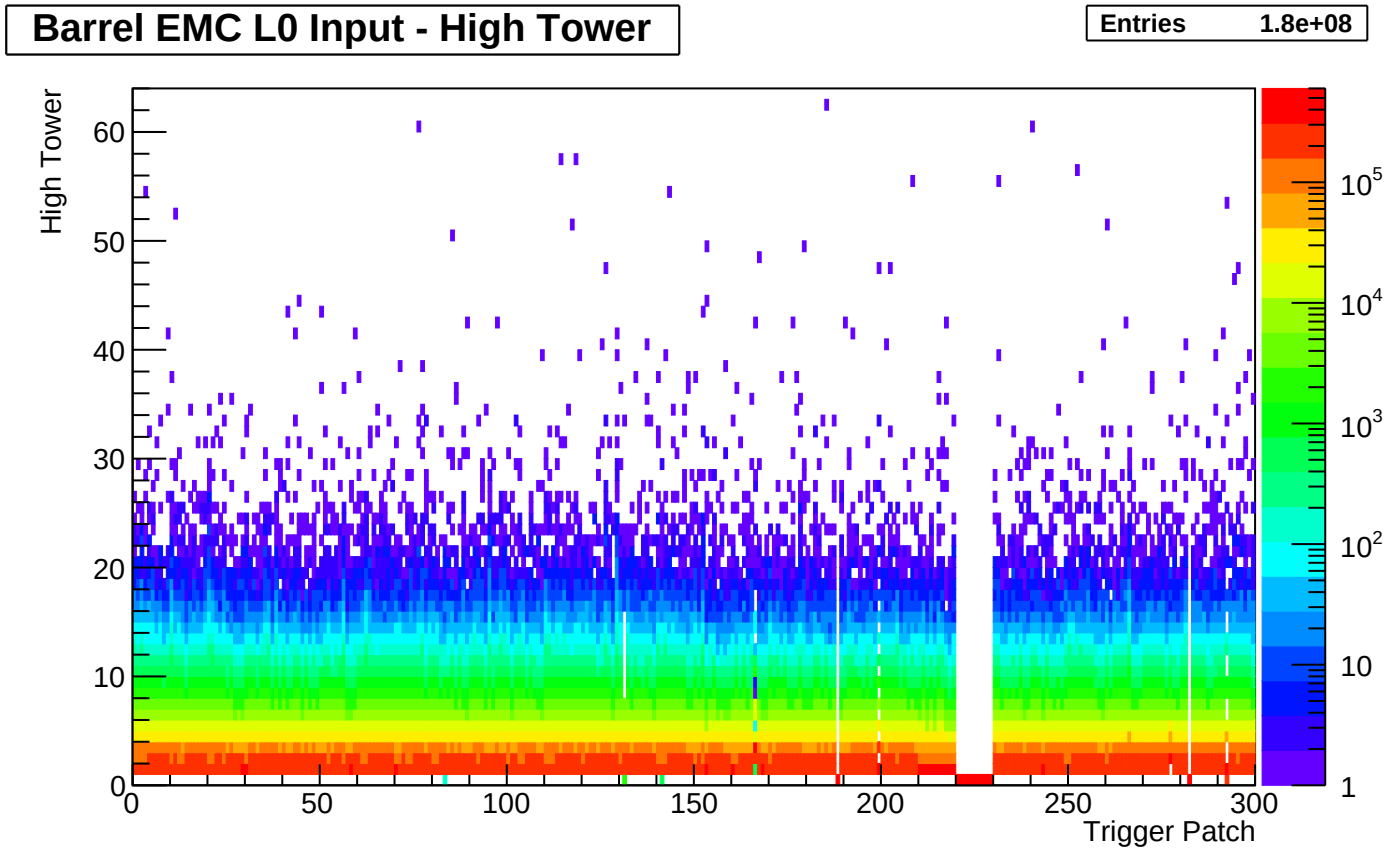
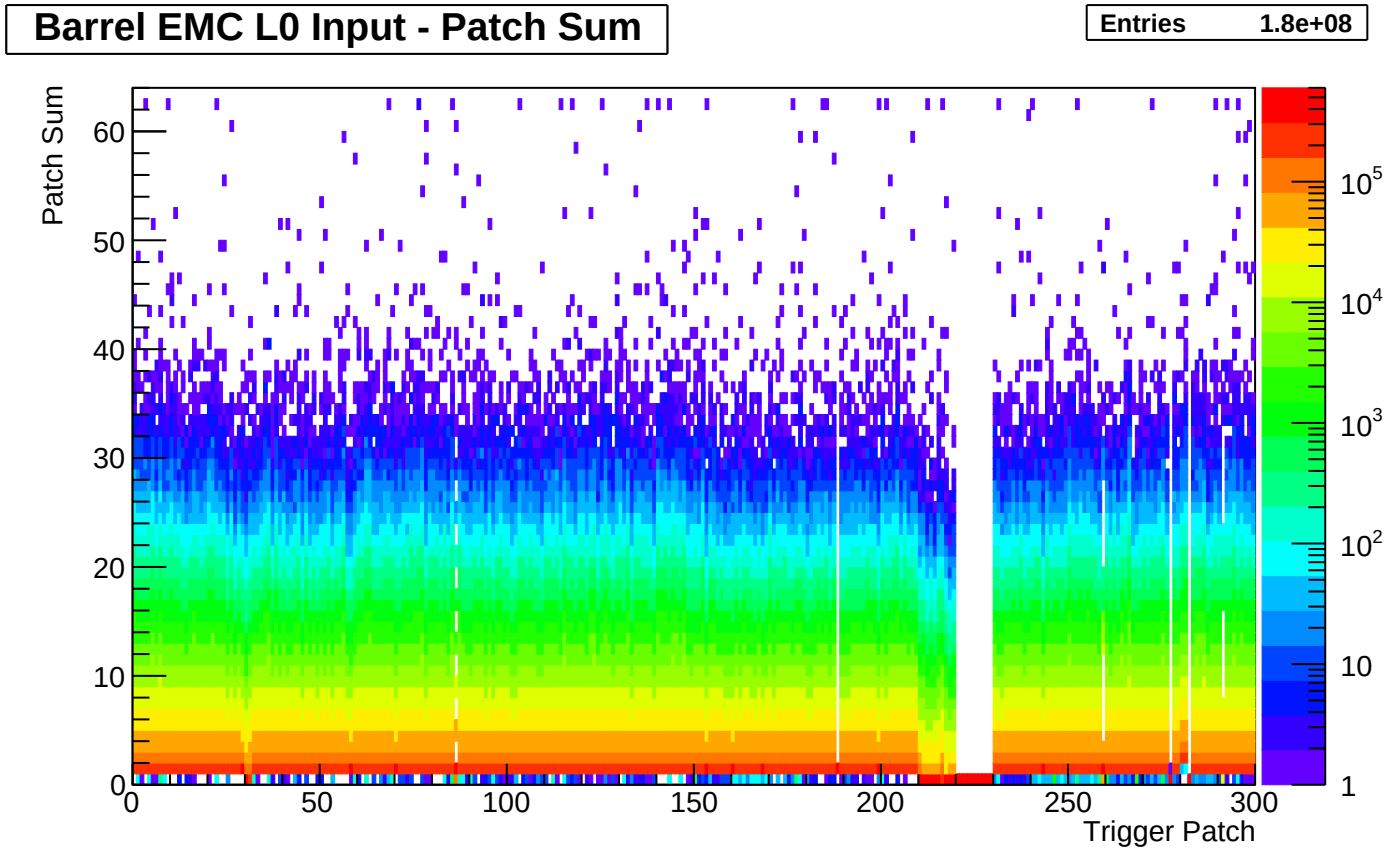
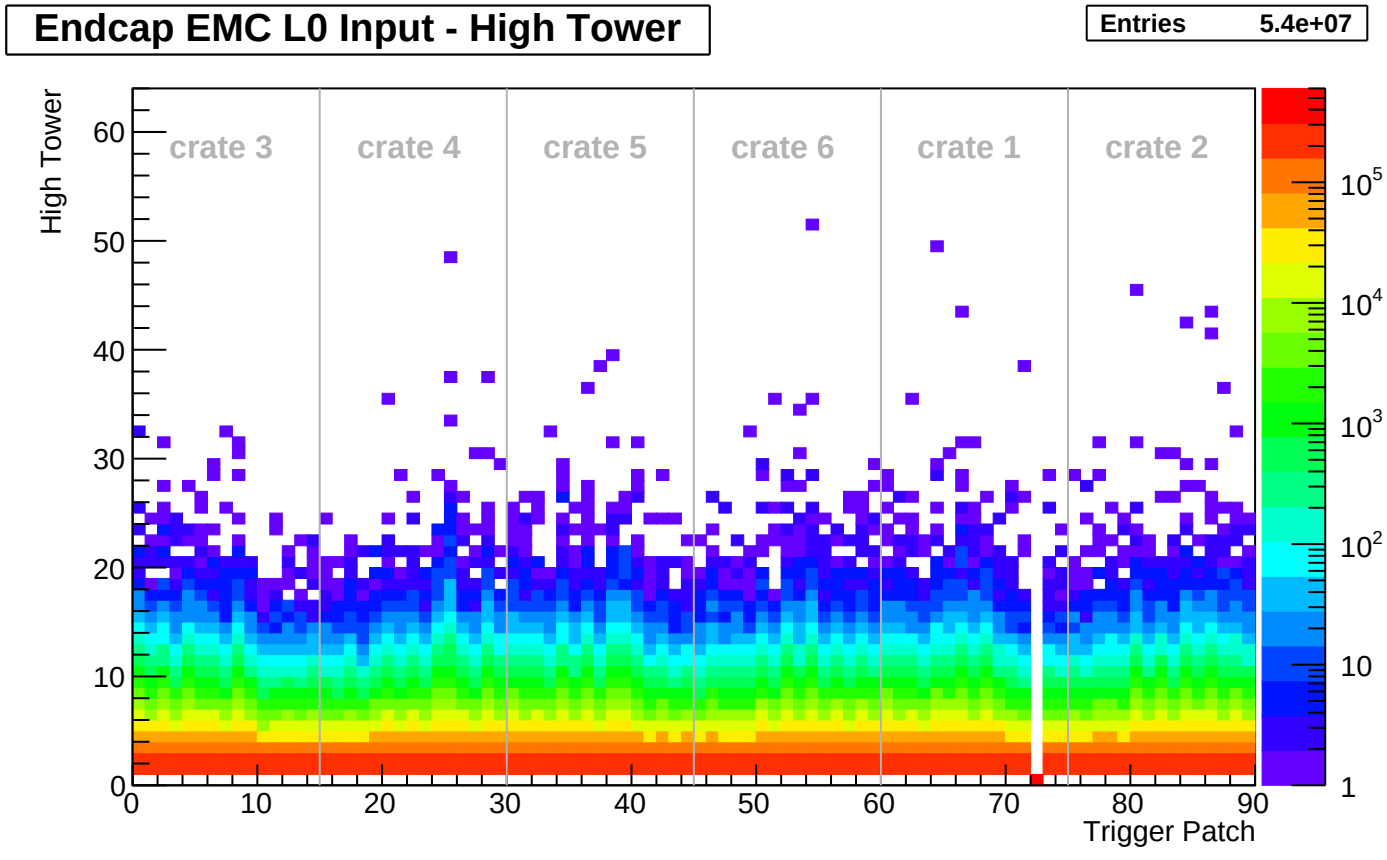
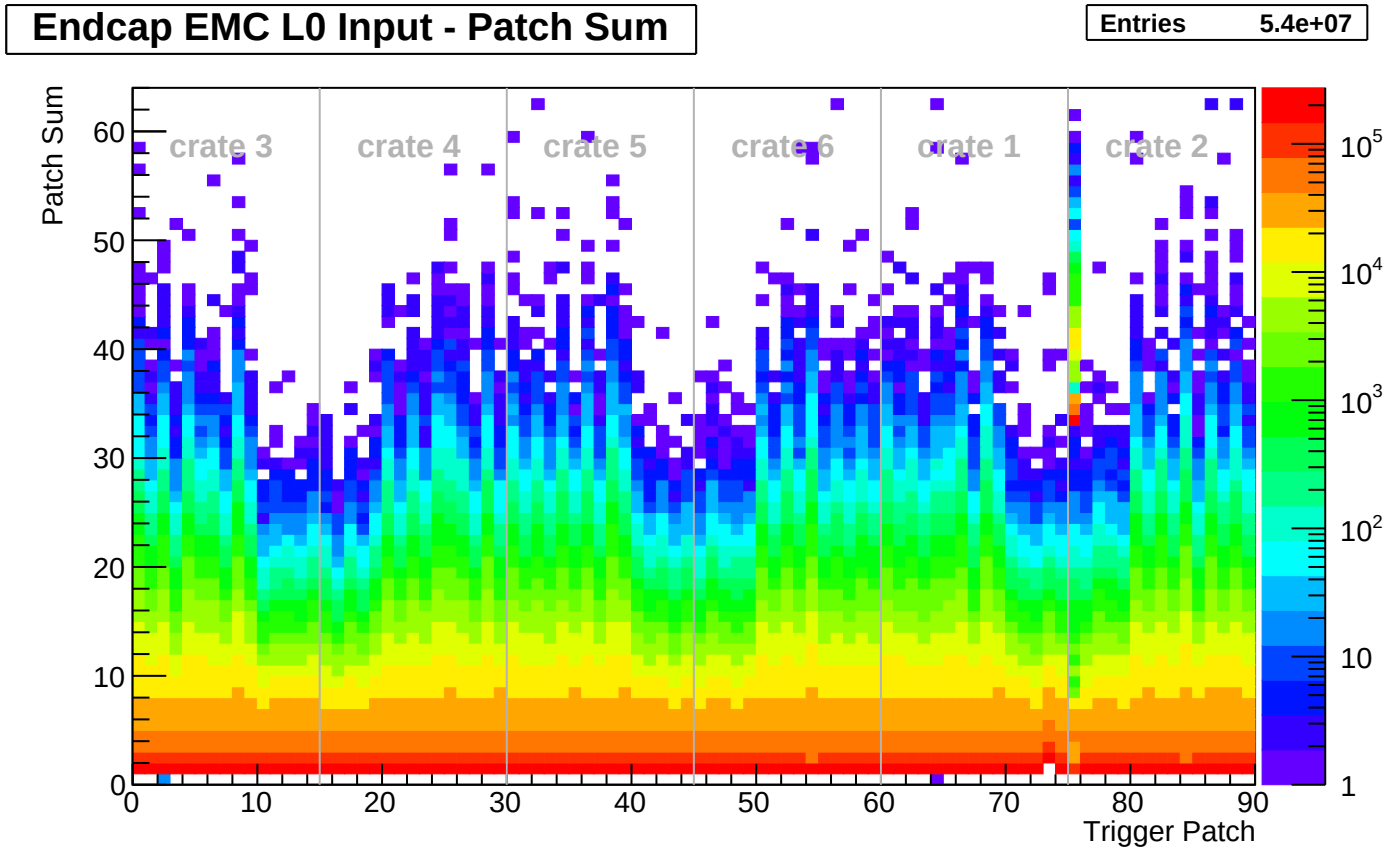
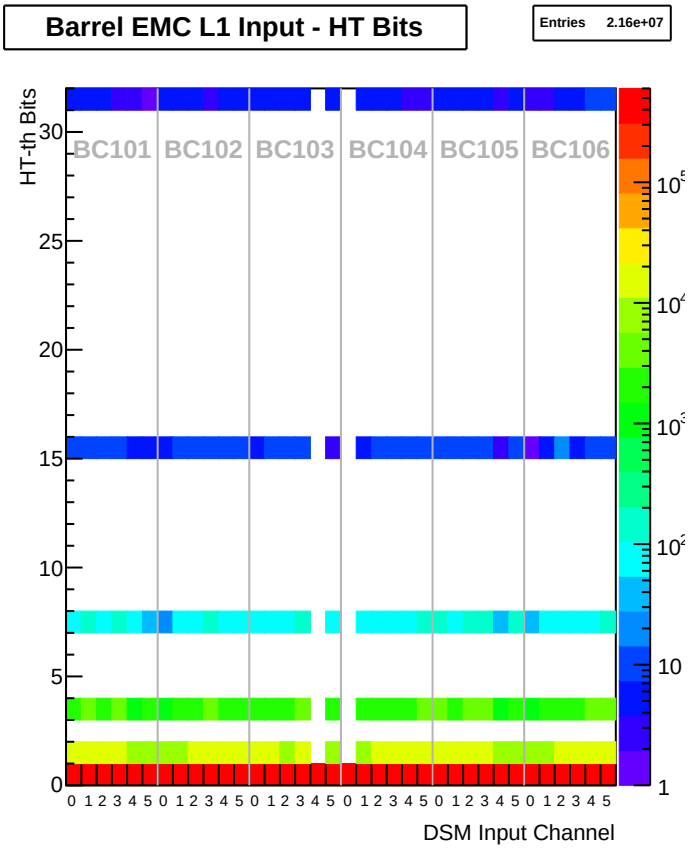
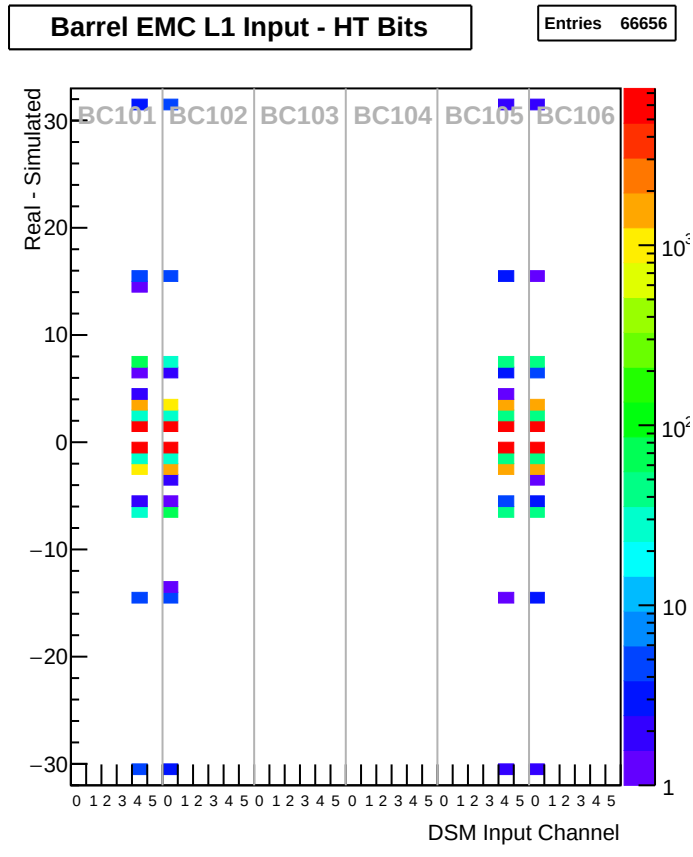

Barrel EMC L0 Input - High Tower
Entries 1.8e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

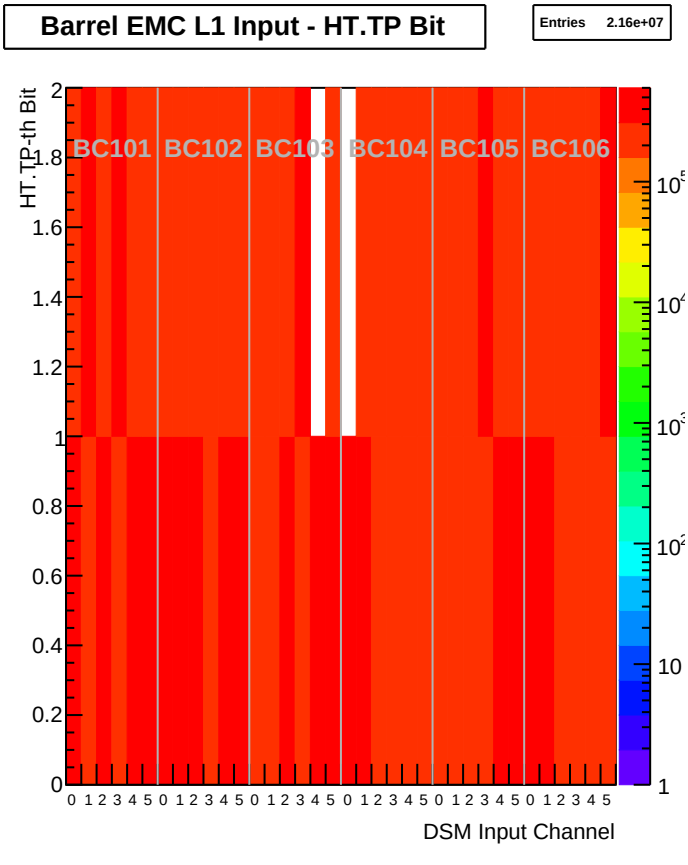

Barrel EMC L0 Input - Patch Sum
Entries 1.8e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

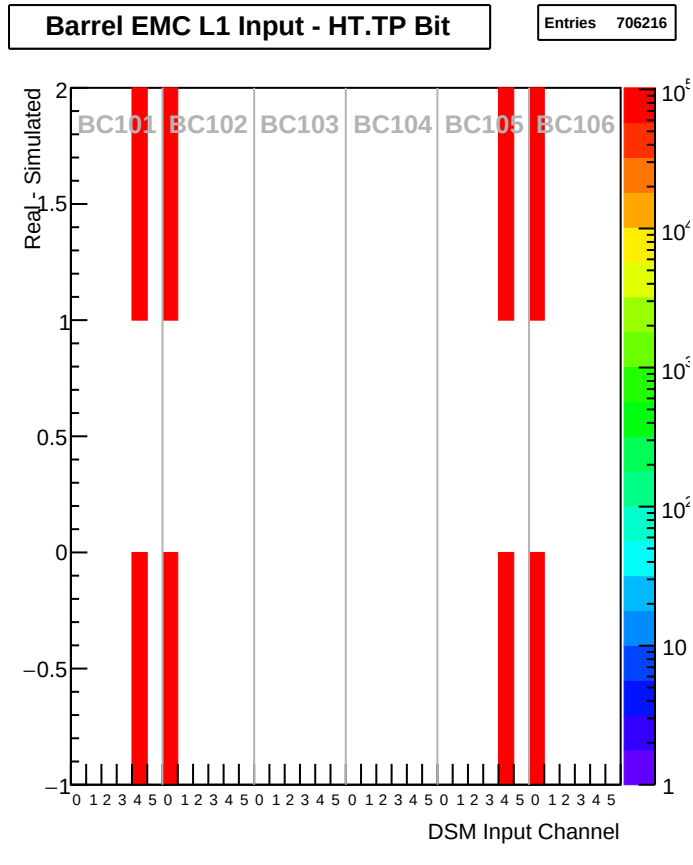

Endcap EMC L0 Input - High Tower
Entries 5.4e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

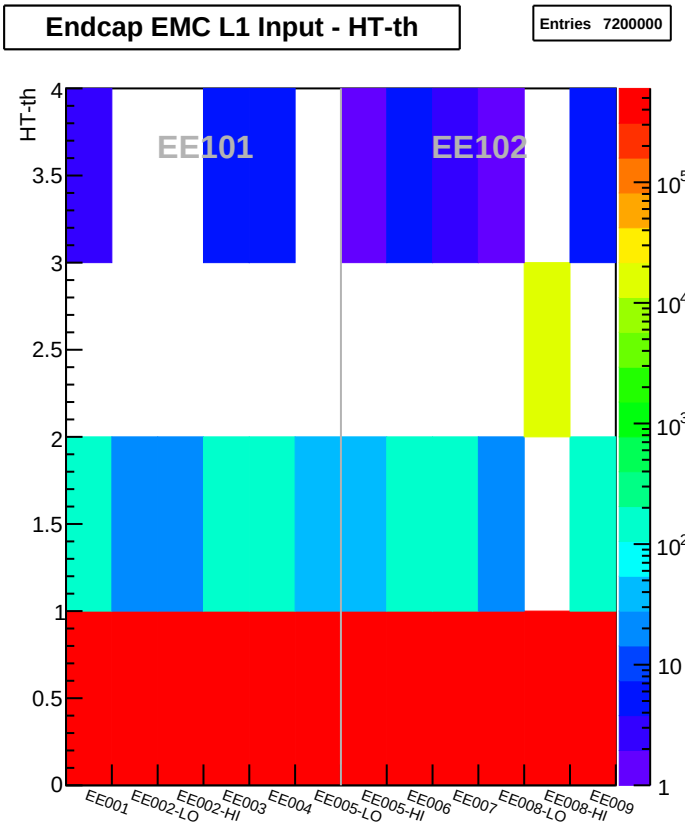

Endcap EMC L0 Input - Patch Sum
Entries 5.4e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

