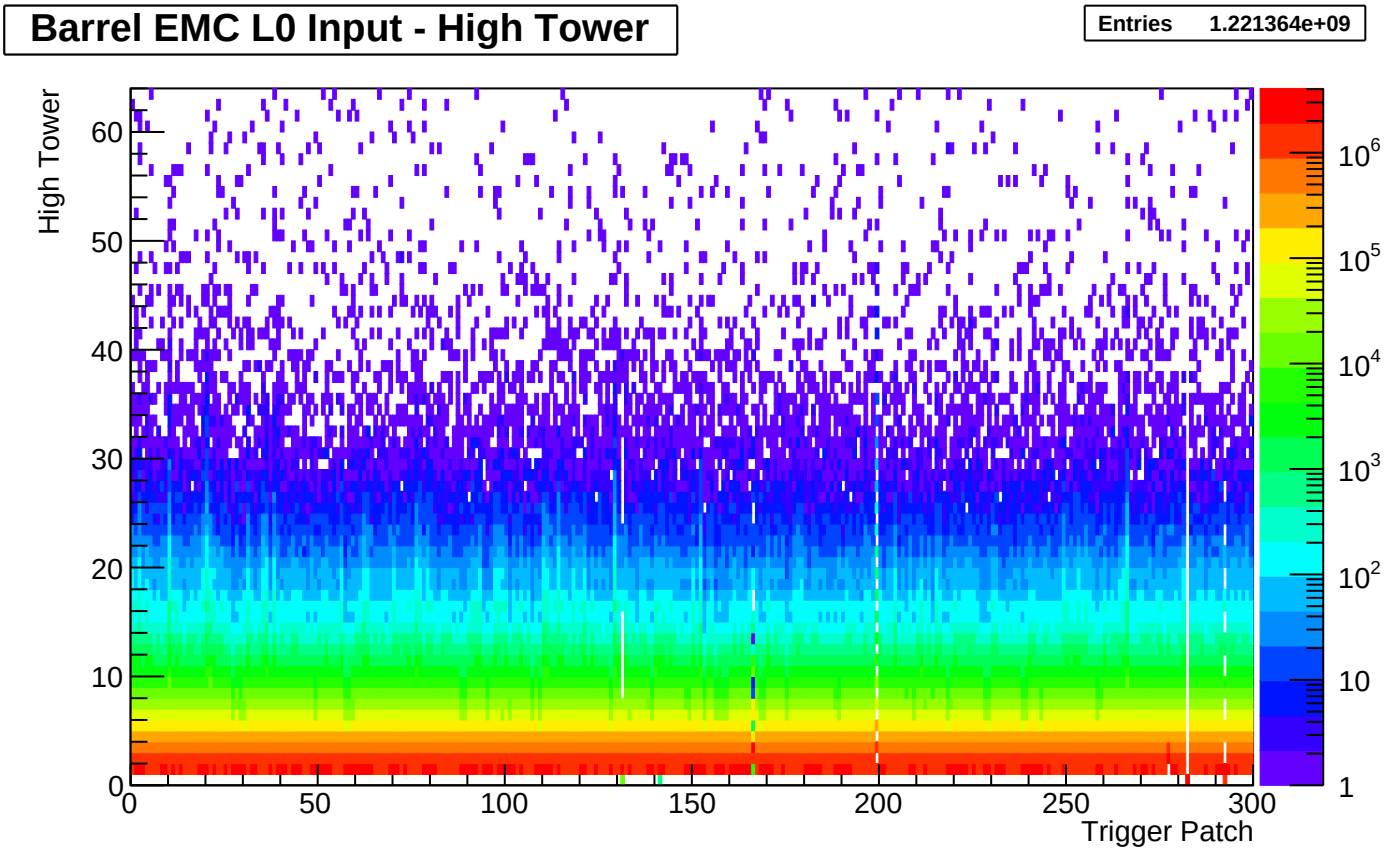
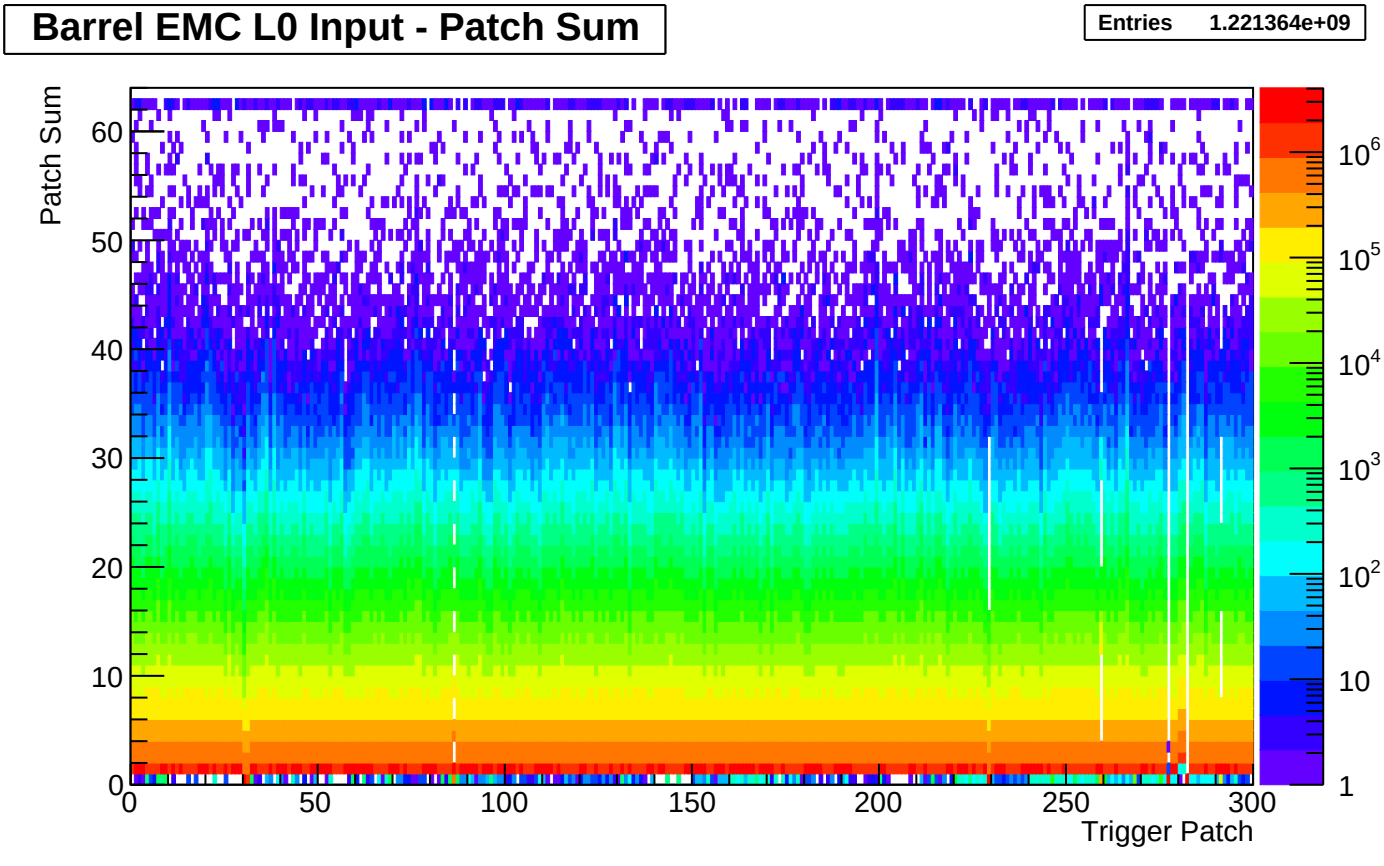
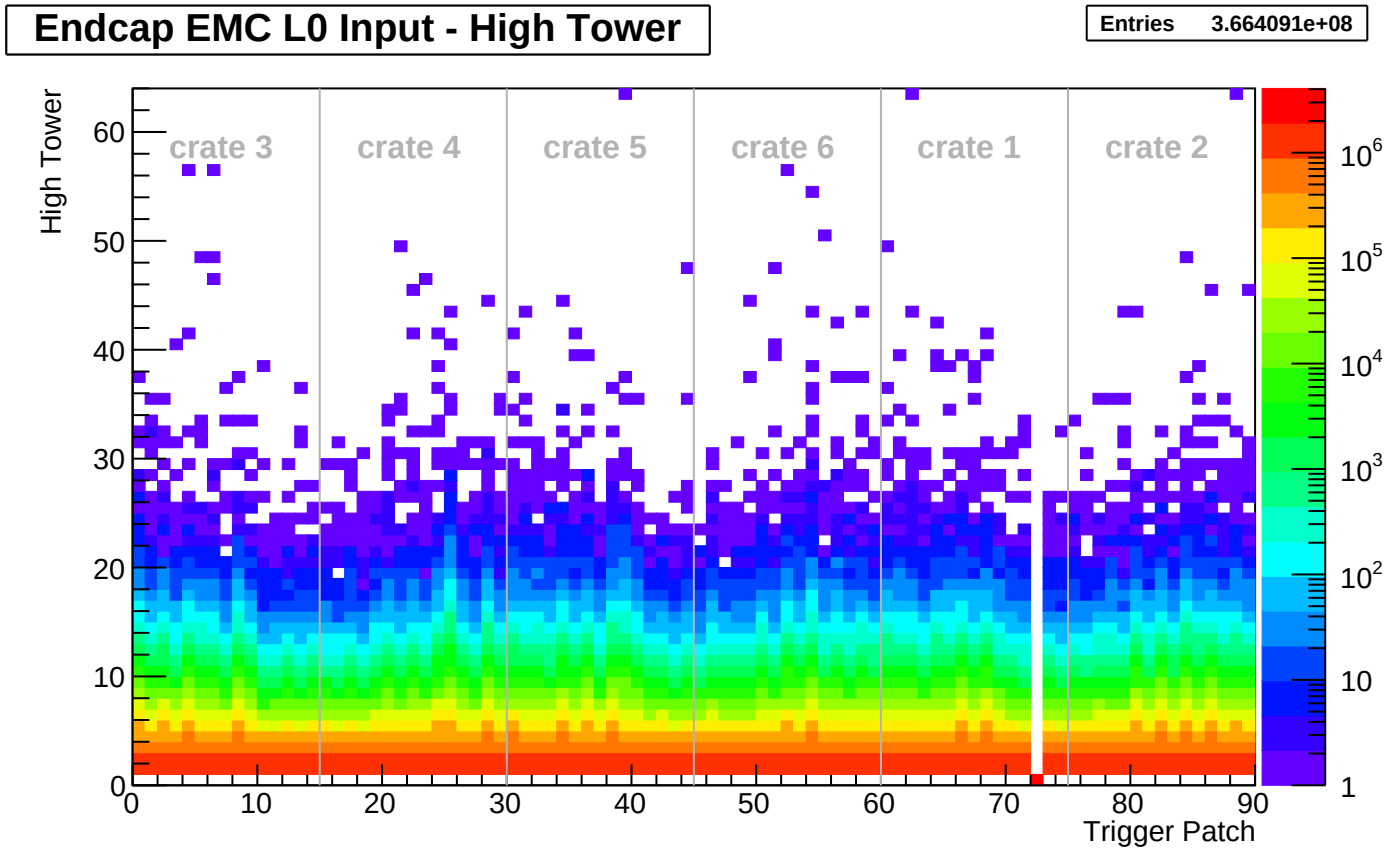
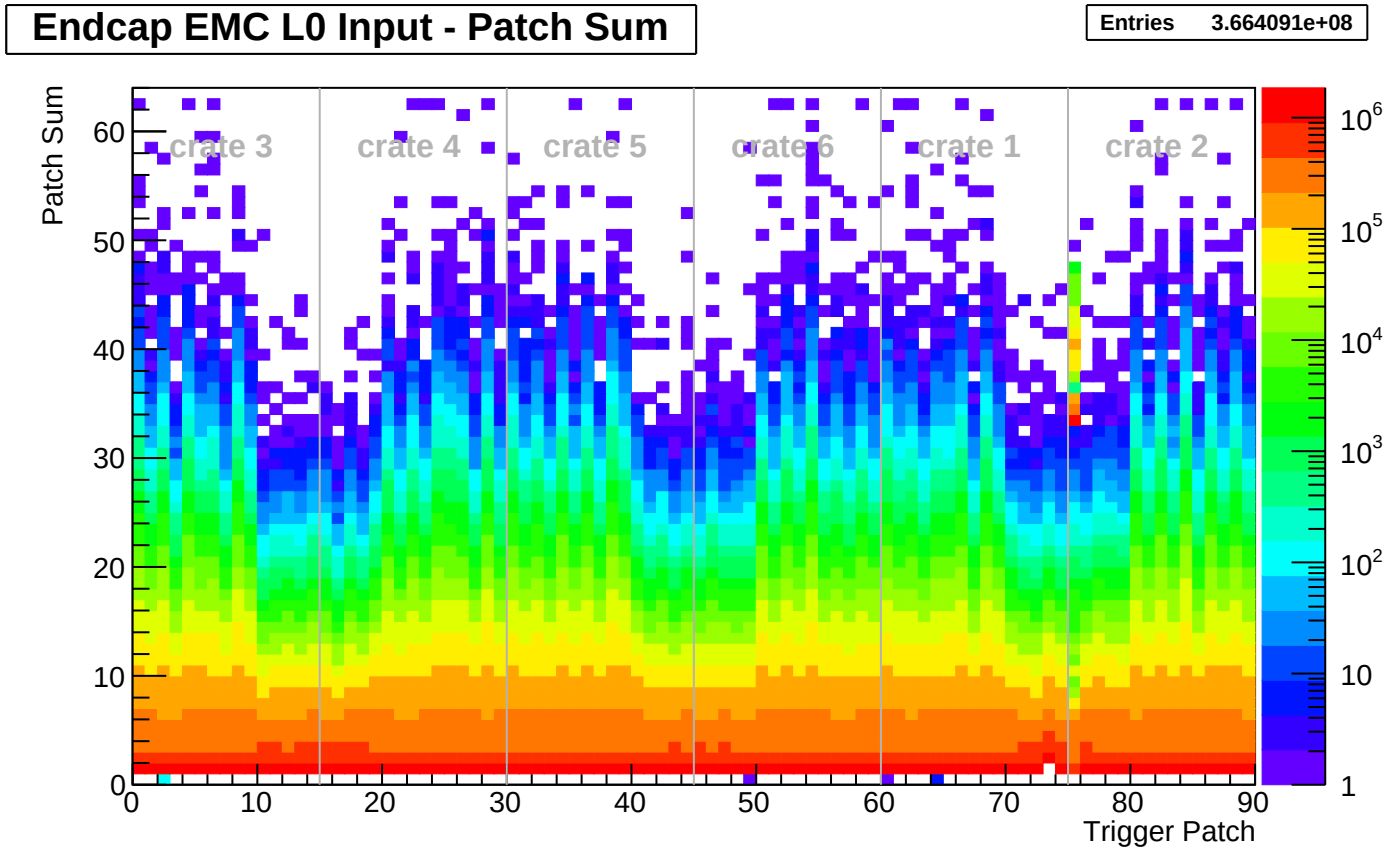
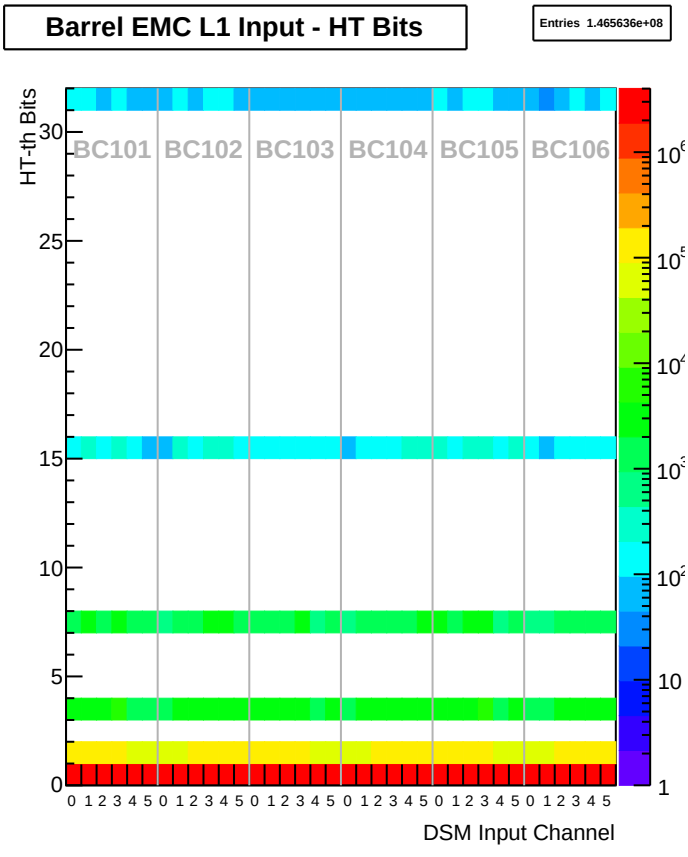
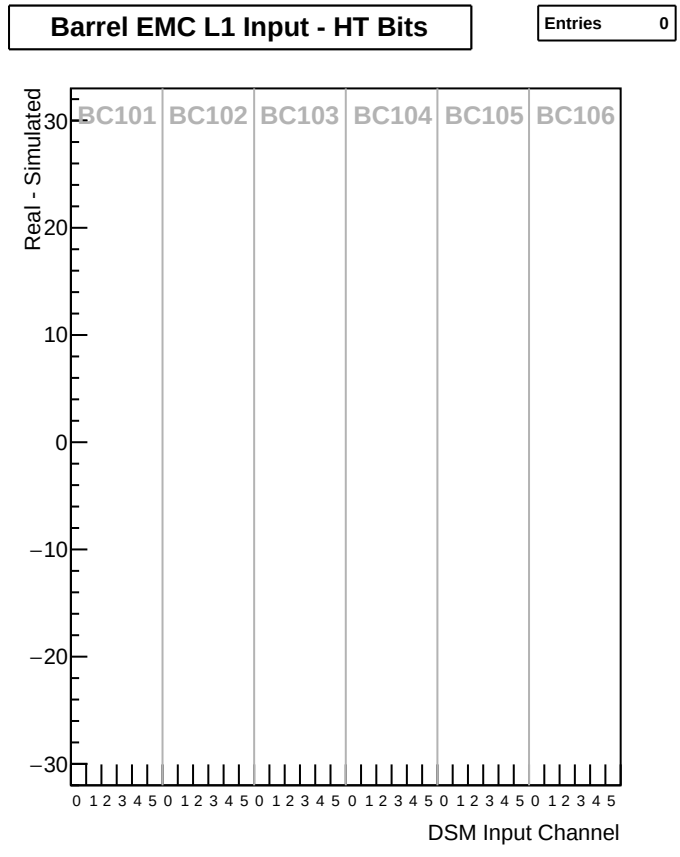

Barrel EMC L0 Input - High Tower
Entries 1.221364e+09
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

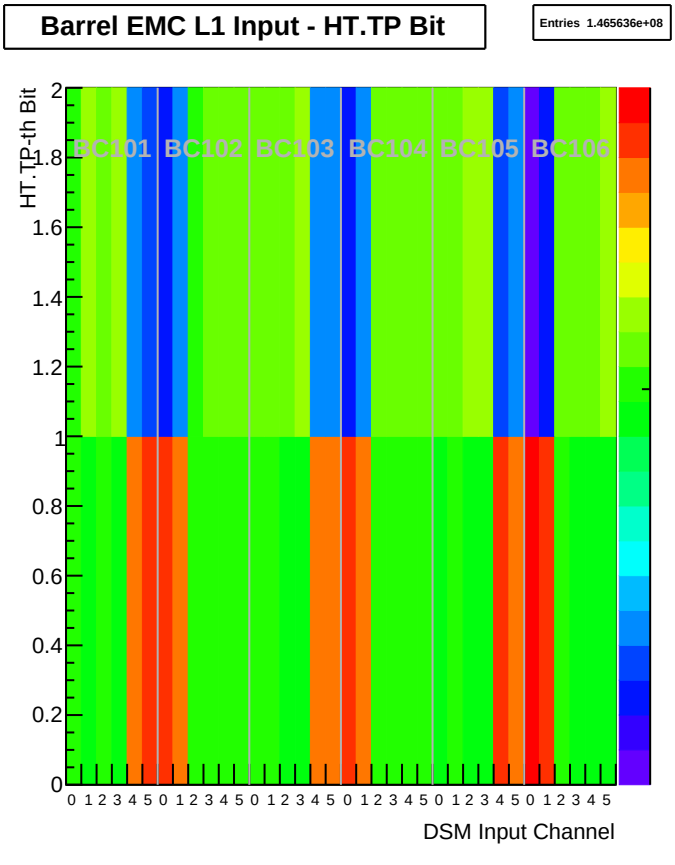

Barrel EMC L0 Input - Patch Sum
Entries 1.221364e+09
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

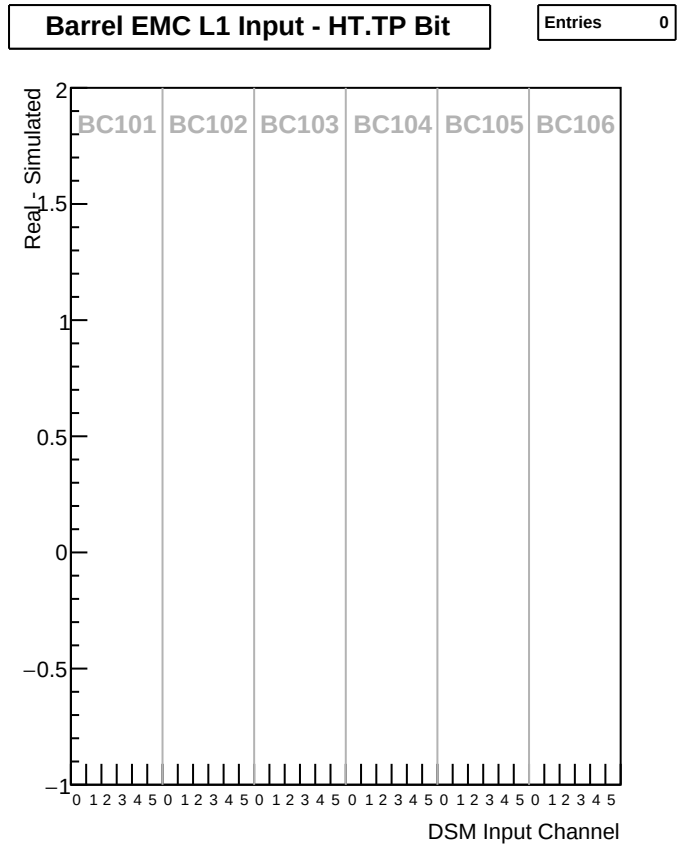

Endcap EMC L0 Input - High Tower
Entries 3.664091e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

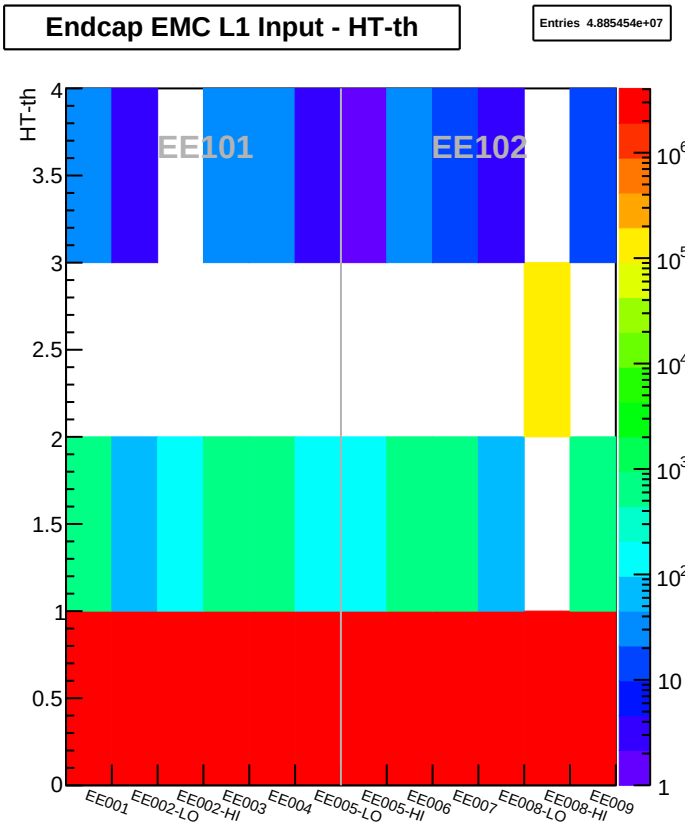

Endcap EMC L0 Input - Patch Sum
Entries 3.664091e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

