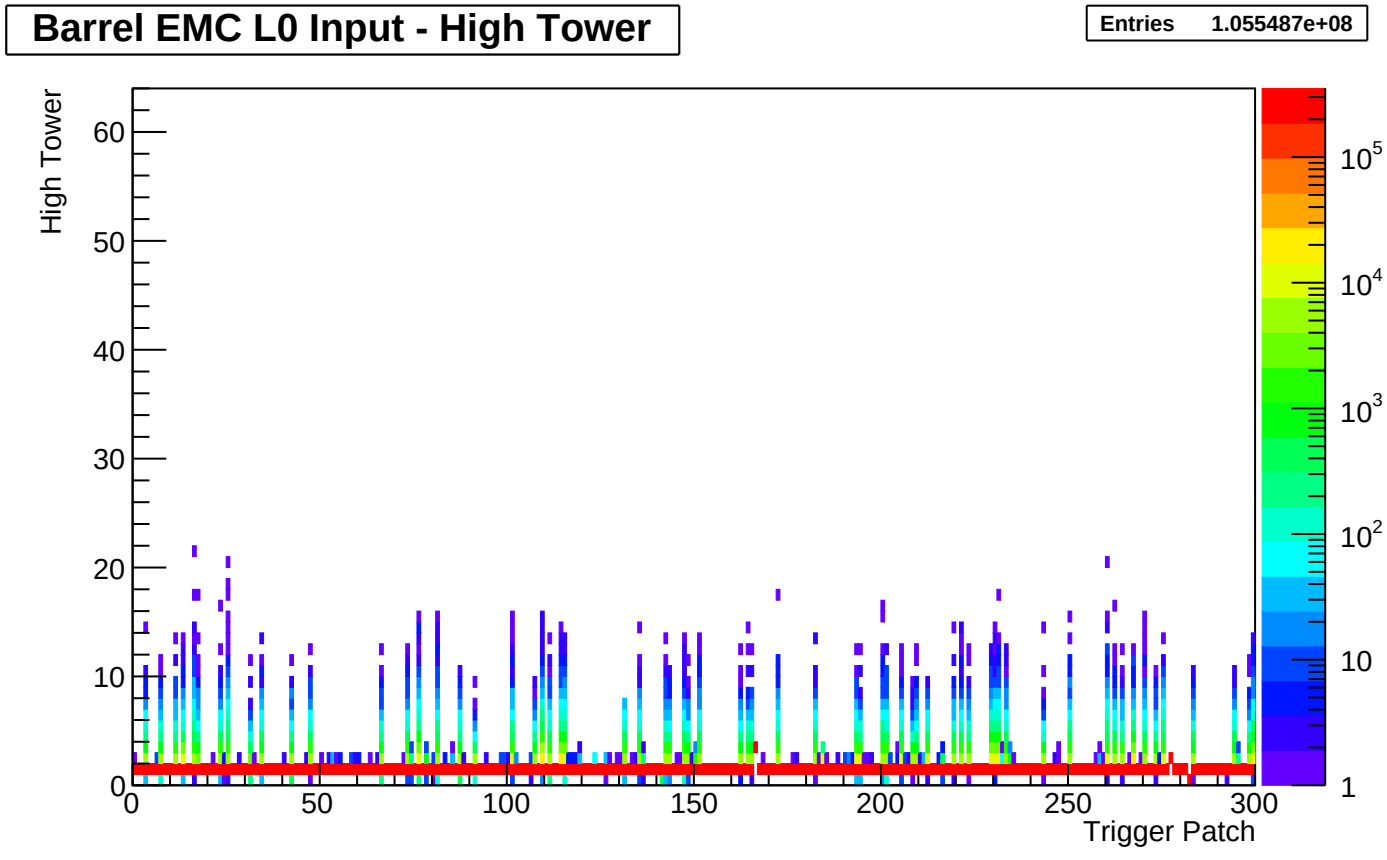
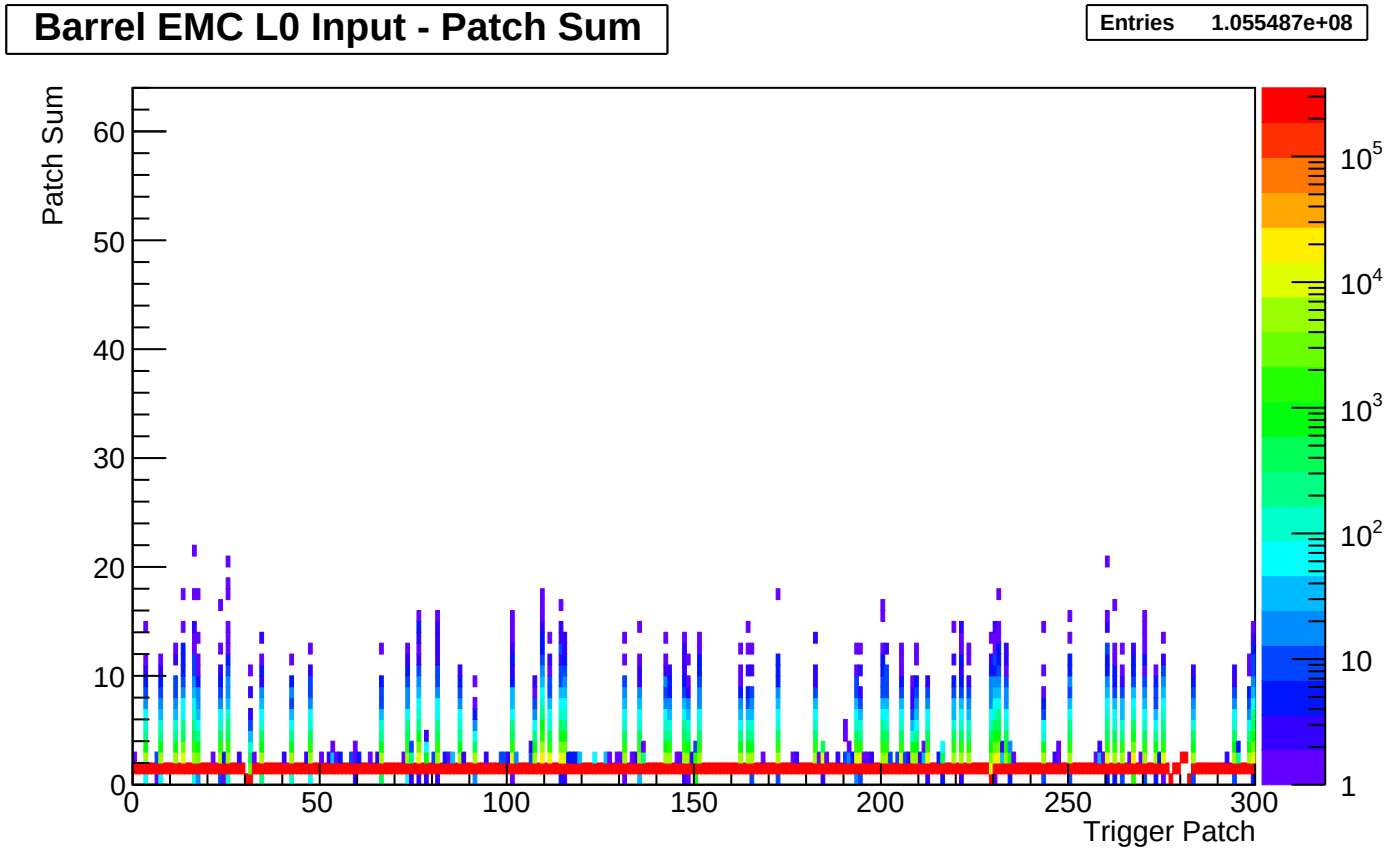
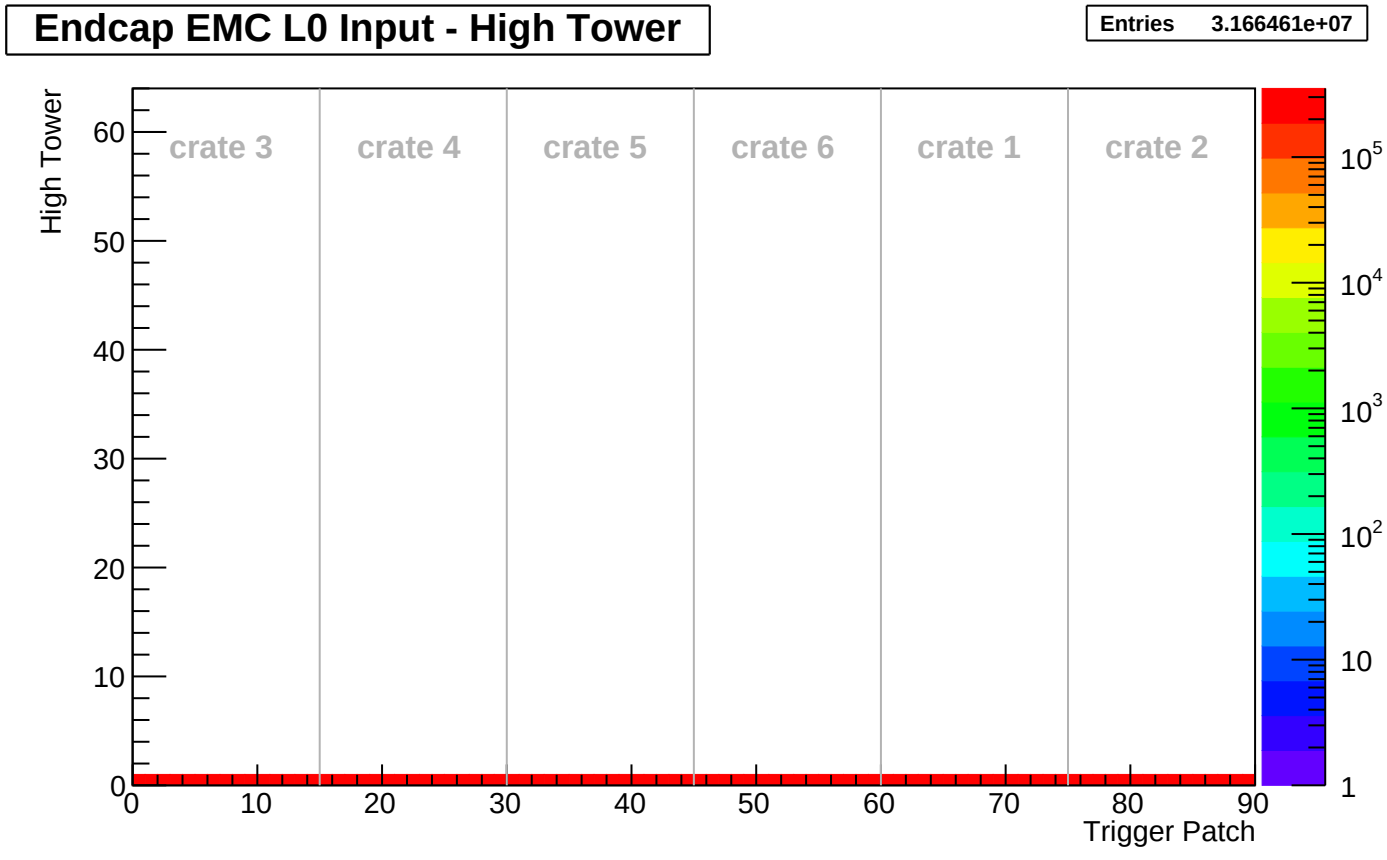
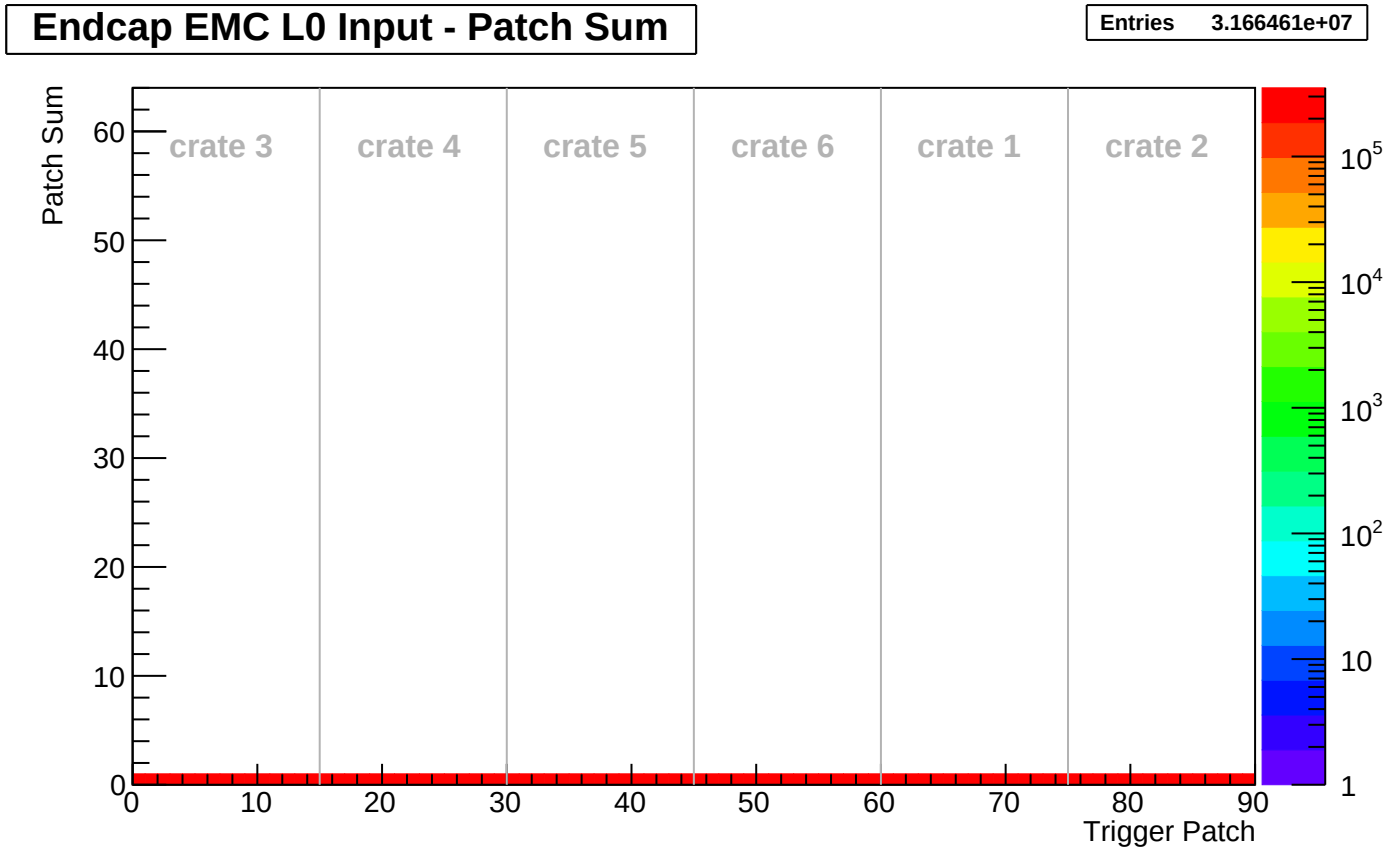
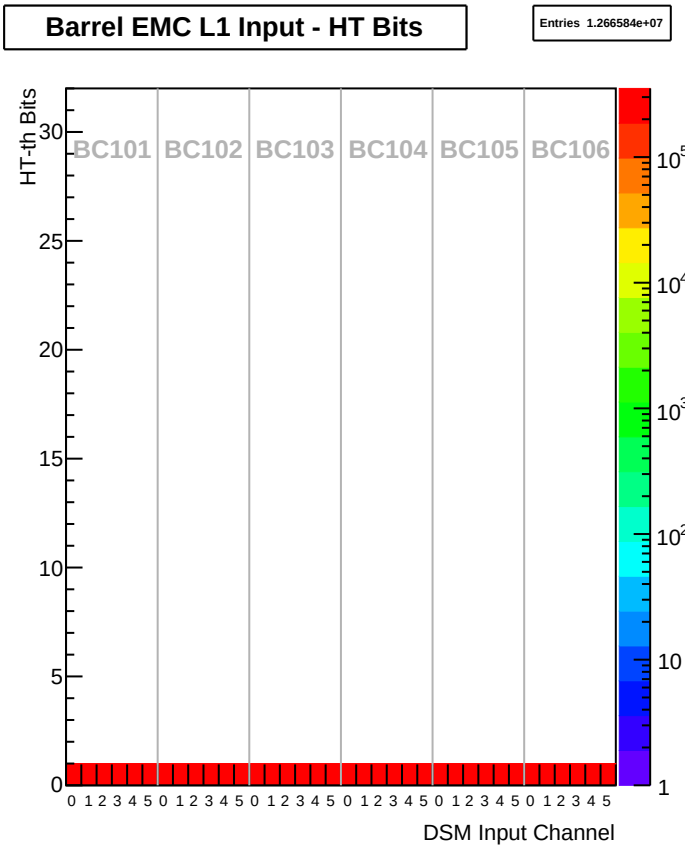
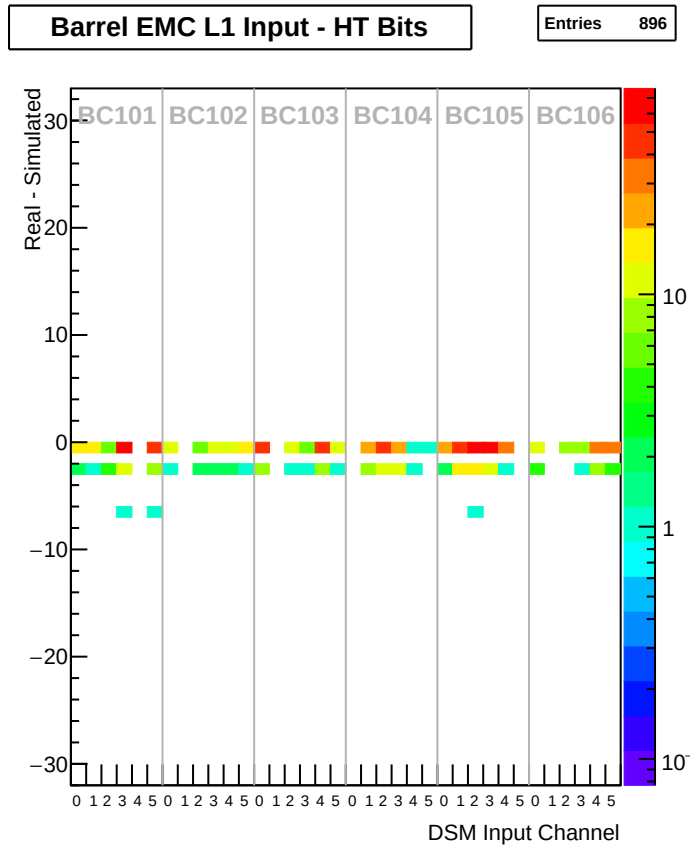

Barrel EMC L0 Input - High Tower
Entries 1.055487e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

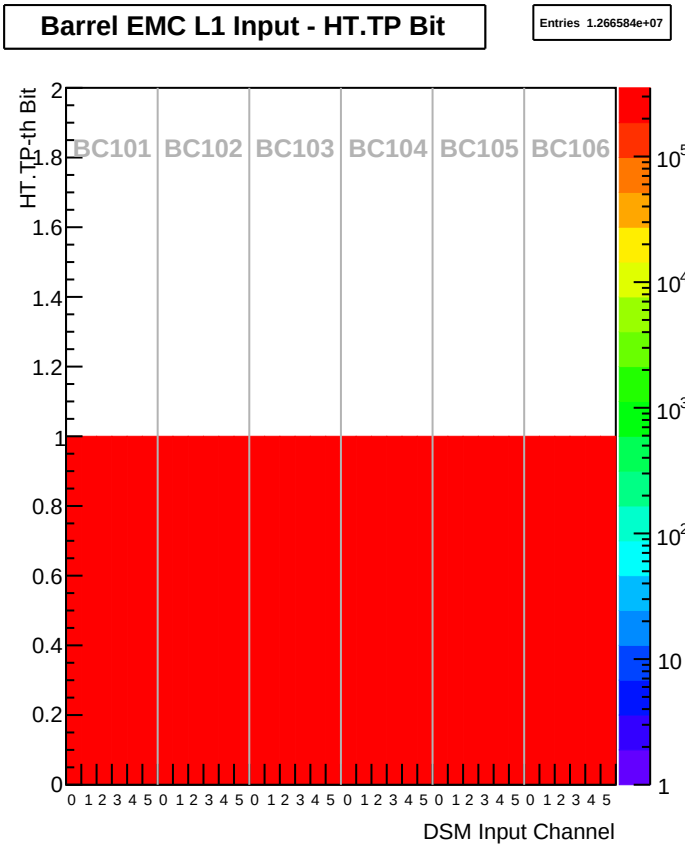

Barrel EMC L0 Input - Patch Sum
Entries 1.055487e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

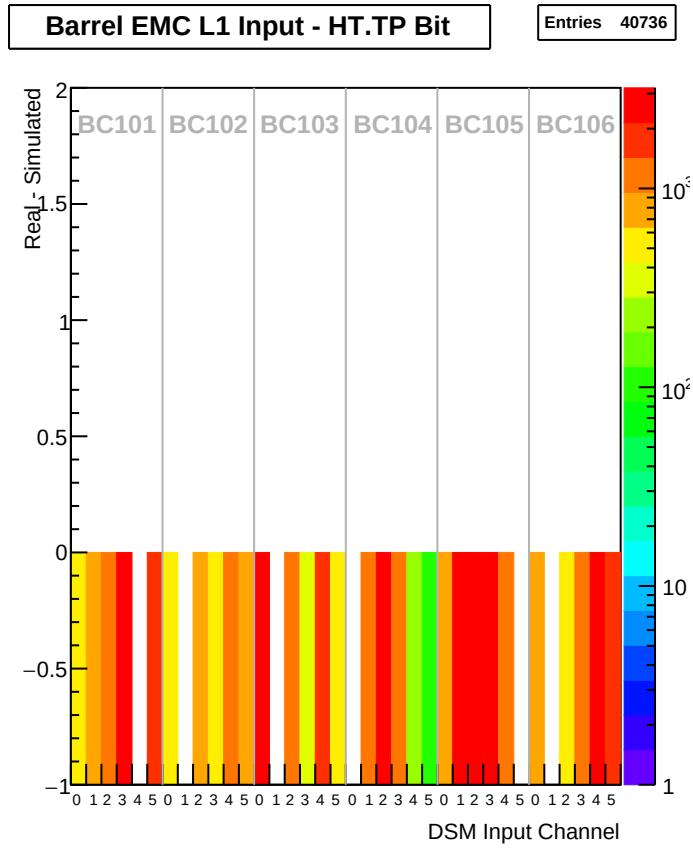

Endcap EMC L0 Input - High Tower
Entries 3.166461e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2
10^3
10^4
10^5

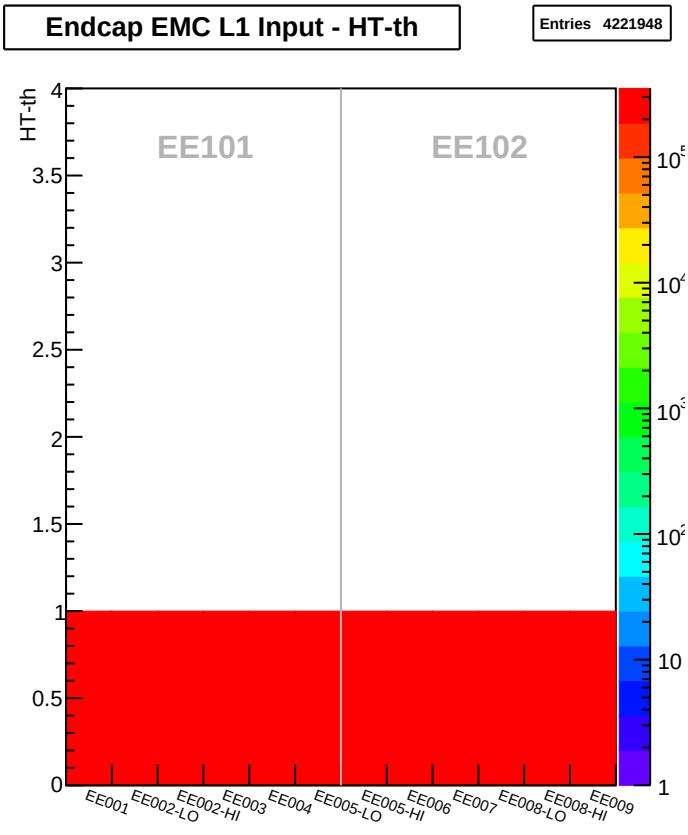

Endcap EMC L0 Input - Patch Sum
Entries 3.166461e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2
10^3
10^4
10^5

