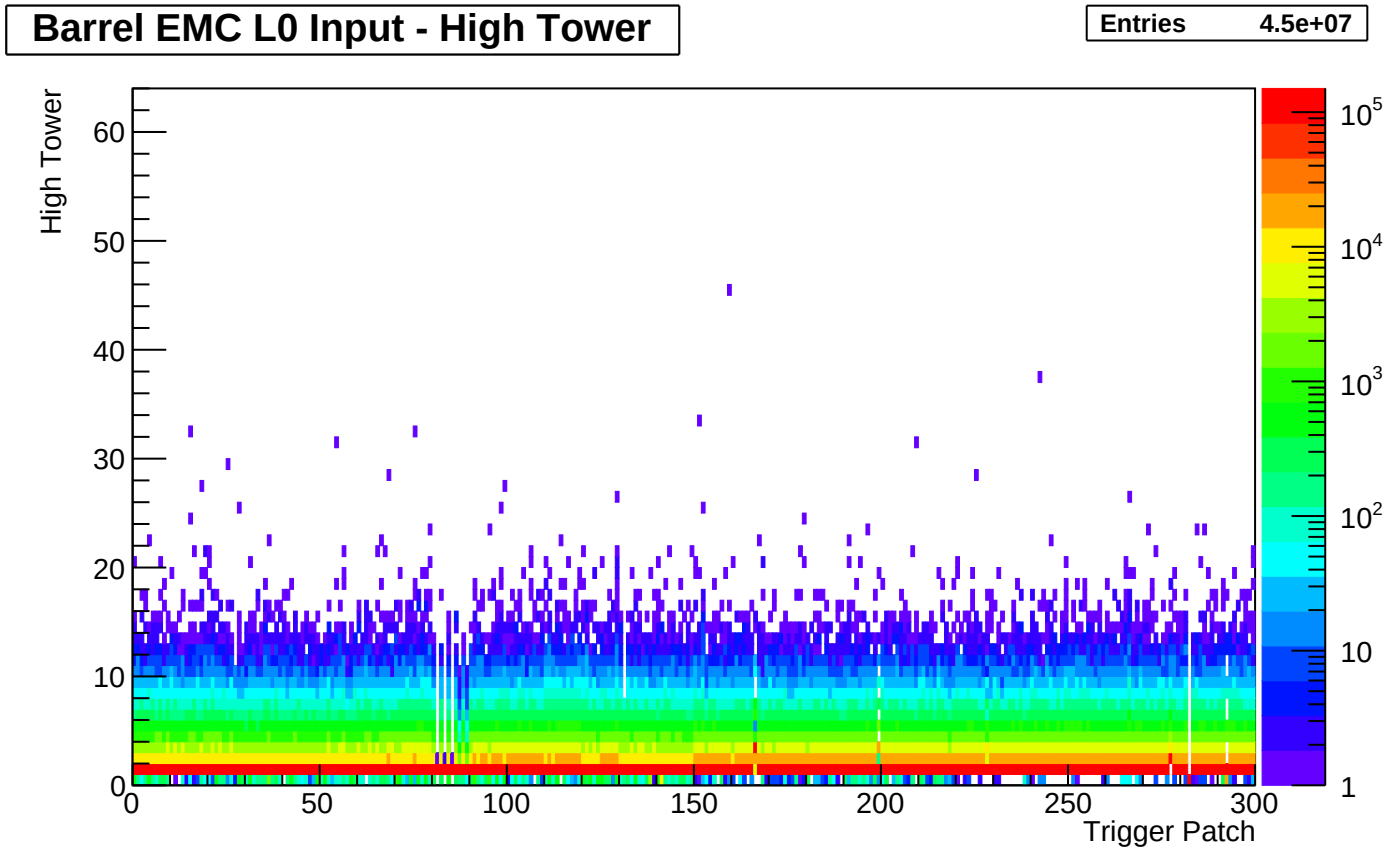
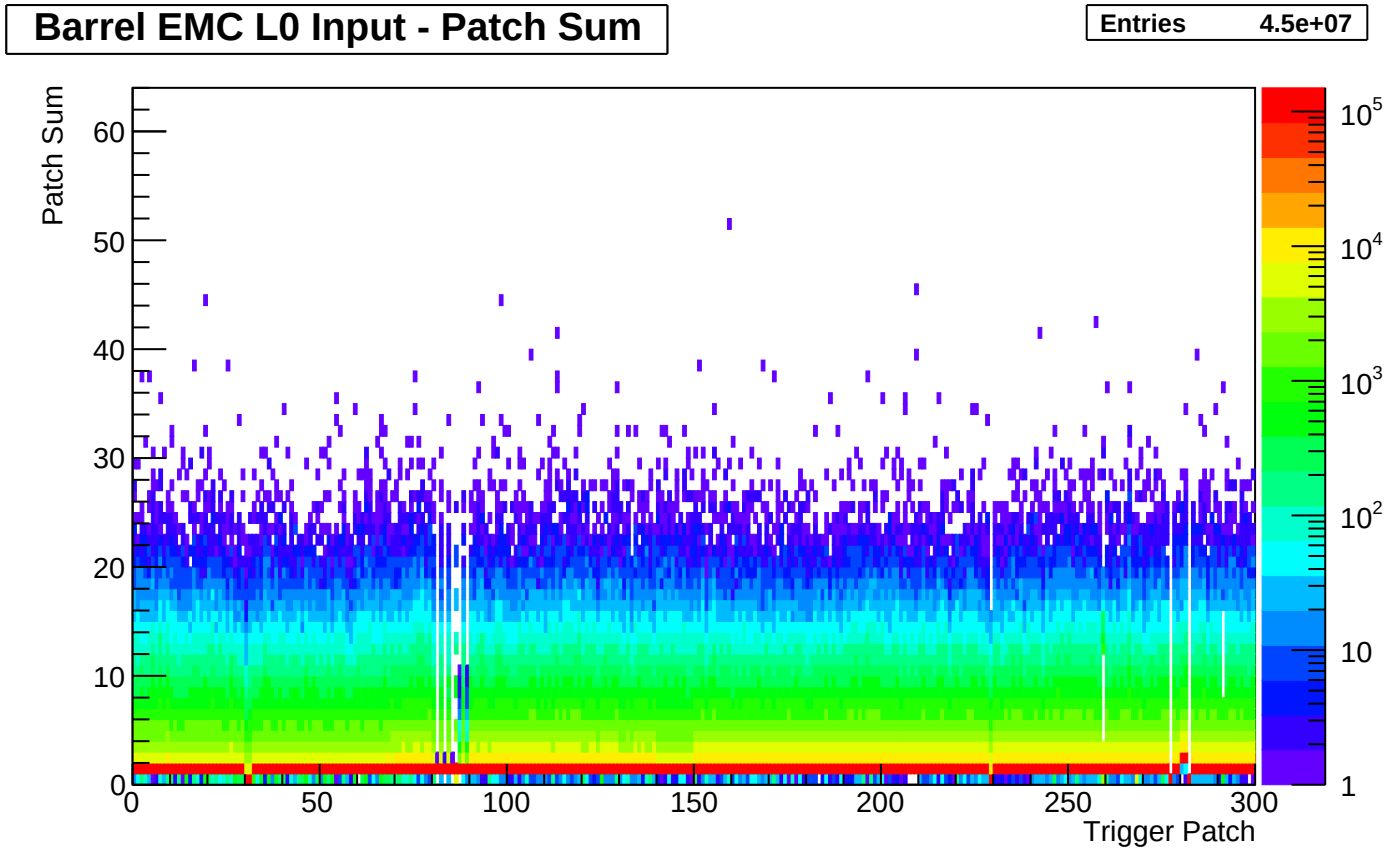
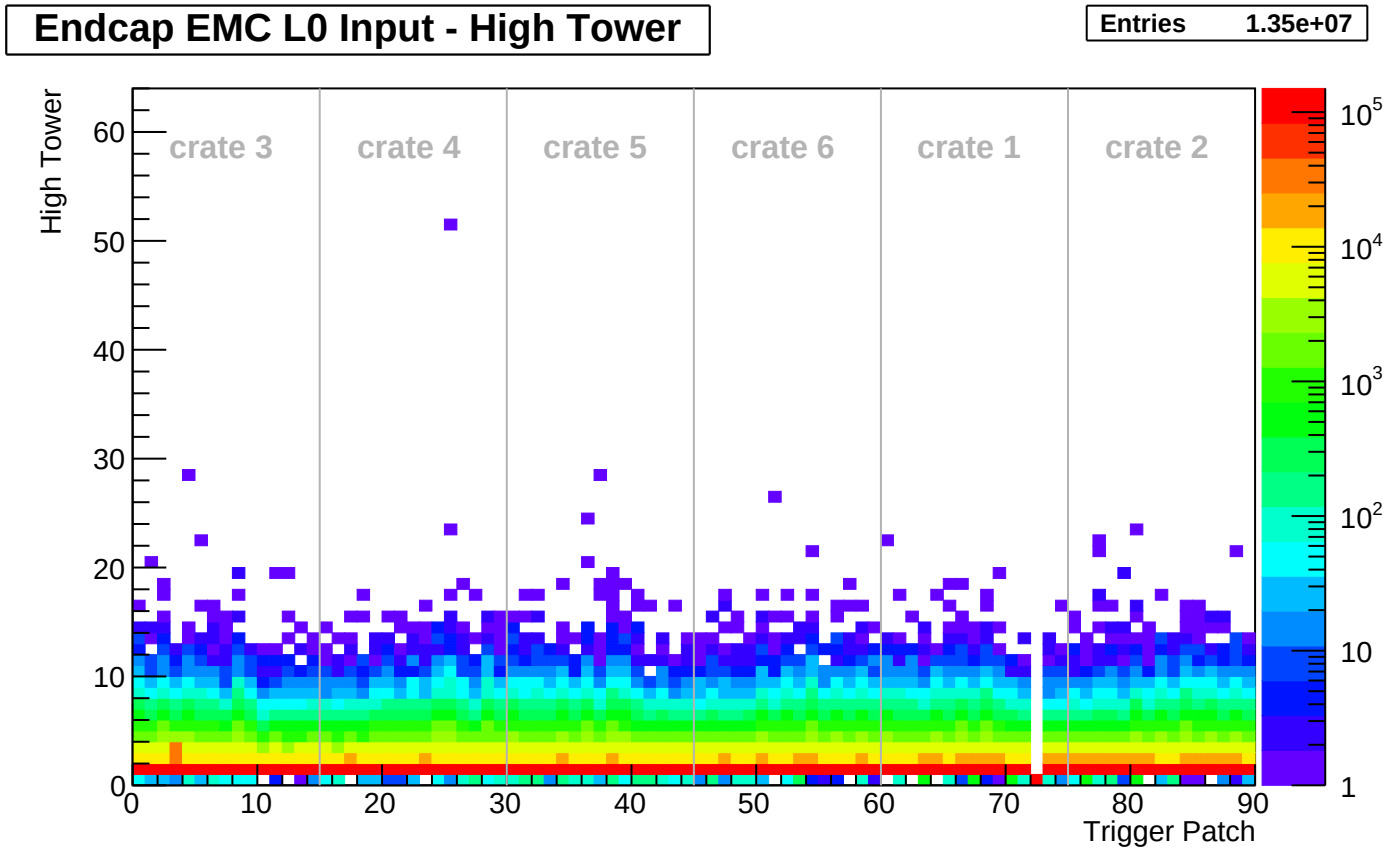
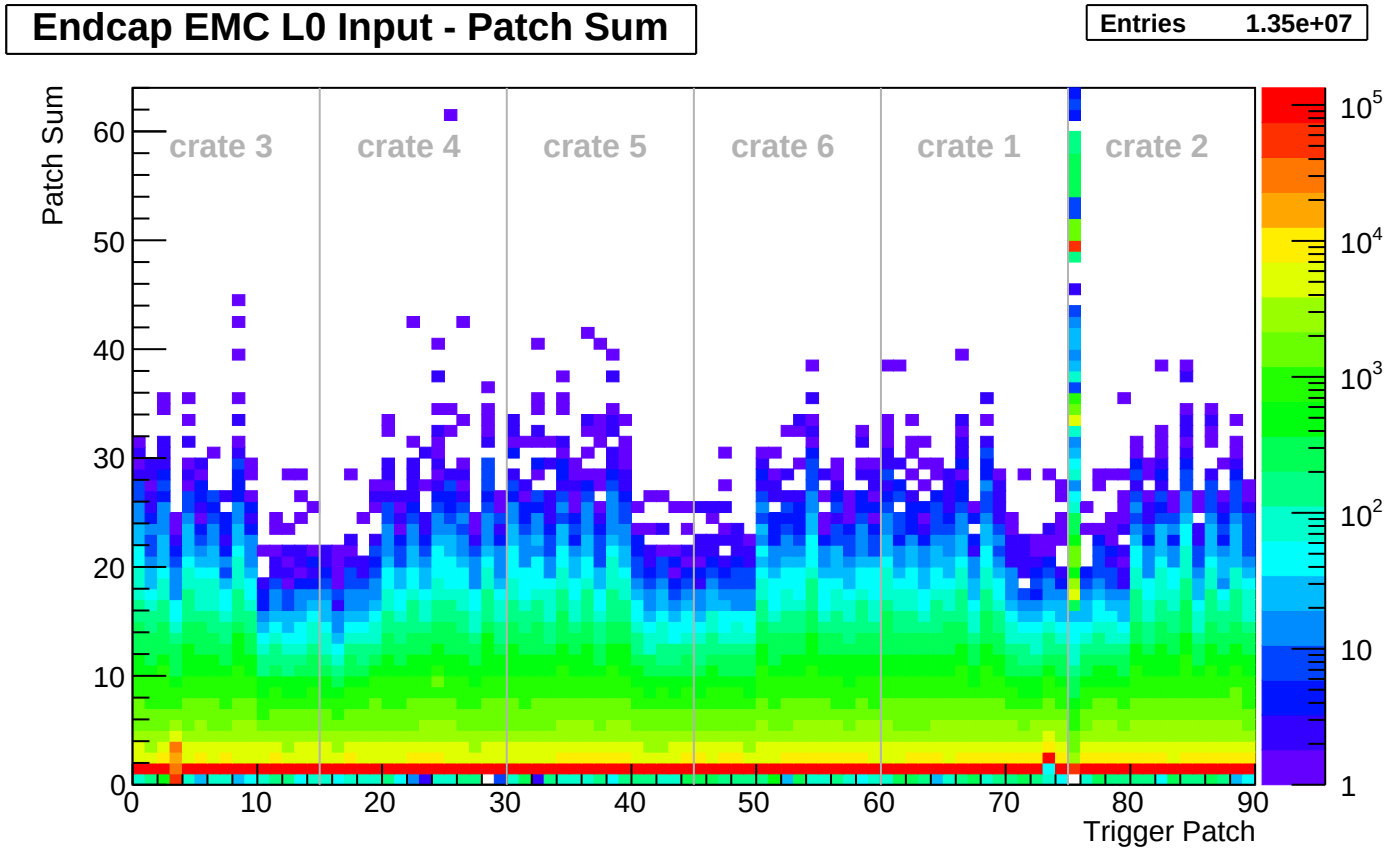
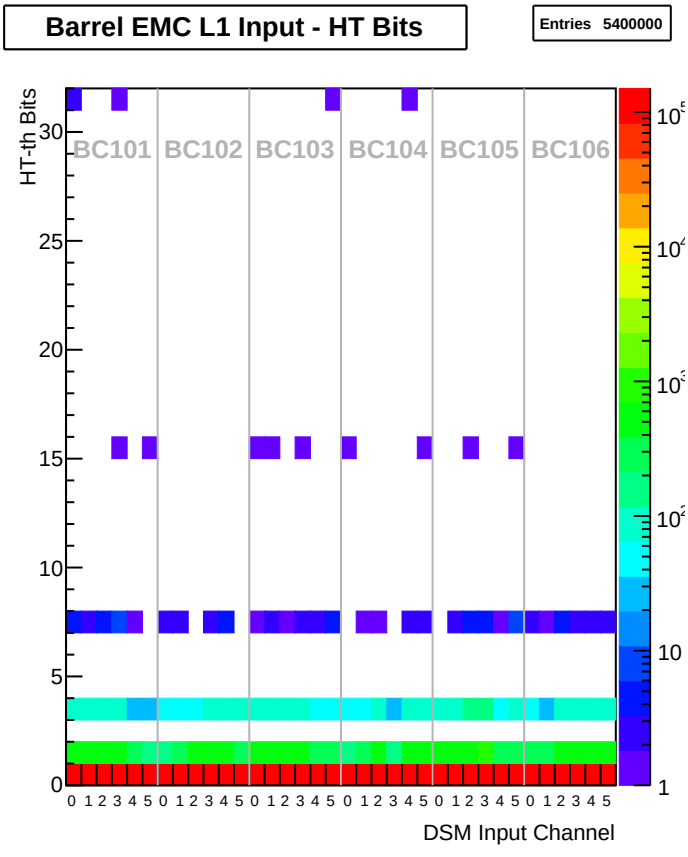
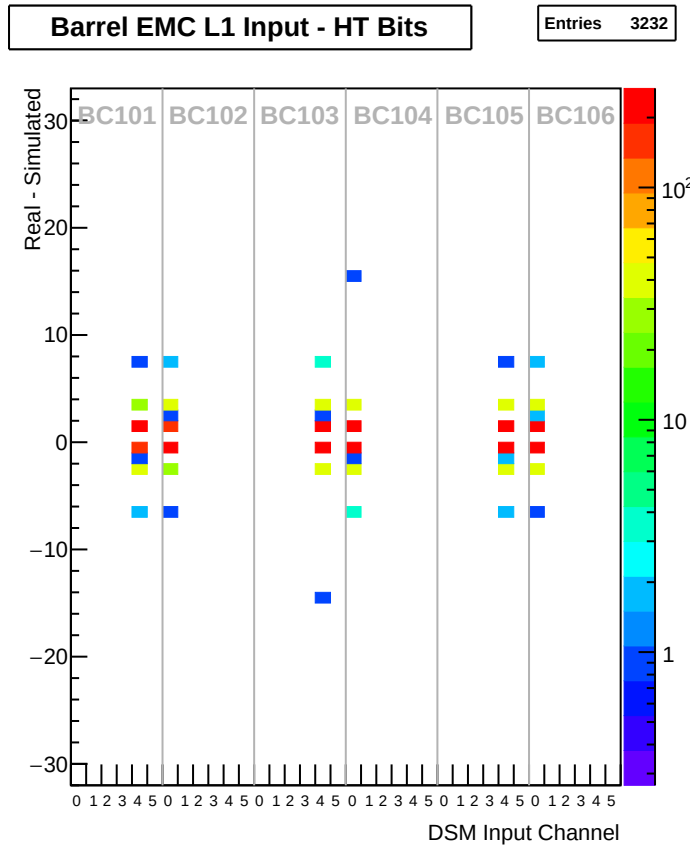

Barrel EMC L0 Input - High Tower
Entries 4.5e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

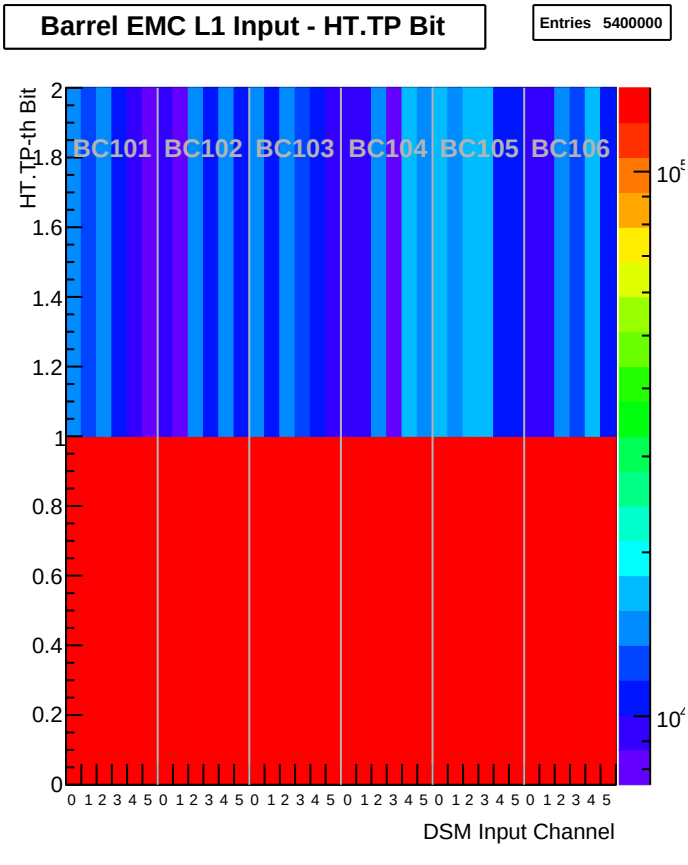

Barrel EMC L0 Input - Patch Sum
Entries 4.5e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

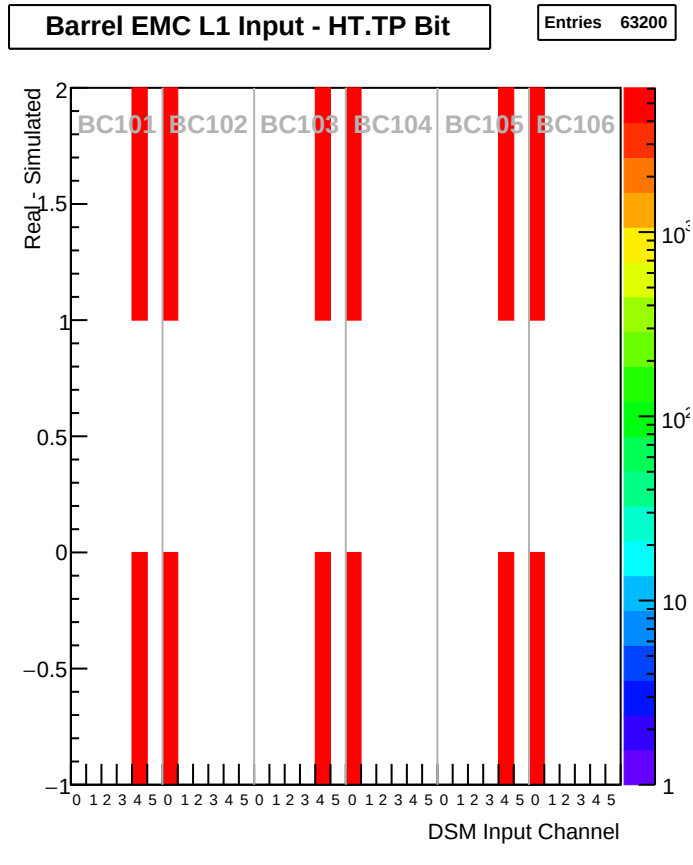

Endcap EMC L0 Input - High Tower
Entries 1.35e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

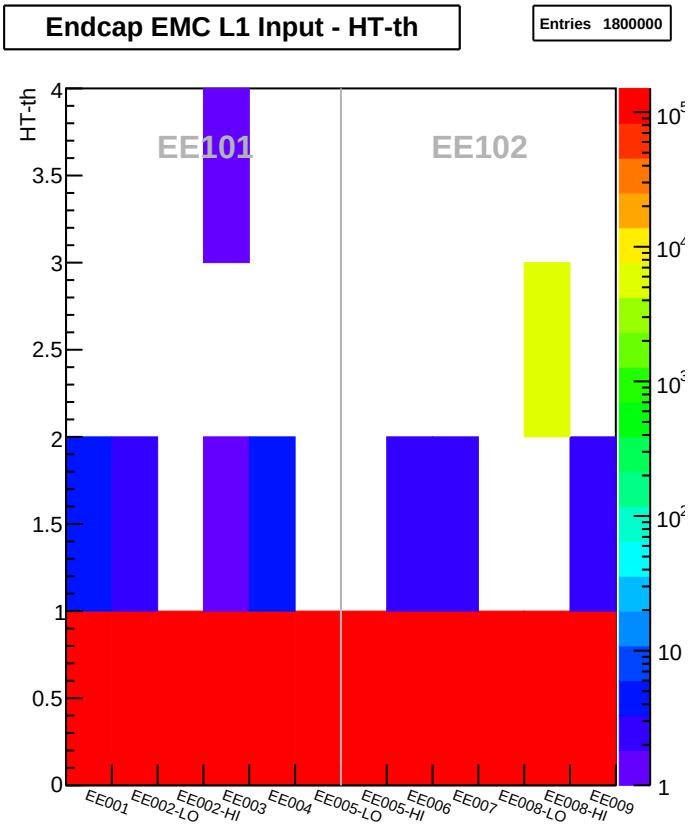

Endcap EMC L0 Input - Patch Sum
Entries 1.35e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

