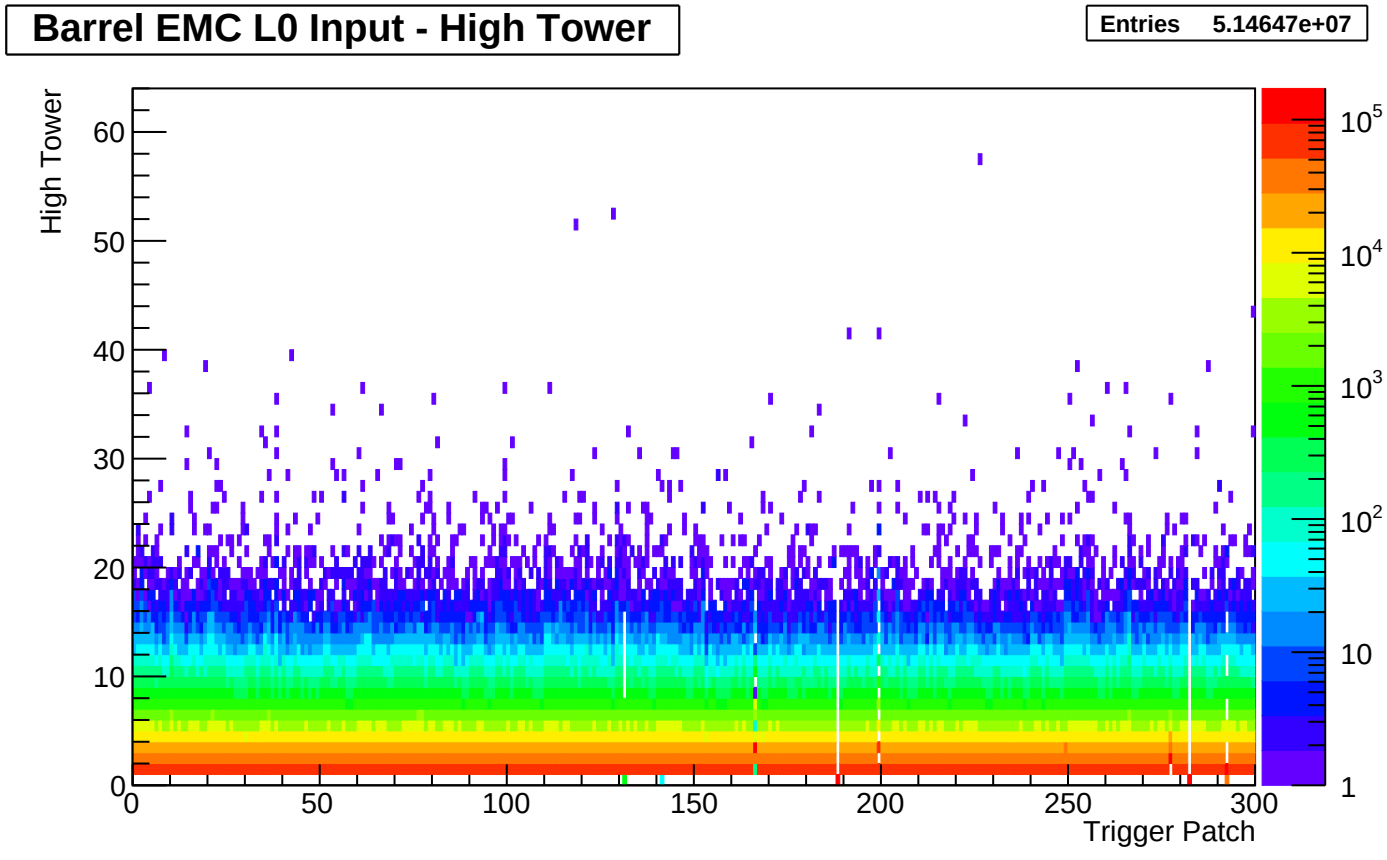
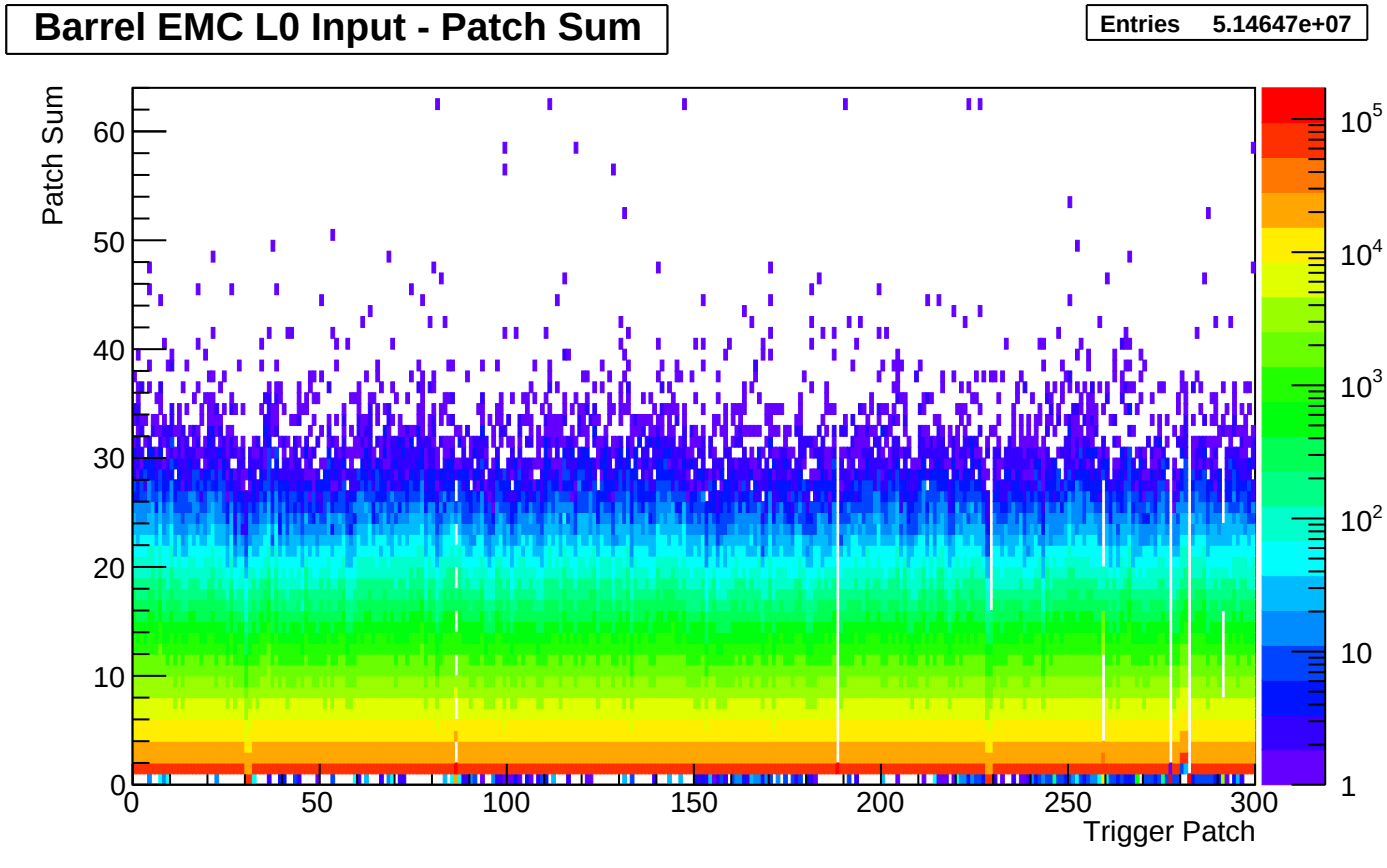
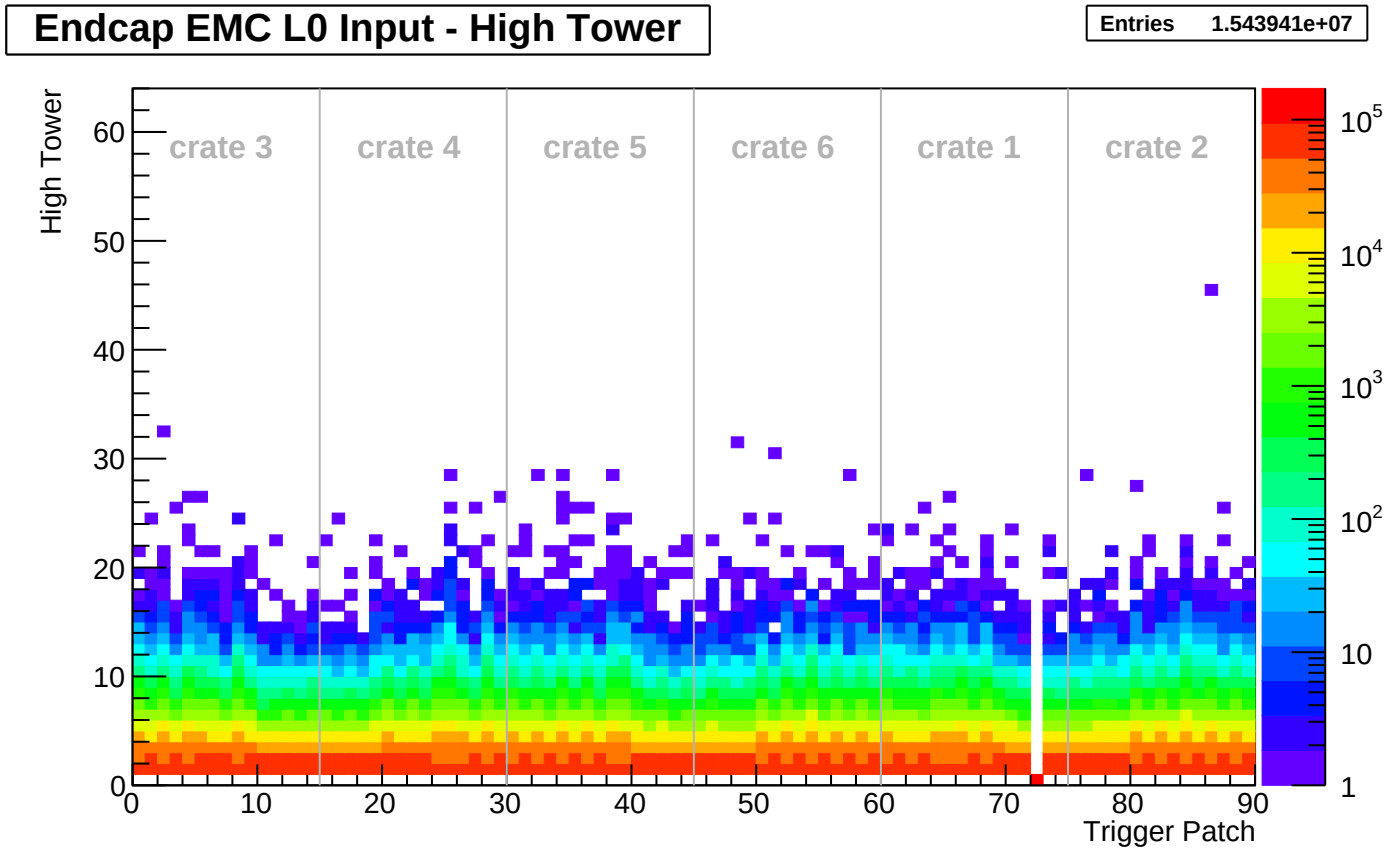
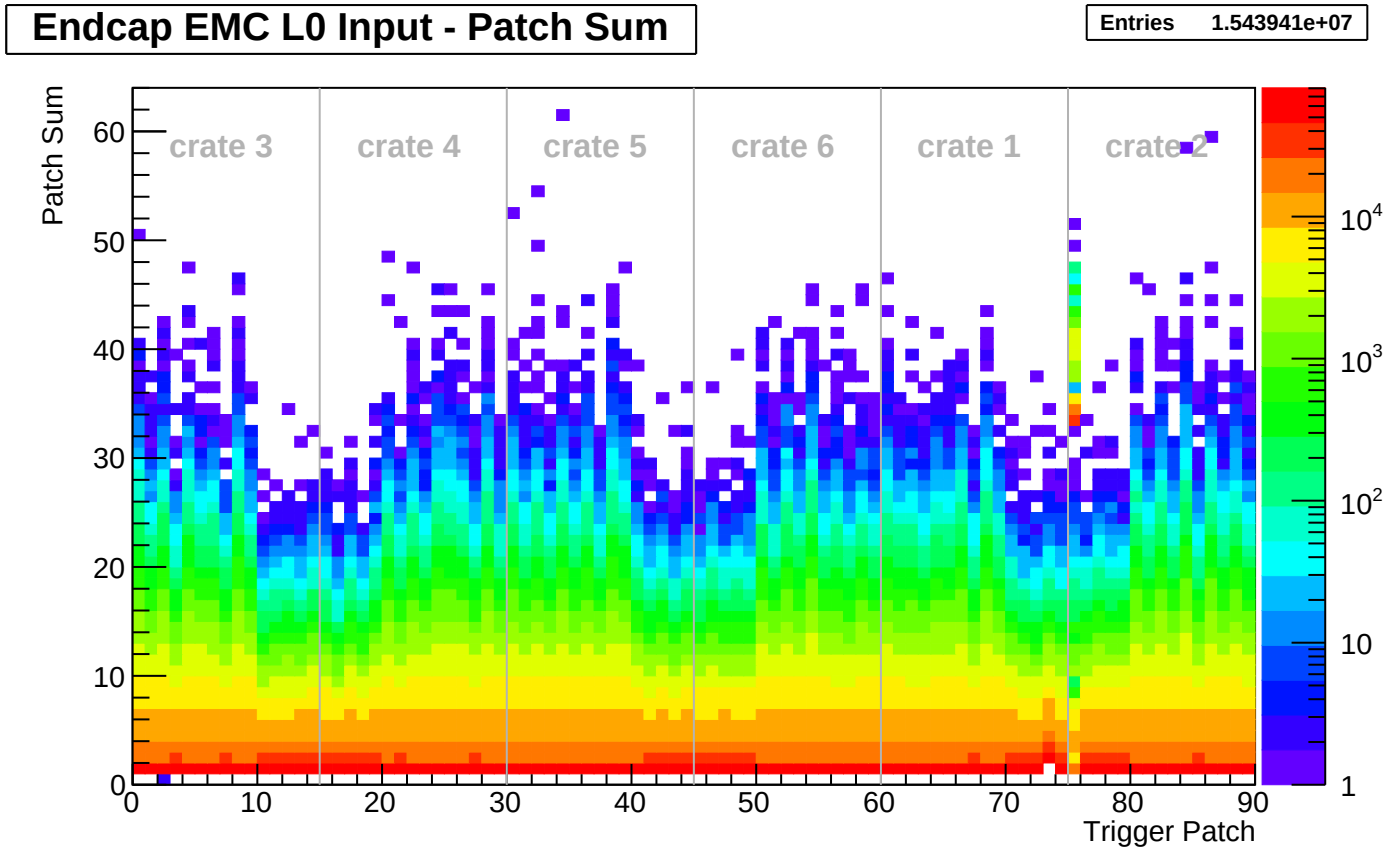
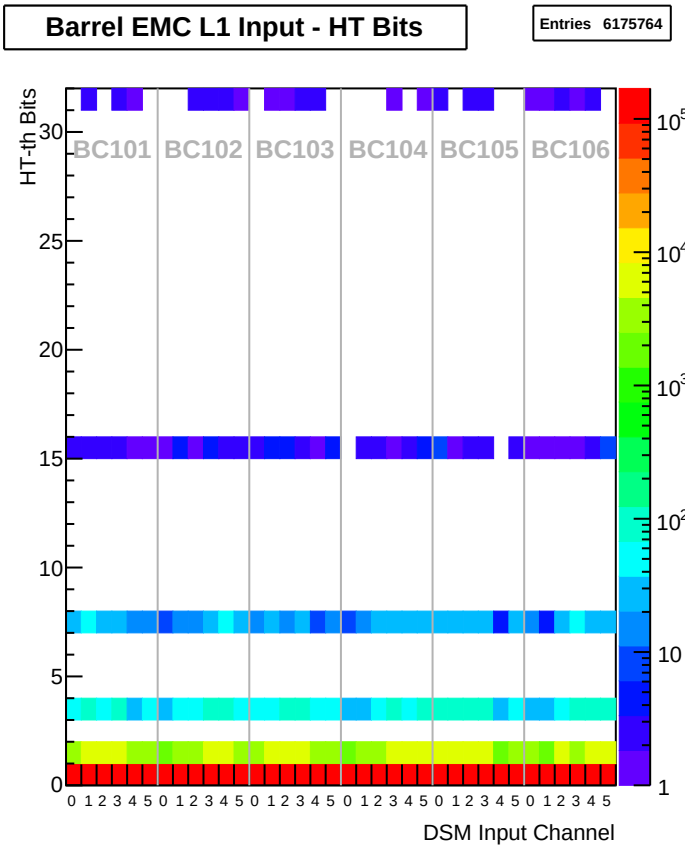
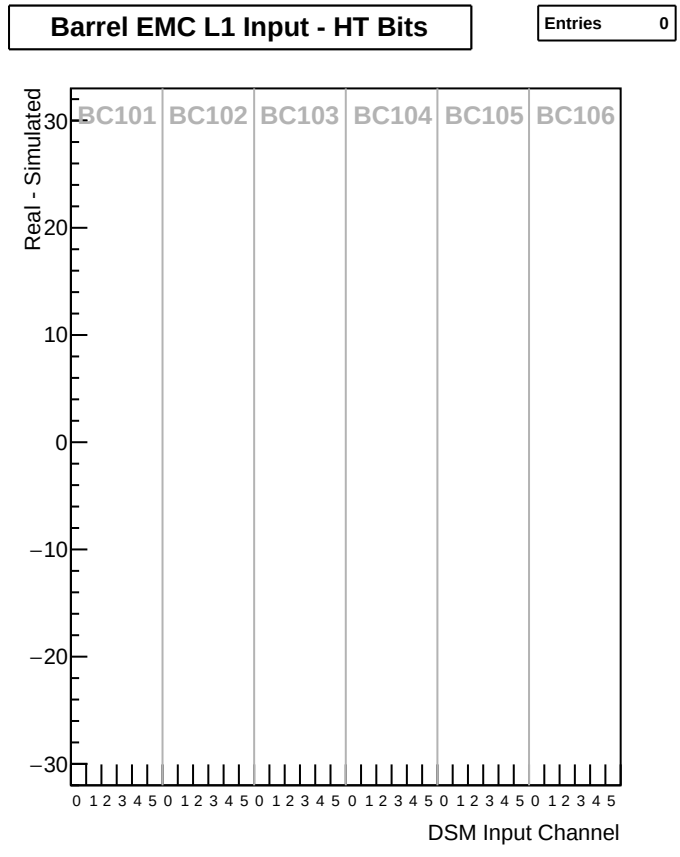

Barrel EMC L0 Input - High Tower
Entries 5.14647e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

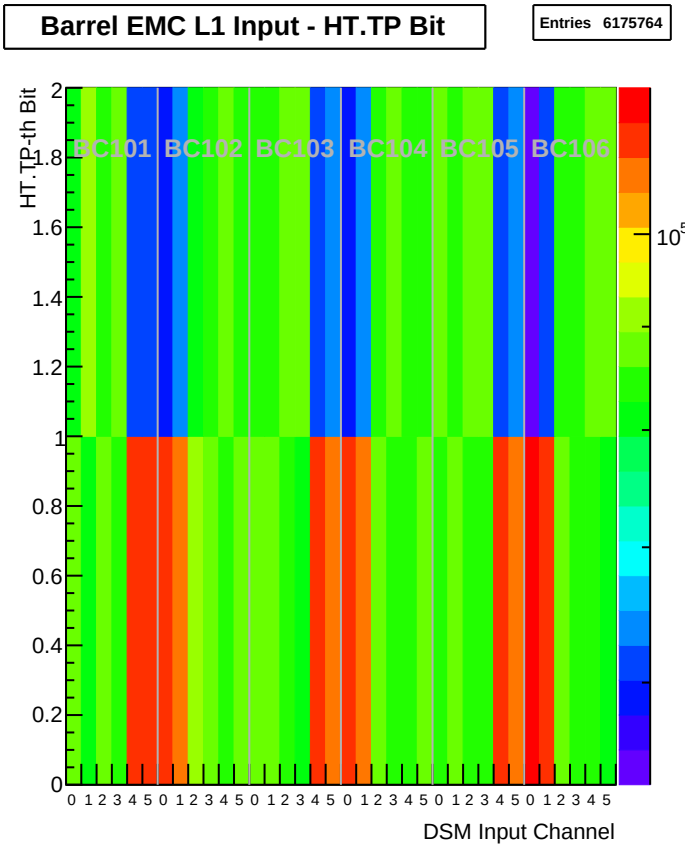

Barrel EMC L0 Input - Patch Sum
Entries 5.14647e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

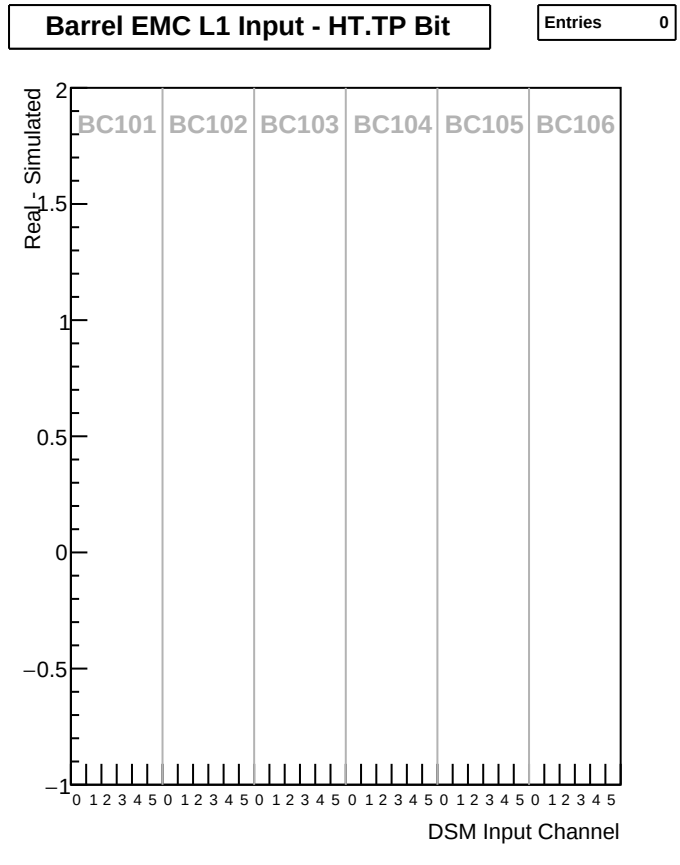

Endcap EMC L0 Input - High Tower
Entries 1.543941e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

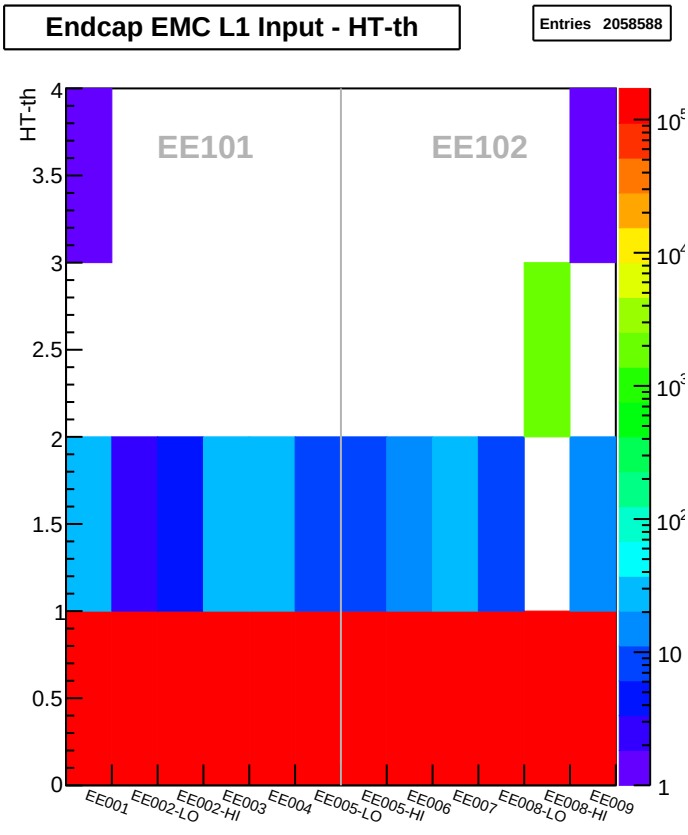

Endcap EMC L0 Input - Patch Sum
Entries 1.543941e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

