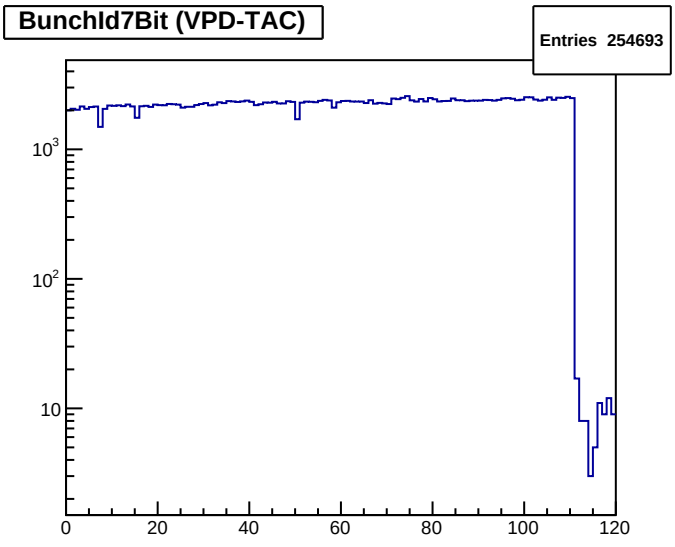
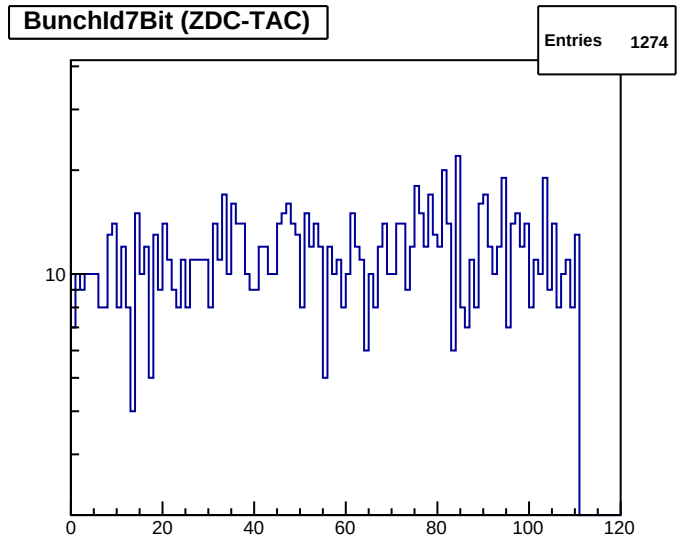
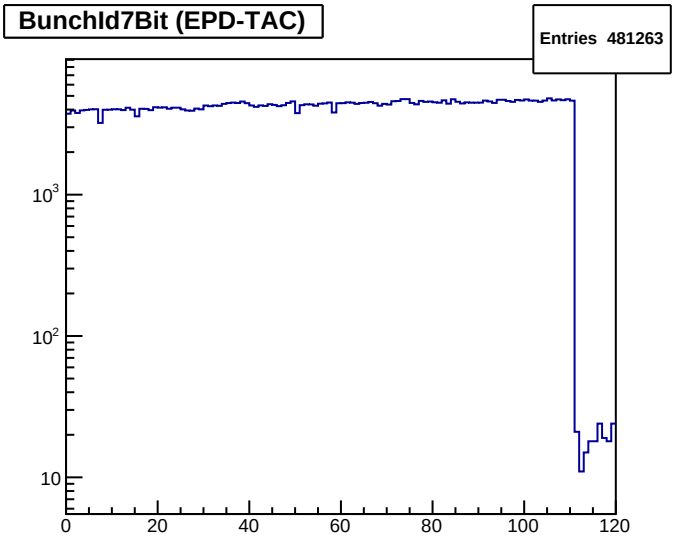
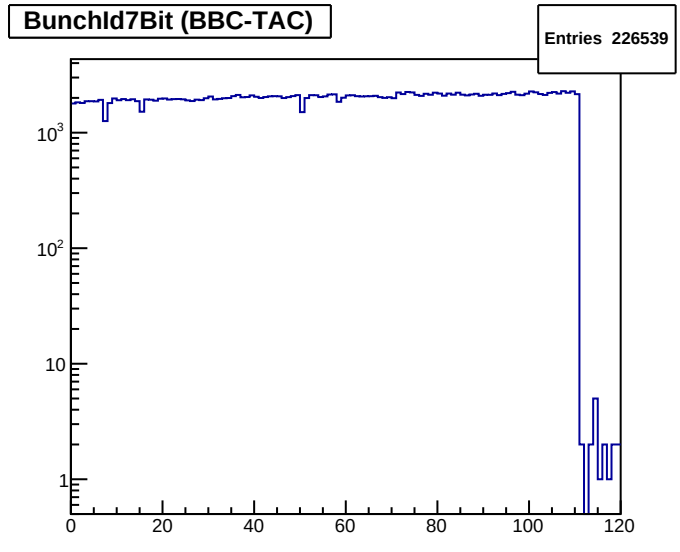
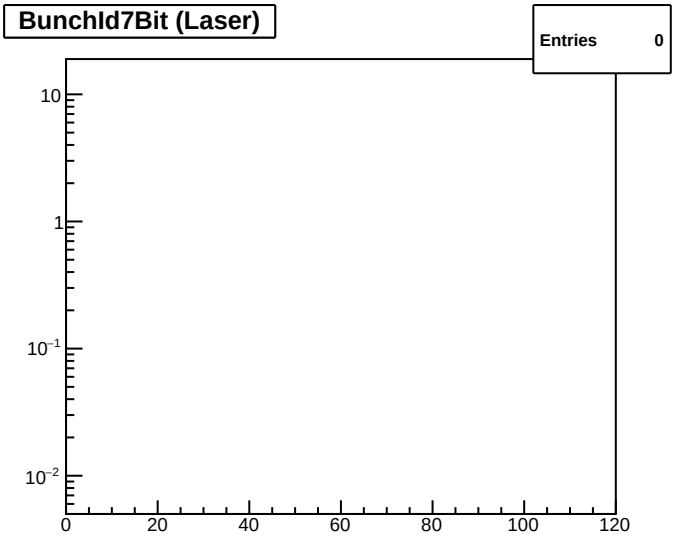
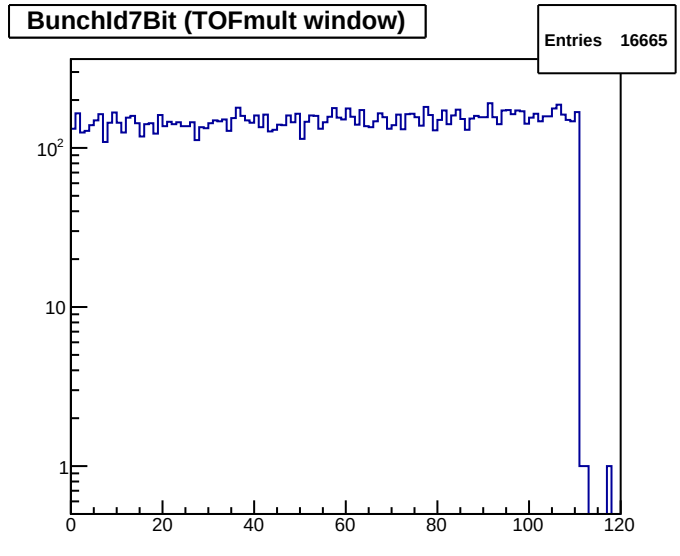

BunchId7Bit (VPD-TAC)
Entries 254693
10^3
10^2
10
0 20 40 60 80 100 120

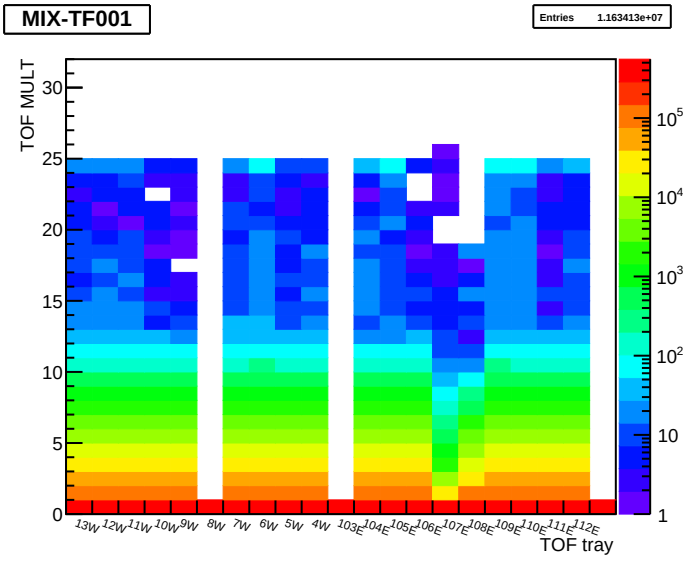

BunchId7Bit (ZDC-TAC)
Entries 1274
10
0 20 40 60 80 100 120

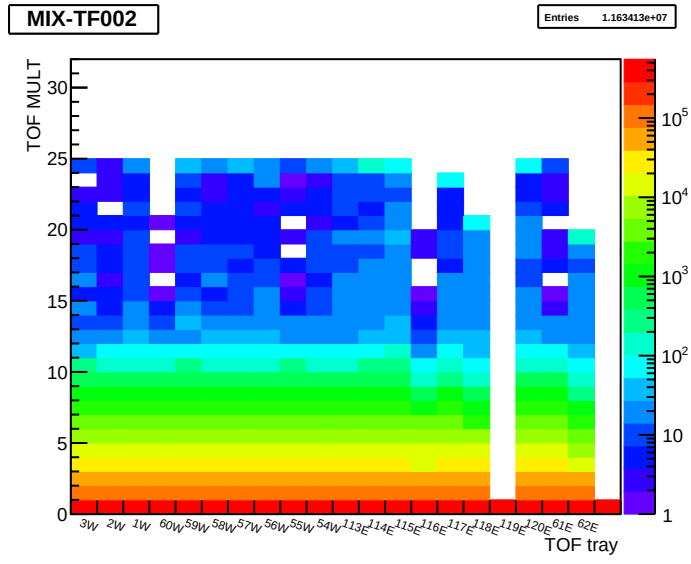

BunchId7Bit (EPD-TAC)
Entries 481263
10^3
10^2
10
0 20 40 60 80 100 120

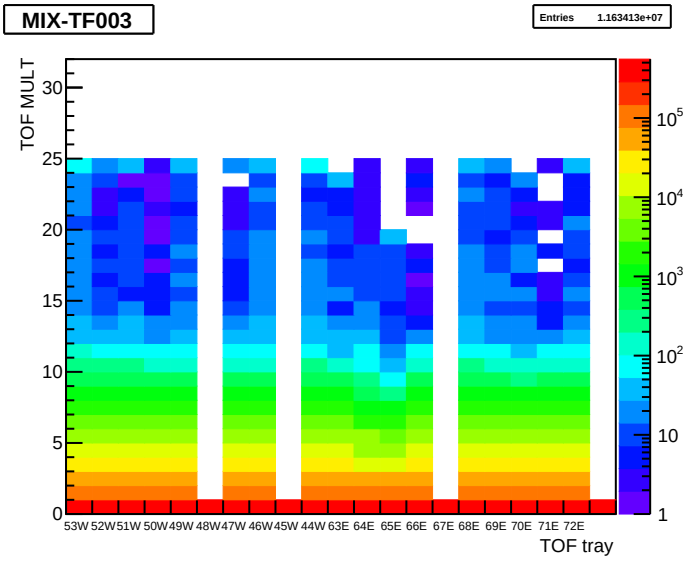

BunchId7Bit (BBC-TAC)
Entries 226539
10^3
10^2
10
1
0 20 40 60 80 100 120

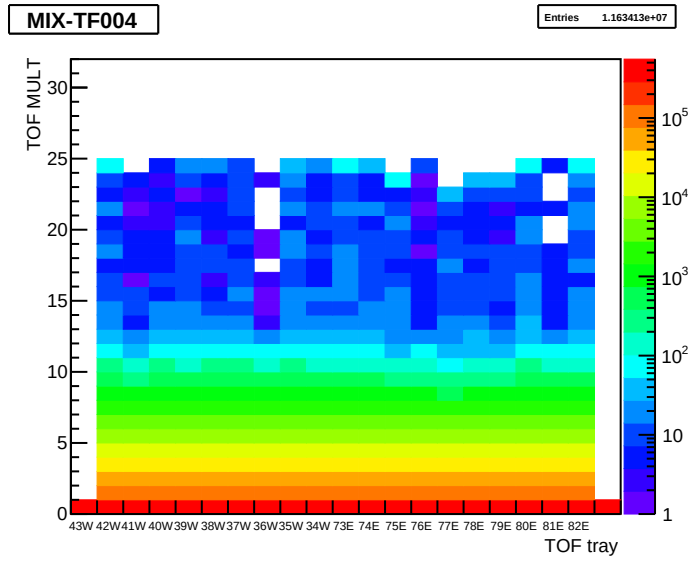

BunchId7Bit (Laser)
Entries 0
10
1
10^{-1}
10^{-2}
0 20 40 60 80 100 120

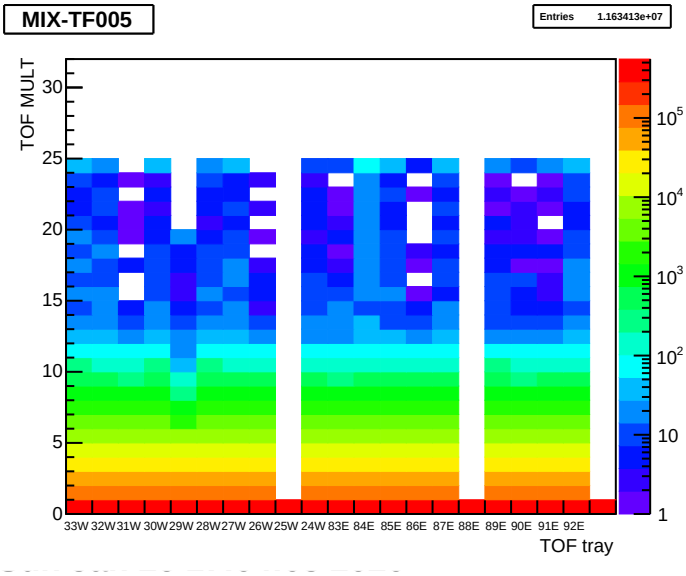

BunchId7Bit (TOFmult window)
Entries 16665
10^2
10
1
0 20 40 60 80 100 120

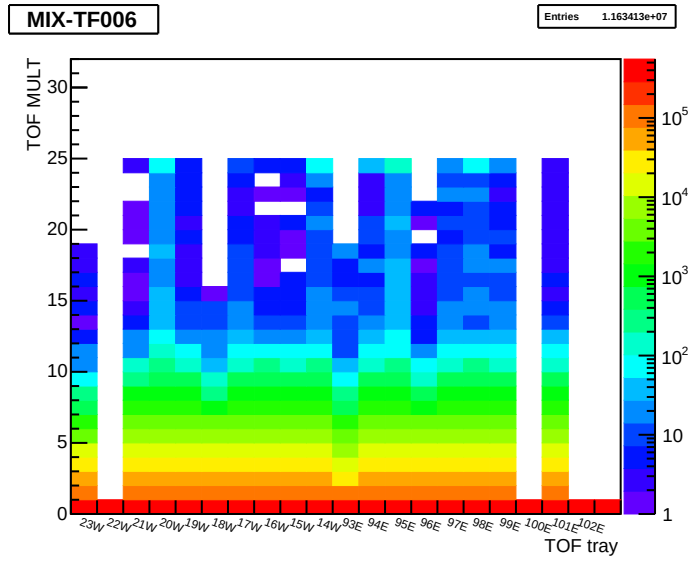

MIX-TF001
Entries 1.163413e+07
TOF MULT
TOF tray
13W 12W 11W 10W 9W 8W 7W 6W 5W 4W 103E 104E 105E 106E 107E 108E 109E 110E 111E 112E

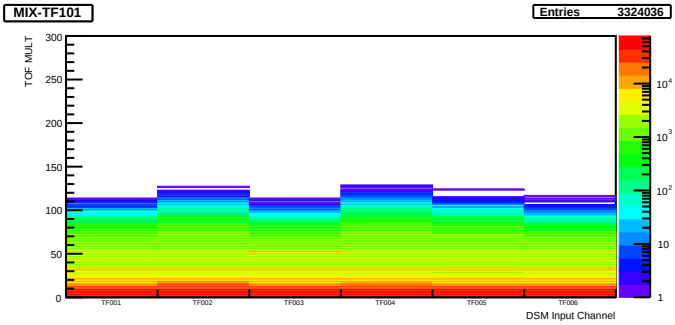

MIX-TF002
Entries 1.163413e+07
TOF MULT
TOF tray
3W 2W 1W 60W 59W 58W 57W 56W 55W 54W 113E 114E 115E 116E 117E 118E 119E 120E 61E 62E

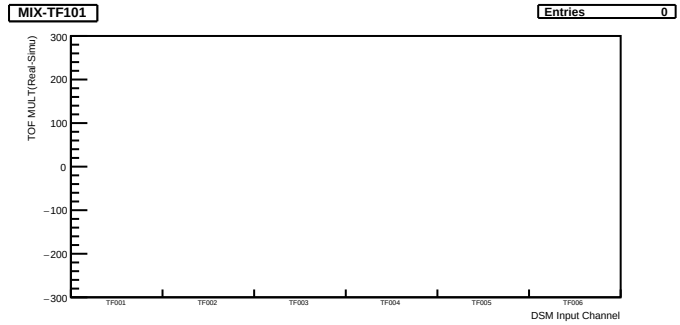

MIX-TF003
Entries 1.163413e+07
TOF MULT
TOF tray
53W 52W 51W 50W 49W 48W 47W 46W 45W 44W 63E 64E 65E 66E 67E 68E 69E 70E 71E 72E

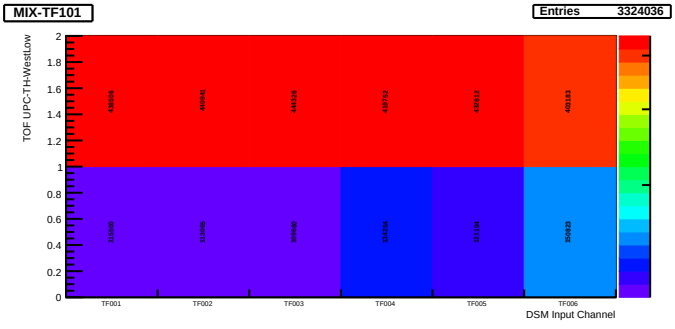

MIX-TF004
Entries 1.163413e+07
TOF MULT
TOF tray
43W 42W 41W 40W 39W 38W 37W 36W 35W 34W 73E 74E 75E 76E 77E 78E 79E 80E 81E 82E

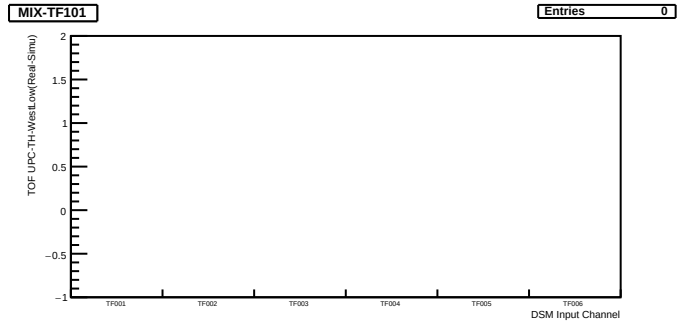

MIX-TF005
Entries 1.163413e+07
TOF MULT
TOF tray
33W 32W 31W 30W 29W 28W 27W 26W 25W 24W 83E 84E 85E 86E 87E 88E 89E 90E 91E 92E

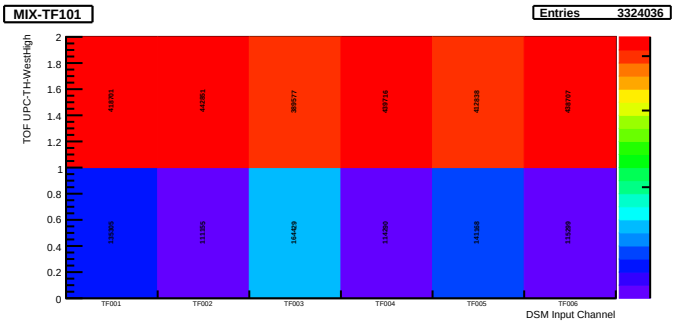

MIX-TF006
Entries 1.163413e+07
TOF MULT
TOF tray
23W 22W 21W 20W 19W 18W 17W 16W 15W 14W 93E 94E 95E 96E 97E 98E 99E 100E 101E 102E