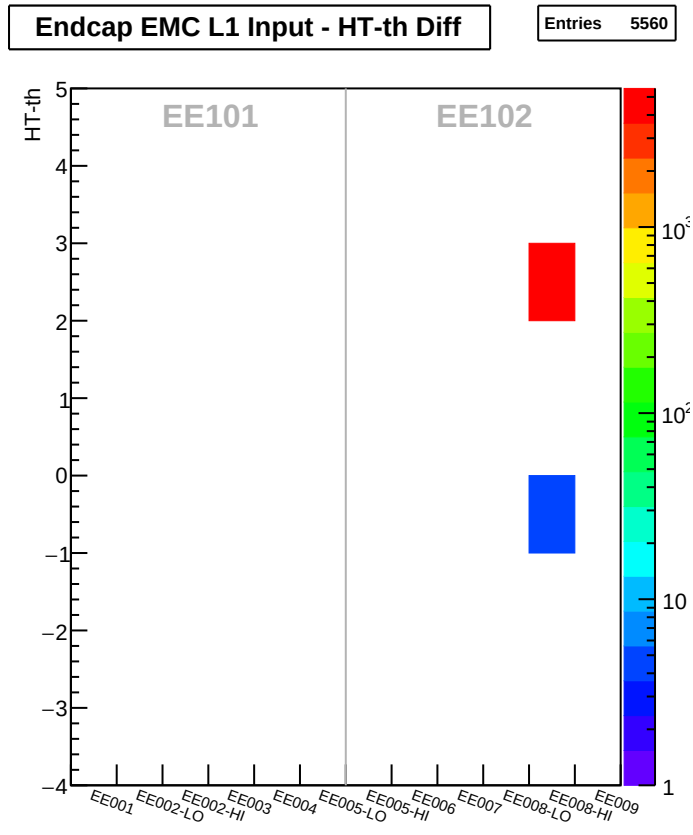

Barrel EMC L1 Input - HT Bits
Entries 5400000
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

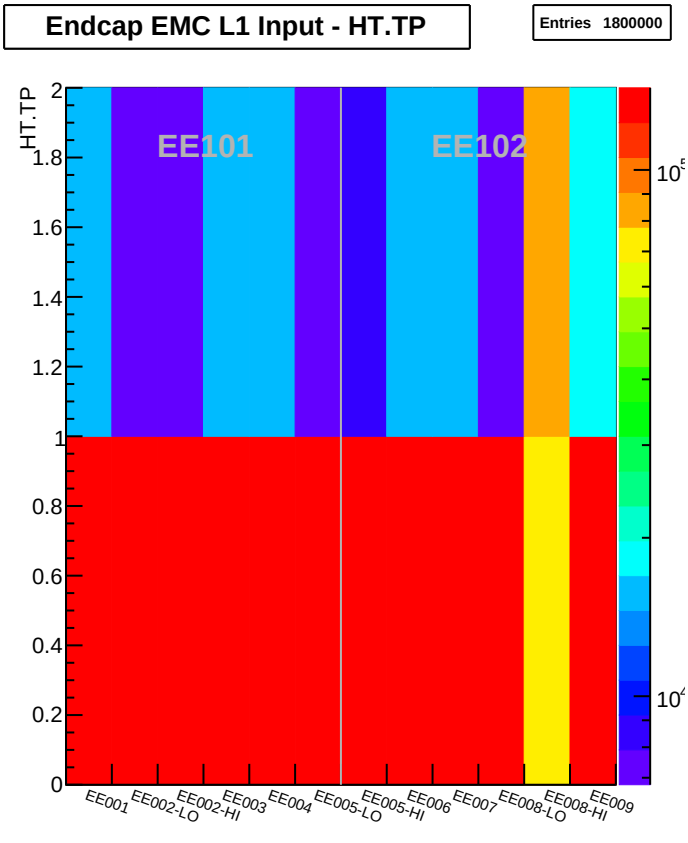

Barrel EMC L1 Input - HT Bits
Entries 3232
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

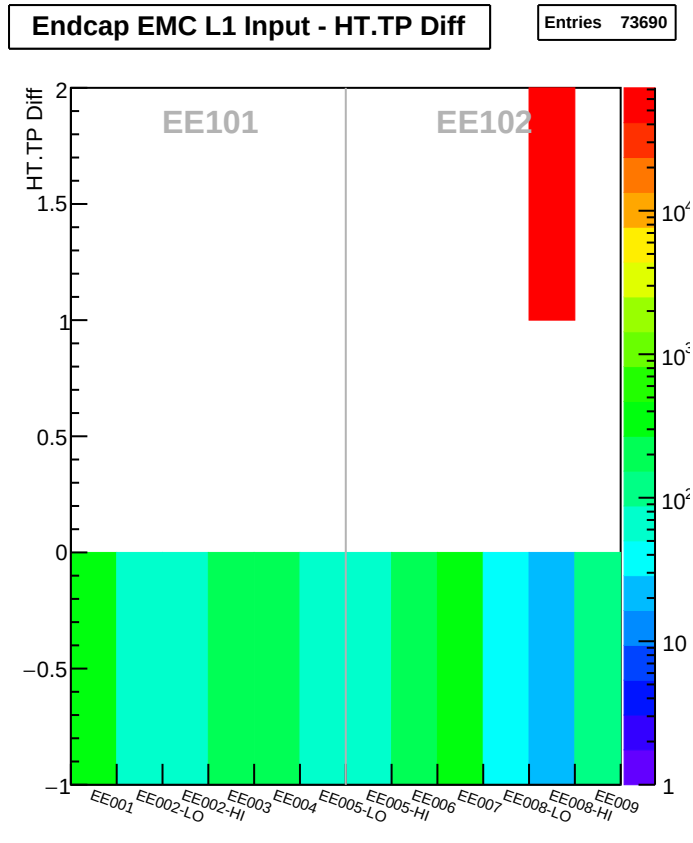

Barrel EMC L1 Input - HT.TP Bit
Entries 5400000
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

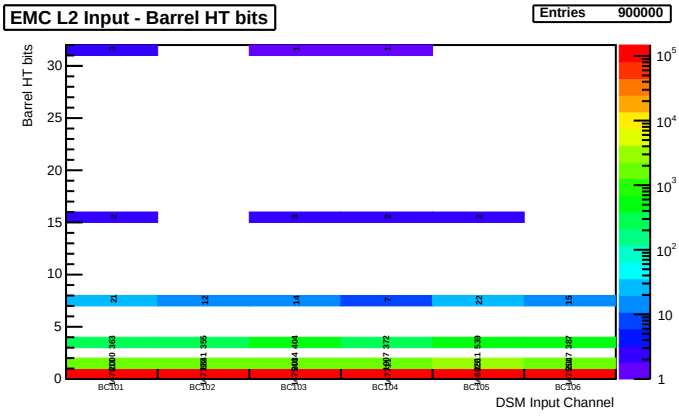

Barrel EMC L1 Input - HT.TP Bit
Entries 63200
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

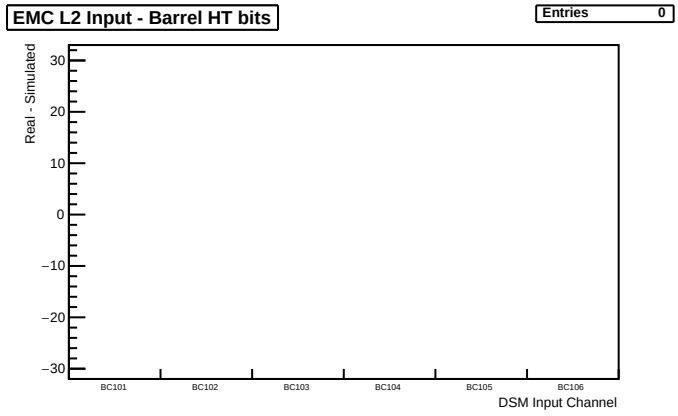

Endcap EMC L1 Input - HT-th
Entries 1800000
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

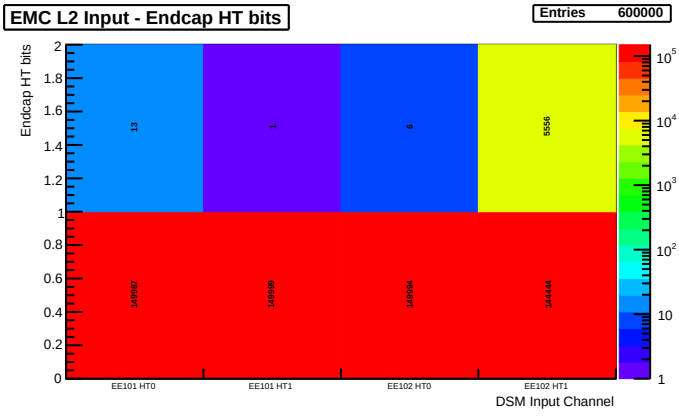

Endcap EMC L1 Input - HT-th Diff
Entries 5560
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

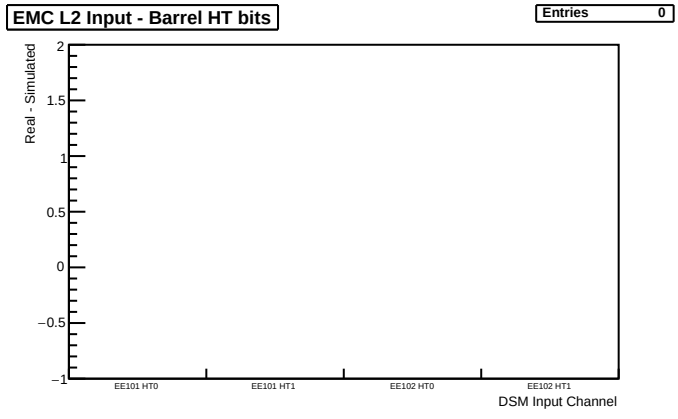

Endcap EMC L1 Input - HT.TP
Entries 1800000
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

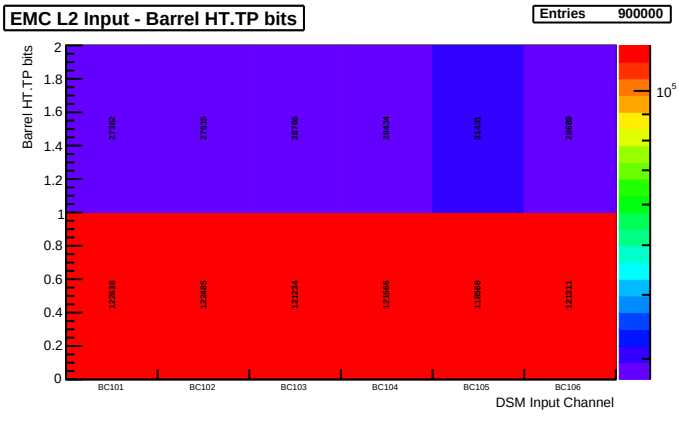

Endcap EMC L1 Input - HT.TP Diff
Entries 73690
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

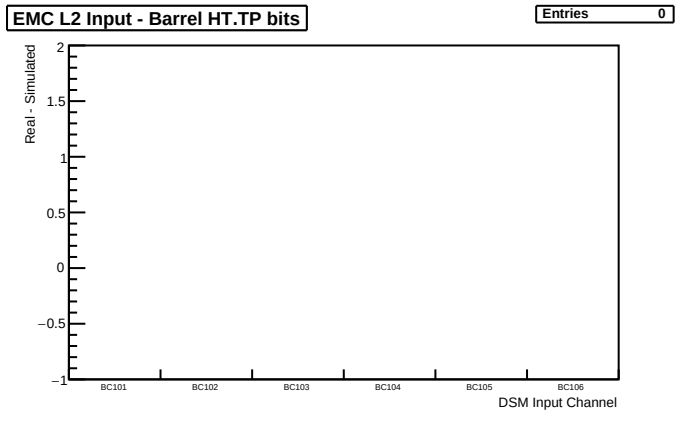

EMC L2 Input - Barrel HT bits
Entries 900000
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

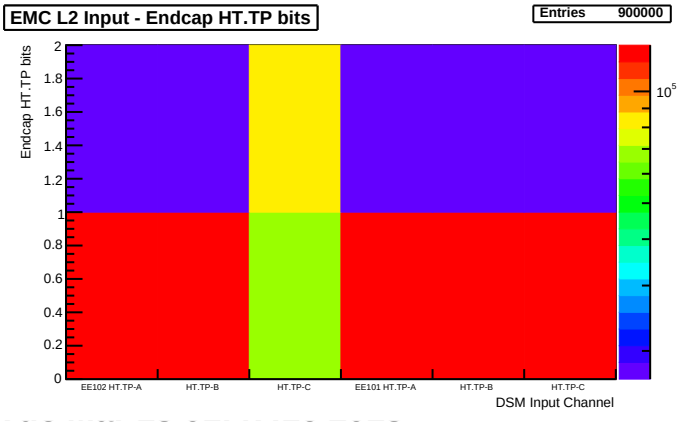

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

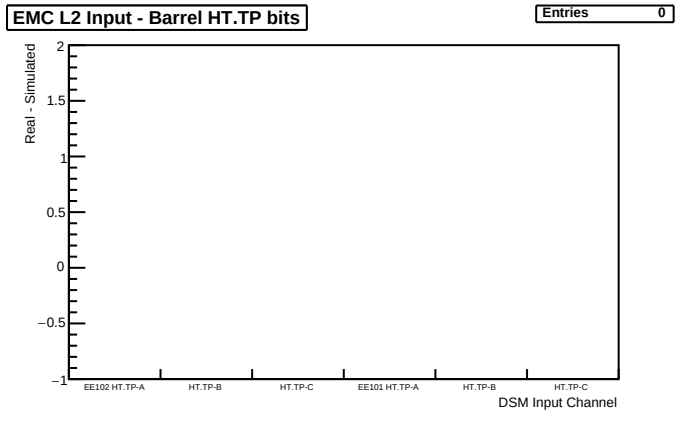

EMC L2 Input - Endcap HT bits
Entries 600000
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

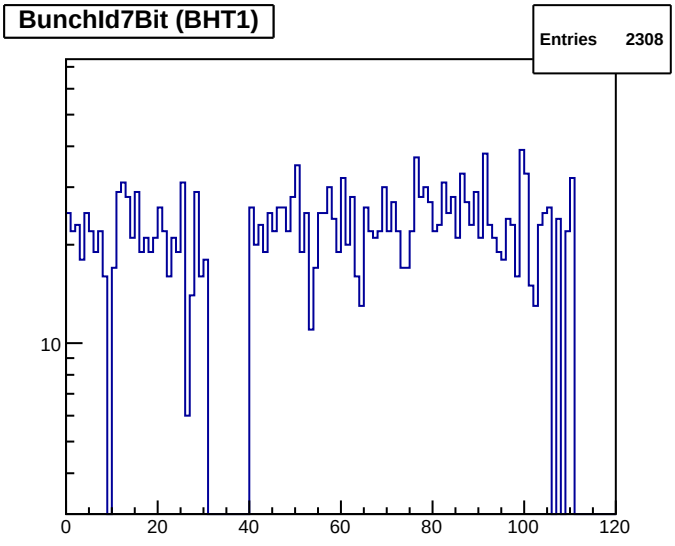

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

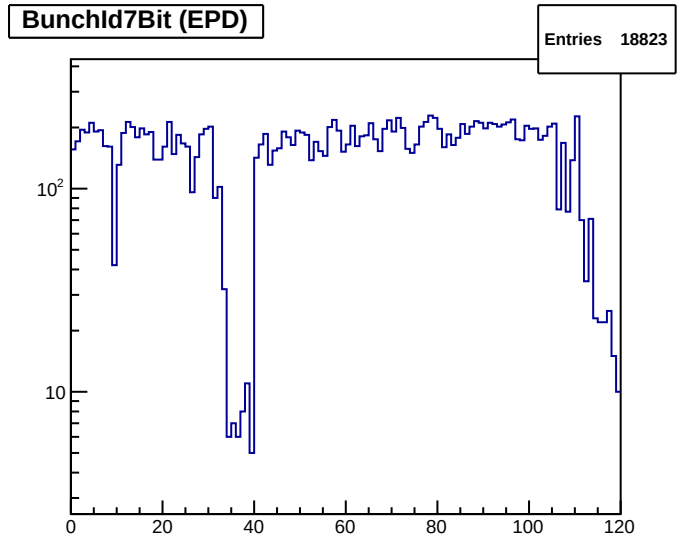

EMC L2 Input - Barrel HT.TP bits
Entries 900000
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

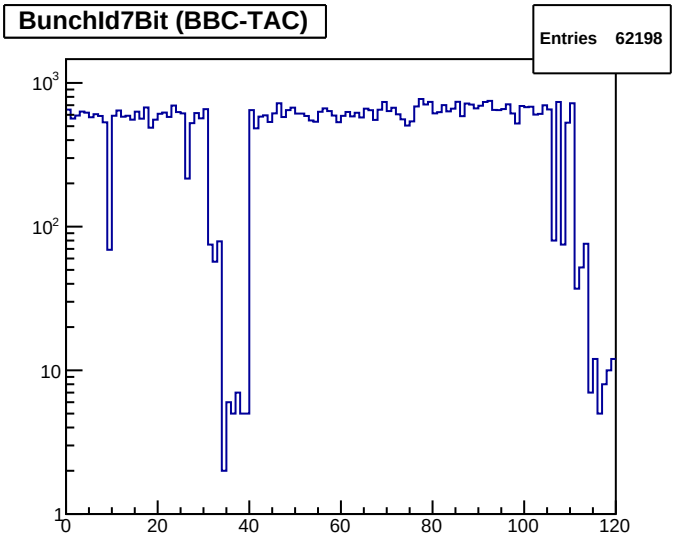

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

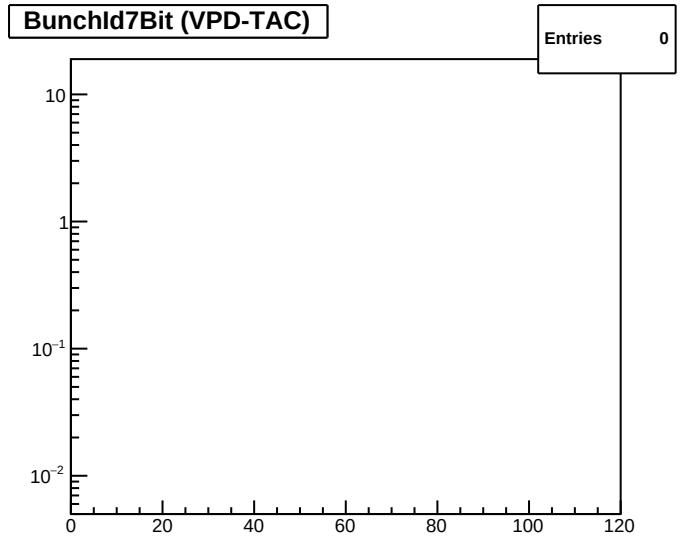

EMC L2 Input - Endcap HT.TP bits
Entries 900000
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