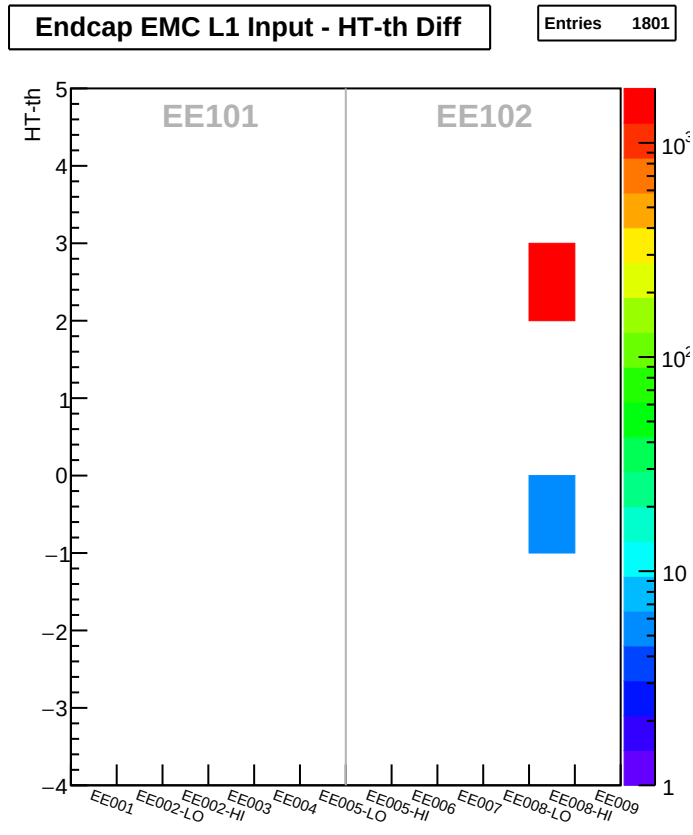

Barrel EMC L1 Input - HT Bits
Entries 6175764
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

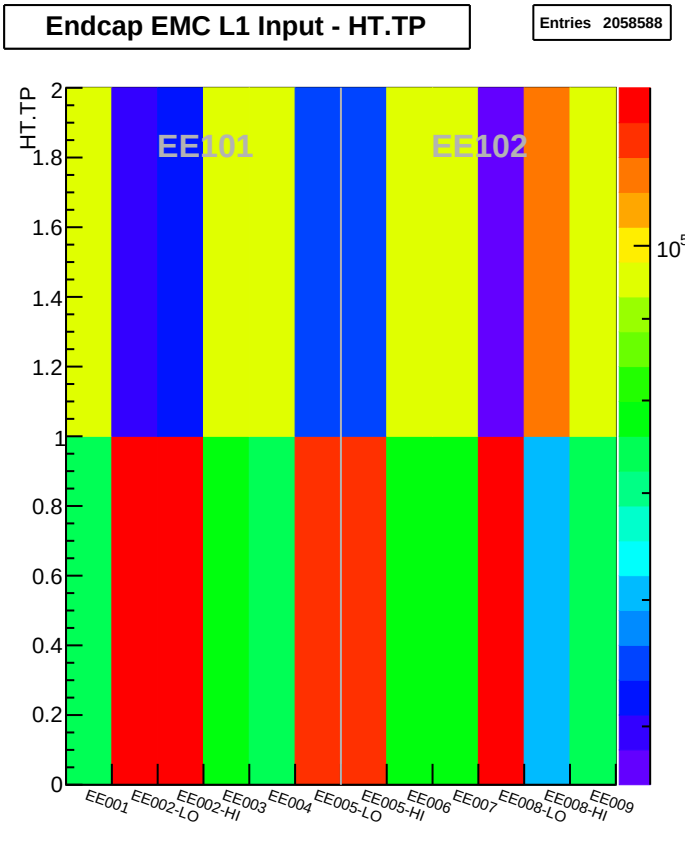

Barrel EMC L1 Input - HT Bits
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

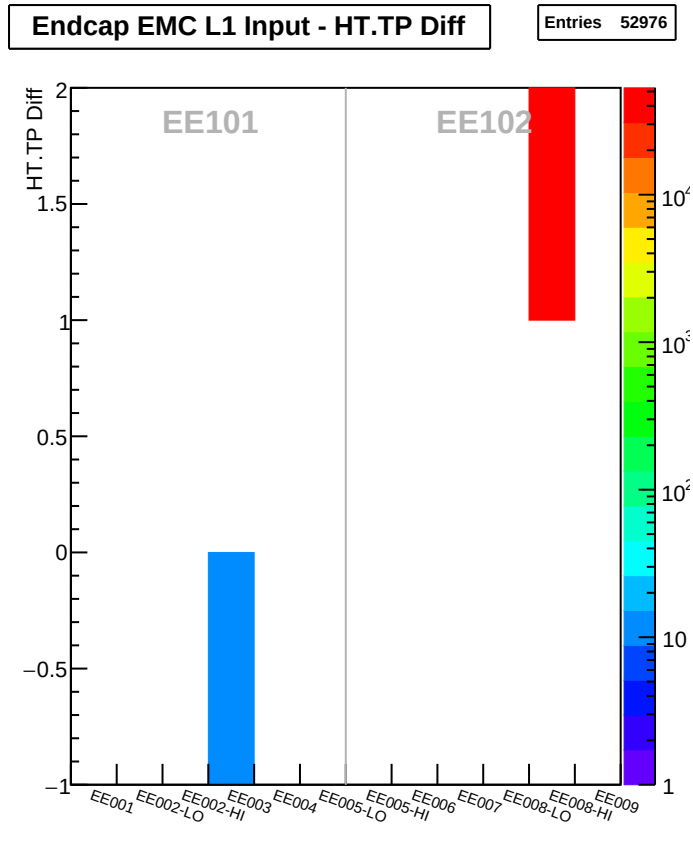

Barrel EMC L1 Input - HT.TP Bit
Entries 6175764
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

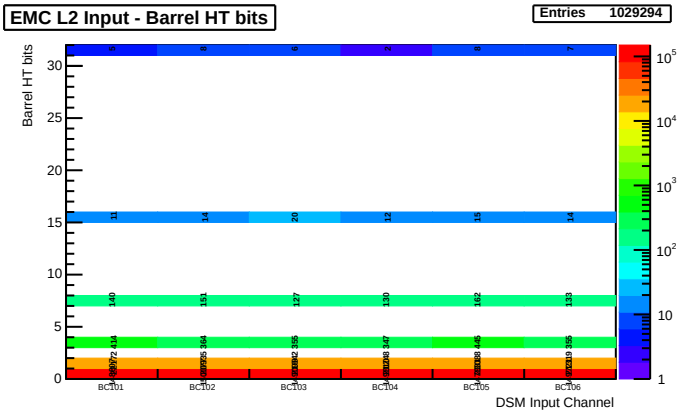

Barrel EMC L1 Input - HT.TP Bit
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

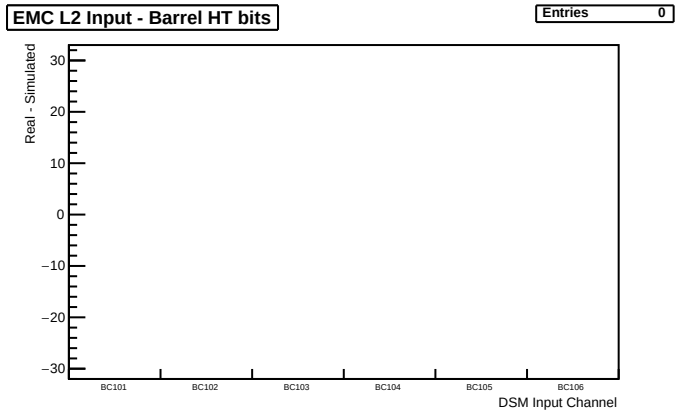

Endcap EMC L1 Input - HT-th
Entries 2058588
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

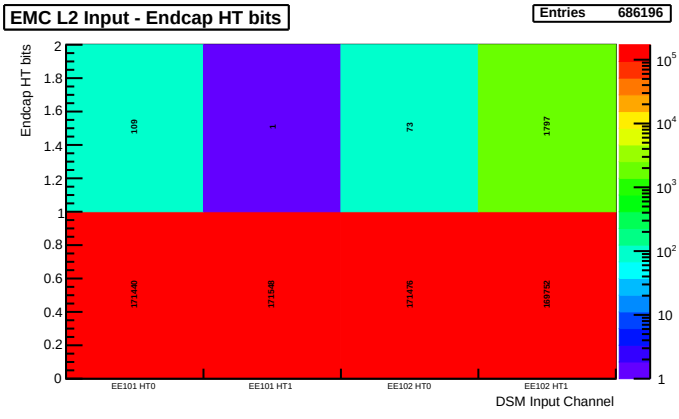

Endcap EMC L1 Input - HT-th Diff
Entries 1801
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

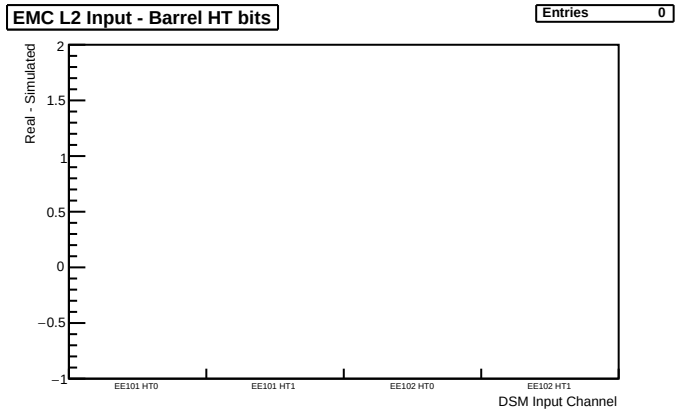

Endcap EMC L1 Input - HT.TP
Entries 2058588
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

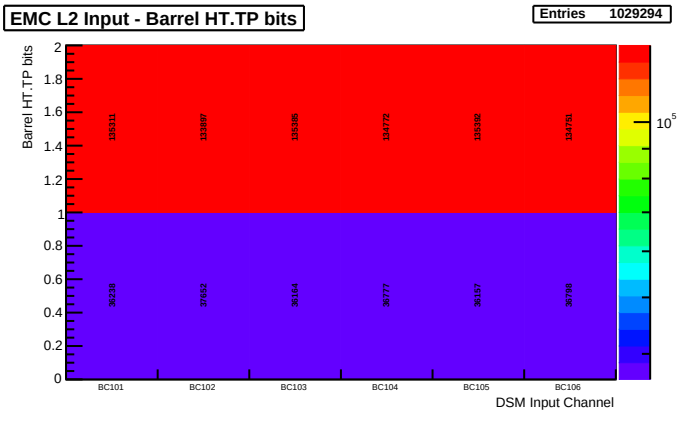

Endcap EMC L1 Input - HT.TP Diff
Entries 52976
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

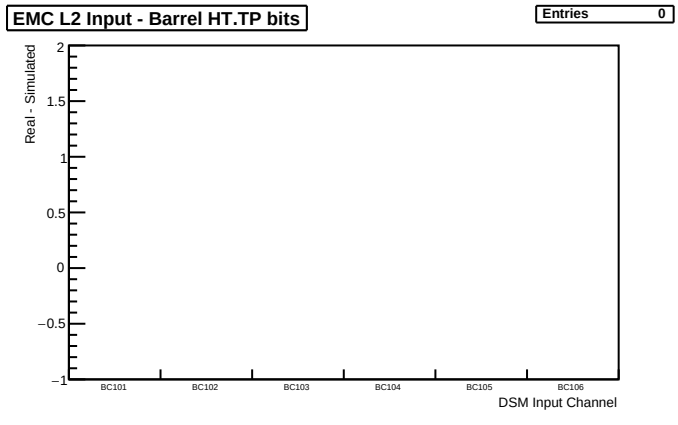

EMC L2 Input - Barrel HT bits
Entries 1029294
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

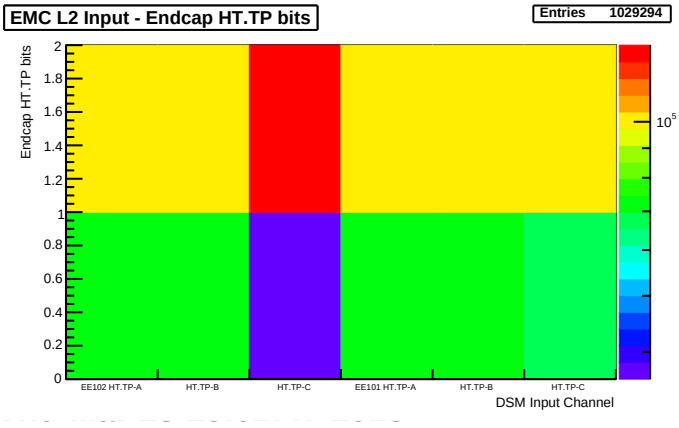

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

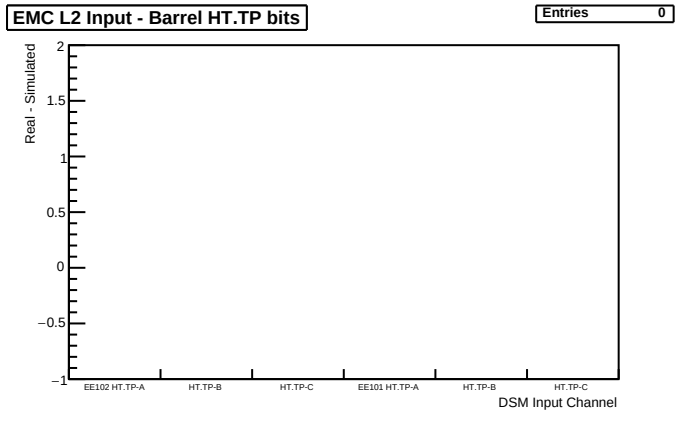

EMC L2 Input - Endcap HT bits
Entries 686196
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

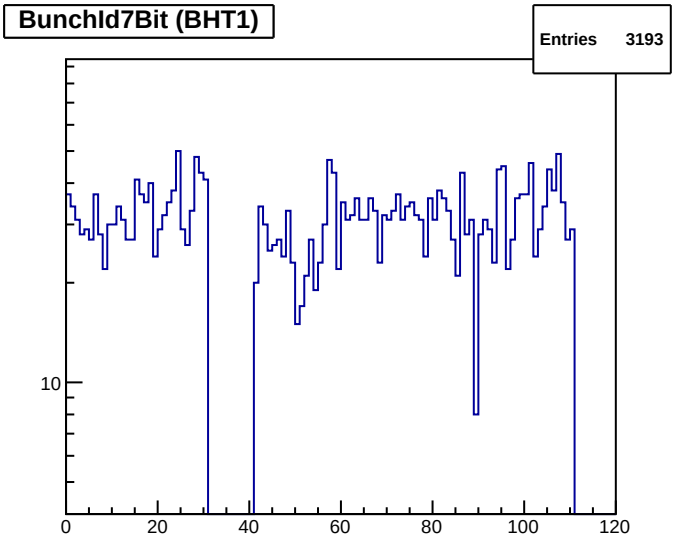

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

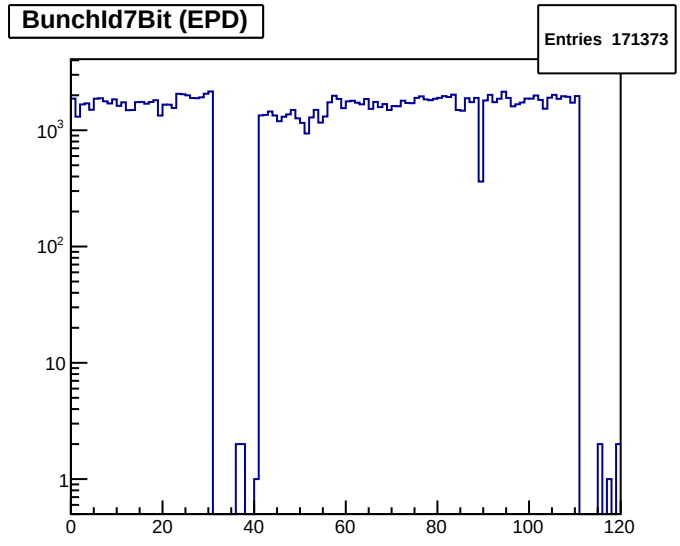

EMC L2 Input - Barrel HT.TP bits
Entries 1029294
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

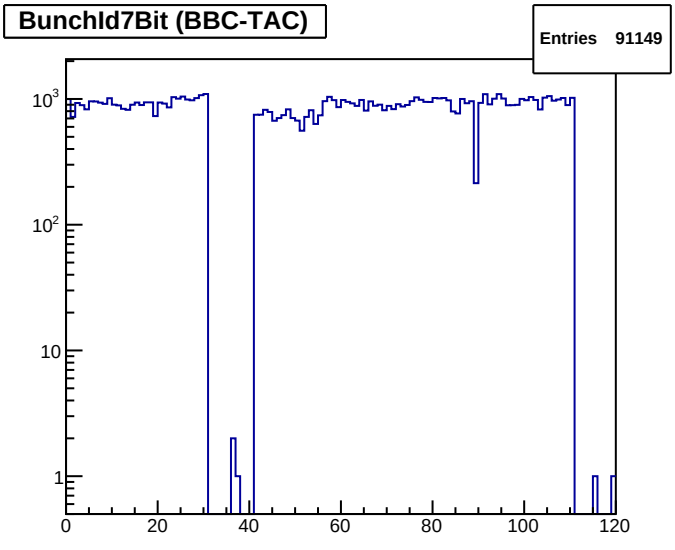

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

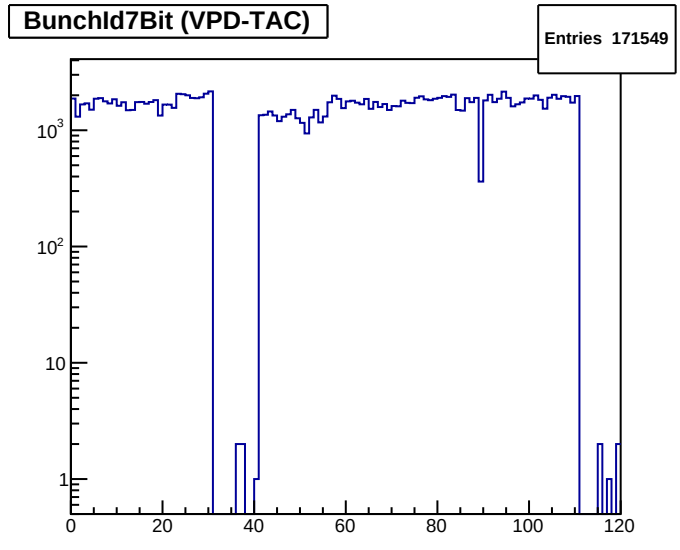

EMC L2 Input - Endcap HT.TP bits
Entries 1029294
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