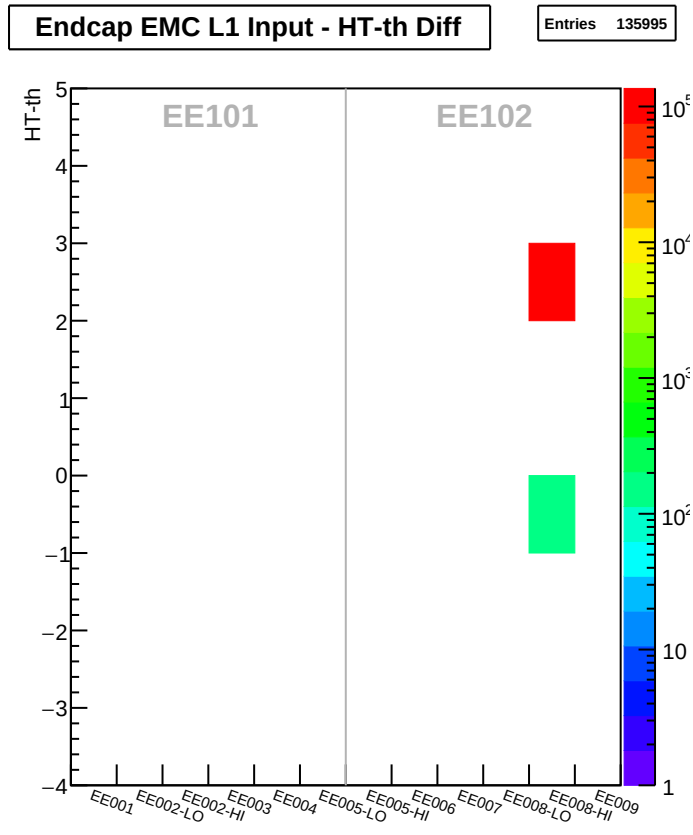

Barrel EMC L1 Input - HT Bits
Entries 1.465636e+08
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

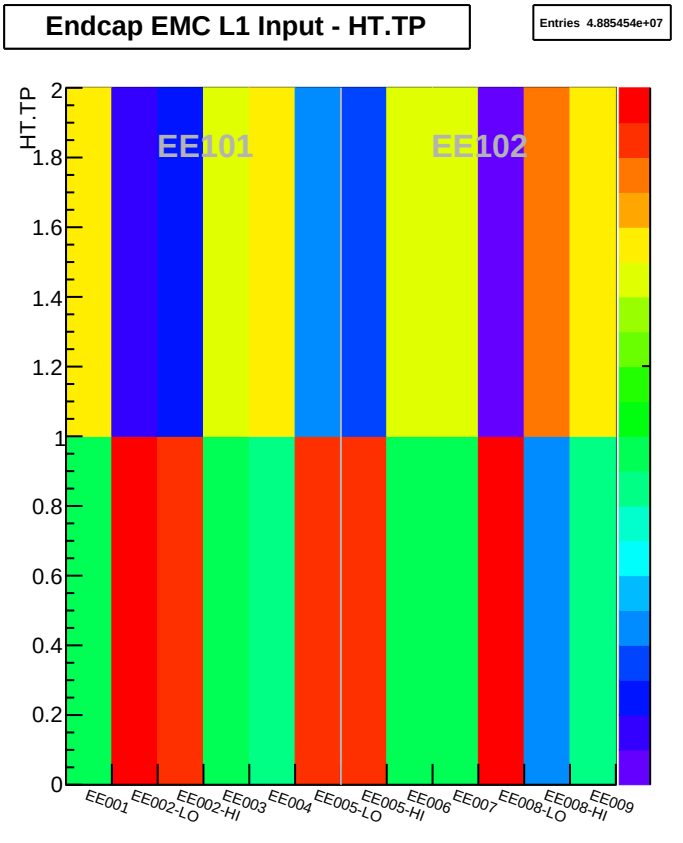

Barrel EMC L1 Input - HT Bits
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

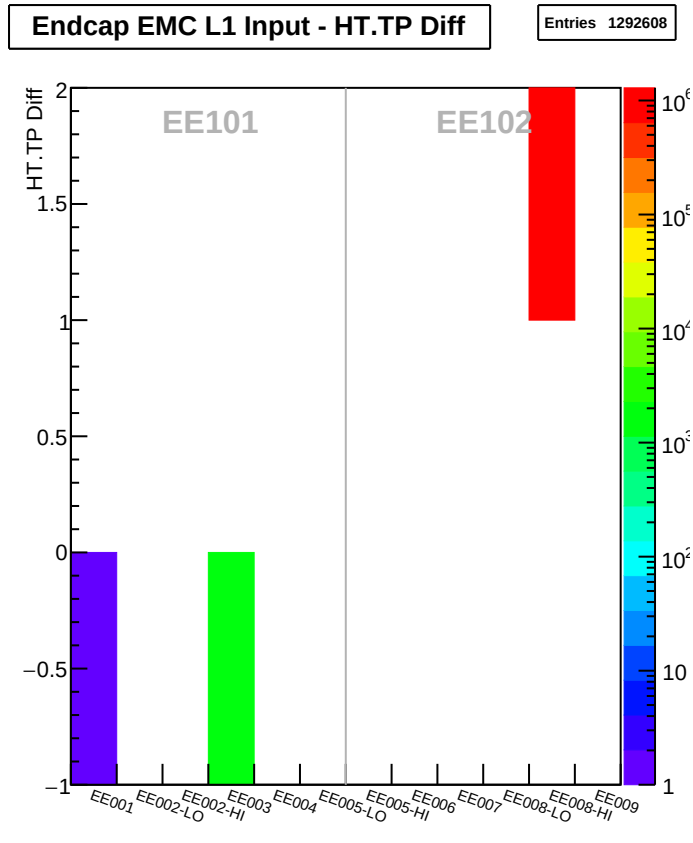

Barrel EMC L1 Input - HT.TP Bit
Entries 1.465636e+08
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

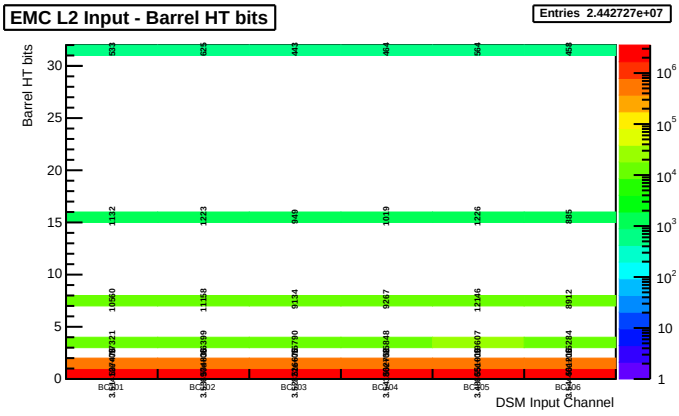

Barrel EMC L1 Input - HT.TP Bit
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

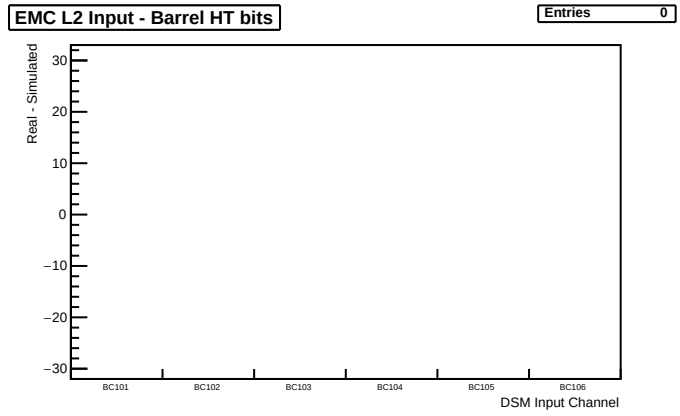

Endcap EMC L1 Input - HT-th
Entries 4.885454e+07
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

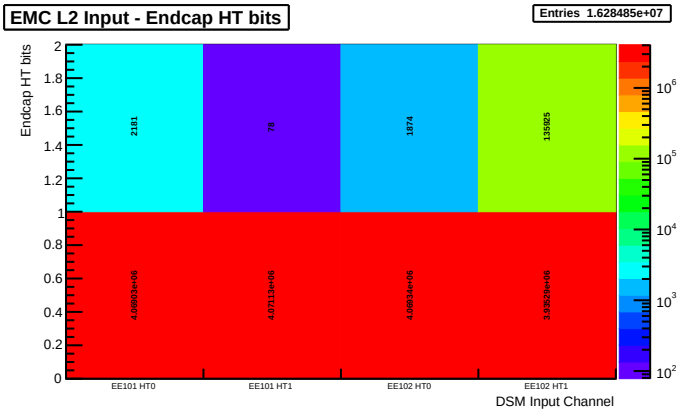

Endcap EMC L1 Input - HT-th Diff
Entries 135995
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

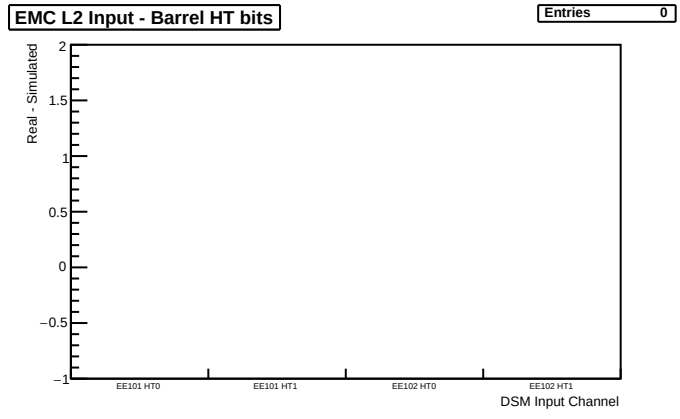

Endcap EMC L1 Input - HT.TP
Entries 4.885454e+07
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

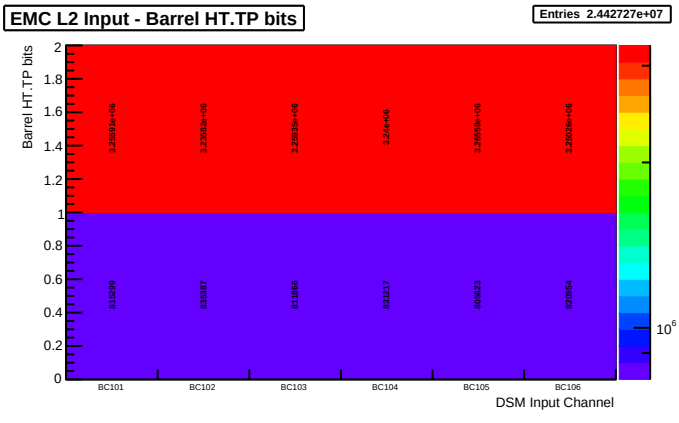

Endcap EMC L1 Input - HT.TP Diff
Entries 1292608
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

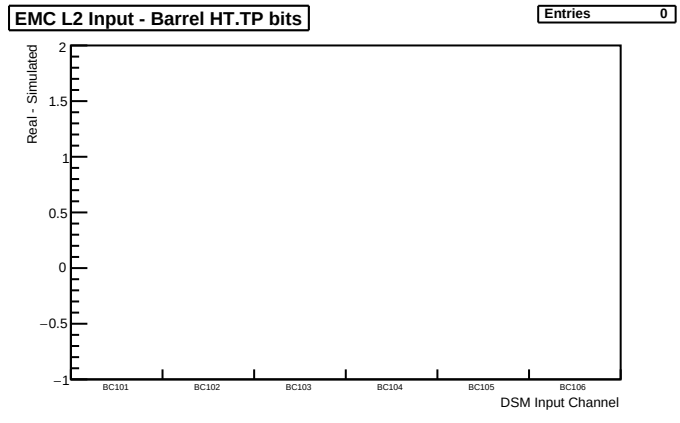

EMC L2 Input - Barrel HT bits
Entries 2.442727e+07
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

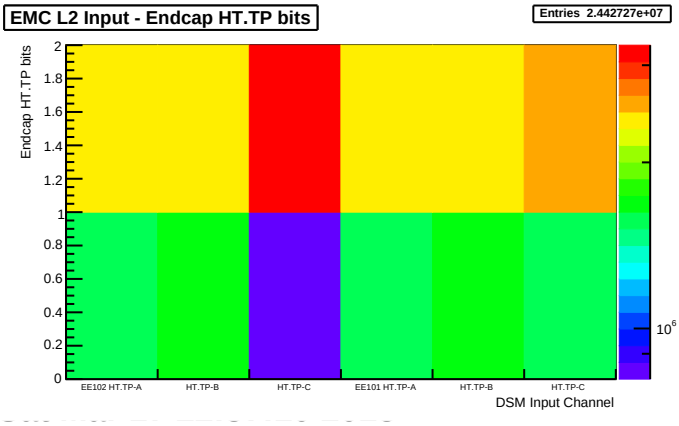

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

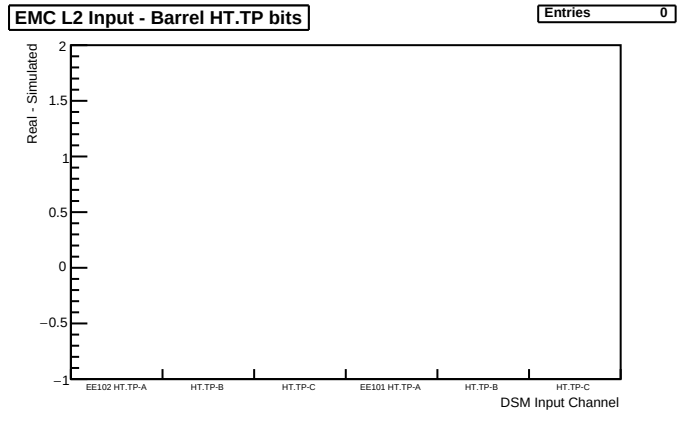

EMC L2 Input - Endcap HT bits
Entries 1.628485e+07
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

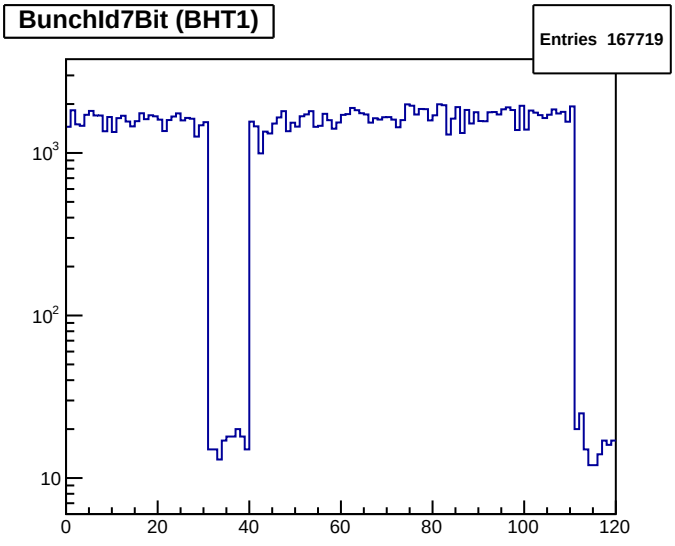

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

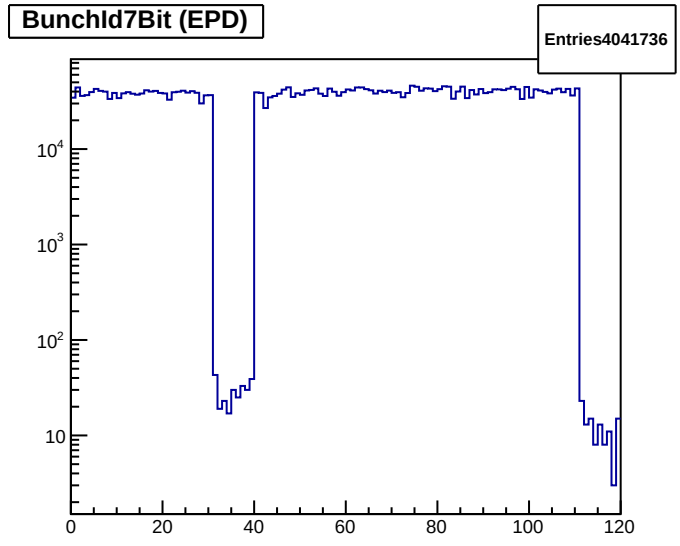

EMC L2 Input - Barrel HT.TP bits
Entries 2.442727e+07
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

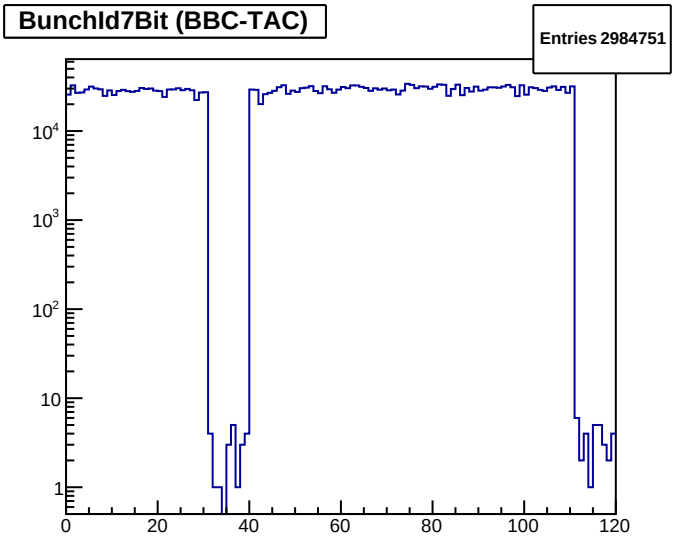

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

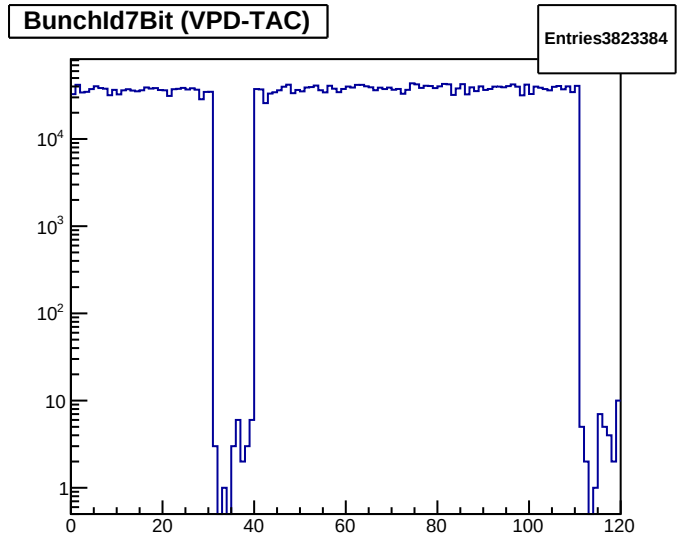

EMC L2 Input - Endcap HT.TP bits
Entries 2.442727e+07
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

