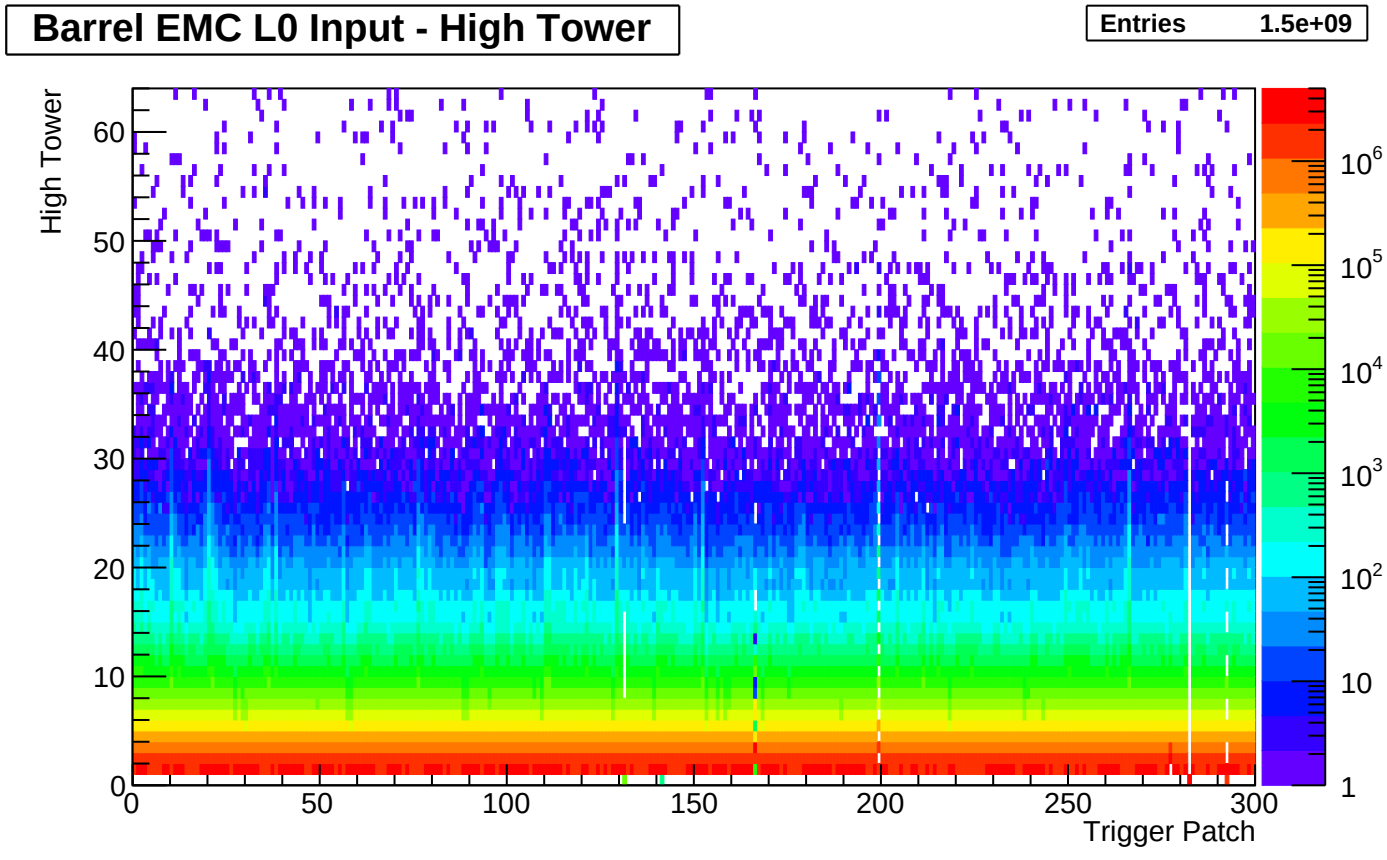
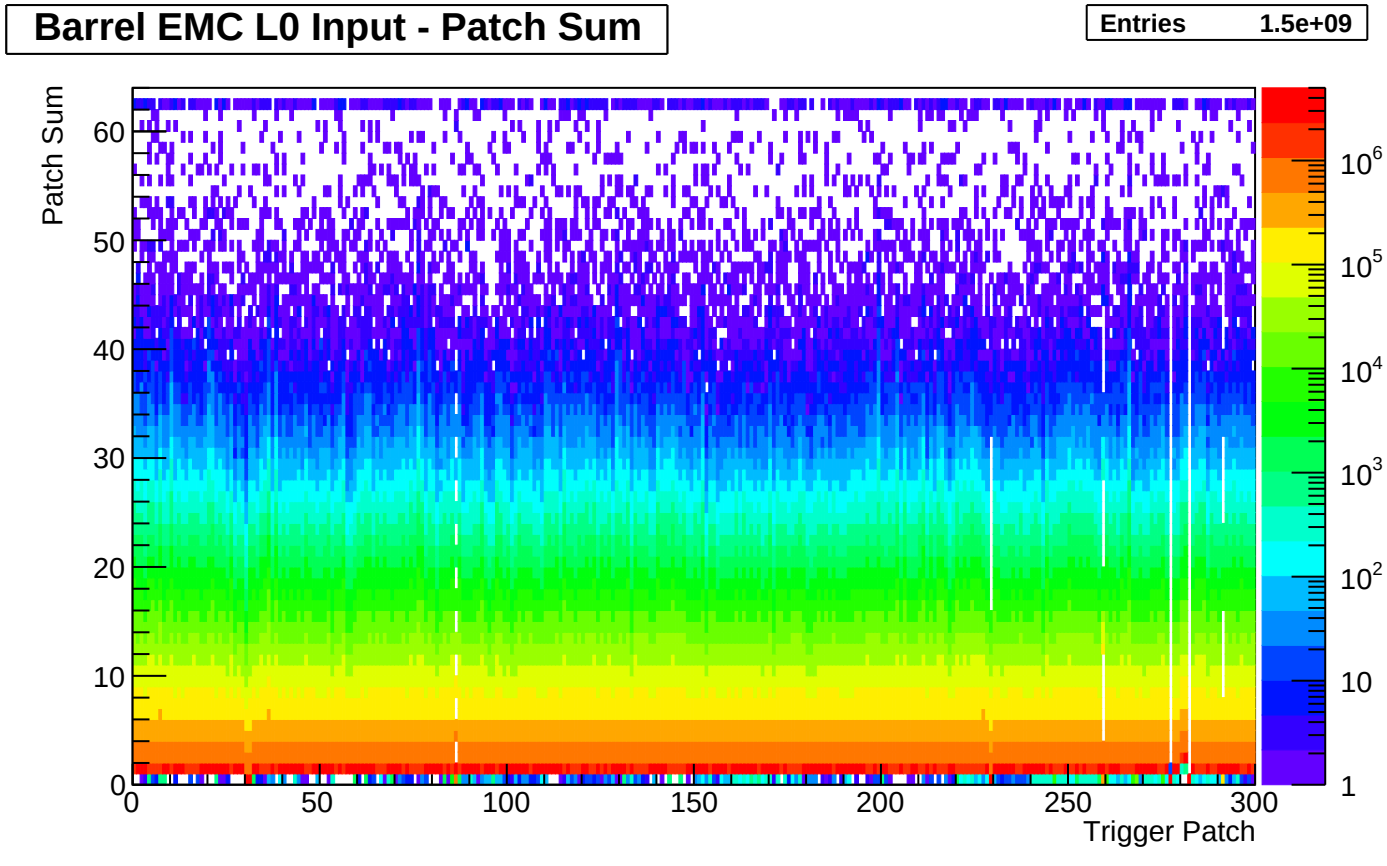
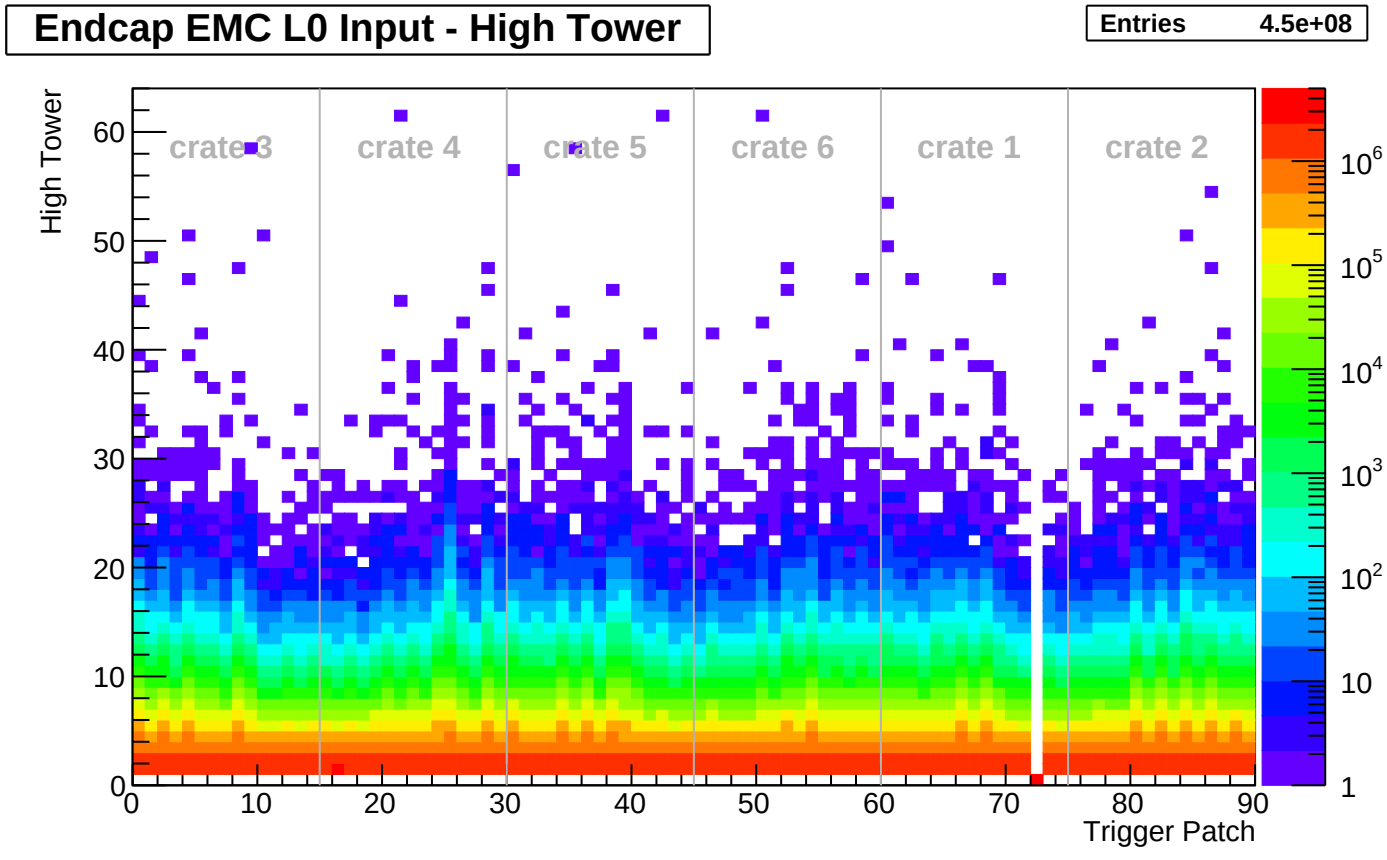
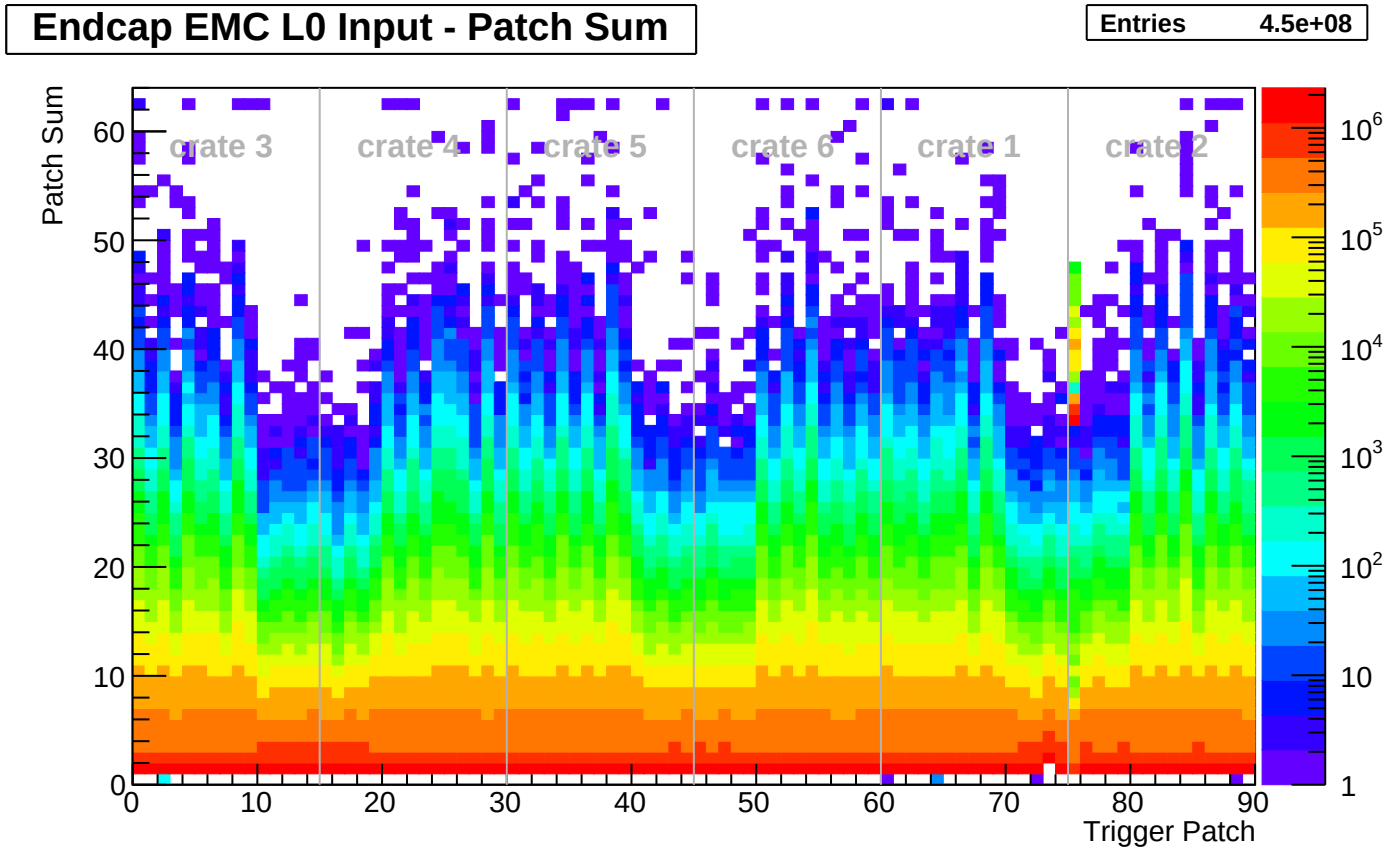
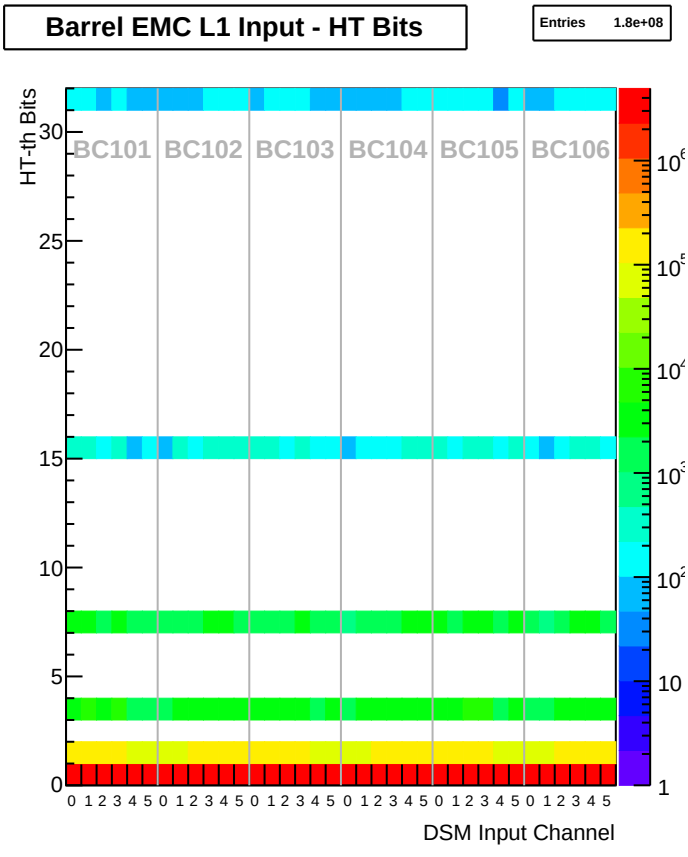
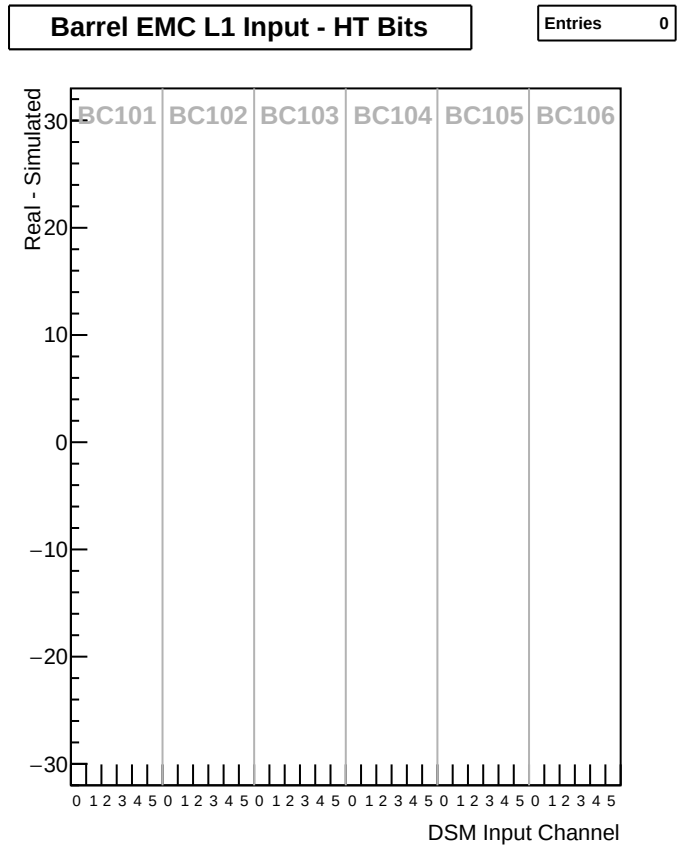

Barrel EMC L0 Input - High Tower
Entries 1.5e+09
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

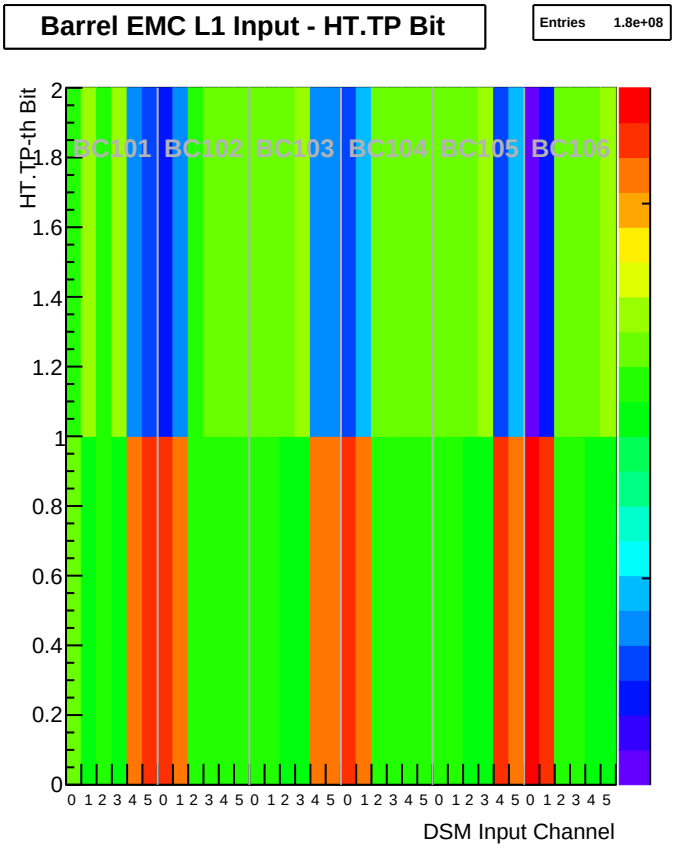

Barrel EMC L0 Input - Patch Sum
Entries 1.5e+09
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

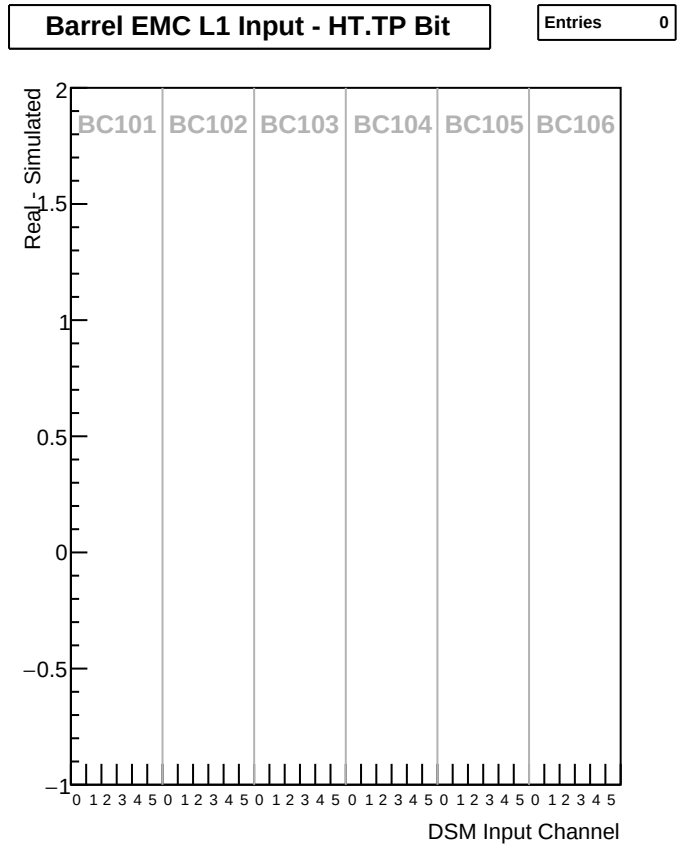

Endcap EMC L0 Input - High Tower
Entries 4.5e+08
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

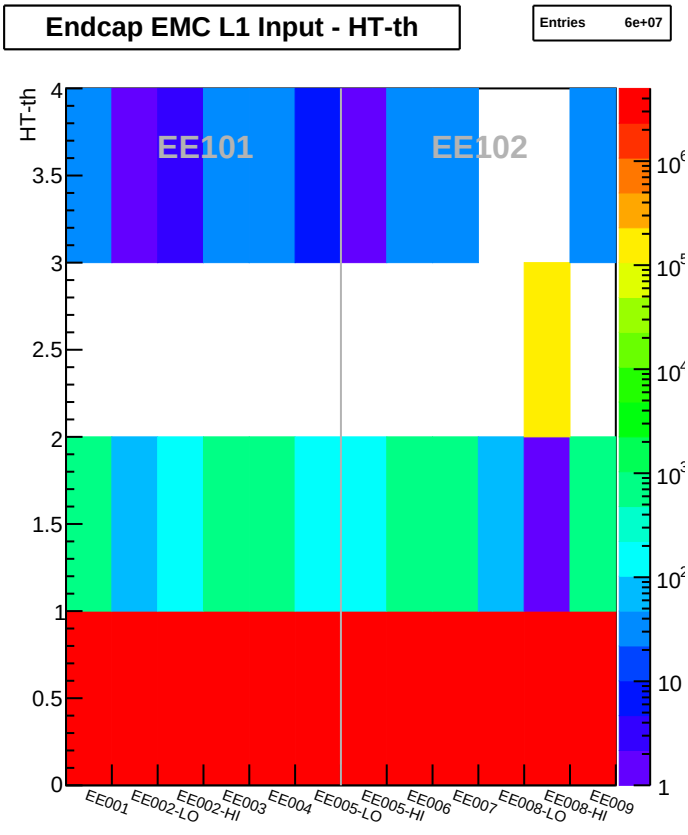

Endcap EMC L0 Input - Patch Sum
Entries 4.5e+08
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