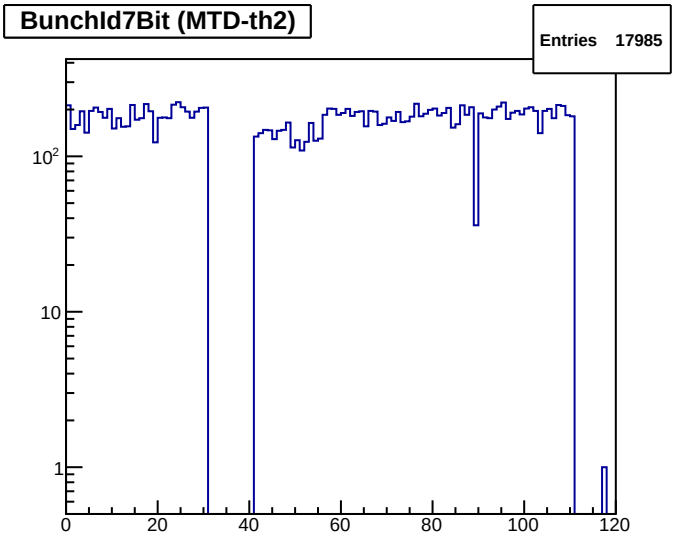

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

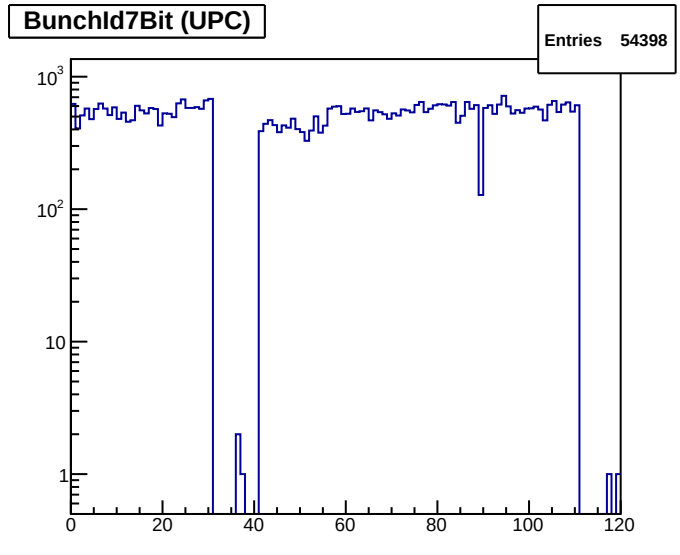

BunchId7Bit (BHT1)
Entries 3193
10
0 20 40 60 80 100 120

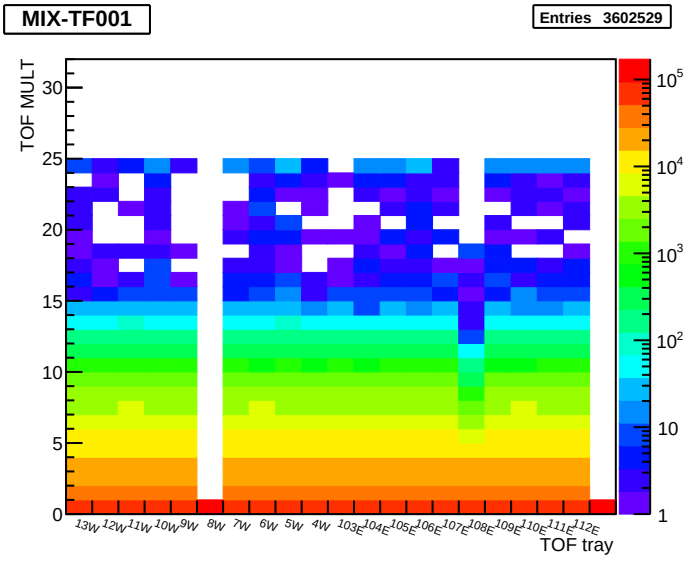

BunchId7Bit (EPD)
Entries 171373
10^3
10^2
10
1
0 20 40 60 80 100 120

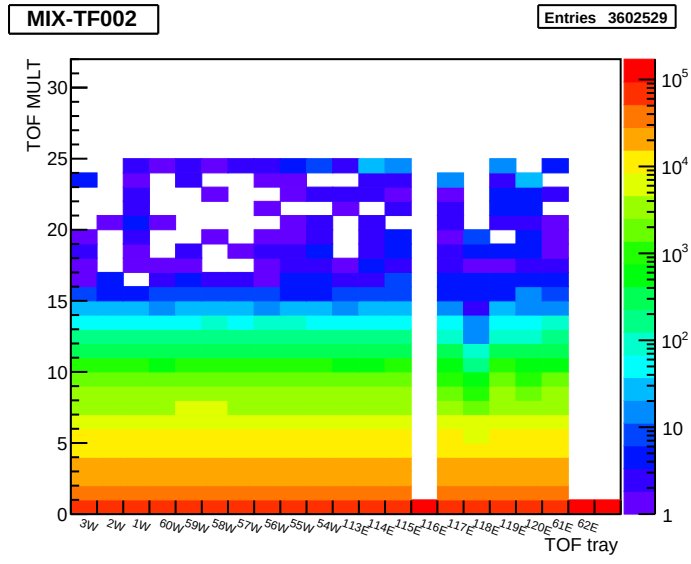

BunchId7Bit (BBC-TAC)
Entries 91149
10^3
10^2
10
1
0 20 40 60 80 100 120

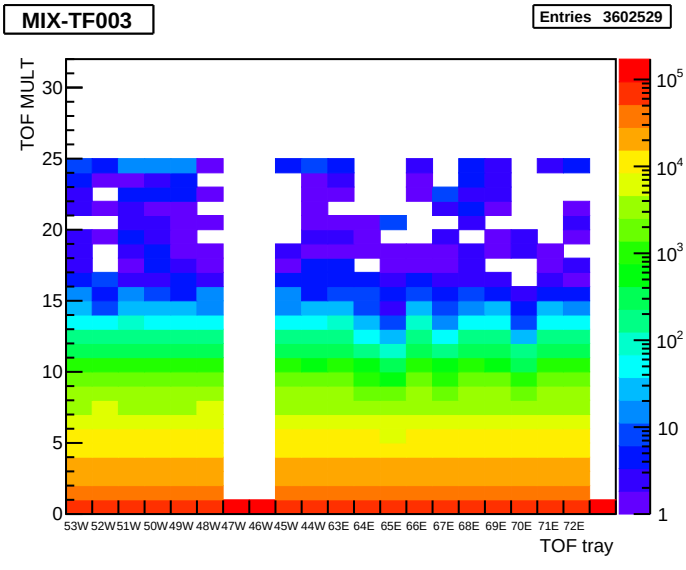

BunchId7Bit (VPD-TAC)
Entries 171549
10^3
10^2
10
1
0 20 40 60 80 100 120

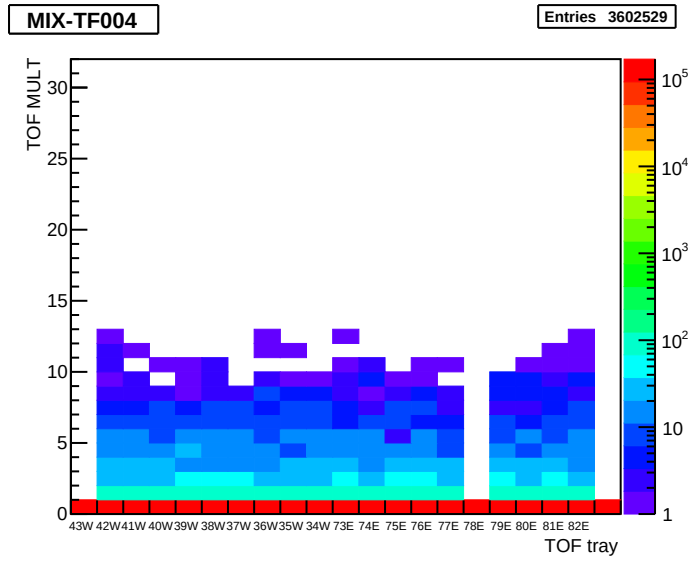

BunchId7Bit (MTD-th2)
Entries 17985
10^2
10
1
0 20 40 60 80 100 120

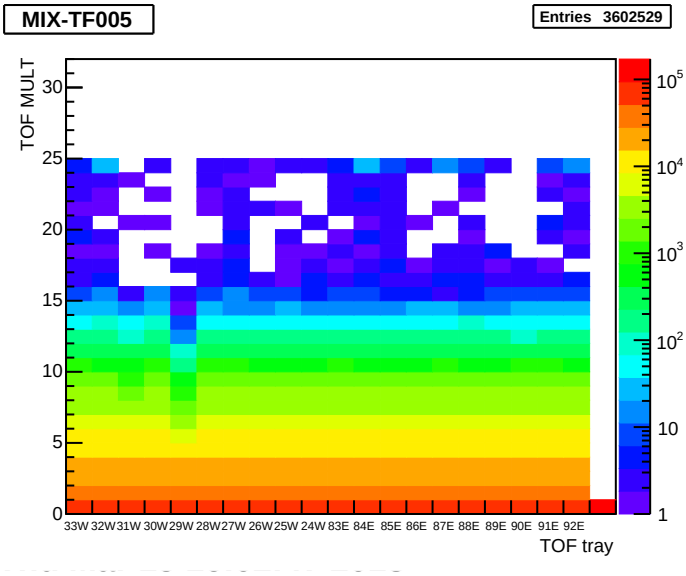

BunchId7Bit (UPC)
Entries 54398
10^3
10^2
10
1
0 20 40 60 80 100 120

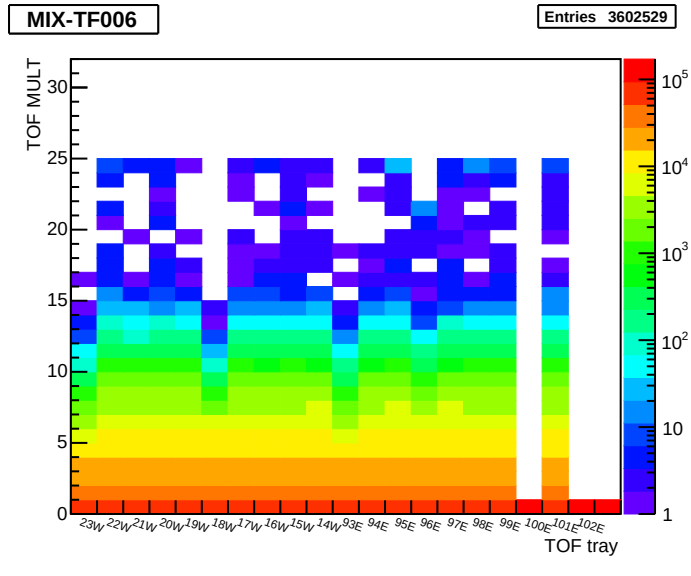

MIX-TF001
Entries 3602529
TOF MULT
TOF tray

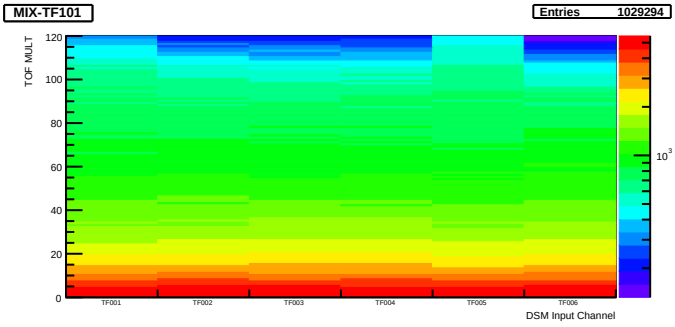

MIX-TF002
Entries 3602529
TOF MULT
TOF tray

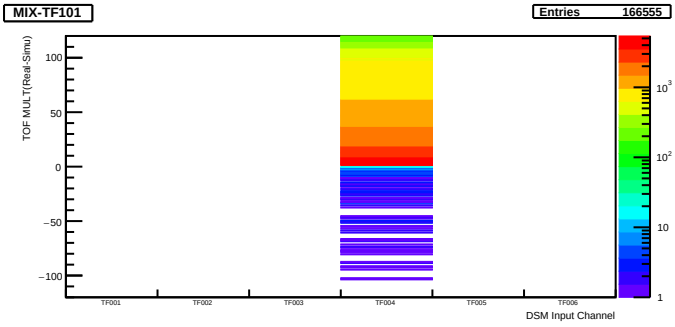

MIX-TF003
Entries 3602529
TOF MULT
TOF tray

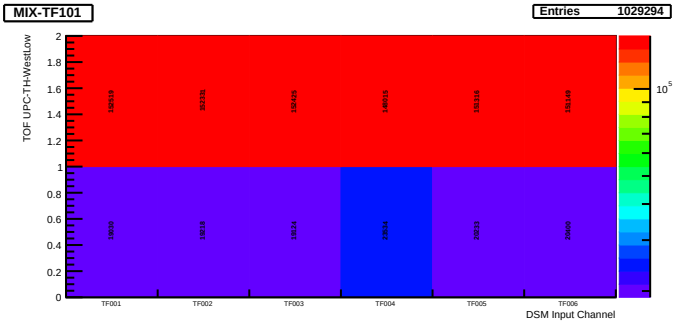

MIX-TF004
Entries 3602529
TOF MULT
TOF tray

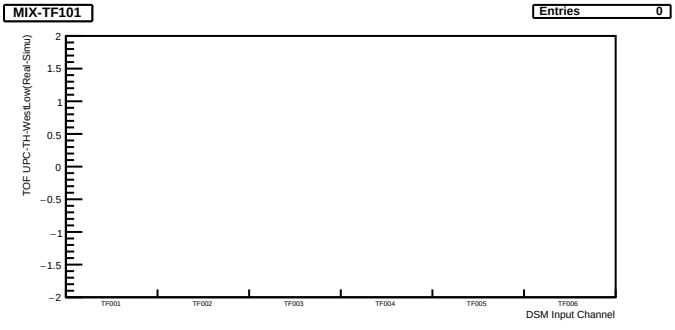

MIX-TF005
Entries 3602529
TOF MULT
TOF tray

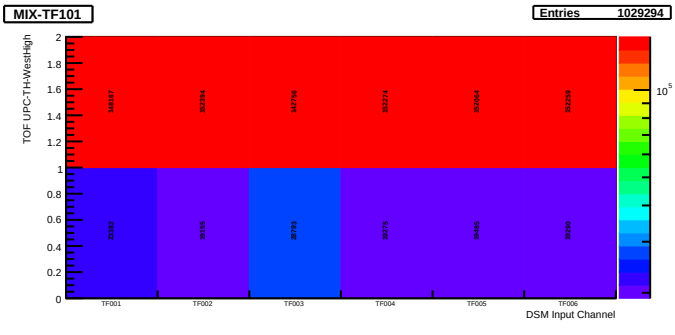

MIX-TF006
Entries 3602529
TOF MULT
TOF tray

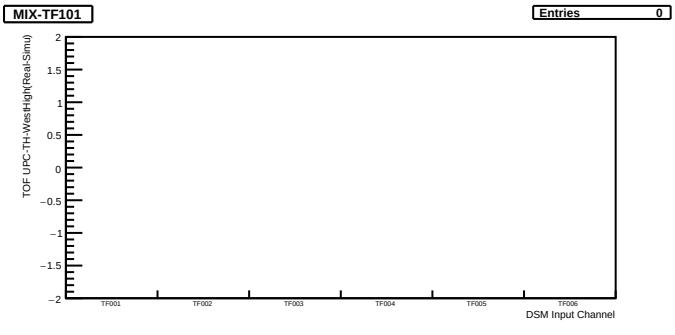

MIX-TF101
Entries 1029294
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

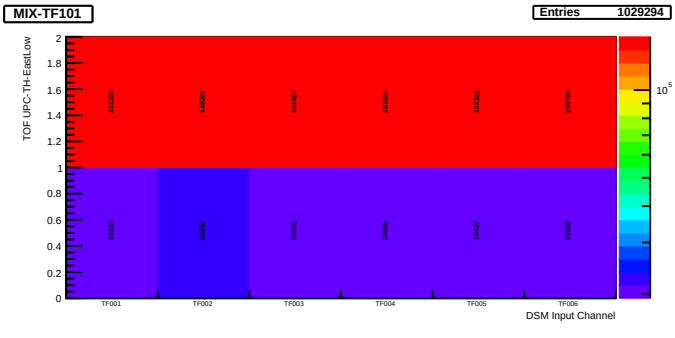

MIX-TF101
Entries 166555
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

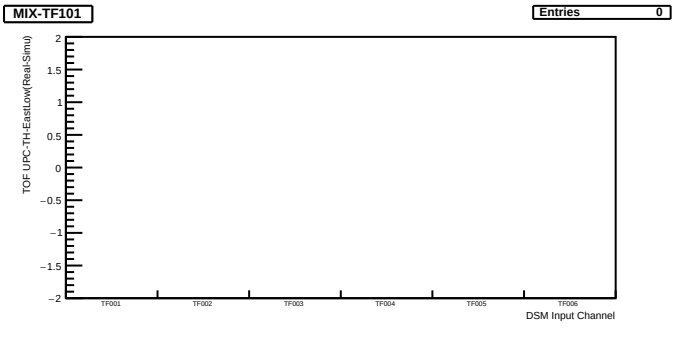

MIX-TF101
Entries 1029294
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

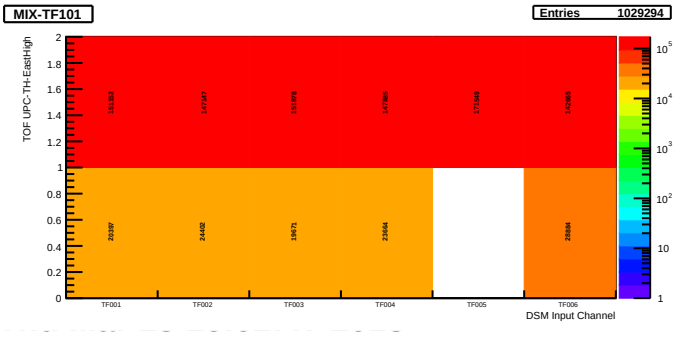

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

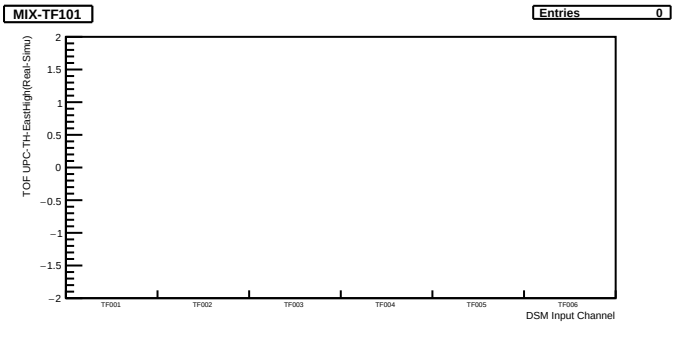

MIX-TF101
Entries 1029294
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

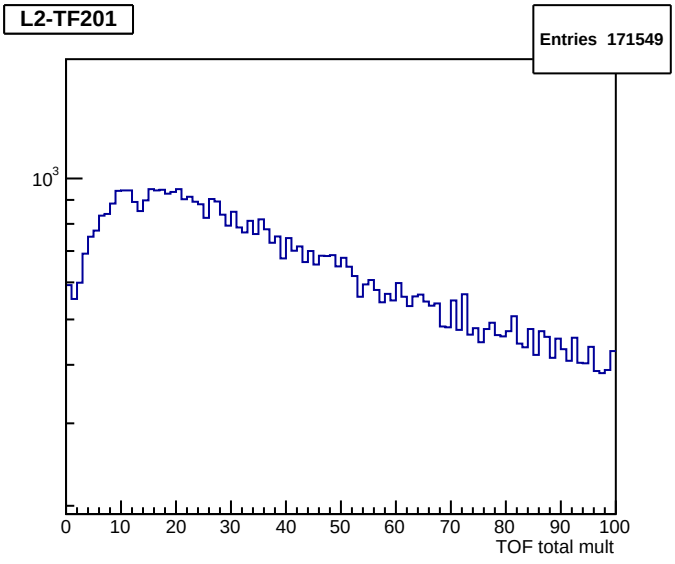

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

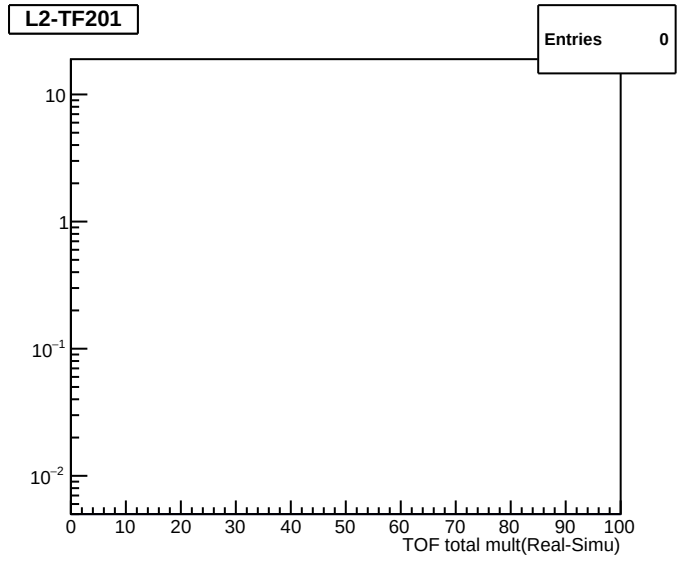

MIX-TF101
Entries 1029294
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

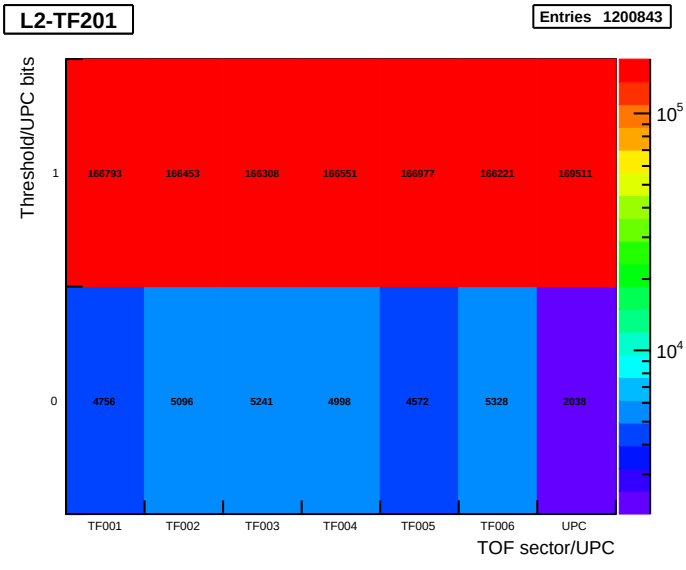

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

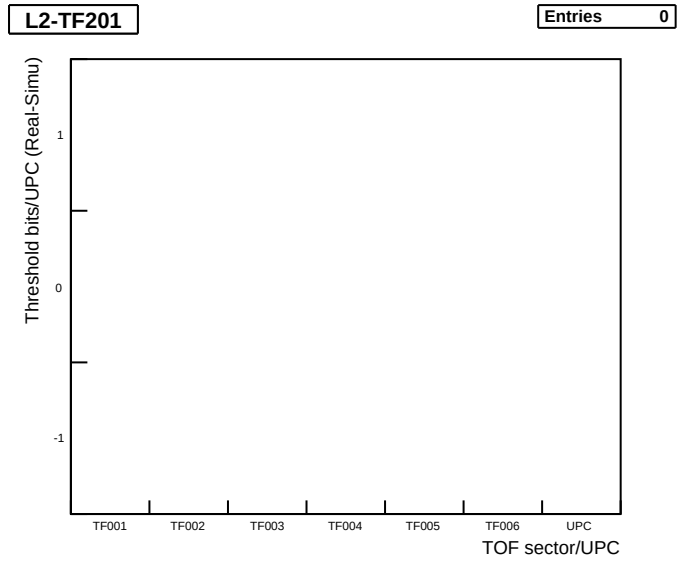

MIX-TF101
Entries 1029294
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

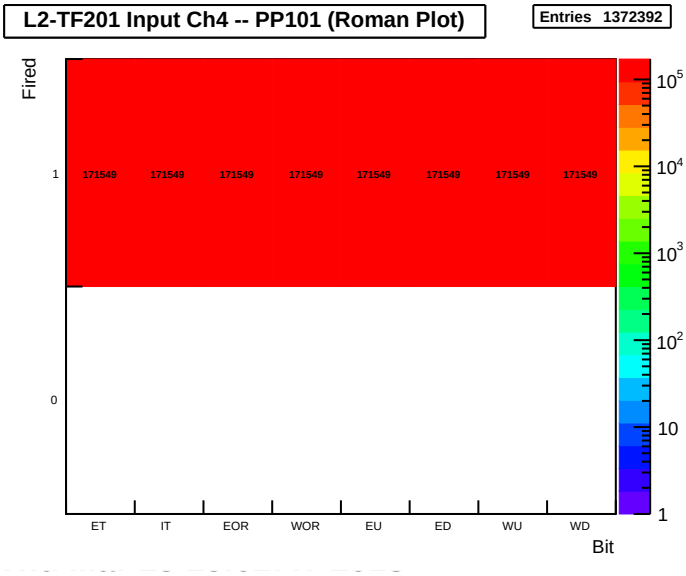

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

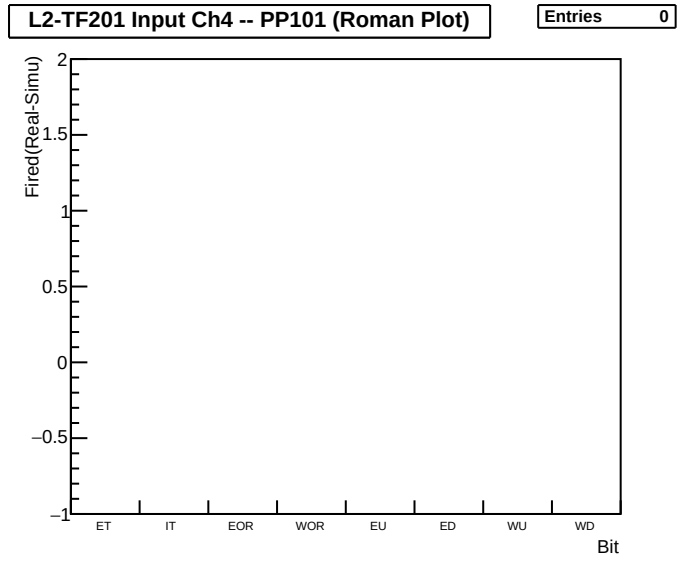

L2-TF201
Entries 171549
10^3
0 10 20 30 40 50 60 70 80 90 100
TOF total mult

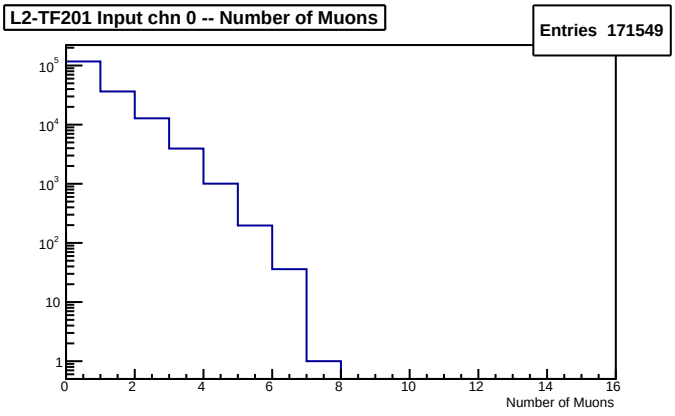

L2-TF201
Entries 0
10
1
10^{-1}
10^{-2}
0 10 20 30 40 50 60 70 80 90 100
TOF total mult(Real-Simu)

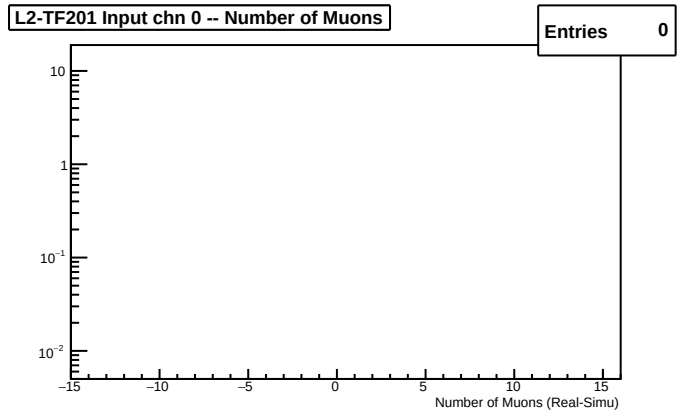

L2-TF201
Entries 1200843
Threshold/UPC bits
1
0
166793 166453 166308 166551 166977 166221 169511
4756 5096 5241 4998 4572 5328 2038
10^5
10^4
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

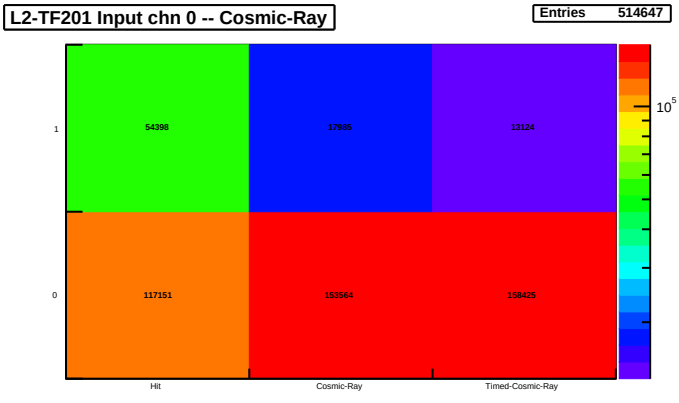

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
1
0
-1
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

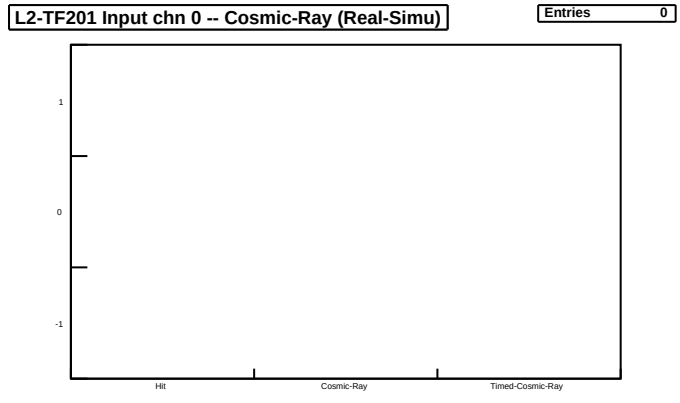

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 1372392
Fired
1
0
171549 171549 171549 171549 171549 171549 171549 171549
10^5
10^4
10^3
10^2
10
1
ET IT EOR WOR EU ED WU WD
Bit

