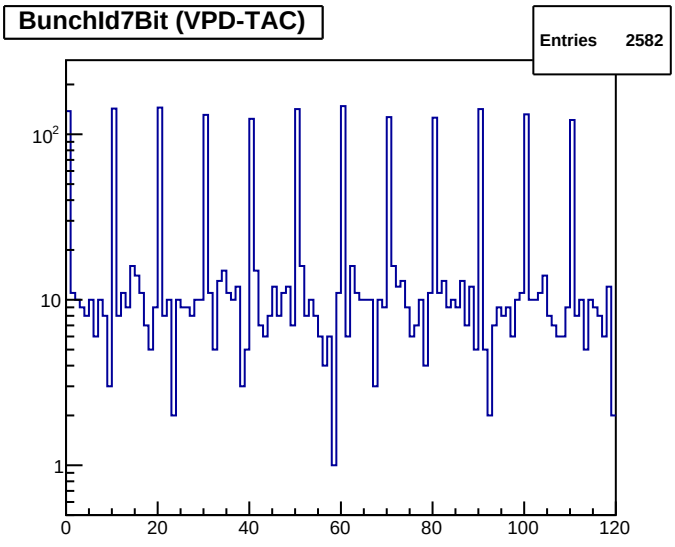
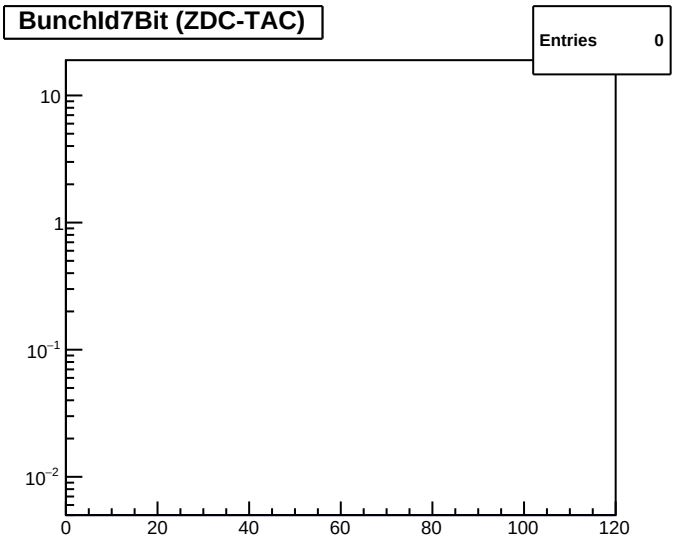
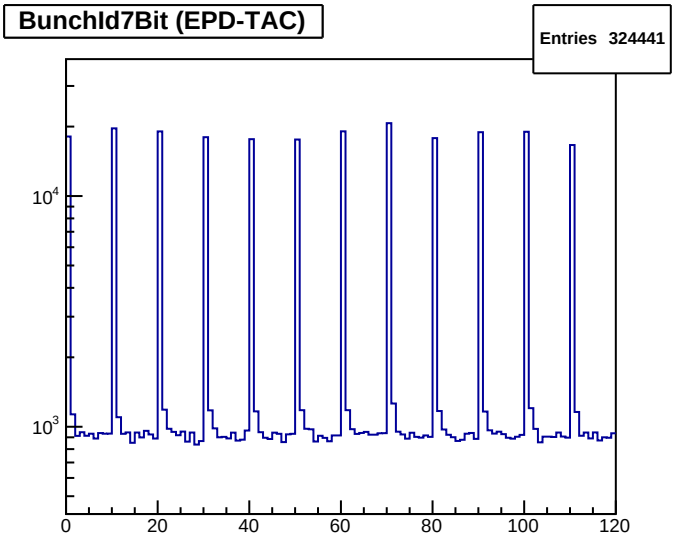
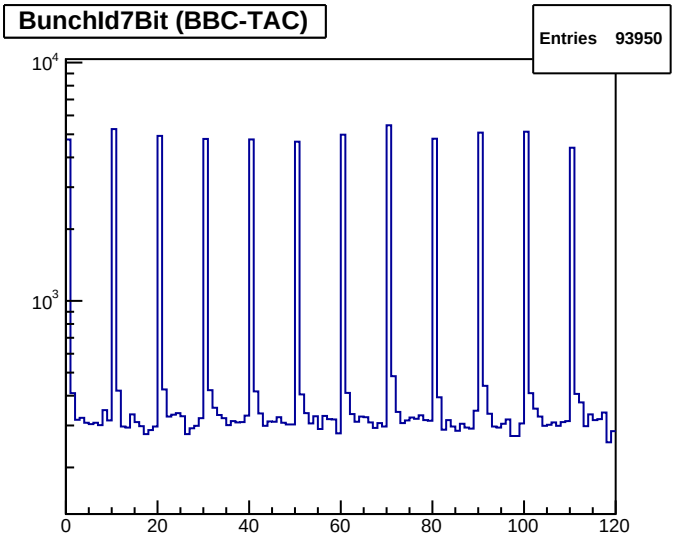
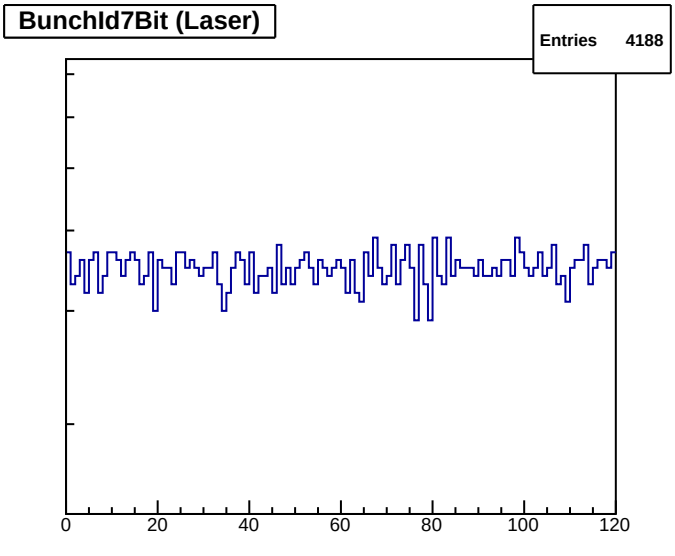
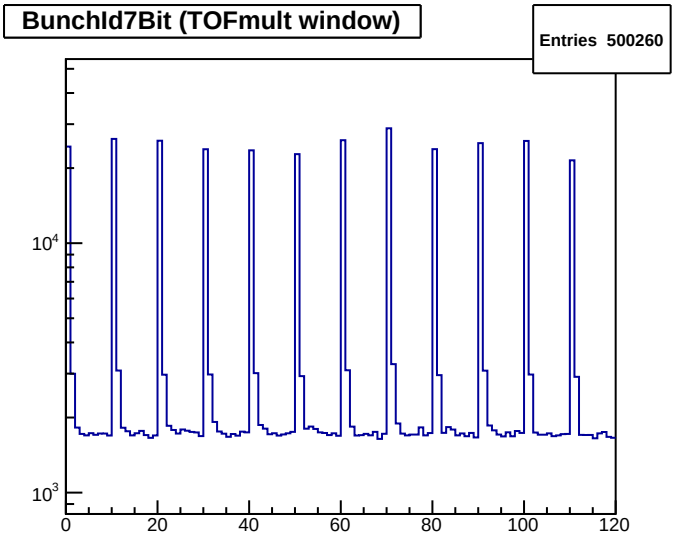

BunchId7Bit (VPD-TAC)
Entries 2582
10^2
10
1
0
20
40
60
80
100
120

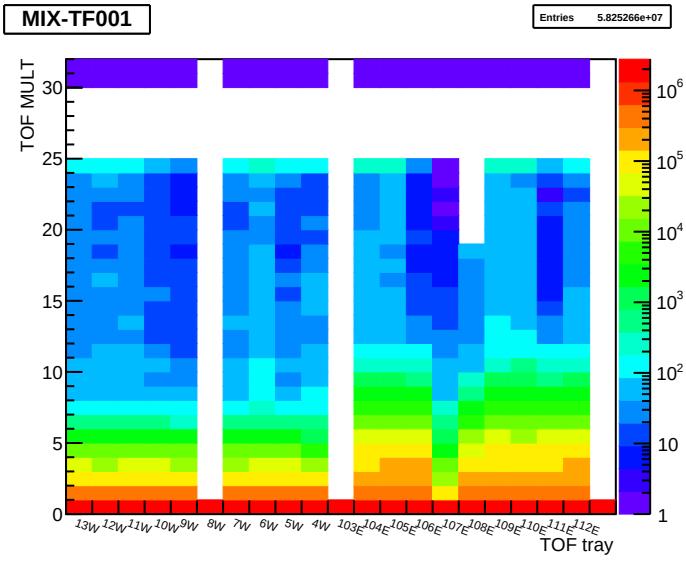

BunchId7Bit (ZDC-TAC)
Entries 0
10
1
10^{-1}
10^{-2}
0
20
40
60
80
100
120

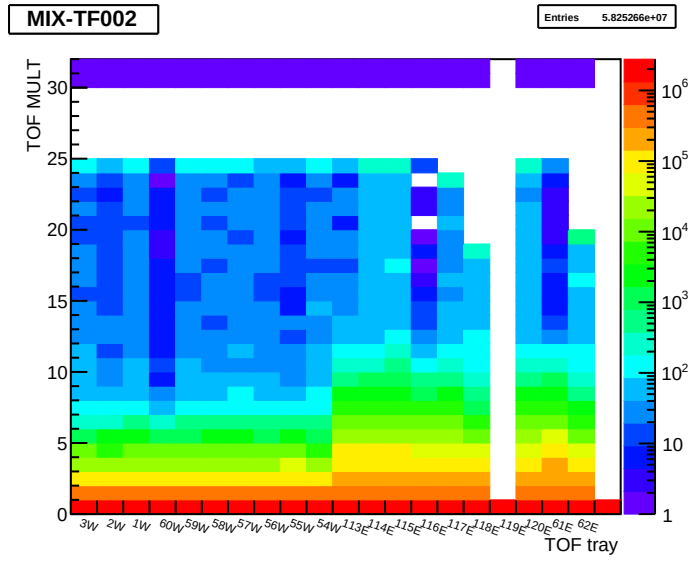

BunchId7Bit (EPD-TAC)
Entries 324441
10^4
10^3
0
20
40
60
80
100
120

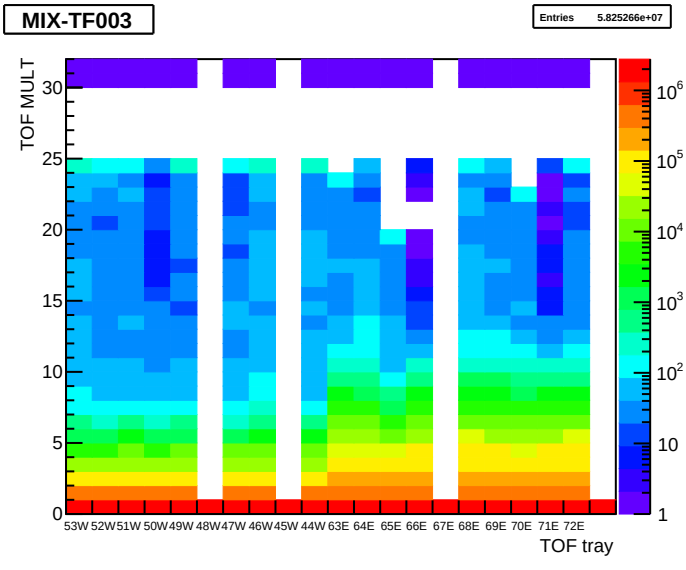

BunchId7Bit (BBC-TAC)
Entries 93950
10^4
10^3
0
20
40
60
80
100
120

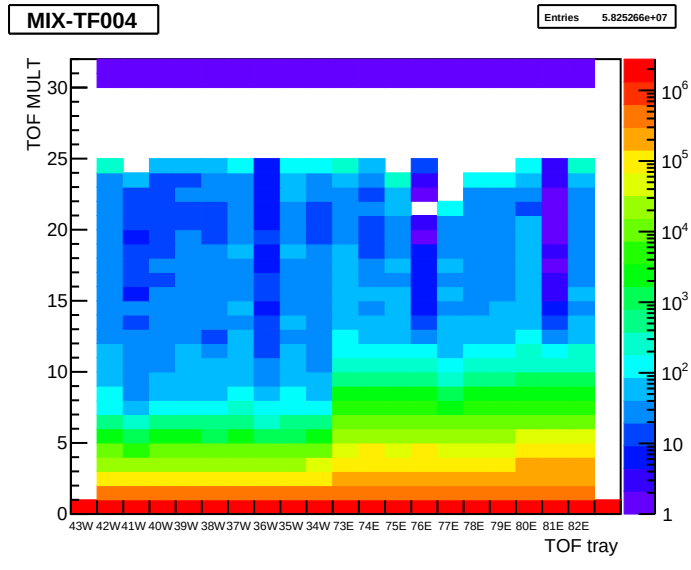

BunchId7Bit (Laser)
Entries 4188
0
20
40
60
80
100
120

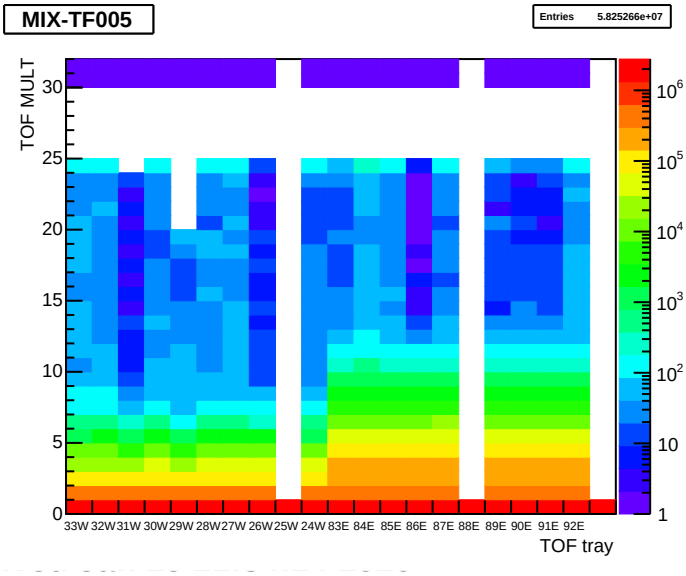

BunchId7Bit (TOFmult window)
Entries 500260
10^4
10^3
0
20
40
60
80
100
120

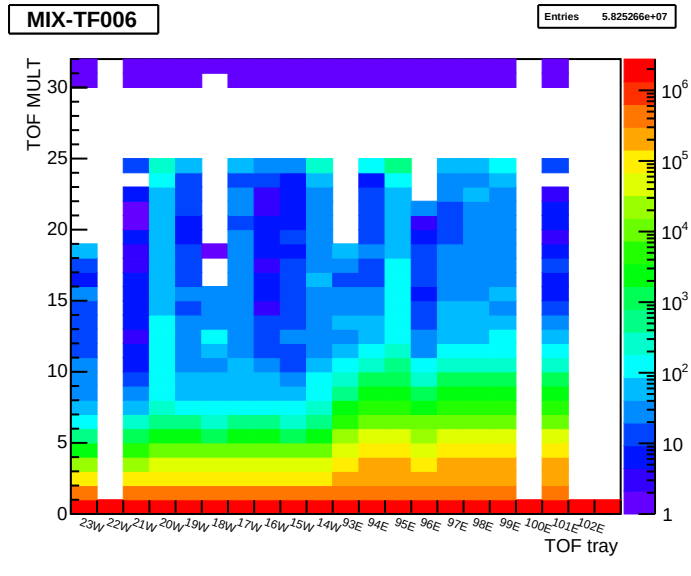

MIX-TF001
Entries 5.825266e+07
TOF MULT
TOF tray

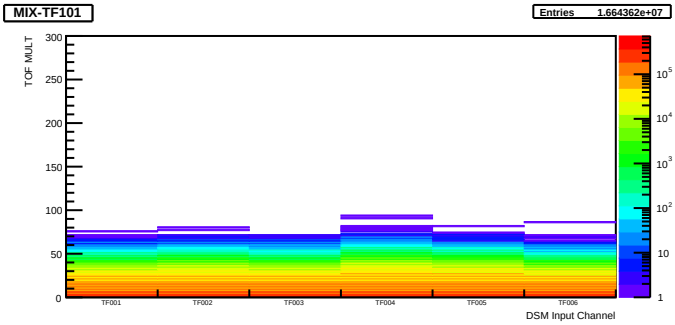

MIX-TF002
Entries 5.825266e+07
TOF MULT
TOF tray

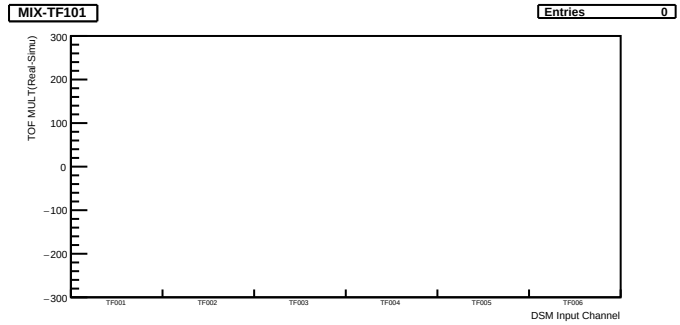

MIX-TF003
Entries 5.825266e+07
TOF MULT
TOF tray

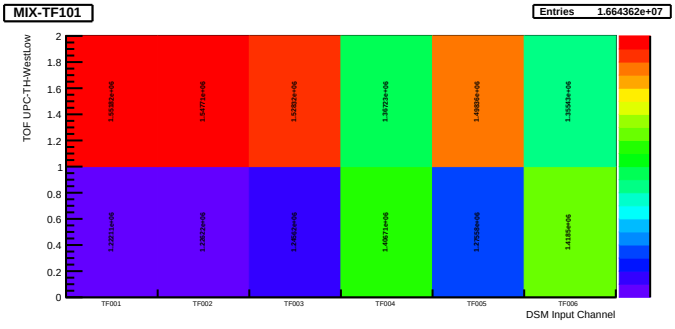

MIX-TF004
Entries 5.825266e+07
TOF MULT
TOF tray

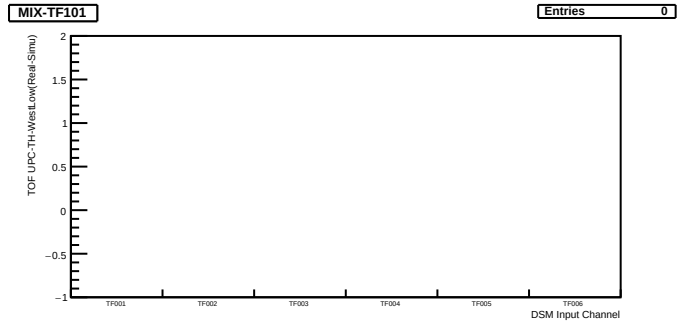

MIX-TF005
Entries 5.825266e+07
TOF MULT
TOF tray

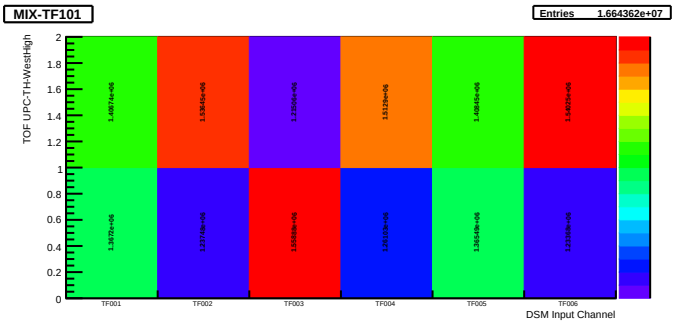

MIX-TF006
Entries 5.825266e+07
TOF MULT
TOF tray

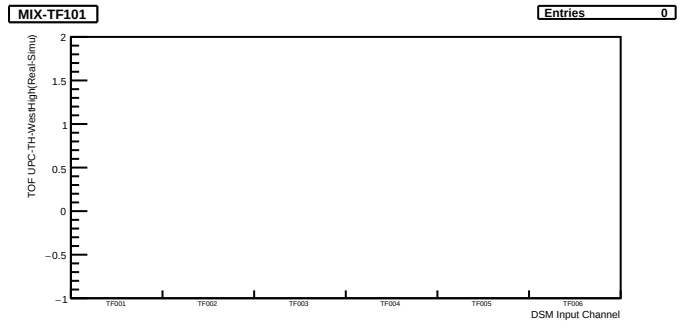

MIX-TF101
Entries 1.664362e+07
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

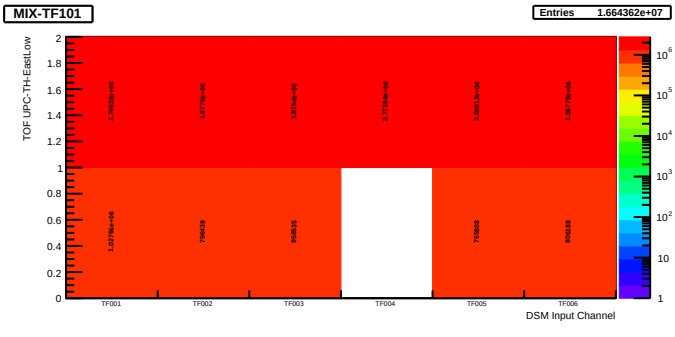

MIX-TF101
Entries 0
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

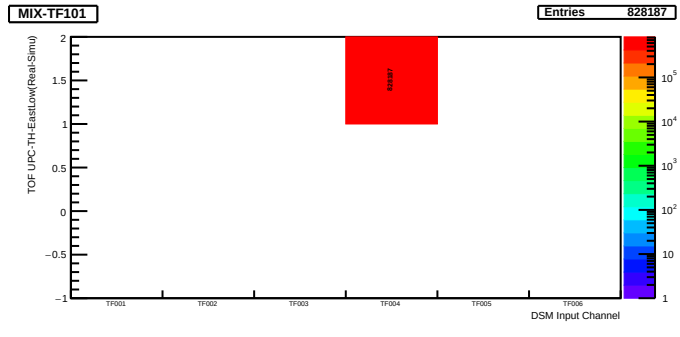

MIX-TF101
Entries 1.664362e+07
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

