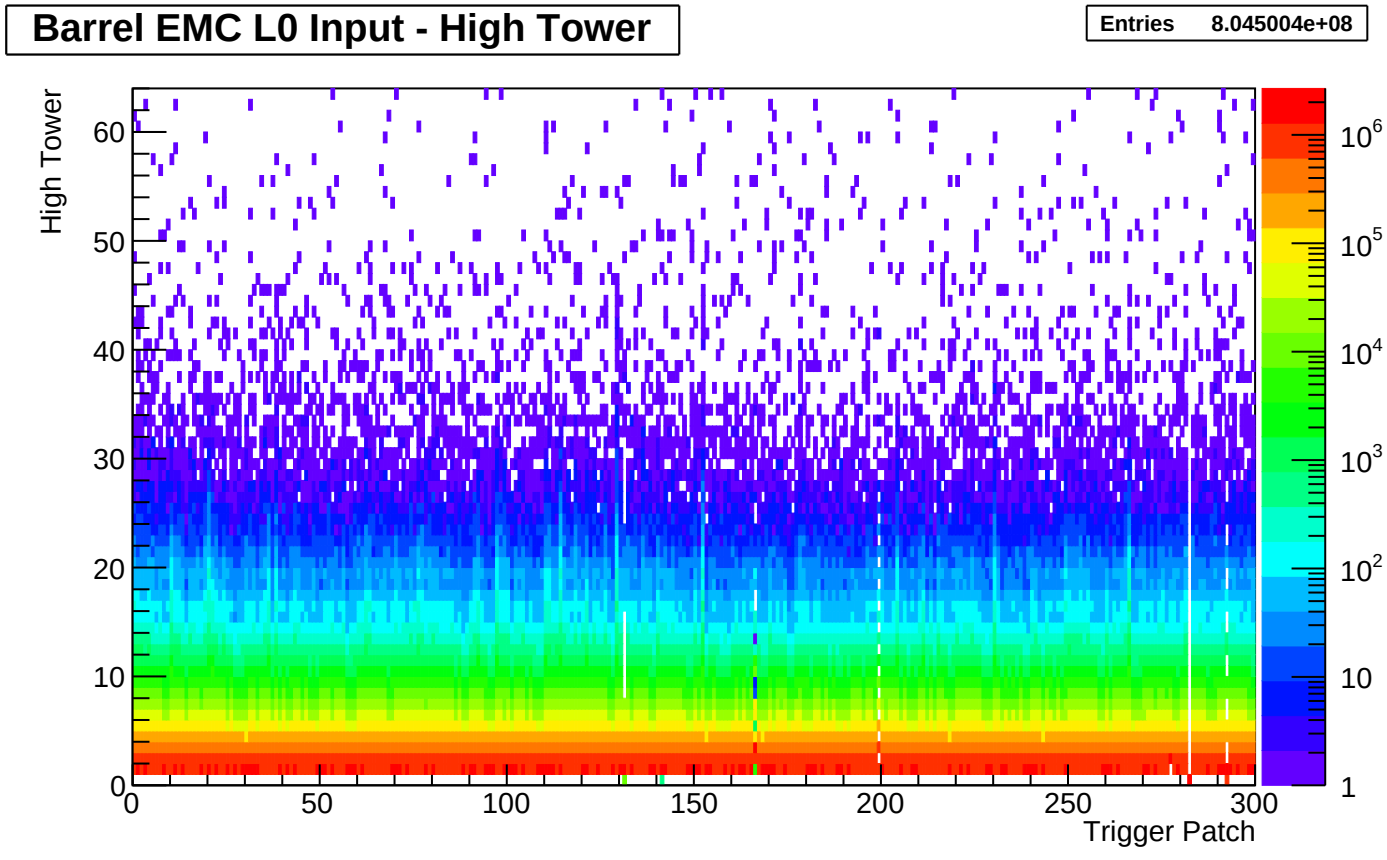
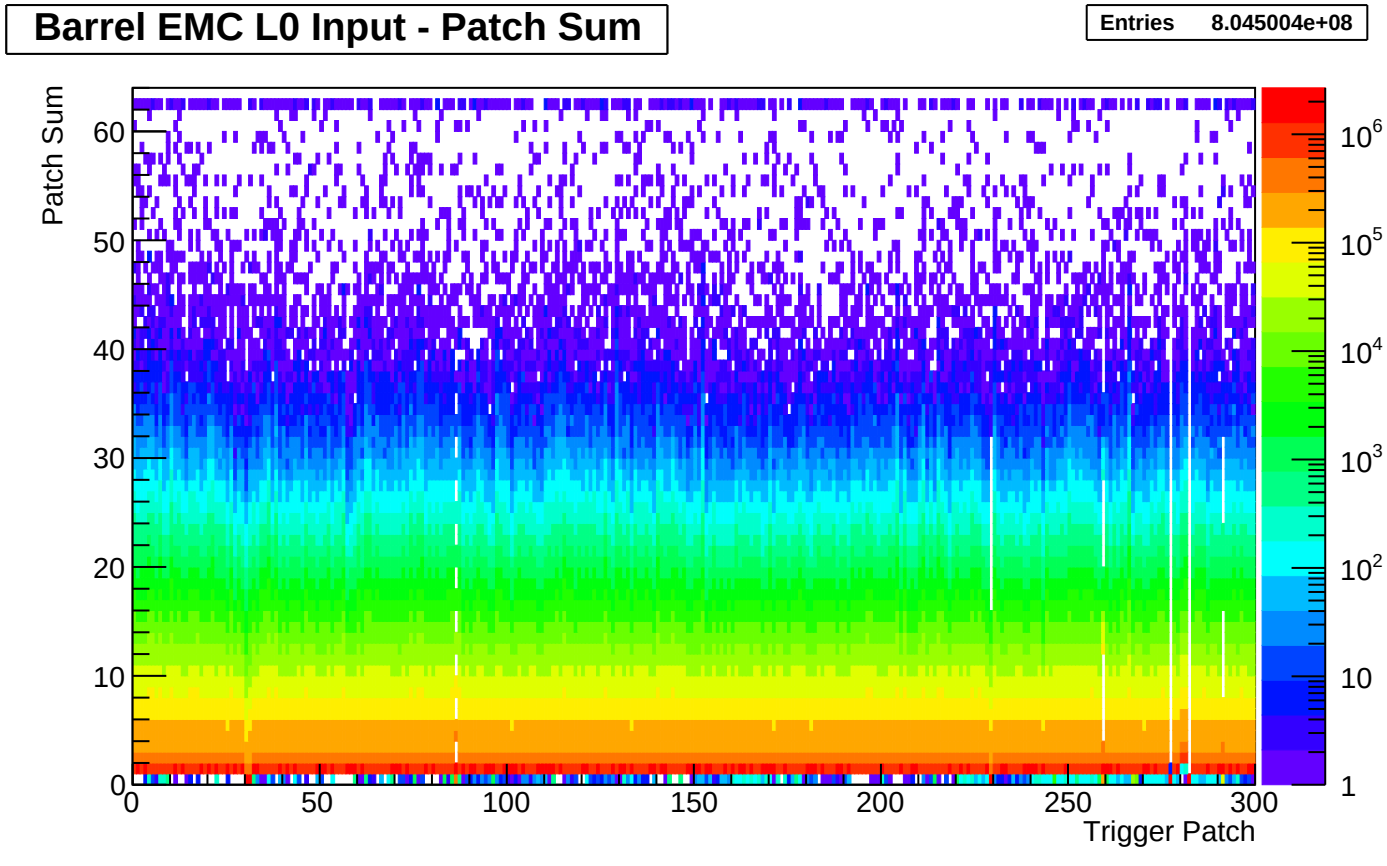
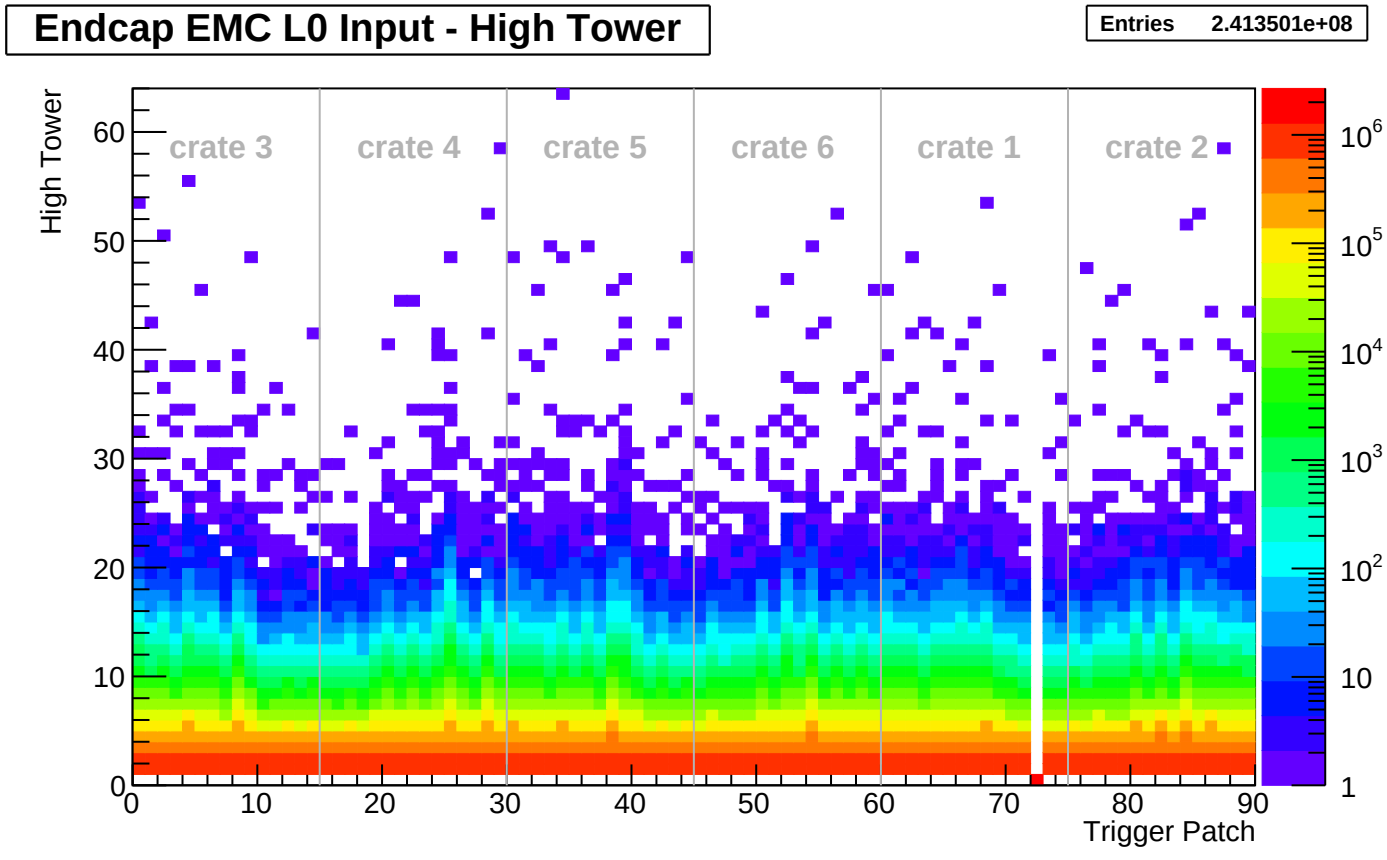
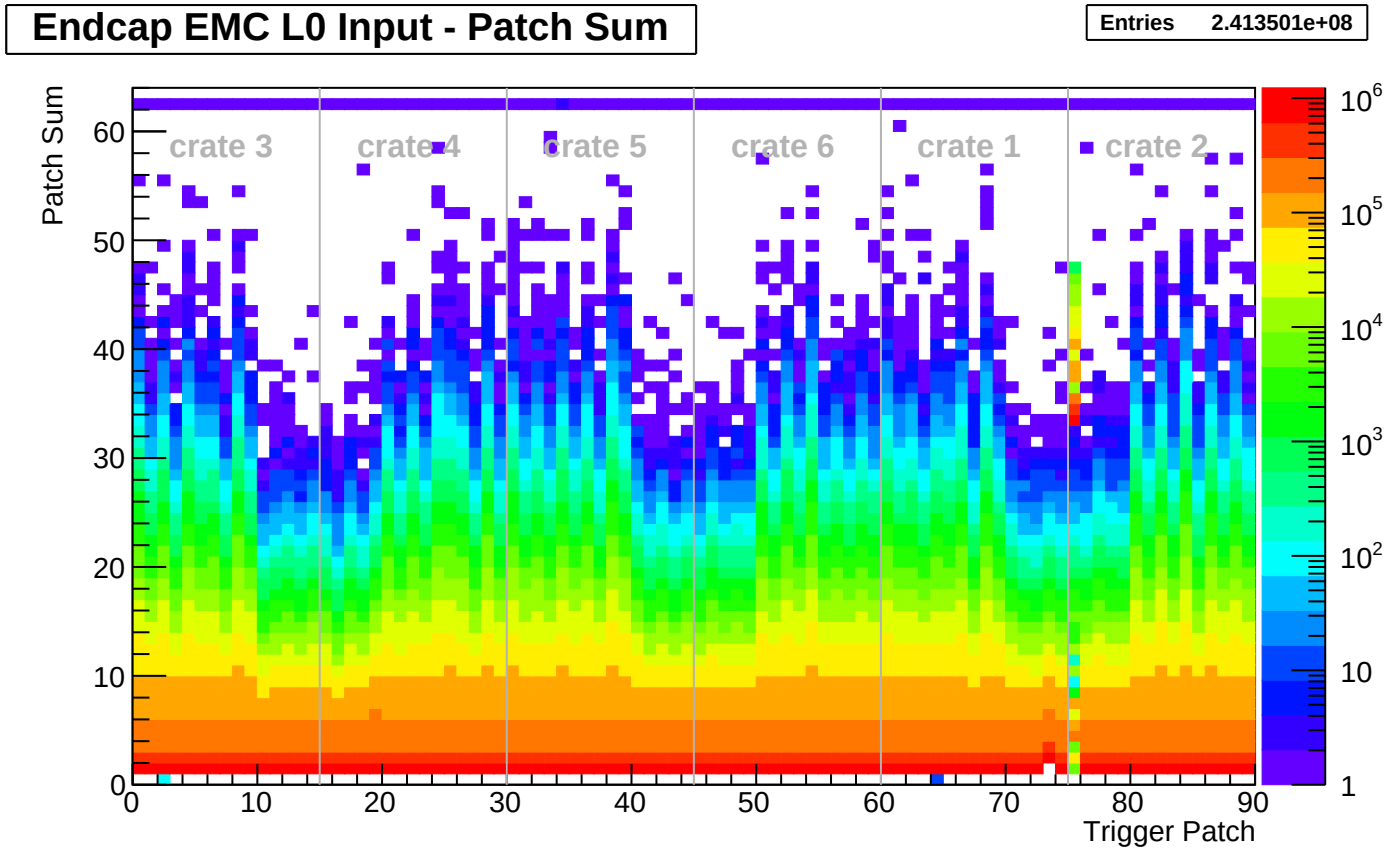
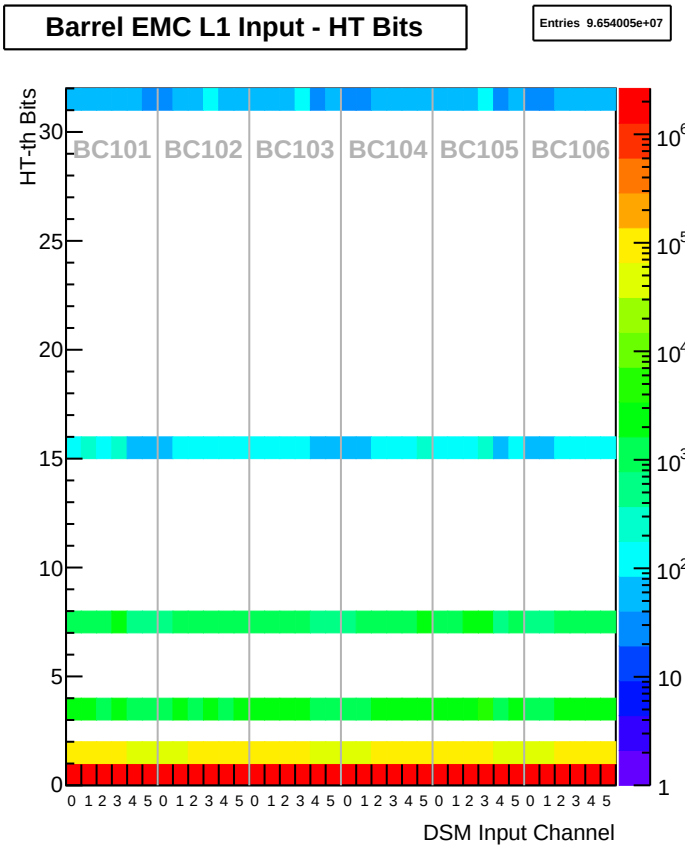
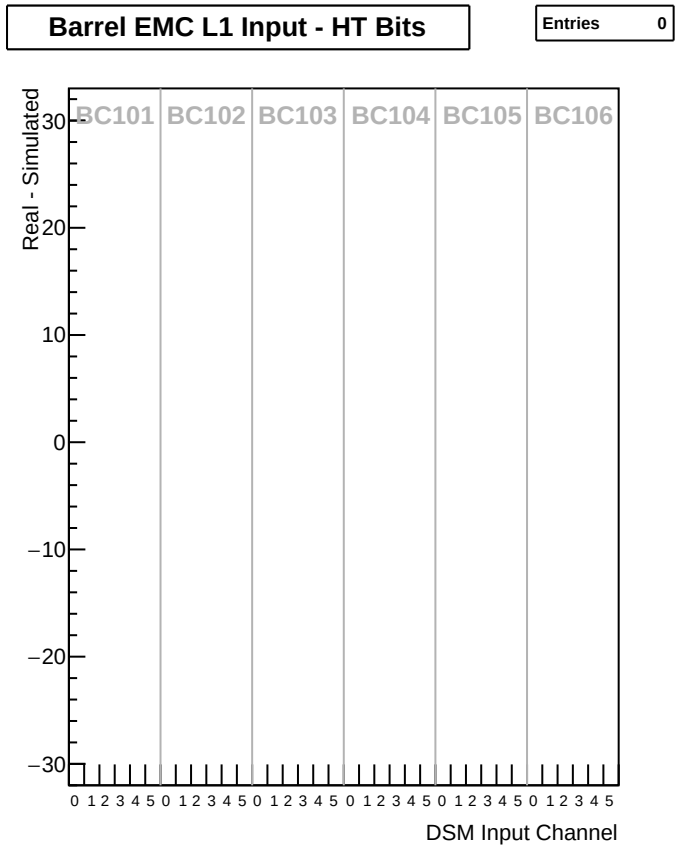

Barrel EMC L0 Input - High Tower
Entries 8.045004e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

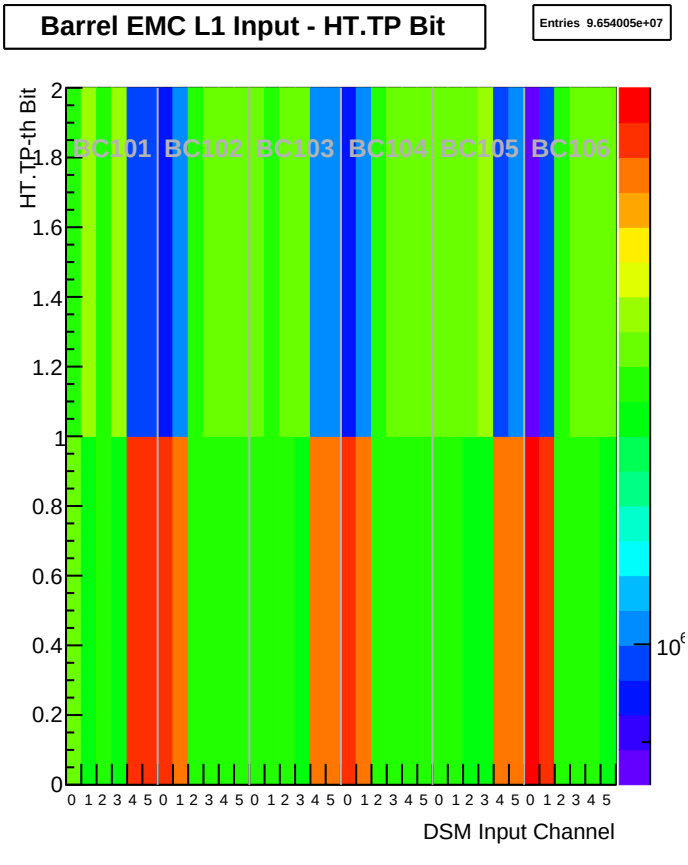

Barrel EMC L0 Input - Patch Sum
Entries 8.045004e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

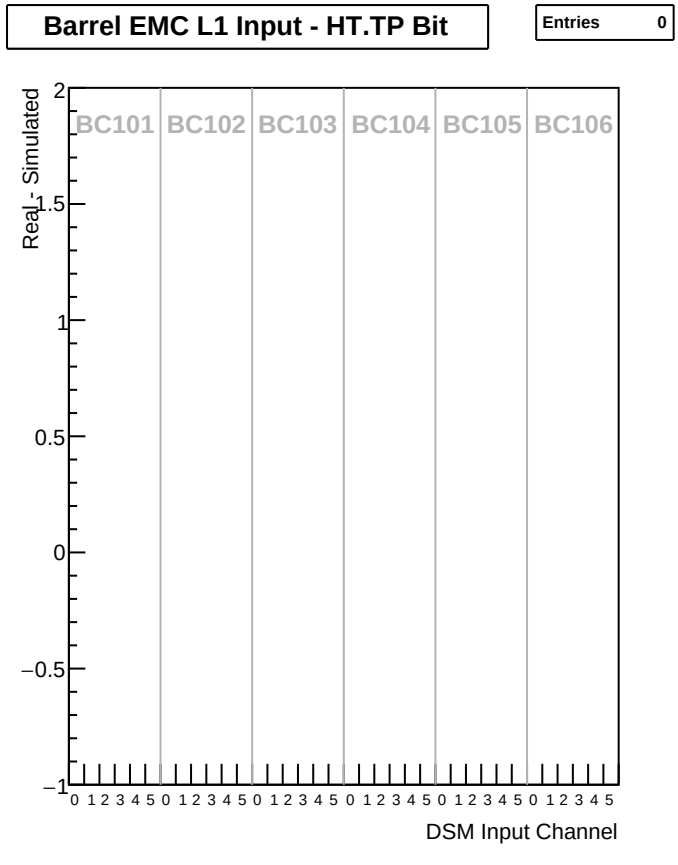

Endcap EMC L0 Input - High Tower
Entries 2.413501e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

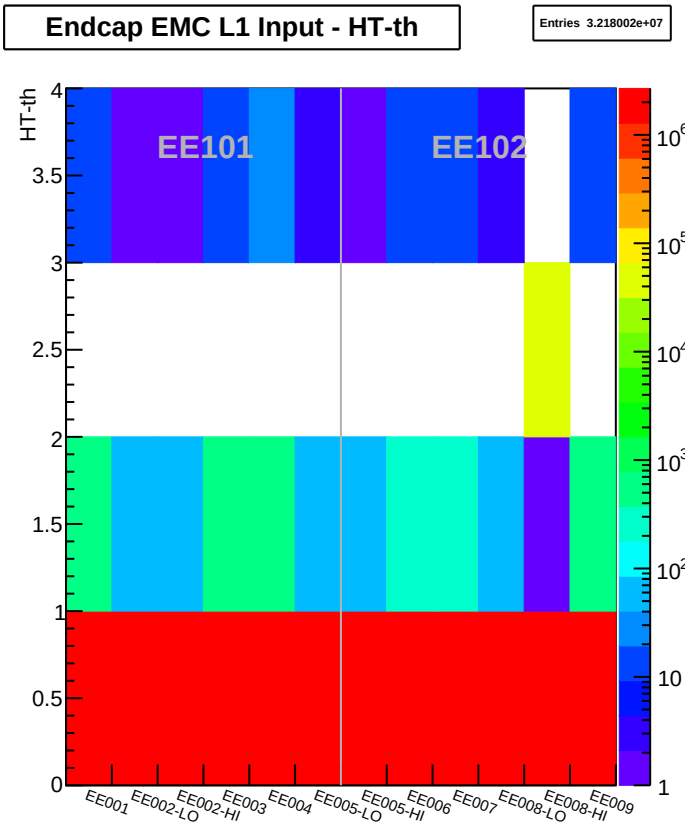

Endcap EMC L0 Input - Patch Sum
Entries 2.413501e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

