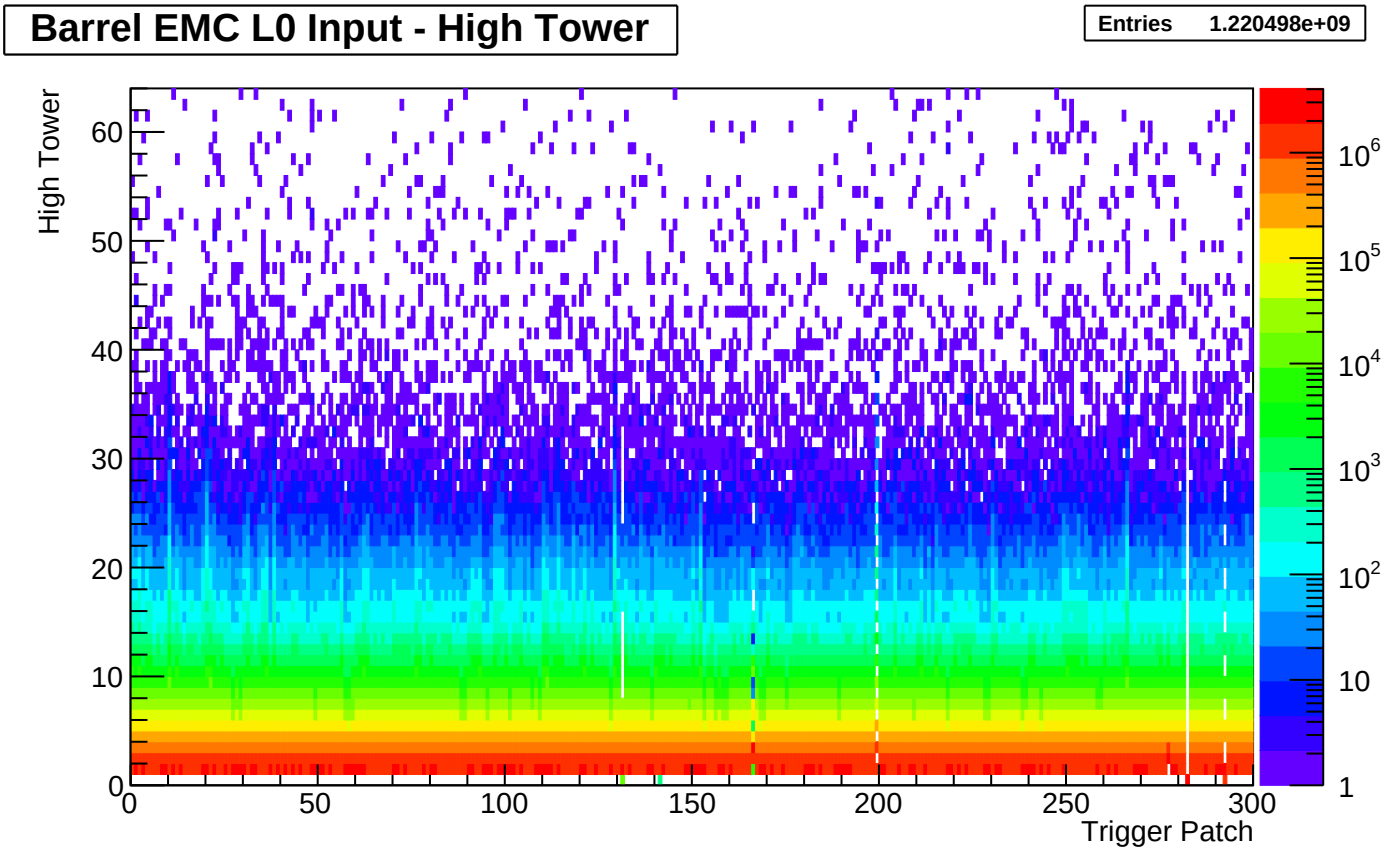
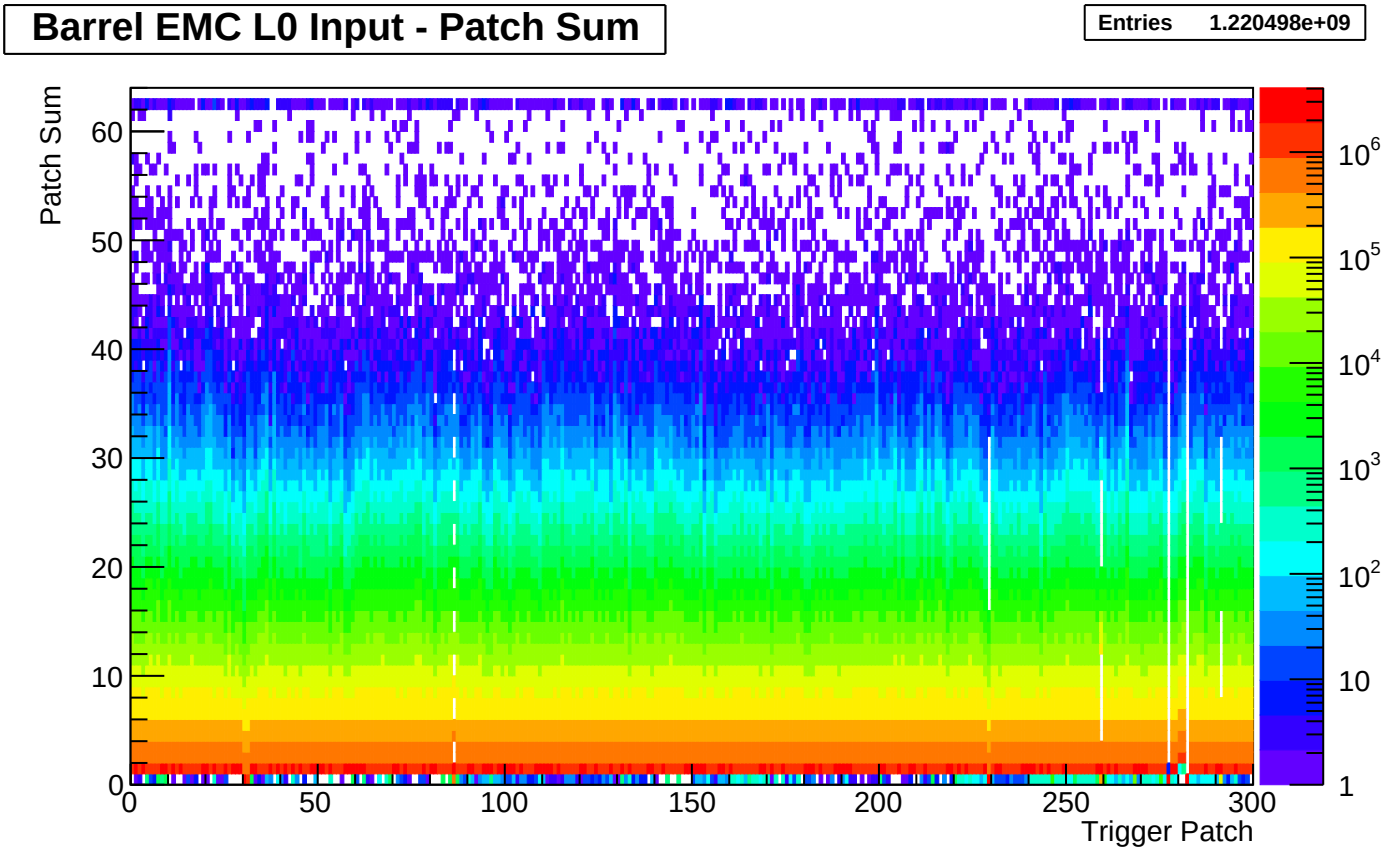
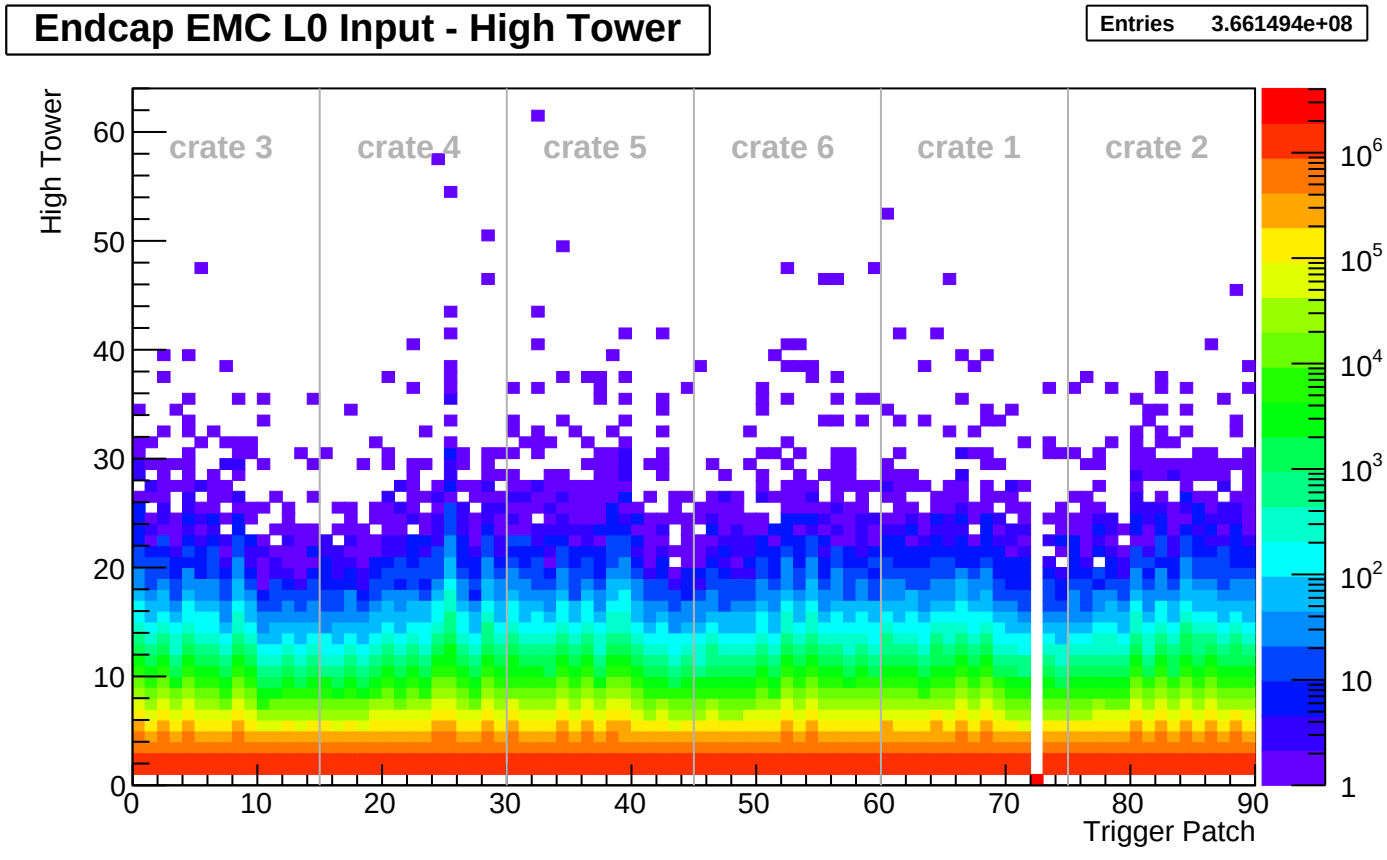
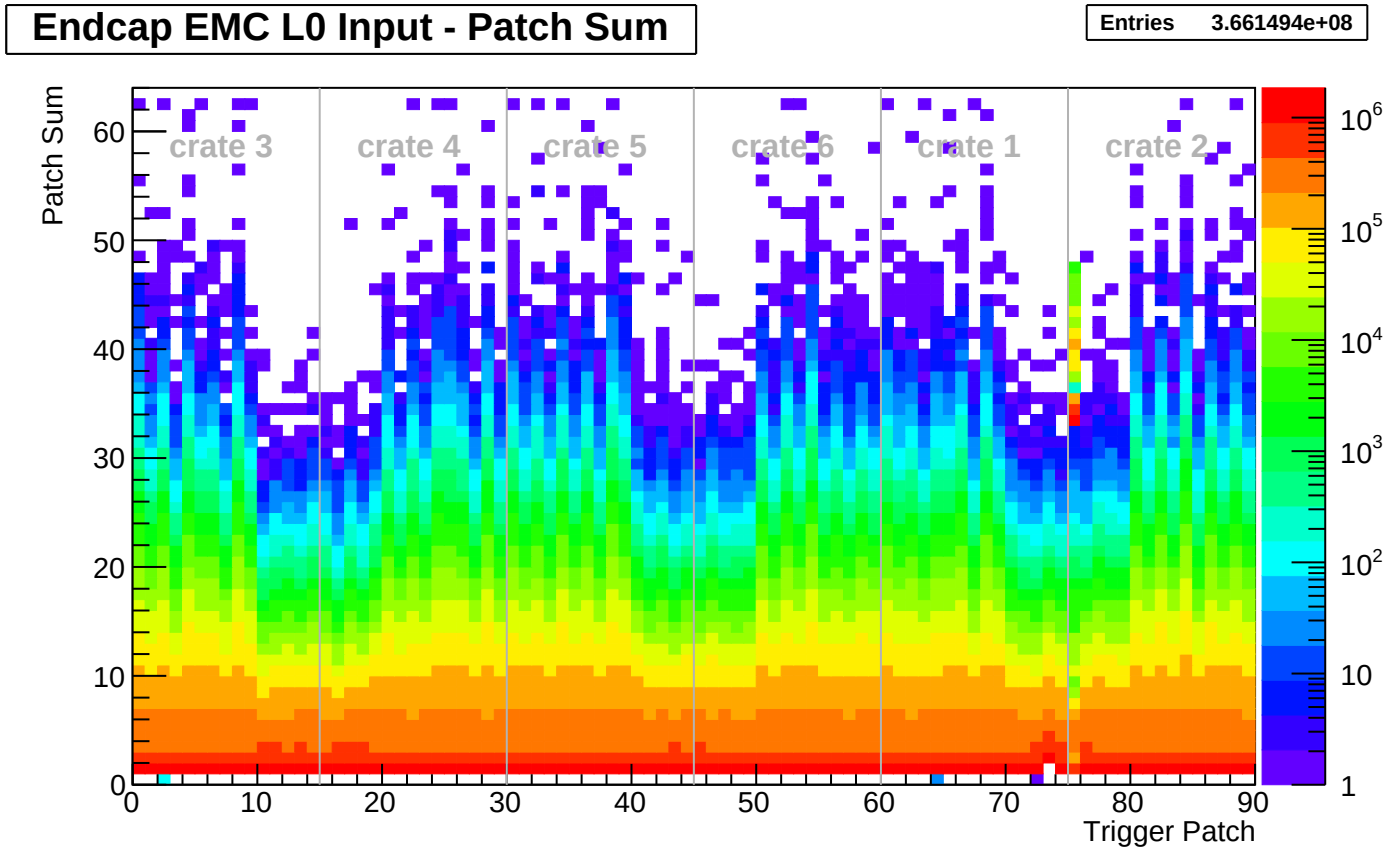
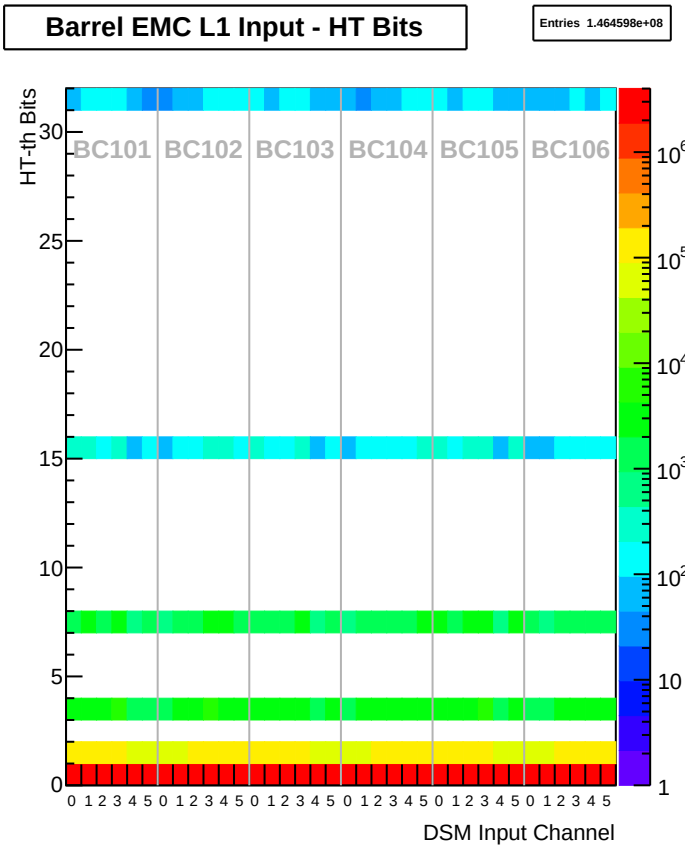
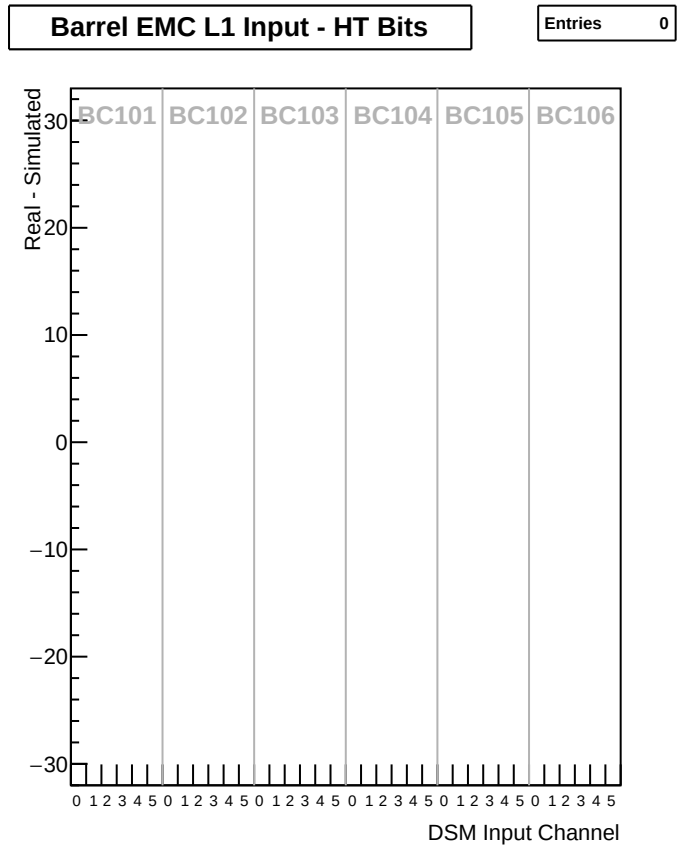

Barrel EMC L0 Input - High Tower
Entries 1.220498e+09
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

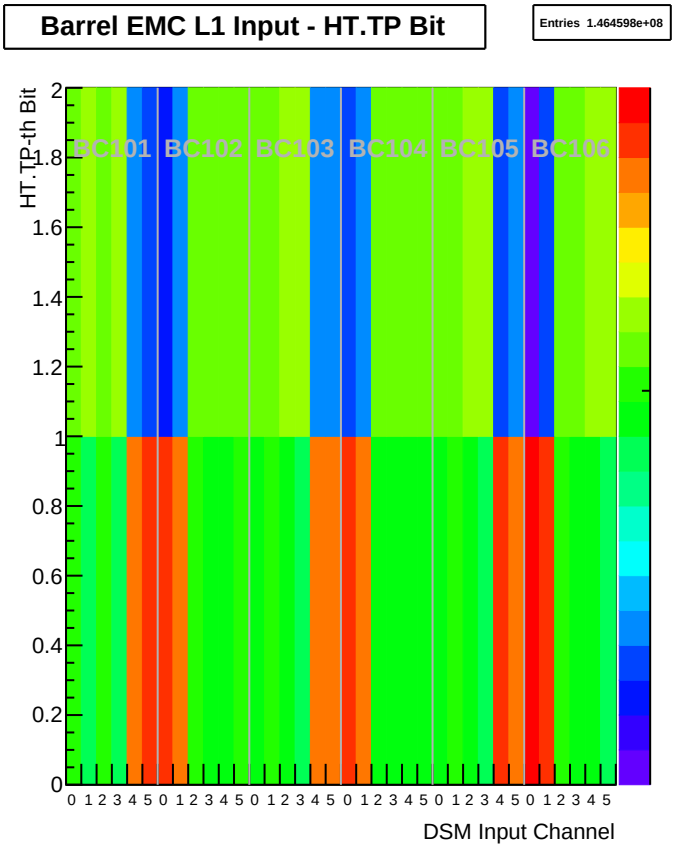

Barrel EMC L0 Input - Patch Sum
Entries 1.220498e+09
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

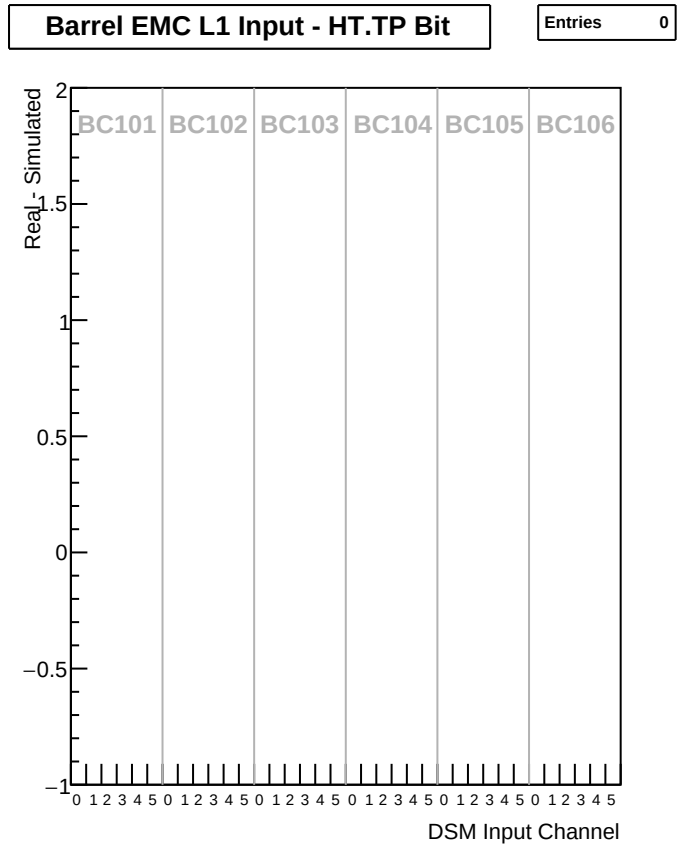

Endcap EMC L0 Input - High Tower
Entries 3.661494e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

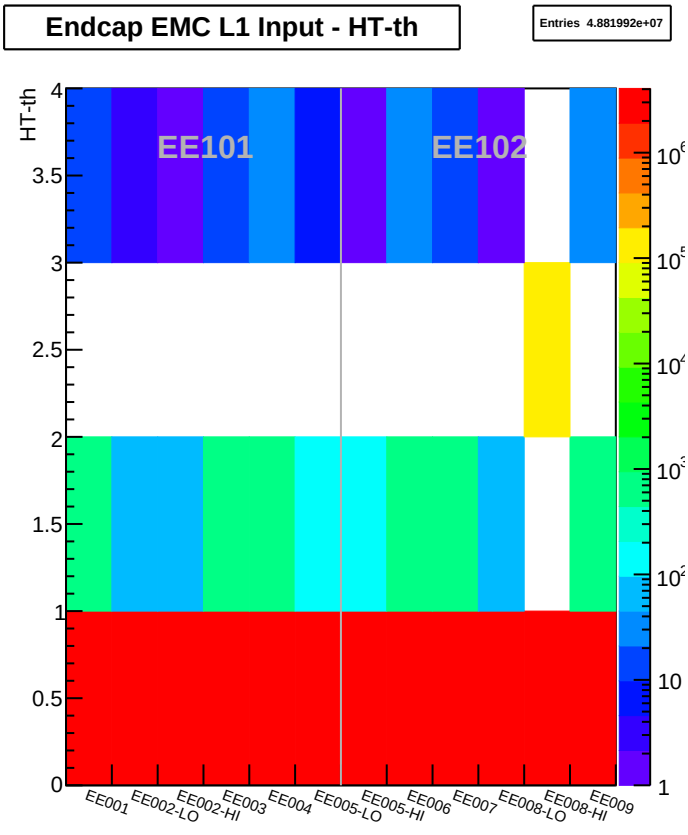

Endcap EMC L0 Input - Patch Sum
Entries 3.661494e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