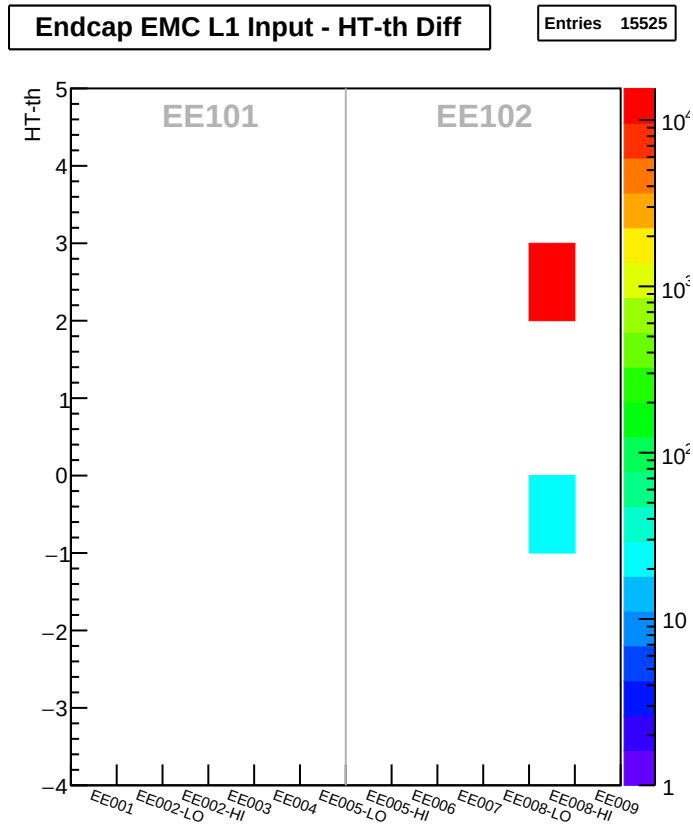

Barrel EMC L1 Input - HT Bits
Entries 2.16e+07
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

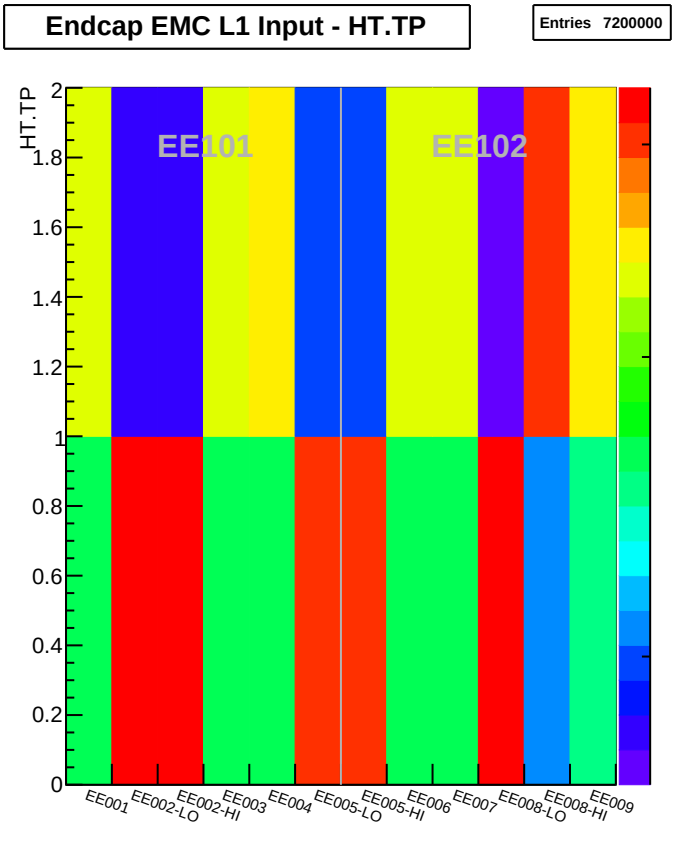

Barrel EMC L1 Input - HT Bits
Entries 66656
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

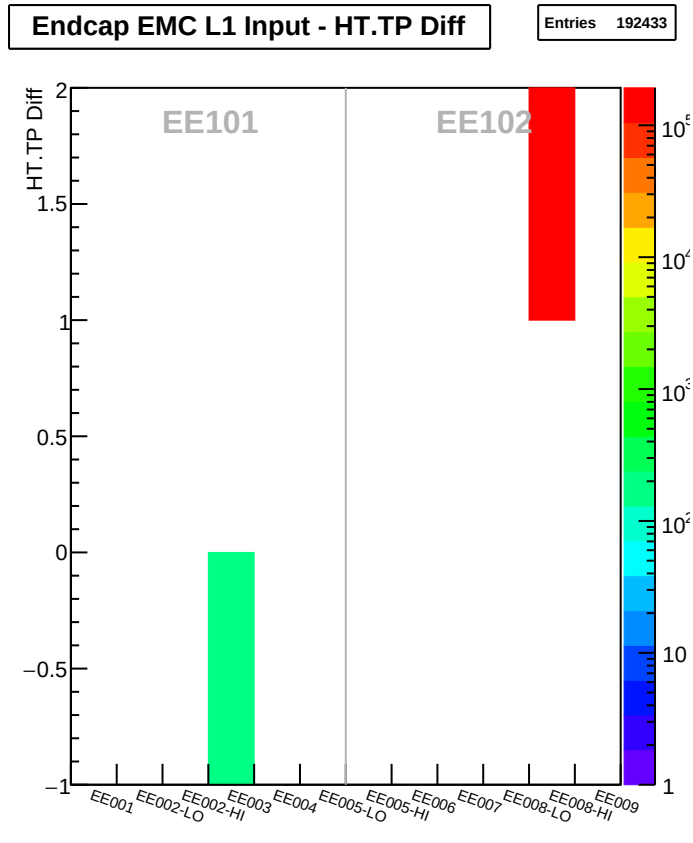

Barrel EMC L1 Input - HT.TP Bit
Entries 2.16e+07
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

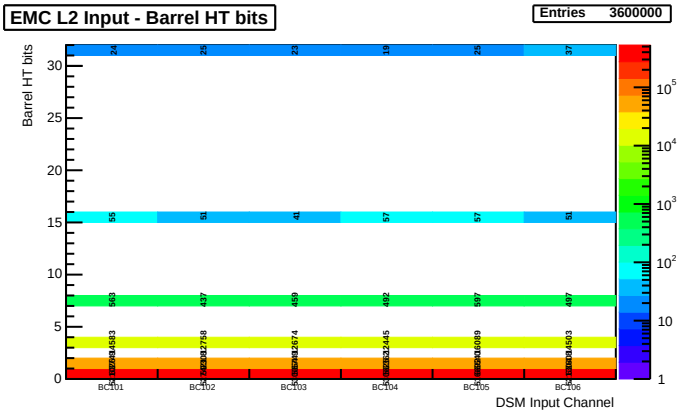

Barrel EMC L1 Input - HT.TP Bit
Entries 706216
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

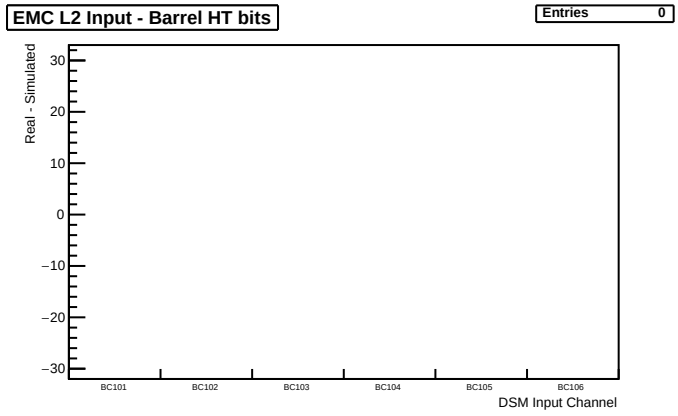

Endcap EMC L1 Input - HT-th
Entries 7200000
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

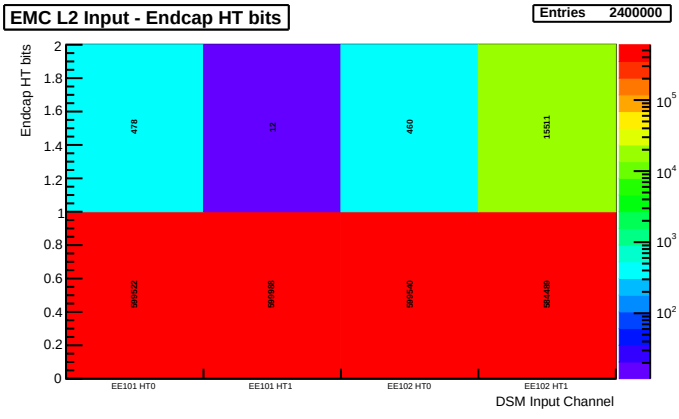

Endcap EMC L1 Input - HT-th Diff
Entries 15525
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

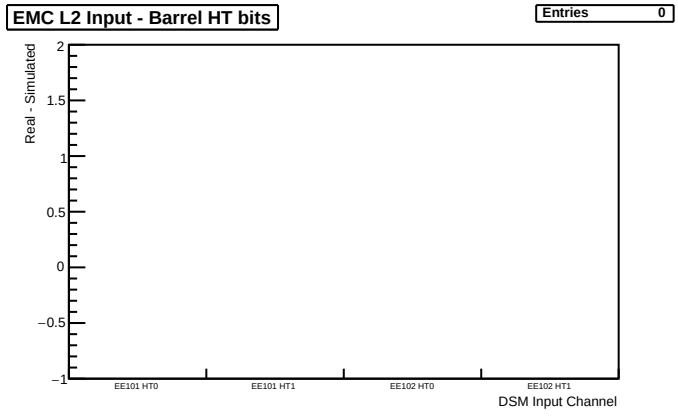

Endcap EMC L1 Input - HT.TP
Entries 7200000
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

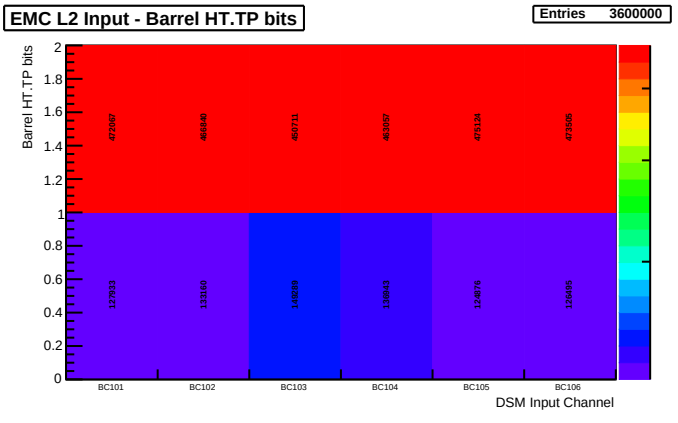

Endcap EMC L1 Input - HT.TP Diff
Entries 192433
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

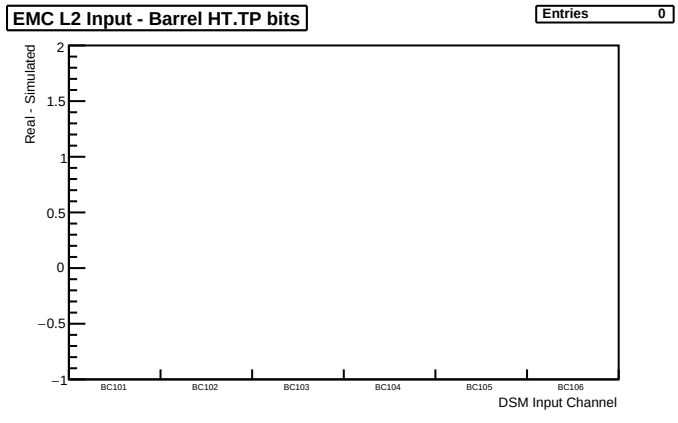

EMC L2 Input - Barrel HT bits
Entries 3600000
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

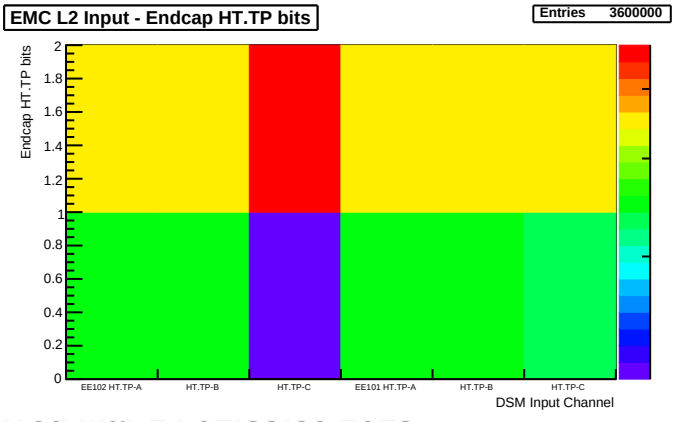

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

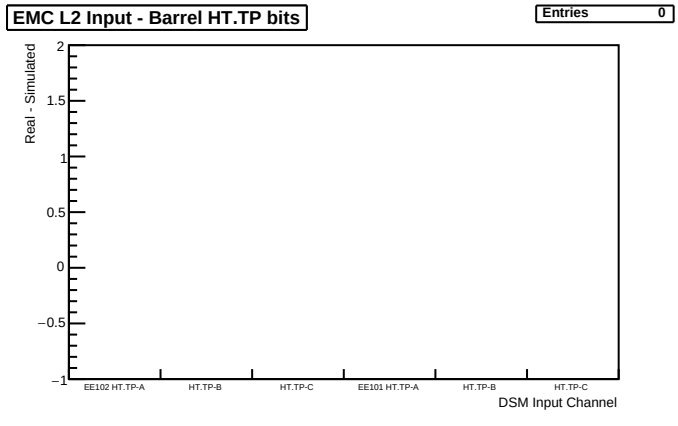

EMC L2 Input - Endcap HT bits
Entries 2400000
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

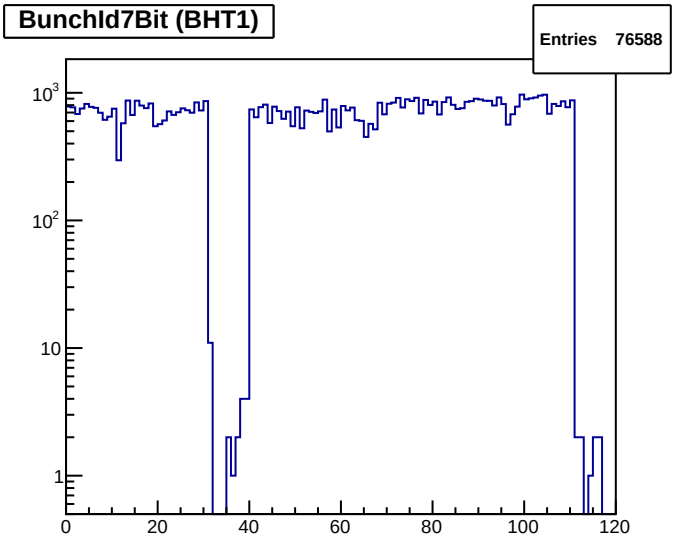

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

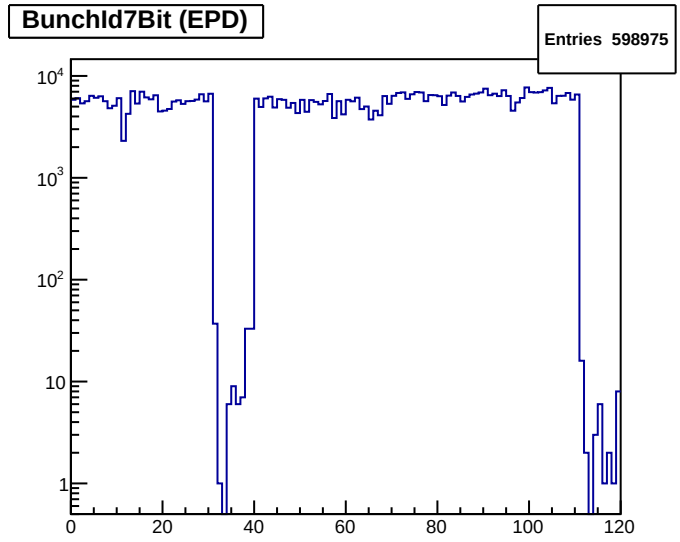

EMC L2 Input - Barrel HT.TP bits
Entries 3600000
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

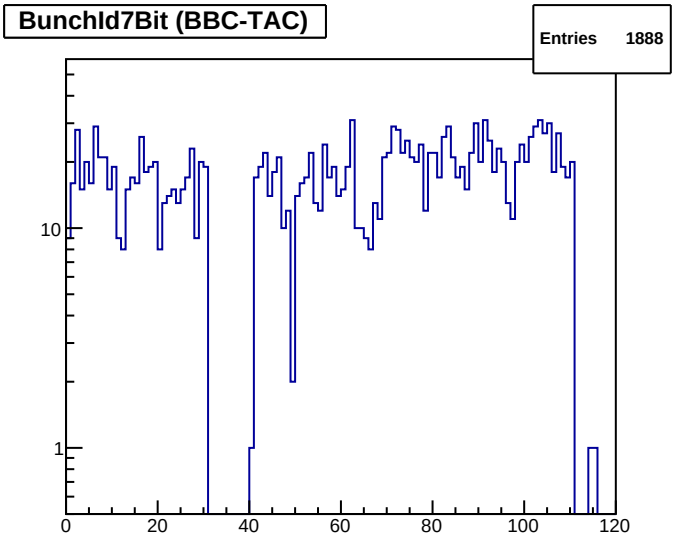

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

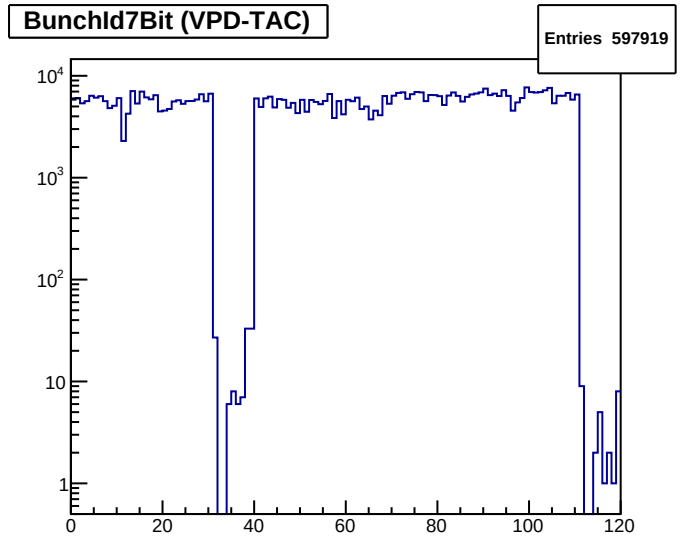

EMC L2 Input - Endcap HT.TP bits
Entries 3600000
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