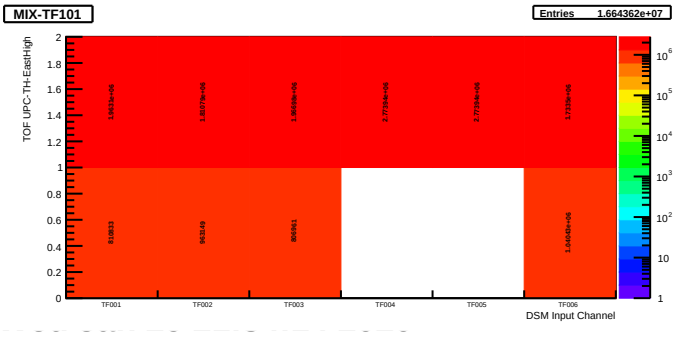

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

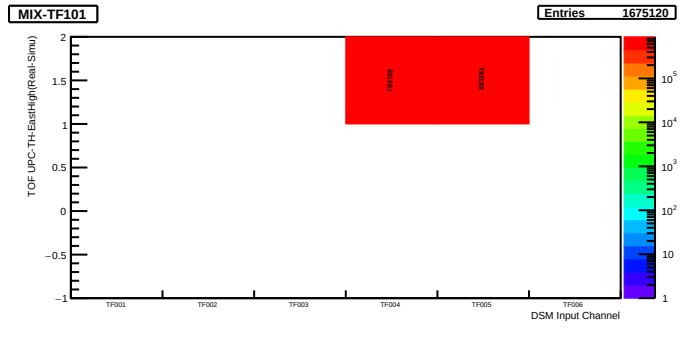

MIX-TF101
Entries 1.664362e+07
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

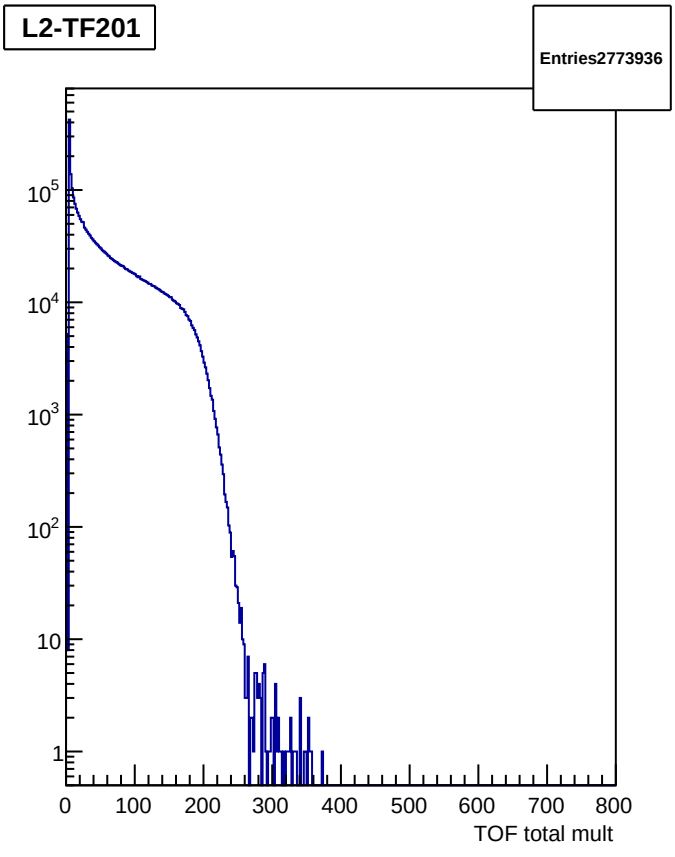

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

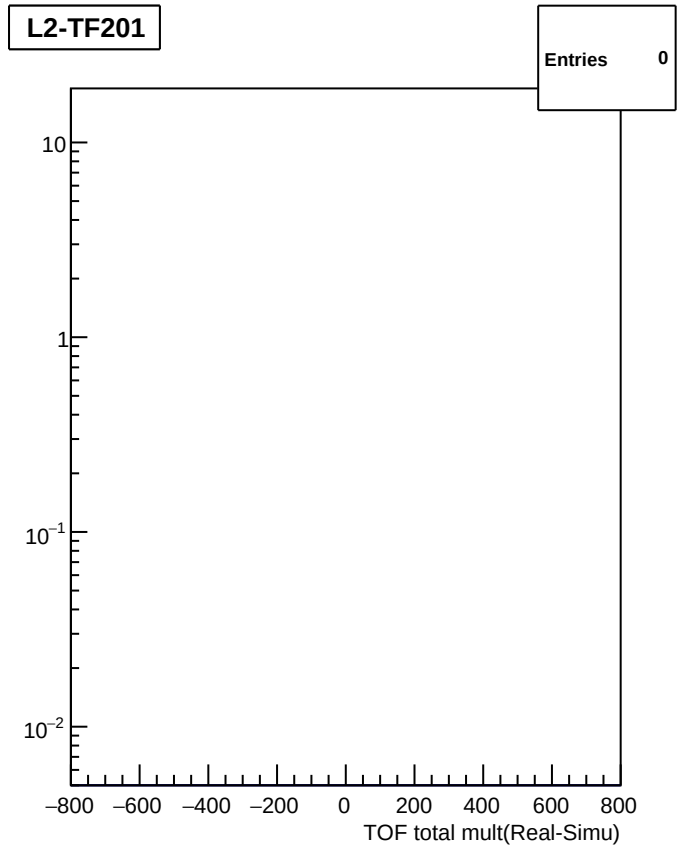

MIX-TF101
Entries 1.664362e+07
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

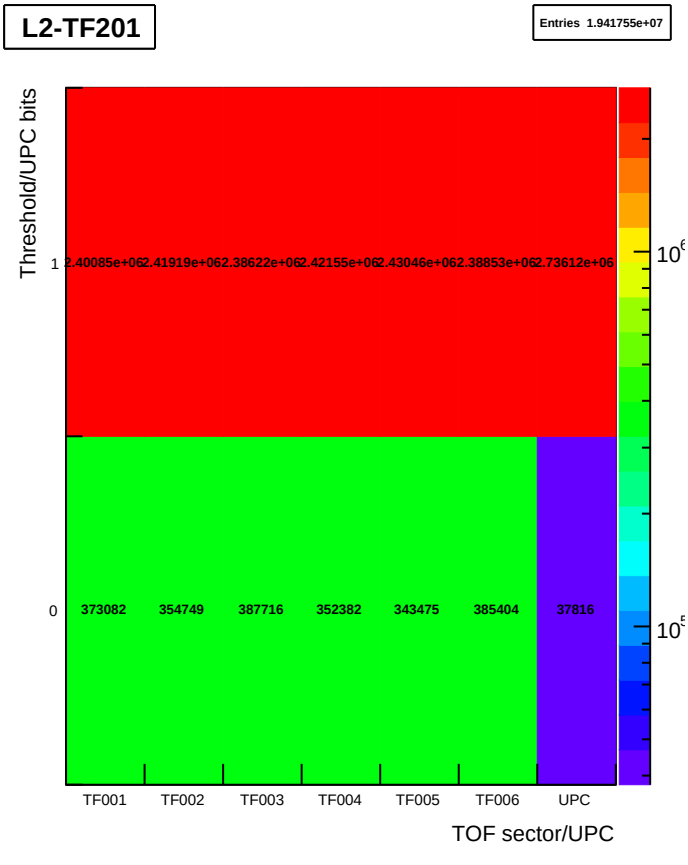

MIX-TF101
Entries 828187
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

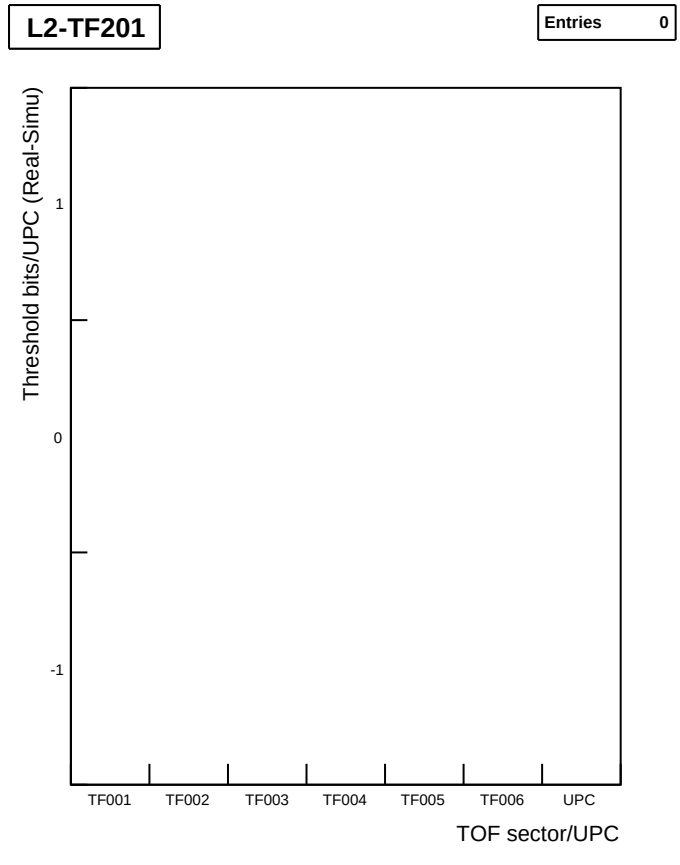

MIX-TF101
Entries 1.664362e+07
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

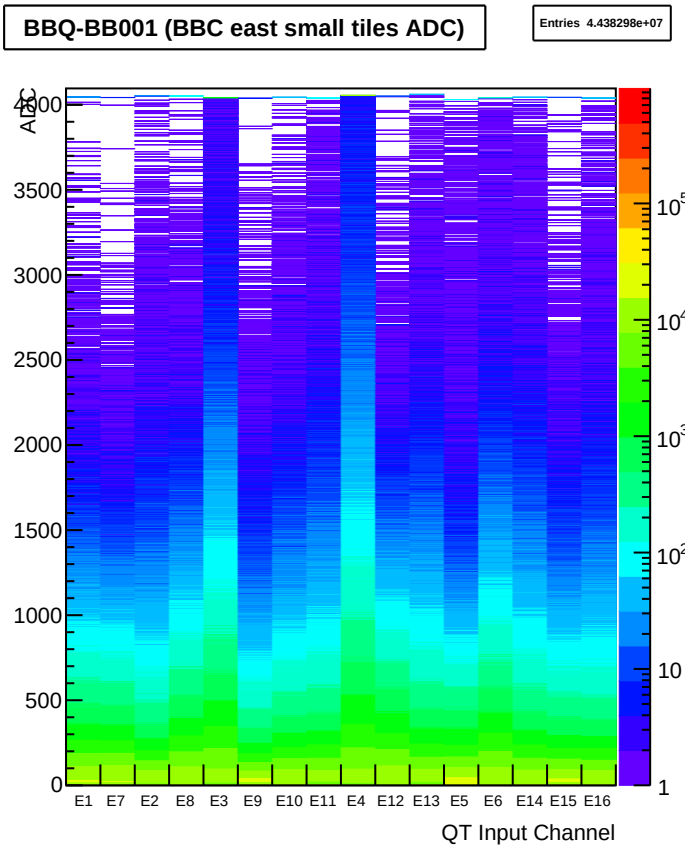

MIX-TF101
Entries 1675120
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

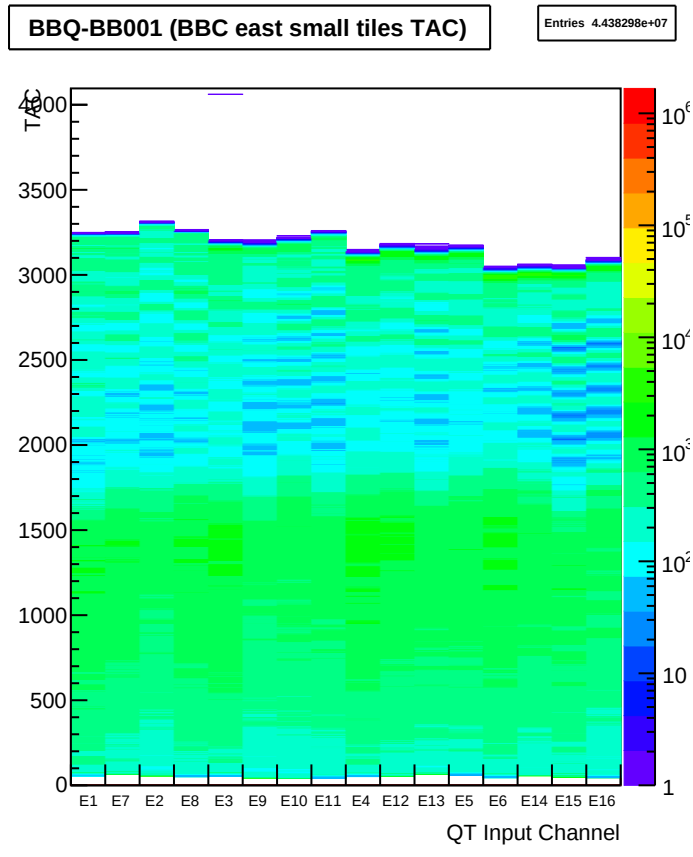

L2-TF201
Entries2773936
TOF total mult

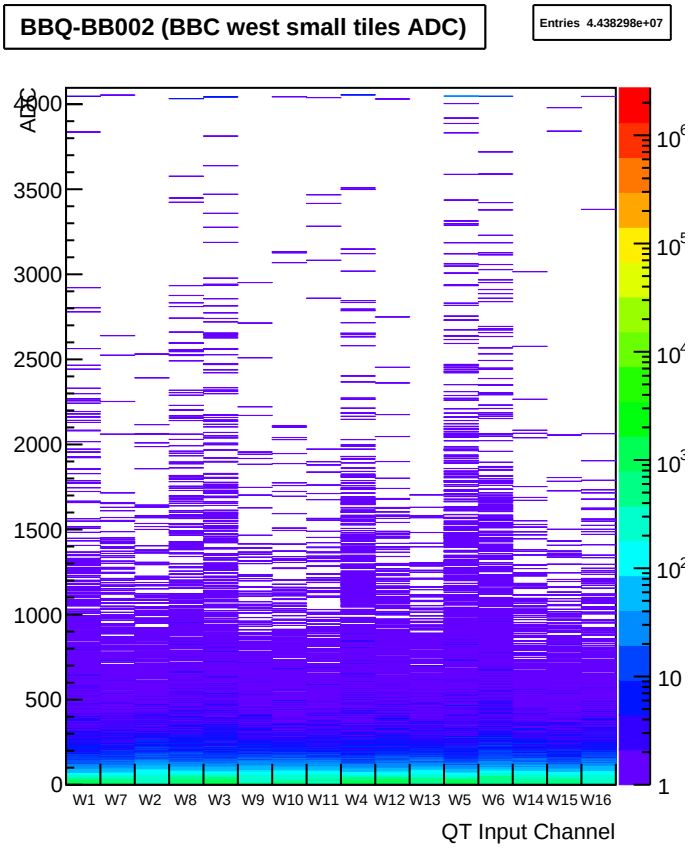

L2-TF201
Entries 0
TOF total mult(Real-Simu)

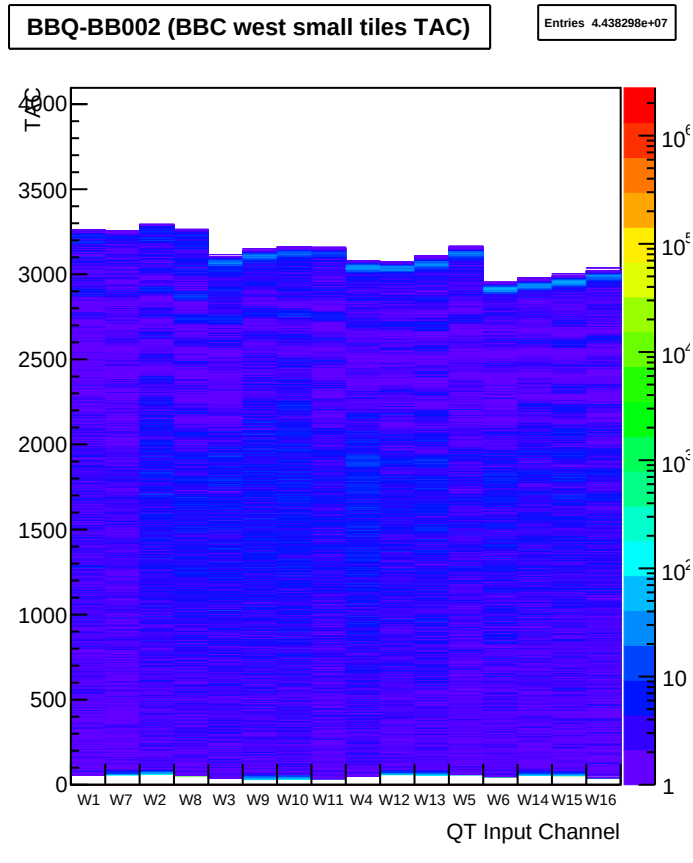

L2-TF201
Entries 1.941755e+07
Threshold/UPC bits
2.40085e+06
2.41919e+06
2.38622e+06
2.42155e+06
2.43046e+06
2.38853e+06
2.73612e+06
373082
354749
387716
352382
343475
385404
37816
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC

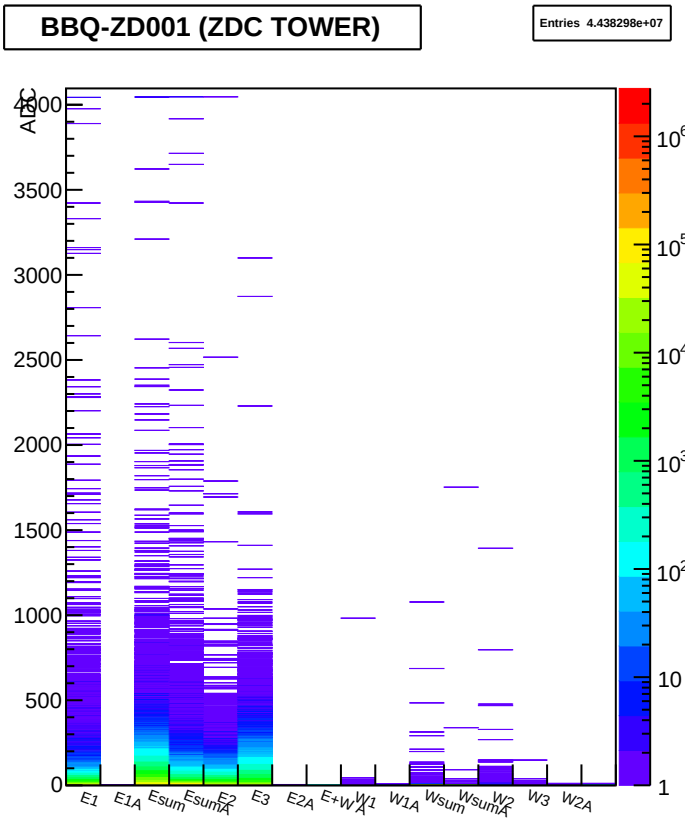

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC

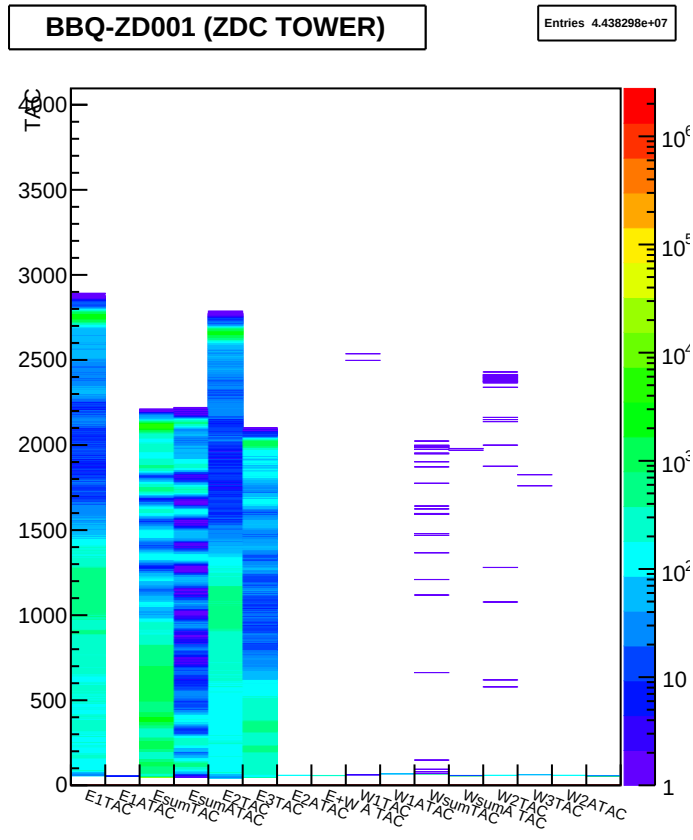

BBQ-BB001 (BBC east small tiles ADC)
Entries 4.438298e+07
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

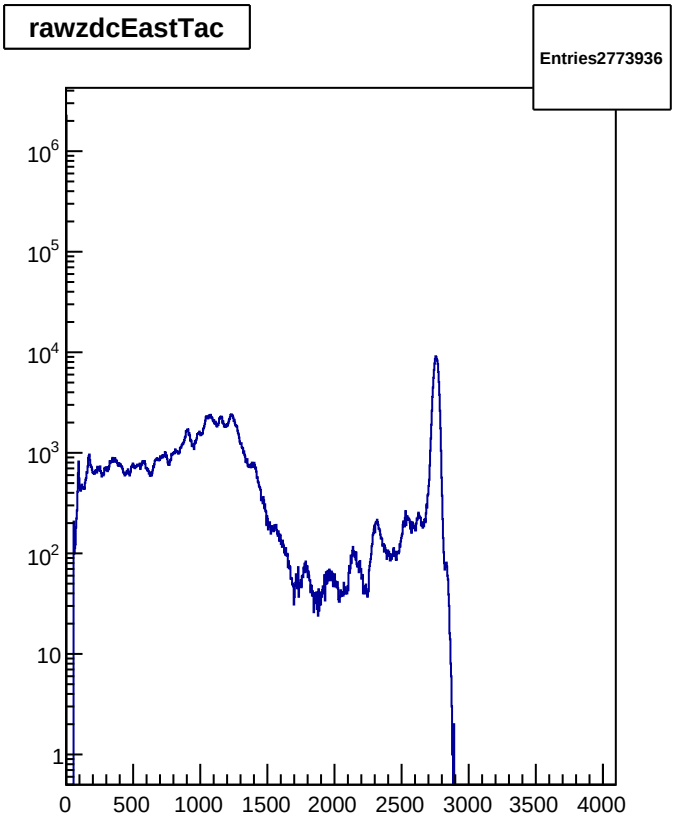

BBQ-BB001 (BBC east small tiles TAC)
Entries 4.438298e+07
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

