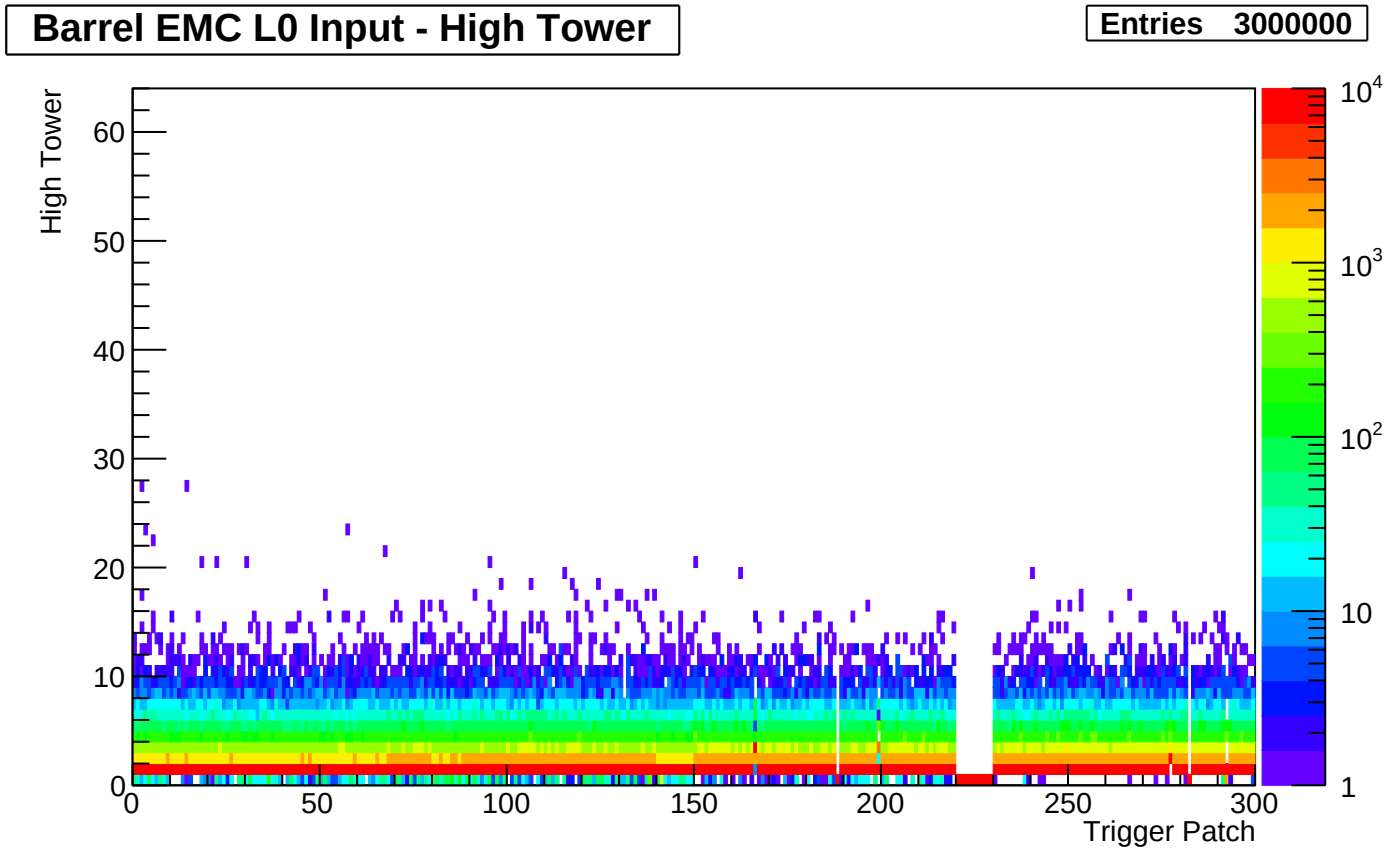
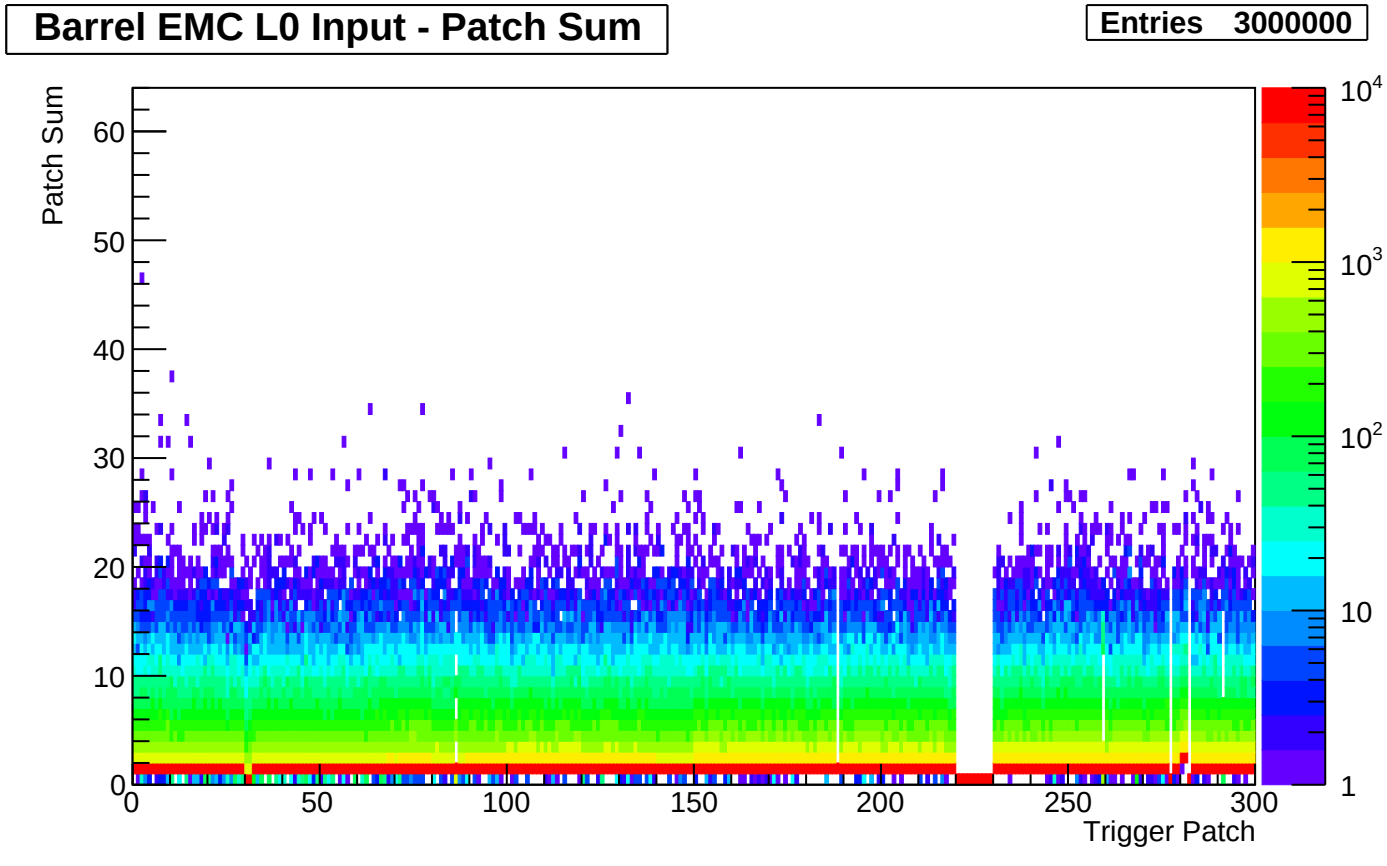
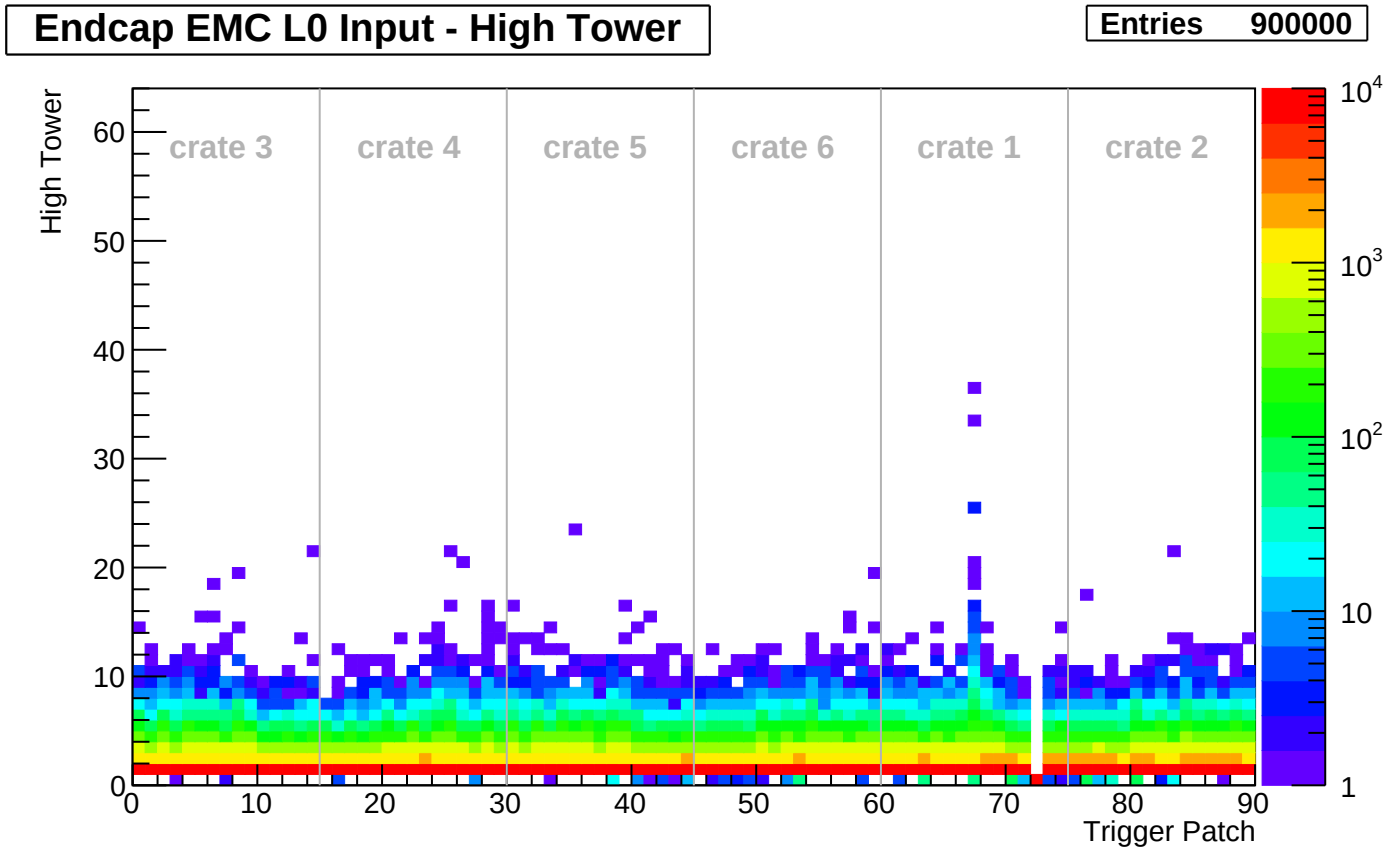
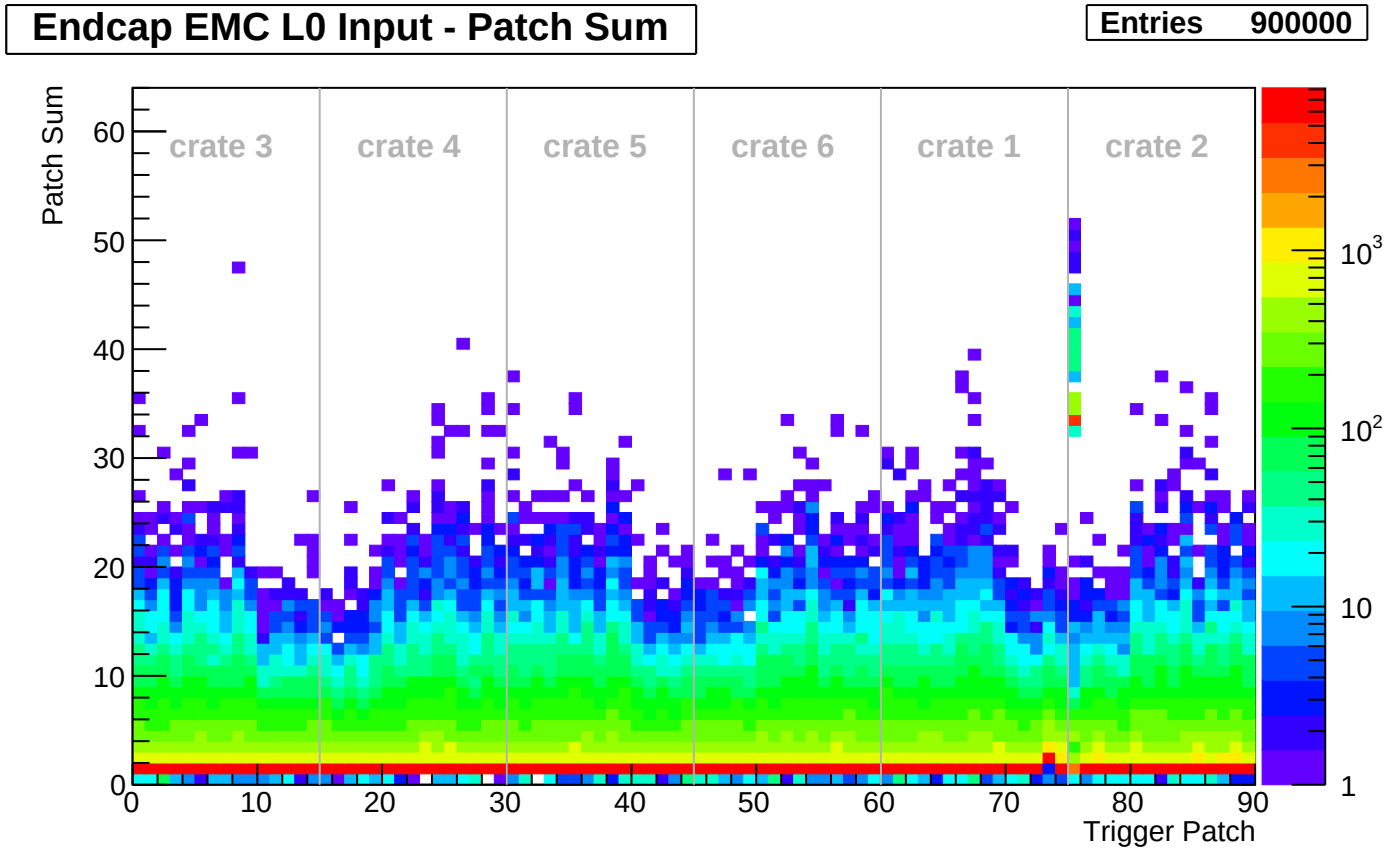
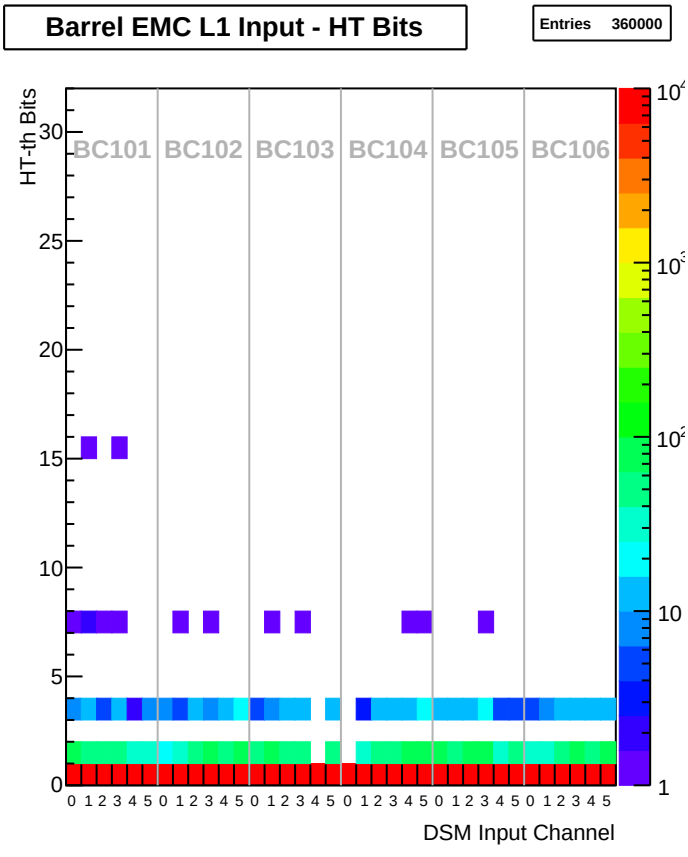
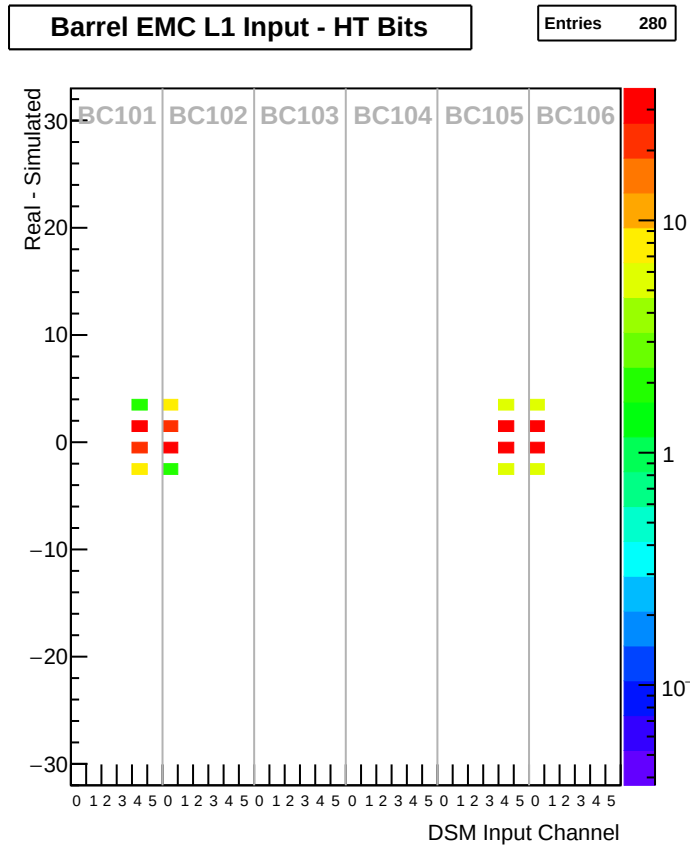

Barrel EMC L0 Input - High Tower
Entries 3000000
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

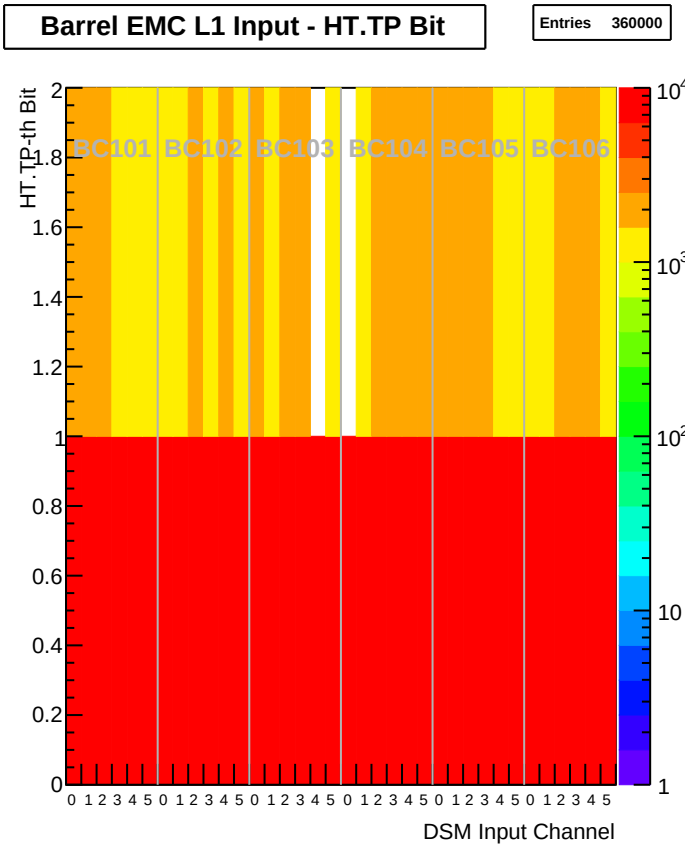

Barrel EMC L0 Input - Patch Sum
Entries 3000000
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

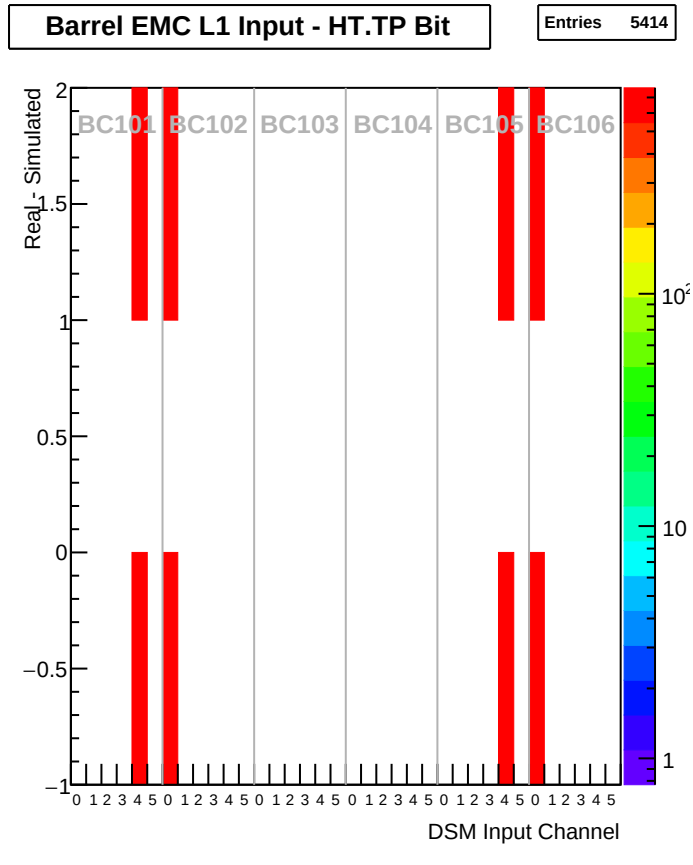

Endcap EMC L0 Input - High Tower
Entries 900000
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

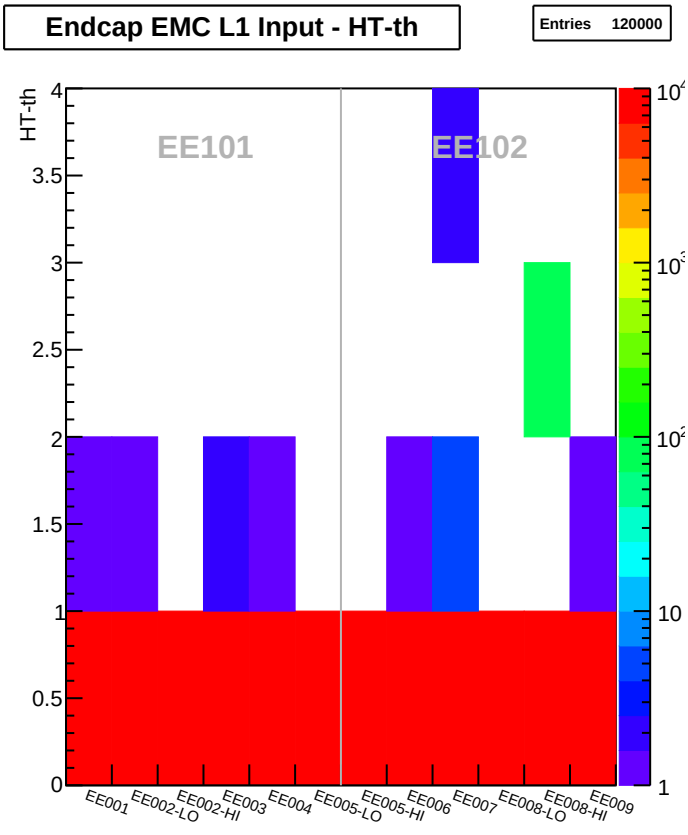

Endcap EMC L0 Input - Patch Sum
Entries 900000
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