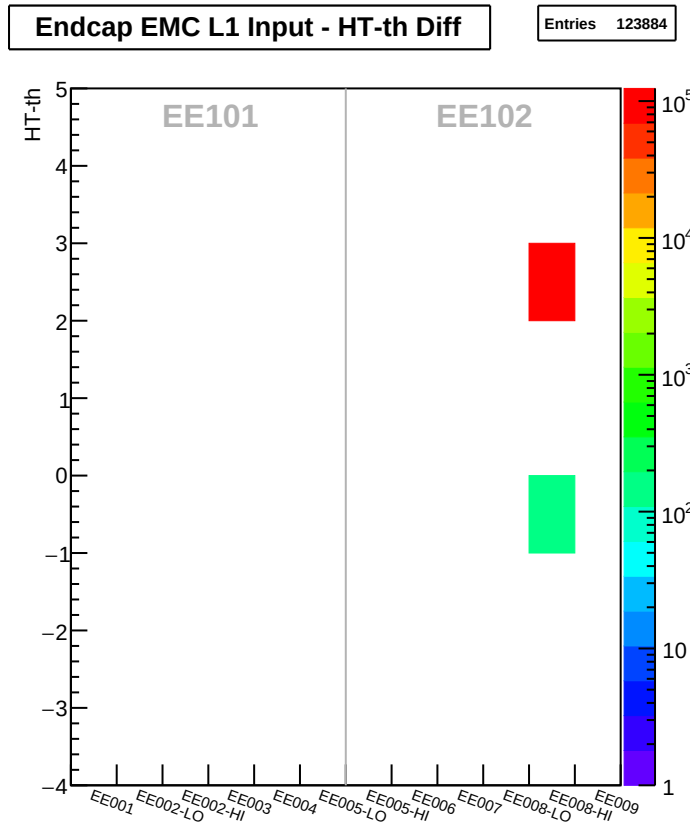

Barrel EMC L1 Input - HT Bits
Entries 1.464598e+08
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

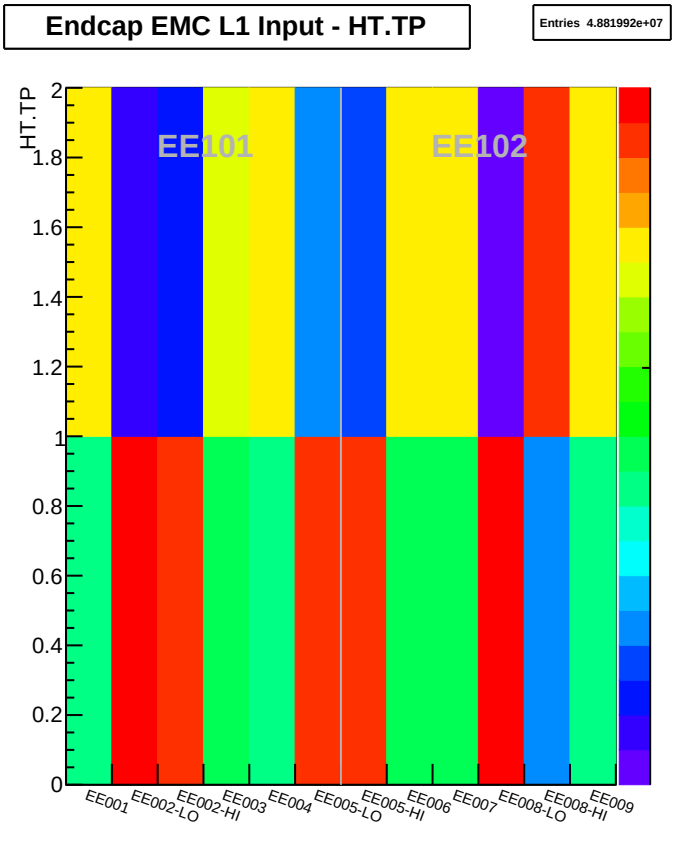

Barrel EMC L1 Input - HT Bits
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

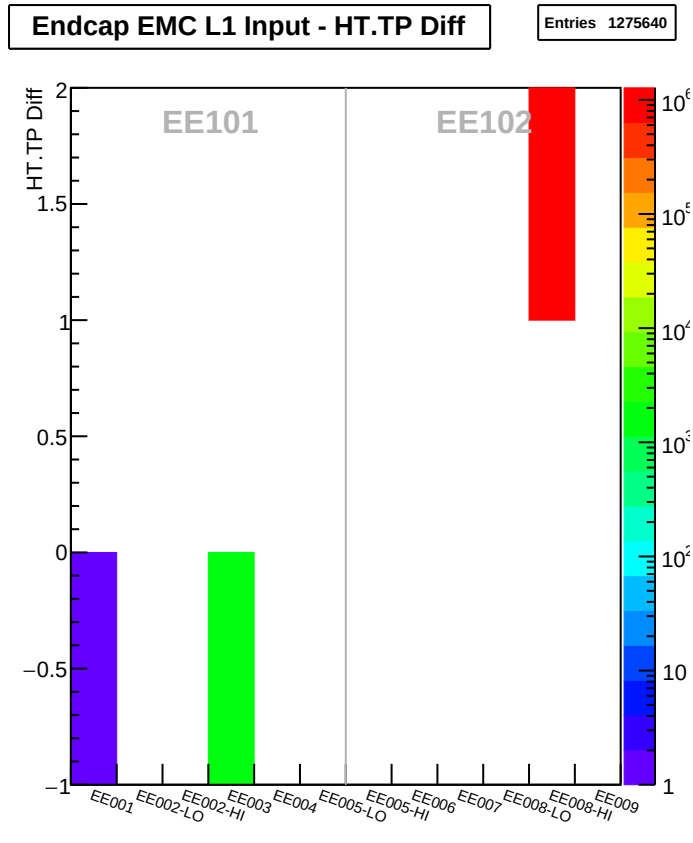

Barrel EMC L1 Input - HT.TP Bit
Entries 1.464598e+08
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

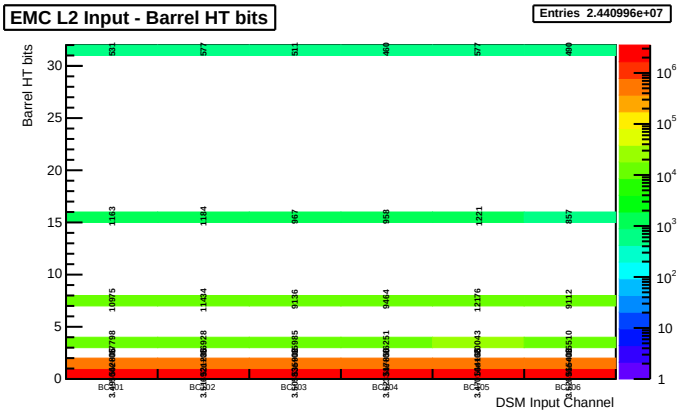

Barrel EMC L1 Input - HT.TP Bit
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

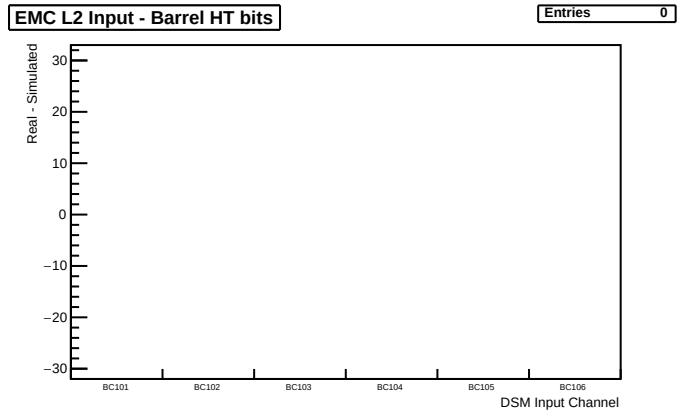

Endcap EMC L1 Input - HT-th
Entries 4.881992e+07
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

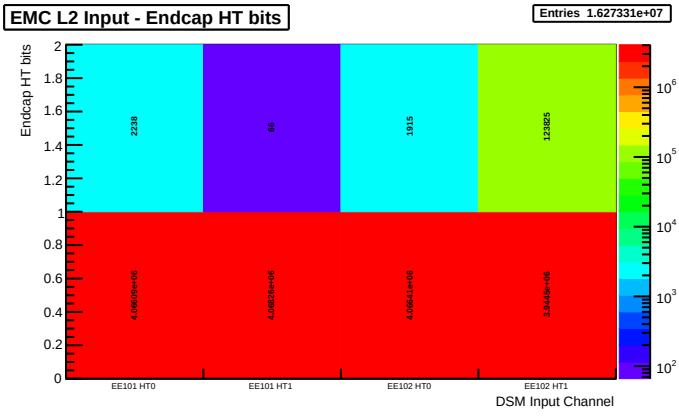

Endcap EMC L1 Input - HT-th Diff
Entries 123884
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

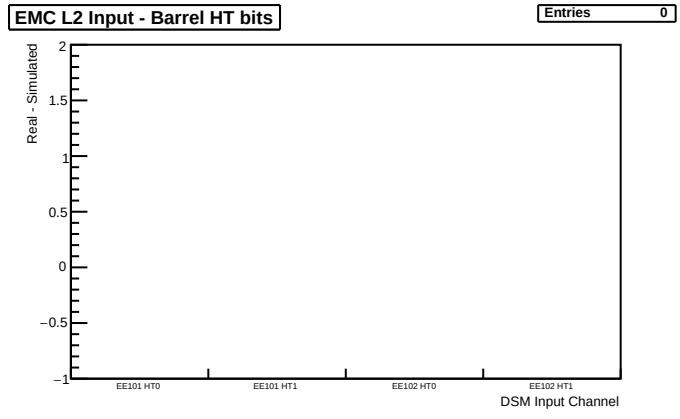

Endcap EMC L1 Input - HT.TP
Entries 4.881992e+07
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

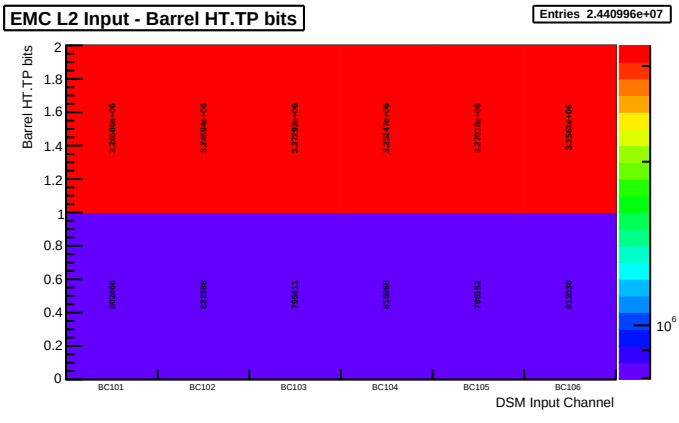

Endcap EMC L1 Input - HT.TP Diff
Entries 1275640
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

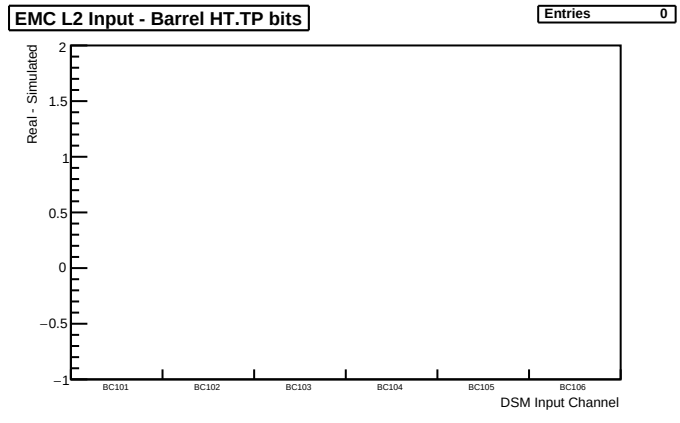

EMC L2 Input - Barrel HT bits
Entries 2.440996e+07
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

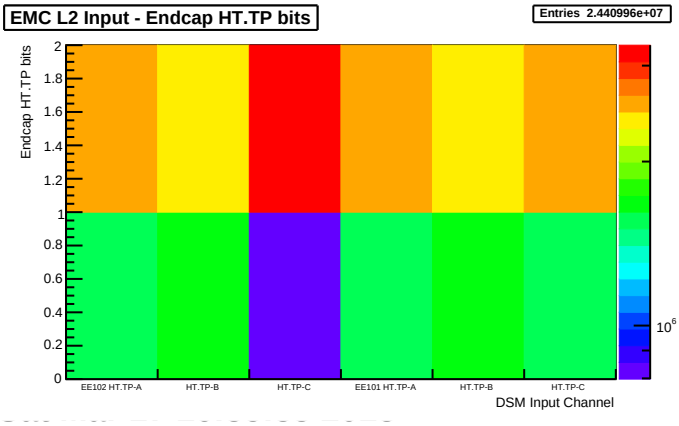

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

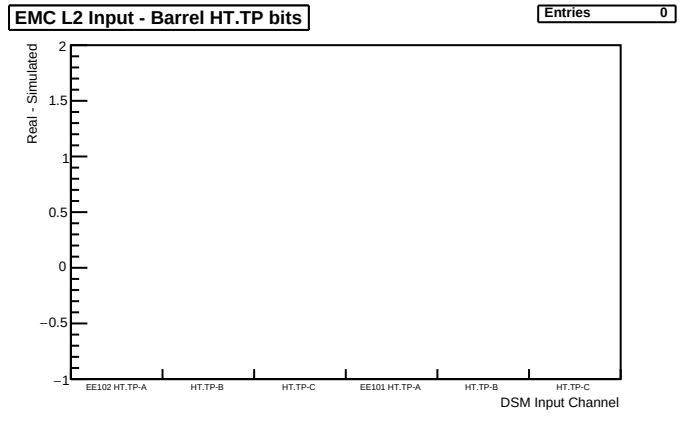

EMC L2 Input - Endcap HT bits
Entries 1.627331e+07
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

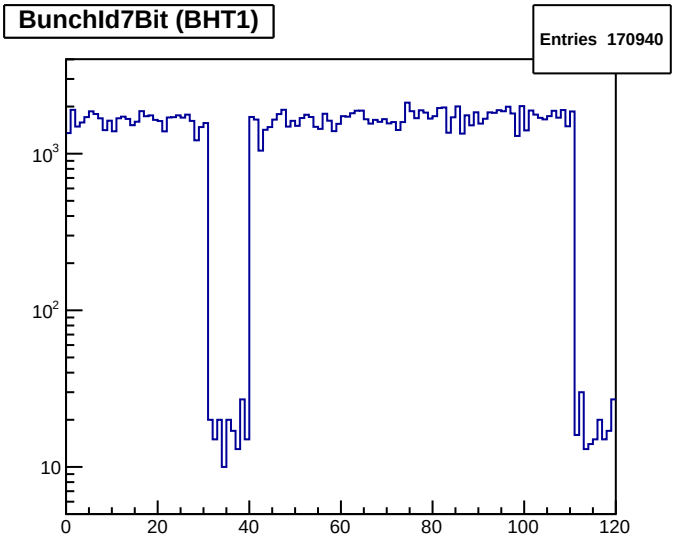

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

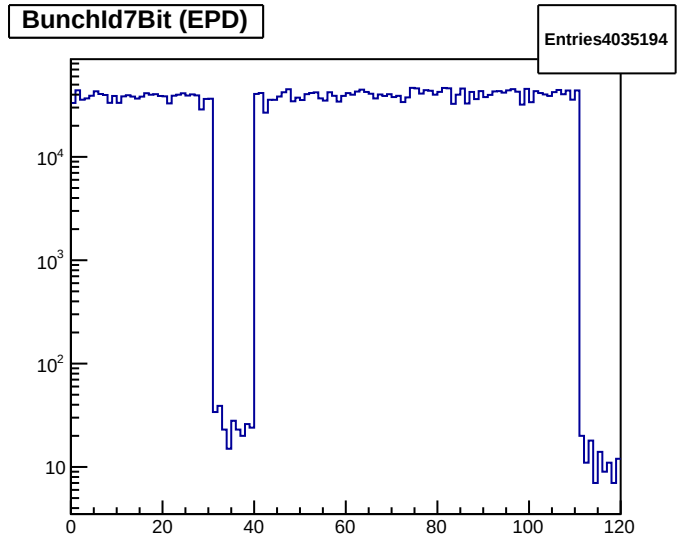

EMC L2 Input - Barrel HT.TP bits
Entries 2.440996e+07
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

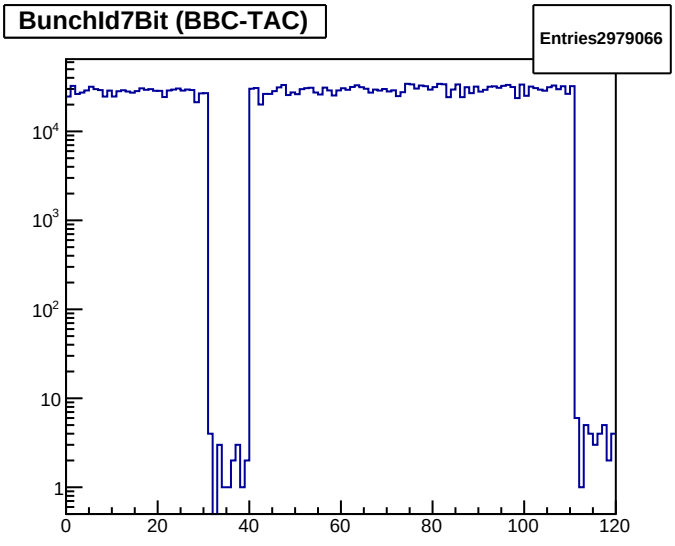

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

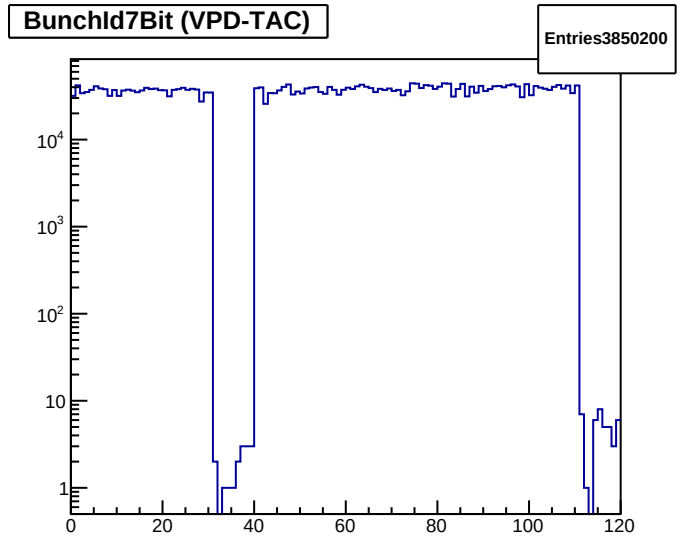

EMC L2 Input - Endcap HT.TP bits
Entries 2.440996e+07
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

