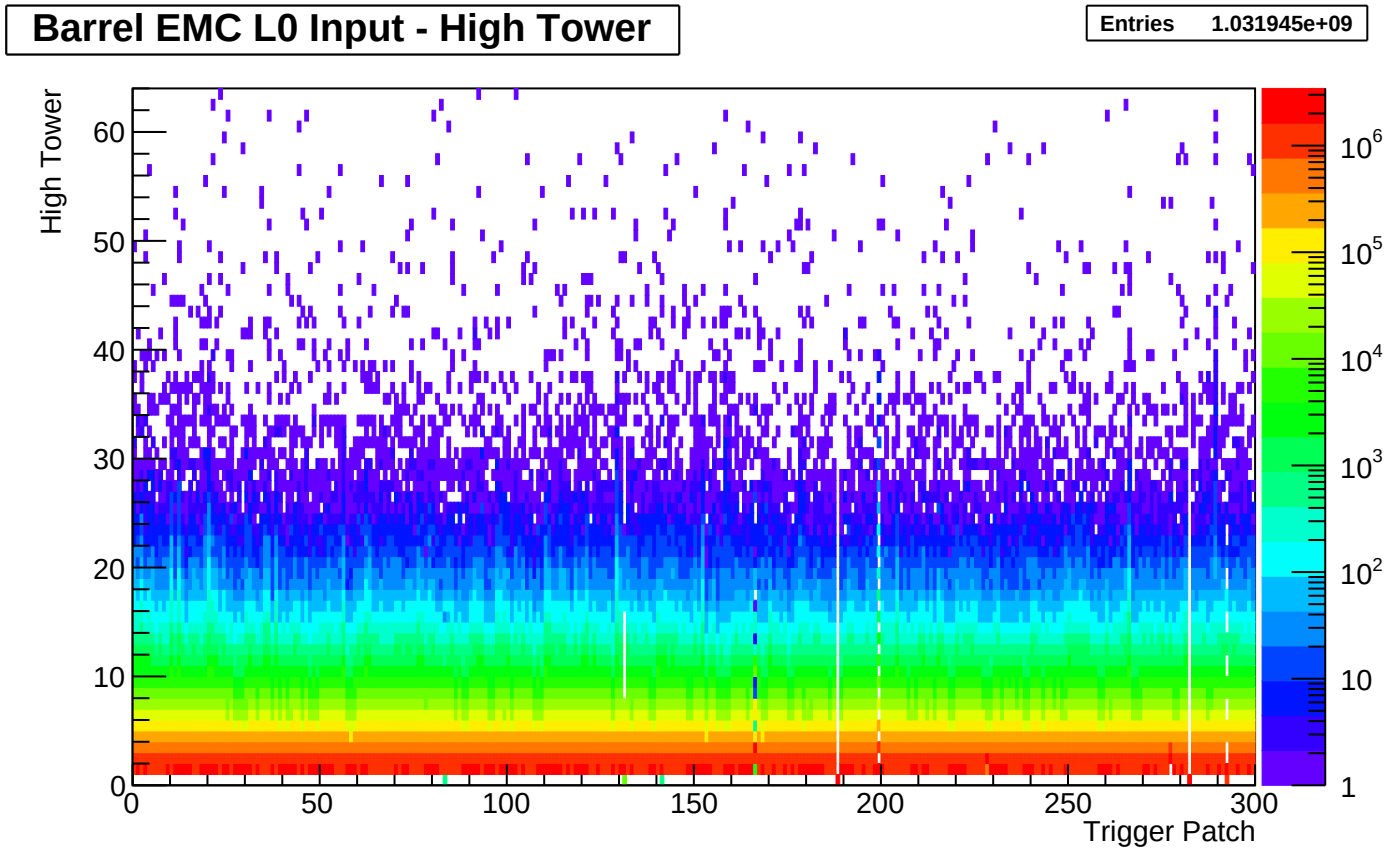
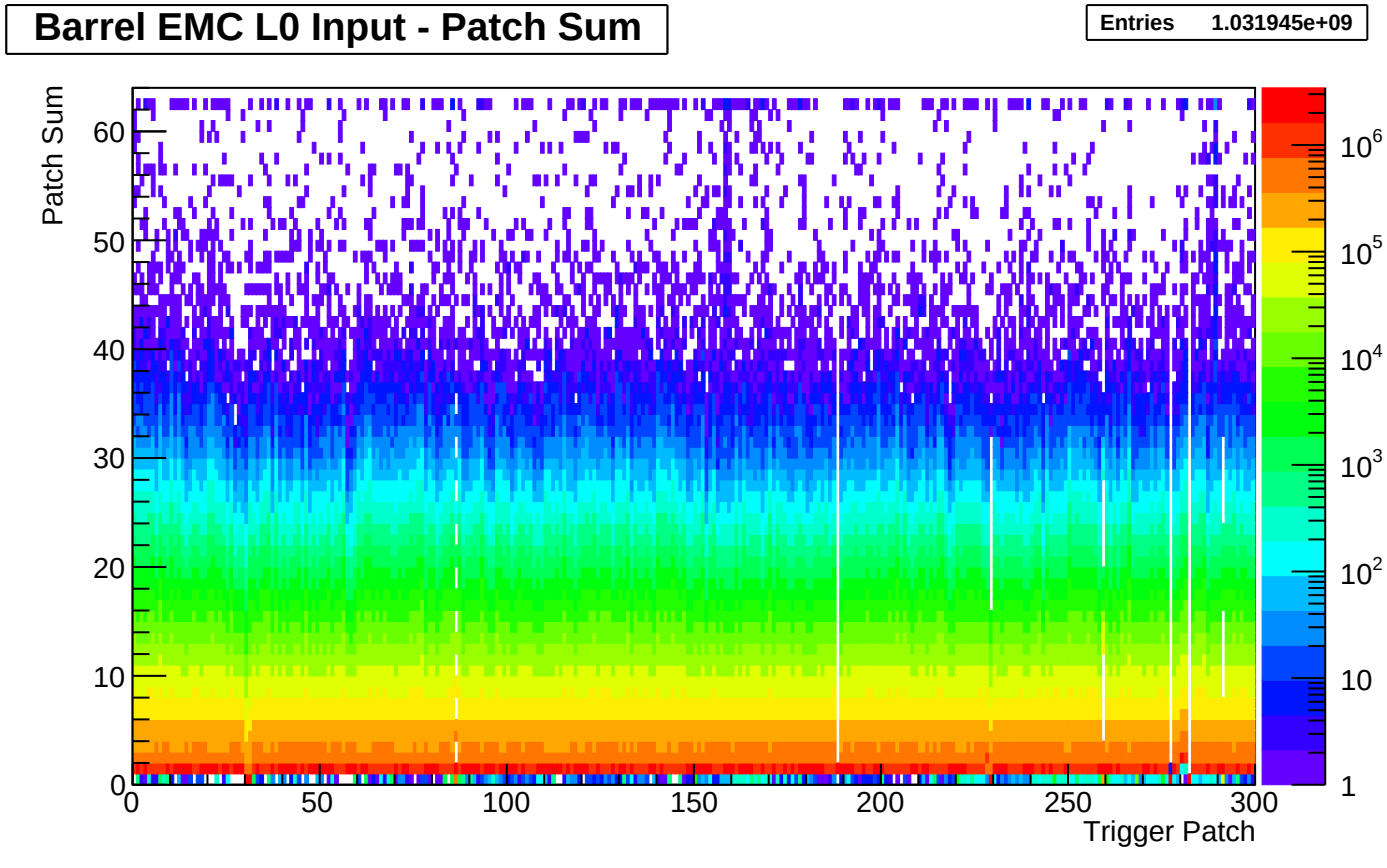
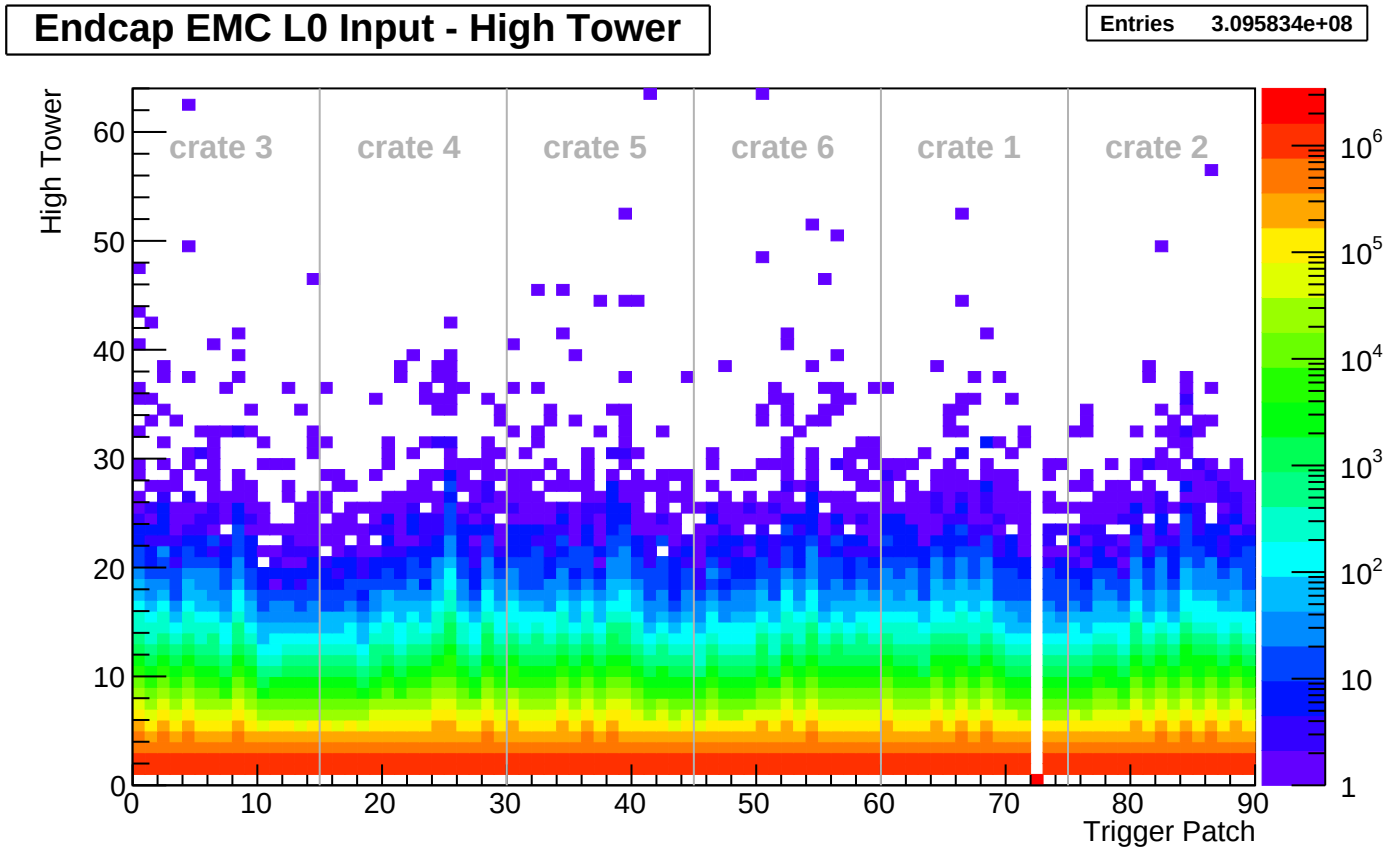
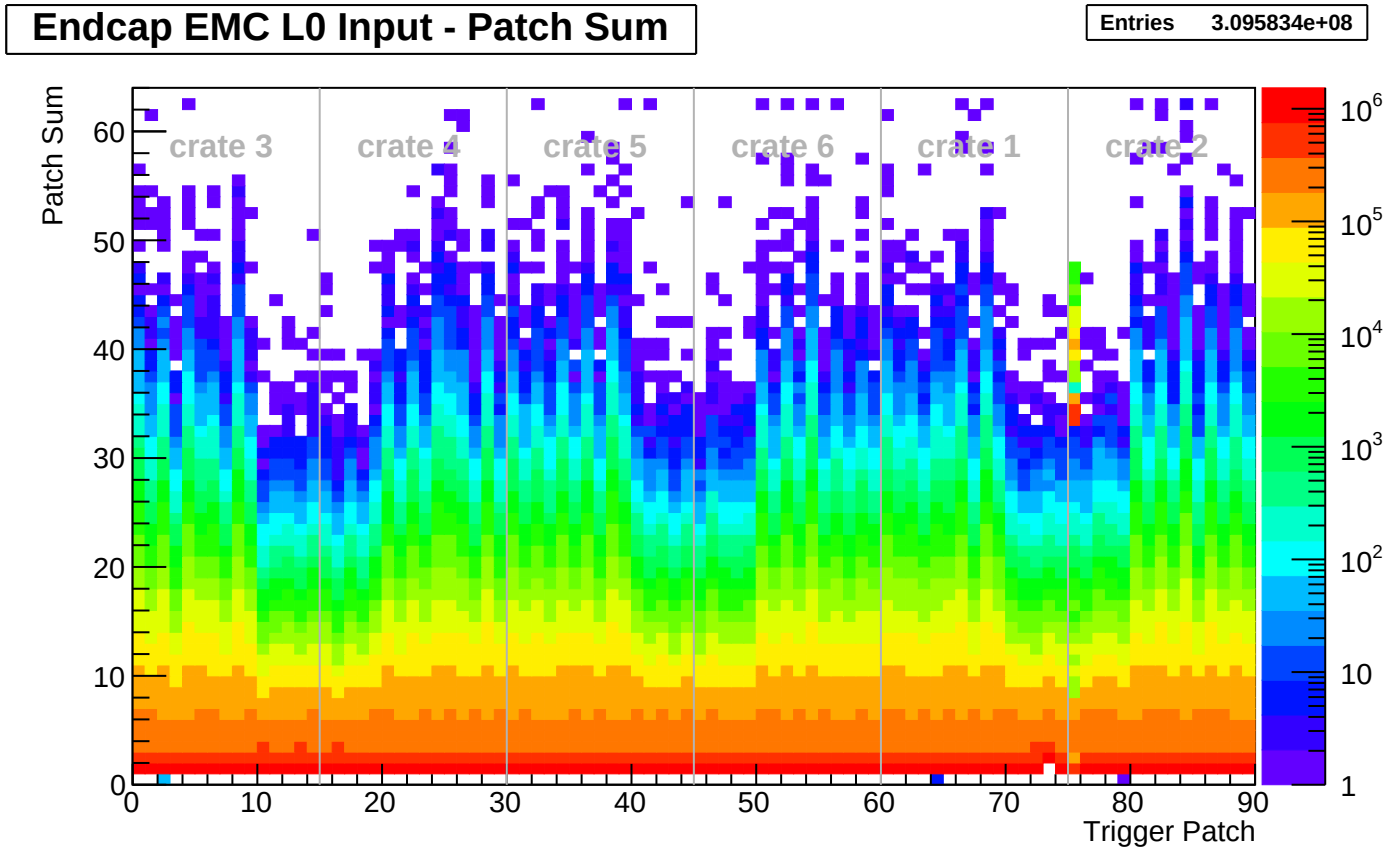
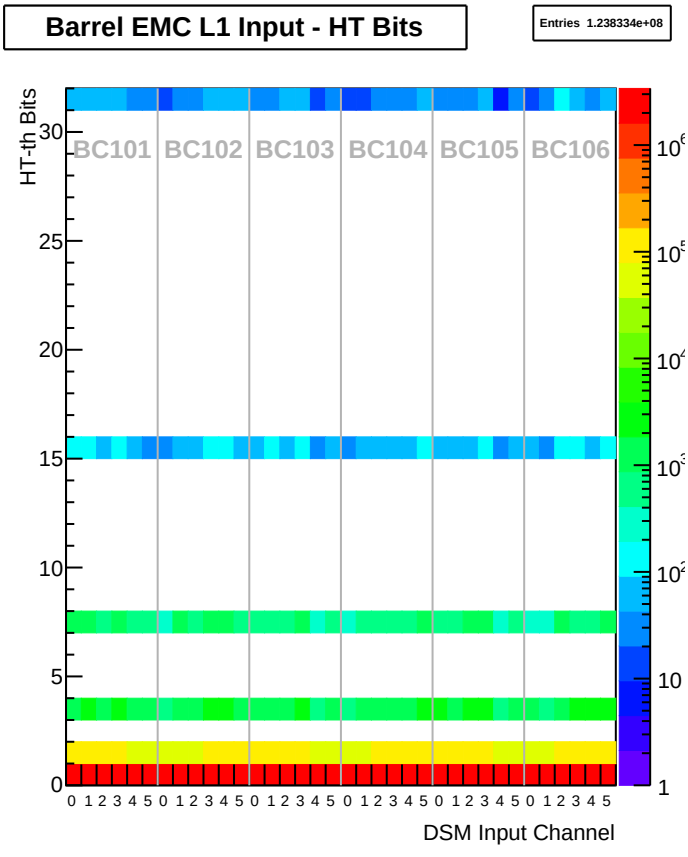
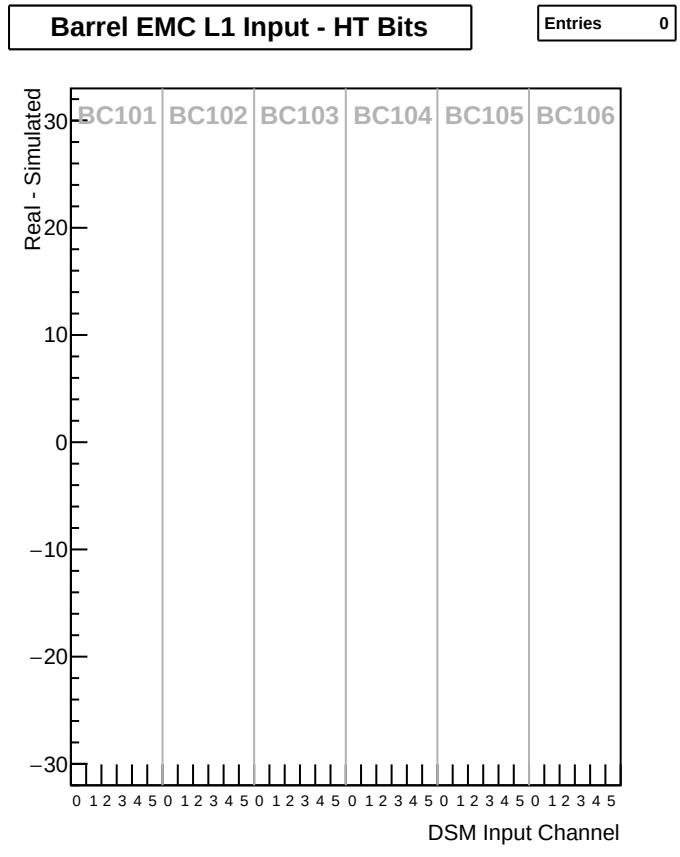

Barrel EMC L0 Input - High Tower
Entries 1.031945e+09
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

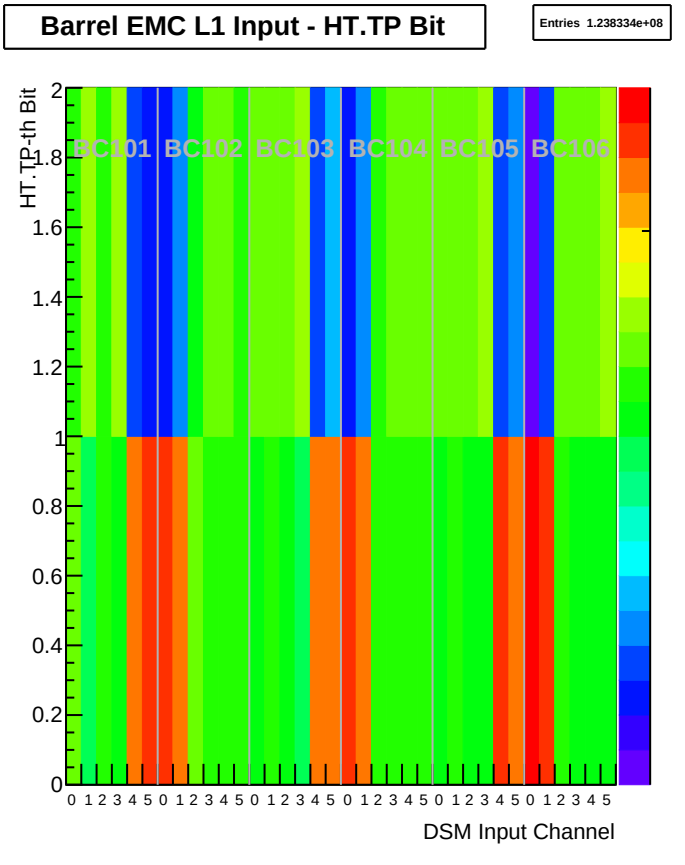

Barrel EMC L0 Input - Patch Sum
Entries 1.031945e+09
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

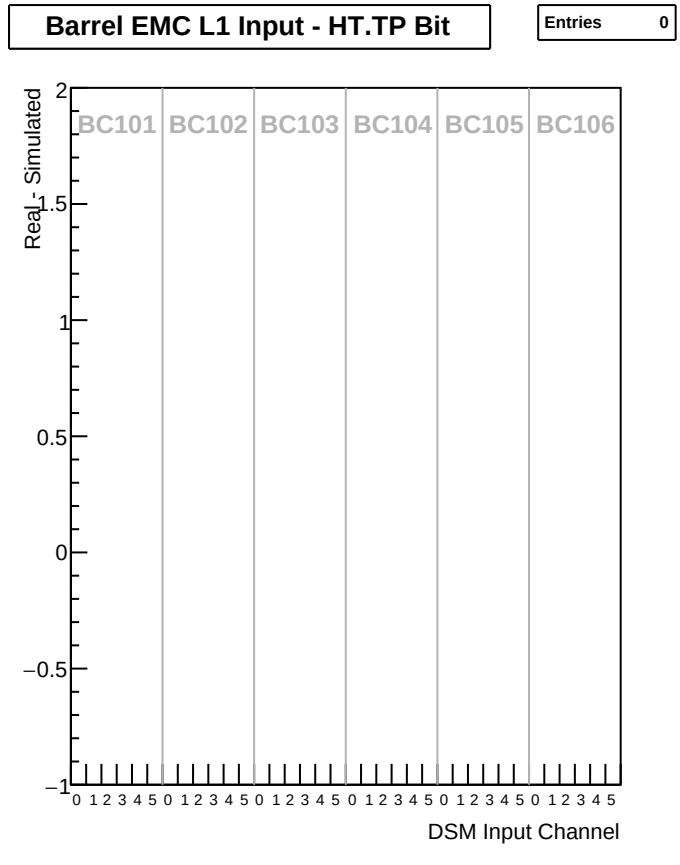

Endcap EMC L0 Input - High Tower
Entries 3.095834e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

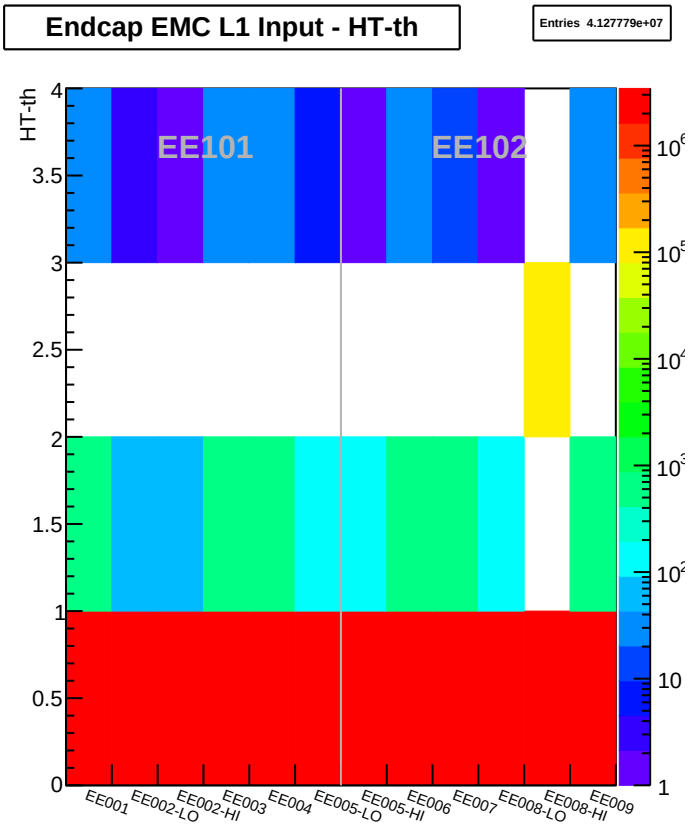

Endcap EMC L0 Input - Patch Sum
Entries 3.095834e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