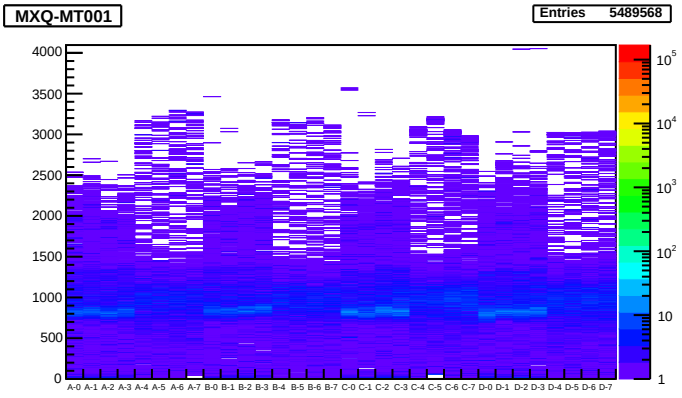

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 0
Fired(Real-Simu)
2
1.5
1
0.5
0
−0.5
−1
ET IT EOR WOR EU ED WU WD
Bit

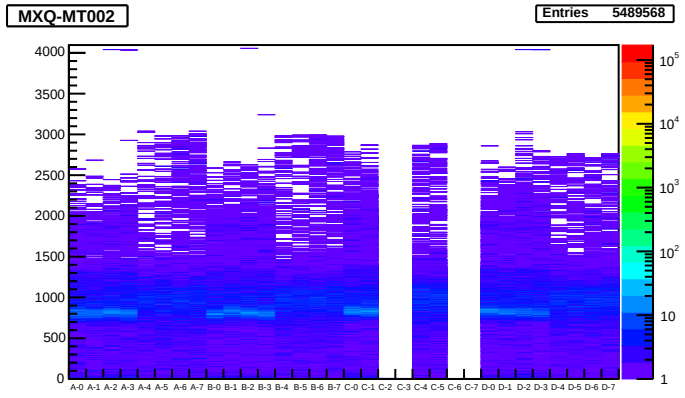

L2-TF201 Input chn 0 -- Number of Muons
Entries 171549
Number of Muons

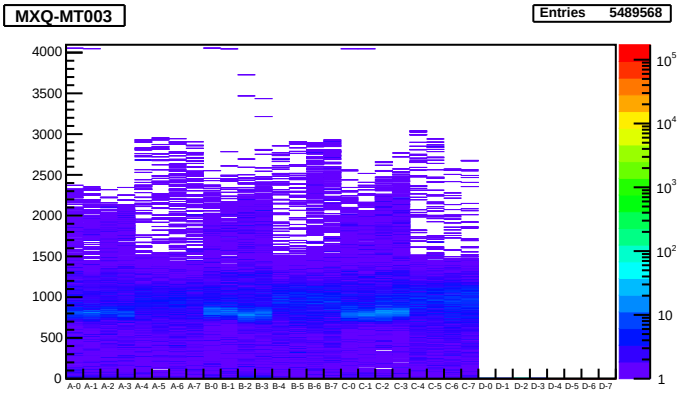

L2-TF201 Input chn 0 -- Number of Muons
Entries 0
Number of Muons (Real-Simu)

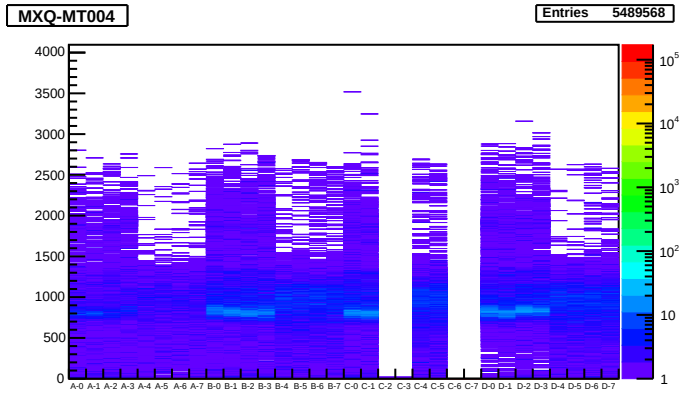

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 514647
54398
17985
13124
117151
153564
158425
Hit
Cosmic-Ray
Timed-Cosmic-Ray

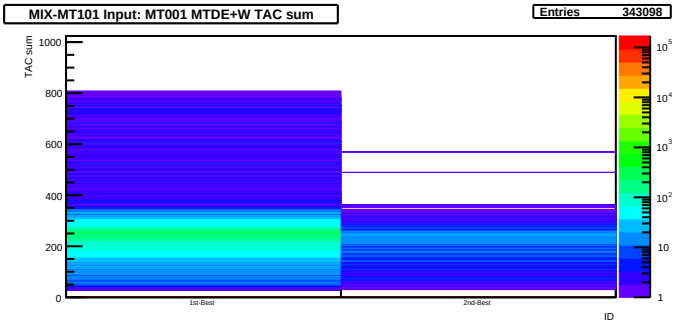

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 0
Hit
Cosmic-Ray
Timed-Cosmic-Ray

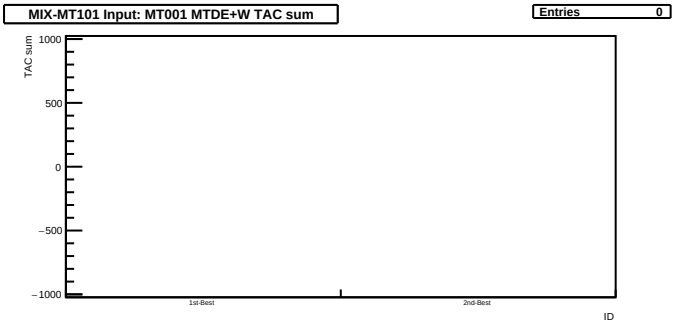

MXQ-MT001
Entries 5489568
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

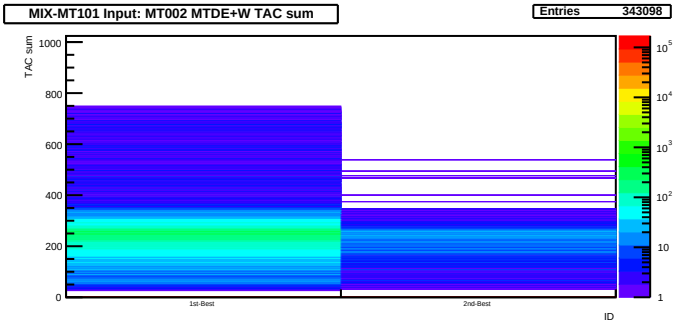

MXQ-MT002
Entries 5489568
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

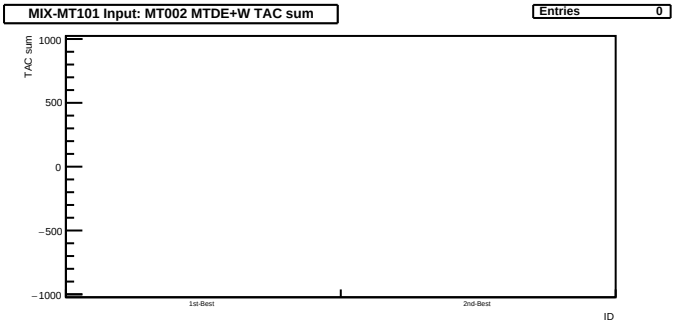

MXQ-MT003
Entries 5489568
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

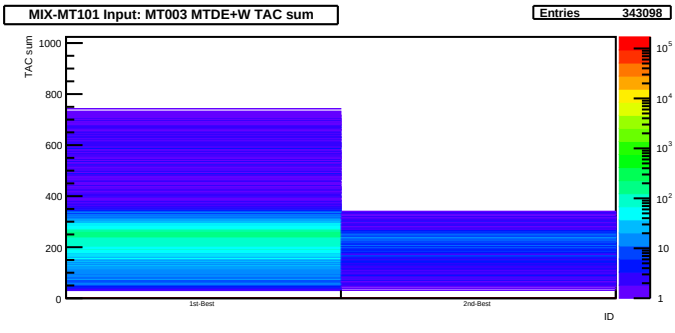

MXQ-MT004
Entries 5489568
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

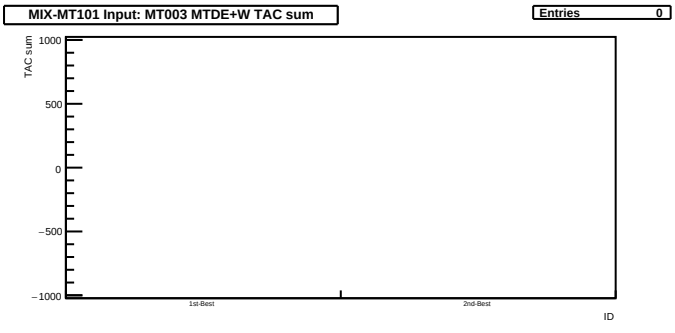

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 343098
TAC sum
1st-Best
2nd-Best
ID

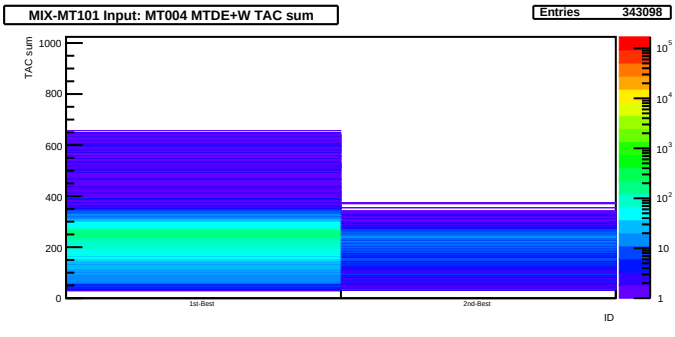

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 0
TAC sum
1st-Best
2nd-Best
ID

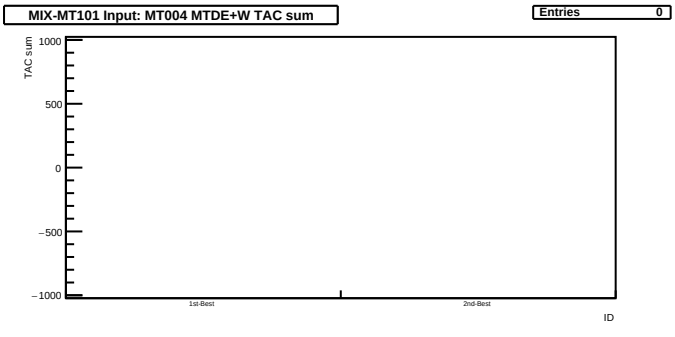

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 343098
TAC sum
1st-Best
2nd-Best
ID

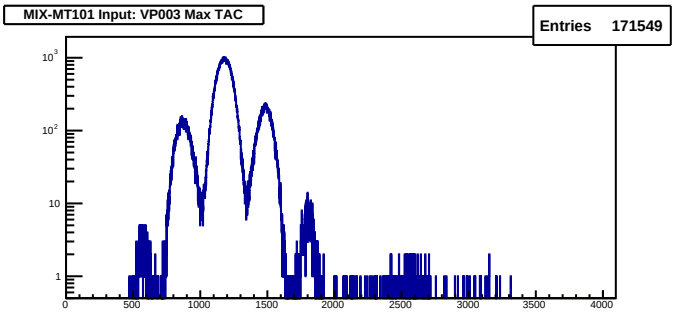

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 0
TAC sum
1st-Best
2nd-Best
ID

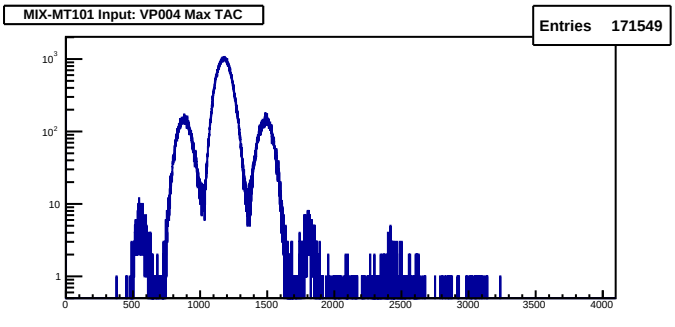

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 343098
TAC sum
1st-Best
2nd-Best
ID

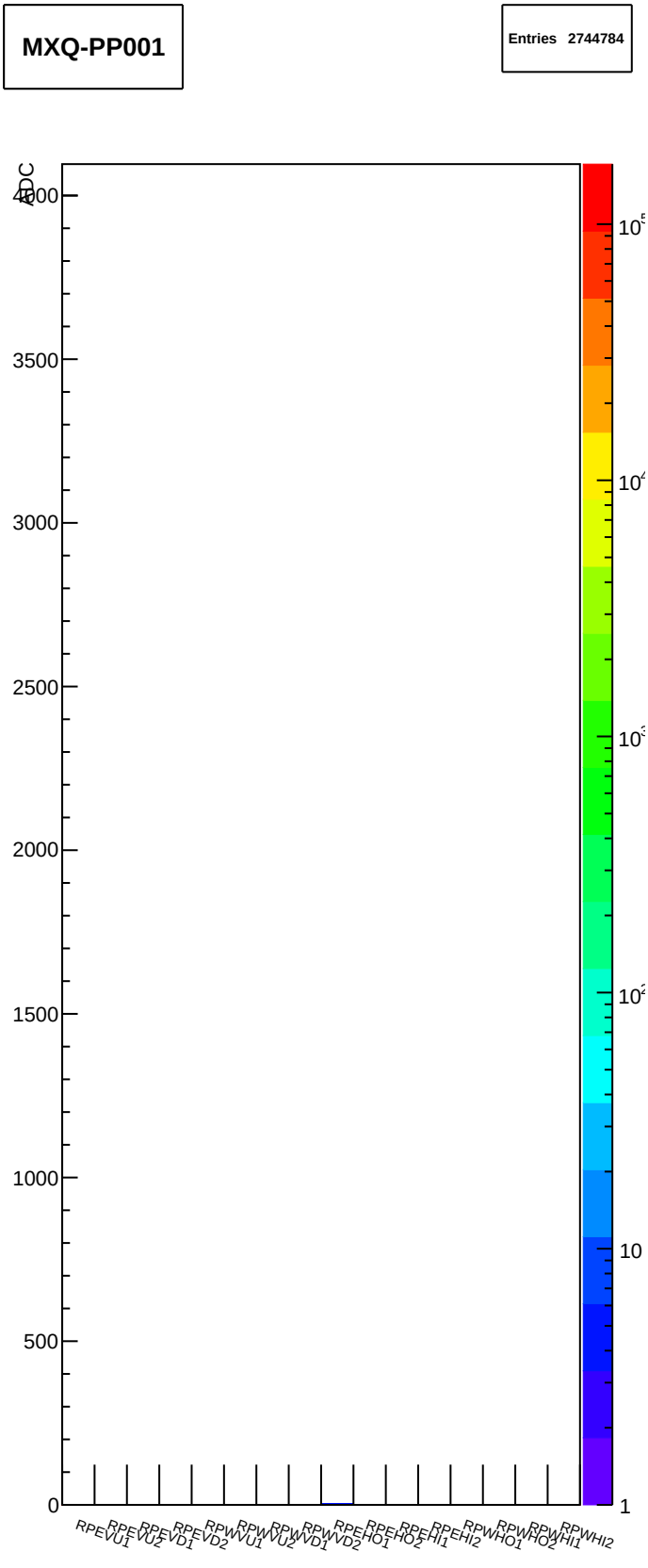

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 0
TAC sum
1st-Best
2nd-Best
ID

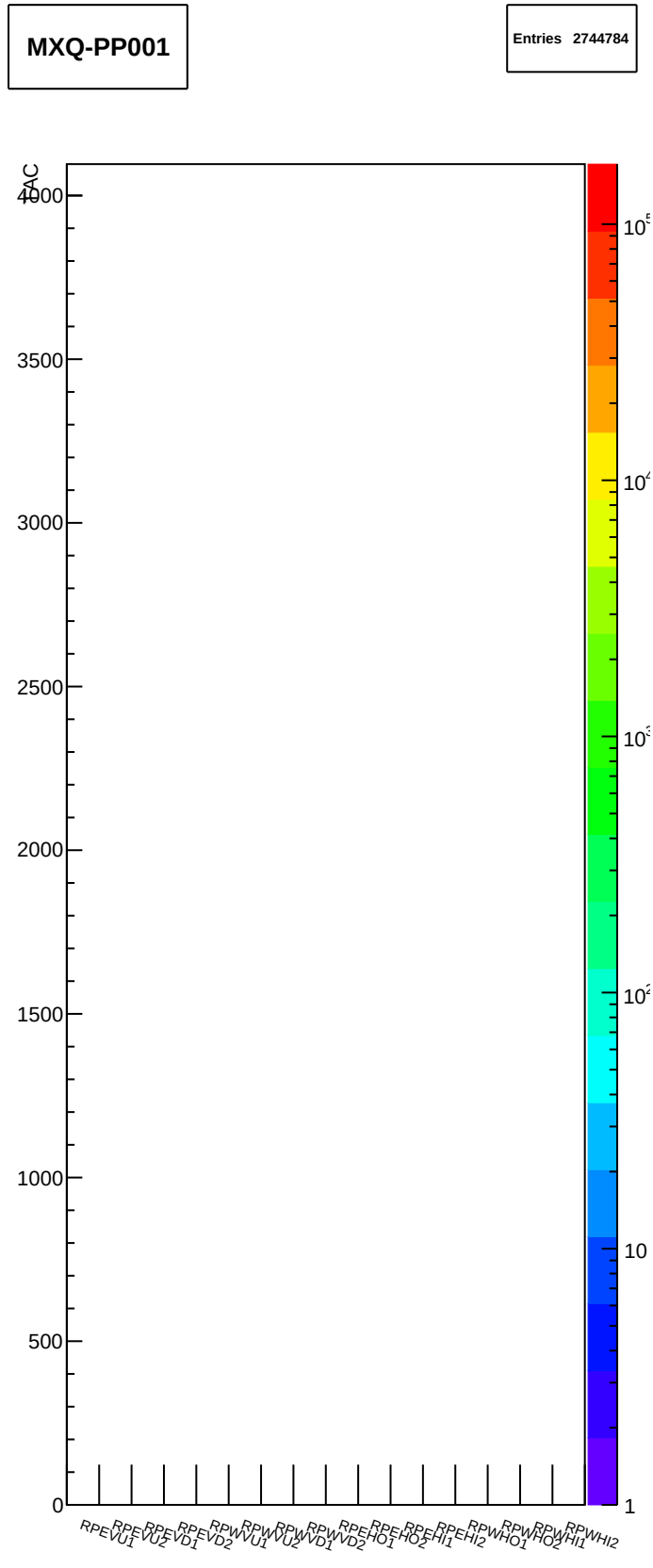

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 343098
TAC sum
1st-Best
2nd-Best
ID

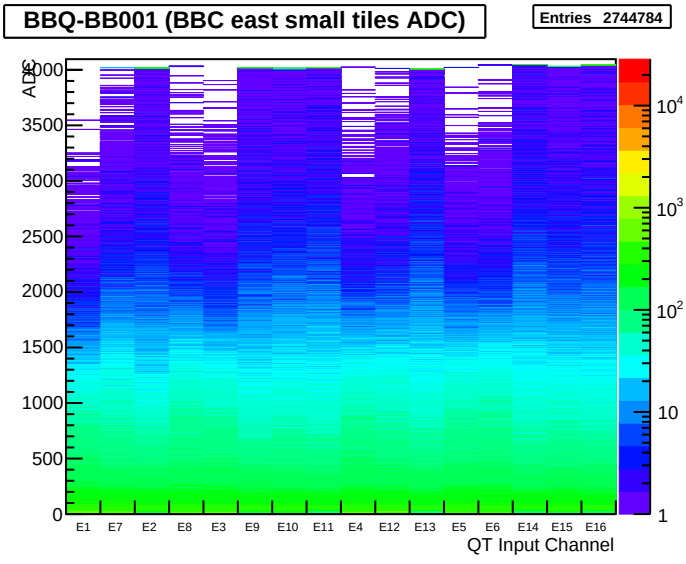

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 0
TAC sum
1st-Best
2nd-Best
ID

