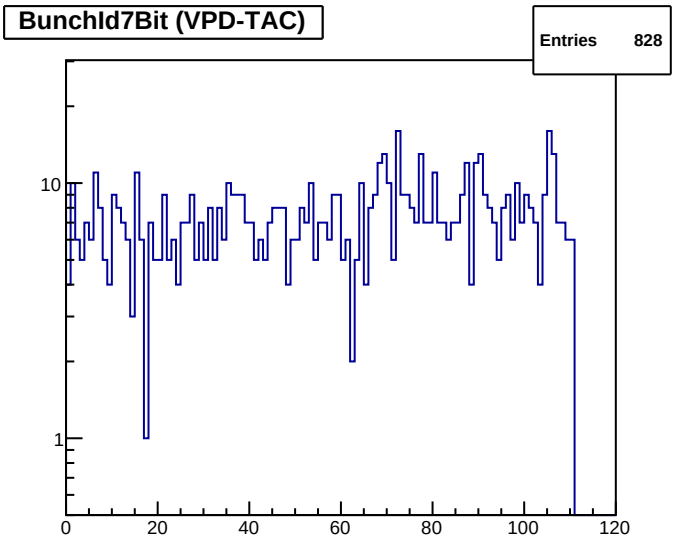
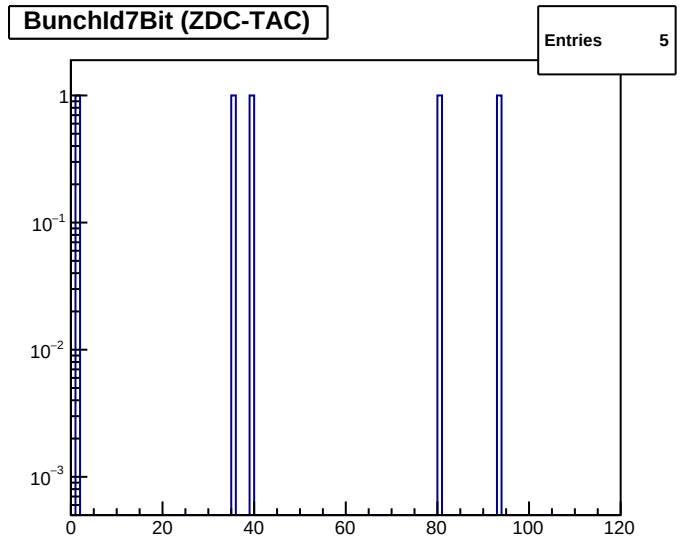
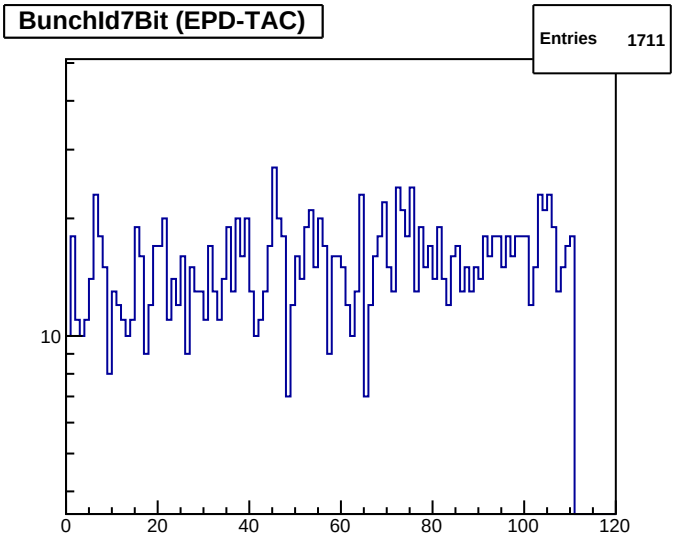
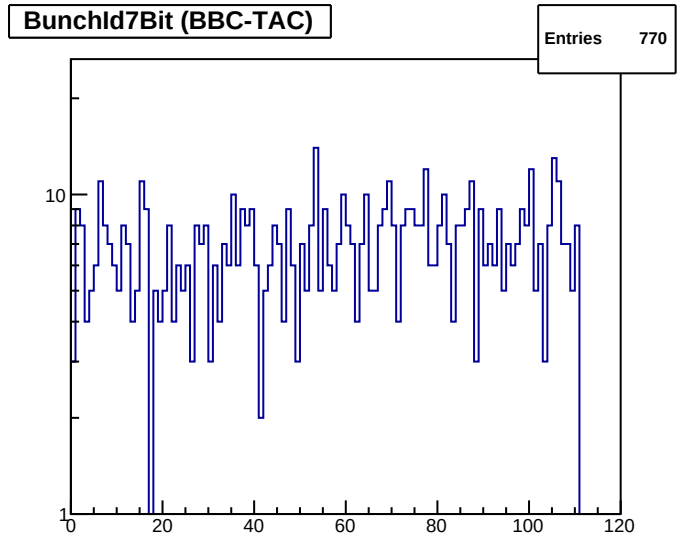
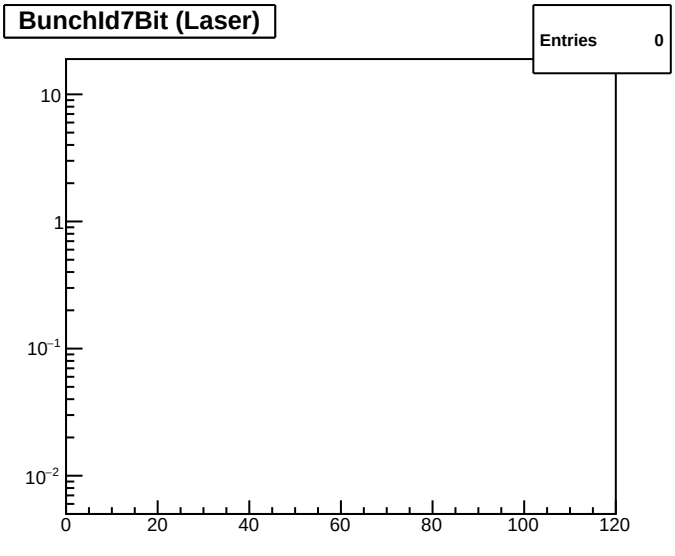
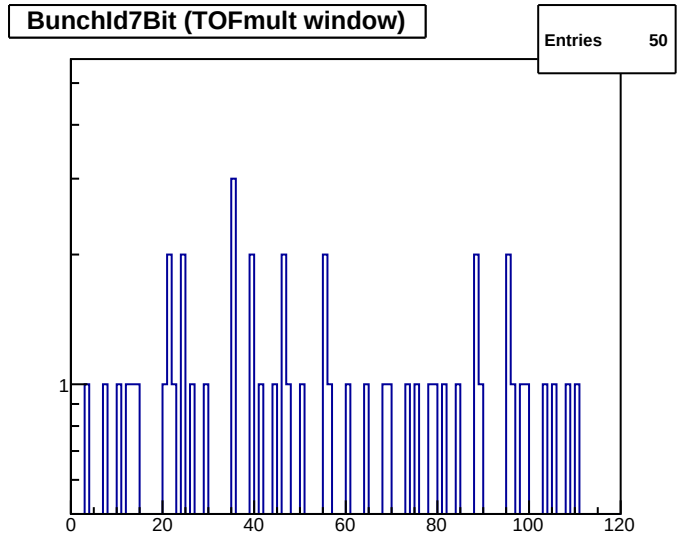