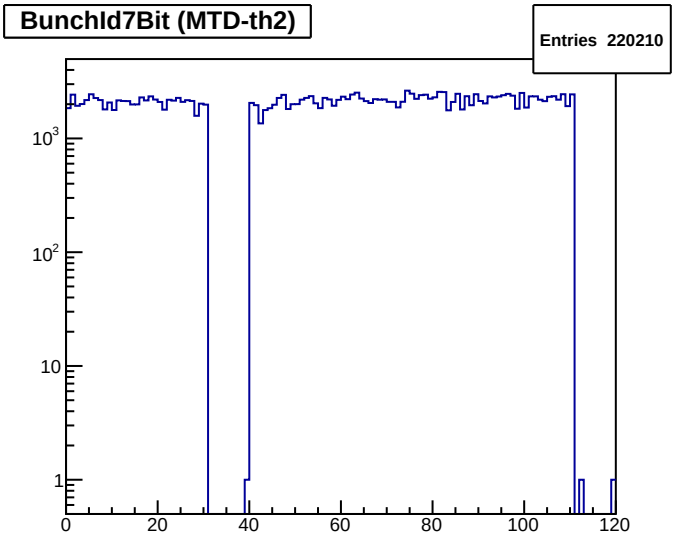

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

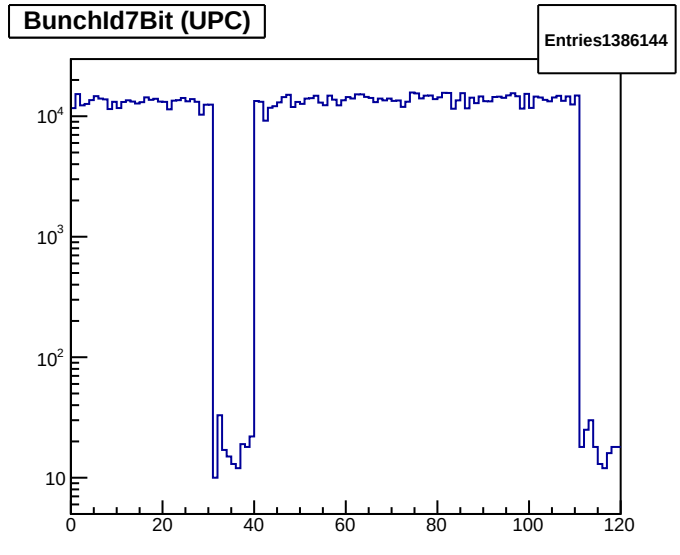

BunchId7Bit (BHT1)
Entries 167719

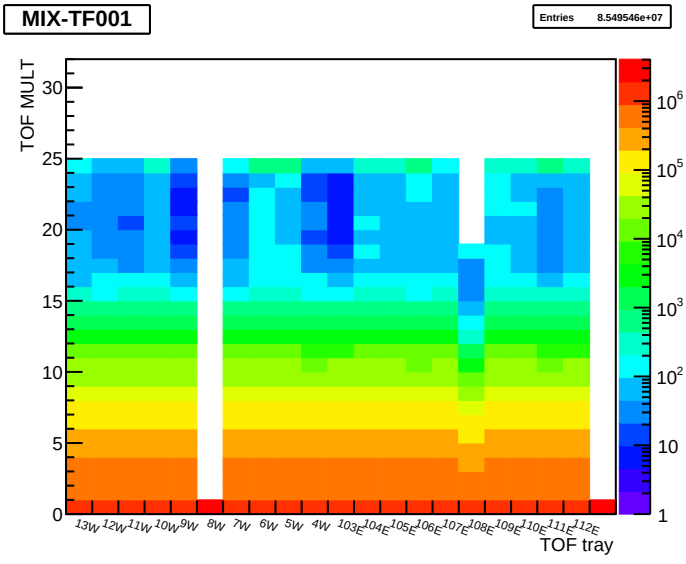

BunchId7Bit (EPD)
Entries4041736

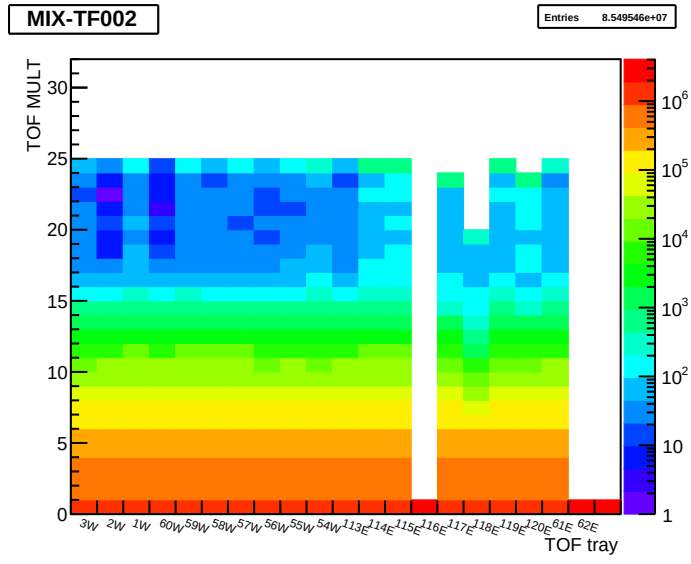

BunchId7Bit (BBC-TAC)
Entries 2984751

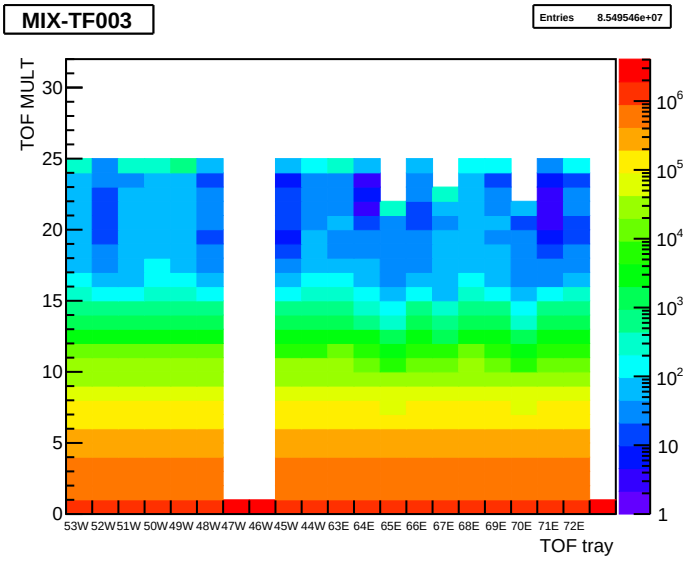

BunchId7Bit (VPD-TAC)
Entries3823384

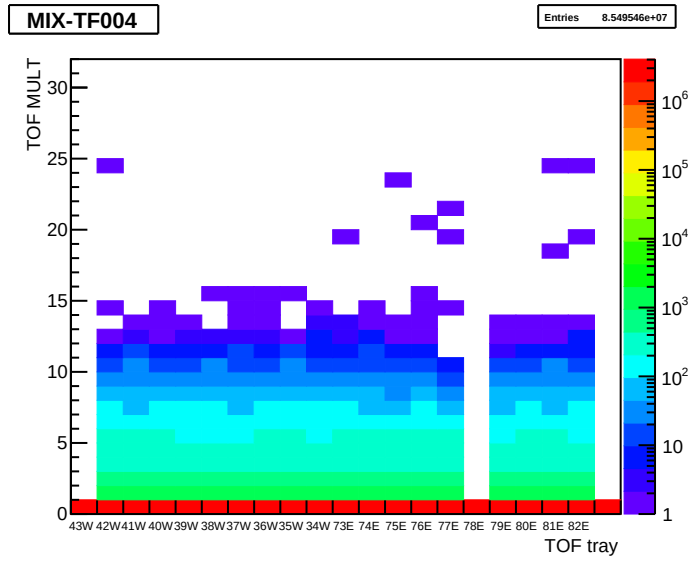

BunchId7Bit (MTD-th2)
Entries 220210

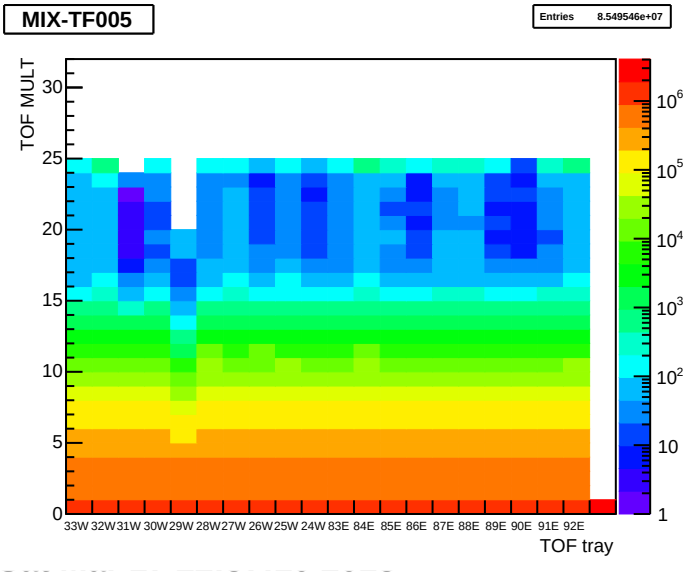

BunchId7Bit (UPC)
Entries1386144

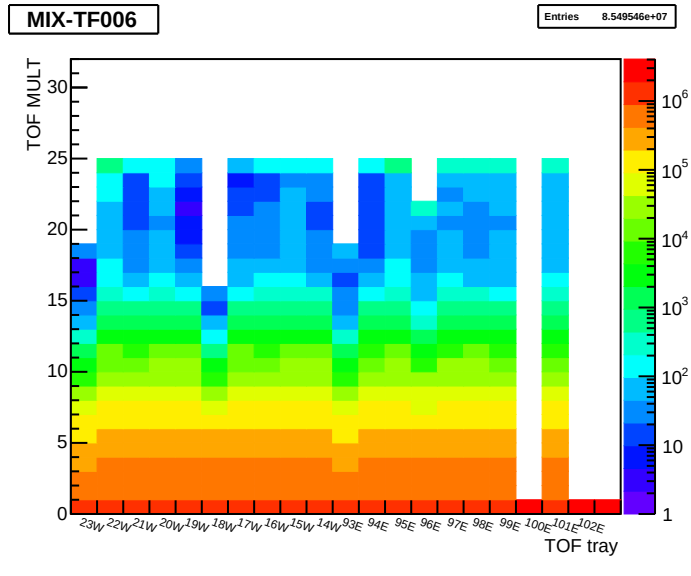

MIX-TF001
Entries 8.549546e+07
TOF MULT
TOF tray

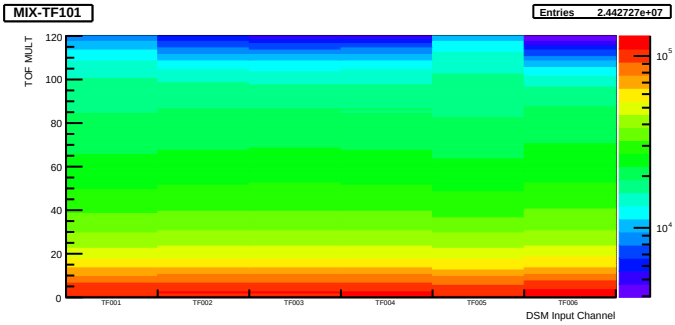

MIX-TF002
Entries 8.549546e+07
TOF MULT
TOF tray

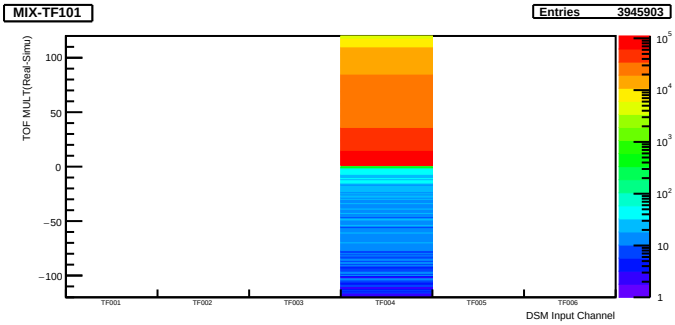

MIX-TF003
Entries 8.549546e+07
TOF MULT
TOF tray

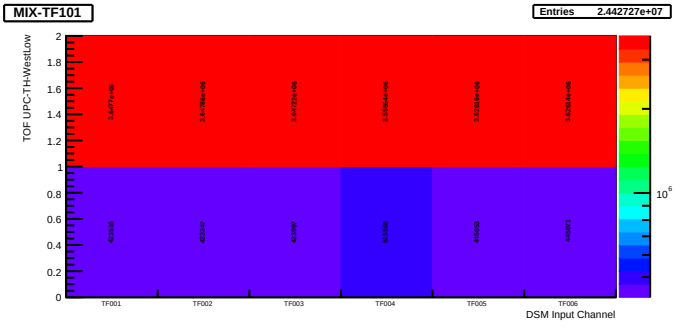

MIX-TF004
Entries 8.549546e+07
TOF MULT
TOF tray

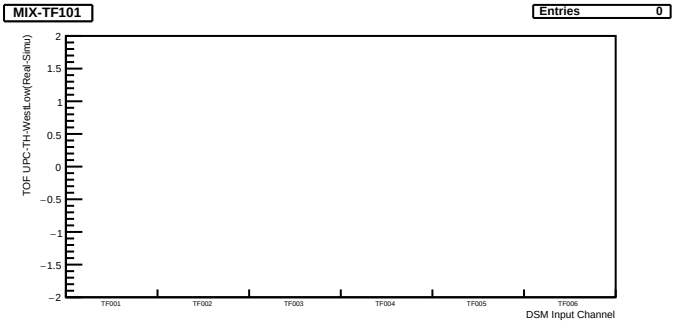

MIX-TF005
Entries 8.549546e+07
TOF MULT
TOF tray

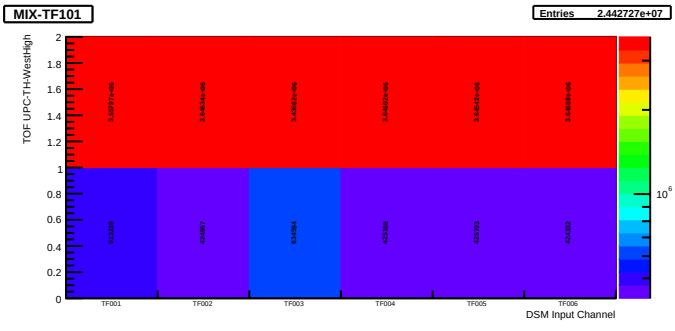

MIX-TF006
Entries 8.549546e+07
TOF MULT
TOF tray

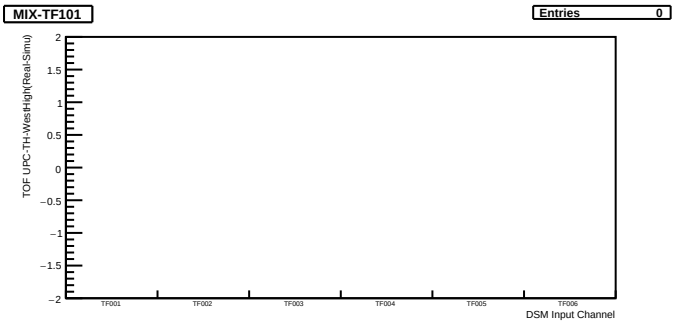

MIX-TF101
Entries 2.442727e+07
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

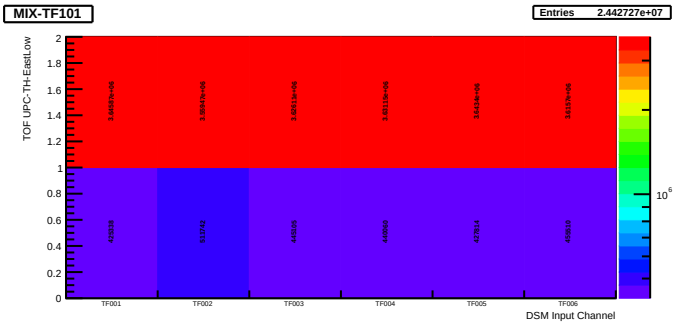

MIX-TF101
Entries 3945903
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

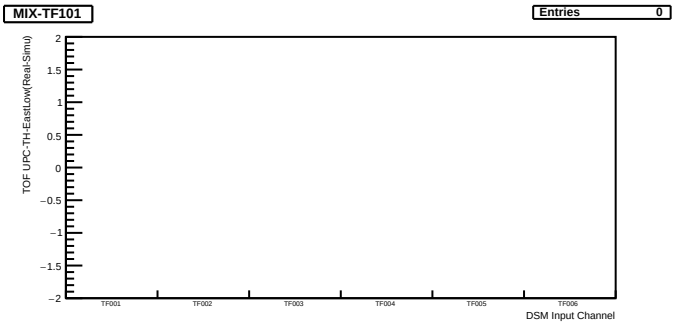

MIX-TF101
Entries 2.442727e+07
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

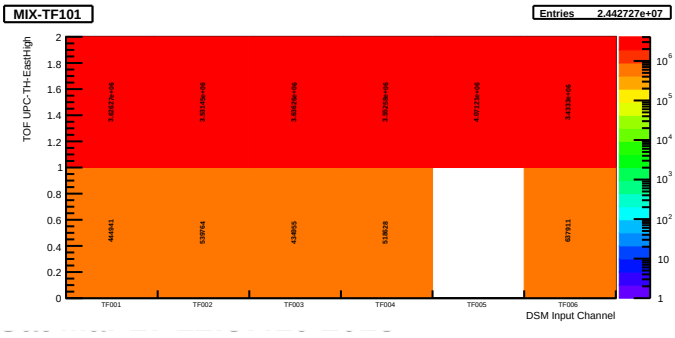

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

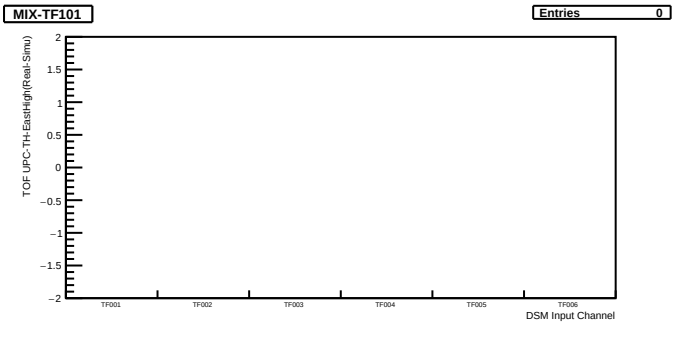

MIX-TF101
Entries 2.442727e+07
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

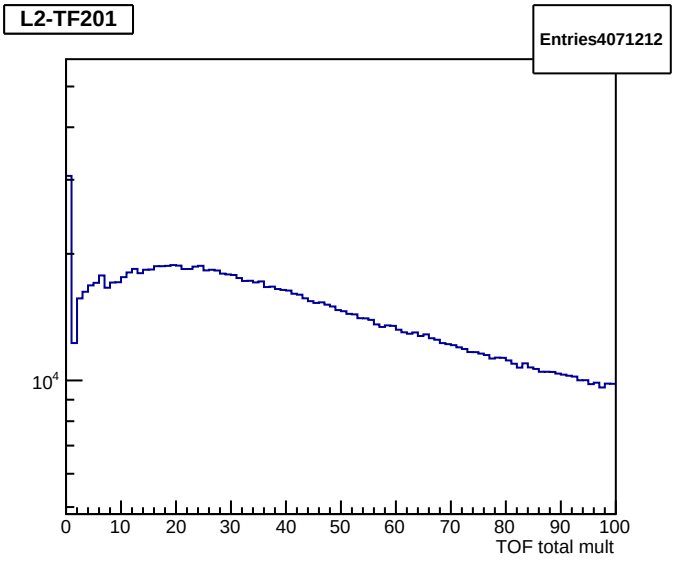

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

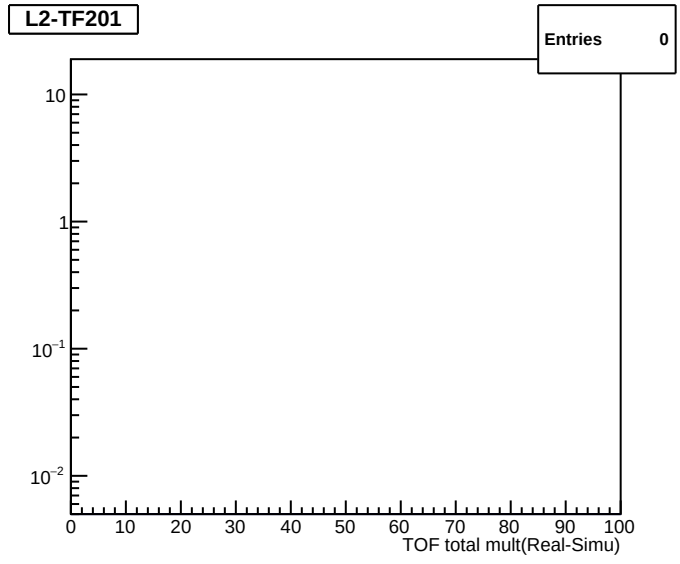

MIX-TF101
Entries 2.442727e+07
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

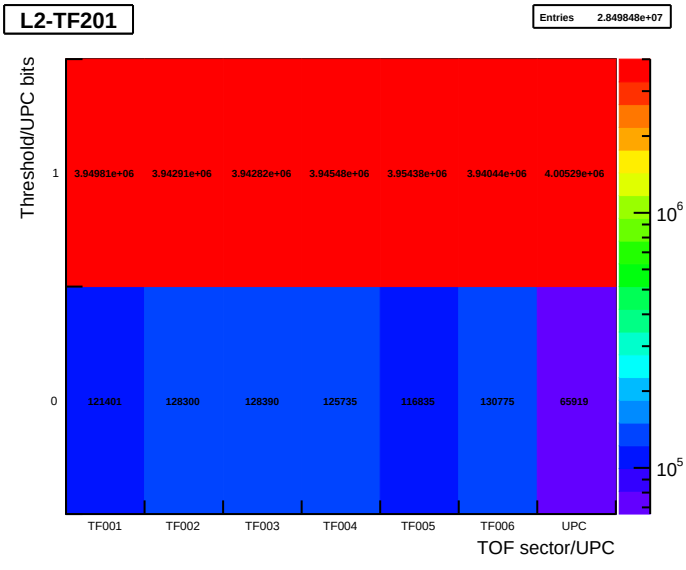

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

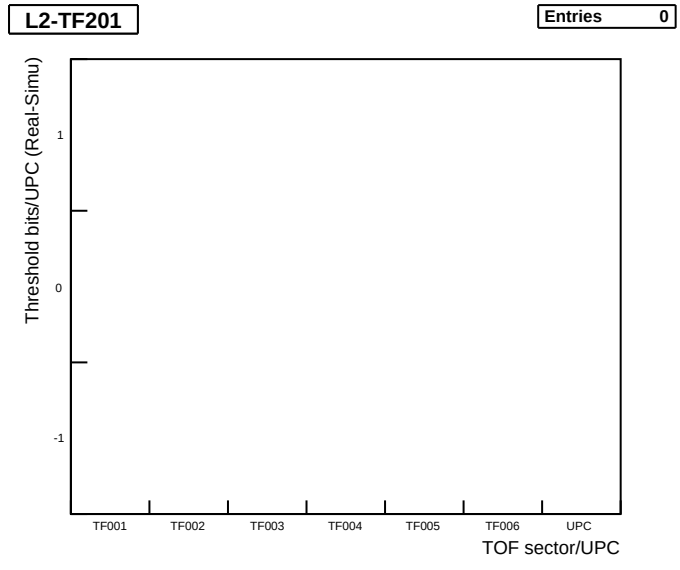

MIX-TF101
Entries 2.442727e+07
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

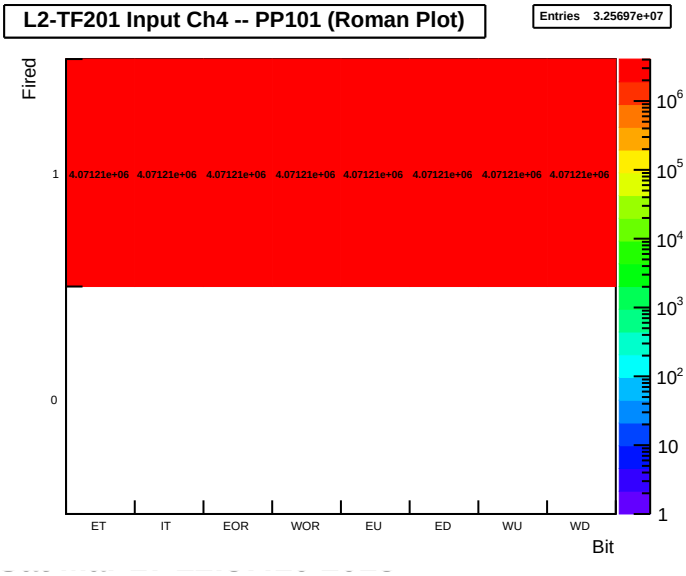

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

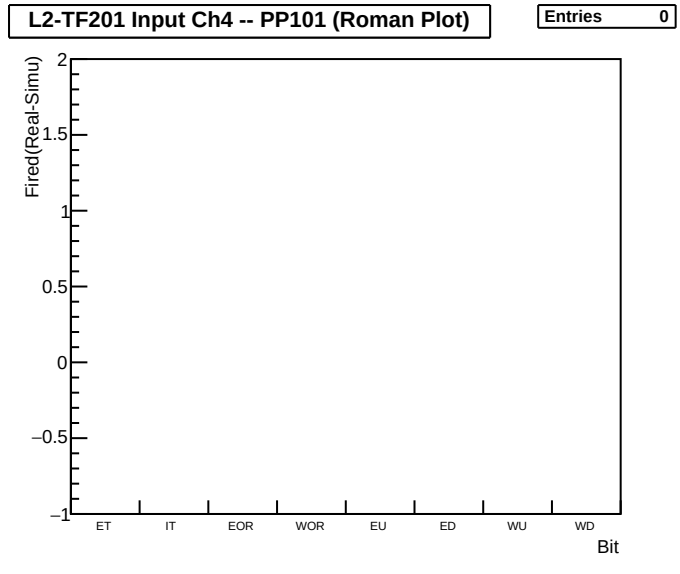

L2-TF201
Entries4071212
10^4
0 10 20 30 40 50 60 70 80 90 100
TOF total mult

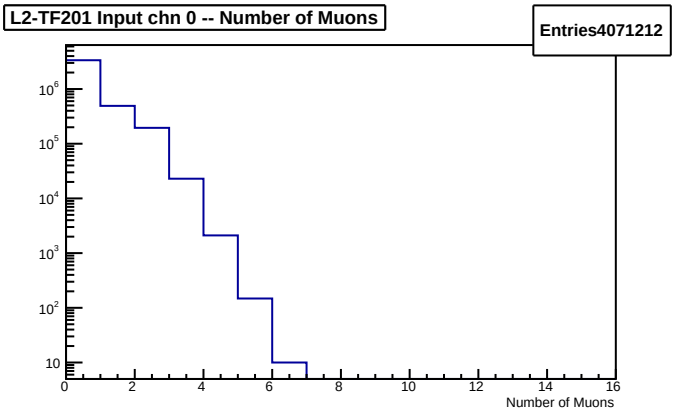

L2-TF201
Entries 0
10
1
10^{-1}
10^{-2}
0 10 20 30 40 50 60 70 80 90 100
TOF total mult(Real-Simu)

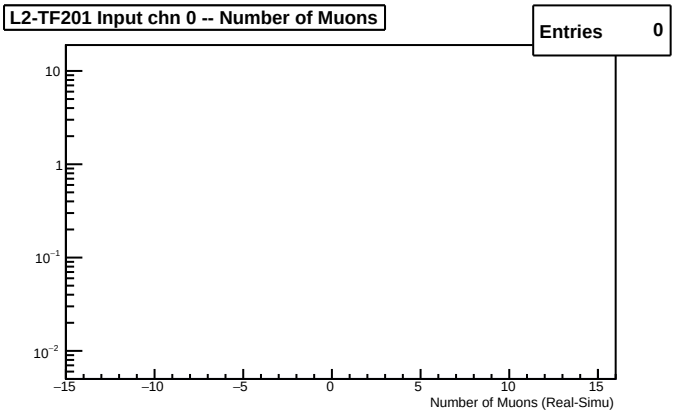

L2-TF201
Entries 2.849848e+07
Threshold/UPC bits
1
0
3.94981e+06 3.94291e+06 3.94282e+06 3.94548e+06 3.95438e+06 3.94044e+06 4.00529e+06
121401 128300 128390 125735 116835 130775 65919
10^6
10^5
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

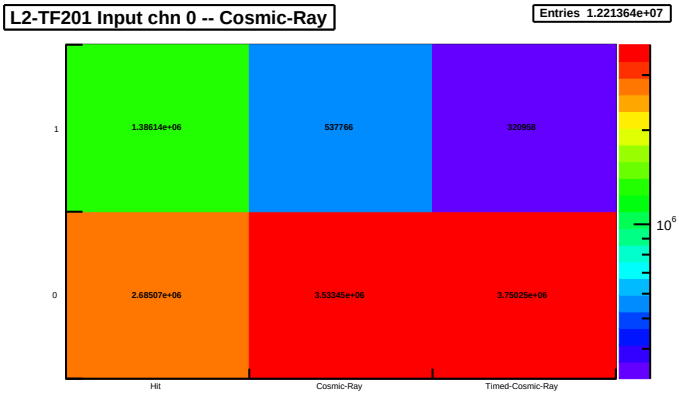

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
1
0
-1
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

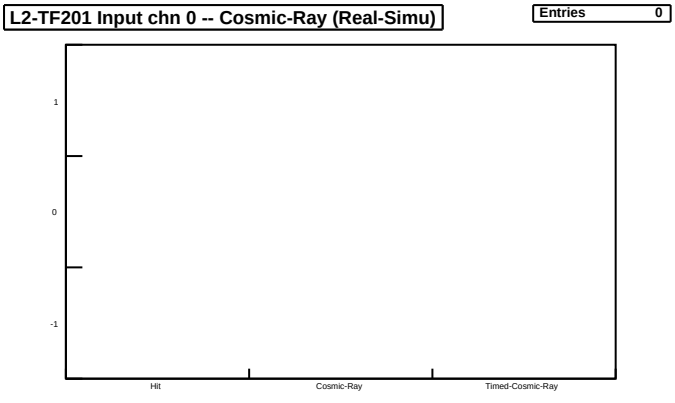

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 3.25697e+07
Fired
1
0
4.07121e+06 4.07121e+06 4.07121e+06 4.07121e+06 4.07121e+06 4.07121e+06 4.07121e+06 4.07121e+06
10^6
10^5
10^4
10^3
10^2
10
1
ET IT EOR WOR EU ED WU WD
Bit