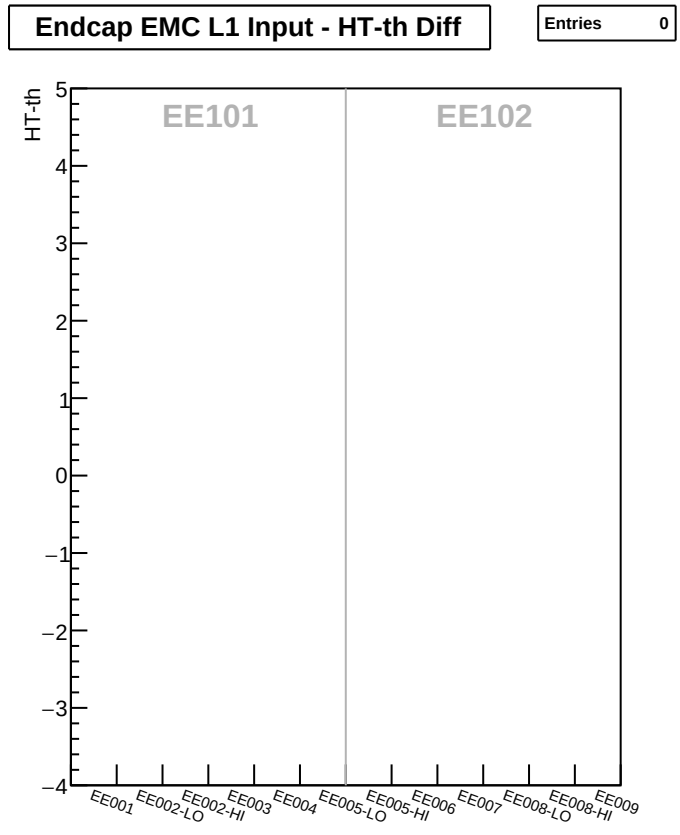

Barrel EMC L1 Input - HT Bits
Entries 1.266584e+07
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

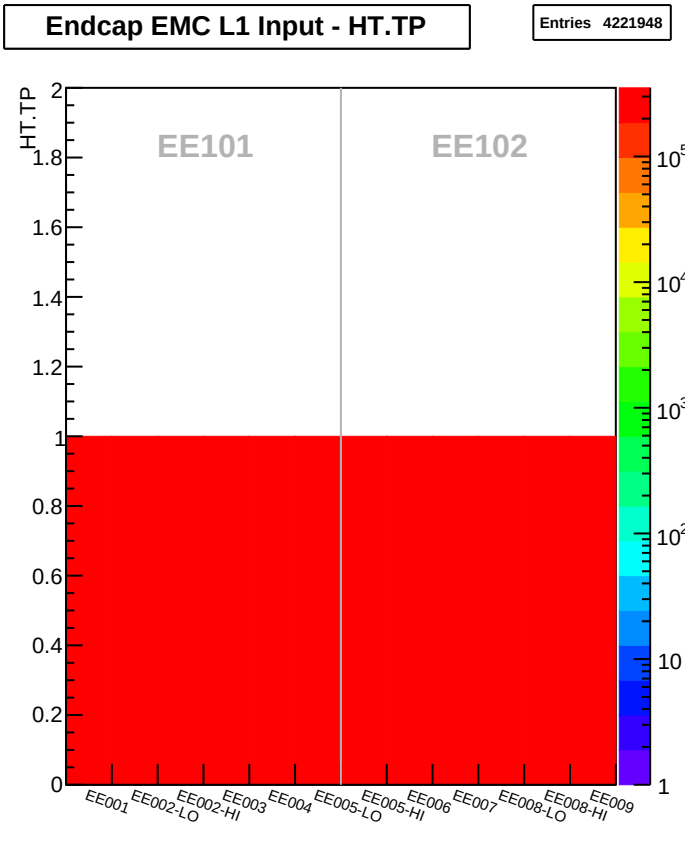

Barrel EMC L1 Input - HT Bits
Entries 896
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

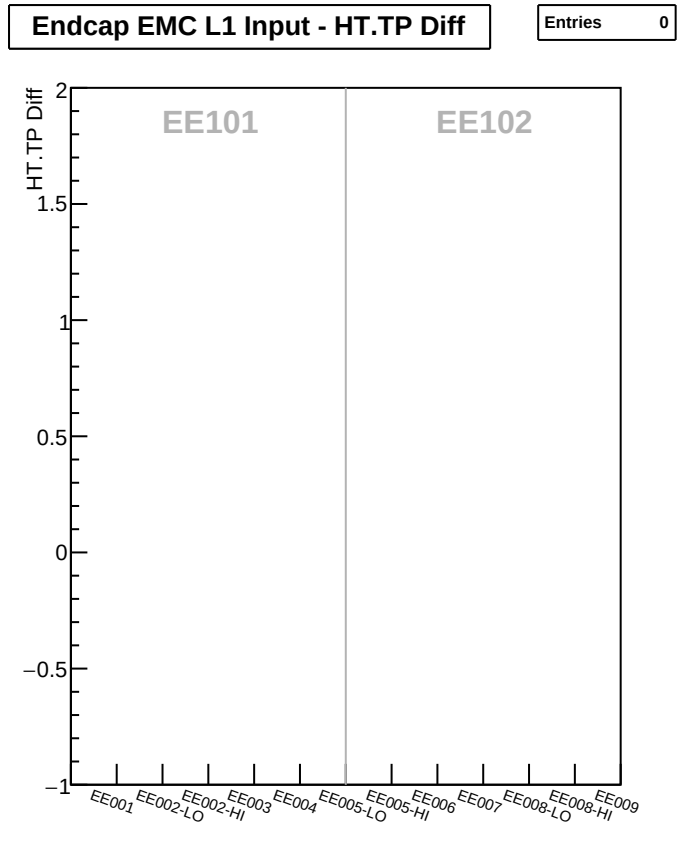

Barrel EMC L1 Input - HT.TP Bit
Entries 1.266584e+07
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

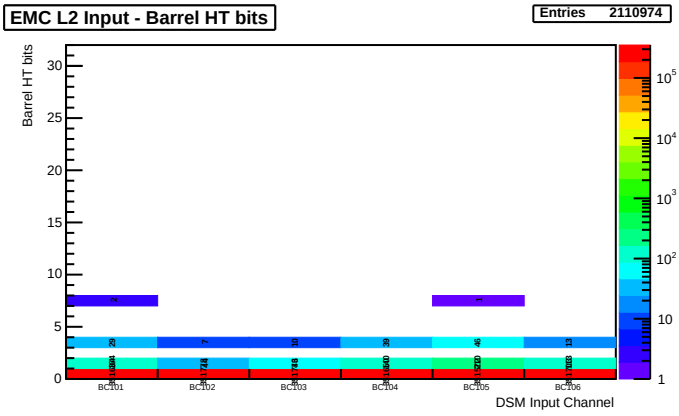

Barrel EMC L1 Input - HT.TP Bit
Entries 40736
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

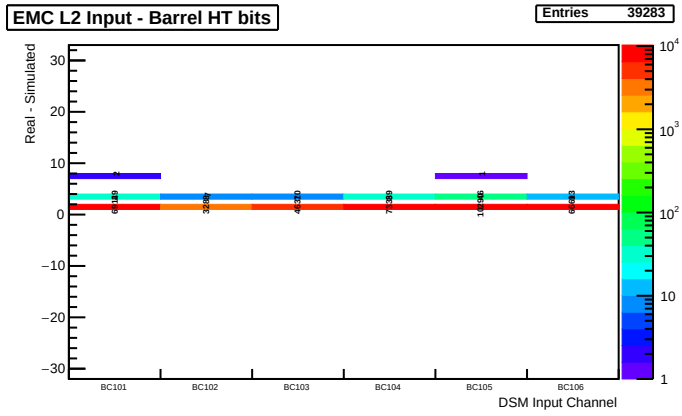

Endcap EMC L1 Input - HT-th
Entries 4221948
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

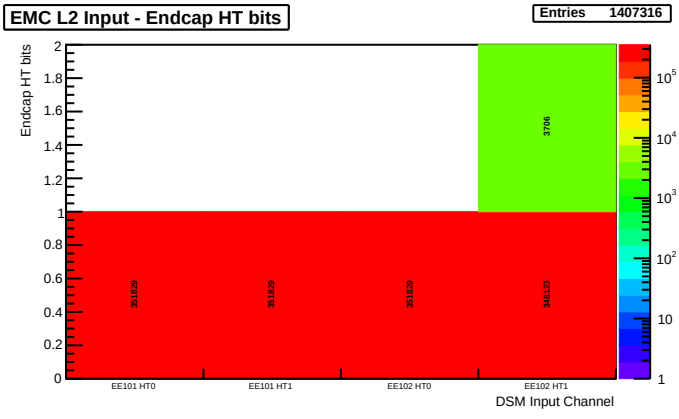

Endcap EMC L1 Input - HT-th Diff
Entries 0
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

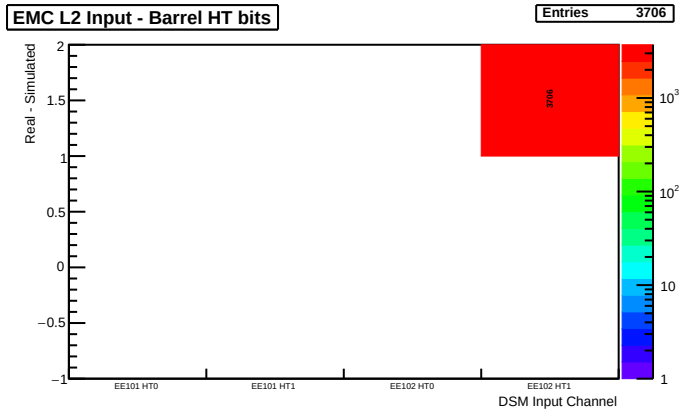

Endcap EMC L1 Input - HT.TP
Entries 4221948
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

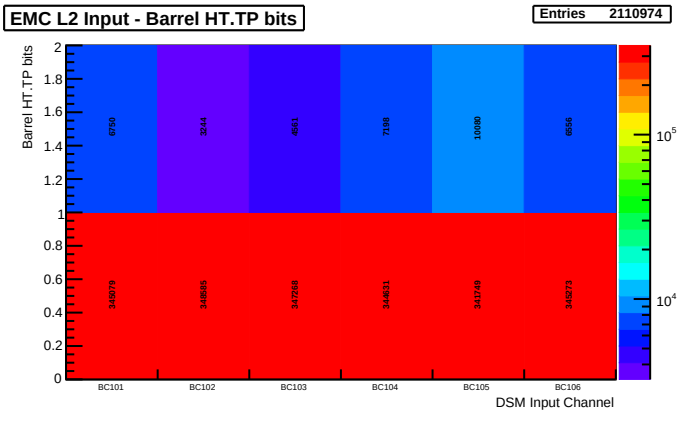

Endcap EMC L1 Input - HT.TP Diff
Entries 0
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

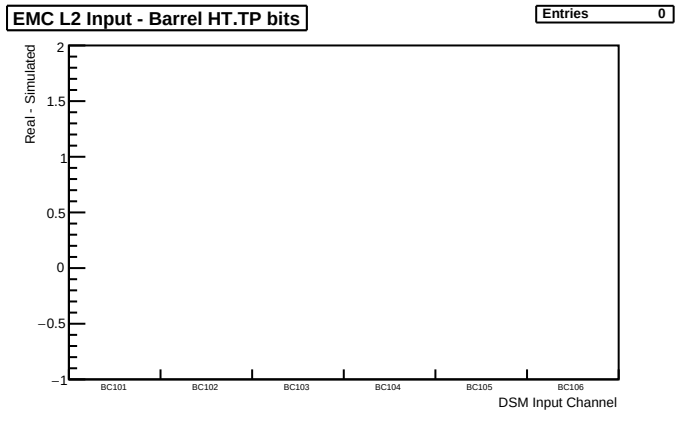

EMC L2 Input - Barrel HT bits
Entries 2110974
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

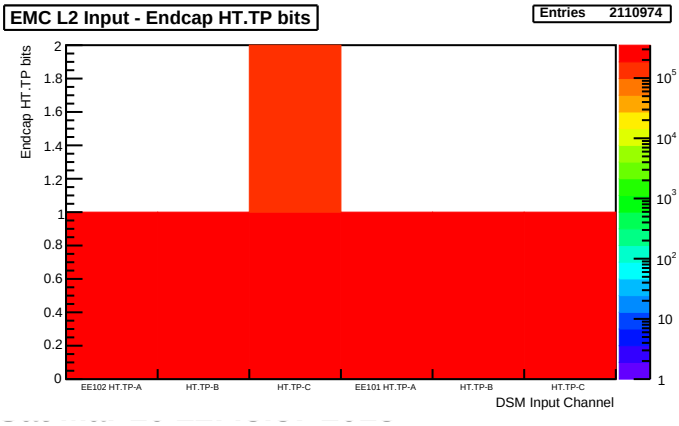

EMC L2 Input - Barrel HT bits
Entries 39283
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

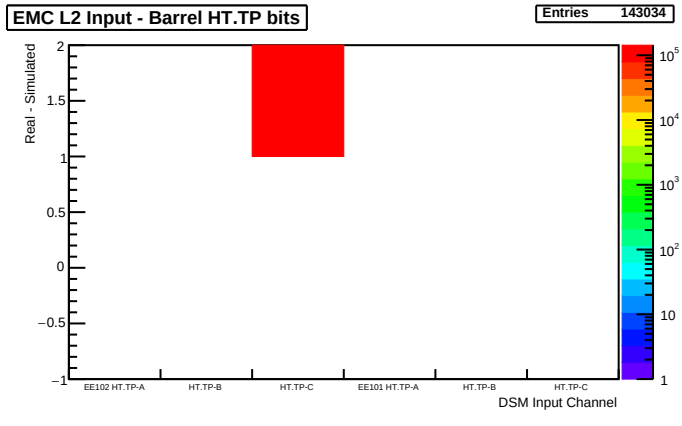

EMC L2 Input - Endcap HT bits
Entries 1407316
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

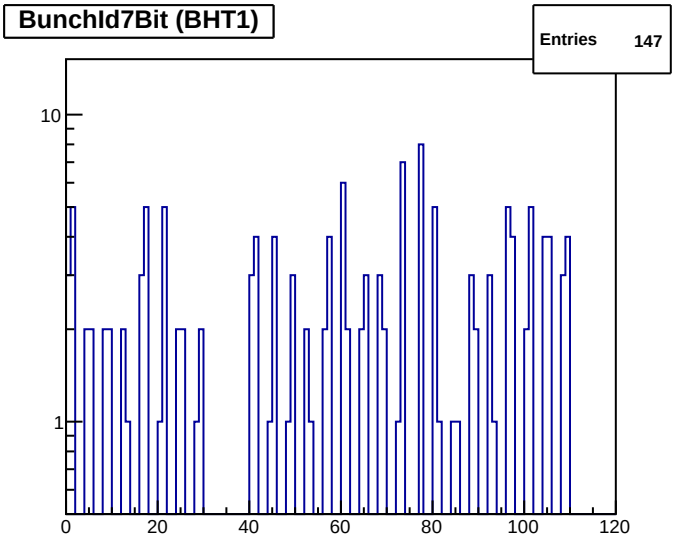

EMC L2 Input - Barrel HT bits
Entries 3706
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

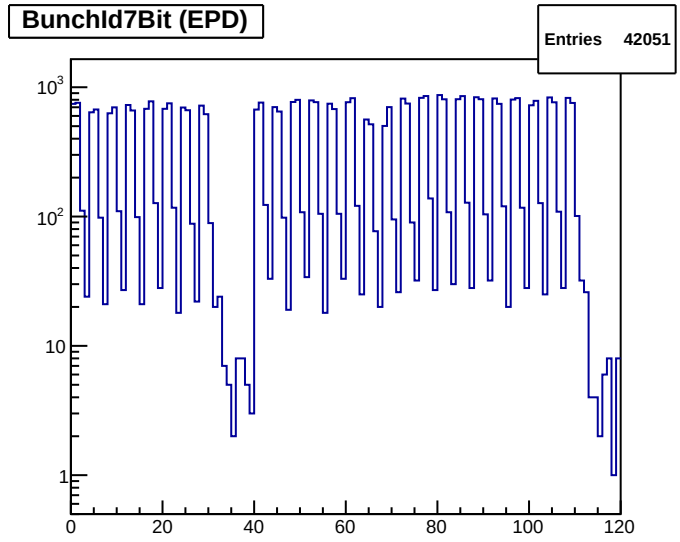

EMC L2 Input - Barrel HT.TP bits
Entries 2110974
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

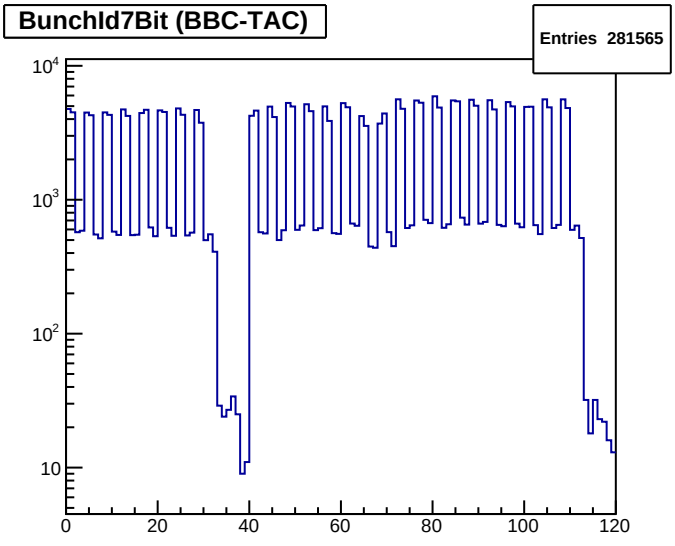

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

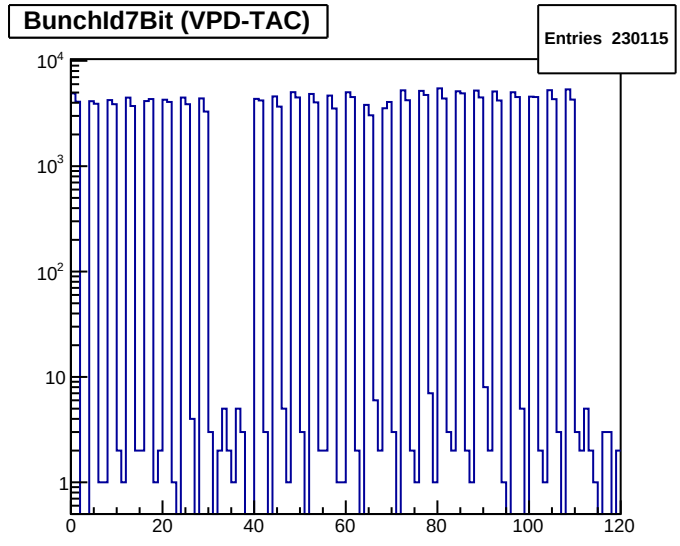

EMC L2 Input - Endcap HT.TP bits
Entries 2110974
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

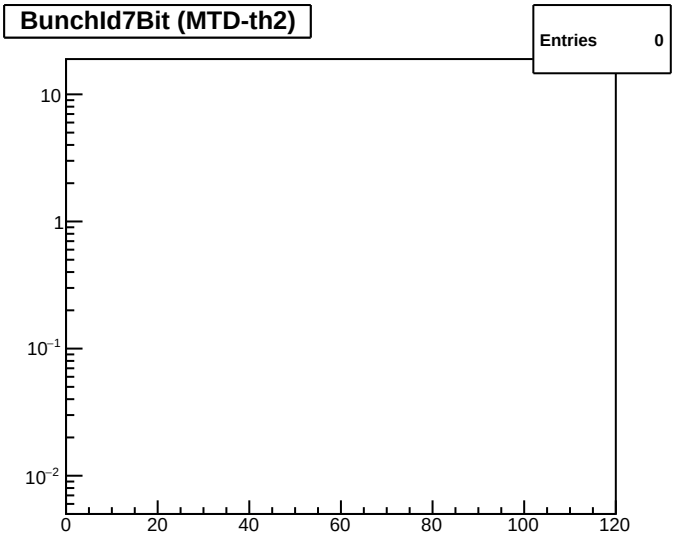

EMC L2 Input - Barrel HT.TP bits
Entries 143034
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

