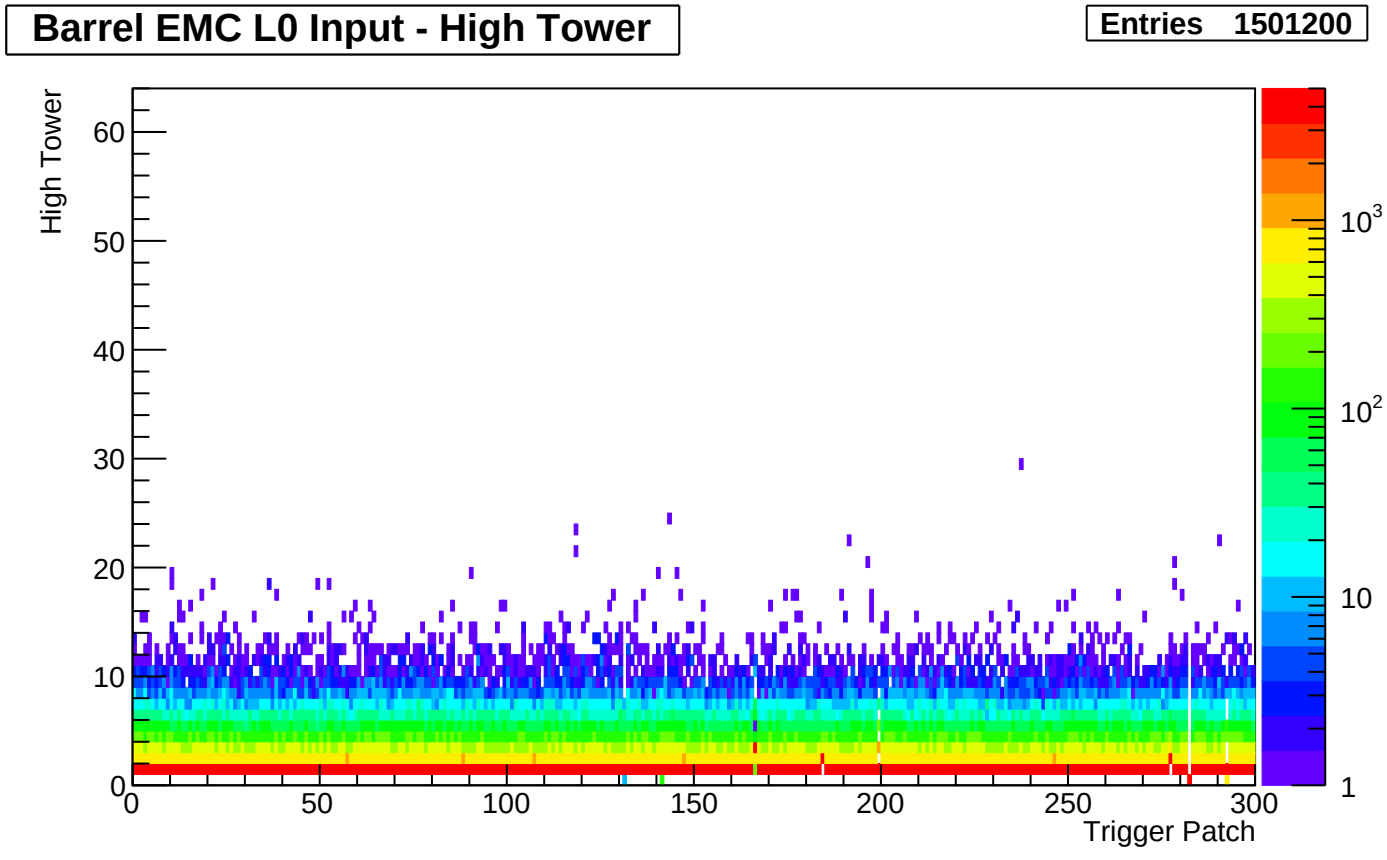
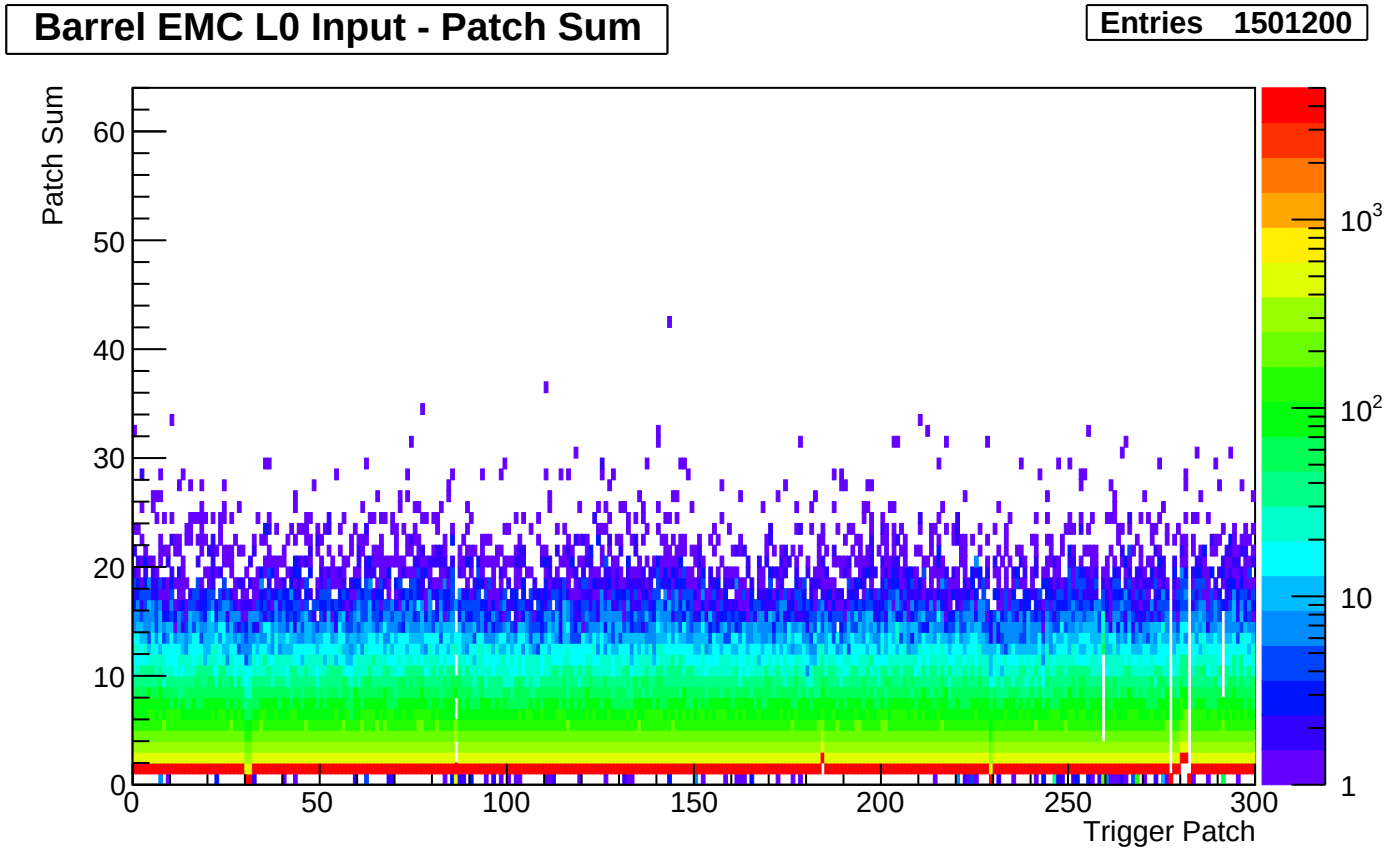
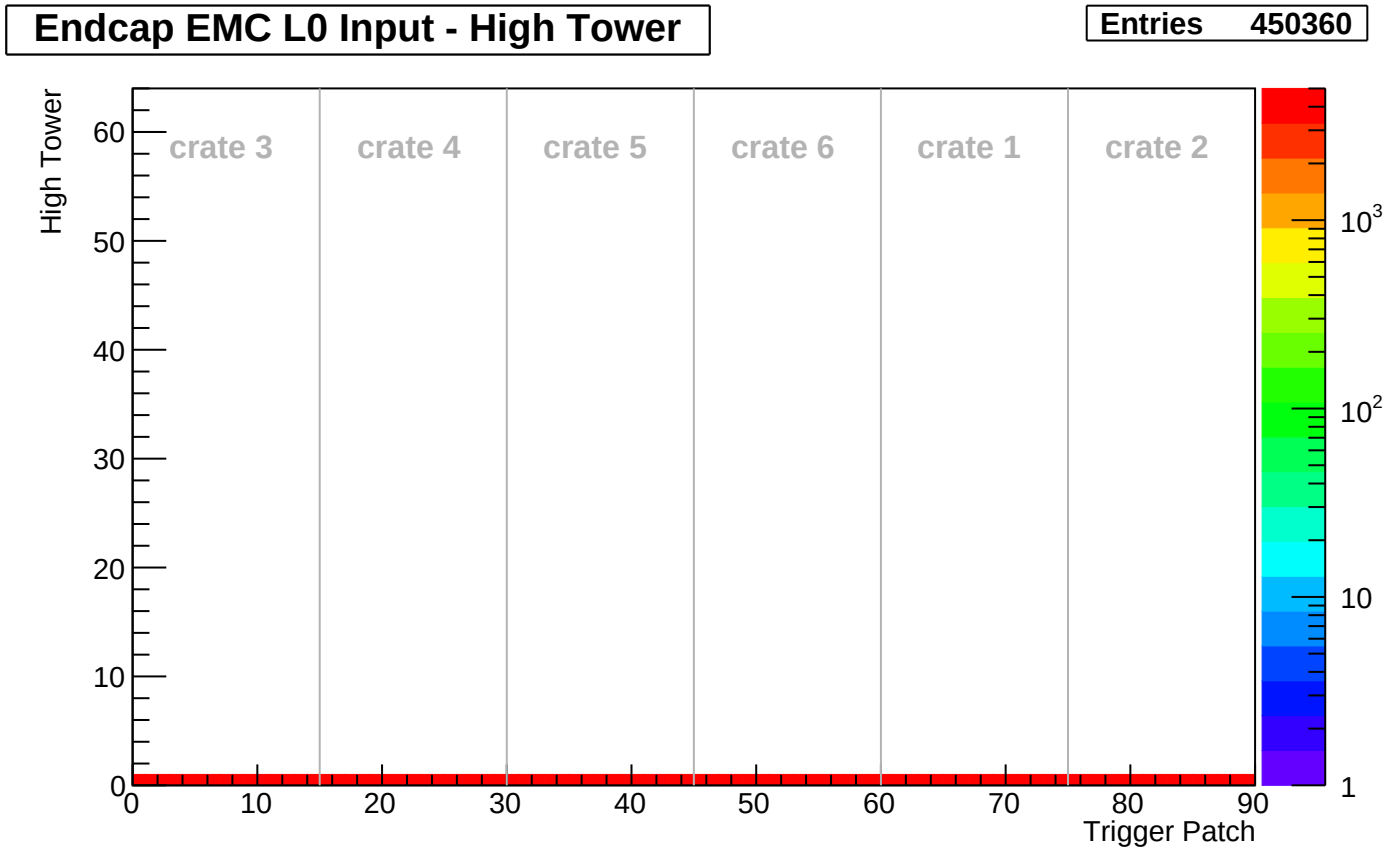
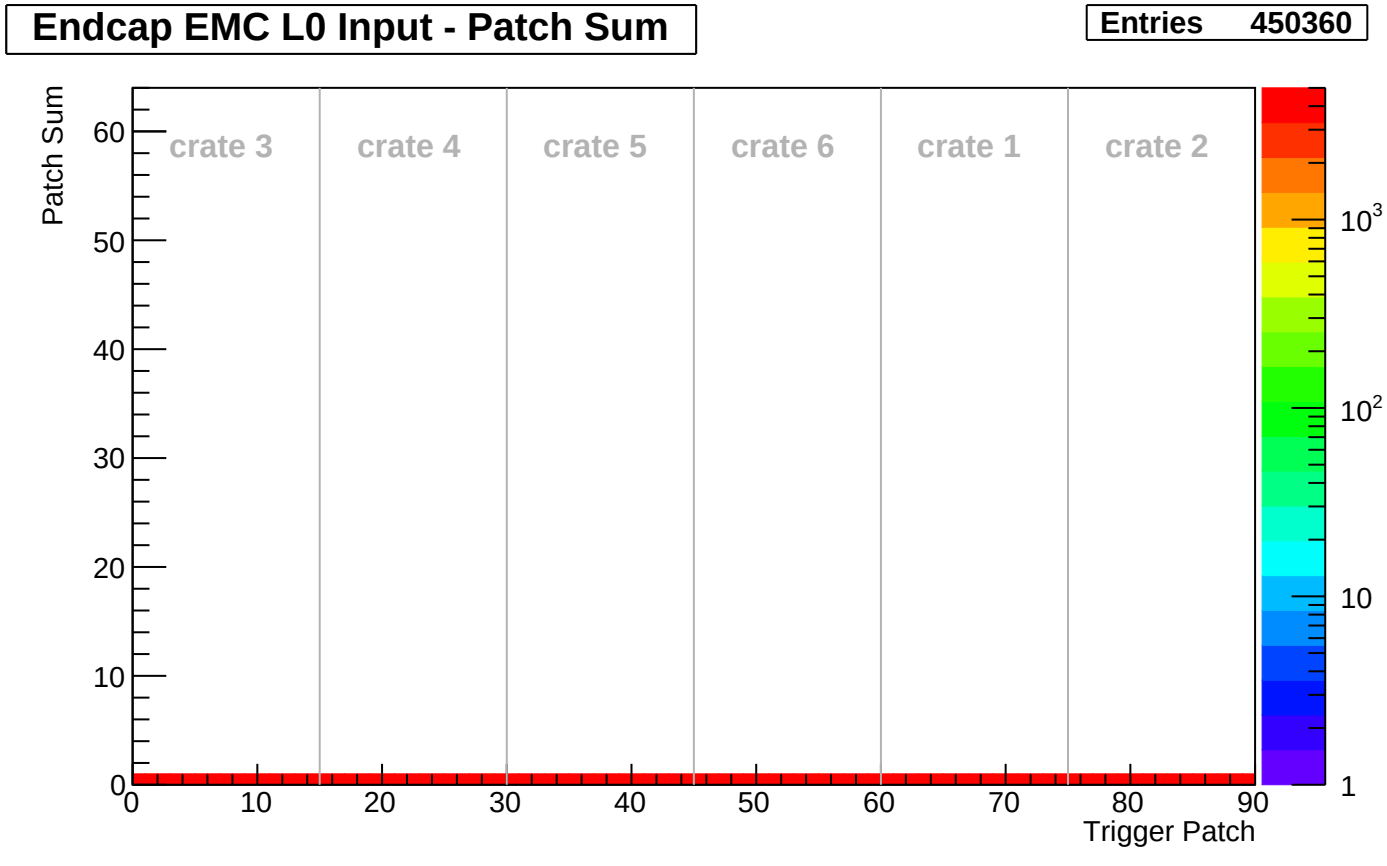
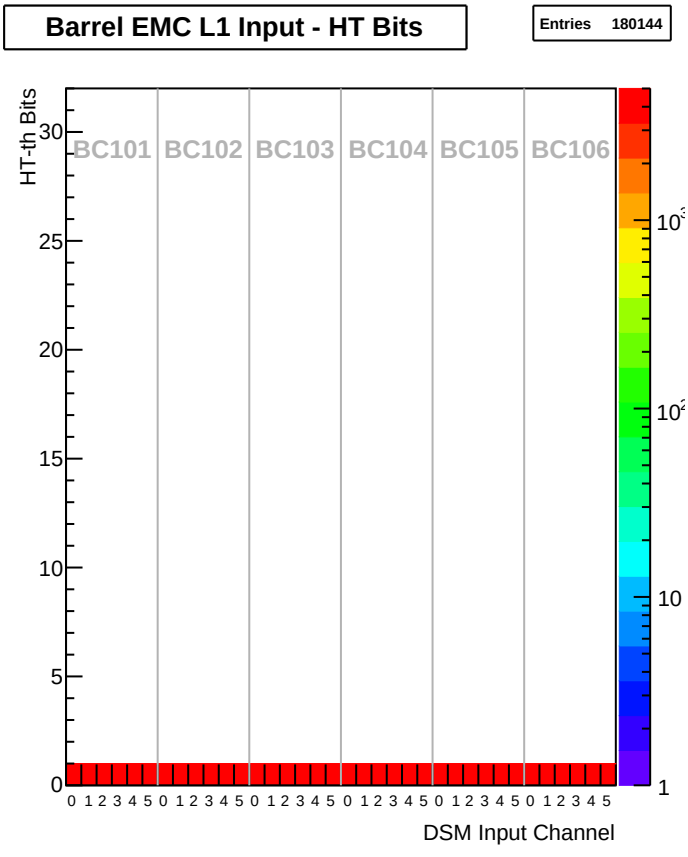
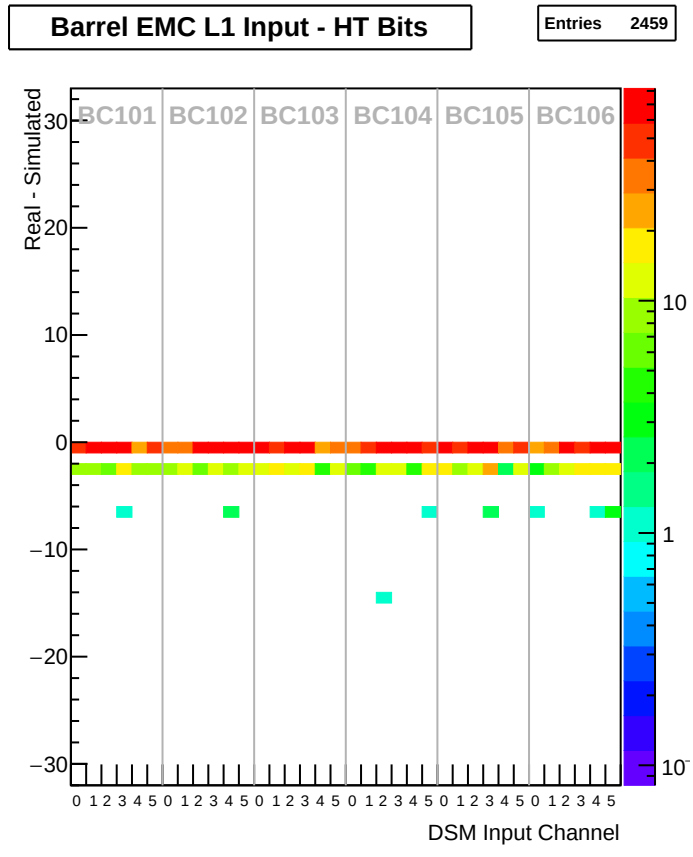

Barrel EMC L0 Input - High Tower
Entries 1501200
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

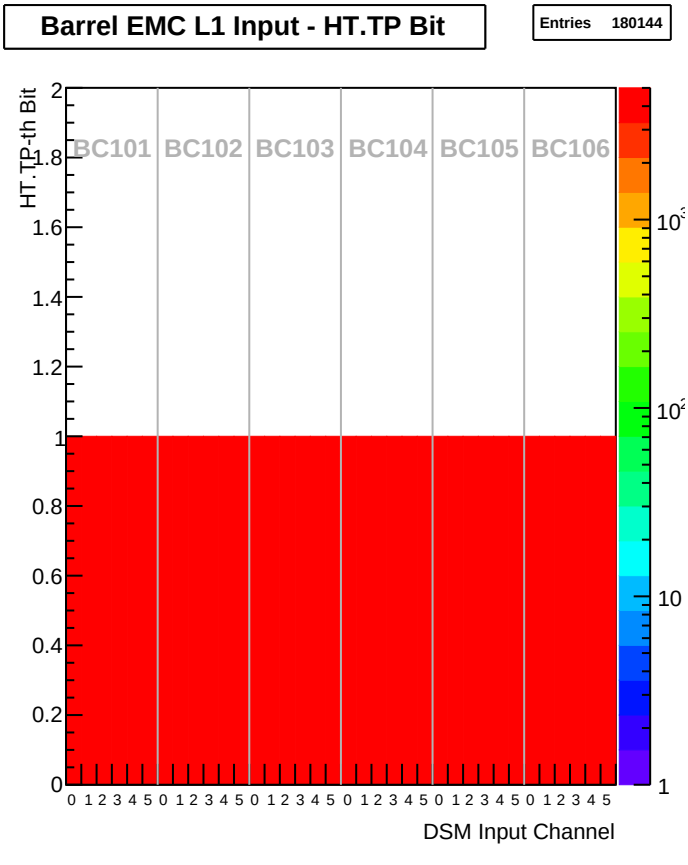

Barrel EMC L0 Input - Patch Sum
Entries 1501200
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

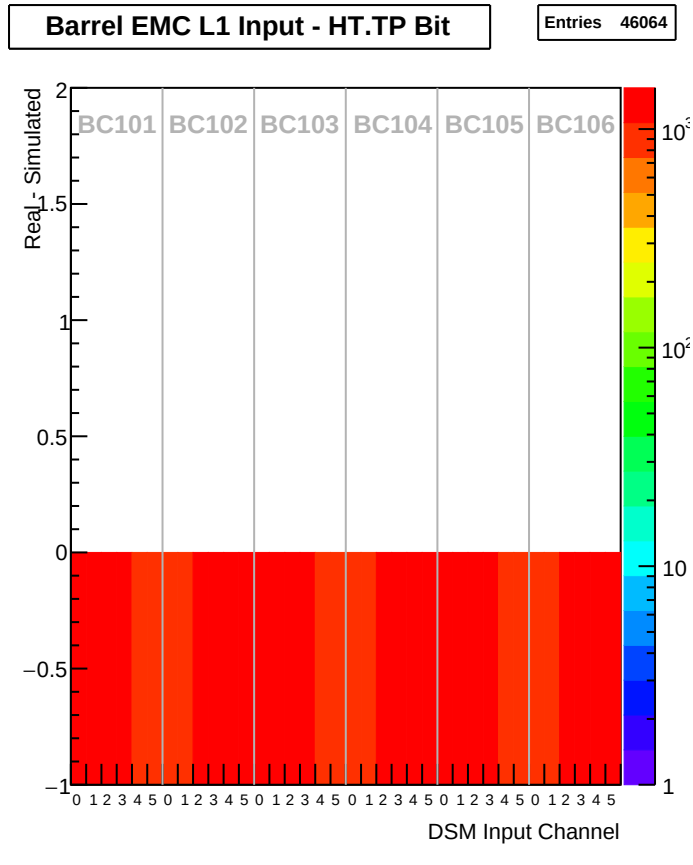

Endcap EMC L0 Input - High Tower
Entries 450360
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

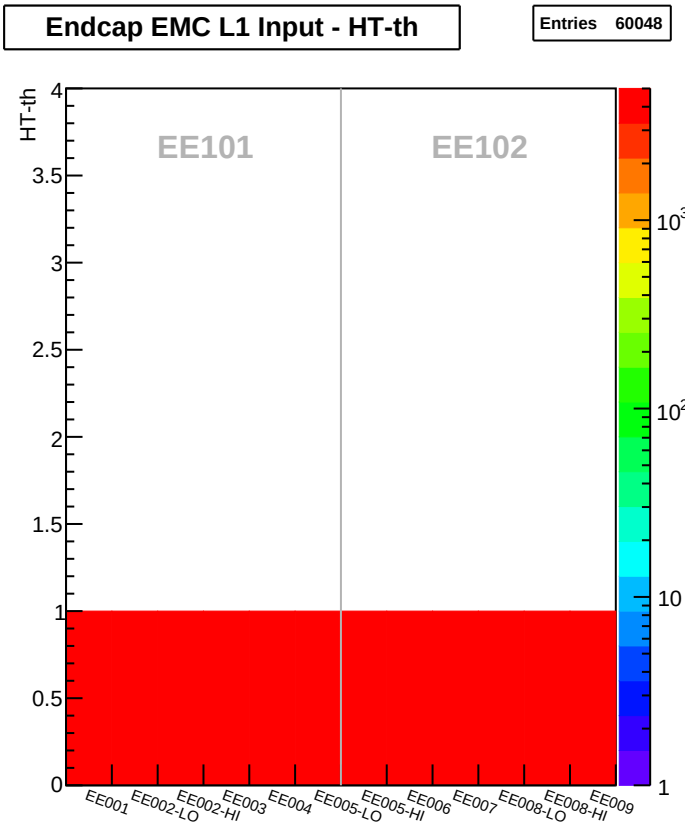

Endcap EMC L0 Input - Patch Sum
Entries 450360
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