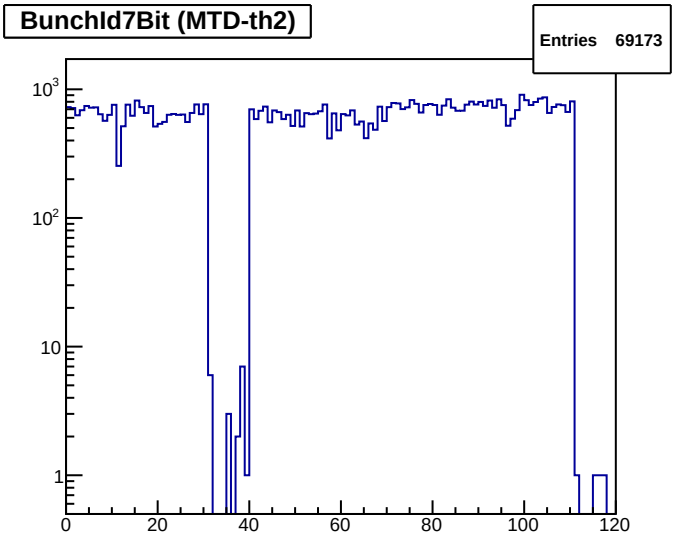

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

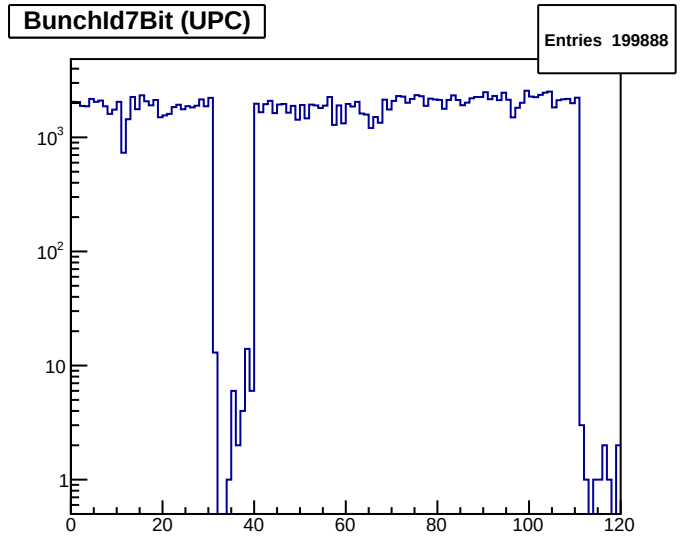

BunchId7Bit (BHT1)
Entries 76588

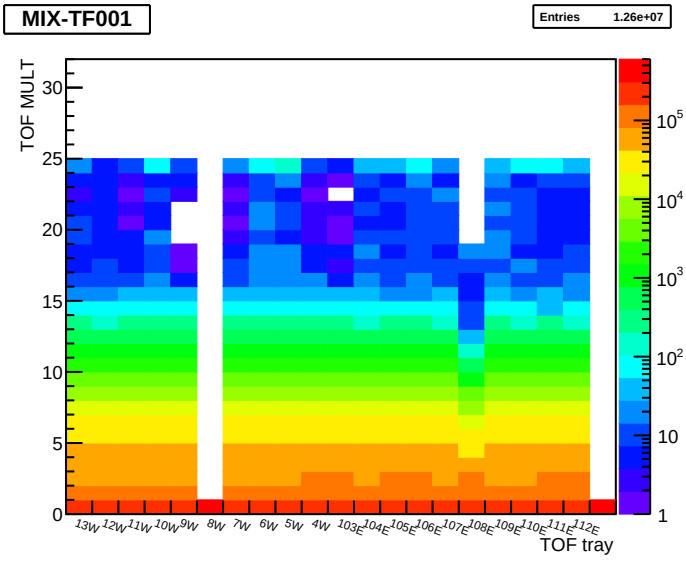

BunchId7Bit (EPD)
Entries 598975

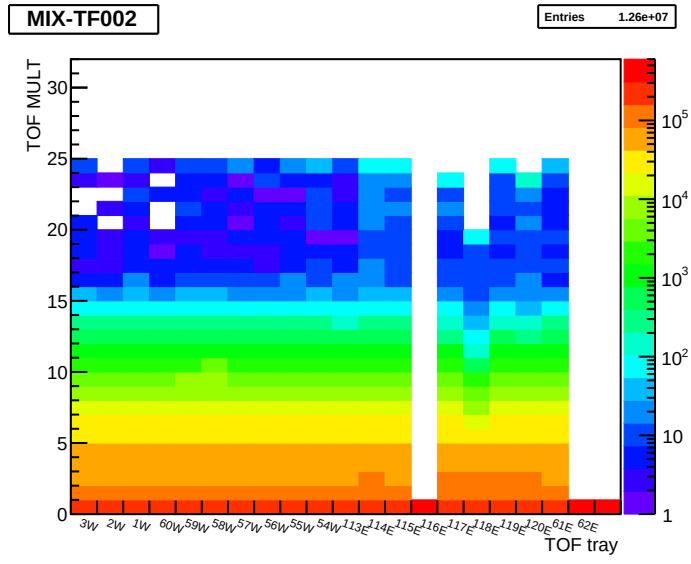

BunchId7Bit (BBC-TAC)
Entries 1888

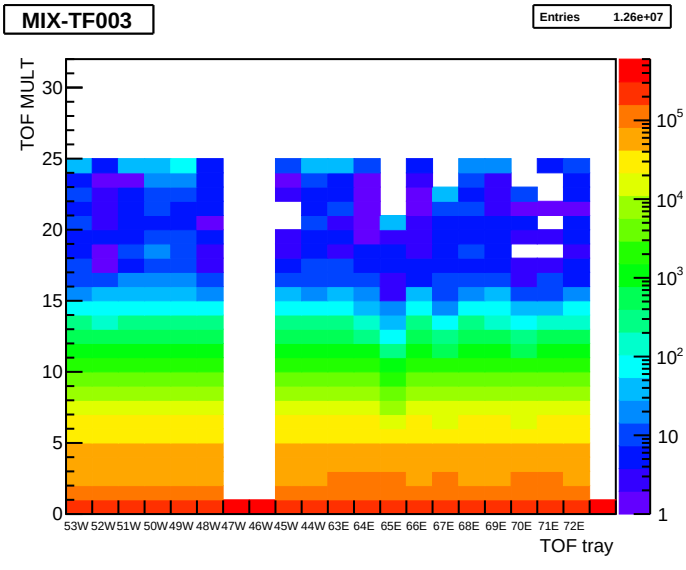

BunchId7Bit (VPD-TAC)
Entries 597919

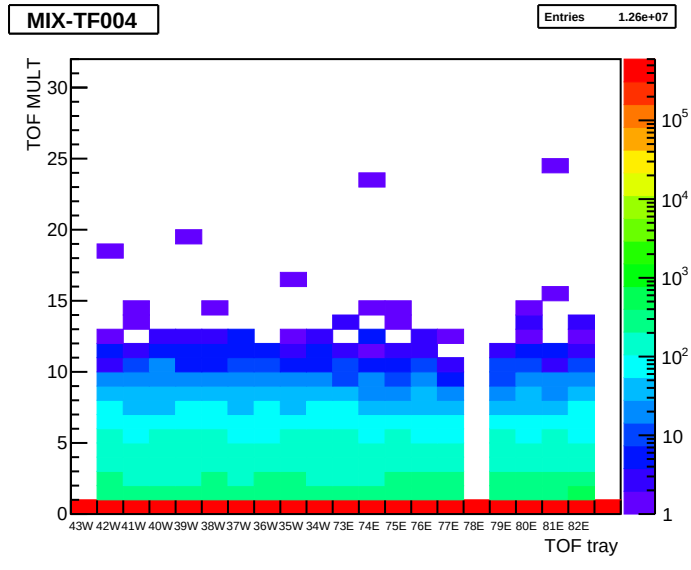

BunchId7Bit (MTD-th2)
Entries 69173

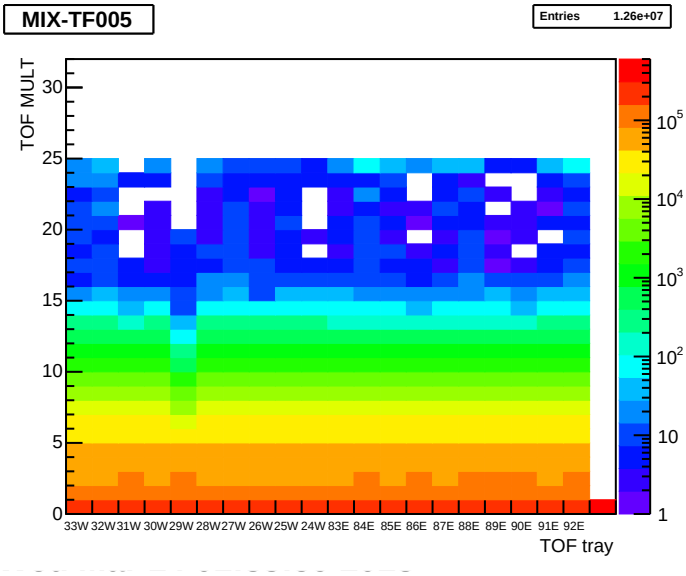

BunchId7Bit (UPC)
Entries 199888

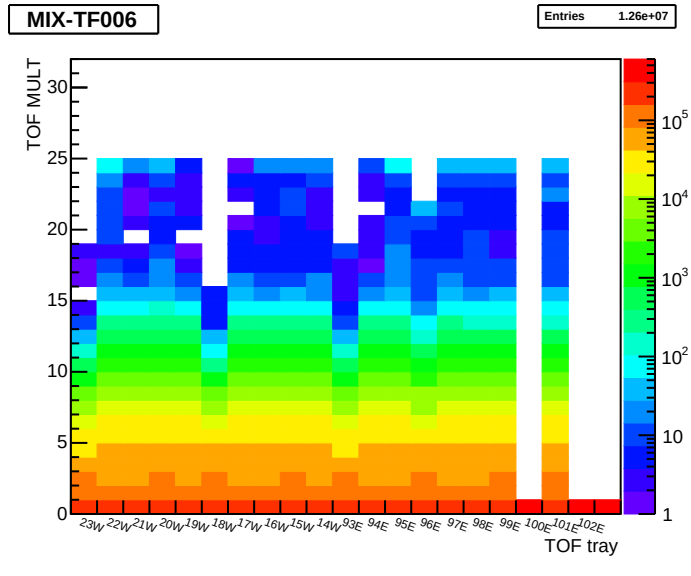

MIX-TF001
Entries 1.26e+07
TOF MULT
TOF tray

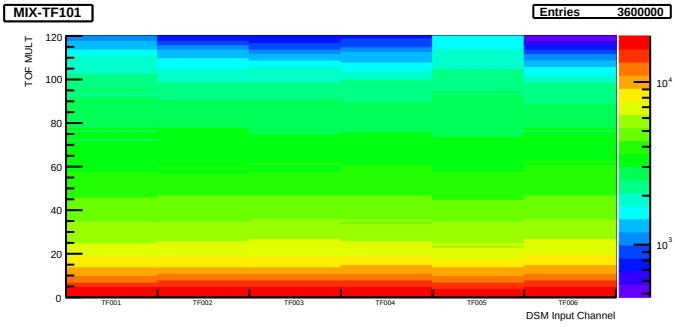

MIX-TF002
Entries 1.26e+07
TOF MULT
TOF tray

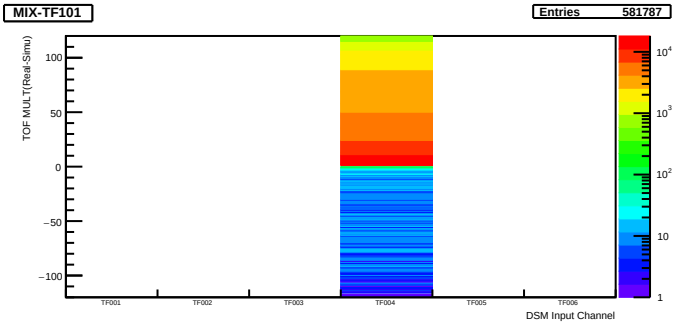

MIX-TF003
Entries 1.26e+07
TOF MULT
TOF tray

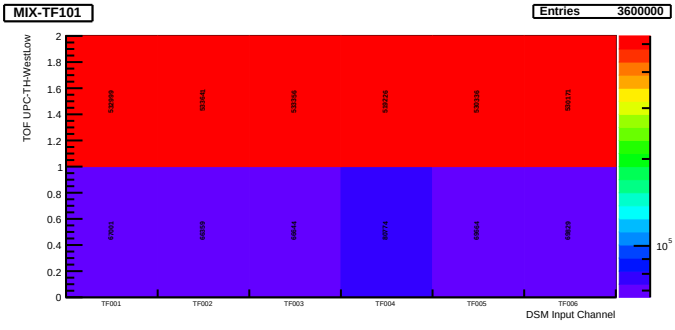

MIX-TF004
Entries 1.26e+07
TOF MULT
TOF tray

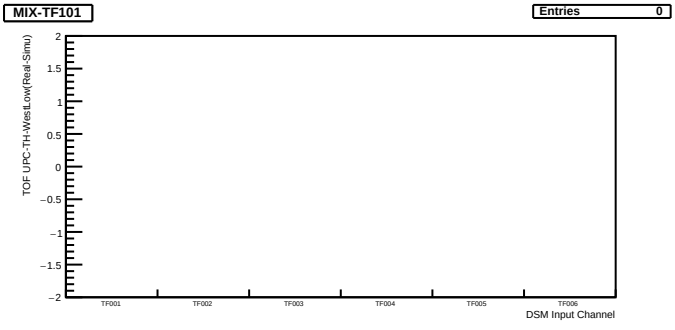

MIX-TF005
Entries 1.26e+07
TOF MULT
TOF tray

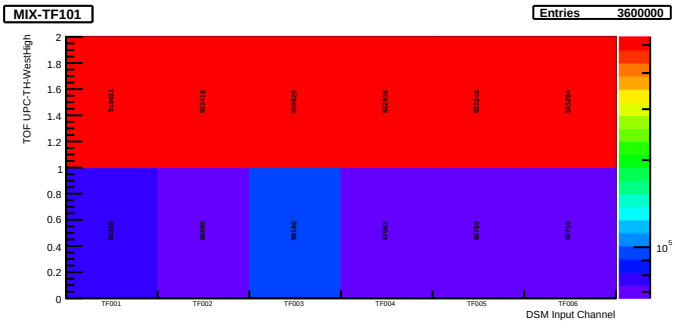

MIX-TF006
Entries 1.26e+07
TOF MULT
TOF tray

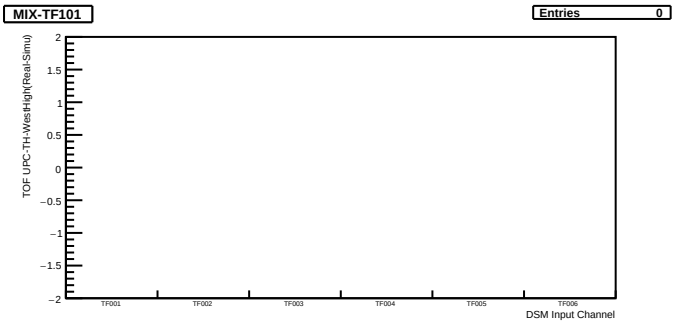

MIX-TF101
Entries 3600000
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

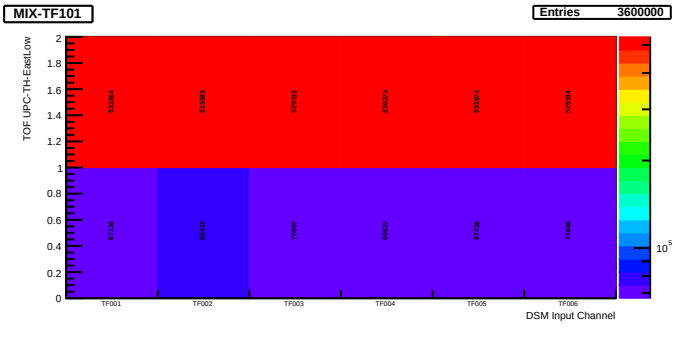

MIX-TF101
Entries 581787
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

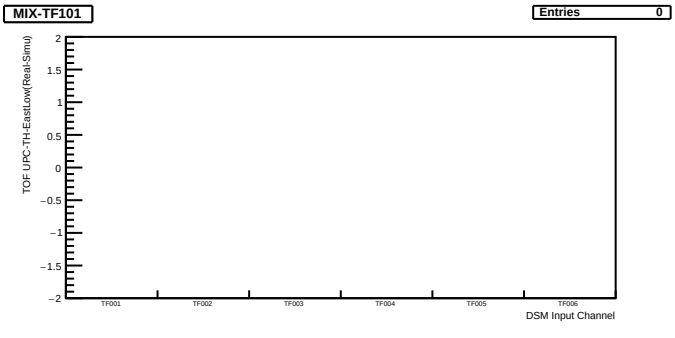

MIX-TF101
Entries 3600000
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

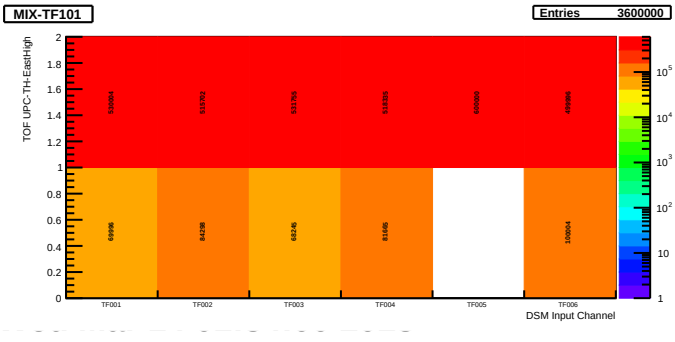

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

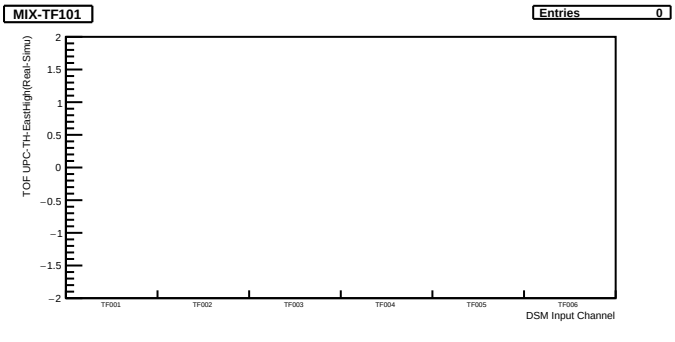

MIX-TF101
Entries 3600000
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

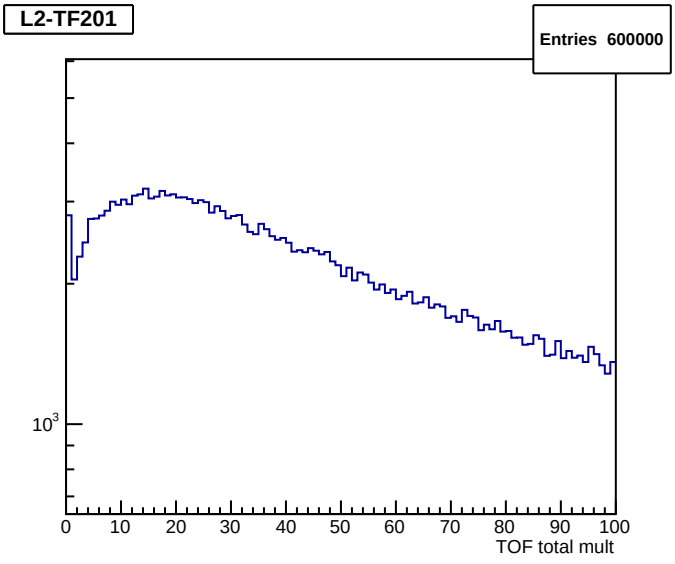

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

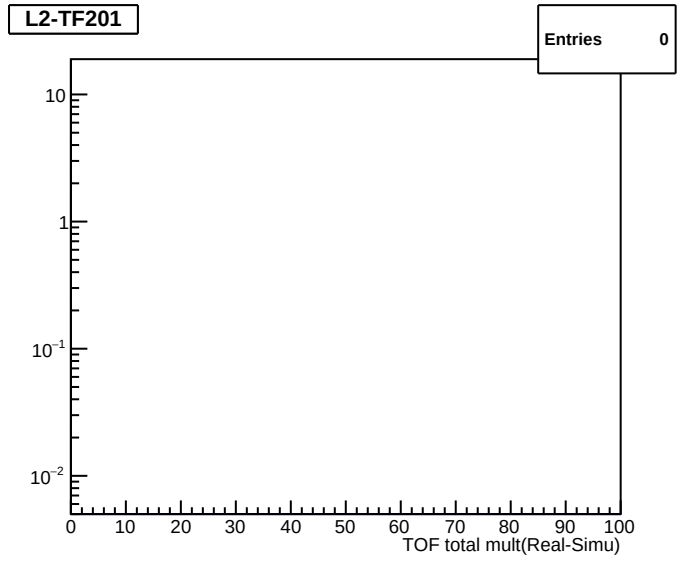

MIX-TF101
Entries 3600000
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

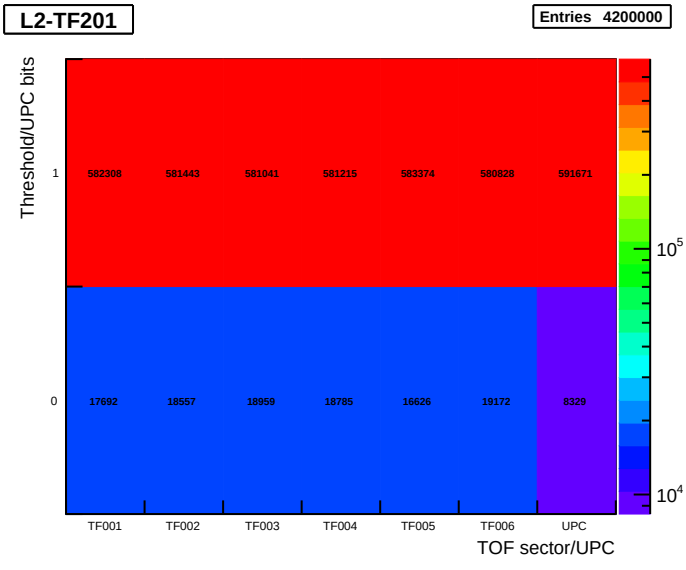

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

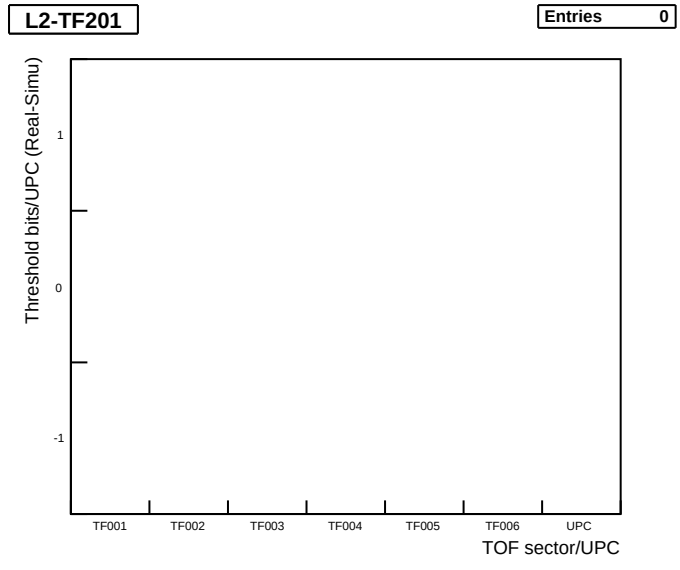

MIX-TF101
Entries 3600000
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

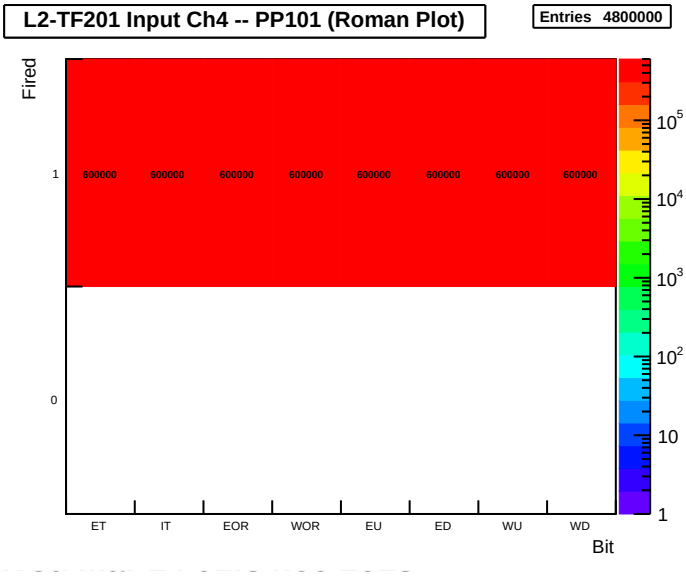

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

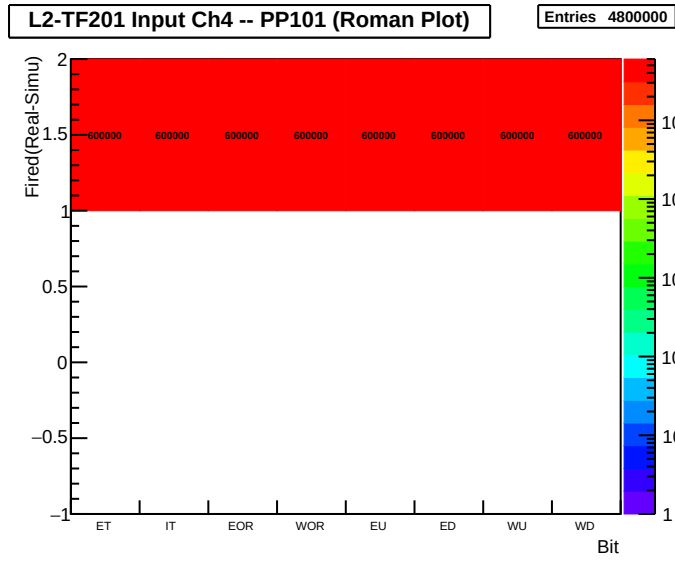

L2-TF201
Entries 600000
$10^3$
0 10 20 30 40 50 60 70 80 90 100
TOF total mult

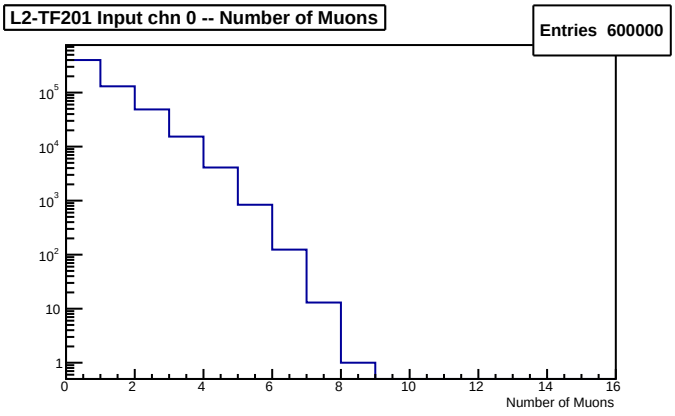

L2-TF201
Entries 0
10
1
$10^{-1}$
$10^{-2}$
0 10 20 30 40 50 60 70 80 90 100
TOF total mult(Real-Simu)

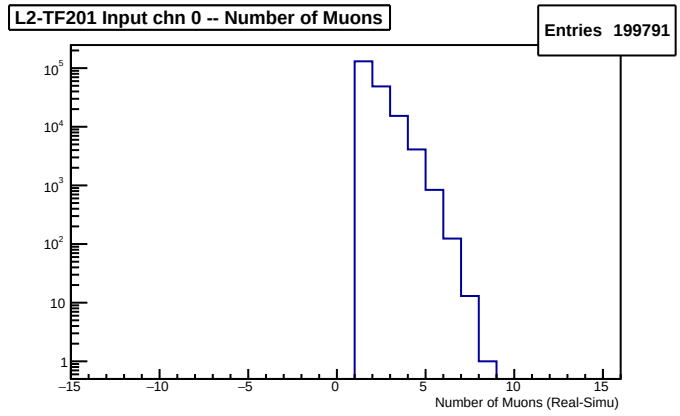

L2-TF201
Entries 4200000
Threshold/UPC bits
1
0
582308 581443 581041 581215 583374 580828 591671
17692 18557 18959 18785 16626 19172 8329
$10^5$
$10^4$
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

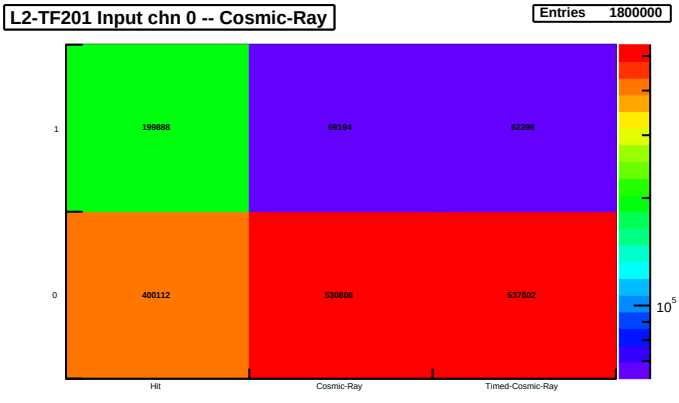

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
1
0
-1
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

