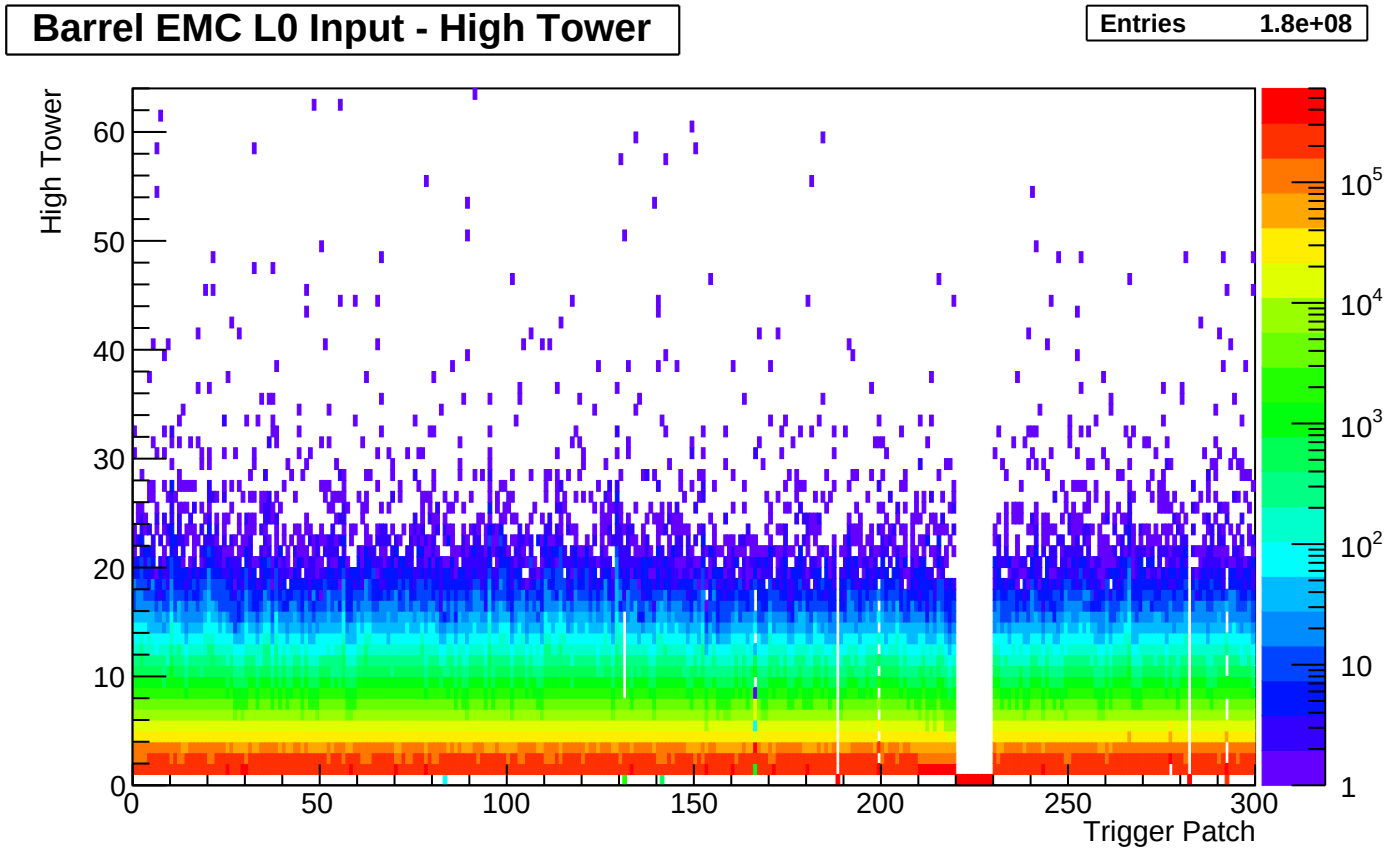
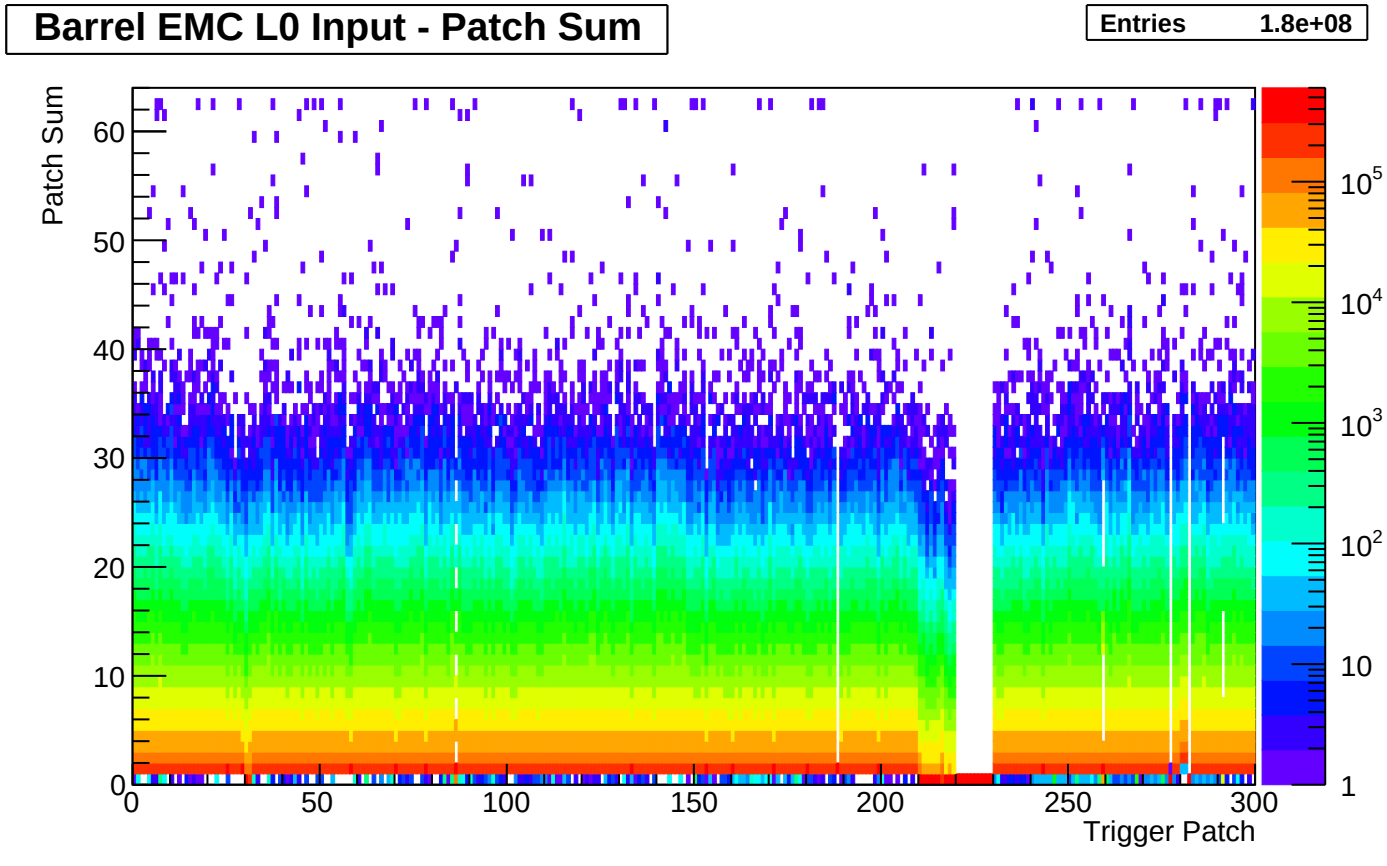
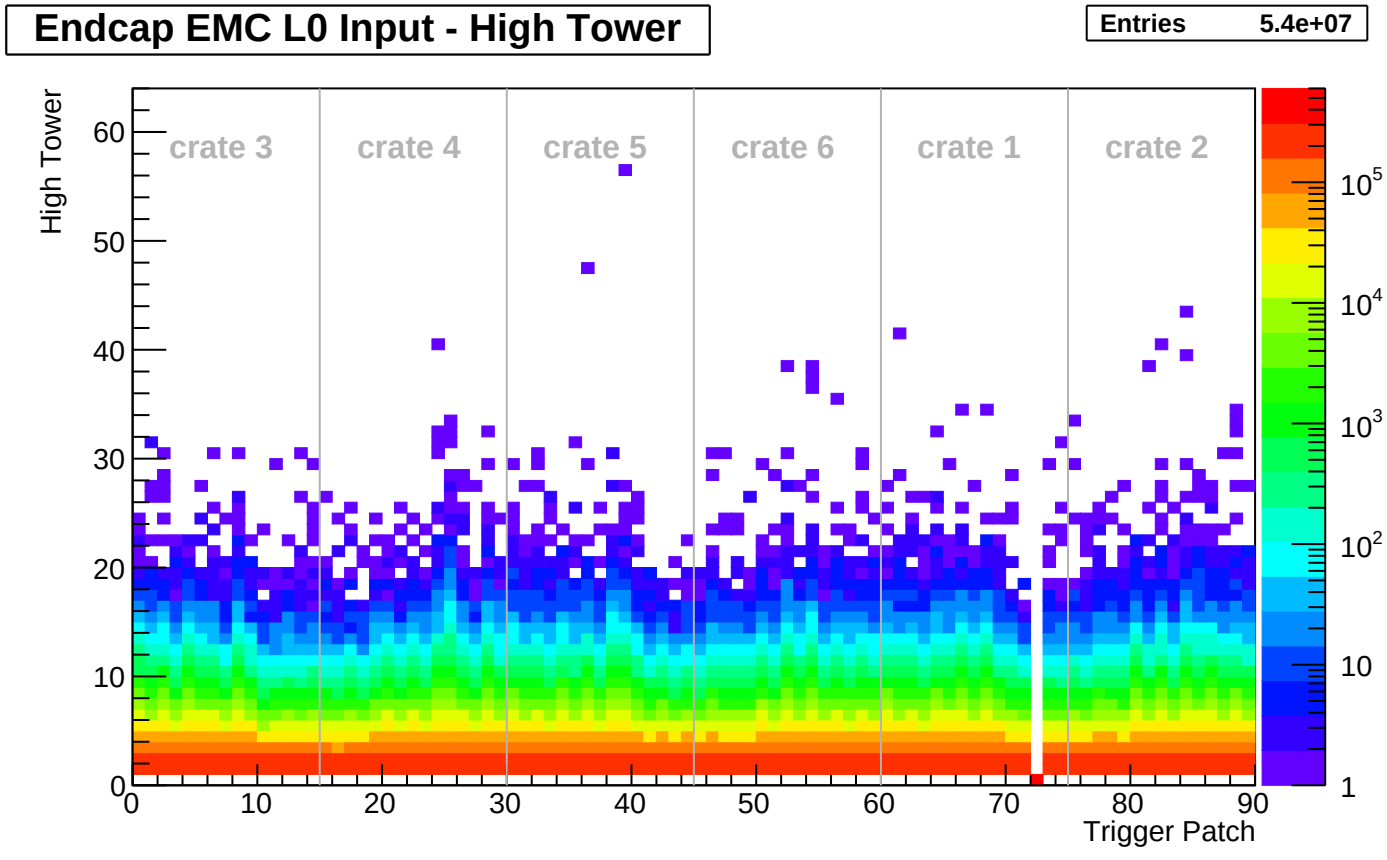
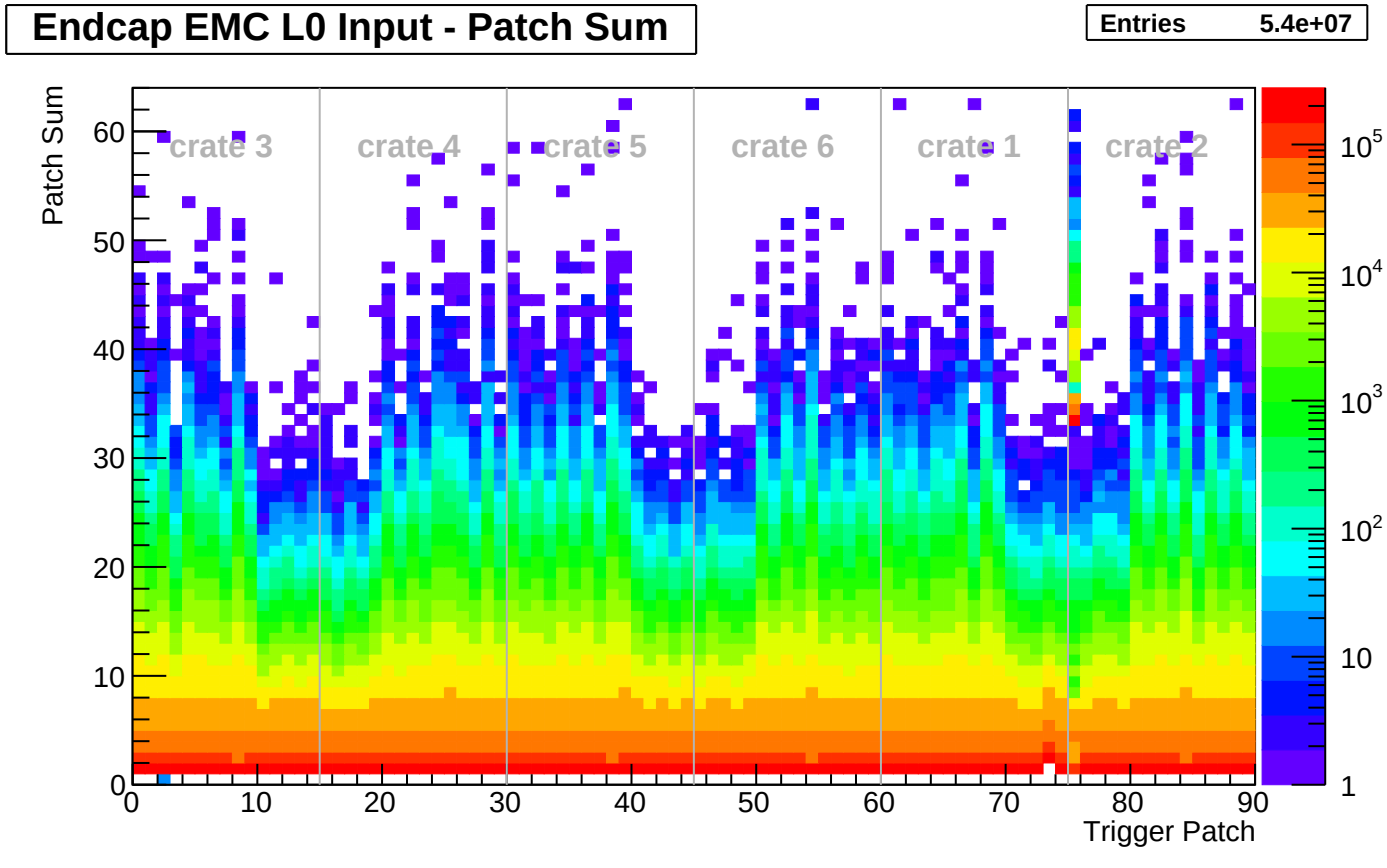
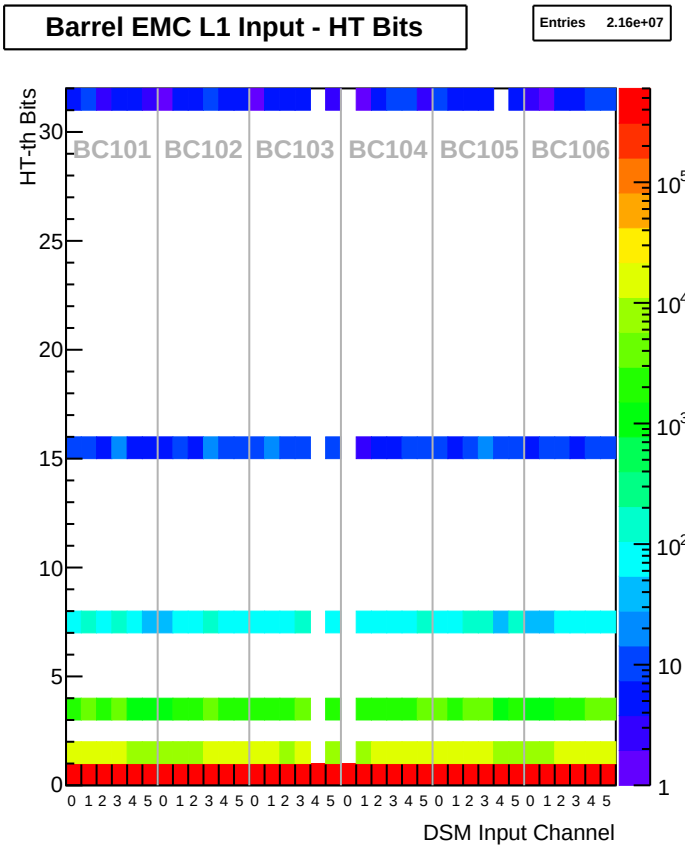
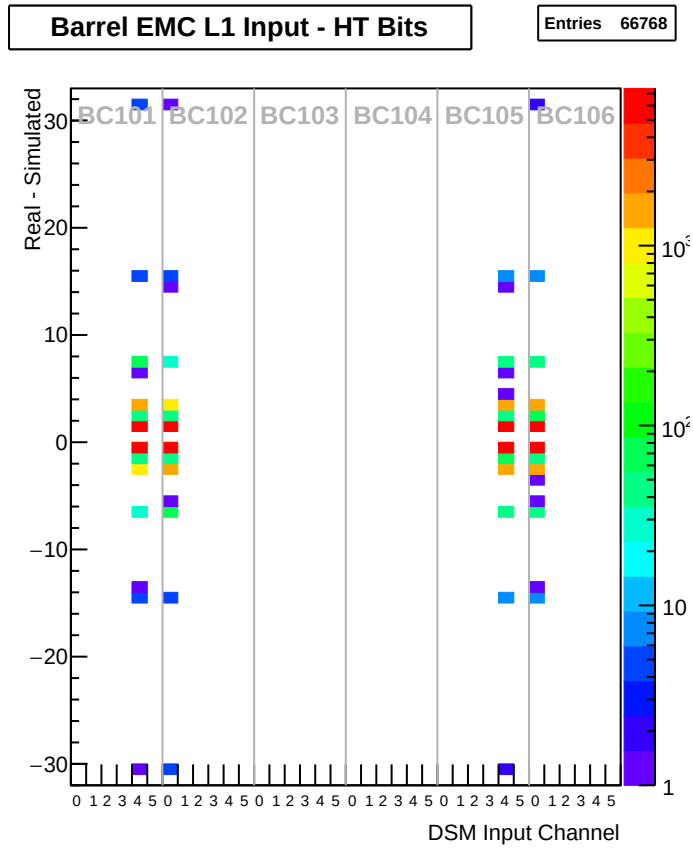