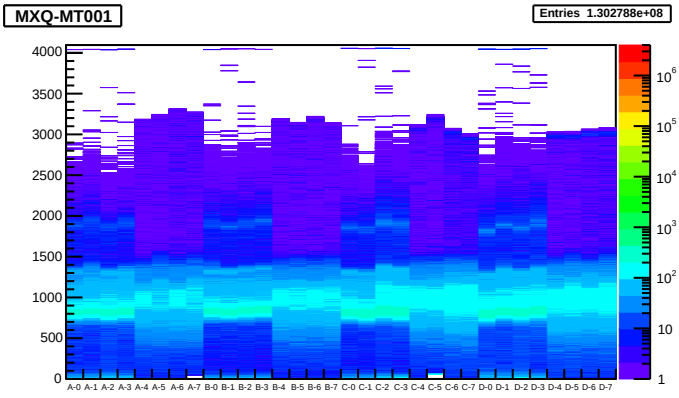

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 0
Fired(Real-Simu)
2
1.5
1
0.5
0
−0.5
−1
ET IT EOR WOR EU ED WU WD
Bit

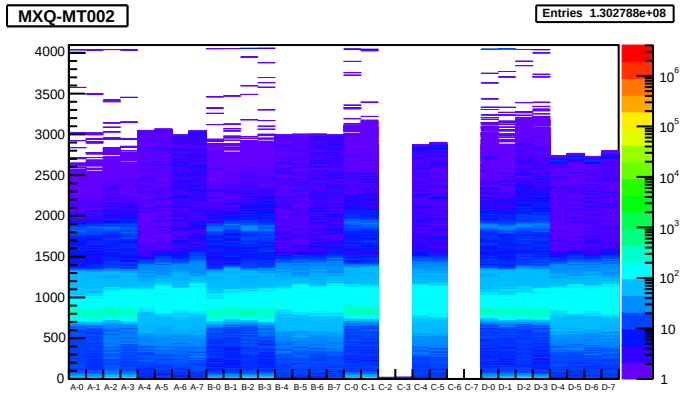

L2-TF201 Input chn 0 -- Number of Muons
Entries4071212
Number of Muons

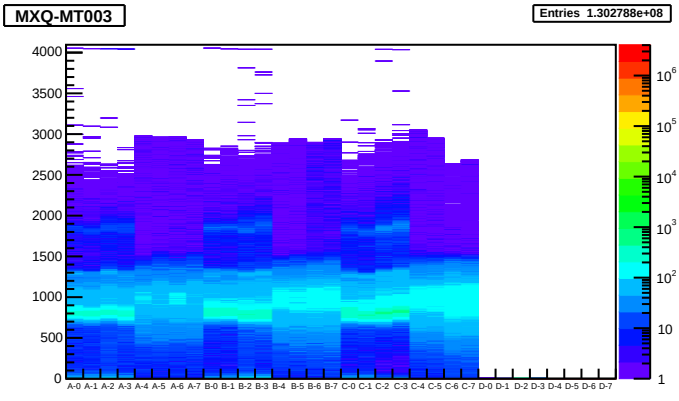

L2-TF201 Input chn 0 -- Number of Muons
Entries 0
Number of Muons (Real-Simu)

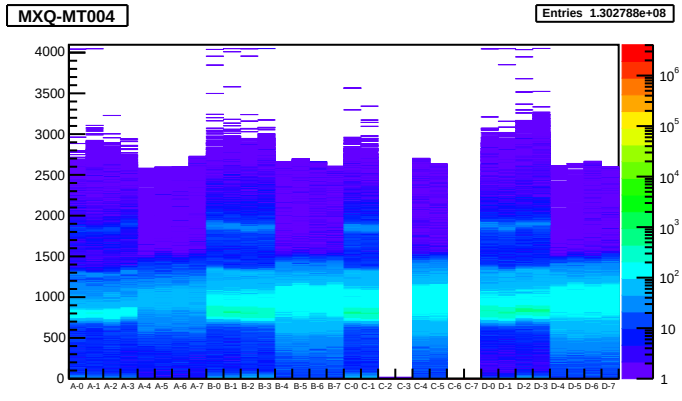

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 1.221364e+07
1.38614e+06
537766
320958
2.68507e+06
3.53345e+06
3.75025e+06
Hit
Cosmic-Ray
Timed-Cosmic-Ray

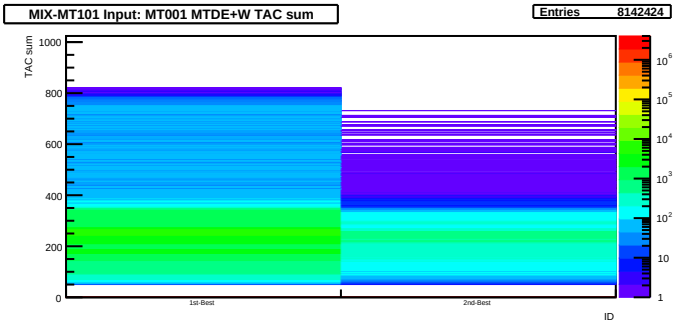

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 0
Hit
Cosmic-Ray
Timed-Cosmic-Ray

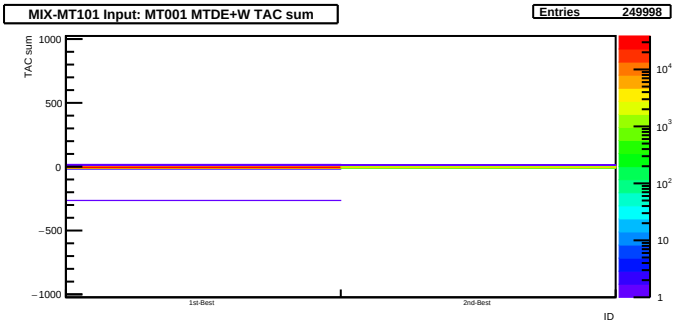

MXQ-MT001
Entries 1.302788e+08

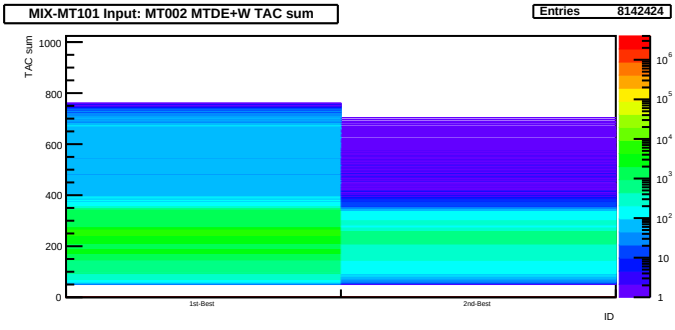

MXQ-MT002
Entries 1.302788e+08

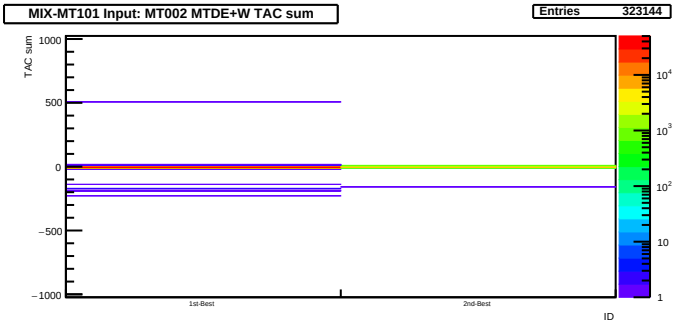

MXQ-MT003
Entries 1.302788e+08

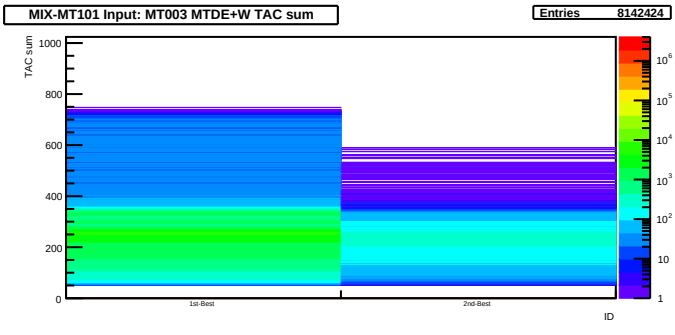

MXQ-MT004
Entries 1.302788e+08

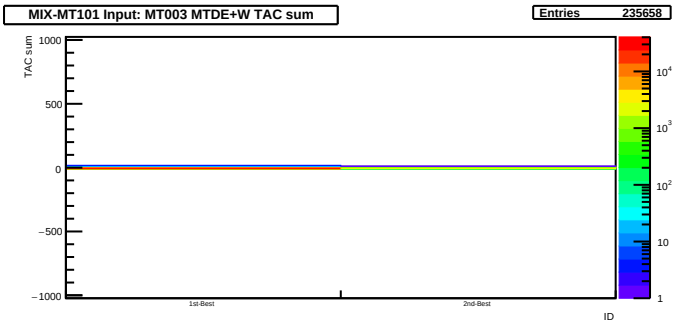

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 8142424
TAC sum
1st-Best
2nd-Best
ID

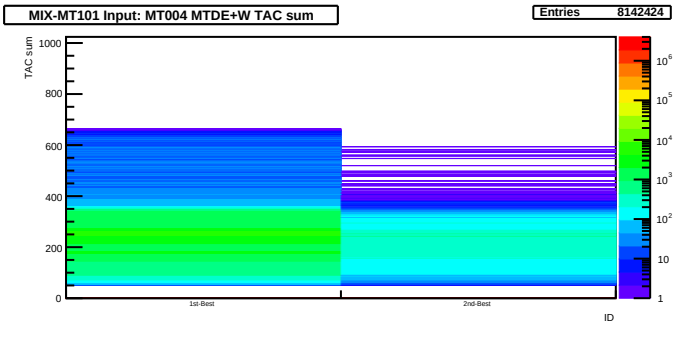

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 249998
TAC sum
1st-Best
2nd-Best
ID

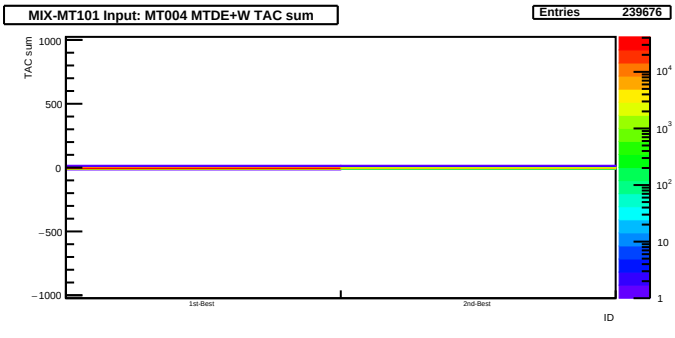

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 8142424
TAC sum
1st-Best
2nd-Best
ID

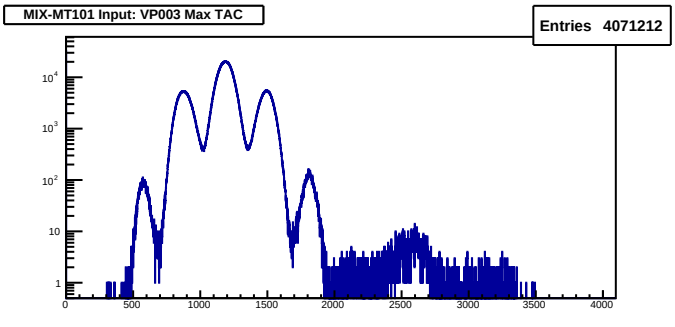

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 323144
TAC sum
1st-Best
2nd-Best
ID

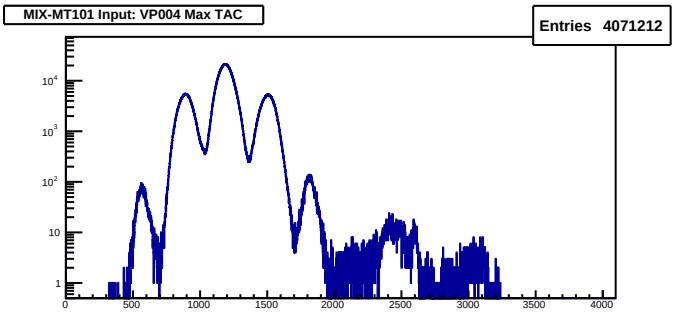

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 8142424
TAC sum
1st-Best
2nd-Best
ID

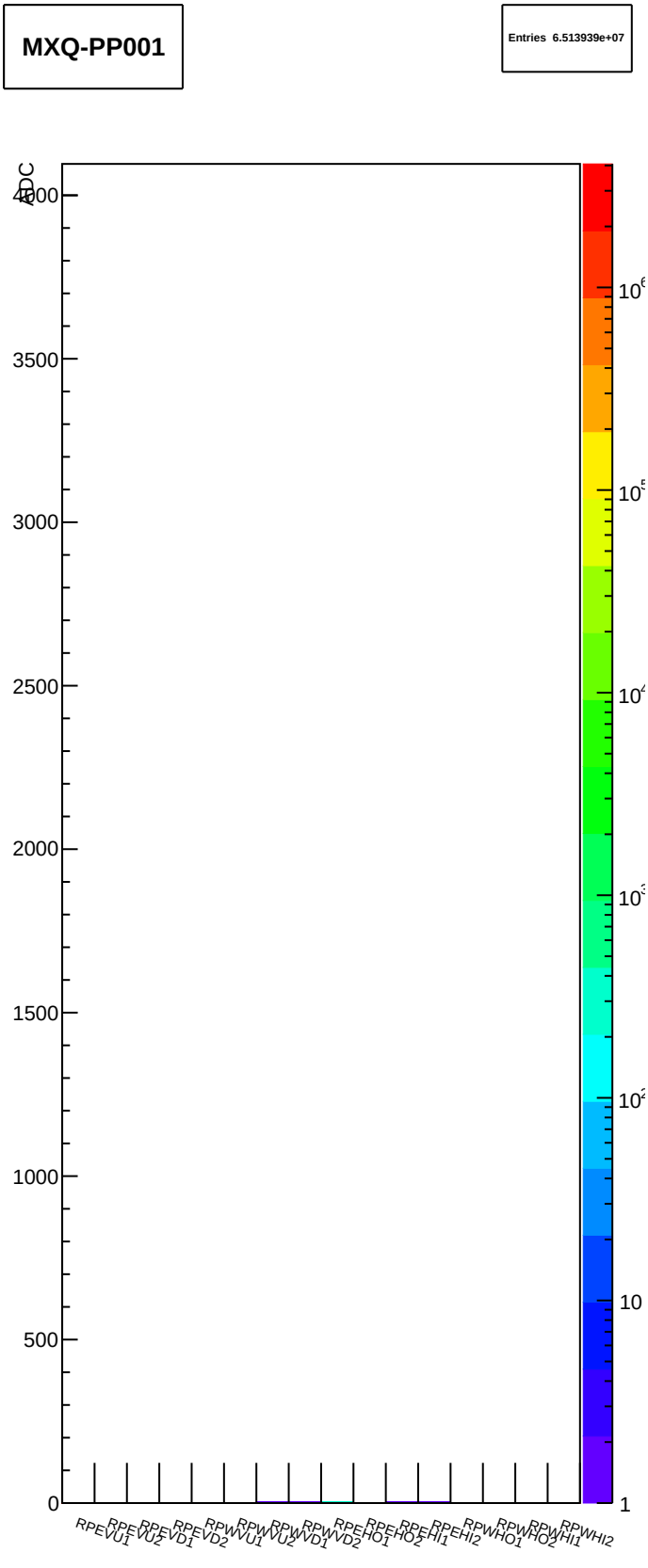

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 235658
TAC sum
1st-Best
2nd-Best
ID

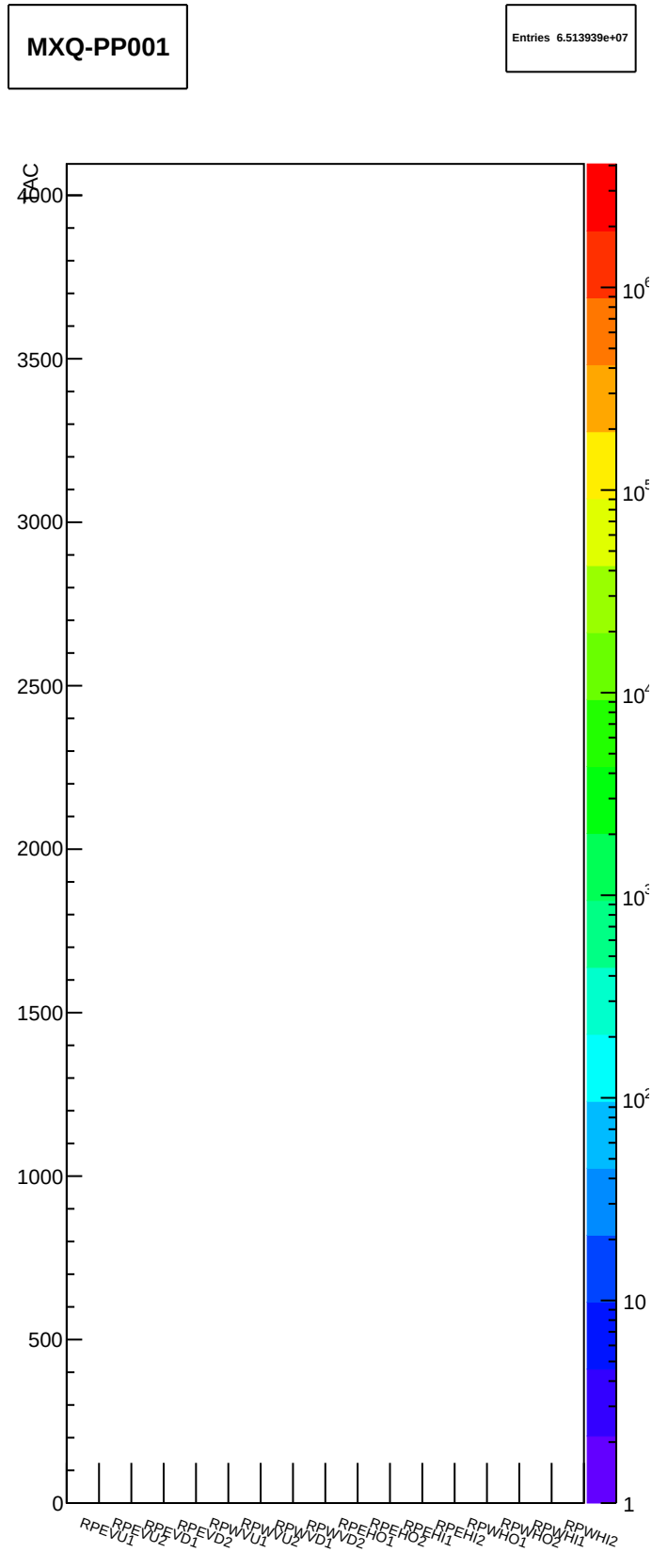

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 8142424
TAC sum
1st-Best
2nd-Best
ID

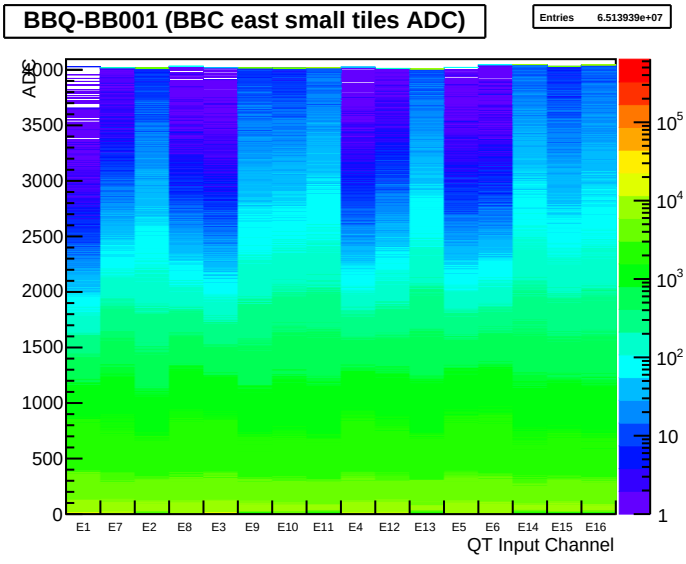

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 239676
TAC sum
1st-Best
2nd-Best
ID

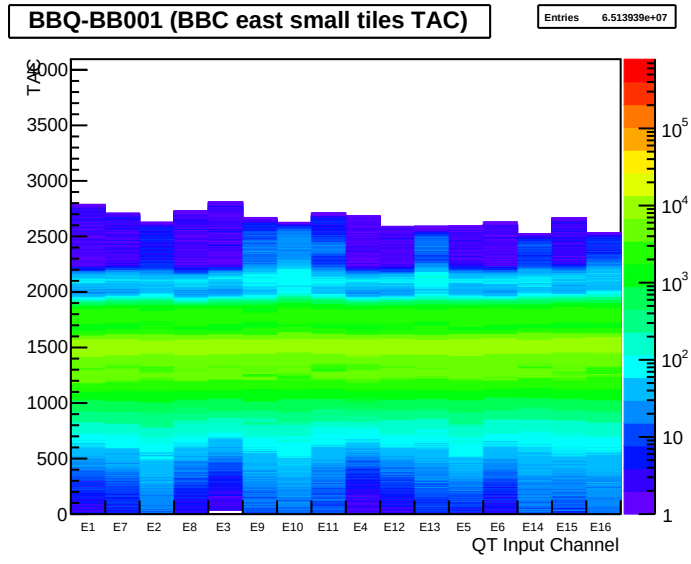

MIX-MT101 Input: VP003 Max TAC
Entries 4071212

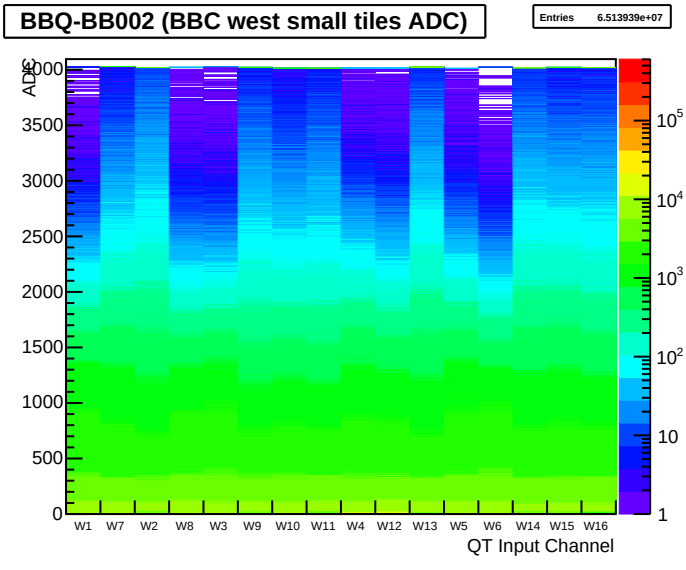

MIX-MT101 Input: VP004 Max TAC
Entries 4071212

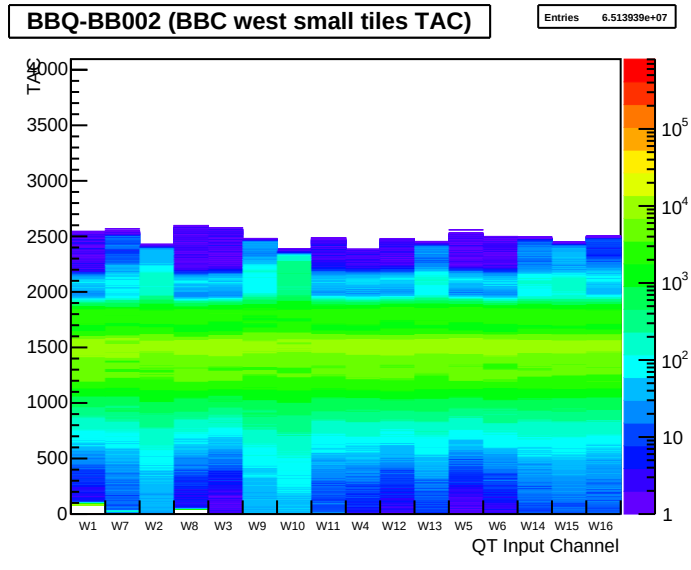

MXQ-PP001
Entries 6.513939e+07
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
1
10

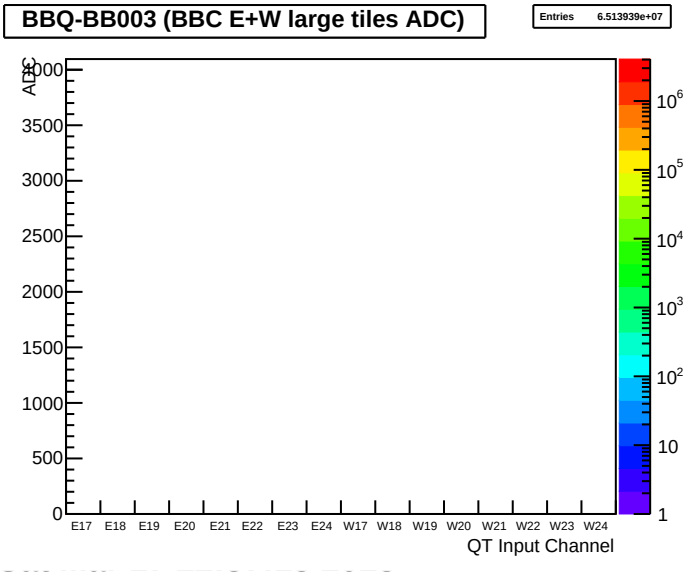

MXQ-PP001
Entries 6.513939e+07
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
1
10

