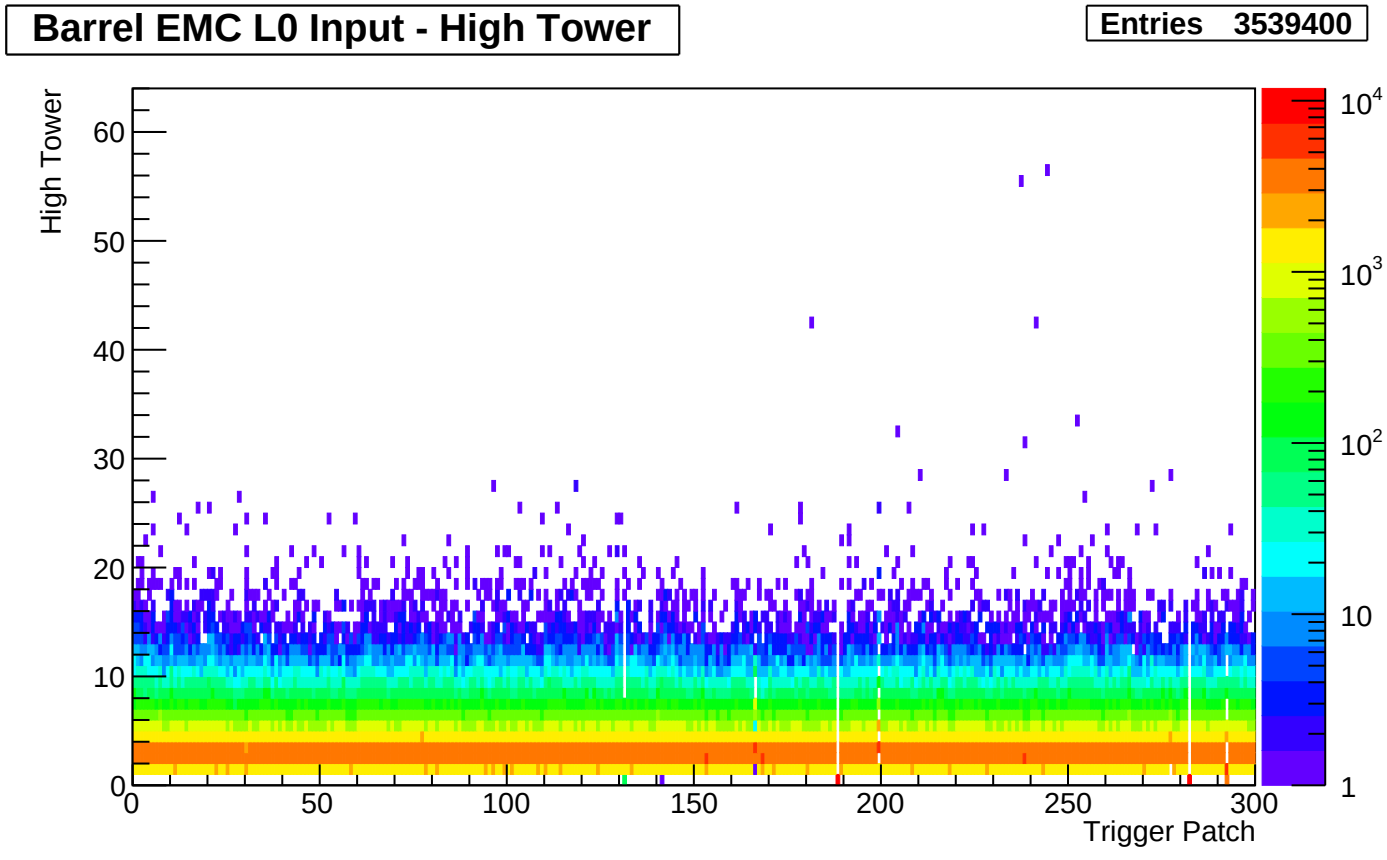
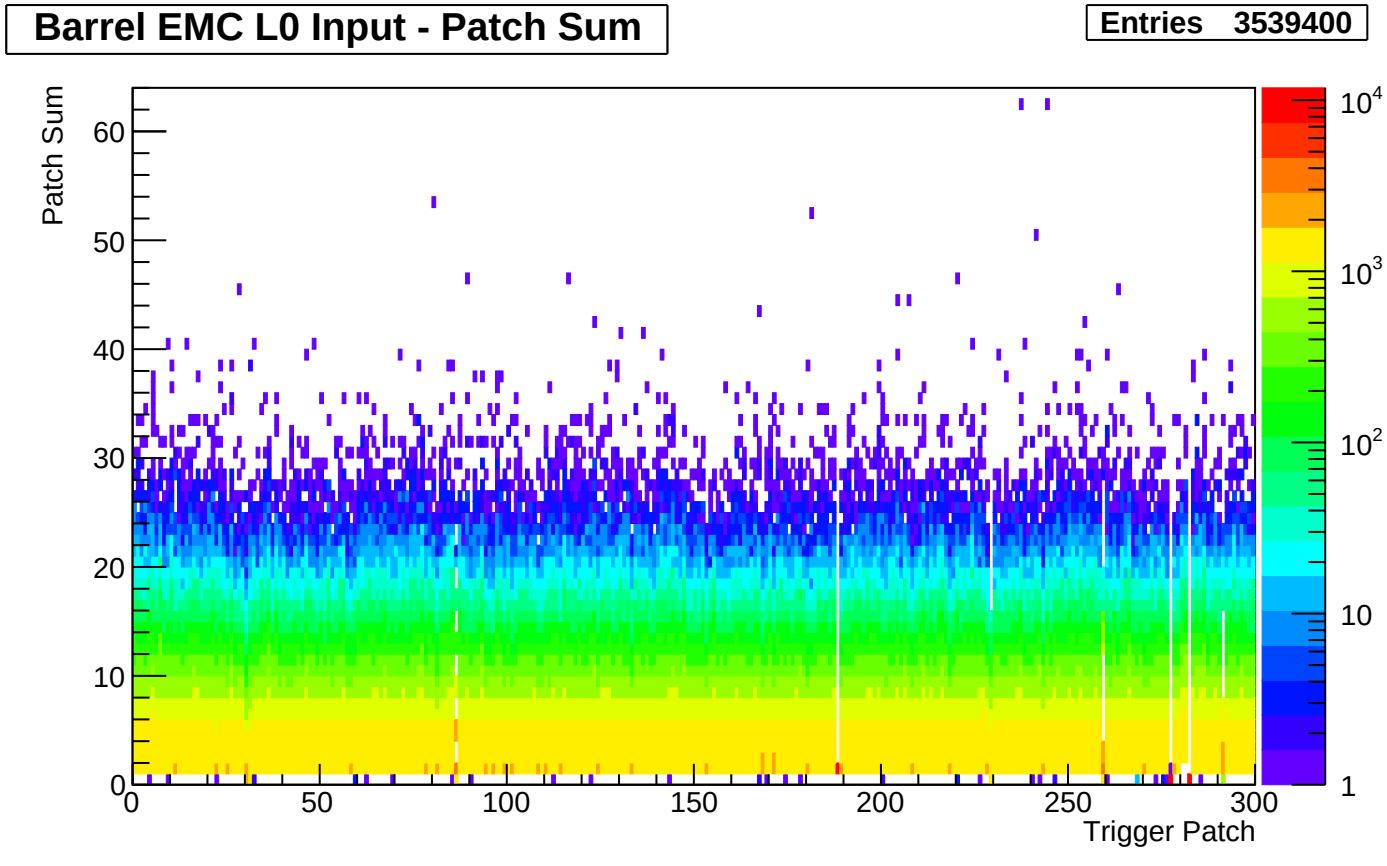
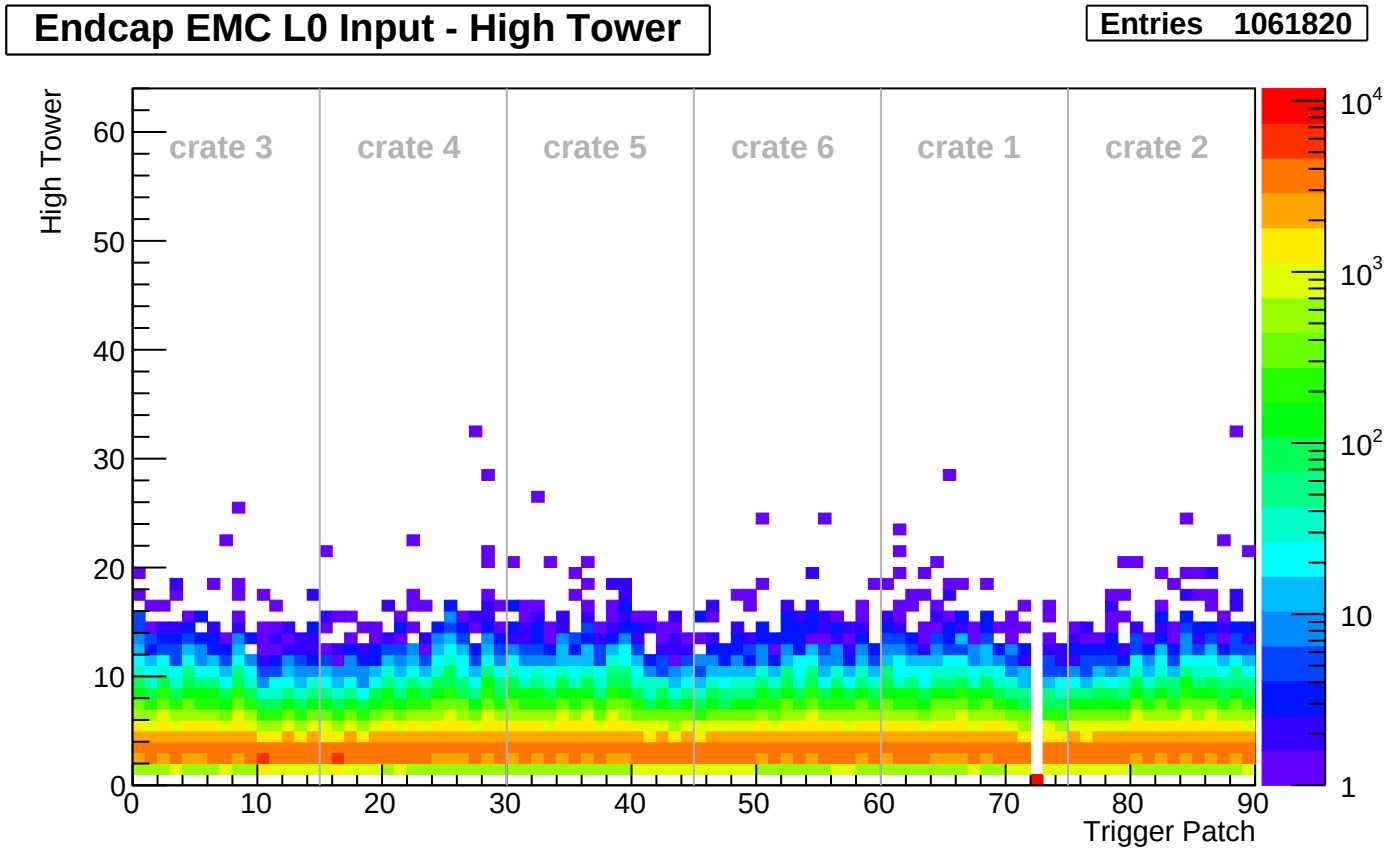
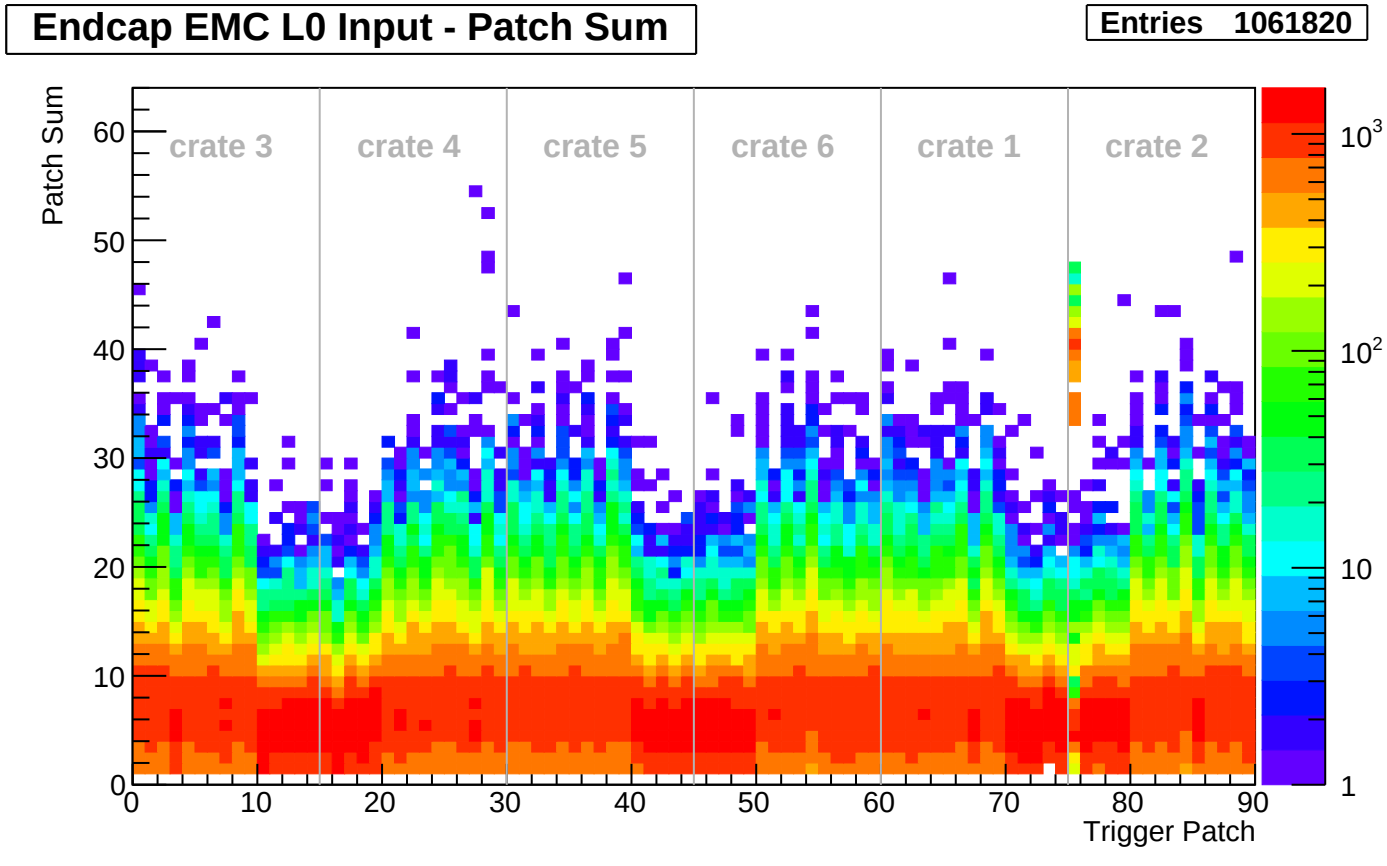
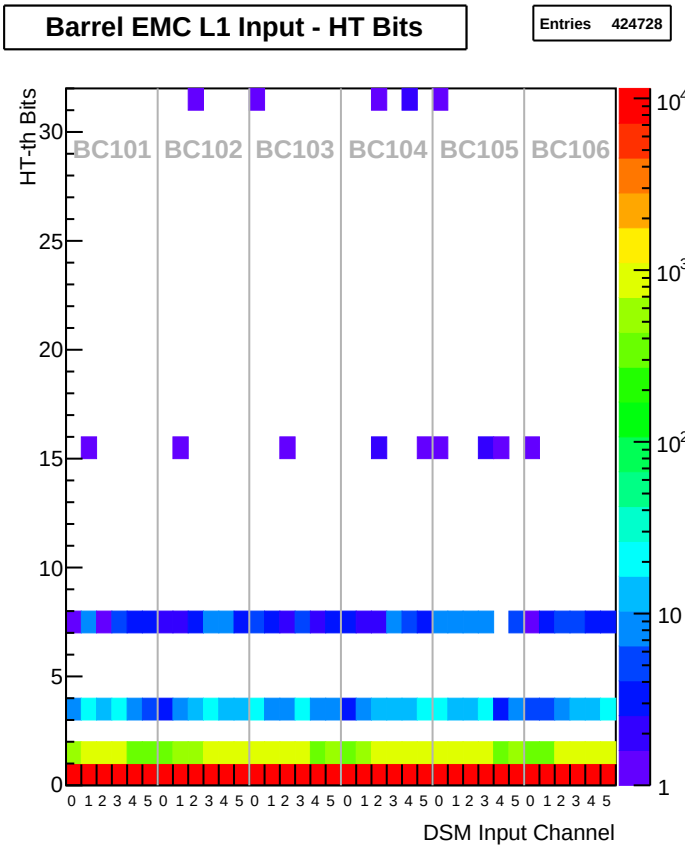
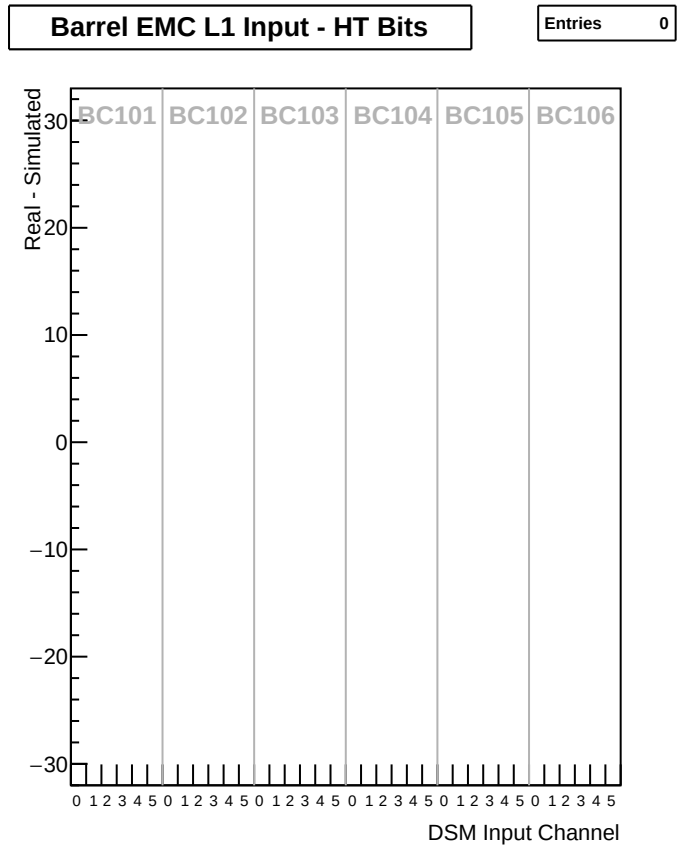

Barrel EMC L0 Input - High Tower
Entries 3539400
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

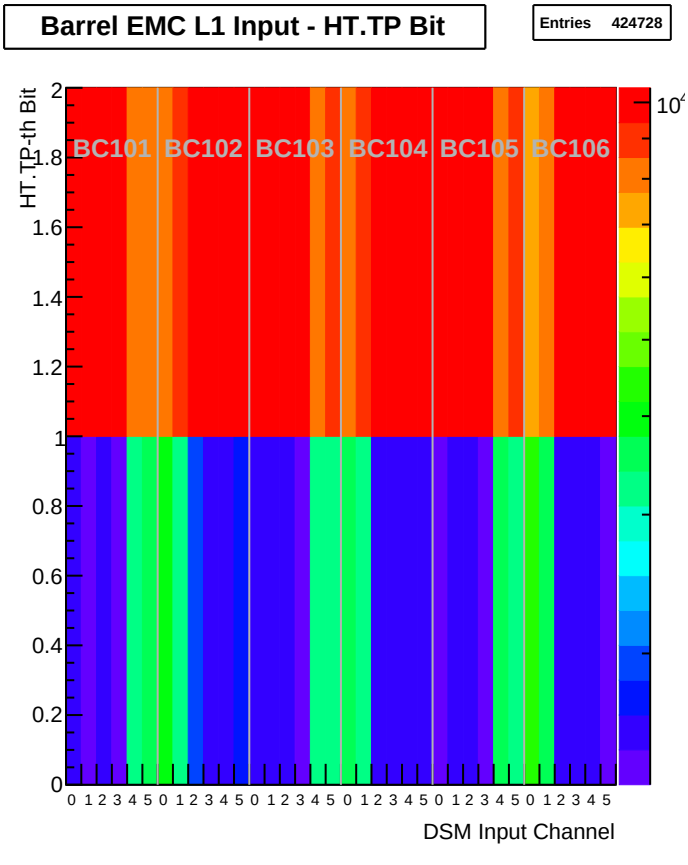

Barrel EMC L0 Input - Patch Sum
Entries 3539400
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

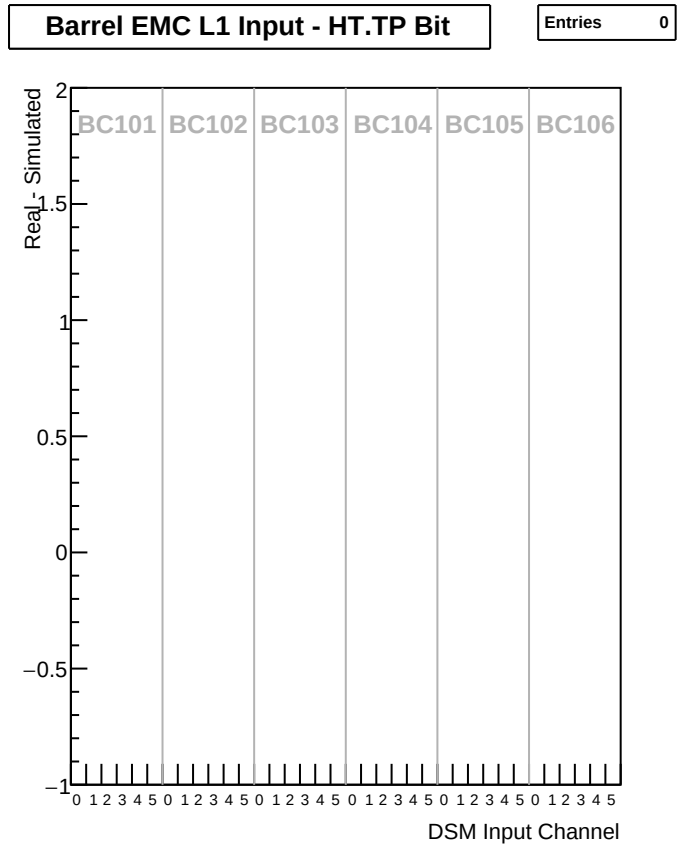

Endcap EMC L0 Input - High Tower
Entries 1061820
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2
10^3
10^4

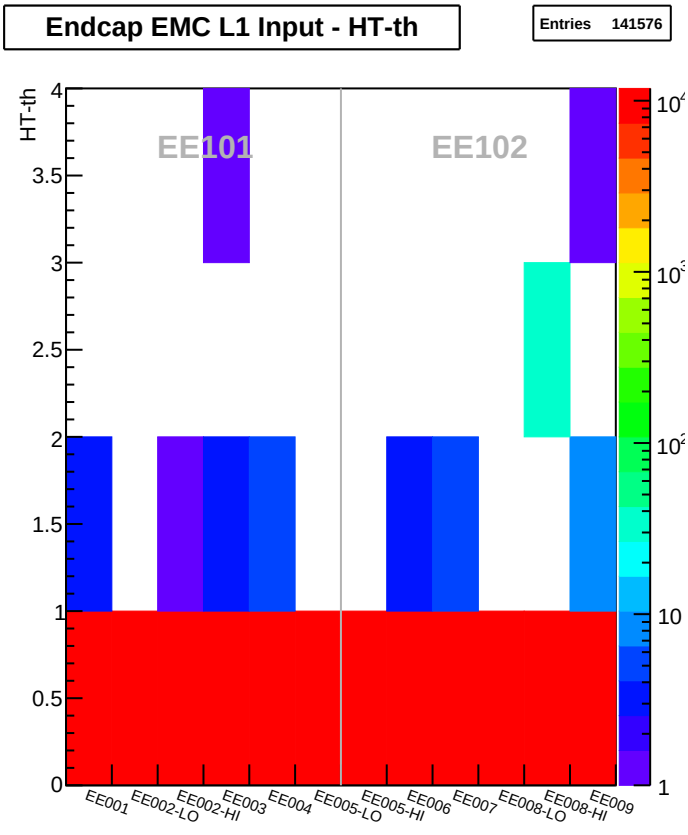

Endcap EMC L0 Input - Patch Sum
Entries 1061820
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch
0
10
20
30
40
50
60
70
80
90
1
10
10^2
10^3