Barrel EMC L0 Input - High Tower
Entries 1.8e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

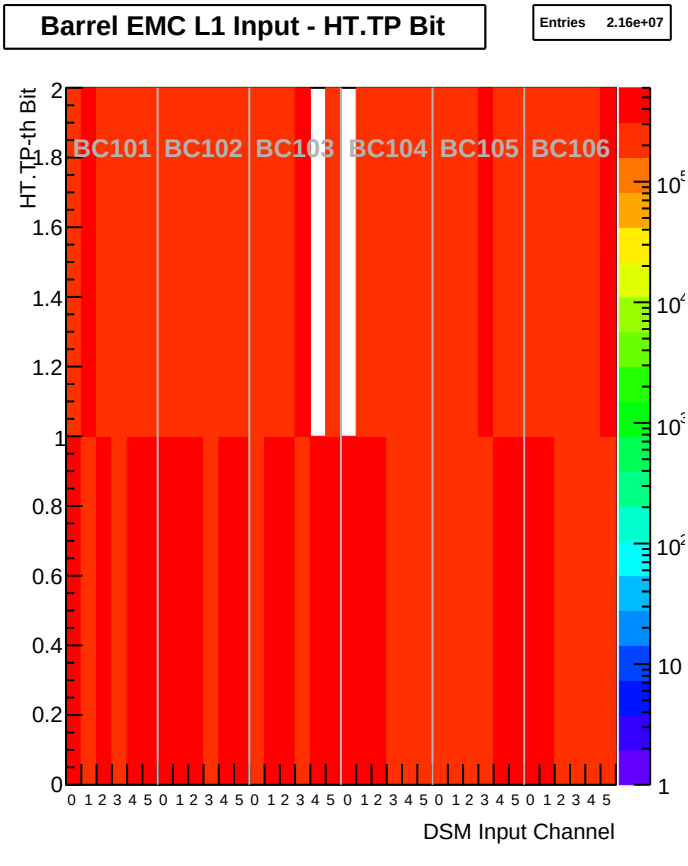

Barrel EMC L0 Input - Patch Sum
Entries 1.8e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

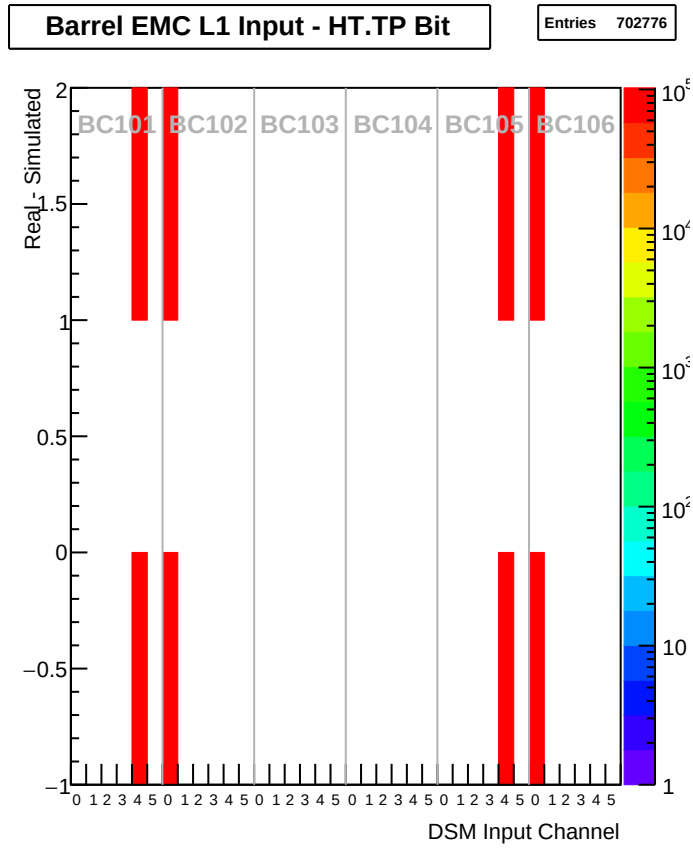

Endcap EMC L0 Input - High Tower
Entries 5.4e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

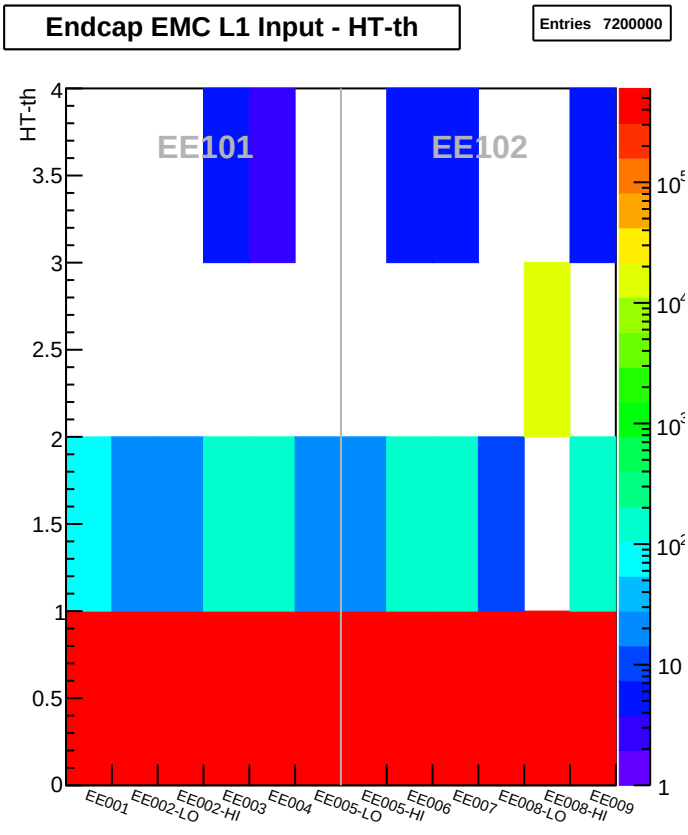

Endcap EMC L0 Input - Patch Sum
Entries 5.4e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

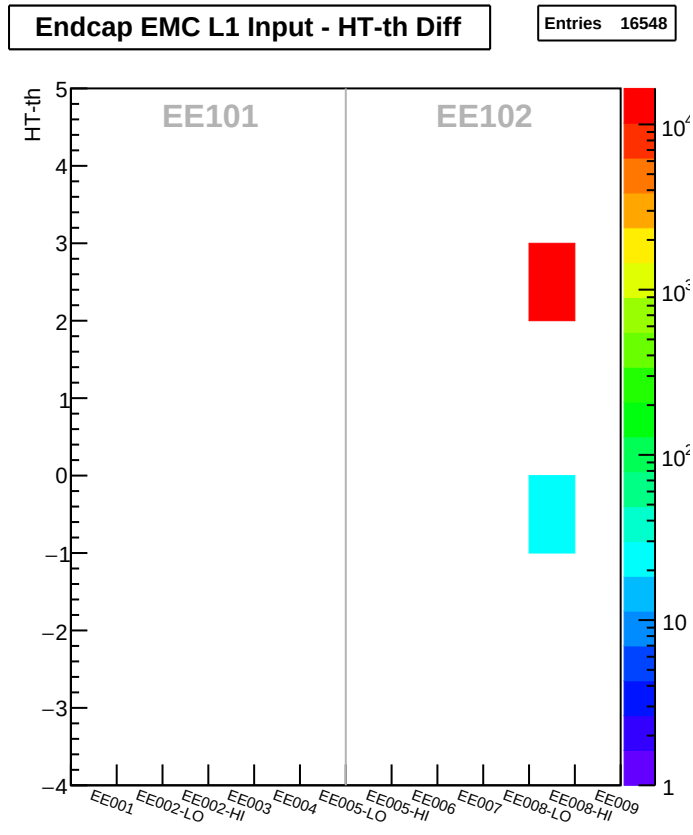

Barrel EMC L1 Input - HT Bits
Entries 2.16e+07
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

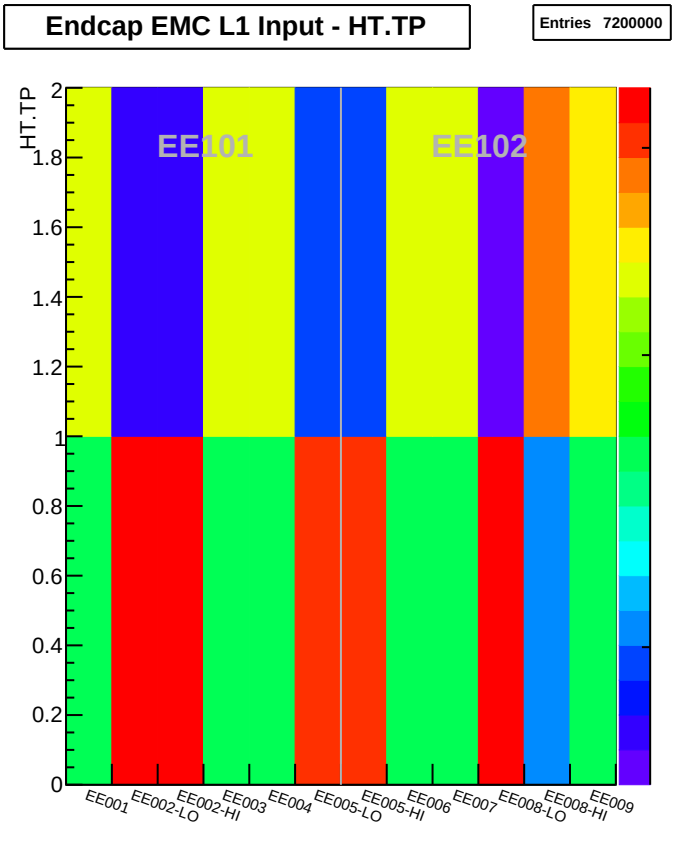

Barrel EMC L1 Input - HT Bits
Entries 66768
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

