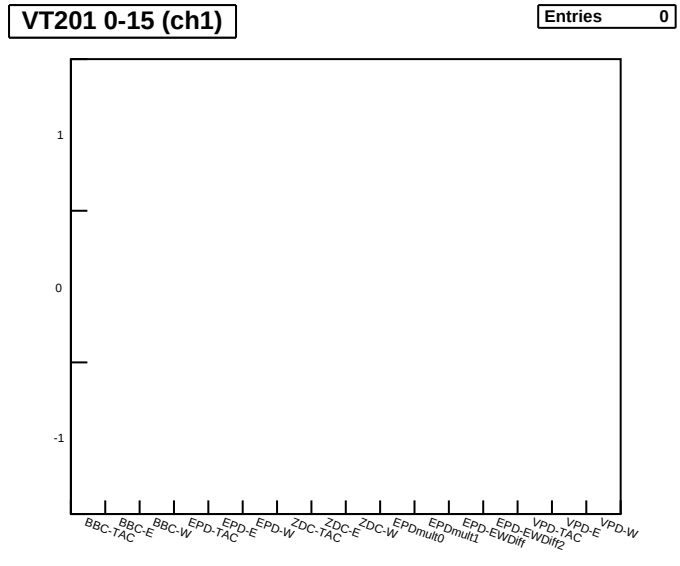

Laser Input Bits
Entries 9452
10^4
10^3
10^2
10
No L,No D
L,No D
D, No L
L,D

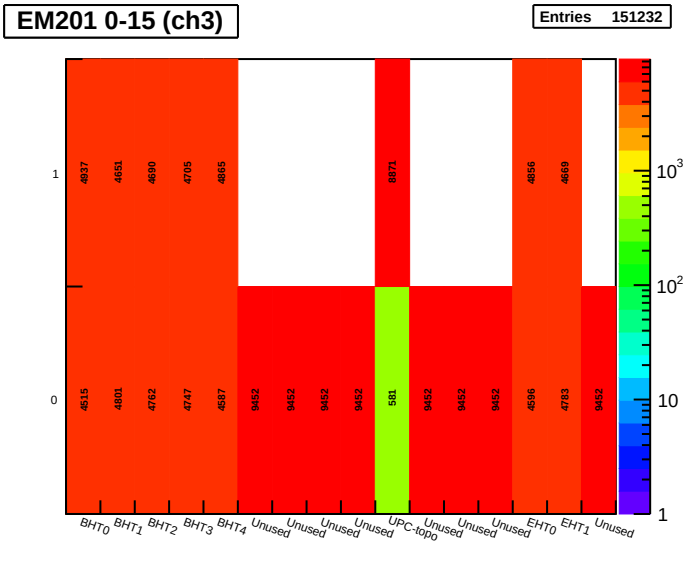

ST201 0-15 (ch6)
Entries 151232
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
9452
9450
2
10^3
10^2
10
1
Laser Protection
Laser Fire
Laser Lamp
Laser Diode
Unused
Zerobias
Random

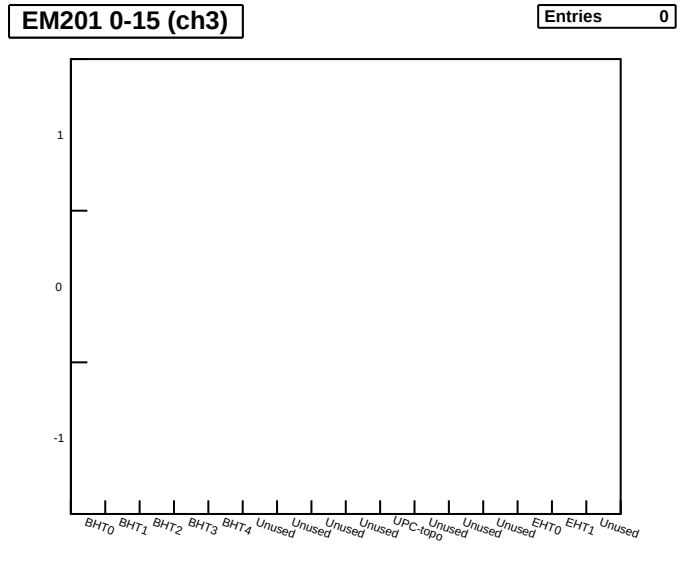

TF201 0-15 (ch0)
Entries 151232
1
0
9452 9326 8456 8194 6453 7885 7893 7862 9452 9452 9452
9452 9452 9452 126 966 1298 2999 9452 1567 1559 1590 9452
Unused Unused Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 Unused TOFsector0_3 TOFsector1_4 TOFsector2_5 Unused Unused Unused Unused
10^3
10^2
10
1


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 151232
1
0
2380 5524 8211 7143 9275 9244 22 150 178 4 8566 9152 3707 4399 7333
7072 3928 1241 2309 177 208 9430 9302 9274 9448 9452 886 300 5745 5063 2119
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 151232
1
0
4937 4651 4690 4705 4865 8871 4856 4669
4515 4801 4762 4747 4587 9452 9452 9452 9452 581 9452 9452 9452 4596 4783 9452
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