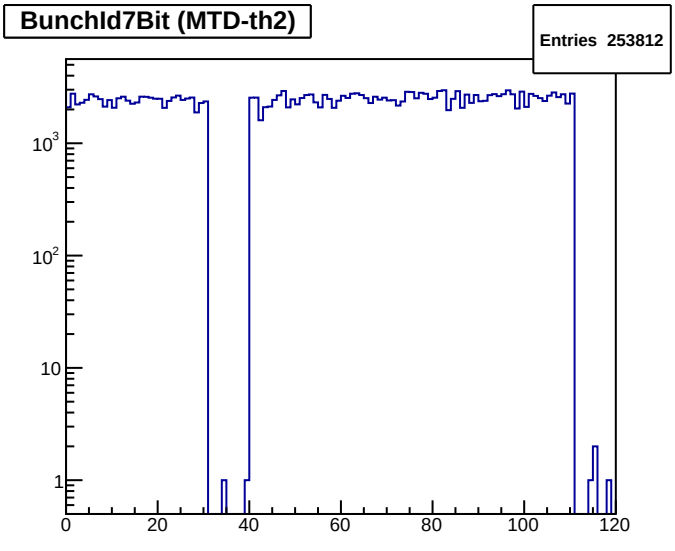

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

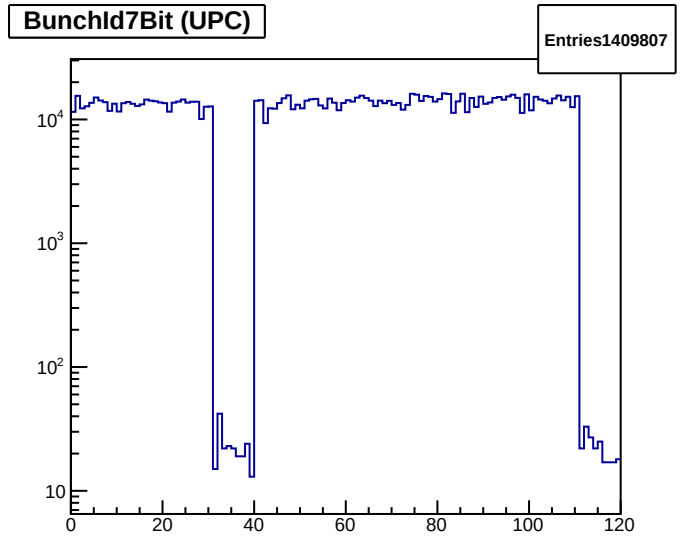

BunchId7Bit (BHT1)
Entries 170940
10^3
10^2
10
0
20
40
60
80
100
120

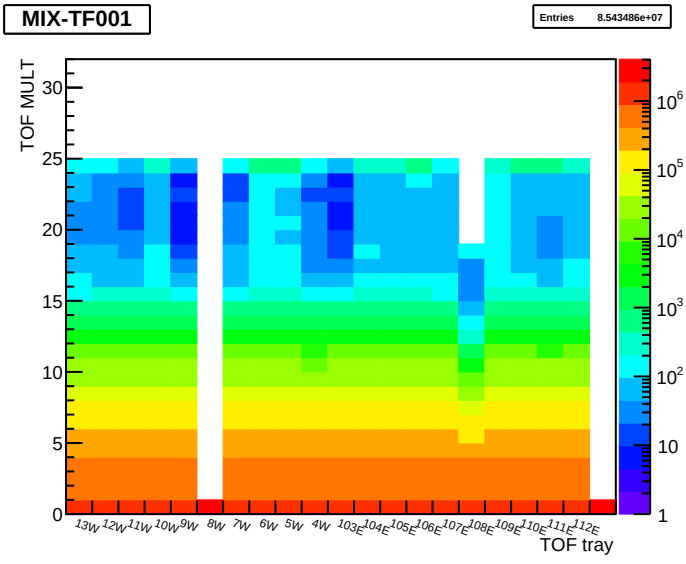

BunchId7Bit (EPD)
Entries4035194
10^4
10^3
10^2
10
0
20
40
60
80
100
120

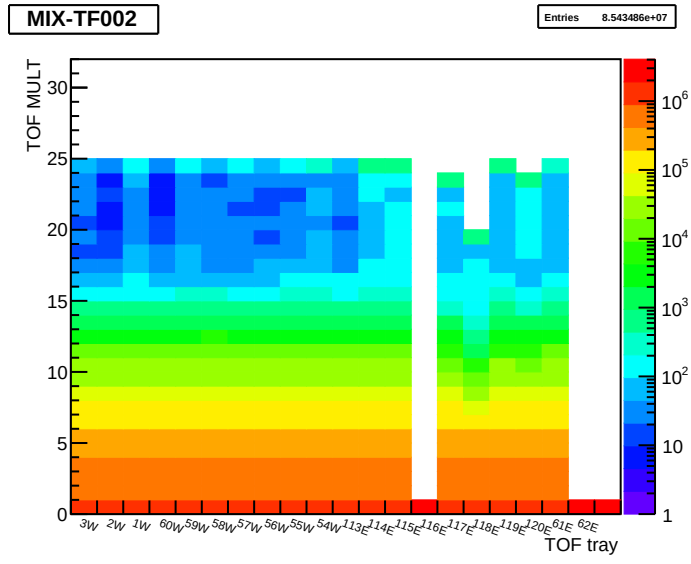

BunchId7Bit (BBC-TAC)
Entries2979066
10^4
10^3
10^2
10
1
0
20
40
60
80
100
120

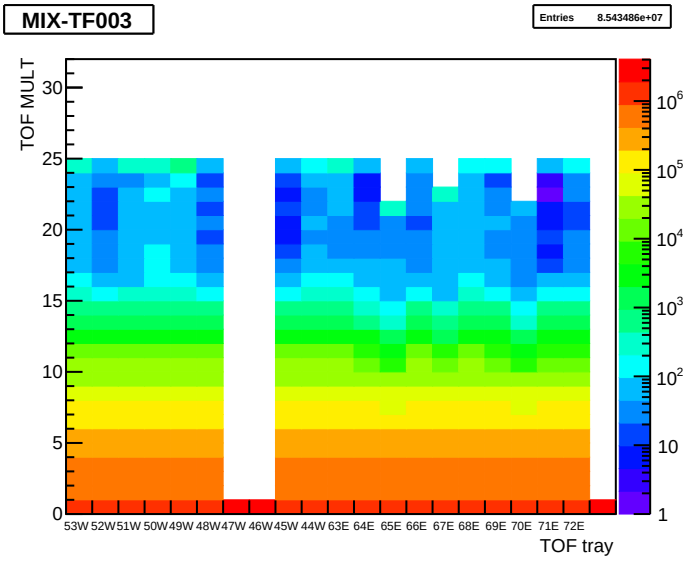

BunchId7Bit (VPD-TAC)
Entries3850200
10^4
10^3
10^2
10
1
0
20
40
60
80
100
120

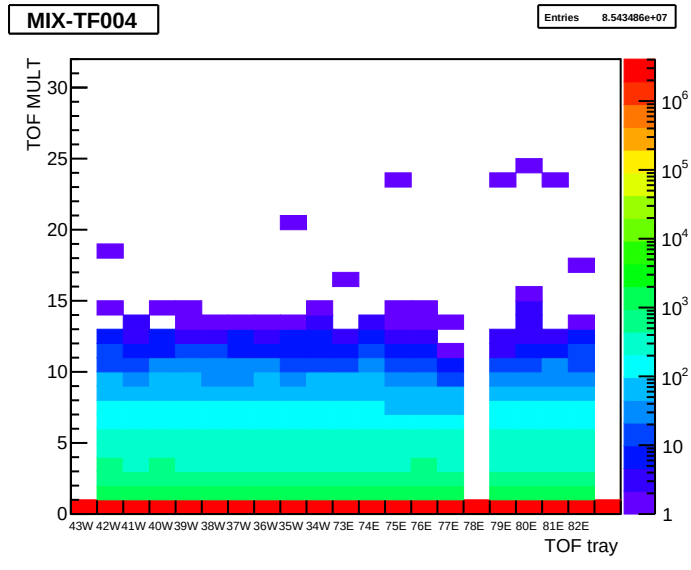

BunchId7Bit (MTD-th2)
Entries 253812
10^3
10^2
10
1
0
20
40
60
80
100
120

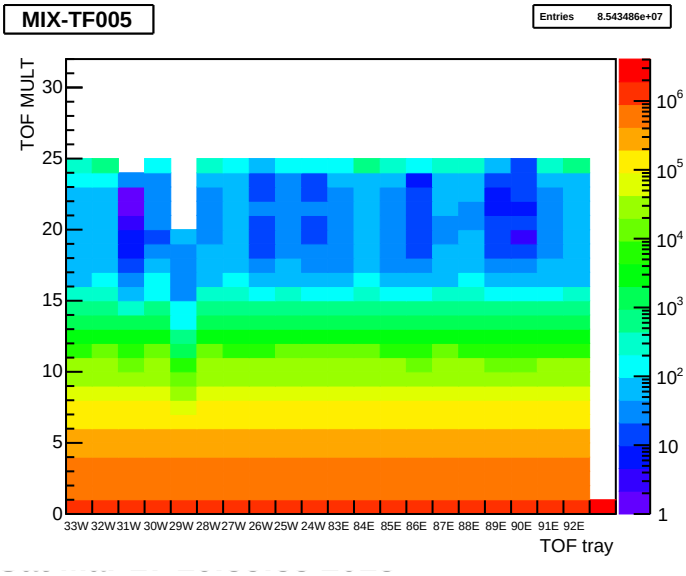

BunchId7Bit (UPC)
Entries1409807
10^4
10^3
10^2
10
0
20
40
60
80
100
120

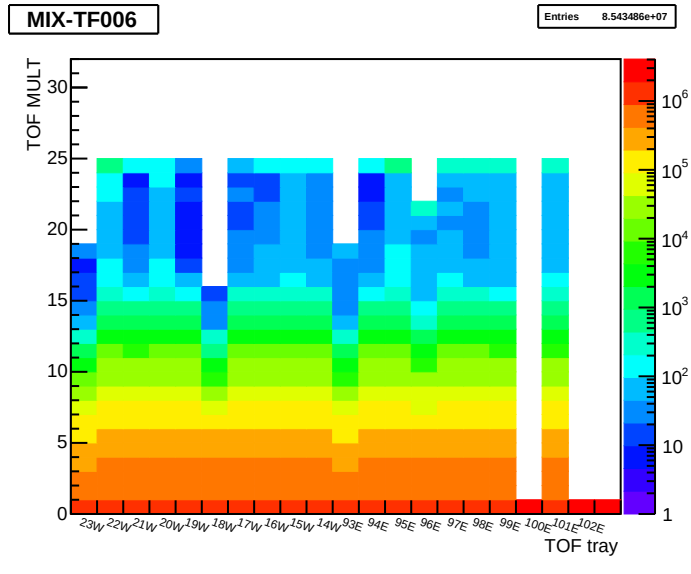

MIX-TF001
Entries 8.543486e+07
TOF MULT
TOF tray
13W 12W 11W 10W 9W 8W 7W 6W 5W 4W 103E 104E 105E 106E 107E 108E 109E 110E 111E 112E

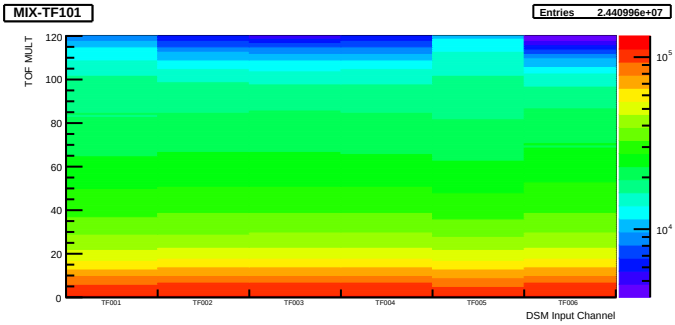

MIX-TF002
Entries 8.543486e+07
TOF MULT
TOF tray
3W 2W 1W 60W 59W 58W 57W 56W 55W 54W 113E 114E 115E 116E 117E 118E 119E 120E 61E 62E

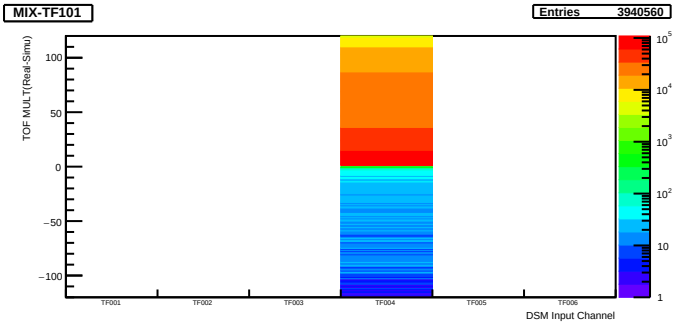

MIX-TF003
Entries 8.543486e+07
TOF MULT
TOF tray
53W 52W 51W 50W 49W 48W 47W 46W 45W 44W 63E 64E 65E 66E 67E 68E 69E 70E 71E 72E

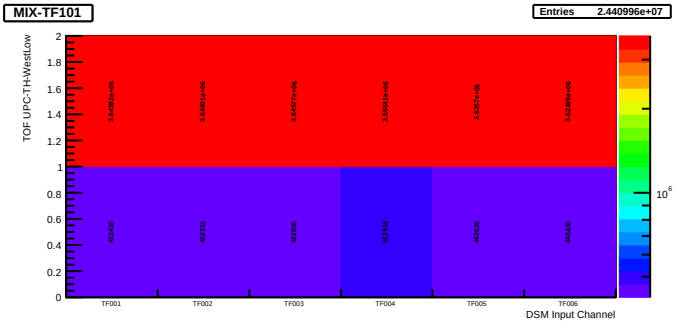

MIX-TF004
Entries 8.543486e+07
TOF MULT
TOF tray
43W 42W 41W 40W 39W 38W 37W 36W 35W 34W 73E 74E 75E 76E 77E 78E 79E 80E 81E 82E

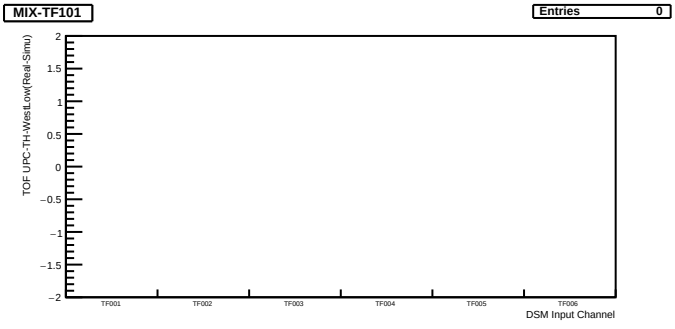

MIX-TF005
Entries 8.543486e+07
TOF MULT
TOF tray
33W 32W 31W 30W 29W 28W 27W 26W 25W 24W 83E 84E 85E 86E 87E 88E 89E 90E 91E 92E

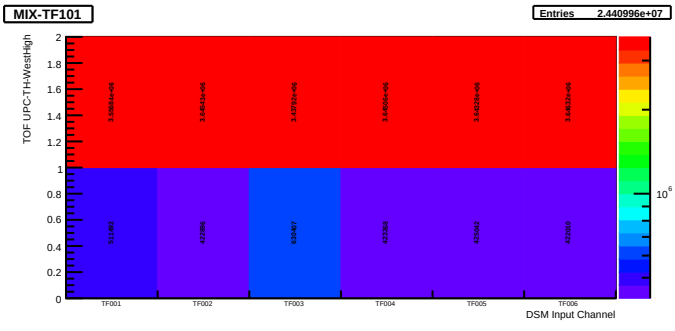

MIX-TF006
Entries 8.543486e+07
TOF MULT
TOF tray
23W 22W 21W 20W 19W 18W 17W 16W 15W 14W 93E 94E 95E 96E 97E 98E 99E 100E 101E 102E

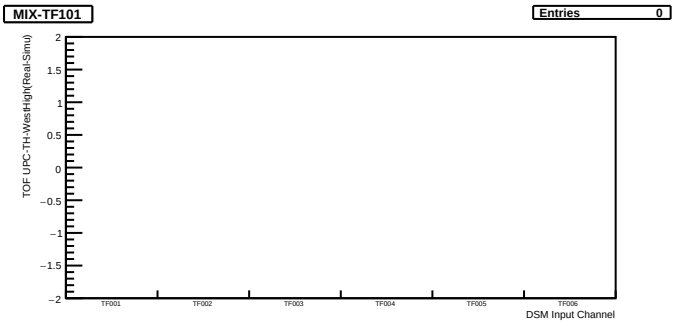

MIX-TF101
Entries 2.440996e+07
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

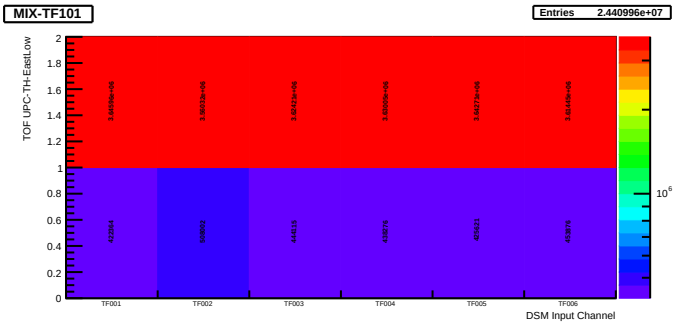

MIX-TF101
Entries 3940560
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

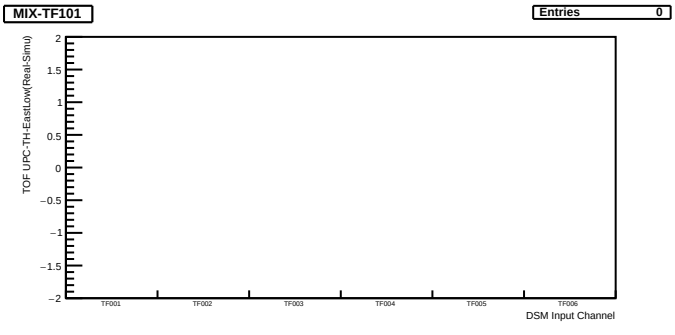

MIX-TF101
Entries 2.440996e+07
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

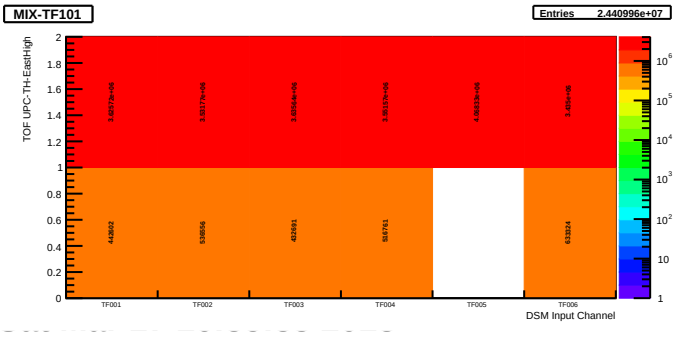

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

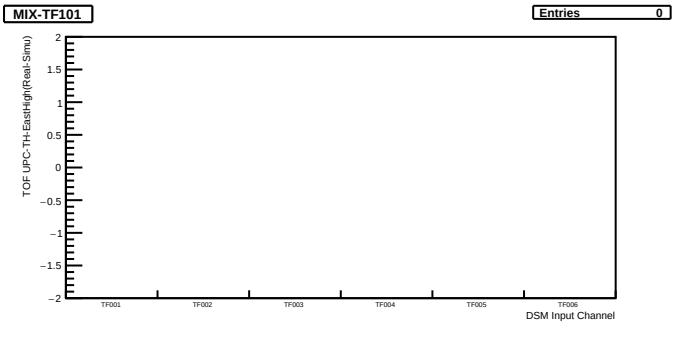

MIX-TF101
Entries 2.440996e+07
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

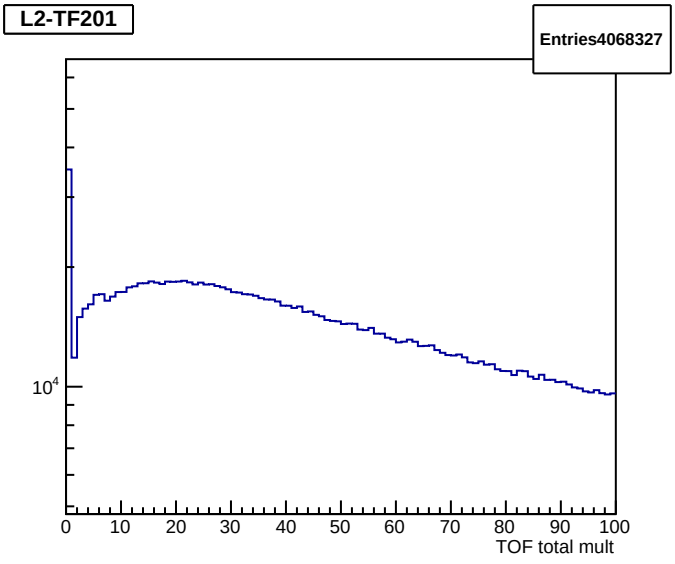

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

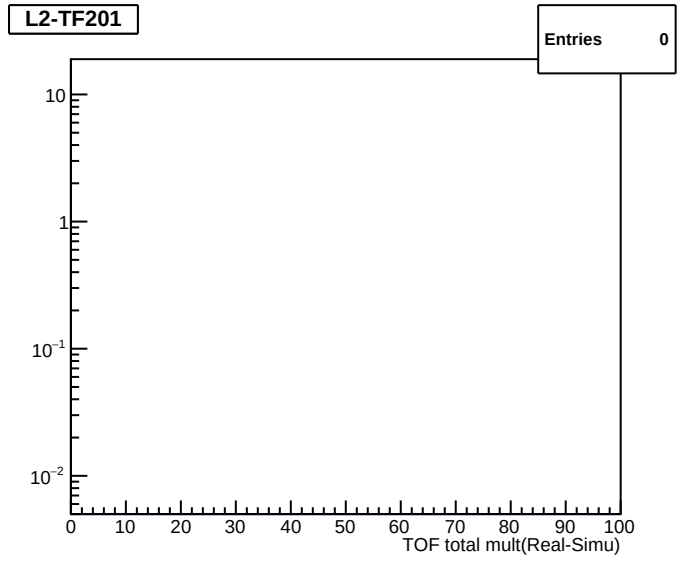

MIX-TF101
Entries 2.440996e+07
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

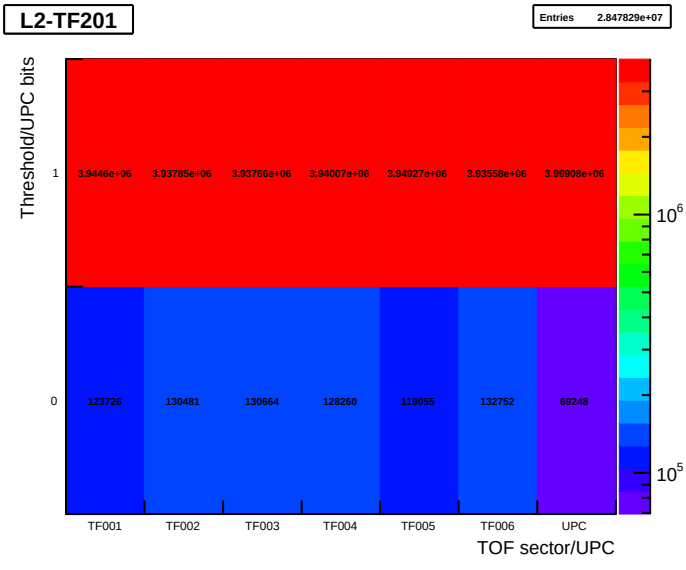

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

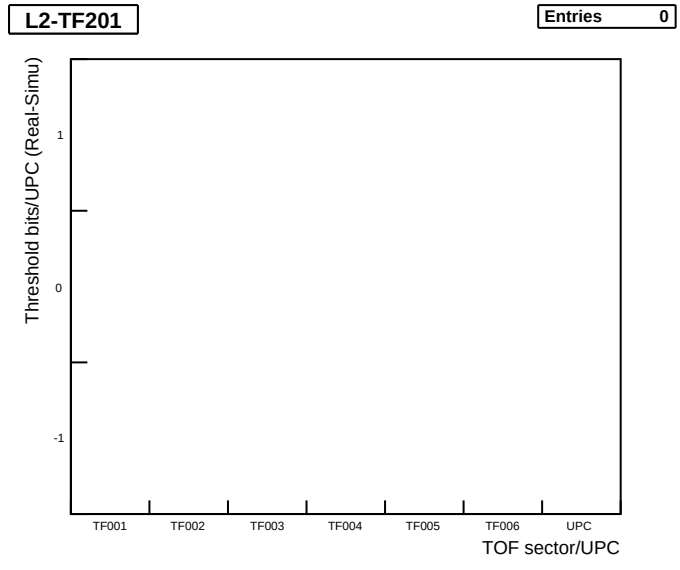

MIX-TF101
Entries 2.440996e+07
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

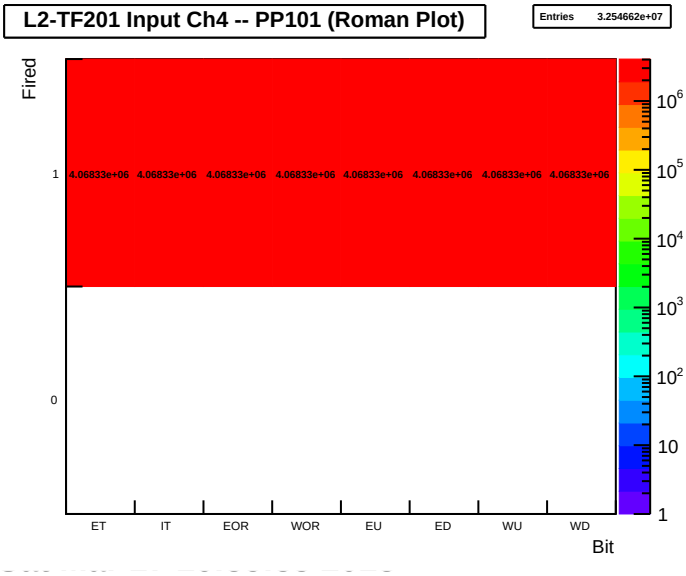

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

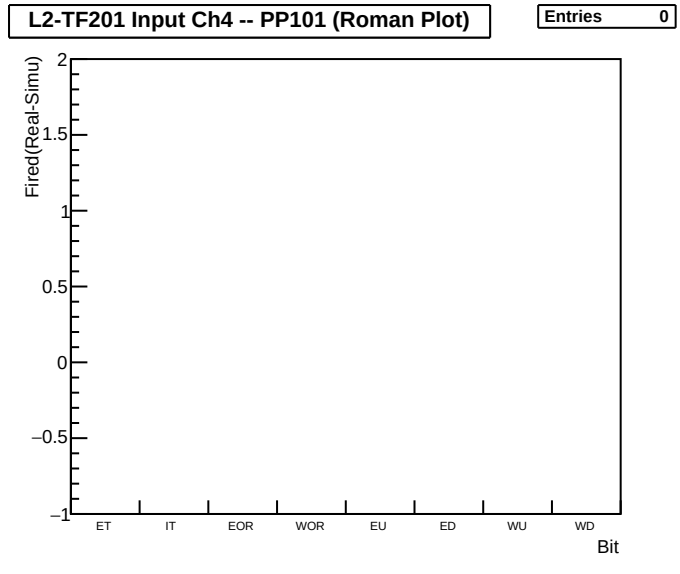

L2-TF201
Entries4068327
10^4
0 10 20 30 40 50 60 70 80 90 100
TOF total mult

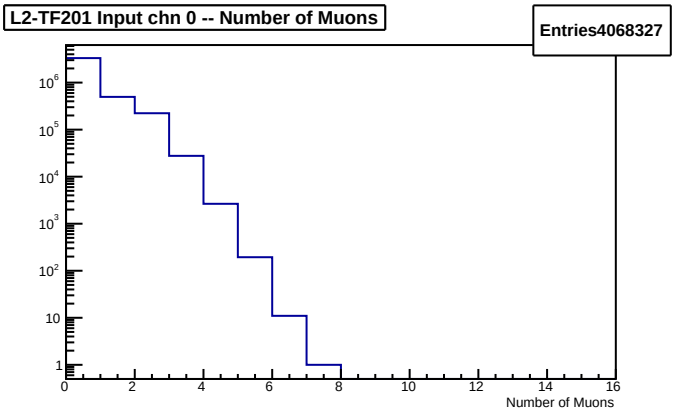

L2-TF201
Entries 0
10
1
10^{-1}
10^{-2}
0 10 20 30 40 50 60 70 80 90 100
TOF total mult(Real-Simu)

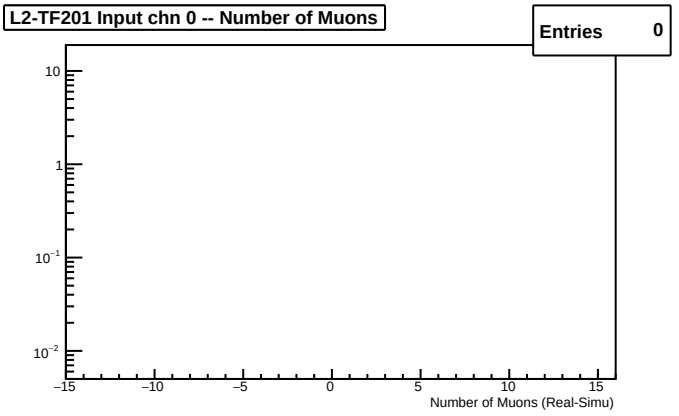

L2-TF201
Entries 2.847829e+07
Threshold/UPC bits
1
0
3.9446e+06 3.93785e+06 3.93766e+06 3.94007e+06 3.94927e+06 3.93558e+06 3.99908e+06
123726 130481 130664 128260 119055 132752 69248
10^6
10^5
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

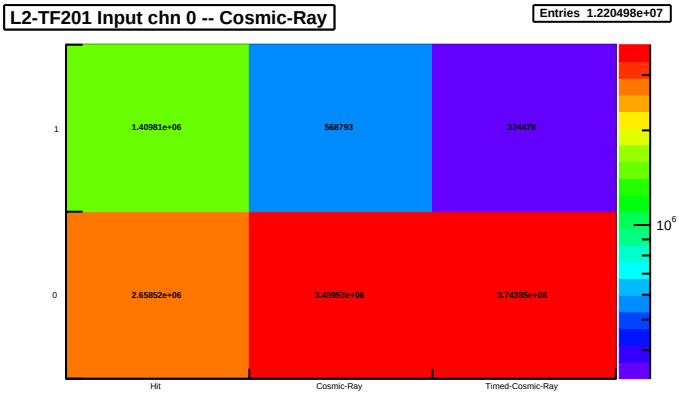

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
1
0
-1
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