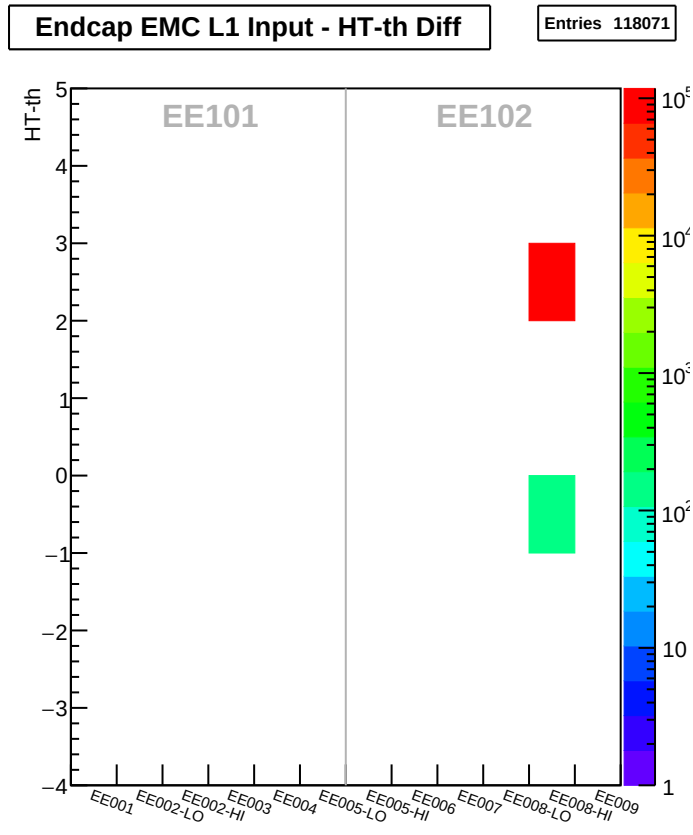

Barrel EMC L1 Input - HT Bits
Entries 1.238334e+08
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

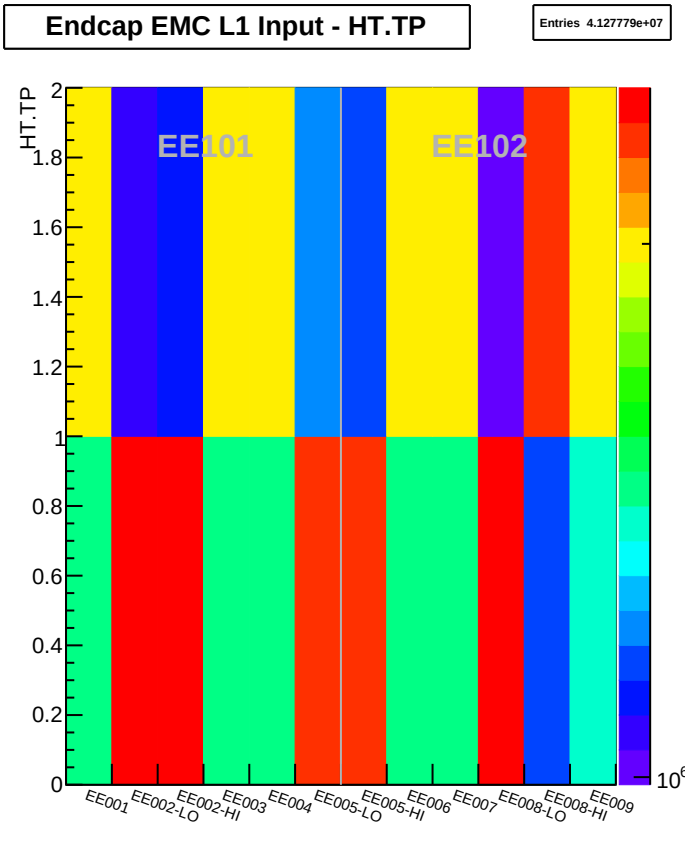

Barrel EMC L1 Input - HT Bits
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

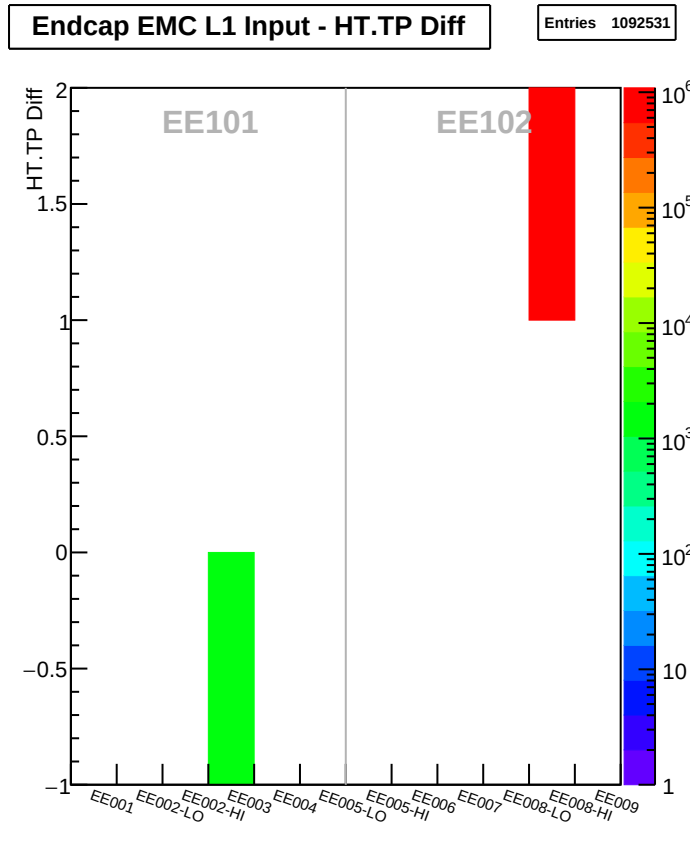

Barrel EMC L1 Input - HT.TP Bit
Entries 1.238334e+08
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

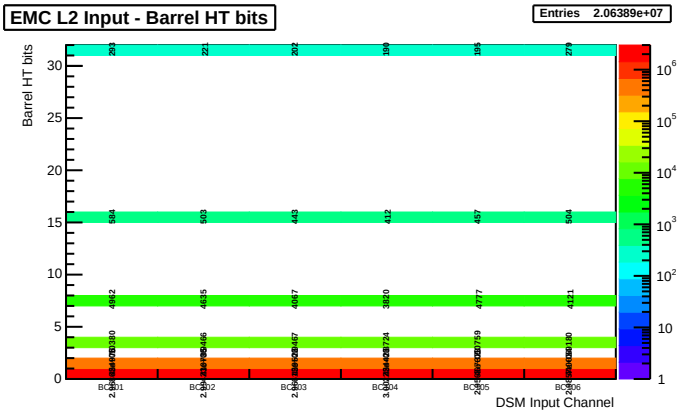

Barrel EMC L1 Input - HT.TP Bit
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

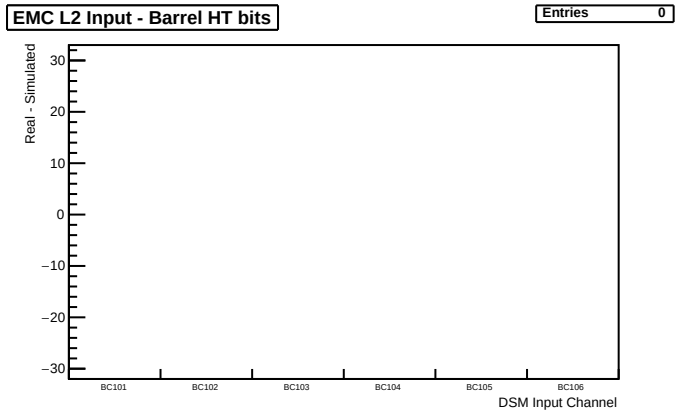

Endcap EMC L1 Input - HT-th
Entries 4.127779e+07
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

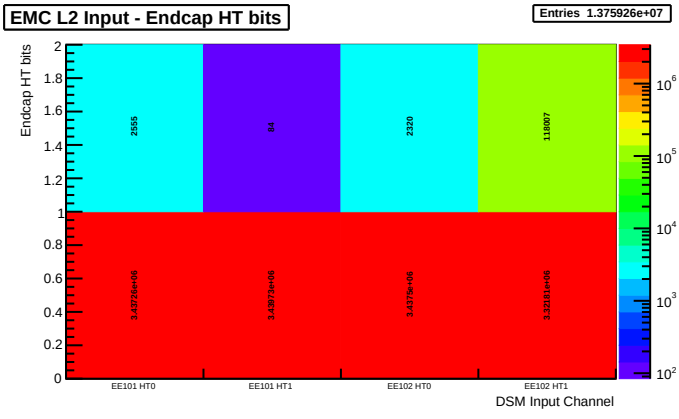

Endcap EMC L1 Input - HT-th Diff
Entries 118071
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

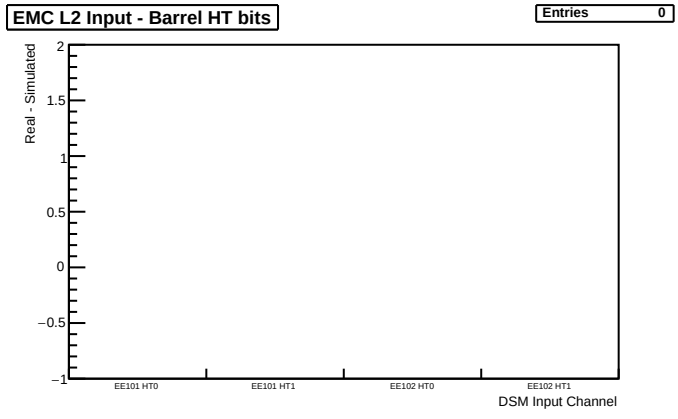

Endcap EMC L1 Input - HT.TP
Entries 4.127779e+07
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

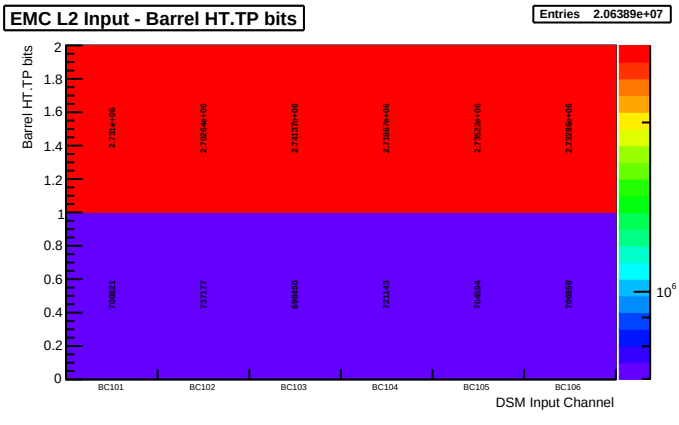

Endcap EMC L1 Input - HT.TP Diff
Entries 1092531
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

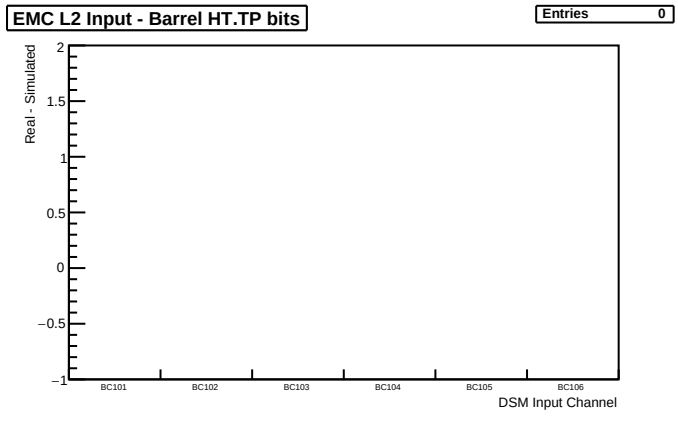

EMC L2 Input - Barrel HT bits
Entries 2.06389e+07
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

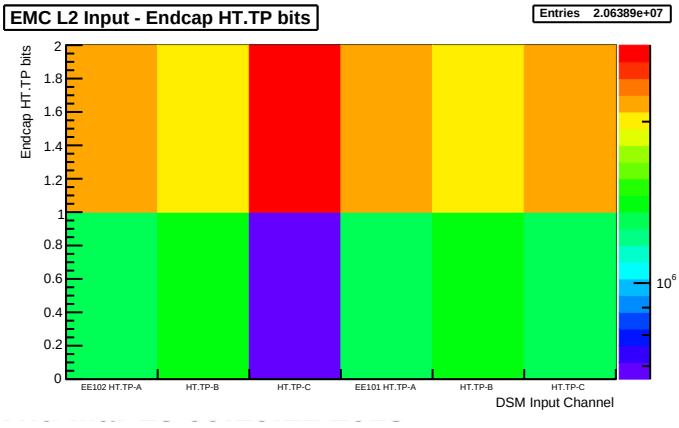

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

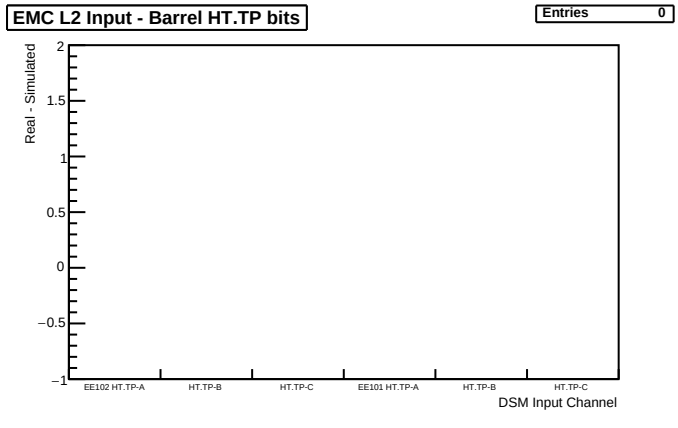

EMC L2 Input - Endcap HT bits
Entries 1.375926e+07
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

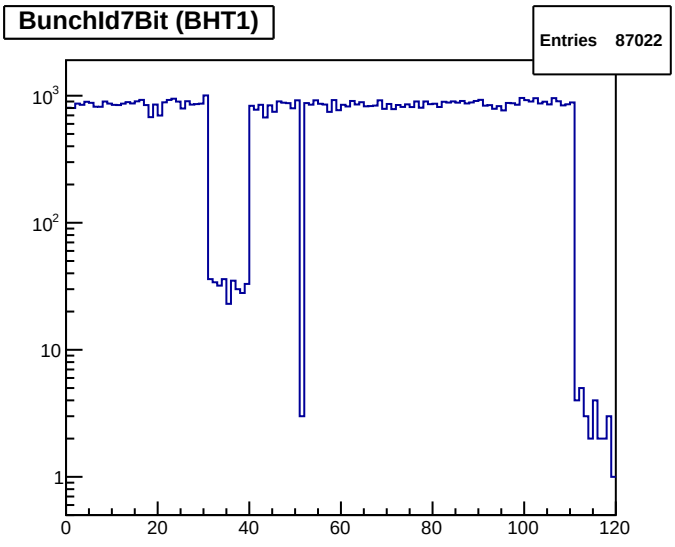

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

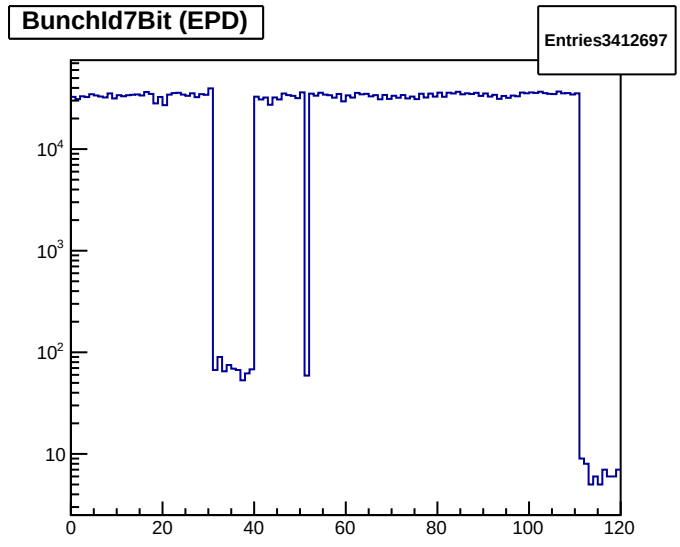

EMC L2 Input - Barrel HT.TP bits
Entries 2.06389e+07
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

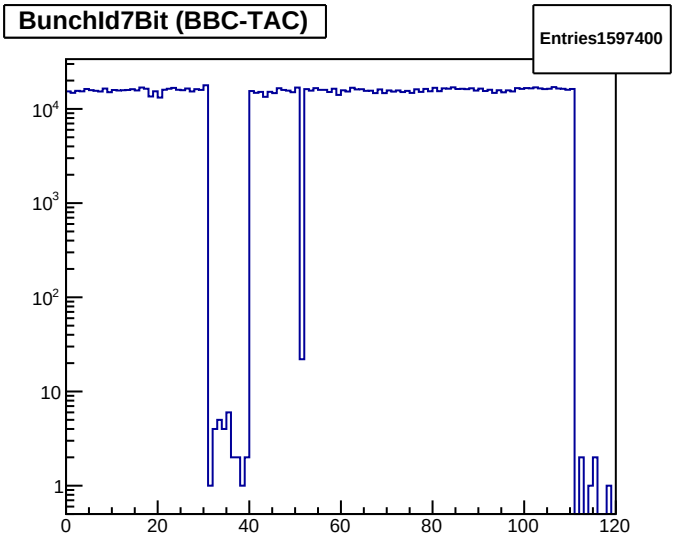

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

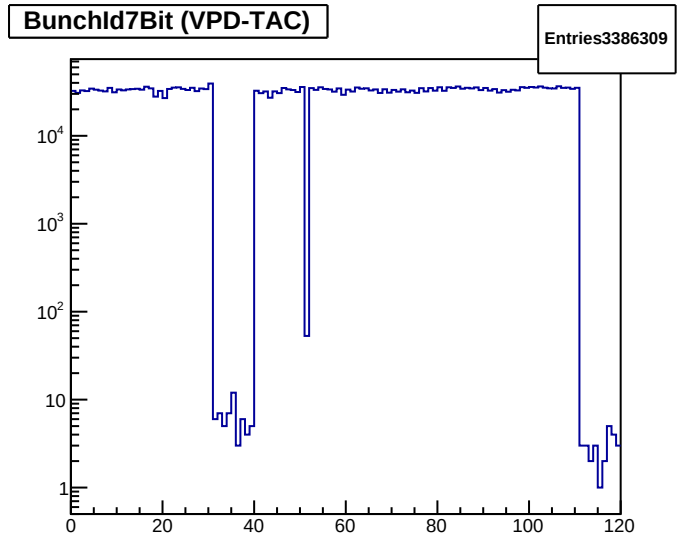

EMC L2 Input - Endcap HT.TP bits
Entries 2.06389e+07
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