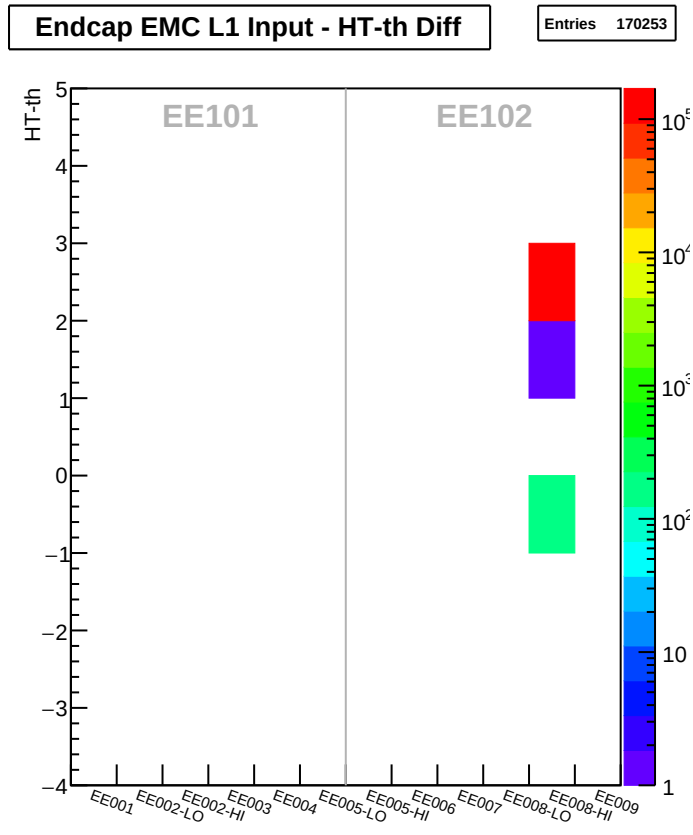

Barrel EMC L1 Input - HT Bits
Entries 1.8e+08
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

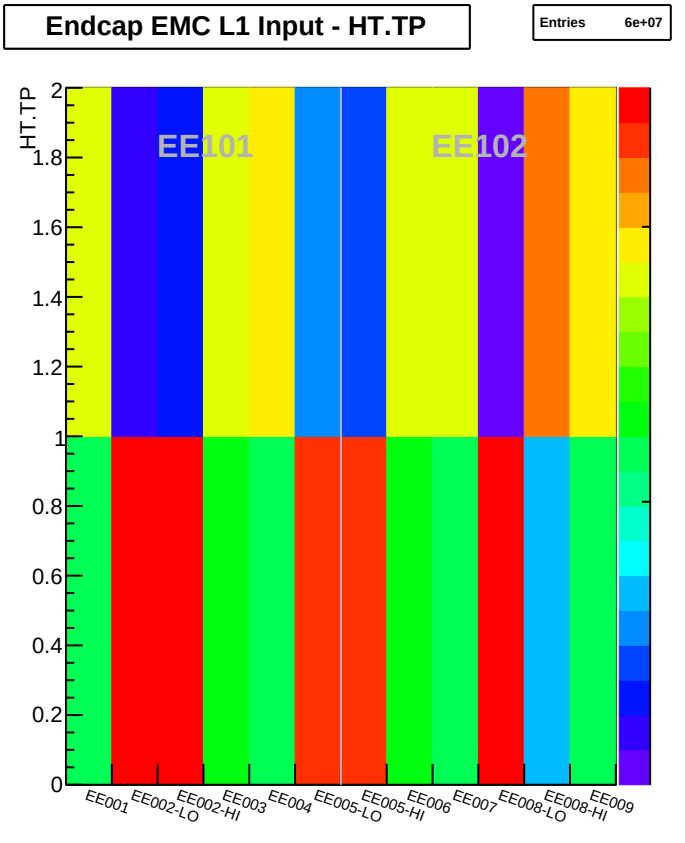

Barrel EMC L1 Input - HT Bits
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

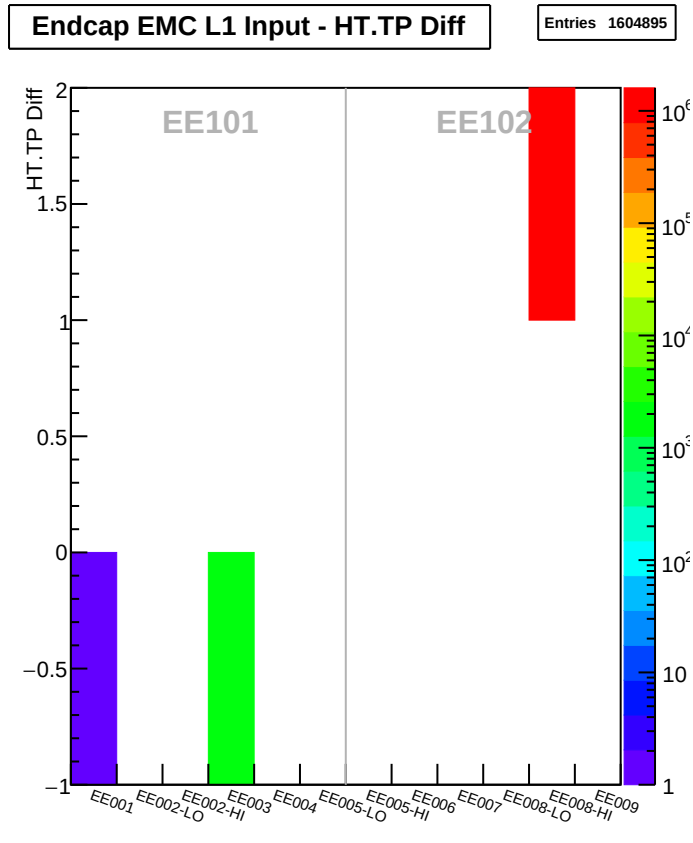

Barrel EMC L1 Input - HT.TP Bit
Entries 1.8e+08
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

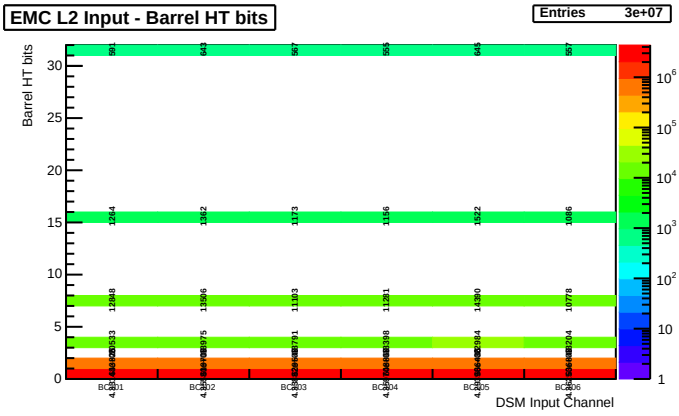

Barrel EMC L1 Input - HT.TP Bit
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

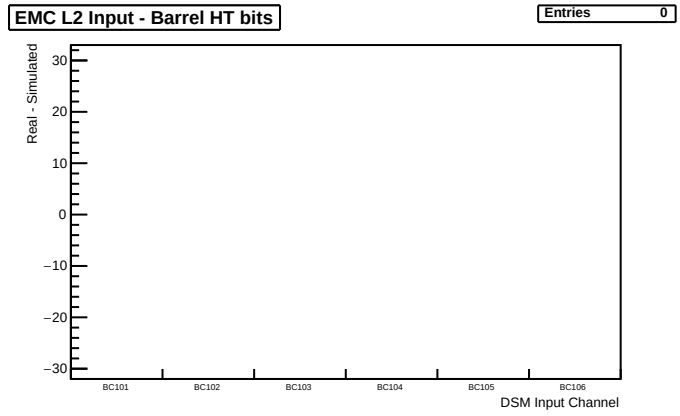

Endcap EMC L1 Input - HT-th
Entries 6e+07
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

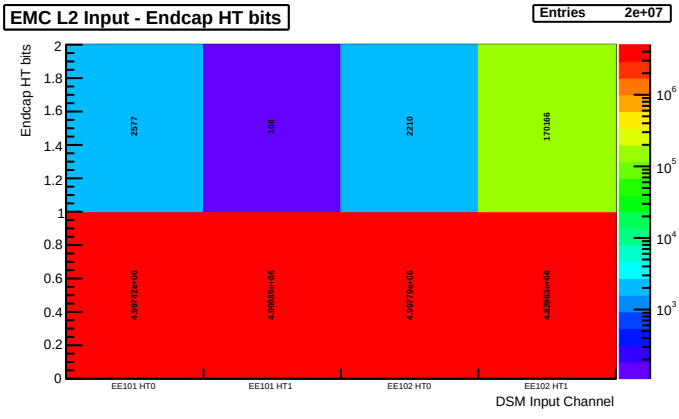

Endcap EMC L1 Input - HT-th Diff
Entries 170253
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

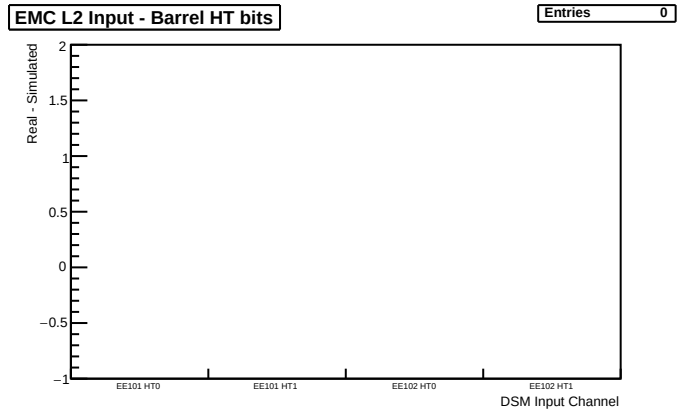

Endcap EMC L1 Input - HT.TP
Entries 6e+07
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

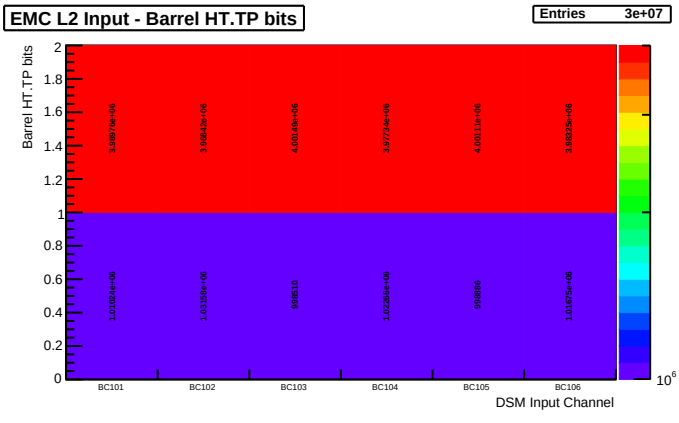

Endcap EMC L1 Input - HT.TP Diff
Entries 1604895
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

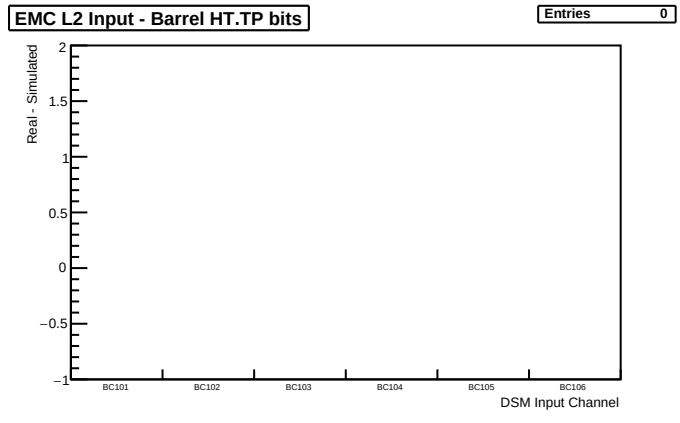

EMC L2 Input - Barrel HT bits
Entries 3e+07
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

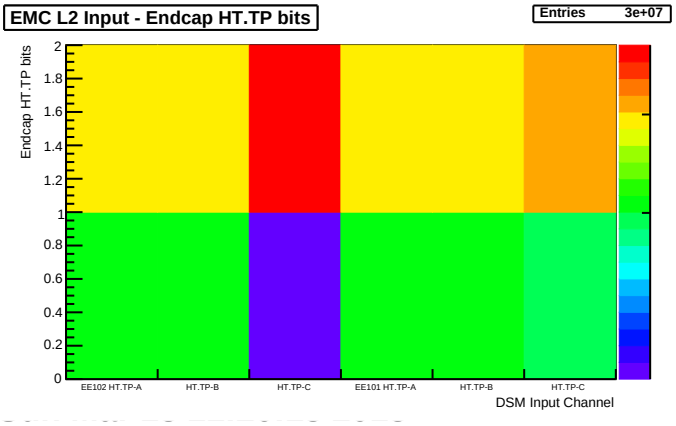

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

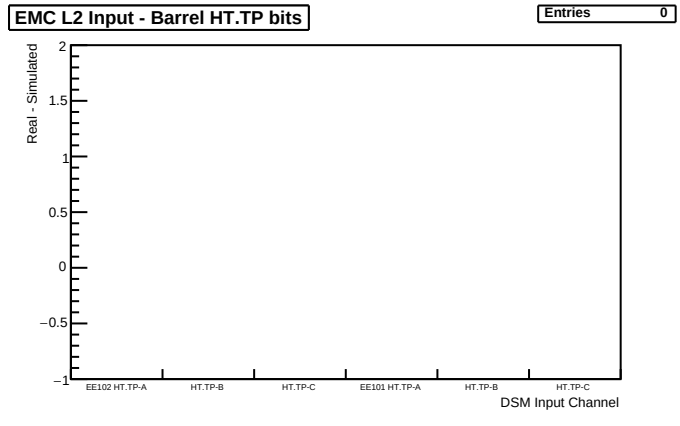

EMC L2 Input - Endcap HT bits
Entries 2e+07
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

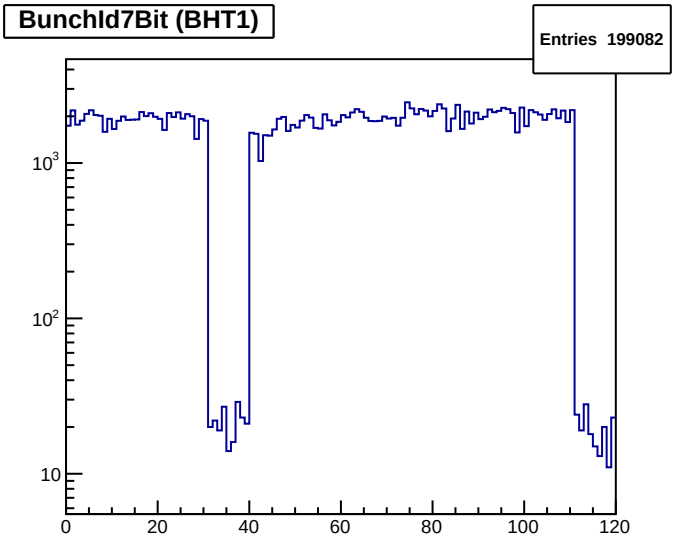

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

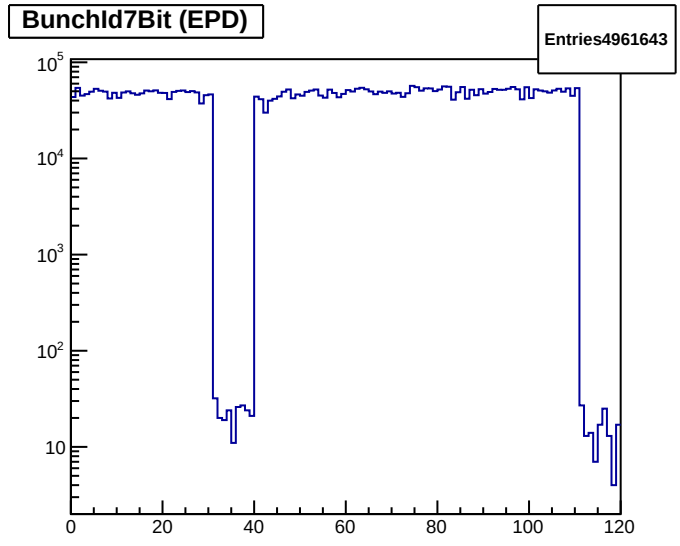

EMC L2 Input - Barrel HT.TP bits
Entries 3e+07
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

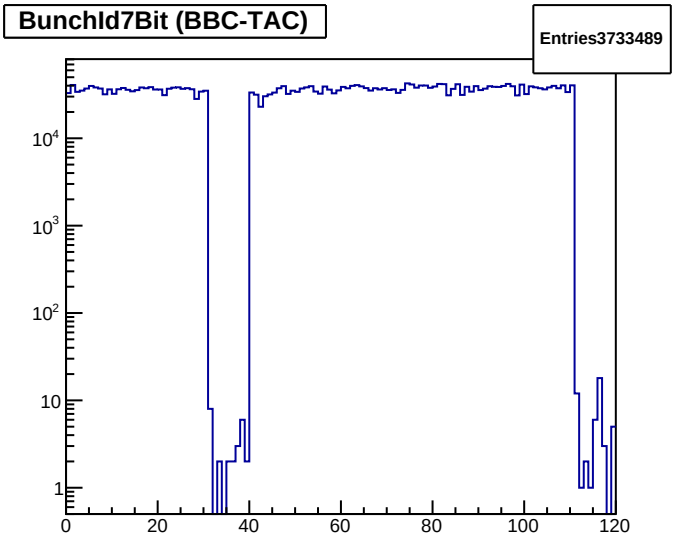

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

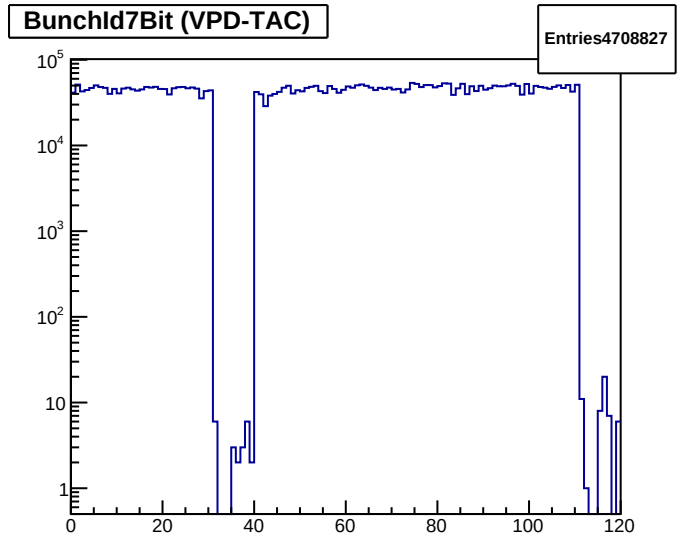

EMC L2 Input - Endcap HT.TP bits
Entries 3e+07
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