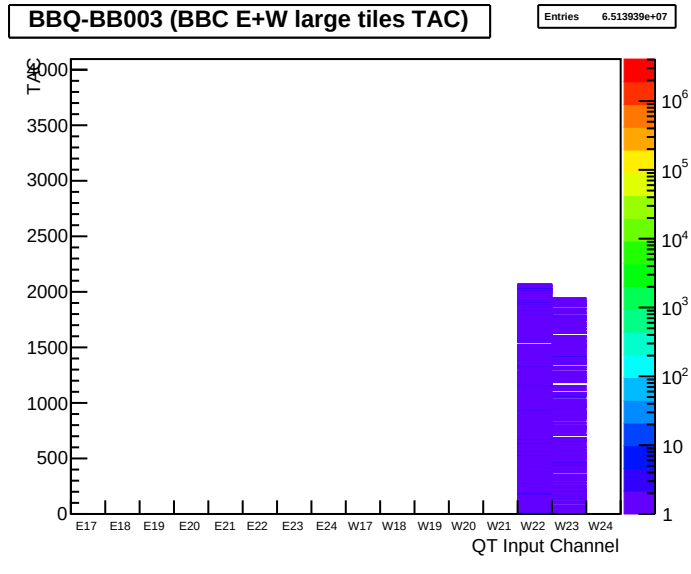

BBQ-BB001 (BBC east small tiles ADC)
Entries 6.513939e+07
ADC
QT Input Channel

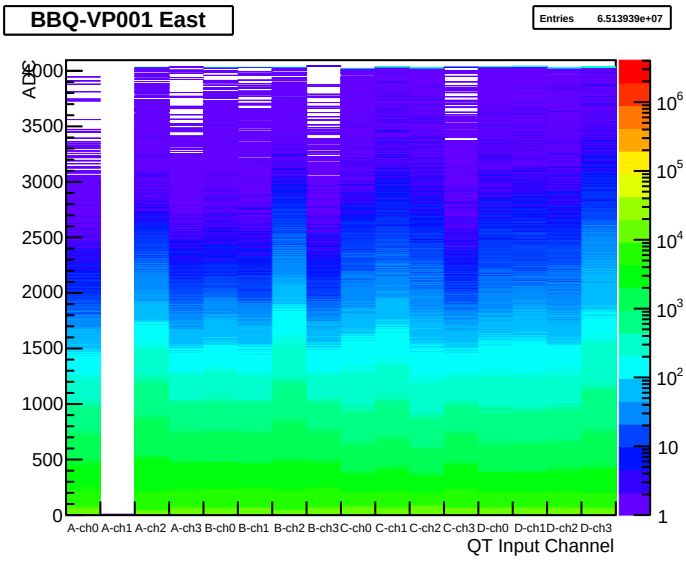

BBQ-BB001 (BBC east small tiles TAC)
Entries 6.513939e+07
TAC
QT Input Channel

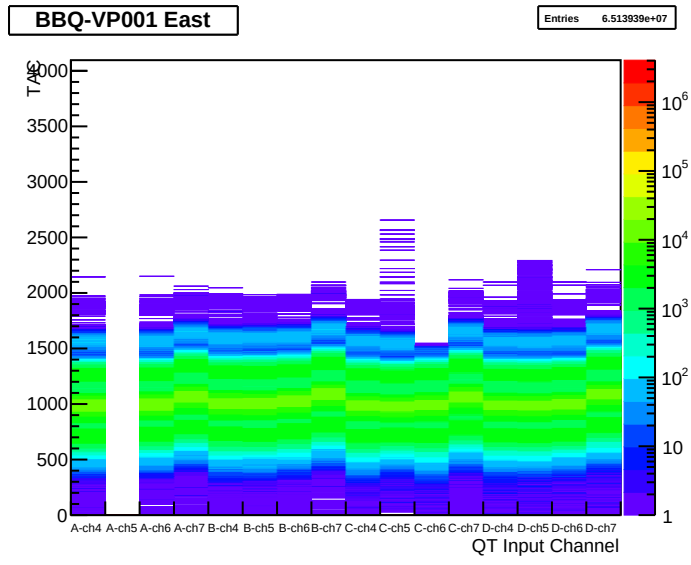

BBQ-BB002 (BBC west small tiles ADC)
Entries 6.513939e+07
ADC
QT Input Channel

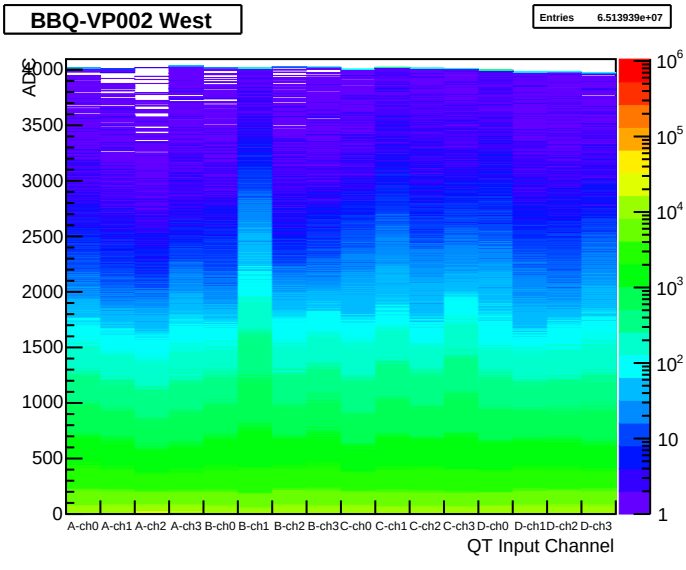

BBQ-BB002 (BBC west small tiles TAC)
Entries 6.513939e+07
TAC
QT Input Channel

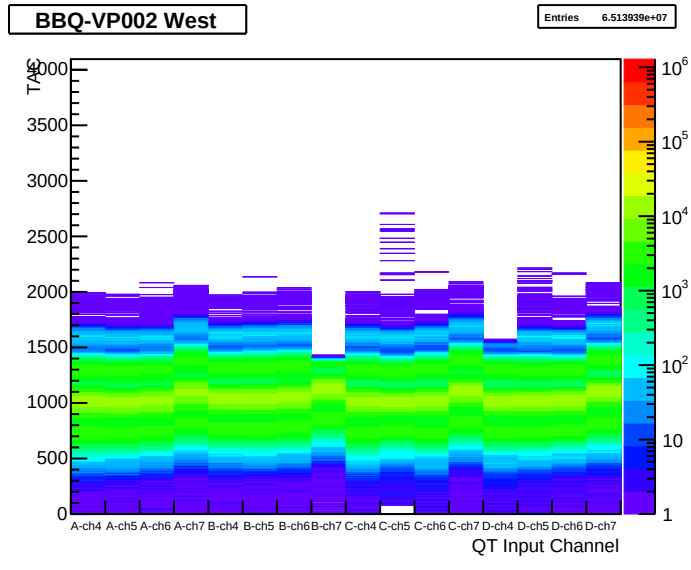

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 6.513939e+07
ADC
QT Input Channel

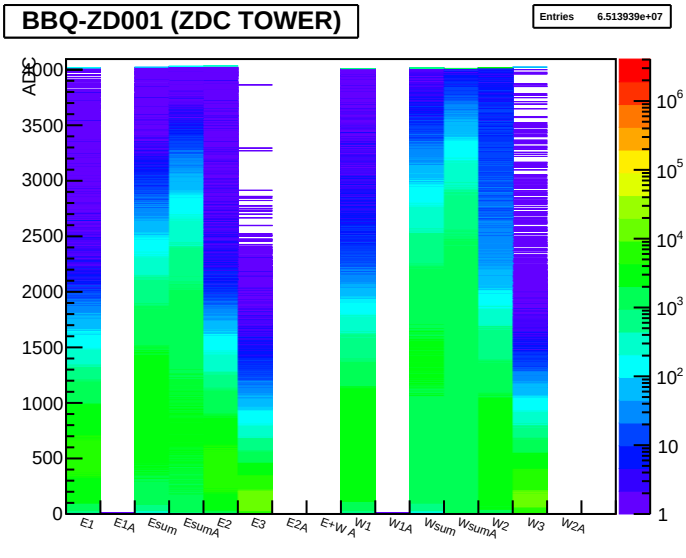

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 6.513939e+07
TAC
QT Input Channel