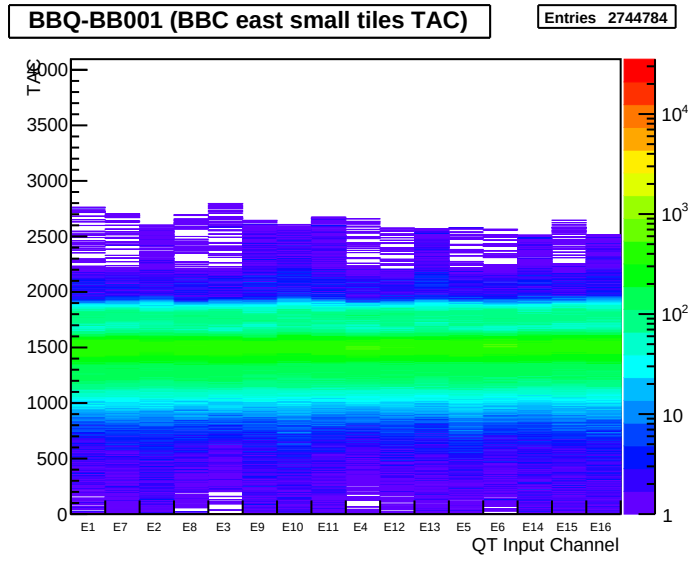

MIX-MT101 Input: VP003 Max TAC
Entries 171549

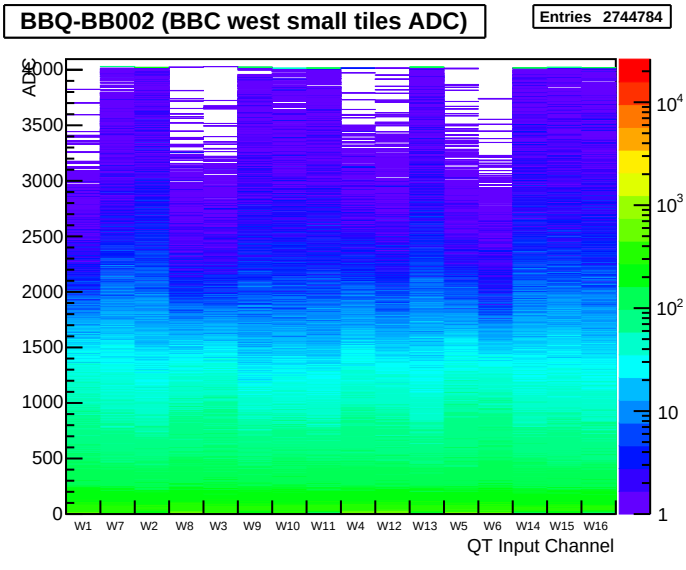

MIX-MT101 Input: VP004 Max TAC
Entries 171549

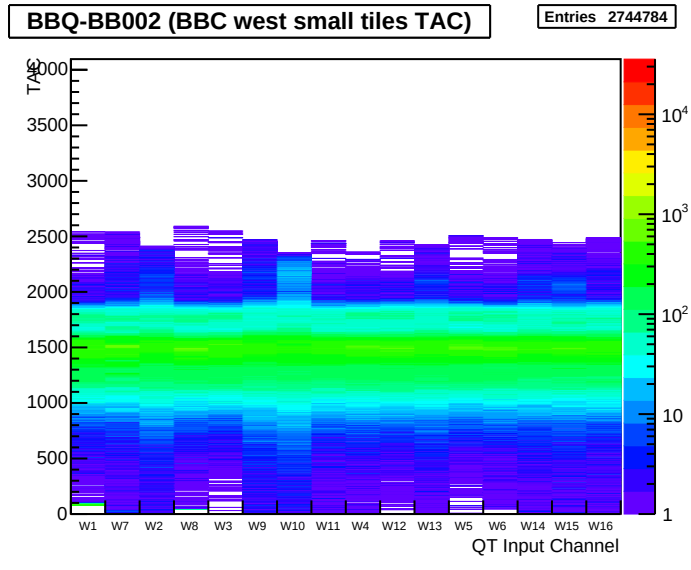

MXQ-PP001
Entries 2744784
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

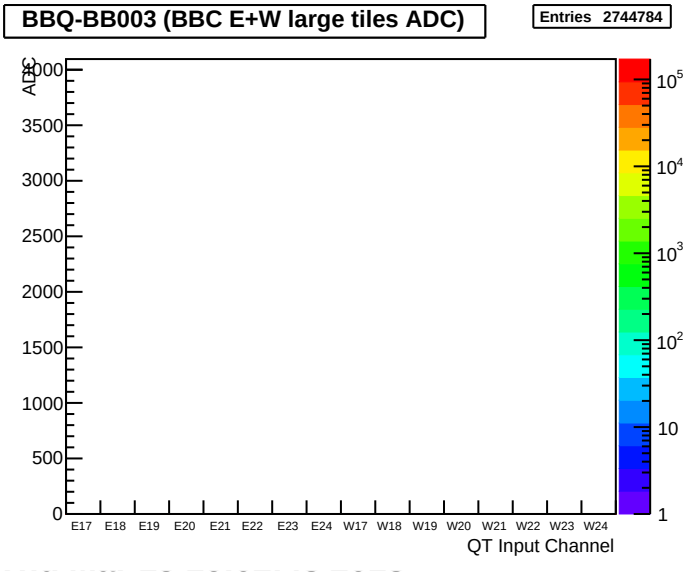

MXQ-PP001
Entries 2744784
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

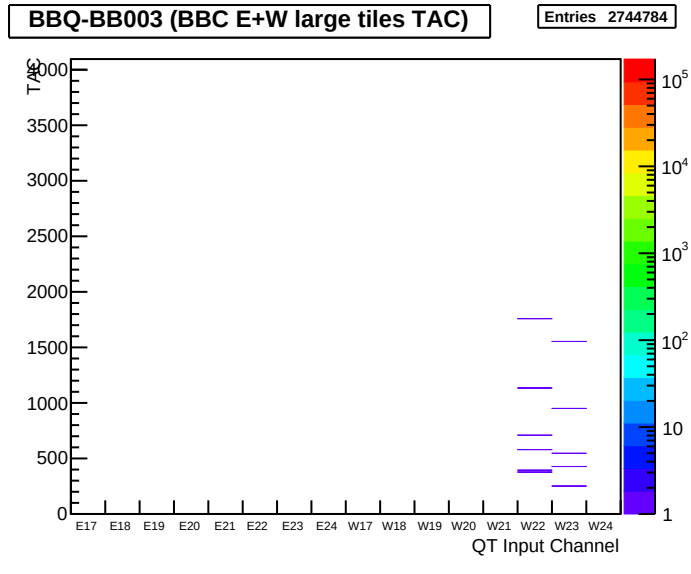

BBQ-BB001 (BBC east small tiles ADC)
Entries 2744784
ADC
QT Input Channel

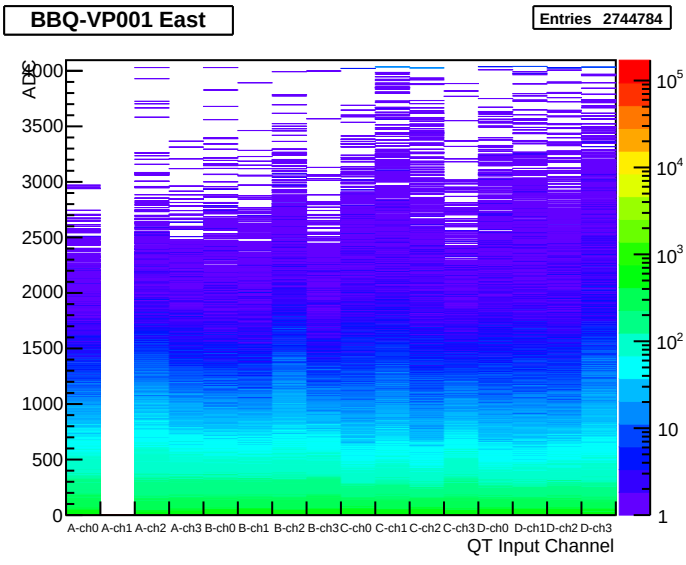

BBQ-BB001 (BBC east small tiles TAC)
Entries 2744784
TAC
QT Input Channel

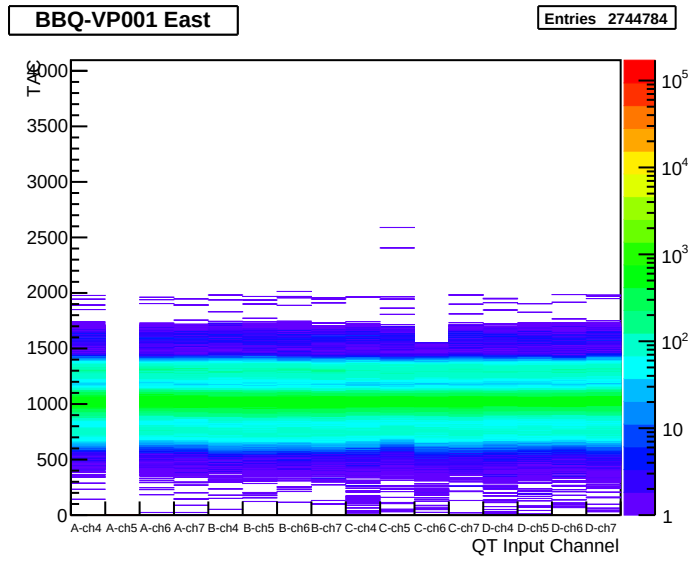

BBQ-BB002 (BBC west small tiles ADC)
Entries 2744784
ADC
QT Input Channel

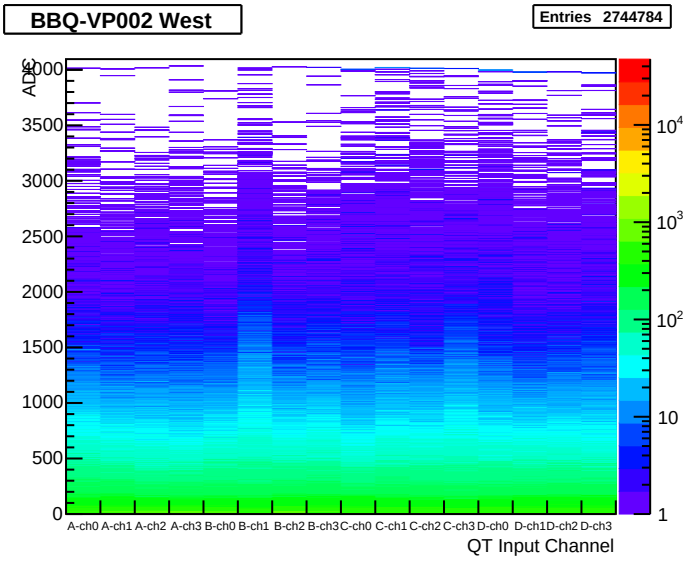

BBQ-BB002 (BBC west small tiles TAC)
Entries 2744784
TAC
QT Input Channel

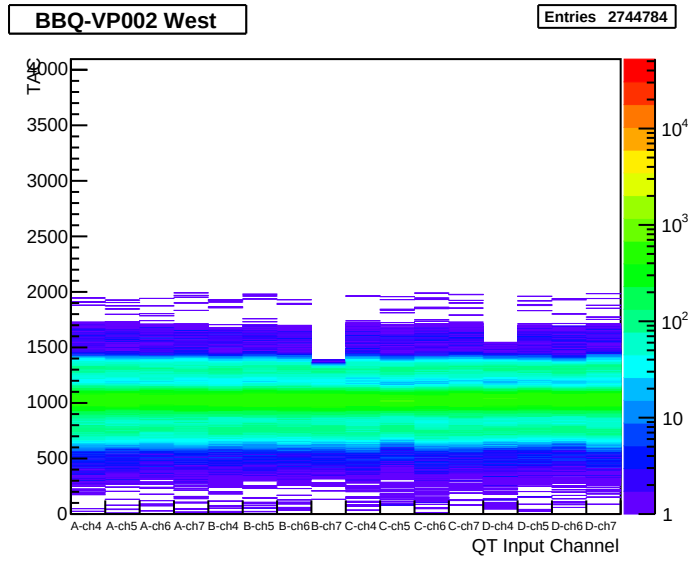

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2744784
ADC
QT Input Channel

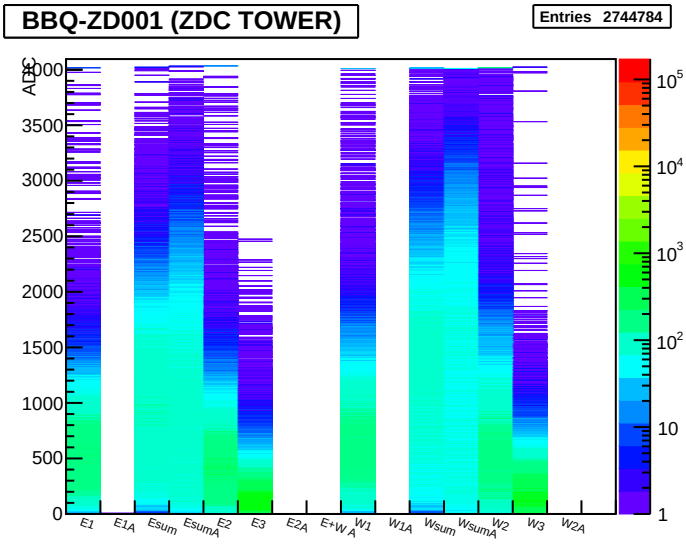

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2744784
TAC
QT Input Channel