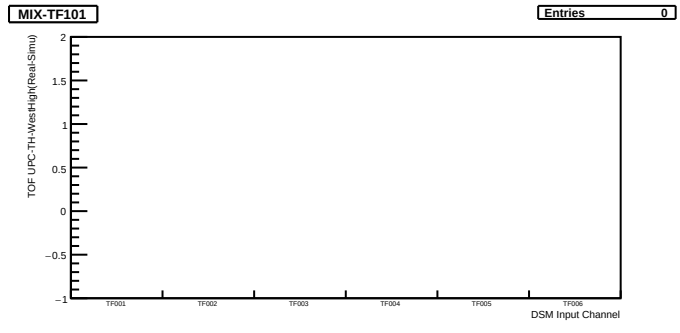

MIX-TF101
Entries 3324036
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

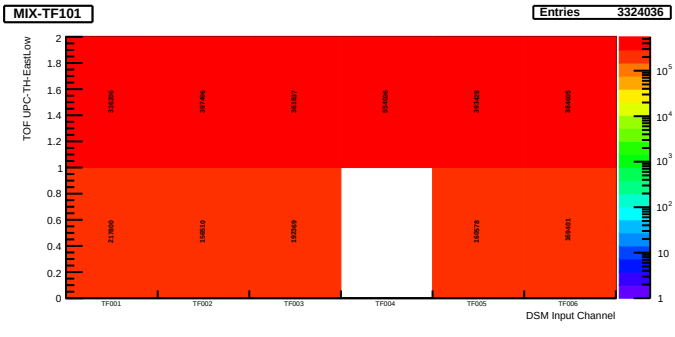

MIX-TF101
Entries 0
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

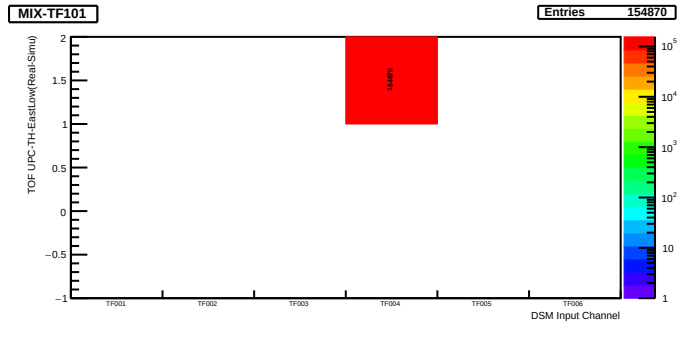

MIX-TF101
Entries 3324036
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

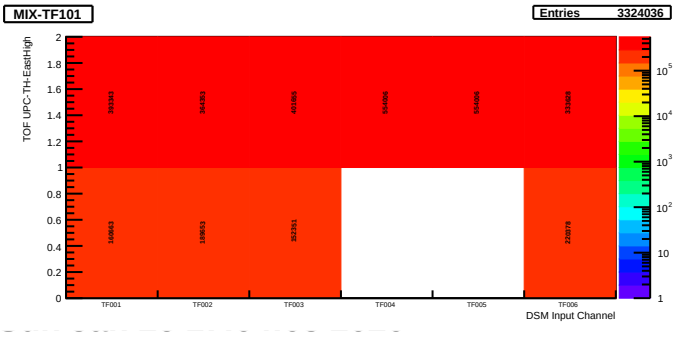

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

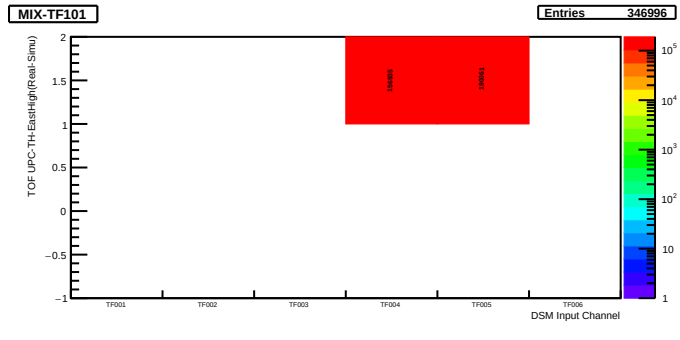

MIX-TF101
Entries 3324036
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

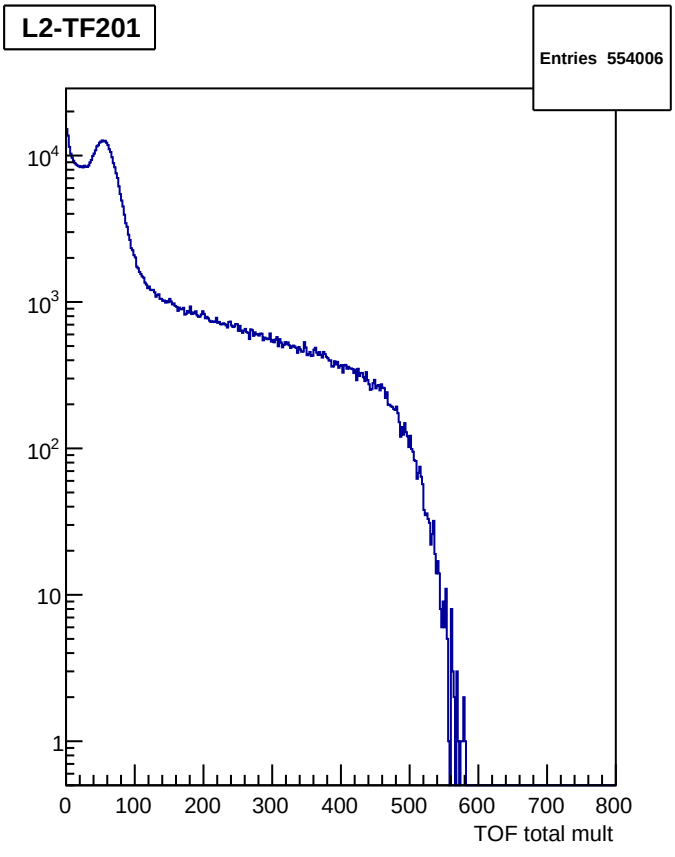

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

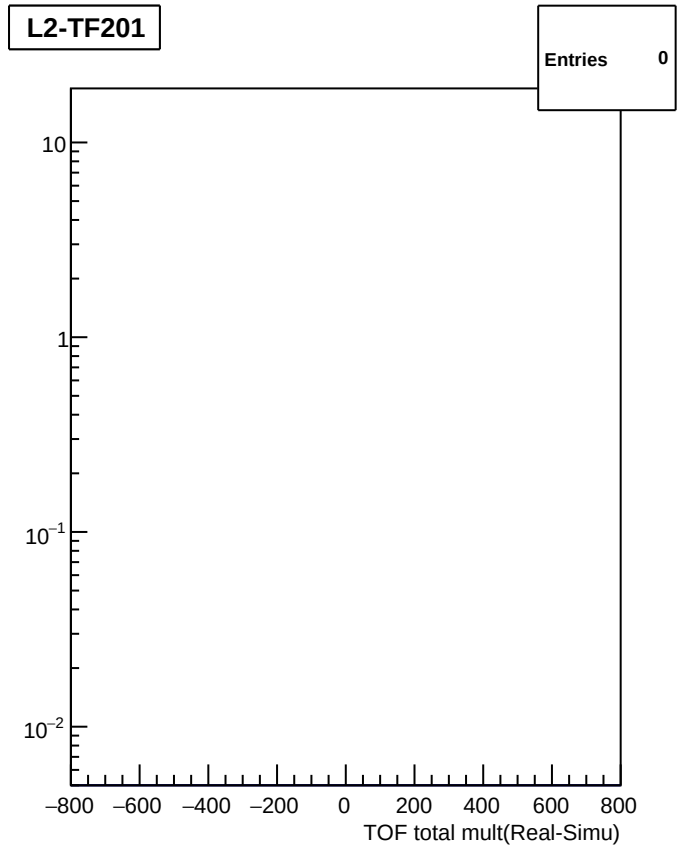

MIX-TF101
Entries 3324036
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

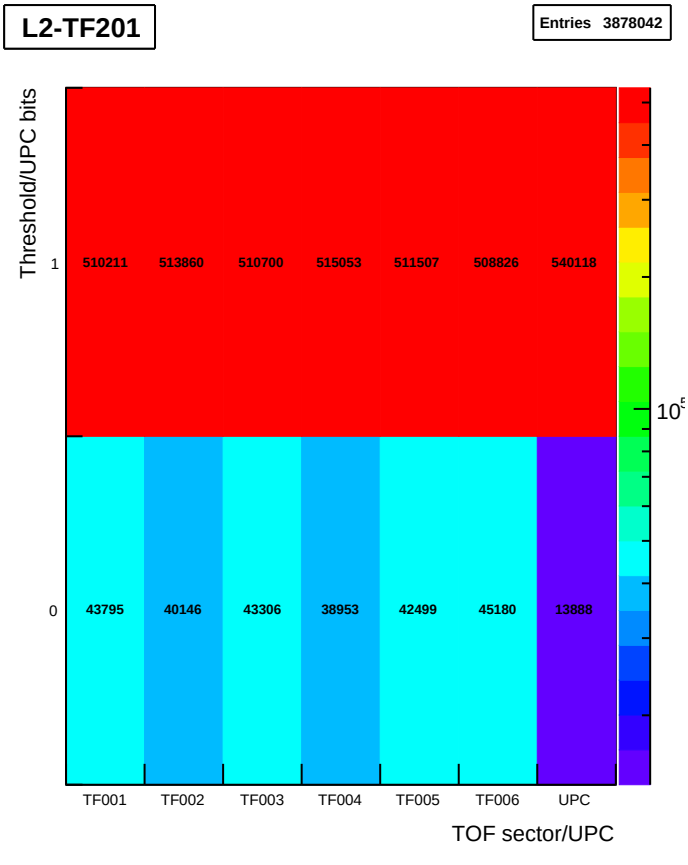

MIX-TF101
Entries 154870
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

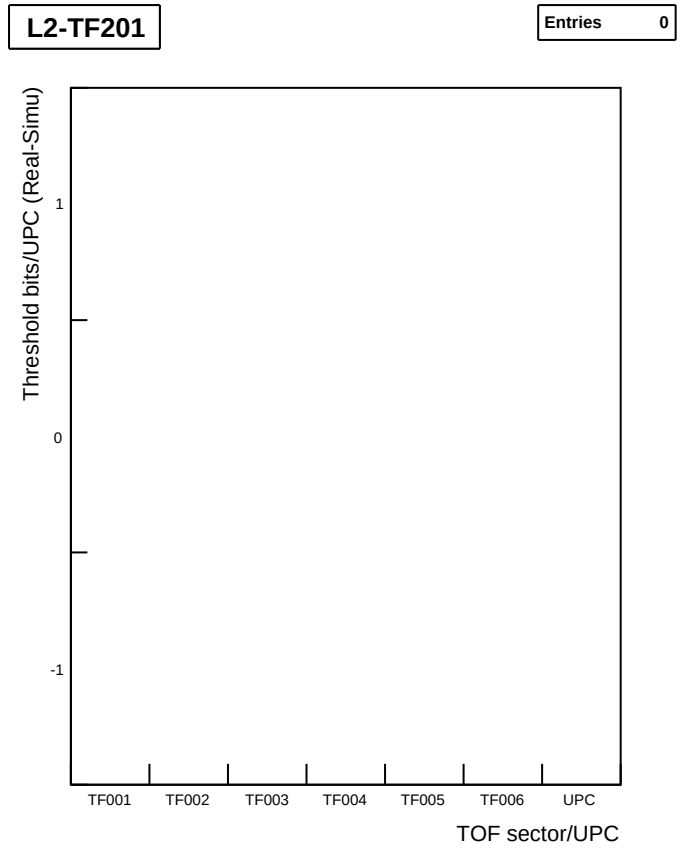

MIX-TF101
Entries 3324036
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

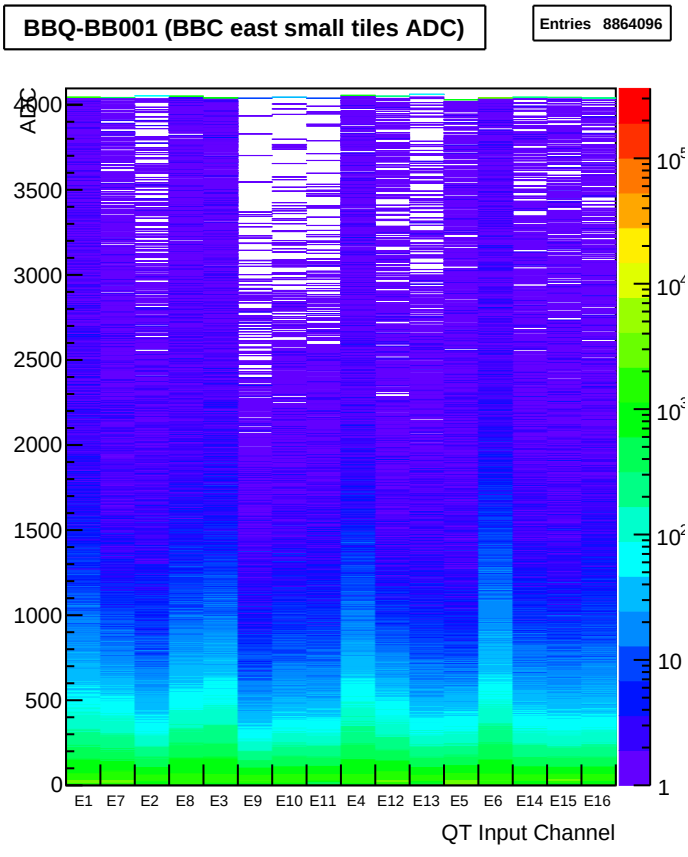

MIX-TF101
Entries 346996
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

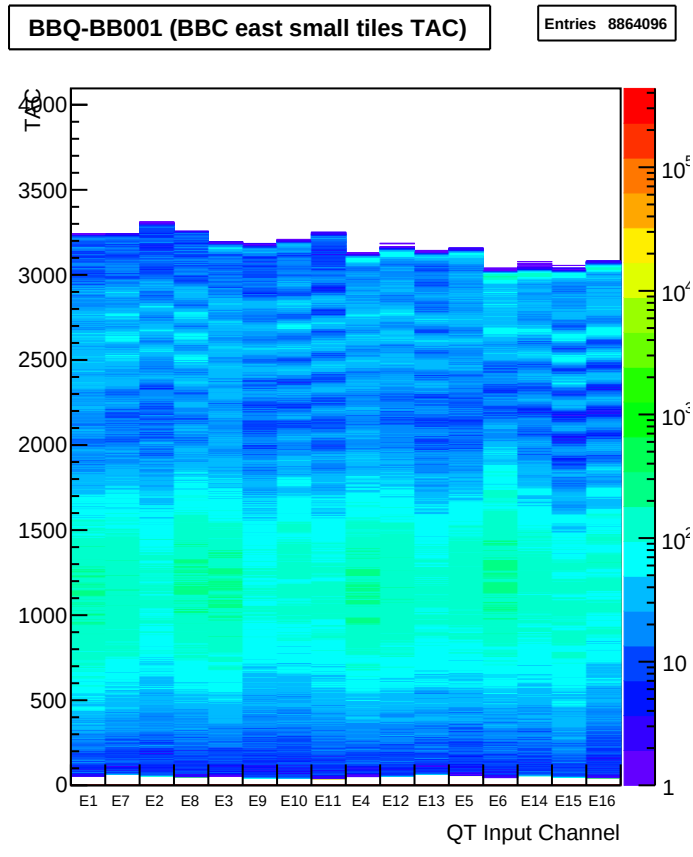

L2-TF201
Entries 554006
TOF total mult

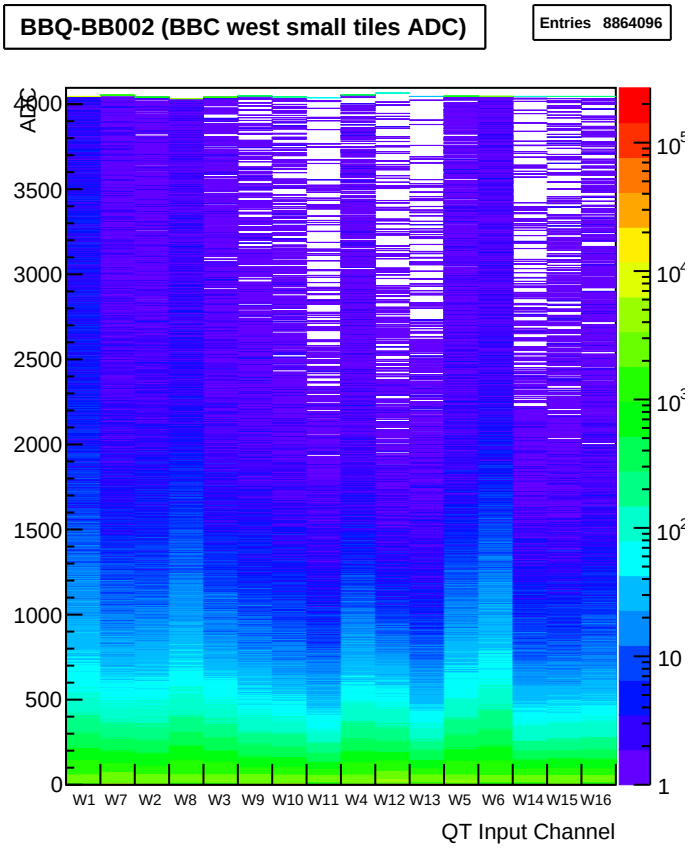

L2-TF201
Entries 0
TOF total mult(Real-Simu)

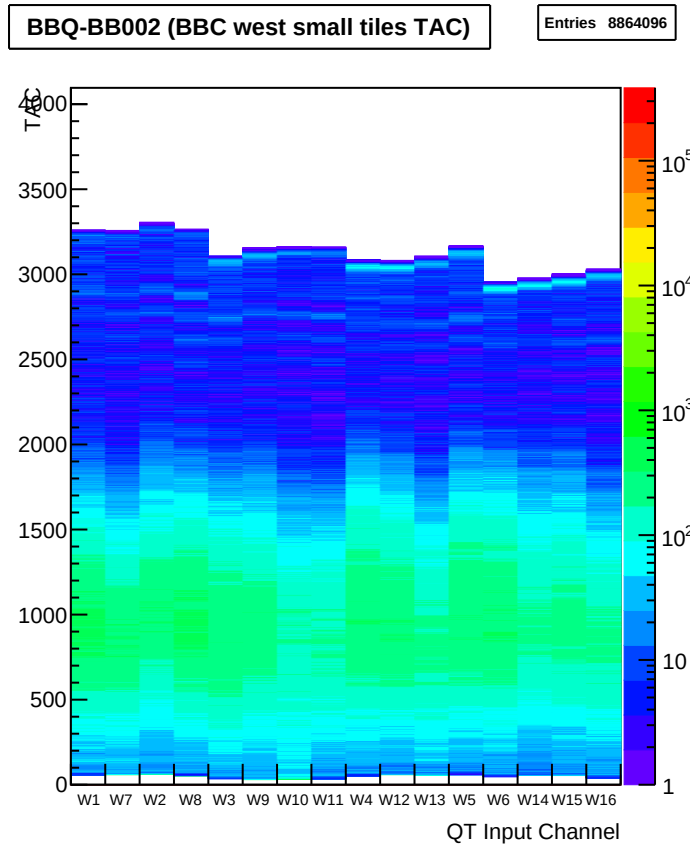

L2-TF201
Entries 3878042
Threshold/UPC bits
510211
513860
510700
515053
511507
508826
540118
43795
40146
43306
38953
42499
45180
13888
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC

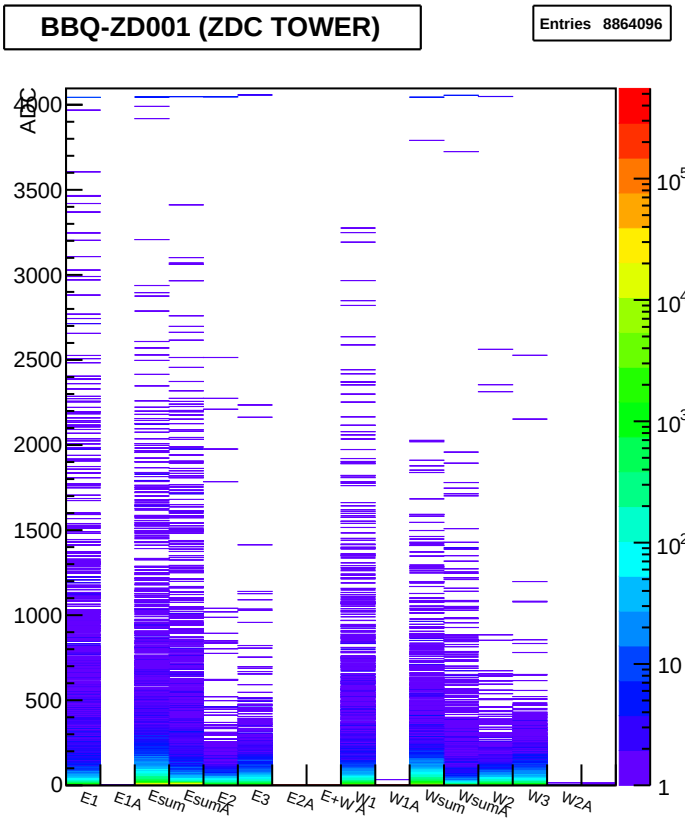

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC

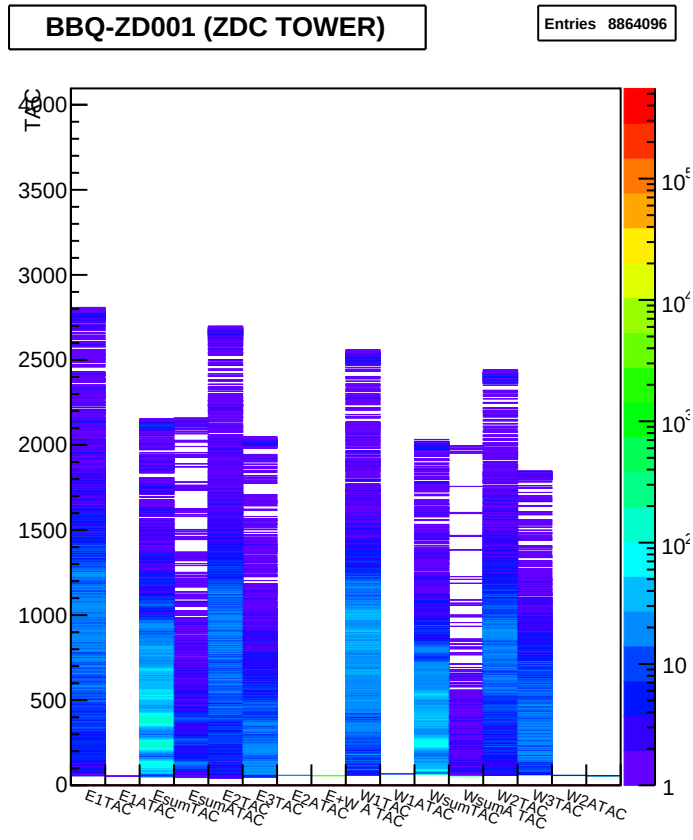

BBQ-BB001 (BBC east small tiles ADC)
Entries 8864096
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

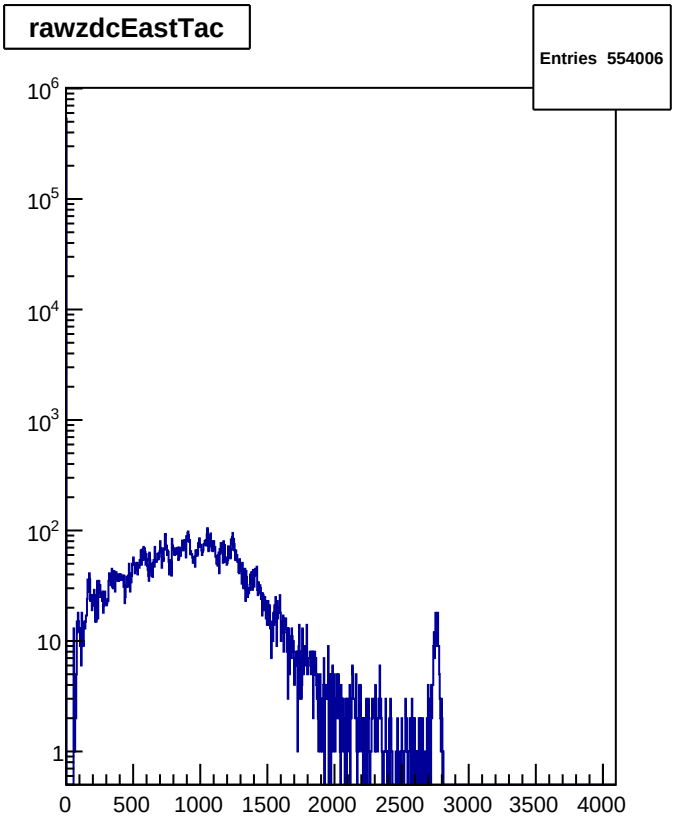

BBQ-BB001 (BBC east small tiles TAC)
Entries 8864096
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