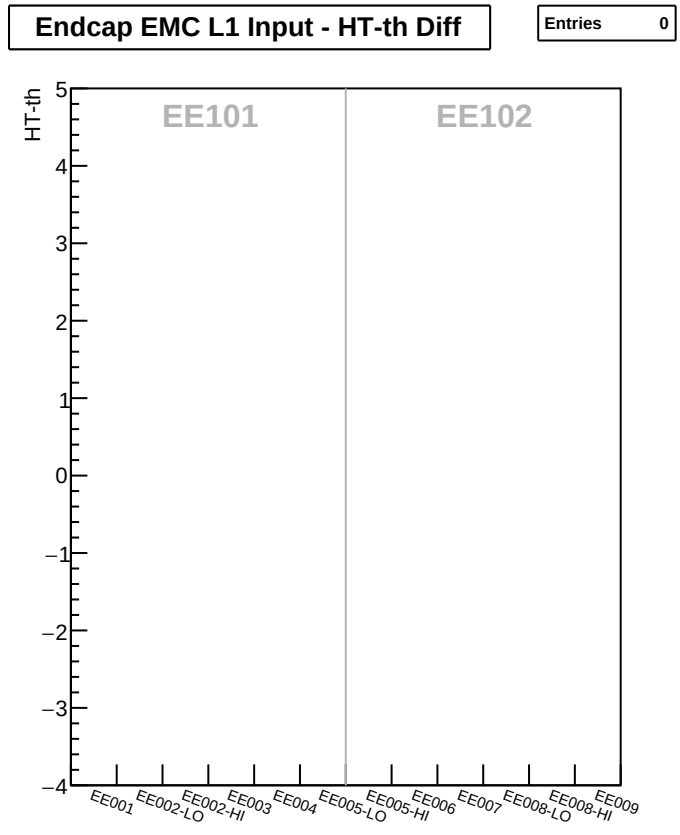

Barrel EMC L1 Input - HT Bits
Entries 180144
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

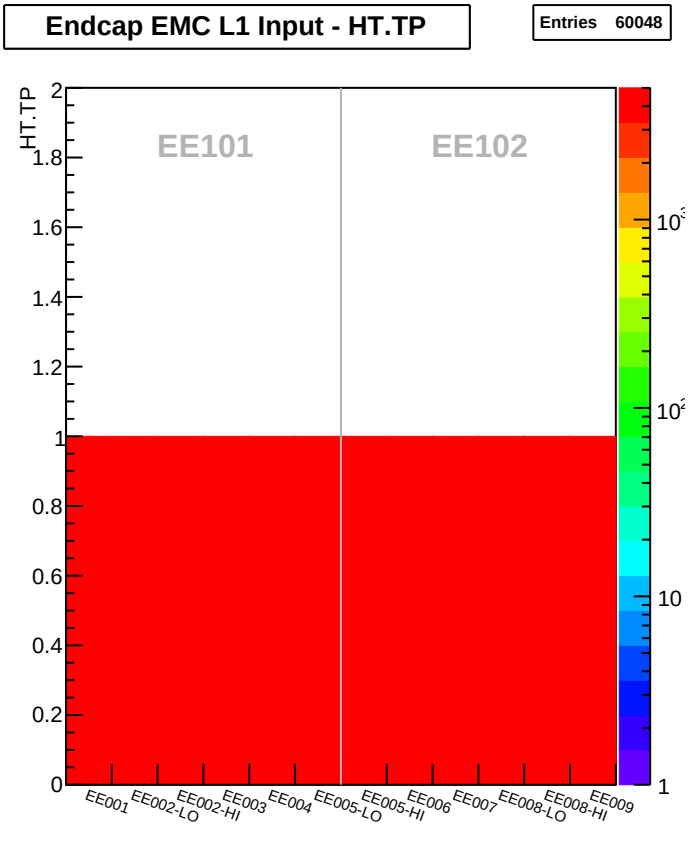

Barrel EMC L1 Input - HT Bits
Entries 2459
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

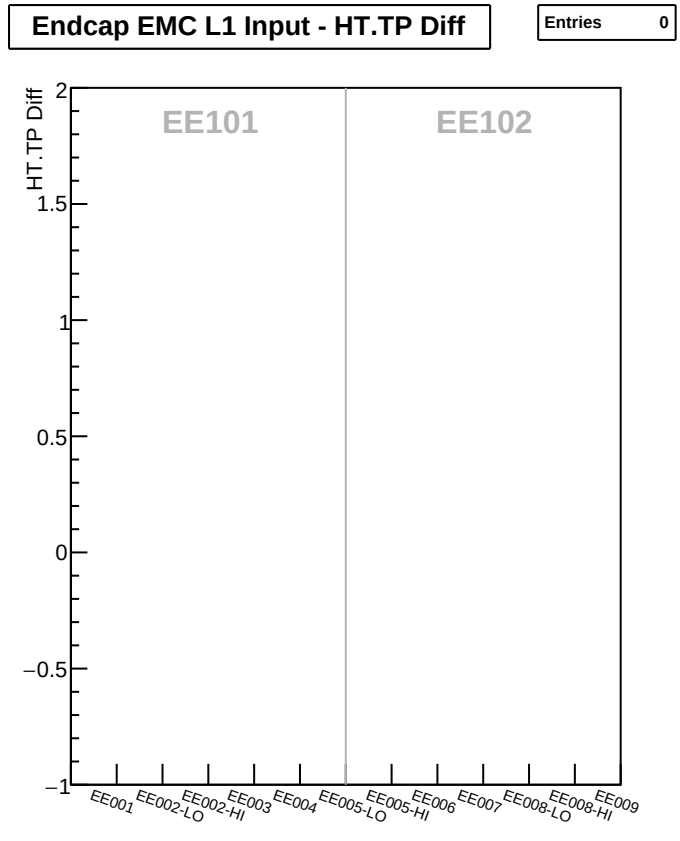

Barrel EMC L1 Input - HT.TP Bit
Entries 180144
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

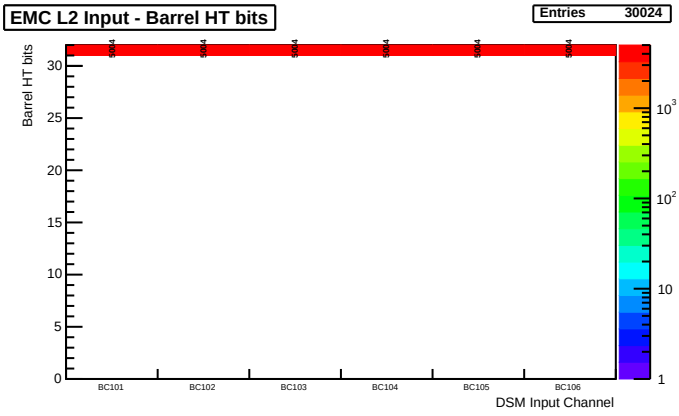

Barrel EMC L1 Input - HT.TP Bit
Entries 46064
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

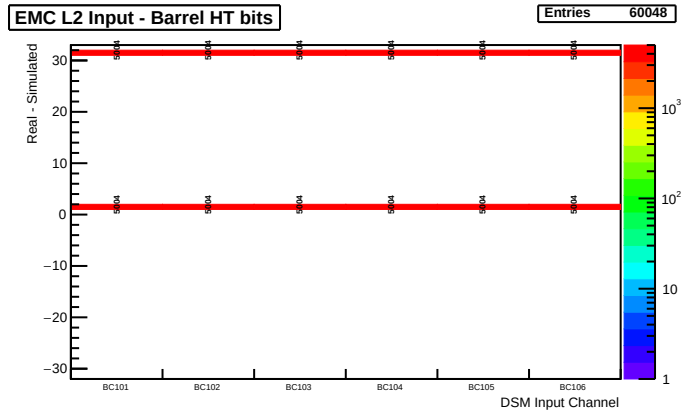

Endcap EMC L1 Input - HT-th
Entries 60048
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

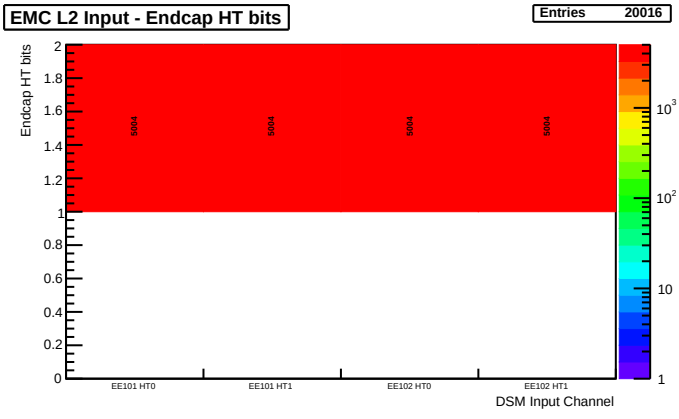

Endcap EMC L1 Input - HT-th Diff
Entries 0
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

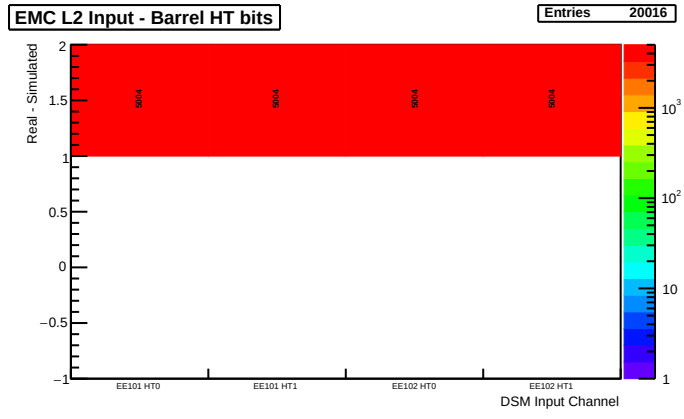

Endcap EMC L1 Input - HT.TP
Entries 60048
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

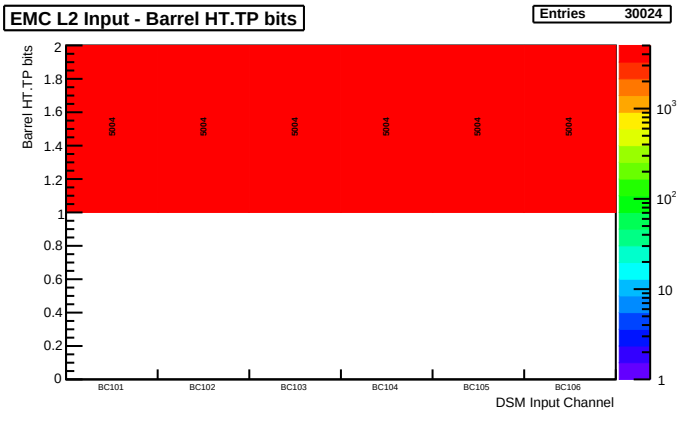

Endcap EMC L1 Input - HT.TP Diff
Entries 0
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

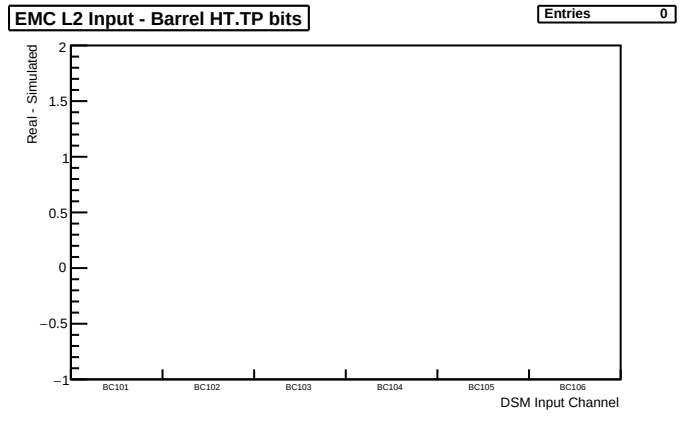

EMC L2 Input - Barrel HT bits
Entries 30024
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
5004

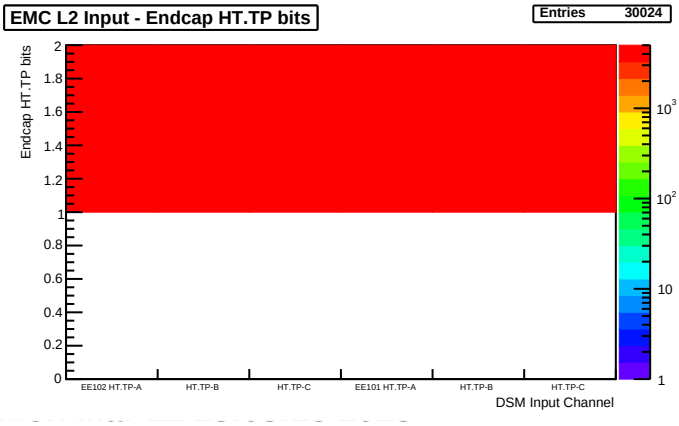

EMC L2 Input - Barrel HT bits
Entries 60048
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
5004

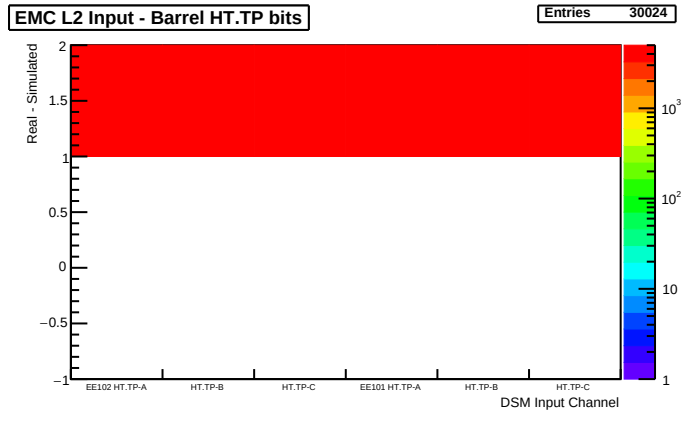

EMC L2 Input - Endcap HT bits
Entries 20016
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1
5004

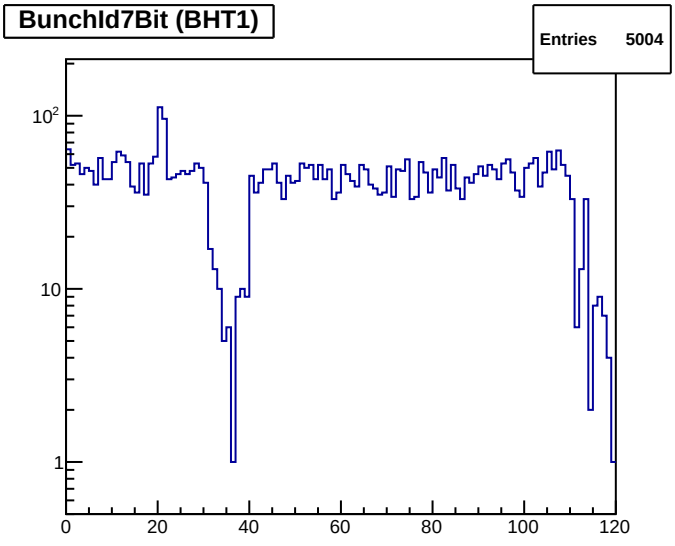

EMC L2 Input - Barrel HT bits
Entries 20016
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1
5004

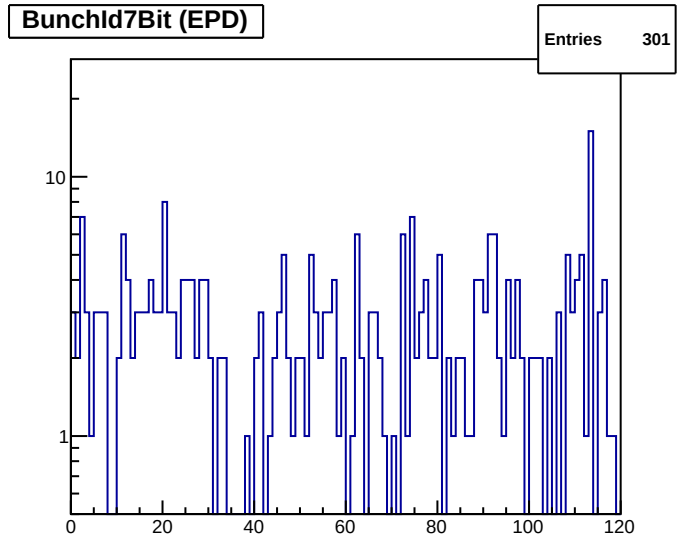

EMC L2 Input - Barrel HT.TP bits
Entries 30024
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
5004

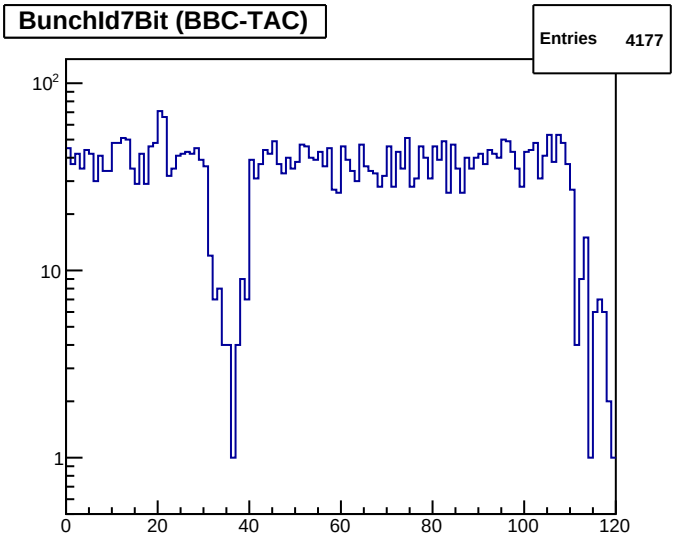

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

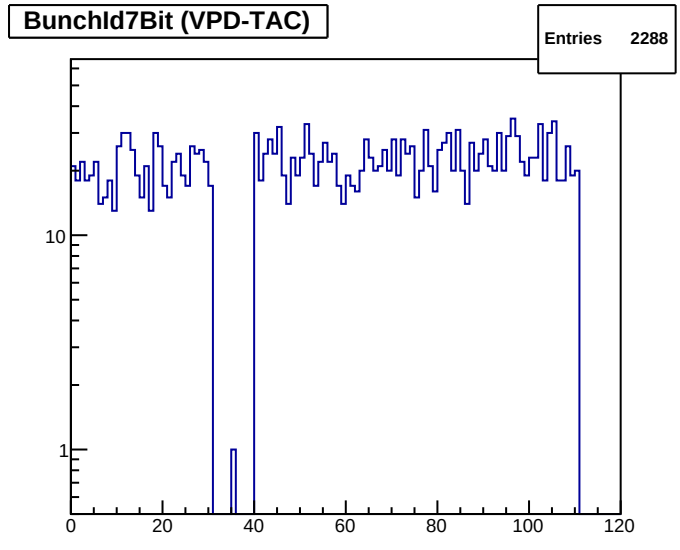

EMC L2 Input - Endcap HT.TP bits
Entries 30024
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C
5004

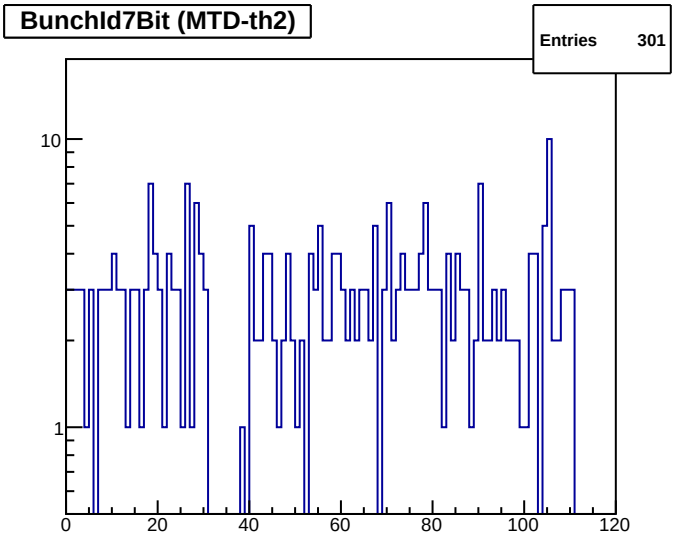

EMC L2 Input - Barrel HT.TP bits
Entries 30024
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

