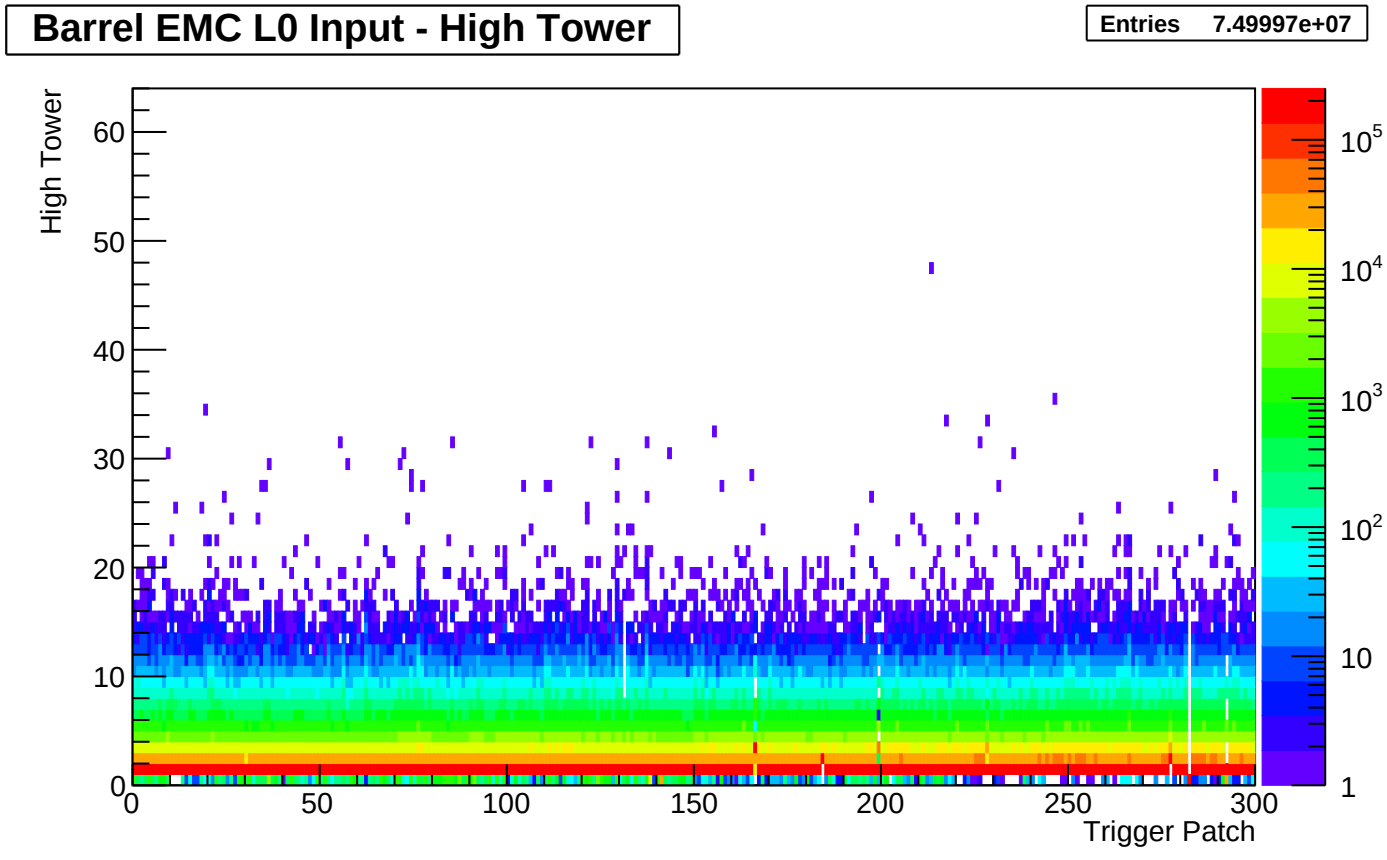
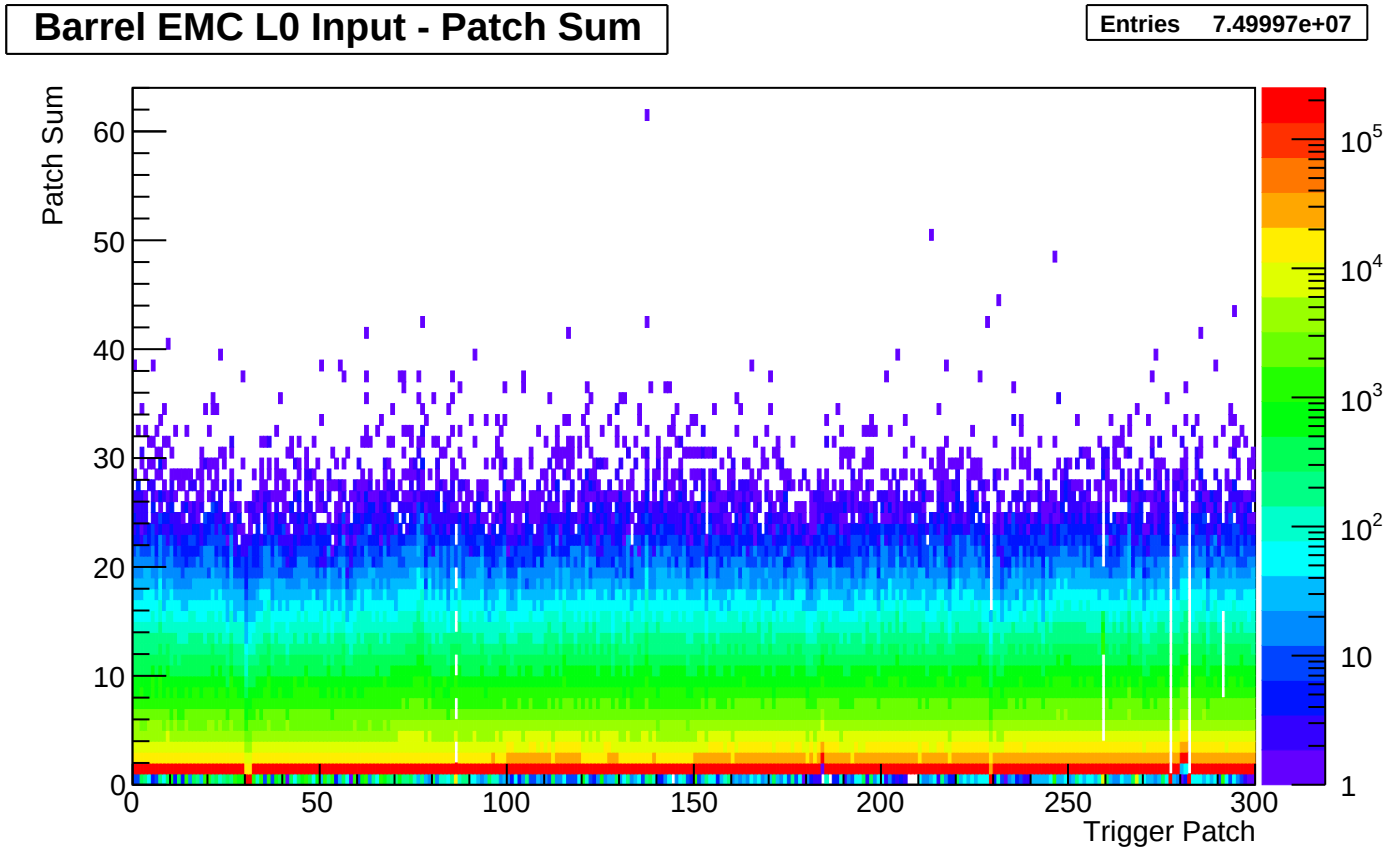
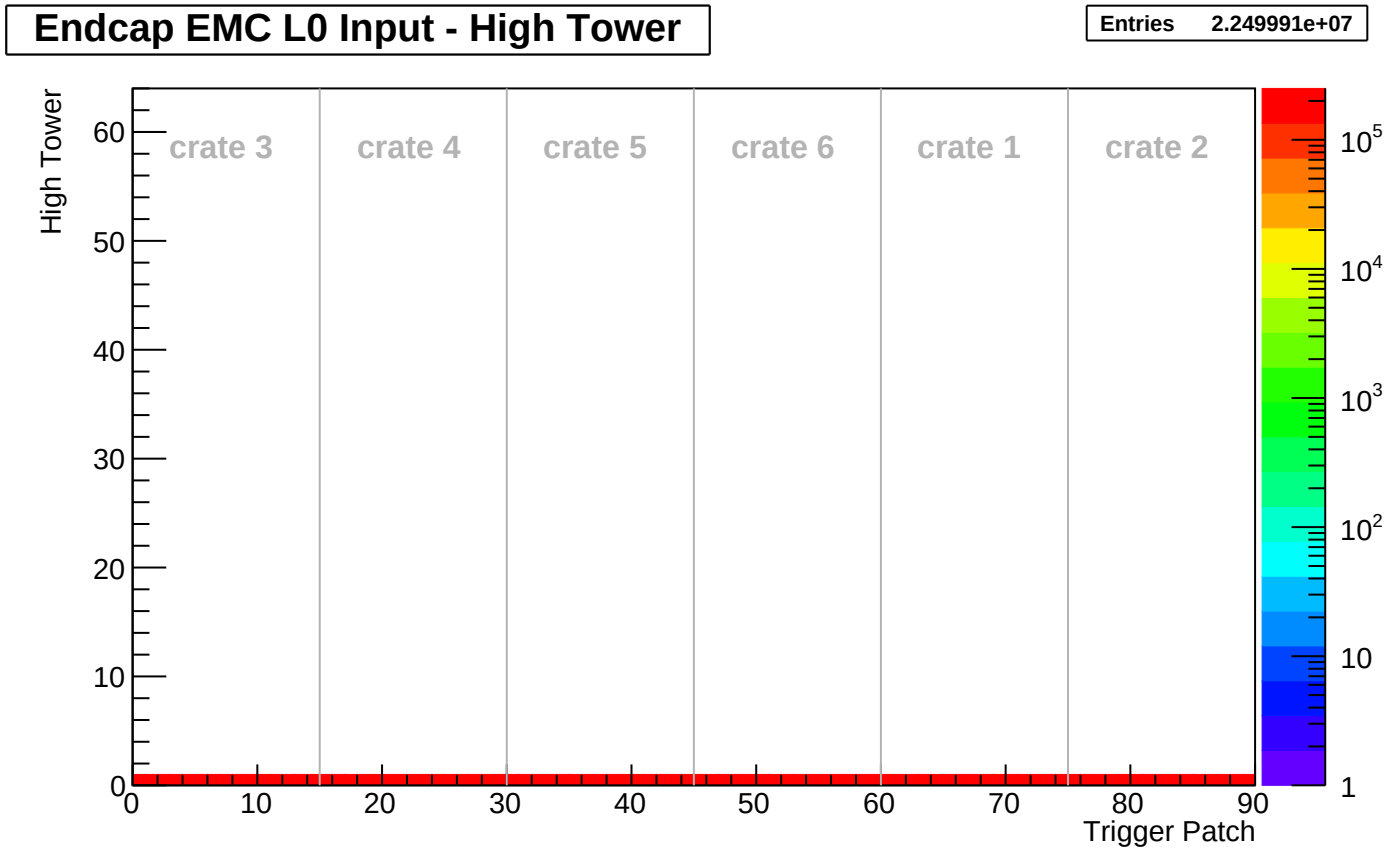
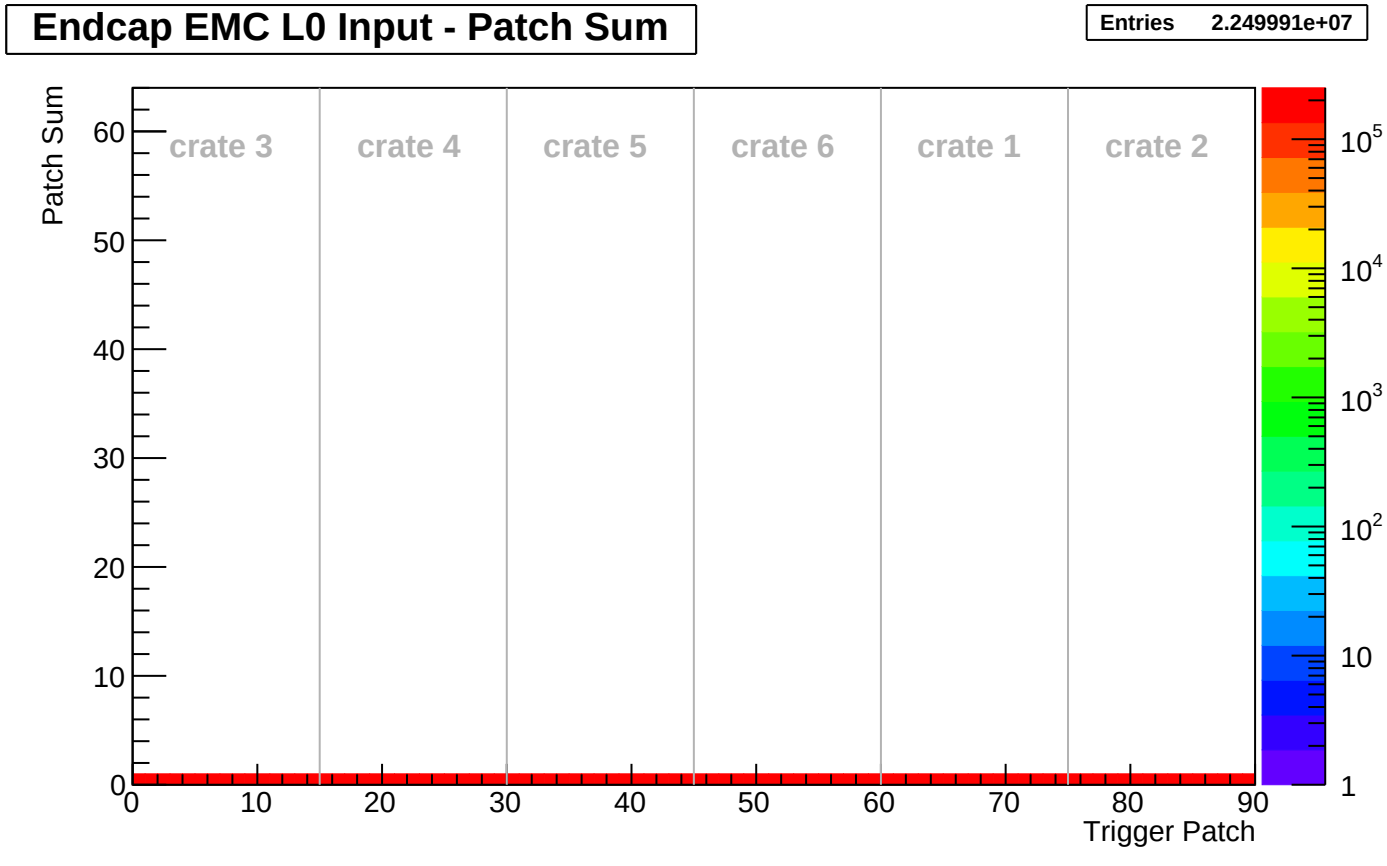
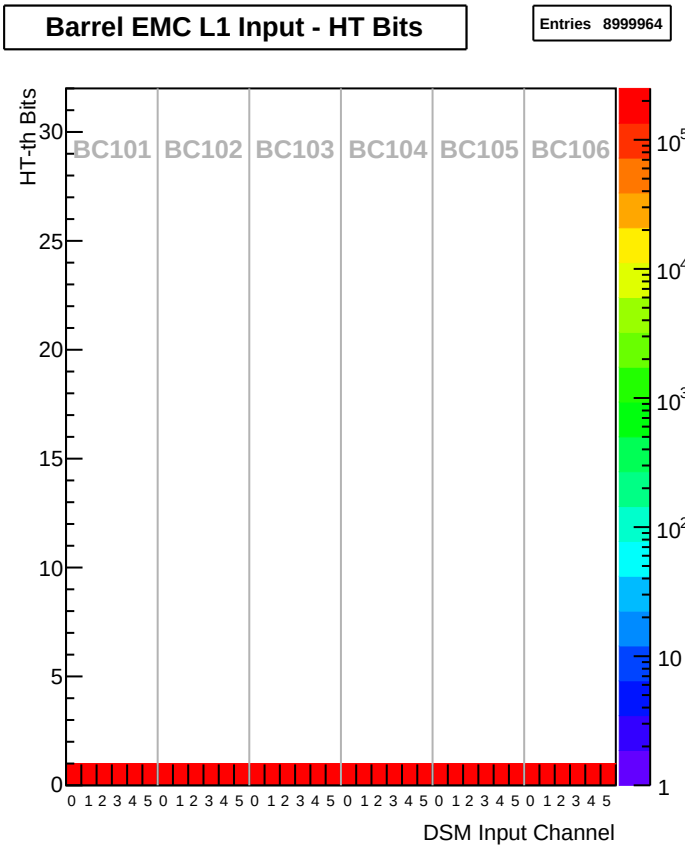
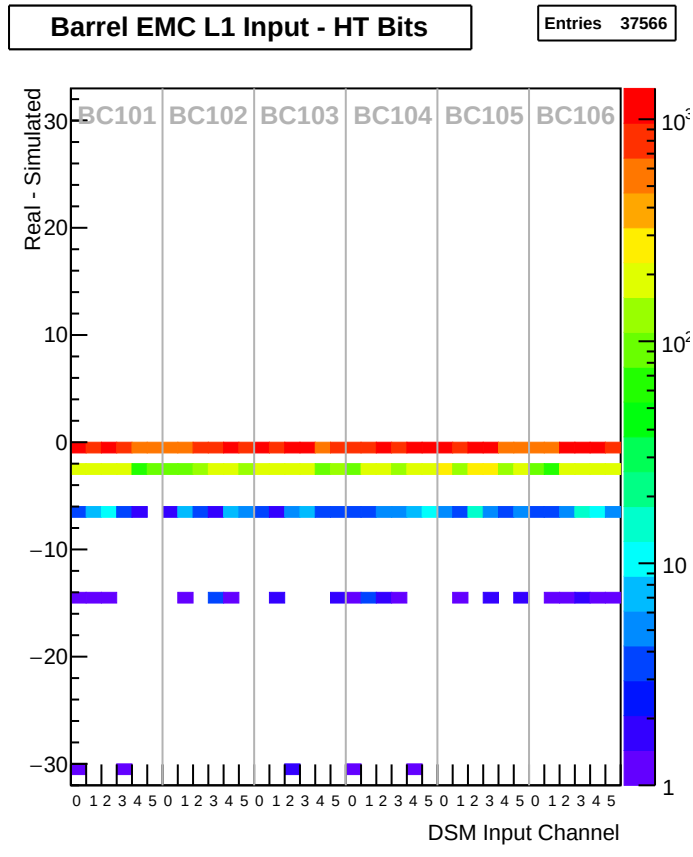

Barrel EMC L0 Input - High Tower
Entries 7.49997e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

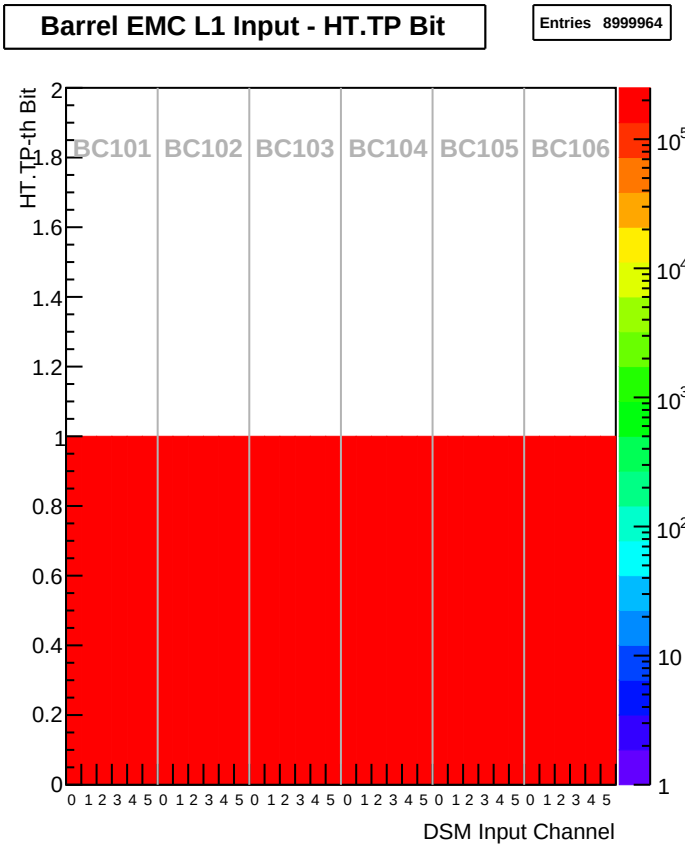

Barrel EMC L0 Input - Patch Sum
Entries 7.49997e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

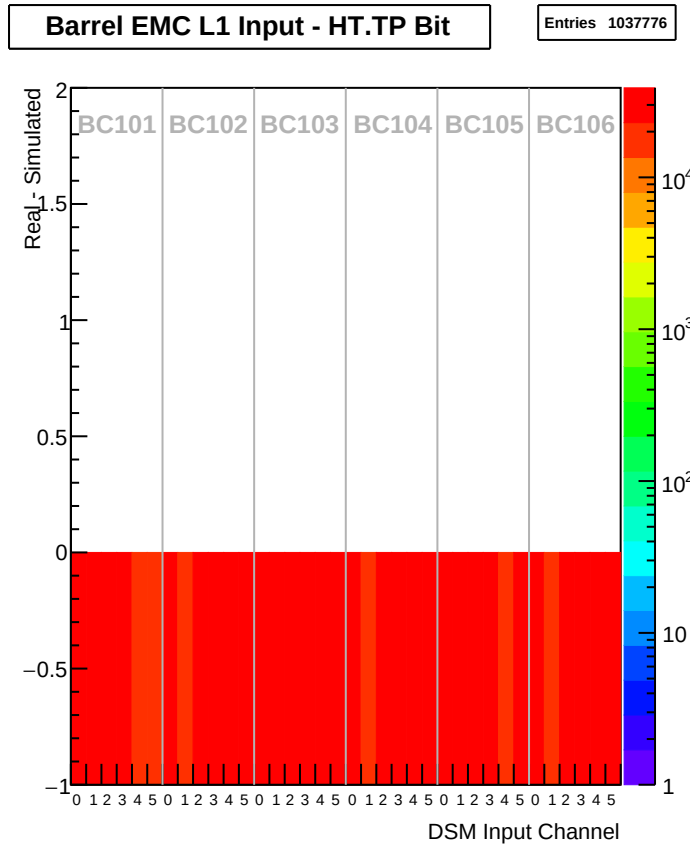

Endcap EMC L0 Input - High Tower
Entries 2.249991e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

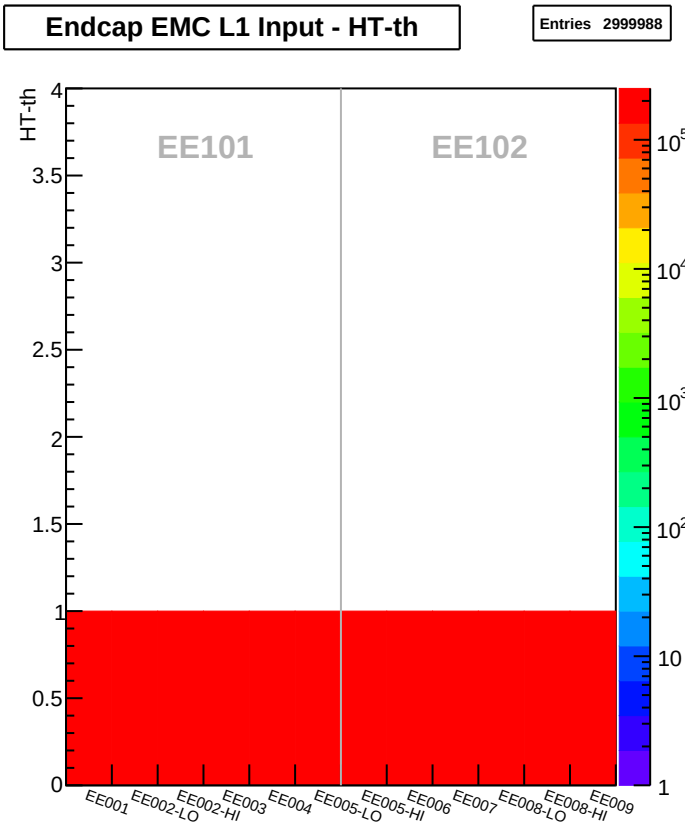

Endcap EMC L0 Input - Patch Sum
Entries 2.249991e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