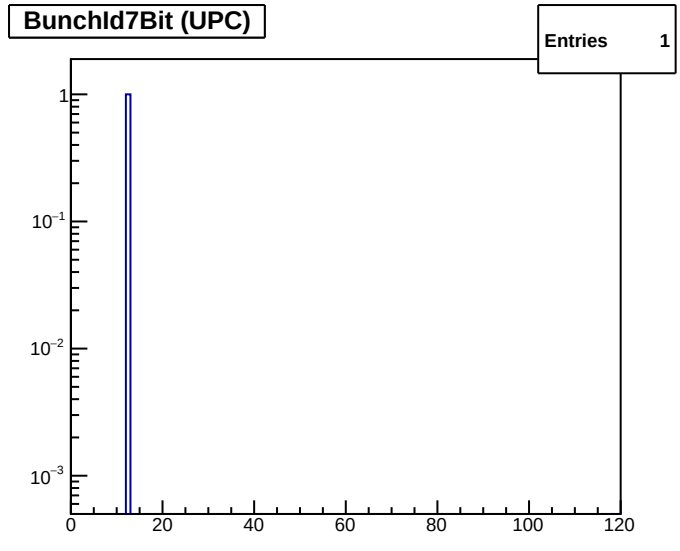

BunchId7Bit (BHT1)
Entries 147

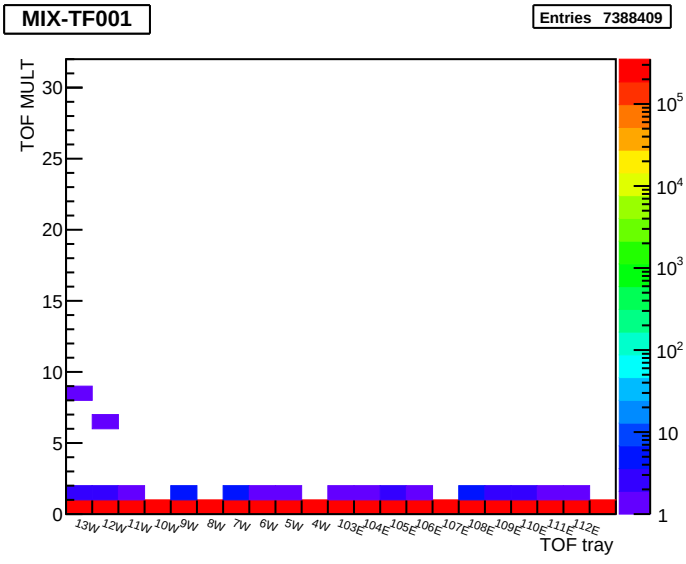

BunchId7Bit (EPD)
Entries 42051

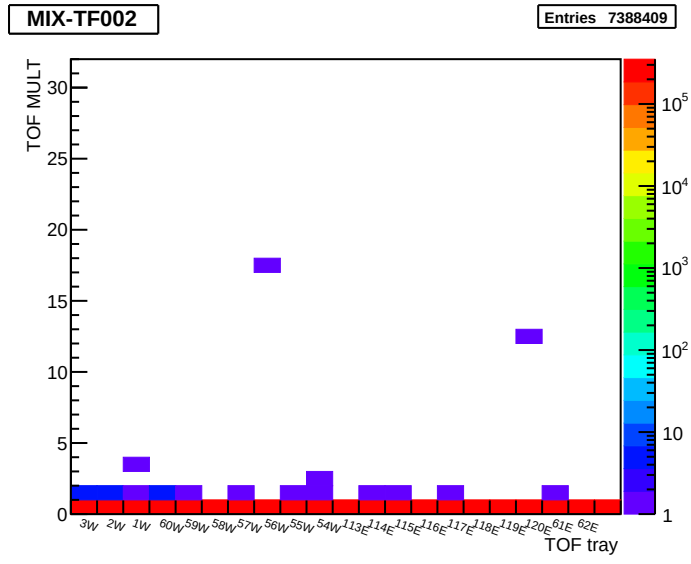

BunchId7Bit (BBC-TAC)
Entries 281565

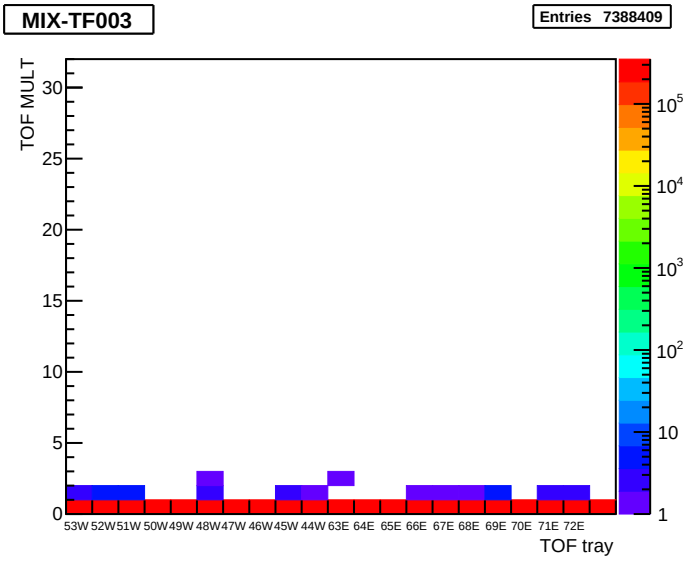

BunchId7Bit (VPD-TAC)
Entries 230115

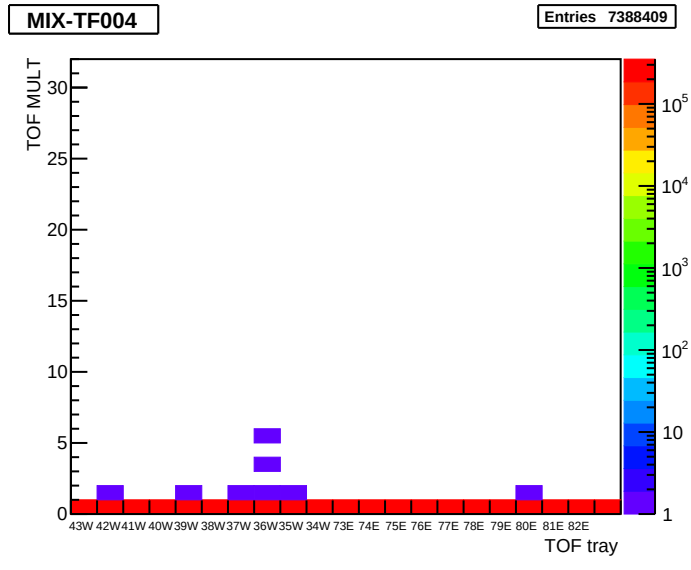

BunchId7Bit (MTD-th2)
Entries 0

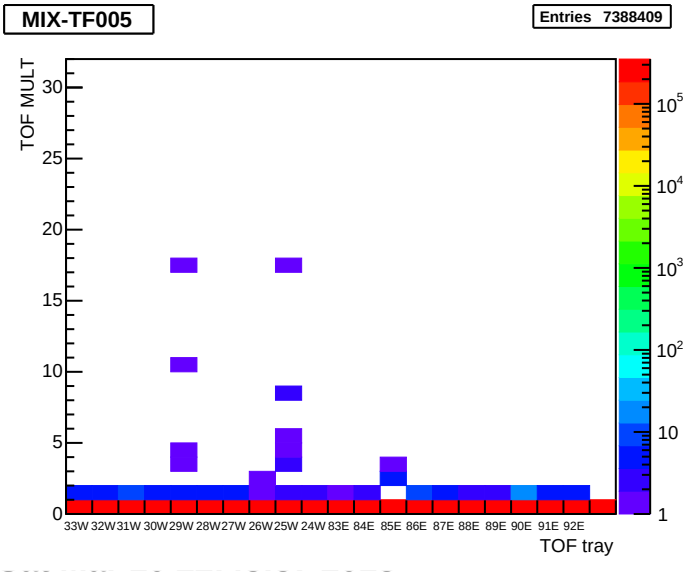

BunchId7Bit (UPC)
Entries 1

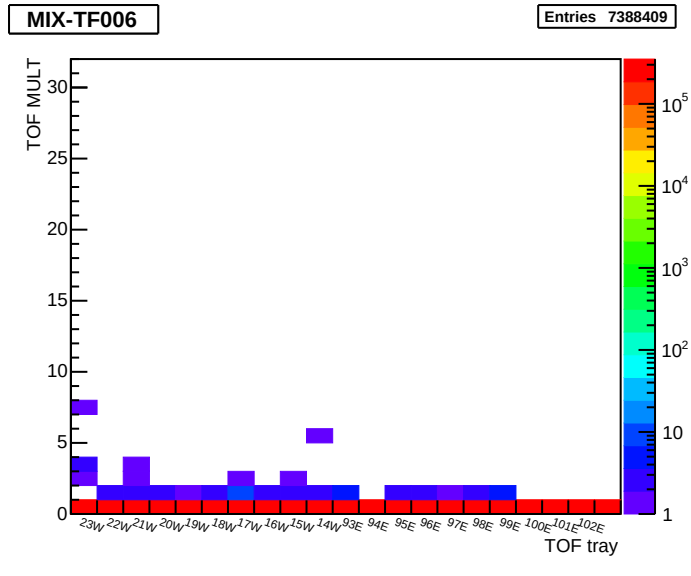

MIX-TF001
Entries 7388409
TOF MULT
TOF tray

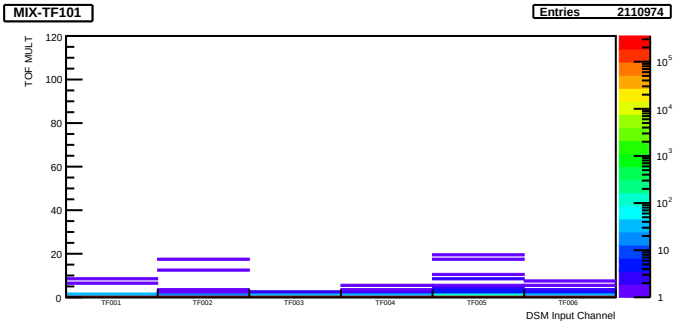

MIX-TF002
Entries 7388409
TOF MULT
TOF tray

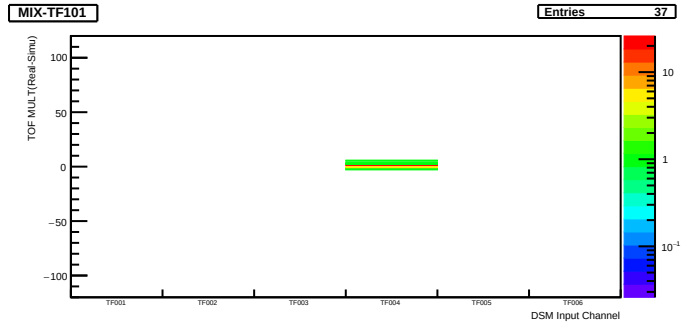

MIX-TF003
Entries 7388409
TOF MULT
TOF tray

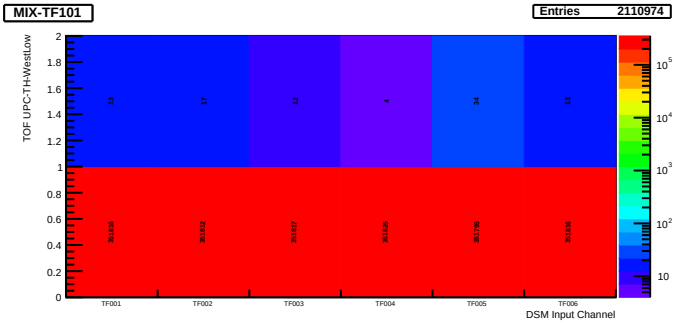

MIX-TF004
Entries 7388409
TOF MULT
TOF tray

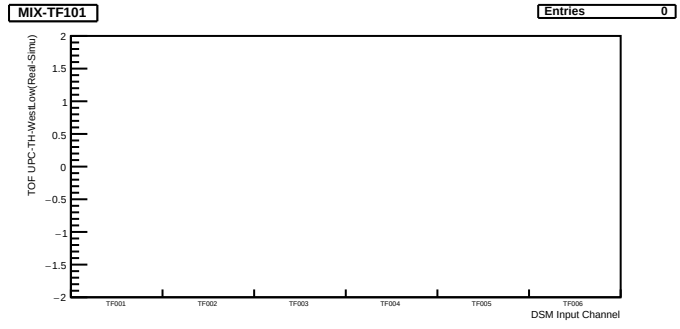

MIX-TF005
Entries 7388409
TOF MULT
TOF tray

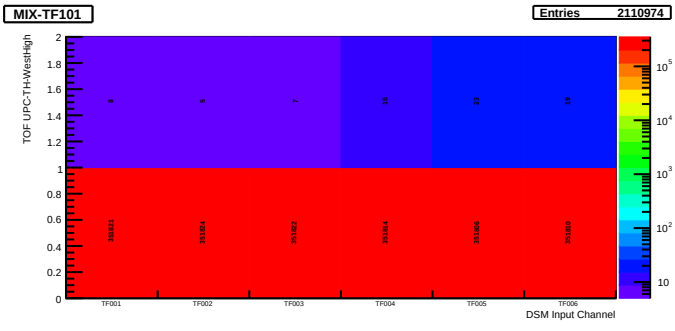

MIX-TF006
Entries 7388409
TOF MULT
TOF tray

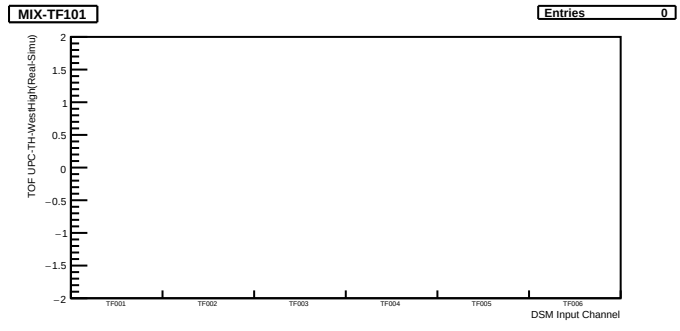

MIX-TF101
Entries 2110974
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

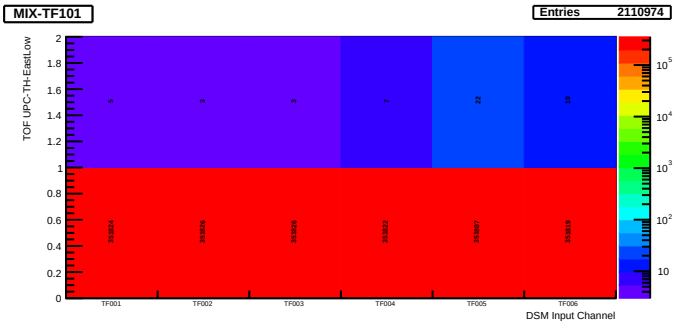

MIX-TF101
Entries 37
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

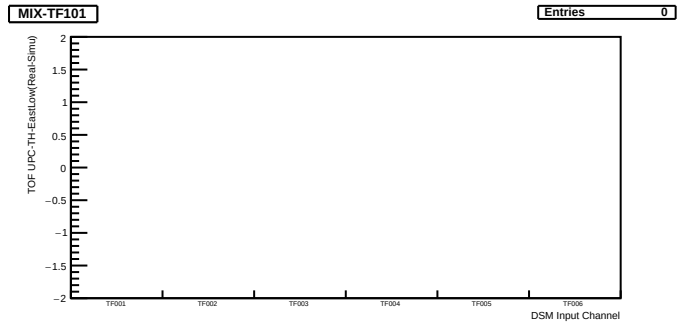

MIX-TF101
Entries 2110974
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

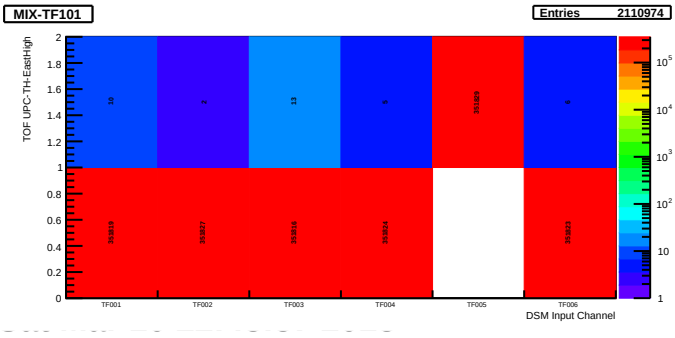

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

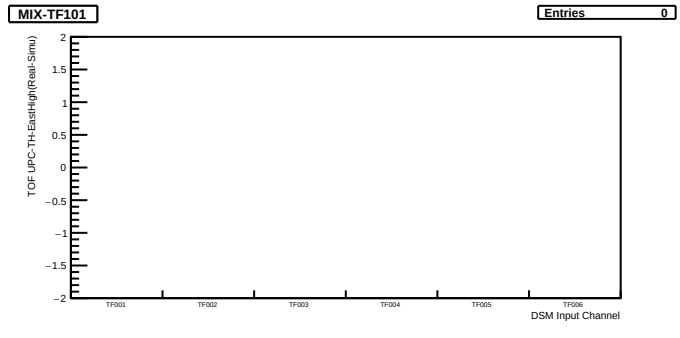

MIX-TF101
Entries 2110974
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

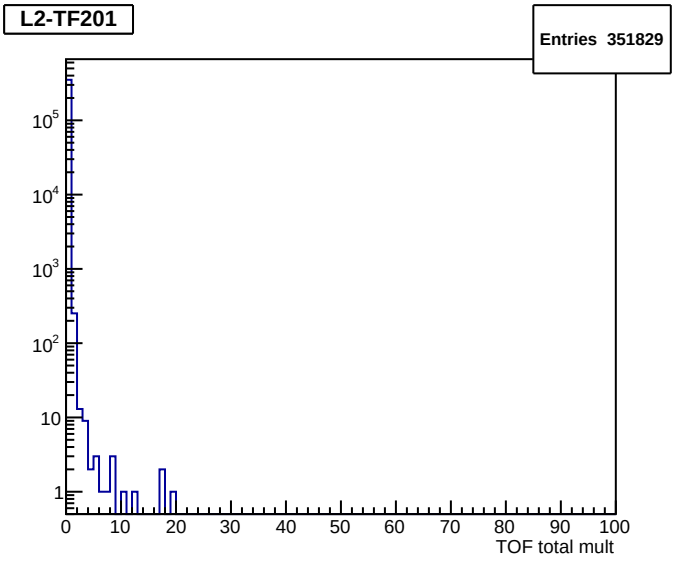

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

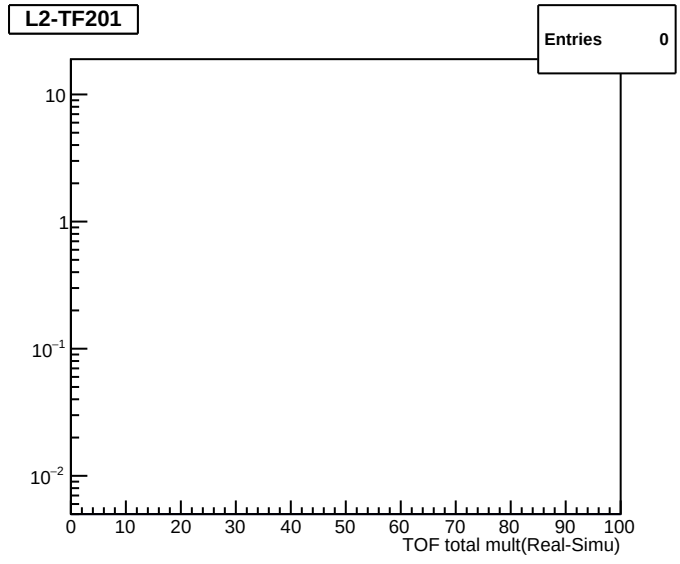

MIX-TF101
Entries 2110974
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

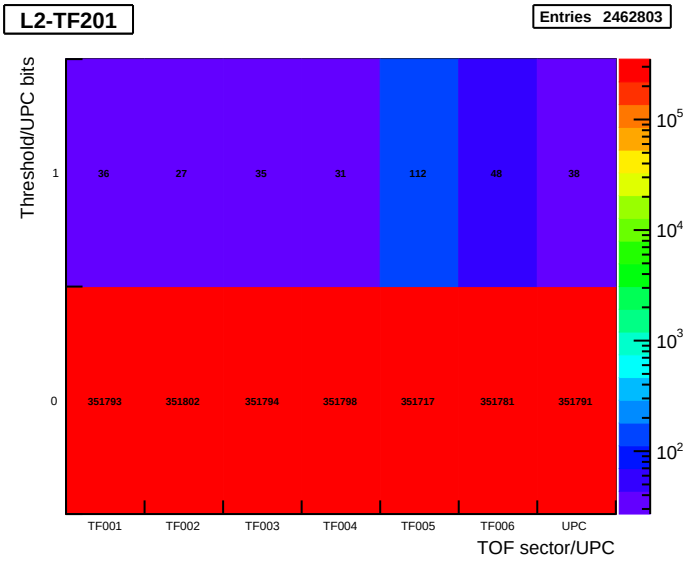

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

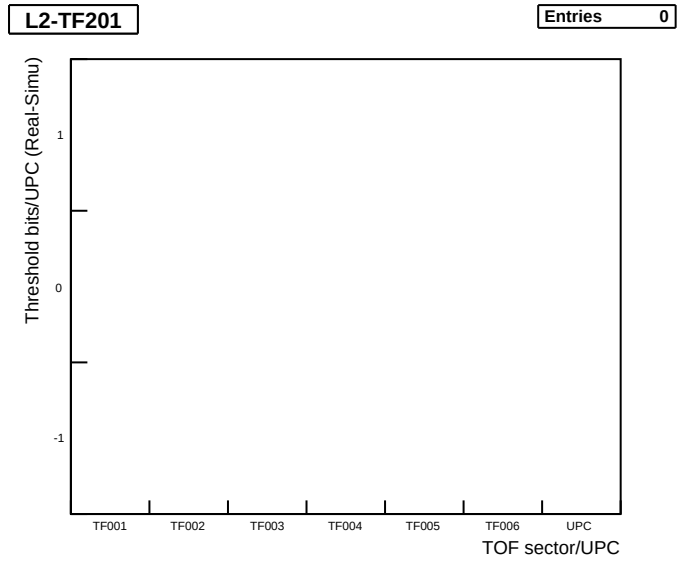

MIX-TF101
Entries 2110974
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

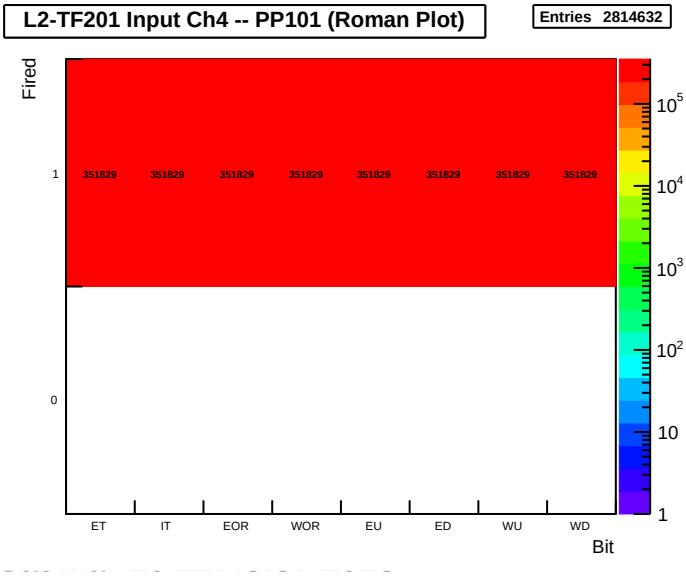

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

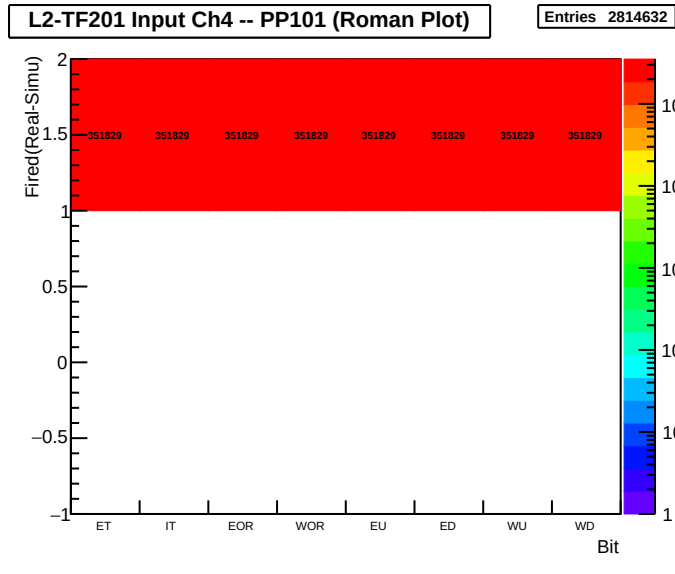

L2-TF201
Entries 351829
TOF total mult

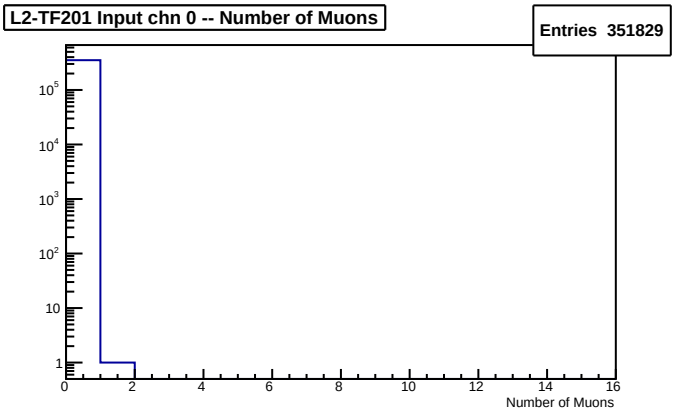

L2-TF201
Entries 0
TOF total mult(Real-Simu)

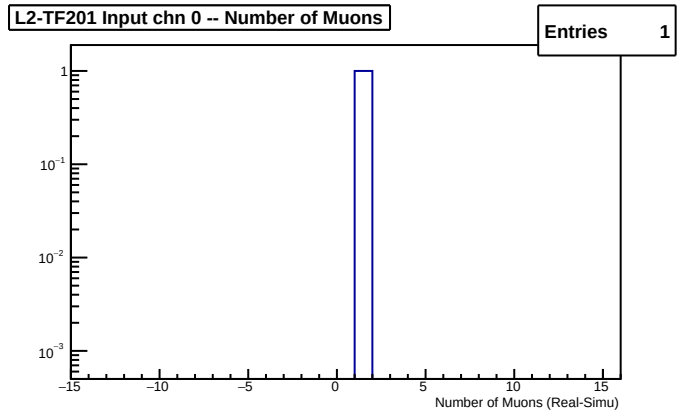

L2-TF201
Entries 2462803
Threshold/UPC bits
36 27 35 31 112 48 38
351793 351802 351794 351798 351717 351781 351791
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

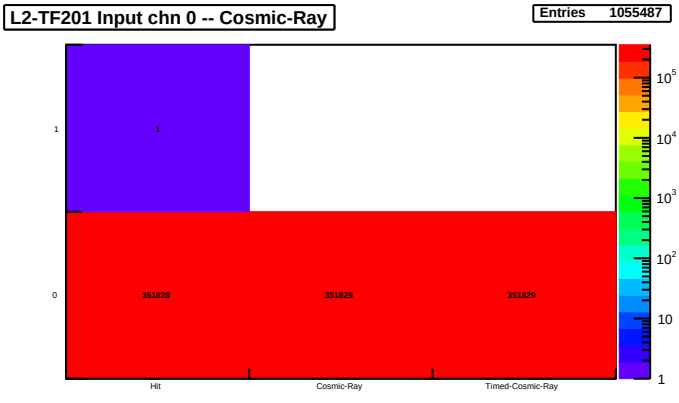

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

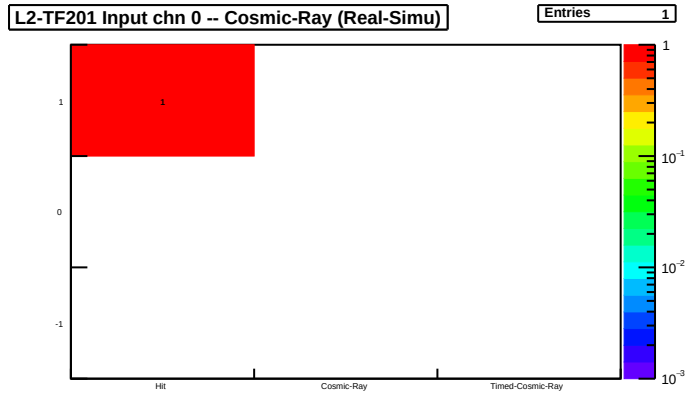

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 2814632
Fired
351829 351829 351829 351829 351829 351829 351829 351829
ET IT EOR WOR EU ED WU WD
Bit