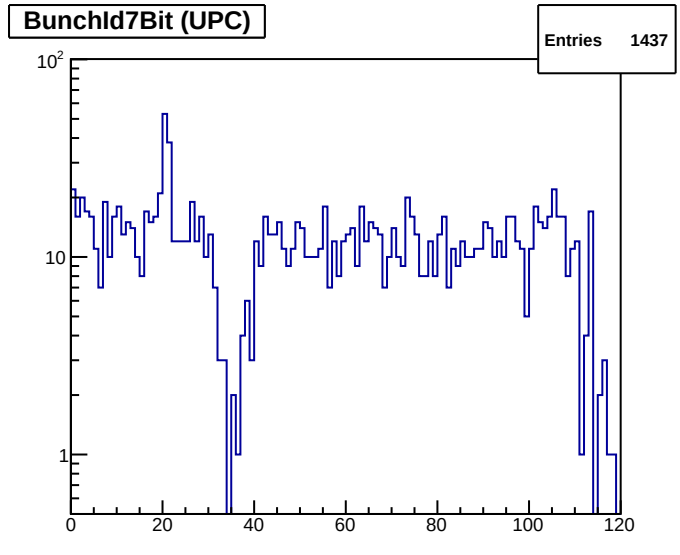

BunchId7Bit (BHT1)
Entries 5004
10^2
10
1
0
20
40
60
80
100
120

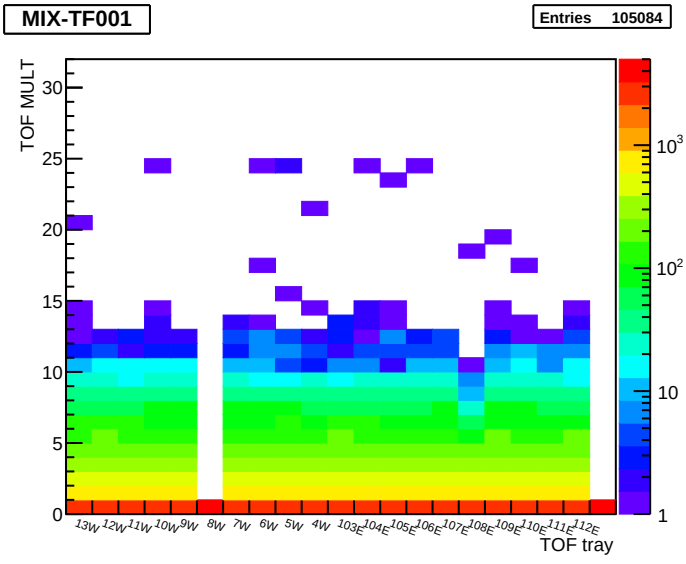

BunchId7Bit (EPD)
Entries 301
10
1
0
20
40
60
80
100
120

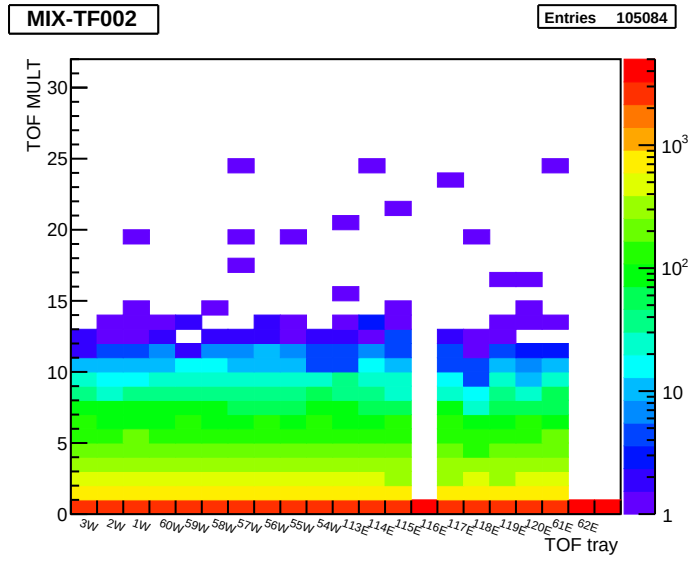

BunchId7Bit (BBC-TAC)
Entries 4177
10^2
10
1
0
20
40
60
80
100
120

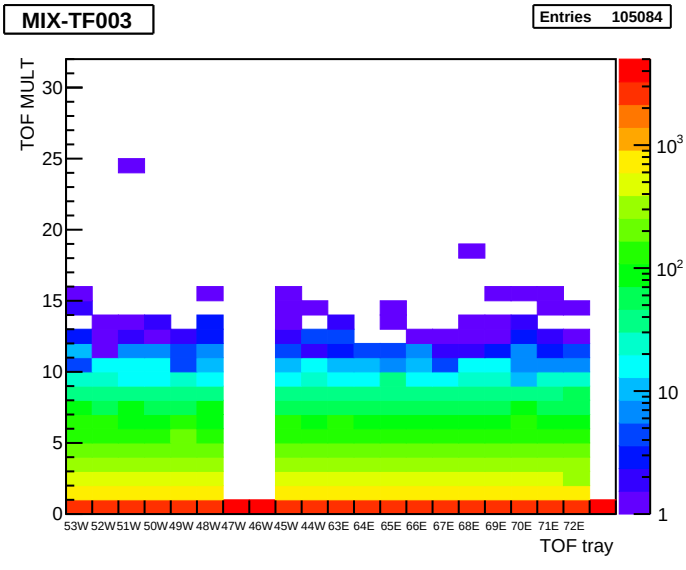

BunchId7Bit (VPD-TAC)
Entries 2288
10
1
0
20
40
60
80
100
120

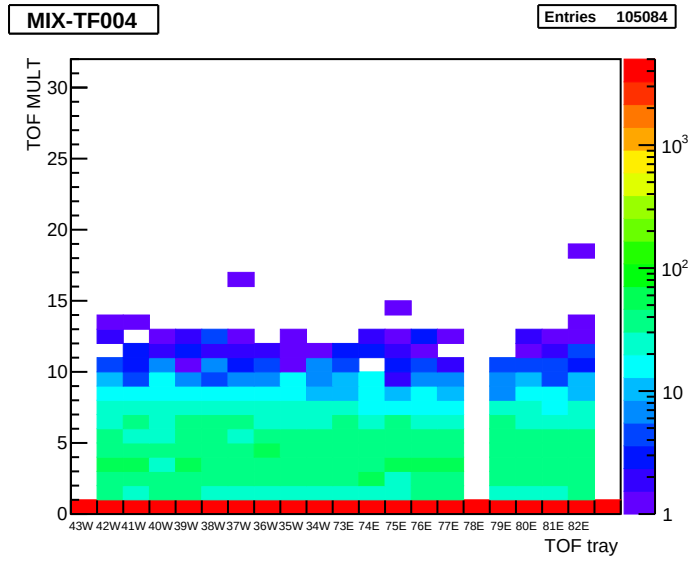

BunchId7Bit (MTD-th2)
Entries 301
10
1
0
20
40
60
80
100
120

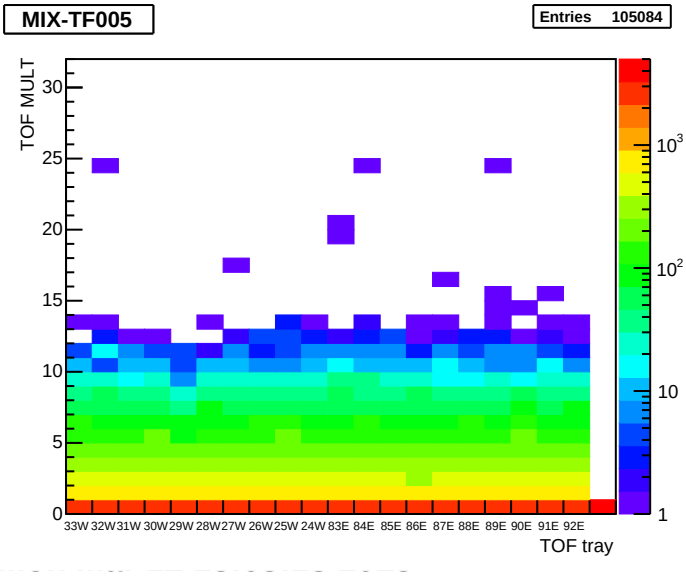

BunchId7Bit (UPC)
Entries 1437
10^2
10
1
0
20
40
60
80
100
120

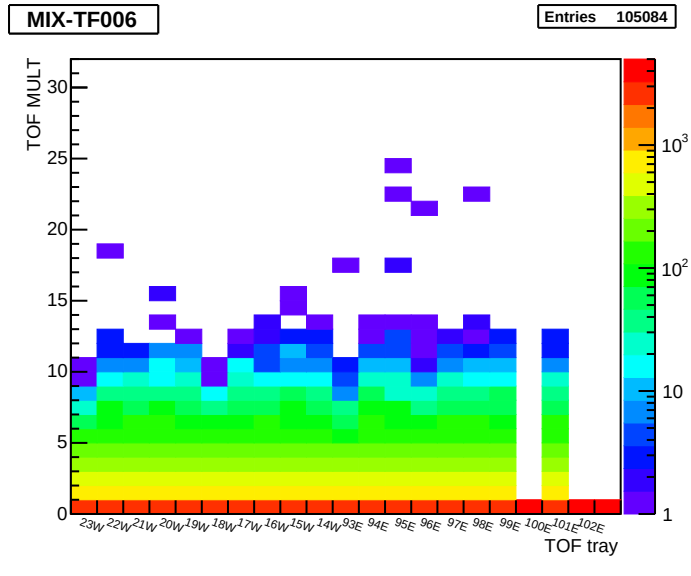

MIX-TF001
Entries 105084
TOF MULT
TOF tray

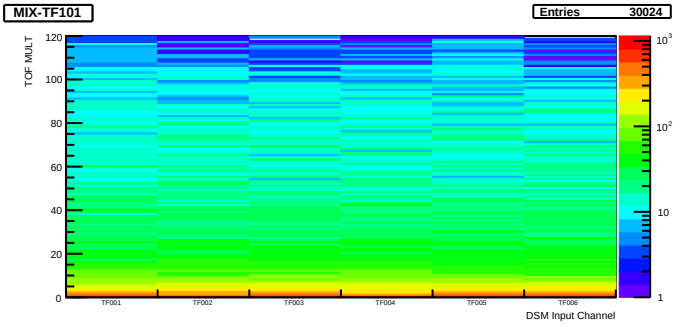

MIX-TF002
Entries 105084
TOF MULT
TOF tray

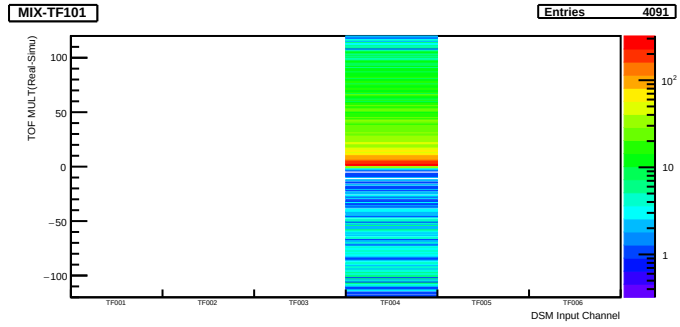

MIX-TF003
Entries 105084
TOF MULT
TOF tray

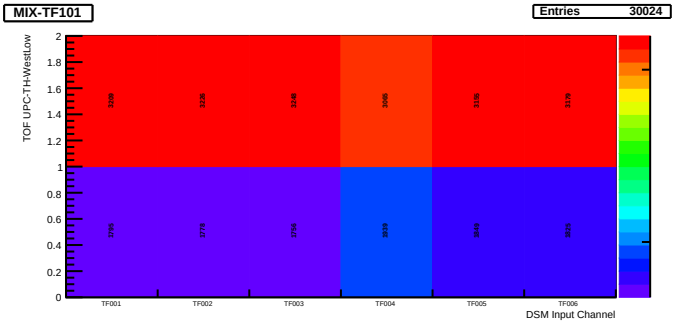

MIX-TF004
Entries 105084
TOF MULT
TOF tray

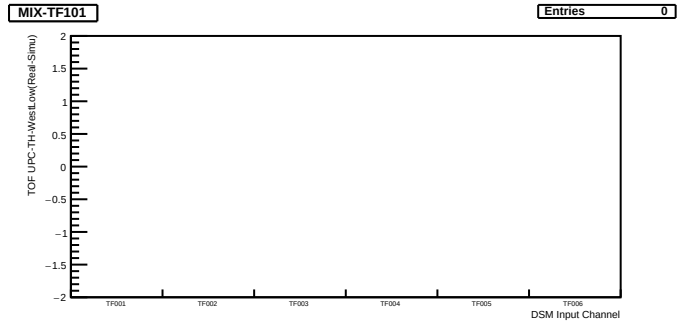

MIX-TF005
Entries 105084
TOF MULT
TOF tray

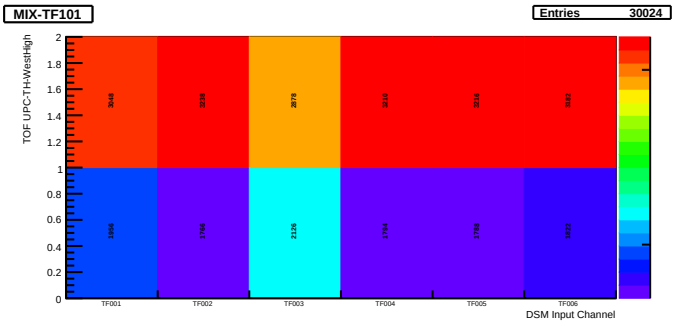

MIX-TF006
Entries 105084
TOF MULT
TOF tray

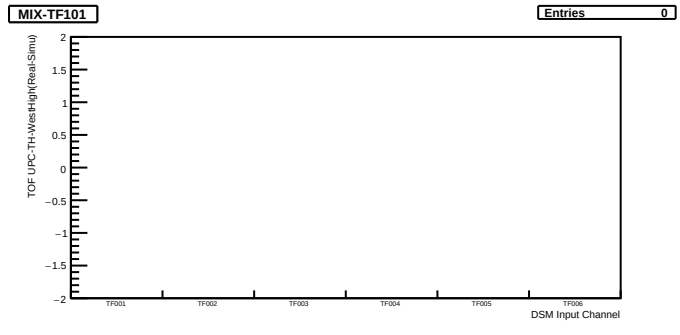

MIX-TF101
Entries 30024
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

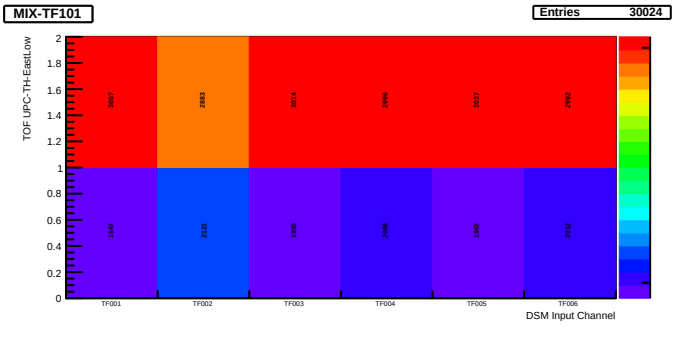

MIX-TF101
Entries 4091
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

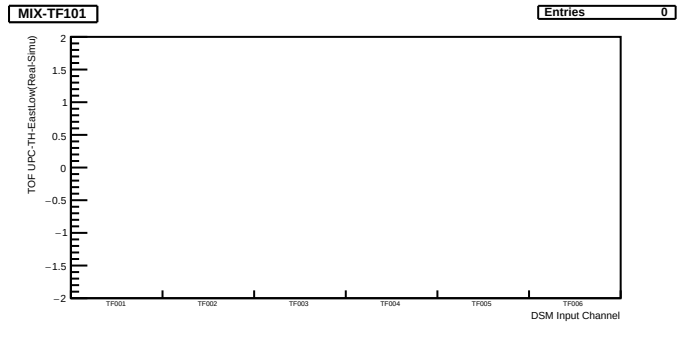

MIX-TF101
Entries 30024
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

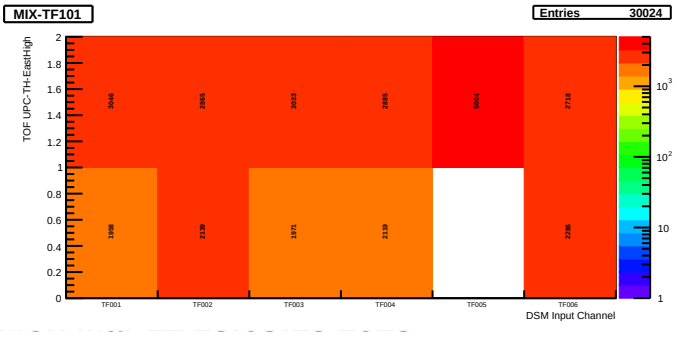

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

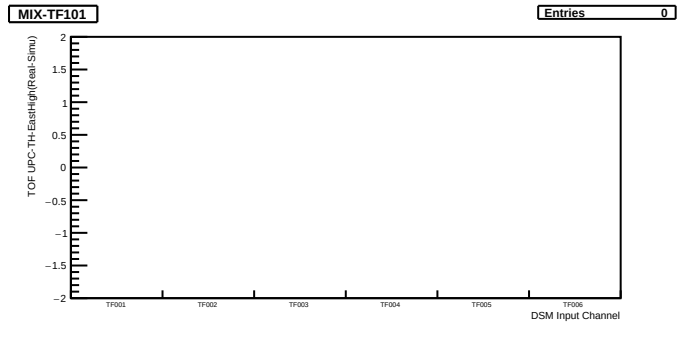

MIX-TF101
Entries 30024
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

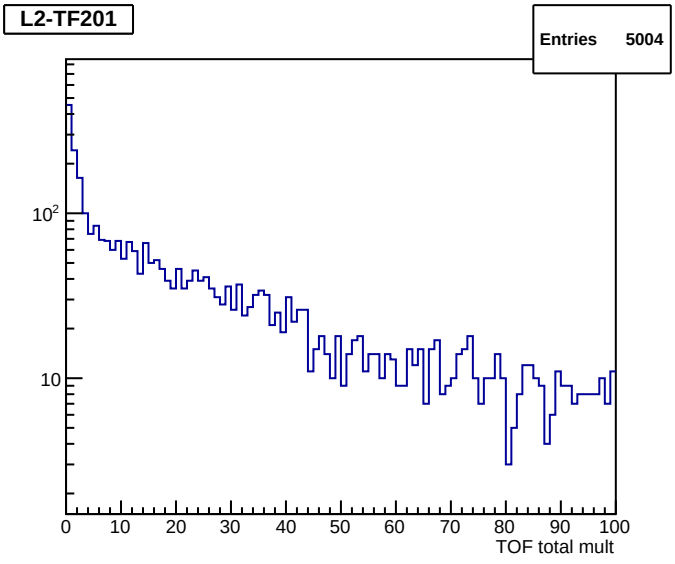

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

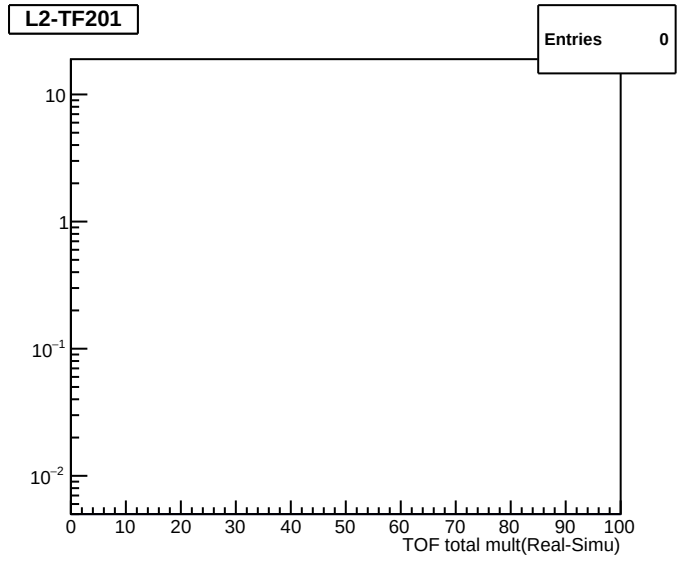

MIX-TF101
Entries 30024
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

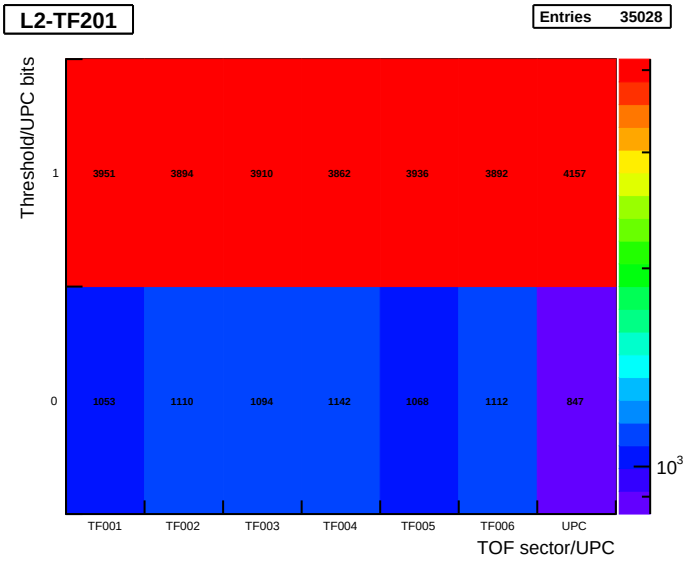

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

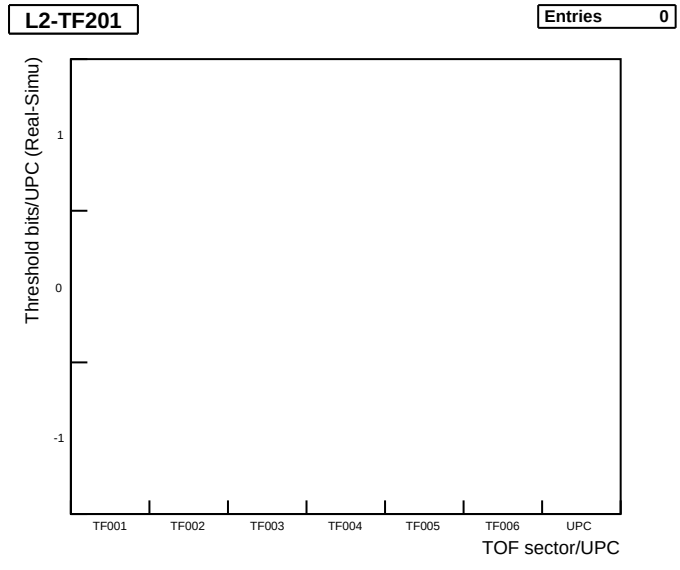

MIX-TF101
Entries 30024
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

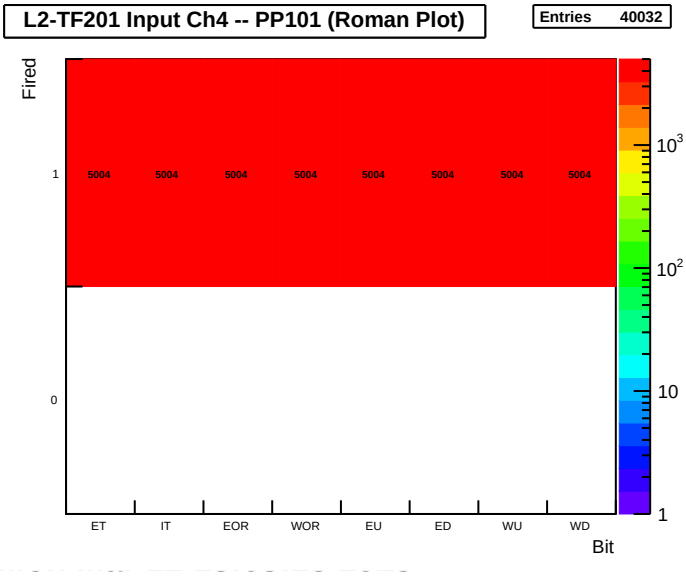

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

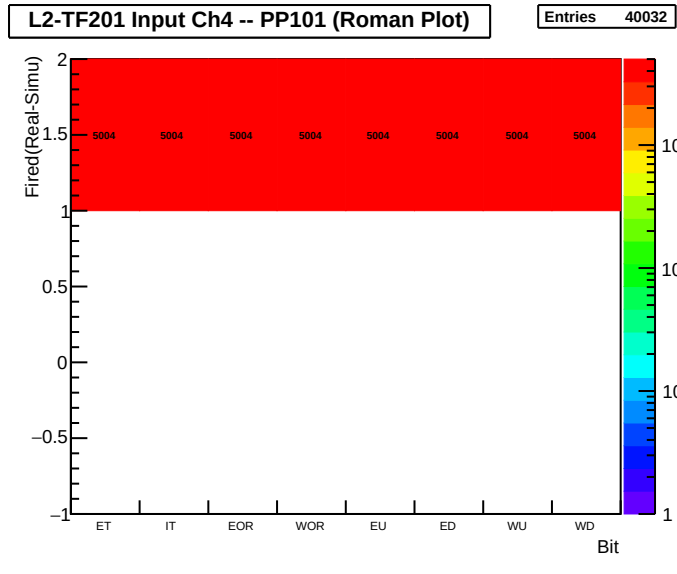

L2-TF201
Entries 5004
TOF total mult

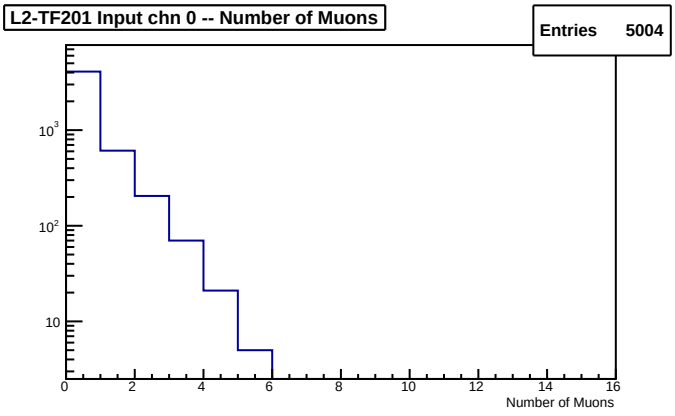

L2-TF201
Entries 0
TOF total mult(Real-Simu)

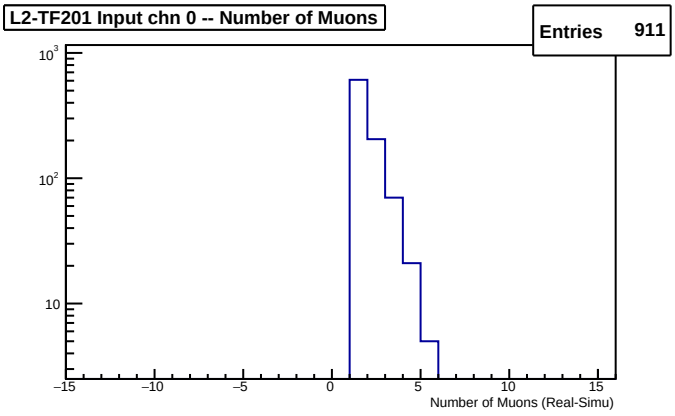

L2-TF201
Entries 35028
Threshold/UPC bits
3951 3894 3910 3862 3936 3892 4157
1053 1110 1094 1142 1068 1112 847
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