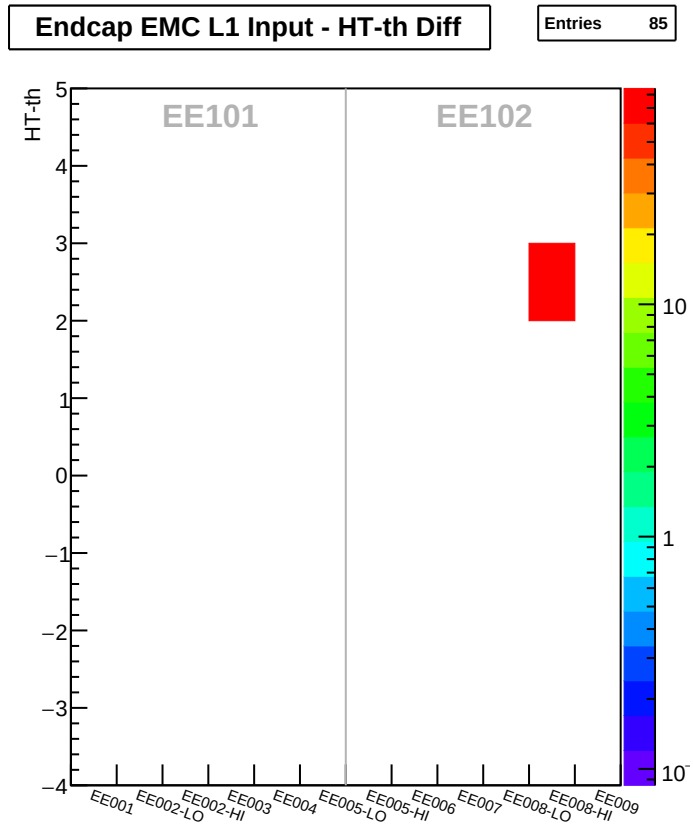

Barrel EMC L1 Input - HT Bits
Entries 360000
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

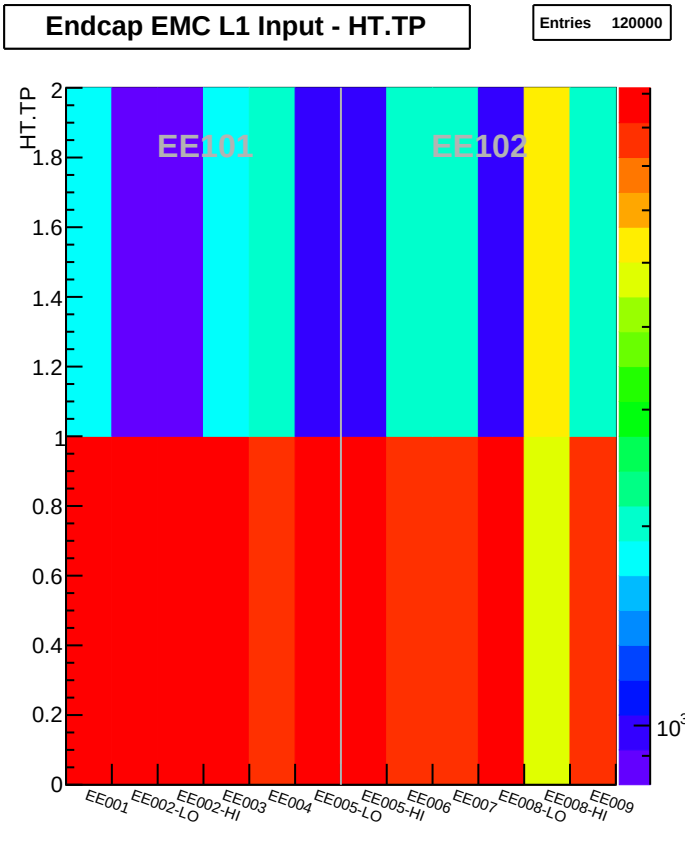

Barrel EMC L1 Input - HT Bits
Entries 280
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

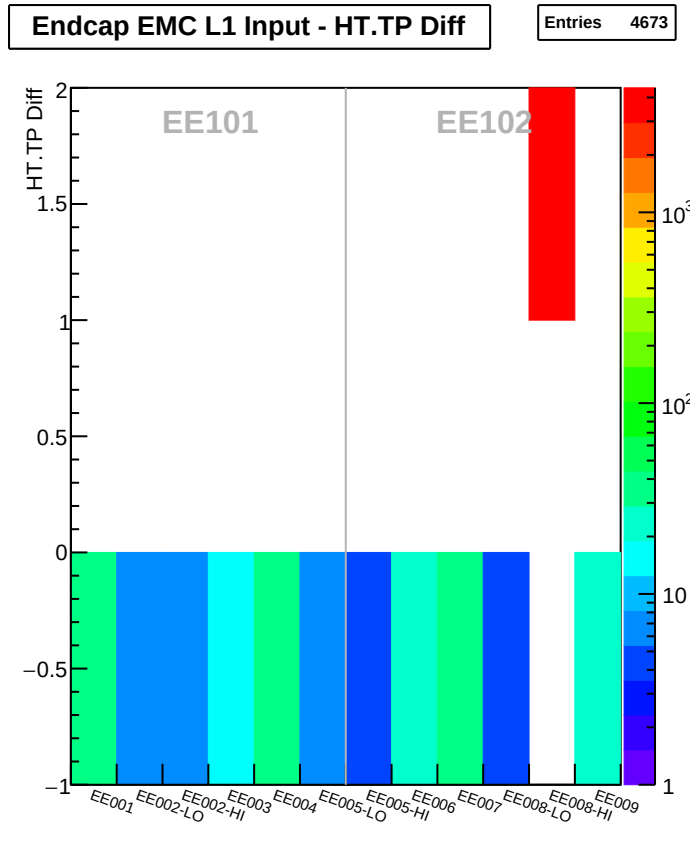

Barrel EMC L1 Input - HT.TP Bit
Entries 360000
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

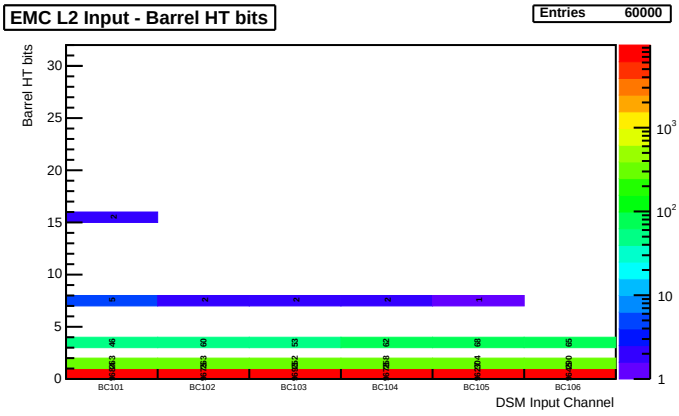

Barrel EMC L1 Input - HT.TP Bit
Entries 5414
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

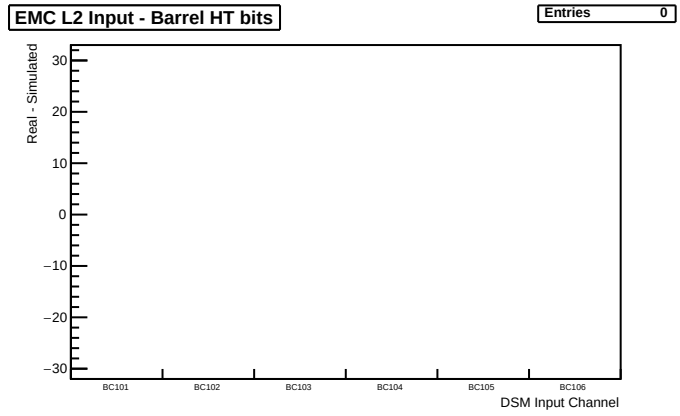

Endcap EMC L1 Input - HT-th
Entries 120000
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

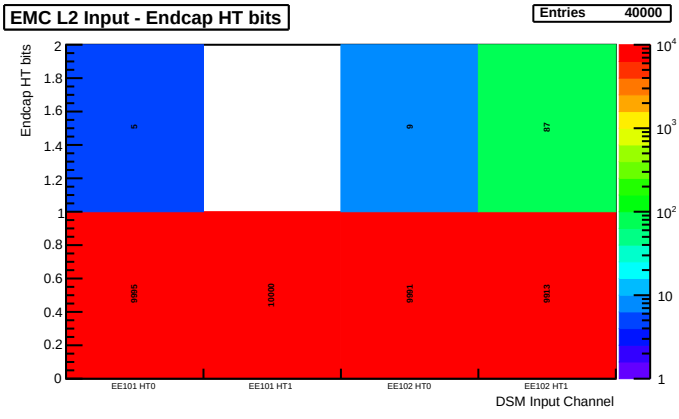

Endcap EMC L1 Input - HT-th Diff
Entries 85
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

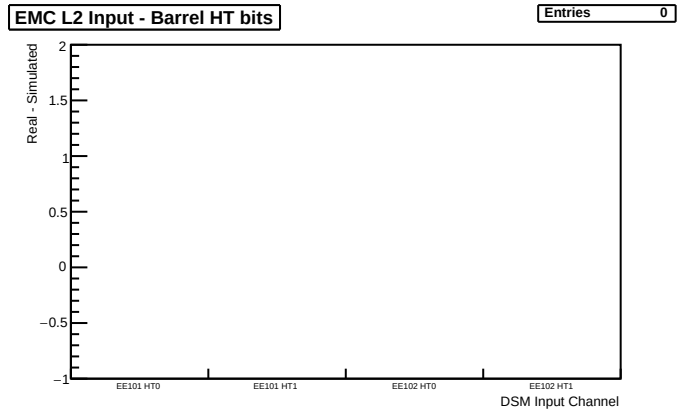

Endcap EMC L1 Input - HT.TP
Entries 120000
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

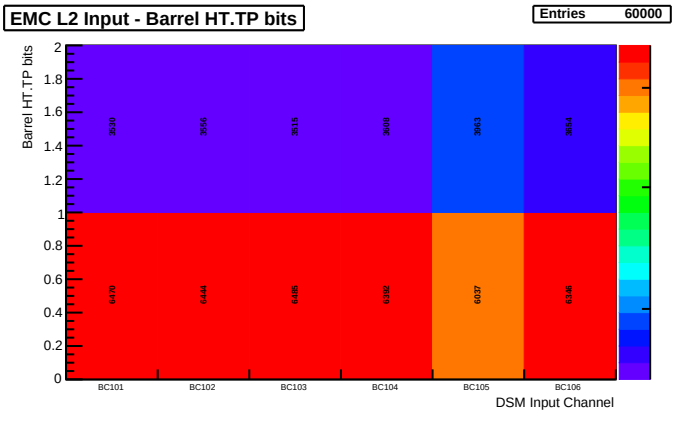

Endcap EMC L1 Input - HT.TP Diff
Entries 4673
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

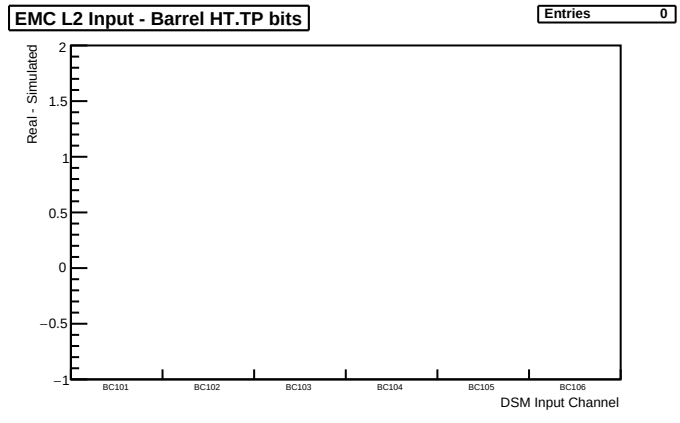

EMC L2 Input - Barrel HT bits
Entries 60000
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

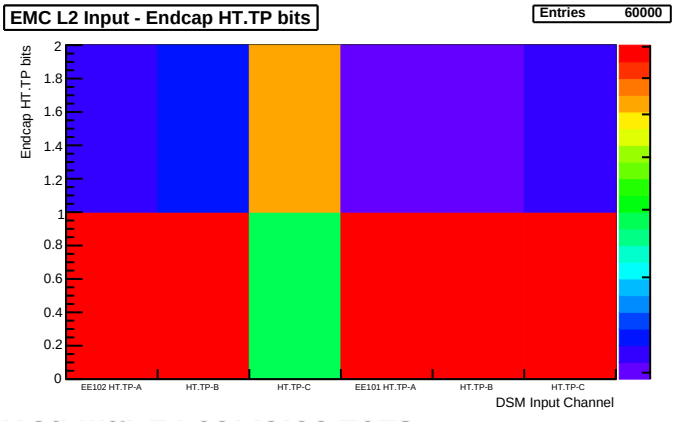

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

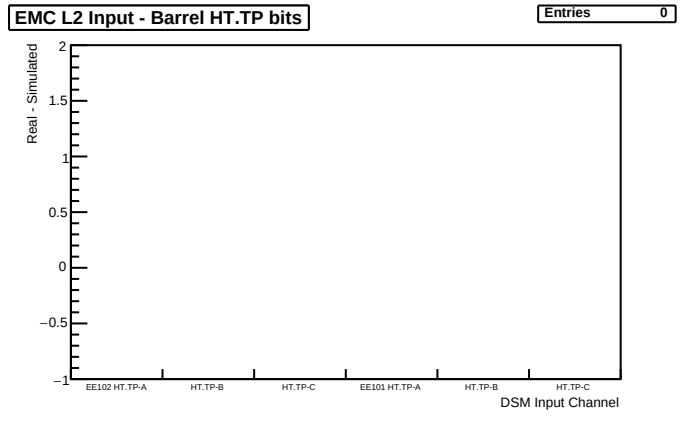

EMC L2 Input - Endcap HT bits
Entries 40000
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

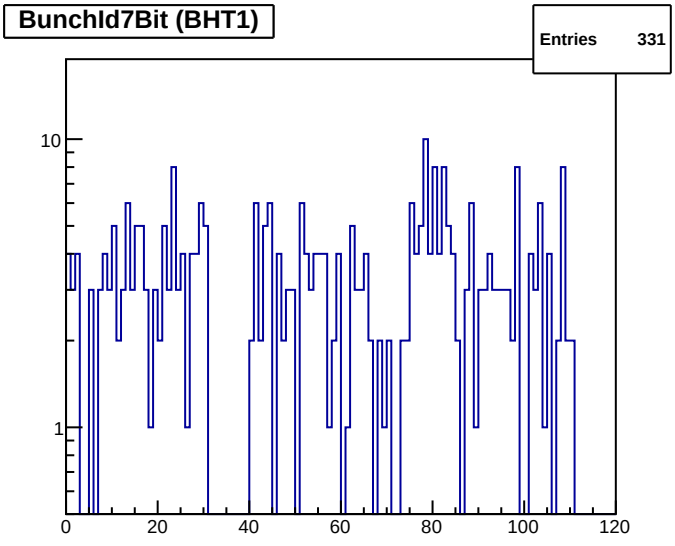

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

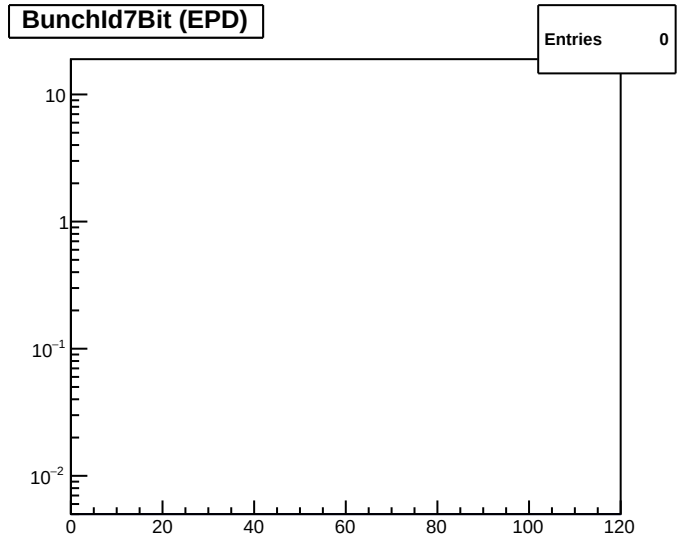

EMC L2 Input - Barrel HT.TP bits
Entries 60000
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

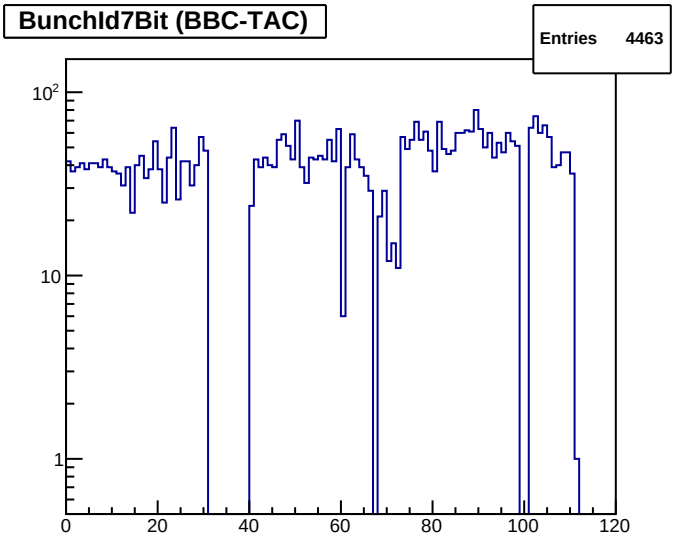

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

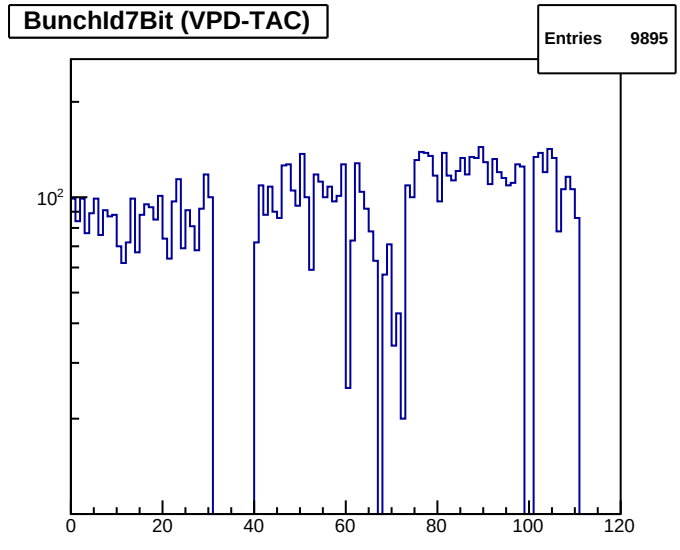

EMC L2 Input - Endcap HT.TP bits
Entries 60000
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