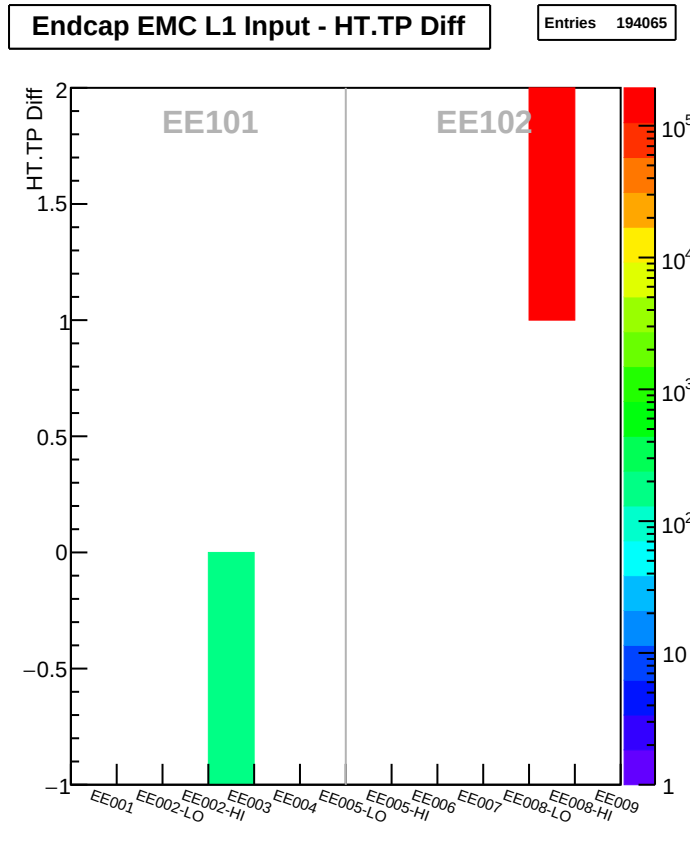

Barrel EMC L1 Input - HT.TP Bit
Entries 2.16e+07
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

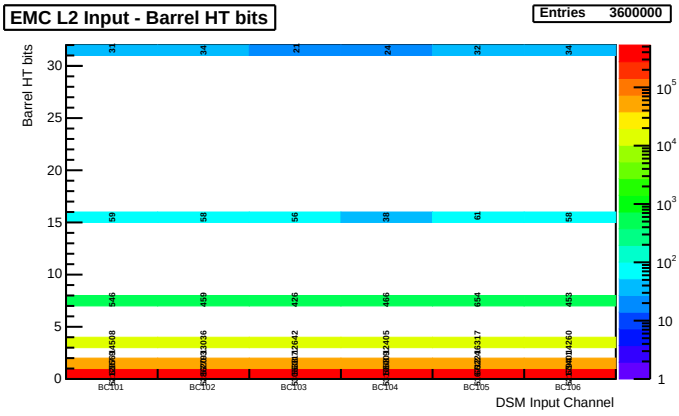

Barrel EMC L1 Input - HT.TP Bit
Entries 702776
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

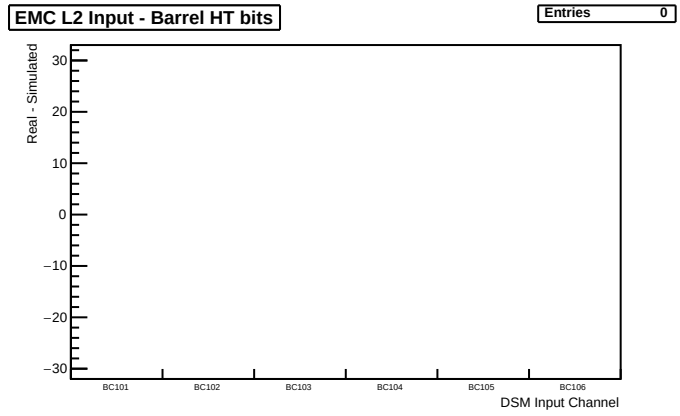

Endcap EMC L1 Input - HT-th
Entries 7200000
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

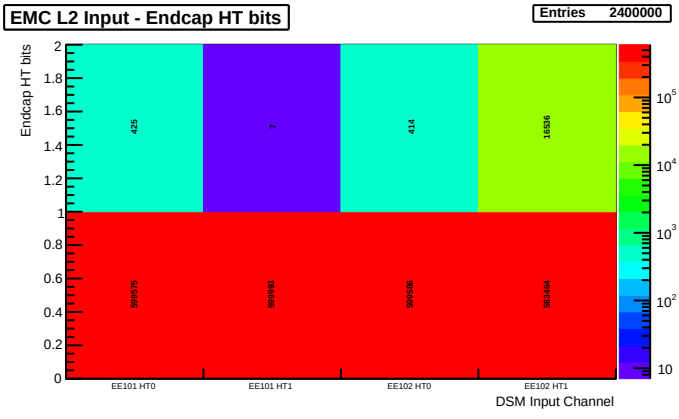

Endcap EMC L1 Input - HT-th Diff
Entries 16548
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

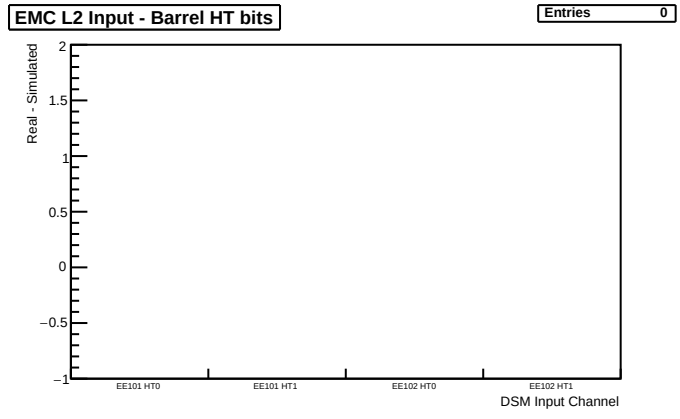

Endcap EMC L1 Input - HT.TP
Entries 7200000
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

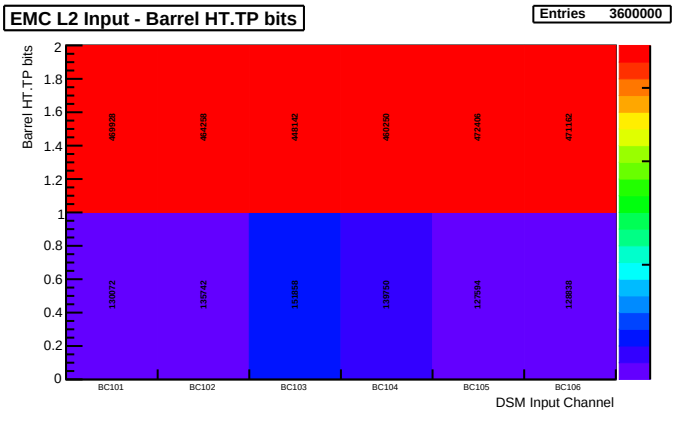

Endcap EMC L1 Input - HT.TP Diff
Entries 194065
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

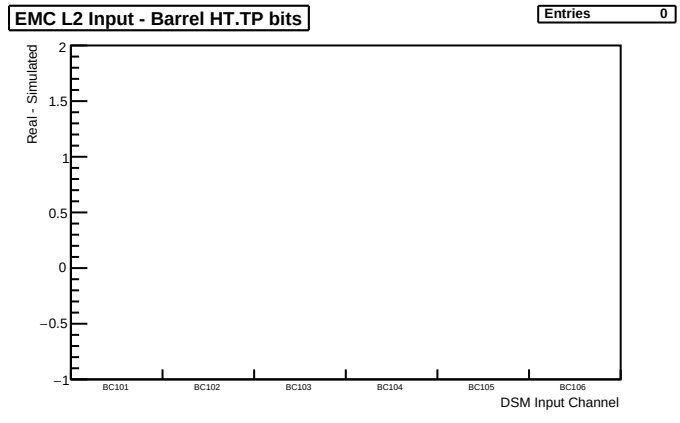

EMC L2 Input - Barrel HT bits
Entries 3600000
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

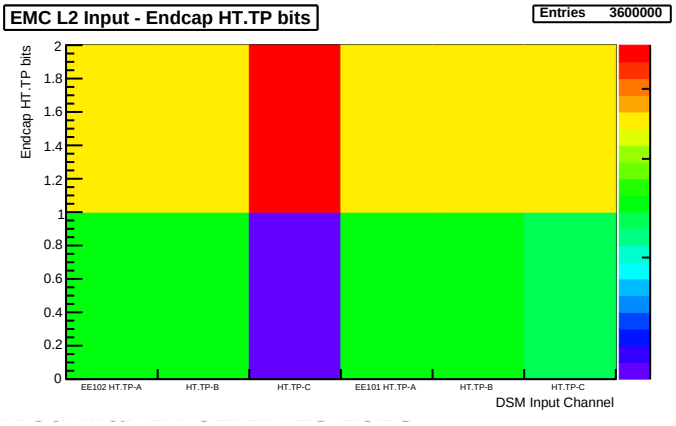

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

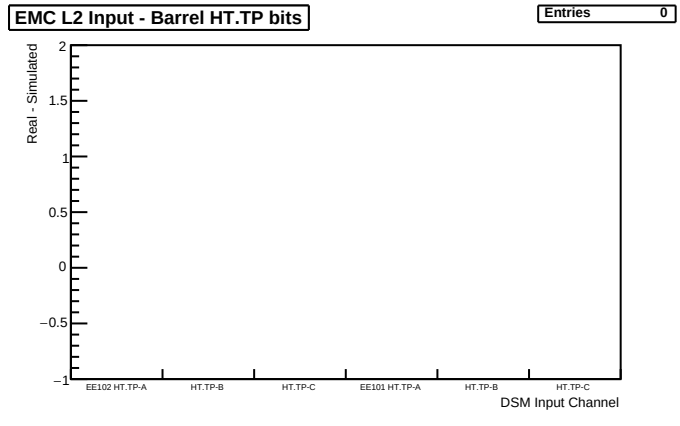

EMC L2 Input - Endcap HT bits
Entries 2400000
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

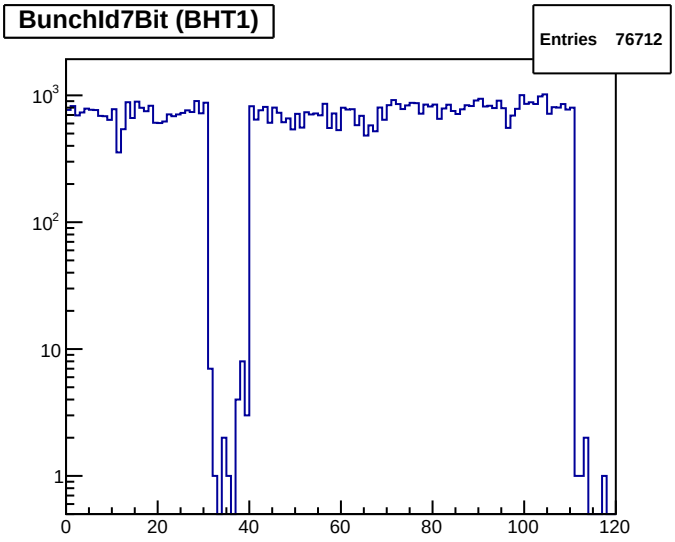

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

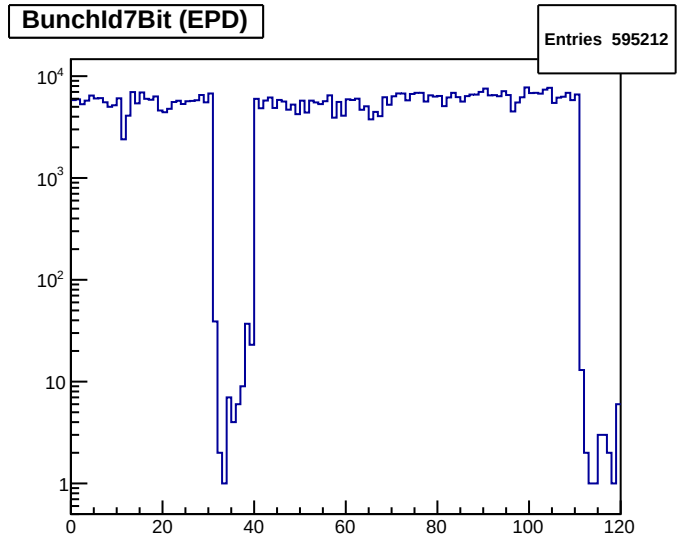

EMC L2 Input - Barrel HT.TP bits
Entries 3600000
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

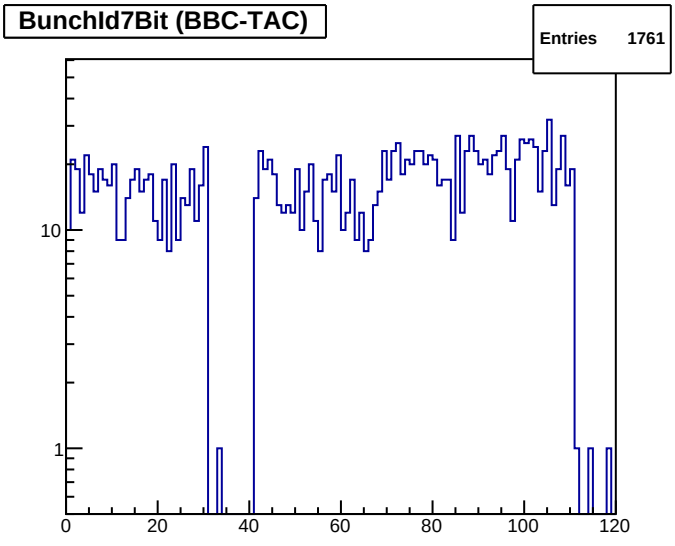

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

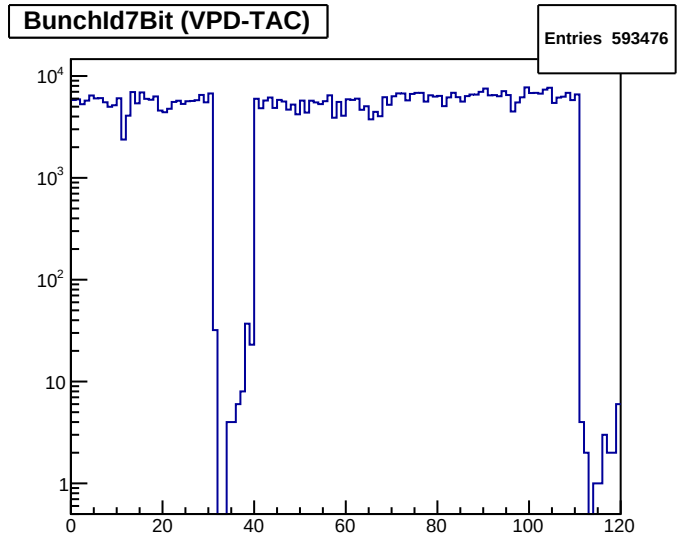

EMC L2 Input - Endcap HT.TP bits
Entries 3600000
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