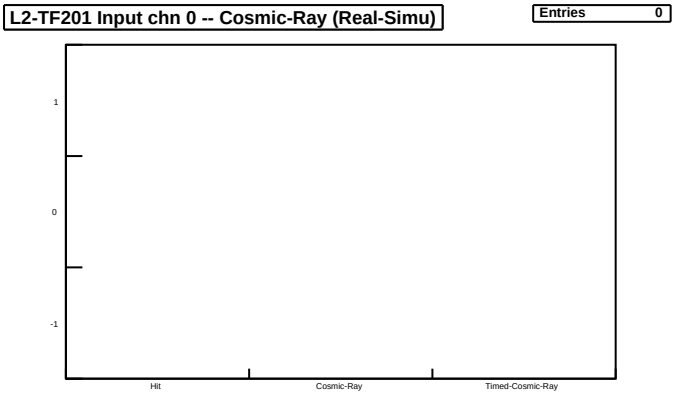

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 3.254662e+07
Fired
1
0
4.06833e+06 4.06833e+06 4.06833e+06 4.06833e+06 4.06833e+06 4.06833e+06 4.06833e+06 4.06833e+06
10^6
10^5
10^4
10^3
10^2
10
1
ET IT EOR WOR EU ED WU WD
Bit

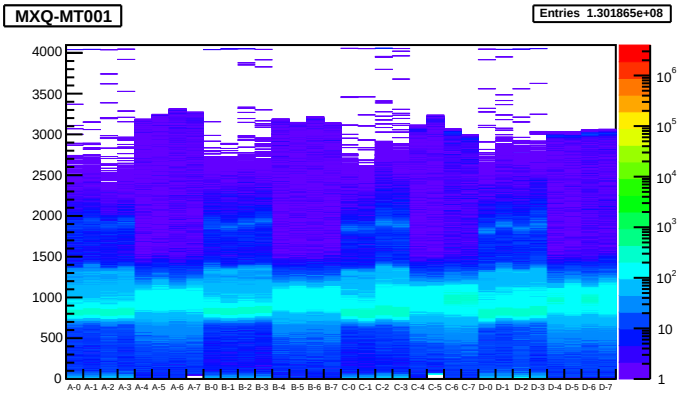

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 0
Fired(Real-Simu)
2
1.5
1
0.5
0
−0.5
−1
ET IT EOR WOR EU ED WU WD
Bit

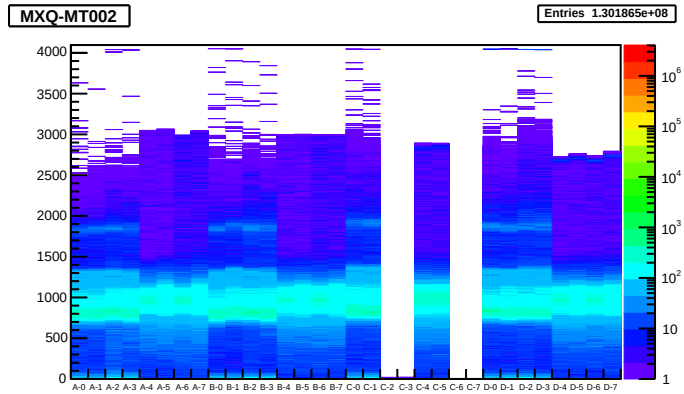

L2-TF201 Input chn 0 -- Number of Muons
Entries4068327
Number of Muons

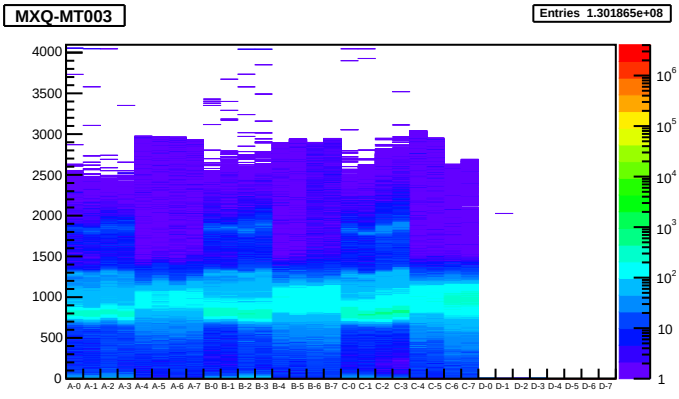

L2-TF201 Input chn 0 -- Number of Muons
Entries 0
Number of Muons (Real-Simu)

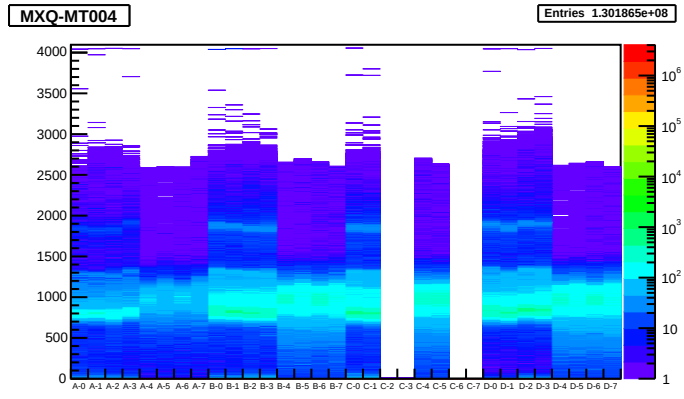

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 1.220498e+07
1.40981e+06
568793
324478
2.65852e+06
3.49953e+06
3.74385e+06
Hit
Cosmic-Ray
Timed-Cosmic-Ray

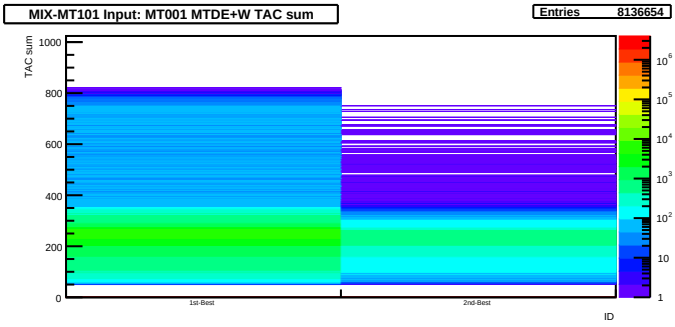

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 0
Hit
Cosmic-Ray
Timed-Cosmic-Ray

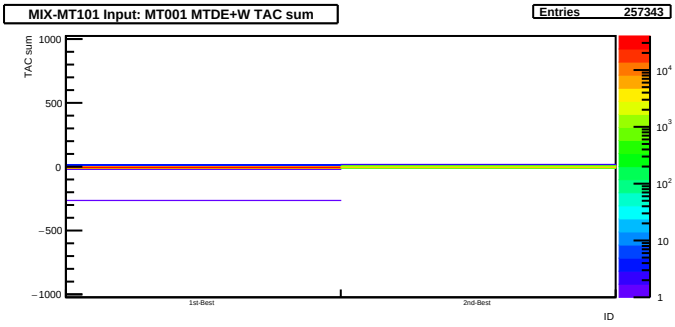

MXQ-MT001
Entries 1.301865e+08
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^6
10^5
10^4
10^3
10^2
10
1

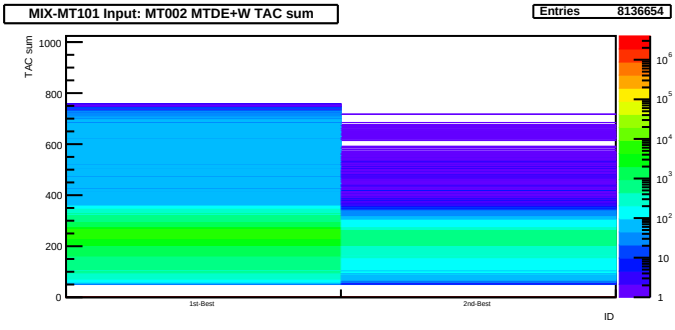

MXQ-MT002
Entries 1.301865e+08
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^6
10^5
10^4
10^3
10^2
10
1

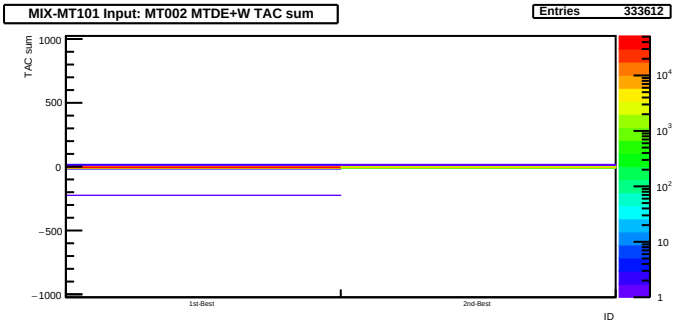

MXQ-MT003
Entries 1.301865e+08
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^6
10^5
10^4
10^3
10^2
10
1

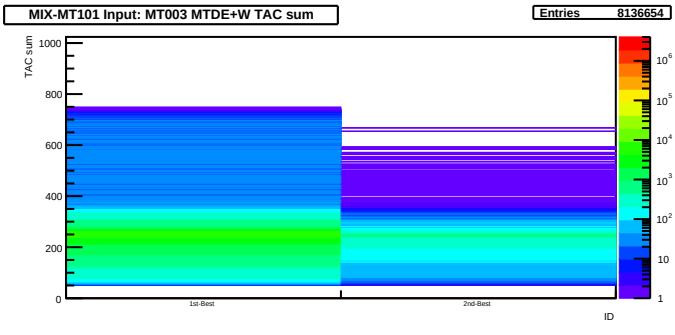

MXQ-MT004
Entries 1.301865e+08
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^6
10^5
10^4
10^3
10^2
10
1

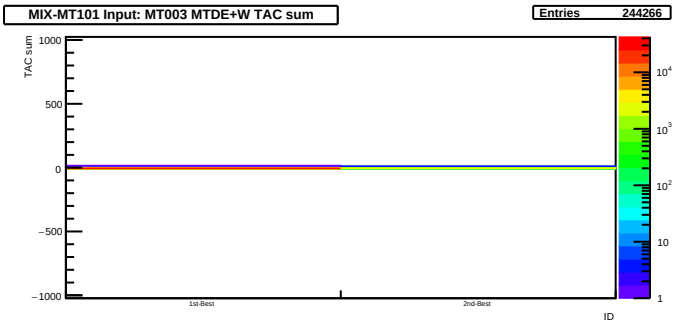

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 8136654
TAC sum
1st-Best
2nd-Best
ID

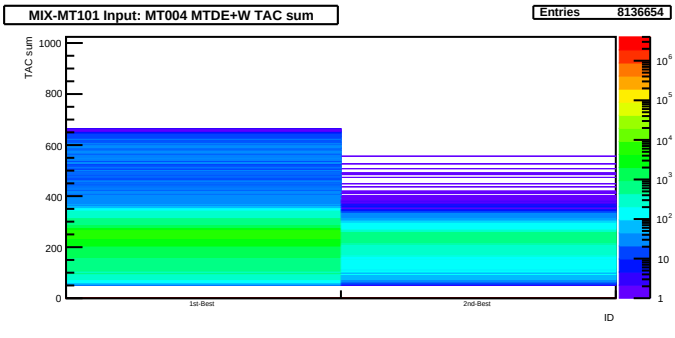

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 257343
TAC sum
1st-Best
2nd-Best
ID

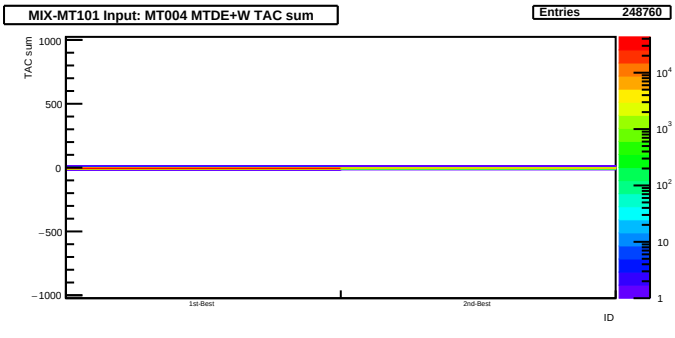

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 8136654
TAC sum
1st-Best
2nd-Best
ID

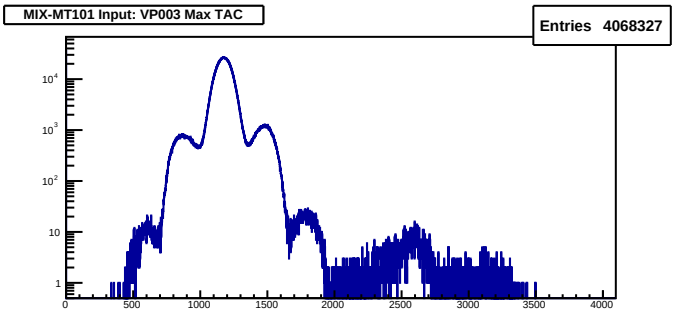

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 333612
TAC sum
1st-Best
2nd-Best
ID

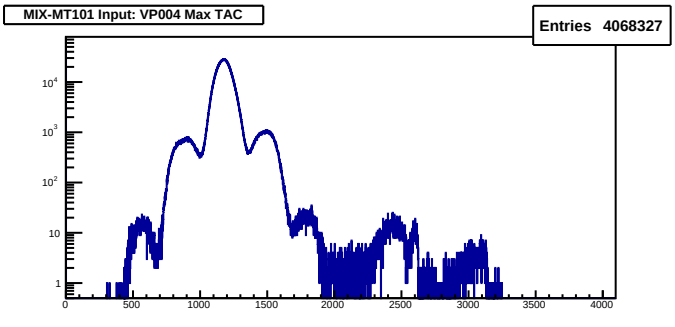

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 8136654
TAC sum
1st-Best
2nd-Best
ID

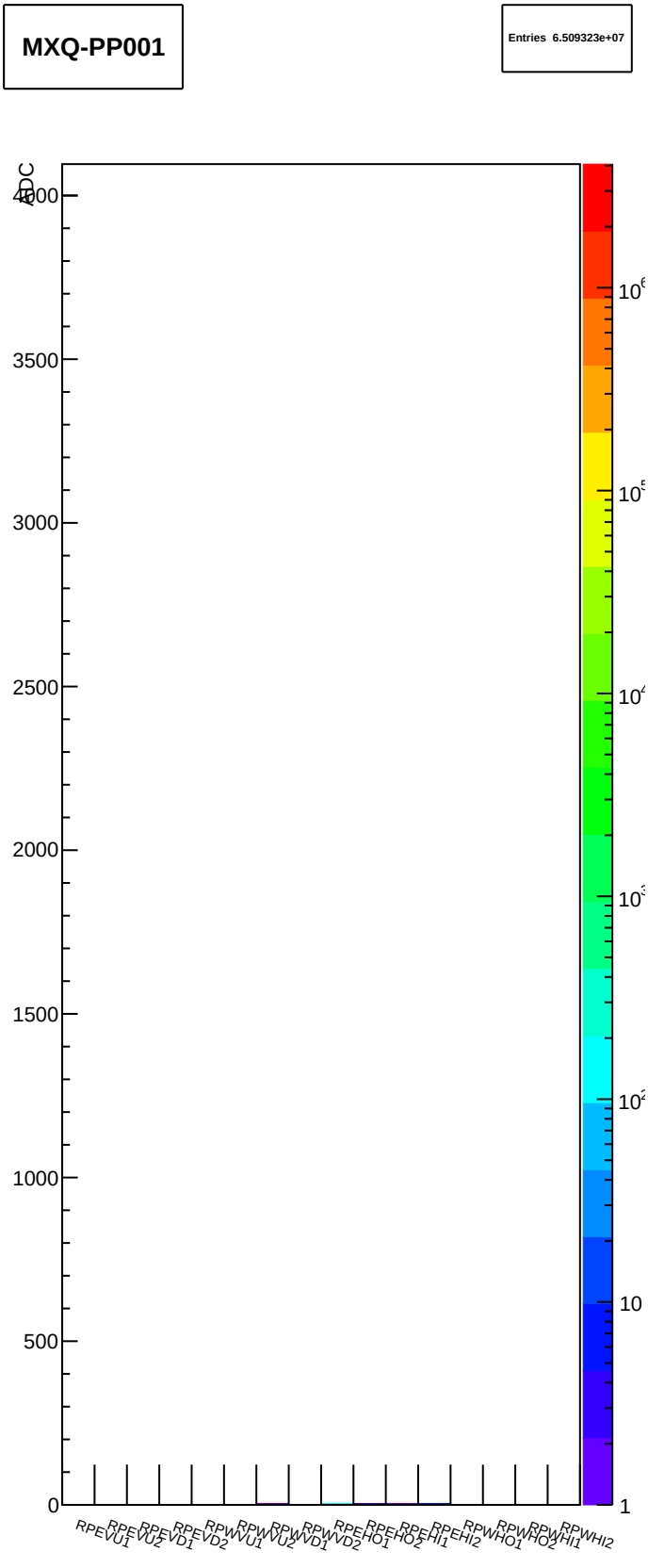

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 244266
TAC sum
1st-Best
2nd-Best
ID

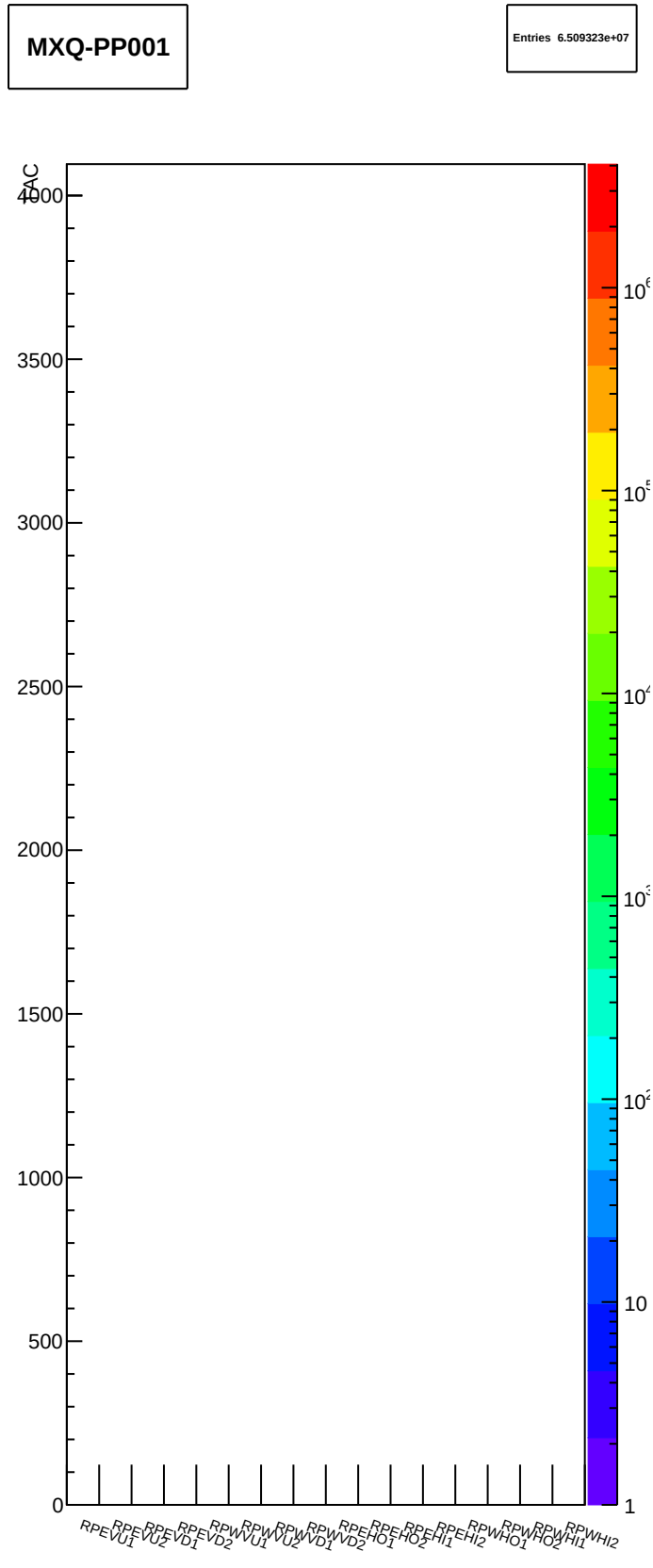

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 8136654
TAC sum
1st-Best
2nd-Best
ID

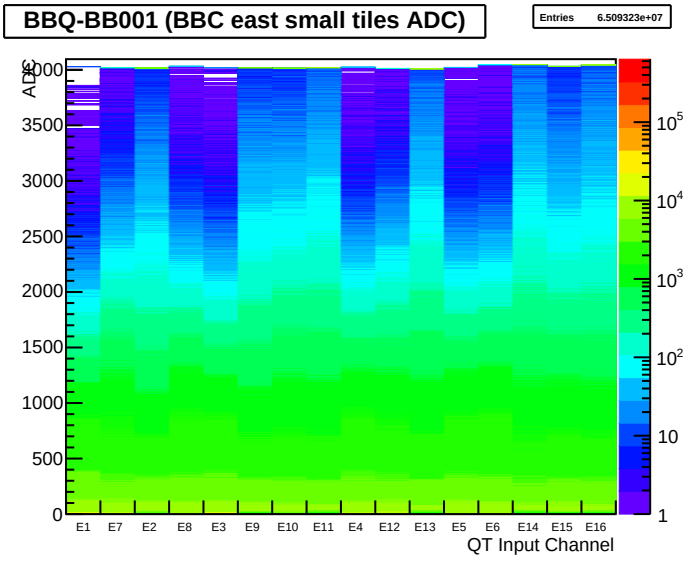

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 248760
TAC sum
1st-Best
2nd-Best
ID

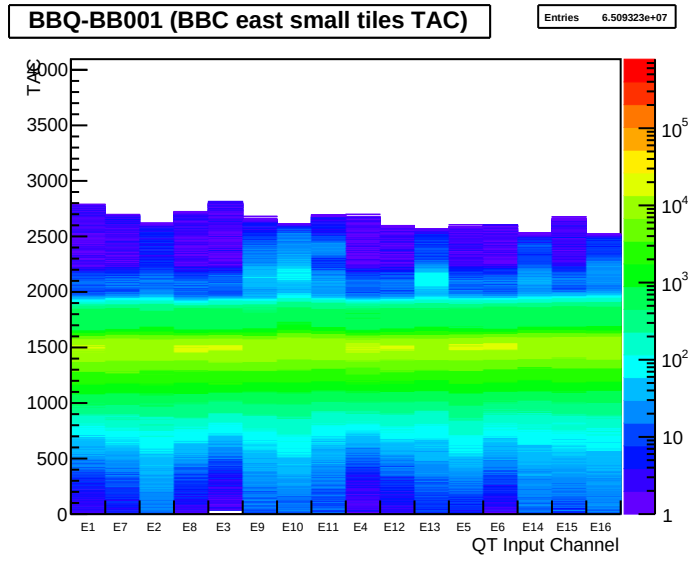

MIX-MT101 Input: VP003 Max TAC
Entries 4068327

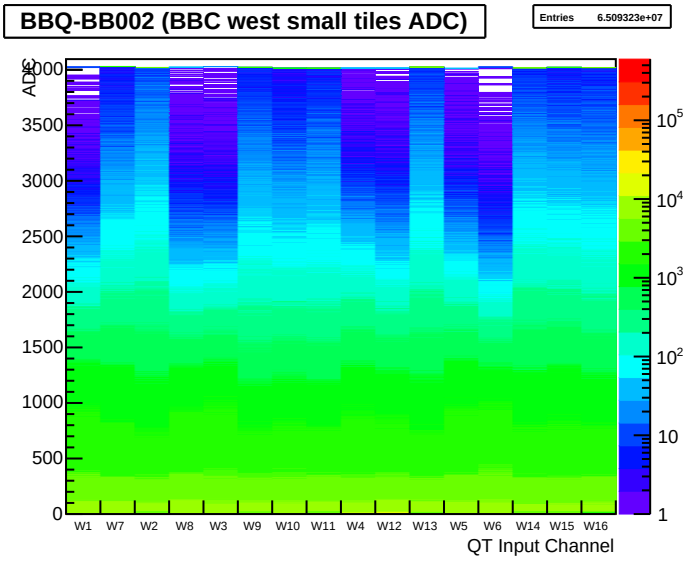

MIX-MT101 Input: VP004 Max TAC
Entries 4068327

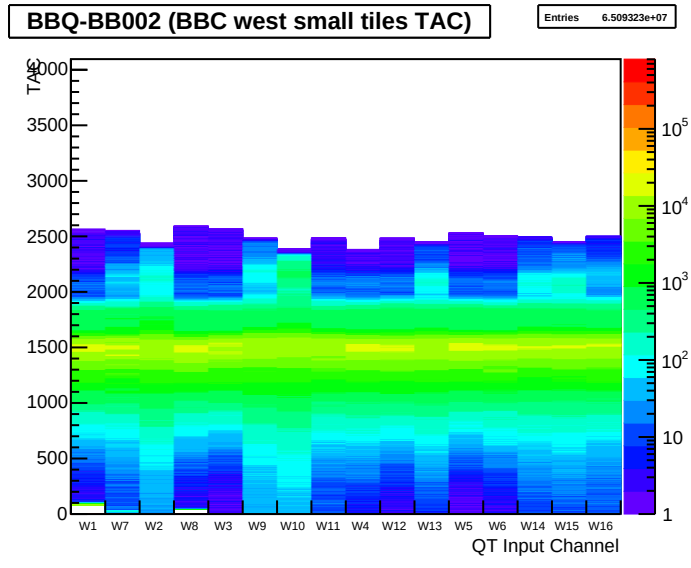

MXQ-PP001
Entries 6.509323e+07
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
1
10