BunchId7Bit (VPD-TAC)
Entries 828
10
1
0 20 40 60 80 100 120

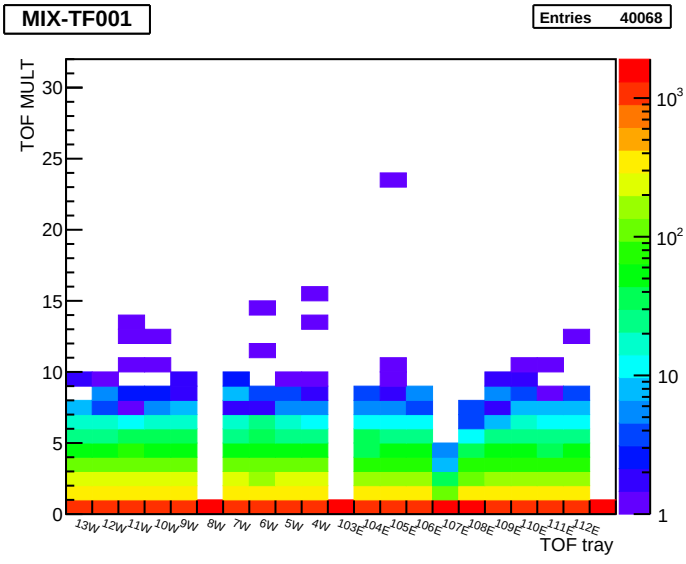

BunchId7Bit (ZDC-TAC)
Entries 5
1
10^{-1}
10^{-2}
10^{-3}
0 20 40 60 80 100 120

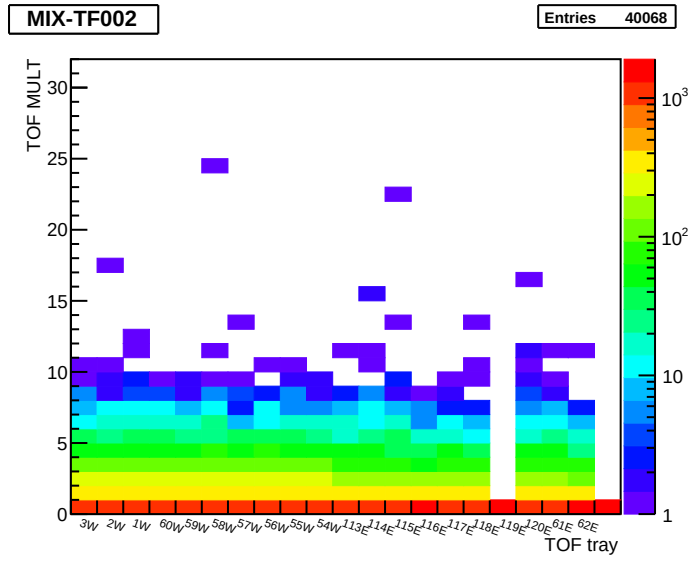

BunchId7Bit (EPD-TAC)
Entries 1711
10
0 20 40 60 80 100 120

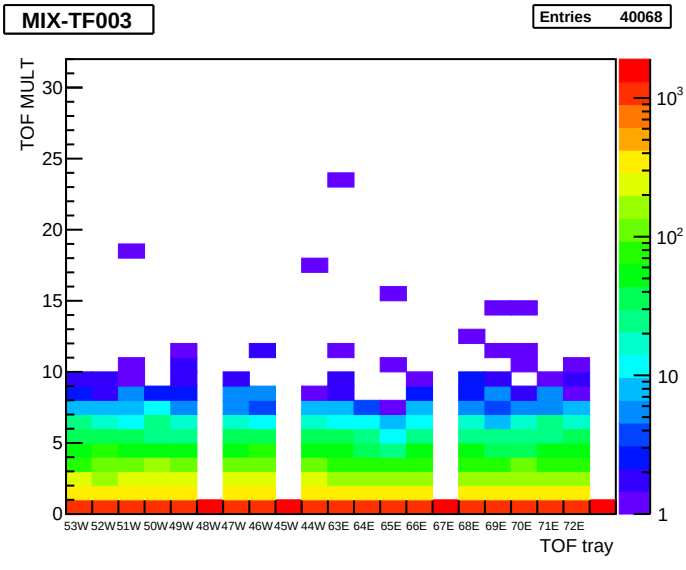

BunchId7Bit (BBC-TAC)
Entries 770
10
1
0 20 40 60 80 100 120

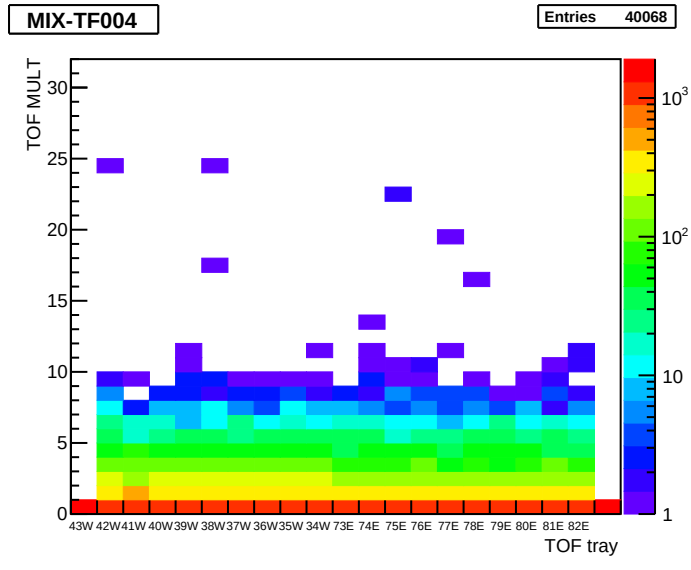

BunchId7Bit (Laser)
Entries 0
10
1
10^{-1}
10^{-2}
0 20 40 60 80 100 120

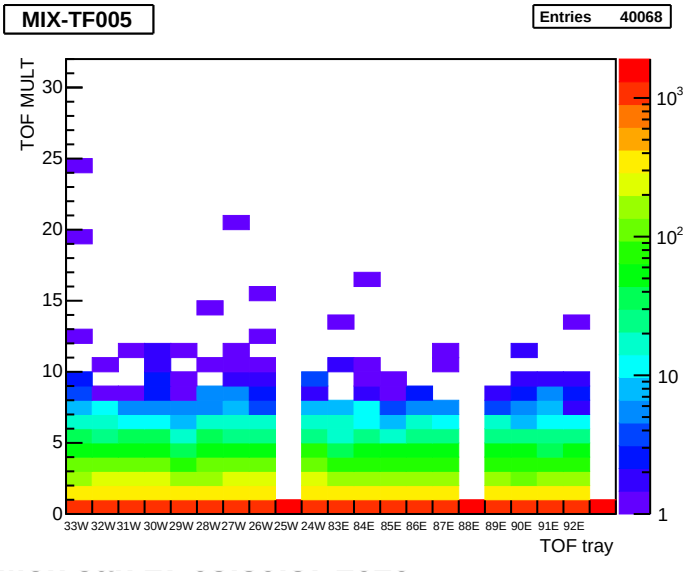

BunchId7Bit (TOFmult window)
Entries 50
1
0 20 40 60 80 100 120

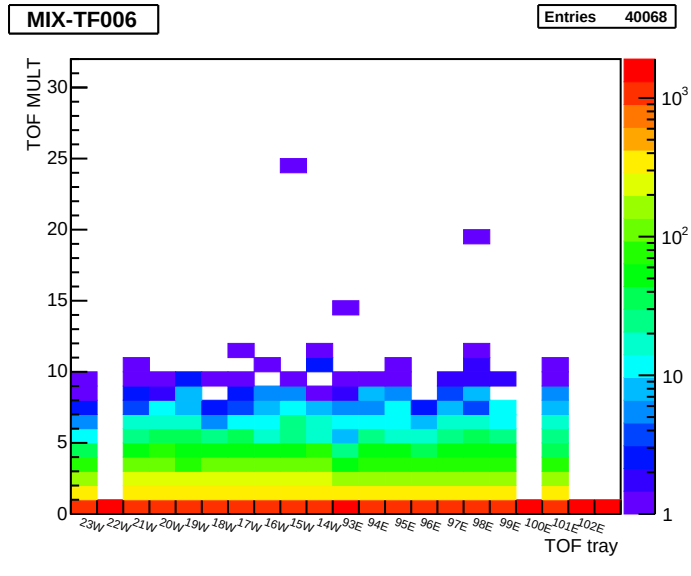

MIX-TF001
Entries 40068
TOF MULT
TOF tray

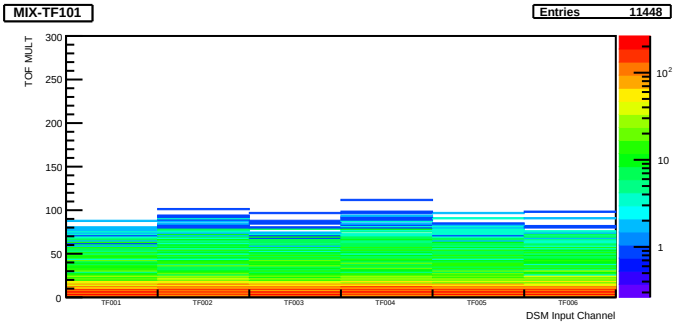

MIX-TF002
Entries 40068
TOF MULT
TOF tray

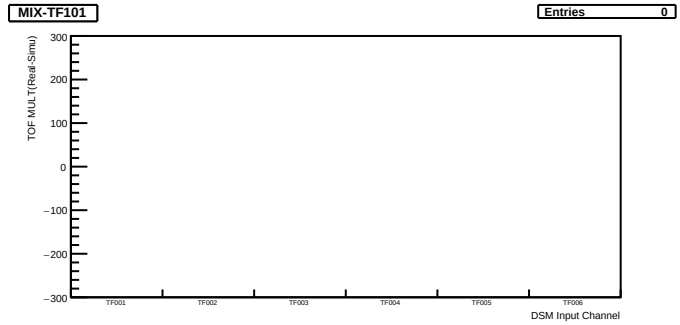

MIX-TF003
Entries 40068
TOF MULT
TOF tray

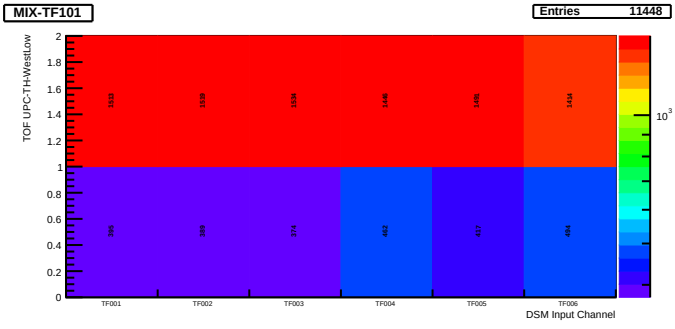

MIX-TF004
Entries 40068
TOF MULT
TOF tray

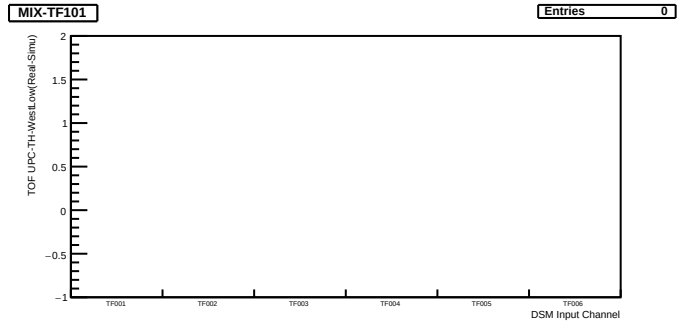

MIX-TF005
Entries 40068
TOF MULT
TOF tray

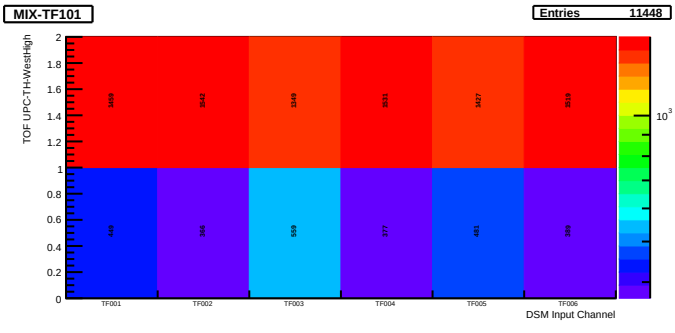

MIX-TF006
Entries 40068
TOF MULT
TOF tray

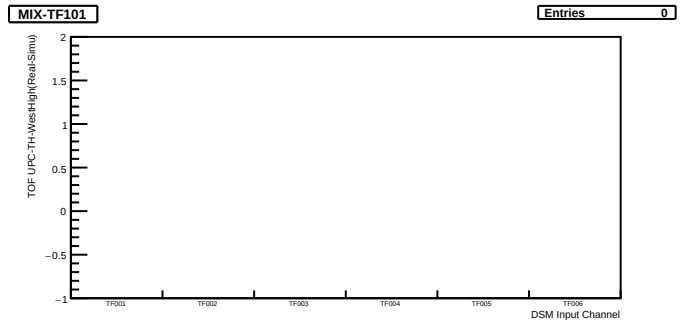

MIX-TF101
Entries 11448
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

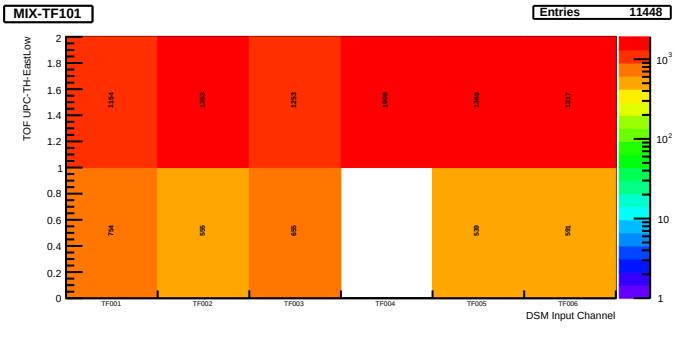

MIX-TF101
Entries 0
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

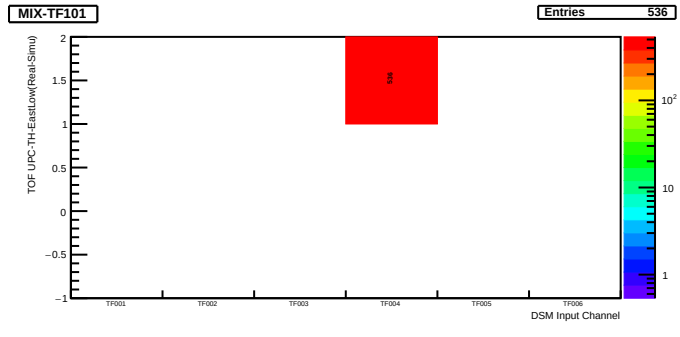

MIX-TF101
Entries 11448
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

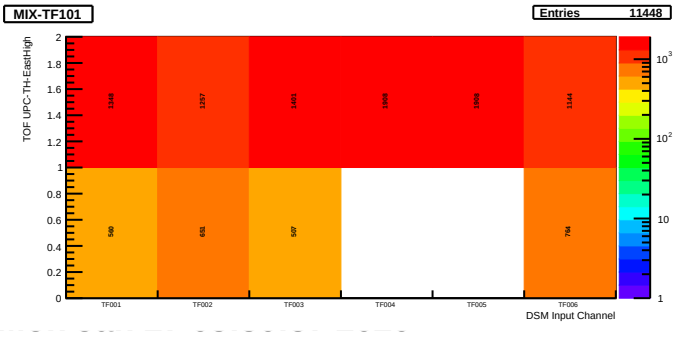

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

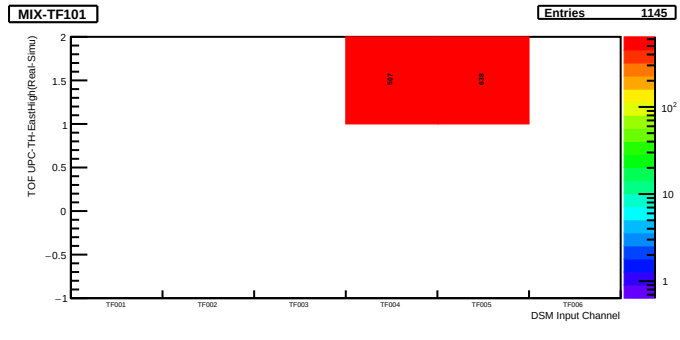

MIX-TF101
Entries 11448
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

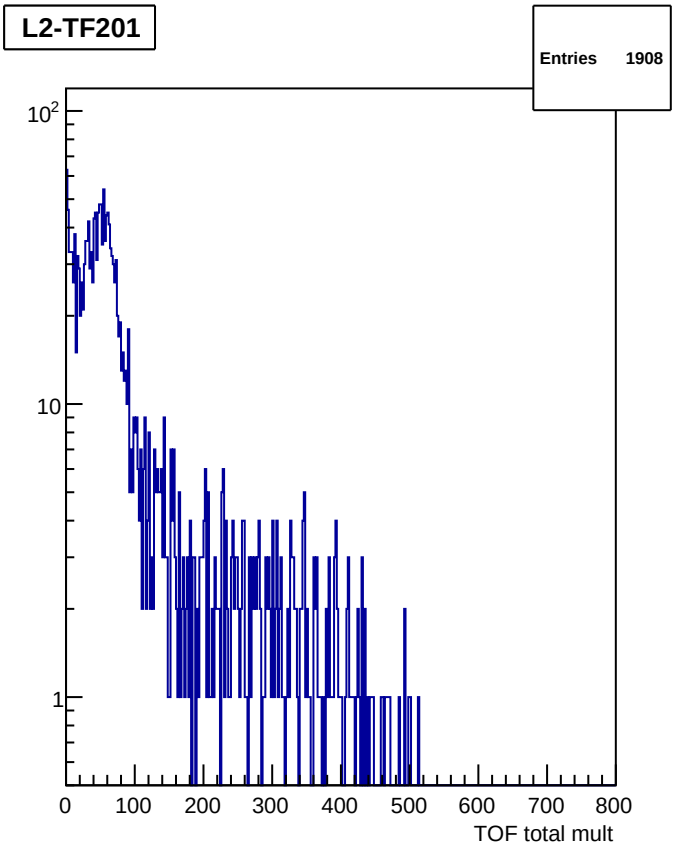

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

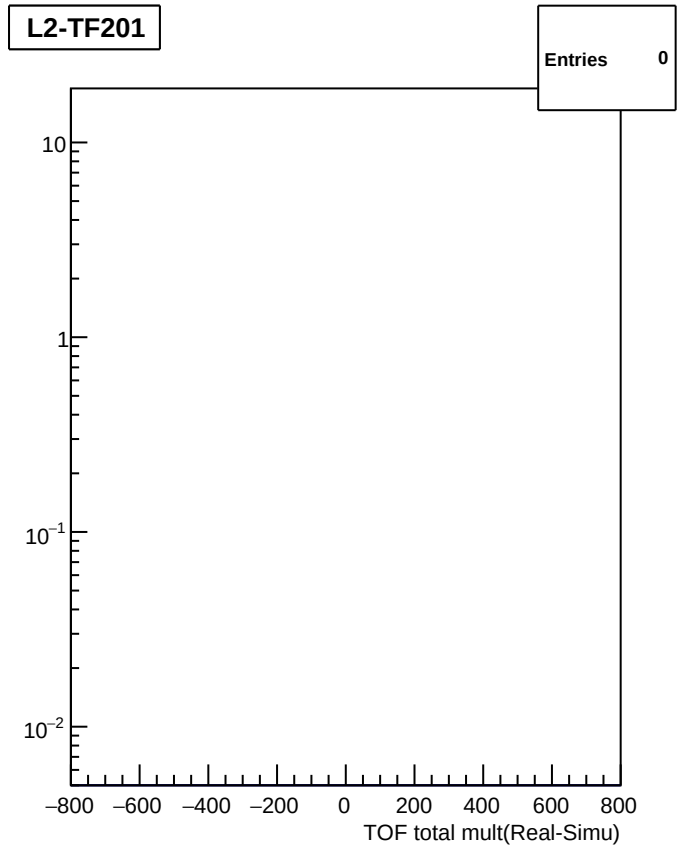

MIX-TF101
Entries 11448
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

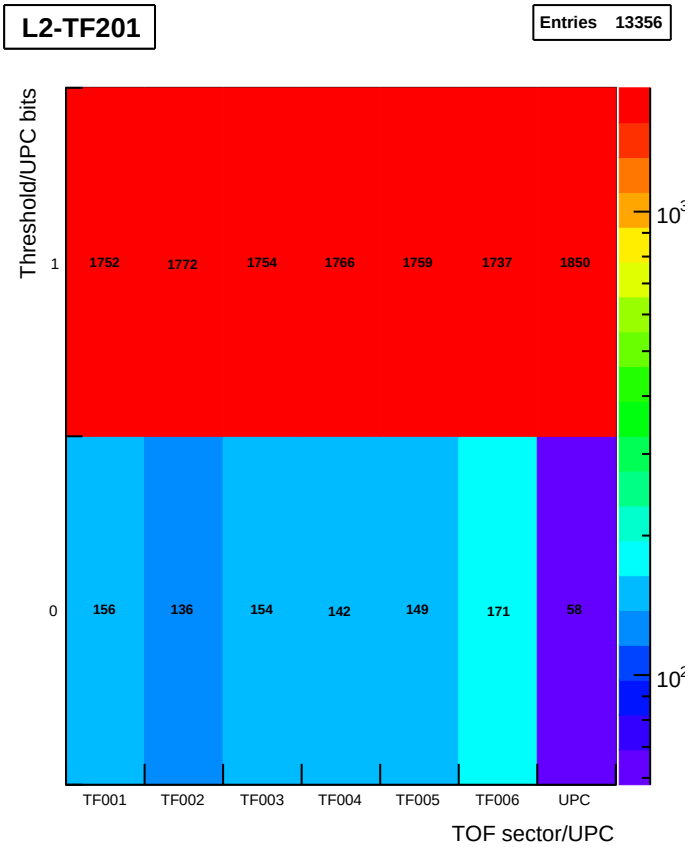

MIX-TF101
Entries 536
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

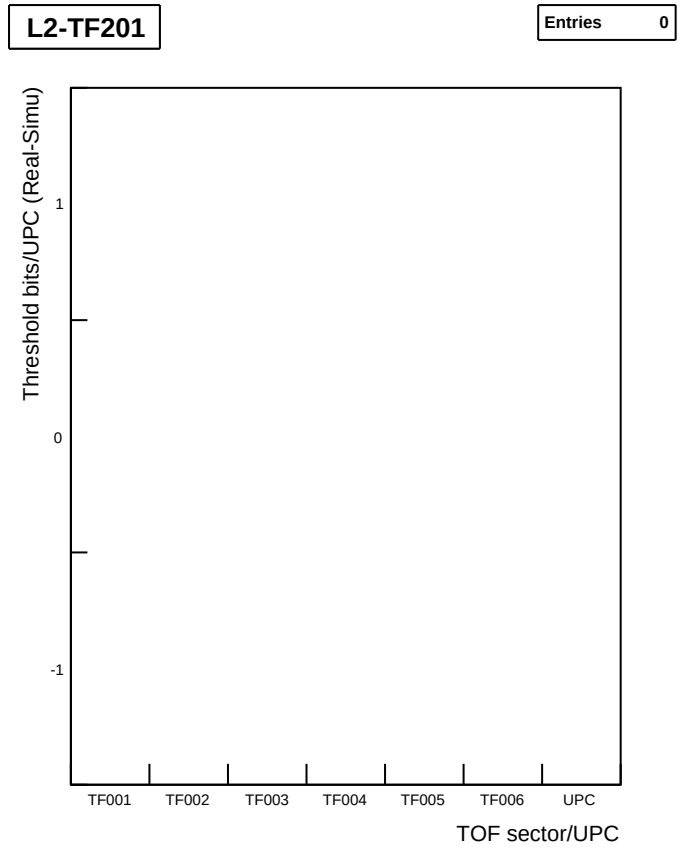

MIX-TF101
Entries 11448
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

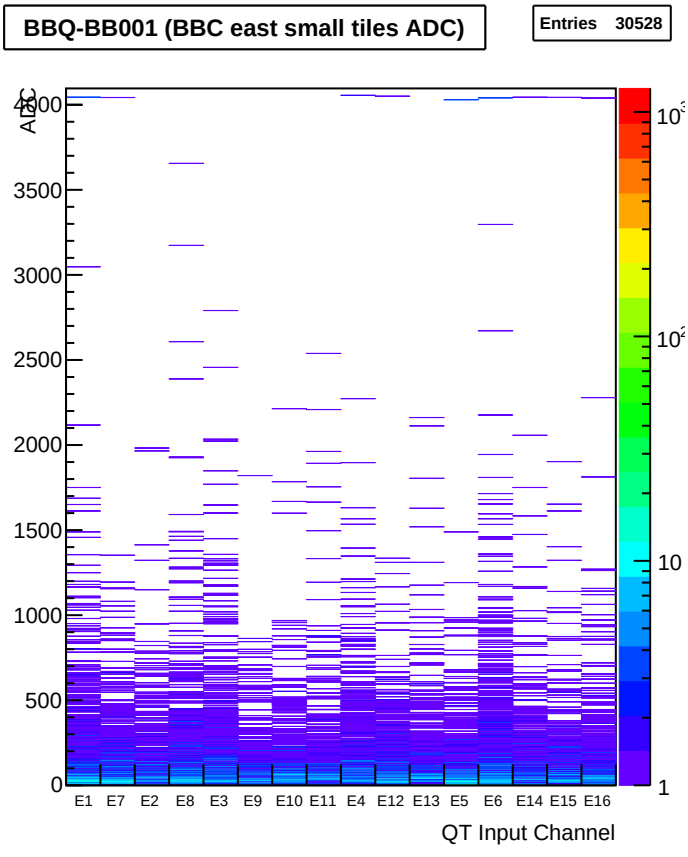

MIX-TF101
Entries 1145
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

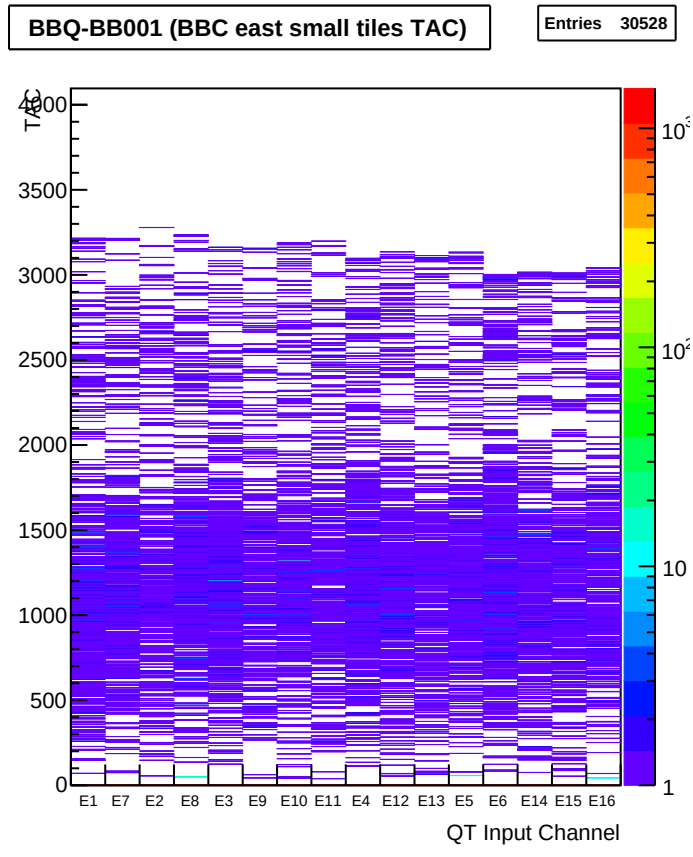

L2-TF201
Entries 1908
TOF total mult

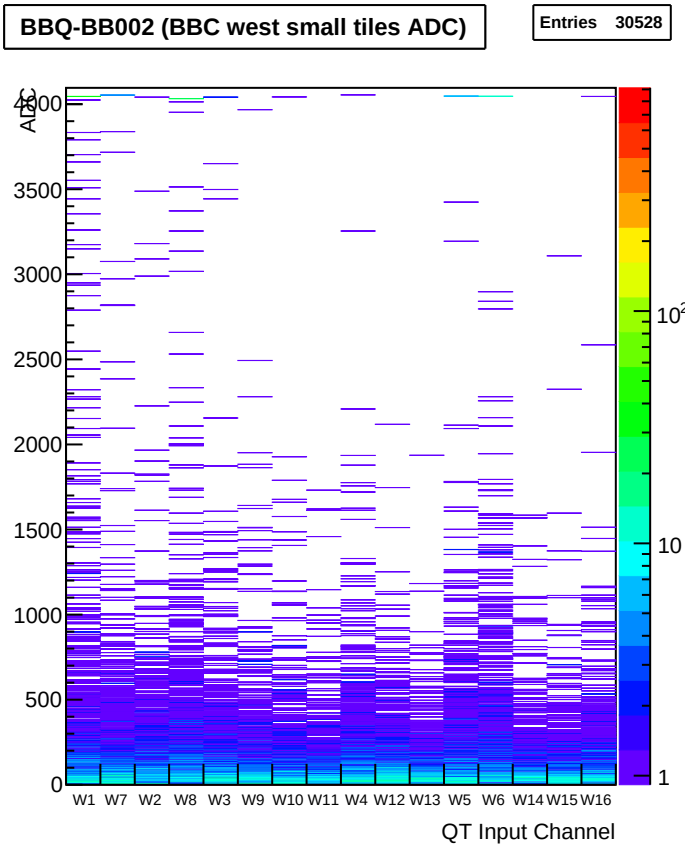

L2-TF201
Entries 0
TOF total mult(Real-Simu)

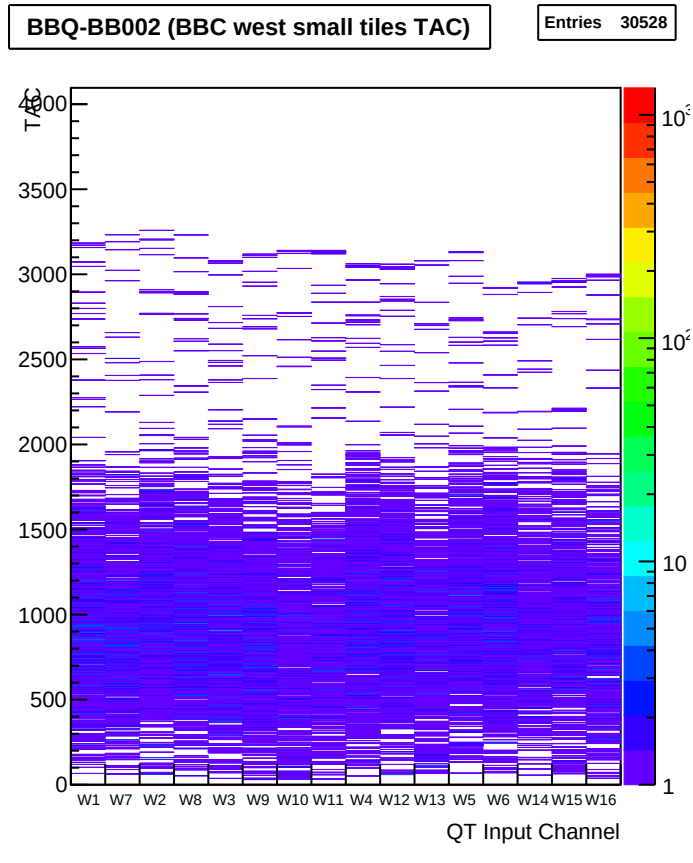

L2-TF201
Entries 13356
Threshold/UPC bits
1752
1772
1754
1766
1759
1737
1850
156
136
154
142
149
171
58
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC

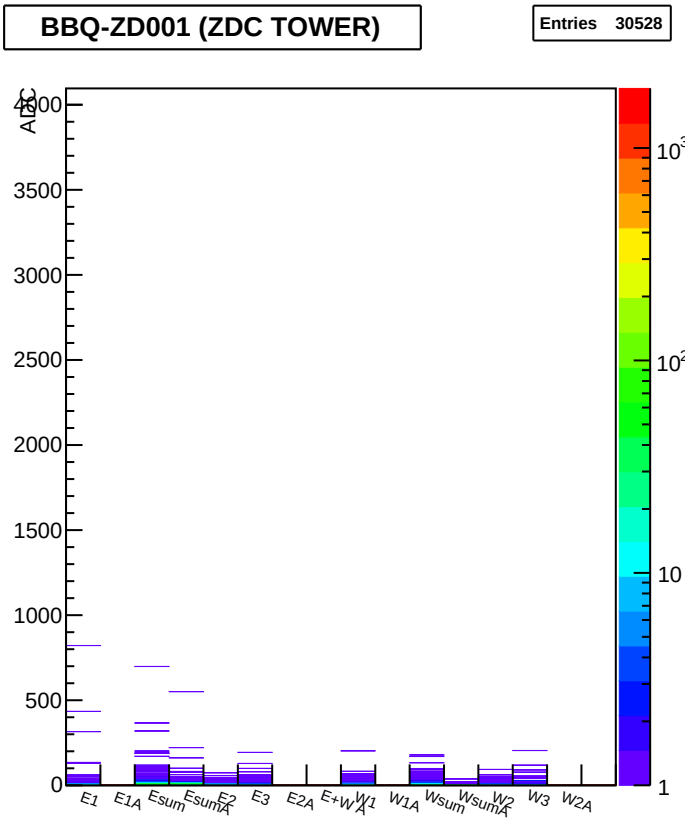

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC

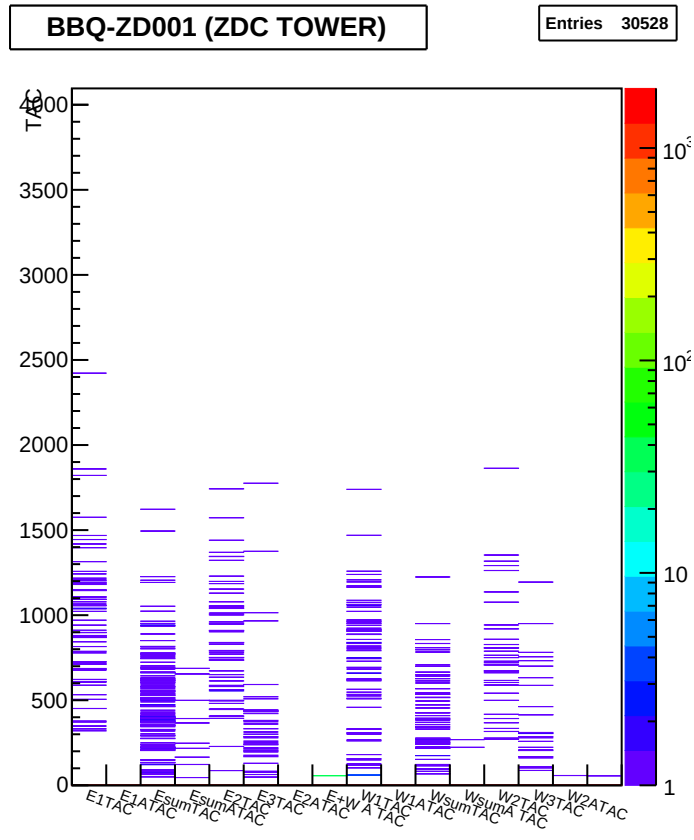

BBQ-BB001 (BBC east small tiles ADC)
Entries 30528
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

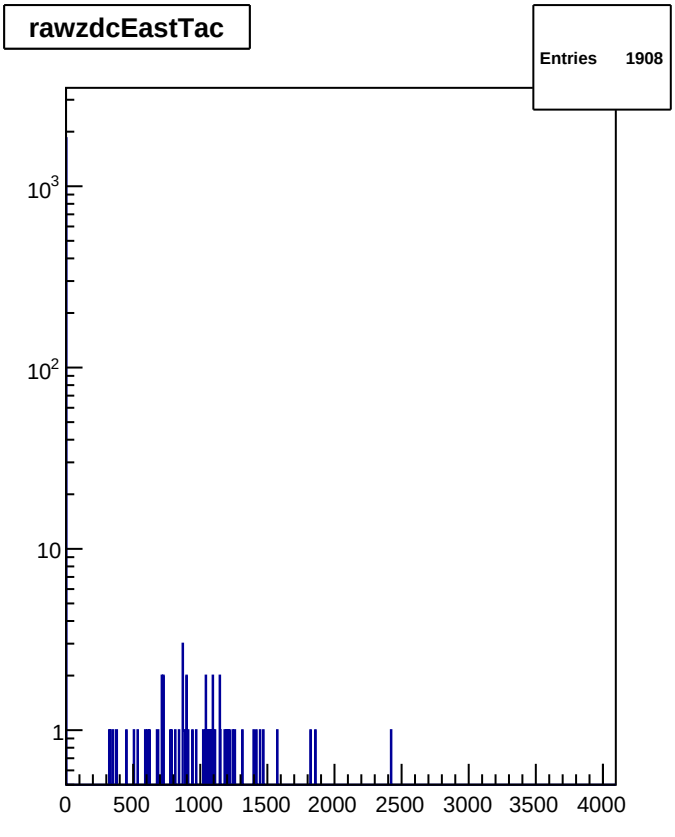

BBQ-BB001 (BBC east small tiles TAC)
Entries 30528
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