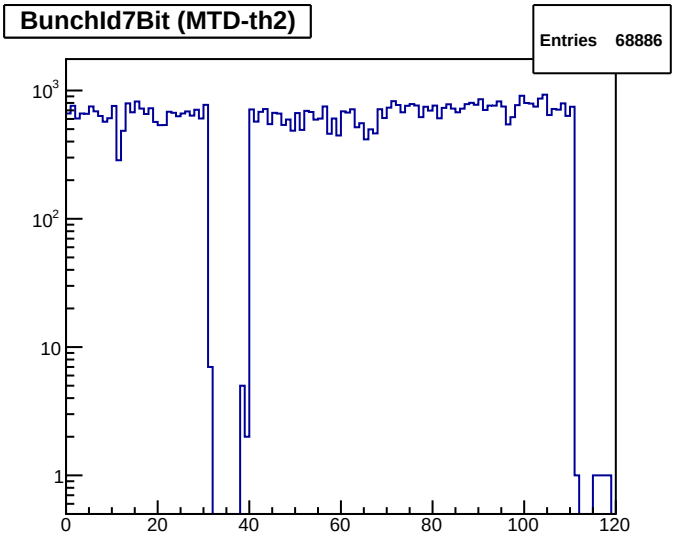

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

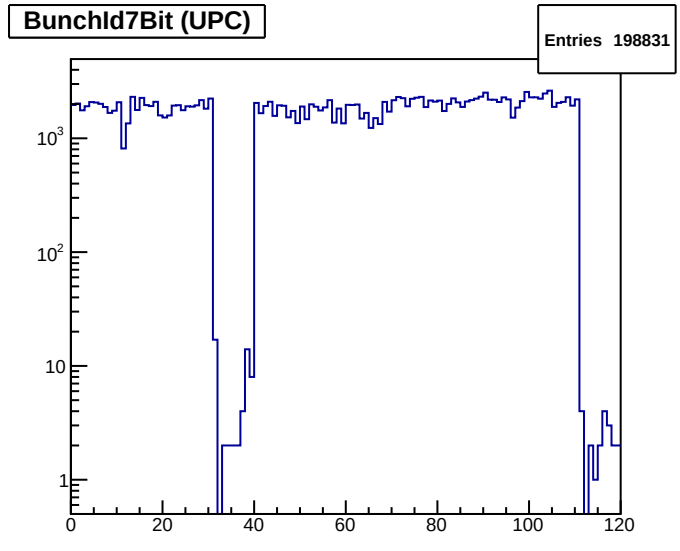

BunchId7Bit (BHT1)
Entries 76712

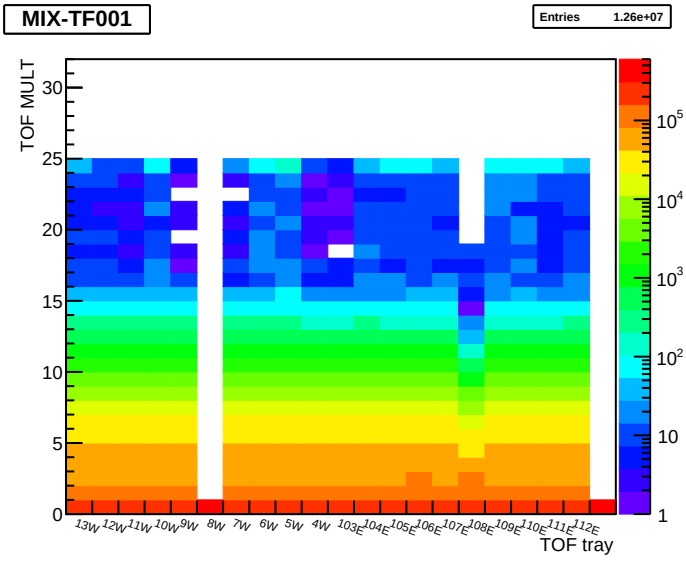

BunchId7Bit (EPD)
Entries 595212

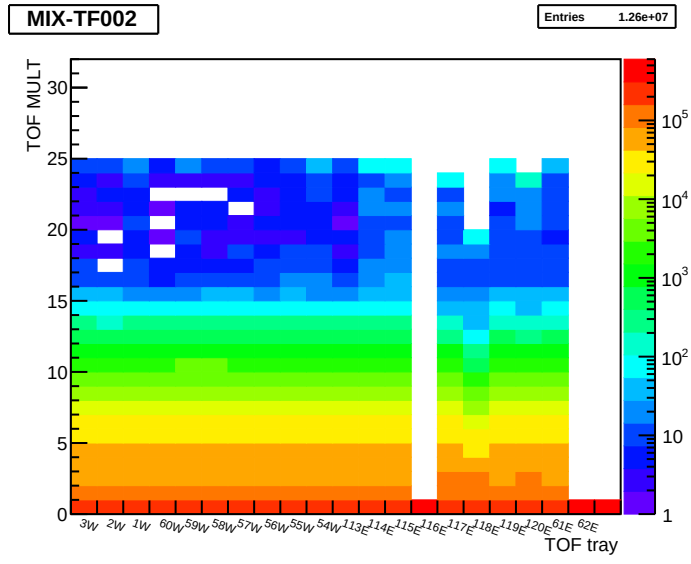

BunchId7Bit (BBC-TAC)
Entries 1761

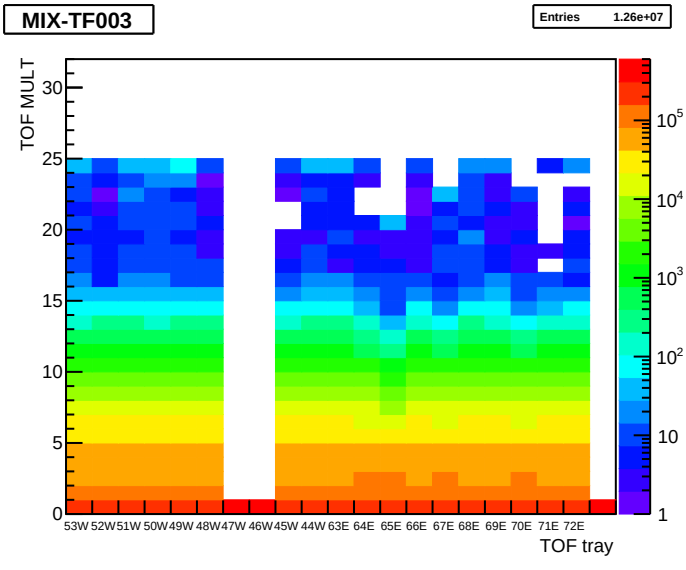

BunchId7Bit (VPD-TAC)
Entries 593476

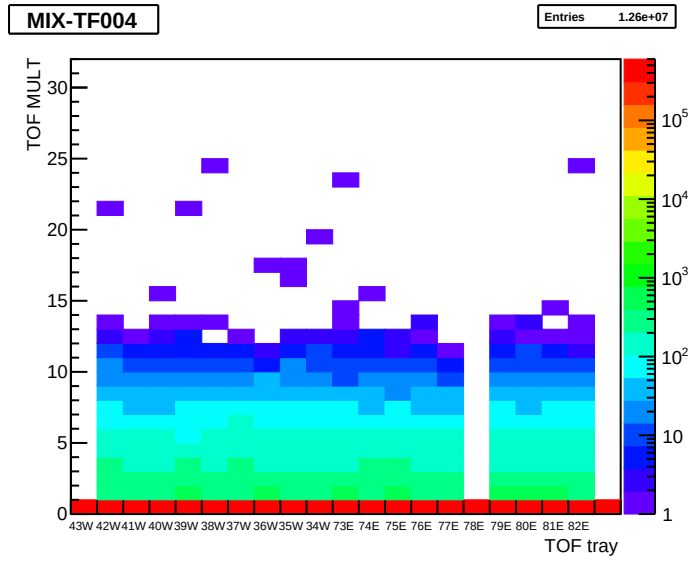

BunchId7Bit (MTD-th2)
Entries 68886

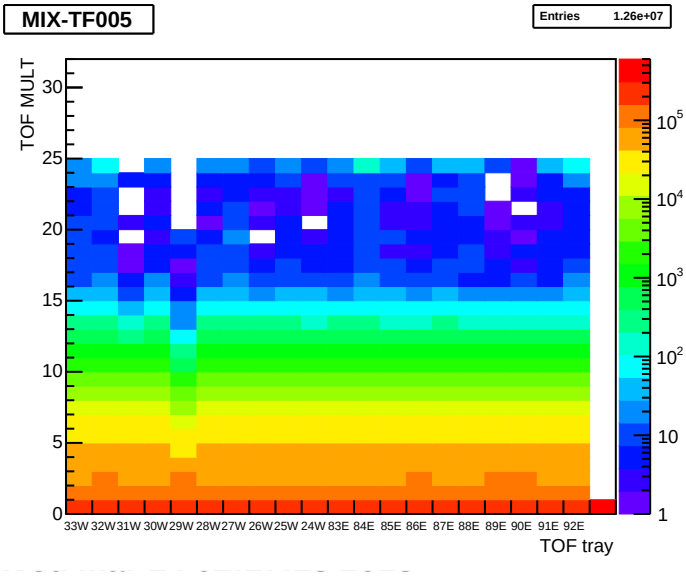

BunchId7Bit (UPC)
Entries 198831

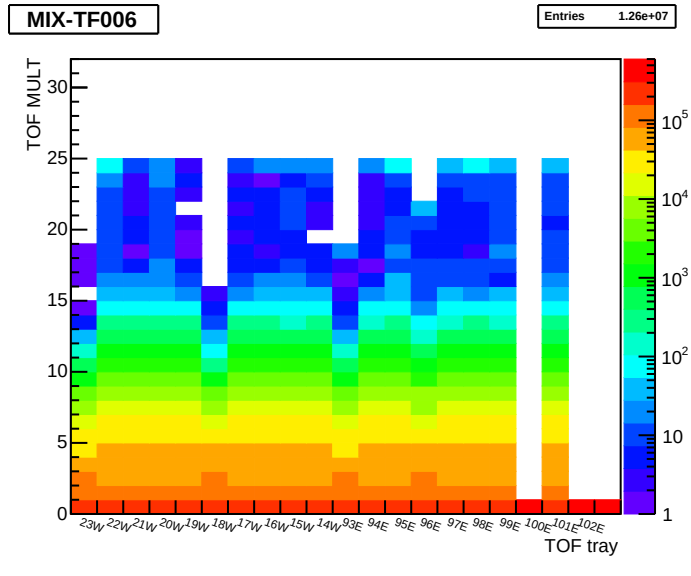

MIX-TF001
Entries 1.26e+07
TOF MULT
TOF tray

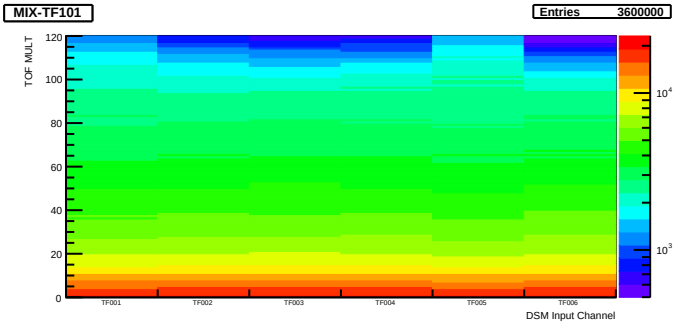

MIX-TF002
Entries 1.26e+07
TOF MULT
TOF tray

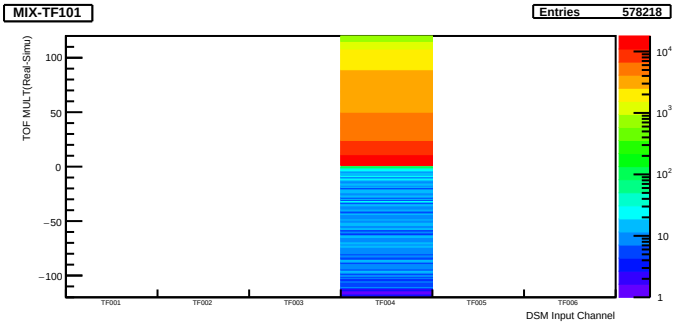

MIX-TF003
Entries 1.26e+07
TOF MULT
TOF tray

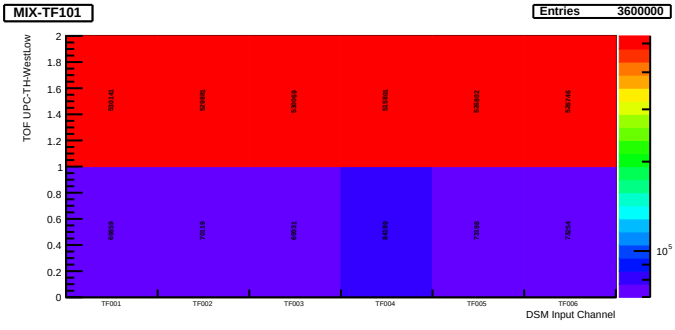

MIX-TF004
Entries 1.26e+07
TOF MULT
TOF tray

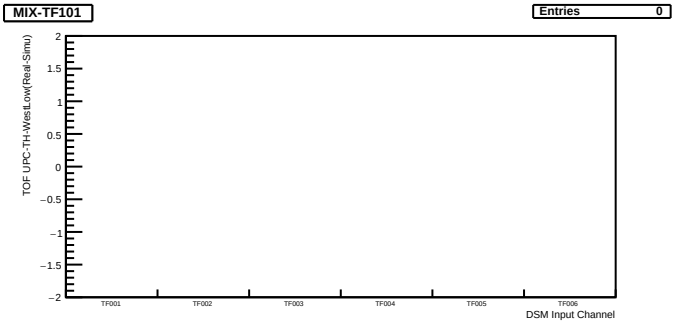

MIX-TF005
Entries 1.26e+07
TOF MULT
TOF tray

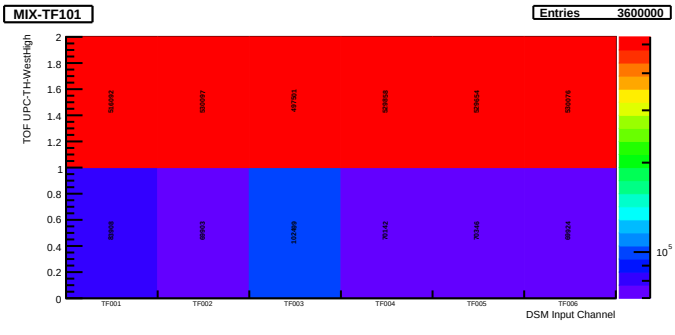

MIX-TF006
Entries 1.26e+07
TOF MULT
TOF tray

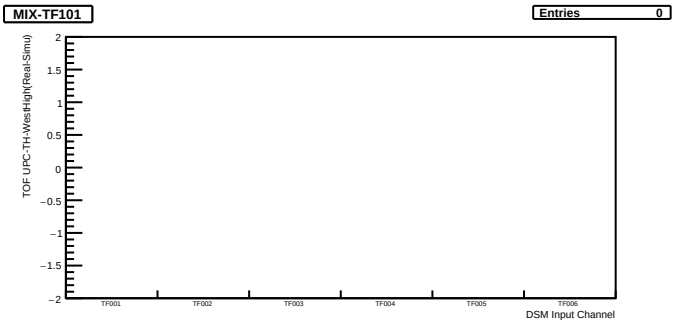

MIX-TF101
Entries 3600000
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

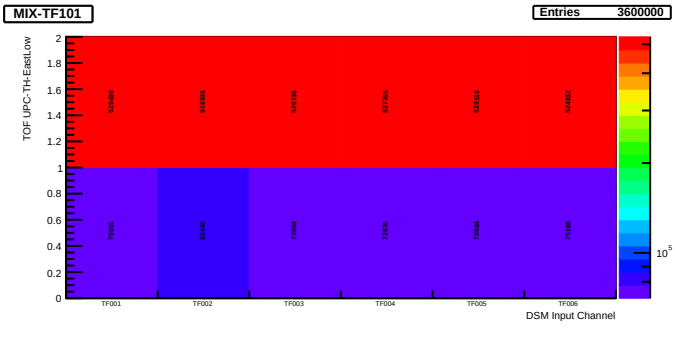

MIX-TF101
Entries 578218
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

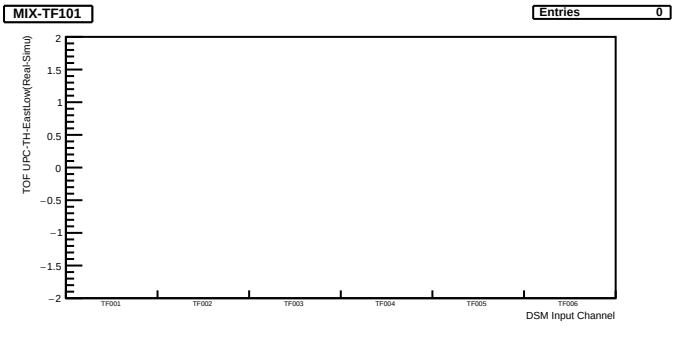

MIX-TF101
Entries 3600000
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