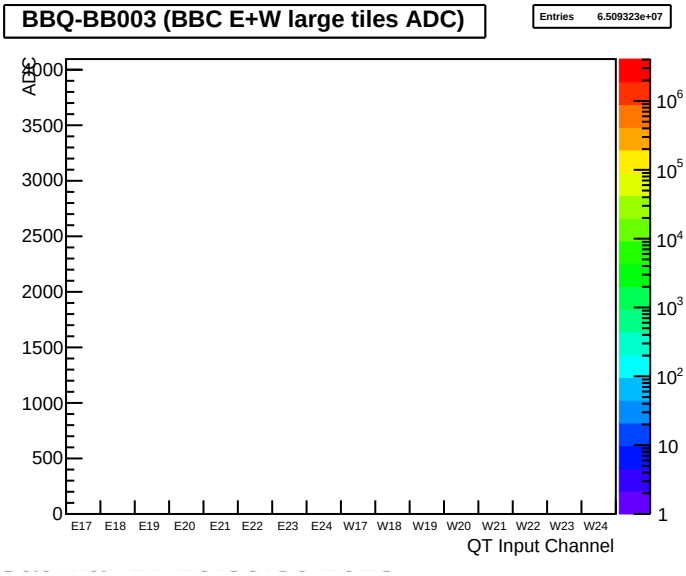

MXQ-PP001
Entries 6.509323e+07
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
1
10

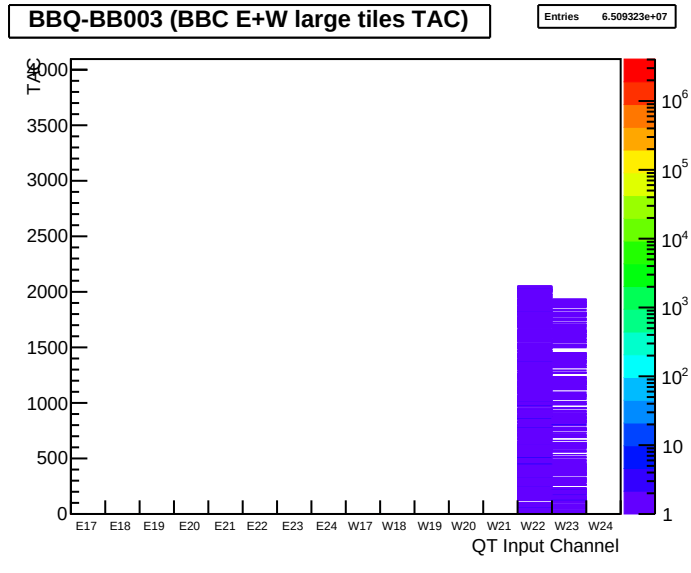

BBQ-BB001 (BBC east small tiles ADC)
Entries 6.509323e+07
ADC
QT Input Channel

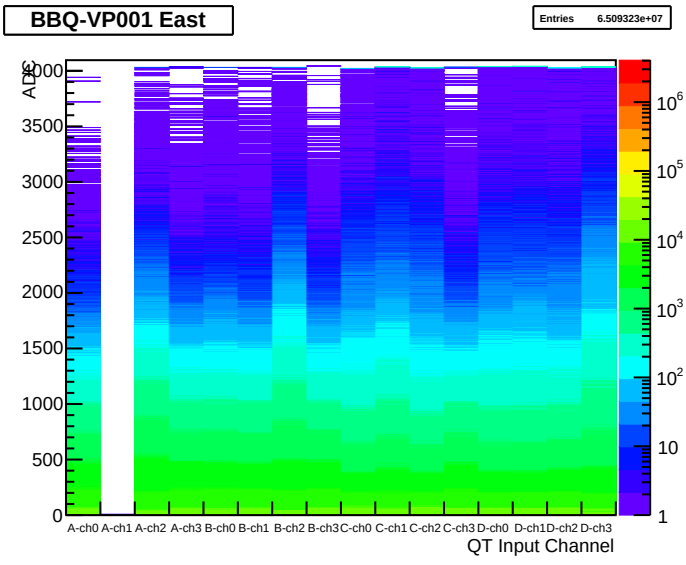

BBQ-BB001 (BBC east small tiles TAC)
Entries 6.509323e+07
TAC
QT Input Channel

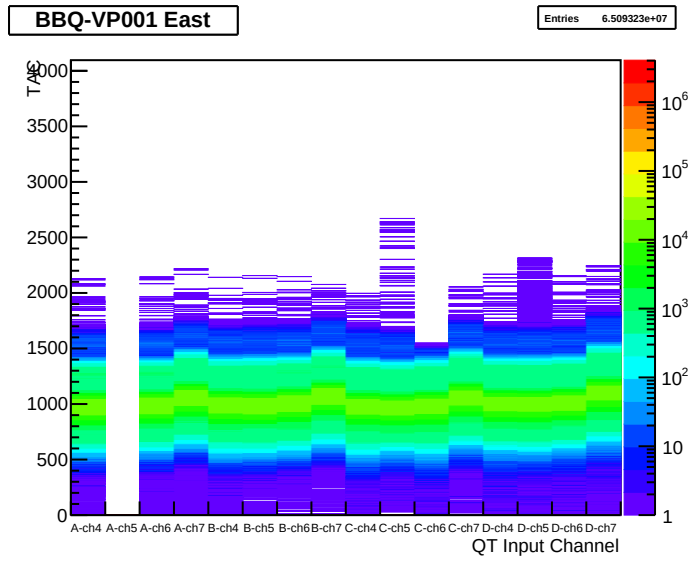

BBQ-BB002 (BBC west small tiles ADC)
Entries 6.509323e+07
ADC
QT Input Channel

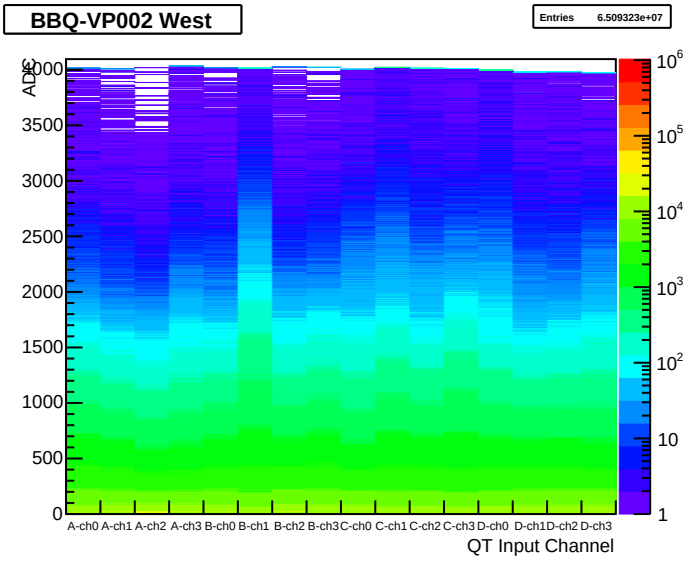

BBQ-BB002 (BBC west small tiles TAC)
Entries 6.509323e+07
TAC
QT Input Channel

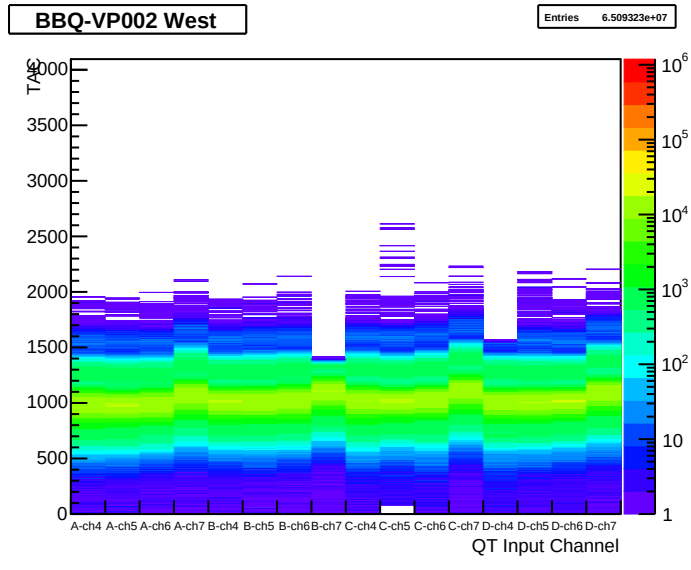

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 6.509323e+07
ADC
QT Input Channel

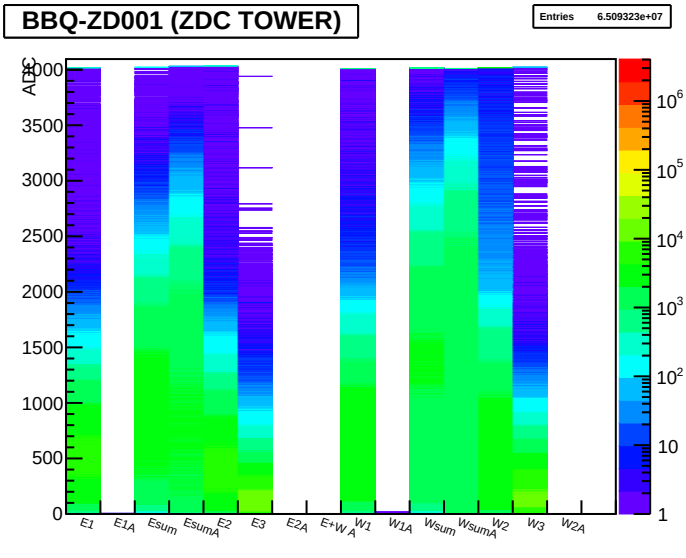

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 6.509323e+07
TAC
QT Input Channel

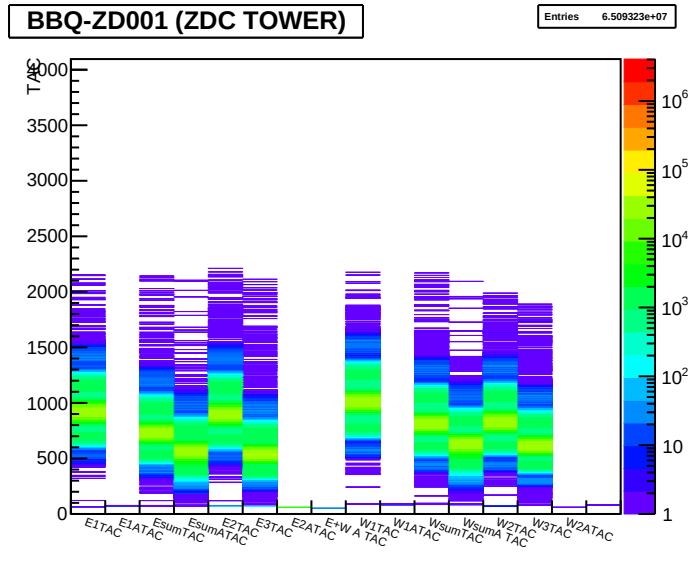

BBQ-VP001 East
Entries 6.509323e+07
ADC
QT Input Channel

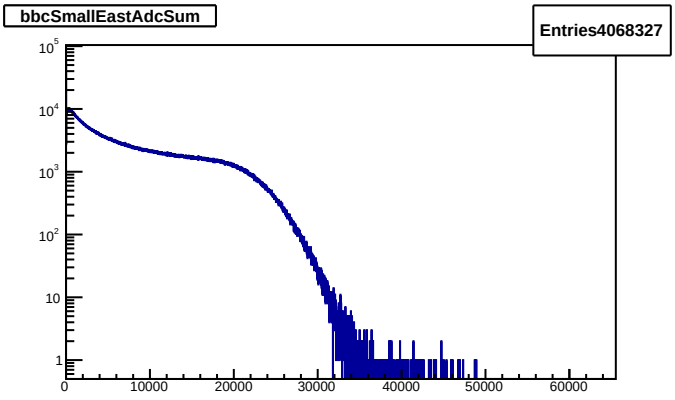

BBQ-VP001 East
Entries 6.509323e+07
TAC
QT Input Channel

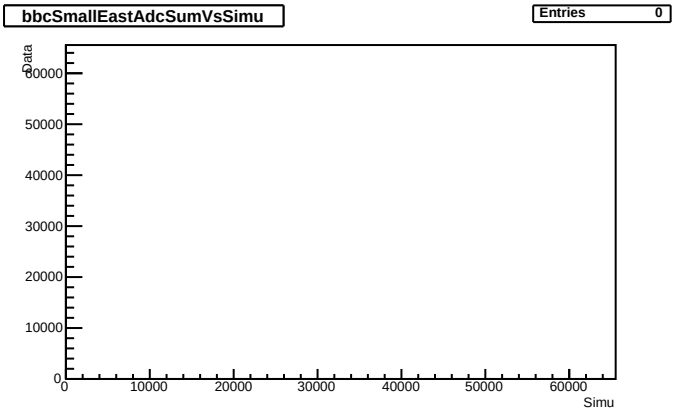

BBQ-VP002 West
Entries 6.509323e+07
ADC
QT Input Channel

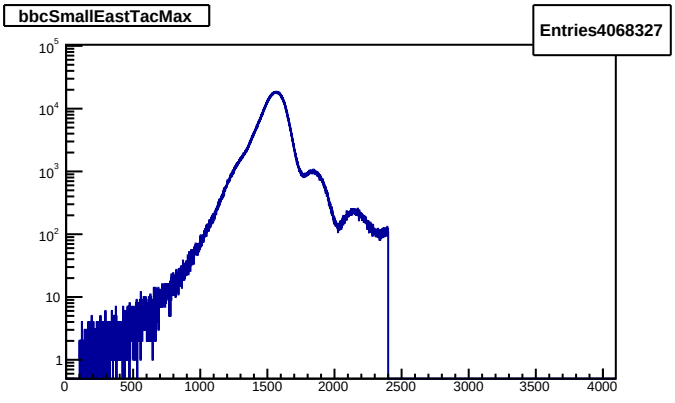

BBQ-VP002 West
Entries 6.509323e+07
TAC
QT Input Channel

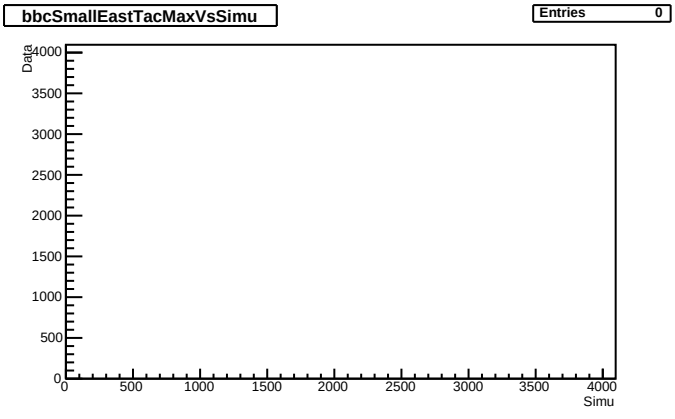

BBQ-ZD001 (ZDC TOWER)
Entries 6.509323e+07
ADC

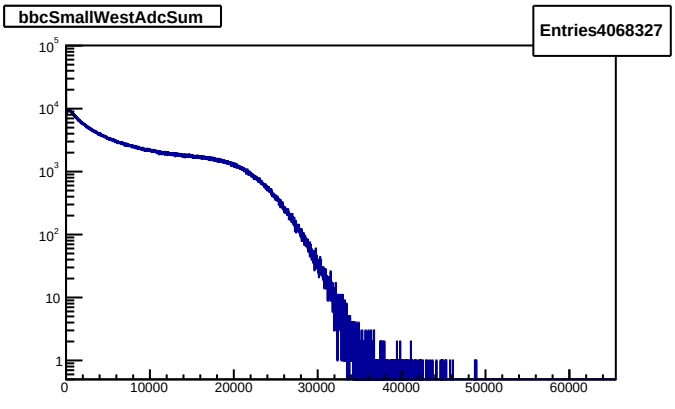

BBQ-ZD001 (ZDC TOWER)
Entries 6.509323e+07
TAC

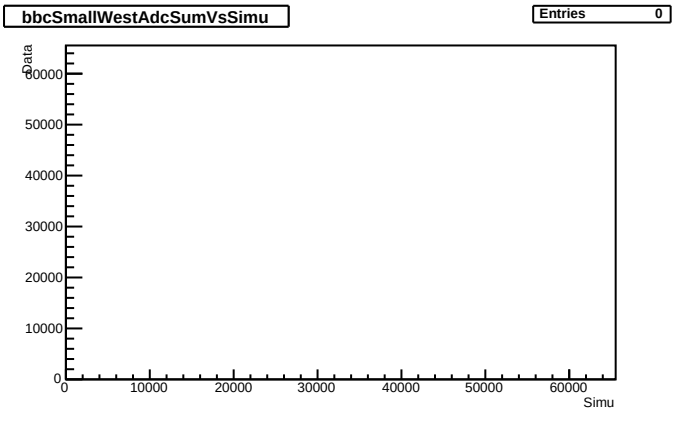

bbcSmallEastAdcSum
Entries4068327

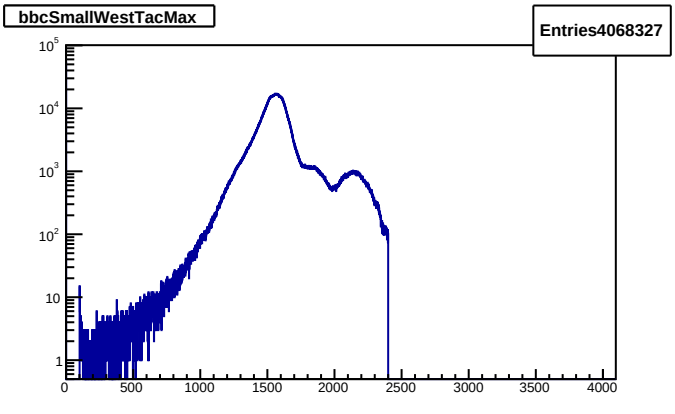

bbcSmallEastAdcSumVsSimu
Entries 0
Data
Simu

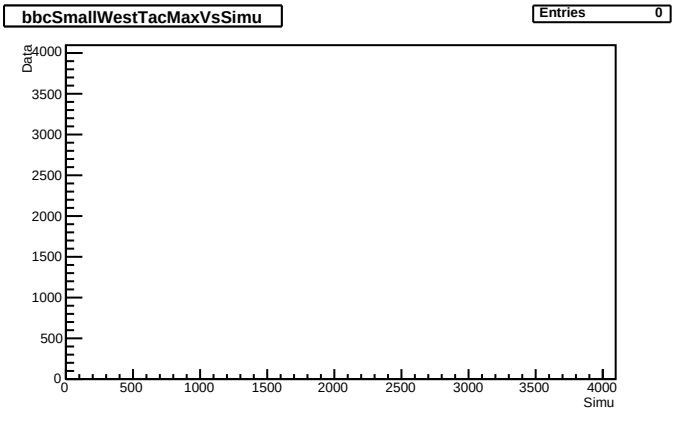

bbcSmallEastTacMax
Entries4068327

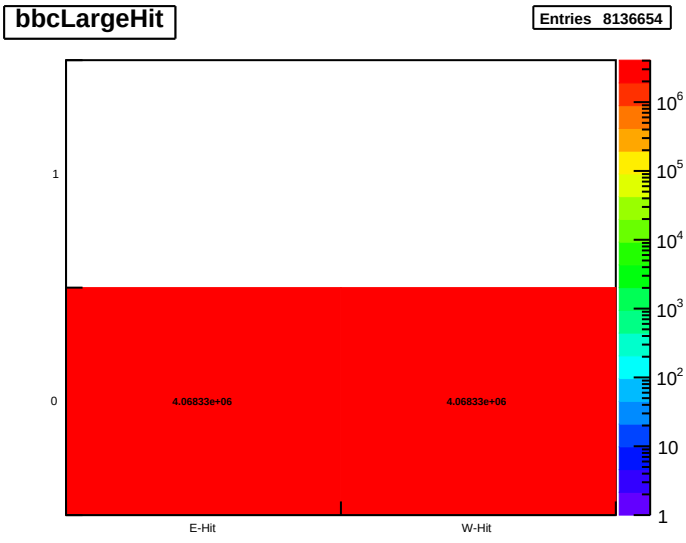

bbcSmallEastTacMaxVsSimu
Entries 0
Data
Simu

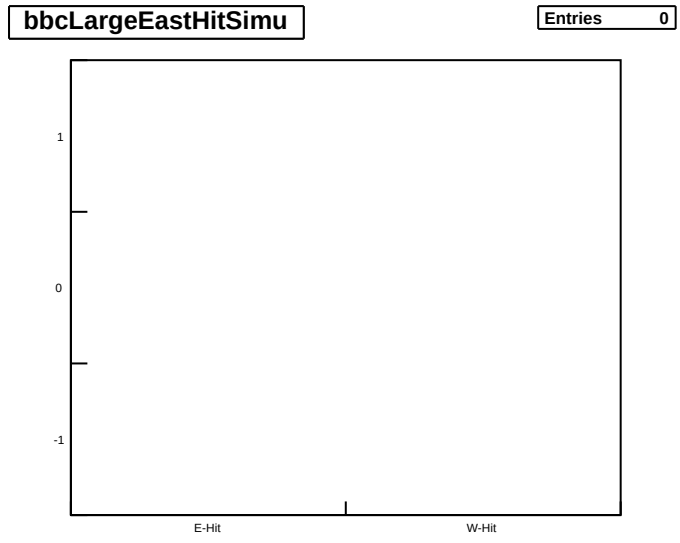

bbcSmallWestAdcSum
Entries4068327

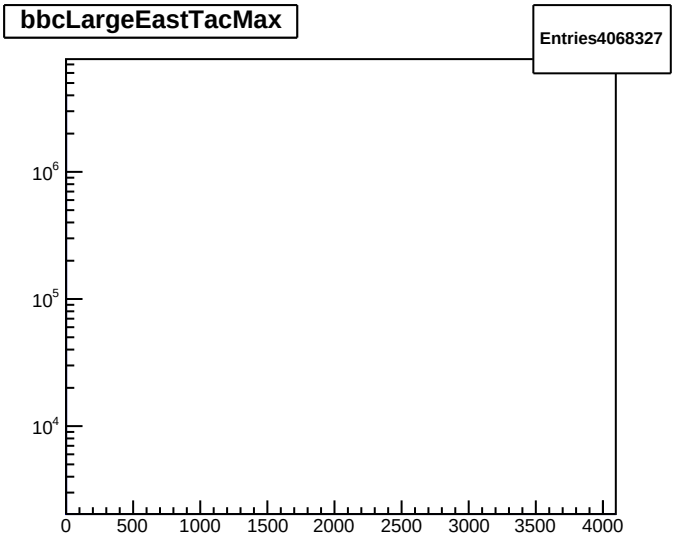

bbcSmallWestAdcSumVsSimu
Entries 0
Data
Simu

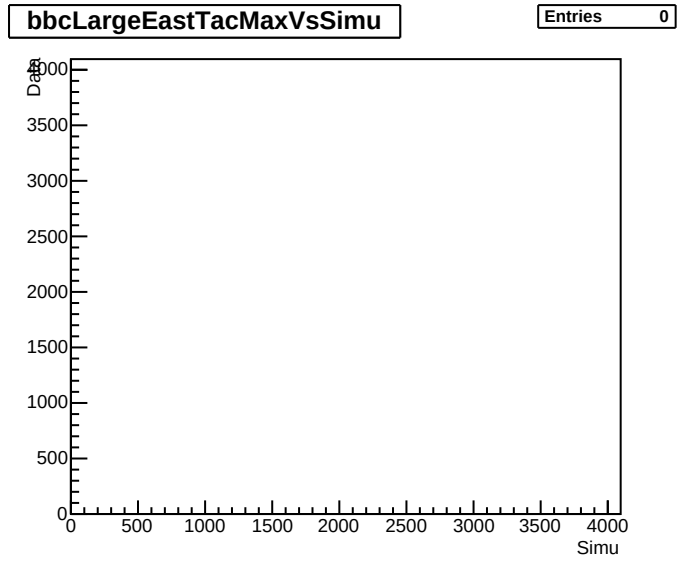

bbcSmallWestTacMax
Entries4068327

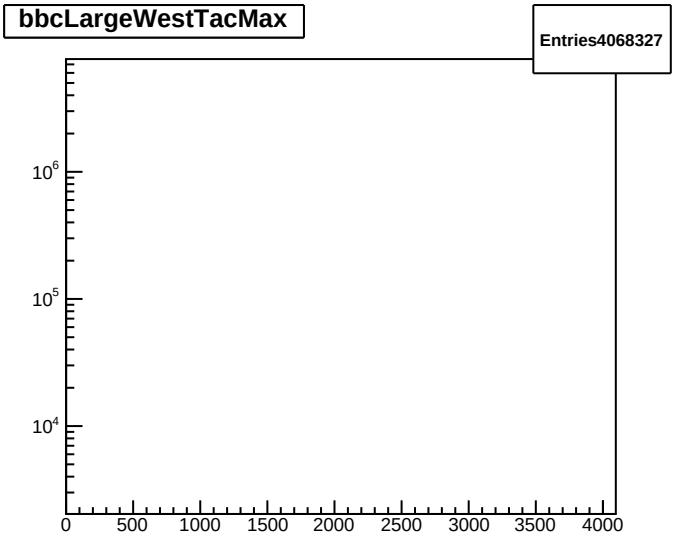

bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu

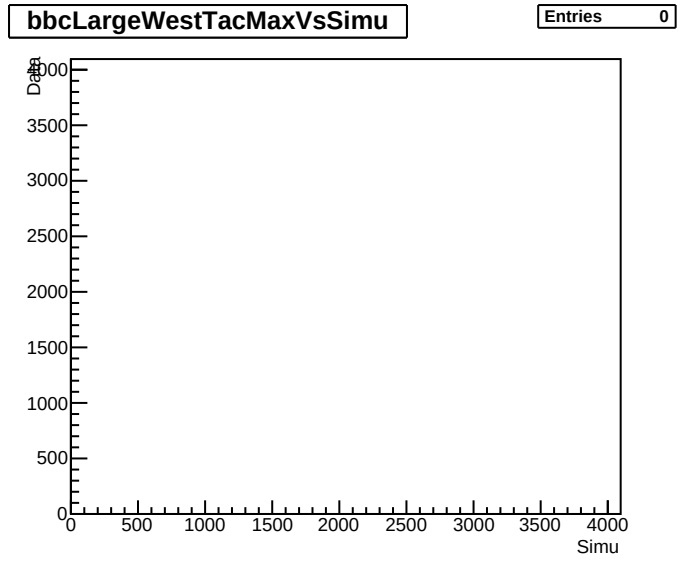

bbcLargeHit
Entries 8136654
1
0
4.06833e+06
4.06833e+06
E-Hit
W-Hit
10^6
10^5
10^4
10^3
10^2
10
1