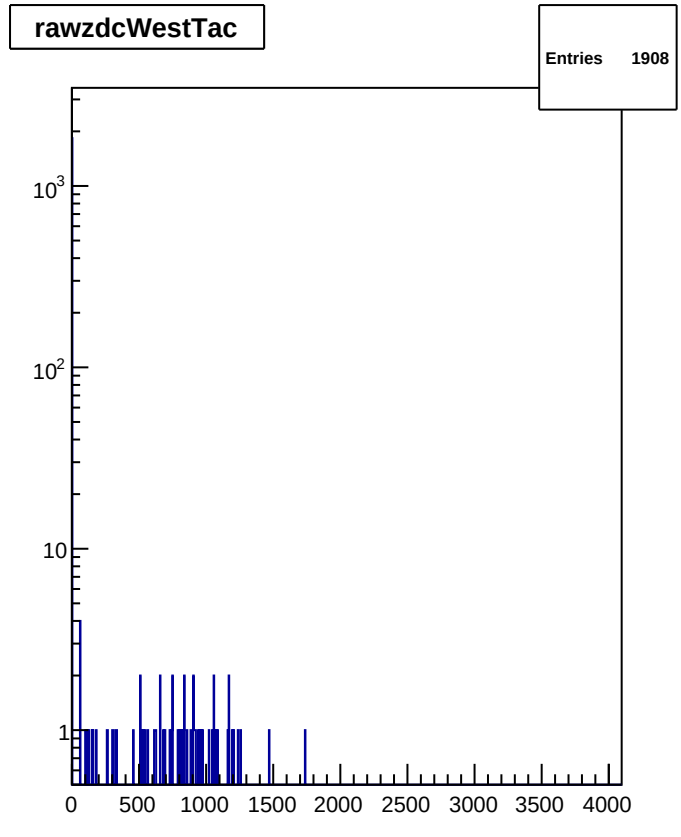

BBQ-BB002 (BBC west small tiles ADC)
Entries 30528
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

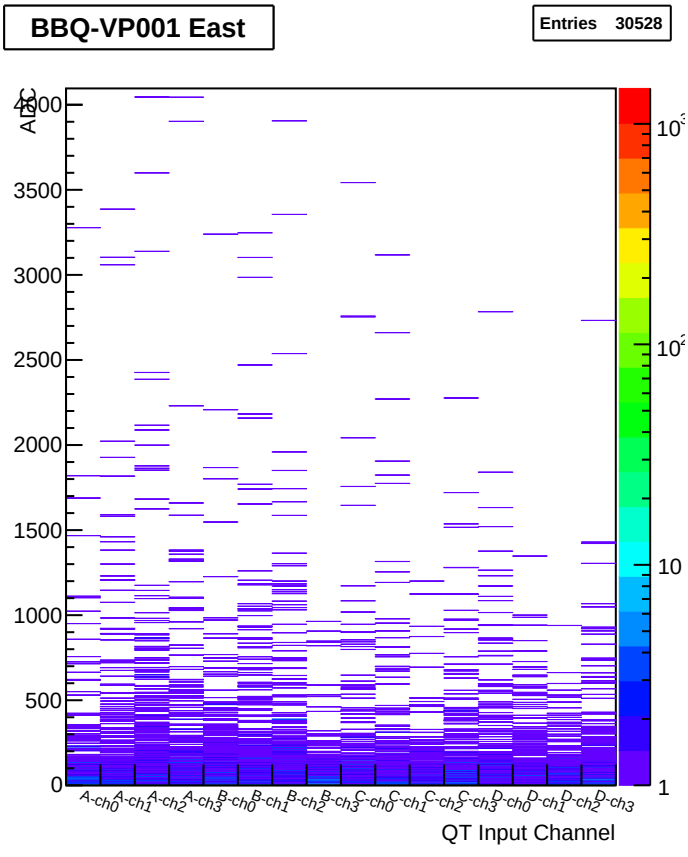

BBQ-BB002 (BBC west small tiles TAC)
Entries 30528
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

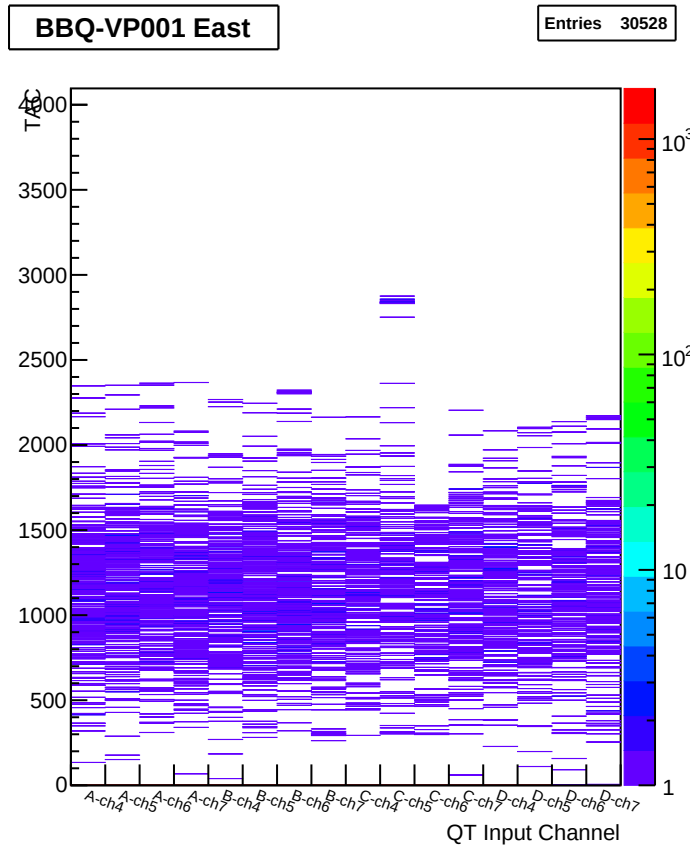

BBQ-ZD001 (ZDC TOWER)
Entries 30528
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
E1
E1A
Esum
EsumA
E2
E3
E2A
E+W A
W1
W1A
Wsum
WsumA
W2
W3
W2A
10
1

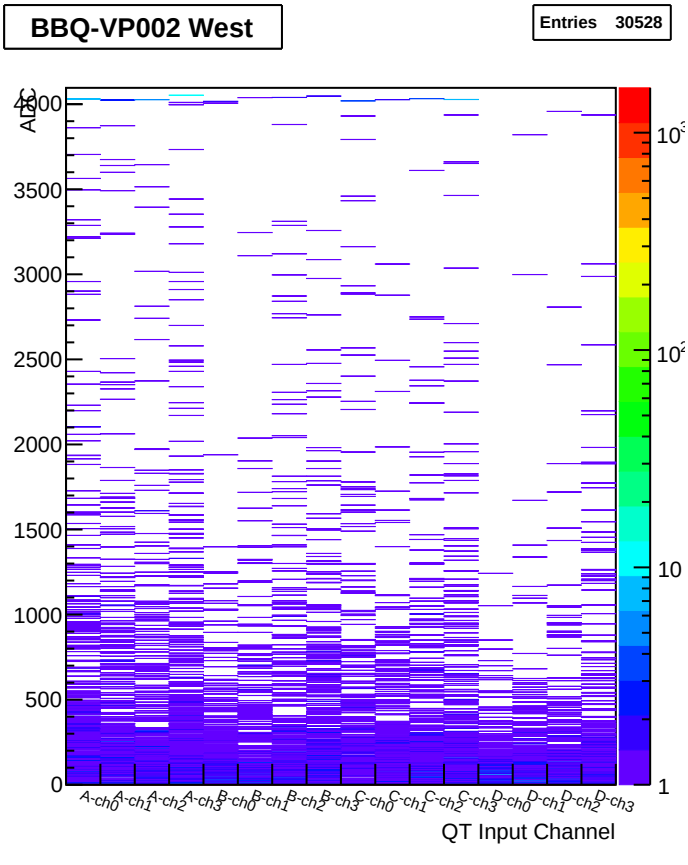

BBQ-ZD001 (ZDC TOWER)
Entries 30528
TAC
4000
3500
3000
2500
2000
1500
1000
500
0
E1TAC
E1ATAC
EsumTAC
EsumATAC
E2TAC
E3TAC
E2ATAC
E+W A TAC
W1TAC
W1ATAC
WsumTAC
WsumA TAC
W2TAC
W3TAC
W2ATAC
10
1

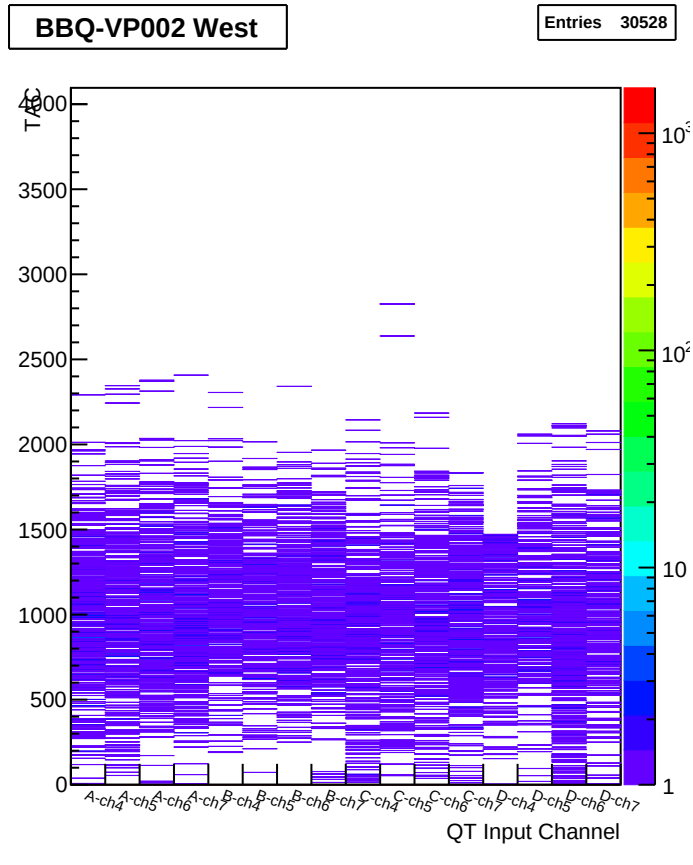

rawzdcEastTac
Entries 1908
10^3
10^2
10
1
0
500
1000
1500
2000
2500
3000
3500
4000

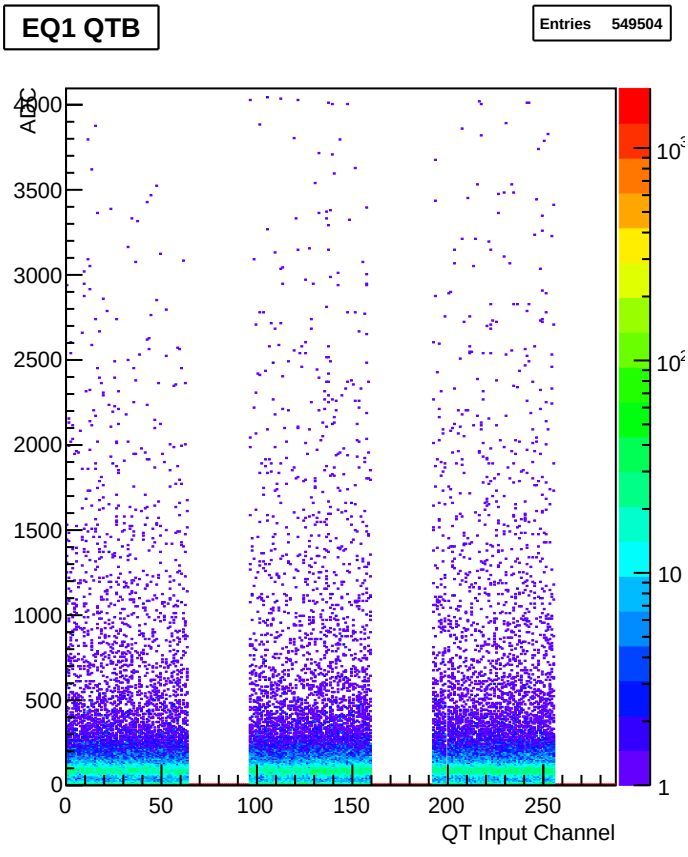

rawzdcWestTac
Entries 1908
10^3
10^2
10
1
0
500
1000
1500
2000
2500
3000
3500
4000