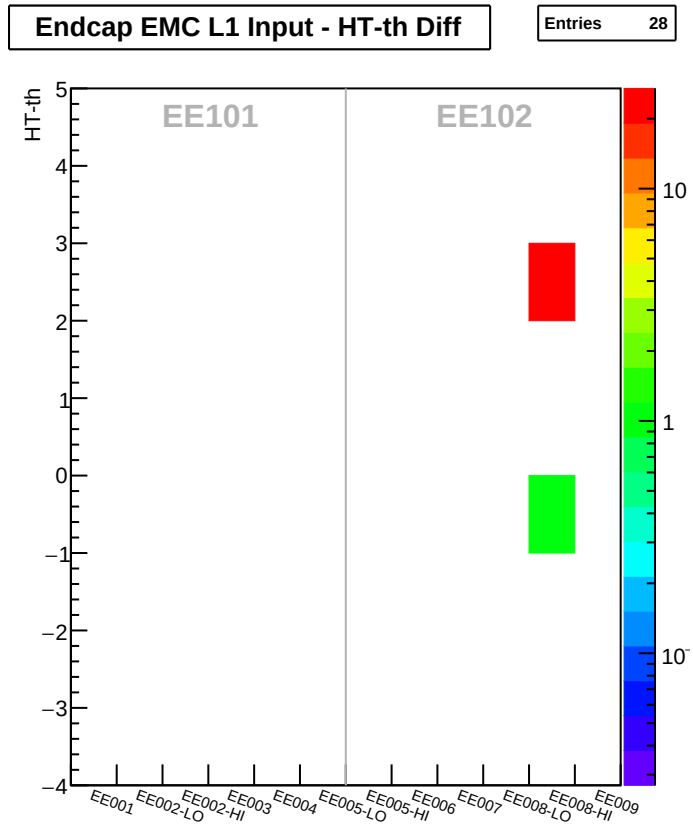

Barrel EMC L1 Input - HT Bits
Entries 424728
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

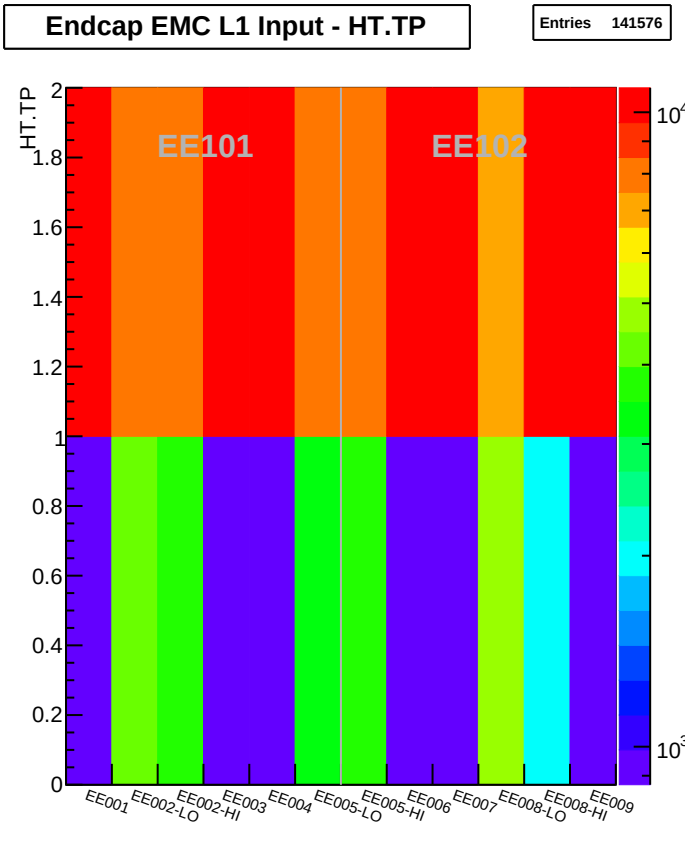

Barrel EMC L1 Input - HT Bits
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

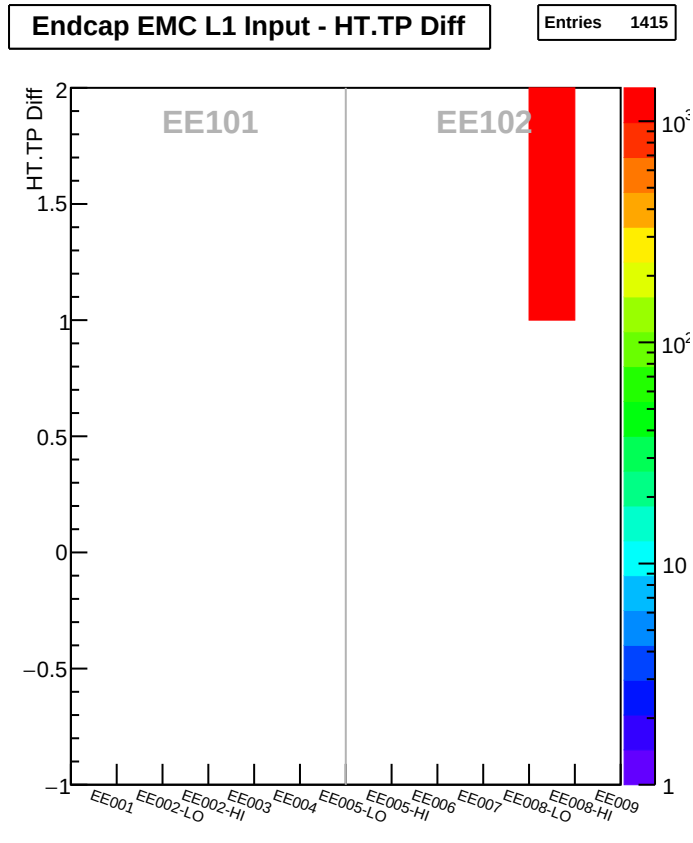

Barrel EMC L1 Input - HT.TP Bit
Entries 424728
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

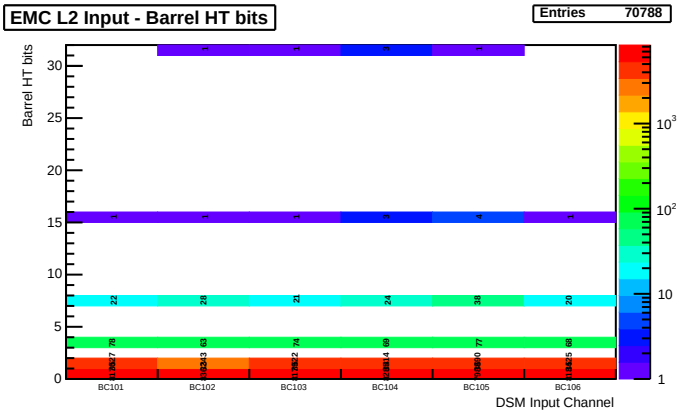

Barrel EMC L1 Input - HT.TP Bit
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

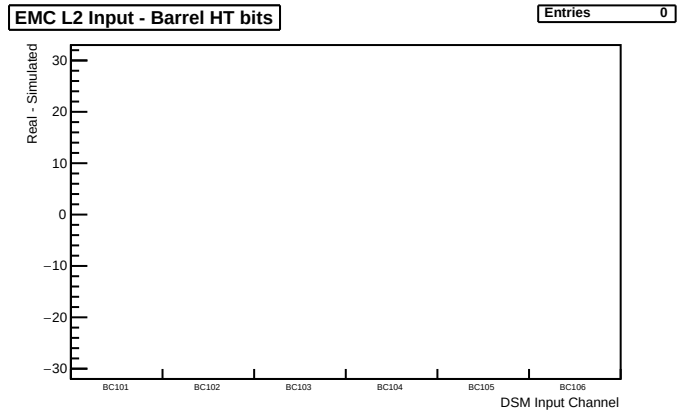

Endcap EMC L1 Input - HT-th
Entries 141576
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

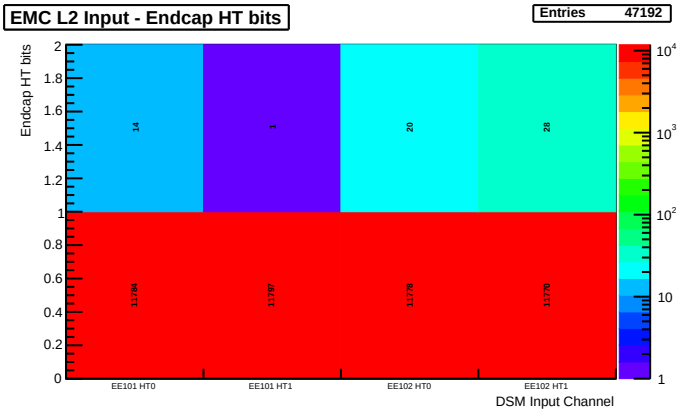

Endcap EMC L1 Input - HT-th Diff
Entries 28
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

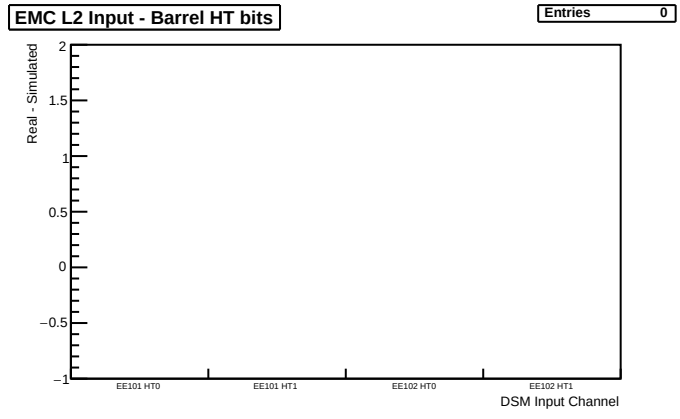

Endcap EMC L1 Input - HT.TP
Entries 141576
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

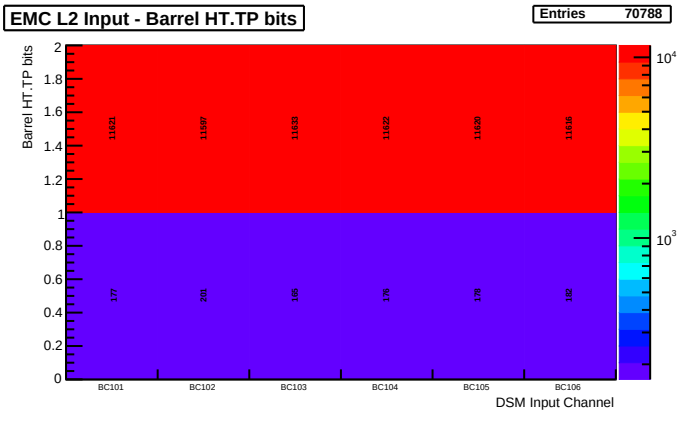

Endcap EMC L1 Input - HT.TP Diff
Entries 1415
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

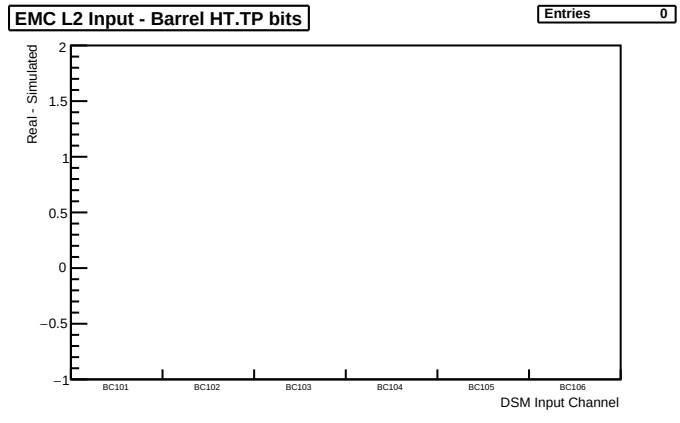

EMC L2 Input - Barrel HT bits
Entries 70788
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

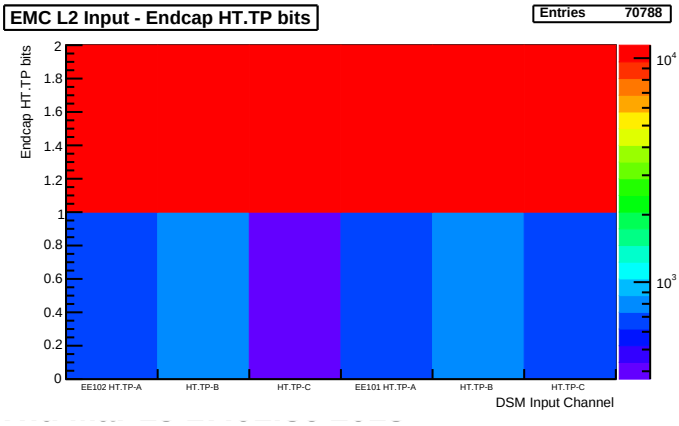

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

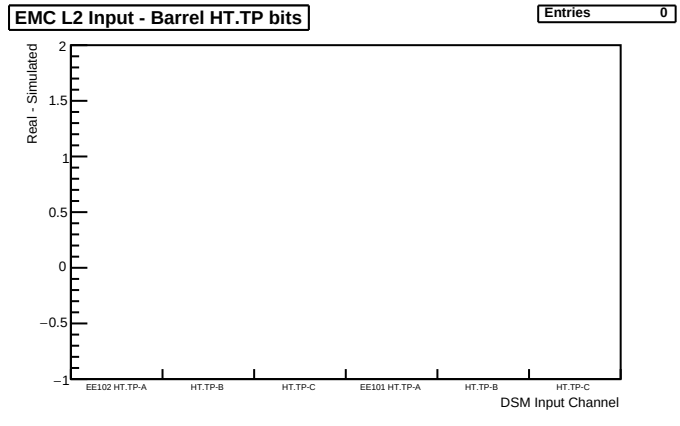

EMC L2 Input - Endcap HT bits
Entries 47192
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

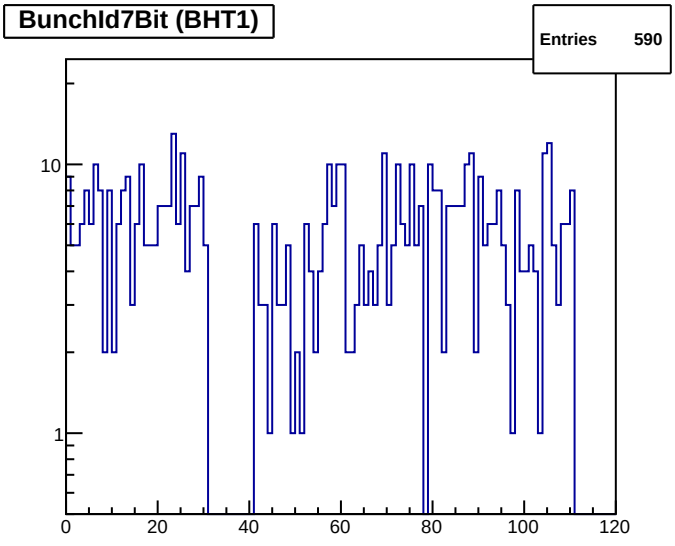

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

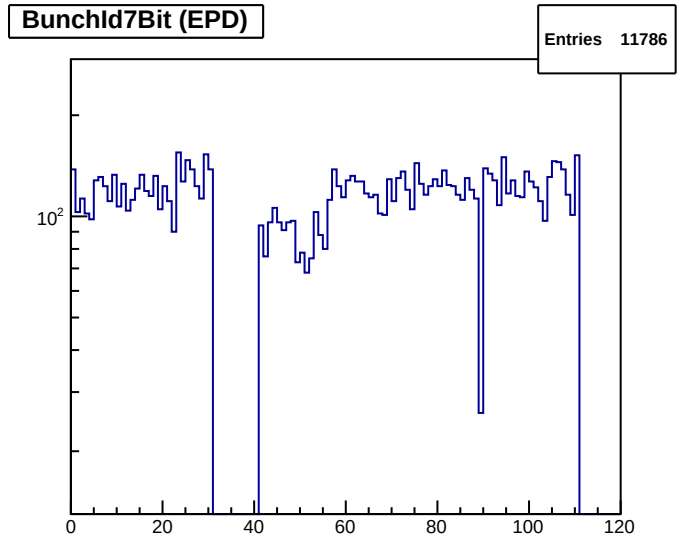

EMC L2 Input - Barrel HT.TP bits
Entries 70788
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

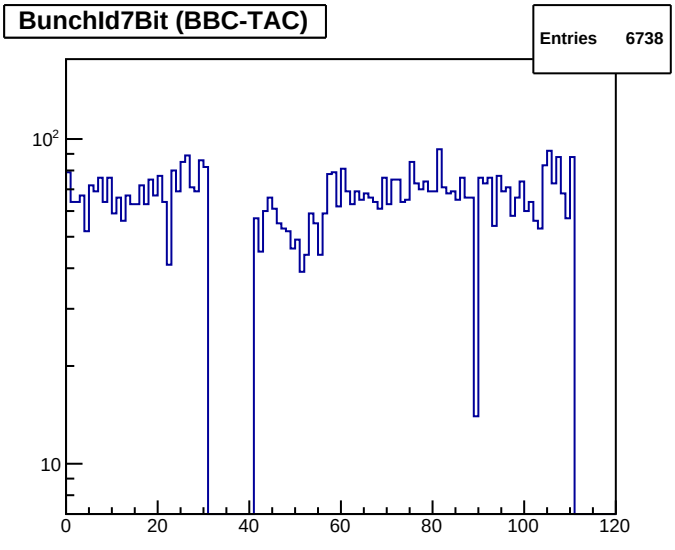

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

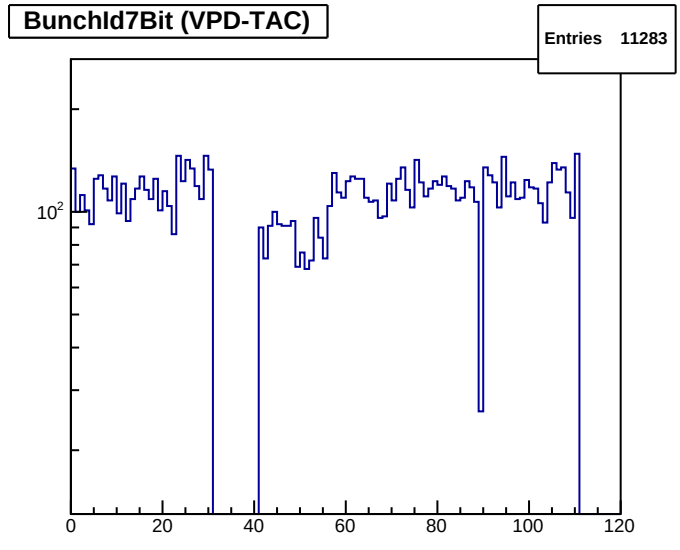

EMC L2 Input - Endcap HT.TP bits
Entries 70788
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

