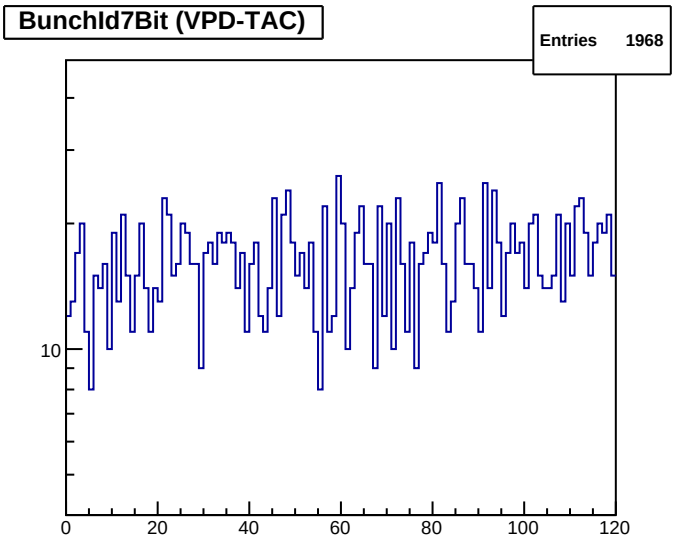
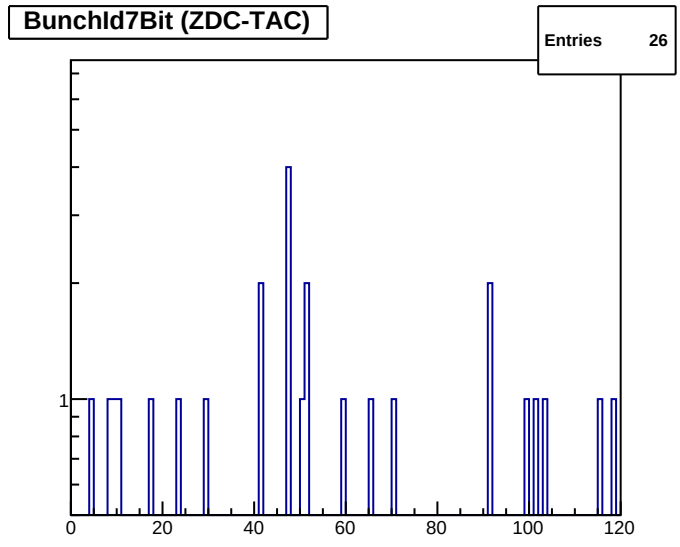
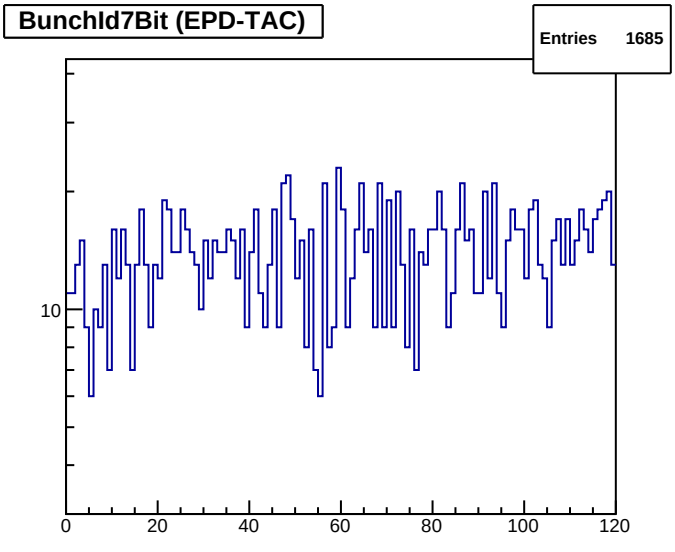
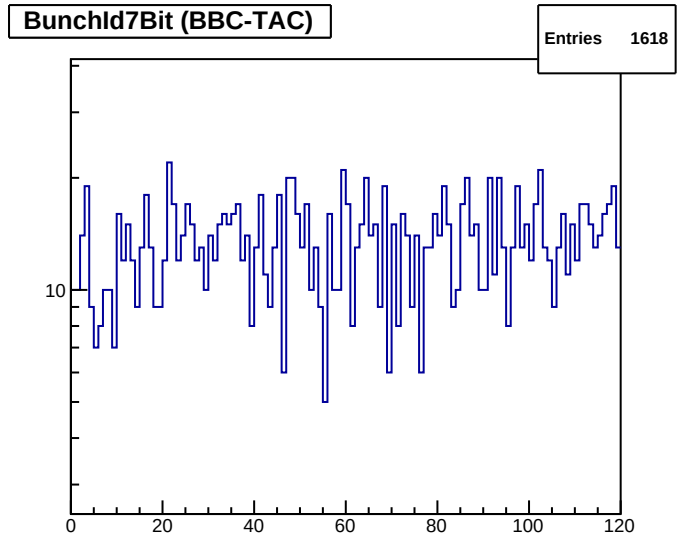
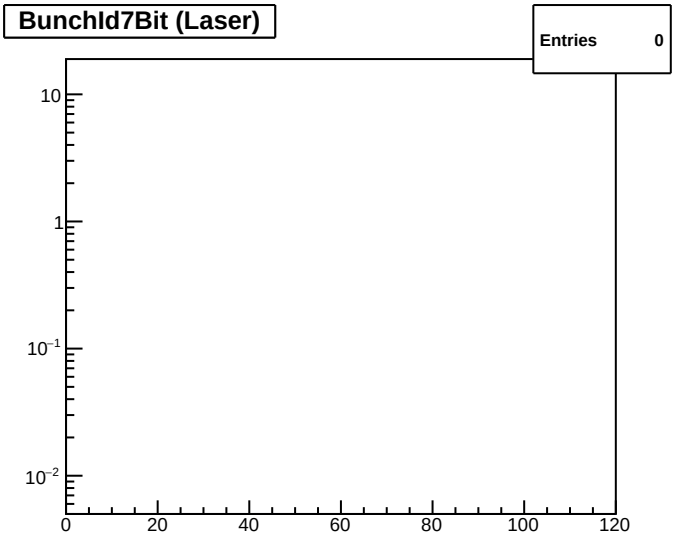
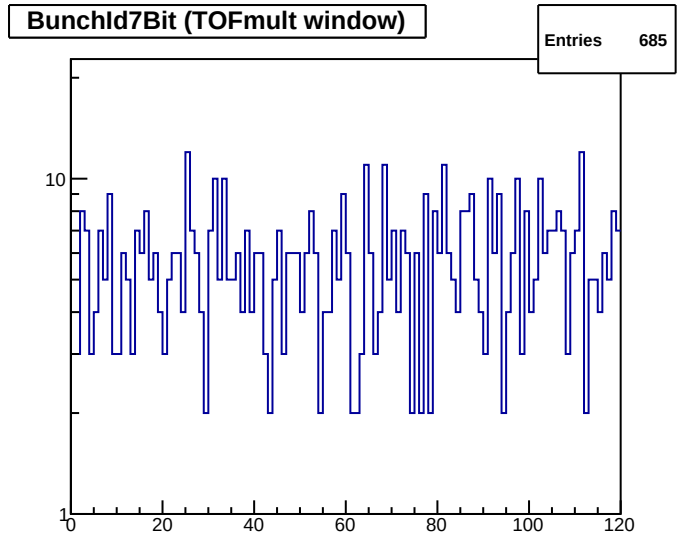