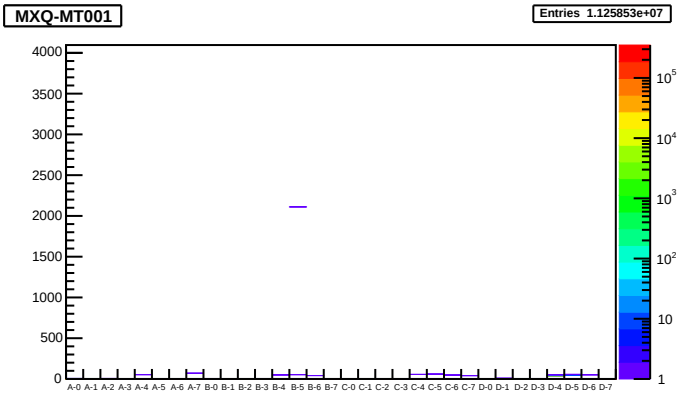

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 2814632
Fired(Real-Simu)
351829 351829 351829 351829 351829 351829 351829 351829
ET IT EOR WOR EU ED WU WD
Bit

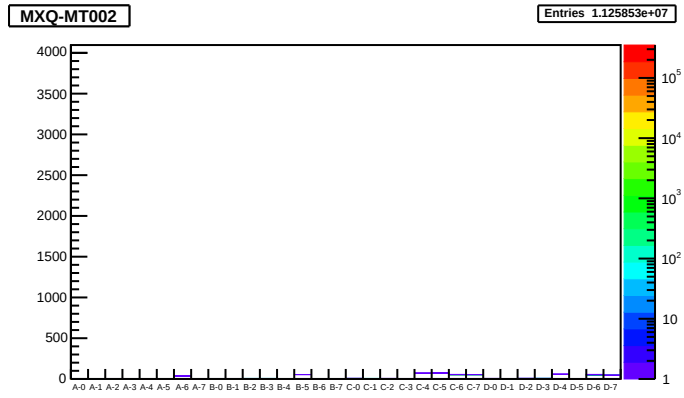

L2-TF201 Input chn 0 -- Number of Muons
Entries 351829
Number of Muons

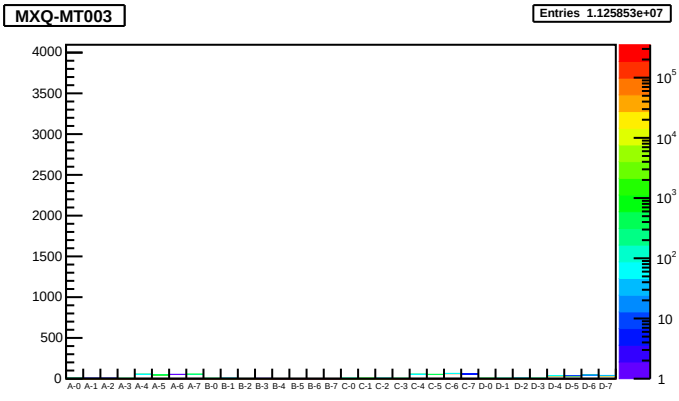

L2-TF201 Input chn 0 -- Number of Muons
Entries 1
Number of Muons (Real-Simu)

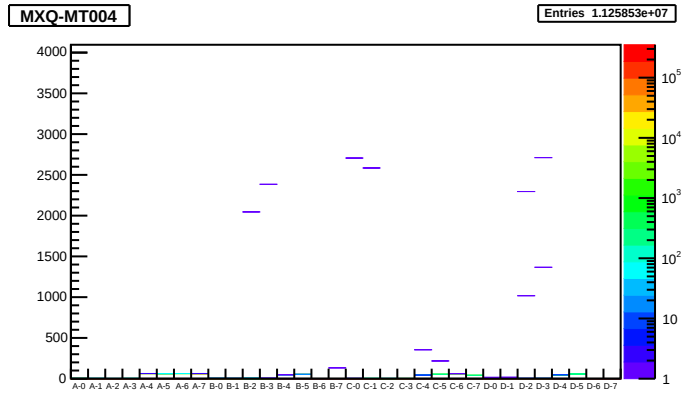

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 1055487
1
351828
351829
351829
Hit
Cosmic-Ray
Timed-Cosmic-Ray

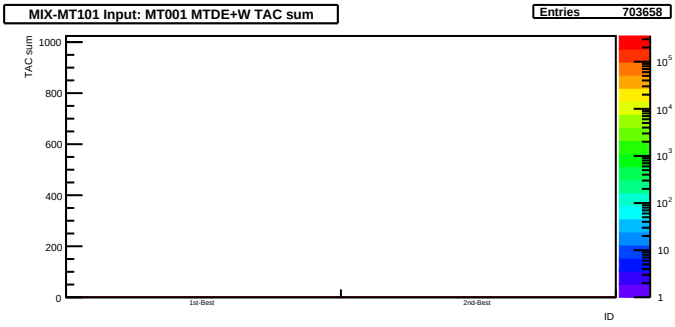

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 1
1
Hit
Cosmic-Ray
Timed-Cosmic-Ray

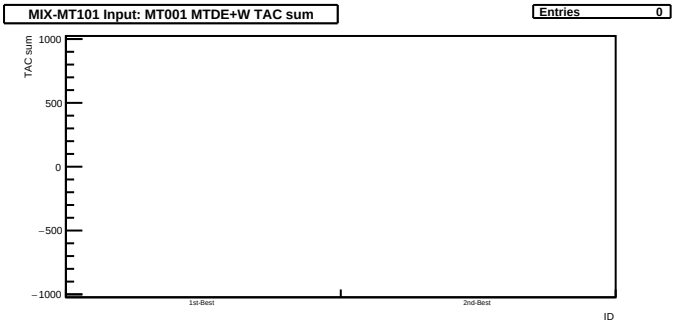

MXQ-MT001
Entries 1.125853e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

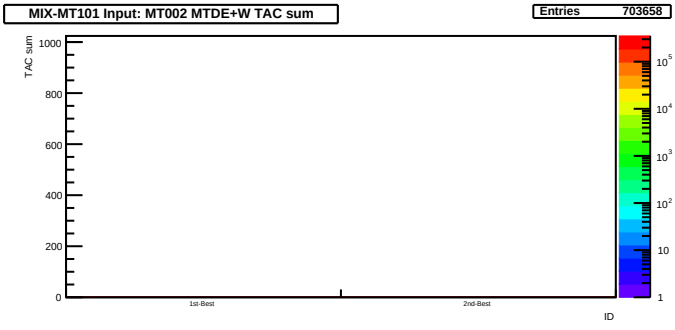

MXQ-MT002
Entries 1.125853e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

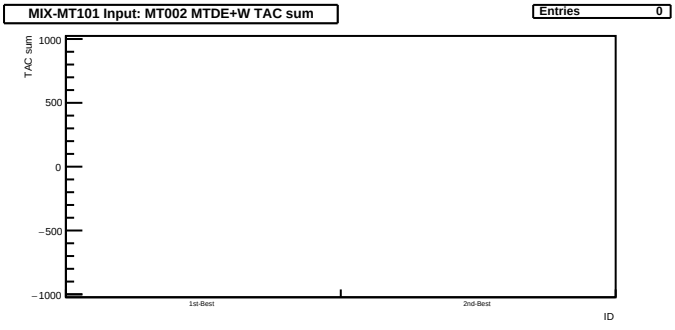

MXQ-MT003
Entries 1.125853e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

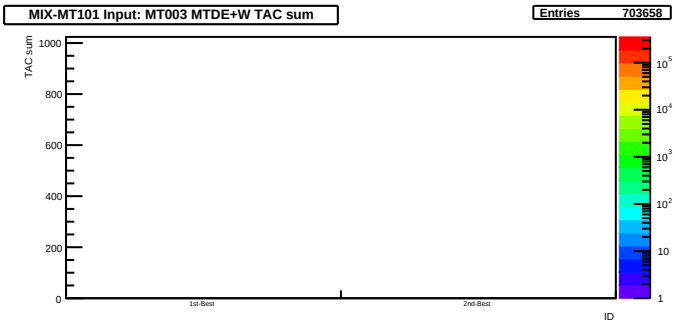

MXQ-MT004
Entries 1.125853e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

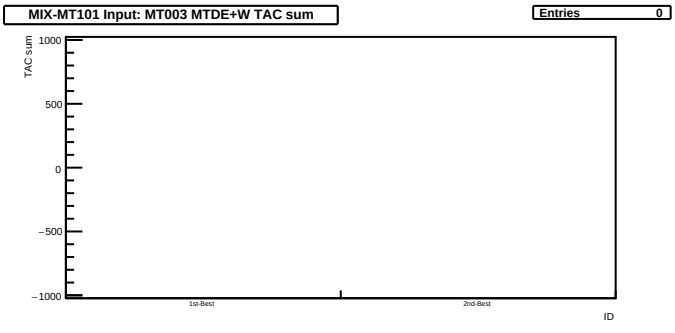

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 703658
TAC sum
1st-Best
2nd-Best
ID

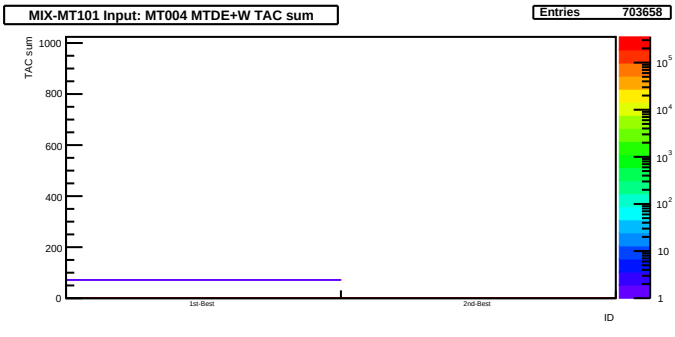

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 0
TAC sum
1st-Best
2nd-Best
ID

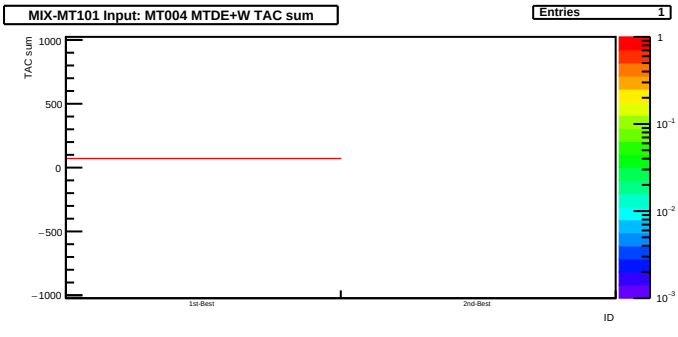

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 703658
TAC sum
1st-Best
2nd-Best
ID

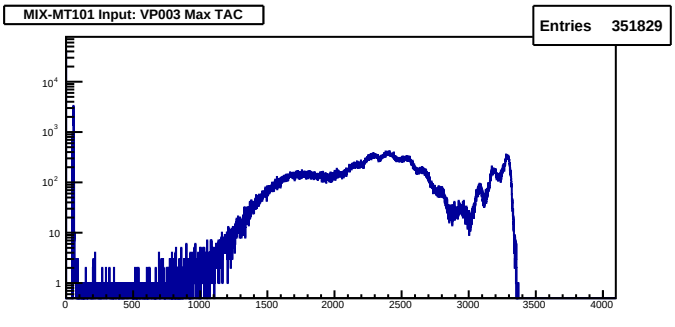

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 0
TAC sum
1st-Best
2nd-Best
ID

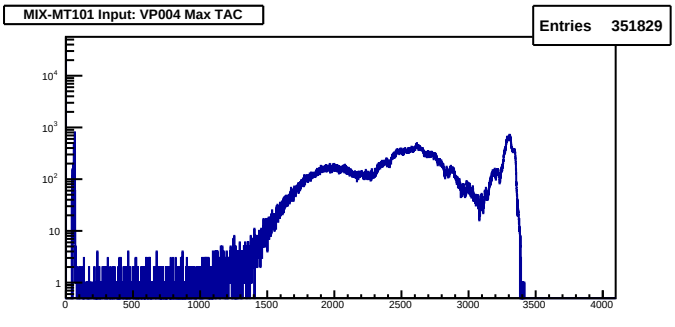

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 703658
TAC sum
1st-Best
2nd-Best
ID

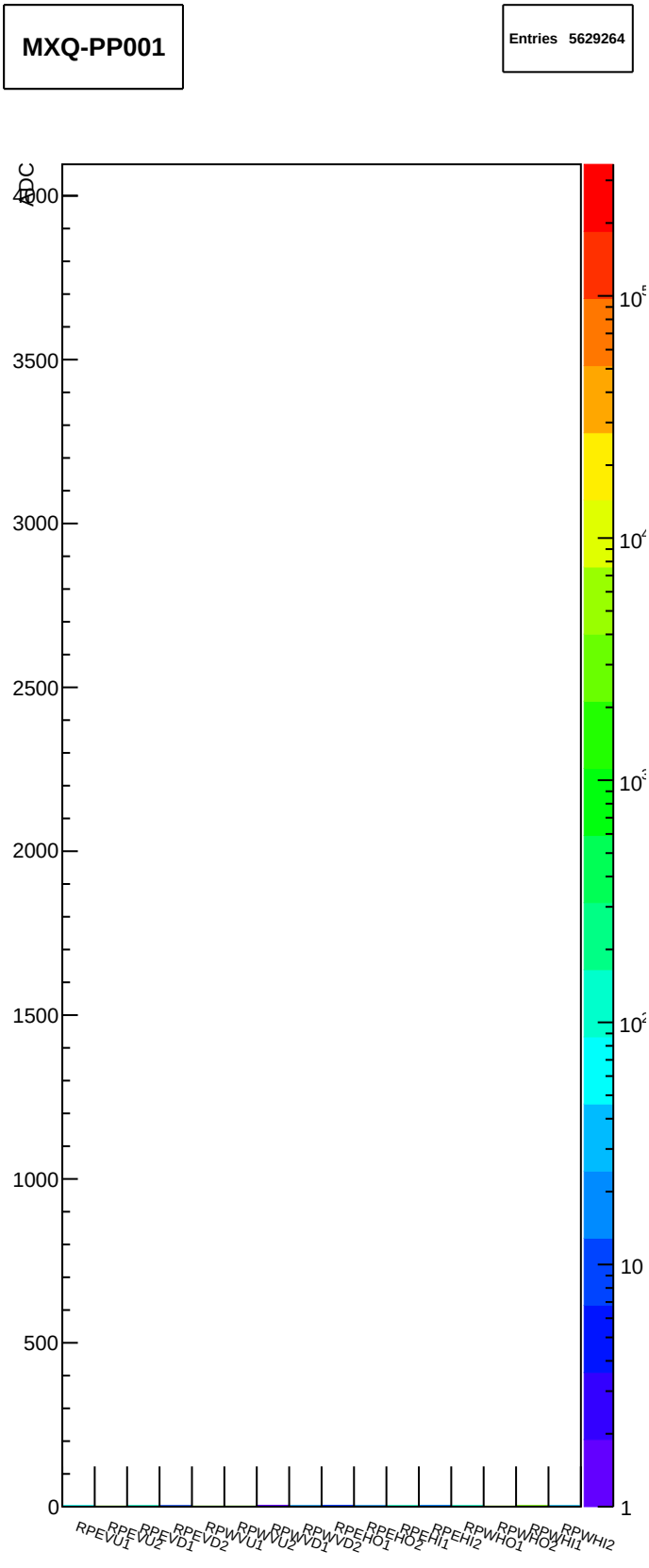

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 0
TAC sum
1st-Best
2nd-Best
ID

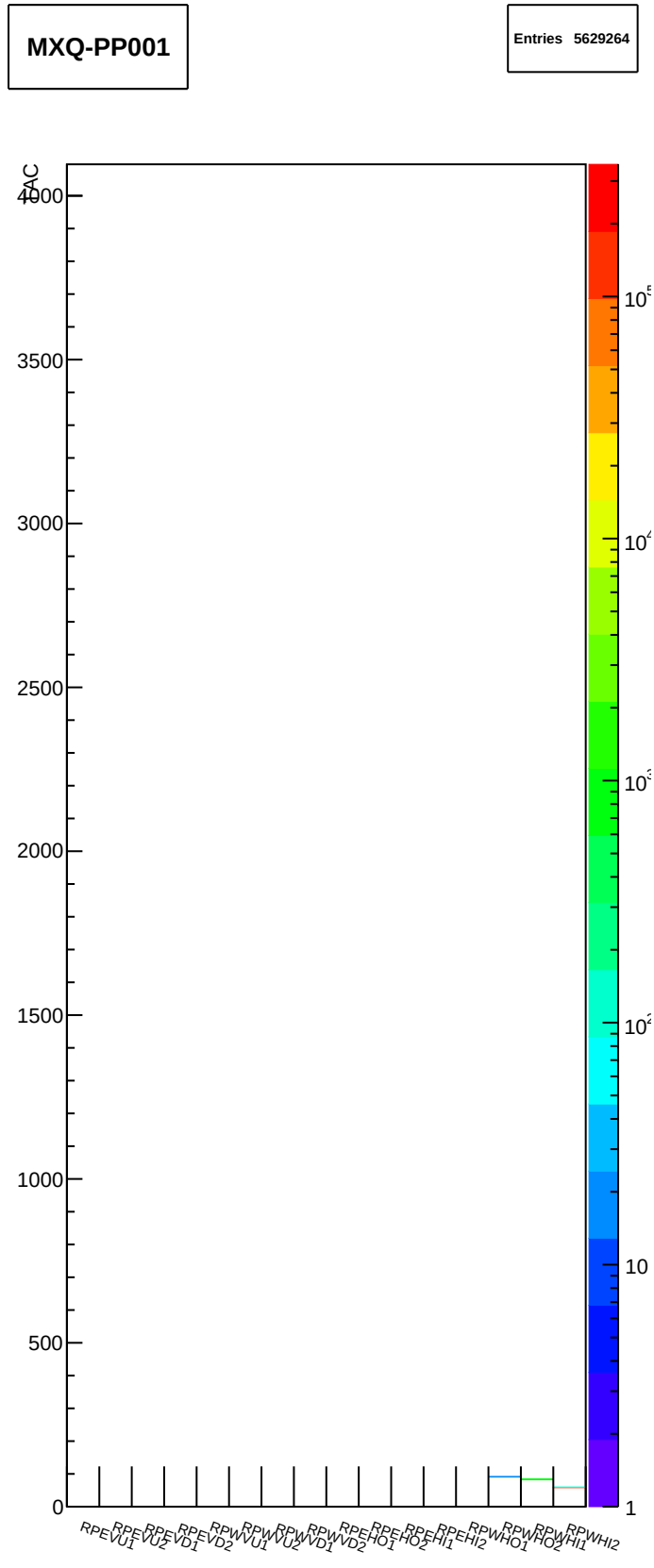

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 703658
TAC sum
1st-Best
2nd-Best
ID

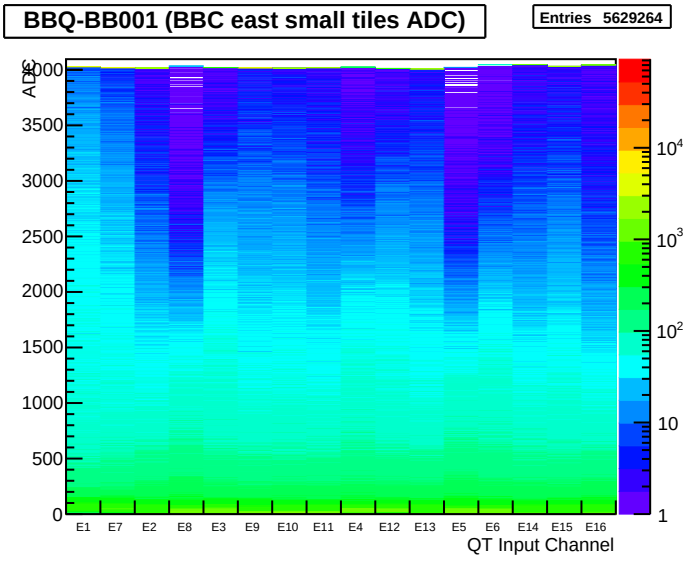

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 1
TAC sum
1st-Best
2nd-Best
ID