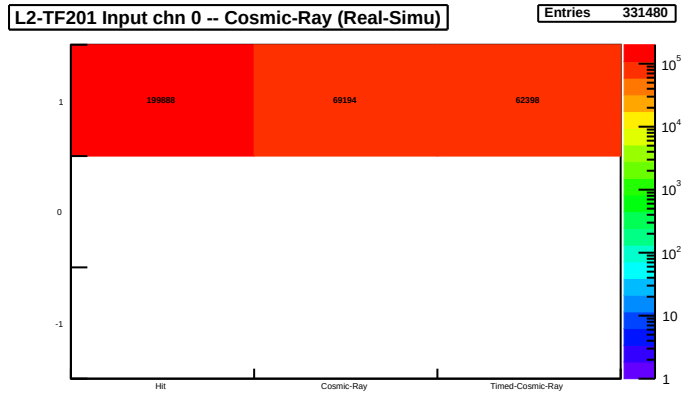

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 4800000
Fired
1
0
600000 600000 600000 600000 600000 600000 600000 600000
$10^5$
$10^4$
$10^3$
$10^2$
10
1
ET IT EOR WOR EU ED WU WD
Bit

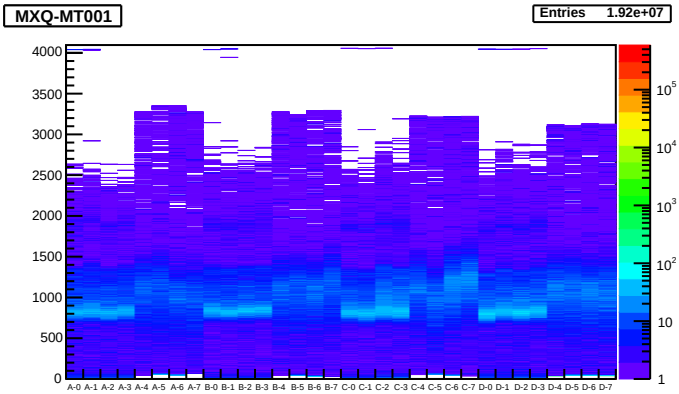

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 4800000
Fired(Real-Simu)
2
1.5
1
0.5
0
−0.5
−1
600000 600000 600000 600000 600000 600000 600000 600000
$10^5$
$10^4$
$10^3$
$10^2$
10
1
ET IT EOR WOR EU ED WU WD
Bit

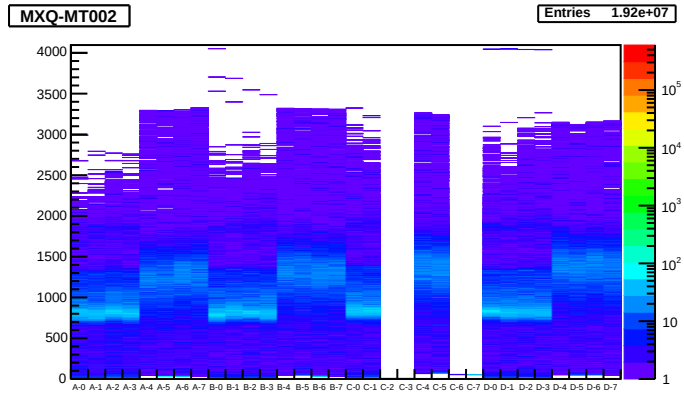

L2-TF201 Input chn 0 -- Number of Muons
Entries 600000
Number of Muons

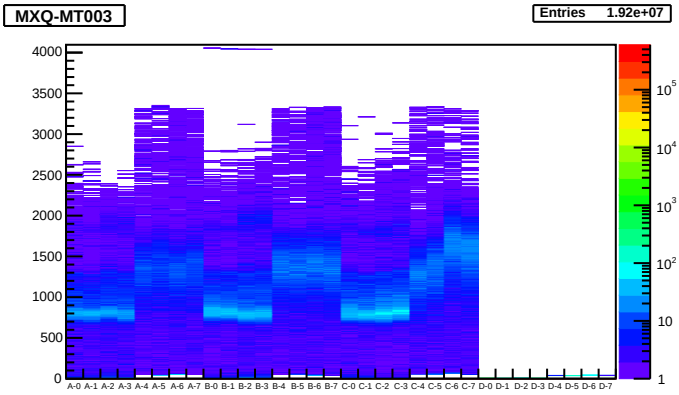

L2-TF201 Input chn 0 -- Number of Muons
Entries 199791
Number of Muons (Real-Simu)

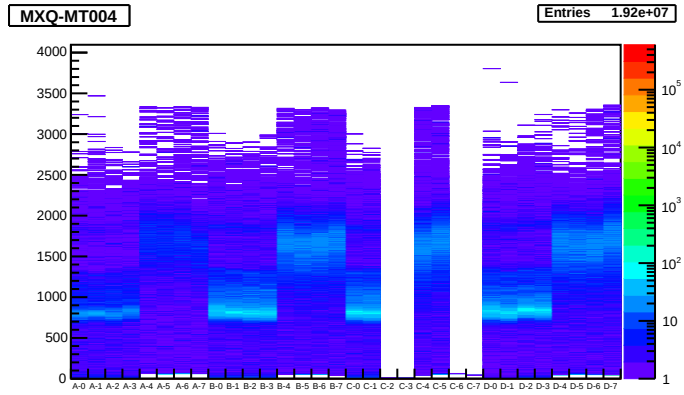

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 1800000
199888
69194
62398
400112
530806
537602
Hit
Cosmic-Ray
Timed-Cosmic-Ray

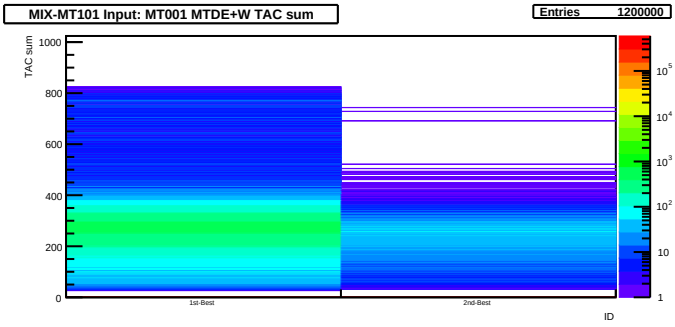

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 331480
199888
69194
62398
Hit
Cosmic-Ray
Timed-Cosmic-Ray

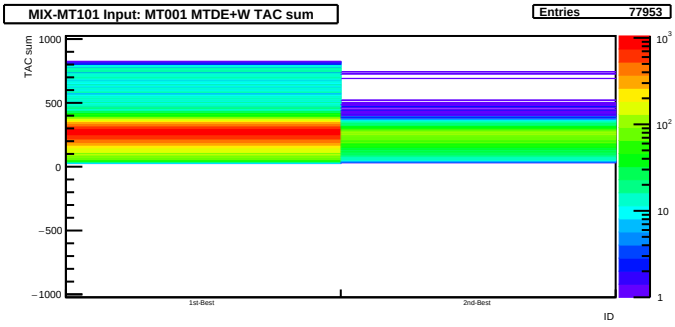

MXQ-MT001
Entries 1.92e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
$10^5$
$10^4$
$10^3$
$10^2$
10
1

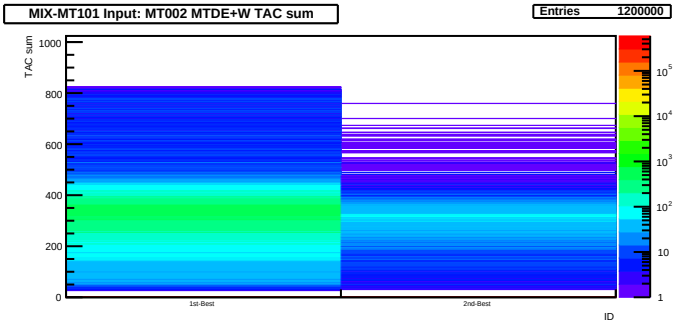

MXQ-MT002
Entries 1.92e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
$10^5$
$10^4$
$10^3$
$10^2$
10
1

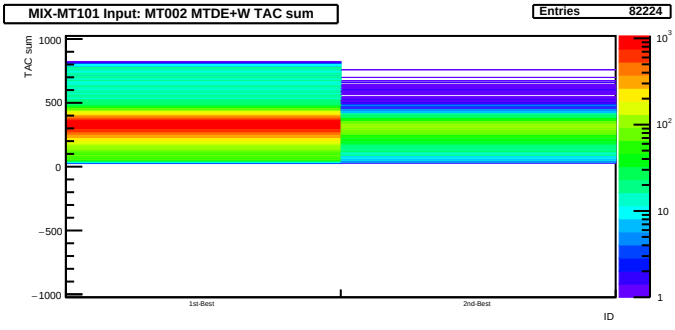

MXQ-MT003
Entries 1.92e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
$10^5$
$10^4$
$10^3$
$10^2$
10
1

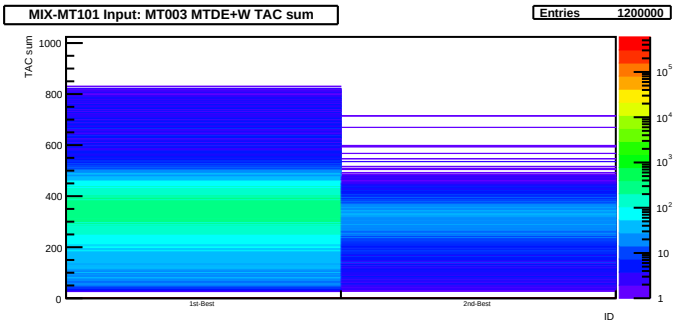

MXQ-MT004
Entries 1.92e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
$10^5$
$10^4$
$10^3$
$10^2$
10
1

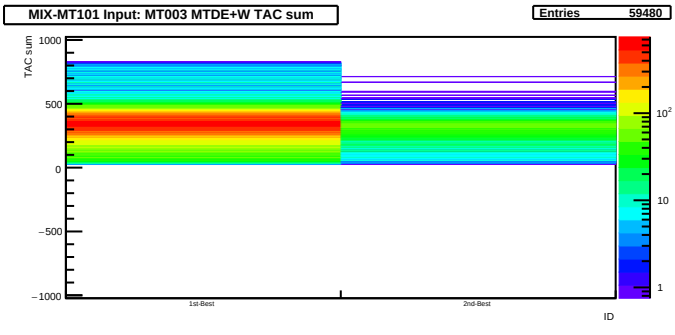

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 1200000
TAC sum
1st-Best
2nd-Best
ID

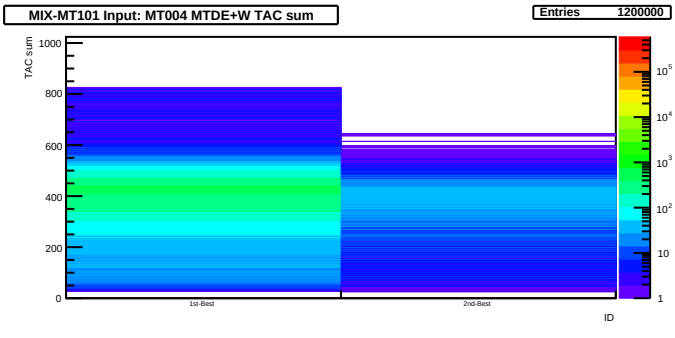

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 77953
TAC sum
1st-Best
2nd-Best
ID

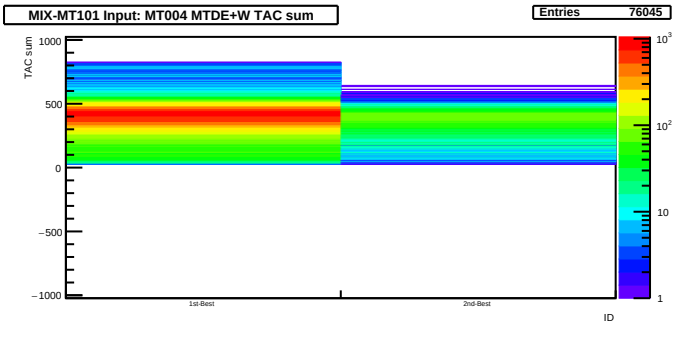

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 1200000
TAC sum
1st-Best
2nd-Best
ID

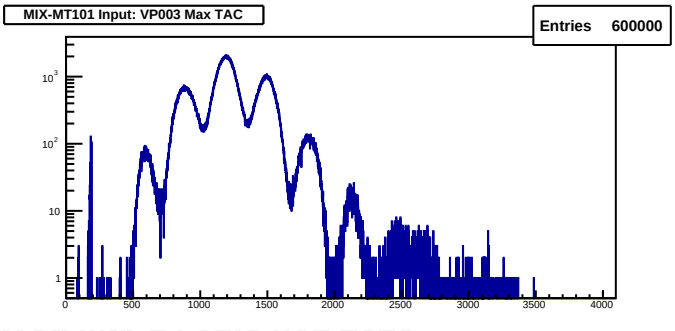

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 82224
TAC sum
1st-Best
2nd-Best
ID

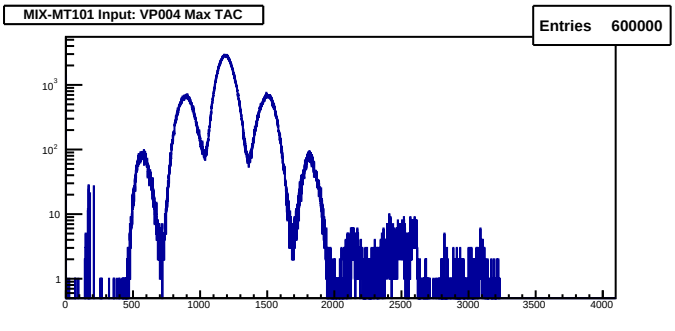

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 1200000
TAC sum
1st-Best
2nd-Best
ID

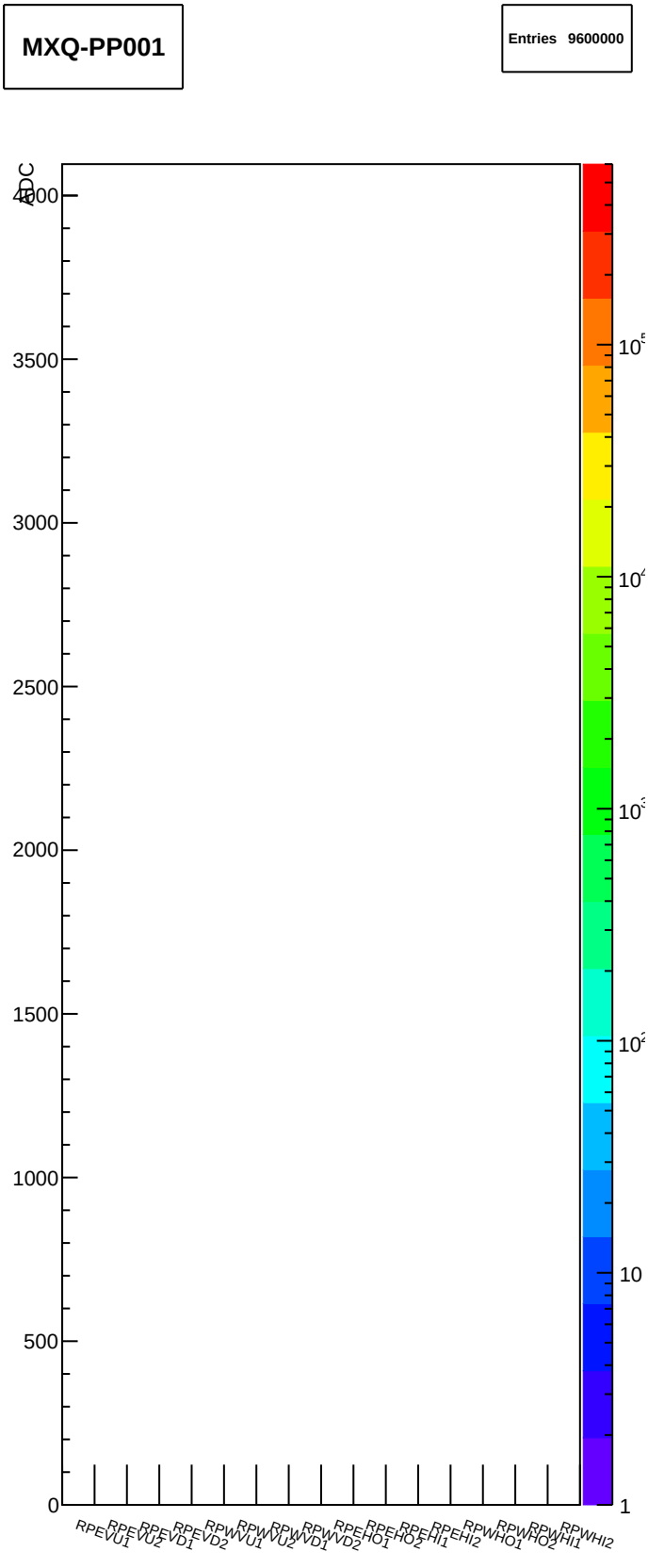

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 59480
TAC sum
1st-Best
2nd-Best
ID

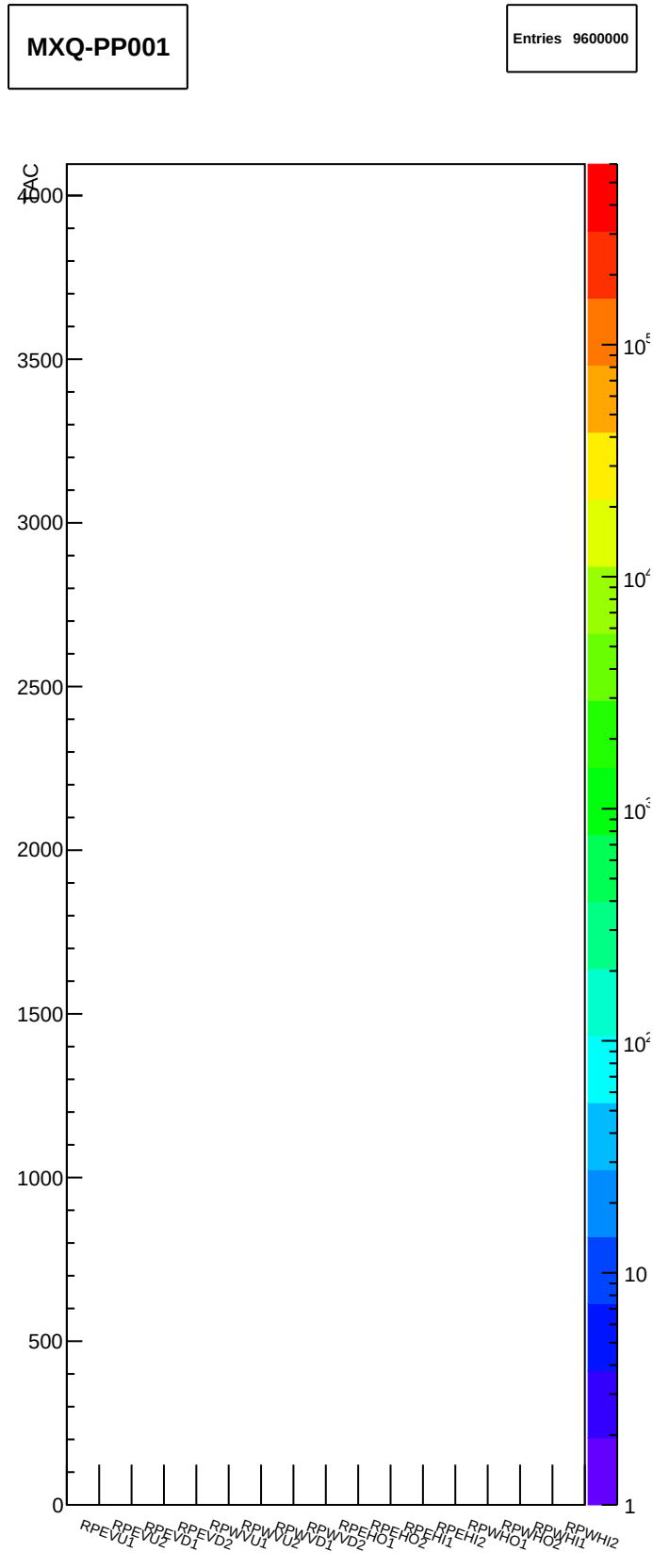

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 1200000
TAC sum
1st-Best
2nd-Best
ID

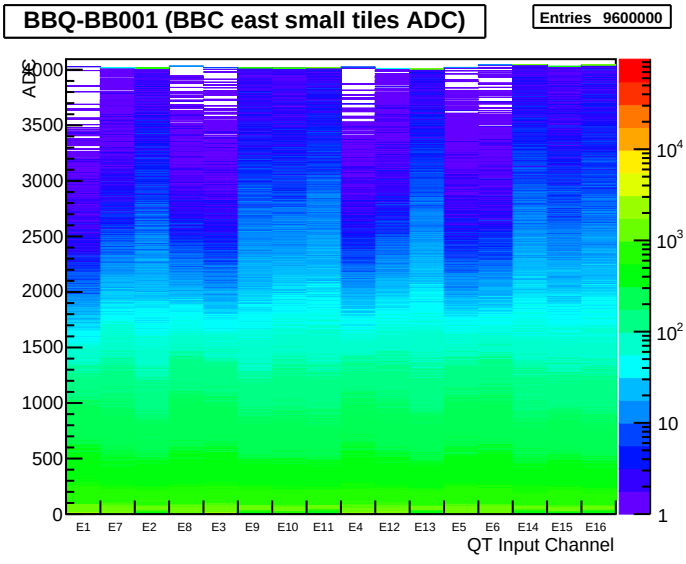

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 76045
TAC sum
1st-Best
2nd-Best
ID