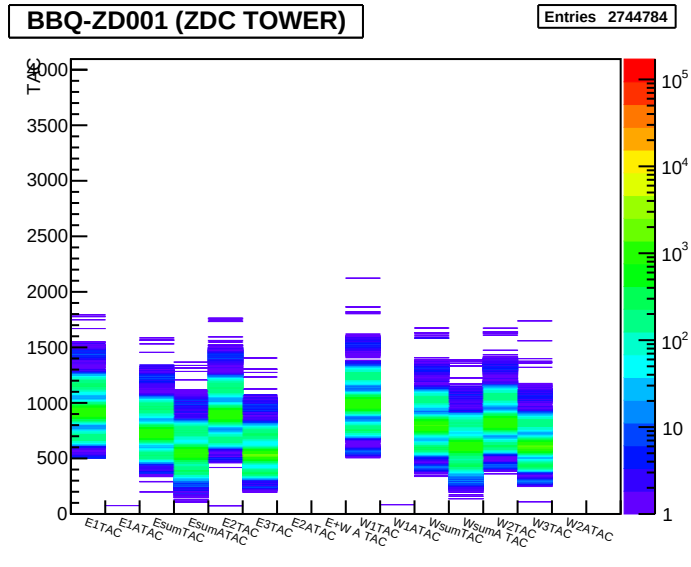

BBQ-VP001 East
Entries 2744784
ADC
QT Input Channel

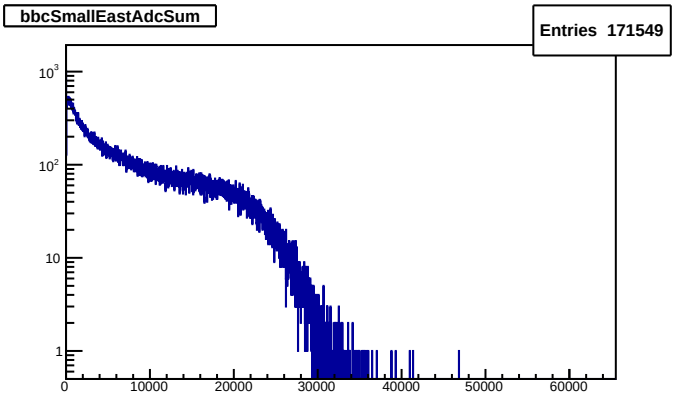

BBQ-VP001 East
Entries 2744784
TAC
QT Input Channel

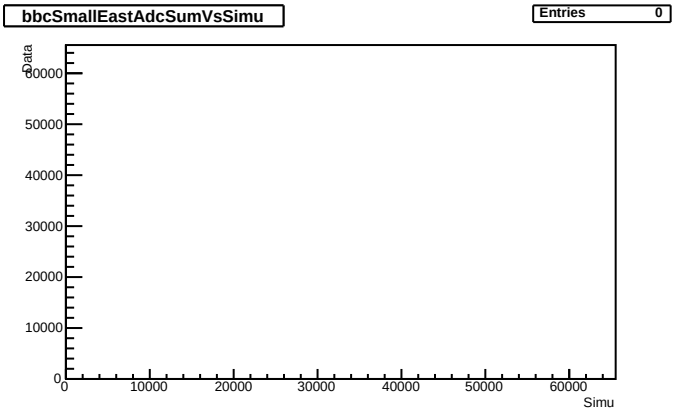

BBQ-VP002 West
Entries 2744784
ADC
QT Input Channel

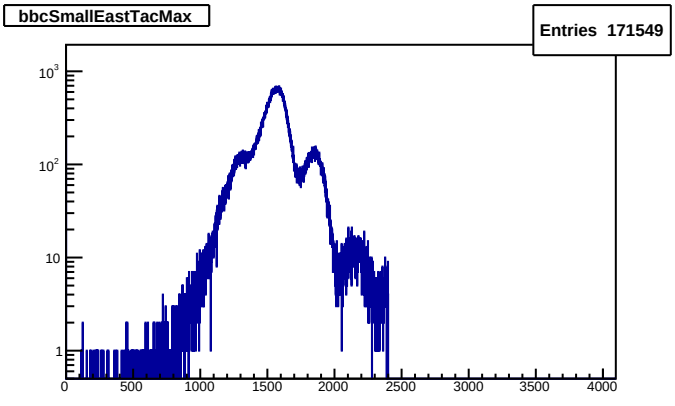

BBQ-VP002 West
Entries 2744784
TAC
QT Input Channel

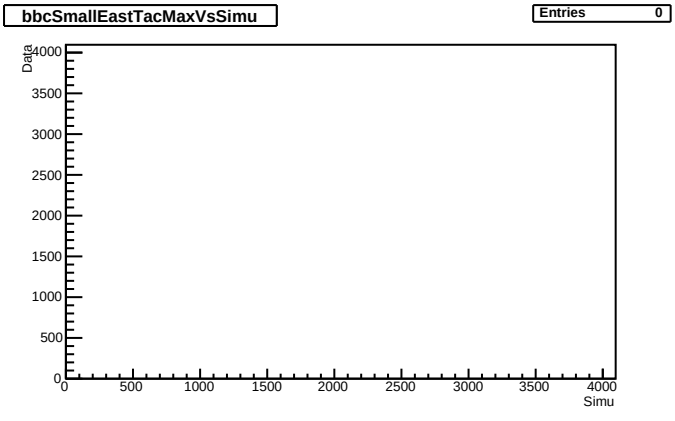

BBQ-ZD001 (ZDC TOWER)
Entries 2744784
ADC

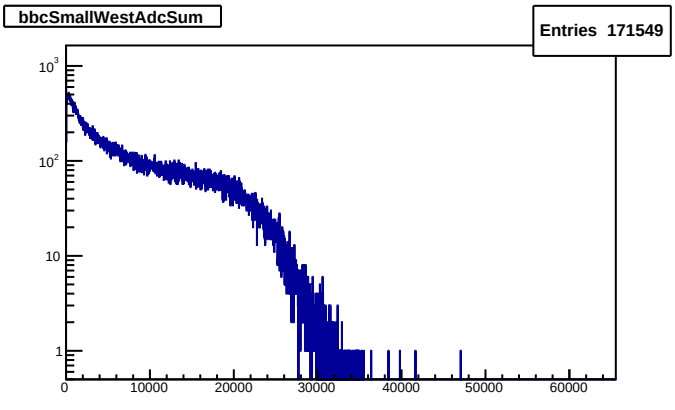

BBQ-ZD001 (ZDC TOWER)
Entries 2744784
TAC

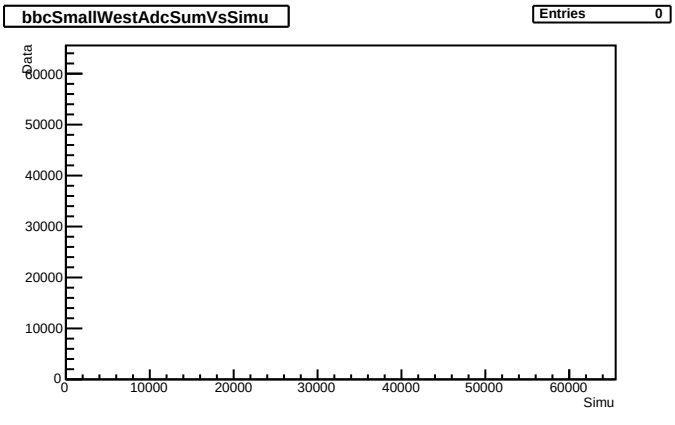

bbcSmallEastAdcSum
Entries 171549

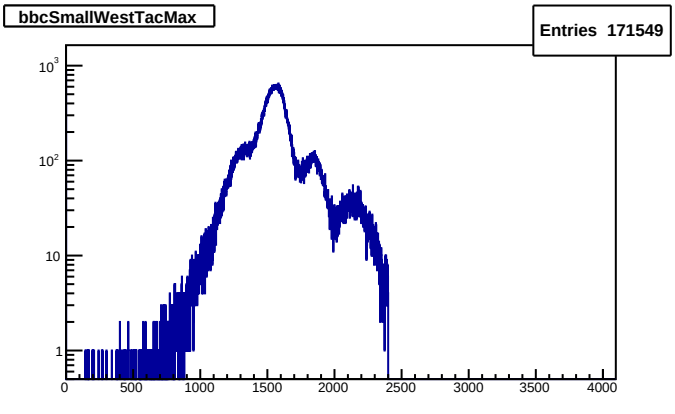

bbcSmallEastAdcSumVsSimu
Entries 0
Data
Simu

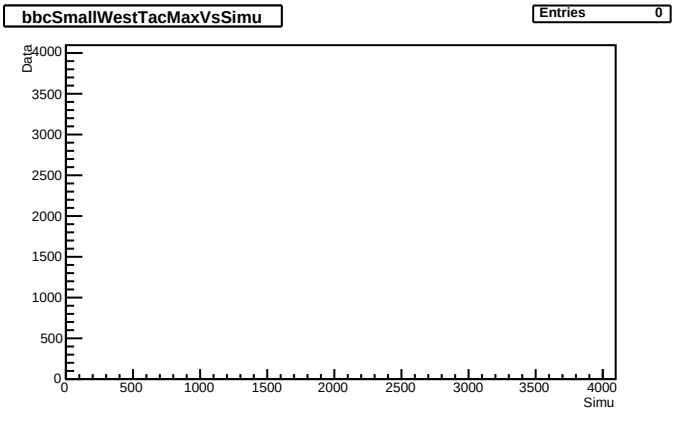

bbcSmallEastTacMax
Entries 171549

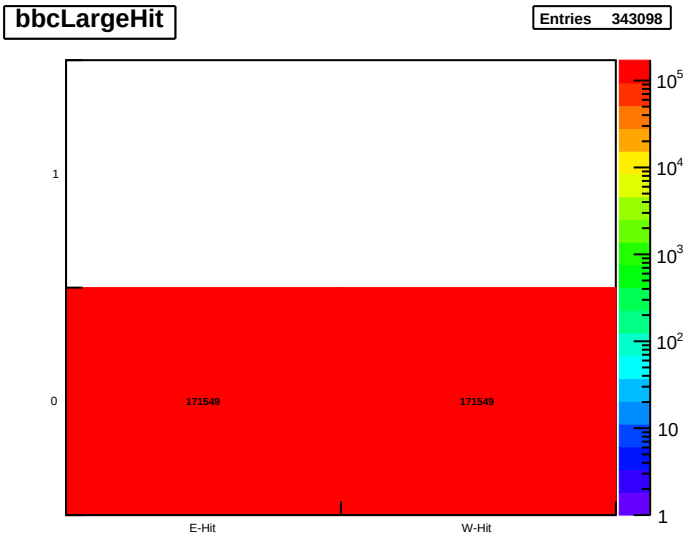

bbcSmallEastTacMaxVsSimu
Entries 0
Data
Simu

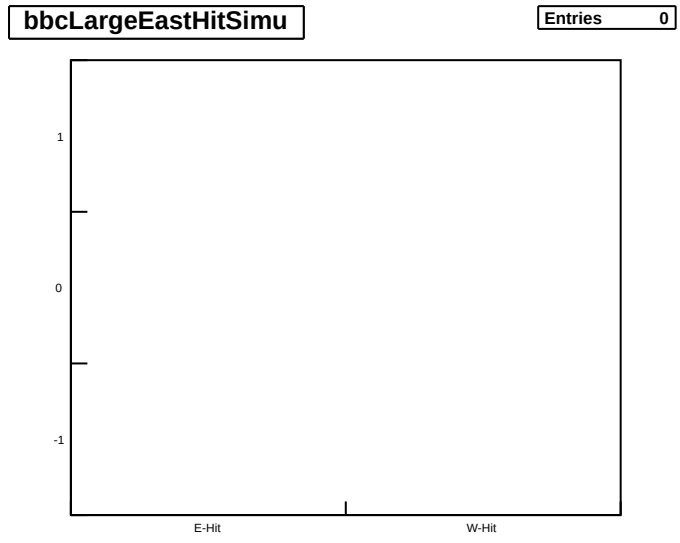

bbcSmallWestAdcSum
Entries 171549

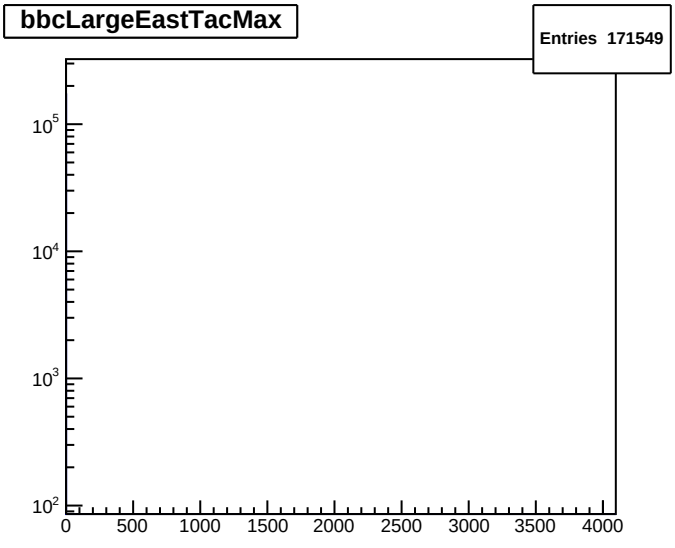

bbcSmallWestAdcSumVsSimu
Entries 0
Data
Simu

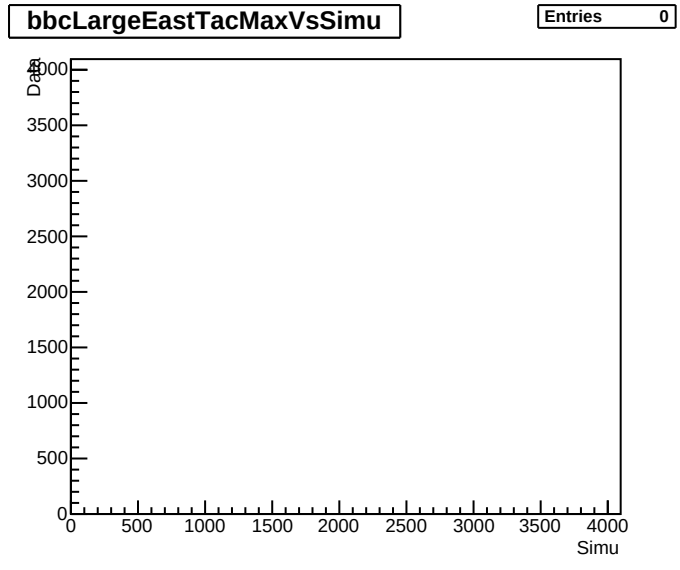

bbcSmallWestTacMax
Entries 171549

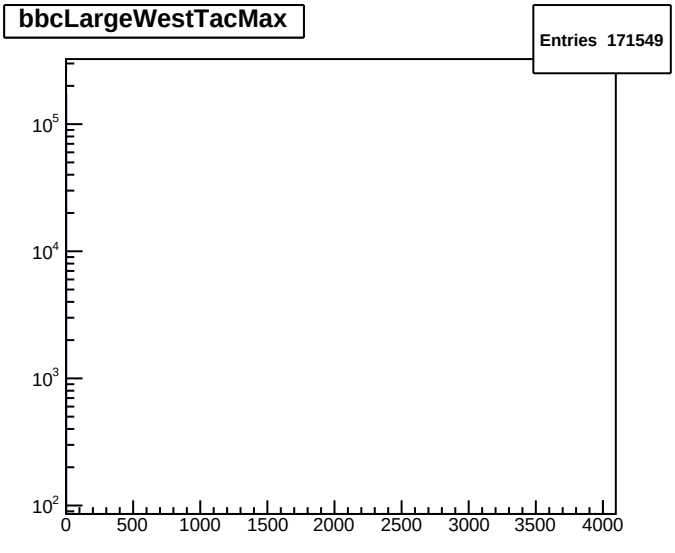

bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu

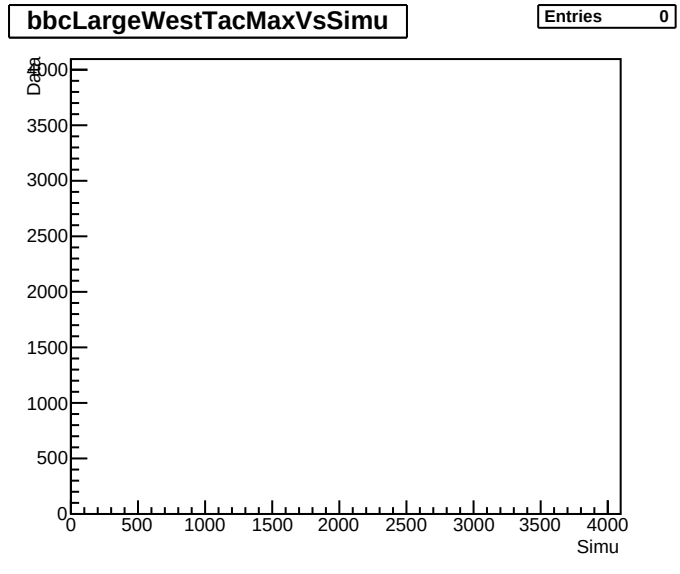

bbcLargeHit
Entries 343098
171549
171549
E-Hit
W-Hit

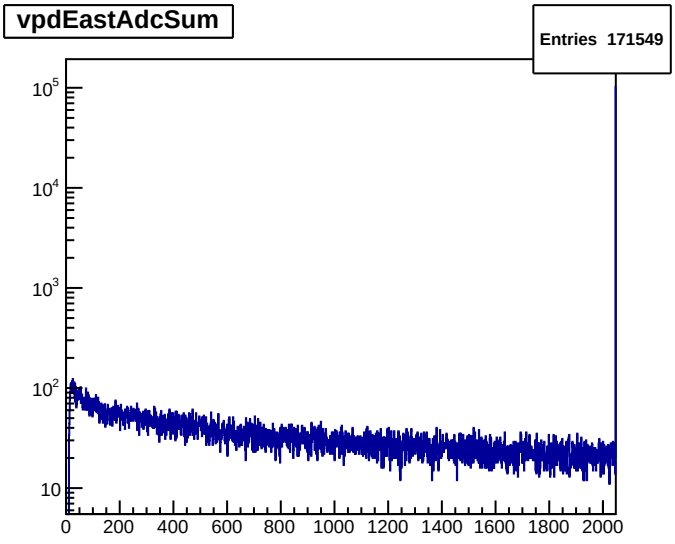

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

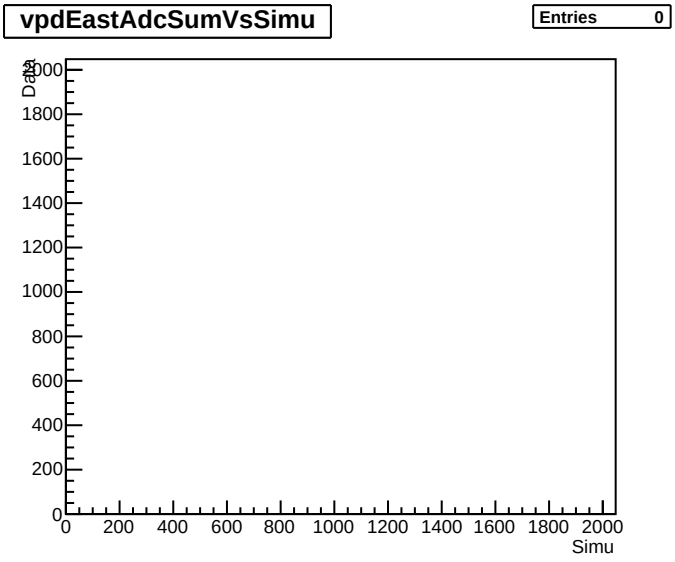

bbcLargeEastTacMax
Entries 171549

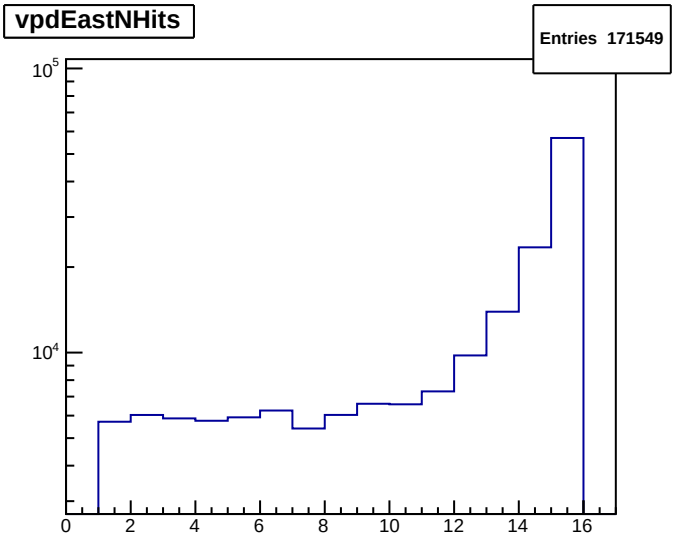

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

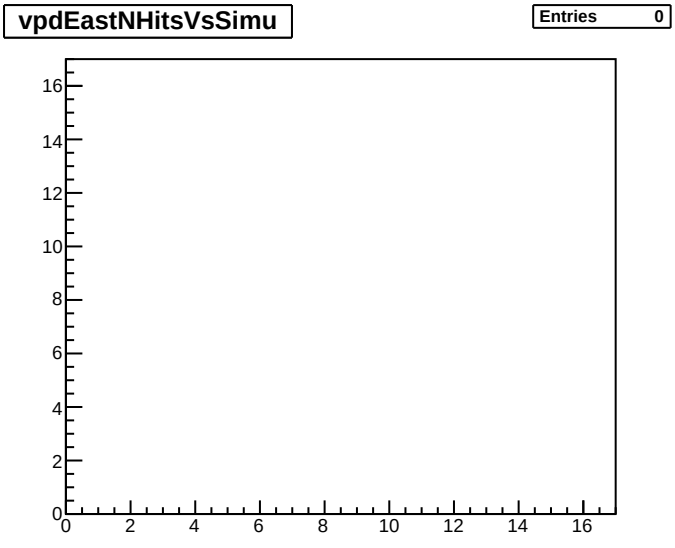

bbcLargeWestTacMax
Entries 171549

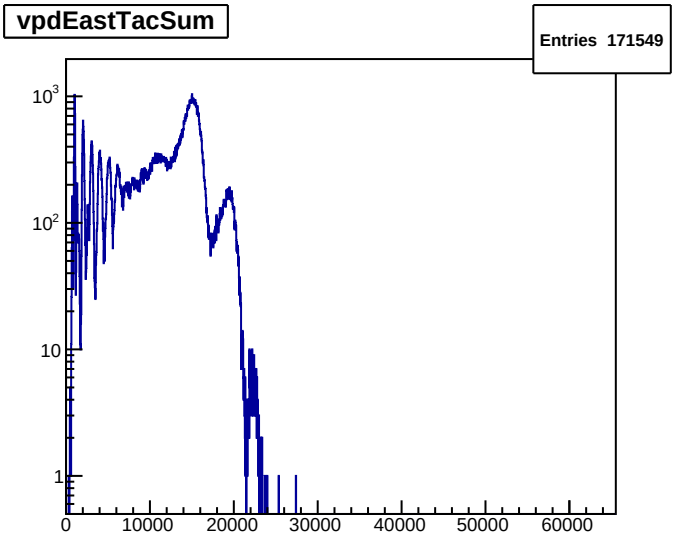

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

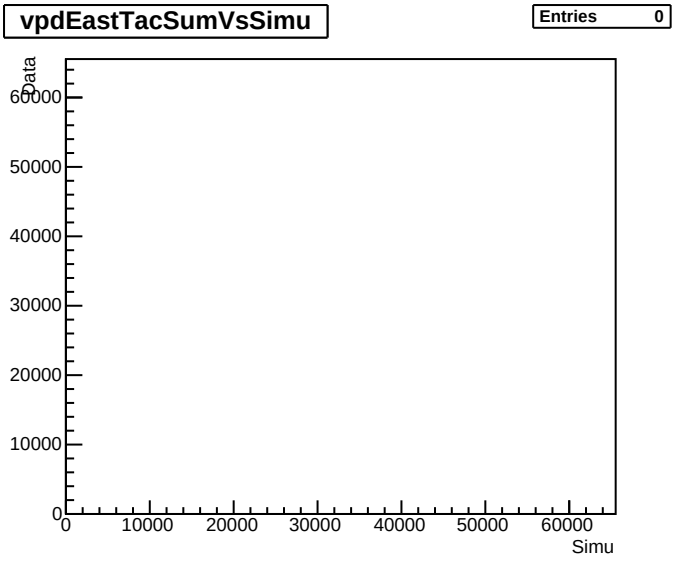

vpdEastAdcSum
Entries 171549
10^5
10^4
10^3
10^2
10
0 200 400 600 800 1000 1200 1400 1600 1800 2000

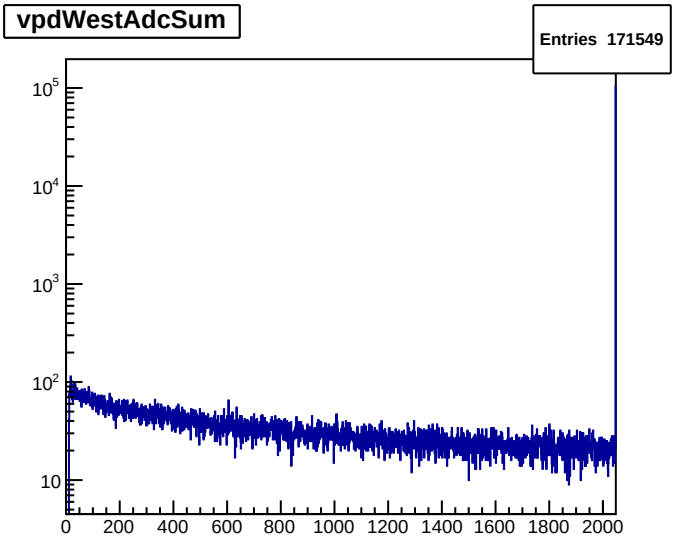

vpdEastAdcSumVsSimu
Entries 0
Data
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0 200 400 600 800 1000 1200 1400 1600 1800 2000
Simu

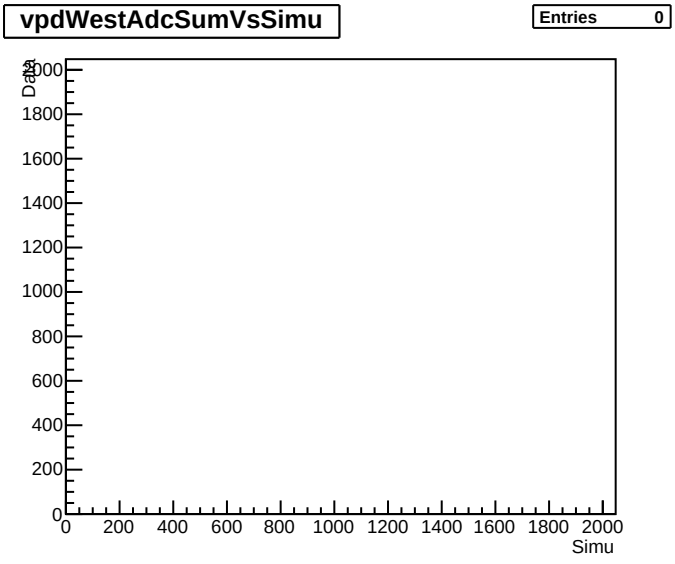

vpdEastNHits
Entries 171549
10^5
10^4
0 2 4 6 8 10 12 14 16

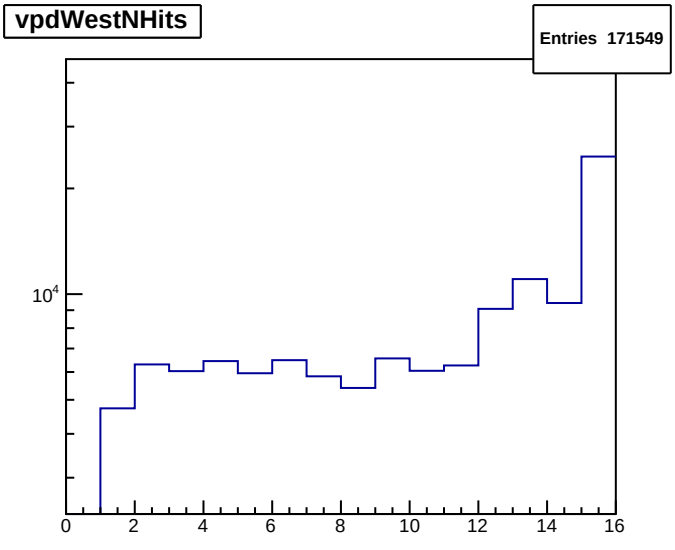

vpdEastNHitsVsSimu
Entries 0
16
14
12
10
8
6
4
2
0
0 2 4 6 8 10 12 14 16

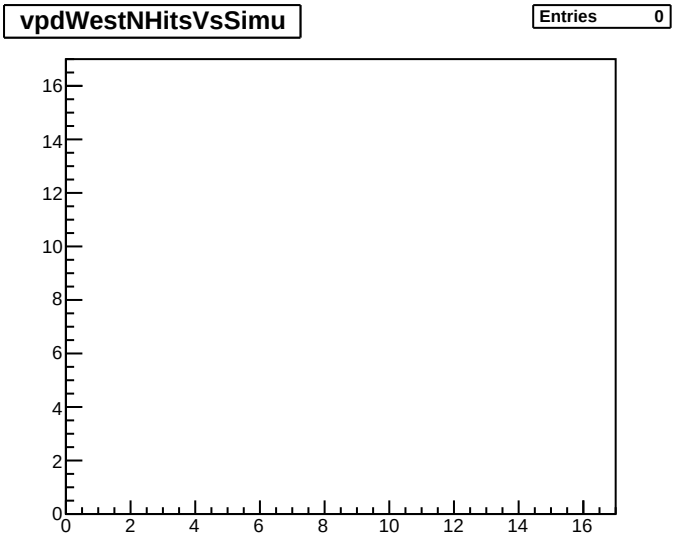

vpdEastTacSum
Entries 171549
10^3
10^2
10
1
0 10000 20000 30000 40000 50000 60000

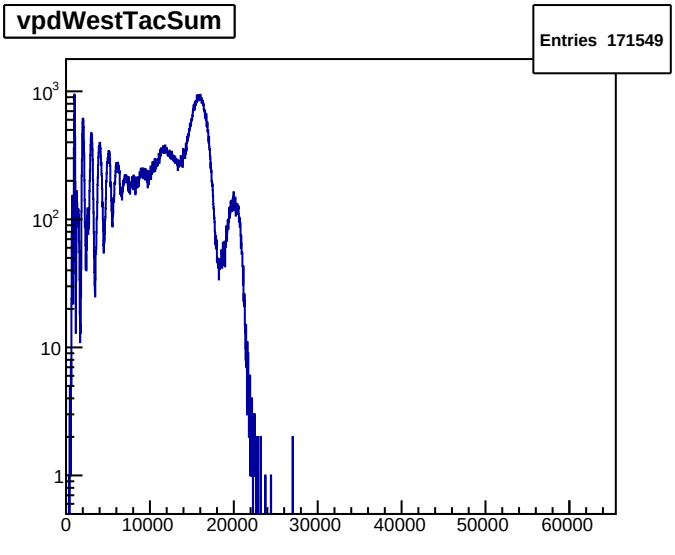

vpdEastTacSumVsSimu
Entries 0
Data
60000
50000
40000
30000
20000
10000
0
0 10000 20000 30000 40000 50000 60000
Simu

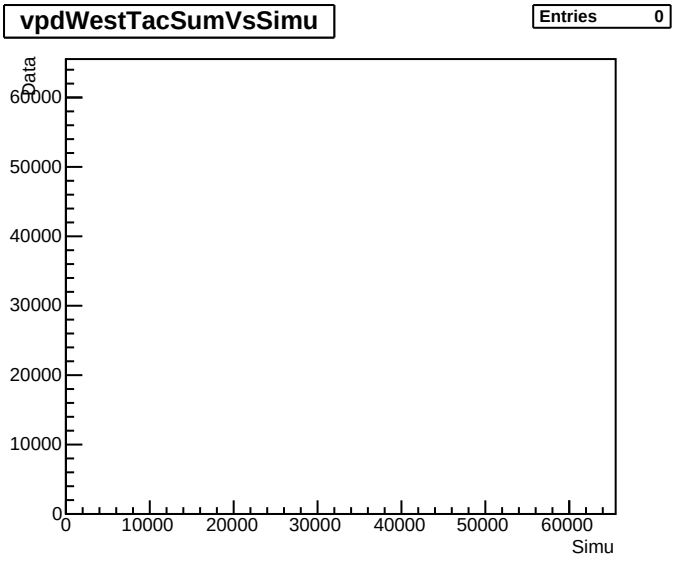

vpdWestAdcSum
Entries 171549
10^5
10^4
10^3
10^2
10
0 200 400 600 800 1000 1200 1400 1600 1800 2000

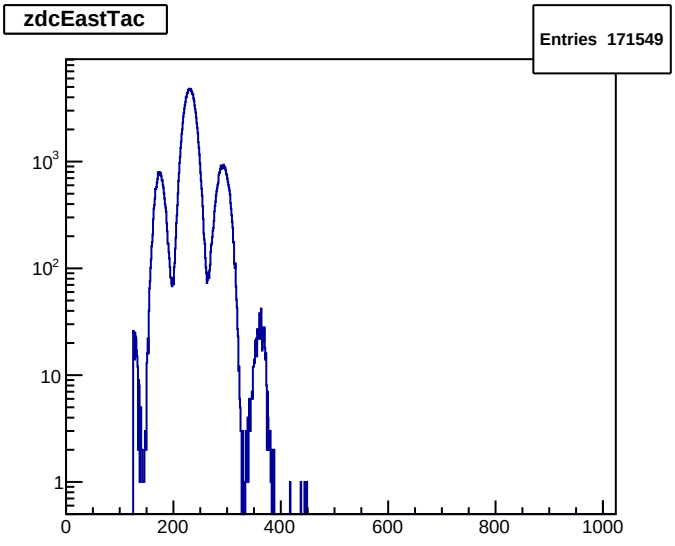

vpdWestAdcSumVsSimu
Entries 0
Data
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0 200 400 600 800 1000 1200 1400 1600 1800 2000
Simu

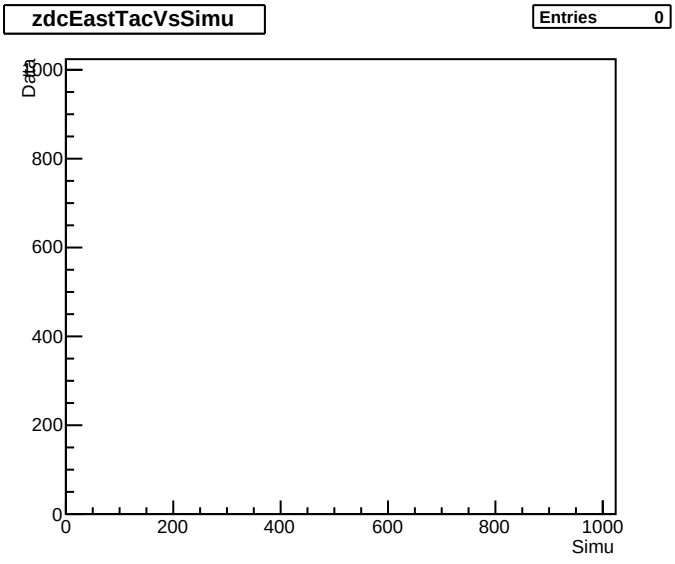

vpdWestNHits
Entries 171549
10^4
0 2 4 6 8 10 12 14 16

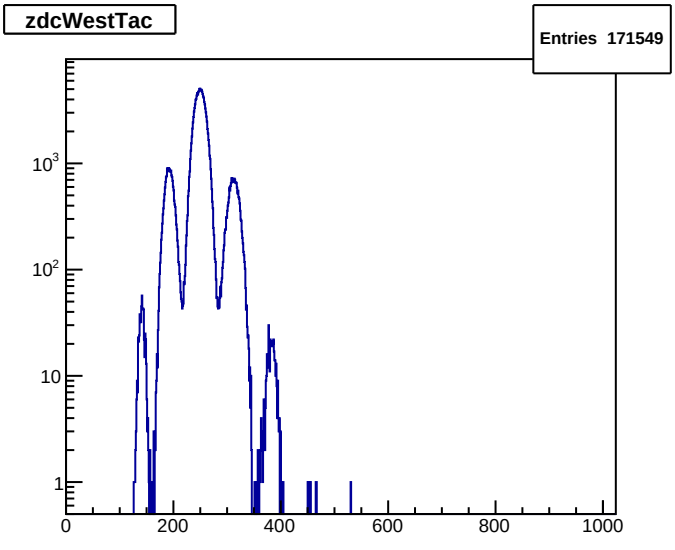

vpdWestNHitsVsSimu
Entries 0
16
14
12
10
8
6
4
2
0
0 2 4 6 8 10 12 14 16

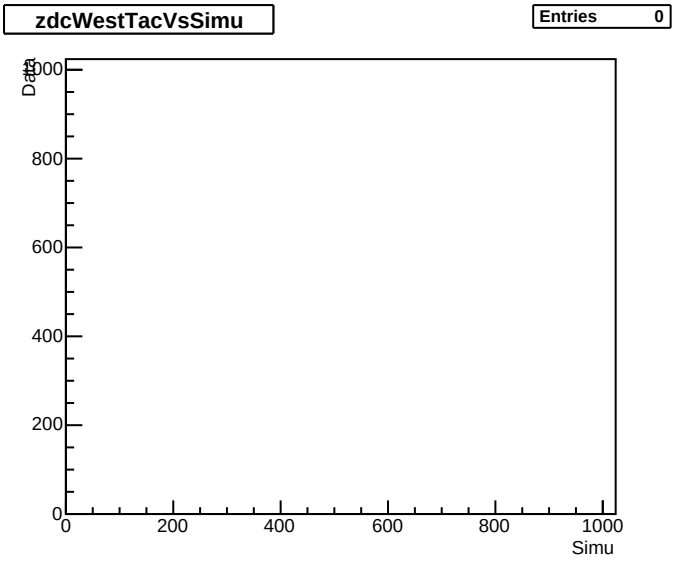

vpdWestTacSum
Entries 171549
10^3
10^2
10
1
0 10000 20000 30000 40000 50000 60000

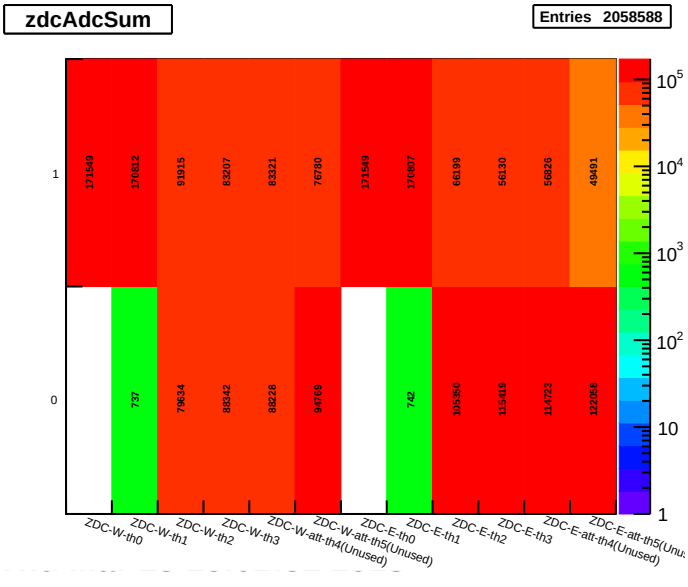

vpdWestTacSumVsSimu
Entries 0
Data
60000
50000
40000
30000
20000
10000
0
0 10000 20000 30000 40000 50000 60000
Simu