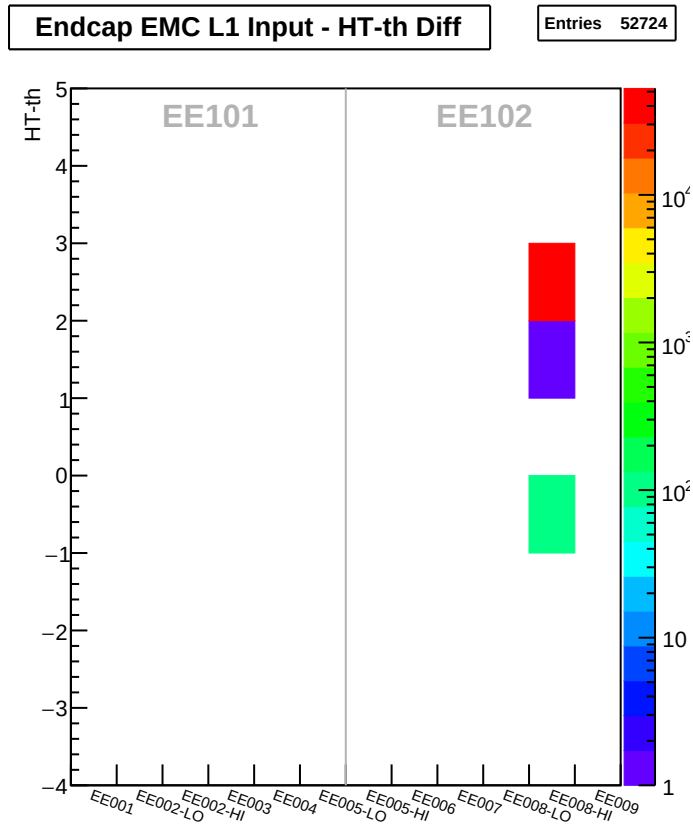

Barrel EMC L1 Input - HT Bits
Entries 9.654005e+07
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

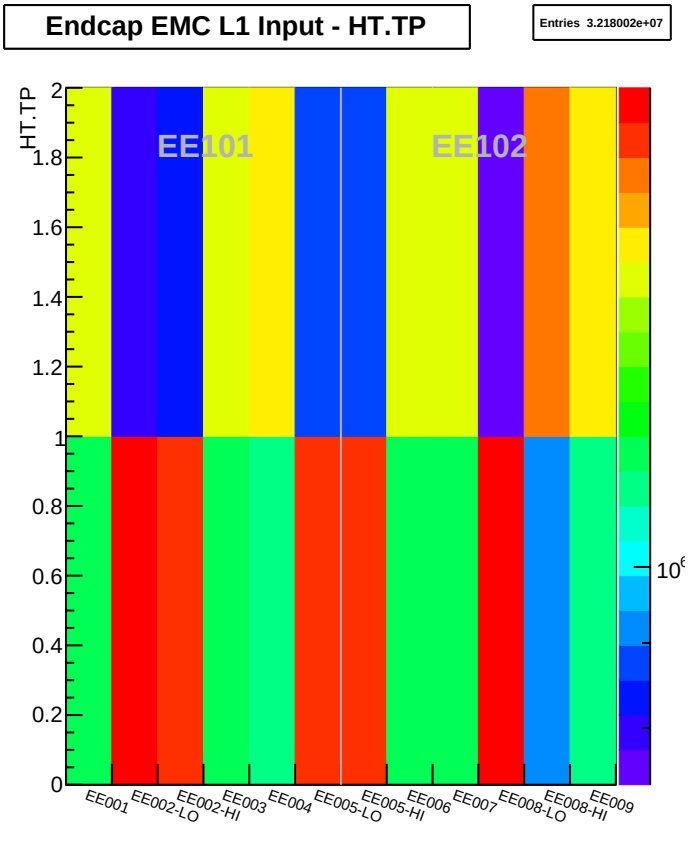

Barrel EMC L1 Input - HT Bits
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

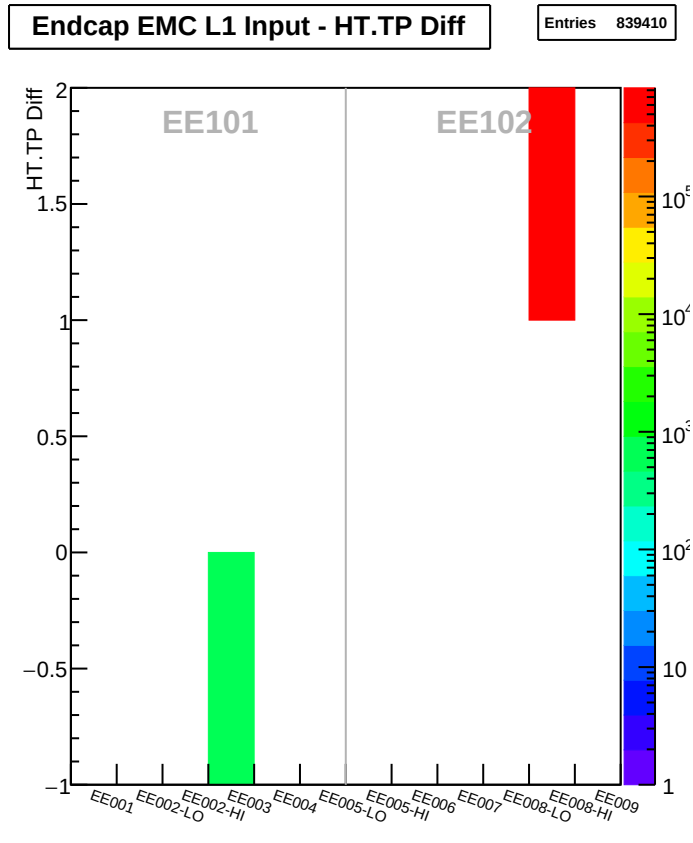

Barrel EMC L1 Input - HT.TP Bit
Entries 9.654005e+07
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

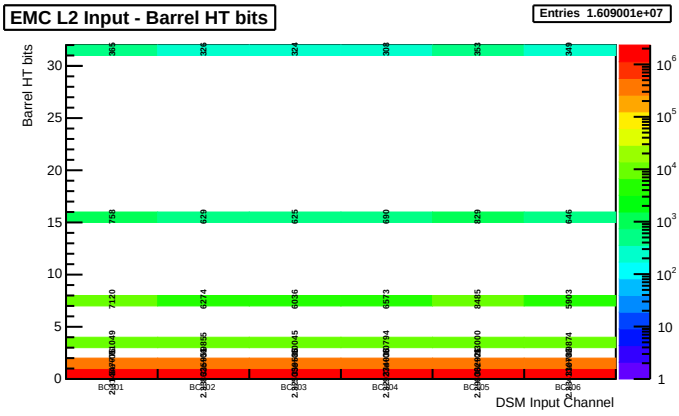

Barrel EMC L1 Input - HT.TP Bit
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

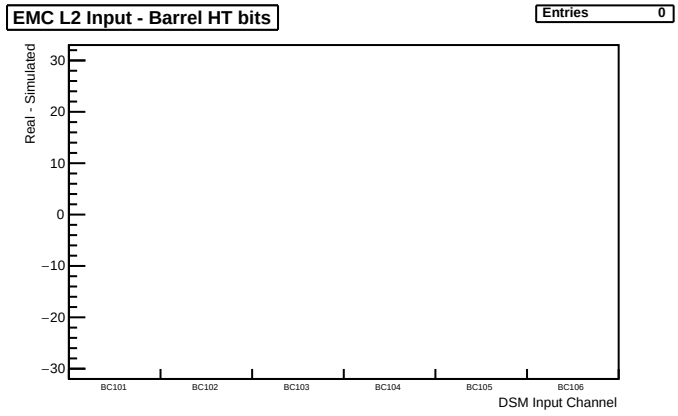

Endcap EMC L1 Input - HT-th
Entries 3.218002e+07
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

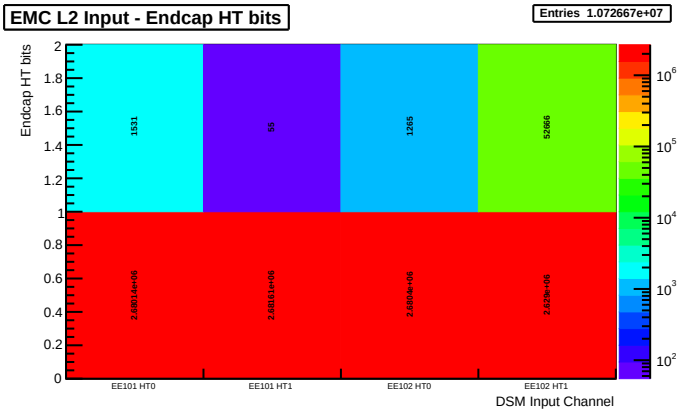

Endcap EMC L1 Input - HT-th Diff
Entries 52724
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

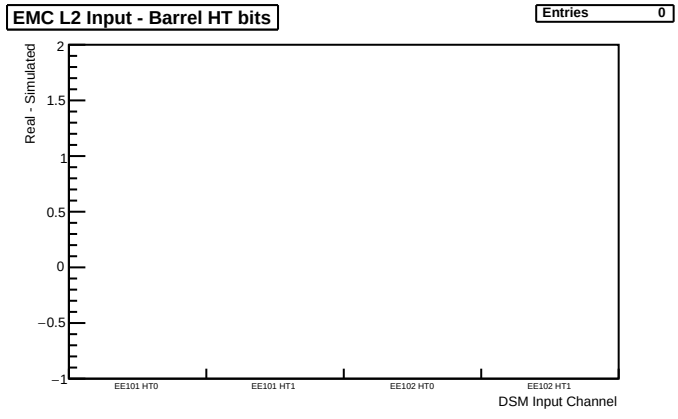

Endcap EMC L1 Input - HT.TP
Entries 3.218002e+07
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

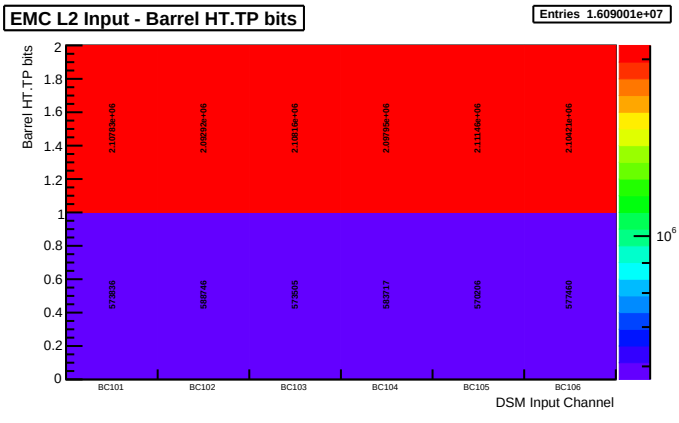

Endcap EMC L1 Input - HT.TP Diff
Entries 839410
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

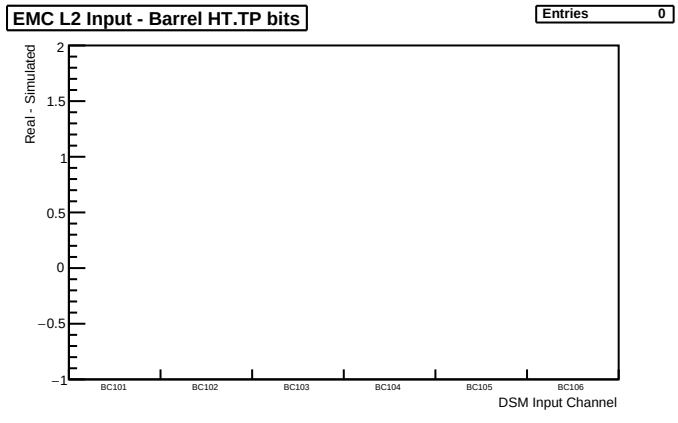

EMC L2 Input - Barrel HT bits
Entries 1.609001e+07
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

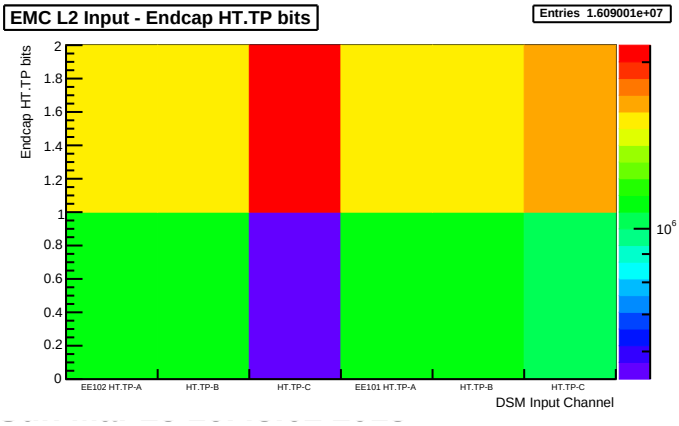

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

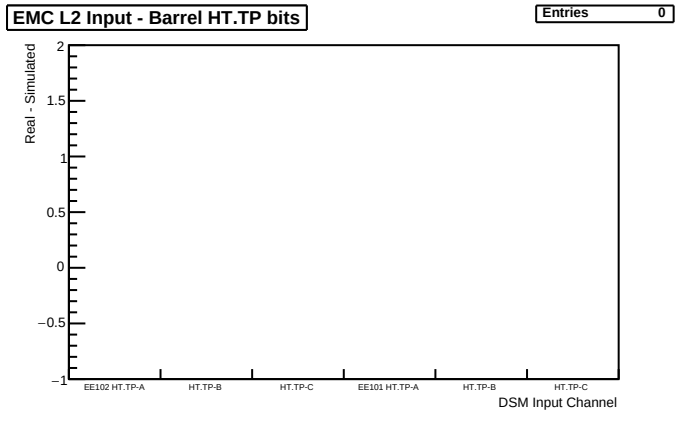

EMC L2 Input - Endcap HT bits
Entries 1.072667e+07
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

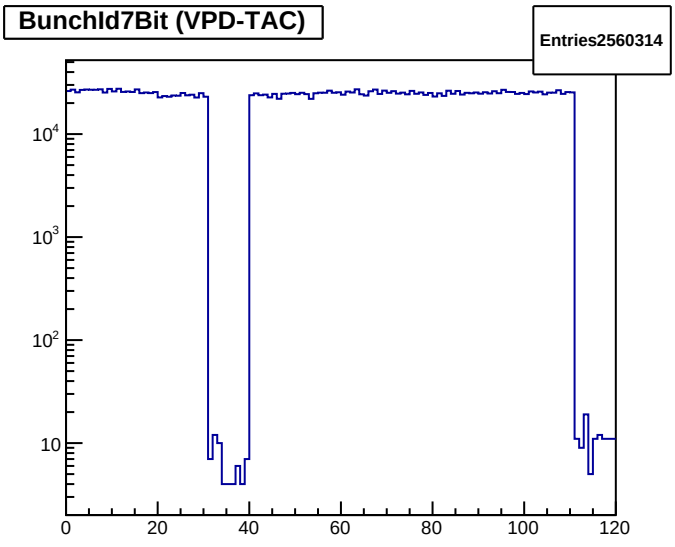

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

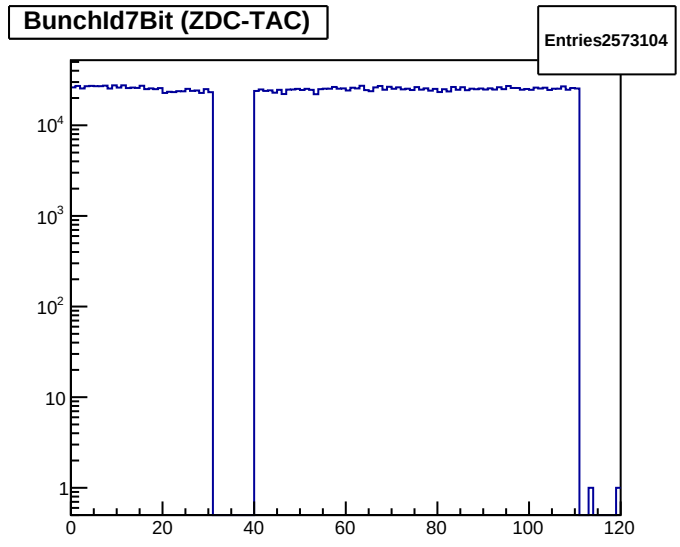

EMC L2 Input - Barrel HT.TP bits
Entries 1.609001e+07
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

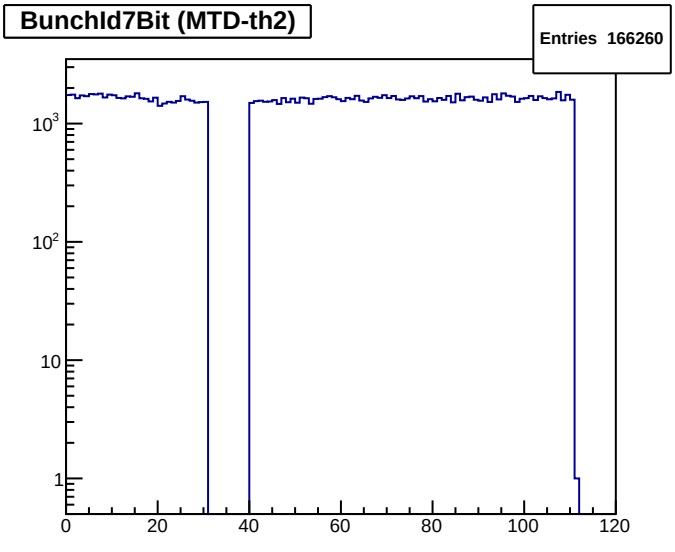

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

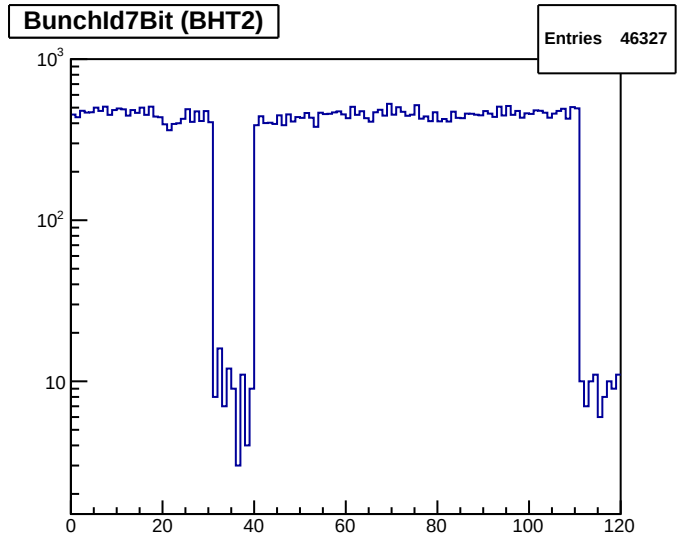

EMC L2 Input - Endcap HT.TP bits
Entries 1.609001e+07
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