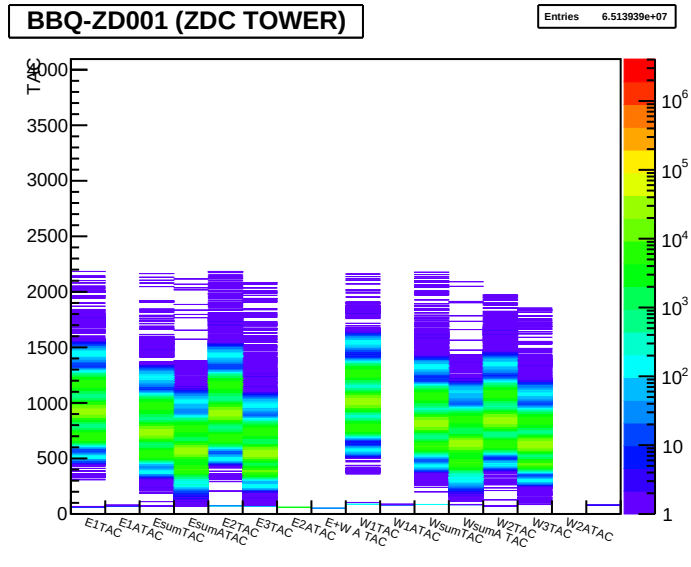

BBQ-VP001 East
Entries 6.513939e+07
ADC
QT Input Channel

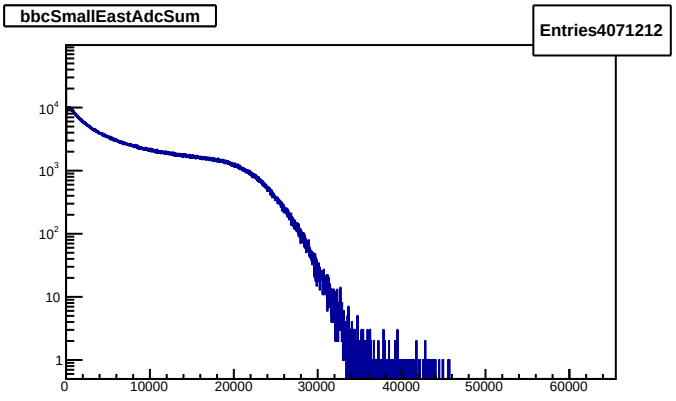

BBQ-VP001 East
Entries 6.513939e+07
TAC
QT Input Channel

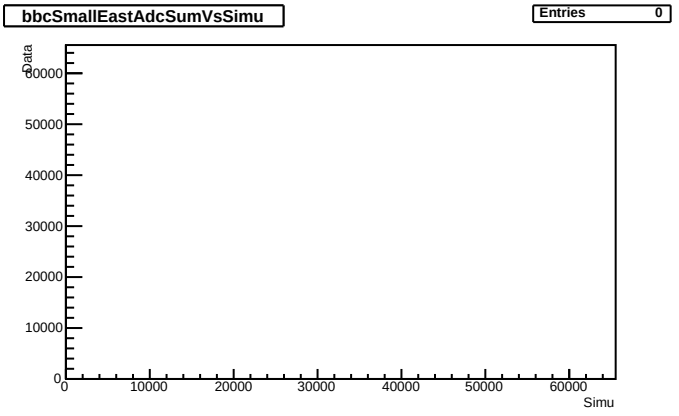

BBQ-VP002 West
Entries 6.513939e+07
ADC
QT Input Channel

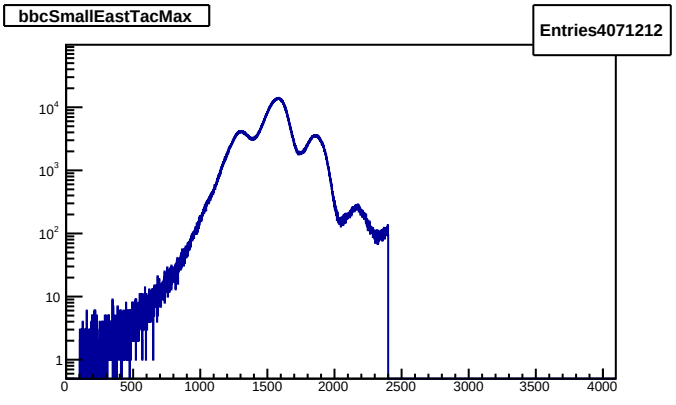

BBQ-VP002 West
Entries 6.513939e+07
TAC
QT Input Channel

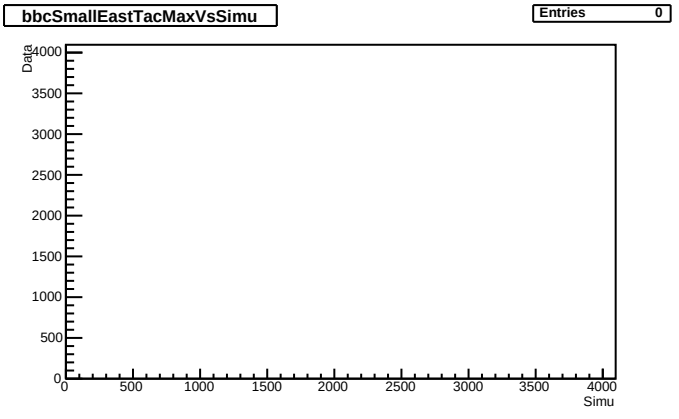

BBQ-ZD001 (ZDC TOWER)
Entries 6.513939e+07
ADC

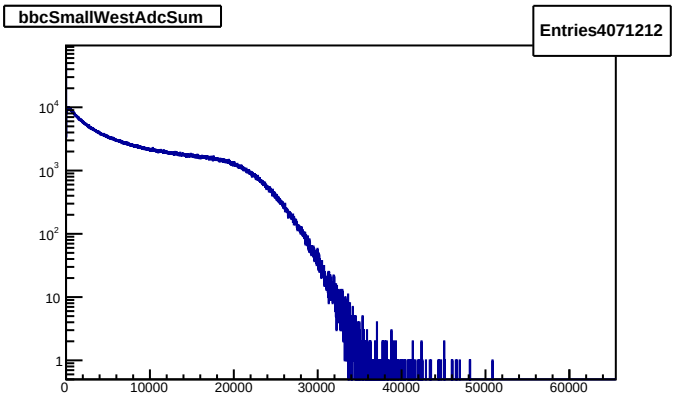

BBQ-ZD001 (ZDC TOWER)
Entries 6.513939e+07
TAC

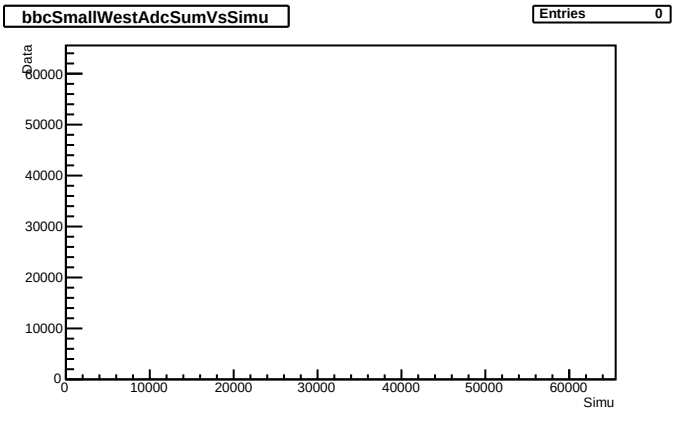

bbcSmallEastAdcSum
Entries4071212

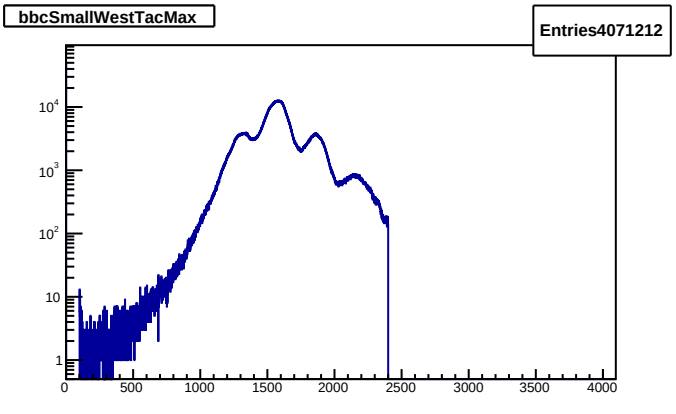

bbcSmallEastAdcSumVsSimu
Entries 0
Data
Simu

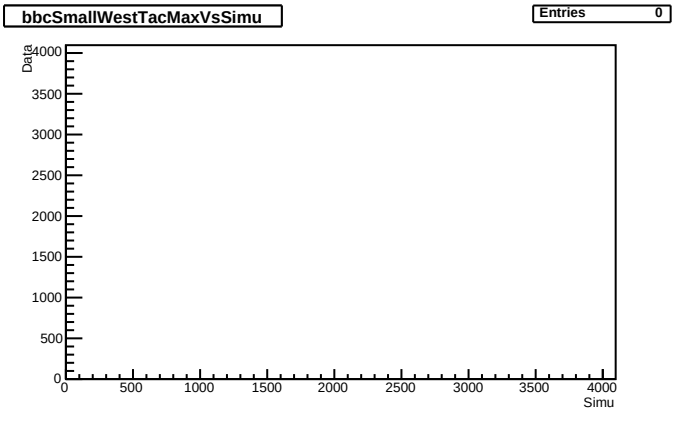

bbcSmallEastTacMax
Entries4071212

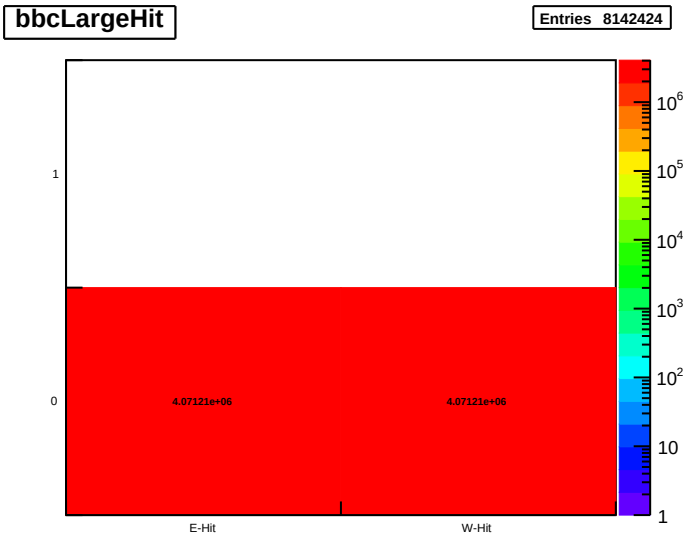

bbcSmallEastTacMaxVsSimu
Entries 0
Data
Simu

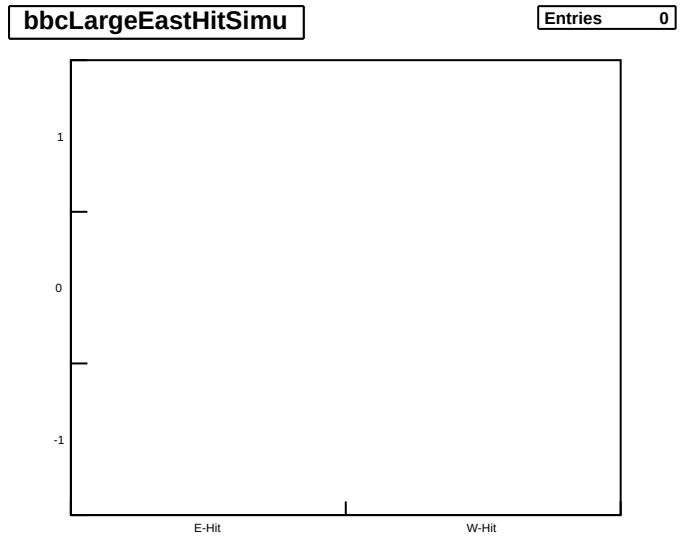

bbcSmallWestAdcSum
Entries4071212

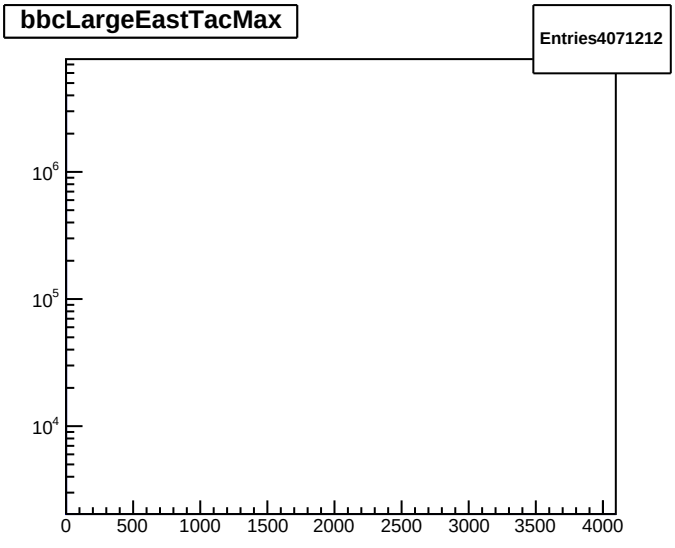

bbcSmallWestAdcSumVsSimu
Entries 0
Data
Simu

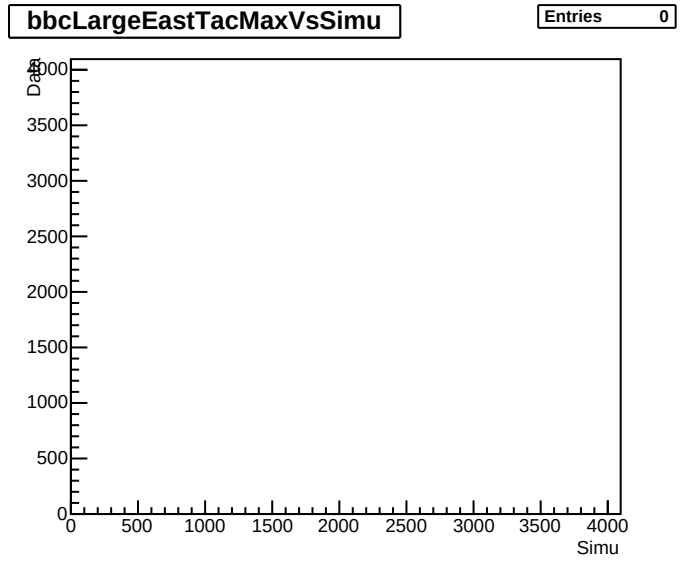

bbcSmallWestTacMax
Entries4071212

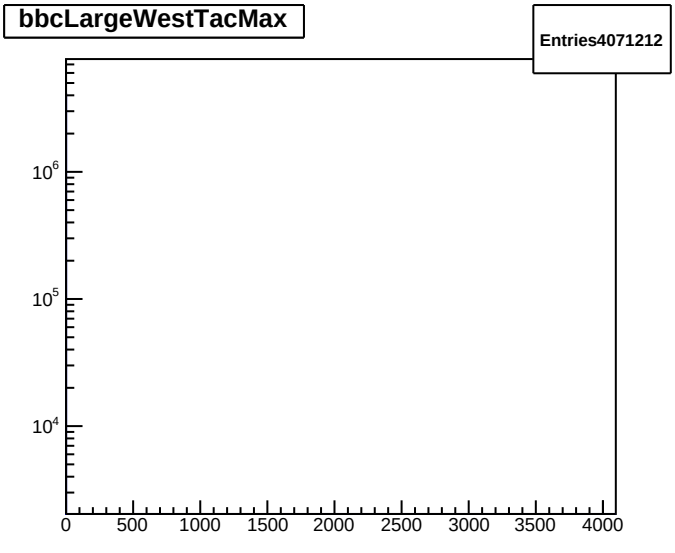

bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu

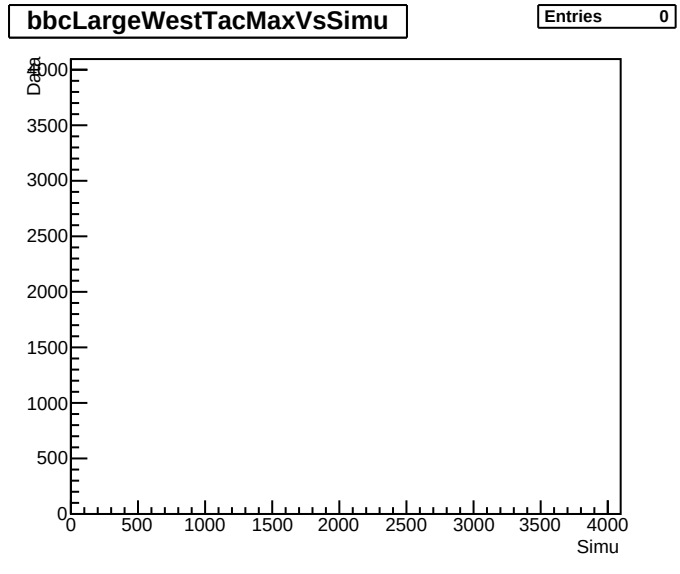

bbcLargeHit
Entries 8142424
4.07121e+06
4.07121e+06
E-Hit
W-Hit

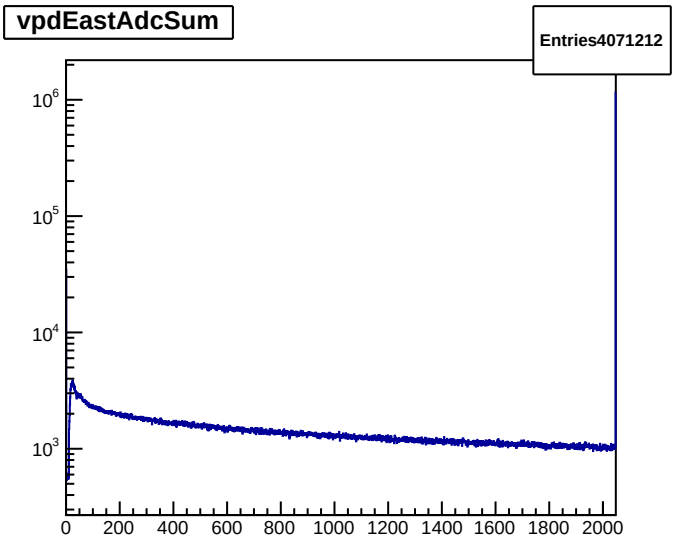

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

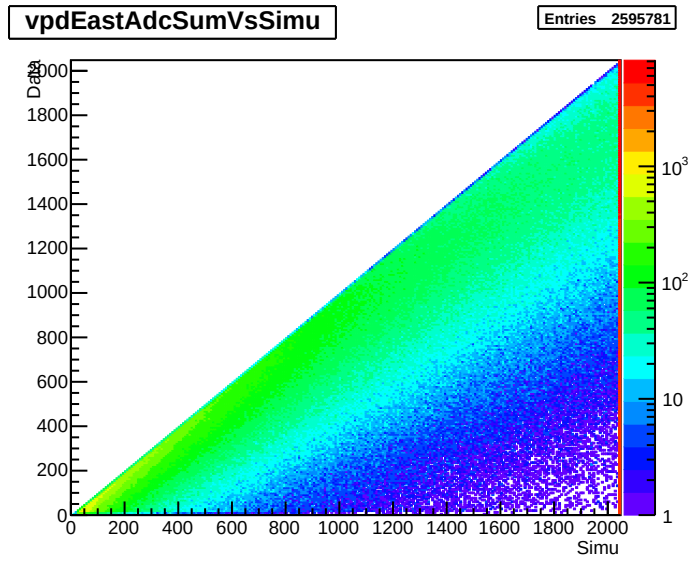

bbcLargeEastTacMax
Entries4071212

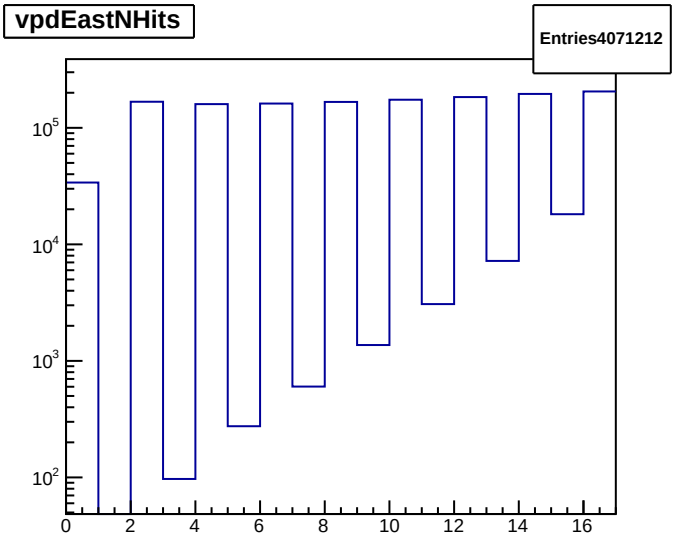

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

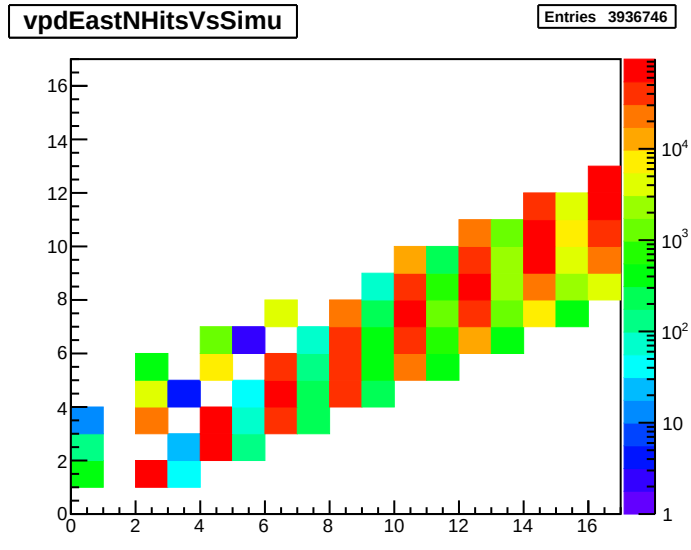

bbcLargeWestTacMax
Entries4071212

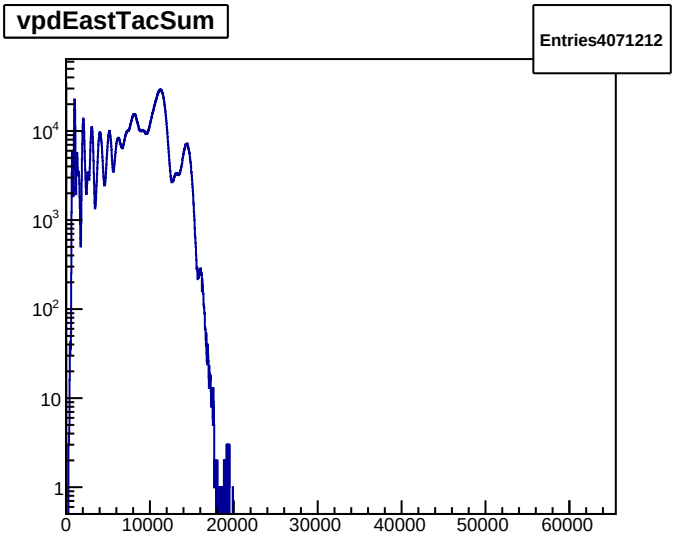

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

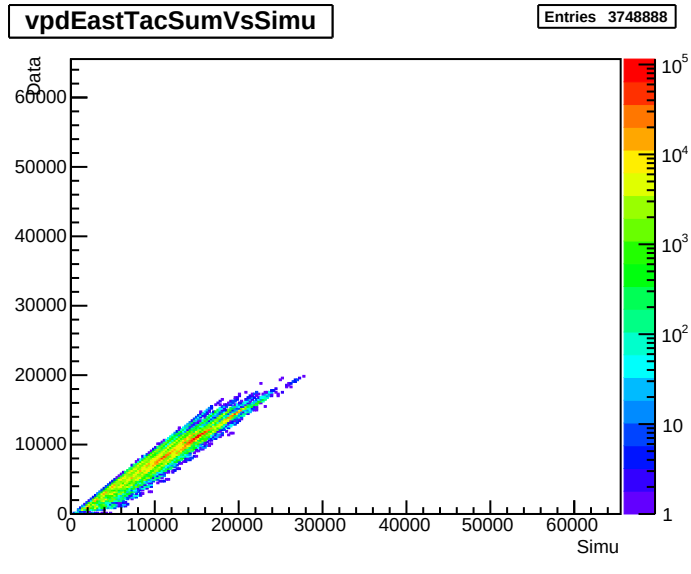

vpdEastAdcSum
Entries4071212

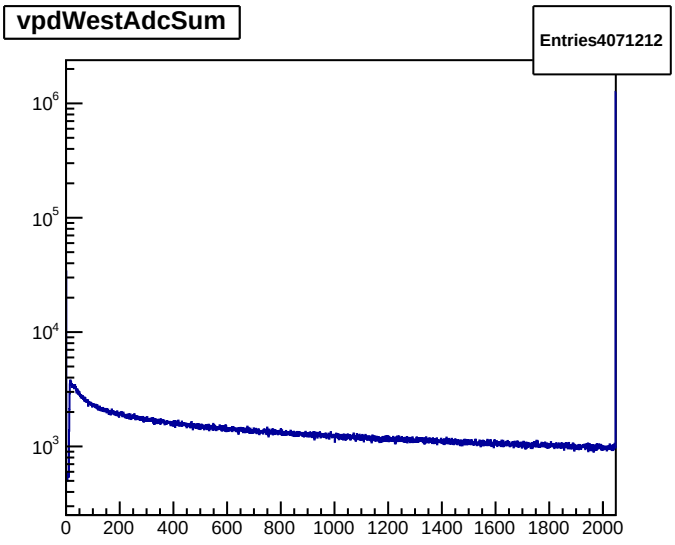

vpdEastAdcSumVsSimu
Entries 2595781
Data
Simu

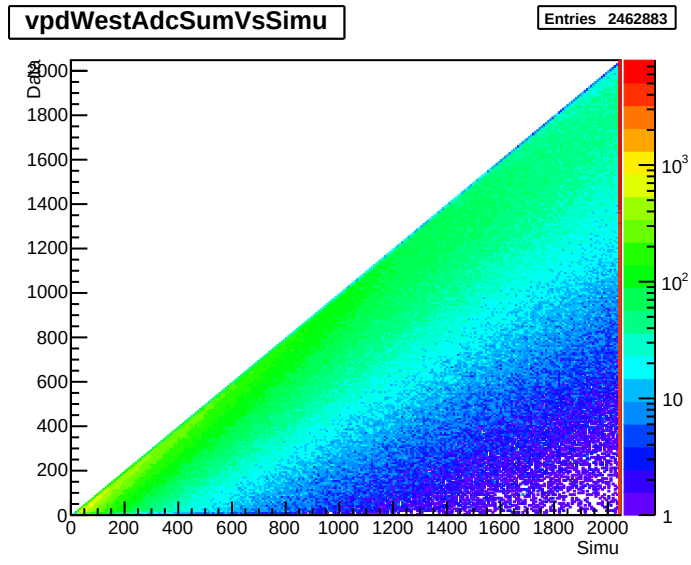

vpdEastNHits
Entries4071212

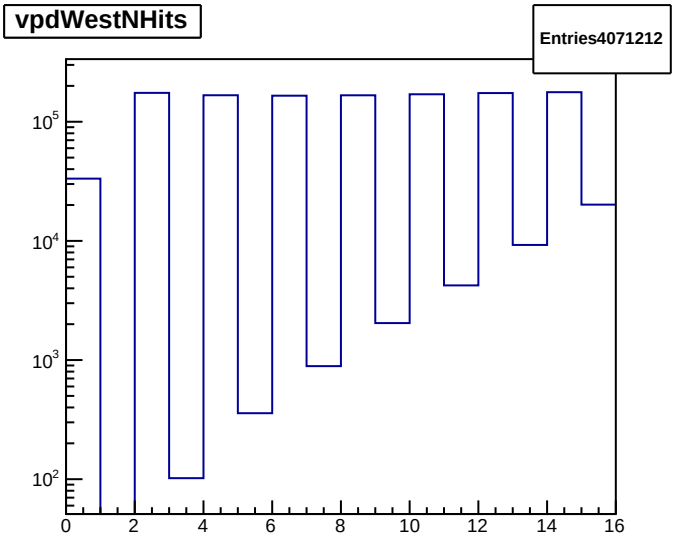

vpdEastNHitsVsSimu
Entries 3936746

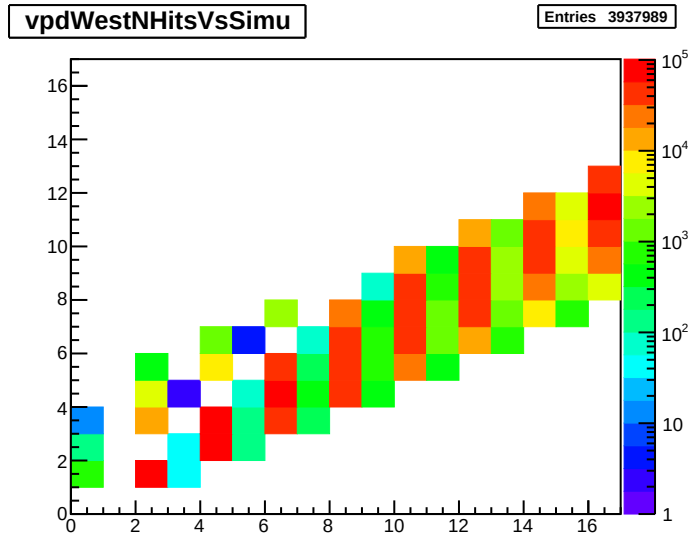

vpdEastTacSum
Entries4071212

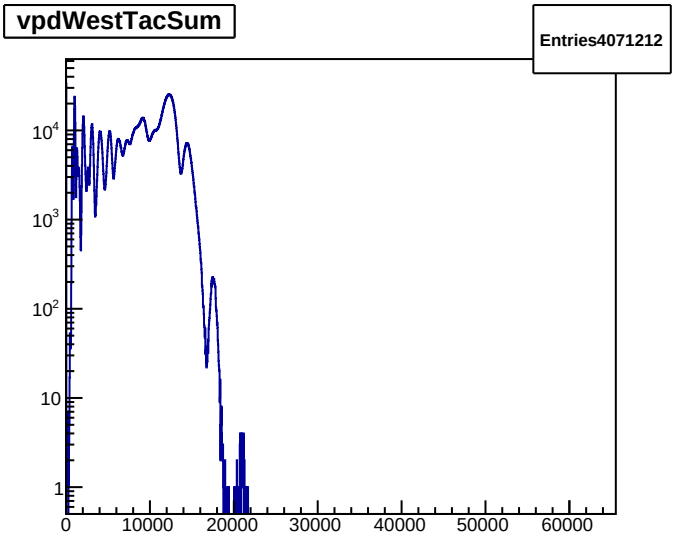

vpdEastTacSumVsSimu
Entries 3748888
Data
Simu

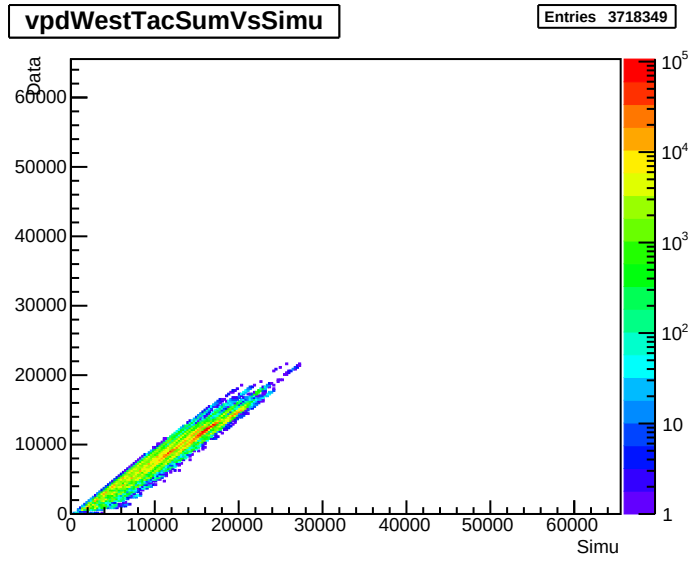

vpdWestAdcSum
Entries4071212

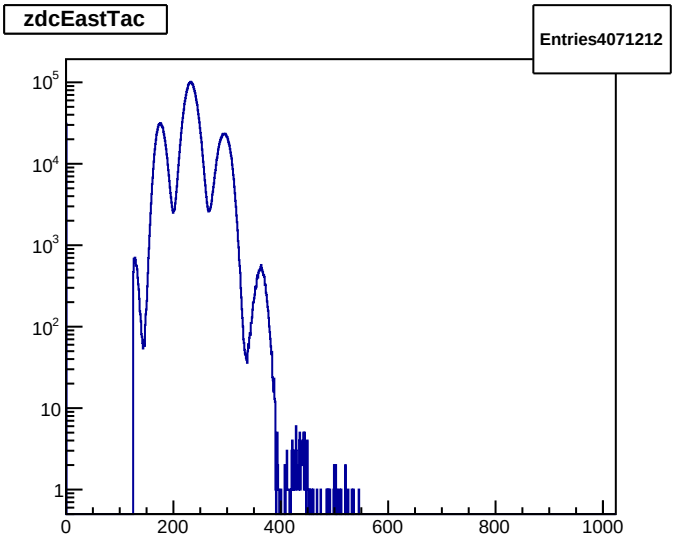

vpdWestAdcSumVsSimu
Entries 2462883
Data
Simu

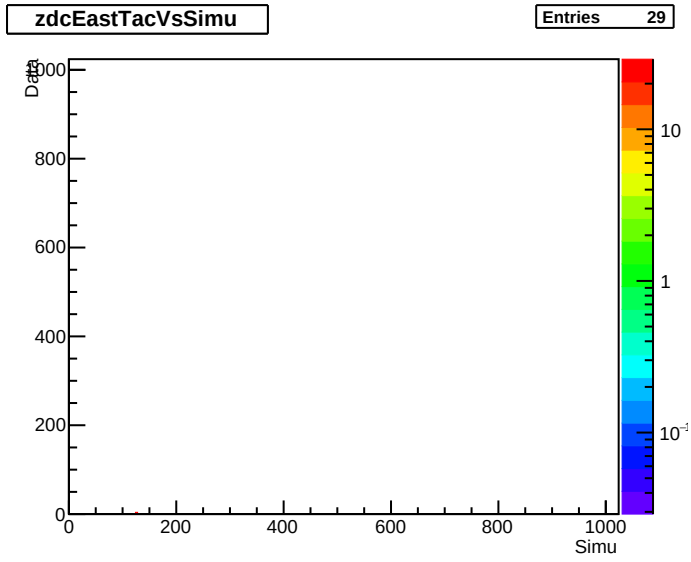

vpdWestNHits
Entries4071212

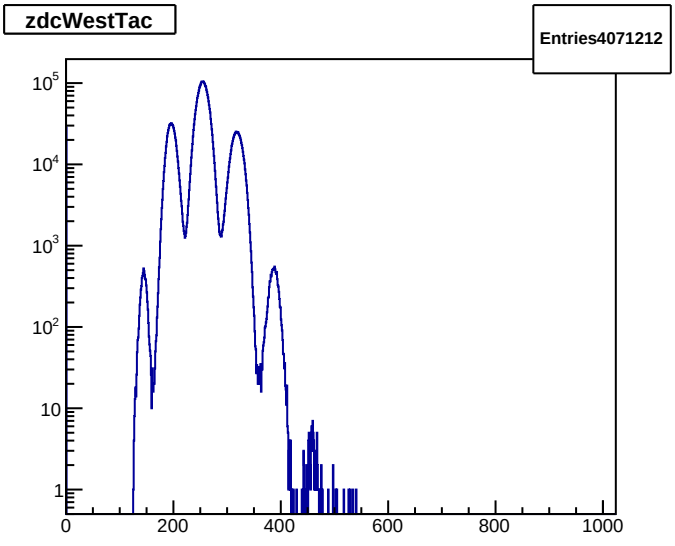

vpdWestNHitsVsSimu
Entries 3937989

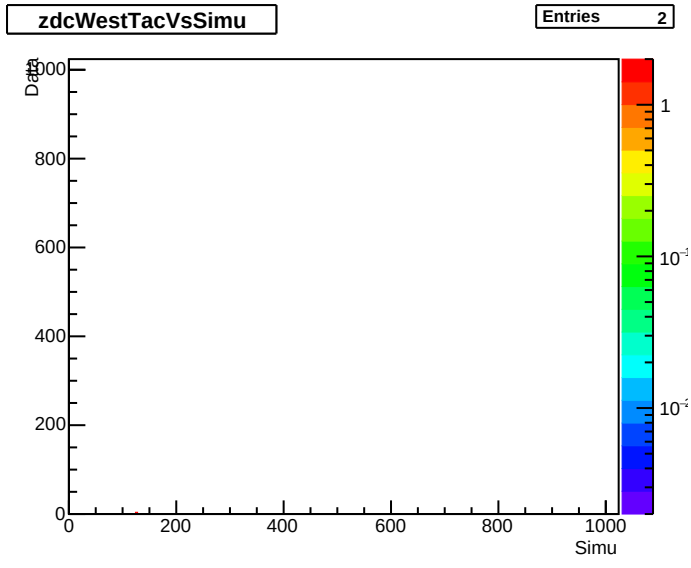

vpdWestTacSum
Entries4071212

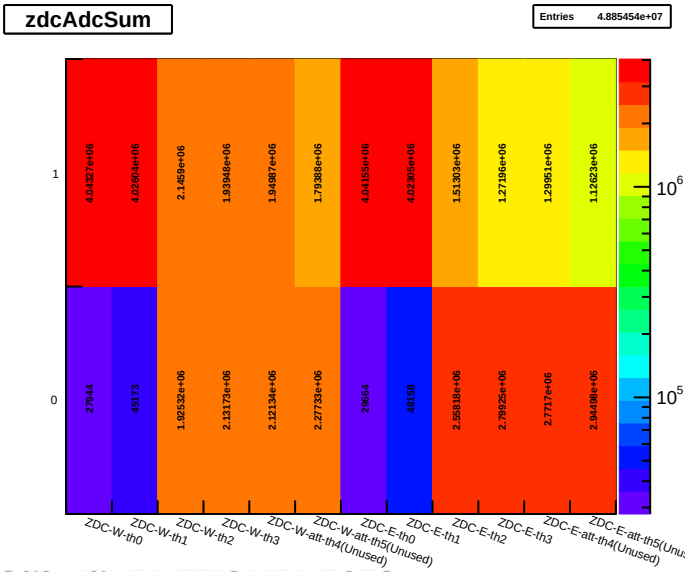

vpdWestTacSumVsSimu
Entries 3718349
Data
Simu

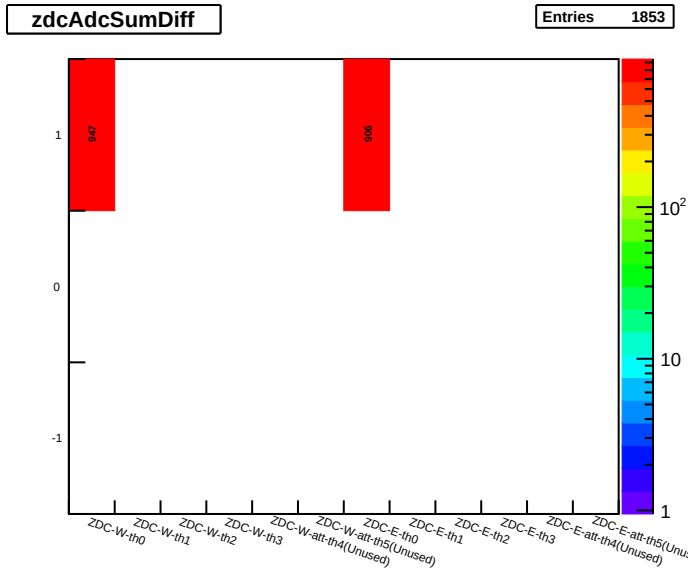

zdcEastTac
Entries4071212

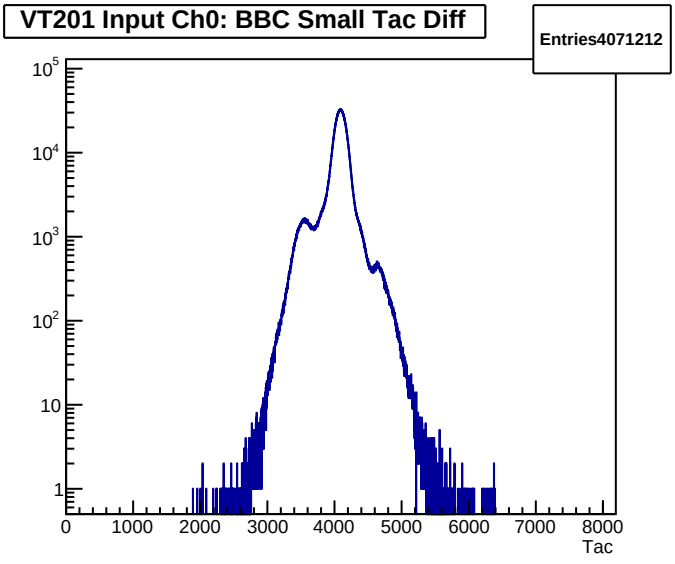

zdcEastTacVsSimu