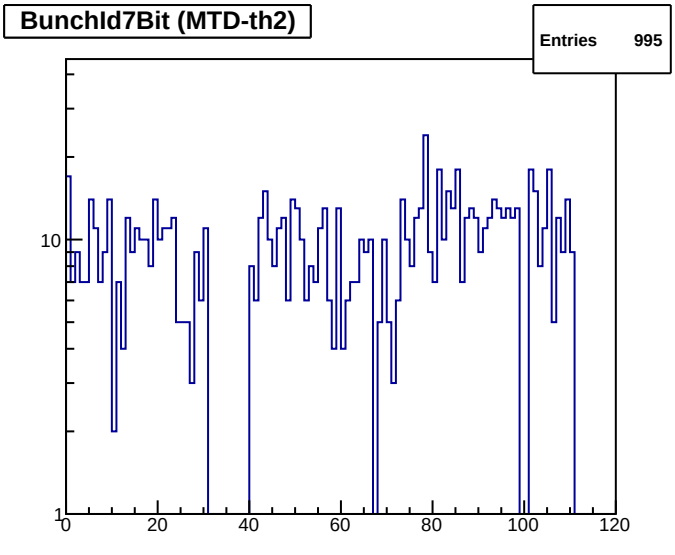

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

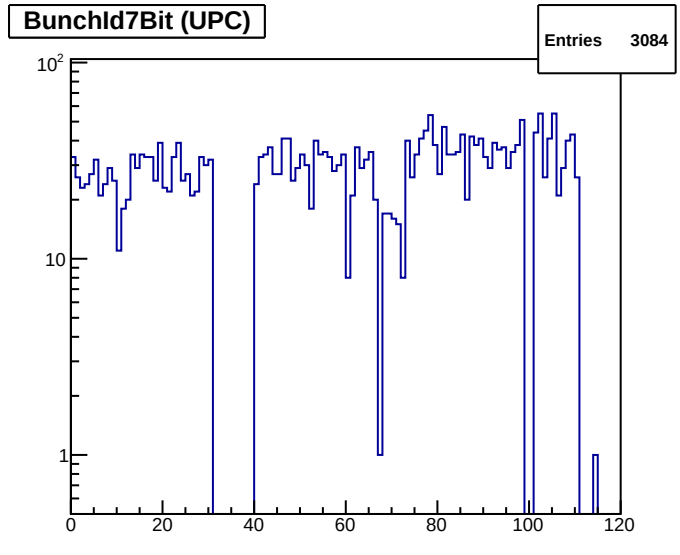

BunchId7Bit (BHT1)
Entries 331
10
1
0
20
40
60
80
100
120

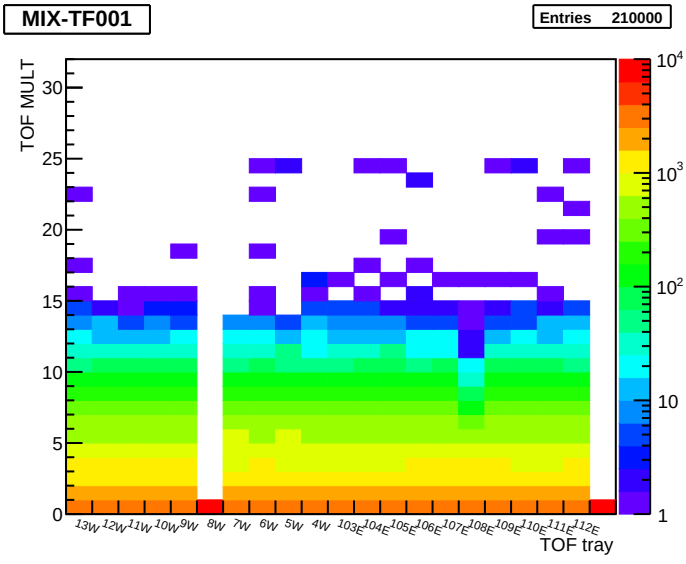

BunchId7Bit (EPD)
Entries 0
10
1
10^{-1}
10^{-2}
0
20
40
60
80
100
120

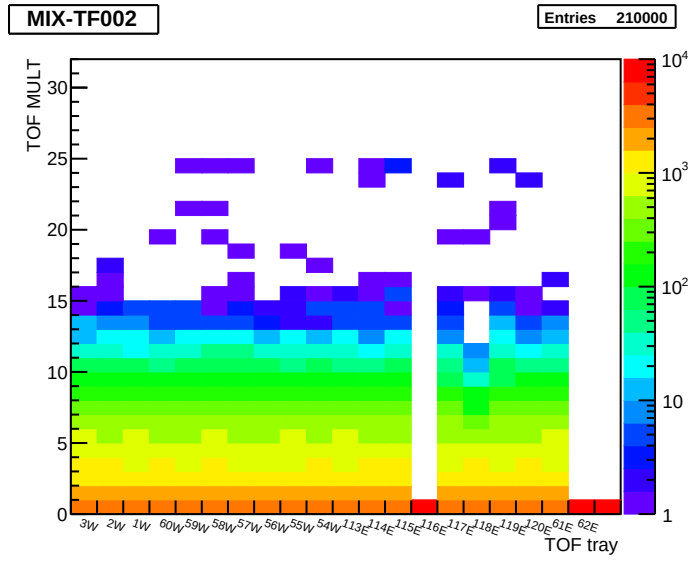

BunchId7Bit (BBC-TAC)
Entries 4463
10^2
10
1
0
20
40
60
80
100
120

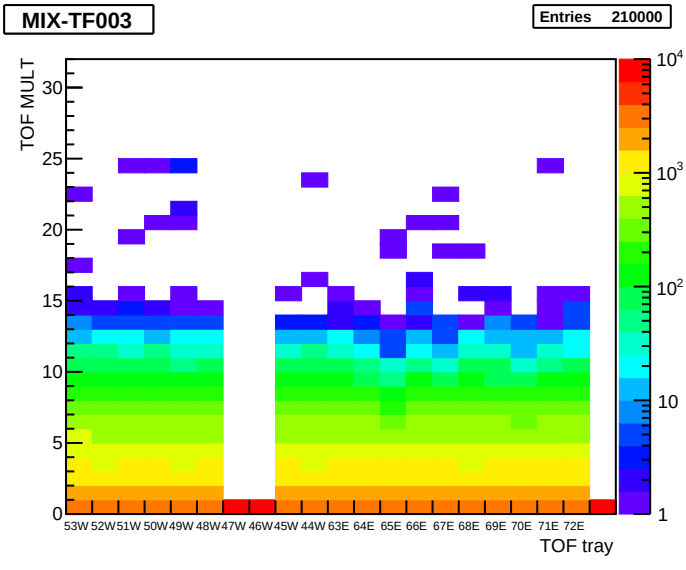

BunchId7Bit (VPD-TAC)
Entries 9895
10^2
0
20
40
60
80
100
120

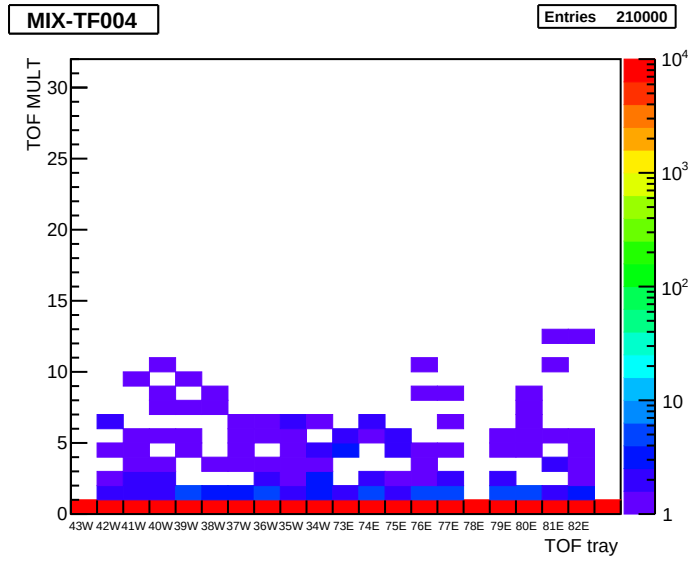

BunchId7Bit (MTD-th2)
Entries 995
10
1
0
20
40
60
80
100
120

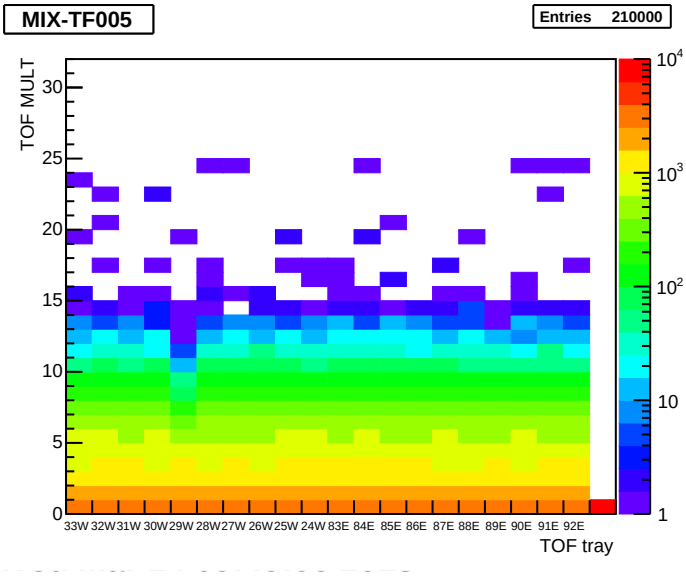

BunchId7Bit (UPC)
Entries 3084
10^2
10
1
0
20
40
60
80
100
120

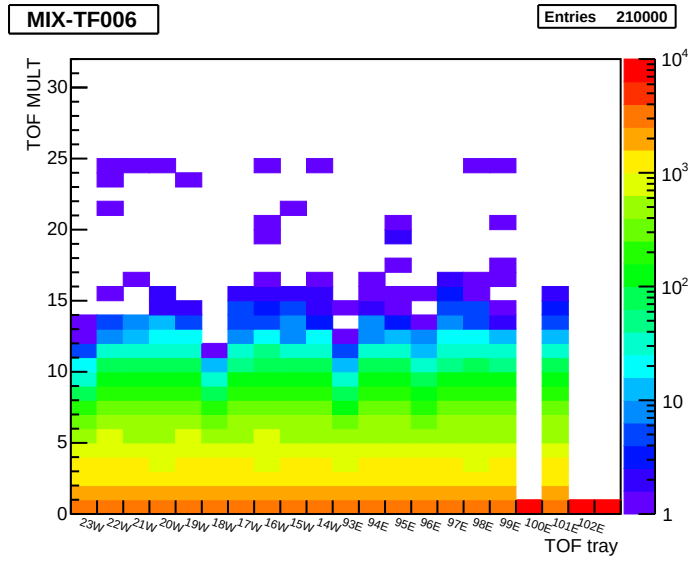

MIX-TF001
Entries 210000
TOF MULT
TOF tray

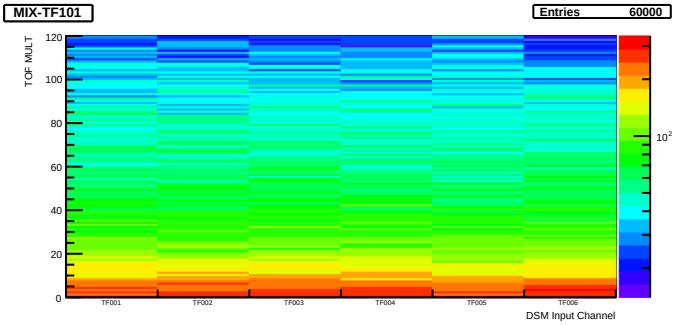

MIX-TF002
Entries 210000
TOF MULT
TOF tray

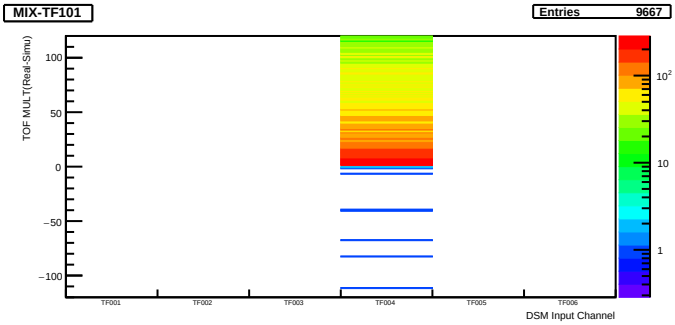

MIX-TF003
Entries 210000
TOF MULT
TOF tray

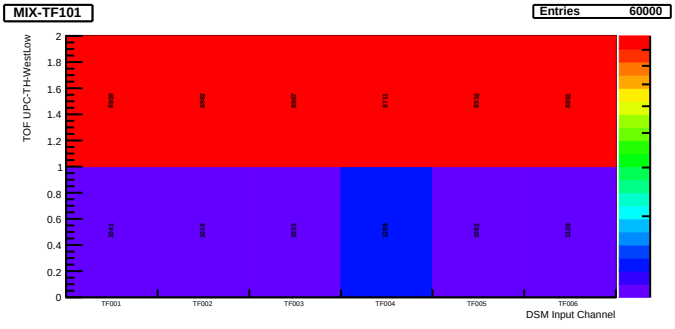

MIX-TF004
Entries 210000
TOF MULT
TOF tray

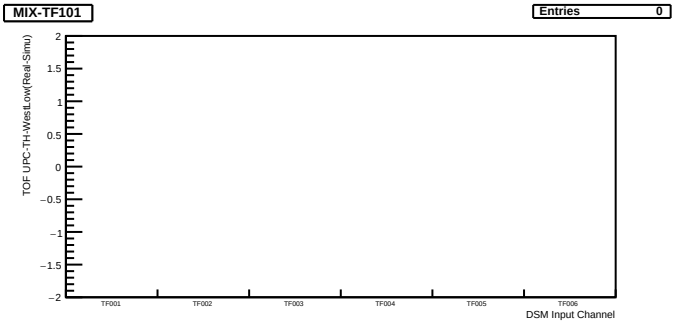

MIX-TF005
Entries 210000
TOF MULT
TOF tray

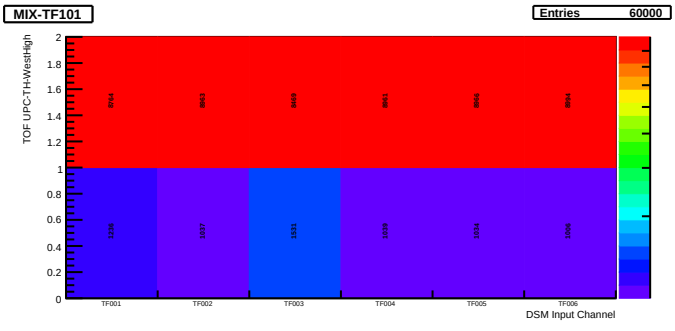

MIX-TF006
Entries 210000
TOF MULT
TOF tray

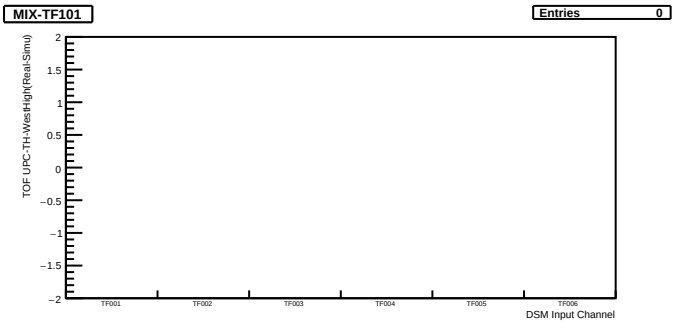

MIX-TF101
Entries 60000
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

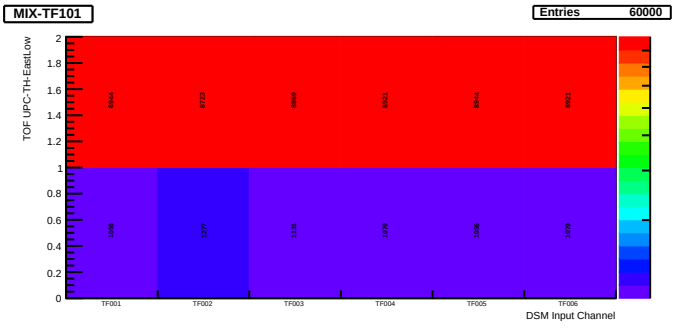

MIX-TF101
Entries 9667
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

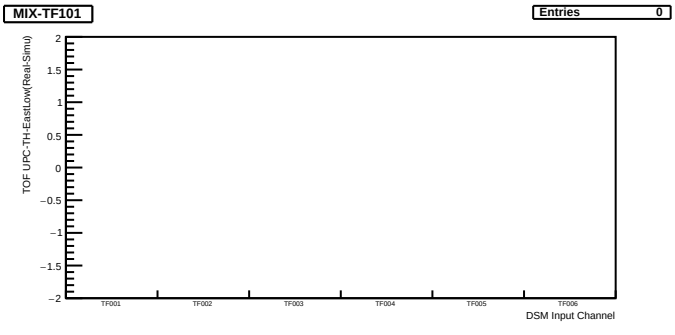

MIX-TF101
Entries 60000
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

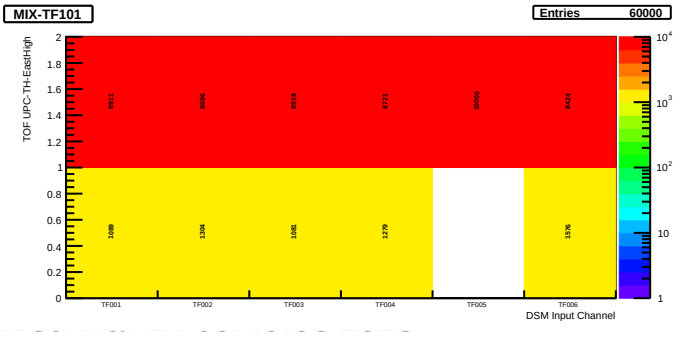

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

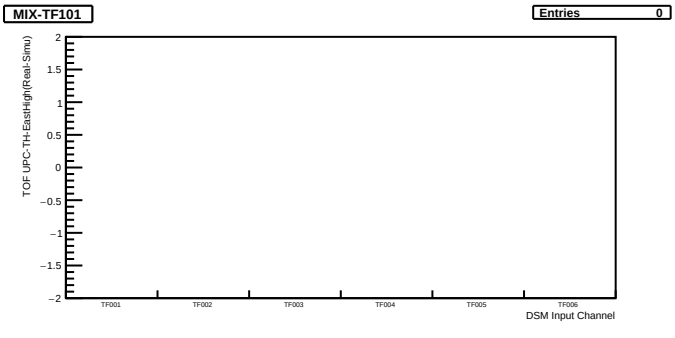

MIX-TF101
Entries 60000
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

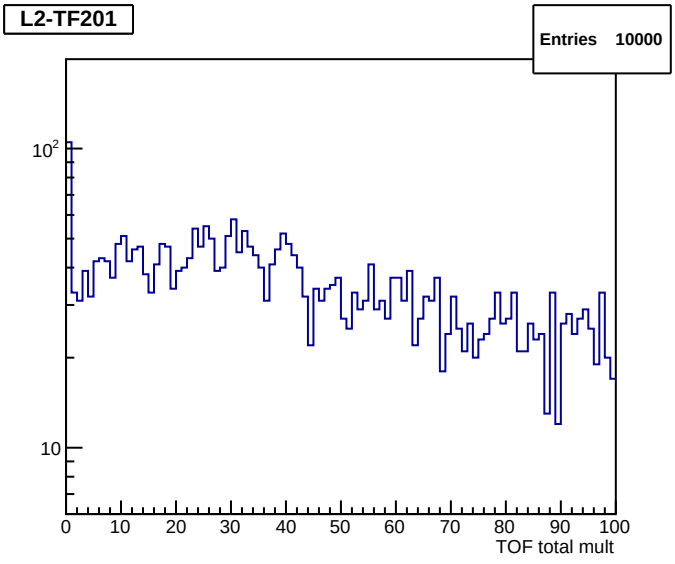

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

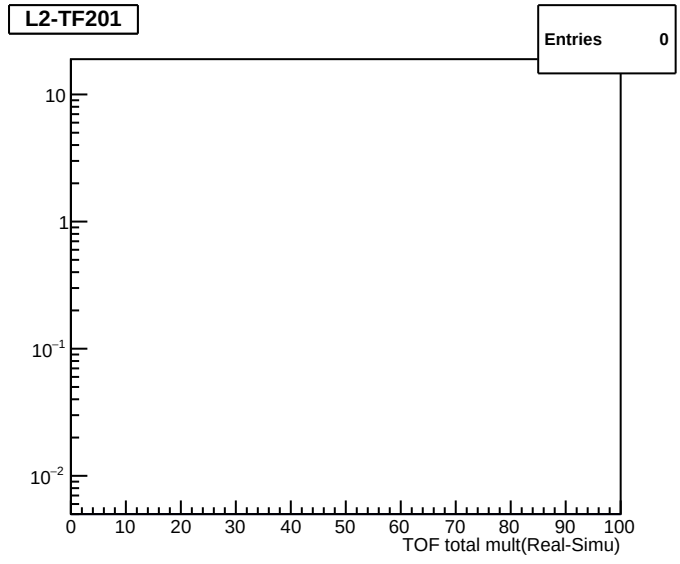

MIX-TF101
Entries 60000
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

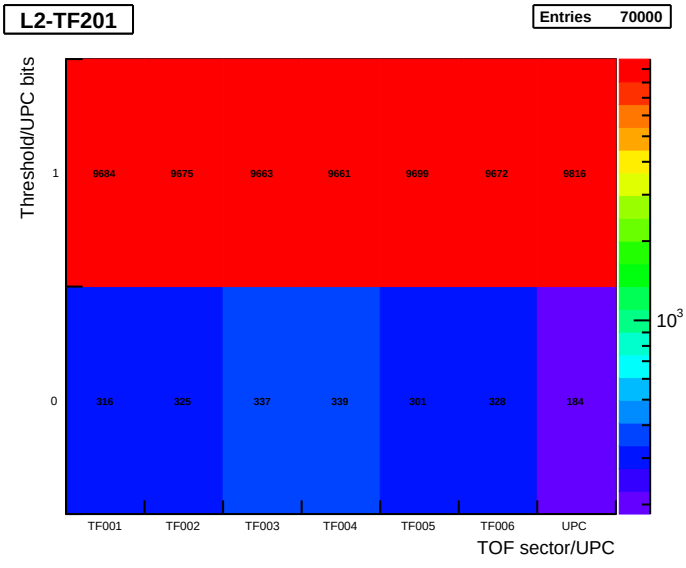

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

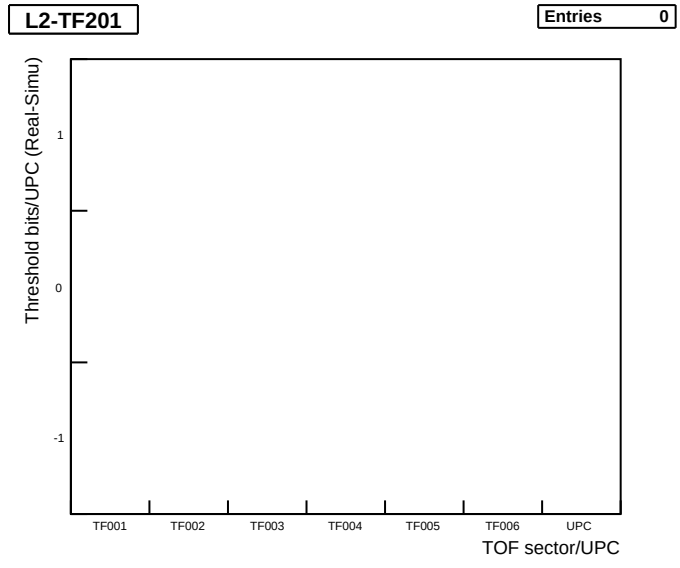

MIX-TF101
Entries 60000
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

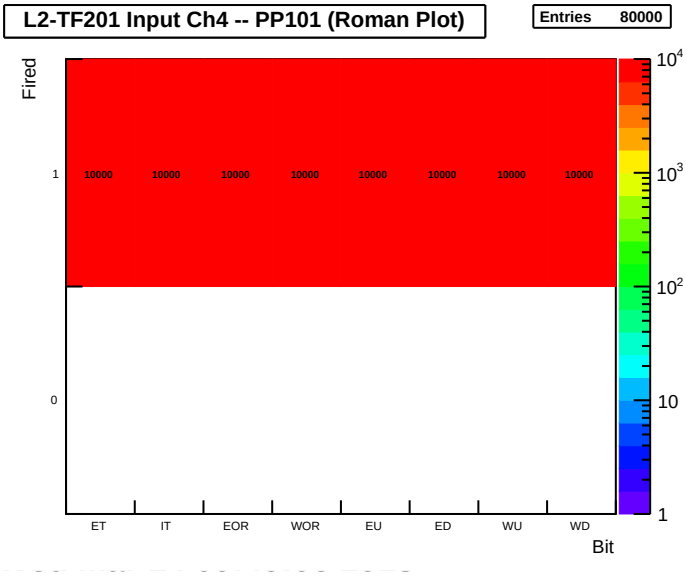

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

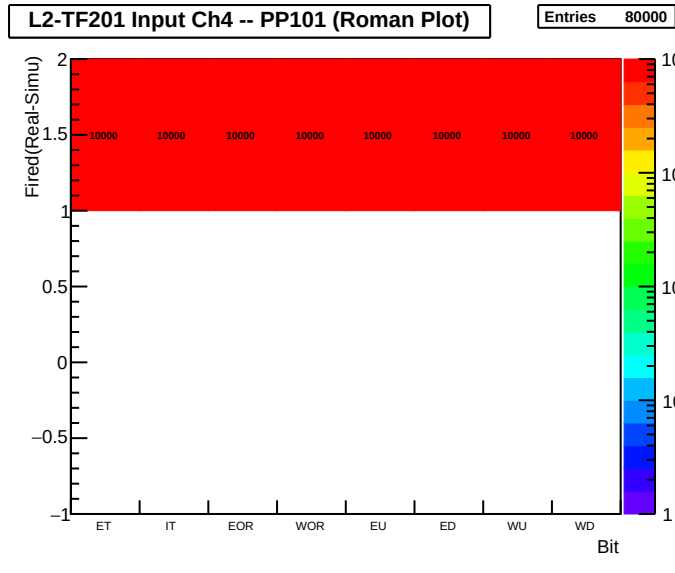

L2-TF201
Entries 10000
TOF total mult

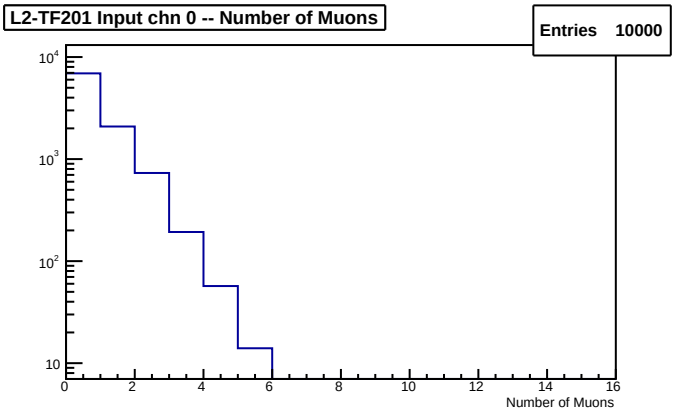

L2-TF201
Entries 0
TOF total mult(Real-Simu)

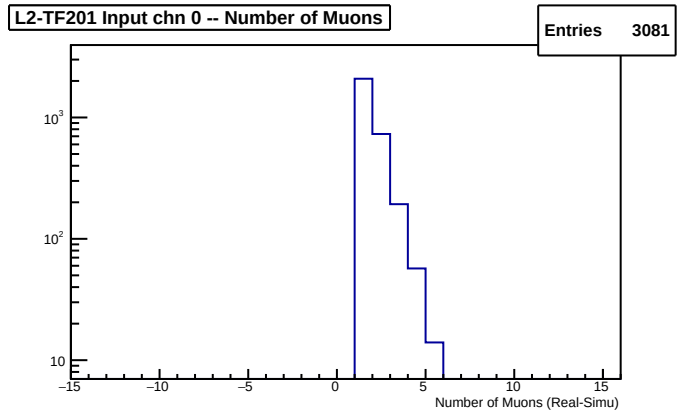

L2-TF201
Entries 70000
Threshold/UPC bits
9684 9675 9663 9661 9699 9672 9816
316 325 337 339 301 328 184
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

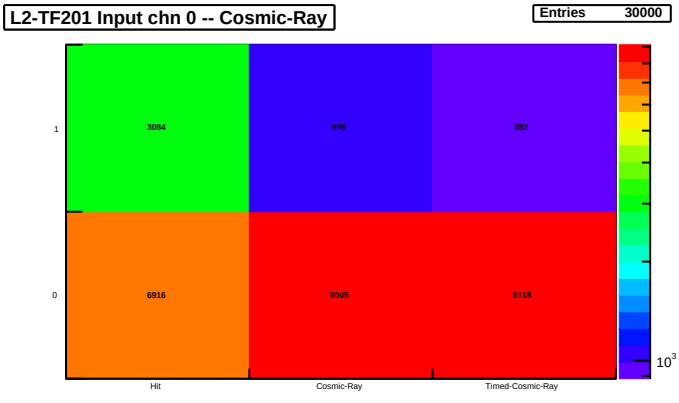

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

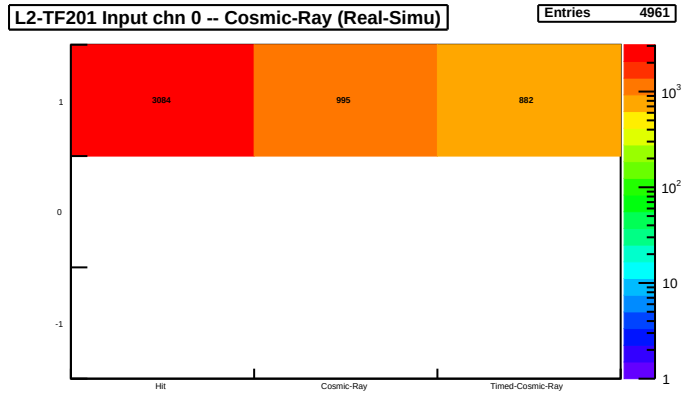

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 80000
Fired
10000 10000 10000 10000 10000 10000 10000 10000
ET IT EOR WOR EU ED WU WD
Bit