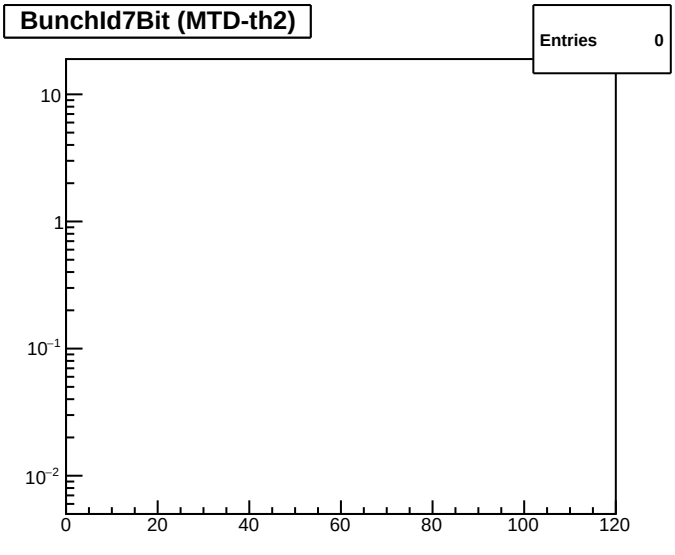

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

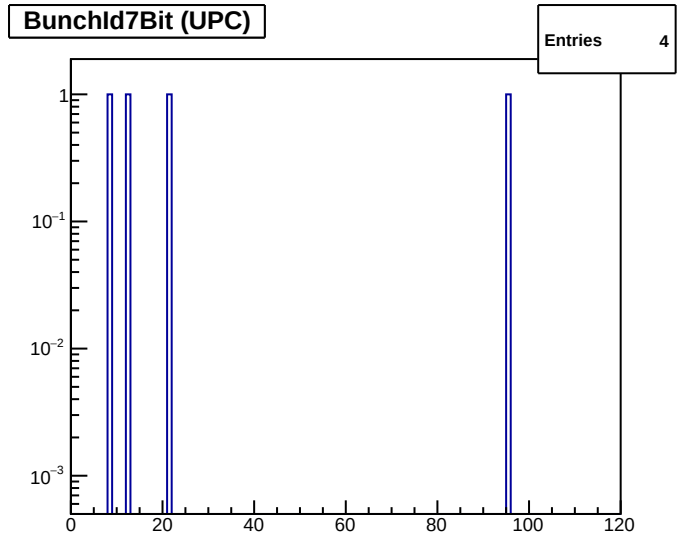

BunchId7Bit (BHT1)
Entries 2308
10
0 20 40 60 80 100 120

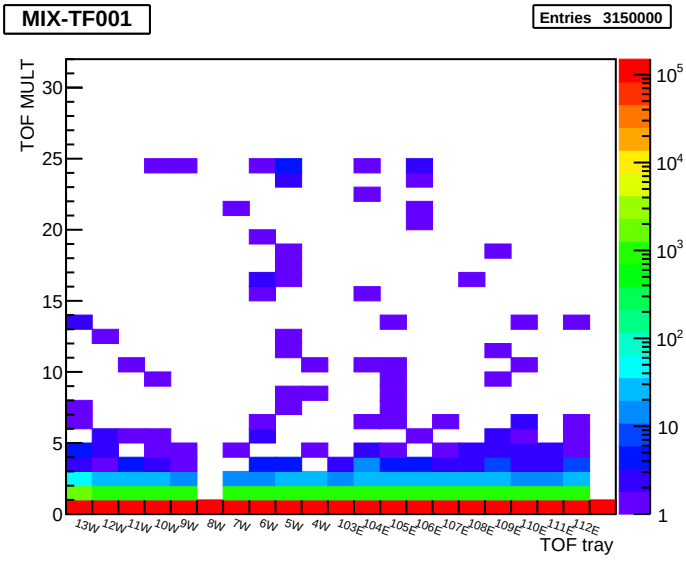

BunchId7Bit (EPD)
Entries 18823
10^2
10
0 20 40 60 80 100 120

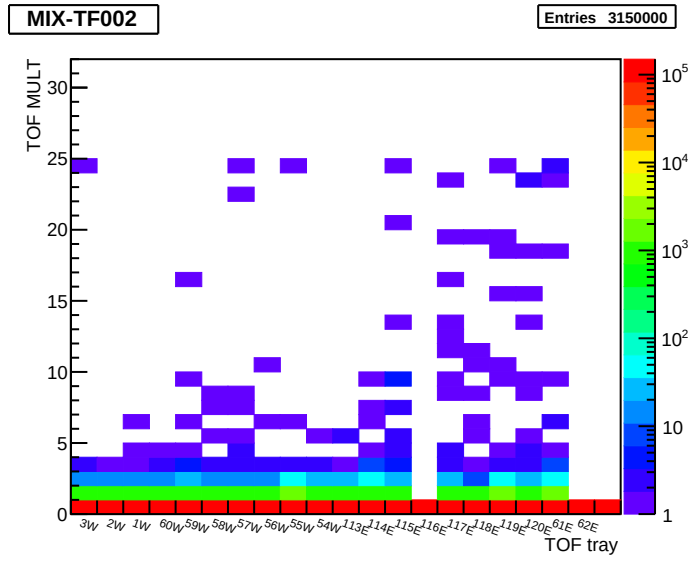

BunchId7Bit (BBC-TAC)
Entries 62198
10^3
10^2
10
1
0 20 40 60 80 100 120

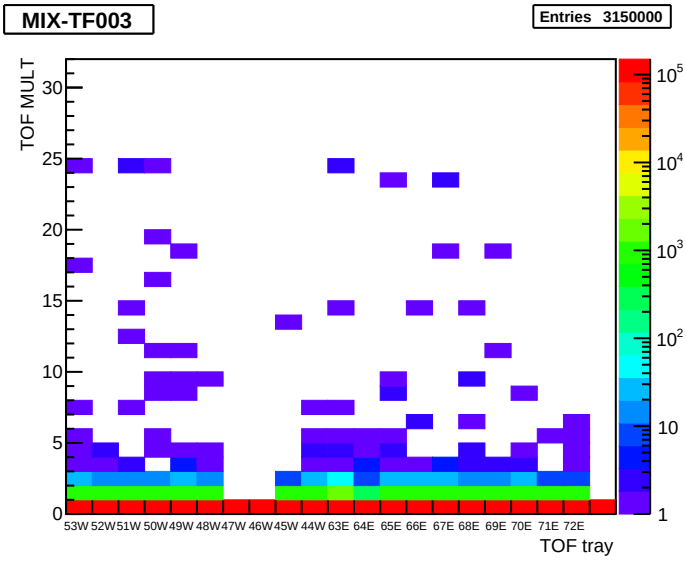

BunchId7Bit (VPD-TAC)
Entries 0
10
1
10^{-1}
10^{-2}
0 20 40 60 80 100 120

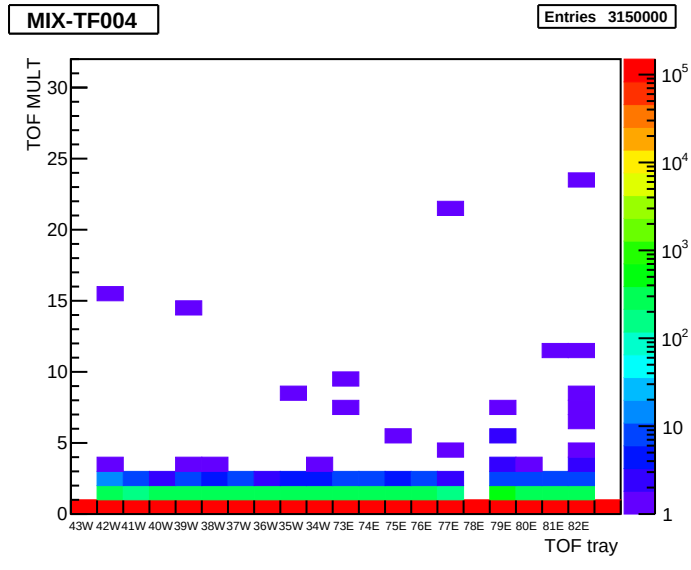

BunchId7Bit (MTD-th2)
Entries 0
10
1
10^{-1}
10^{-2}
0 20 40 60 80 100 120

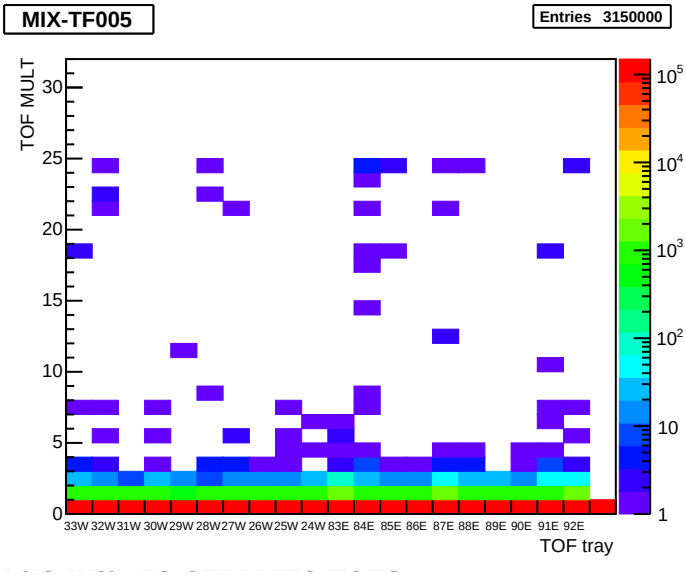

BunchId7Bit (UPC)
Entries 4
1
10^{-1}
10^{-2}
10^{-3}
0 20 40 60 80 100 120

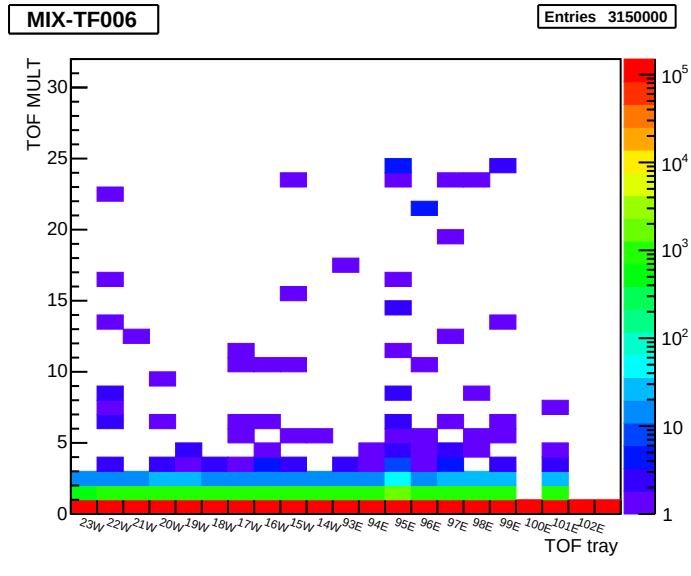

MIX-TF001
Entries 3150000
TOF MULT
TOF tray

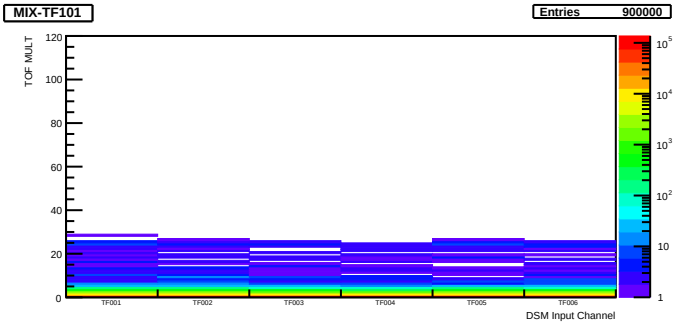

MIX-TF002
Entries 3150000
TOF MULT
TOF tray

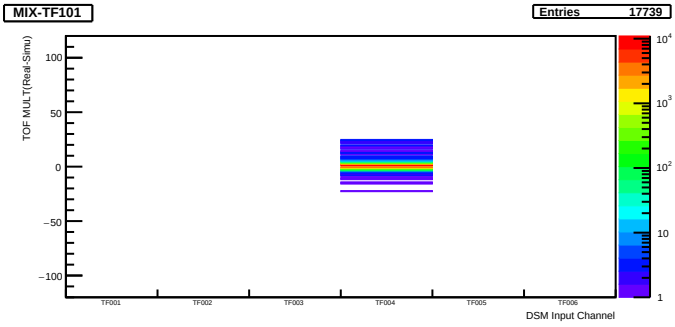

MIX-TF003
Entries 3150000
TOF MULT
TOF tray

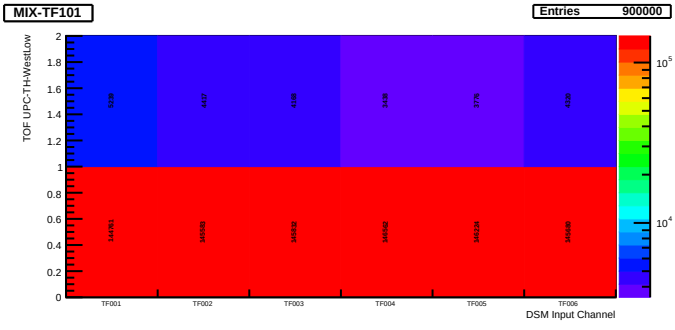

MIX-TF004
Entries 3150000
TOF MULT
TOF tray

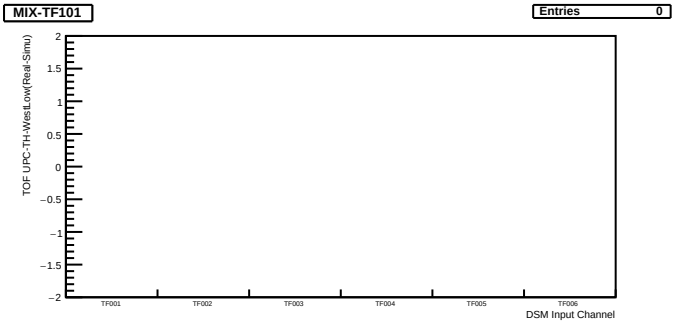

MIX-TF005
Entries 3150000
TOF MULT
TOF tray

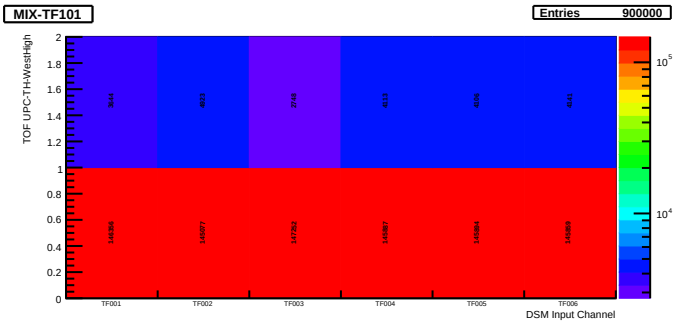

MIX-TF006
Entries 3150000
TOF MULT
TOF tray

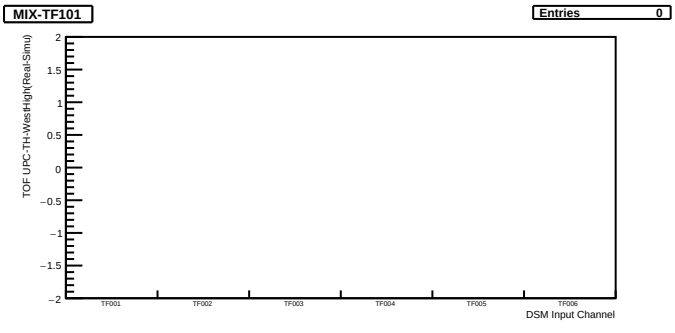

MIX-TF101
Entries 900000
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

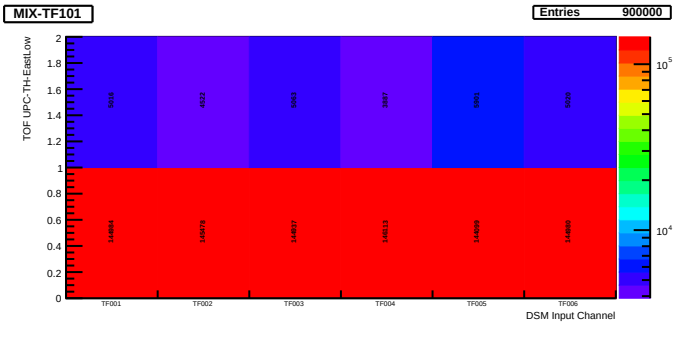

MIX-TF101
Entries 17739
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

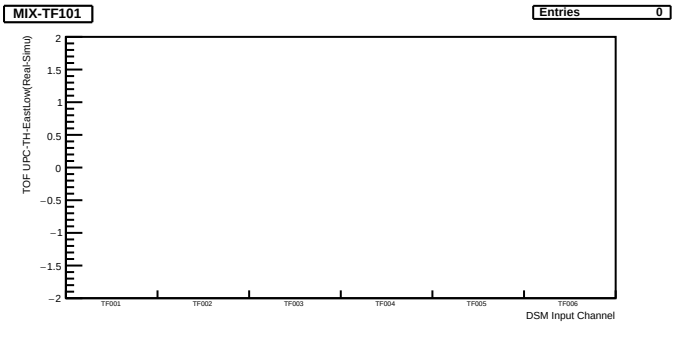

MIX-TF101
Entries 900000
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

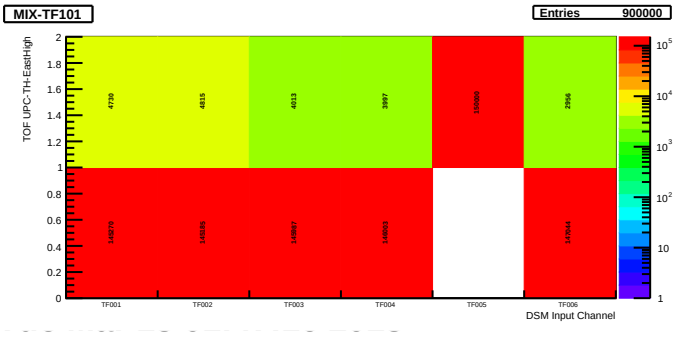

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

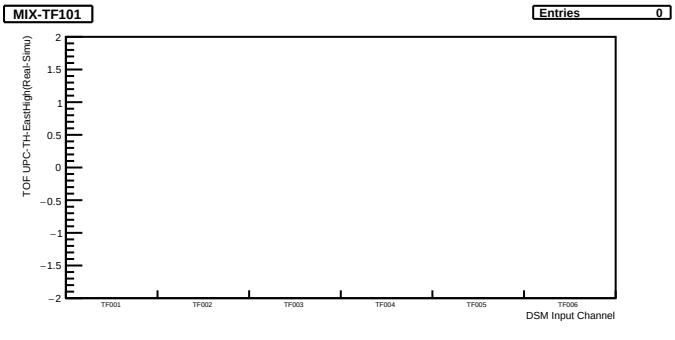

MIX-TF101
Entries 900000
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

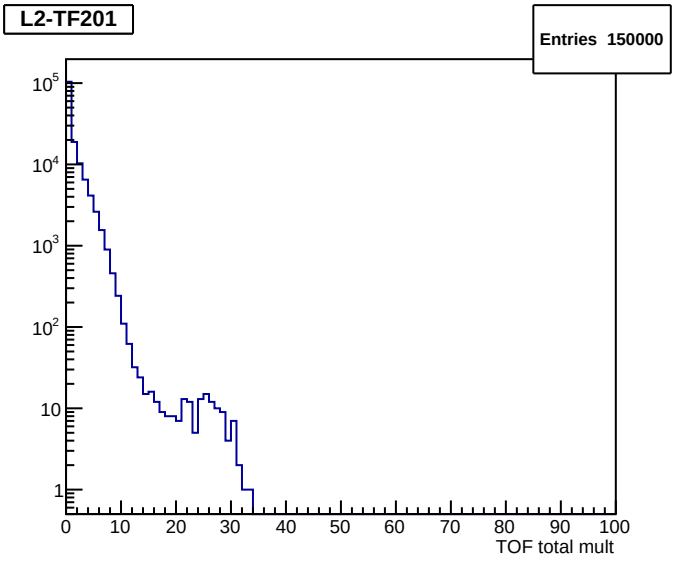

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

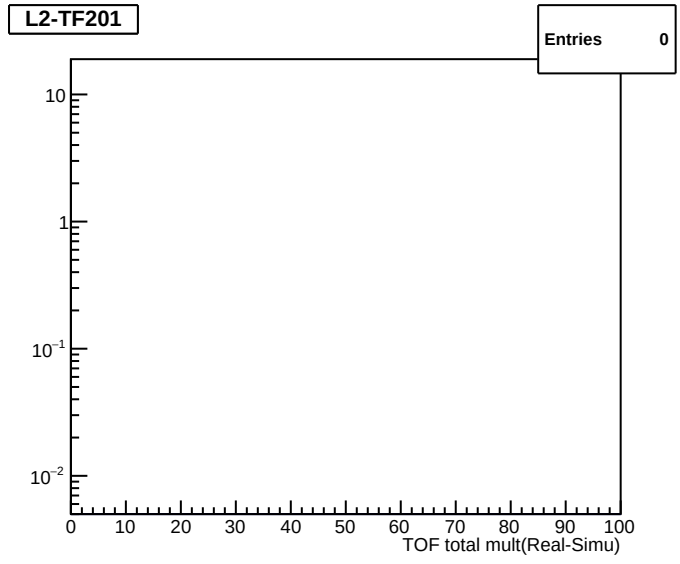

MIX-TF101
Entries 900000
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

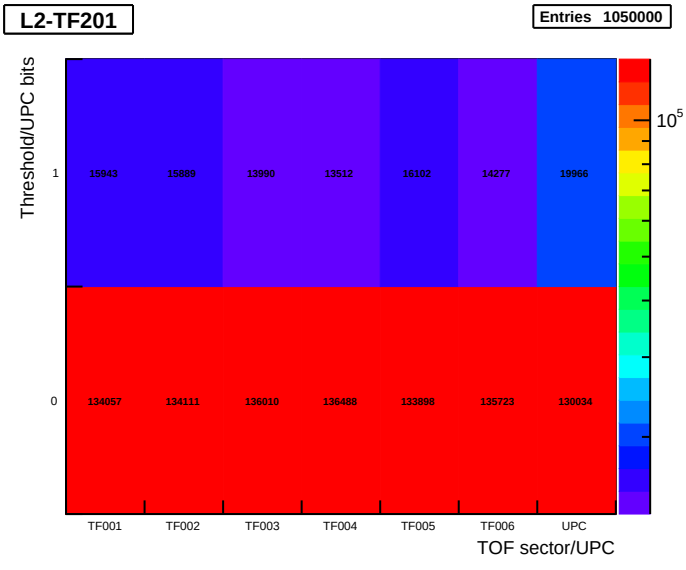

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

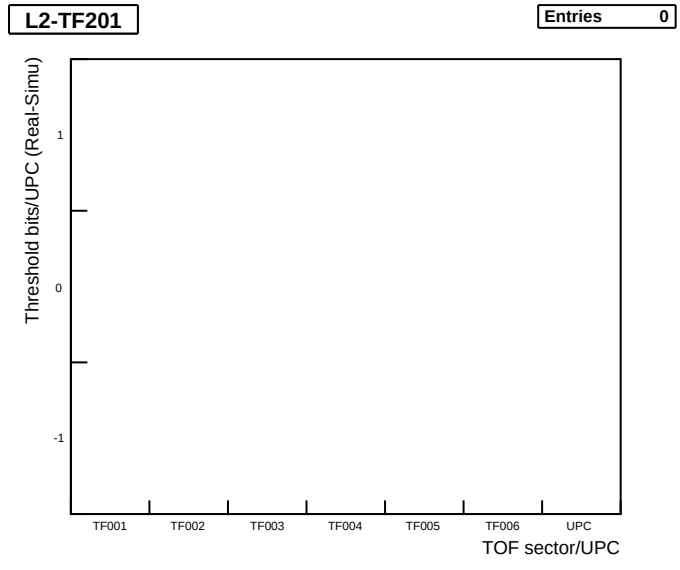

MIX-TF101
Entries 900000
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

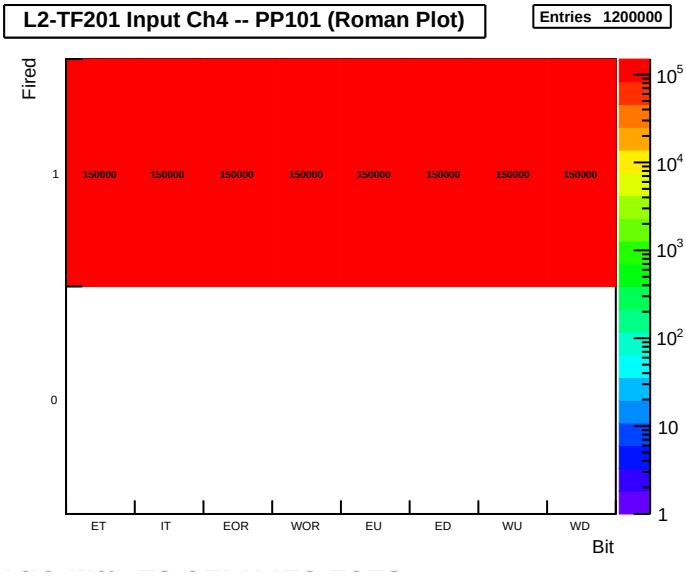

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

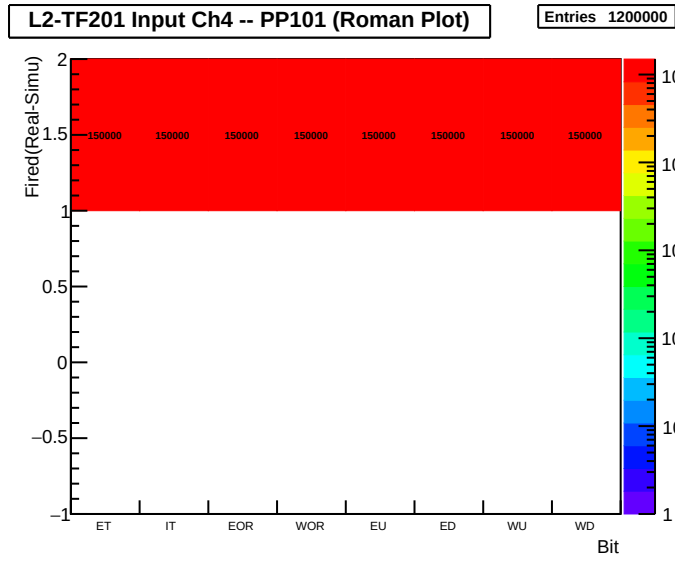

L2-TF201
Entries 150000
TOF total mult

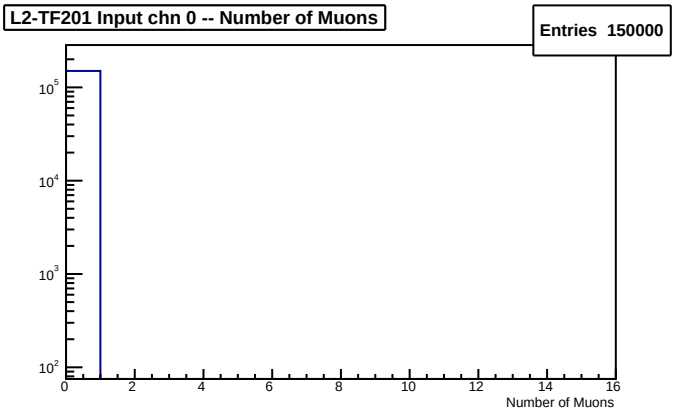

L2-TF201
Entries 0
TOF total mult(Real-Simu)

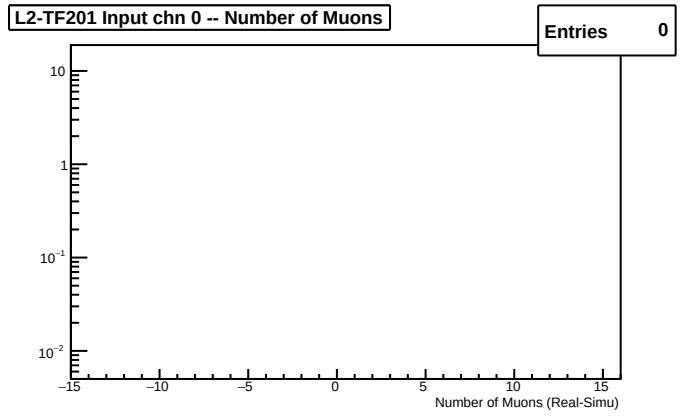

L2-TF201
Entries 1050000
Threshold/UPC bits
15943
15889
13990
13512
16102
14277
19966
134057
134111
136010
136488
133898
135723
130034
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC

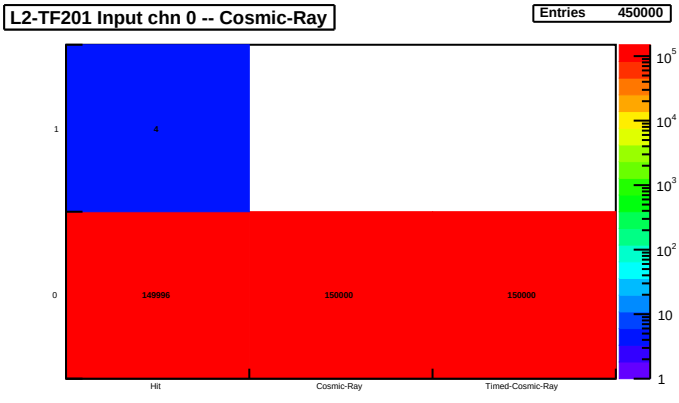

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001
TF002
TF003
TF004
TF005
TF006
UPC
TOF sector/UPC

