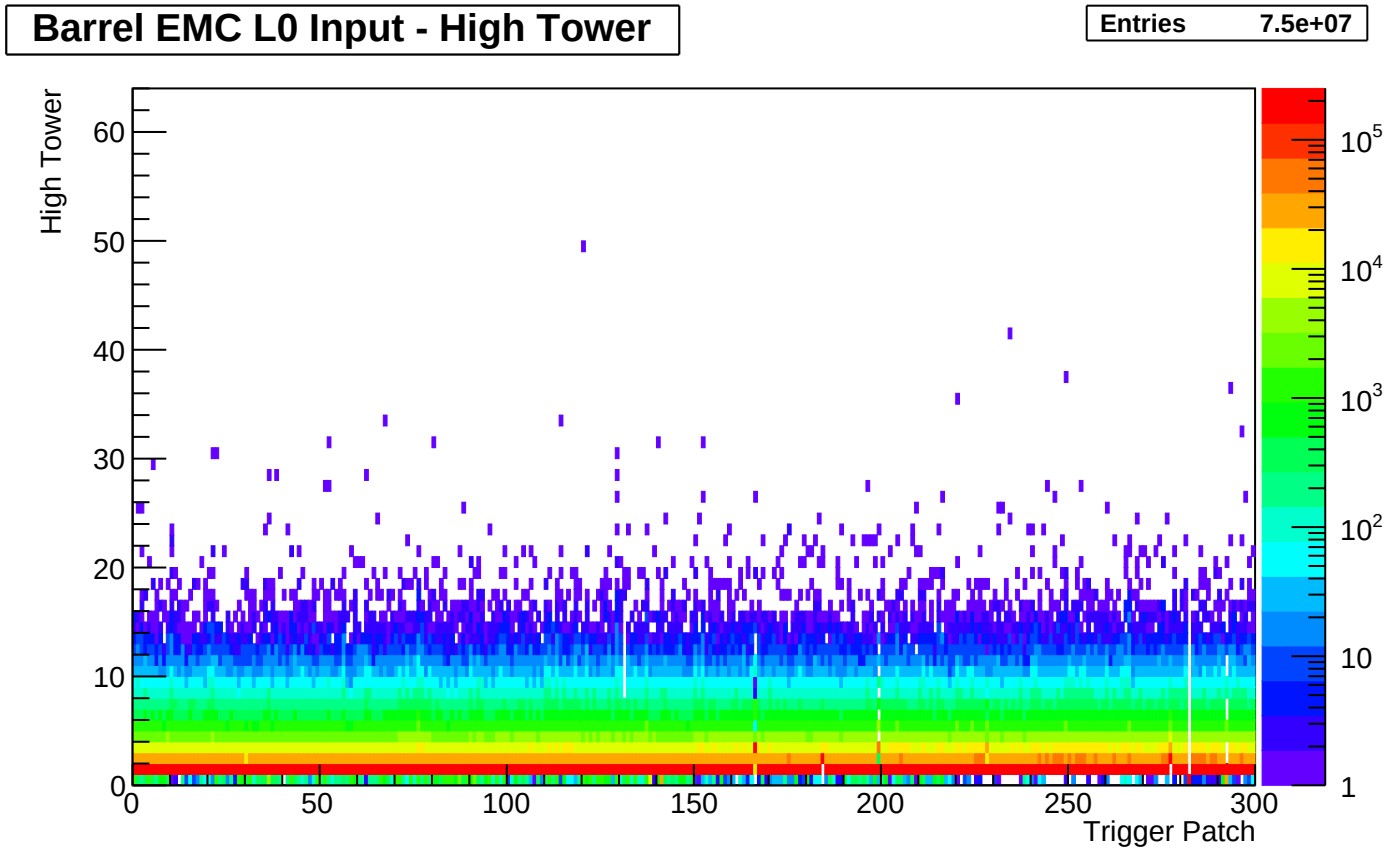
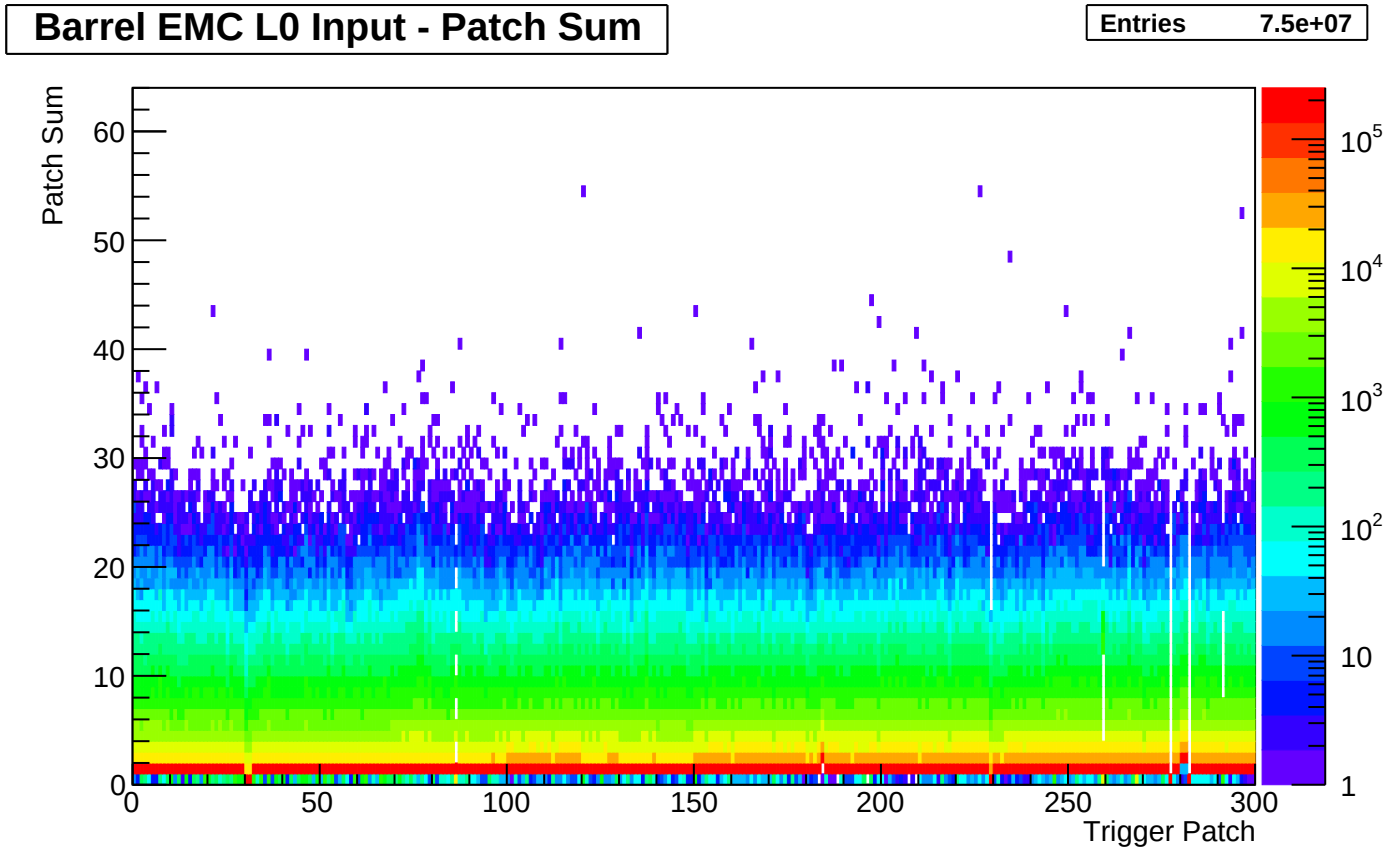
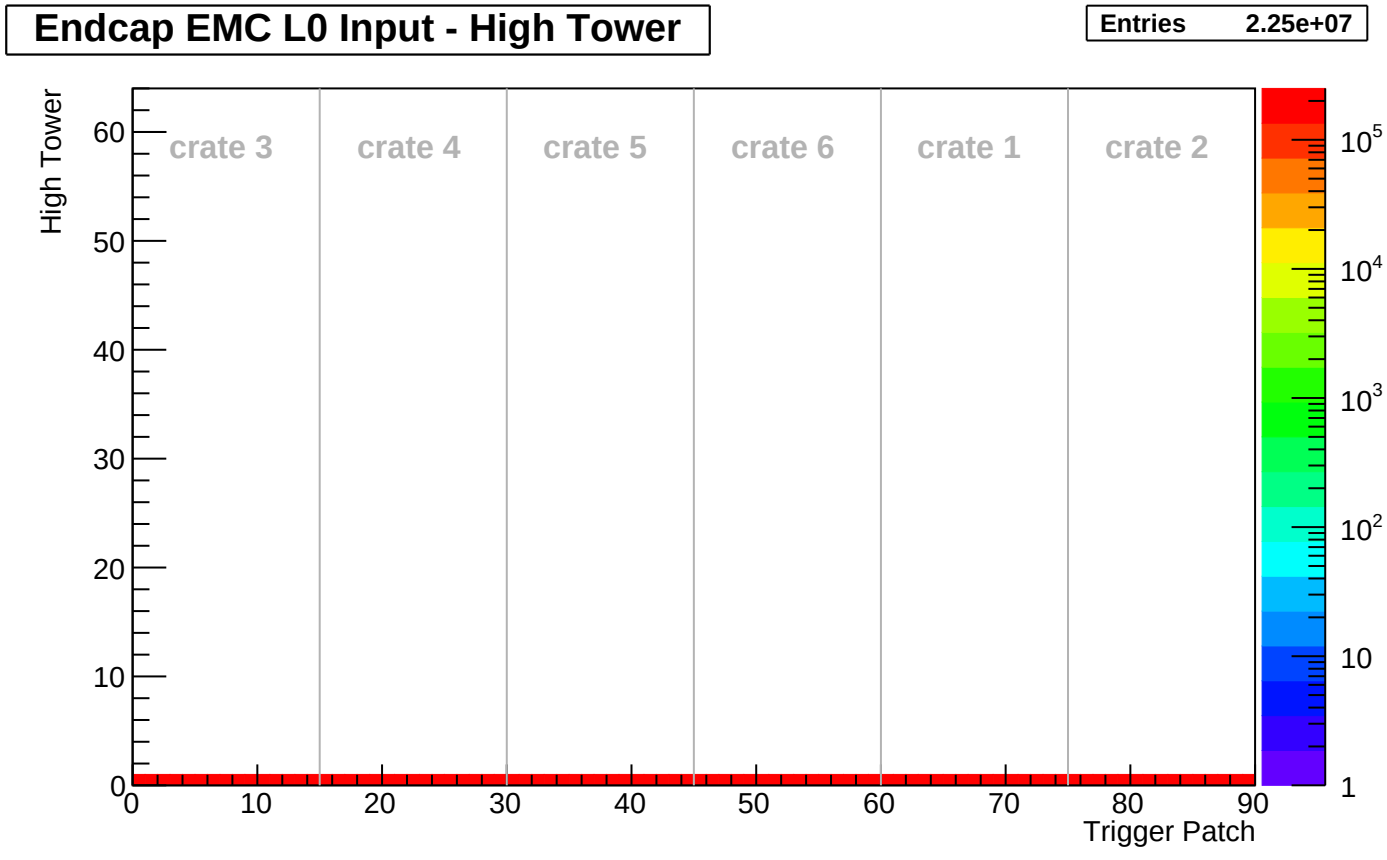
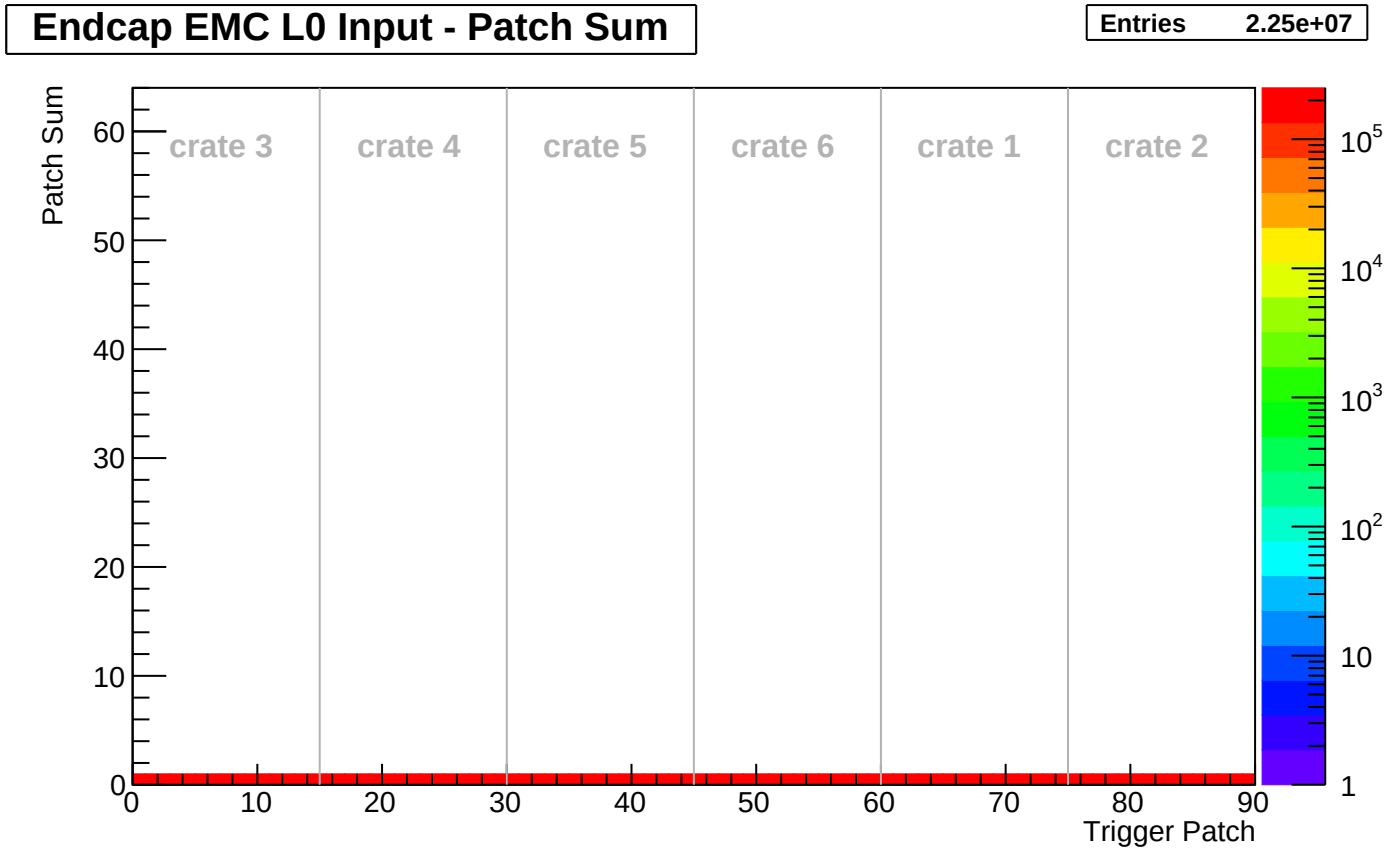
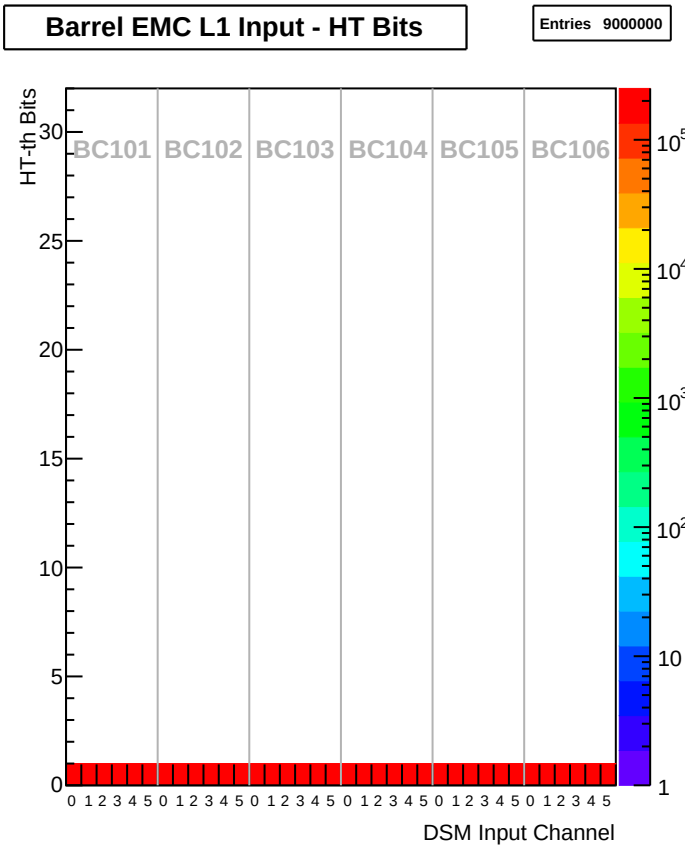
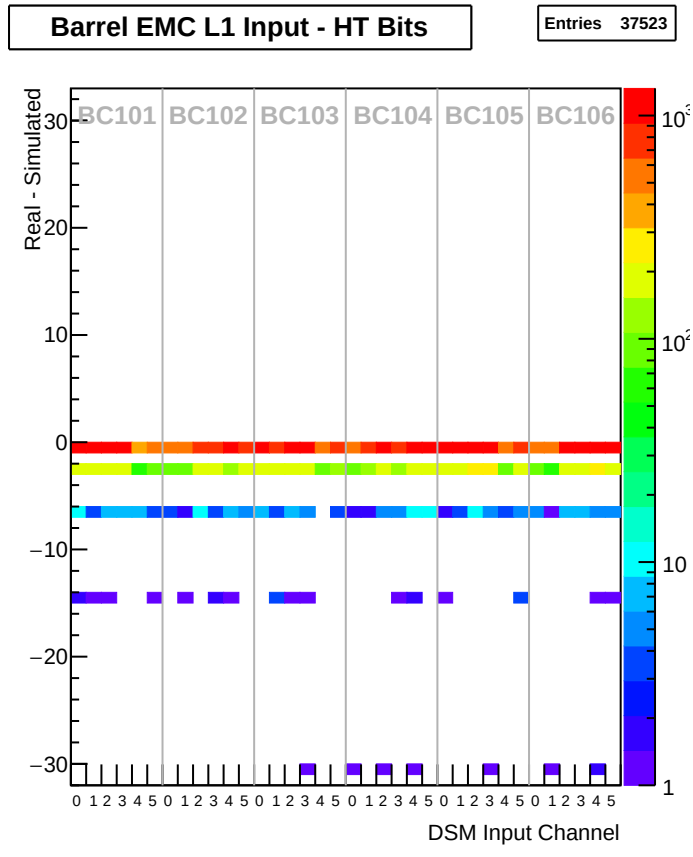

Barrel EMC L0 Input - High Tower
Entries 7.5e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

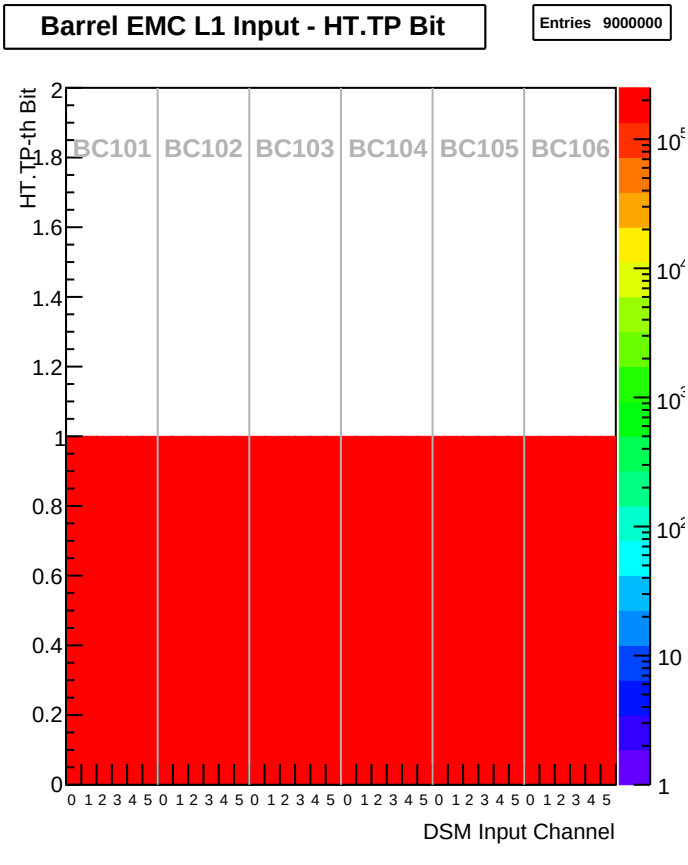

Barrel EMC L0 Input - Patch Sum
Entries 7.5e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

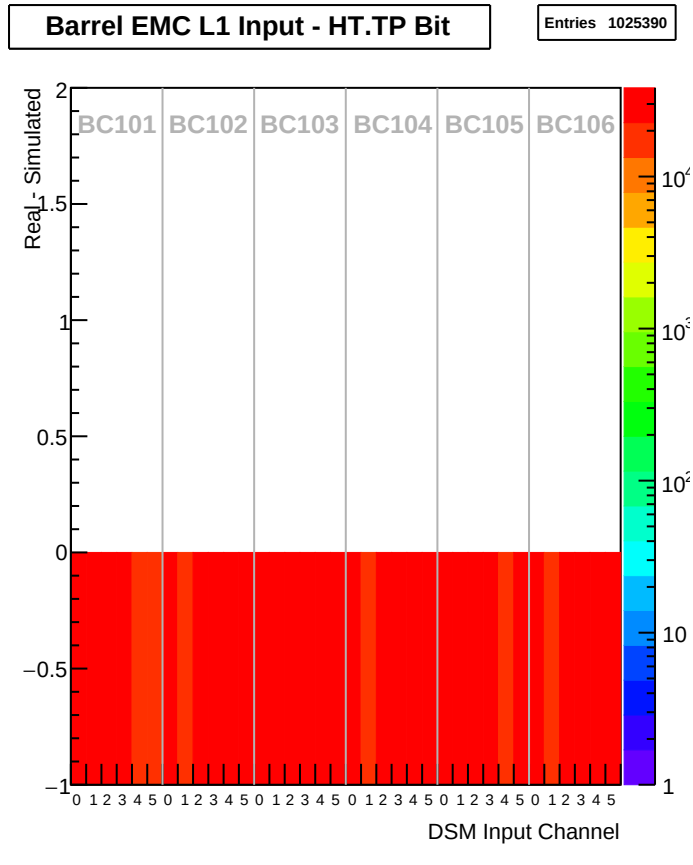

Endcap EMC L0 Input - High Tower
Entries 2.25e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

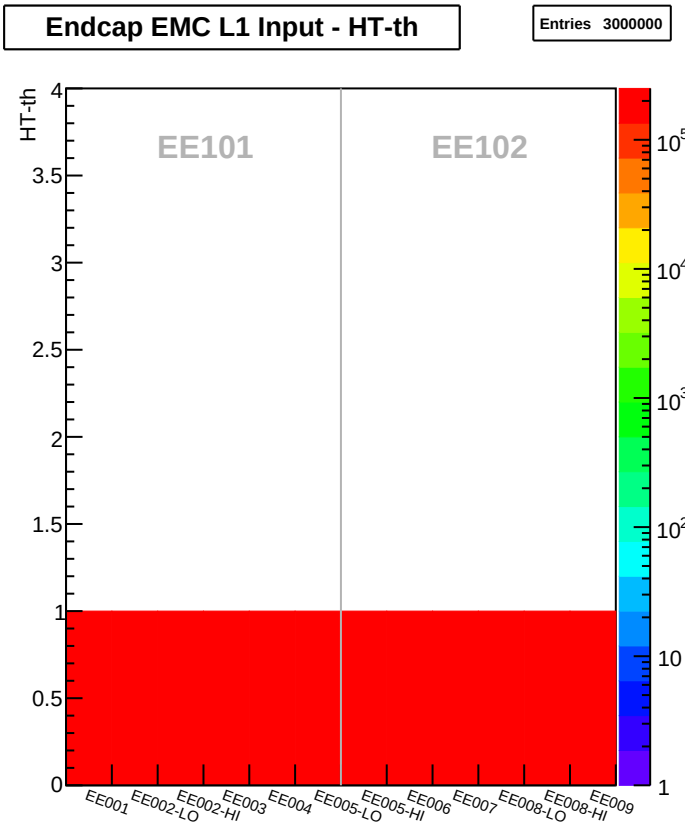

Endcap EMC L0 Input - Patch Sum
Entries 2.25e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