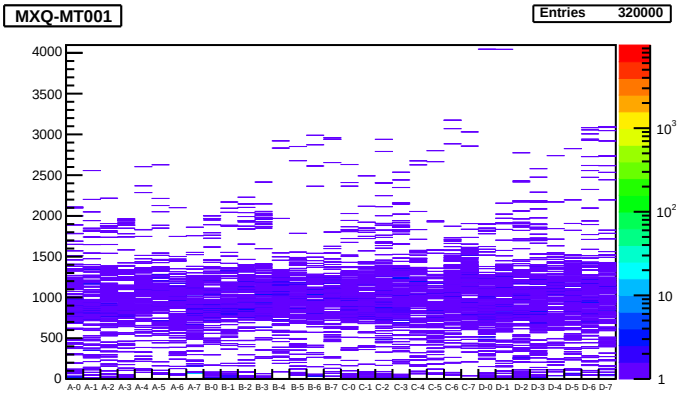

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 80000
Fired(Real-Simu)
10000 10000 10000 10000 10000 10000 10000 10000
ET IT EOR WOR EU ED WU WD
Bit

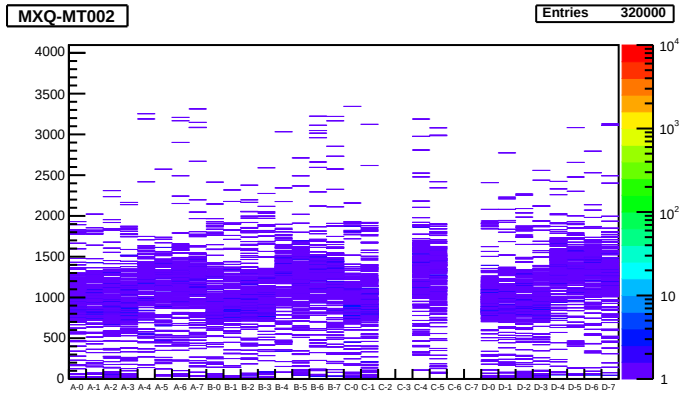

L2-TF201 Input chn 0 -- Number of Muons
Entries 10000
Number of Muons

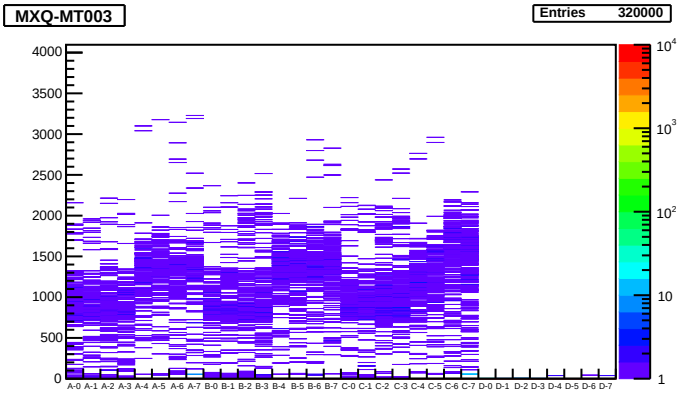

L2-TF201 Input chn 0 -- Number of Muons
Entries 3081
Number of Muons (Real-Simu)

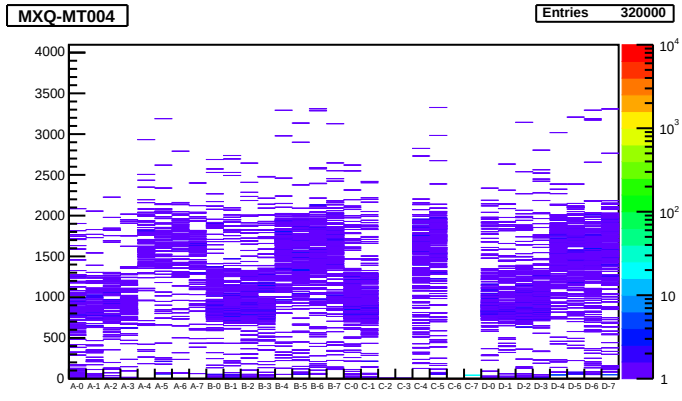

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 30000
3084
995
882
6916
9005
9118
Hit
Cosmic-Ray
Timed-Cosmic-Ray

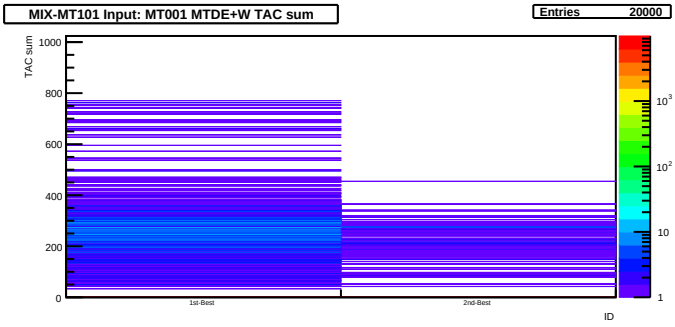

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 4961
3084
995
882
Hit
Cosmic-Ray
Timed-Cosmic-Ray

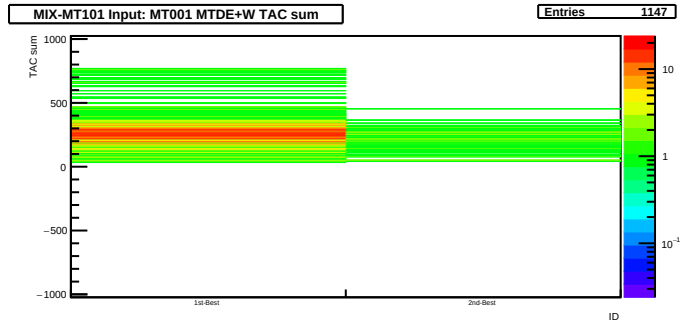

MXQ-MT001
Entries 320000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^3
10^2
10
1

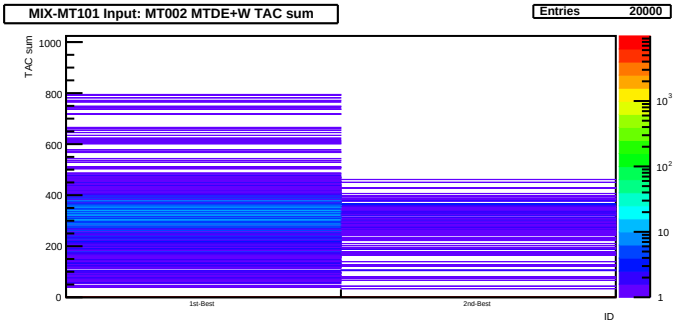

MXQ-MT002
Entries 320000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

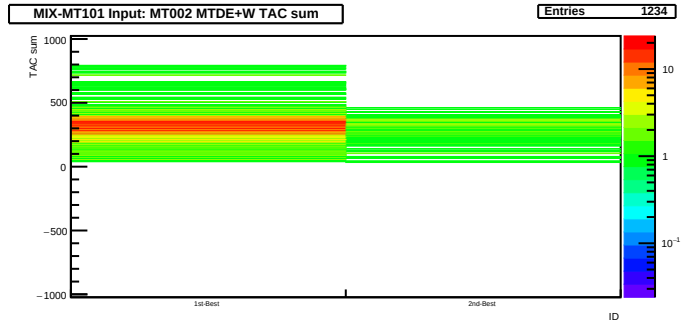

MXQ-MT003
Entries 320000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

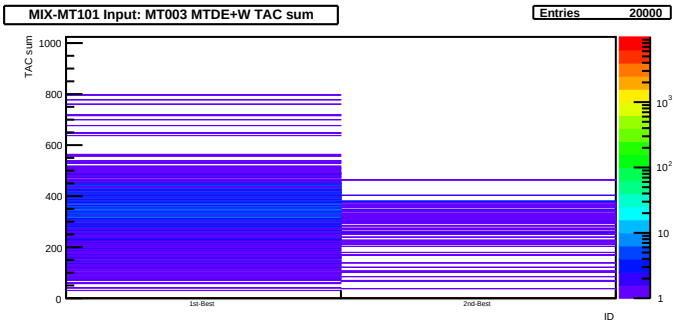

MXQ-MT004
Entries 320000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

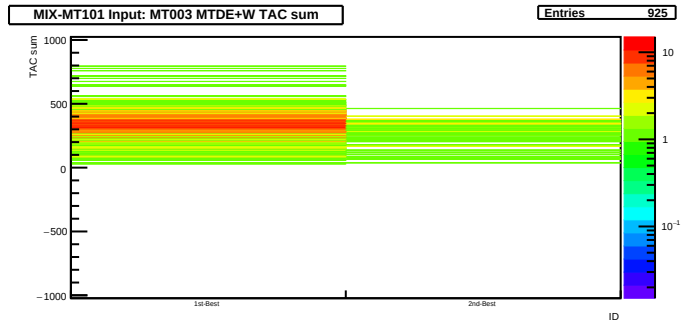

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 20000
TAC sum
1st-Best
2nd-Best
ID

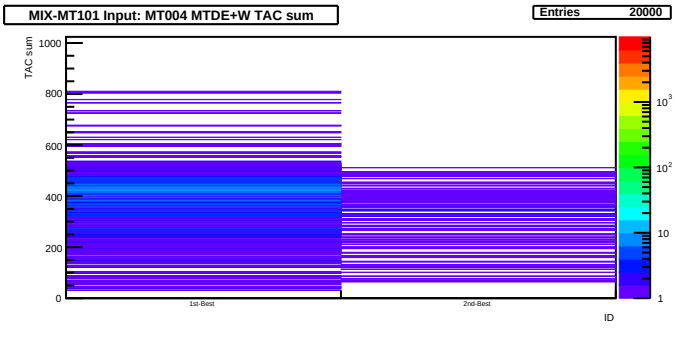

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 1147
TAC sum
1st-Best
2nd-Best
ID

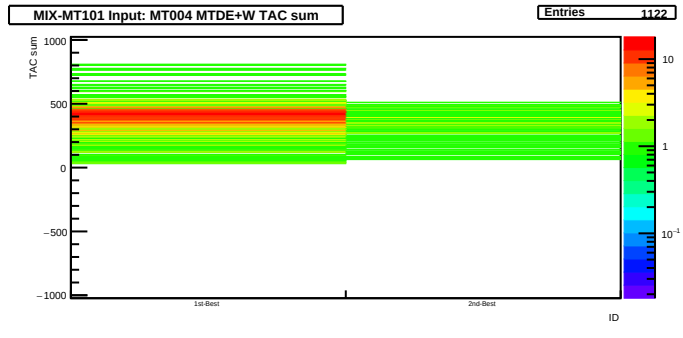

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 20000
TAC sum
1st-Best
2nd-Best
ID

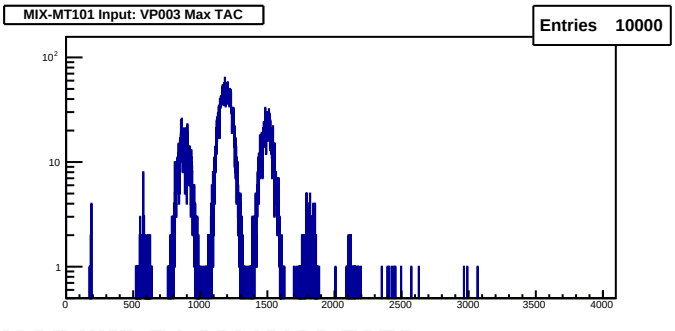

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 1234
TAC sum
1st-Best
2nd-Best
ID

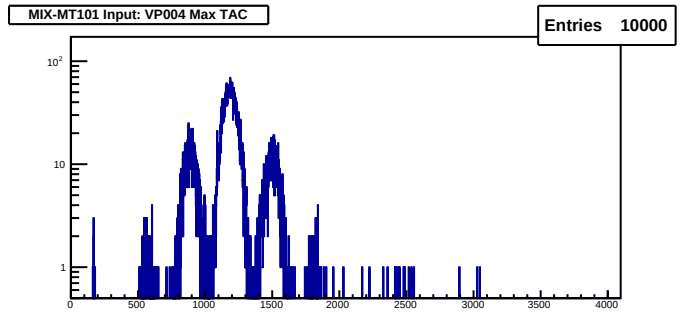

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 20000
TAC sum
1st-Best
2nd-Best
ID

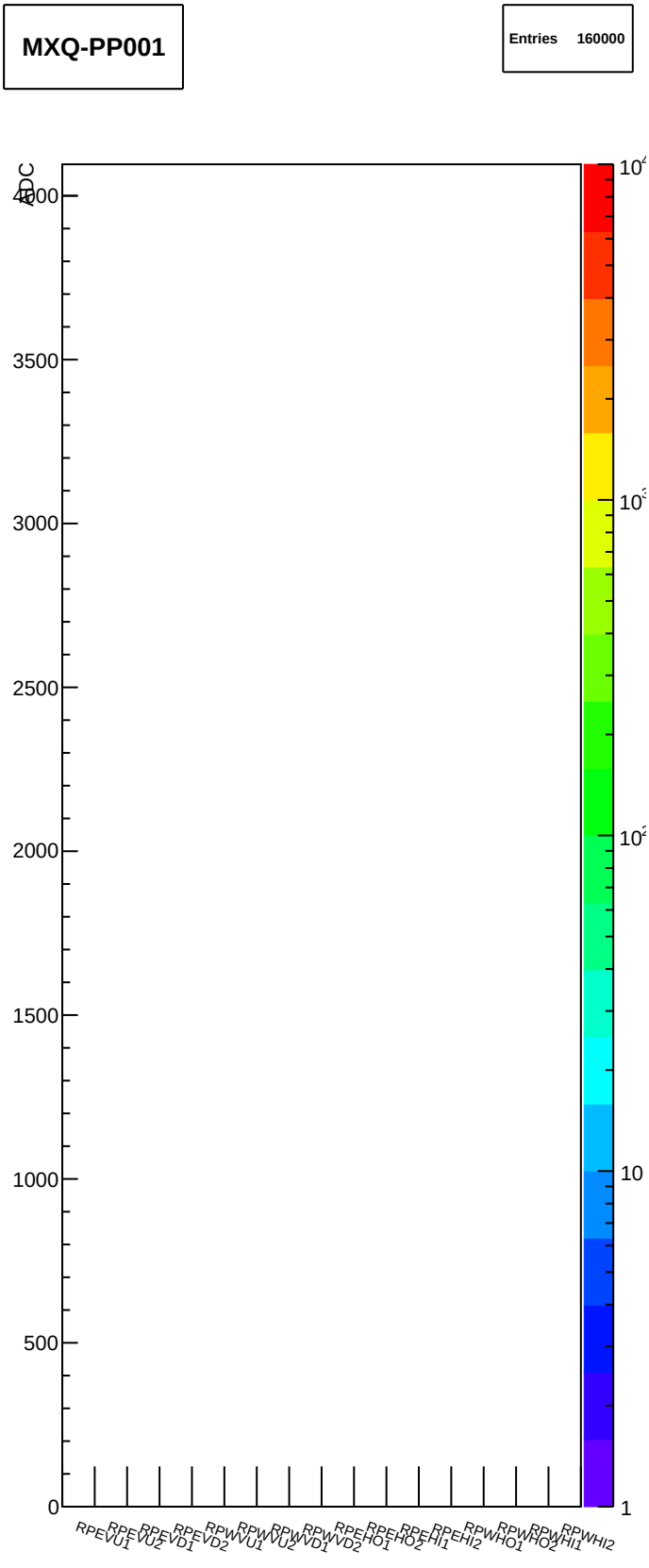

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 925
TAC sum
1st-Best
2nd-Best
ID

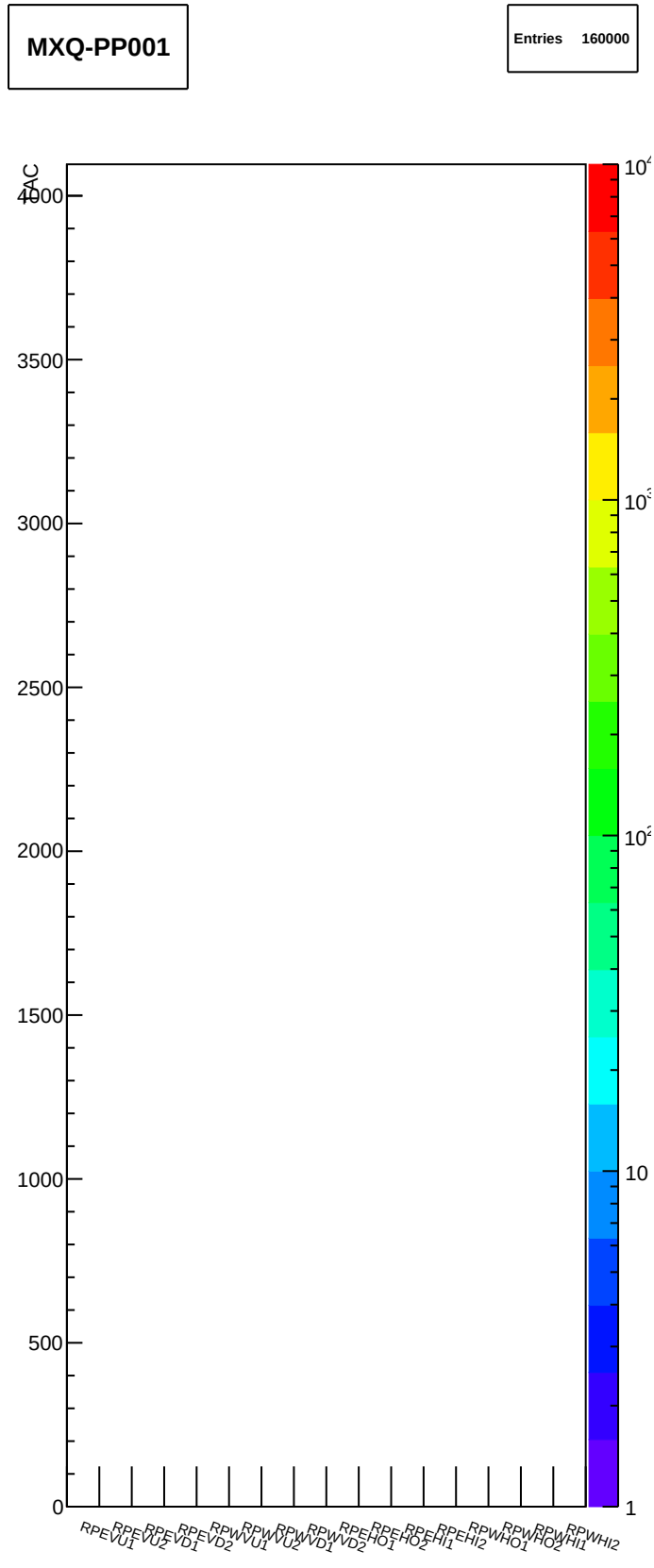

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 20000
TAC sum
1st-Best
2nd-Best
ID

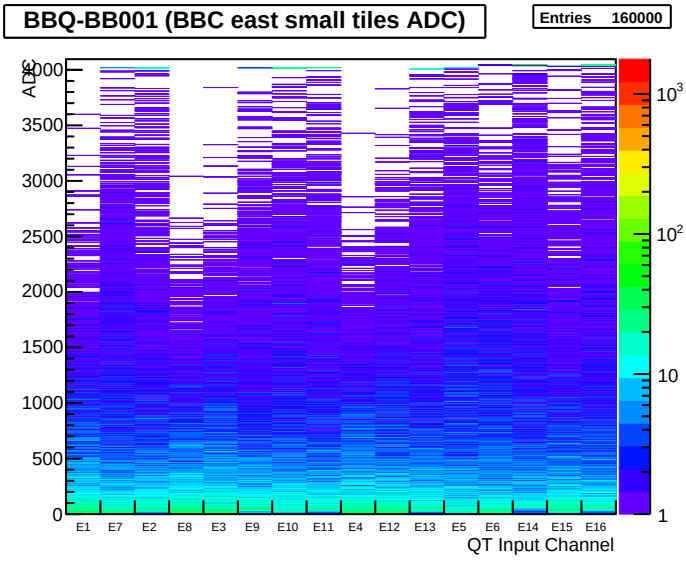

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 1122
TAC sum
1st-Best
2nd-Best
ID

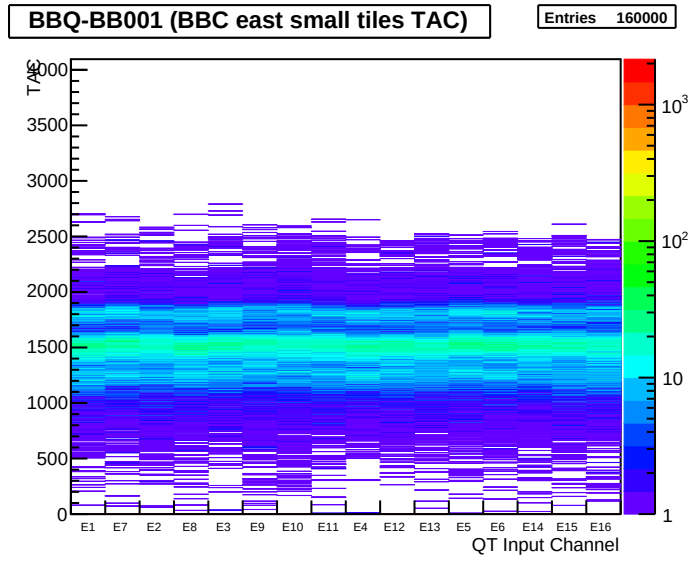

MIX-MT101 Input: VP003 Max TAC
Entries 10000

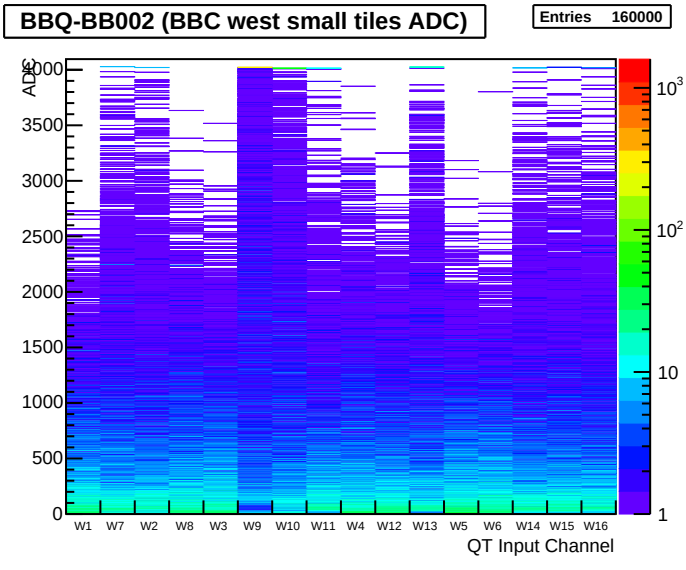

MIX-MT101 Input: VP004 Max TAC
Entries 10000

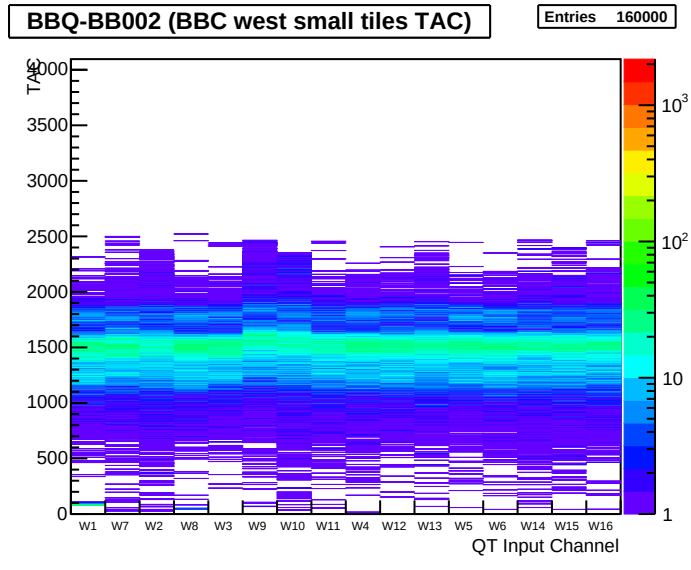

MXQ-PP001
Entries 160000
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

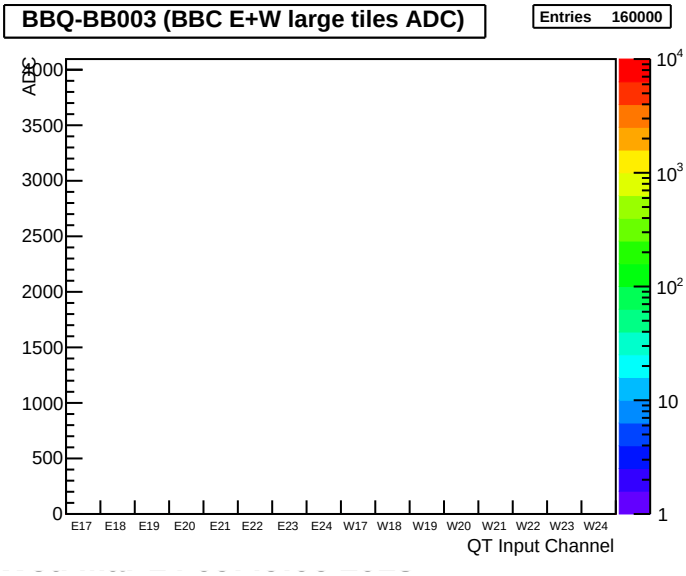

MXQ-PP001
Entries 160000
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

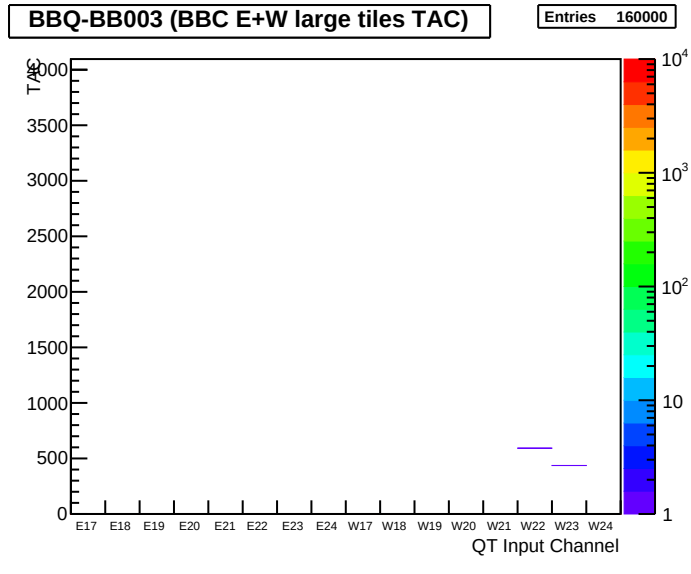

BBQ-BB001 (BBC east small tiles ADC)
Entries 160000
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