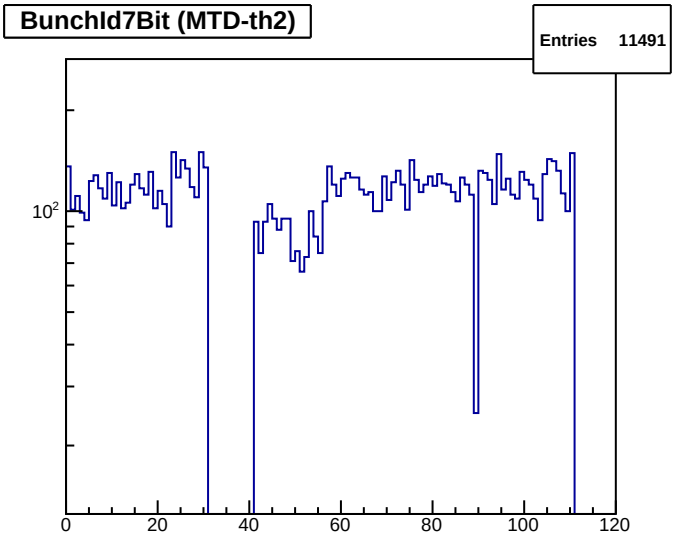

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

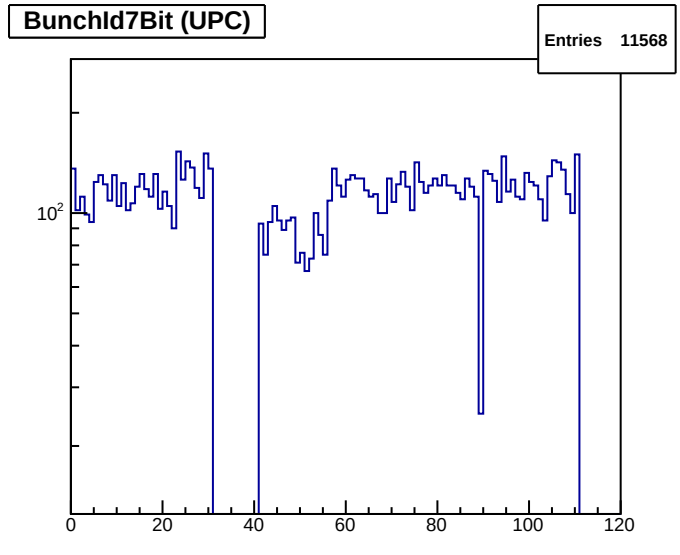

BunchId7Bit (BHT1)
Entries 590
10
1
0
20
40
60
80
100
120

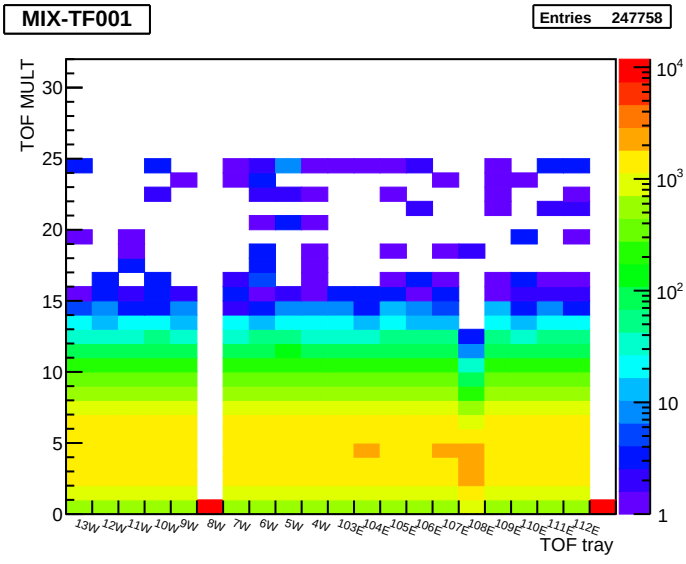

BunchId7Bit (EPD)
Entries 11786
10^2
0
20
40
60
80
100
120

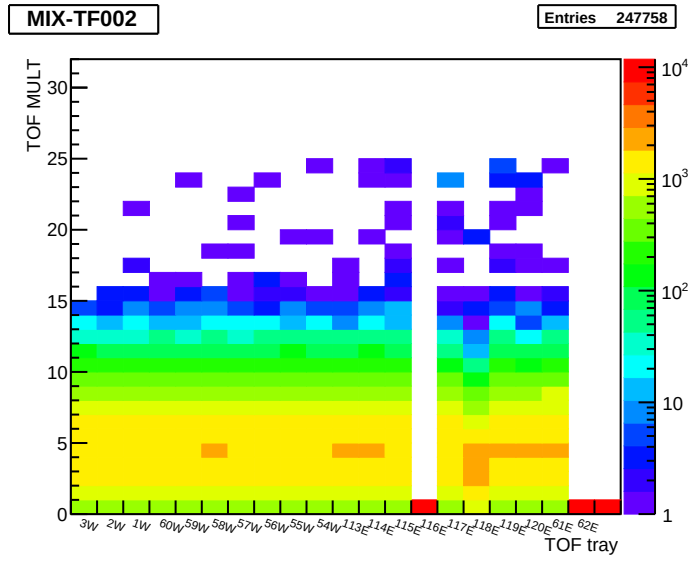

BunchId7Bit (BBC-TAC)
Entries 6738
10^2
10
0
20
40
60
80
100
120

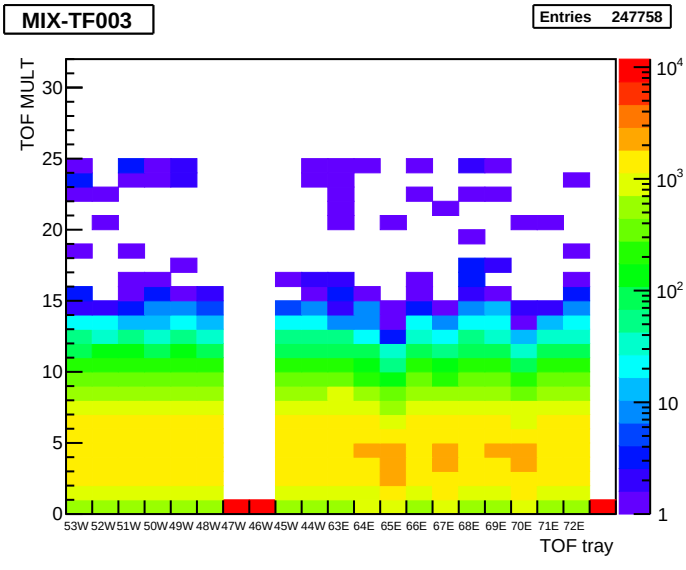

BunchId7Bit (VPD-TAC)
Entries 11283
10^2
0
20
40
60
80
100
120

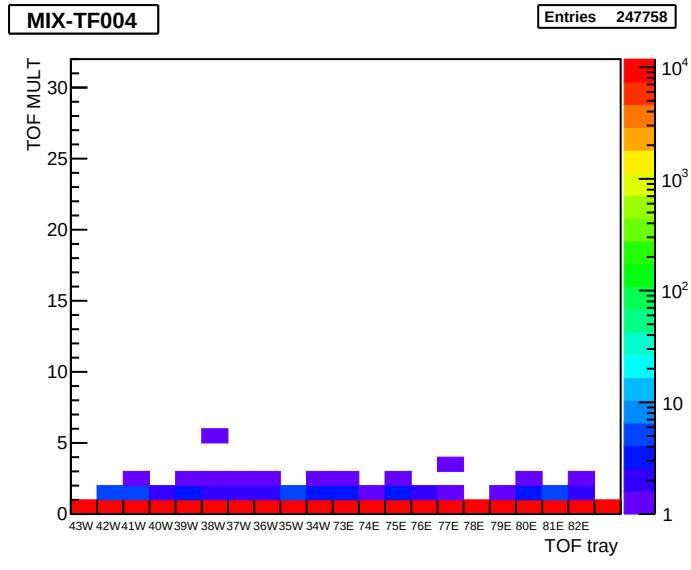

BunchId7Bit (MTD-th2)
Entries 11491
10^2
0
20
40
60
80
100
120

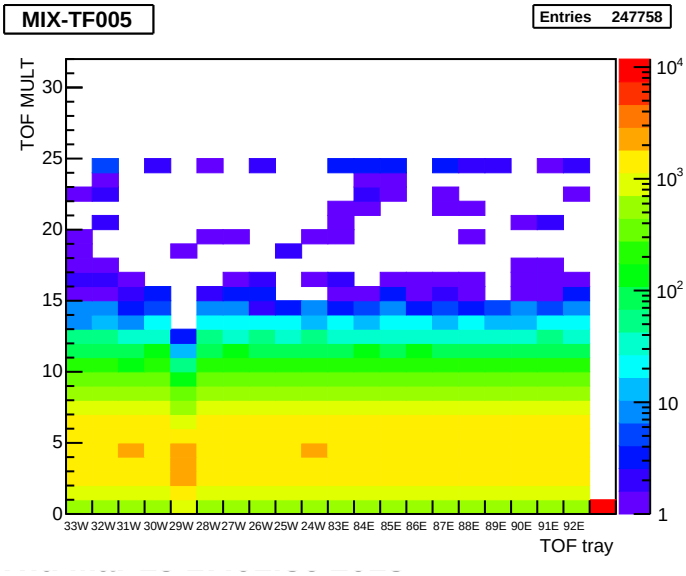

BunchId7Bit (UPC)
Entries 11568
10^2
0
20
40
60
80
100
120

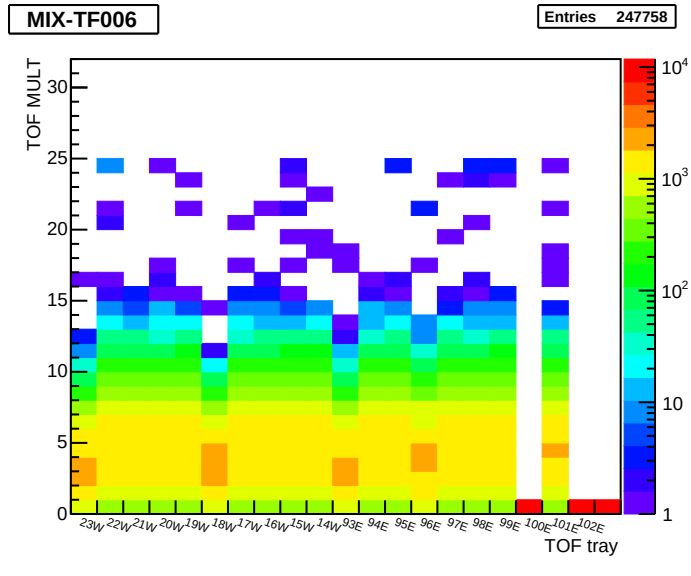

MIX-TF001
Entries 247758
TOF MULT
TOF tray

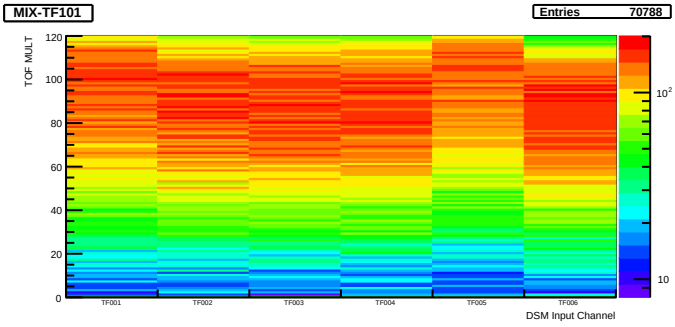

MIX-TF002
Entries 247758
TOF MULT
TOF tray

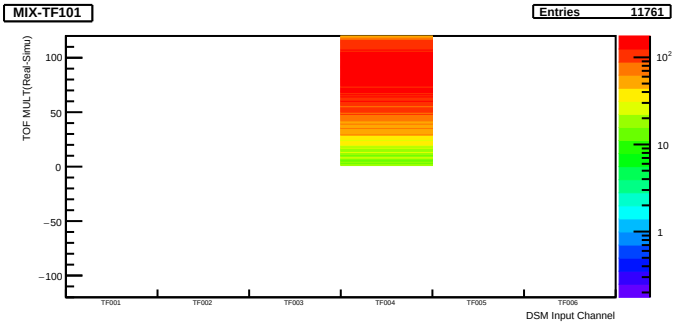

MIX-TF003
Entries 247758
TOF MULT
TOF tray

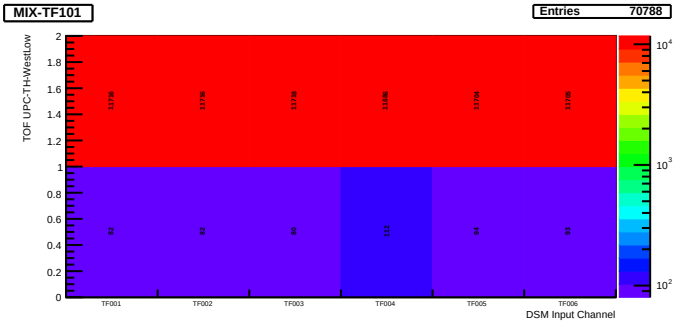

MIX-TF004
Entries 247758
TOF MULT
TOF tray

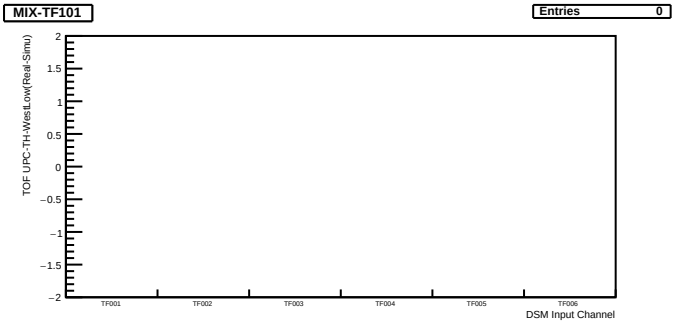

MIX-TF005
Entries 247758
TOF MULT
TOF tray

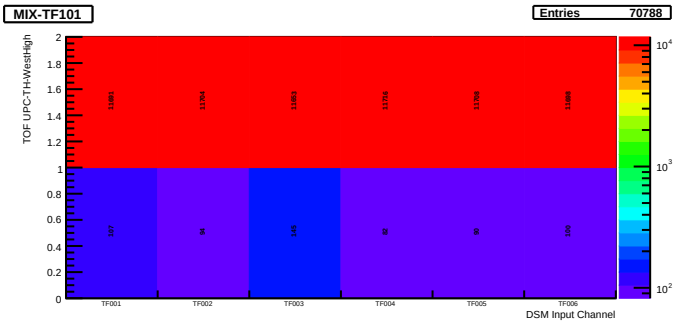

MIX-TF006
Entries 247758
TOF MULT
TOF tray

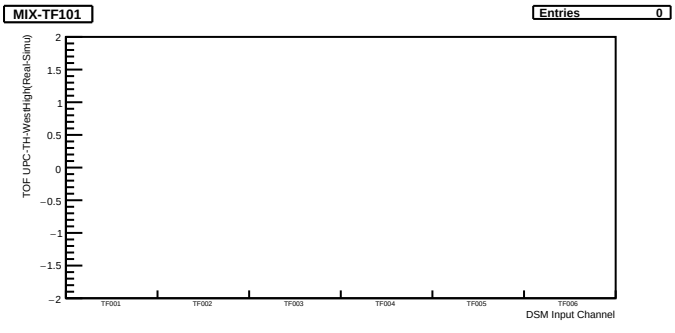

MIX-TF101
Entries 70788
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

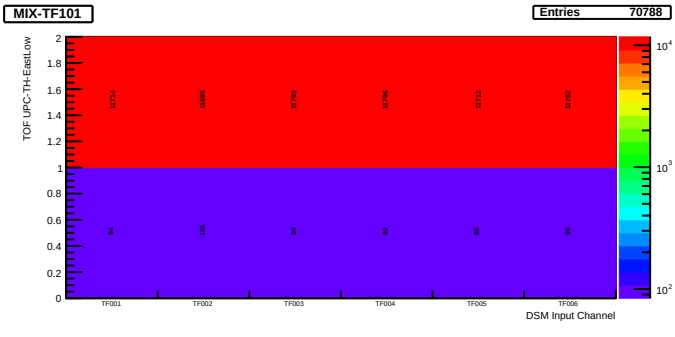

MIX-TF101
Entries 11761
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

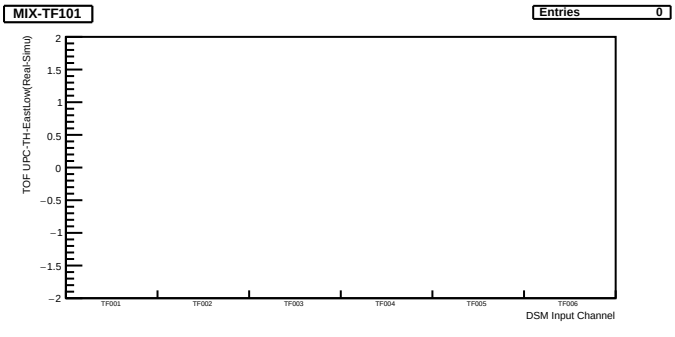

MIX-TF101
Entries 70788
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

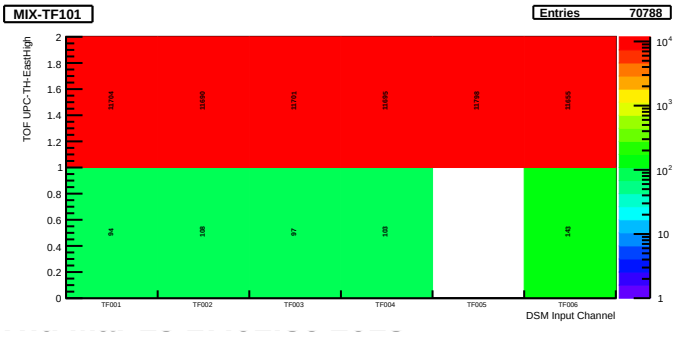

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

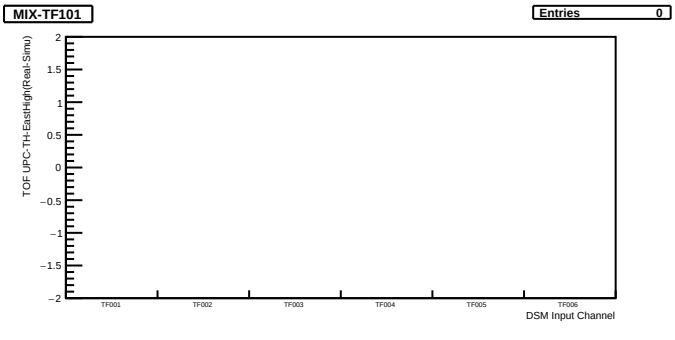

MIX-TF101
Entries 70788
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

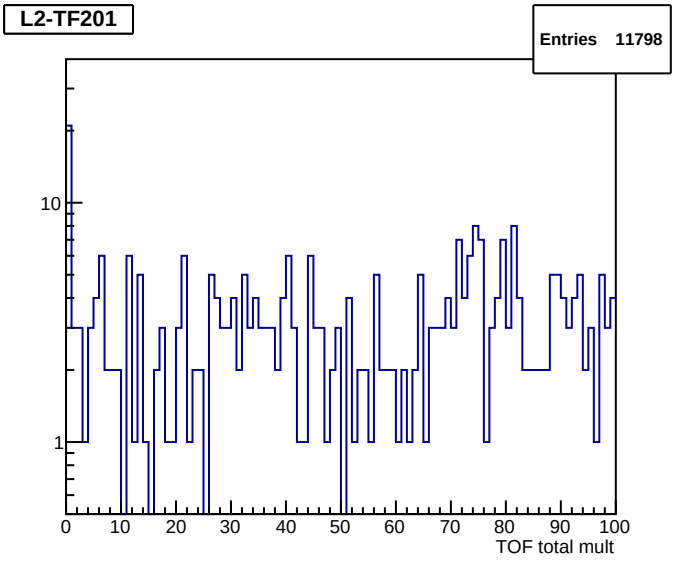

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

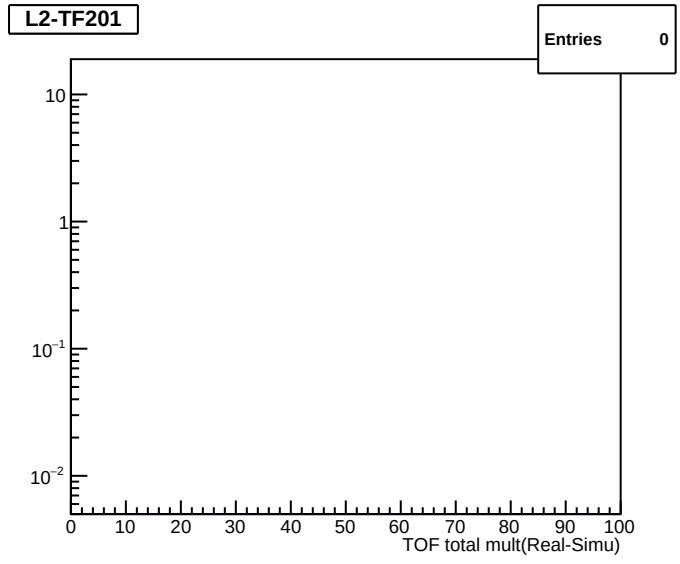

MIX-TF101
Entries 70788
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

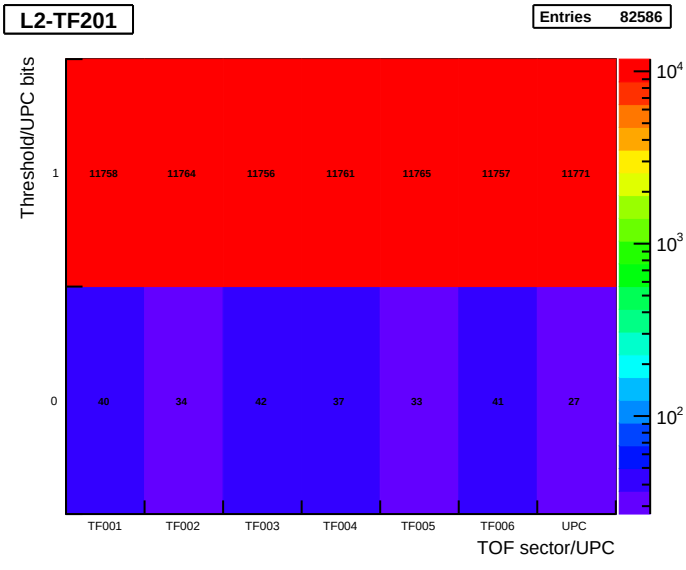

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

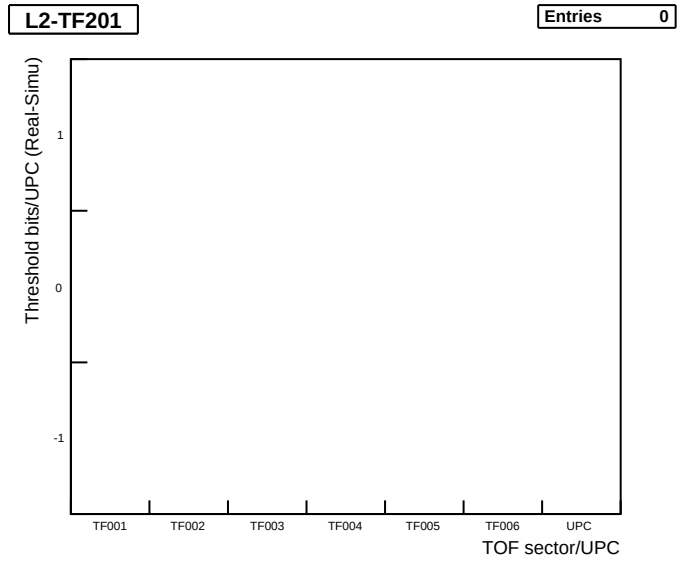

MIX-TF101
Entries 70788
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

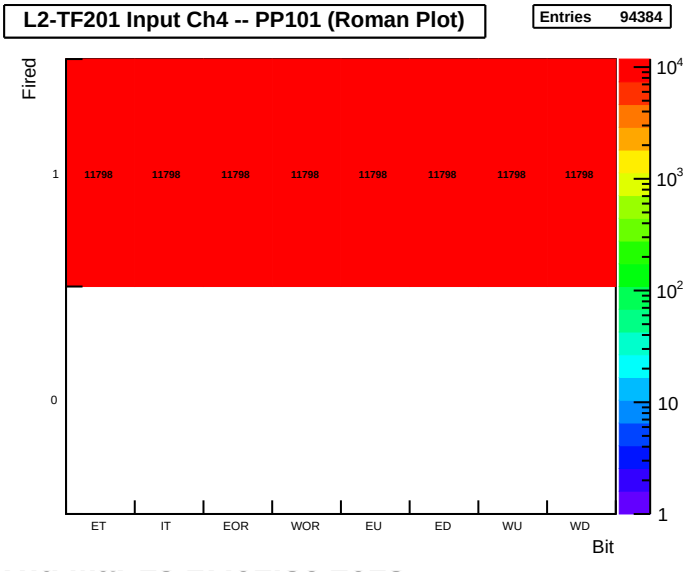

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

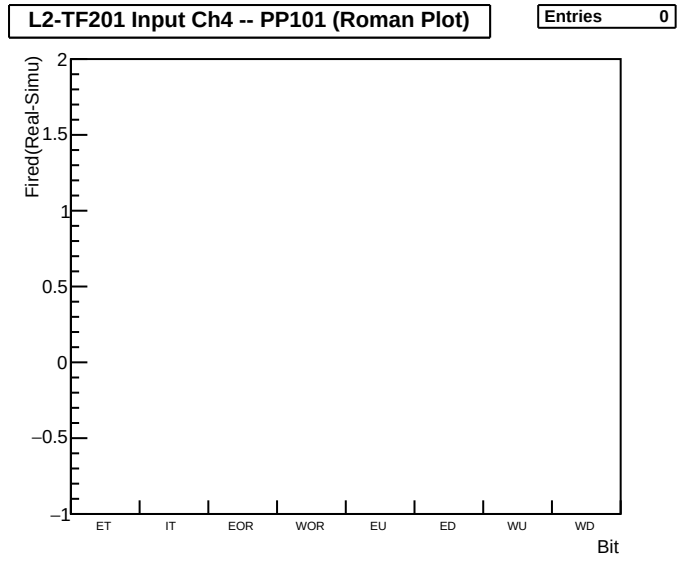

L2-TF201
Entries 11798
TOF total mult

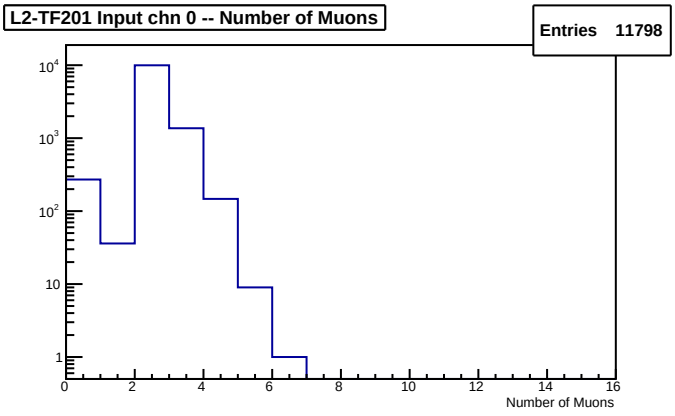

L2-TF201
Entries 0
TOF total mult(Real-Simu)

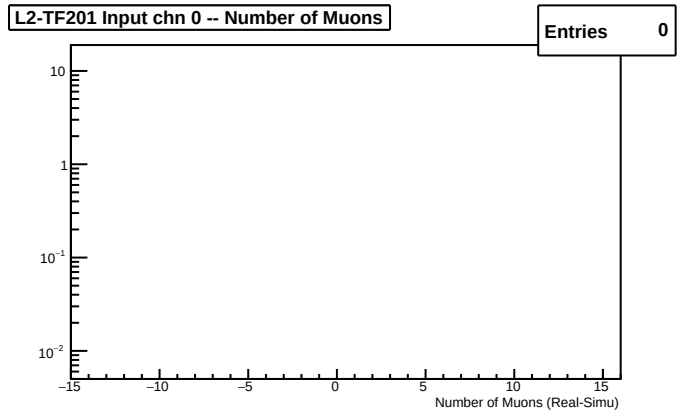

L2-TF201
Entries 82586
Threshold/UPC bits
11758 11764 11756 11761 11765 11757 11771
40 34 42 37 33 41 27
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

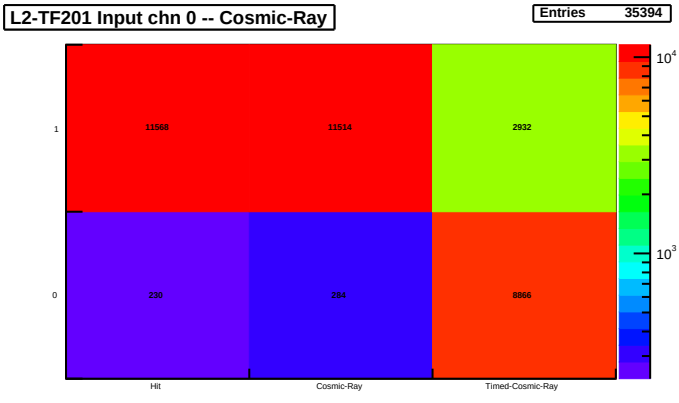

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

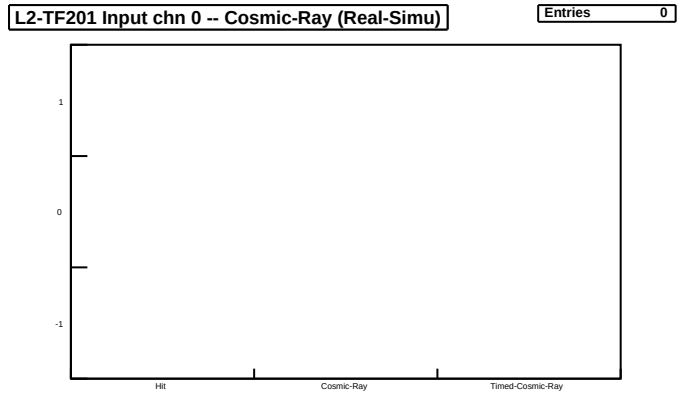

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 94384
Fired
11798 11798 11798 11798 11798 11798 11798 11798
ET IT EOR WOR EU ED WU WD
Bit