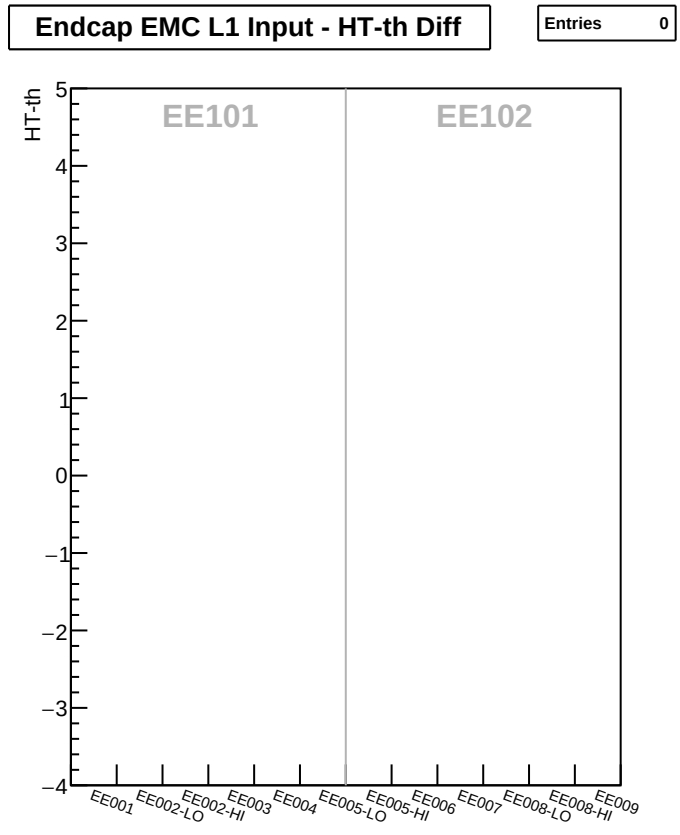

Barrel EMC L1 Input - HT Bits
Entries 9000000
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

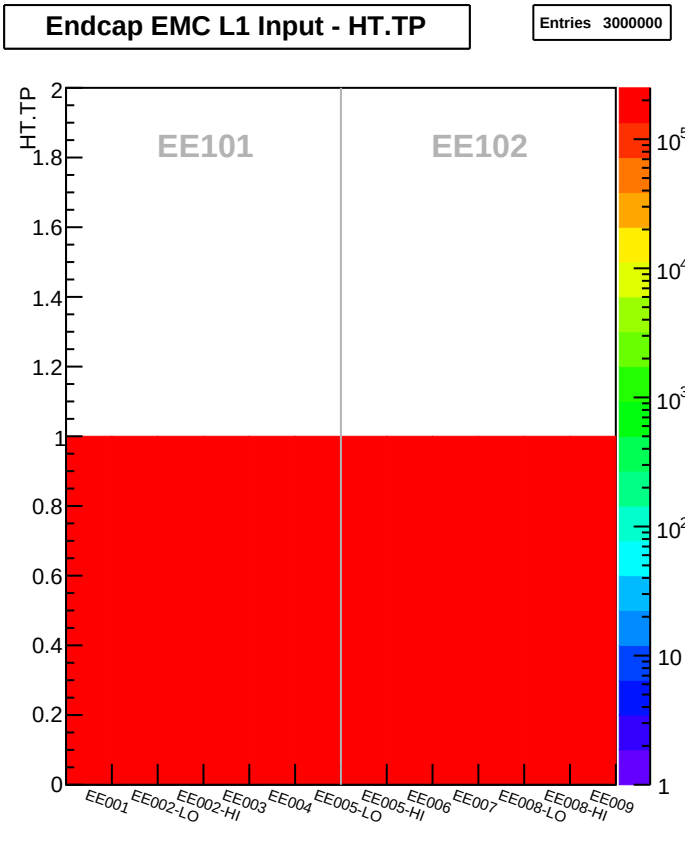

Barrel EMC L1 Input - HT Bits
Entries 37523
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

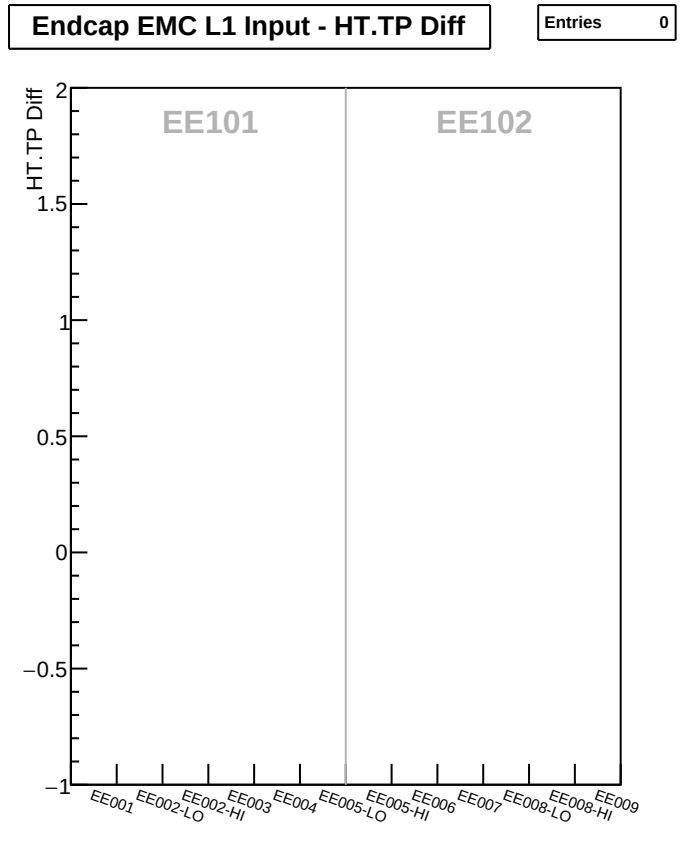

Barrel EMC L1 Input - HT.TP Bit
Entries 9000000
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

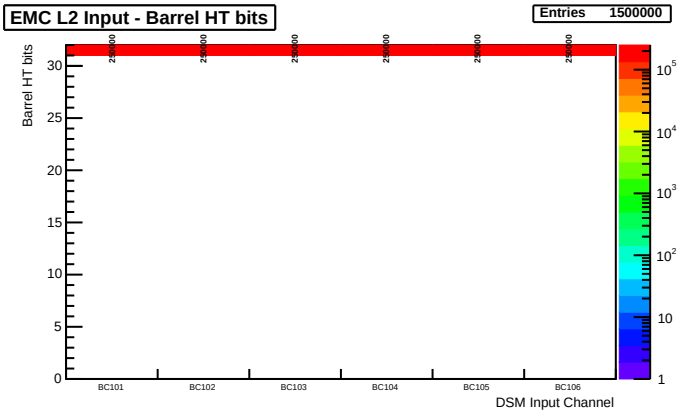

Barrel EMC L1 Input - HT.TP Bit
Entries 1025390
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

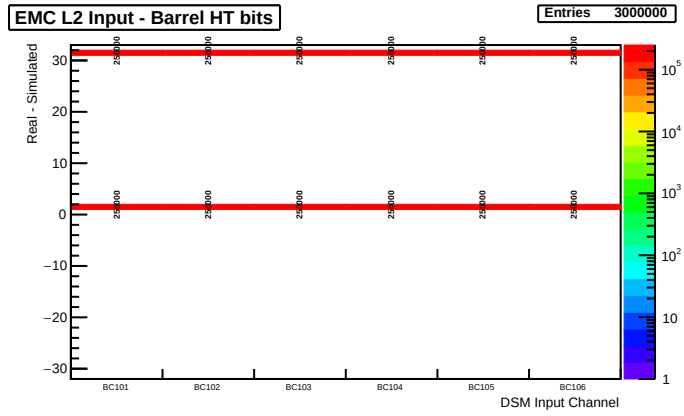

Endcap EMC L1 Input - HT-th
Entries 3000000
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

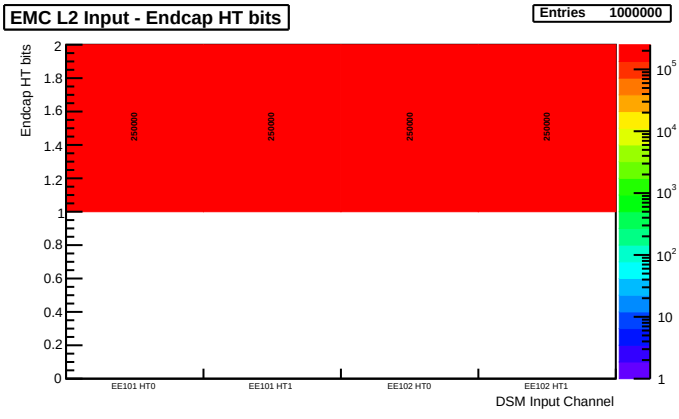

Endcap EMC L1 Input - HT-th Diff
Entries 0
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

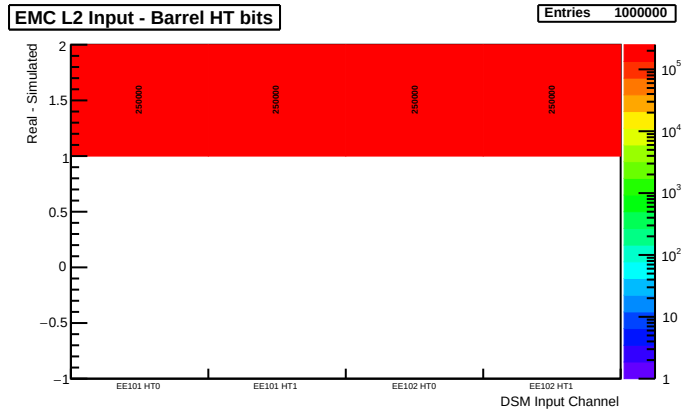

Endcap EMC L1 Input - HT.TP
Entries 3000000
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

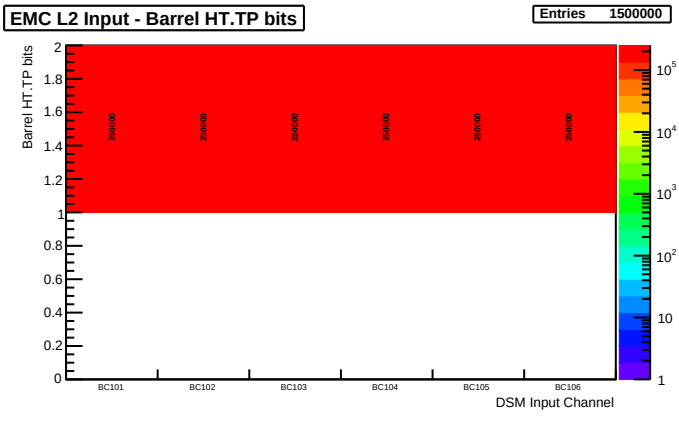

Endcap EMC L1 Input - HT.TP Diff
Entries 0
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

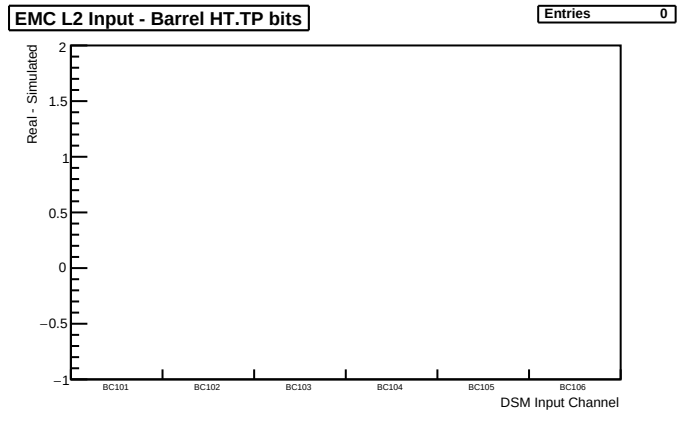

EMC L2 Input - Barrel HT bits
Entries 1500000
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

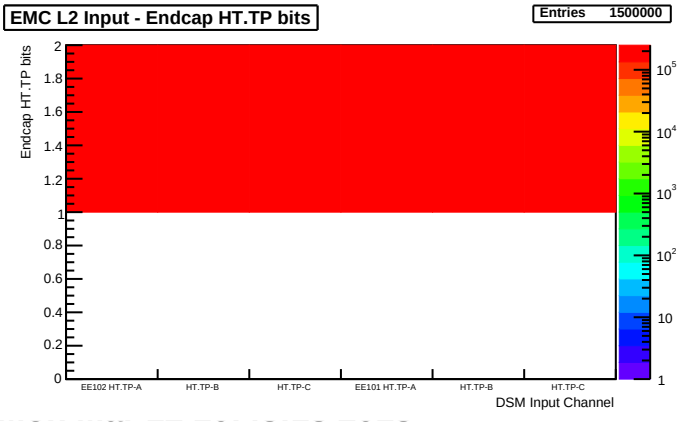

EMC L2 Input - Barrel HT bits
Entries 3000000
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

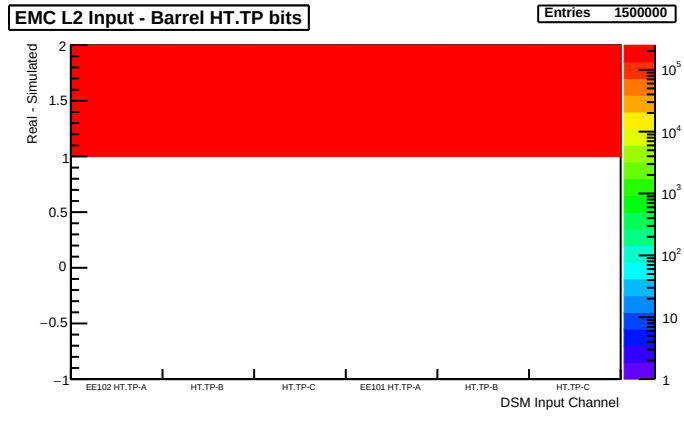

EMC L2 Input - Endcap HT bits
Entries 1000000
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

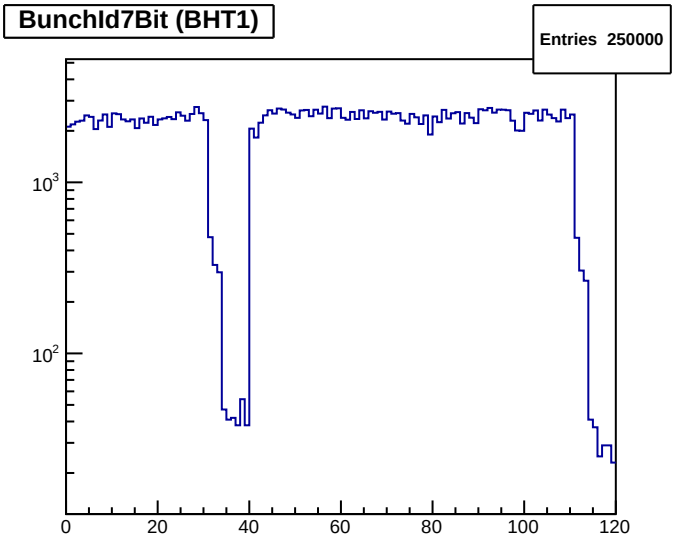

EMC L2 Input - Barrel HT bits
Entries 1000000
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

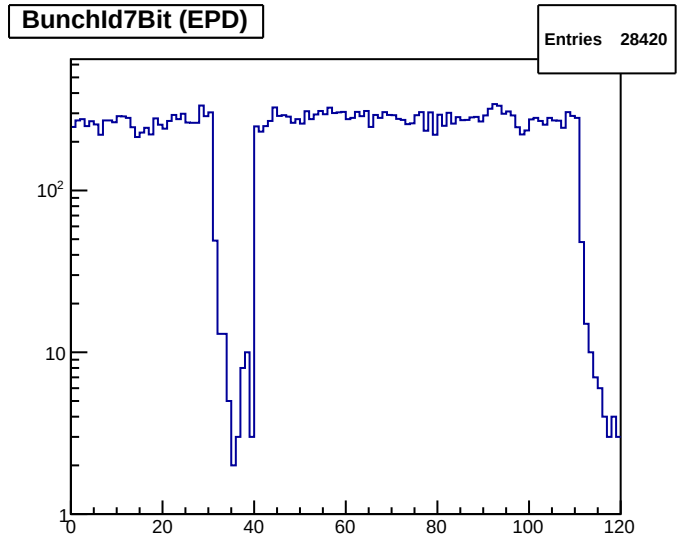

EMC L2 Input - Barrel HT.TP bits
Entries 1500000
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

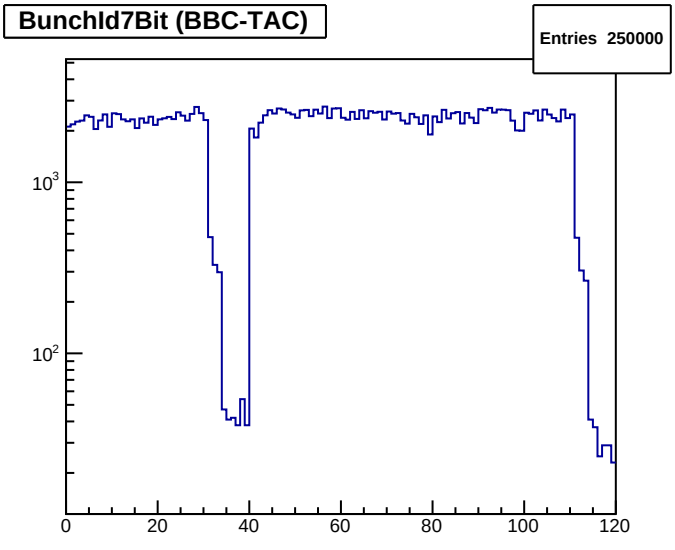

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

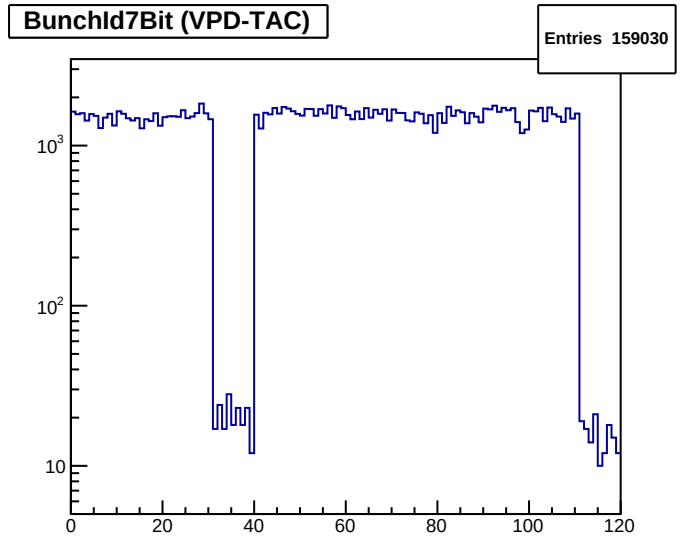

EMC L2 Input - Endcap HT.TP bits
Entries 1500000
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

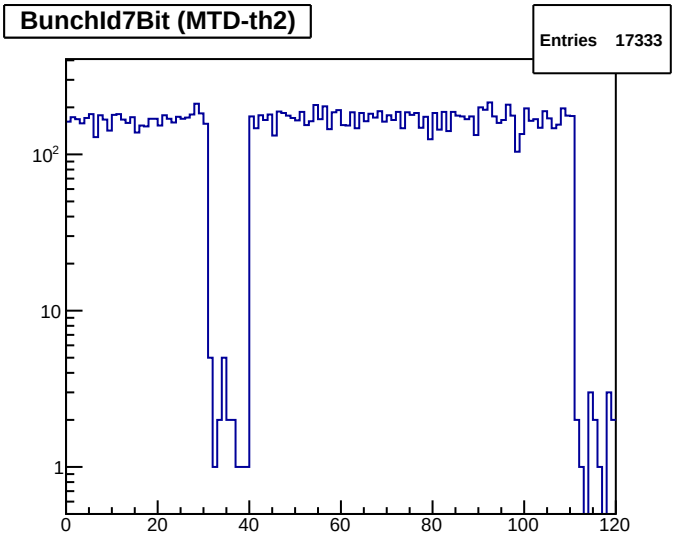

EMC L2 Input - Barrel HT.TP bits
Entries 1500000
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