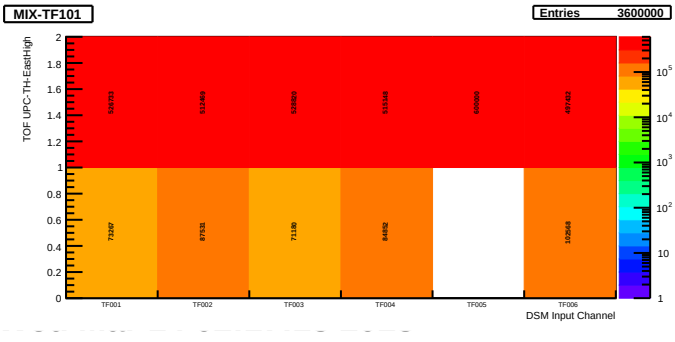

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

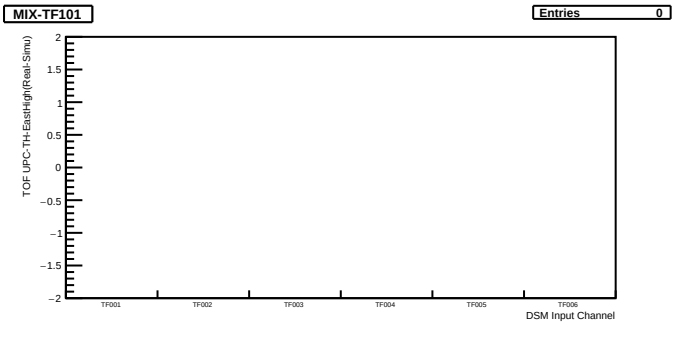

MIX-TF101
Entries 3600000
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

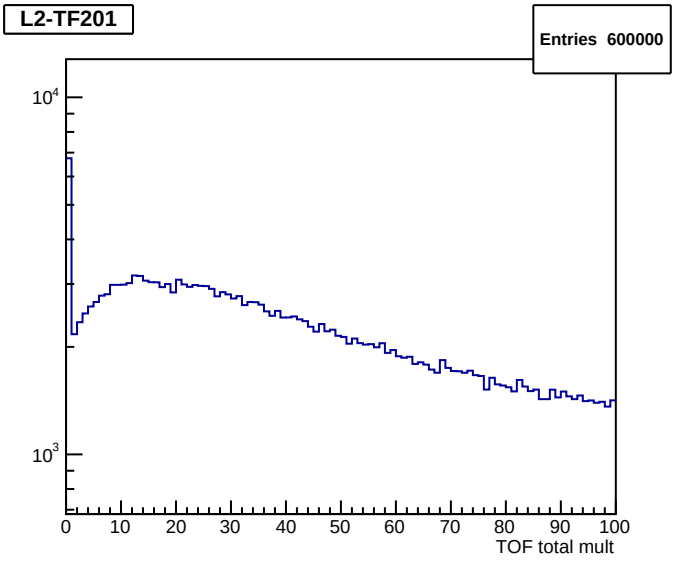

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

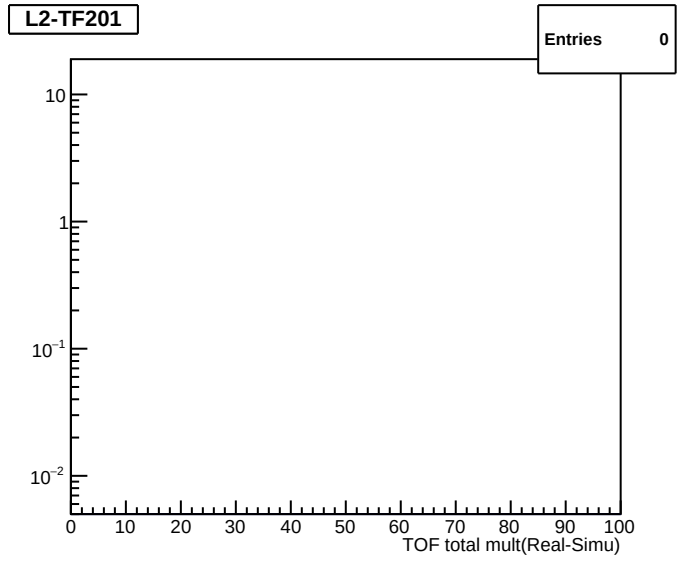

MIX-TF101
Entries 3600000
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

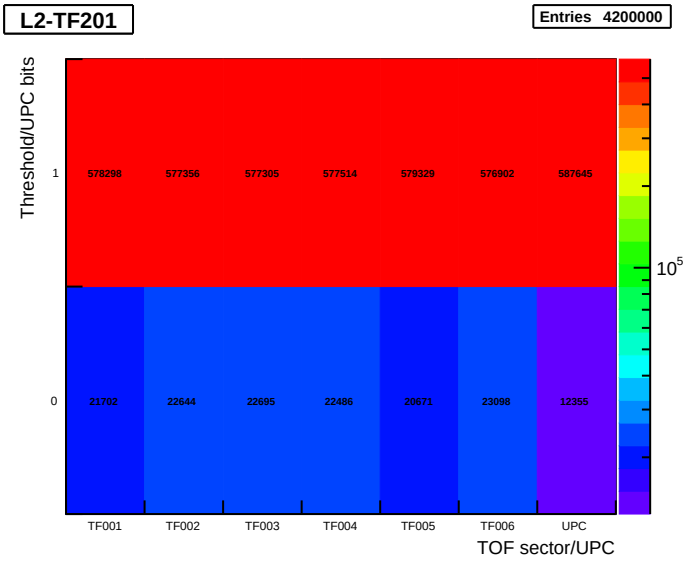

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

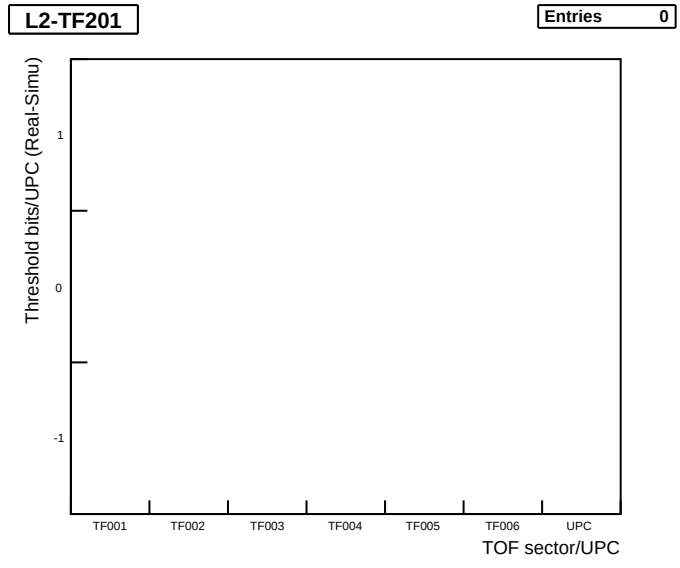

MIX-TF101
Entries 3600000
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

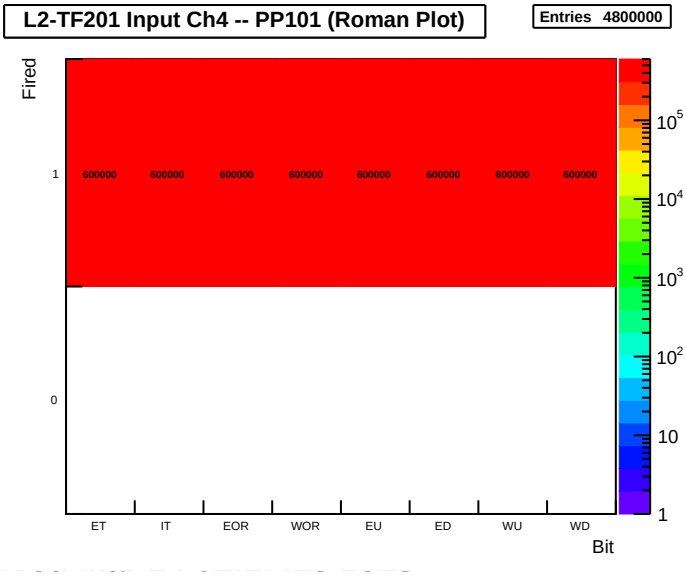

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

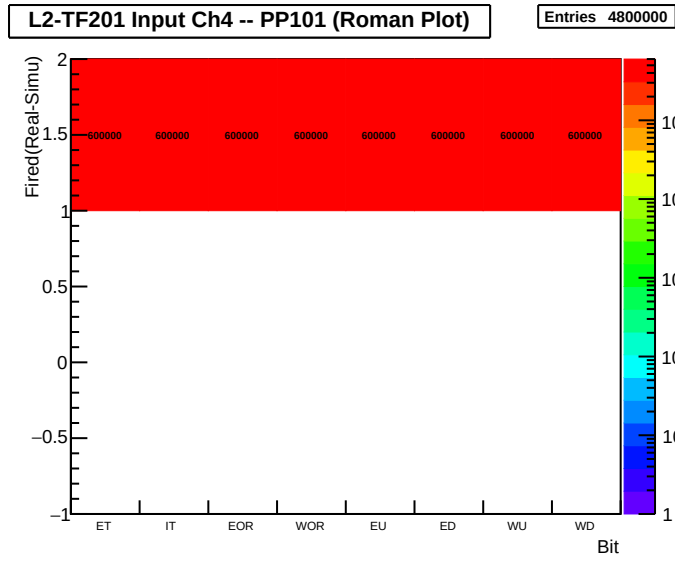

L2-TF201
Entries 600000
TOF total mult

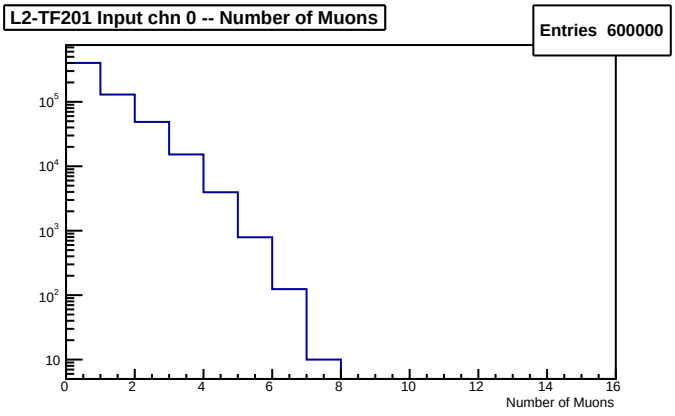

L2-TF201
Entries 0
TOF total mult(Real-Simu)

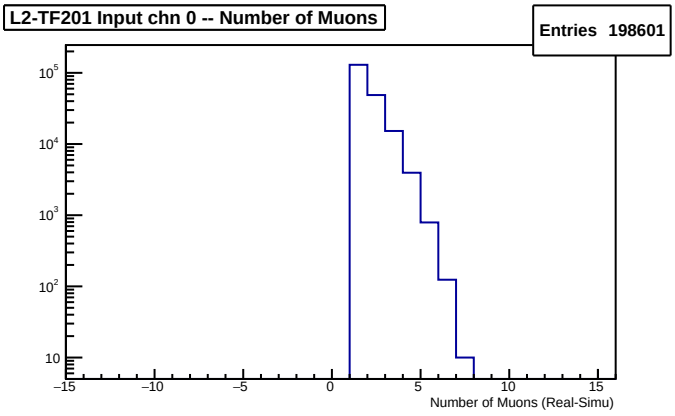

L2-TF201
Entries 4200000
Threshold/UPC bits
578298 577356 577305 577514 579329 576902 587645
21702 22644 22695 22486 20671 23098 12355
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

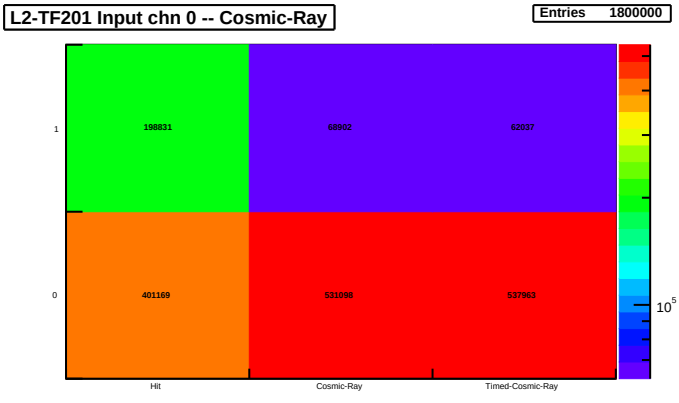

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

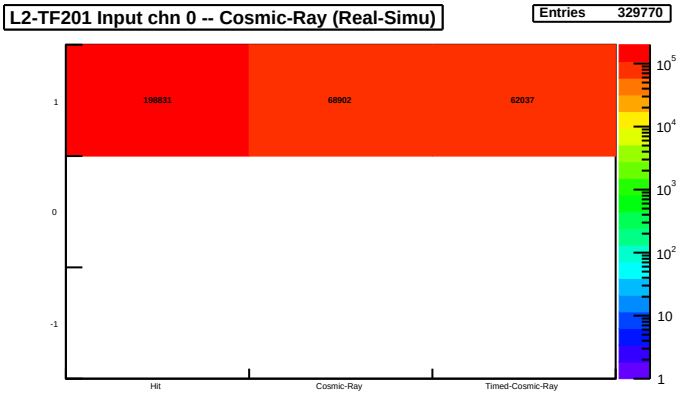

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 4800000
Fired
600000 600000 600000 600000 600000 600000 600000 600000
ET IT EOR WOR EU ED WU WD
Bit