Entries 29
Data
Simu

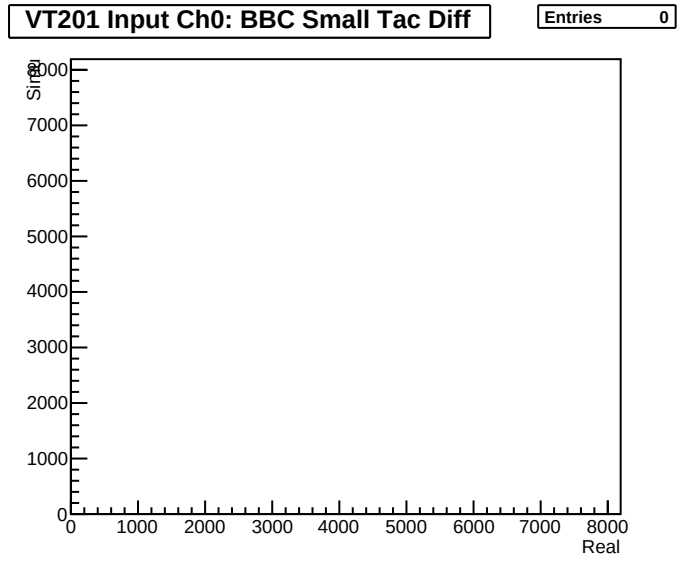

zdcWestTac
Entries4071212

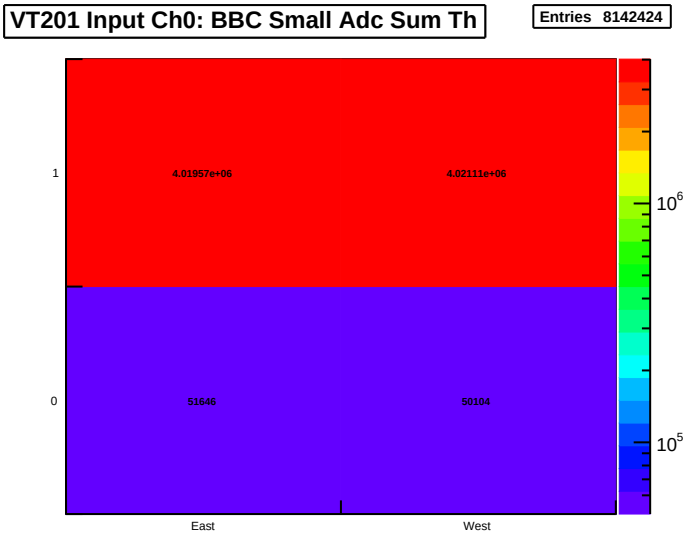

zdcWestTacVsSimu
Entries 2
Data
Simu

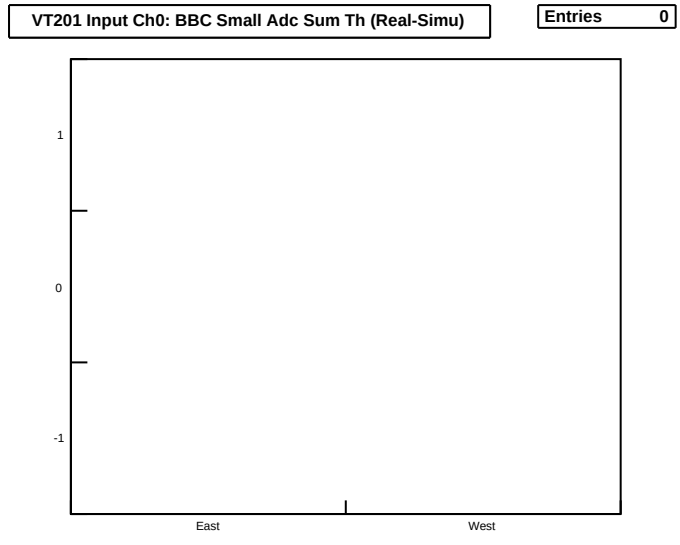

zdcAdcSum
Entries 4.885454e+07
4.04327e+06
4.02604e+06
2.1459e+06
1.93948e+06
1.94987e+06
1.79388e+06
4.04155e+06
4.02385e+06
1.51303e+06
1.27196e+06
1.29951e+06
1.12623e+06
27944
45173
1.92532e+06
2.13172e+06
2.12134e+06
2.27733e+06
29664
48158
2.55818e+06
2.79925e+06
2.7717e+06
2.94498e+06
ZDC-W-th0
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)

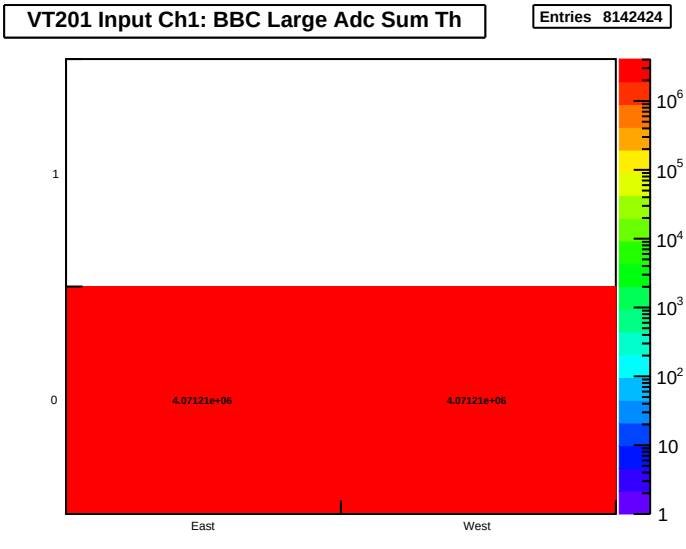

zdcAdcSumDiff
Entries 1853
947
906
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

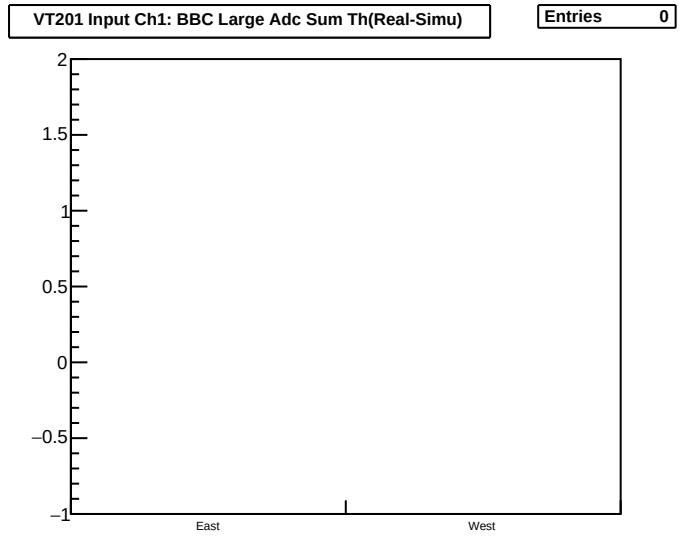

VT201 Input Ch0: BBC Small Tac Diff
Entries4071212
Tac

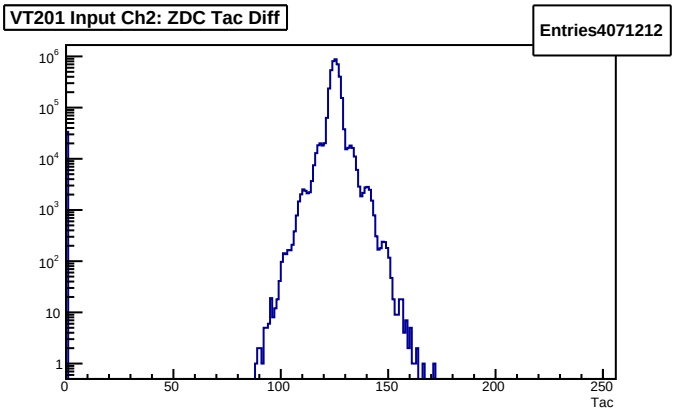

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

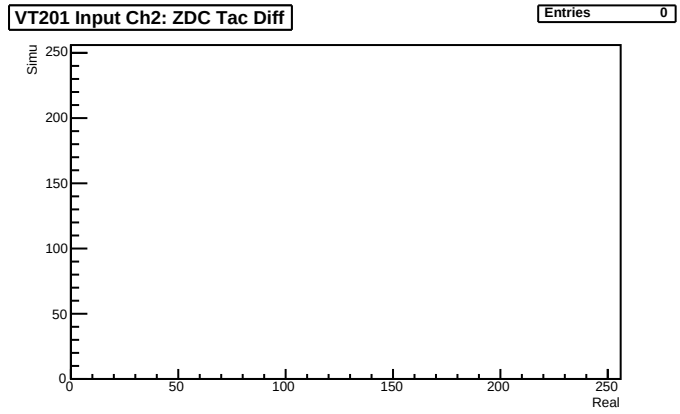

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 8142424
4.01957e+06
4.02111e+06
51646
50104
East
West

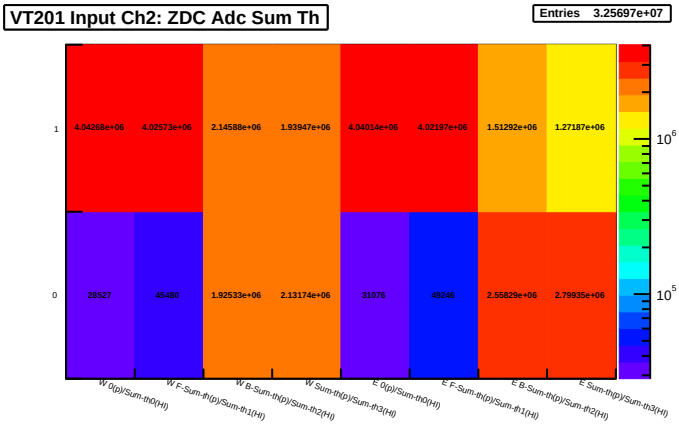

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

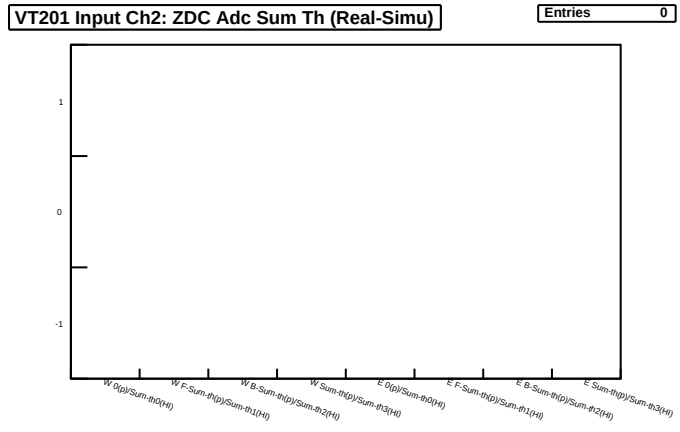

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 8142424
4.07121e+06
4.07121e+06
East
West

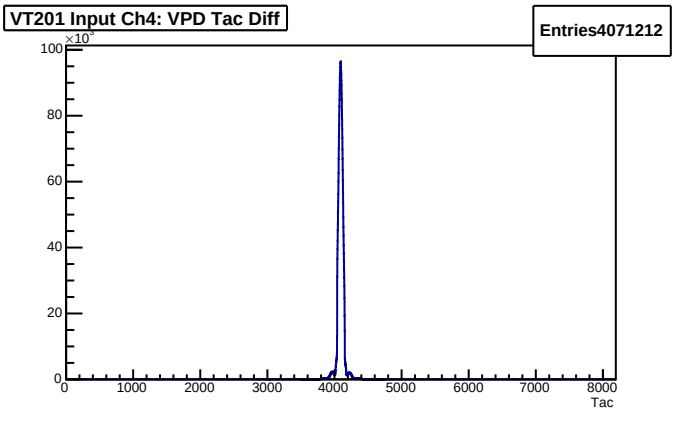

VT201 Input Ch1: BBC Large Adc Sum Th(Real-Simu)
Entries 0
East
West

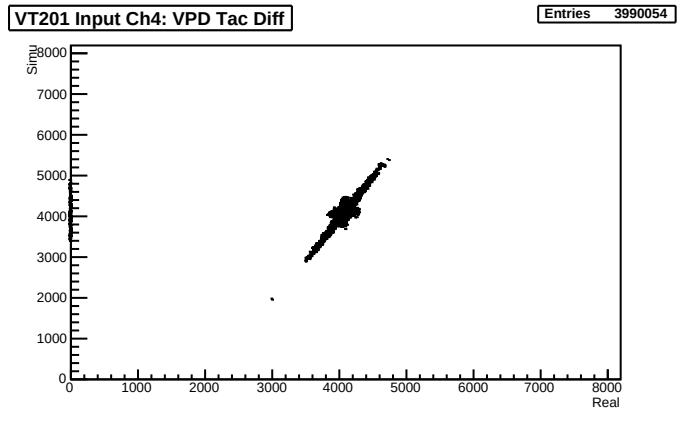

VT201 Input Ch2: ZDC Tac Diff
Entries4071212
Tac

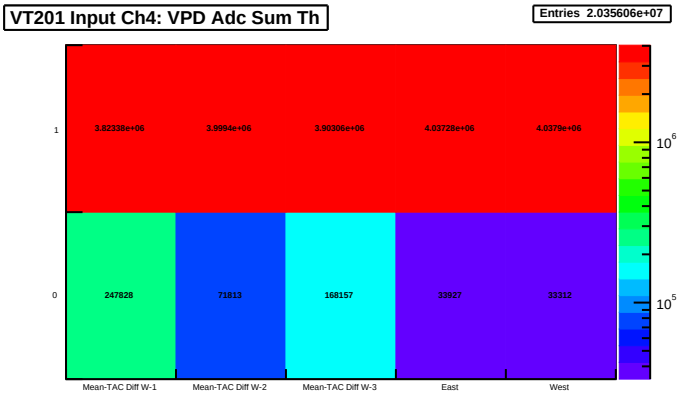

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

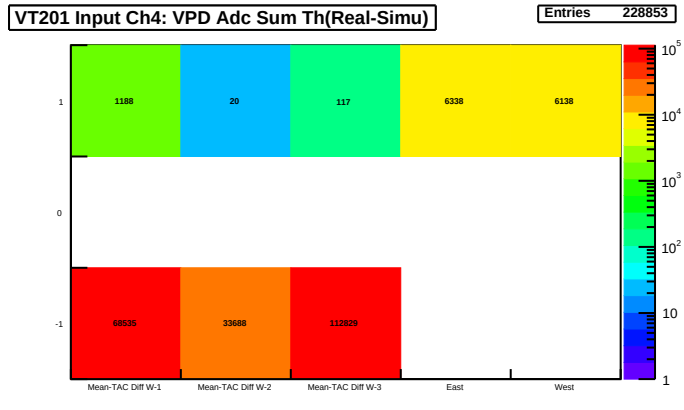

VT201 Input Ch2: ZDC Adc Sum Th
Entries 3.25697e+07
4.04268e+06
4.02573e+06
2.14588e+06
1.93947e+06
4.04014e+06
4.02197e+06
1.51292e+06
1.27187e+06
28527
45480
1.92533e+06
2.13174e+06
31076
49246
2.55829e+06
2.79935e+06
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
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)

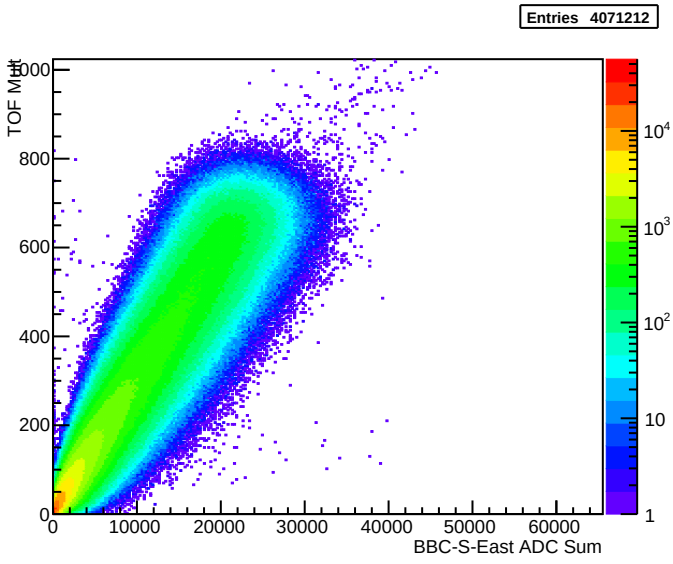

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(Hl)
W F-Sum-th(p)/Sum-th1(Hl)
W B-Sum-th(p)/Sum-th2(Hl)
W Sum-th(p)/Sum-th3(Hl)
E 0(p)/Sum-th0(Hl)
E F-Sum-th(p)/Sum-th1(Hl)
E B-Sum-th(p)/Sum-th2(Hl)
E Sum-th(p)/Sum-th3(Hl)

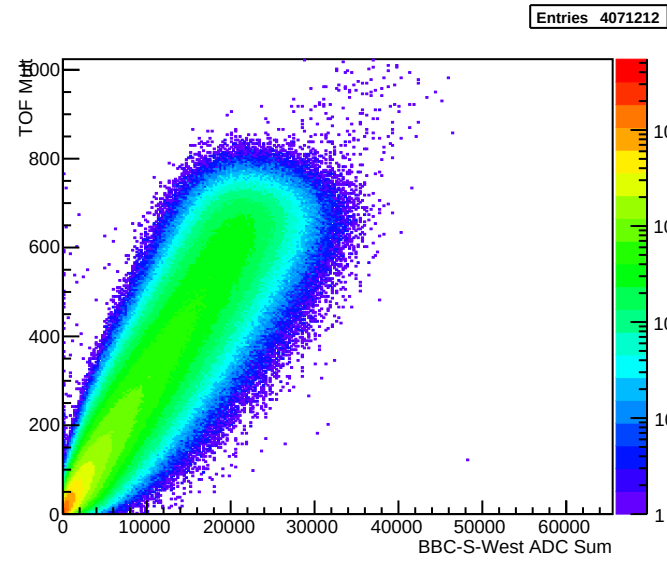

VT201 Input Ch4: VPD Tac Diff
Entries4071212
Tac

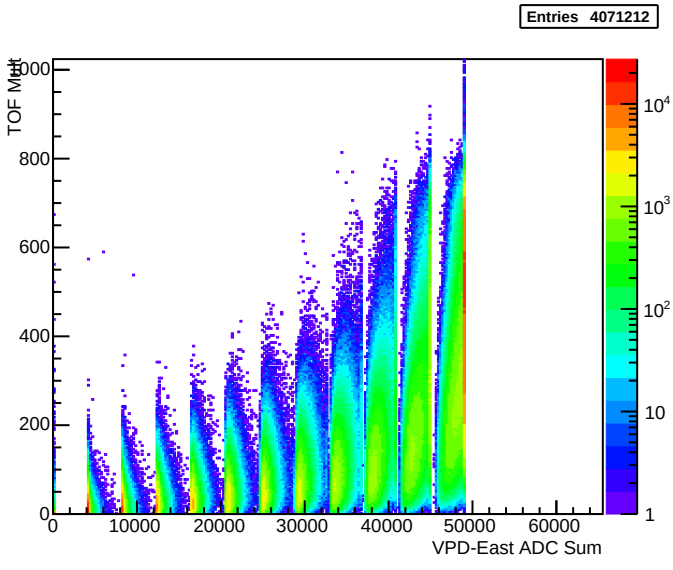

VT201 Input Ch4: VPD Tac Diff
Entries 3990054
Simu
Real

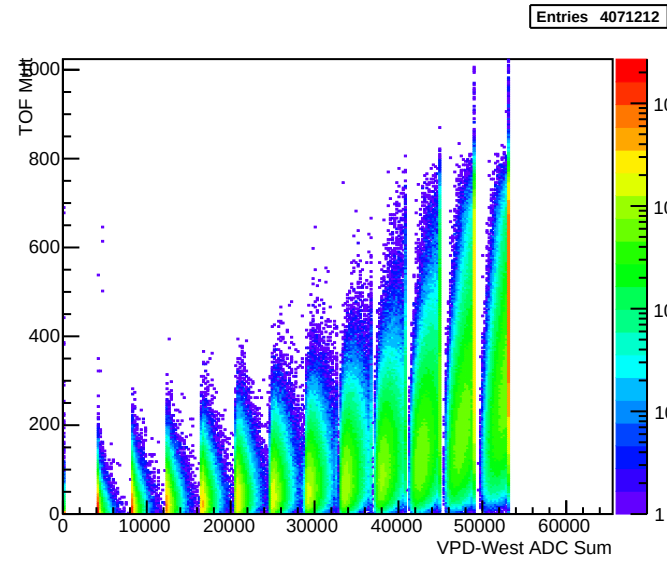

VT201 Input Ch4: VPD Adc Sum Th
Entries 2.035606e+07
3.82338e+06
3.9994e+06
3.90306e+06
4.03728e+06
4.0379e+06
247828
71813
168157
33927
33312
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

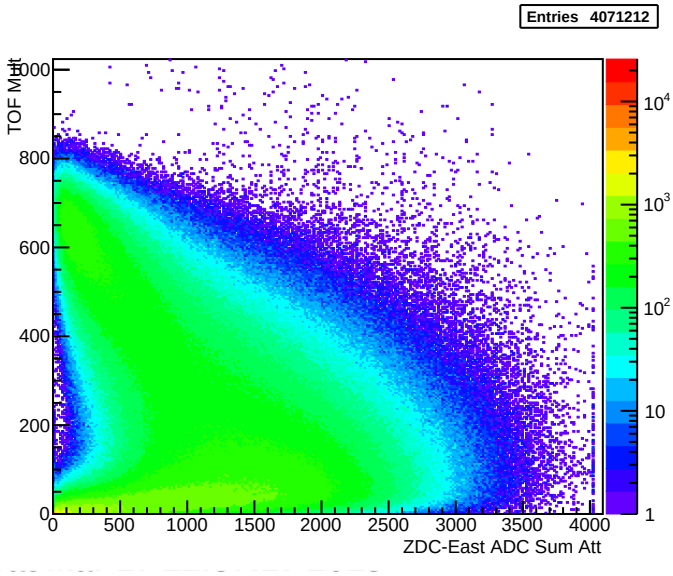

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 228853
1188
20
117
6338
6138
68535
33688
112829
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