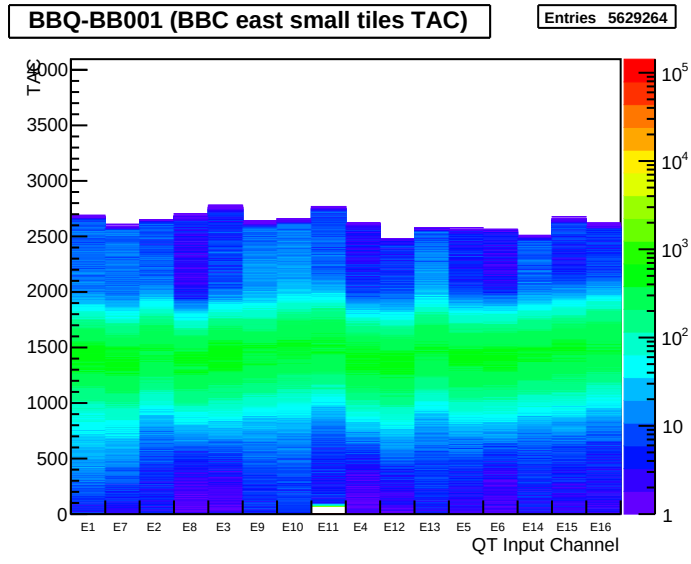

MIX-MT101 Input: VP003 Max TAC
Entries 351829

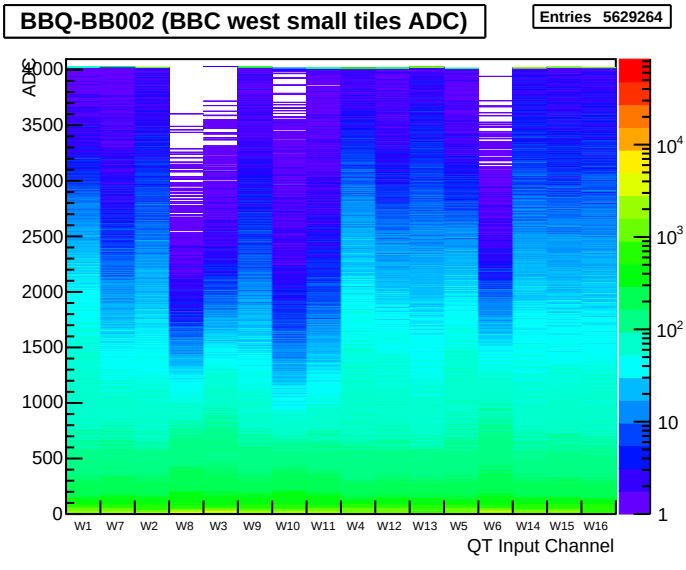

MIX-MT101 Input: VP004 Max TAC
Entries 351829

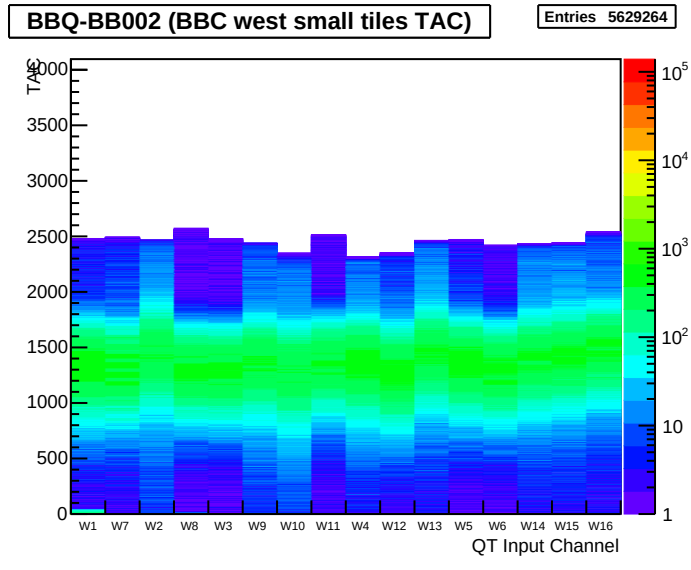

MXQ-PP001
Entries 5629264
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

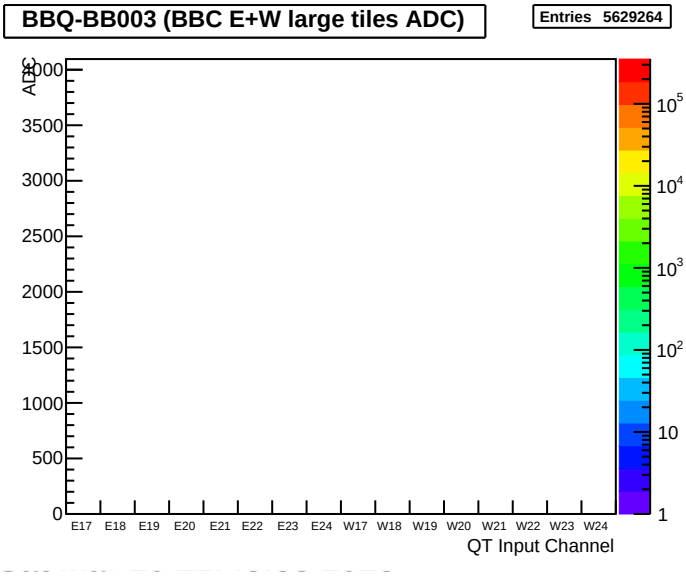

MXQ-PP001
Entries 5629264
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

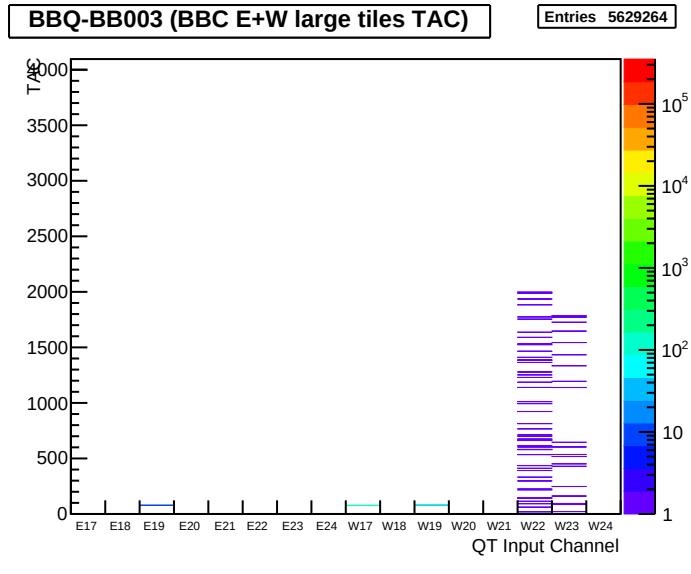

BBQ-BB001 (BBC east small tiles ADC)
Entries 5629264
ADC
QT Input Channel

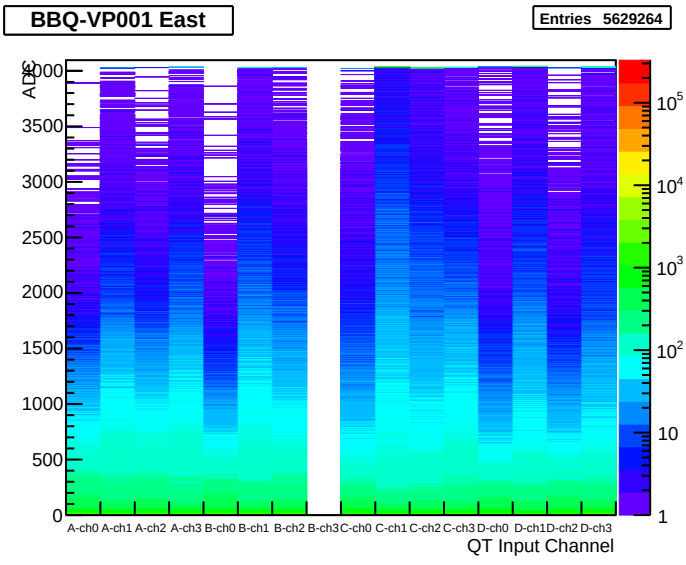

BBQ-BB001 (BBC east small tiles TAC)
Entries 5629264
TAC
QT Input Channel

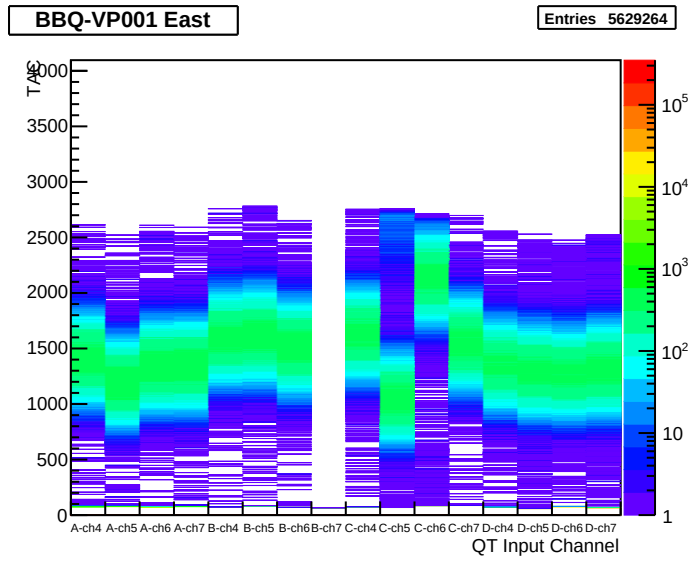

BBQ-BB002 (BBC west small tiles ADC)
Entries 5629264
ADC
QT Input Channel

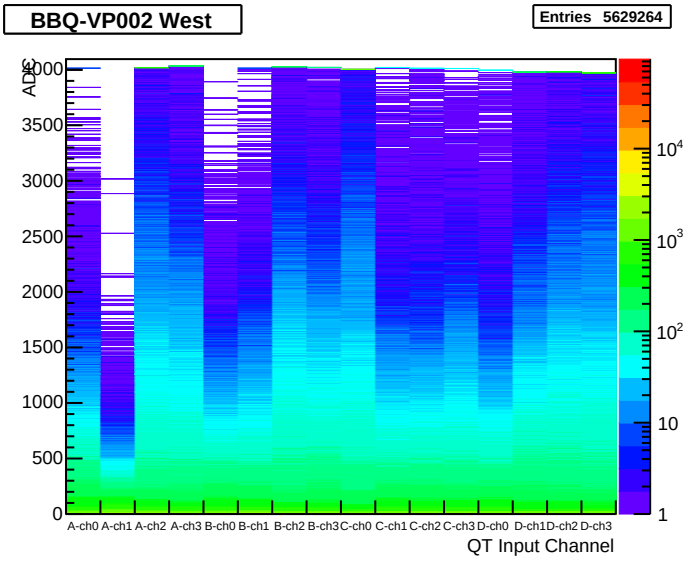

BBQ-BB002 (BBC west small tiles TAC)
Entries 5629264
TAC
QT Input Channel

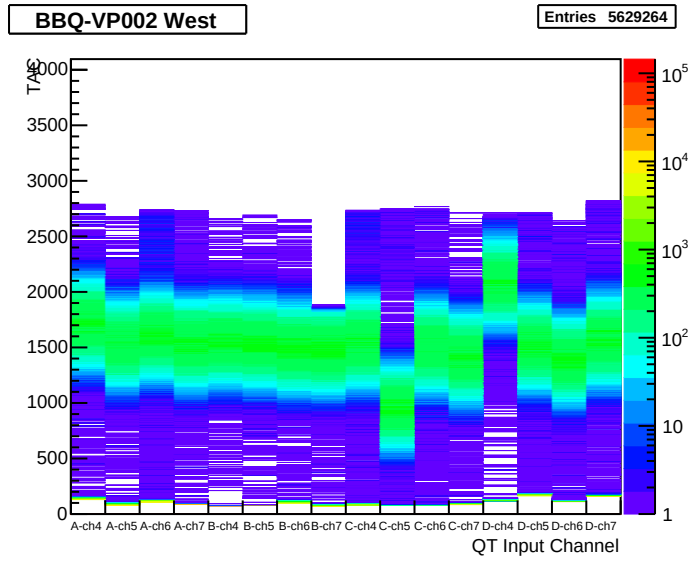

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 5629264
ADC
QT Input Channel

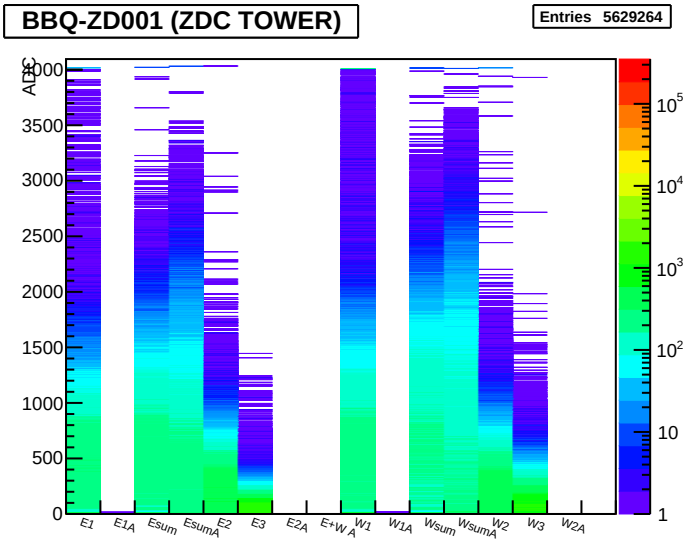

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 5629264
TAC
QT Input Channel

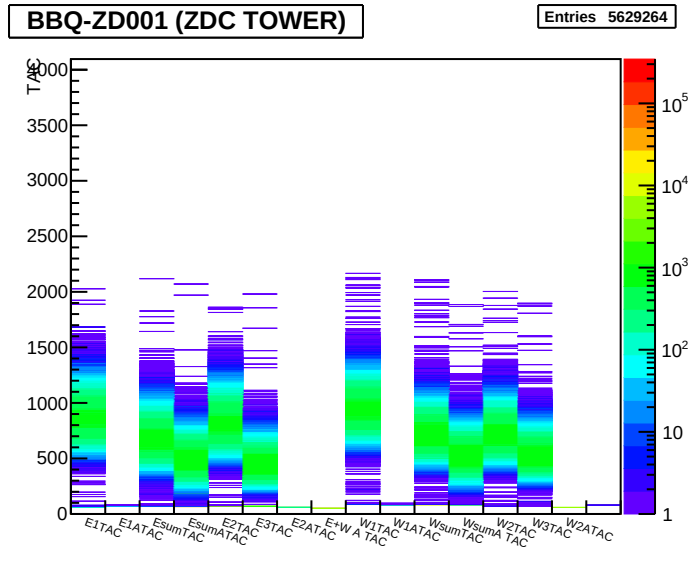

BBQ-VP001 East
Entries 5629264
ADC
QT Input Channel

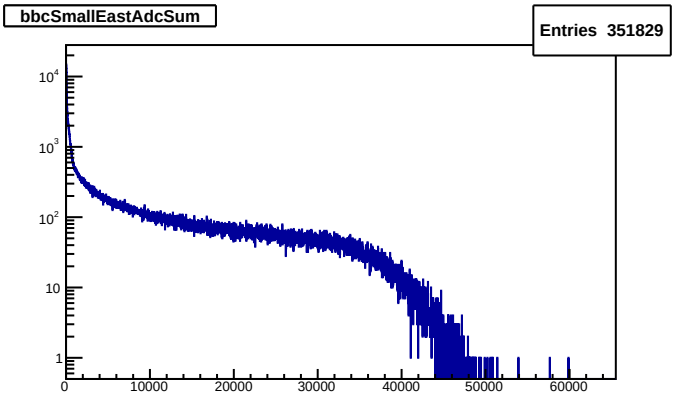

BBQ-VP001 East
Entries 5629264
TAC
QT Input Channel

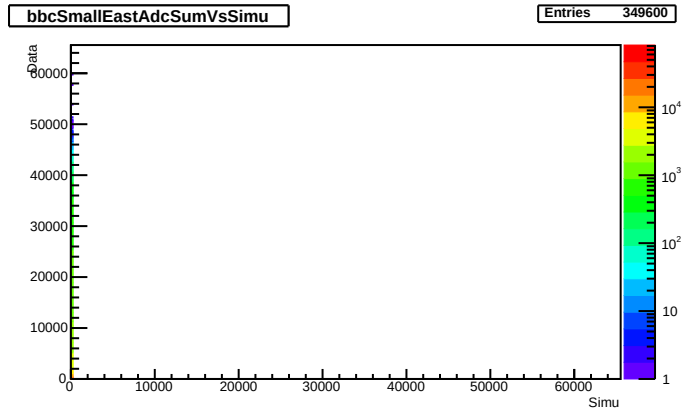

BBQ-VP002 West
Entries 5629264
ADC
QT Input Channel

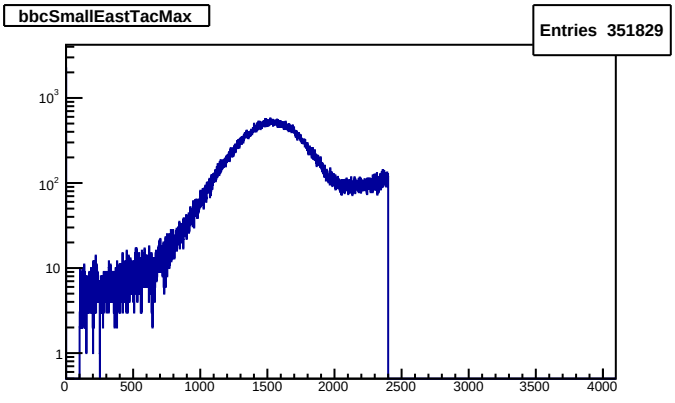

BBQ-VP002 West
Entries 5629264
TAC
QT Input Channel

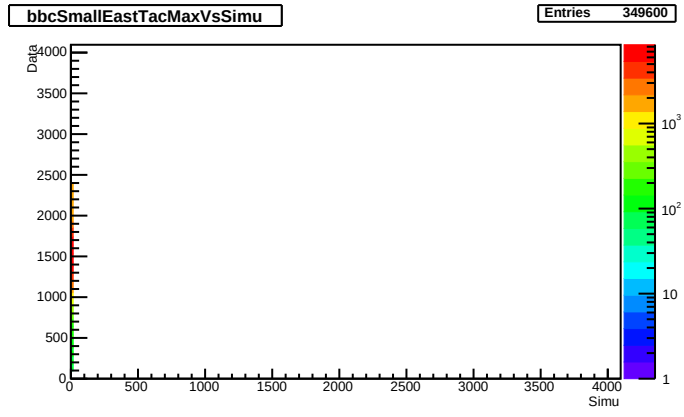

BBQ-ZD001 (ZDC TOWER)
Entries 5629264
ADC

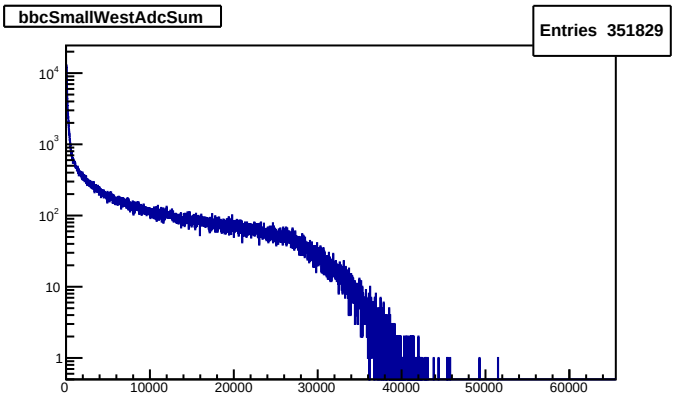

BBQ-ZD001 (ZDC TOWER)
Entries 5629264
TAC

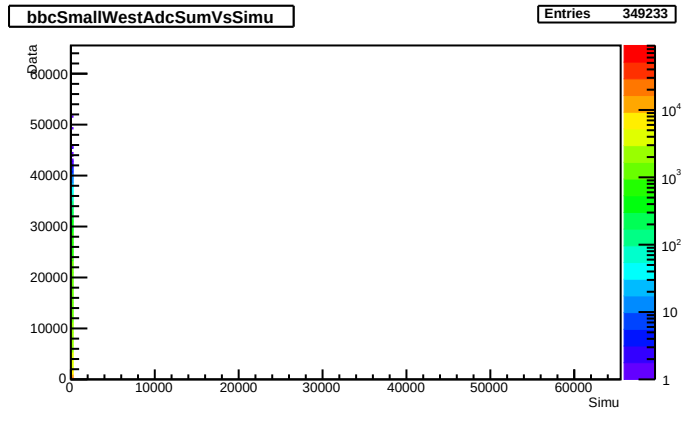

bbcSmallEastAdcSum
Entries 351829

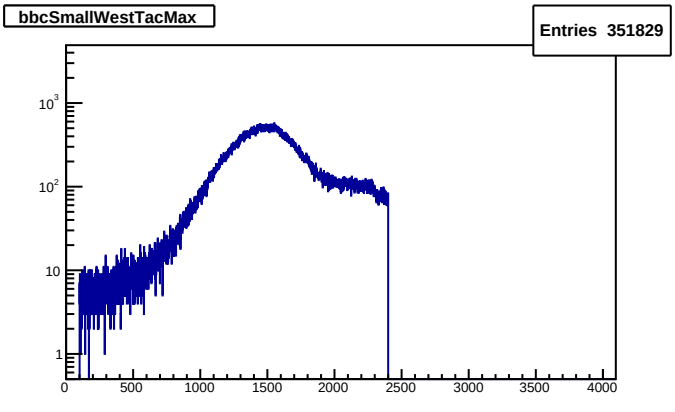

bbcSmallEastAdcSumVsSimu
Entries 349600
Data
Simu

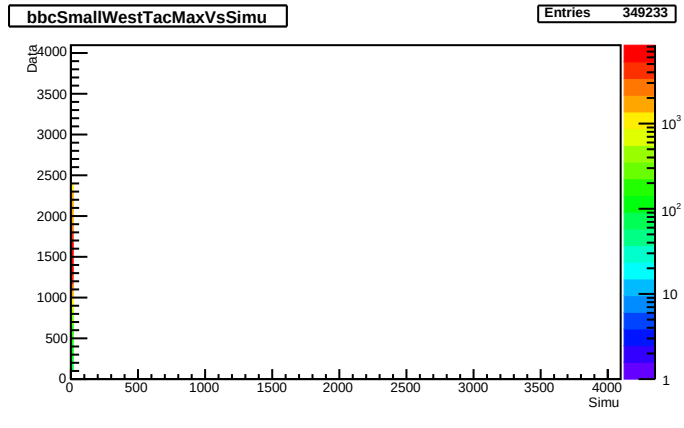

bbcSmallEastTacMax
Entries 351829

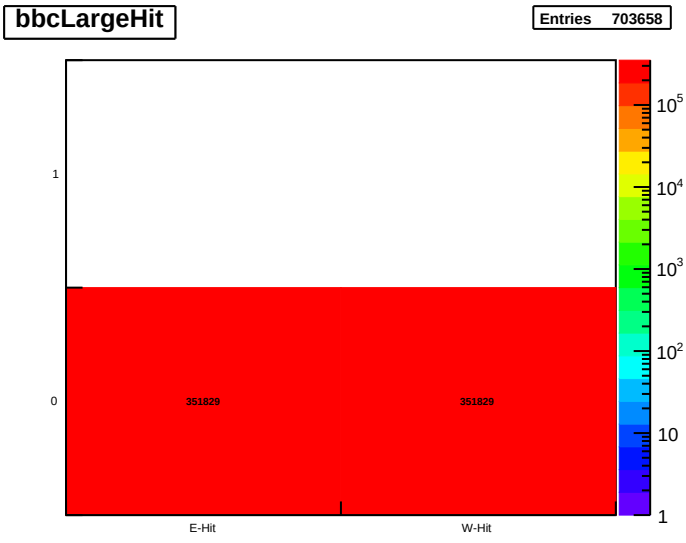

bbcSmallEastTacMaxVsSimu
Entries 349600
Data
Simu

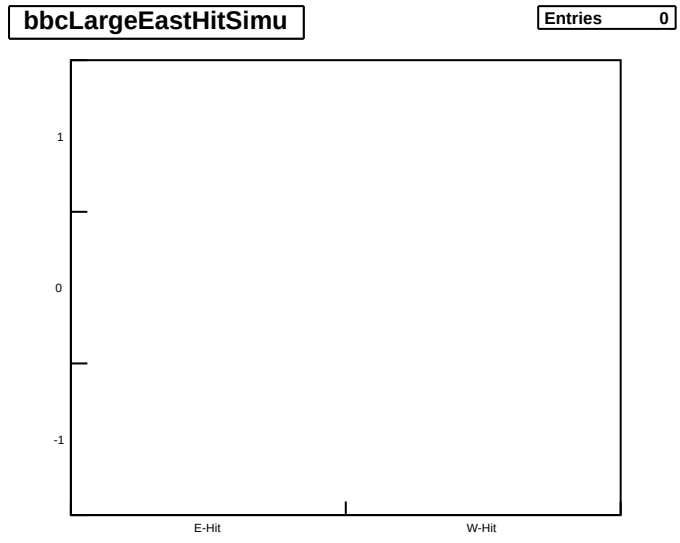

bbcSmallWestAdcSum
Entries 351829

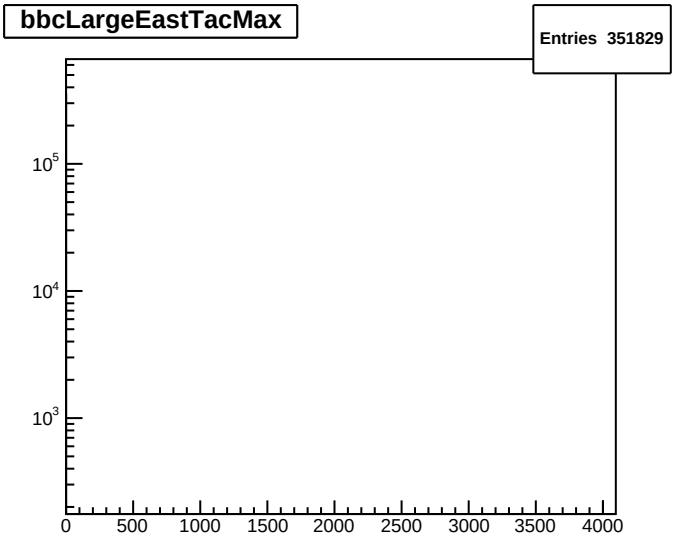

bbcSmallWestAdcSumVsSimu
Entries 349233
Data
Simu

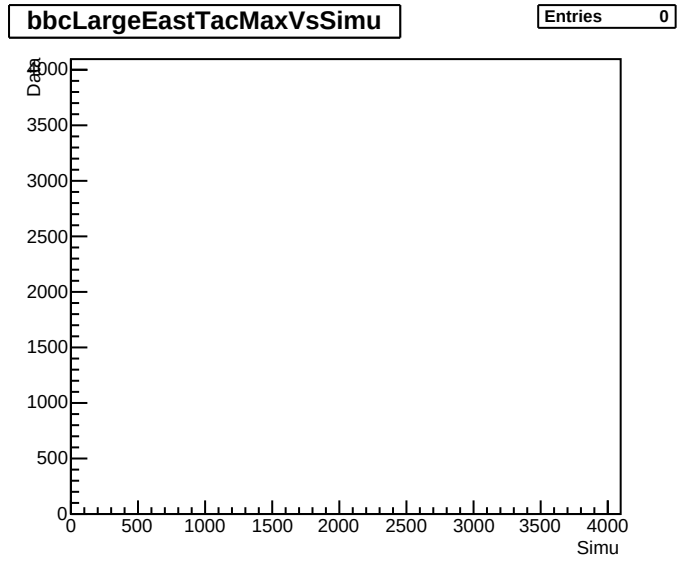

bbcSmallWestTacMax
Entries 351829

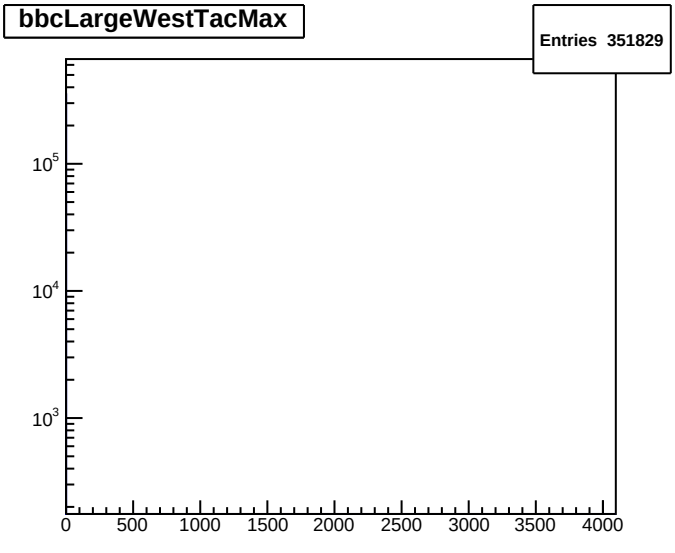

bbcSmallWestTacMaxVsSimu
Entries 349233
Data
Simu

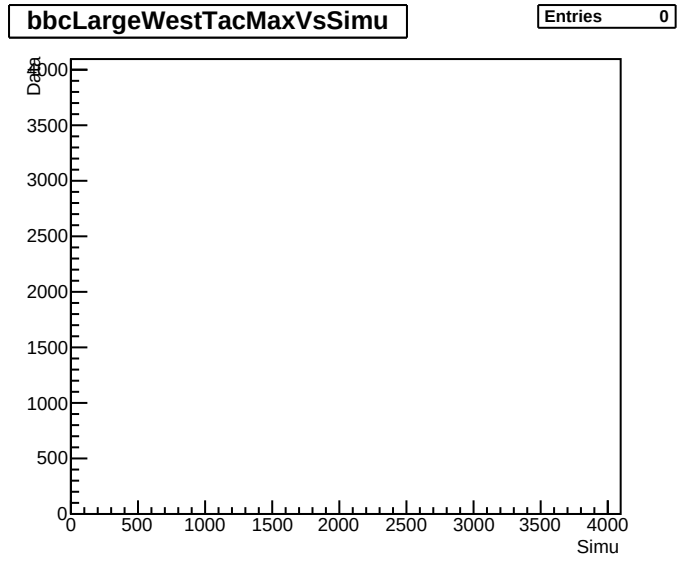

bbcLargeHit
Entries 703658
1
0
351829
351829
E-Hit
W-Hit
10^5
10^4
10^3
10^2
10
1