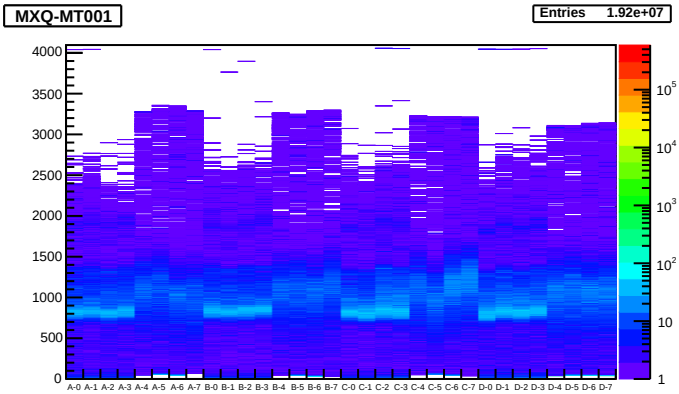

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 4800000
Fired(Real-Simu)
600000 600000 600000 600000 600000 600000 600000 600000
ET IT EOR WOR EU ED WU WD
Bit

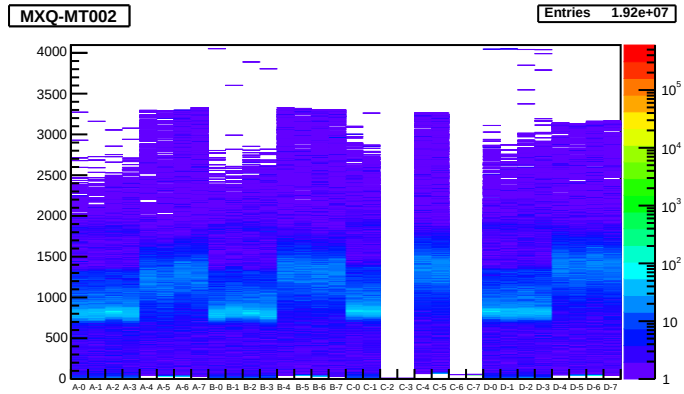

L2-TF201 Input chn 0 -- Number of Muons
Entries 600000
Number of Muons

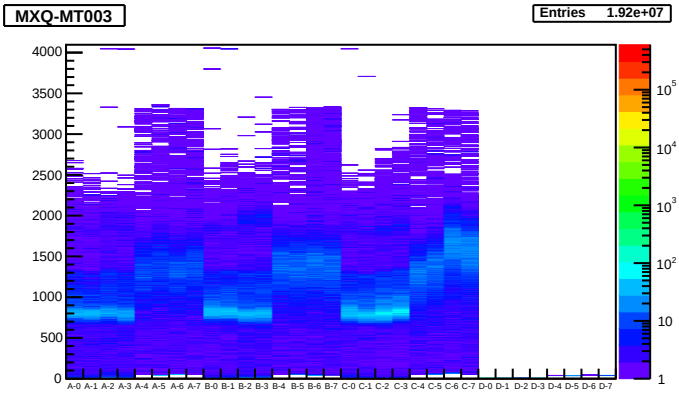

L2-TF201 Input chn 0 -- Number of Muons
Entries 198601
Number of Muons (Real-Simu)

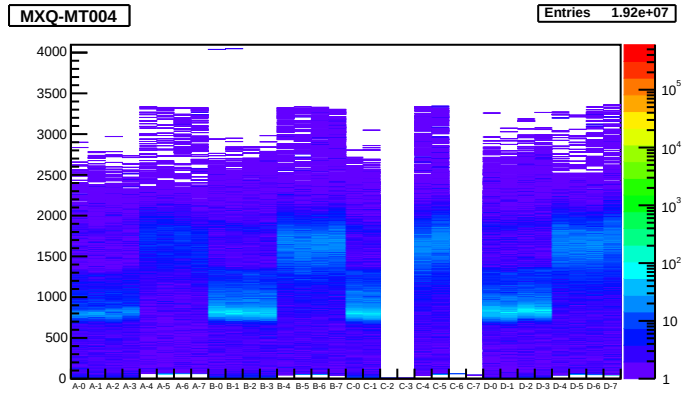

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 1800000
198831
68902
62037
401169
531098
537963
Hit
Cosmic-Ray
Timed-Cosmic-Ray

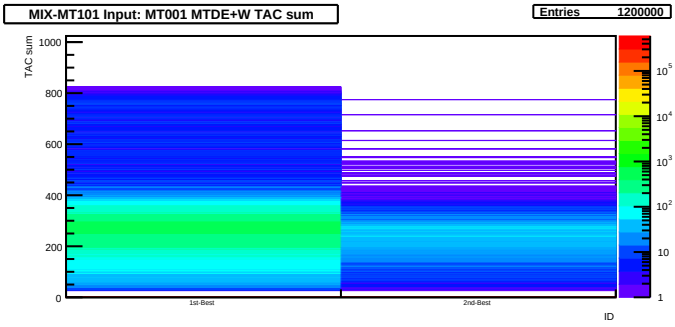

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 329770
198831
68902
62037
Hit
Cosmic-Ray
Timed-Cosmic-Ray

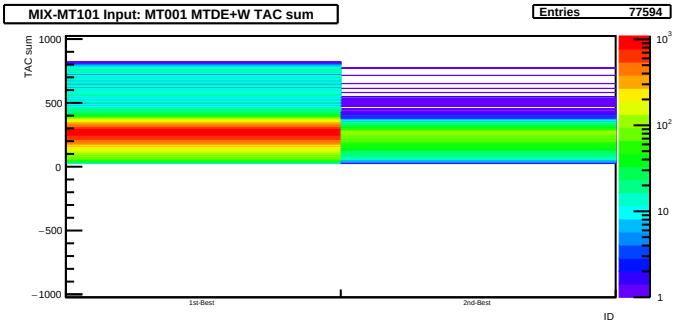

MXQ-MT001
Entries 1.92e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

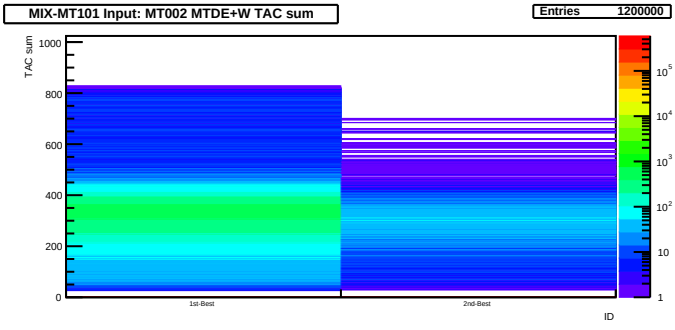

MXQ-MT002
Entries 1.92e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

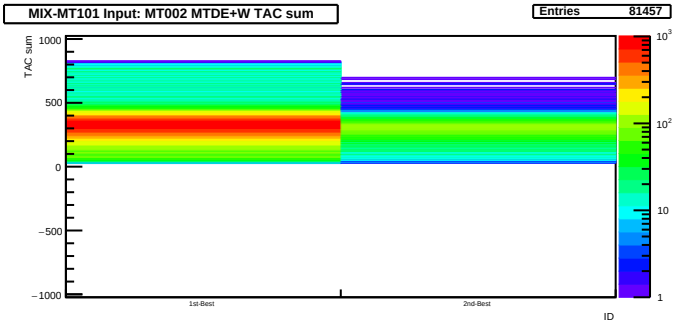

MXQ-MT003
Entries 1.92e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

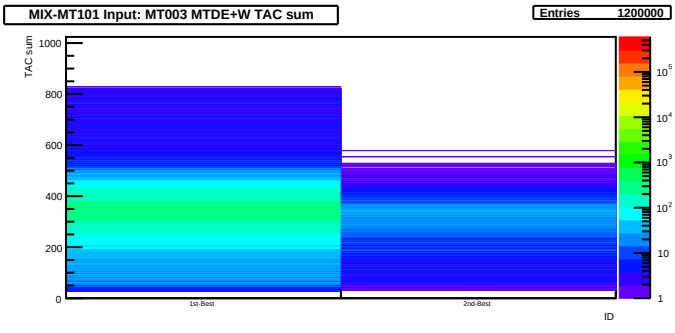

MXQ-MT004
Entries 1.92e+07
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

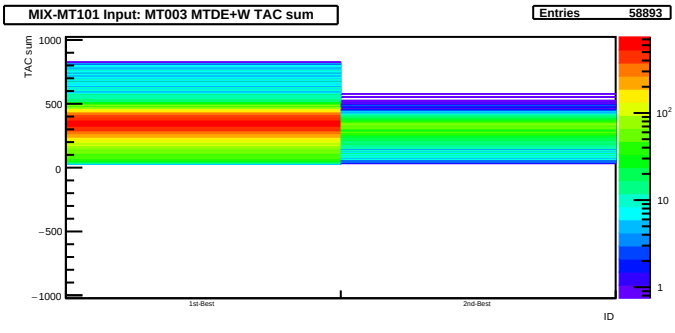

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 1200000
TAC sum
1st-Best
2nd-Best
ID

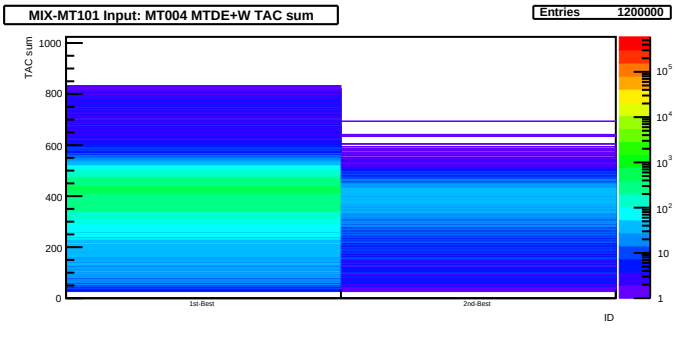

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 77594
TAC sum
1st-Best
2nd-Best
ID

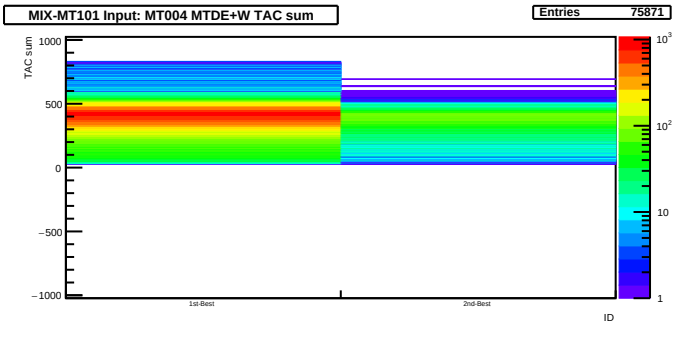

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 1200000
TAC sum
1st-Best
2nd-Best
ID

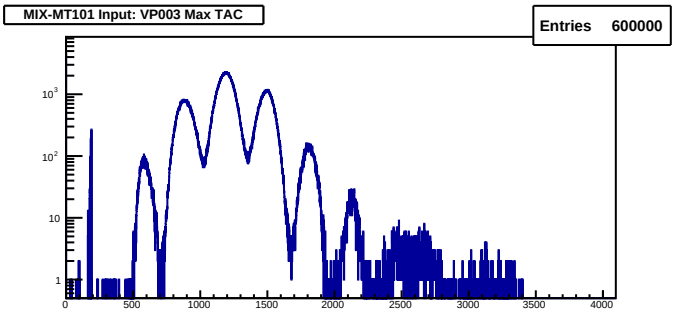

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 81457
TAC sum
1st-Best
2nd-Best
ID

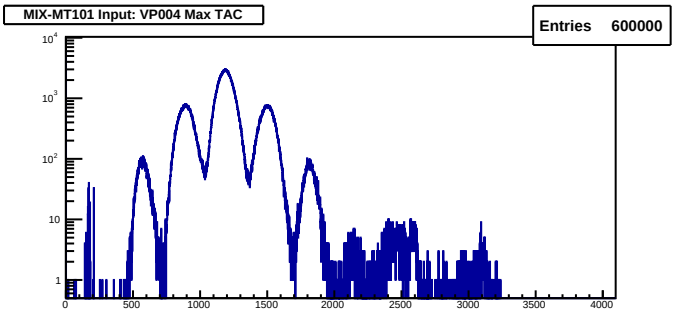

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 1200000
TAC sum
1st-Best
2nd-Best
ID