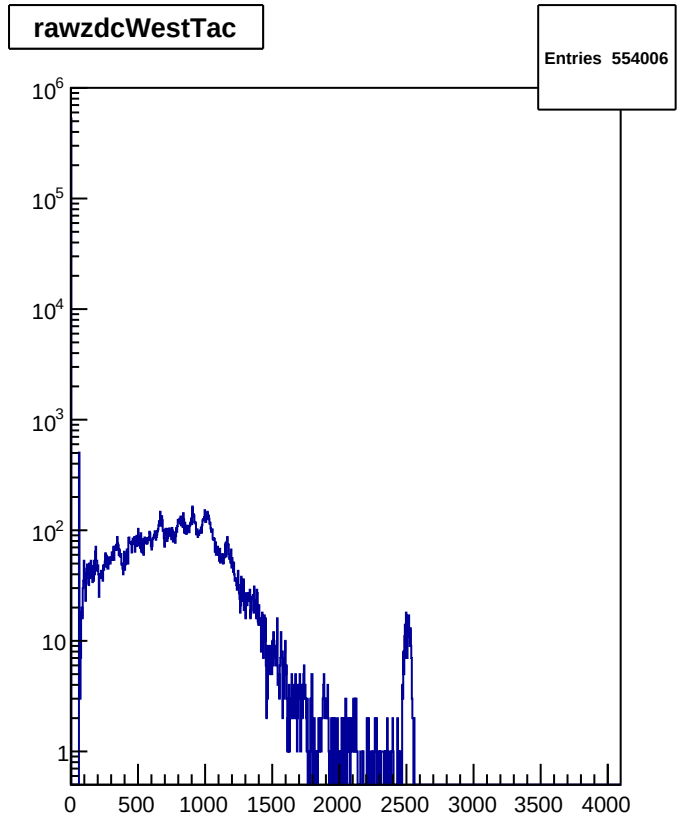

BBQ-BB002 (BBC west small tiles ADC)
Entries 8864096
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

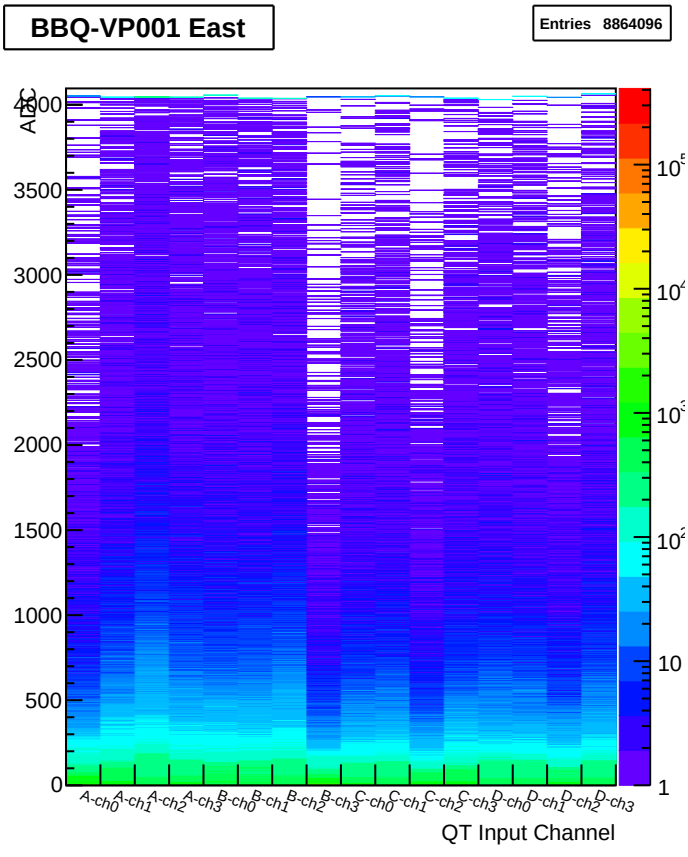

BBQ-BB002 (BBC west small tiles TAC)
Entries 8864096
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

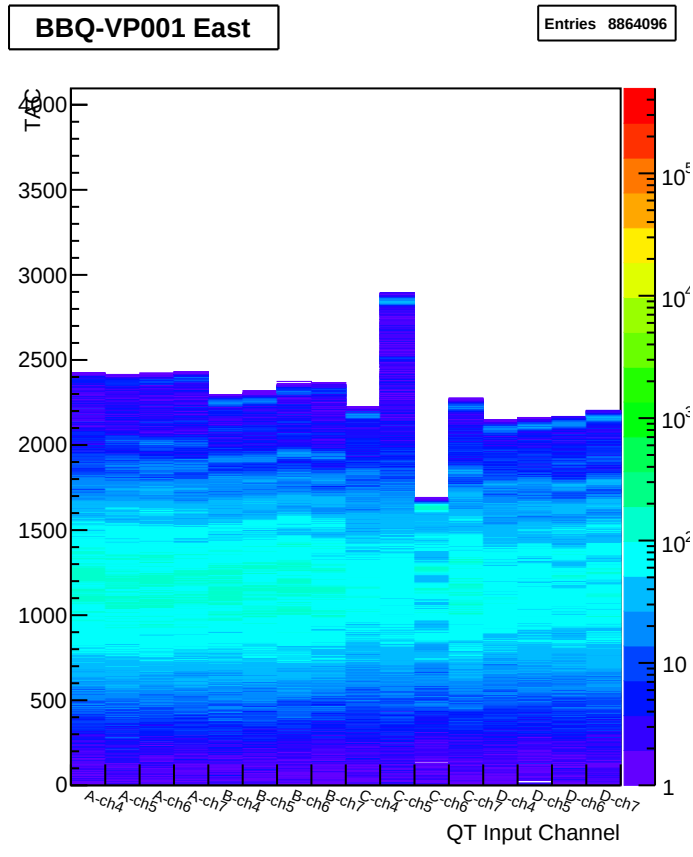

BBQ-ZD001 (ZDC TOWER)
Entries 8864096
ADC
E1
E1A
Esum
EsumA
E2
E3
E2A
E+W
W1
W1A
Wsum
WsumA
W2
W3
W2A

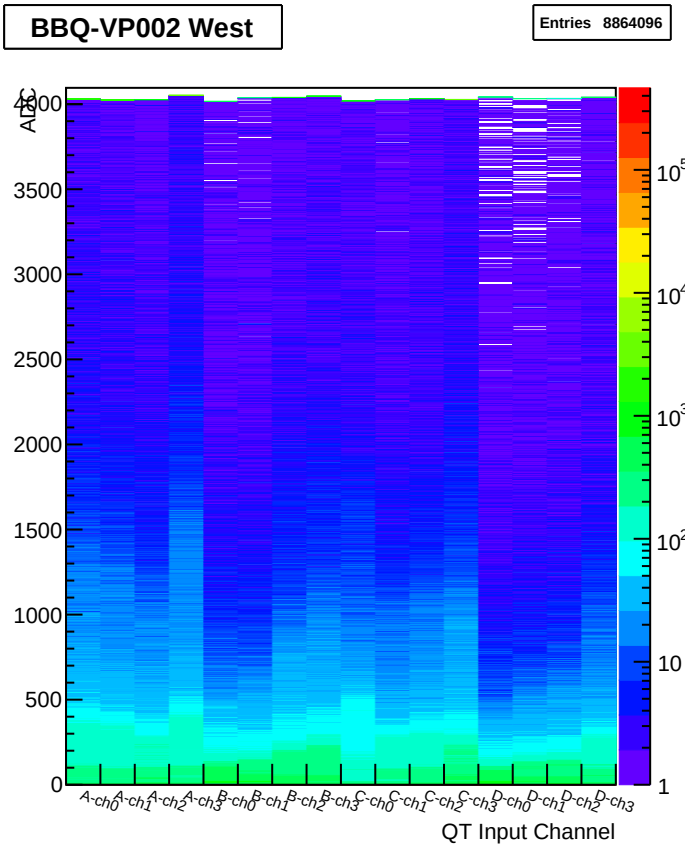

BBQ-ZD001 (ZDC TOWER)
Entries 8864096
TAC
E1TAC
E1ATAC
EsumTAC
EsumATAC
E2TAC
E3TAC
E2ATAC
E+W TAC
W1TAC
W1ATAC
WsumTAC
WsumATAC
W2TAC
W3TAC
W2ATAC