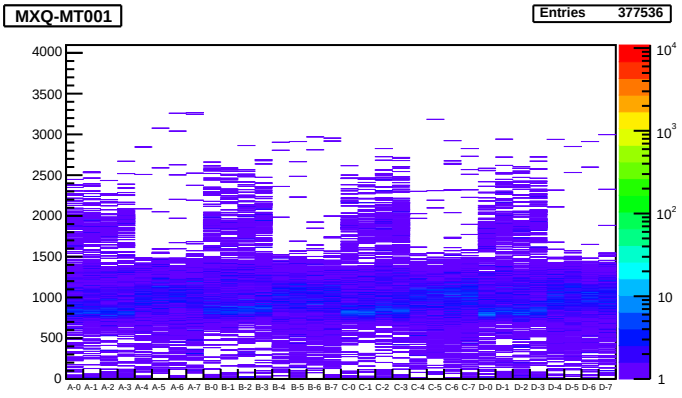

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 0
Fired(Real-Simu)
ET IT EOR WOR EU ED WU WD
Bit

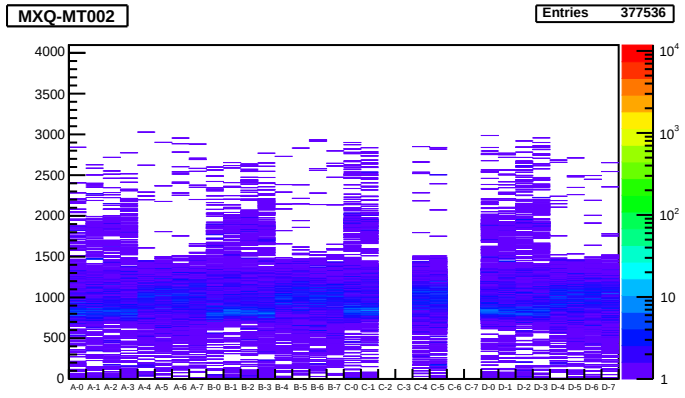

L2-TF201 Input chn 0 -- Number of Muons
Entries 11798
Number of Muons

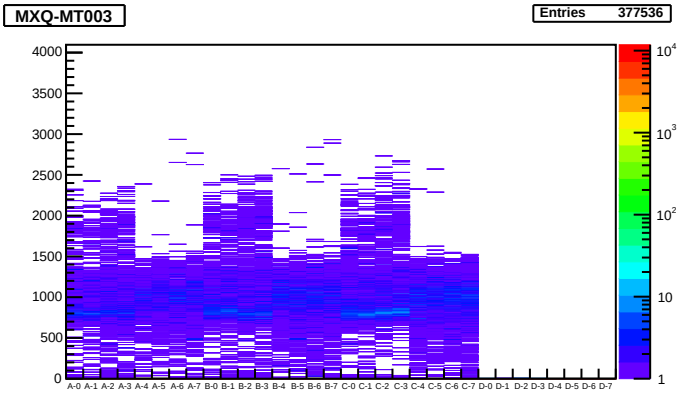

L2-TF201 Input chn 0 -- Number of Muons
Entries 0
Number of Muons (Real-Simu)

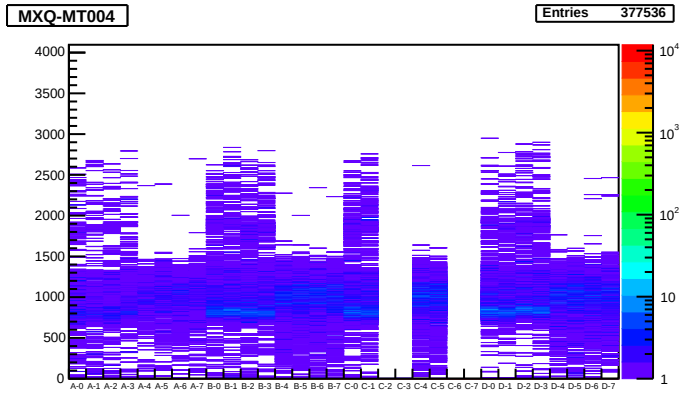

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 35394
11568
11514
2932
230
284
8866
Hit
Cosmic-Ray
Timed-Cosmic-Ray

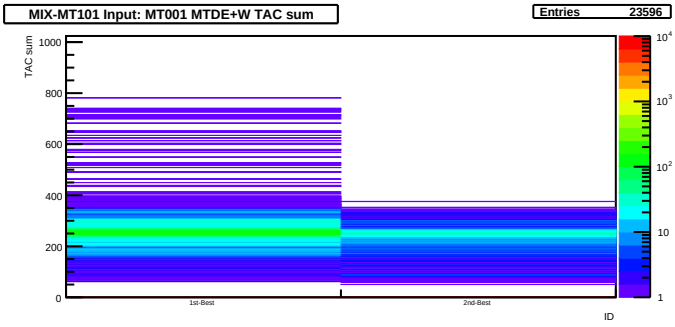

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 0
Hit
Cosmic-Ray
Timed-Cosmic-Ray

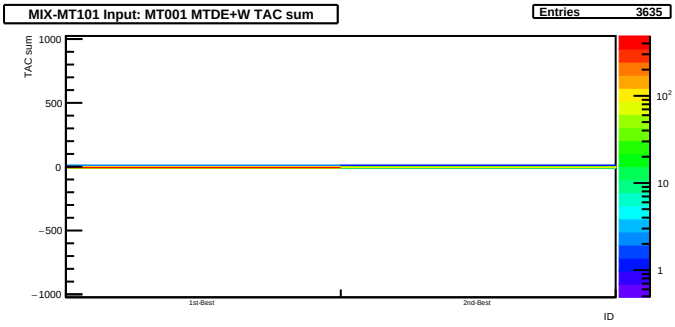

MXQ-MT001
Entries 377536
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

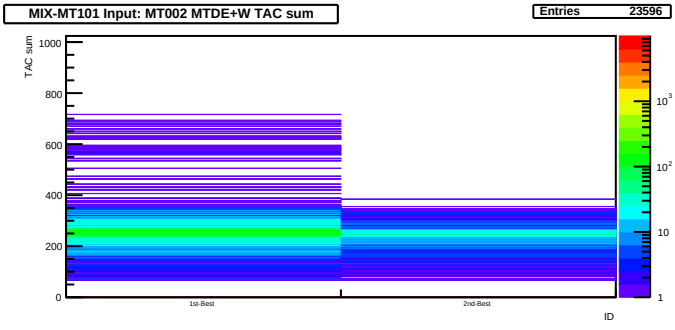

MXQ-MT002
Entries 377536
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

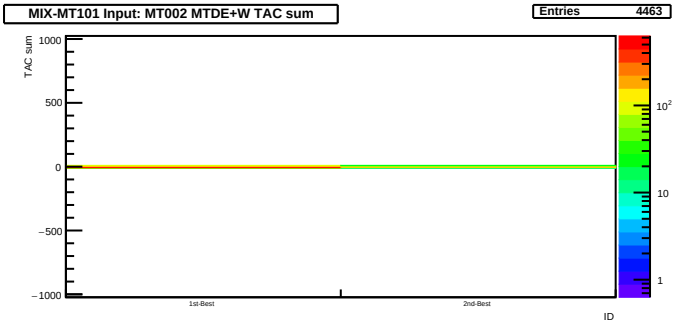

MXQ-MT003
Entries 377536
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

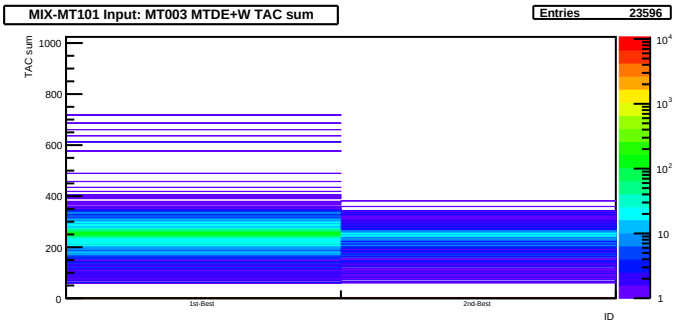

MXQ-MT004
Entries 377536
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

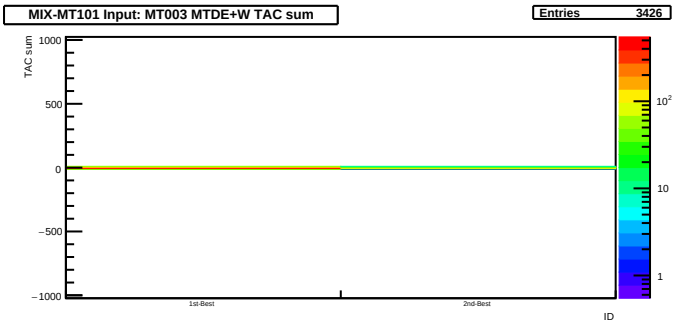

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 23596
TAC sum
1st-Best
2nd-Best
ID

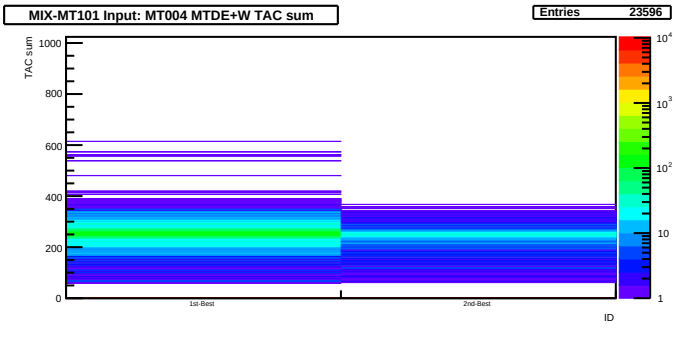

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 3635
TAC sum
1st-Best
2nd-Best
ID

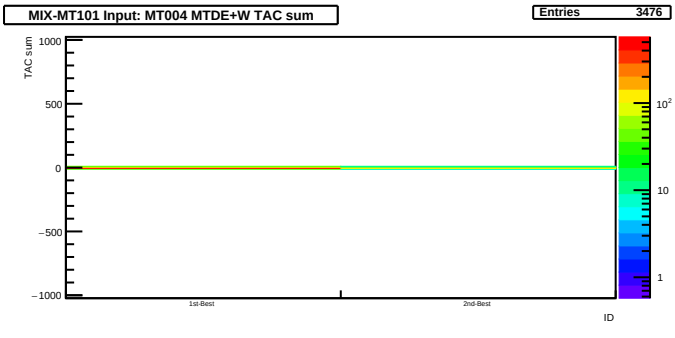

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 23596
TAC sum
1st-Best
2nd-Best
ID

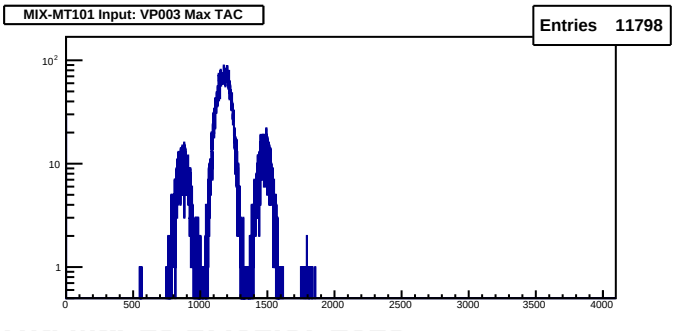

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 4463
TAC sum
1st-Best
2nd-Best
ID

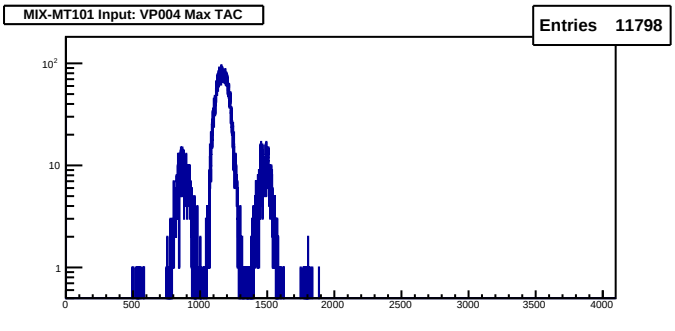

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 23596
TAC sum
1st-Best
2nd-Best
ID

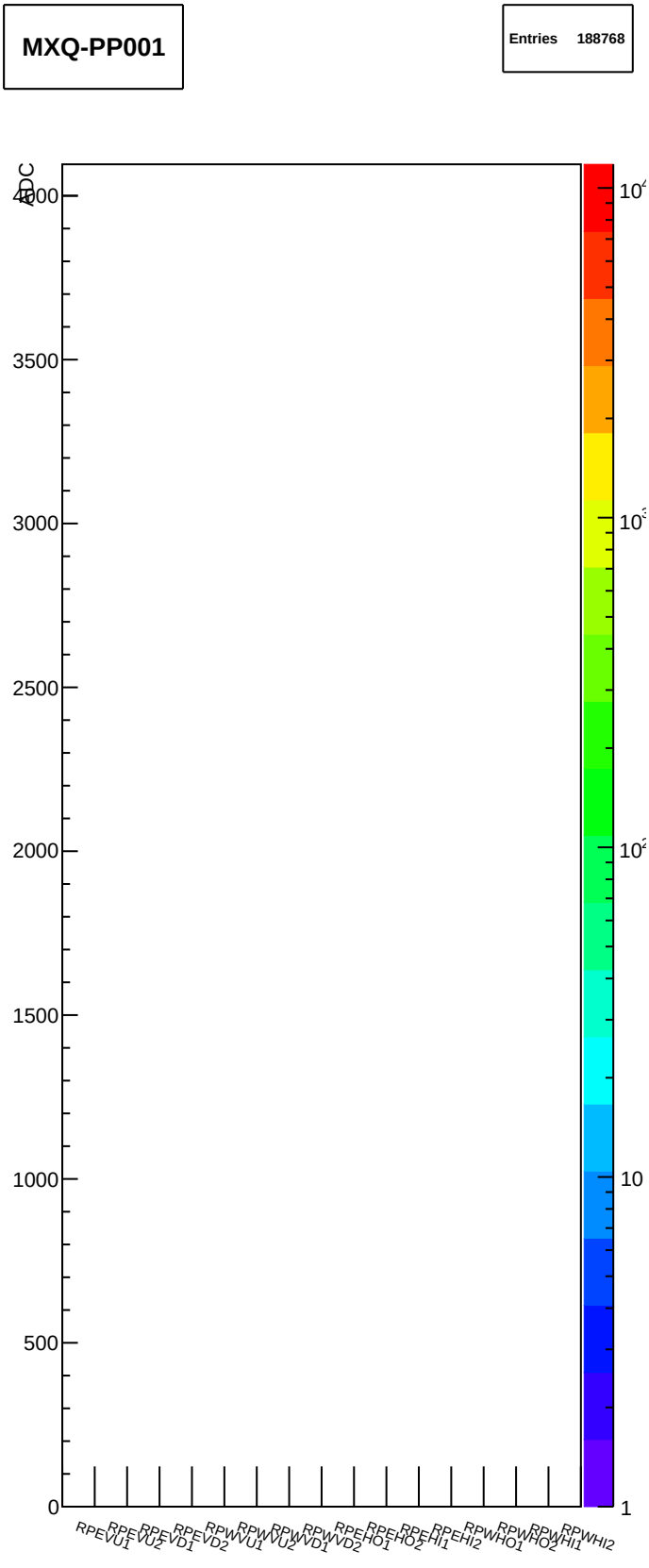

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 3426
TAC sum
1st-Best
2nd-Best
ID

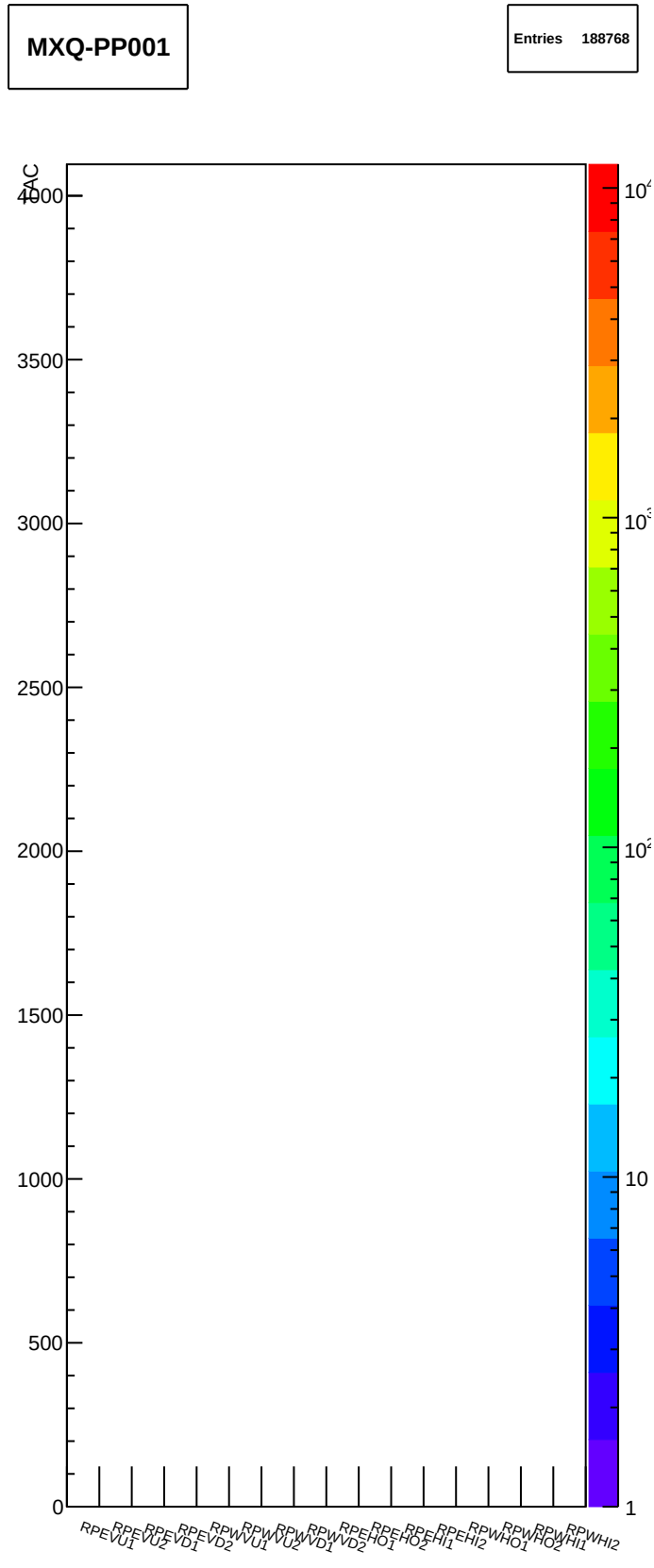

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 23596
TAC sum
1st-Best
2nd-Best
ID

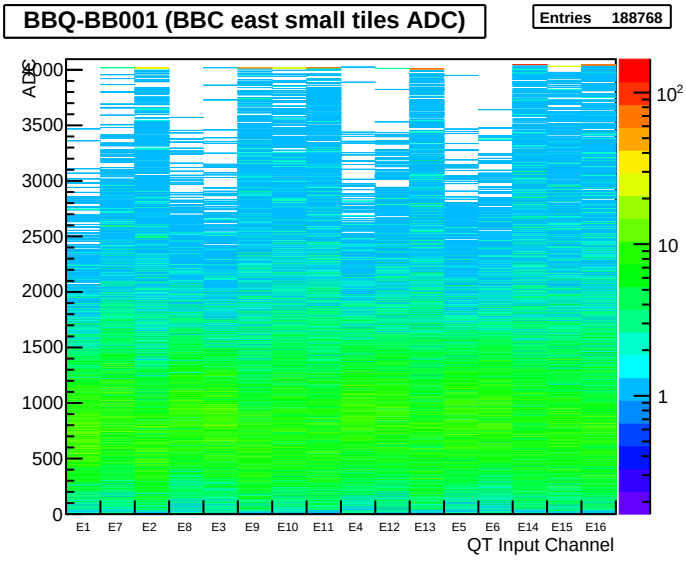

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 3476
TAC sum
1st-Best
2nd-Best
ID