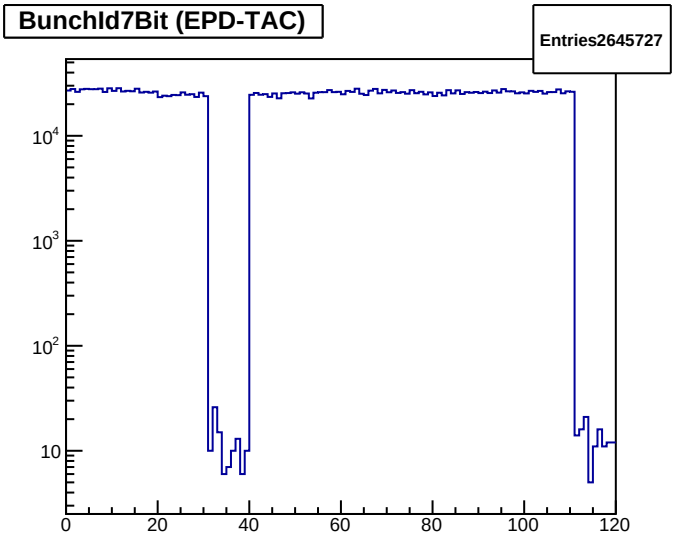

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

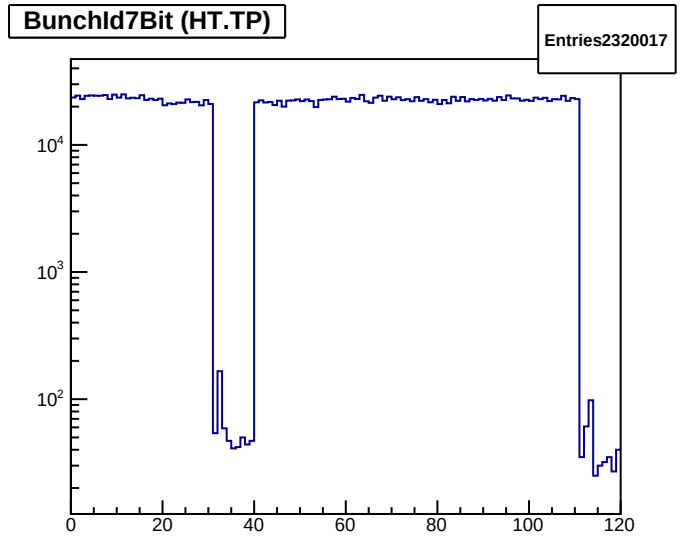

BunchId7Bit (VPD-TAC)
Entries2560314
10^4
10^3
10^2
10
0
20
40
60
80
100
120

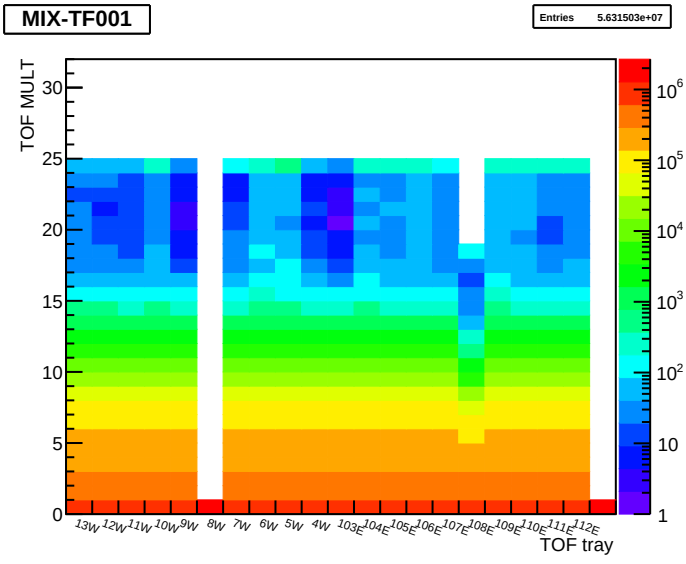

BunchId7Bit (ZDC-TAC)
Entries2573104
10^4
10^3
10^2
10
1
0
20
40
60
80
100
120

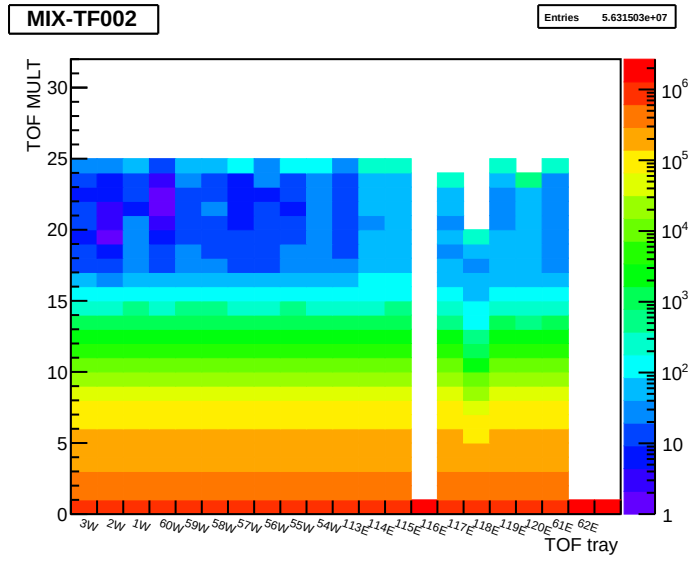

BunchId7Bit (MTD-th2)
Entries 166260
10^3
10^2
10
1
0
20
40
60
80
100
120

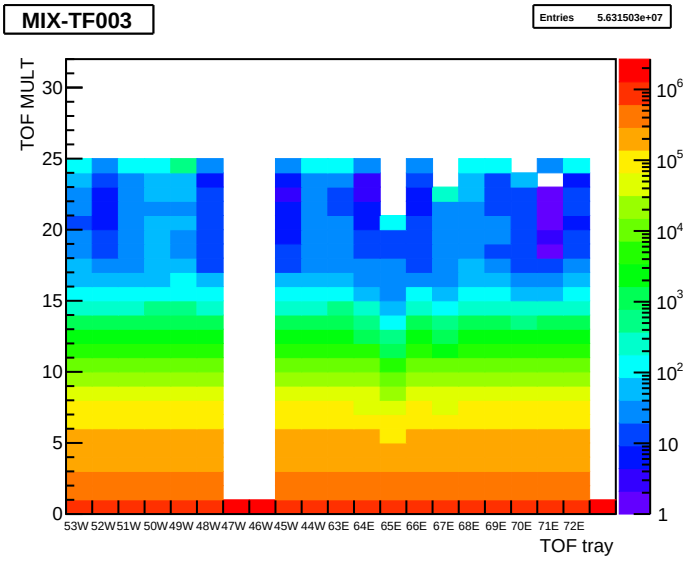

BunchId7Bit (BHT2)
Entries 46327
10^3
10^2
10
0
20
40
60
80
100
120

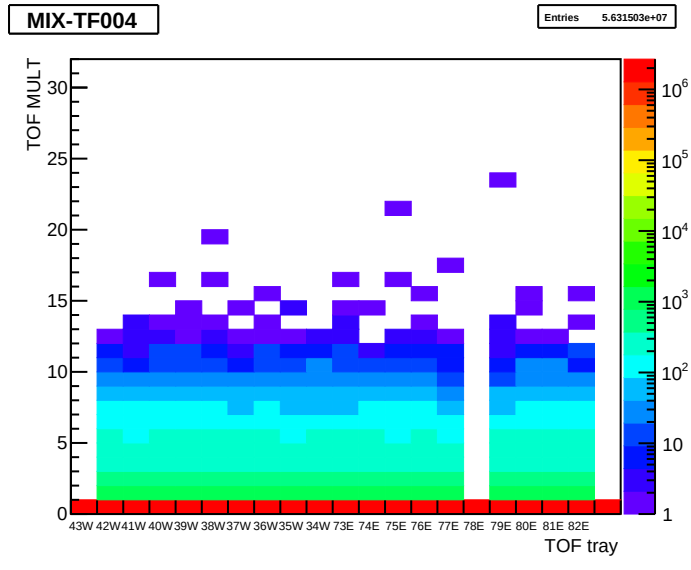

BunchId7Bit (EPD-TAC)
Entries2645727
10^4
10^3
10^2
10
0
20
40
60
80
100
120

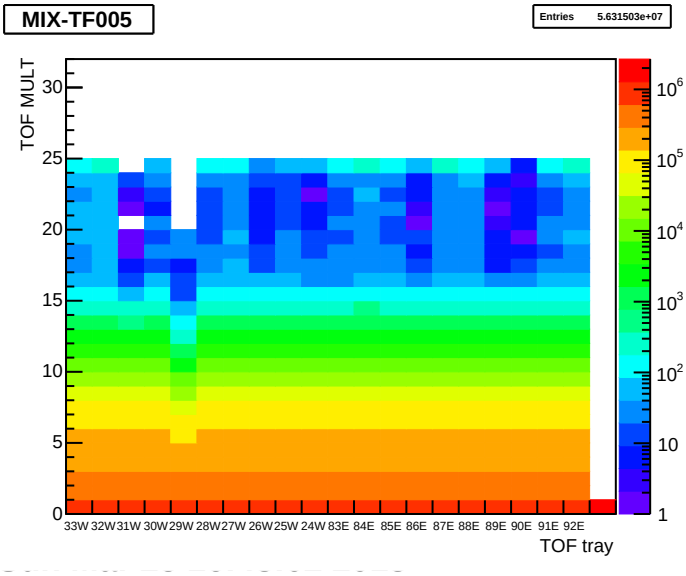

BunchId7Bit (HT.TP)
Entries2320017
10^4
10^3
10^2
0
20
40
60
80
100
120

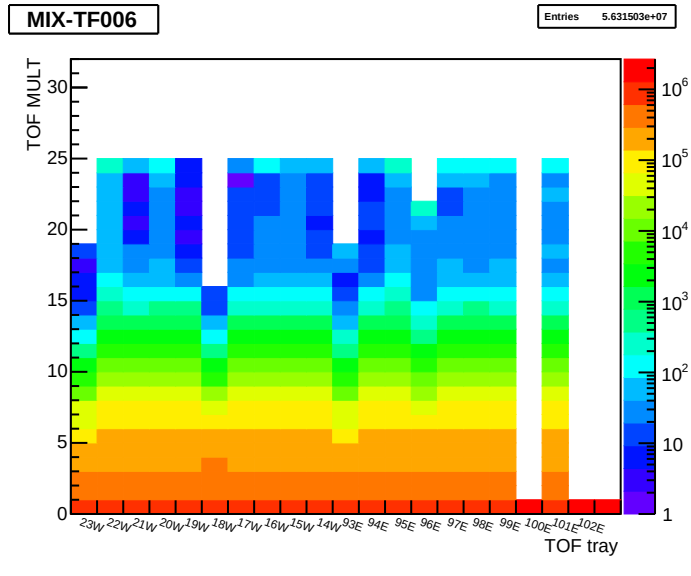

MIX-TF001
Entries 5.631503e+07
TOF MULT
TOF tray

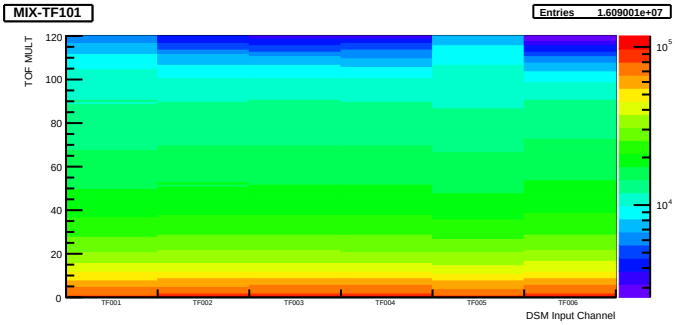

MIX-TF002
Entries 5.631503e+07
TOF MULT
TOF tray

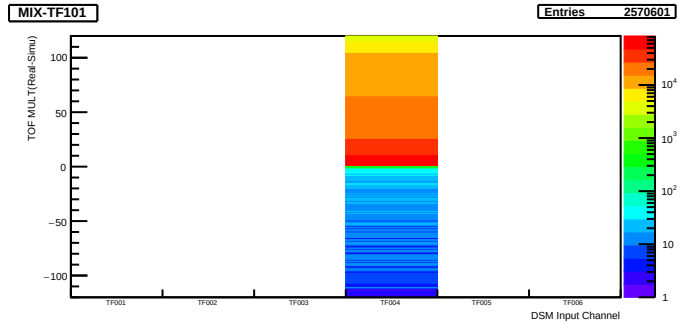

MIX-TF003
Entries 5.631503e+07
TOF MULT
TOF tray

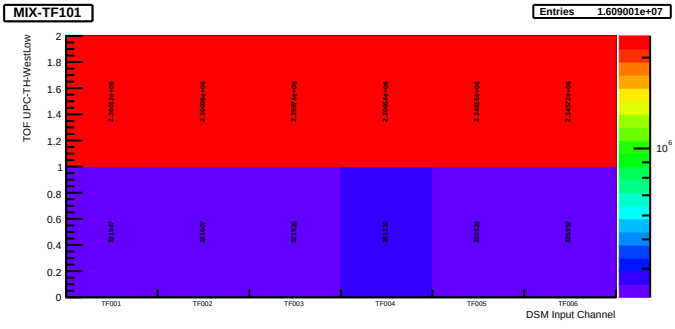

MIX-TF004
Entries 5.631503e+07
TOF MULT
TOF tray

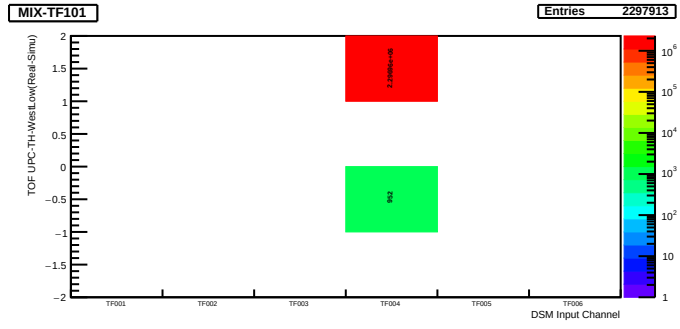

MIX-TF005
Entries 5.631503e+07
TOF MULT
TOF tray

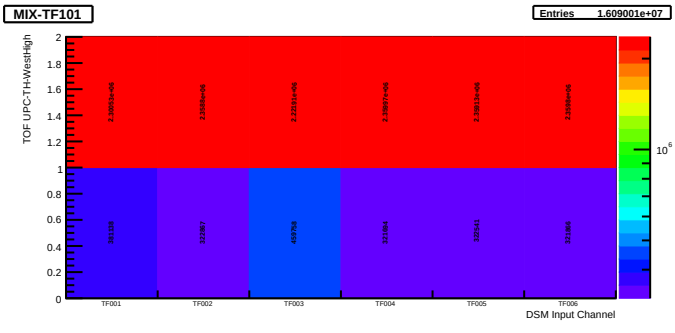

MIX-TF006
Entries 5.631503e+07
TOF MULT
TOF tray

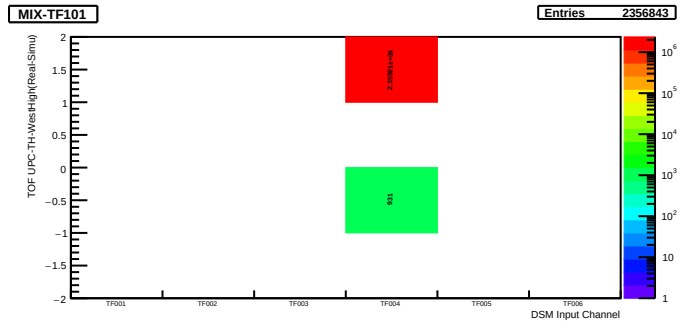

MIX-TF101
Entries 1.609001e+07
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

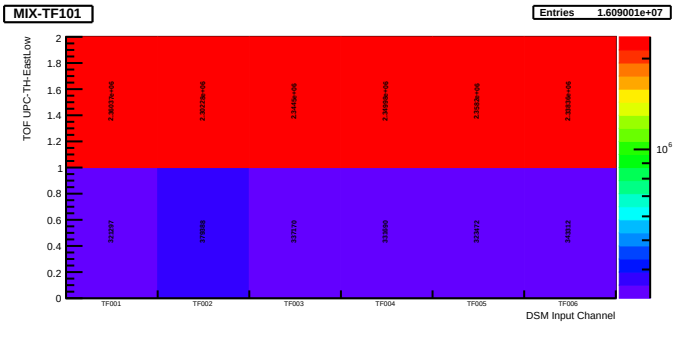

MIX-TF101
Entries 2570601
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

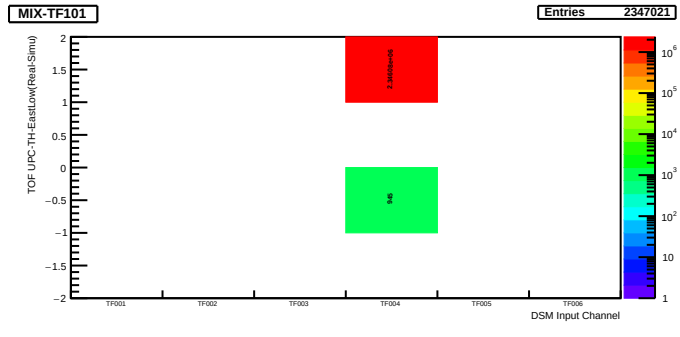

MIX-TF101
Entries 1.609001e+07
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

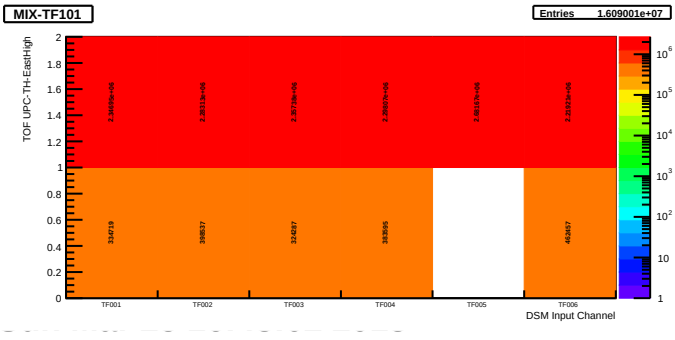

MIX-TF101
Entries 2297913
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

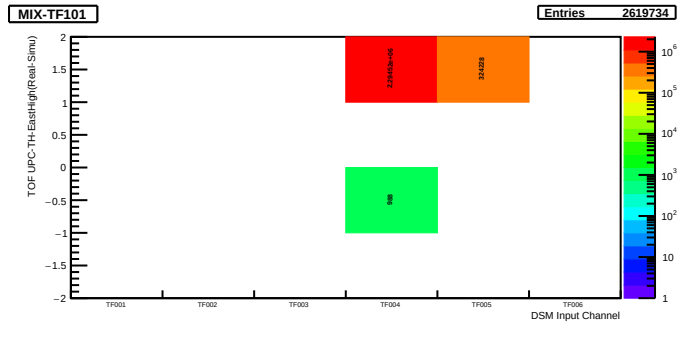

MIX-TF101
Entries 1.609001e+07
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

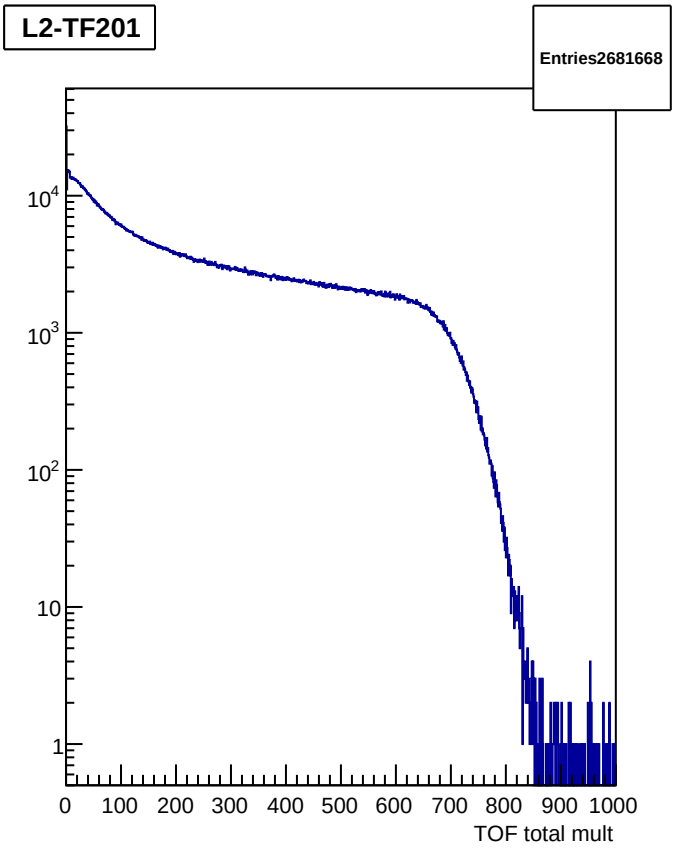

MIX-TF101
Entries 2356843
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

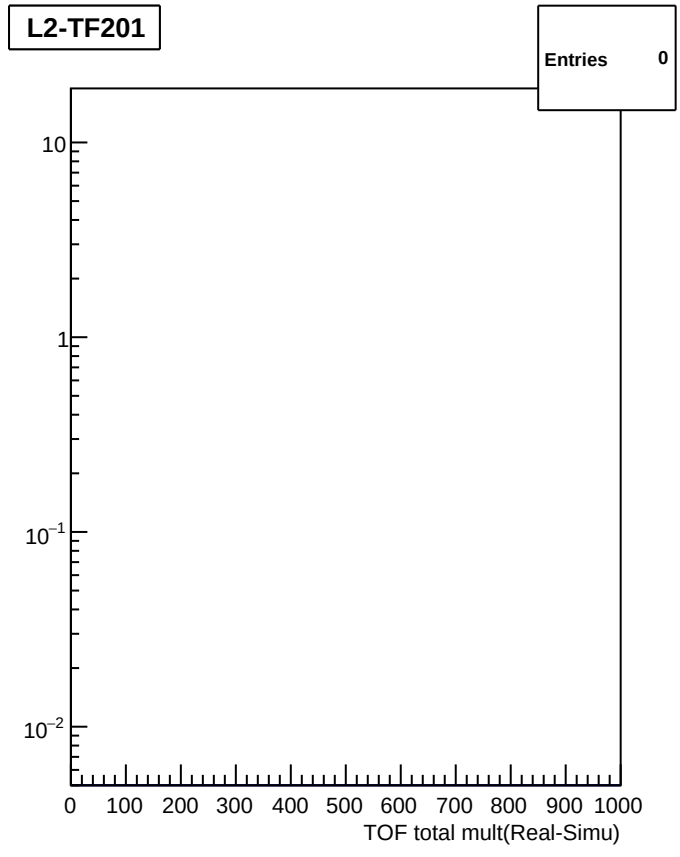

MIX-TF101
Entries 1.609001e+07
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

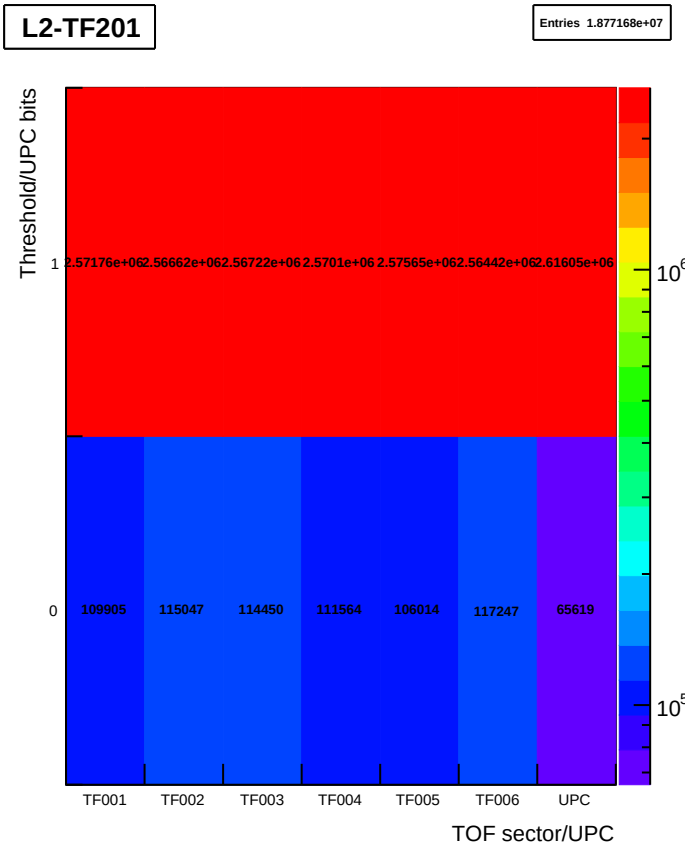

MIX-TF101
Entries 2347021
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

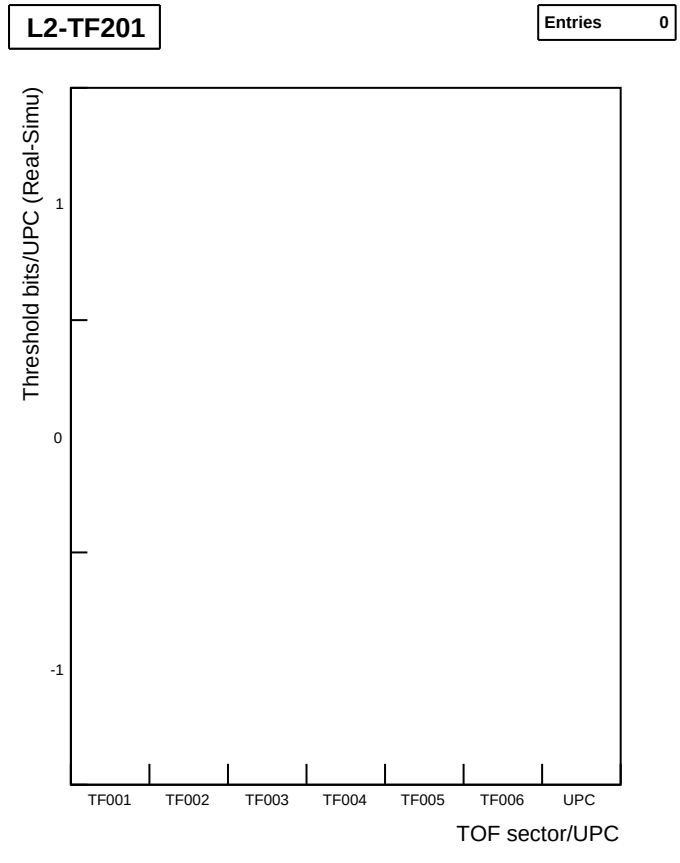

MIX-TF101
Entries 1.609001e+07
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