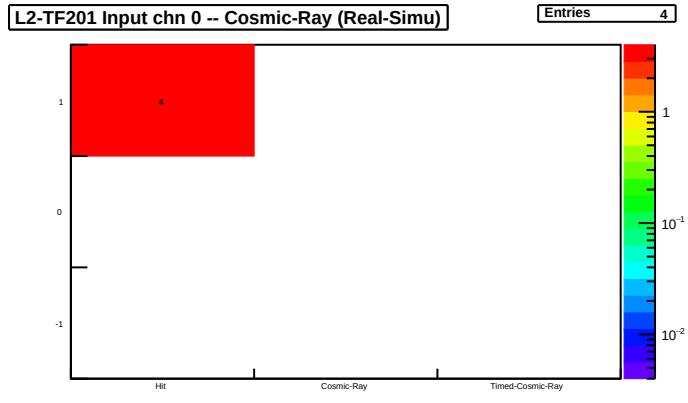

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 1200000
Fired
150000
ET
IT
EOR
WOR
EU
ED
WU
WD
Bit

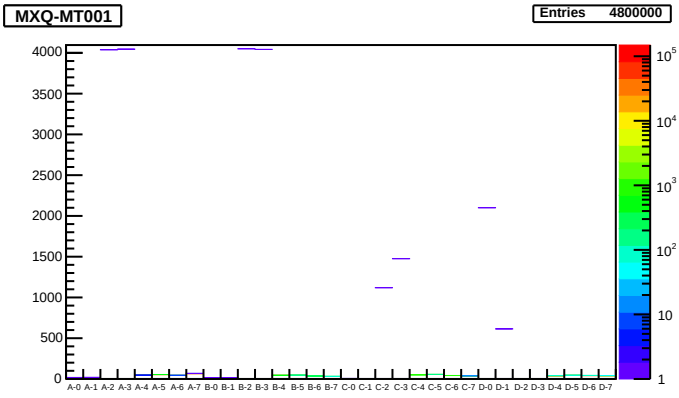

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 1200000
Fired(Real-Simu)
150000
ET
IT
EOR
WOR
EU
ED
WU
WD
Bit

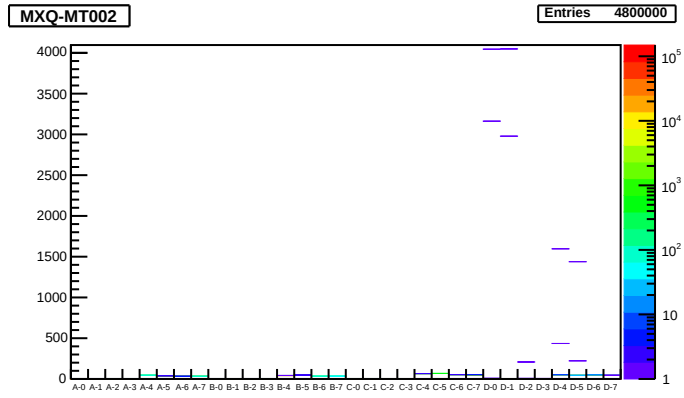

L2-TF201 Input chn 0 -- Number of Muons
Entries 150000
Number of Muons

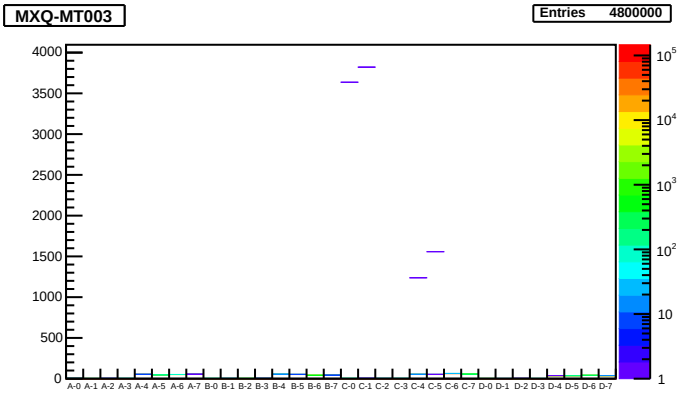

L2-TF201 Input chn 0 -- Number of Muons
Entries 0
Number of Muons (Real-Simu)

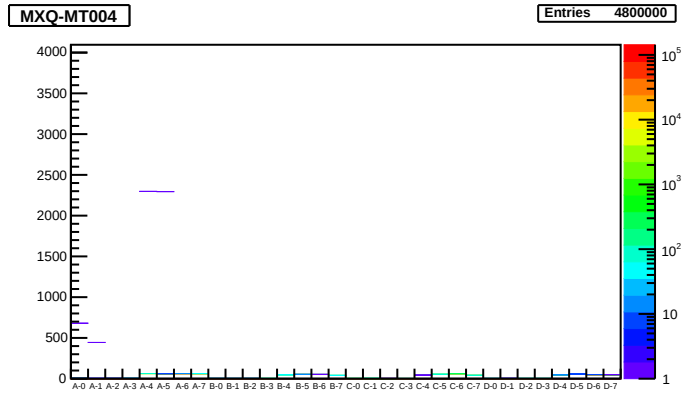

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 450000
4
149996
150000
150000
Hit
Cosmic-Ray
Timed-Cosmic-Ray

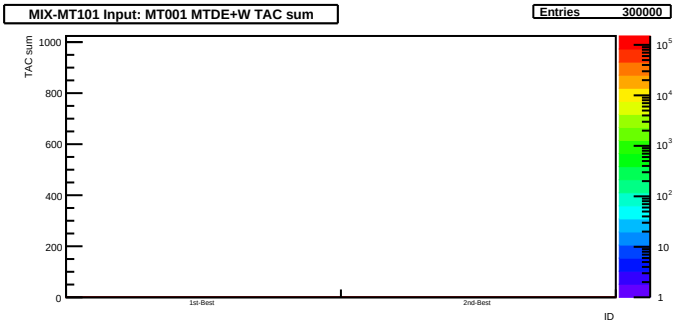

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 4
4
Hit
Cosmic-Ray
Timed-Cosmic-Ray

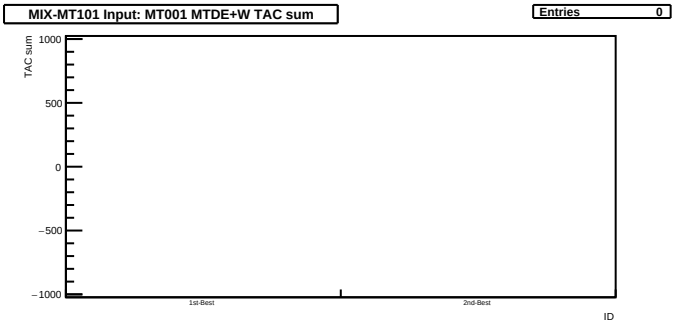

MXQ-MT001
Entries 4800000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

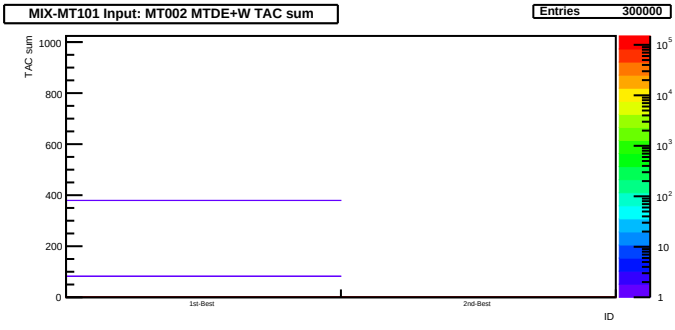

MXQ-MT002
Entries 4800000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

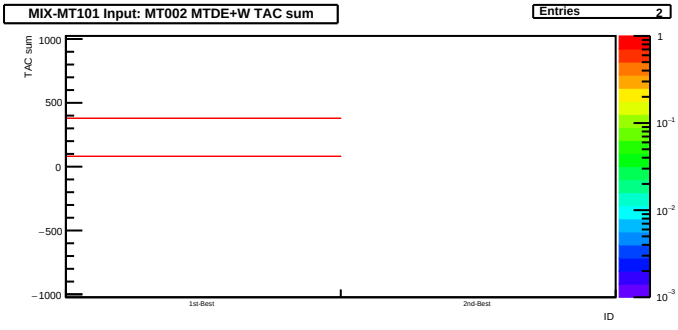

MXQ-MT003
Entries 4800000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

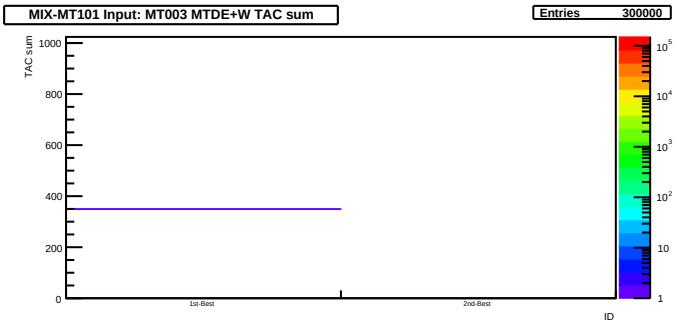

MXQ-MT004
Entries 4800000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

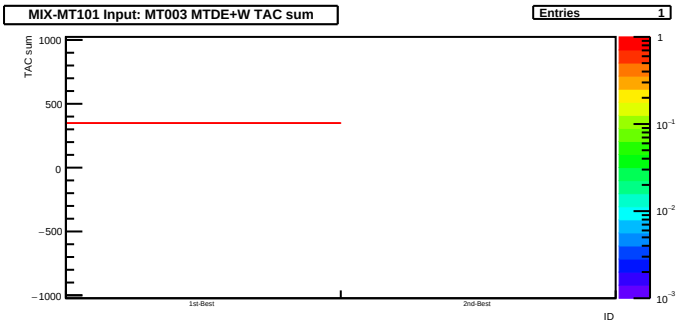

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 300000
TAC sum
1st-Best
2nd-Best
ID

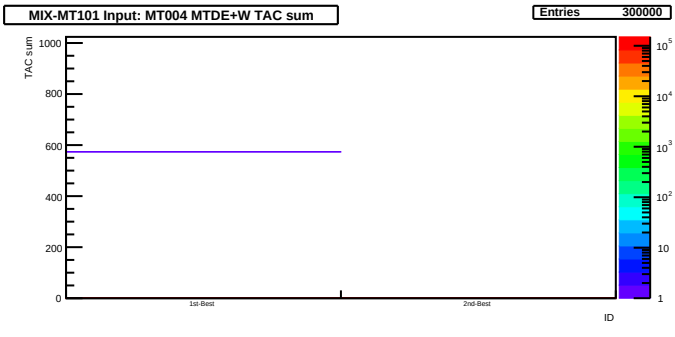

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 0
TAC sum
1st-Best
2nd-Best
ID

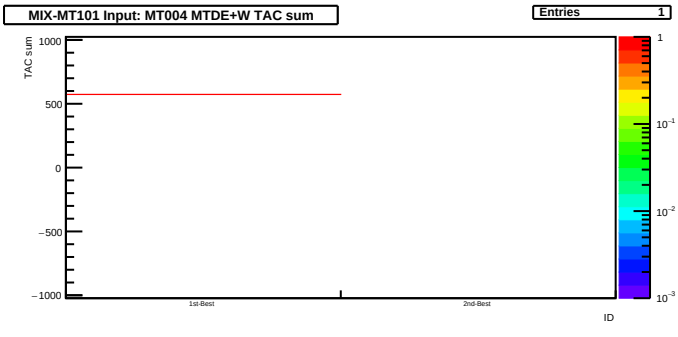

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 300000
TAC sum
1st-Best
2nd-Best
ID

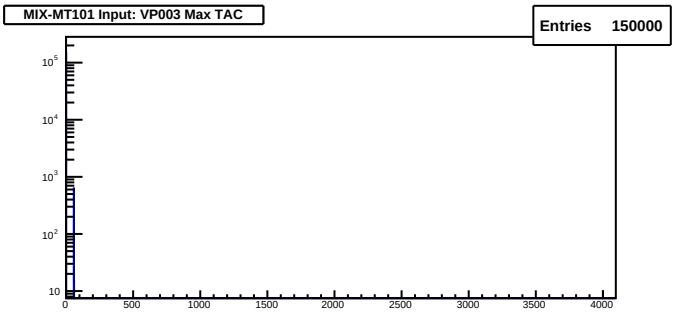

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 2
TAC sum
1st-Best
2nd-Best
ID

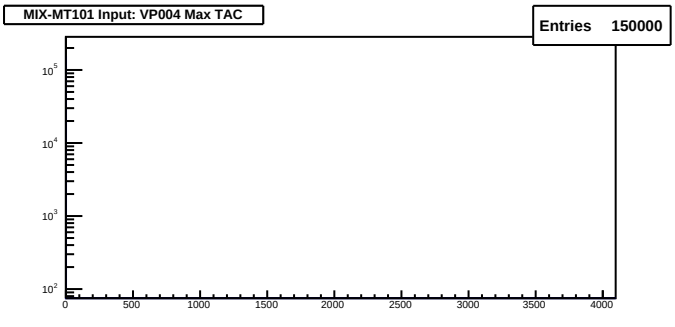

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 300000
TAC sum
1st-Best
2nd-Best
ID

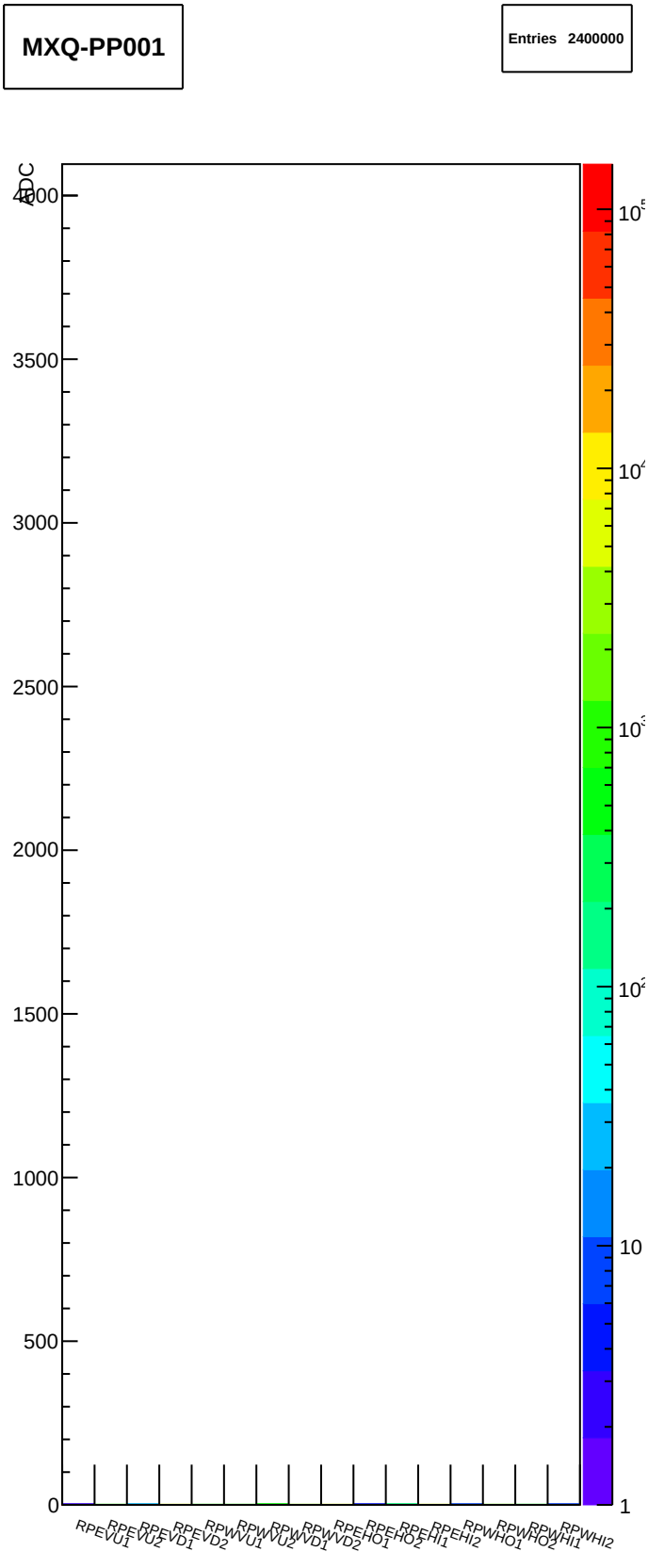

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 1
TAC sum
1st-Best
2nd-Best
ID

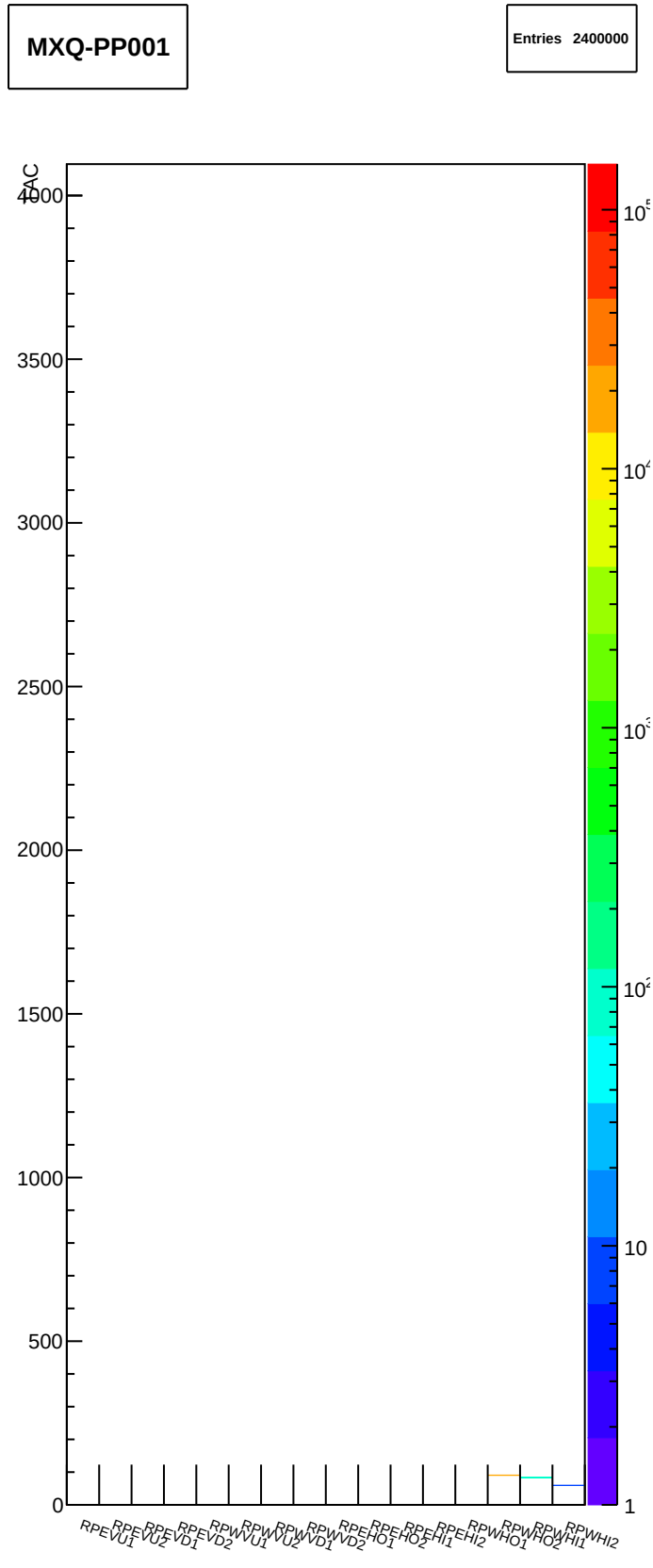

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 300000
TAC sum
1st-Best
2nd-Best
ID

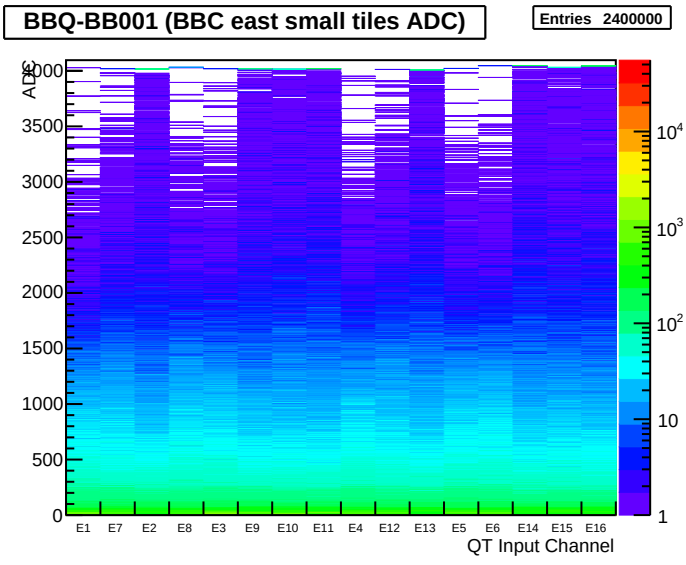

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 1
TAC sum
1st-Best
2nd-Best
ID

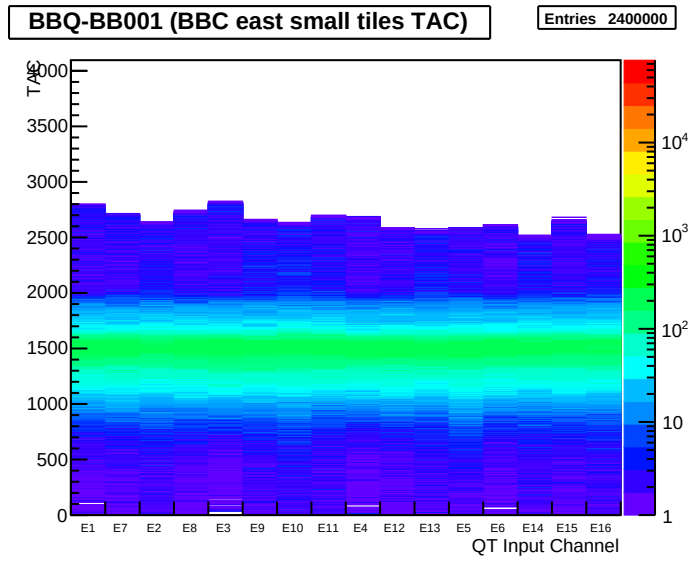

MIX-MT101 Input: VP003 Max TAC
Entries 150000

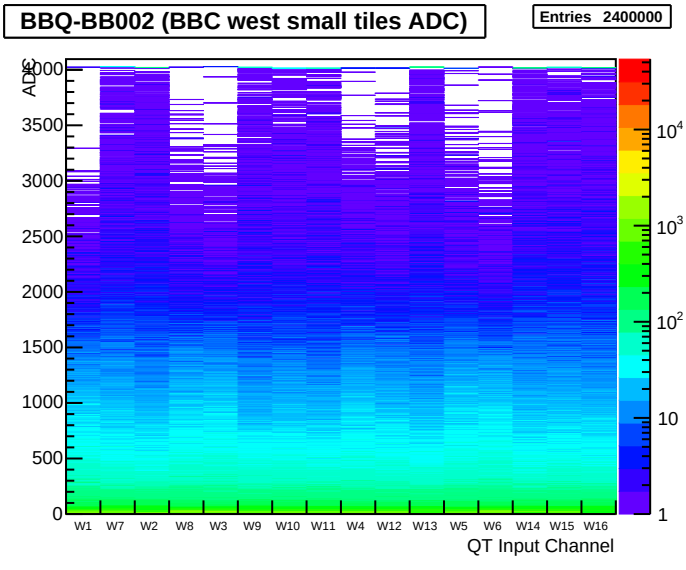

MIX-MT101 Input: VP004 Max TAC
Entries 150000

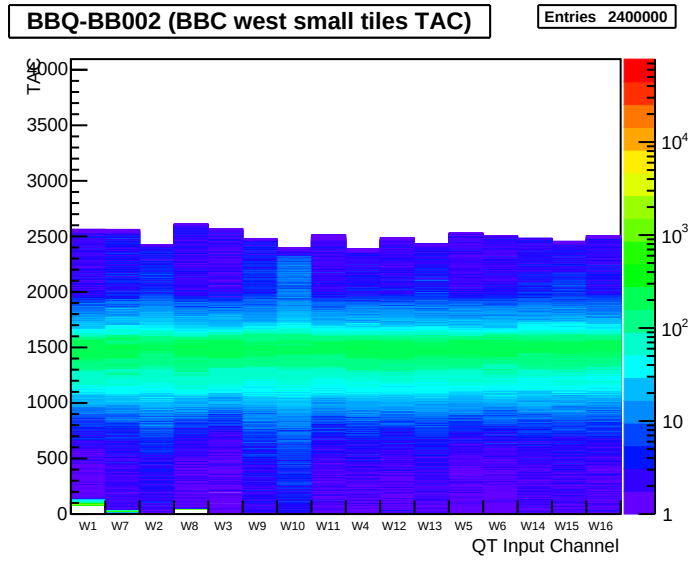

MXQ-PP001
Entries 2400000
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

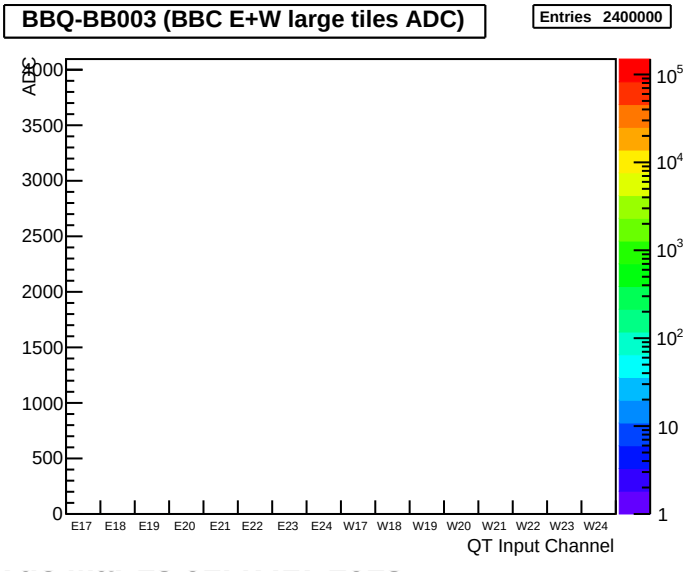

MXQ-PP001
Entries 2400000
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

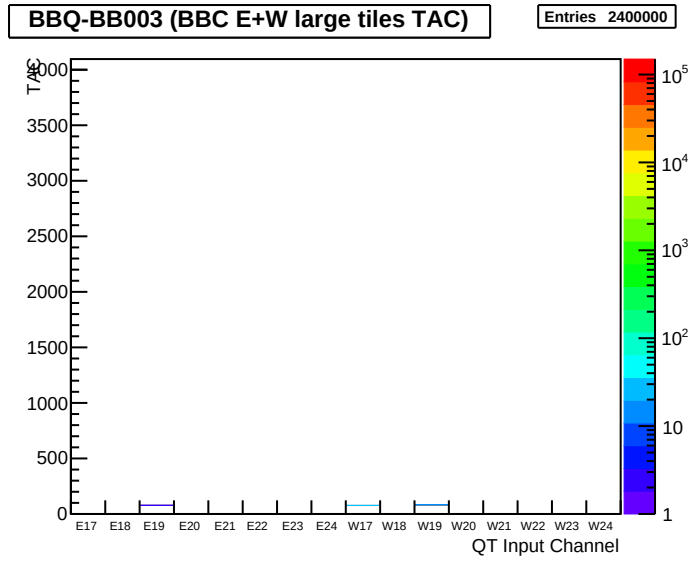

BBQ-BB001 (BBC east small tiles ADC)
Entries 2400000
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