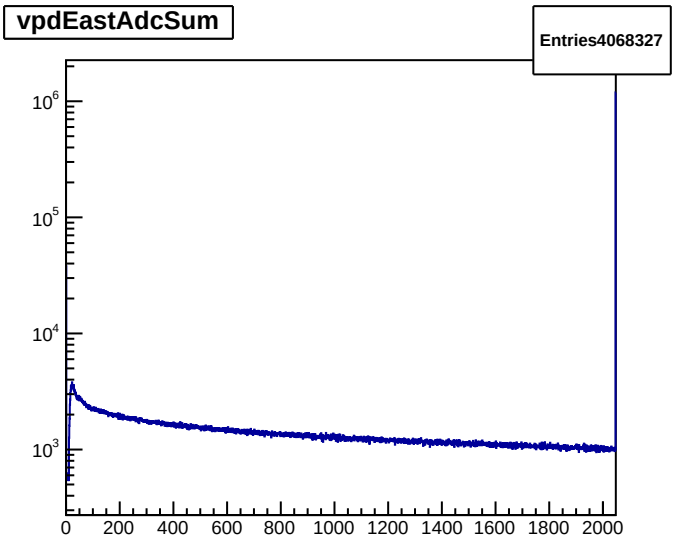

bbcLargeEastHitSimu
Entries 0
1
0
-1
E-Hit
W-Hit

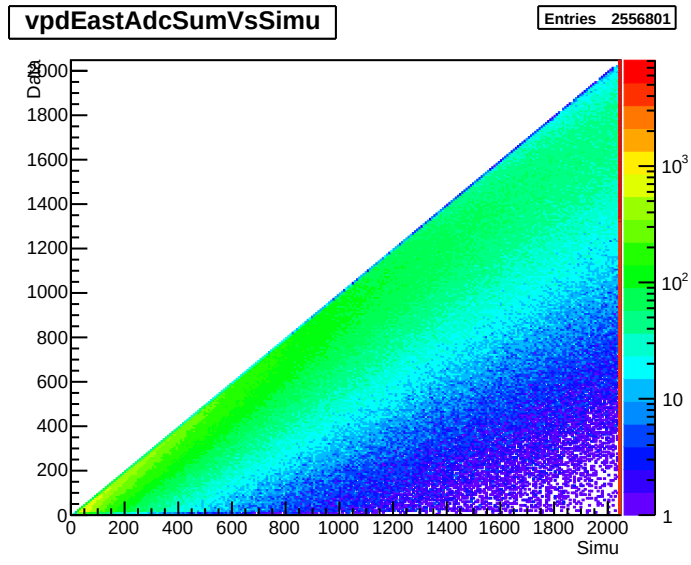

bbcLargeEastTacMax
Entries4068327
10^6
10^5
10^4
0
500
1000
1500
2000
2500
3000
3500
4000

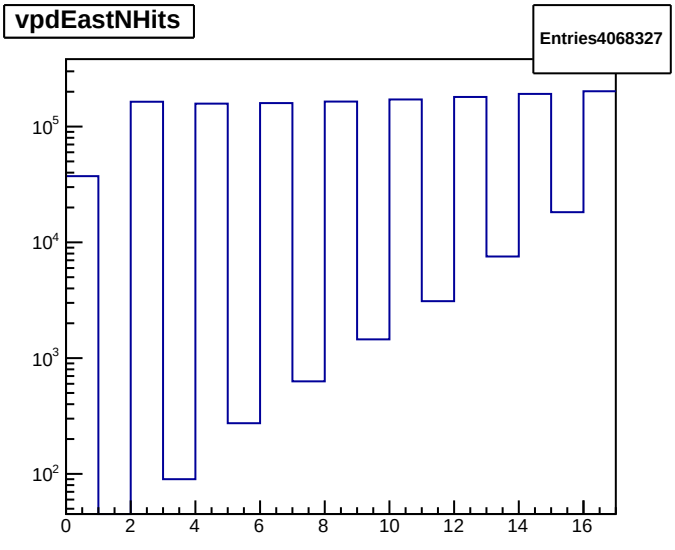

bbcLargeEastTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

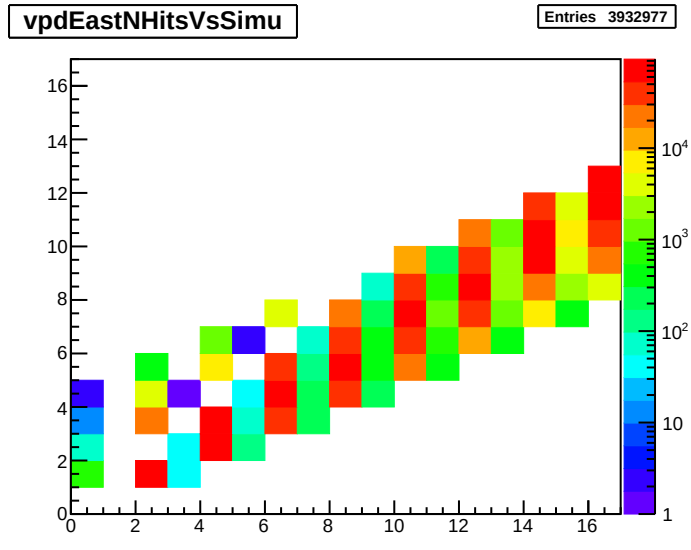

bbcLargeWestTacMax
Entries4068327
10^6
10^5
10^4
0
500
1000
1500
2000
2500
3000
3500
4000