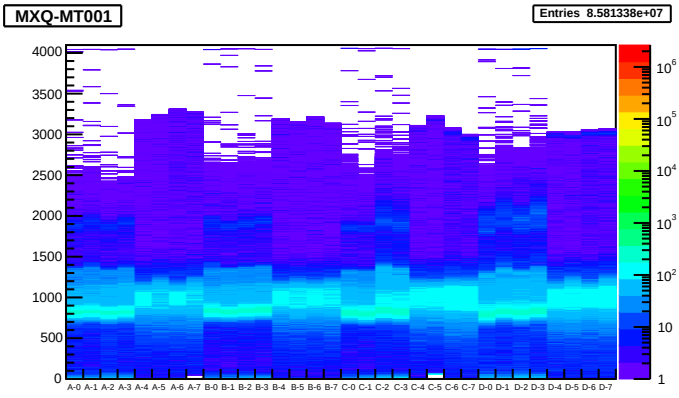

MIX-TF101
Entries 2619734
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

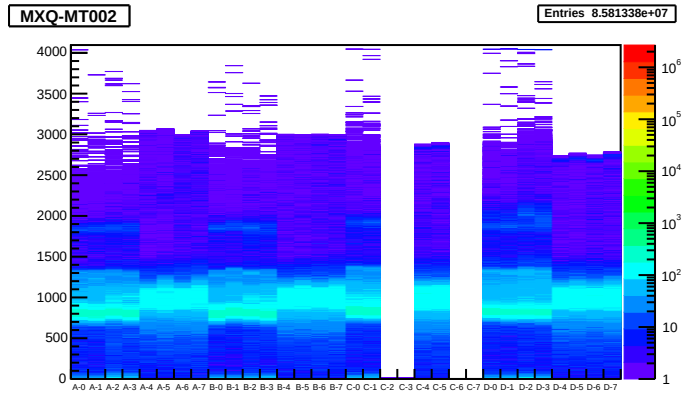

L2-TF201
Entries2681668
TOF total mult

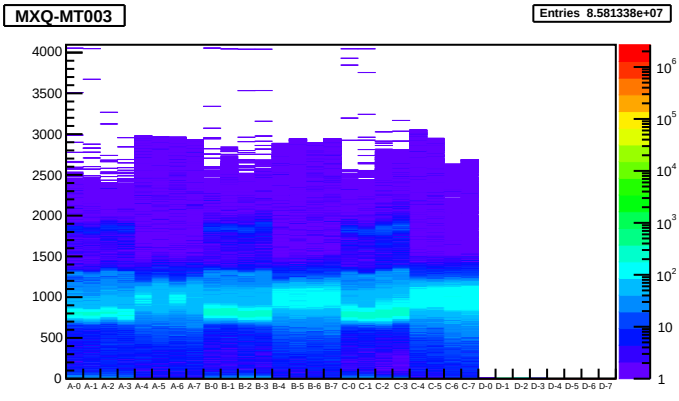

L2-TF201
Entries 0
TOF total mult(Real-Simu)

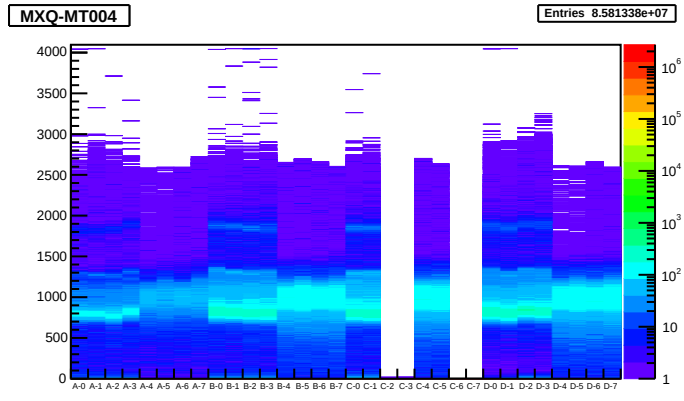

L2-TF201
Entries 1.877168e+07
Threshold/UPC bits
2.57176e+06 2.56662e+06 2.56722e+06 2.5701e+06 2.57565e+06 2.56442e+06 2.61605e+06
109905 115047 114450 111564 106014 117247 65619
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

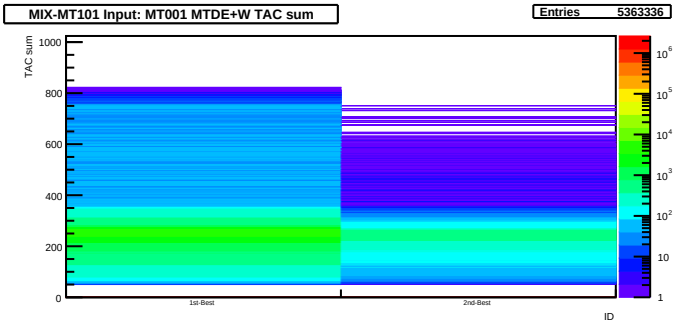

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

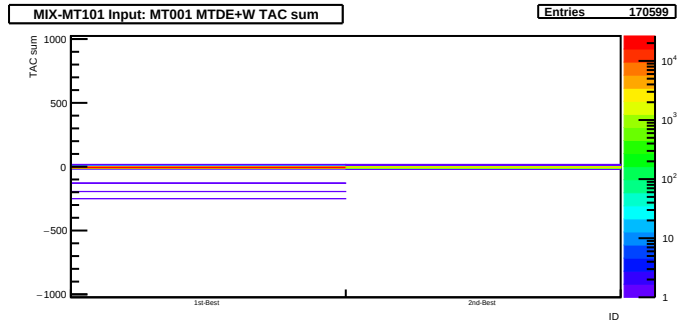

MXQ-MT001
Entries 8.581338e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^6
10^5
10^4
10^3
10^2
10
1

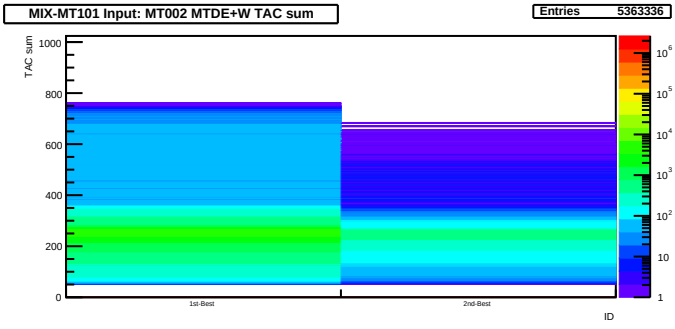

MXQ-MT002
Entries 8.581338e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^6
10^5
10^4
10^3
10^2
10
1

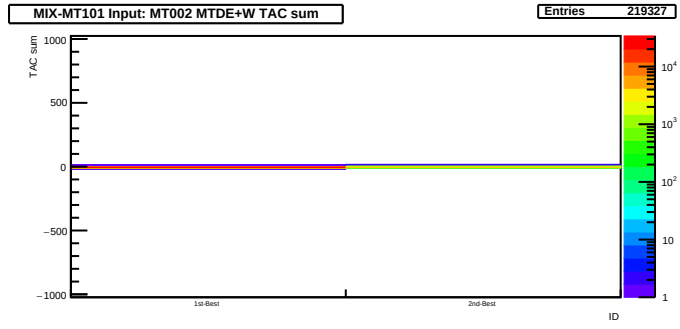

MXQ-MT003
Entries 8.581338e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^6
10^5
10^4
10^3
10^2
10
1

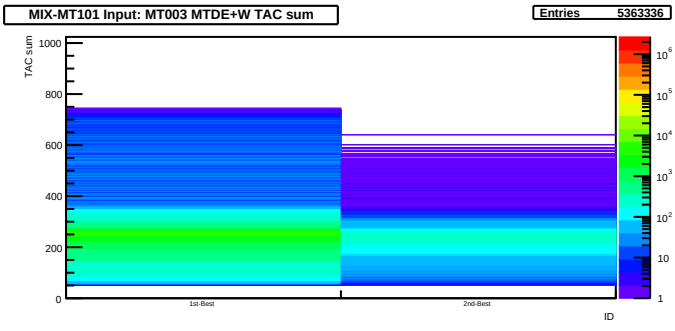

MXQ-MT004
Entries 8.581338e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^6
10^5
10^4
10^3
10^2
10
1

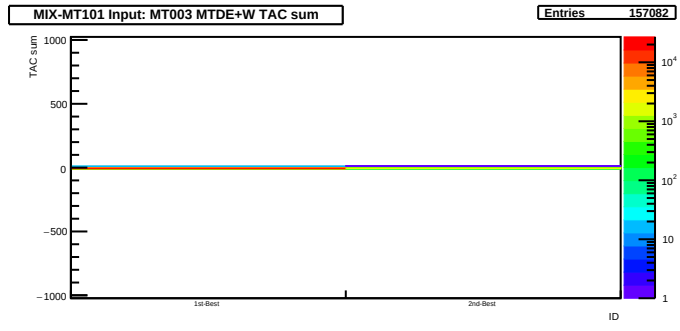

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 5363336
TAC sum
1st-Best
2nd-Best
ID

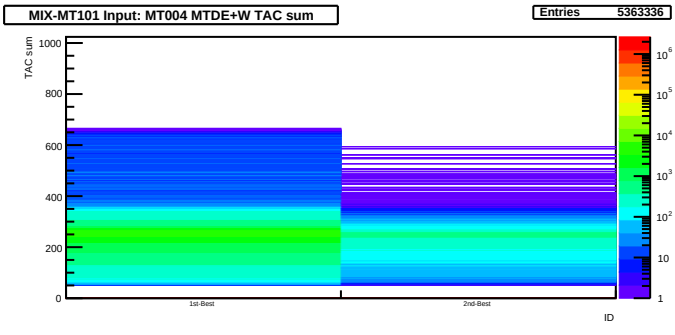

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 170599
TAC sum
1st-Best
2nd-Best
ID

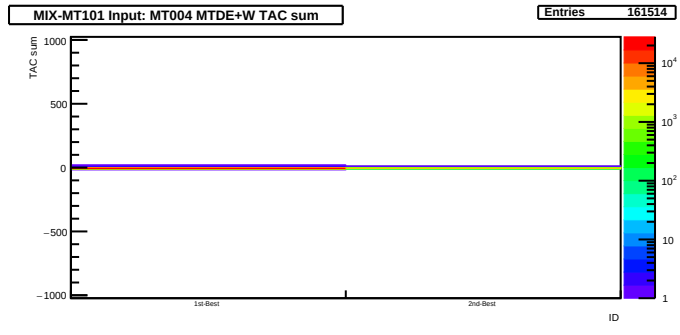

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 5363336
TAC sum
1st-Best
2nd-Best
ID

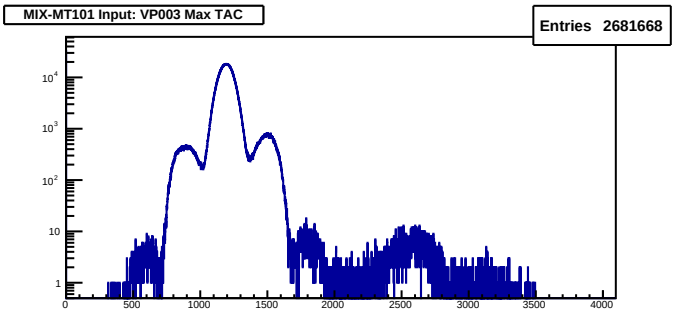

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 219327
TAC sum
1st-Best
2nd-Best
ID

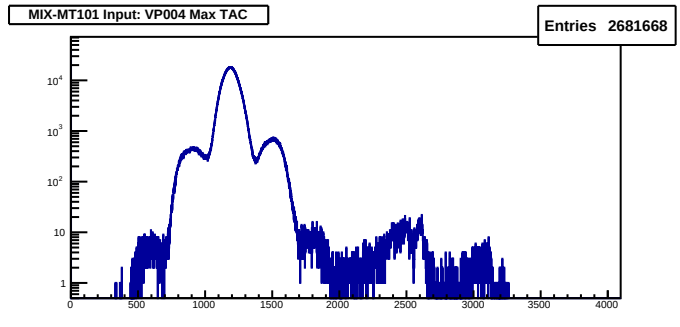

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 5363336
TAC sum
1st-Best
2nd-Best
ID

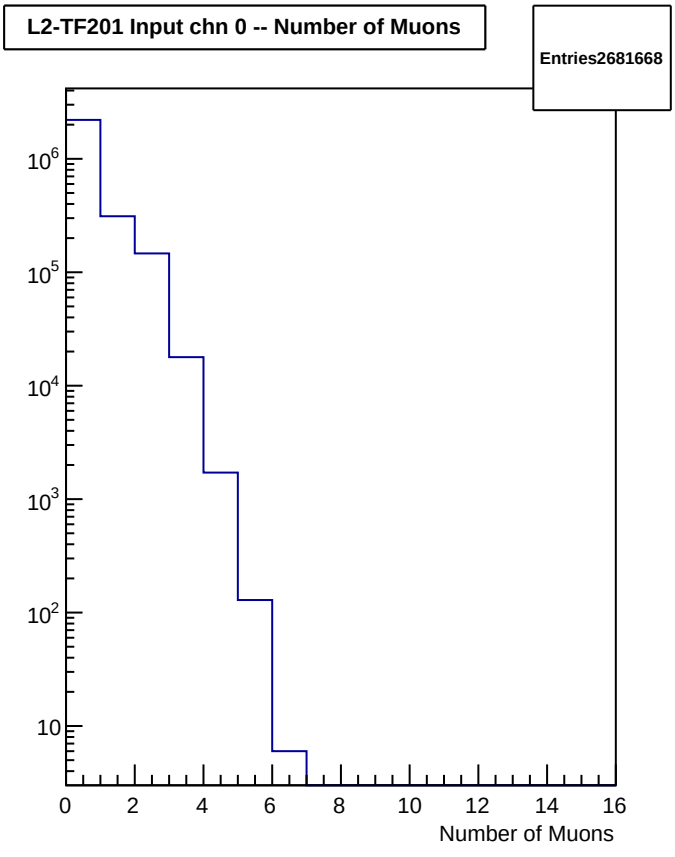

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 157082
TAC sum
1st-Best
2nd-Best
ID

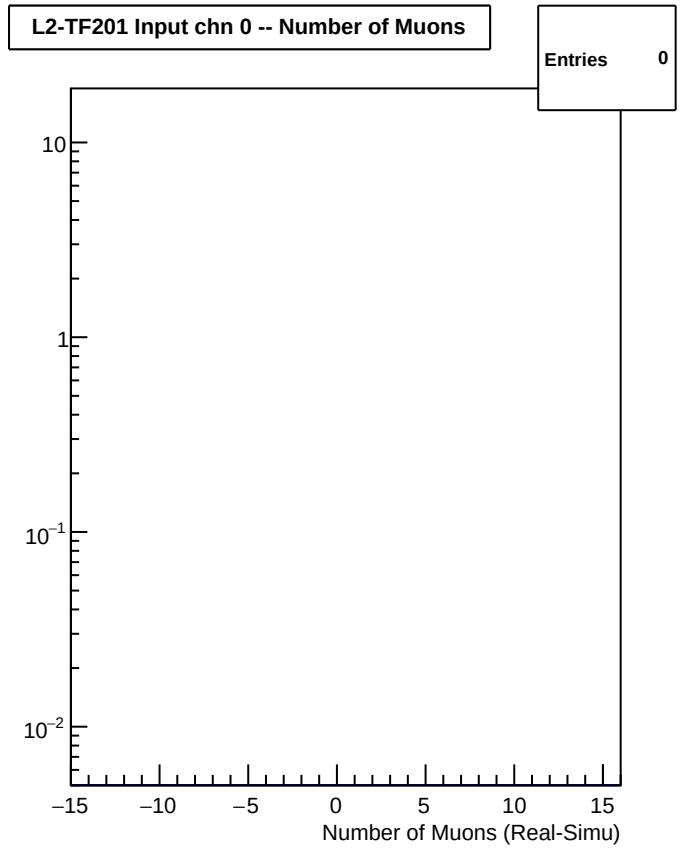

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 5363336
TAC sum
1st-Best
2nd-Best
ID

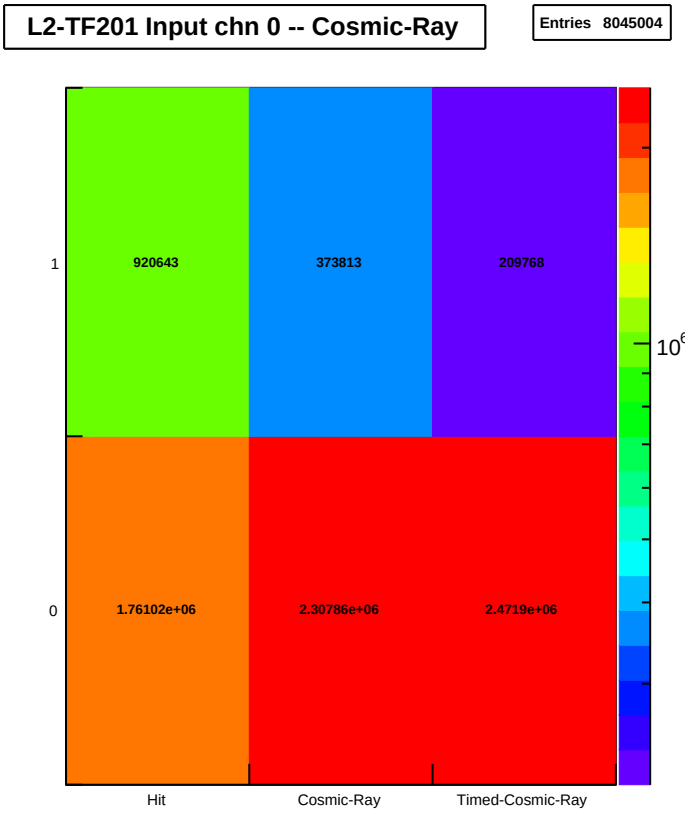

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 161514
TAC sum
1st-Best
2nd-Best
ID

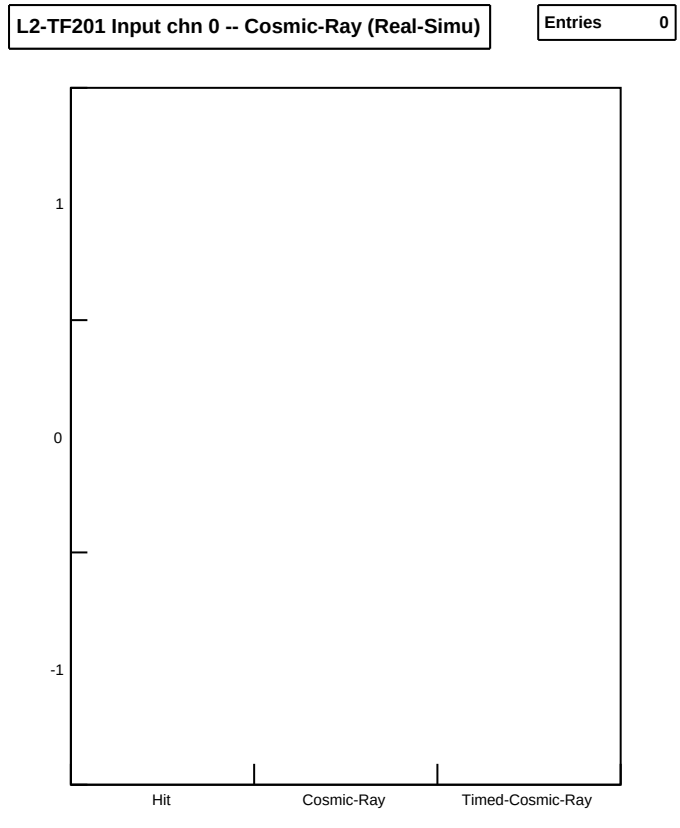

MIX-MT101 Input: VP003 Max TAC
Entries 2681668

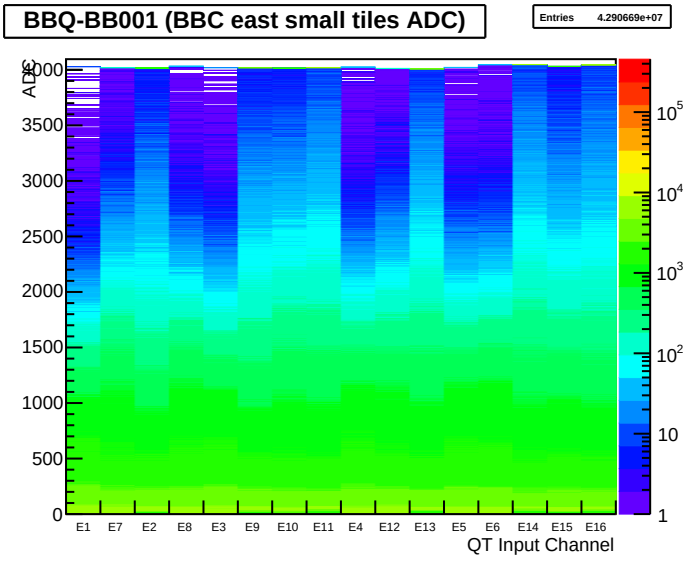

MIX-MT101 Input: VP004 Max TAC
Entries 2681668

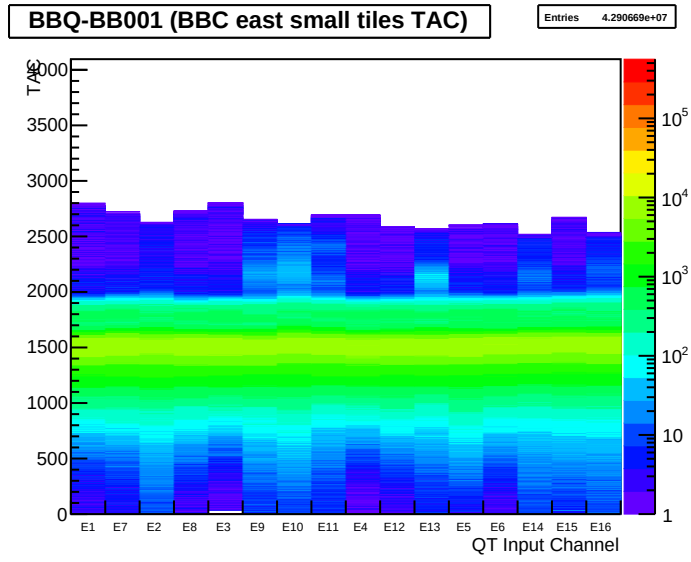

L2-TF201 Input chn 0 -- Number of Muons
Entries2681668
Number of Muons

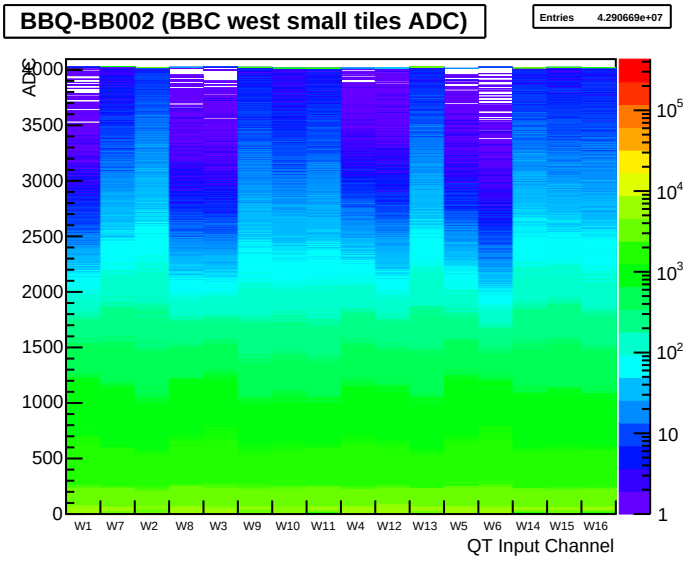

L2-TF201 Input chn 0 -- Number of Muons
Entries 0
Number of Muons (Real-Simu)

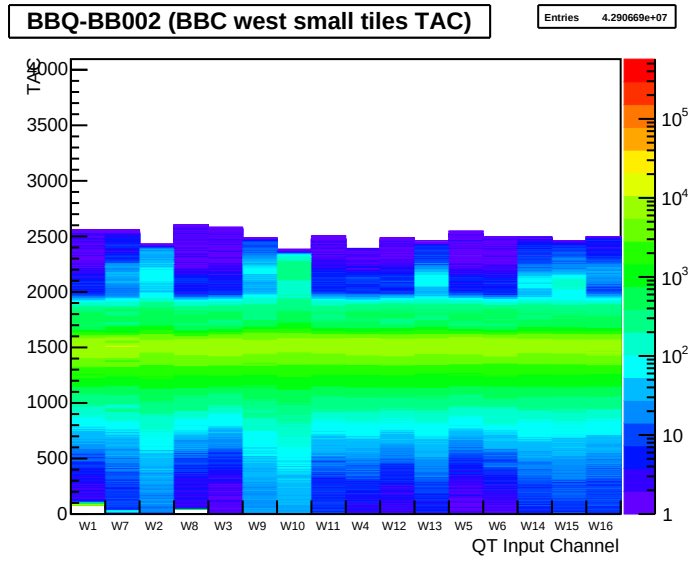

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 8045004
920643
373813
209768
1.76102e+06
2.30786e+06
2.4719e+06
Hit
Cosmic-Ray
Timed-Cosmic-Ray