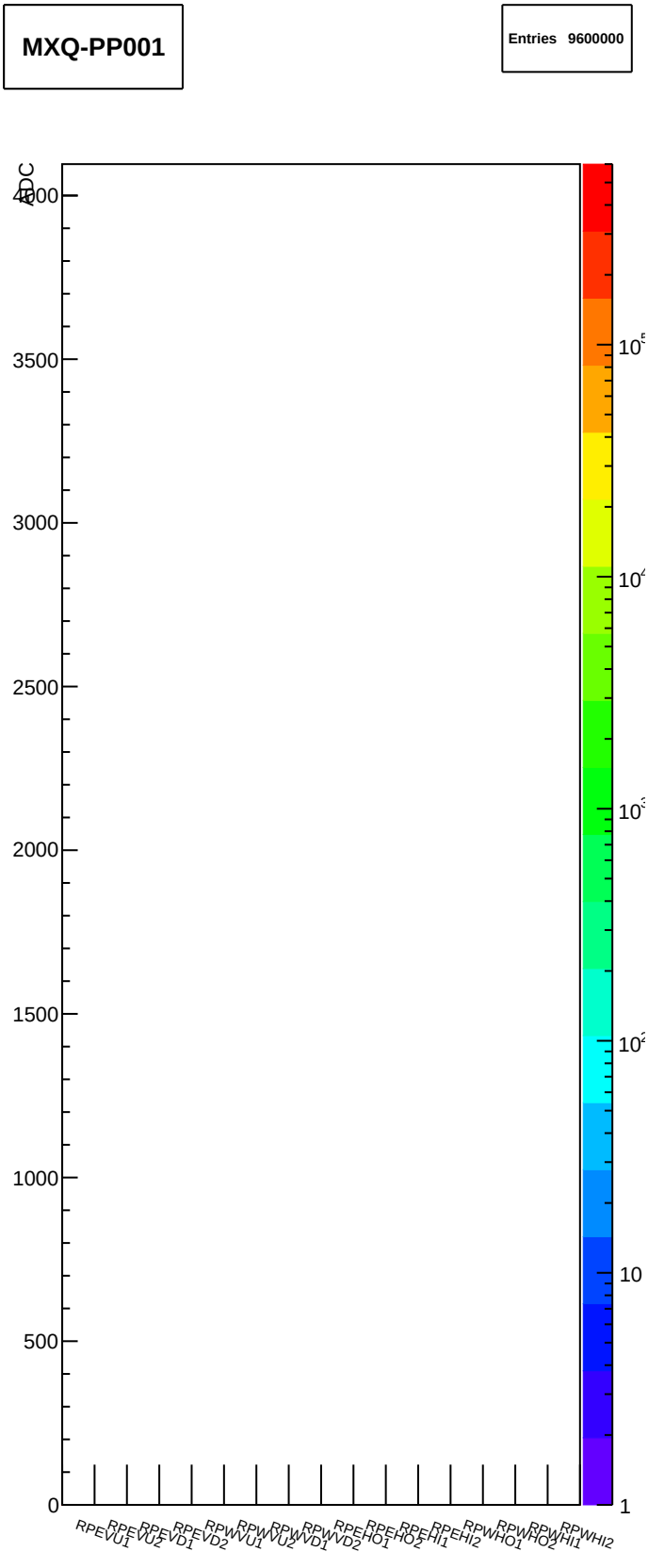

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 58893
TAC sum
1st-Box
2nd-Best
ID

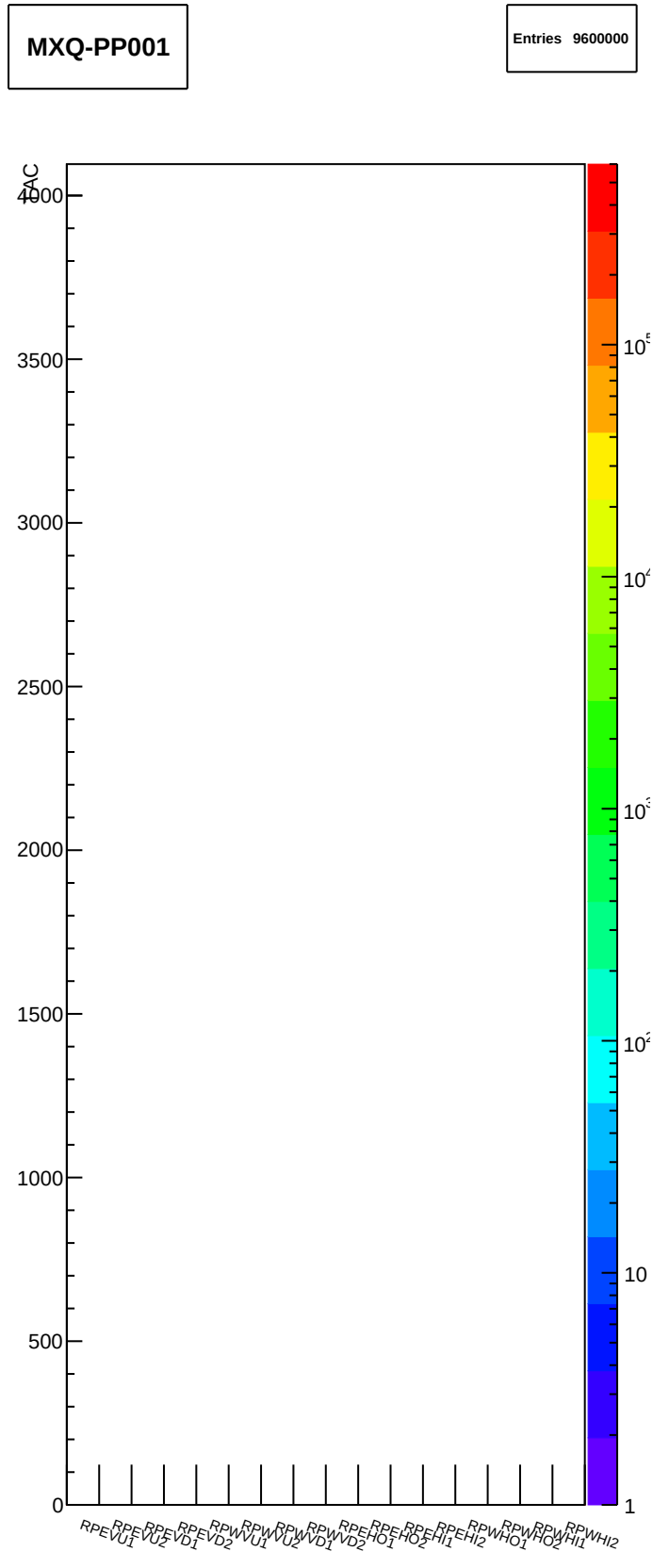

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 1200000
TAC sum
1st-Best
2nd-Best
ID

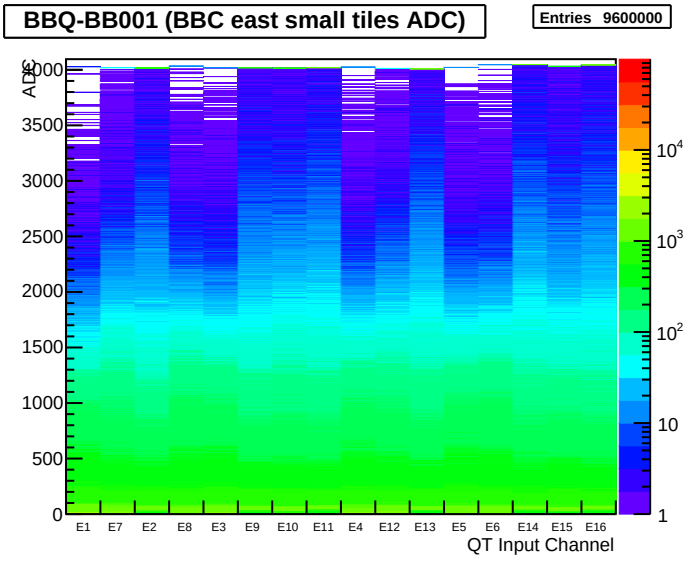

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 75871
TAC sum
1st-Best
2nd-Best
ID

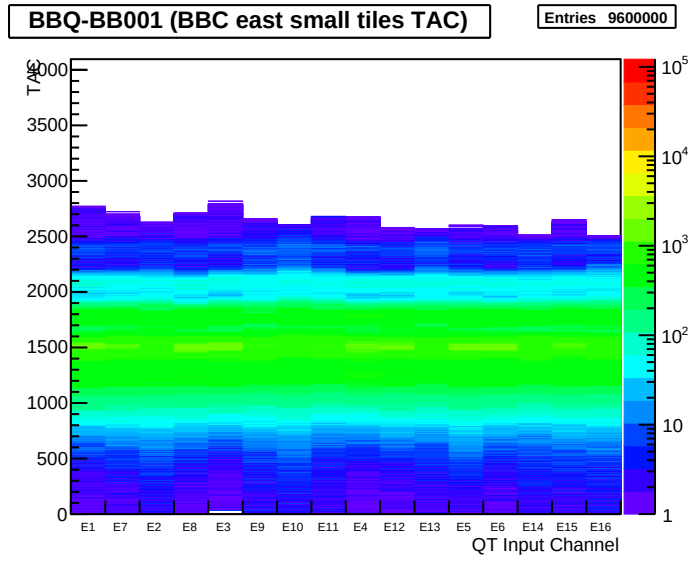

MIX-MT101 Input: VP003 Max TAC
Entries 600000

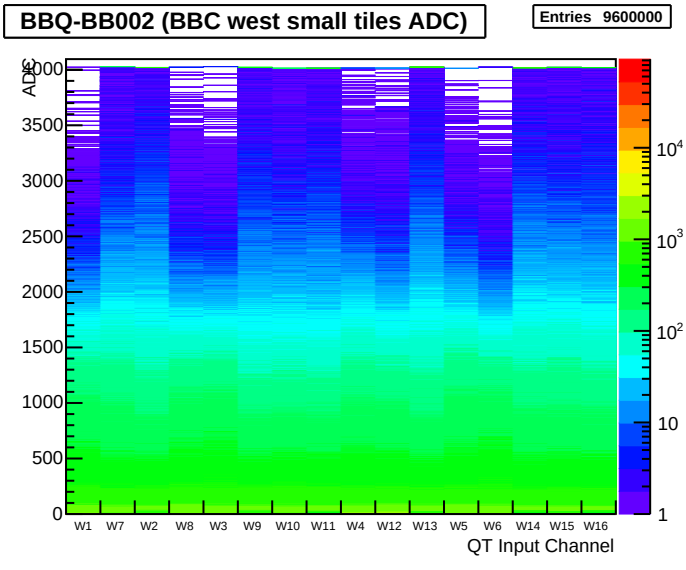

MIX-MT101 Input: VP004 Max TAC
Entries 600000

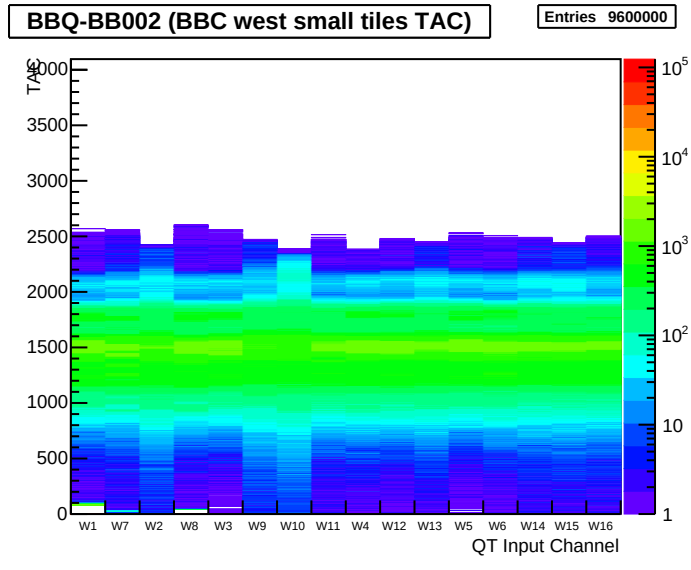

MXQ-PP001
Entries 9600000
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

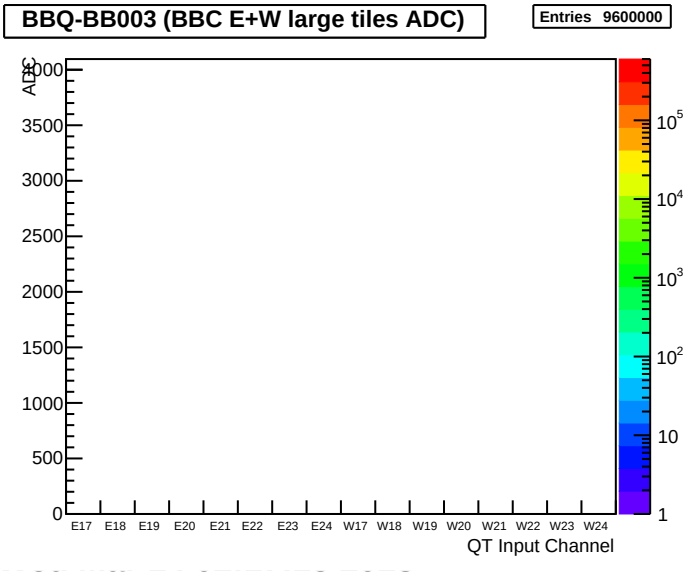

MXQ-PP001
Entries 9600000
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

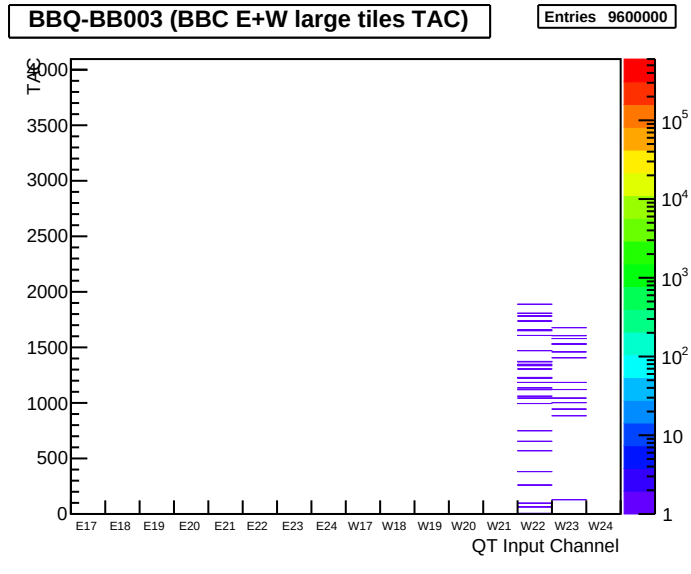

BBQ-BB001 (BBC east small tiles ADC)
Entries 9600000
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

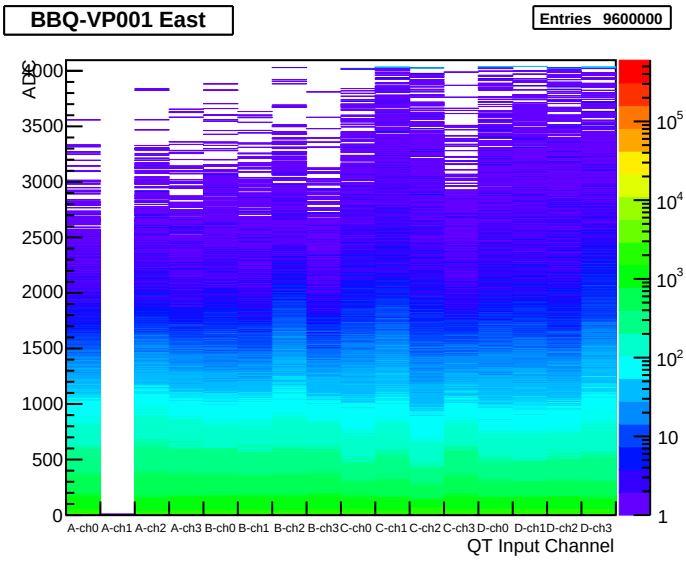

BBQ-BB001 (BBC east small tiles TAC)
Entries 9600000
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