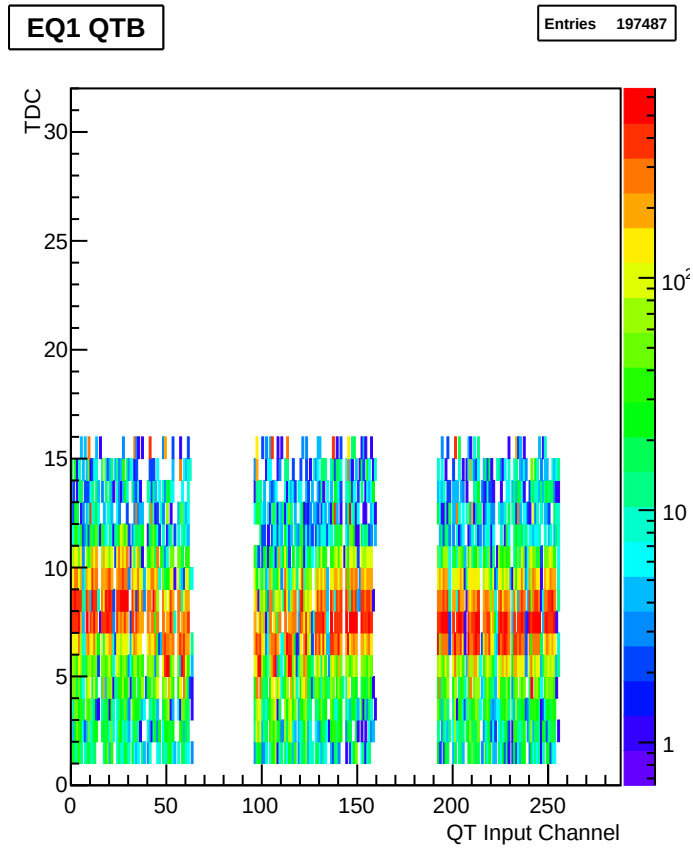

BBQ-VP001 East
Entries 30528
ADC
QT Input Channel

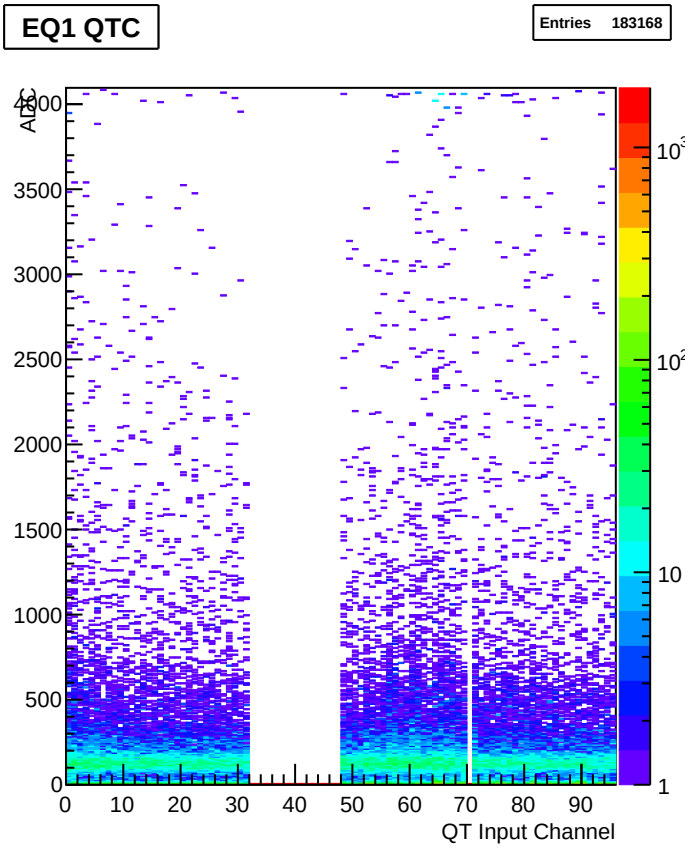

BBQ-VP001 East
Entries 30528
TADC
QT Input Channel

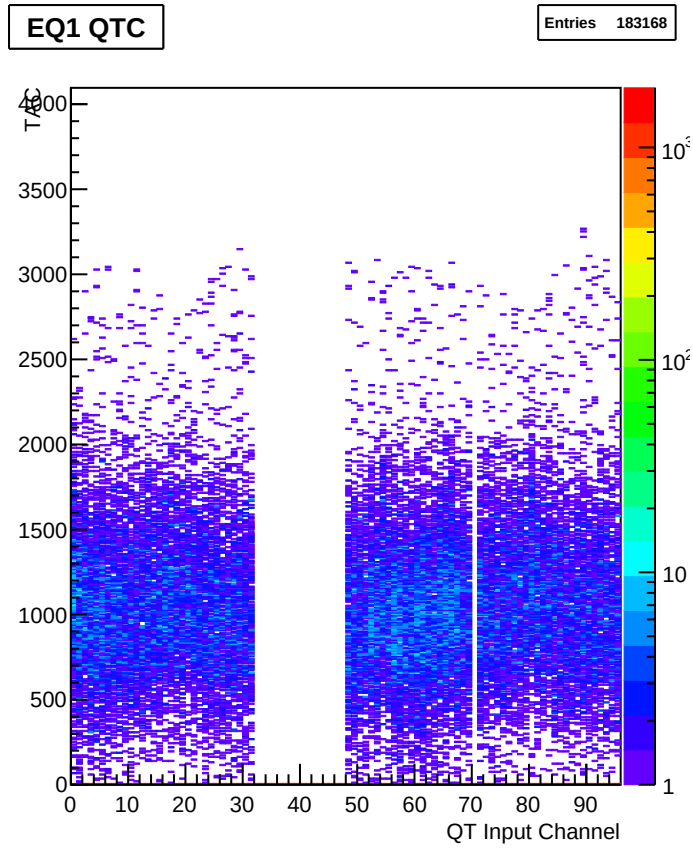

BBQ-VP002 West
Entries 30528
ADC
QT Input Channel

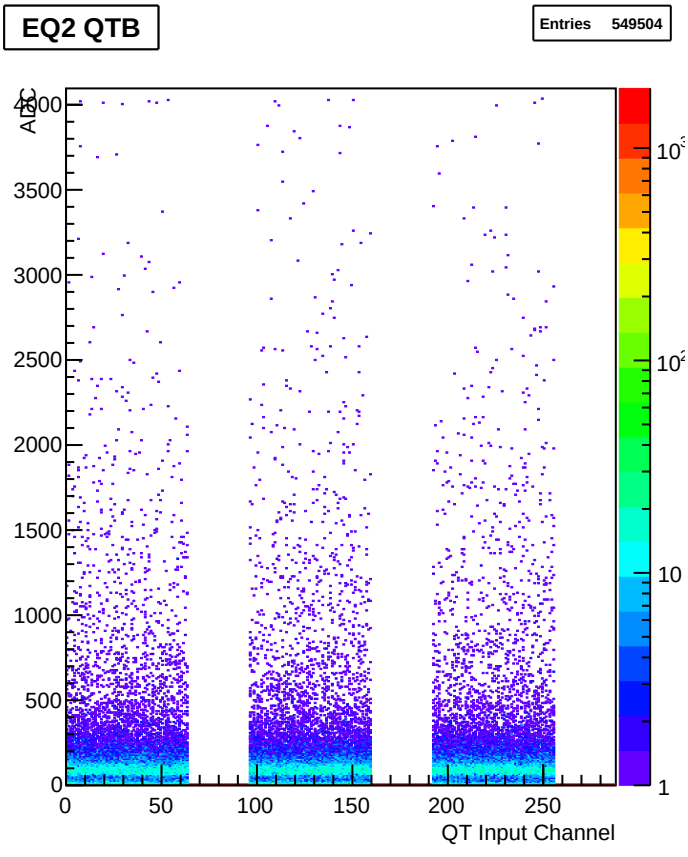

BBQ-VP002 West
Entries 30528
TADC
QT Input Channel

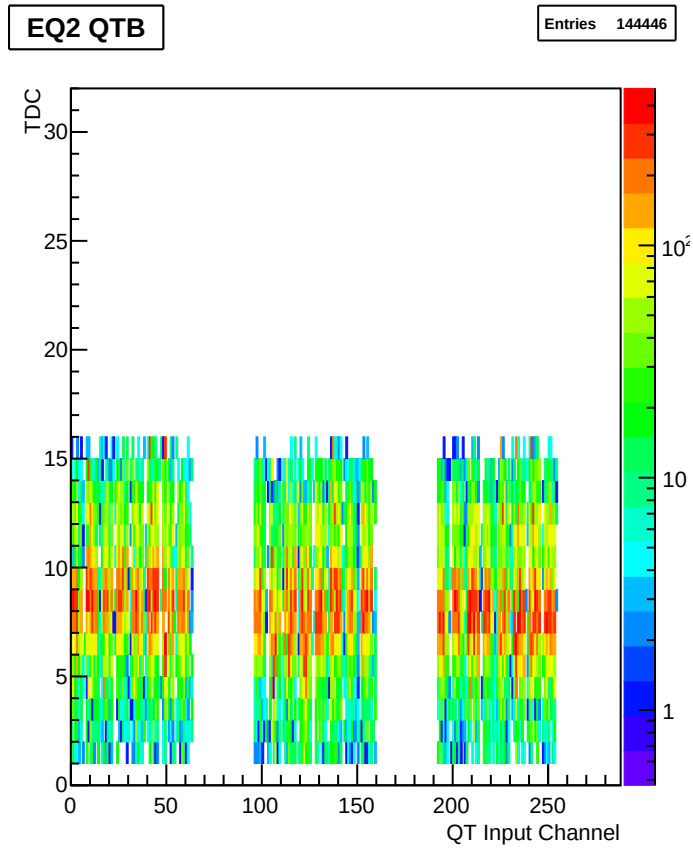

EQ1 QTB
Entries 549504
ADC
QT Input Channel

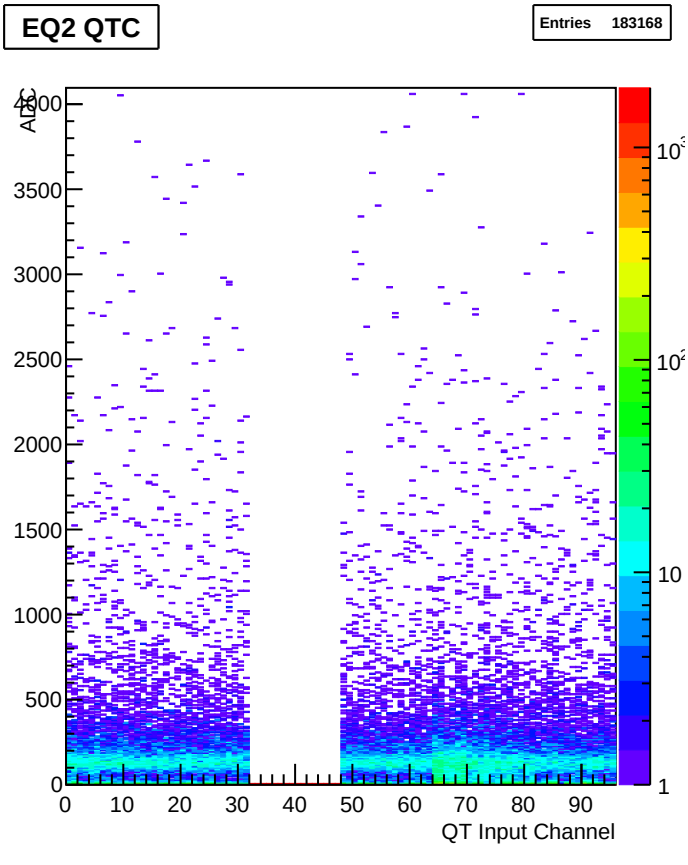

EQ1 QTB
Entries 197487
TDC
QT Input Channel

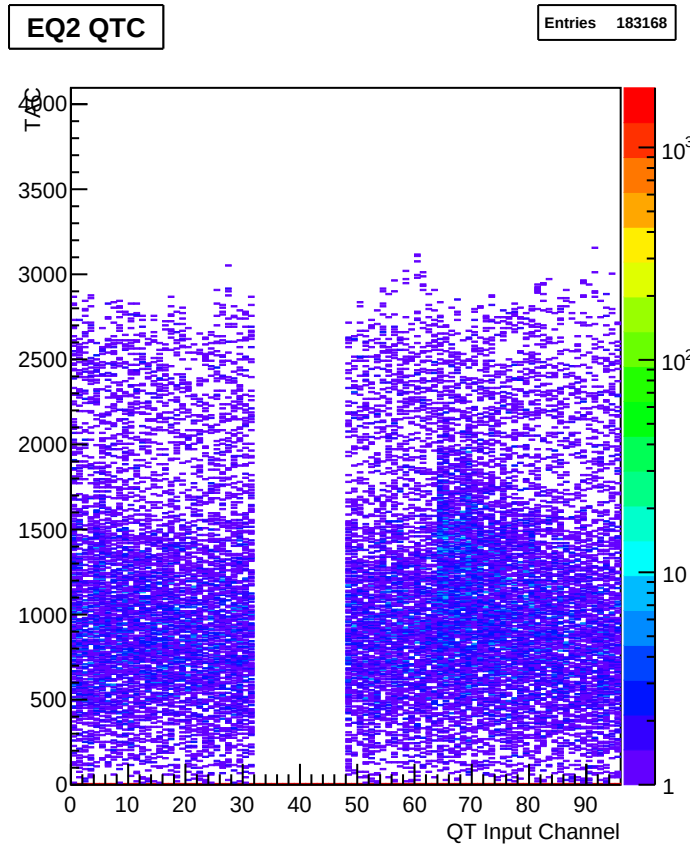

EQ1 QTC
Entries 183168
ADC
QT Input Channel

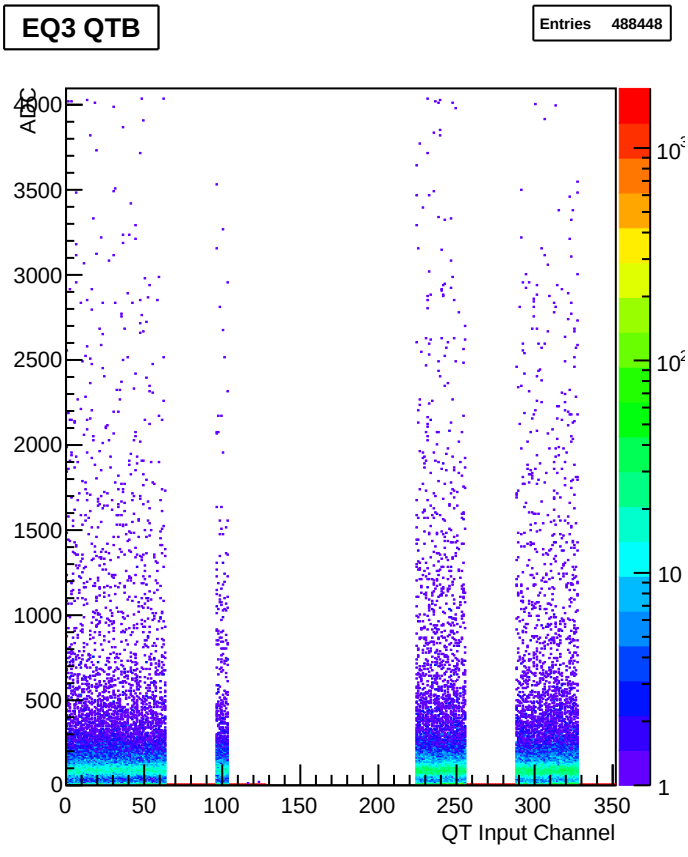

EQ1 QTC
Entries 183168
TADC
QT Input Channel

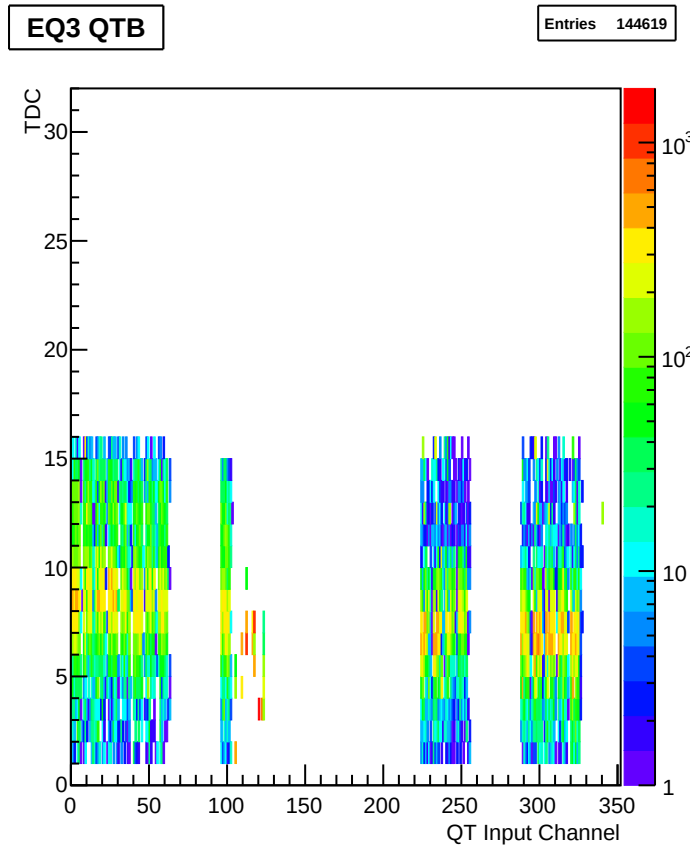

EQ2 QTB
Entries 549504
ADC
QT Input Channel

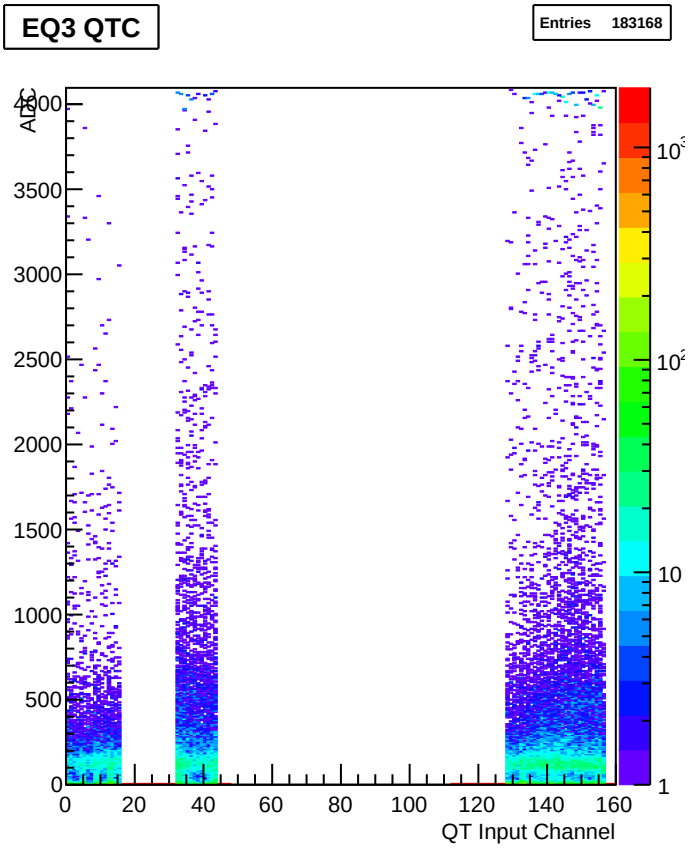

EQ2 QTB
Entries 144446
TDC
QT Input Channel

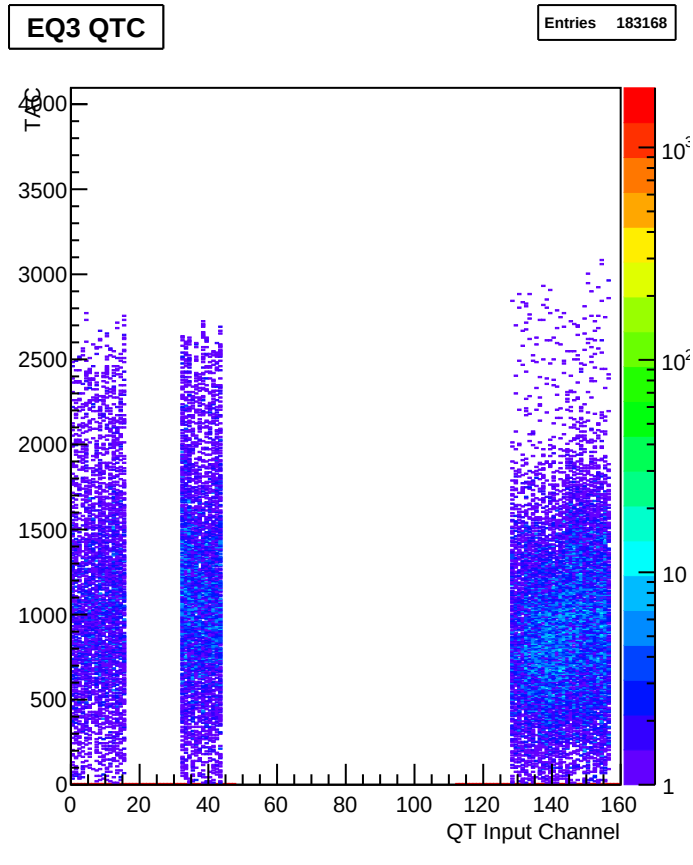

EQ2 QTC
Entries 183168
ADC
QT Input Channel

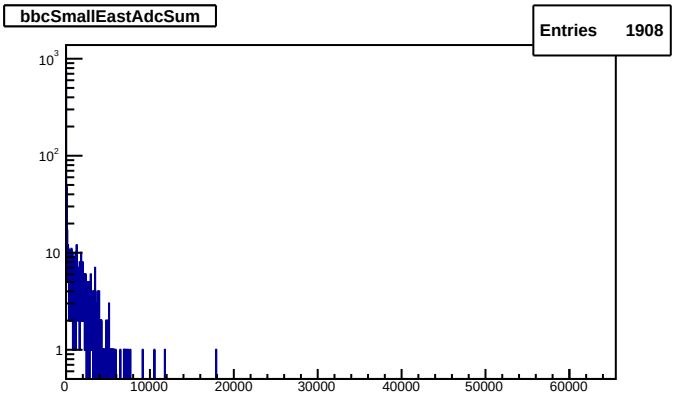

EQ2 QTC
Entries 183168
TADC
QT Input Channel

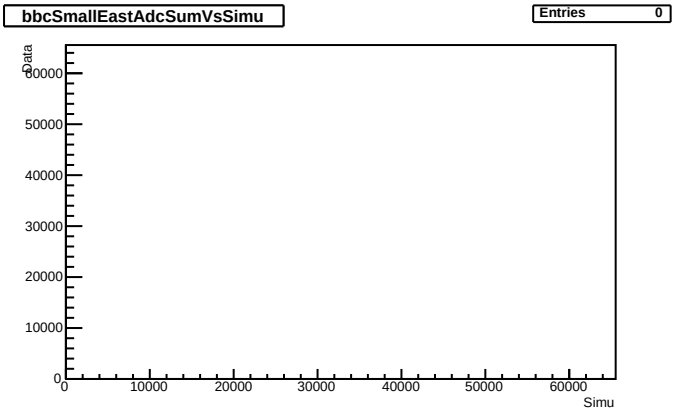

EQ3 QTB
Entries 488448
ADC
QT Input Channel

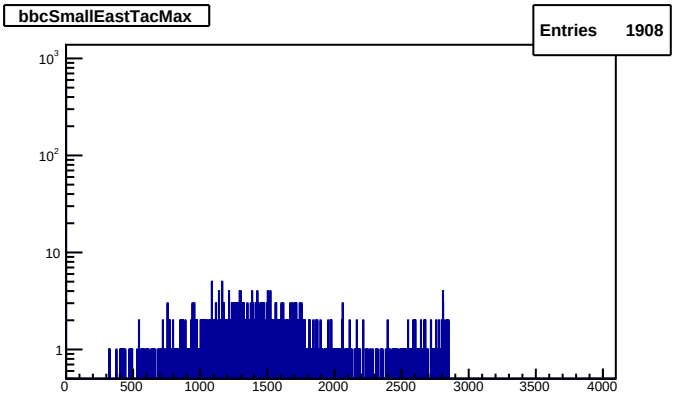

EQ3 QTB
Entries 144619
TDC
QT Input Channel

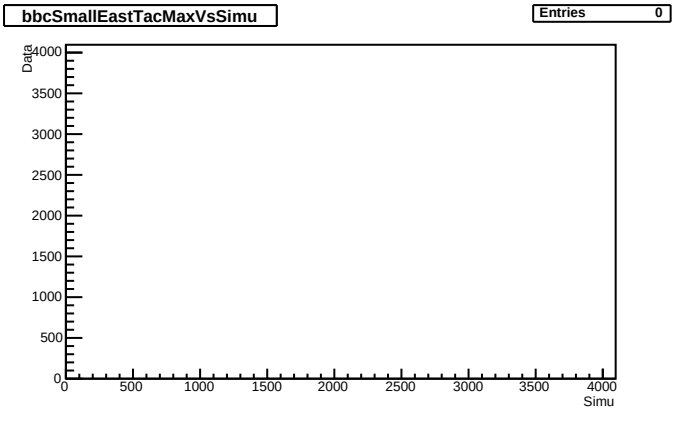

EQ3 QTC
Entries 183168
ADC
QT Input Channel

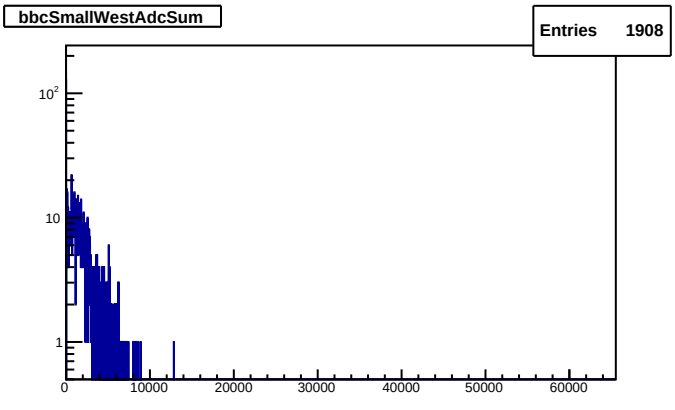

EQ3 QTC
Entries 183168
TADC
QT Input Channel

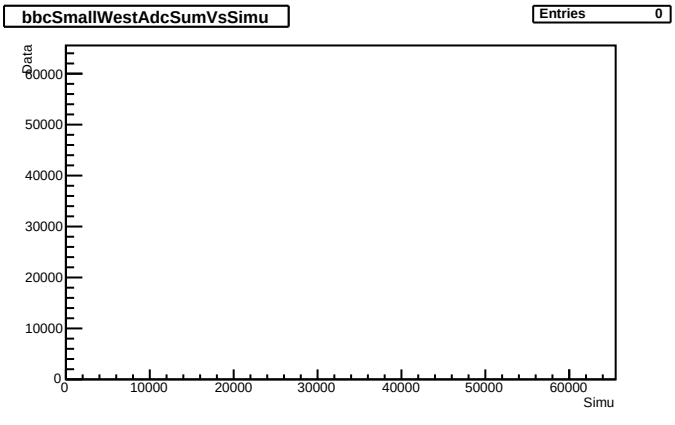

bbcSmallEastAdcSum
Entries 1908

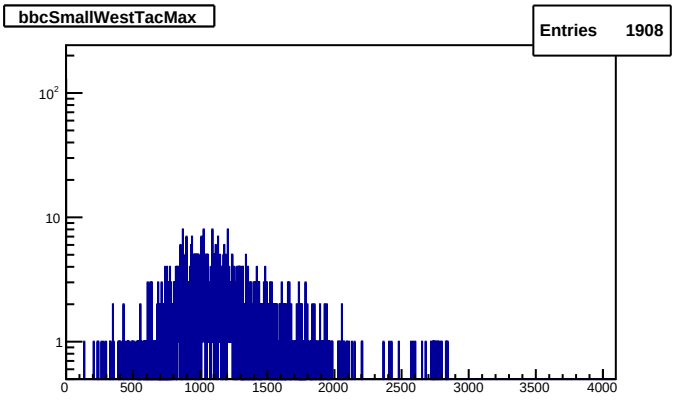

bbcSmallEastAdcSumVsSimu
Entries 0
Data
Simu

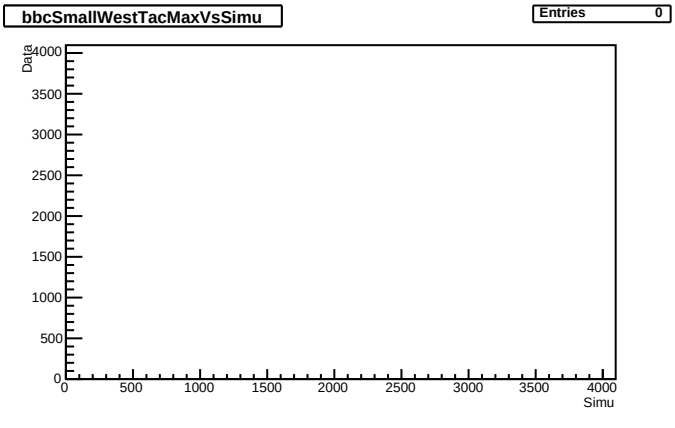

bbcSmallEastTacMax
Entries 1908

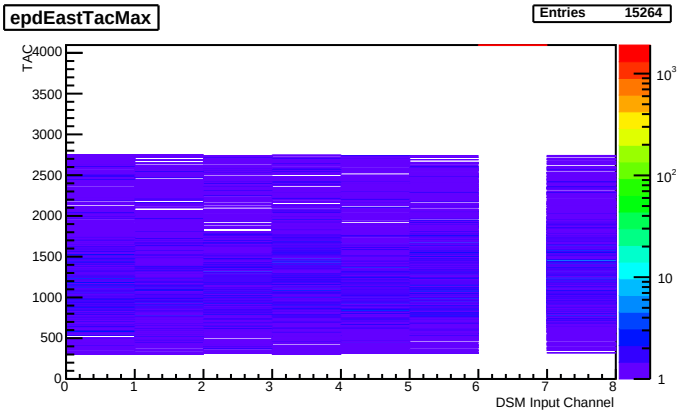

bbcSmallEastTacMaxVsSimu
Entries 0
Data
Simu

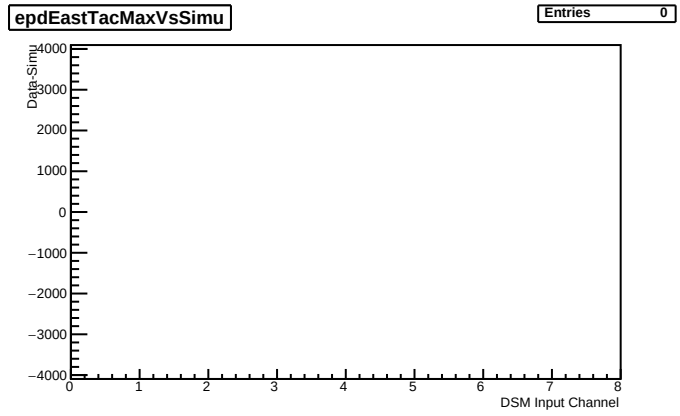

bbcSmallWestAdcSum
Entries 1908

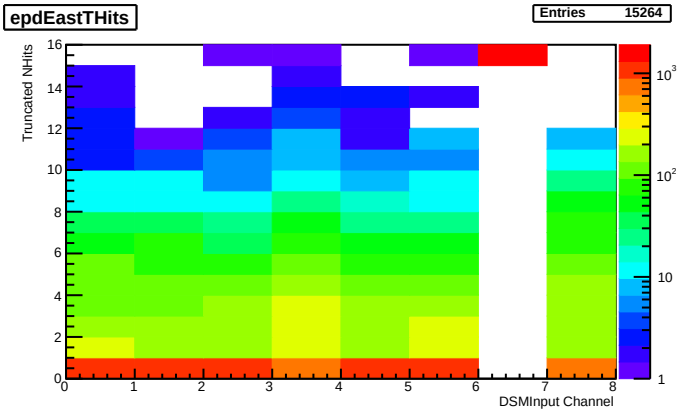

bbcSmallWestAdcSumVsSimu
Entries 0
Data
Simu

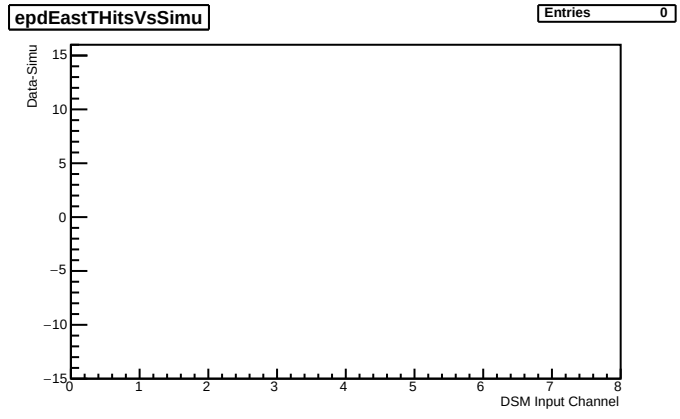

bbcSmallWestTacMax
Entries 1908

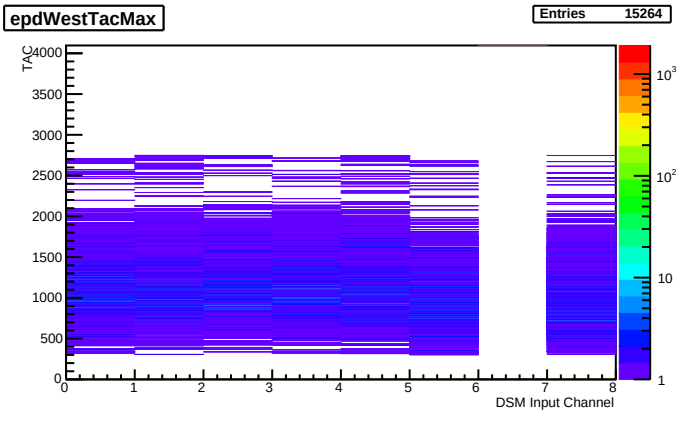

bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu

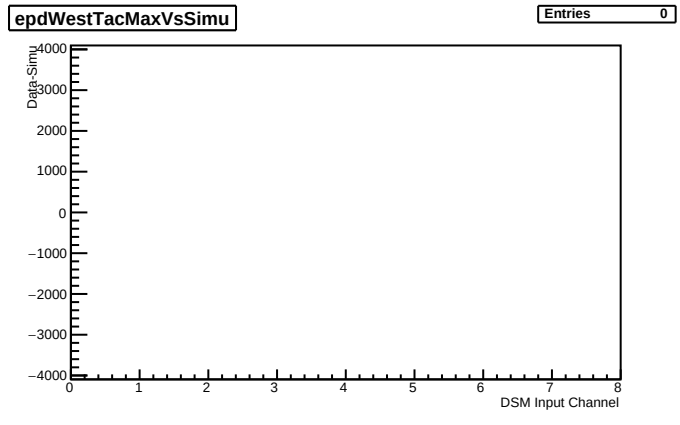

epdEastTacMax