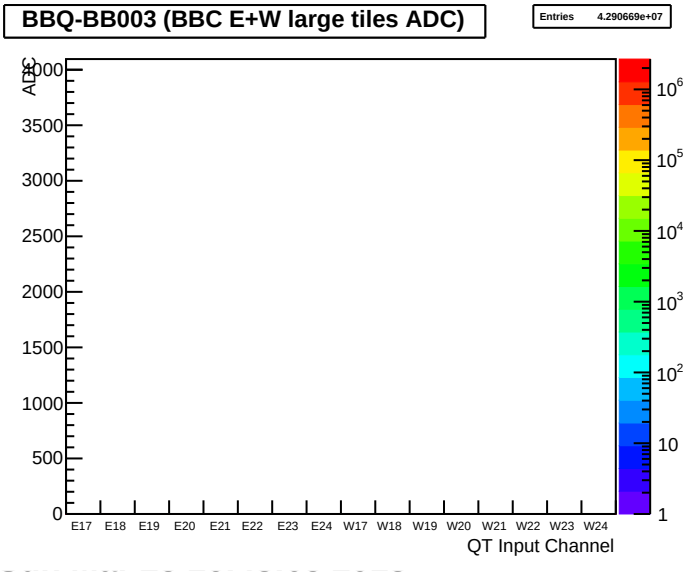

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 0
Hit
Cosmic-Ray
Timed-Cosmic-Ray

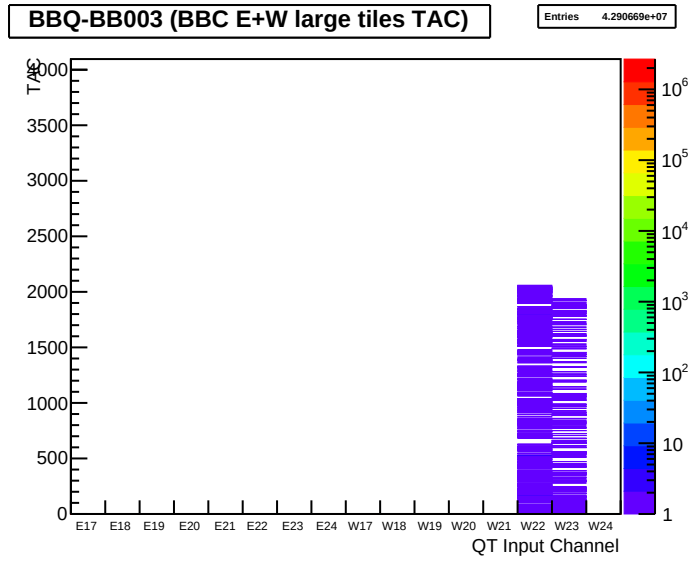

BBQ-BB001 (BBC east small tiles ADC)
Entries 4.290669e+07
ADC
QT Input Channel

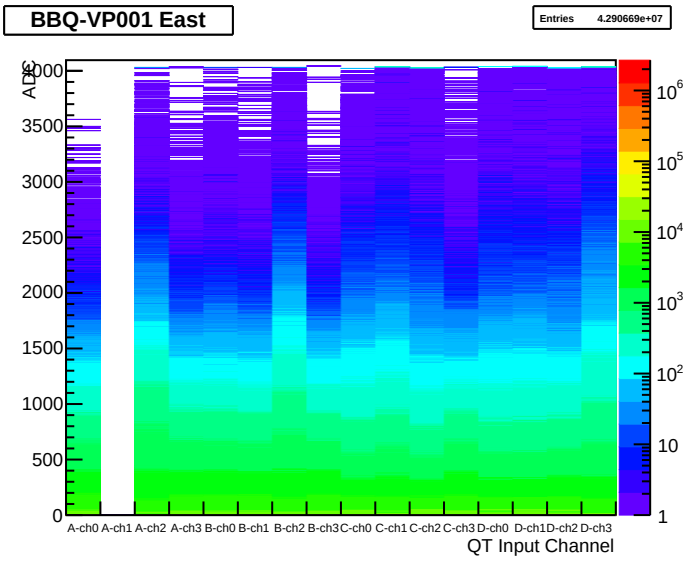

BBQ-BB001 (BBC east small tiles TAC)
Entries 4.290669e+07
TAC
QT Input Channel

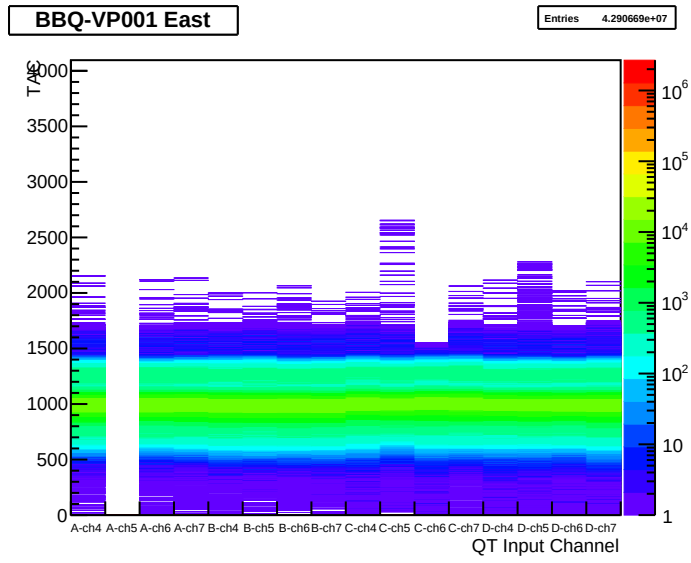

BBQ-BB002 (BBC west small tiles ADC)
Entries 4.290669e+07
ADC
QT Input Channel

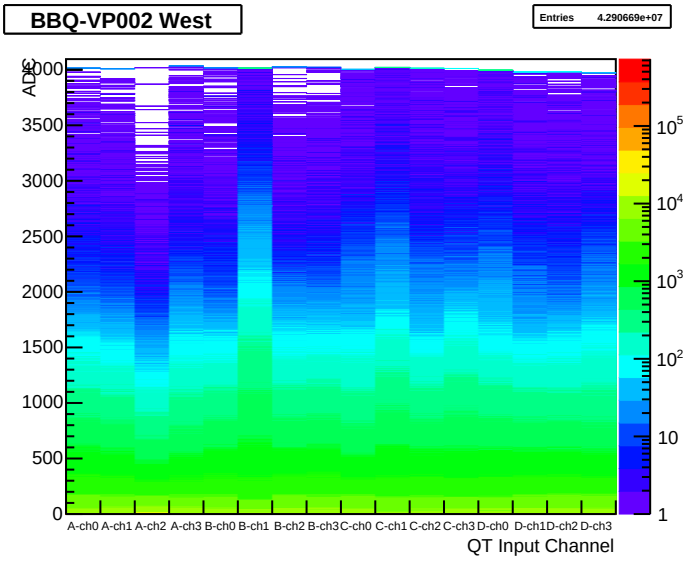

BBQ-BB002 (BBC west small tiles TAC)
Entries 4.290669e+07
TAC
QT Input Channel

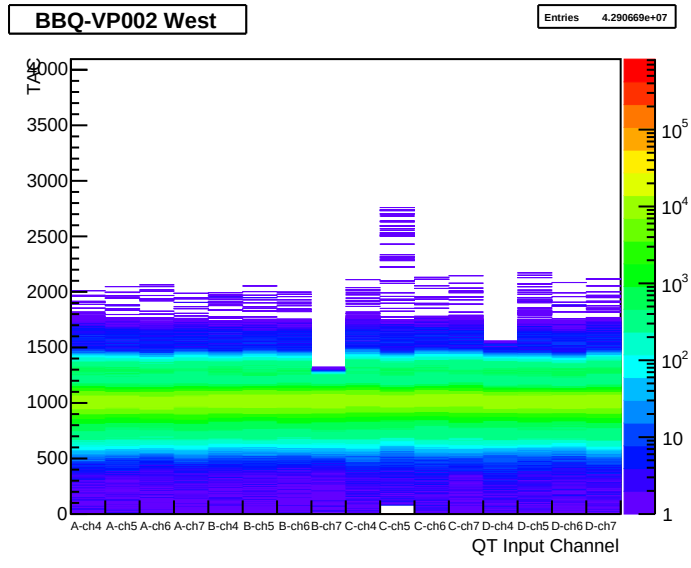

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4.290669e+07
ADC
QT Input Channel

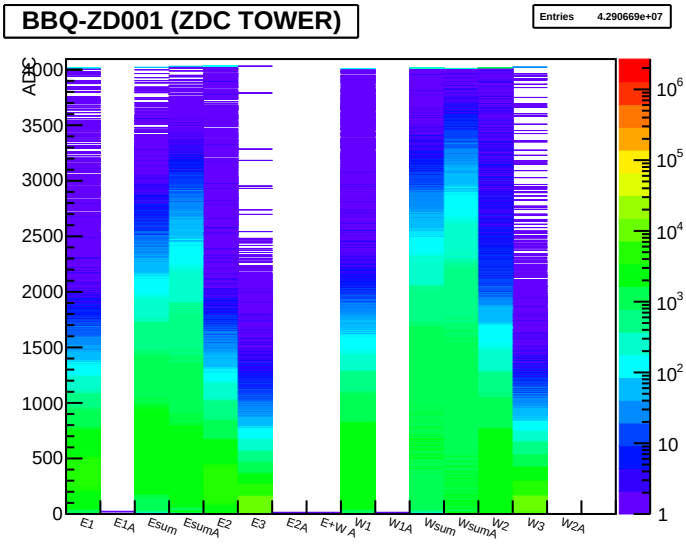

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4.290669e+07
TAC
QT Input Channel

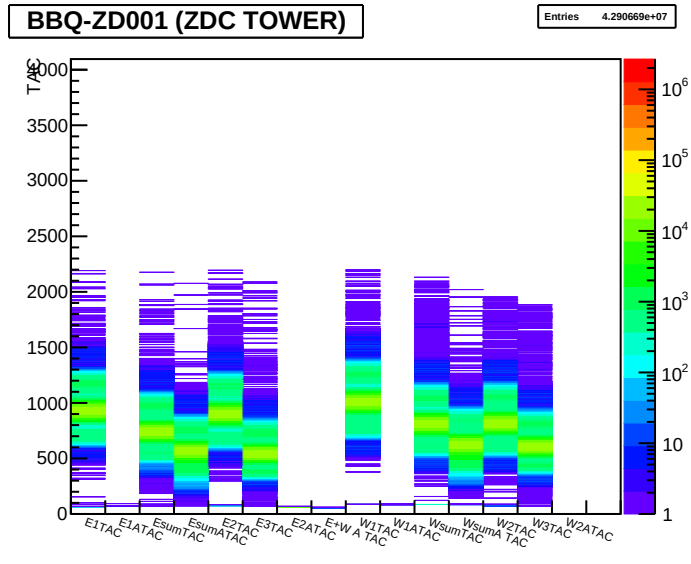

BBQ-VP001 East
Entries 4.290669e+07
ADC
A-ch0 A-ch1 A-ch2 A-ch3 B-ch0 B-ch1 B-ch2 B-ch3 C-ch0 C-ch1 C-ch2 C-ch3 D-ch0 D-ch1 D-ch2 D-ch3
QT Input Channel

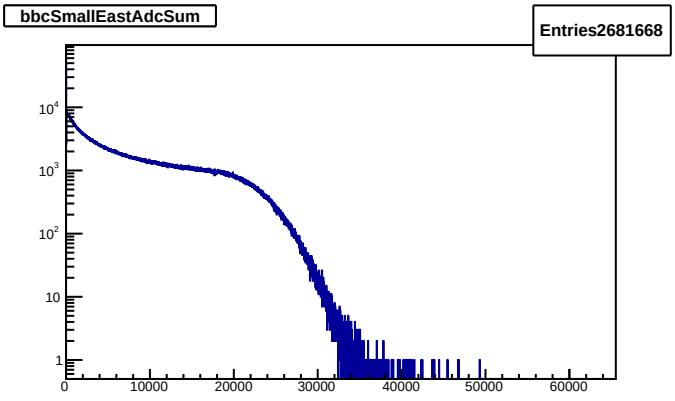

BBQ-VP001 East
Entries 4.290669e+07
TAC
A-ch4 A-ch5 A-ch6 A-ch7 B-ch4 B-ch5 B-ch6 B-ch7 C-ch4 C-ch5 C-ch6 C-ch7 D-ch4 D-ch5 D-ch6 D-ch7
QT Input Channel

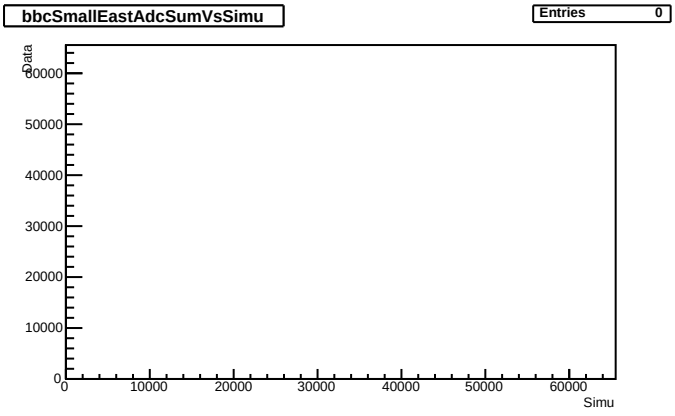

BBQ-VP002 West
Entries 4.290669e+07
ADC
A-ch0 A-ch1 A-ch2 A-ch3 B-ch0 B-ch1 B-ch2 B-ch3 C-ch0 C-ch1 C-ch2 C-ch3 D-ch0 D-ch1 D-ch2 D-ch3
QT Input Channel

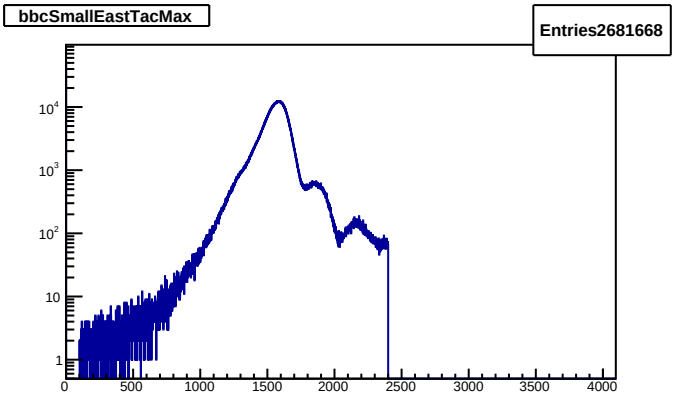

BBQ-VP002 West
Entries 4.290669e+07
TAC
A-ch4 A-ch5 A-ch6 A-ch7 B-ch4 B-ch5 B-ch6 B-ch7 C-ch4 C-ch5 C-ch6 C-ch7 D-ch4 D-ch5 D-ch6 D-ch7
QT Input Channel

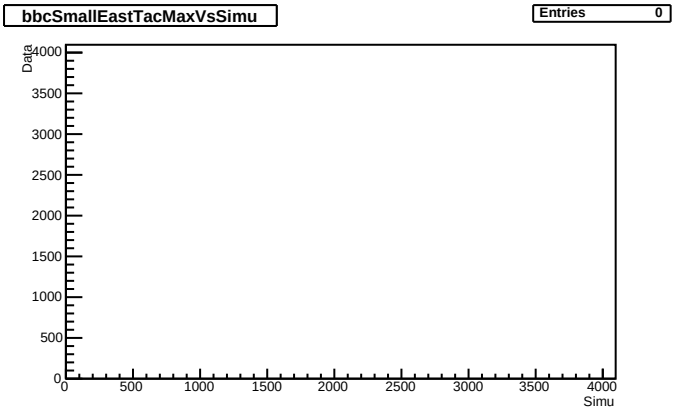

BBQ-ZD001 (ZDC TOWER)
Entries 4.290669e+07
ADC
E1 E1A Esum EsumA E2 E3 E2A E+W A W1 W1A Wsum WsumA W2 W3 W2A

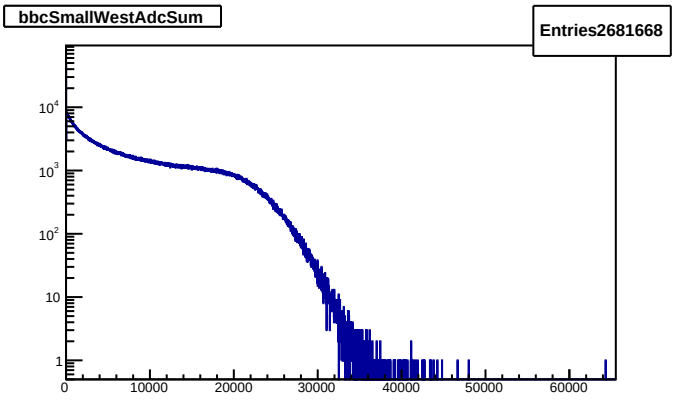

BBQ-ZD001 (ZDC TOWER)
Entries 4.290669e+07
TAC
E1TAC E1ATAC EsumTAC EsumATAC E2TAC E3TAC E2ATAC E+W A TAC W1TAC W1ATAC WsumTAC WsumA TAC W2TAC W3TAC W2ATAC