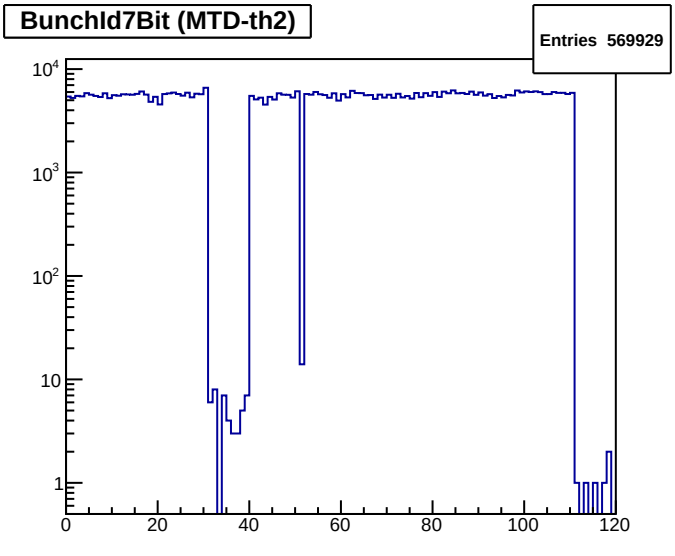

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

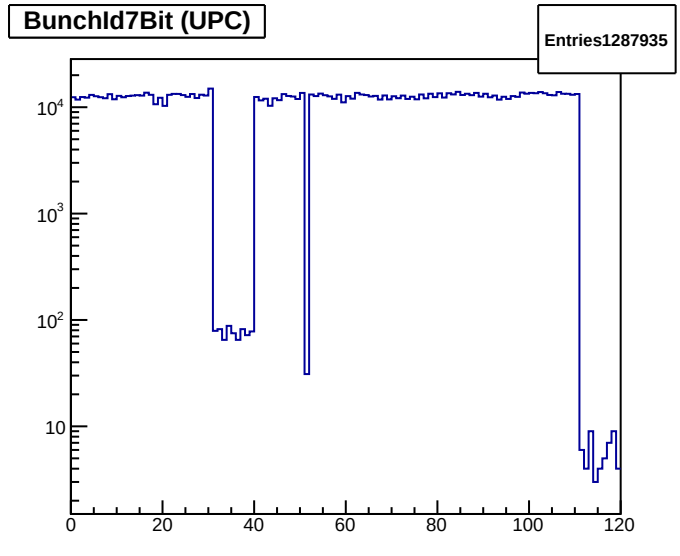

BunchId7Bit (BHT1)
Entries 87022

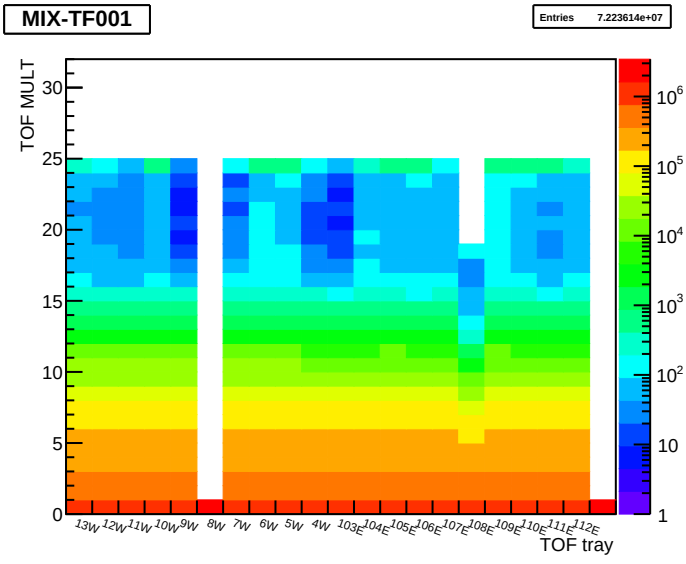

BunchId7Bit (EPD)
Entries3412697

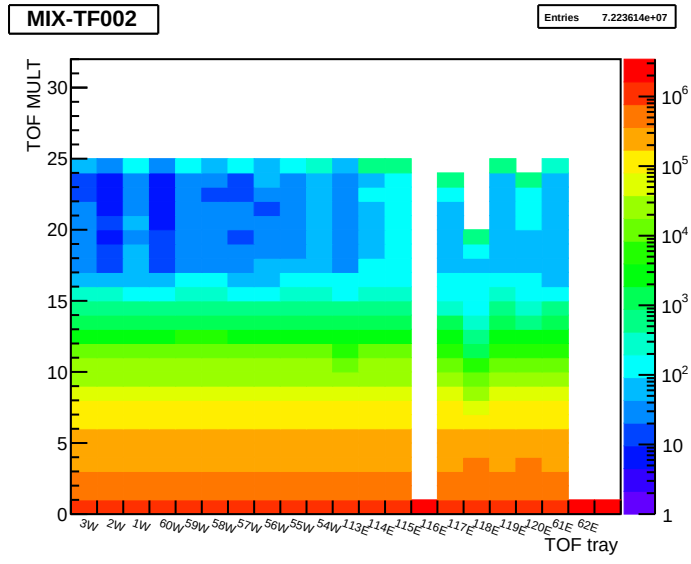

BunchId7Bit (BBC-TAC)
Entries1597400

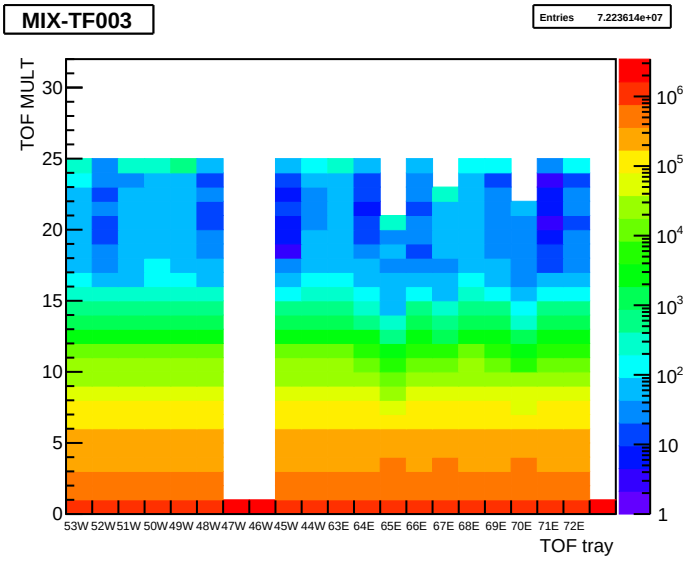

BunchId7Bit (VPD-TAC)
Entries3386309

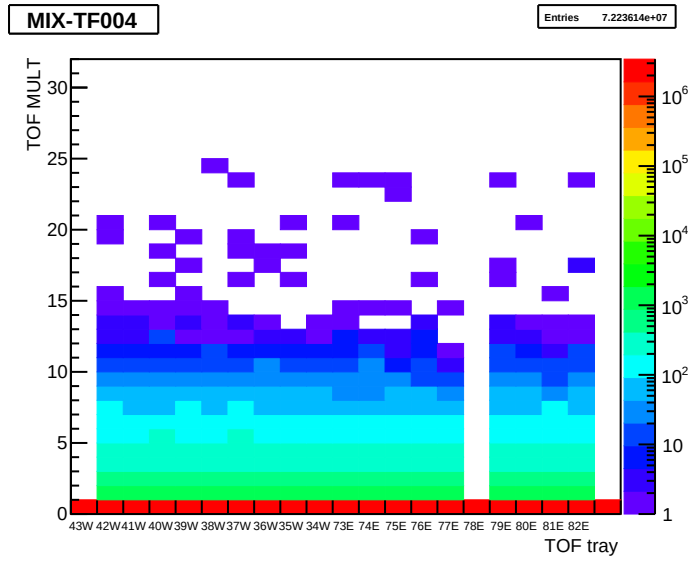

BunchId7Bit (MTD-th2)
Entries 569929

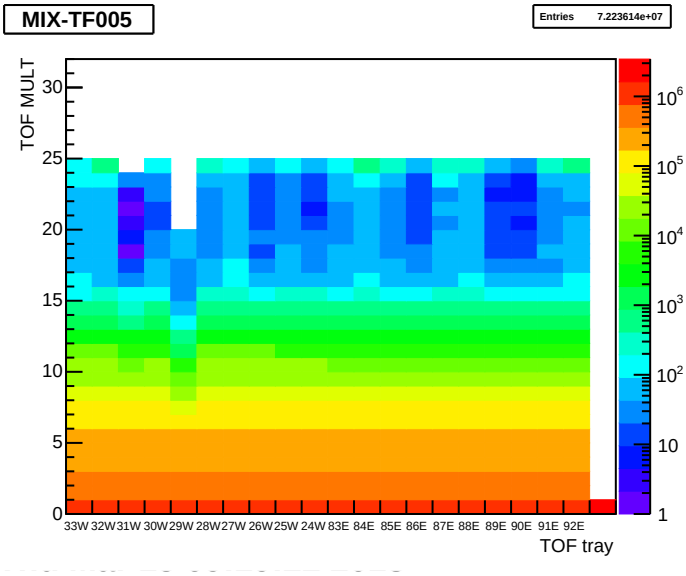

BunchId7Bit (UPC)
Entries1287935

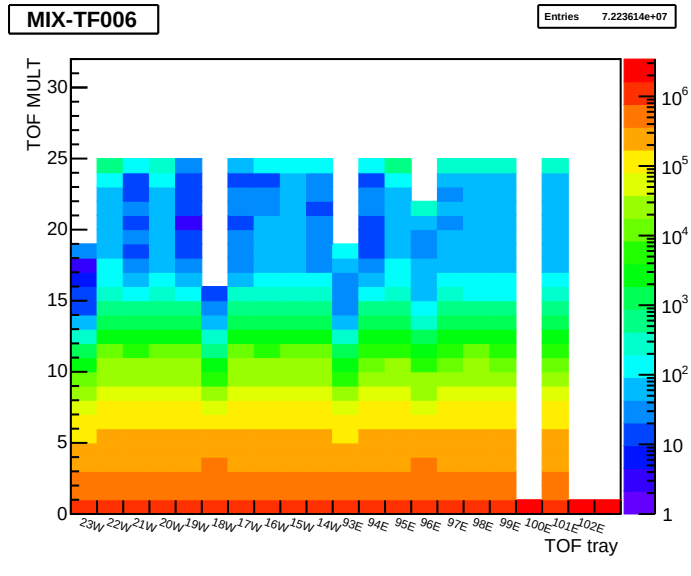

MIX-TF001
Entries 7.223614e+07
TOF MULT
TOF tray

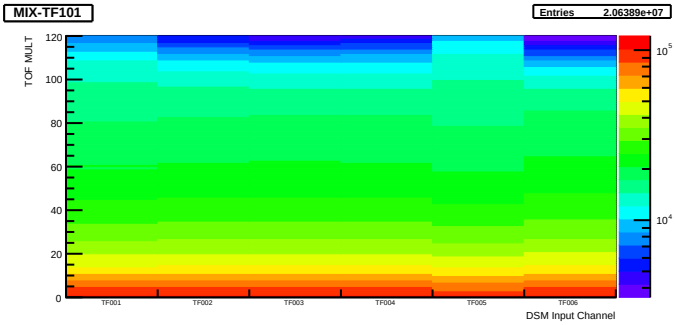

MIX-TF002
Entries 7.223614e+07
TOF MULT
TOF tray

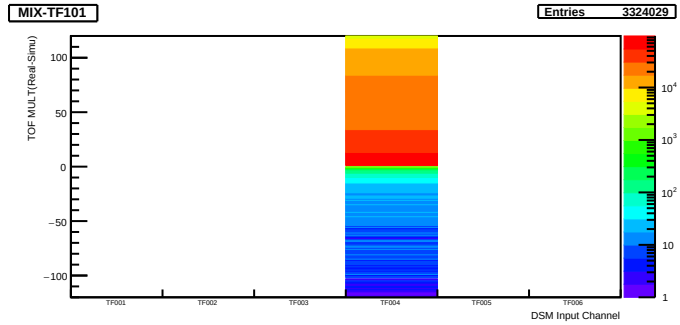

MIX-TF003
Entries 7.223614e+07
TOF MULT
TOF tray

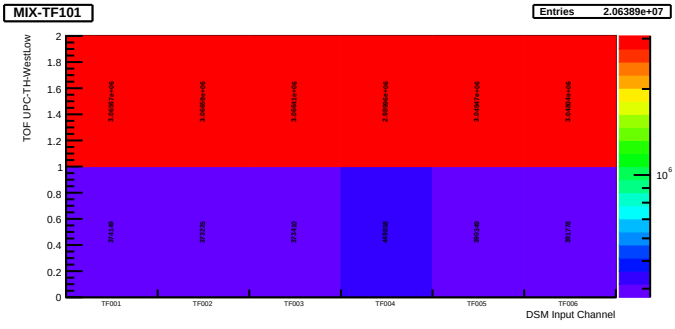

MIX-TF004
Entries 7.223614e+07
TOF MULT
TOF tray

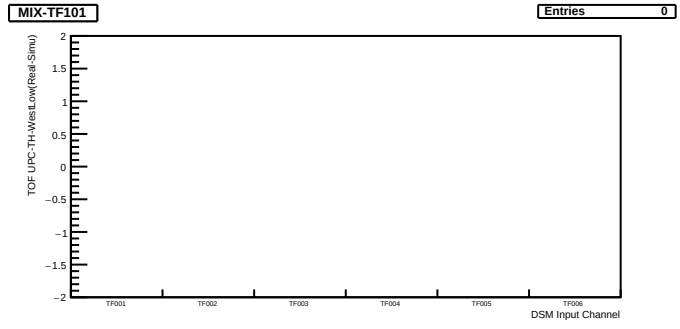

MIX-TF005
Entries 7.223614e+07
TOF MULT
TOF tray

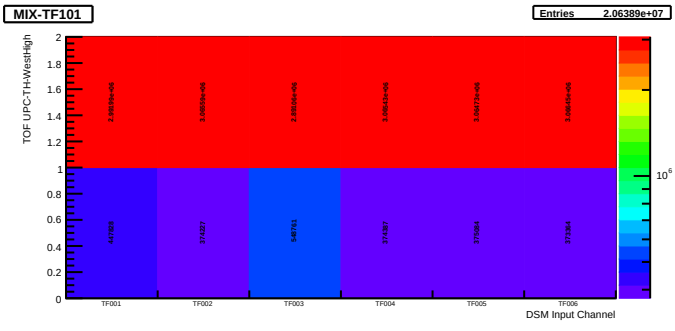

MIX-TF006
Entries 7.223614e+07
TOF MULT
TOF tray

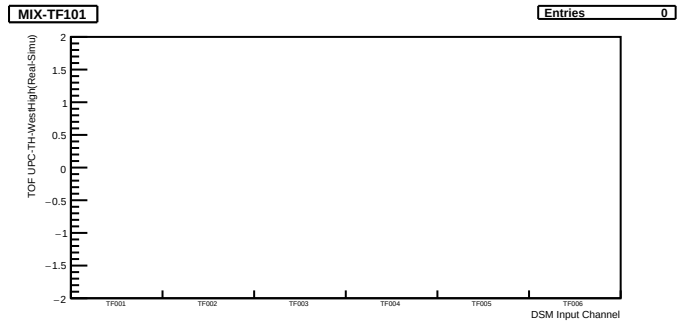

MIX-TF101
Entries 2.06389e+07
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

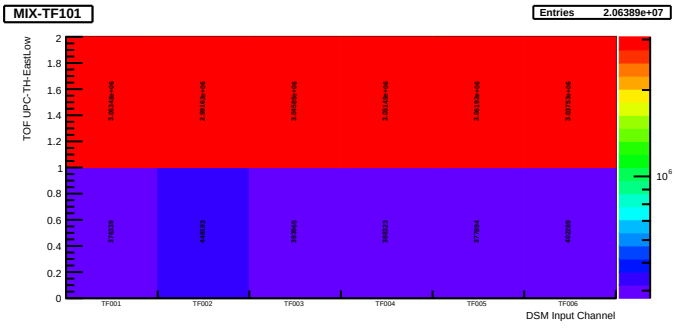

MIX-TF101
Entries 3324029
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

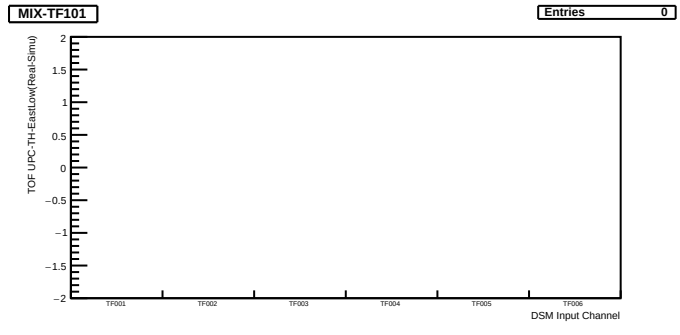

MIX-TF101
Entries 2.06389e+07
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

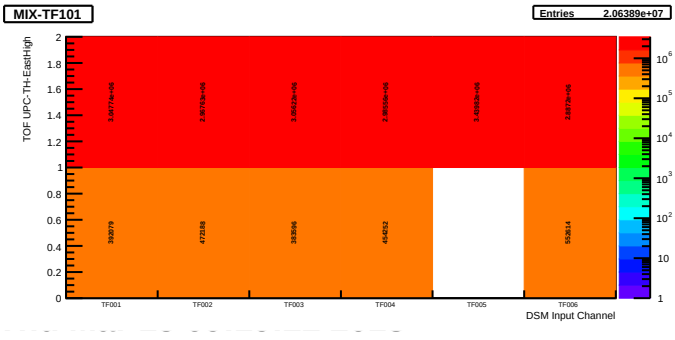

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

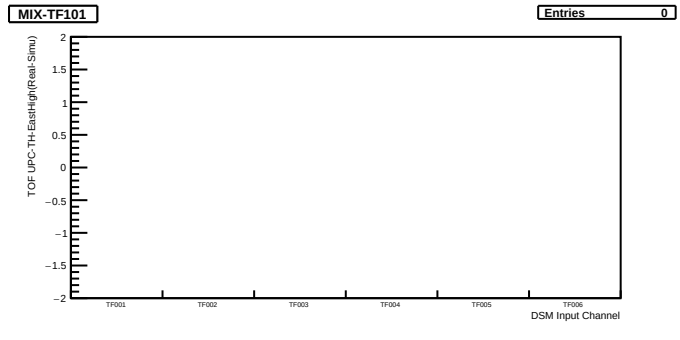

MIX-TF101
Entries 2.06389e+07
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

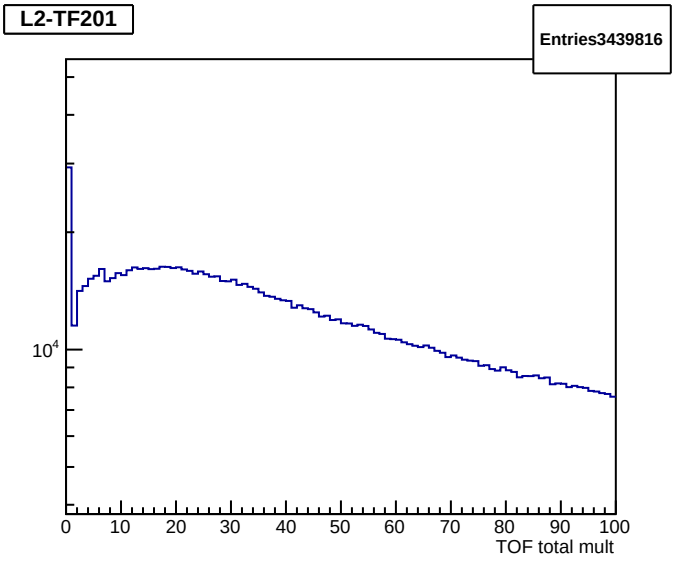

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

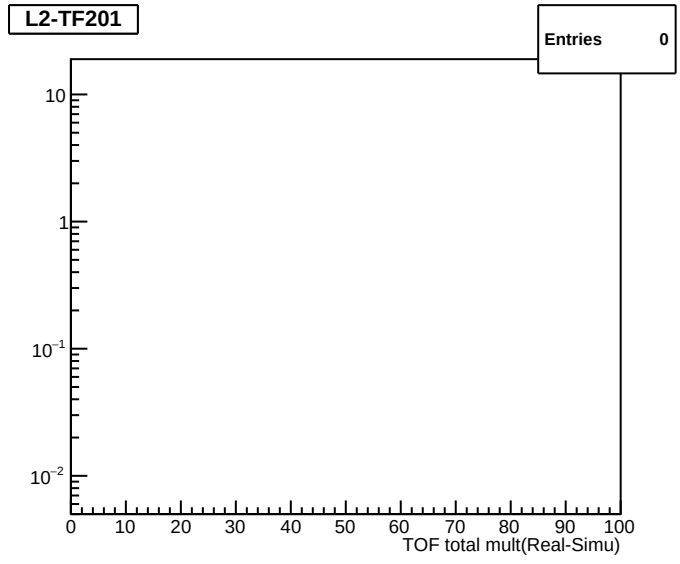

MIX-TF101
Entries 2.06389e+07
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

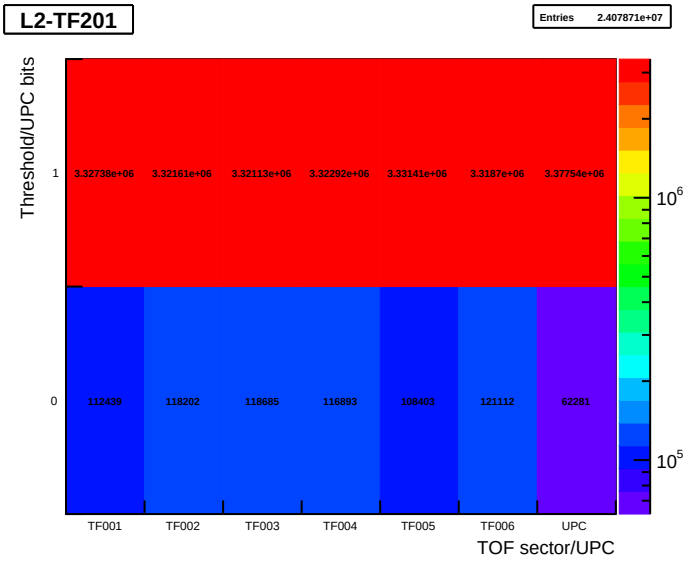

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

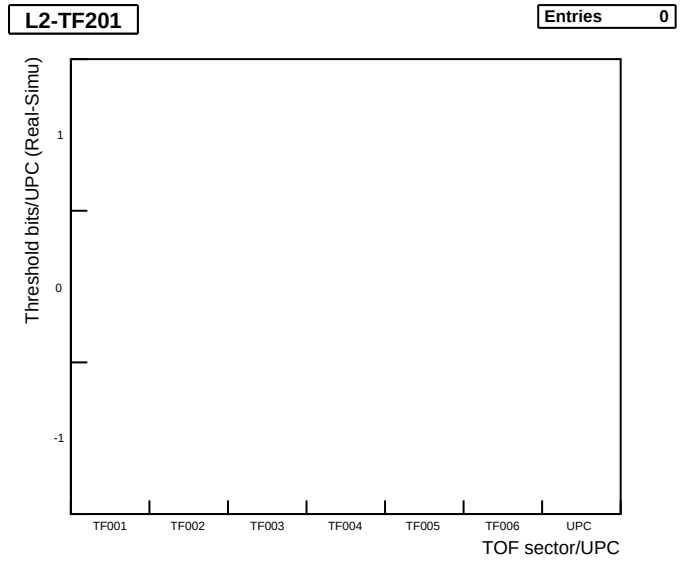

MIX-TF101
Entries 2.06389e+07
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

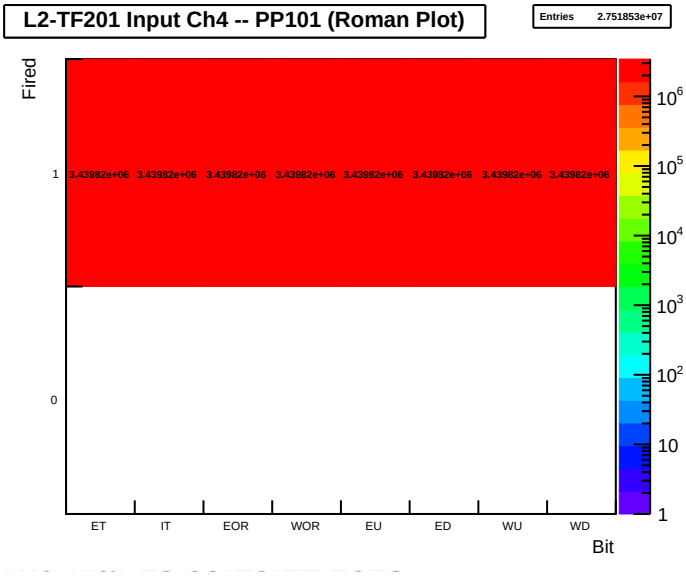

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

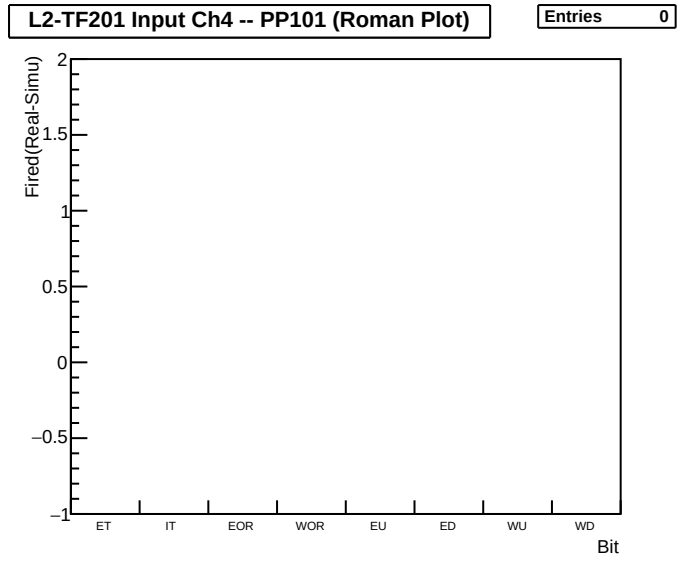

L2-TF201
Entries3439816
10^4
0 10 20 30 40 50 60 70 80 90 100
TOF total mult

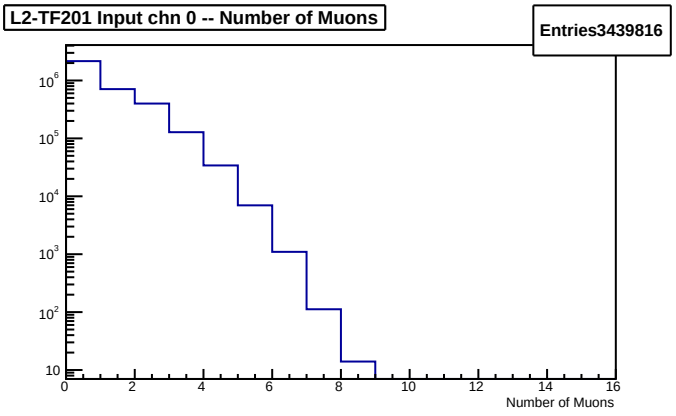

L2-TF201
Entries 0
10
1
10^{-1}
10^{-2}
0 10 20 30 40 50 60 70 80 90 100
TOF total mult(Real-Simu)

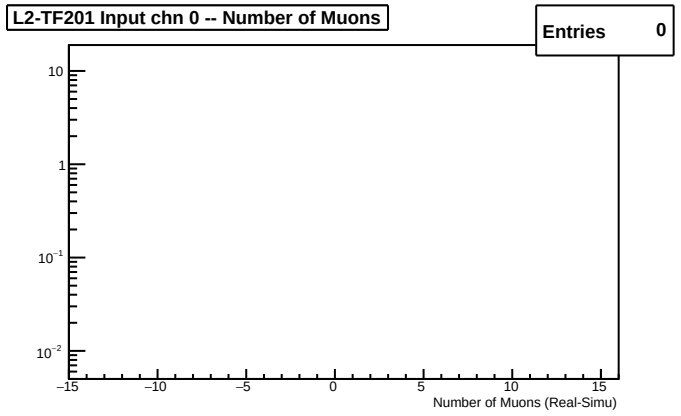

L2-TF201
Entries 2.407871e+07
Threshold/UPC bits
1
0
3.32738e+06 3.32161e+06 3.32113e+06 3.32292e+06 3.33141e+06 3.3187e+06 3.37754e+06
112439 118202 118685 116893 108403 121112 62281
10^6
10^5
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

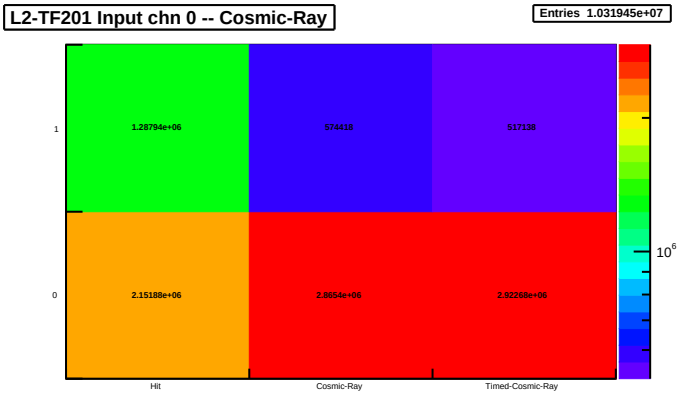

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
1
0
-1
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

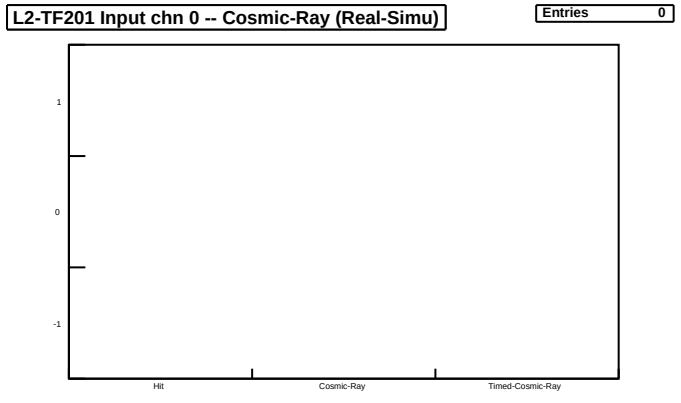

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 2.751853e+07
Fired
1
0
3.43982e+06 3.43982e+06 3.43982e+06 3.43982e+06 3.43982e+06 3.43982e+06 3.43982e+06 3.43982e+06
10^6
10^5
10^4
10^3
10^2
10
1
ET IT EOR WOR EU ED WU WD
Bit

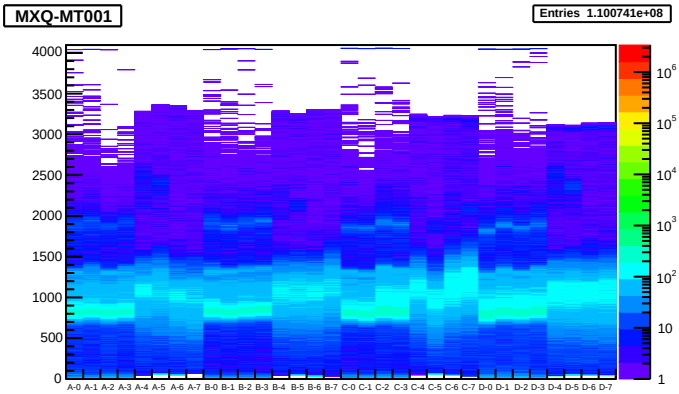

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 0
Fired(Real-Simu)
2
1.5
1
0.5
0
−0.5
−1
ET IT EOR WOR EU ED WU WD
Bit