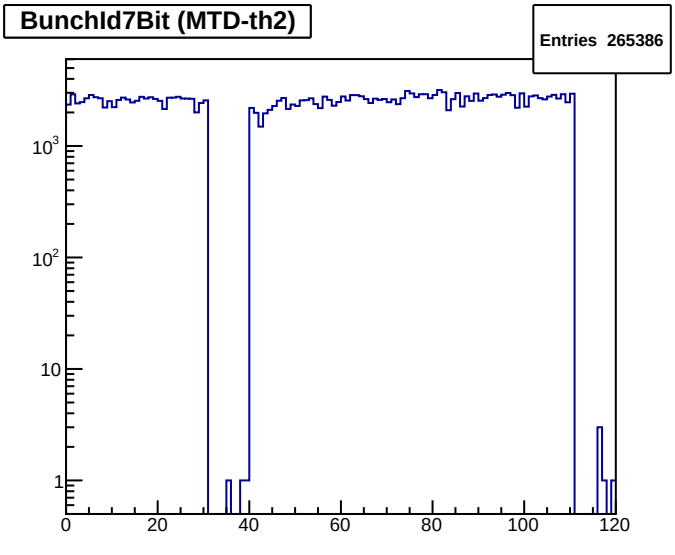

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

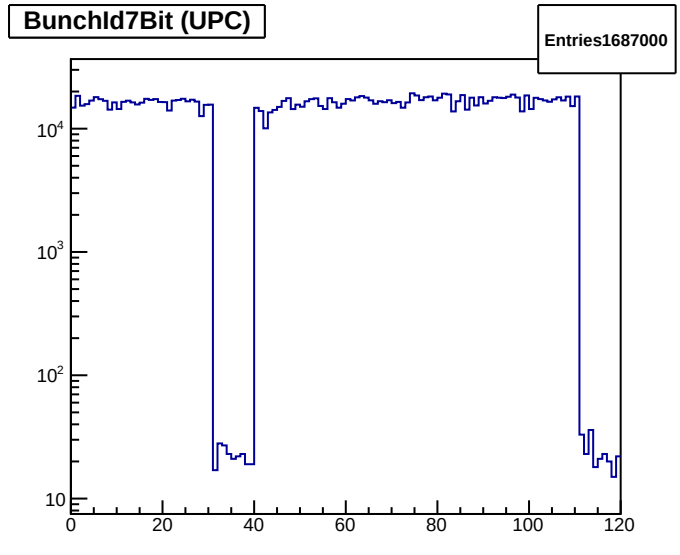

BunchId7Bit (BHT1)
Entries 199082

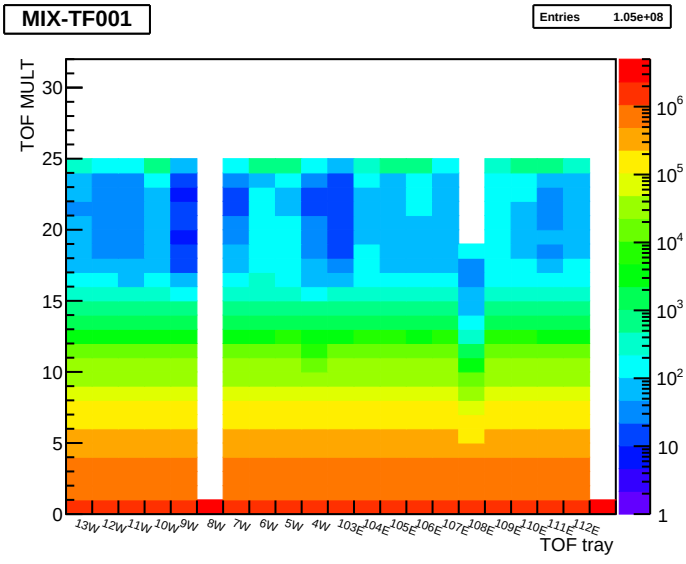

BunchId7Bit (EPD)
Entries4961643

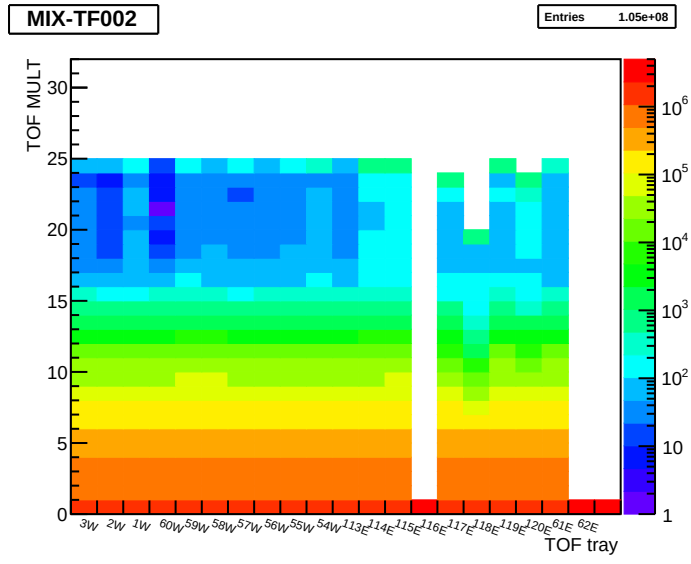

BunchId7Bit (BBC-TAC)
Entries3733489

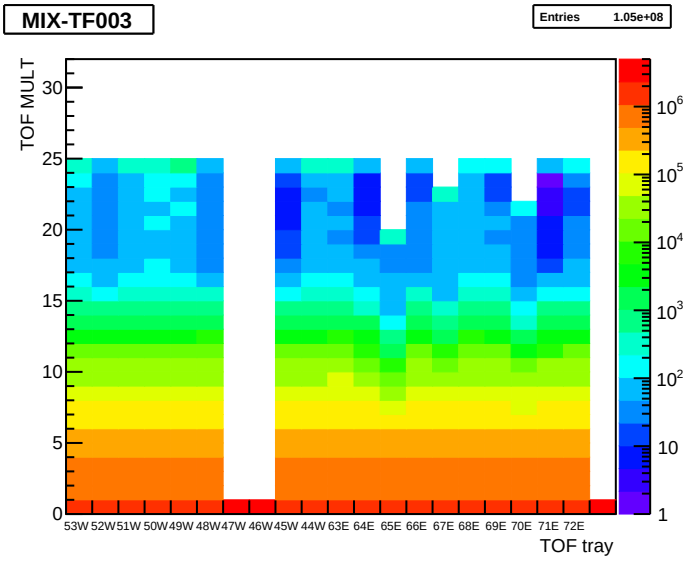

BunchId7Bit (VPD-TAC)
Entries4708827

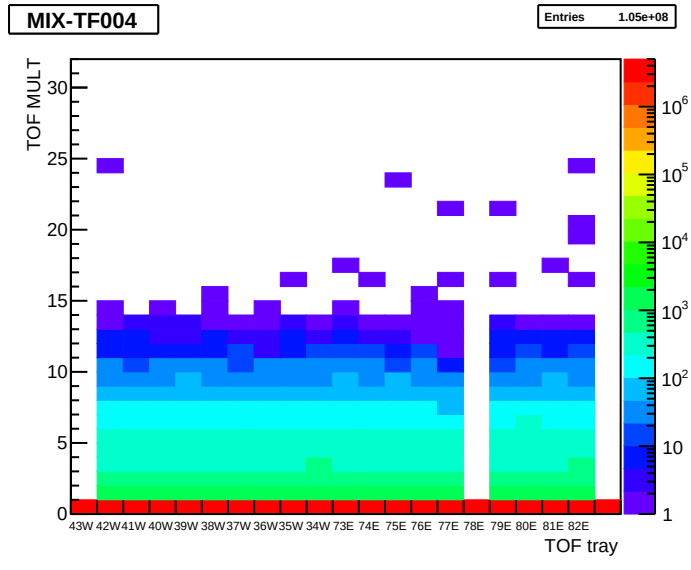

BunchId7Bit (MTD-th2)
Entries 265386

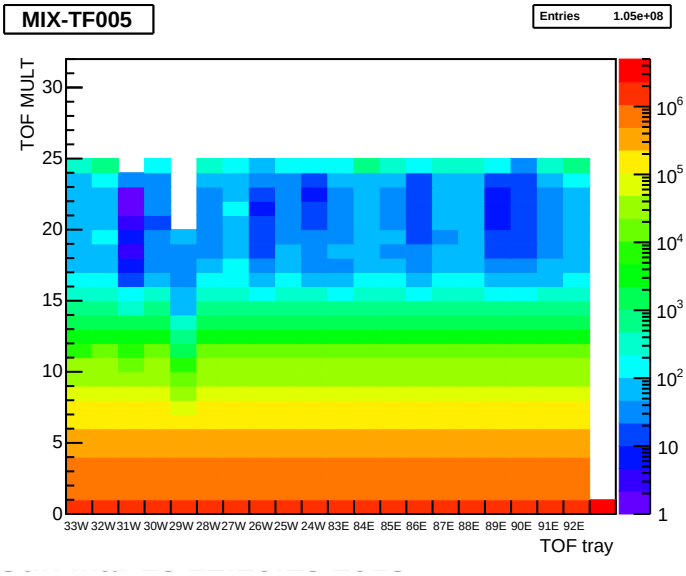

BunchId7Bit (UPC)
Entries1687000

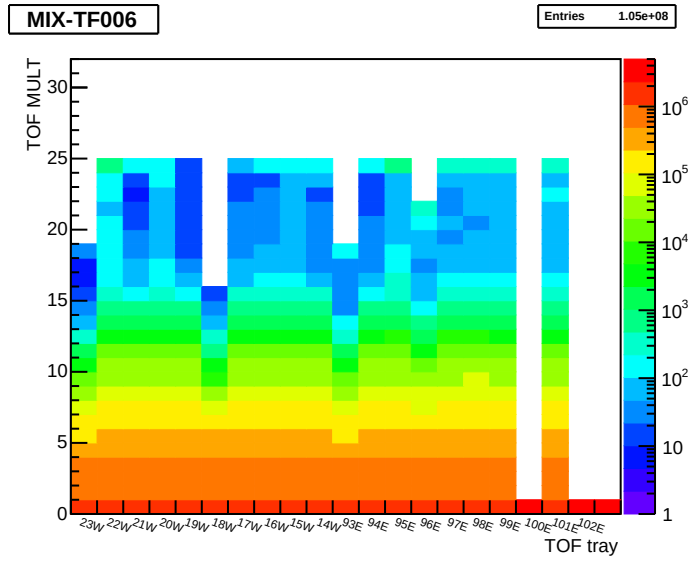

MIX-TF001
Entries 1.05e+08
TOF MULT
TOF tray

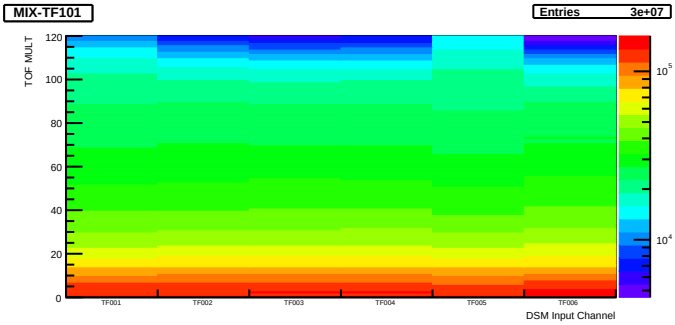

MIX-TF002
Entries 1.05e+08
TOF MULT
TOF tray

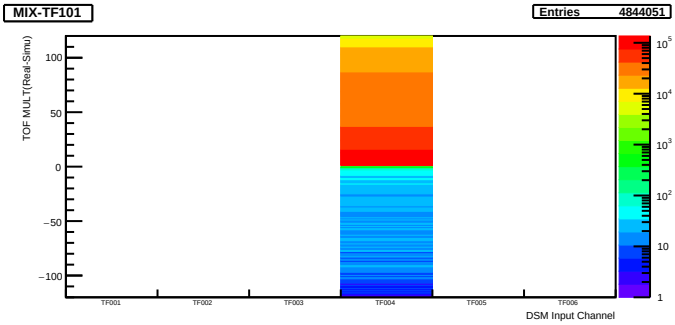

MIX-TF003
Entries 1.05e+08
TOF MULT
TOF tray

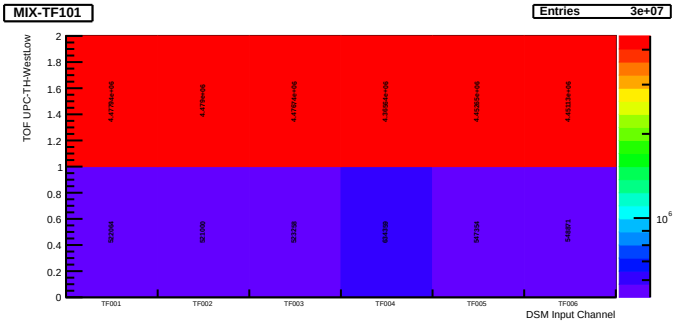

MIX-TF004
Entries 1.05e+08
TOF MULT
TOF tray

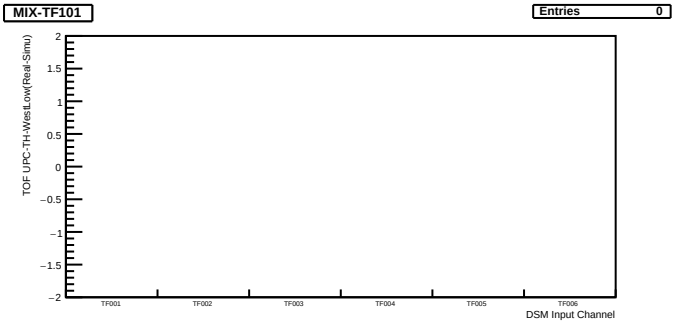

MIX-TF005
Entries 1.05e+08
TOF MULT
TOF tray

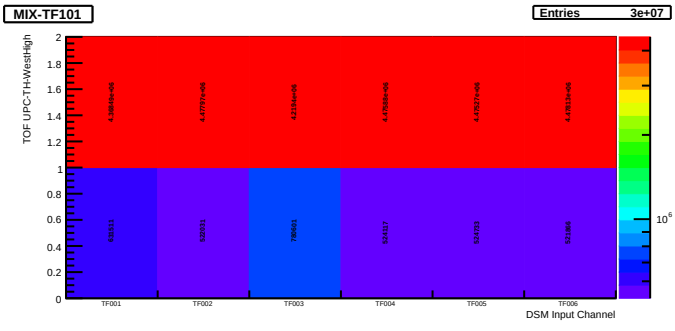

MIX-TF006
Entries 1.05e+08
TOF MULT
TOF tray

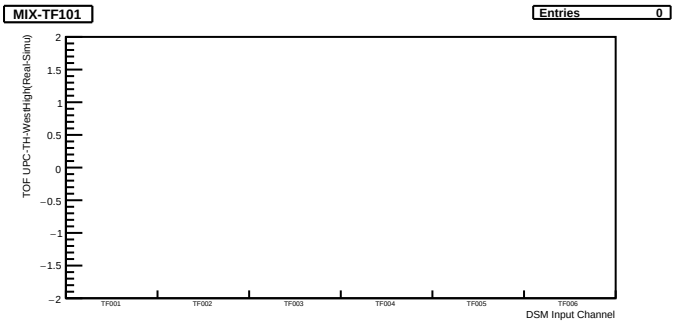

MIX-TF101
Entries 3e+07
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

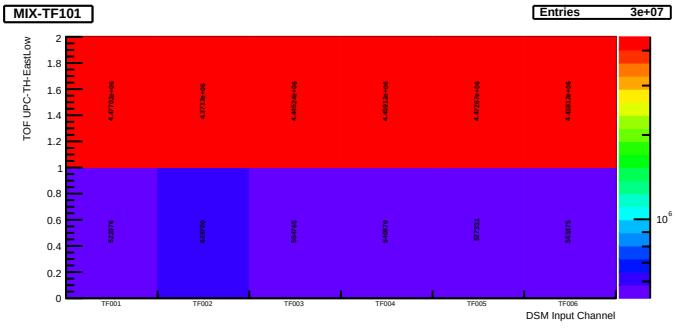

MIX-TF101
Entries 4844051
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

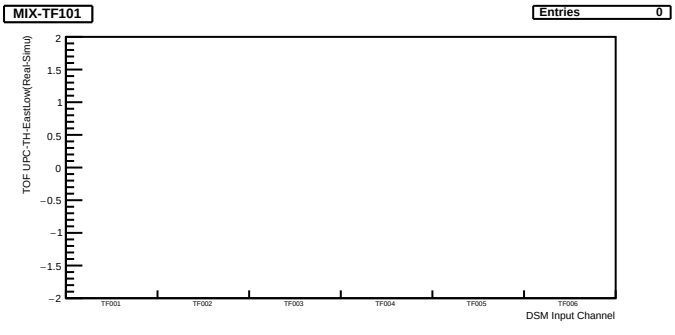

MIX-TF101
Entries 3e+07
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

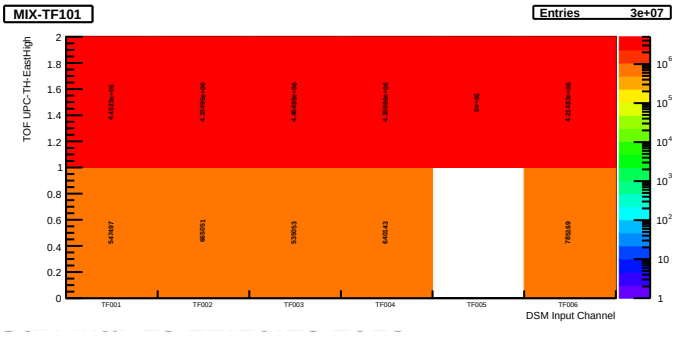

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

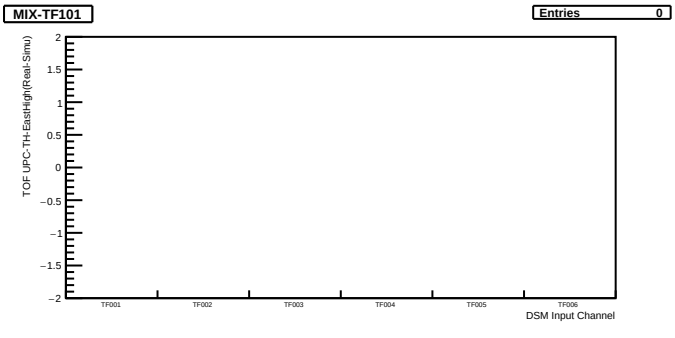

MIX-TF101
Entries 3e+07
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

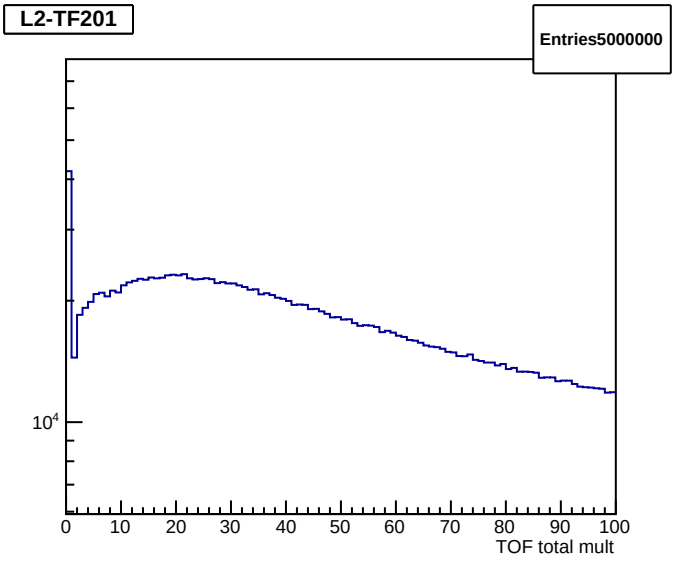

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

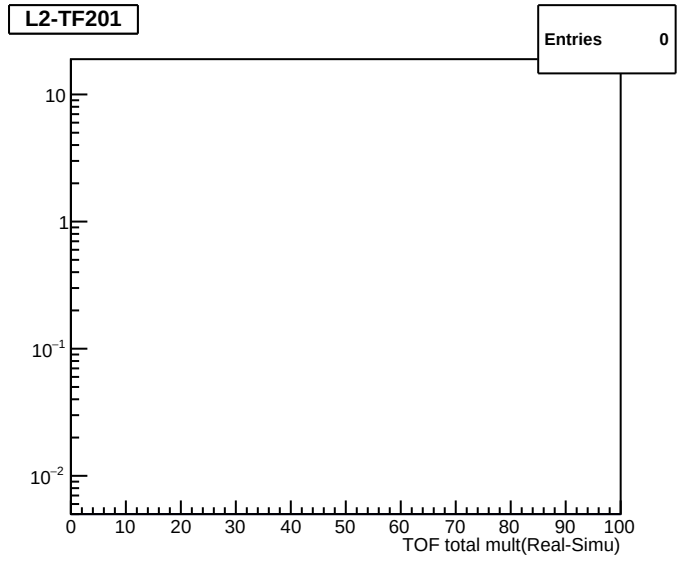

MIX-TF101
Entries 3e+07
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

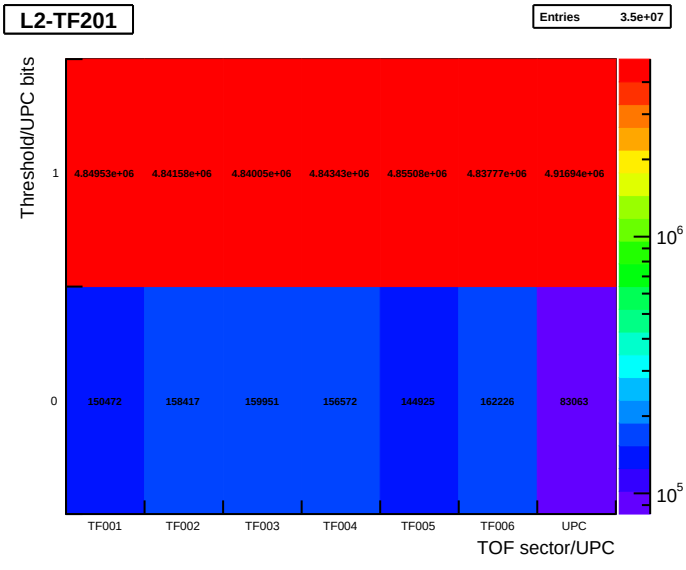

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

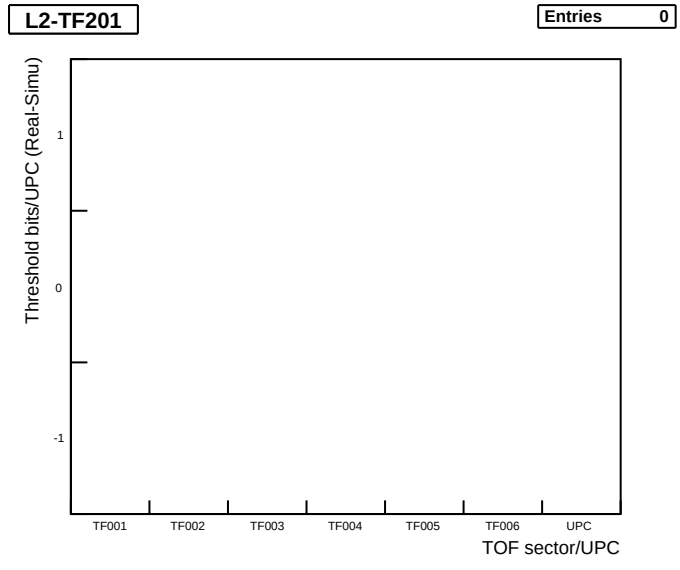

MIX-TF101
Entries 3e+07
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

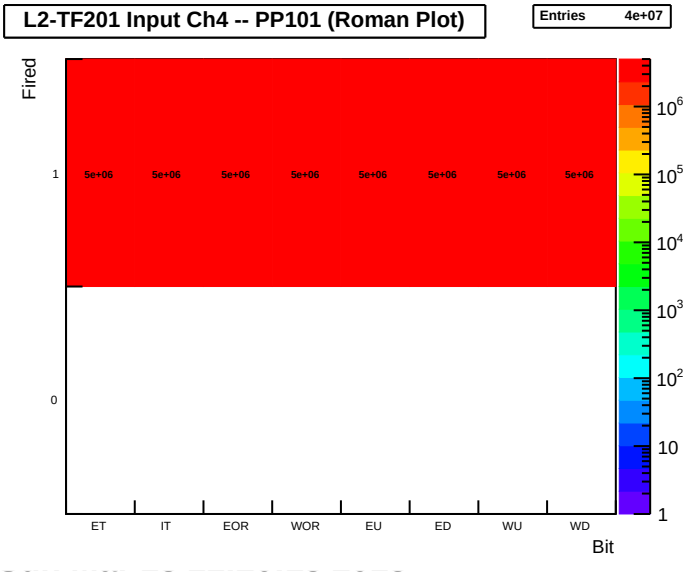

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

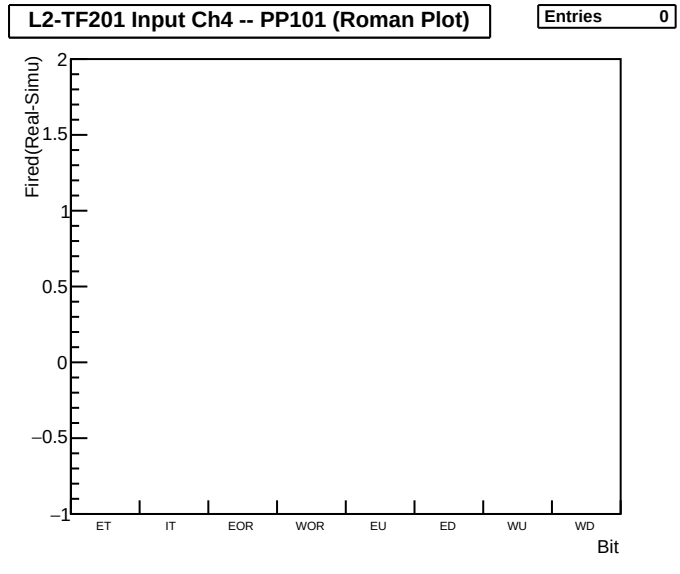

L2-TF201
Entries5000000
10^4
0 10 20 30 40 50 60 70 80 90 100
TOF total mult

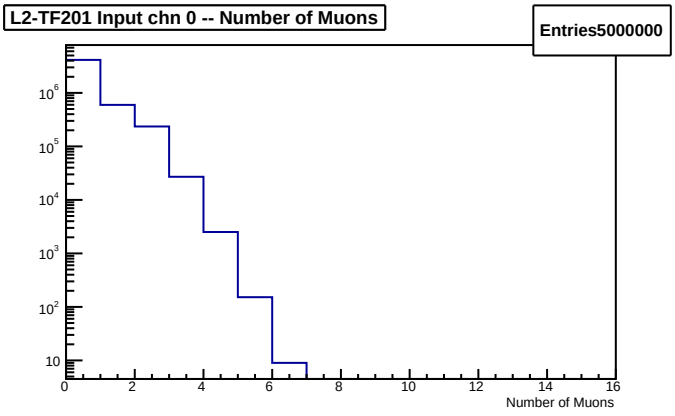

L2-TF201
Entries 0
10
1
10^{-1}
10^{-2}
0 10 20 30 40 50 60 70 80 90 100
TOF total mult(Real-Simu)

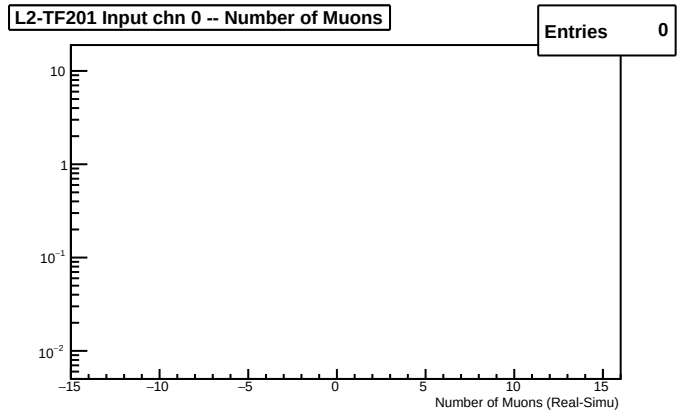

L2-TF201
Entries 3.5e+07
Threshold/UPC bits
1
0
4.84953e+06 4.84158e+06 4.84005e+06 4.84343e+06 4.85508e+06 4.83777e+06 4.91694e+06
150472 158417 159951 156572 144925 162226 83063
10^6
10^5
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

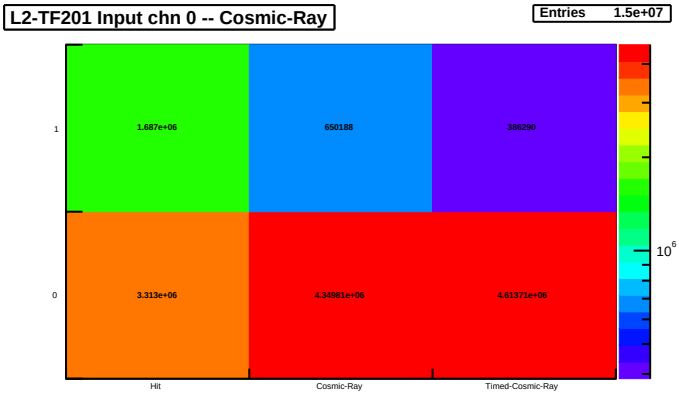

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
1
0
-1
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

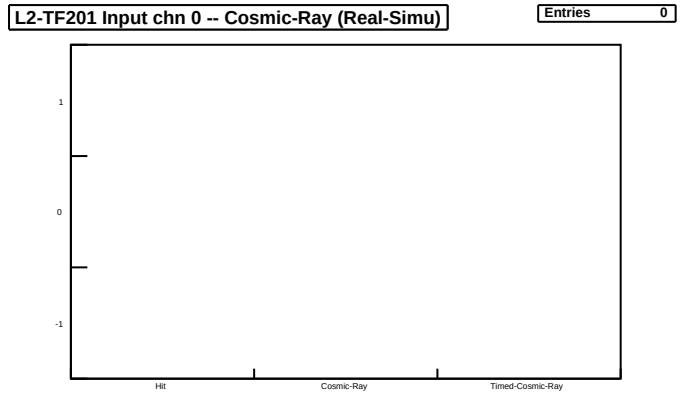

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 4e+07
Fired
1
0
5e+06 5e+06 5e+06 5e+06 5e+06 5e+06 5e+06 5e+06
10^6
10^5
10^4
10^3
10^2
10
1
ET IT EOR WOR EU ED WU WD
Bit