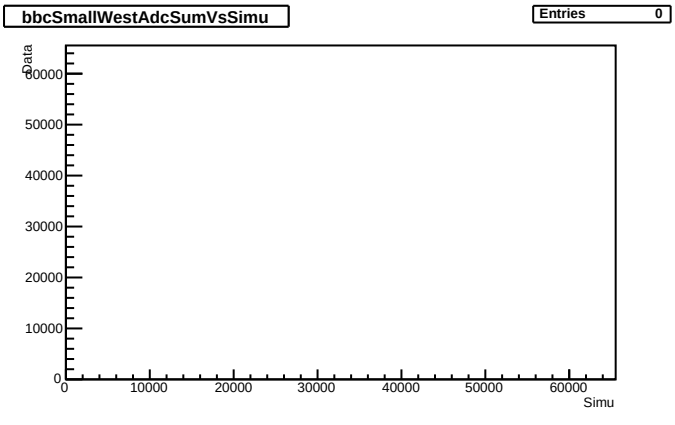

bbcSmallEastAdcSum
Entries2681668

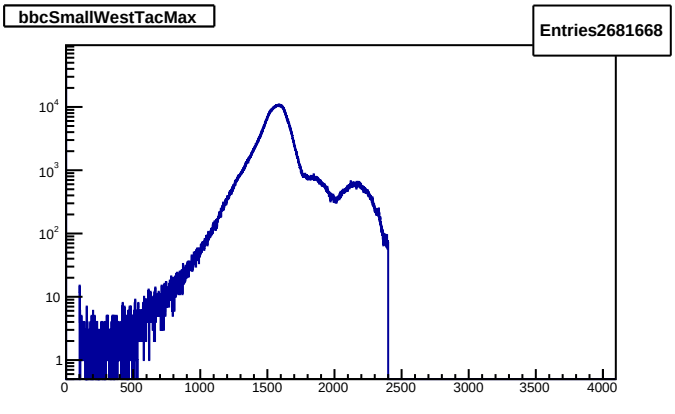

bbcSmallEastAdcSumVsSimu
Entries 0
Data
Simu

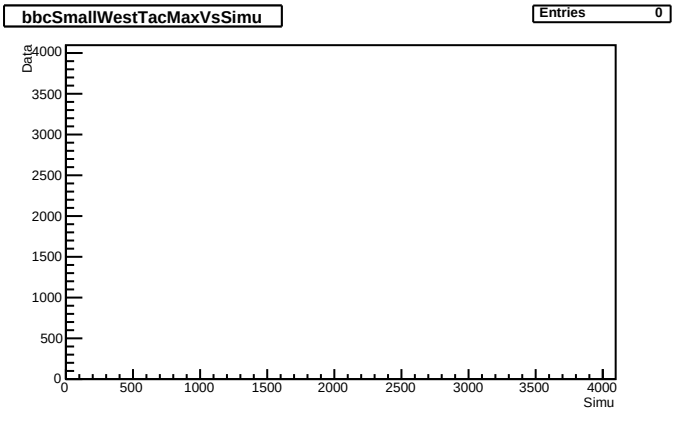

bbcSmallEastTacMax
Entries2681668

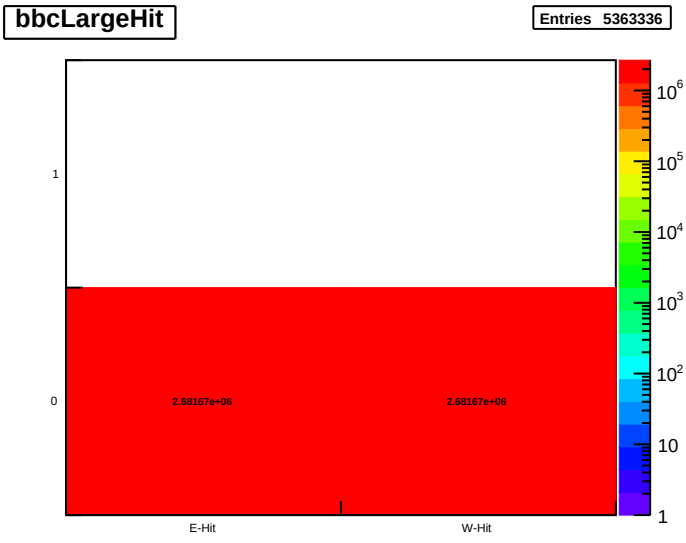

bbcSmallEastTacMaxVsSimu
Entries 0
Data
Simu

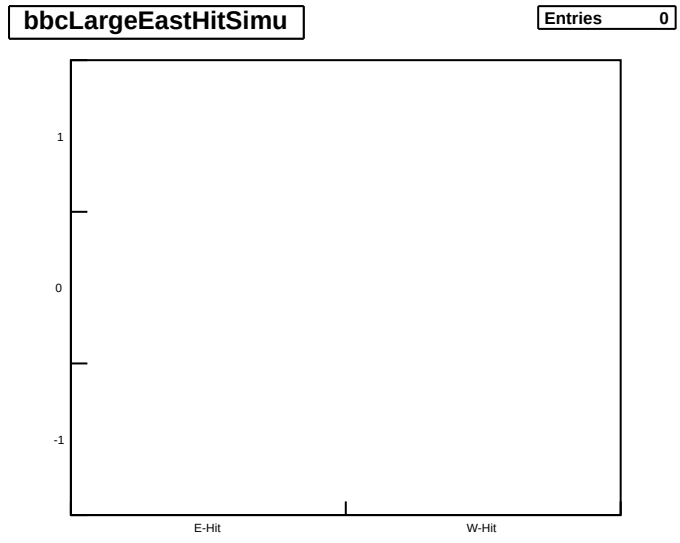

bbcSmallWestAdcSum
Entries2681668

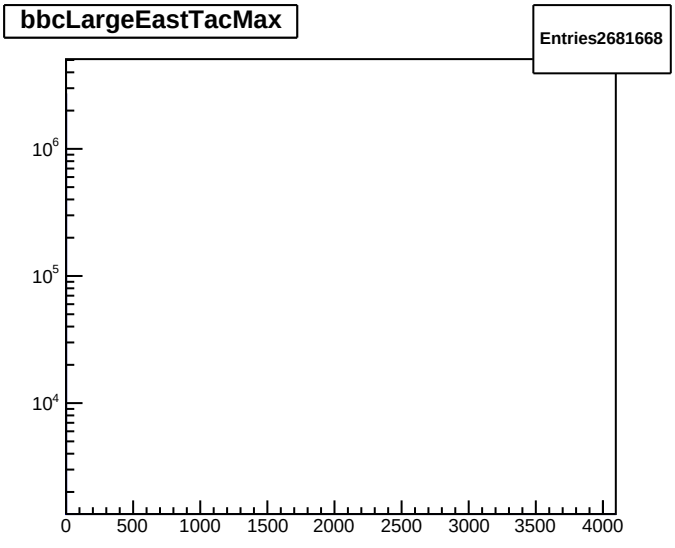

bbcSmallWestAdcSumVsSimu
Entries 0
Data
Simu

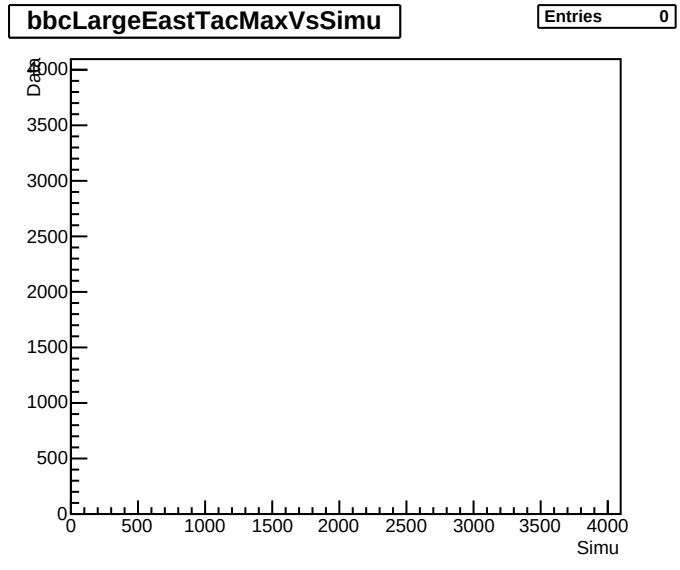

bbcSmallWestTacMax
Entries2681668

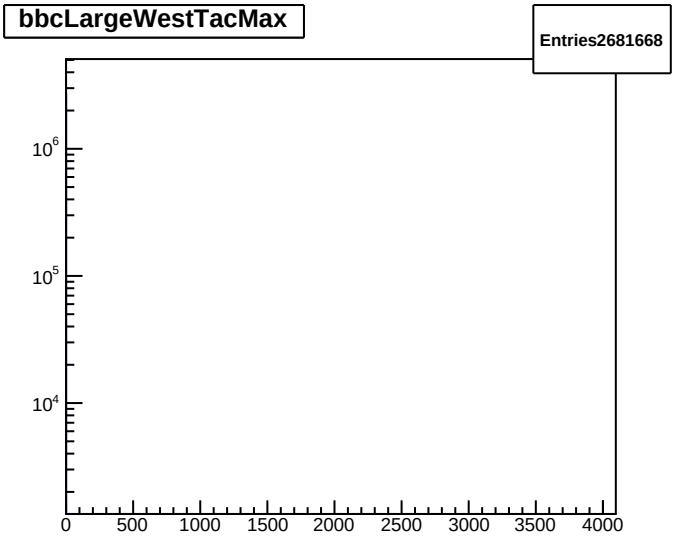

bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu

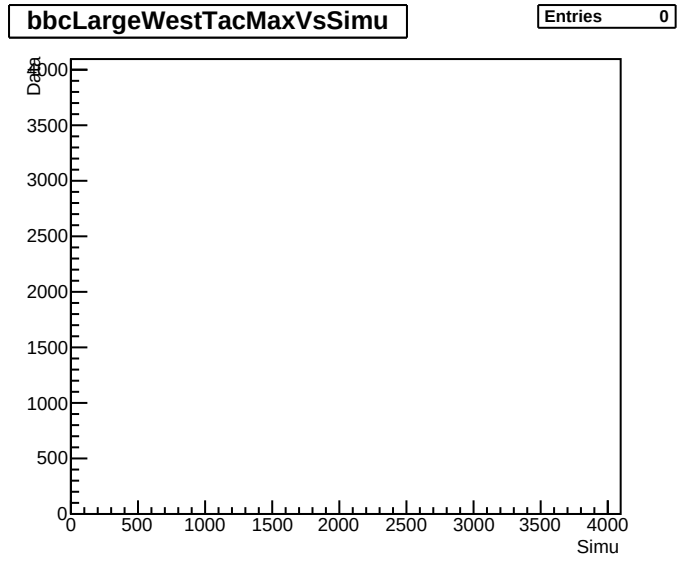

bbcLargeHit
Entries 5363336
2.68167e+06
2.68167e+06
E-Hit
W-Hit

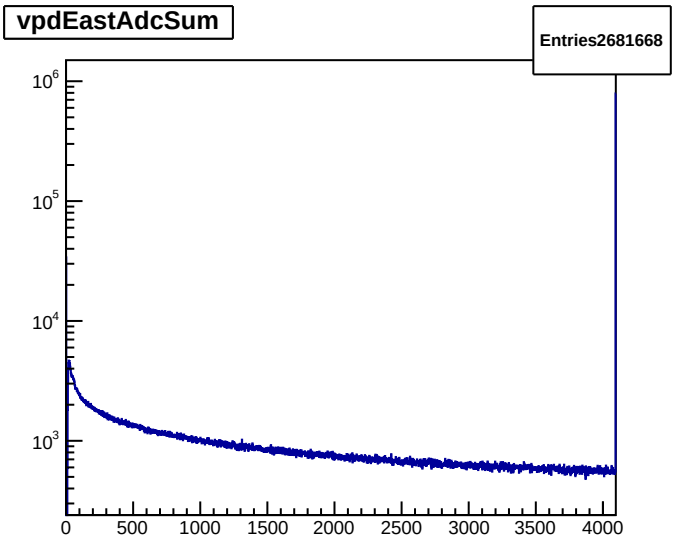

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

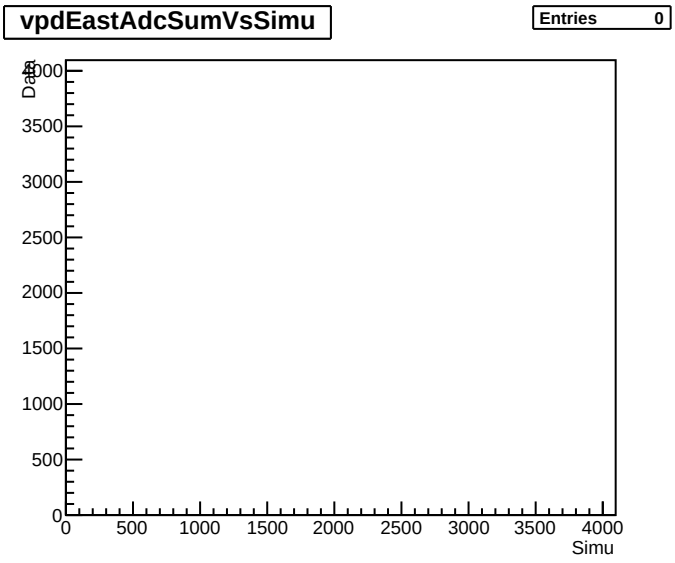

bbcLargeEastTacMax
Entries2681668

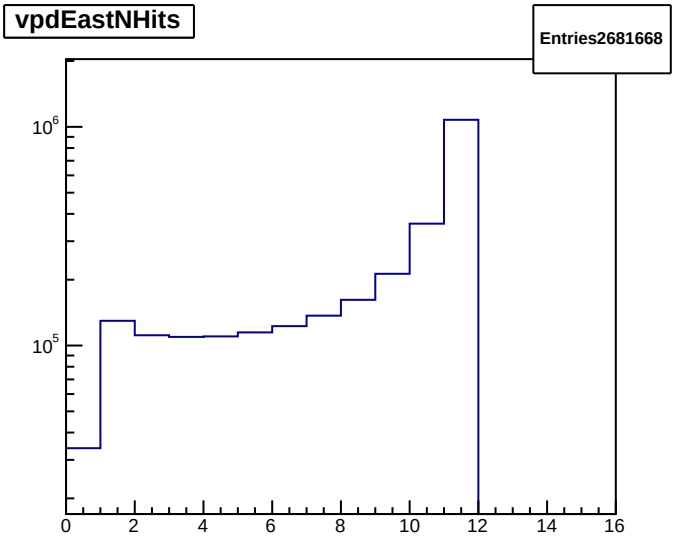

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

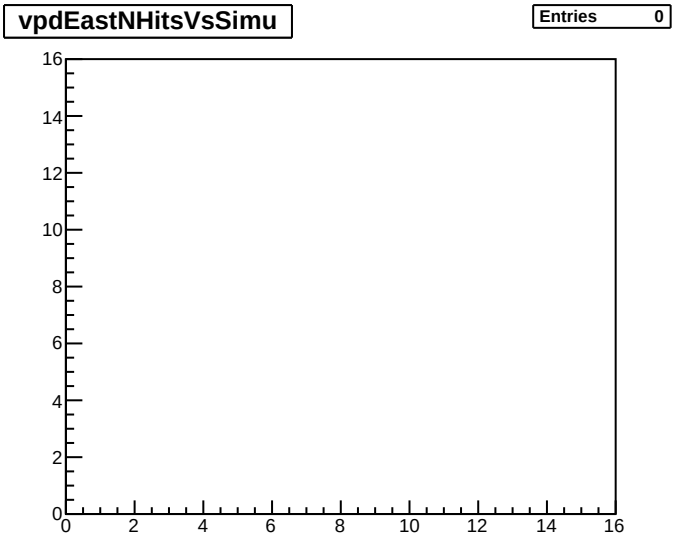

bbcLargeWestTacMax
Entries2681668

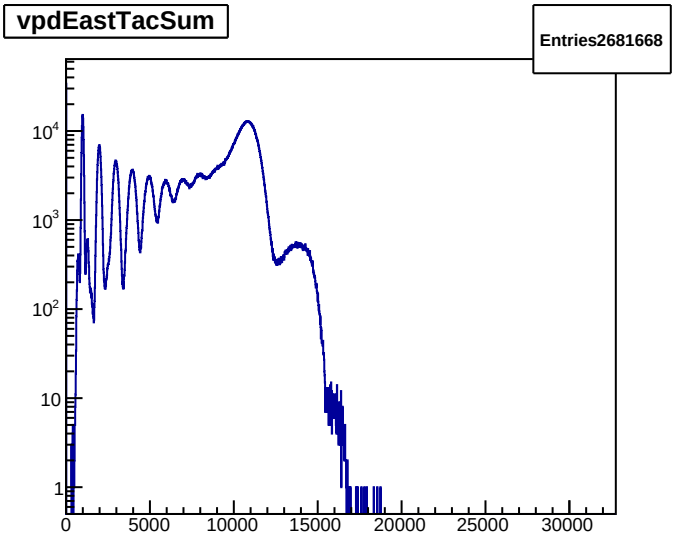

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

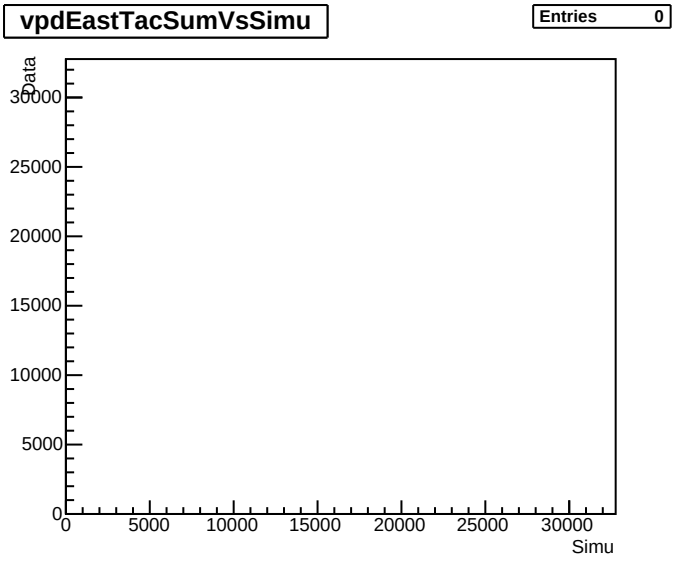

vpdEastAdcSum
Entries2681668
10^6
10^5
10^4
10^3
0 500 1000 1500 2000 2500 3000 3500 4000

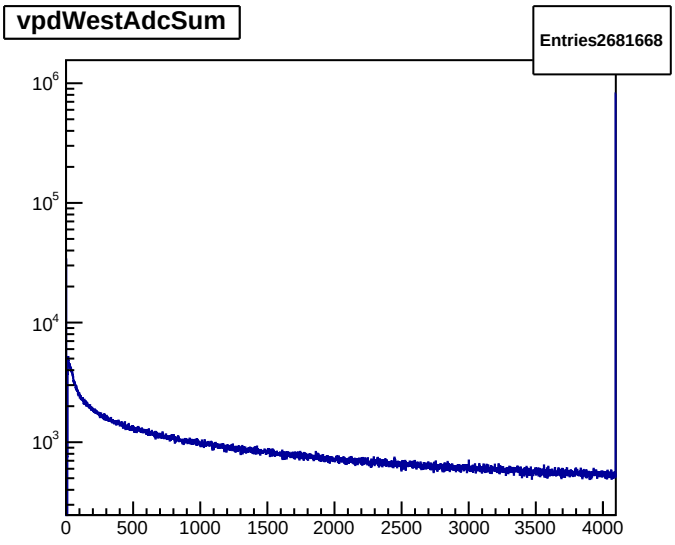

vpdEastAdcSumVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

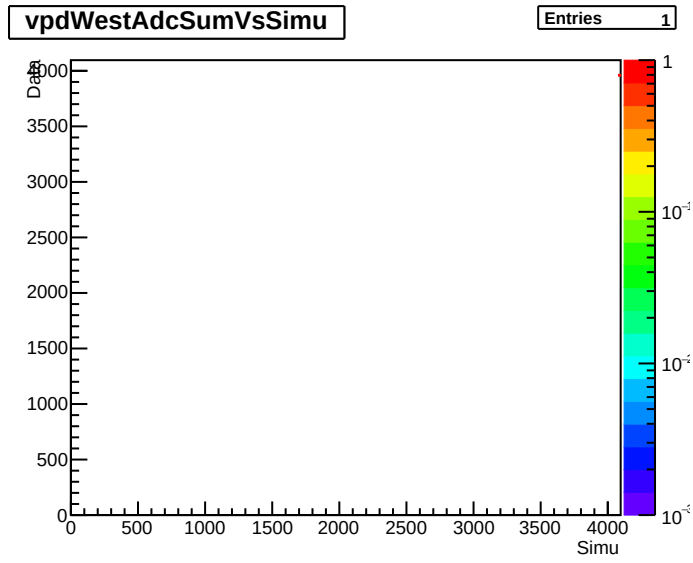

vpdEastNHits
Entries2681668
10^6
10^5
0 2 4 6 8 10 12 14 16

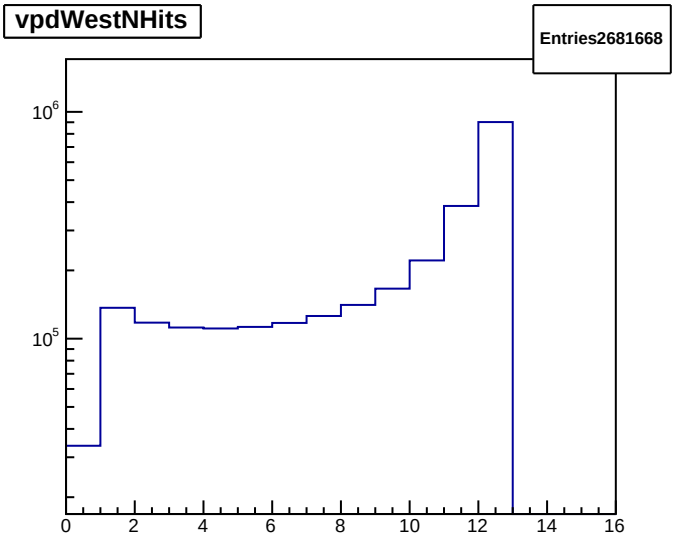

vpdEastNHitsVsSimu
Entries 0
16
14
12
10
8
6
4
2
0
0 2 4 6 8 10 12 14 16

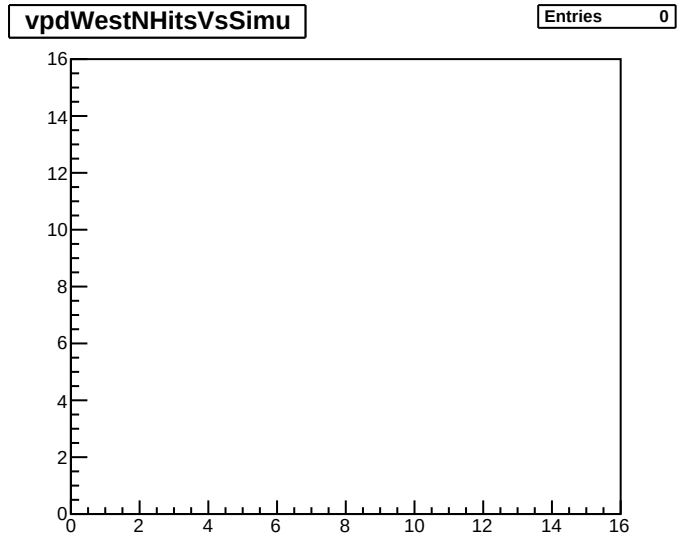

vpdEastTacSum
Entries2681668
10^4
10^3
10^2
10
1
0 5000 10000 15000 20000 25000 30000

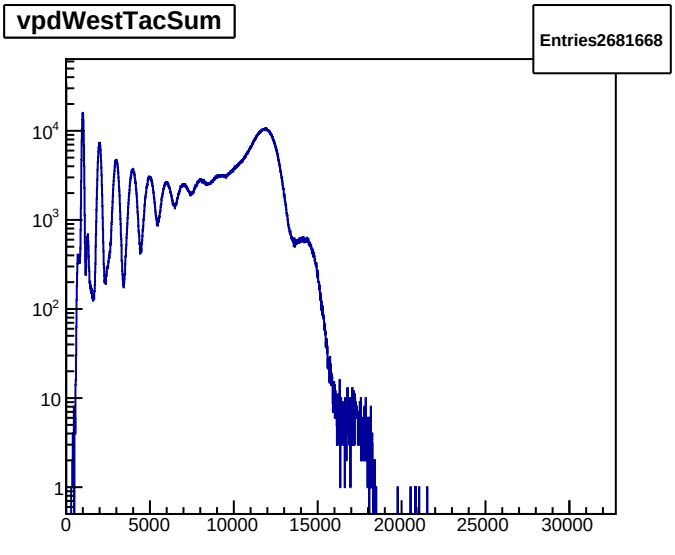

vpdEastTacSumVsSimu
Entries 0
Data
30000
25000
20000
15000
10000
5000
0
0 5000 10000 15000 20000 25000 30000
Simu