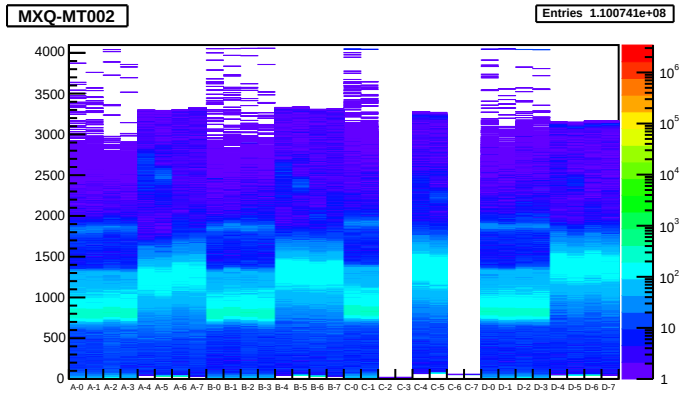

L2-TF201 Input chn 0 -- Number of Muons
Entries3439816
Number of Muons

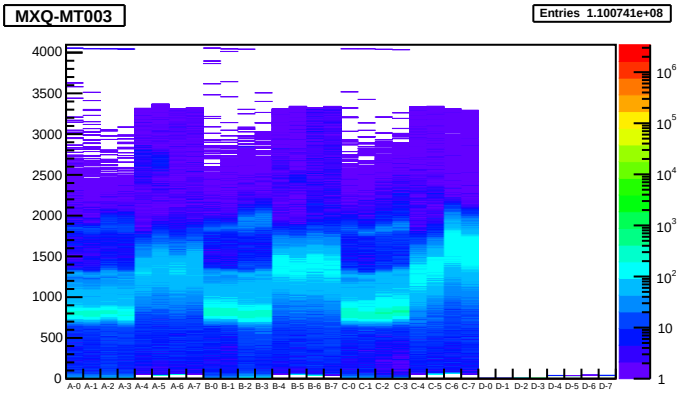

L2-TF201 Input chn 0 -- Number of Muons
Entries 0
Number of Muons (Real-Simu)

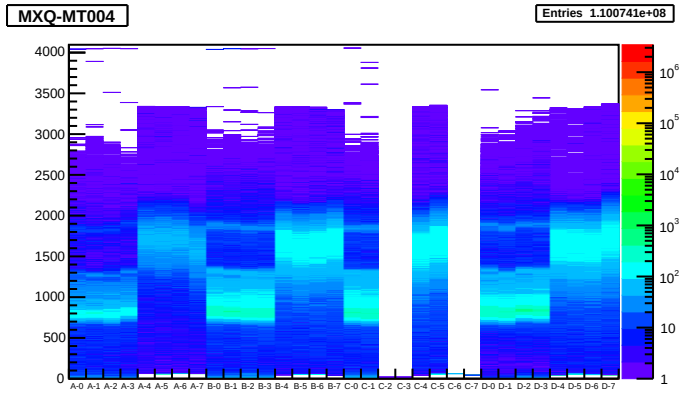

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 1.031945e+07
1.28794e+06
574418
517138
2.15188e+06
2.8654e+06
2.92268e+06
Hit
Cosmic-Ray
Timed-Cosmic-Ray

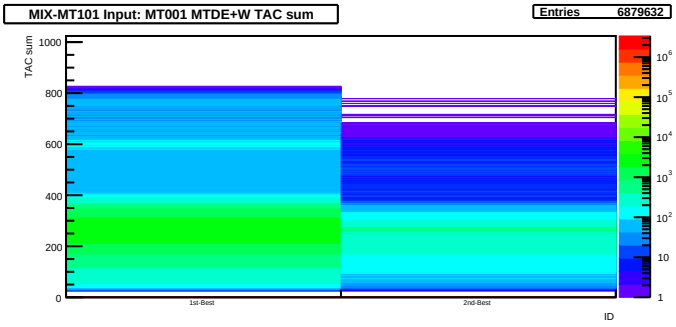

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 0
Hit
Cosmic-Ray
Timed-Cosmic-Ray

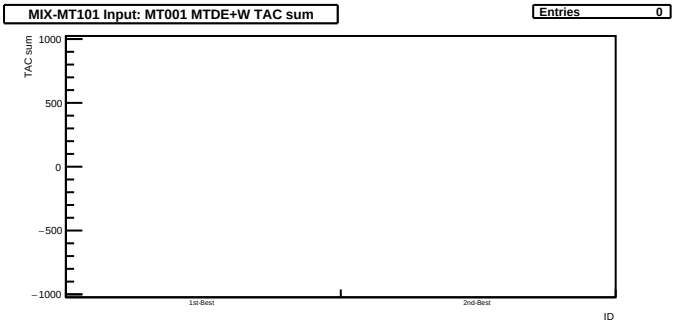

MXQ-MT001
Entries 1.100741e+08

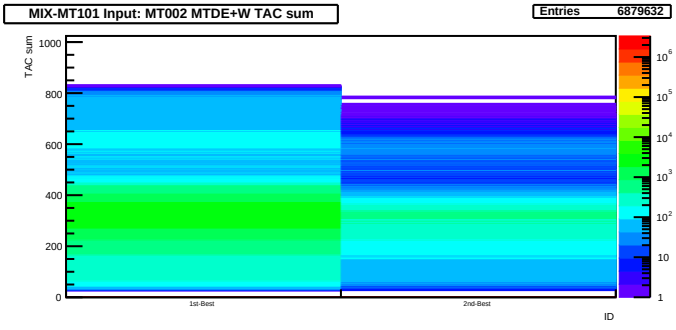

MXQ-MT002
Entries 1.100741e+08

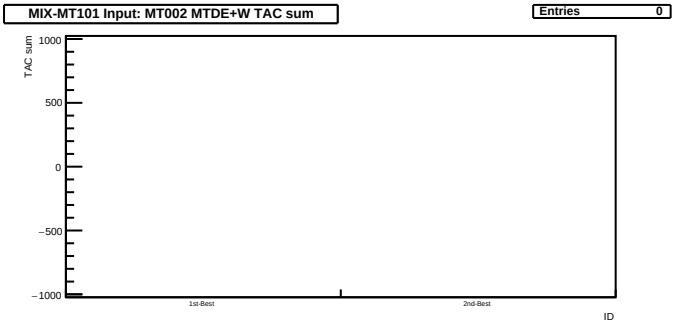

MXQ-MT003
Entries 1.100741e+08

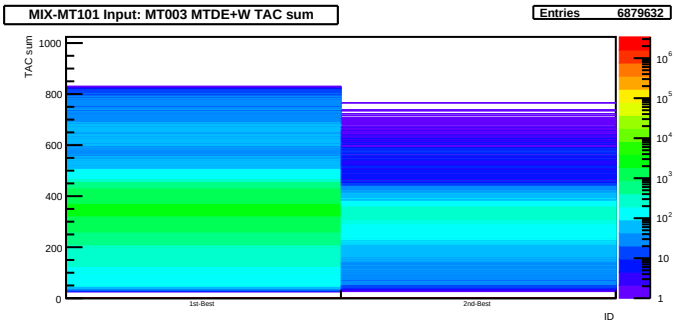

MXQ-MT004
Entries 1.100741e+08

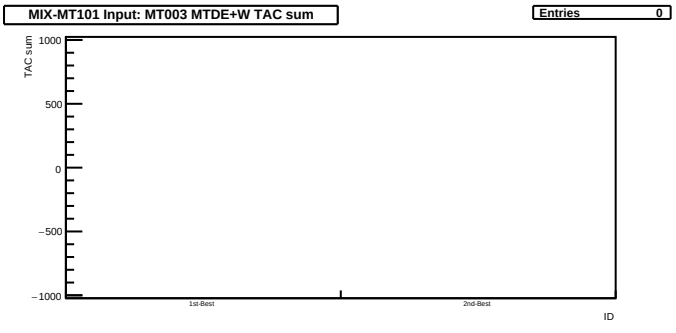

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 6879632
TAC sum
1st-Best
2nd-Best
ID

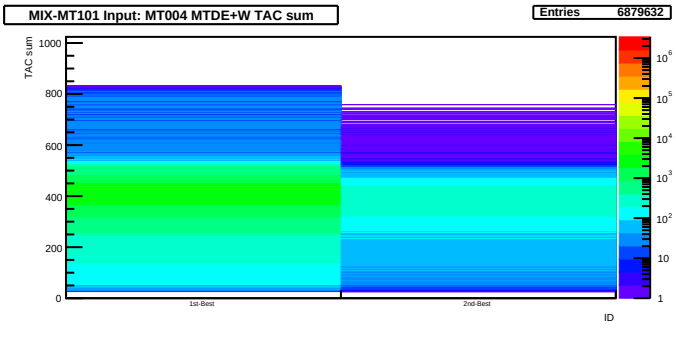

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 0
TAC sum
1st-Best
2nd-Best
ID

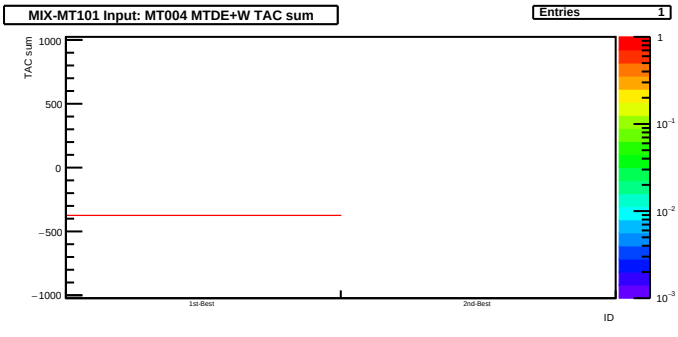

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 6879632
TAC sum
1st-Best
2nd-Best
ID

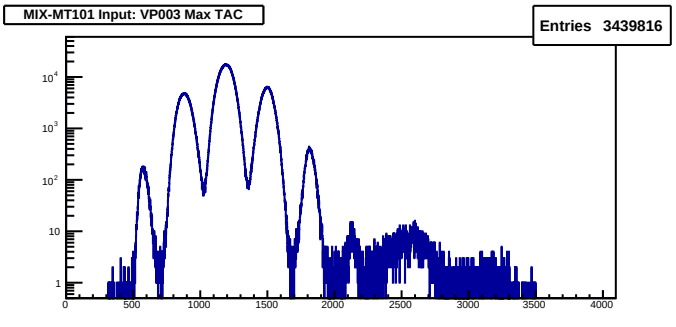

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 0
TAC sum
1st-Best
2nd-Best
ID

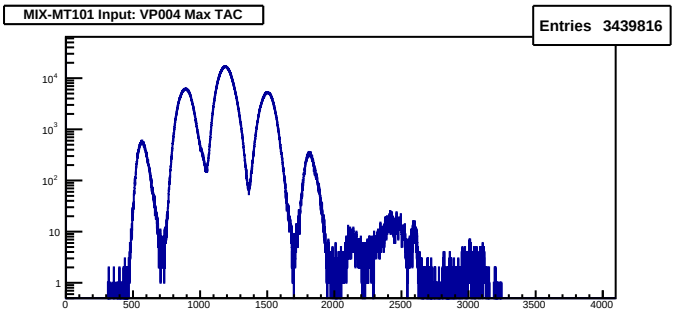

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 6879632
TAC sum
1st-Best
2nd-Best
ID

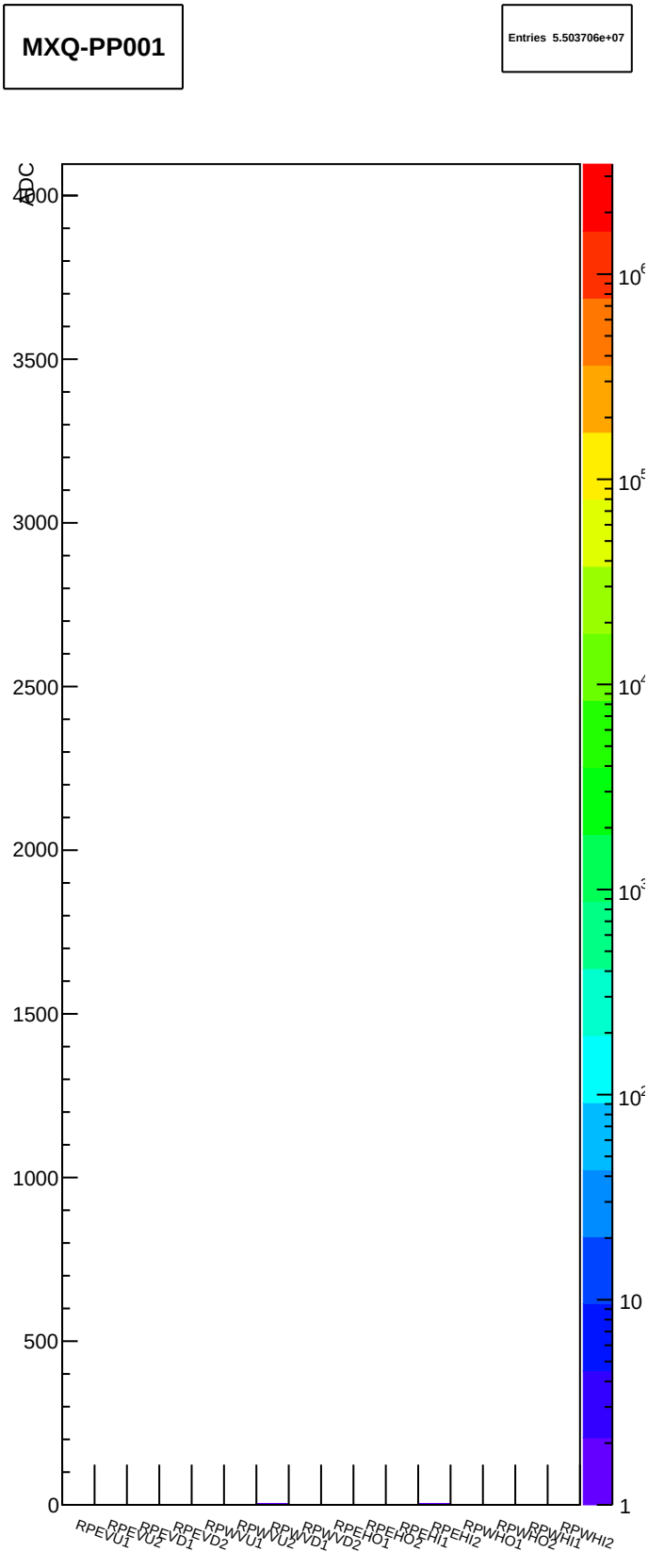

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 0
TAC sum
1st-Best
2nd-Best
ID

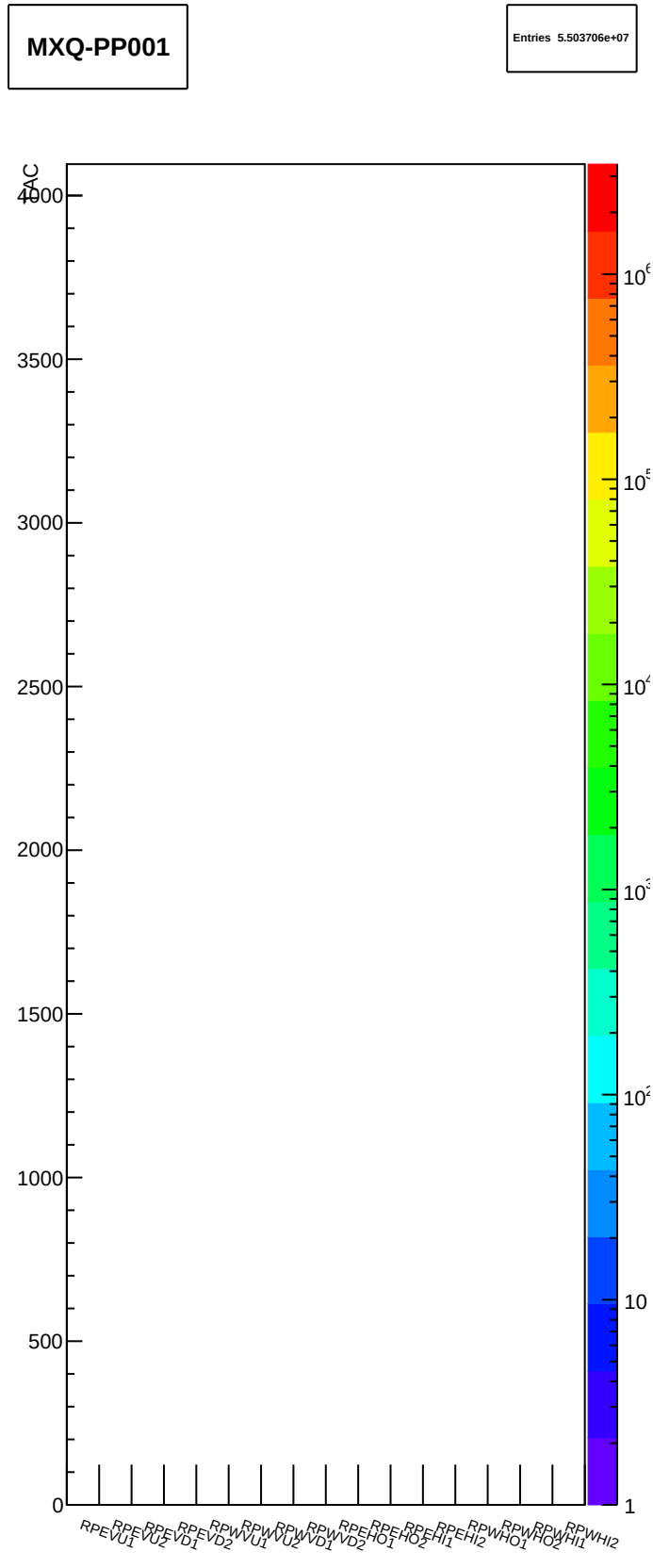

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 6879632
TAC sum
1st-Best
2nd-Best
ID

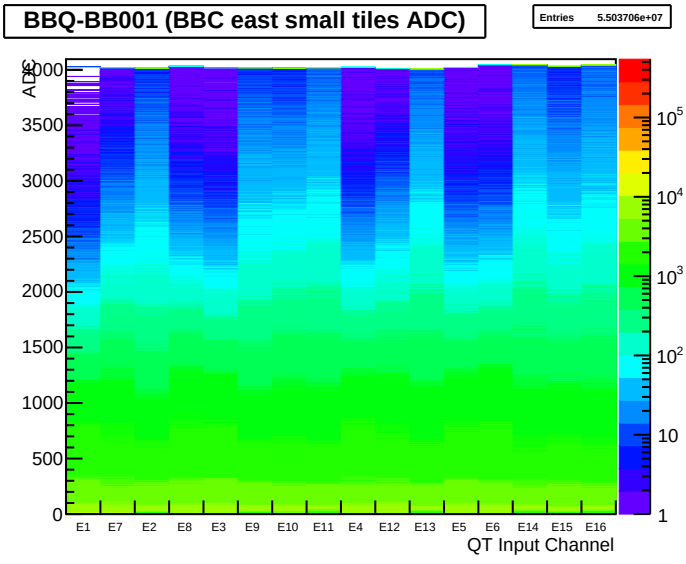

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 1
TAC sum
1st-Best
2nd-Best
ID

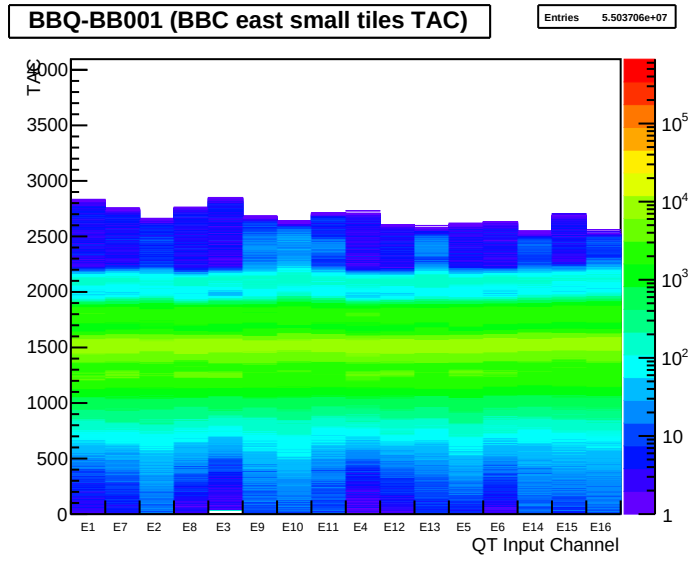

MIX-MT101 Input: VP003 Max TAC
Entries 3439816

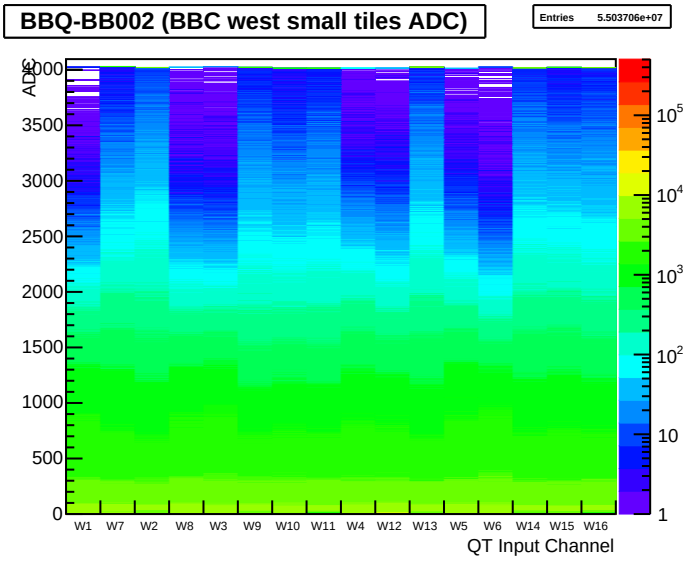

MIX-MT101 Input: VP004 Max TAC
Entries 3439816

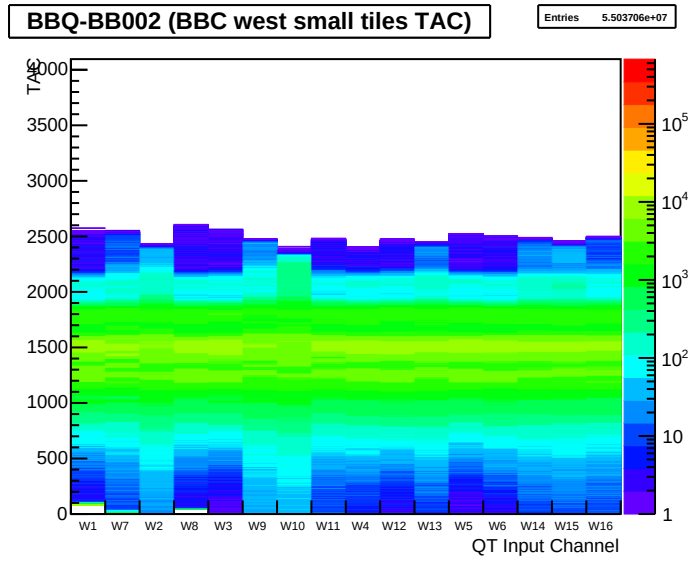

MXQ-PP001
Entries 5.503706e+07
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10^6
10^5
10^4
10^3
10^2
10
1

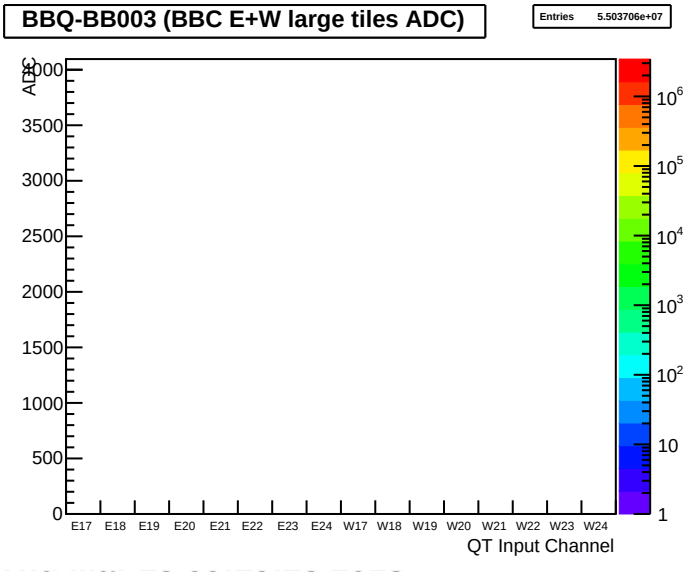

MXQ-PP001
Entries 5.503706e+07
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10^6
10^5
10^4
10^3
10^2
10
1