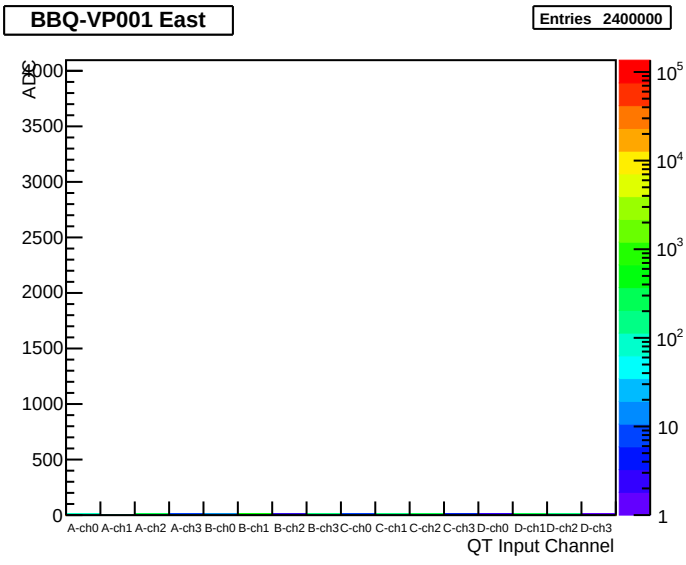

BBQ-BB001 (BBC east small tiles TAC)
Entries 2400000
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

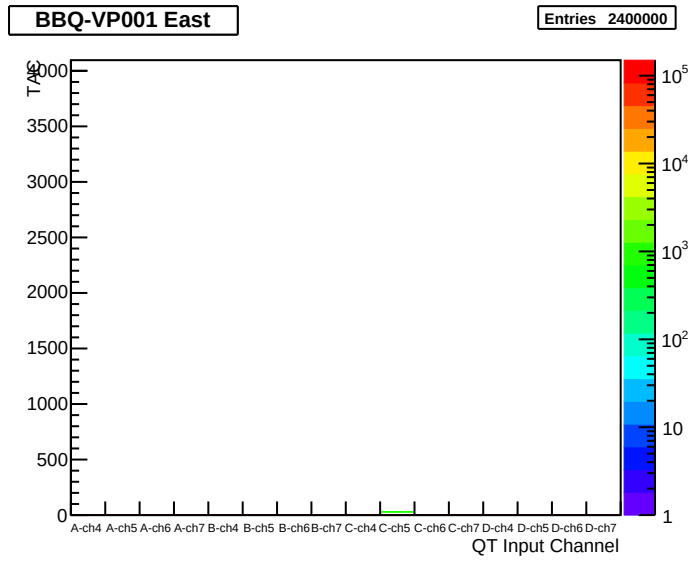

BBQ-BB002 (BBC west small tiles ADC)
Entries 2400000
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

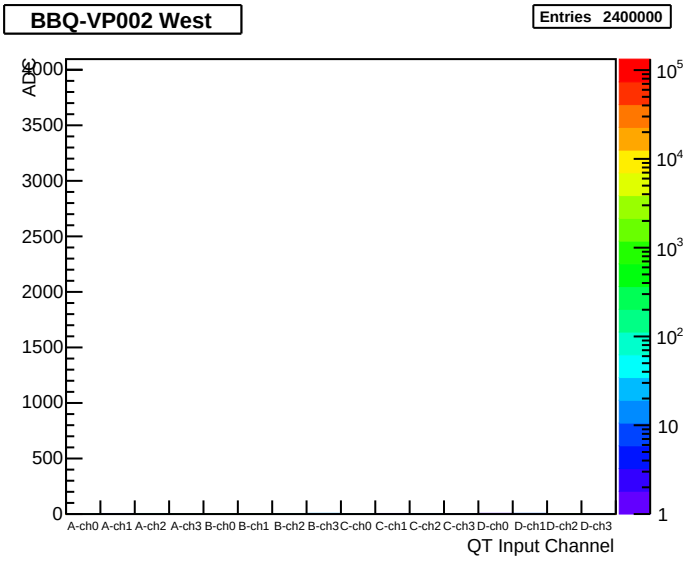

BBQ-BB002 (BBC west small tiles TAC)
Entries 2400000
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

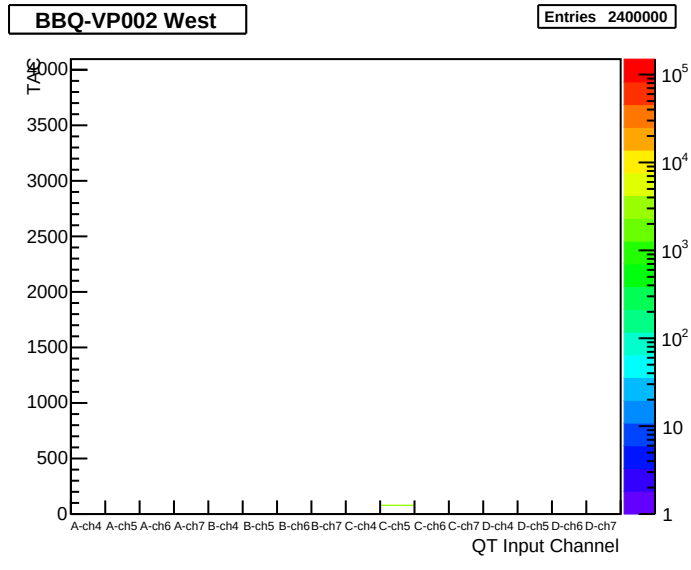

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2400000
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

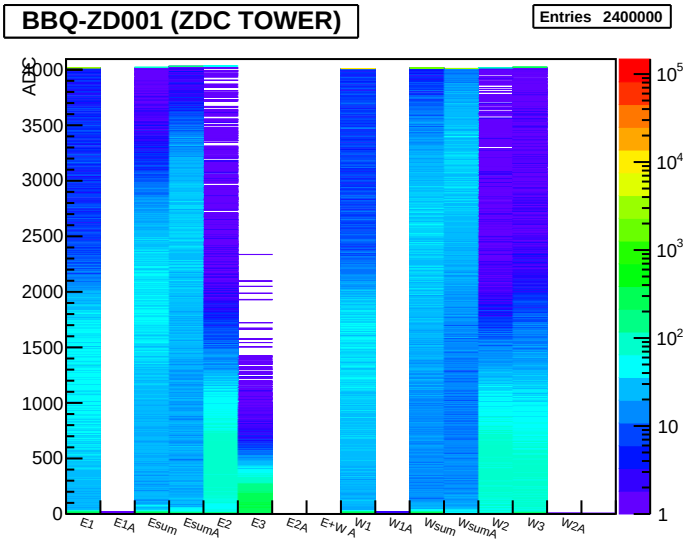

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2400000
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