BunchId7Bit (VPD-TAC)
Entries 1968
10
0 20 40 60 80 100 120

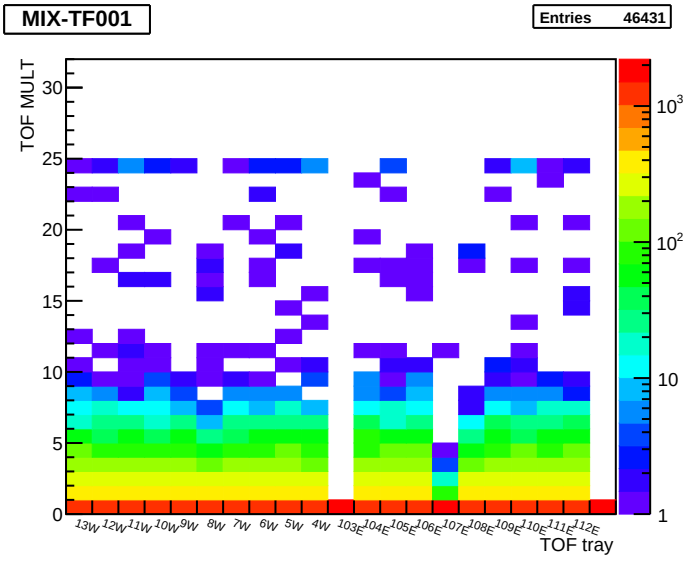

BunchId7Bit (ZDC-TAC)
Entries 26
1
0 20 40 60 80 100 120

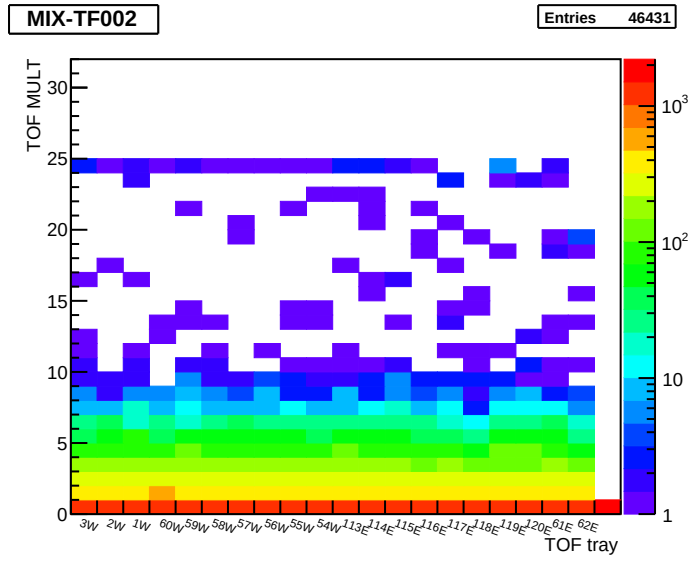

BunchId7Bit (EPD-TAC)
Entries 1685
10
0 20 40 60 80 100 120

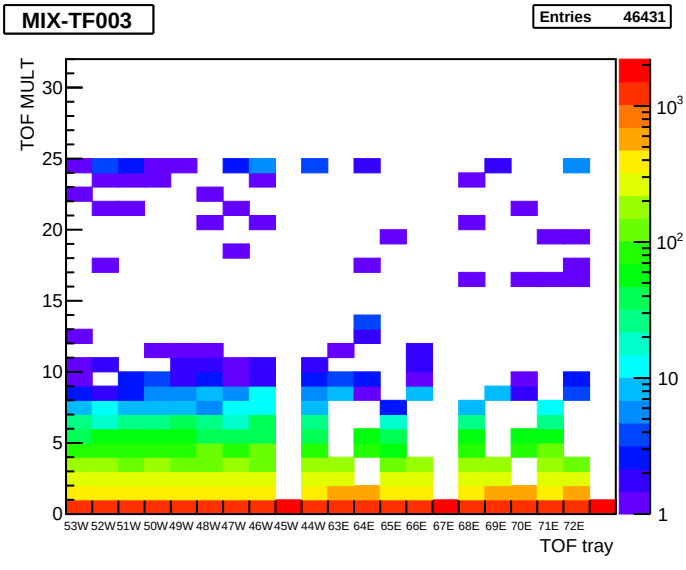

BunchId7Bit (BBC-TAC)
Entries 1618
10
0 20 40 60 80 100 120

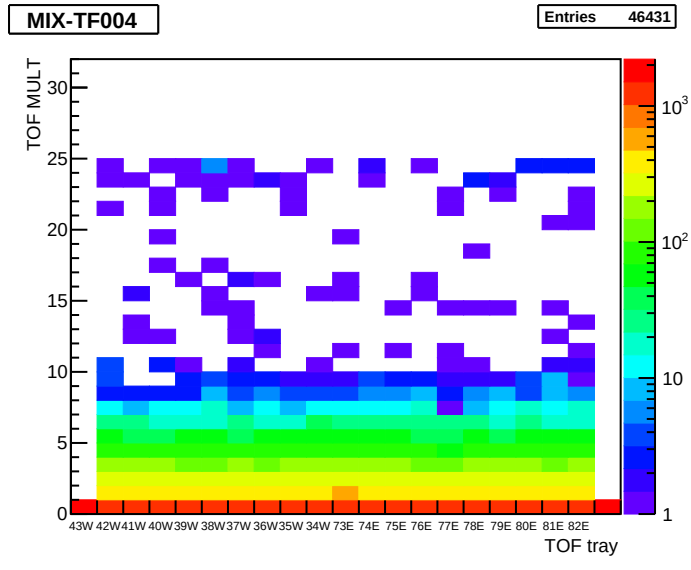

BunchId7Bit (Laser)
Entries 0
10
1
10⁻¹
10⁻²
0 20 40 60 80 100 120

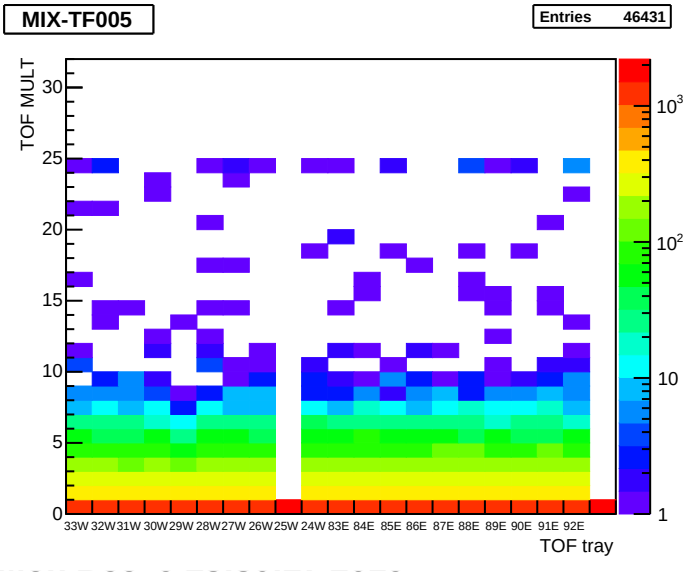

BunchId7Bit (TOFmult window)
Entries 685
10
1
0 20 40 60 80 100 120

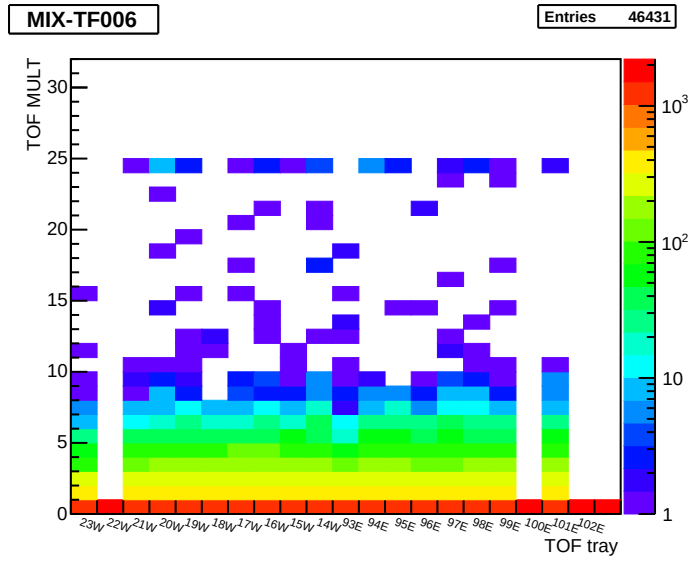

MIX-TF001
Entries 46431
TOF MULT
TOF tray

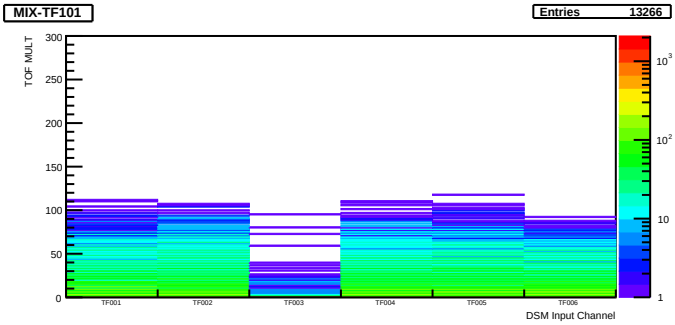

MIX-TF002
Entries 46431
TOF MULT
TOF tray

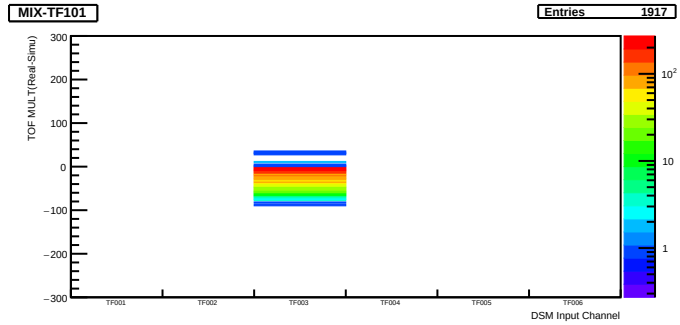

MIX-TF003
Entries 46431
TOF MULT
TOF tray

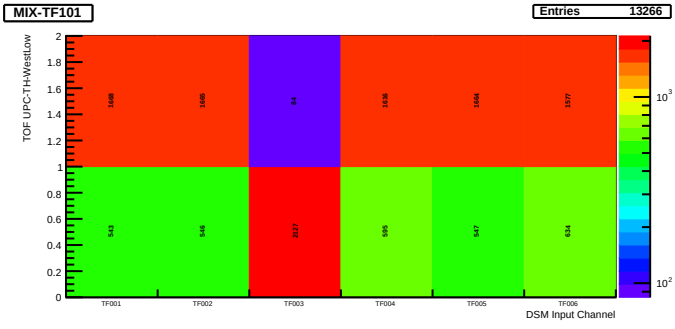

MIX-TF004
Entries 46431
TOF MULT
TOF tray

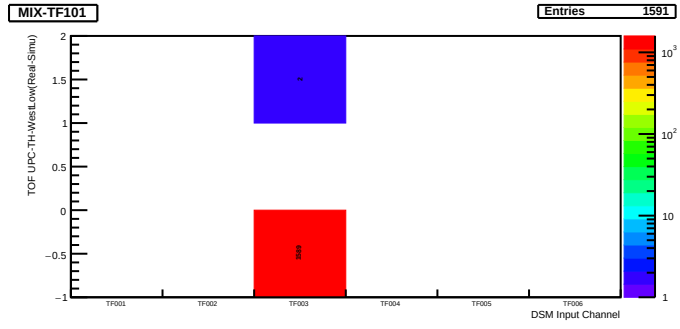

MIX-TF005
Entries 46431
TOF MULT
TOF tray

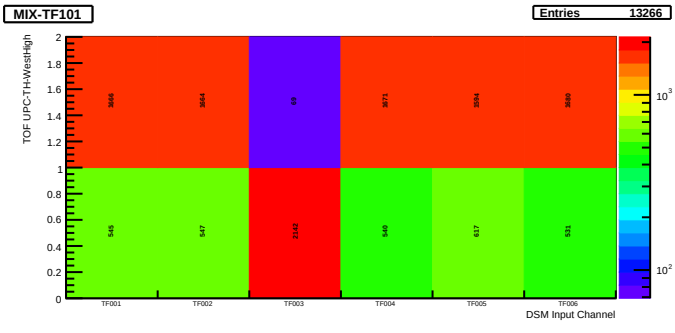

MIX-TF006
Entries 46431
TOF MULT
TOF tray

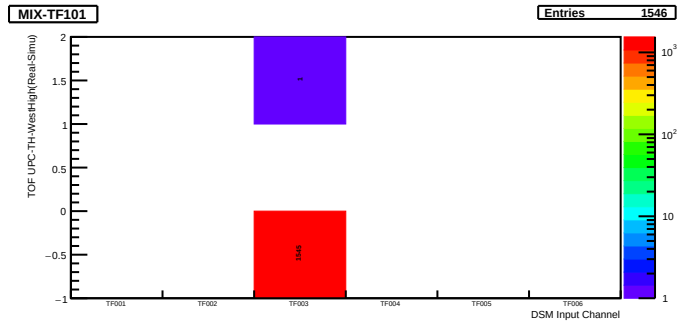

MIX-TF101
Entries 13266
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

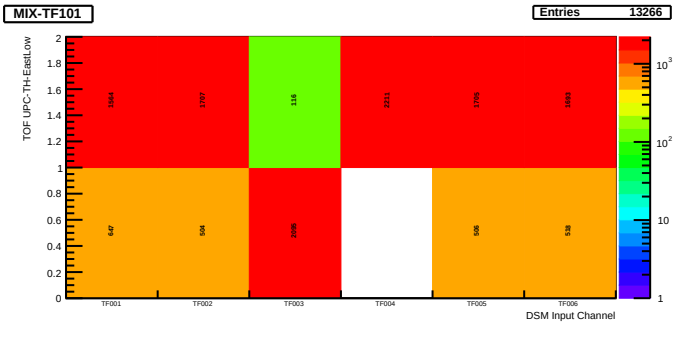

MIX-TF101
Entries 1917
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

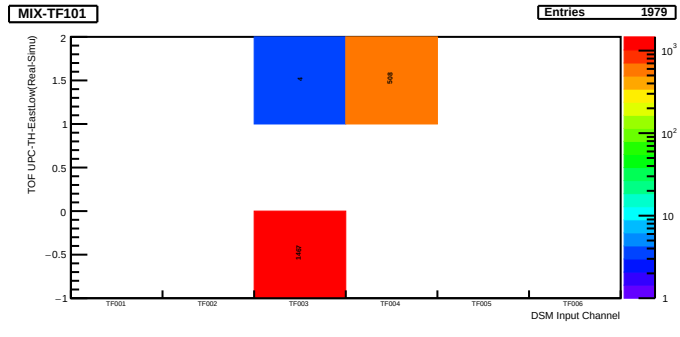

MIX-TF101
Entries 13266
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

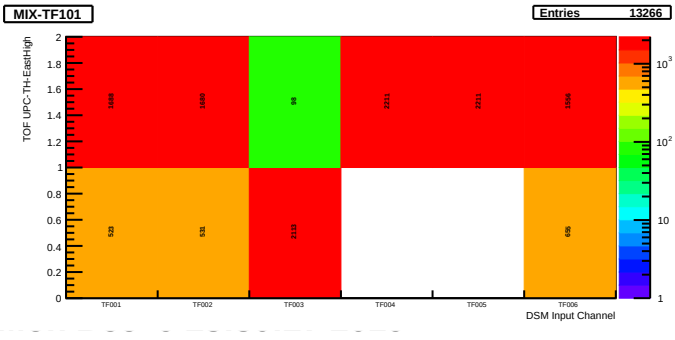

MIX-TF101
Entries 1591
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

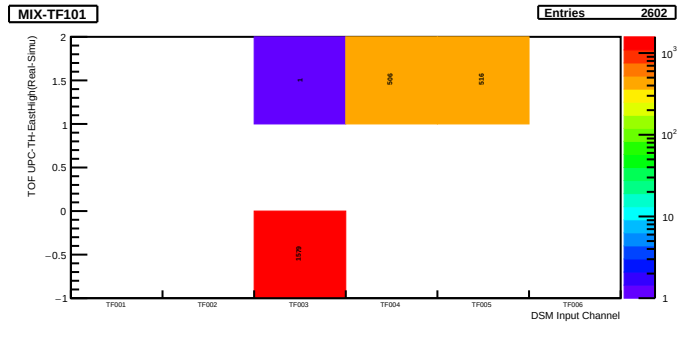

MIX-TF101
Entries 13266
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

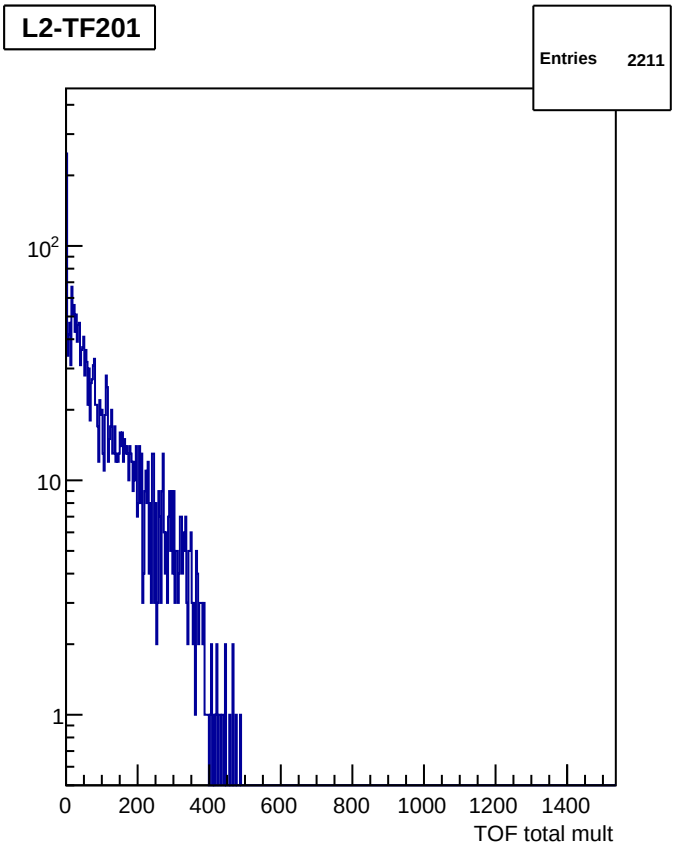

MIX-TF101
Entries 1546
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

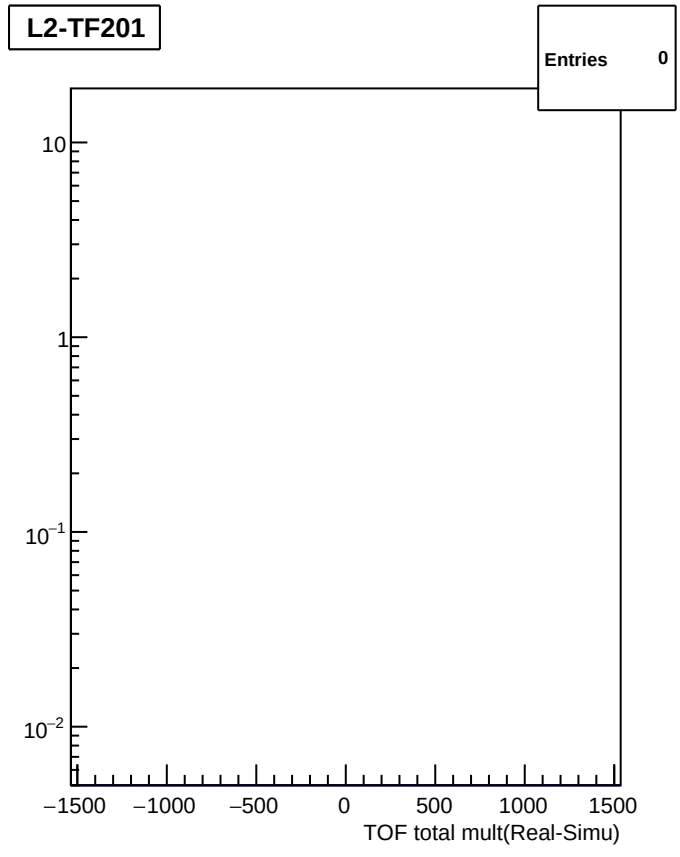

MIX-TF101
Entries 13266
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

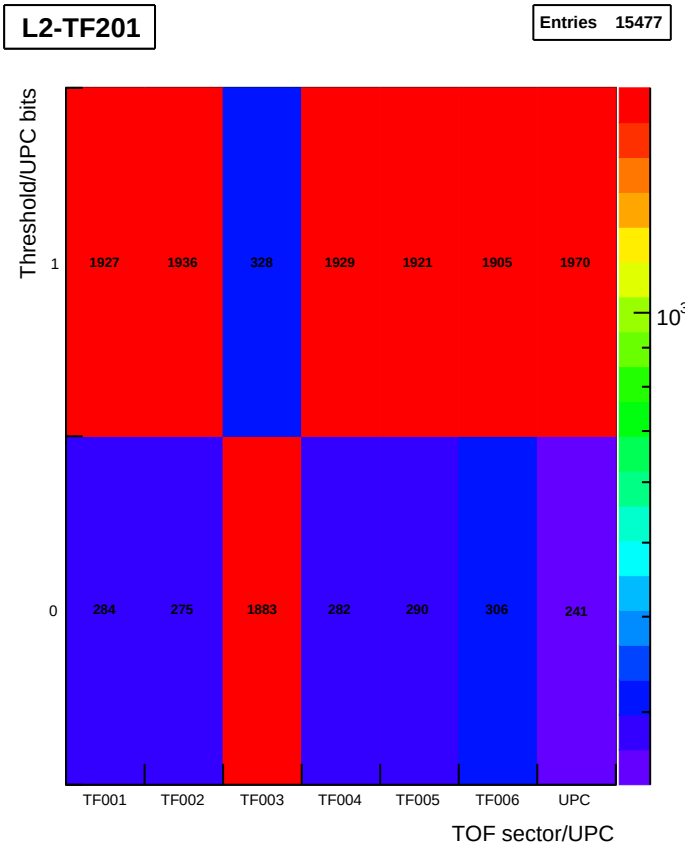

MIX-TF101
Entries 1979
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

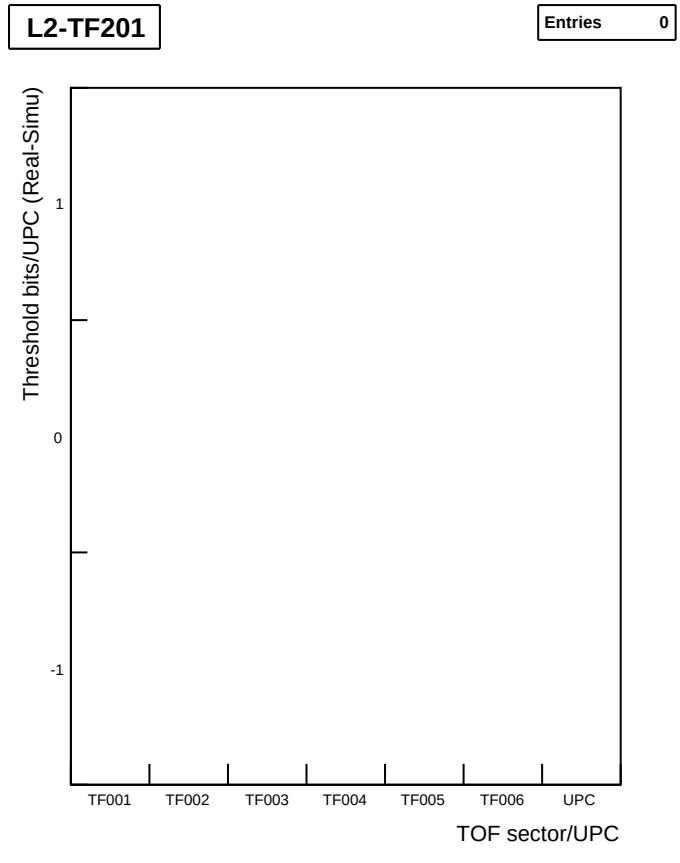

MIX-TF101
Entries 13266
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

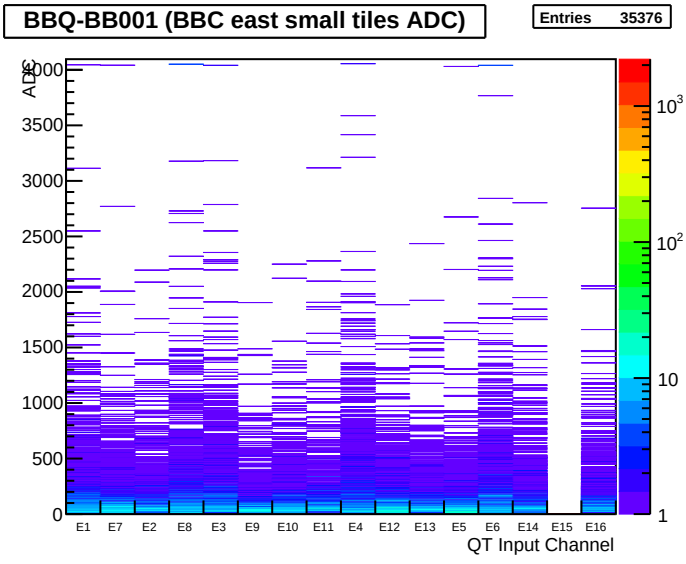

MIX-TF101
Entries 2602
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

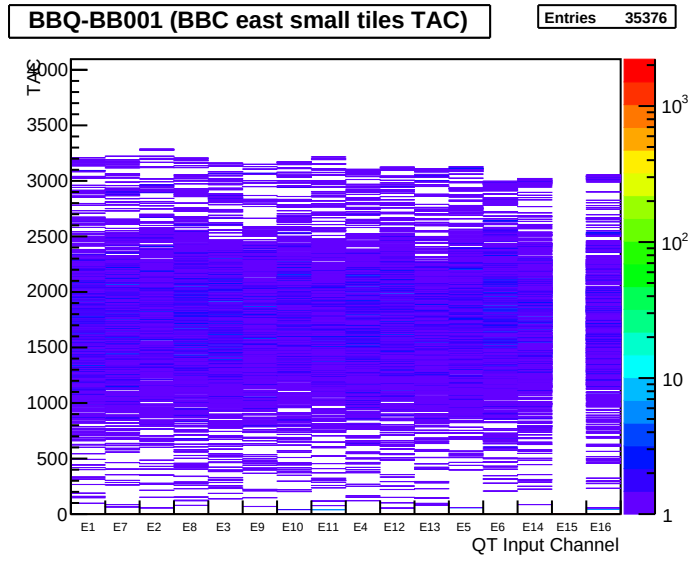

L2-TF201
Entries 2211
10^2
10
1
0
200
400
600
800
1000
1200
1400
TOF total mult

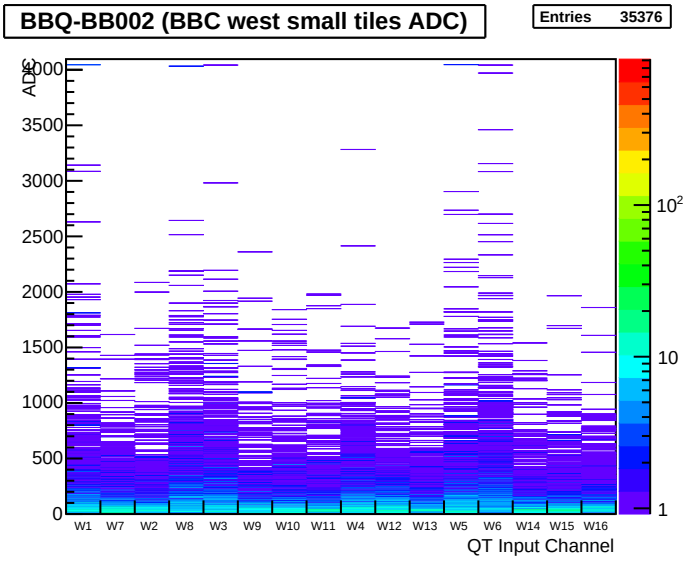

L2-TF201
Entries 0
10
1
10^{-1}
10^{-2}
−1500
−1000
−500
0
500
1000
1500
TOF total mult(Real-Simu)

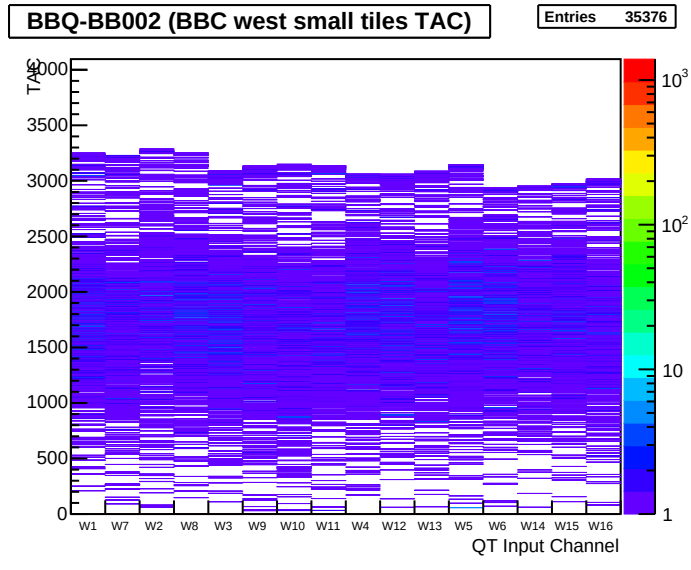

L2-TF201
Entries 15477
Threshold/UPC bits
1
0
1927
1936
328
1929
1921
1905
1970
284
275
1883
282
290
306
241
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC

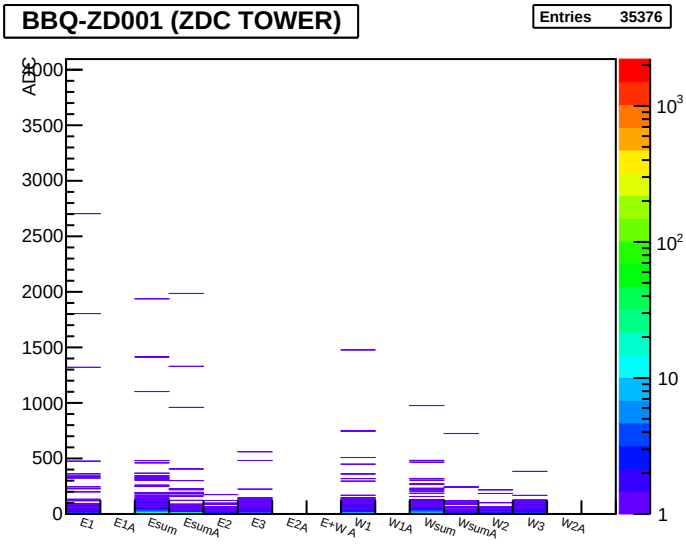

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
1
0
-1
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC