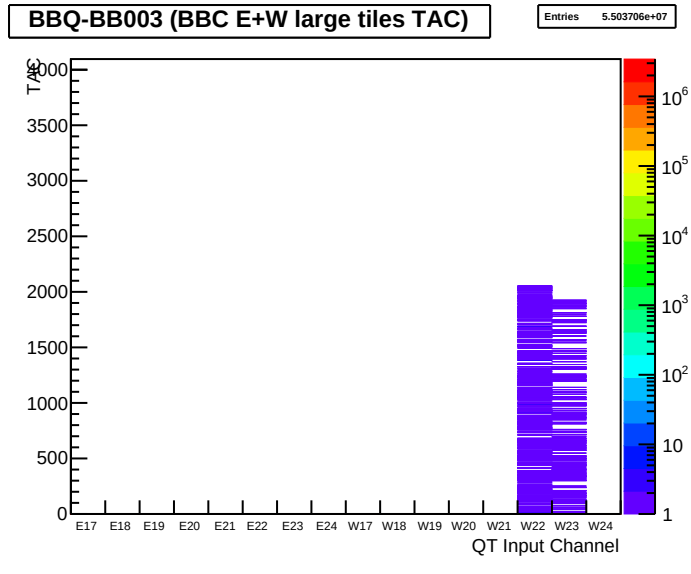

BBQ-BB001 (BBC east small tiles ADC)
Entries 5.503706e+07
ADC
QT Input Channel

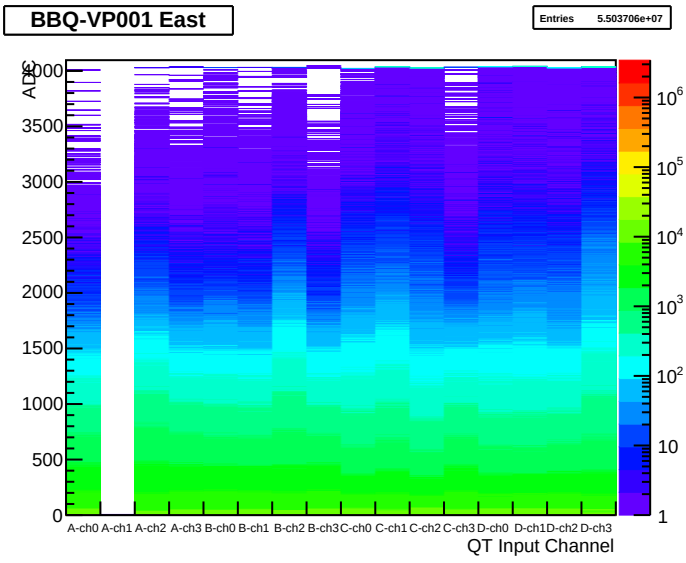

BBQ-BB001 (BBC east small tiles TAC)
Entries 5.503706e+07
TAC
QT Input Channel

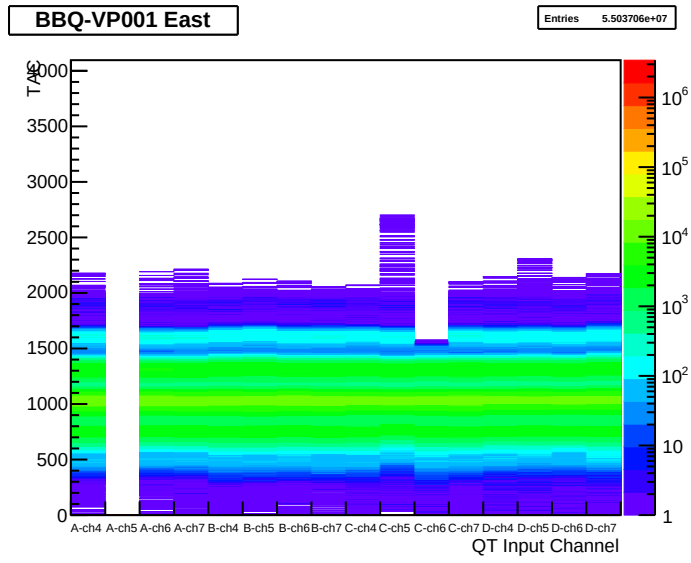

BBQ-BB002 (BBC west small tiles ADC)
Entries 5.503706e+07
ADC
QT Input Channel

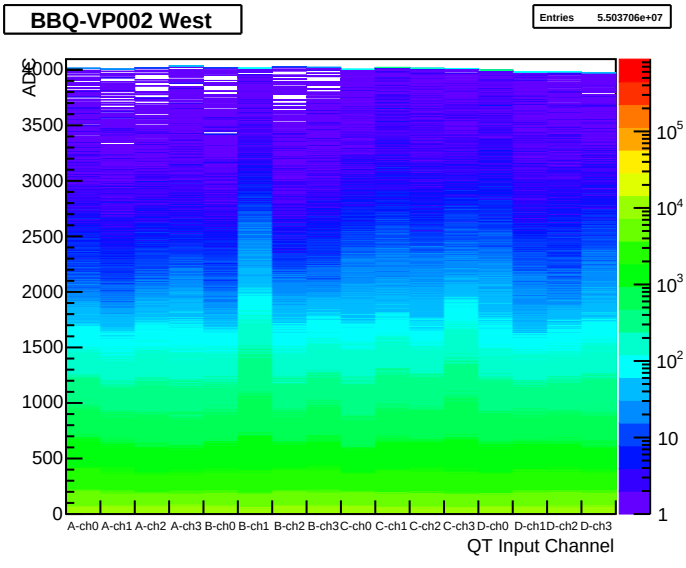

BBQ-BB002 (BBC west small tiles TAC)
Entries 5.503706e+07
TAC
QT Input Channel

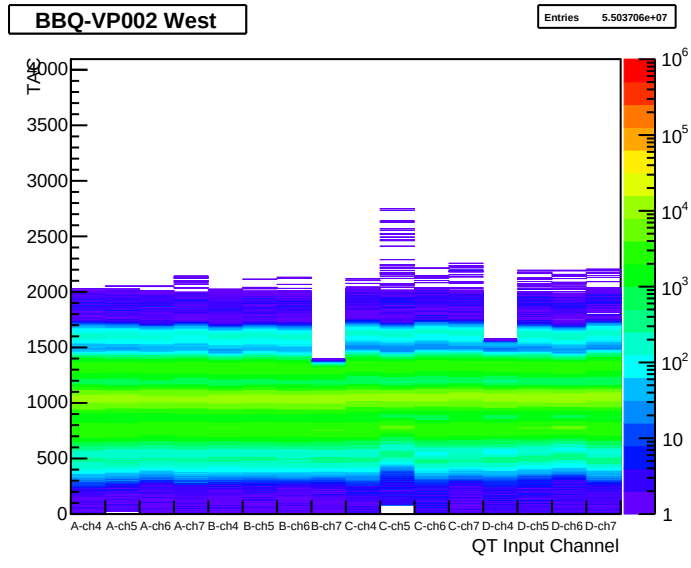

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 5.503706e+07
ADC
QT Input Channel

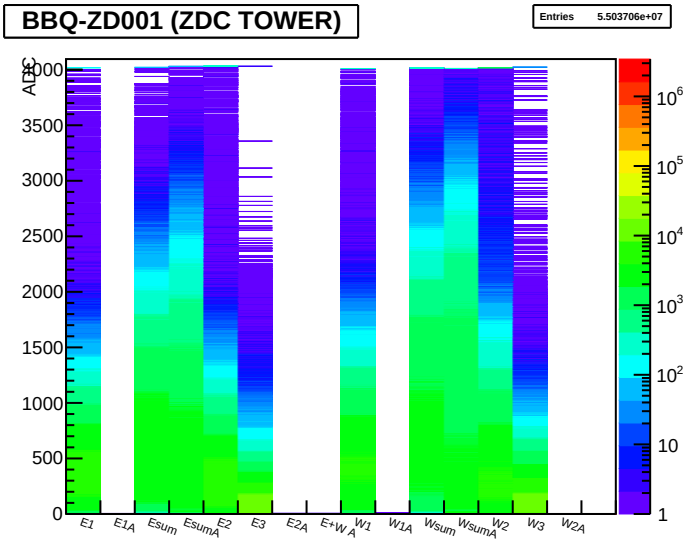

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 5.503706e+07
TAC
QT Input Channel

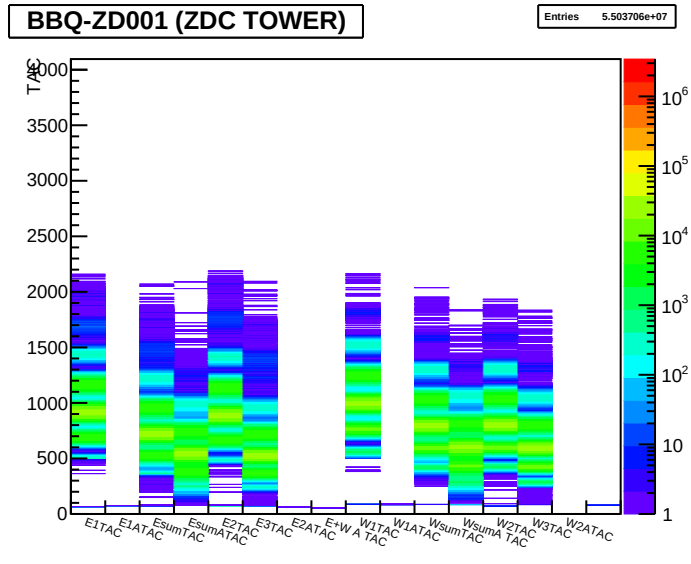

BBQ-VP001 East
Entries 5.503706e+07
ADC
A-ch0 A-ch1 A-ch2 A-ch3 B-ch0 B-ch1 B-ch2 B-ch3 C-ch0 C-ch1 C-ch2 C-ch3 D-ch0 D-ch1 D-ch2 D-ch3
QT Input Channel

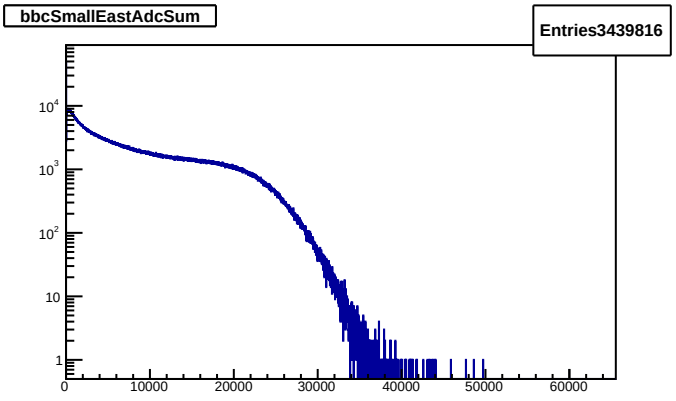

BBQ-VP001 East
Entries 5.503706e+07
TAC
A-ch4 A-ch5 A-ch6 A-ch7 B-ch4 B-ch5 B-ch6 B-ch7 C-ch4 C-ch5 C-ch6 C-ch7 D-ch4 D-ch5 D-ch6 D-ch7
QT Input Channel

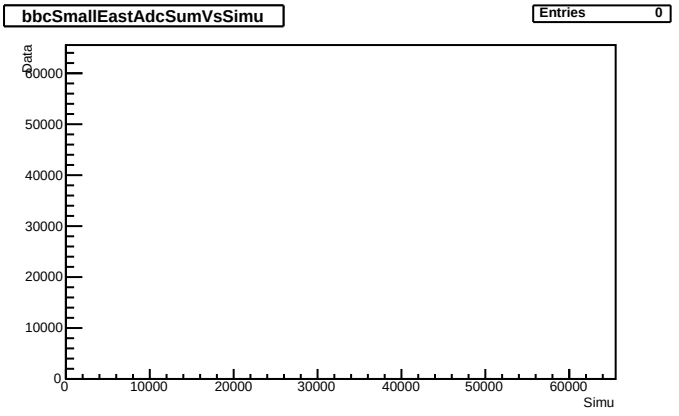

BBQ-VP002 West
Entries 5.503706e+07
ADC
A-ch0 A-ch1 A-ch2 A-ch3 B-ch0 B-ch1 B-ch2 B-ch3 C-ch0 C-ch1 C-ch2 C-ch3 D-ch0 D-ch1 D-ch2 D-ch3
QT Input Channel

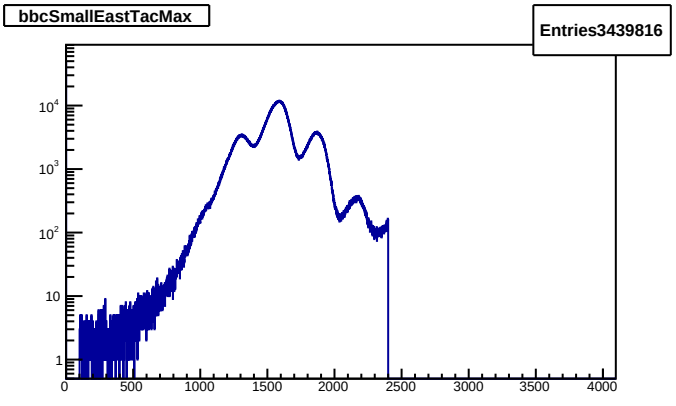

BBQ-VP002 West
Entries 5.503706e+07
TAC
A-ch4 A-ch5 A-ch6 A-ch7 B-ch4 B-ch5 B-ch6 B-ch7 C-ch4 C-ch5 C-ch6 C-ch7 D-ch4 D-ch5 D-ch6 D-ch7
QT Input Channel

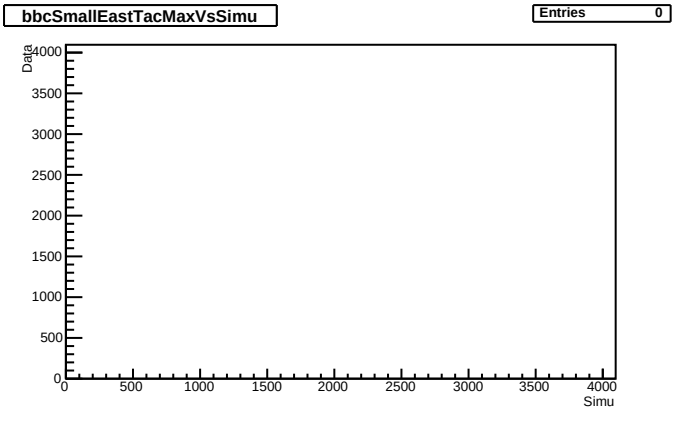

BBQ-ZD001 (ZDC TOWER)
Entries 5.503706e+07
ADC
E1 E1A Esum EsumA E2 E3 E2A E+W A W1 W1A Wsum WsumA W2 W3 W2A

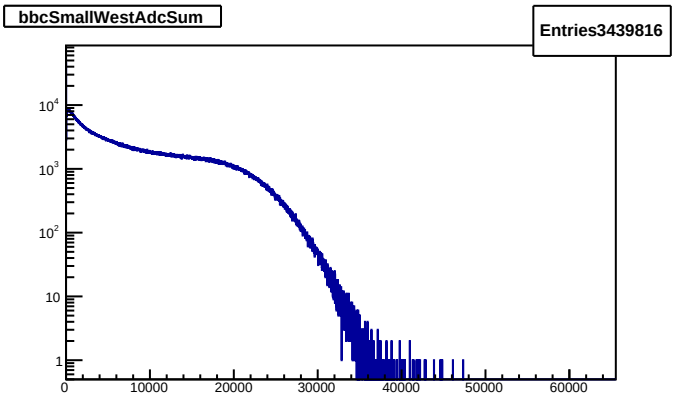

BBQ-ZD001 (ZDC TOWER)
Entries 5.503706e+07
TAC
E1TAC E1ATAC EsumTAC EsumATAC E2TAC E3TAC E2ATAC E+W A TAC W1TAC W1ATAC WsumTAC WsumA TAC W2TAC W3TAC W2ATAC

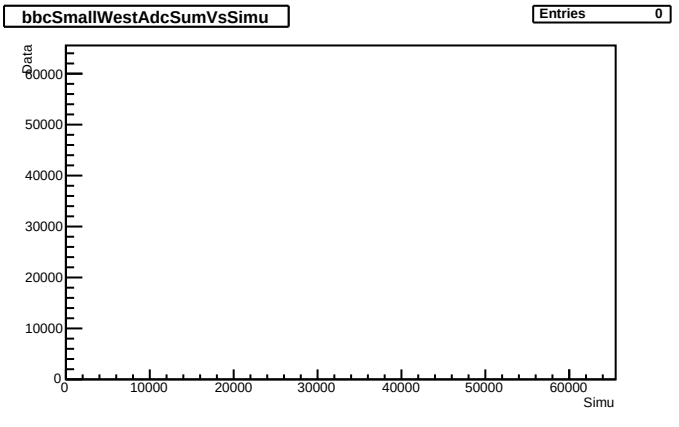

bbcSmallEastAdcSum
Entries3439816

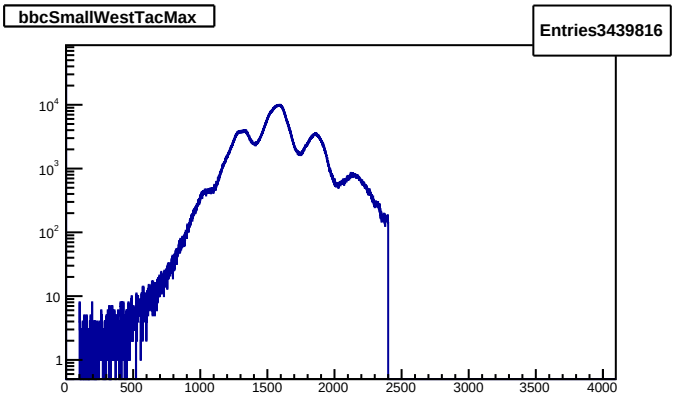

bbcSmallEastAdcSumVsSimu
Entries 0
Data
Simu

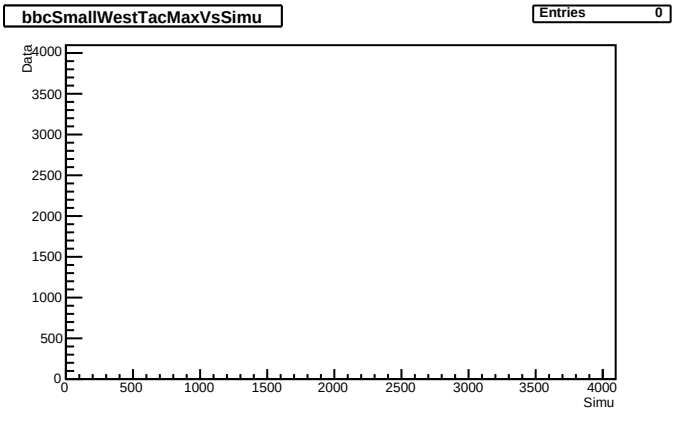

bbcSmallEastTacMax
Entries3439816

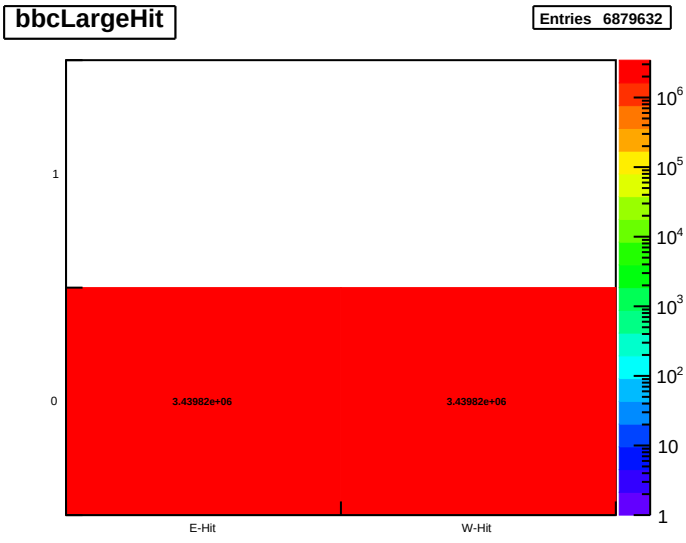

bbcSmallEastTacMaxVsSimu
Entries 0
Data
Simu

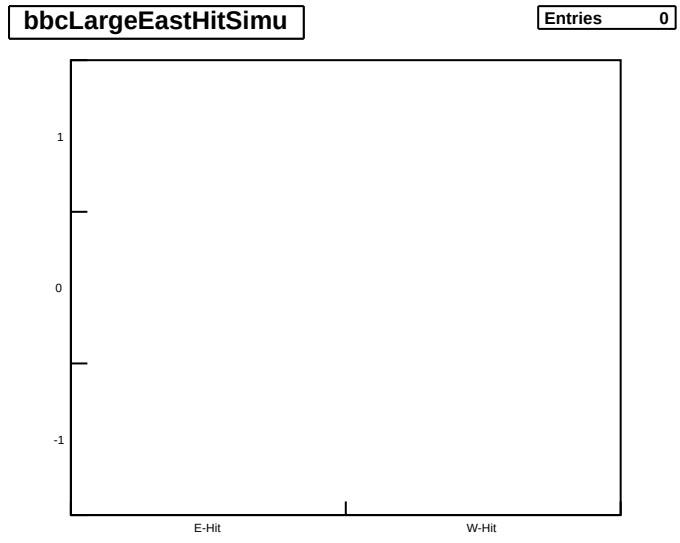

bbcSmallWestAdcSum
Entries3439816

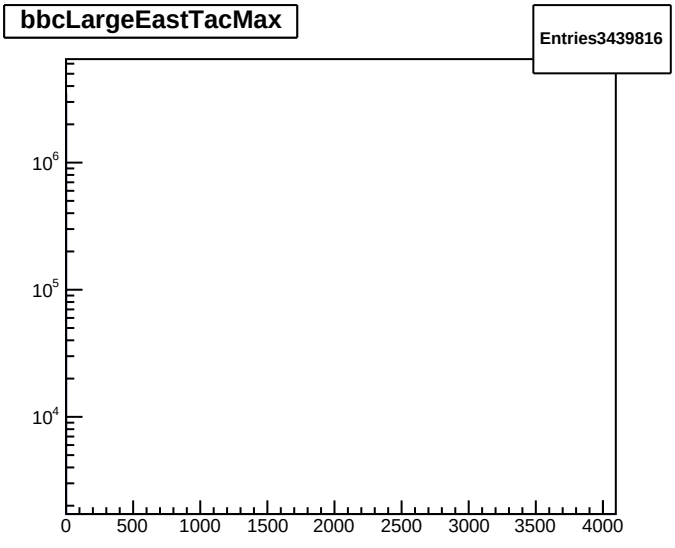

bbcSmallWestAdcSumVsSimu
Entries 0
Data
Simu

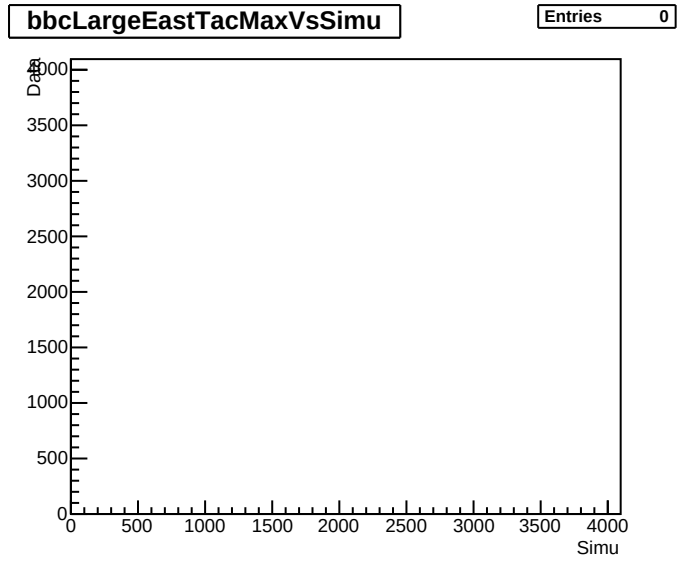

bbcSmallWestTacMax
Entries3439816

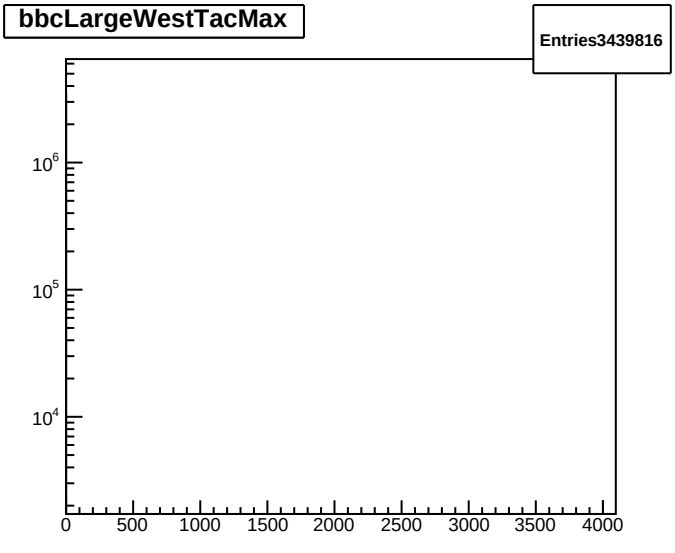

bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu

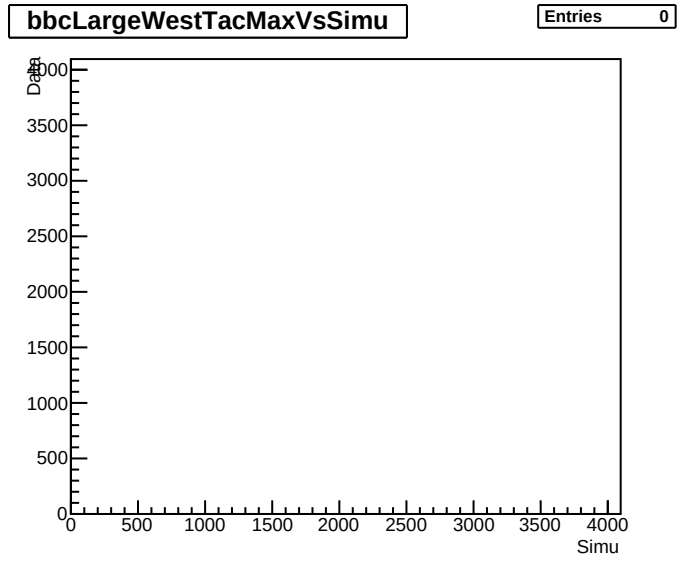

bbcLargeHit
Entries 6879632
1
0
3.43982e+06
3.43982e+06
E-Hit
W-Hit
10^6
10^5
10^4
10^3
10^2
10
1