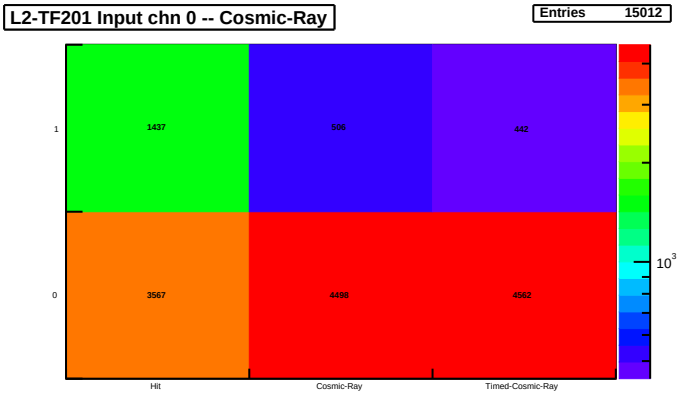

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

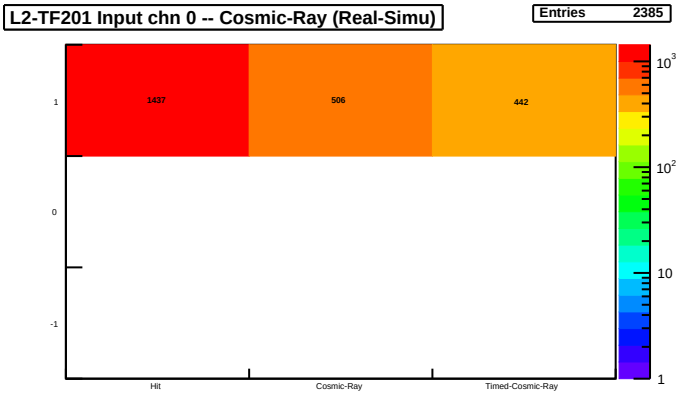

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 40032
Fired
5004 5004 5004 5004 5004 5004 5004 5004
ET IT EOR WOR EU ED WU WD
Bit

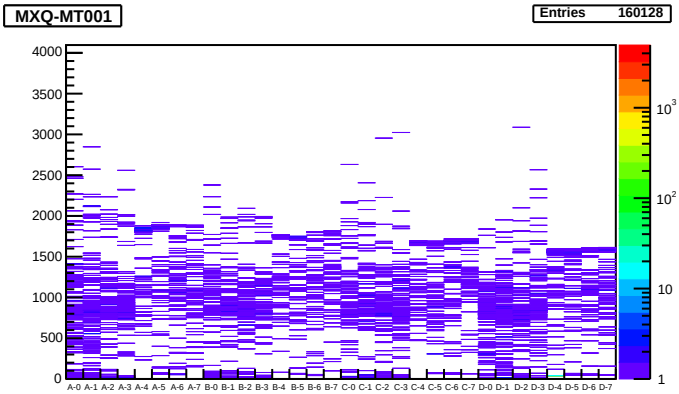

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 40032
Fired(Real-Simu)
5004 5004 5004 5004 5004 5004 5004 5004
ET IT EOR WOR EU ED WU WD
Bit

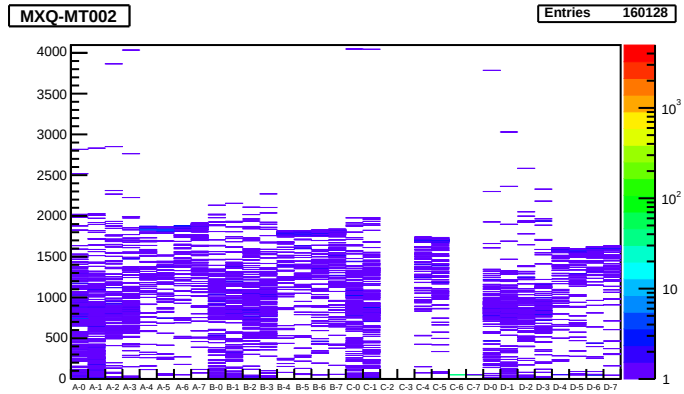

L2-TF201 Input chn 0 -- Number of Muons
Entries 5004
Number of Muons

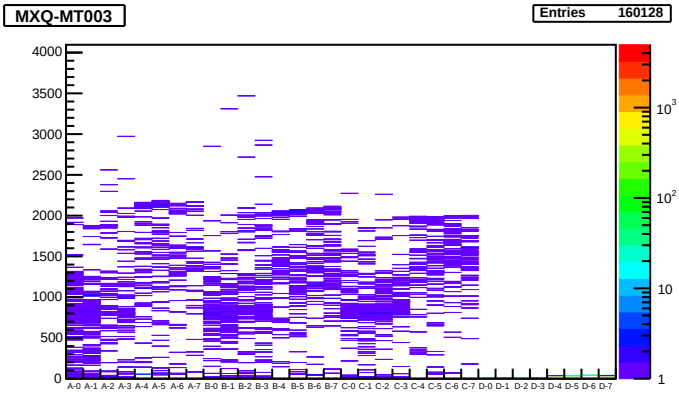

L2-TF201 Input chn 0 -- Number of Muons
Entries 911
Number of Muons (Real-Simu)

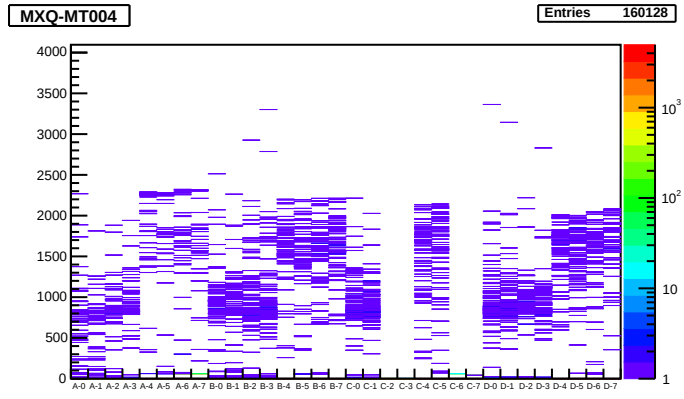

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 15012
1437
506
442
3567
4498
4562
Hit
Cosmic-Ray
Timed-Cosmic-Ray

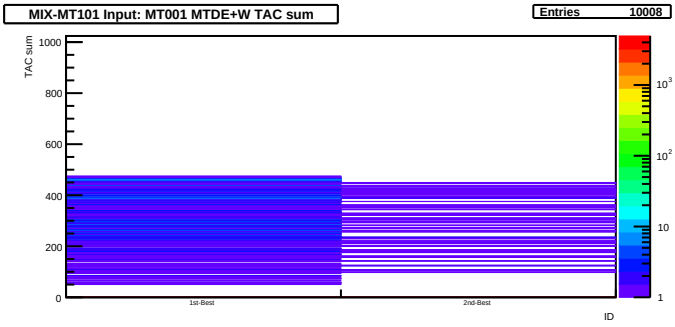

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 2385
1437
506
442
Hit
Cosmic-Ray
Timed-Cosmic-Ray

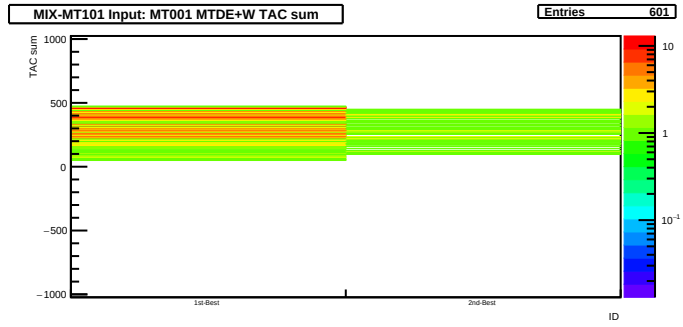

MXQ-MT001
Entries 160128
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^3
10^2
10
1

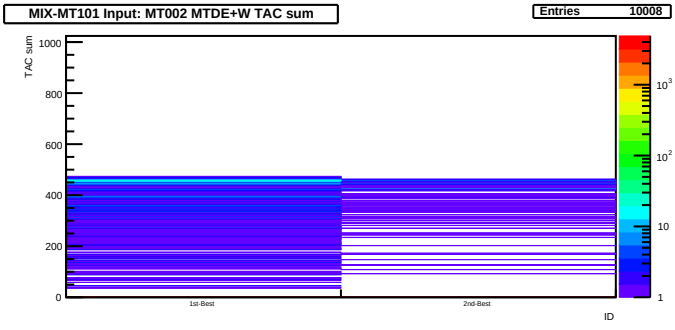

MXQ-MT002
Entries 160128
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^3
10^2
10
1

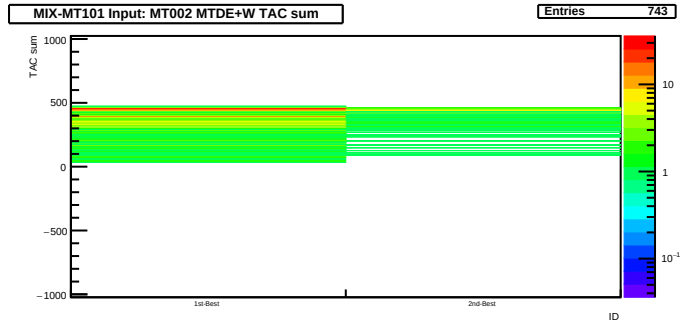

MXQ-MT003
Entries 160128
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^3
10^2
10
1

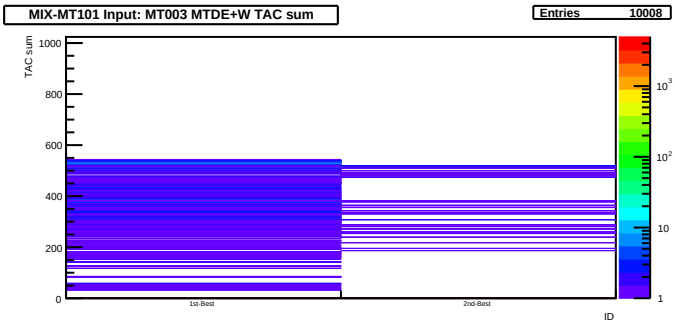

MXQ-MT004
Entries 160128
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^3
10^2
10
1

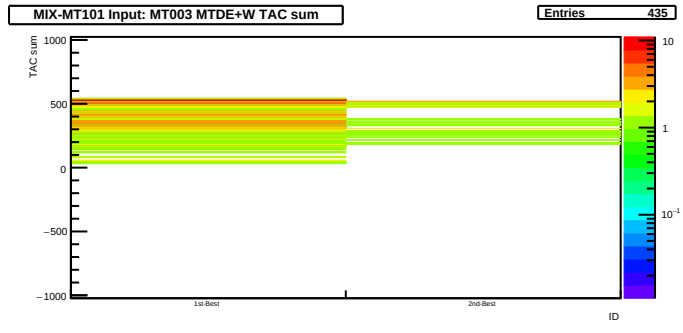

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 10008
TAC sum
1st-Best
2nd-Best
ID

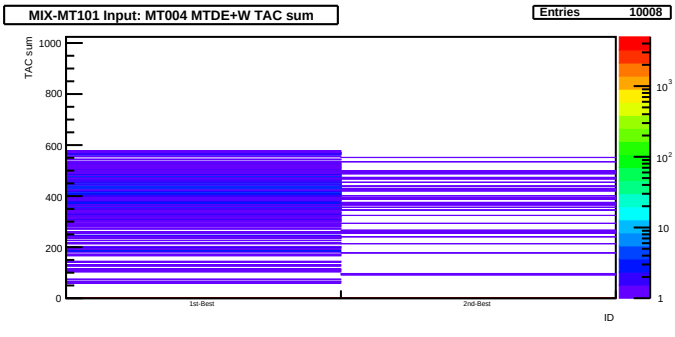

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 601
TAC sum
1st-Best
2nd-Best
ID

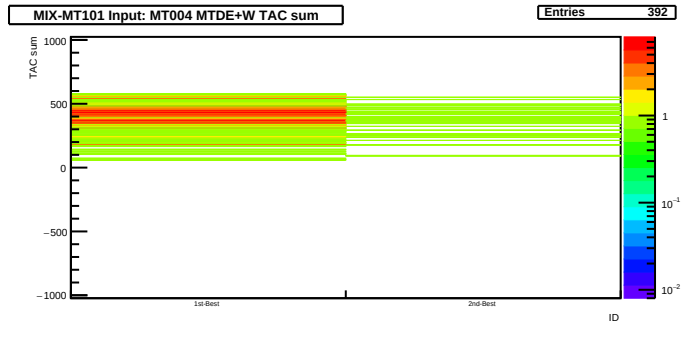

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 10008
TAC sum
1st-Best
2nd-Best
ID

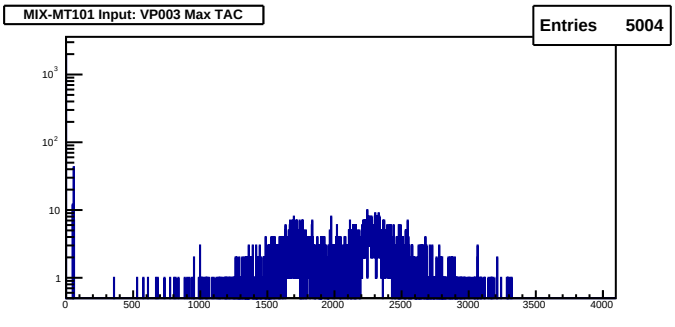

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 743
TAC sum
1st-Best
2nd-Best
ID

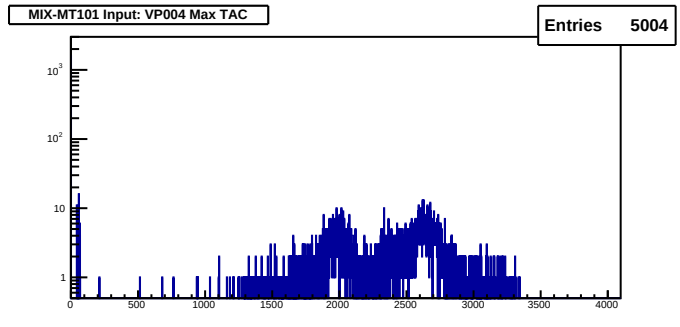

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 10008
TAC sum
1st-Best
2nd-Best
ID

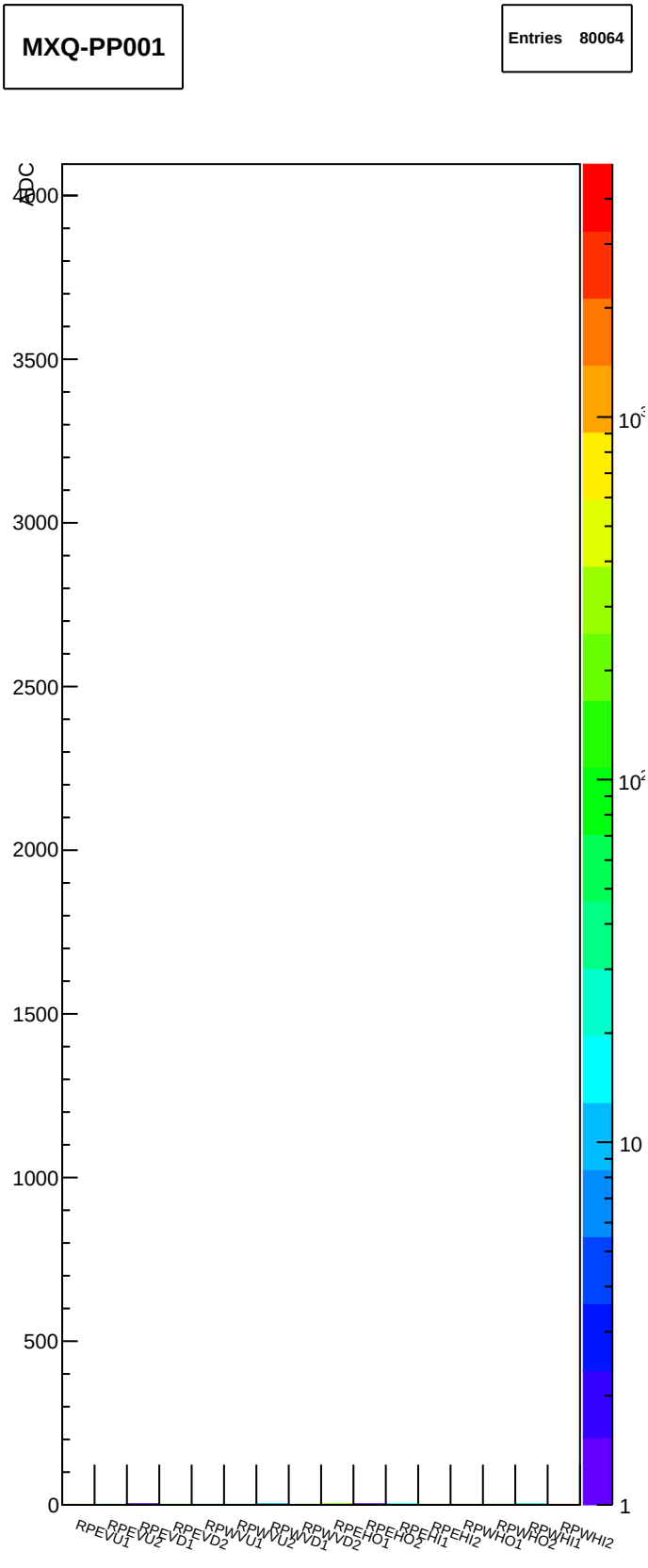

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 435
TAC sum
1st-Best
2nd-Best
ID

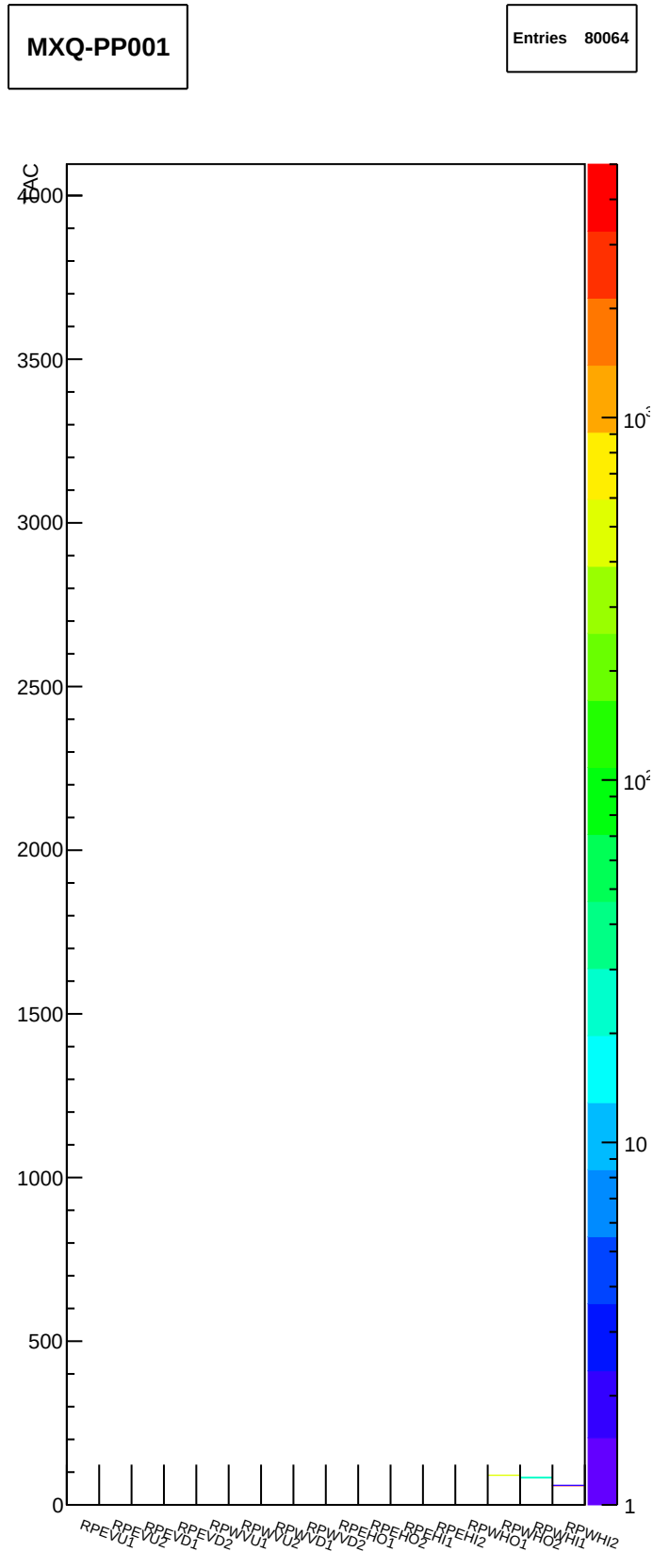

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 10008
TAC sum
1st-Best
2nd-Best
ID

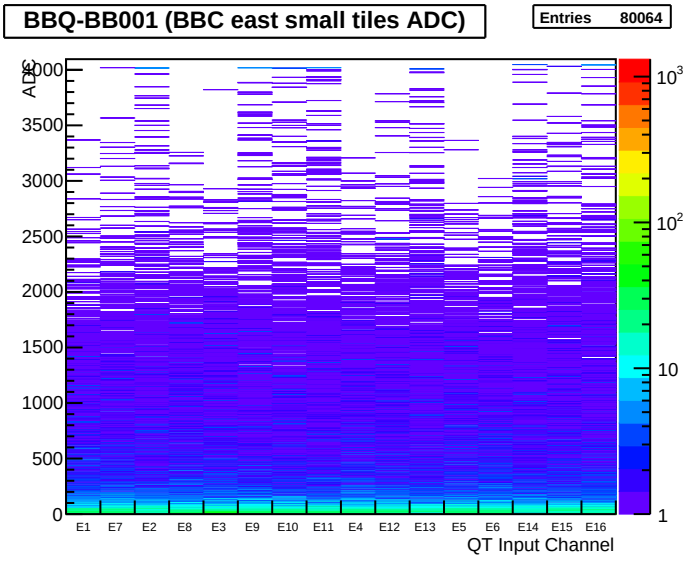

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 392
TAC sum
1st-Best
2nd-Best
ID