Entries 15264
TAC
DSM Input Channel

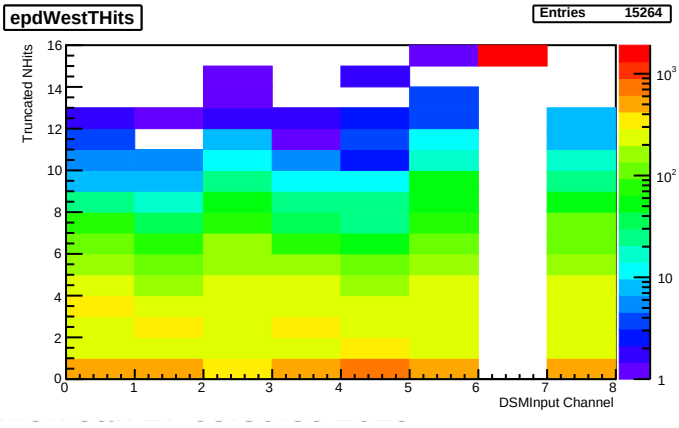

epdEastTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel

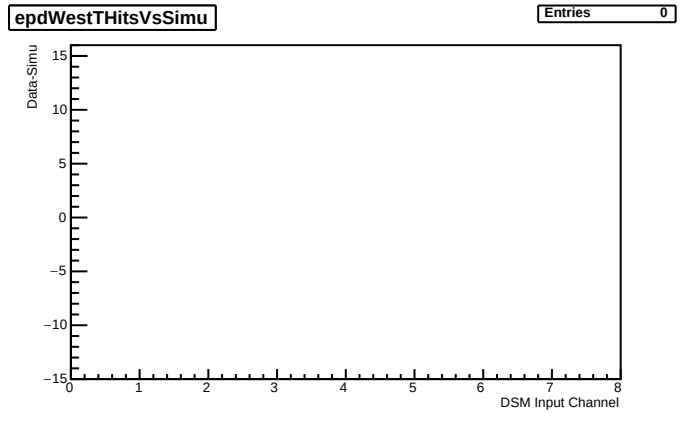

epdEastTHits
Entries 15264
Truncated NHits
DSMInput Channel

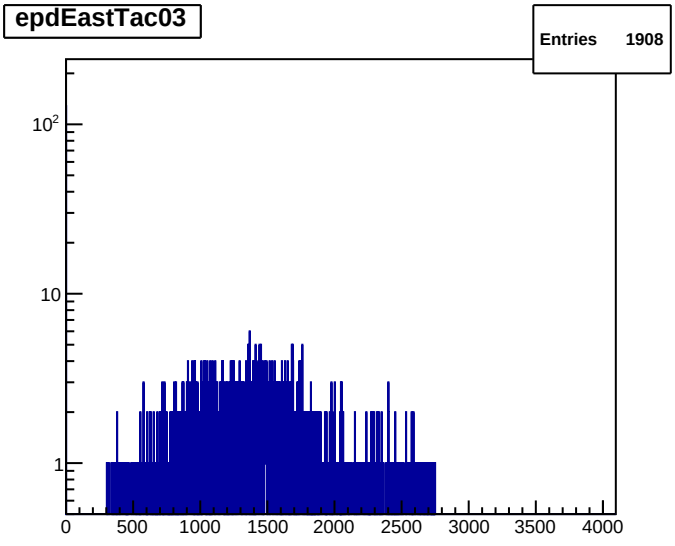

epdEastTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel

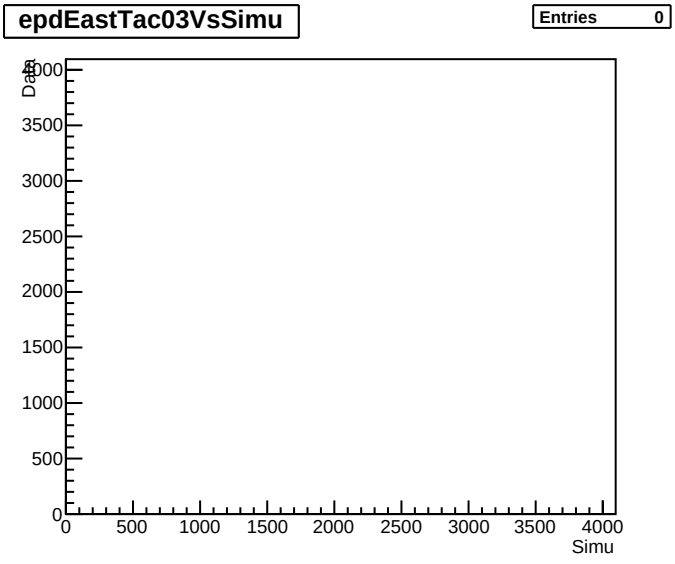

epdWestTacMax
Entries 15264
TAC
DSM Input Channel

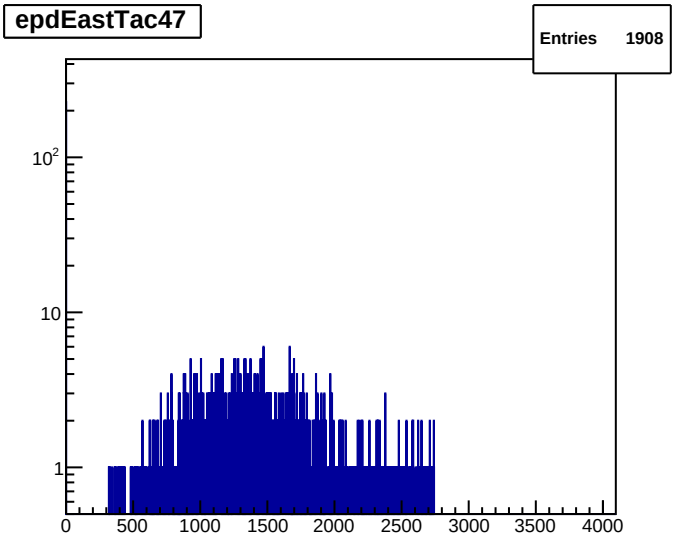

epdWestTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel

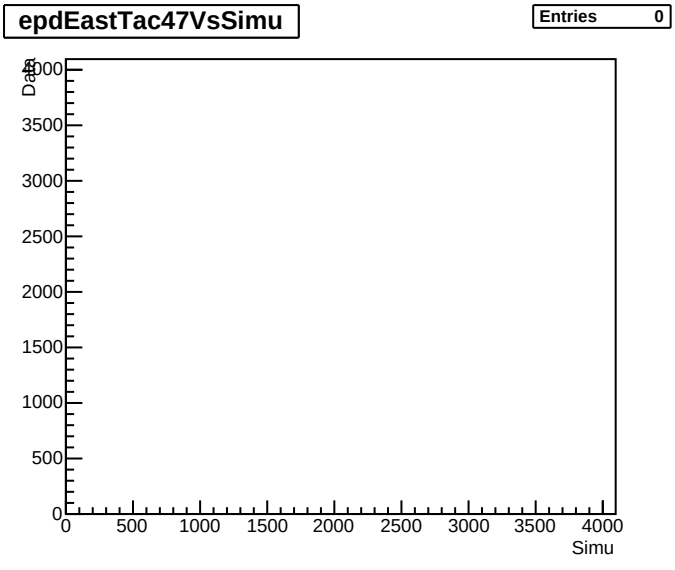

epdWestTHits
Entries 15264
Truncated NHits
DSMInput Channel

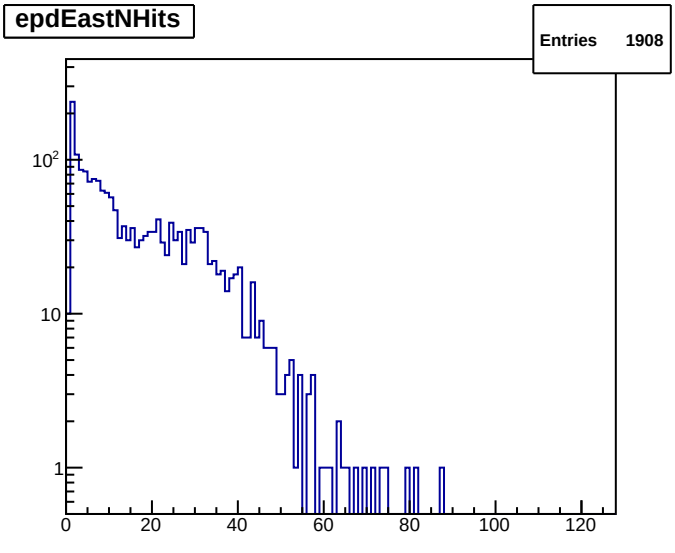

epdWestTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel

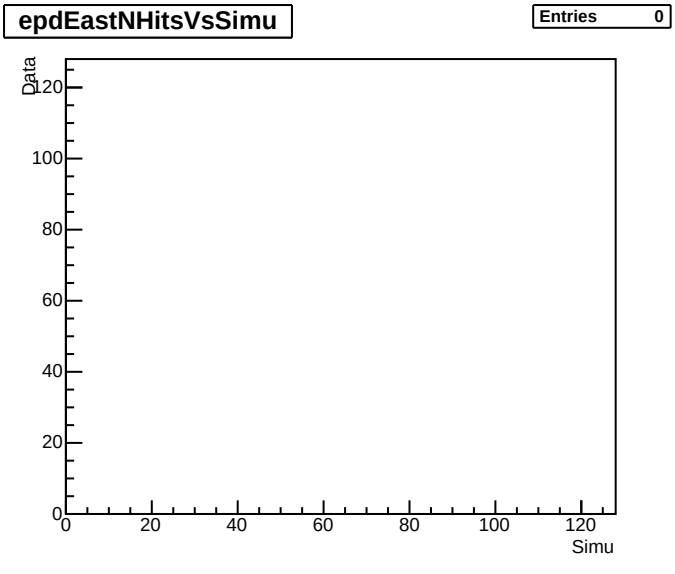

epdEastTac03
Entries 1908
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

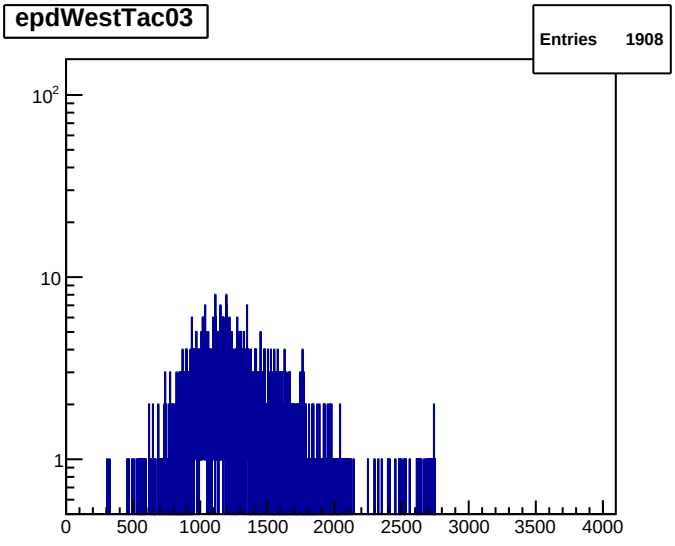

epdEastTac03VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

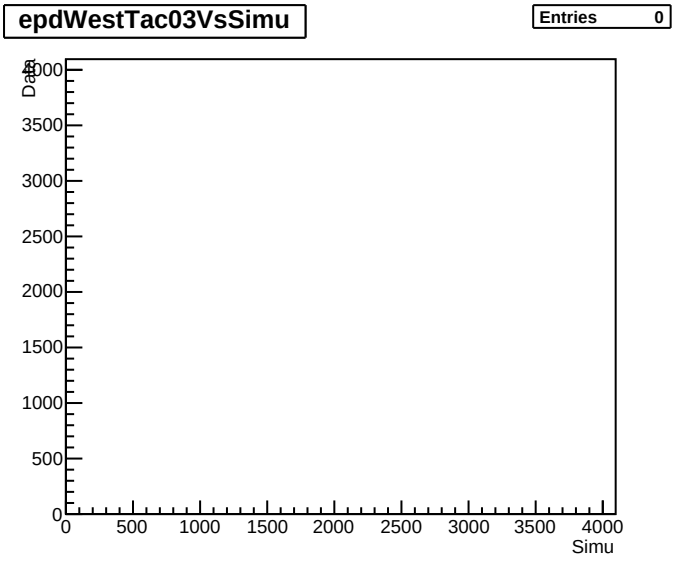

epdEastTac47
Entries 1908
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

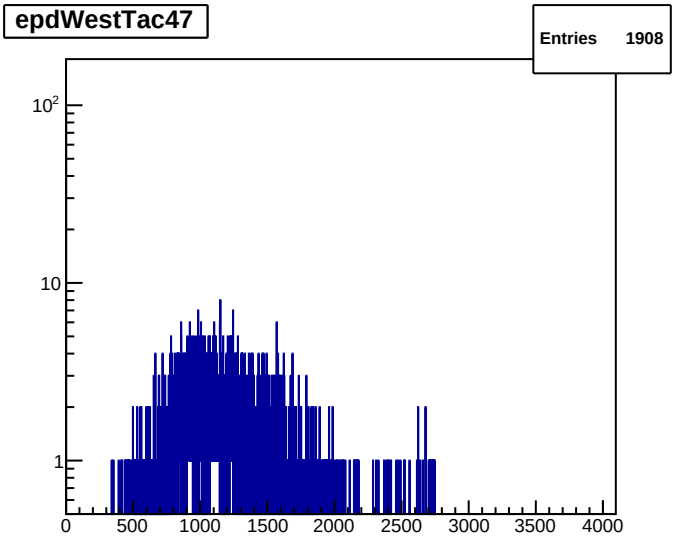

epdEastTac47VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

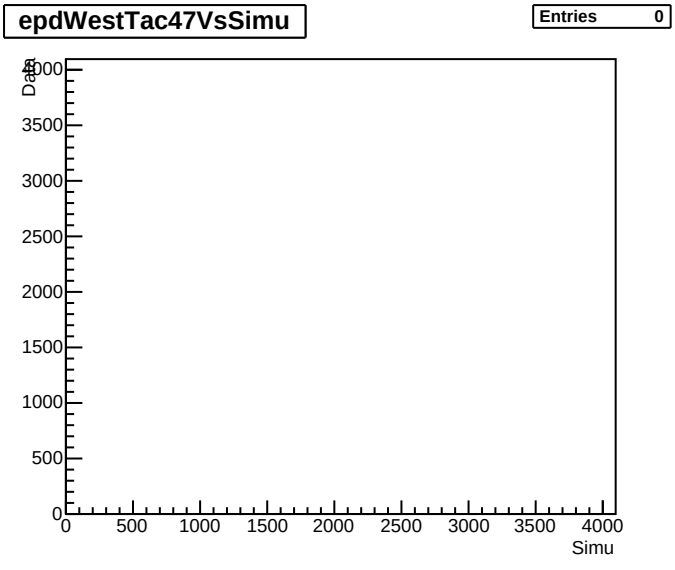

epdEastNHits
Entries 1908
10^2
10
1
0 20 40 60 80 100 120

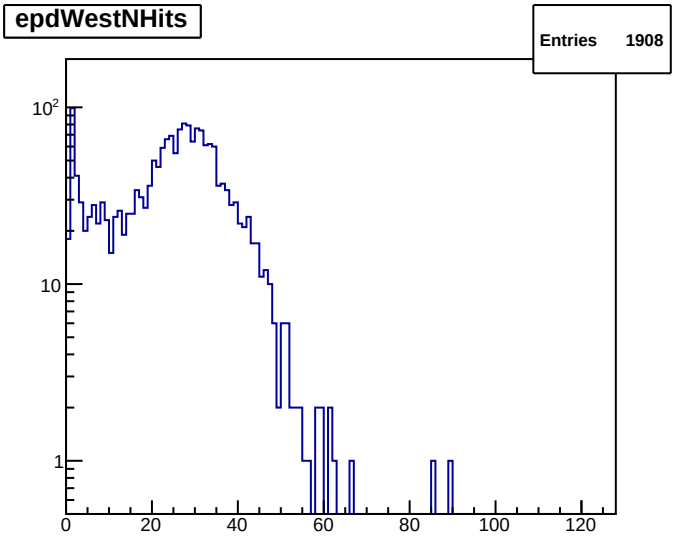

epdEastNHitsVsSimu
Entries 0
Data
120 100 80 60 40 20 0
0 20 40 60 80 100 120
Simu

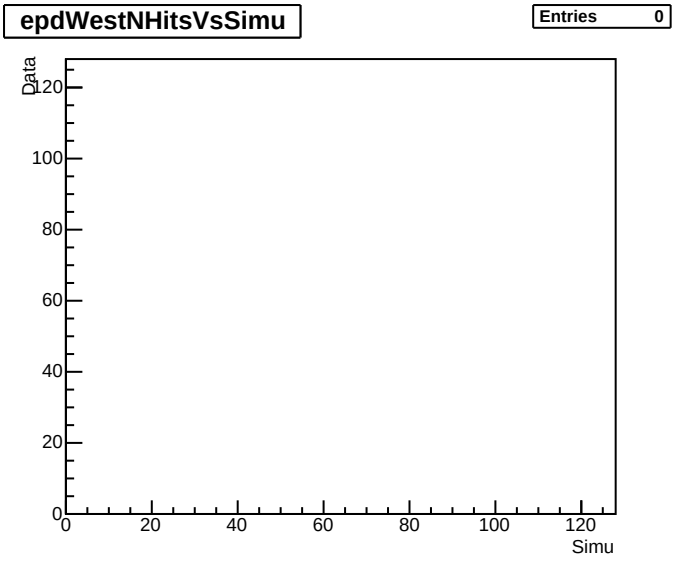

epdWestTac03
Entries 1908
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

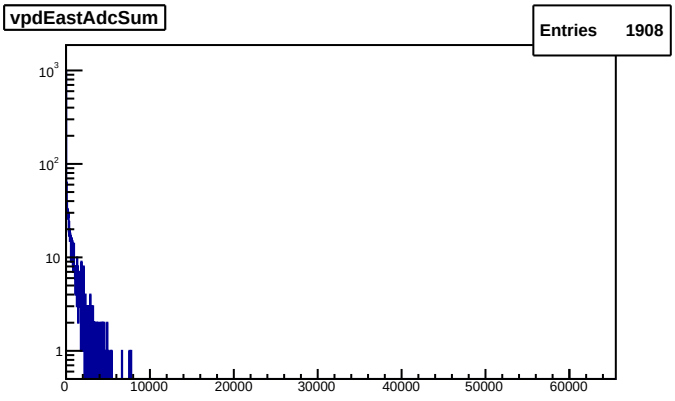

epdWestTac03VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

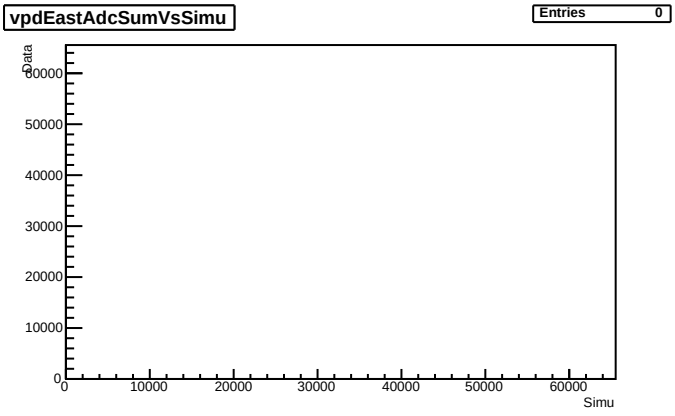

epdWestTac47
Entries 1908
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

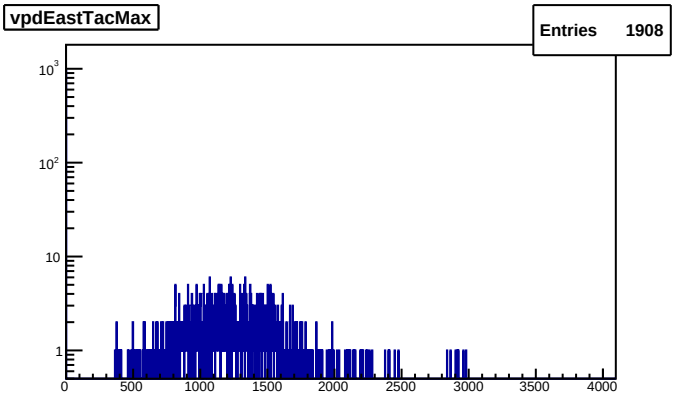

epdWestTac47VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

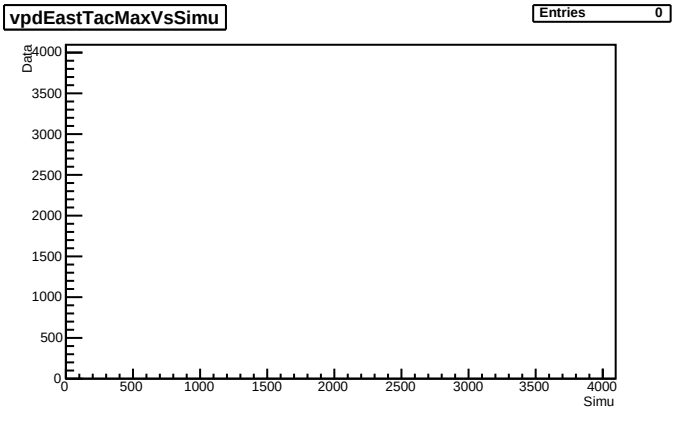

epdWestNHits
Entries 1908
10^2
10
1
0 20 40 60 80 100 120

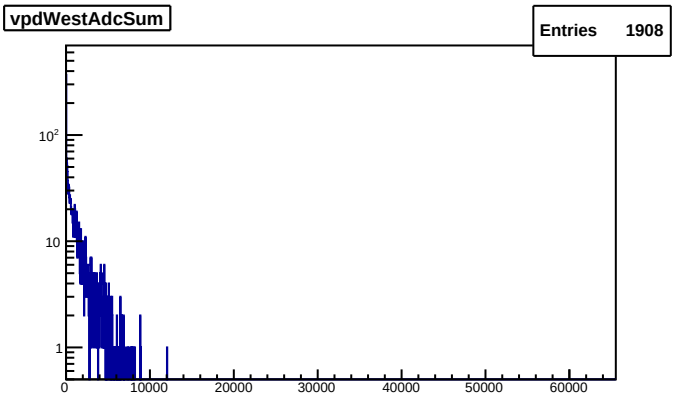

epdWestNHitsVsSimu
Entries 0
Data
120 100 80 60 40 20 0
0 20 40 60 80 100 120
Simu