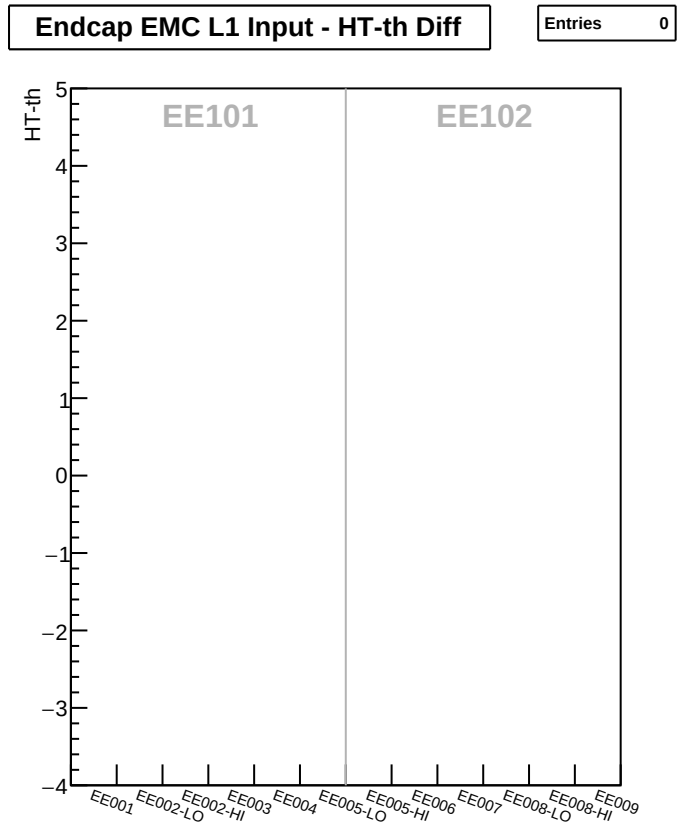

Barrel EMC L1 Input - HT Bits
Entries 8999964
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

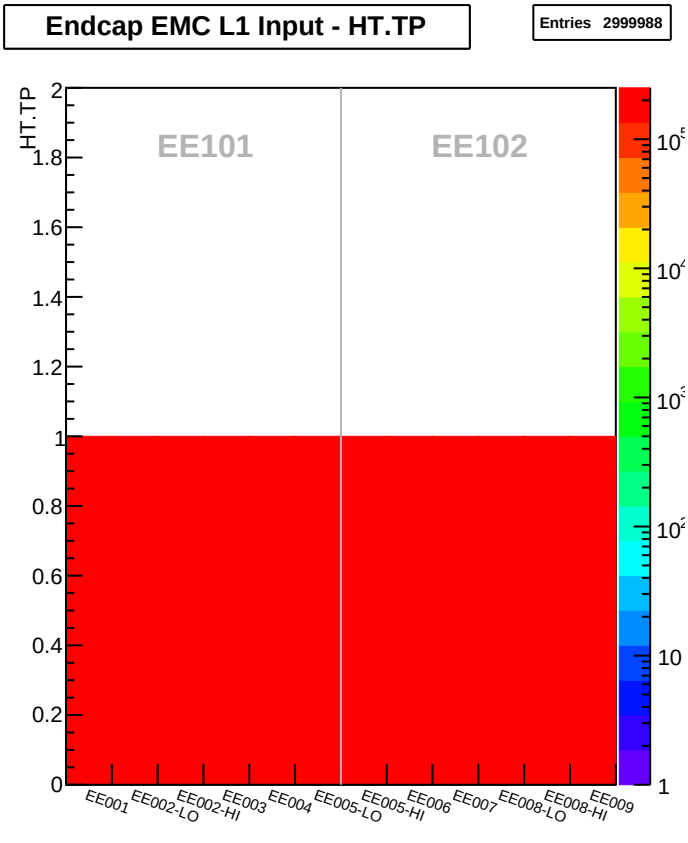

Barrel EMC L1 Input - HT Bits
Entries 37566
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

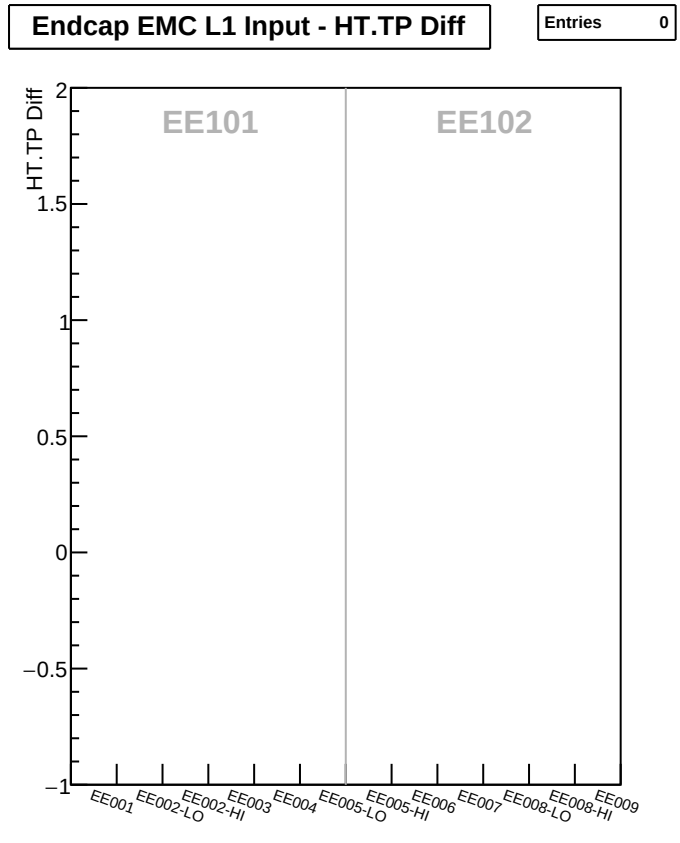

Barrel EMC L1 Input - HT.TP Bit
Entries 8999964
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

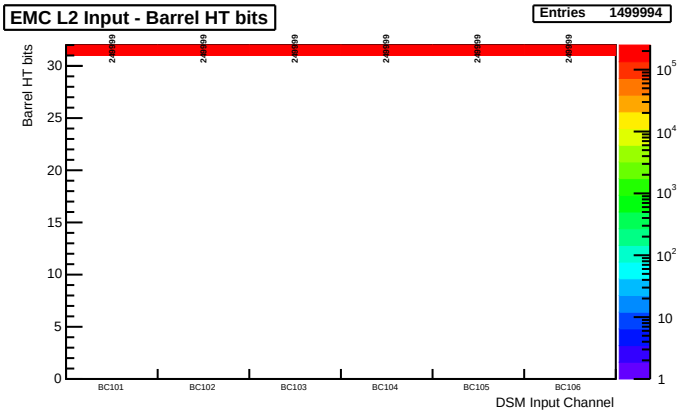

Barrel EMC L1 Input - HT.TP Bit
Entries 1037776
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

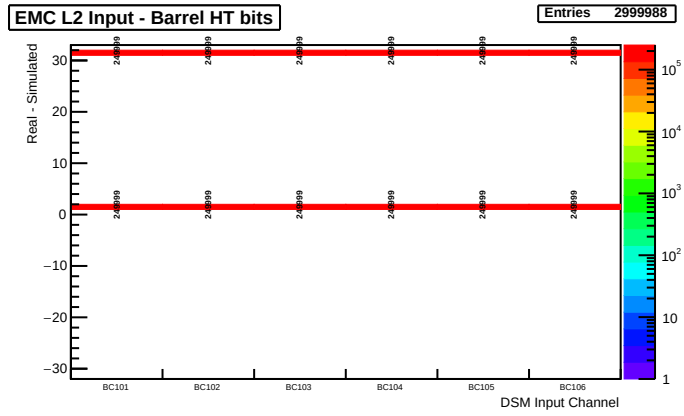

Endcap EMC L1 Input - HT-th
Entries 2999988
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

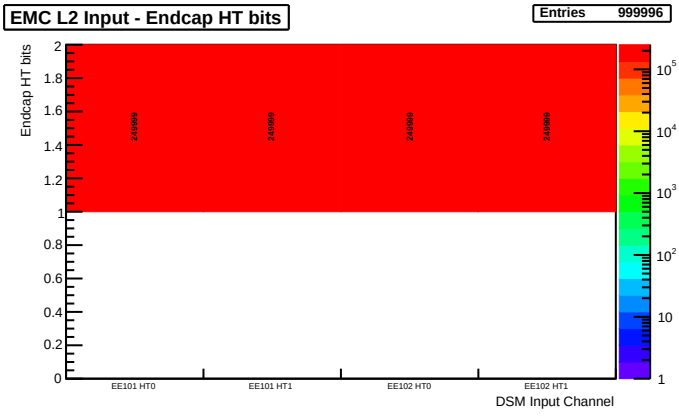

Endcap EMC L1 Input - HT-th Diff
Entries 0
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

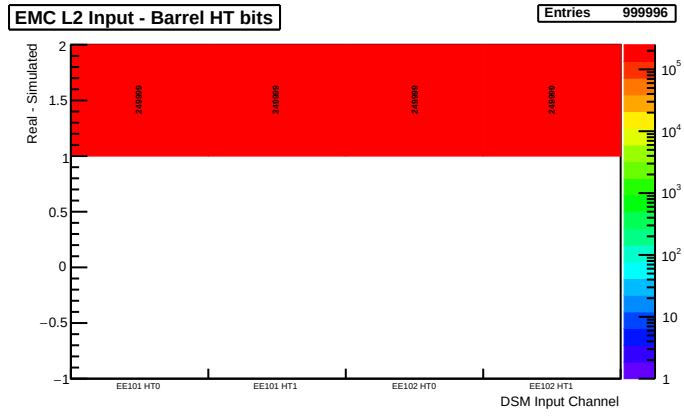

Endcap EMC L1 Input - HT.TP
Entries 2999988
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

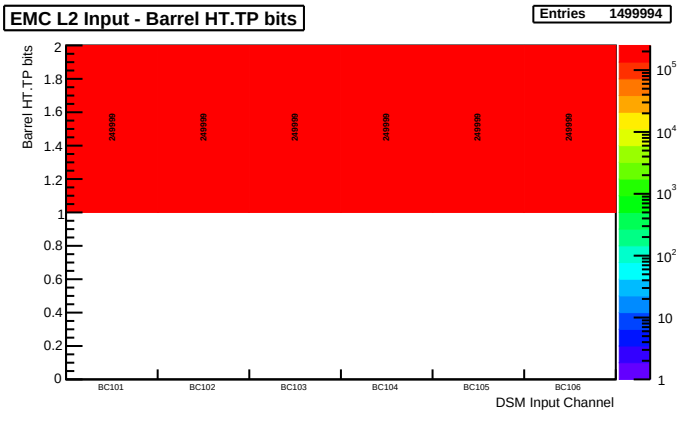

Endcap EMC L1 Input - HT.TP Diff
Entries 0
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

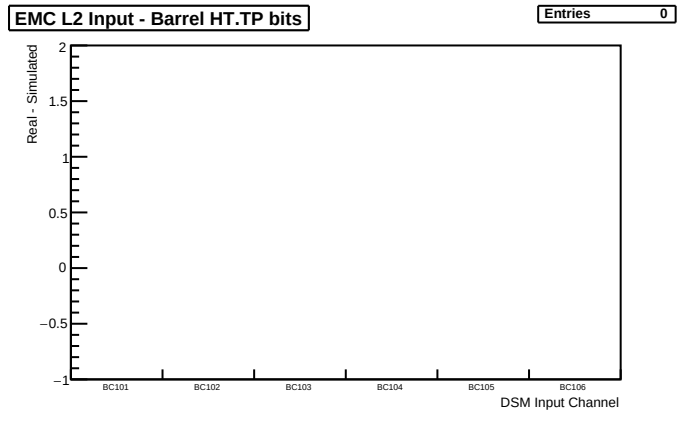

EMC L2 Input - Barrel HT bits
Entries 1499994
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

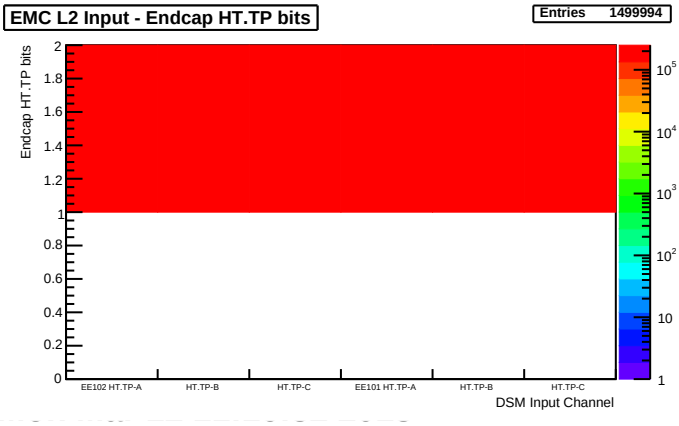

EMC L2 Input - Barrel HT bits
Entries 2999988
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

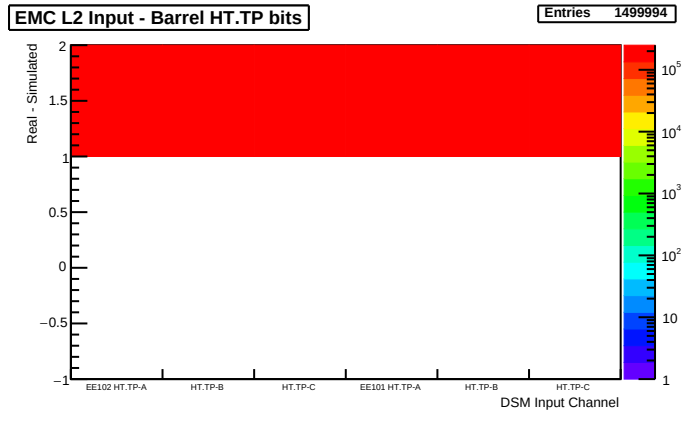

EMC L2 Input - Endcap HT bits
Entries 999996
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

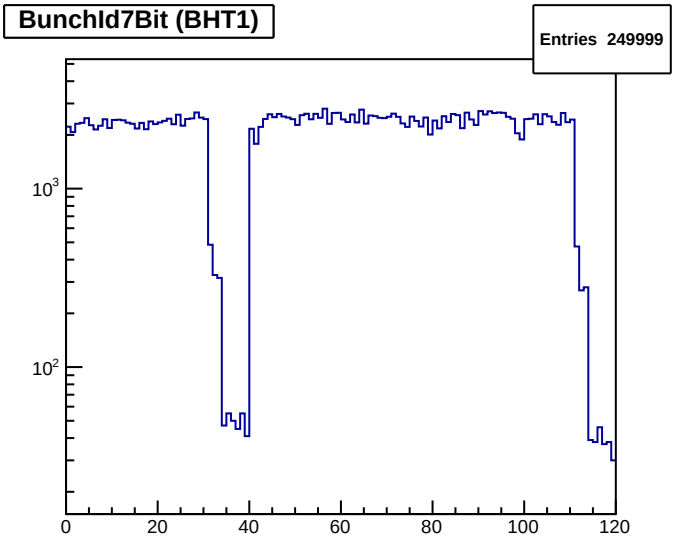

EMC L2 Input - Barrel HT bits
Entries 999996
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

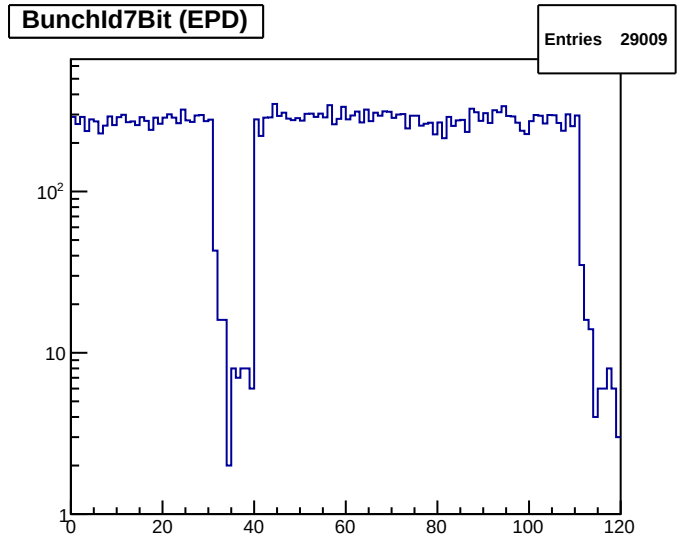

EMC L2 Input - Barrel HT.TP bits
Entries 1499994
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

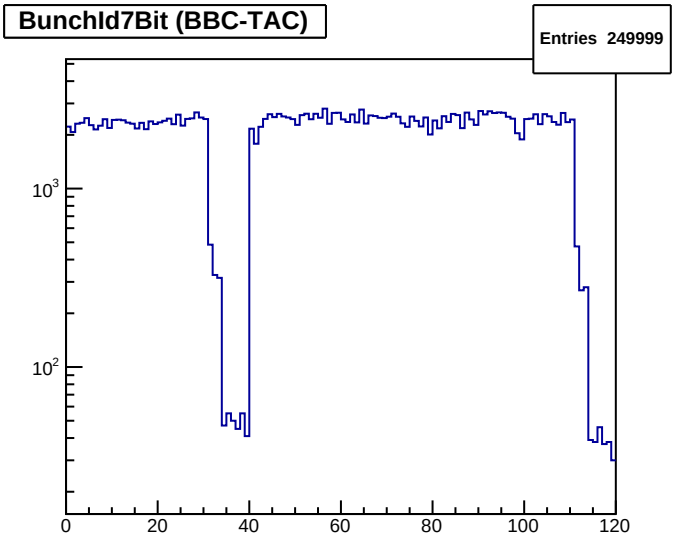

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

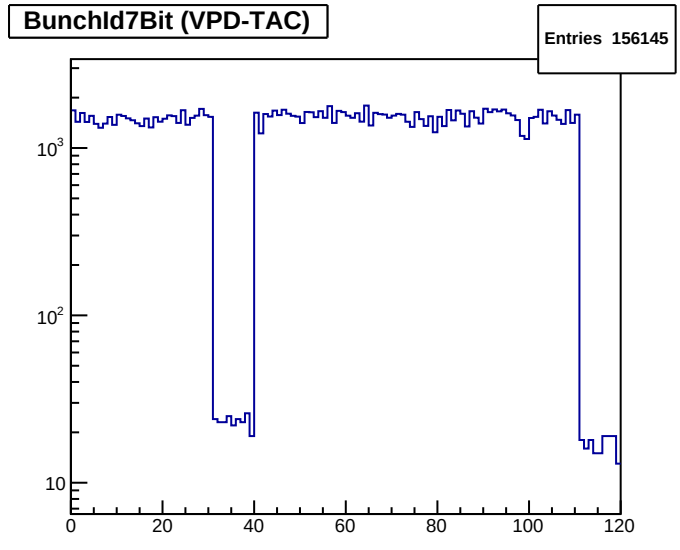

EMC L2 Input - Endcap HT.TP bits
Entries 1499994
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

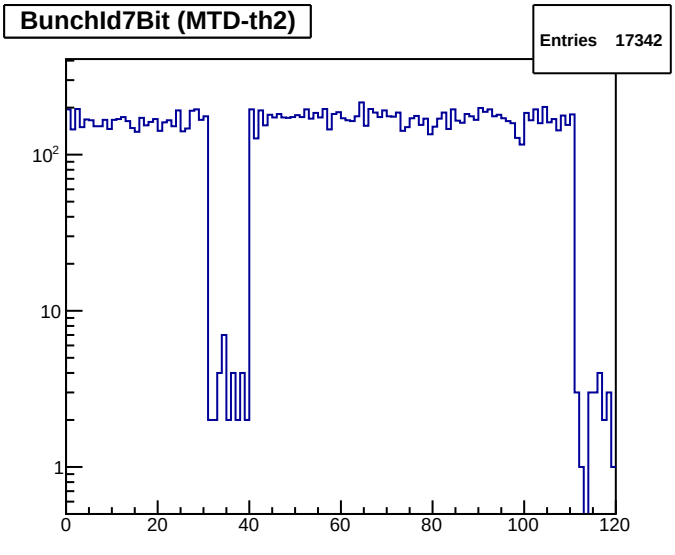

EMC L2 Input - Barrel HT.TP bits
Entries 1499994
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