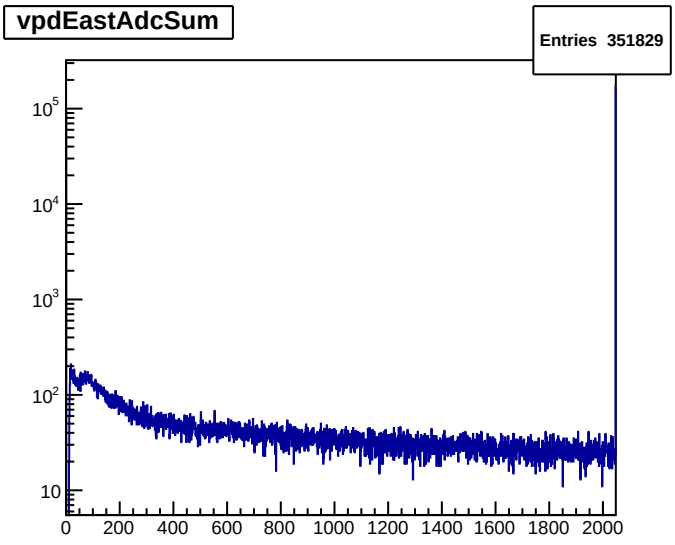

bbcLargeEastHitSimu
Entries 0
1
0
-1
E-Hit
W-Hit

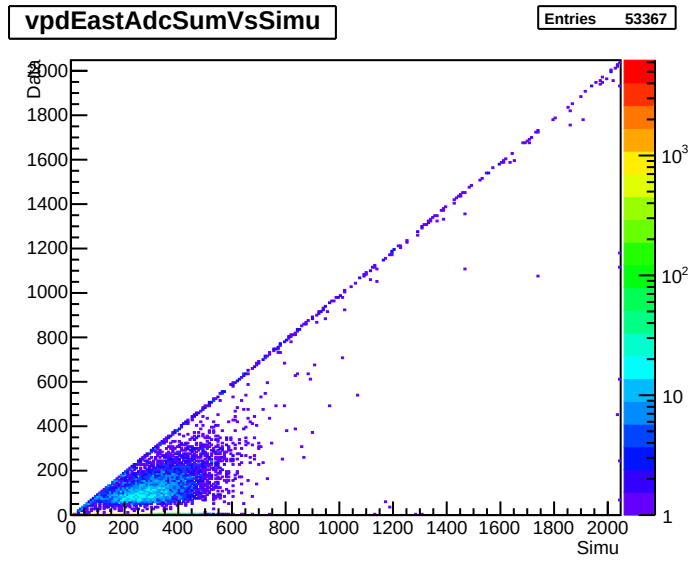

bbcLargeEastTacMax
Entries 351829
10^5
10^4
10^3
0
500
1000
1500
2000
2500
3000
3500
4000

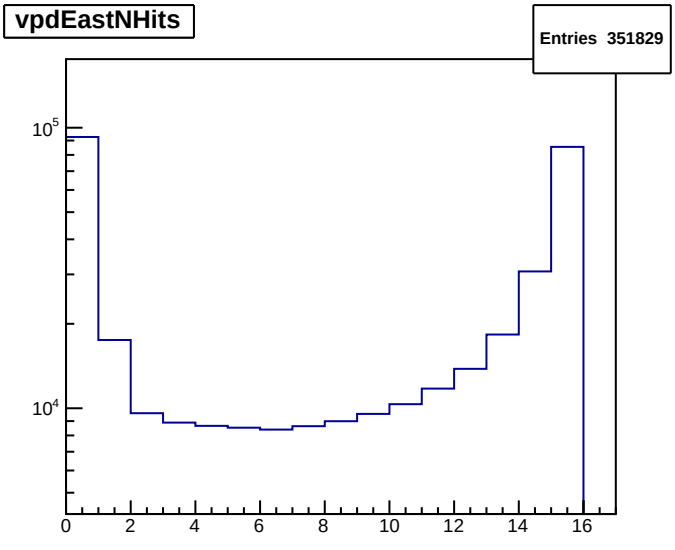

bbcLargeEastTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

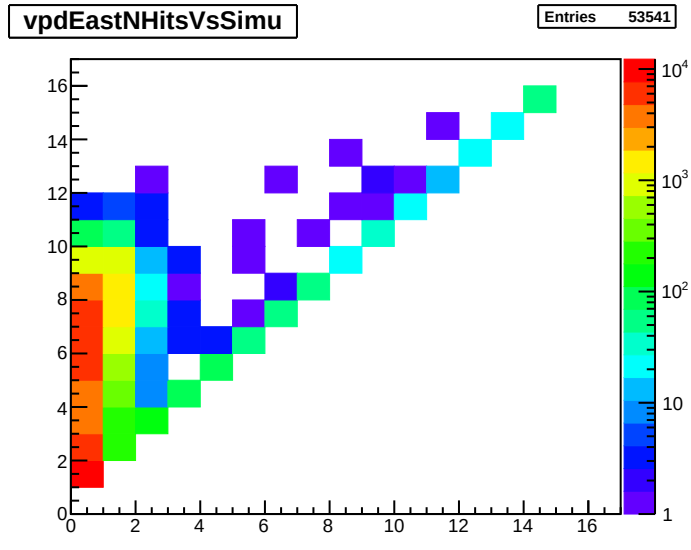

bbcLargeWestTacMax
Entries 351829
10^5
10^4
10^3
0
500
1000
1500
2000
2500
3000
3500
4000