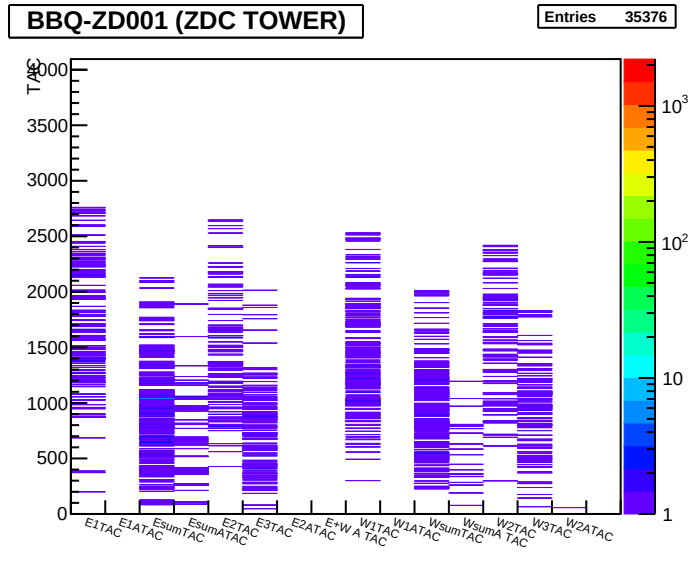

BBQ-BB001 (BBC east small tiles ADC)
Entries 35376
ADC
QT Input Channel

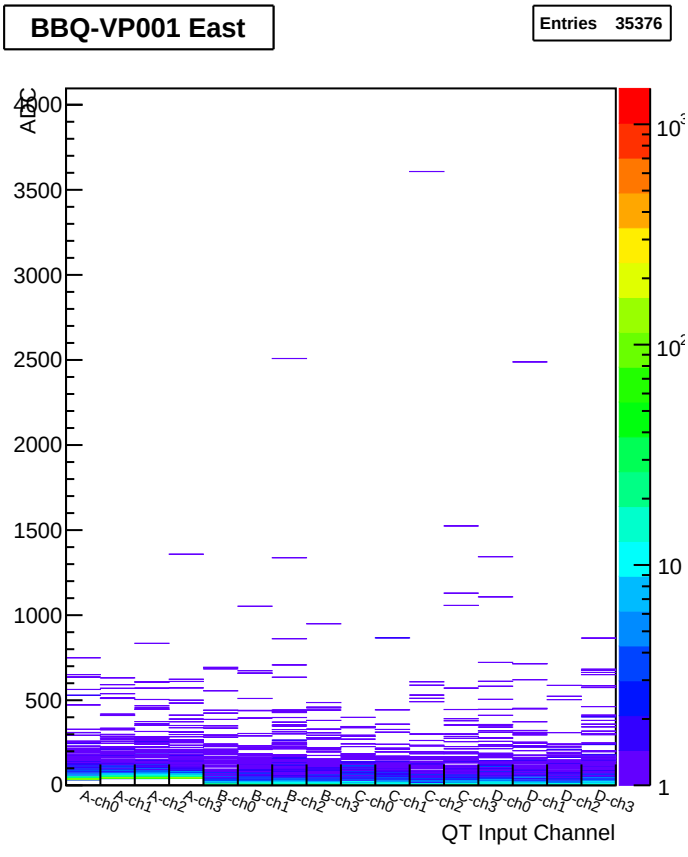

BBQ-BB001 (BBC east small tiles TAC)
Entries 35376
TAC
QT Input Channel

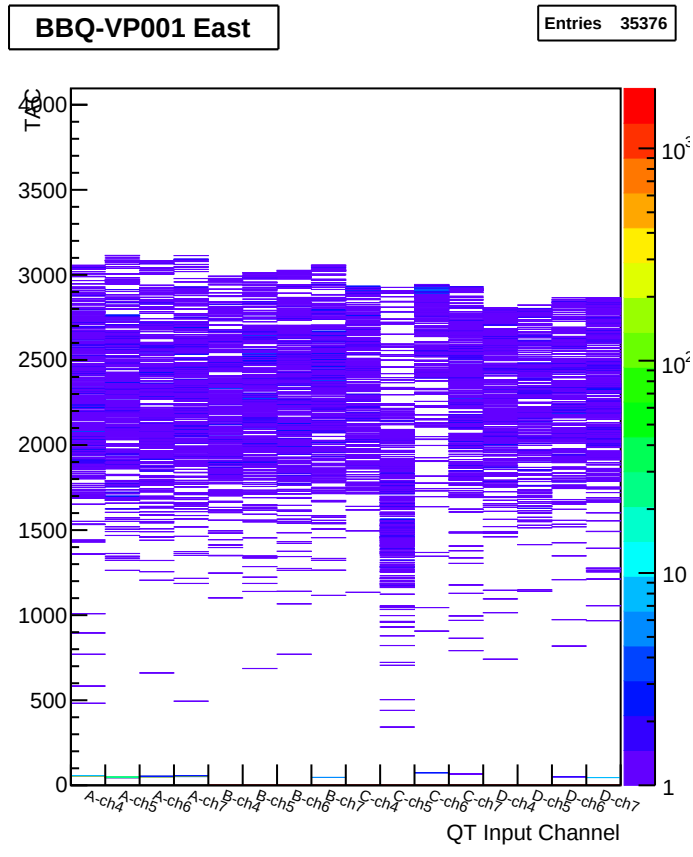

BBQ-BB002 (BBC west small tiles ADC)
Entries 35376
ADC
QT Input Channel

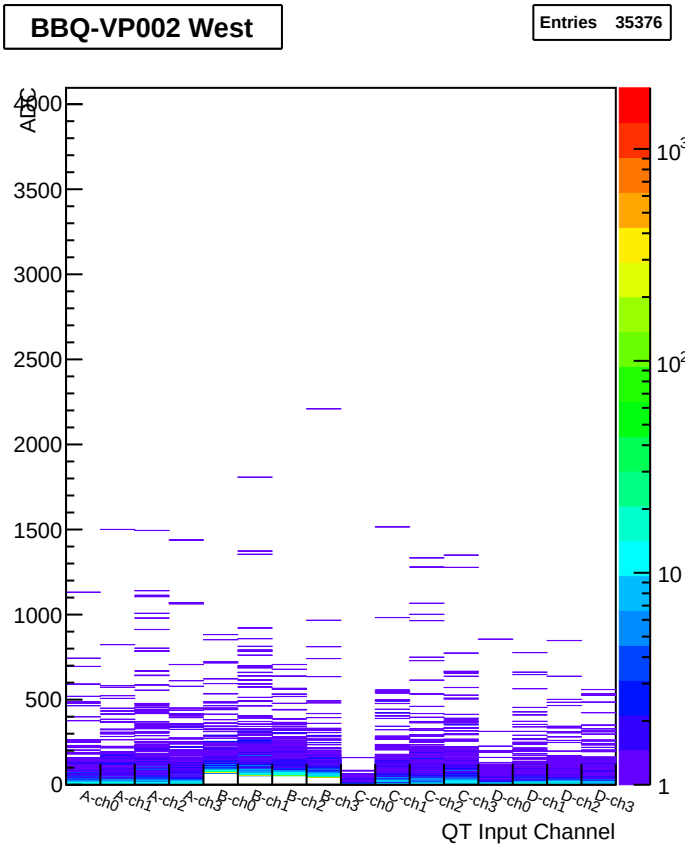

BBQ-BB002 (BBC west small tiles TAC)
Entries 35376
TAC
QT Input Channel

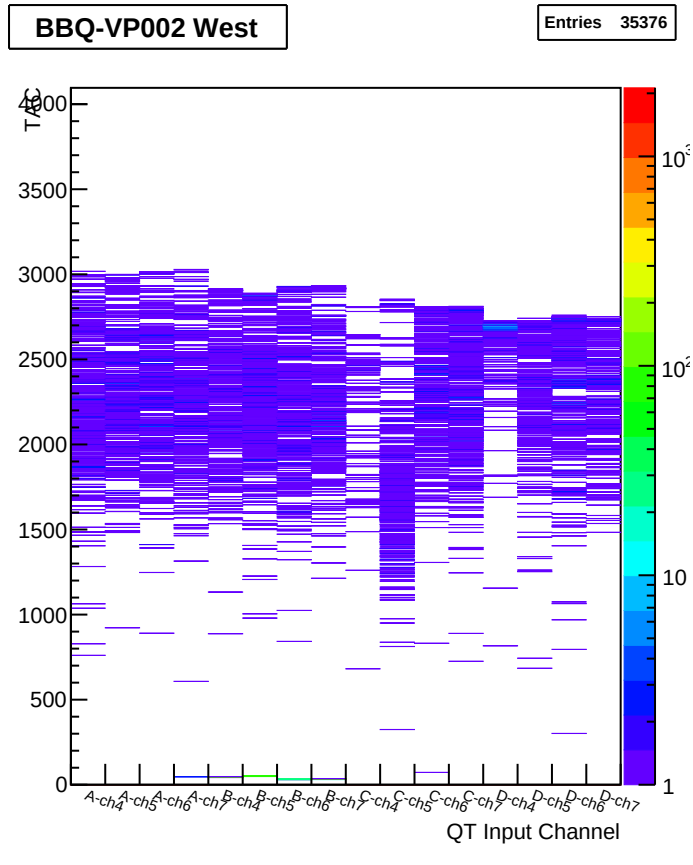

BBQ-ZD001 (ZDC TOWER)
Entries 35376
ADC

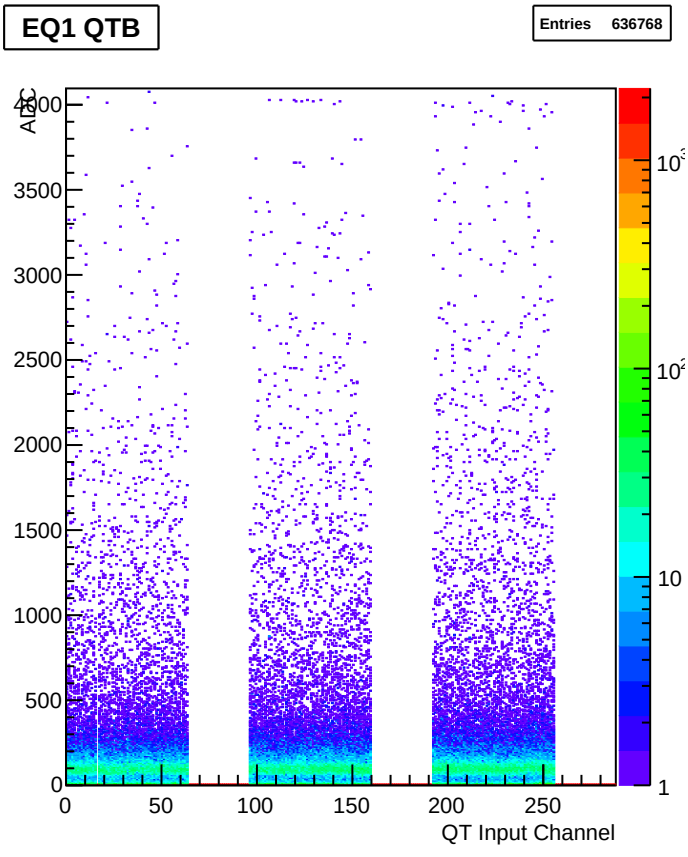

BBQ-ZD001 (ZDC TOWER)
Entries 35376
TAC

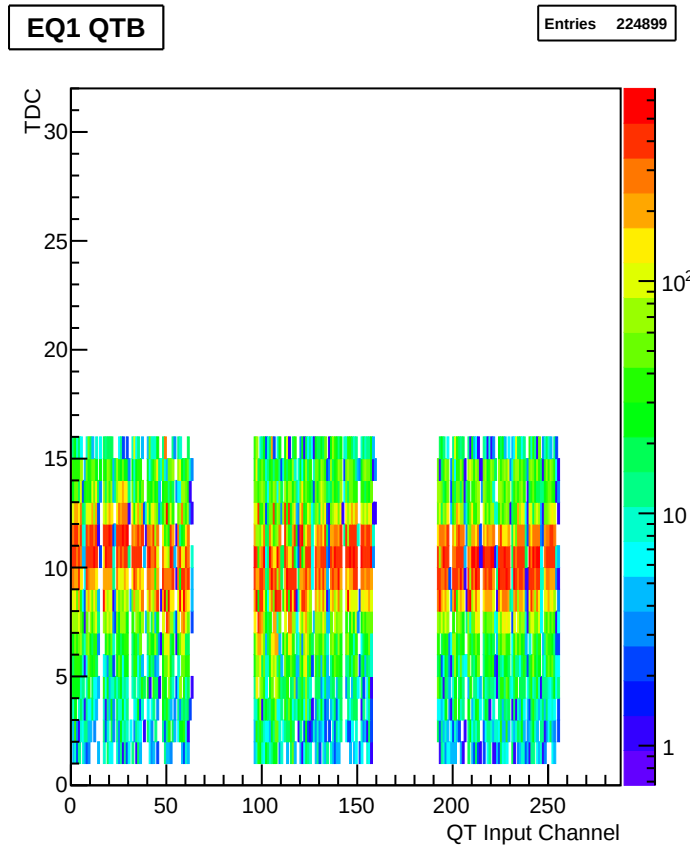

BBQ-VP001 East
Entries 35376
ADC
QT Input Channel

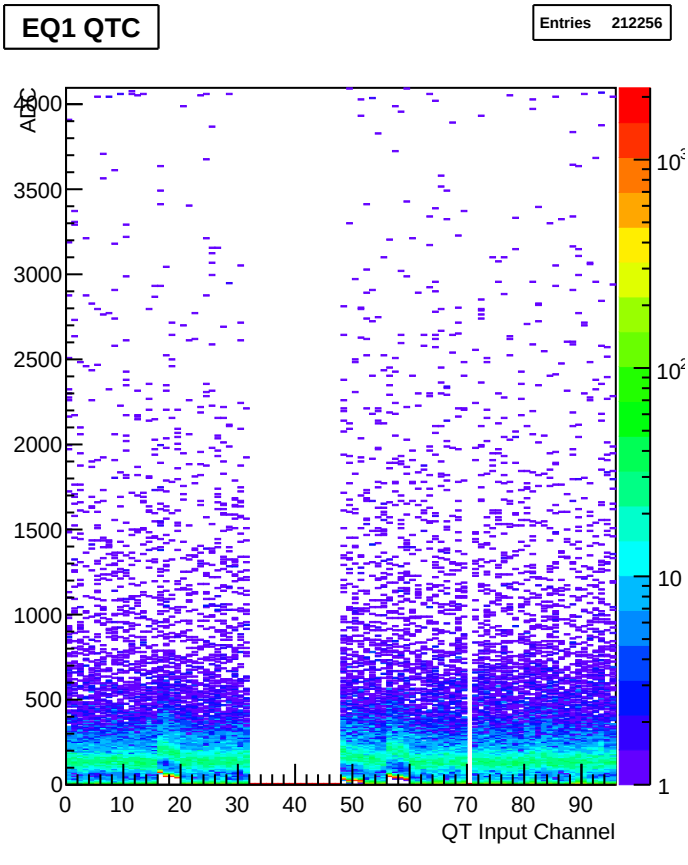

BBQ-VP001 East
Entries 35376
TADC
QT Input Channel

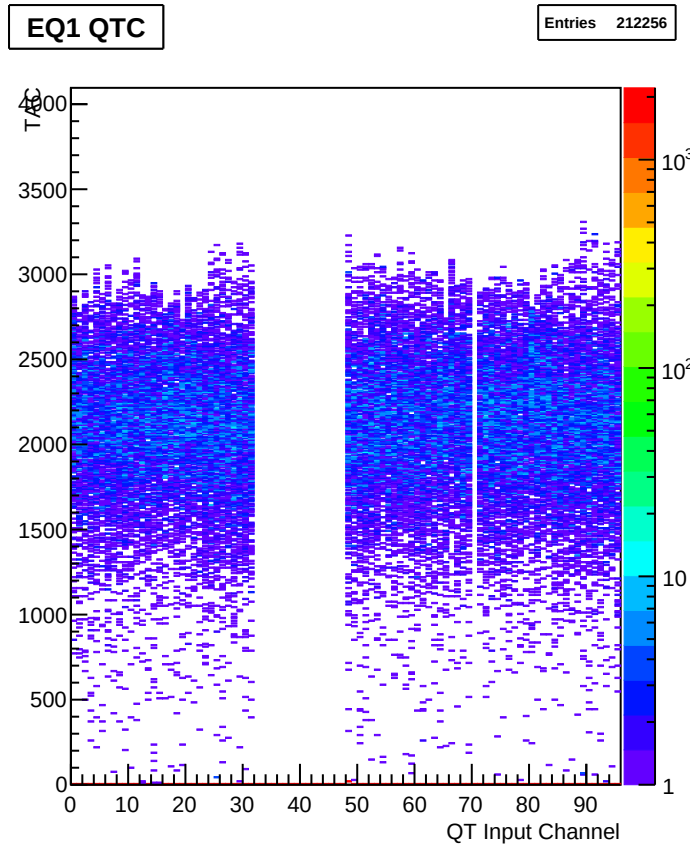

BBQ-VP002 West
Entries 35376
ADC
QT Input Channel

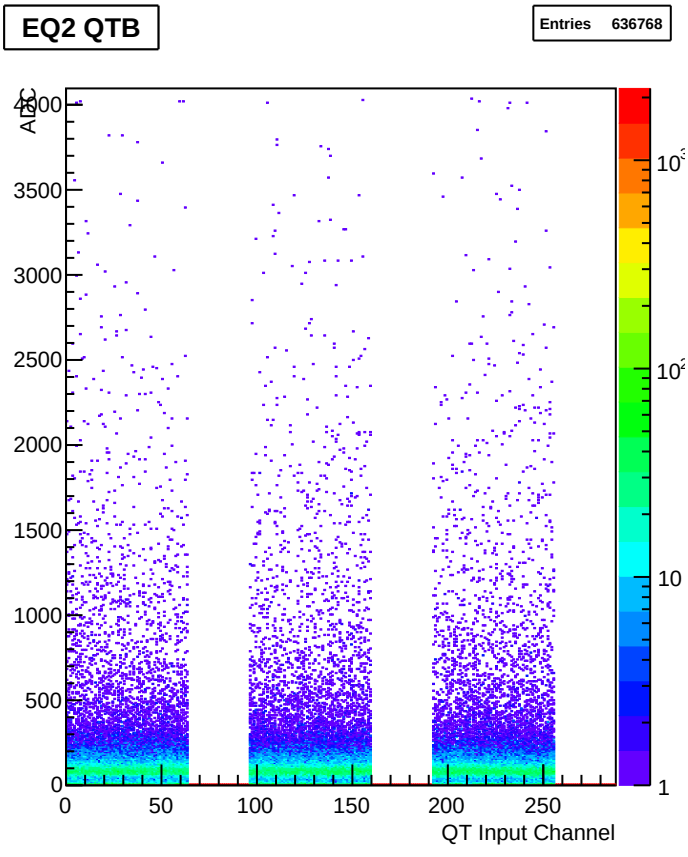

BBQ-VP002 West
Entries 35376
TADC
QT Input Channel

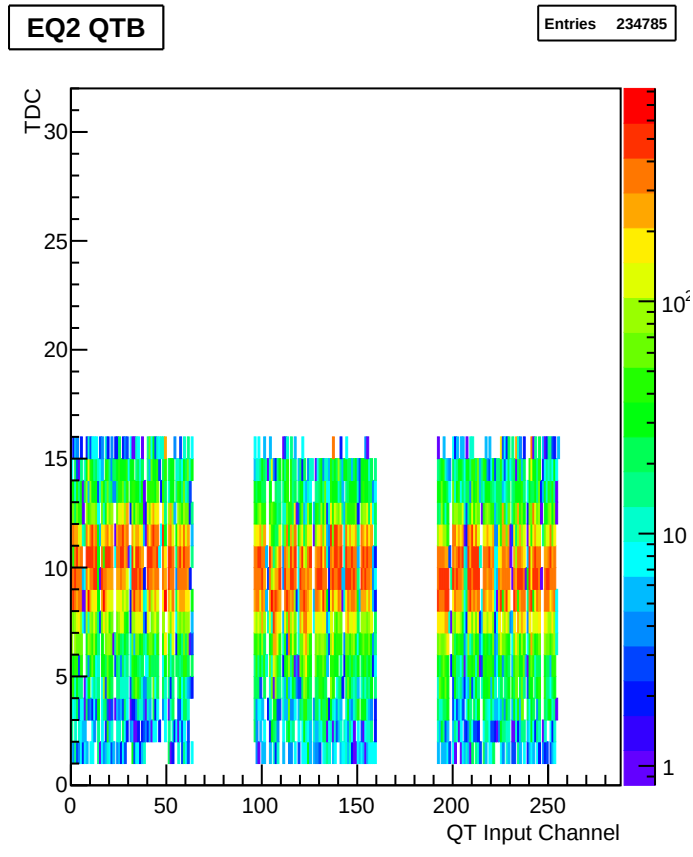

EQ1 QTB
Entries 636768
ADC
QT Input Channel

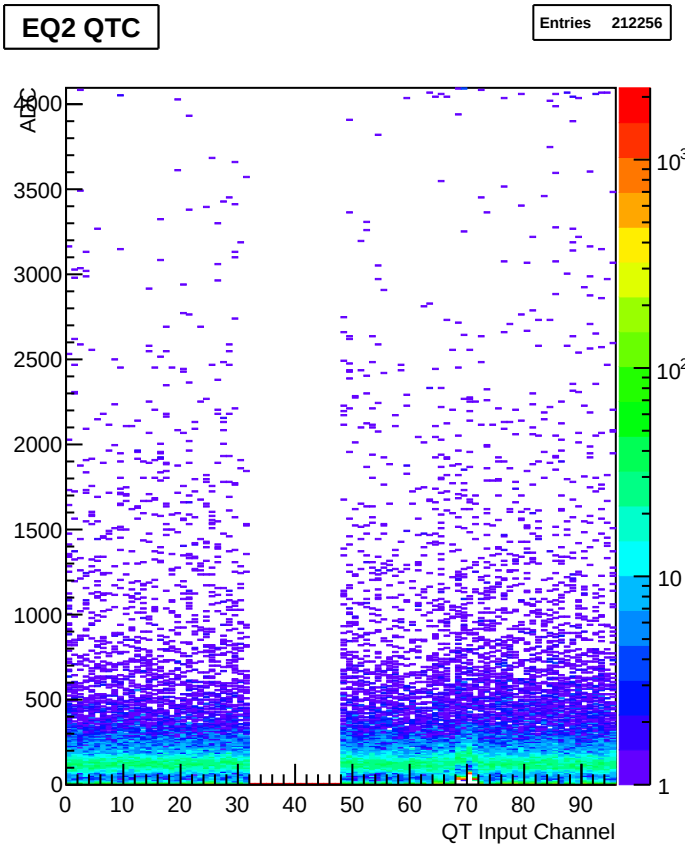

EQ1 QTB
Entries 224899
TDC
QT Input Channel

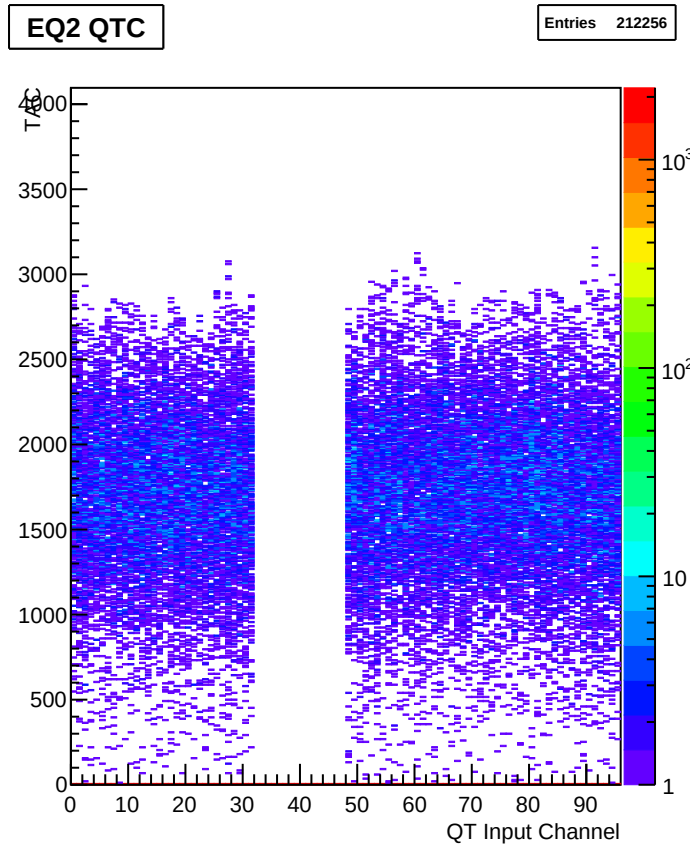

EQ1 QTC
Entries 212256
ADC
QT Input Channel

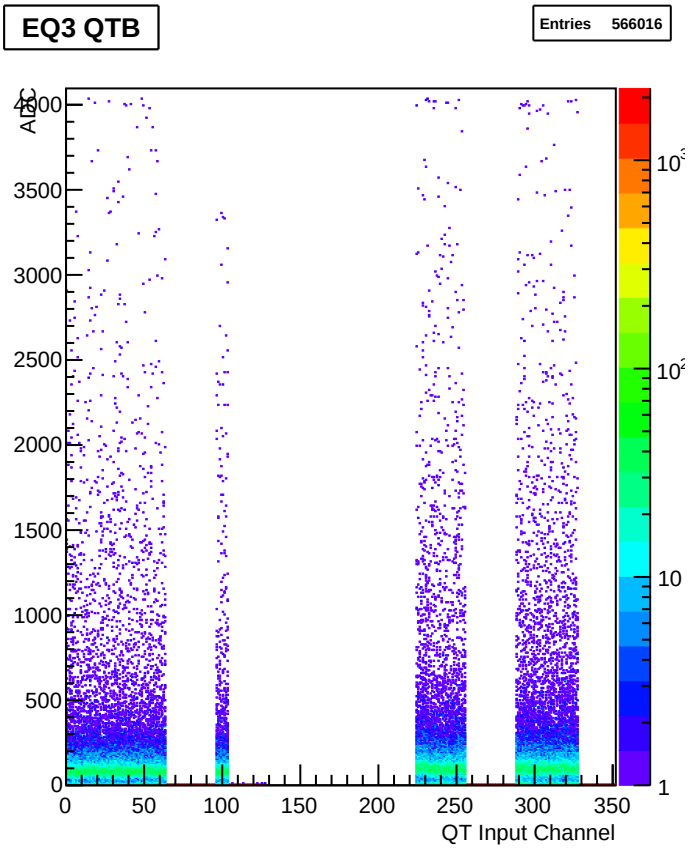

EQ1 QTC
Entries 212256
TADC
QT Input Channel

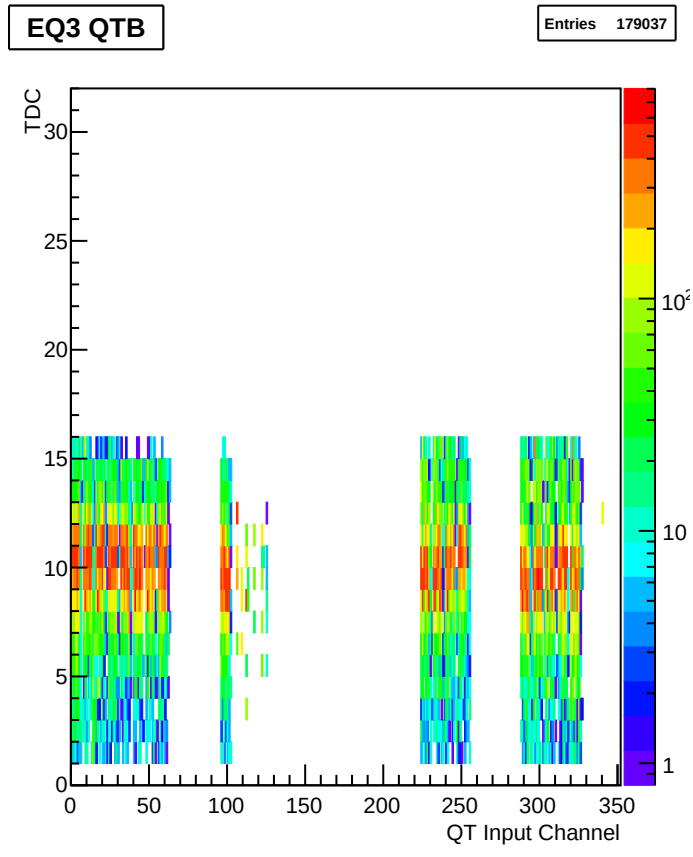

EQ2 QTB
Entries 636768
ADC
QT Input Channel

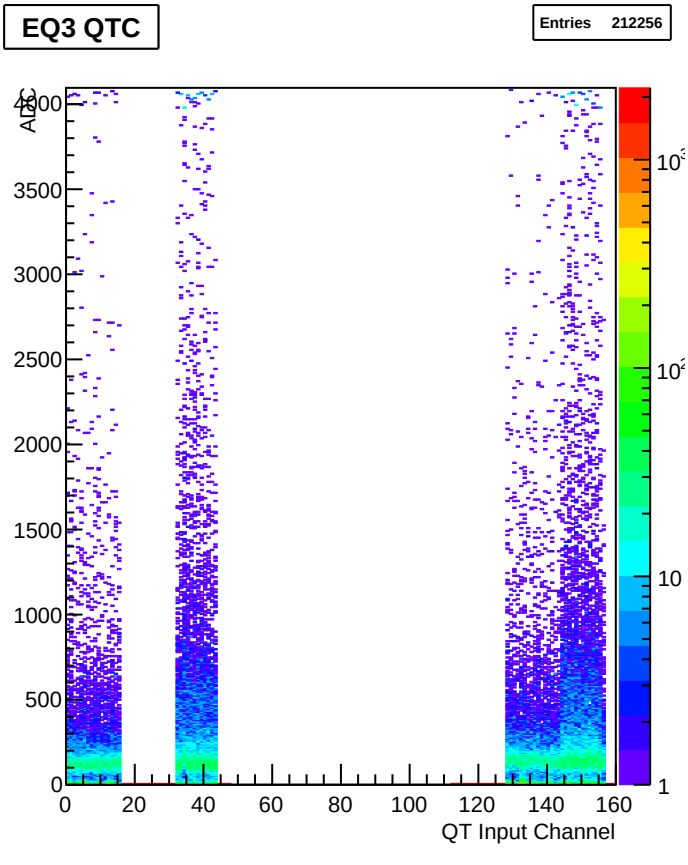

EQ2 QTB
Entries 234785
TDC
QT Input Channel

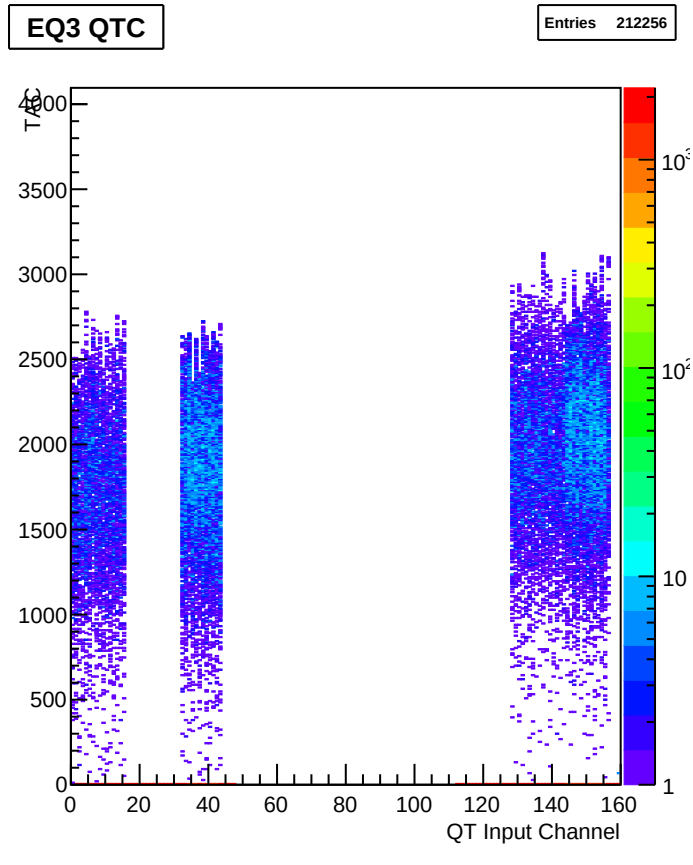

EQ2 QTC
Entries 212256
ADC
QT Input Channel

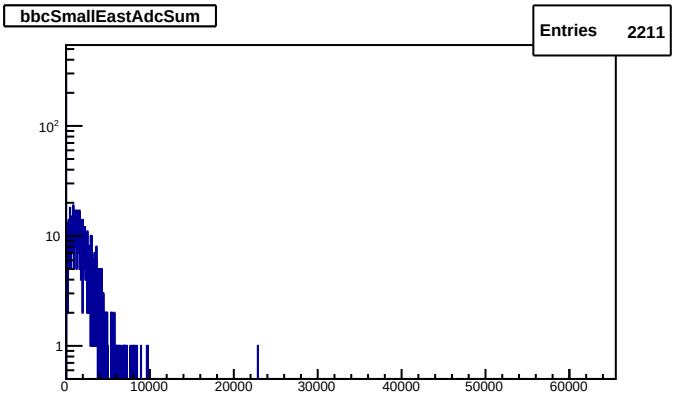

EQ2 QTC