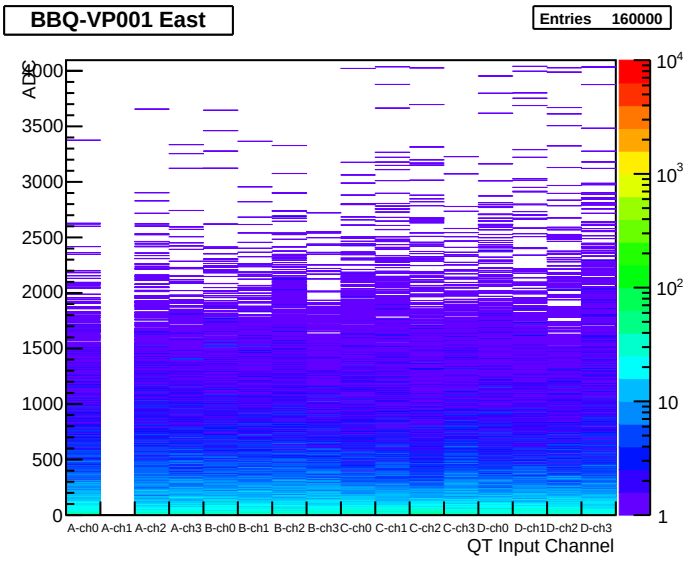

BBQ-BB001 (BBC east small tiles TAC)
Entries 160000
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

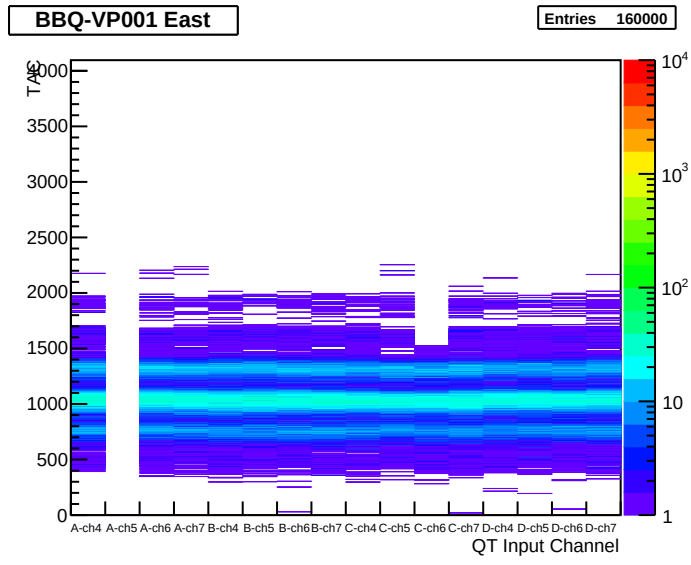

BBQ-BB002 (BBC west small tiles ADC)
Entries 160000
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

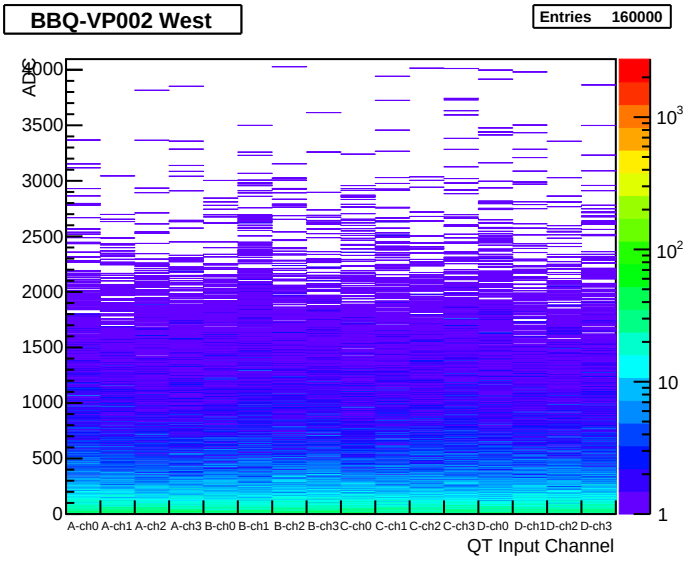

BBQ-BB002 (BBC west small tiles TAC)
Entries 160000
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

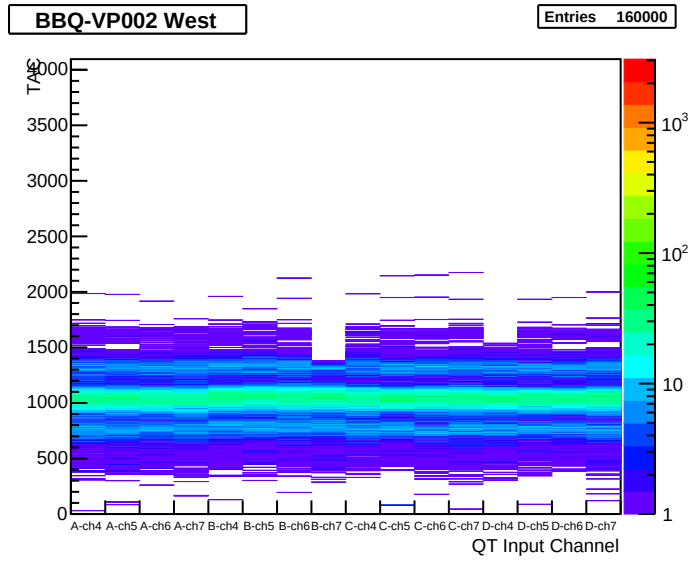

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 160000
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

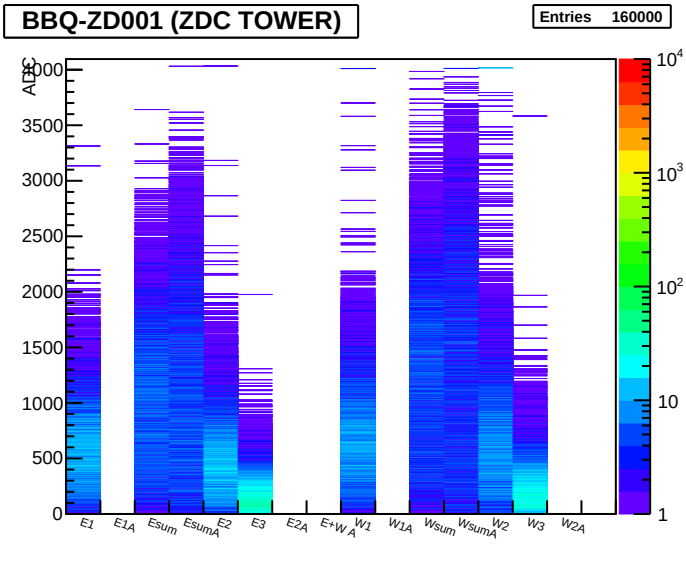

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 160000
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