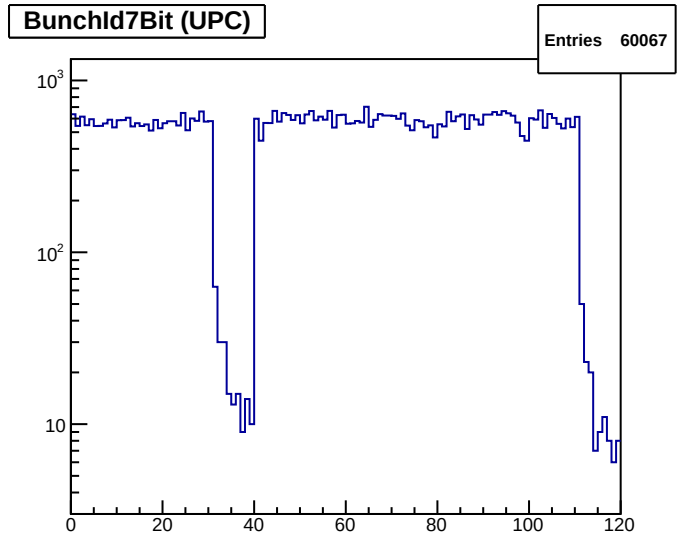

BunchId7Bit (BHT1)
Entries 249999
10^3
10^2
0 20 40 60 80 100 120

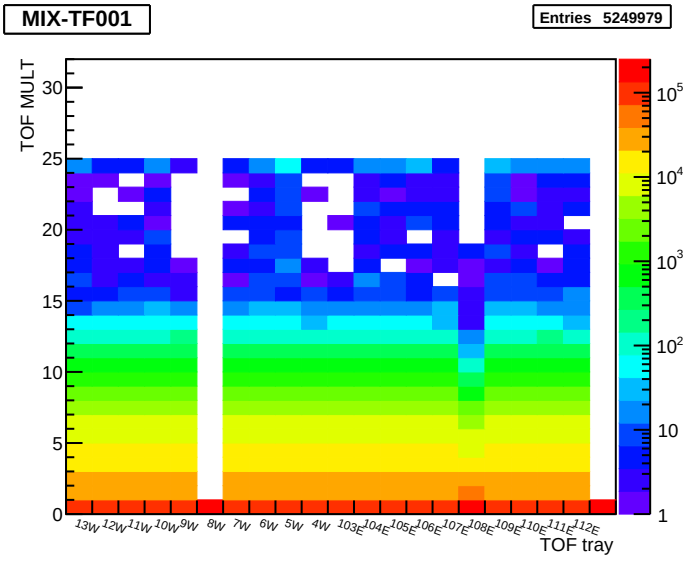

BunchId7Bit (EPD)
Entries 29009
10^2
10
1
0 20 40 60 80 100 120

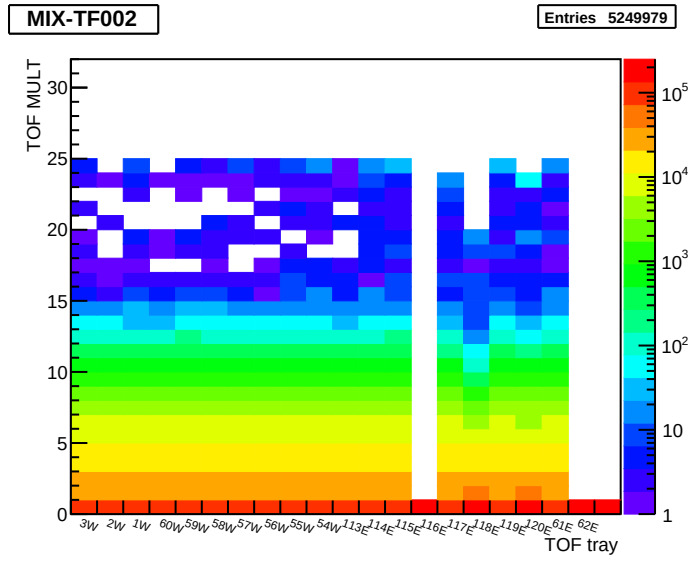

BunchId7Bit (BBC-TAC)
Entries 249999
10^3
10^2
0 20 40 60 80 100 120

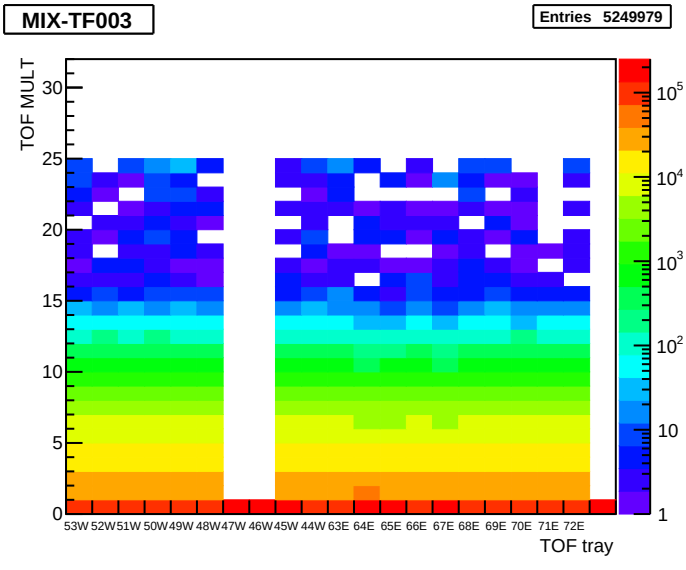

BunchId7Bit (VPD-TAC)
Entries 156145
10^3
10^2
10
0 20 40 60 80 100 120

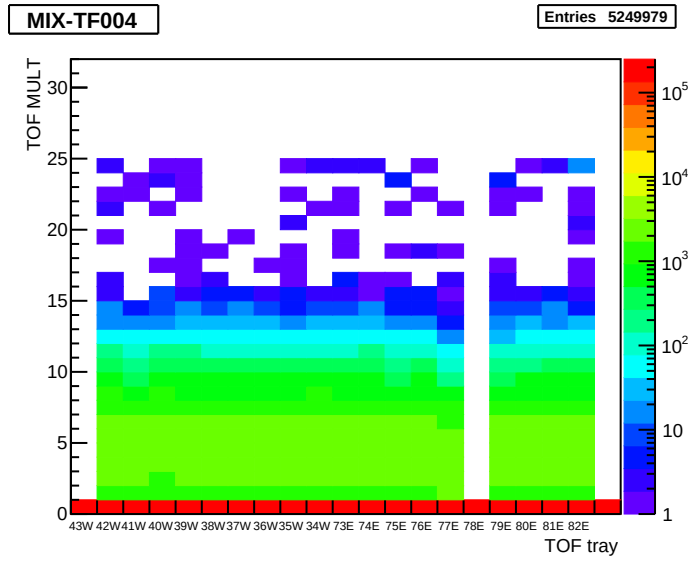

BunchId7Bit (MTD-th2)
Entries 17342
10^2
10
1
0 20 40 60 80 100 120

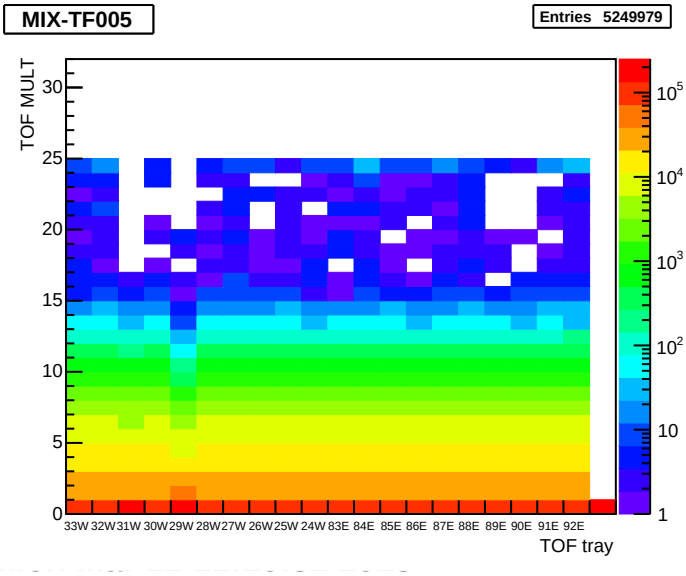

BunchId7Bit (UPC)
Entries 60067
10^3
10^2
10
0 20 40 60 80 100 120

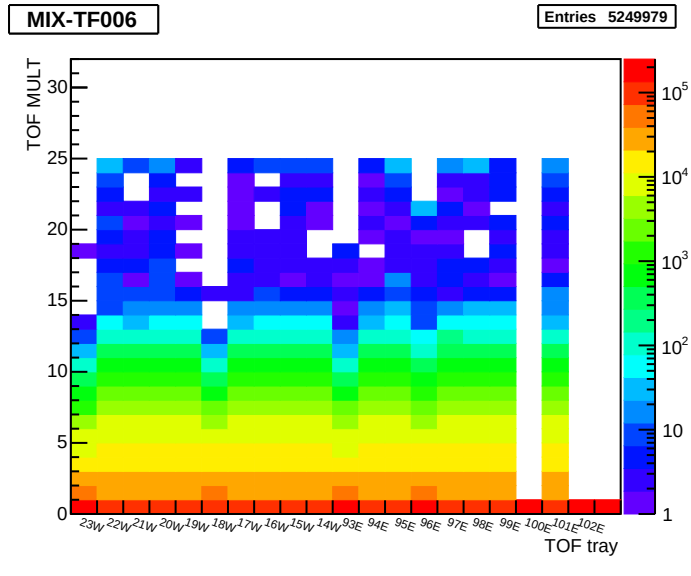

MIX-TF001
Entries 5249979
TOF MULT
TOF tray

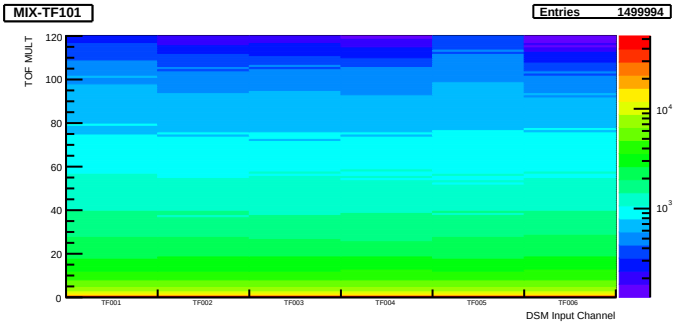

MIX-TF002
Entries 5249979
TOF MULT
TOF tray

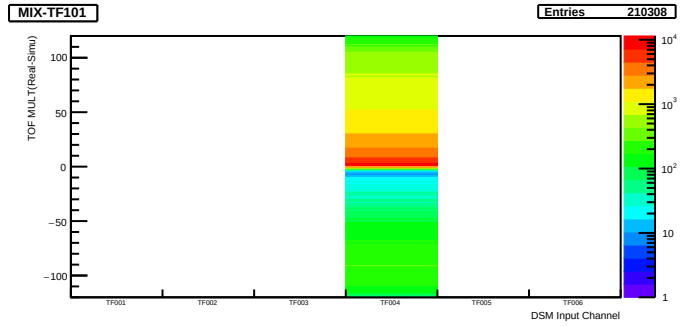

MIX-TF003
Entries 5249979
TOF MULT
TOF tray

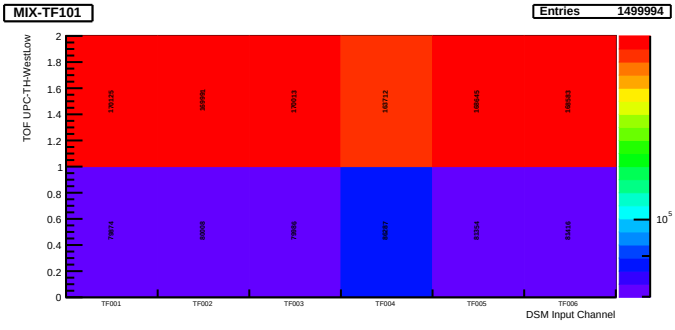

MIX-TF004
Entries 5249979
TOF MULT
TOF tray

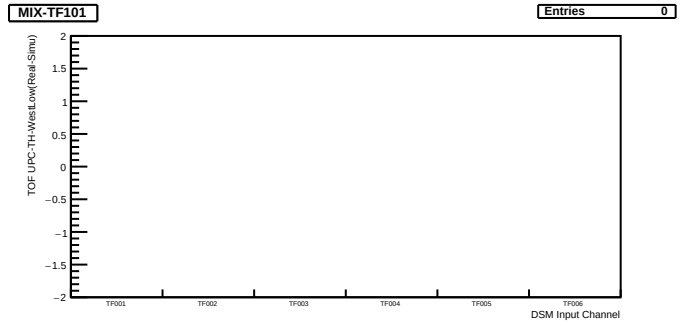

MIX-TF005
Entries 5249979
TOF MULT
TOF tray

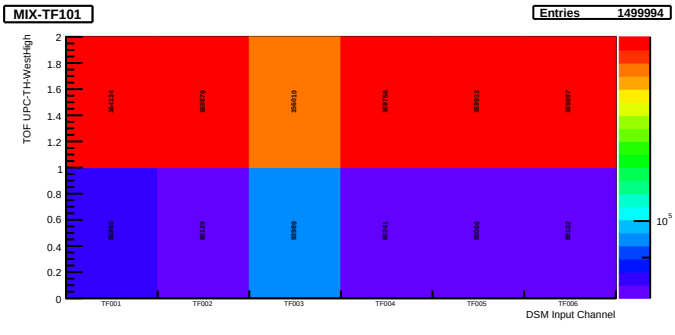

MIX-TF006
Entries 5249979
TOF MULT
TOF tray

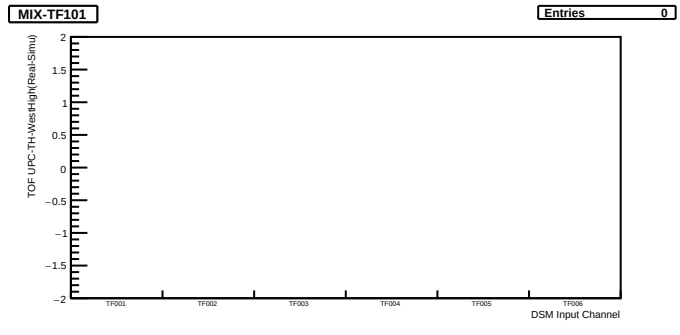

MIX-TF101
Entries 1499994
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

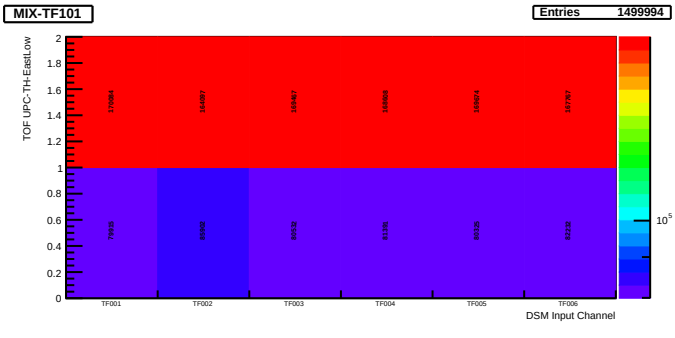

MIX-TF101
Entries 210308
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

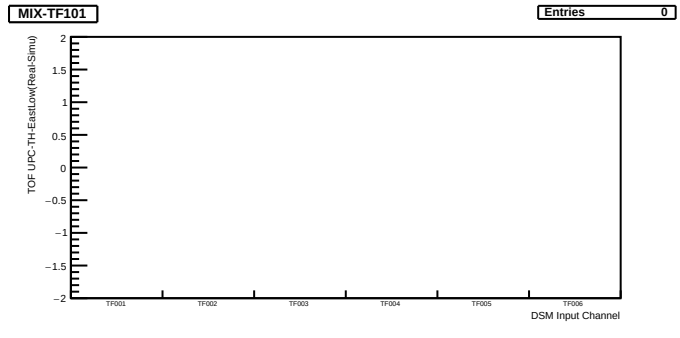

MIX-TF101
Entries 1499994
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

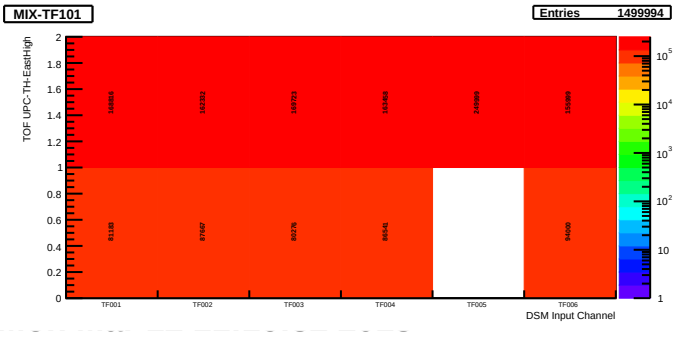

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

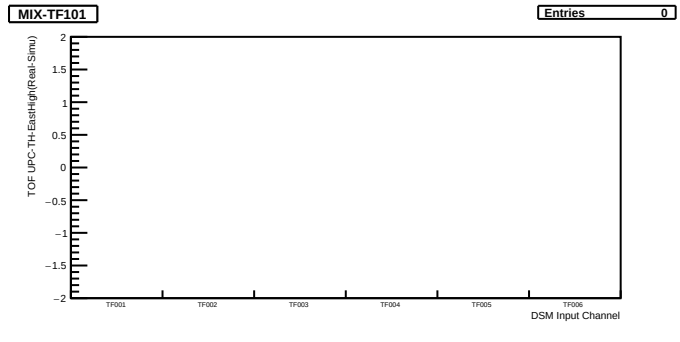

MIX-TF101
Entries 1499994
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

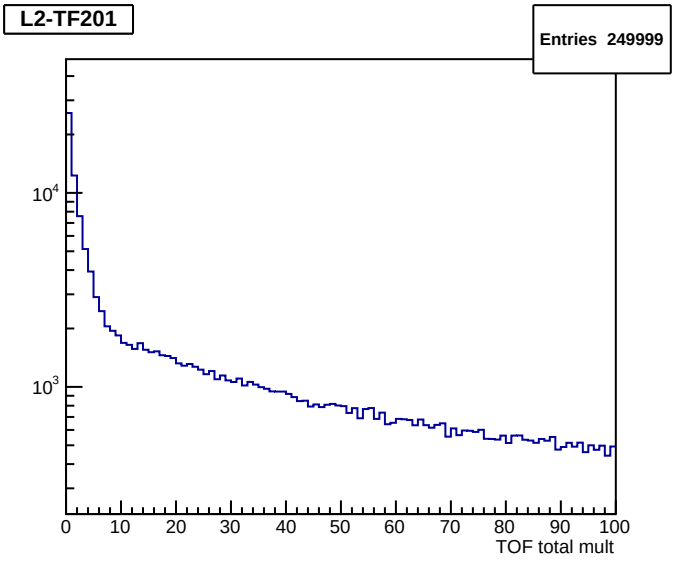

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

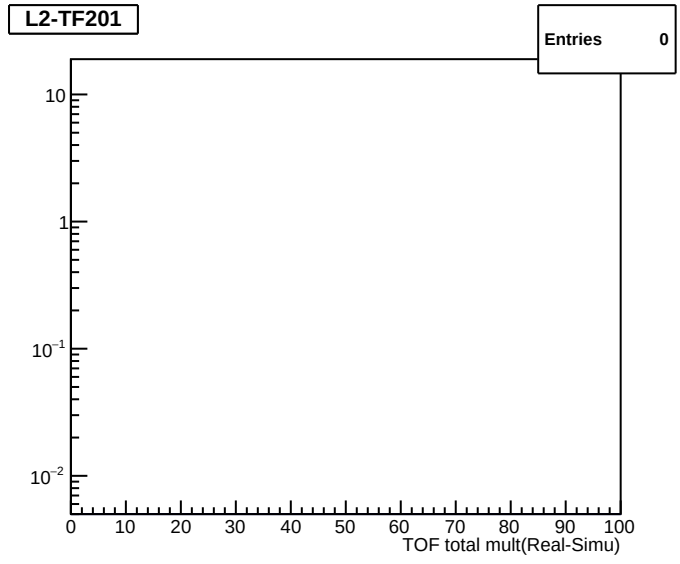

MIX-TF101
Entries 1499994
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

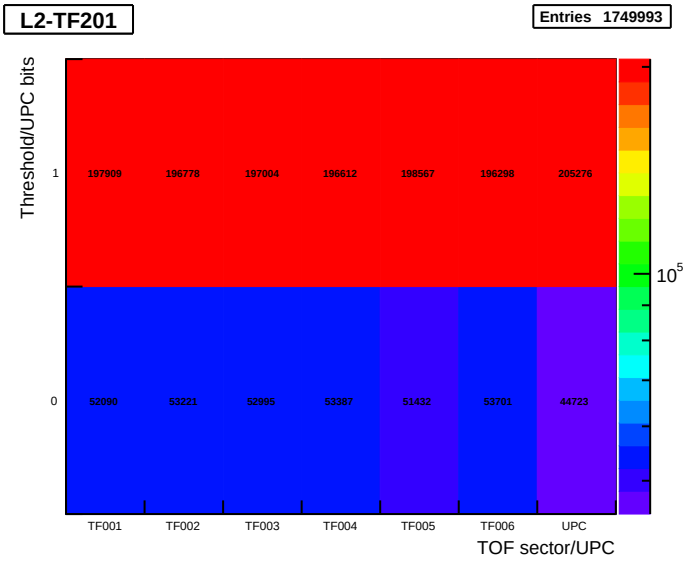

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

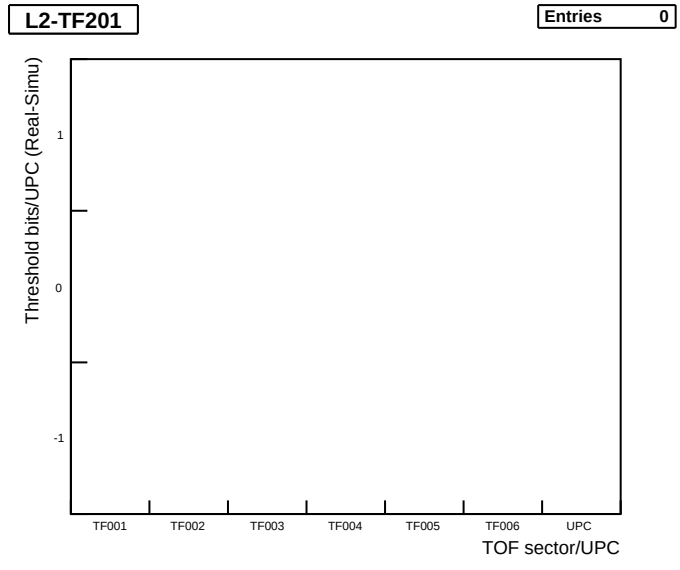

MIX-TF101
Entries 1499994
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

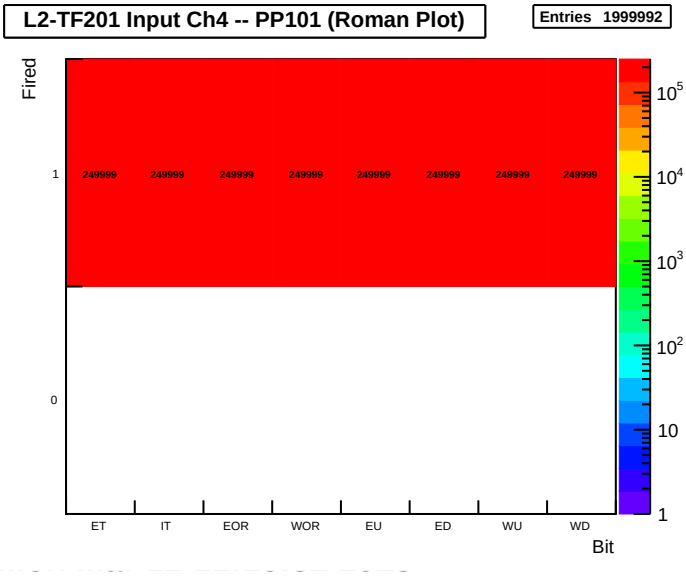

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

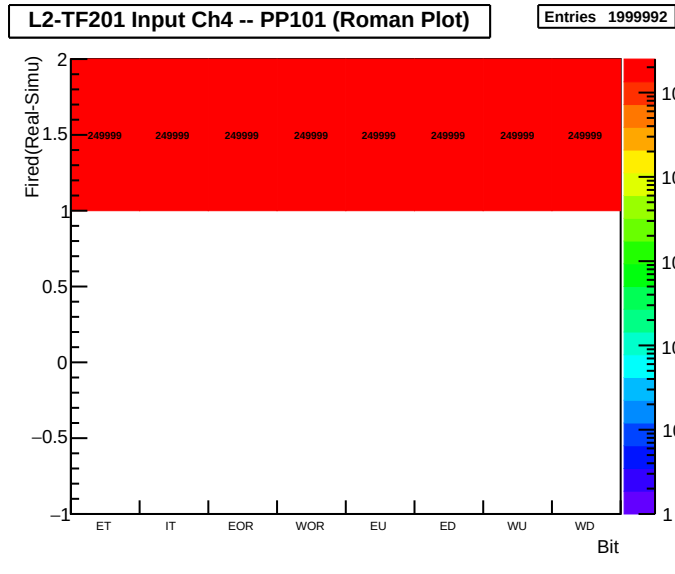

L2-TF201
Entries 249999
10^4
10^3
0 10 20 30 40 50 60 70 80 90 100
TOF total mult

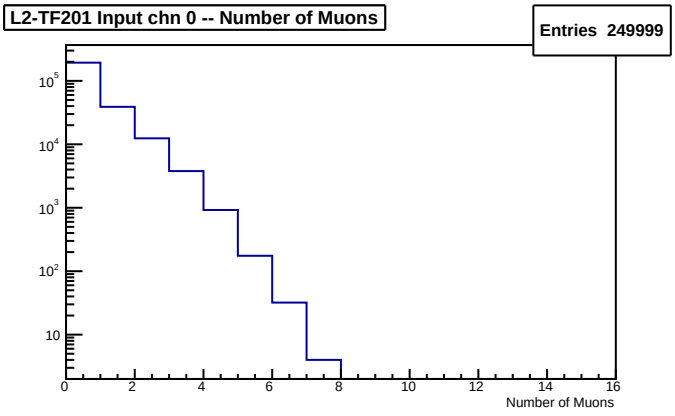

L2-TF201
Entries 0
10
1
10^{-1}
10^{-2}
0 10 20 30 40 50 60 70 80 90 100
TOF total mult(Real-Simu)

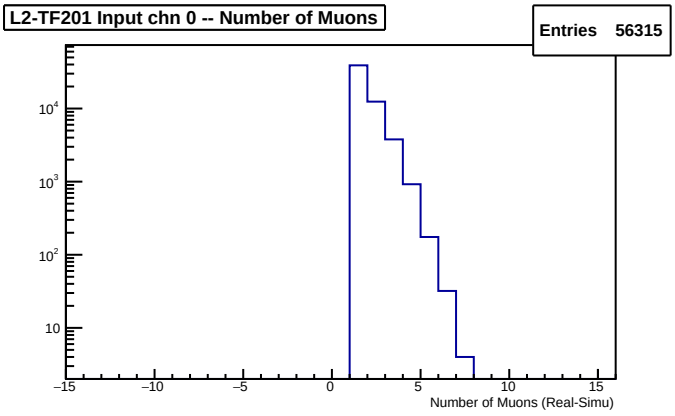

L2-TF201
Entries 1749993
Threshold/UPC bits
1
0
197909 196778 197004 196612 198567 196298 205276
52090 53221 52995 53387 51432 53701 44723
10^5
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

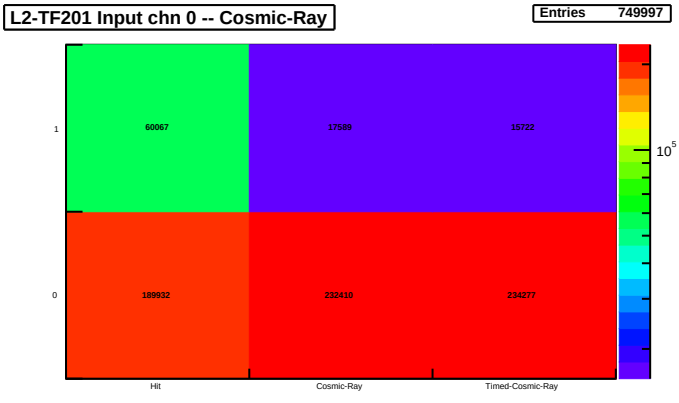

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
1
0
-1
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