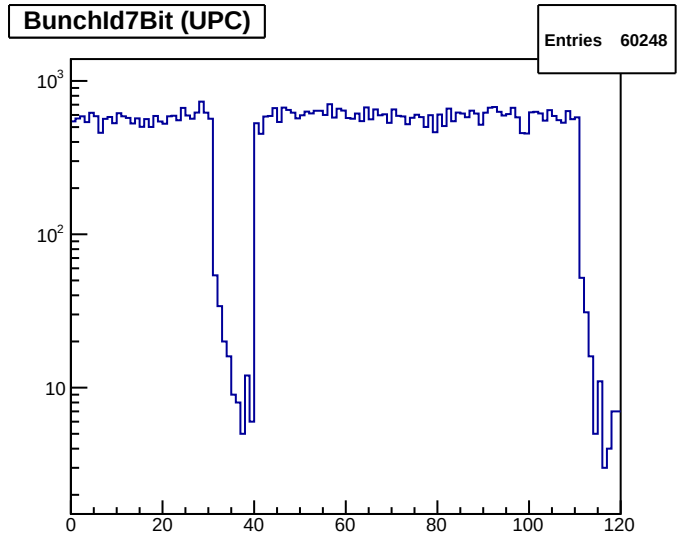

BunchId7Bit (BHT1)
Entries 250000
$10^3$
$10^2$
0 20 40 60 80 100 120

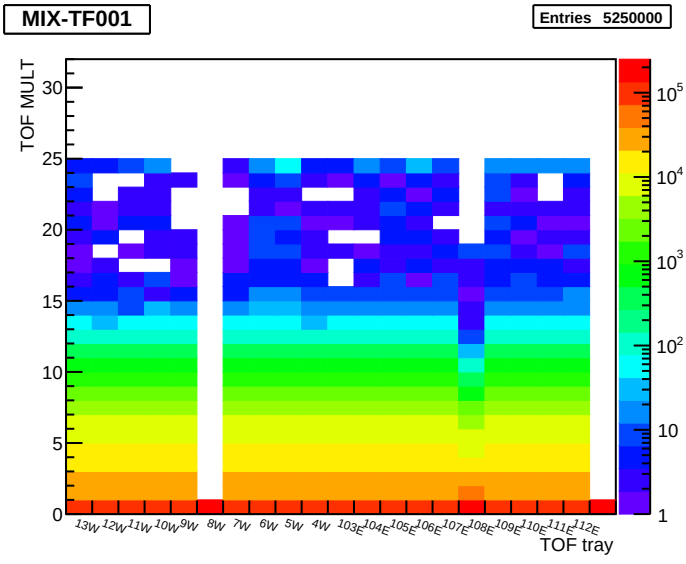

BunchId7Bit (EPD)
Entries 28420
$10^2$
10
1
0 20 40 60 80 100 120

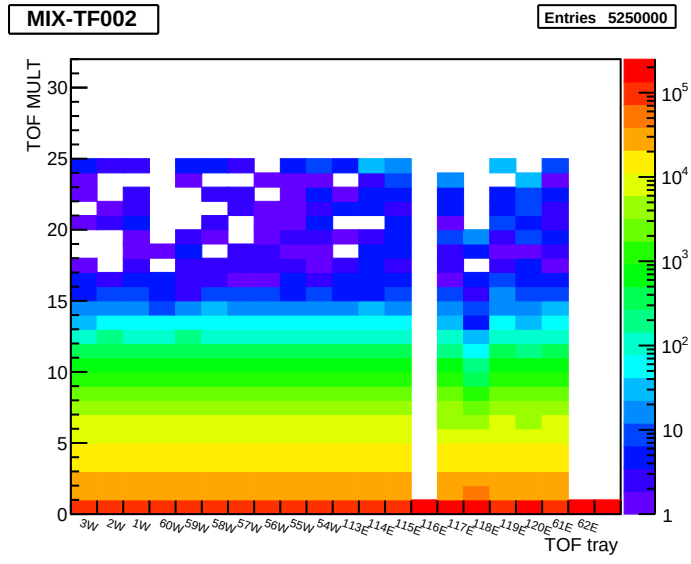

BunchId7Bit (BBC-TAC)
Entries 250000
$10^3$
$10^2$
0 20 40 60 80 100 120

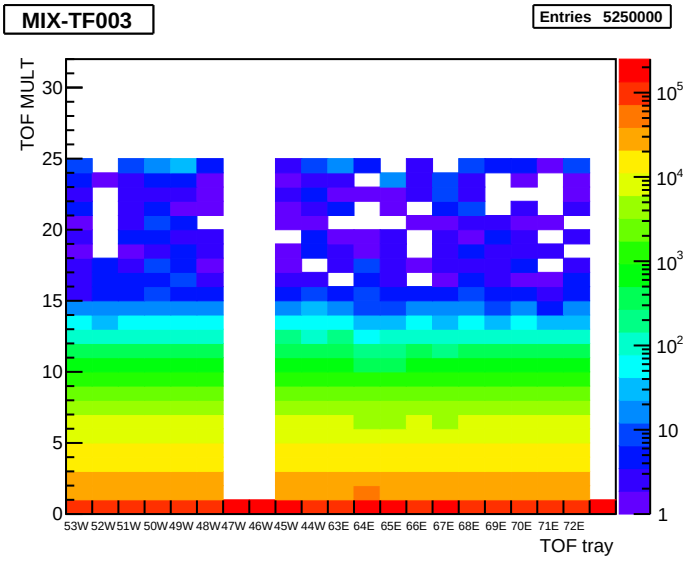

BunchId7Bit (VPD-TAC)
Entries 159030
$10^3$
$10^2$
10
0 20 40 60 80 100 120

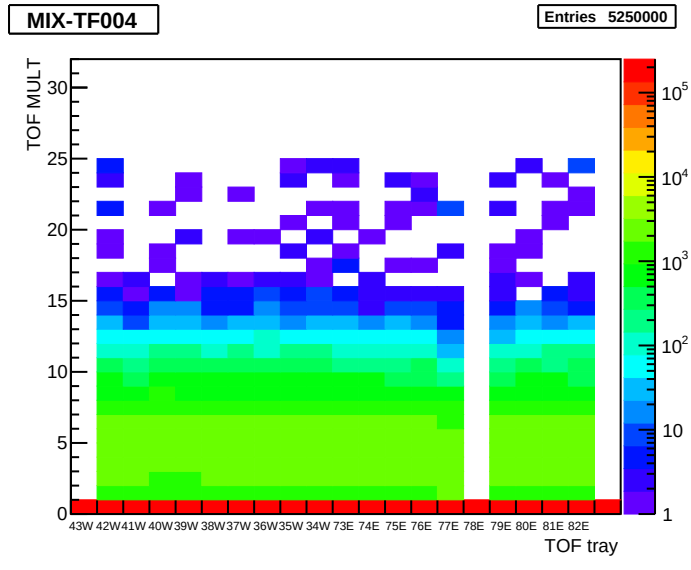

BunchId7Bit (MTD-th2)
Entries 17333
$10^2$
10
1
0 20 40 60 80 100 120

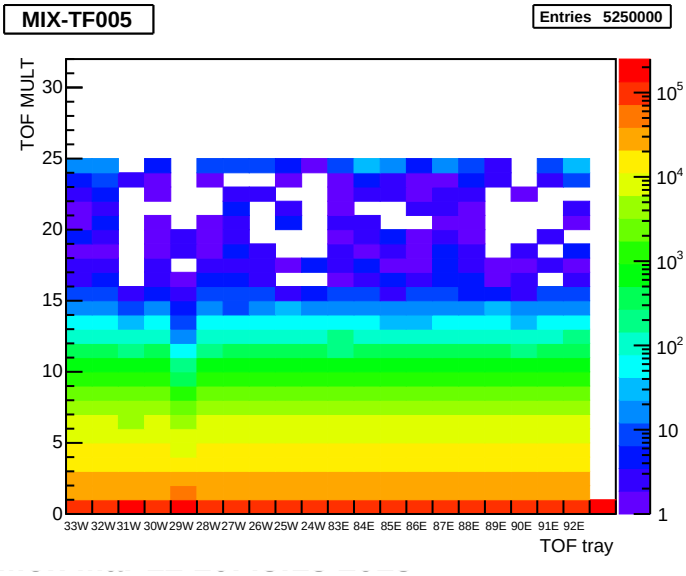

BunchId7Bit (UPC)
Entries 60248
$10^3$
$10^2$
10
0 20 40 60 80 100 120

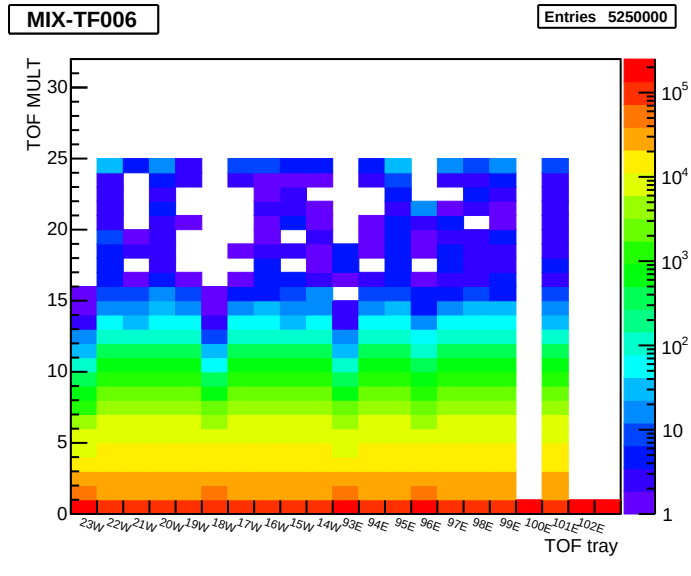

MIX-TF001
Entries 5250000
TOF MULT
TOF tray

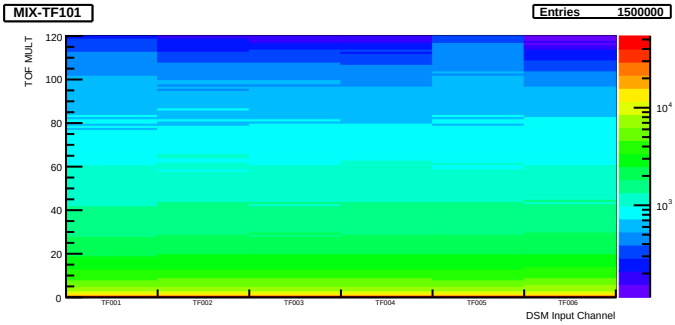

MIX-TF002
Entries 5250000
TOF MULT
TOF tray

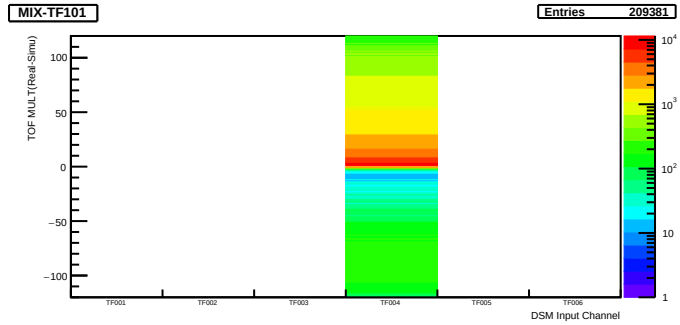

MIX-TF003
Entries 5250000
TOF MULT
TOF tray

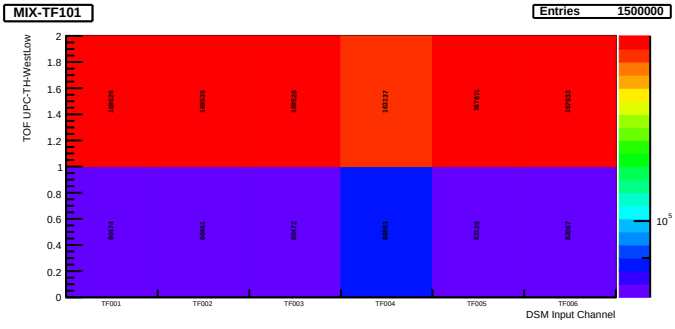

MIX-TF004
Entries 5250000
TOF MULT
TOF tray

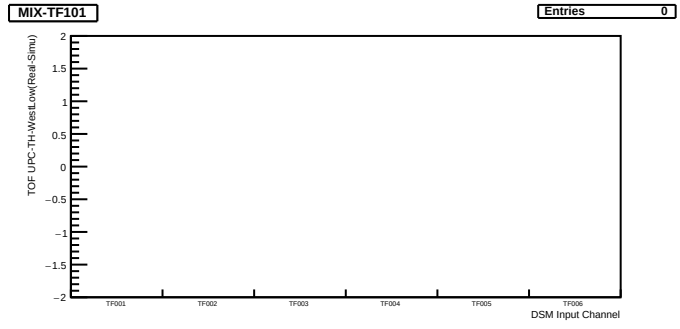

MIX-TF005
Entries 5250000
TOF MULT
TOF tray

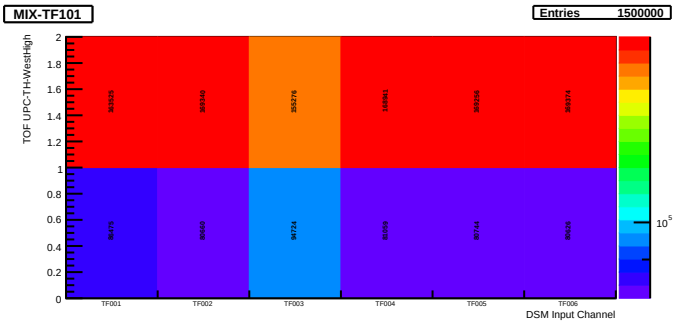

MIX-TF006
Entries 5250000
TOF MULT
TOF tray

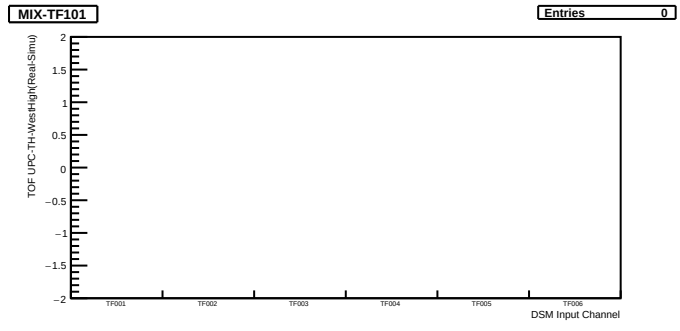

MIX-TF101
Entries 1500000
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

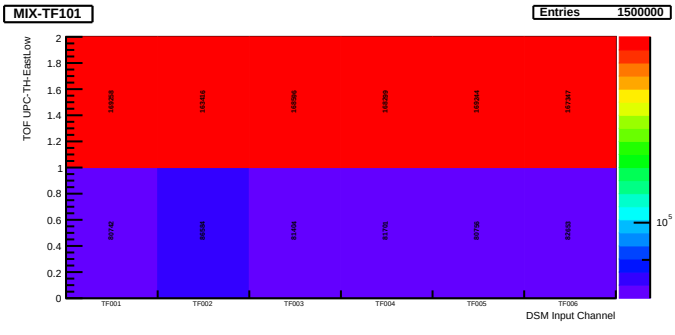

MIX-TF101
Entries 209381
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

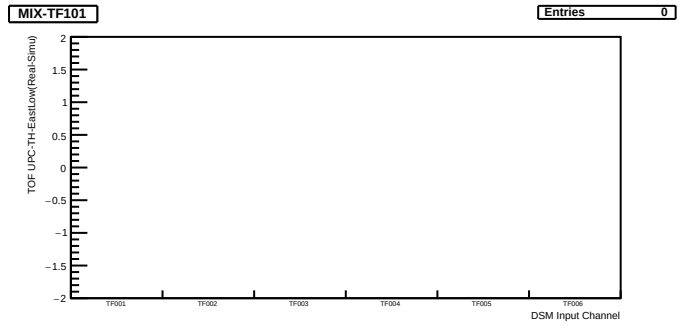

MIX-TF101
Entries 1500000
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

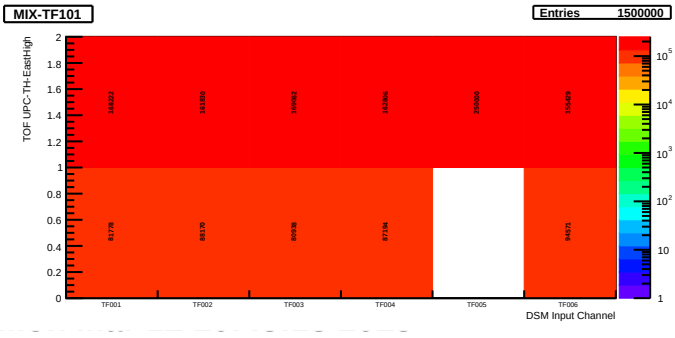

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

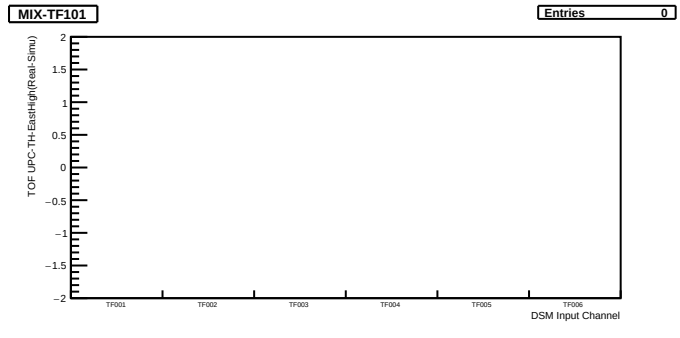

MIX-TF101
Entries 1500000
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

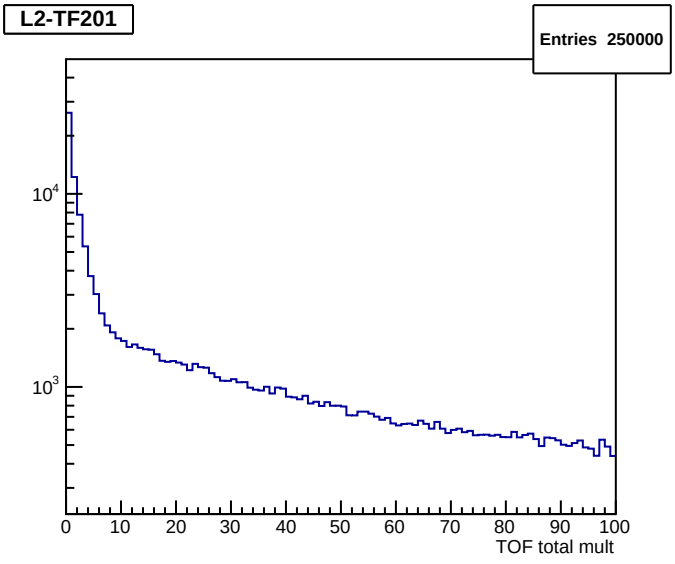

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

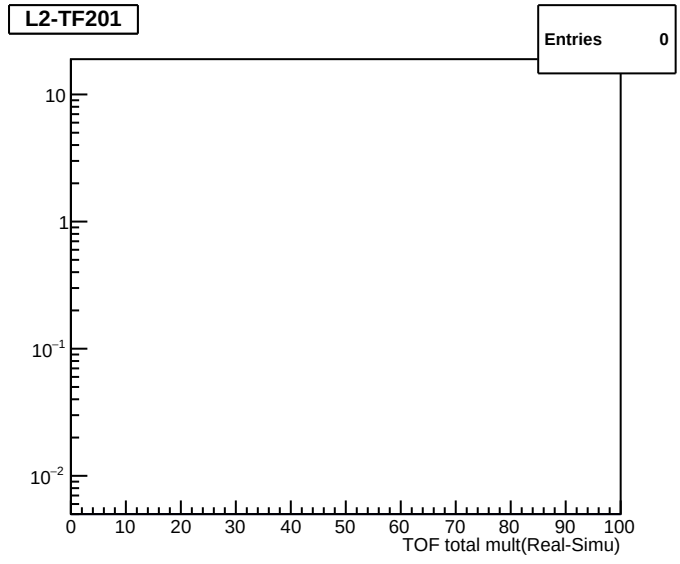

MIX-TF101
Entries 1500000
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

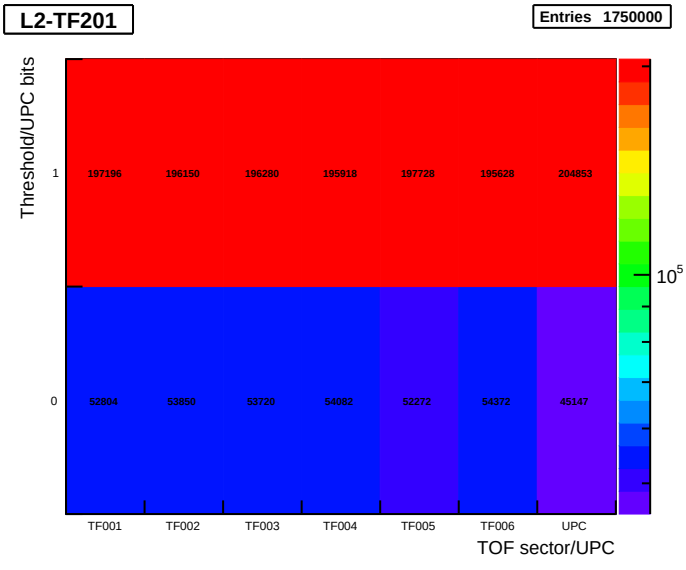

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

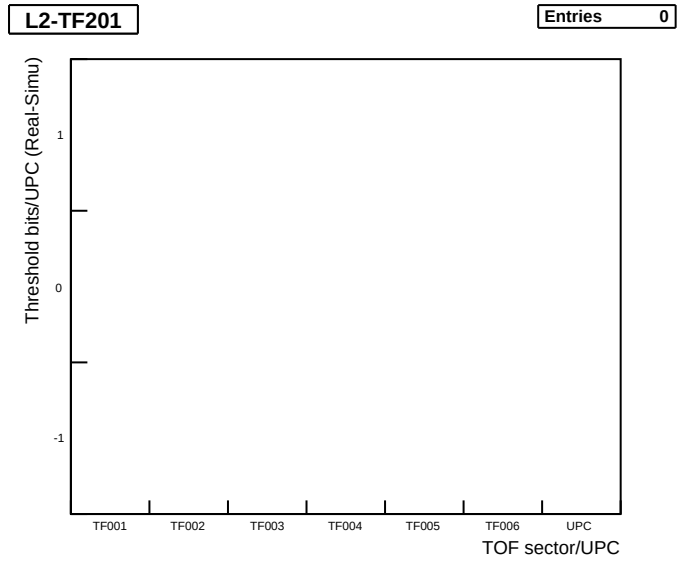

MIX-TF101
Entries 1500000
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

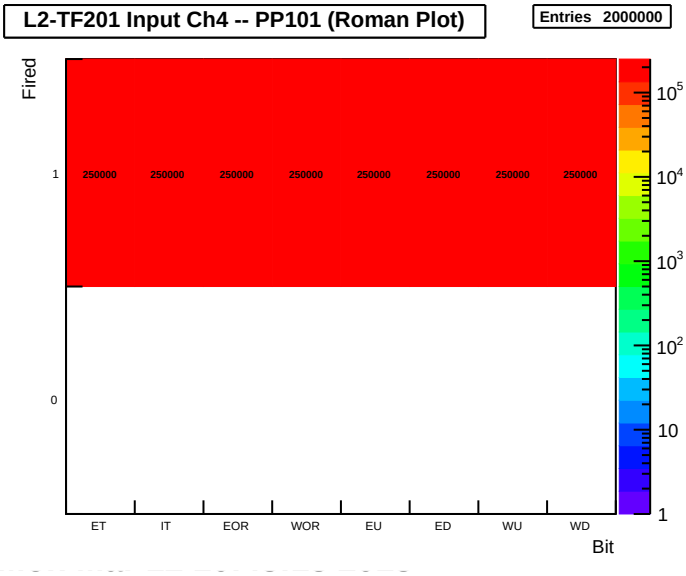

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

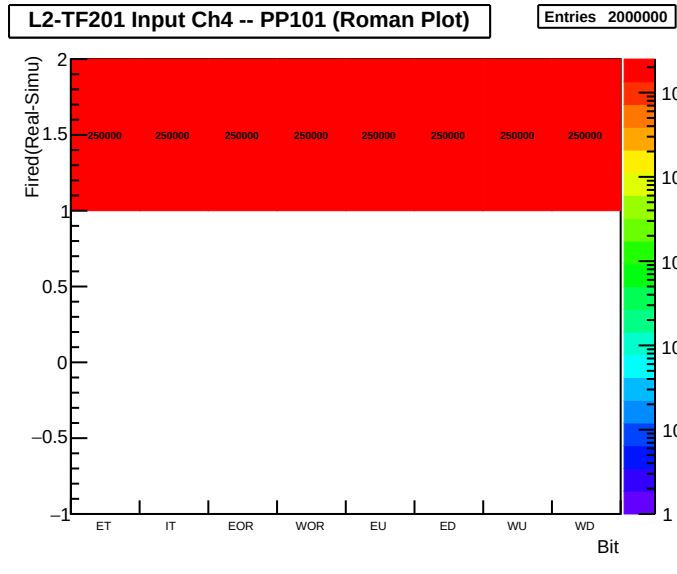

L2-TF201
Entries 250000
TOF total mult

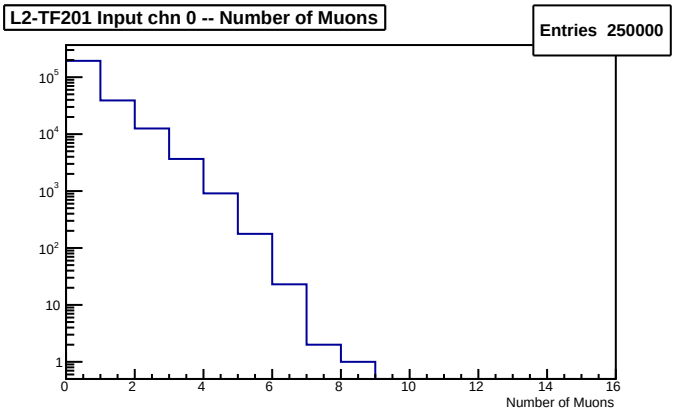

L2-TF201
Entries 0
TOF total mult(Real-Simu)

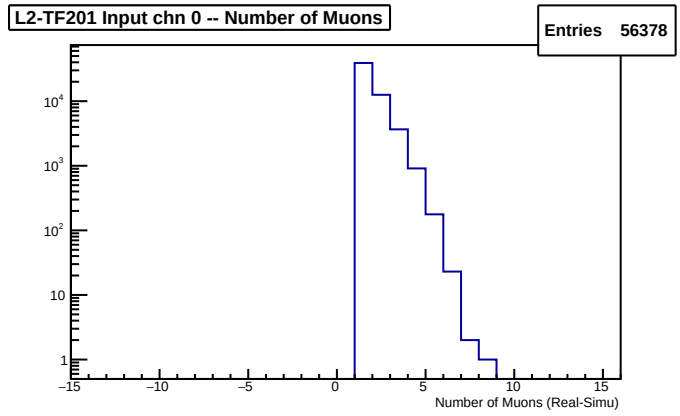

L2-TF201
Entries 1750000
Threshold/UPC bits
197196 196150 196280 195918 197728 195628 204853
52804 53850 53720 54082 52272 54372 45147
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