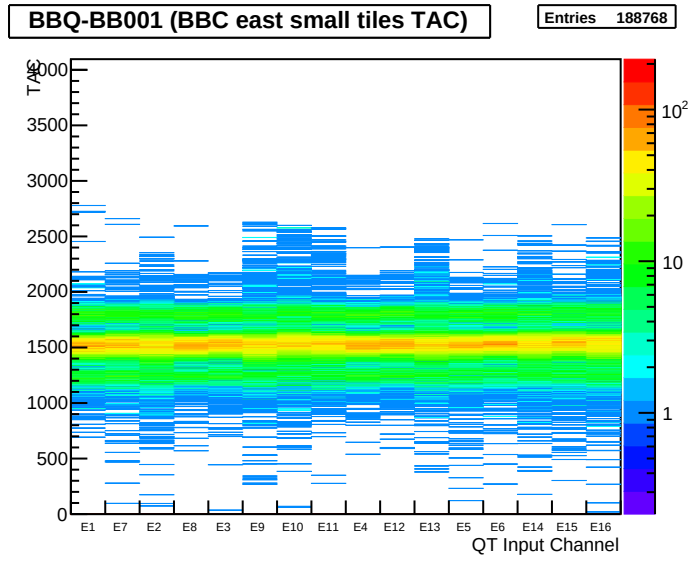

MIX-MT101 Input: VP003 Max TAC
Entries 11798

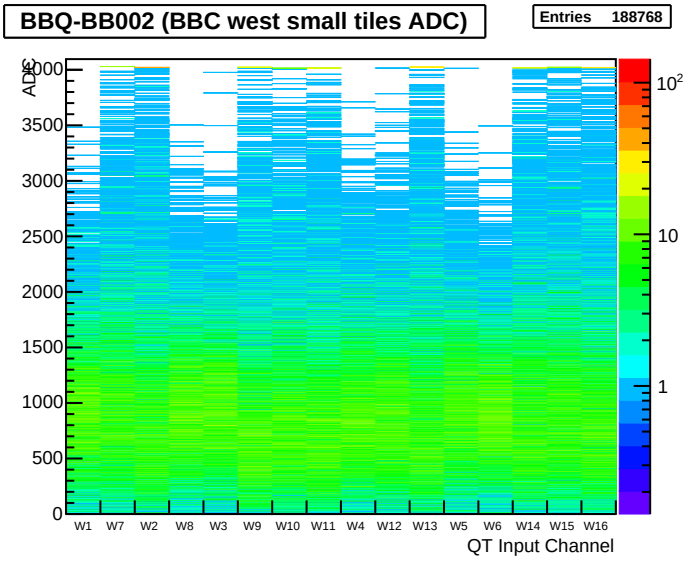

MIX-MT101 Input: VP004 Max TAC
Entries 11798

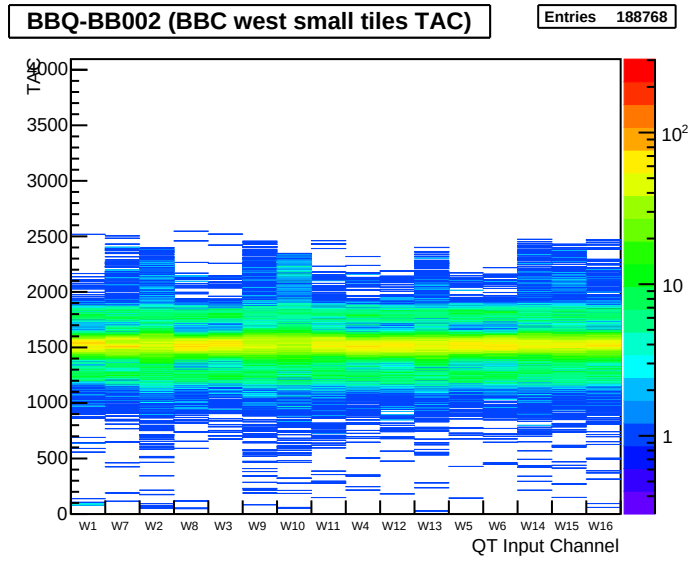

MXQ-PP001
Entries 188768
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

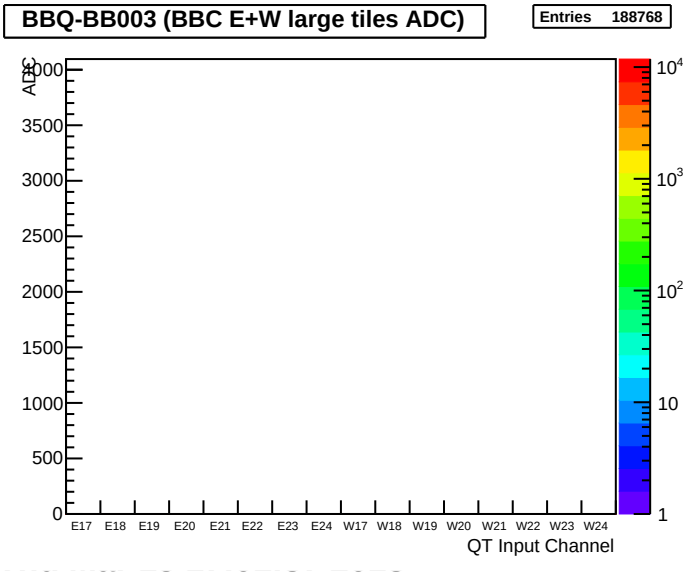

MXQ-PP001
Entries 188768
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

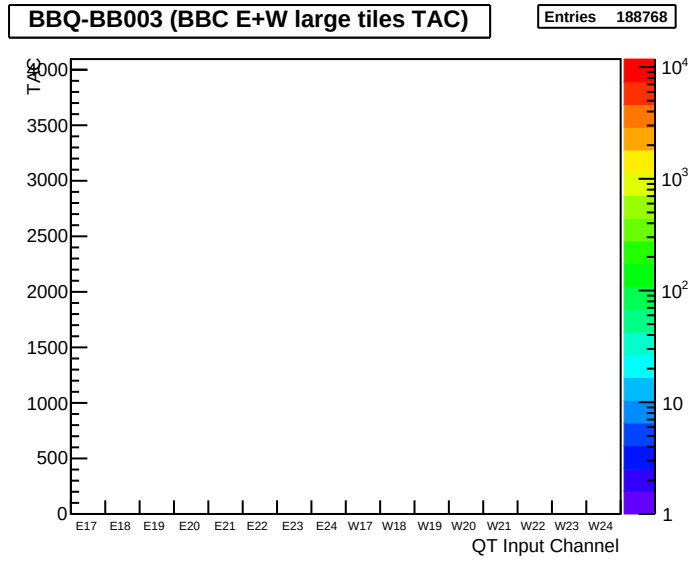

BBQ-BB001 (BBC east small tiles ADC)
Entries 188768
ADC
QT Input Channel

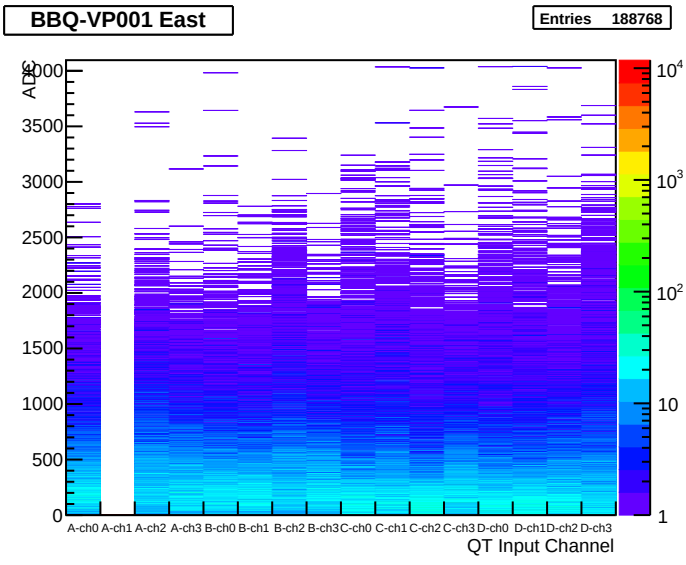

BBQ-BB001 (BBC east small tiles TAC)
Entries 188768
TAC
QT Input Channel

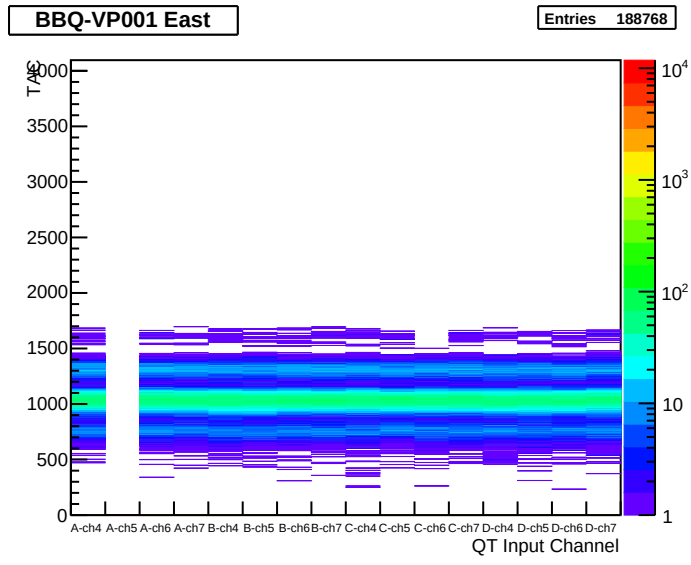

BBQ-BB002 (BBC west small tiles ADC)
Entries 188768
ADC
QT Input Channel

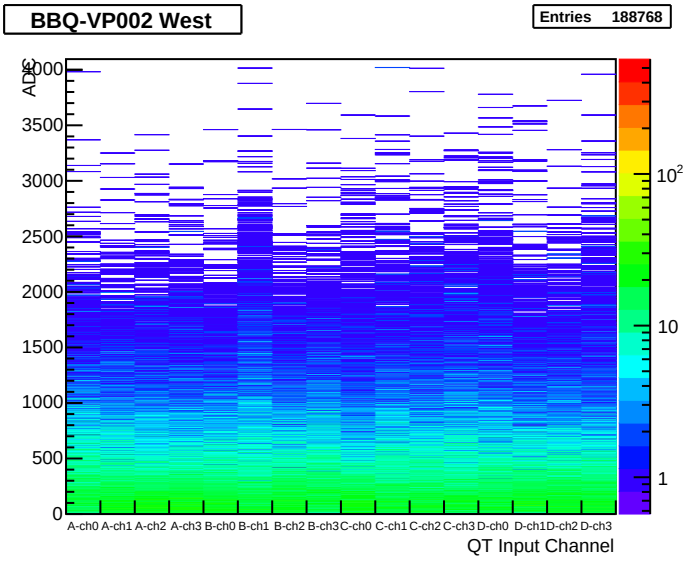

BBQ-BB002 (BBC west small tiles TAC)
Entries 188768
TAC
QT Input Channel

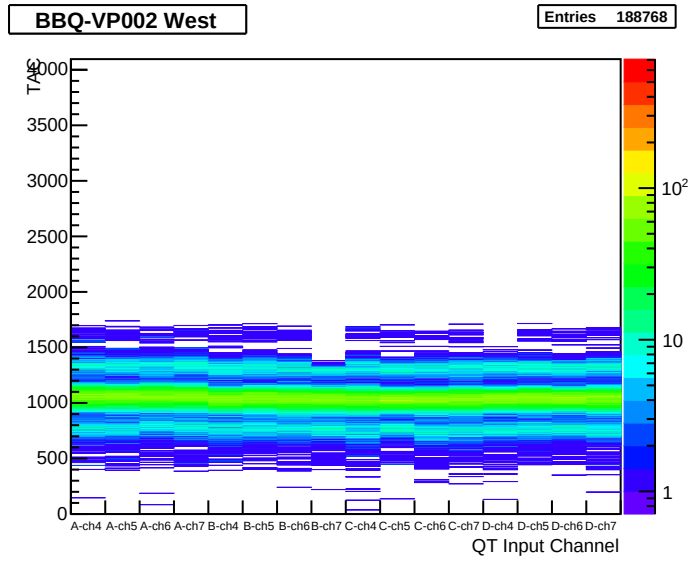

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 188768
ADC
QT Input Channel

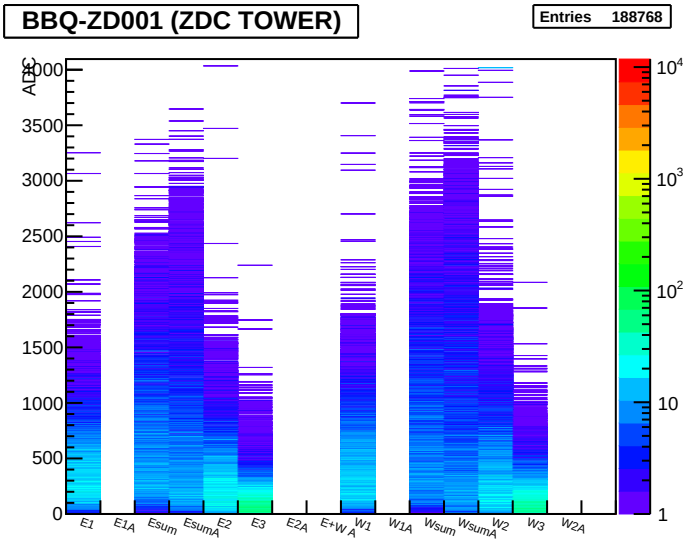

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 188768
TAC
QT Input Channel

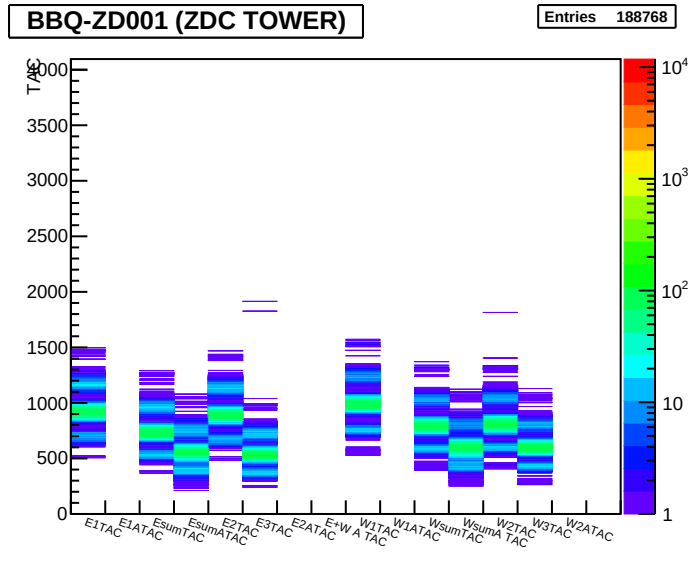

BBQ-VP001 East
Entries 188768
ADC
QT Input Channel

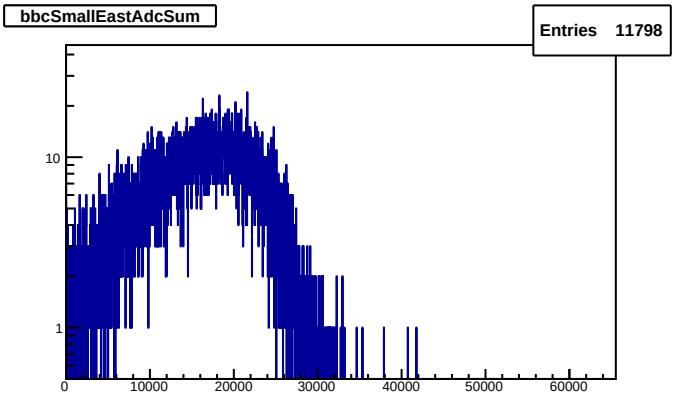

BBQ-VP001 East
Entries 188768
TAC
QT Input Channel

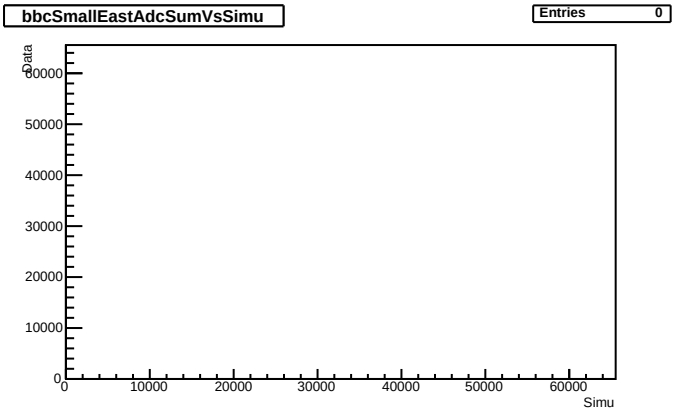

BBQ-VP002 West
Entries 188768
ADC
QT Input Channel

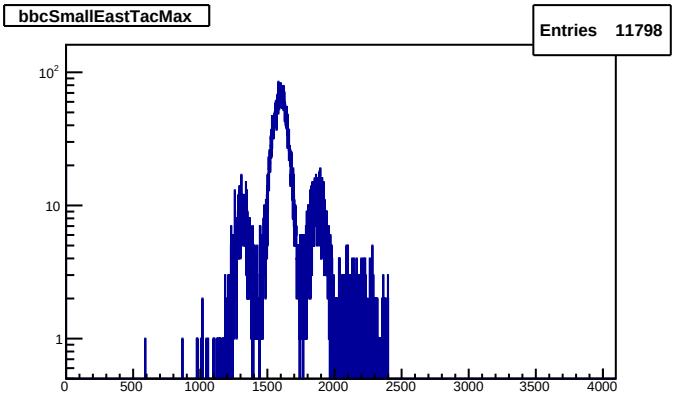

BBQ-VP002 West
Entries 188768
TAC
QT Input Channel

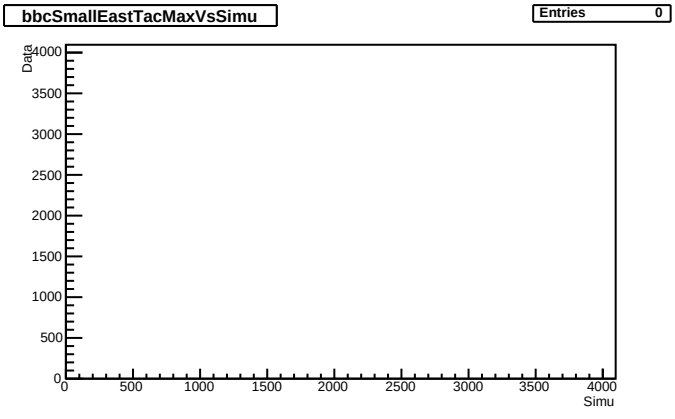

BBQ-ZD001 (ZDC TOWER)
Entries 188768
ADC

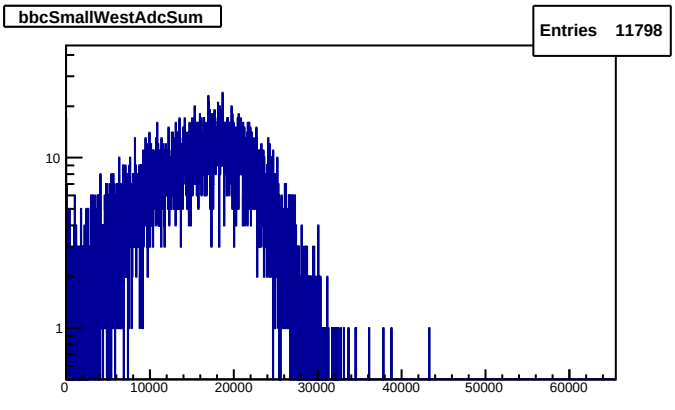

BBQ-ZD001 (ZDC TOWER)
Entries 188768
TAC

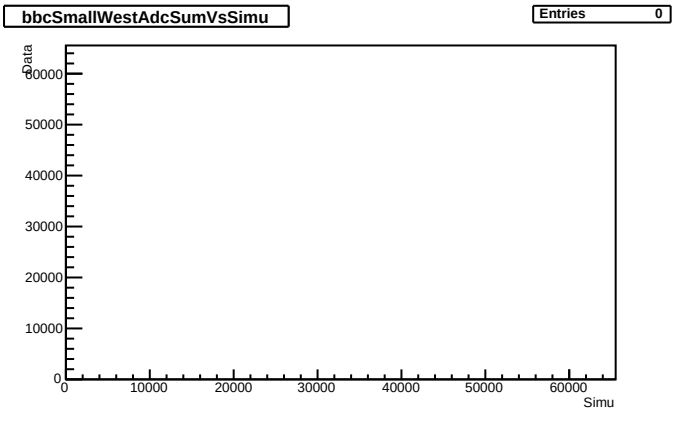

bbcSmallEastAdcSum
Entries 11798
10
1
0
10000
20000
30000
40000
50000
60000

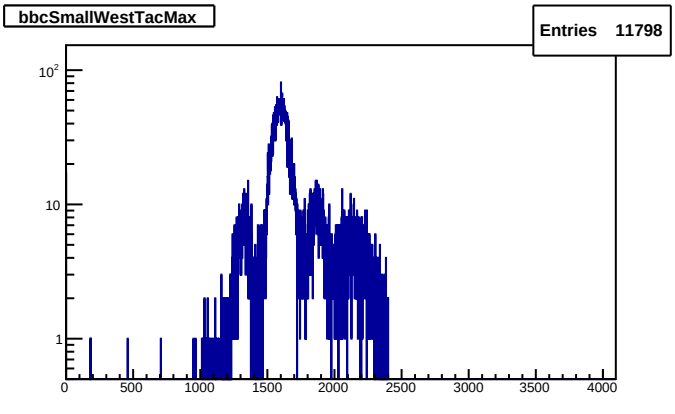

bbcSmallEastAdcSumVsSimu
Entries 0
Data
60000
50000
40000
30000
20000
10000
0
0
10000
20000
30000
40000
50000
60000
Simu

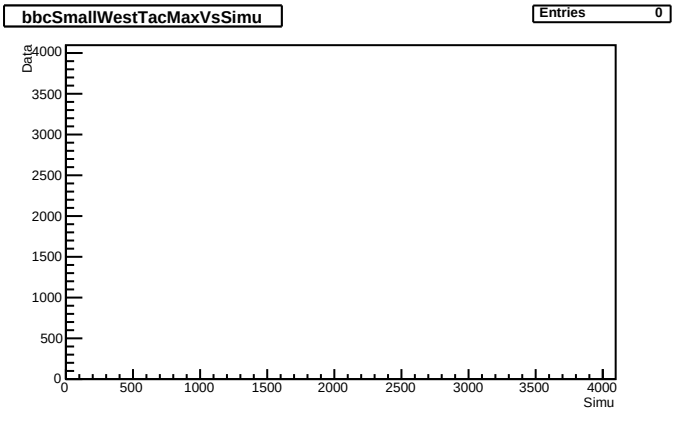

bbcSmallEastTacMax
Entries 11798
10^2
10
1
0
500
1000
1500
2000
2500
3000
3500
4000

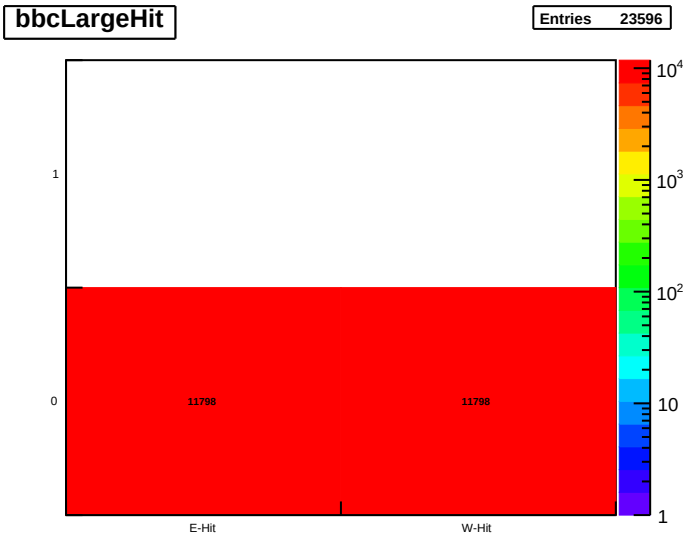

bbcSmallEastTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

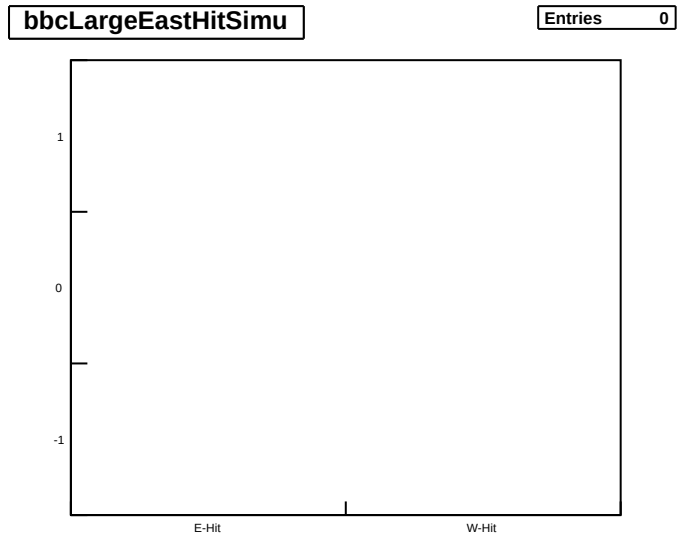

bbcSmallWestAdcSum
Entries 11798
10
1
0
10000
20000
30000
40000
50000
60000

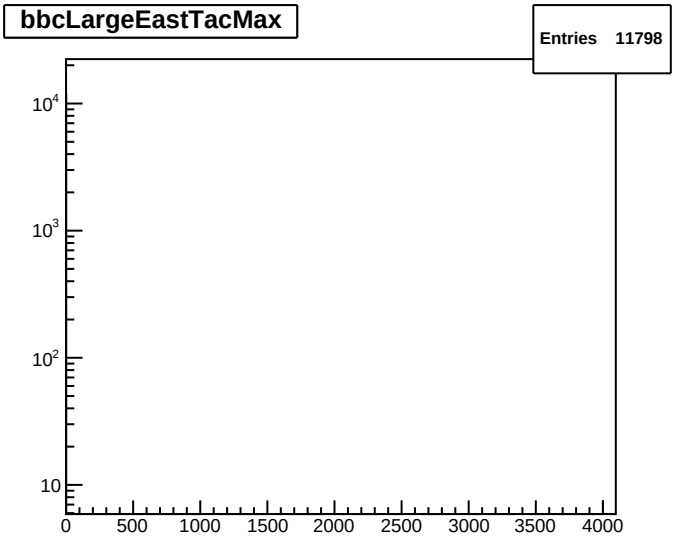

bbcSmallWestAdcSumVsSimu
Entries 0
Data
60000
50000
40000
30000
20000
10000
0
0
10000
20000
30000
40000
50000
60000
Simu

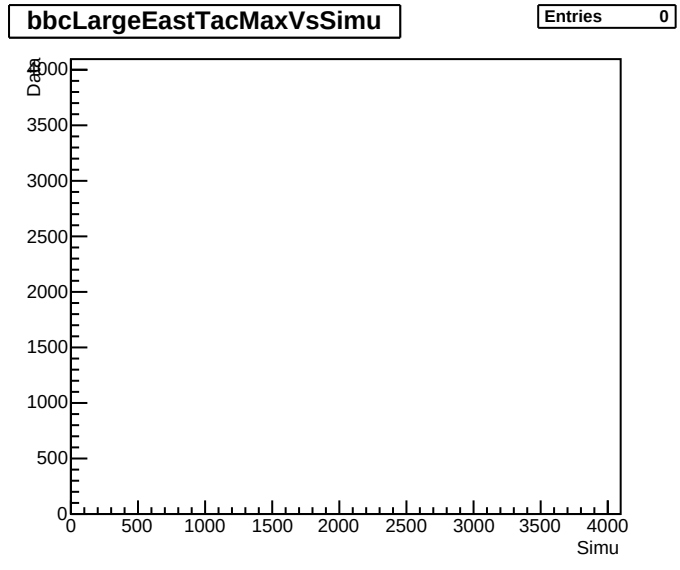

bbcSmallWestTacMax
Entries 11798
10^2
10
1
0
500
1000
1500
2000
2500
3000
3500
4000