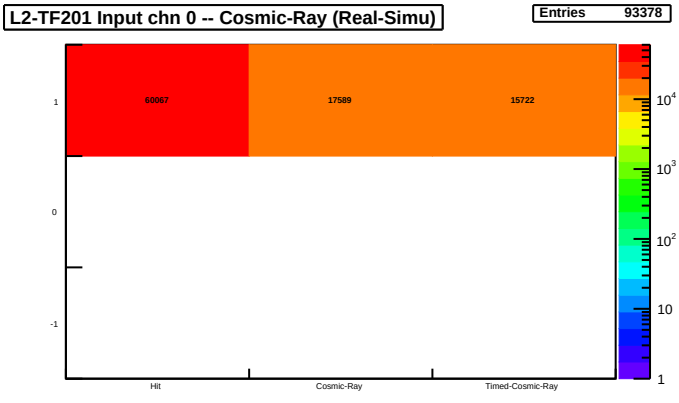

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 1999992
Fired
1
0
249999 249999 249999 249999 249999 249999 249999 249999
10^5
10^4
10^3
10^2
10
1
ET IT EOR WOR EU ED WU WD
Bit

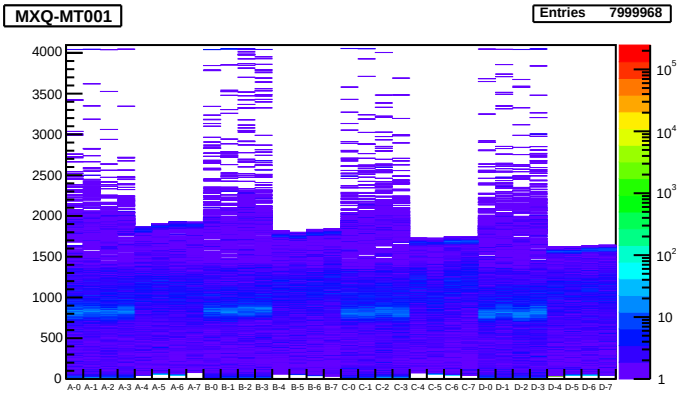

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 1999992
Fired(Real-Simu)
2
1.5
1
0.5
0
−0.5
−1
249999 249999 249999 249999 249999 249999 249999 249999
10^5
10^4
10^3
10^2
10
1
ET IT EOR WOR EU ED WU WD
Bit

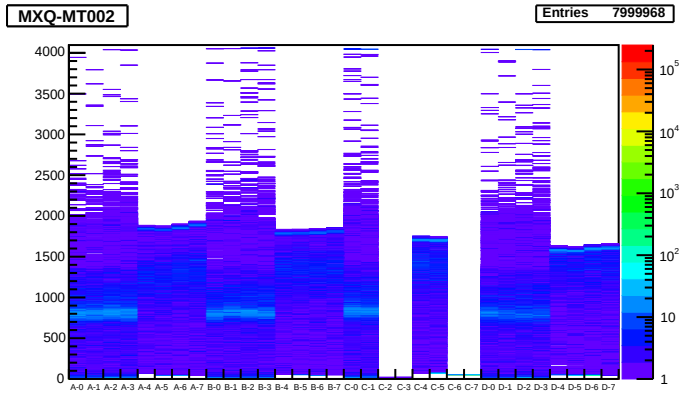

L2-TF201 Input chn 0 -- Number of Muons
Entries 249999
Number of Muons

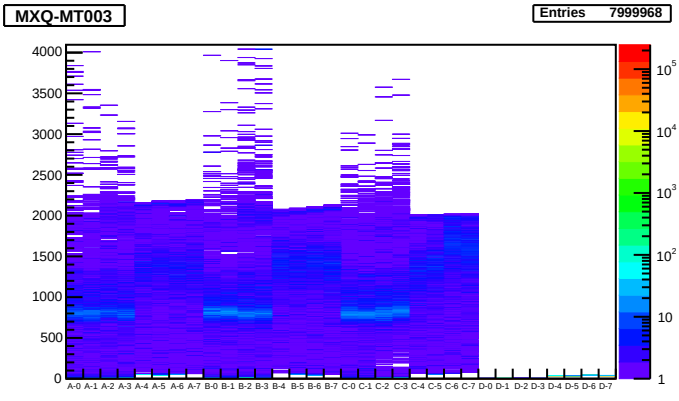

L2-TF201 Input chn 0 -- Number of Muons
Entries 56315
Number of Muons (Real-Simu)

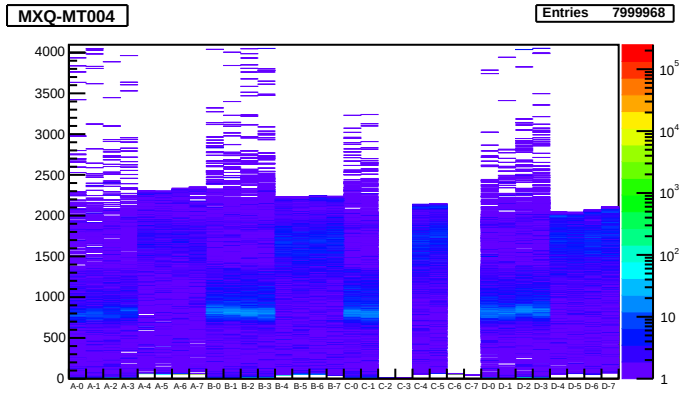

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 749997
60067
17589
15722
189932
232410
234277
Hit
Cosmic-Ray
Timed-Cosmic-Ray

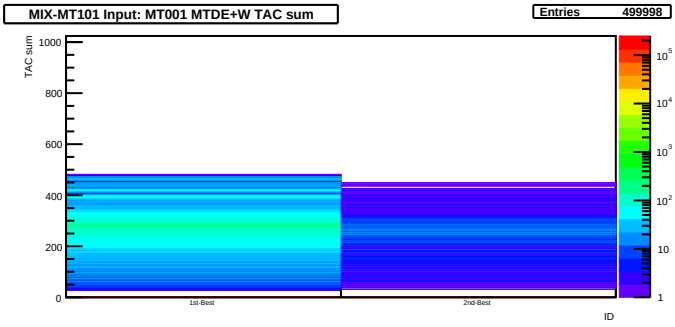

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 93378
60067
17589
15722
Hit
Cosmic-Ray
Timed-Cosmic-Ray

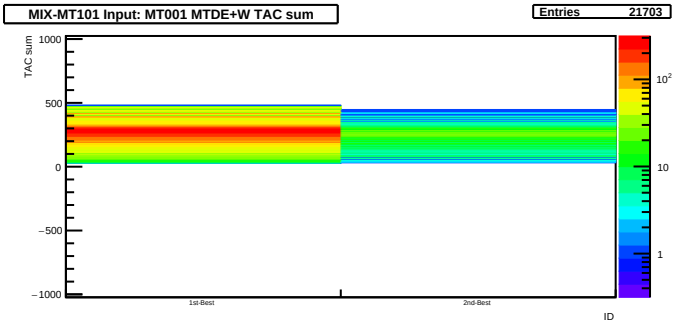

MXQ-MT001
Entries 7999968
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

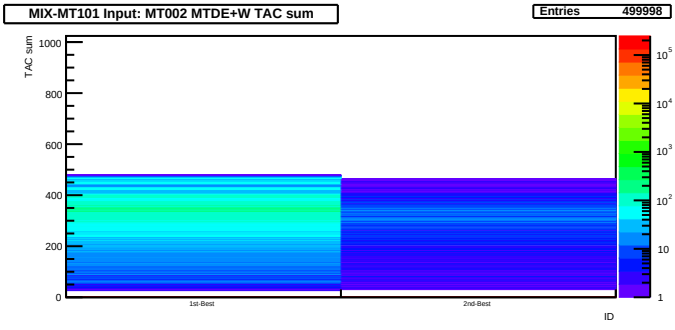

MXQ-MT002
Entries 7999968
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

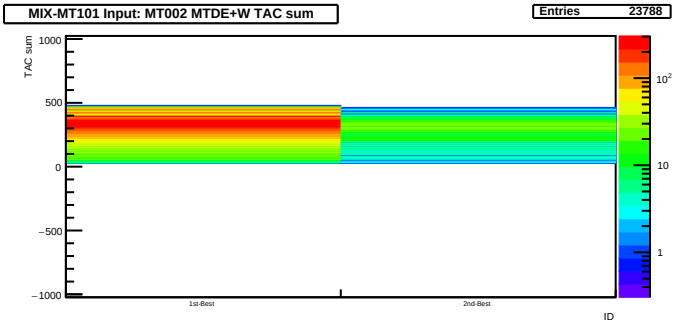

MXQ-MT003
Entries 7999968
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

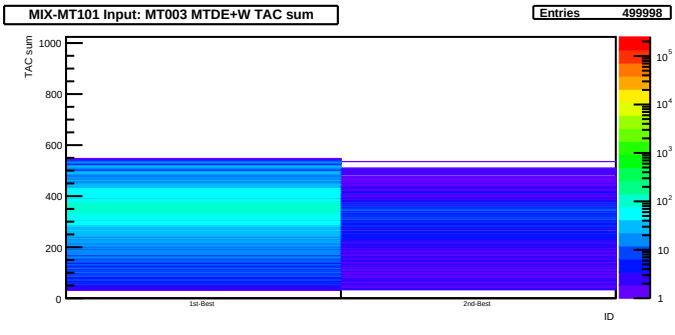

MXQ-MT004
Entries 7999968
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

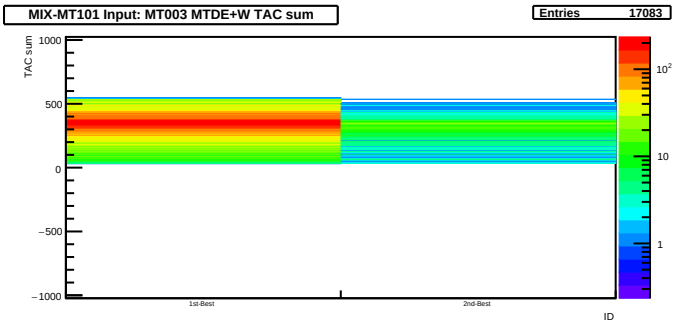

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 499998
TAC sum
1st-Best
2nd-Best
ID

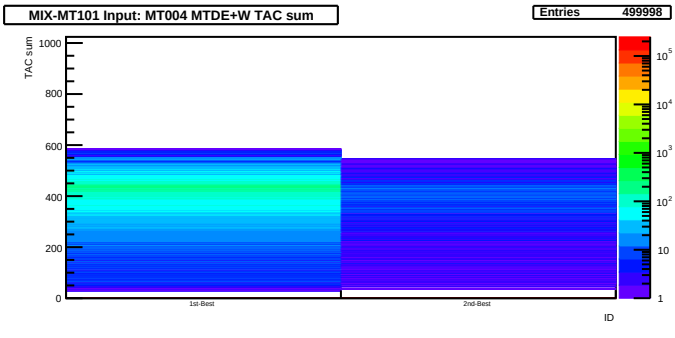

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 21703
TAC sum
1st-Best
2nd-Best
ID

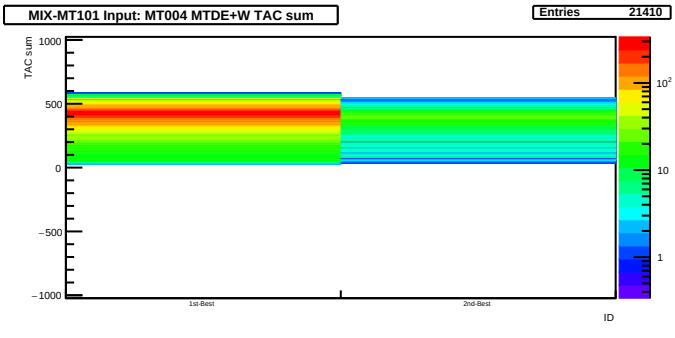

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 499998
TAC sum
1st-Best
2nd-Best
ID

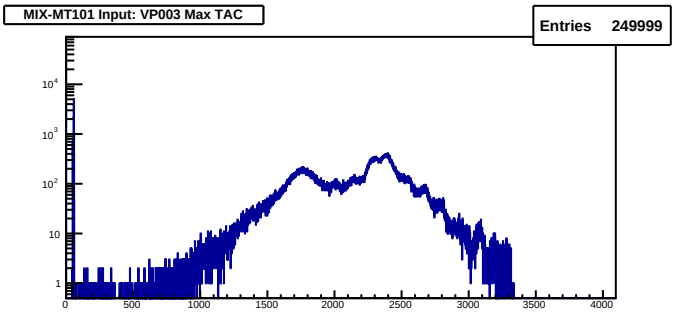

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 23788
TAC sum
1st-Best
2nd-Best
ID

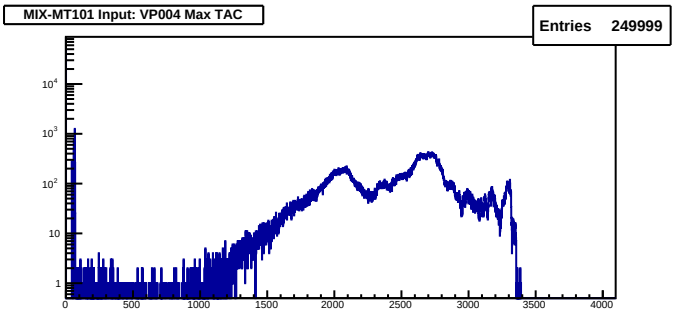

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 499998
TAC sum
1st-Best
2nd-Best
ID

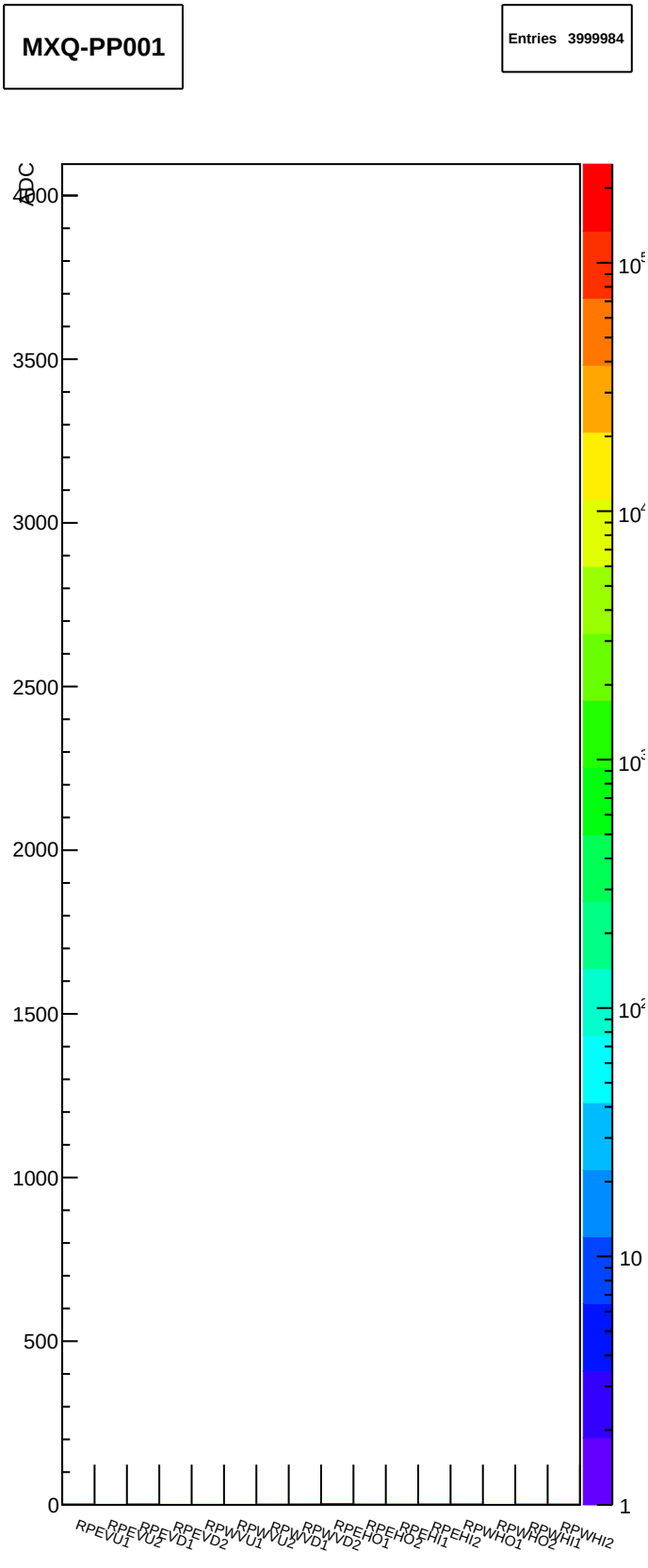

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 17083
TAC sum
1st-Best
2nd-Best
ID

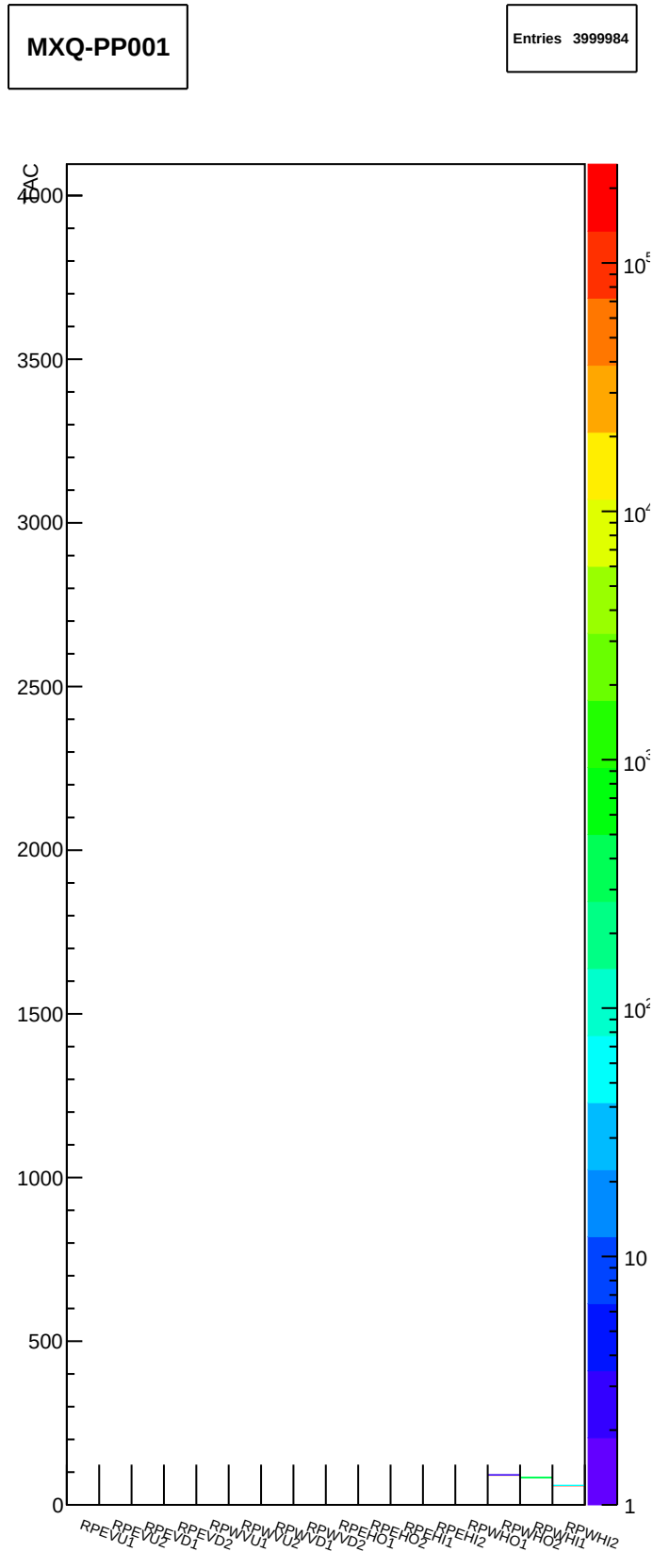

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 499998
TAC sum
1st-Best
2nd-Best
ID

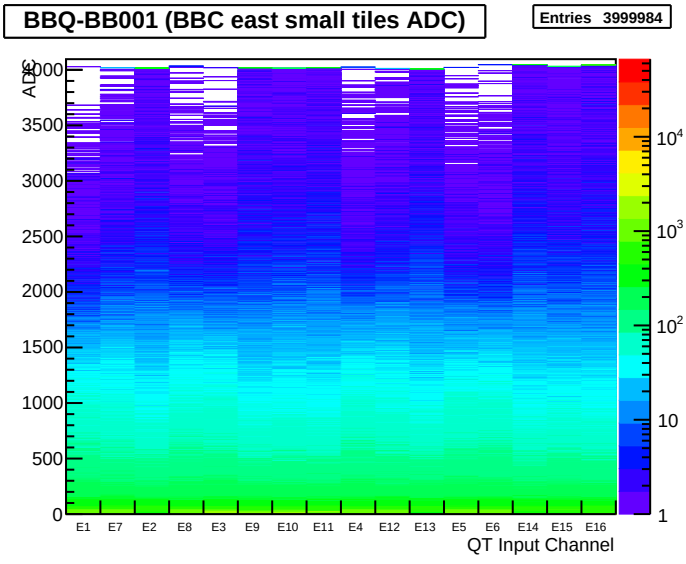

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 21410
TAC sum
1st-Best
2nd-Best
ID

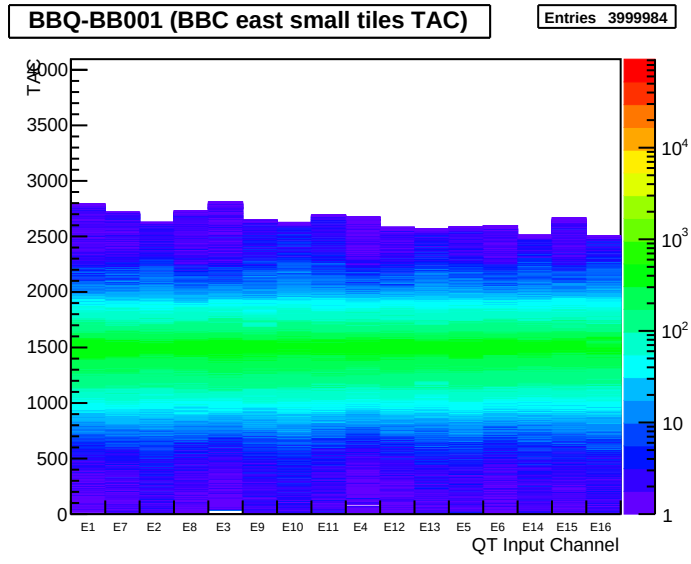

MIX-MT101 Input: VP003 Max TAC
Entries 249999

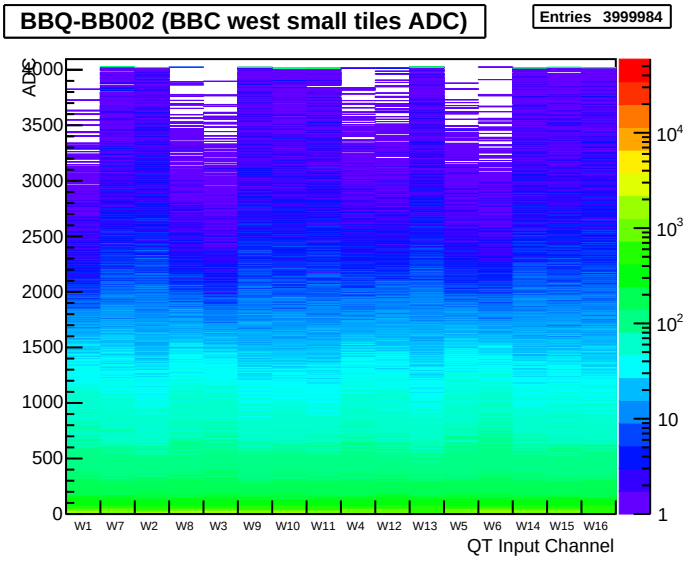

MIX-MT101 Input: VP004 Max TAC
Entries 249999

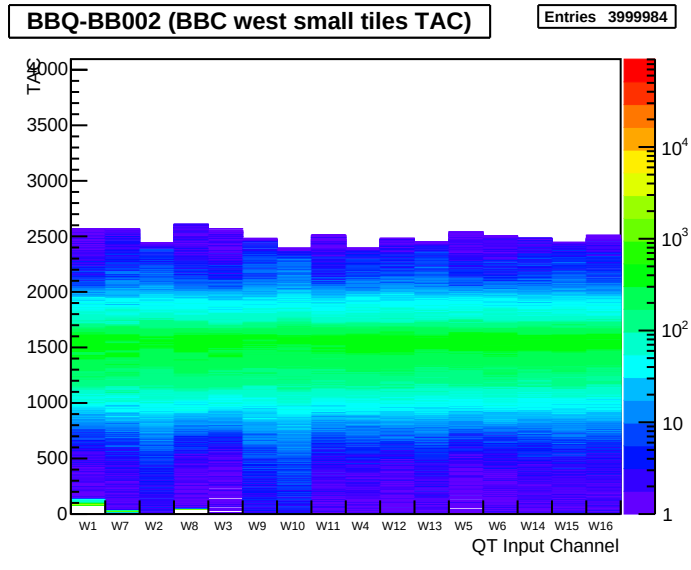

MXQ-PP001
Entries 3999984
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10^5
10^4
10^3
10^2
10
1