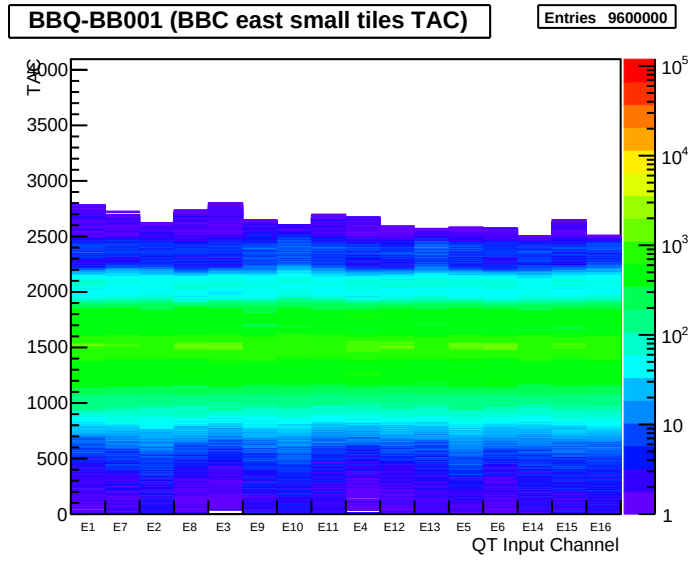

MIX-MT101 Input: VP003 Max TAC
Entries 600000

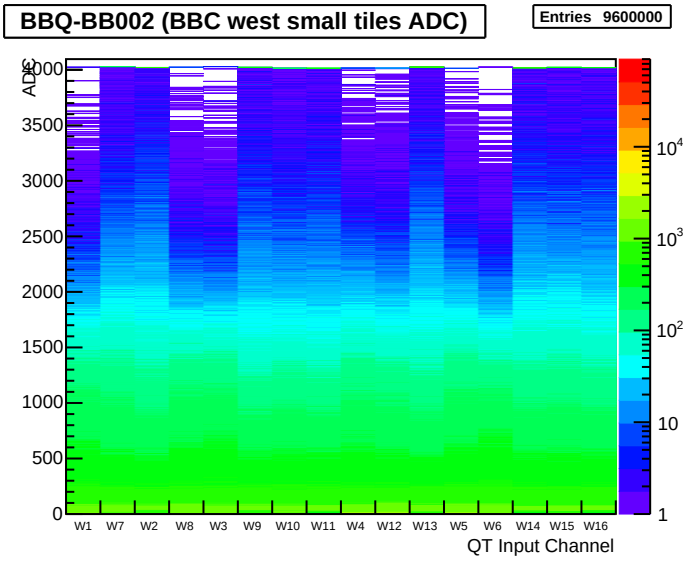

MIX-MT101 Input: VP004 Max TAC
Entries 600000

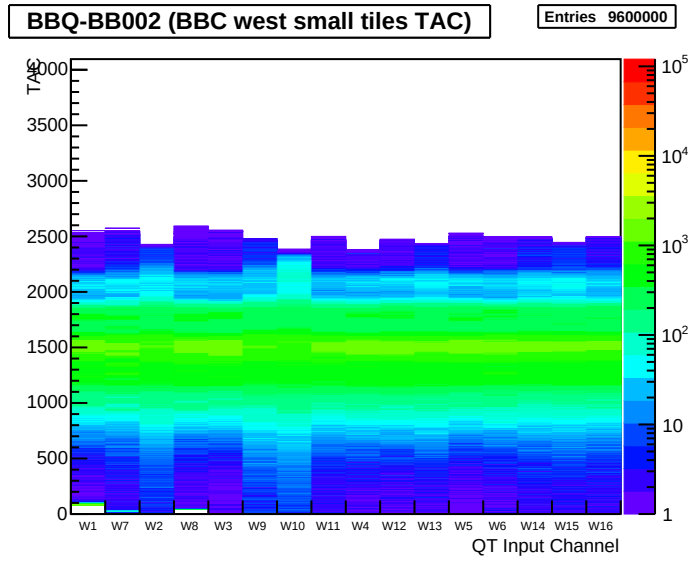

MXQ-PP001
Entries 9600000
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

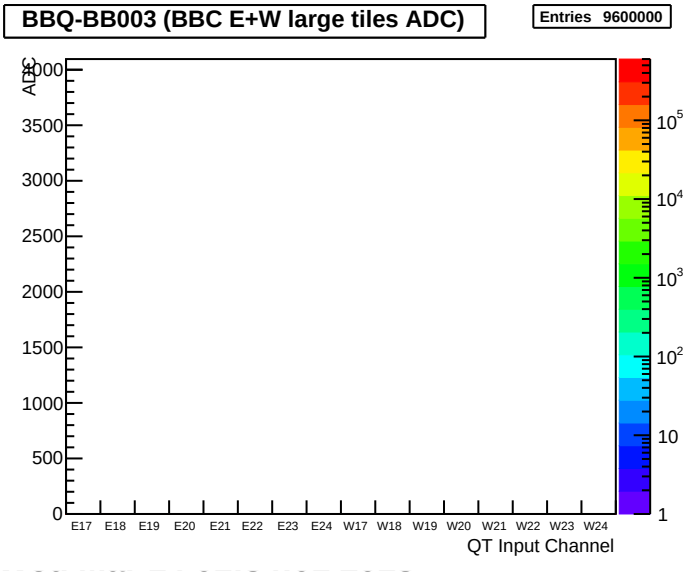

MXQ-PP001
Entries 9600000
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

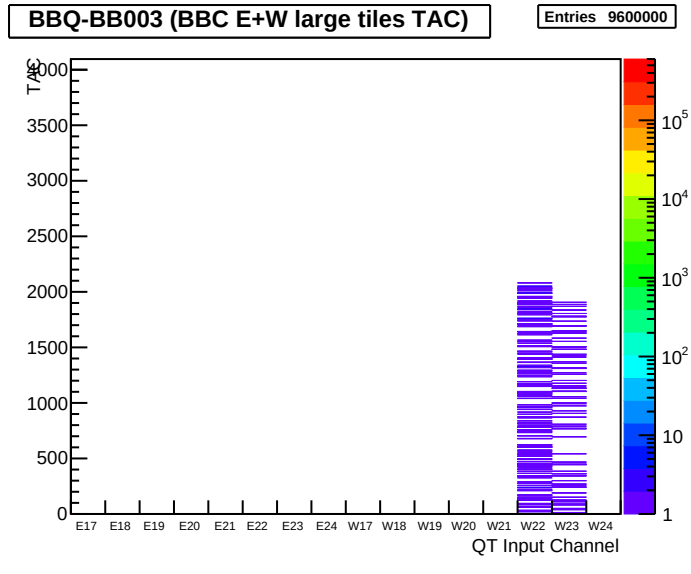

BBQ-BB001 (BBC east small tiles ADC)
Entries 9600000
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

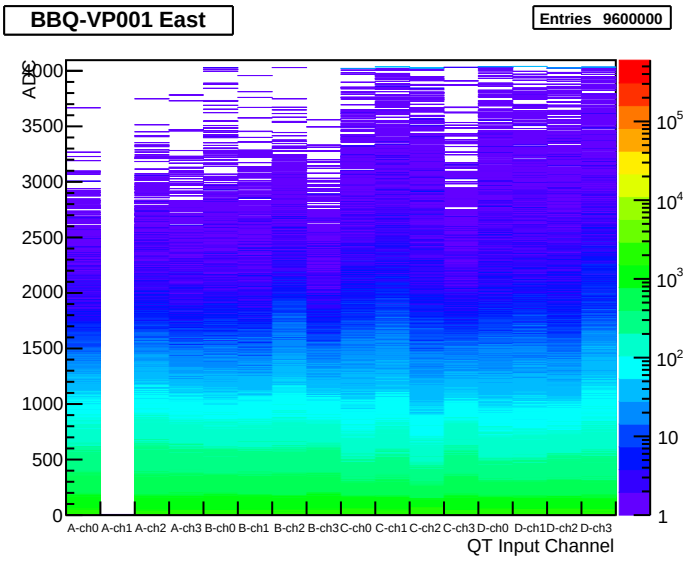

BBQ-BB001 (BBC east small tiles TAC)
Entries 9600000
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

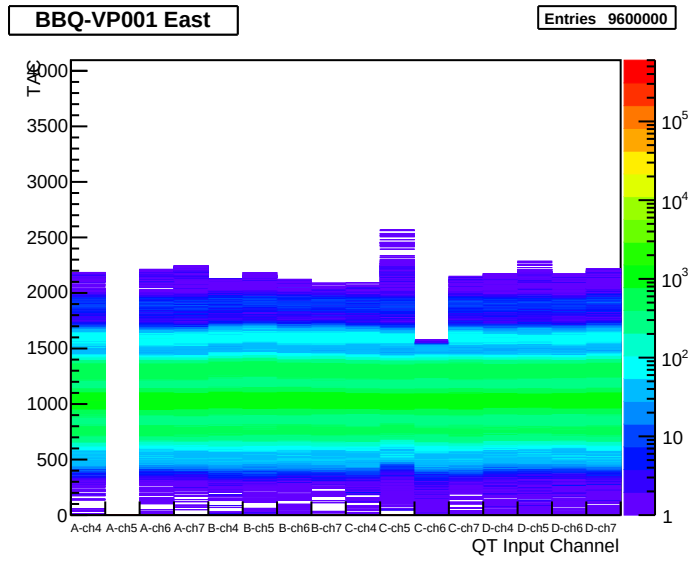

BBQ-BB002 (BBC west small tiles ADC)
Entries 9600000
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

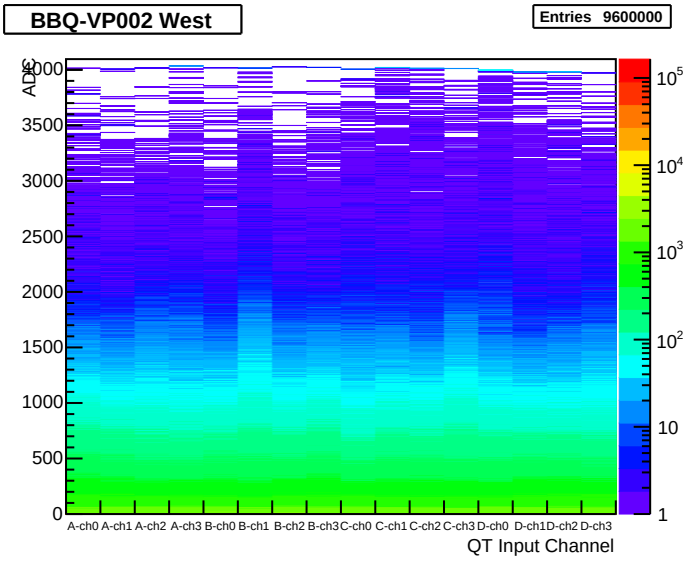

BBQ-BB002 (BBC west small tiles TAC)
Entries 9600000
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

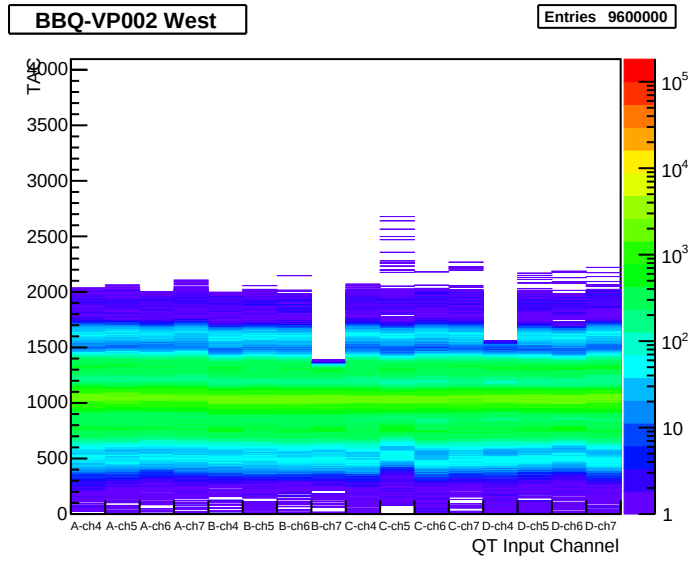

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 9600000
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

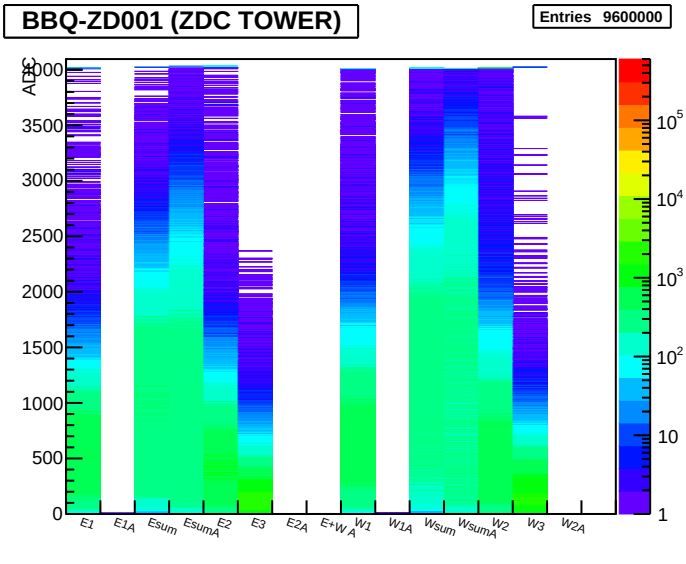

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 9600000
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