Entries 212256
TADC
QT Input Channel

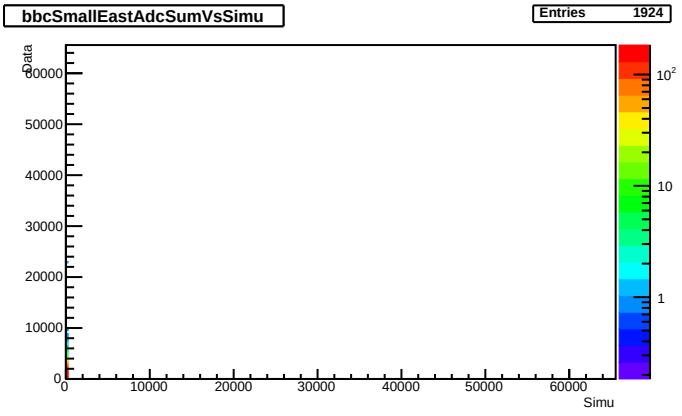

EQ3 QTB
Entries 566016
ADC
QT Input Channel

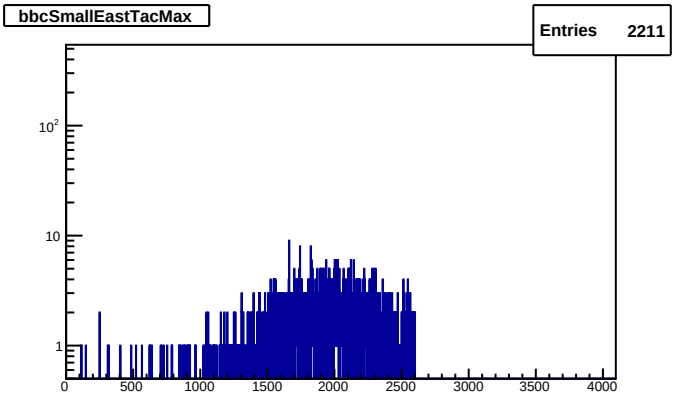

EQ3 QTB
Entries 179037
TDC
QT Input Channel

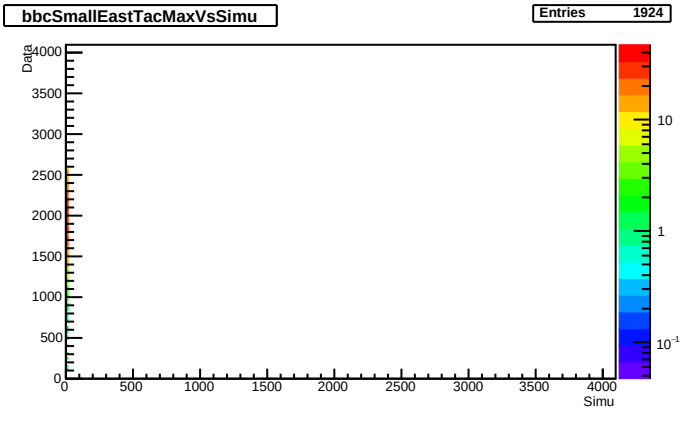

EQ3 QTC
Entries 212256
ADC
QT Input Channel

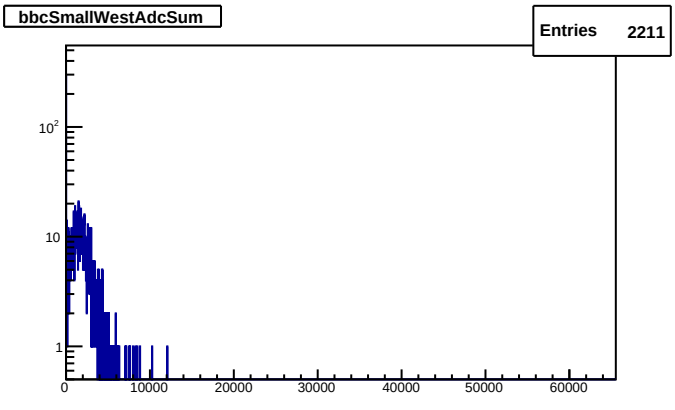

EQ3 QTC
Entries 212256
TADC
QT Input Channel

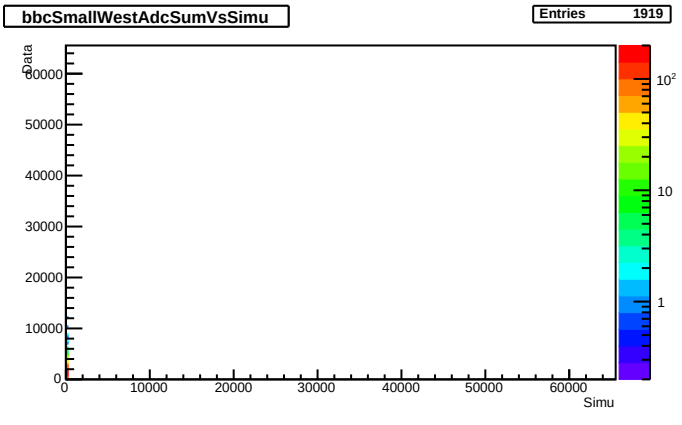

bbcSmallEastAdcSum
Entries 2211

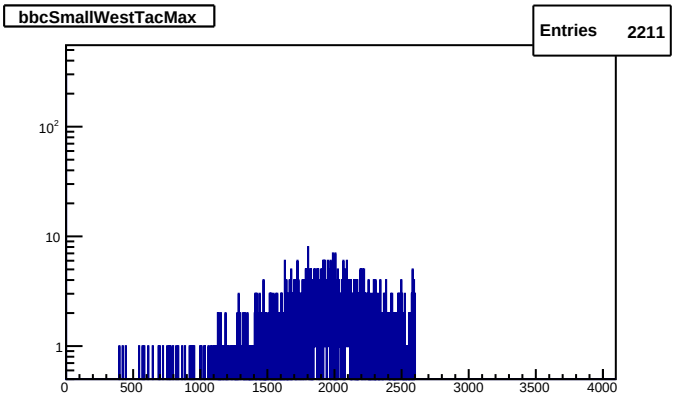

bbcSmallEastAdcSumVsSimu
Entries 1924
Data
Simu

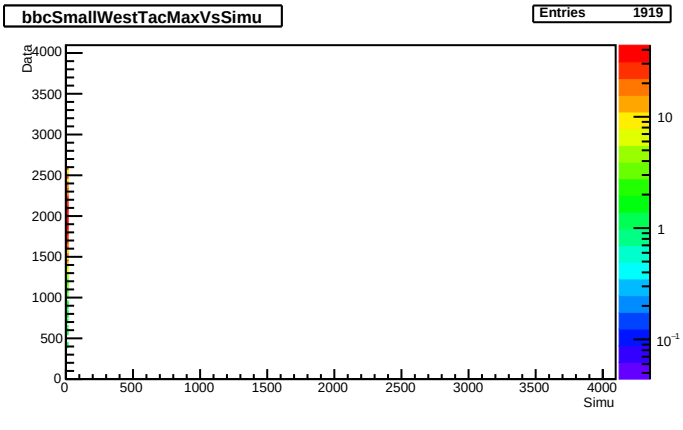

bbcSmallEastTacMax
Entries 2211

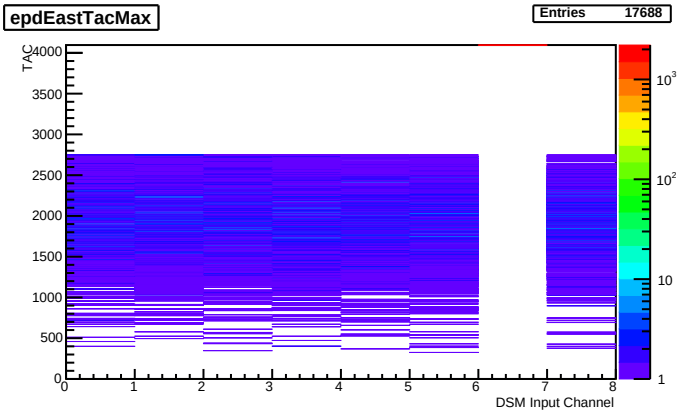

bbcSmallEastTacMaxVsSimu
Entries 1924
Data
Simu

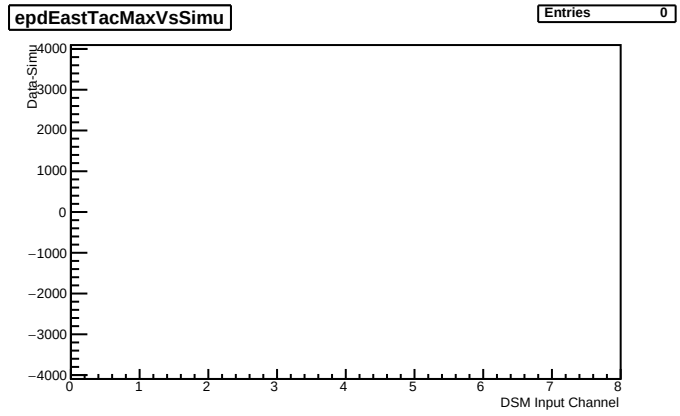

bbcSmallWestAdcSum
Entries 2211

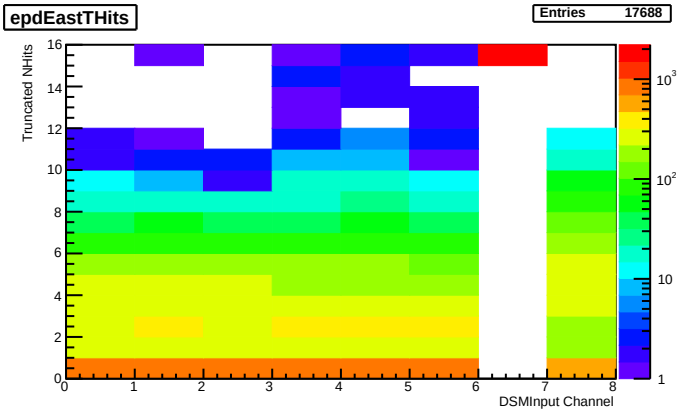

bbcSmallWestAdcSumVsSimu
Entries 1919
Data
Simu

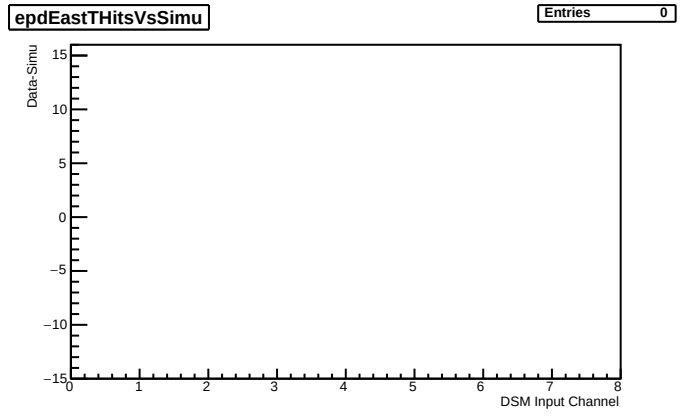

bbcSmallWestTacMax
Entries 2211

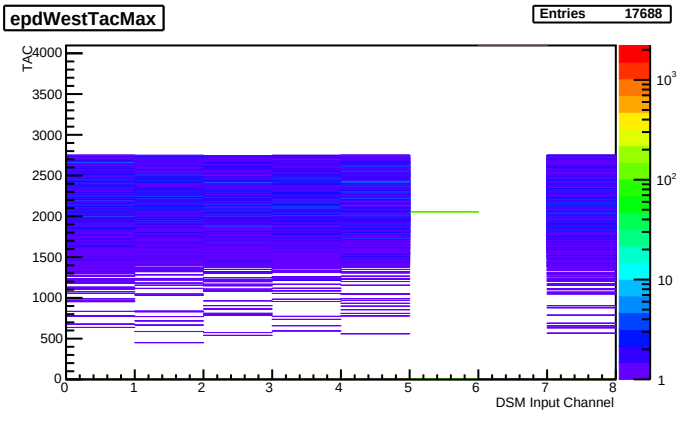

bbcSmallWestTacMaxVsSimu
Entries 1919
Data
Simu

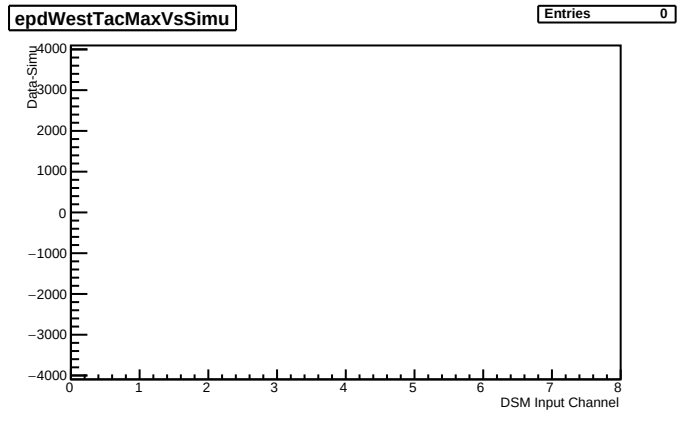

epdEastTacMax
Entries 17688
TAC
DSM Input Channel

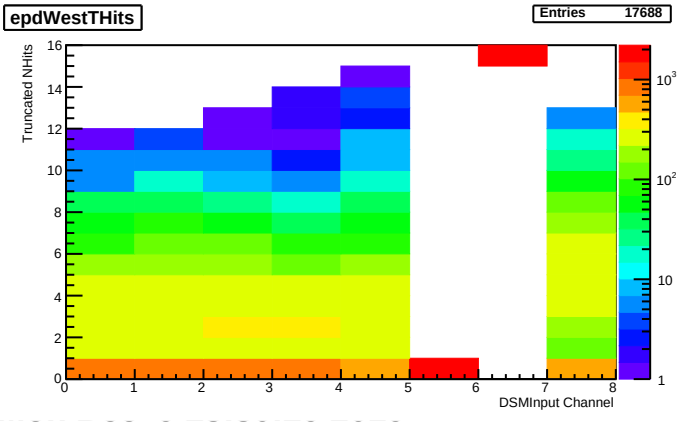

epdEastTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel

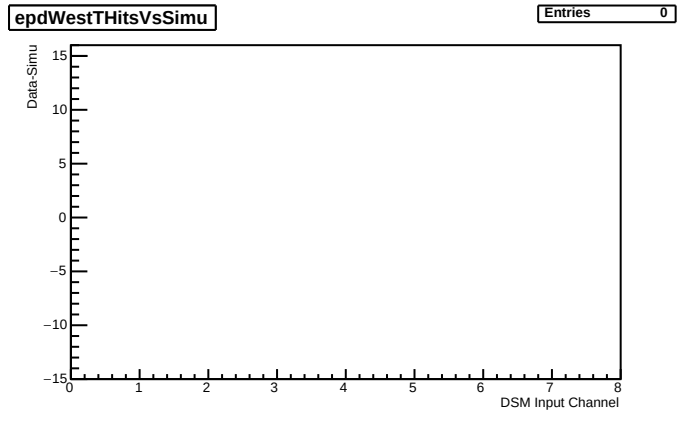

epdEastTHits
Entries 17688
Truncated NHits
DSMInput Channel

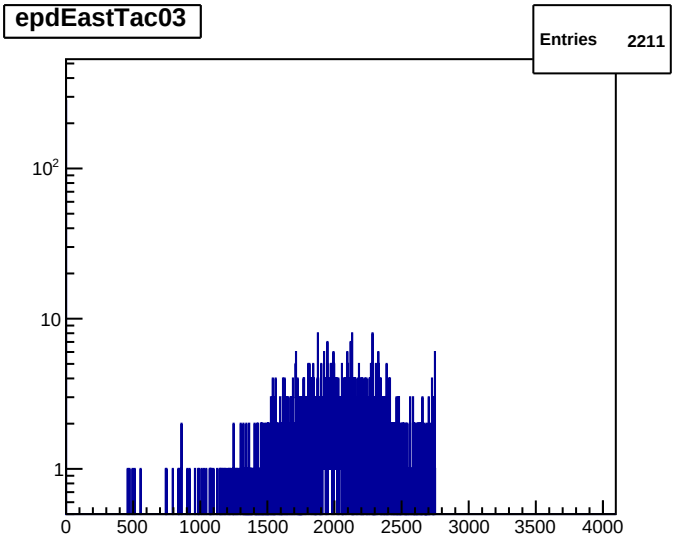

epdEastTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel

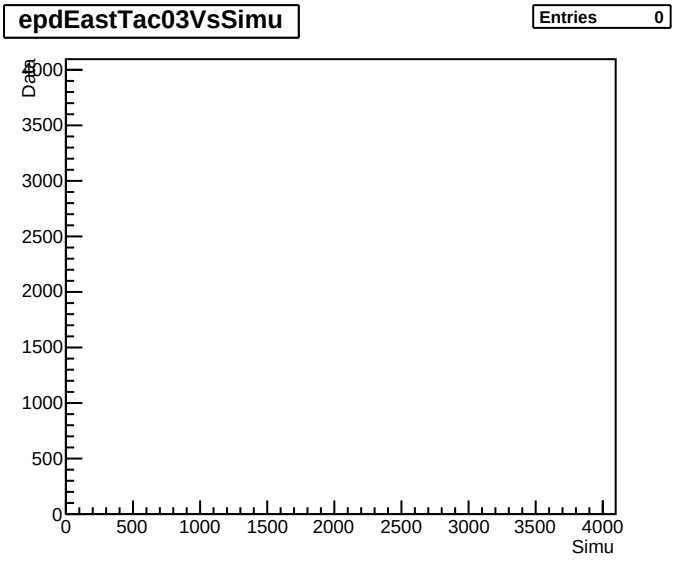

epdWestTacMax
Entries 17688
TAC
DSM Input Channel

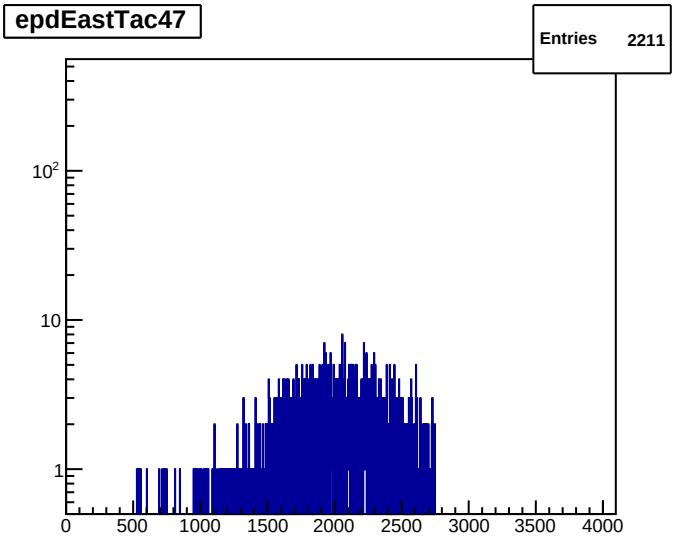

epdWestTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel