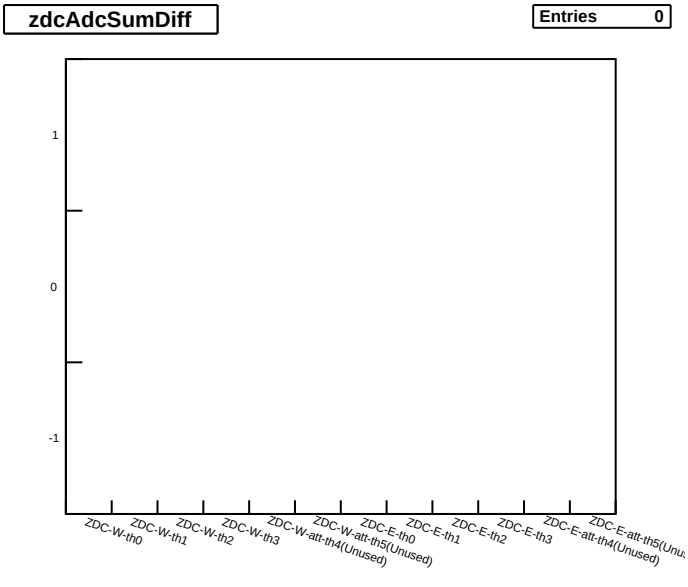

zdcEastTac
Entries 171549
10^3
10^2
10
1
0
200
400
600
800
1000

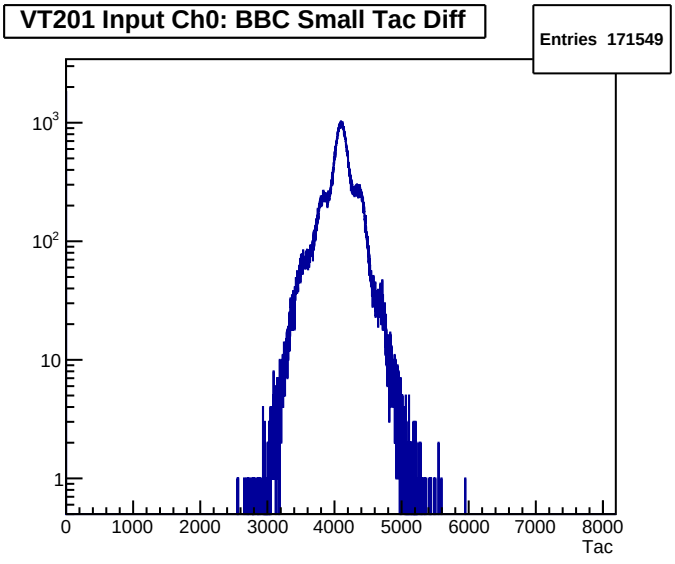

zdcEastTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

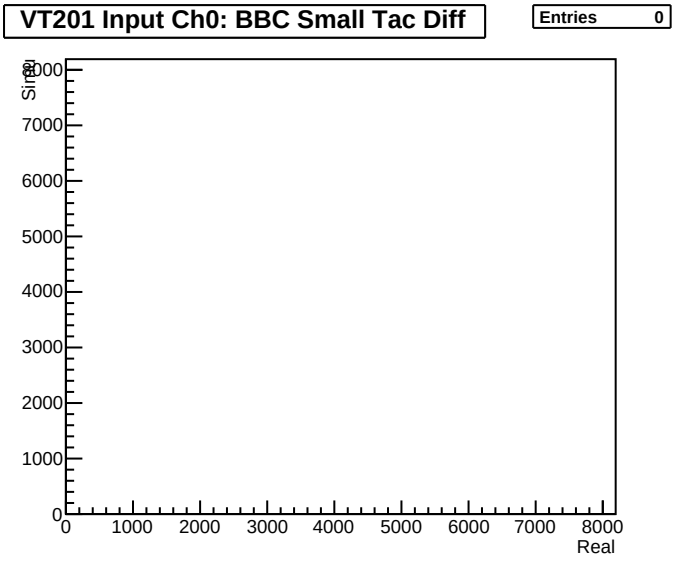

zdcWestTac
Entries 171549
10^3
10^2
10
1
0
200
400
600
800
1000

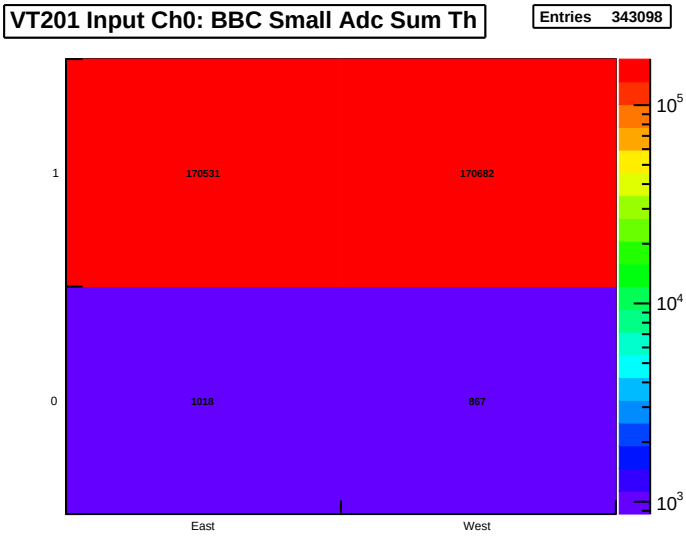

zdcWestTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

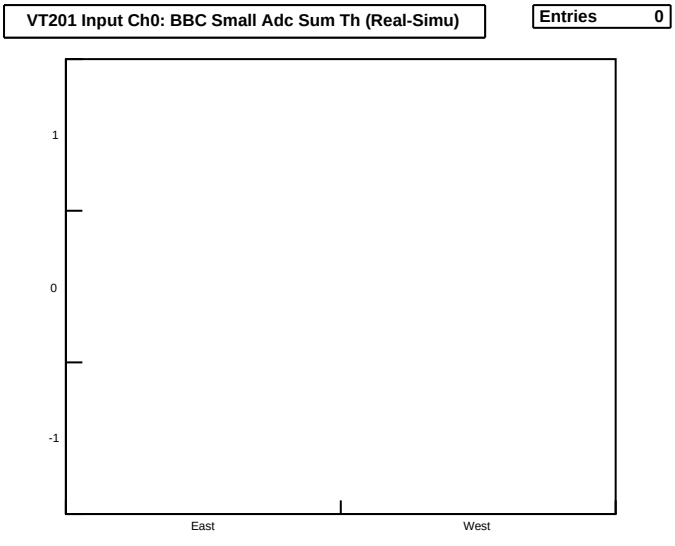

zdcAdcSum
Entries 2058588
1
0
171549
170812
91915
83207
83321
76780
171549
170807
66199
56130
56826
49491
737
79634
88342
88228
94769
742
105350
115419
114723
122568
10^5
10^4
10^3
10^2
10
1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

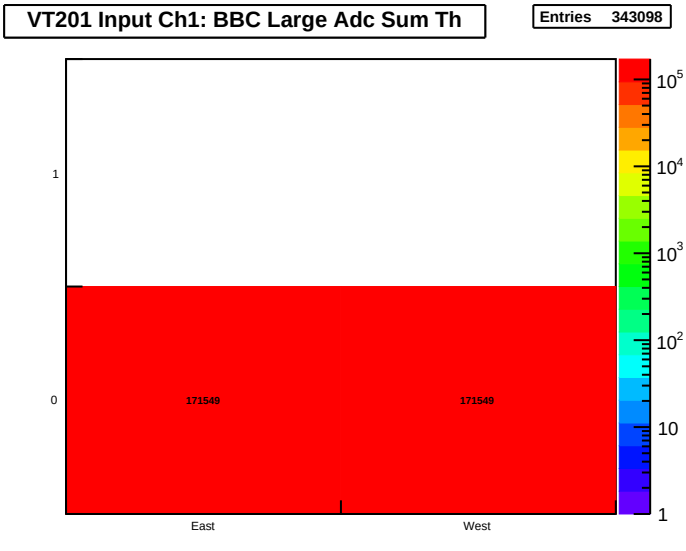

zdcAdcSumDiff
Entries 0
1
0
-1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

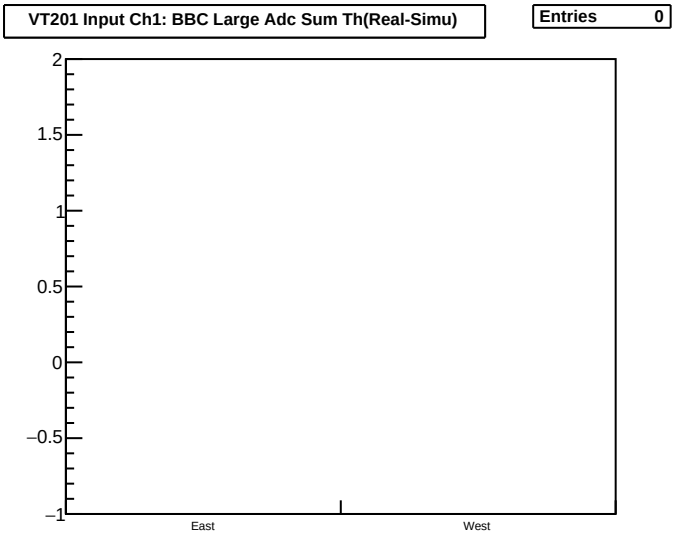

VT201 Input Ch0: BBC Small Tac Diff
Entries 171549
Tac

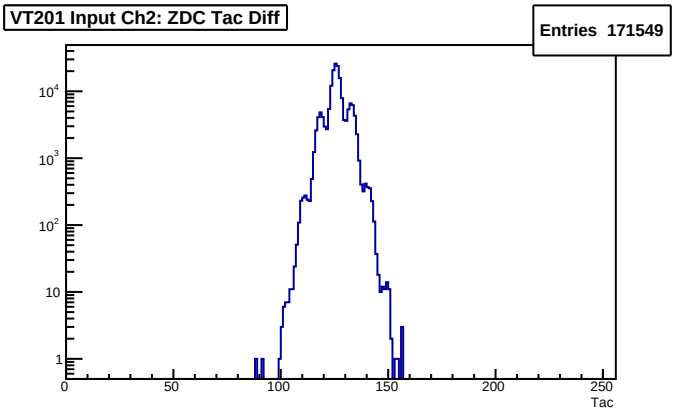

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

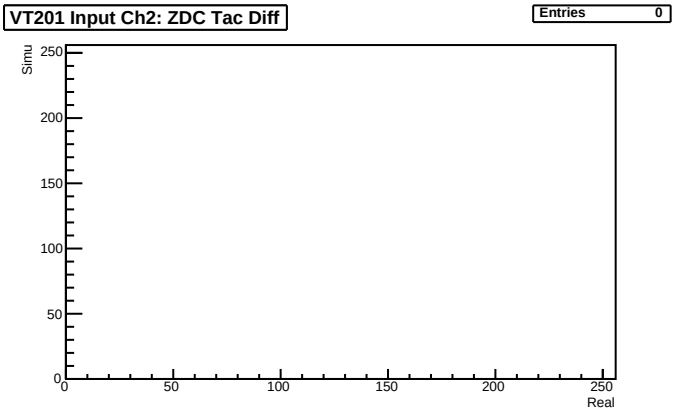

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 343098
170531
170682
1018
867
East
West

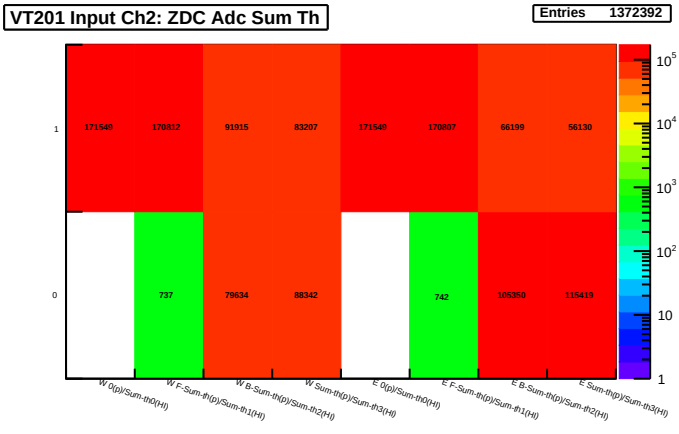

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

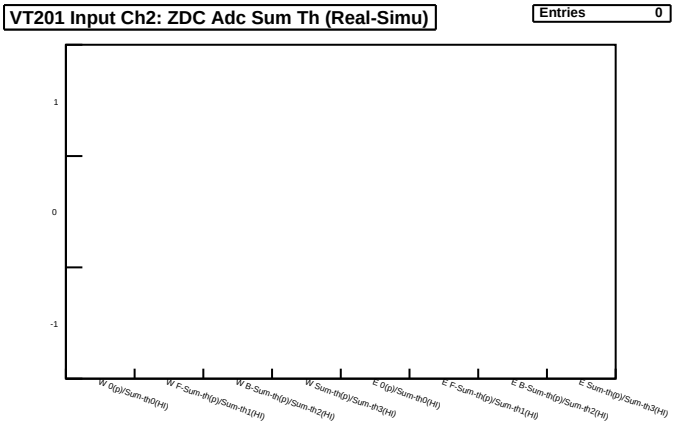

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 343098
171549
171549
East
West

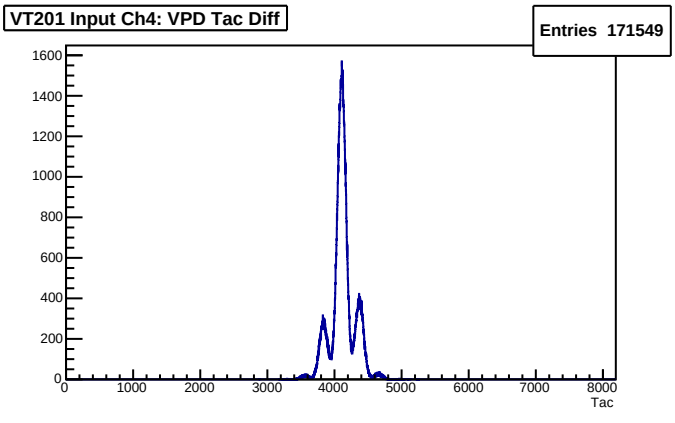

VT201 Input Ch1: BBC Large Adc Sum Th(Real-Simu)
Entries 0
East
West

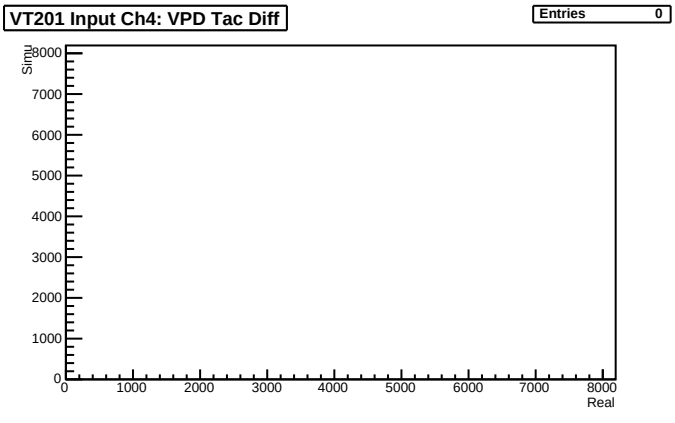

VT201 Input Ch2: ZDC Tac Diff
Entries 171549
Tac

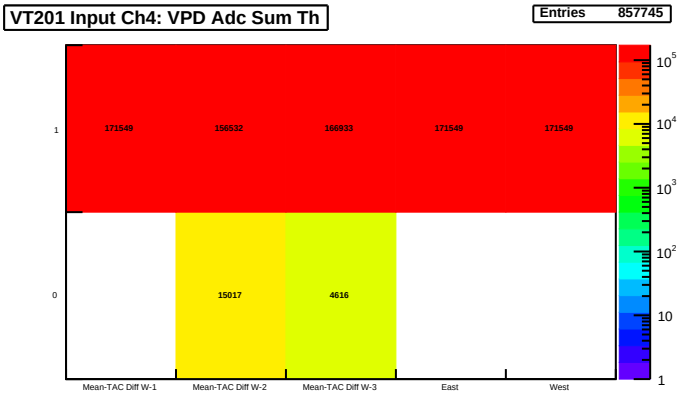

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

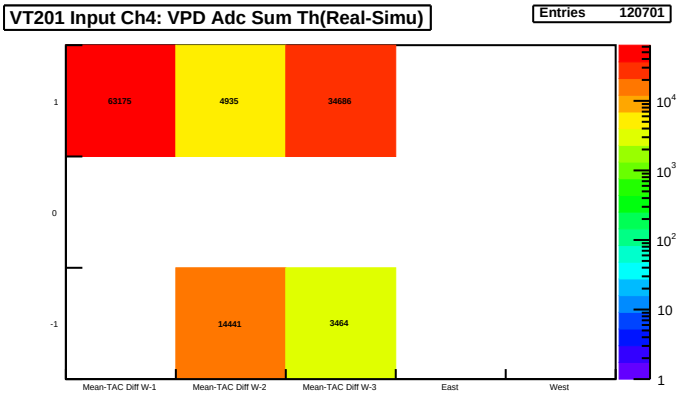

VT201 Input Ch2: ZDC Adc Sum Th
Entries 1372392
171549
170812
91915
83207
171549
170807
66199
56130
737
79634
88342
742
105350
115419
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

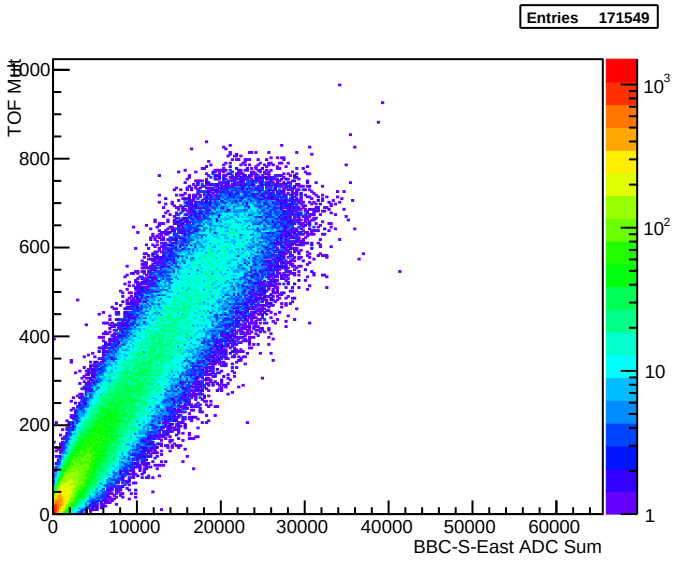

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

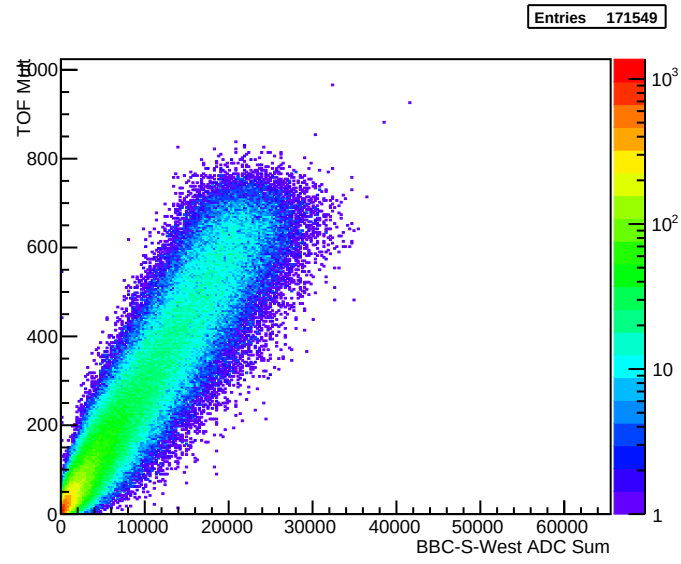

VT201 Input Ch4: VPD Tac Diff
Entries 171549
Tac

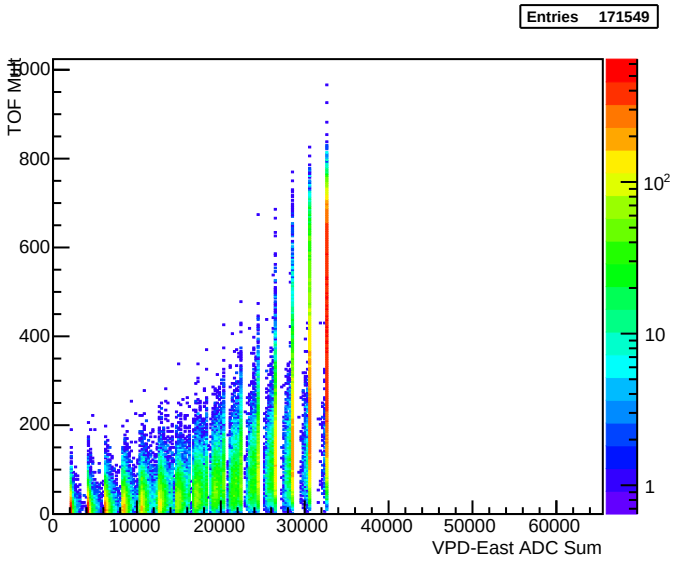

VT201 Input Ch4: VPD Tac Diff
Entries 0
Simu
Real

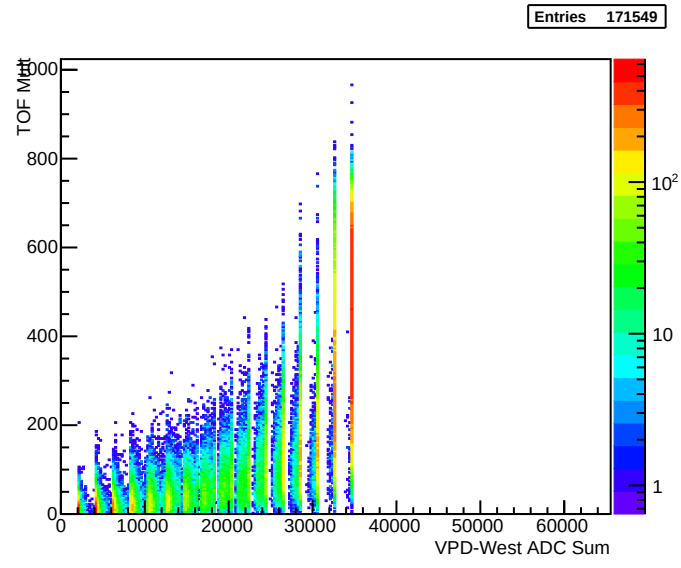

VT201 Input Ch4: VPD Adc Sum Th
Entries 857745
171549
156532
166933
171549
171549
15017
4616
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

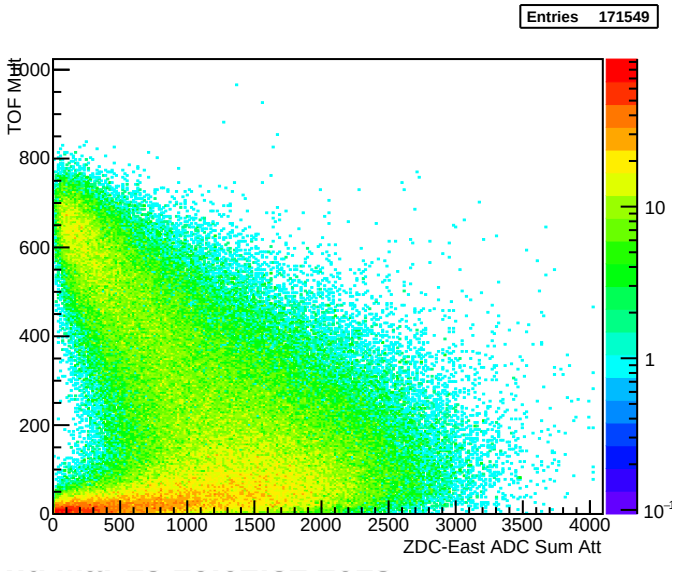

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 120701
63175
4935
34686
14441
3464
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