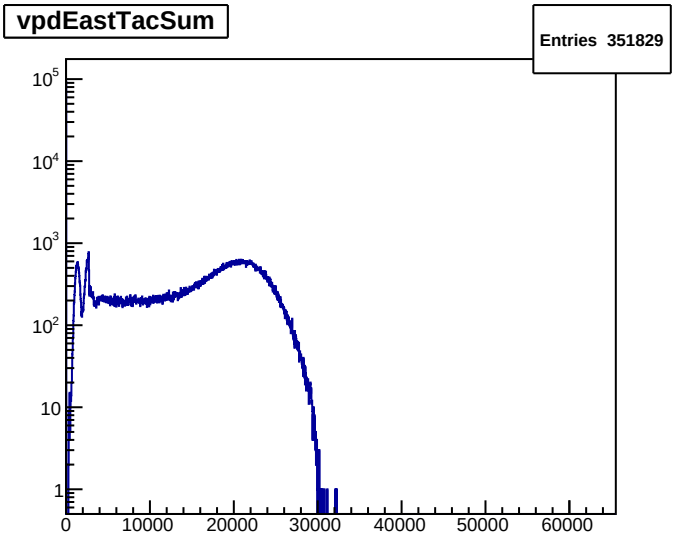

bbcLargeWestTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

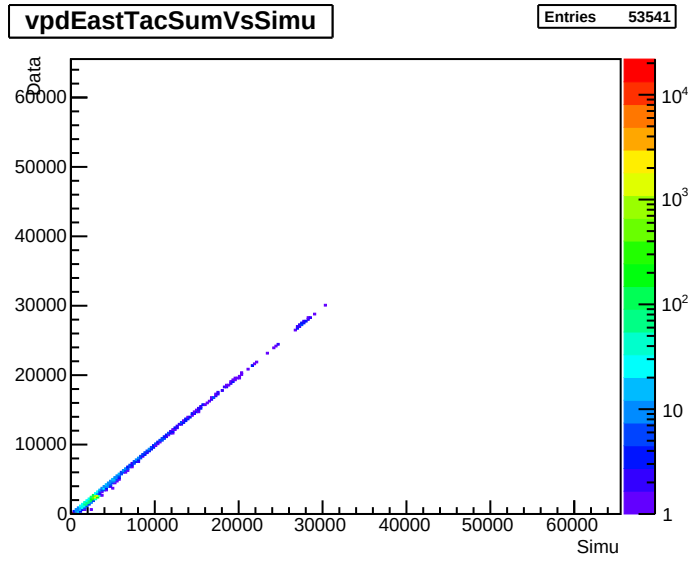

vpdEastAdcSum
Entries 351829

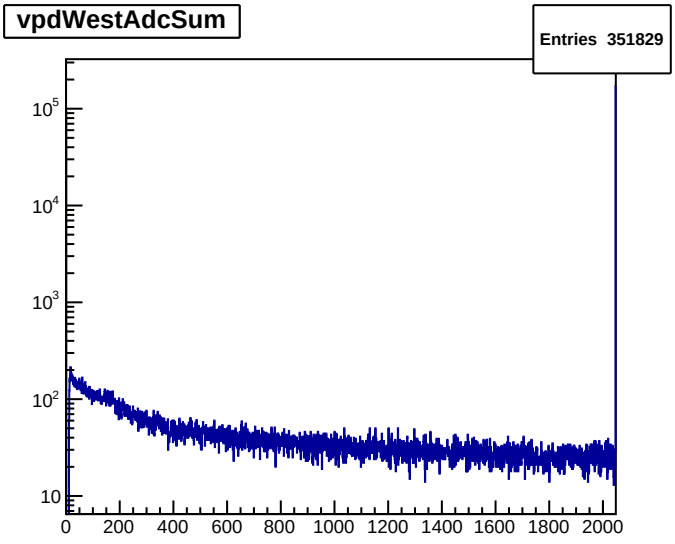

vpdEastAdcSumVsSimu
Entries 53367
Data
Simu

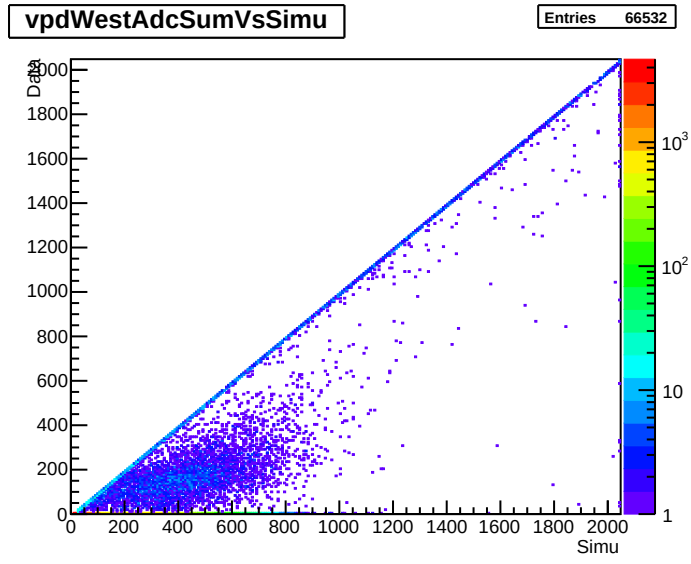

vpdEastNHits
Entries 351829

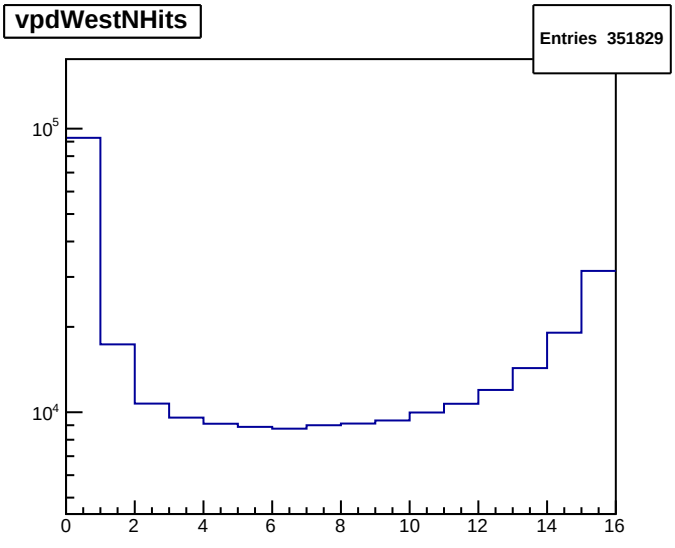

vpdEastNHitsVsSimu
Entries 53541

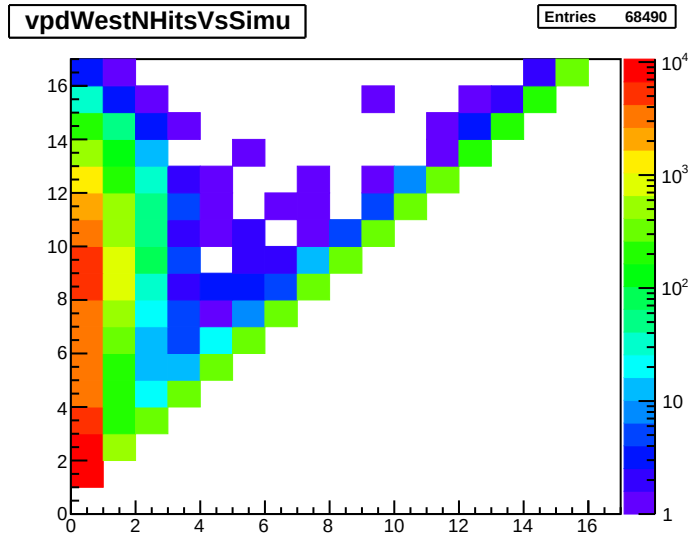

vpdEastTacSum
Entries 351829

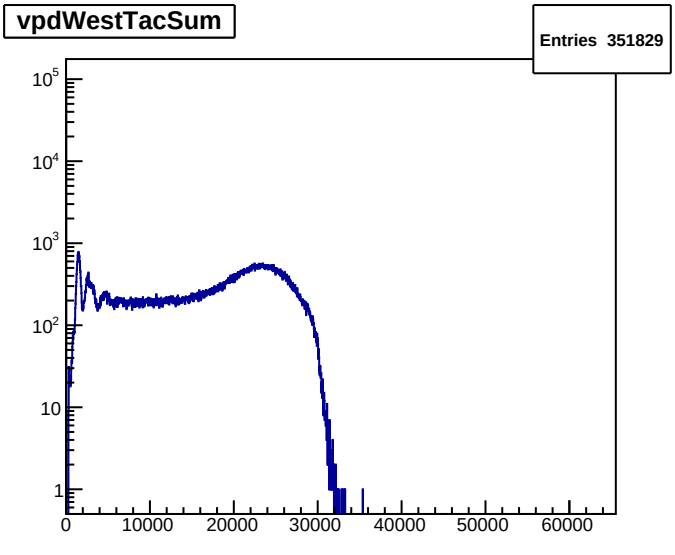

vpdEastTacSumVsSimu
Entries 53541
Data
Simu

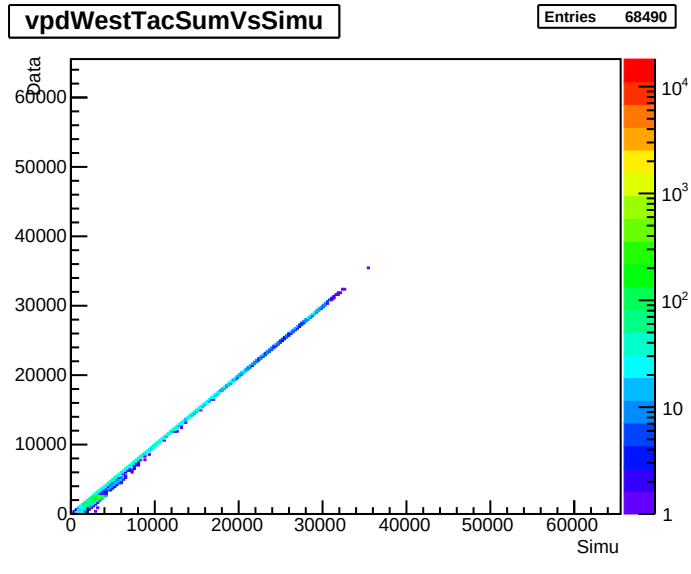

vpdWestAdcSum
Entries 351829

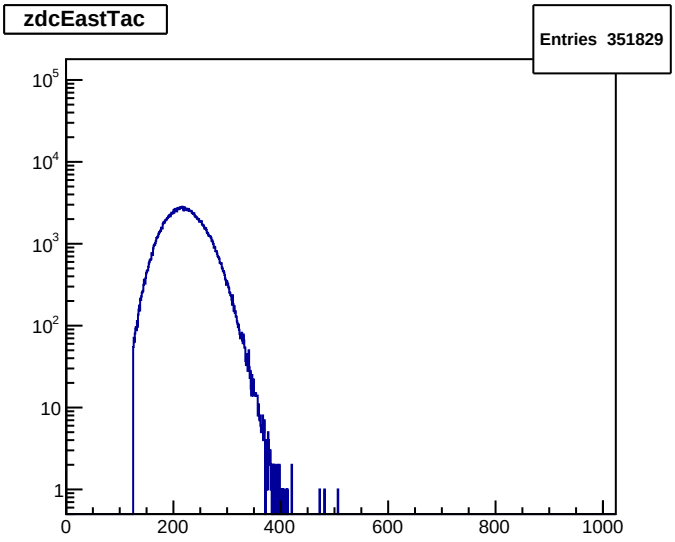

vpdWestAdcSumVsSimu
Entries 66532
Data
Simu

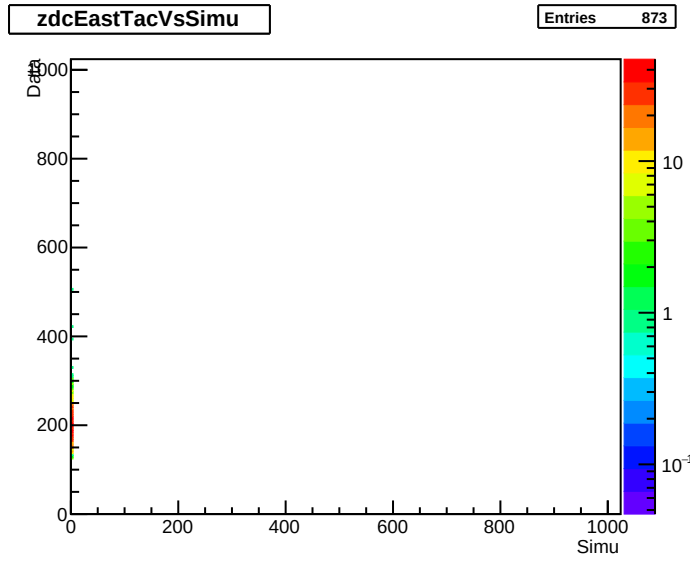

vpdWestNHits
Entries 351829

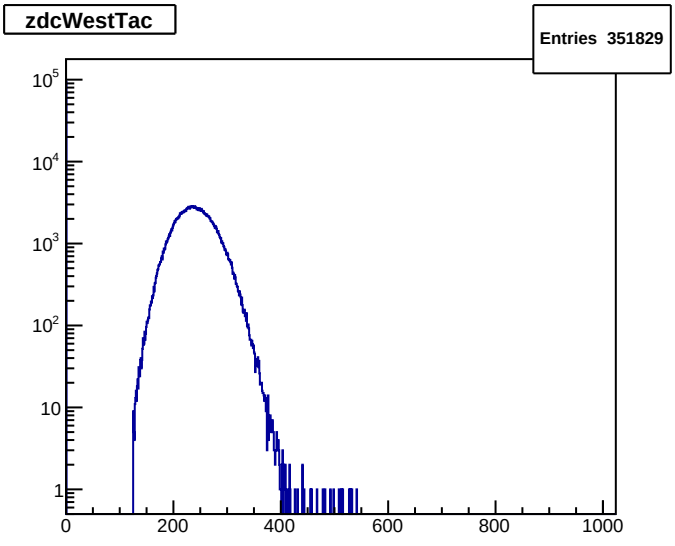

vpdWestNHitsVsSimu
Entries 68490

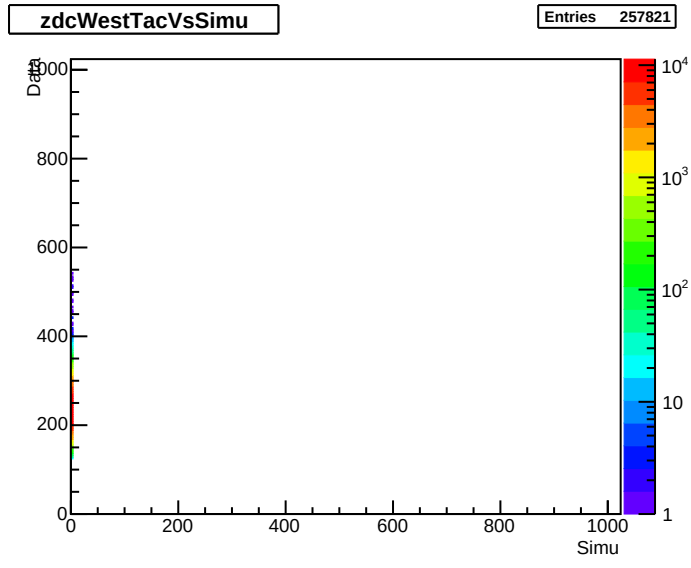

vpdWestTacSum
Entries 351829

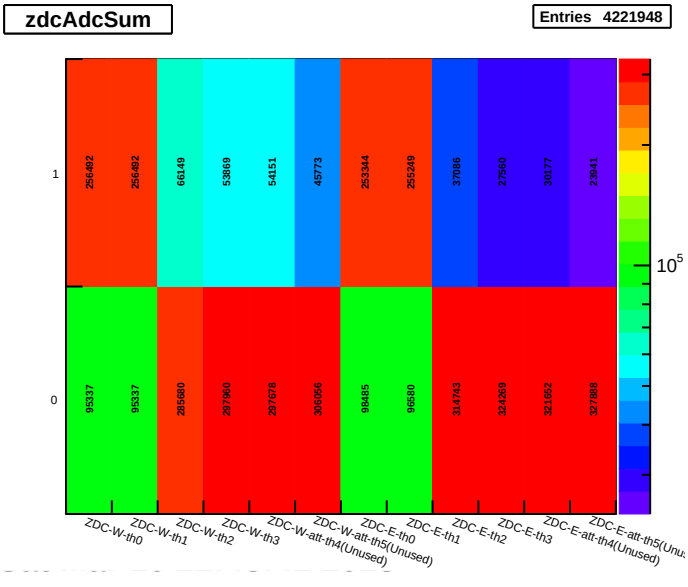

vpdWestTacSumVsSimu
Entries 68490
Data
Simu

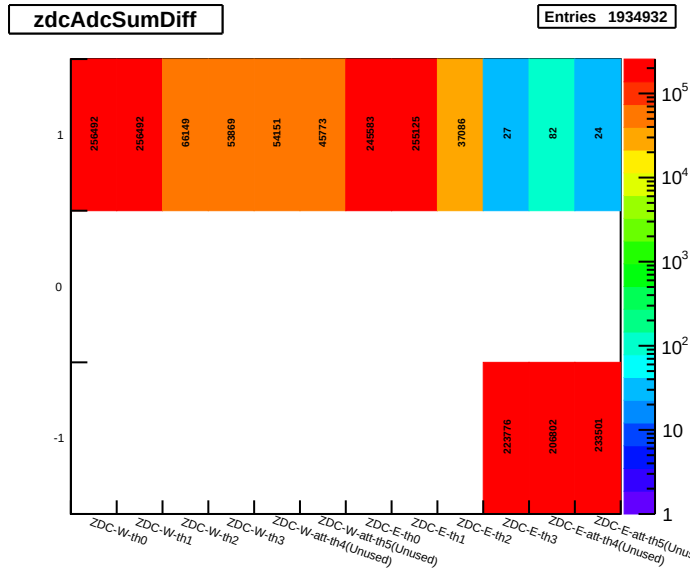

zdcEastTac
Entries 351829

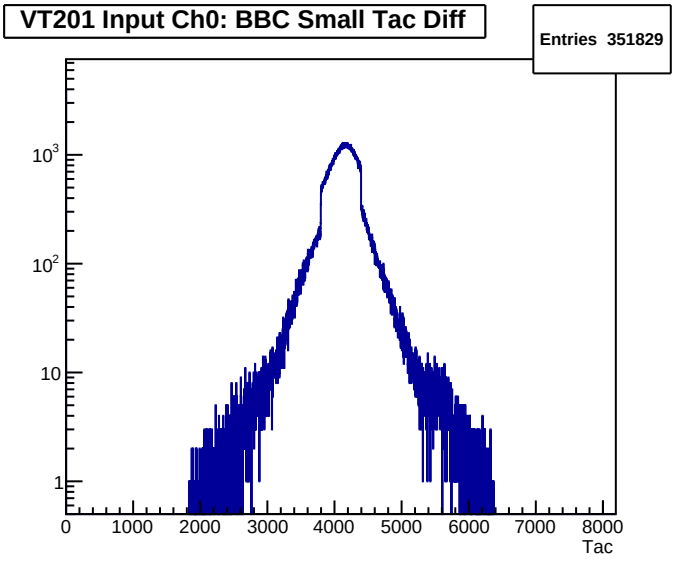

zdcEastTacVsSimu
Entries 873
Data
Simu

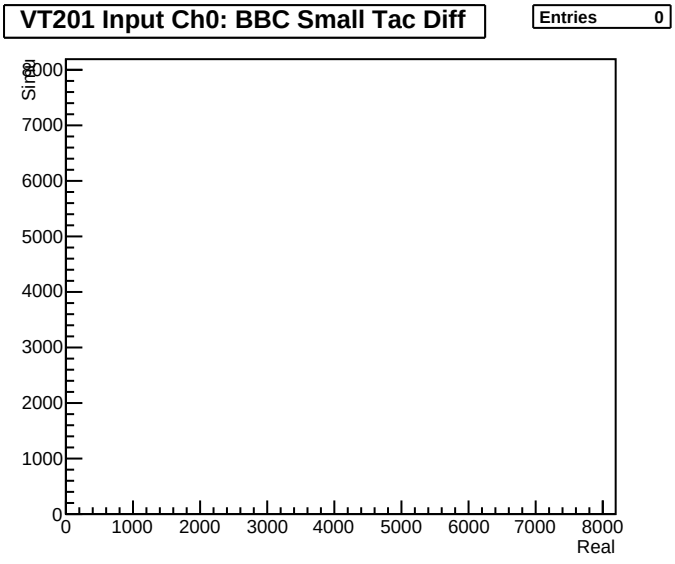

zdcWestTac
Entries 351829

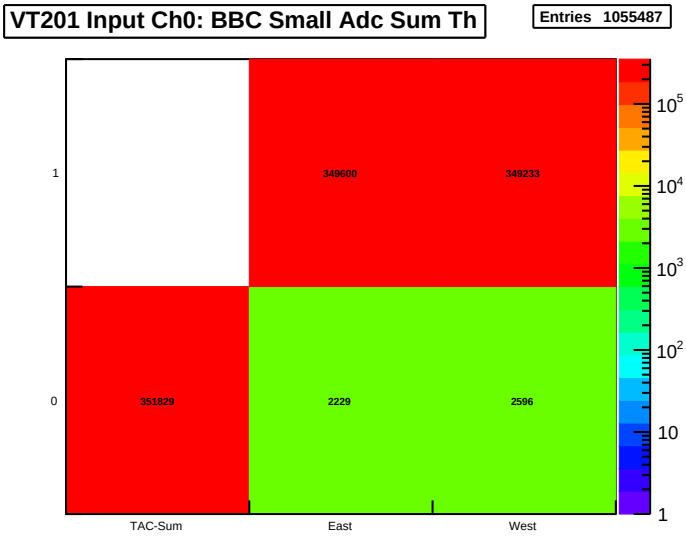

zdcWestTacVsSimu
Entries 257821
Data
Simu

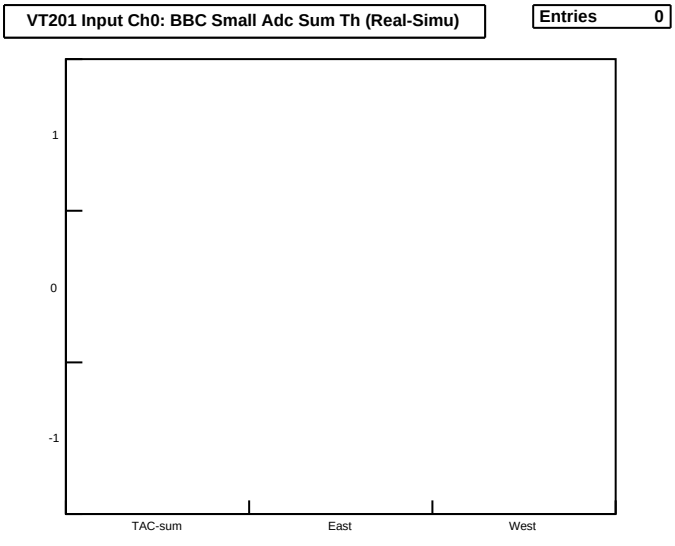

zdcAdcSum
Entries 4221948
256492
256492
66149
53869
54151
45773
253344
255249
37086
27560
30177
23941
95337
95337
285680
297960
297678
306056
99485
96580
314743
324269
321652
327888
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

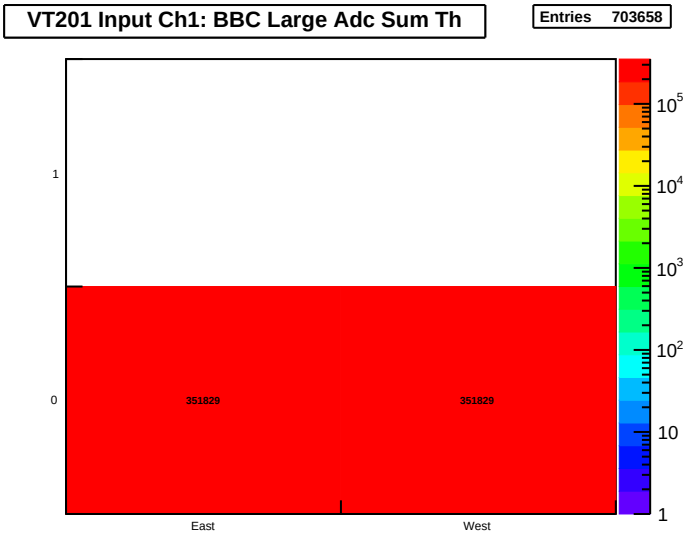

zdcAdcSumDiff
Entries 1934932
256492
256492
66149
53869
54151
45773
245583
255125
37086
27
82
24
223776
206802
233501
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

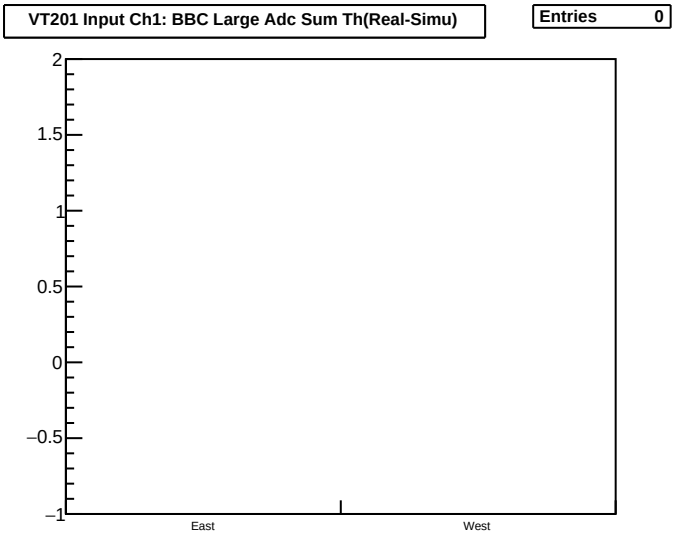

VT201 Input Ch0: BBC Small Tac Diff
Entries 351829
Tac


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

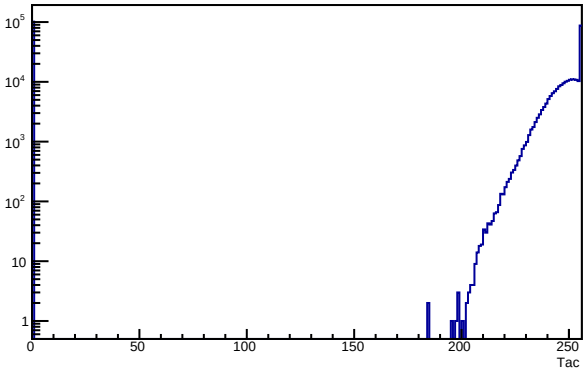

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 1055487
349600
349233
351829
2229
2596
TAC-Sum
East
West


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

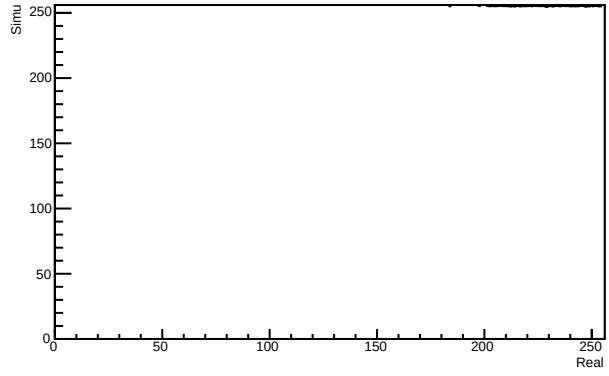

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 703658
351829
351829
East
West


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

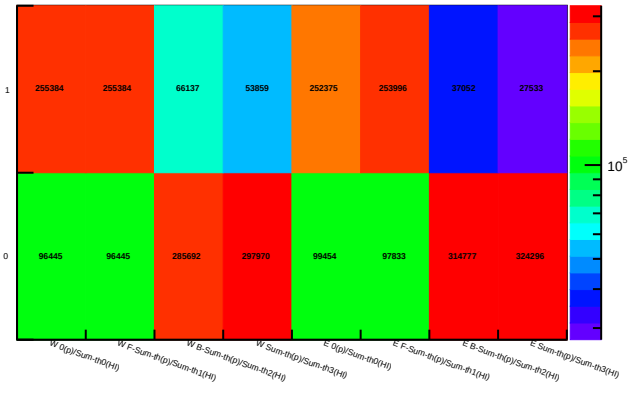
VT201 Input Ch2: ZDC Tac Diff



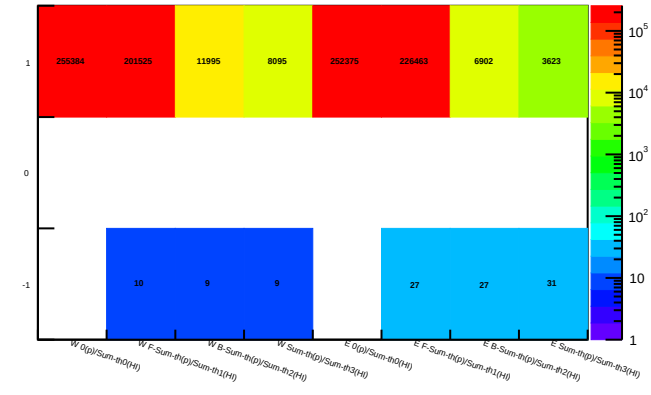
VT201 Input Ch2: ZDC Tac Diff



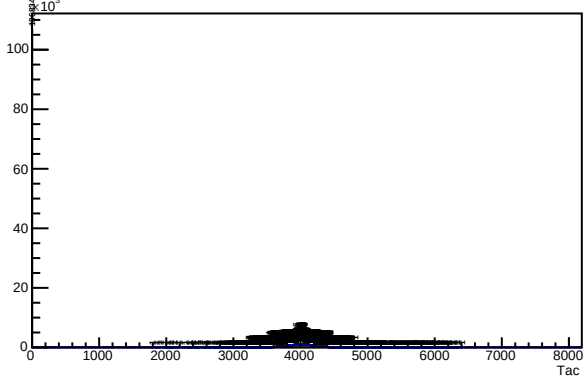
VT201 Input Ch2: ZDC Adc Sum Th



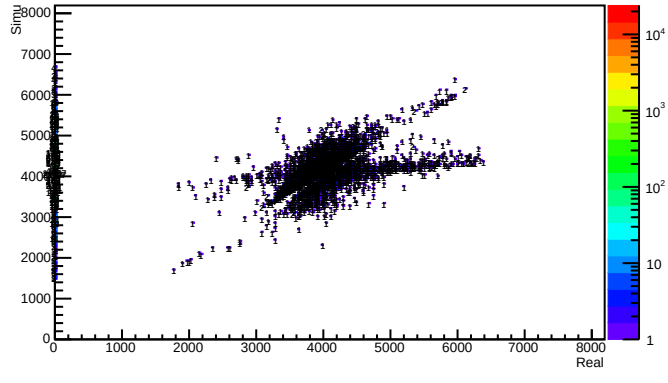
VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)



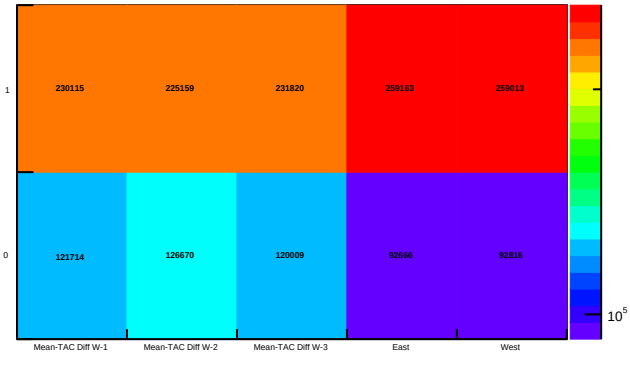
VT201 Input Ch4: VPD Tac Diff



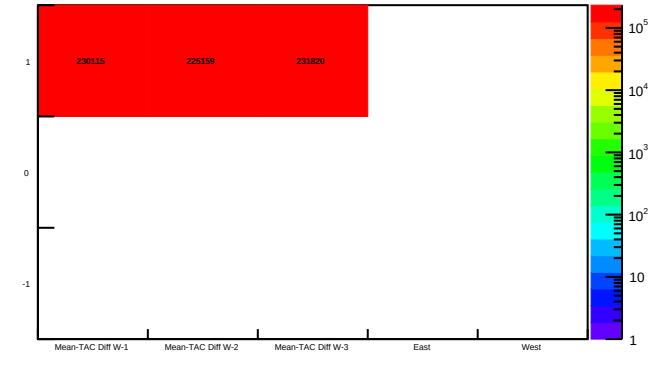
VT201 Input Ch4: VPD Tac Diff

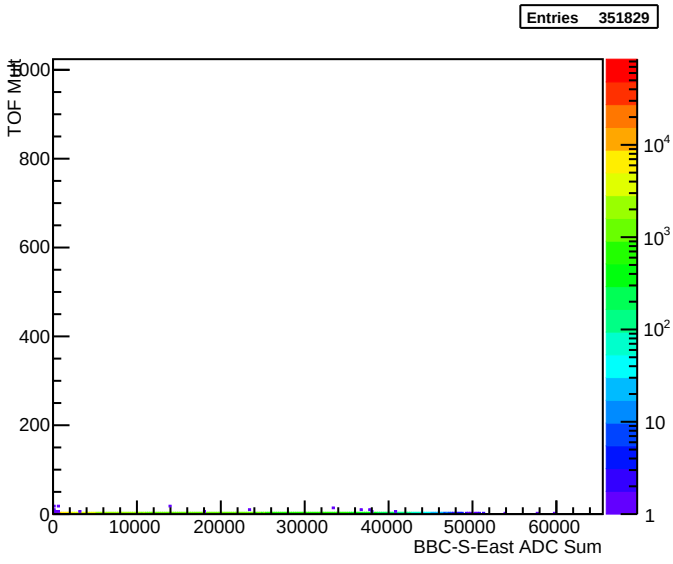


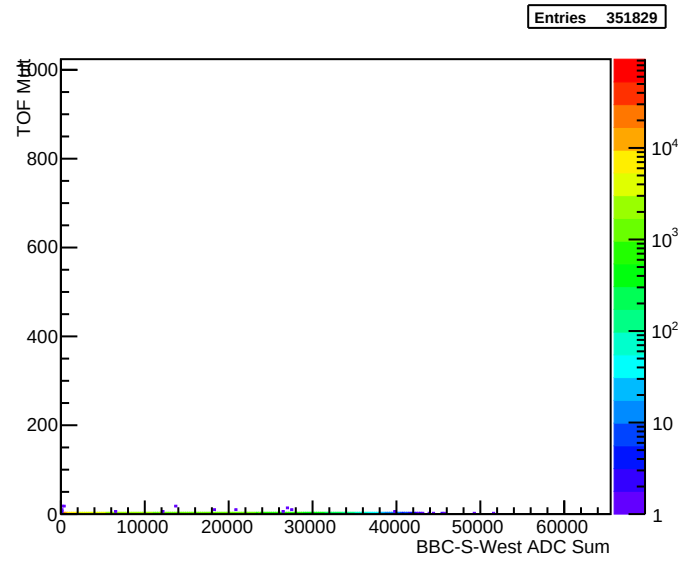
VT201 Input Ch4: VPD Adc Sum Th

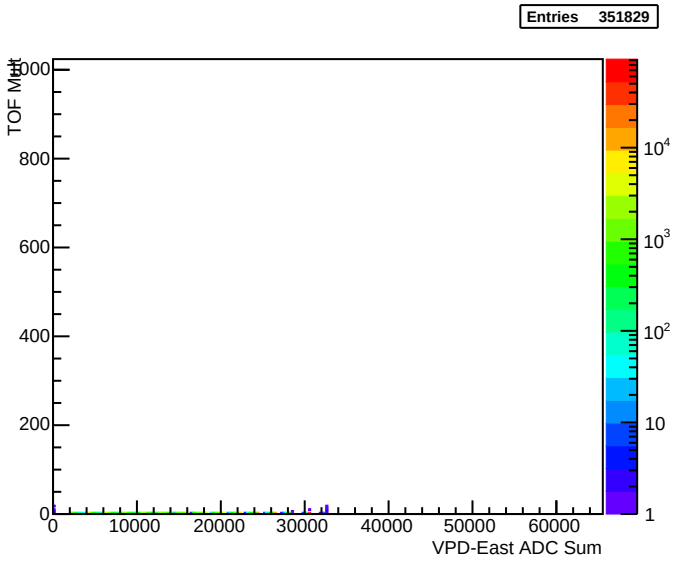


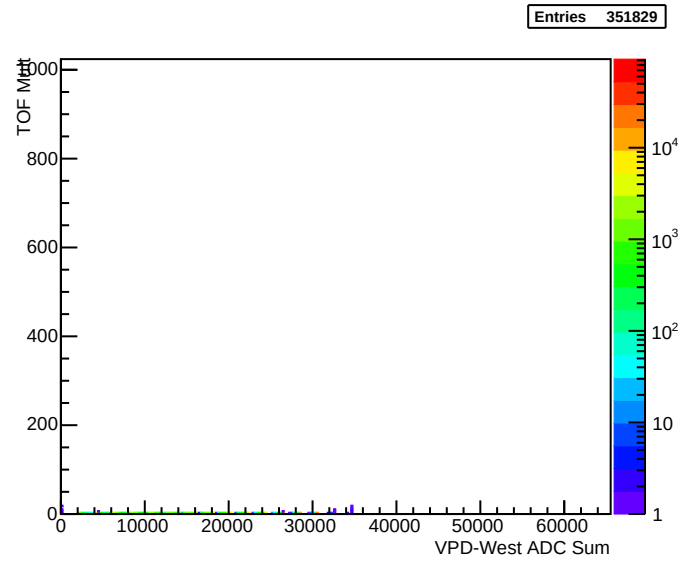
VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)