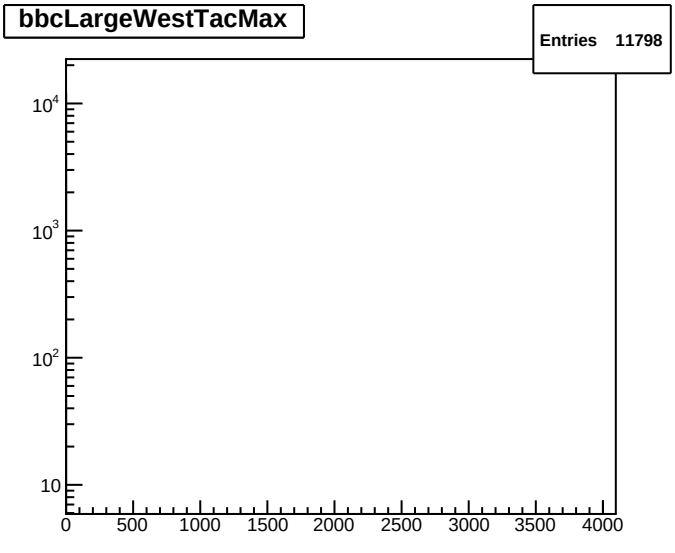

bbcSmallWestTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

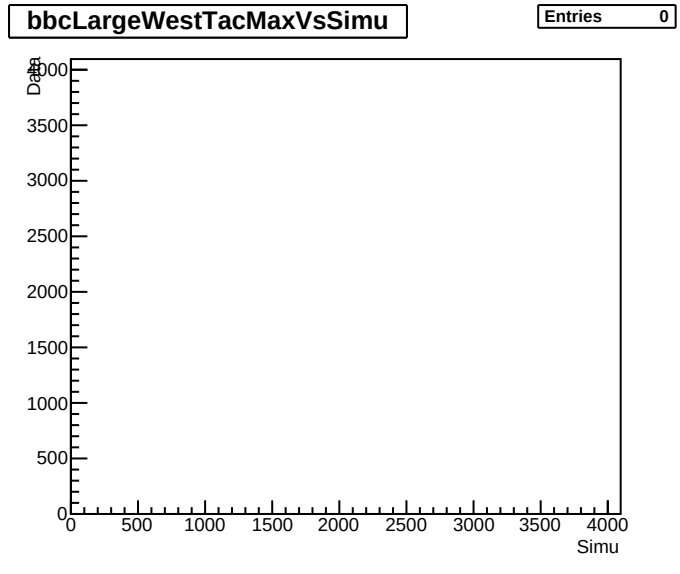

bbcLargeHit
Entries 23596
11798
11798
E-Hit
W-Hit

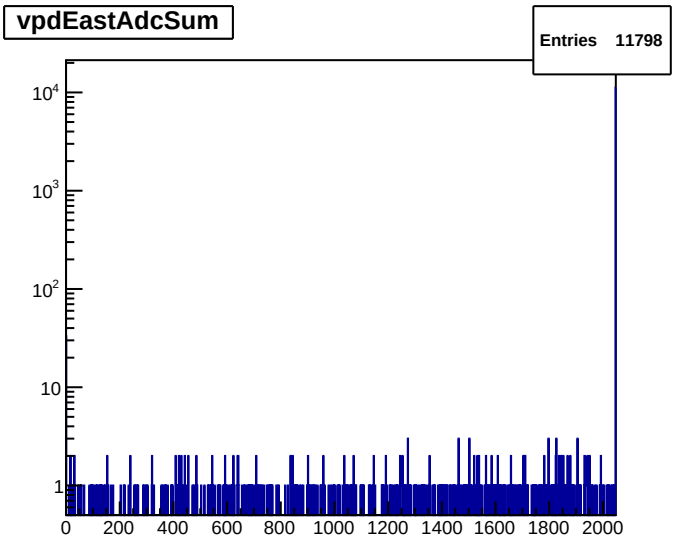

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

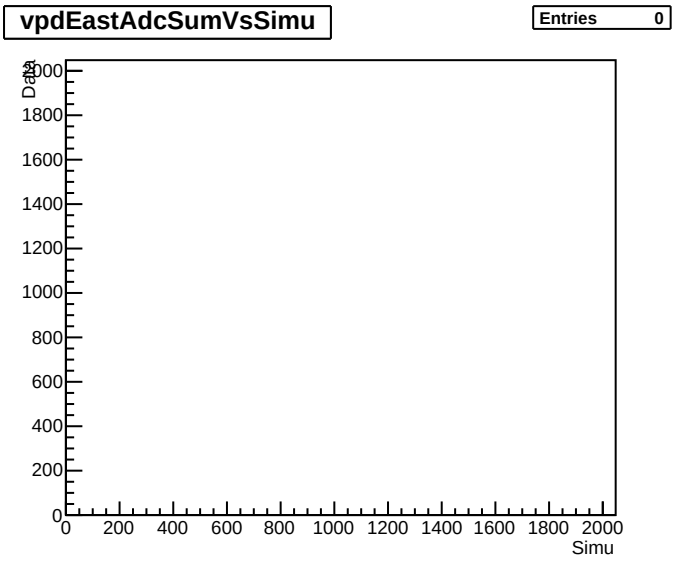

bbcLargeEastTacMax
Entries 11798

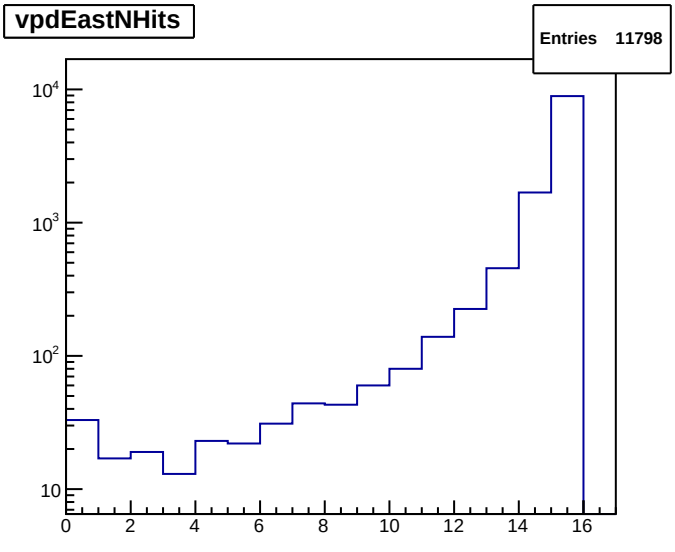

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

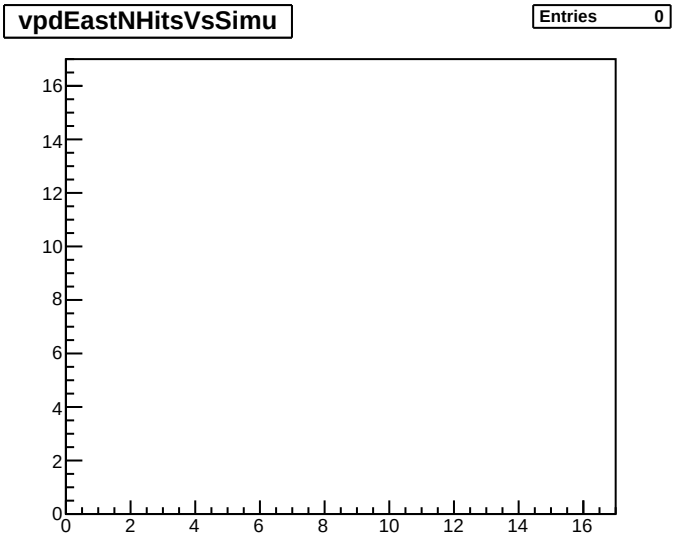

bbcLargeWestTacMax
Entries 11798

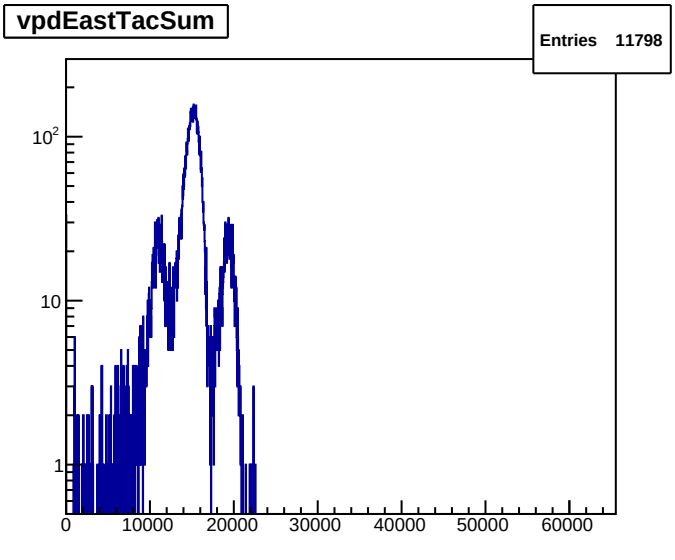

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

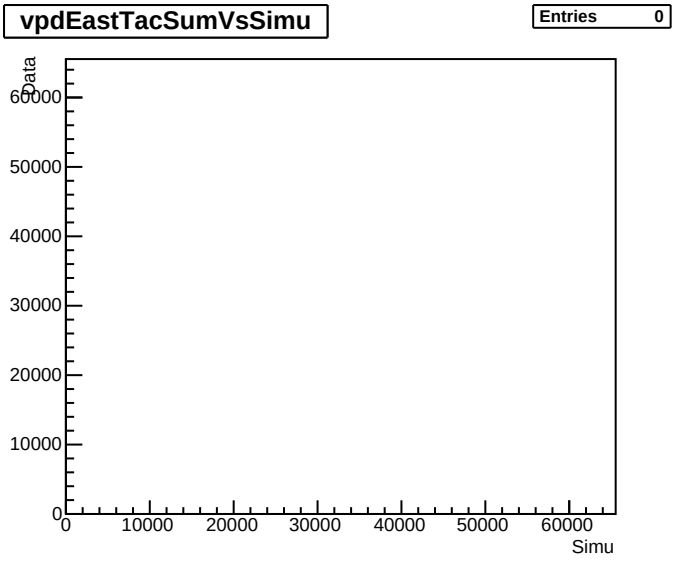

vpdEastAdcSum
Entries 11798

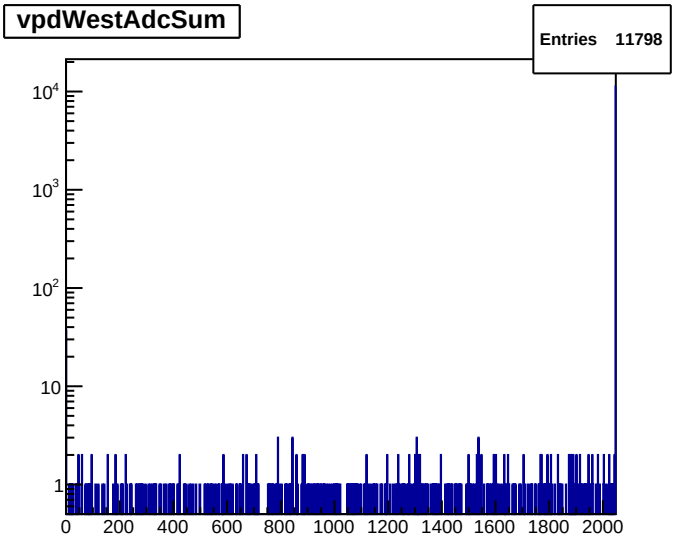

vpdEastAdcSumVsSimu
Entries 0
Data
Simu

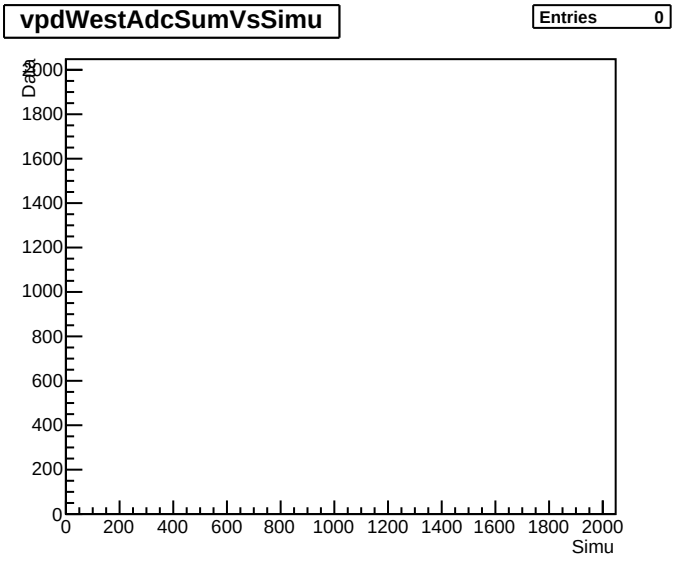

vpdEastNHits
Entries 11798

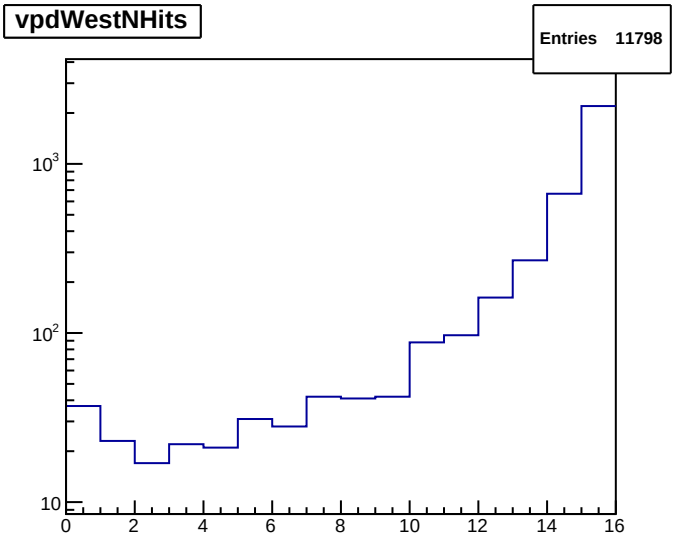

vpdEastNHitsVsSimu
Entries 0

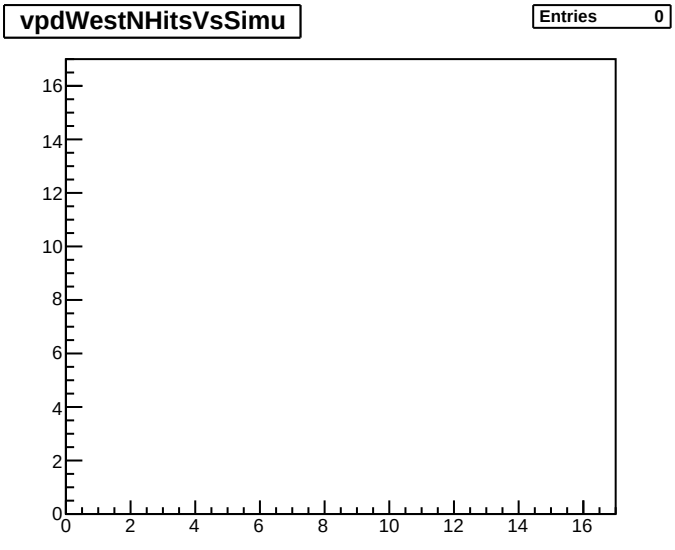

vpdEastTacSum
Entries 11798

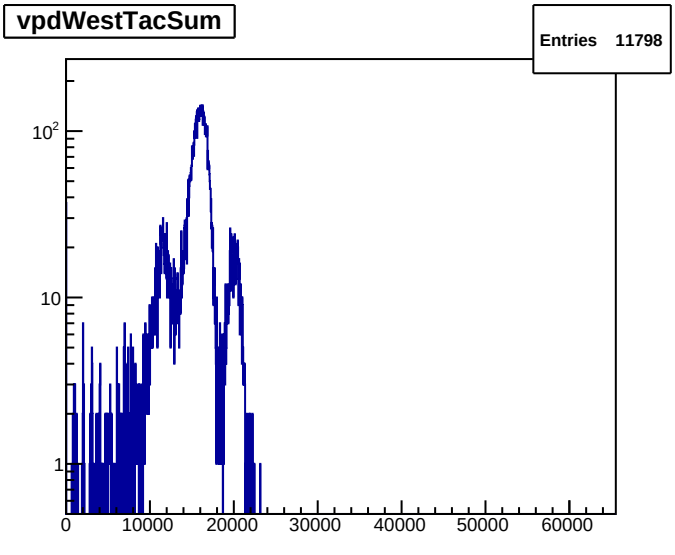

vpdEastTacSumVsSimu
Entries 0
Data
Simu

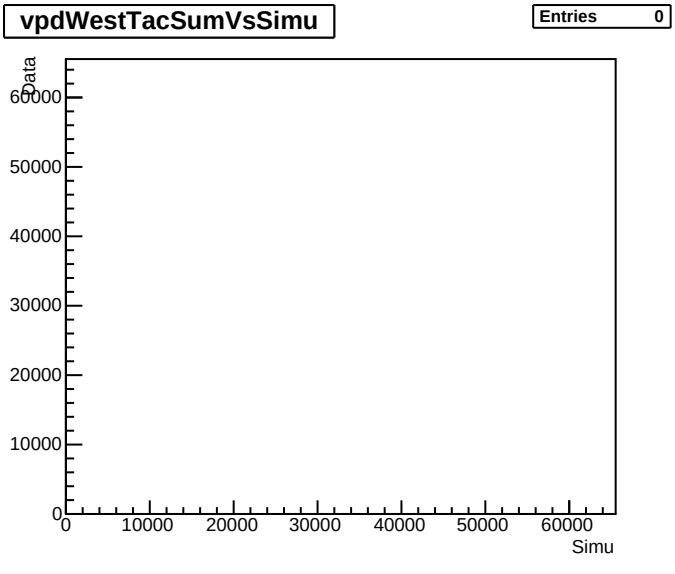

vpdWestAdcSum
Entries 11798
10^4
10^3
10^2
10
1
0 200 400 600 800 1000 1200 1400 1600 1800 2000

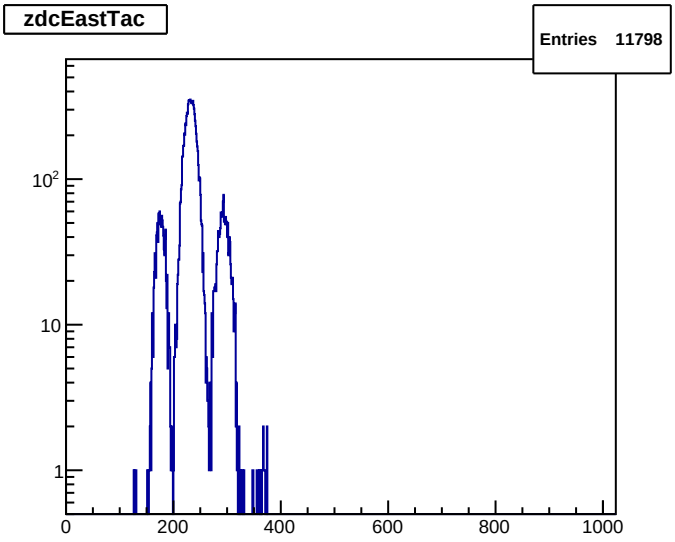

vpdWestAdcSumVsSimu
Entries 0
Data
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0 200 400 600 800 1000 1200 1400 1600 1800 2000
Simu

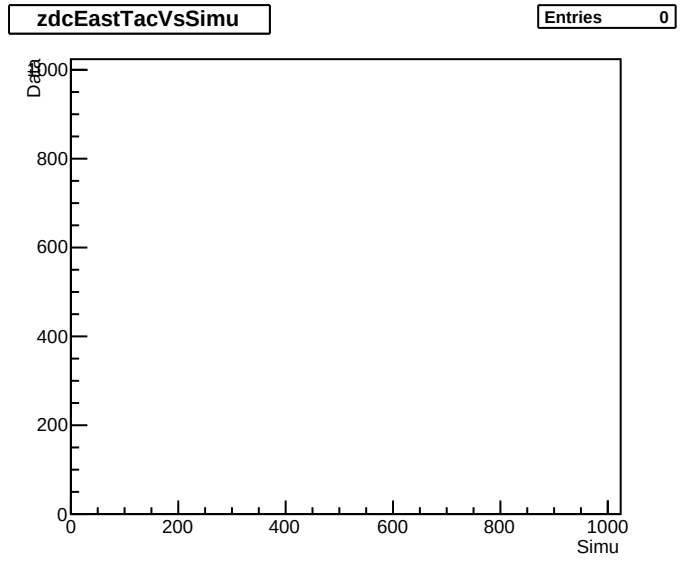

vpdWestNHits
Entries 11798
10^3
10^2
10
0 2 4 6 8 10 12 14 16

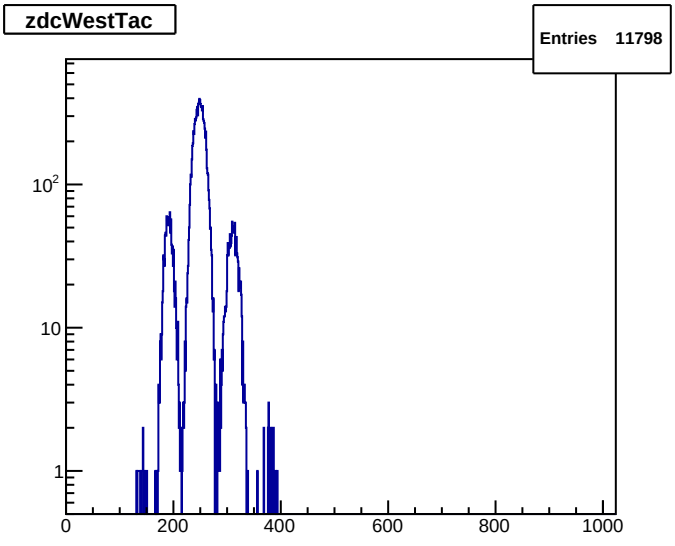

vpdWestNHitsVsSimu
Entries 0
16
14
12
10
8
6
4
2
0
0 2 4 6 8 10 12 14 16

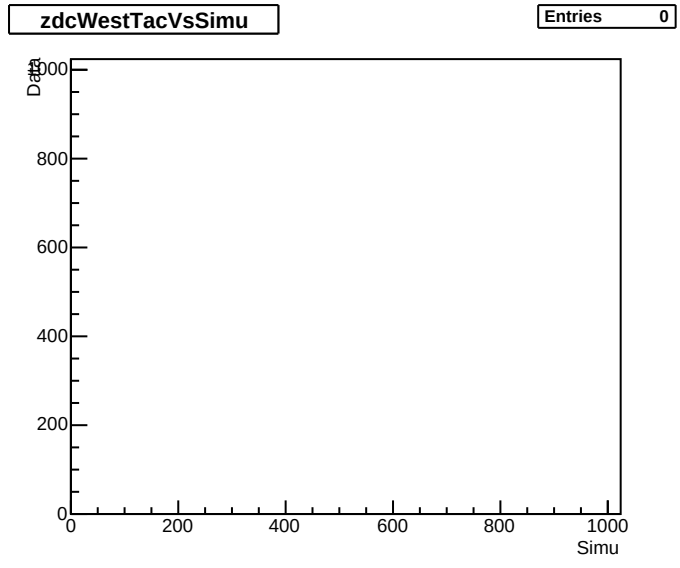

vpdWestTacSum
Entries 11798
10^2
10
1
0 10000 20000 30000 40000 50000 60000

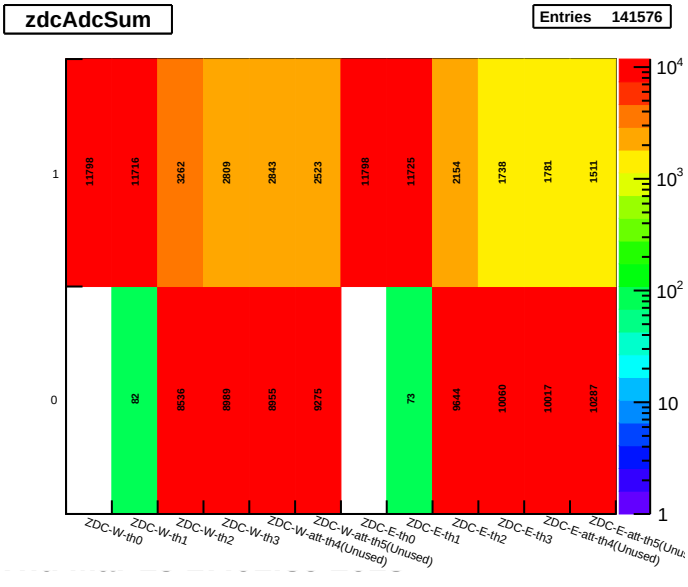

vpdWestTacSumVsSimu
Entries 0
Data
60000
50000
40000
30000
20000
10000
0
0 10000 20000 30000 40000 50000 60000
Simu