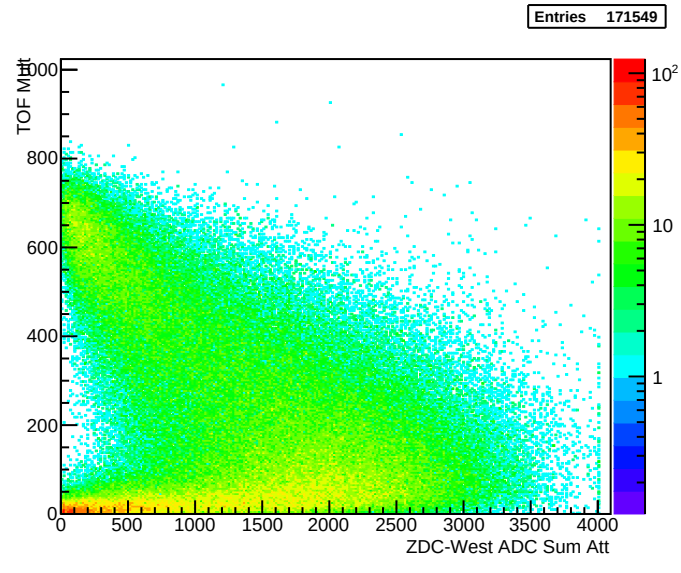

Entries 171549
TOF Mult
BBC-S-East ADC Sum

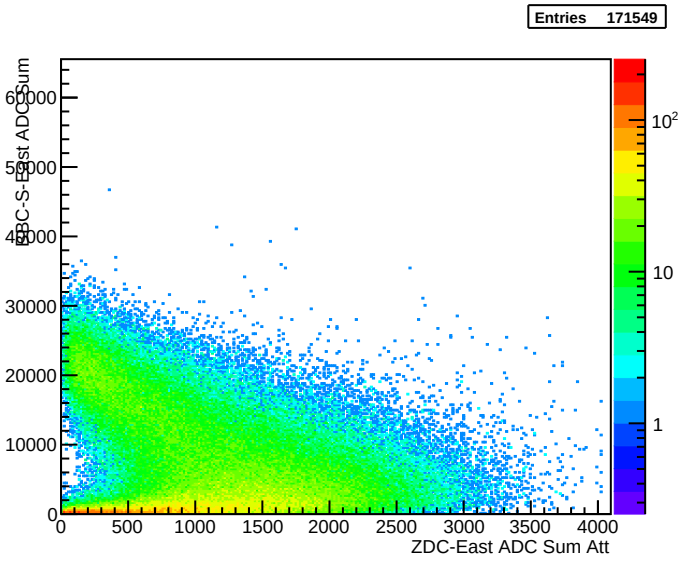

Entries 171549
TOF Mult
BBC-S-West ADC Sum

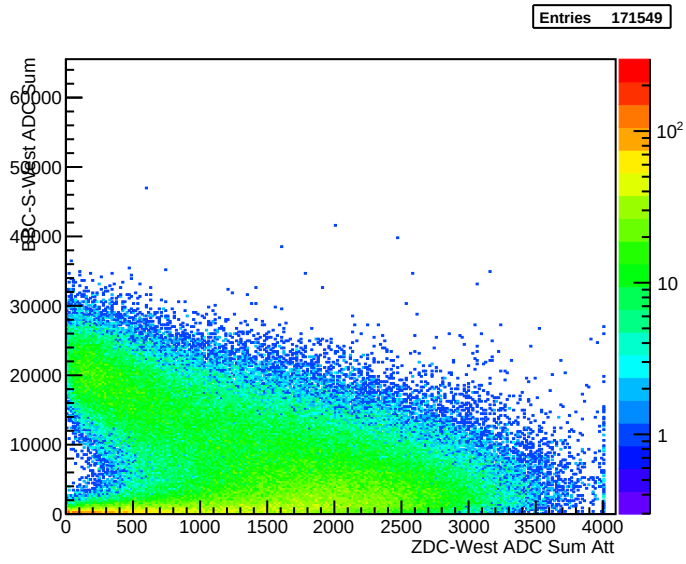

Entries 171549
TOF Mult
VPD-East ADC Sum

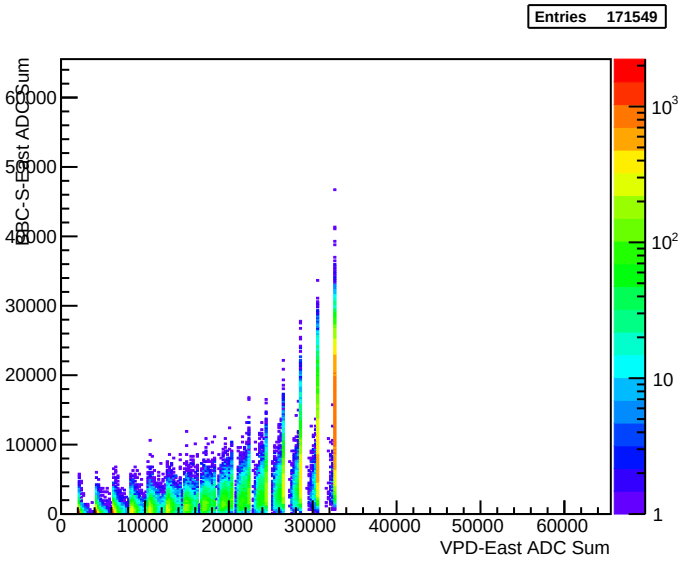

Entries 171549
TOF Mult
VPD-West ADC Sum

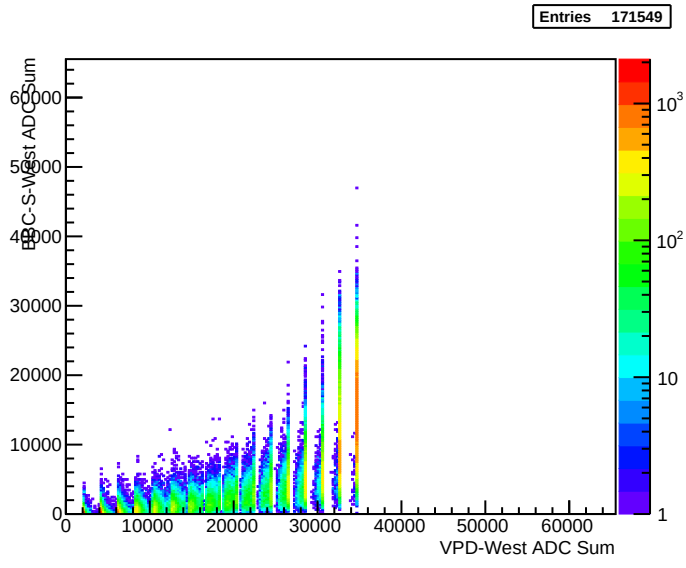

Entries 171549
TOF Mult
ZDC-East ADC Sum Att

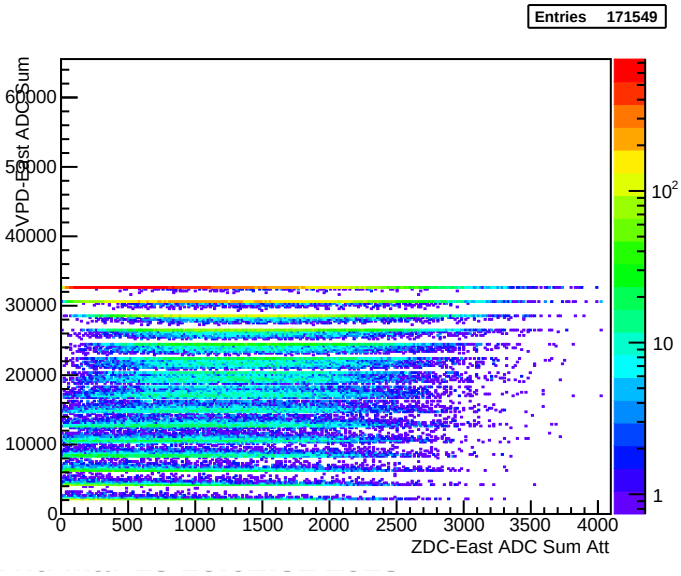

Entries 171549
TOF Mult
ZDC-West ADC Sum Att


Entries 171549
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 171549
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 171549
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 171549
BBC-S-West ADC Sum
VPD-West ADC Sum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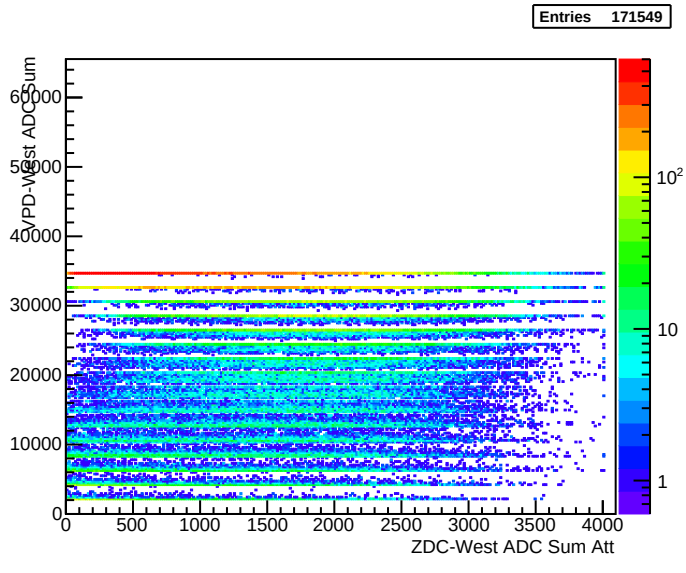
VPD-East ADC Sum
ZDC-East ADC Sum Att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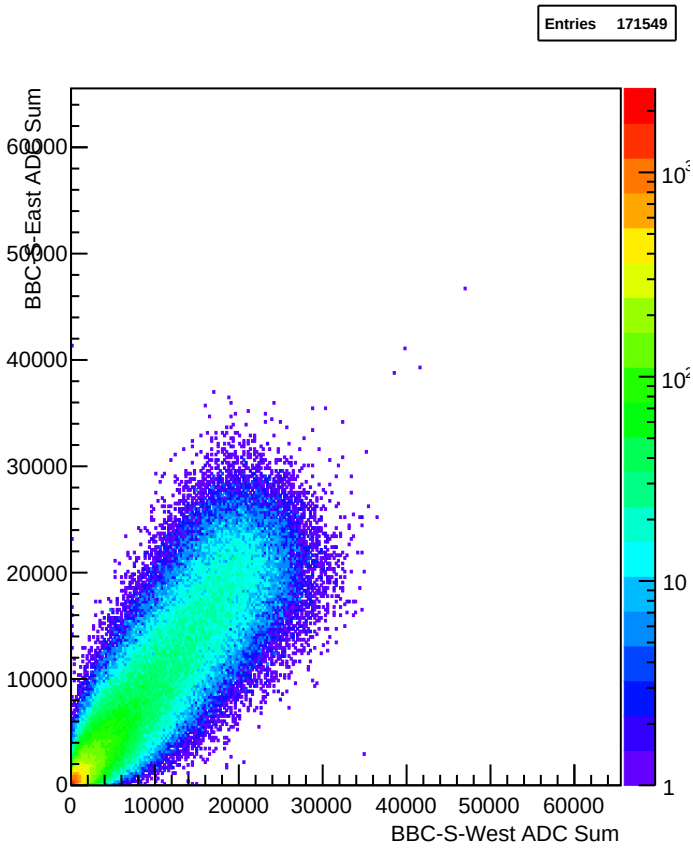
VPD-West ADC Sum
ZDC-West ADC Sum Att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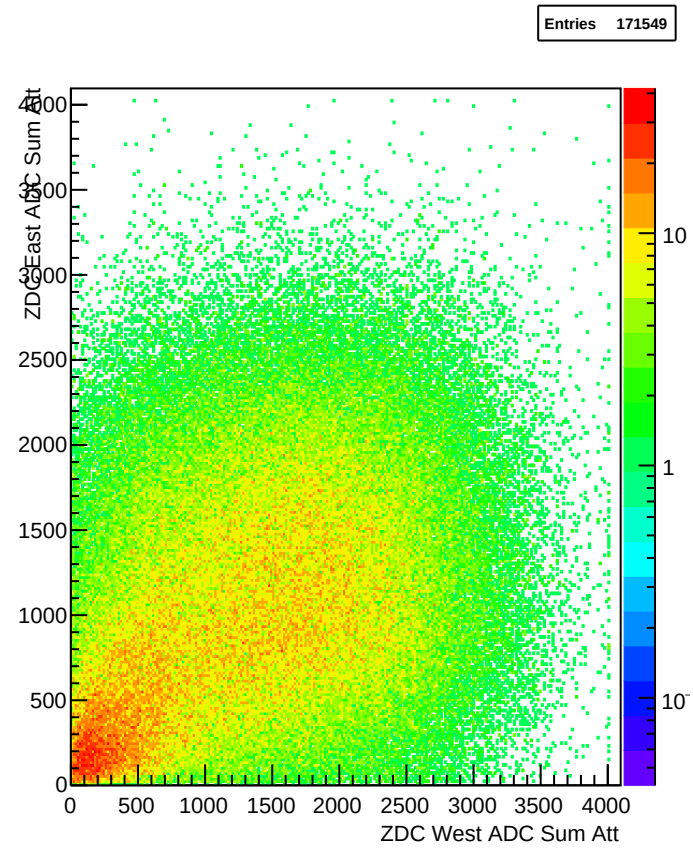
BBC-S-East ADC Sum
BBC-S-West ADC Sum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ZDC East ADC Sum Att
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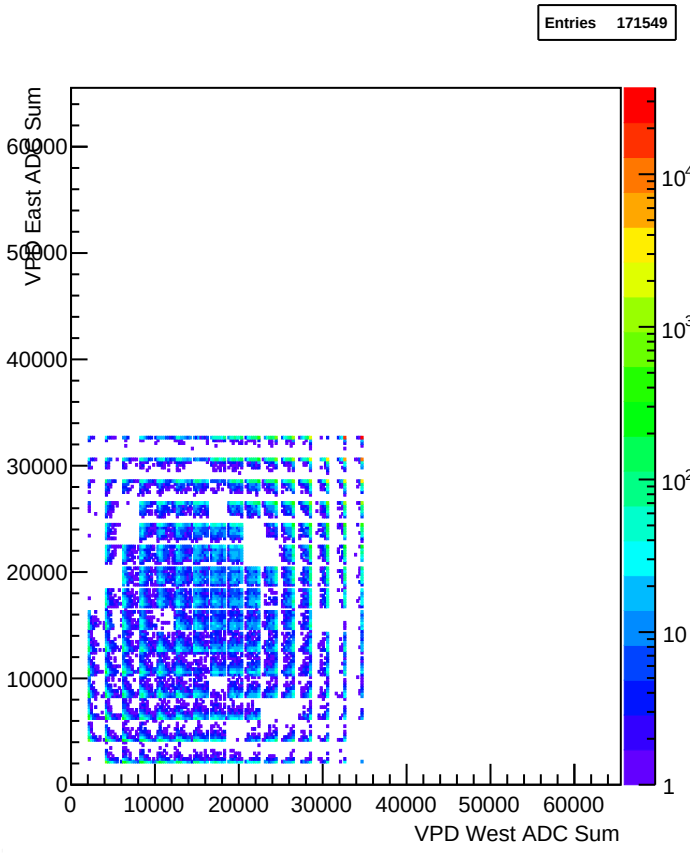
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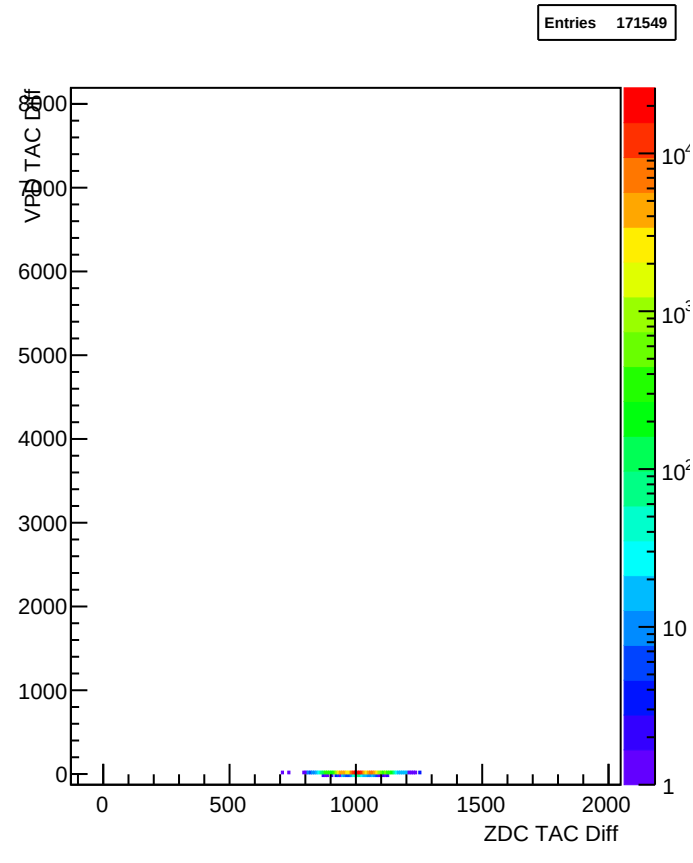
VPD East ADC Sum
VPD West ADC Sum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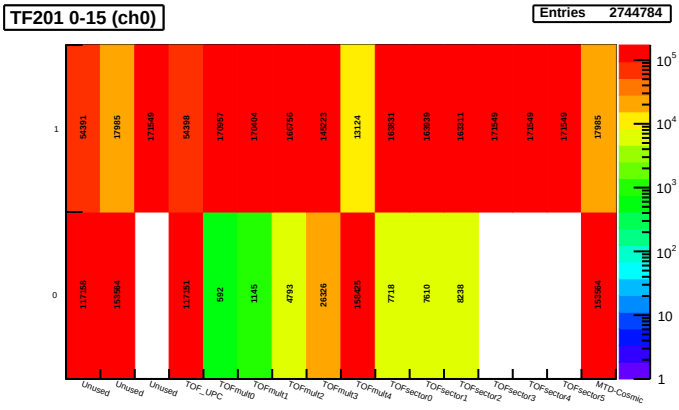
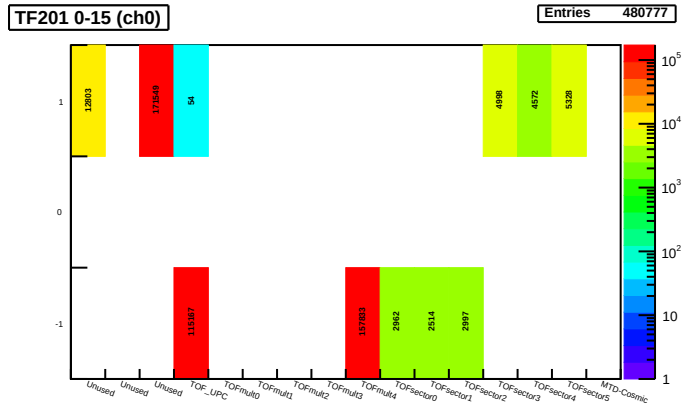
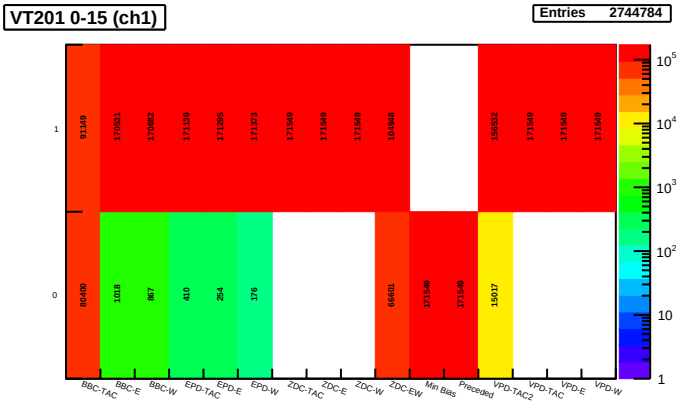
VPD TAC Diff
ZDC TAC Diff


TF201 0-15 (ch0)
Entries 2744784
54391 17985 171549 54398 170857 170404 166756 145223 13124 163331 163939 163311 171549 171549 171549 17985
117359 153564 117351 592 1145 4793 26326 159425 7718 7610 8238 153564
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 480777
12803 171549 54 4998 4572 5328
115167 157833 2962 2514 2997
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic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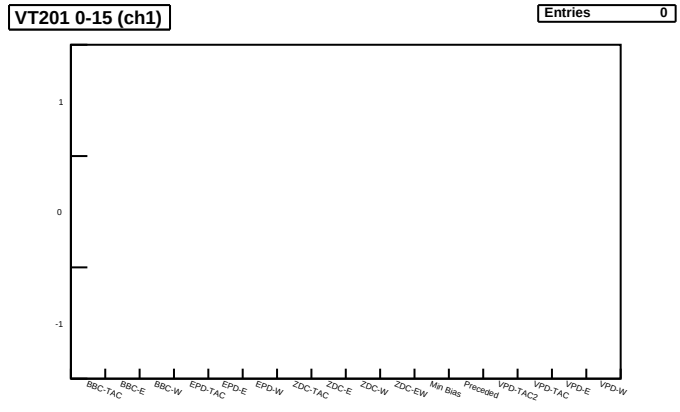
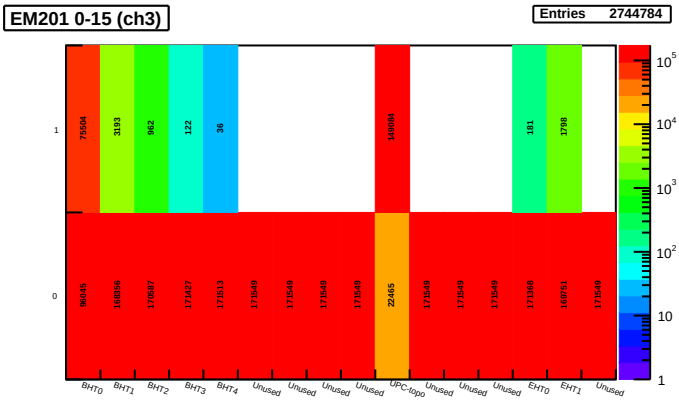
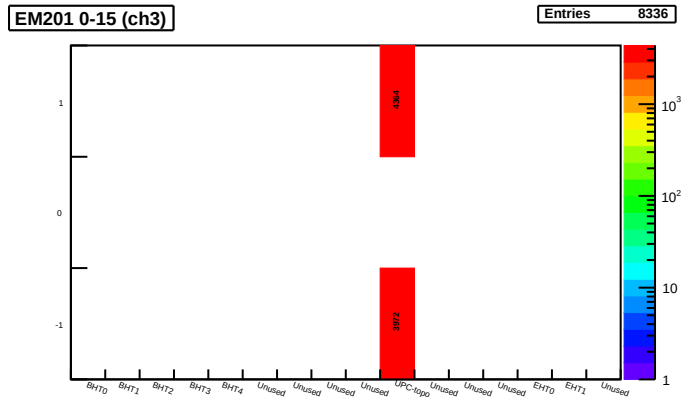
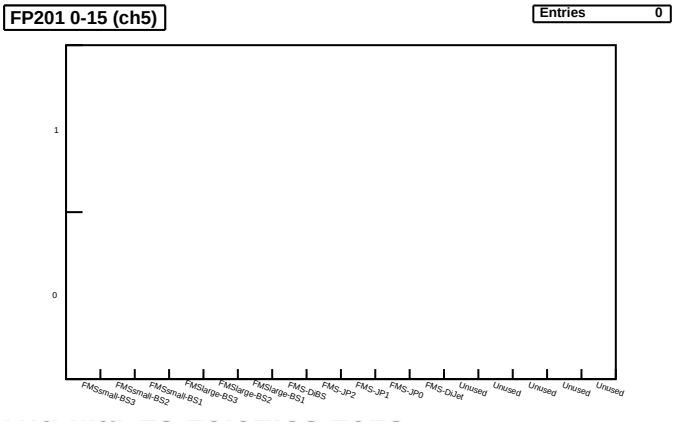
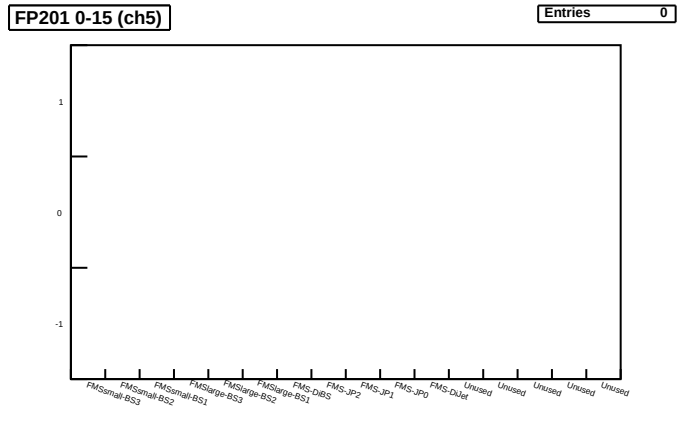
Entries 2744784
91349 170531 170682 171139 171295 171373 171549 171549 171549 104848 156552 171549 171549 171549
80400 1018 867 410 254 176 66601 171549 171549 15017
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W


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 2744784
75504 3193 962 122 36 146084 181 1798
96345 168356 170537 171427 172513 171549 171549 171549 171549 22465 171549 171549 171549 171368 169751 171549
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


EM201 0-15 (ch3)
Entries 8336
4364
3972
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
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