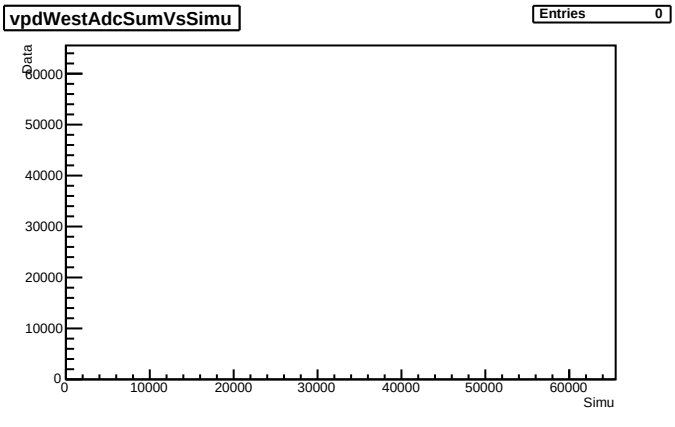

vpdEastAdcSum
Entries 1908

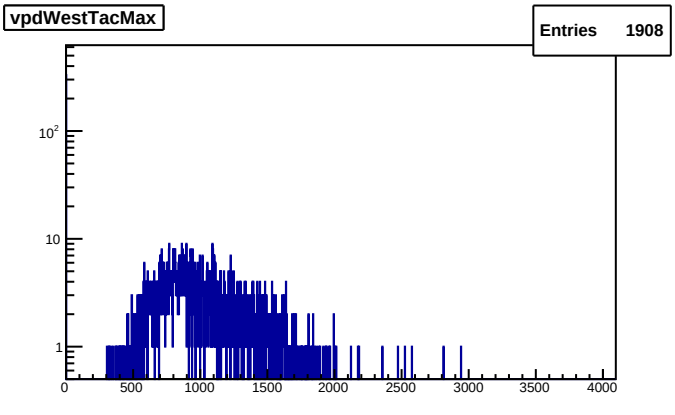

vpdEastAdcSumVsSimu
Entries 0
Data
Simu

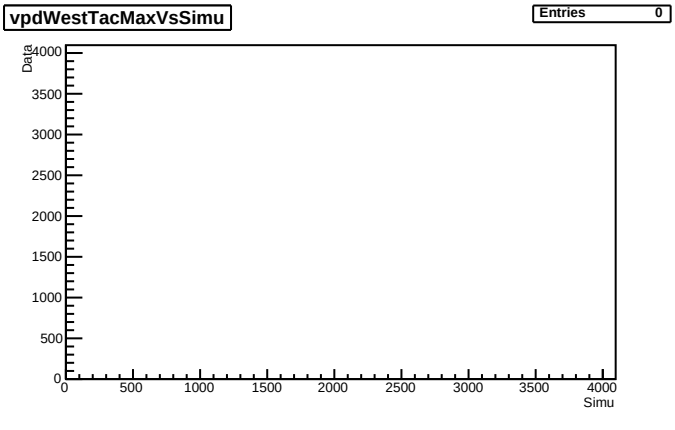

vpdEastTacMax
Entries 1908

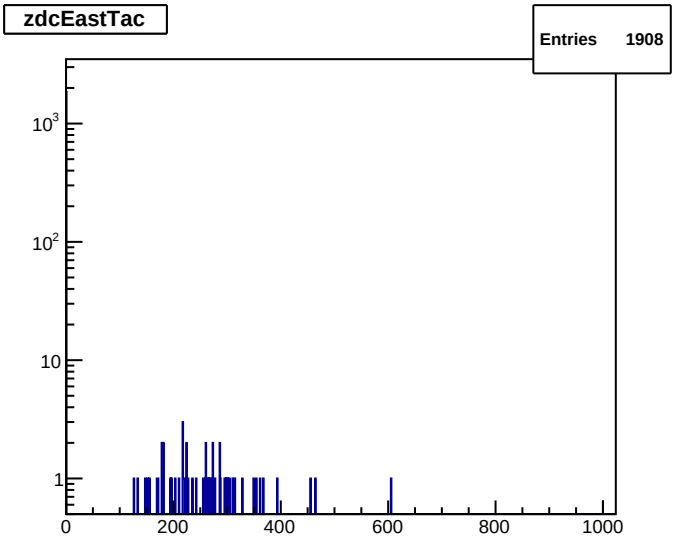

vpdEastTacMaxVsSimu
Entries 0
Data
Simu

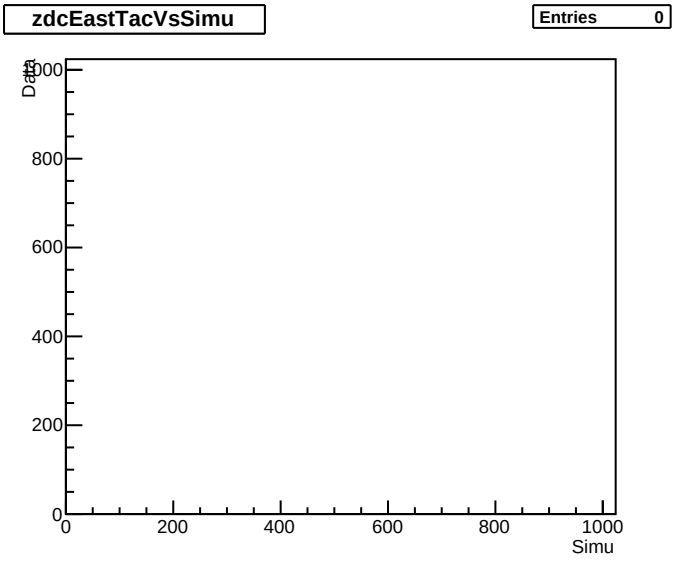

vpdWestAdcSum
Entries 1908

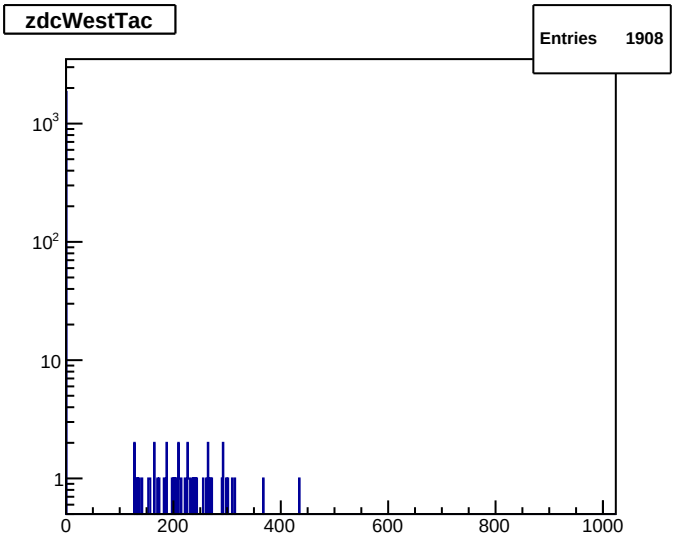

vpdWestAdcSumVsSimu
Entries 0
Data
Simu

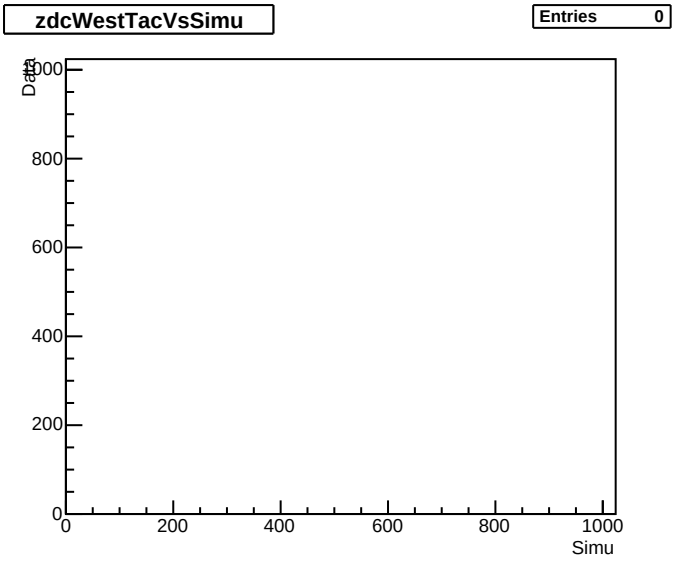

vpdWestTacMax
Entries 1908

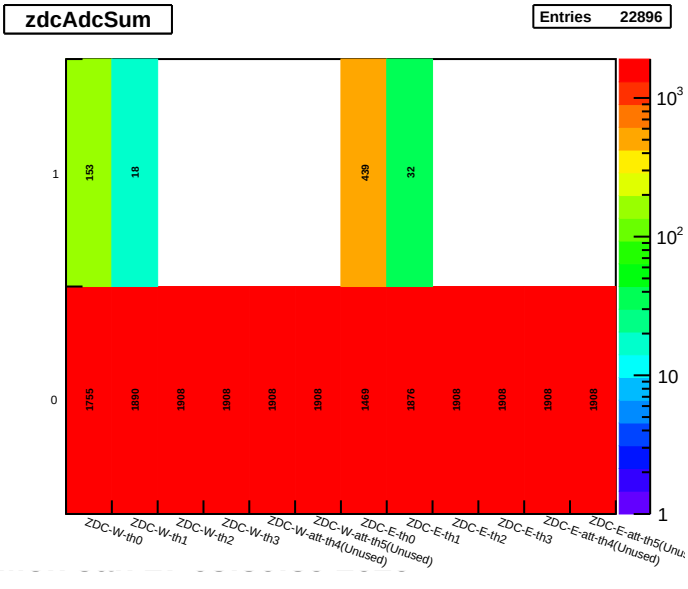

vpdWestTacMaxVsSimu
Entries 0
Data
Simu

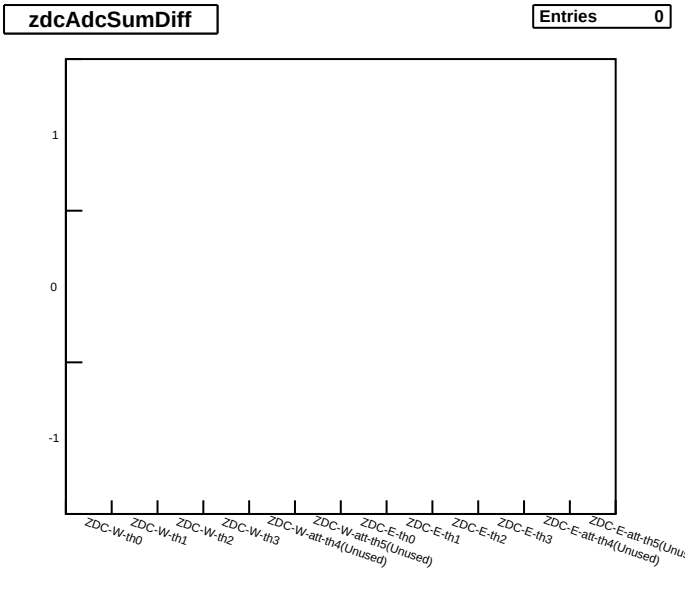

zdcEastTac
Entries 1908
10^3
10^2
10
1
0
200
400
600
800
1000

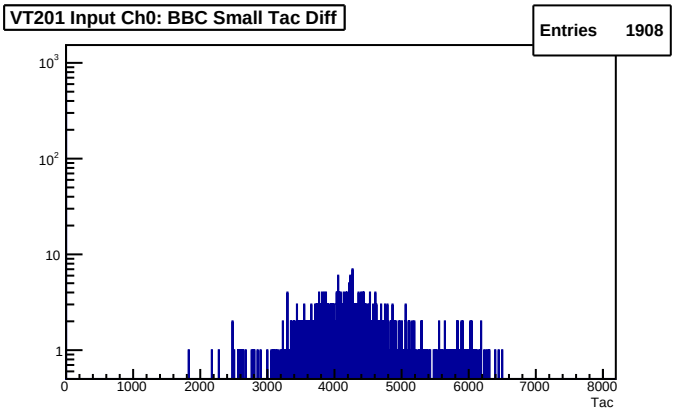

zdcEastTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

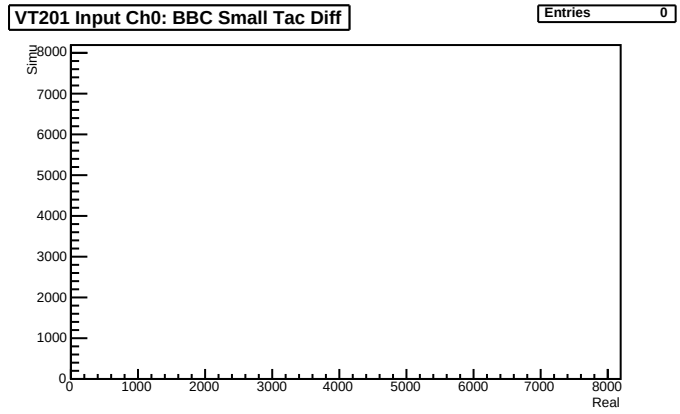

zdcWestTac
Entries 1908
10^3
10^2
10
1
0
200
400
600
800
1000

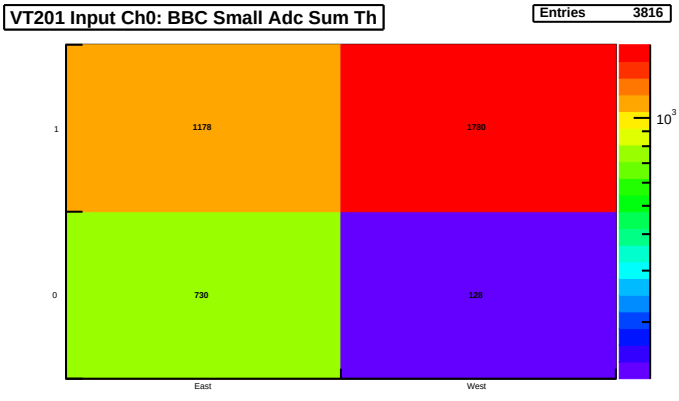

zdcWestTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

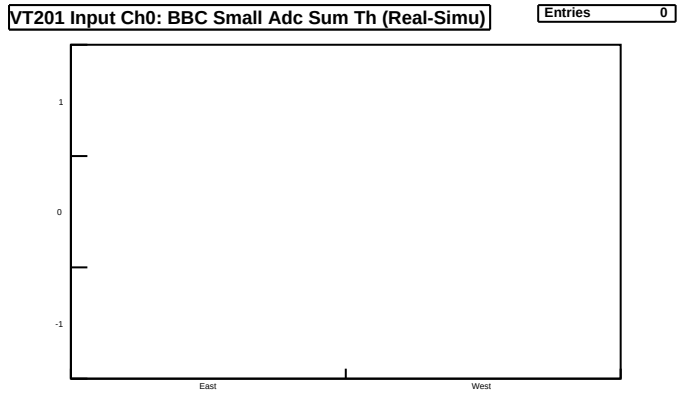

zdcAdcSum
Entries 22896
1
0
153
18
439
32
1755
1890
1908
1908
1908
1908
1469
1876
1908
1908
1908
1908
10^3
10^2
10
1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

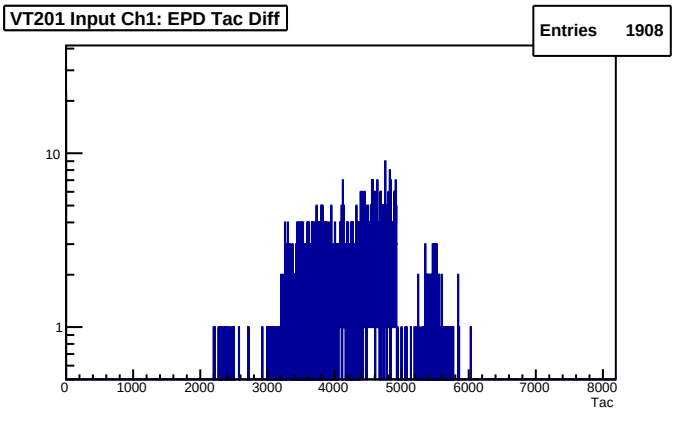

zdcAdcSumDiff
Entries 0
1
0
-1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

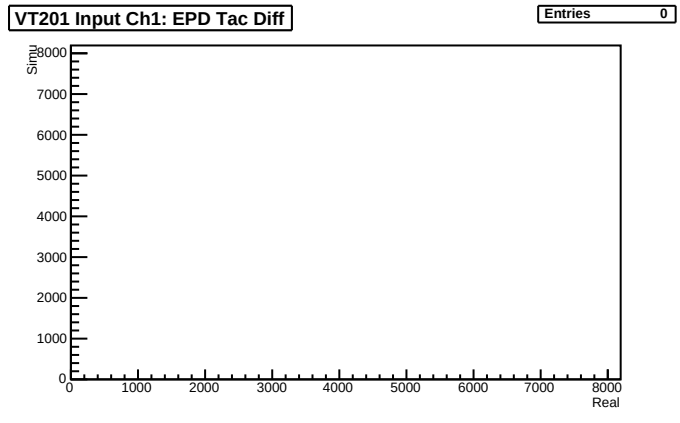

VT201 Input Ch0: BBC Small Tac Diff
Entries 1908
Tac

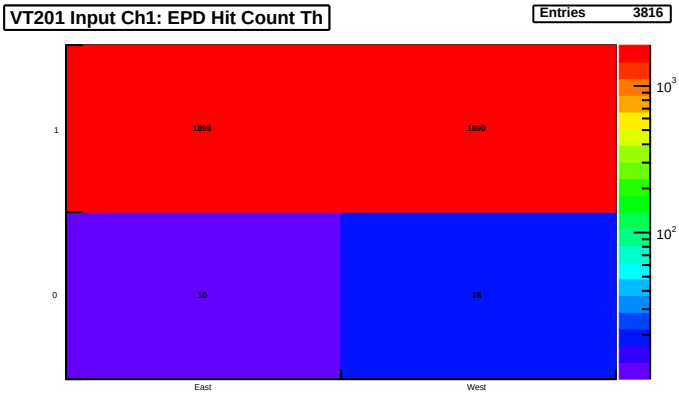

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

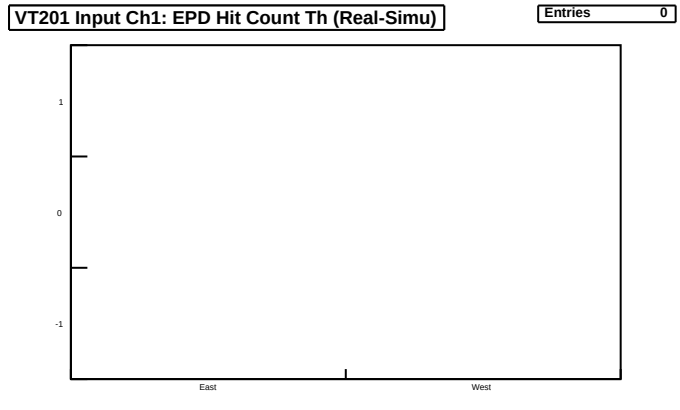

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 3816
1178
1780
730
128
East
West