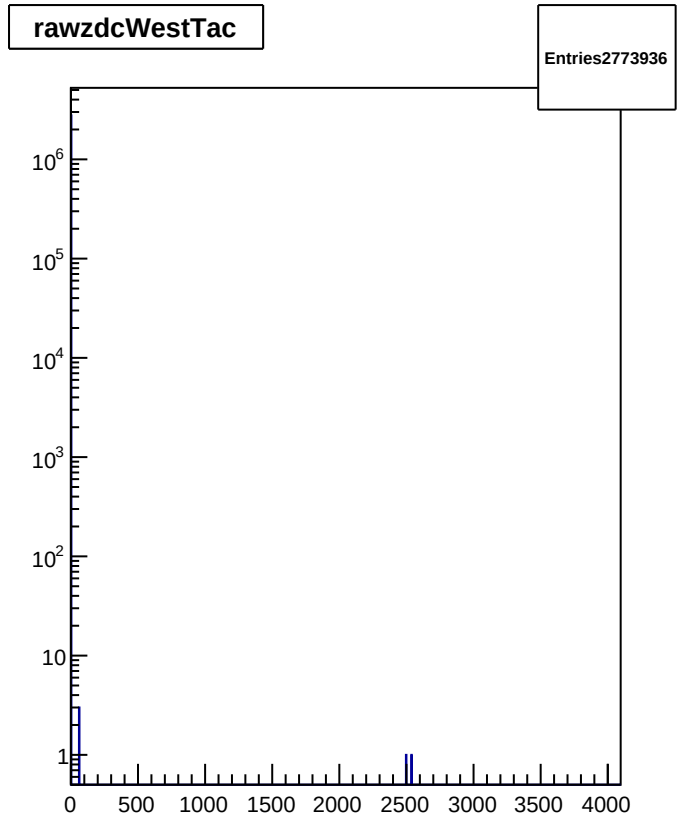

BBQ-BB002 (BBC west small tiles ADC)
Entries 4.438298e+07
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

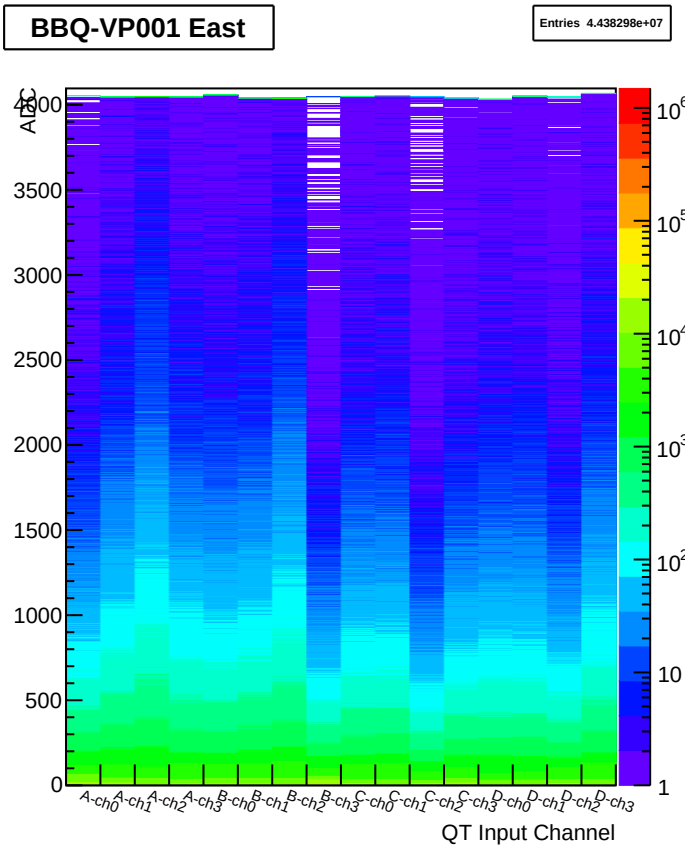

BBQ-BB002 (BBC west small tiles TAC)
Entries 4.438298e+07
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

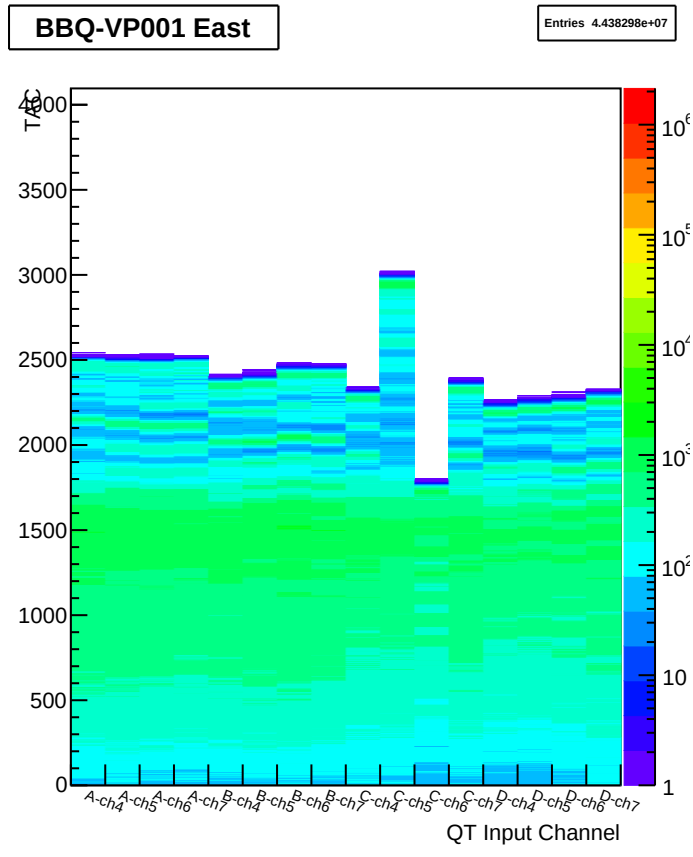

BBQ-ZD001 (ZDC TOWER)
Entries 4.438298e+07
ADC
E1
E1A
Esum
EsumA
E2
E3
E2A
E+W A
W1
W1A
Wsum
WsumA
W2
W3
W2A

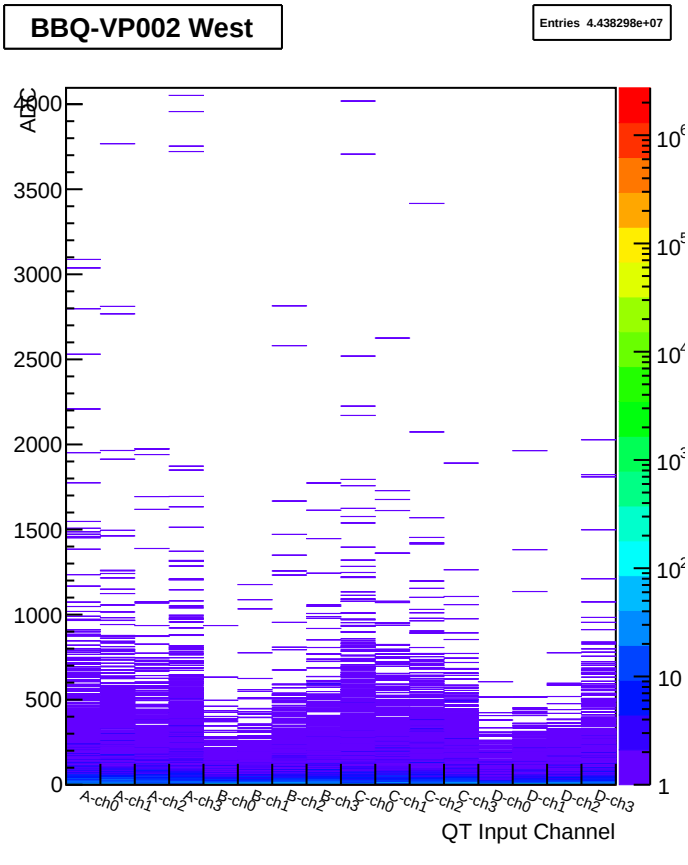

BBQ-ZD001 (ZDC TOWER)
Entries 4.438298e+07
TAC
E1TAC
E1ATAC
EsumTAC
EsumATAC
E2TAC
E3TAC
E2ATAC
E+W A TAC
W1TAC
W1ATAC
WsumTAC
WsumA TAC
W2TAC
W3TAC
W2ATAC