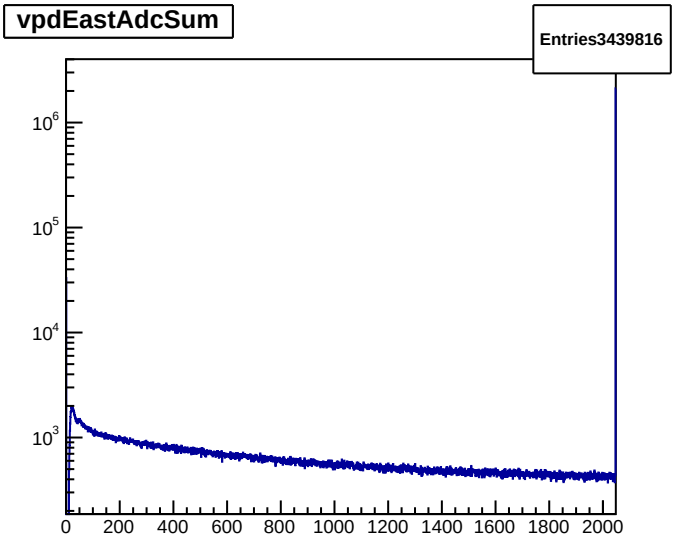

bbcLargeEastHitSimu
Entries 0
1
0
-1
E-Hit
W-Hit

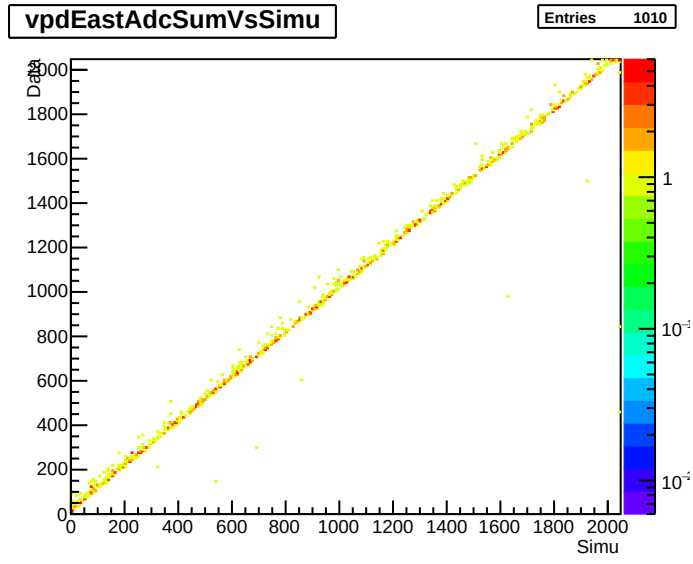

bbcLargeEastTacMax
Entries3439816
10^6
10^5
10^4
0
500
1000
1500
2000
2500
3000
3500
4000

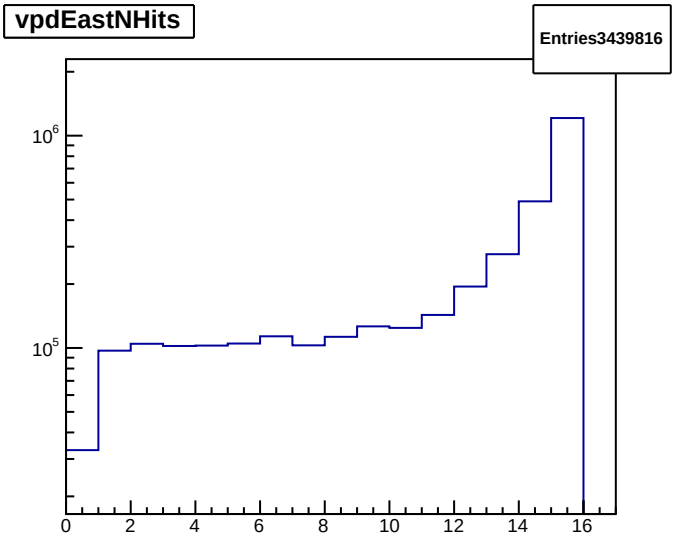

bbcLargeEastTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

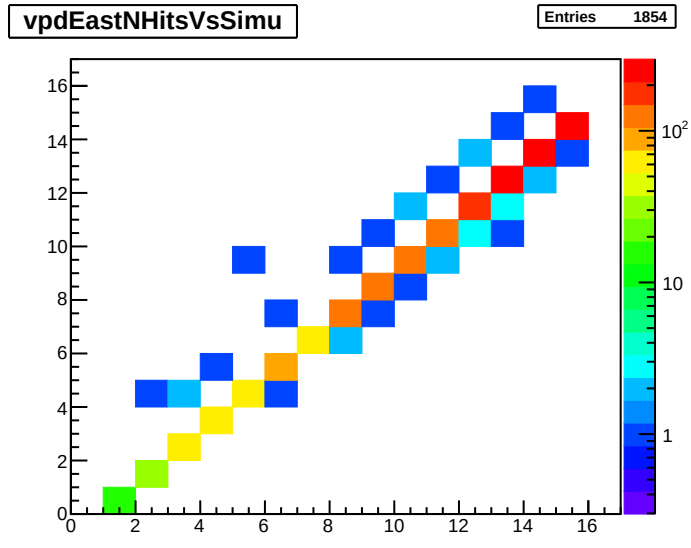

bbcLargeWestTacMax
Entries3439816
10^6
10^5
10^4
0
500
1000
1500
2000
2500
3000
3500
4000