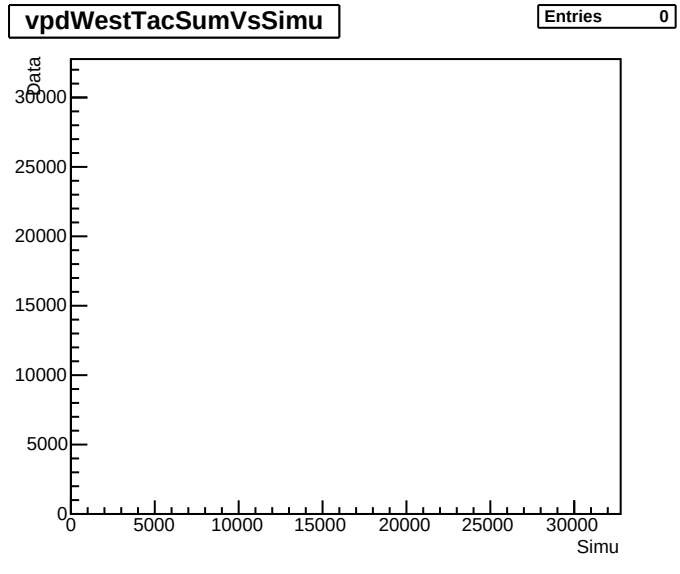

vpdWestAdcSum
Entries2681668

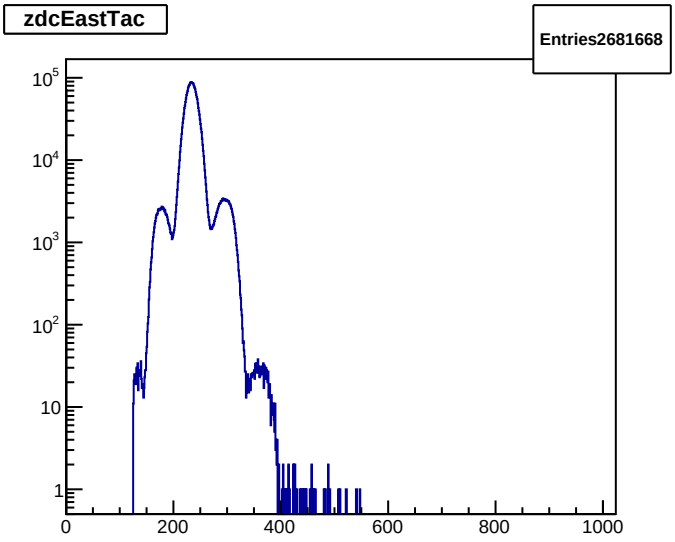

vpdWestAdcSumVsSimu
Entries 1
Data
Simu

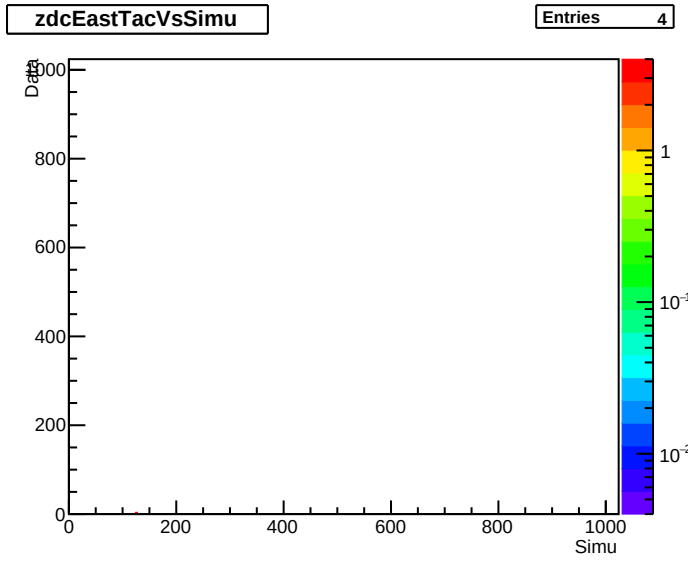

vpdWestNHits
Entries2681668

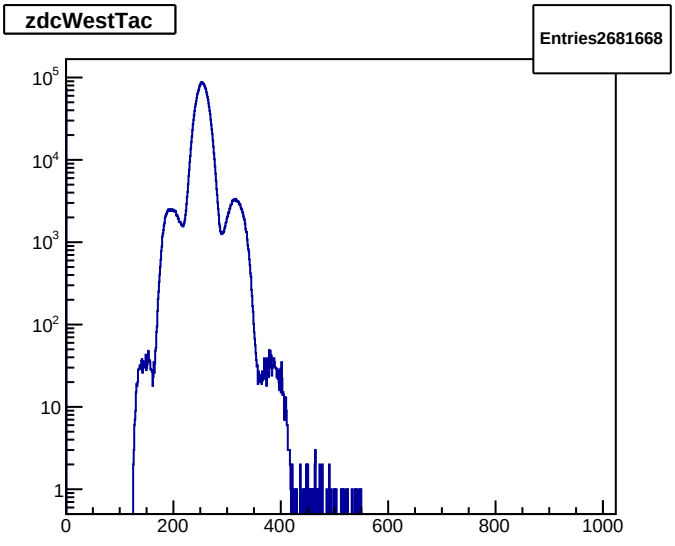

vpdWestNHitsVsSimu
Entries 0

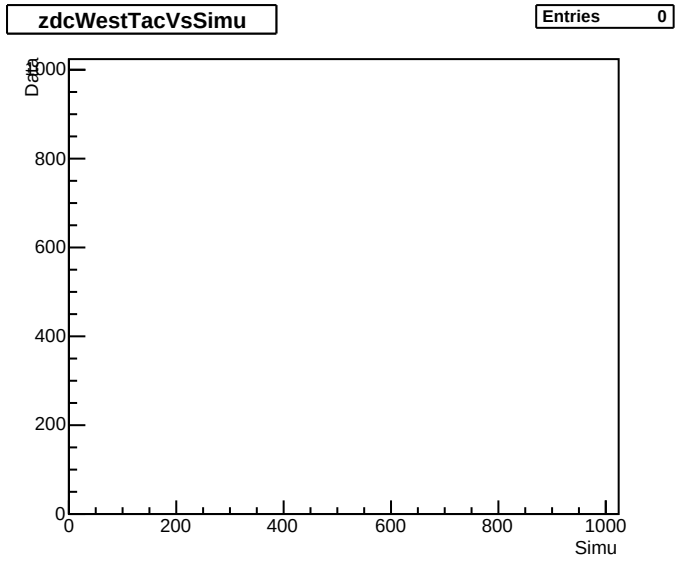

vpdWestTacSum
Entries2681668

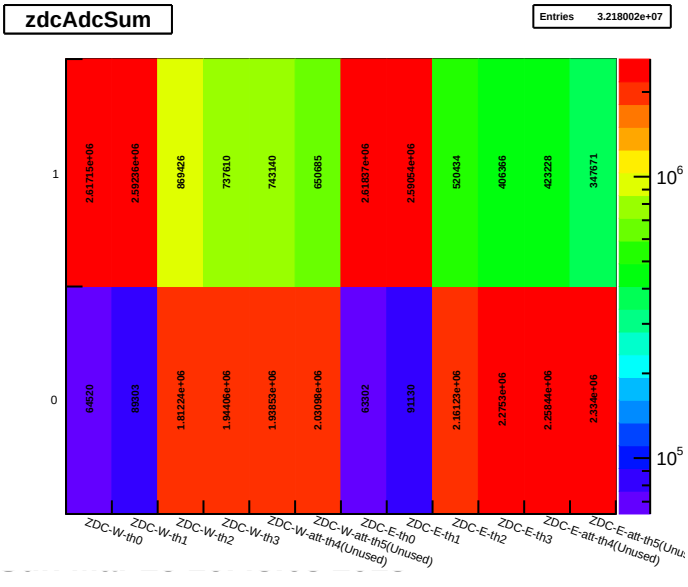

vpdWestTacSumVsSimu
Entries 0
Data
Simu

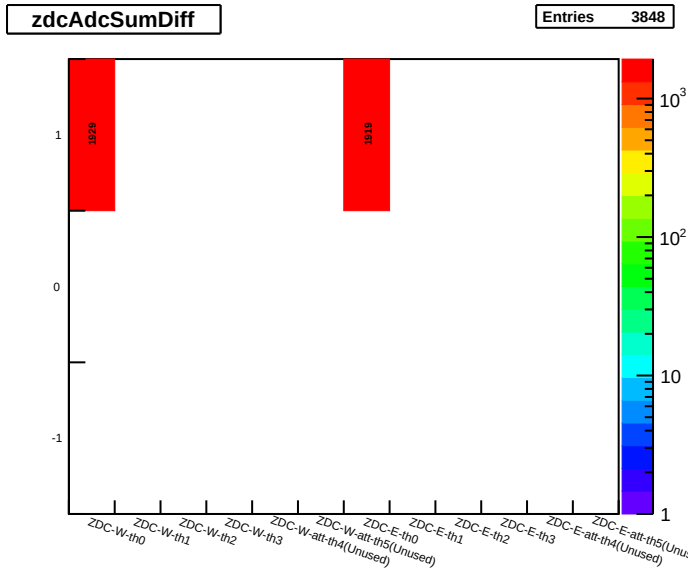

zdcEastTac
Entries2681668

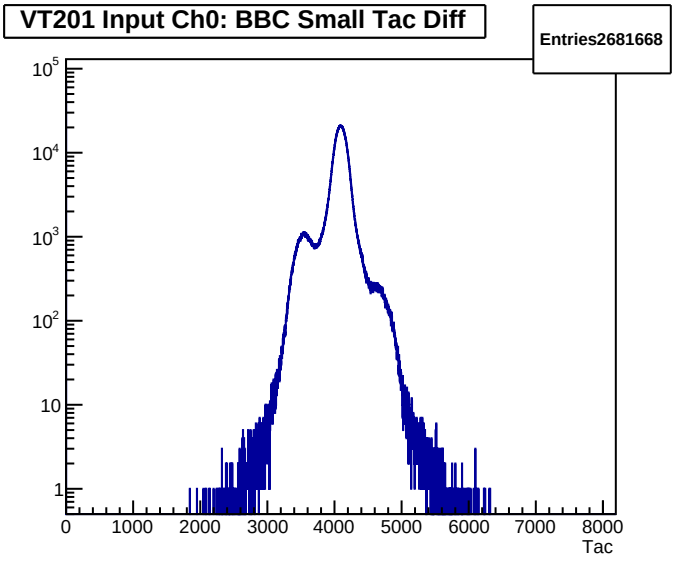

zdcEastTacVsSimu
Entries 4
Data
Simu

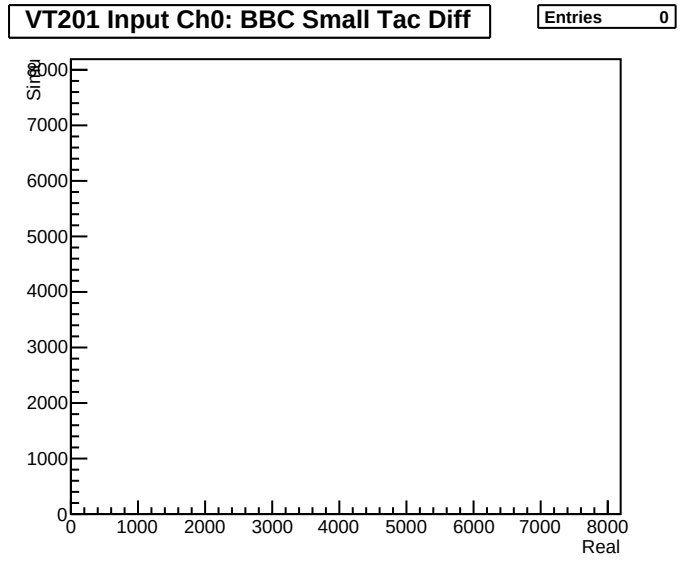

zdcWestTac
Entries2681668

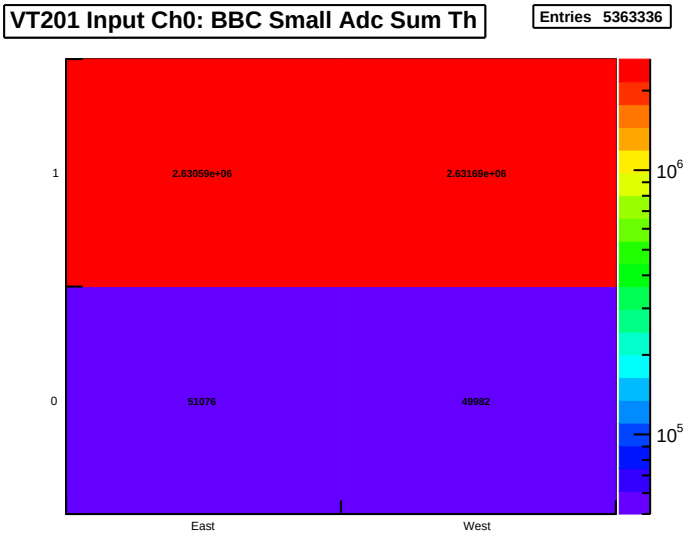

zdcWestTacVsSimu
Entries 0
Data
Simu

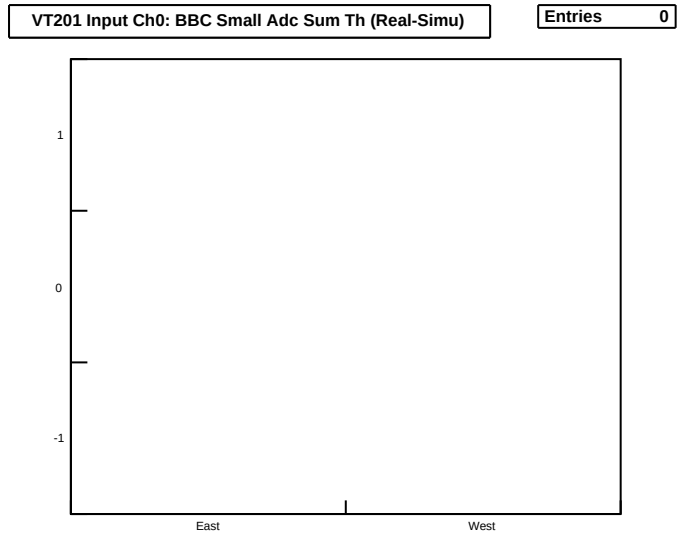

zdcAdcSum
Entries 3.218002e+07
2.61715e+06
2.59226e+06
869426
737610
743140
650685
2.61837e+06
2.59054e+06
520434
406366
423228
347671
64520
89003
1.81224e+06
1.94406e+06
1.93853e+06
2.03098e+06
63302
91130
2.16123e+06
2.2753e+06
2.25844e+06
2.334e+06
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

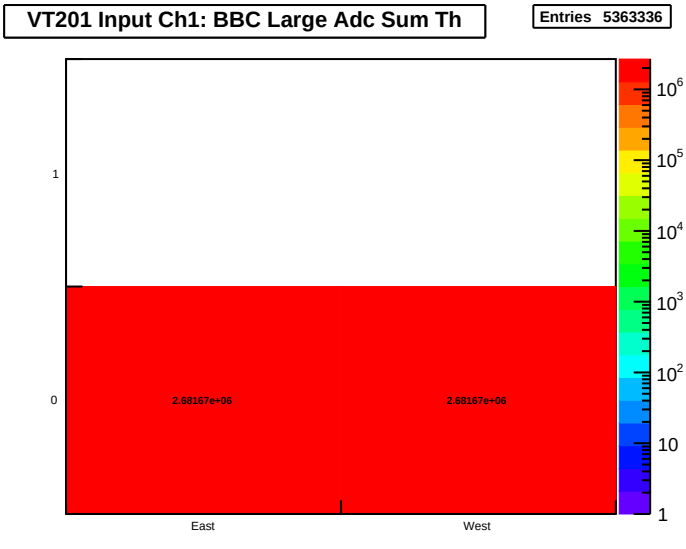

zdcAdcSumDiff
Entries 3848
1929
1919
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

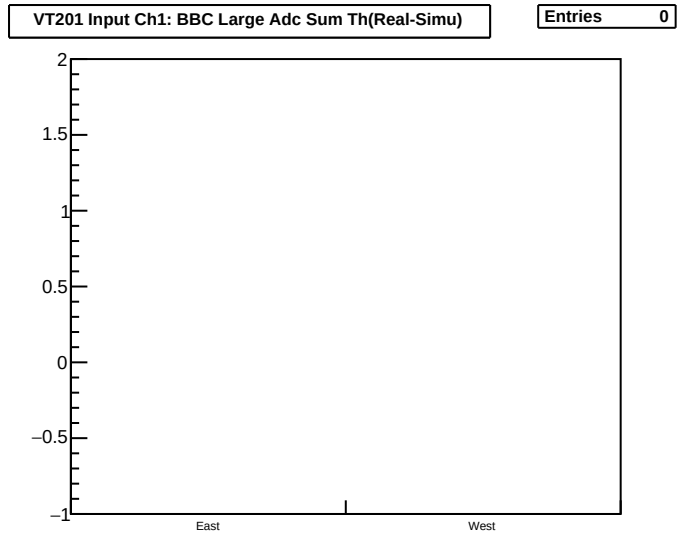

VT201 Input Ch0: BBC Small Tac Diff
Entries2681668
Tac

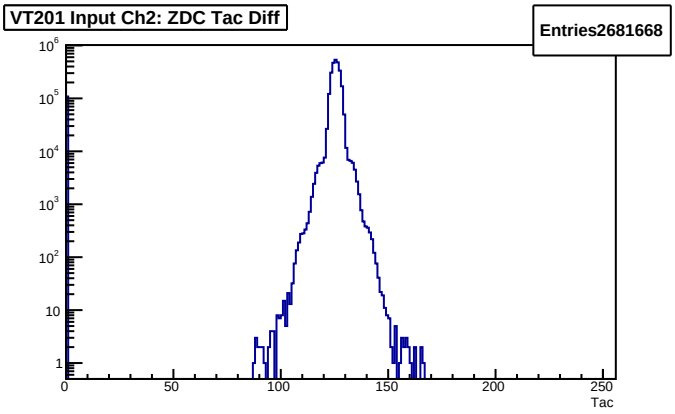

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

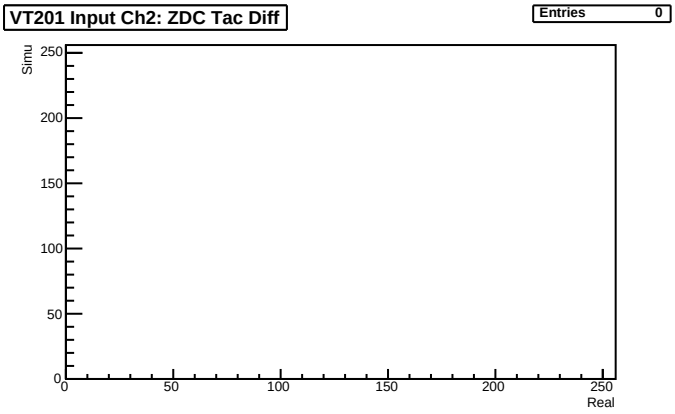

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 5363336
2.63059e+06
2.63169e+06
51076
49982
East
West

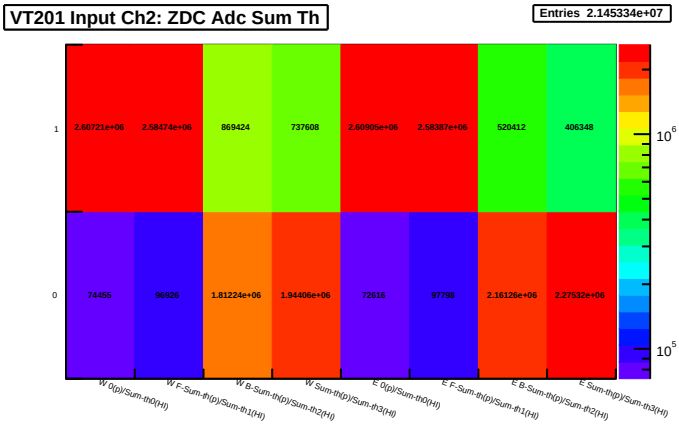

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

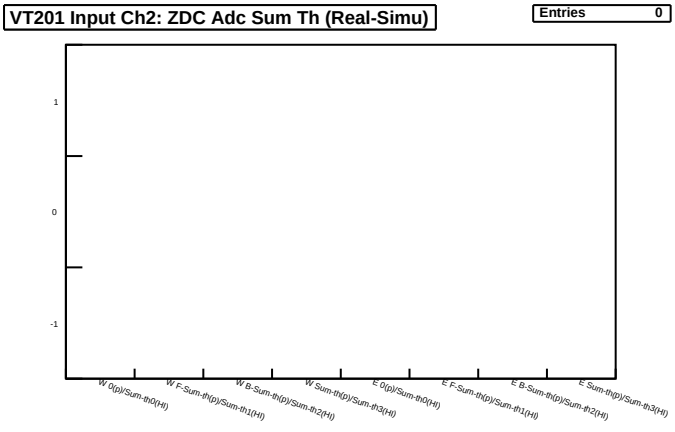

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 5363336
2.68167e+06
2.68167e+06
East
West

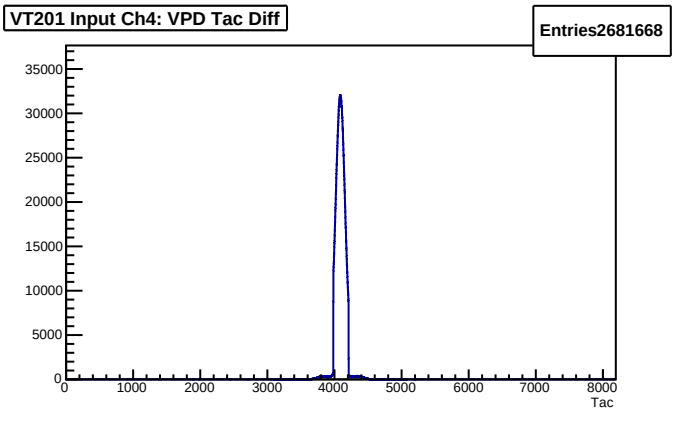

VT201 Input Ch1: BBC Large Adc Sum Th(Real-Simu)
Entries 0
East
West

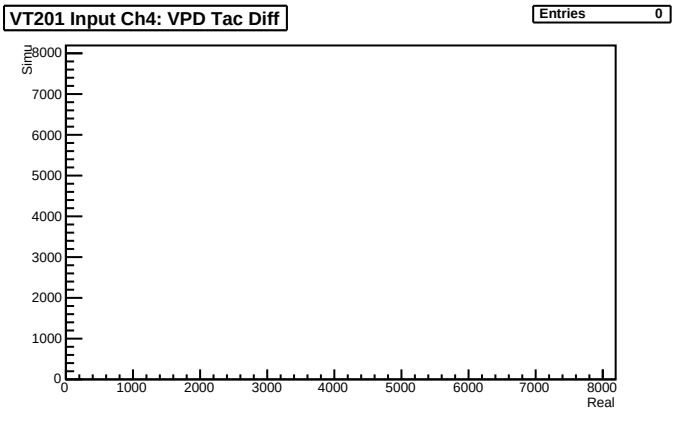

VT201 Input Ch2: ZDC Tac Diff
Entries2681668
Tac

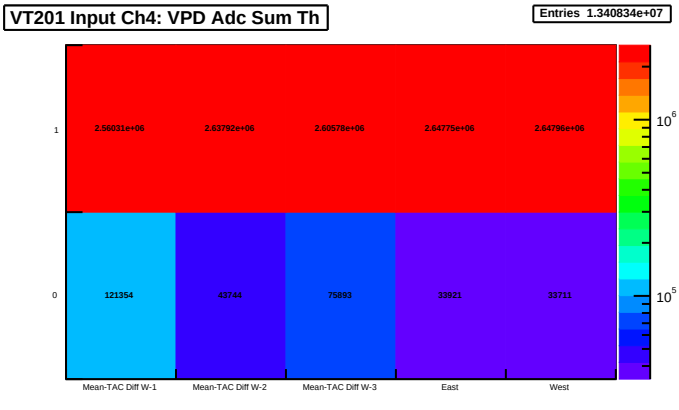

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

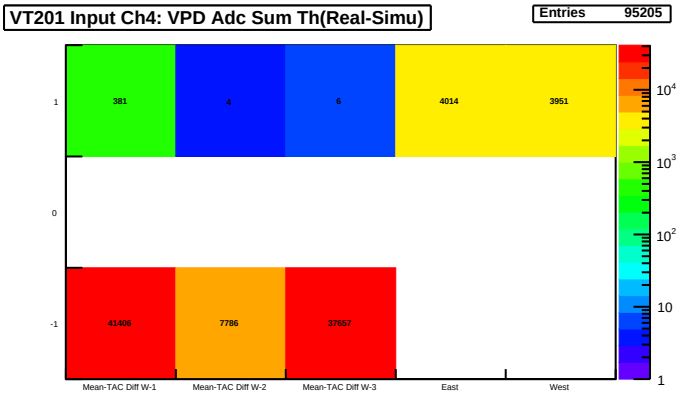

VT201 Input Ch2: ZDC Adc Sum Th
Entries 2.145334e+07
2.60721e+06
2.58474e+06
869424
737608
2.60905e+06
2.58387e+06
520412
406348
74455
96926
1.81224e+06
1.94406e+06
72616
97798
2.16126e+06
2.27532e+06
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
E 0(p)/Sum-th0(Hl)
E F-Sum-th(p)/Sum-th1(Hl)
E B-Sum-th(p)/Sum-th2(Hl)
E Sum-th(p)/Sum-th3(Hl)

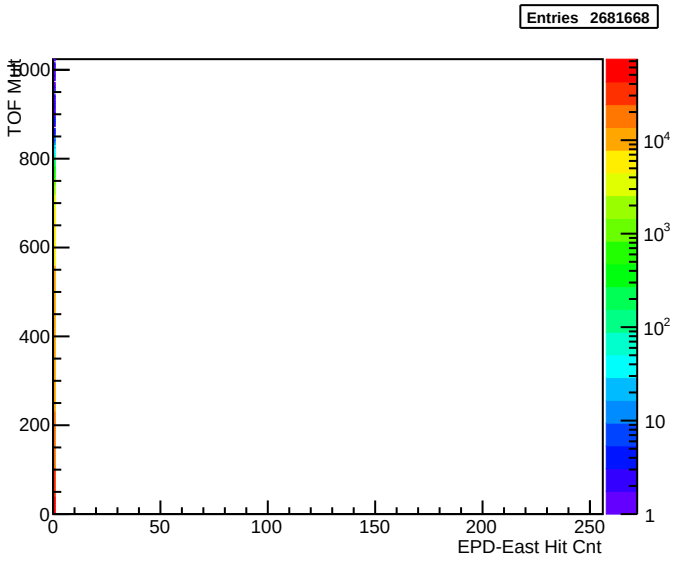

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
E 0(p)/Sum-th0(Hl)
E F-Sum-th(p)/Sum-th1(Hl)
E B-Sum-th(p)/Sum-th2(Hl)
E Sum-th(p)/Sum-th3(Hl)