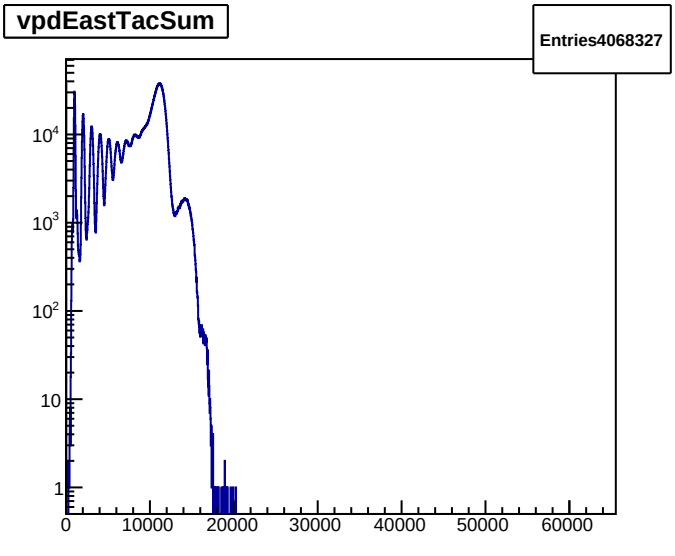

bbcLargeWestTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

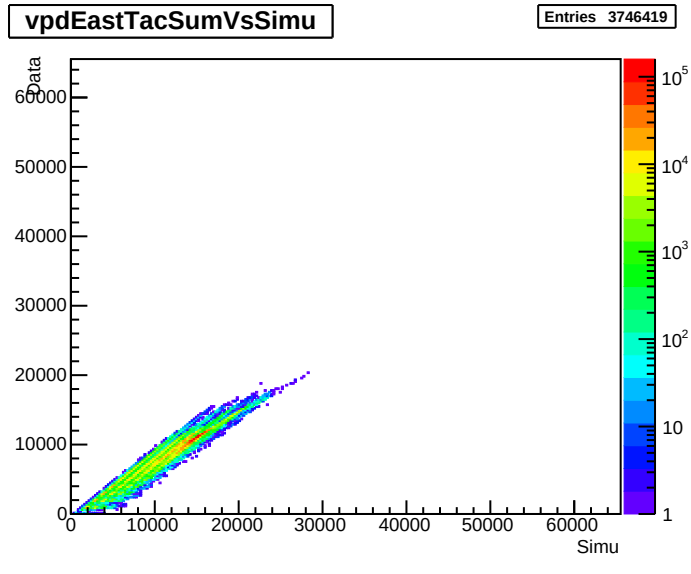

vpdEastAdcSum
Entries4068327

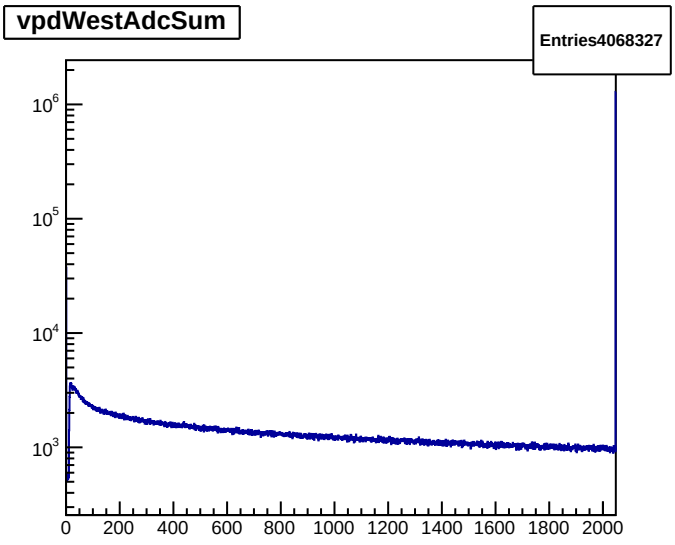

vpdEastAdcSumVsSimu
Entries 2556801
Data
Simu

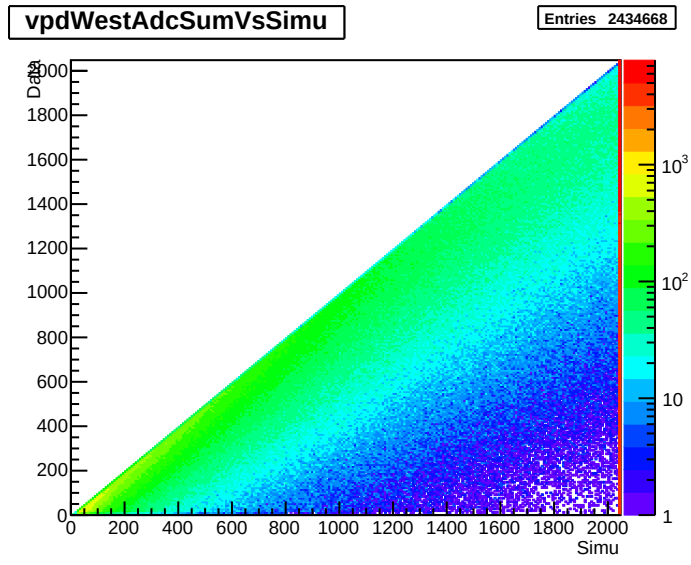

vpdEastNHits
Entries4068327

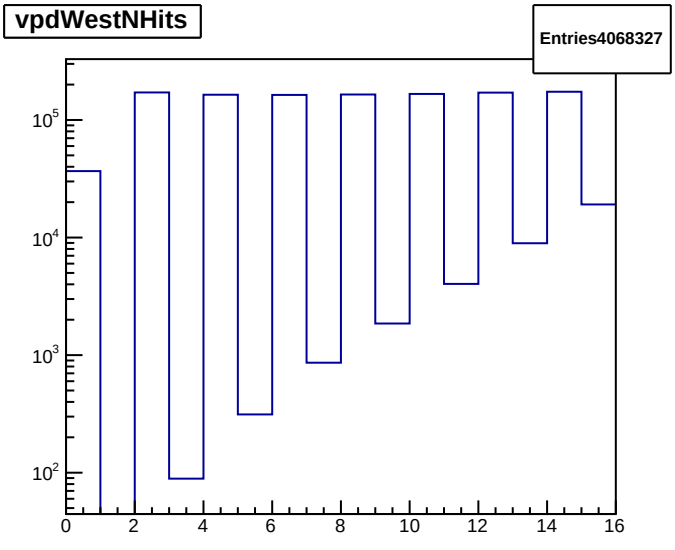

vpdEastNHitsVsSimu
Entries 3932977

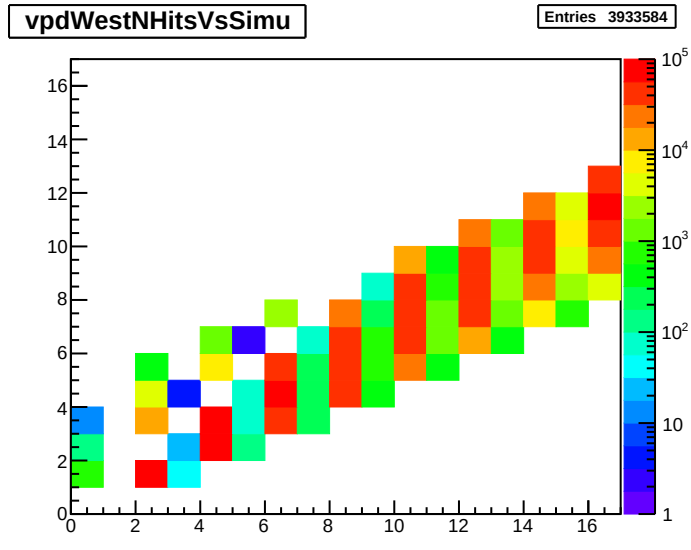

vpdEastTacSum
Entries4068327

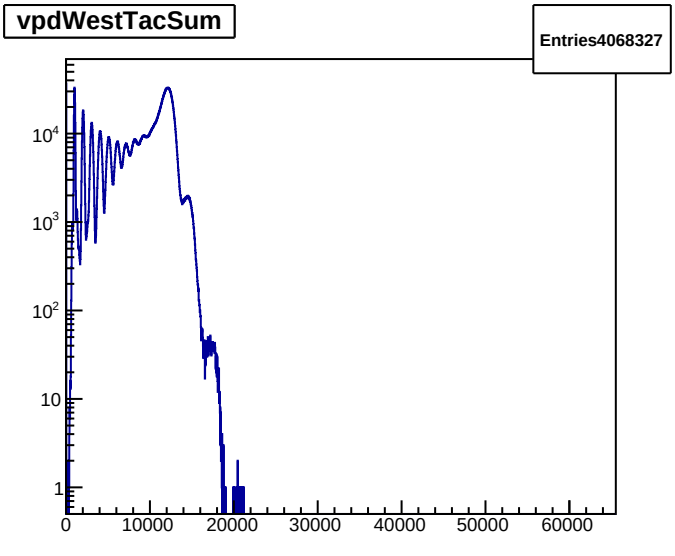

vpdEastTacSumVsSimu
Entries 3746419
Data
Simu

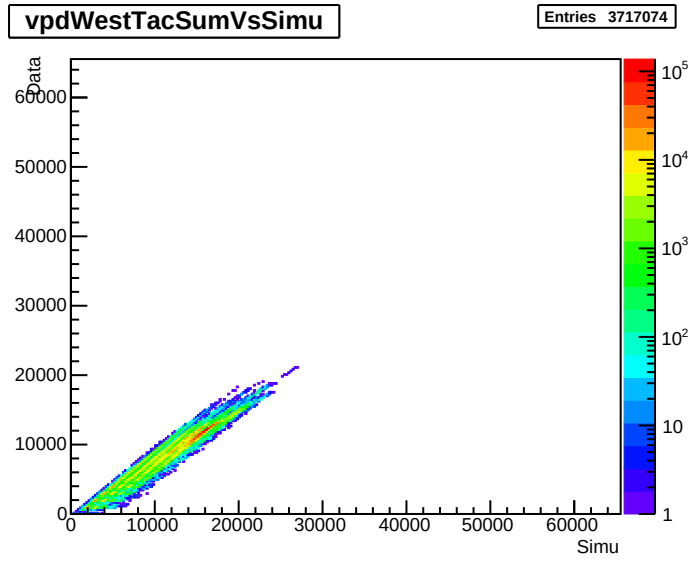

vpdWestAdcSum
Entries4068327

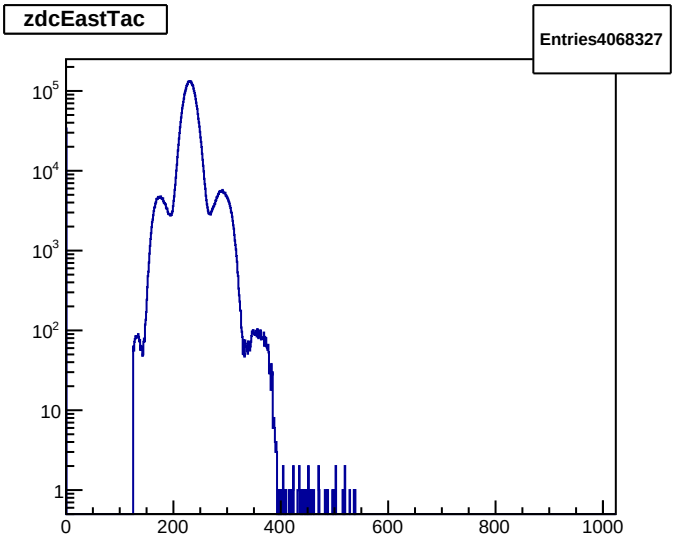

vpdWestAdcSumVsSimu
Entries 2434668
Data
Simu

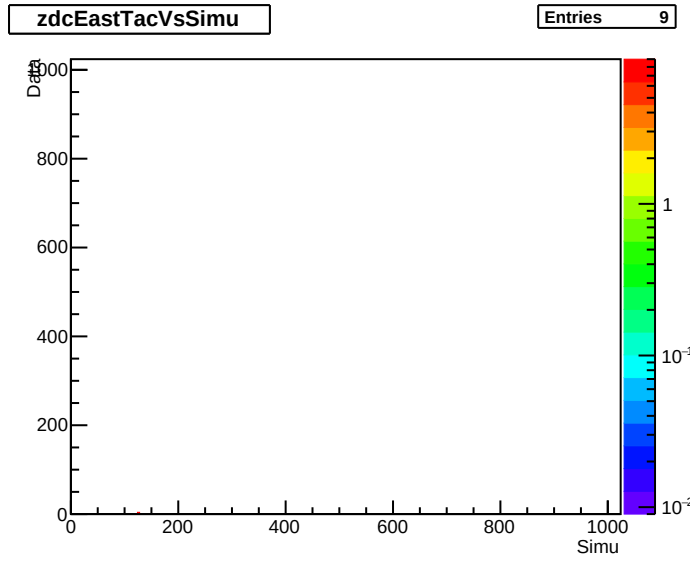

vpdWestNHits
Entries4068327

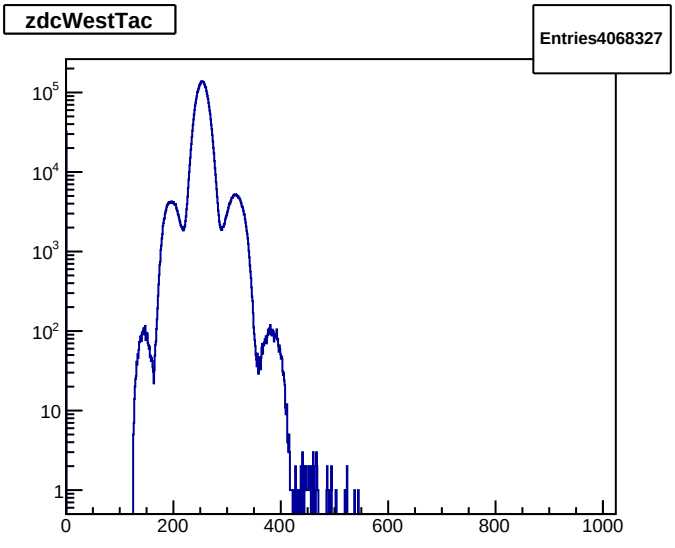

vpdWestNHitsVsSimu
Entries 3933584

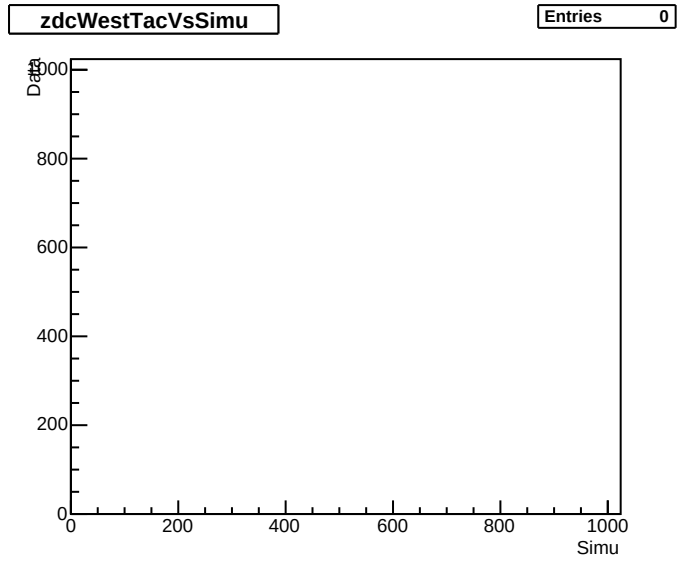

vpdWestTacSum
Entries4068327

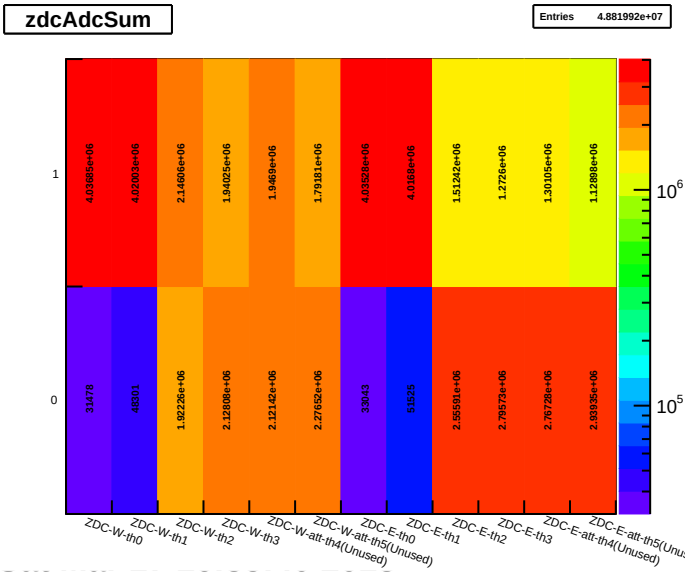

vpdWestTacSumVsSimu
Entries 3717074
Data
Simu

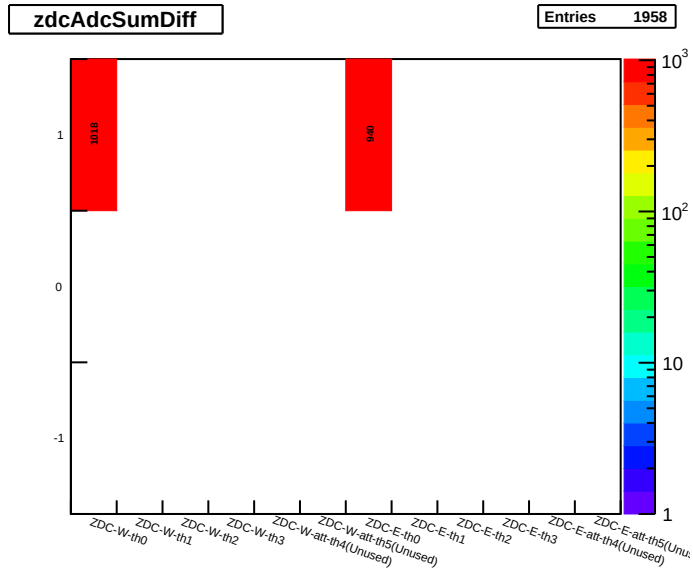

zdcEastTac
Entries4068327

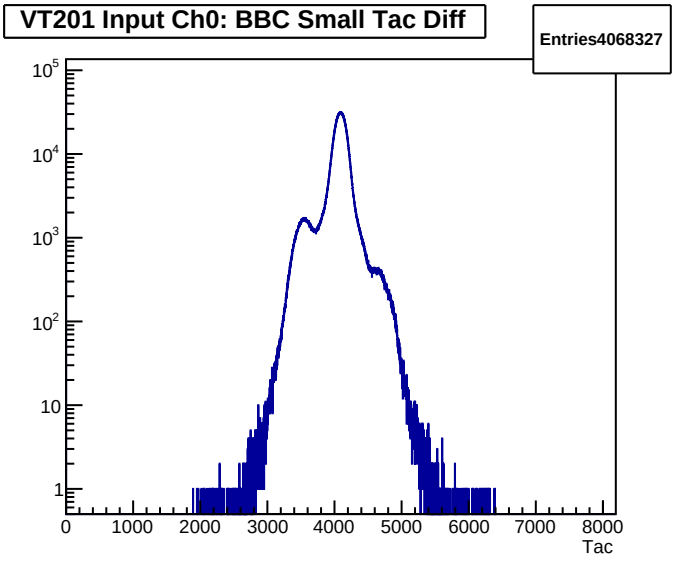

zdcEastTacVsSimu
Entries 9
Data
Simu

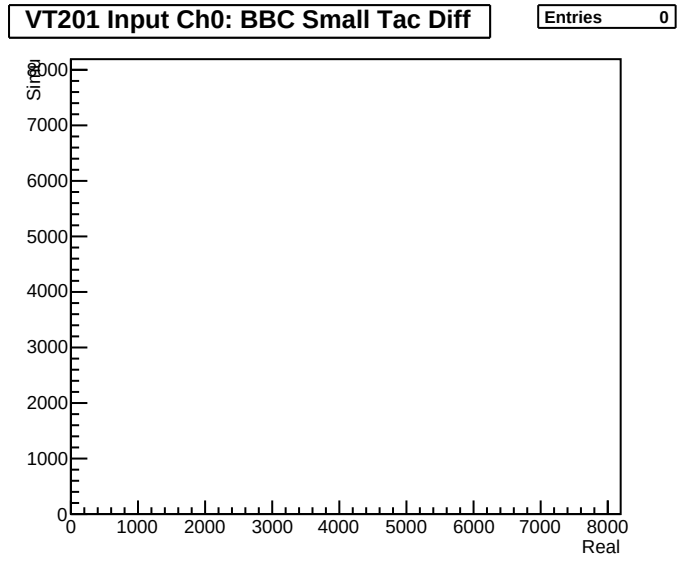

zdcWestTac
Entries4068327

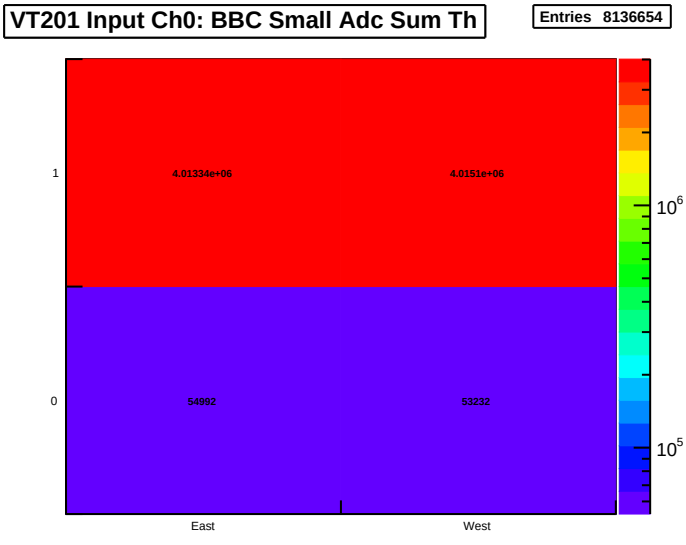

zdcWestTacVsSimu
Entries 0
Data
Simu

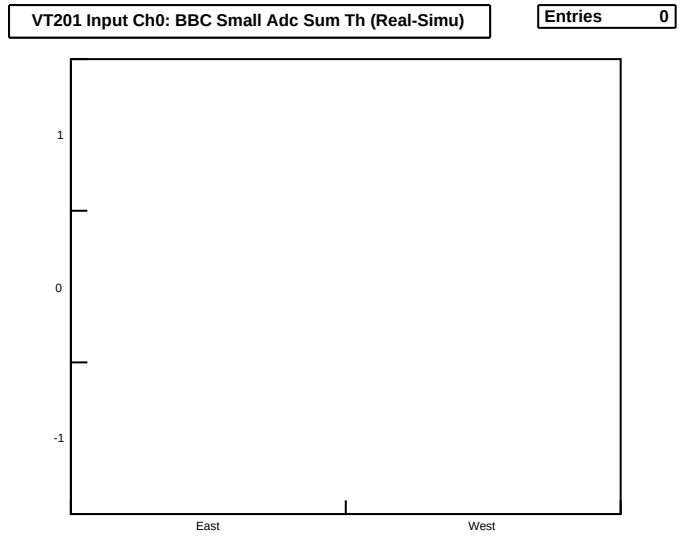

zdcAdcSum
Entries 4.881992e+07
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

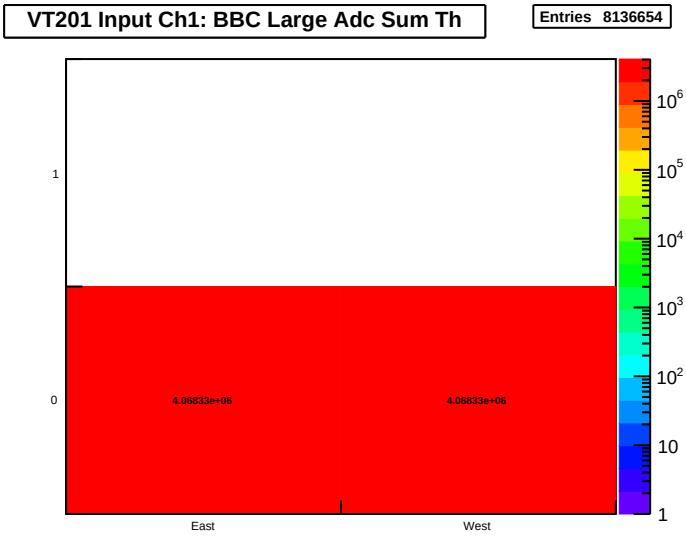

zdcAdcSumDiff
Entries 1958
1018
940
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

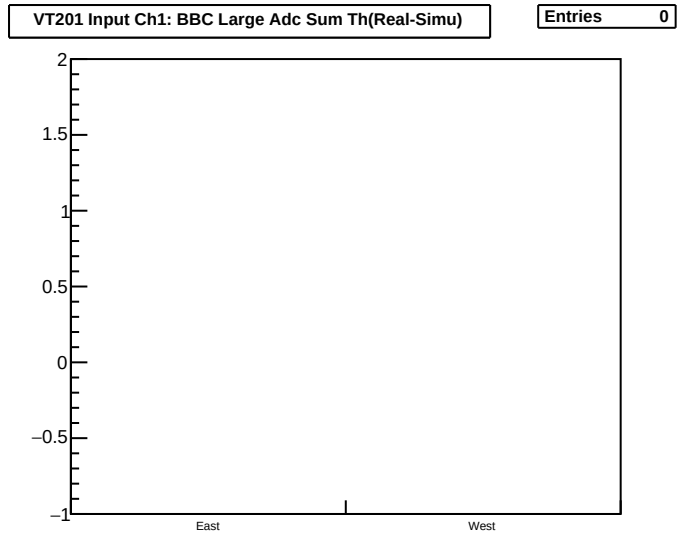

VT201 Input Ch0: BBC Small Tac Diff
Entries4068327
Tac

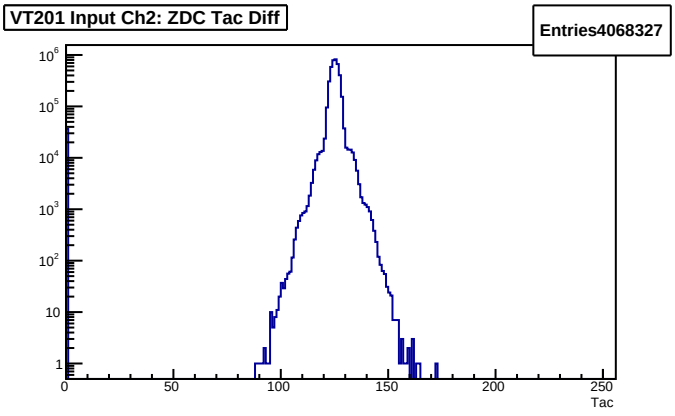

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

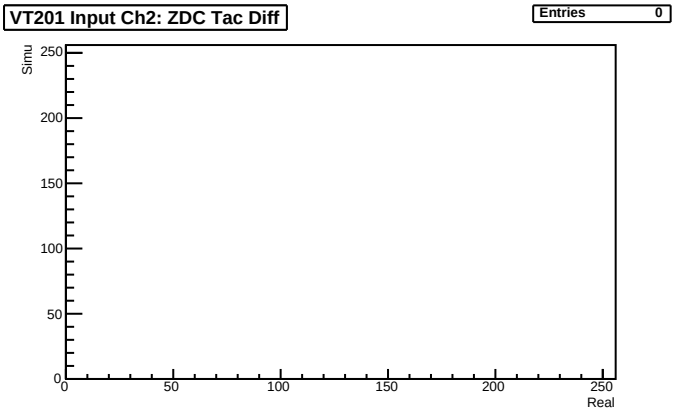

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 8136654
4.01334e+06
4.0151e+06
54992
53232
East
West

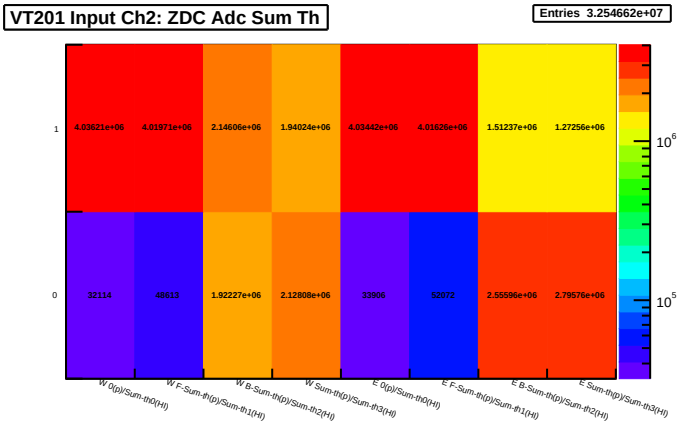

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

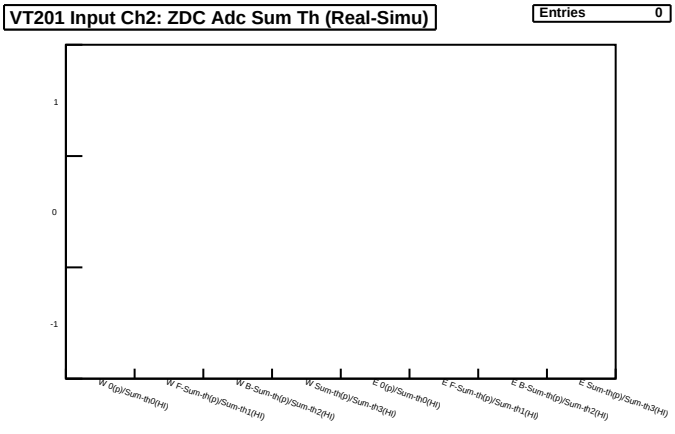

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 8136654
4.06833e+06
4.06833e+06
East
West

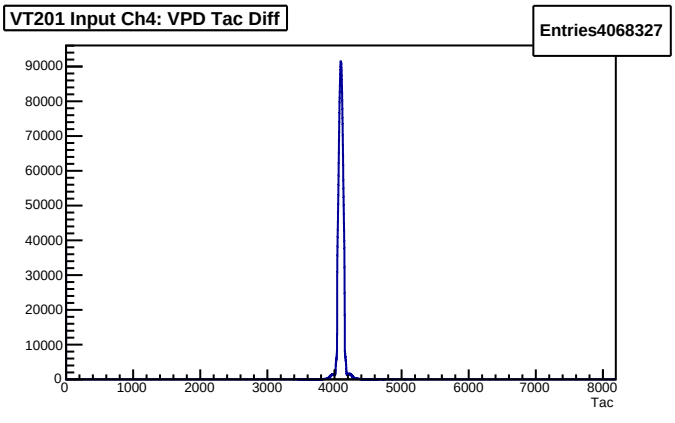

VT201 Input Ch1: BBC Large Adc Sum Th(Real-Simu)
Entries 0
East
West

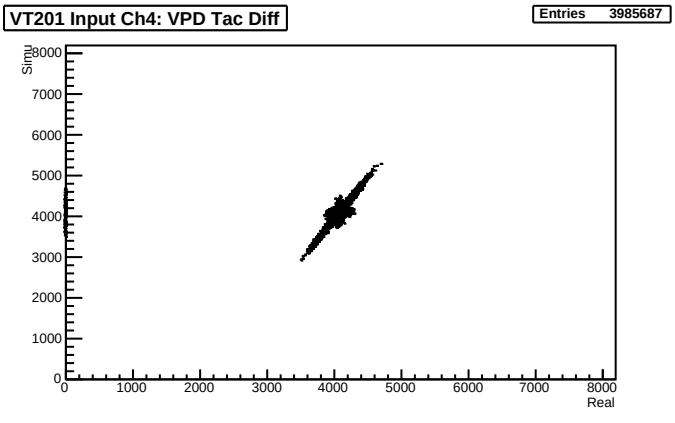

VT201 Input Ch2: ZDC Tac Diff
Entries4068327
Tac

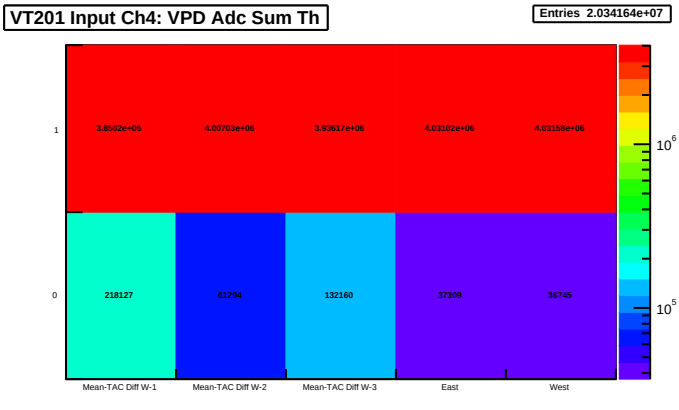

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

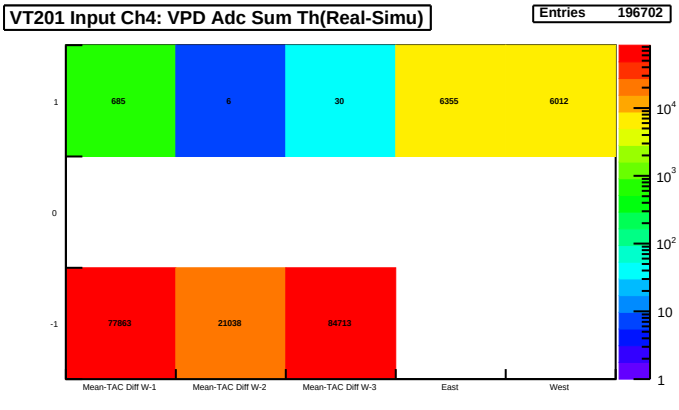

VT201 Input Ch2: ZDC Adc Sum Th
Entries 3.254662e+07
4.03621e+06
4.01971e+06
2.14606e+06
1.94024e+06
4.03442e+06
4.01626e+06
1.51237e+06
1.27256e+06
32114
48613
1.92227e+06
2.12808e+06
33906
52072
2.55596e+06
2.79576e+06
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
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)

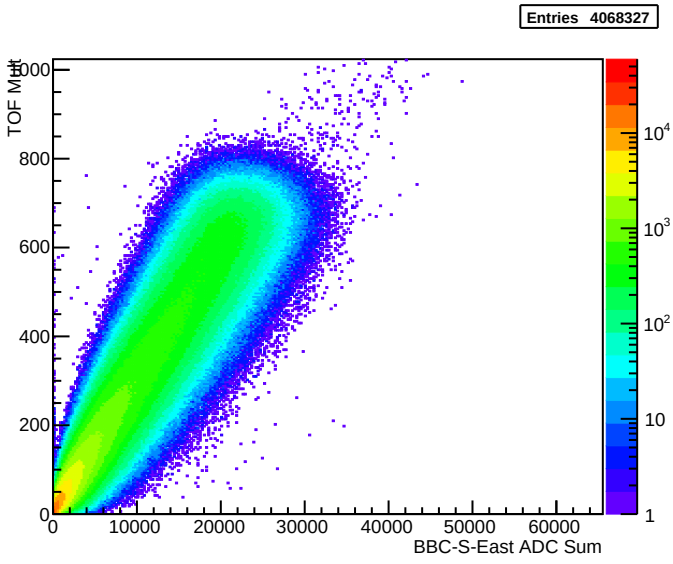

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
E 0(p)/Sum-th0(Hl)
E F-Sum-th(p)/Sum-th1(Hl)
E B-Sum-th(p)/Sum-th2(Hl)
E Sum-th(p)/Sum-th3(Hl)

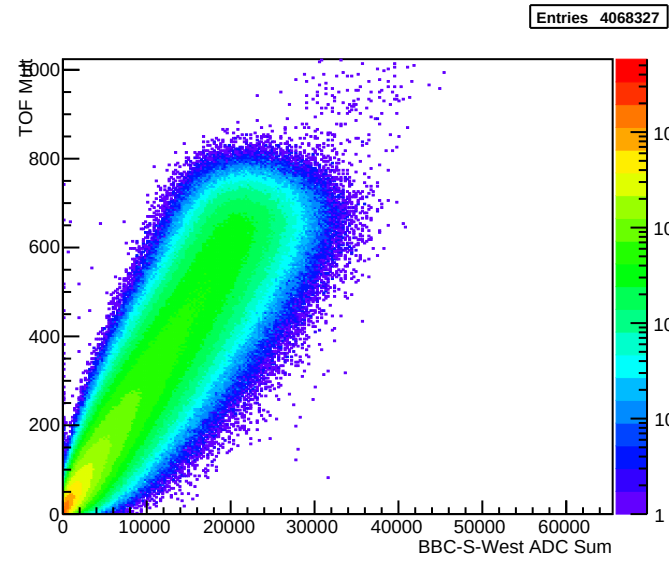

VT201 Input Ch4: VPD Tac Diff
Entries4068327
Tac

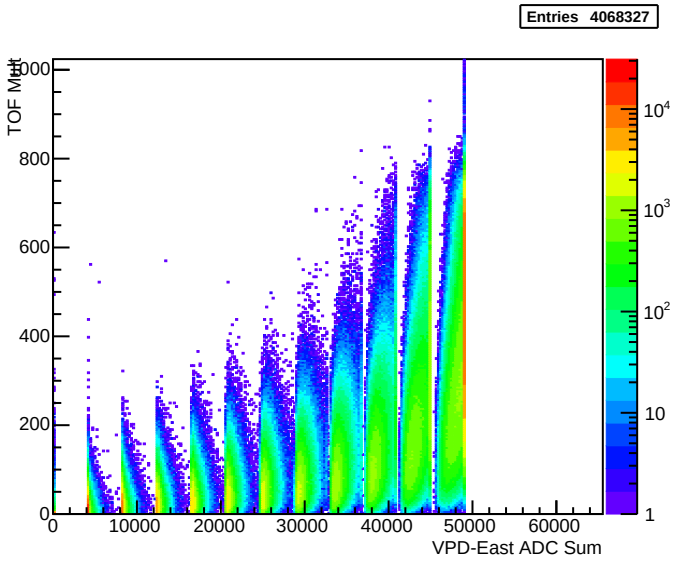

VT201 Input Ch4: VPD Tac Diff
Entries 3985687
Simu
Real

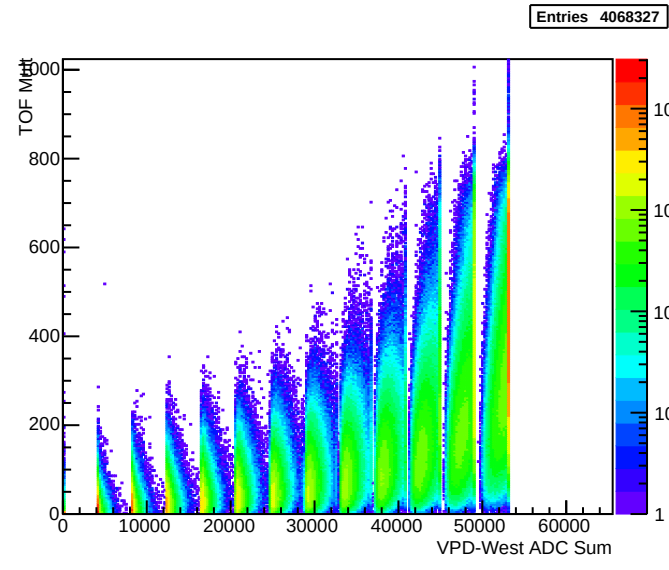

VT201 Input Ch4: VPD Adc Sum Th
Entries 2.034164e+07
3.8502e+06
4.00703e+06
3.93617e+06
4.03102e+06
4.03158e+06
218127
61294
132160
37309
36745
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

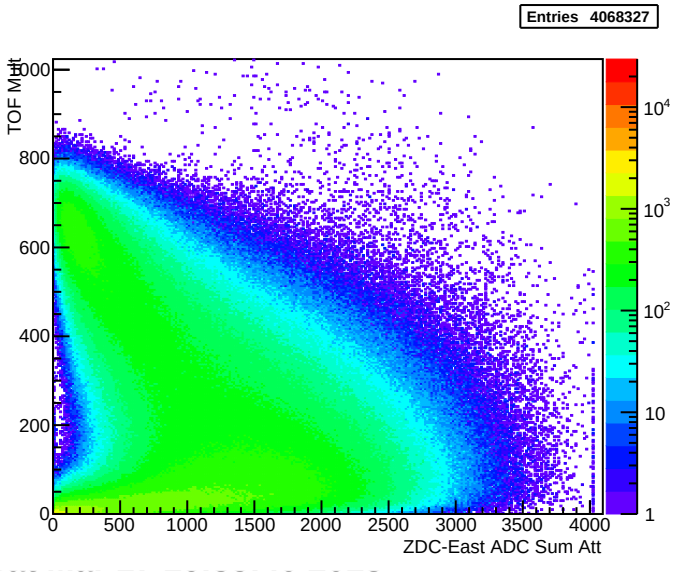

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 196702
685
6
30
6355
6012
77863
21038
84713
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