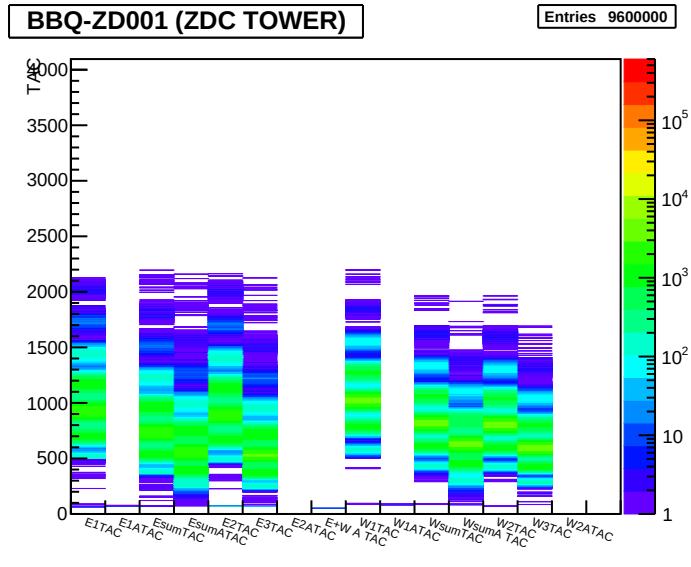

BBQ-VP001 East
Entries 9600000
ADC
QT Input Channel

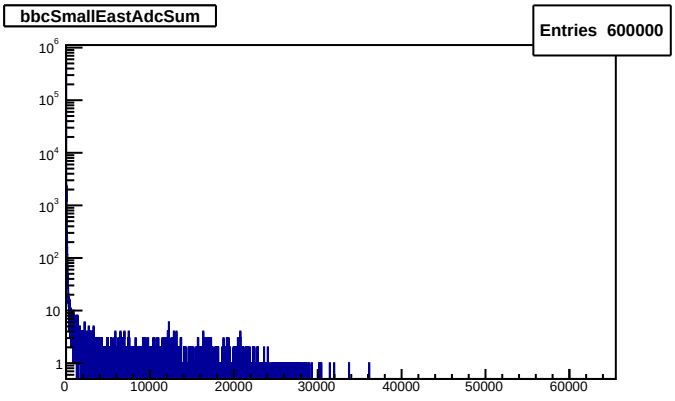

BBQ-VP001 East
Entries 9600000
TAC
QT Input Channel

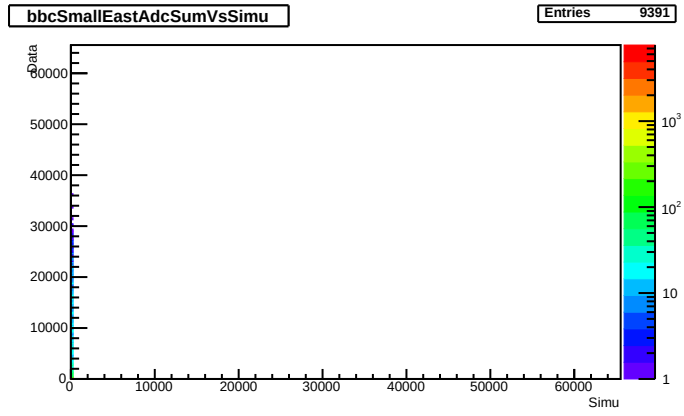

BBQ-VP002 West
Entries 9600000
ADC
QT Input Channel

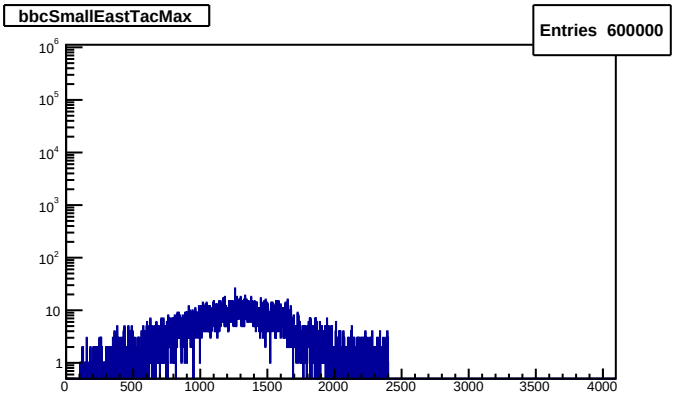

BBQ-VP002 West
Entries 9600000
TAC
QT Input Channel

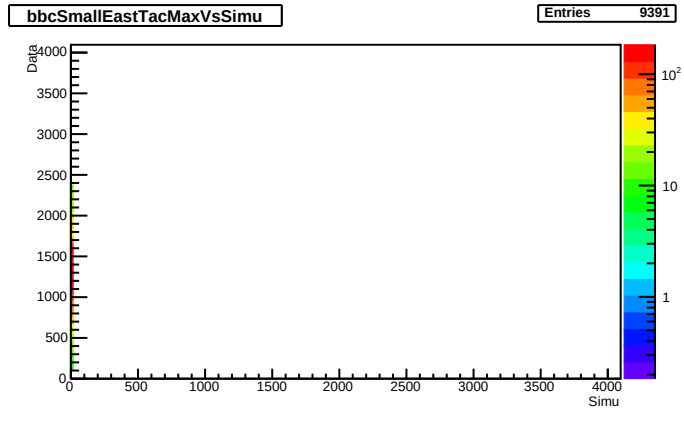

BBQ-ZD001 (ZDC TOWER)
Entries 9600000
ADC

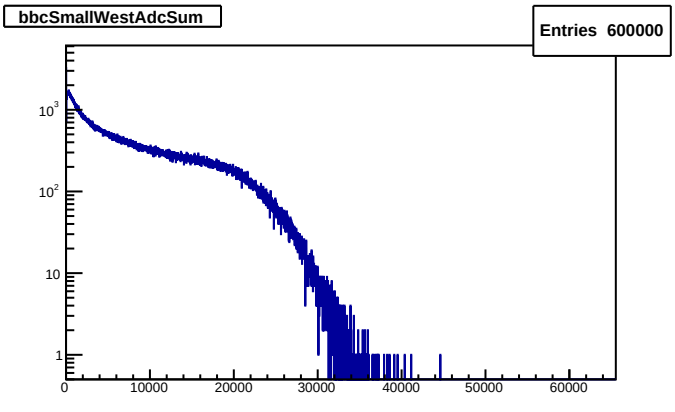

BBQ-ZD001 (ZDC TOWER)
Entries 9600000
TAC

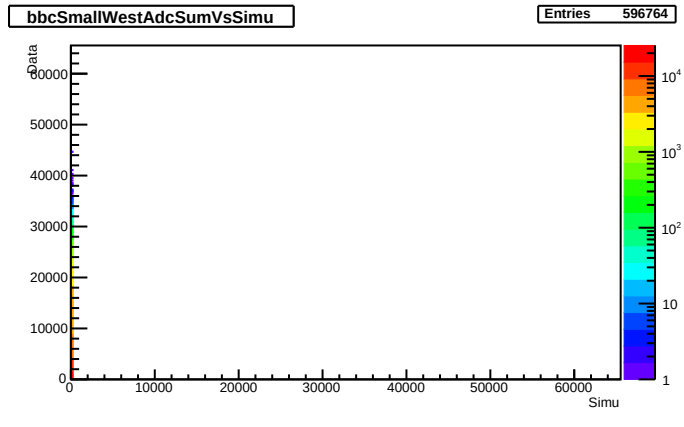

bbcSmallEastAdcSum
Entries 600000

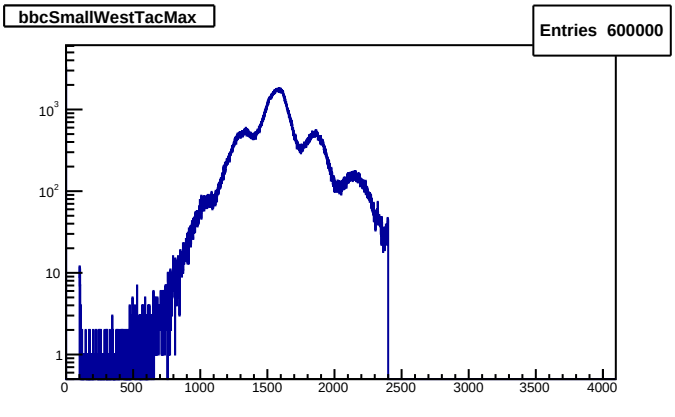

bbcSmallEastAdcSumVsSimu
Entries 9391
Data
Simu

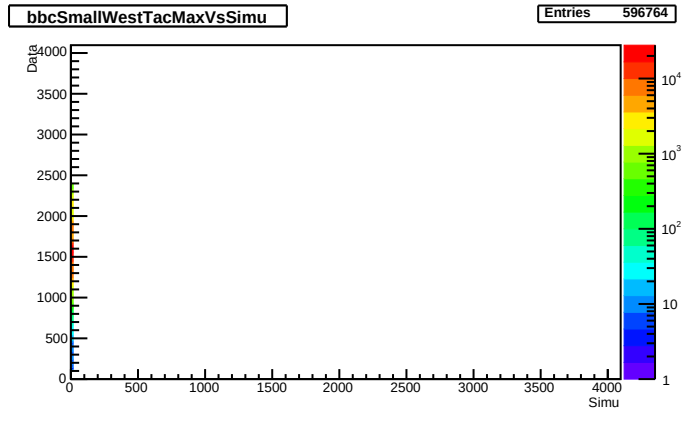

bbcSmallEastTacMax
Entries 600000

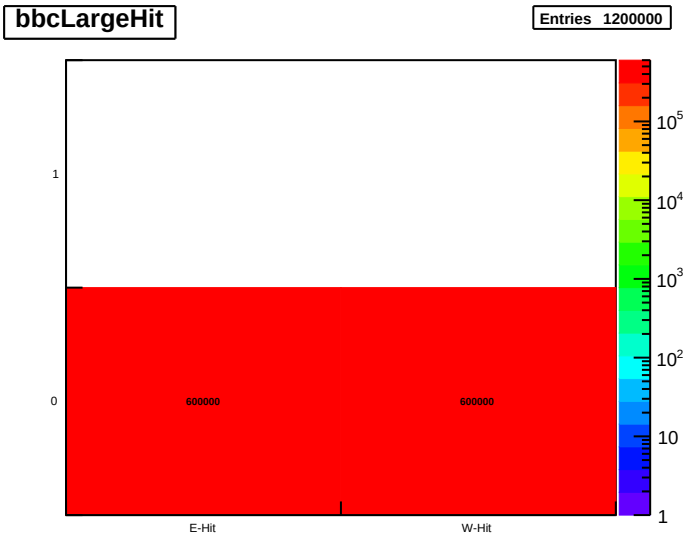

bbcSmallEastTacMaxVsSimu
Entries 9391
Data
Simu

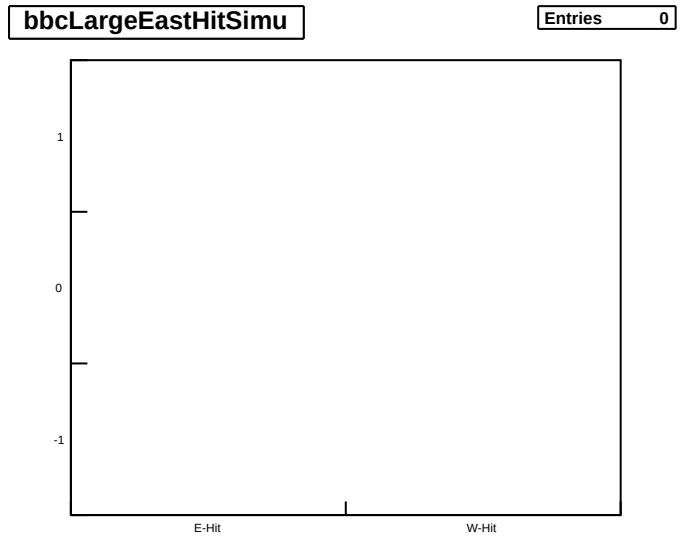

bbcSmallWestAdcSum
Entries 600000

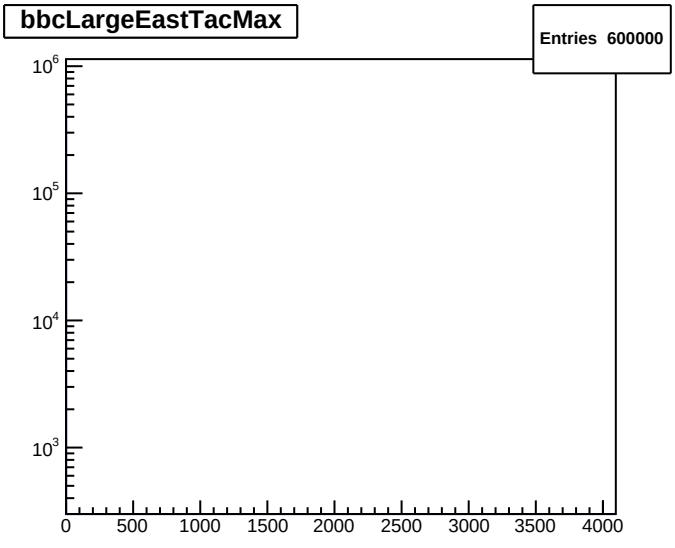

bbcSmallWestAdcSumVsSimu
Entries 596764
Data
Simu

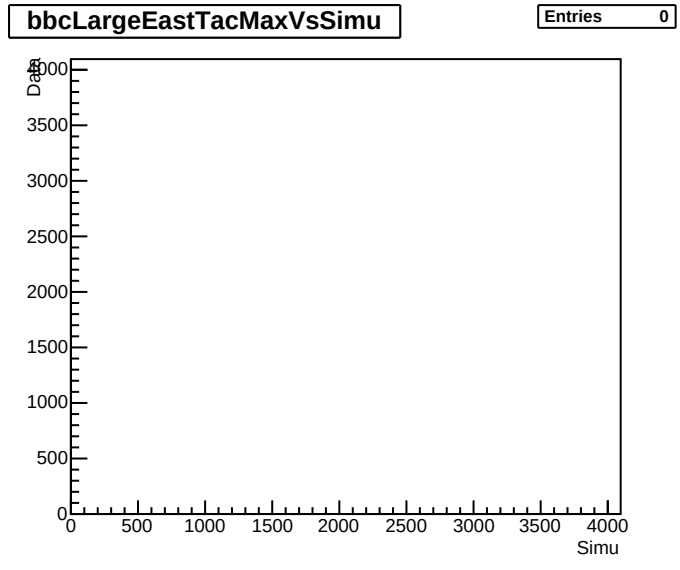

bbcSmallWestTacMax
Entries 600000

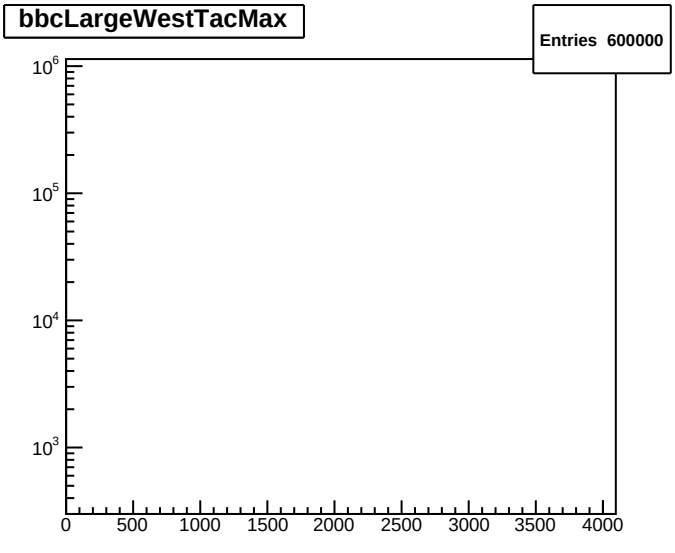

bbcSmallWestTacMaxVsSimu
Entries 596764
Data
Simu

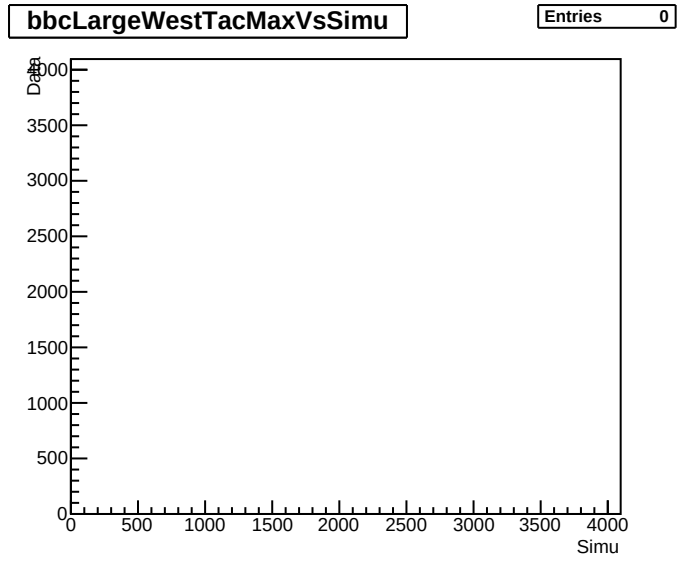

bbcLargeHit
Entries 1200000
600000
600000
E-Hit
W-Hit

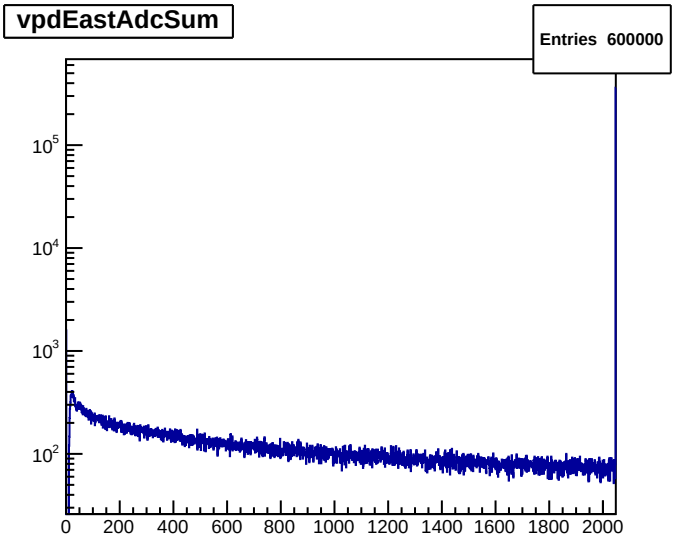

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

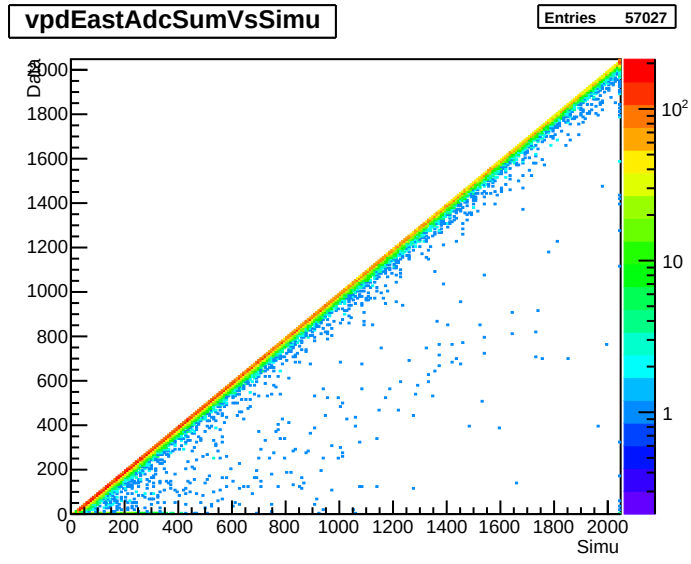

bbcLargeEastTacMax
Entries 600000

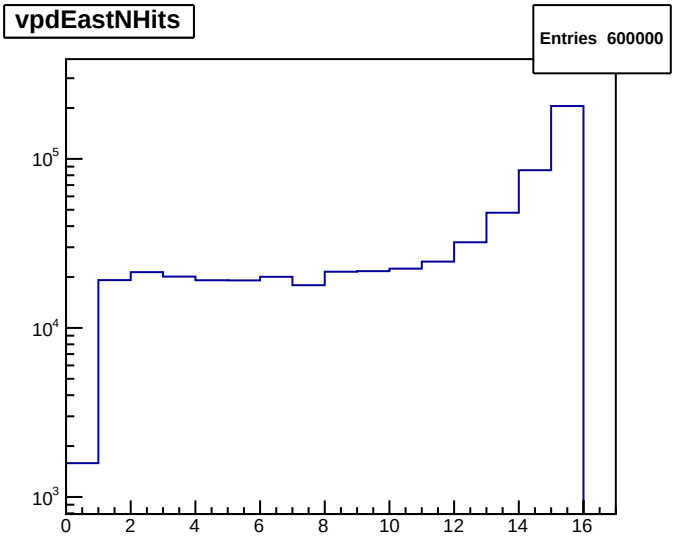

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

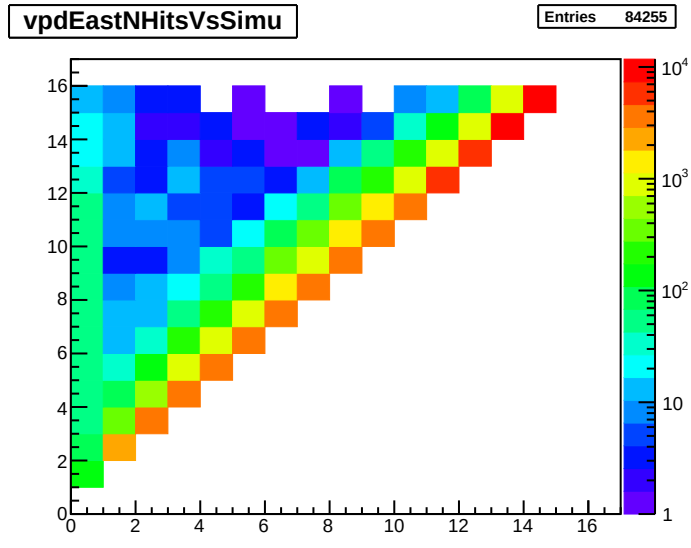

bbcLargeWestTacMax
Entries 600000

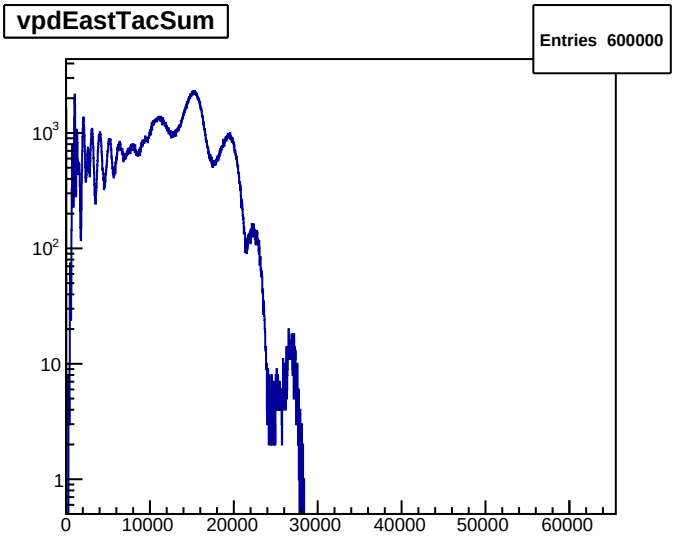

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

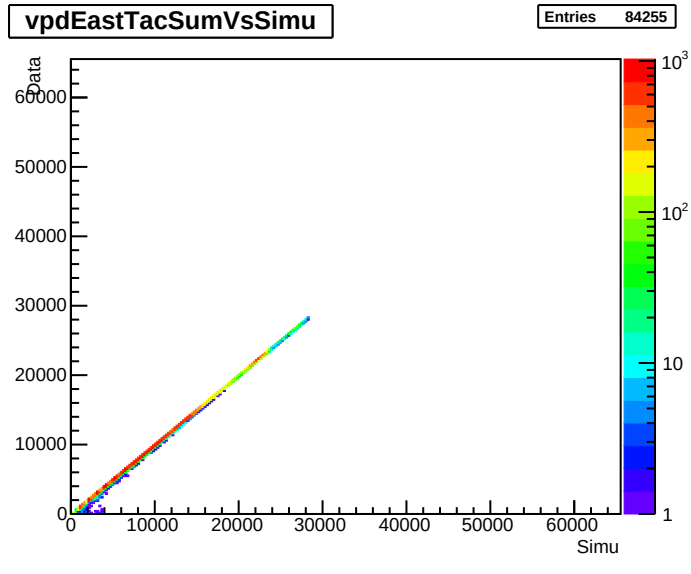

vpdEastAdcSum
Entries 600000

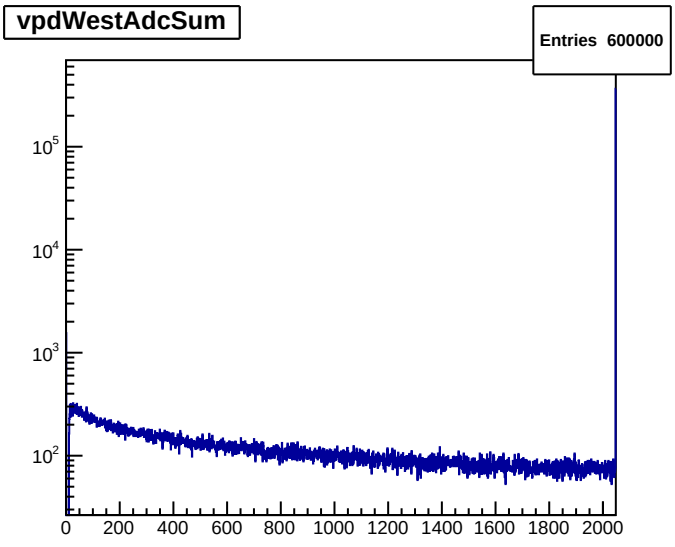

vpdEastAdcSumVsSimu
Entries 57027
Data
Simu

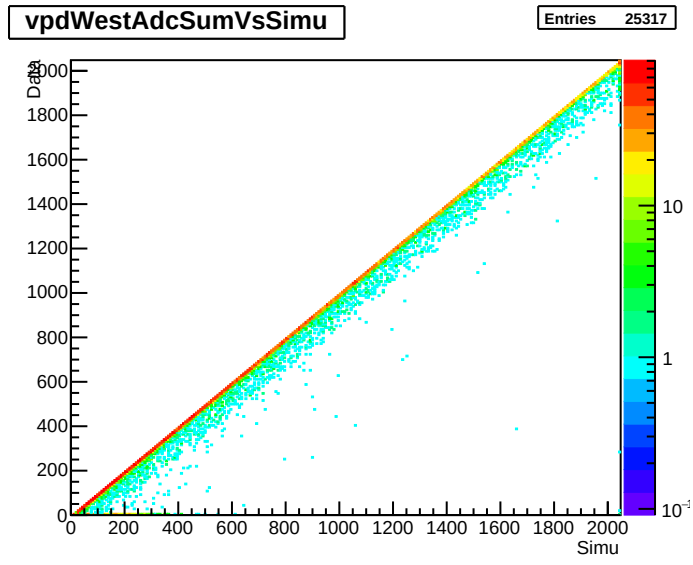

vpdEastNHits
Entries 600000