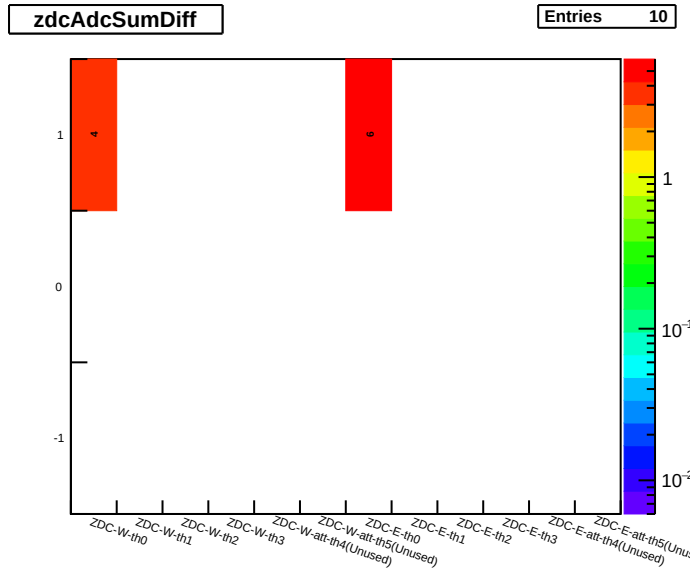

zdcEastTac
Entries 11798
10^2
10
1
0
200
400
600
800
1000

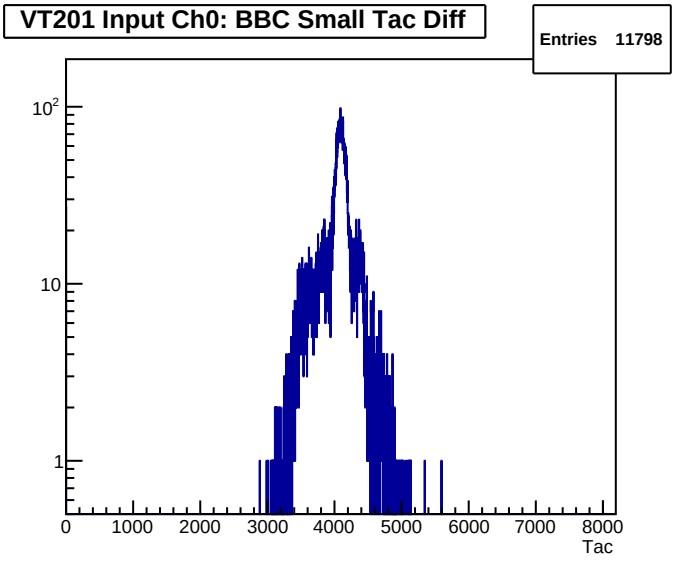

zdcEastTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

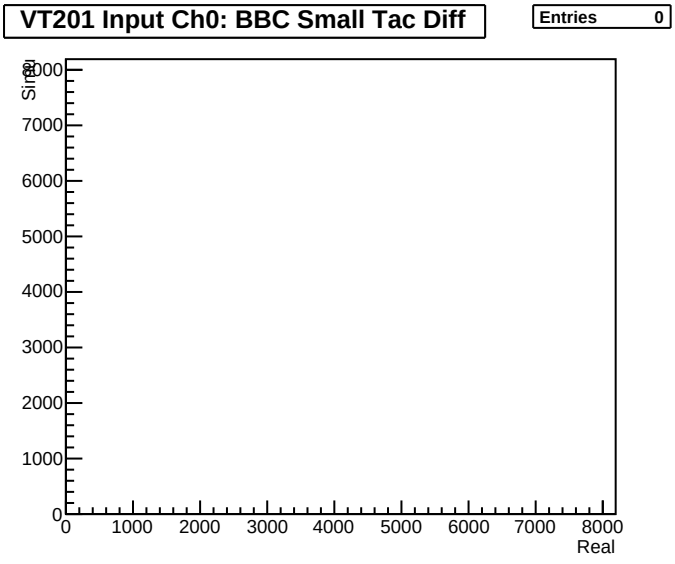

zdcWestTac
Entries 11798
10^2
10
1
0
200
400
600
800
1000

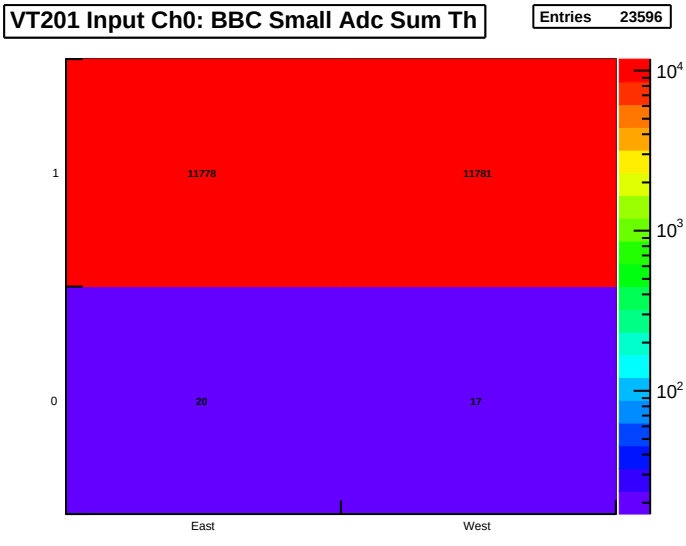

zdcWestTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

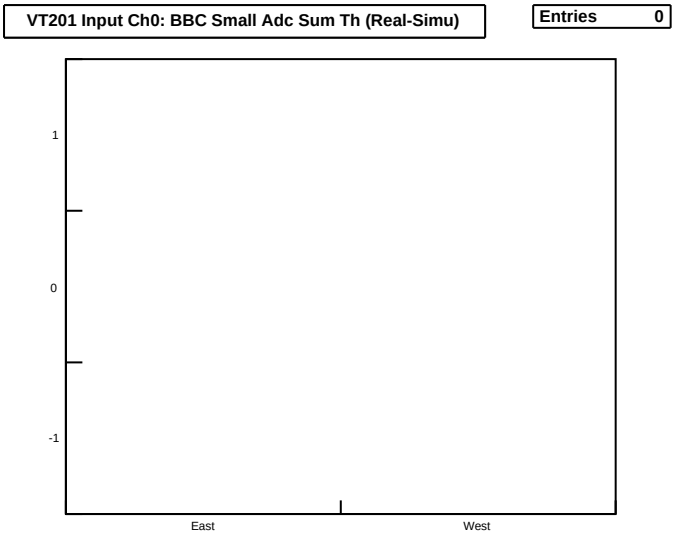

zdcAdcSum
Entries 141576
1
0
11798
11716
3262
2809
2843
2523
11798
11725
2154
1738
1781
1511
82
6536
8939
8955
9275
73
9644
10060
10017
10087
10^4
10^3
10^2
10
1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

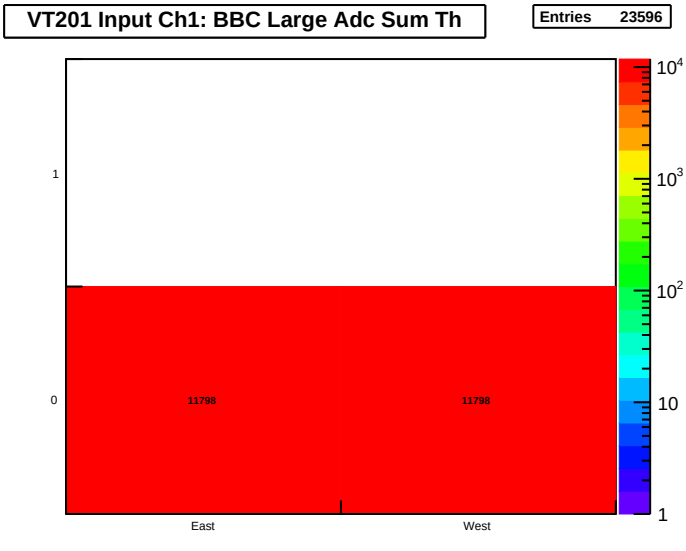

zdcAdcSumDiff
Entries 10
1
0
-1
4
6
1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

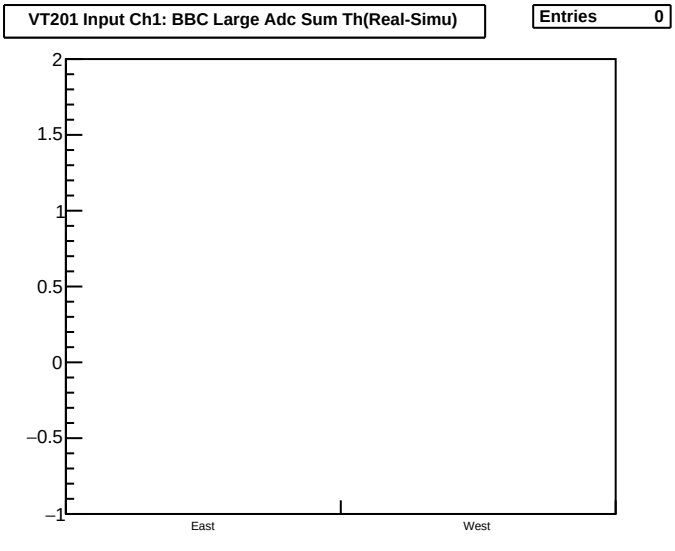

VT201 Input Ch0: BBC Small Tac Diff
Entries 11798
Tac

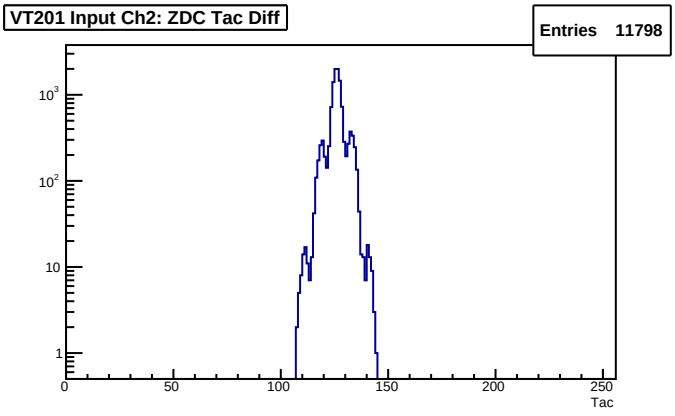

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

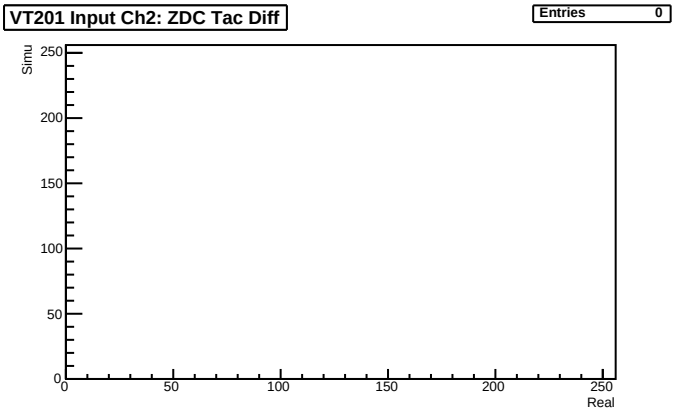

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 23596
11778
11781
20
17
East
West

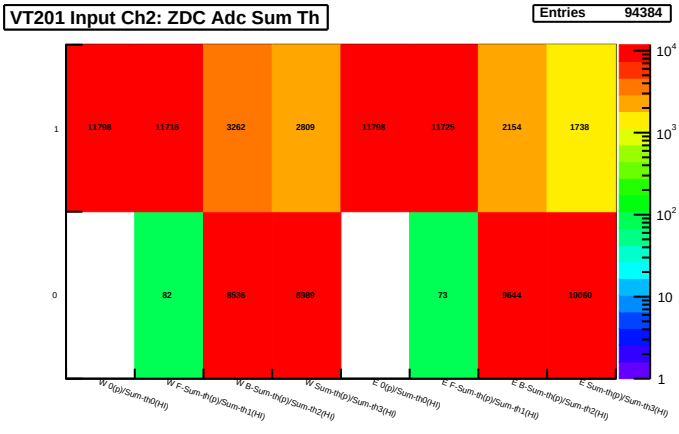

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

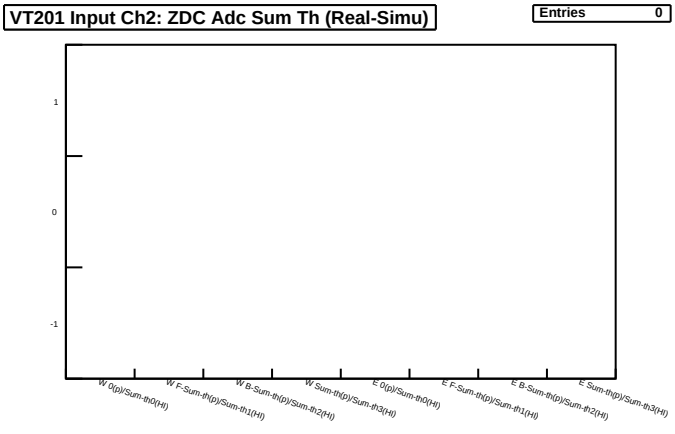

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 23596
11798
11798
East
West

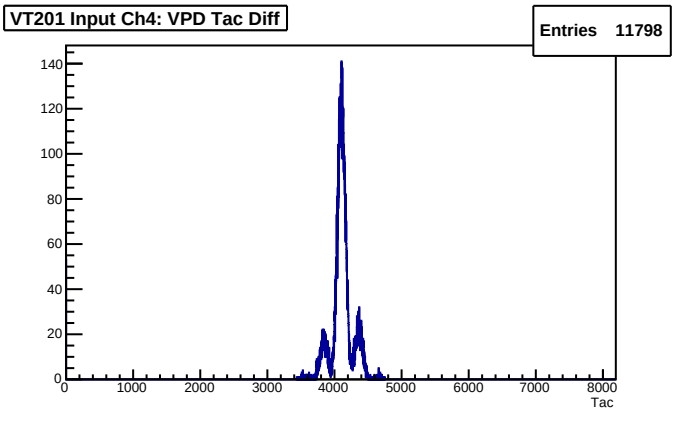

VT201 Input Ch1: BBC Large Adc Sum Th(Real-Simu)
Entries 0
East
West

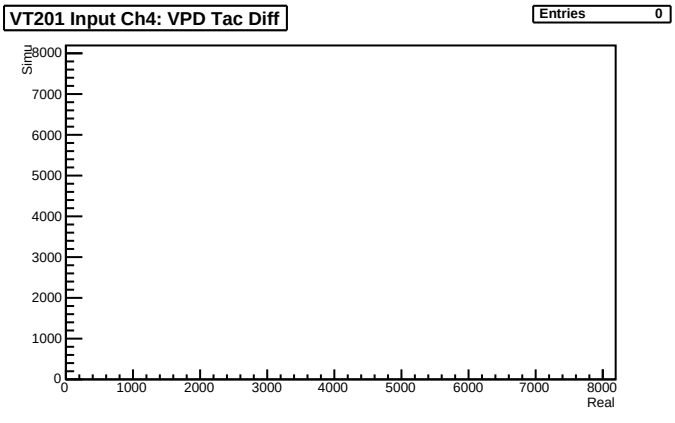

VT201 Input Ch2: ZDC Tac Diff
Entries 11798
Tac

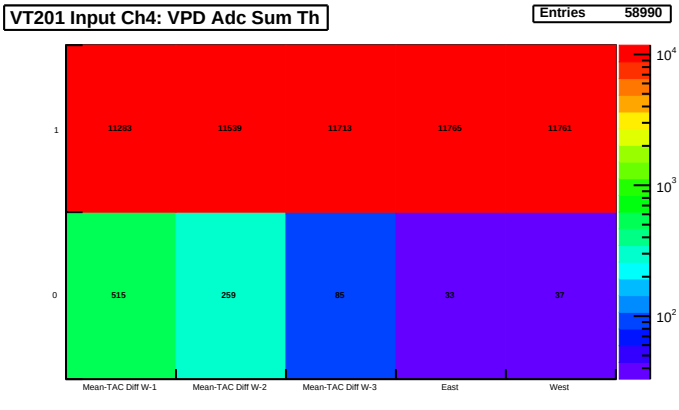

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

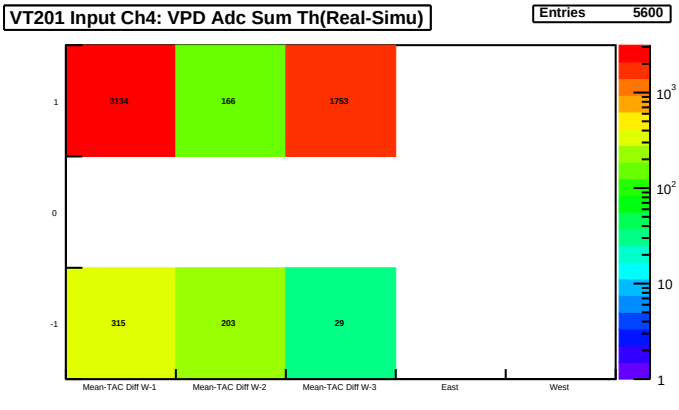

VT201 Input Ch2: ZDC Adc Sum Th
Entries 94384
11798 11716 3262 2809 11798 11725 2154 1738
82 8536 8989 73 9644 10060
W 0(p)/Sum-th0(Hi)
W F-Sum-th(p)/Sum-th1(Hi)
W B-Sum-th(p)/Sum-th2(Hi)
W Sum-th(p)/Sum-th3(Hi)
E 0(p)/Sum-th0(Hi)
E F-Sum-th(p)/Sum-th1(Hi)
E B-Sum-th(p)/Sum-th2(Hi)
E Sum-th(p)/Sum-th3(Hi)

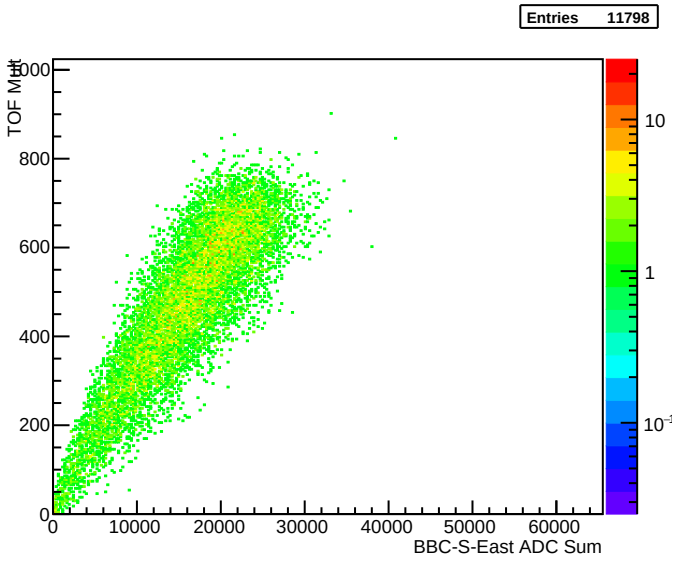

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(Hi)
W F-Sum-th(p)/Sum-th1(Hi)
W B-Sum-th(p)/Sum-th2(Hi)
W Sum-th(p)/Sum-th3(Hi)
E 0(p)/Sum-th0(Hi)
E F-Sum-th(p)/Sum-th1(Hi)
E B-Sum-th(p)/Sum-th2(Hi)
E Sum-th(p)/Sum-th3(Hi)

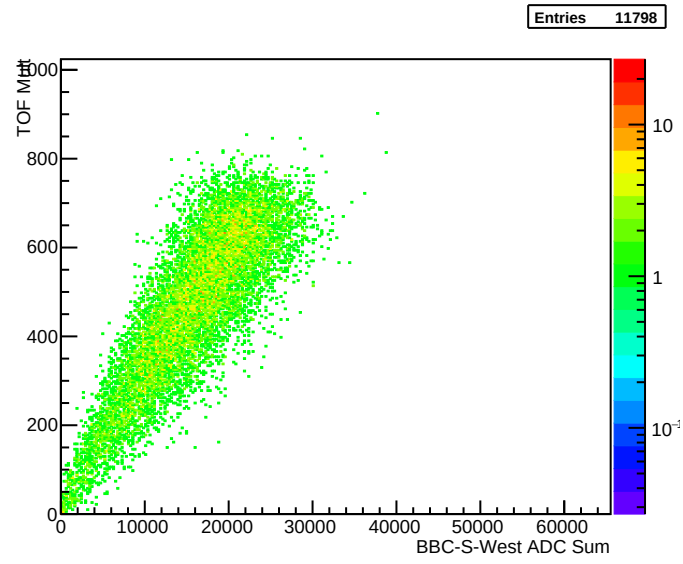

VT201 Input Ch4: VPD Tac Diff
Entries 11798
Tac

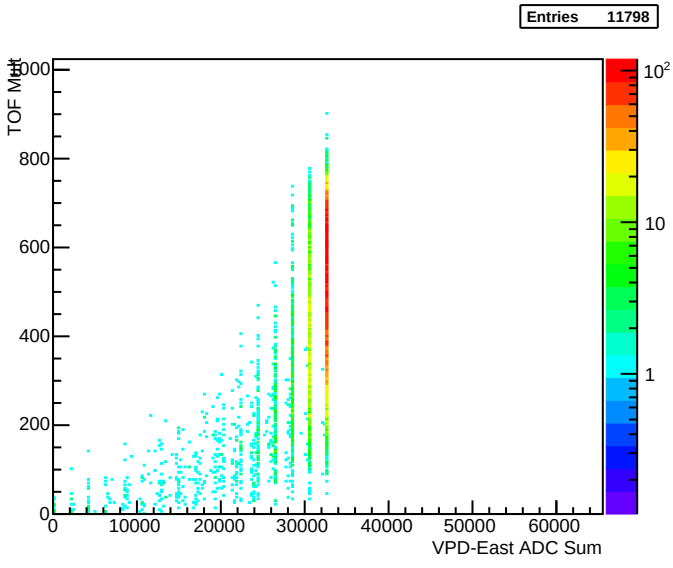

VT201 Input Ch4: VPD Tac Diff
Entries 0
Simu
Real

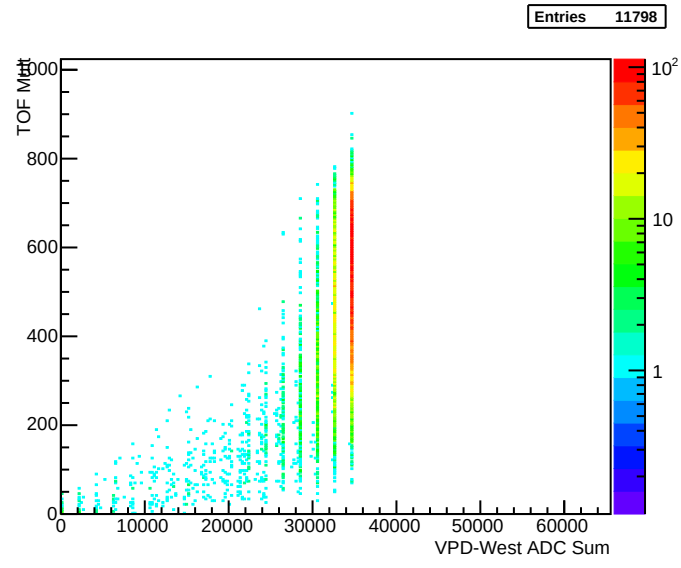

VT201 Input Ch4: VPD Adc Sum Th
Entries 58990
11283 11539 11713 11765 11761
515 259 85 33 37
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

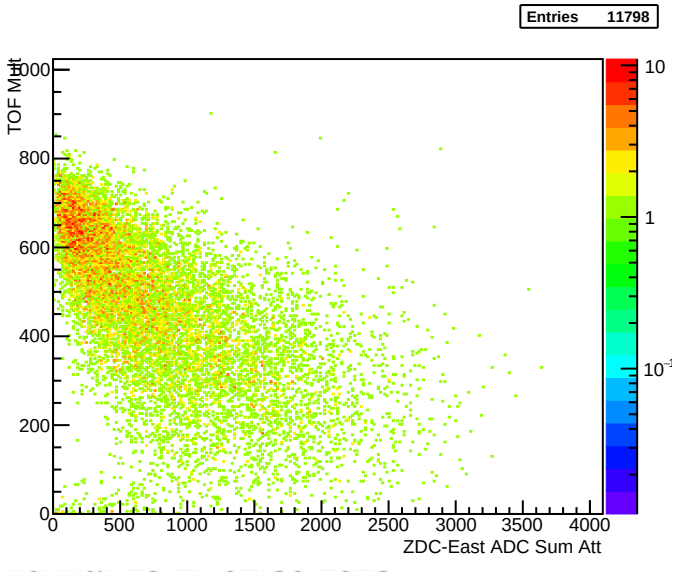

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 5600
3134 166 1753
315 203 29
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