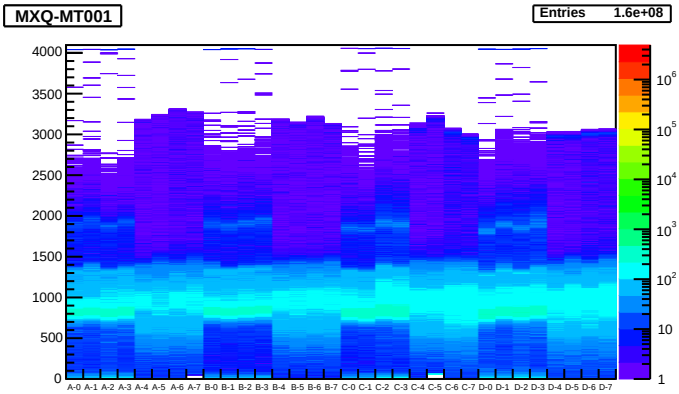

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 0
Fired(Real-Simu)
2
1.5
1
0.5
0
−0.5
−1
ET IT EOR WOR EU ED WU WD
Bit

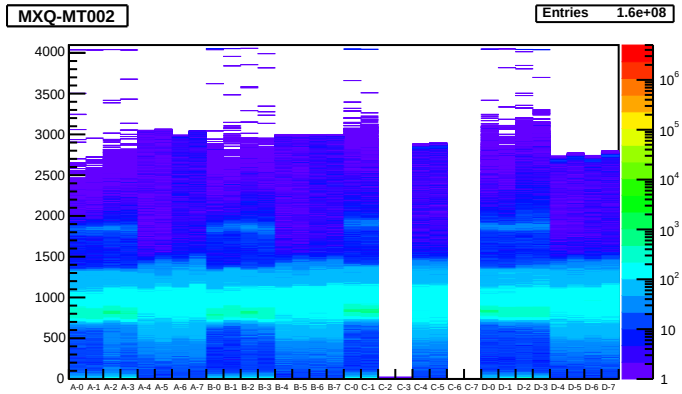

L2-TF201 Input chn 0 -- Number of Muons
Entries5000000
Number of Muons

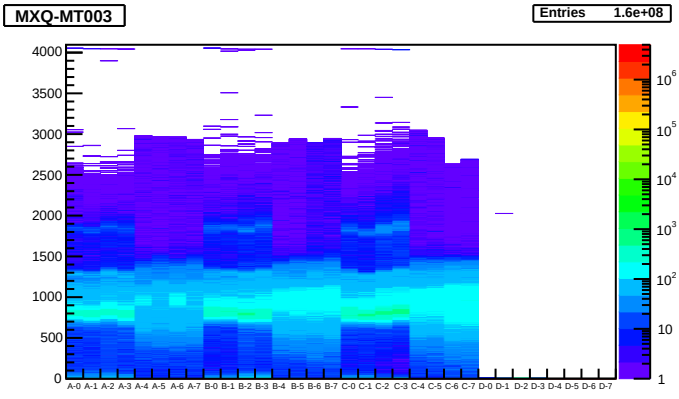

L2-TF201 Input chn 0 -- Number of Muons
Entries 0
Number of Muons (Real-Simu)

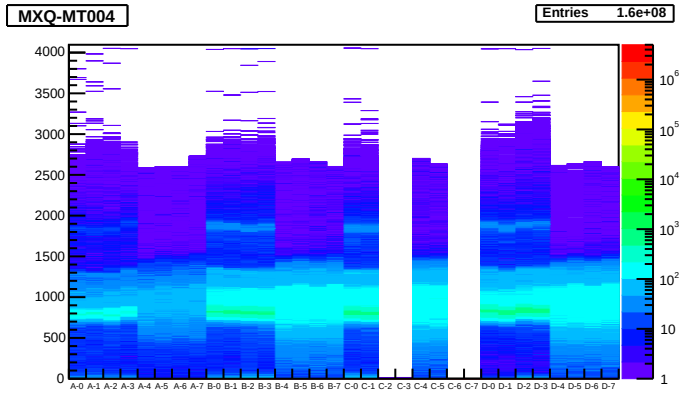

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 1.5e+07
1.687e+06
650188
386290
3.313e+06
4.34981e+06
4.61371e+06
Hit
Cosmic-Ray
Timed-Cosmic-Ray

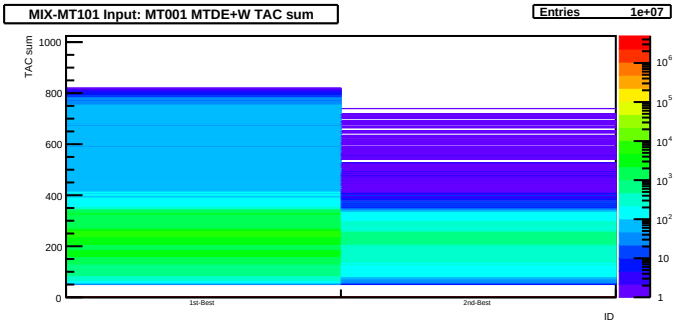

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 0
Hit
Cosmic-Ray
Timed-Cosmic-Ray

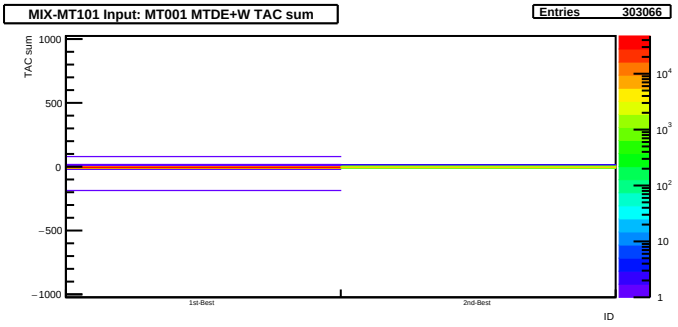

MXQ-MT001
Entries 1.6e+08

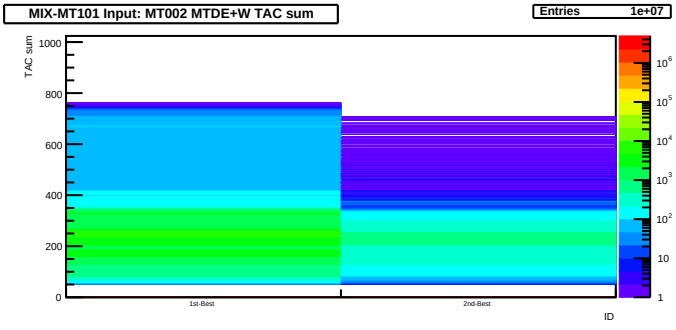

MXQ-MT002
Entries 1.6e+08

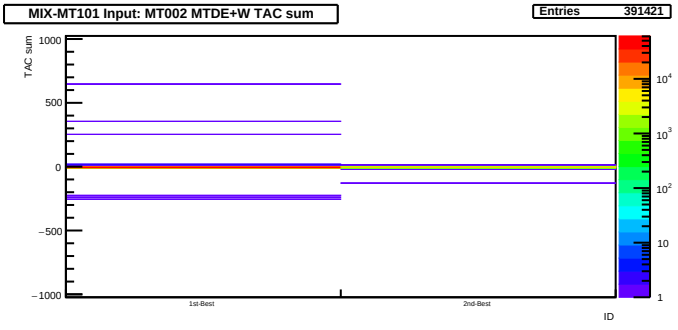

MXQ-MT003
Entries 1.6e+08

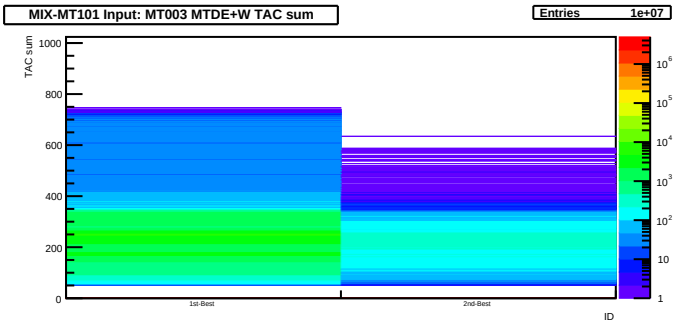

MXQ-MT004
Entries 1.6e+08

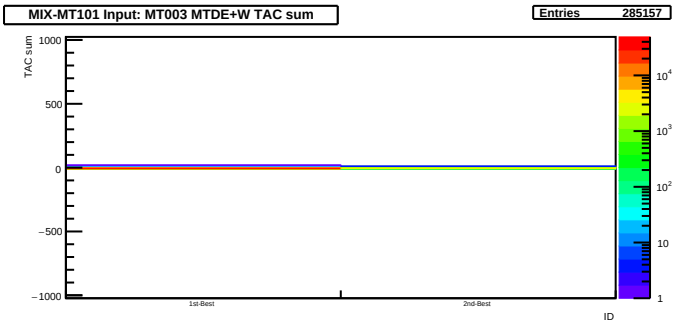

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 1e+07
TAC sum
1st-Best
2nd-Best
ID

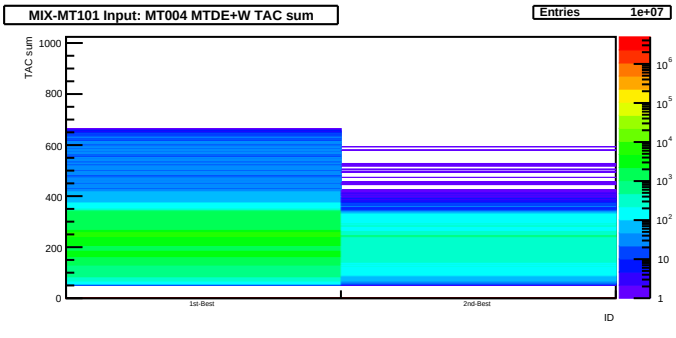

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 303066
TAC sum
1st-Best
2nd-Best
ID

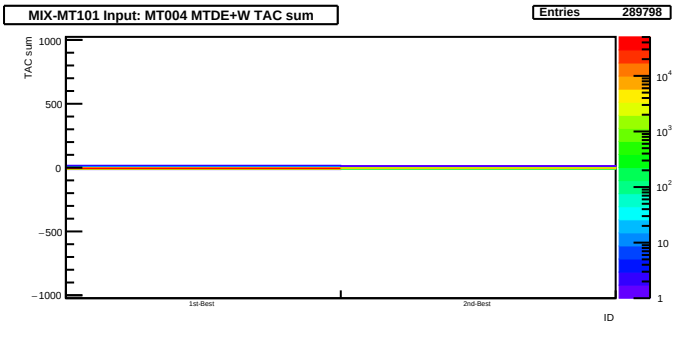

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 1e+07
TAC sum
1st-Best
2nd-Best
ID

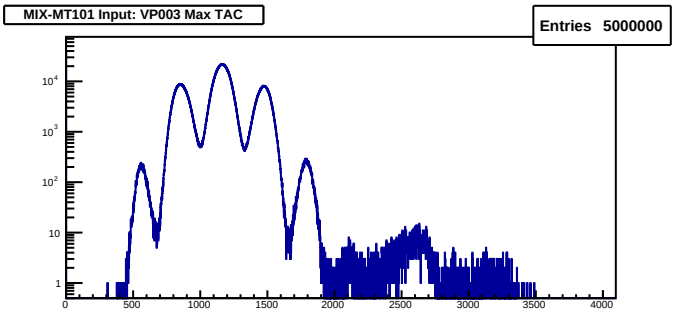

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 391421
TAC sum
1st-Best
2nd-Best
ID

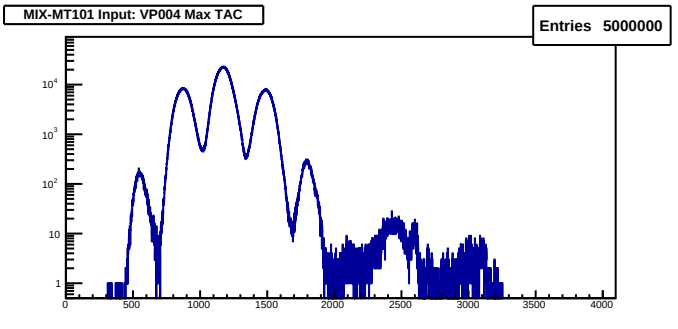

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 1e+07
TAC sum
1st-Best
2nd-Best
ID

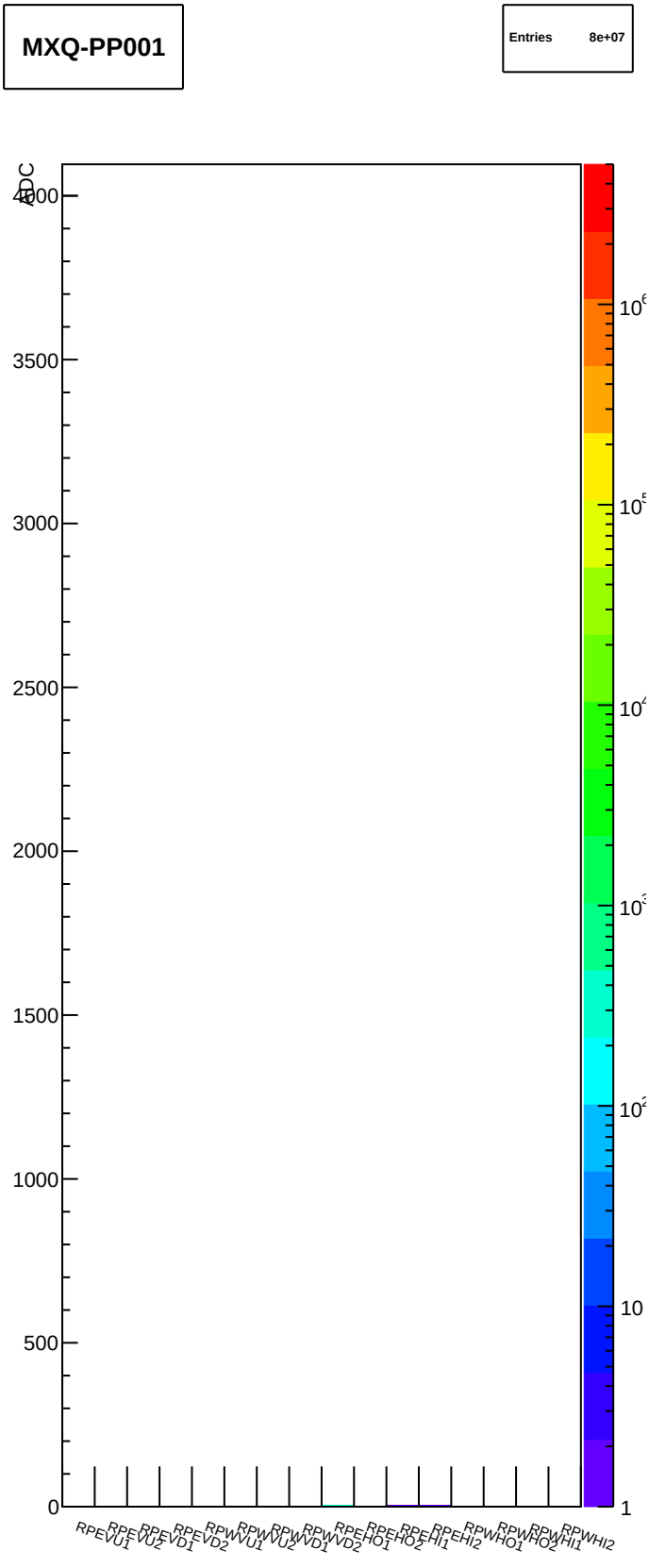

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 285157
TAC sum
1st-Best
2nd-Best
ID

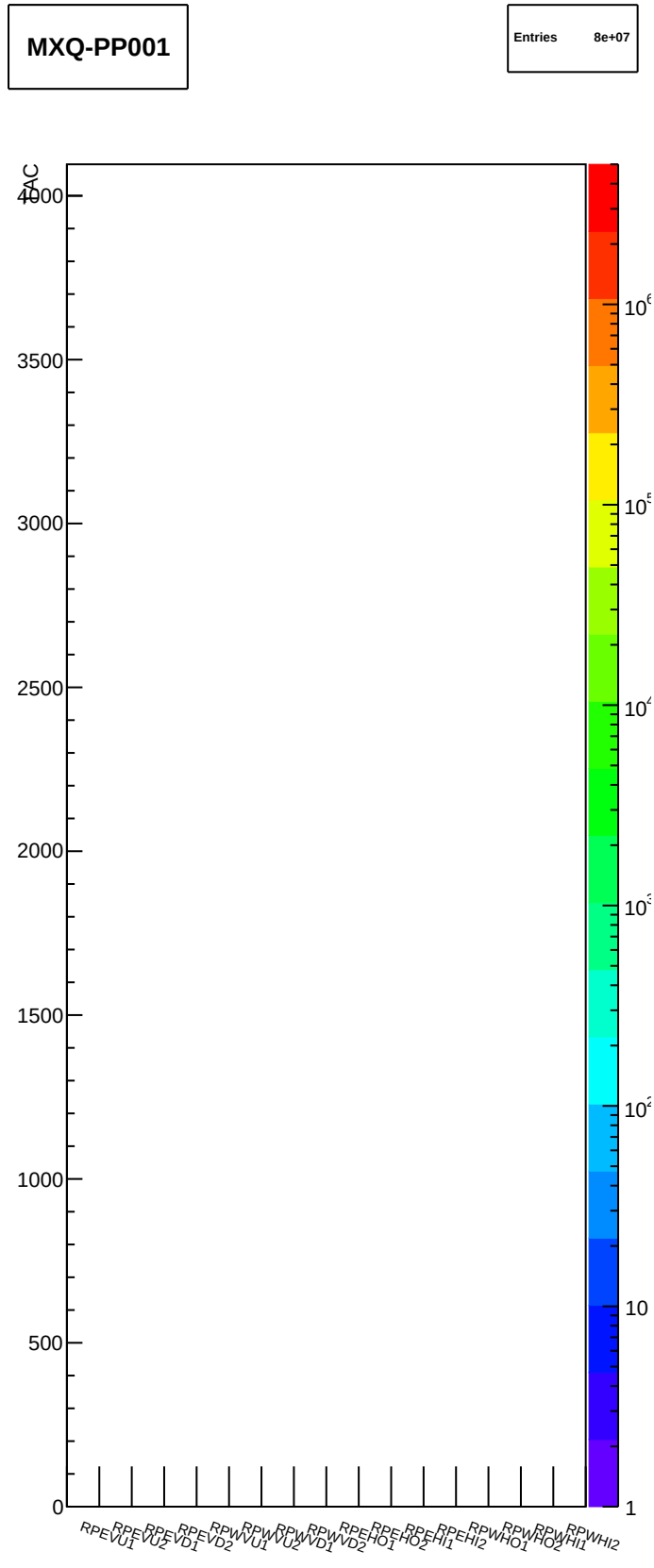

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 1e+07
TAC sum
1st-Best
2nd-Best
ID

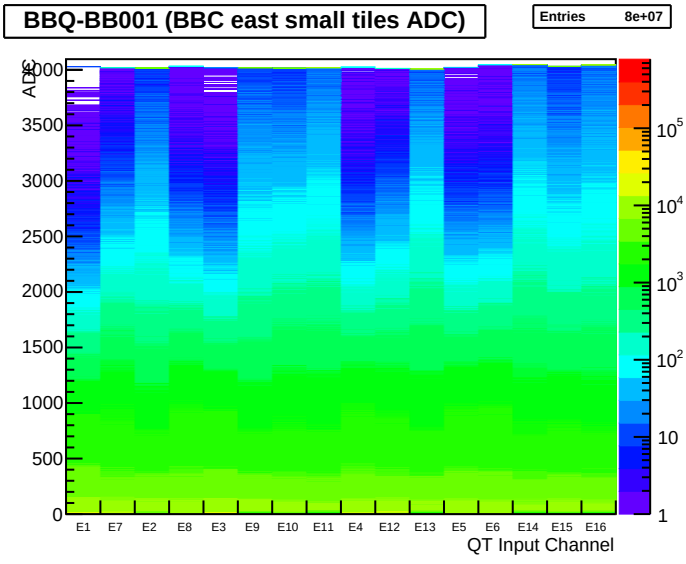

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 289798
TAC sum
1st-Best
2nd-Best
ID

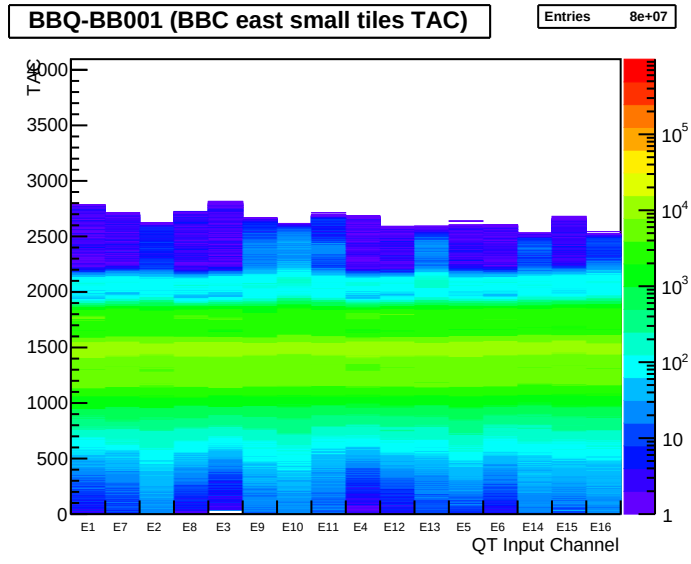

MIX-MT101 Input: VP003 Max TAC
Entries 5000000

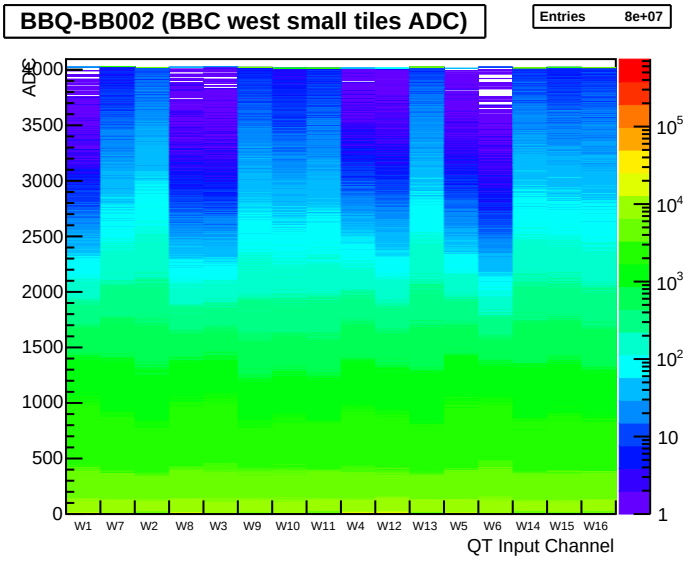

MIX-MT101 Input: VP004 Max TAC
Entries 5000000

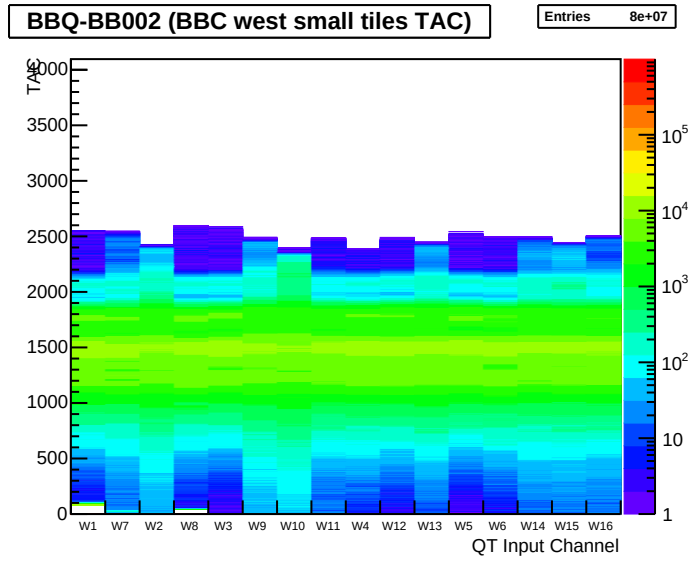

MXQ-PP001
Entries 8e+07
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10^6
10^5
10^4
10^3
10^2
10
1