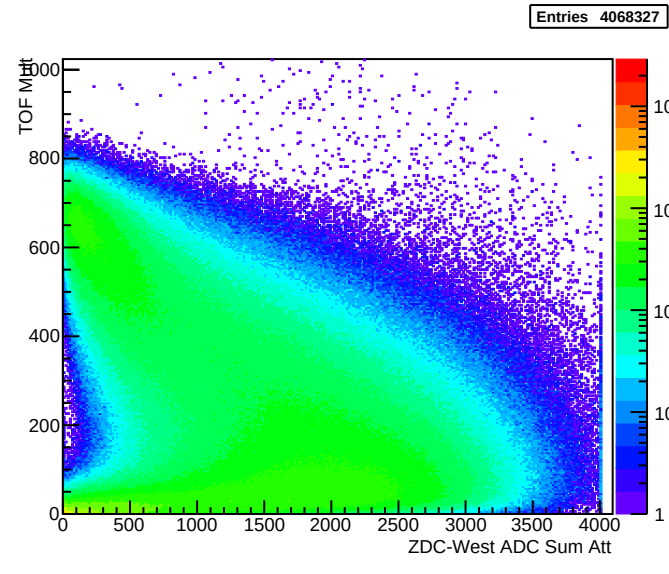

Entries 4068327
TOF Mult
BBC-S-East ADC Sum

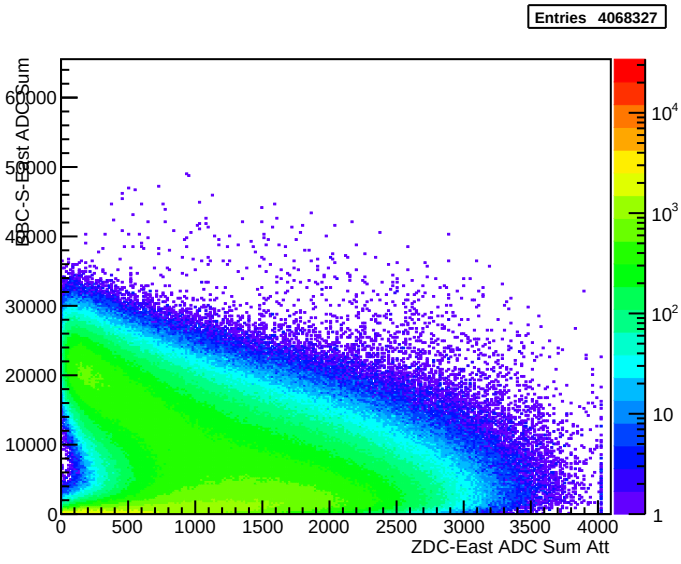

Entries 4068327
TOF Mult
BBC-S-West ADC Sum

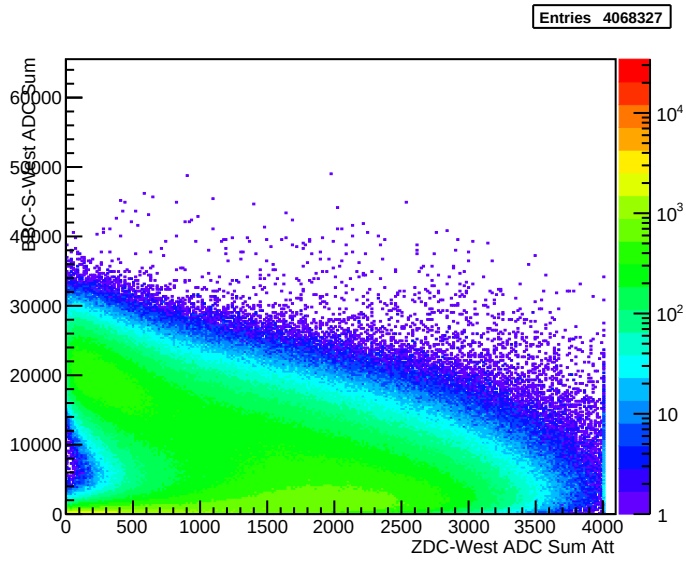

Entries 4068327
TOF Mult
VPD-East ADC Sum

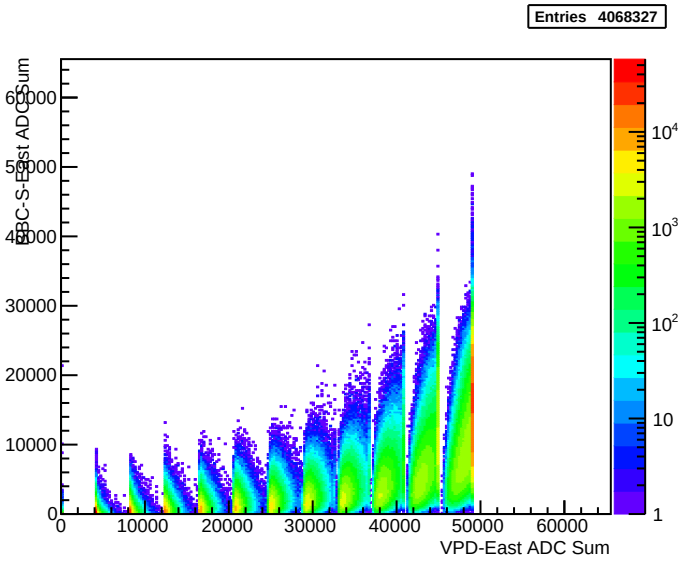

Entries 4068327
TOF Mult
VPD-West ADC Sum

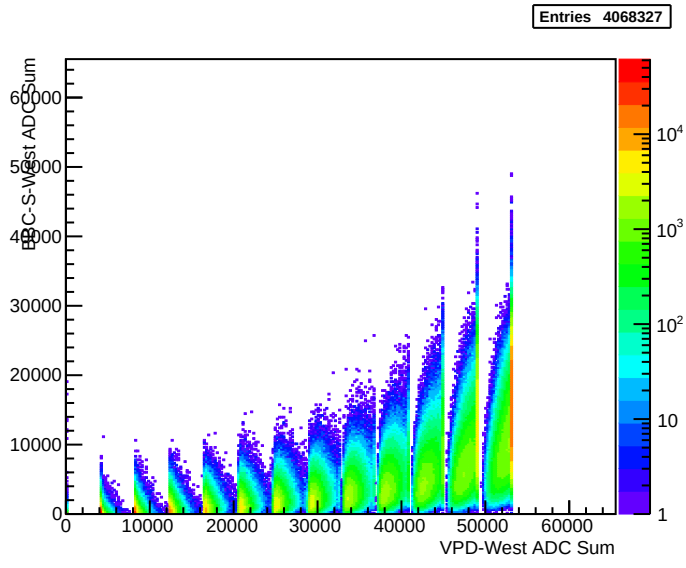

Entries 4068327
TOF Mult
ZDC-East ADC Sum Att

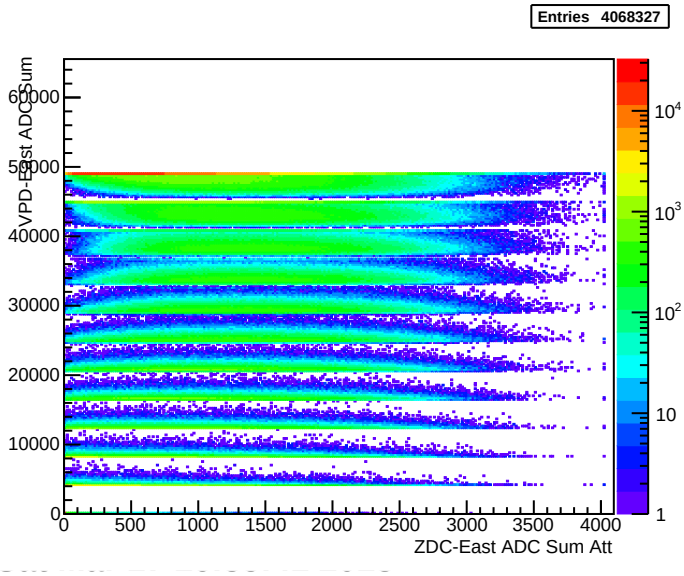

Entries 4068327
TOF Mult
ZDC-West ADC Sum Att

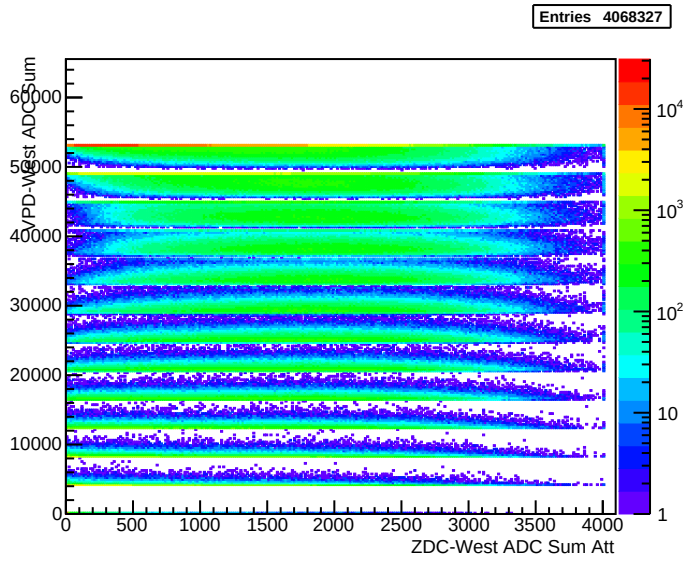

Entries 4068327
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

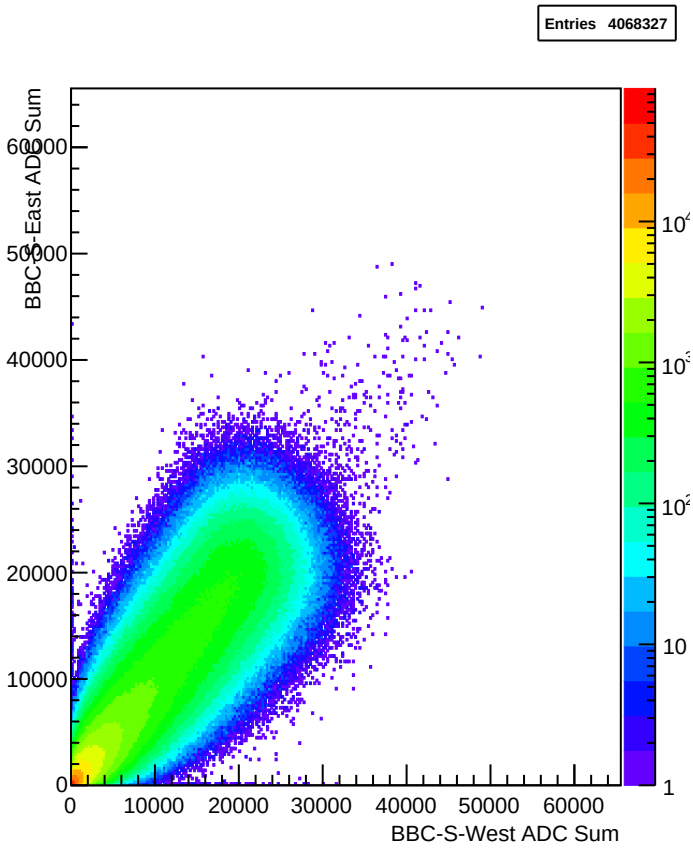

Entries 4068327
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

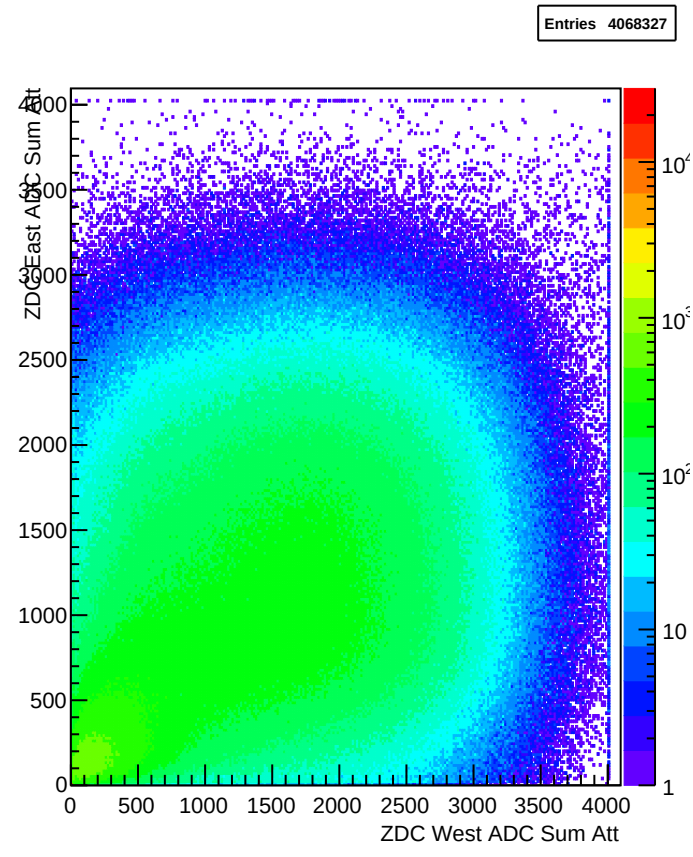

Entries 4068327
BBC-S-East ADC Sum
VPD-East ADC Sum

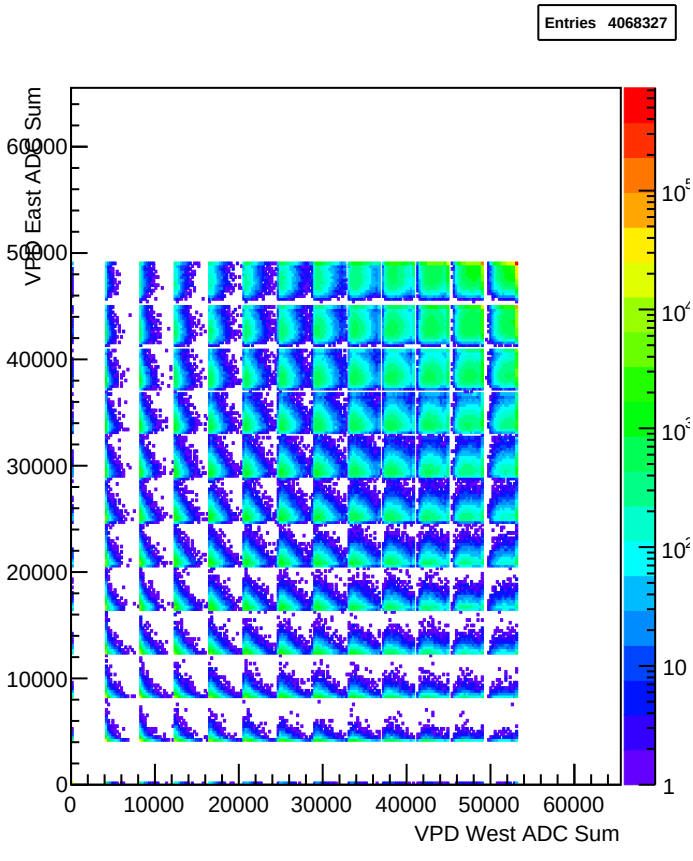

Entries 4068327
BBC-S-West ADC Sum
VPD-West ADC Sum

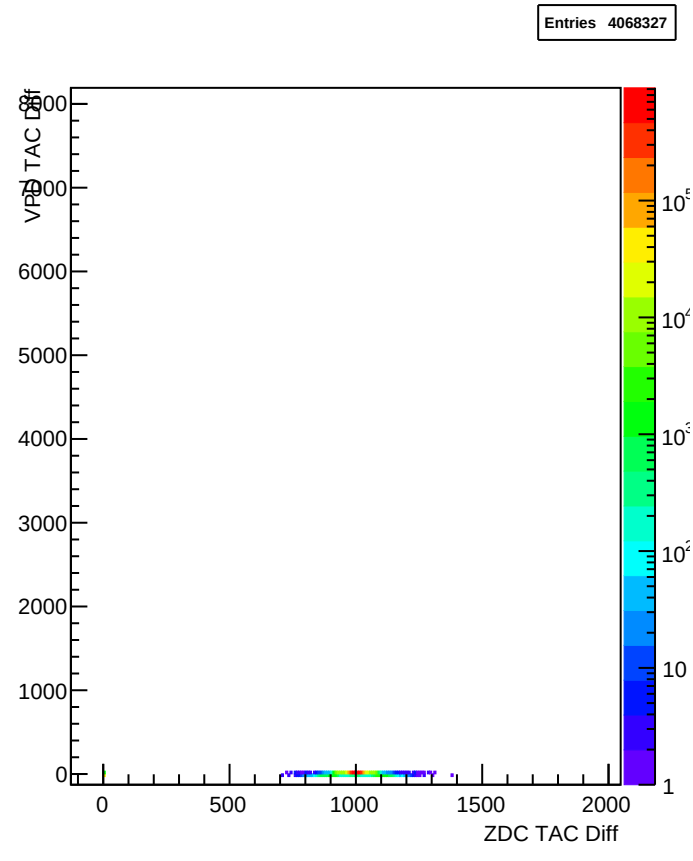

Entries 4068327
VPD-East ADC Sum
ZDC-East ADC Sum Att

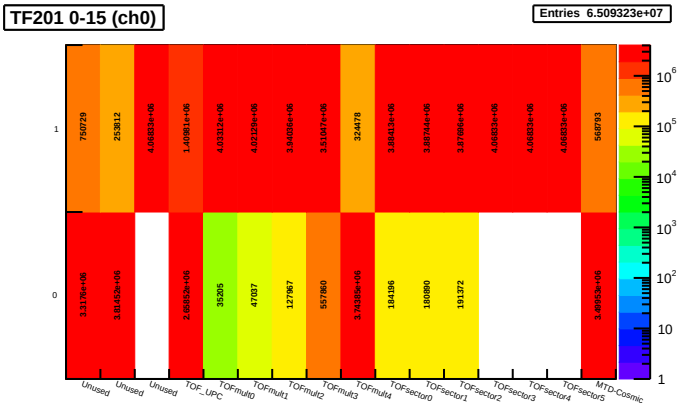

Entries 4068327
VPD-West ADC Sum
ZDC-West ADC Sum Att

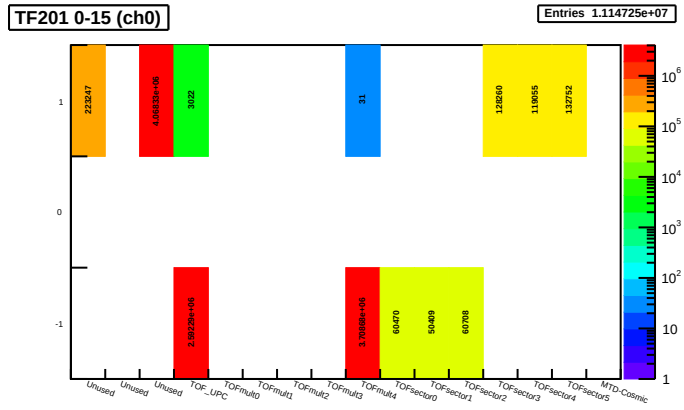

Entries 4068327
BBC-S-East ADC Sum
BBC-S-West ADC Sum

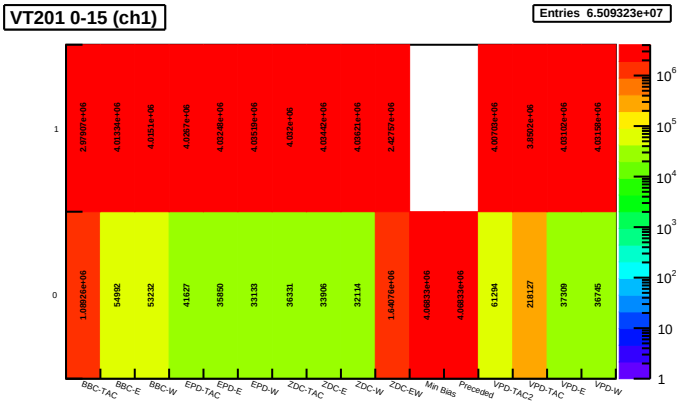

Entries 4068327
ZDC East ADC Sum Att
ZDC West ADC Sum Att

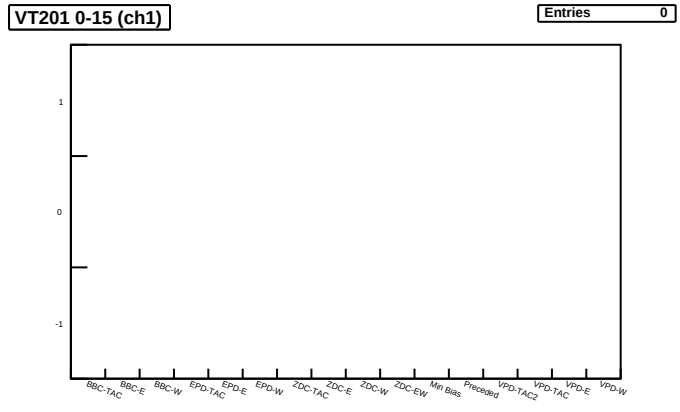

Entries 4068327
VPD East ADC Sum
VPD West ADC Sum

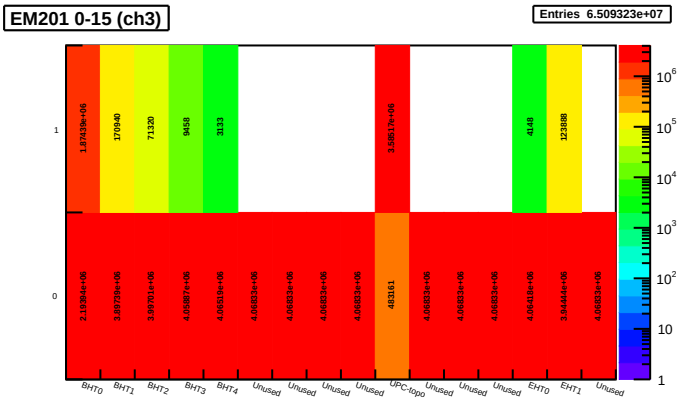

Entries 4068327
VPD TAC Diff
ZDC TAC Diff

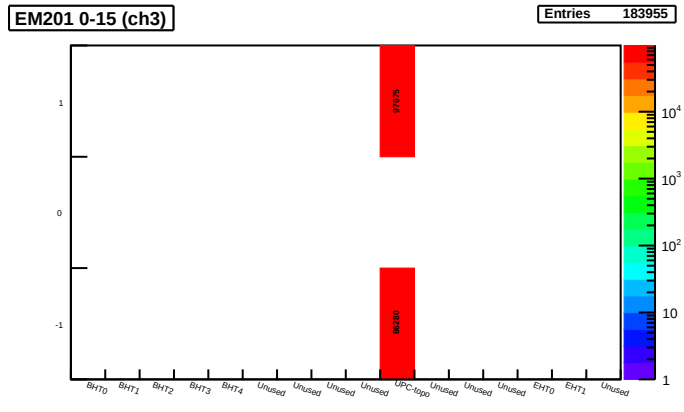

TF201 0-15 (ch0)
Entries 6.509323e+07
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

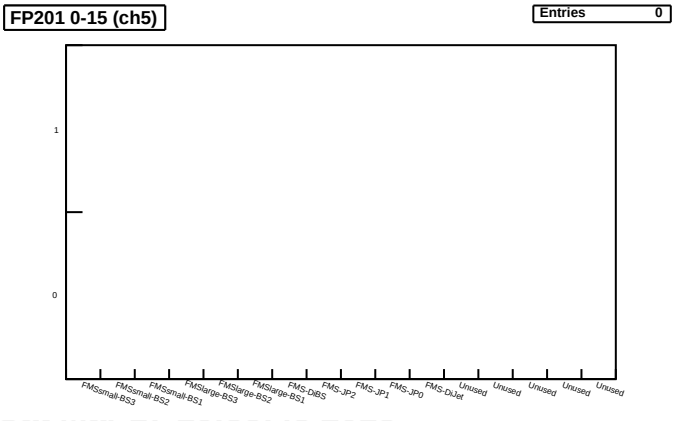

TF201 0-15 (ch0)
Entries 1.114725e+07
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

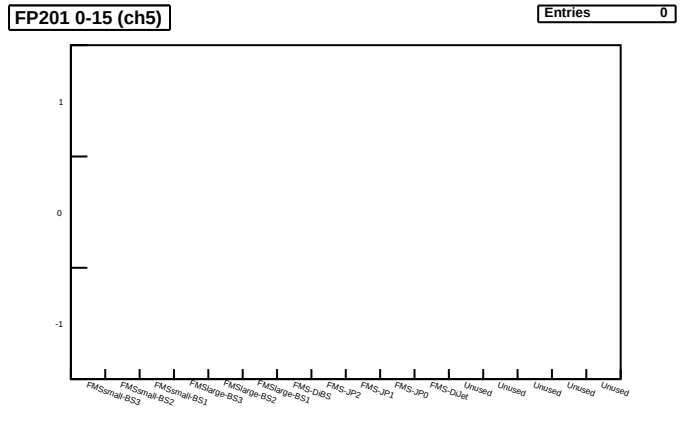

VT201 0-15 (ch1)
Entries 6.509323e+07
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W


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 6.509323e+07
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


EM201 0-15 (ch3)
Entries 183955
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 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 Unused Unused Unused 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 Unused Unused Unused Unused