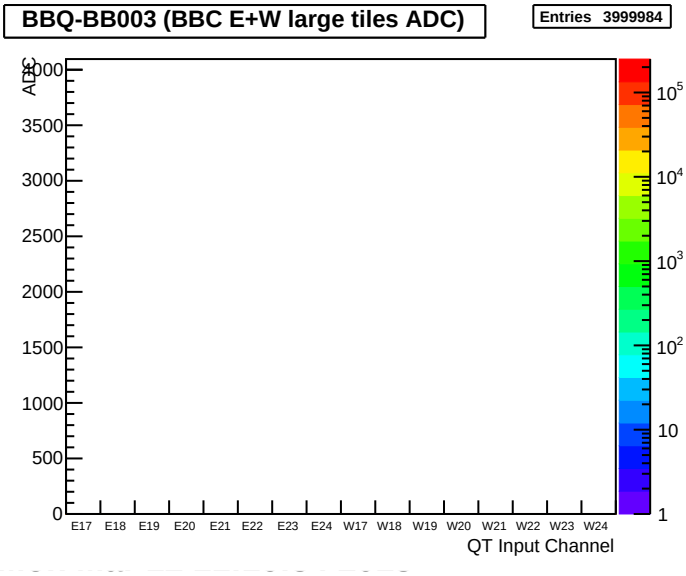

MXQ-PP001
Entries 3999984
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10^5
10^4
10^3
10^2
10
1

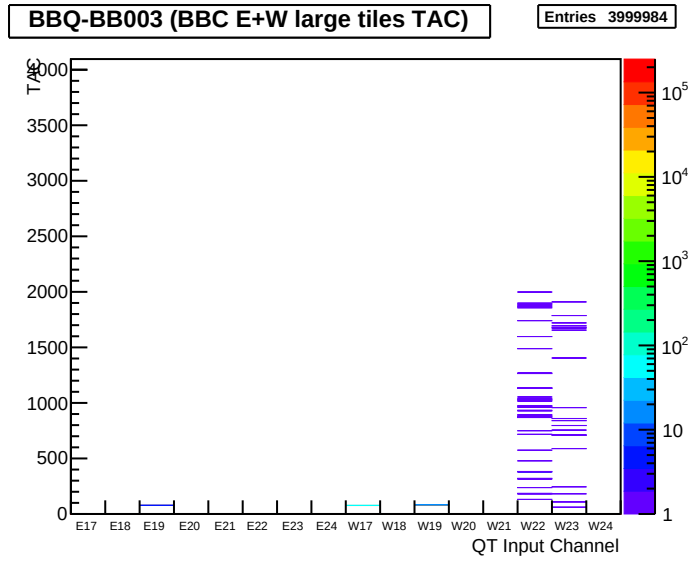

BBQ-BB001 (BBC east small tiles ADC)
Entries 3999984
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

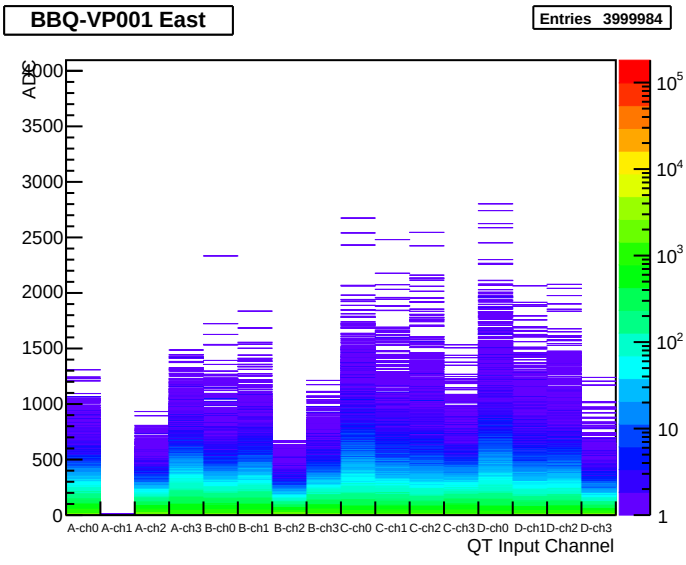

BBQ-BB001 (BBC east small tiles TAC)
Entries 3999984
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

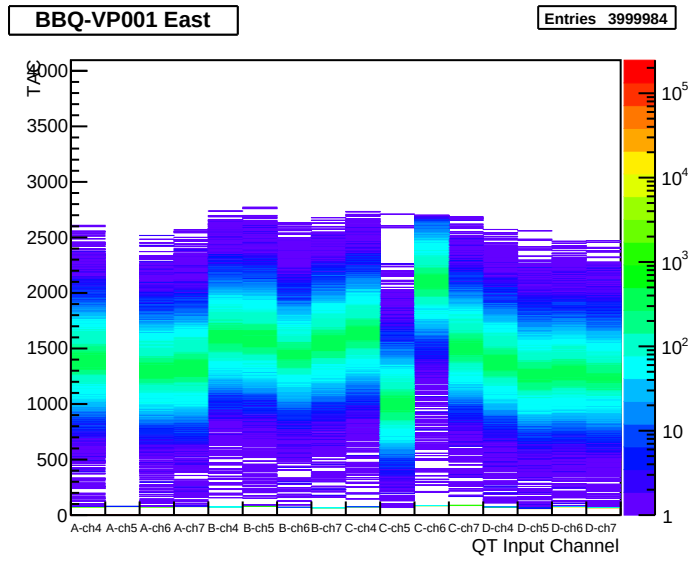

BBQ-BB002 (BBC west small tiles ADC)
Entries 3999984
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

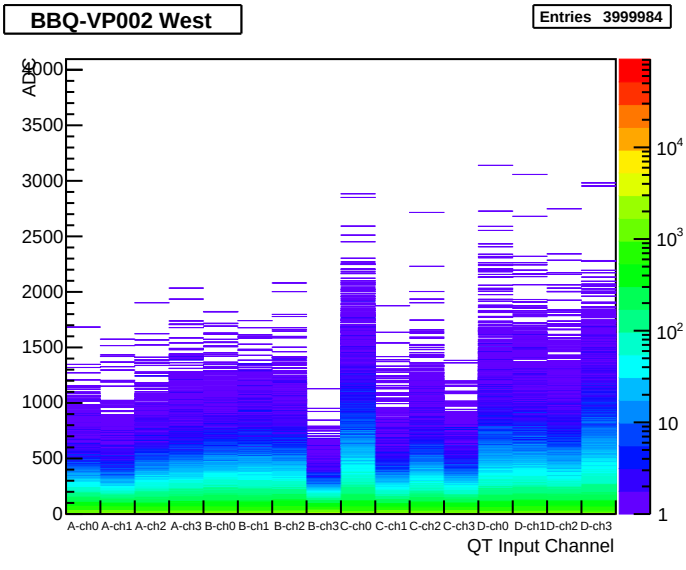

BBQ-BB002 (BBC west small tiles TAC)
Entries 3999984
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

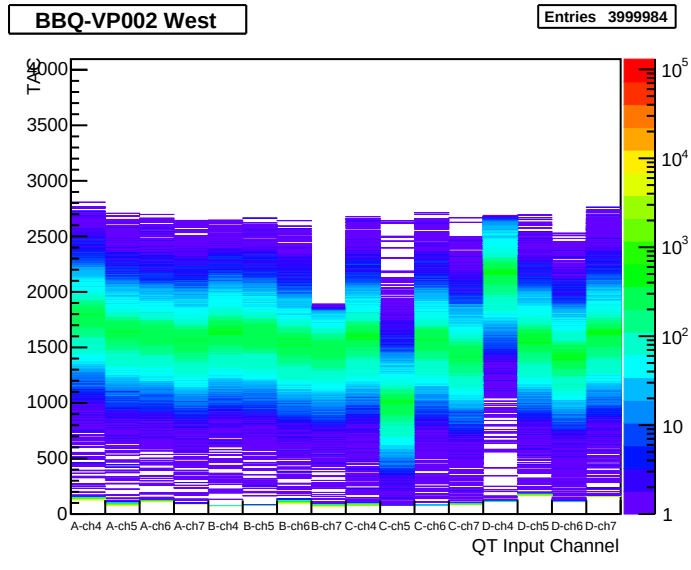

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3999984
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

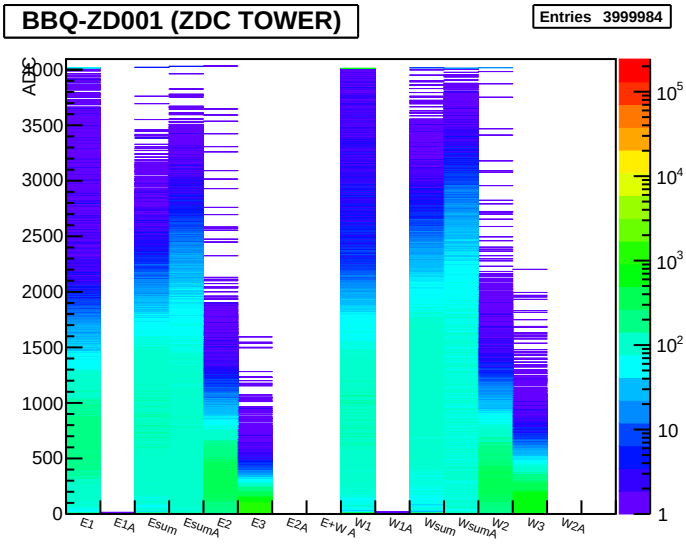

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3999984
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