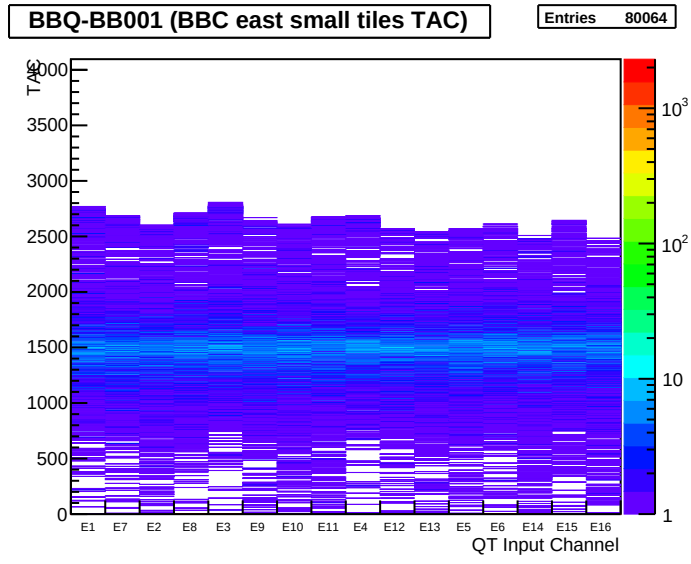

MIX-MT101 Input: VP003 Max TAC
Entries 5004

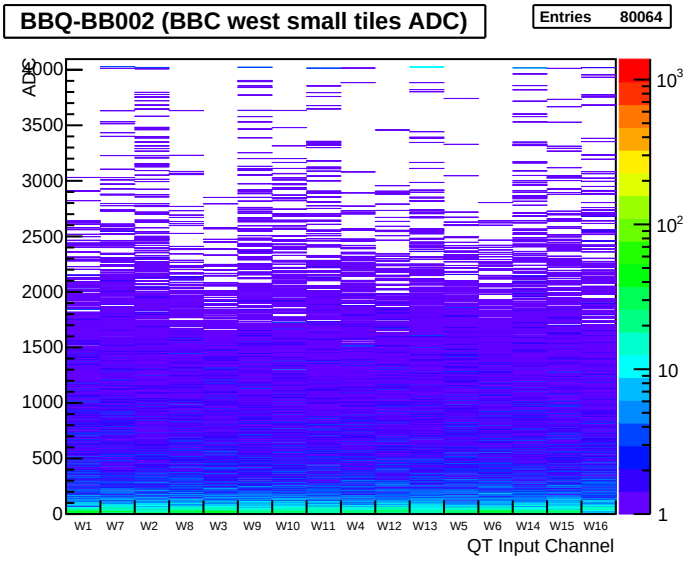

MIX-MT101 Input: VP004 Max TAC
Entries 5004

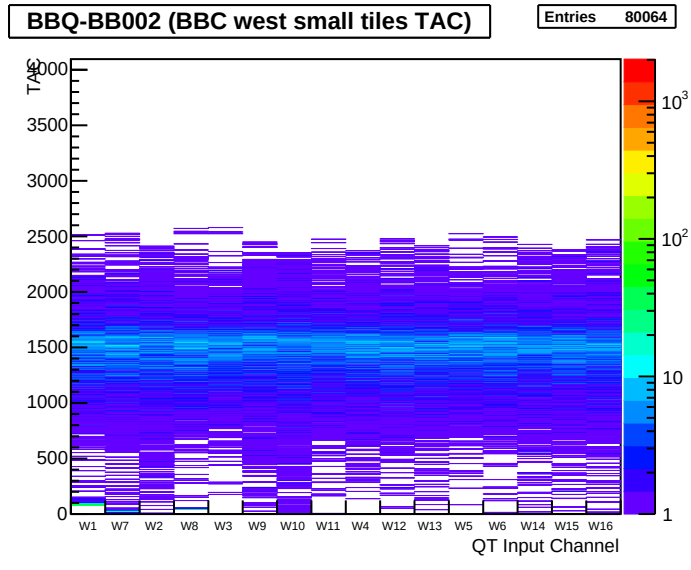

MXQ-PP001
Entries 80064
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

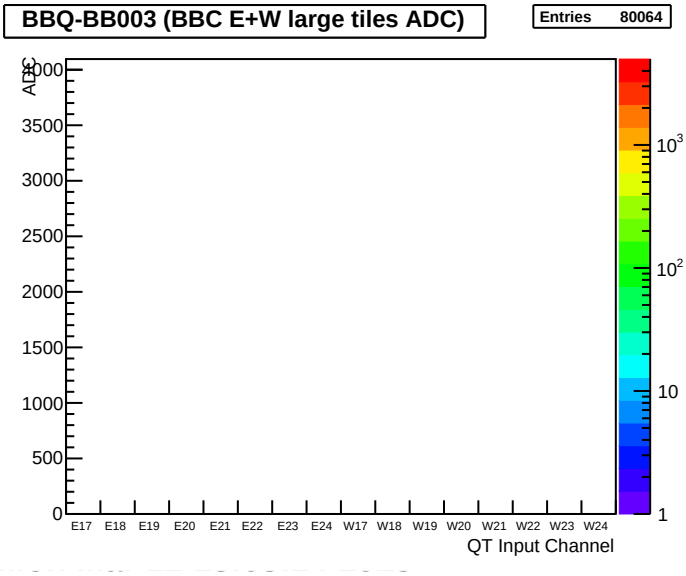

MXQ-PP001
Entries 80064
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

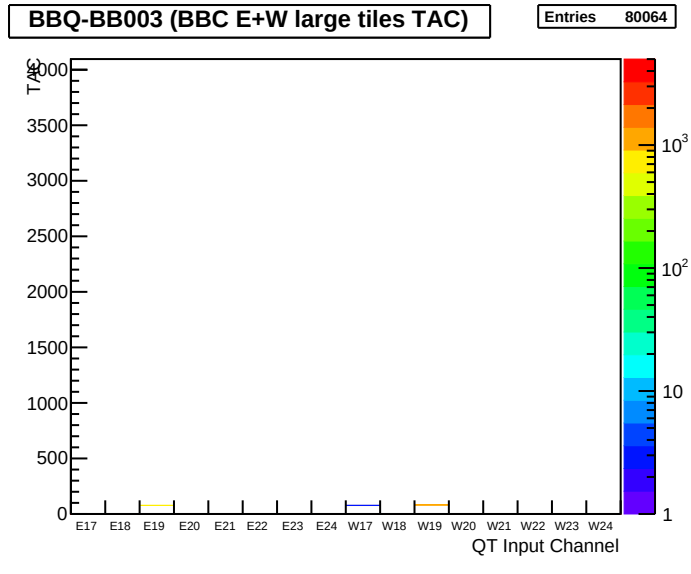

BBQ-BB001 (BBC east small tiles ADC)
Entries 80064
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

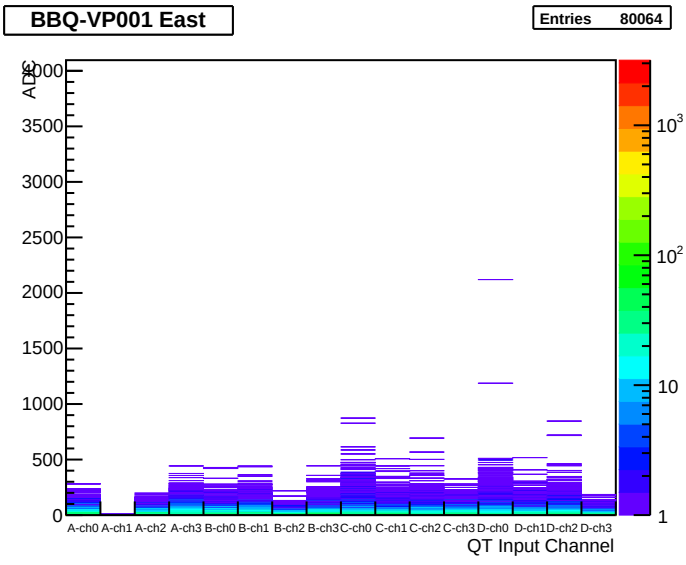

BBQ-BB001 (BBC east small tiles TAC)
Entries 80064
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

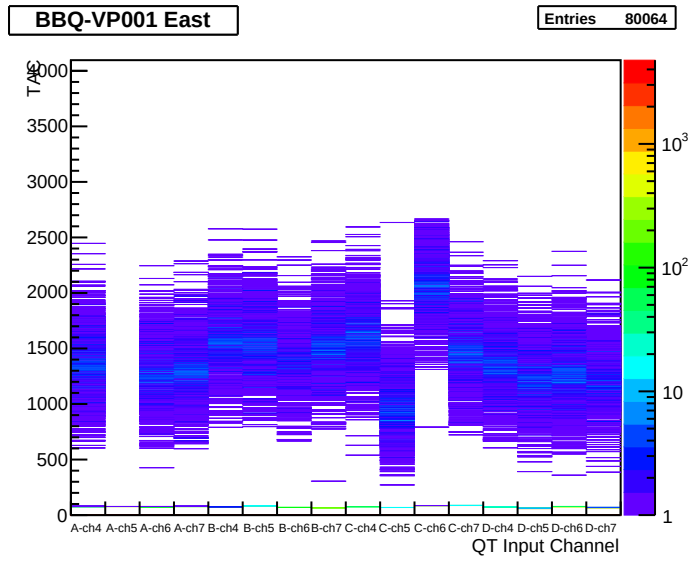

BBQ-BB002 (BBC west small tiles ADC)
Entries 80064
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

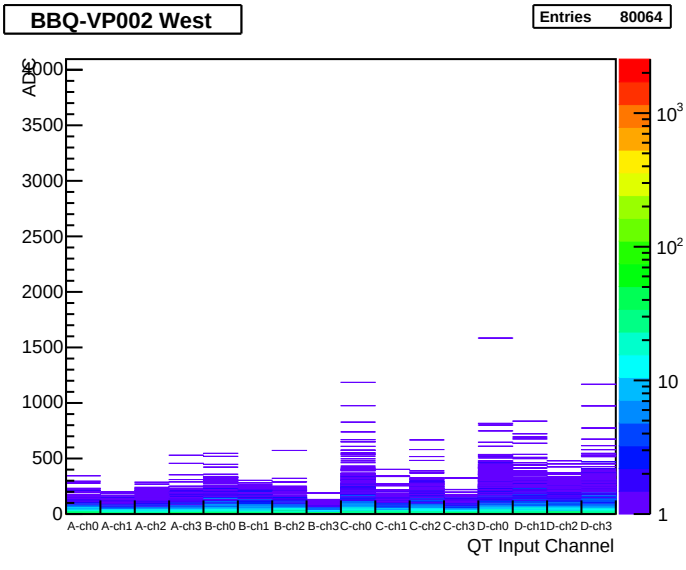

BBQ-BB002 (BBC west small tiles TAC)
Entries 80064
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

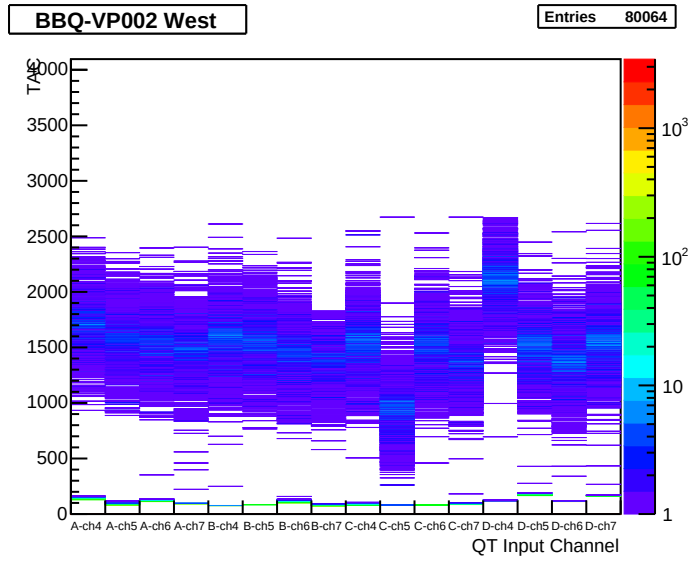

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 80064
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

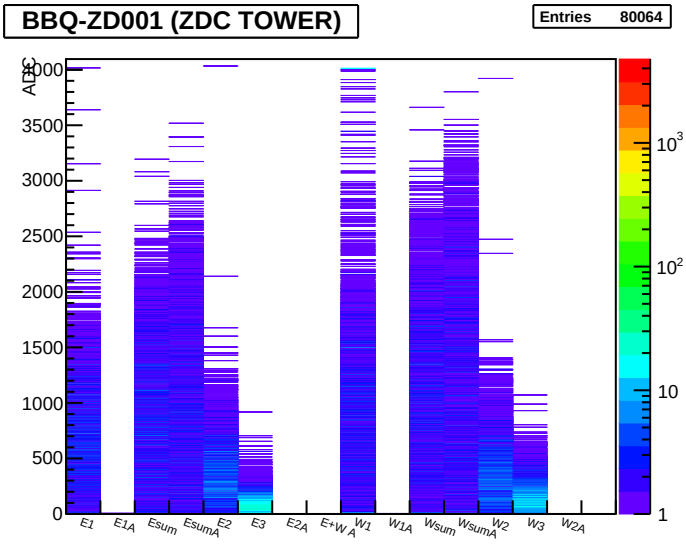

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 80064
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