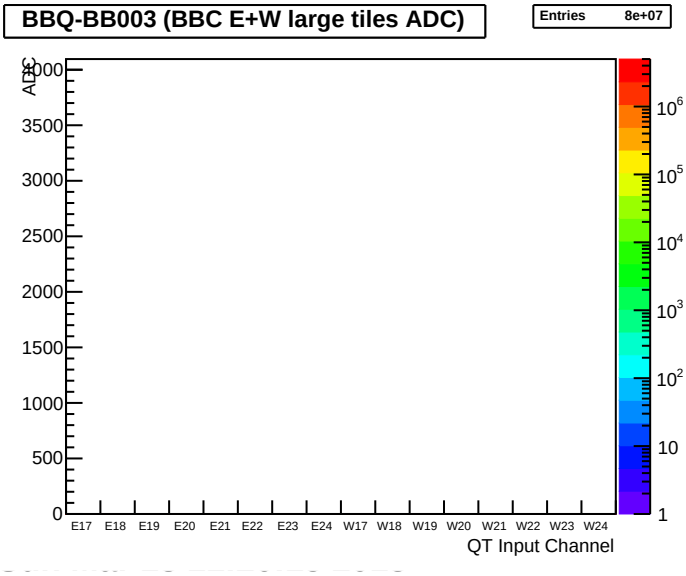

MXQ-PP001
Entries 8e+07
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10^6
10^5
10^4
10^3
10^2
10
1

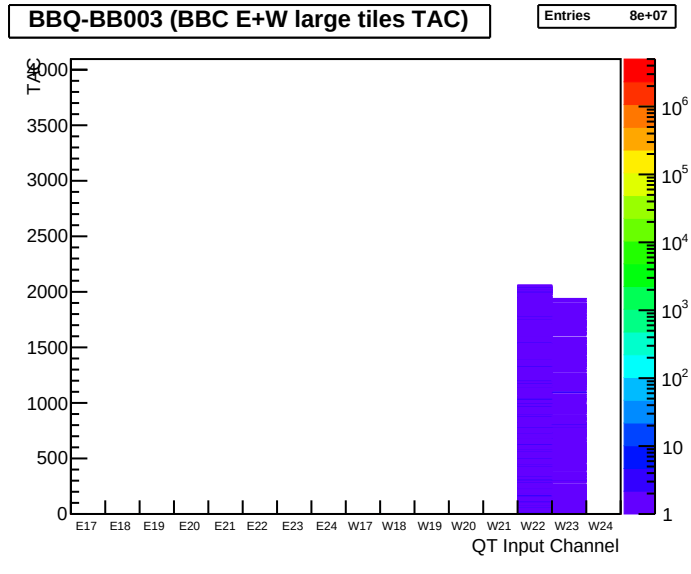

BBQ-BB001 (BBC east small tiles ADC)
Entries 8e+07
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

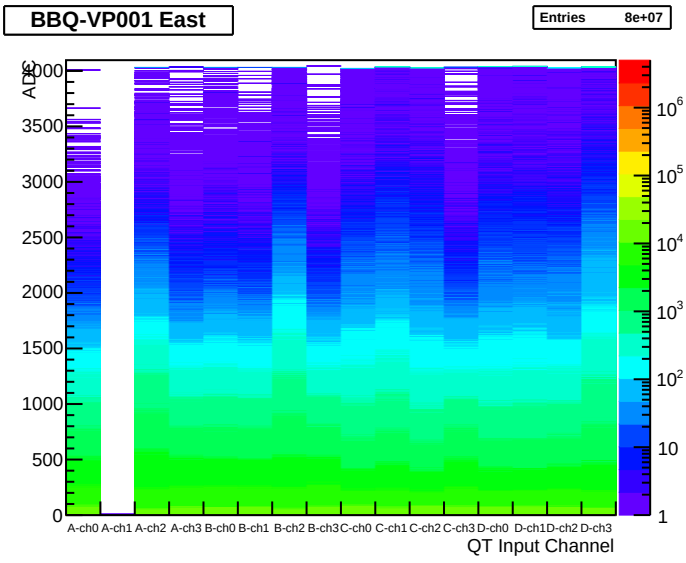

BBQ-BB001 (BBC east small tiles TAC)
Entries 8e+07
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

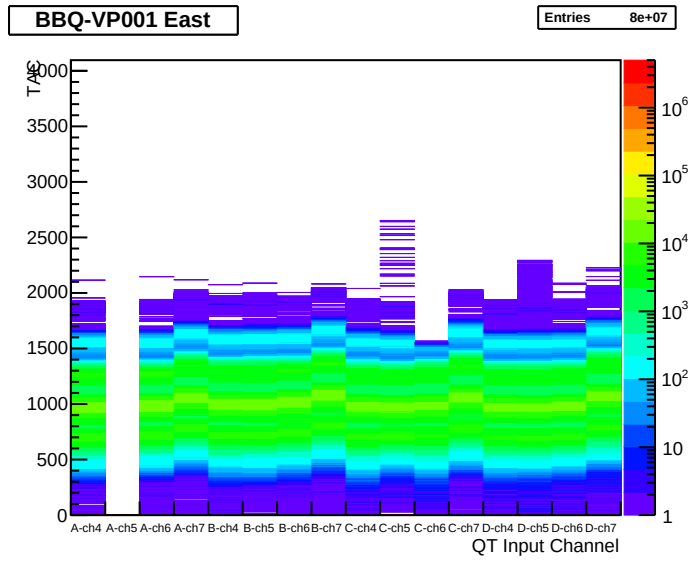

BBQ-BB002 (BBC west small tiles ADC)
Entries 8e+07
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

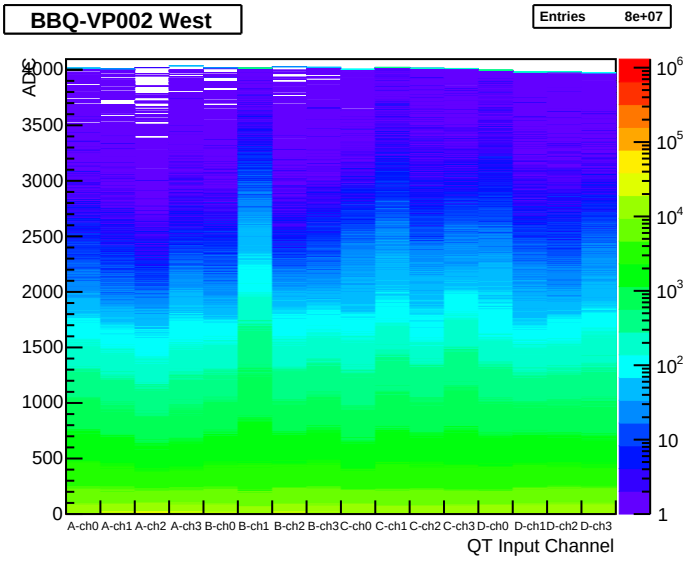

BBQ-BB002 (BBC west small tiles TAC)
Entries 8e+07
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

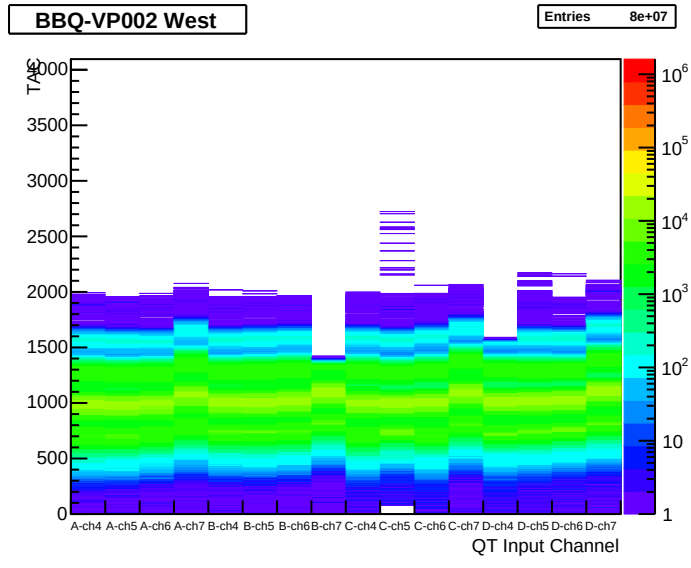

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 8e+07
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

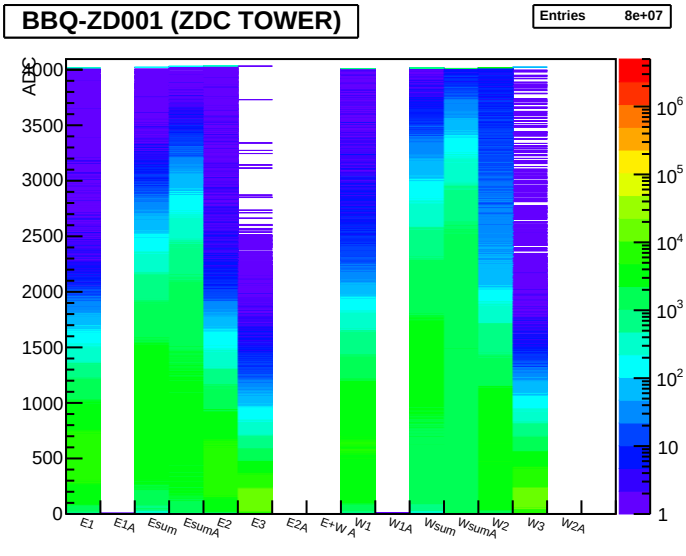

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 8e+07
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

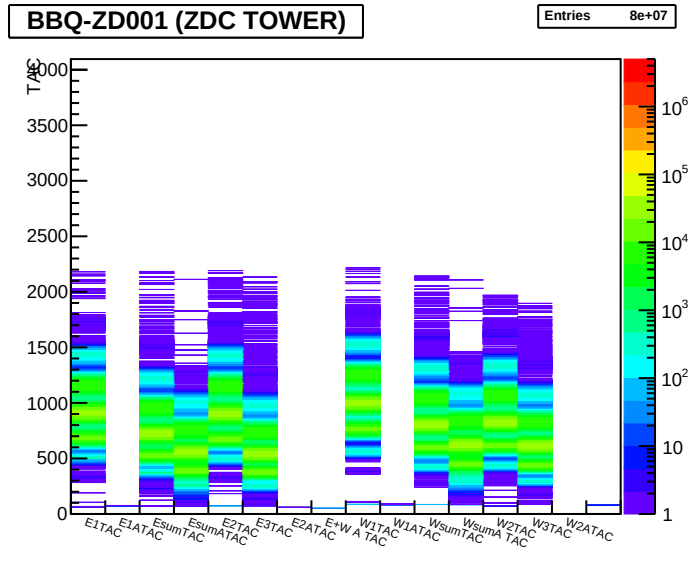

BBQ-VP001 East
Entries 8e+07
ADC
QT Input Channel

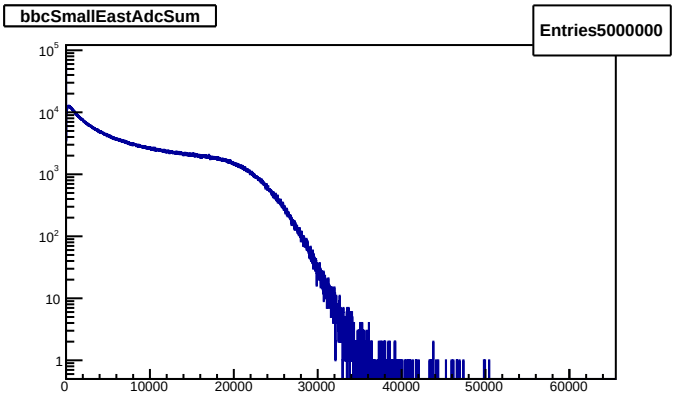

BBQ-VP001 East
Entries 8e+07
TAC
QT Input Channel

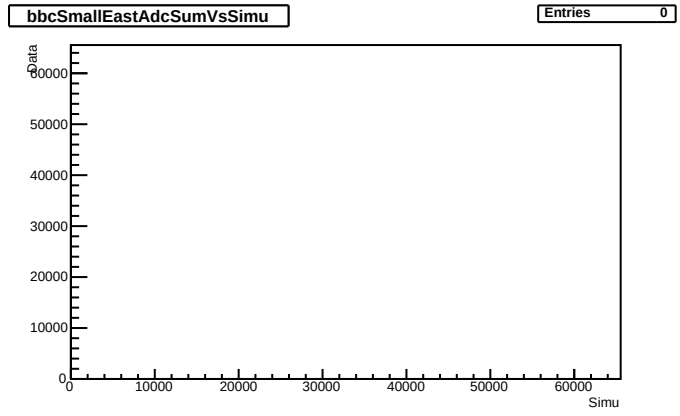

BBQ-VP002 West
Entries 8e+07
ADC
QT Input Channel

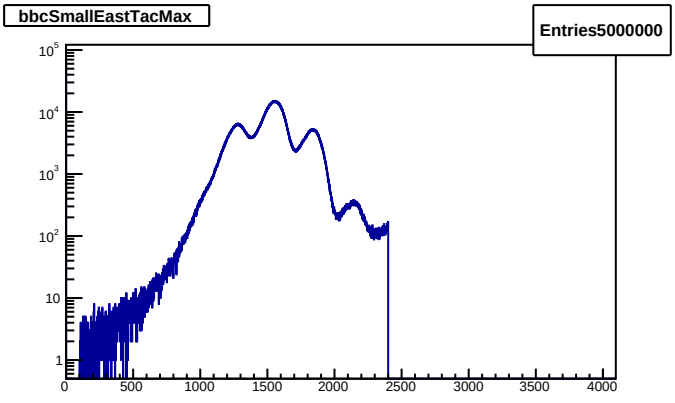

BBQ-VP002 West
Entries 8e+07
TAC
QT Input Channel

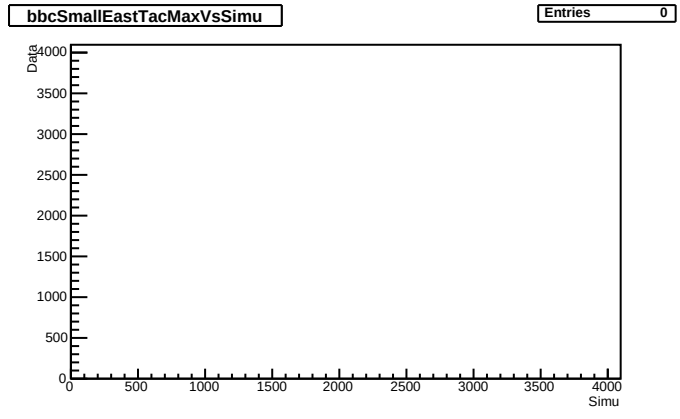

BBQ-ZD001 (ZDC TOWER)
Entries 8e+07
ADC

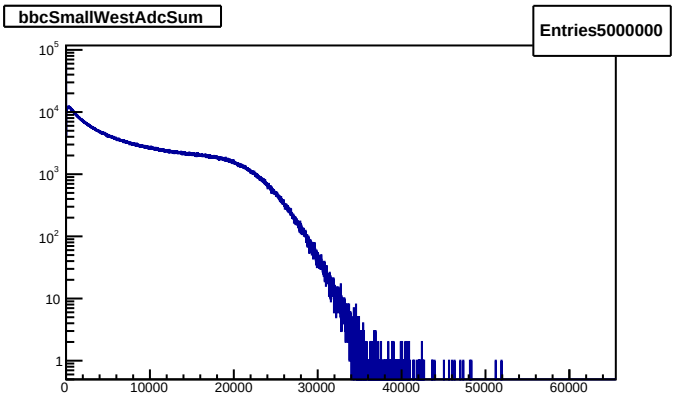

BBQ-ZD001 (ZDC TOWER)
Entries 8e+07
TAC

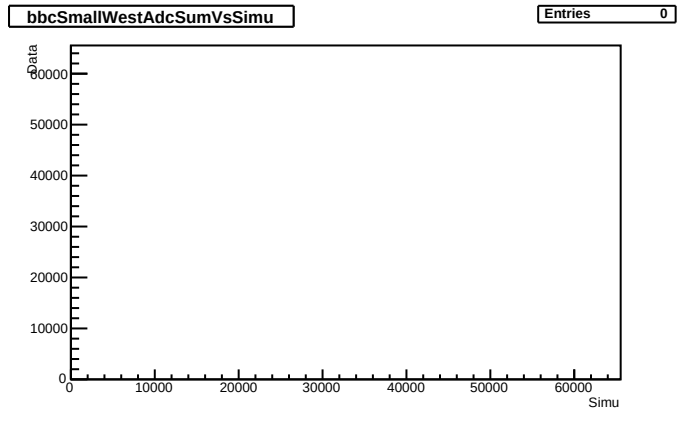

bbcSmallEastAdcSum
Entries5000000

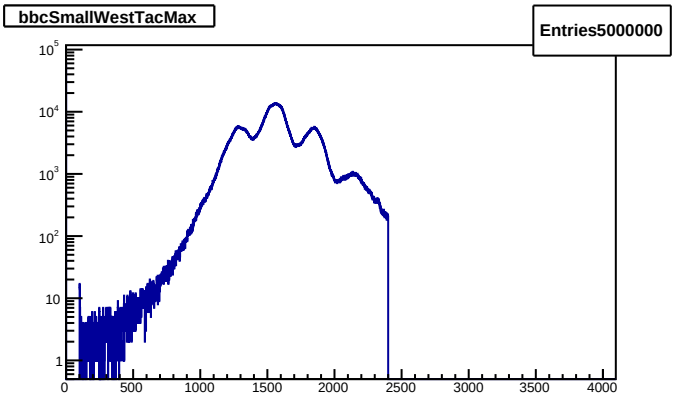

bbcSmallEastAdcSumVsSimu
Entries 0
Data
Simu

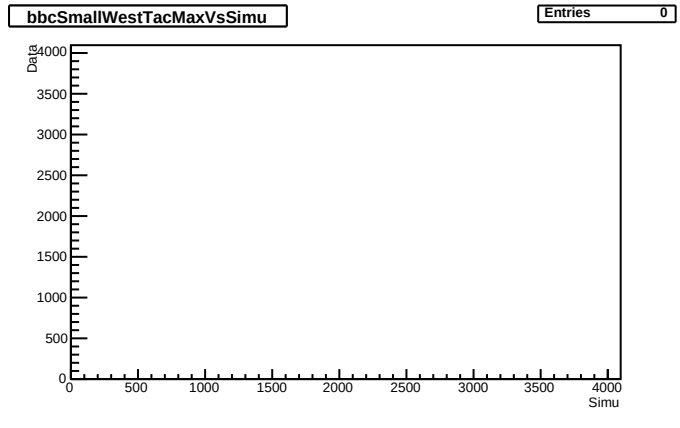

bbcSmallEastTacMax
Entries5000000

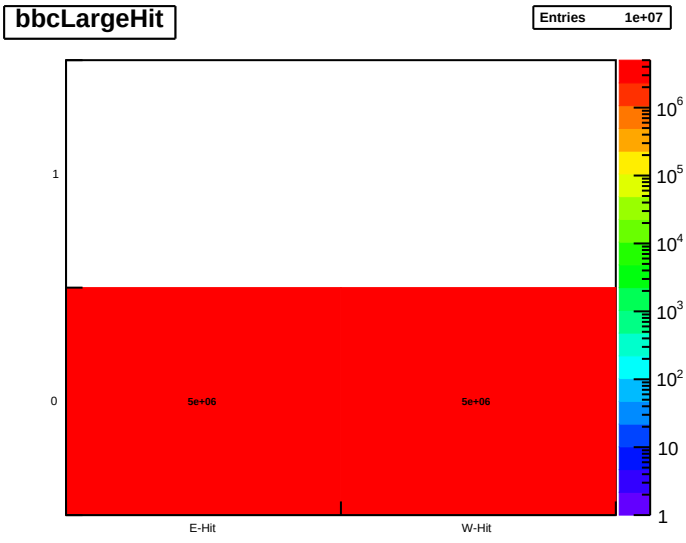

bbcSmallEastTacMaxVsSimu
Entries 0
Data
Simu

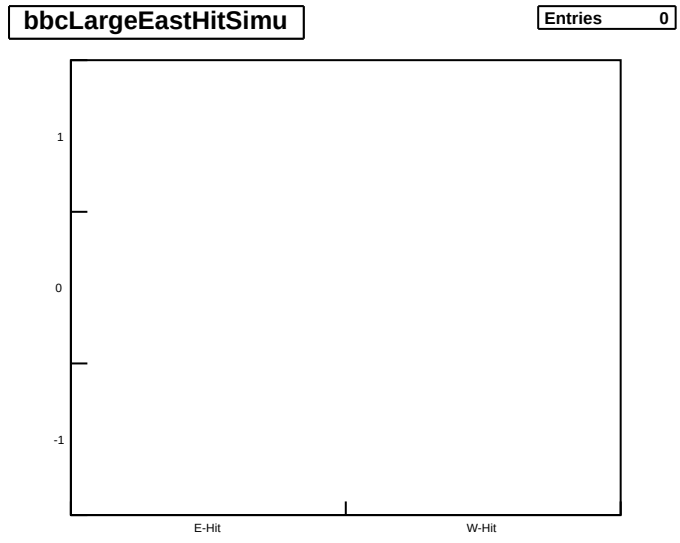

bbcSmallWestAdcSum
Entries5000000

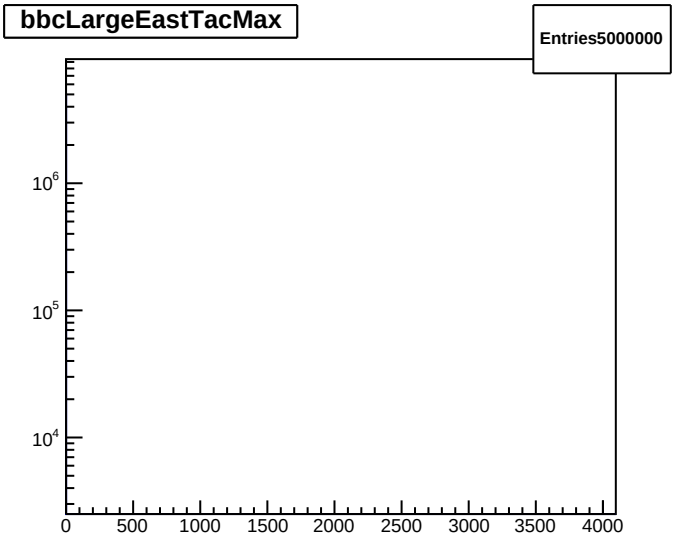

bbcSmallWestAdcSumVsSimu
Entries 0
Data
Simu

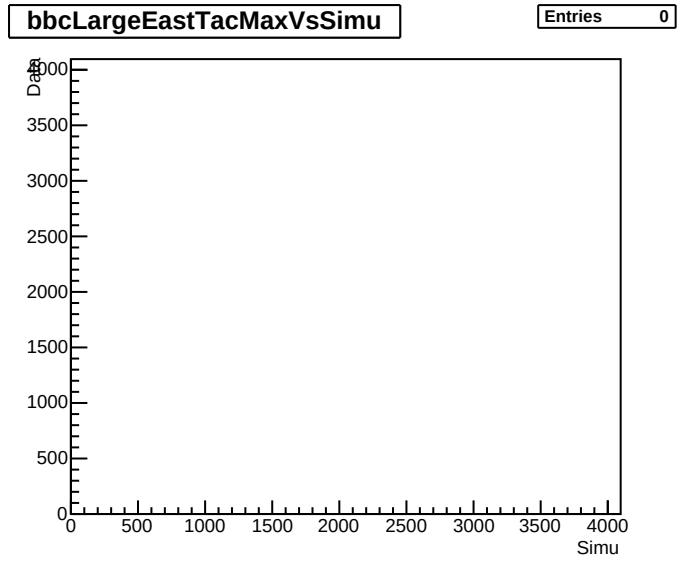

bbcSmallWestTacMax
Entries5000000

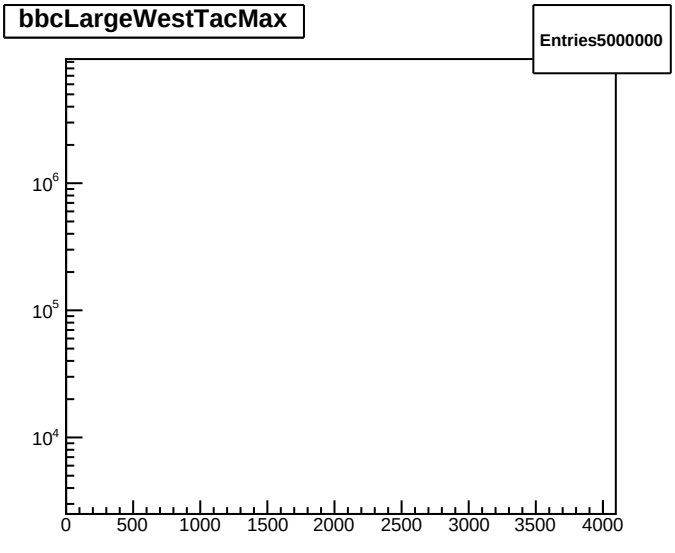

bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu

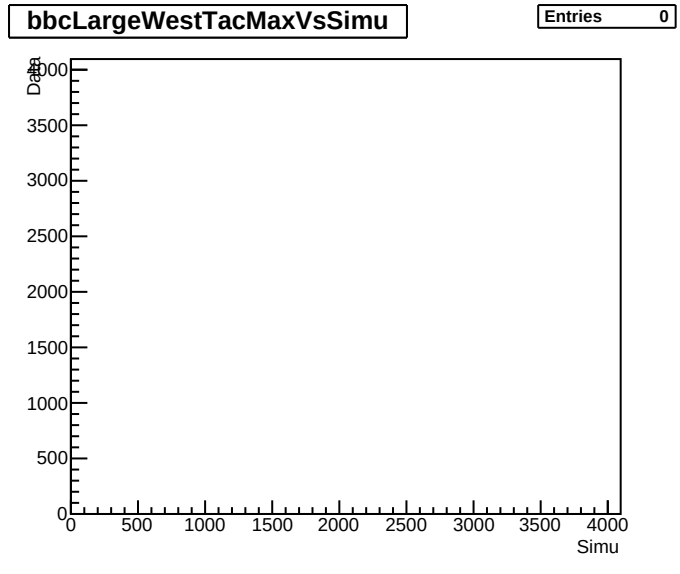

bbcLargeHit
Entries 1e+07
1
0
5e+06
5e+06
E-Hit
W-Hit
10^6
10^5
10^4
10^3
10^2
10
1