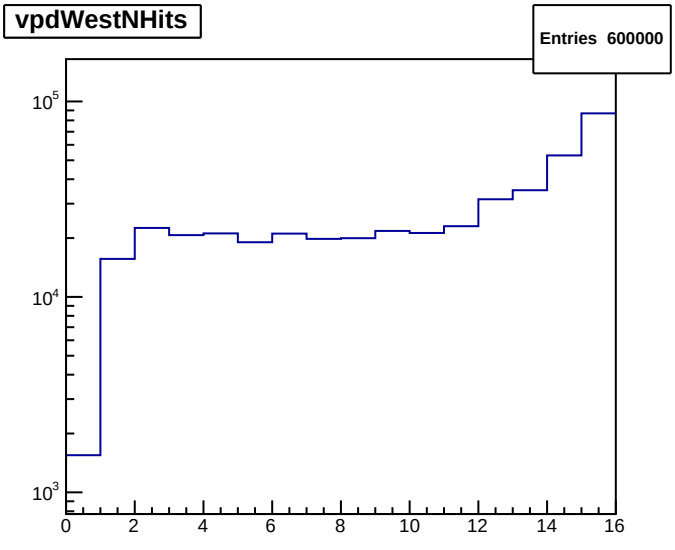

vpdEastNHitsVsSimu
Entries 84255

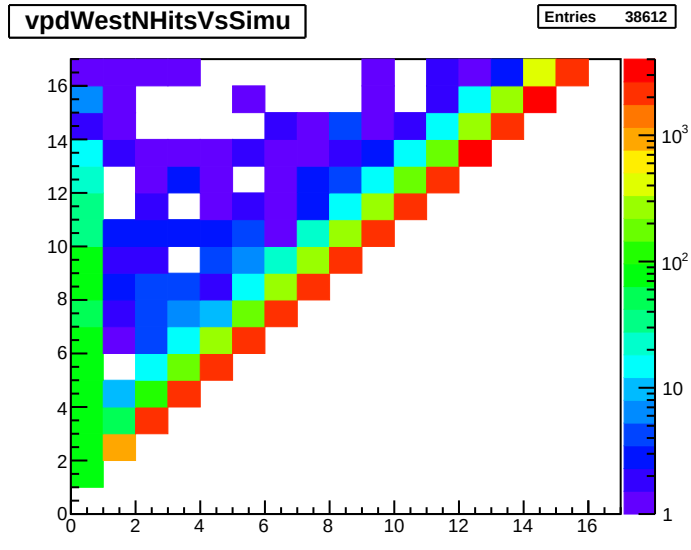

vpdEastTacSum
Entries 600000

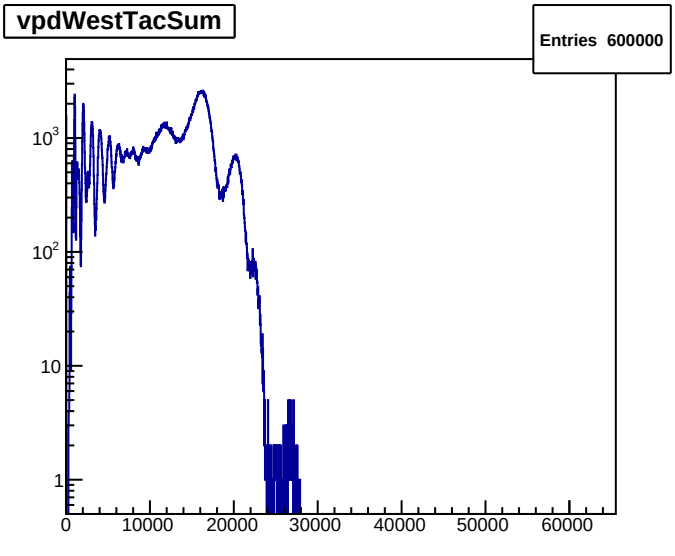

vpdEastTacSumVsSimu
Entries 84255
Data
Simu

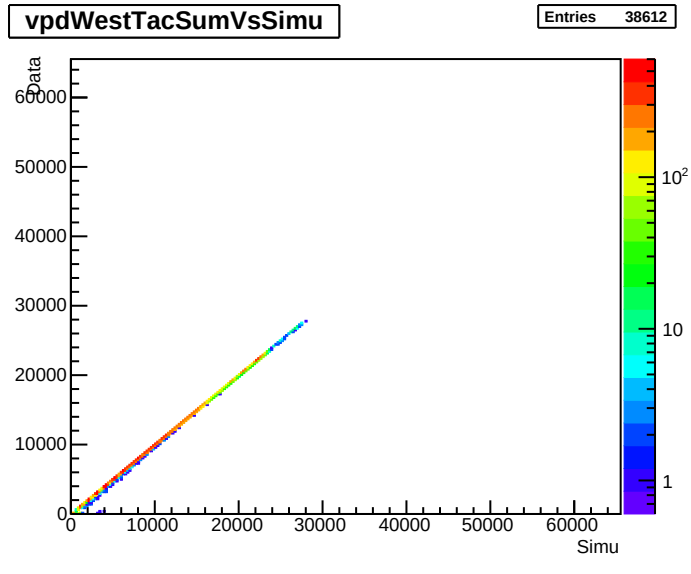

vpdWestAdcSum
Entries 600000

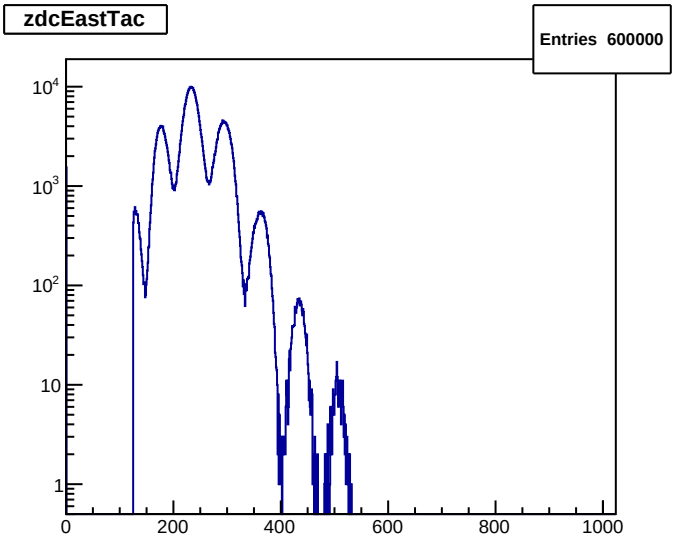

vpdWestAdcSumVsSimu
Entries 25317
Data
Simu

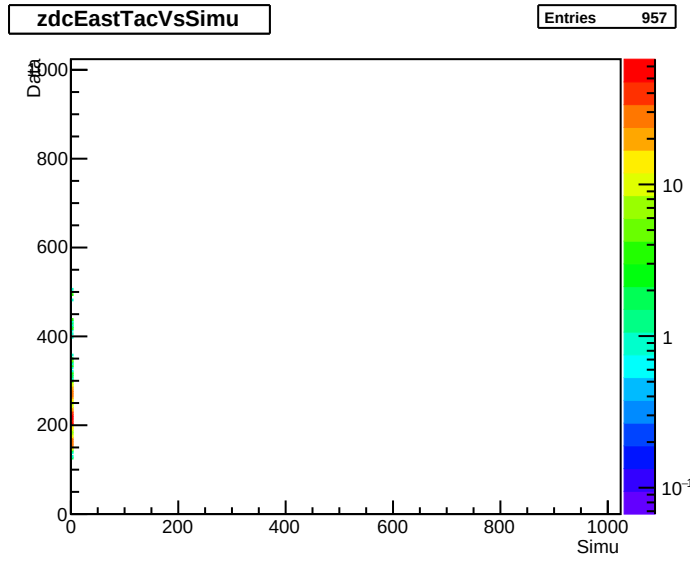

vpdWestNHits
Entries 600000

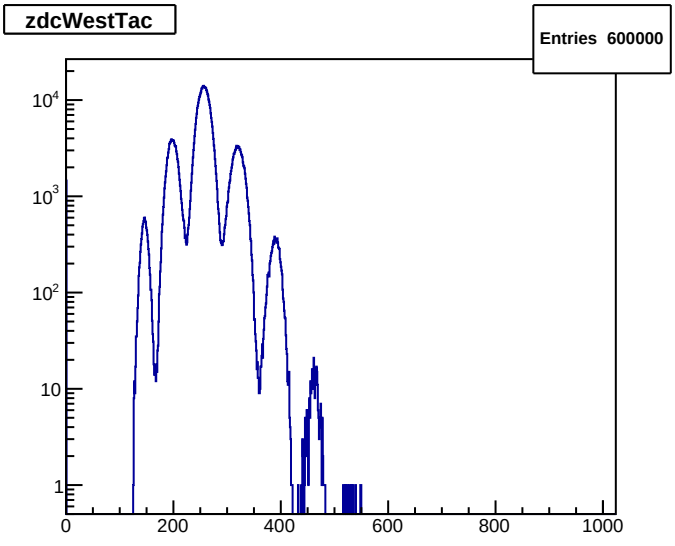

vpdWestNHitsVsSimu
Entries 38612

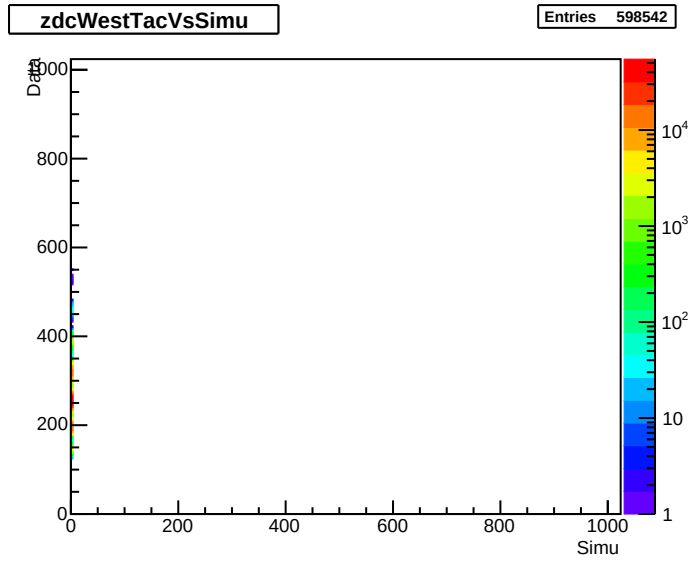

vpdWestTacSum
Entries 600000

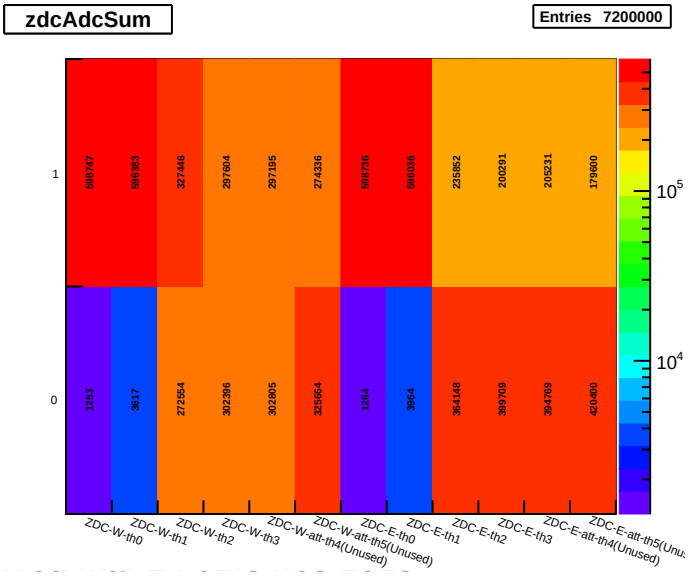

vpdWestTacSumVsSimu
Entries 38612
Data
Simu

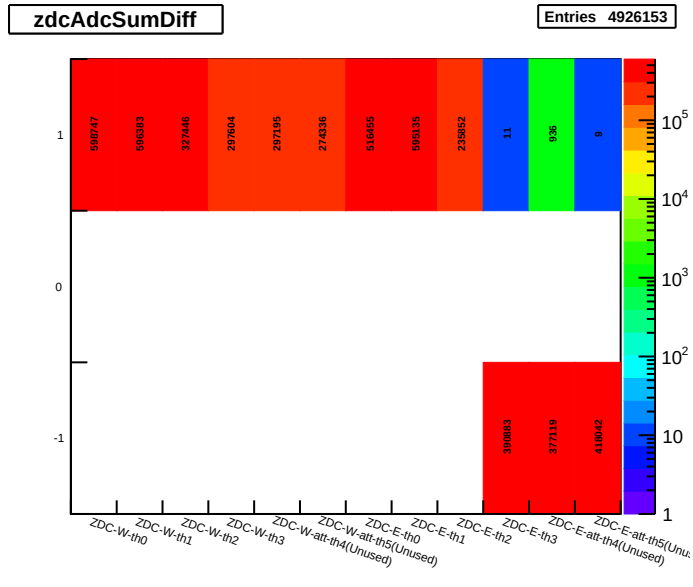

zdcEastTac
Entries 600000

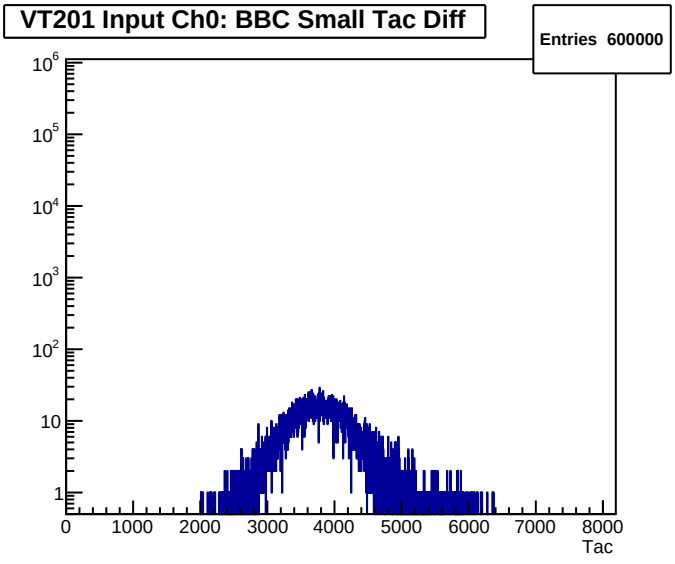

zdcEastTacVsSimu
Entries 957
Data
Simu

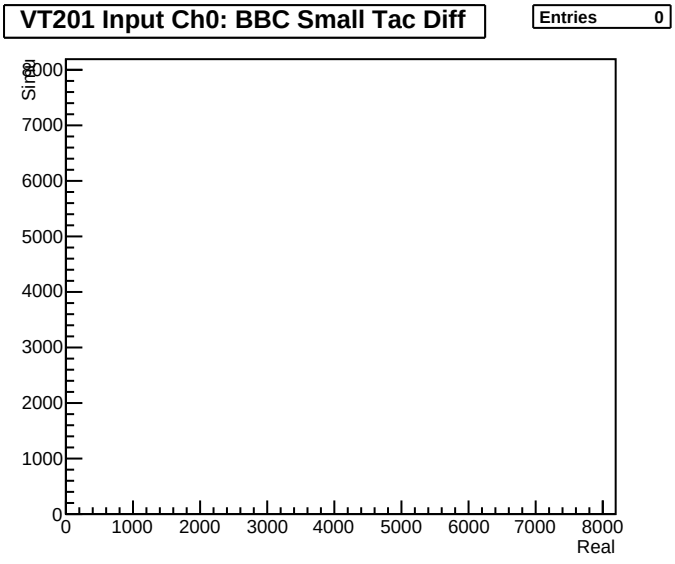

zdcWestTac
Entries 600000

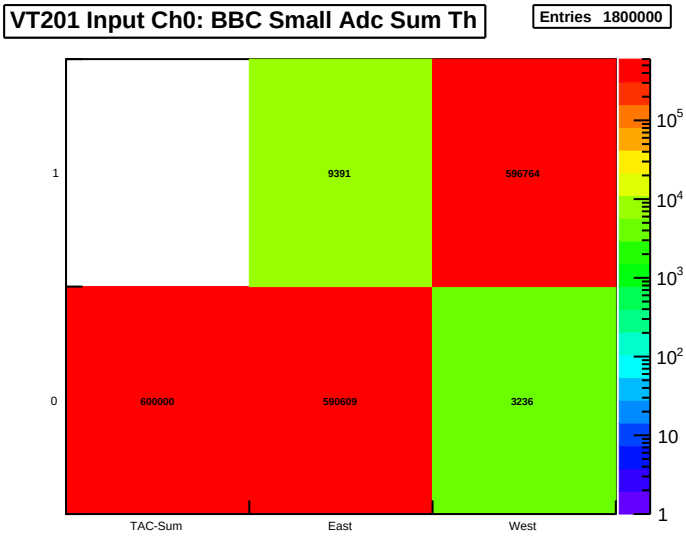

zdcWestTacVsSimu
Entries 598542
Data
Simu

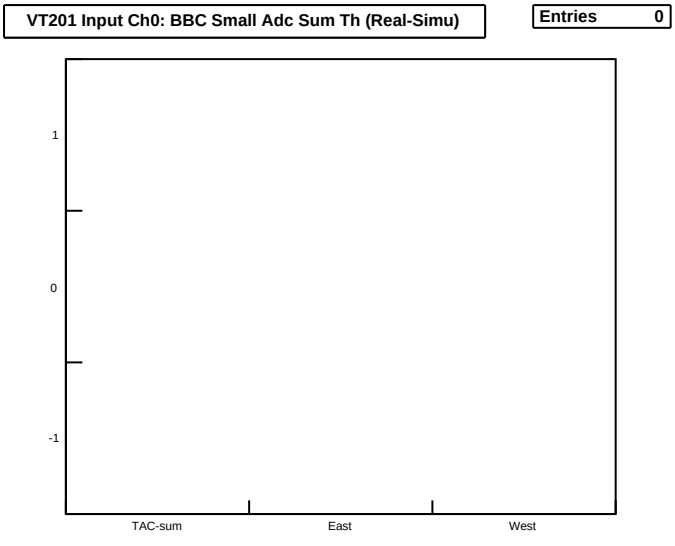

zdcAdcSum
Entries 7200000
598747
596383
327446
297604
297195
274336
598736
596036
235852
200291
205231
179600
1253
3617
272554
302396
302805
325664
1254
3964
364148
399709
394769
420400
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

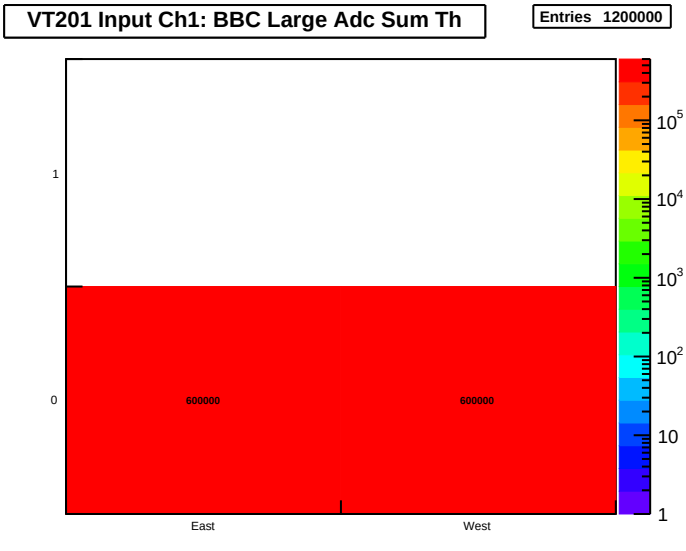

zdcAdcSumDiff
Entries 4926153
598747
596383
327446
297604
297195
274336
516455
595135
235852
11
936
9
390883
377119
418042
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

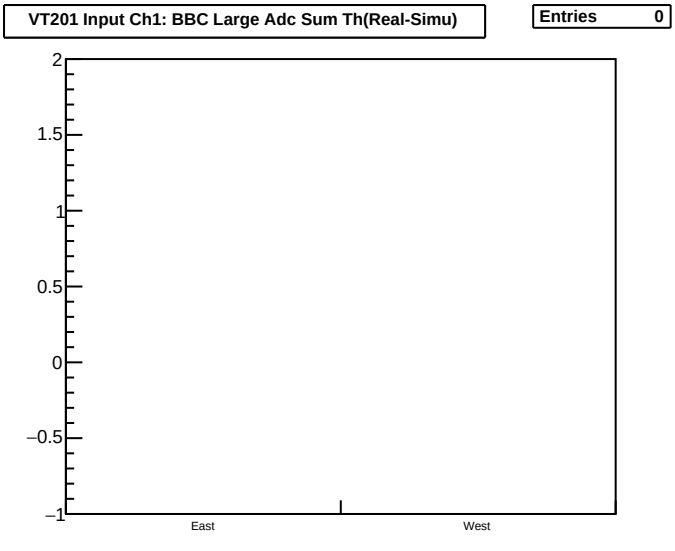

VT201 Input Ch0: BBC Small Tac Diff
Entries 600000
Tac


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

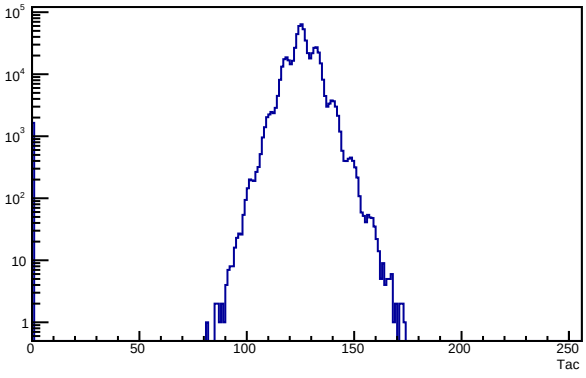

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 1800000
9391
596764
600000
590609
3236
TAC-Sum
East
West


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

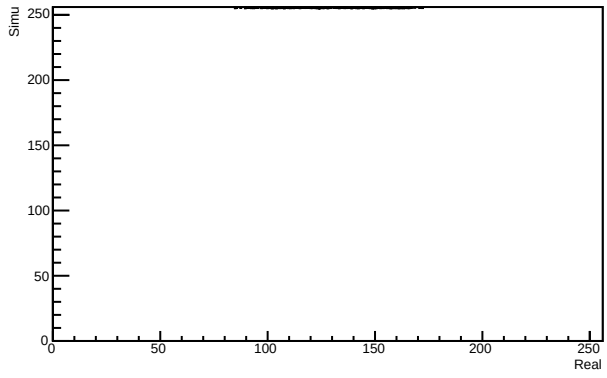

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 1200000
600000
600000
East
West