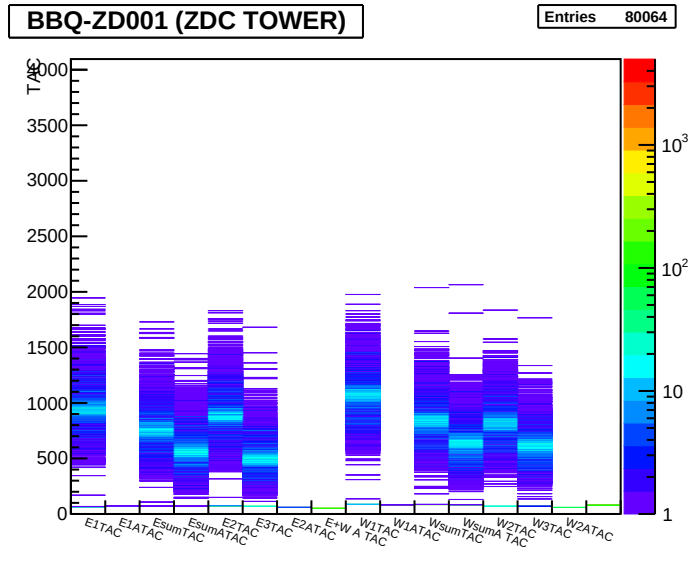

BBQ-VP001 East
Entries 80064
ADC
QT Input Channel

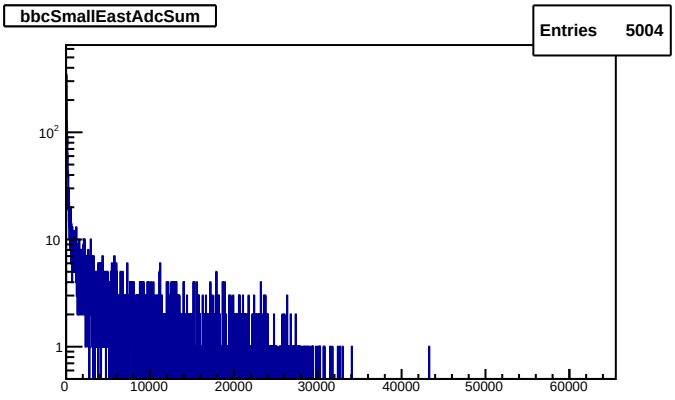

BBQ-VP001 East
Entries 80064
TAC
QT Input Channel

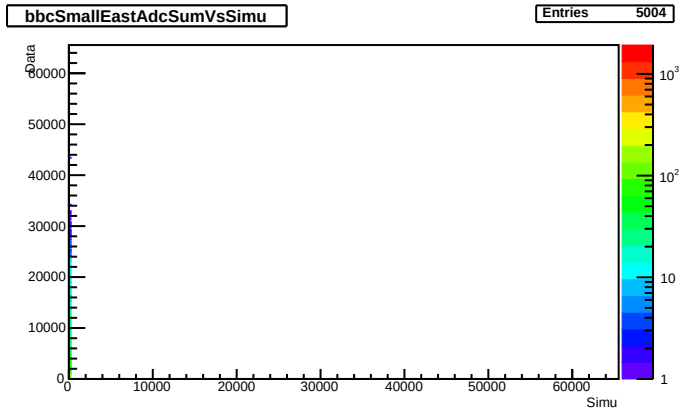

BBQ-VP002 West
Entries 80064
ADC
QT Input Channel

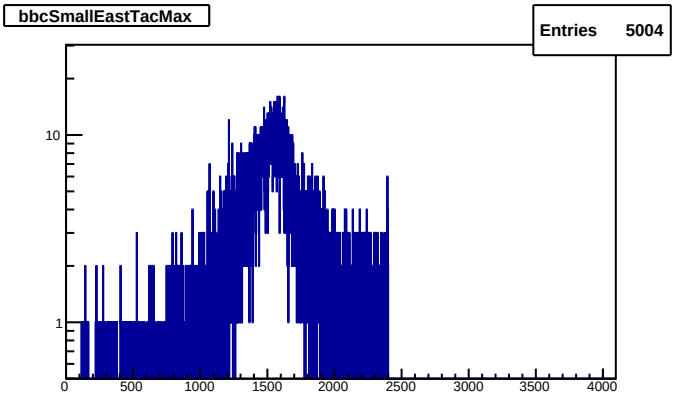

BBQ-VP002 West
Entries 80064
TAC
QT Input Channel

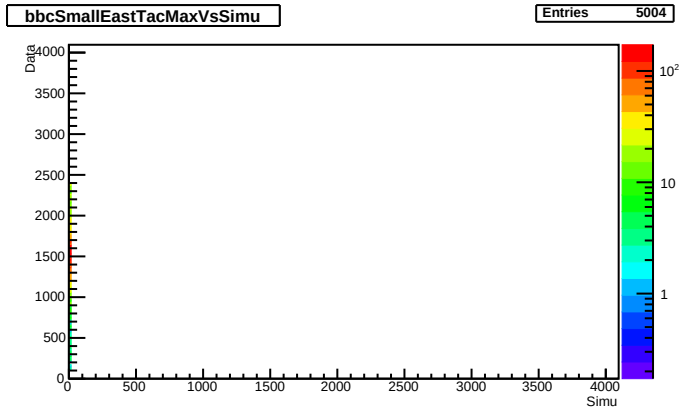

BBQ-ZD001 (ZDC TOWER)
Entries 80064
ADC

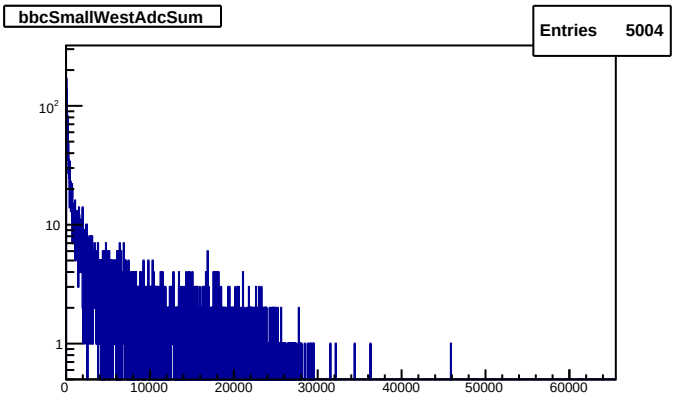

BBQ-ZD001 (ZDC TOWER)
Entries 80064
TAC

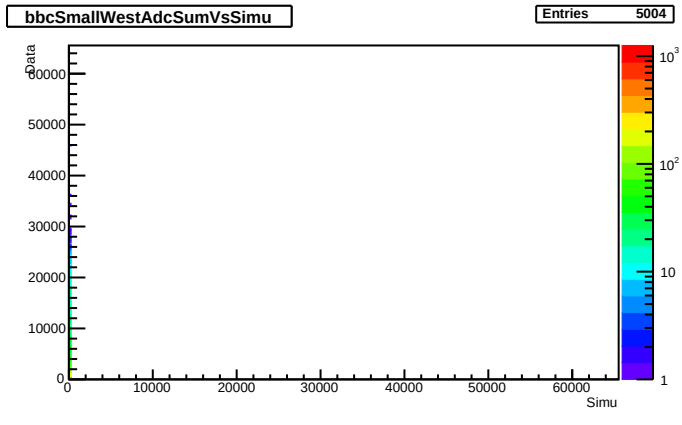

bbcSmallEastAdcSum
Entries 5004

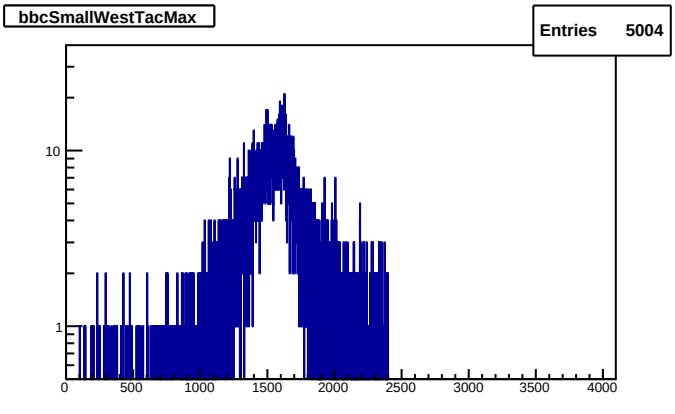

bbcSmallEastAdcSumVsSimu
Entries 5004
Data
Simu

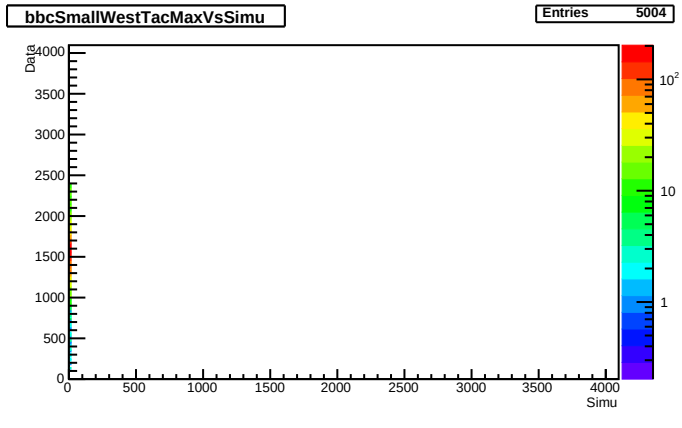

bbcSmallEastTacMax
Entries 5004

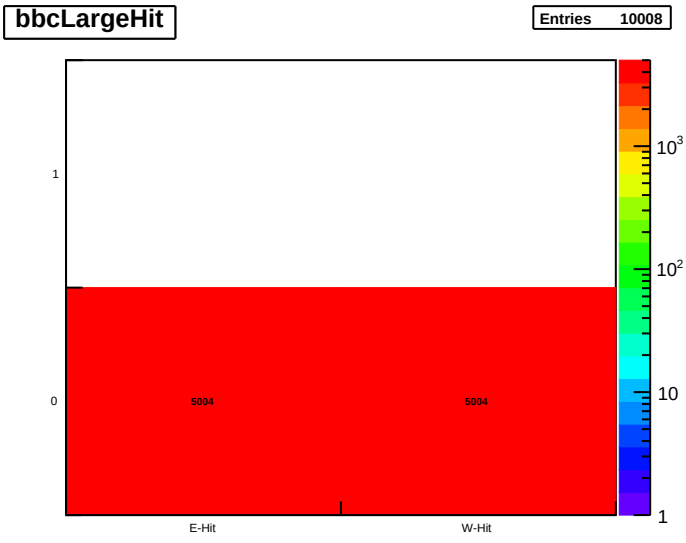

bbcSmallEastTacMaxVsSimu
Entries 5004
Data
Simu

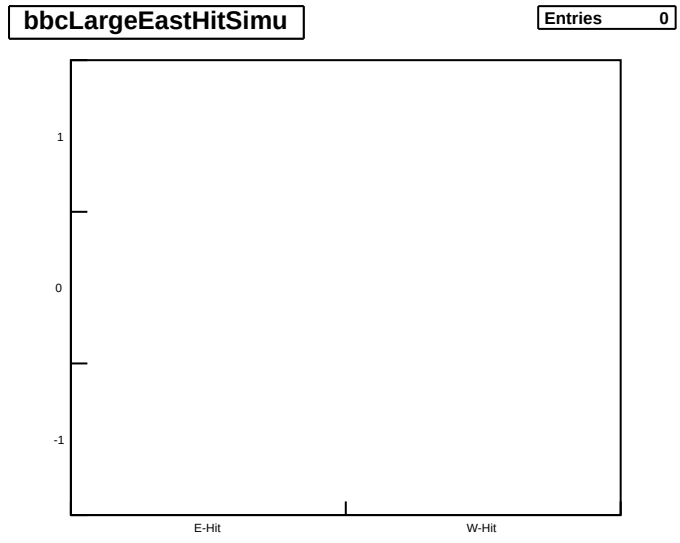

bbcSmallWestAdcSum
Entries 5004

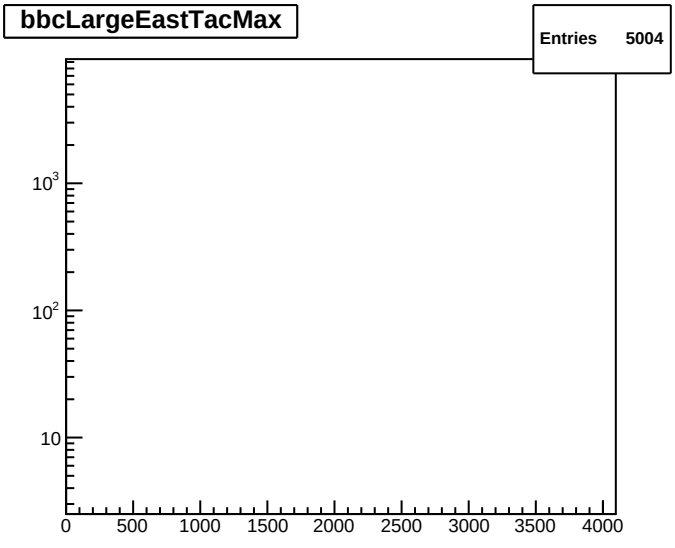

bbcSmallWestAdcSumVsSimu
Entries 5004
Data
Simu

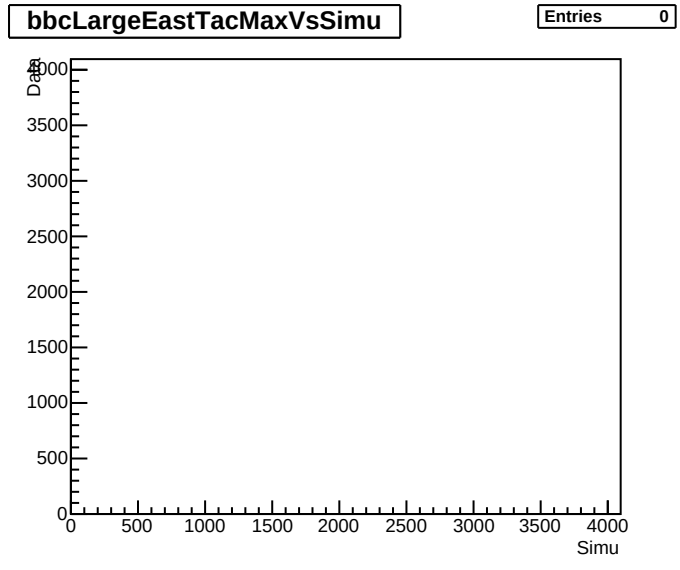

bbcSmallWestTacMax
Entries 5004

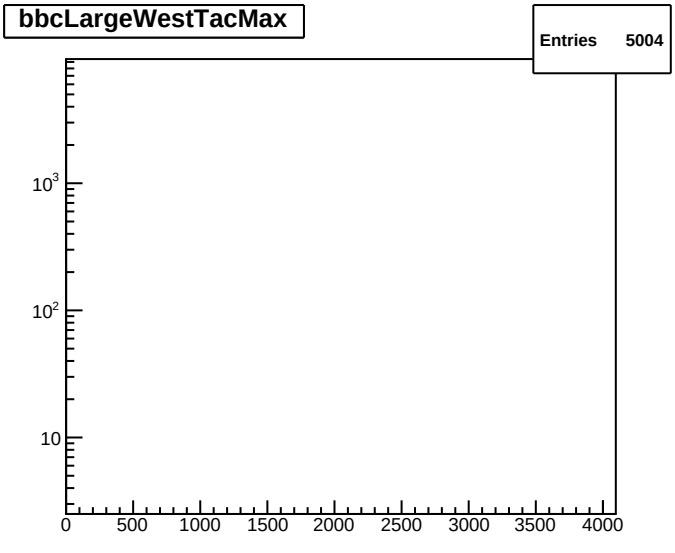

bbcSmallWestTacMaxVsSimu
Entries 5004
Data
Simu

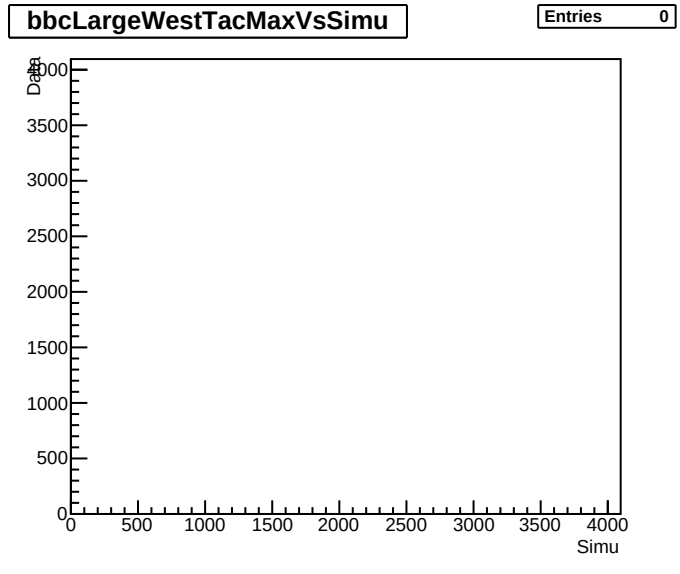

bbcLargeHit
Entries 10008
1
0
5004
5004
E-Hit
W-Hit
10^3
10^2
10
1

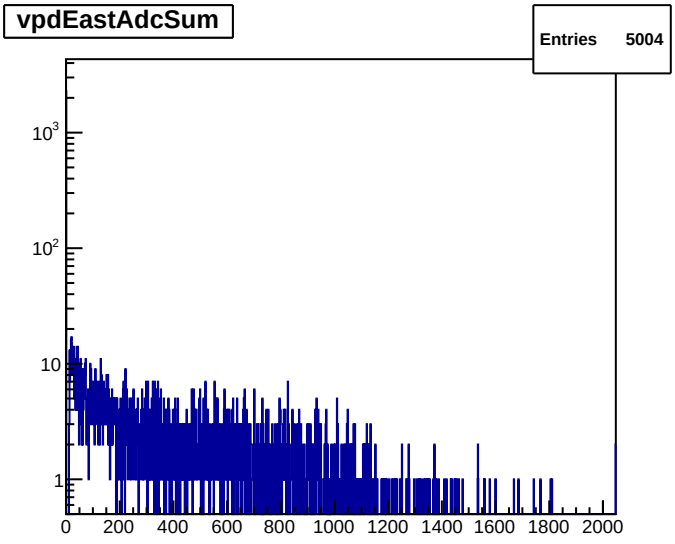

bbcLargeEastHitSimu
Entries 0
1
0
-1
E-Hit
W-Hit

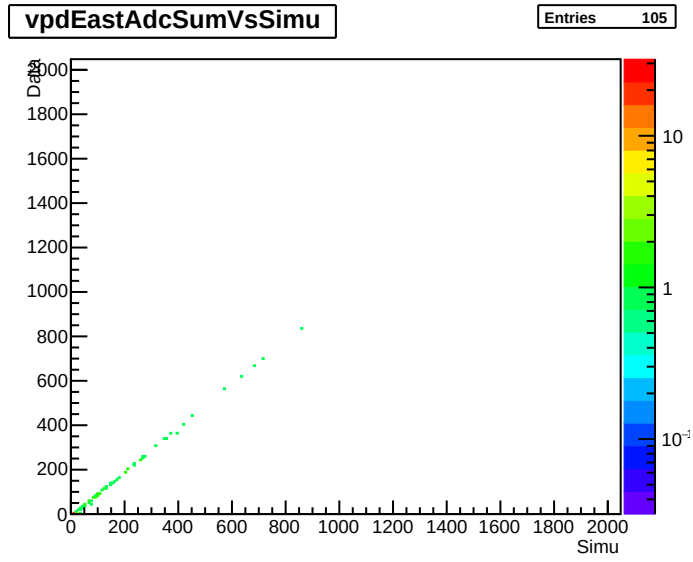

bbcLargeEastTacMax
Entries 5004
10^3
10^2
10
0
500
1000
1500
2000
2500
3000
3500
4000

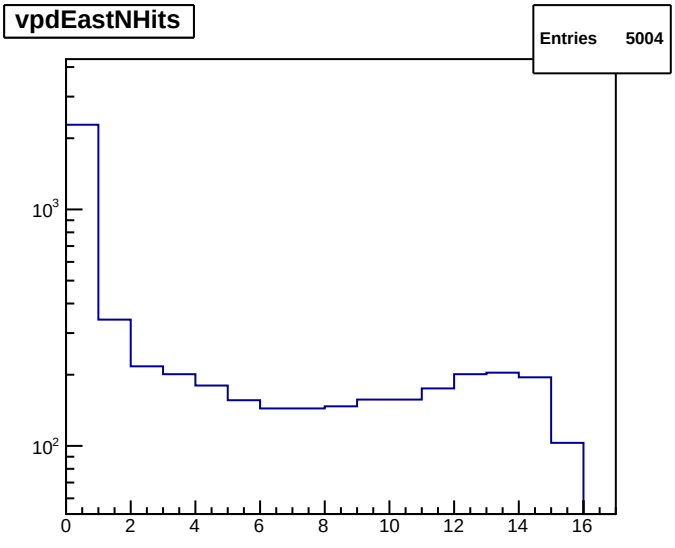

bbcLargeEastTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

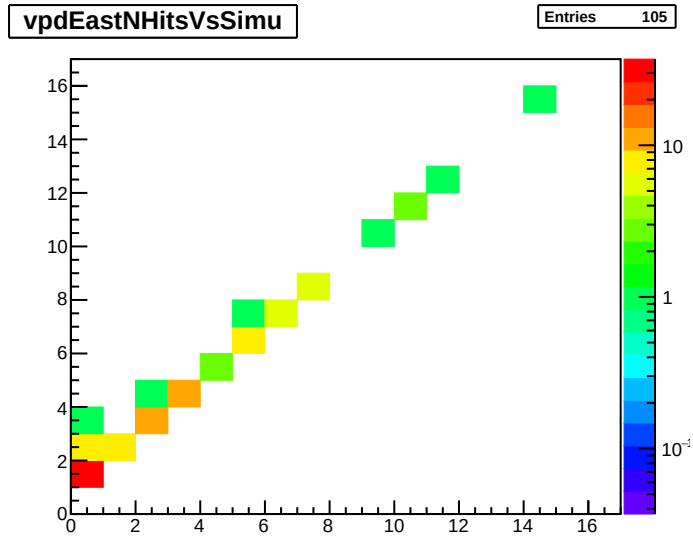

bbcLargeWestTacMax
Entries 5004
10^3
10^2
10
0
500
1000
1500
2000
2500
3000
3500
4000