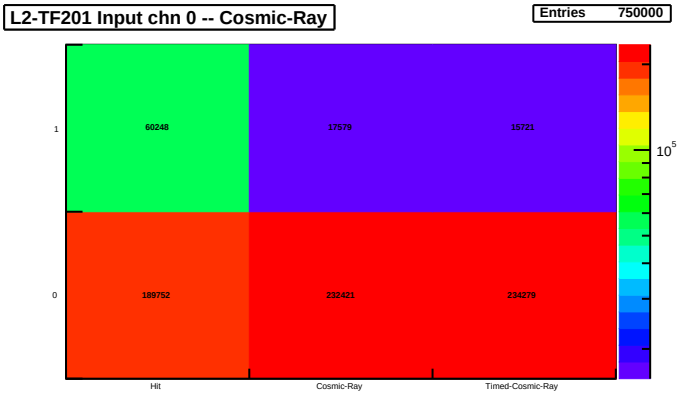

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

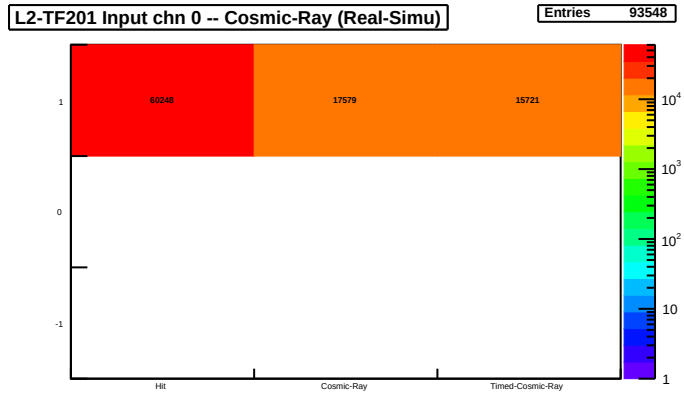

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 2000000
Fired
250000 250000 250000 250000 250000 250000 250000 250000
ET IT EOR WOR EU ED WU WD
Bit

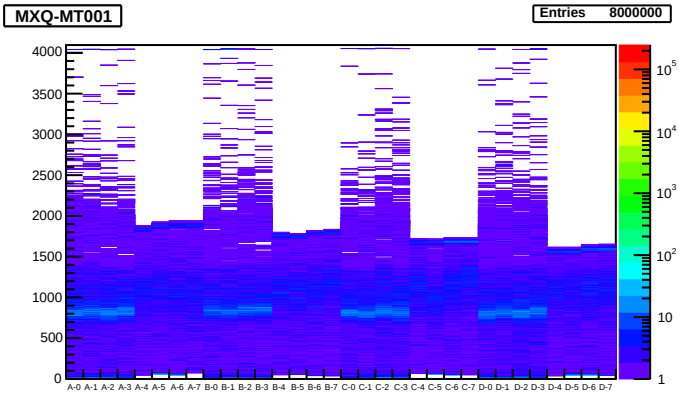

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 2000000
Fired(Real-Simu)
250000 250000 250000 250000 250000 250000 250000 250000
ET IT EOR WOR EU ED WU WD
Bit

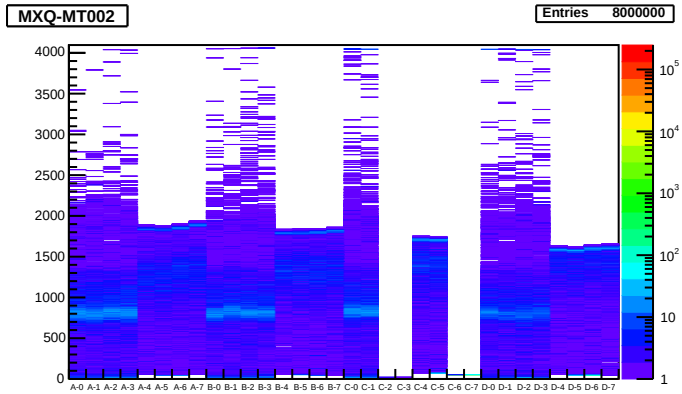

L2-TF201 Input chn 0 -- Number of Muons
Entries 250000
Number of Muons

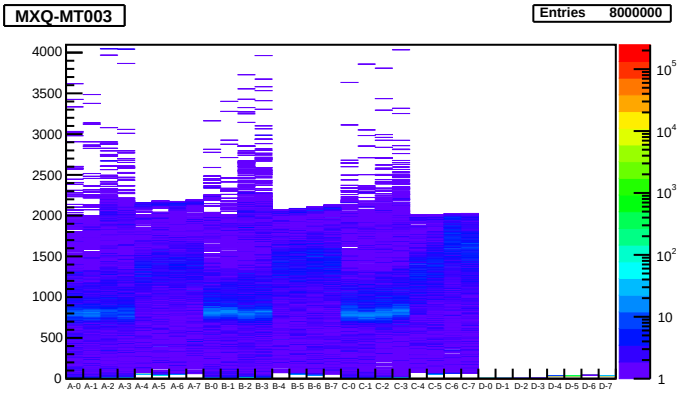

L2-TF201 Input chn 0 -- Number of Muons
Entries 56378
Number of Muons (Real-Simu)

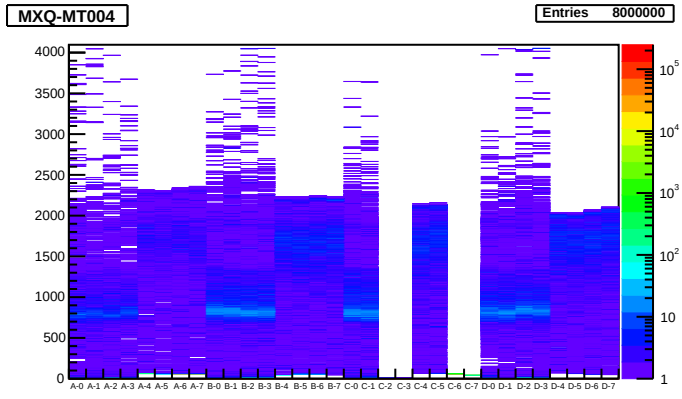

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 750000
60248
17579
15721
189752
232421
234279
Hit
Cosmic-Ray
Timed-Cosmic-Ray

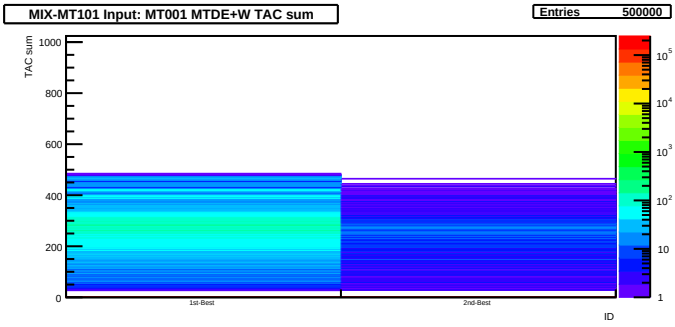

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 93548
60248
17579
15721
Hit
Cosmic-Ray
Timed-Cosmic-Ray

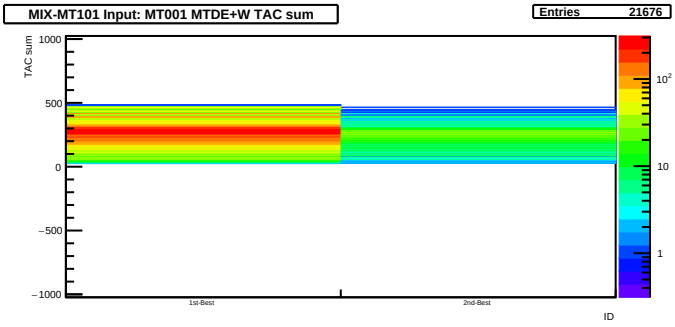

MXQ-MT001
Entries 8000000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
$10^5$
$10^4$
$10^3$
$10^2$
10
1

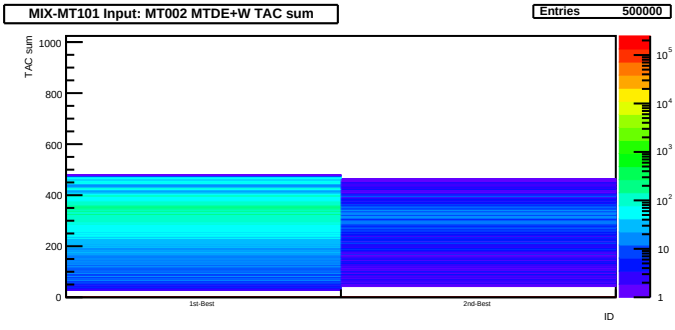

MXQ-MT002
Entries 8000000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
$10^5$
$10^4$
$10^3$
$10^2$
10
1

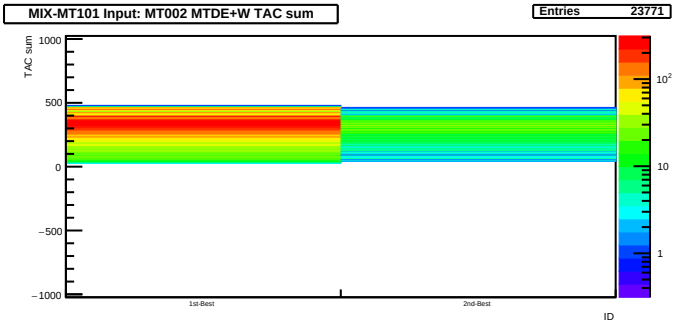

MXQ-MT003
Entries 8000000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
$10^5$
$10^4$
$10^3$
$10^2$
10
1

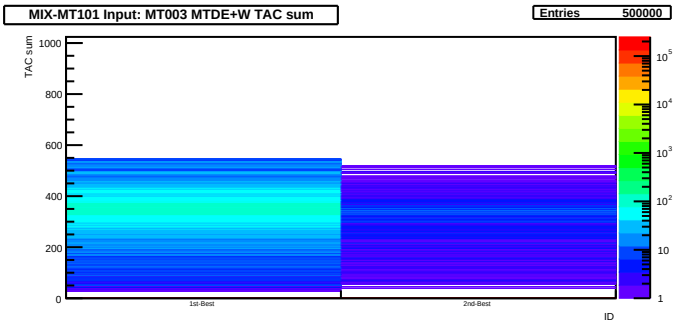

MXQ-MT004
Entries 8000000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
$10^5$
$10^4$
$10^3$
$10^2$
10
1

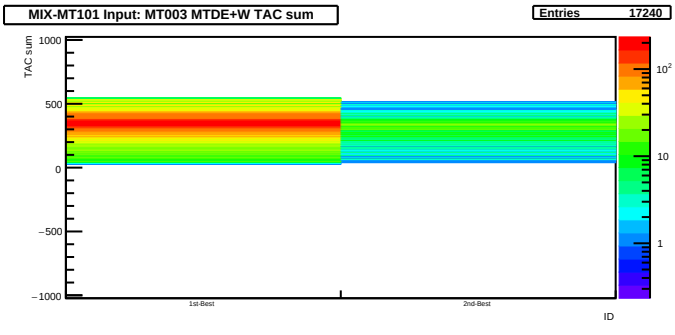

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 500000
TAC sum
1st-Best
2nd-Best
ID

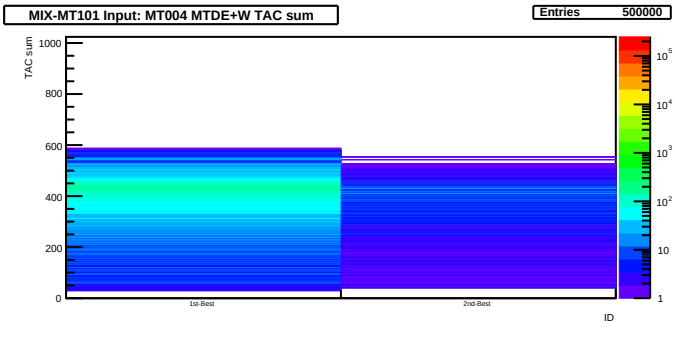

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 21676
TAC sum
1st-Best
2nd-Best
ID

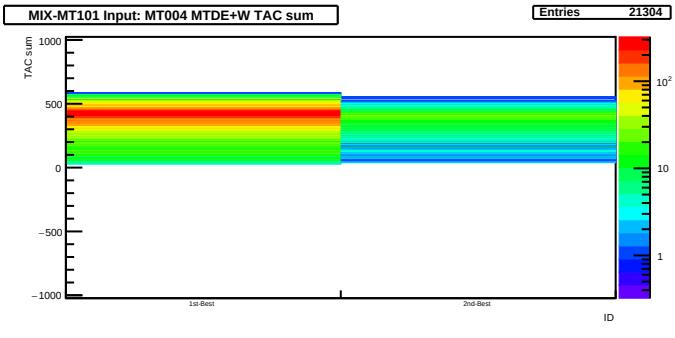

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 500000
TAC sum
1st-Best
2nd-Best
ID

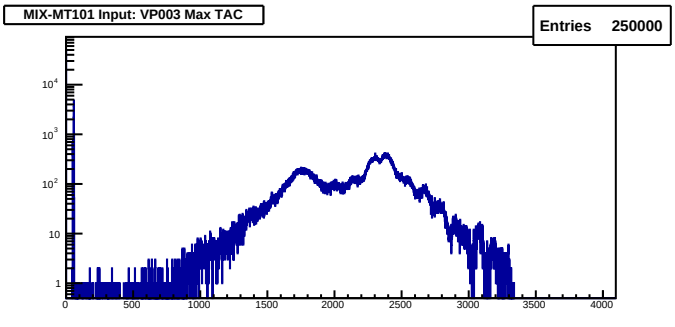

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 23771
TAC sum
1st-Best
2nd-Best
ID

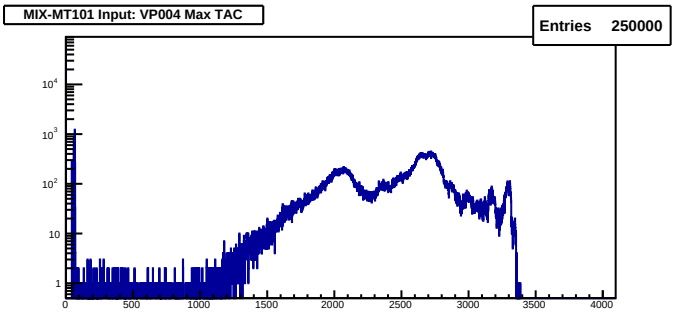

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 500000
TAC sum
1st-Best
2nd-Best
ID

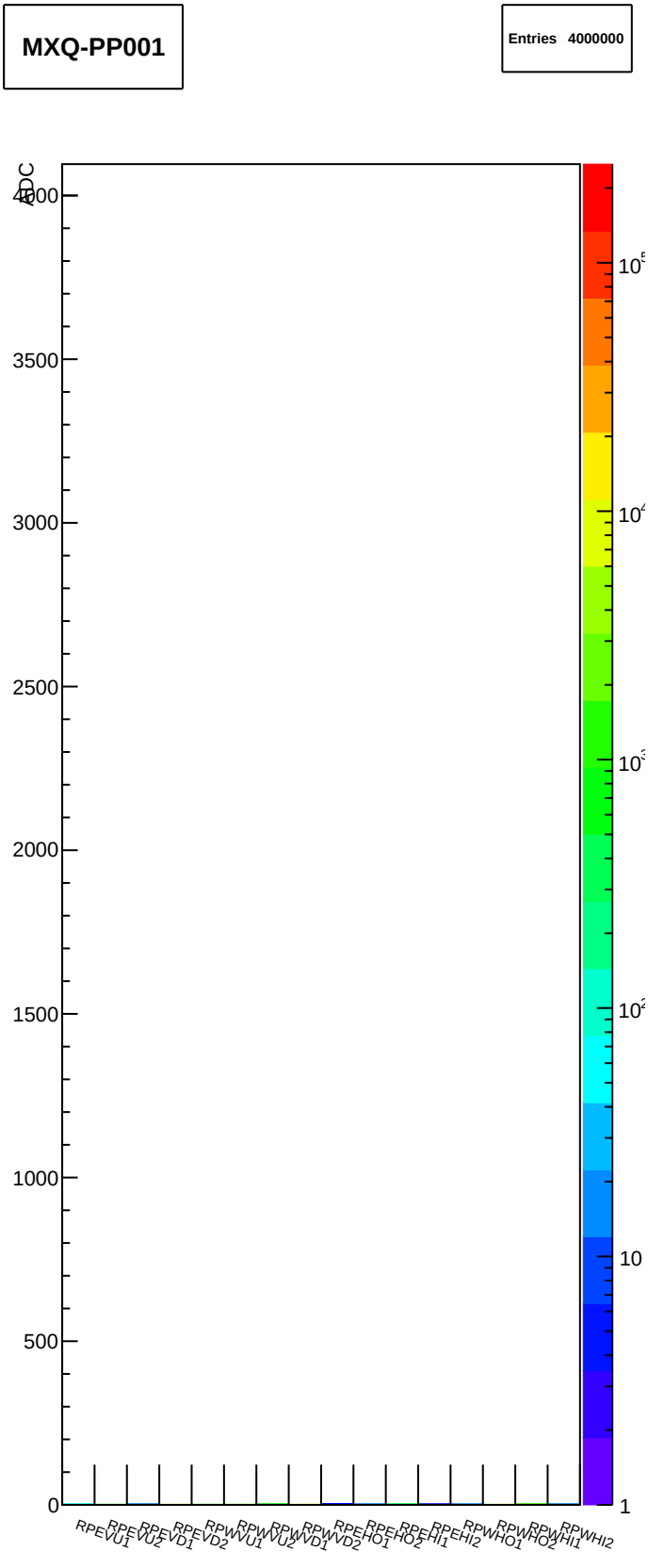

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 17240
TAC sum
1st-Best
2nd-Best
ID

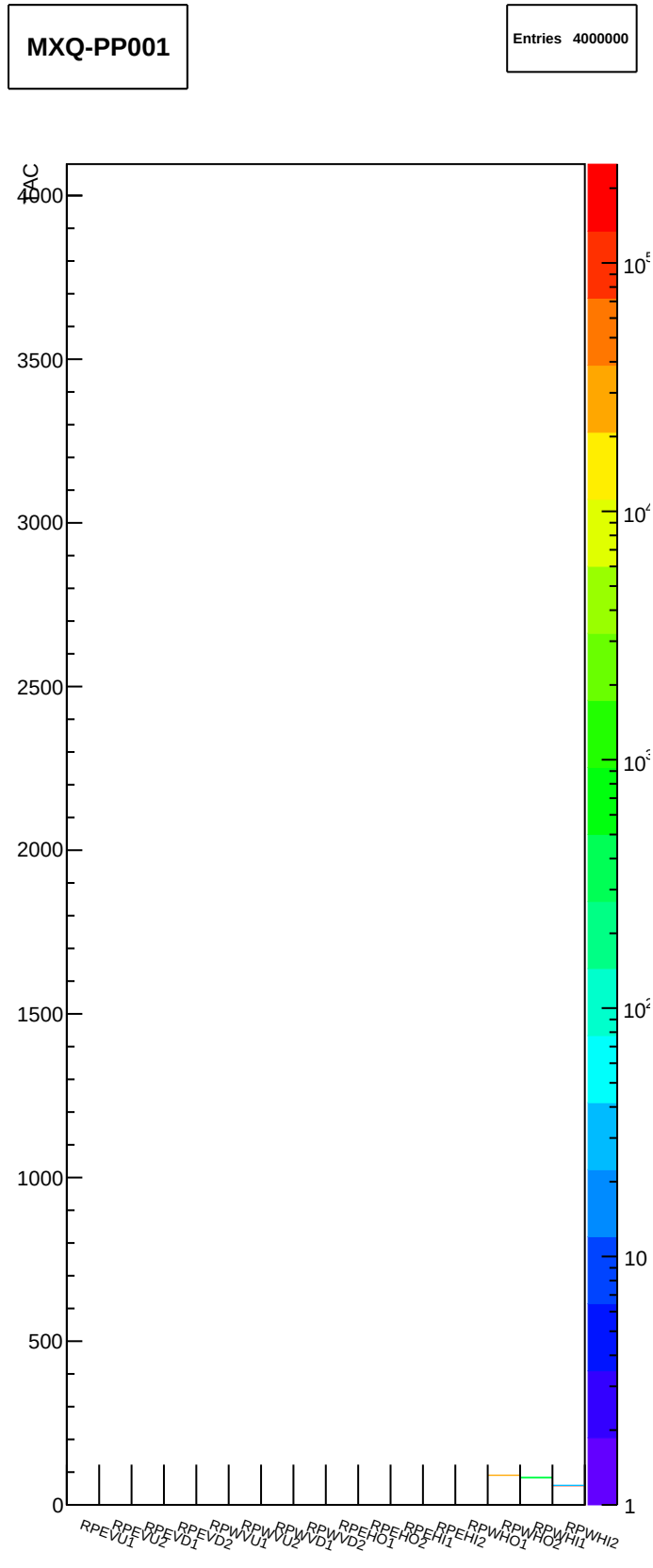

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 500000
TAC sum
1st-Best
2nd-Best
ID

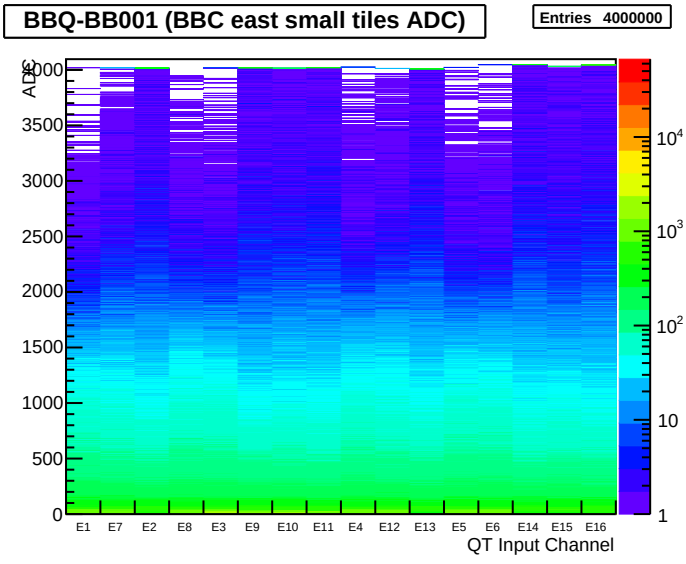

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 21304
TAC sum
1st-Best
2nd-Best
ID

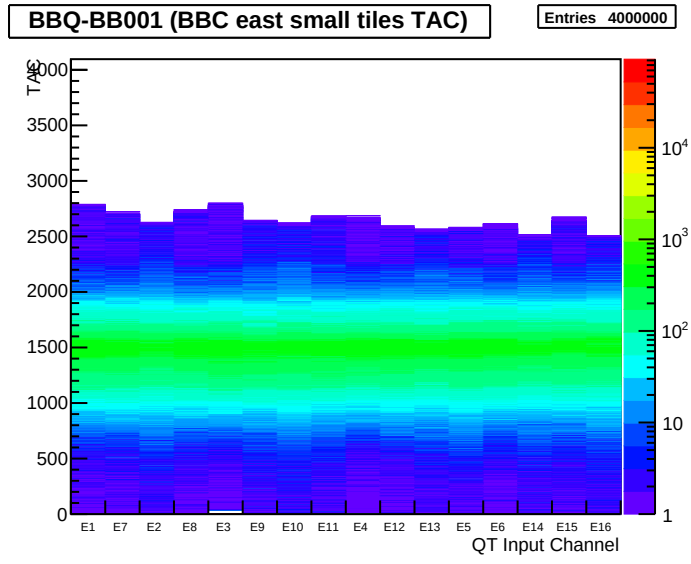

MIX-MT101 Input: VP003 Max TAC
Entries 250000

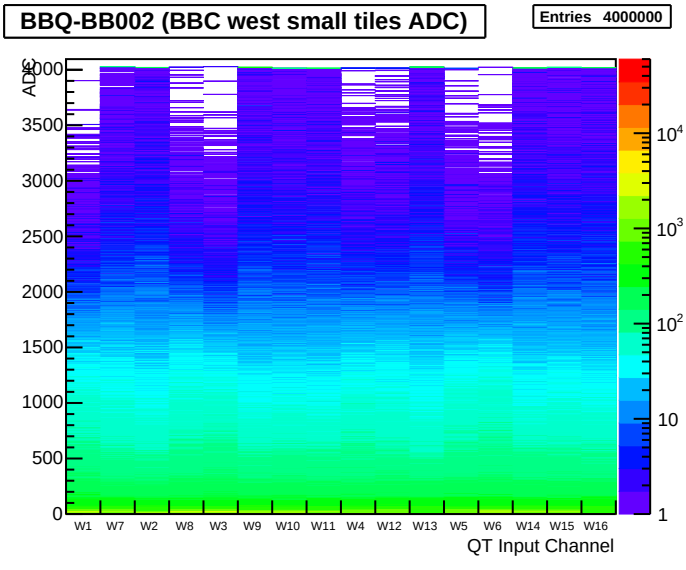

MIX-MT101 Input: VP004 Max TAC
Entries 250000

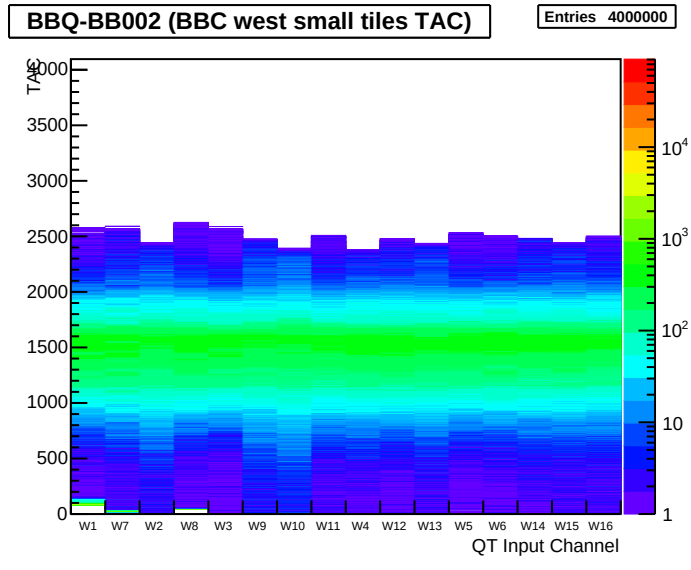

MXQ-PP001
Entries 4000000
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10^5
10^4
10^3
10^2
10
1