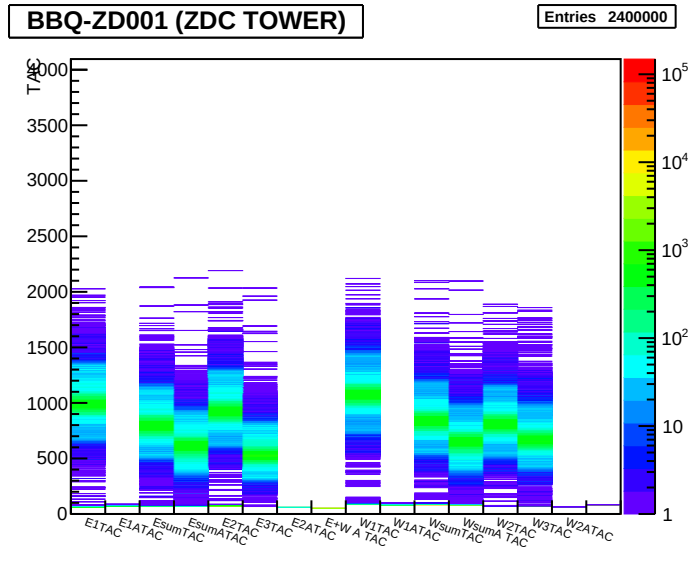

BBQ-VP001 East
Entries 2400000
ADC
QT Input Channel

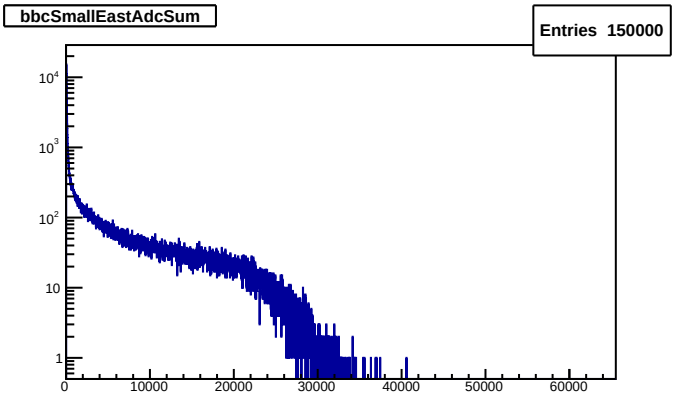

BBQ-VP001 East
Entries 2400000
TAC
QT Input Channel

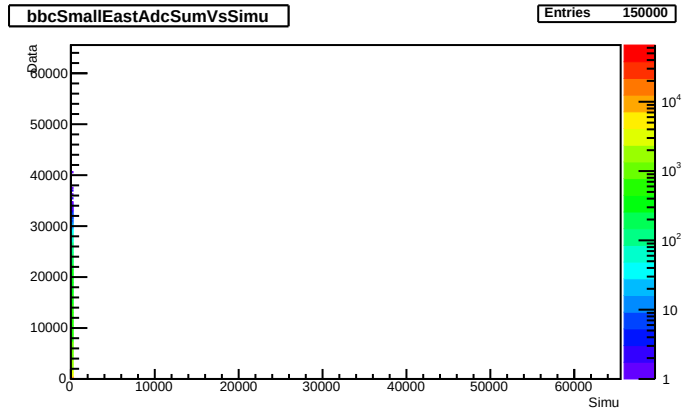

BBQ-VP002 West
Entries 2400000
ADC
QT Input Channel

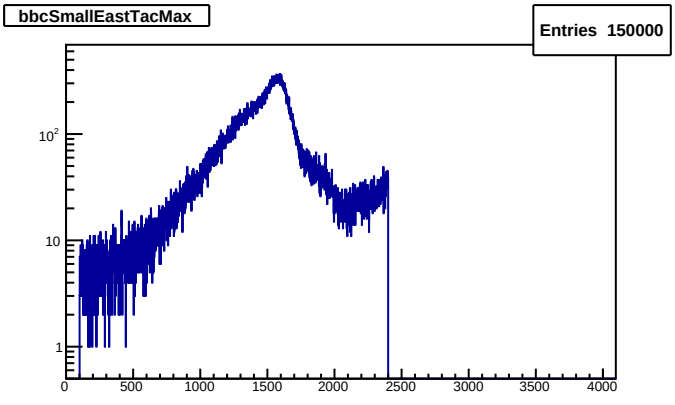

BBQ-VP002 West
Entries 2400000
TAC
QT Input Channel

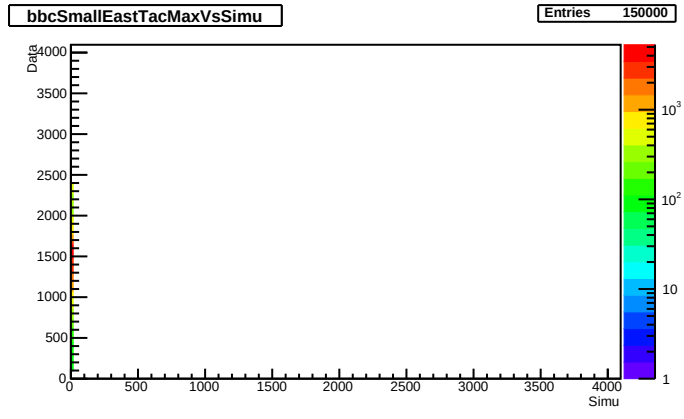

BBQ-ZD001 (ZDC TOWER)
Entries 2400000
ADC

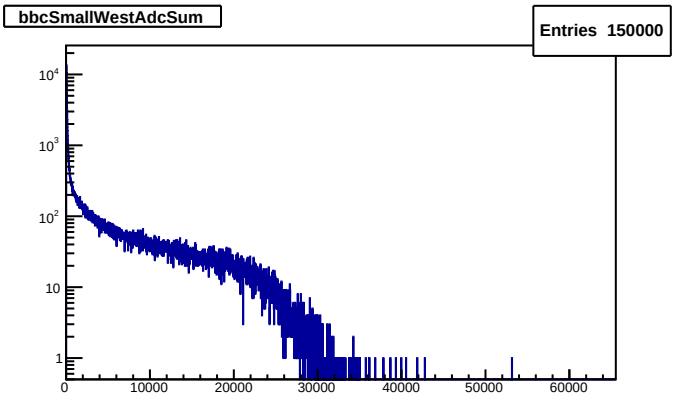

BBQ-ZD001 (ZDC TOWER)
Entries 2400000
TAC

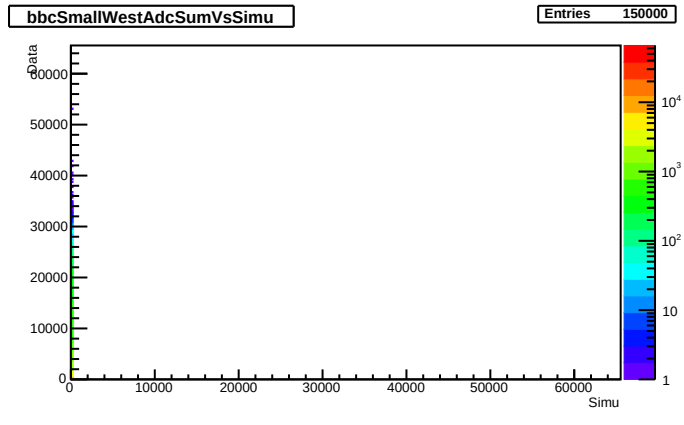

bbcSmallEastAdcSum
Entries 150000

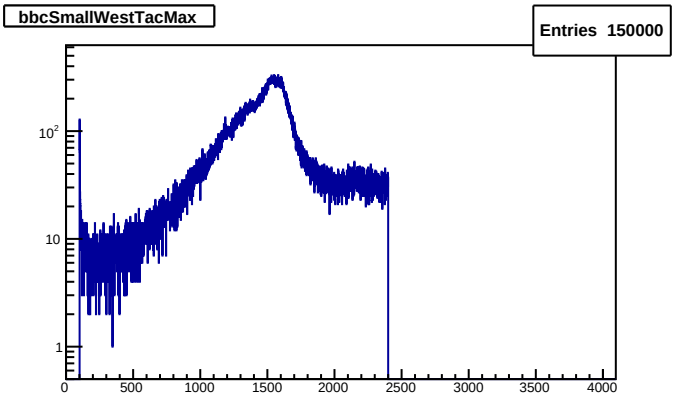

bbcSmallEastAdcSumVsSimu
Entries 150000
Data
Simu

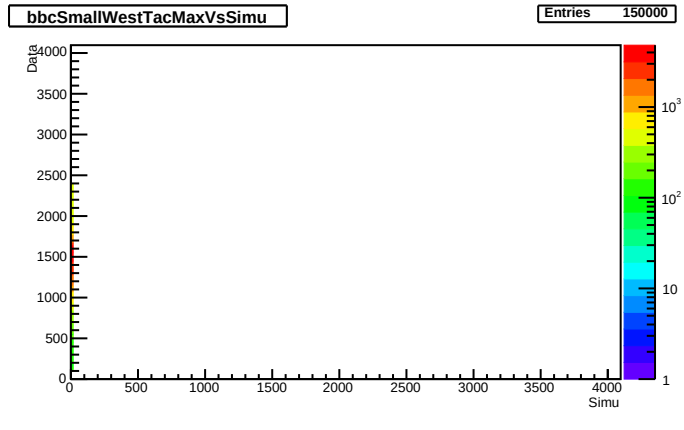

bbcSmallEastTacMax
Entries 150000

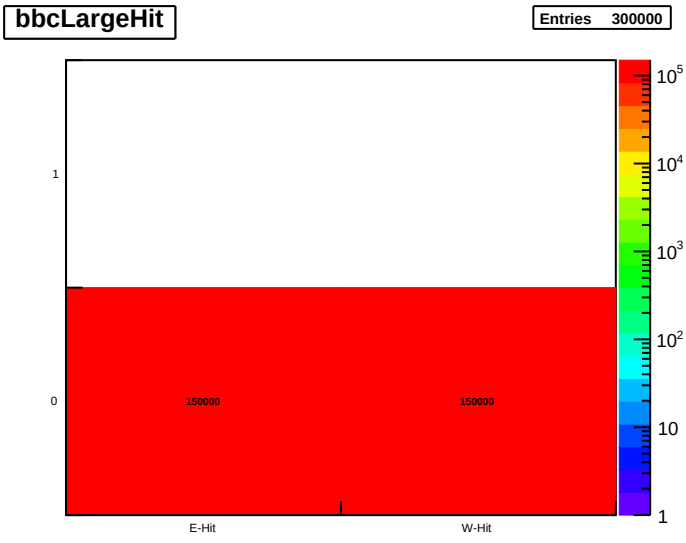

bbcSmallEastTacMaxVsSimu
Entries 150000
Data
Simu

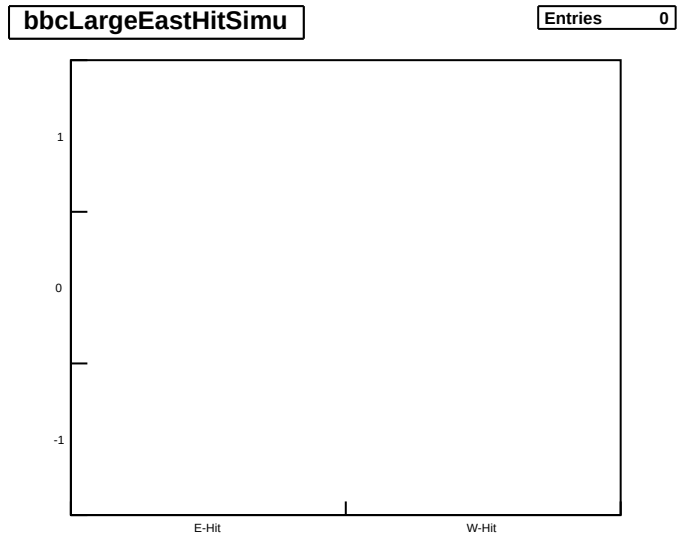

bbcSmallWestAdcSum
Entries 150000

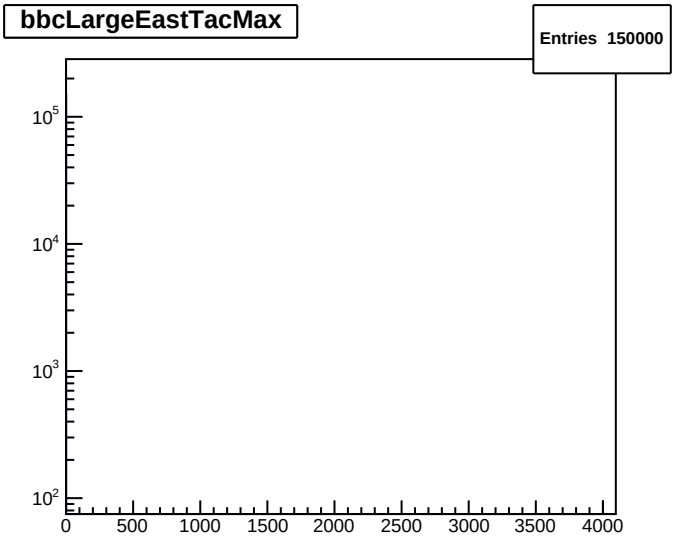

bbcSmallWestAdcSumVsSimu
Entries 150000
Data
Simu

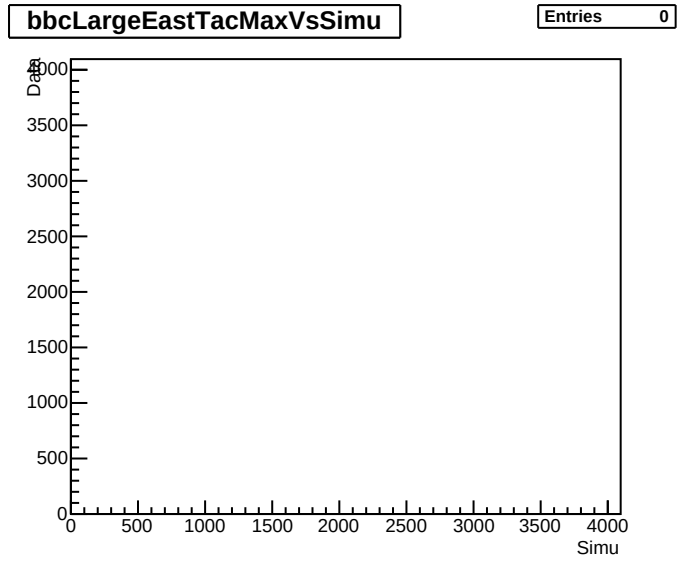

bbcSmallWestTacMax
Entries 150000

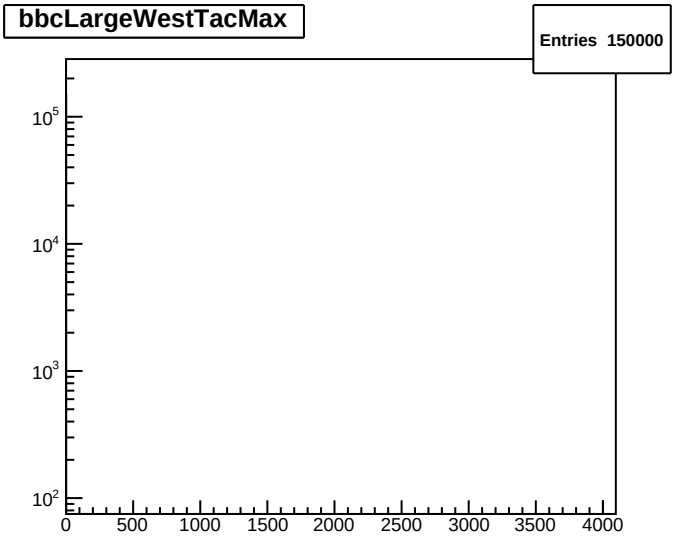

bbcSmallWestTacMaxVsSimu
Entries 150000
Data
Simu

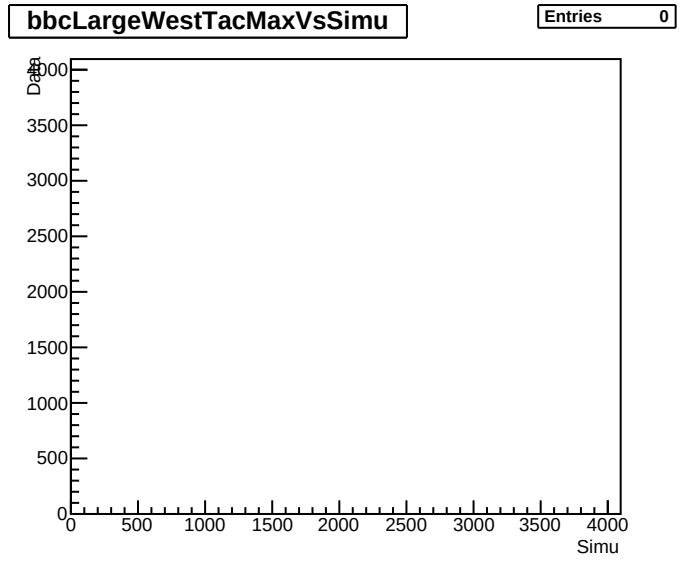

bbcLargeHit
Entries 300000
150000
150000
E-Hit
W-Hit

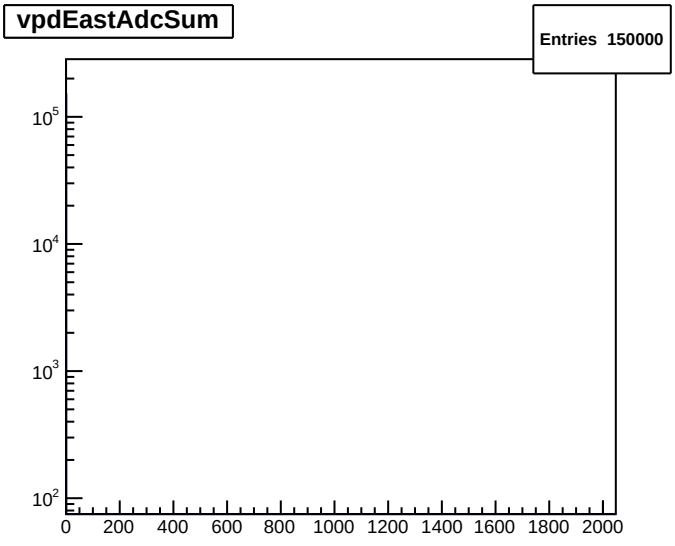

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

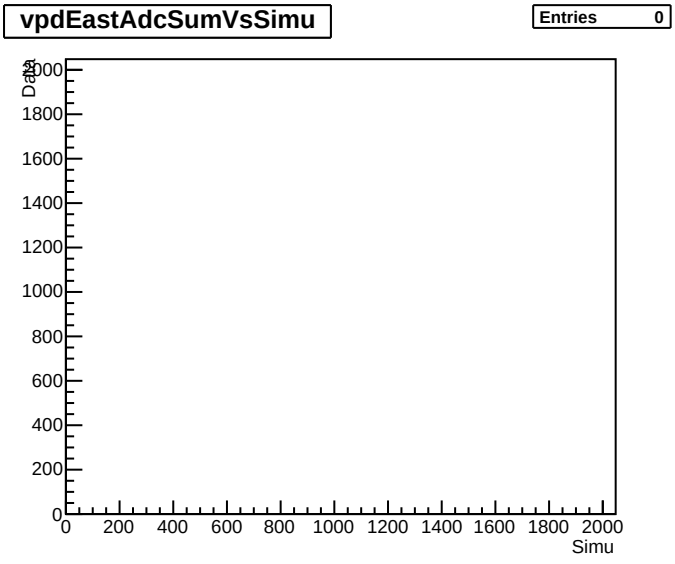

bbcLargeEastTacMax
Entries 150000

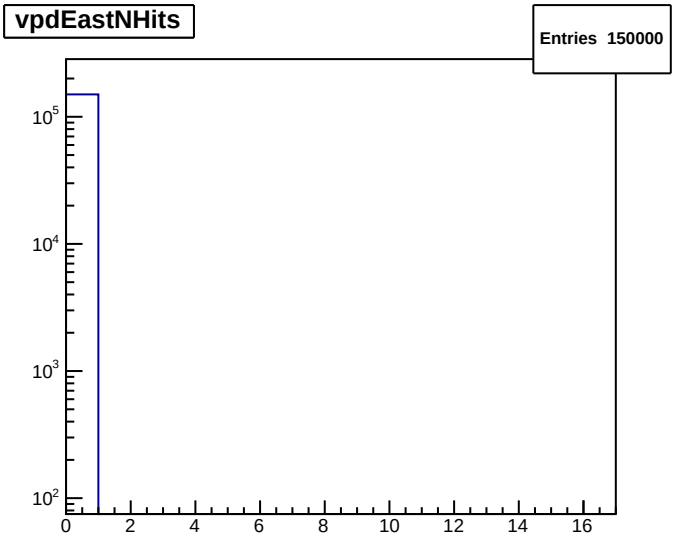

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

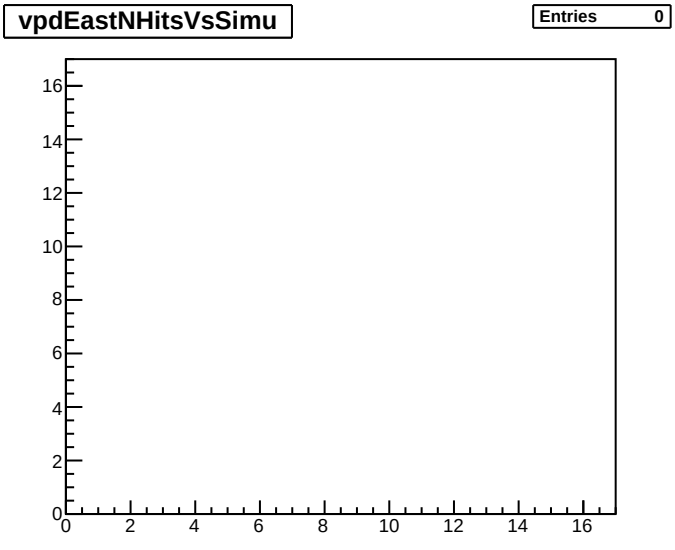

bbcLargeWestTacMax
Entries 150000

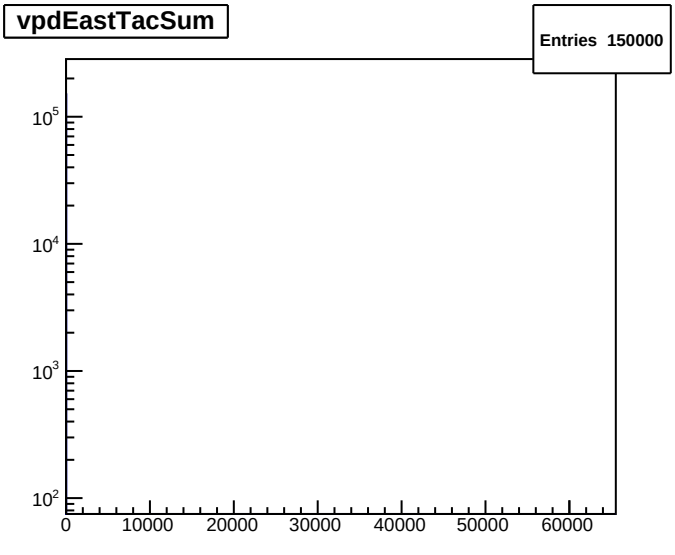

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

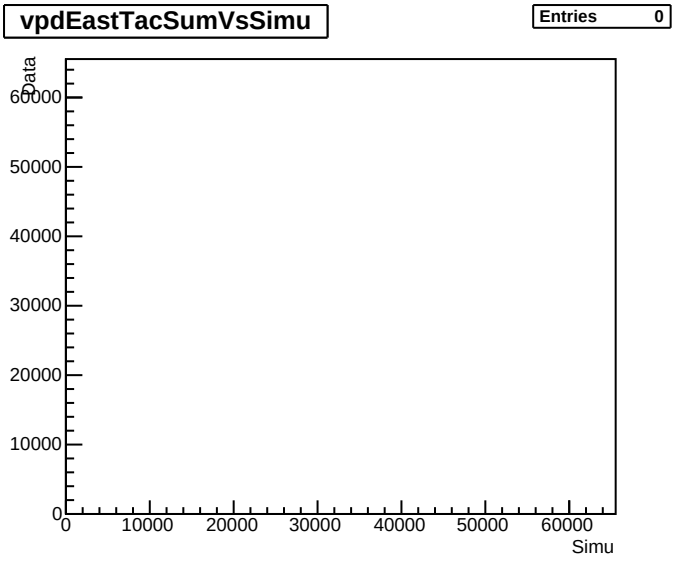

vpdEastAdcSum
Entries 150000
10^5
10^4
10^3
10^2
0 200 400 600 800 1000 1200 1400 1600 1800 2000

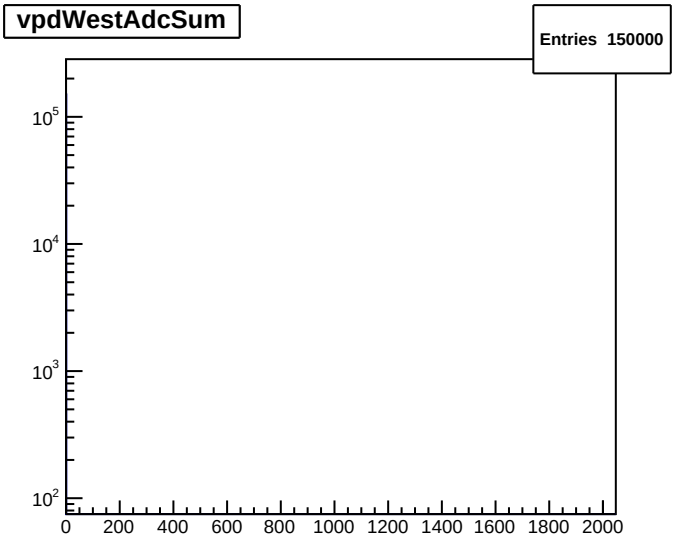

vpdEastAdcSumVsSimu
Entries 0
Data
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0 200 400 600 800 1000 1200 1400 1600 1800 2000
Simu

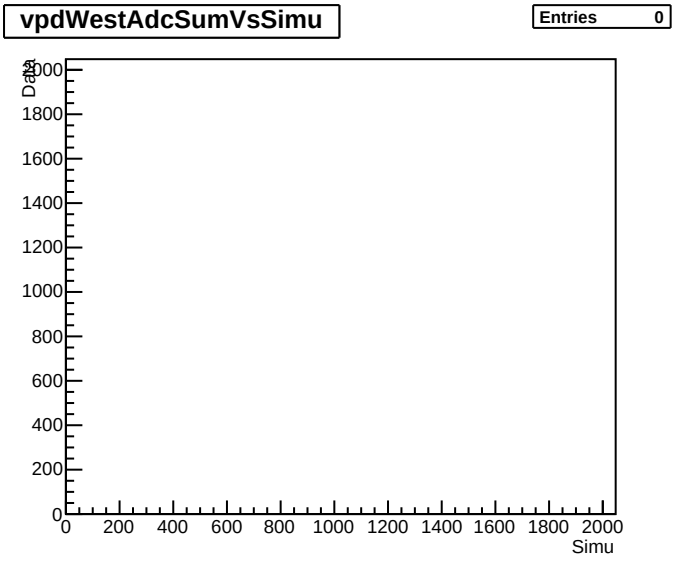

vpdEastNHits
Entries 150000
10^5
10^4
10^3
10^2
0 2 4 6 8 10 12 14 16

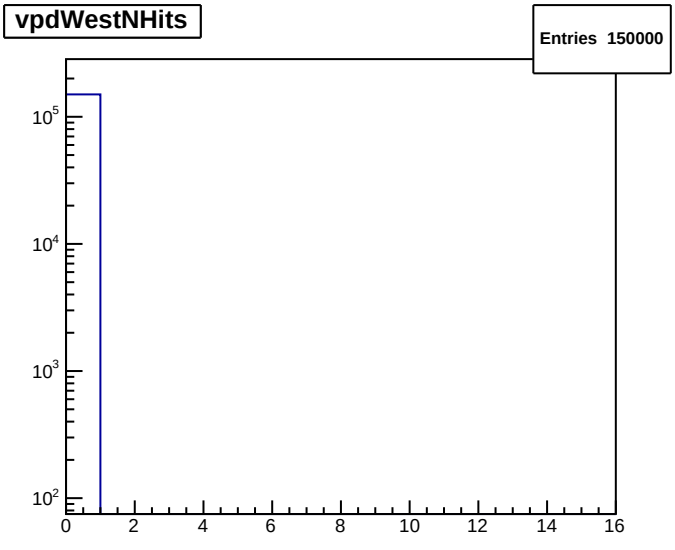

vpdEastNHitsVsSimu
Entries 0
16
14
12
10
8
6
4
2
0
0 2 4 6 8 10 12 14 16

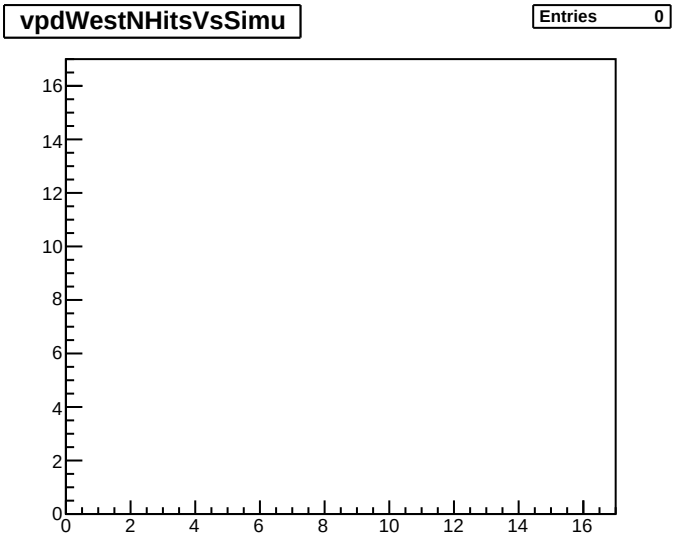

vpdEastTacSum
Entries 150000
10^5
10^4
10^3
10^2
0 10000 20000 30000 40000 50000 60000

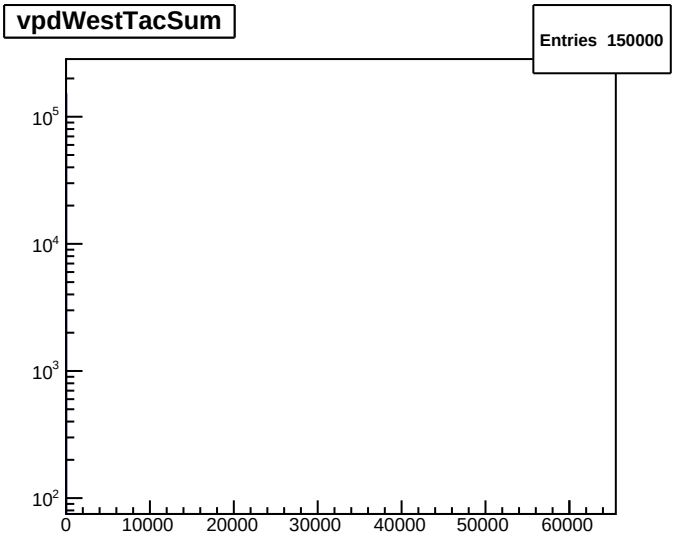

vpdEastTacSumVsSimu
Entries 0
Data
60000
50000
40000
30000
20000
10000
0
0 10000 20000 30000 40000 50000 60000
Simu

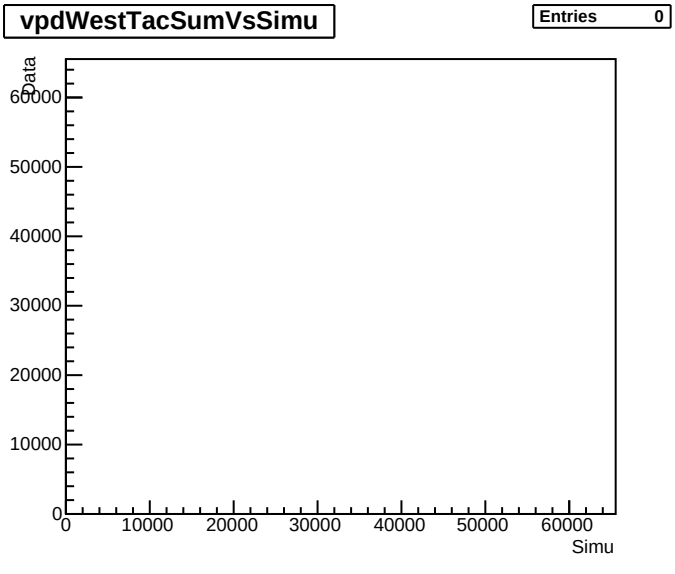

vpdWestAdcSum
Entries 150000
10^5
10^4
10^3
10^2
0 200 400 600 800 1000 1200 1400 1600 1800 2000

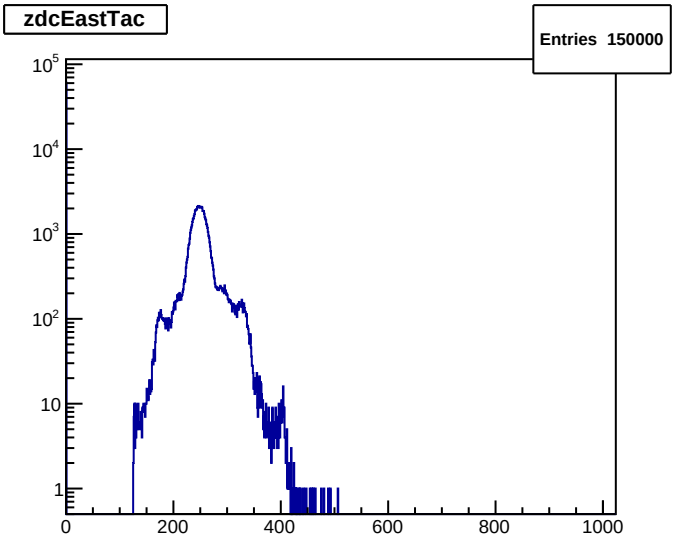

vpdWestAdcSumVsSimu
Entries 0
Data
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0 200 400 600 800 1000 1200 1400 1600 1800 2000
Simu

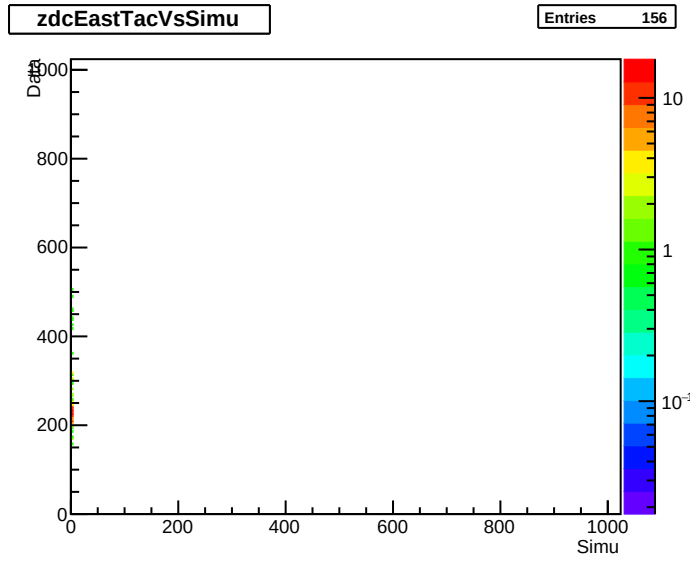

vpdWestNHits
Entries 150000
10^5
10^4
10^3
10^2
0 2 4 6 8 10 12 14 16

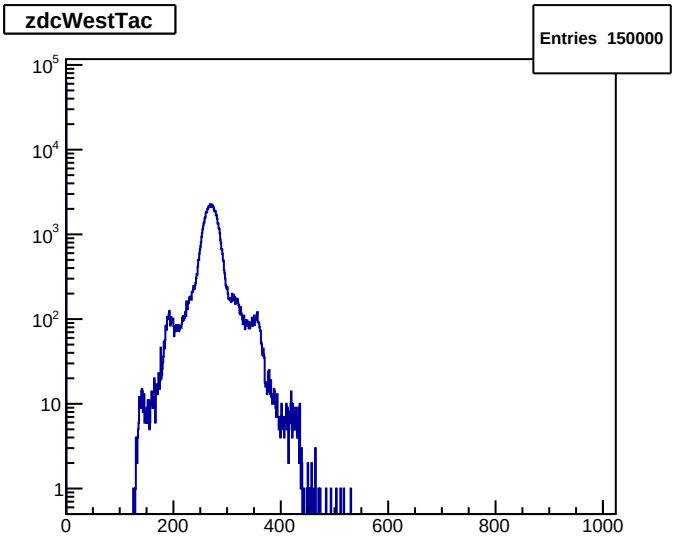

vpdWestNHitsVsSimu
Entries 0
16
14
12
10
8
6
4
2
0
0 2 4 6 8 10 12 14 16

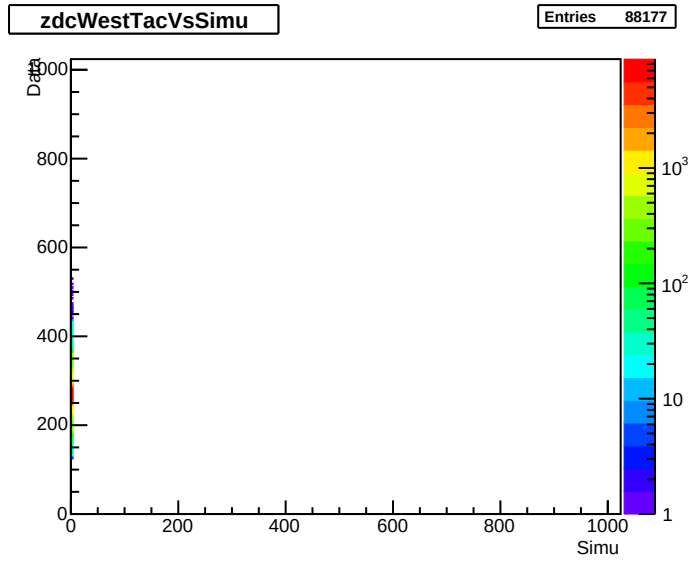

vpdWestTacSum
Entries 150000
10^5
10^4
10^3
10^2
0 10000 20000 30000 40000 50000 60000