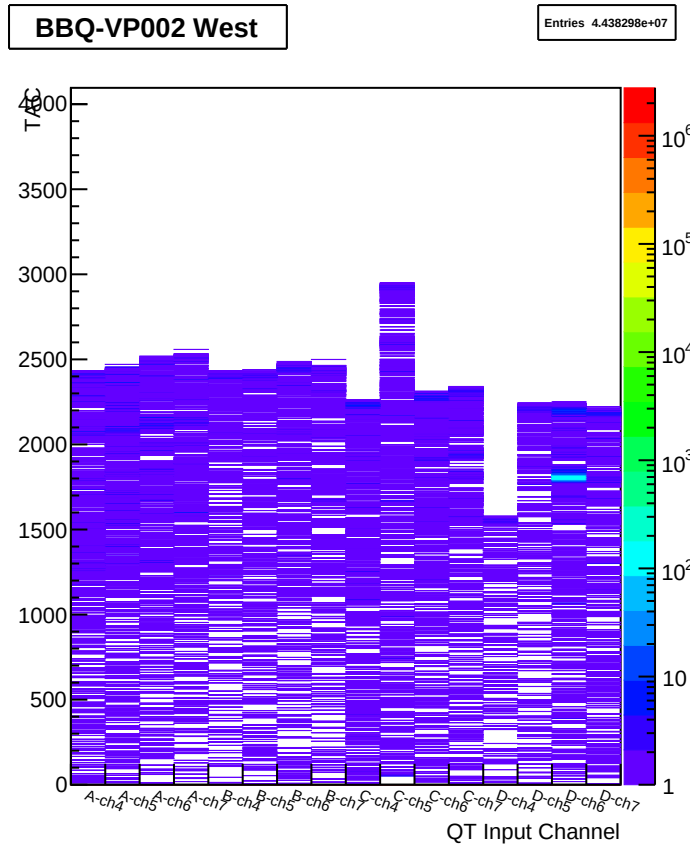

rawzdcEastTac
Entries2773936

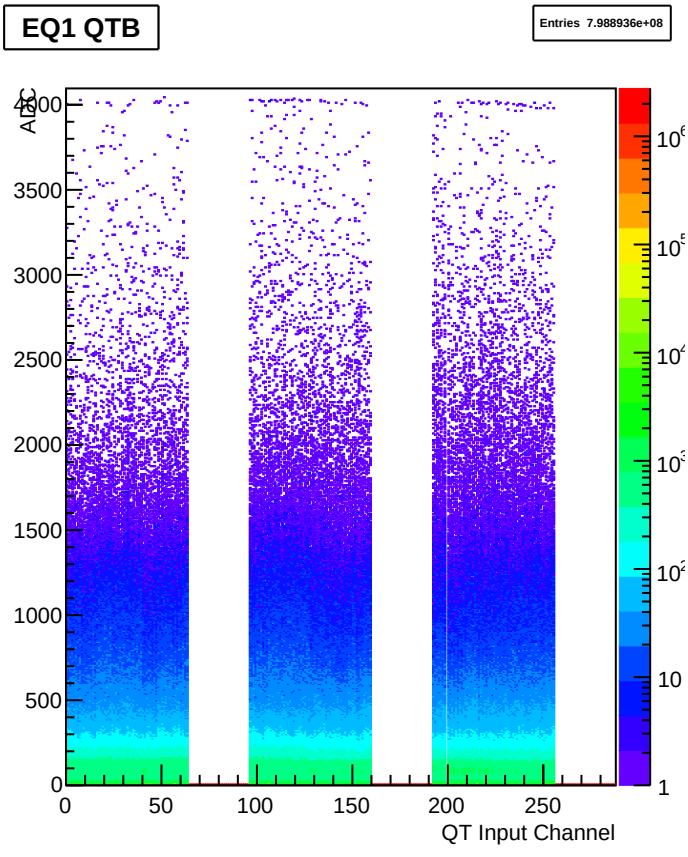

rawzdcWestTac
Entries2773936

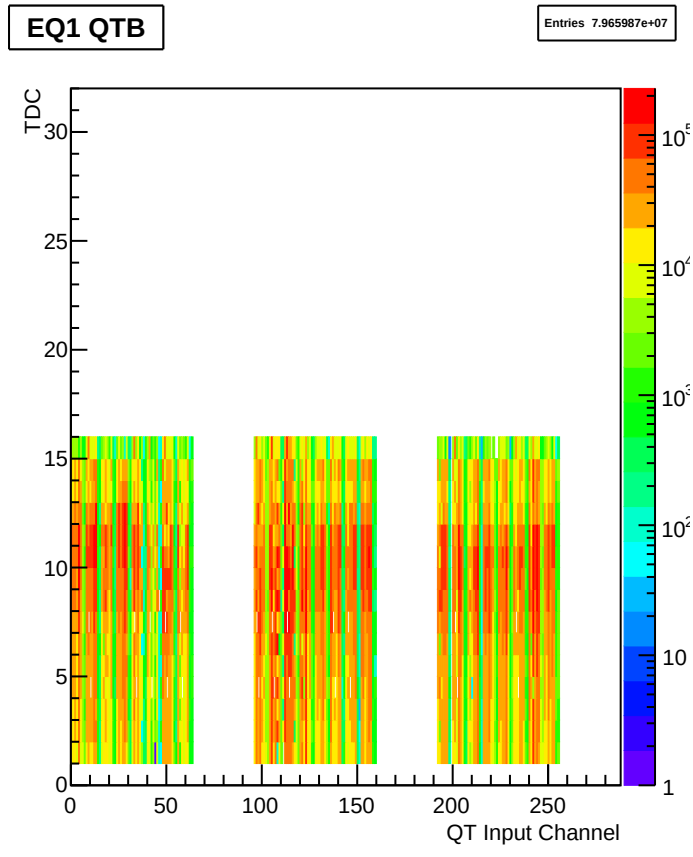

BBQ-VP001 East
Entries 4.438298e+07
ADC
QT Input Channel

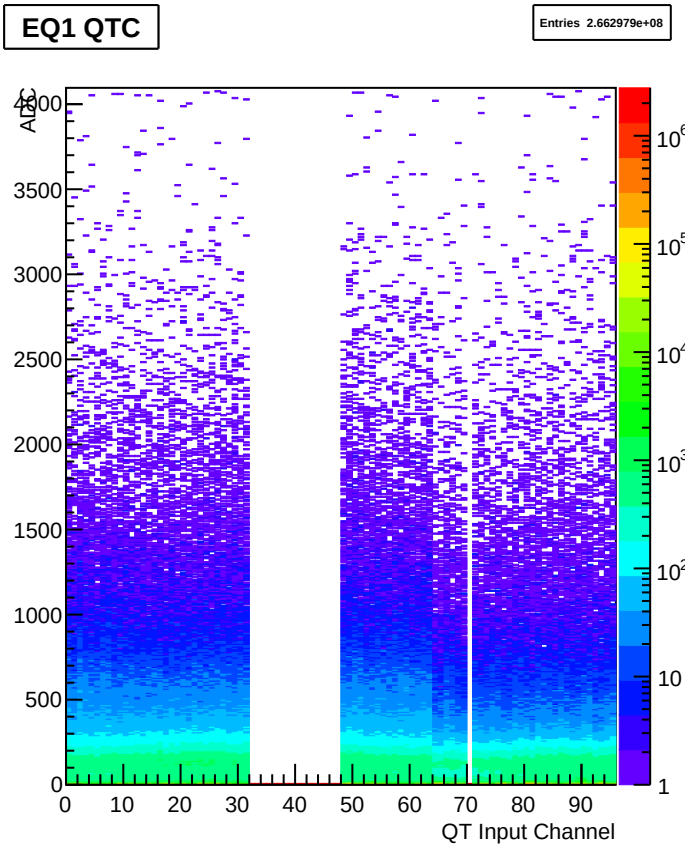

BBQ-VP001 East
Entries 4.438298e+07
TADC
QT Input Channel

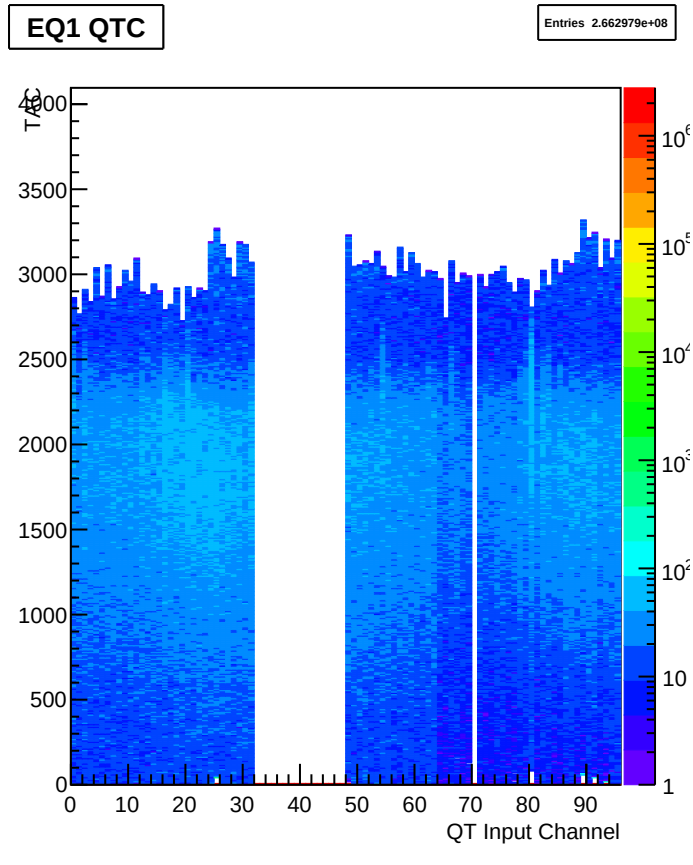

BBQ-VP002 West
Entries 4.438298e+07
ADC
QT Input Channel

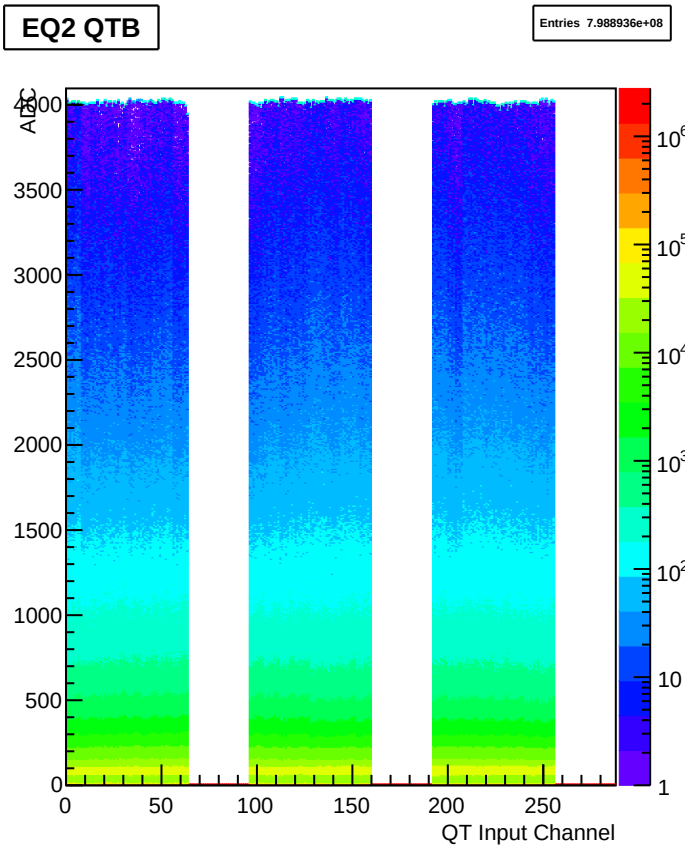

BBQ-VP002 West
Entries 4.438298e+07
TADC
QT Input Channel

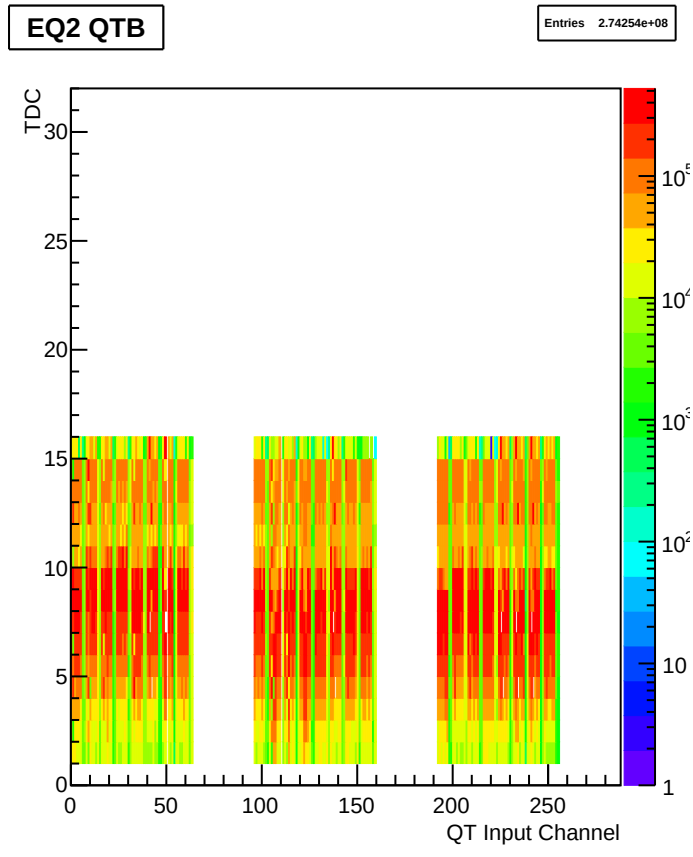

EQ1 QTB
Entries 7.988936e+08
ADC
QT Input Channel

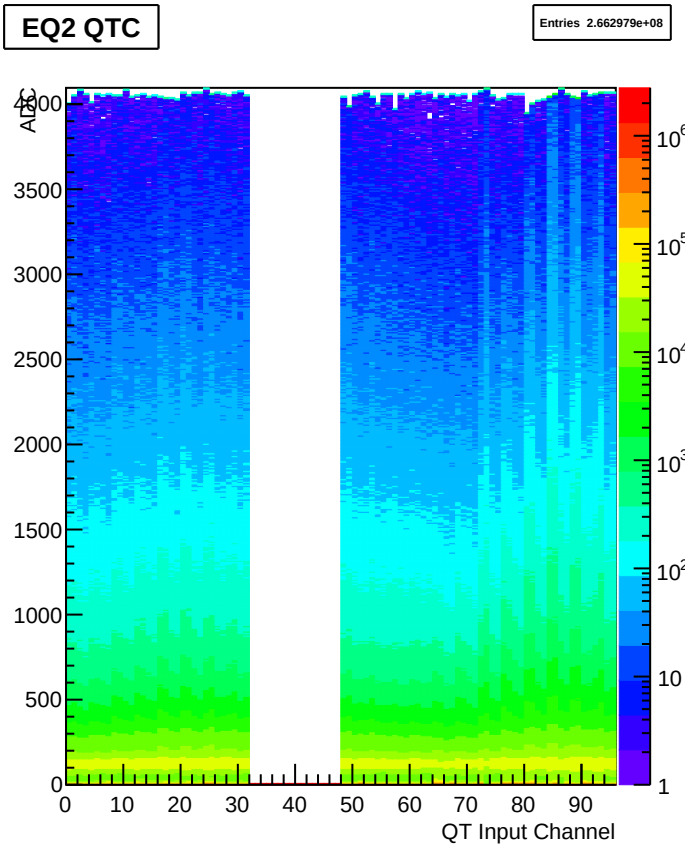

EQ1 QTB
Entries 7.965987e+07
TDC
QT Input Channel

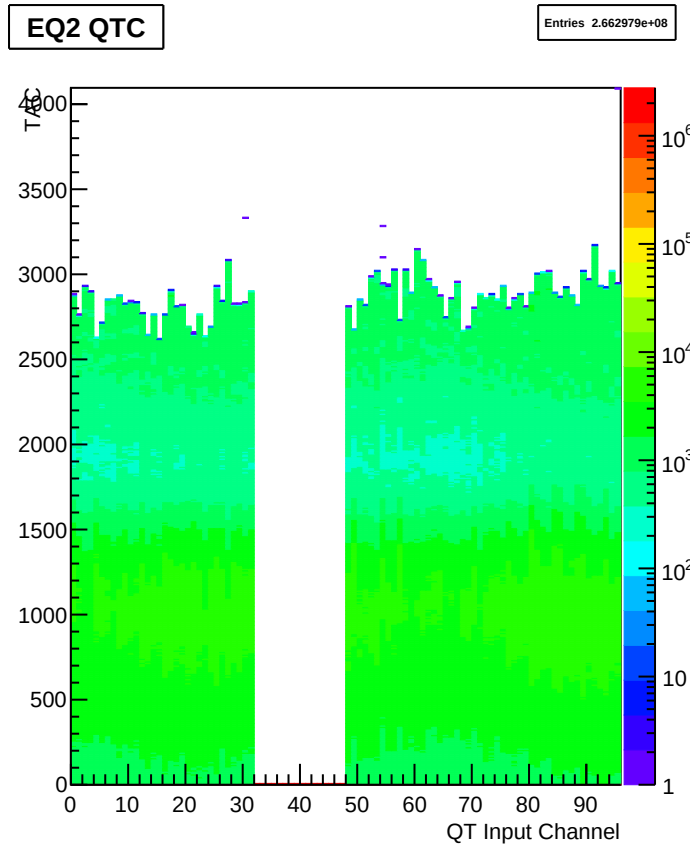

EQ1 QTC
Entries 2.662979e+08
ADC
QT Input Channel

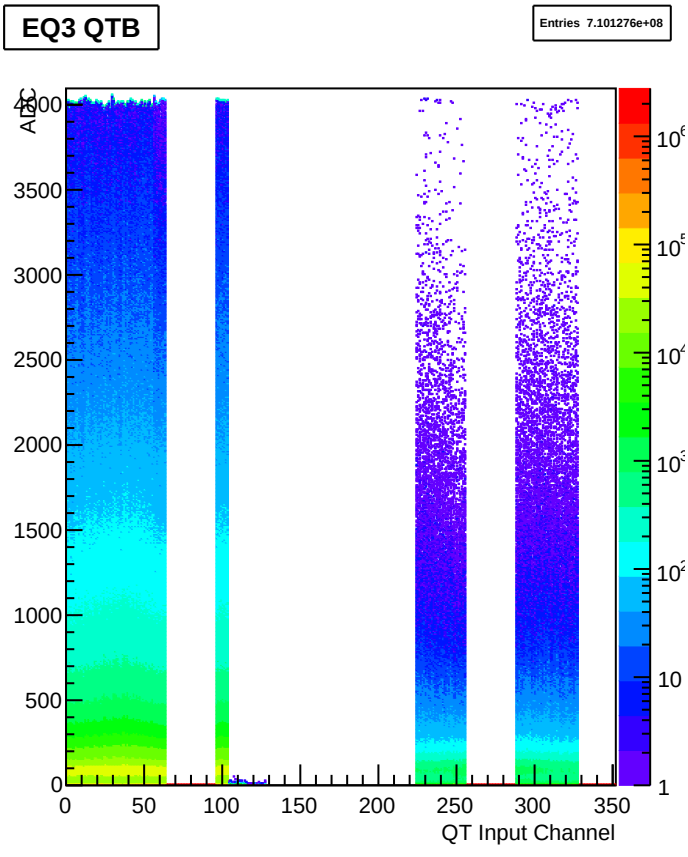

EQ1 QTC
Entries 2.662979e+08
TADC
QT Input Channel

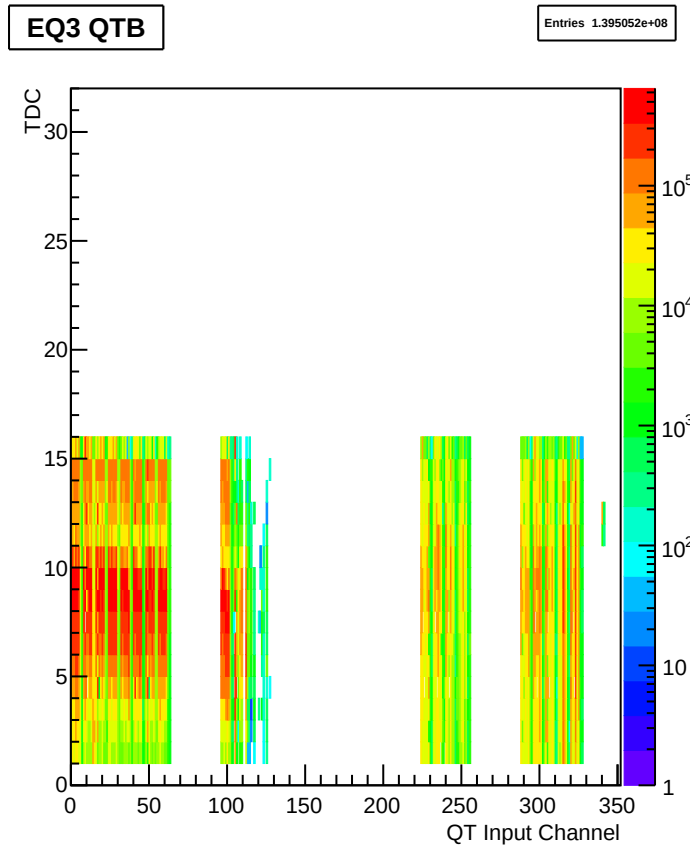

EQ2 QTB
Entries 7.988936e+08
ADC
QT Input Channel

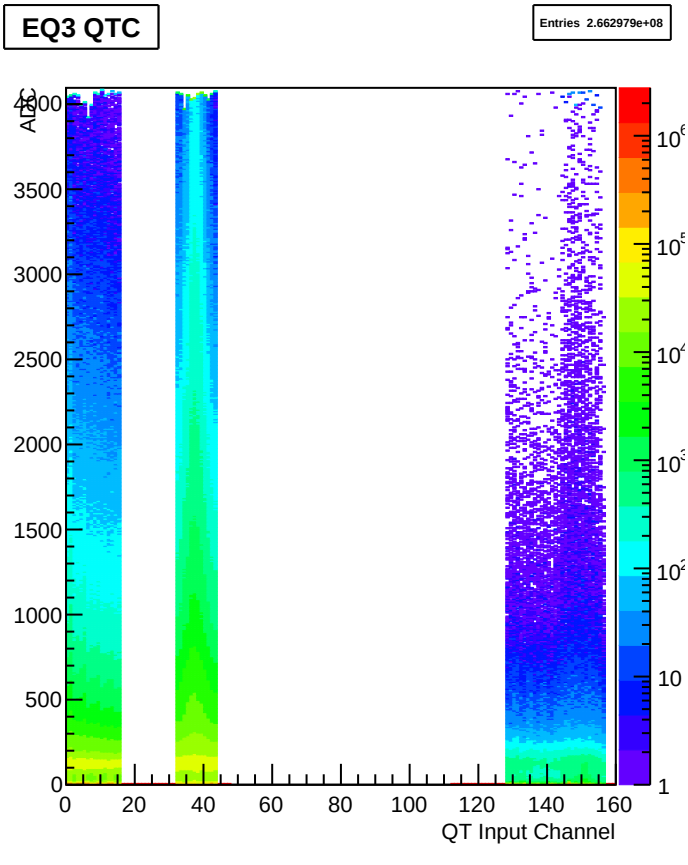

EQ2 QTB
Entries 2.74254e+08
TDC
QT Input Channel

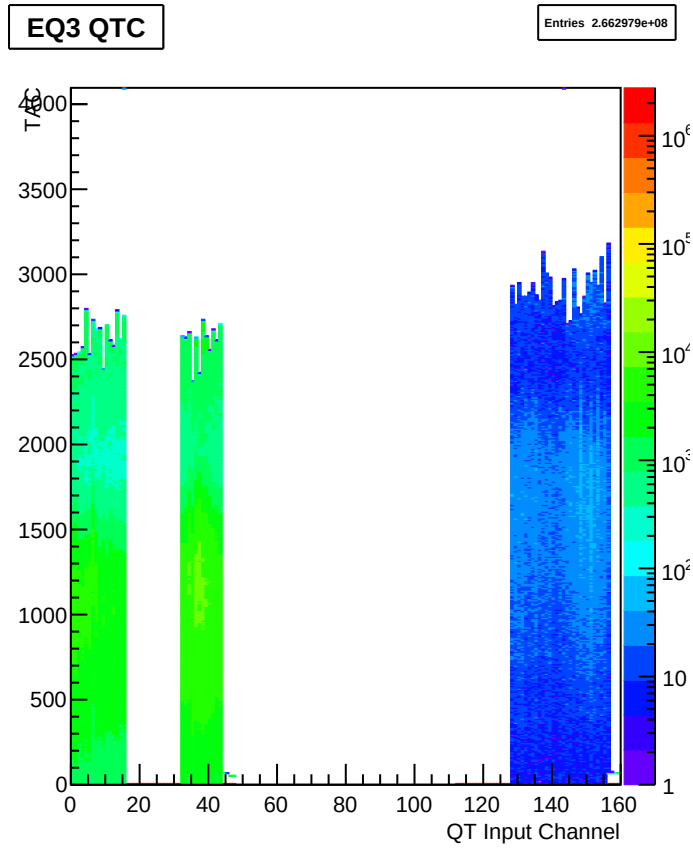

EQ2 QTC
Entries 2.662979e+08
ADC
QT Input Channel

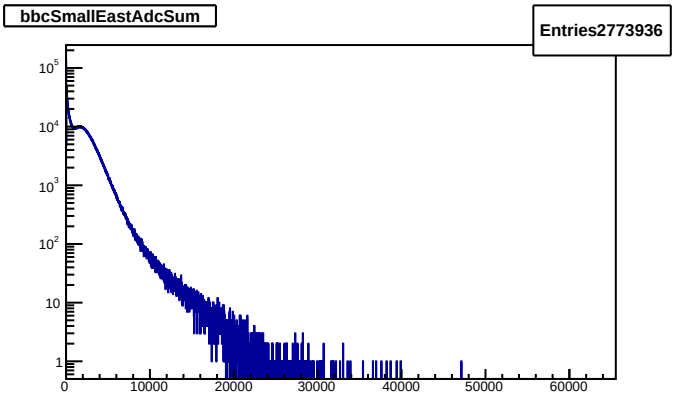

EQ2 QTC
Entries 2.662979e+08
TADC
QT Input Channel

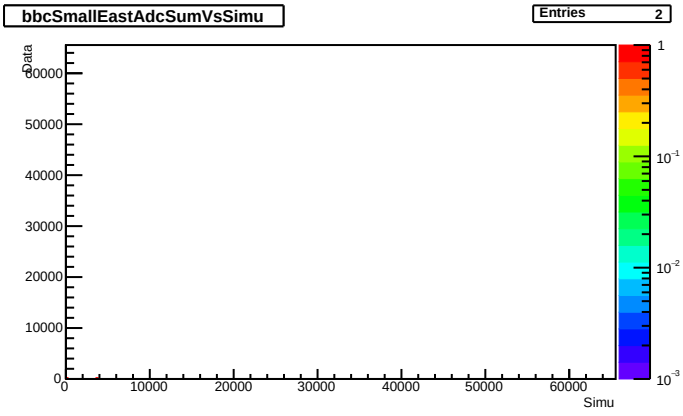

EQ3 QTB
Entries 7.101276e+08
ADC
QT Input Channel

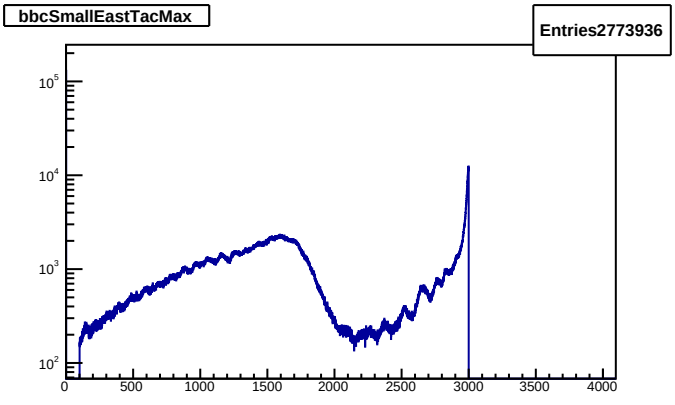

EQ3 QTB
Entries 1.395052e+08
TDC
QT Input Channel


EQ3 QTC
Entries 2.662979e+08
ADC
QT Input Channel


EQ3 QTC
Entries 2.662979e+08
TADC
QT Input Channel


bbcSmallEastAdcSum
Entries2773936


bbcSmallEastAdcSumVsSimu
Entries 2
Data
Simu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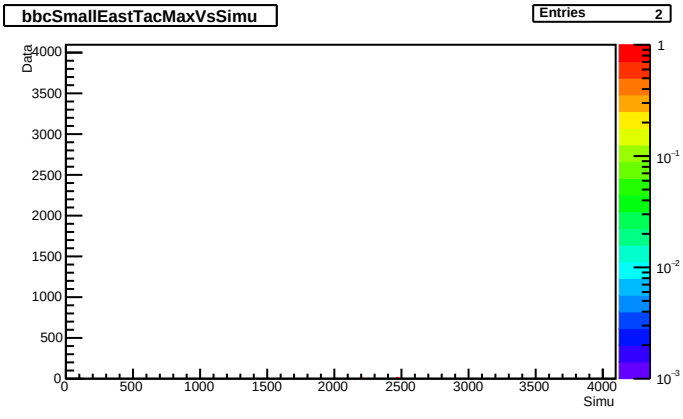
Entries2773936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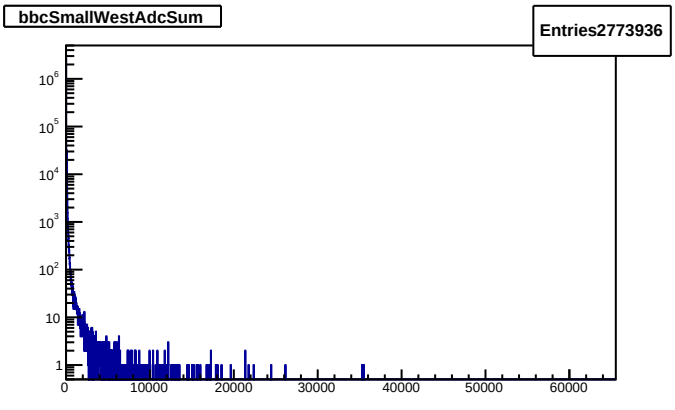
Entries 2
Data
Simu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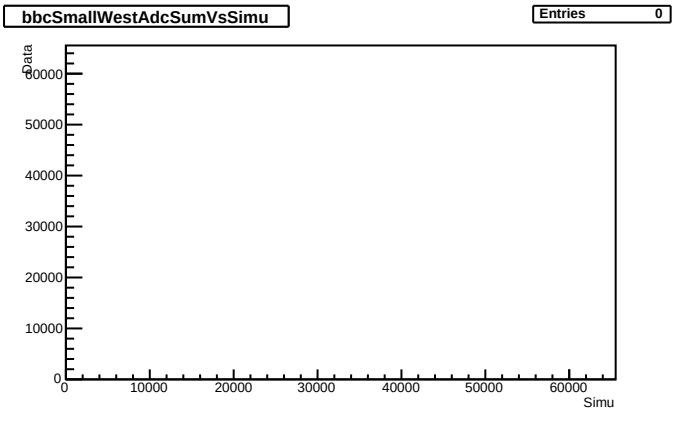
Entries2773936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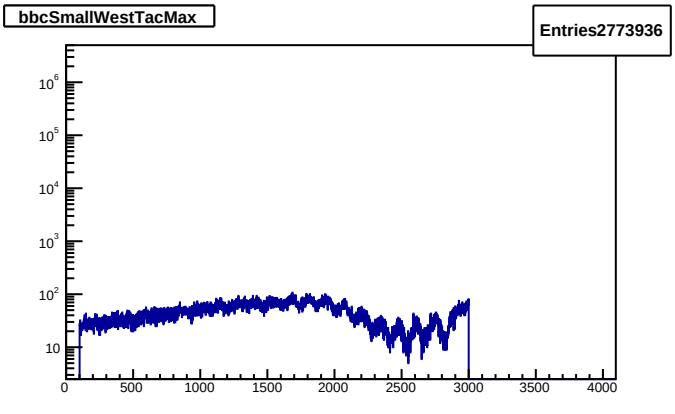
Entries 0
Data
Simu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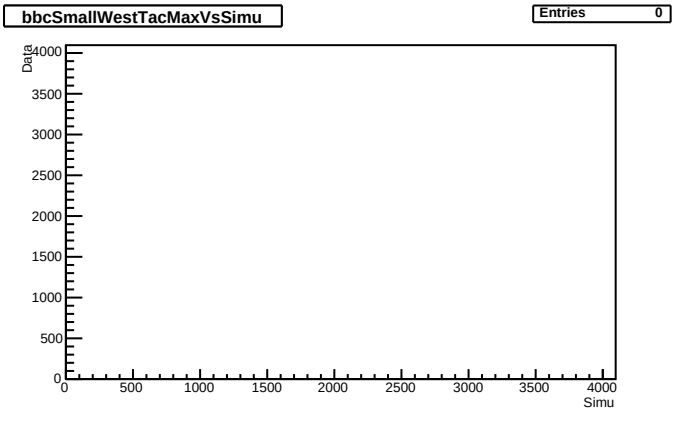
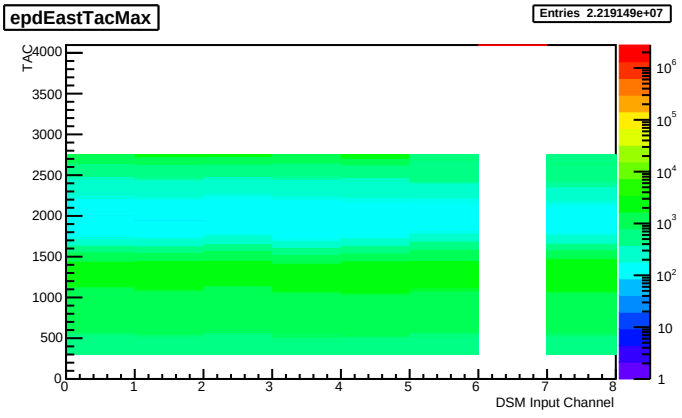
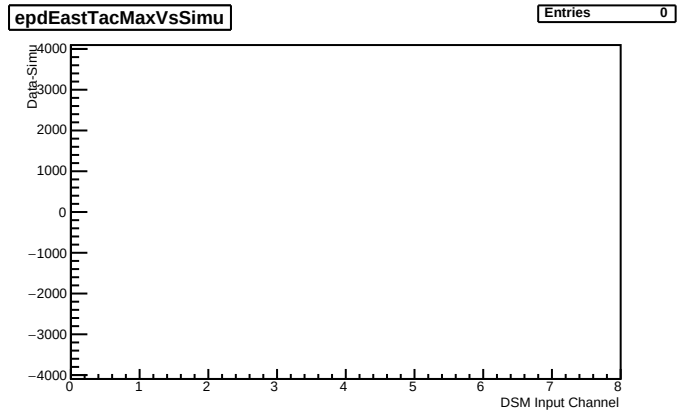
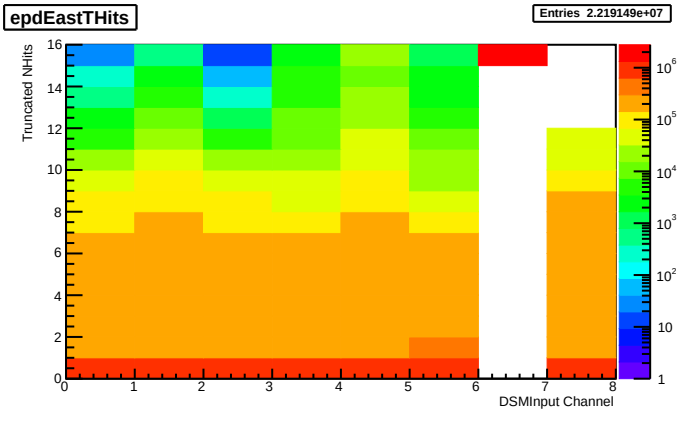
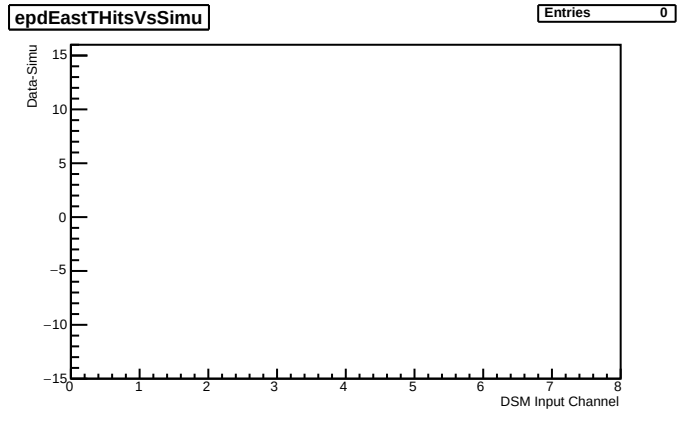
Entries2773936


bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu


epdEastTacMax
Entries 2.219149e+07
TAC
DSM Input Channel


epdEastTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel


epdEastTHits
Entries 2.219149e+07
Truncated NHits
DSMInput Channel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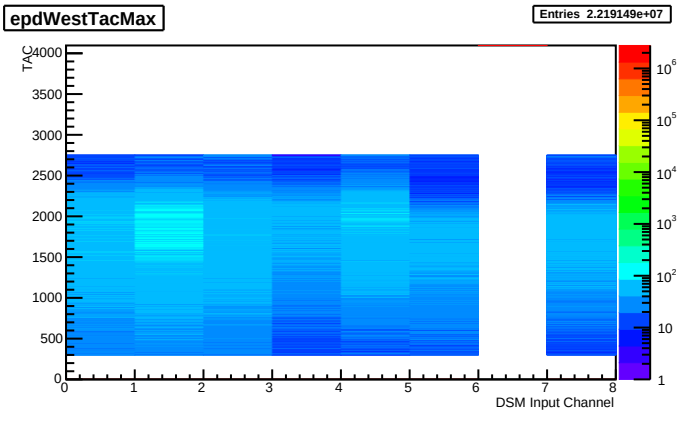
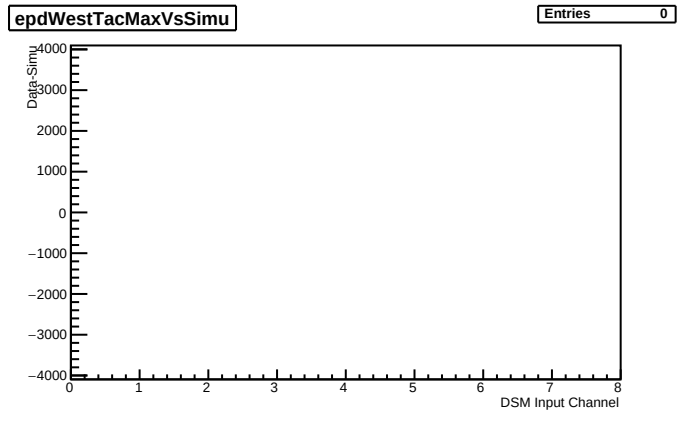
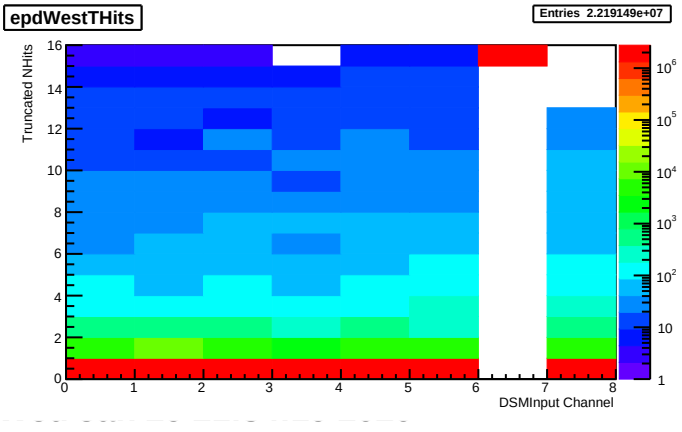
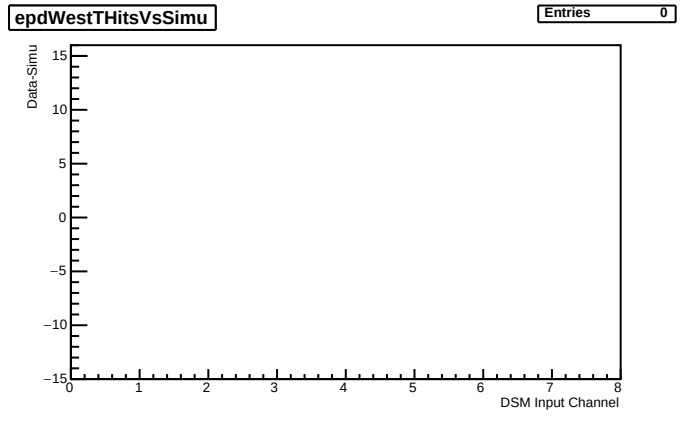
Data-Simu
DSM Input Channel


epdWestTacMax
Entries 2.219149e+07
TAC
DSM Input Channel


epdWestTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel


epdWestTHits
Entries 2.219149e+07
Truncated NHits
DSMInput Channel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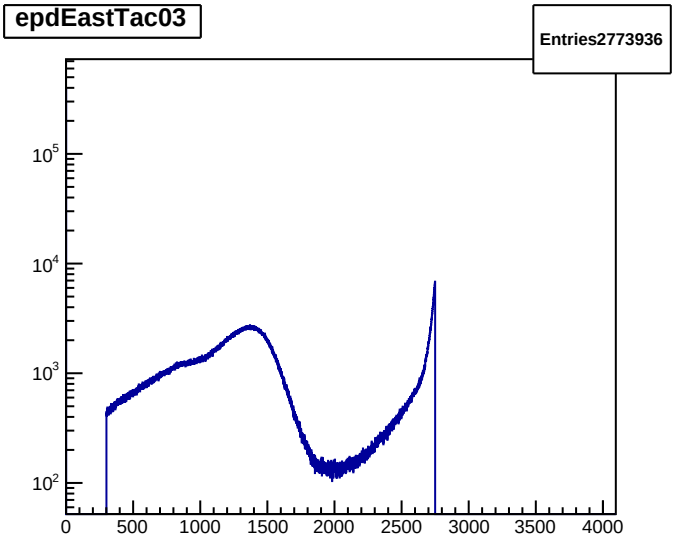
Entries 0
Data-Simu
DSM Input Channel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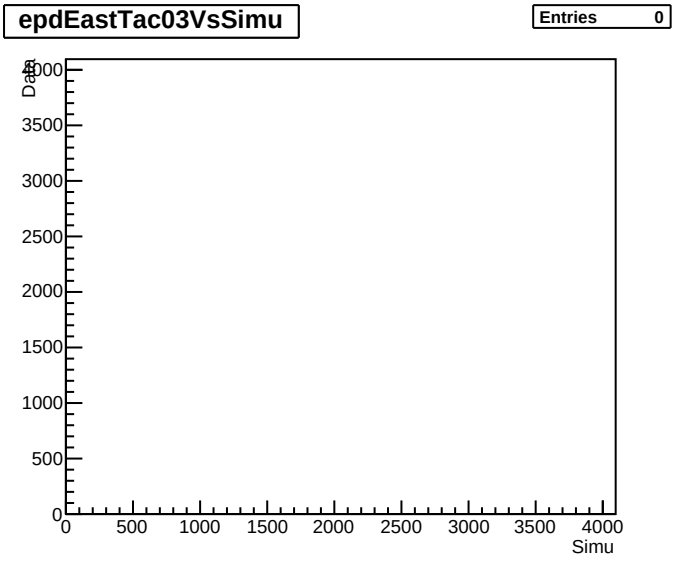
Entries2773936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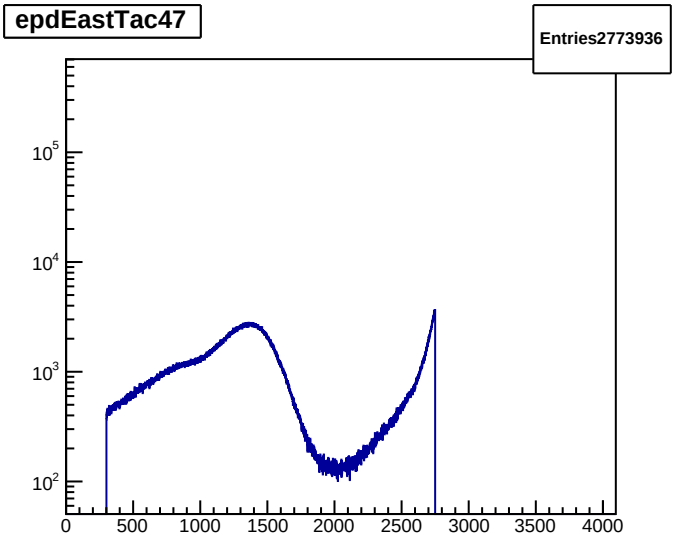
Entries 0
Data
Simu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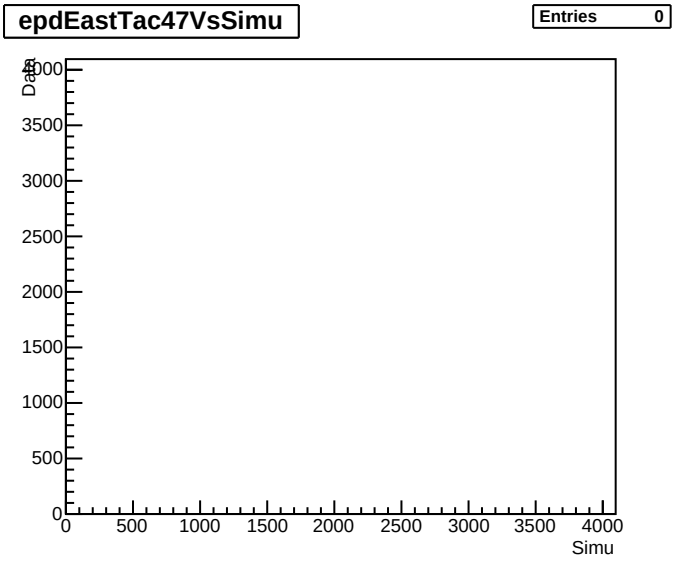
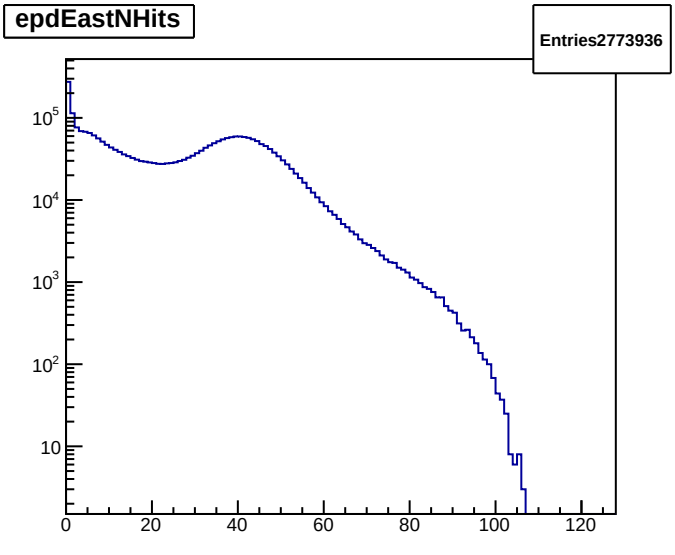
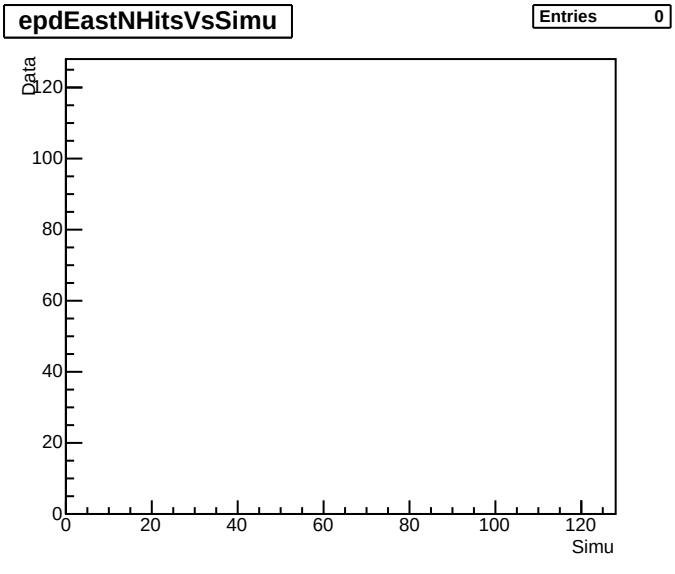
Entries2773936


epdEastTac47VsSimu
Entries 0
Data
Simu


epdEastNHits
Entries2773936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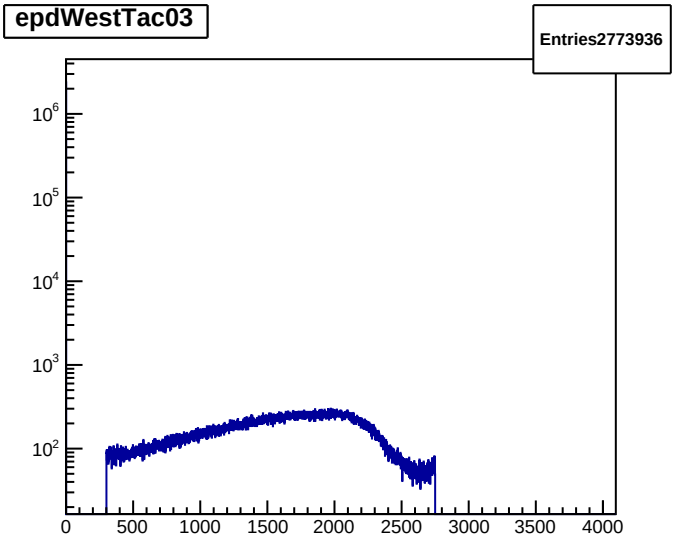
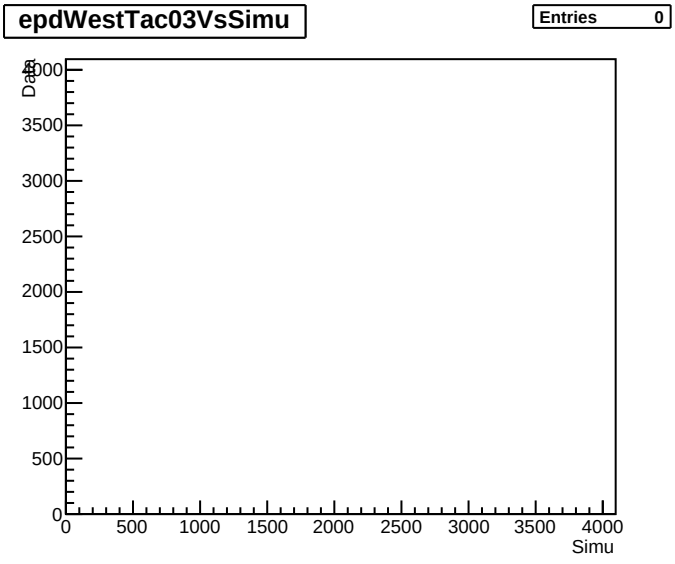
Entries 0
Data
Simu


epdWestTac03
Entries2773936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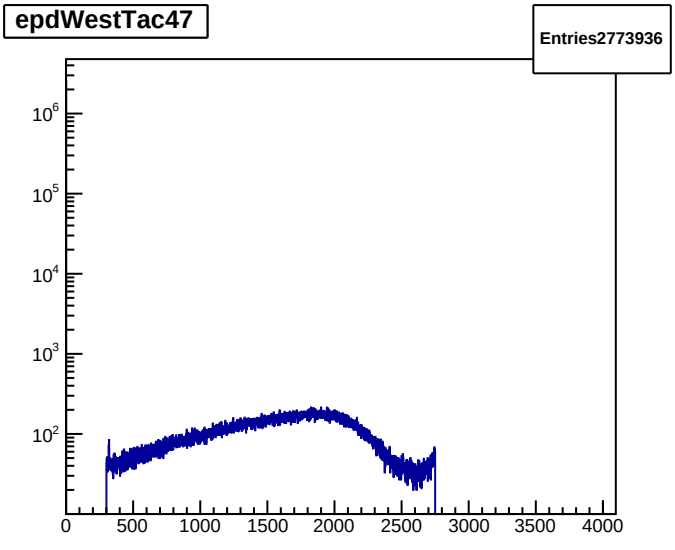
Entries 0
Data
Simu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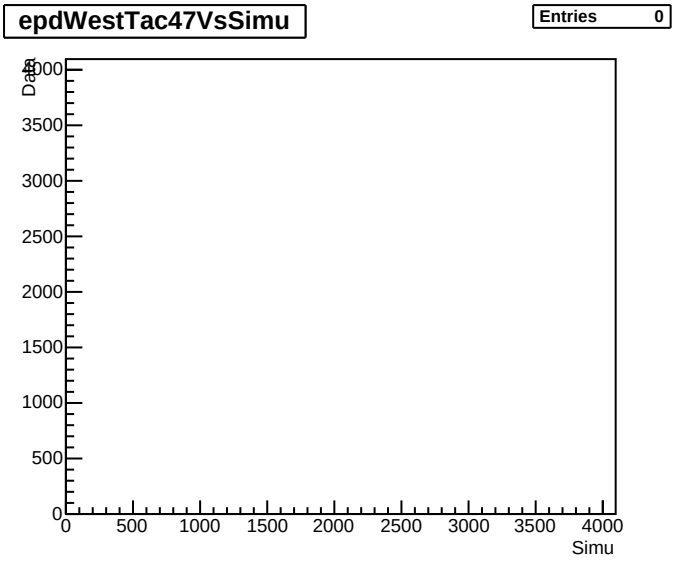
Entries2773936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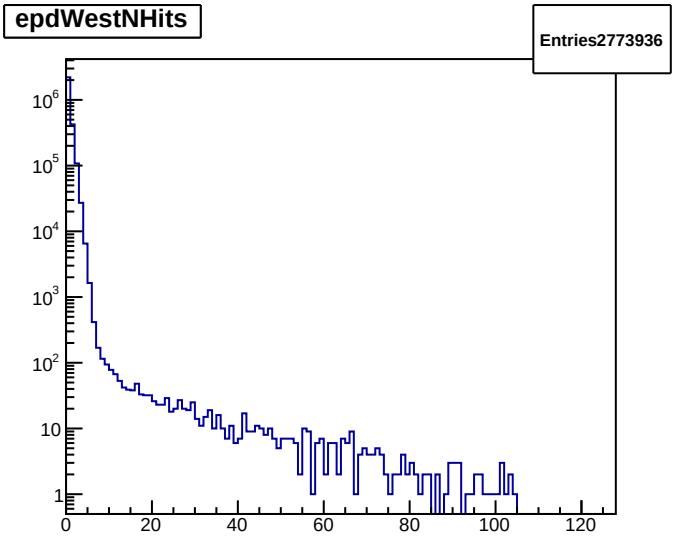
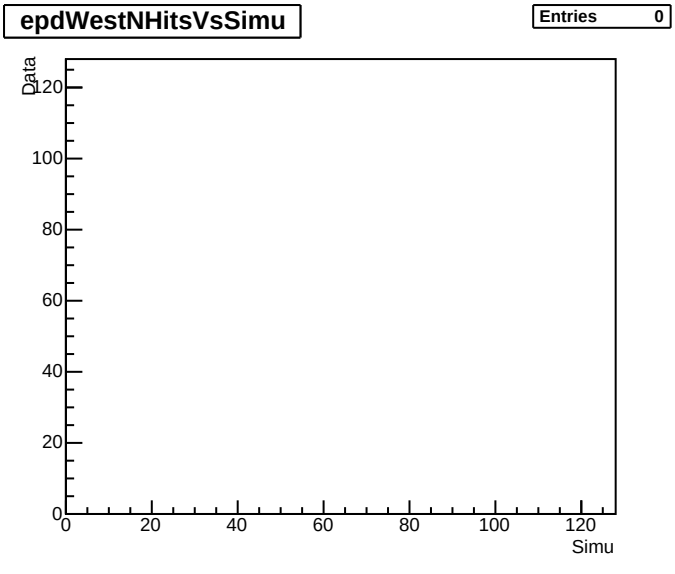
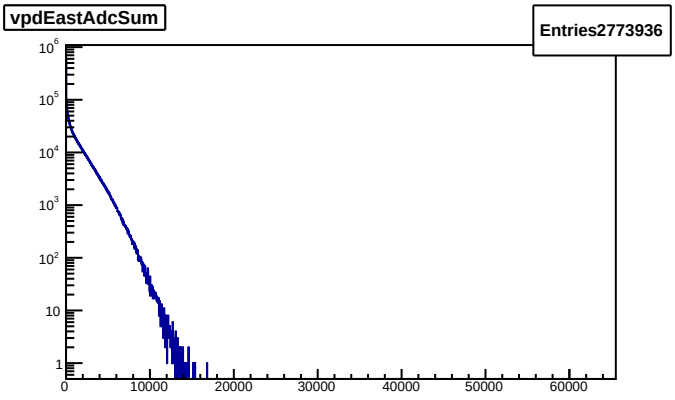
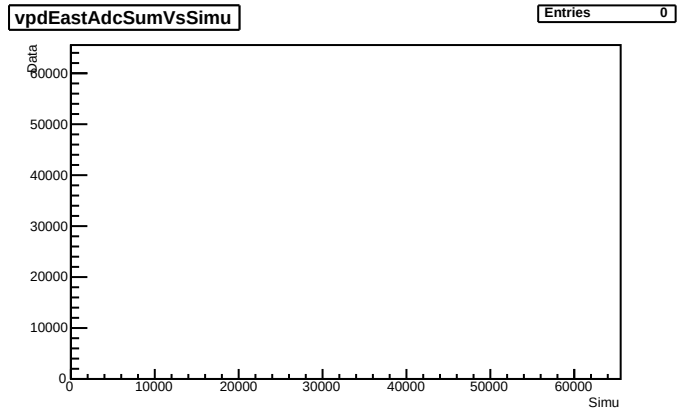
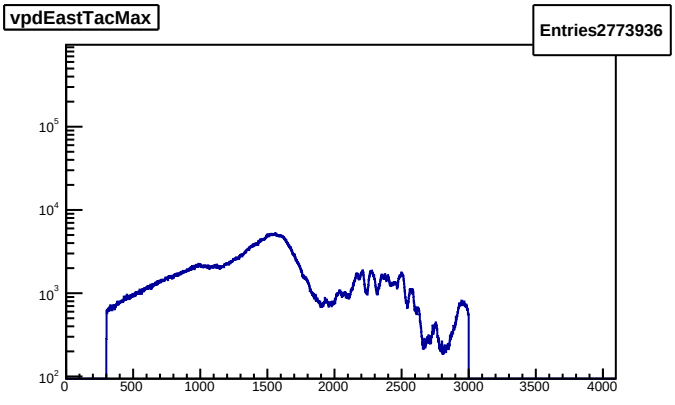
Entries 0
Data
Simu