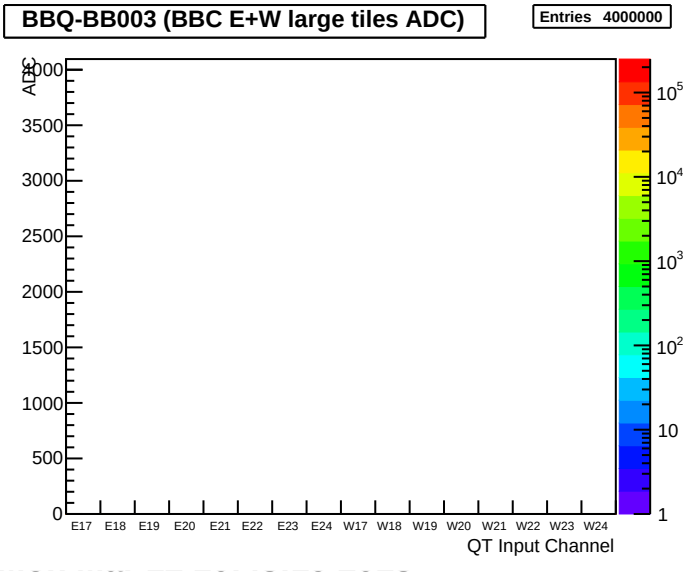

MXQ-PP001
Entries 4000000
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10^5
10^4
10^3
10^2
10
1

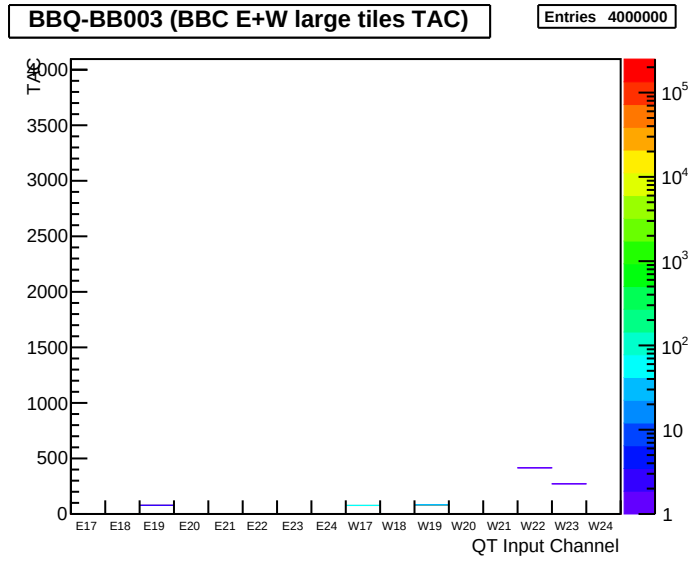

BBQ-BB001 (BBC east small tiles ADC)
Entries 4000000
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

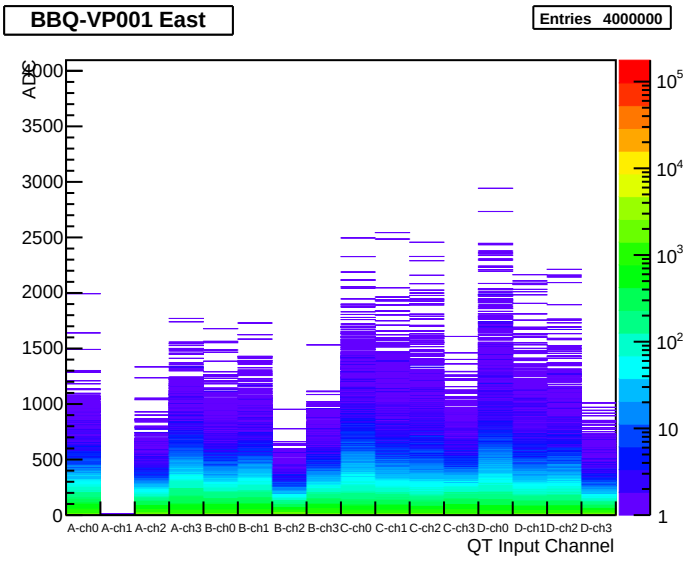

BBQ-BB001 (BBC east small tiles TAC)
Entries 4000000
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

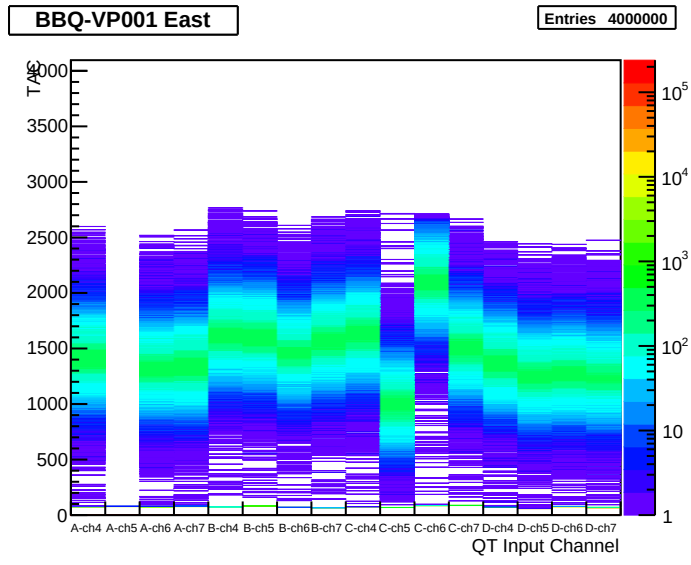

BBQ-BB002 (BBC west small tiles ADC)
Entries 4000000
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

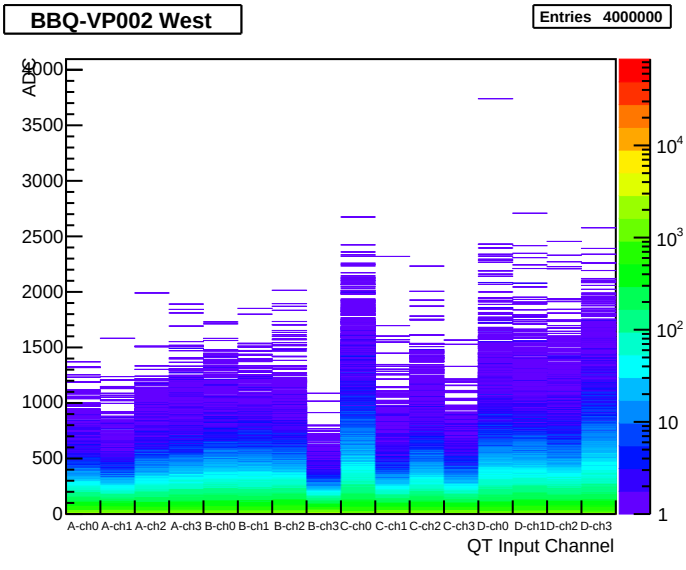

BBQ-BB002 (BBC west small tiles TAC)
Entries 4000000
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

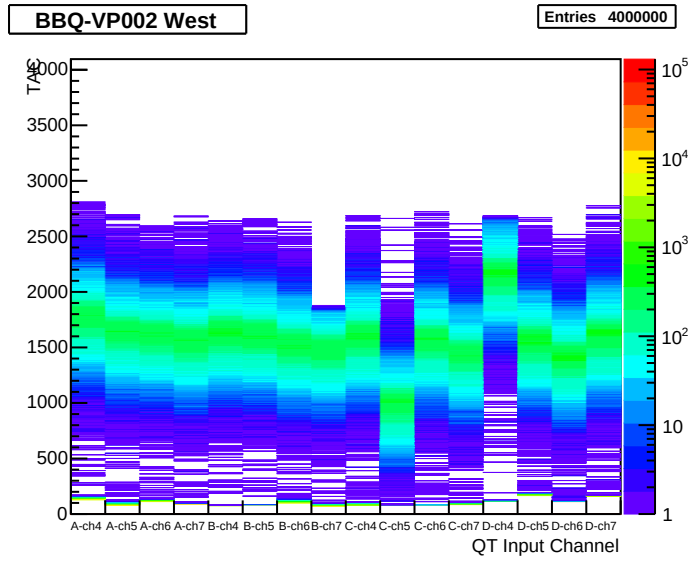

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4000000
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

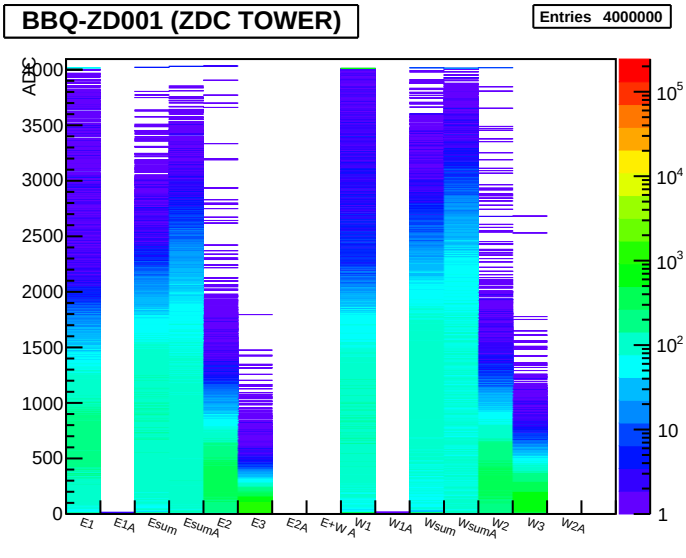

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4000000
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