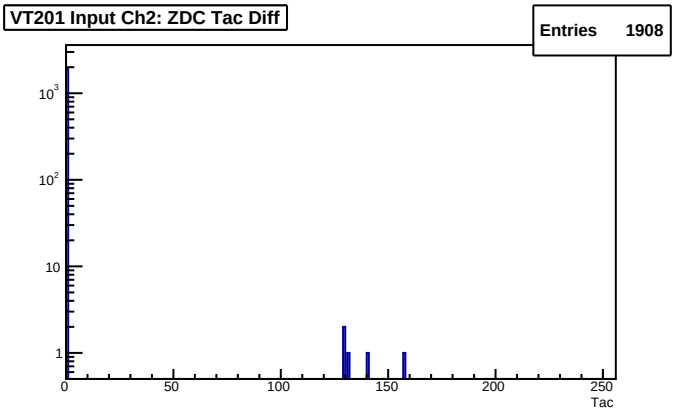

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

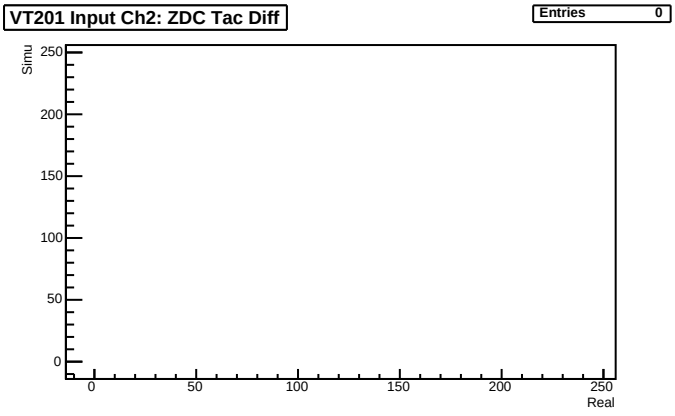

VT201 Input Ch1: EPD Tac Diff
Entries 1908
Tac

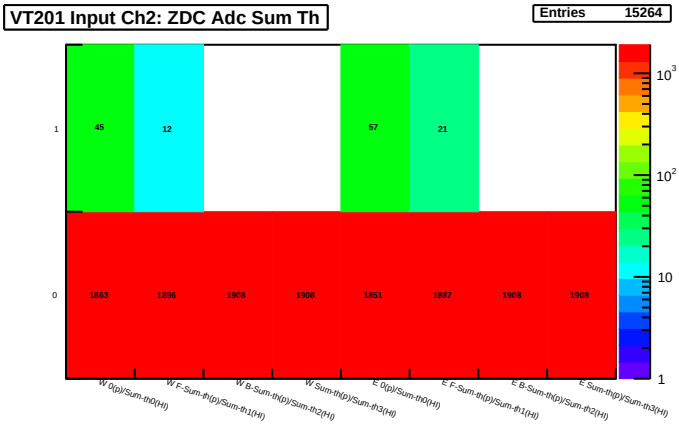

VT201 Input Ch1: EPD Tac Diff
Entries 0
Simu
Real

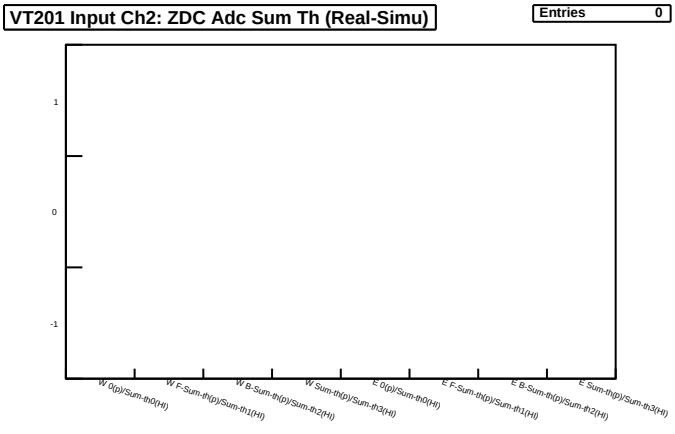

VT201 Input Ch1: EPD Hit Count Th
Entries 3816
1898
1990
10
18
East
West

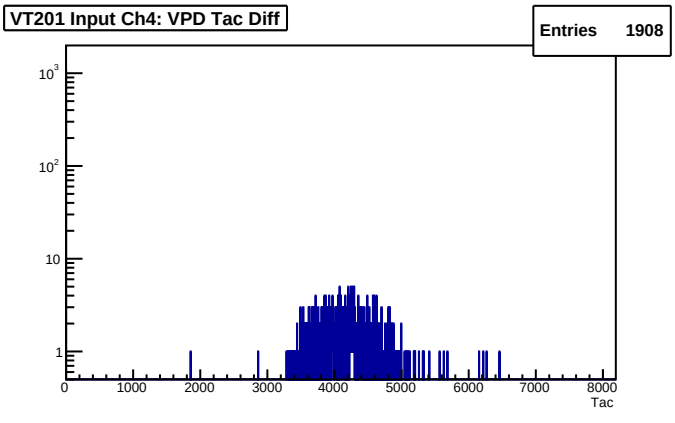

VT201 Input Ch1: EPD Hit Count Th (Real-Simu)
Entries 0
East
West

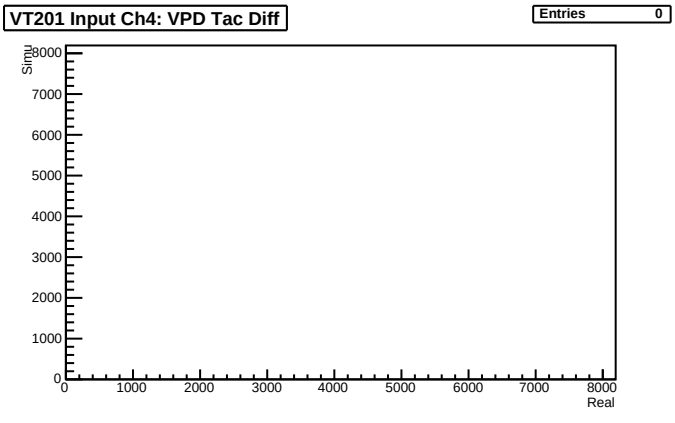

VT201 Input Ch2: ZDC Tac Diff
Entries 1908
Tac

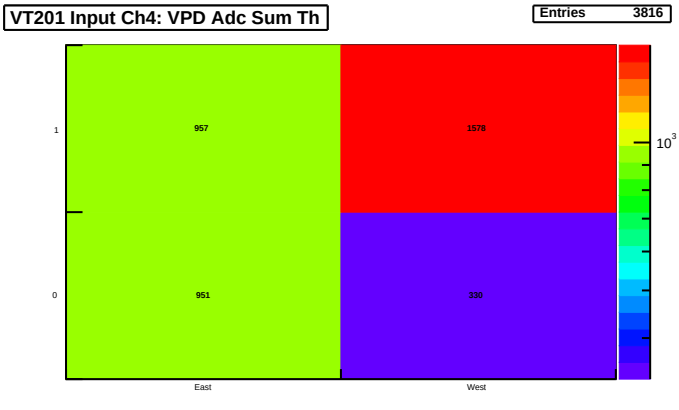

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

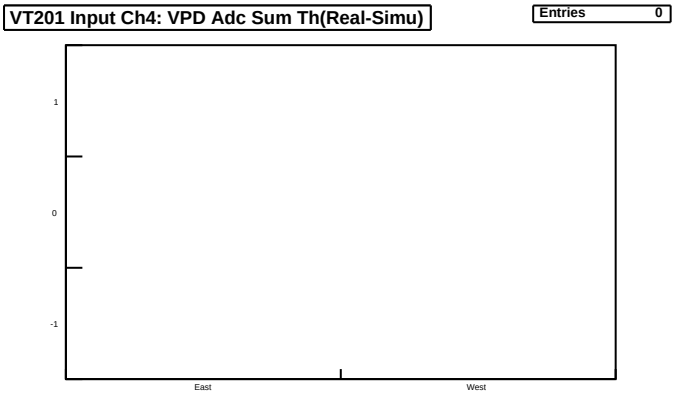

VT201 Input Ch2: ZDC Adc Sum Th
Entries 15264
45
12
57
21
1863
1896
1908
1908
1851
1887
1908
1908
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