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

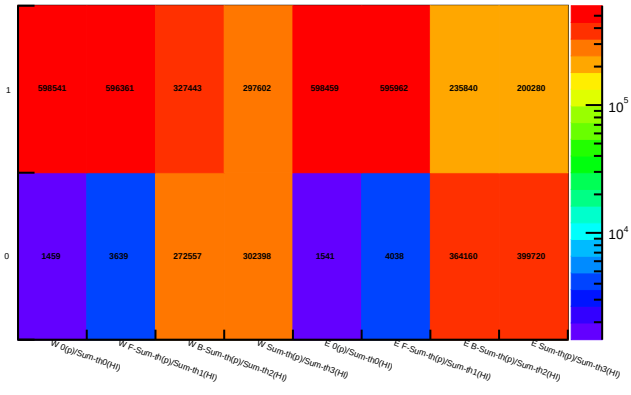
**VT201 Input Ch2: ZDC Tac Diff**



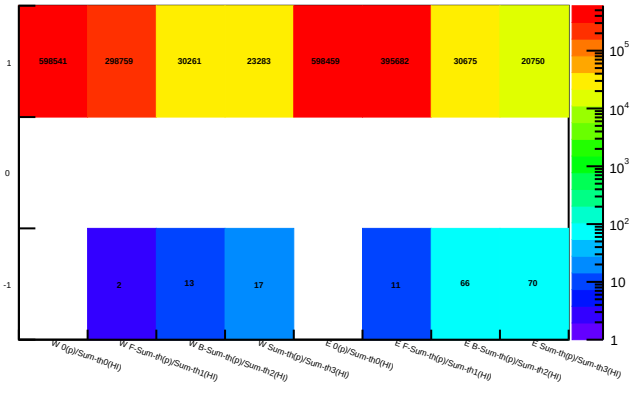

**VT201 Input Ch2: ZDC Tac Diff**



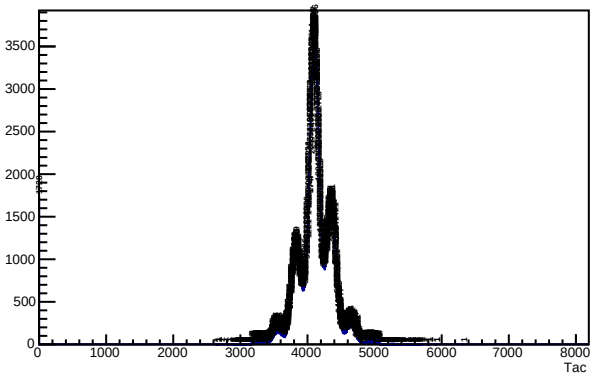

**VT201 Input Ch2: ZDC Adc Sum Th**



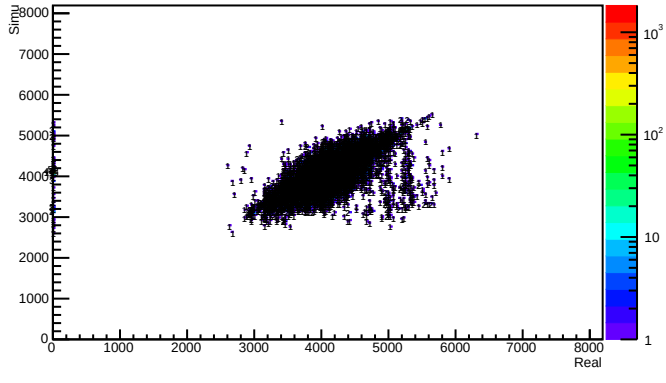

**VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)**



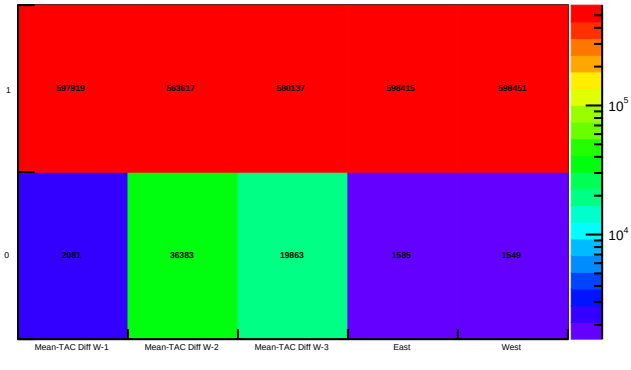

**VT201 Input Ch4: VPD Tac Diff**



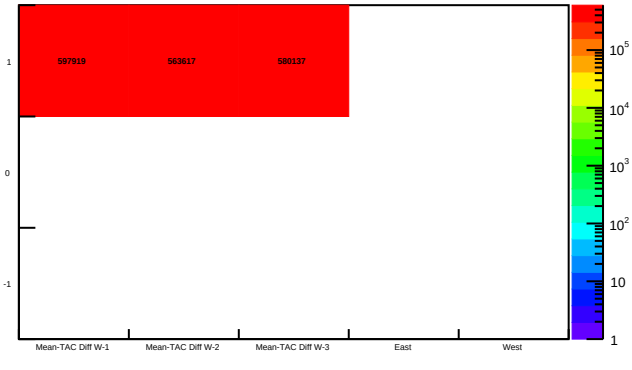

**VT201 Input Ch4: VPD Tac Diff**

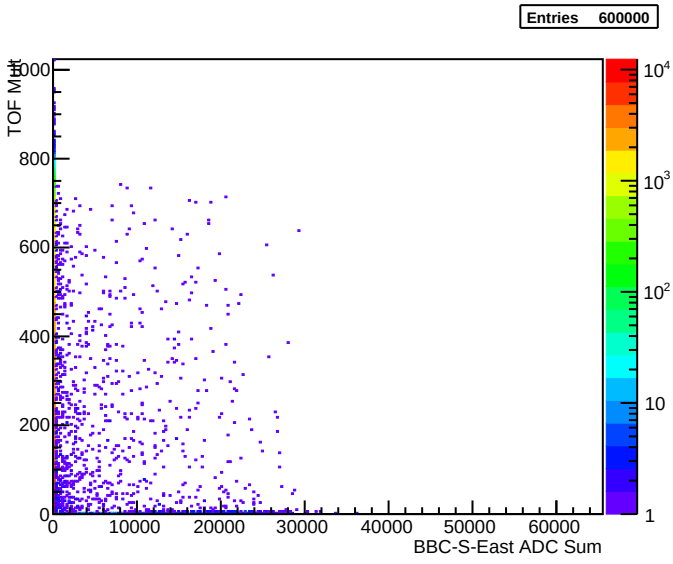


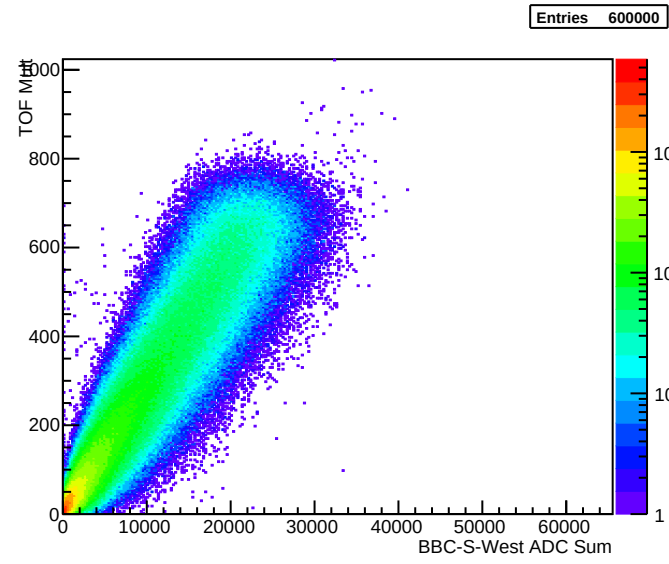

**VT201 Input Ch4: VPD Adc Sum Th**

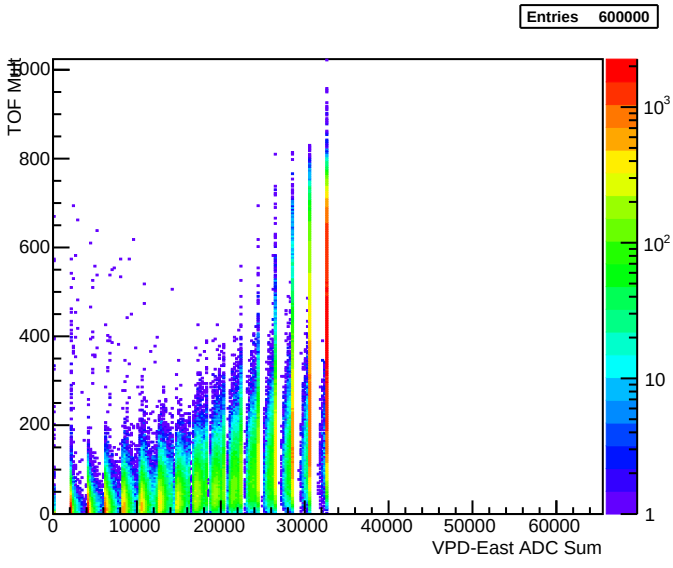


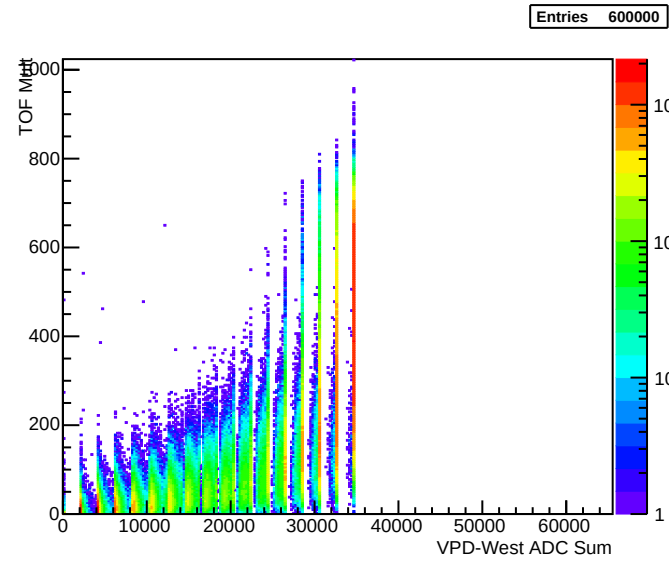

**VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)**

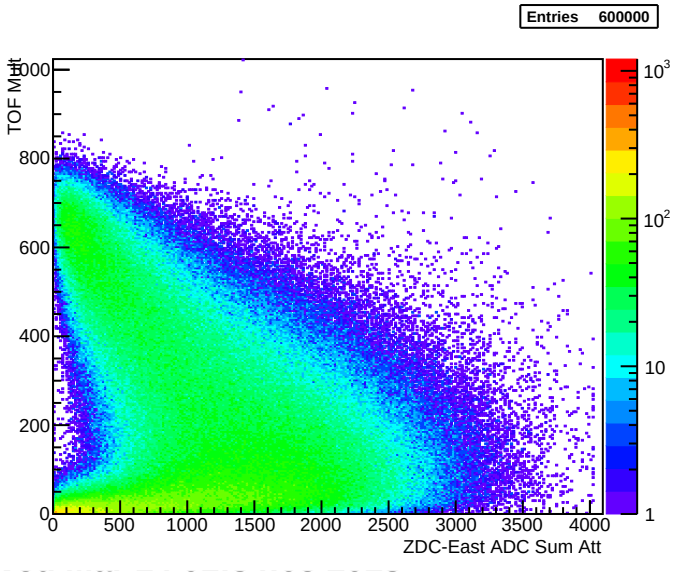


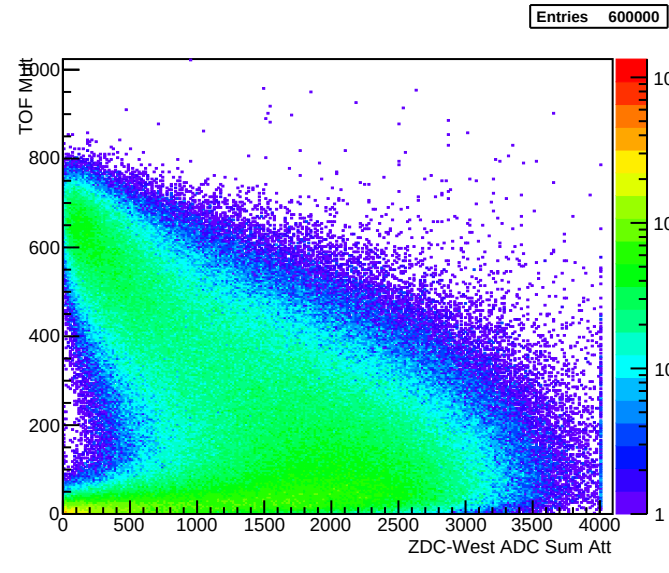

Entries 600000
TOF Mult
BBC-S-East ADC Sum

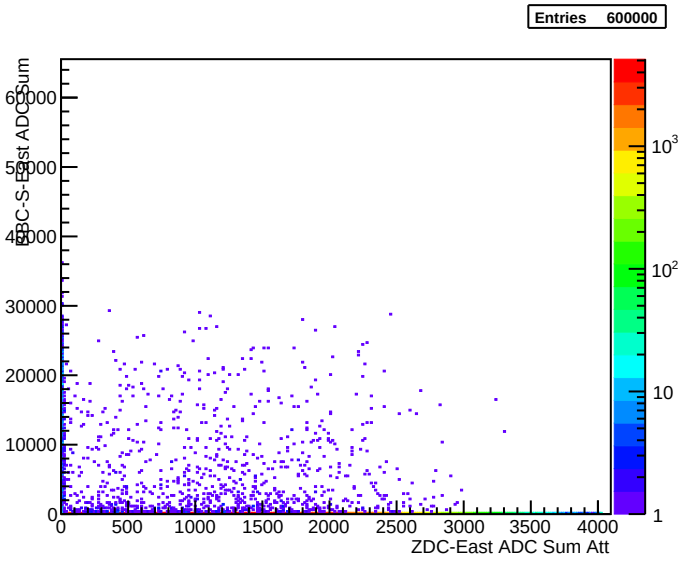

Entries 600000
TOF Mult
BBC-S-West ADC Sum

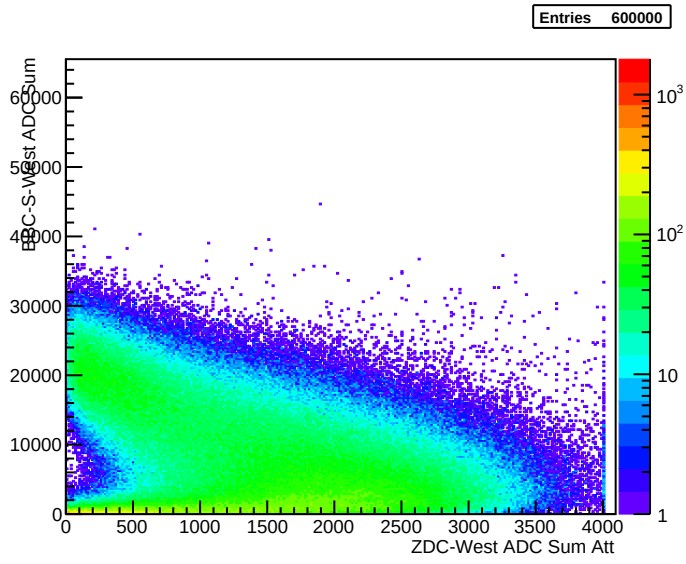

Entries 600000
TOF Mult
VPD-East ADC Sum

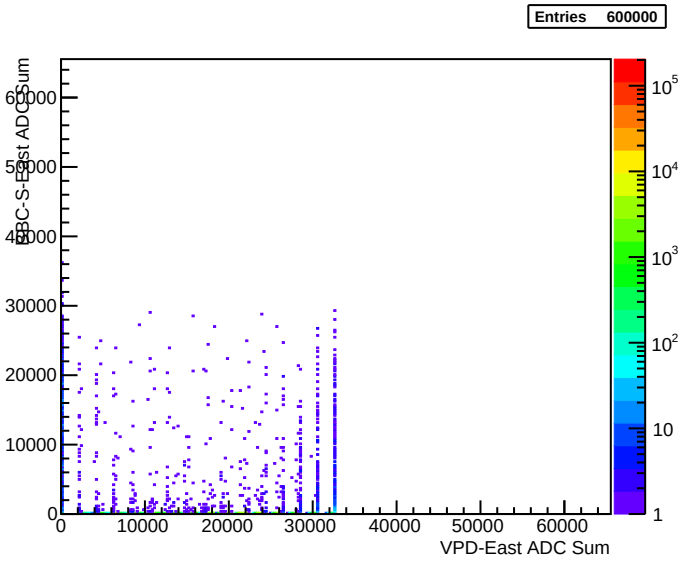

Entries 600000
TOF Mult
VPD-West ADC Sum

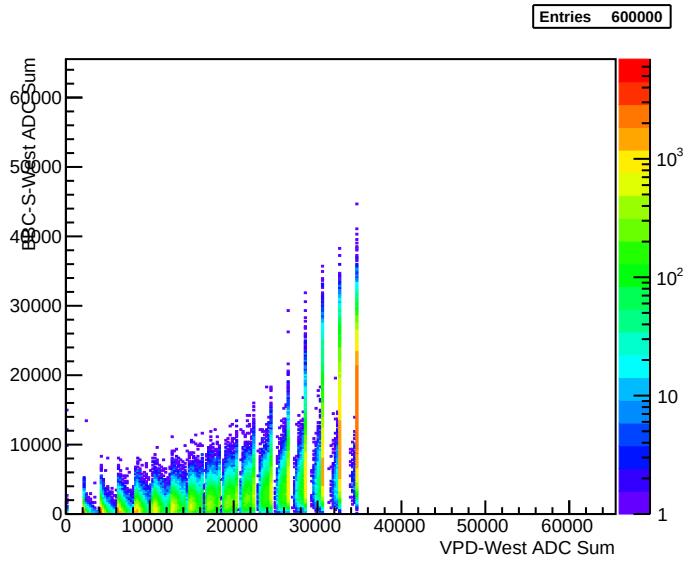

Entries 600000
TOF Mult
ZDC-East ADC Sum Att

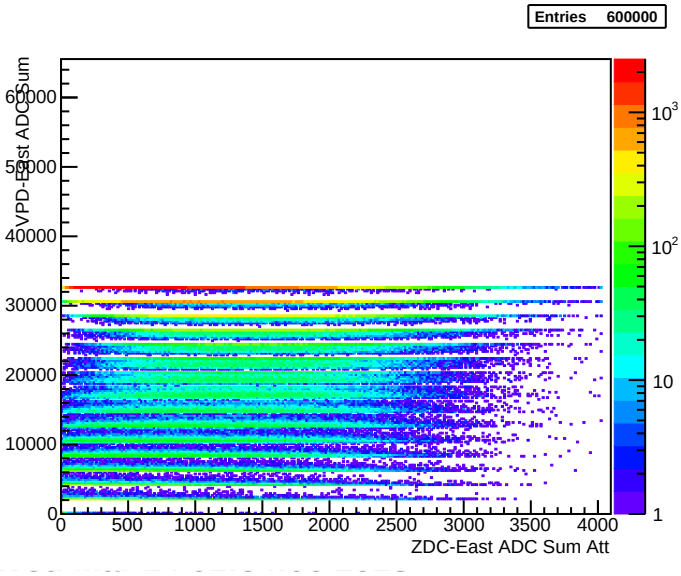

Entries 600000
TOF Mult
ZDC-West ADC Sum Att

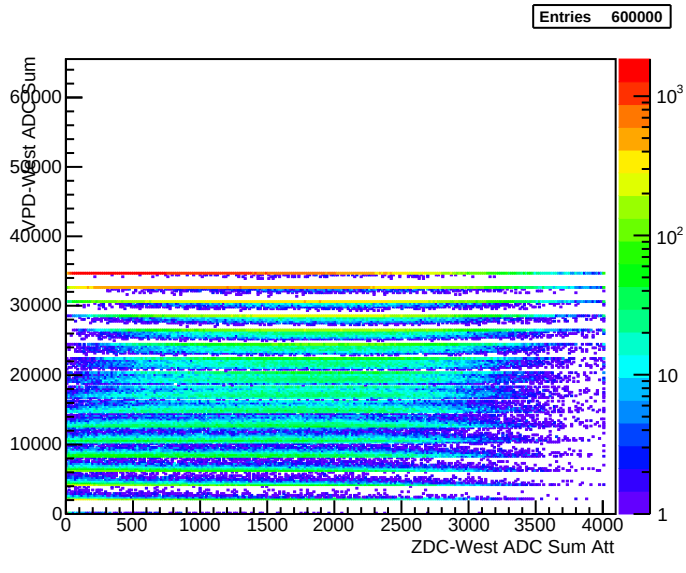

Entries 600000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

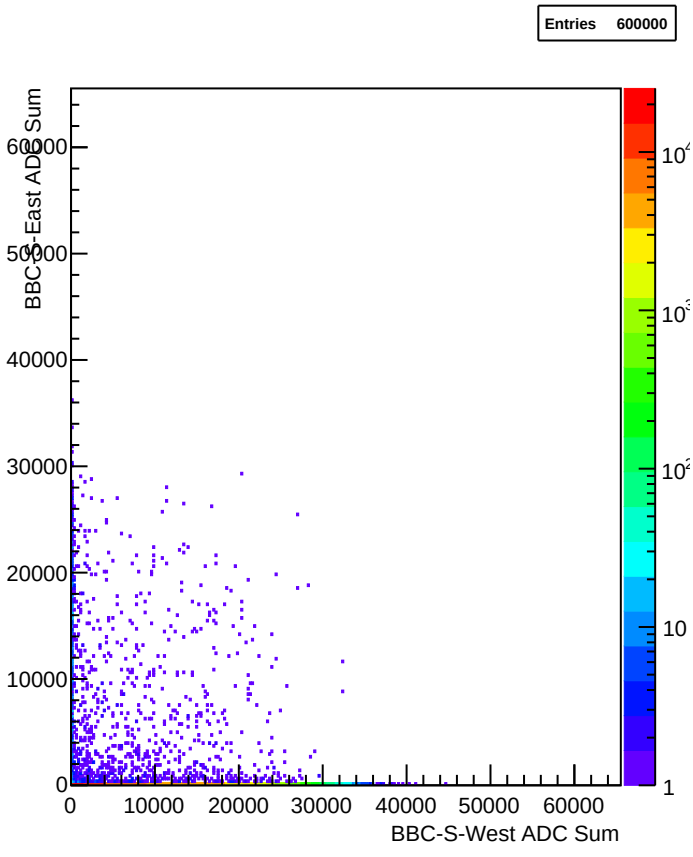

Entries 600000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

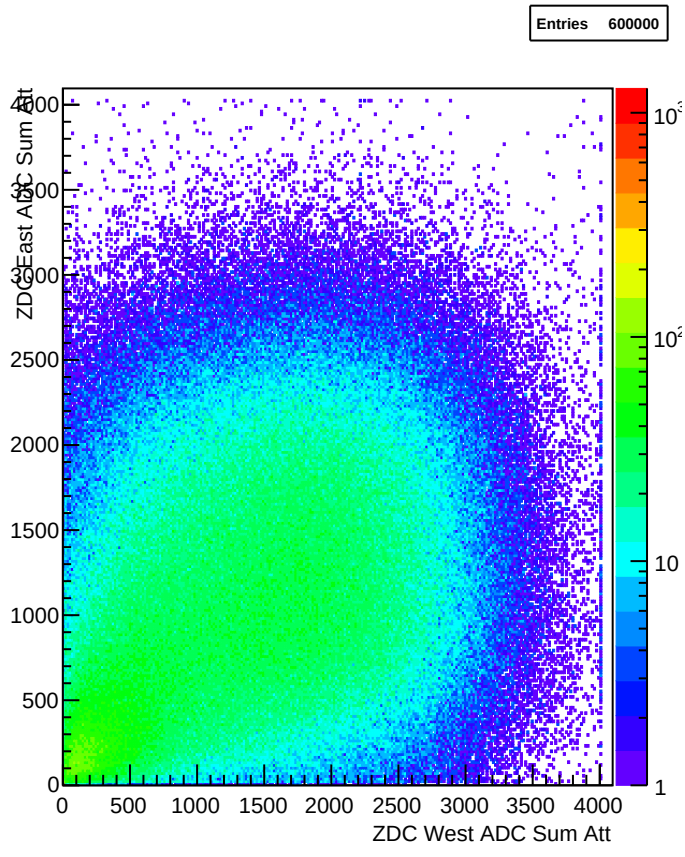

Entries 600000
BBC-S-East ADC Sum
VPD-East ADC Sum

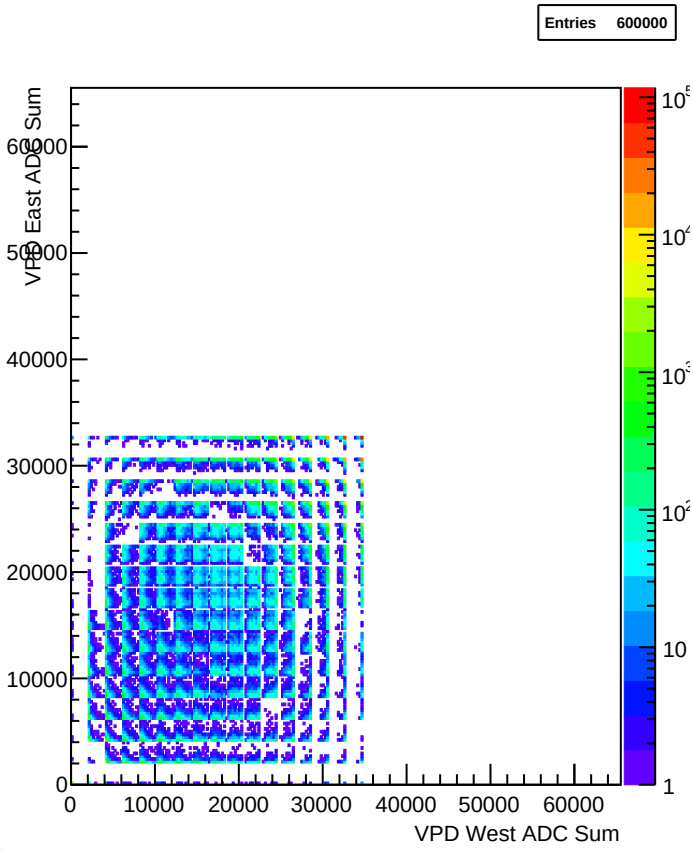

Entries 600000
BBC-S-West ADC Sum
VPD-West ADC Sum

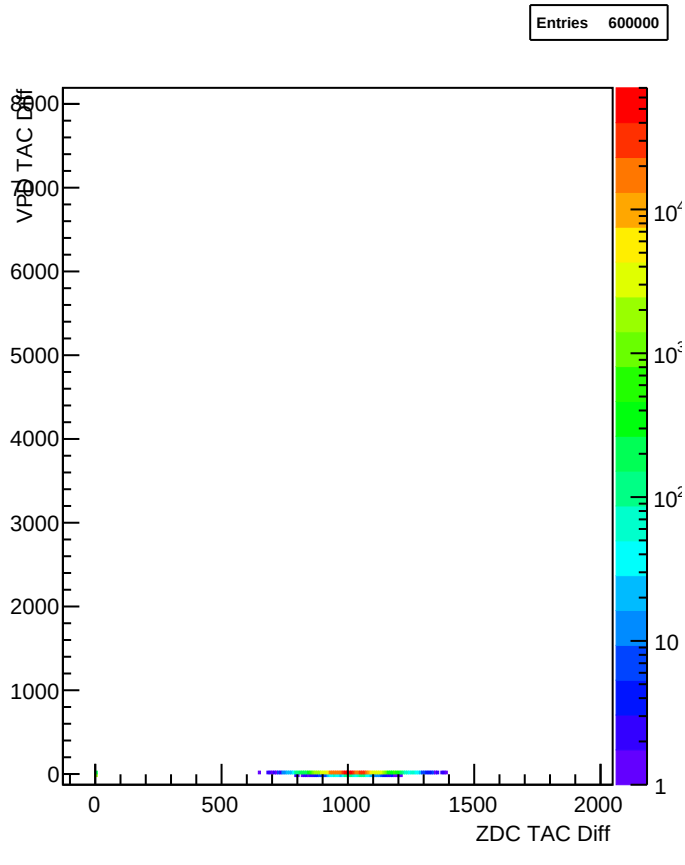

Entries 600000
VPD-East ADC Sum
ZDC-East ADC Sum Att

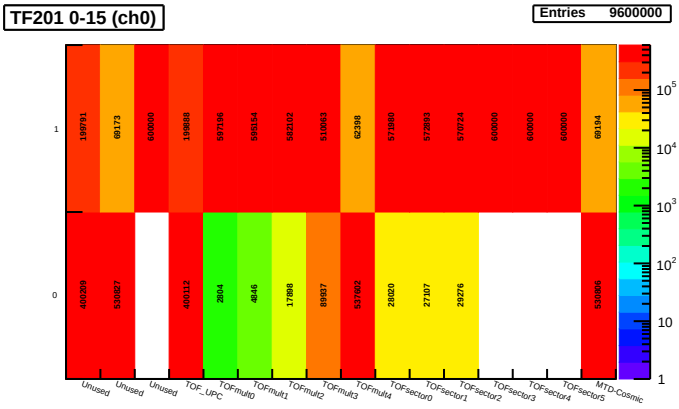

Entries 600000
VPD-West ADC Sum
ZDC-West ADC Sum Att

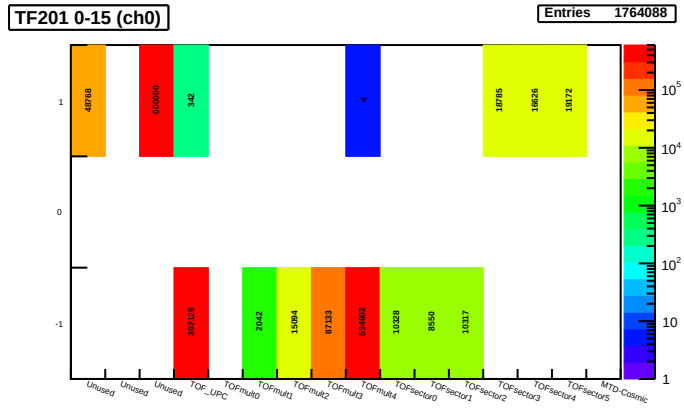

Entries 600000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

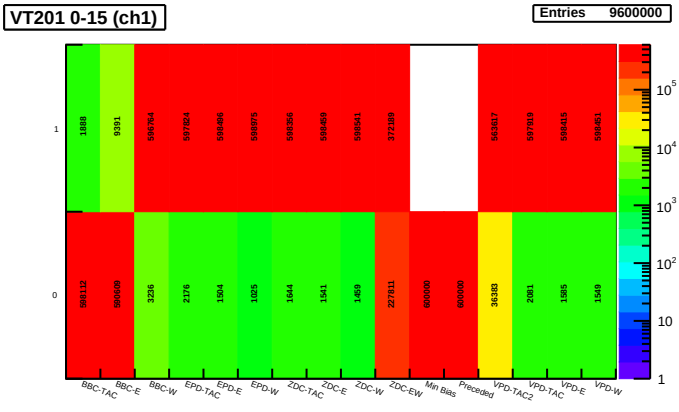

Entries 600000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

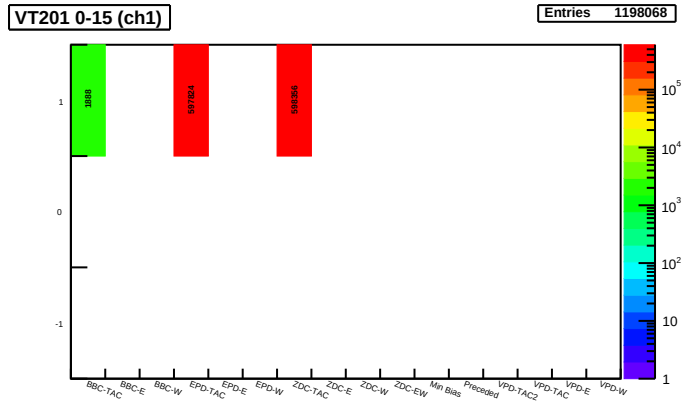

Entries 600000
VPD East ADC Sum
VPD West ADC Sum

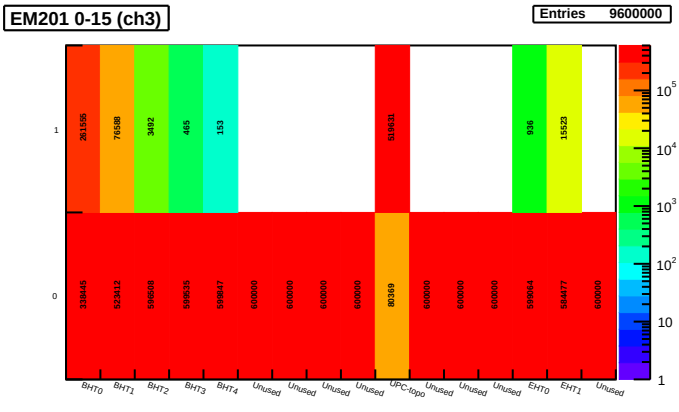

Entries 600000
VPD TAC Diff
ZDC TAC Diff

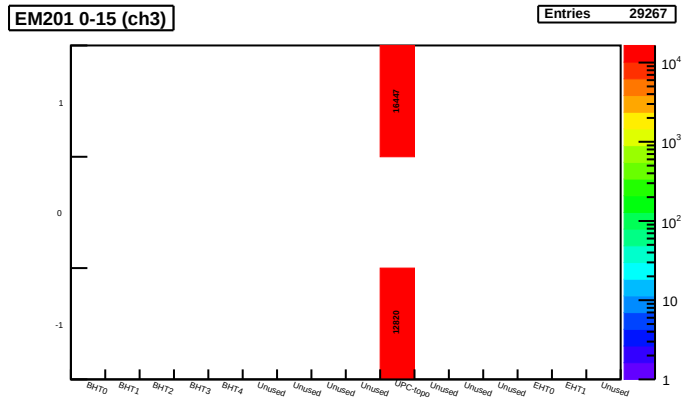

TF201 0-15 (ch0)
Entries 9600000
199791 69173 600000 199888 597196 595154 582102 510063 62398 572860 572893 570724 600000 600000 600000 69194
400209 530827 400112 2804 4846 17898 89937 537902 28020 27107 29276 530806
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

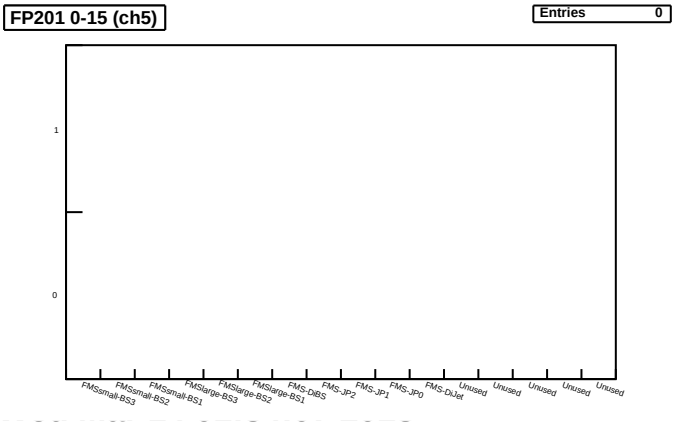

TF201 0-15 (ch0)
Entries 1764088
48768 600000 342 4 18785 16626 19172
392125 2042 15984 87133 534802 10328 8550 10317
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

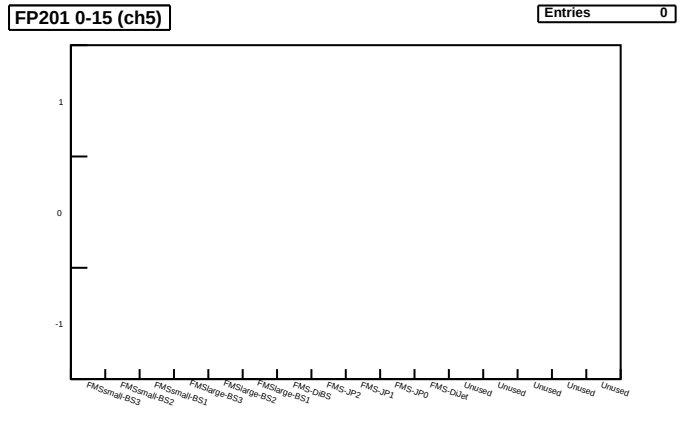

VT201 0-15 (ch1)
Entries 9600000
1888 9391 596764 597824 598486 598975 598356 598469 598541 372189 563617 597819 598415 598461
598112 590609 3236 2176 1504 1025 1644 1541 1459 227811 600000 600000 36383 2081 1585 1549
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 1198068
1888 597824 598336
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 9600000
261555 76588 3492 465 153 518631 936 15523
338445 523412 596508 599535 598847 600000 600000 600000 600000 80369 600000 600000 600000 599064 584477 600000
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


EM201 0-15 (ch3)
Entries 29267
16447
12820
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