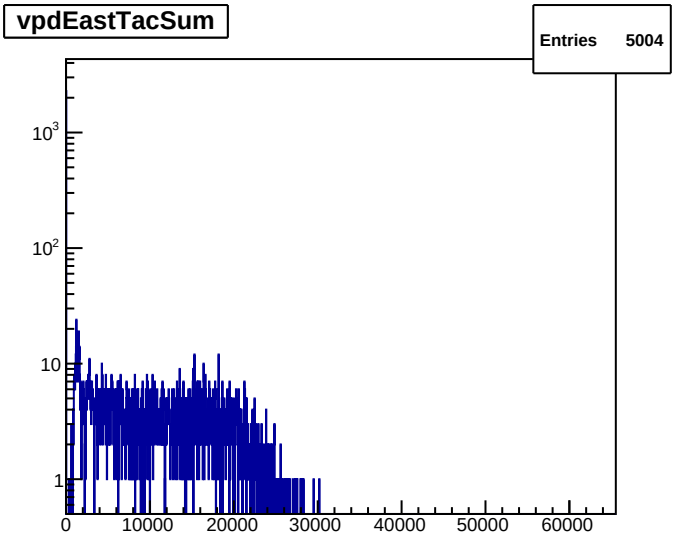

bbcLargeWestTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

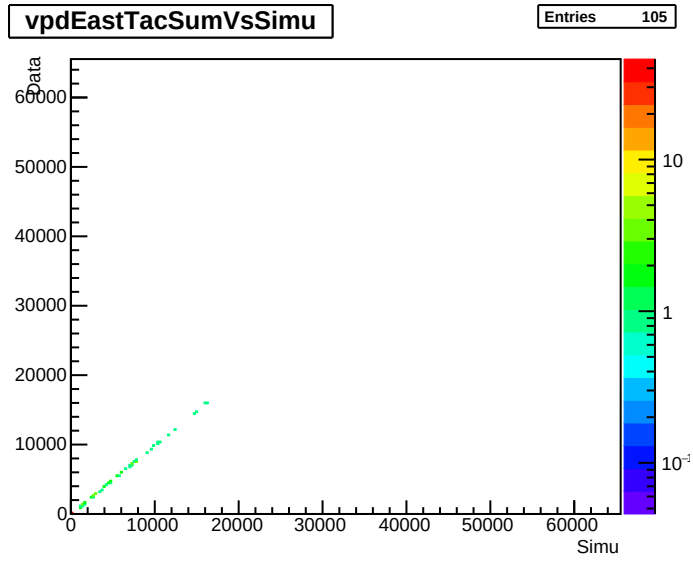

vpdEastAdcSum
Entries 5004

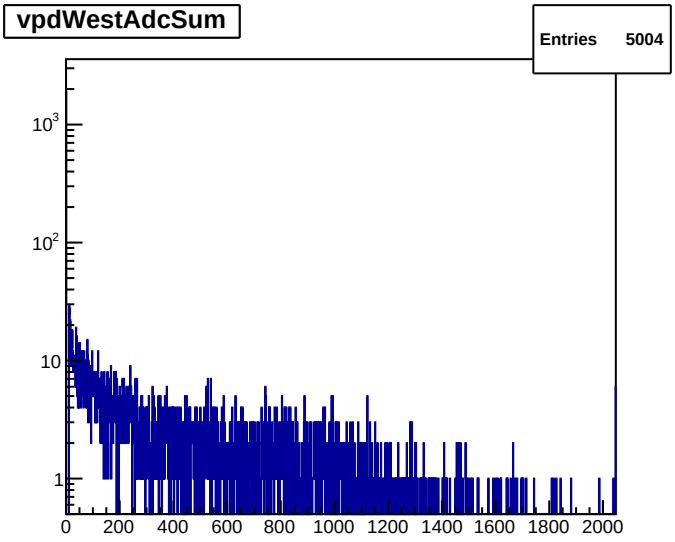

vpdEastAdcSumVsSimu
Entries 105
Data
Simu

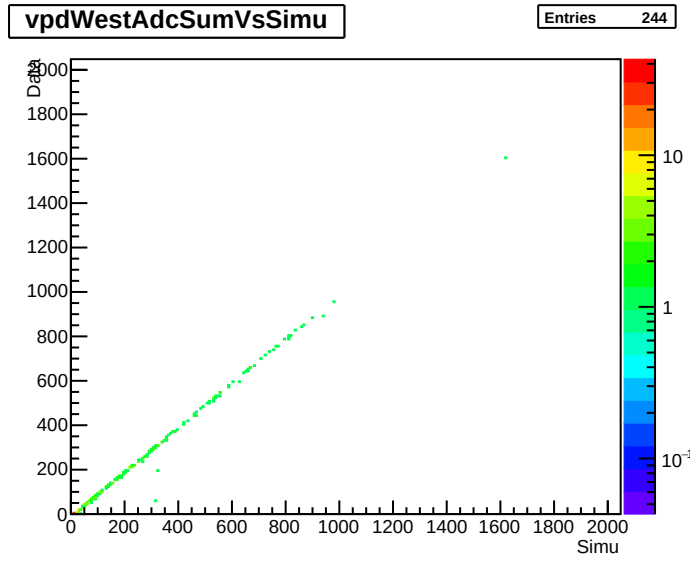

vpdEastNHits
Entries 5004

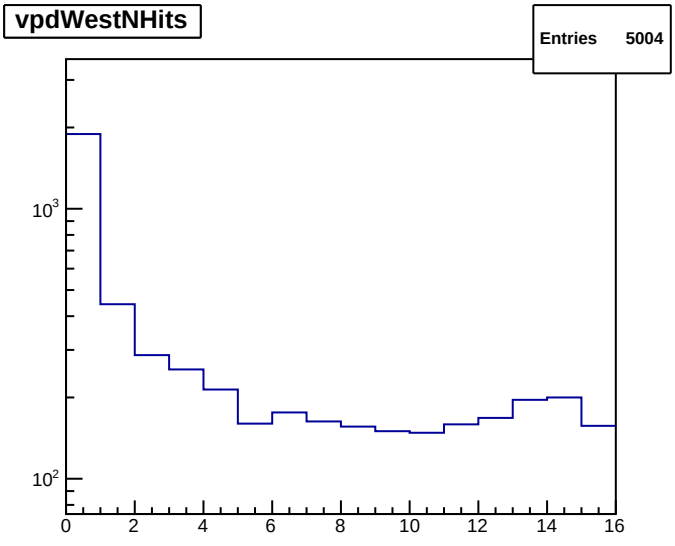

vpdEastNHitsVsSimu
Entries 105

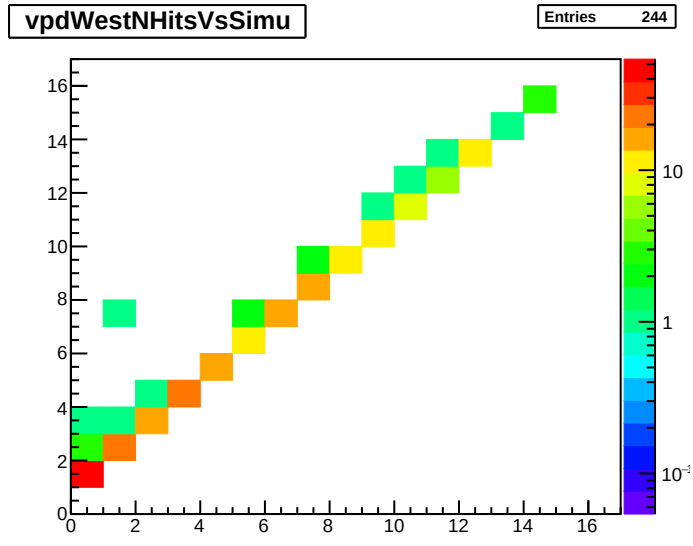

vpdEastTacSum
Entries 5004

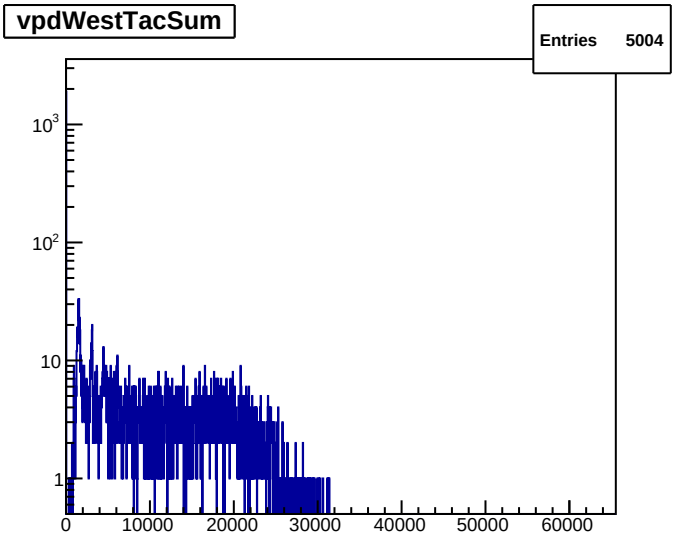

vpdEastTacSumVsSimu
Entries 105
Data
Simu

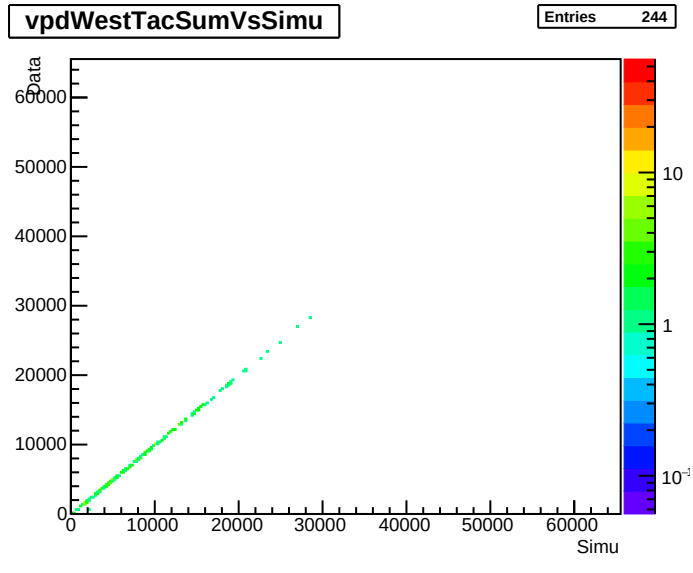

vpdWestAdcSum
Entries 5004

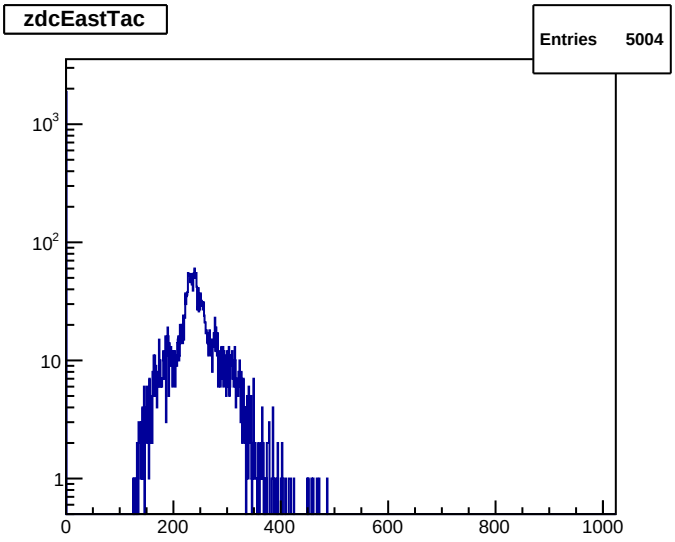

vpdWestAdcSumVsSimu
Entries 244
Data
Simu

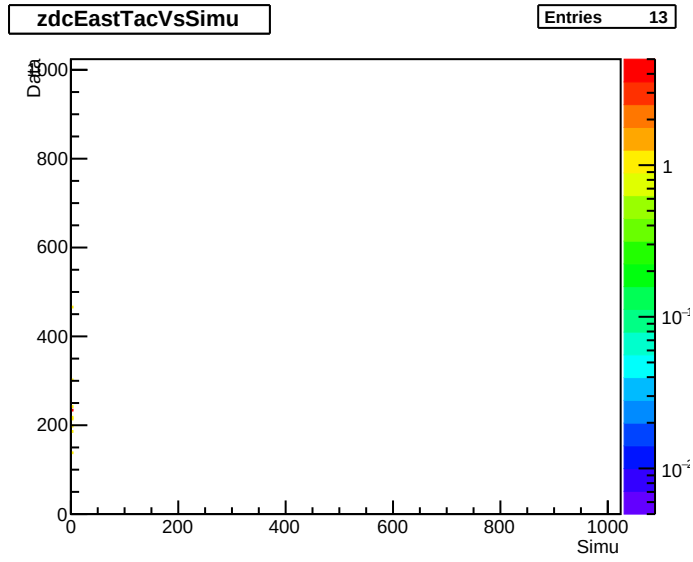

vpdWestNHits
Entries 5004

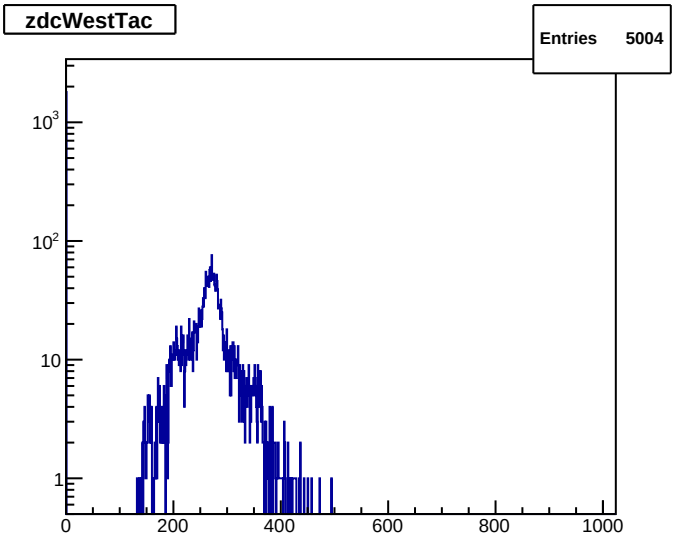

vpdWestNHitsVsSimu
Entries 244

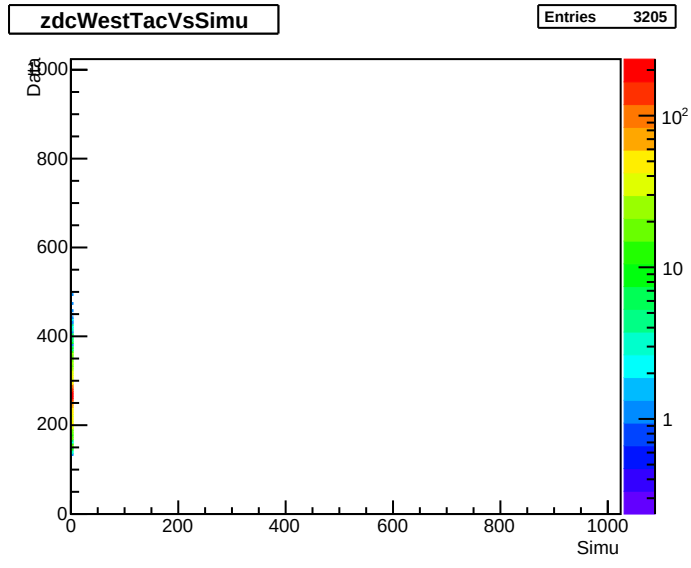

vpdWestTacSum
Entries 5004

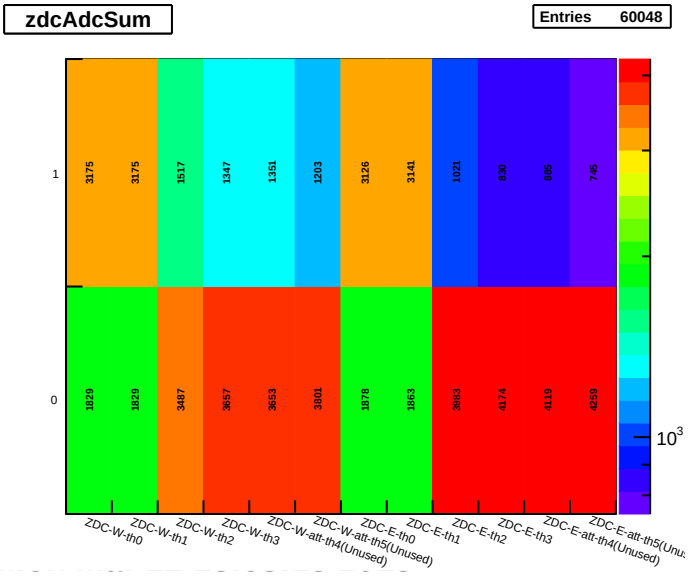

vpdWestTacSumVsSimu
Entries 244
Data
Simu

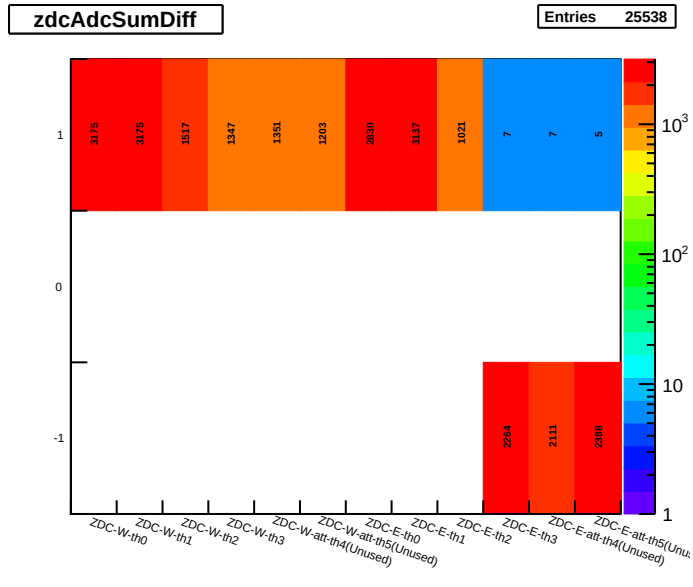

zdcEastTac
Entries 5004
10^3
10^2
10
1
0
200
400
600
800
1000

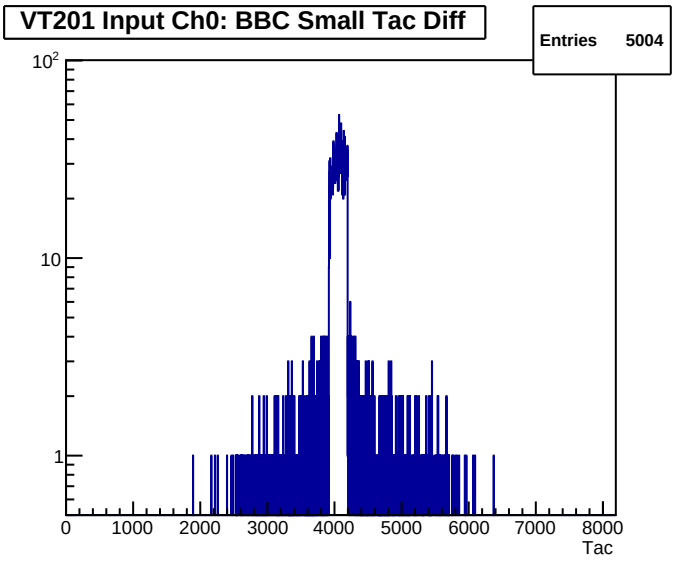

zdcEastTacVsSimu
Entries 13
Data
Simu
0
200
400
600
800
1000
1

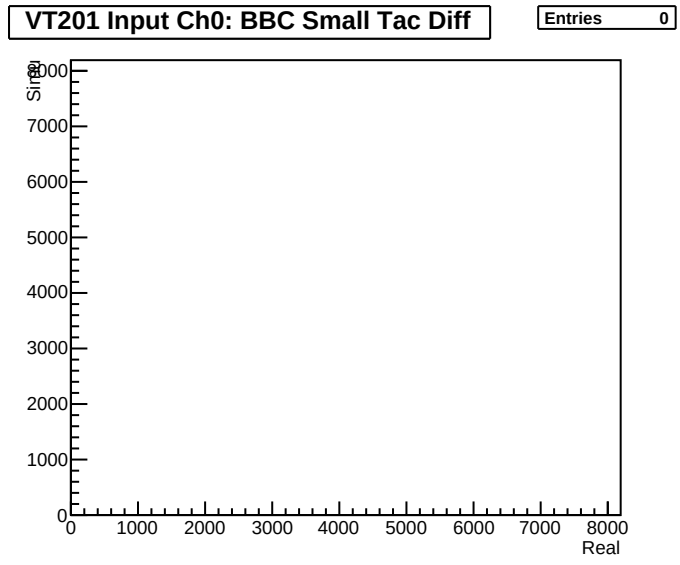

zdcWestTac
Entries 5004
10^3
10^2
10
1
0
200
400
600
800
1000

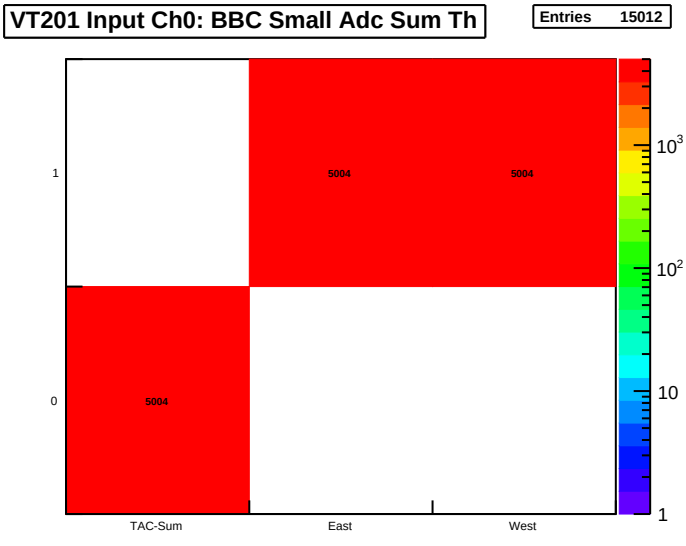

zdcWestTacVsSimu
Entries 3205
Data
Simu
0
200
400
600
800
1000
10^2
10
1

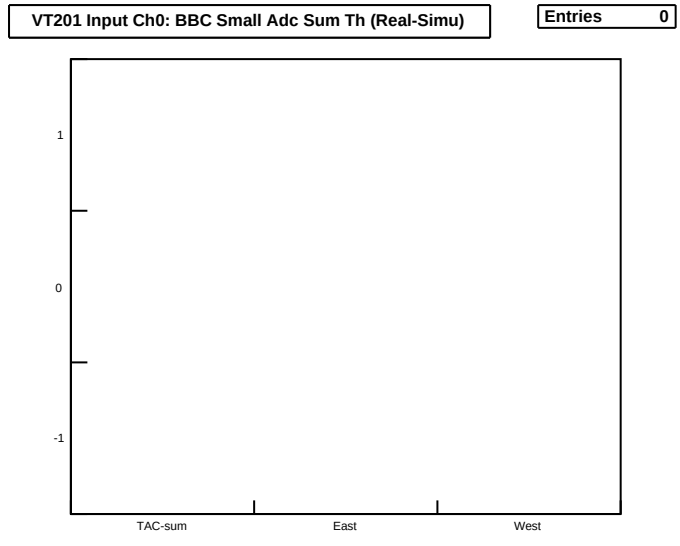

zdcAdcSum
Entries 60048
1
0
3175
3175
1517
1347
1351
1203
3126
3141
1021
830
885
745
1829
1829
3487
3657
3653
3801
1878
1863
3983
4174
4119
4259
10^3
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

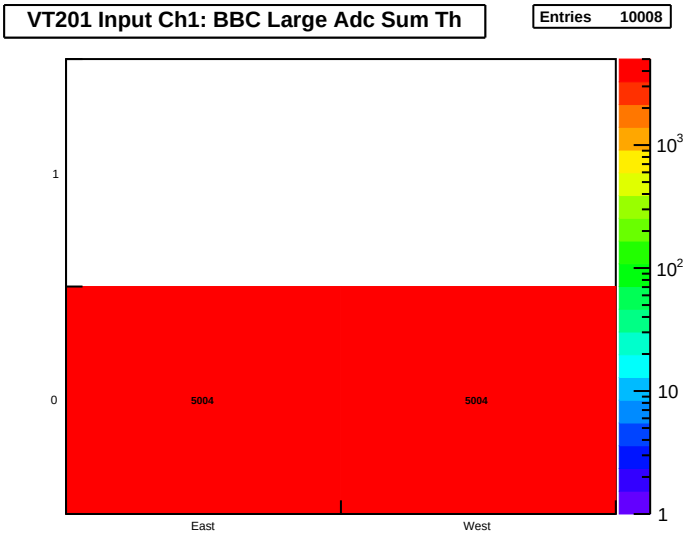

zdcAdcSumDiff
Entries 25538
1
0
-1
3175
3175
1517
1347
1351
1203
2830
3137
1021
7
7
5
2264
2111
2388
10^3
10^2
10
1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

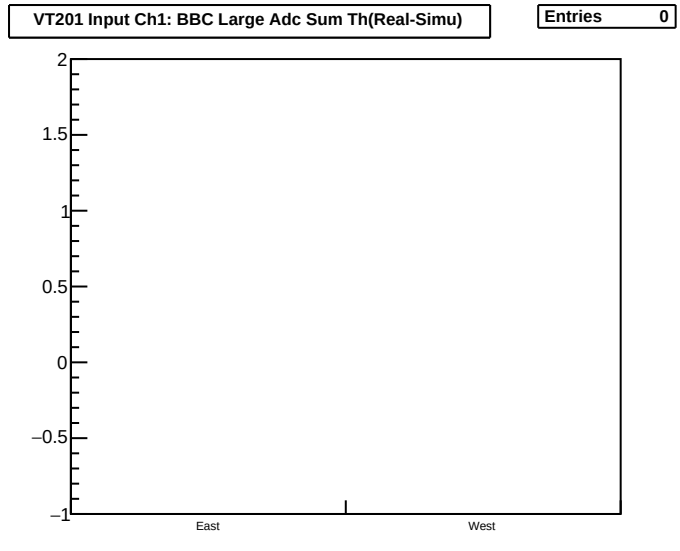

VT201 Input Ch0: BBC Small Tac Diff
Entries 5004
Tac


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

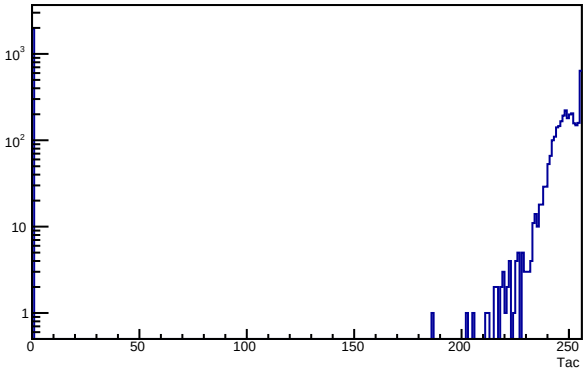

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 15012
5004
5004
5004
TAC-Sum
East
West


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

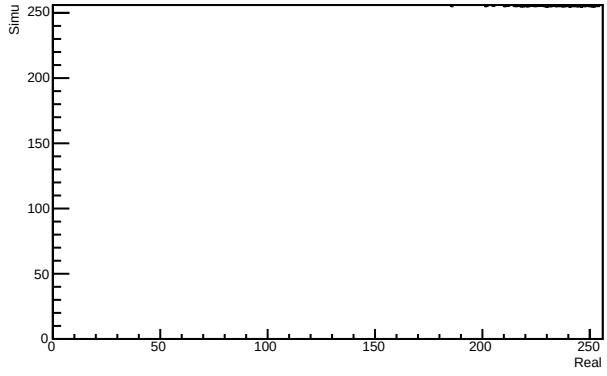

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 10008
5004
5004
East
West


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

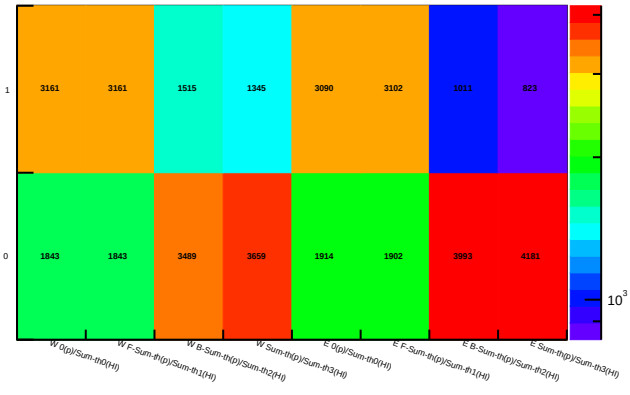
VT201 Input Ch2: ZDC Tac Diff



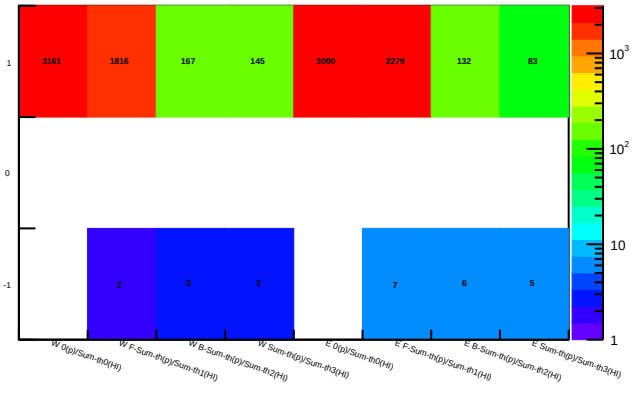
VT201 Input Ch2: ZDC Tac Diff



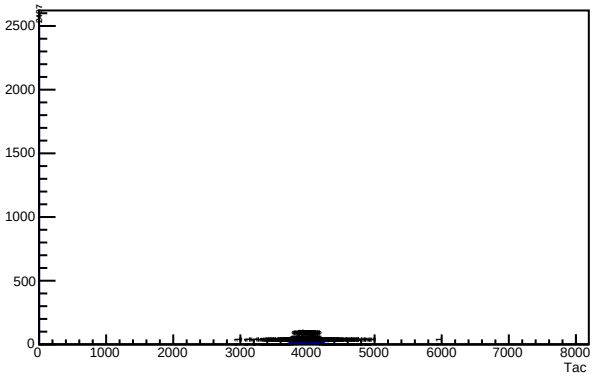
VT201 Input Ch2: ZDC Adc Sum Th



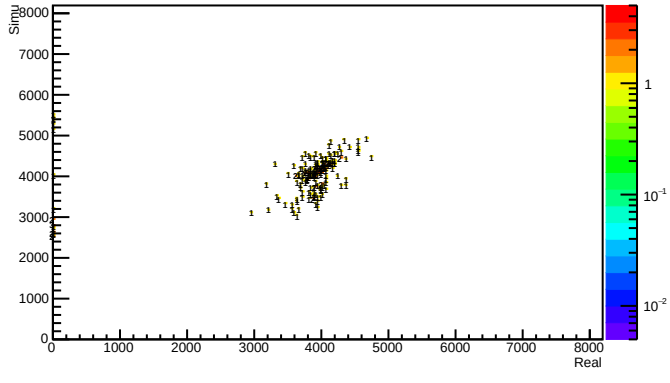
VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)



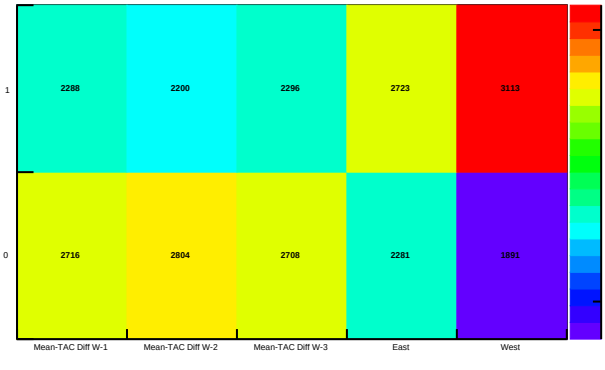
VT201 Input Ch4: VPD Tac Diff



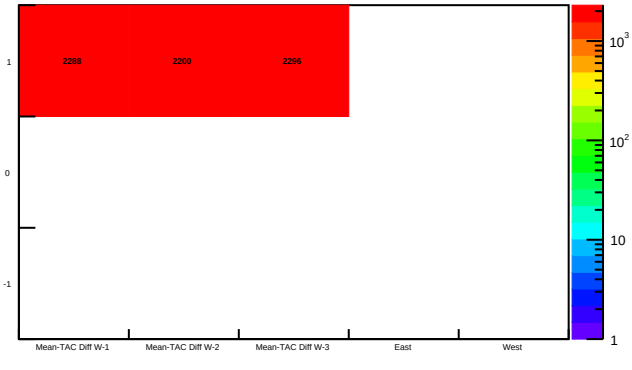
VT201 Input Ch4: VPD Tac Diff

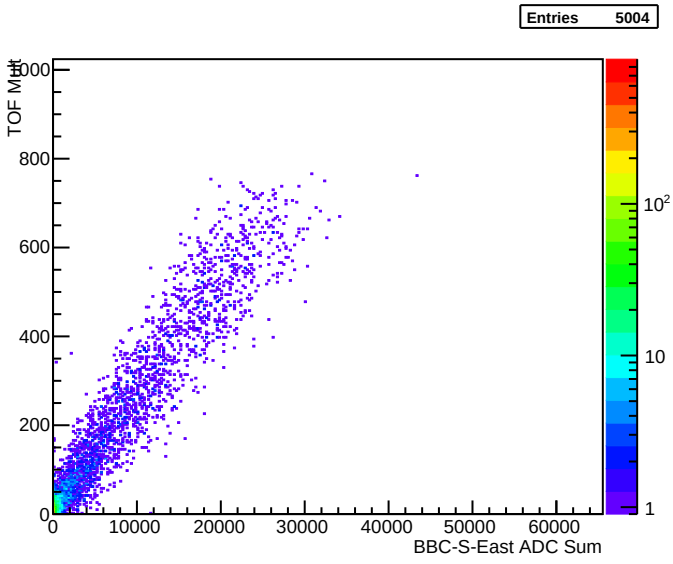


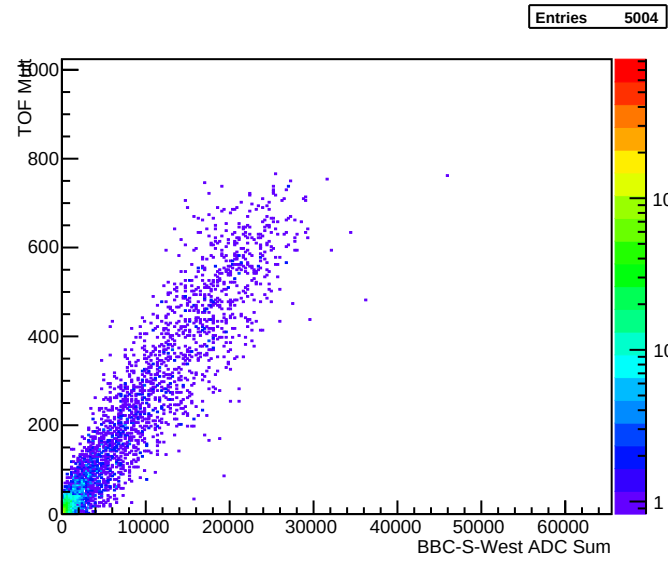
VT201 Input Ch4: VPD Adc Sum Th

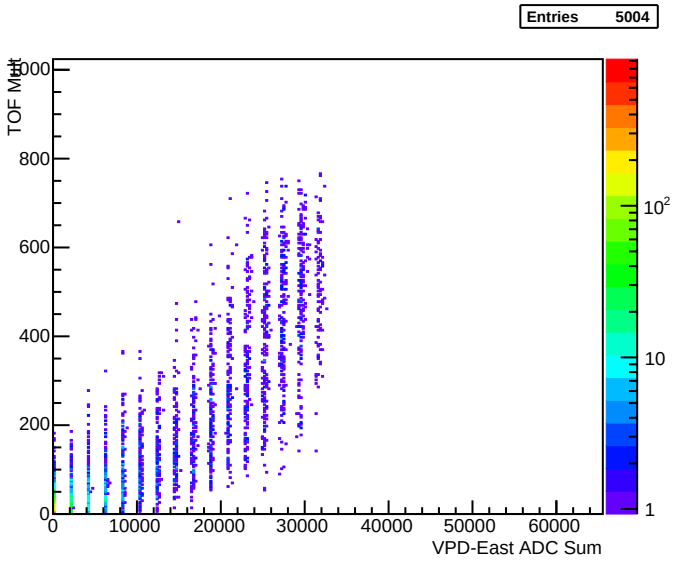


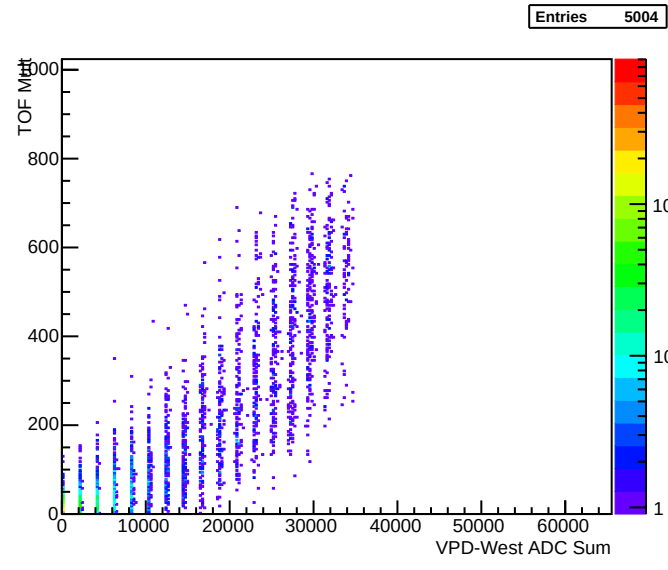
VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)