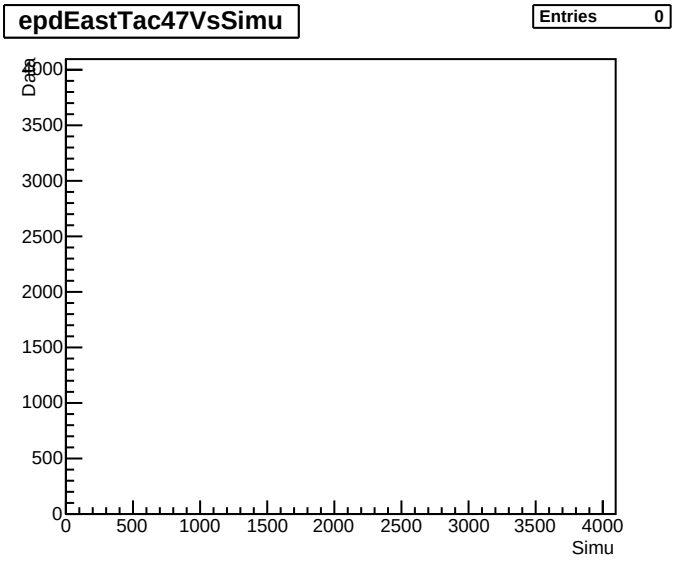

epdWestTHits
Entries 17688
Truncated NHits
DSMInput Channel

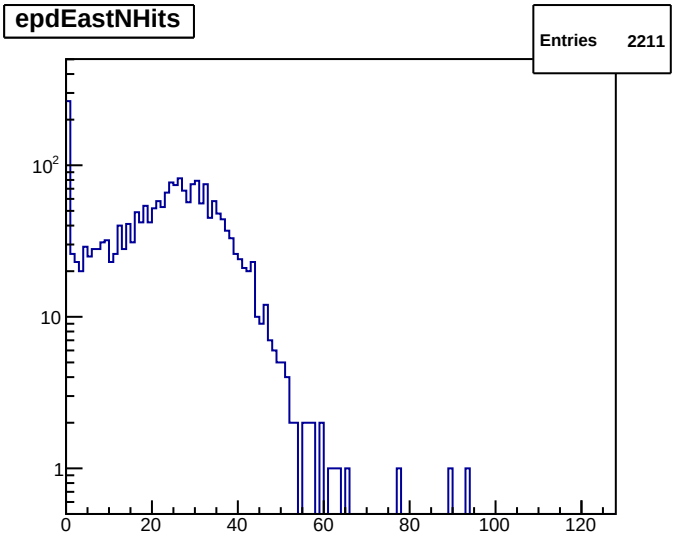

epdWestTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel

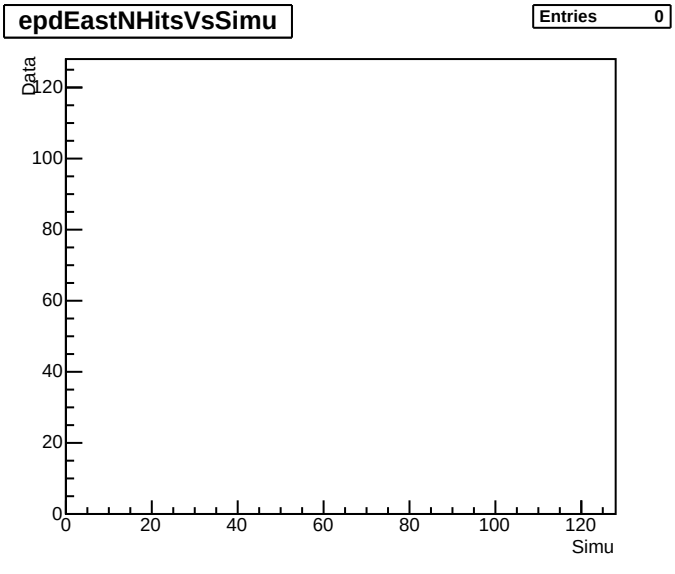

epdEastTac03
Entries 2211
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

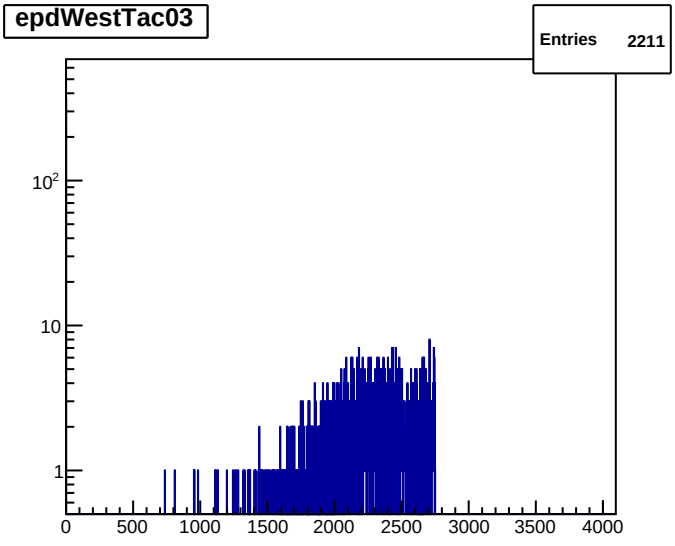

epdEastTac03VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

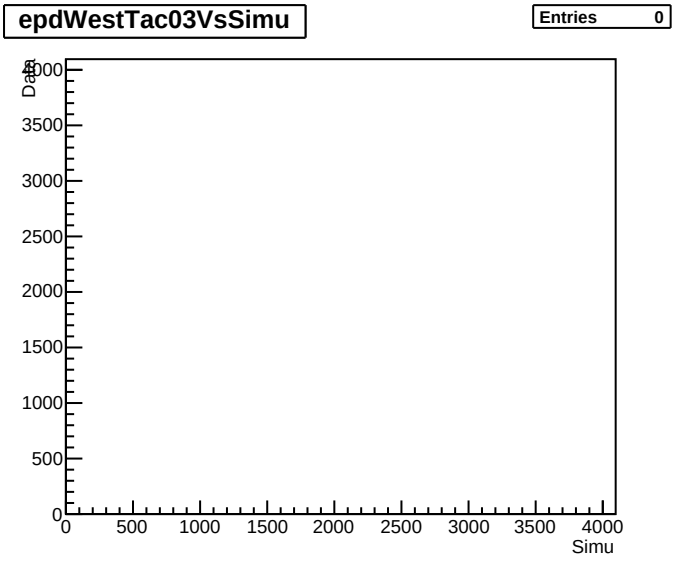

epdEastTac47
Entries 2211
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

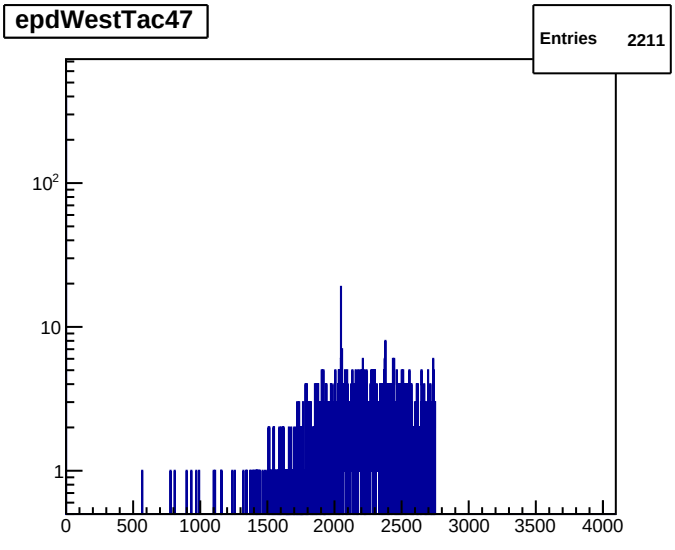

epdEastTac47VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

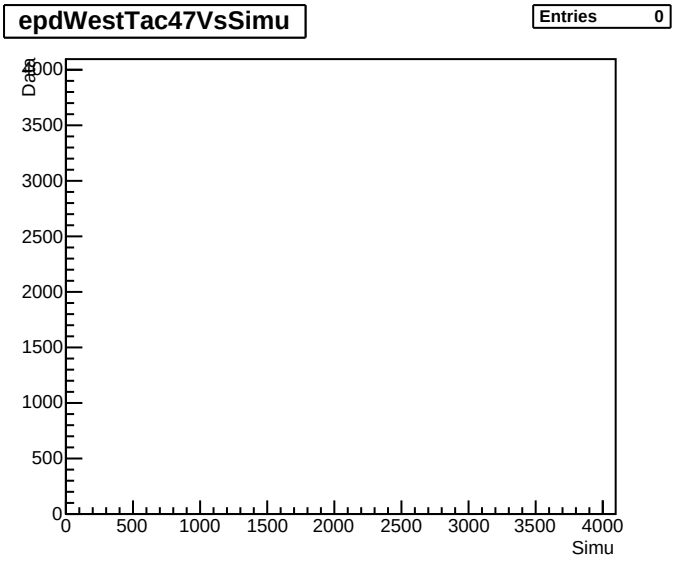

epdEastNHits
Entries 2211
10^2
10
1
0 20 40 60 80 100 120

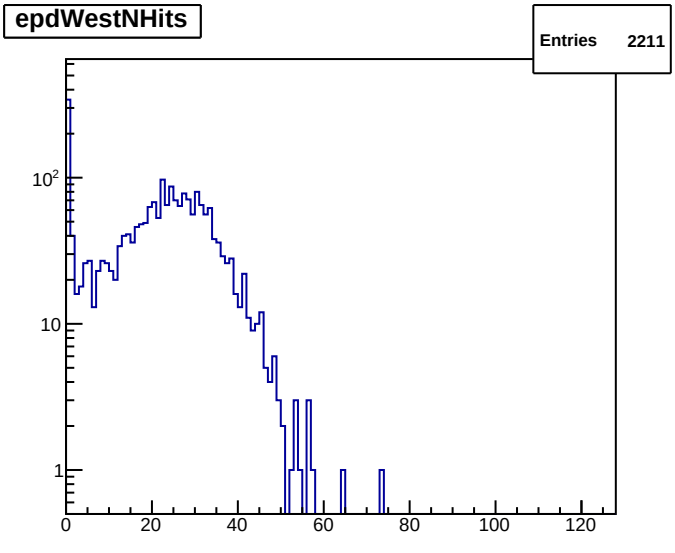

epdEastNHitsVsSimu
Entries 0
Data
120 100 80 60 40 20 0
0 20 40 60 80 100 120
Simu

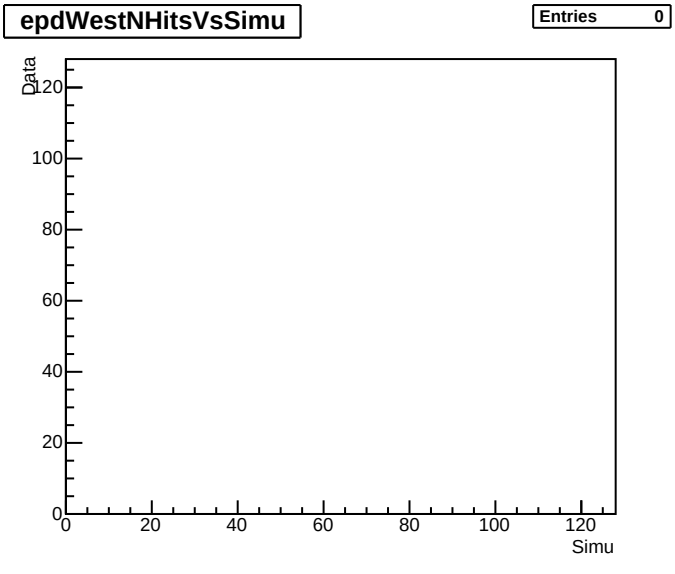

epdWestTac03
Entries 2211
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

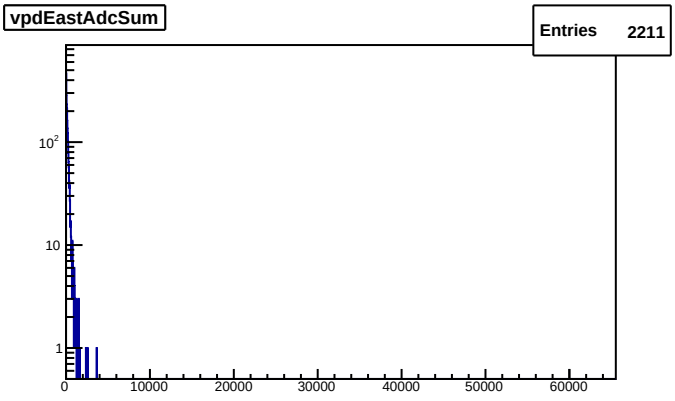

epdWestTac03VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

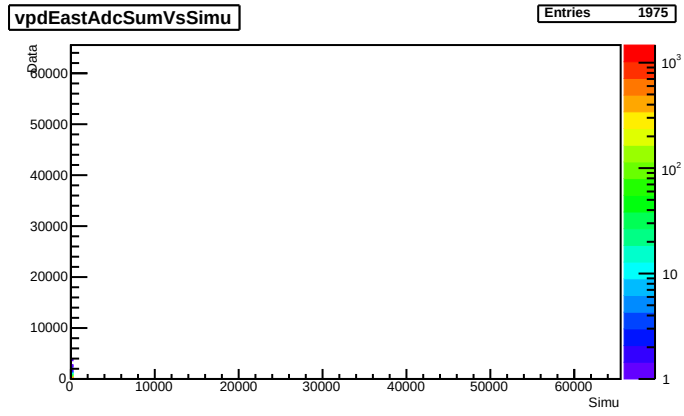

epdWestTac47
Entries 2211
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

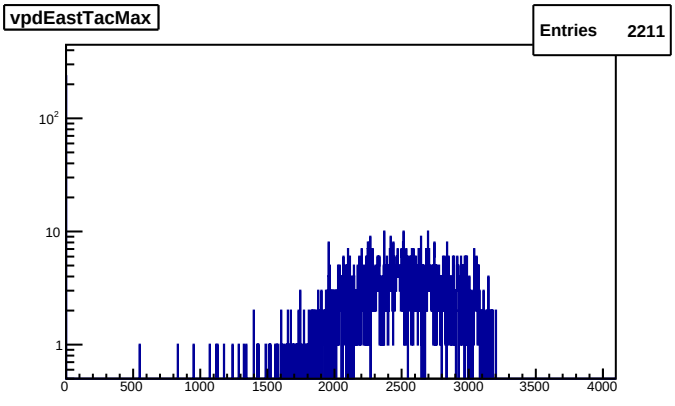

epdWestTac47VsSimu
Entries 0
Data
4000 3500 3000 2500 2000 1500 1000 500 0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

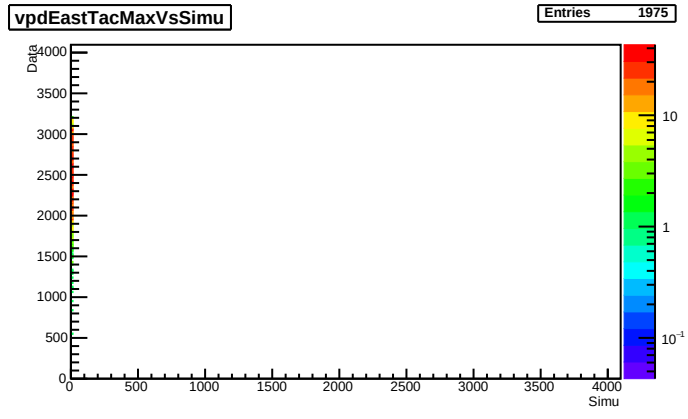

epdWestNHits
Entries 2211
10^2
10
1
0 20 40 60 80 100 120

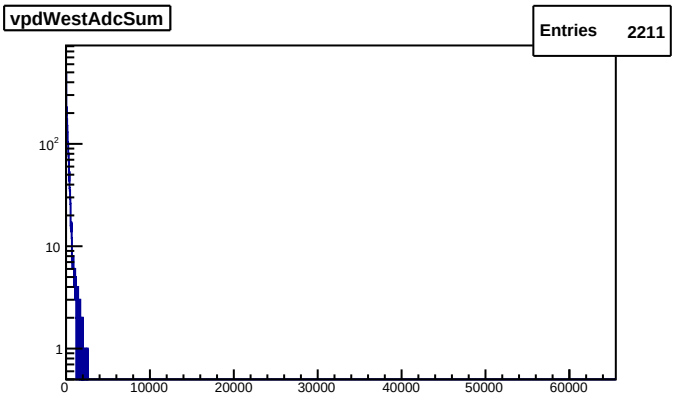

epdWestNHitsVsSimu
Entries 0
Data
120 100 80 60 40 20 0
0 20 40 60 80 100 120
Simu