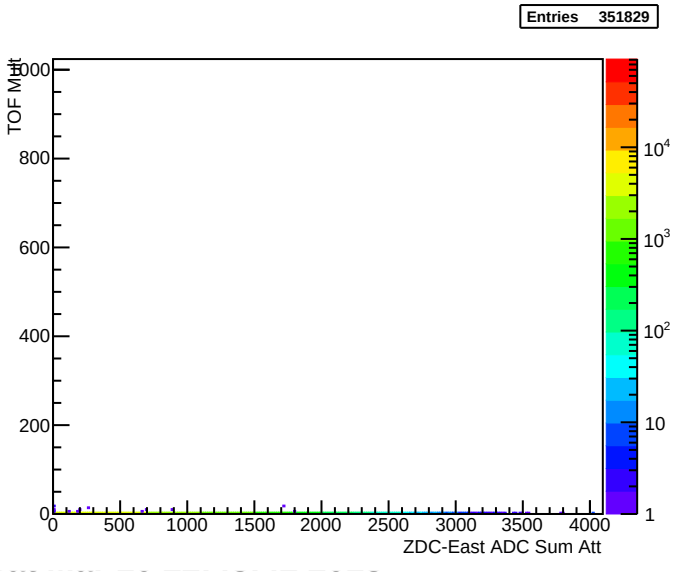


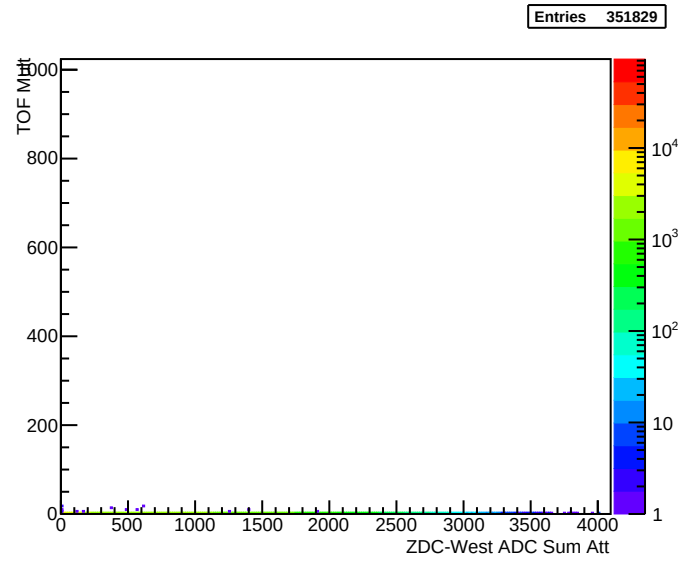

Entries 351829
TOF Mult
BBC-S-East ADC Sum

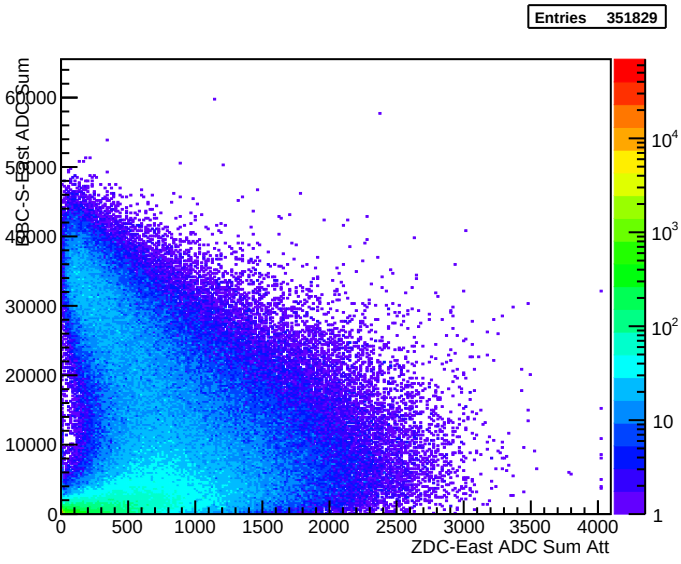

Entries 351829
TOF Mult
BBC-S-West ADC Sum

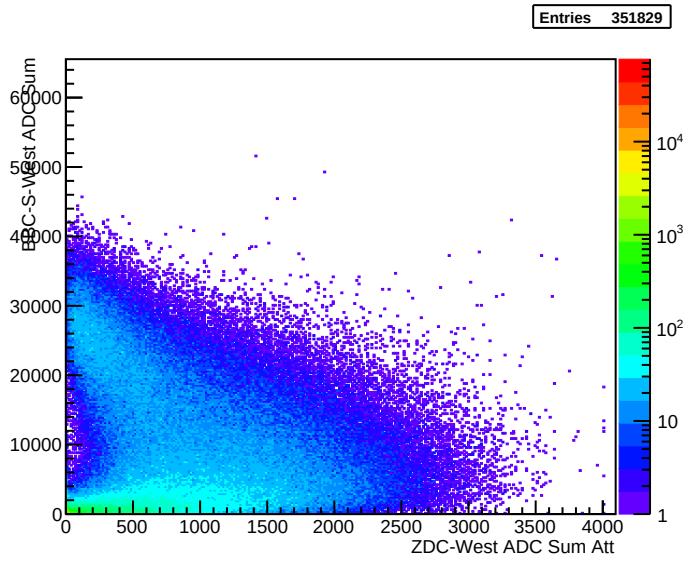

Entries 351829
TOF Mult
VPD-East ADC Sum

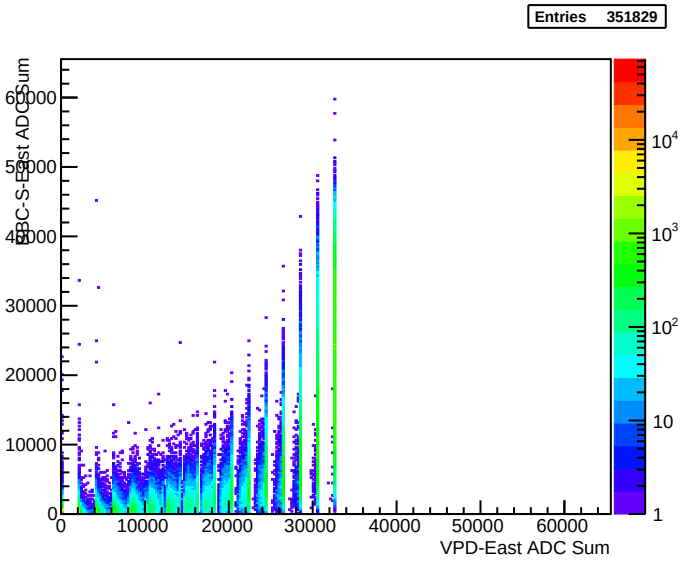

Entries 351829
TOF Mult
VPD-West ADC Sum

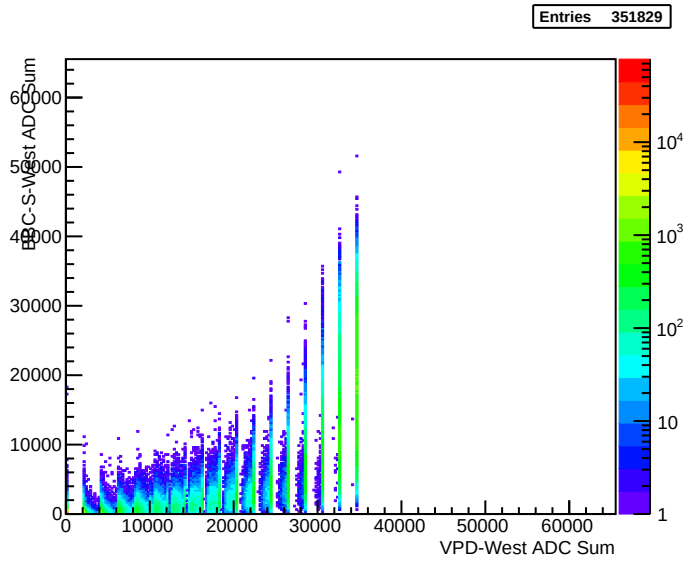

Entries 351829
TOF Mult
ZDC-East ADC Sum Att

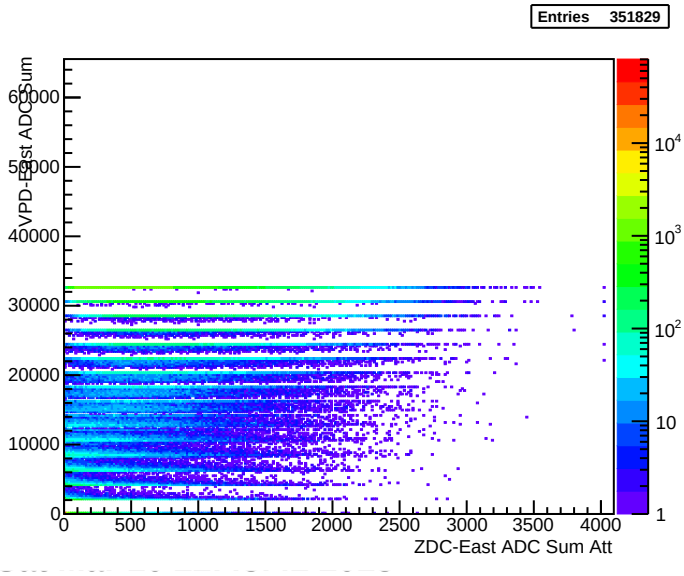

Entries 351829
TOF Mult
ZDC-West ADC Sum Att

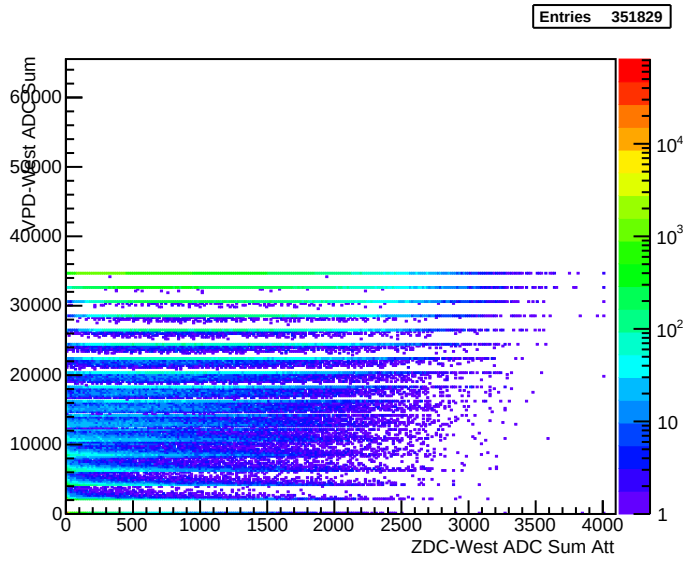

Entries 351829
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

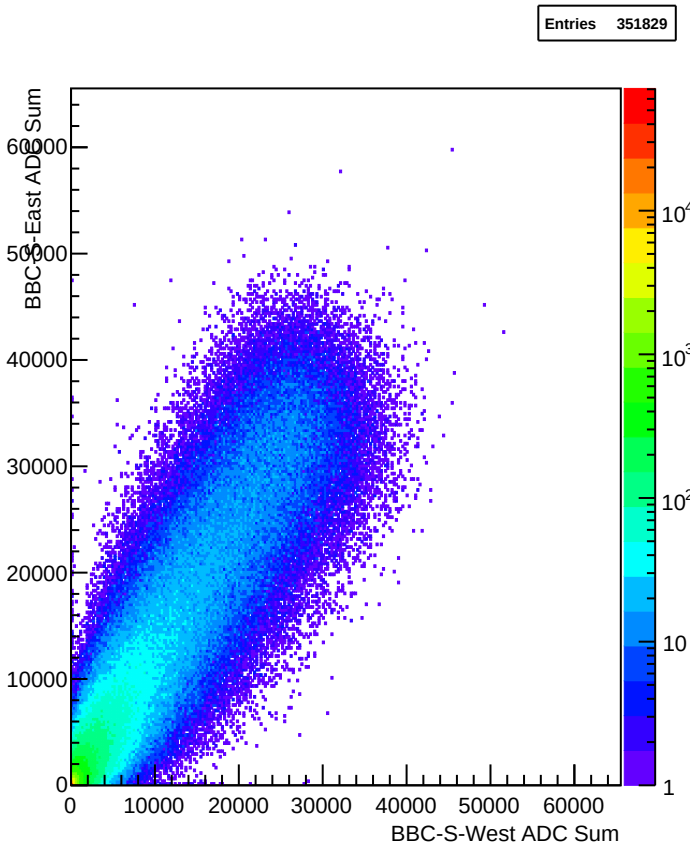

Entries 351829
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

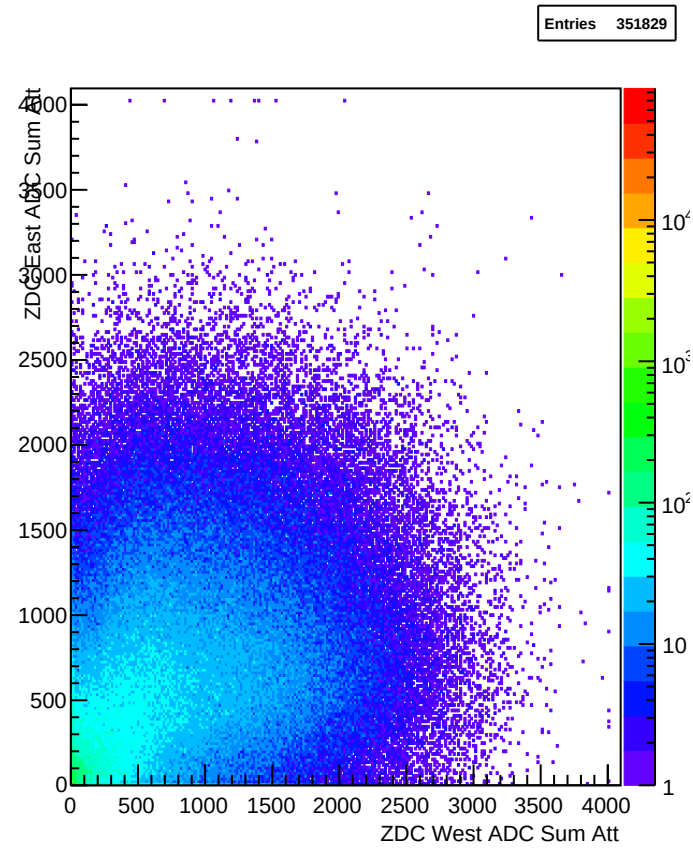

Entries 351829
BBC-S-East ADC Sum
VPD-East ADC Sum

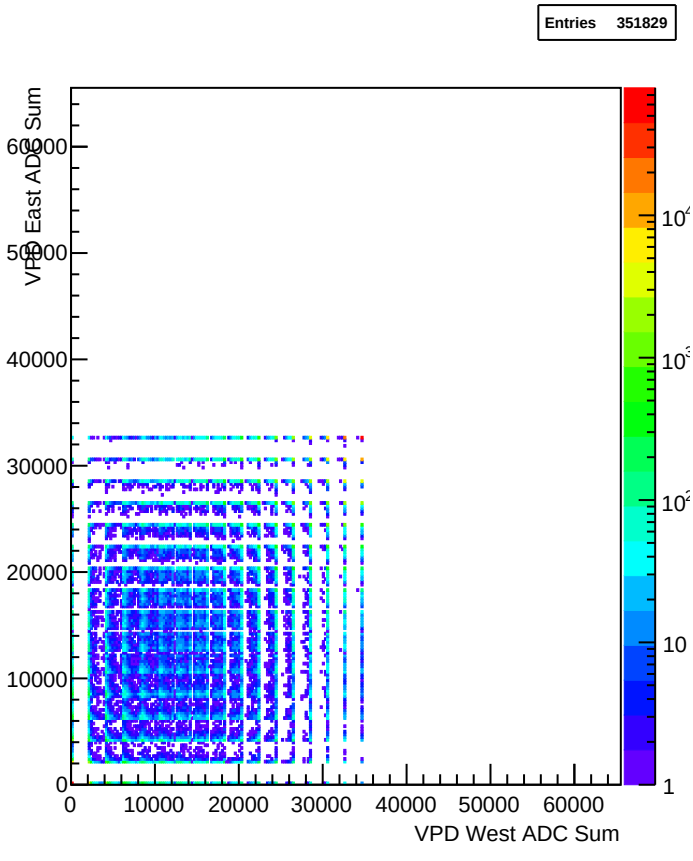

Entries 351829
BBC-S-West ADC Sum
VPD-West ADC Sum

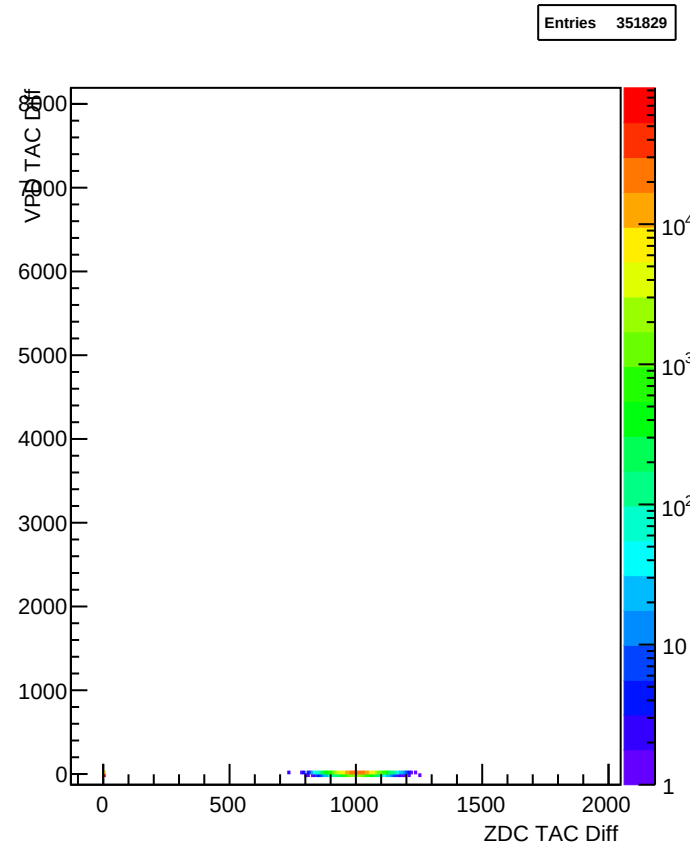

Entries 351829
VPD-East ADC Sum
ZDC-East ADC Sum Att

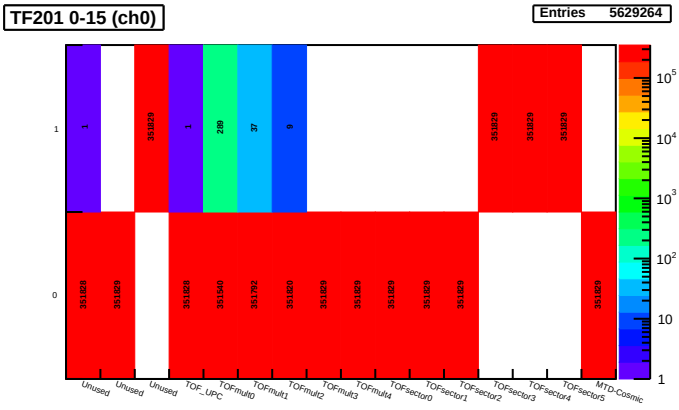

Entries 351829
VPD-West ADC Sum
ZDC-West ADC Sum Att

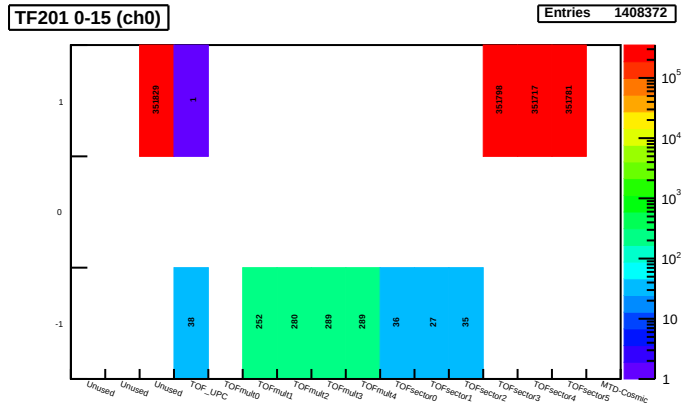

Entries 351829
BBC-S-East ADC Sum
BBC-S-West ADC Sum

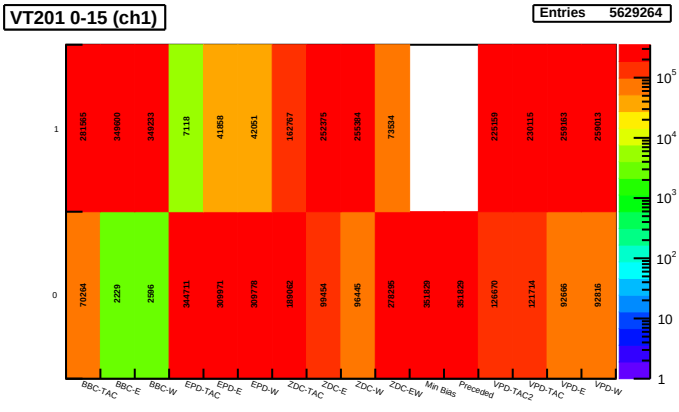

Entries 351829
ZDC East ADC Sum Att
ZDC West ADC Sum Att

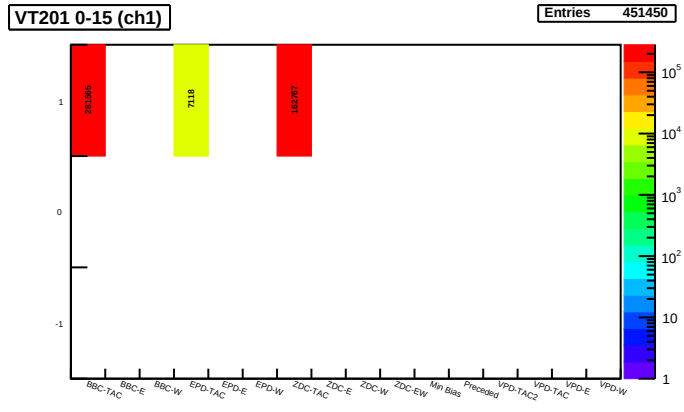

Entries 351829
VPD East ADC Sum
VPD West ADC Sum

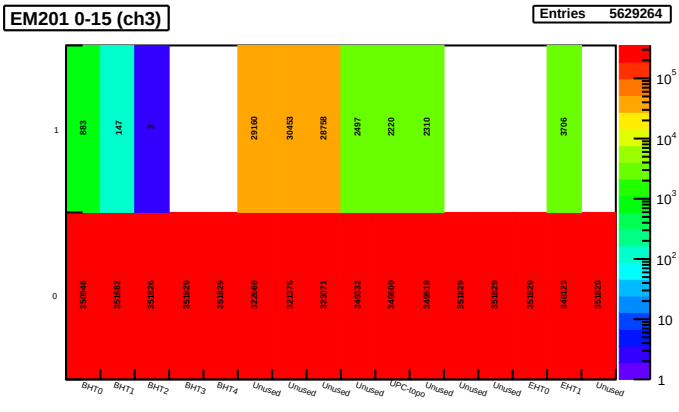

Entries 351829
VPD TAC Diff
ZDC TAC Diff

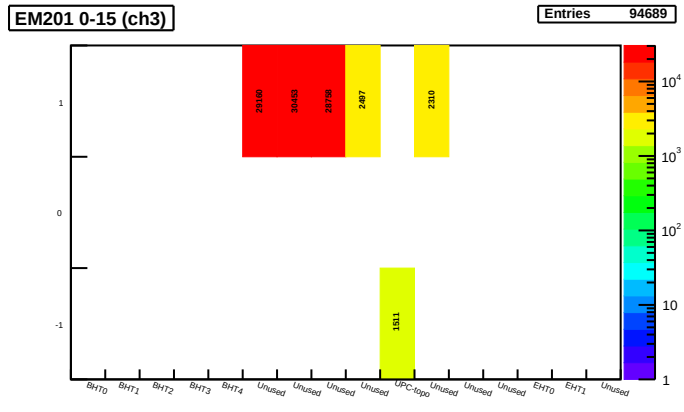

TF201 0-15 (ch0)
Entries 5629264
1 351829 1 289 37 9 351829 351829 351829
0 351829 351829 351828 351540 351792 351820 351829 351829 351829 351829 351829 351829
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic
1 10 10^2 10^3 10^4 10^5

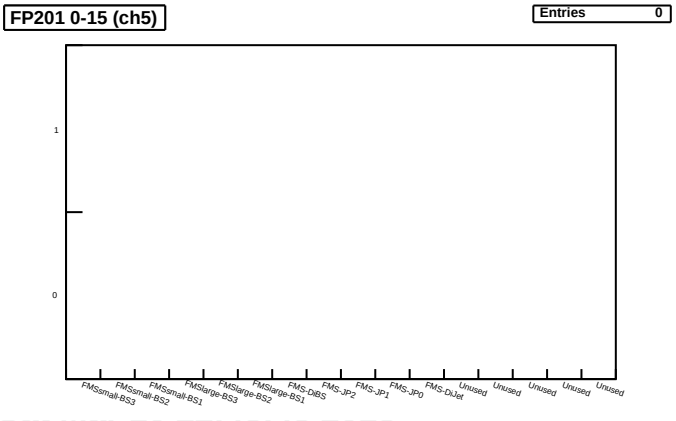

TF201 0-15 (ch0)
Entries 1408372
1 351829 1 351798 351717 351701
0 38 252 280 289 289 36 27 35
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic
1 10 10^2 10^3 10^4 10^5

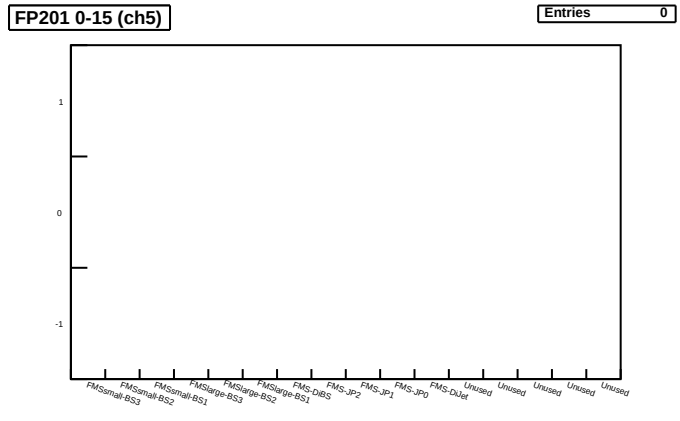

VT201 0-15 (ch1)
Entries 5629264
1 281565 349600 349233 7118 41858 42061 162767 252375 255384 73534 225159 230115 259163 259013
0 70284 2229 2996 344711 309971 309778 189062 99454 96445 278295 351829 351829 126670 121714 92666 92816
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W
1 10 10^2 10^3 10^4 10^5


VT201 0-15 (ch1)
Entries 451450
1 281565 7118 162767
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
1 10 10^2 10^3 10^4 10^5


EM201 0-15 (ch3)
Entries 5629264
1 883 147 3 29160 30453 28758 2497 2220 2310 3706
0 350946 351682 351826 351829 351829 322669 321376 323071 348332 348609 348519 351829 351829 351829 348123 351829
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused
1 10 10^2 10^3 10^4 10^5


EM201 0-15 (ch3)
Entries 94689
1 29160 30453 28758 2497 2310
0 1511
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused
1 10 10^2 10^3 10^4


FP201 0-15 (ch5)
Entries 0
1
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
1
0
-1
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