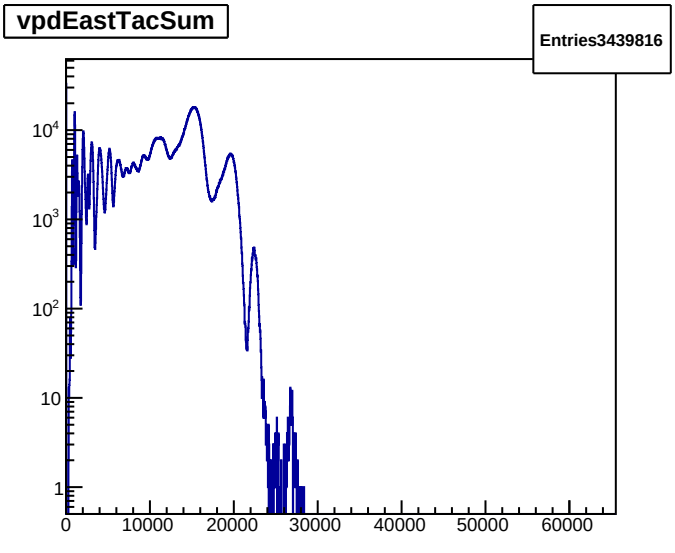

bbcLargeWestTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

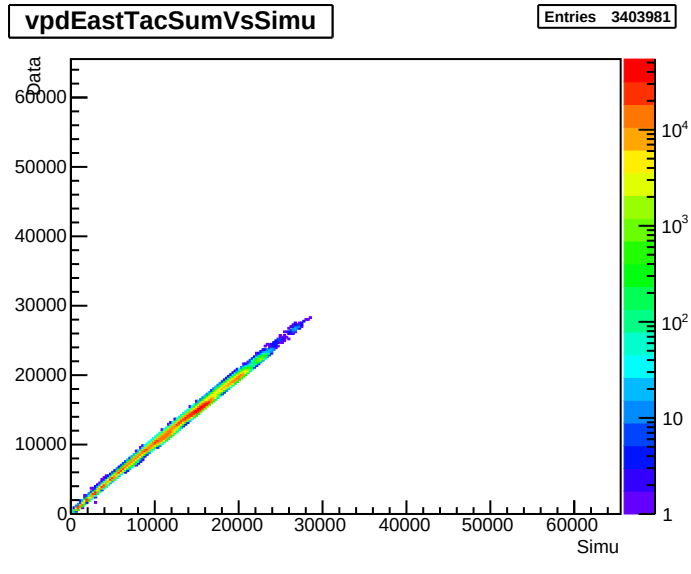

vpdEastAdcSum
Entries3439816

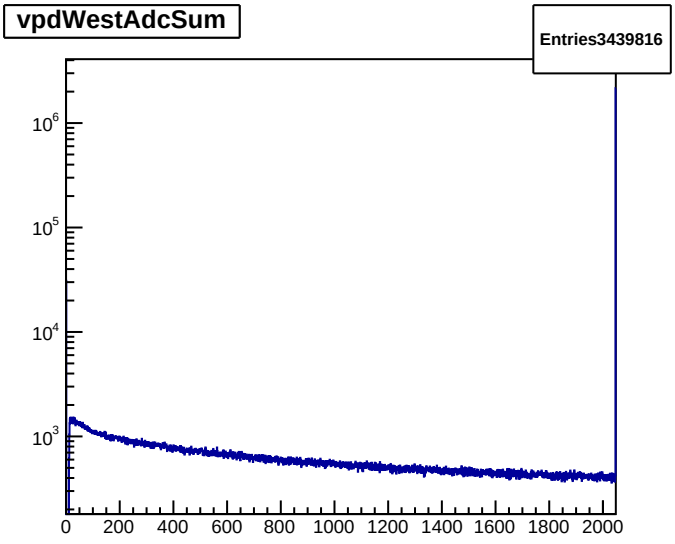

vpdEastAdcSumVsSimu
Entries 1010
Data
Simu

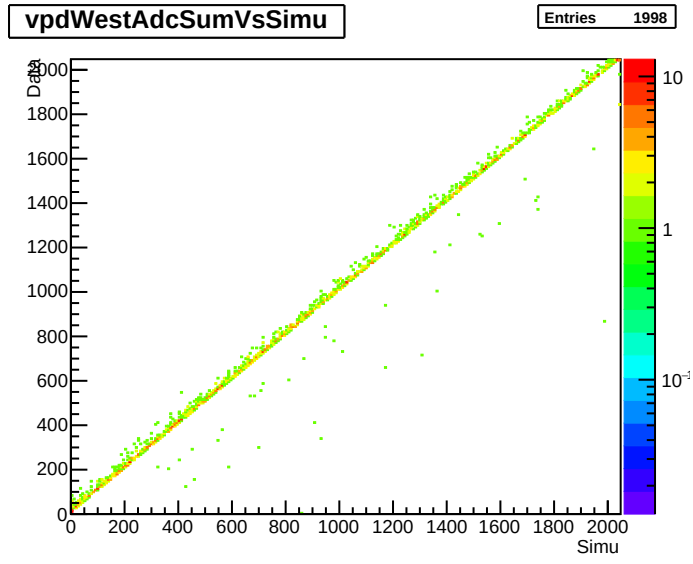

vpdEastNHits
Entries3439816

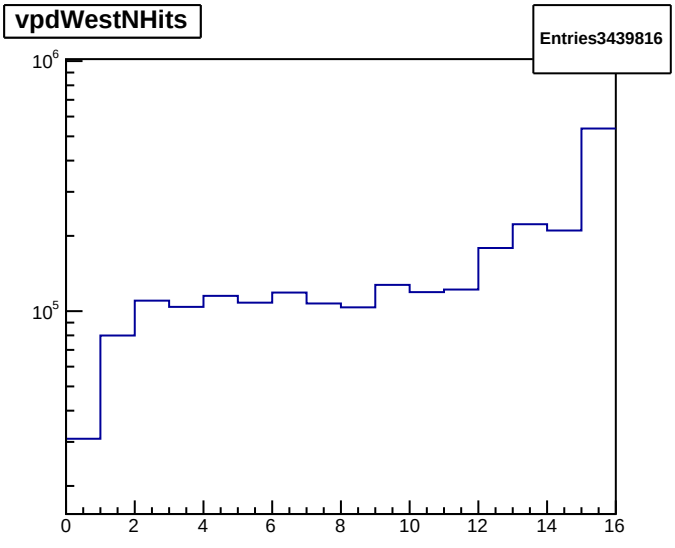

vpdEastNHitsVsSimu
Entries 1854

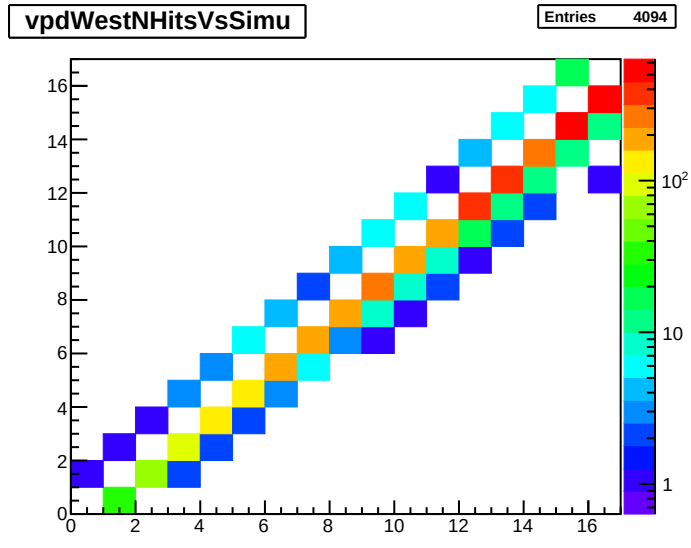

vpdEastTacSum
Entries3439816

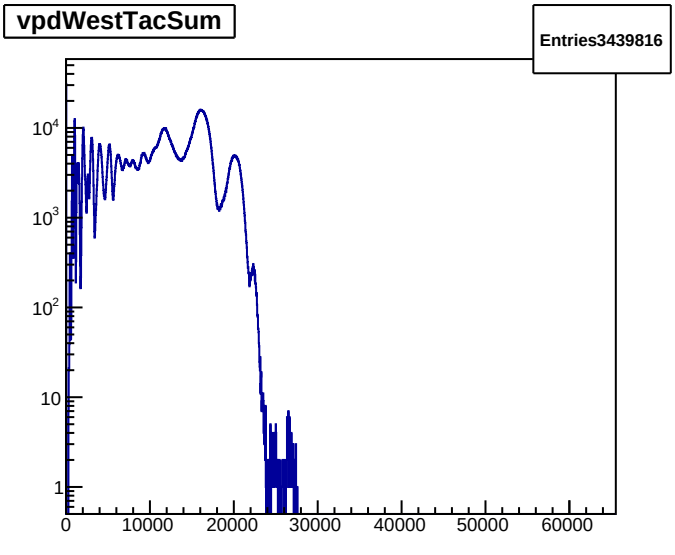

vpdEastTacSumVsSimu
Entries 3403981
Data
Simu

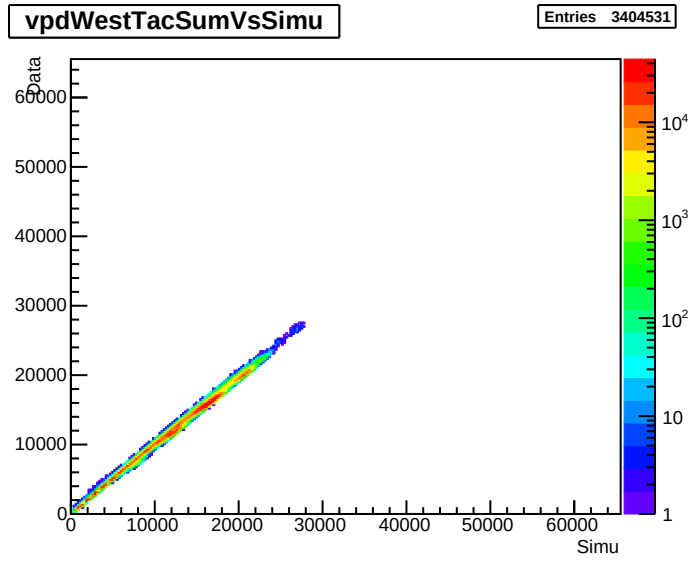

vpdWestAdcSum
Entries3439816

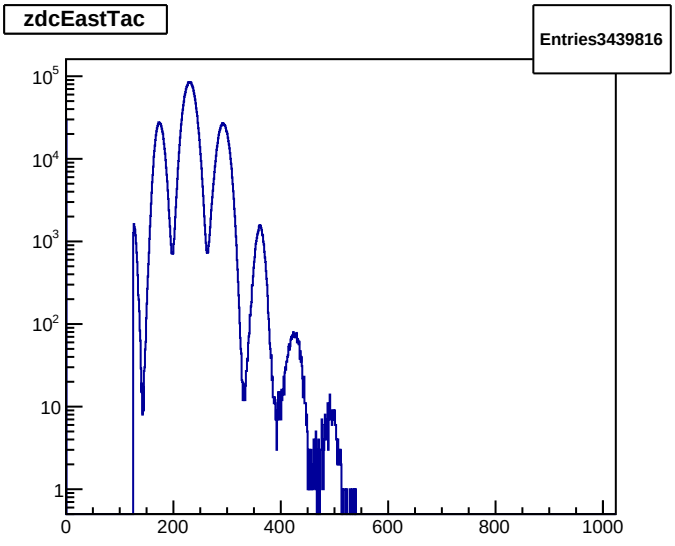

vpdWestAdcSumVsSimu
Entries 1998
Data
Simu

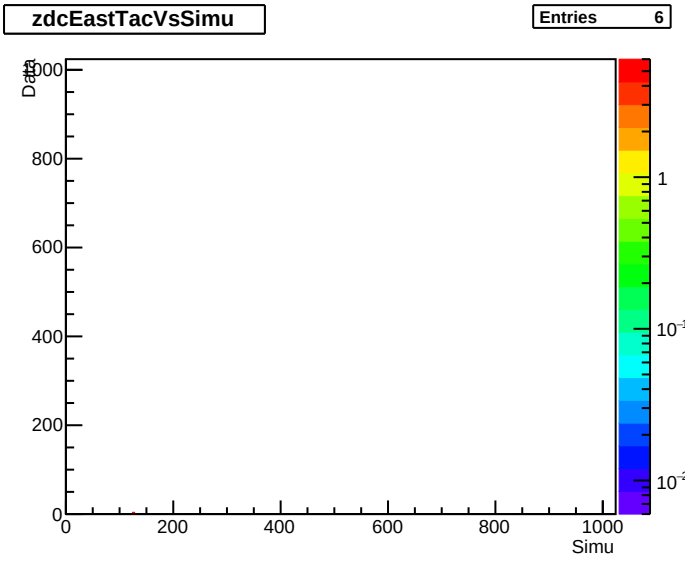

vpdWestNHits
Entries3439816

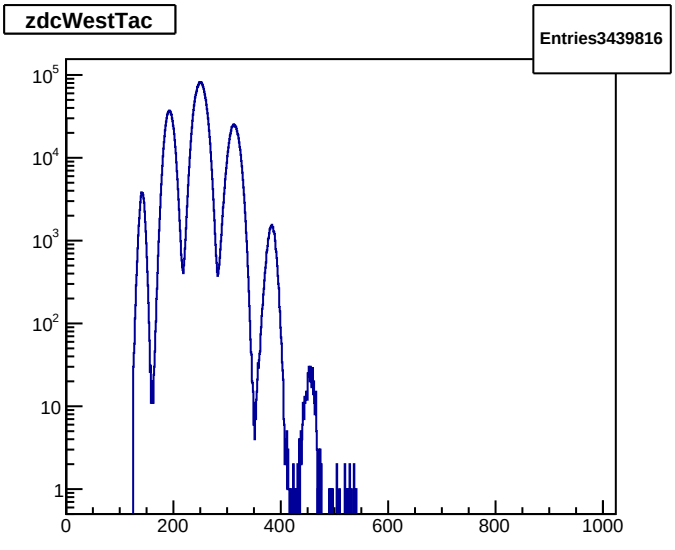

vpdWestNHitsVsSimu
Entries 4094

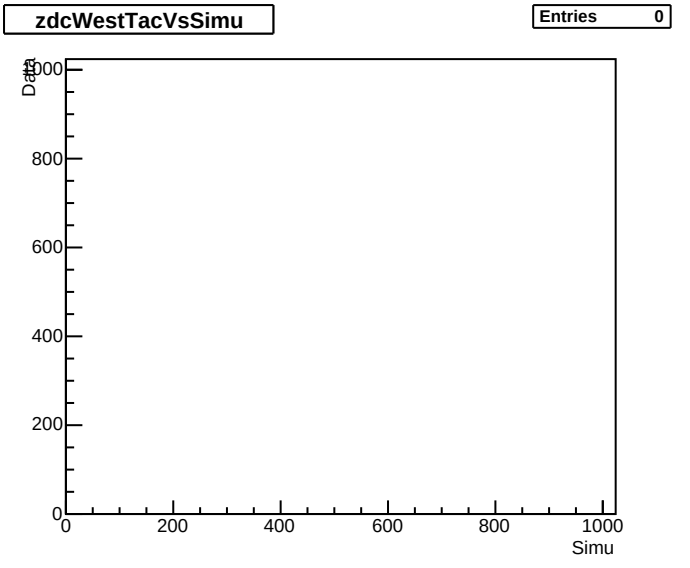

vpdWestTacSum
Entries3439816

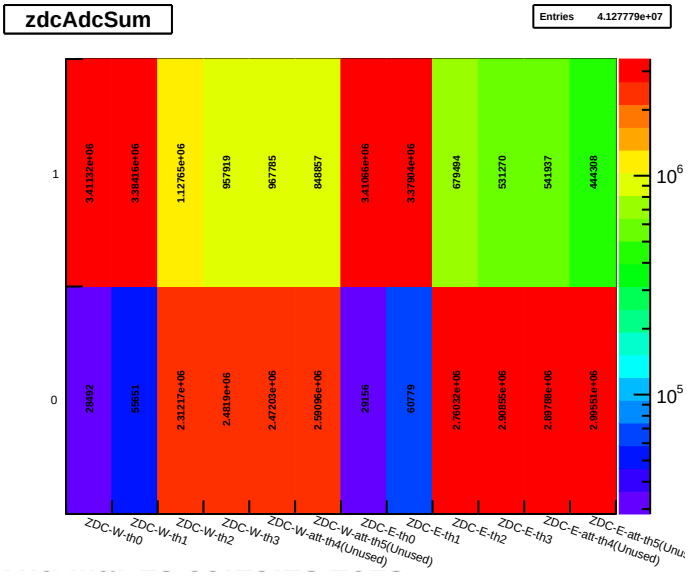

vpdWestTacSumVsSimu
Entries 3404531
Data
Simu

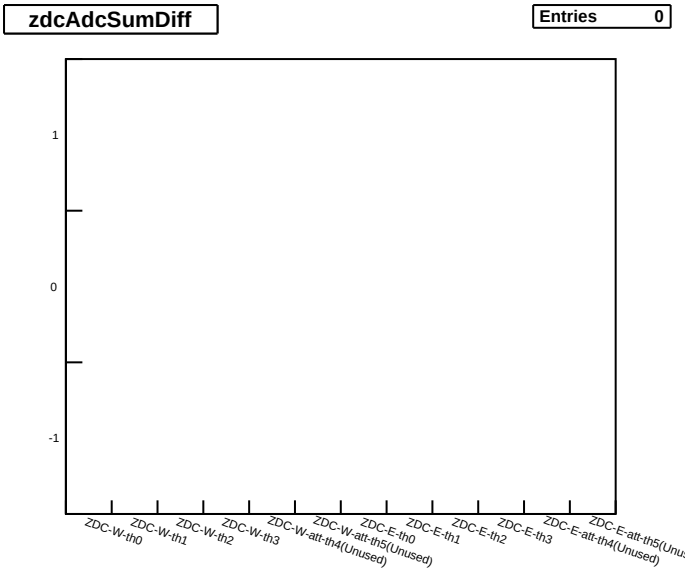

zdcEastTac
Entries3439816

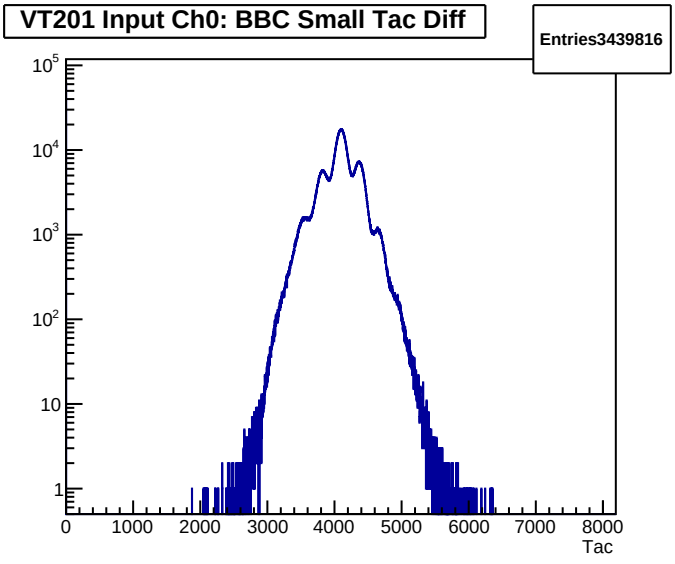

zdcEastTacVsSimu
Entries 6
Data
Simu

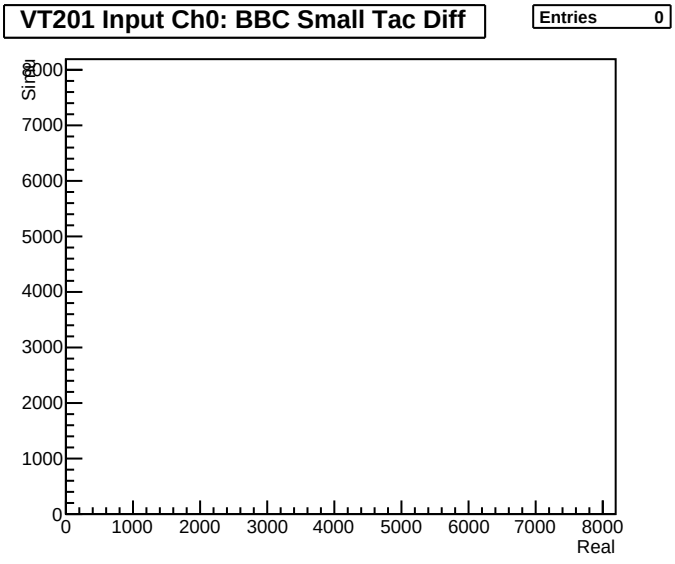

zdcWestTac
Entries3439816

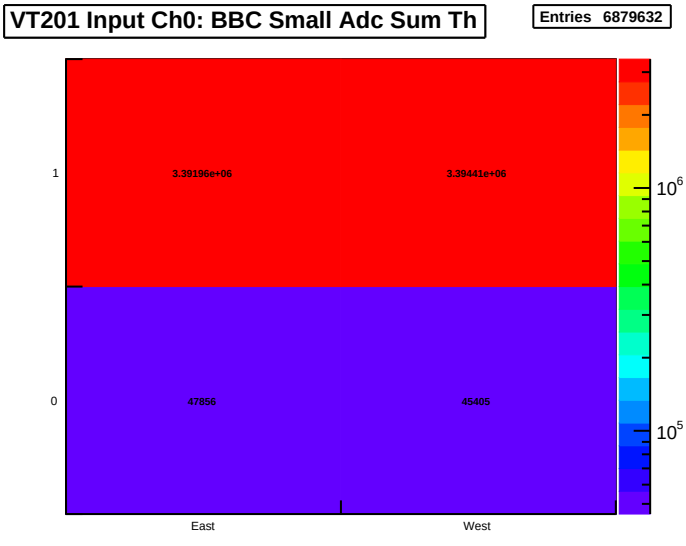

zdcWestTacVsSimu
Entries 0
Data
Simu

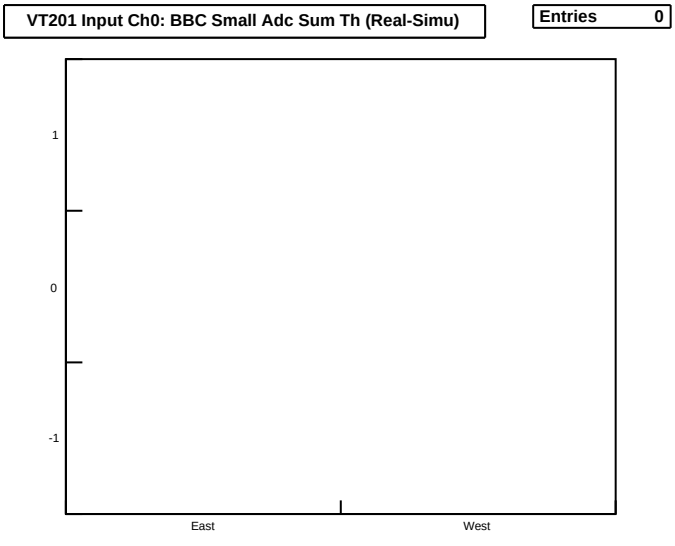

zdcAdcSum
Entries 4.127779e+07
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unus

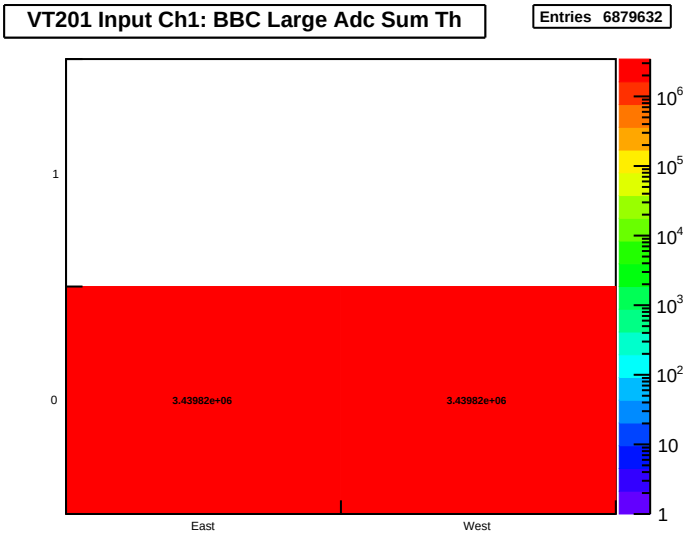

zdcAdcSumDiff
Entries 0
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unus

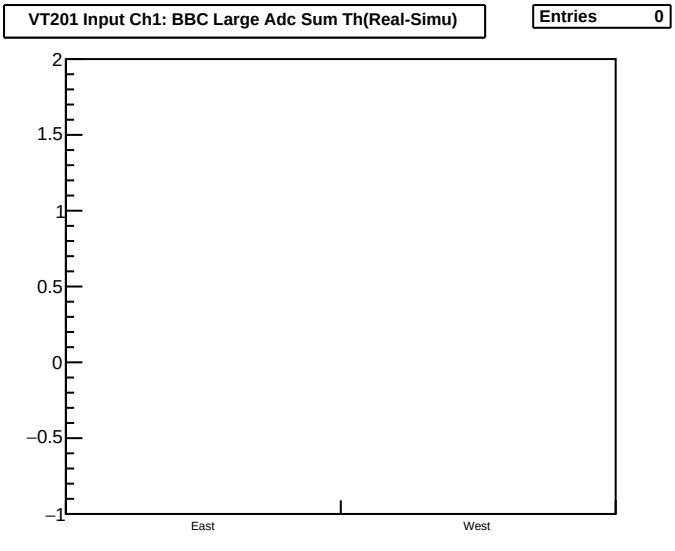

VT201 Input Ch0: BBC Small Tac Diff
Entries3439816
Tac

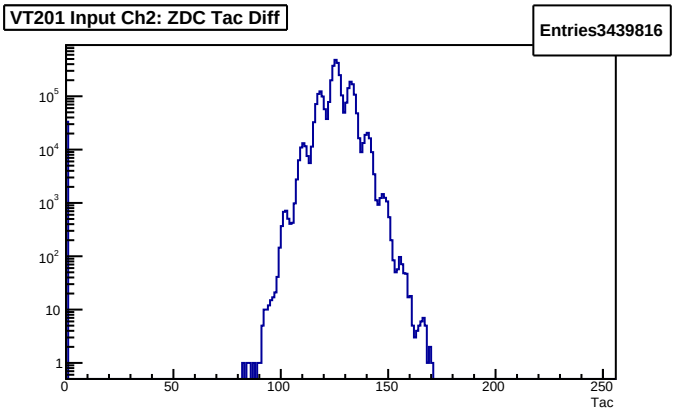

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

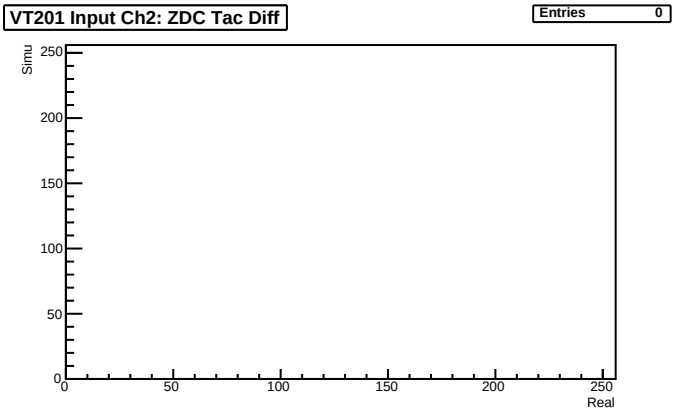

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 6879632
3.39196e+06
3.39441e+06
47856
45405
East
West

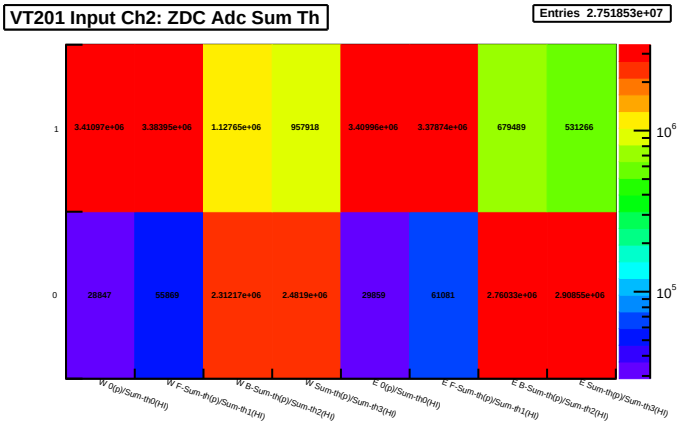

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

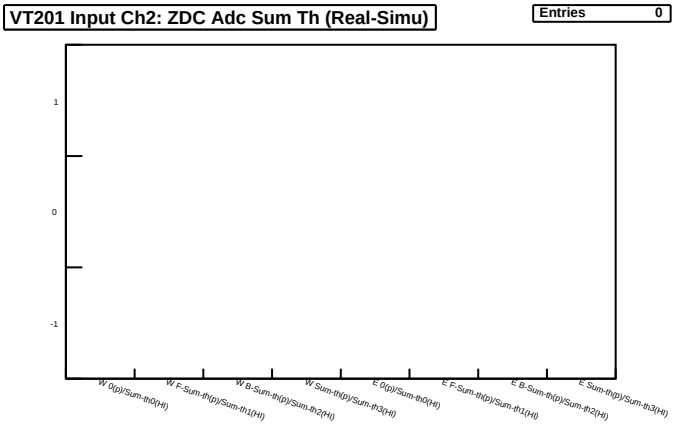

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 6879632
3.43982e+06
3.43982e+06
East
West

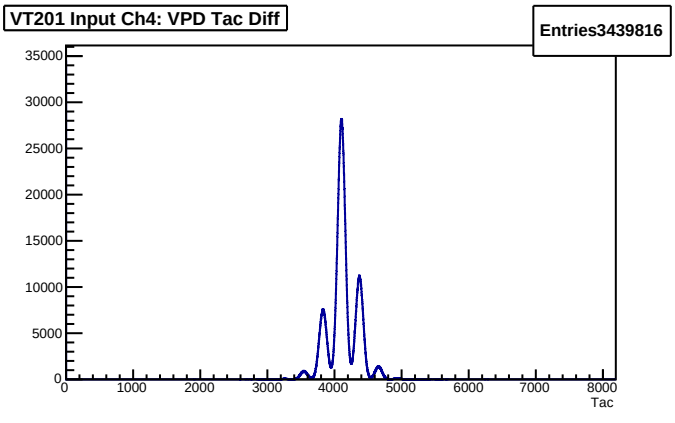

VT201 Input Ch1: BBC Large Adc Sum Th(Real-Simu)
Entries 0
East
West

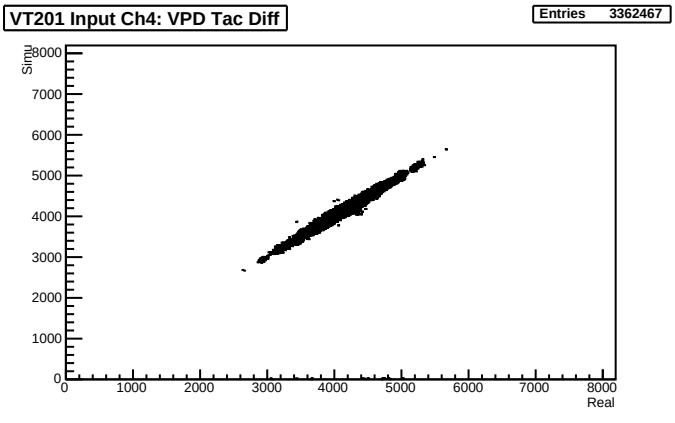

VT201 Input Ch2: ZDC Tac Diff
Entries3439816
Tac

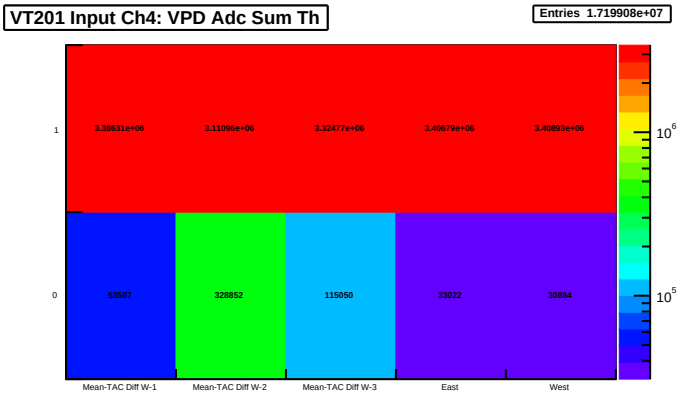

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

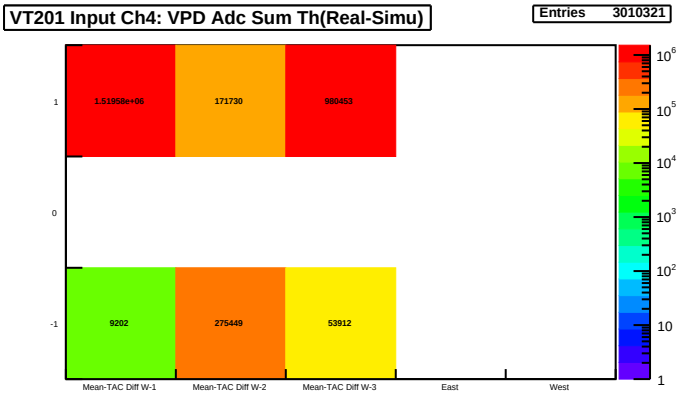

VT201 Input Ch2: ZDC Adc Sum Th
Entries 2.751853e+07
3.41097e+06
3.38395e+06
1.12765e+06
957918
3.40996e+06
3.37874e+06
679489
531266
28847
55869
2.31217e+06
2.4819e+06
29859
61081
2.76033e+06
2.90855e+06
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
E 0(p)/Sum-th0(Hl)
E F-Sum-th(p)/Sum-th1(Hl)
E B-Sum-th(p)/Sum-th2(Hl)
E Sum-th(p)/Sum-th3(Hl)

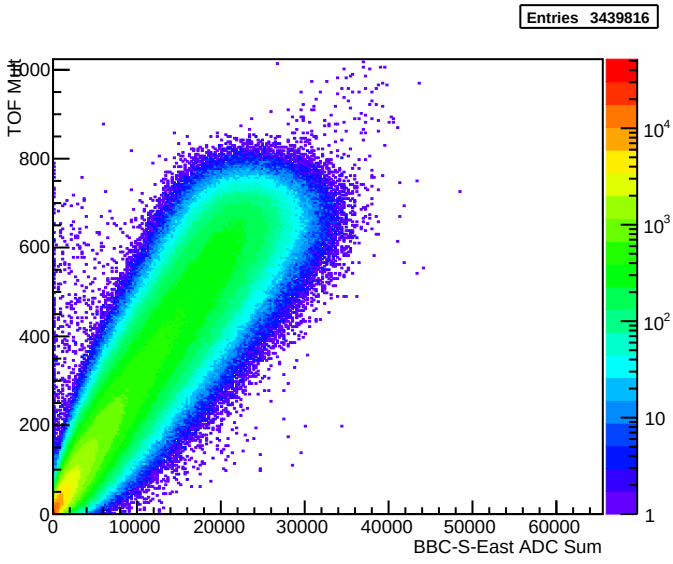

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
E 0(p)/Sum-th0(Hl)
E F-Sum-th(p)/Sum-th1(Hl)
E B-Sum-th(p)/Sum-th2(Hl)
E Sum-th(p)/Sum-th3(Hl)

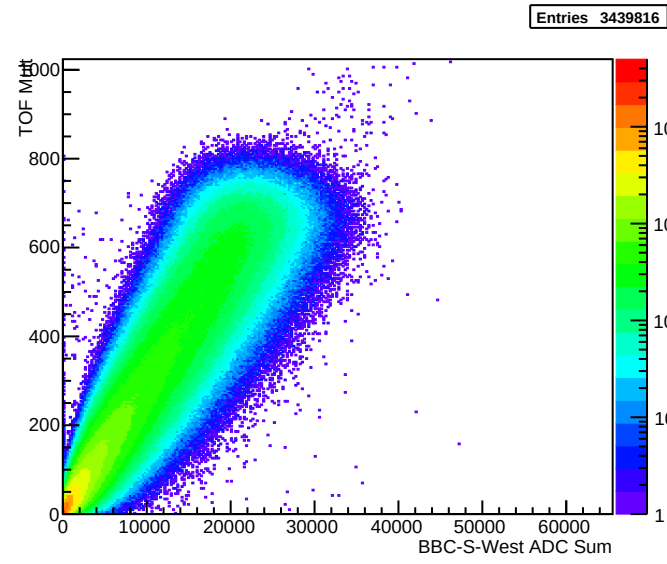

VT201 Input Ch4: VPD Tac Diff
Entries3439816
Tac

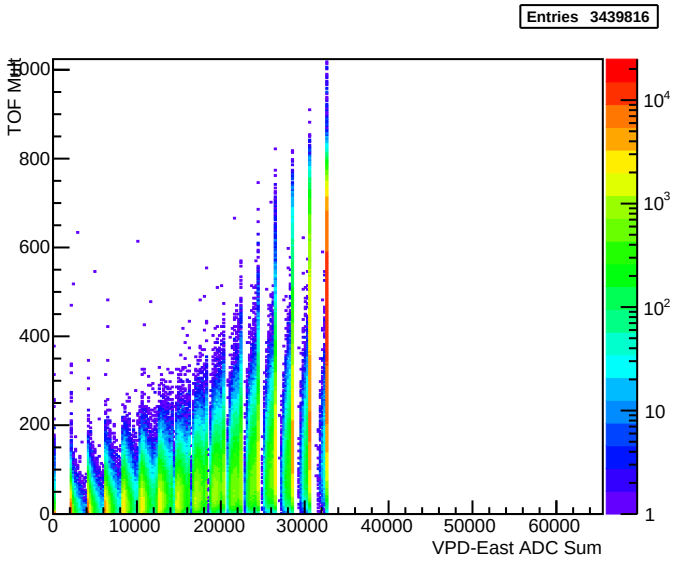

VT201 Input Ch4: VPD Tac Diff
Entries 3362467
Simu
Real

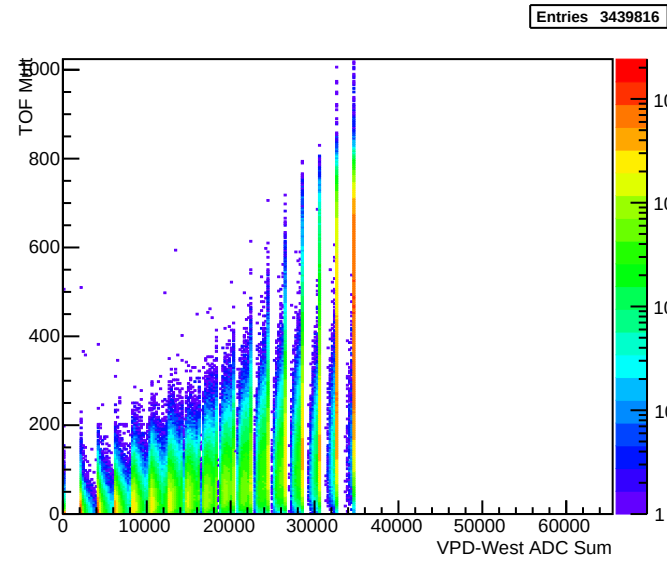

VT201 Input Ch4: VPD Adc Sum Th
Entries 1.719908e+07
3.38631e+06
3.11096e+06
3.32477e+06
3.40679e+06
3.40893e+06
53507
328852
115050
33022
30884
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

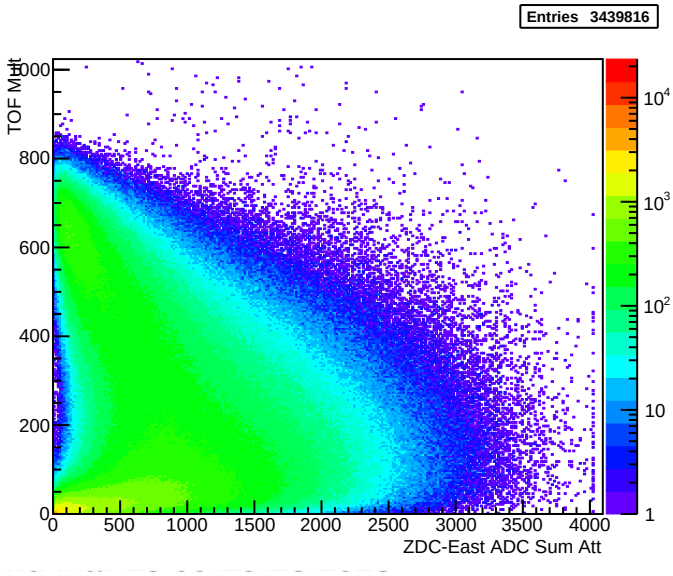

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 3010321
1.51958e+06
171730
980453
9202
275449
53912
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