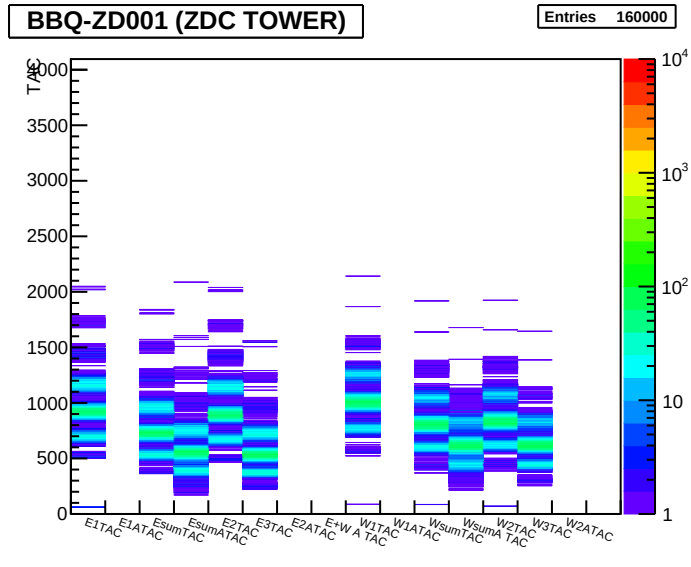

BBQ-VP001 East
Entries 160000
ADC
QT Input Channel

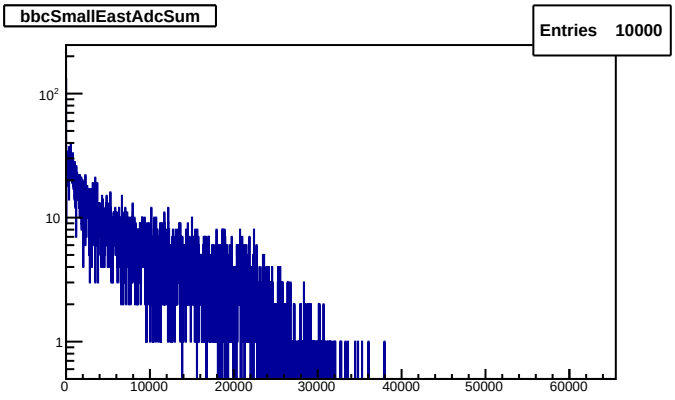

BBQ-VP001 East
Entries 160000
TAC
QT Input Channel

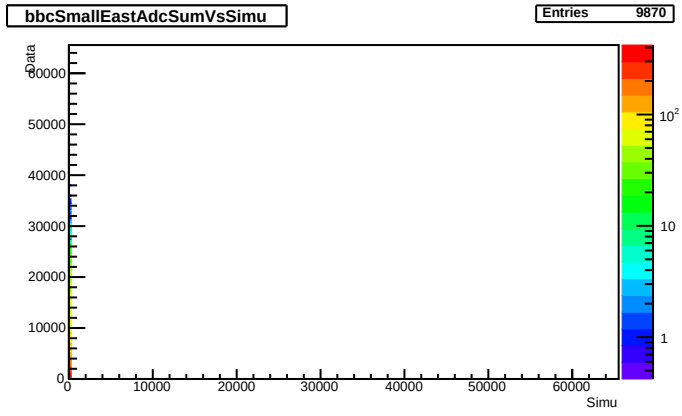

BBQ-VP002 West
Entries 160000
ADC
QT Input Channel

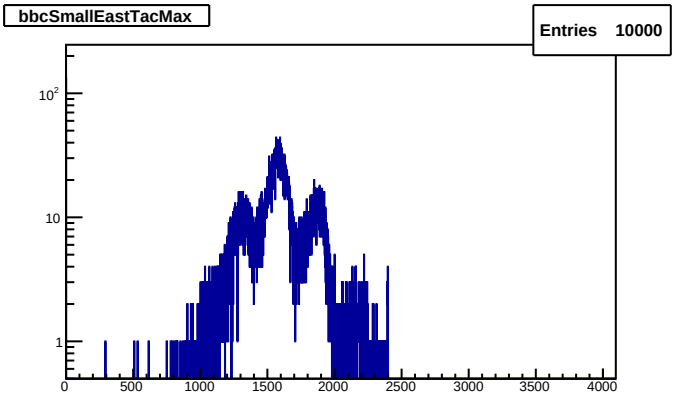

BBQ-VP002 West
Entries 160000
TAC
QT Input Channel

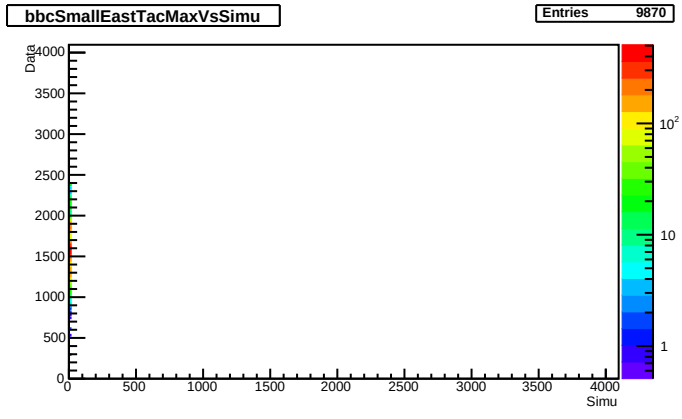

BBQ-ZD001 (ZDC TOWER)
Entries 160000
ADC

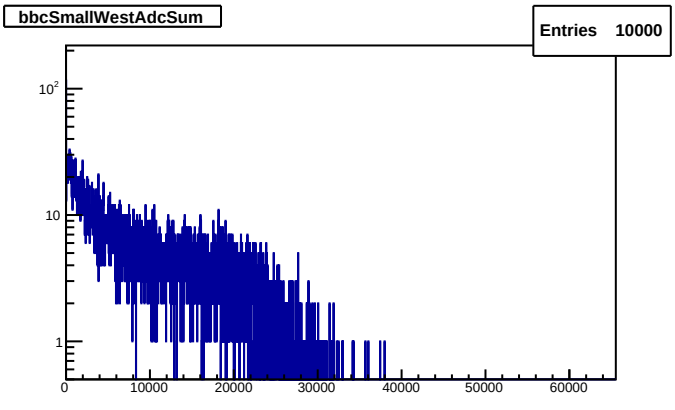

BBQ-ZD001 (ZDC TOWER)
Entries 160000
TAC

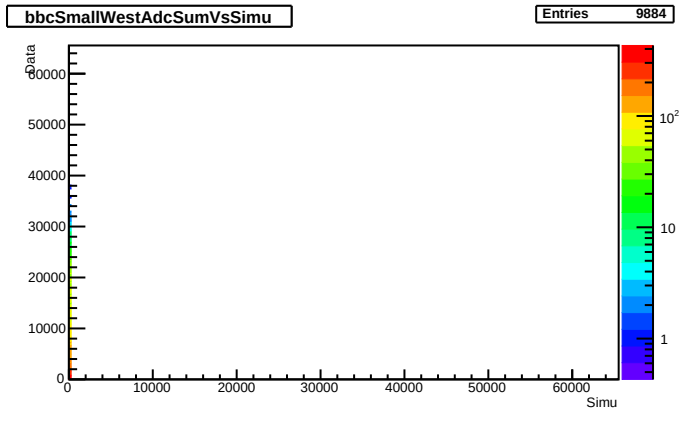

bbcSmallEastAdcSum
Entries 10000

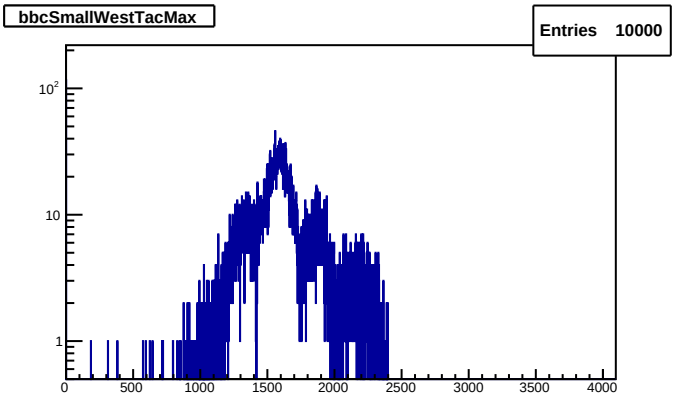

bbcSmallEastAdcSumVsSimu
Entries 9870
Data
Simu

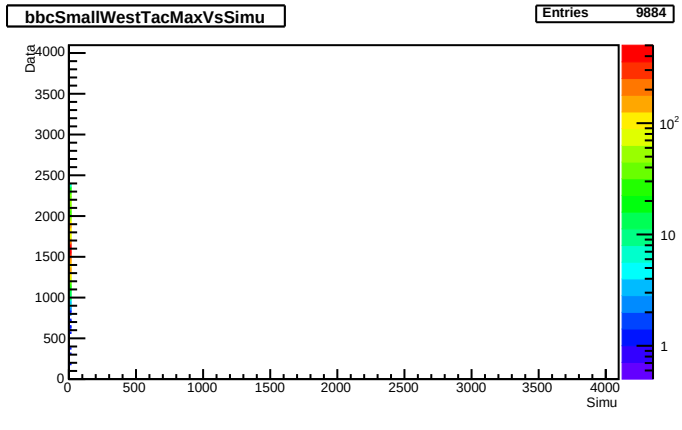

bbcSmallEastTacMax
Entries 10000

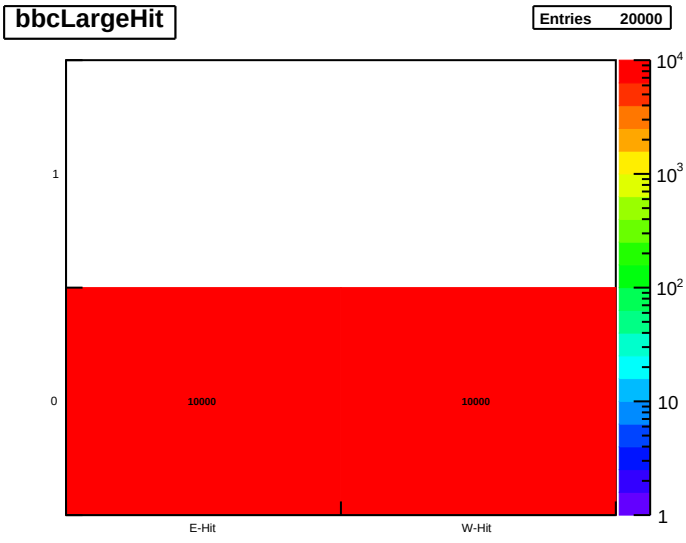

bbcSmallEastTacMaxVsSimu
Entries 9870
Data
Simu

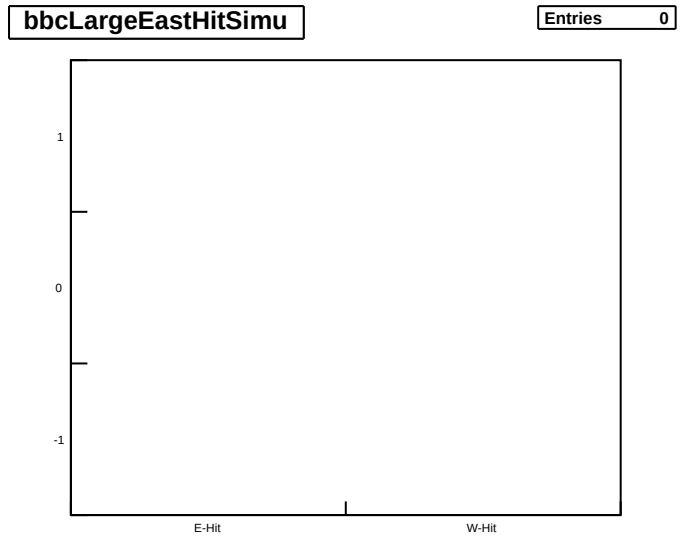

bbcSmallWestAdcSum
Entries 10000

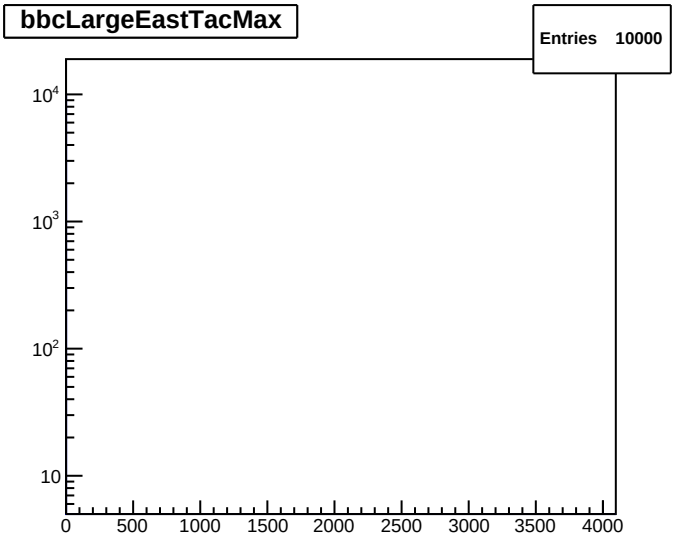

bbcSmallWestAdcSumVsSimu
Entries 9884
Data
Simu

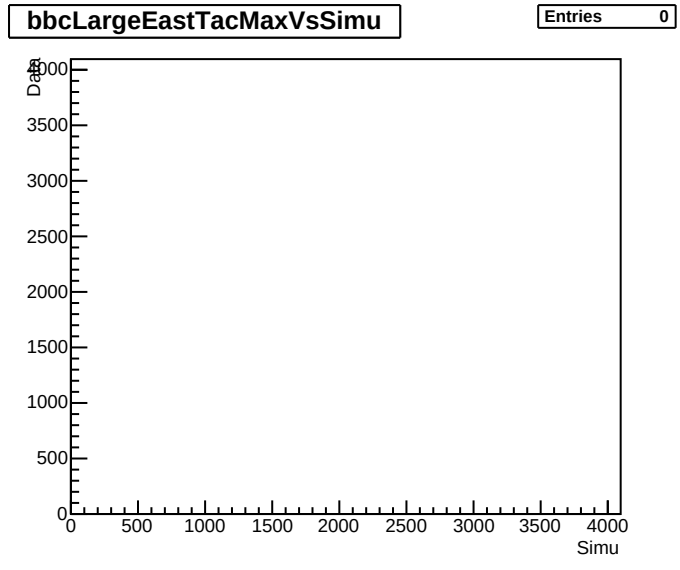

bbcSmallWestTacMax
Entries 10000

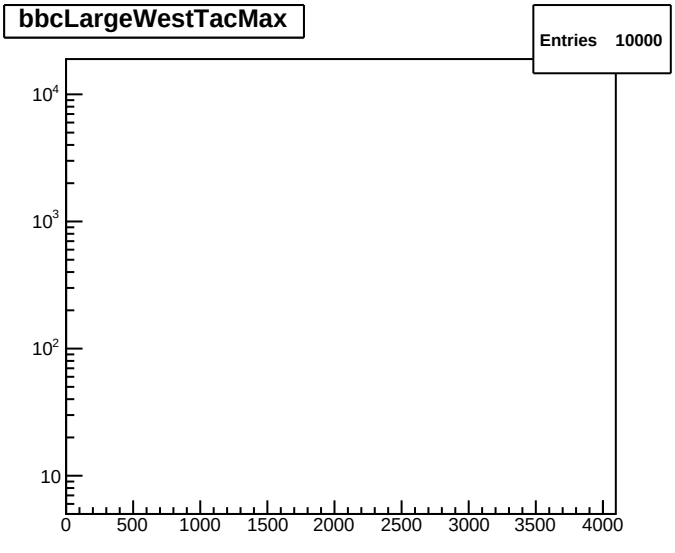

bbcSmallWestTacMaxVsSimu
Entries 9884
Data
Simu

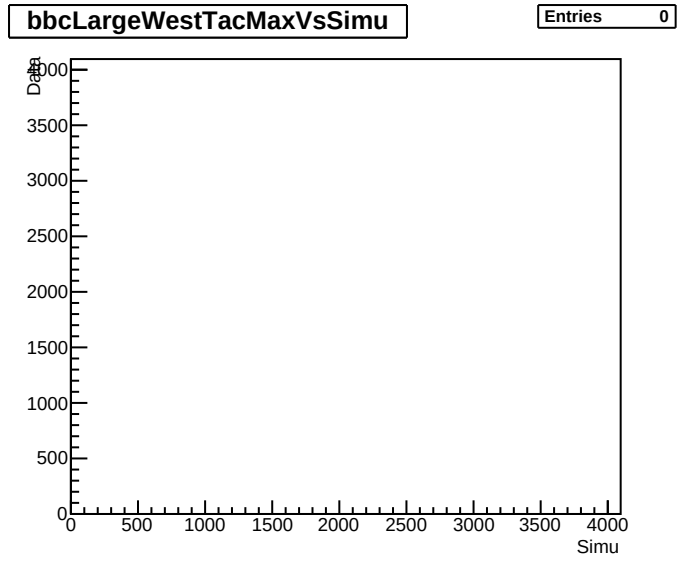

bbcLargeHit
Entries 20000
10000
10000
E-Hit
W-Hit

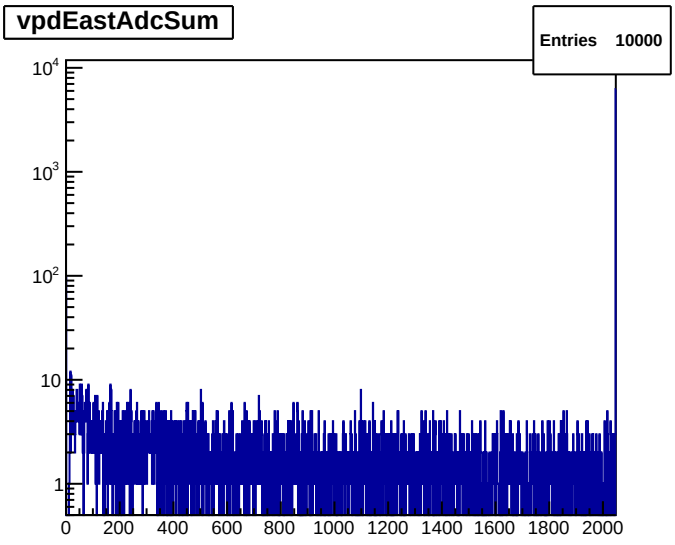

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

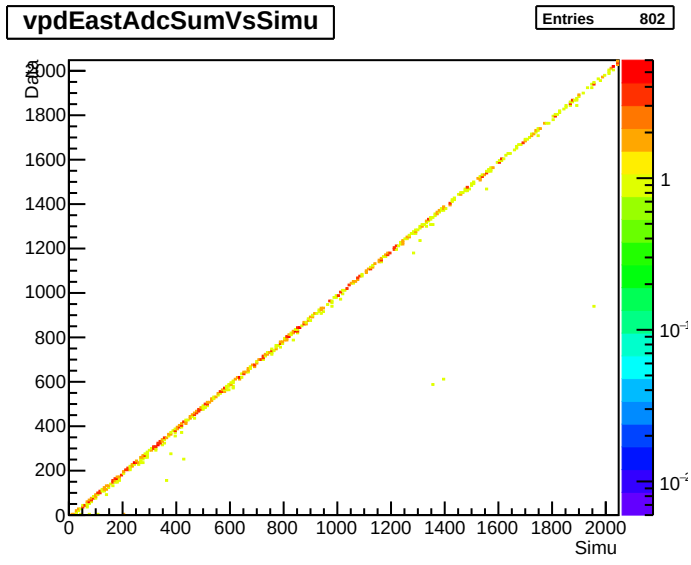

bbcLargeEastTacMax
Entries 10000

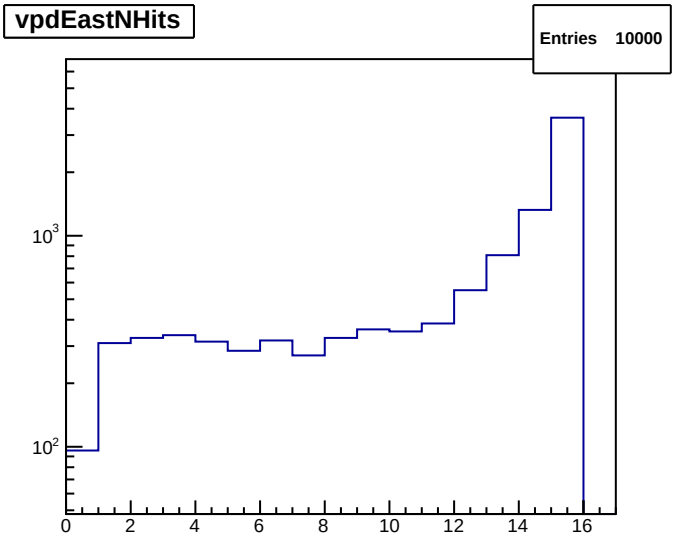

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

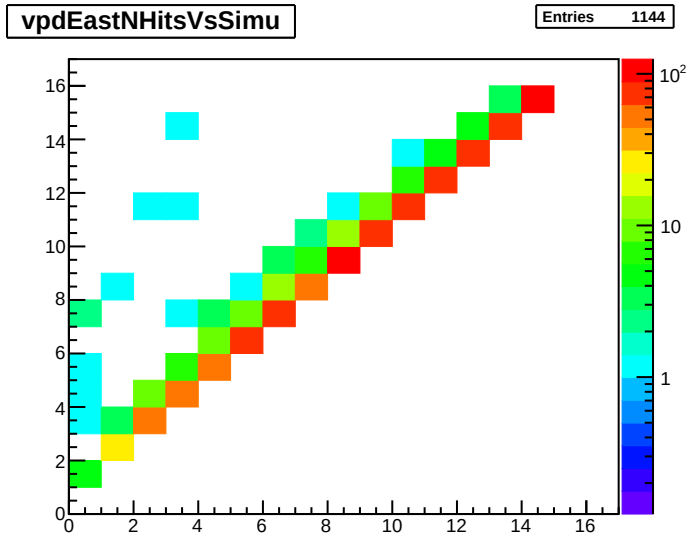

bbcLargeWestTacMax
Entries 10000

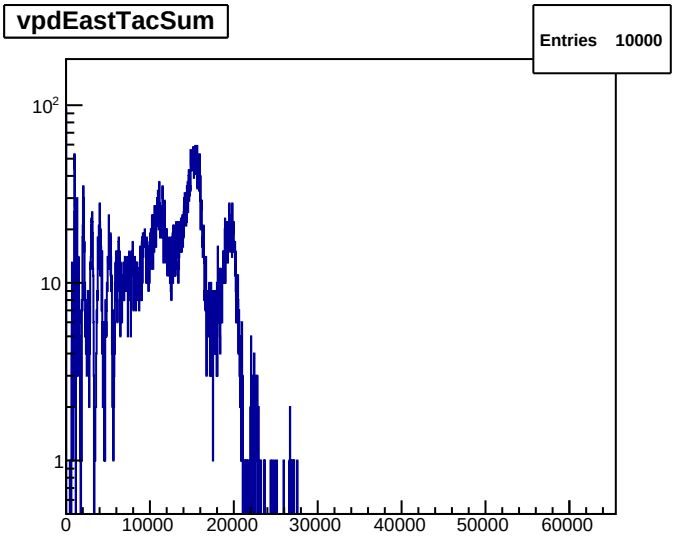

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

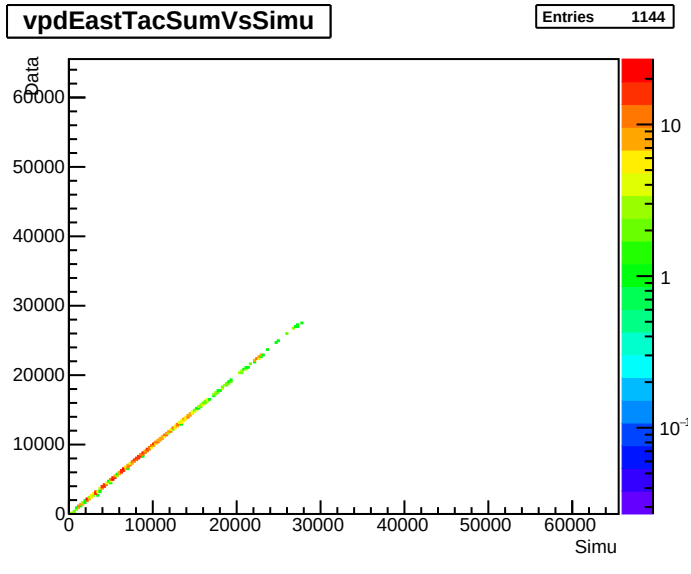

vpdEastAdcSum
Entries 10000

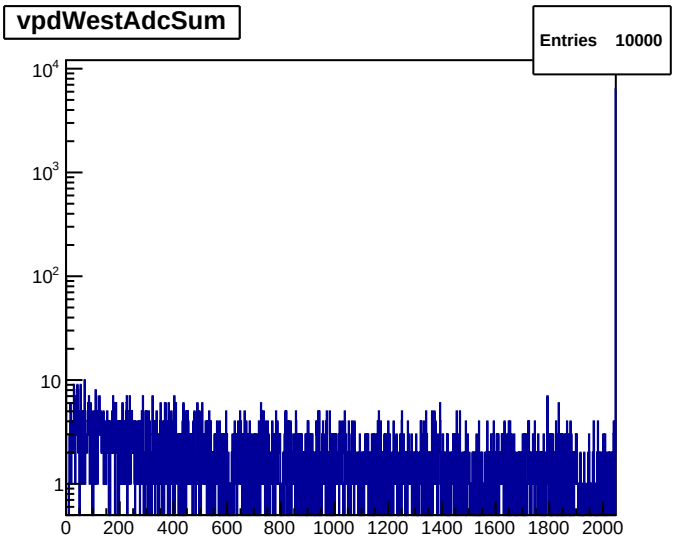

vpdEastAdcSumVsSimu
Entries 802
Data
Simu

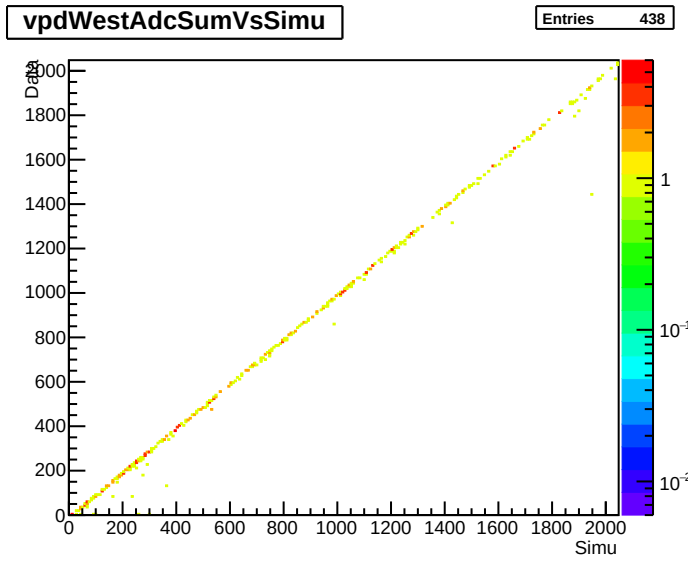

vpdEastNHits
Entries 10000

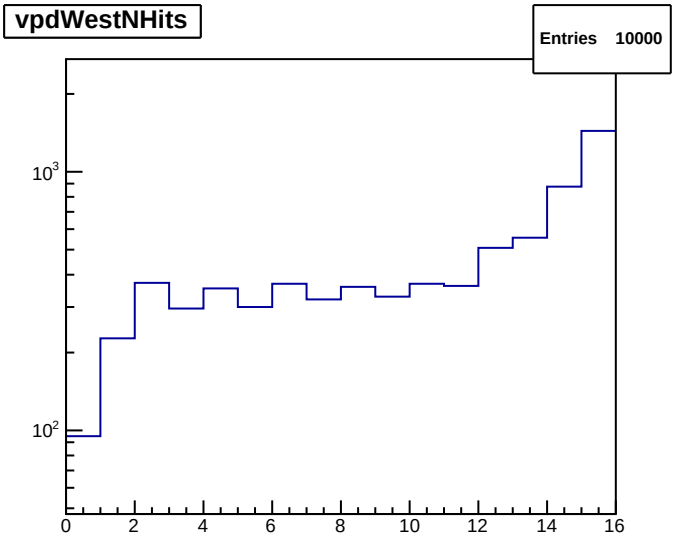

vpdEastNHitsVsSimu
Entries 1144

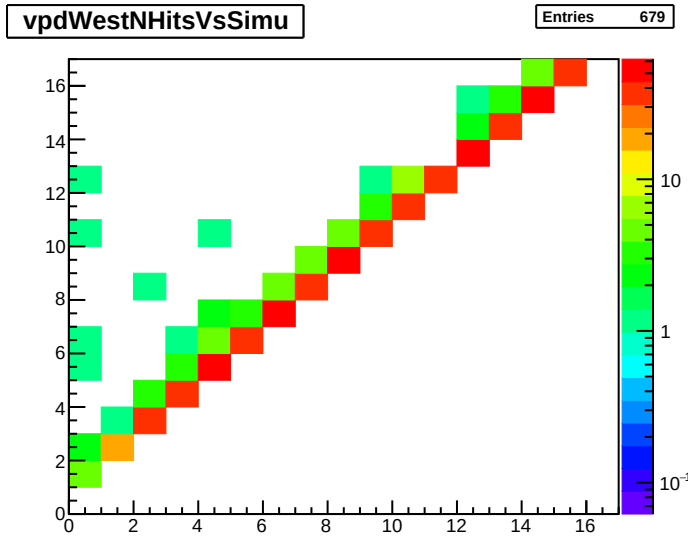

vpdEastTacSum
Entries 10000

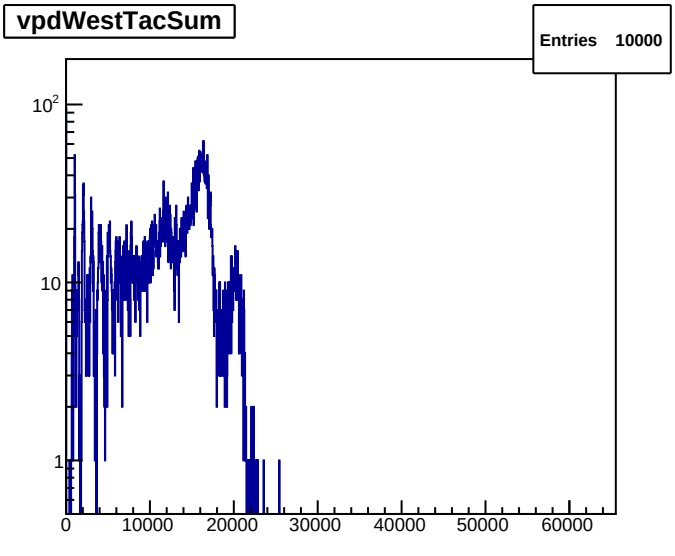

vpdEastTacSumVsSimu
Entries 1144
Data
Simu

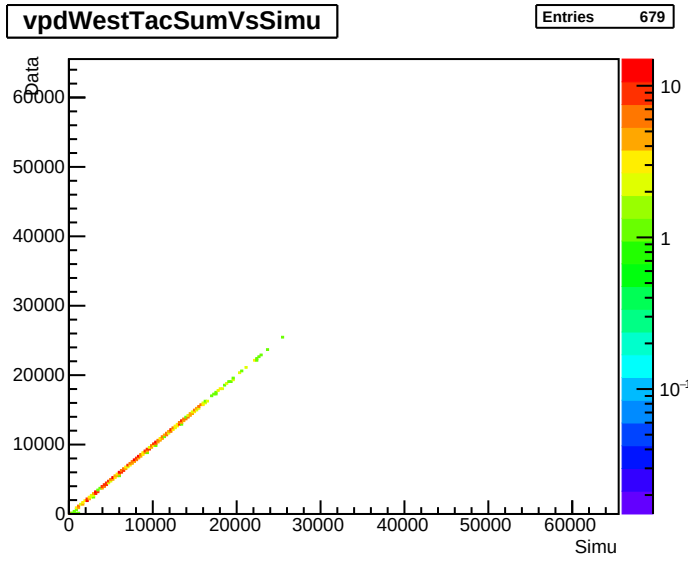

vpdWestAdcSum
Entries 10000

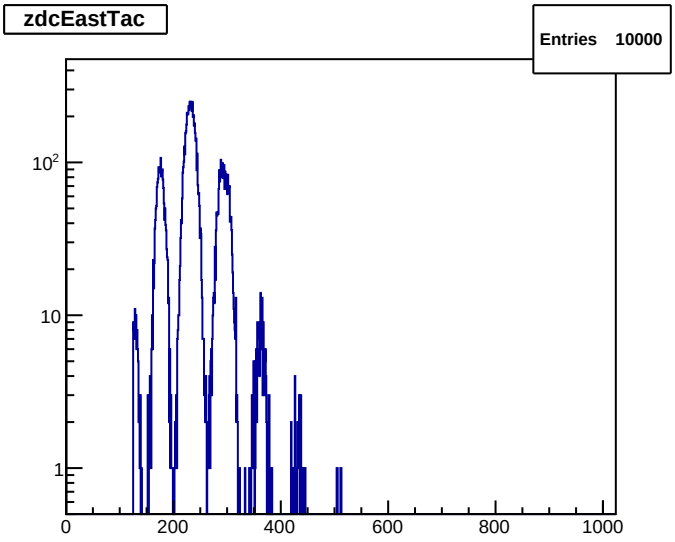

vpdWestAdcSumVsSimu
Entries 438
Data
Simu

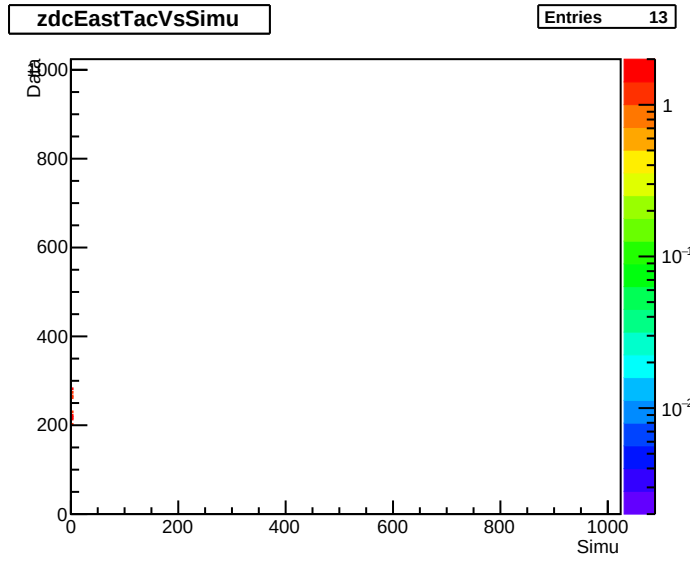

vpdWestNHits
Entries 10000

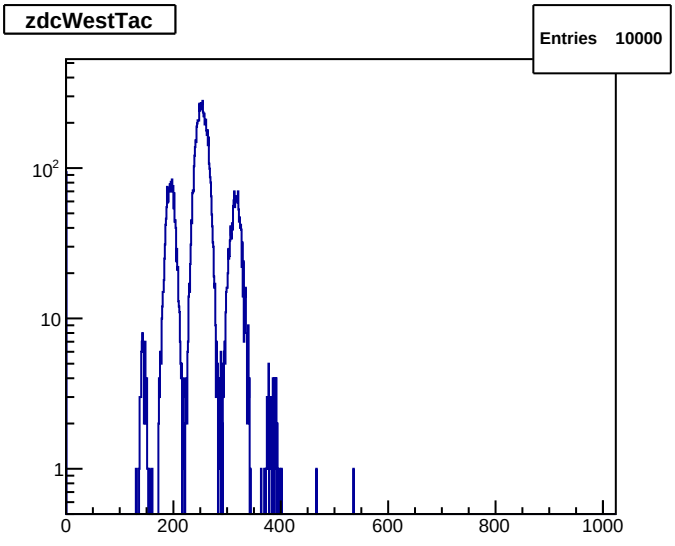

vpdWestNHitsVsSimu
Entries 679

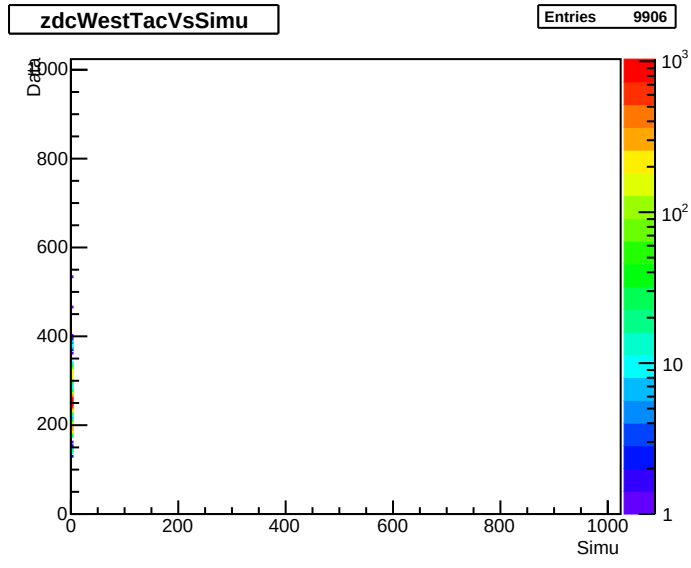

vpdWestTacSum
Entries 10000

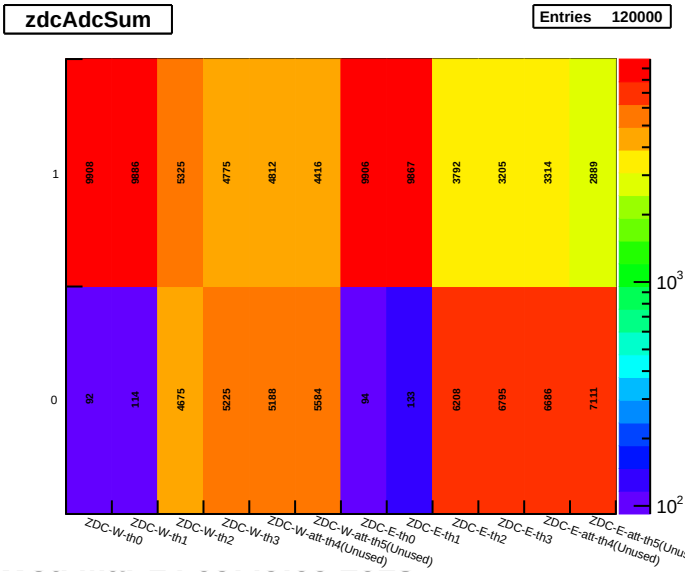

vpdWestTacSumVsSimu
Entries 679
Data
Simu

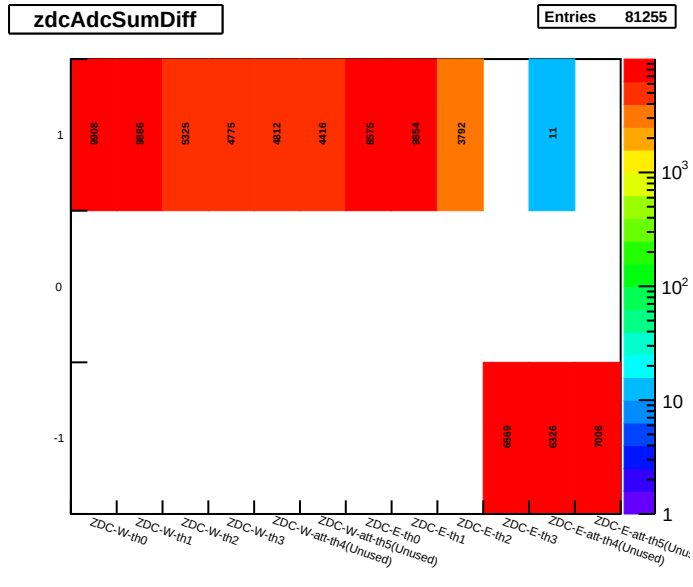

zdcEastTac
Entries 10000
10^2
10
1
0
200
400
600
800
1000

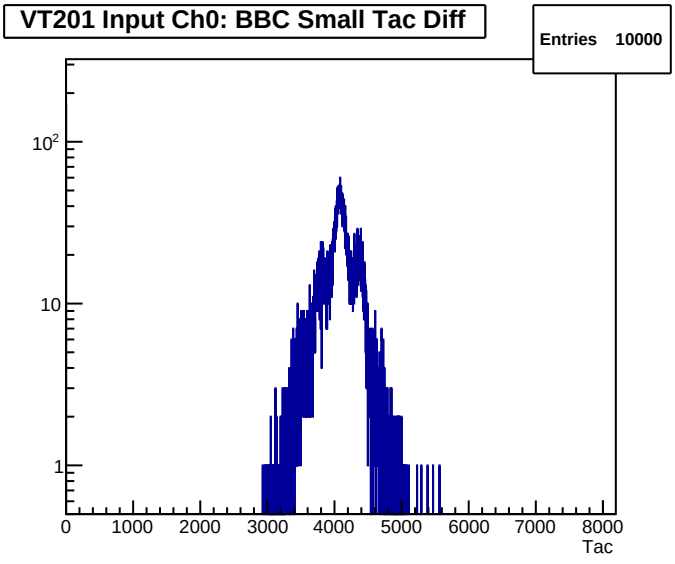

zdcEastTacVsSimu
Entries 13
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu
1
10^{-1}
10^{-2}