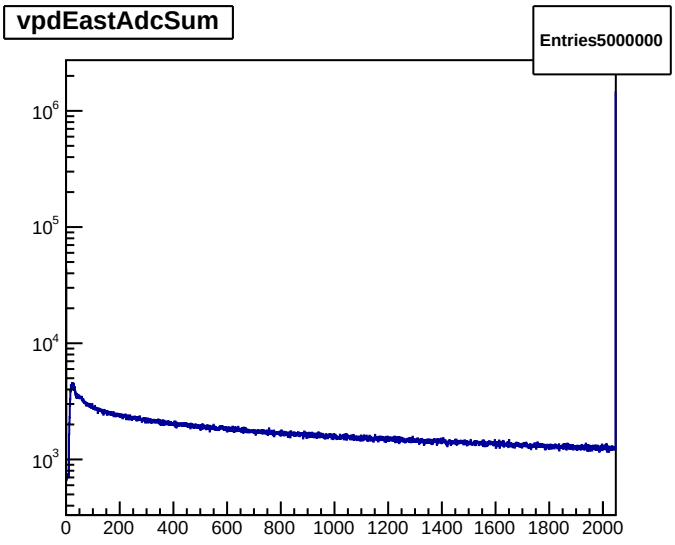

bbcLargeEastHitSimu
Entries 0
1
0
-1
E-Hit
W-Hit

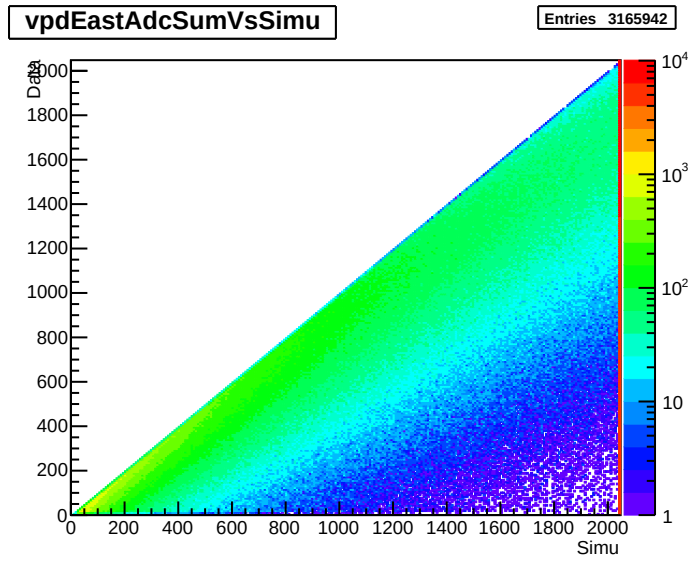

bbcLargeEastTacMax
Entries5000000
10^6
10^5
10^4
0
500
1000
1500
2000
2500
3000
3500
4000

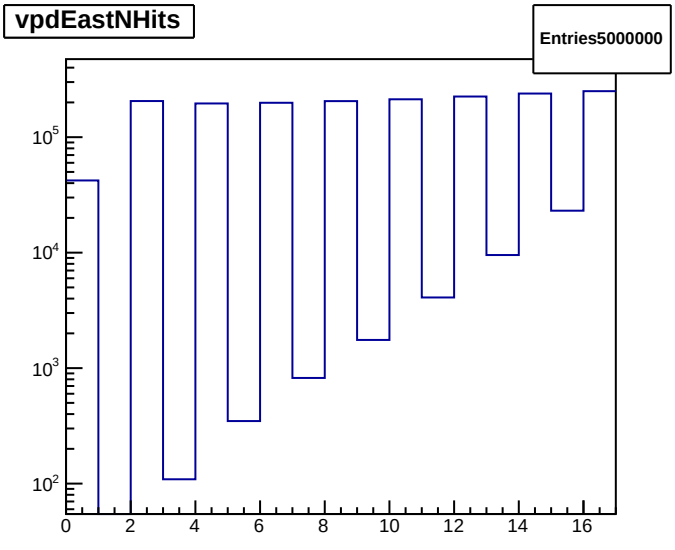

bbcLargeEastTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

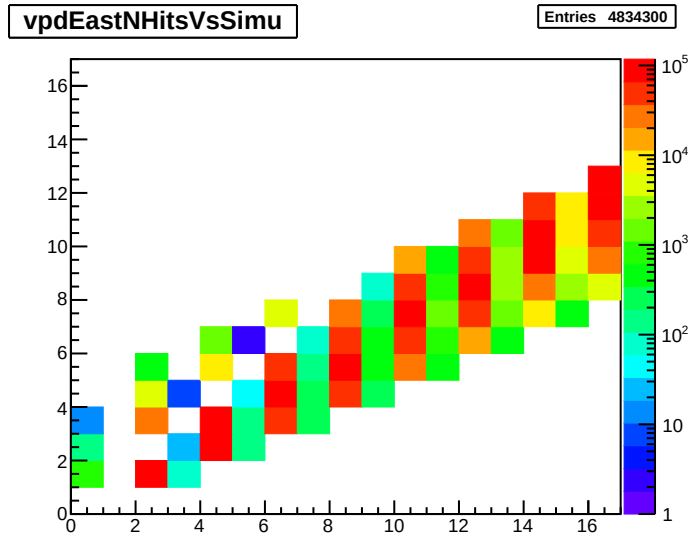

bbcLargeWestTacMax
Entries5000000
10^6
10^5
10^4
0
500
1000
1500
2000
2500
3000
3500
4000