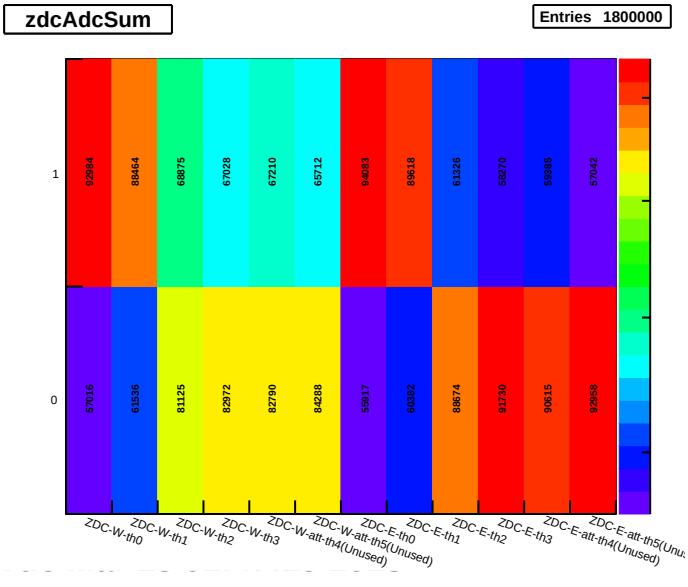

vpdWestTacSumVsSimu
Entries 0
Data
60000
50000
40000
30000
20000
10000
0
0 10000 20000 30000 40000 50000 60000
Simu

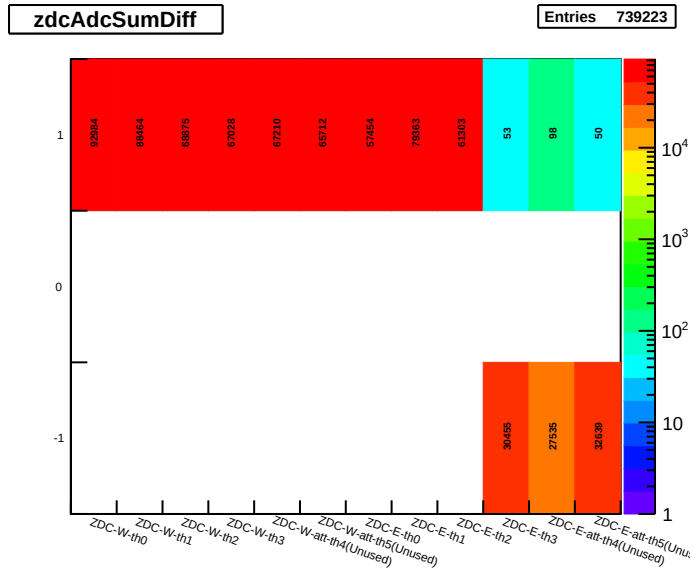

zdcEastTac
Entries 150000

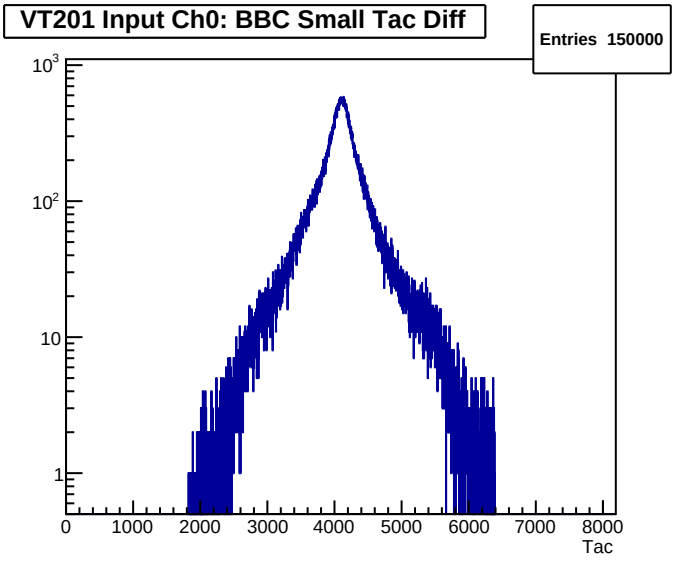

zdcEastTacVsSimu
Entries 156
Data
Simu

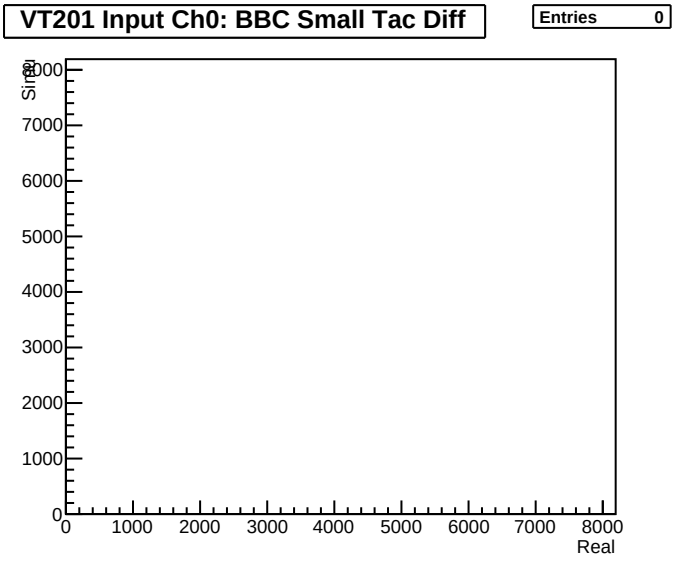

zdcWestTac
Entries 150000

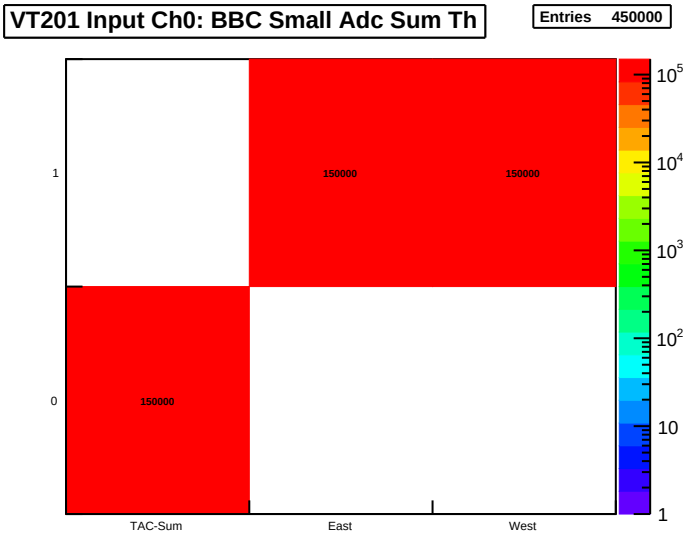

zdcWestTacVsSimu
Entries 88177
Data
Simu

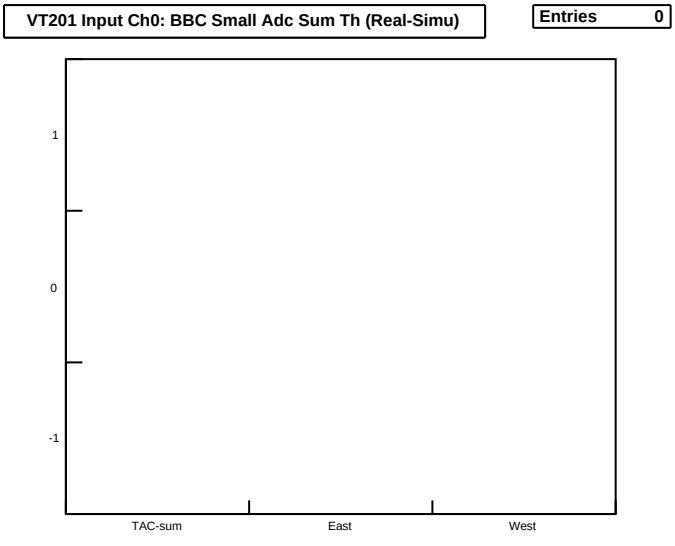

zdcAdcSum
Entries 1800000
92984
88464
68875
67028
67210
65712
94083
89618
61326
56270
59385
57042
57016
61536
81125
82972
82790
84288
59917
60382
88674
91730
90615
92958
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

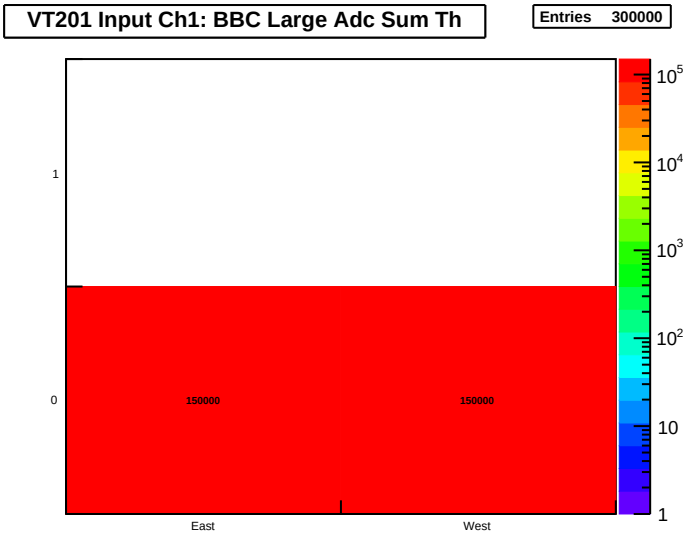

zdcAdcSumDiff
Entries 739223
92984
88464
68875
67028
67210
65712
57454
76963
61303
53
98
50
30455
27535
32639
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

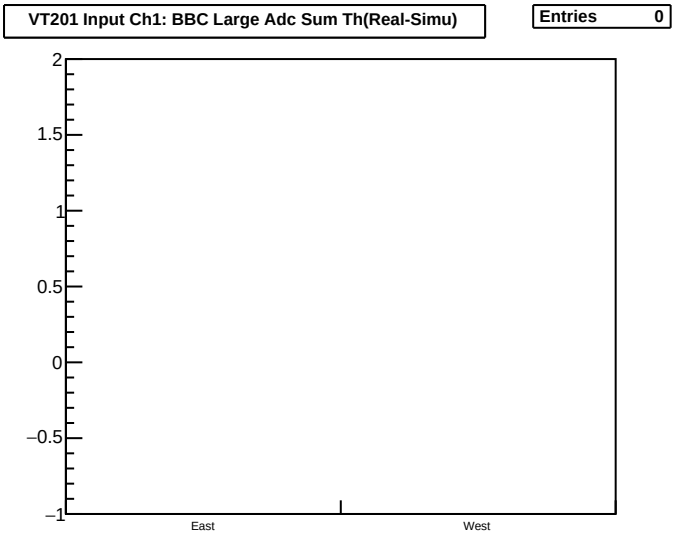

VT201 Input Ch0: BBC Small Tac Diff
Entries 150000
Tac


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

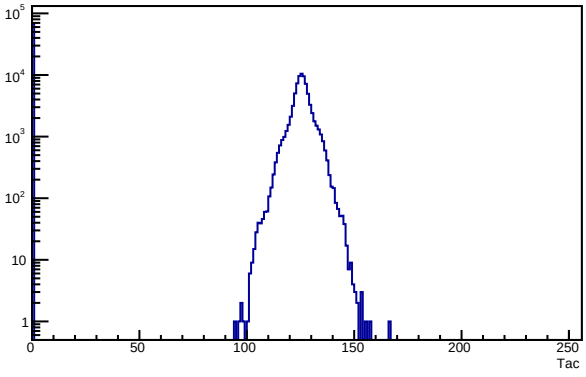

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 450000
150000
150000
150000
TAC-Sum
East
West


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

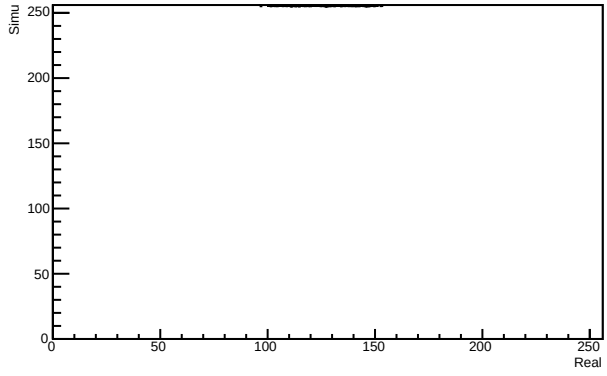

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 300000
150000
150000
East
West


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

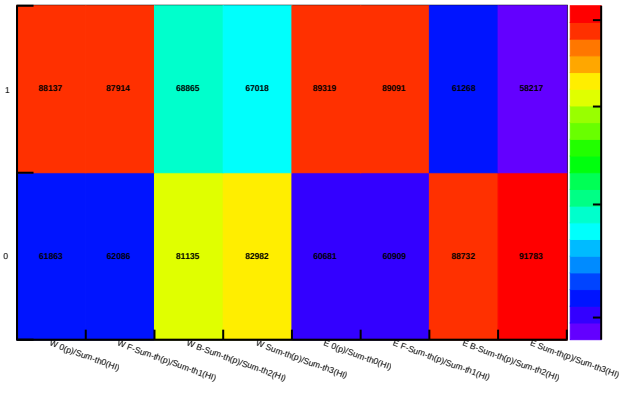
VT201 Input Ch2: ZDC Tac Diff



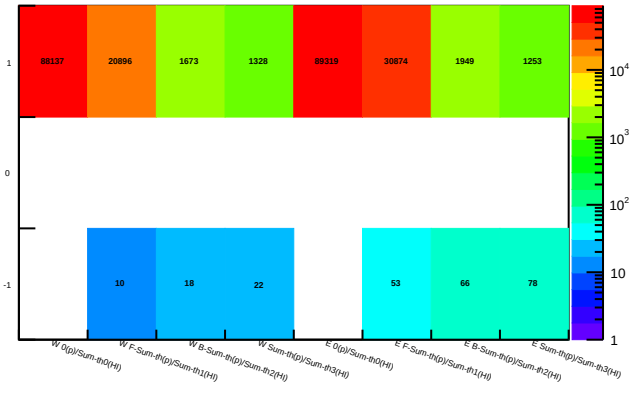
VT201 Input Ch2: ZDC Tac Diff



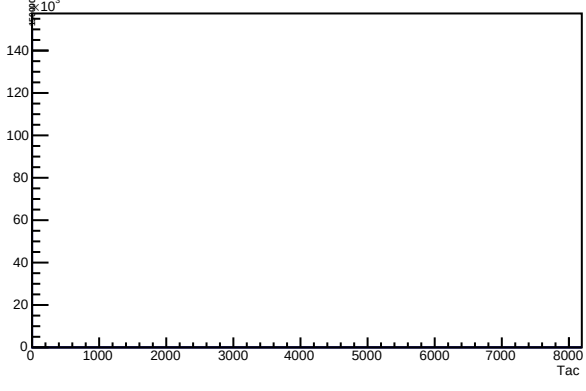
VT201 Input Ch2: ZDC Adc Sum Th



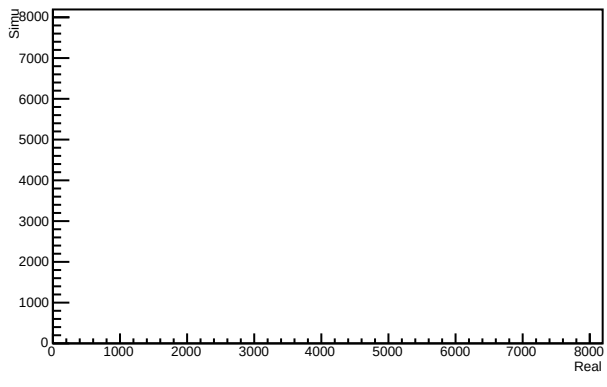
VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)



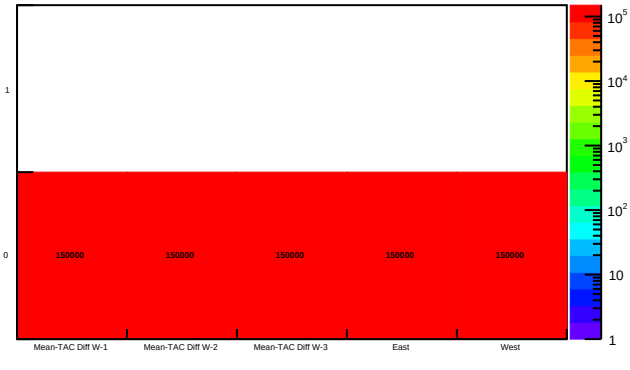
VT201 Input Ch4: VPD Tac Diff



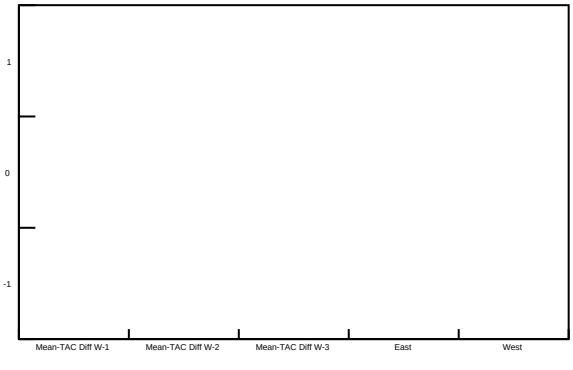
VT201 Input Ch4: VPD Tac Diff

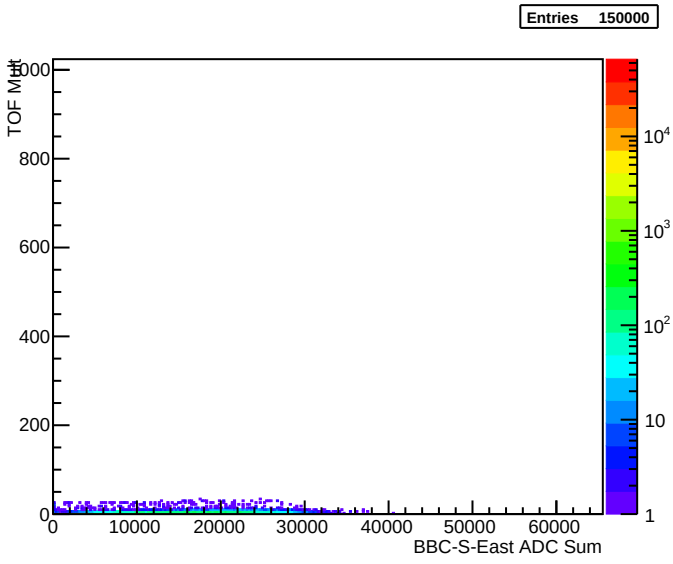


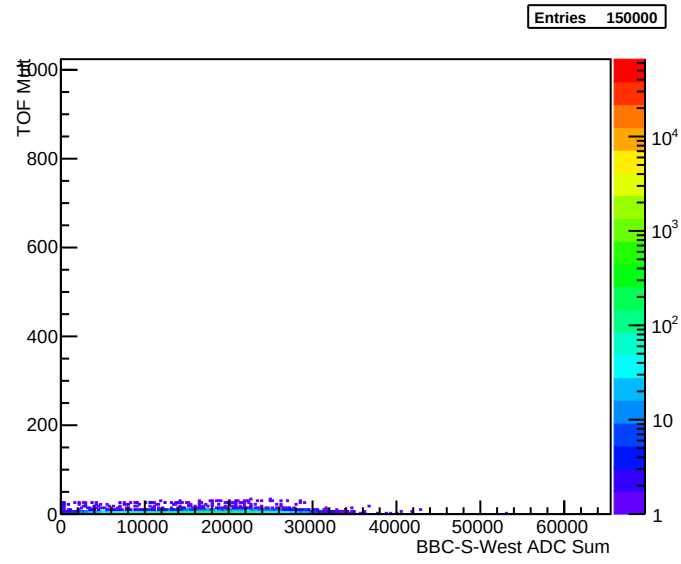
VT201 Input Ch4: VPD Adc Sum Th

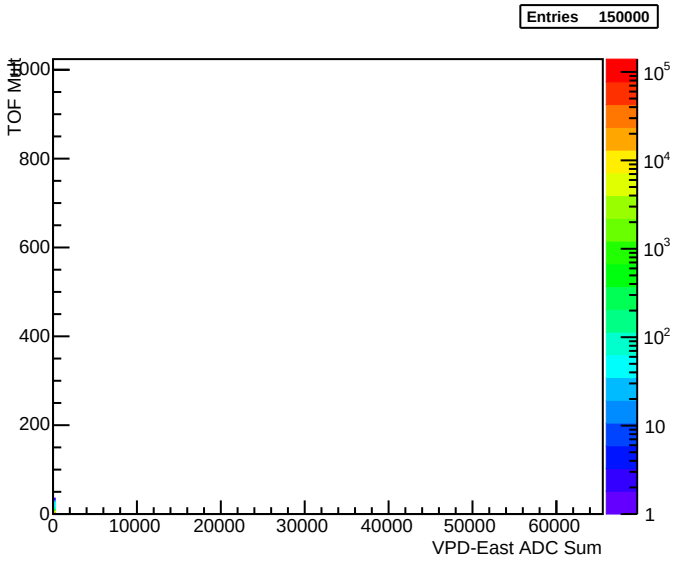


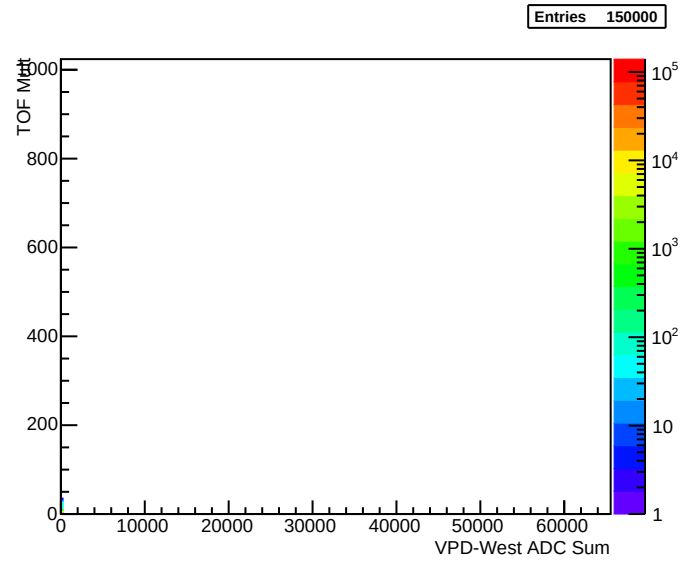
VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)