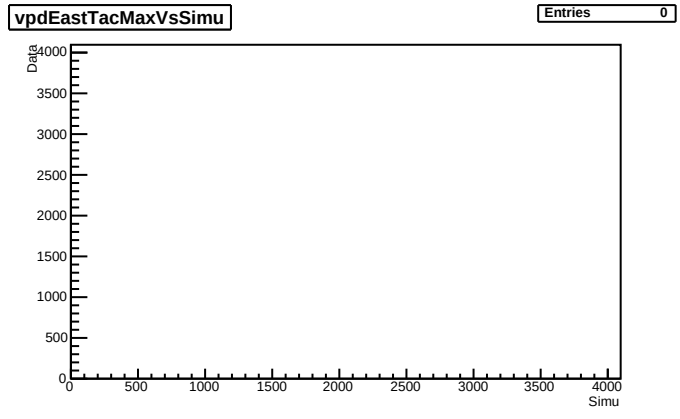

epdWestNHits
Entries2773936

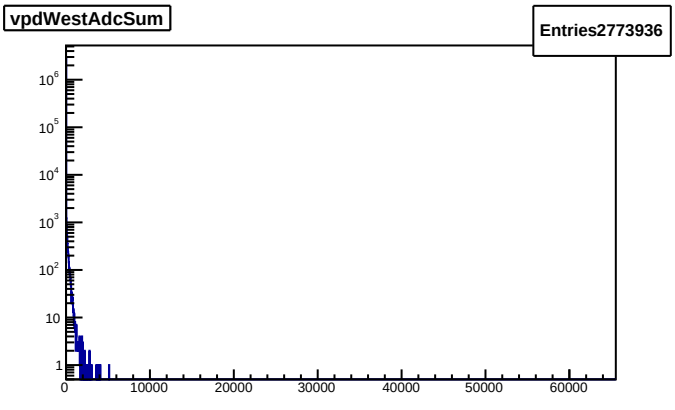

epdWestNHitsVsSimu
Entries 0
Data
Simu

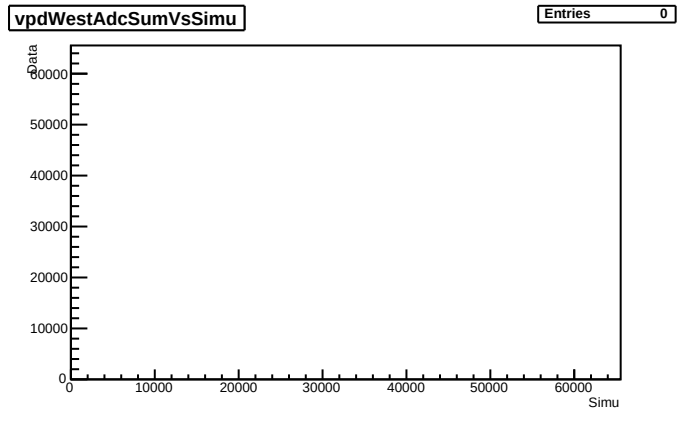

vpdEastAdcSum
Entries2773936

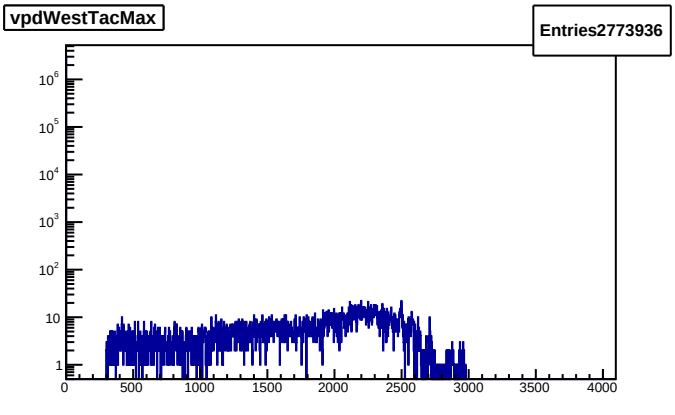

vpdEastAdcSumVsSimu
Entries 0
Data
Simu

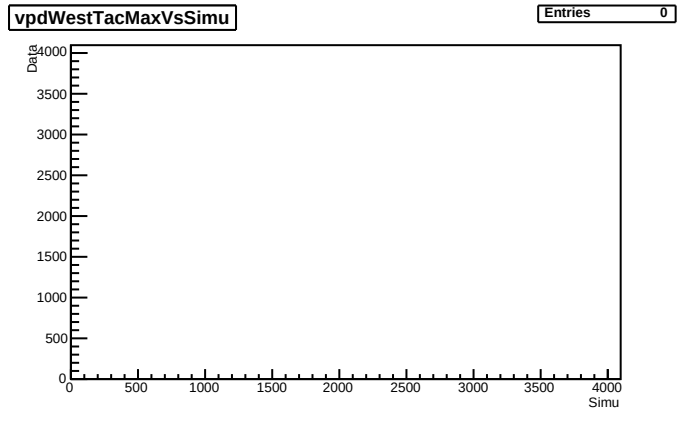

vpdEastTacMax
Entries2773936

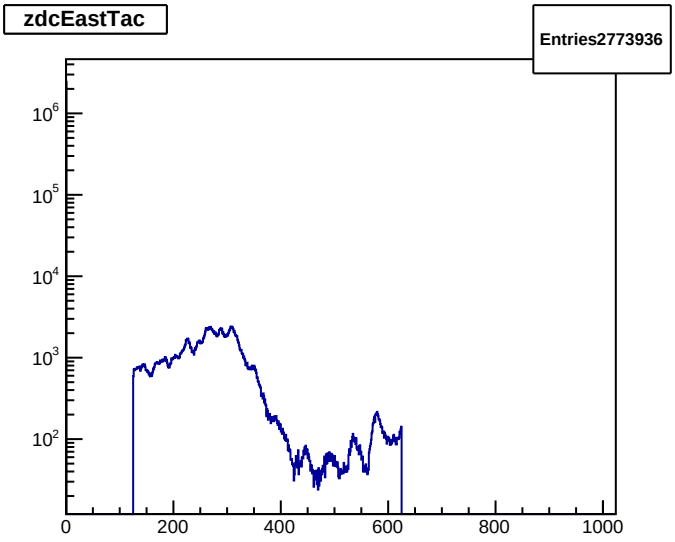

vpdEastTacMaxVsSimu
Entries 0
Data
Simu

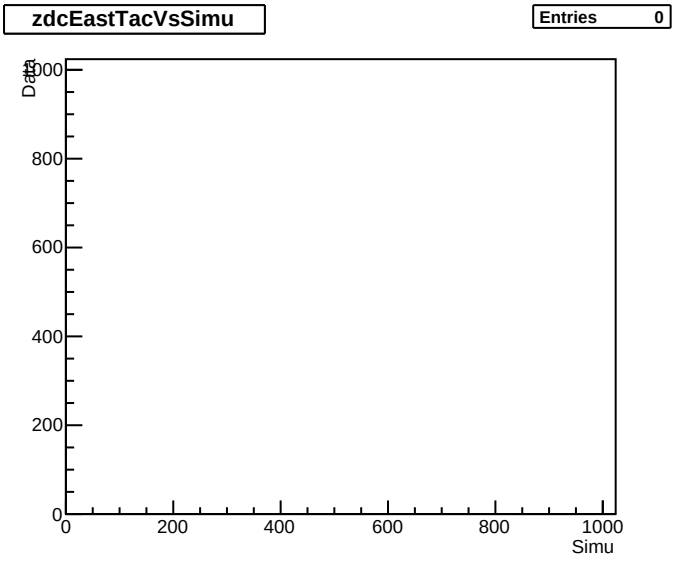

vpdWestAdcSum
Entries2773936

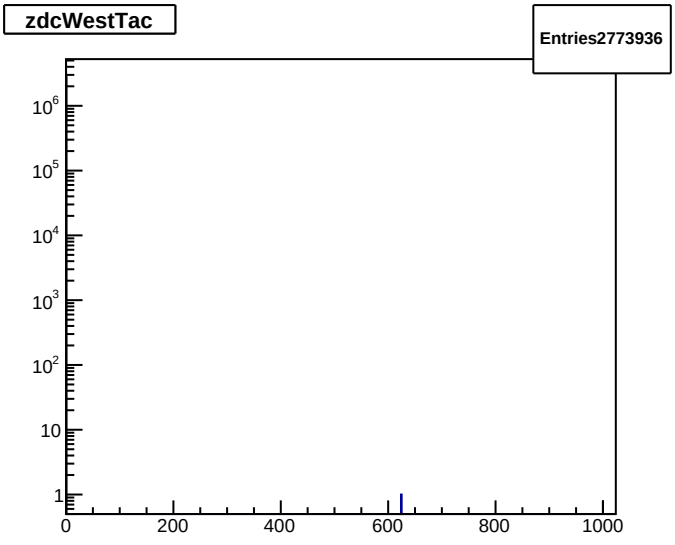

vpdWestAdcSumVsSimu
Entries 0
Data
Simu

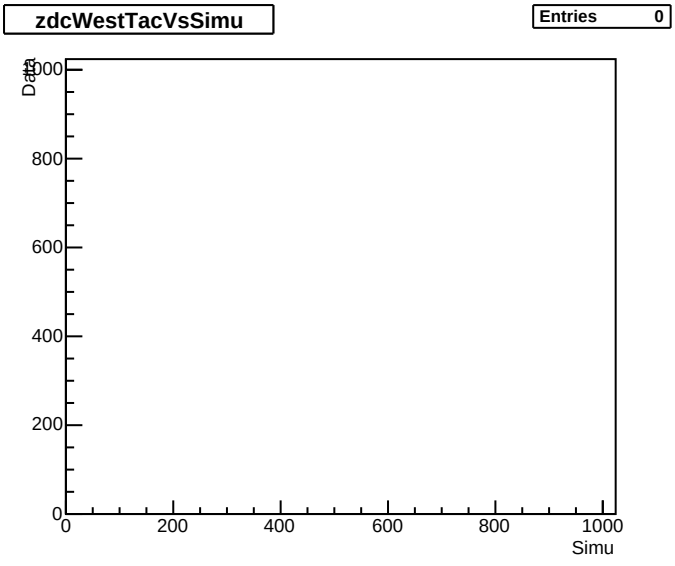

vpdWestTacMax
Entries2773936

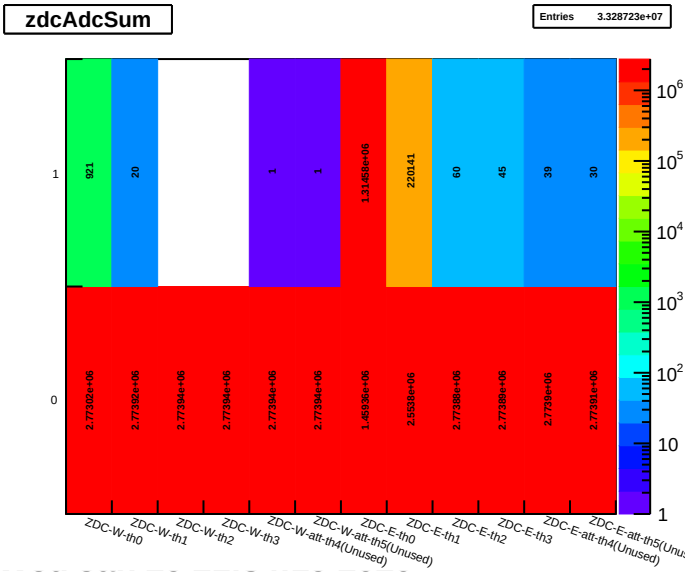

vpdWestTacMaxVsSimu
Entries 0
Data
Simu

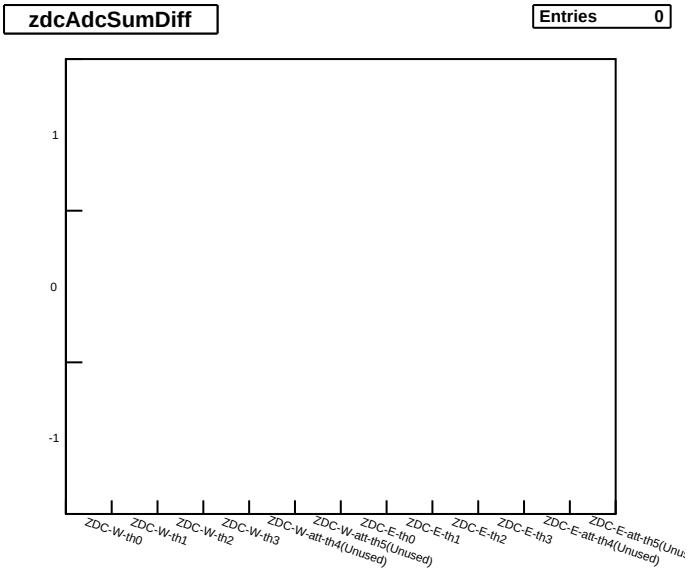

zdcEastTac
Entries2773936
10^6
10^5
10^4
10^3
10^2
0
200
400
600
800
1000

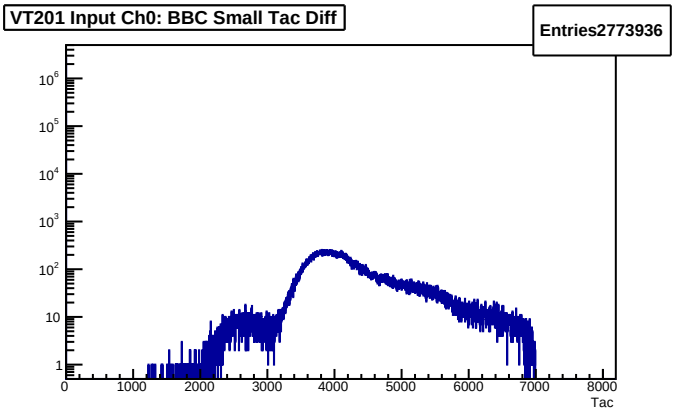

zdcEastTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

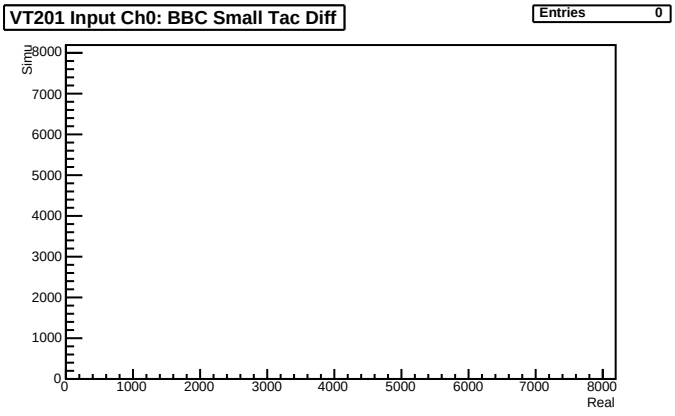

zdcWestTac
Entries2773936
10^6
10^5
10^4
10^3
10^2
10
1
0
200
400
600
800
1000

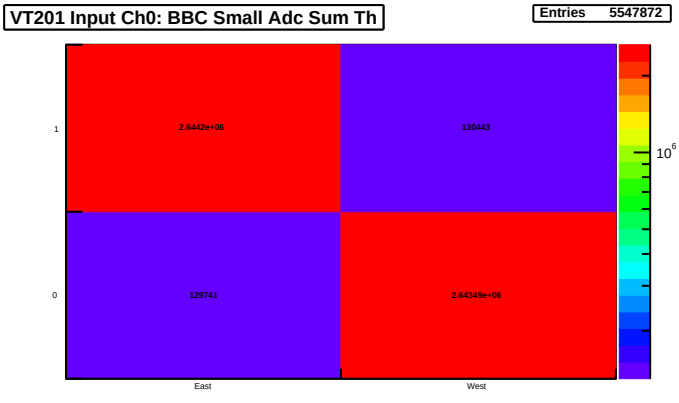

zdcWestTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

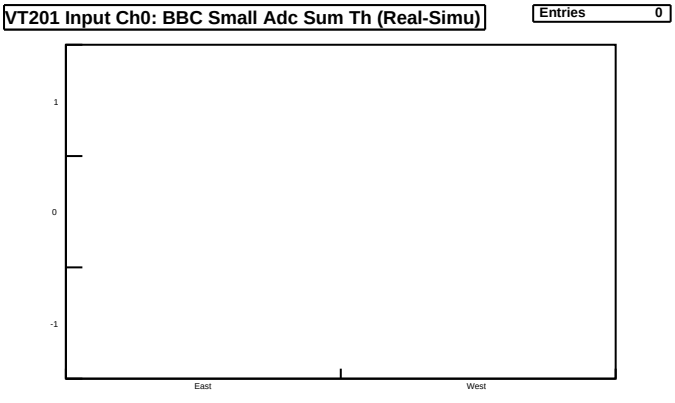

zdcAdcSum
Entries 3.328723e+07
1
0
921
20
1
1
1.31458e+06
220141
60
45
39
30
2.77302e+06
2.77392e+06
2.77394e+06
2.77394e+06
2.77394e+06
2.77394e+06
1.45936e+06
2.5538e+06
2.77388e+06
2.77389e+06
2.7739e+06
2.77391e+06
10^6
10^5
10^4
10^3
10^2
10
1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
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

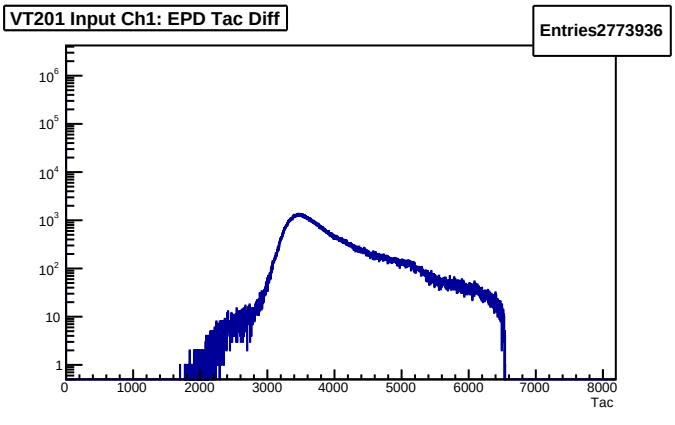

zdcAdcSumDiff
Entries 0
1
0
-1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

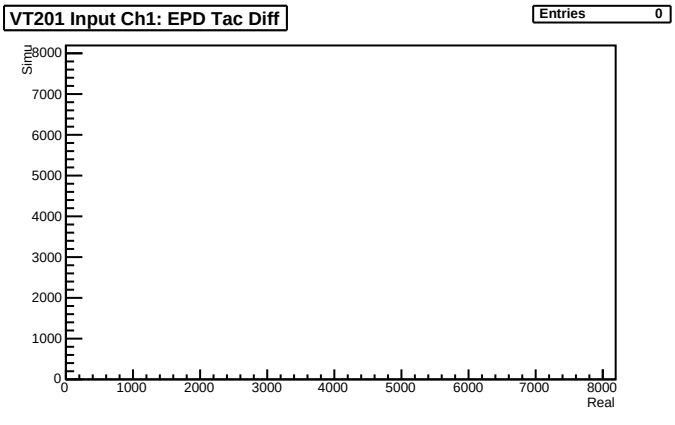

VT201 Input Ch0: BBC Small Tac Diff
Entries2773936
Tac

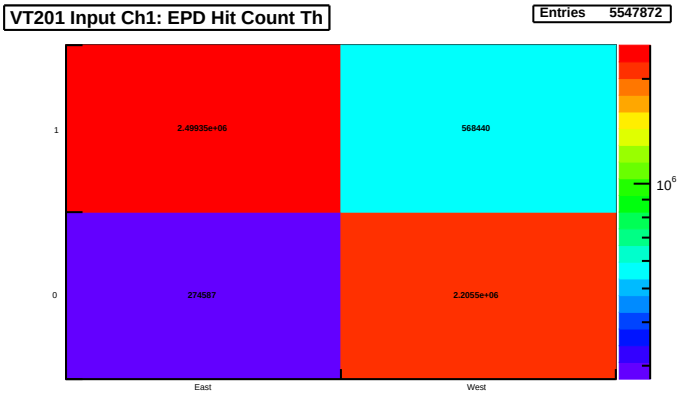

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

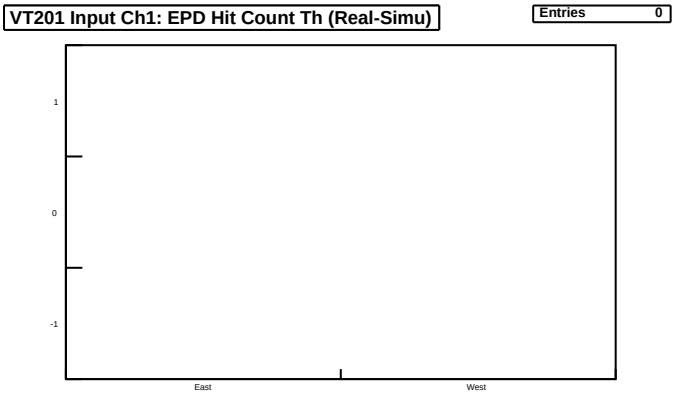

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 5547872
2.6442e+06
130443
129741
2.64349e+06
East
West

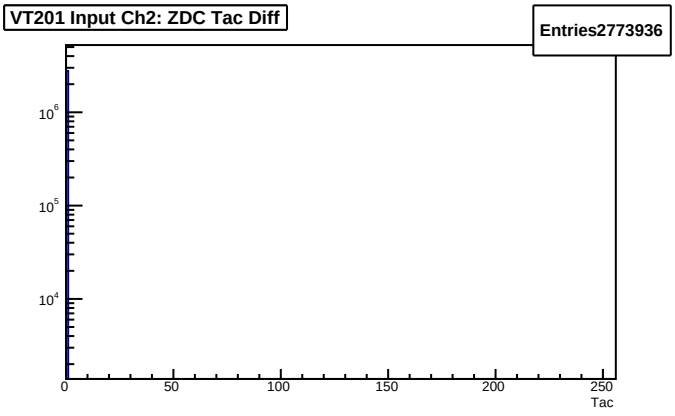

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

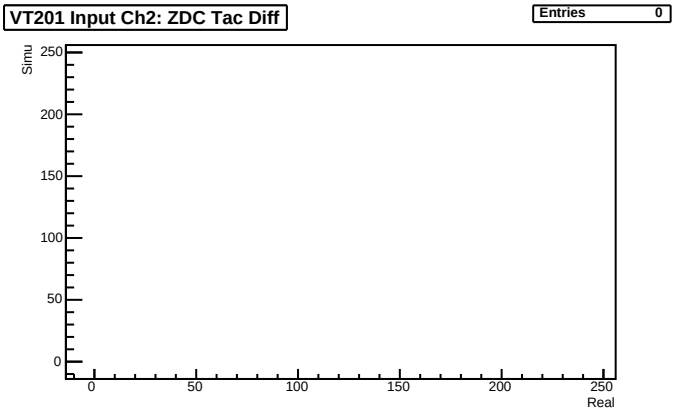

VT201 Input Ch1: EPD Tac Diff
Entries2773936
Tac

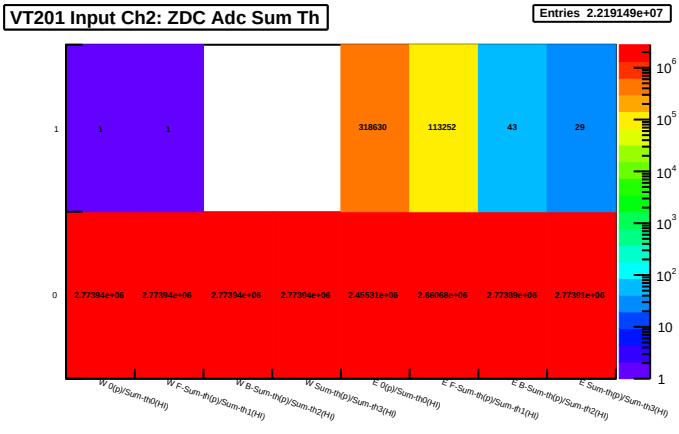

VT201 Input Ch1: EPD Tac Diff
Entries 0
Simu
Real

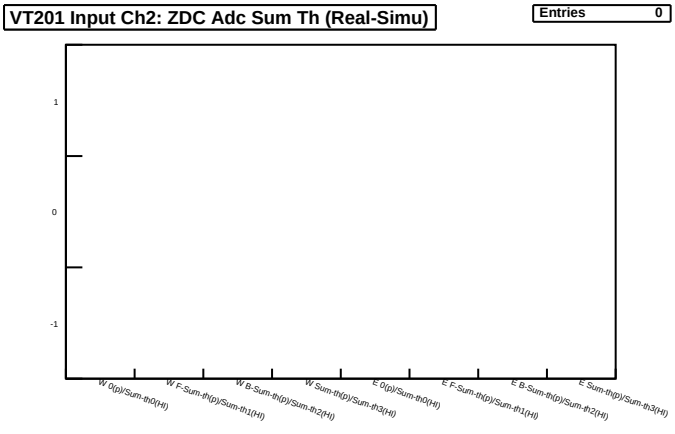

VT201 Input Ch1: EPD Hit Count Th
Entries 5547872
2.49935e+06
568440
274597
2.2055e+06
East
West