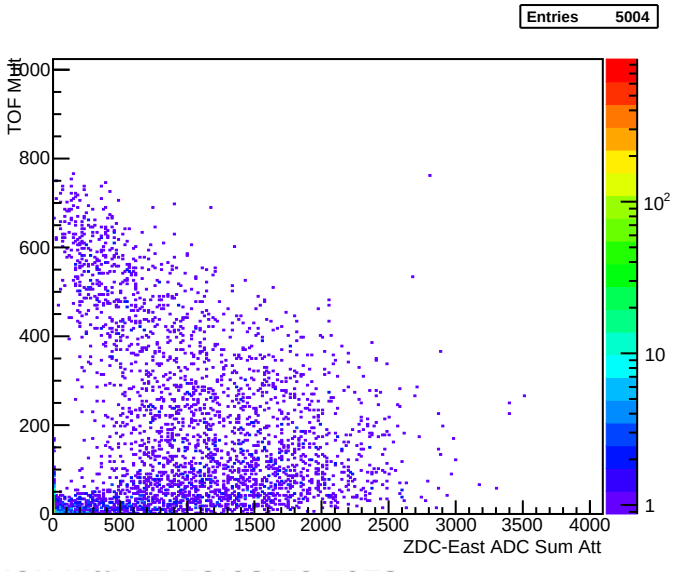


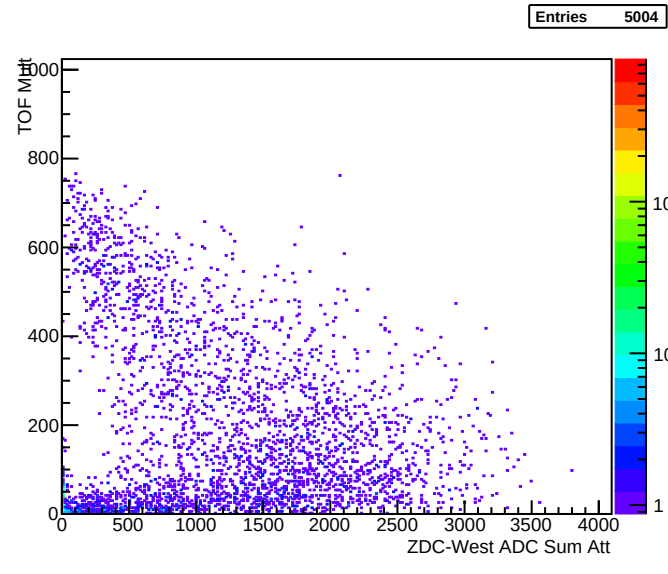

Entries 5004
TOF Mult
BBC-S-East ADC Sum

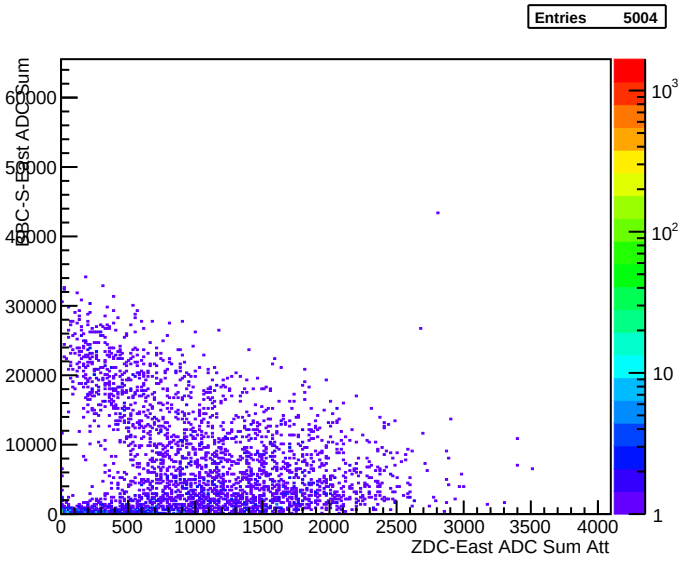

Entries 5004
TOF Mult
BBC-S-West ADC Sum

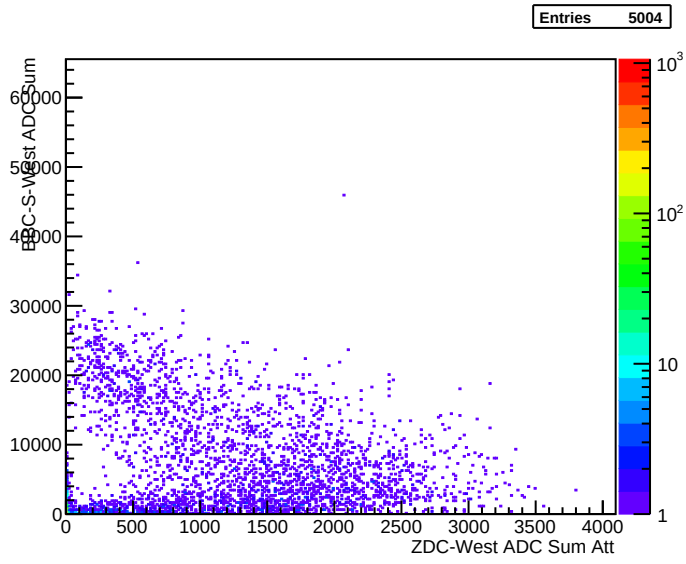

Entries 5004
TOF Mult
VPD-East ADC Sum

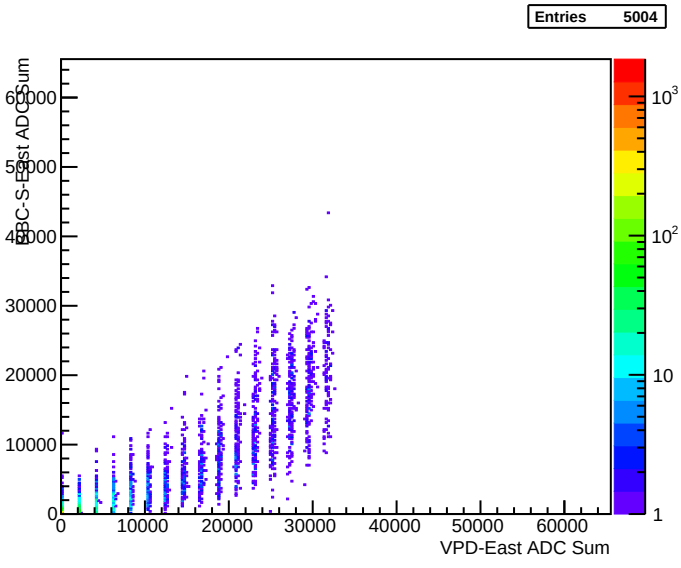

Entries 5004
TOF Mult
VPD-West ADC Sum

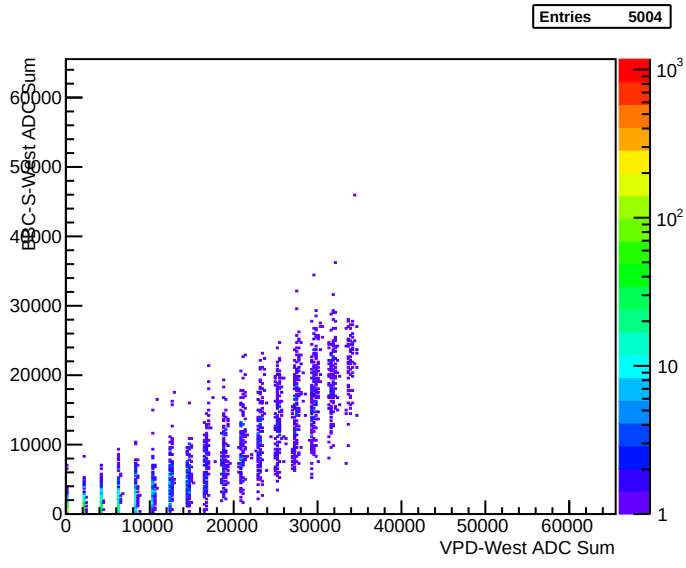

Entries 5004
TOF Mult
ZDC-East ADC Sum Att

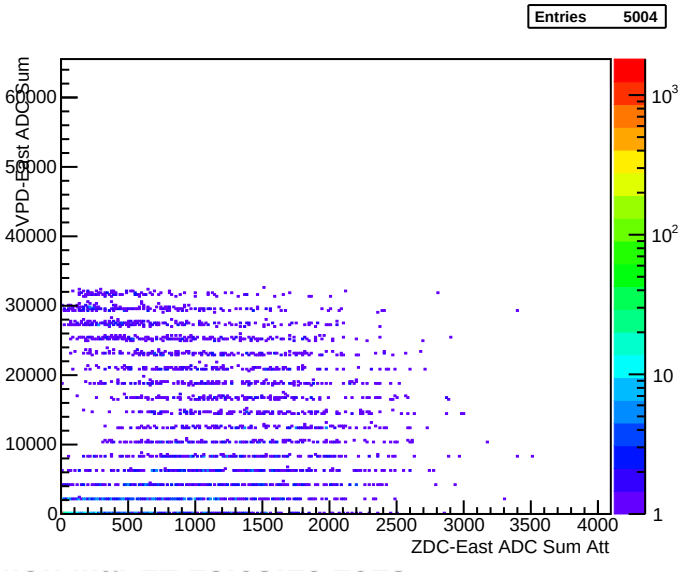

Entries 5004
TOF Mult
ZDC-West ADC Sum Att

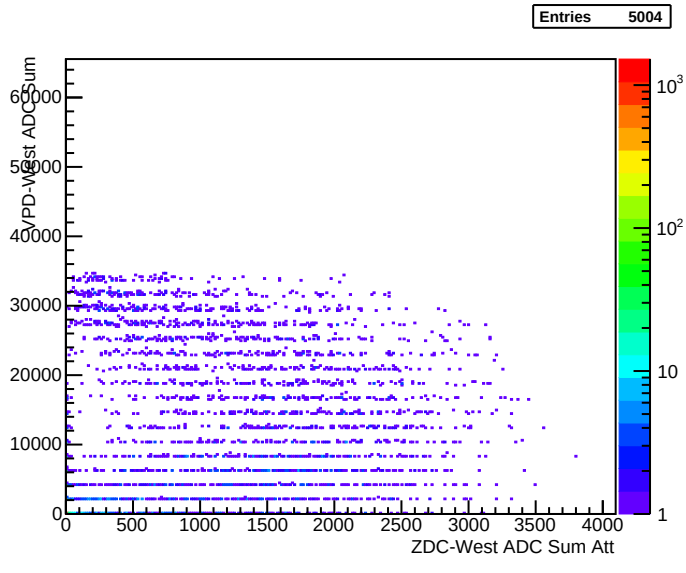

Entries 5004
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

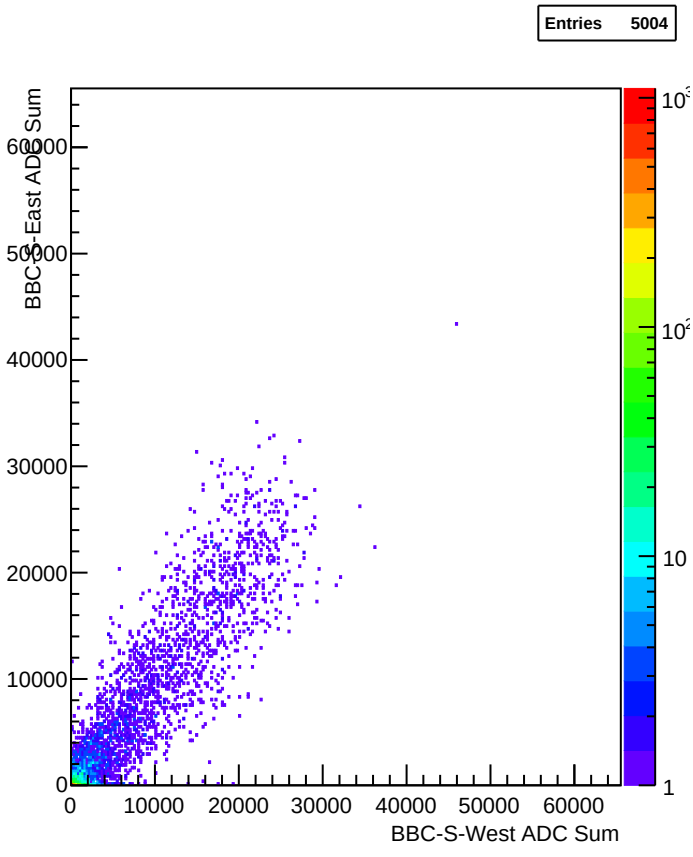

Entries 5004
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

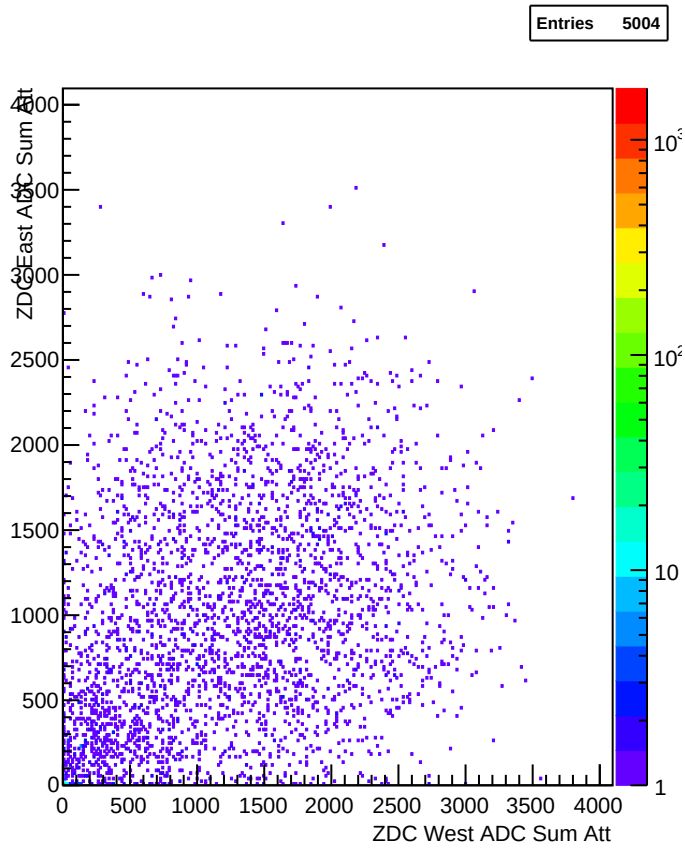

Entries 5004
BBC-S-East ADC Sum
VPD-East ADC Sum

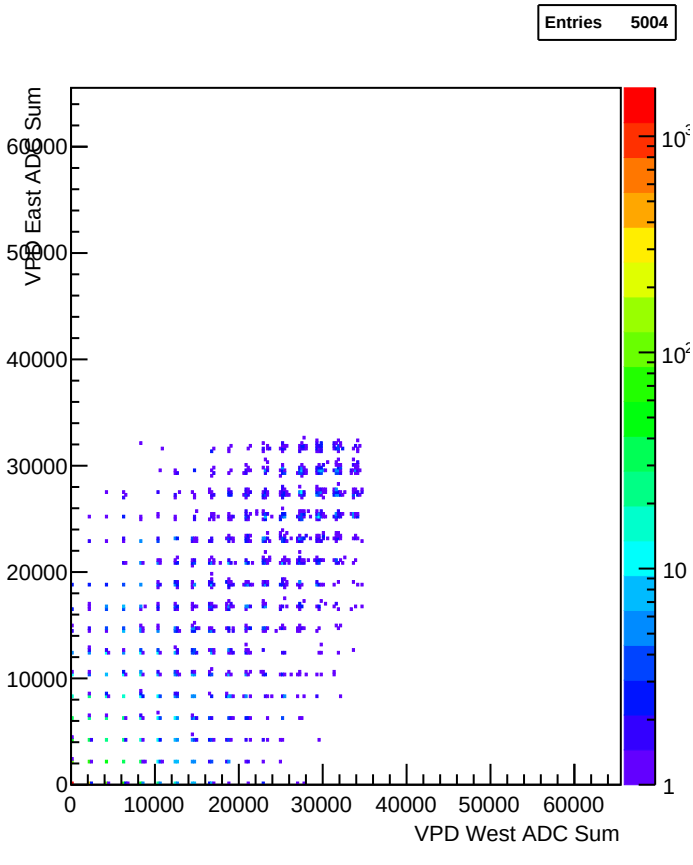

Entries 5004
BBC-S-West ADC Sum
VPD-West ADC Sum

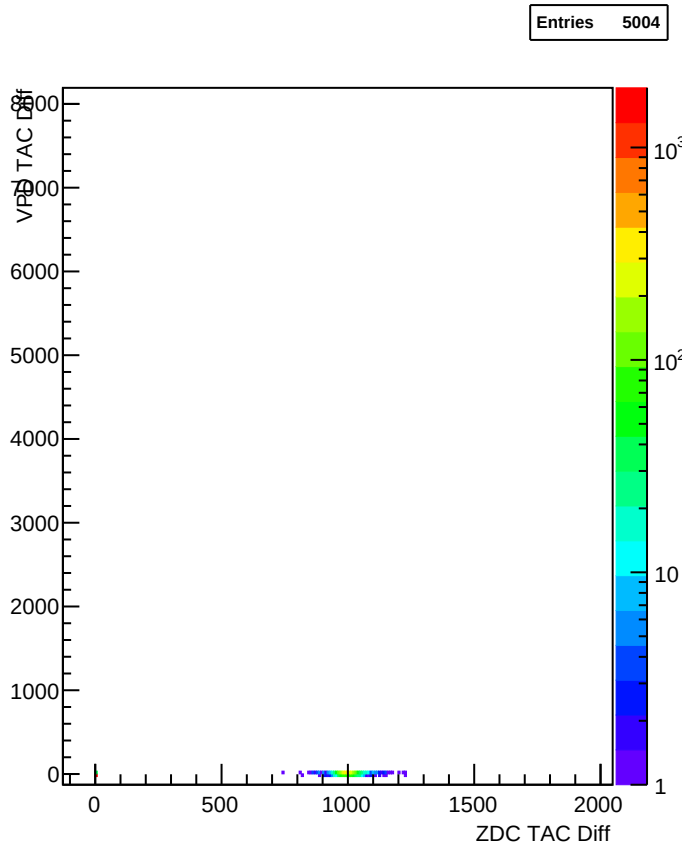

Entries 5004
VPD-East ADC Sum
ZDC-East ADC Sum Att

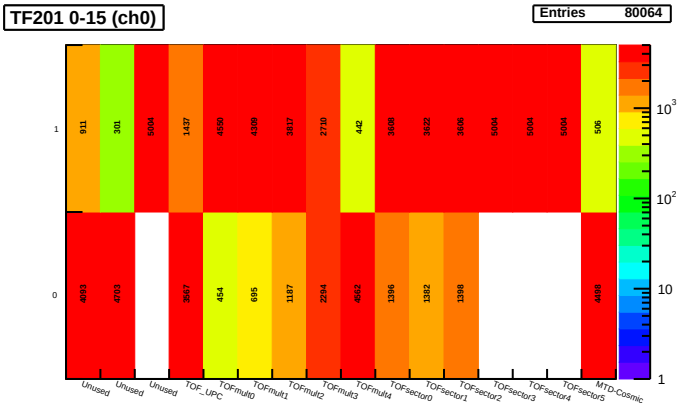

Entries 5004
VPD-West ADC Sum
ZDC-West ADC Sum Att

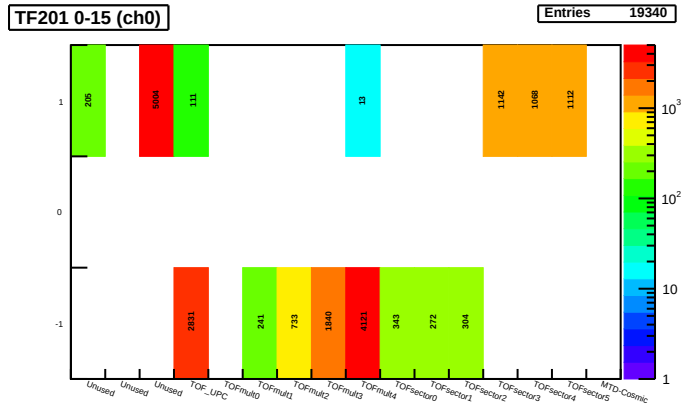

Entries 5004
BBC-S-East ADC Sum
BBC-S-West ADC Sum

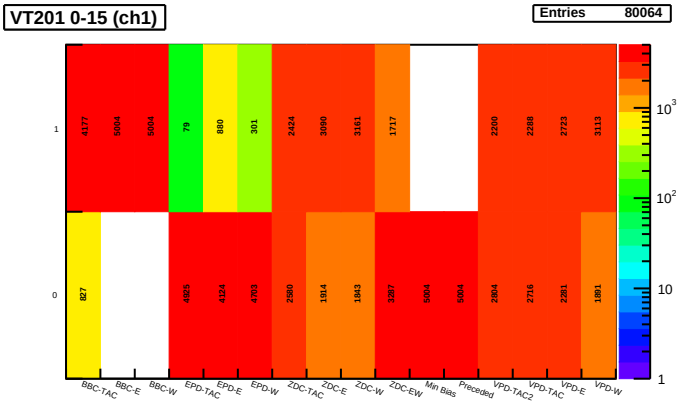

Entries 5004
ZDC East ADC Sum Att
ZDC West ADC Sum Att

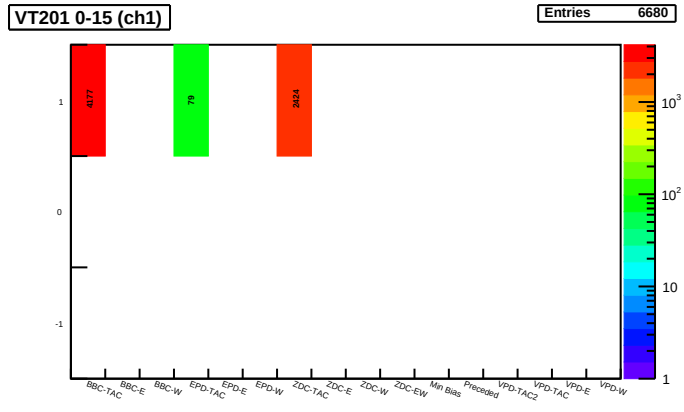

Entries 5004
VPD East ADC Sum
VPD West ADC Sum

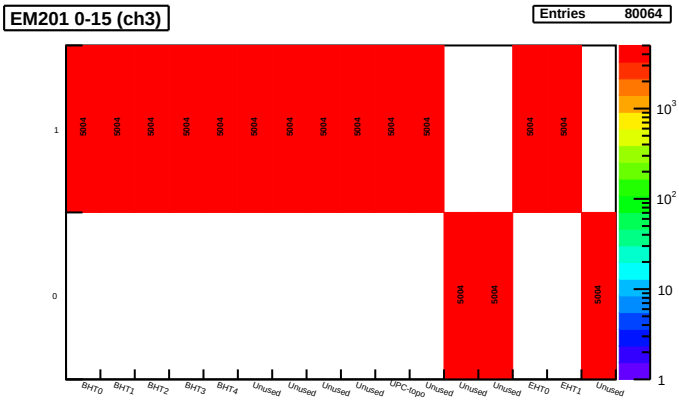

Entries 5004
VPD TAC Diff
ZDC TAC Diff

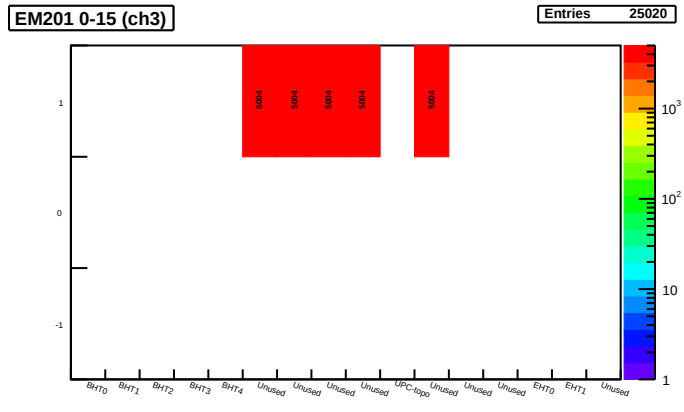

TF201 0-15 (ch0)
Entries 80064
911 301 5004 1437 4530 4309 3817 2710 442 3608 3622 3606 5004 5004 5004 506
4053 4703 3567 454 695 1187 2294 4562 1396 1382 1398 4488
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

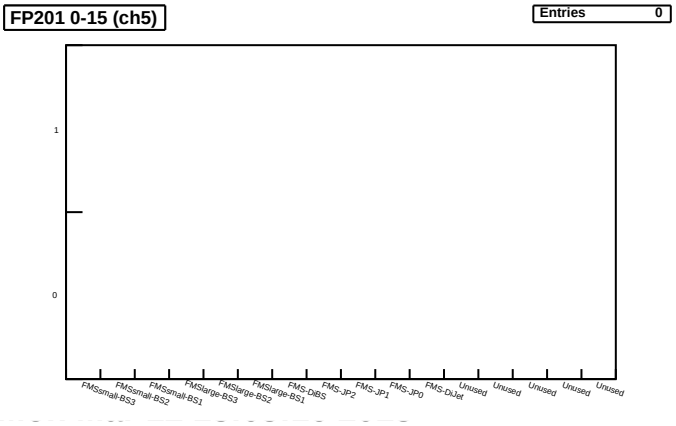

TF201 0-15 (ch0)
Entries 19340
205 5004 111 13 1142 1068 1112
2831 241 733 1840 4121 343 272 304
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

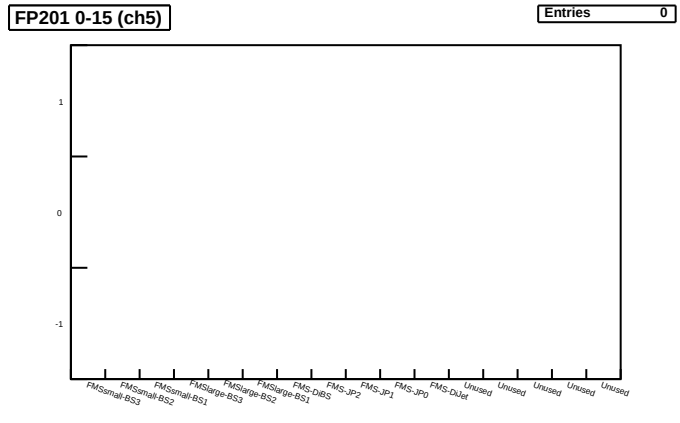

VT201 0-15 (ch1)
Entries 80064
4177 5004 5004 79 800 301 2424 3090 3161 1717 2200 2288 2723 3113
827 4825 4124 4703 2380 1914 1943 3387 5004 5004 2804 2716 2281 1891
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 6680
4177 79 2424
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 80064
5004 5004 5004 5004 5004 5004 5004 5004 5004 5004 5004 5004 5004 5004 5004
5004 5004 5004
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


EM201 0-15 (ch3)
Entries 25020
5004 5004 5004 5004 5004
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