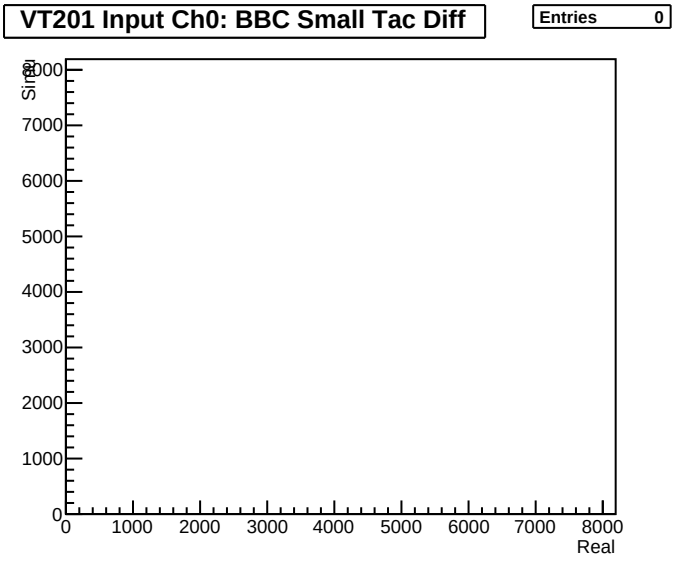

zdcWestTac
Entries 10000
10^2
10
1
0
200
400
600
800
1000

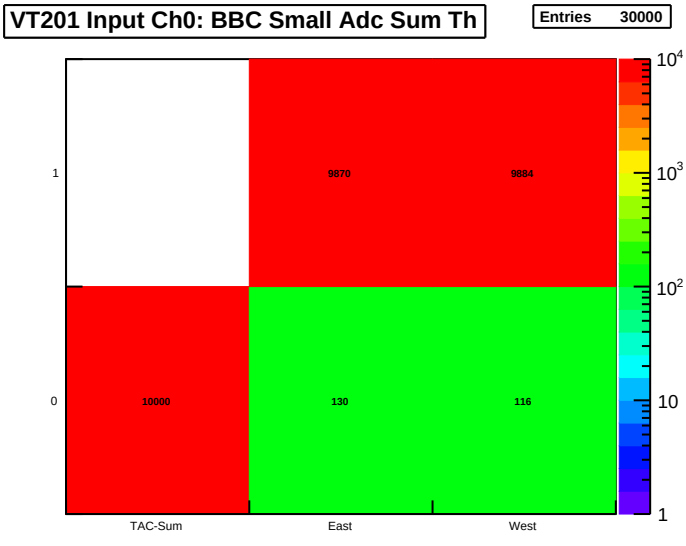

zdcWestTacVsSimu
Entries 9906
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu
10^3
10^2
10
1

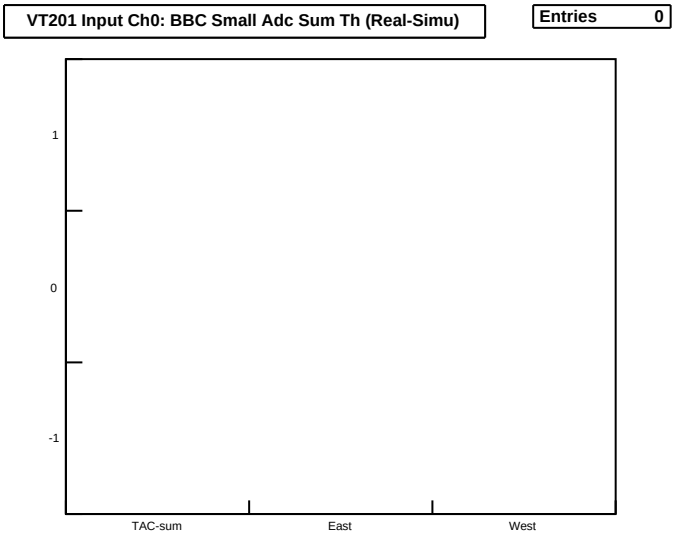

zdcAdcSum
Entries 120000
1
0
9908
9886
5325
4775
4812
4416
9906
9867
3792
3205
3314
2889
92
114
4675
5225
5188
5584
94
133
6208
6795
6686
7111
10^3
10^2
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

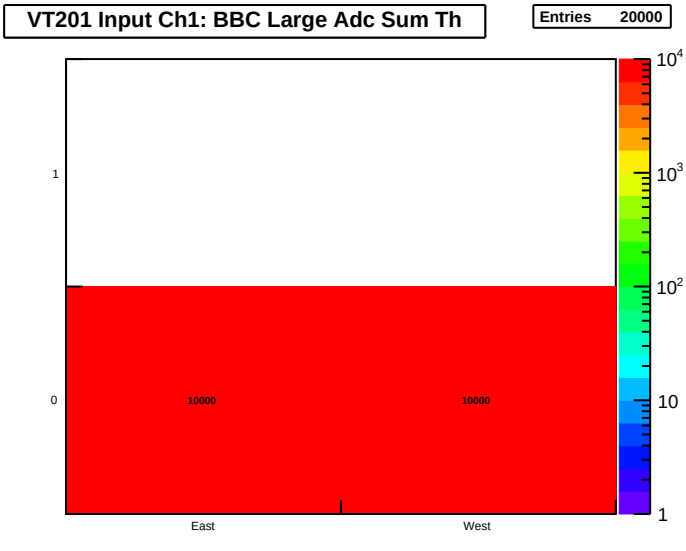

zdcAdcSumDiff
Entries 81255
1
0
-1
9908
9886
5325
4775
4812
4416
8575
9854
3792
11
6569
6326
7006
10^3
10^2
10
1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

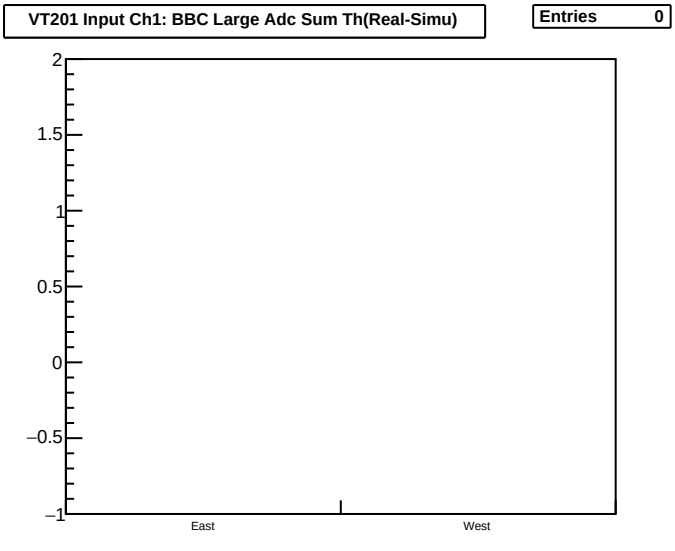

VT201 Input Ch0: BBC Small Tac Diff
Entries 10000
Tac


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

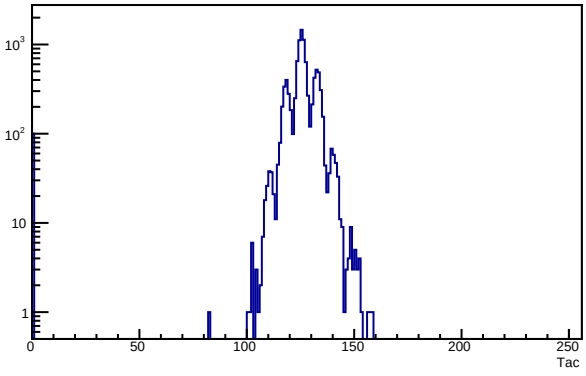

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 30000
9870
9884
10000
130
116
TAC-Sum
East
West


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

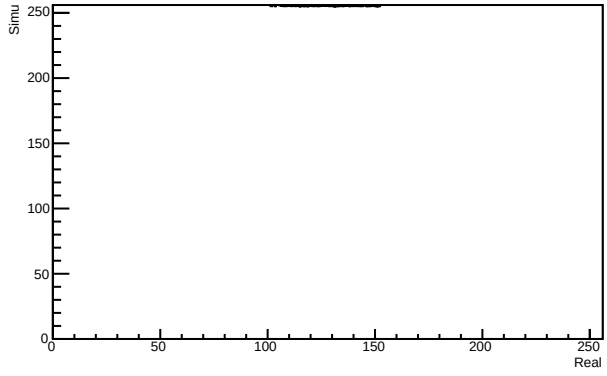

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 20000
10000
10000
East
West


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

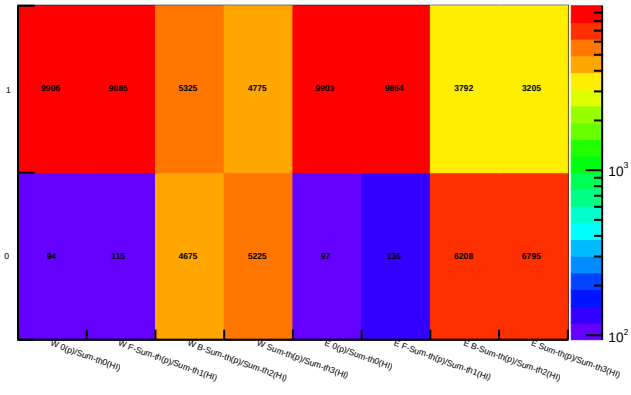
VT201 Input Ch2: ZDC Tac Diff



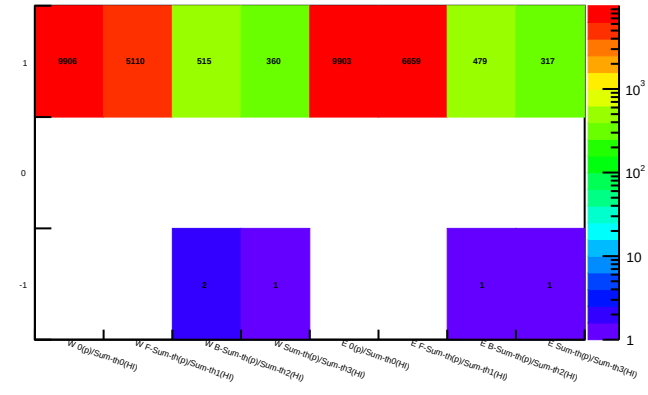
VT201 Input Ch2: ZDC Tac Diff



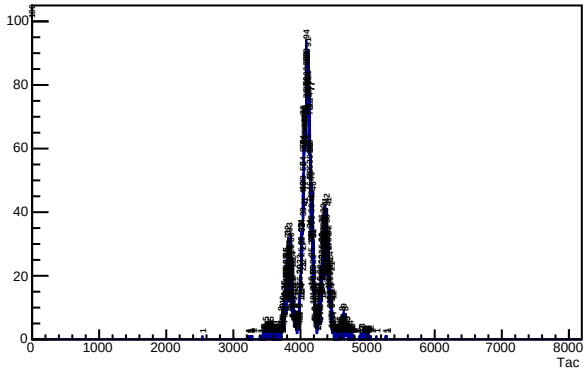
VT201 Input Ch2: ZDC Adc Sum Th



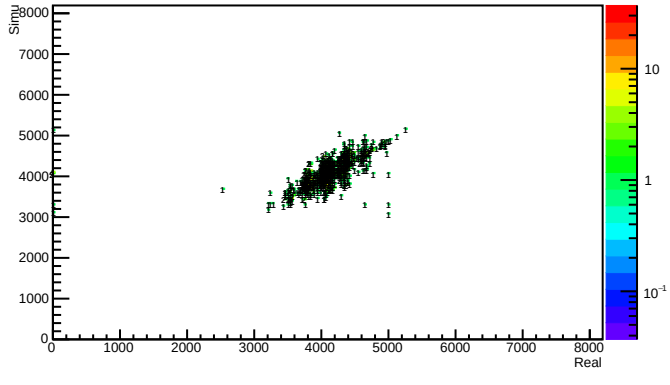
VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)



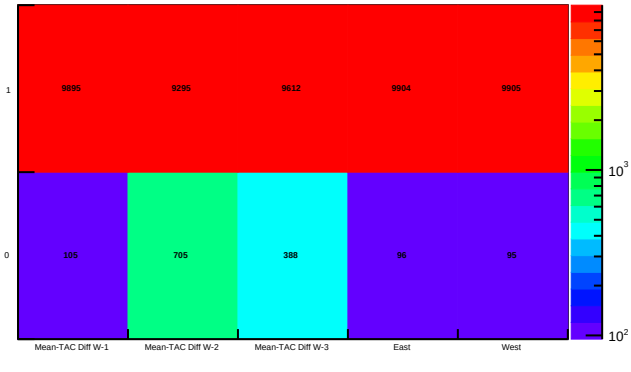
VT201 Input Ch4: VPD Tac Diff



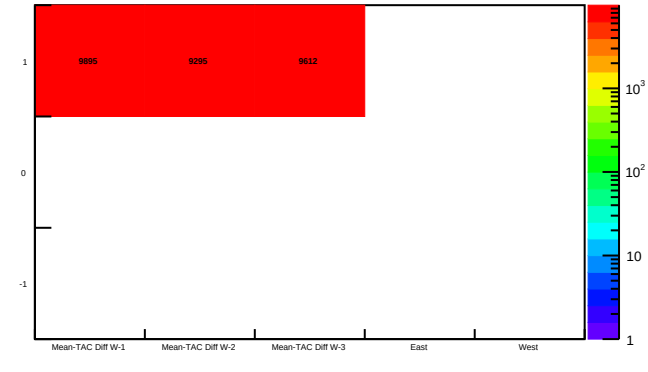
VT201 Input Ch4: VPD Tac Diff

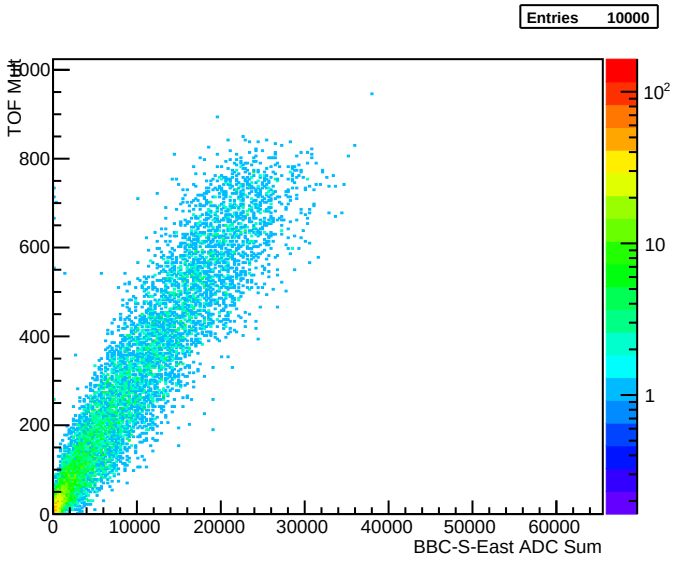


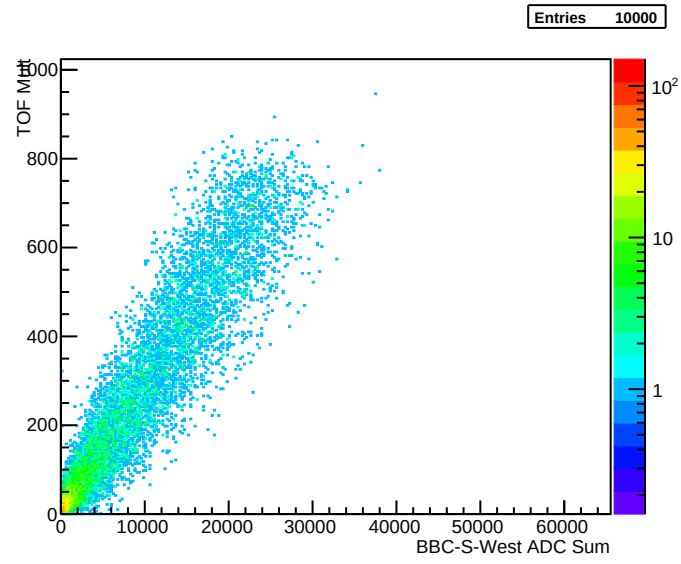
VT201 Input Ch4: VPD Adc Sum Th

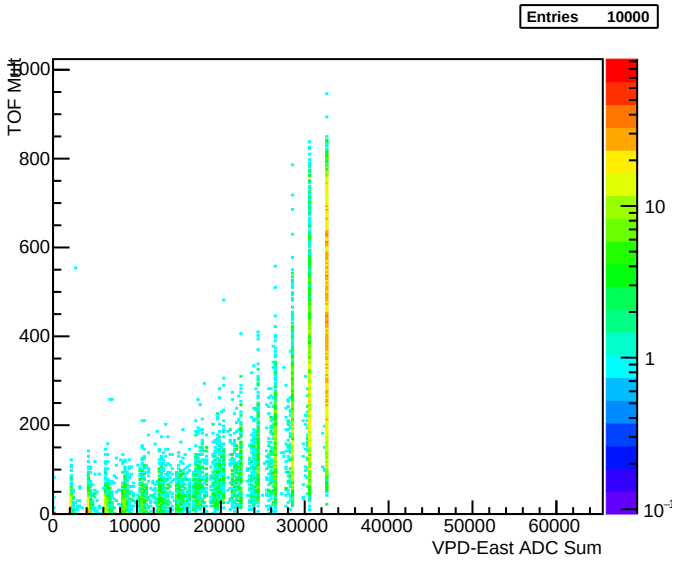


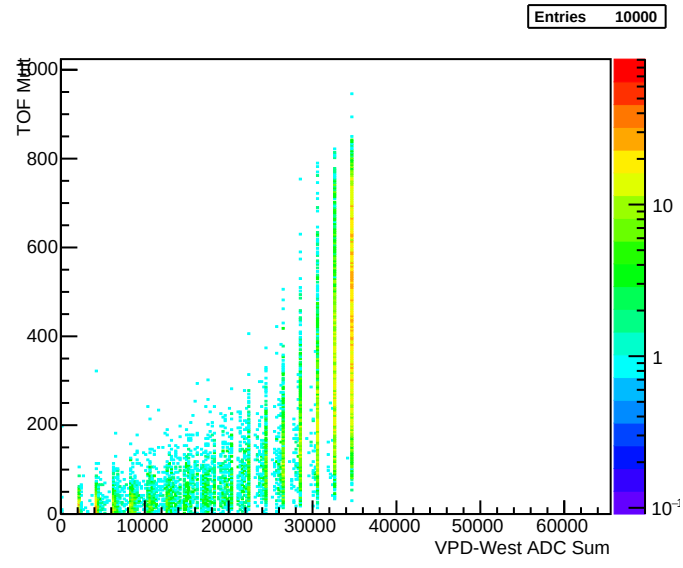
VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)