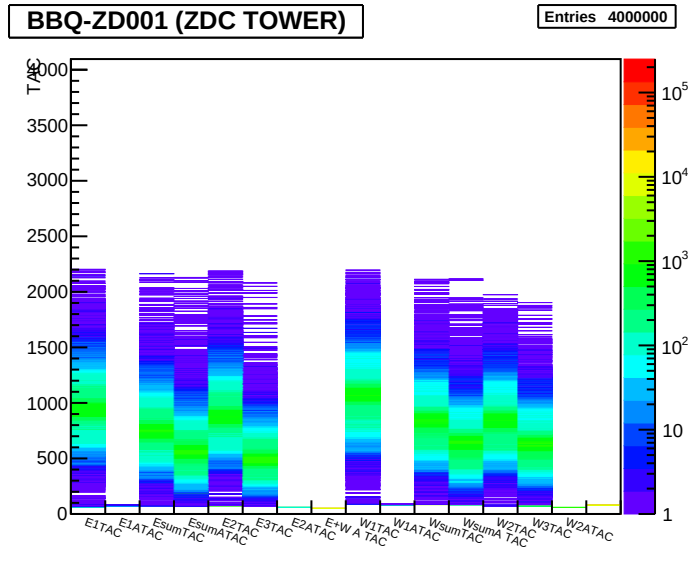

BBQ-VP001 East
Entries 4000000
ADC
QT Input Channel

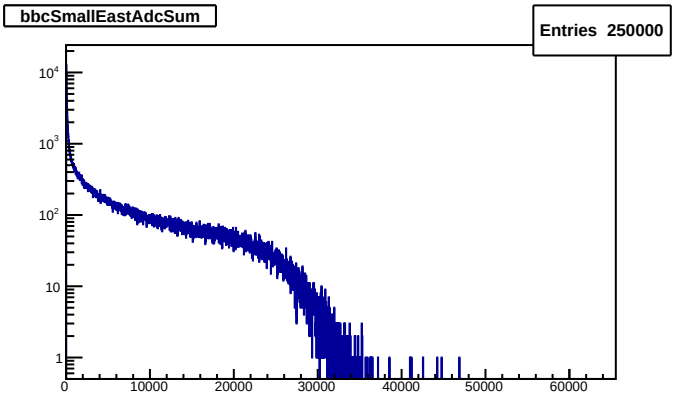

BBQ-VP001 East
Entries 4000000
TAC
QT Input Channel

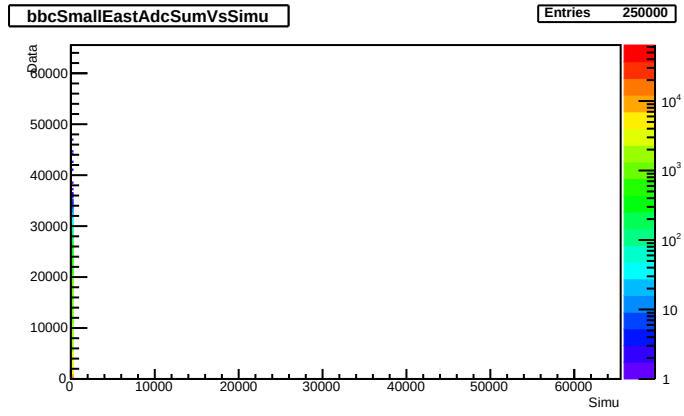

BBQ-VP002 West
Entries 4000000
ADC
QT Input Channel

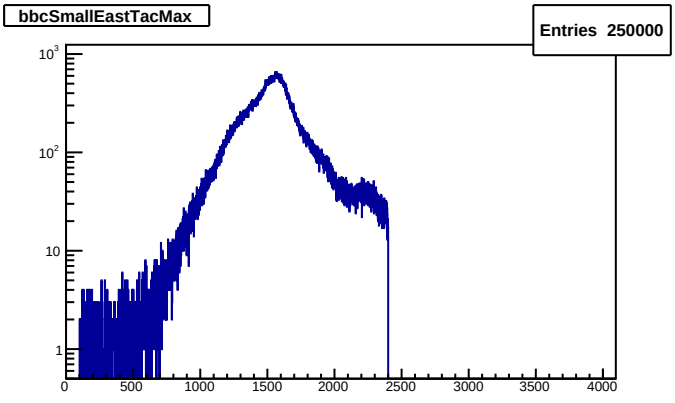

BBQ-VP002 West
Entries 4000000
TAC
QT Input Channel

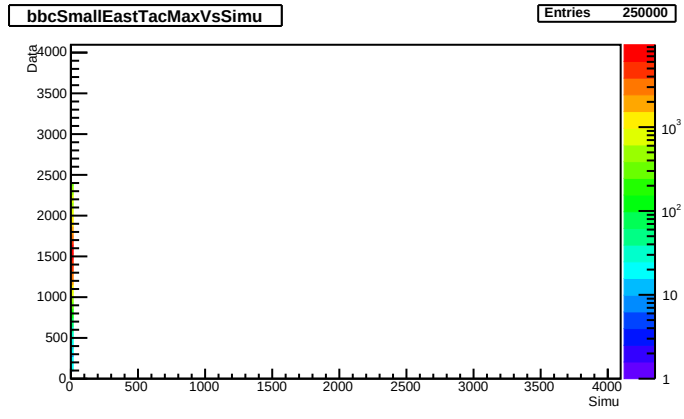

BBQ-ZD001 (ZDC TOWER)
Entries 4000000
ADC

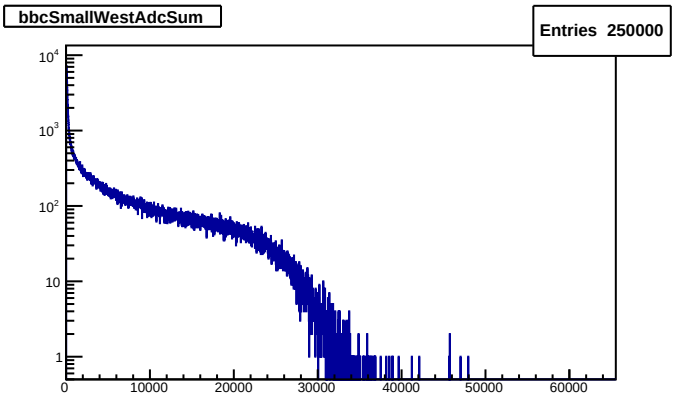

BBQ-ZD001 (ZDC TOWER)
Entries 4000000
TAC

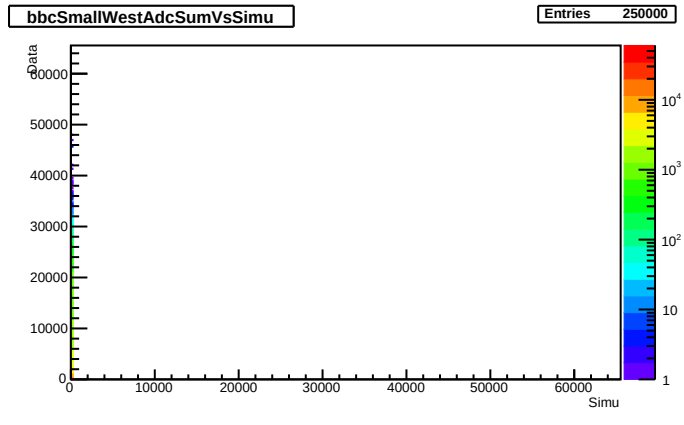

bbcSmallEastAdcSum
Entries 250000

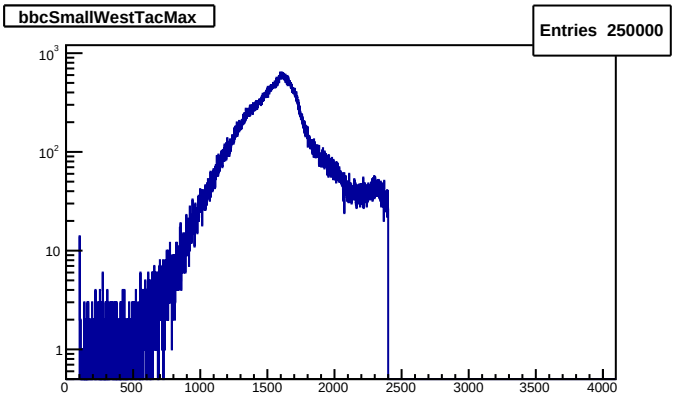

bbcSmallEastAdcSumVsSimu
Entries 250000
Data
Simu

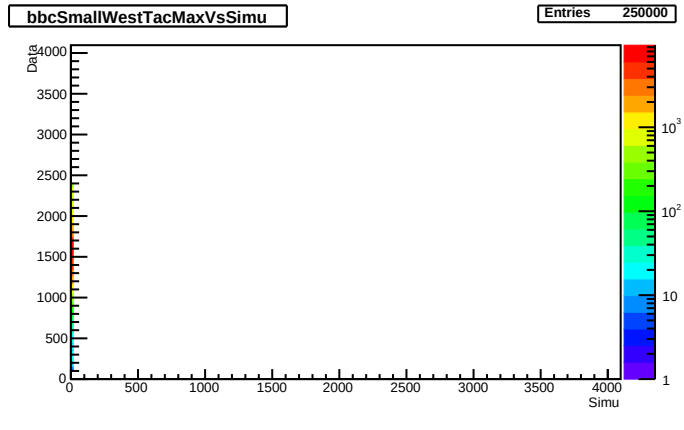

bbcSmallEastTacMax
Entries 250000

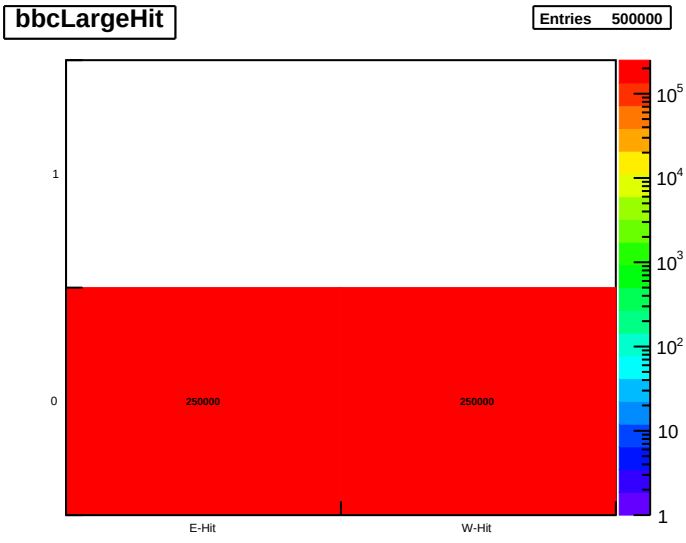

bbcSmallEastTacMaxVsSimu
Entries 250000
Data
Simu

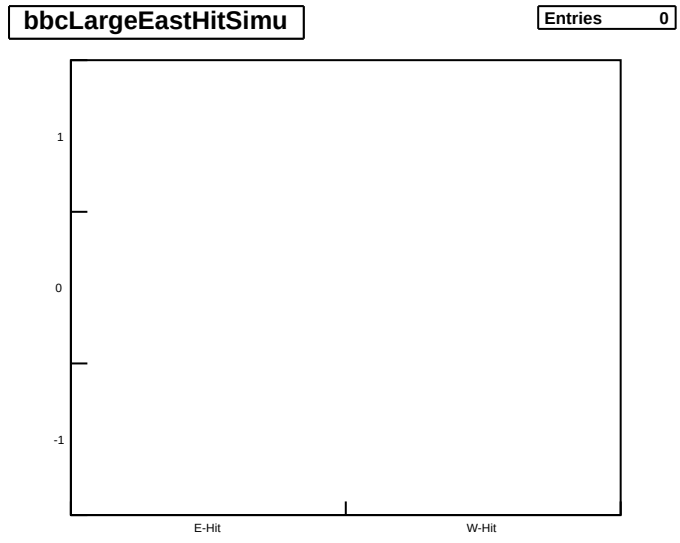

bbcSmallWestAdcSum
Entries 250000

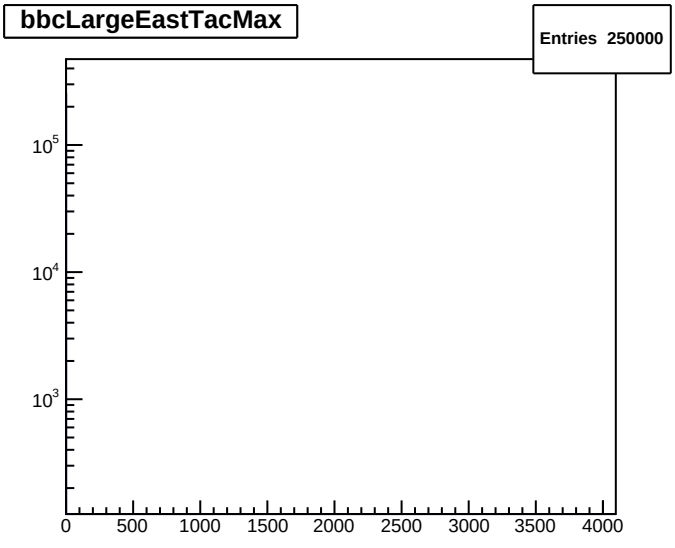

bbcSmallWestAdcSumVsSimu
Entries 250000
Data
Simu

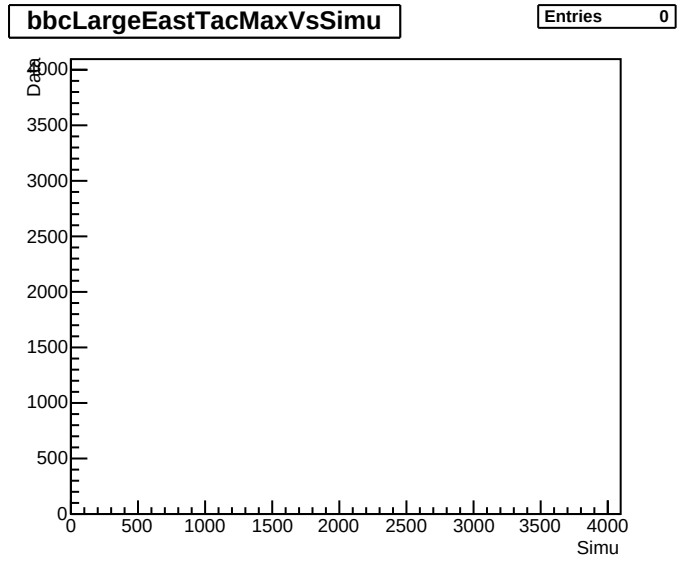

bbcSmallWestTacMax
Entries 250000

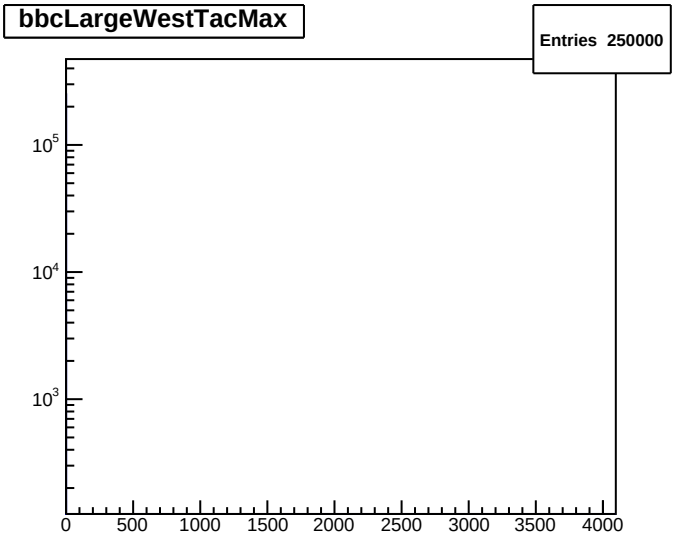

bbcSmallWestTacMaxVsSimu
Entries 250000
Data
Simu

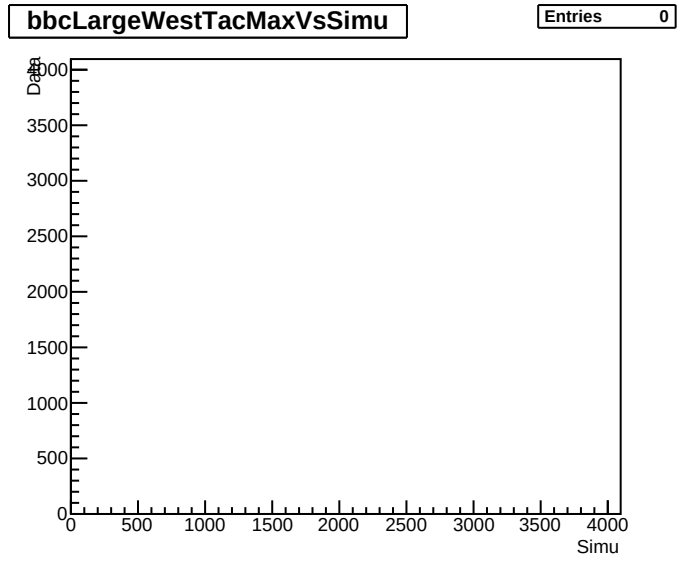

bbcLargeHit
Entries 500000
250000
250000
E-Hit
W-Hit

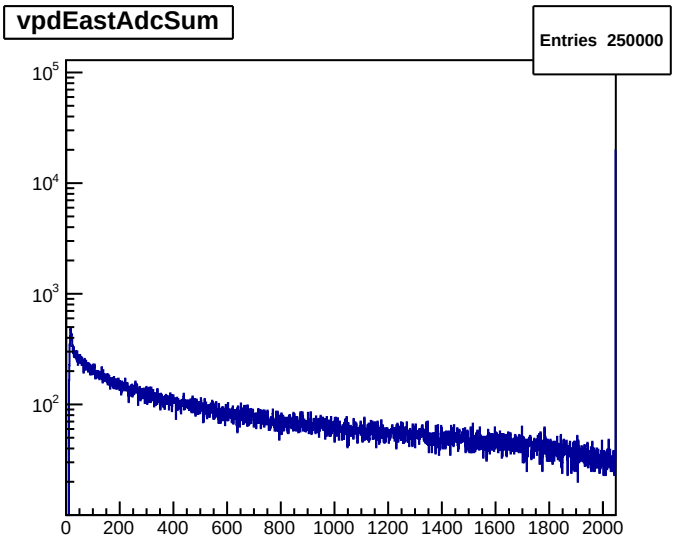

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

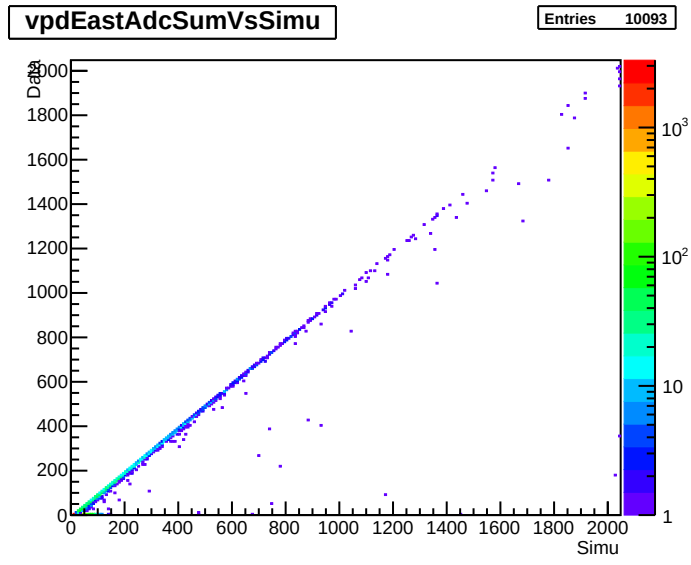

bbcLargeEastTacMax
Entries 250000

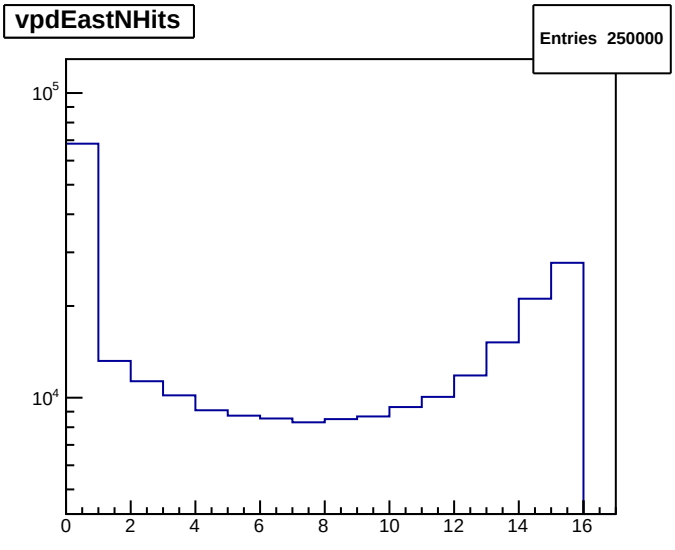

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

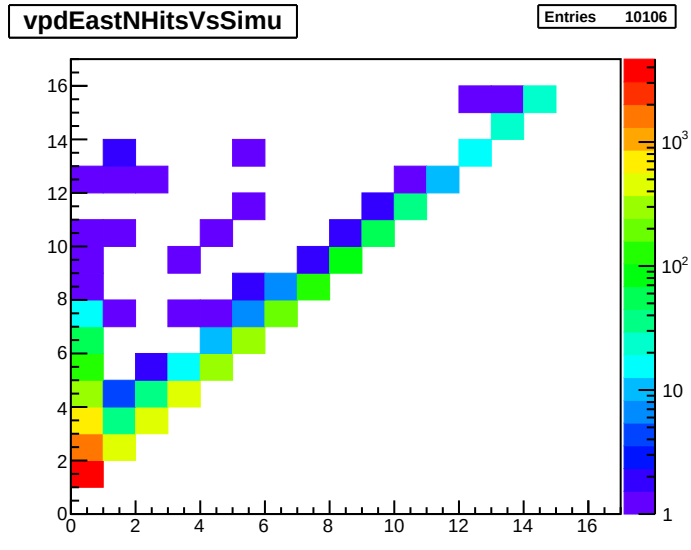

bbcLargeWestTacMax
Entries 250000

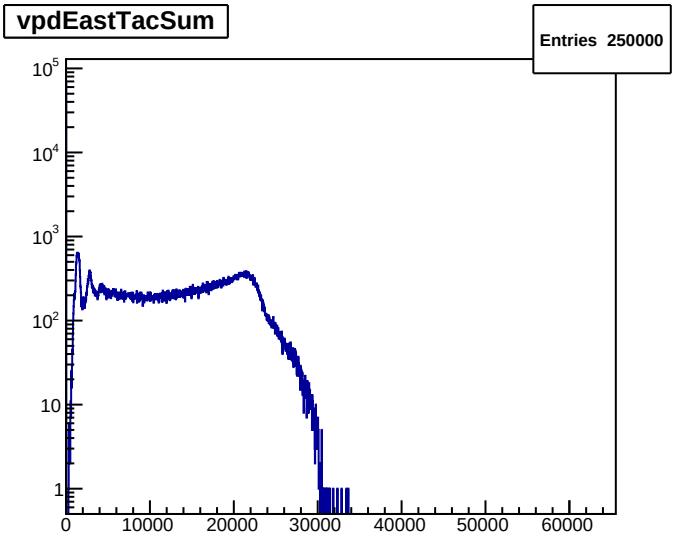

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

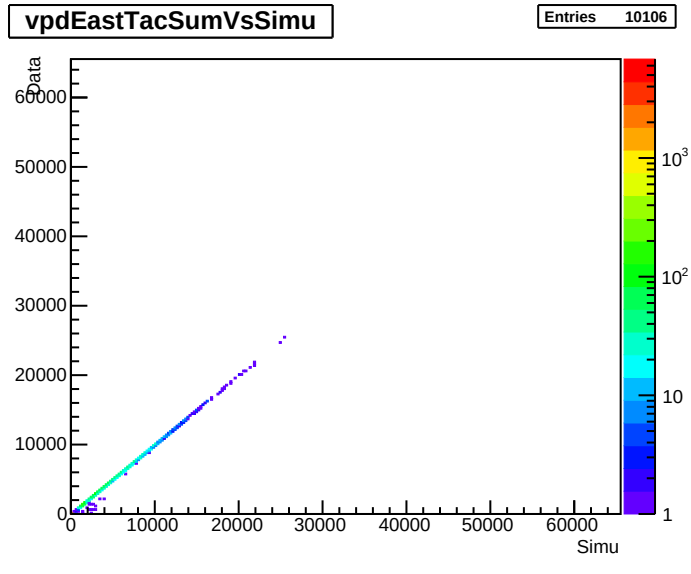

vpdEastAdcSum
Entries 250000

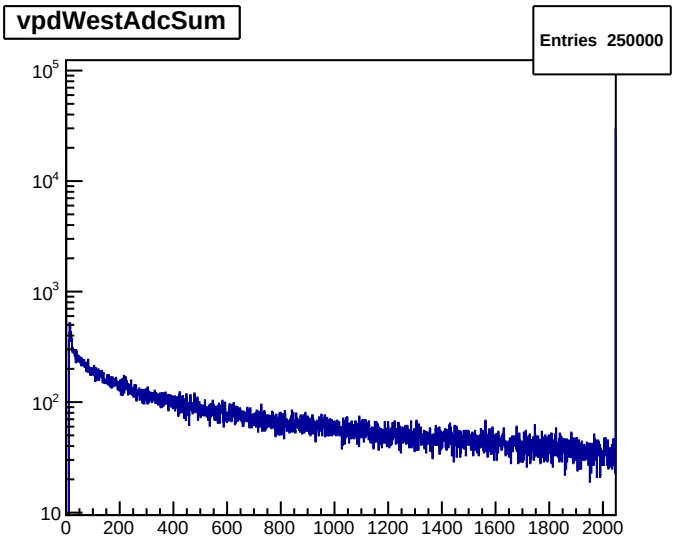

vpdEastAdcSumVsSimu
Entries 10093
Data
Simu

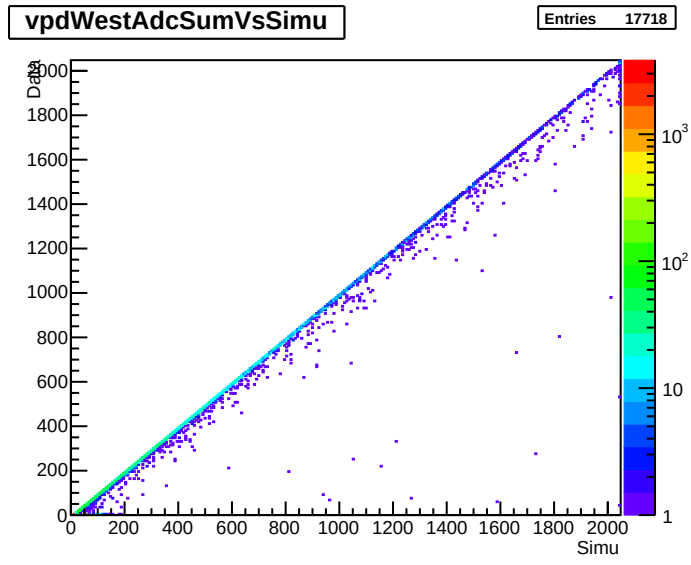

vpdEastNHits
Entries 250000

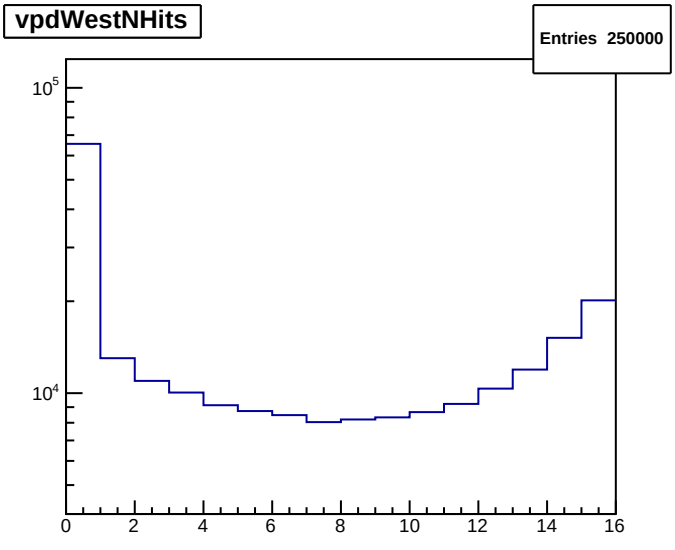

vpdEastNHitsVsSimu
Entries 10106

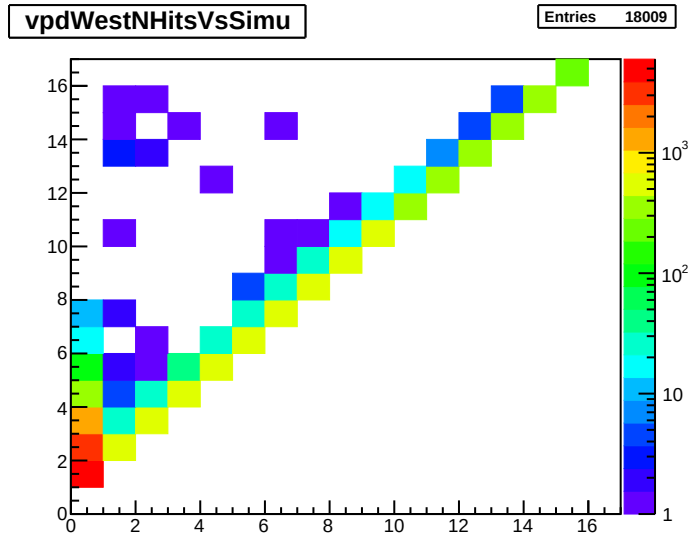

vpdEastTacSum
Entries 250000