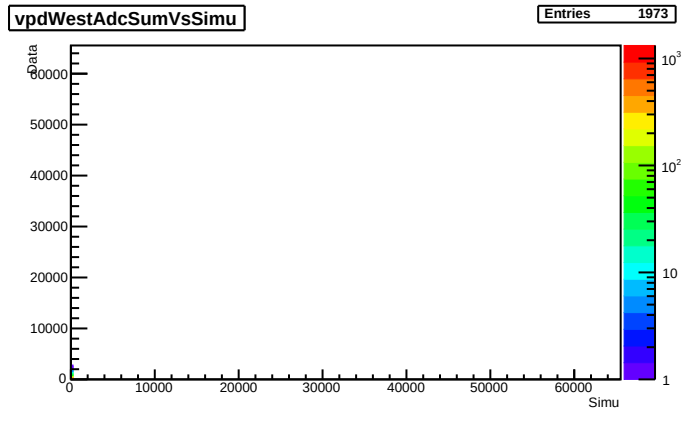

vpdEastAdcSum
Entries 2211

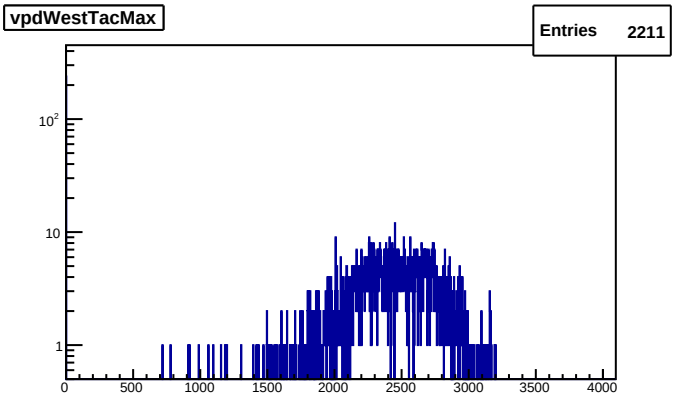

vpdEastAdcSumVsSimu
Entries 1975
Data
Simu

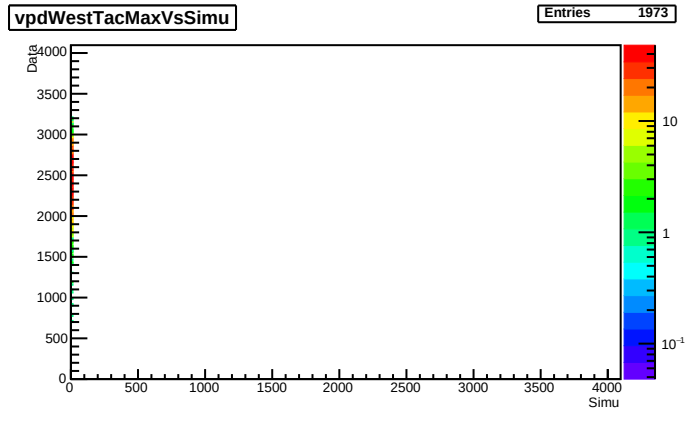

vpdEastTacMax
Entries 2211

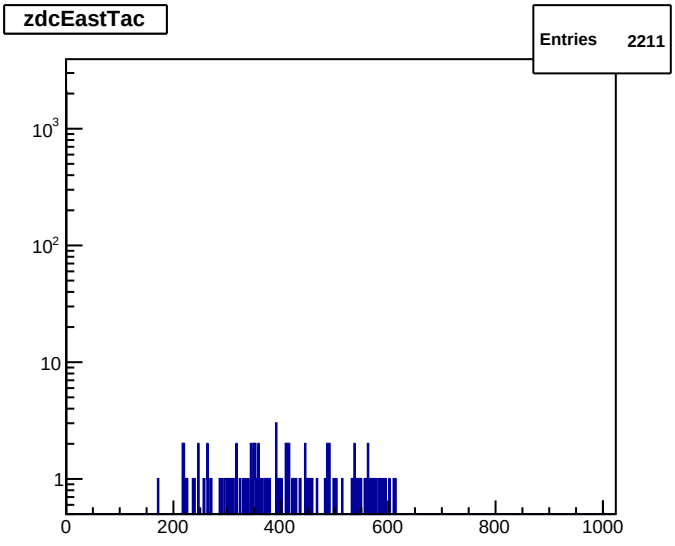

vpdEastTacMaxVsSimu
Entries 1975
Data
Simu

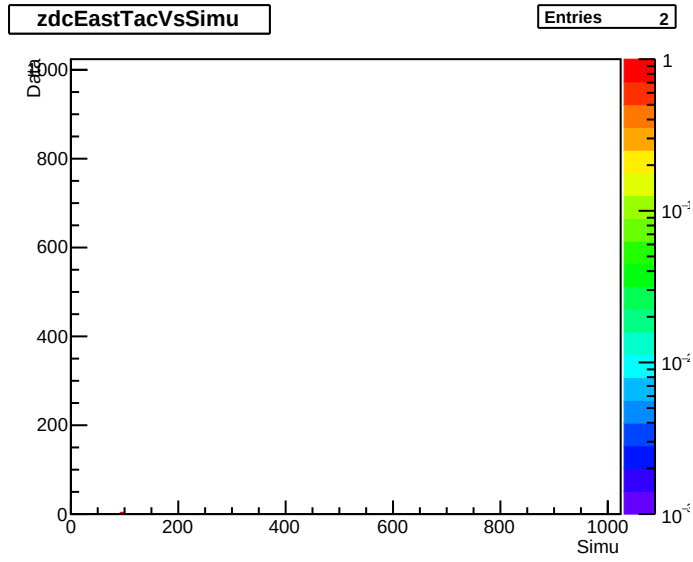

vpdWestAdcSum
Entries 2211

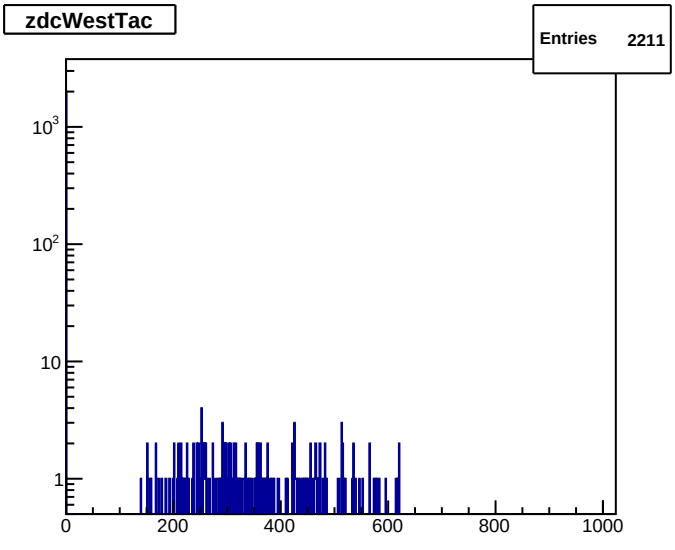

vpdWestAdcSumVsSimu
Entries 1973
Data
Simu

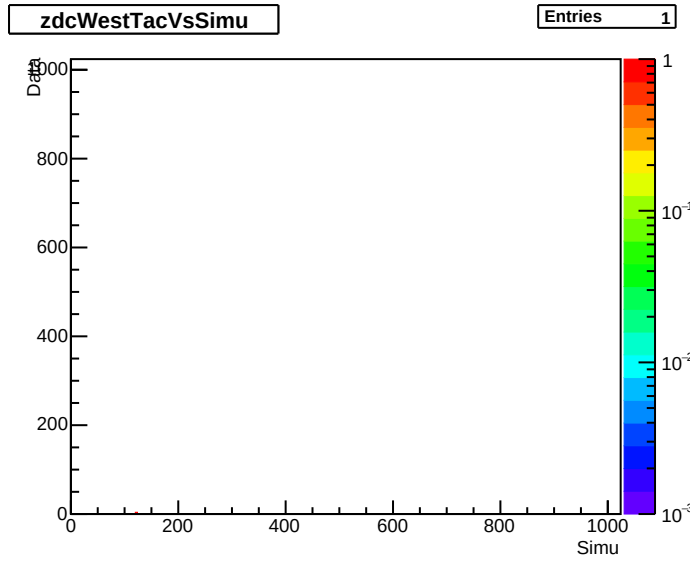

vpdWestTacMax
Entries 2211

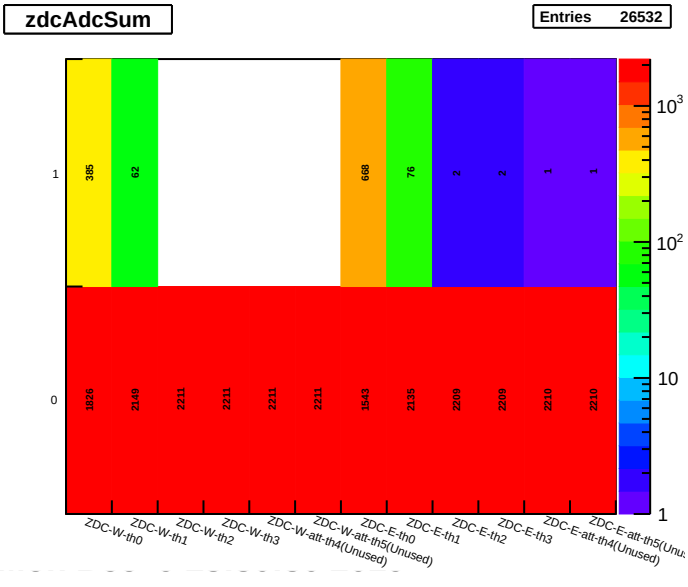

vpdWestTacMaxVsSimu
Entries 1973
Data
Simu

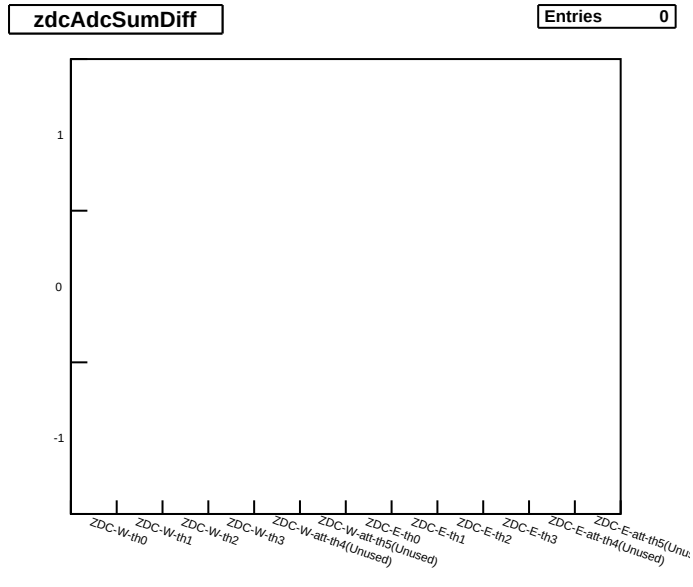

zdcEastTac
Entries 2211
10^3
10^2
10
1
0
200
400
600
800
1000

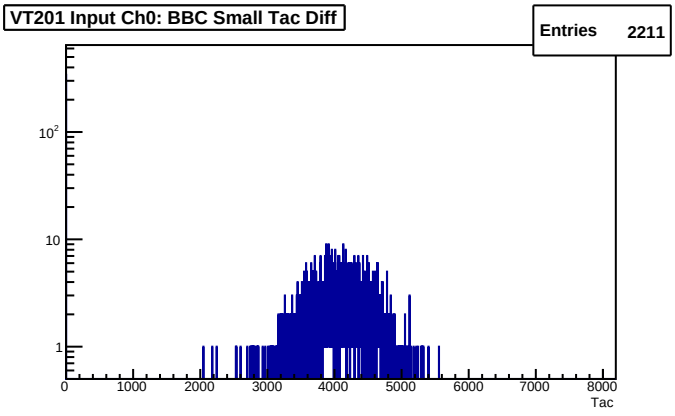

zdcEastTacVsSimu
Entries 2
Data
1000
800
600
400
200
0
Simu
1
10^{-1}
10^{-2}
10^{-3}

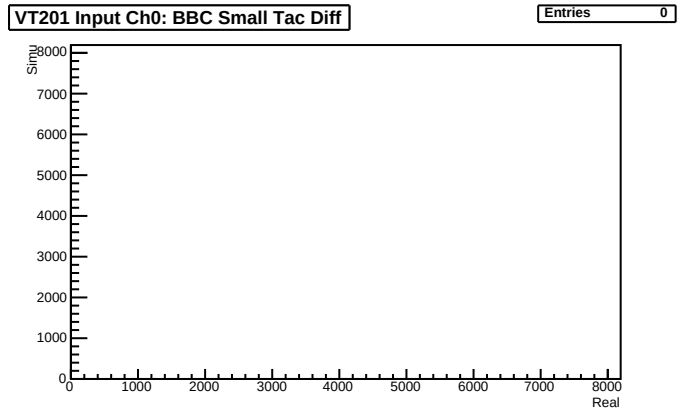

zdcWestTac
Entries 2211
10^3
10^2
10
1
0
200
400
600
800
1000

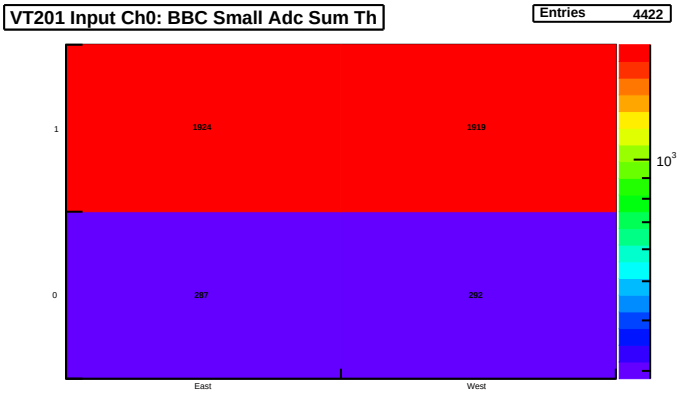

zdcWestTacVsSimu
Entries 1
Data
1000
800
600
400
200
0
Simu
1
10^{-1}
10^{-2}
10^{-3}

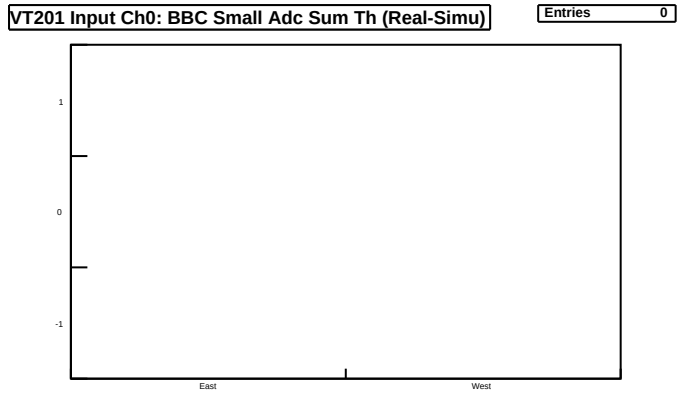

zdcAdcSum
Entries 26532
1
0
385
62
668
76
2
2
1
1
1826
2149
2211
2211
2211
2211
1543
2135
2209
2209
2210
2210
10^3
10^2
10
1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

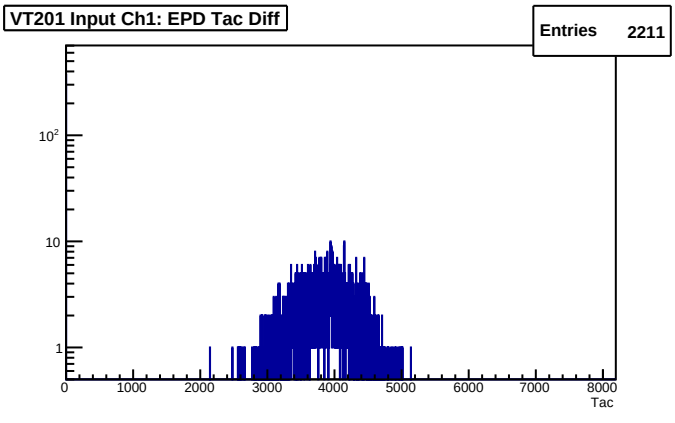

zdcAdcSumDiff
Entries 0
1
0
-1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

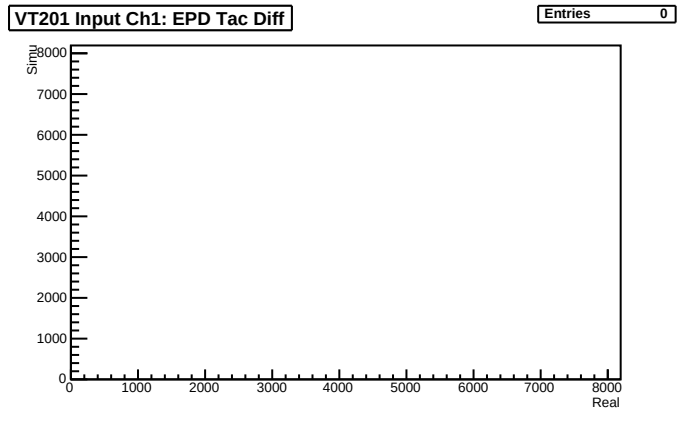

VT201 Input Ch0: BBC Small Tac Diff
Entries 2211
Tac

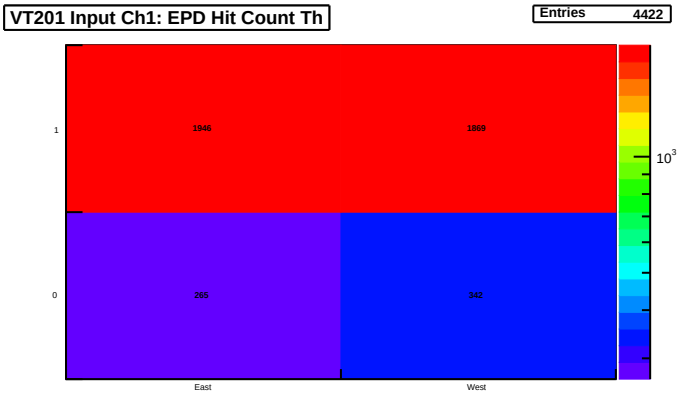

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

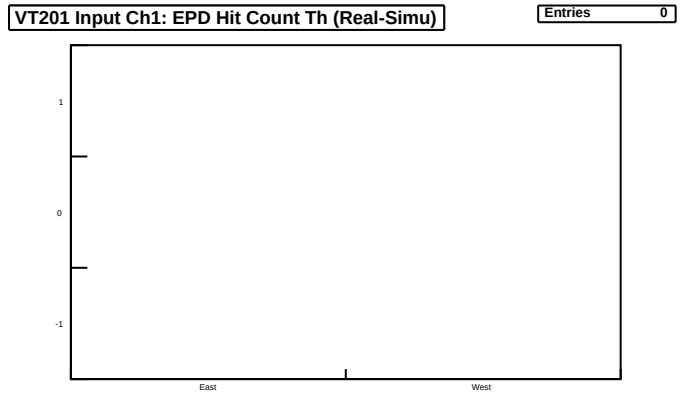

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 4422
1924
1919
287
292
East
West