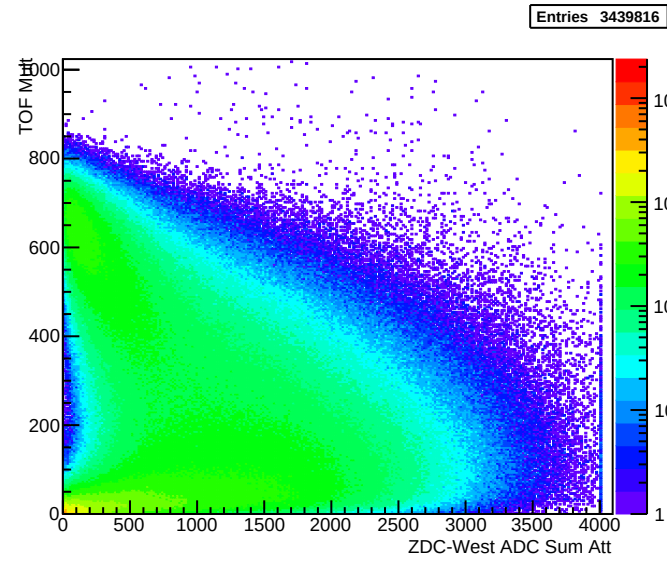

Entries 3439816
TOF Mult
BBC-S-East ADC Sum

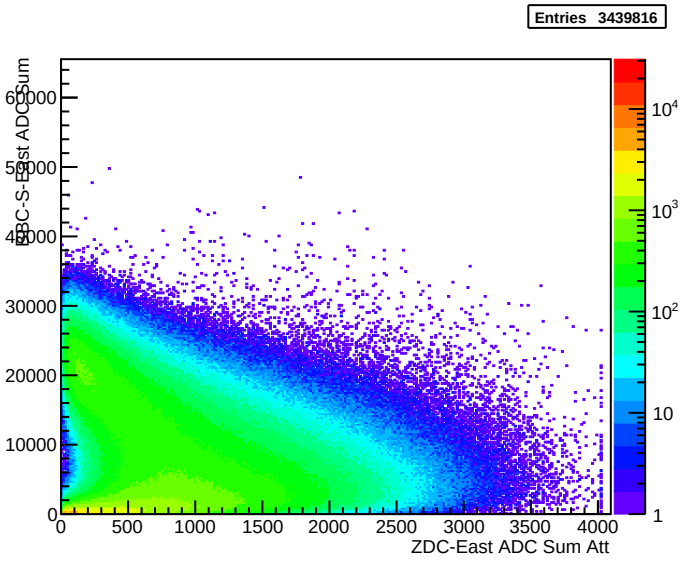

Entries 3439816
TOF Mult
BBC-S-West ADC Sum

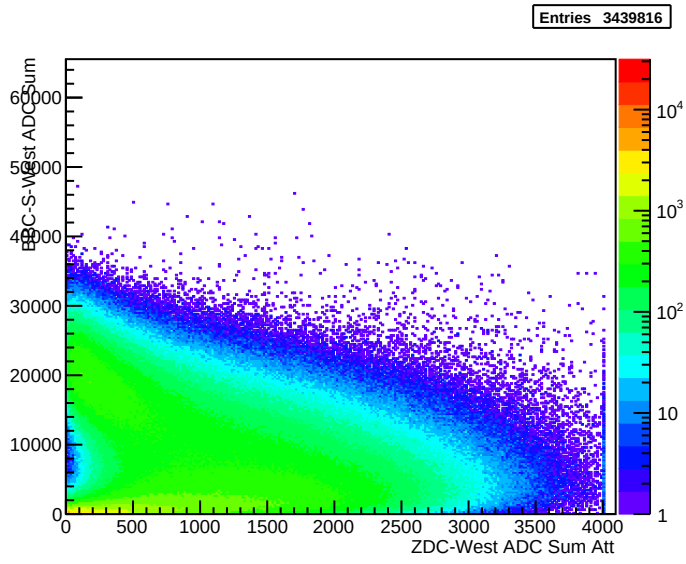

Entries 3439816
TOF Mult
VPD-East ADC Sum

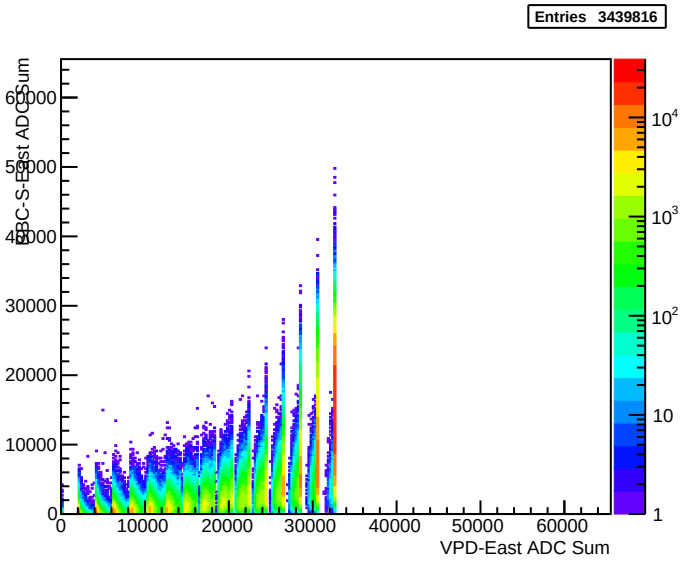

Entries 3439816
TOF Mult
VPD-West ADC Sum

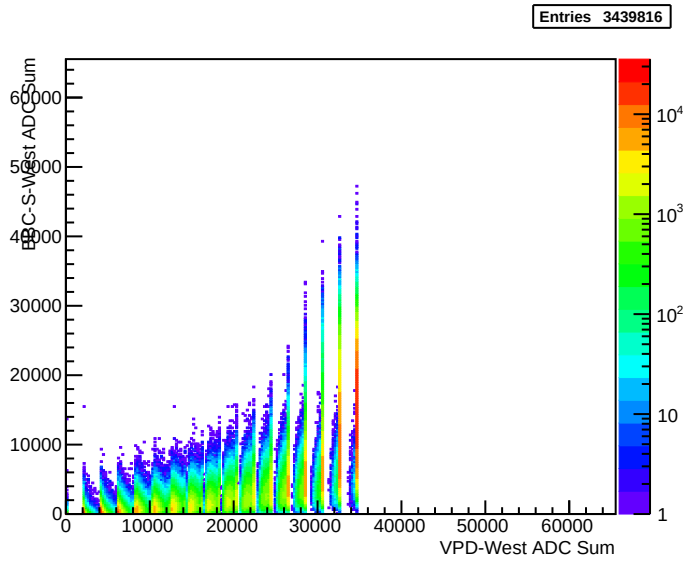

Entries 3439816
TOF Mult
ZDC-East ADC Sum Att

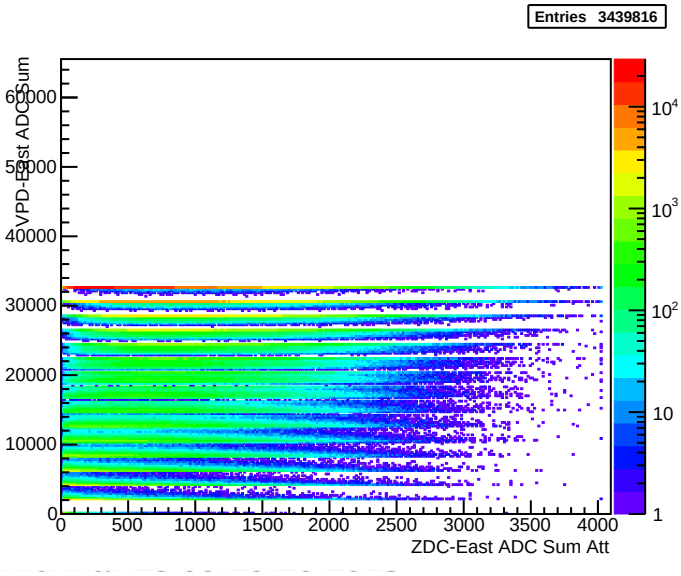

Entries 3439816
TOF Mult
ZDC-West ADC Sum Att

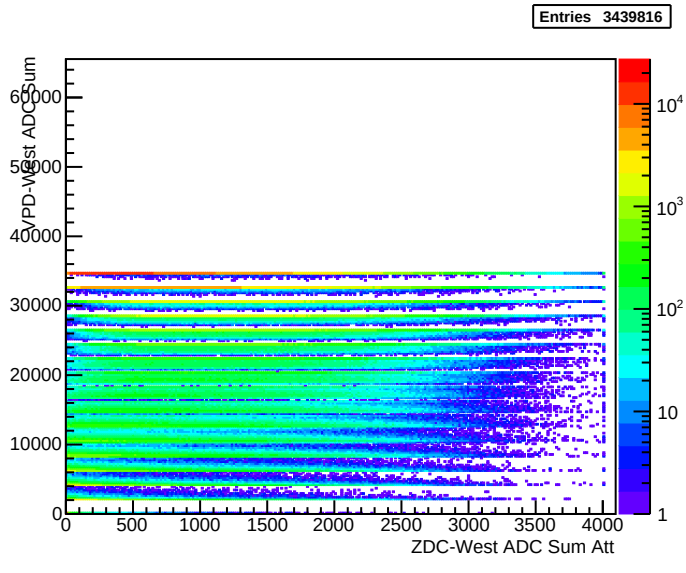

Entries 3439816
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

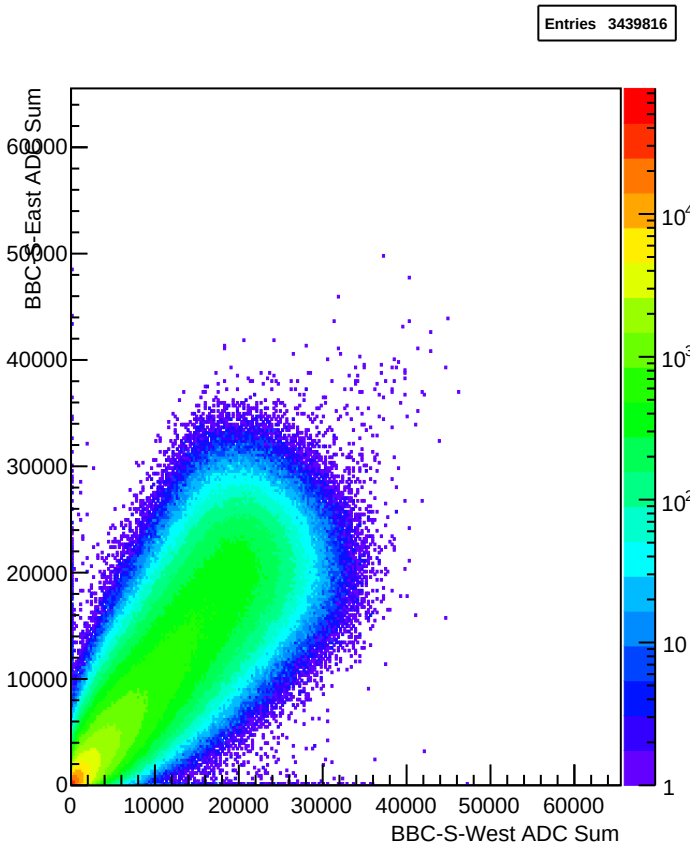

Entries 3439816
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

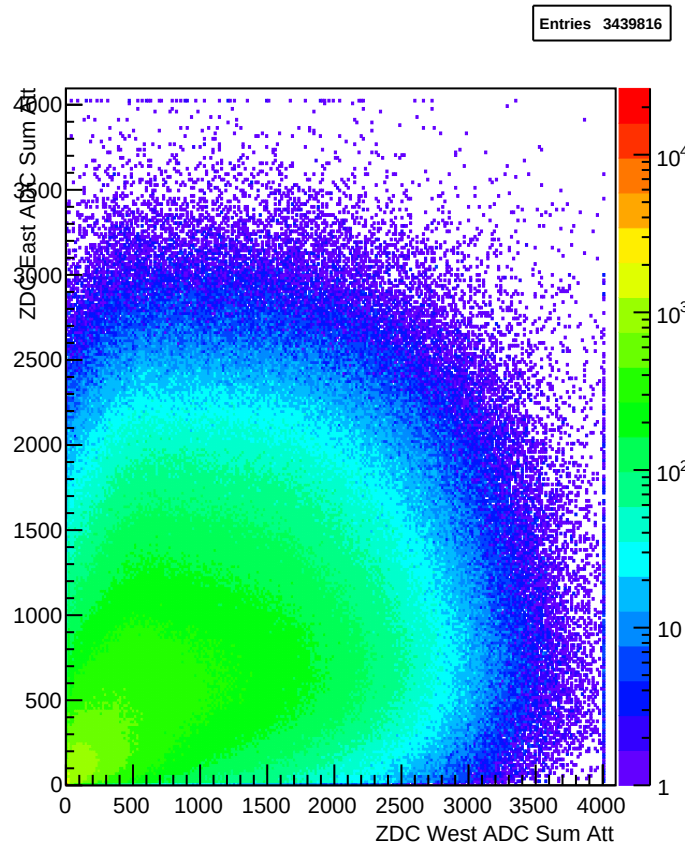

Entries 3439816
BBC-S-East ADC Sum
VPD-East ADC Sum

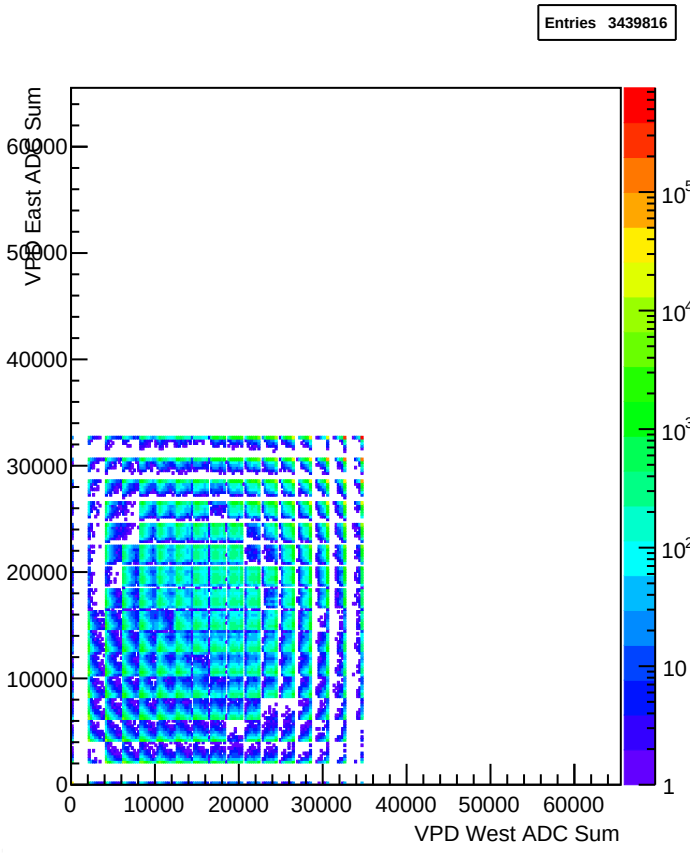

Entries 3439816
BBC-S-West ADC Sum
VPD-West ADC Sum

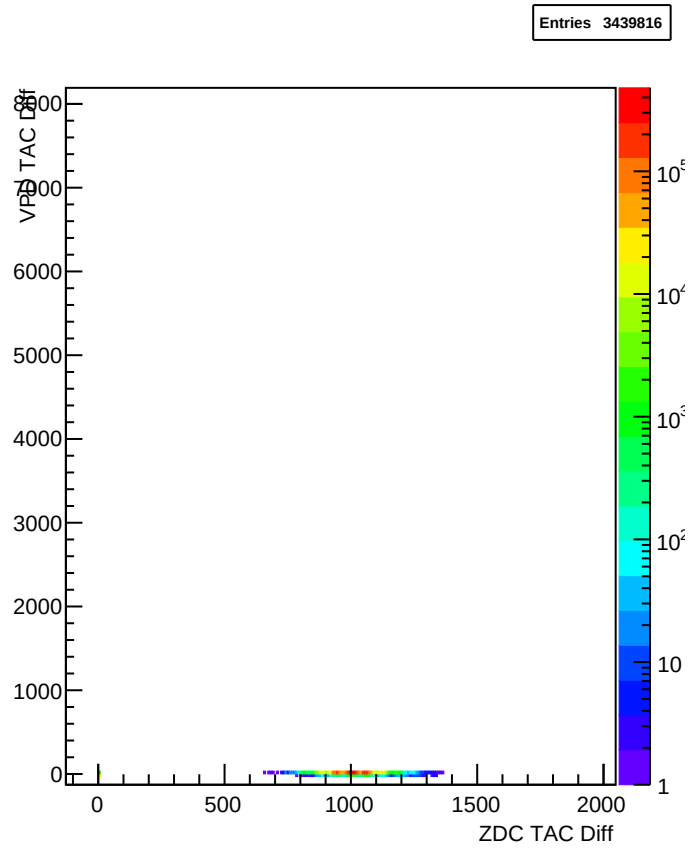

Entries 3439816
VPD-East ADC Sum
ZDC-East ADC Sum Att

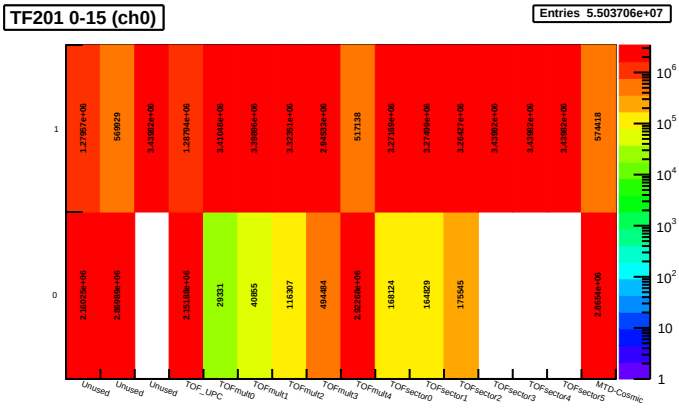

Entries 3439816
VPD-West ADC Sum
ZDC-West ADC Sum Att

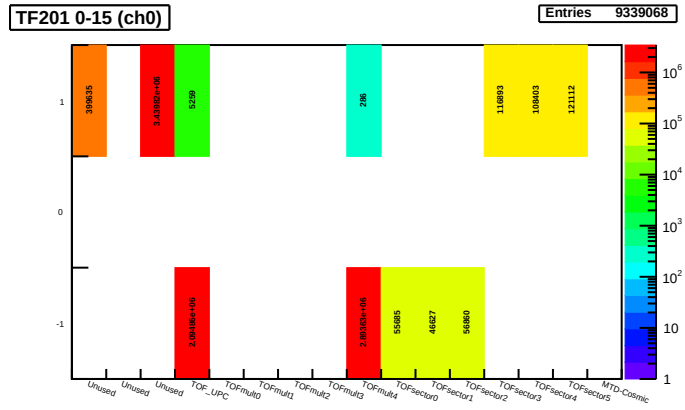

Entries 3439816
BBC-S-East ADC Sum
BBC-S-West ADC Sum

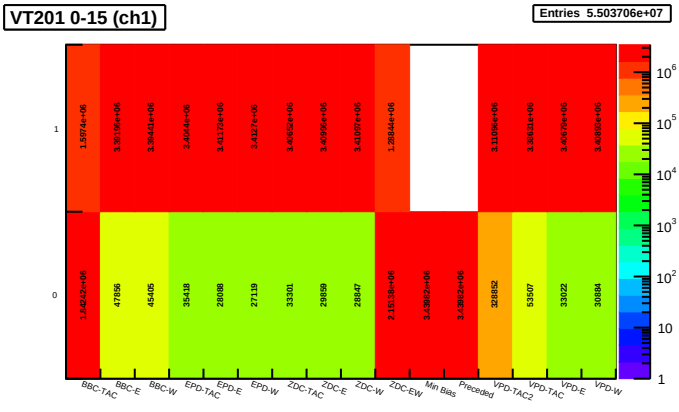

Entries 3439816
ZDC East ADC Sum Att
ZDC West ADC Sum Att

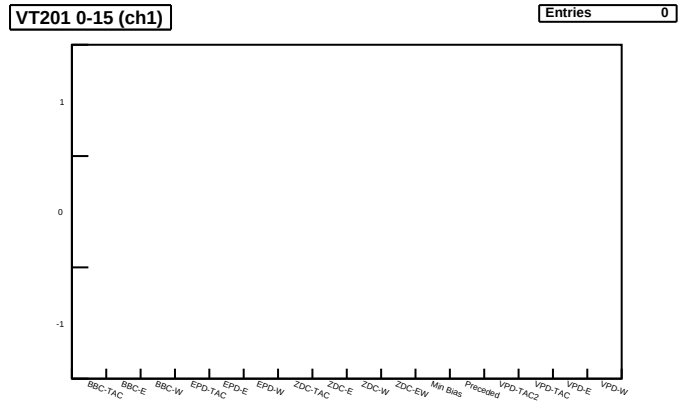

Entries 3439816
VPD East ADC Sum
VPD West ADC Sum

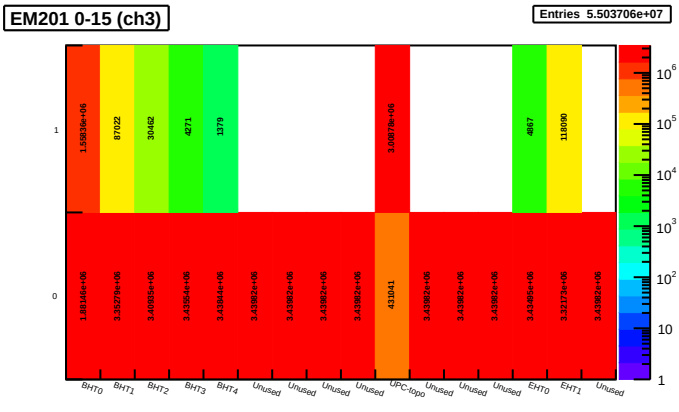

Entries 3439816
VPD TAC Diff
ZDC TAC Diff

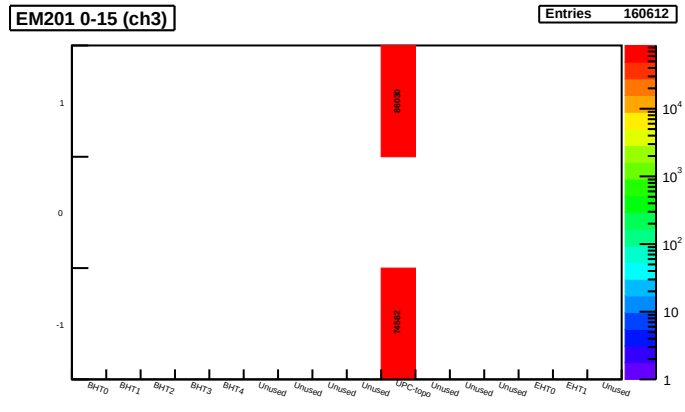

TF201 0-15 (ch0)
Entries 5.503706e+07
1.27857e+06
569929
3.43822e+06
1.23794e+06
3.41040e+06
3.39895e+06
3.32351e+06
2.94532e+06
517138
3.27169e+06
3.27499e+06
3.25427e+06
3.43822e+06
3.43822e+06
3.43822e+06
574418
2.15025e+06
2.86959e+06
2.15189e+06
29321
40855
116307
494484
2.92259e+06
168124
164829
175545
2.86596e+05
Unused
Unused
Unused
TOF_UPC
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5
MTD-Cosmic

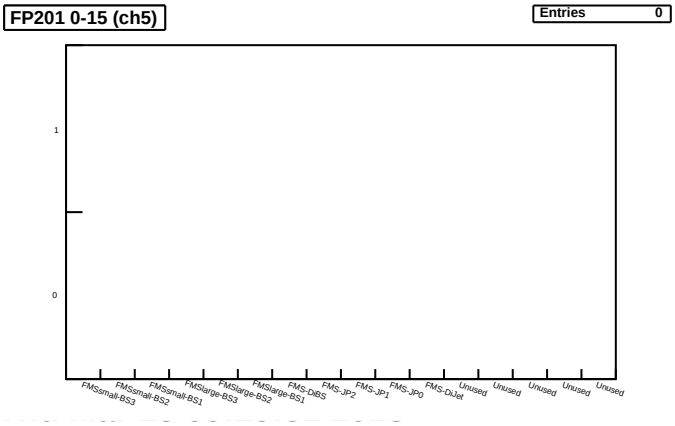

TF201 0-15 (ch0)
Entries 9339068
399635
3.43822e+06
5259
286
116893
108403
121112
2.09486e+06
2.89362e+06
55685
46627
56860
Unused
Unused
Unused
TOF_UPC
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5
MTD-Cosmic

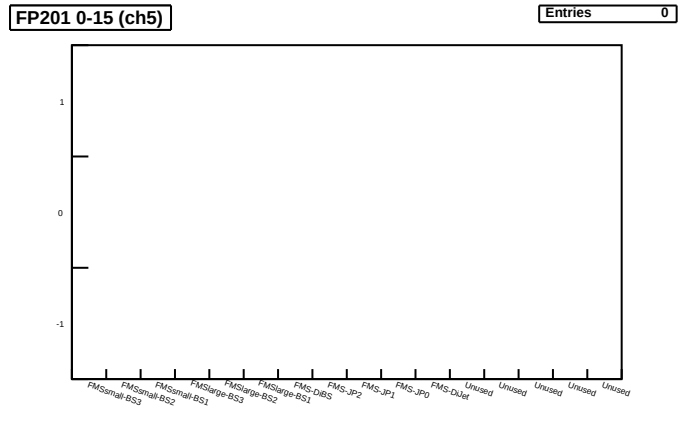

VT201 0-15 (ch1)
Entries 5.503706e+07
1.5974e+06
3.39196e+06
3.39441e+06
3.4044e+06
3.41736e+06
3.4127e+06
3.40932e+06
3.40996e+06
3.41097e+06
1.28944e+06
3.11096e+06
3.38631e+06
3.40679e+06
3.40939e+06
1.84542e+06
47896
45405
35418
28088
27119
33301
29859
28847
2.15138e+06
3.43982e+06
3.43982e+06
328852
53507
33022
30884
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 5.503706e+07
1.53838e+06
87022
30462
4271
1379
3.00878e+06
4667
119090
1.83146e+06
3.35279e+06
3.40935e+06
3.43854e+06
3.43944e+06
3.43822e+06
3.43822e+06
3.43822e+06
3.43822e+06
431041
3.43822e+06
3.43822e+06
3.43822e+06
3.43455e+06
3.32173e+06
3.43822e+06
BHT0
BHT1
BHT2
BHT3
BHT4
Unused
Unused
Unused
Unused
UPC-topo
Unused
Unused
Unused
EHT0
EHT1
Unused


EM201 0-15 (ch3)
Entries 160612
86030
74582
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