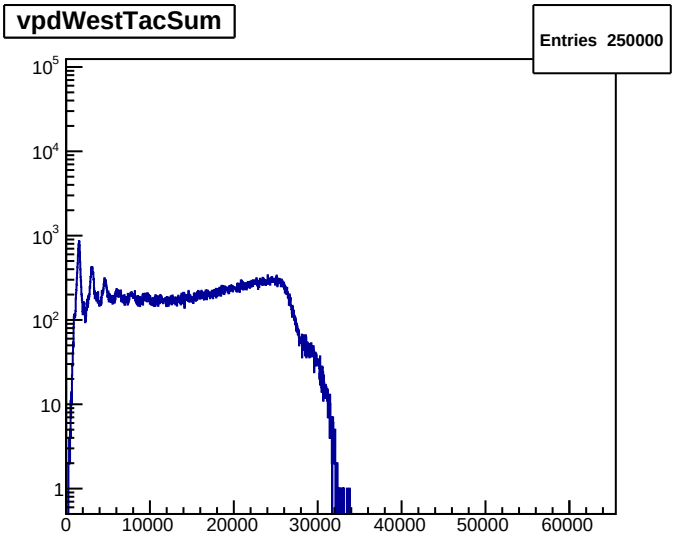

vpdEastTacSumVsSimu
Entries 10106
Data
Simu

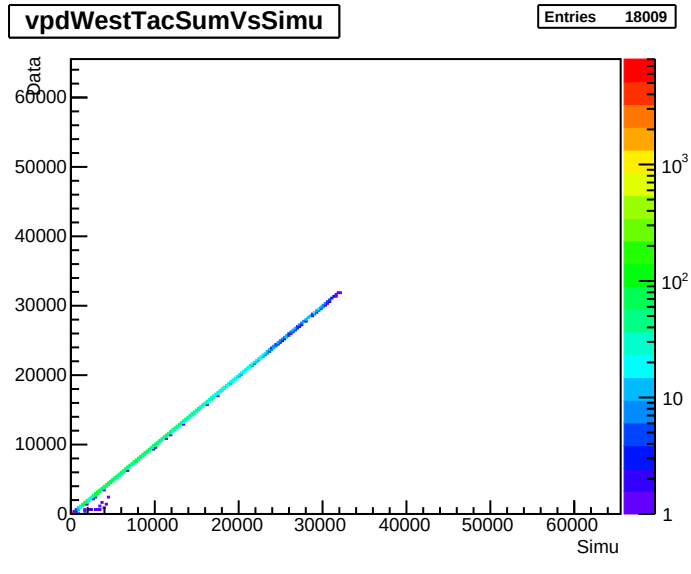

vpdWestAdcSum
Entries 250000

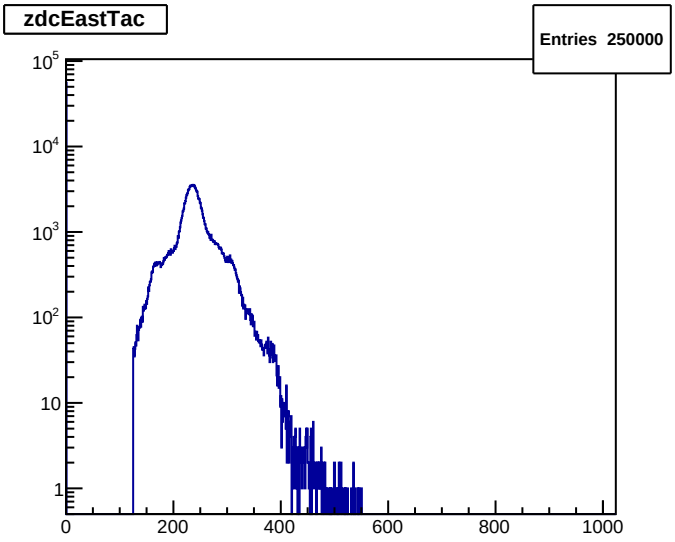

vpdWestAdcSumVsSimu
Entries 17718
Data
Simu

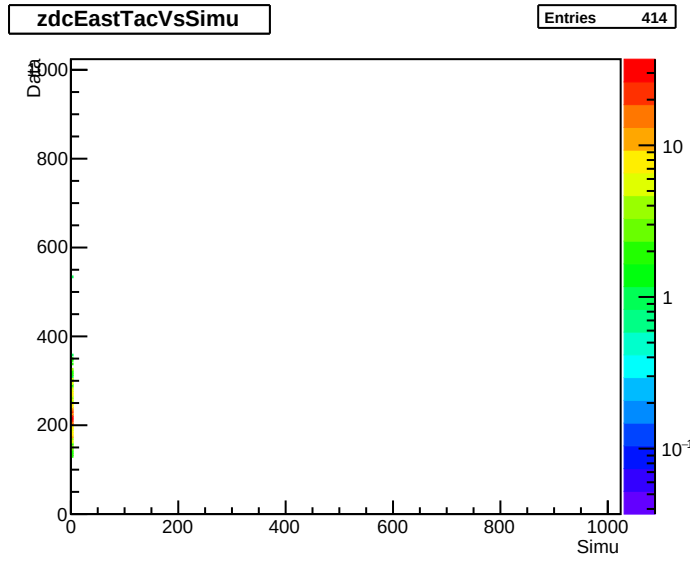

vpdWestNHits
Entries 250000

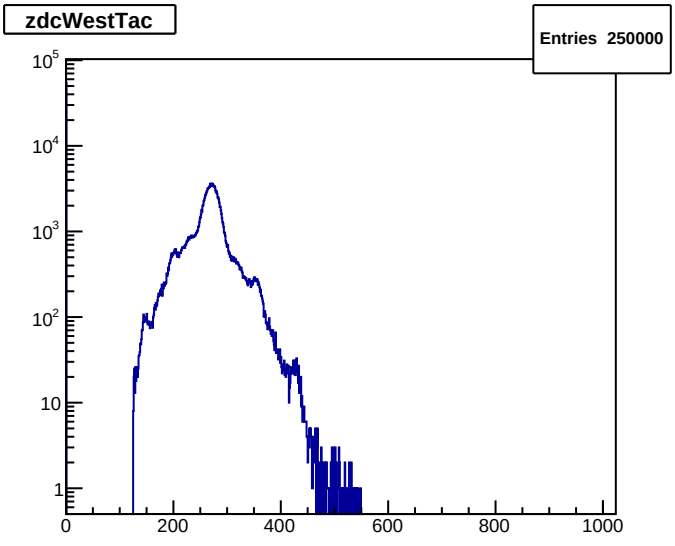

vpdWestNHitsVsSimu
Entries 18009

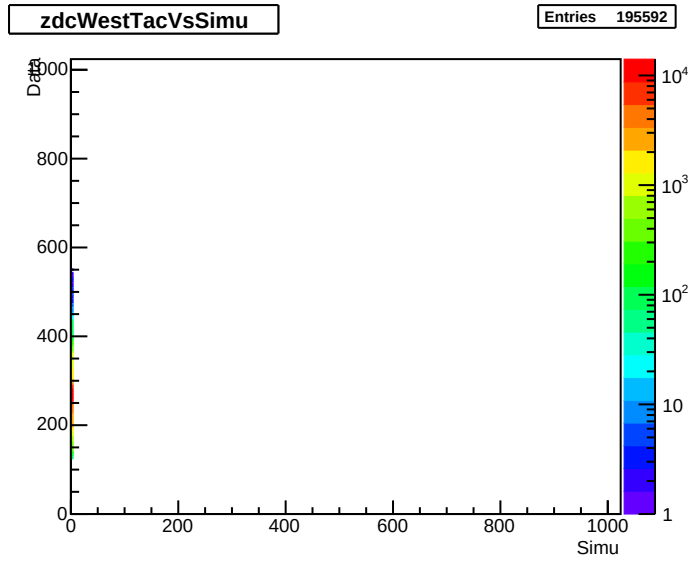

vpdWestTacSum
Entries 250000

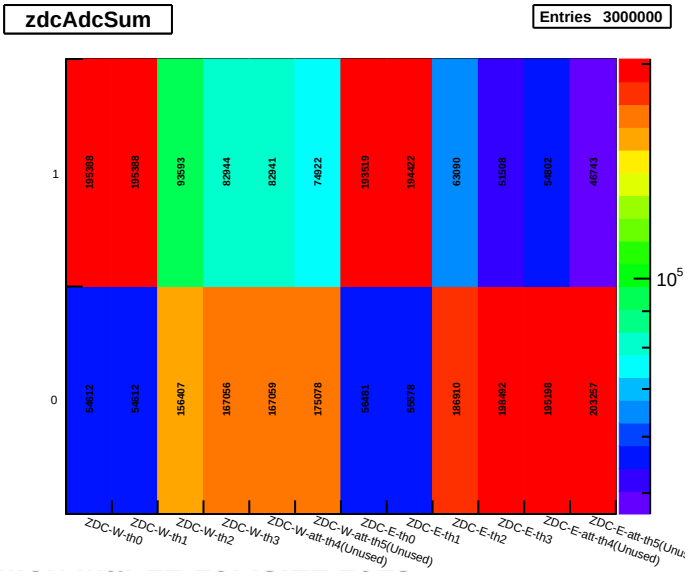

vpdWestTacSumVsSimu
Entries 18009
Data
Simu

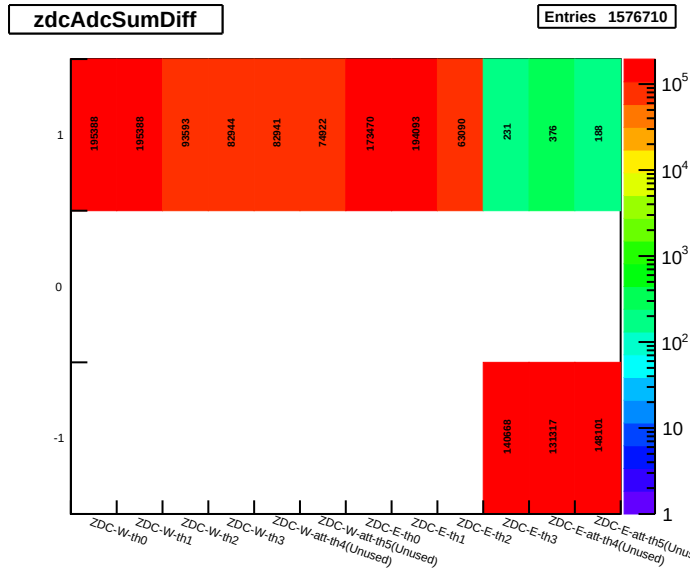

zdcEastTac
Entries 250000

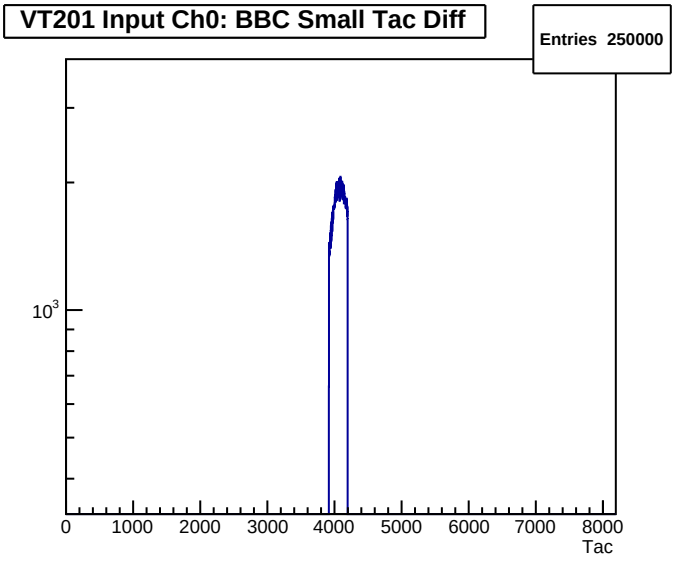

zdcEastTacVsSimu
Entries 414
Data
Simu

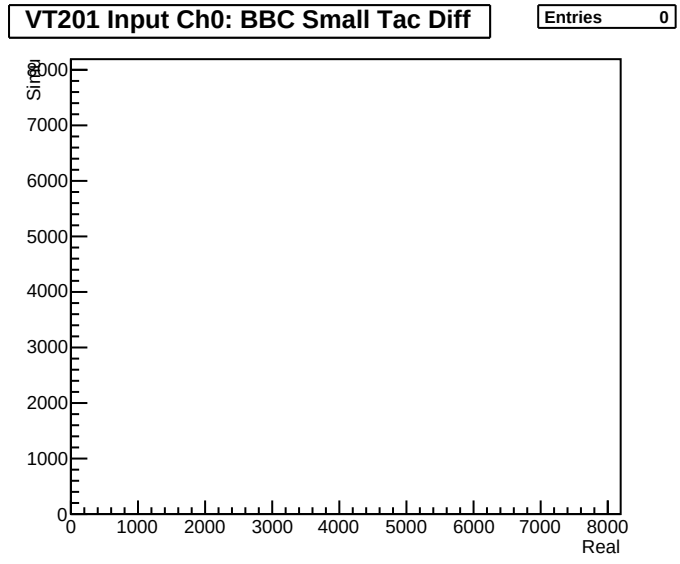

zdcWestTac
Entries 250000

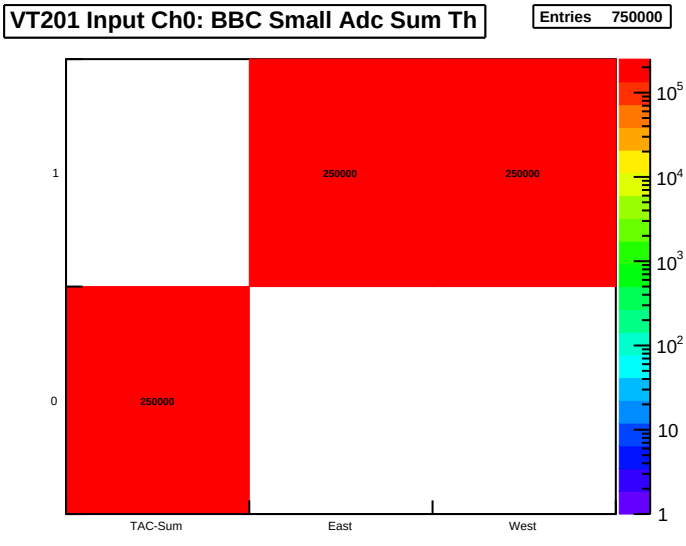

zdcWestTacVsSimu
Entries 195592
Data
Simu

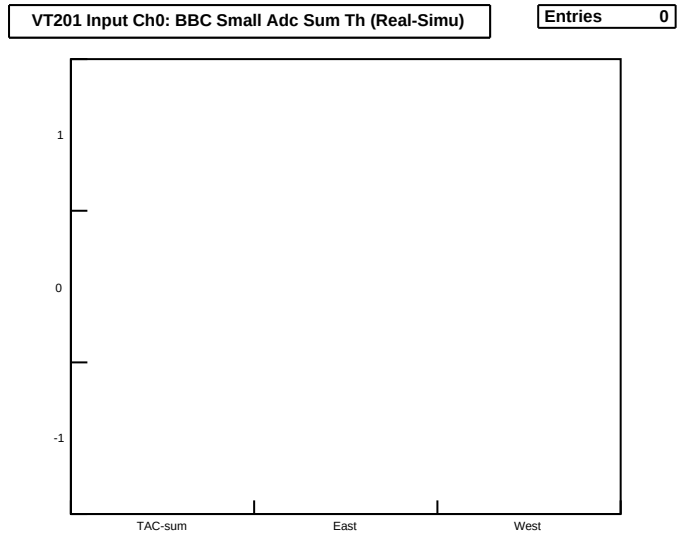

zdcAdcSum
Entries 3000000
195388
195388
93593
82944
82941
74922
193519
194422
63090
51508
54802
46743
54612
54612
156407
167056
167059
175078
56431
55578
186910
198492
195198
203257
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

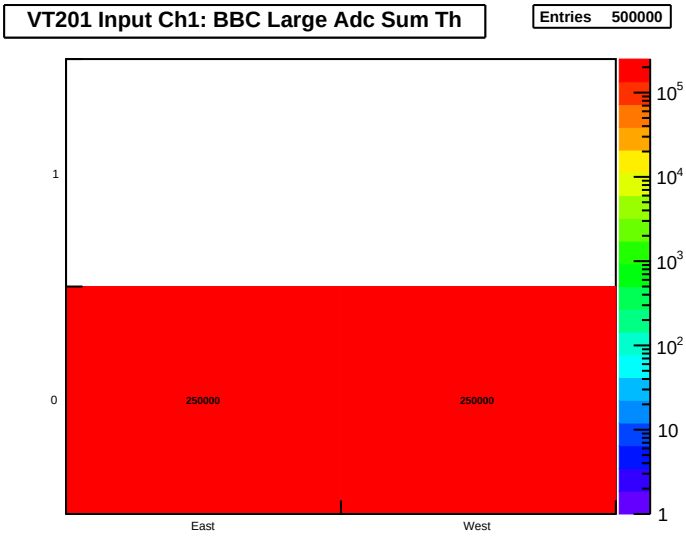

zdcAdcSumDiff
Entries 1576710
195388
195388
93593
82944
82941
74922
173470
194093
63090
231
376
188
140668
131317
148101
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

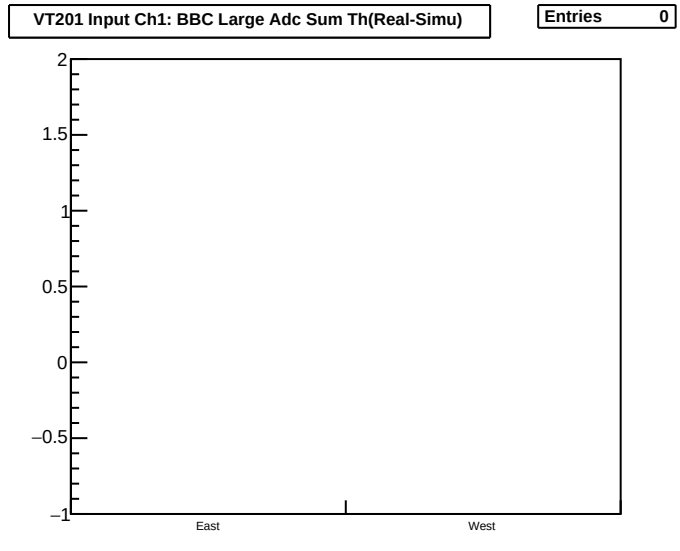

VT201 Input Ch0: BBC Small Tac Diff
Entries 250000
$10^3$
0 1000 2000 3000 4000 5000 6000 7000 8000
Tac


VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
8000 7000 6000 5000 4000 3000 2000 1000 0
0 1000 2000 3000 4000 5000 6000 7000 8000
Real

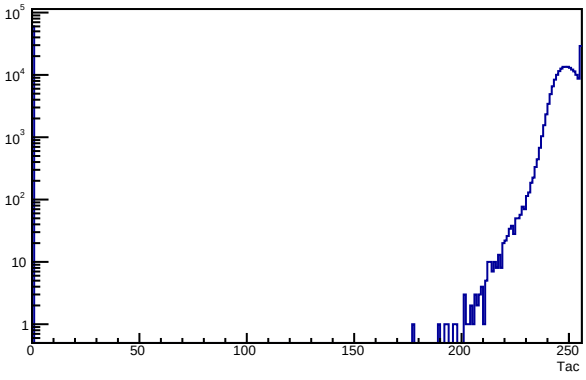

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 750000
1
0
250000
250000
250000
TAC-Sum
East
West
$10^5$
$10^4$
$10^3$
$10^2$
10
1


VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
1
0
-1
TAC-sum
East
West

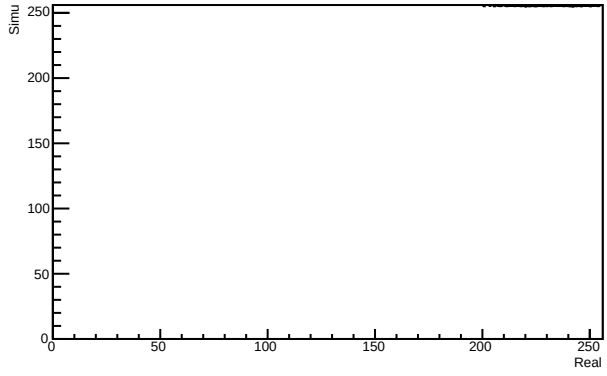

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 500000
1
0
250000
250000
East
West
$10^5$
$10^4$
$10^3$
$10^2$
10
1


VT201 Input Ch1: BBC Large Adc Sum Th(Real-Simu)
Entries 0
2
1.5
1
0.5
0
−0.5
−1
East
West