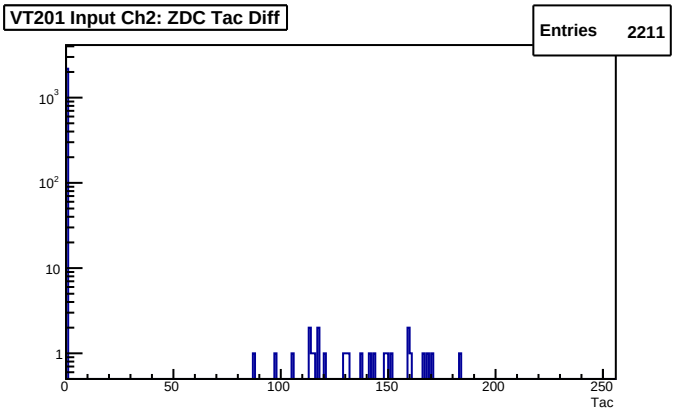

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

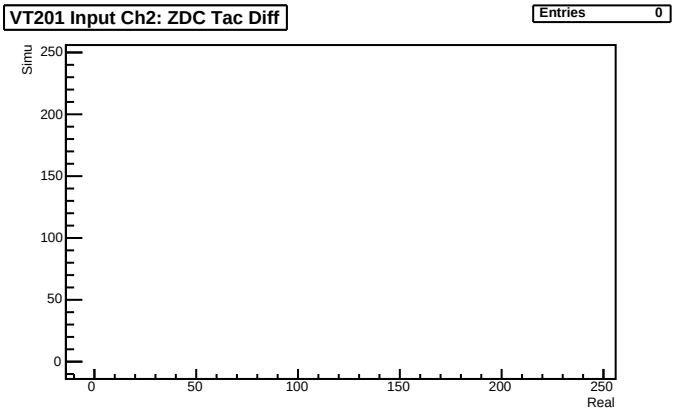

VT201 Input Ch1: EPD Tac Diff
Entries 2211
Tac

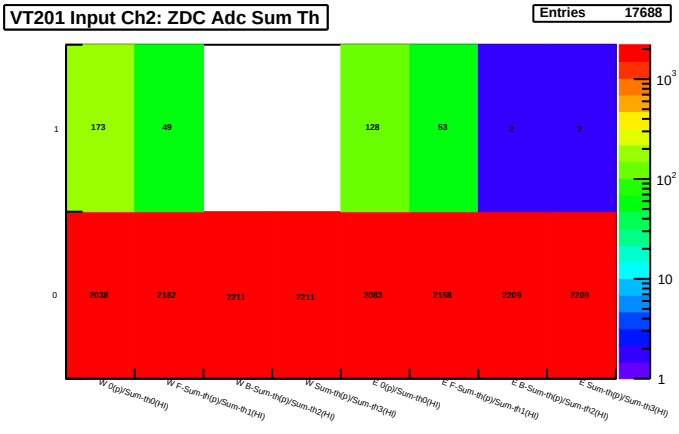

VT201 Input Ch1: EPD Tac Diff
Entries 0
Simu
Real

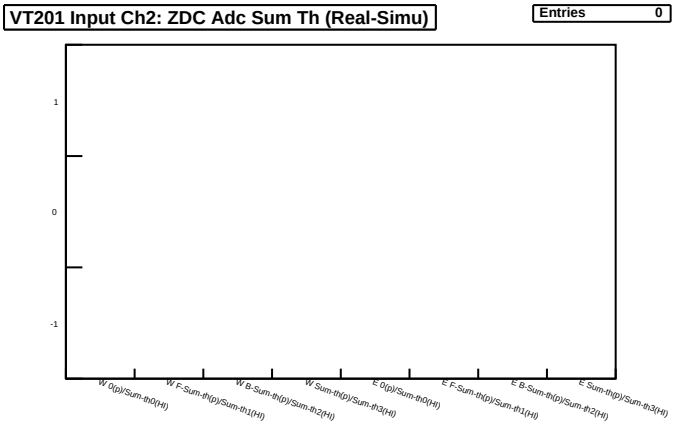

VT201 Input Ch1: EPD Hit Count Th
Entries 4422
1946
1869
265
342
East
West

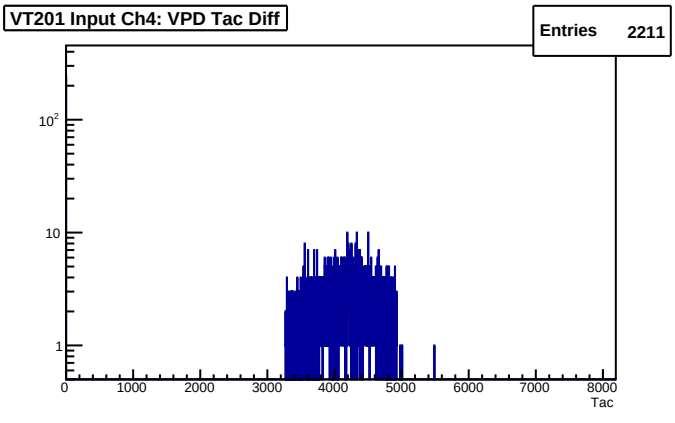

VT201 Input Ch1: EPD Hit Count Th (Real-Simu)
Entries 0
East
West

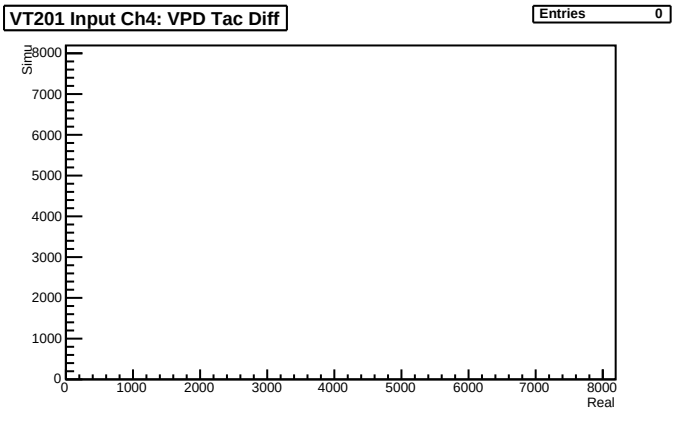

VT201 Input Ch2: ZDC Tac Diff
Entries 2211
Tac

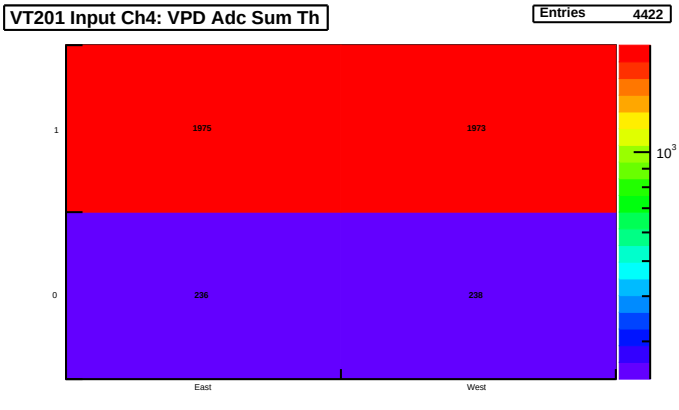

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

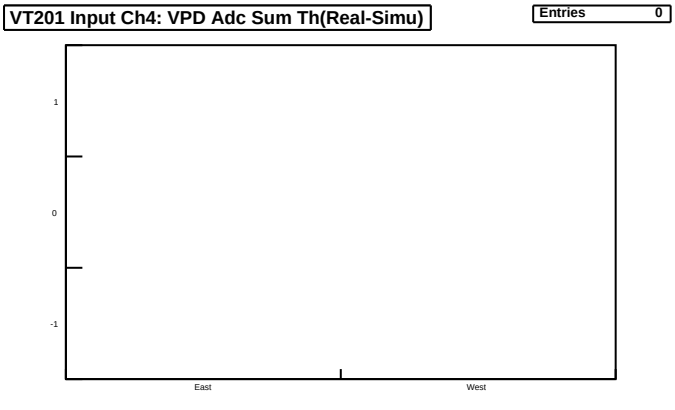

VT201 Input Ch2: ZDC Adc Sum Th
Entries 17688
173
49
128
53
2
2
2038
2162
2211
2211
2083
2158
2209
2209
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