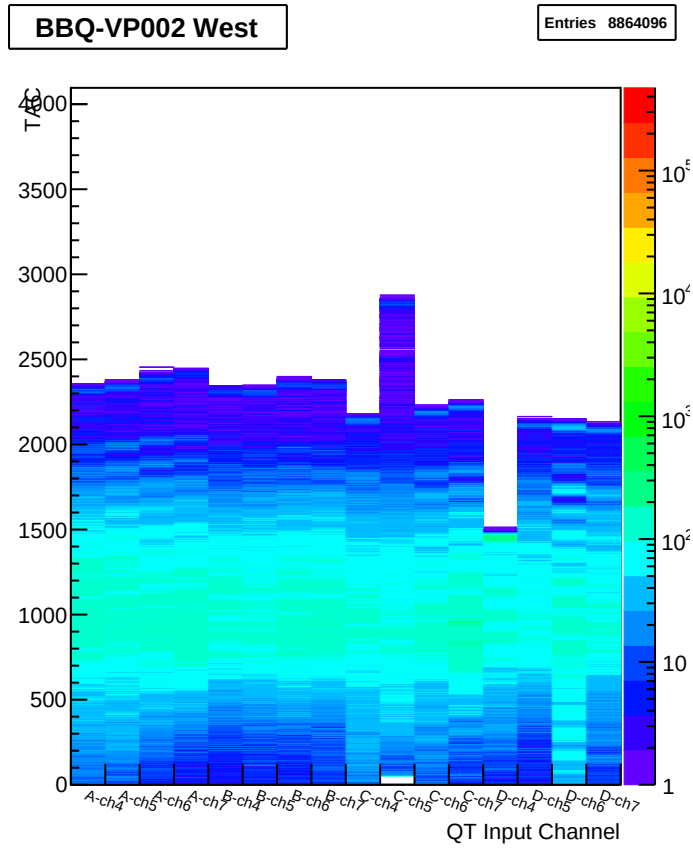

rawzdcEastTac
Entries 554006

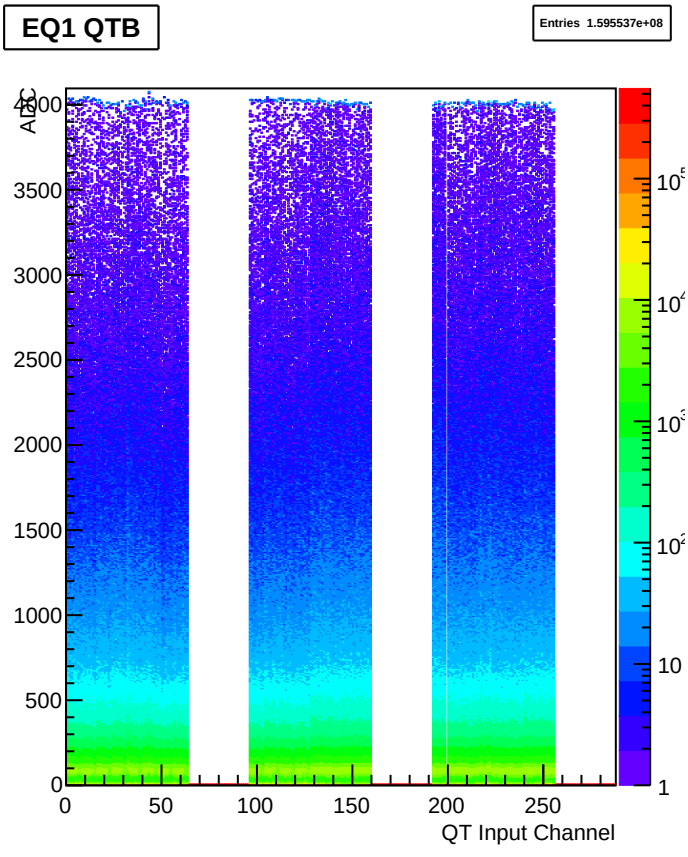

rawzdcWestTac
Entries 554006

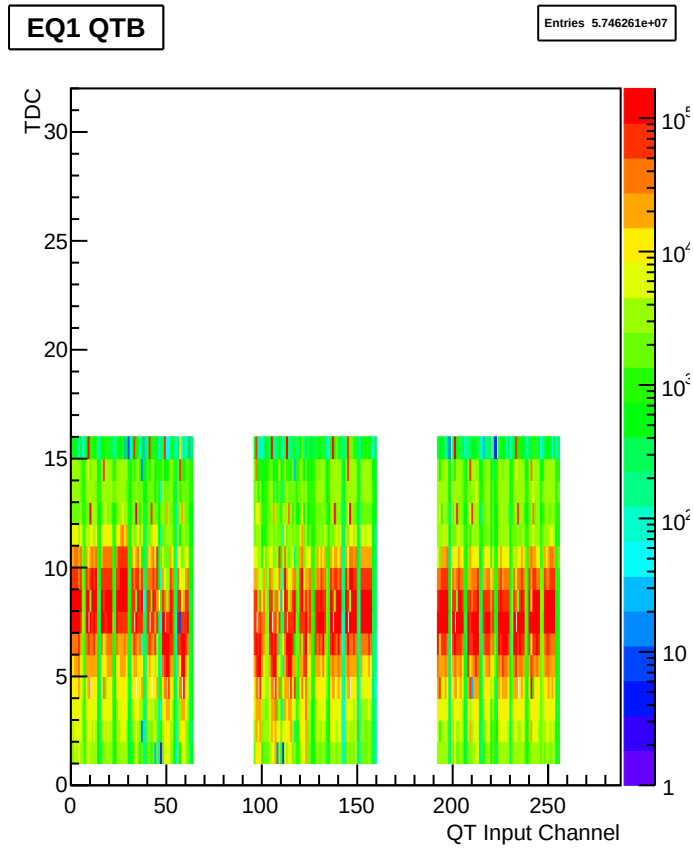

BBQ-VP001 East
Entries 8864096
ADC
QT Input Channel

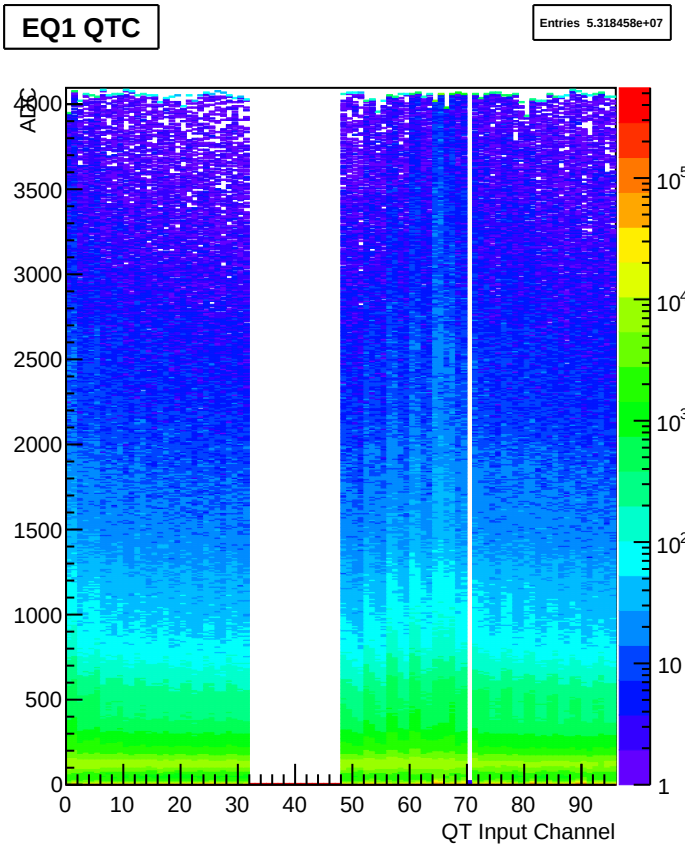

BBQ-VP001 East
Entries 8864096
TADC
QT Input Channel

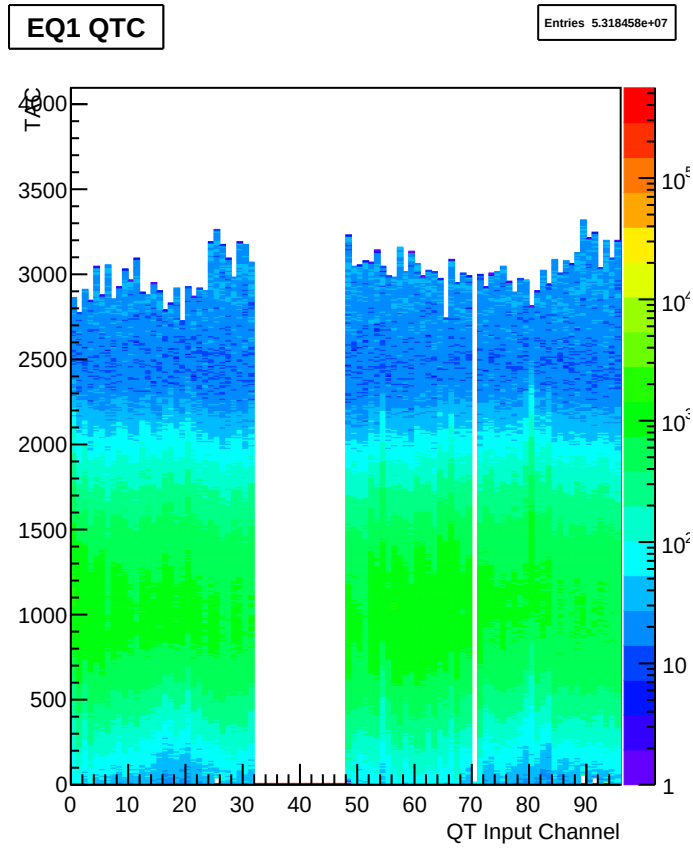

BBQ-VP002 West
Entries 8864096
ADC
QT Input Channel

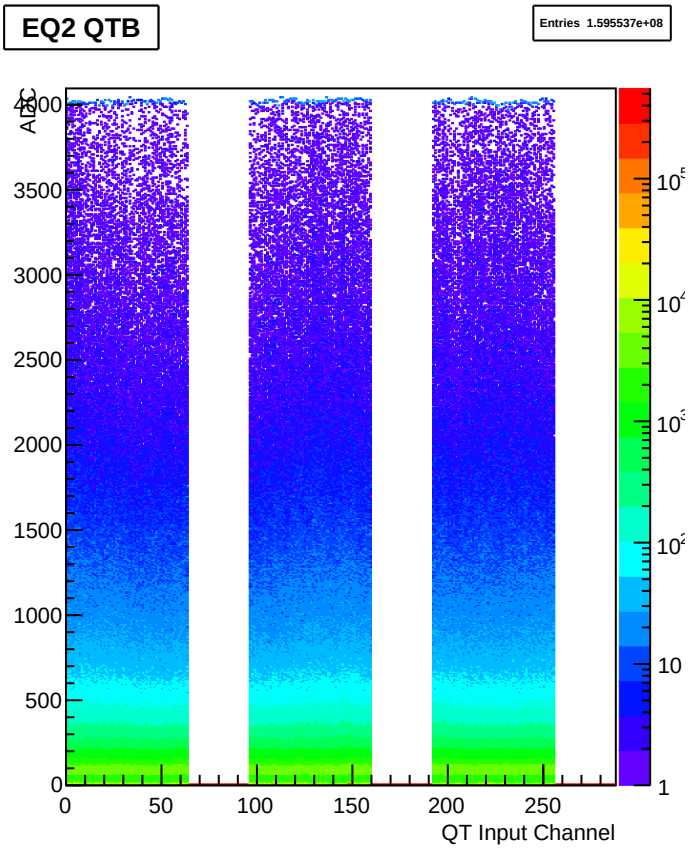

BBQ-VP002 West
Entries 8864096
TADC
QT Input Channel

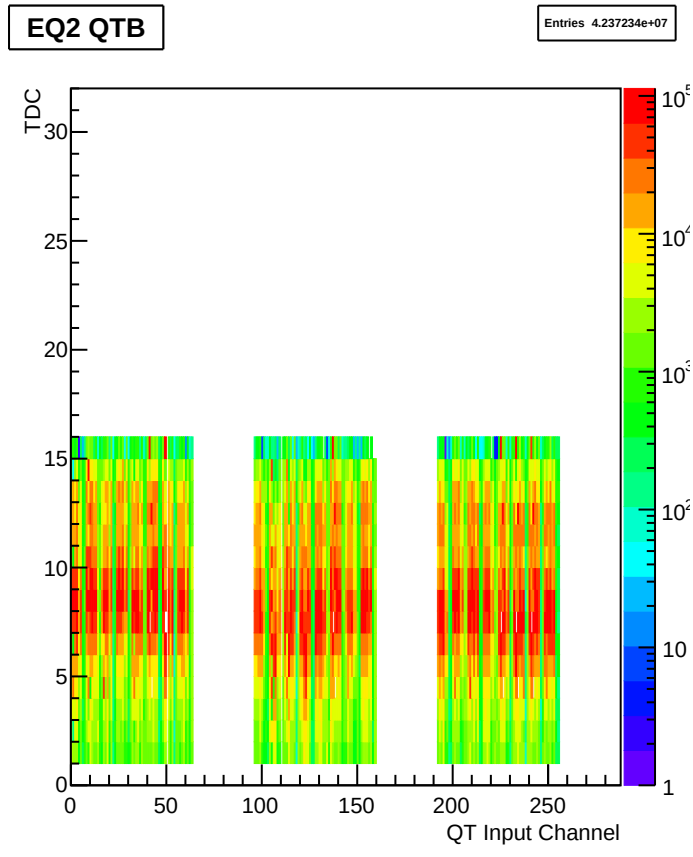

EQ1 QTB
Entries 1.595537e+08
ADC
QT Input Channel

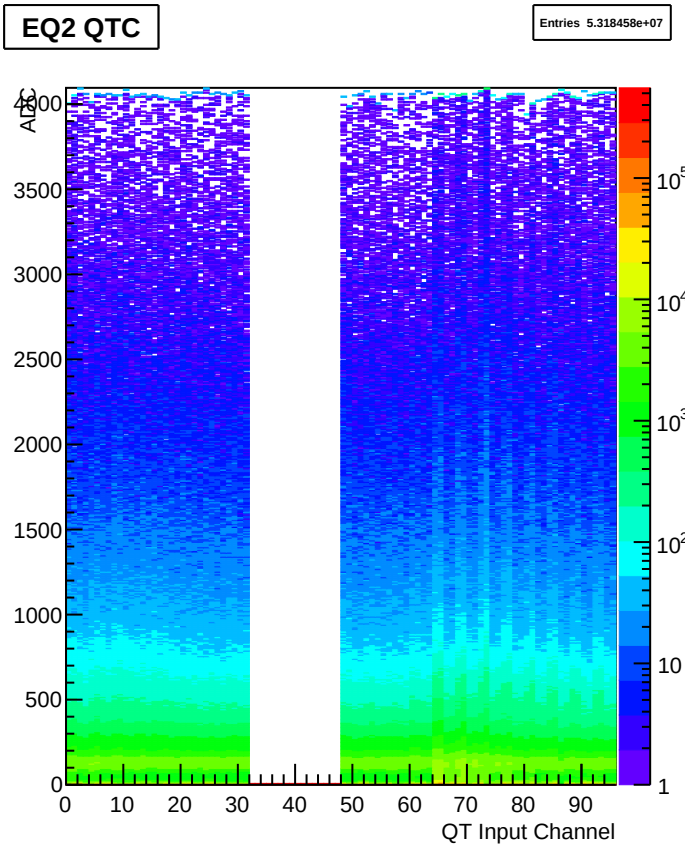

EQ1 QTB
Entries 5.746261e+07
TDC
QT Input Channel

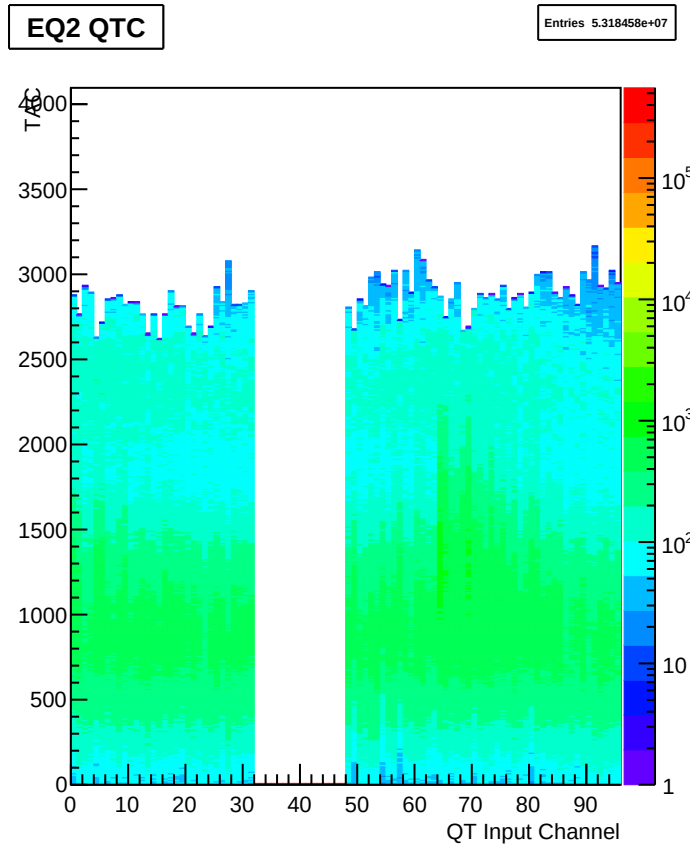

EQ1 QTC
Entries 5.318458e+07
ADC
QT Input Channel

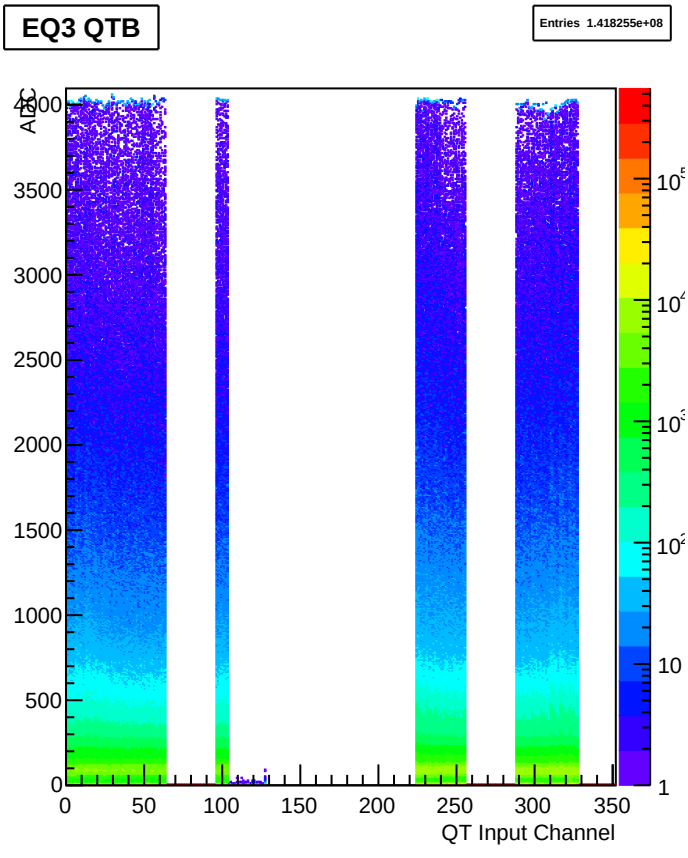

EQ1 QTC
Entries 5.318458e+07
TADC
QT Input Channel

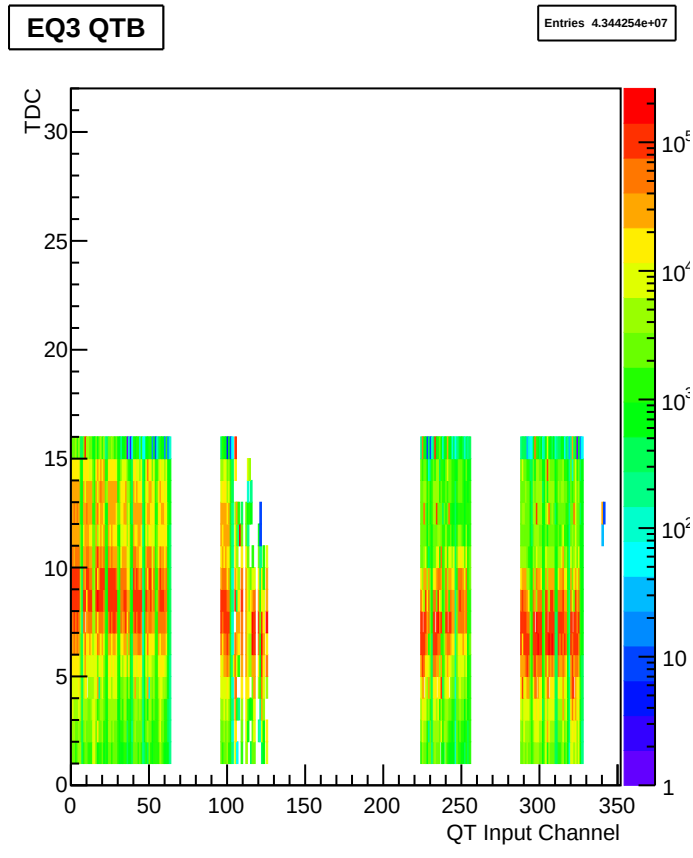

EQ2 QTB
Entries 1.595537e+08
ADC
QT Input Channel

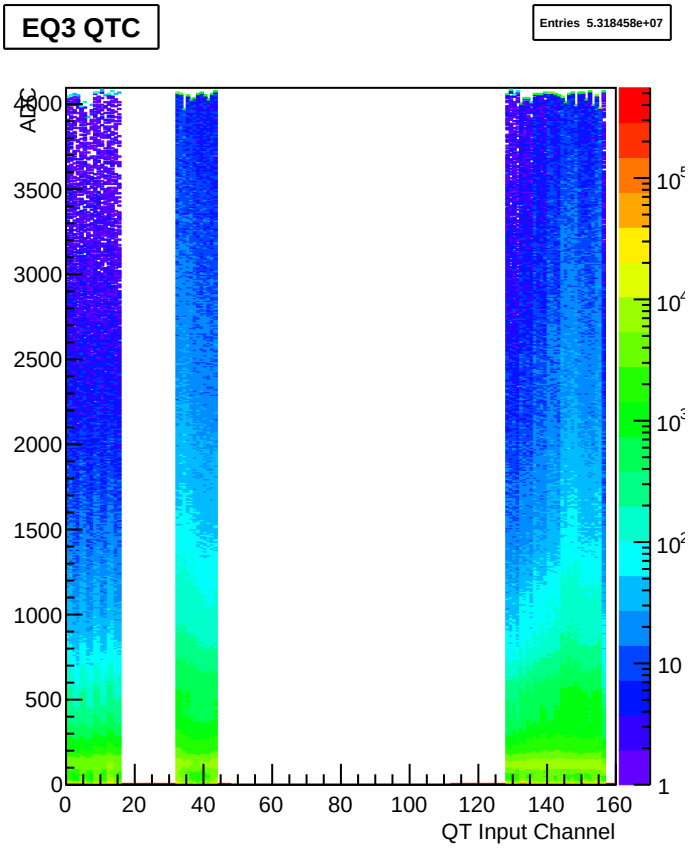

EQ2 QTB
Entries 4.237234e+07
TDC
QT Input Channel

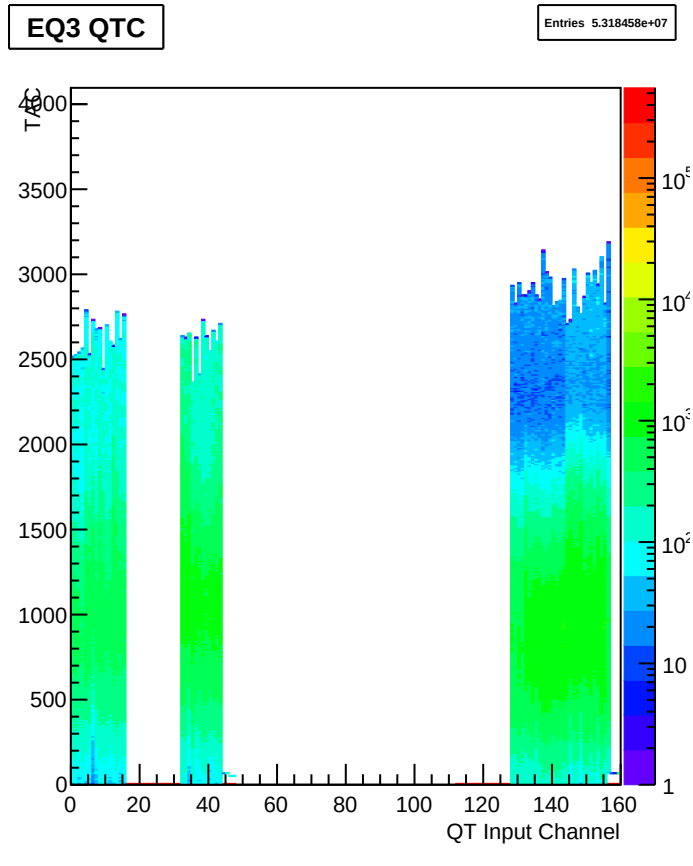

EQ2 QTC
Entries 5.318458e+07
ADC
QT Input Channel

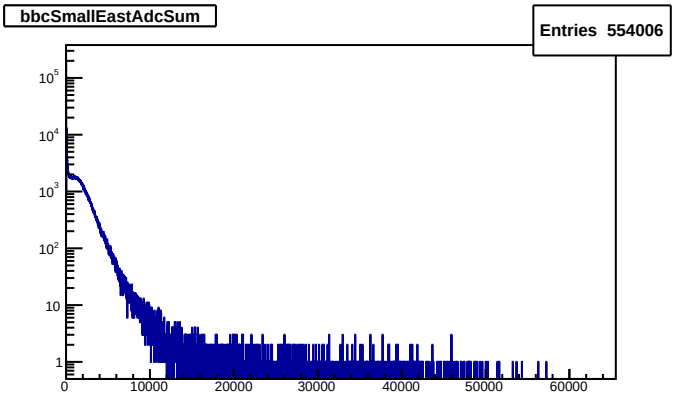

EQ2 QTC
Entries 5.318458e+07
TADC
QT Input Channel

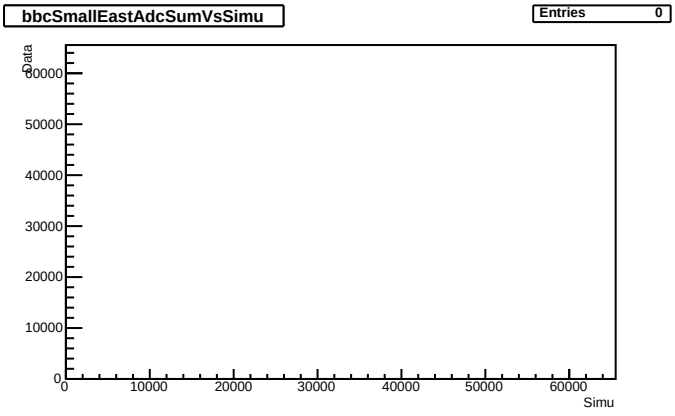

EQ3 QTB
Entries 1.418255e+08
ADC
QT Input Channel

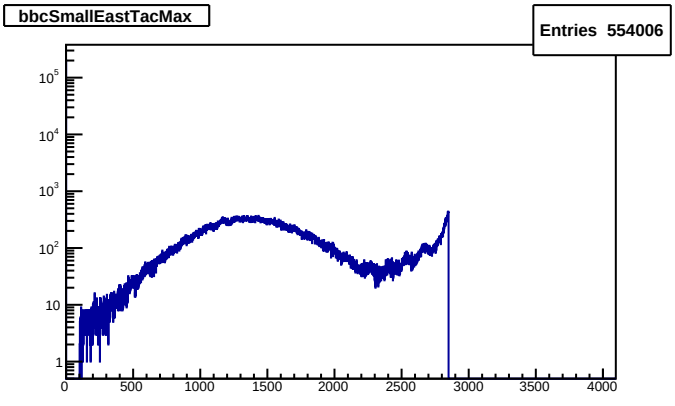

EQ3 QTB
Entries 4.344254e+07
TDC
QT Input Channel

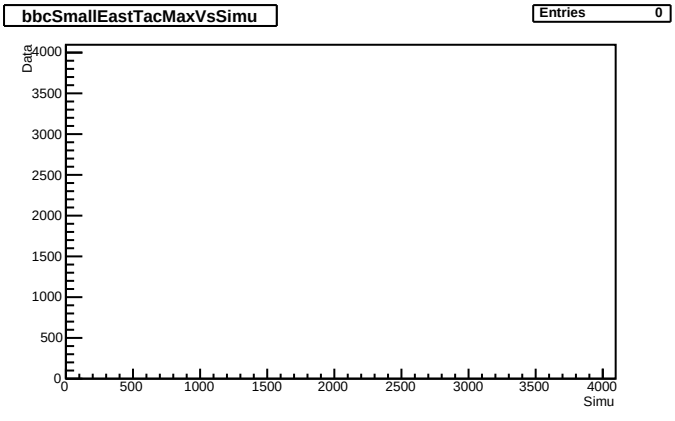

EQ3 QTC
Entries 5.318458e+07
ADC
QT Input Channel

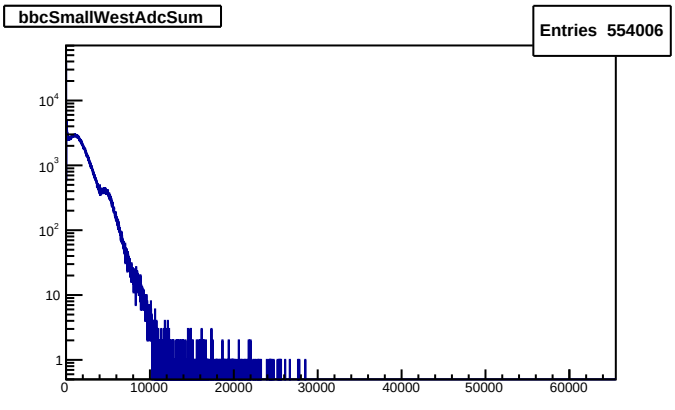

EQ3 QTC
Entries 5.318458e+07
TADC
QT Input Channel

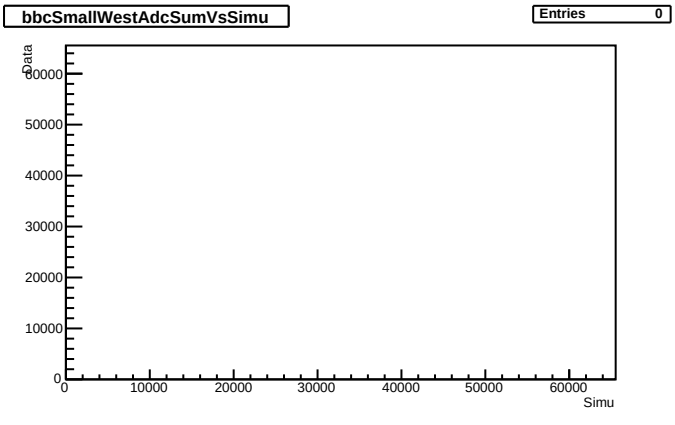

bbcSmallEastAdcSum
Entries 554006

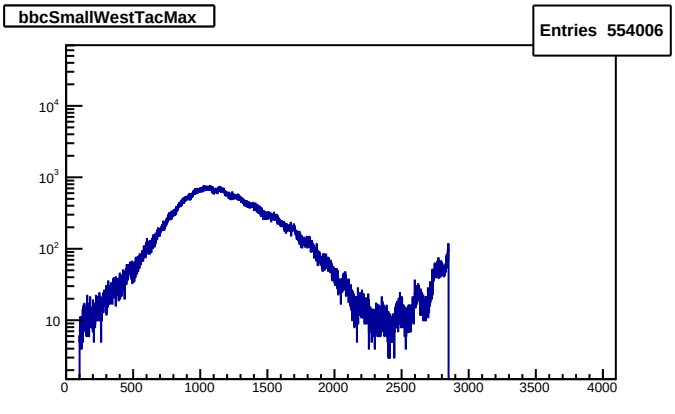

bbcSmallEastAdcSumVsSimu
Entries 0
Data
Simu

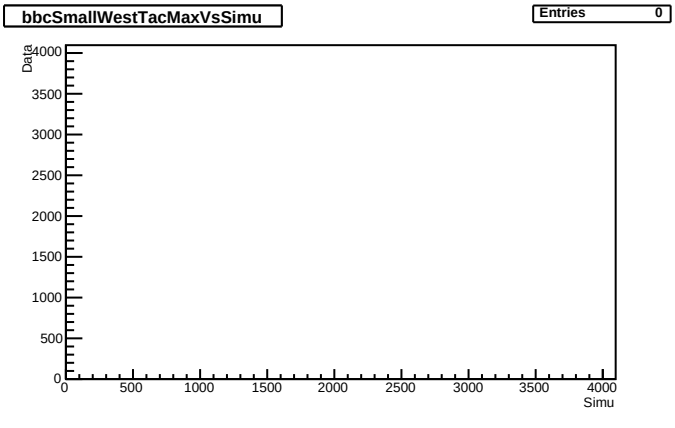

bbcSmallEastTacMax
Entries 554006

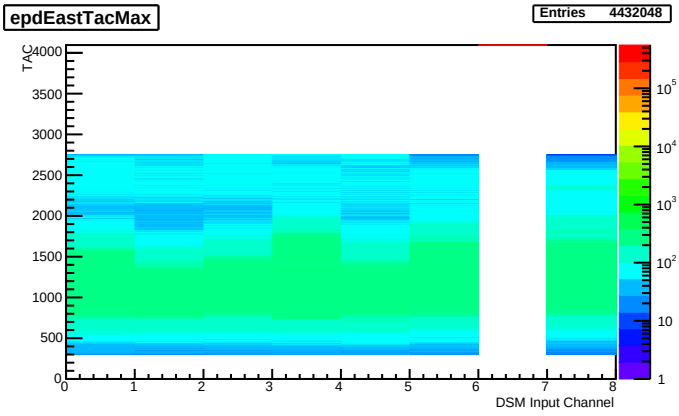