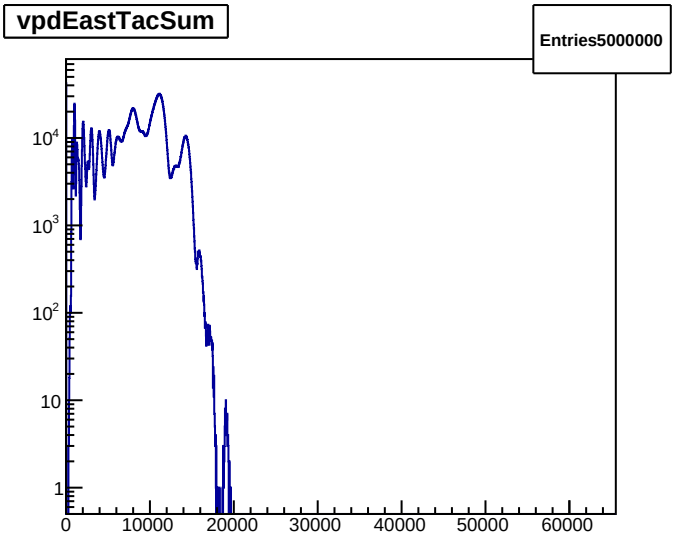

bbcLargeWestTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

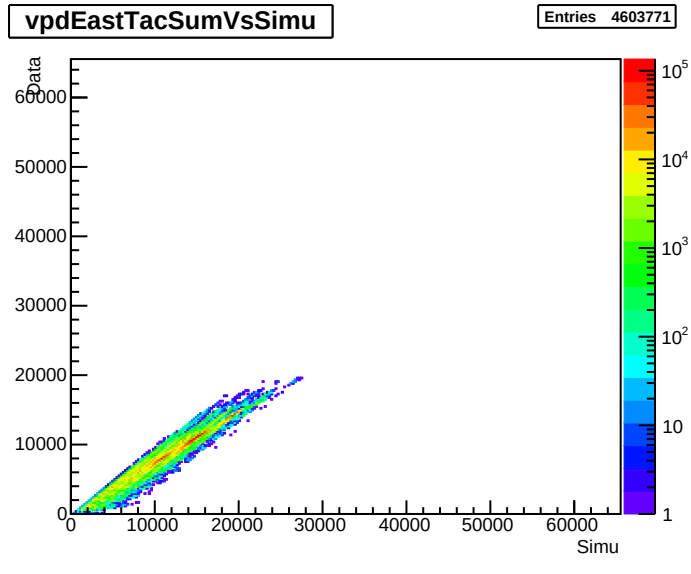

vpdEastAdcSum
Entries5000000

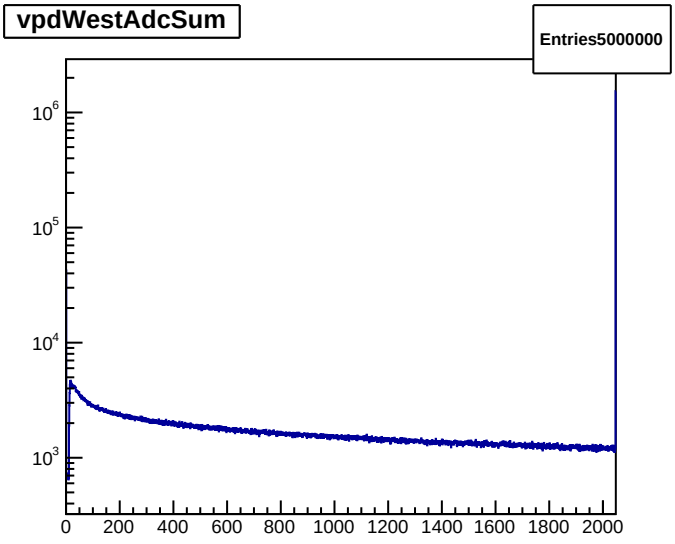

vpdEastAdcSumVsSimu
Entries 3165942
Data
Simu

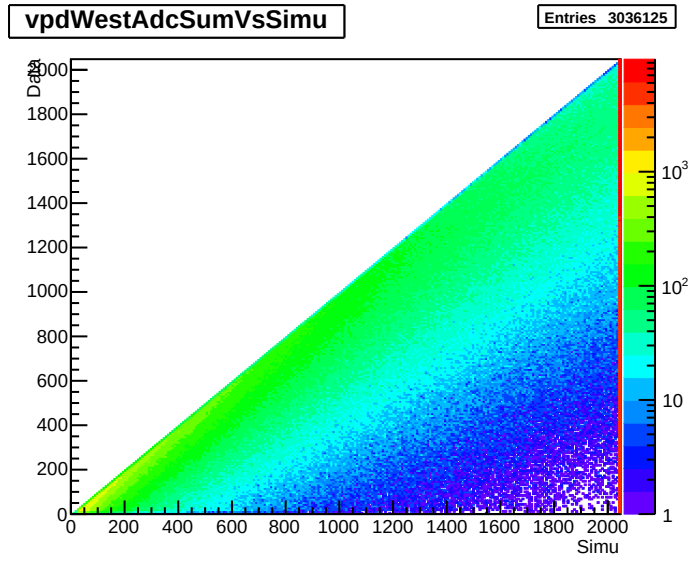

vpdEastNHits
Entries5000000

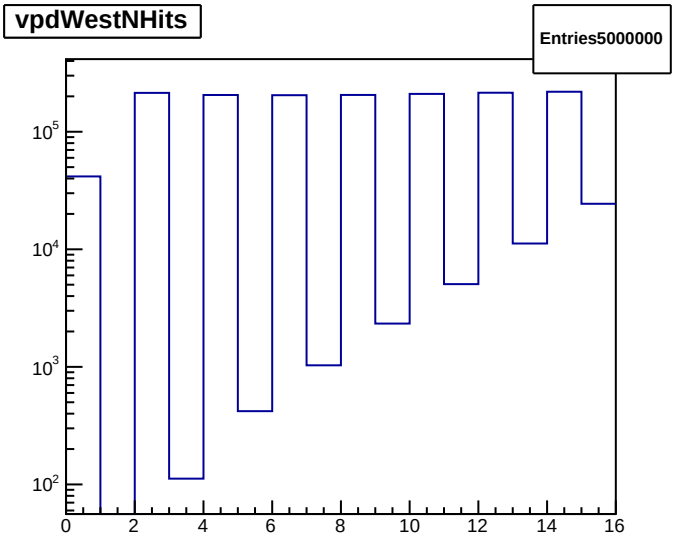

vpdEastNHitsVsSimu
Entries 4834300

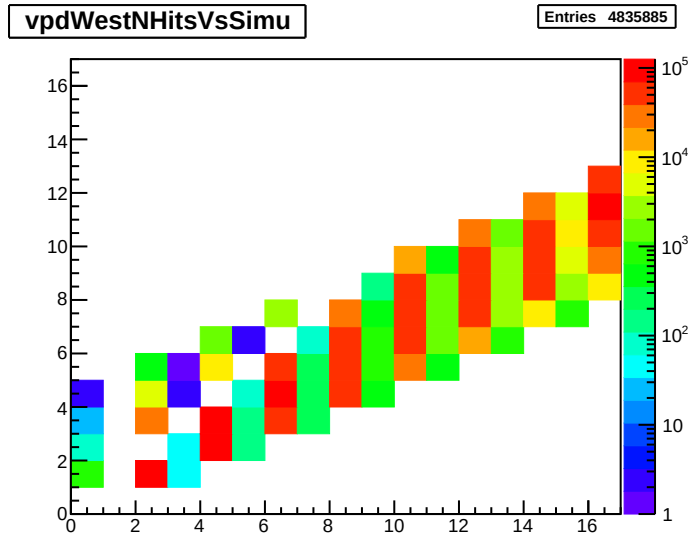

vpdEastTacSum
Entries5000000

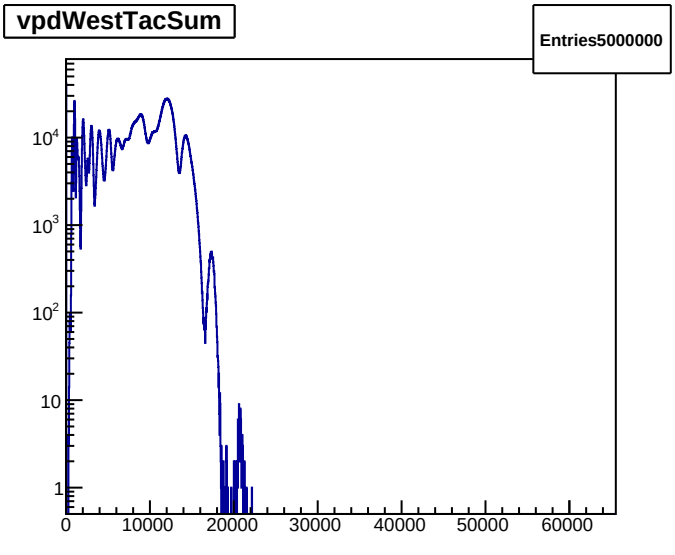

vpdEastTacSumVsSimu
Entries 4603771
Data
Simu

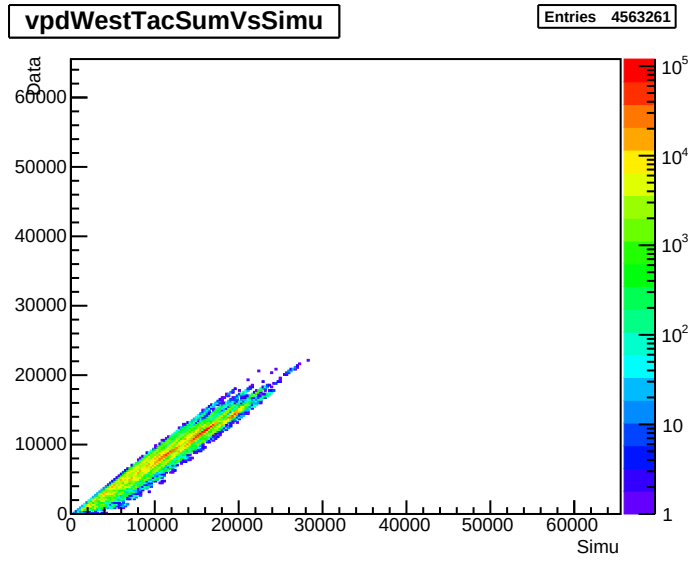

vpdWestAdcSum
Entries5000000

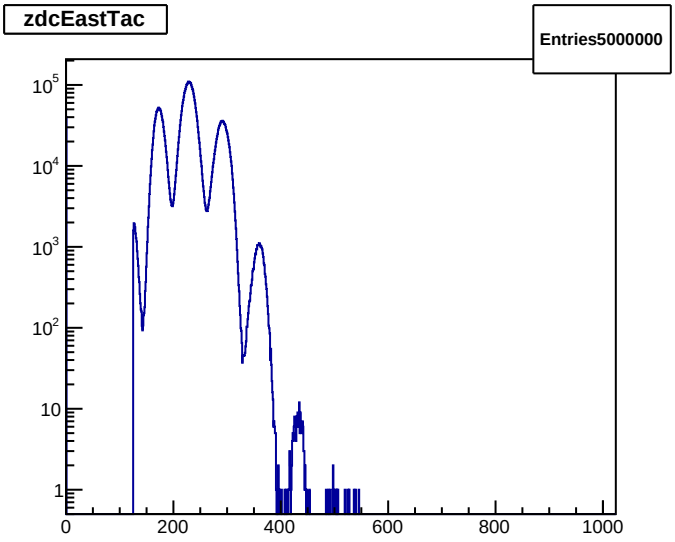

vpdWestAdcSumVsSimu
Entries 3036125
Data
Simu

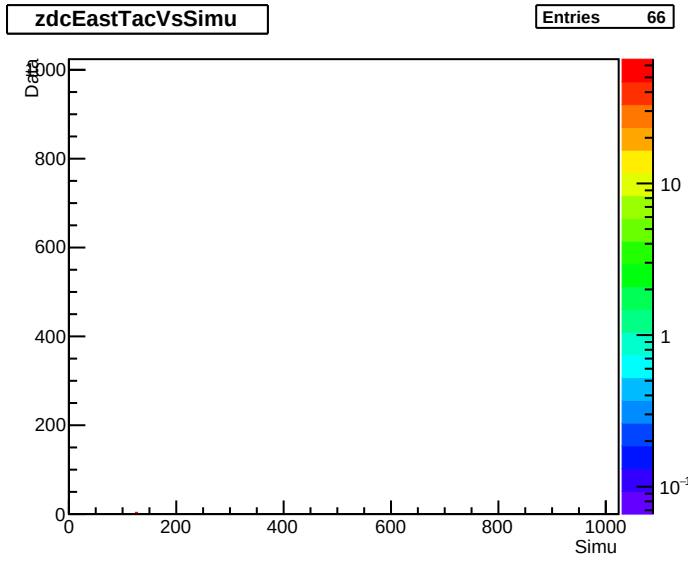

vpdWestNHits
Entries5000000

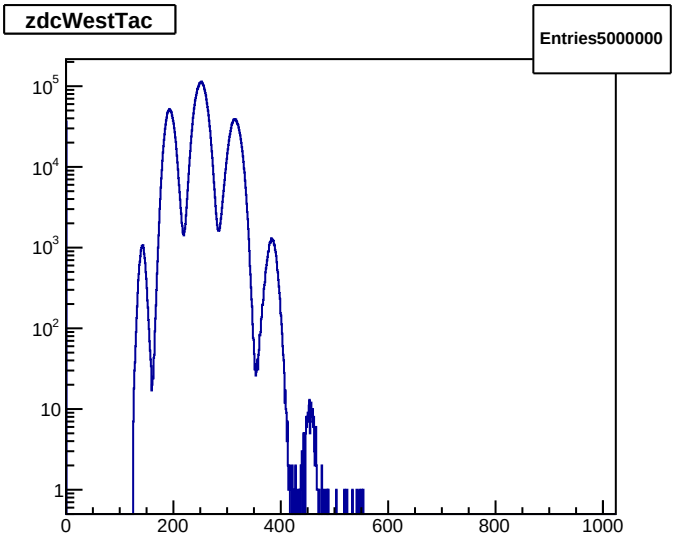

vpdWestNHitsVsSimu
Entries 4835885

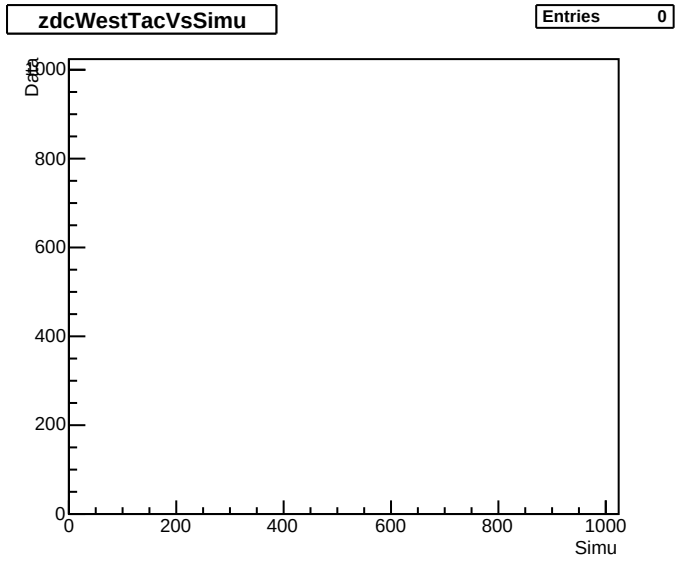

vpdWestTacSum
Entries5000000

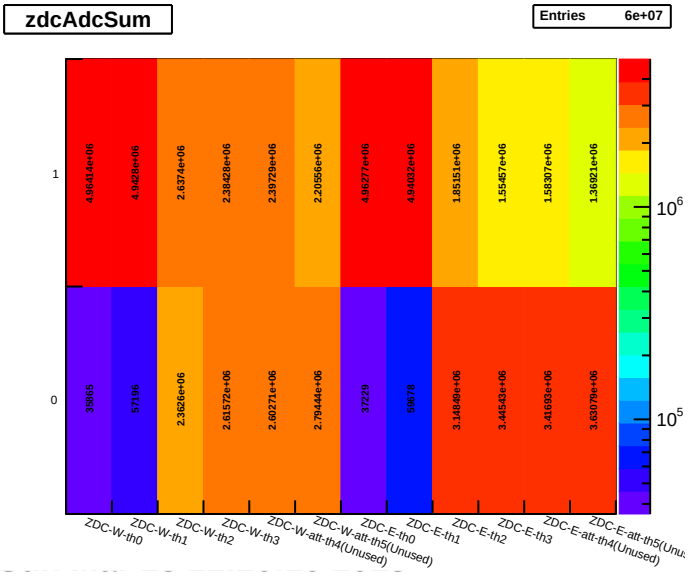

vpdWestTacSumVsSimu
Entries 4563261
Data
Simu

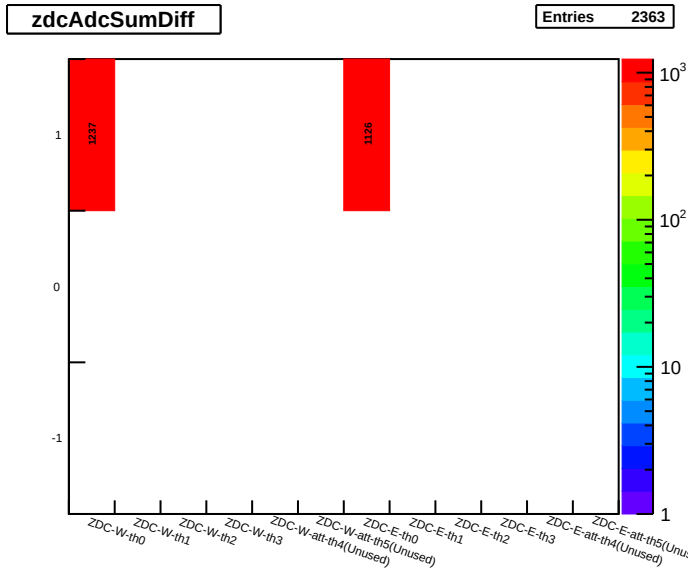

zdcEastTac
Entries5000000

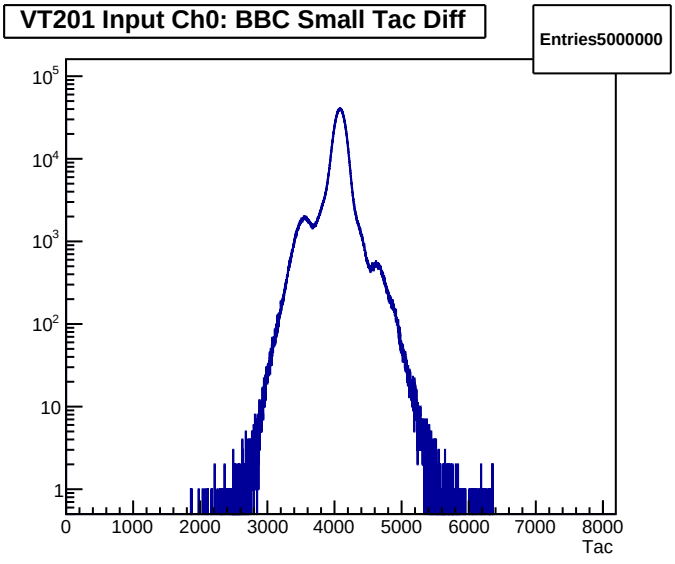

zdcEastTacVsSimu
Entries 66
Data
Simu

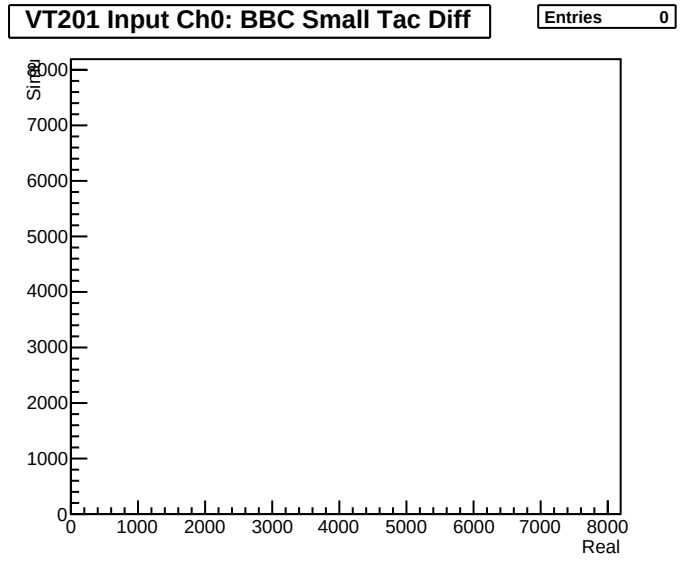

zdcWestTac
Entries5000000

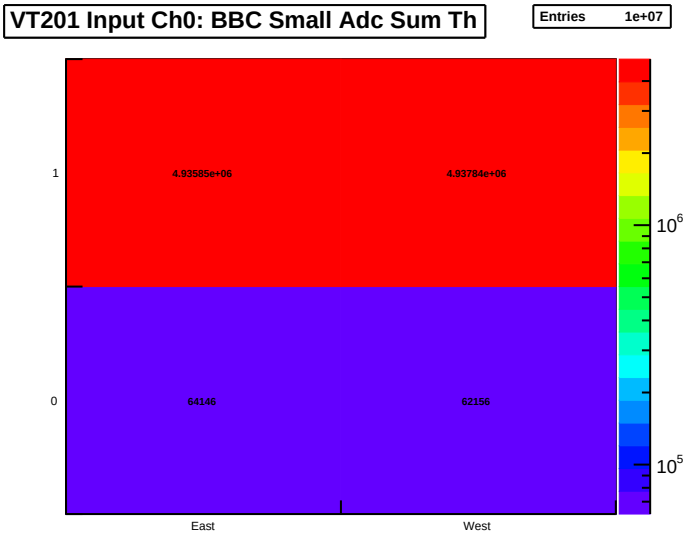

zdcWestTacVsSimu
Entries 0
Data
Simu

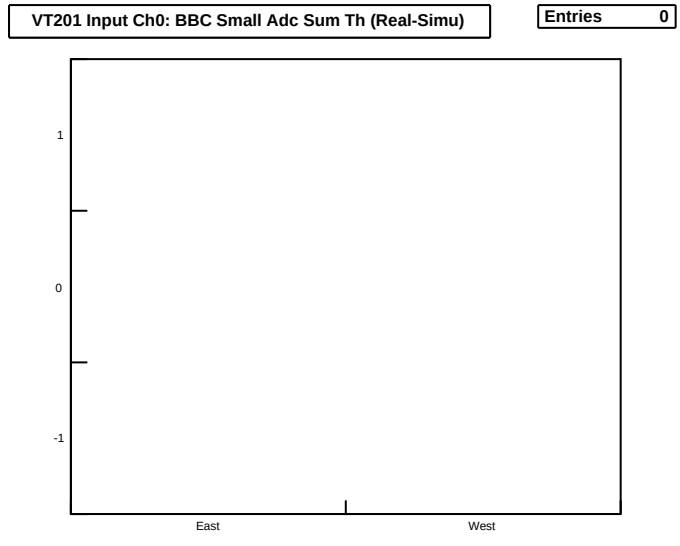

zdcAdcSum
Entries 6e+07
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unus

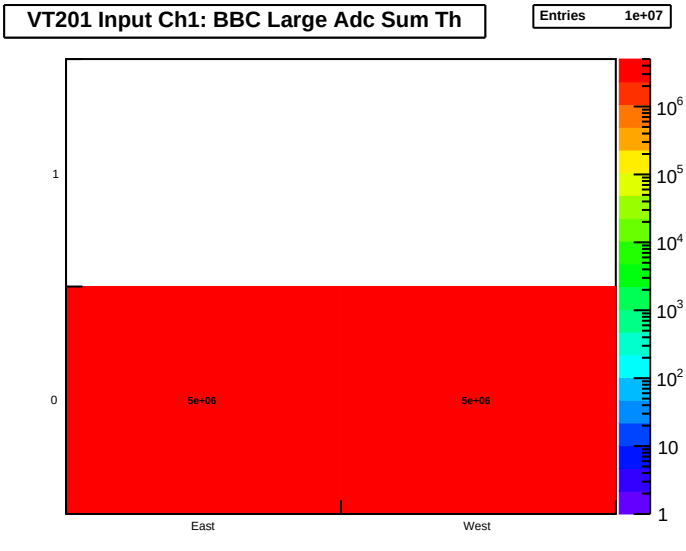

zdcAdcSumDiff
Entries 2363
1237
1126
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unus

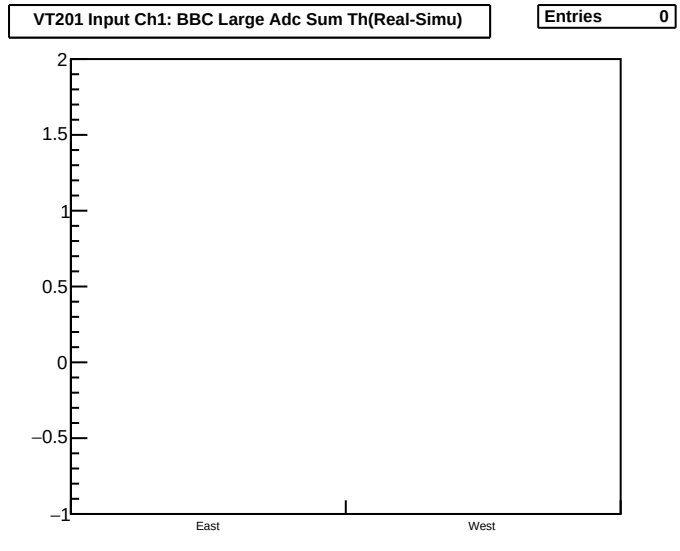

VT201 Input Ch0: BBC Small Tac Diff
Entries5000000
Tac

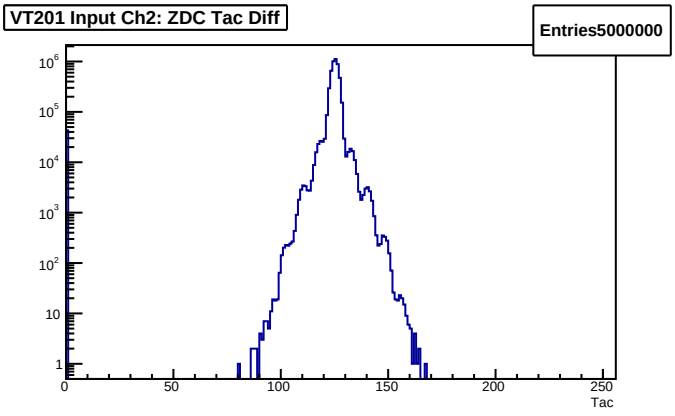

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

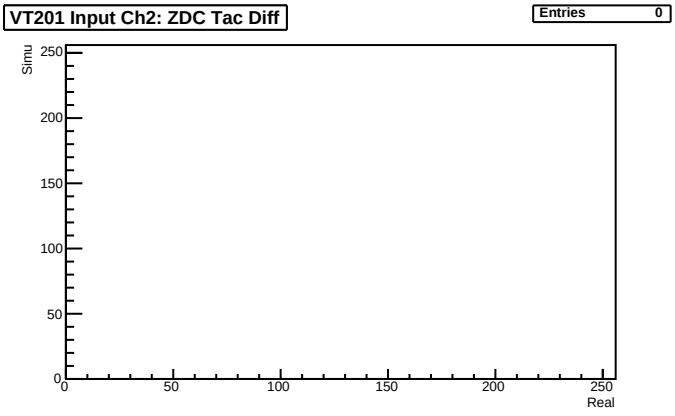

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 1e+07
4.93585e+06
4.93784e+06
64146
62156
East
West

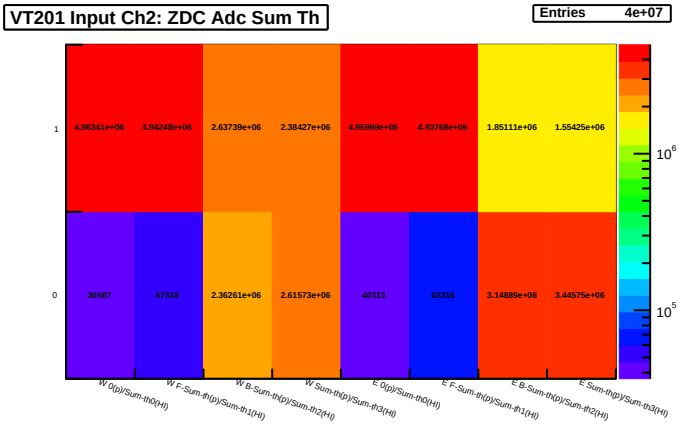

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

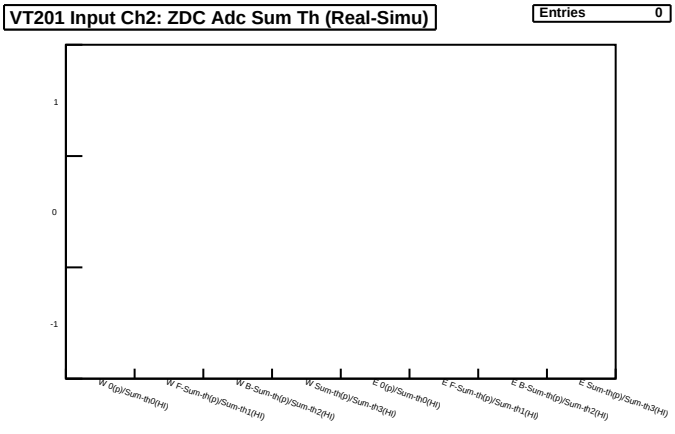

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 1e+07
5e+06
5e+06
East
West

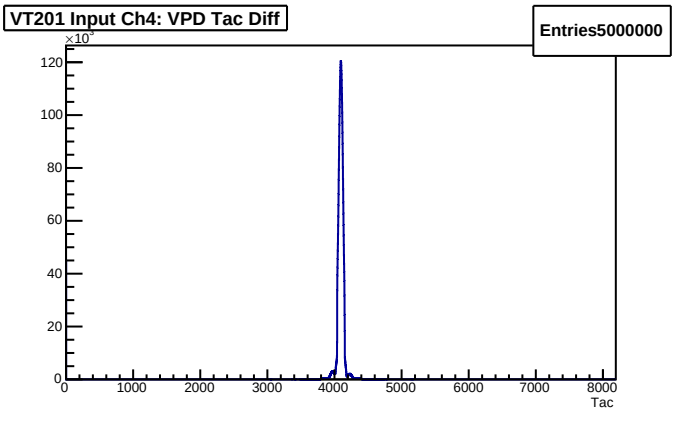

VT201 Input Ch1: BBC Large Adc Sum Th(Real-Simu)
Entries 0
East
West

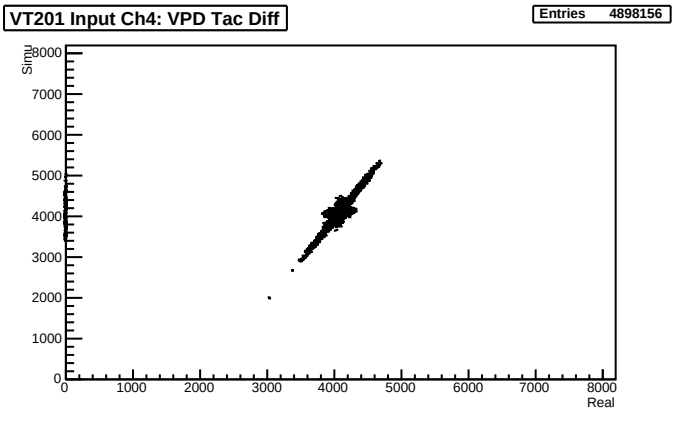

VT201 Input Ch2: ZDC Tac Diff
Entries5000000
Tac

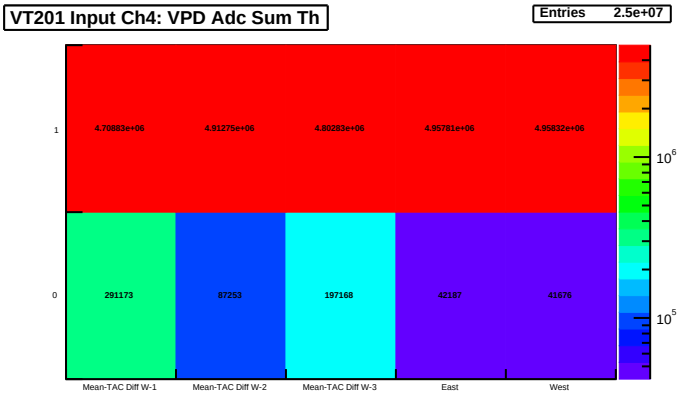

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

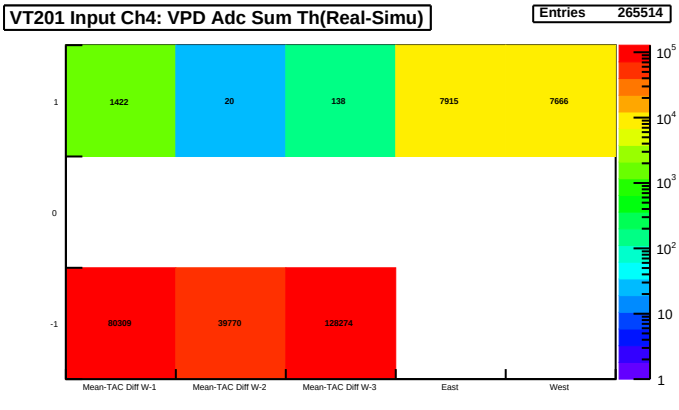

VT201 Input Ch2: ZDC Adc Sum Th
Entries 4e+07
4.96341e+06
4.94248e+06
2.63739e+06
2.38427e+06
4.95969e+06
4.93768e+06
1.85111e+06
1.55425e+06
36587
57516
2.36261e+06
2.61573e+06
40313
62316
3.14889e+06
3.44575e+06
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

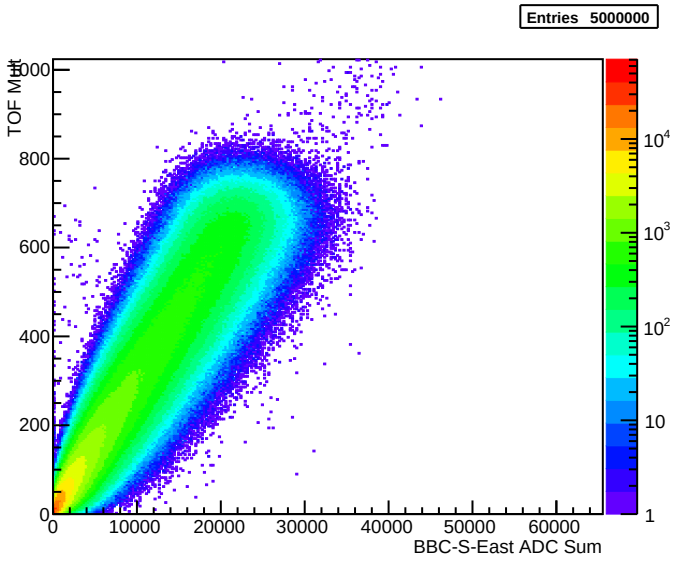

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

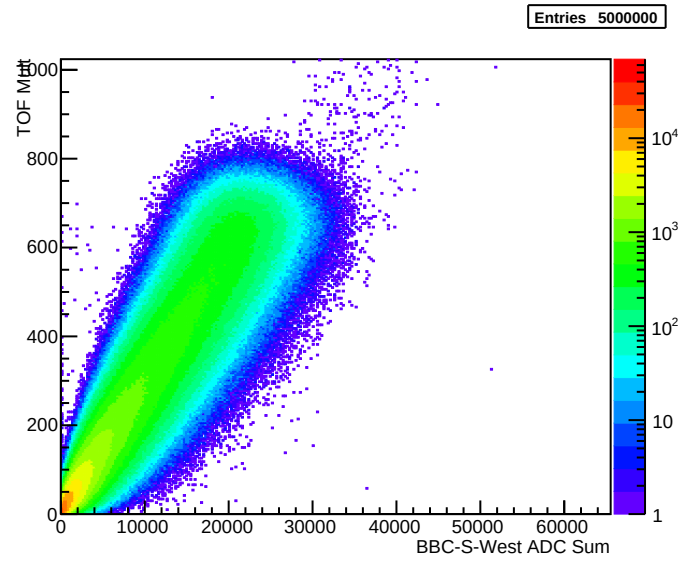

VT201 Input Ch4: VPD Tac Diff
Entries5000000
Tac

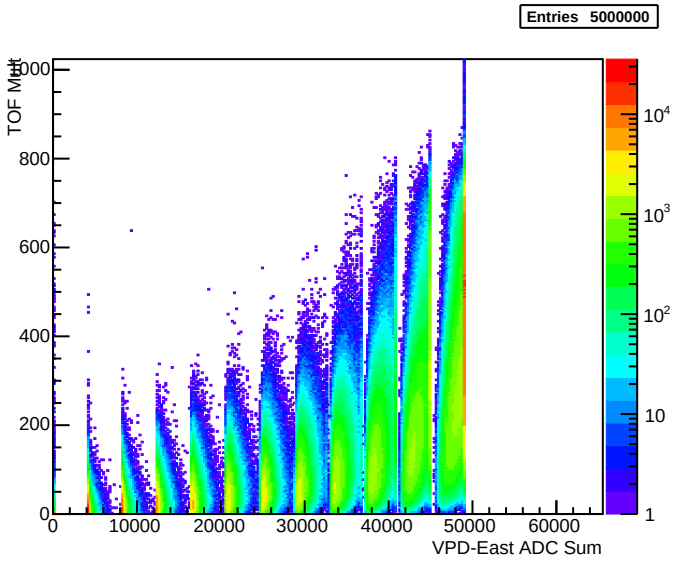

VT201 Input Ch4: VPD Tac Diff
Entries 4898156
Simu
Real

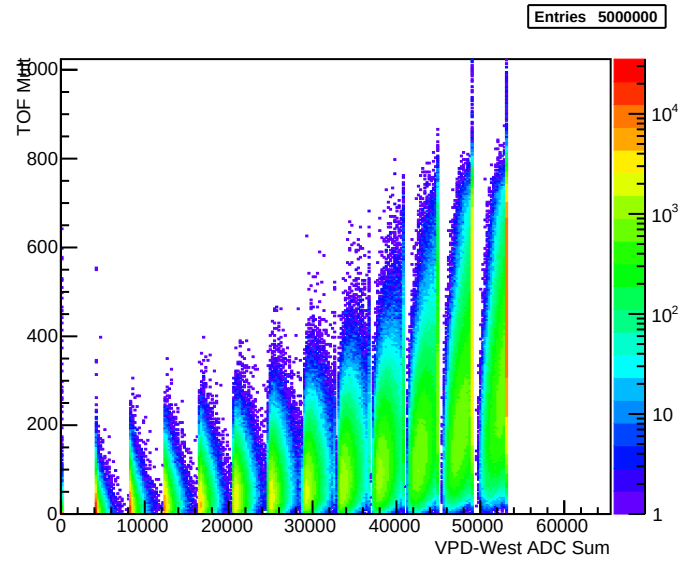

VT201 Input Ch4: VPD Adc Sum Th
Entries 2.5e+07
4.70883e+06
4.91275e+06
4.80283e+06
4.95781e+06
4.95832e+06
291173
87253
197168
42187
41678
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

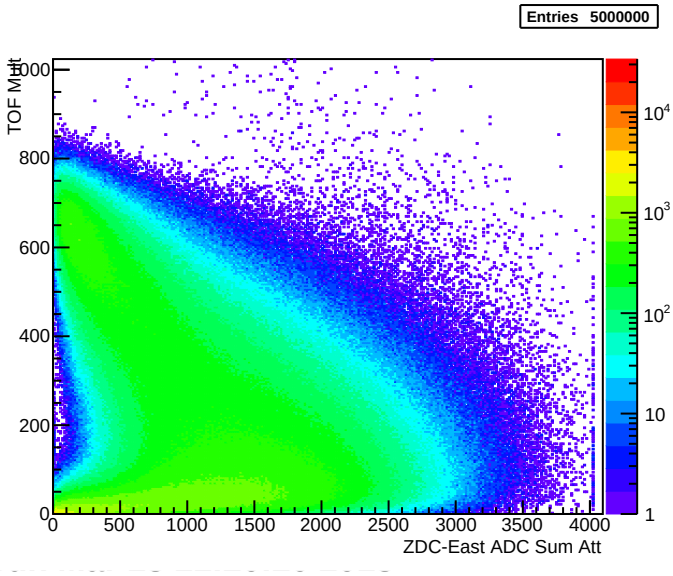

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 265514
1422
20
138
7915
7666
80309
39770
128274
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