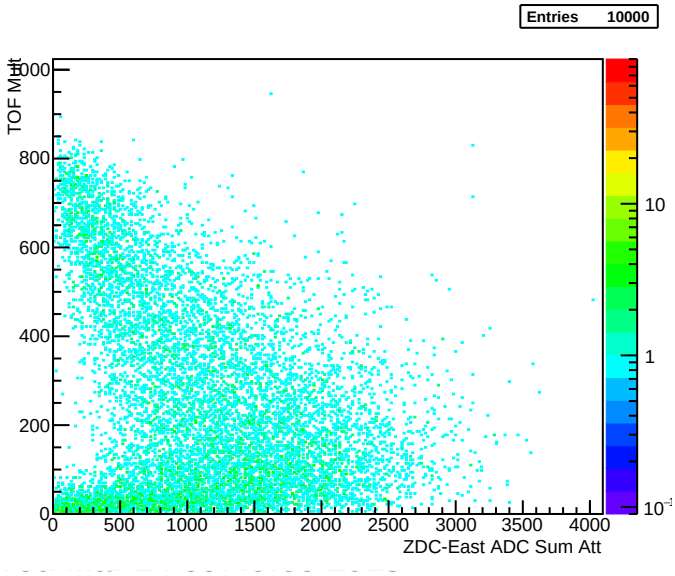


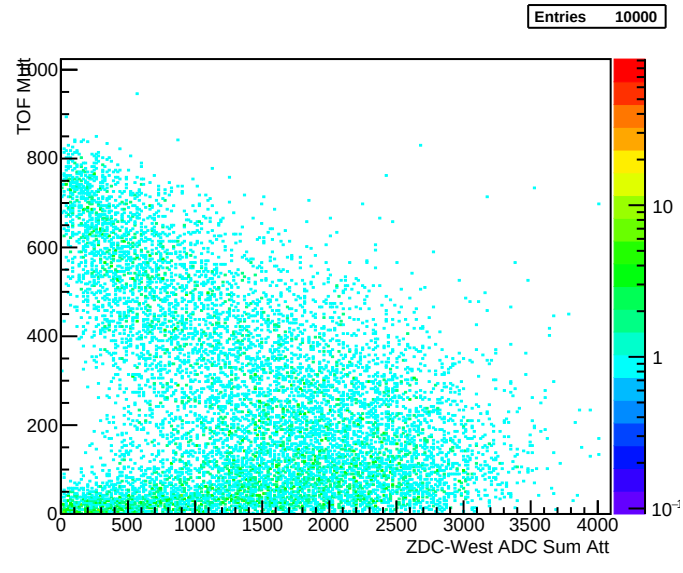

Entries 10000
TOF Mult
BBC-S-East ADC Sum

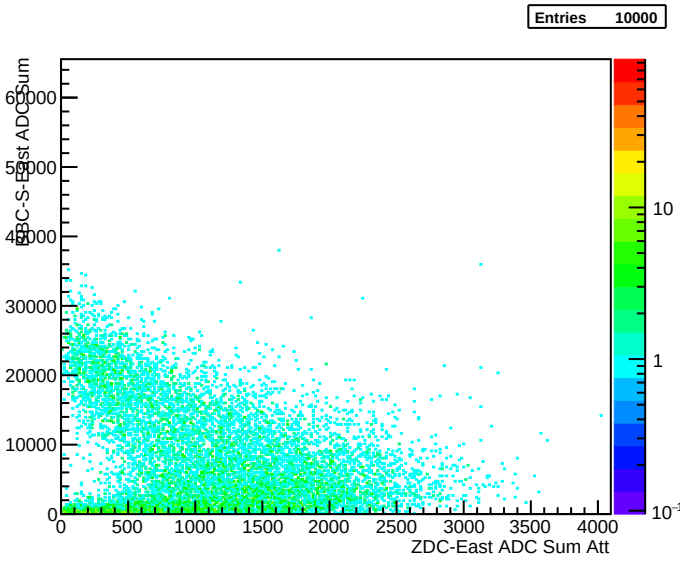

Entries 10000
TOF Mult
BBC-S-West ADC Sum

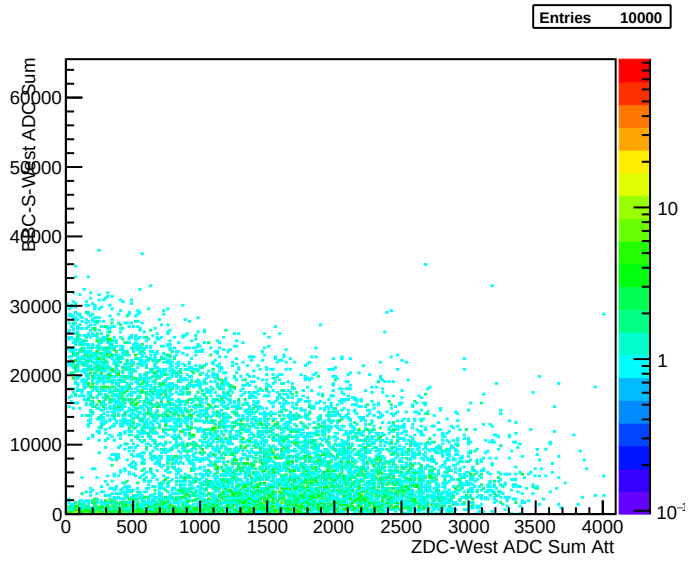

Entries 10000
TOF Mult
VPD-East ADC Sum

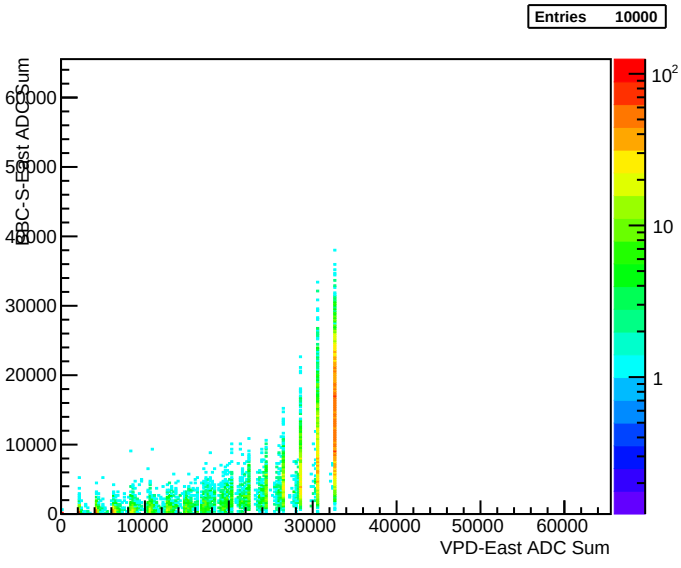

Entries 10000
TOF Mult
VPD-West ADC Sum

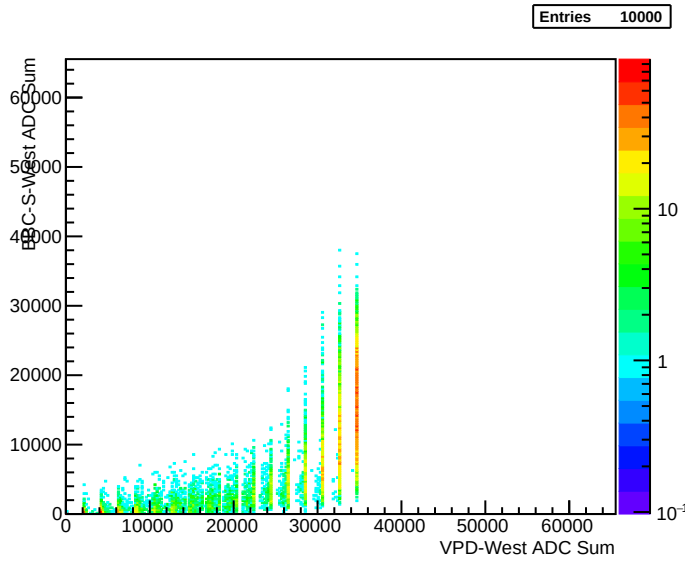

Entries 10000
TOF Mult
ZDC-East ADC Sum Att

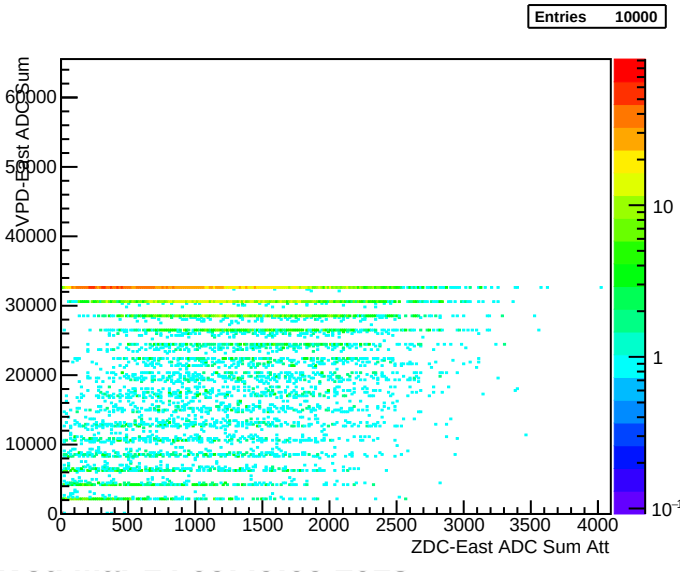

Entries 10000
TOF Mult
ZDC-West ADC Sum Att

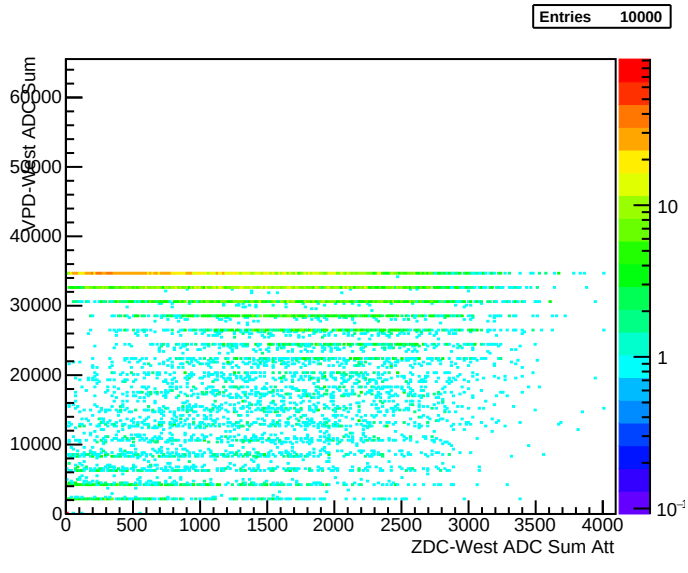

Entries 10000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

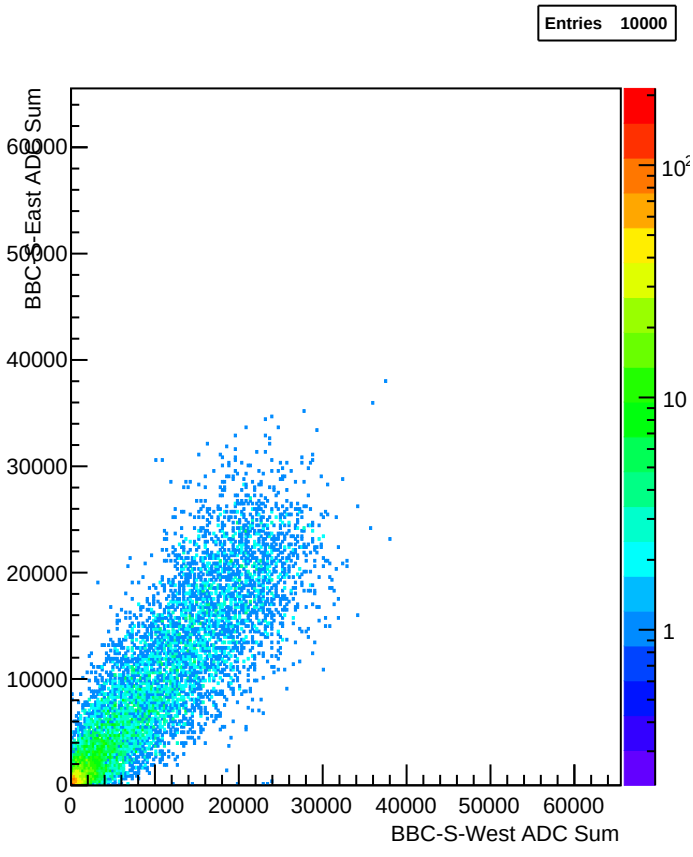

Entries 10000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

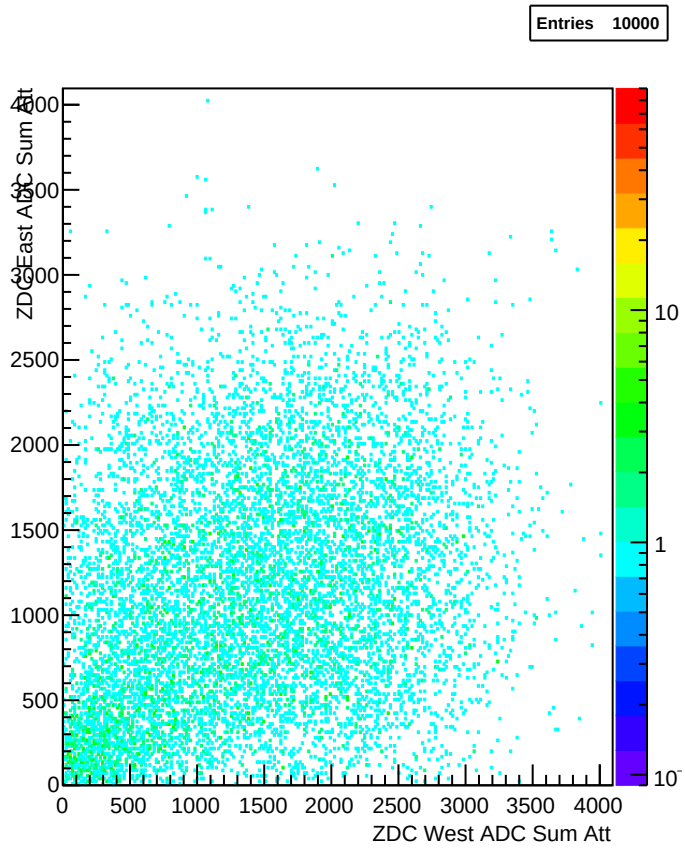

Entries 10000
BBC-S-East ADC Sum
VPD-East ADC Sum

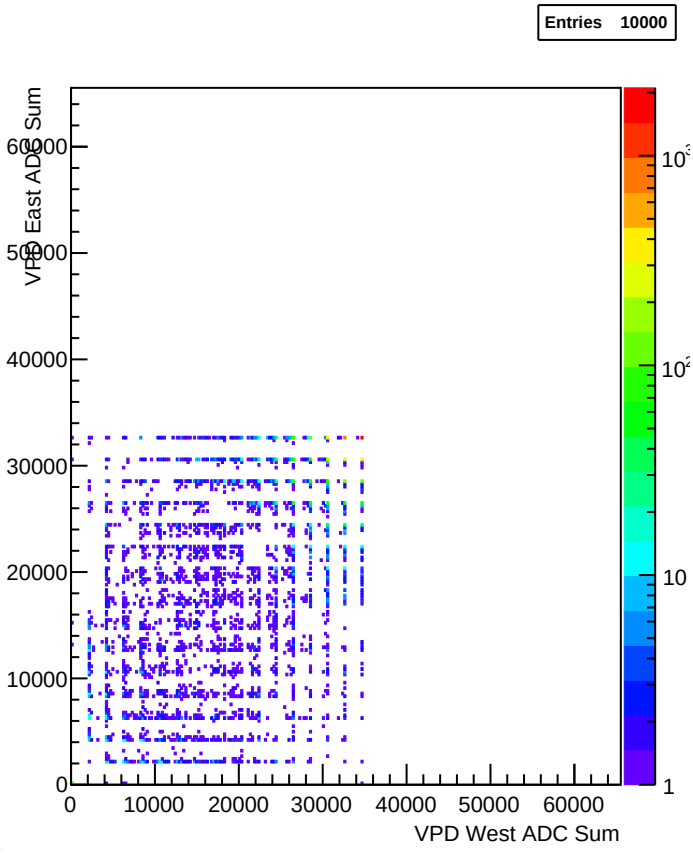

Entries 10000
BBC-S-West ADC Sum
VPD-West ADC Sum

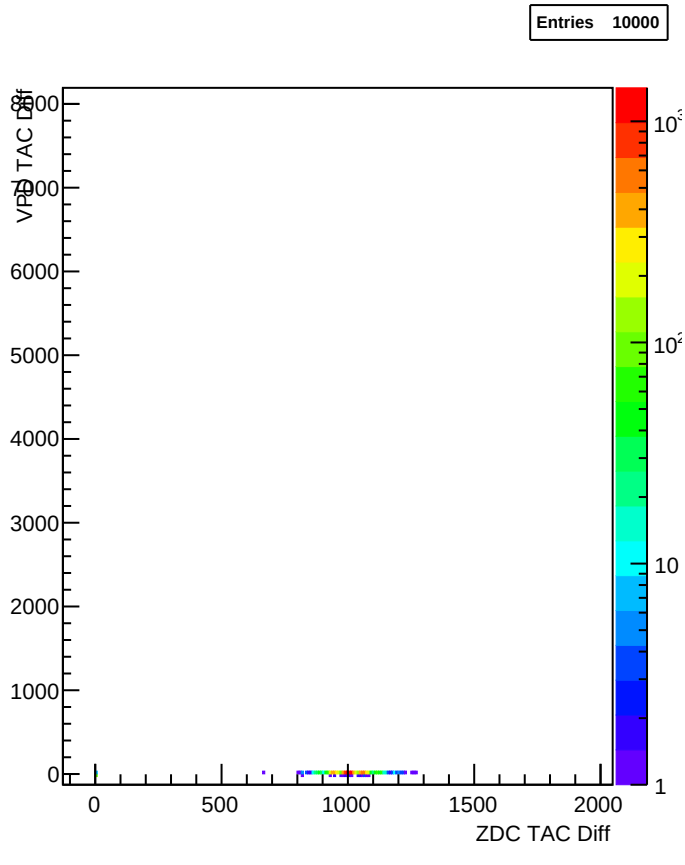

Entries 10000
VPD-East ADC Sum
ZDC-East ADC Sum Att

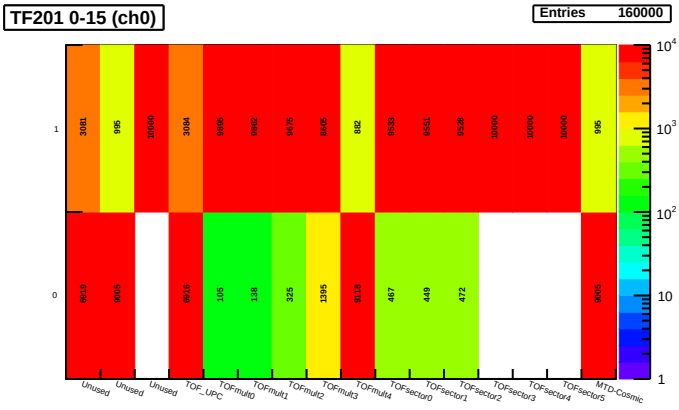

Entries 10000
VPD-West ADC Sum
ZDC-West ADC Sum Att

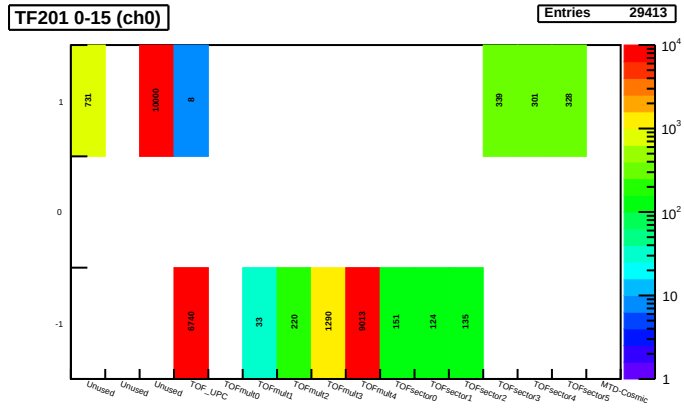

Entries 10000
BBC-S-East ADC Sum
BBC-S-West ADC Sum
0
10000
20000
30000
40000
50000
60000
1
10
10²

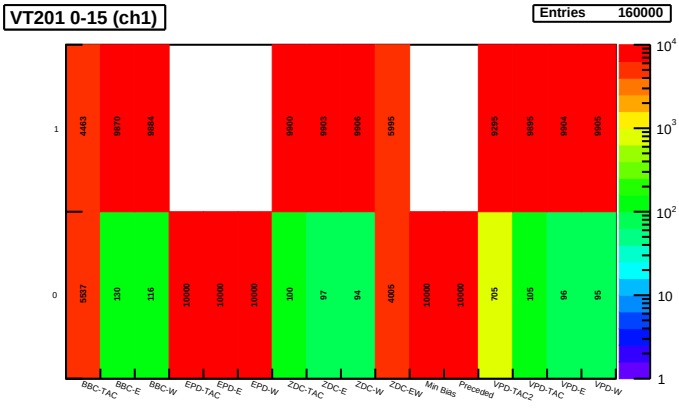

Entries 10000
ZDC East ADC Sum Att
ZDC West ADC Sum Att
0
500
1000
1500
2000
2500
3000
3500
4000
1
10

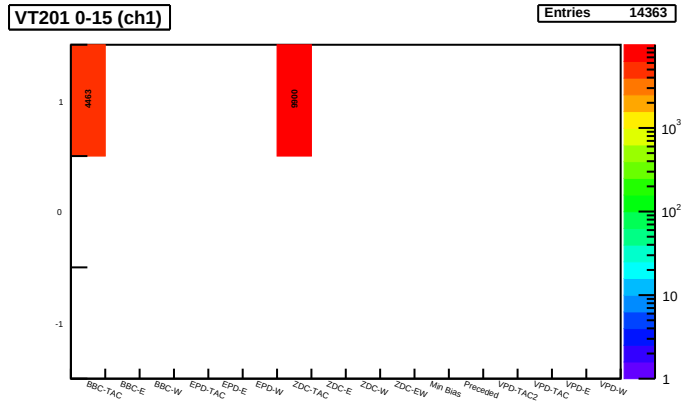

Entries 10000
VPD East ADC Sum
VPD West ADC Sum
0
10000
20000
30000
40000
50000
60000
1
10
10²

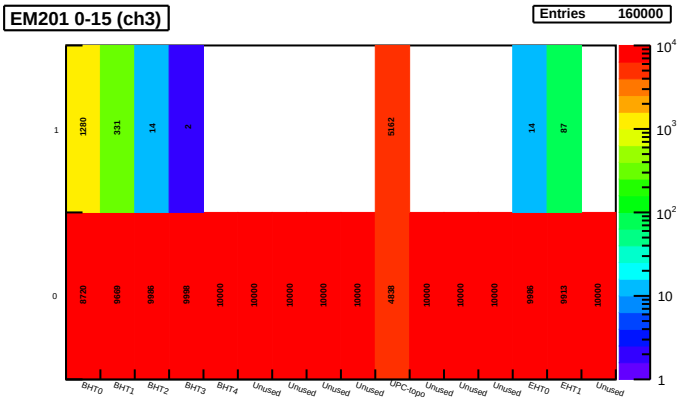

Entries 10000
VPD TAC Diff
ZDC TAC Diff
0
500
1000
1500
2000
1000
2000
3000
4000
5000
6000
7000
8000
1
10
10²

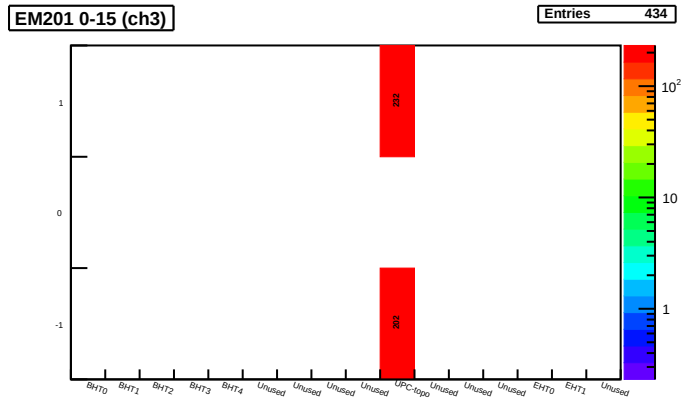

TF201 0-15 (ch0)
Entries 160000
3081 995 10000 3094 9885 9882 9675 8605 882 9533 9551 9528 10000 10000 10000 995
6919 9005 6916 105 138 325 1395 9118 467 449 472 9005
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

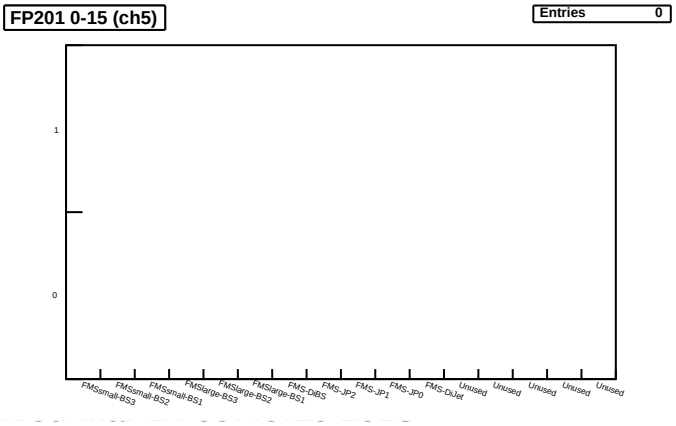

TF201 0-15 (ch0)
Entries 29413
731 10000 8 339 301 328
6740 33 220 1290 9013 151 124 135
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

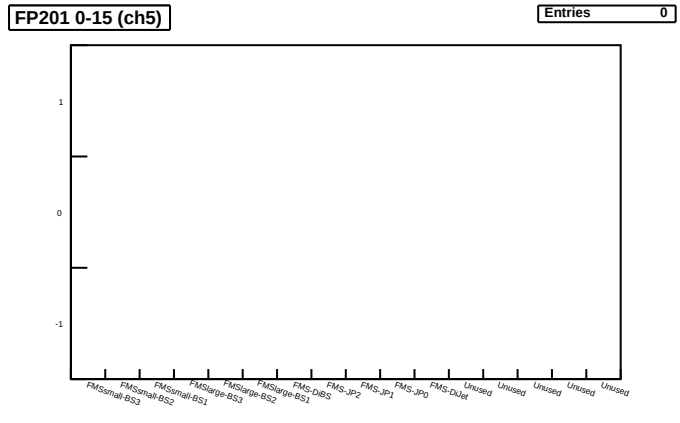

VT201 0-15 (ch1)
Entries 160000
4463 9870 9884 9900 9903 9906 5995 9295 9895 9904 9905
5537 100 116 10000 10000 10000 100 97 94 4005 10000 10000 705 105 96 95
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 14363
4463 9900
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 160000
1280 331 14 2 5162 14 87
8720 9669 9986 9998 10000 10000 10000 10000 10000 4838 10000 10000 10000 9986 9913 10000
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


EM201 0-15 (ch3)
Entries 434
232 202
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