bbcSmallEastTacMaxVsSimu
Entries 0
Data
Simu

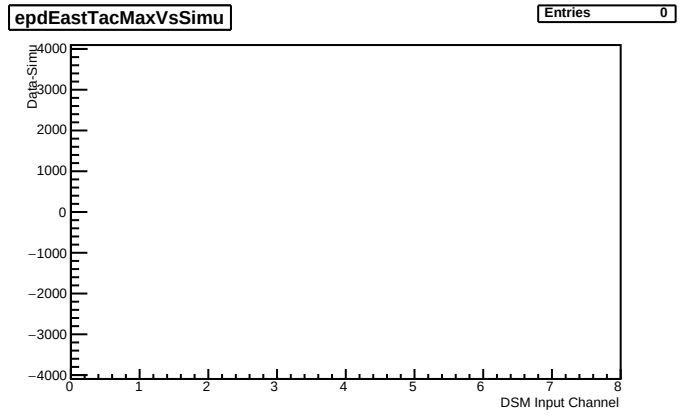

bbcSmallWestAdcSum
Entries 554006

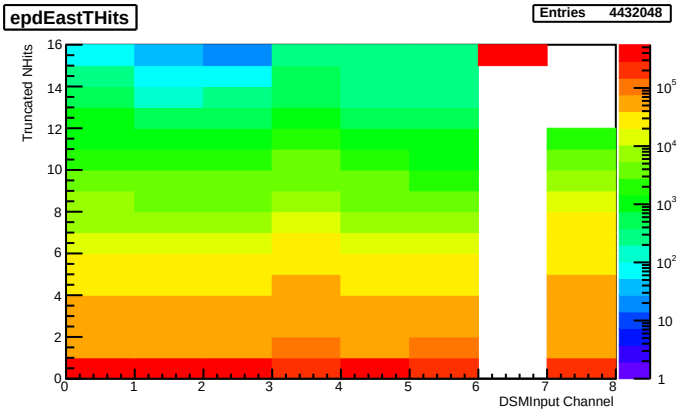

bbcSmallWestAdcSumVsSimu
Entries 0
Data
Simu

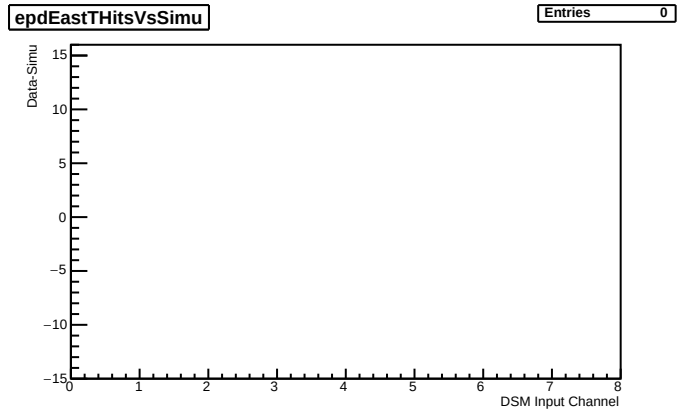

bbcSmallWestTacMax
Entries 554006

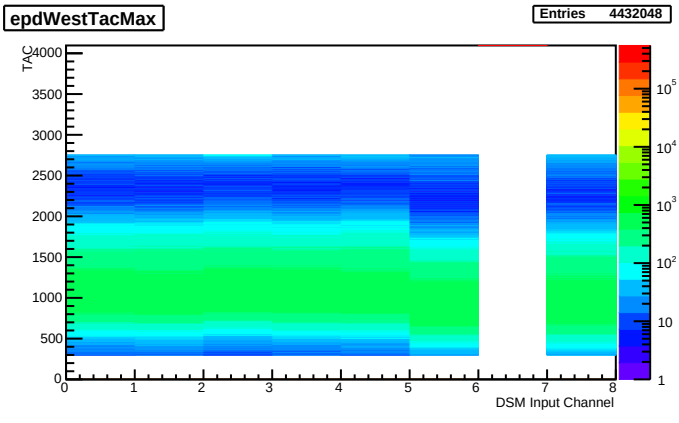

bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu

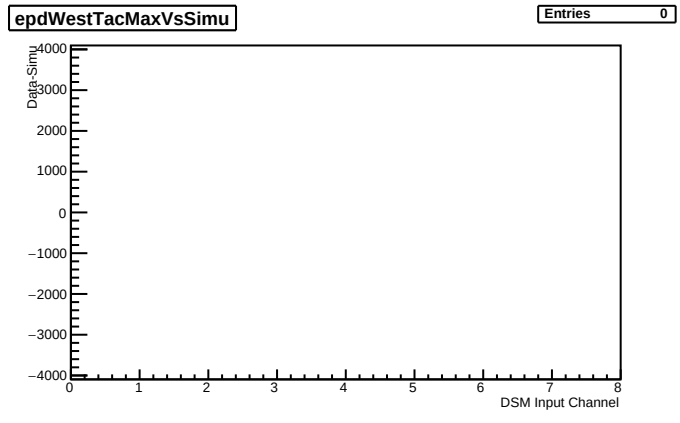

epdEastTacMax
Entries 4432048
TAC
DSM Input Channel

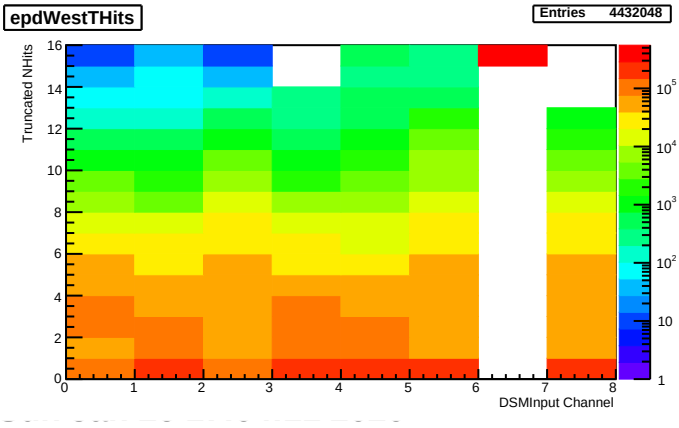

epdEastTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel

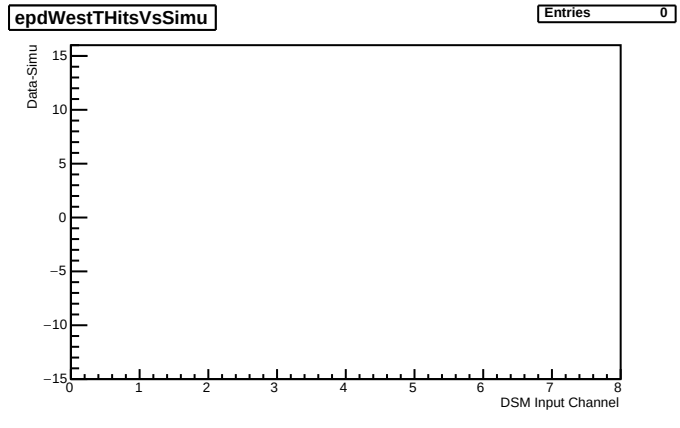

epdEastTHits
Entries 4432048
Truncated NHits
DSMInput Channel

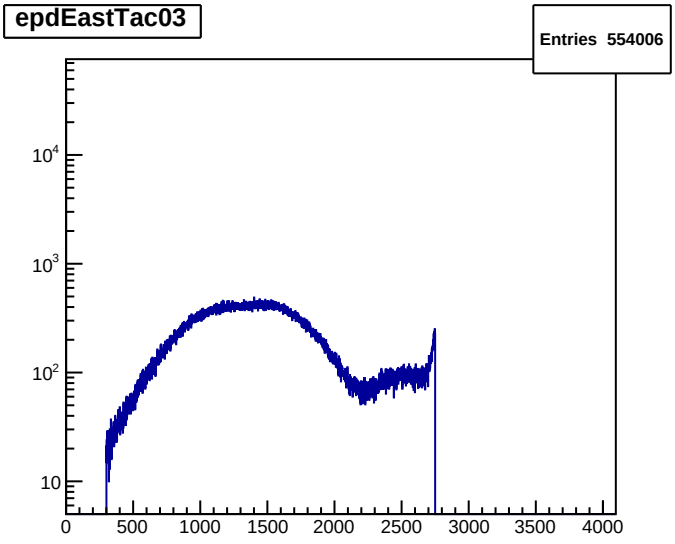

epdEastTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel

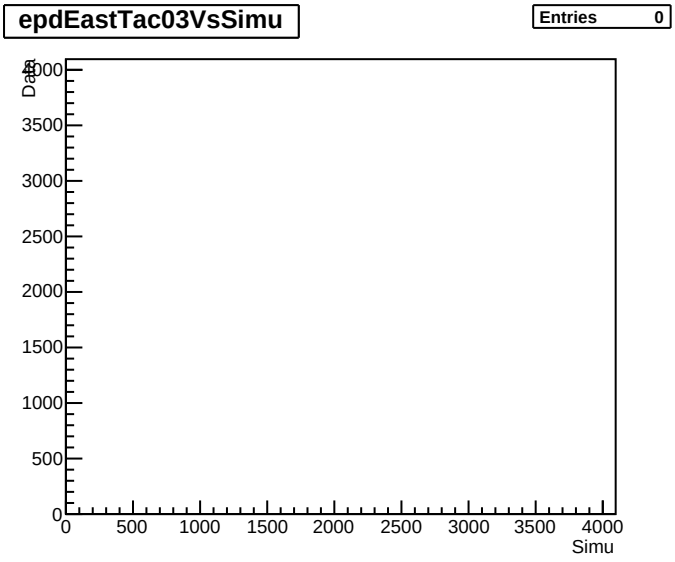

epdWestTacMax
Entries 4432048
TAC
DSM Input Channel

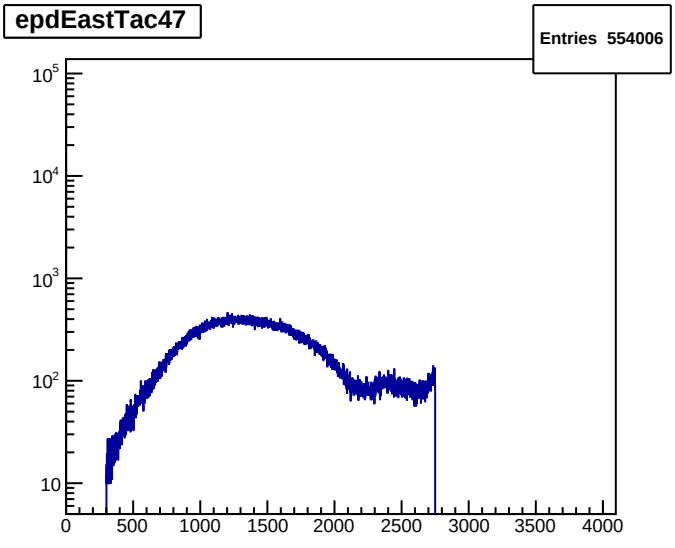

epdWestTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel

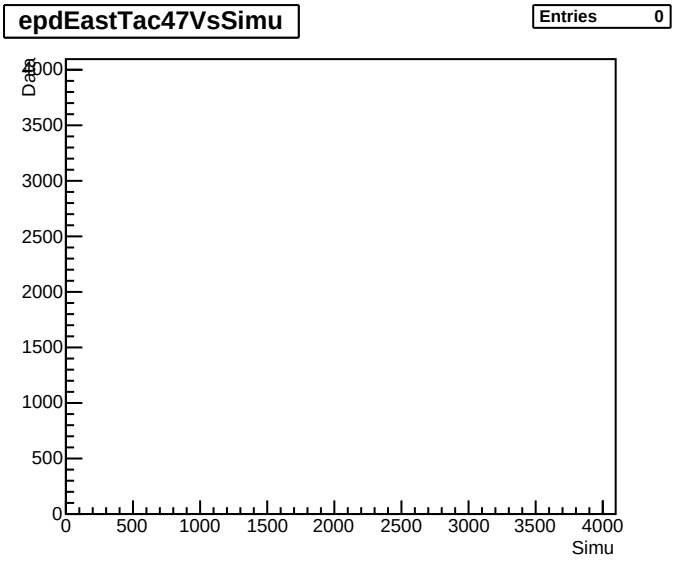

epdWestTHits
Entries 4432048
Truncated NHits
DSMInput Channel

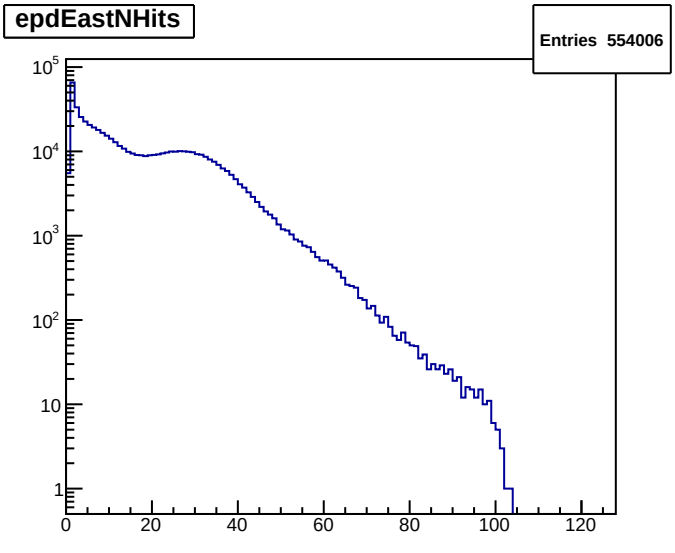

epdWestTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel

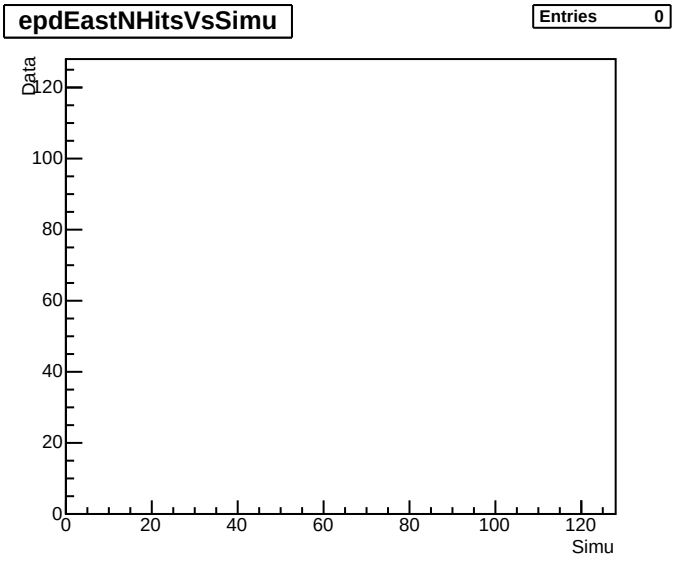

epdEastTac03
Entries 554006
10^4
10^3
10^2
10
0 500 1000 1500 2000 2500 3000 3500 4000

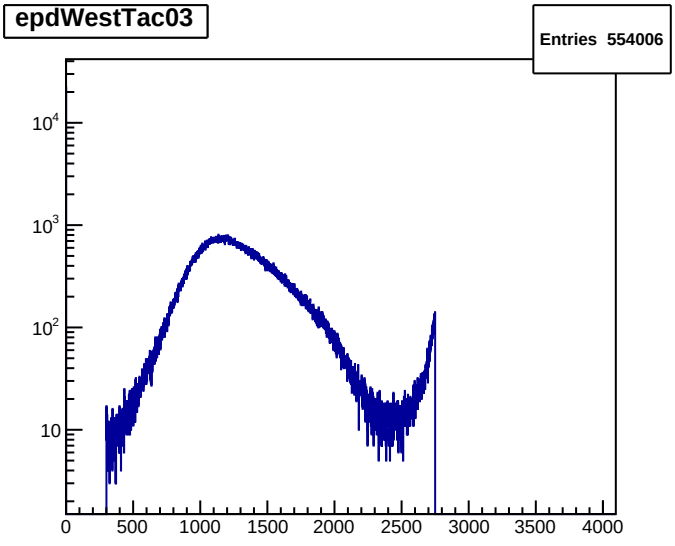

epdEastTac03VsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

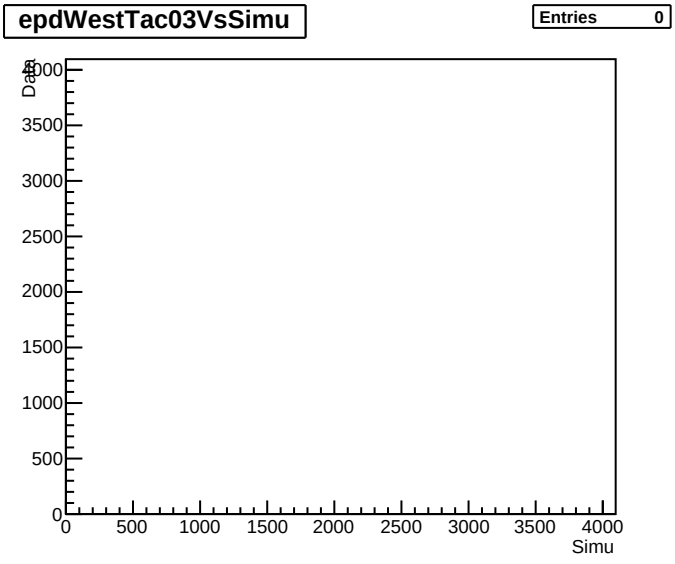

epdEastTac47
Entries 554006
10^5
10^4
10^3
10^2
10
0 500 1000 1500 2000 2500 3000 3500 4000

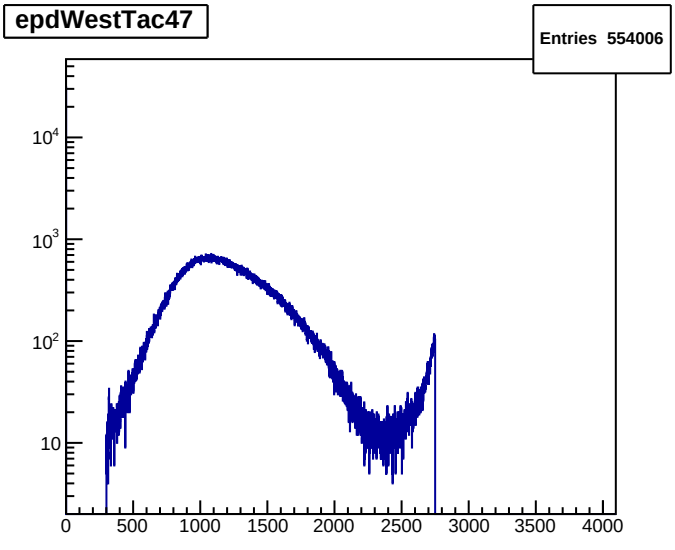

epdEastTac47VsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

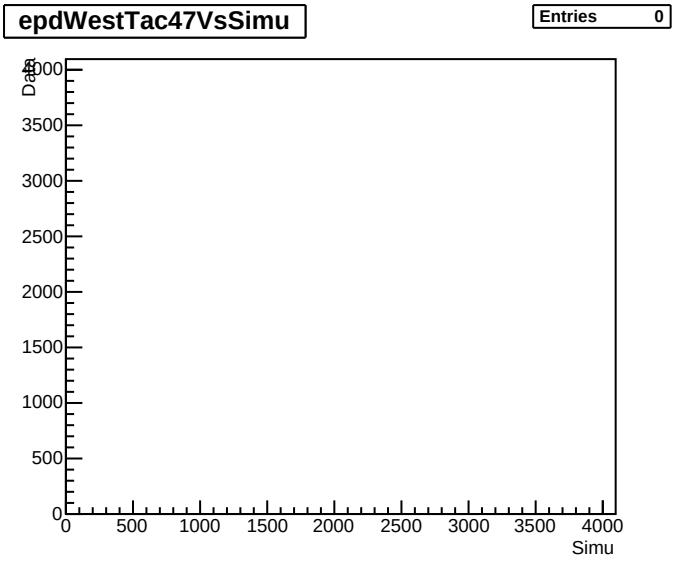

epdEastNHits
Entries 554006
10^5
10^4
10^3
10^2
10
1
0 20 40 60 80 100 120

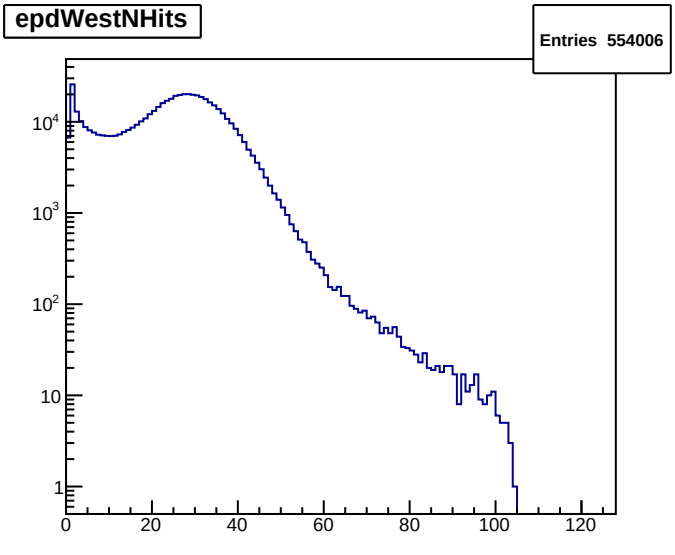

epdEastNHitsVsSimu
Entries 0
Data
120
100
80
60
40
20
0
0 20 40 60 80 100 120
Simu