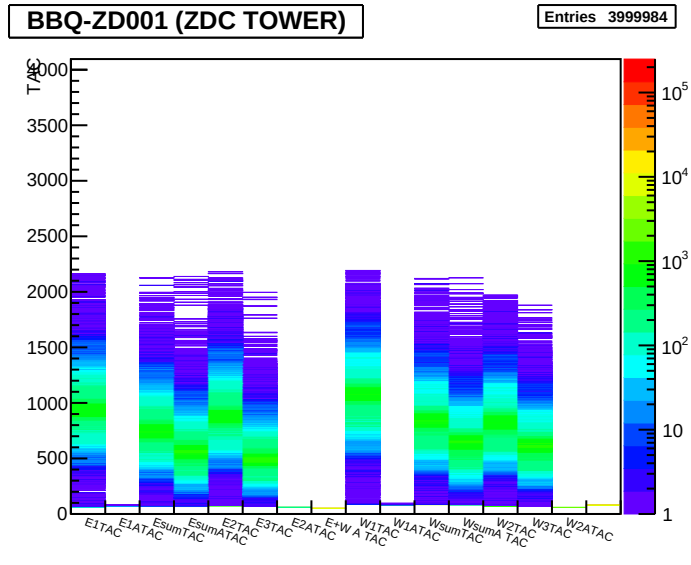

BBQ-VP001 East
Entries 3999984
ADC
QT Input Channel

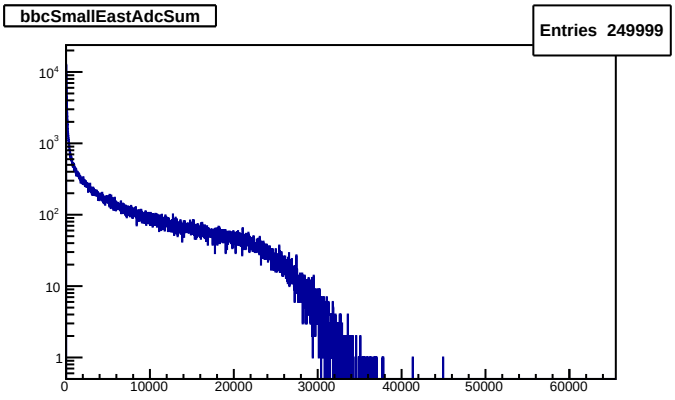

BBQ-VP001 East
Entries 3999984
TAC
QT Input Channel

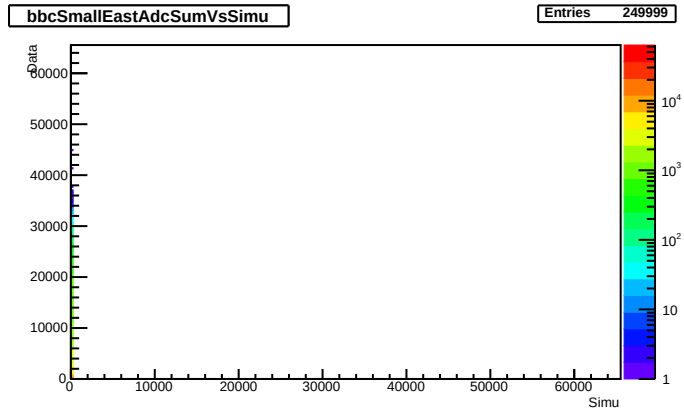

BBQ-VP002 West
Entries 3999984
ADC
QT Input Channel

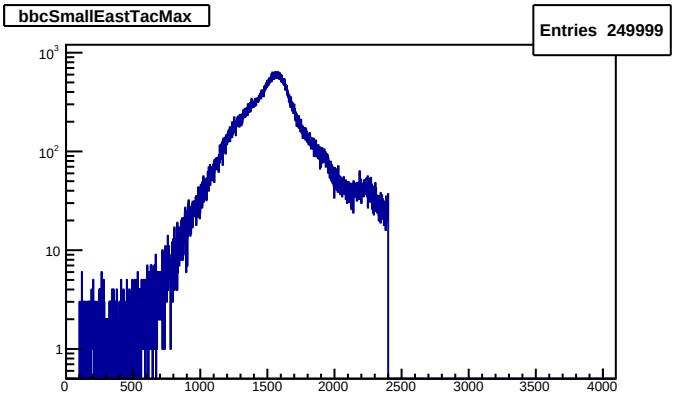

BBQ-VP002 West
Entries 3999984
TAC
QT Input Channel

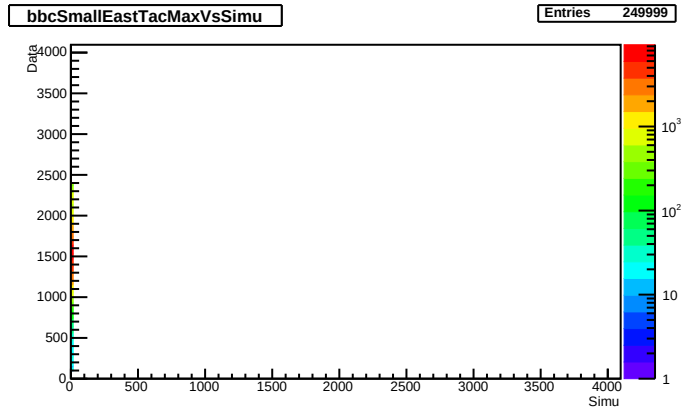

BBQ-ZD001 (ZDC TOWER)
Entries 3999984
ADC

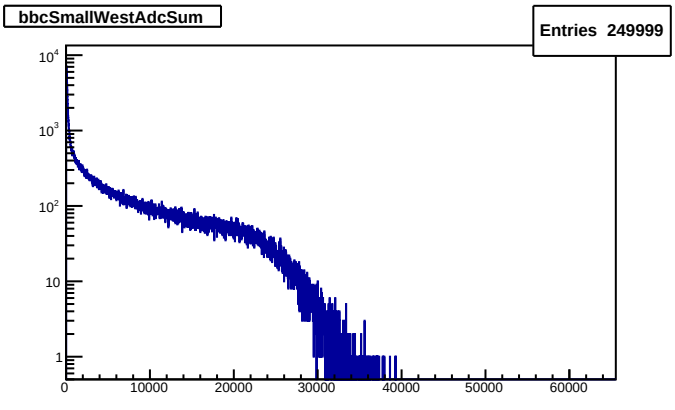

BBQ-ZD001 (ZDC TOWER)
Entries 3999984
TAC

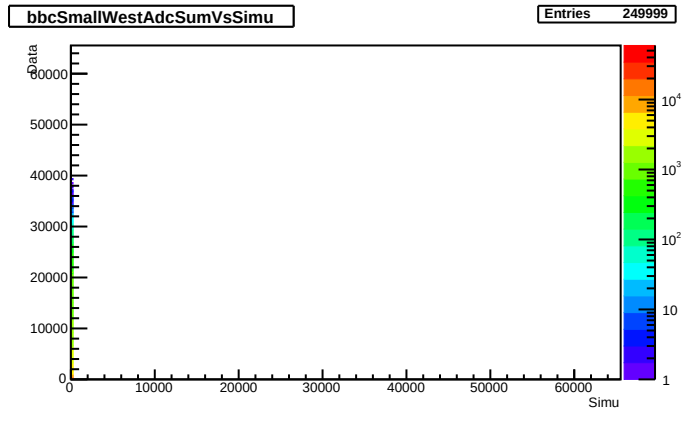

bbcSmallEastAdcSum
Entries 249999

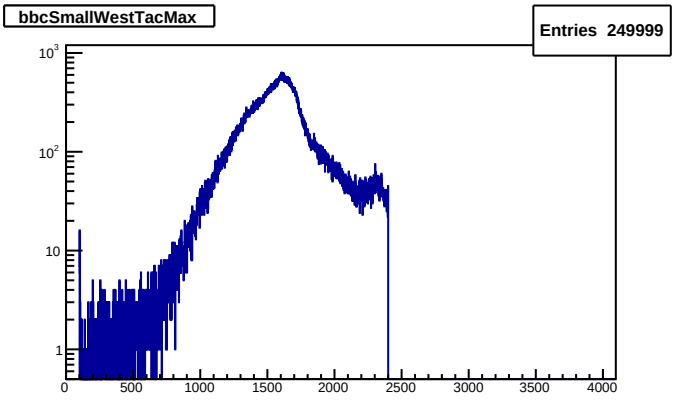

bbcSmallEastAdcSumVsSimu
Entries 249999
Data
Simu

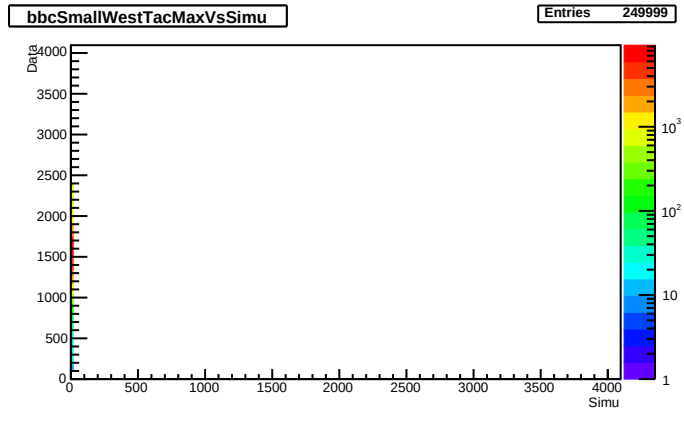

bbcSmallEastTacMax
Entries 249999

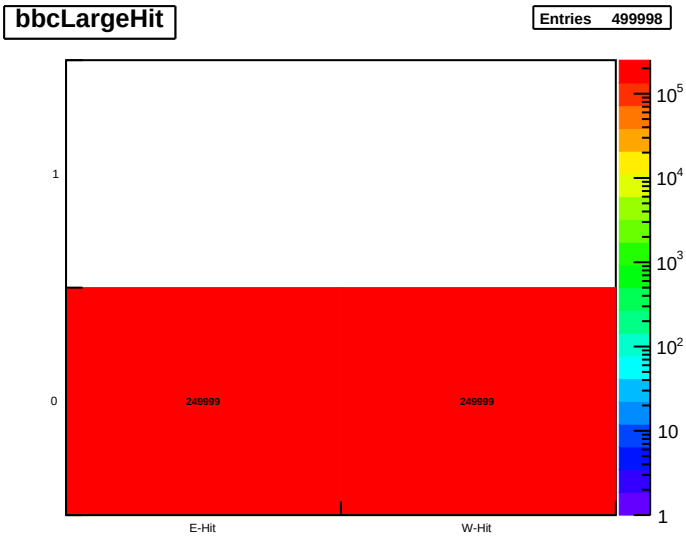

bbcSmallEastTacMaxVsSimu
Entries 249999
Data
Simu

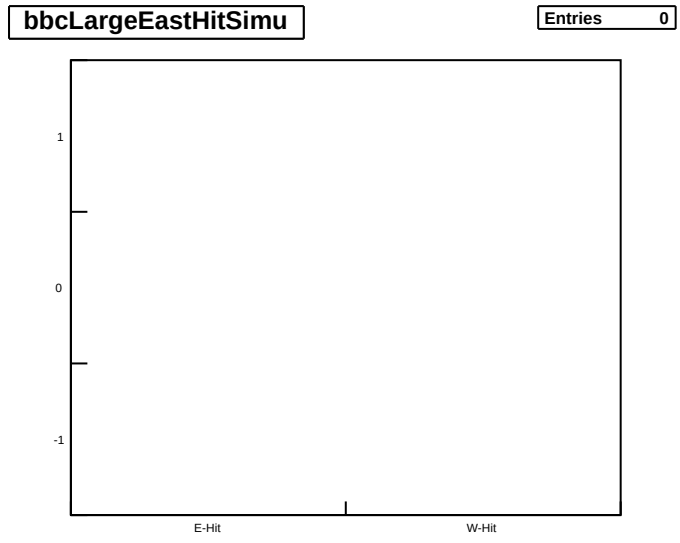

bbcSmallWestAdcSum
Entries 249999

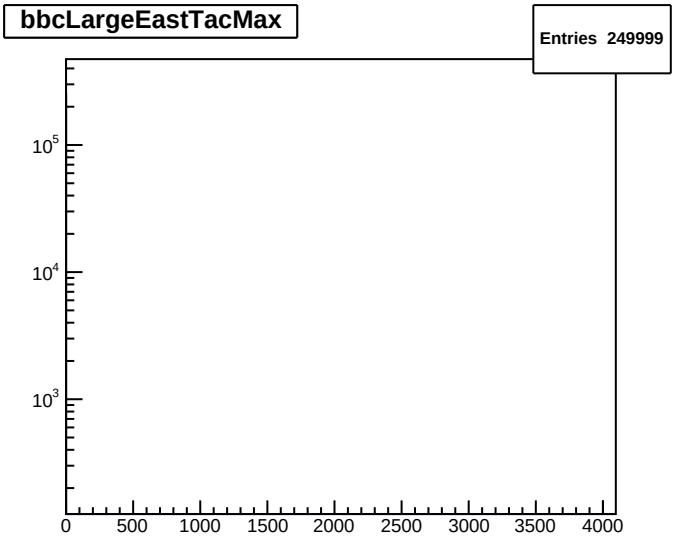

bbcSmallWestAdcSumVsSimu
Entries 249999
Data
Simu

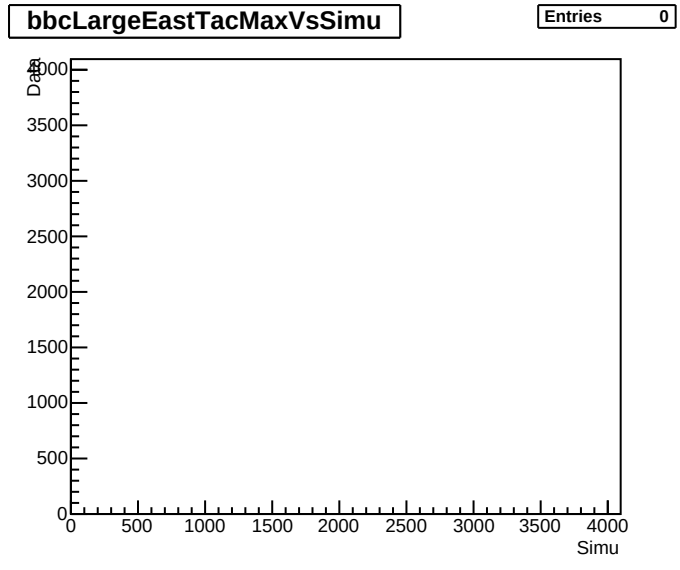

bbcSmallWestTacMax
Entries 249999

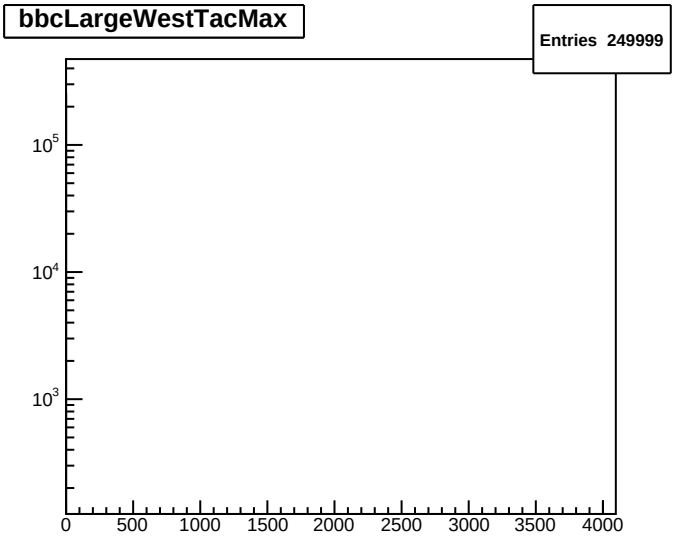

bbcSmallWestTacMaxVsSimu
Entries 249999
Data
Simu

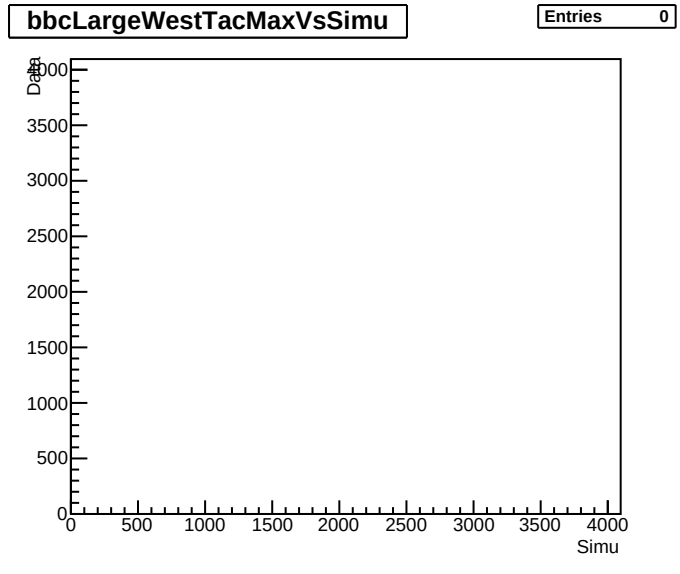

bbcLargeHit
Entries 499998
249999
249999
E-Hit
W-Hit

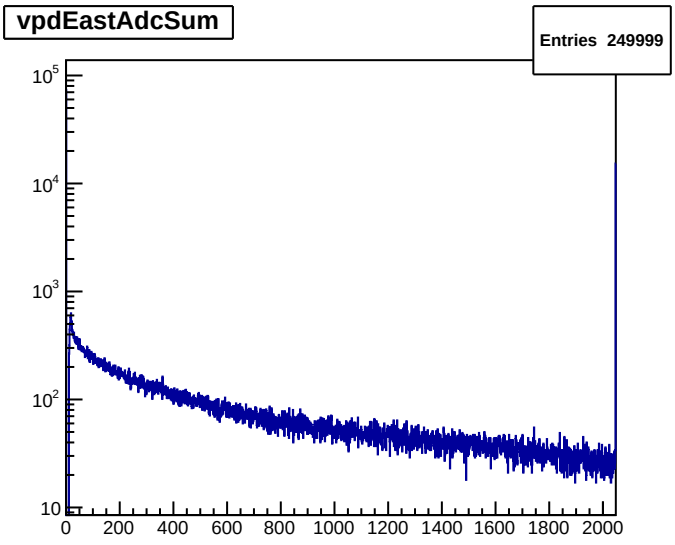

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

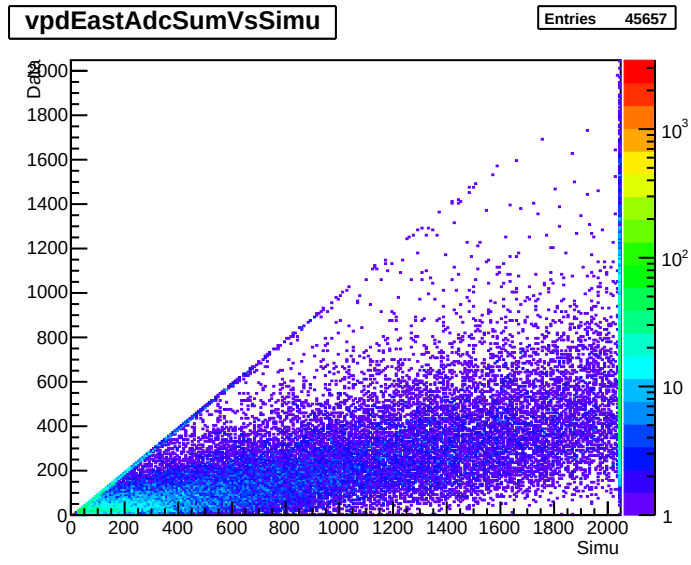

bbcLargeEastTacMax
Entries 249999

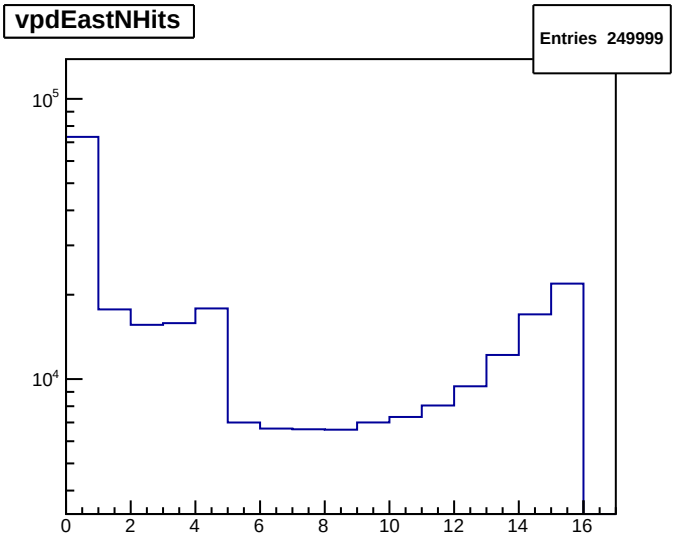

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

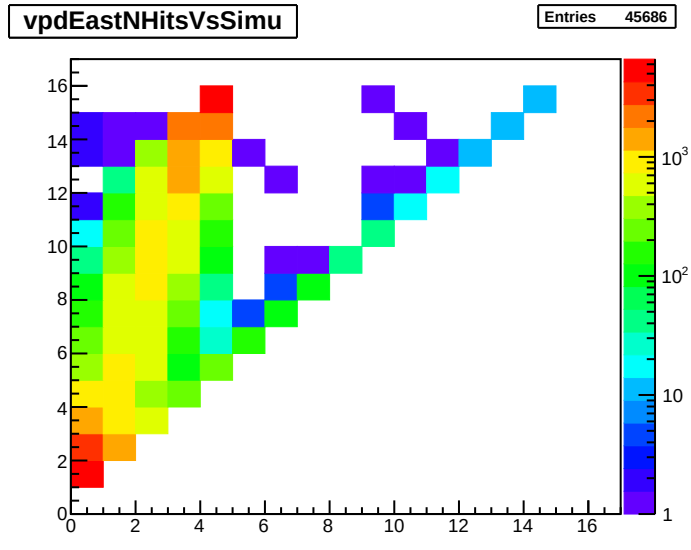

bbcLargeWestTacMax
Entries 249999

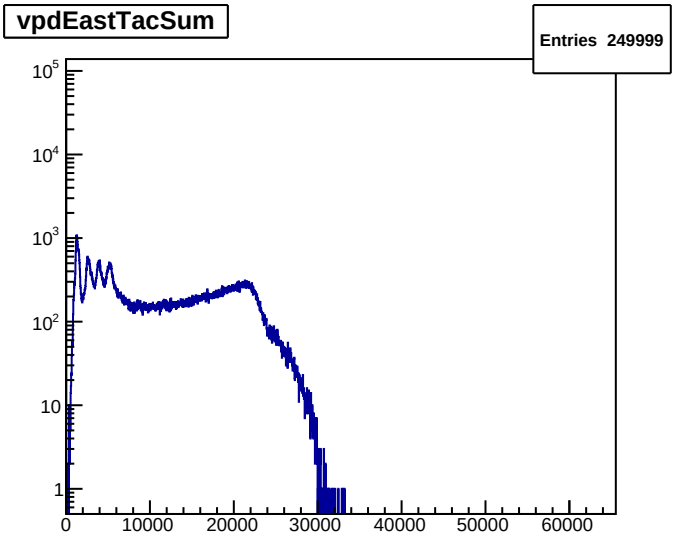

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

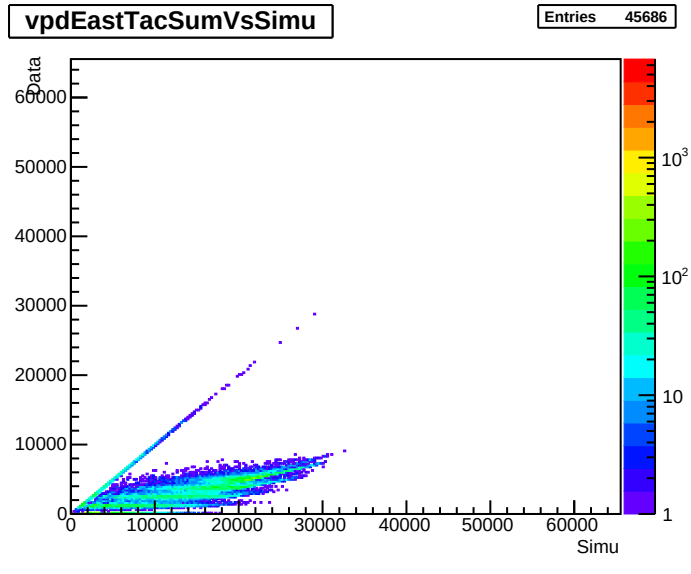

vpdEastAdcSum
Entries 249999

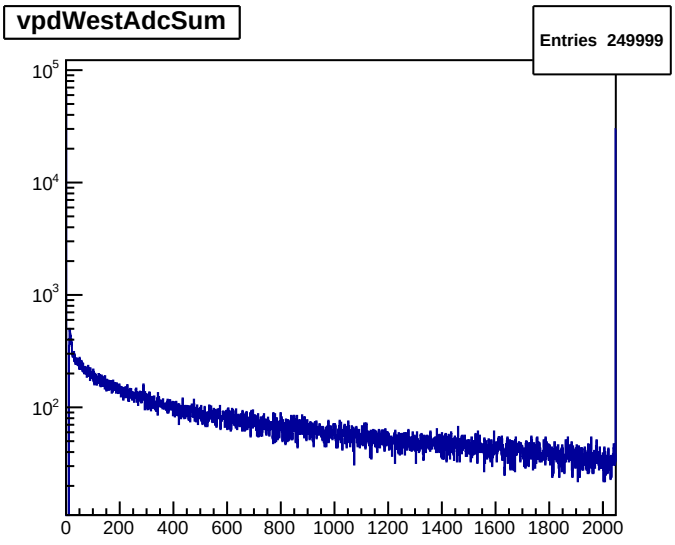

vpdEastAdcSumVsSimu
Entries 45657
Data
Simu

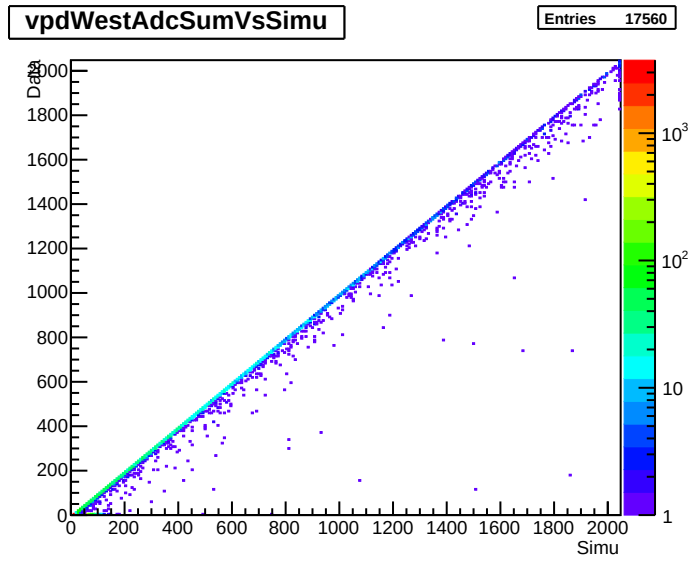

vpdEastNHits
Entries 249999

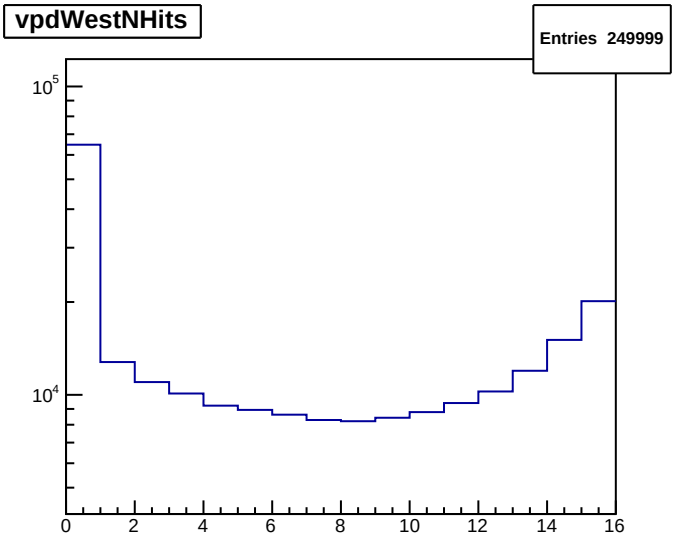

vpdEastNHitsVsSimu
Entries 45686

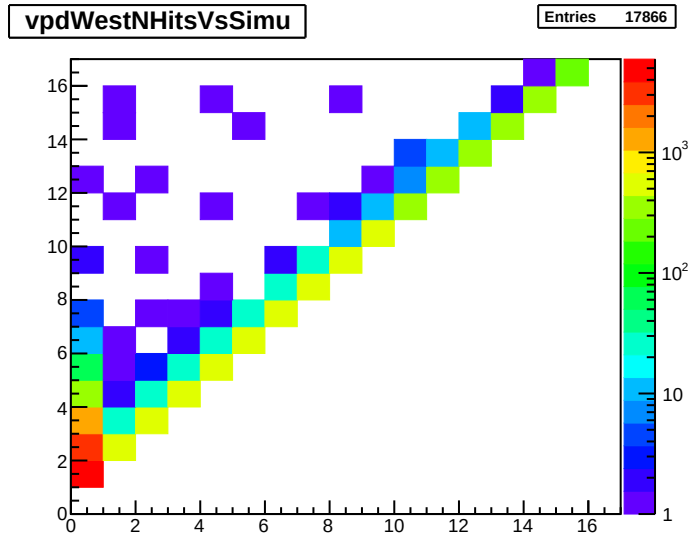

vpdEastTacSum
Entries 249999

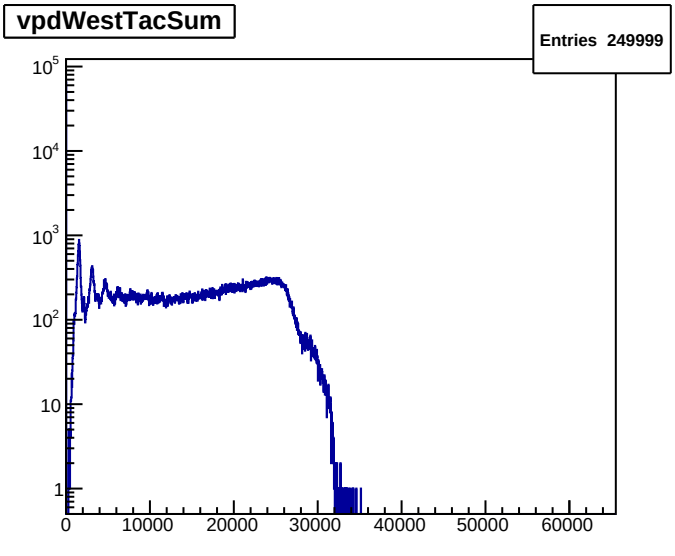

vpdEastTacSumVsSimu
Entries 45686
Data
Simu

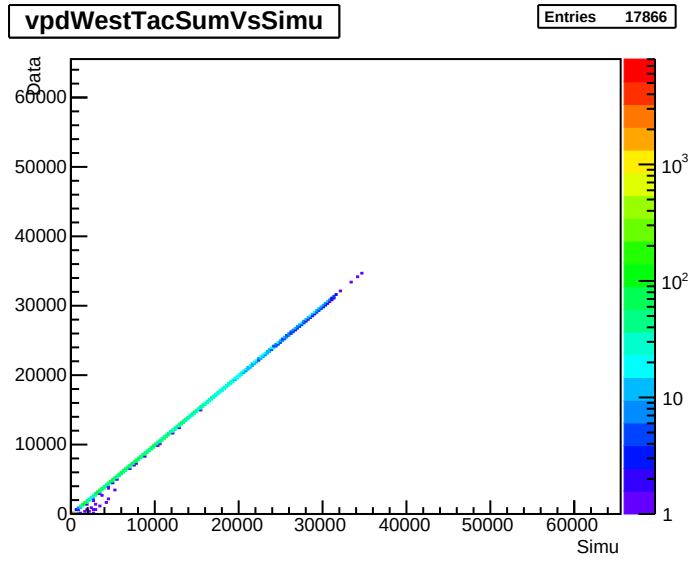