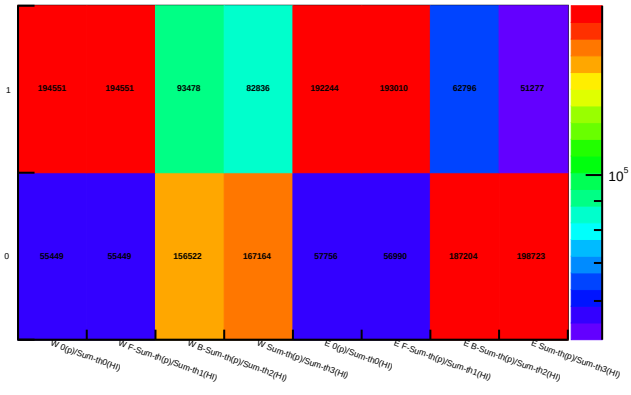
**VT201 Input Ch2: ZDC Tac Diff**



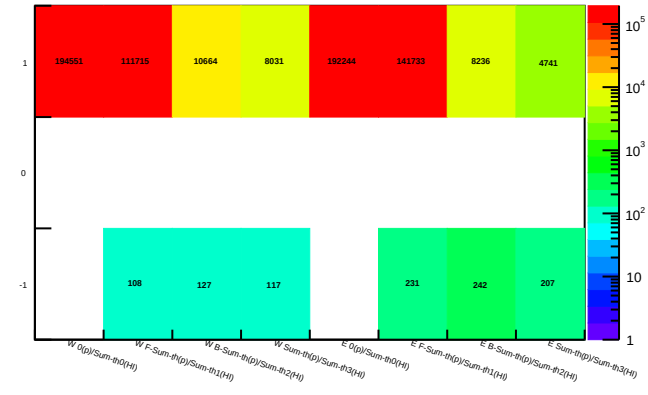

**VT201 Input Ch2: ZDC Tac Diff**



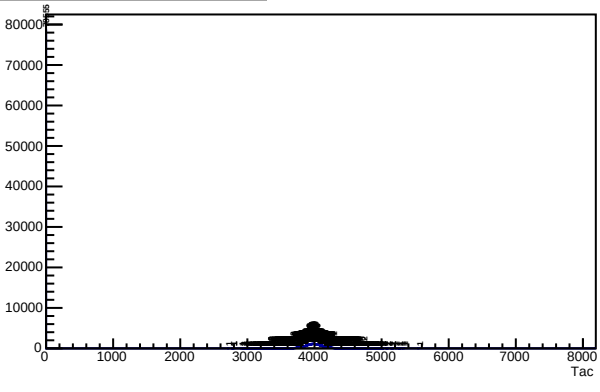

**VT201 Input Ch2: ZDC Adc Sum Th**



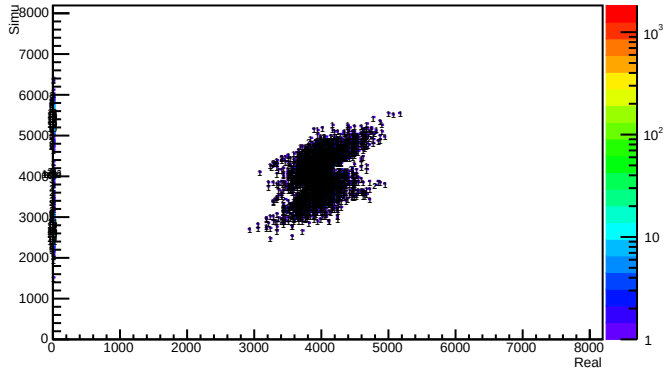

**VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)**



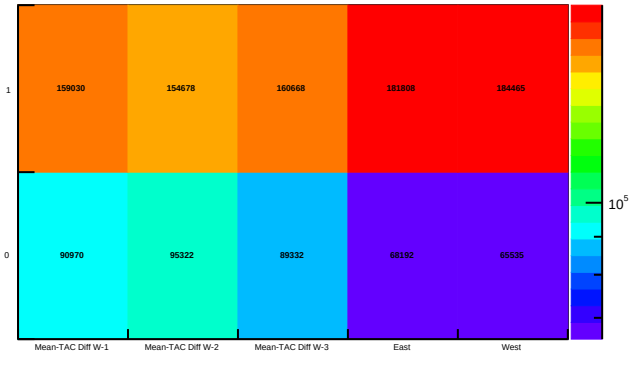

**VT201 Input Ch4: VPD Tac Diff**



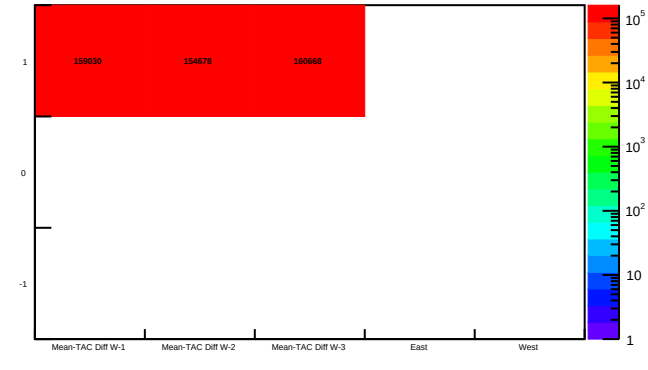

**VT201 Input Ch4: VPD Tac Diff**

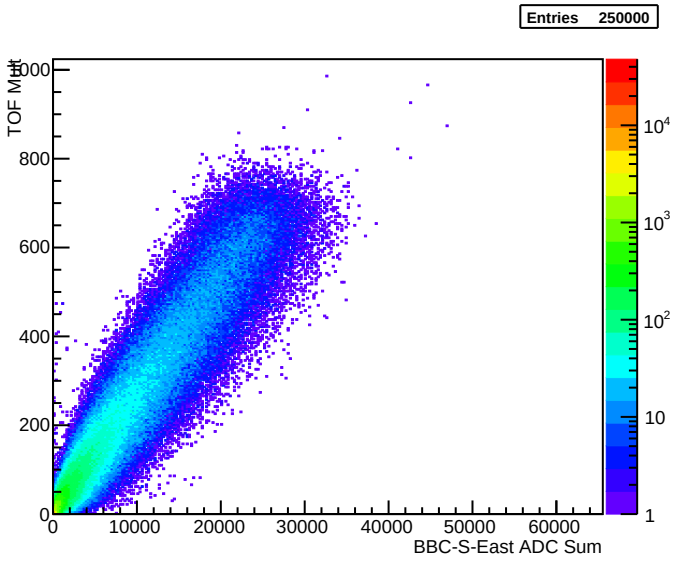


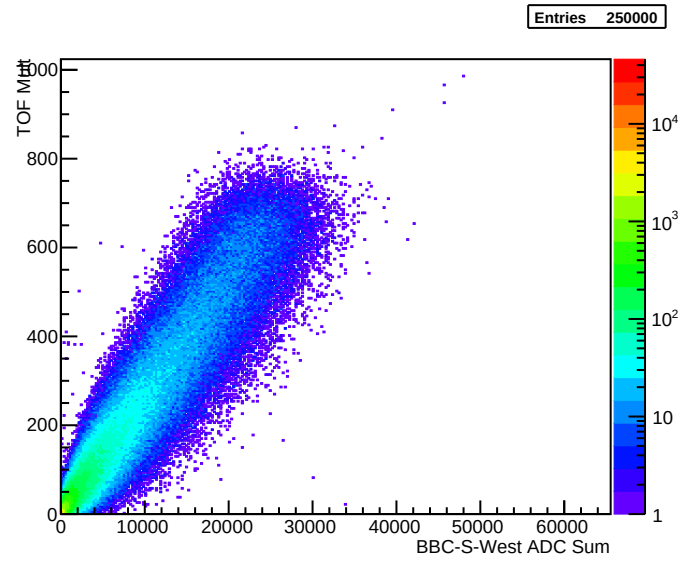

**VT201 Input Ch4: VPD Adc Sum Th**

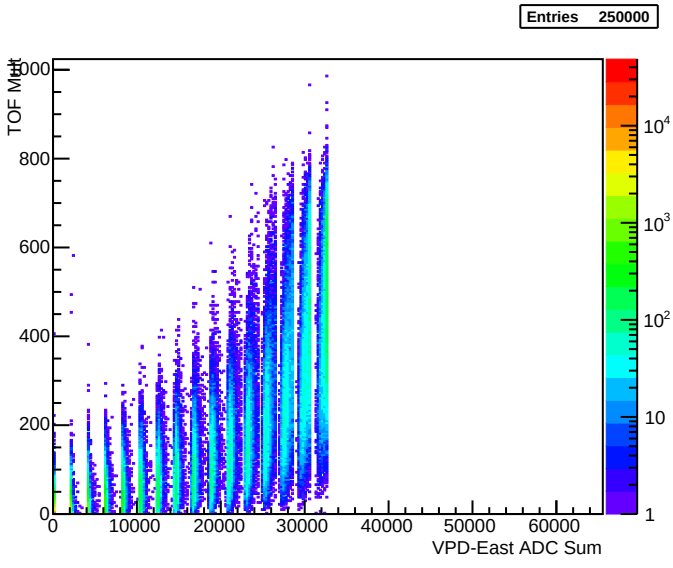


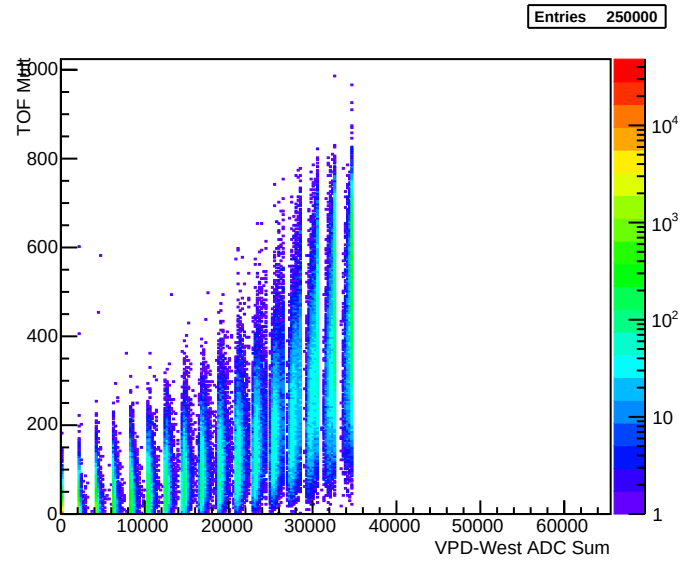

**VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)**

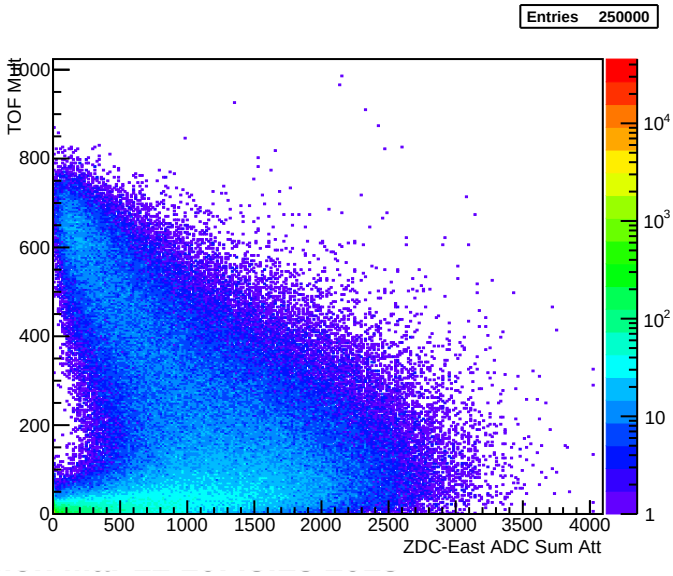


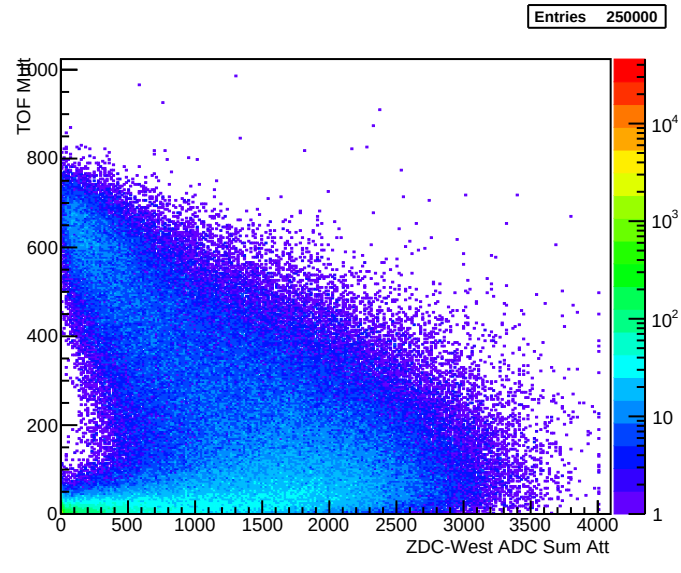

Entries 250000
TOF Mult
BBC-S-East ADC Sum

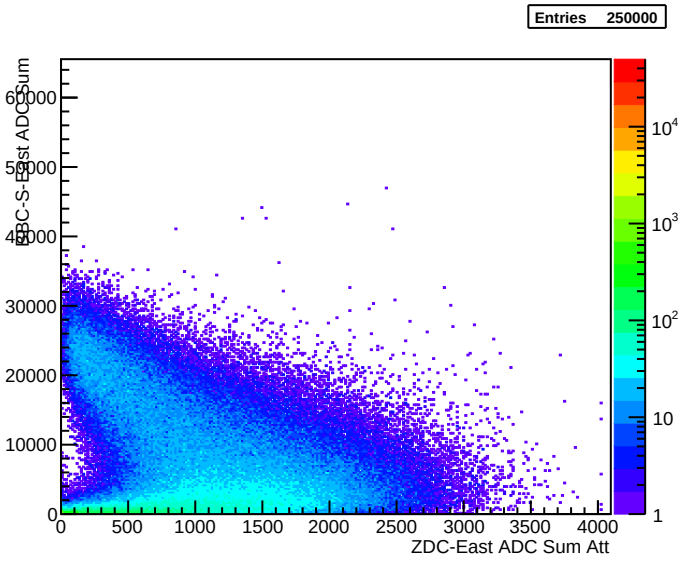

Entries 250000
TOF Mult
BBC-S-West ADC Sum

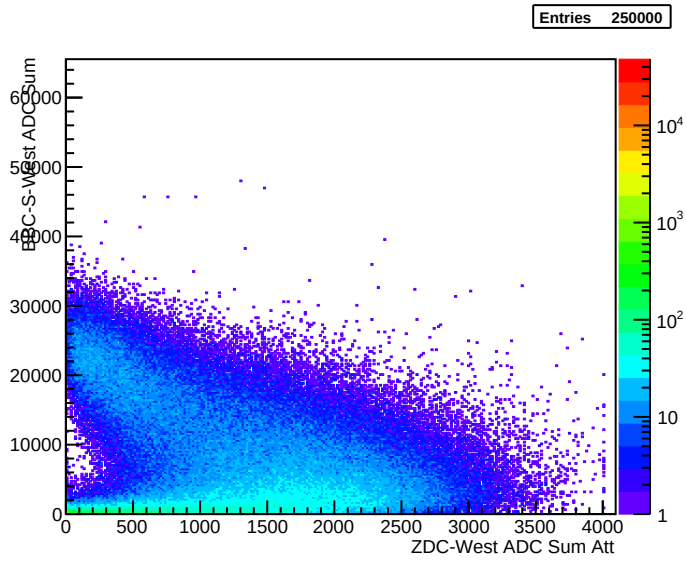

Entries 250000
TOF Mult
VPD-East ADC Sum

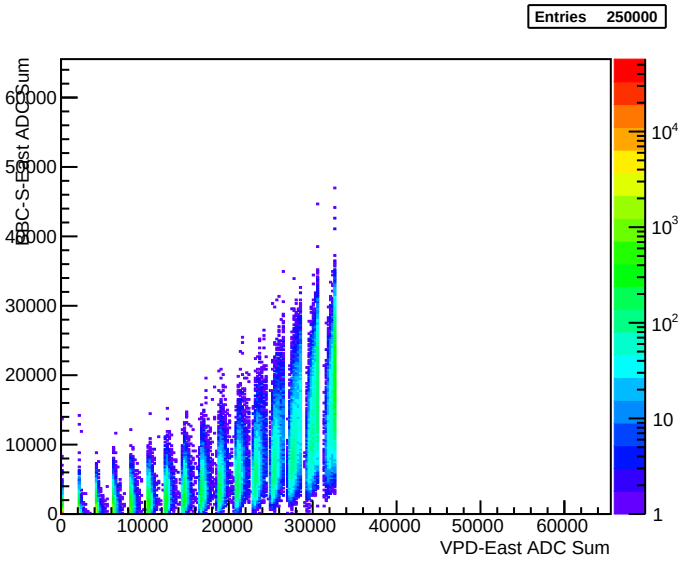

Entries 250000
TOF Mult
VPD-West ADC Sum

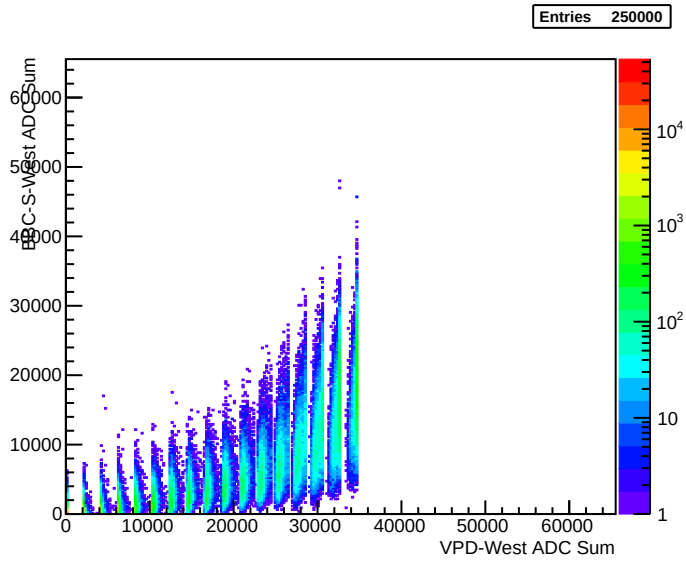

Entries 250000
TOF Mult
ZDC-East ADC Sum Att

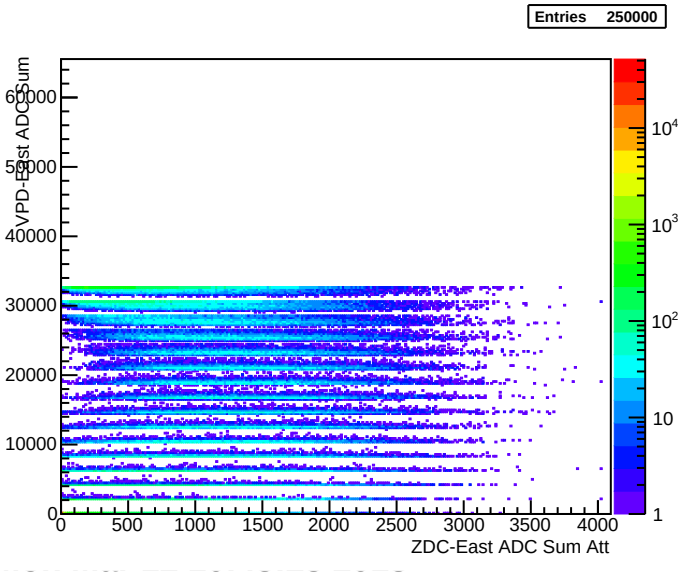

Entries 250000
TOF Mult
ZDC-West ADC Sum Att

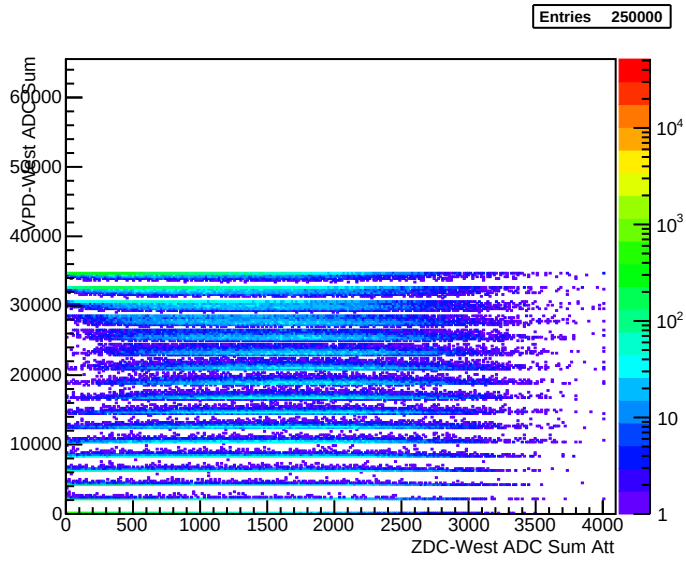

Entries 250000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

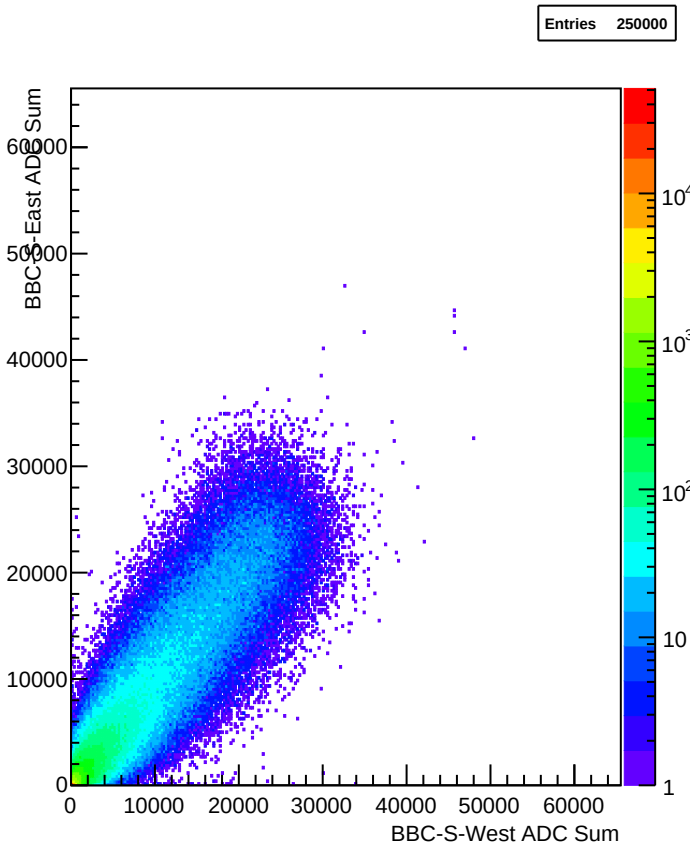

Entries 250000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

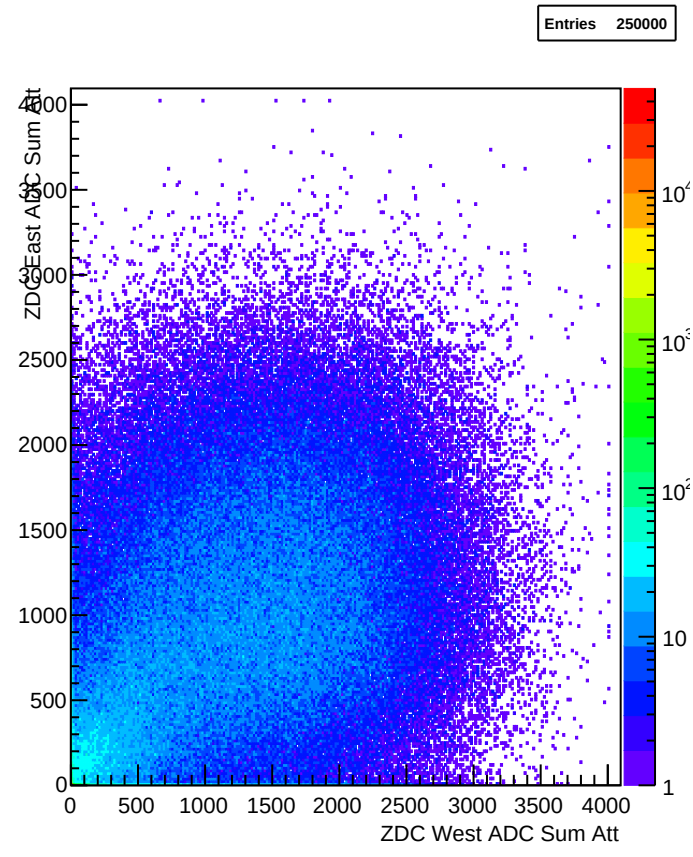

Entries 250000
BBC-S-East ADC Sum
VPD-East ADC Sum

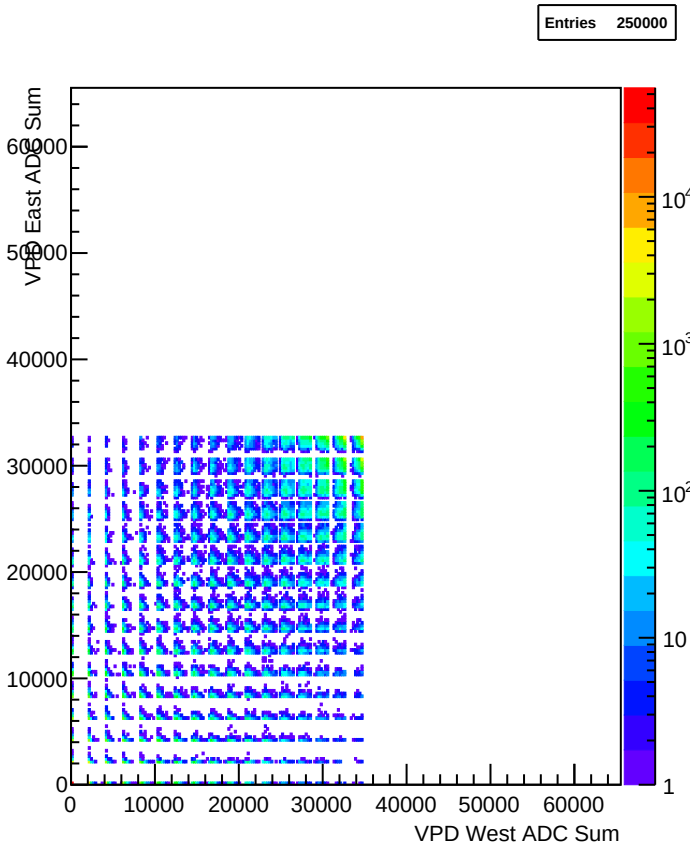

Entries 250000
BBC-S-West ADC Sum
VPD-West ADC Sum

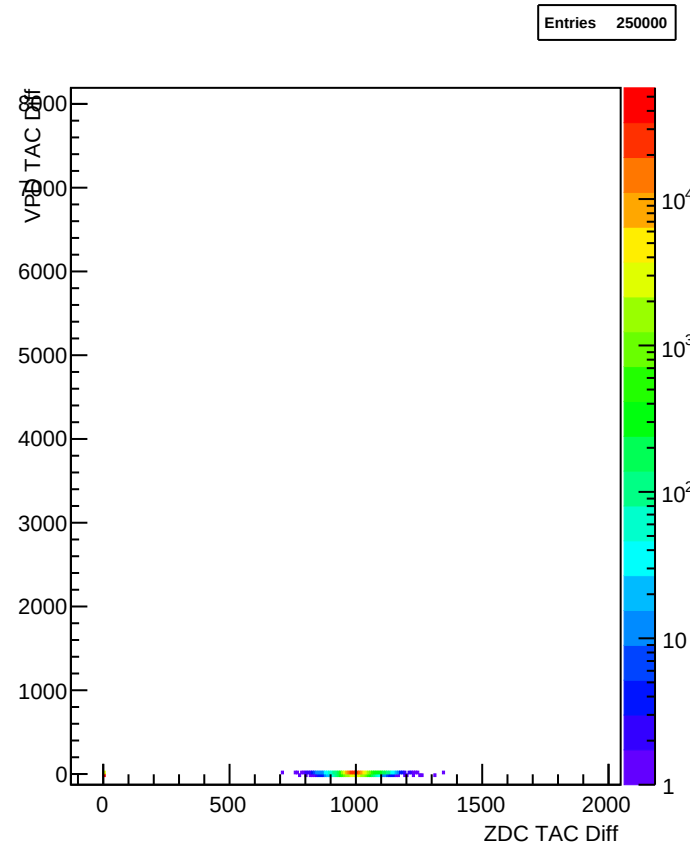

Entries 250000
VPD-East ADC Sum
ZDC-East ADC Sum Att

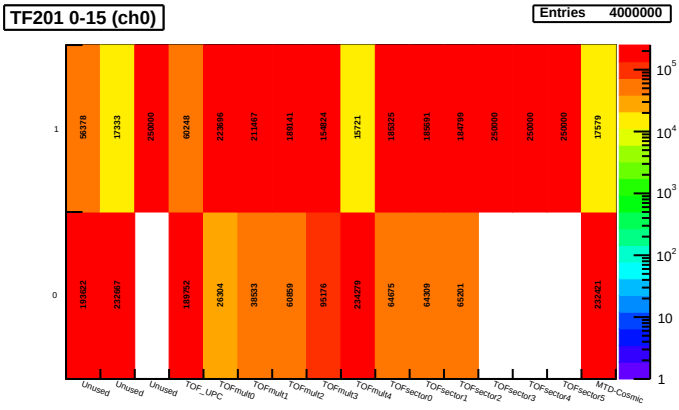

Entries 250000
VPD-West ADC Sum
ZDC-West ADC Sum Att

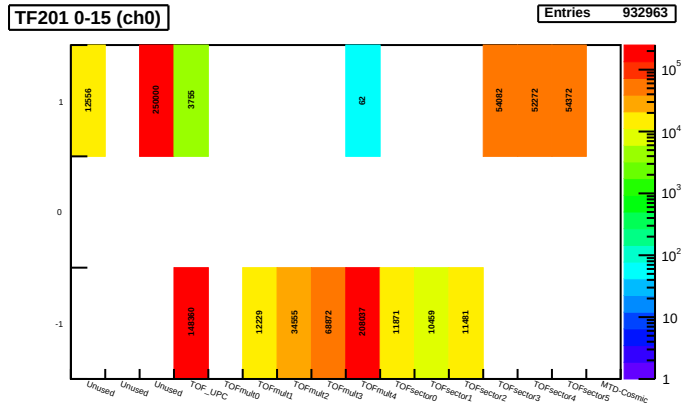

Entries 250000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

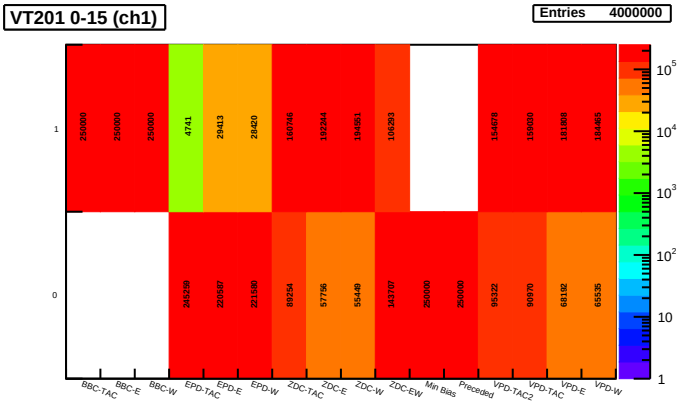

Entries 250000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

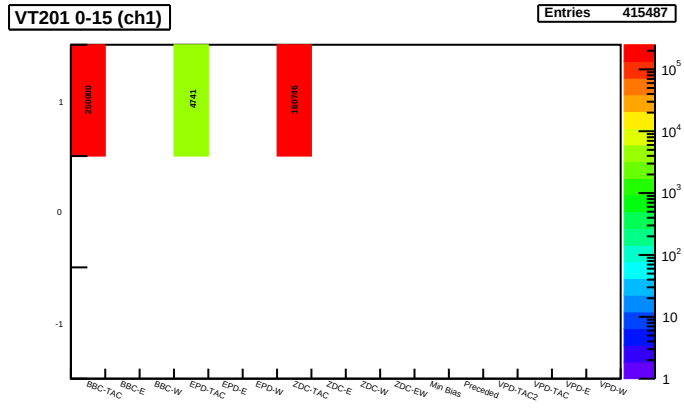

Entries 250000
VPD East ADC Sum
VPD West ADC Sum

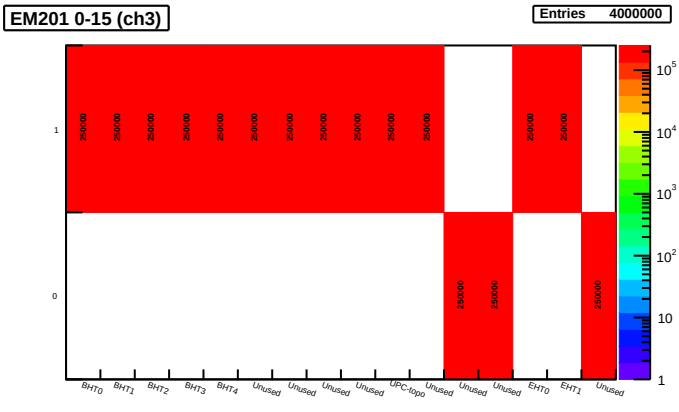

Entries 250000
VPD TAC Diff
ZDC TAC Diff

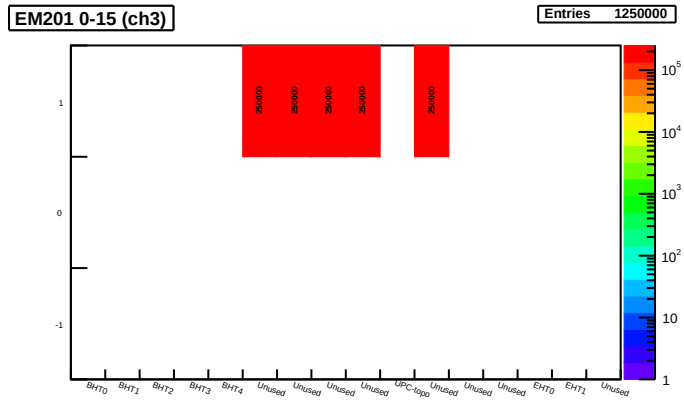

TF201 0-15 (ch0)
Entries 4000000
Unused Unused Unused TOF_-UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

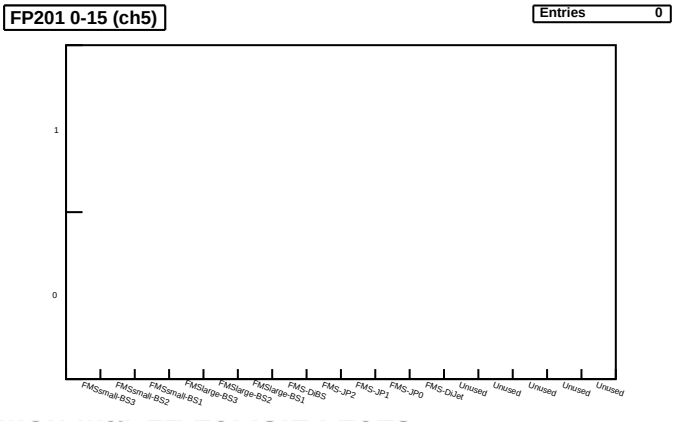

TF201 0-15 (ch0)
Entries 932963
Unused Unused Unused TOF_-UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

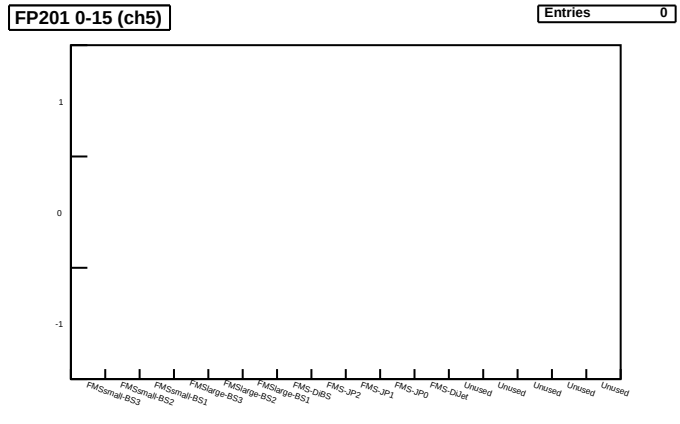

VT201 0-15 (ch1)
Entries 4000000
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 415487
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 4000000
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


EM201 0-15 (ch3)
Entries 1250000
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