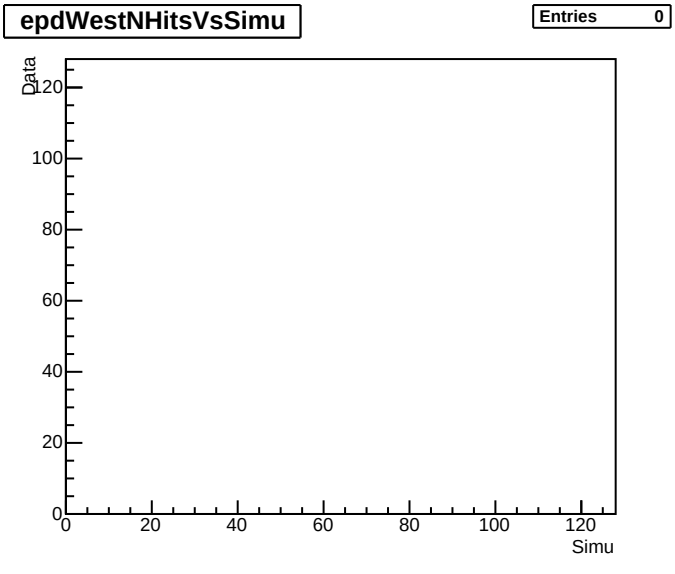

epdWestTac03
Entries 554006

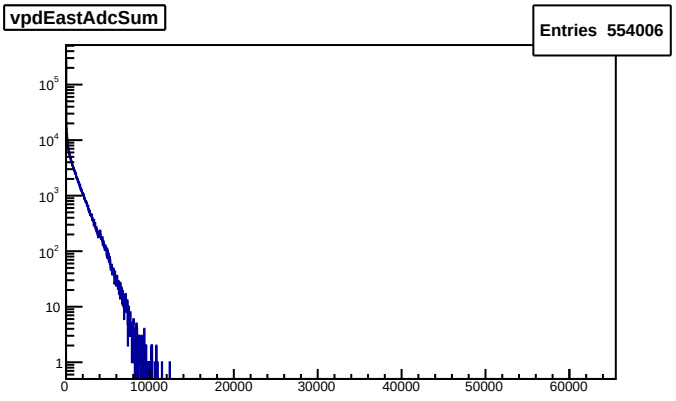

epdWestTac03VsSimu
Entries 0
Data
Simu

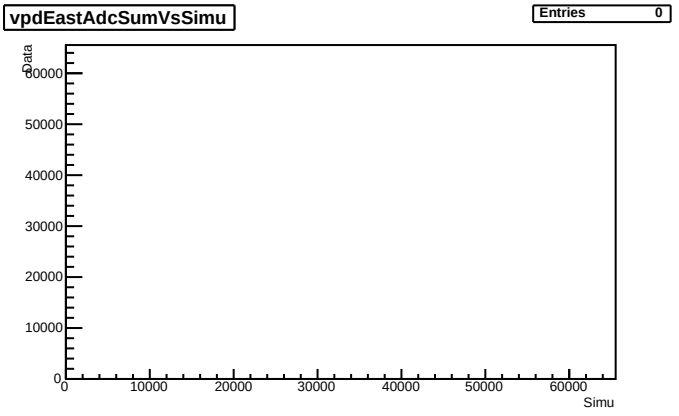

epdWestTac47
Entries 554006

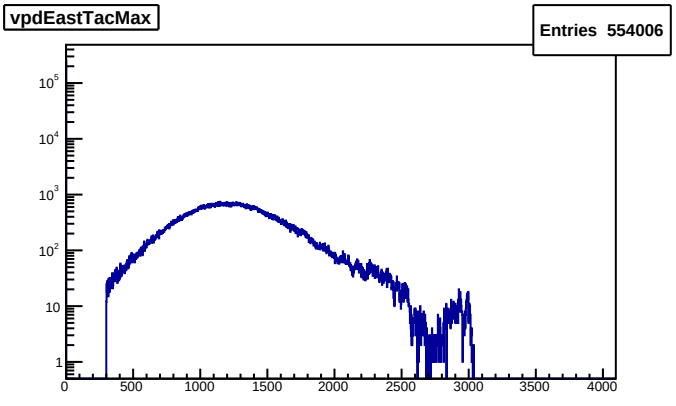

epdWestTac47VsSimu
Entries 0
Data
Simu

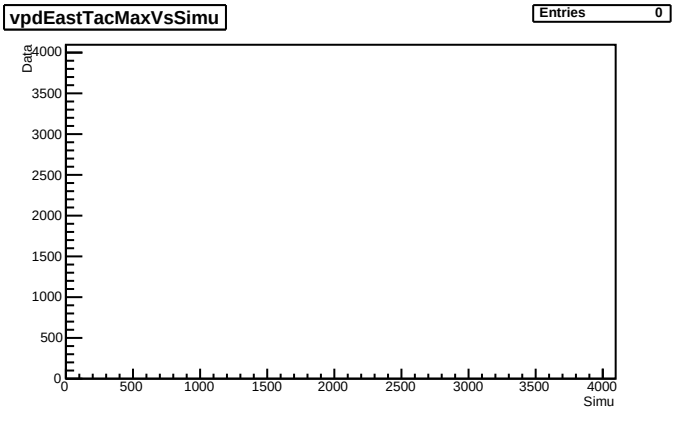

epdWestNHits
Entries 554006

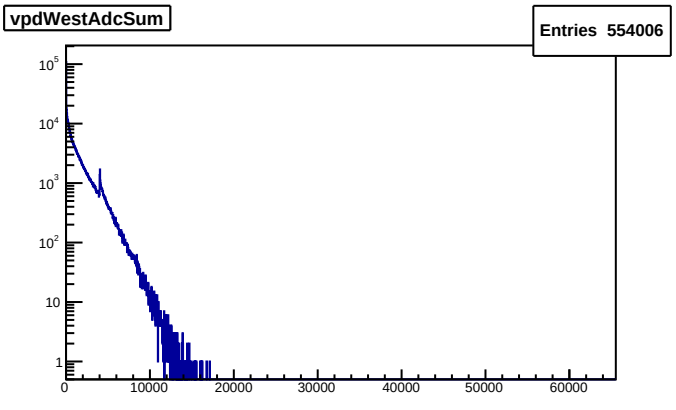

epdWestNHitsVsSimu
Entries 0
Data
Simu

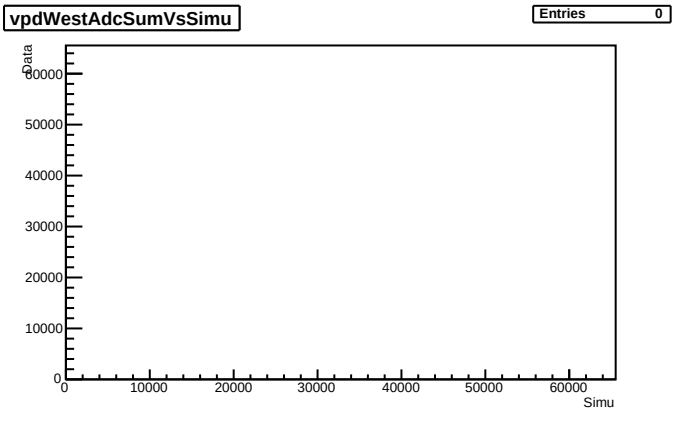

vpdEastAdcSum
Entries 554006

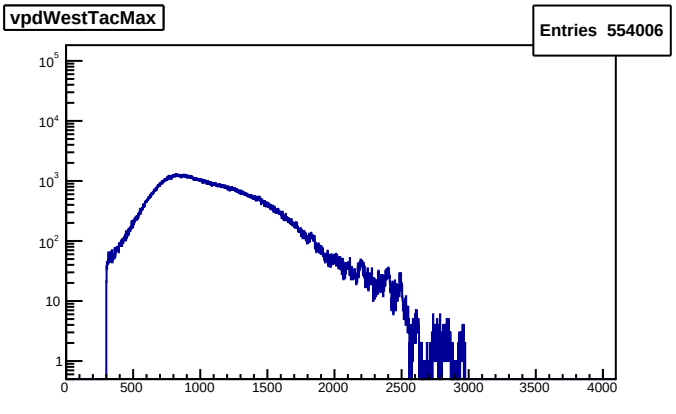

vpdEastAdcSumVsSimu
Entries 0
Data
Simu

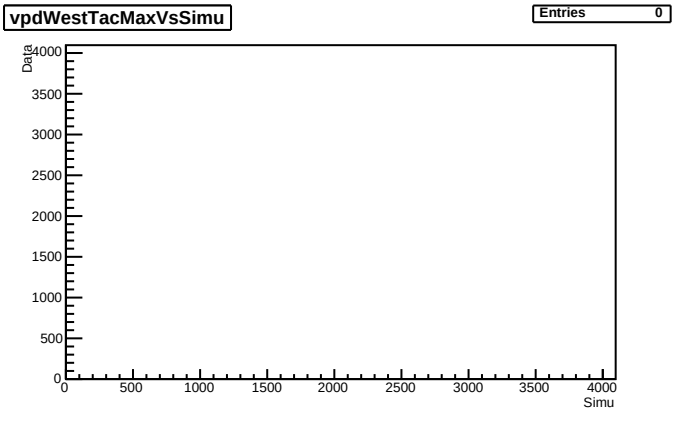

vpdEastTacMax
Entries 554006

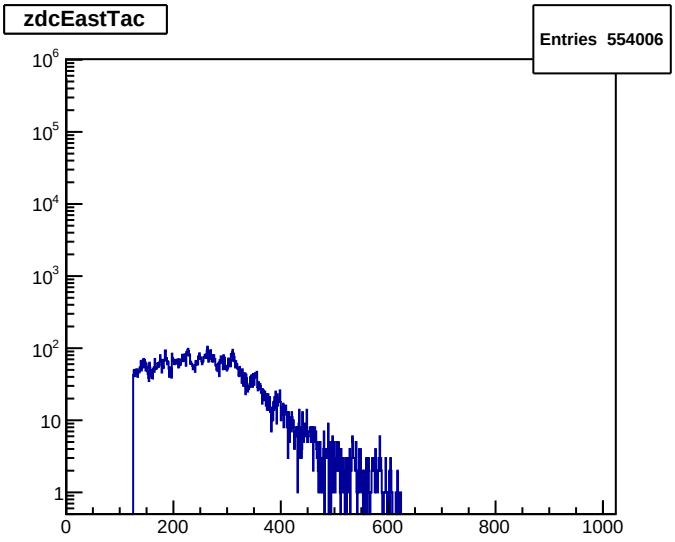

vpdEastTacMaxVsSimu
Entries 0
Data
Simu

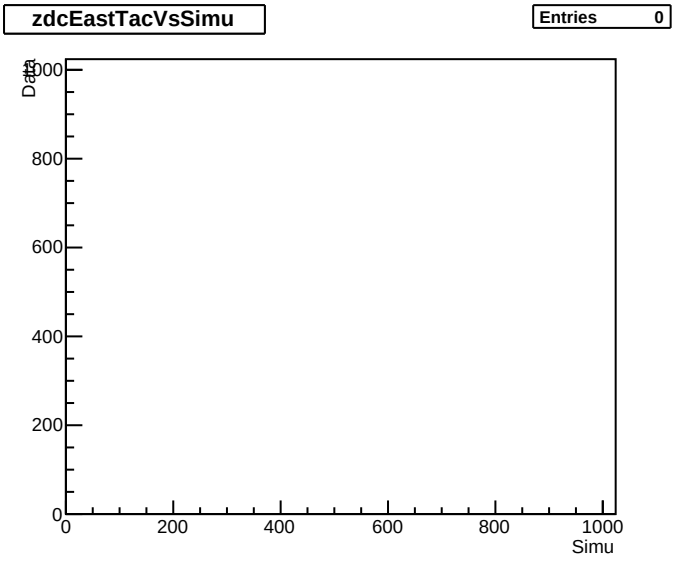

vpdWestAdcSum
Entries 554006

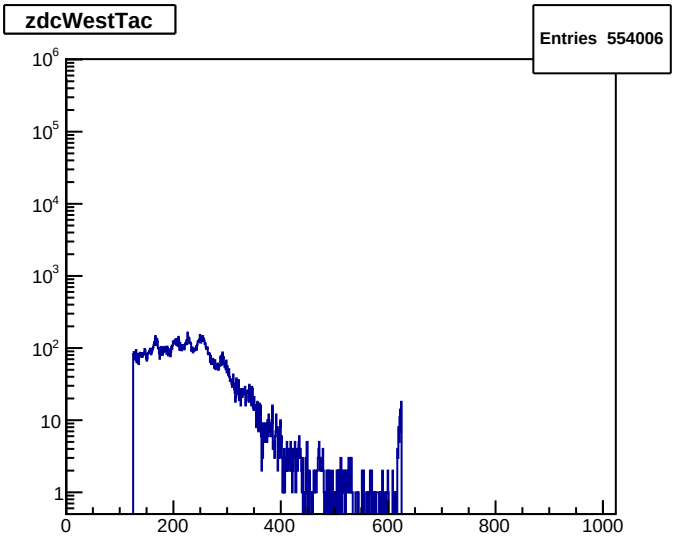

vpdWestAdcSumVsSimu
Entries 0
Data
Simu

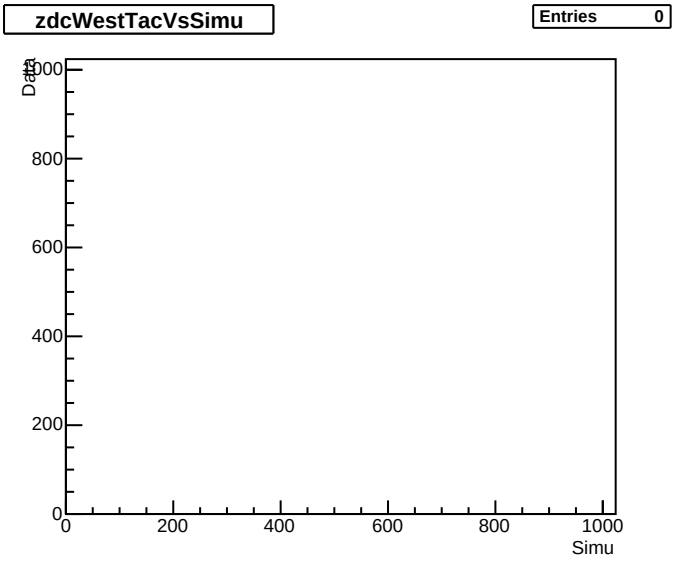

vpdWestTacMax
Entries 554006

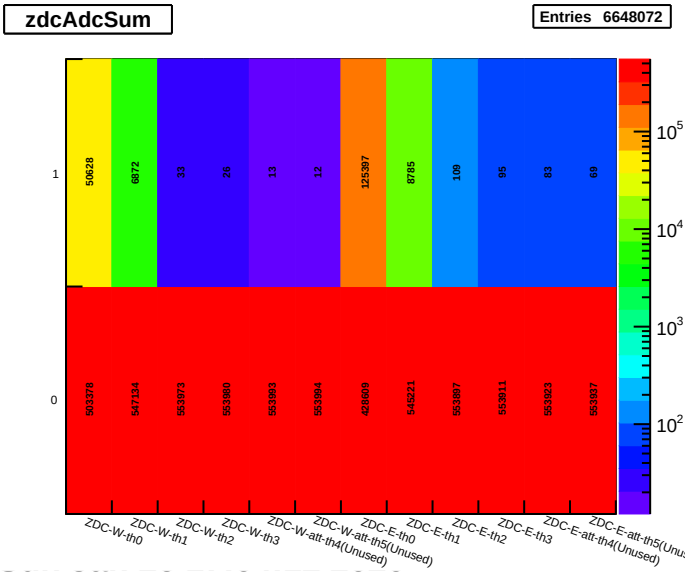

vpdWestTacMaxVsSimu
Entries 0
Data
Simu

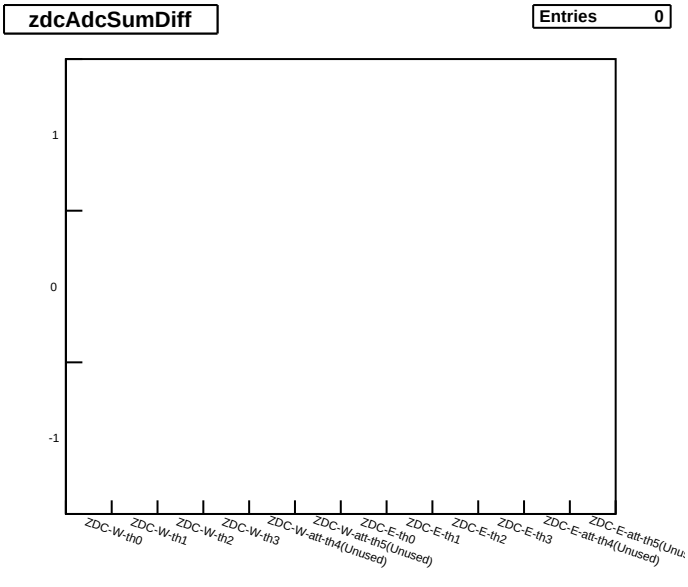

zdcEastTac
Entries 554006
10^6
10^5
10^4
10^3
10^2
10
1
0
200
400
600
800
1000

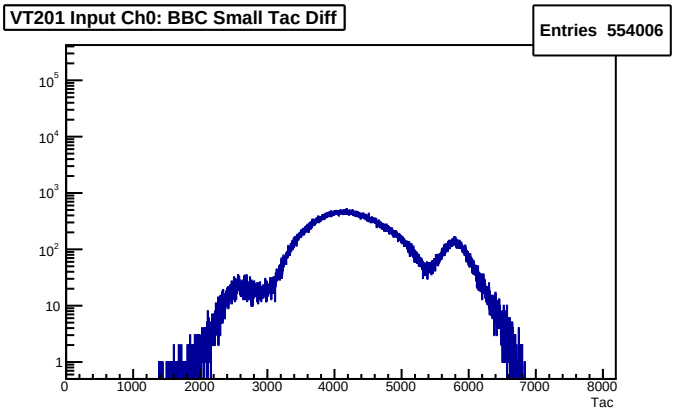

zdcEastTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

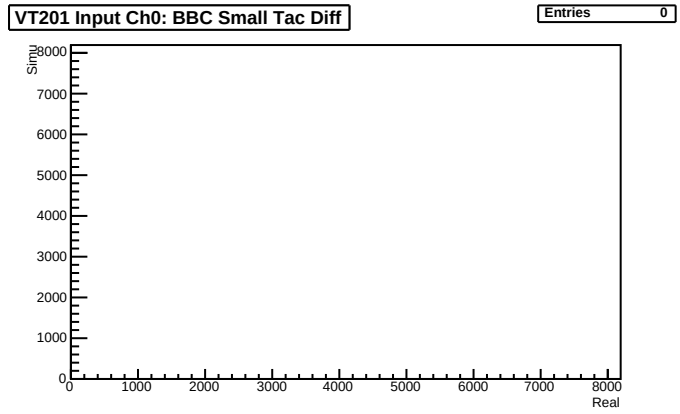

zdcWestTac
Entries 554006
10^6
10^5
10^4
10^3
10^2
10
1
0
200
400
600
800
1000

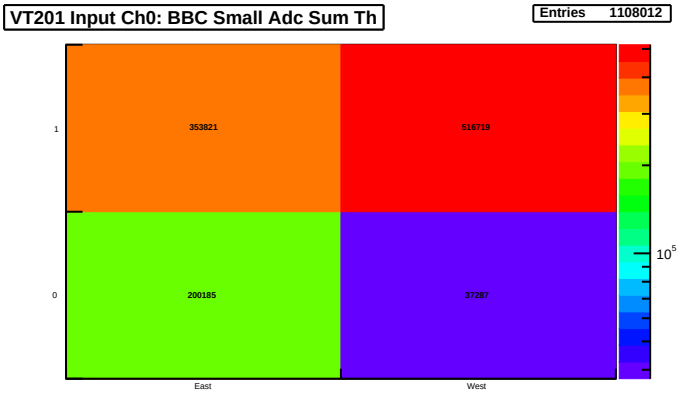

zdcWestTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

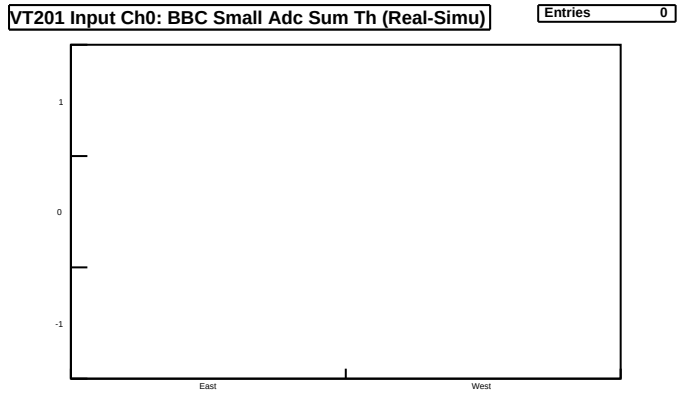

zdcAdcSum
Entries 6648072
1
0
50628
6872
33
26
13
12
125397
8785
109
95
83
69
503376
547134
553973
553980
553993
553994
428609
545221
553897
553911
553923
553937
10^5
10^4
10^3
10^2
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

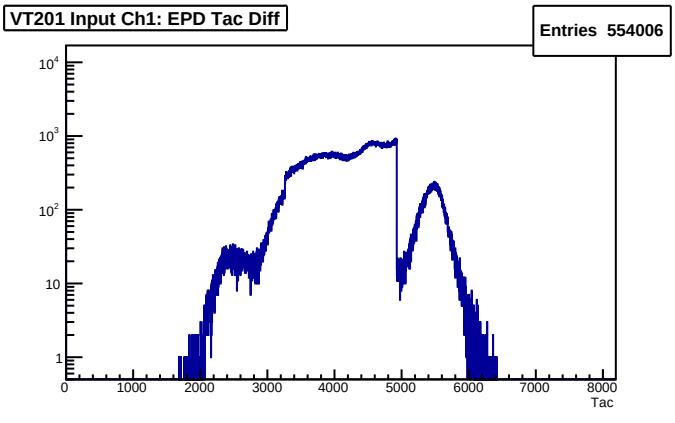

zdcAdcSumDiff
Entries 0
1
0
-1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

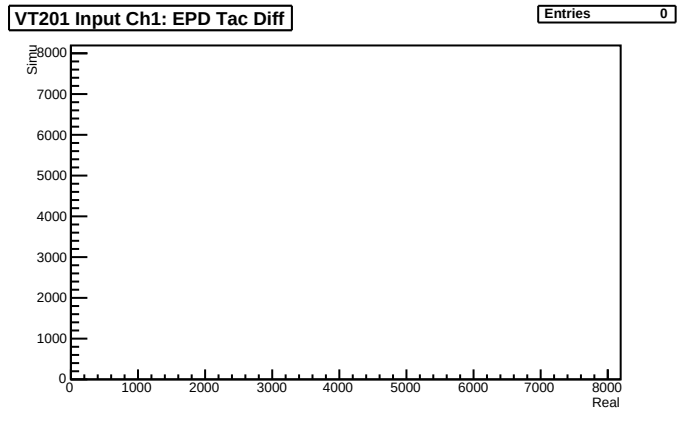

VT201 Input Ch0: BBC Small Tac Diff
Entries 554006
Tac

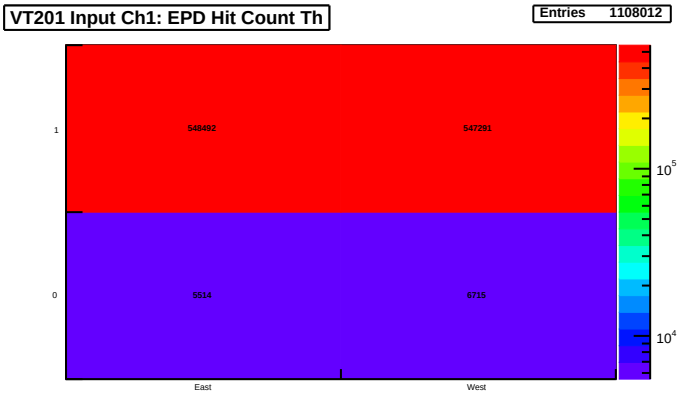

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

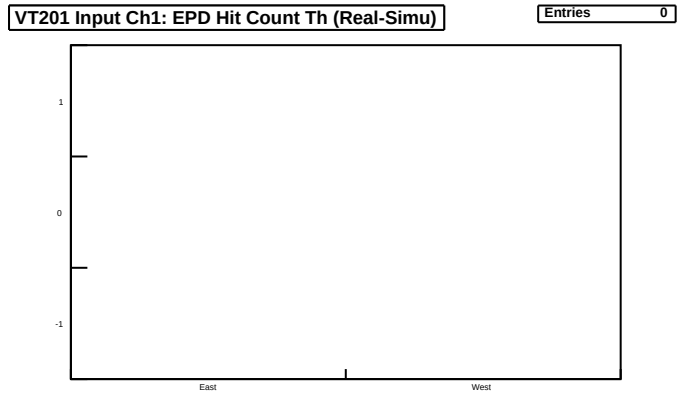

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 1108012
353821
516719
200185
37287
East
West

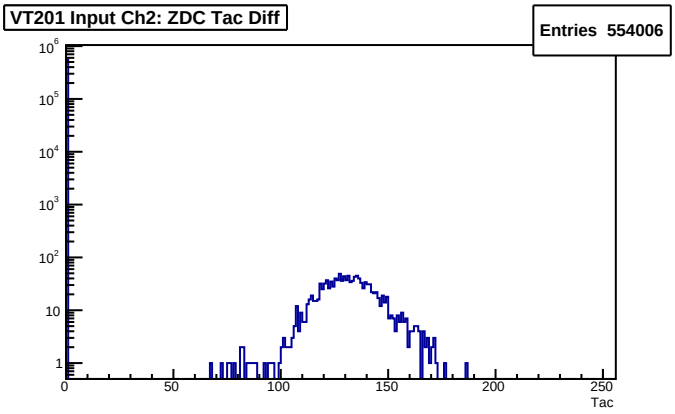

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

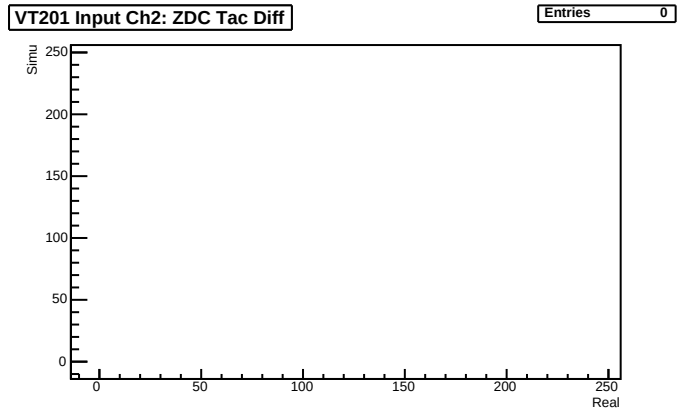

VT201 Input Ch1: EPD Tac Diff
Entries 554006
Tac

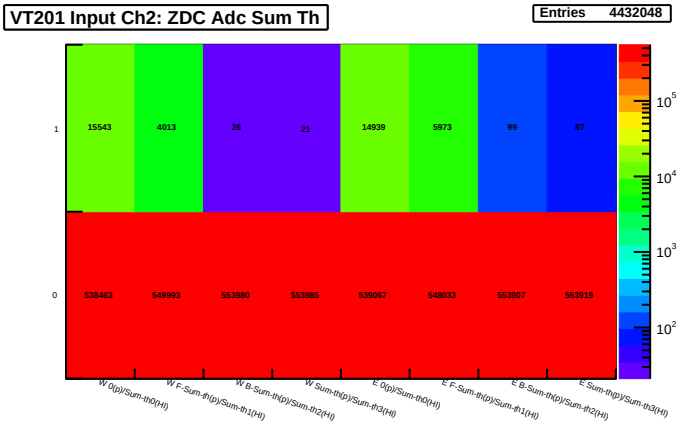

VT201 Input Ch1: EPD Tac Diff
Entries 0
Simu
Real

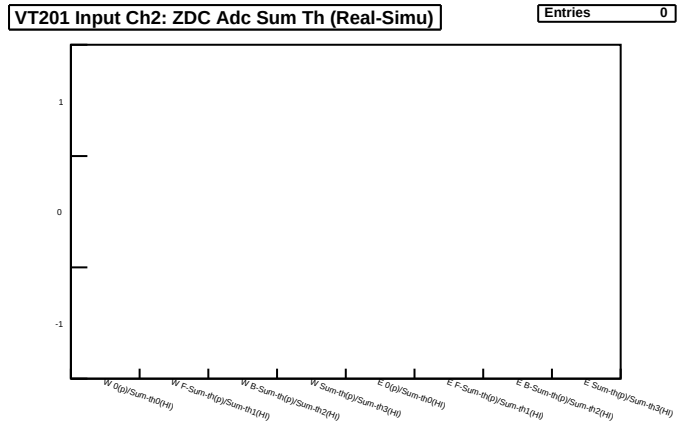

VT201 Input Ch1: EPD Hit Count Th
Entries 1108012
548492
547291
5514
6715
East
West