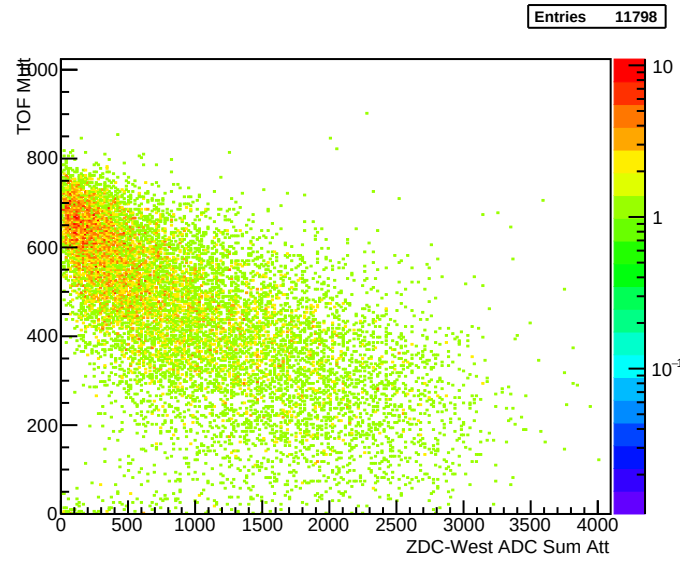

Entries 11798
TOF Mult
BBC-S-East ADC Sum

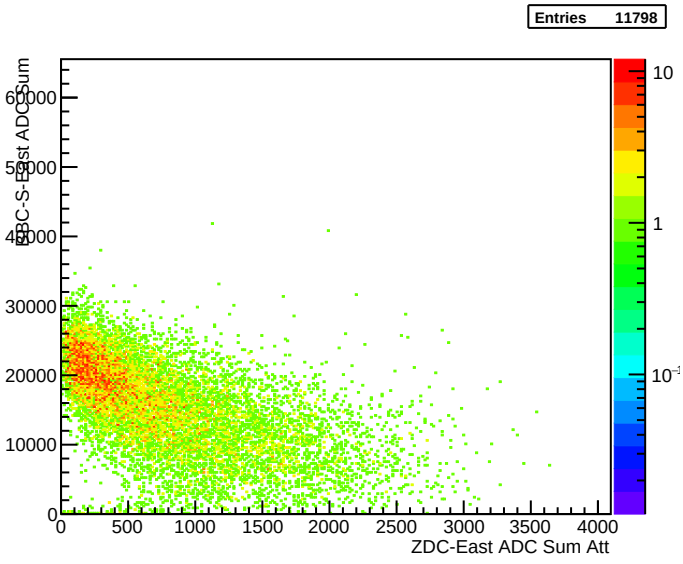

Entries 11798
TOF Mult
BBC-S-West ADC Sum

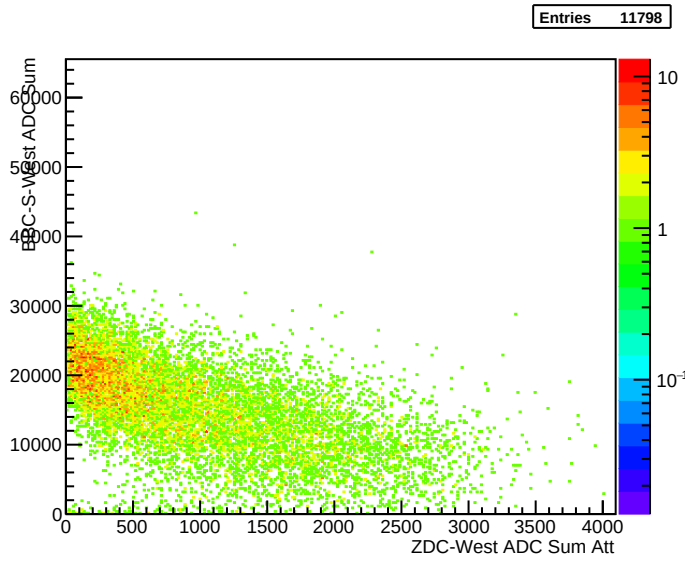

Entries 11798
TOF Mult
VPD-East ADC Sum

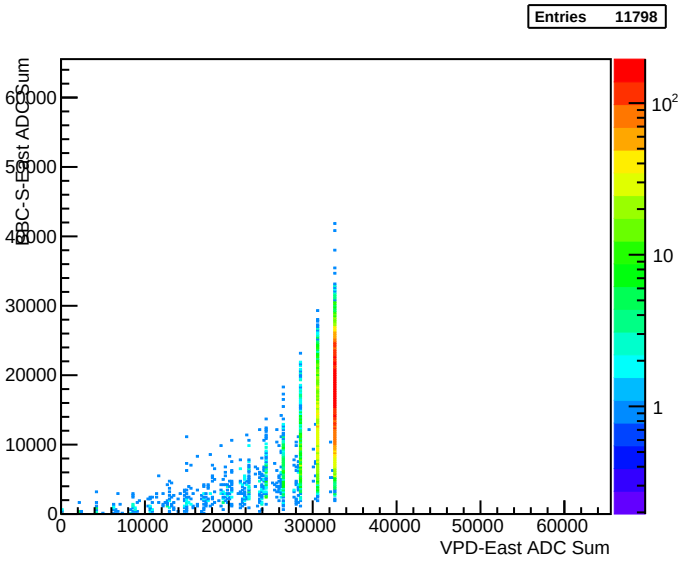

Entries 11798
TOF Mult
VPD-West ADC Sum

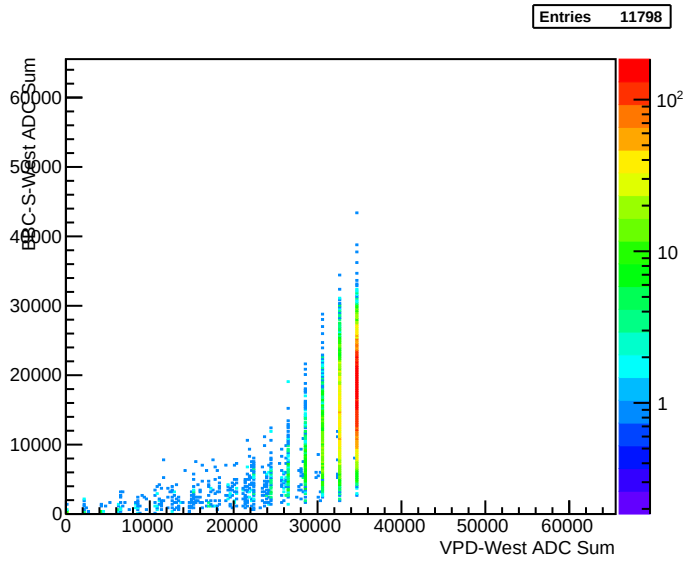

Entries 11798
TOF Mult
ZDC-East ADC Sum Att

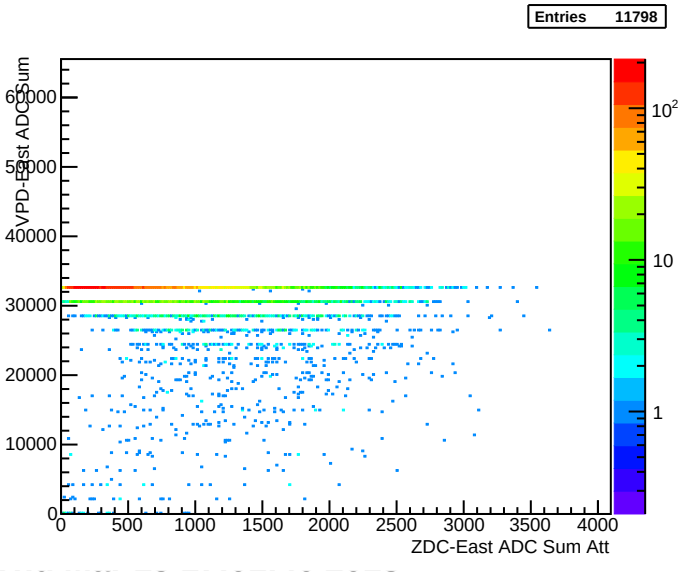

Entries 11798
TOF Mult
ZDC-West ADC Sum Att

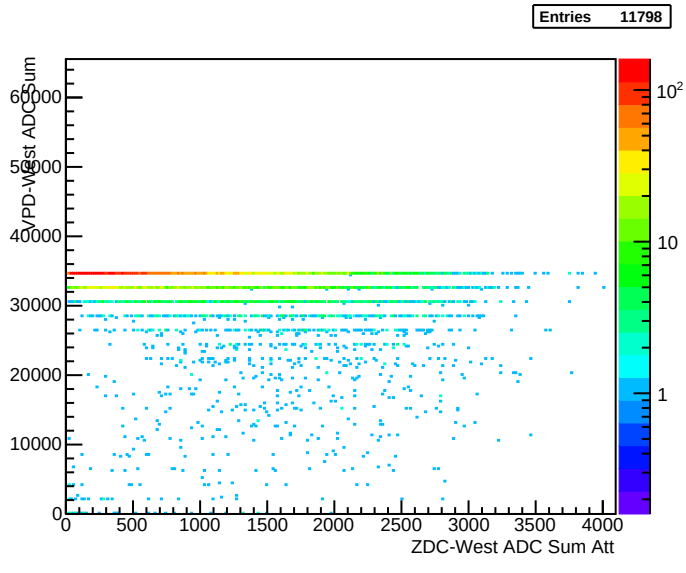

Entries 11798
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

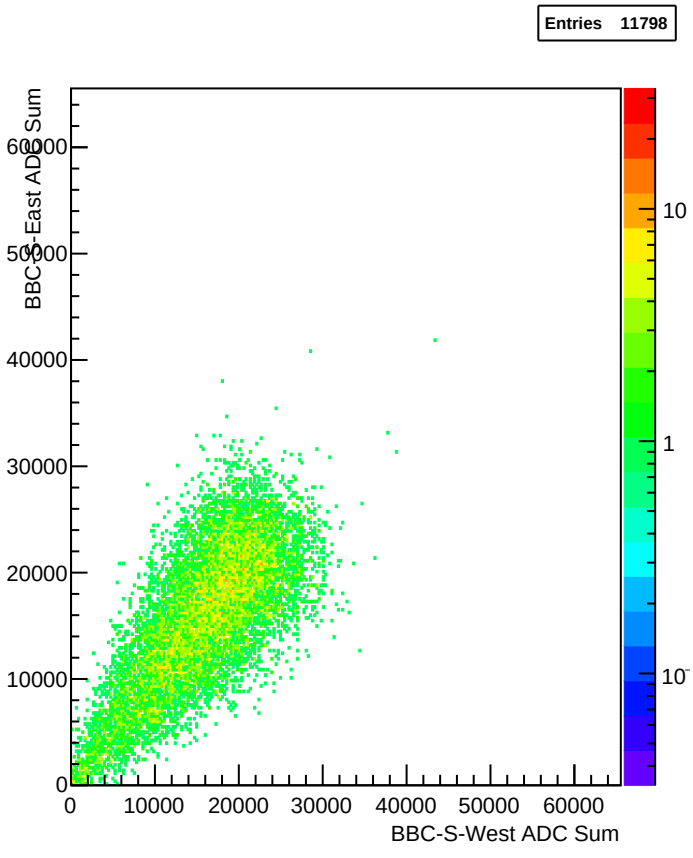

Entries 11798
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

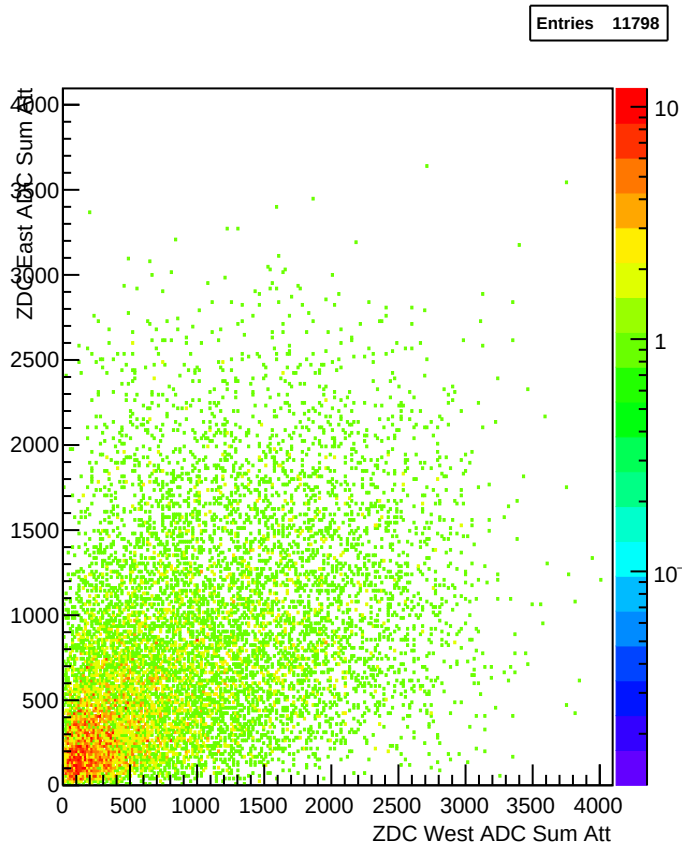

Entries 11798
BBC-S-East ADC Sum
VPD-East ADC Sum

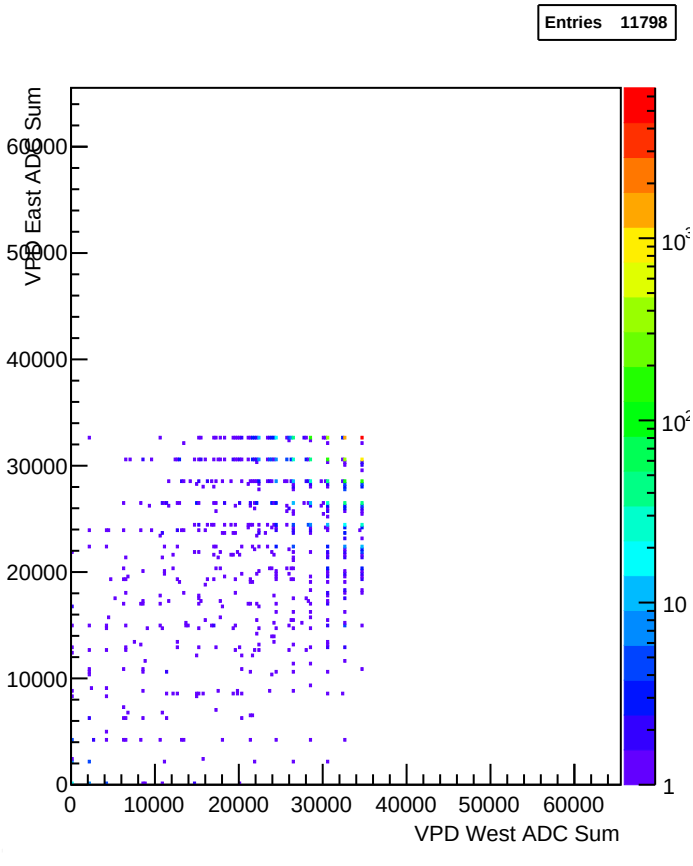

Entries 11798
BBC-S-West ADC Sum
VPD-West ADC Sum

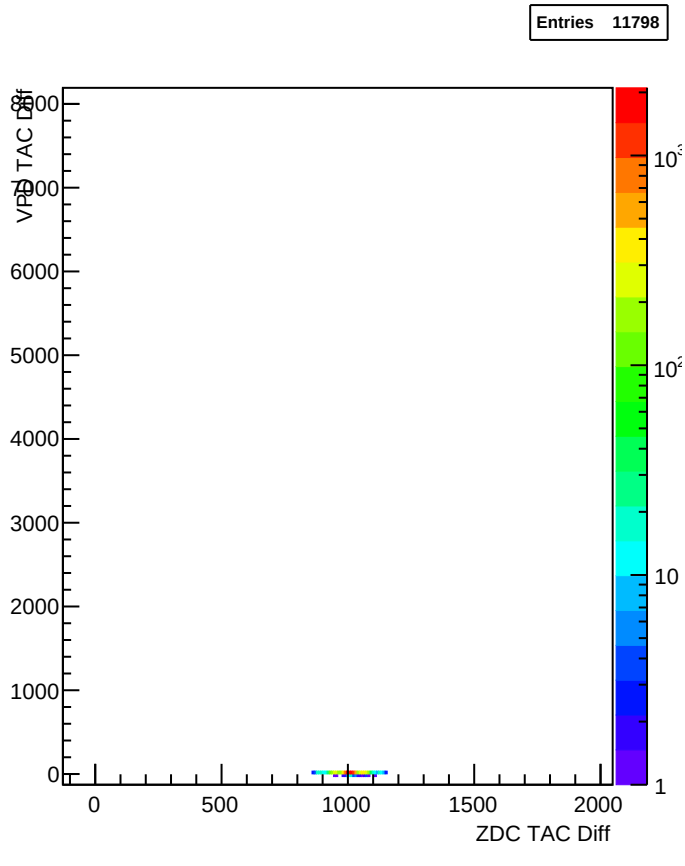

Entries 11798
VPD-East ADC Sum
ZDC-East ADC Sum Att

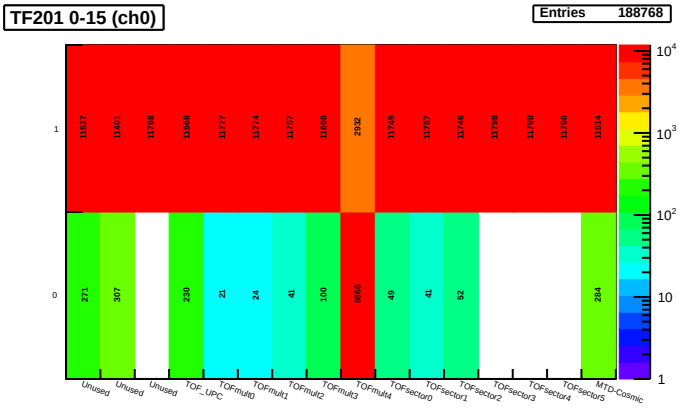

Entries 11798
VPD-West ADC Sum
ZDC-West ADC Sum Att

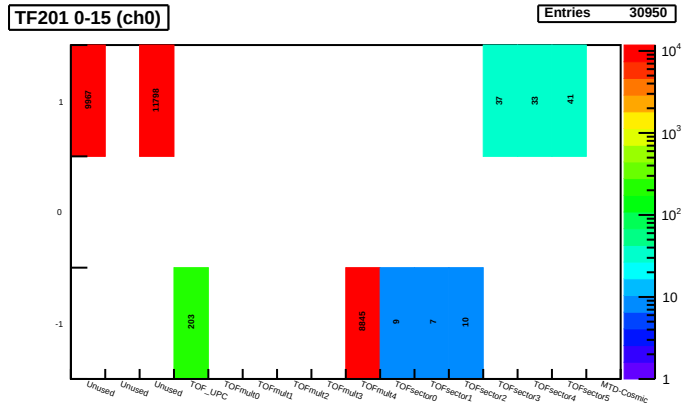

Entries 11798
BBC-S-East ADC Sum
BBC-S-West ADC Sum
0
10000
20000
30000
40000
50000
60000
10
1

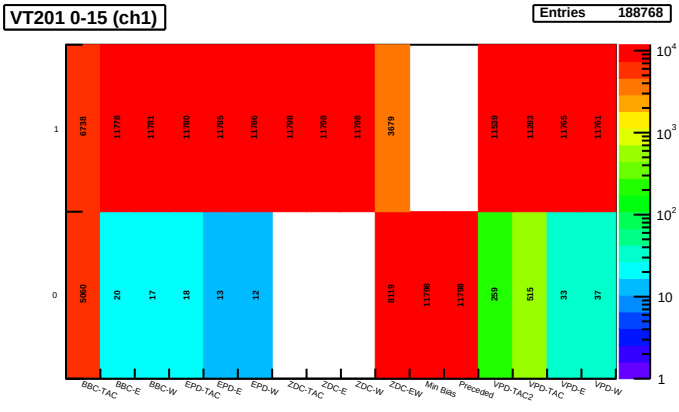

Entries 11798
ZDC East ADC Sum Att
ZDC West ADC Sum Att
0
500
1000
1500
2000
2500
3000
3500
4000
10
1

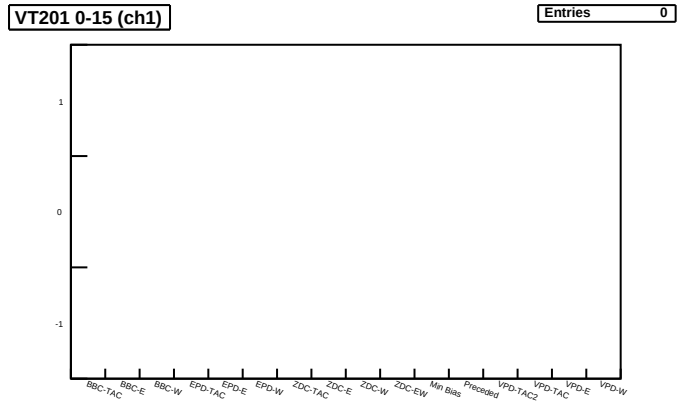

Entries 11798
VPD East ADC Sum
VPD West ADC Sum
0
10000
20000
30000
40000
50000
60000
10
1

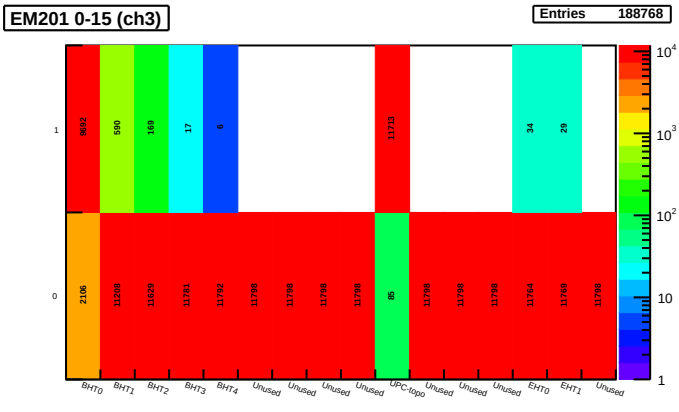

Entries 11798
VPD TAC Diff
ZDC TAC Diff
0
500
1000
1500
2000
1000
2000
3000
4000
5000
6000
7000
8000
10
1

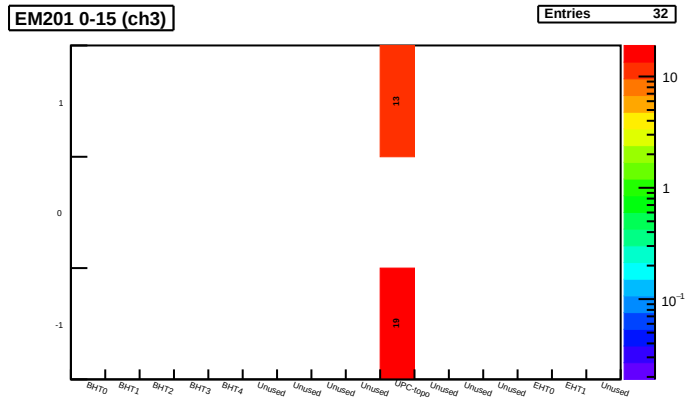

TF201 0-15 (ch0)
Entries 188768
11527 11491 11798 11568 11777 11774 11757 11698 2932 11749 11757 11746 11798 11798 11798 11514
271 307 230 21 24 41 100 8866 49 41 52 284
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

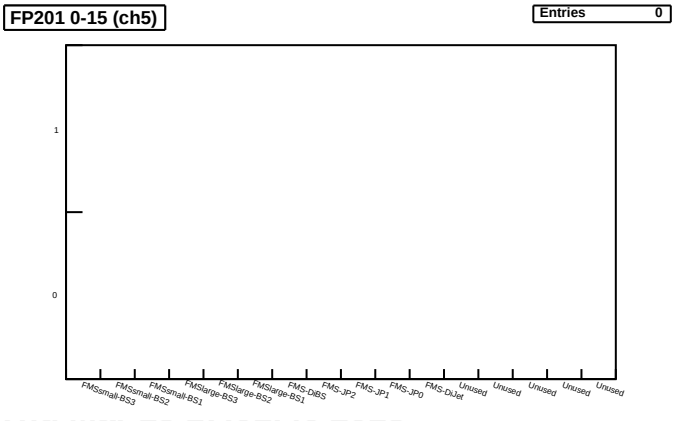

TF201 0-15 (ch0)
Entries 30950
9967 11798 37 33 41
293 8845 9 7 10
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

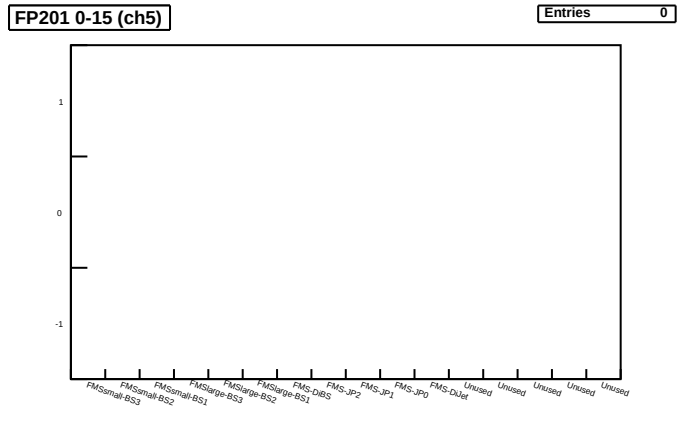

VT201 0-15 (ch1)
Entries 188768
6738 11778 11781 11780 11785 11786 11798 11798 11798 3679 11539 11283 11765 11761
5060 20 17 18 13 12 8119 11798 11798 269 515 33 37
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W


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 188768
9692 590 169 17 6 11713 34 29
2106 11208 11629 11781 11792 11798 11798 11798 11798 85 11798 11798 11798 11764 11769 11798
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


EM201 0-15 (ch3)
Entries 32
13
19
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


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


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