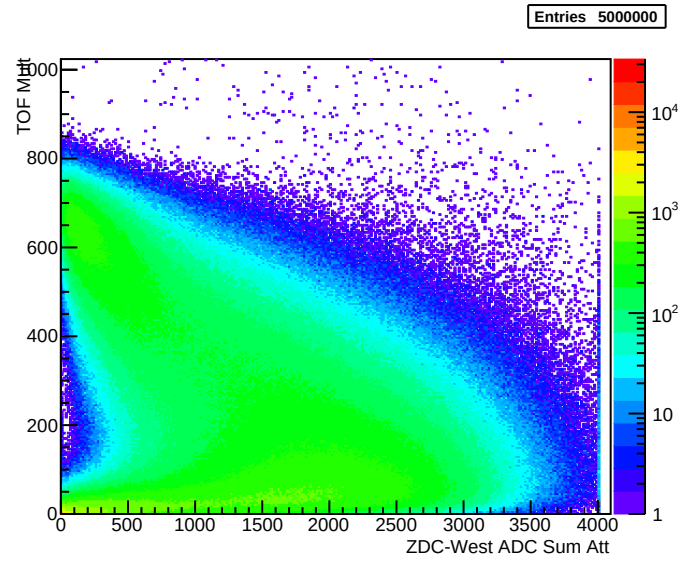

Entries 5000000
TOF Mult
BBC-S-East ADC Sum

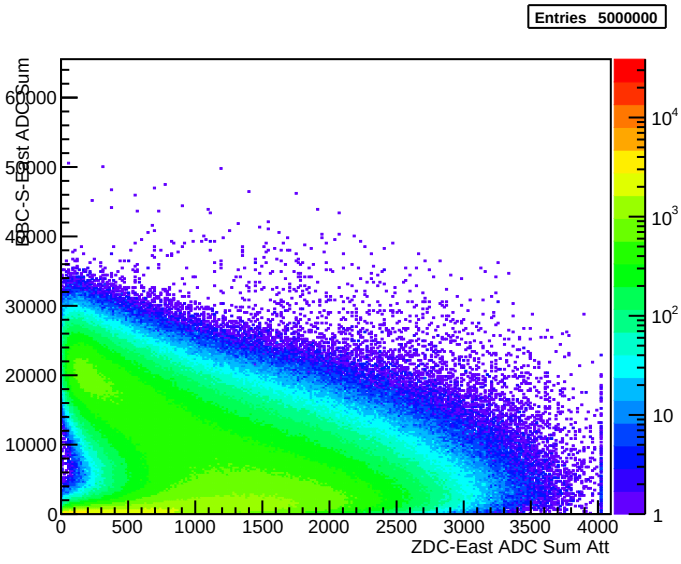

Entries 5000000
TOF Mult
BBC-S-West ADC Sum

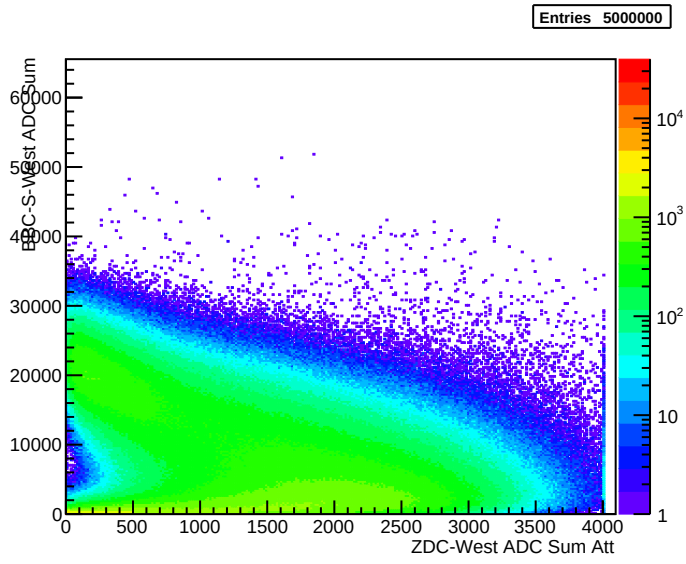

Entries 5000000
TOF Mult
VPD-East ADC Sum

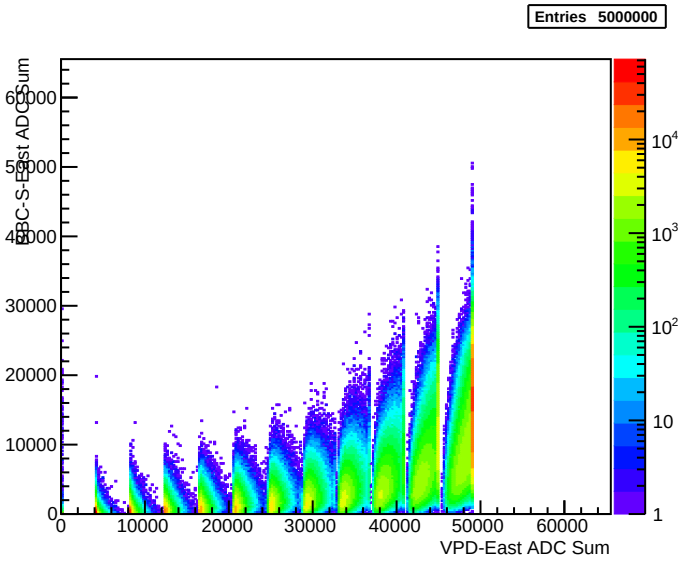

Entries 5000000
TOF Mult
VPD-West ADC Sum

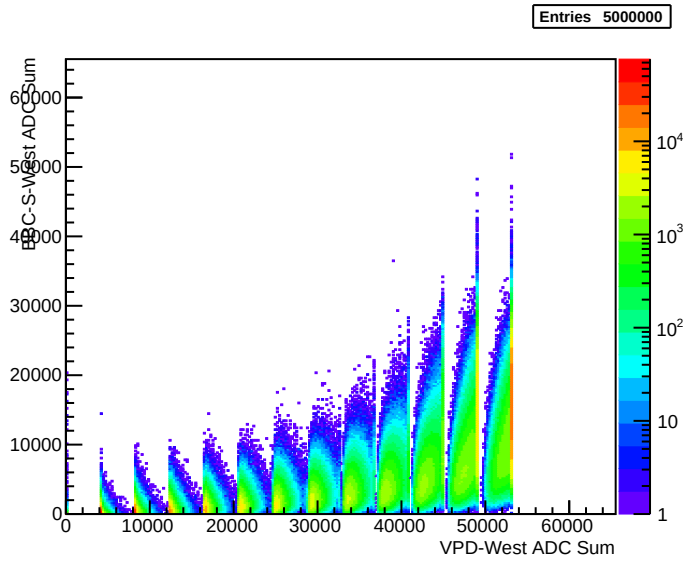

Entries 5000000
TOF Mult
ZDC-East ADC Sum Att

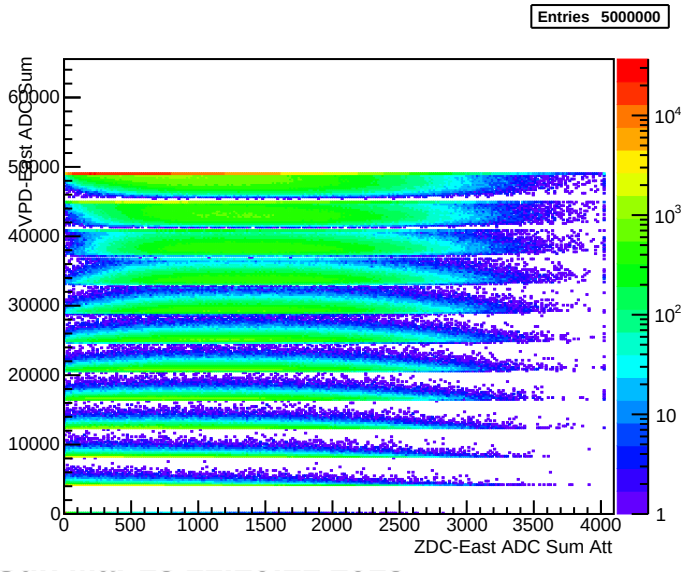

Entries 5000000
TOF Mult
ZDC-West ADC Sum Att

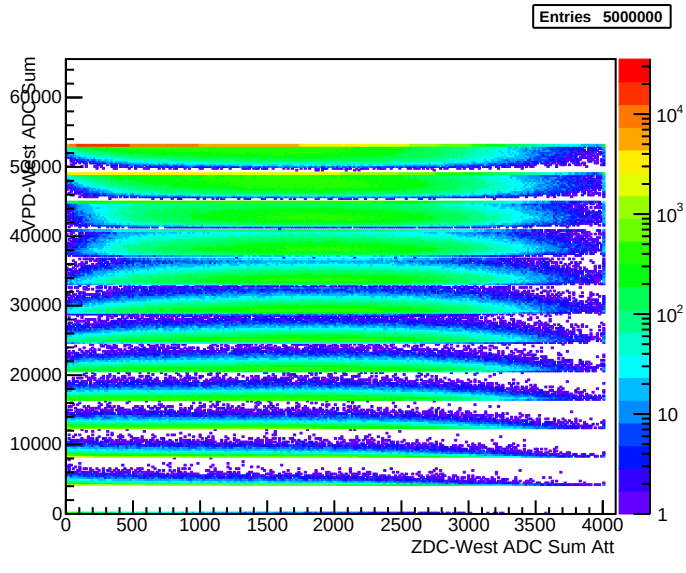

Entries 5000000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

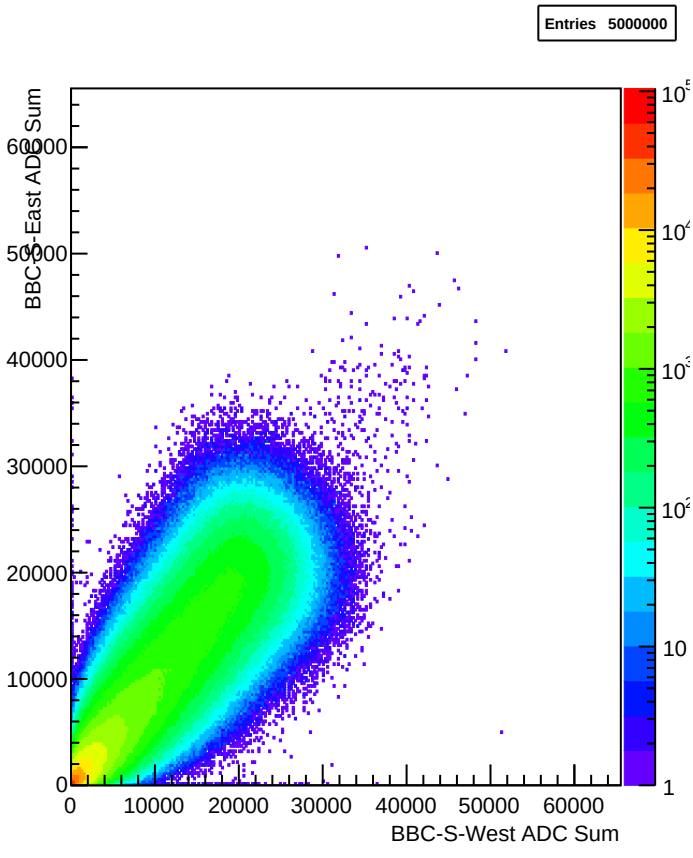

Entries 5000000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

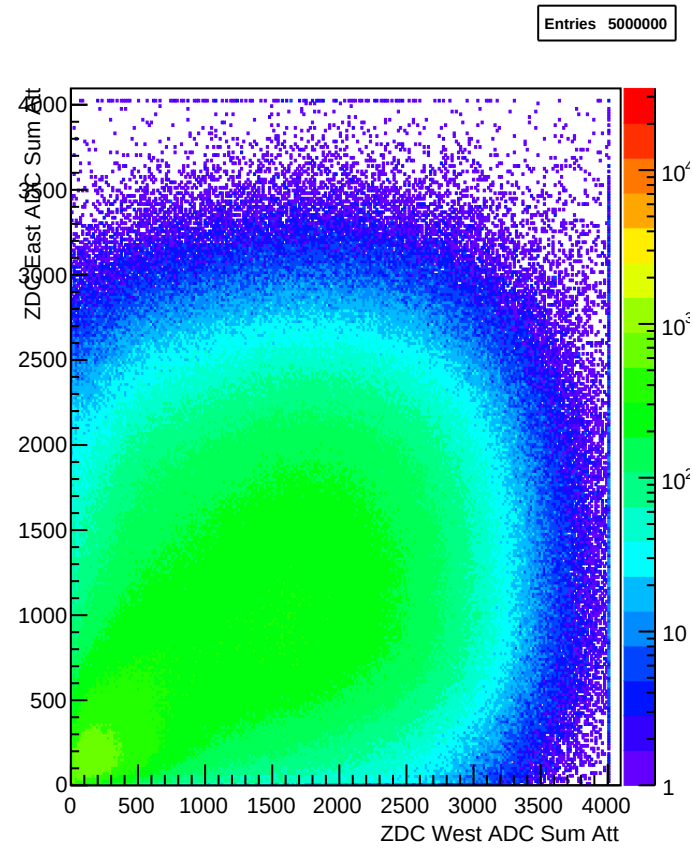

Entries 5000000
BBC-S-East ADC Sum
VPD-East ADC Sum

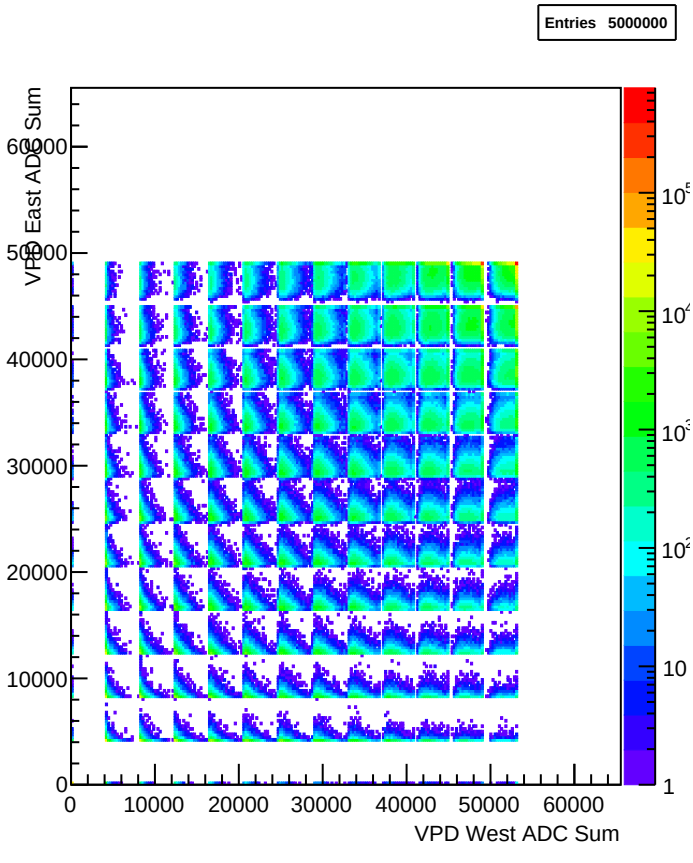

Entries 5000000
BBC-S-West ADC Sum
VPD-West ADC Sum

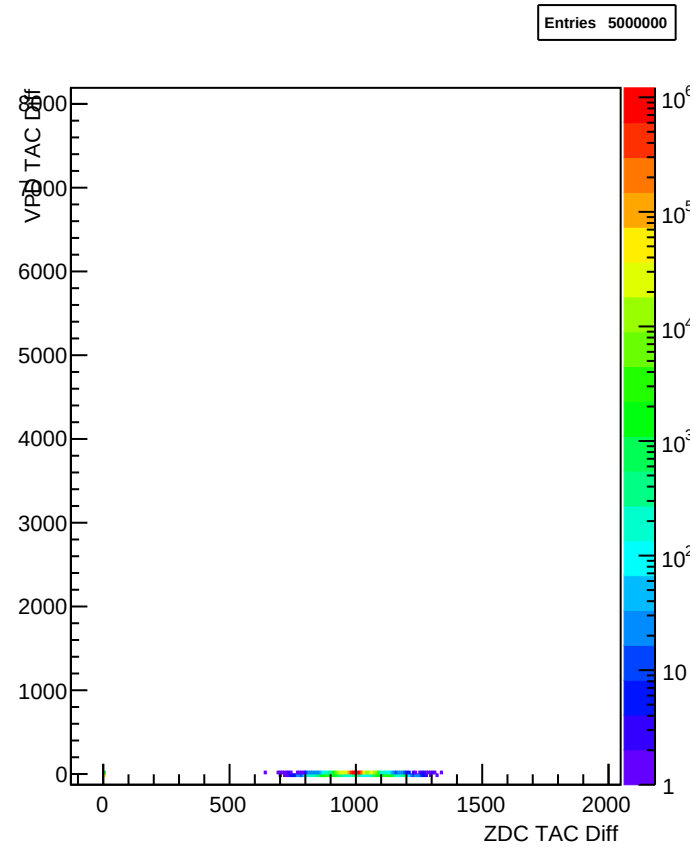

Entries 5000000
VPD-East ADC Sum
ZDC-East ADC Sum Att

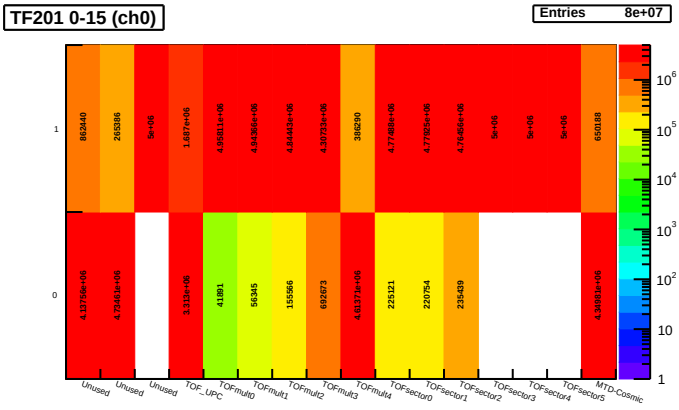

Entries 5000000
VPD-West ADC Sum
ZDC-West ADC Sum Att

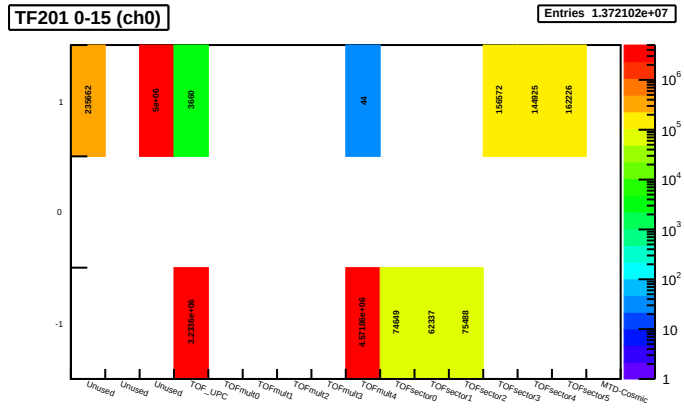

Entries 5000000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

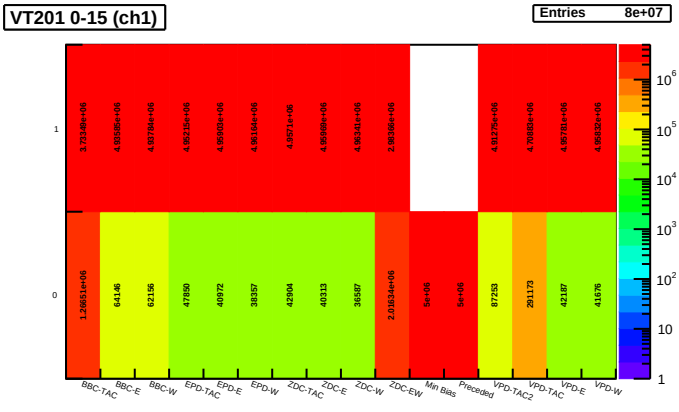

Entries 5000000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

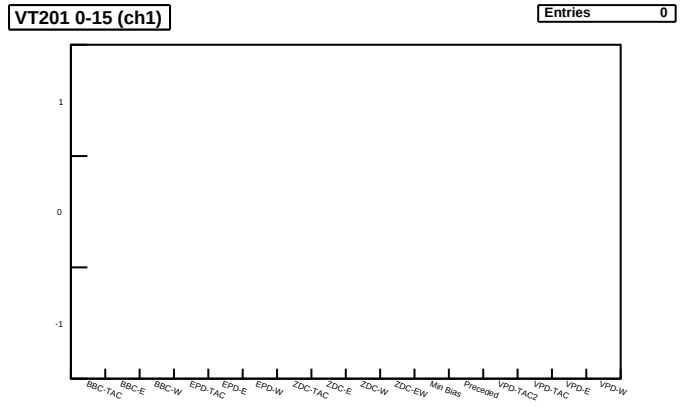

Entries 5000000
VPD East ADC Sum
VPD West ADC Sum

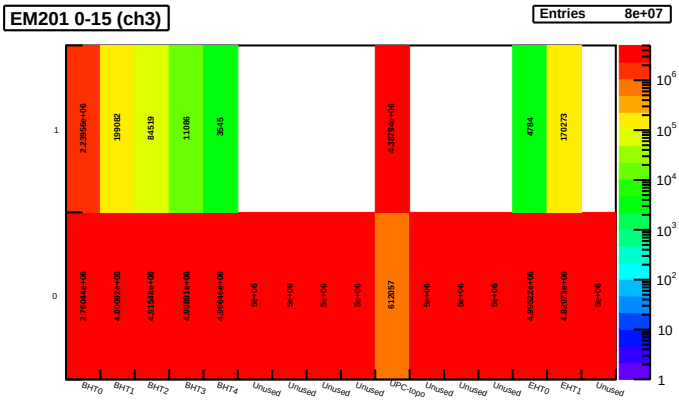

Entries 5000000
VPD TAC Diff
ZDC TAC Diff

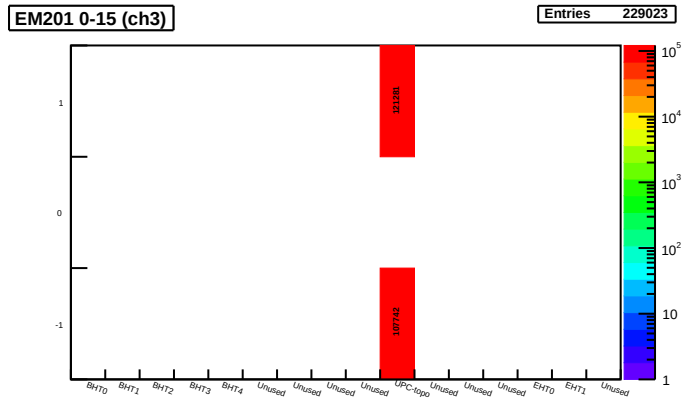

TF201 0-15 (ch0)
Entries 8e+07
892440 265586 5e+06 1.687e+06 4.95311e+06 4.94360e+06 4.84413e+06 4.37073e+06 386290 4.77483e+06 4.77925e+06 4.75456e+06 5e+06 5e+06 5e+06 650188
4.13756e+06 4.73461e+06 3.133e+06 41801 56345 155566 692573 4.61371e+06 225121 220754 235439 4.36981e+06
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

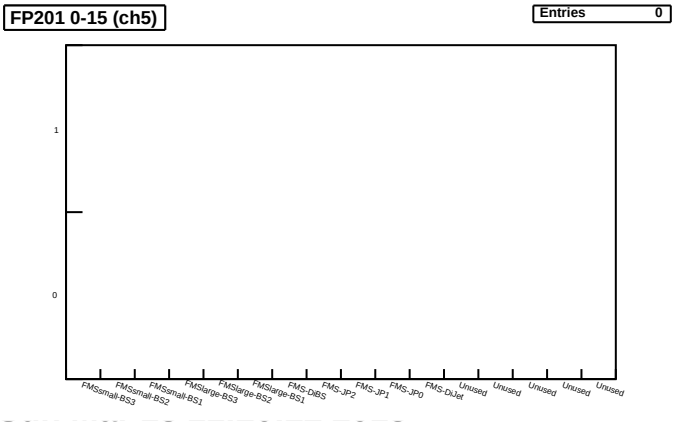

TF201 0-15 (ch0)
Entries 1.372102e+07
235662 5e+06 3660 44 156572 144825 162226
3.23356e+06 4.57186e+06 74949 62337 75488
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

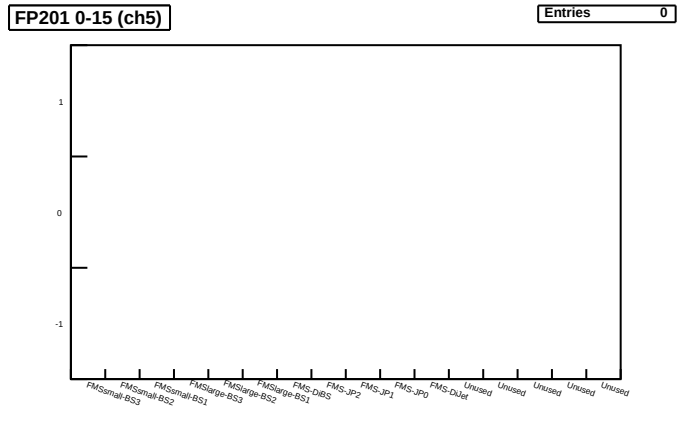

VT201 0-15 (ch1)
Entries 8e+07
3.73346e+06 4.03956e+06 4.07704e+06 4.05215e+06 4.05903e+06 4.06104e+06 4.05716e+06 4.05999e+06 4.06341e+06 2.86366e+06 4.01275e+06 4.70083e+06 4.05701e+06 4.05932e+06
1.20651e+06 64146 62156 47890 40972 38357 42904 40313 36587 2.03534e+06 5e+06 5e+06 87253 291173 42187 41676
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 8e+07
2.23959e+06 199082 84519 11986 3645 4.30794e+06 4784 170273
2.76044e+06 4.60092e+06 4.91548e+06 4.98881e+06 4.99646e+06 5e+06 5e+06 5e+06 5e+06 615057 5e+06 5e+06 5e+06 4.99522e+06 4.82973e+06 5e+06
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


EM201 0-15 (ch3)
Entries 229023
121231
107742
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