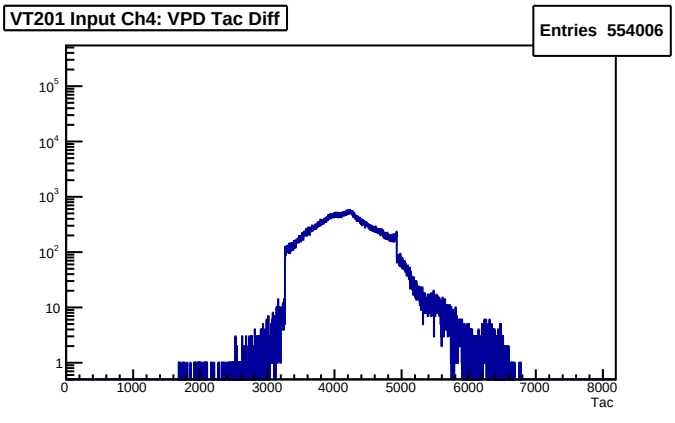

VT201 Input Ch1: EPD Hit Count Th (Real-Simu)
Entries 0
East
West

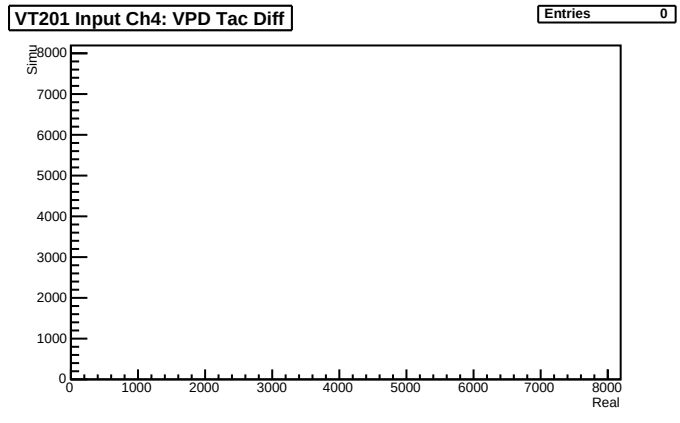

VT201 Input Ch2: ZDC Tac Diff
Entries 554006
Tac

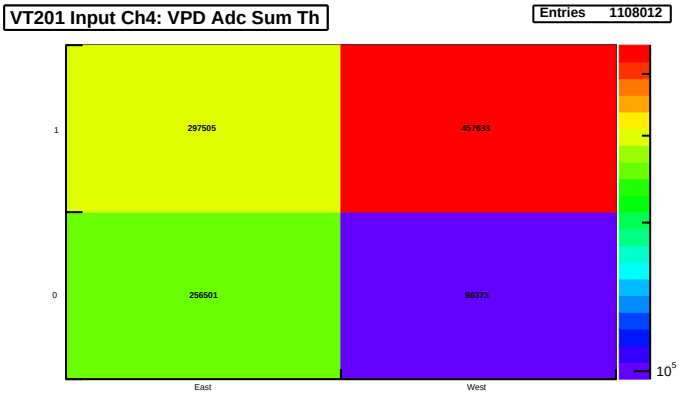

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

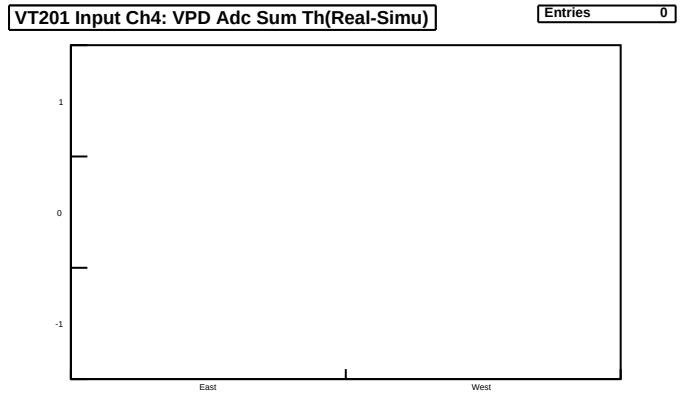

VT201 Input Ch2: ZDC Adc Sum Th
Entries 4432048
15543
4013
26
21
14939
5973
99
87
538463
549993
553980
553985
539067
548033
553907
553919
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
E 0(p)/Sum-th0(Hl)
E F-Sum-th(p)/Sum-th1(Hl)
E B-Sum-th(p)/Sum-th2(Hl)
E Sum-th(p)/Sum-th3(Hl)

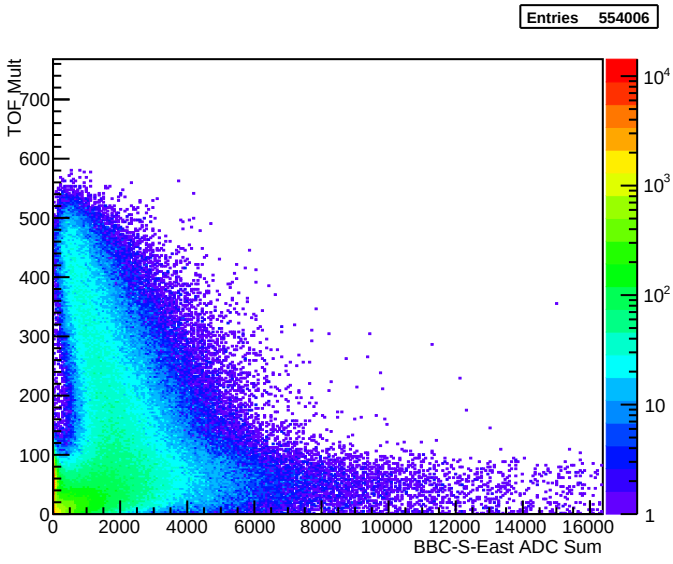

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
E 0(p)/Sum-th0(Hl)
E F-Sum-th(p)/Sum-th1(Hl)
E B-Sum-th(p)/Sum-th2(Hl)
E Sum-th(p)/Sum-th3(Hl)

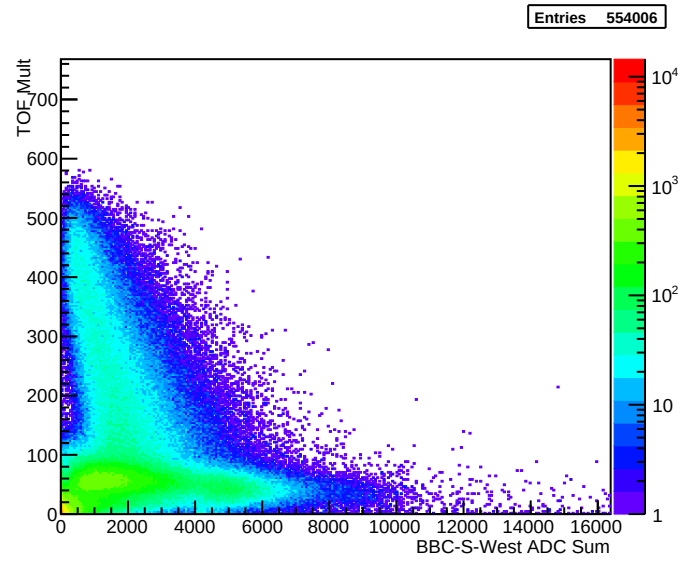

VT201 Input Ch4: VPD Tac Diff
Entries 554006
Tac

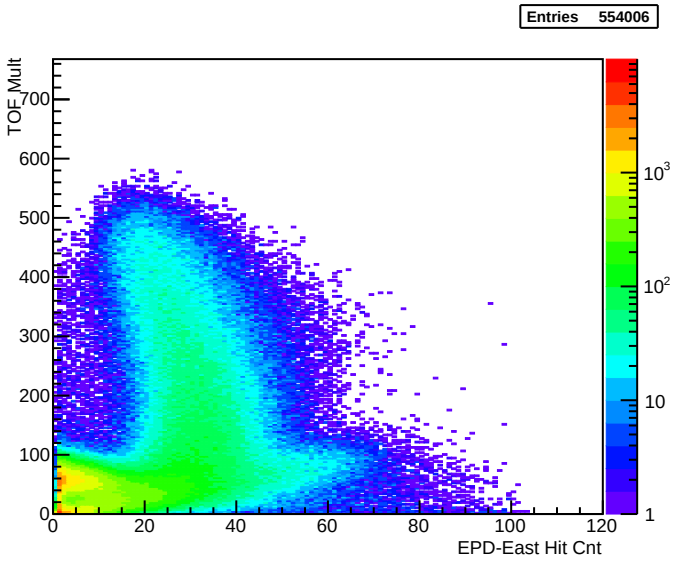

VT201 Input Ch4: VPD Tac Diff
Entries 0
Simu
Real

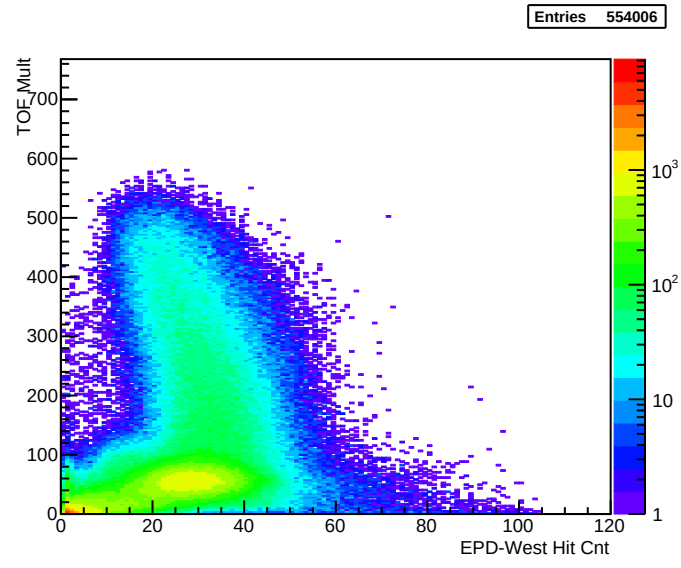

VT201 Input Ch4: VPD Adc Sum Th
Entries 1108012
297505
457633
256501
96373
East
West