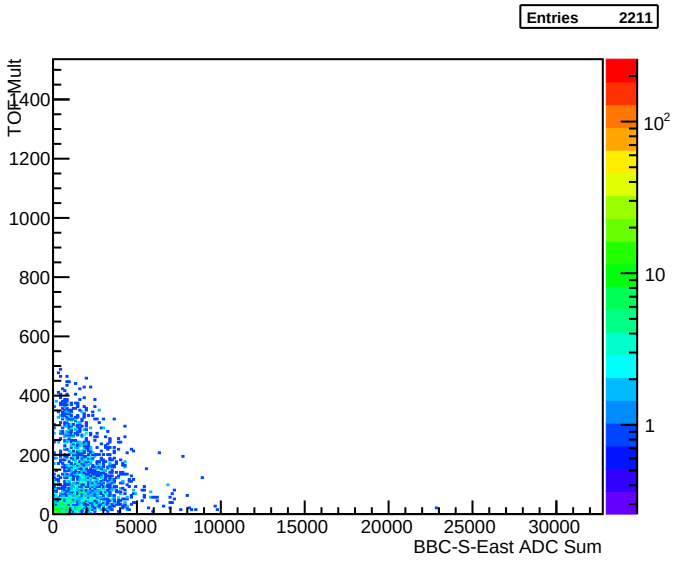

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

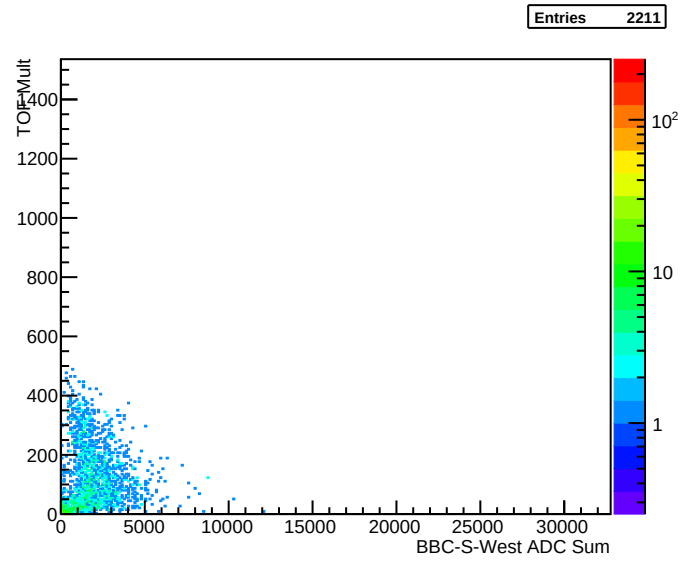

VT201 Input Ch4: VPD Tac Diff
Entries 2211
Tac

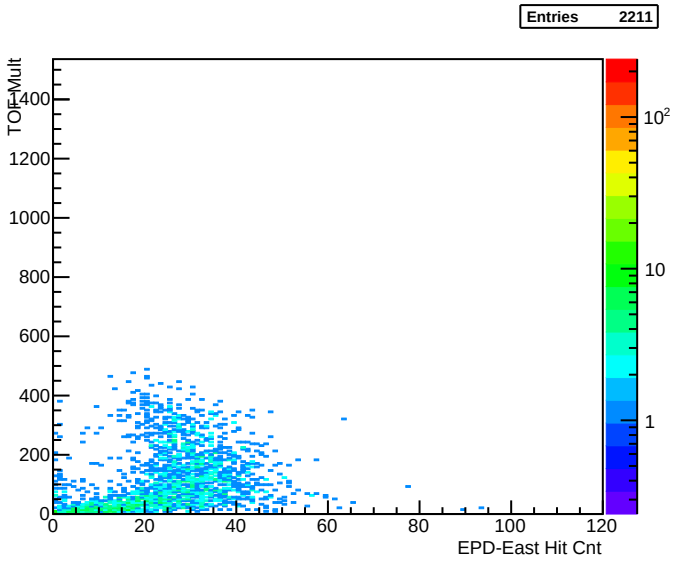

VT201 Input Ch4: VPD Tac Diff
Entries 0
Simu
Real

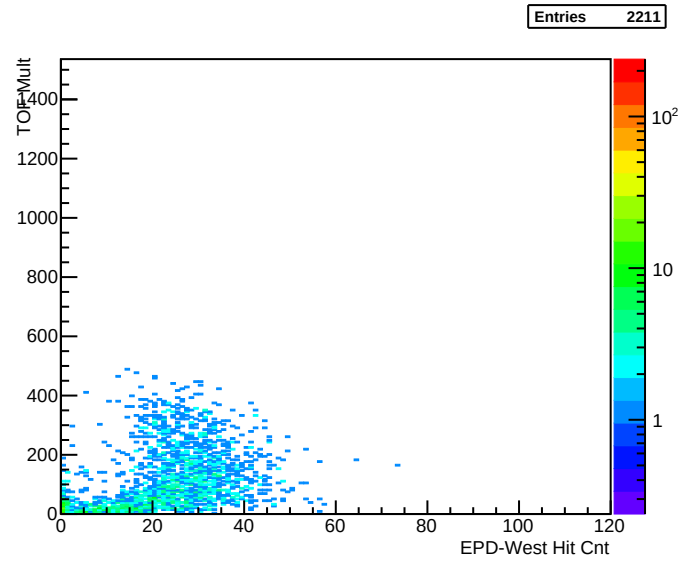

VT201 Input Ch4: VPD Adc Sum Th
Entries 4422
1975
1973
236
238
East
West

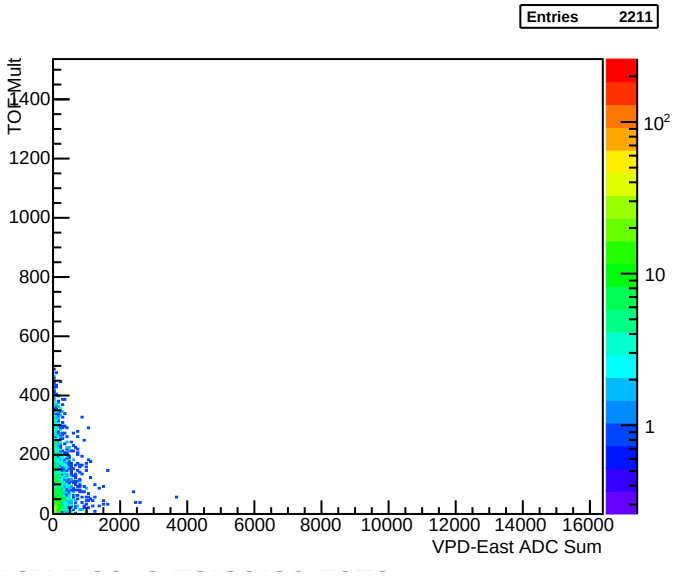

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 0
East
West

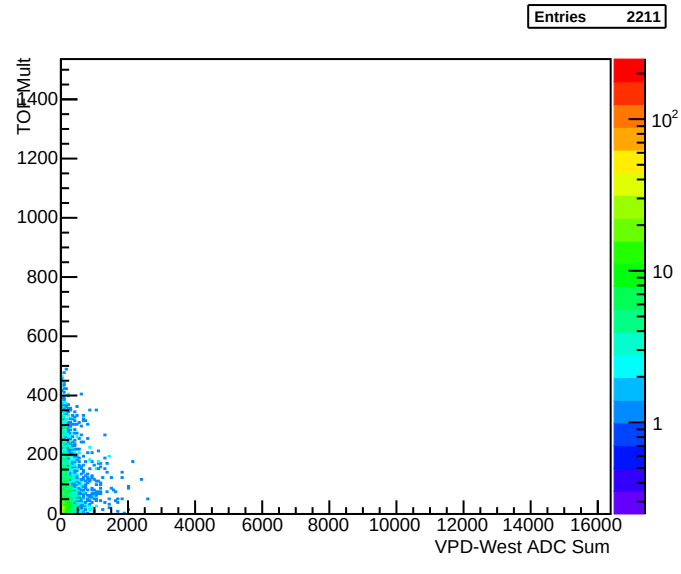

Entries 2211
TOF-Mult
BBC-S-East ADC Sum

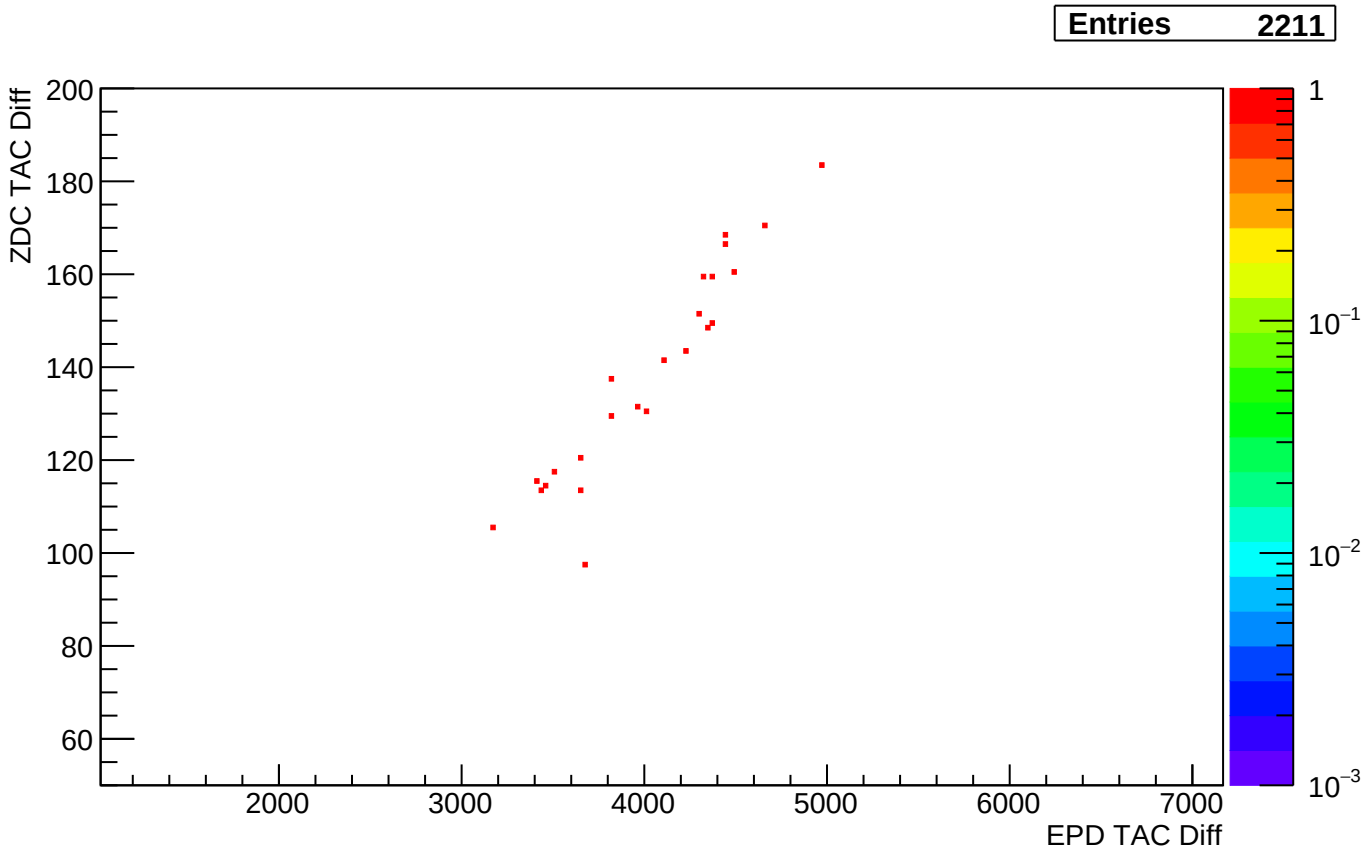

Entries 2211
TOF-Mult
BBC-S-West ADC Sum

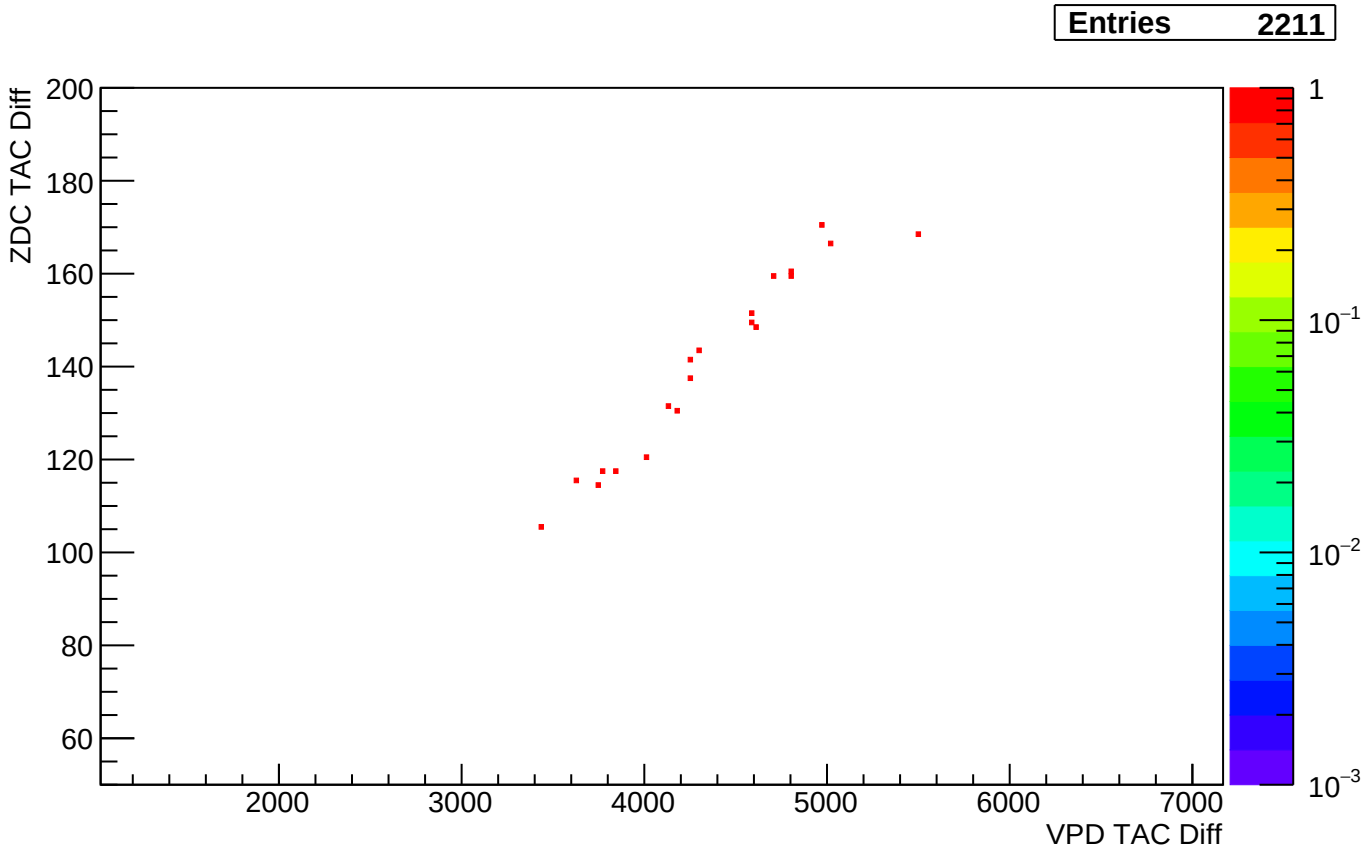

Entries 2211
TOF-Mult
EPD-East Hit Cnt

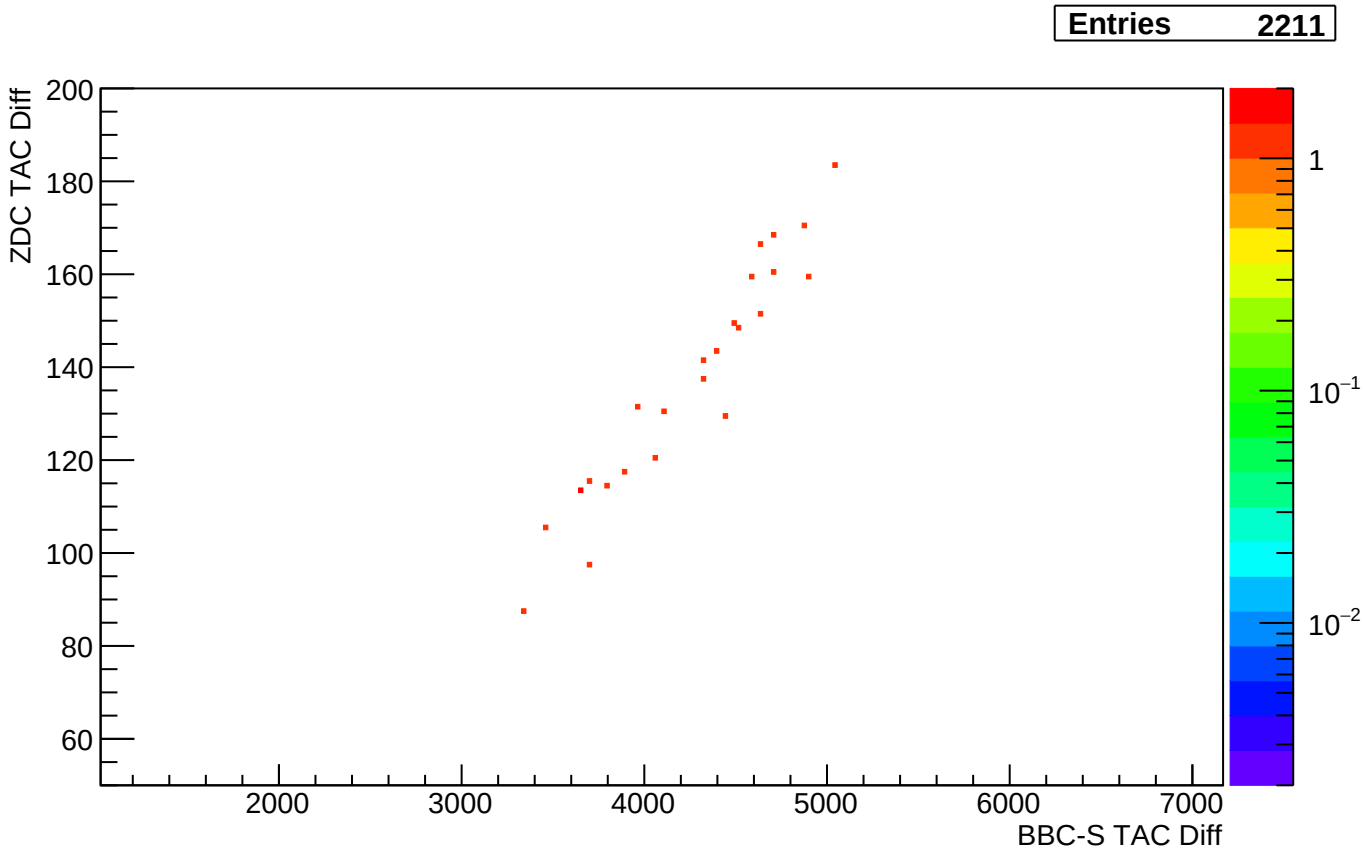

Entries 2211
TOF-Mult
EPD-West Hit Cnt

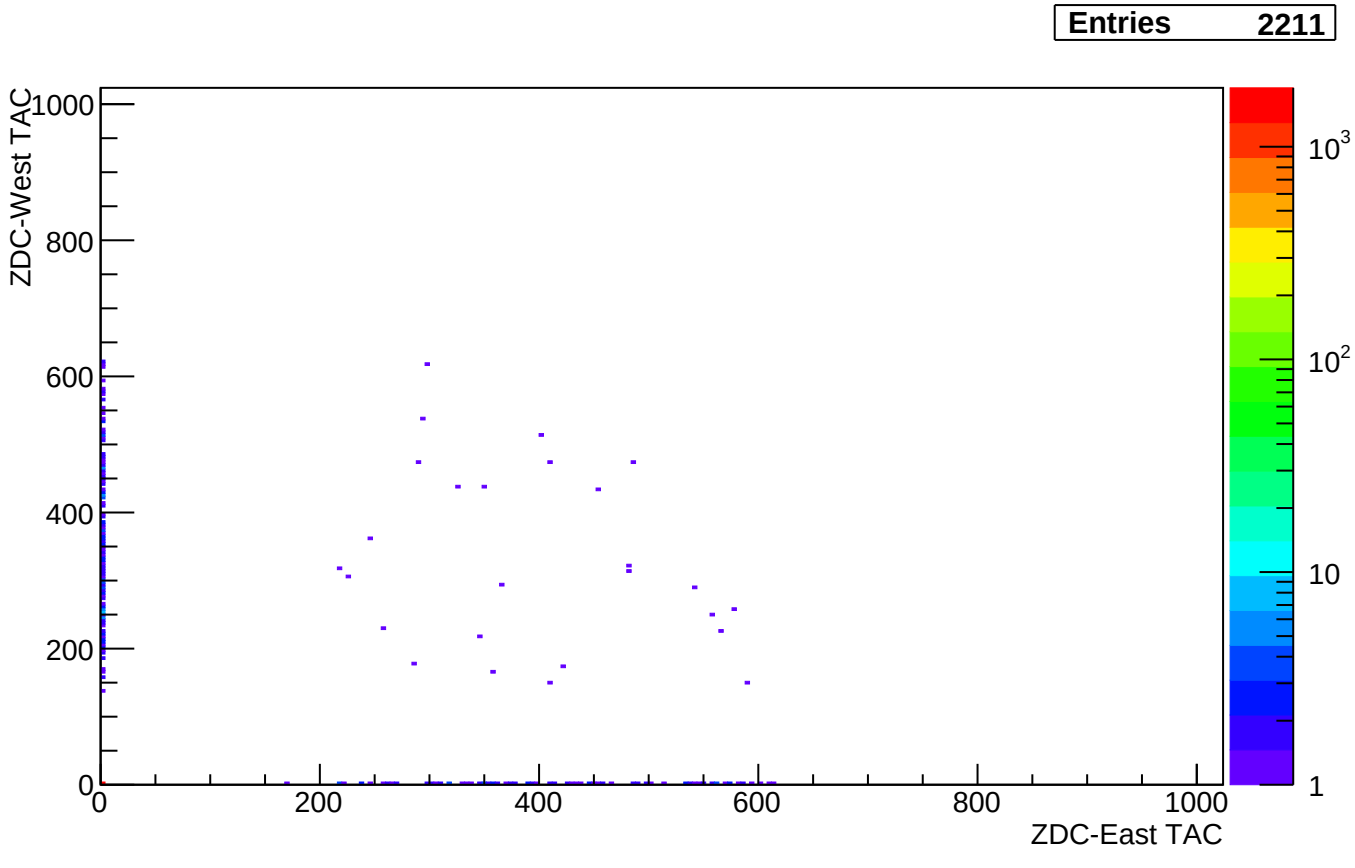

Entries 2211
TOF-Mult
VPD-East ADC Sum

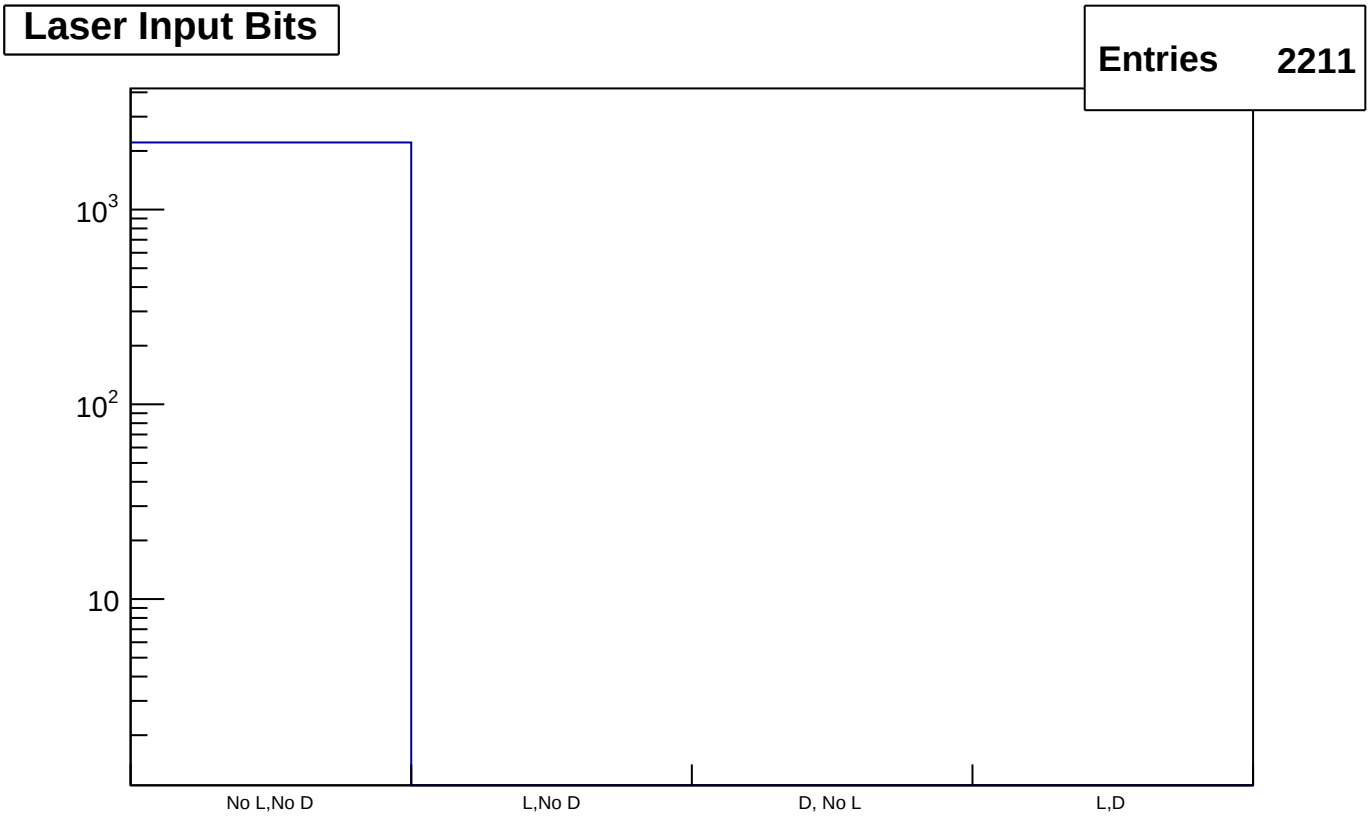

Entries 2211
TOF-Mult
VPD-West ADC Sum

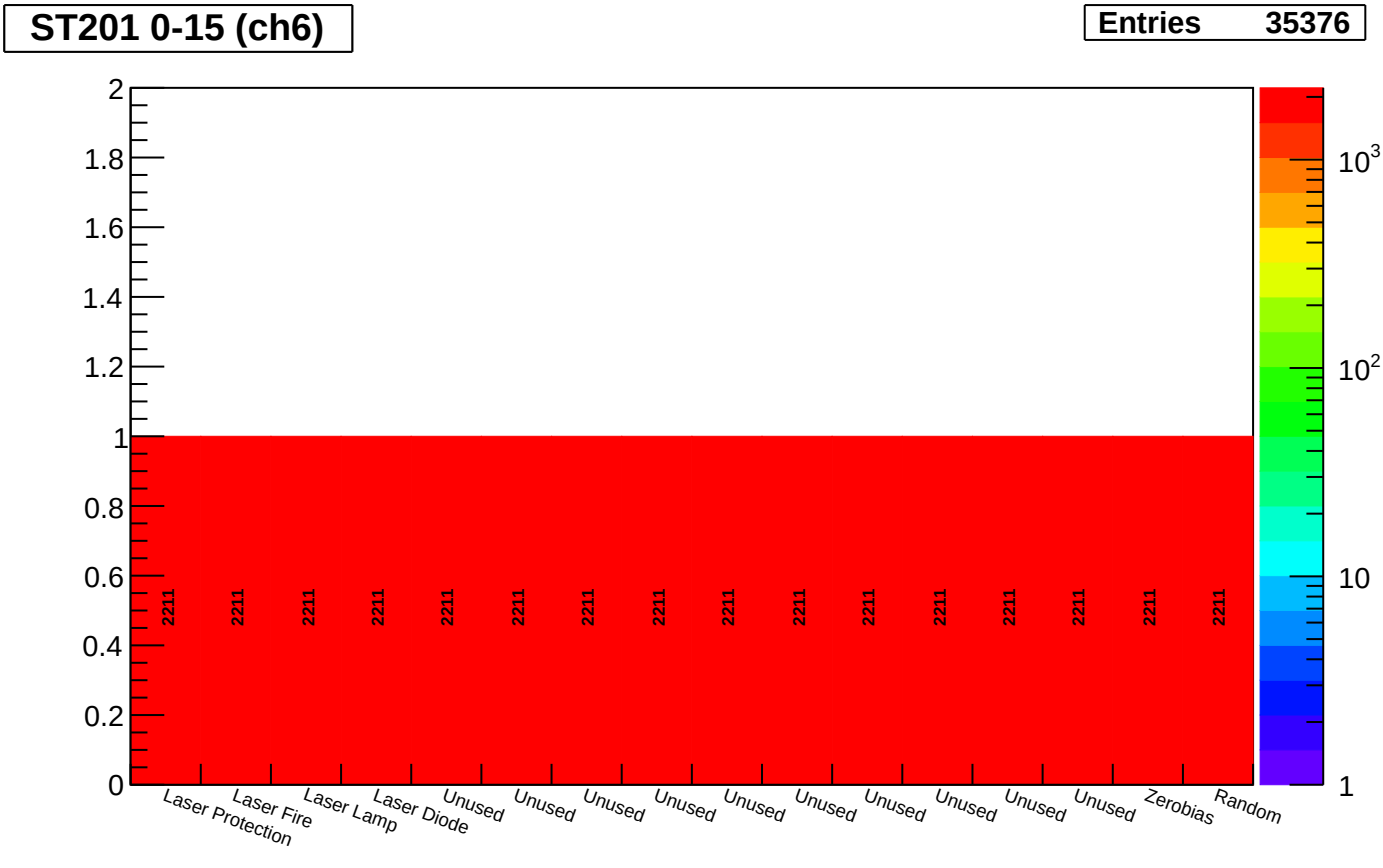

Entries 2211
ZDC TAC Diff
200
180
160
140
120
100
80
60
2000
3000
4000
5000
6000
7000
EPD TAC Diff
1
10^{-1}
10^{-2}
10^{-3}

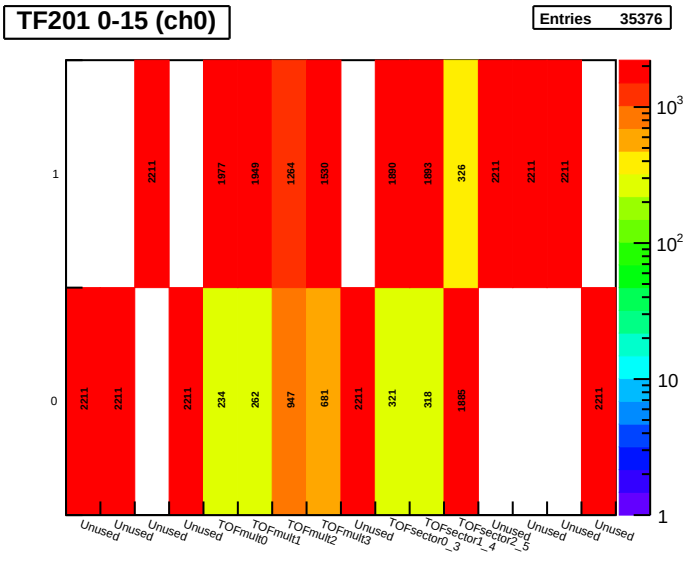

Entries 2211
ZDC TAC Diff
200
180
160
140
120
100
80
60
2000
3000
4000
5000
6000
7000
VPD TAC Diff
1
10^{-1}
10^{-2}
10^{-3}

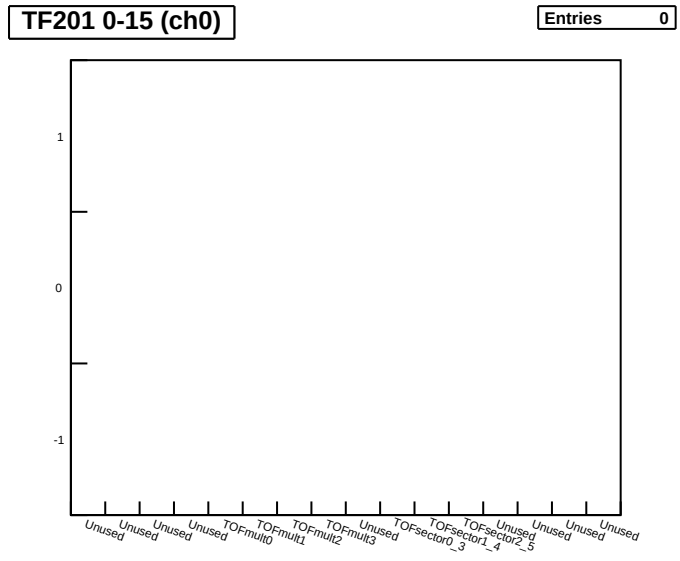

Entries 2211
ZDC TAC Diff
BBC-S TAC Diff
200
180
160
140
120
100
80
60
2000
3000
4000
5000
6000
7000
1
10^{-1}
10^{-2}

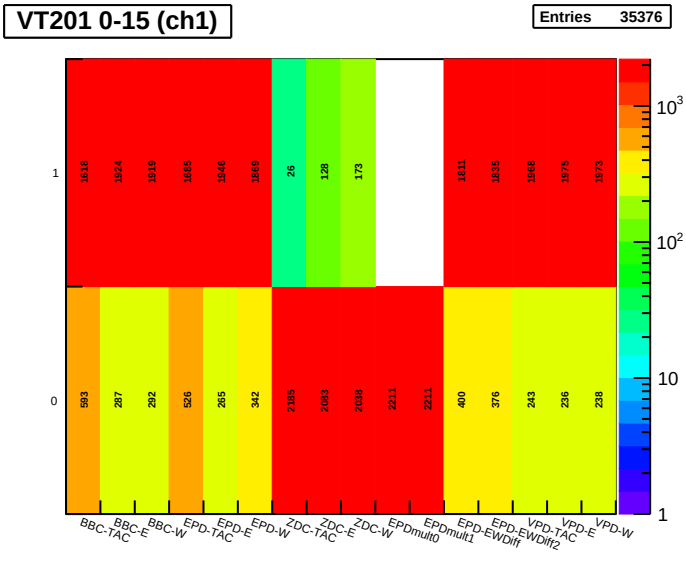

Entries 2211
ZDC-West TAC
ZDC-East TAC
1000
800
600
400
200
0
0
200
400
600
800
1000
10^3
10^2
10
1

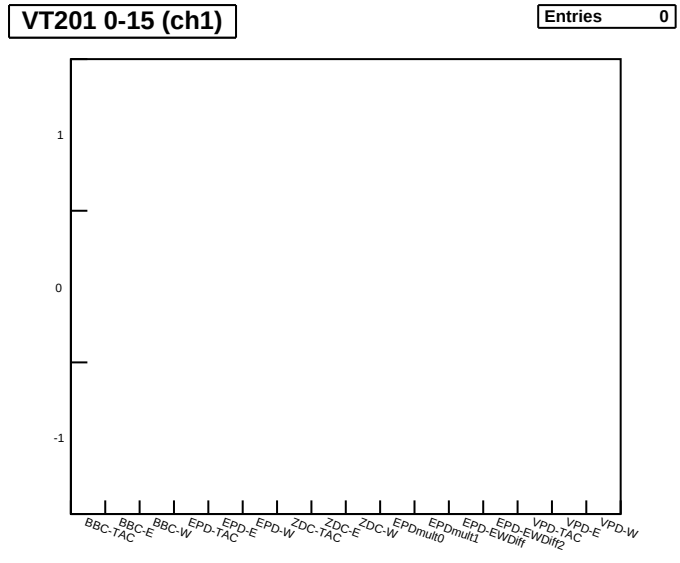

Laser Input Bits
Entries 2211
10^3
10^2
10
No L,No D
L,No D
D, No L
L,D

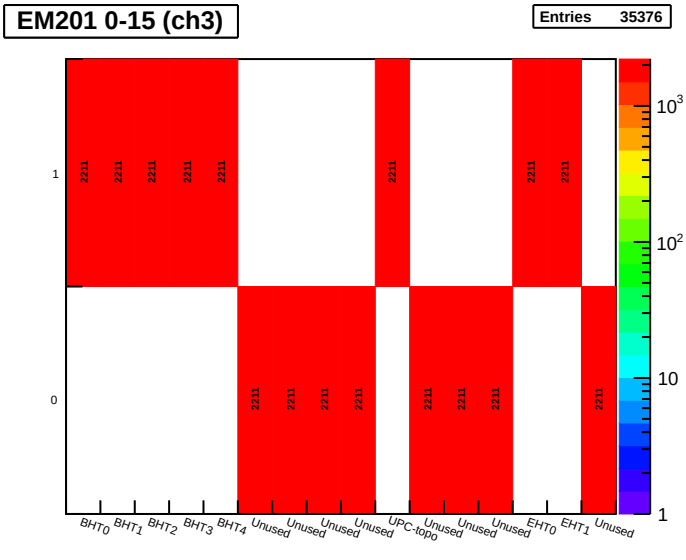

ST201 0-15 (ch6)
Entries 35376
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2211
Laser Protection
Laser Fire
Laser Lamp
Laser Diode
Unused
Zerobias
Random
10^3
10^2
10
1

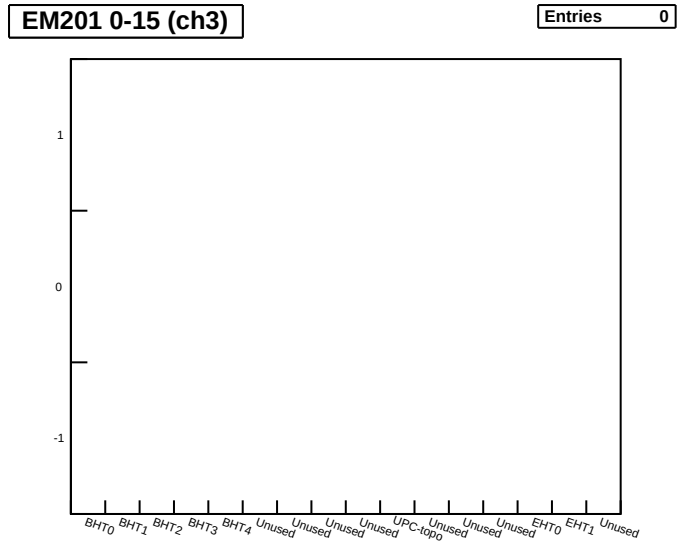

TF201 0-15 (ch0)
Entries 35376
1
0
2211 1977 1949 1264 1530 1890 1893 326 2211 2211 2211
2211 2211 2211 234 262 947 681 2211 321 318 1885 2211
Unused Unused Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 Unused TOFsector0_3 TOFsector1_4 TOFsector2_5 Unused Unused Unused
10^3
10^2
10
1


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 35376
1
0
1618 1924 1919 1685 1946 1869 26 128 173 1811 1835 1968 1975 1973
593 287 292 526 265 342 2185 2083 2038 2211 2211 400 376 243 236 238
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 35376
1
0
2211 2211 2211 2211 2211 2211 2211 2211
2211 2211 2211 2211 2211 2211 2211 2211
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