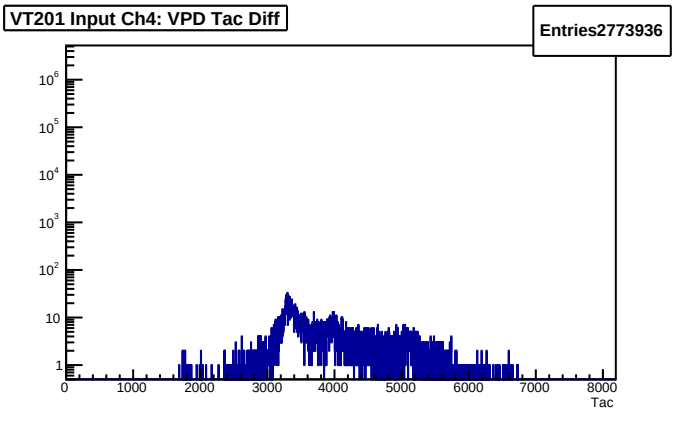

VT201 Input Ch1: EPD Hit Count Th (Real-Simu)
Entries 0
East
West

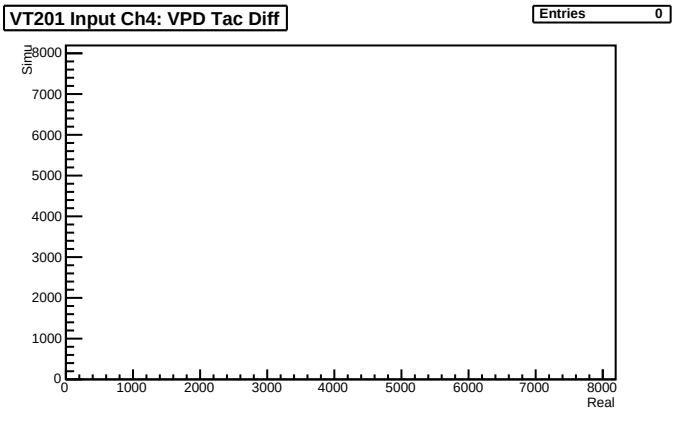

VT201 Input Ch2: ZDC Tac Diff
Entries2773936
Tac

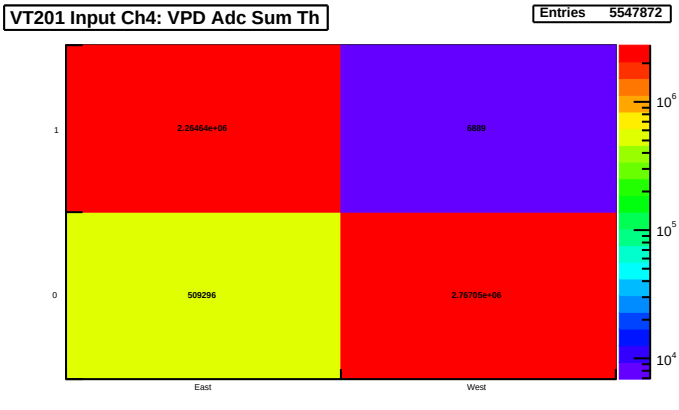

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

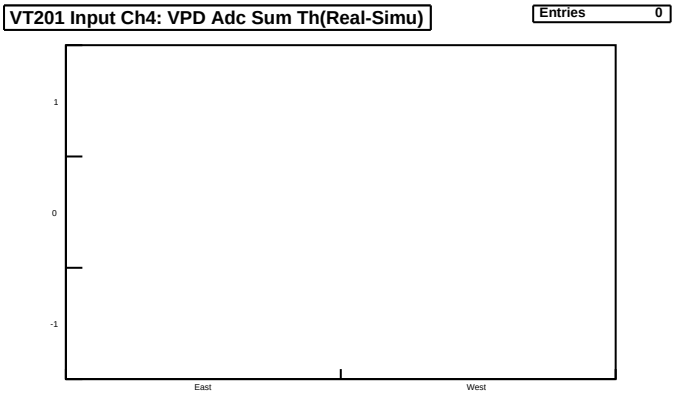

VT201 Input Ch2: ZDC Adc Sum Th
Entries 2.219149e+07
1
1
318630
113252
43
29
2.77394e+06
2.77394e+06
2.77394e+06
2.77394e+06
2.45531e+06
2.66068e+06
2.77389e+06
2.77391e+06
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
E 0(p)/Sum-th0(Hl)
E F-Sum-th(p)/Sum-th1(Hl)
E B-Sum-th(p)/Sum-th2(Hl)
E Sum-th(p)/Sum-th3(Hl)

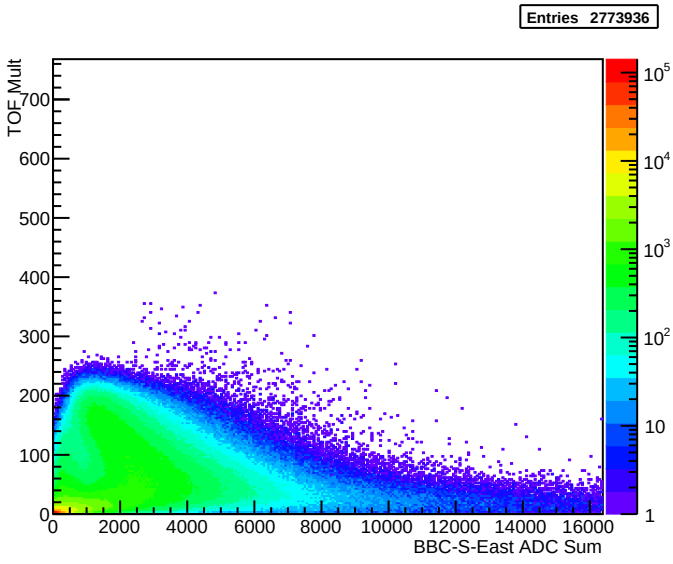

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
E 0(p)/Sum-th0(Hl)
E F-Sum-th(p)/Sum-th1(Hl)
E B-Sum-th(p)/Sum-th2(Hl)
E Sum-th(p)/Sum-th3(Hl)

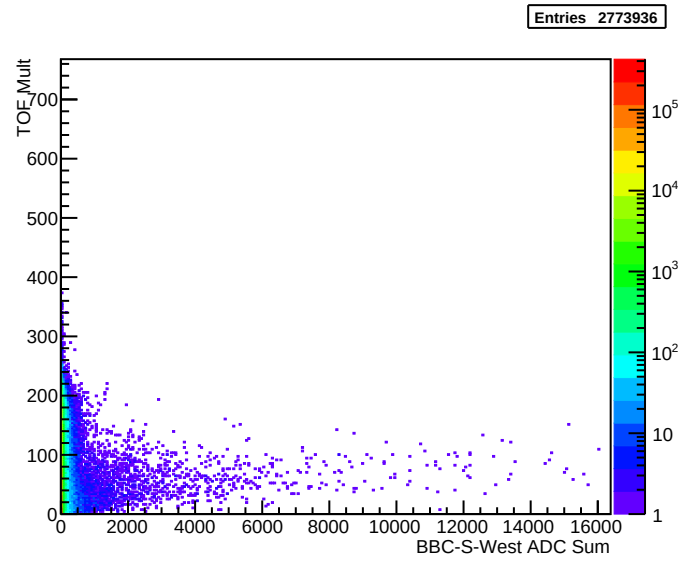

VT201 Input Ch4: VPD Tac Diff
Entries2773936
Tac

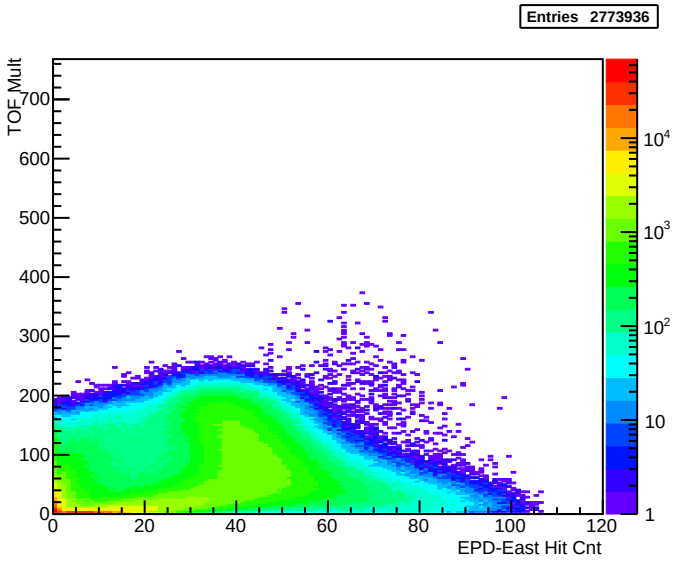

VT201 Input Ch4: VPD Tac Diff
Entries 0
Simu
Real

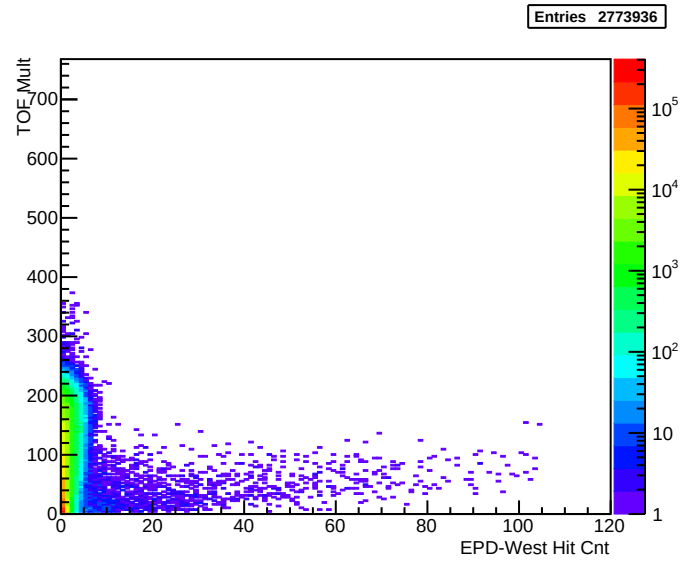

VT201 Input Ch4: VPD Adc Sum Th
Entries 5547872
2.26464e+06
6889
509296
2.76705e+06
East
West