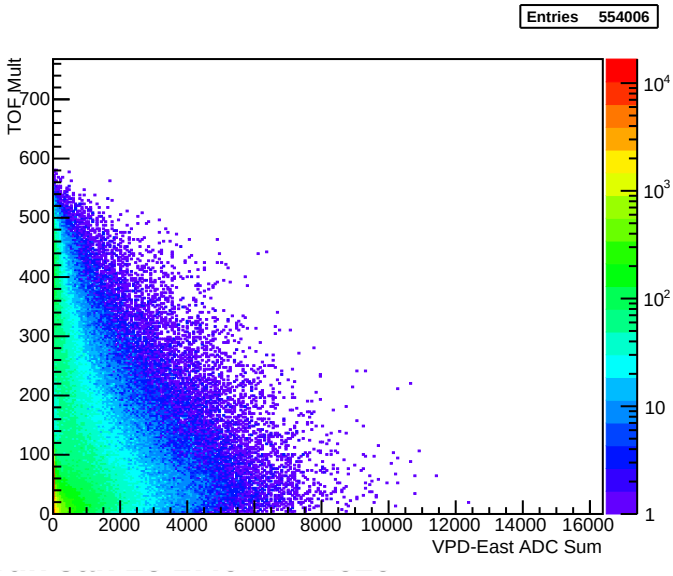

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 0
East
West

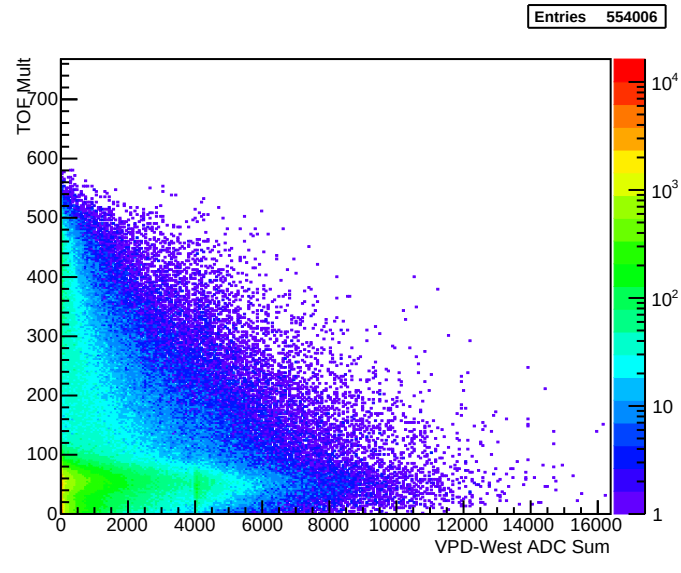

Entries 554006
TOF_Mult
BBC-S-East ADC Sum

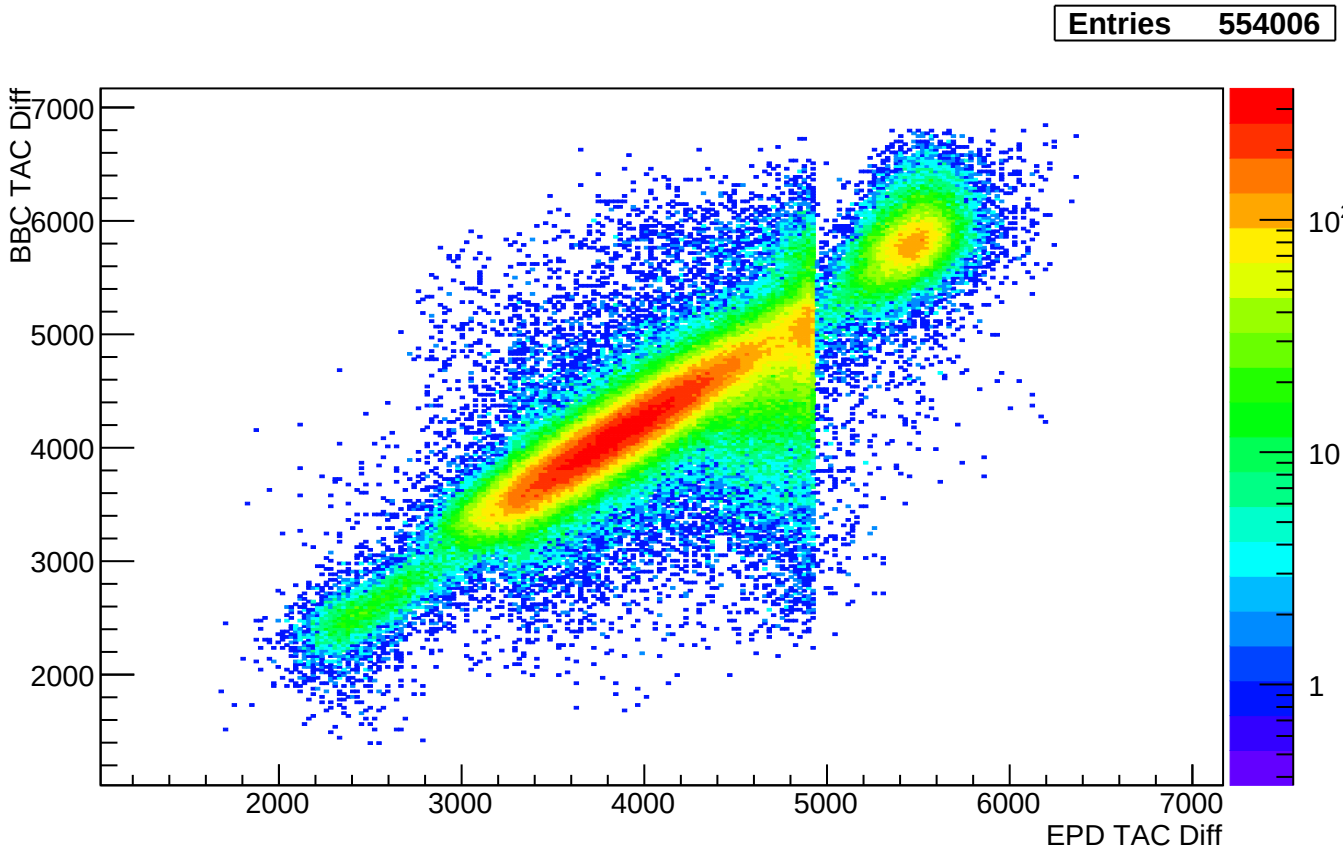

Entries 554006
TOF_Mult
BBC-S-West ADC Sum

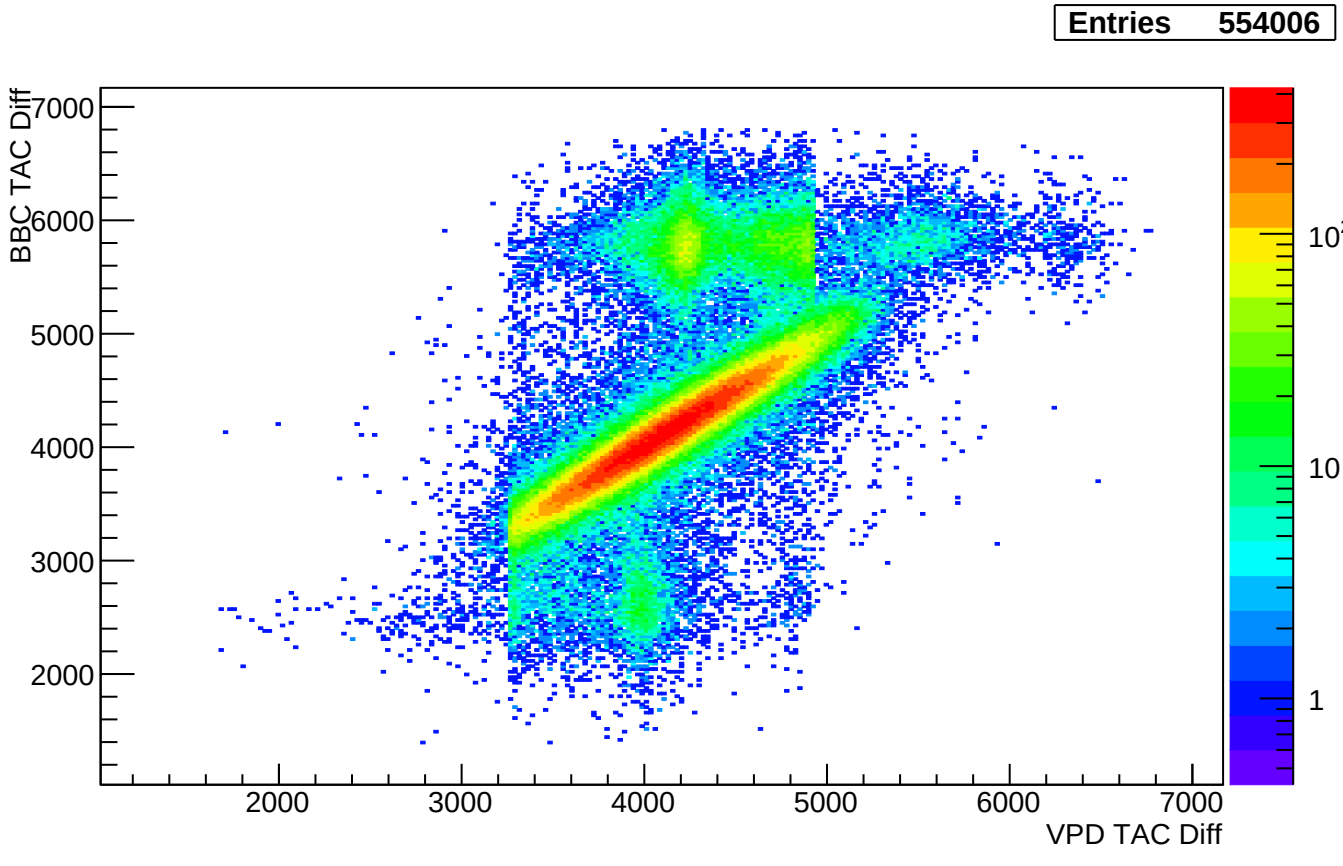

Entries 554006
TOF_Mult
EPD-East Hit Cnt

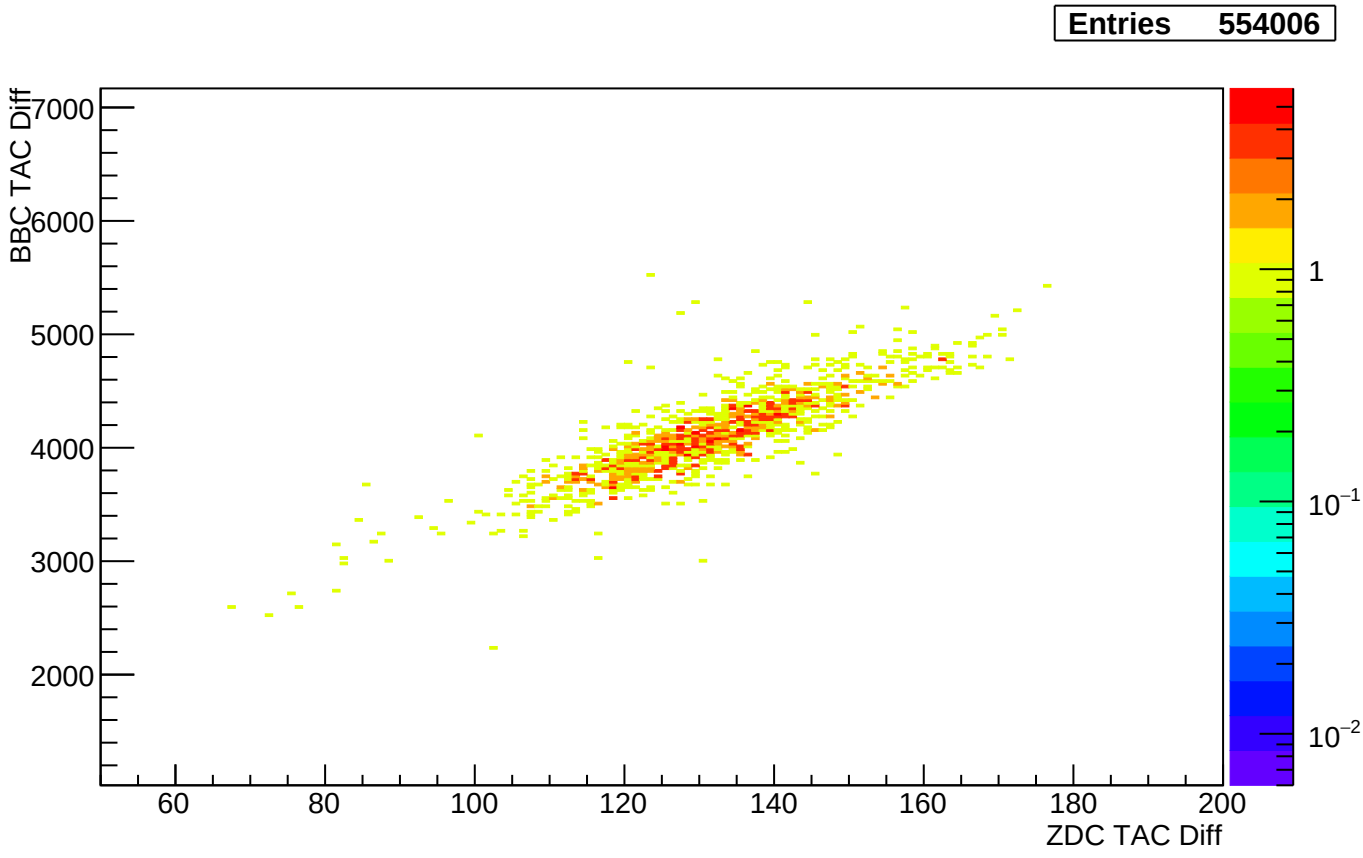

Entries 554006
TOF_Mult
EPD-West Hit Cnt

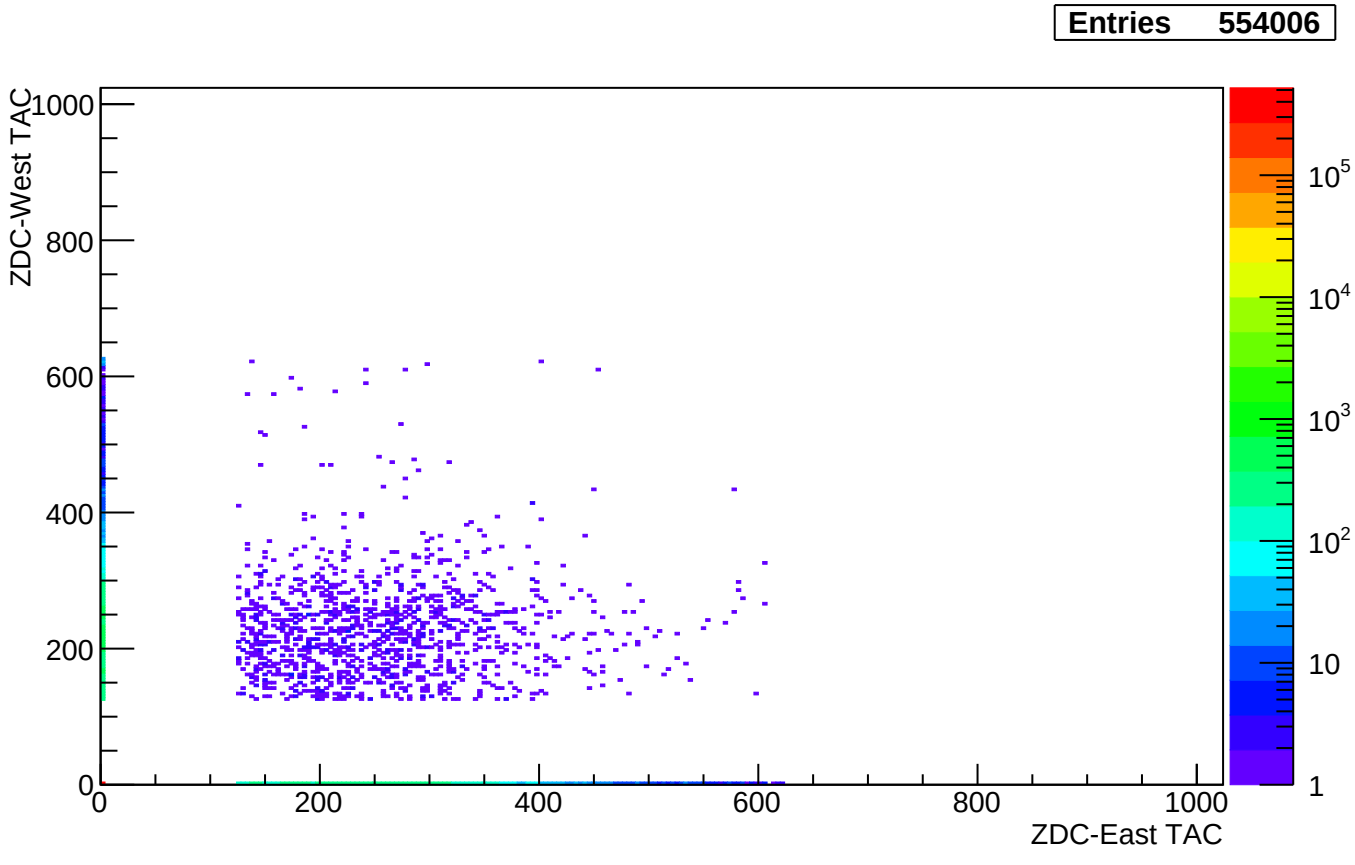

Entries 554006
TOF_Mult
VPD-East ADC Sum

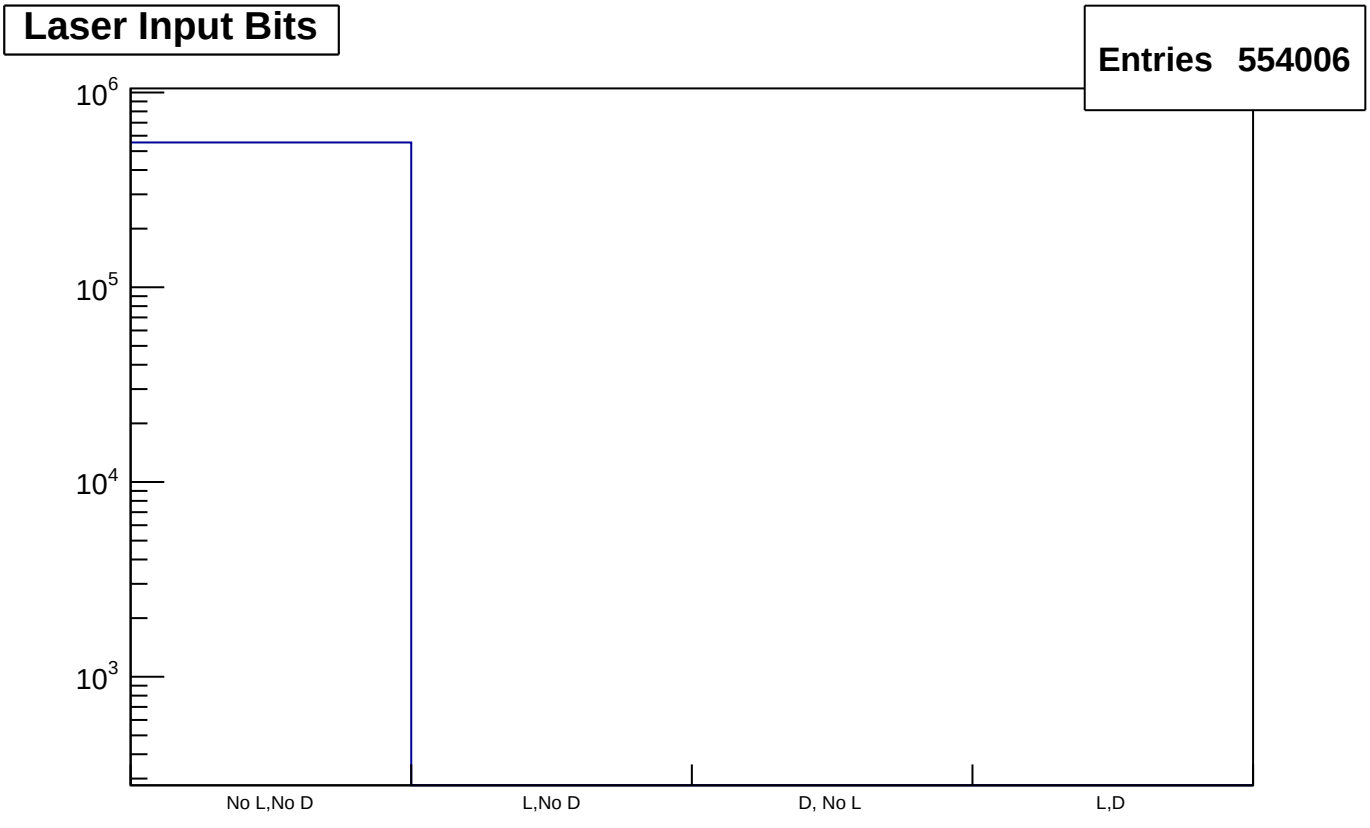

Entries 554006
TOF_Mult
VPD-West ADC Sum

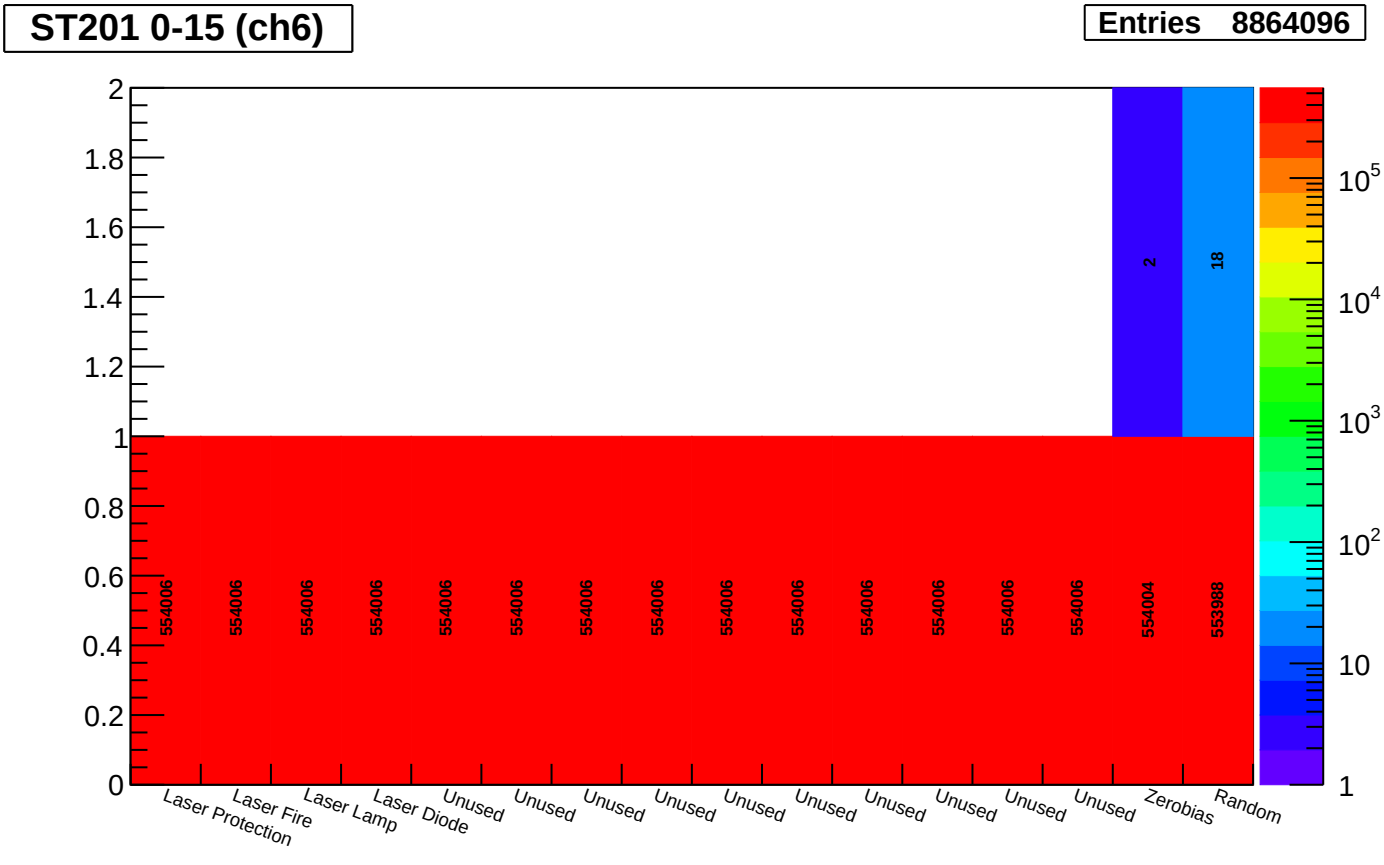

Entries 554006
BBC TAC Diff
7000
6000
5000
4000
3000
2000
2000
3000
4000
5000
6000
7000
EPD TAC Diff
10^2
10
1

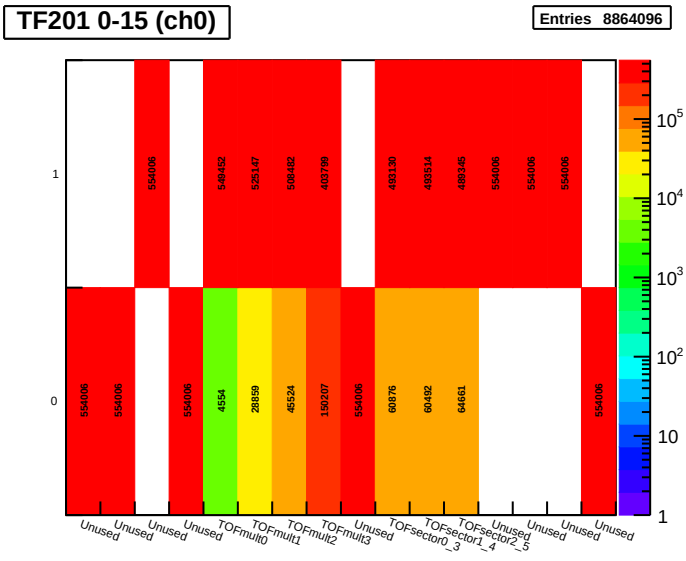

Entries 554006
BBC TAC Diff
7000
6000
5000
4000
3000
2000
2000
3000
4000
5000
6000
7000
VPD TAC Diff
10^2
10
1

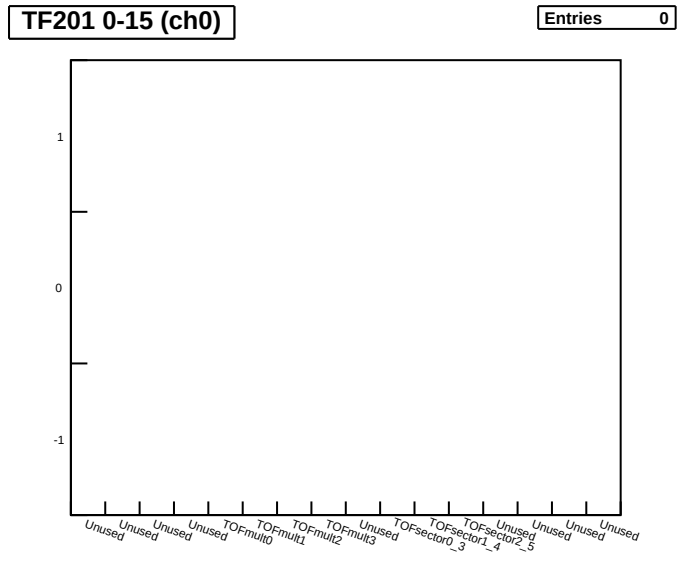

Entries 554006
BBC TAC Diff
7000
6000
5000
4000
3000
2000
60
80
100
120
140
160
180
200
ZDC TAC Diff
1
10^{-1}
10^{-2}

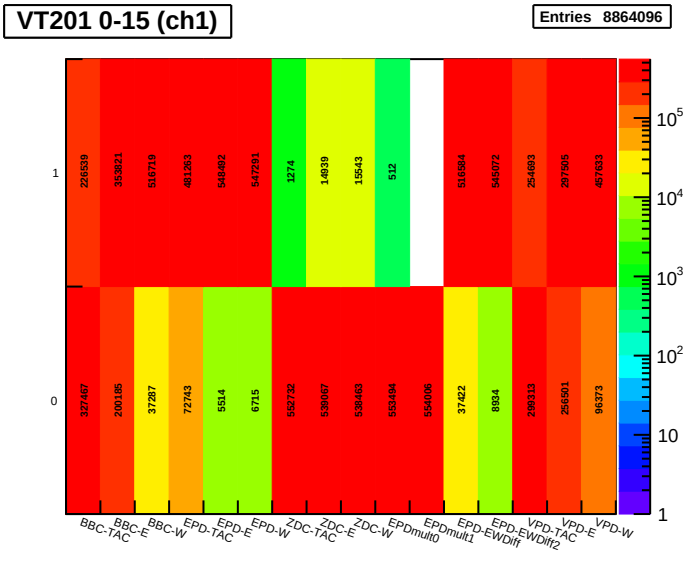

Entries 554006
ZDC-West TAC
1000
800
600
400
200
0
0
200
400
600
800
1000
ZDC-East TAC
10^5
10^4
10^3
10^2
10
1

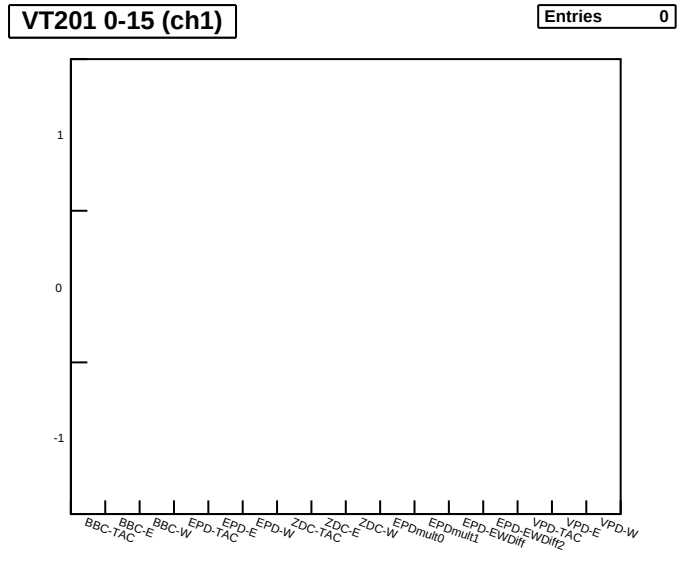

Laser Input Bits
Entries 554006
10^6
10^5
10^4
10^3
No L,No D
L,No D
D, No L
L,D

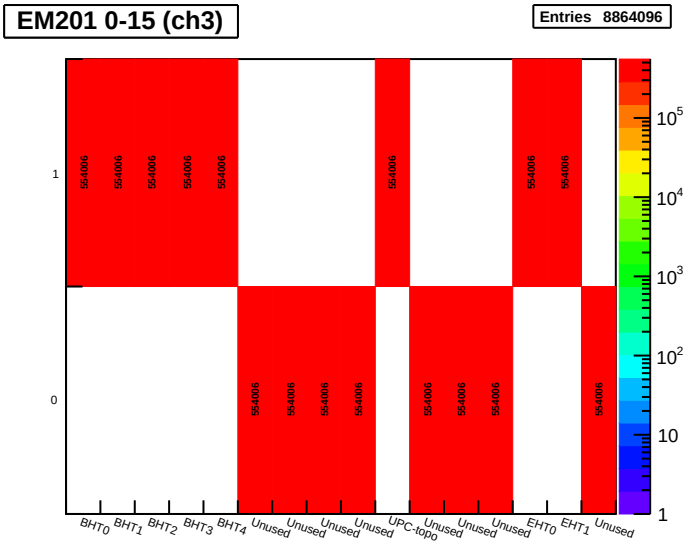

ST201 0-15 (ch6)
Entries 8864096
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
554006
554006
554006
554006
554006
554006
554006
554006
554006
554006
554006
554006
554006
554006
554004
553988
2
18
Laser Protection
Laser Fire
Laser Lamp
Laser Diode
Unused
Unused
Unused
Unused
Unused
Unused
Unused
Unused
Unused
Unused
Zerobias
Random
10^5
10^4
10^3
10^2
10
1

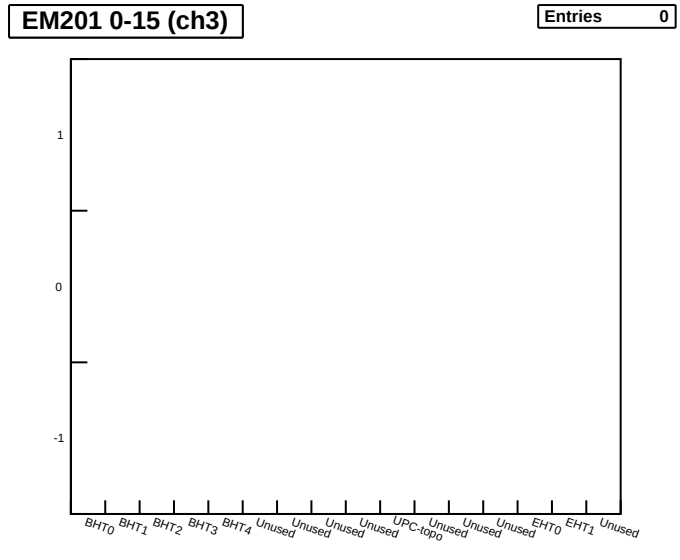

TF201 0-15 (ch0)
Entries 8864096
1
0
554006
548452
525147
508482
403799
493130
493514
489345
554006
554006
554006
554006
554006
554006
4554
28859
45534
150207
554006
60876
60492
64661
554006
Unused
Unused
Unused
Unused
TOFmult0
TOFmult1
TOFmult2
TOFmult3
Unused
TOFsector0_3
TOFsector1_4
TOFsector2_5
Unused
Unused
Unused
Unused
10^5
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 8864096
1
0
226539
353821
516719
481263
548492
547291
1274
14939
15543
512
516584
545072
254693
297505
457633
327467
200185
37287
72743
5514
6715
562732
539067
538463
553494
554006
37422
8934
299313
256501
96373
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
10^5
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 8864096
1
0
554006
554006
554006
554006
554006
554006
554006
554006
554006
554006
554006
554006
554006
554006
554006
554006
554006
BHT0
BHT1
BHT2
BHT3
BHT4
Unused
Unused
Unused
Unused
UPC-topo
Unused
Unused
Unused
EHT0
EHT1
Unused
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
Unused
Unused
Unused
UPC-topo
Unused
Unused
Unused
EHT0
EHT1
Unused