vpdWestAdcSum
Entries 249999

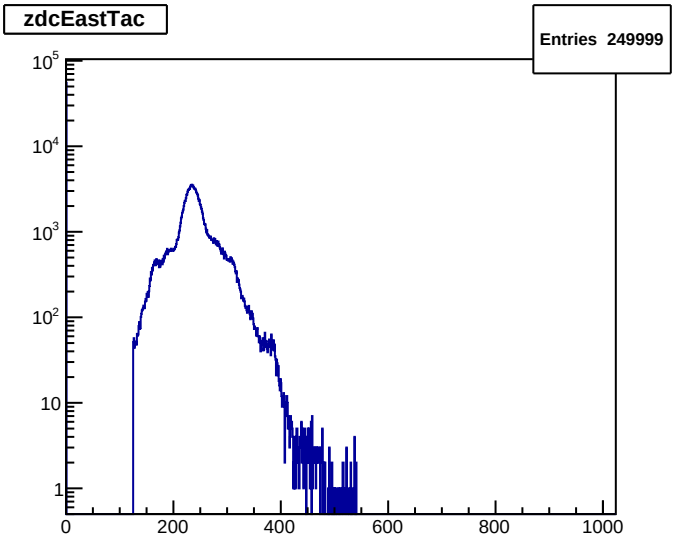

vpdWestAdcSumVsSimu
Entries 17560
Data
Simu

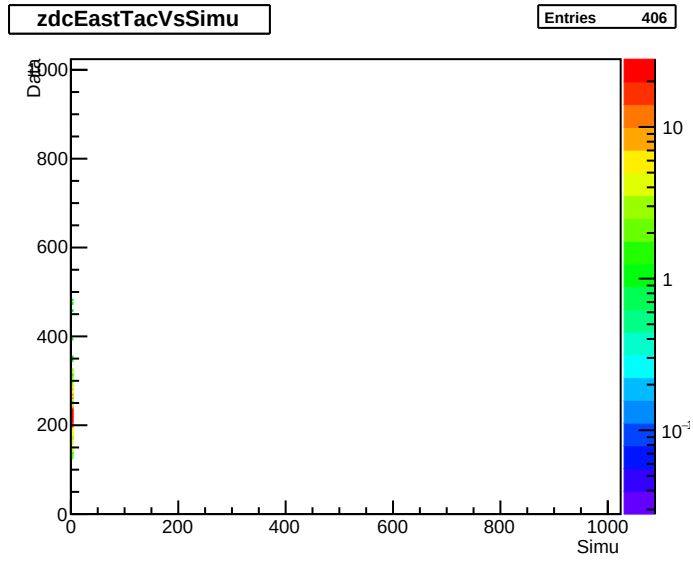

vpdWestNHits
Entries 249999

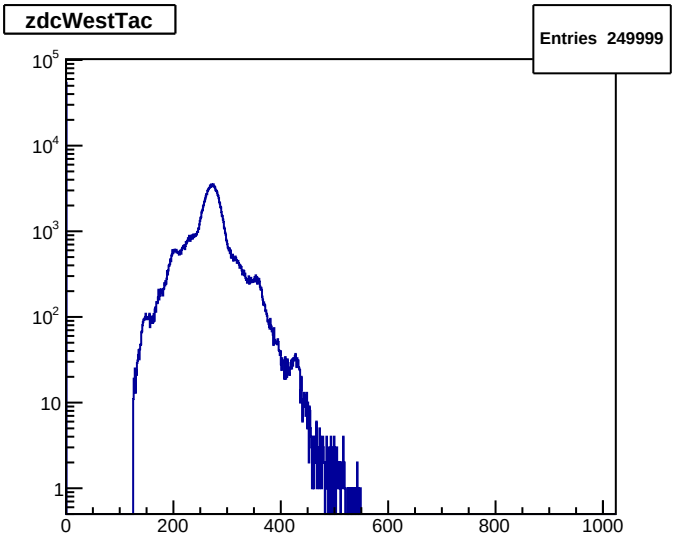

vpdWestNHitsVsSimu
Entries 17866

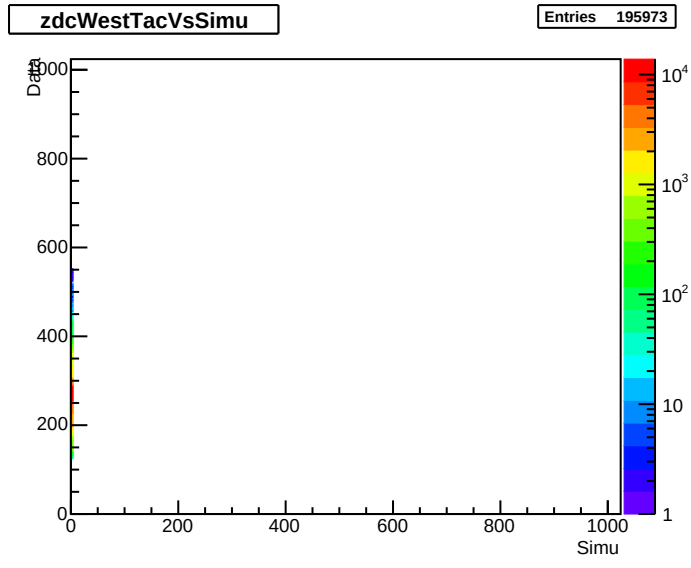

vpdWestTacSum
Entries 249999

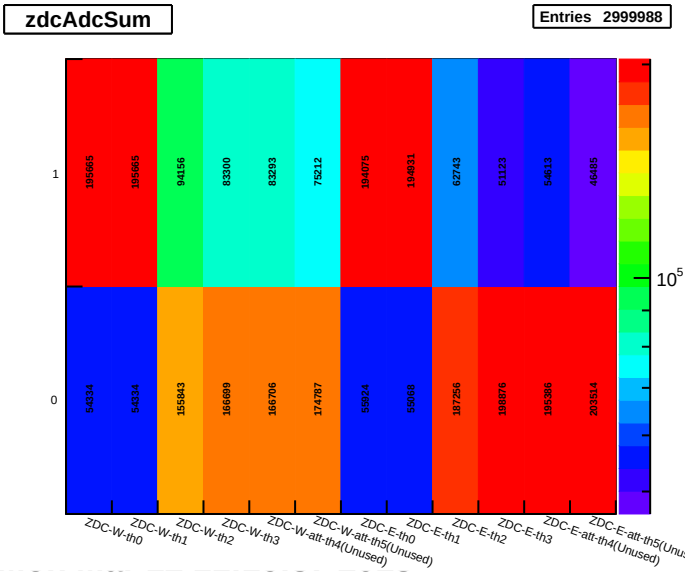

vpdWestTacSumVsSimu
Entries 17866
Data
Simu

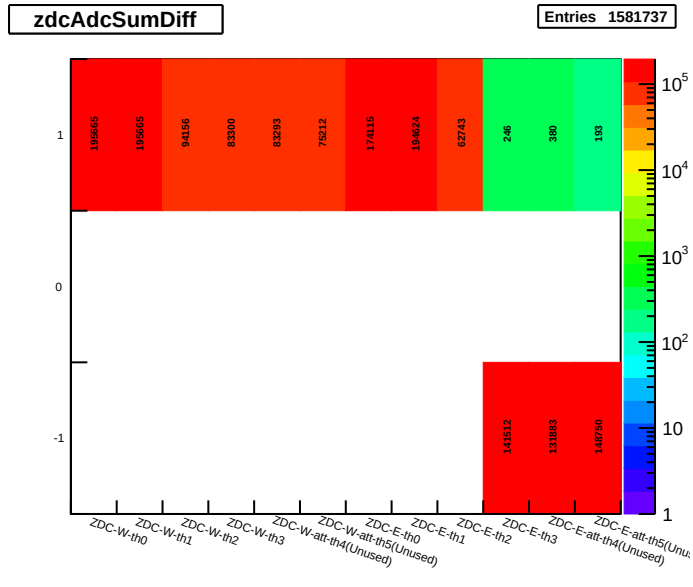

zdcEastTac
Entries 249999

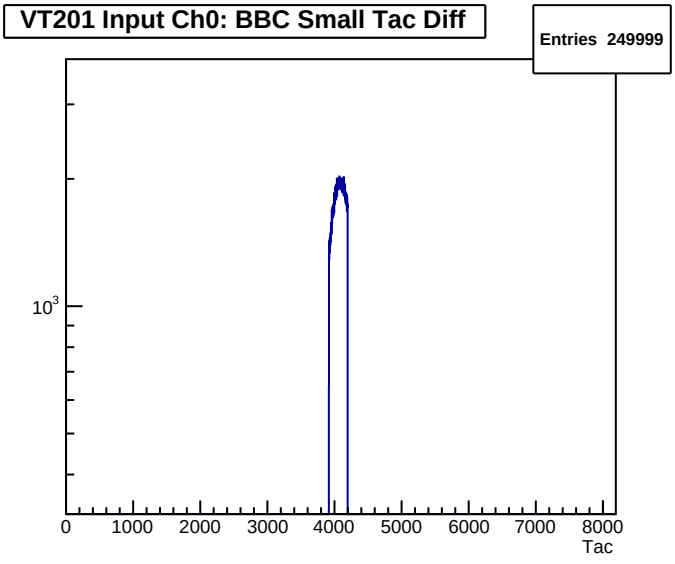

zdcEastTacVsSimu
Entries 406
Data
Simu

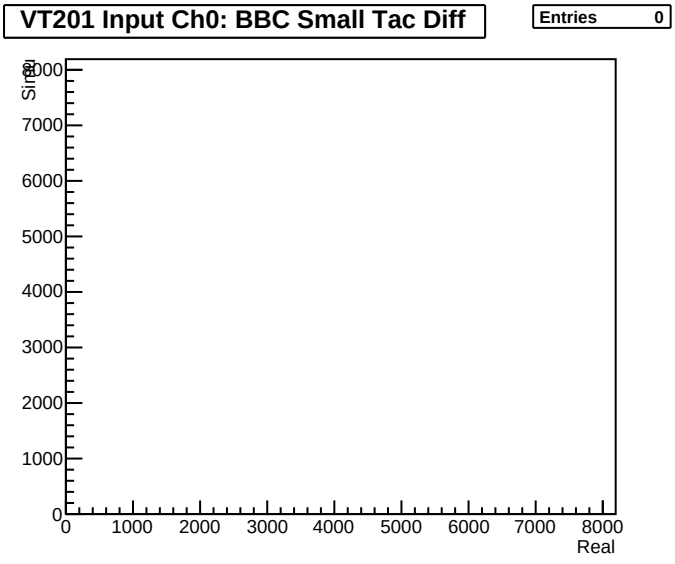

zdcWestTac
Entries 249999

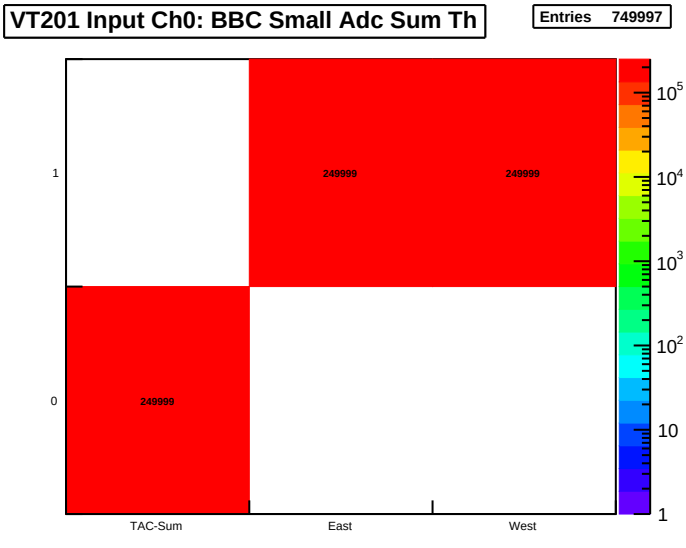

zdcWestTacVsSimu
Entries 195973
Data
Simu

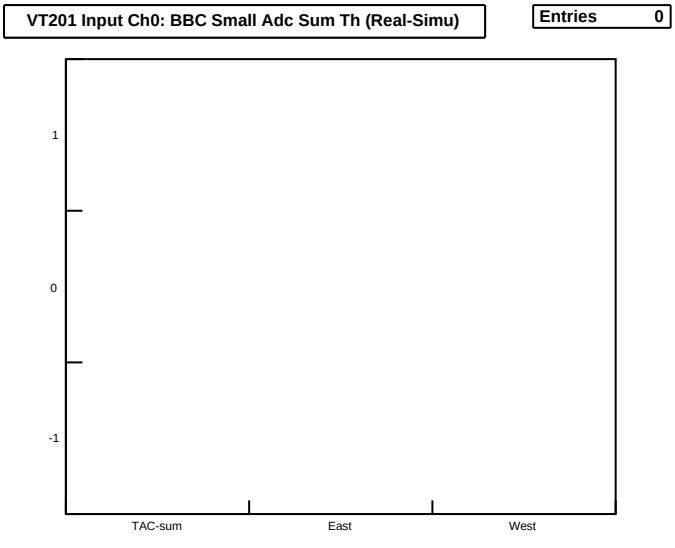

zdcAdcSum
Entries 2999988
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

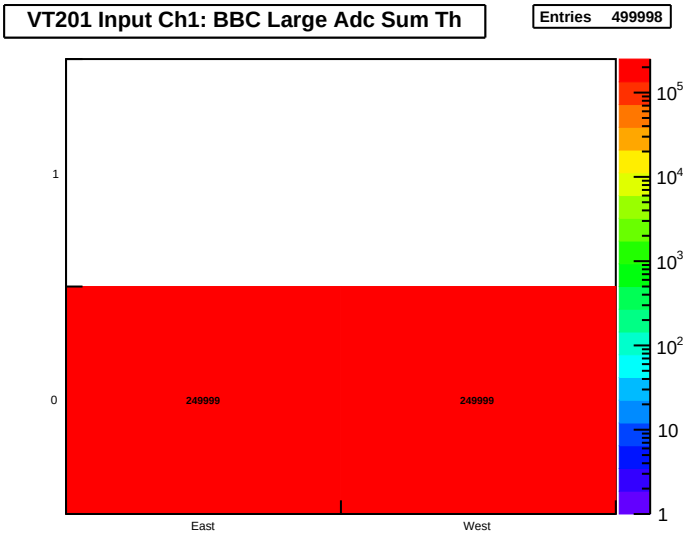

zdcAdcSumDiff
Entries 1581737
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

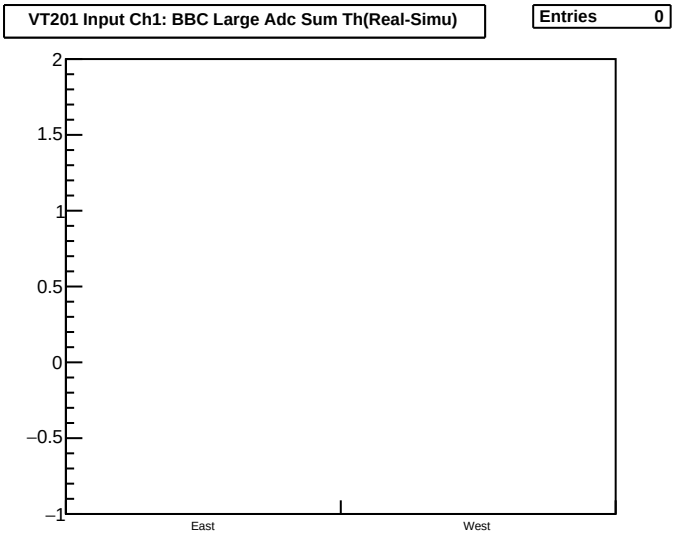

VT201 Input Ch0: BBC Small Tac Diff
Entries 249999
Tac


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

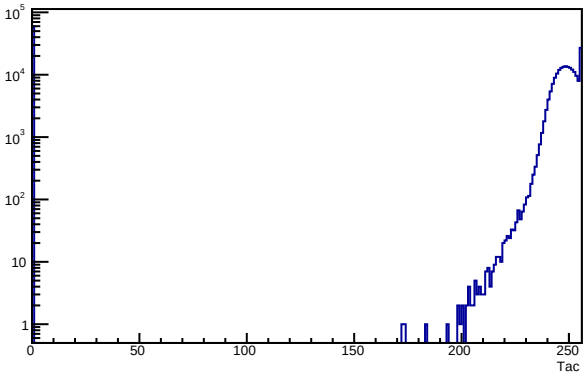

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 749997
249999
249999
249999
TAC-Sum
East
West


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

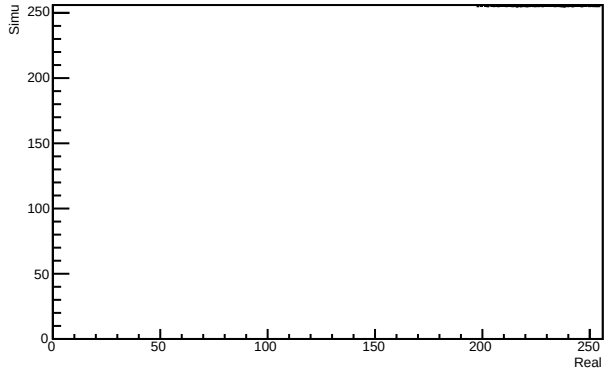

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 499998
249999
249999
East
West


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

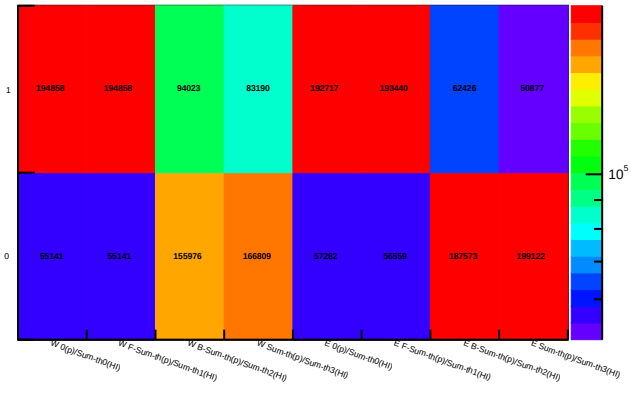
VT201 Input Ch2: ZDC Tac Diff



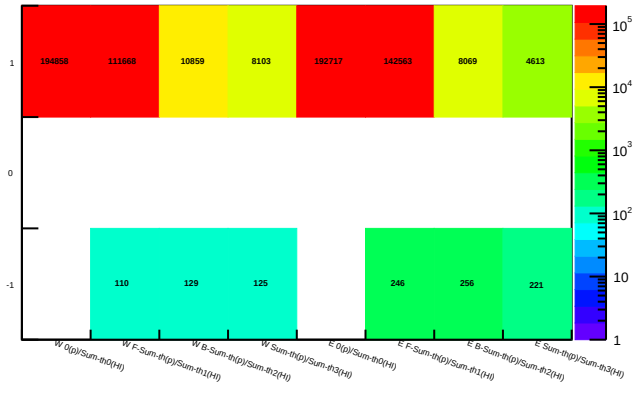
VT201 Input Ch2: ZDC Tac Diff



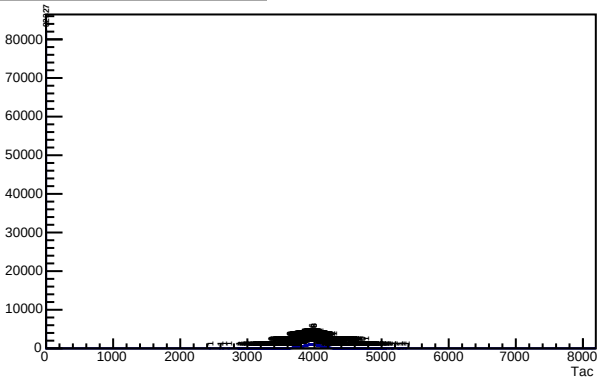
VT201 Input Ch2: ZDC Adc Sum Th



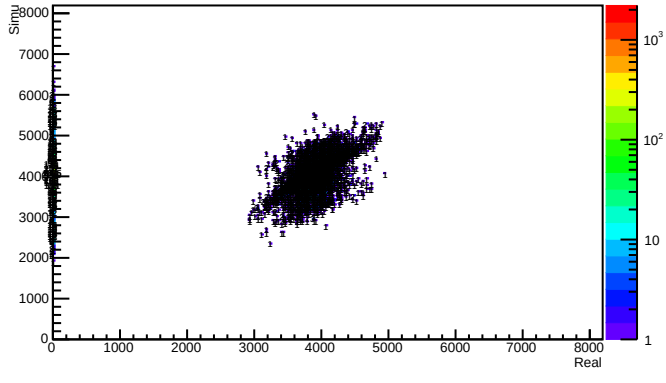
VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)



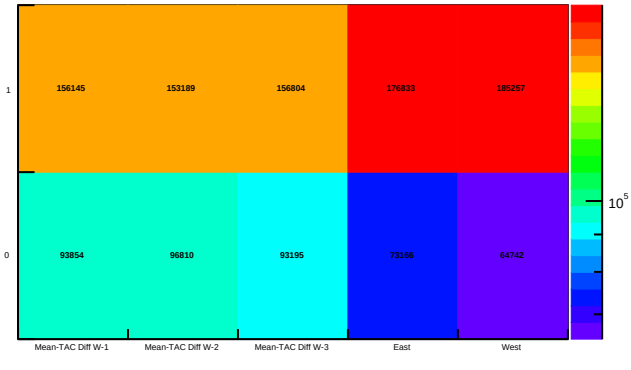
VT201 Input Ch4: VPD Tac Diff



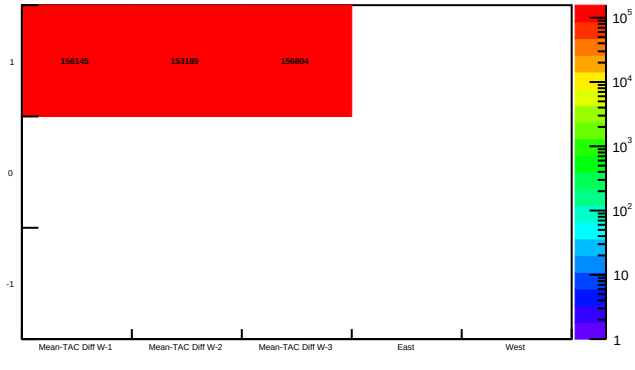
VT201 Input Ch4: VPD Tac Diff

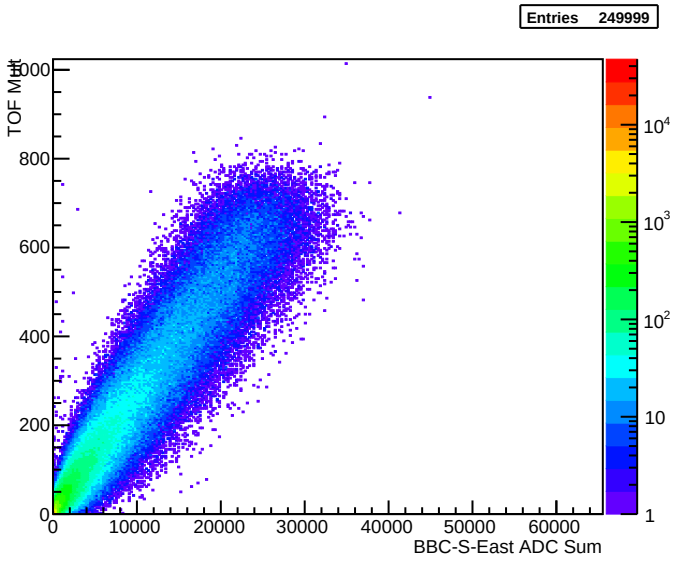


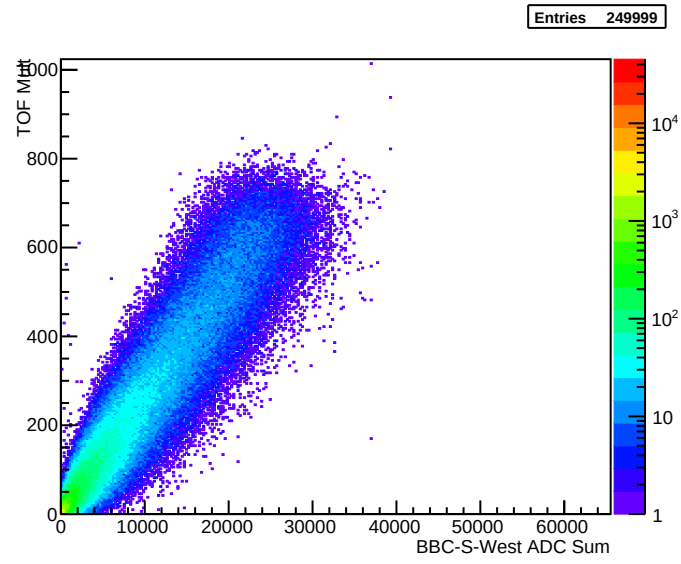
VT201 Input Ch4: VPD Adc Sum Th

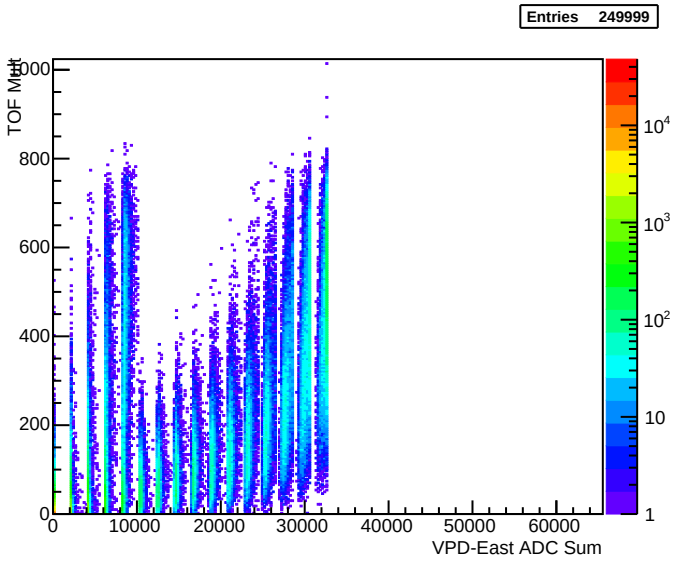


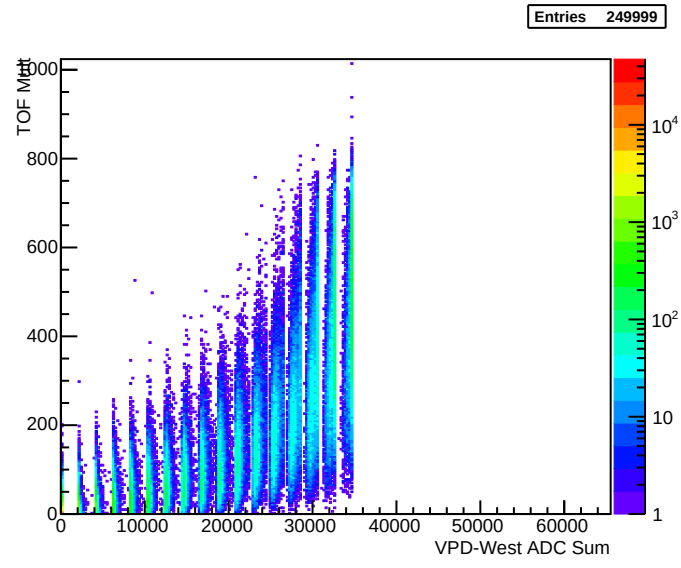
VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)