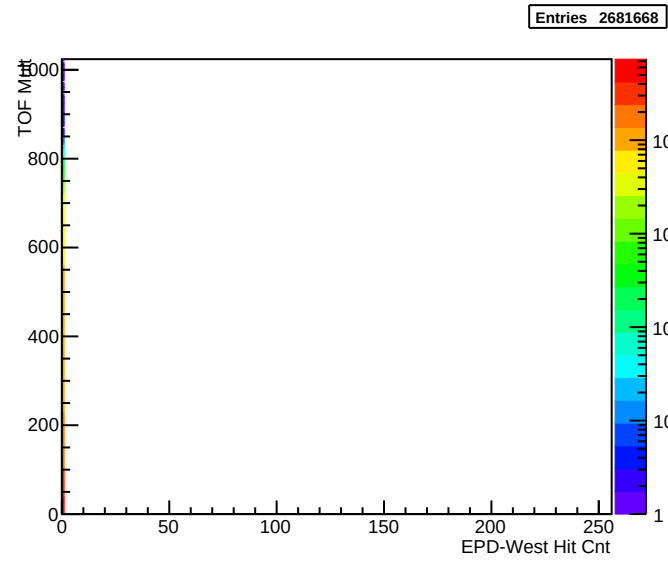

VT201 Input Ch4: VPD Tac Diff
Entries2681668
Tac

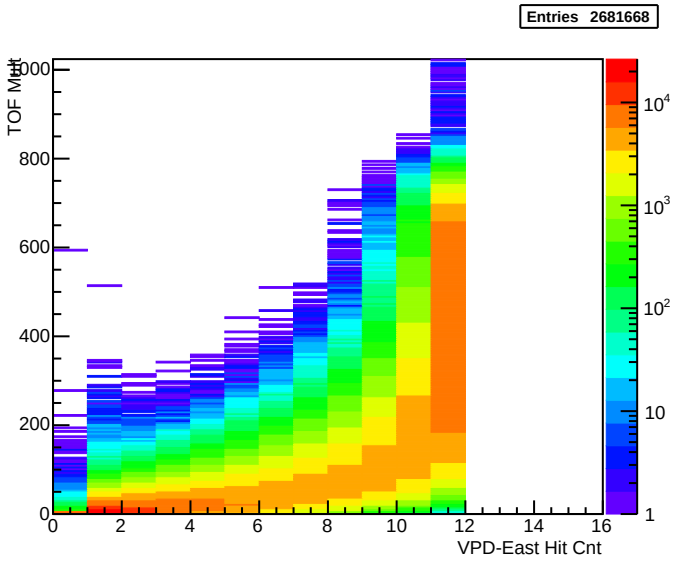

VT201 Input Ch4: VPD Tac Diff
Entries 0
Simu
Real

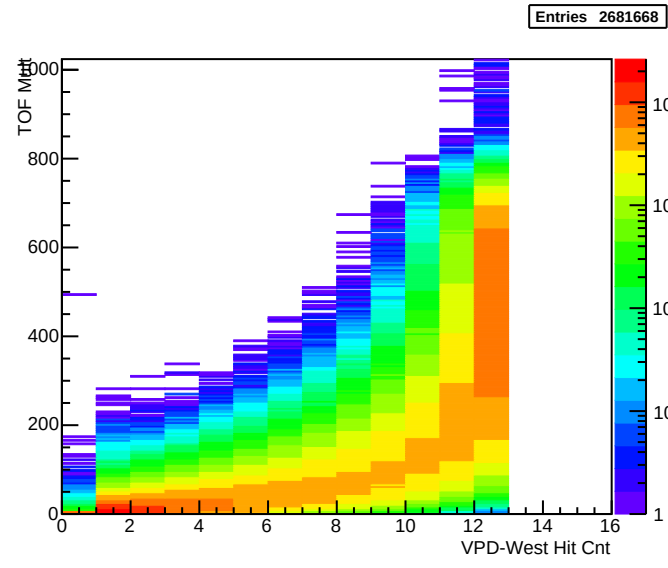

VT201 Input Ch4: VPD Adc Sum Th
Entries 1.340834e+07
2.56031e+06
2.63792e+06
2.60578e+06
2.64775e+06
2.64796e+06
121354
43744
75893
33921
33711
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

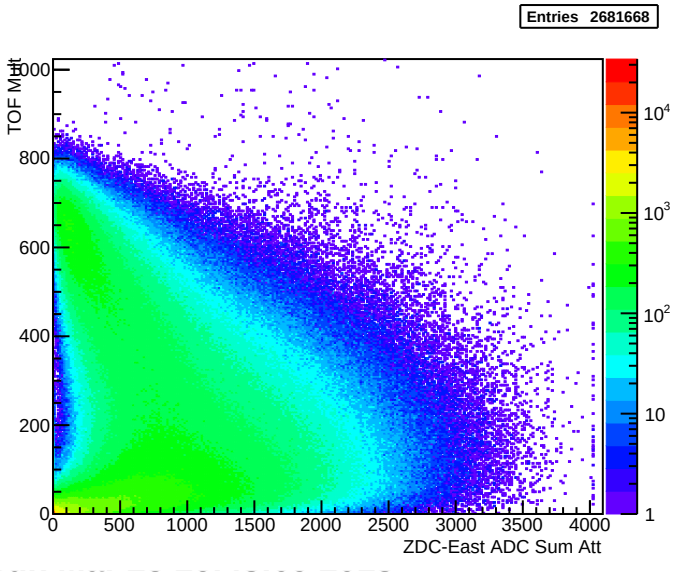

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 95205
381
4
6
4014
3951
41406
7786
37657
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

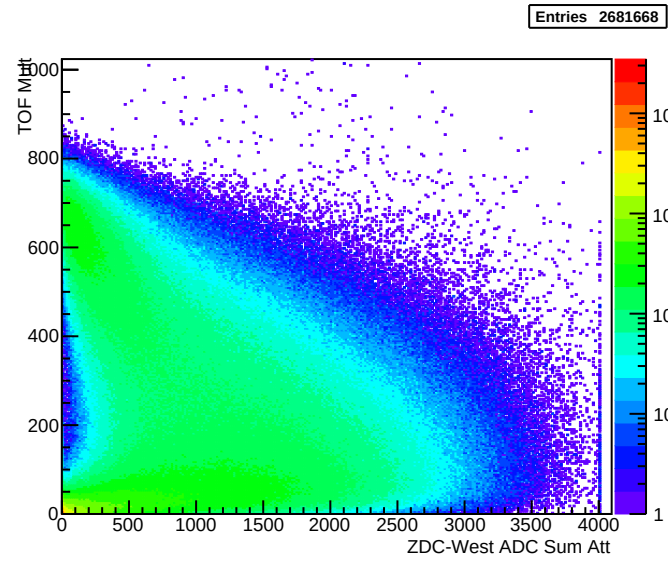

Entries 2681668
TOF Mult
EPD-East Hit Cnt

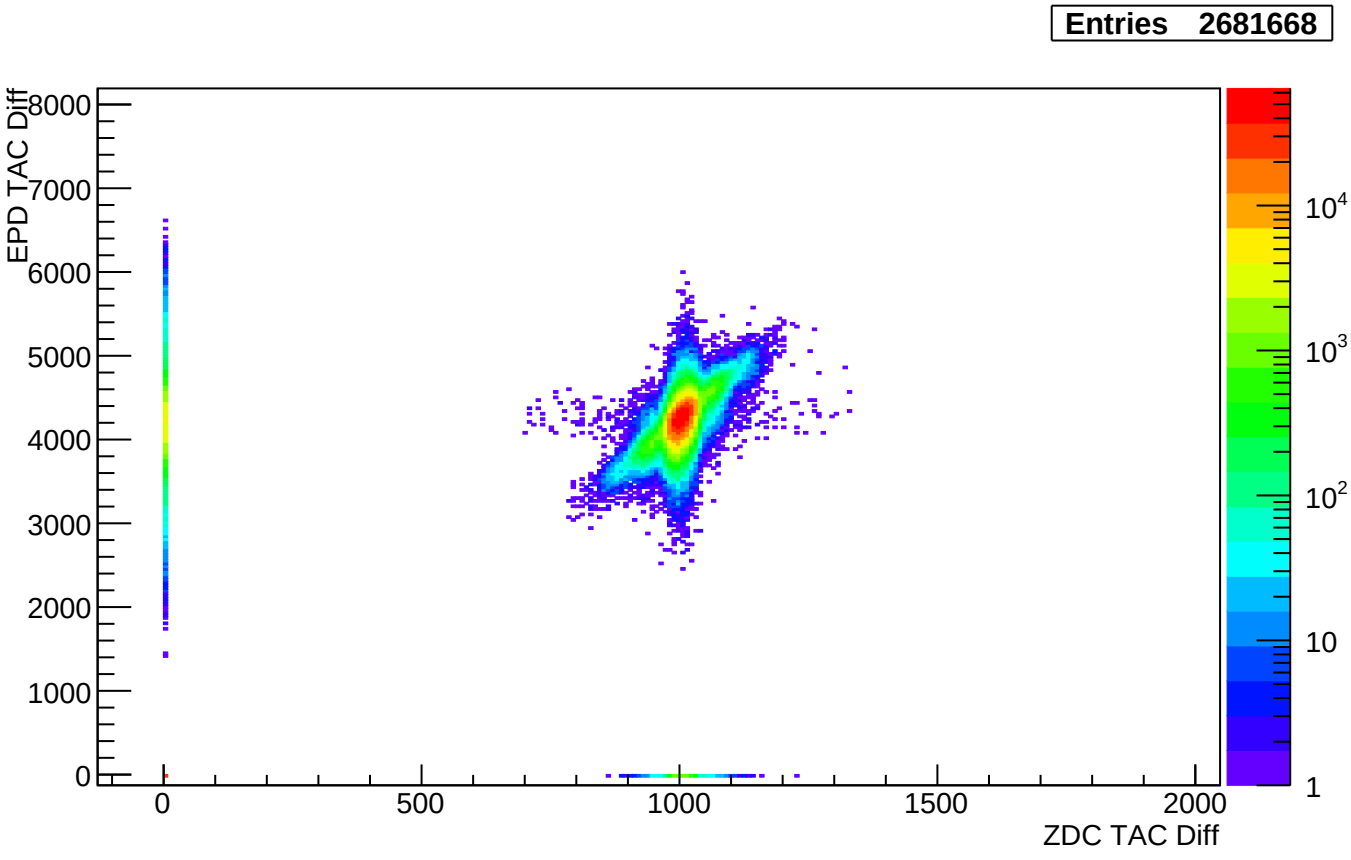

Entries 2681668
TOF Mult
EPD-West Hit Cnt

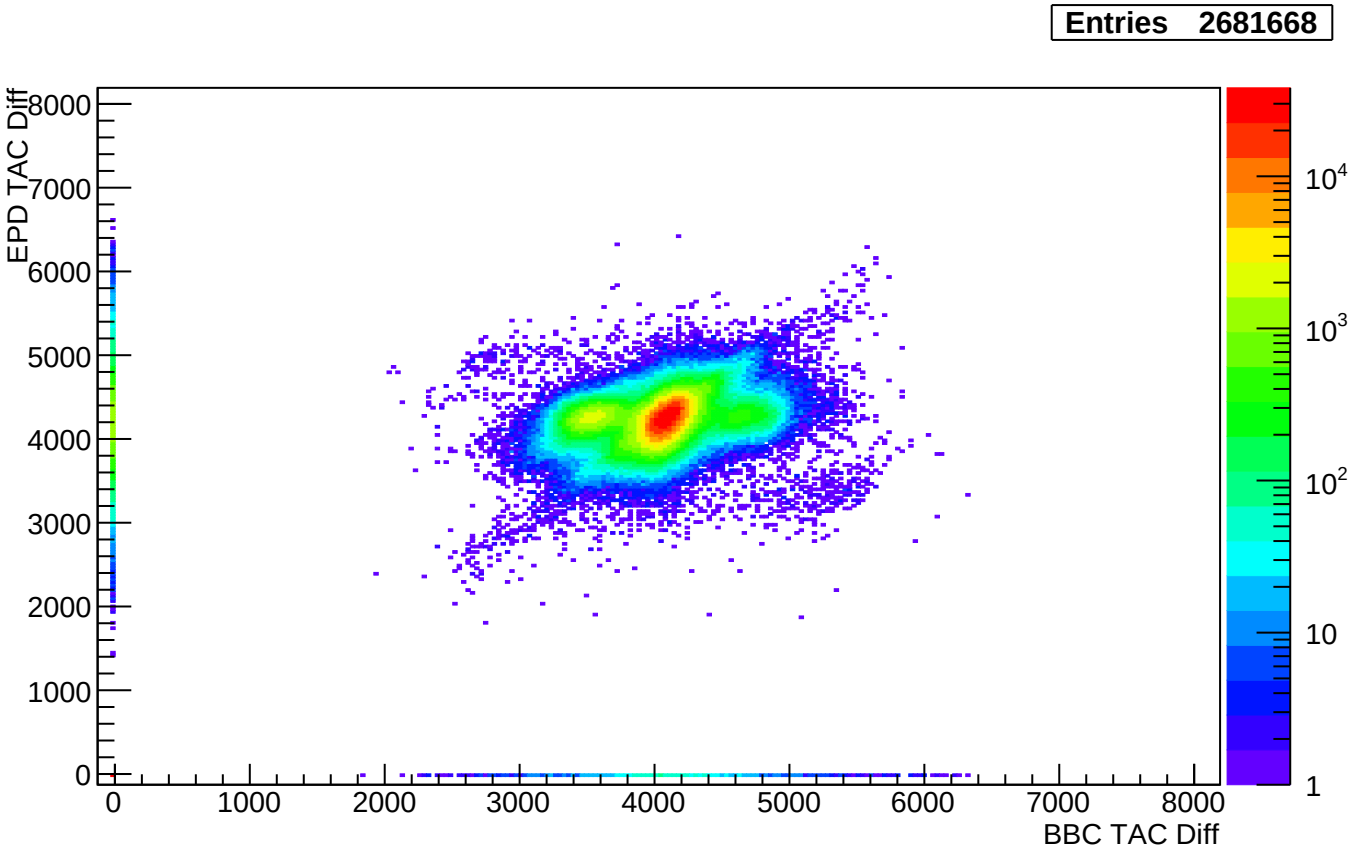

Entries 2681668
TOF Mult
VPD-East Hit Cnt

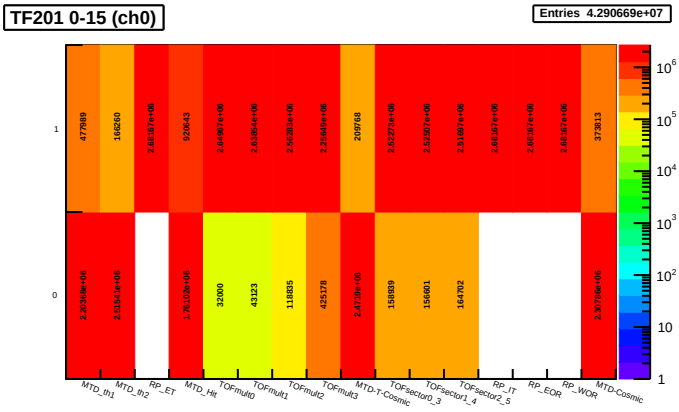

Entries 2681668
TOF Mult
VPD-West Hit Cnt

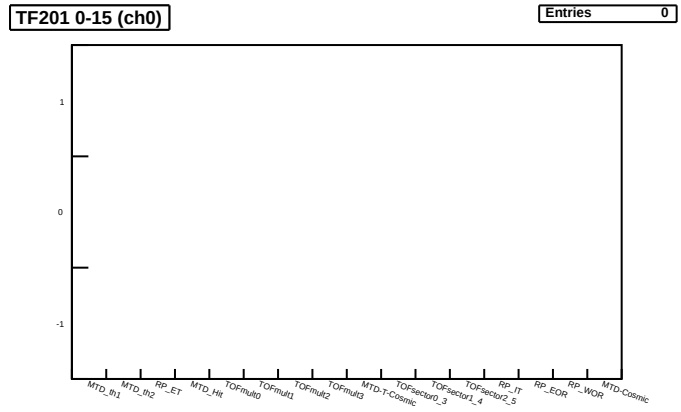

Entries 2681668
TOF Mult
ZDC-East ADC Sum Att

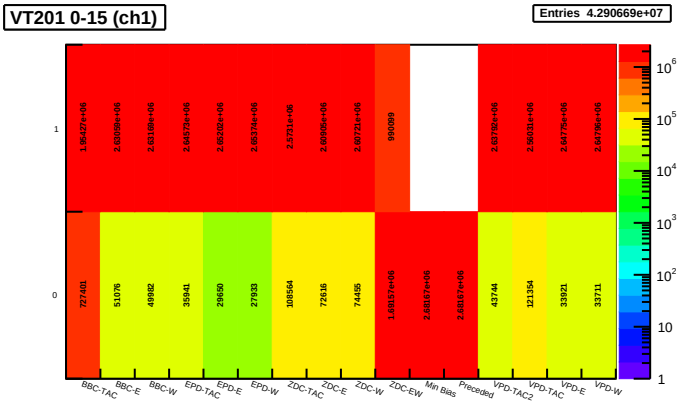

Entries 2681668
TOF Mult
ZDC-West ADC Sum Att

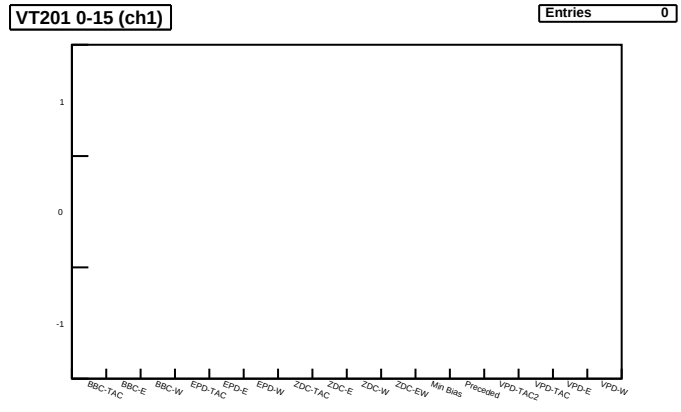

Entries 2681668
EPD TAC Diff
ZDC TAC Diff
0
1000
2000
3000
4000
5000
6000
7000
8000
0
500
1000
1500
2000
1
10
10^2
10^3
10^4

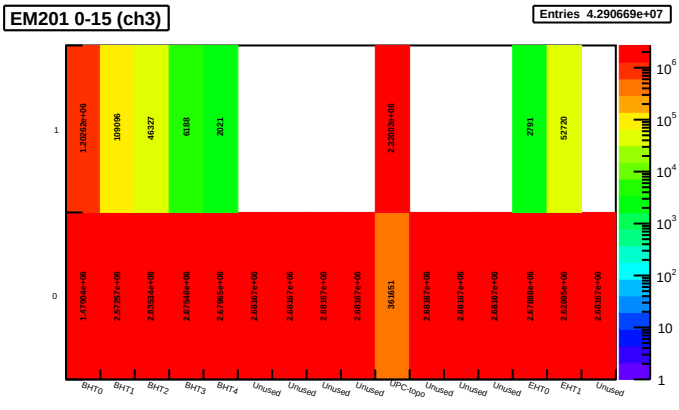

Entries 2681668
EPD TAC Diff
BBC TAC Diff
0
1000
2000
3000
4000
5000
6000
7000
8000
0
1000
2000
3000
4000
5000
6000
7000
8000
1
10
10^2
10^3
10^4

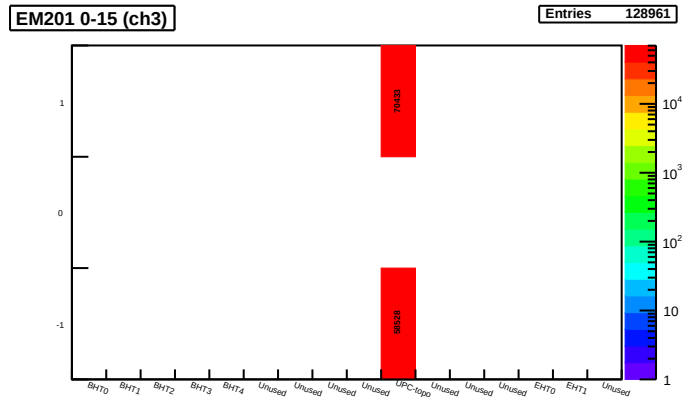

TF201 0-15 (ch0)
Entries 4.290669e+07
477869
166260
2.63157e+06
920643
2.64957e+06
2.63854e+06
2.59283e+06
2.25649e+06
209768
2.52272e+06
2.52597e+06
2.51697e+06
2.63167e+06
2.63167e+06
2.63167e+06
373813
2.33568e+06
2.51541e+06
1.76102e+06
32000
43123
118835
425178
2.47159e+06
158859
156601
164702
2.33786e+06
MTD_th1
MTD_th2
RP_ET
MTD_Hit
TOFmult0
TOFmult1
TOFmult2
TOFmult3
MTD-T-Cosmic
TOFsector0_3
TOFsector1_4
TOFsector2_5
RP_IT
RP_EOR
RP_WOR
MTD-Cosmic

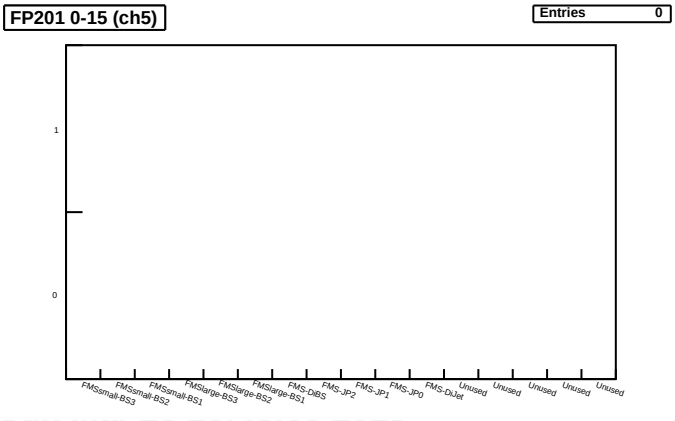

TF201 0-15 (ch0)
Entries 0
MTD_th1
MTD_th2
RP_ET
MTD_Hit
TOFmult0
TOFmult1
TOFmult2
TOFmult3
MTD-T-Cosmic
TOFsector0_3
TOFsector1_4
TOFsector2_5
RP_IT
RP_EOR
RP_WOR
MTD-Cosmic

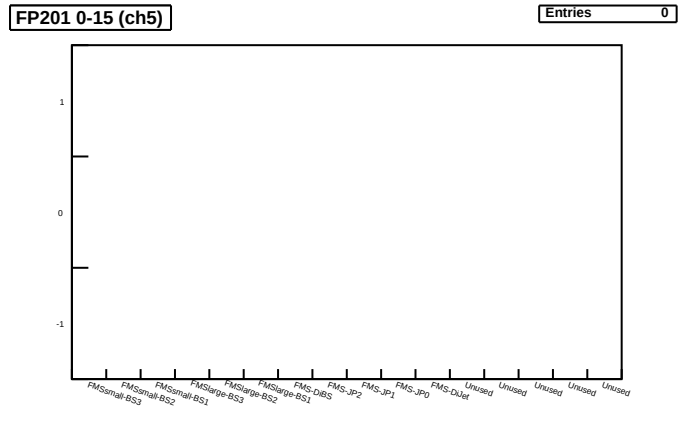

VT201 0-15 (ch1)
Entries 4.290669e+07
1.65427e+06
2.63959e+06
2.63169e+06
2.64573e+06
2.65202e+06
2.65374e+06
2.57318e+06
2.60905e+06
2.60721e+06
990099
2.63782e+06
2.56031e+06
2.64775e+06
2.64786e+06
727401
51076
49982
35941
29650
27933
108564
72616
74495
1.69157e+06
2.68167e+06
2.68167e+06
43744
121354
33921
33711
BBC-TAC
BBC-E
BBC-W
EPD-TAC
EPD-E
EPD-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-EW
Min Bias
Preceded
VPD-TAC2
VPD-TAC
VPD-E
VPD-W


VT201 0-15 (ch1)
Entries 0
BBC-TAC
BBC-E
BBC-W
EPD-TAC
EPD-E
EPD-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-EW
Min Bias
Preceded
VPD-TAC2
VPD-TAC
VPD-E
VPD-W


EM201 0-15 (ch3)
Entries 4.290669e+07
1.20262e+06
109096
46327
6188
2021
2.23002e+06
2791
52720
1.47904e+06
2.72757e+06
2.63334e+06
2.67548e+06
2.67955e+06
2.68167e+06
2.68167e+06
2.68167e+06
2.68167e+06
363551
2.68167e+06
2.68167e+06
2.68167e+06
2.67868e+06
2.62885e+06
2.68167e+06
BHT0
BHT1
BHT2
BHT3
BHT4
Unused
UPC-topo
EHT0
EHT1


EM201 0-15 (ch3)
Entries 128961
70433
58528
BHT0
BHT1
BHT2
BHT3
BHT4
Unused
UPC-topo
EHT0
EHT1


FP201 0-15 (ch5)
Entries 0
FMSsmall-BS3
FMSsmall-BS2
FMSsmall-BS1
FMSlarge-BS3
FMSlarge-BS2
FMSlarge-BS1
FMS-DiBS
FMS-JP2
FMS-JP1
FMS-JP0
FMS-DiJet
Unused


FP201 0-15 (ch5)
Entries 0
FMSsmall-BS3
FMSsmall-BS2
FMSsmall-BS1
FMSlarge-BS3
FMSlarge-BS2
FMSlarge-BS1
FMS-DiBS
FMS-JP2
FMS-JP1
FMS-JP0
FMS-DiJet
Unused