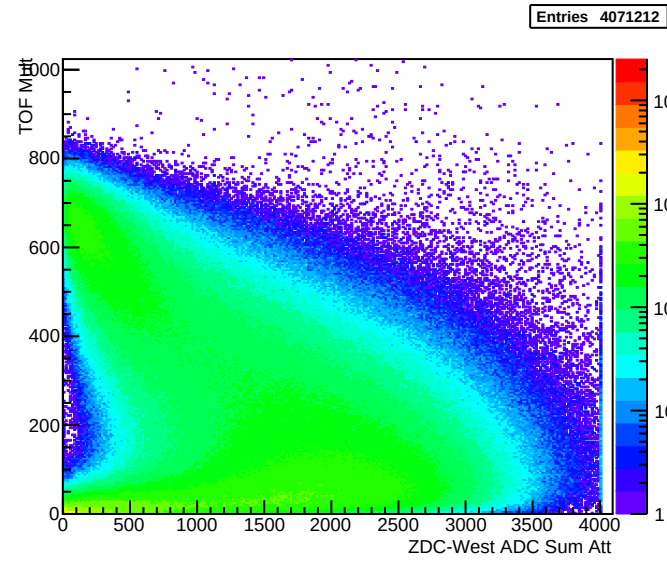

Entries 4071212
TOF Mult
BBC-S-East ADC Sum

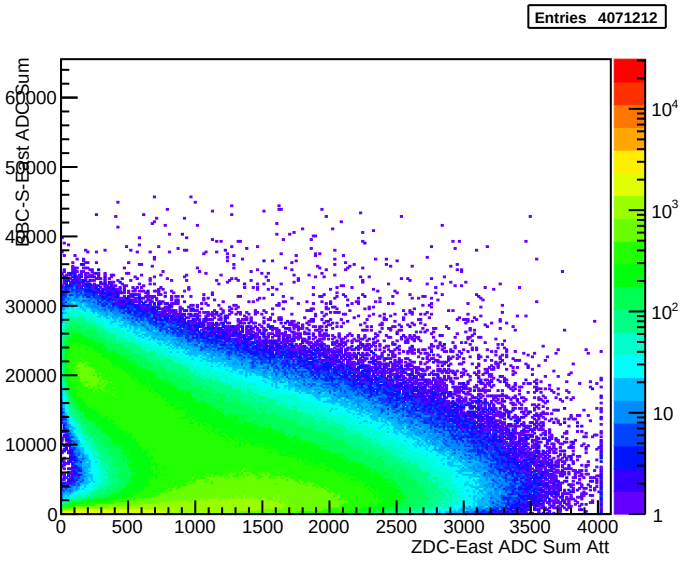

Entries 4071212
TOF Mult
BBC-S-West ADC Sum

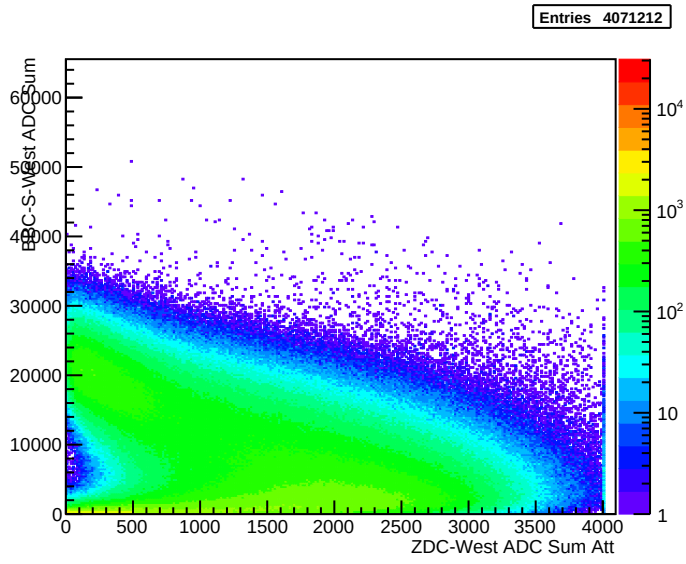

Entries 4071212
TOF Mult
VPD-East ADC Sum

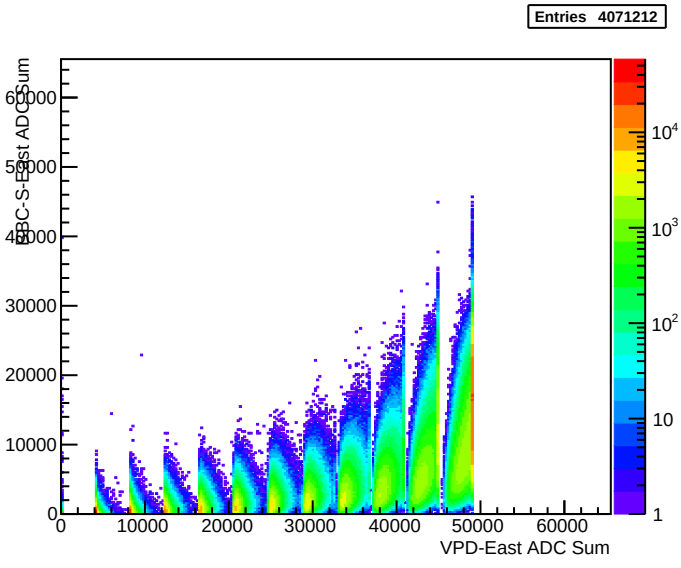

Entries 4071212
TOF Mult
VPD-West ADC Sum

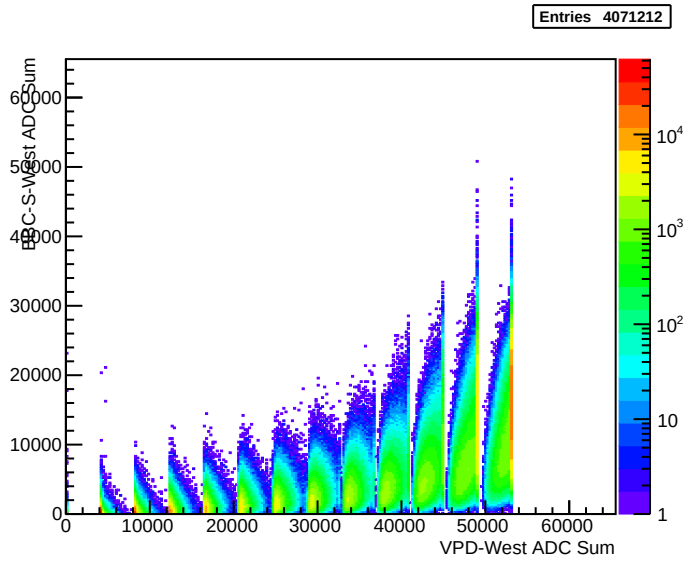

Entries 4071212
TOF Mult
ZDC-East ADC Sum Att

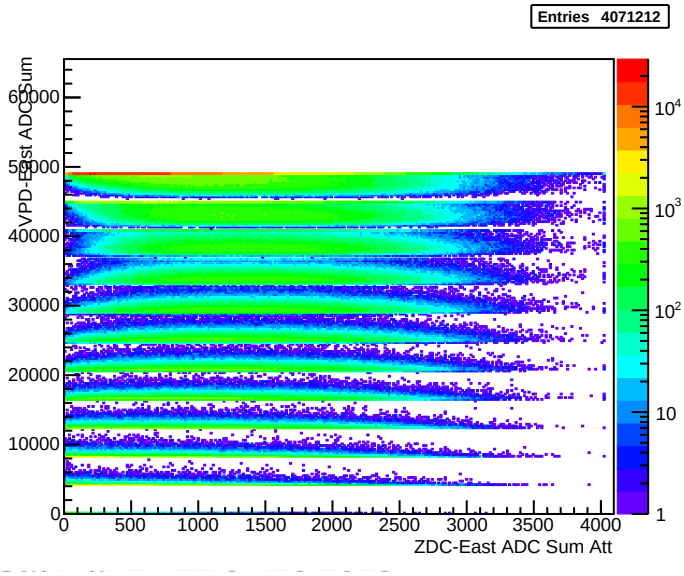

Entries 4071212
TOF Mult
ZDC-West ADC Sum Att

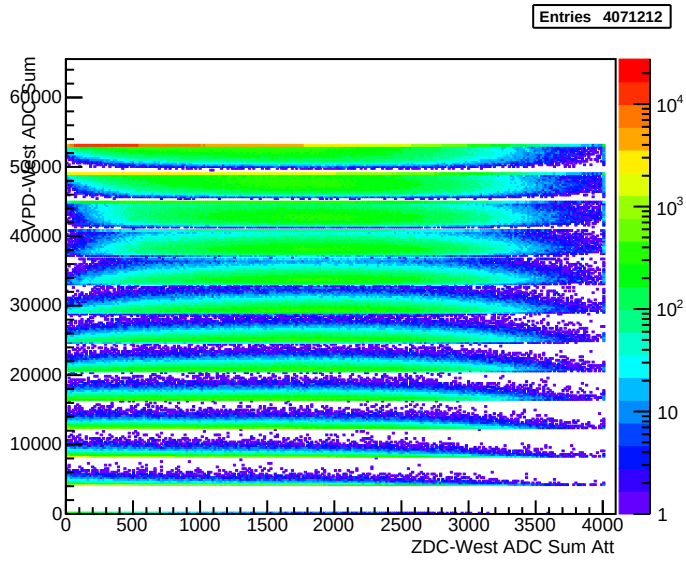

Entries 4071212
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

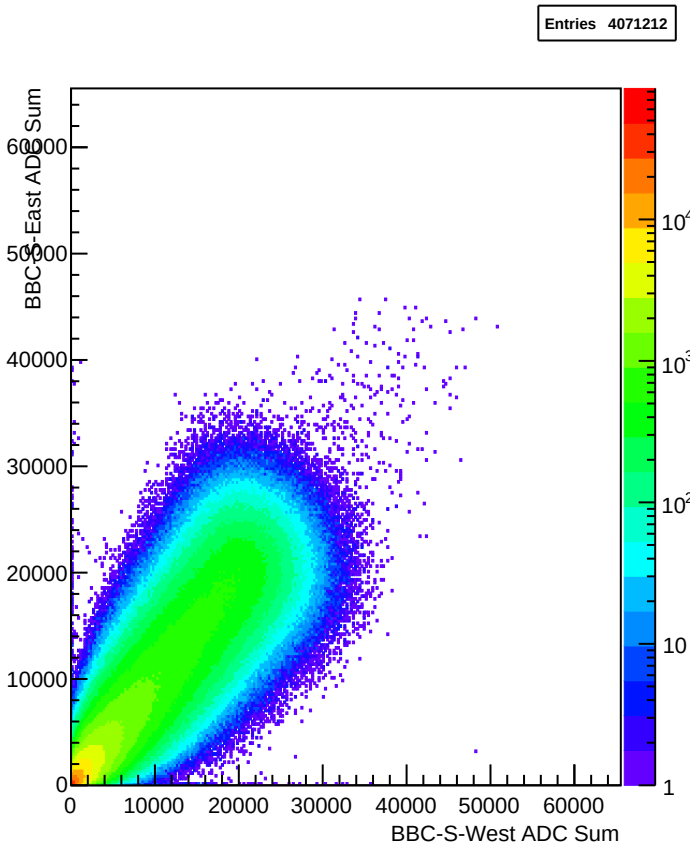

Entries 4071212
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

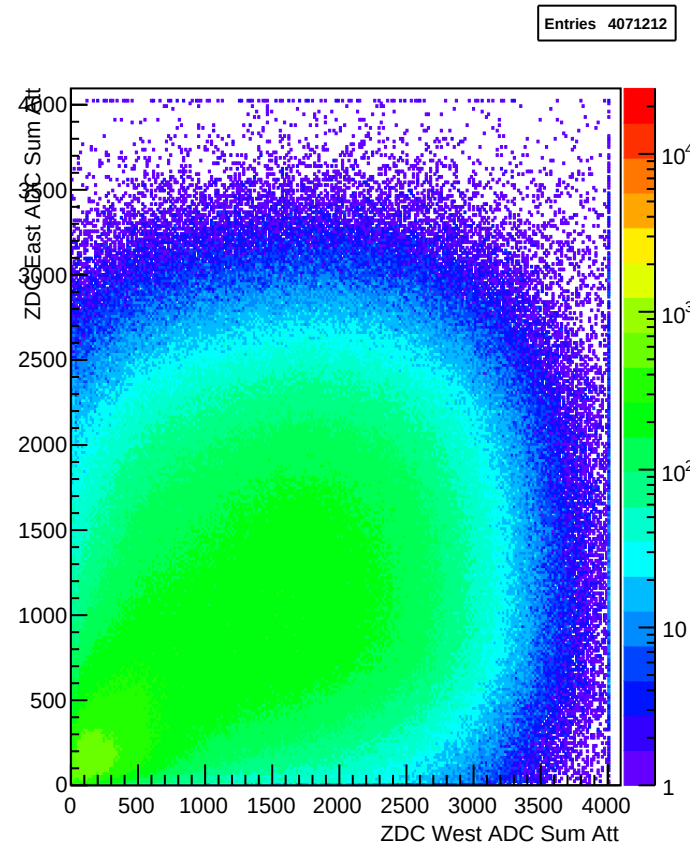

Entries 4071212
BBC-S-East ADC Sum
VPD-East ADC Sum

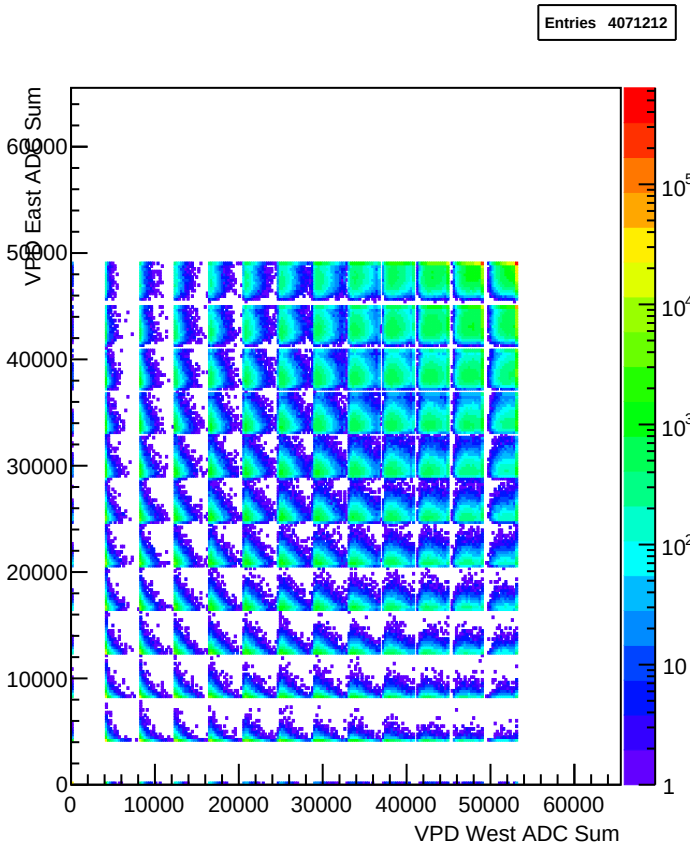

Entries 4071212
BBC-S-West ADC Sum
VPD-West ADC Sum

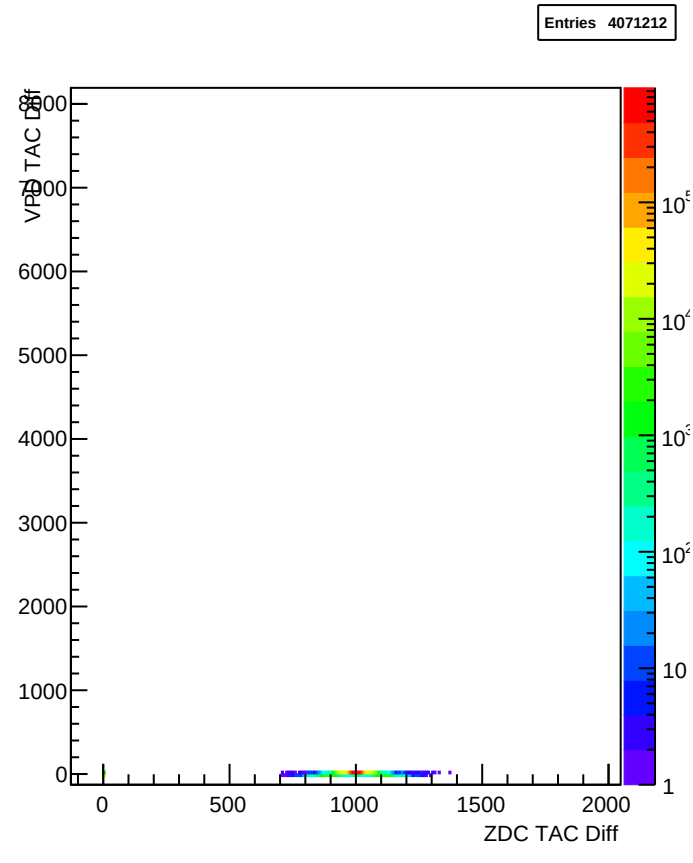

Entries 4071212
VPD-East ADC Sum
ZDC-East ADC Sum Att

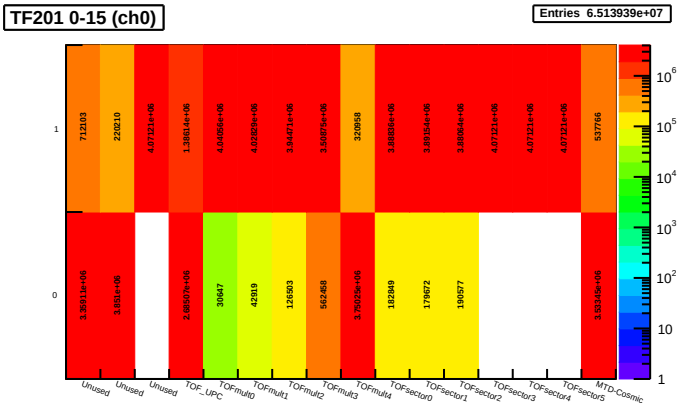

Entries 4071212
VPD-West ADC Sum
ZDC-West ADC Sum Att

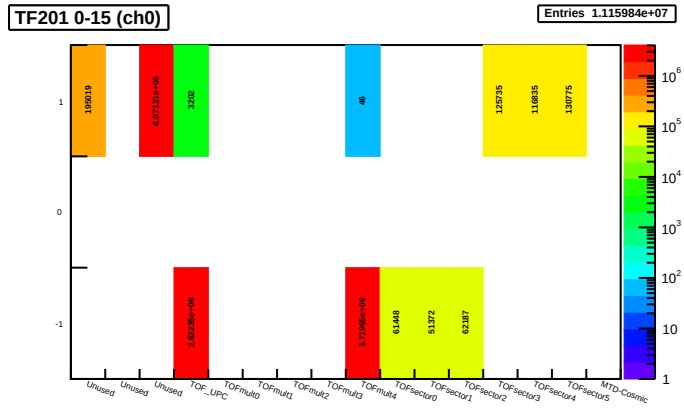

Entries 4071212
BBC-S-East ADC Sum
BBC-S-West ADC Sum

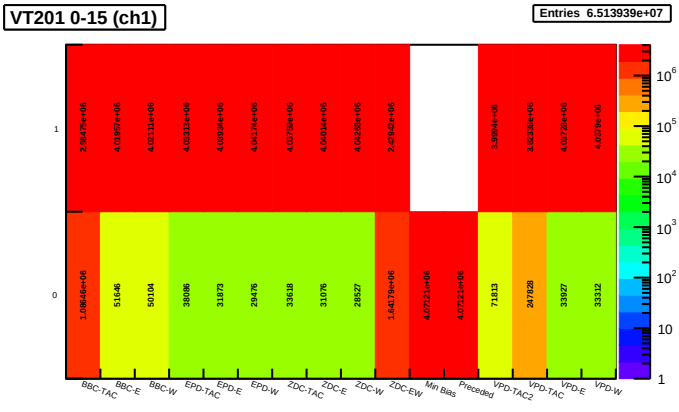

Entries 4071212
ZDC East ADC Sum Att
ZDC West ADC Sum Att

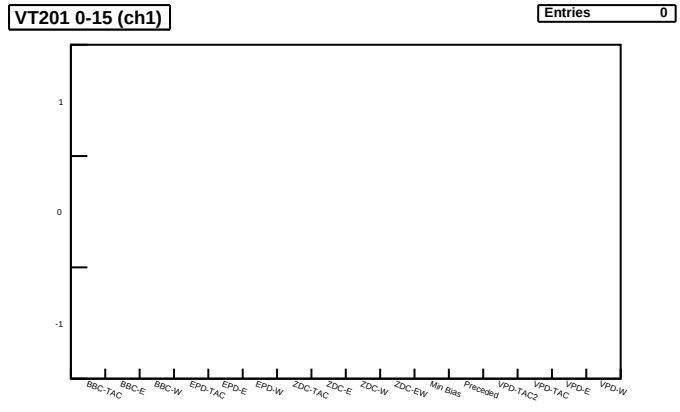

Entries 4071212
VPD East ADC Sum
VPD West ADC Sum

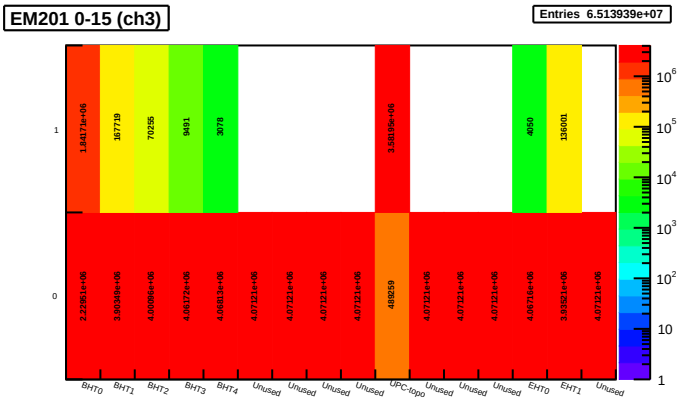

Entries 4071212
VPD TAC Diff
ZDC TAC Diff

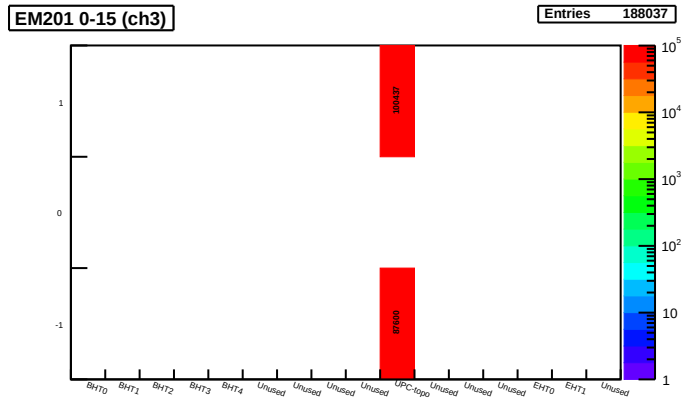

TF201 0-15 (ch0)
Entries 6.513939e+07
712103
220010
4.07121e+06
1.36614e+06
4.00356e+06
4.02829e+06
3.94471e+06
3.50975e+06
320958
3.83834e+06
3.83154e+06
3.83834e+06
4.07121e+06
4.07121e+06
4.07121e+06
537766
3.35911e+06
3.851e+06
2.69507e+06
30647
42919
126503
562458
3.75025e+06
182949
179672
190577
3.53345e+06
Unused
Unused
Unused
TOF_UPC
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5
MTD-Cosmic

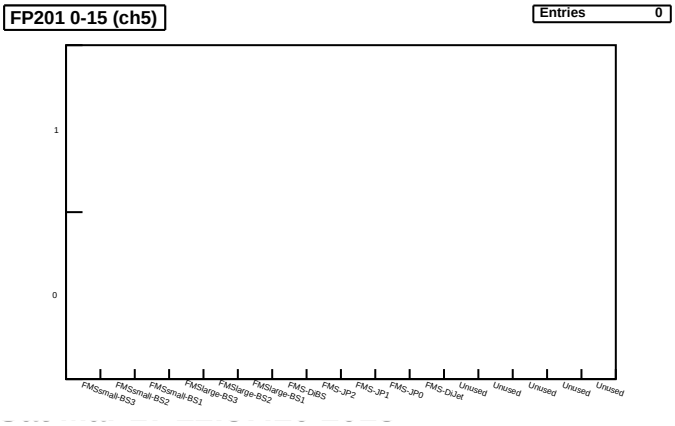

TF201 0-15 (ch0)
Entries 1.115984e+07
199019
4.07121e+06
3202
46
125735
118335
130775
2.62235e+06
3.71985e+06
61448
51372
62187
Unused
Unused
Unused
TOF_UPC
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5
MTD-Cosmic

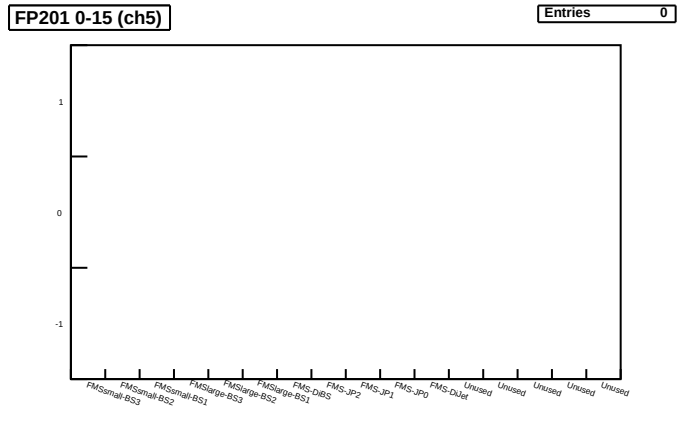

VT201 0-15 (ch1)
Entries 6.513939e+07
2.86475e+06
4.01957e+06
4.02111e+06
4.03133e+06
4.03234e+06
4.04174e+06
4.03799e+06
4.04014e+06
4.04208e+06
2.42542e+06
3.9994e+06
3.82338e+06
4.03728e+06
4.03730e+06
1.08646e+06
51646
50104
38086
31873
29476
33618
31076
28527
1.64179e+06
4.07121e+06
4.07121e+06
71813
267828
33927
33312
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 6.513939e+07
1.84471e+06
167719
70235
9491
3078
3.581694e+06
4560
136001
2.22851e+06
3.90349e+06
4.00086e+06
4.06172e+06
4.06813e+06
4.07121e+06
4.07121e+06
4.07121e+06
4.07121e+06
489259
4.07121e+06
4.07121e+06
4.07121e+06
4.06716e+06
3.93521e+06
4.07121e+06
BHT0
BHT1
BHT2
BHT3
BHT4
Unused
Unused
Unused
Unused
UPC-topo
Unused
Unused
Unused
EHT0
EHT1
Unused


EM201 0-15 (ch3)
Entries 188037
100437
87600
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