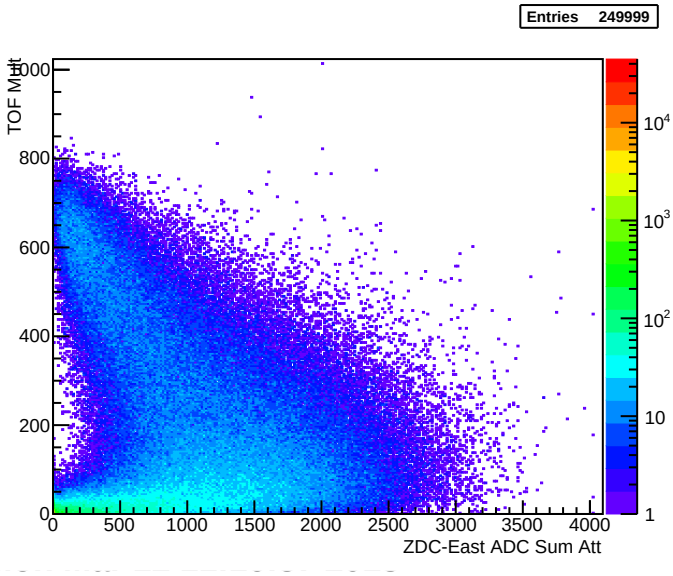


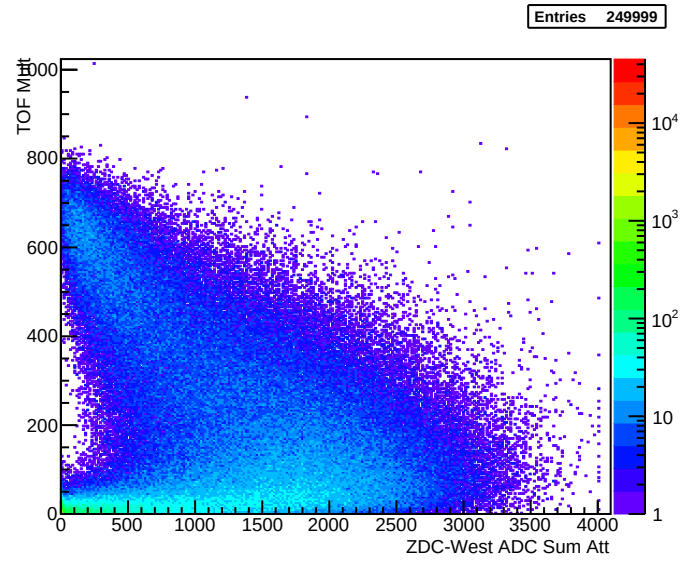

Entries 249999
TOF Mult
BBC-S-East ADC Sum

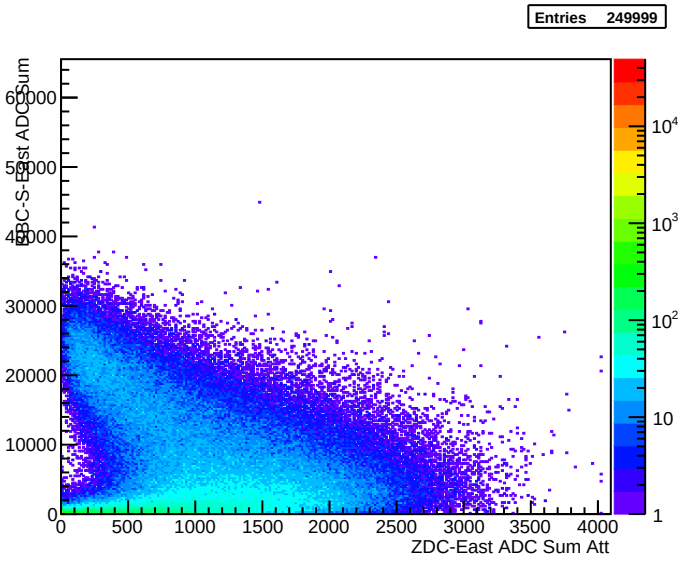

Entries 249999
TOF Mult
BBC-S-West ADC Sum

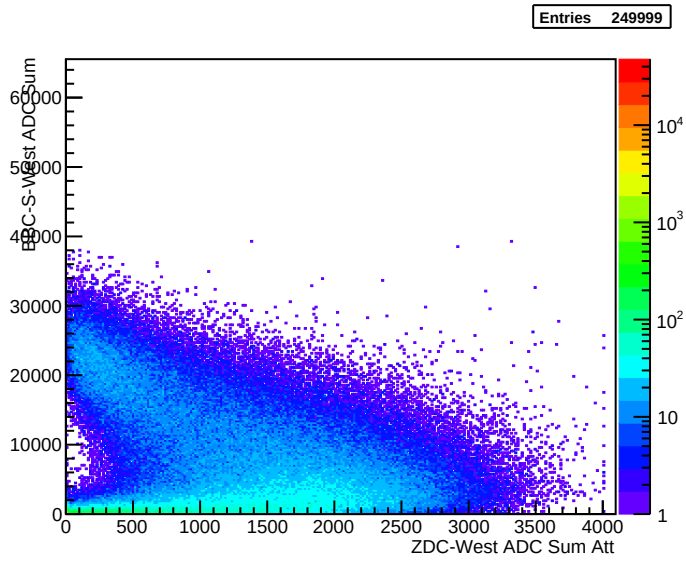

Entries 249999
TOF Mult
VPD-East ADC Sum

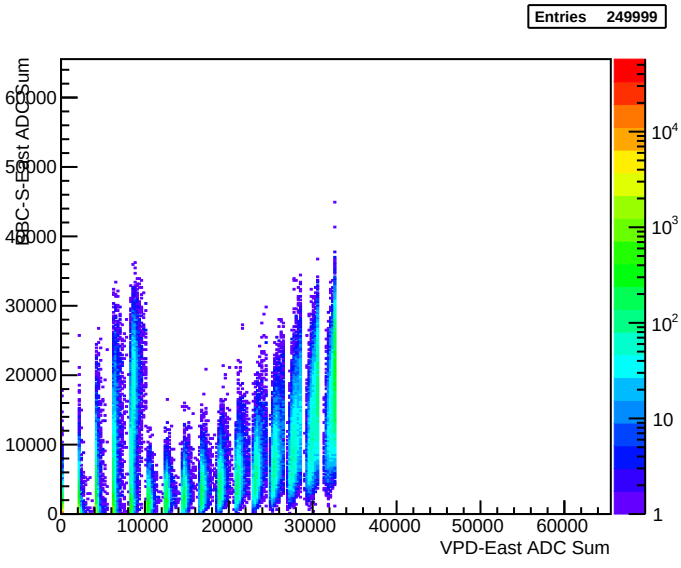

Entries 249999
TOF Mult
VPD-West ADC Sum

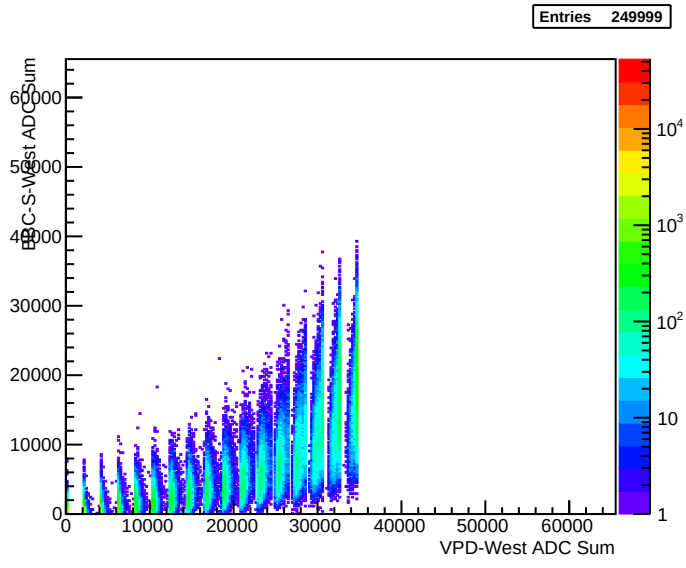

Entries 249999
TOF Mult
ZDC-East ADC Sum Att

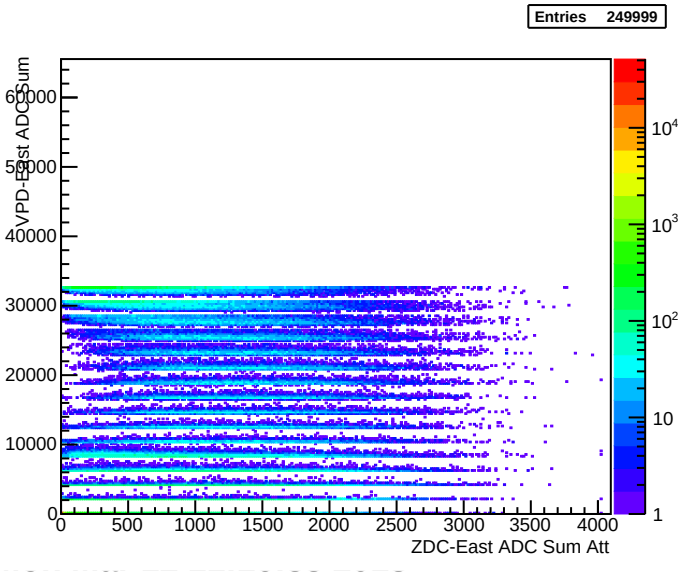

Entries 249999
TOF Mult
ZDC-West ADC Sum Att

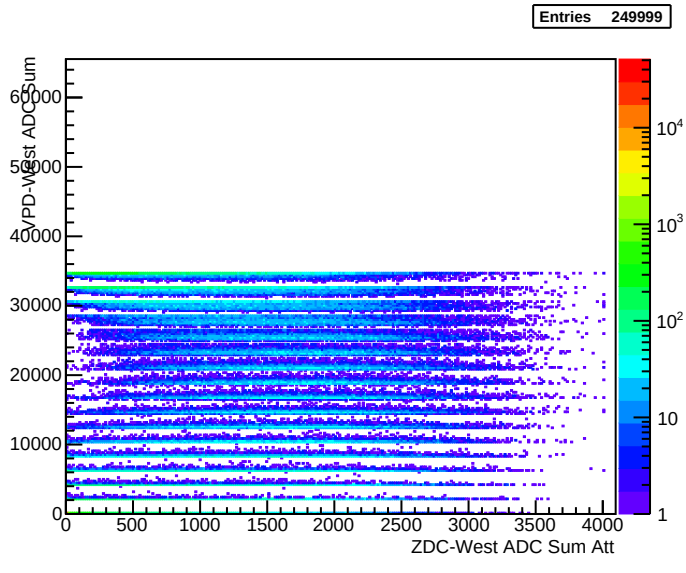

Entries 249999
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

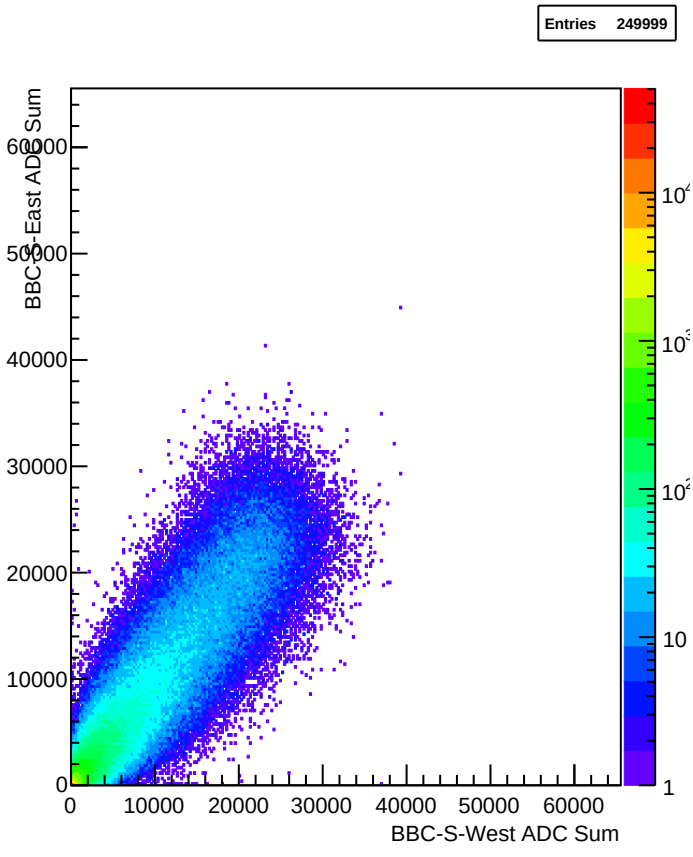

Entries 249999
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

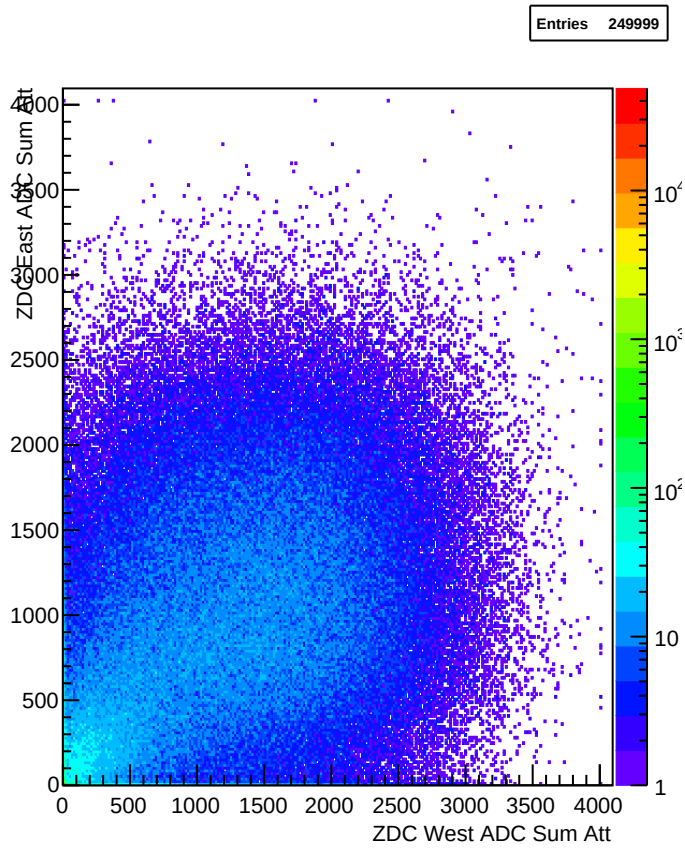

Entries 249999
BBC-S-East ADC Sum
VPD-East ADC Sum

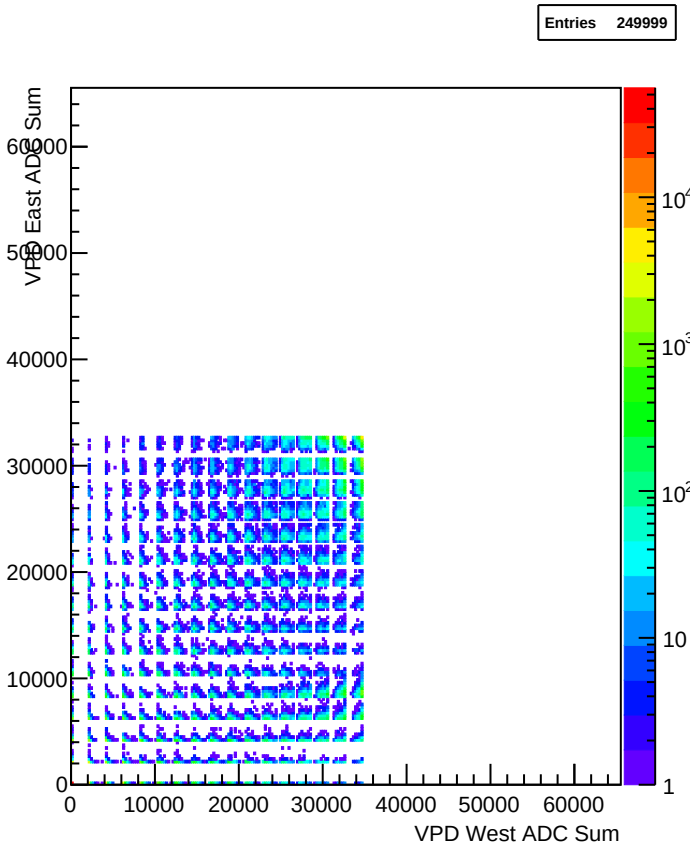

Entries 249999
BBC-S-West ADC Sum
VPD-West ADC Sum

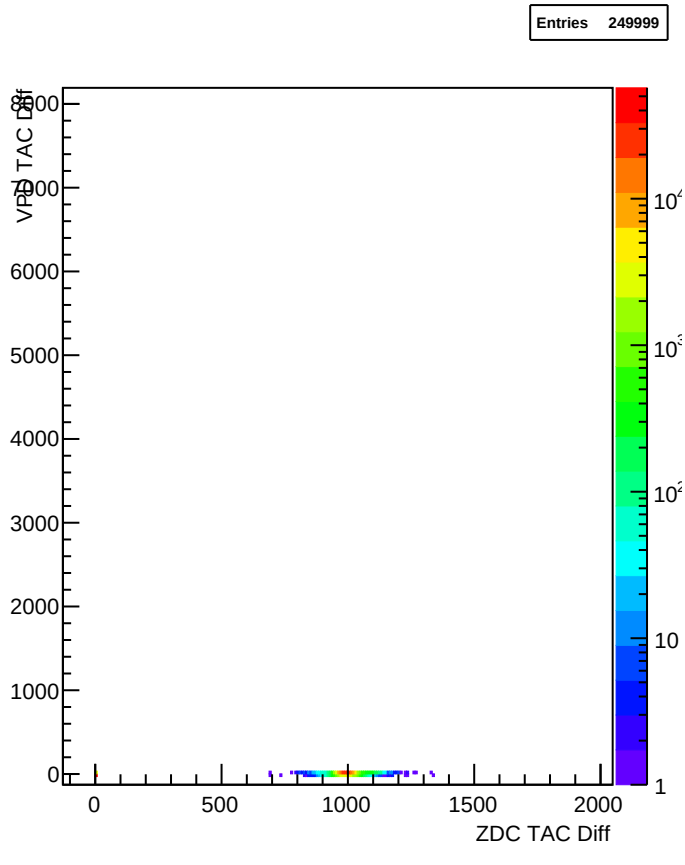

Entries 249999
VPD-East ADC Sum
ZDC-East ADC Sum Att

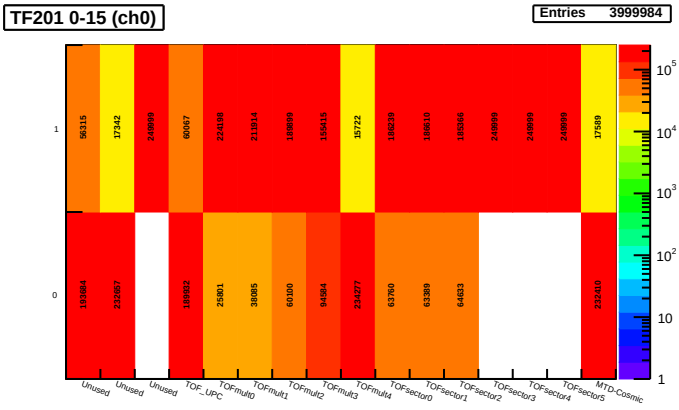

Entries 249999
VPD-West ADC Sum
ZDC-West ADC Sum Att

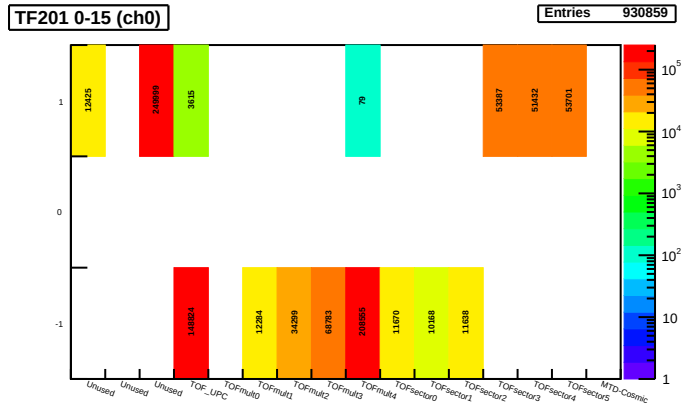

Entries 249999
BBC-S-East ADC Sum
BBC-S-West ADC Sum

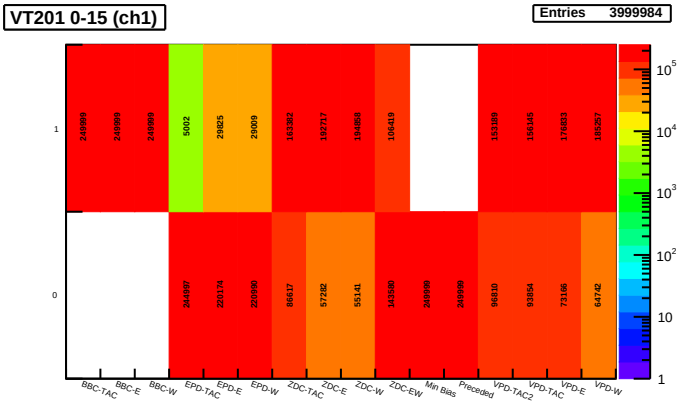

Entries 249999
ZDC East ADC Sum Att
ZDC West ADC Sum Att

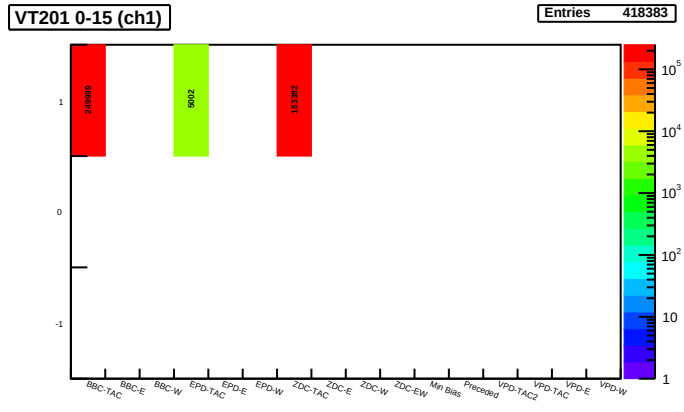

Entries 249999
VPD East ADC Sum
VPD West ADC Sum

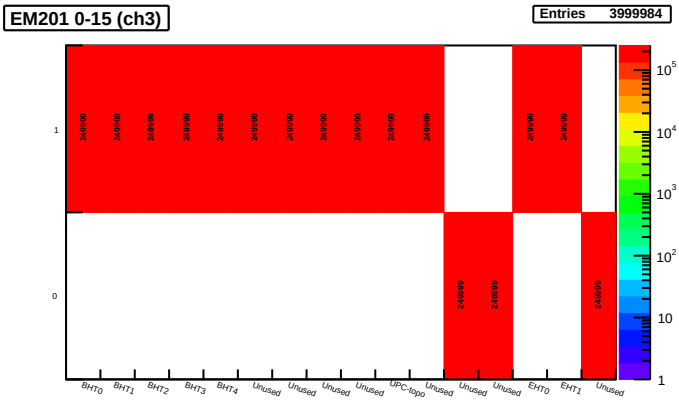

Entries 249999
VPD TAC Diff
ZDC TAC Diff

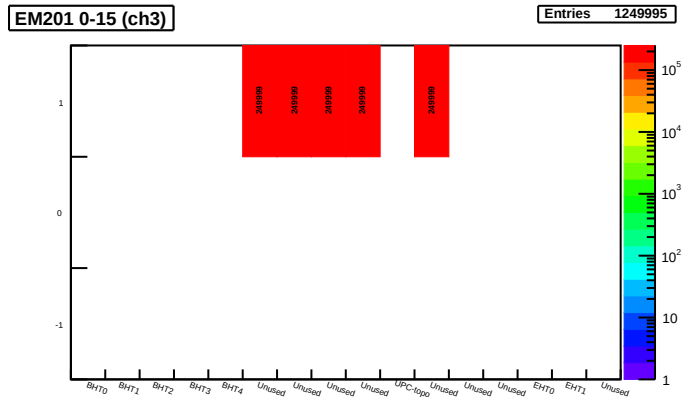

TF201 0-15 (ch0)
Entries 3999984
1
0
56315
17342
249999
60067
224108
211914
189999
155415
15722
186239
198510
185366
249999
249999
249999
17589
193684
232667
189932
25801
38085
60100
94984
234277
63760
63389
64633
232410
Unused
Unused
Unused
TOF_UPC
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5
MTD-Cosmic
10^5
10^4
10^3
10^2
10
1

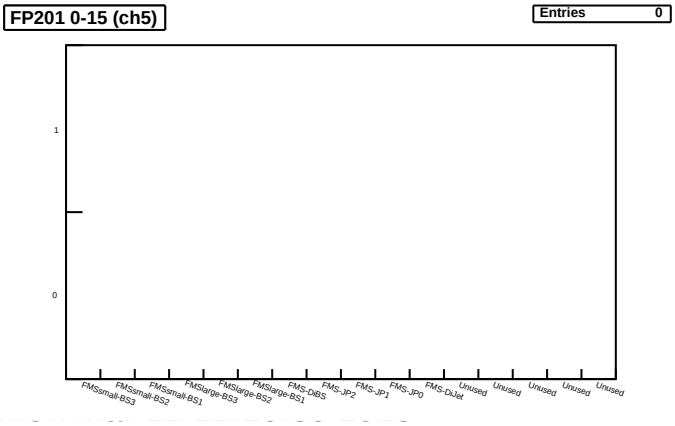

TF201 0-15 (ch0)
Entries 930859
1
0
-1
12425
249999
3615
79
53387
51432
53701
148824
12284
34299
68783
209555
11670
10168
11638
Unused
Unused
Unused
TOF_UPC
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5
MTD-Cosmic
10^5
10^4
10^3
10^2
10
1

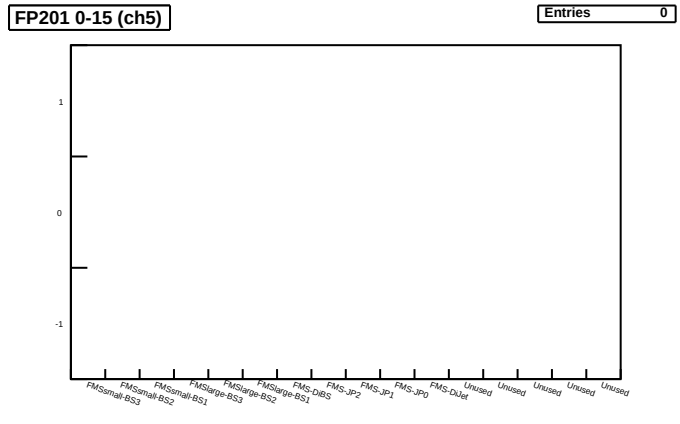

VT201 0-15 (ch1)
Entries 3999984
1
0
249999
249999
249999
5002
23825
23009
163382
192717
194858
106419
153189
156145
176863
185357
244997
220124
220990
86617
57282
55141
143580
249999
249999
96810
93854
73166
64742
BBC-TAC
BBC-E
BBC-W
EPD-TAC
EPD-E
EPD-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-EW
Min Bias
Preceded
VPD-TAC2
VPD-TAC
VPD-E
VPD-W
10^5
10^4
10^3
10^2
10
1


VT201 0-15 (ch1)
Entries 418383
1
0
-1
249999
5002
163382
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
10^5
10^4
10^3
10^2
10
1


EM201 0-15 (ch3)
Entries 3999984
1
0
249999
249999
249999
249999
249999
249999
249999
249999
249999
249999
249999
249999
249999
249999
249999
249999
249999
249999
249999
BH0
BH1
BH2
BH3
BH4
Unused
Unused
Unused
Unused
UPC-topo
Unused
Unused
Unused
EH0
EH1
Unused
10^5
10^4
10^3
10^2
10
1


EM201 0-15 (ch3)
Entries 1249995
1
0
-1
249999
249999
249999
249999
249999
BH0
BH1
BH2
BH3
BH4
Unused
Unused
Unused
Unused
UPC-topo
Unused
Unused
Unused
EH0
EH1
Unused
10^5
10^4
10^3
10^2
10
1


FP201 0-15 (ch5)
Entries 0
1
0
FMSsmall-BS3
FMSsmall-BS2
FMSsmall-BS1
FMSlarge-BS3
FMSlarge-BS2
FMSlarge-BS1
FMS-DiBS
FMS-JP2
FMS-JP1
FMS-JP0
FMS-DiJet
Unused
Unused
Unused
Unused
Unused


FP201 0-15 (ch5)
Entries 0
1
0
-1
FMSsmall-BS3
FMSsmall-BS2
FMSsmall-BS1
FMSlarge-BS3
FMSlarge-BS2
FMSlarge-BS1
FMS-DiBS
FMS-JP2
FMS-JP1
FMS-JP0
FMS-DiJet
Unused
Unused
Unused
Unused
Unused