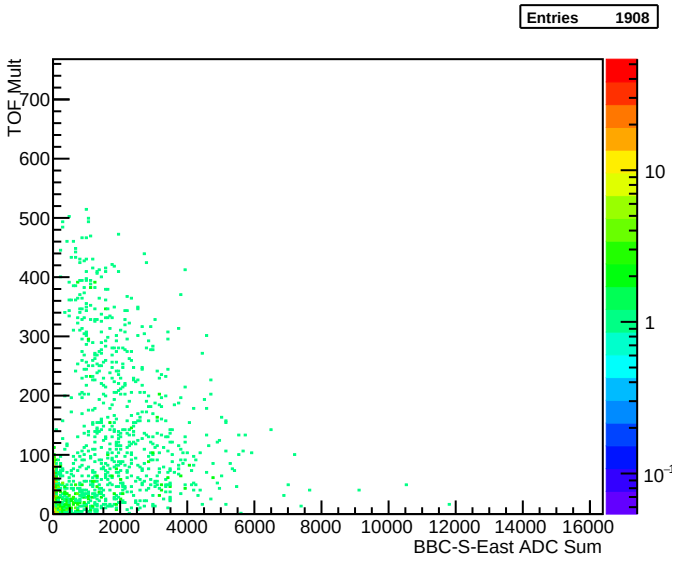

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

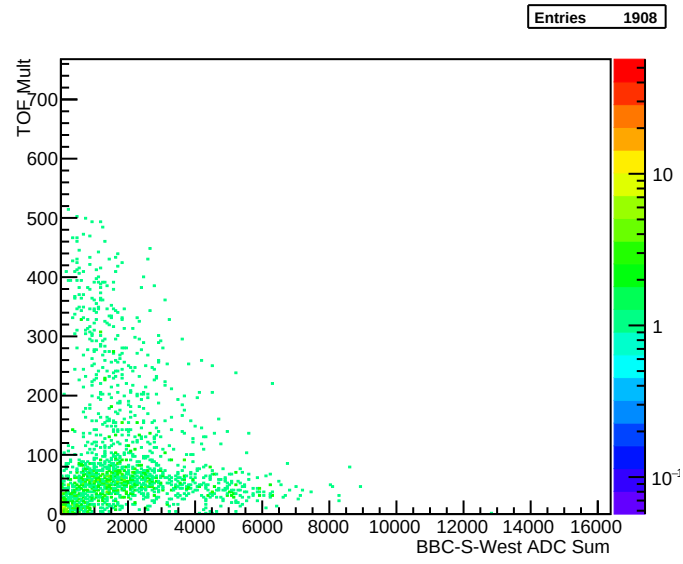

VT201 Input Ch4: VPD Tac Diff
Entries 1908
Tac

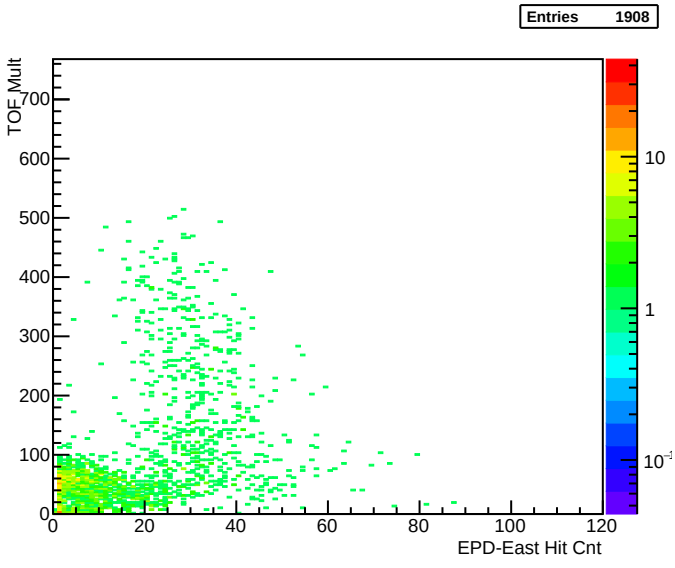

VT201 Input Ch4: VPD Tac Diff
Entries 0
Simu
Real

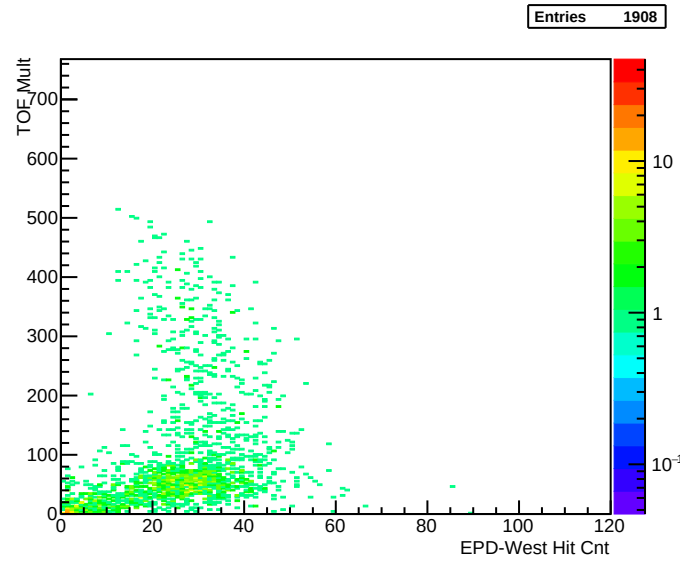

VT201 Input Ch4: VPD Adc Sum Th
Entries 3816
957
1578
951
330
East
West

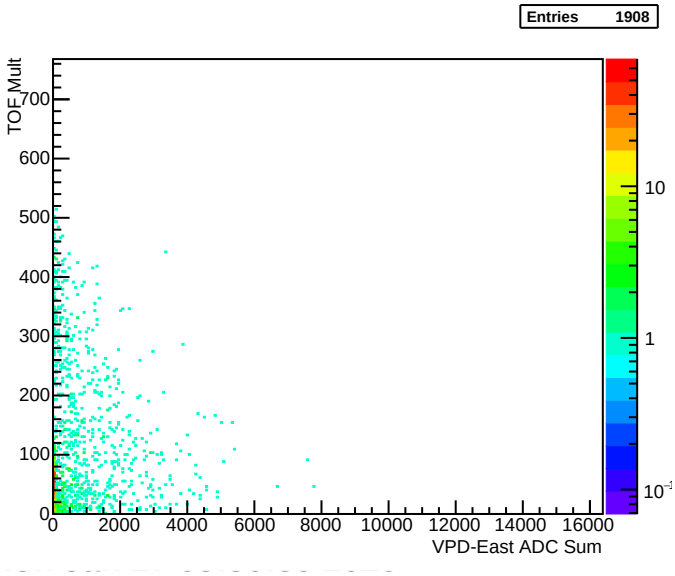

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 0
East
West

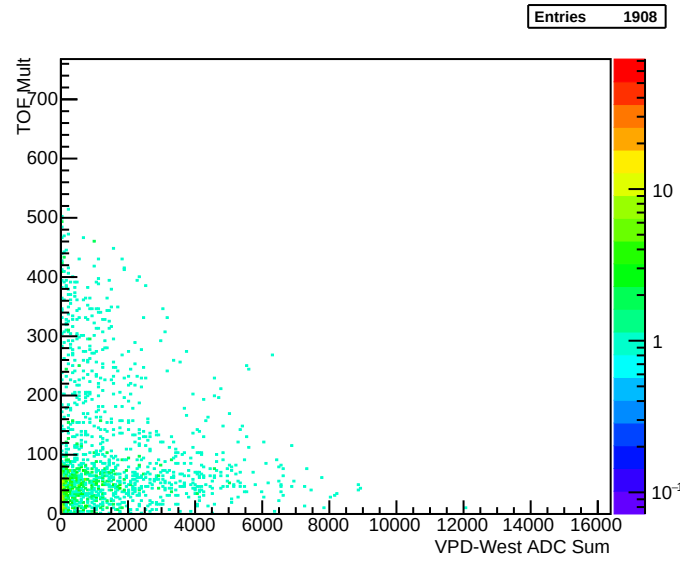

Entries 1908
TOF_Mult
BBC-S-East ADC Sum

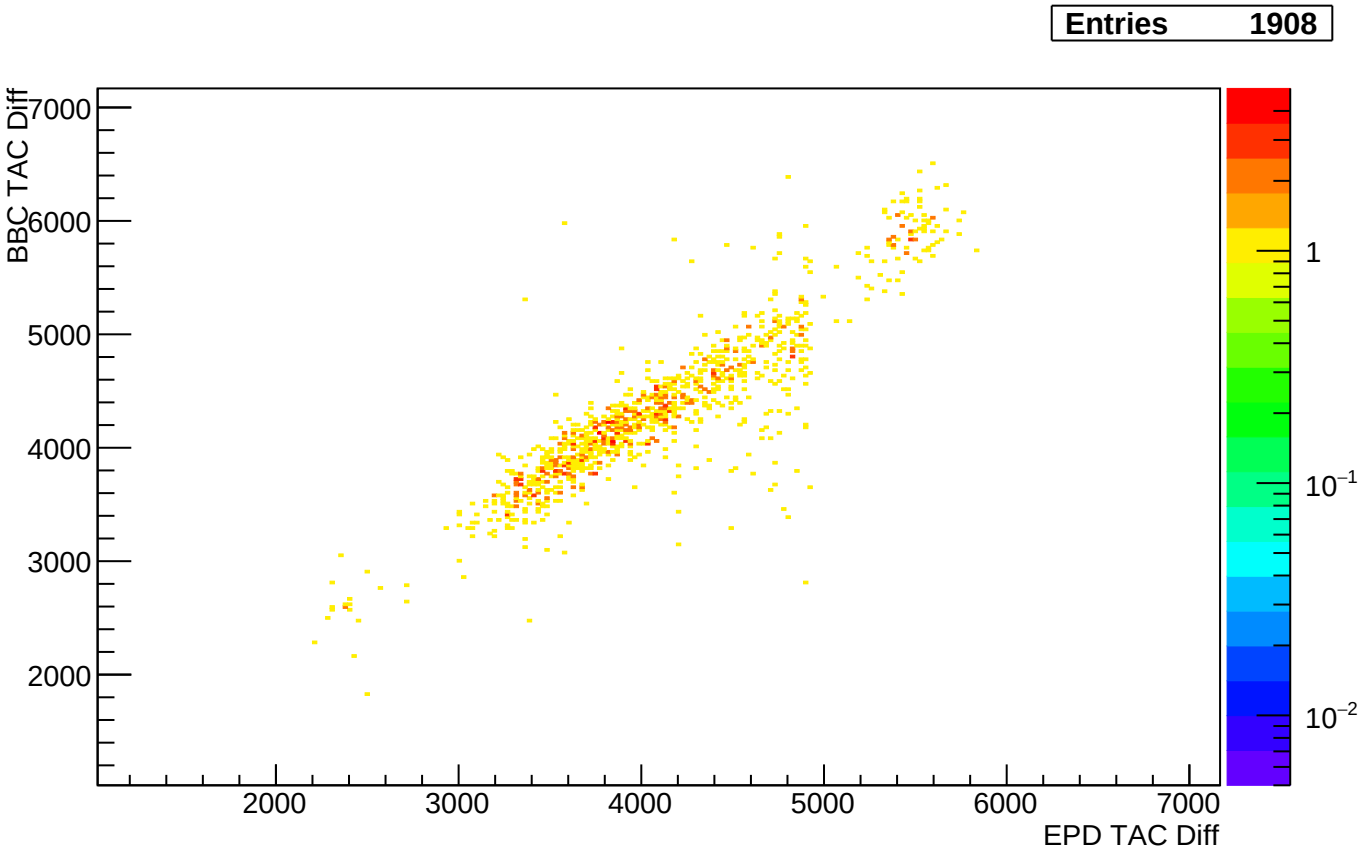

Entries 1908
TOF_Mult
BBC-S-West ADC Sum

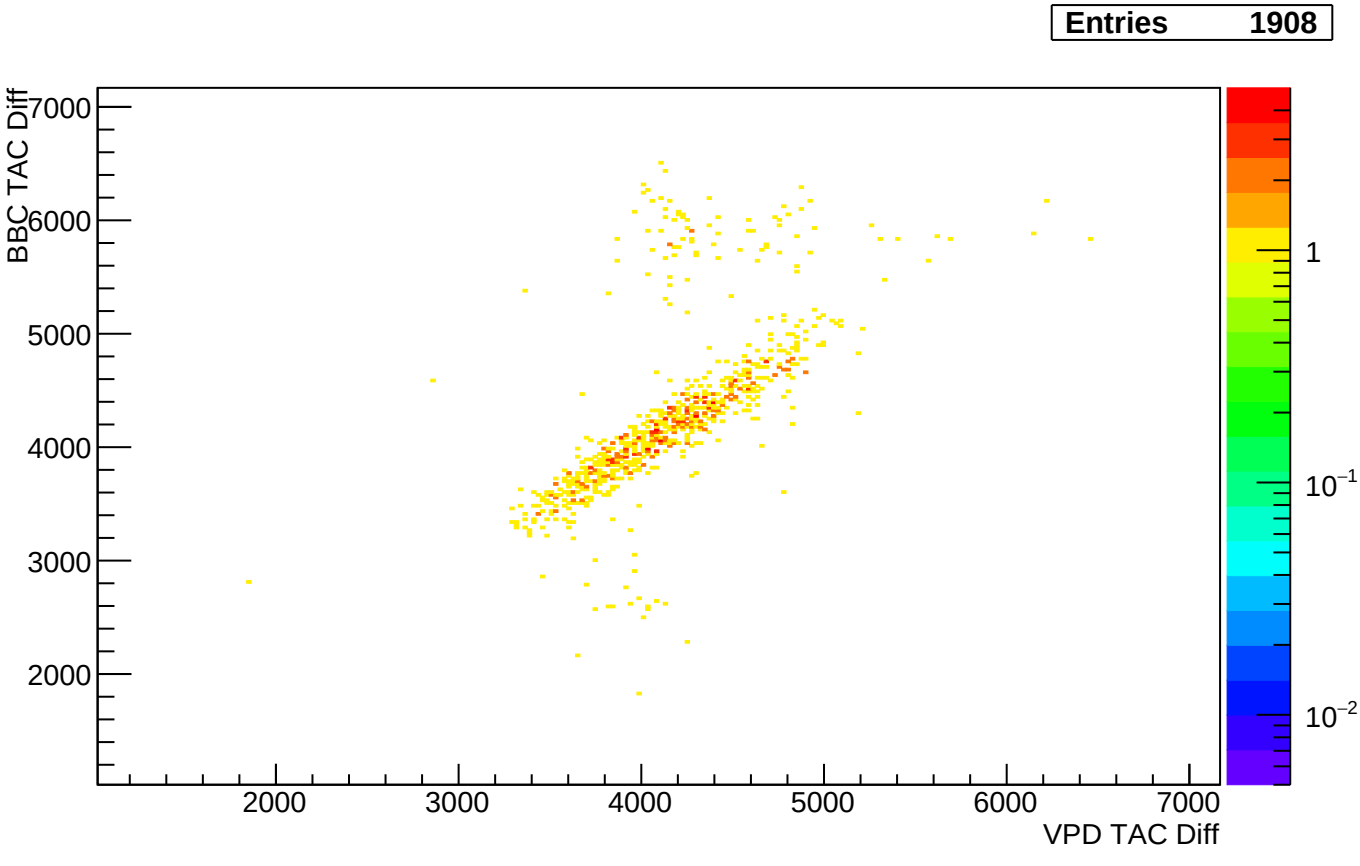

Entries 1908
TOF_Mult
EPD-East Hit Cnt

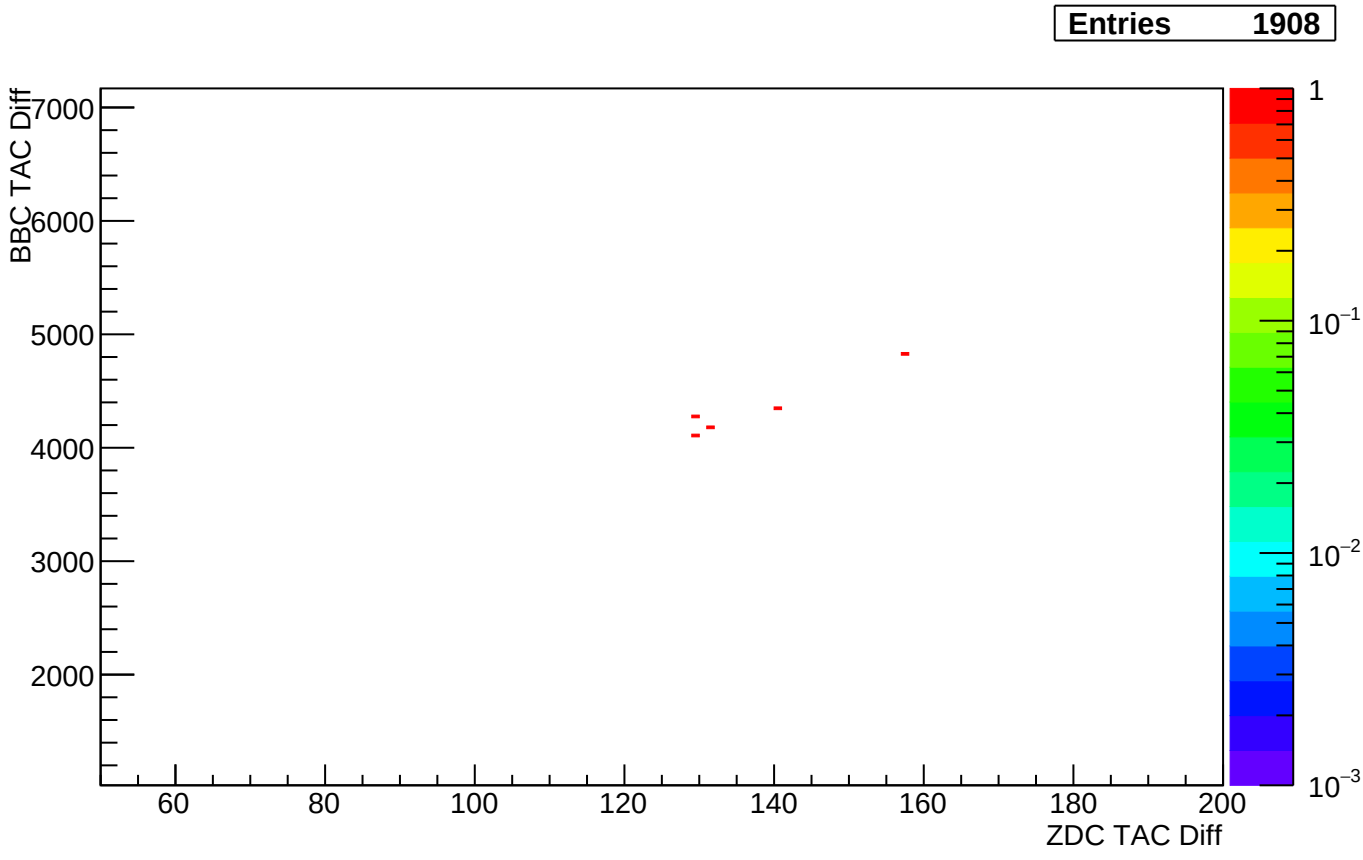

Entries 1908
TOF_Mult
EPD-West Hit Cnt

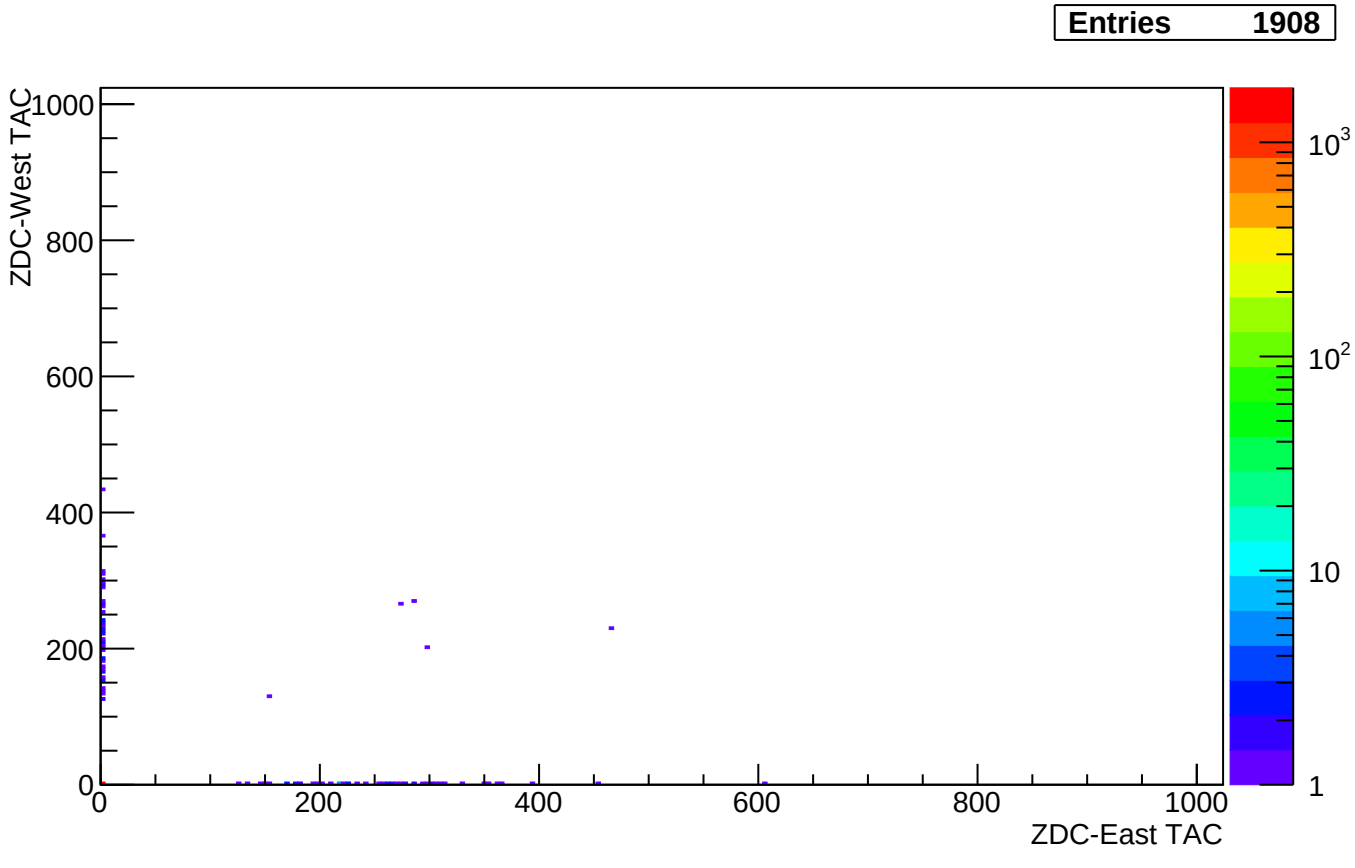

Entries 1908
TOF_Mult
VPD-East ADC Sum

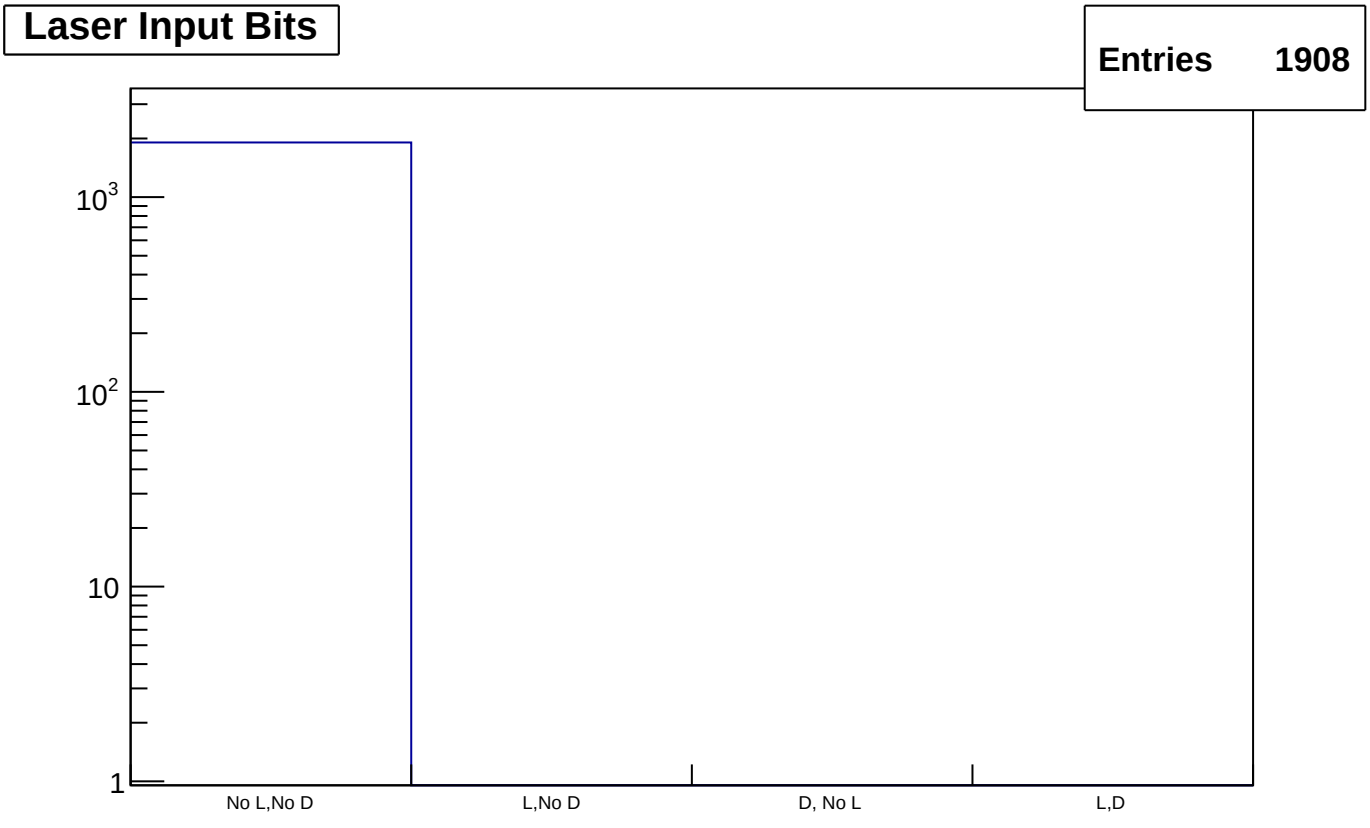

Entries 1908
TOF_Mult
VPD-West ADC Sum

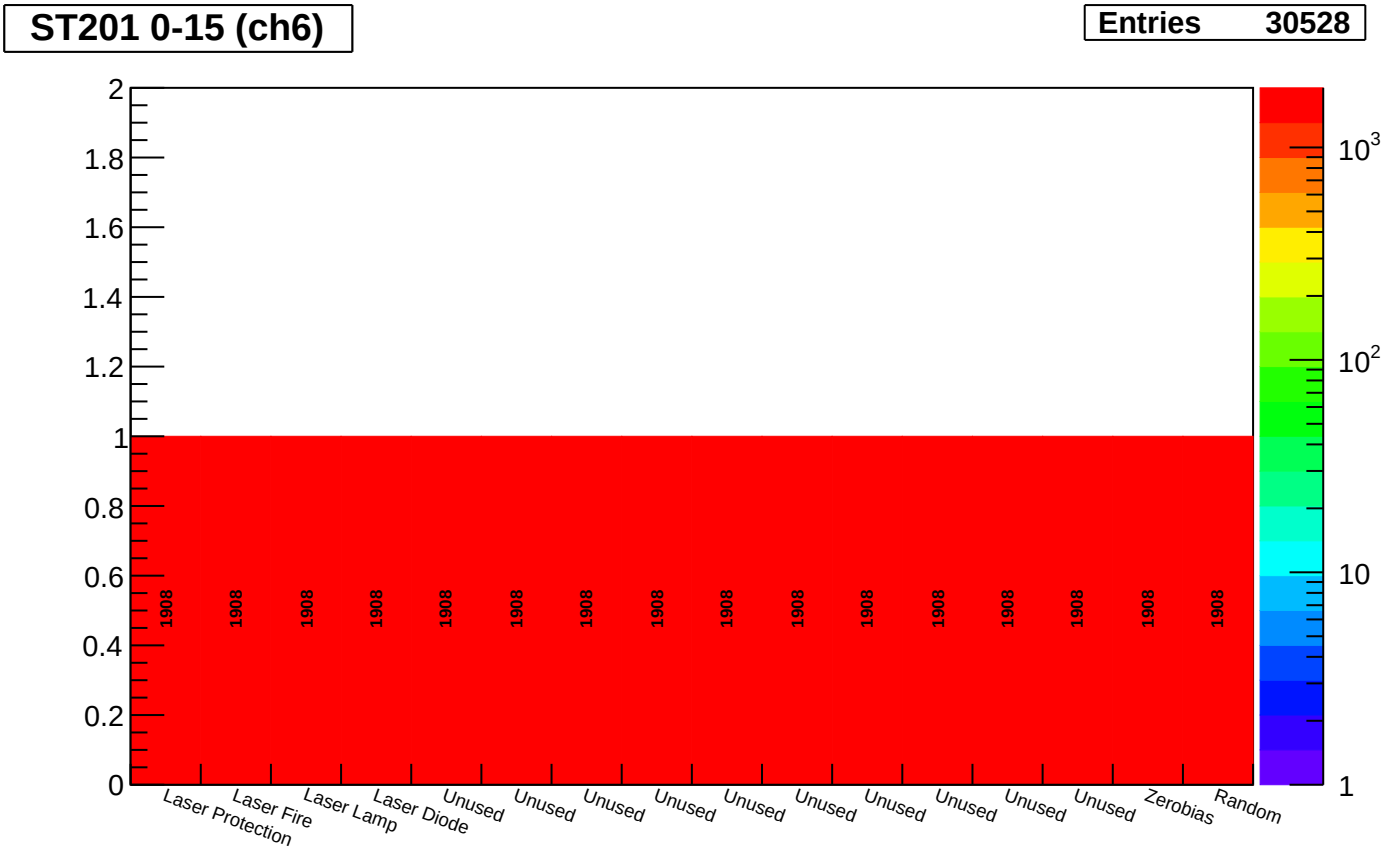

Entries 1908
BBC TAC Diff
7000
6000
5000
4000
3000
2000
2000
3000
4000
5000
6000
7000
EPD TAC Diff
1
10^{-1}
10^{-2}

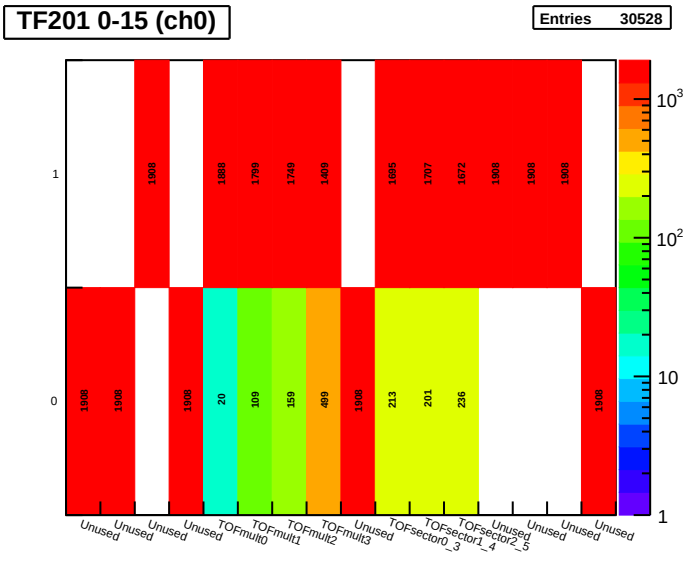

Entries 1908
BBC TAC Diff
7000
6000
5000
4000
3000
2000
2000
3000
4000
5000
6000
7000
VPD TAC Diff
1
10^{-1}
10^{-2}

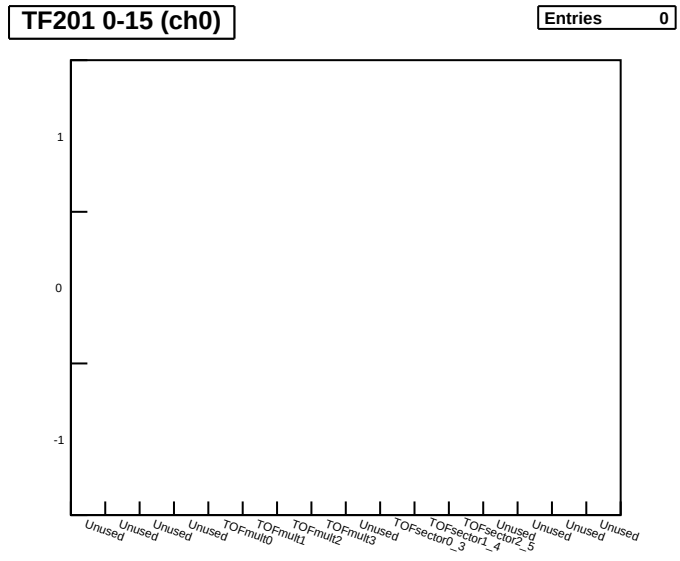

Entries 1908
BBC TAC Diff
7000
6000
5000
4000
3000
2000
60
80
100
120
140
160
180
200
ZDC TAC Diff
1
10^{-1}
10^{-2}
10^{-3}

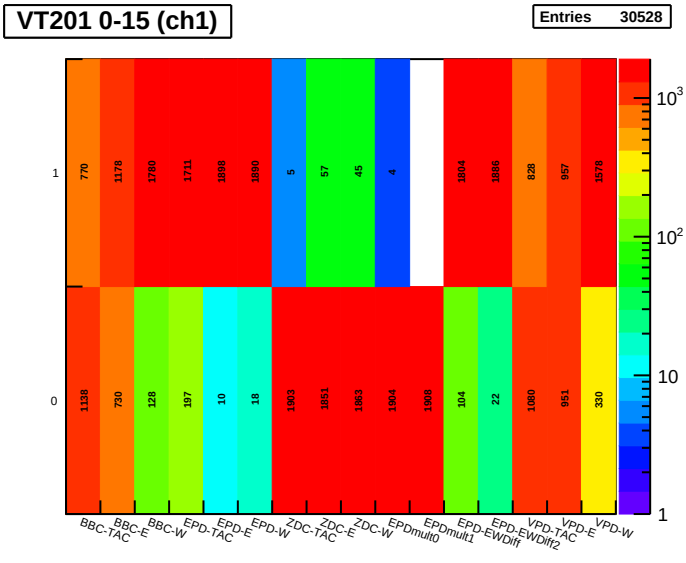

Entries 1908
ZDC-West TAC
1000
800
600
400
200
0
0
200
400
600
800
1000
ZDC-East TAC
10^3
10^2
10
1

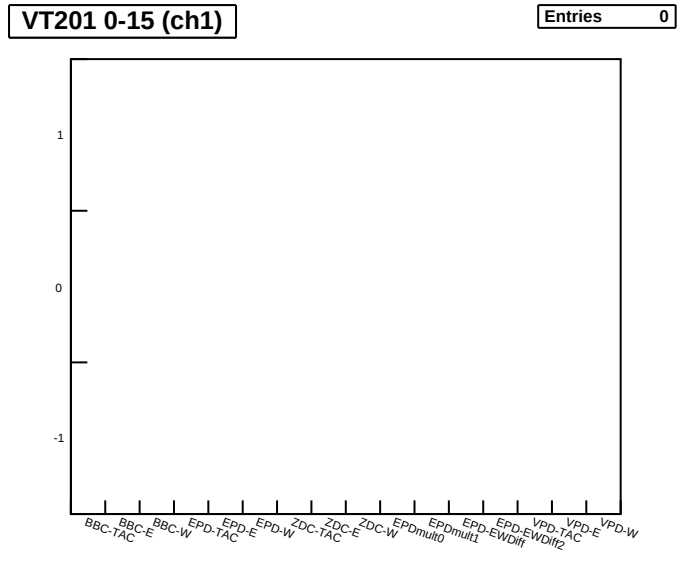

Laser Input Bits
Entries 1908
10^3
10^2
10
1
No L,No D
L,No D
D, No L
L,D

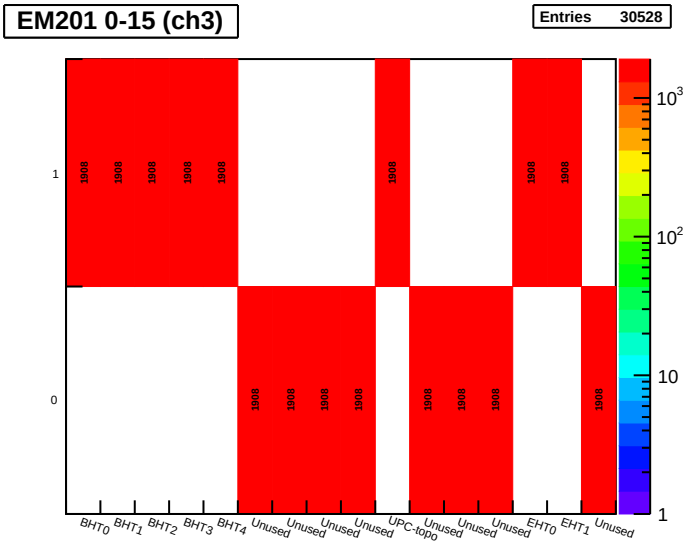

ST201 0-15 (ch6)
Entries 30528
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1908
Laser Protection
Laser Fire
Laser Lamp
Laser Diode
Unused
Zerobias
Random
10^3
10^2
10
1

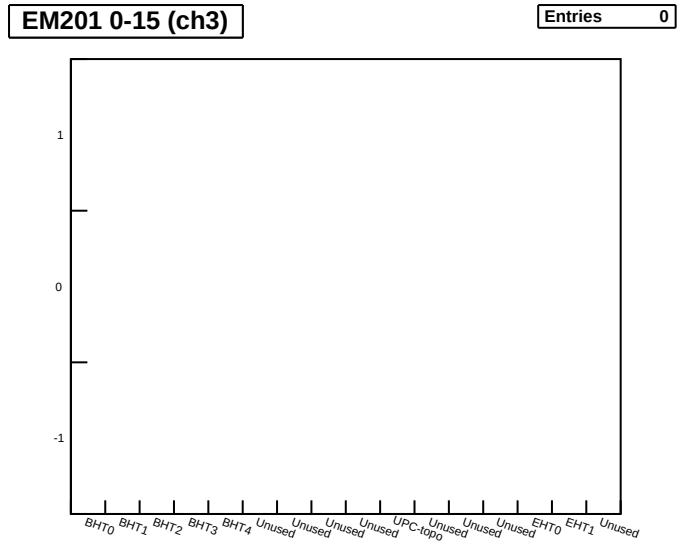

TF201 0-15 (ch0)
Entries 30528
1
0
1908 1888 1799 1749 1409 1695 1707 1672 1908 1908 1908
1908 1908 1908 20 109 159 499 1908 213 201 236 1908
Unused Unused Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 Unused TOFsector0_3 TOFsector1_4 TOFsector2_5 Unused Unused Unused Unused
10^3
10^2
10
1


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 30528
1
0
770 1178 1760 1711 1898 1890 5 57 45 4 1904 1886 828 957 1578
1138 730 128 197 10 18 1903 1851 1863 1904 1908 104 22 1060 951 330
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 30528
1
0
1908 1908 1908 1908 1908 1908 1908 1908
1908 1908 1908 1908 1908 1908 1908 1908
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