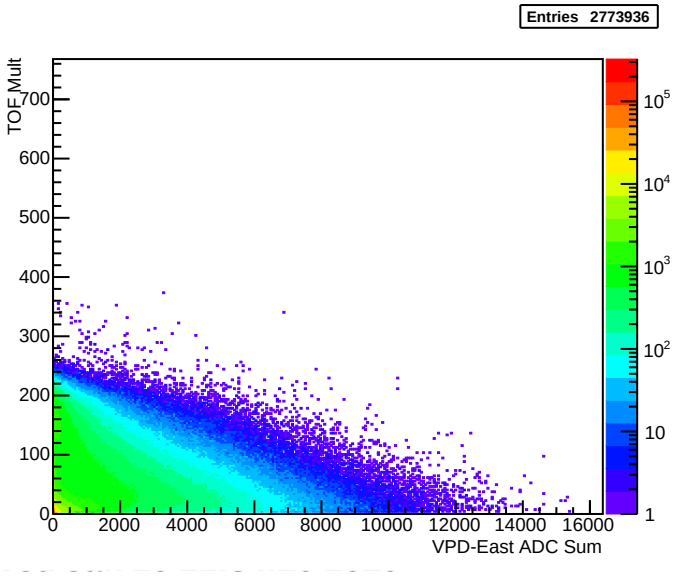

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 0
East
West

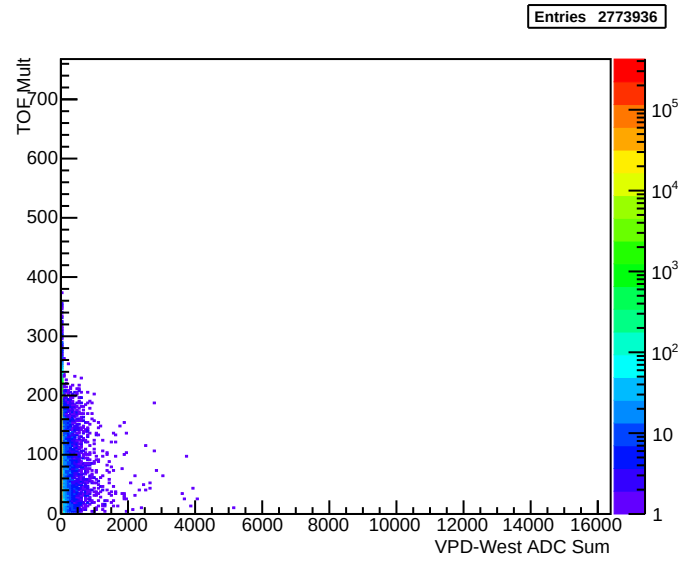

Entries 2773936
TOF_Mult
BBC-S-East ADC Sum

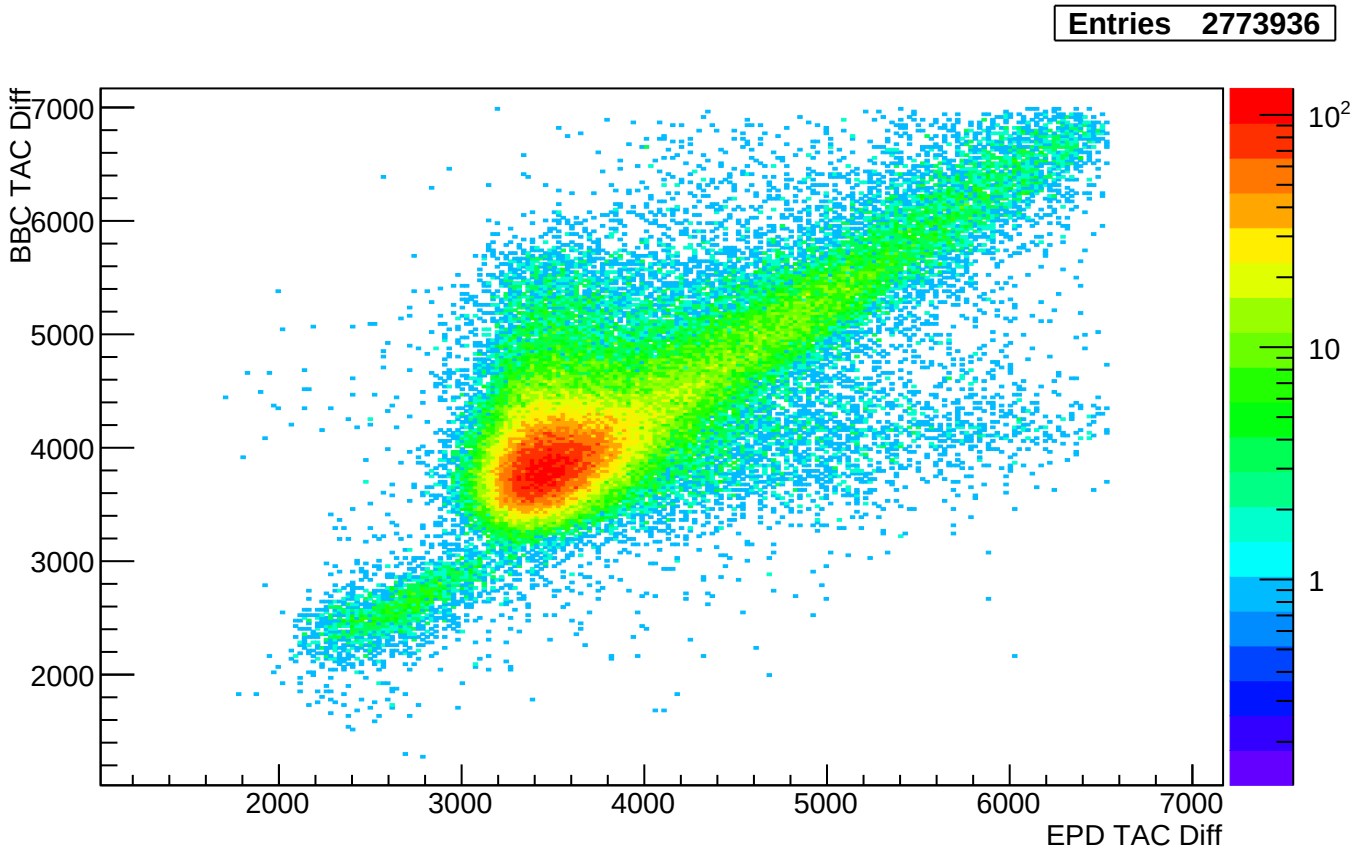

Entries 2773936
TOF_Mult
BBC-S-West ADC Sum

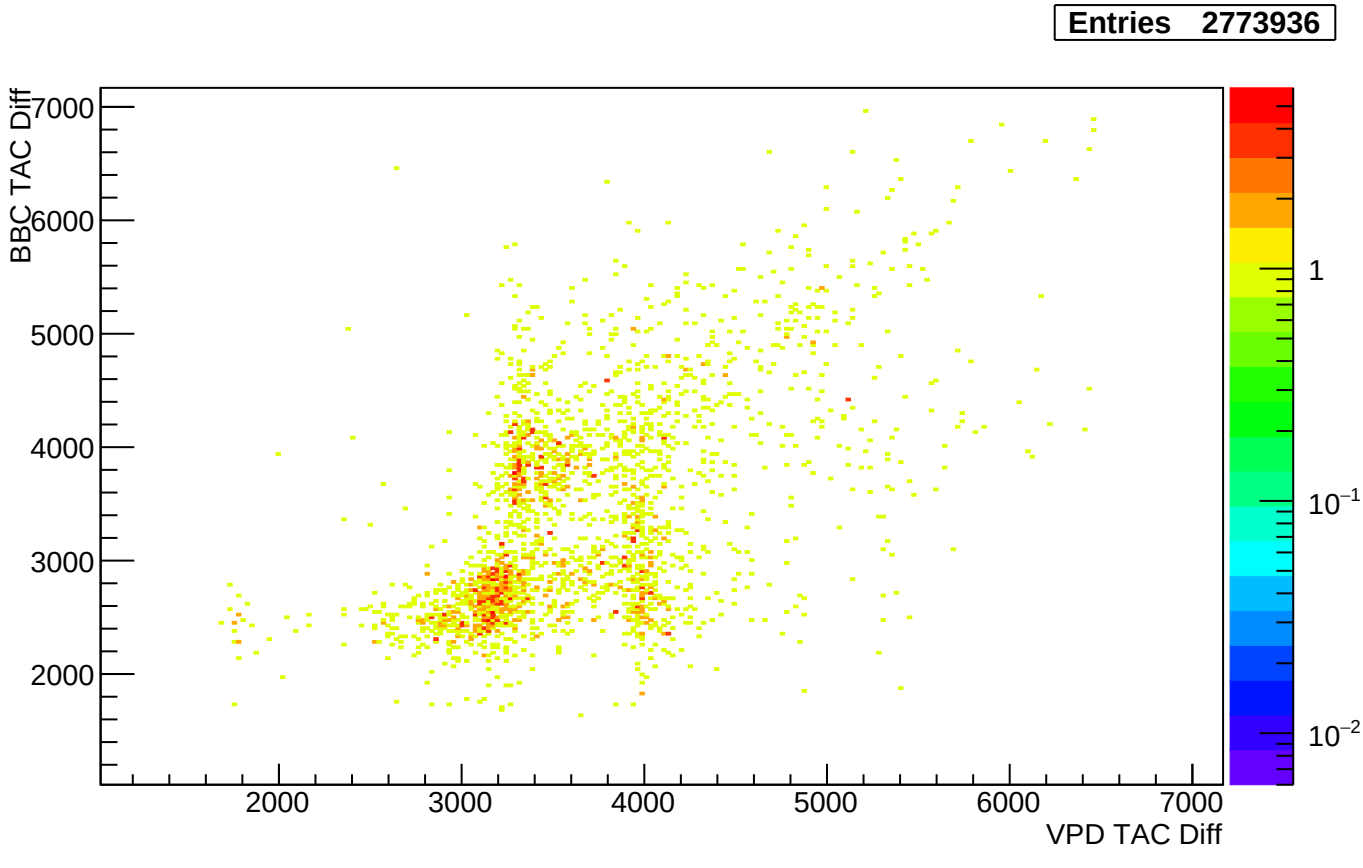

Entries 2773936
TOF_Mult
EPD-East Hit Cnt

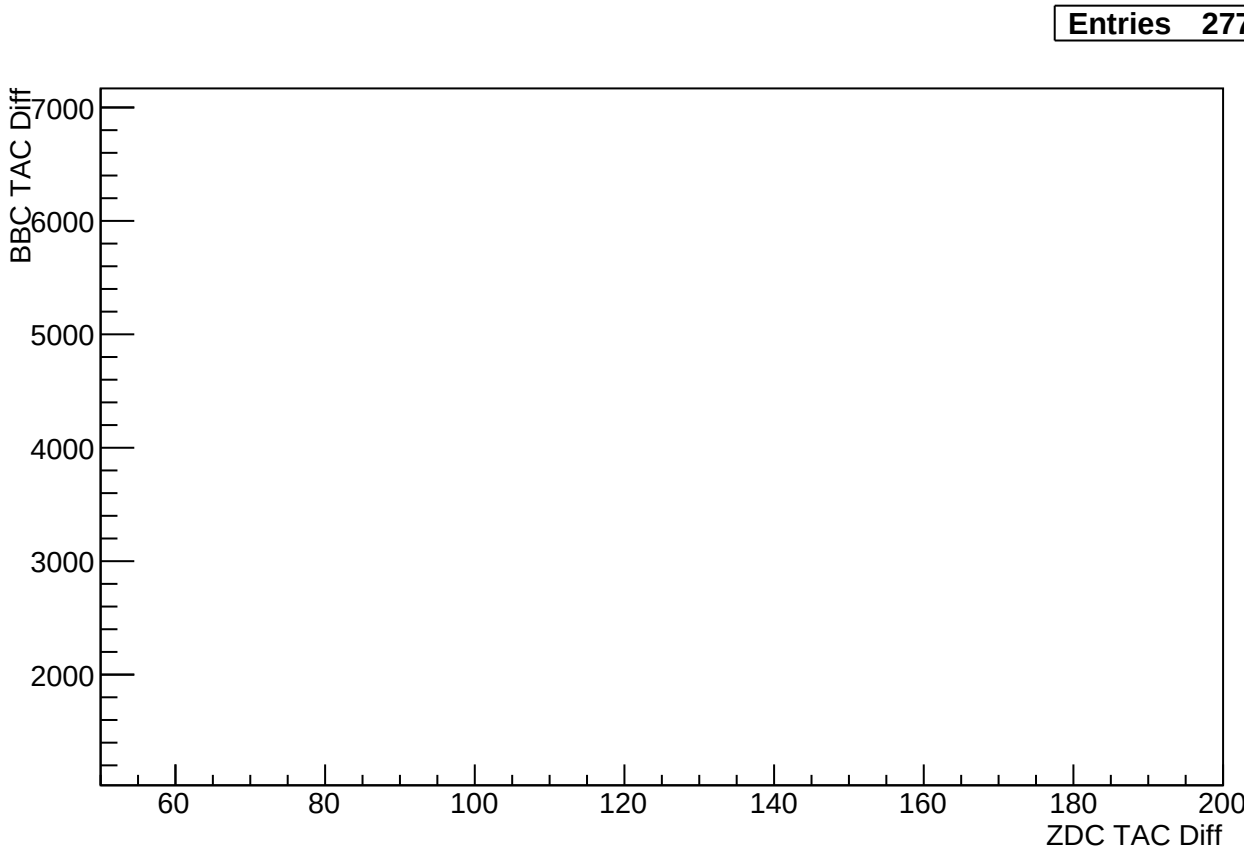

Entries 2773936
TOF_Mult
EPD-West Hit Cnt

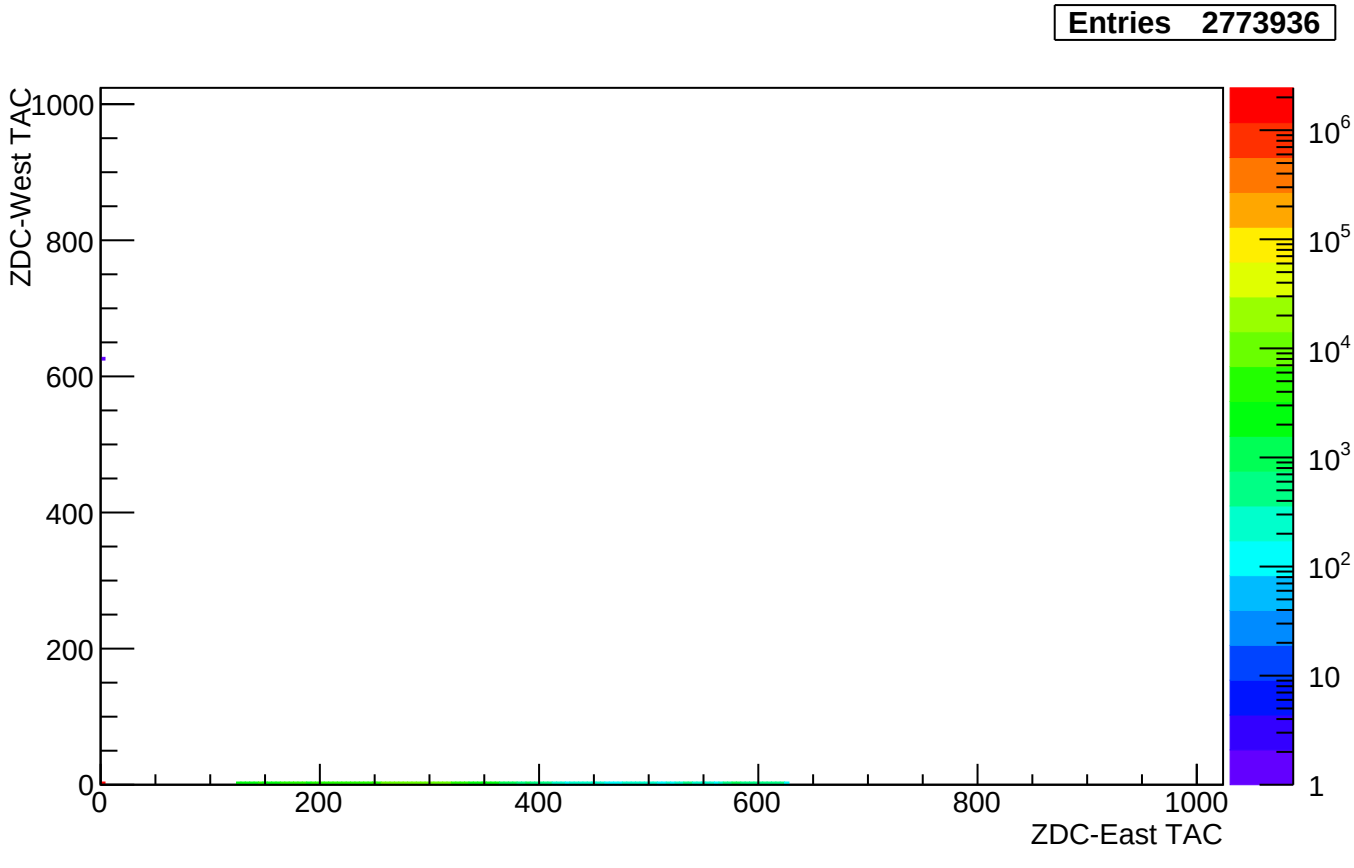

Entries 2773936
TOF_Mult
VPD-East ADC Sum

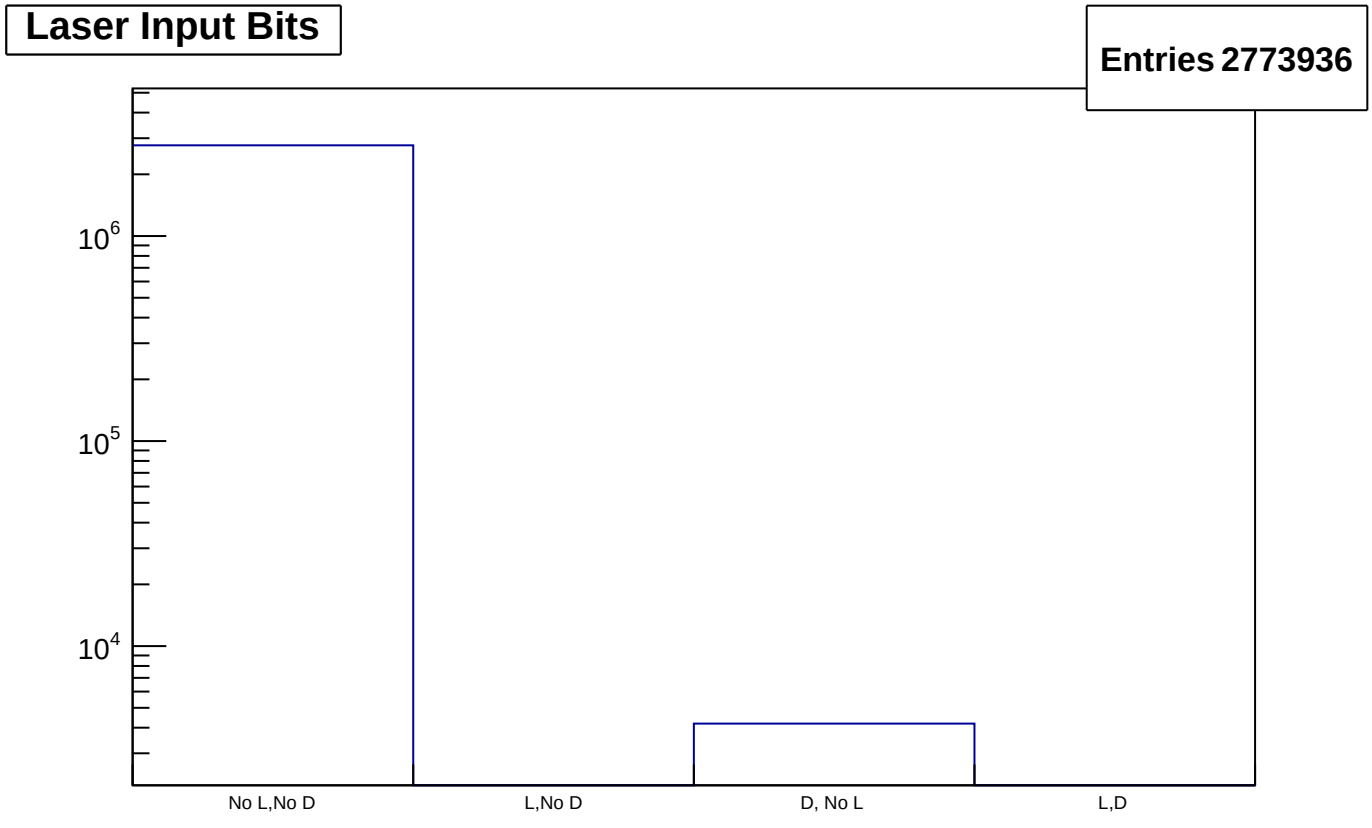

Entries 2773936
TOF_Mult
VPD-West ADC Sum

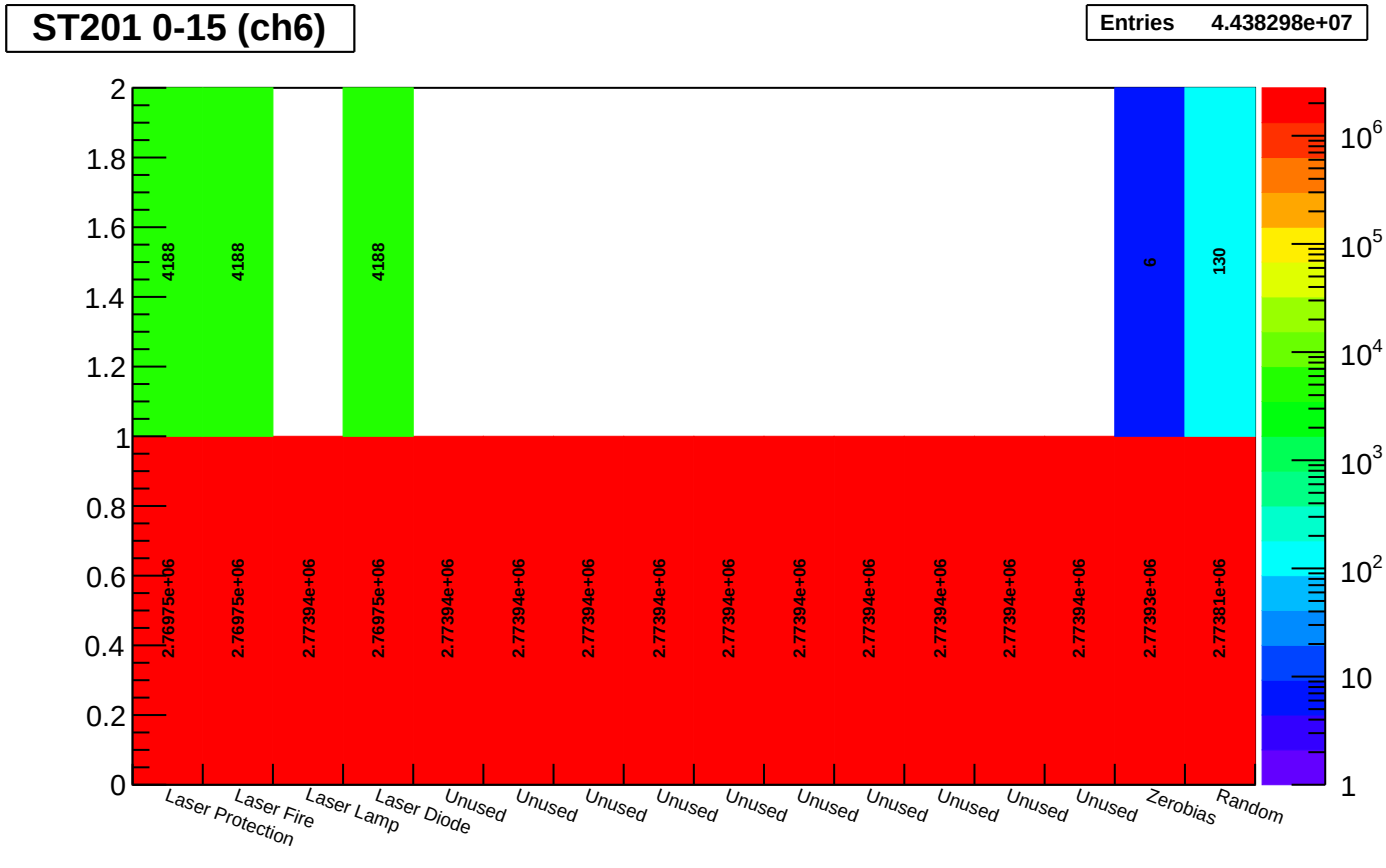

Entries 2773936
BBC TAC Diff
EPD TAC Diff
7000
6000
5000
4000
3000
2000
2000
3000
4000
5000
6000
7000
10^2
10
1

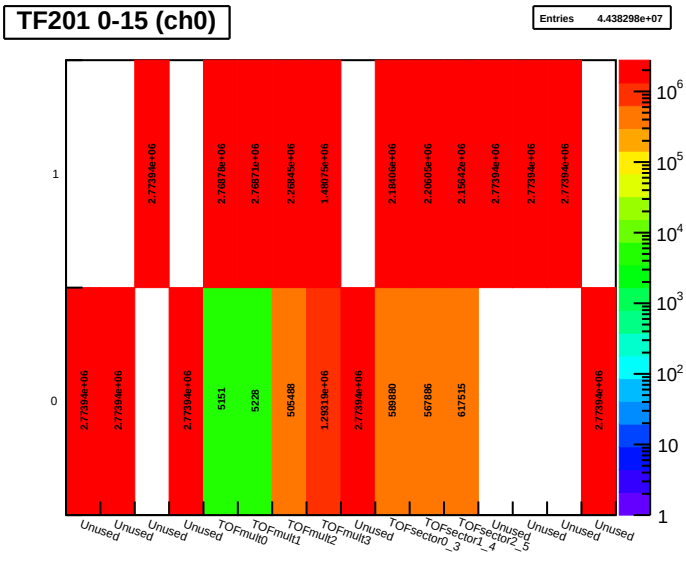

Entries 2773936
BBC TAC Diff
VPD TAC Diff
7000
6000
5000
4000
3000
2000
2000
3000
4000
5000
6000
7000
1
10^{-1}
10^{-2}

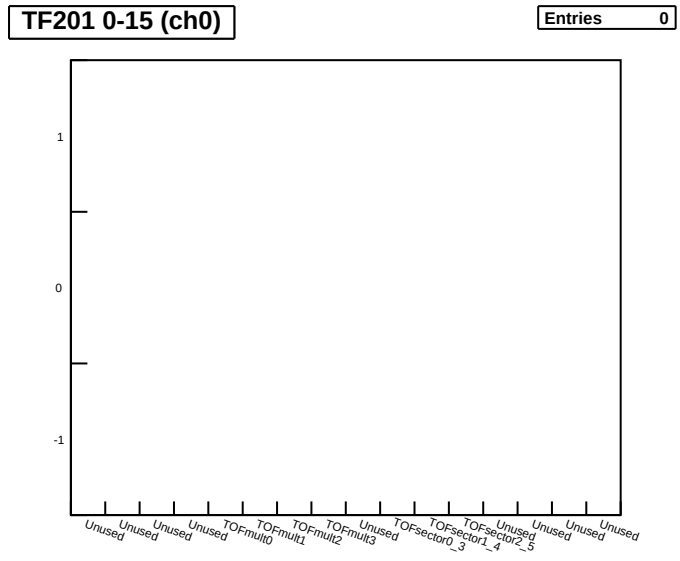

Entries 2773936
BBC TAC Diff
7000
6000
5000
4000
3000
2000
60
80
100
120
140
160
180
200
ZDC TAC Diff

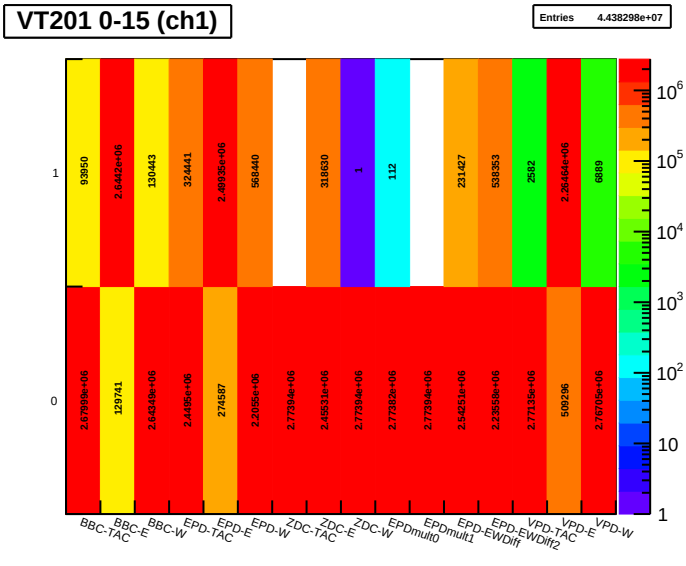

Entries 2773936
ZDC-West TAC
1000
800
600
400
200
0
0
200
400
600
800
1000
ZDC-East TAC
10^6
10^5
10^4
10^3
10^2
10
1

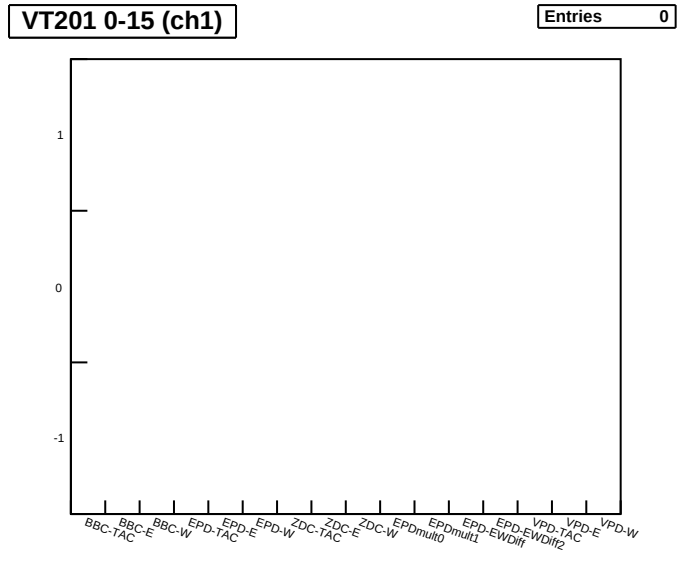

Laser Input Bits
Entries 2773936
10^6
10^5
10^4
No L,No D
L,No D
D, No L
L,D

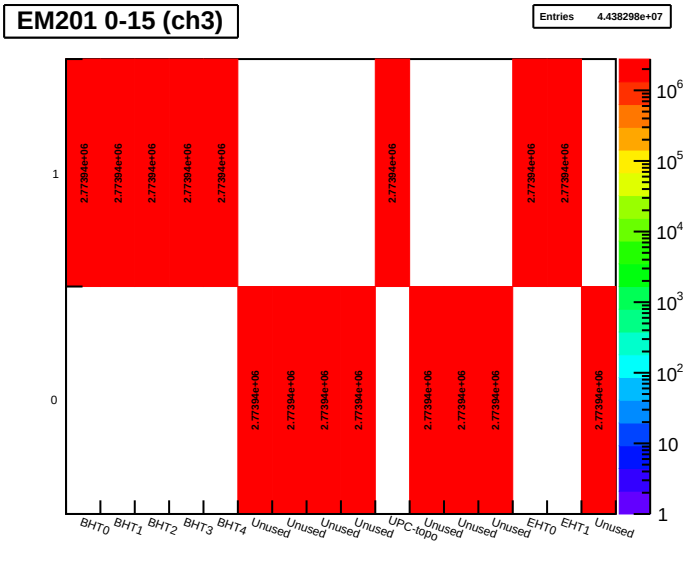

ST201 0-15 (ch6)
Entries 4.438298e+07
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
4188
4188
4188
6
130
2.76975e+06
2.76975e+06
2.77394e+06
2.76975e+06
2.77394e+06
2.77394e+06
2.77394e+06
2.77394e+06
2.77394e+06
2.77394e+06
2.77394e+06
2.77394e+06
2.77394e+06
2.77394e+06
2.77393e+06
2.77381e+06
Laser Protection
Laser Fire
Laser Lamp
Laser Diode
Unused
Unused
Unused
Unused
Unused
Unused
Unused
Unused
Unused
Unused
Zerobias
Random
10^6
10^5
10^4
10^3
10^2
10
1

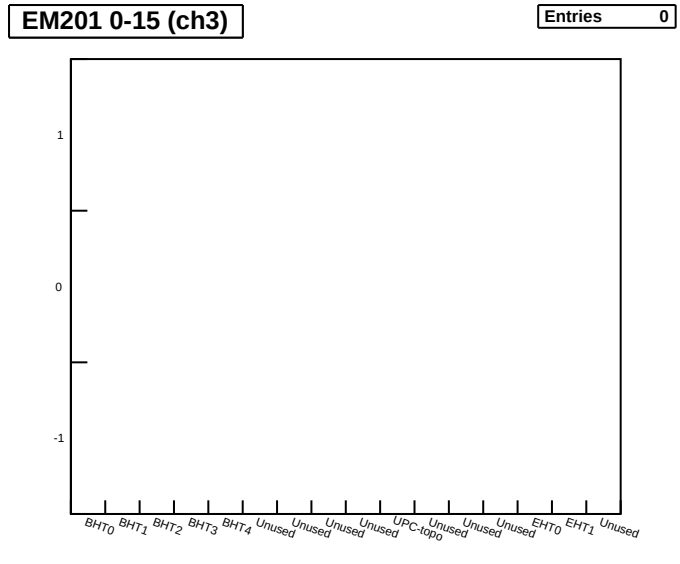

TF201 0-15 (ch0)
Entries 4.438298e+07
1
0
2.77394e+06
2.76878e+06
2.76371e+06
2.26845e+06
1.48075e+06
2.18406e+06
2.20605e+06
2.15642e+06
5151
5228
505488
1.29319e+06
589880
567886
617515
Unused
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFsector0_3
TOFsector1_4
TOFsector2_5
10^6
10^5
10^4
10^3
10^2
10
1


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


VT201 0-15 (ch1)
Entries 4.438298e+07
1
0
93950
2.6442e+06
130443
324441
2.49935e+06
568440
318630
1
112
231427
538353
2582
2.26464e+06
6889
2.67999e+06
129741
2.66348e+06
2.4495e+06
274587
2.2055e+06
2.77394e+06
2.45531e+06
2.77392e+06
2.54251e+06
2.23558e+06
2.77135e+06
509296
2.76705e+06
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
10^6
10^5
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 4.438298e+07
1
0
2.77394e+06
2.77394e+05
BHT0
BHT1
BHT2
BHT3
BHT4
Unused
UPC-topo
EHT0
EHT1
10^6
10^5
10^4
10^3
10^2
10
1


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