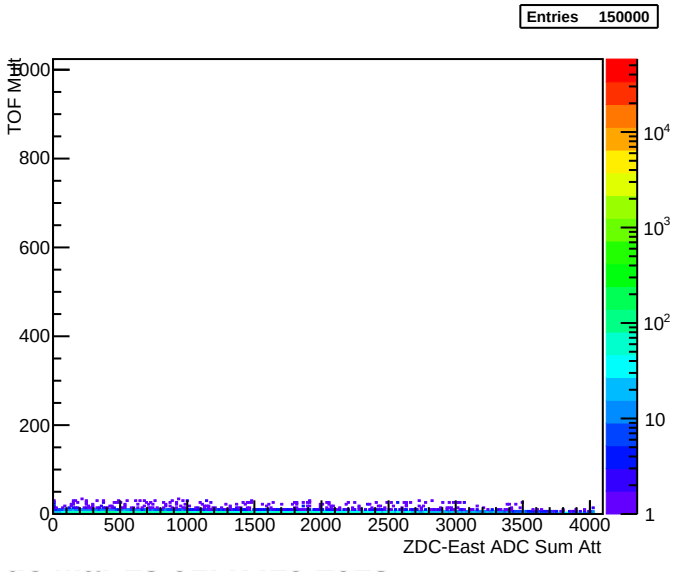


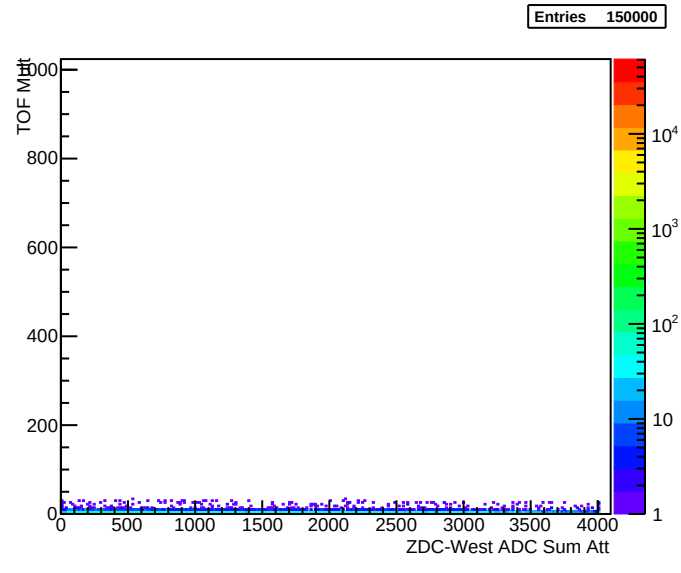

Entries 150000
TOF Mult
BBC-S-East ADC Sum

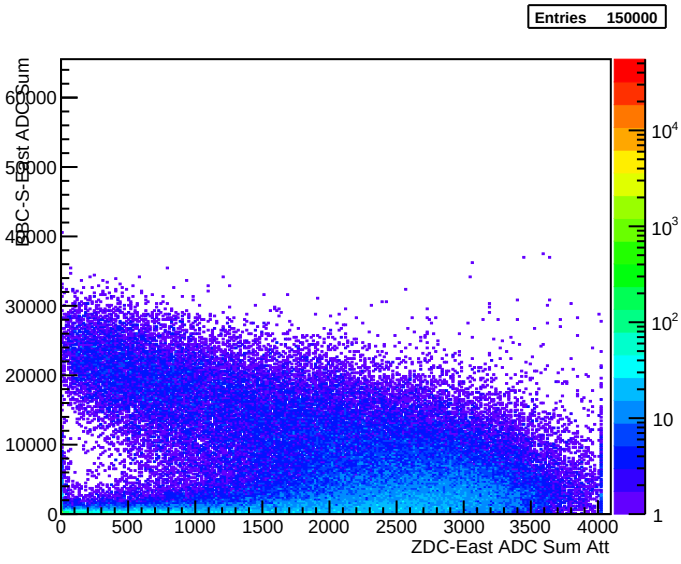

Entries 150000
TOF Mult
BBC-S-West ADC Sum

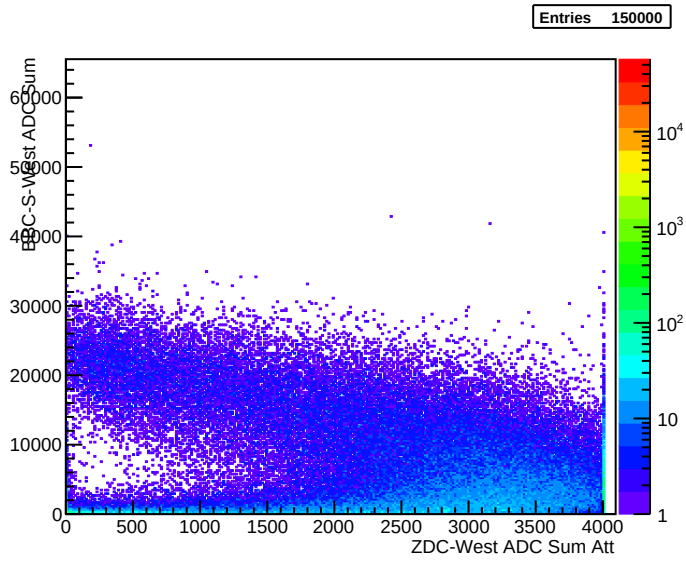

Entries 150000
TOF Mult
VPD-East ADC Sum

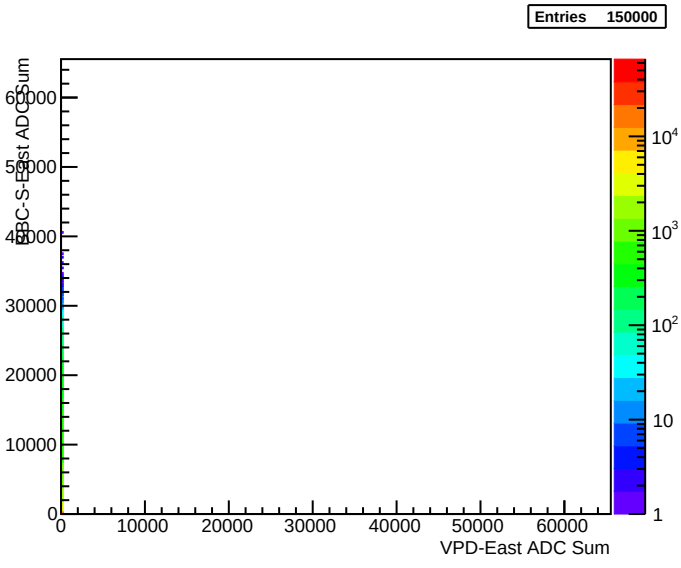

Entries 150000
TOF Mult
VPD-West ADC Sum

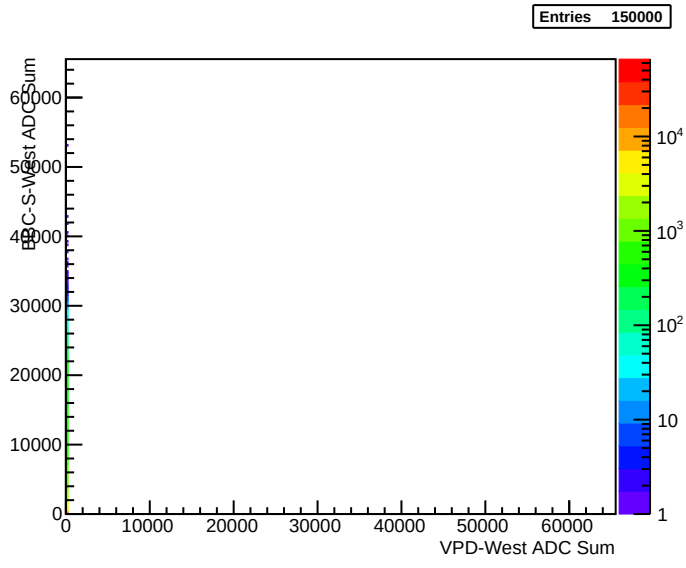

Entries 150000
TOF Mult
ZDC-East ADC Sum Att

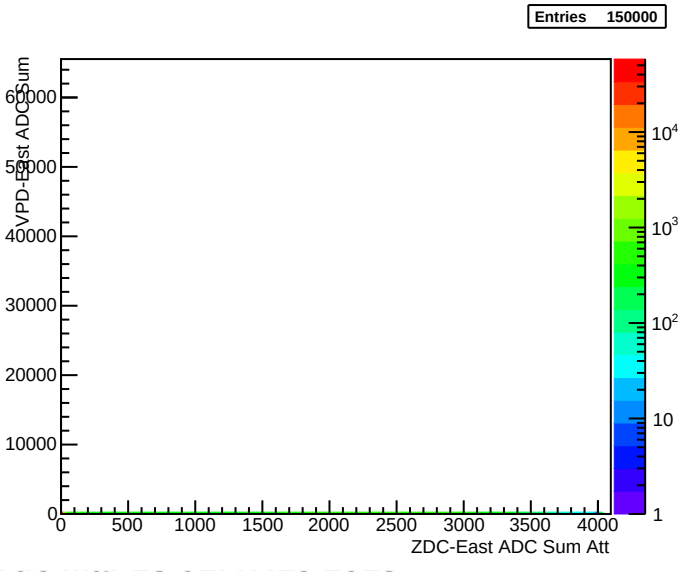

Entries 150000
TOF Mult
ZDC-West ADC Sum Att

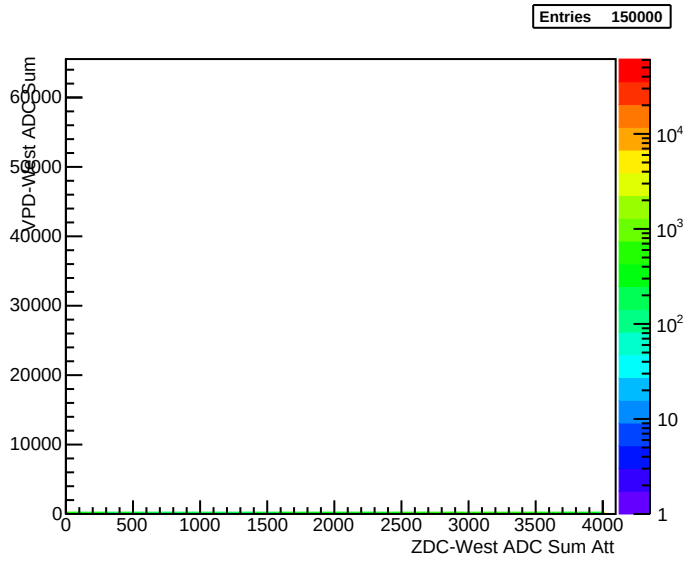

Entries 150000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

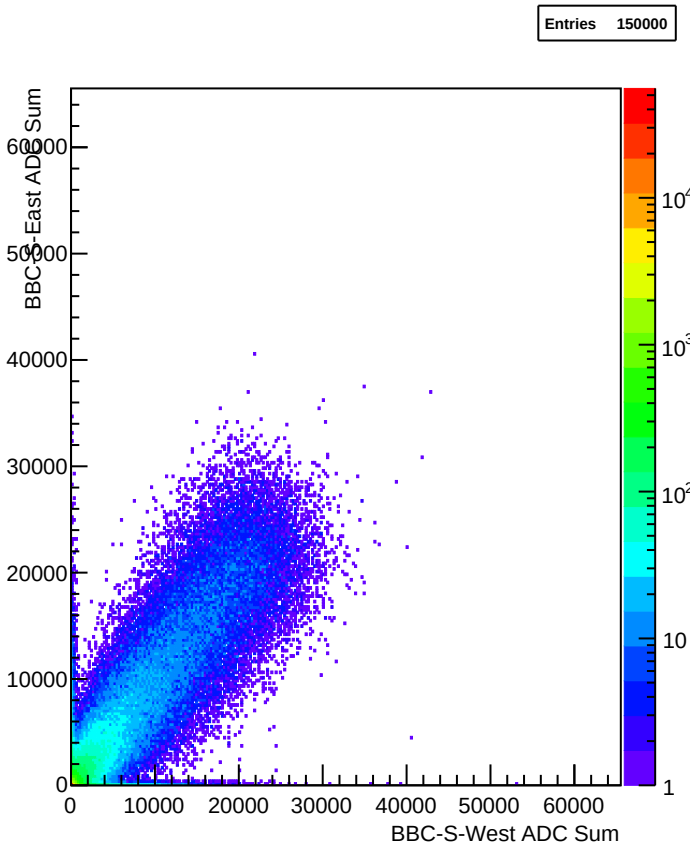

Entries 150000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

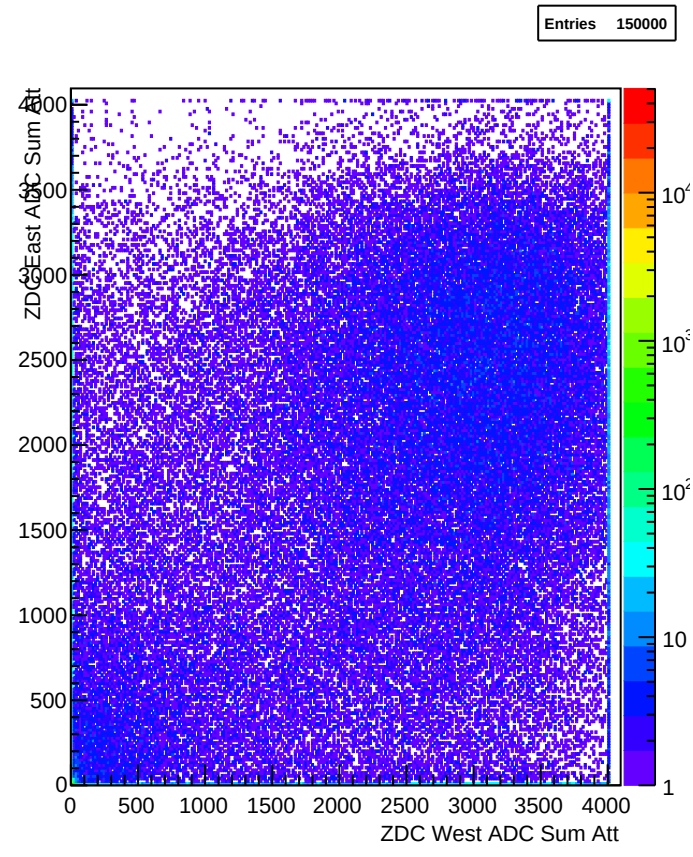

Entries 150000
BBC-S-East ADC Sum
VPD-East ADC Sum

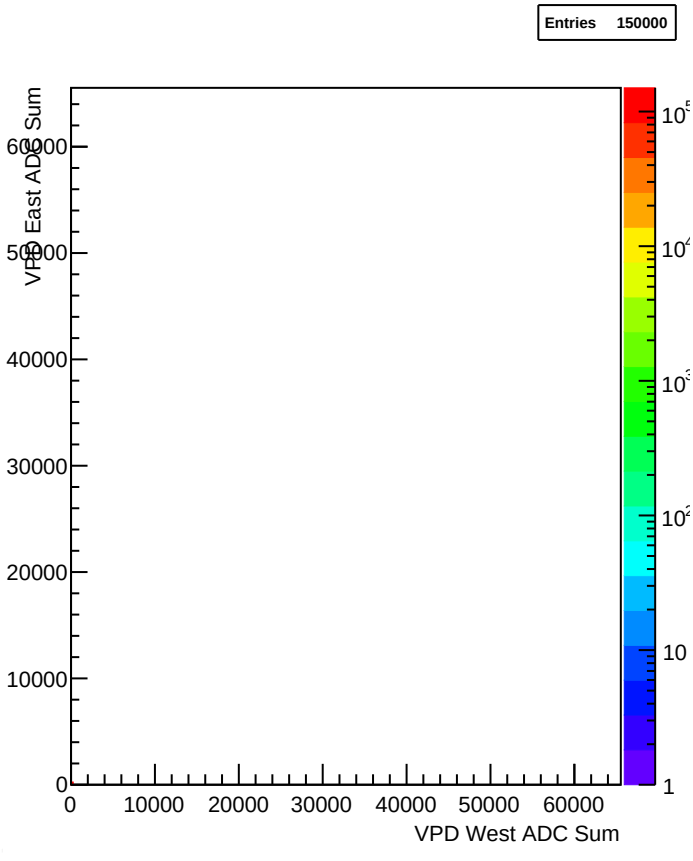

Entries 150000
BBC-S-West ADC Sum
VPD-West ADC Sum

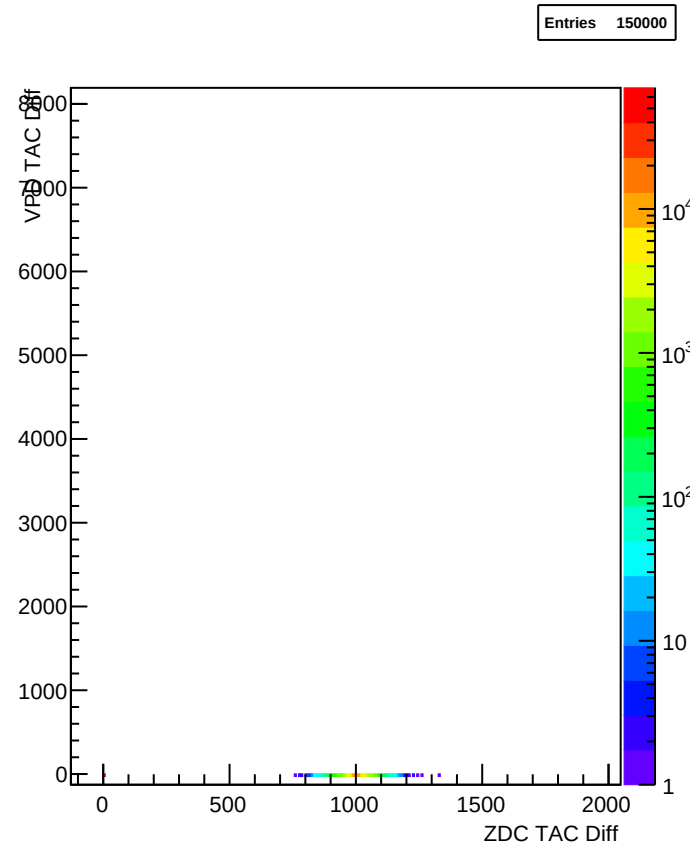

Entries 150000
VPD-East ADC Sum
ZDC-East ADC Sum Att

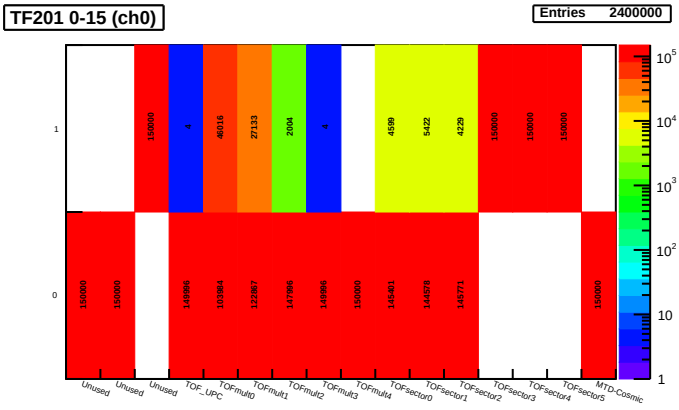

Entries 150000
VPD-West ADC Sum
ZDC-West ADC Sum Att

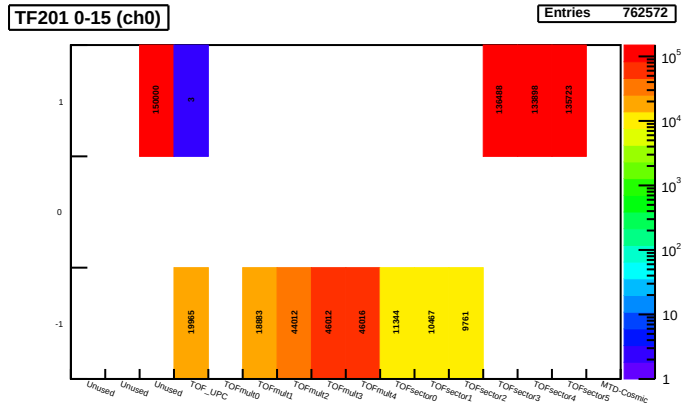

Entries 150000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

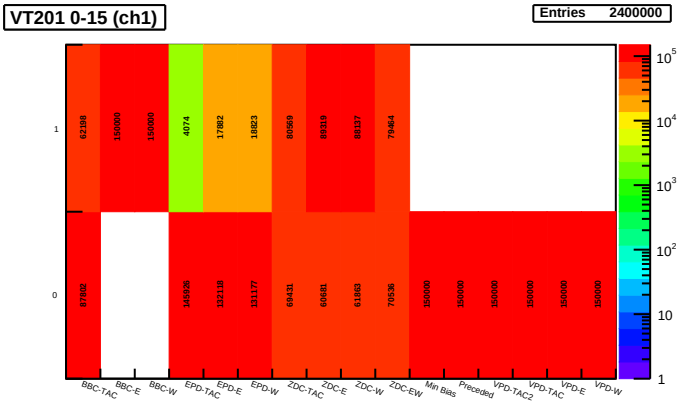

Entries 150000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

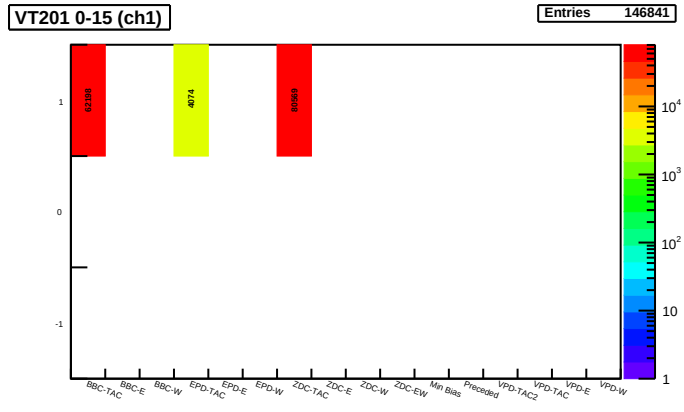

Entries 150000
VPD East ADC Sum
VPD West ADC Sum

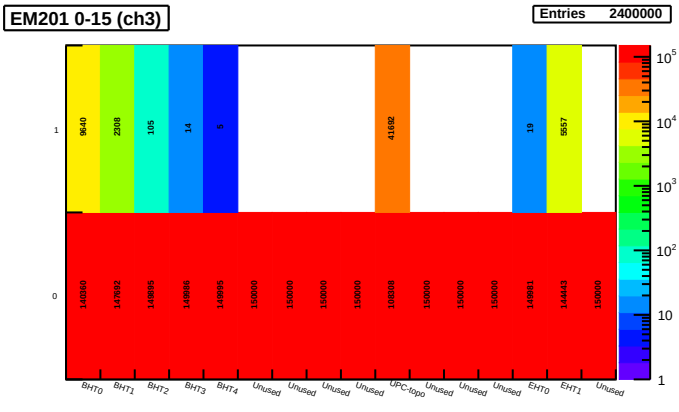

Entries 150000
VPD TAC Diff
ZDC TAC Diff

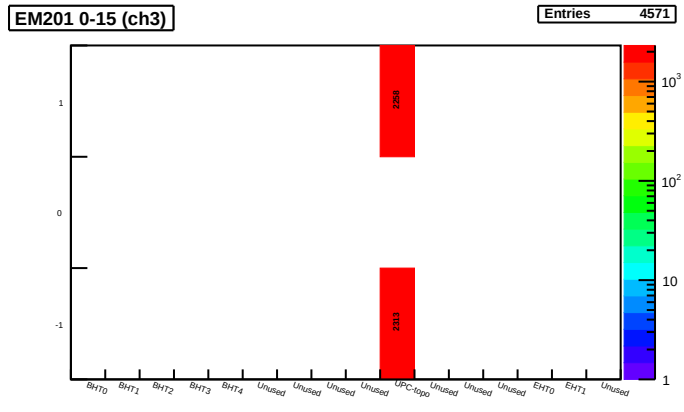

TF201 0-15 (ch0)
Entries 2400000
150000 4 46016 27133 2904 4 4599 5422 4229 150000 150000 150000
150000 150000 149996 103384 122867 147996 149996 150000 145401 144578 145771 150000
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

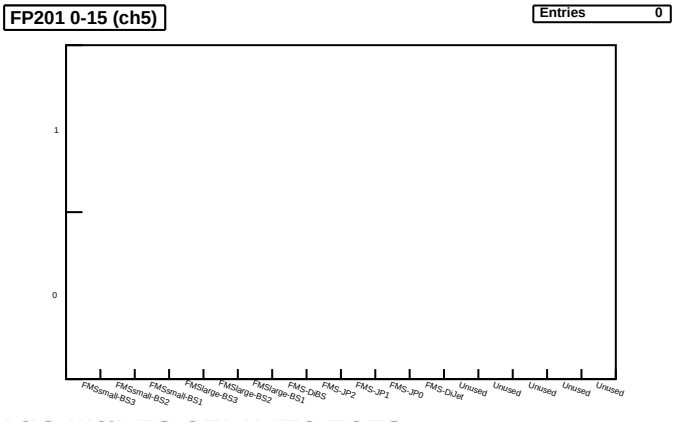

TF201 0-15 (ch0)
Entries 762572
150000 3 136688 133398 135723
19965 18883 44012 46012 46016 11344 10467 9761
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

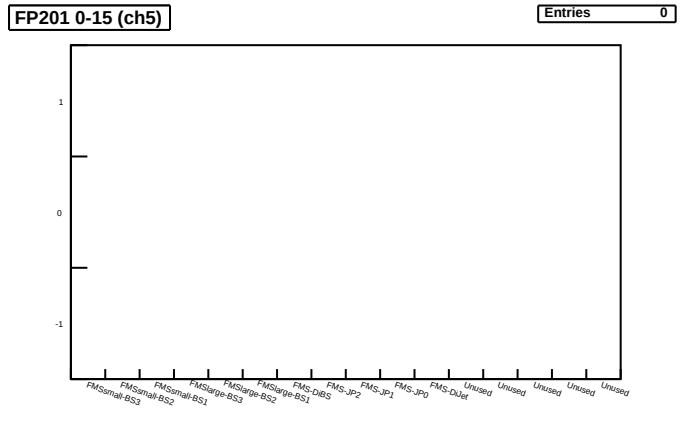

VT201 0-15 (ch1)
Entries 2400000
62198 150000 150000 4074 17862 18823 80569 83319 83137 79464
87602 145926 122118 131177 69431 60681 61883 70536 150000 150000 150000 150000 150000 150000
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 146841
62198 4074 80569
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 2400000
9640 2308 105 14 5 41692 19 9557
140860 147692 148895 149886 149995 150000 150000 150000 150000 108308 150000 150000 150000 149861 144443 150000
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


EM201 0-15 (ch3)
Entries 4571
2258
2313
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