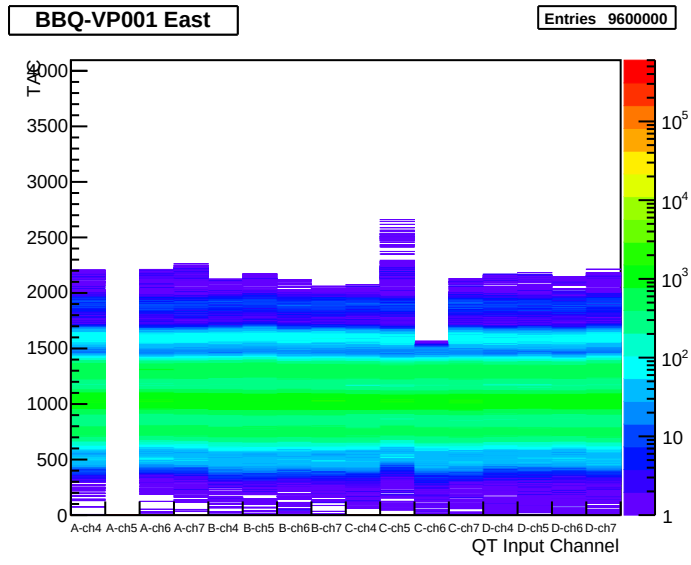

BBQ-BB002 (BBC west small tiles ADC)
Entries 9600000
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

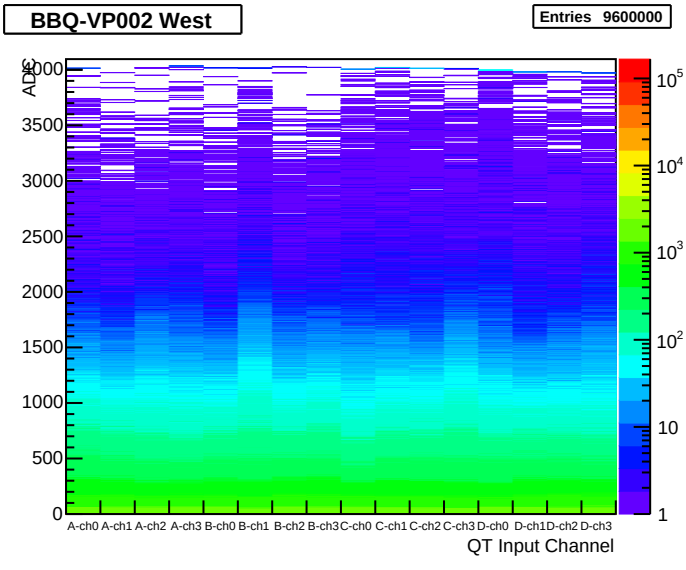

BBQ-BB002 (BBC west small tiles TAC)
Entries 9600000
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

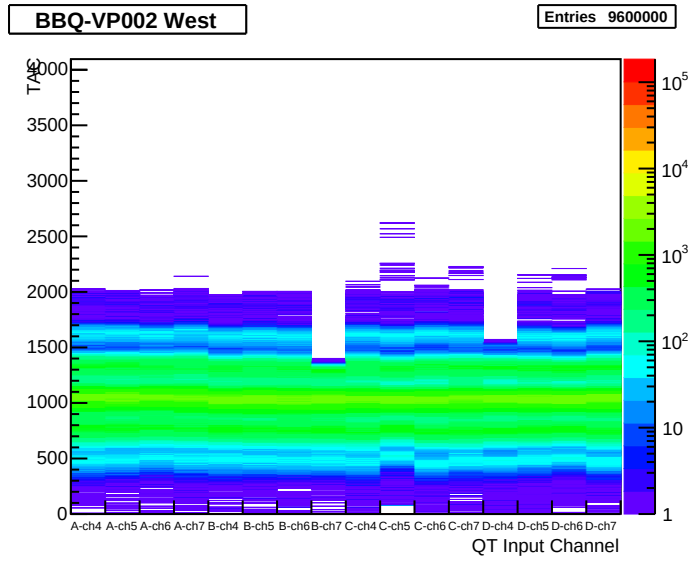

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 9600000
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

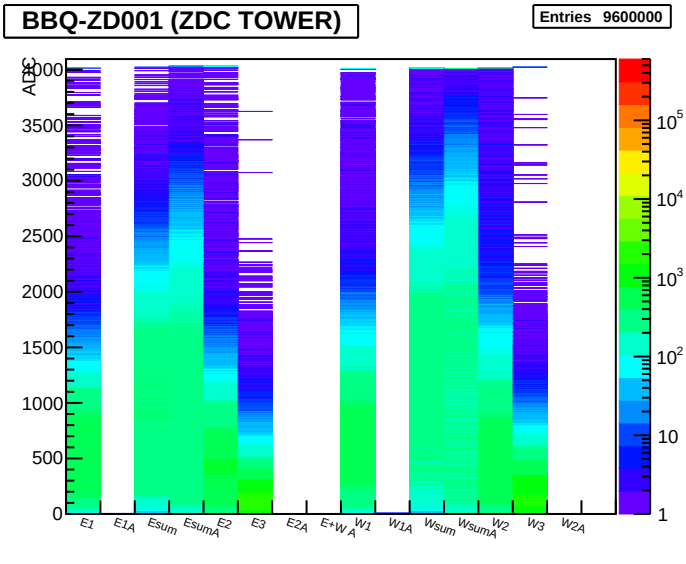

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 9600000
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

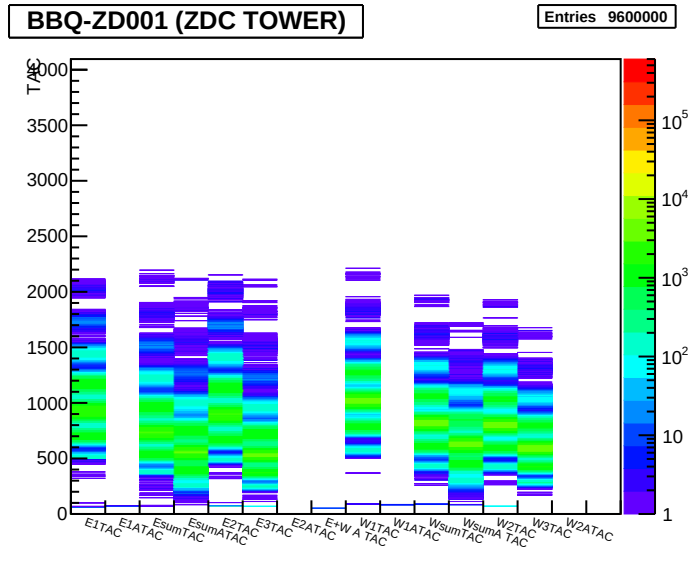

BBQ-VP001 East
Entries 9600000
ADC
QT Input Channel

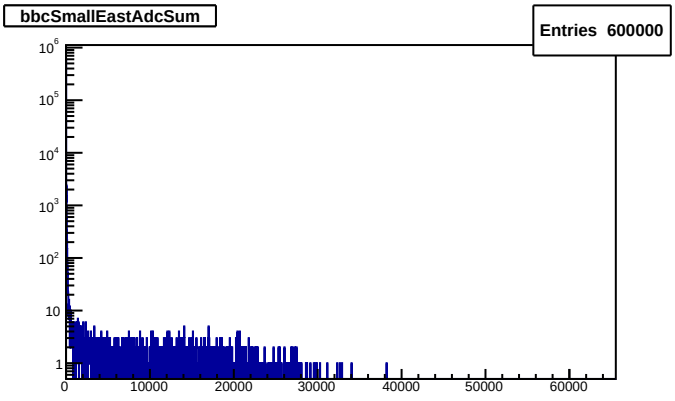

BBQ-VP001 East
Entries 9600000
TAC
QT Input Channel

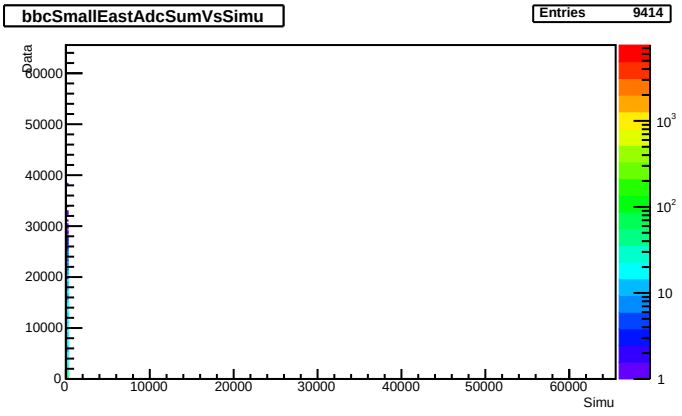

BBQ-VP002 West
Entries 9600000
ADC
QT Input Channel

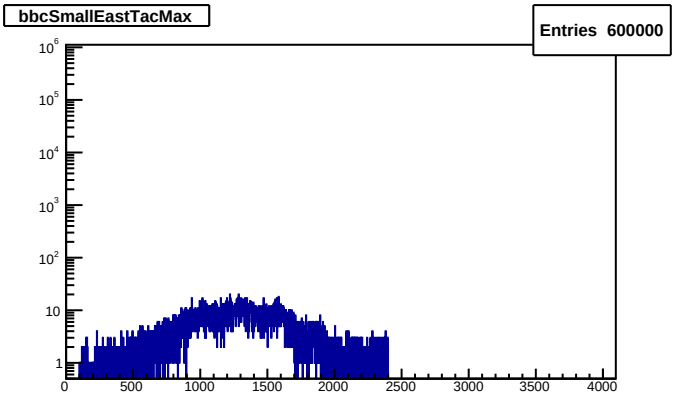

BBQ-VP002 West
Entries 9600000
TAC
QT Input Channel

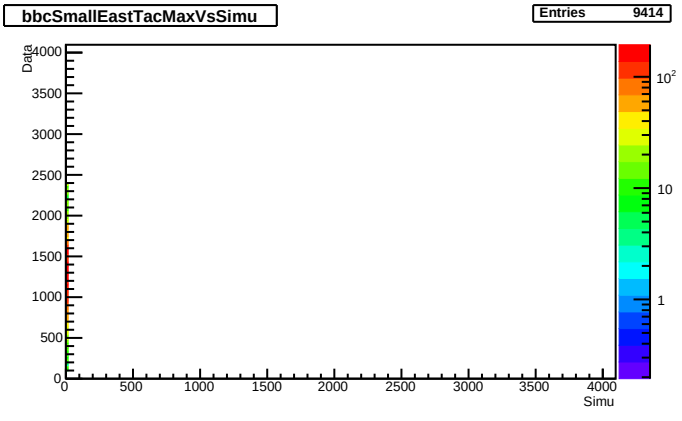

BBQ-ZD001 (ZDC TOWER)
Entries 9600000
ADC

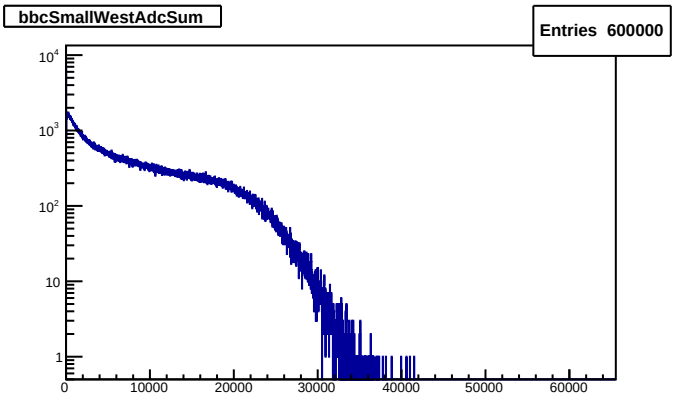

BBQ-ZD001 (ZDC TOWER)
Entries 9600000
TAC

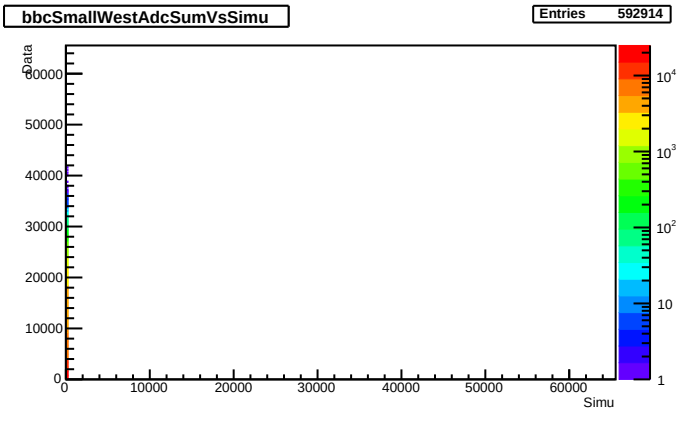

bbcSmallEastAdcSum
Entries 600000

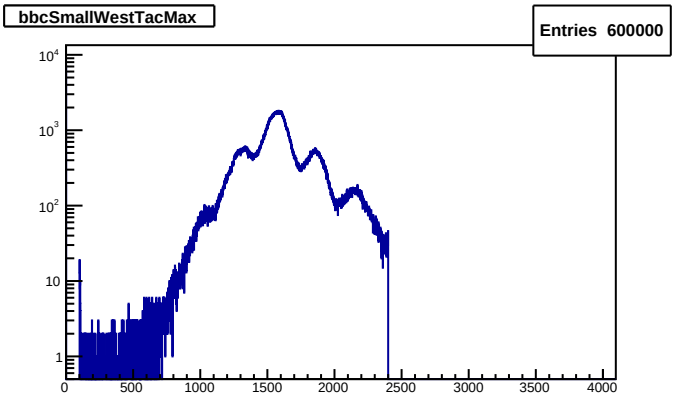

bbcSmallEastAdcSumVsSimu
Entries 9414
Data
Simu

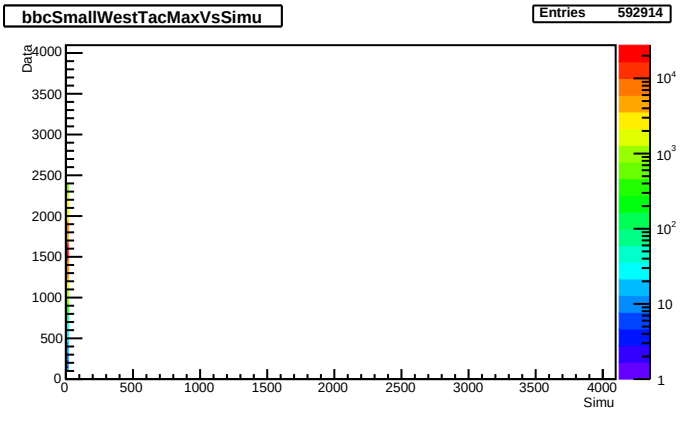

bbcSmallEastTacMax
Entries 600000

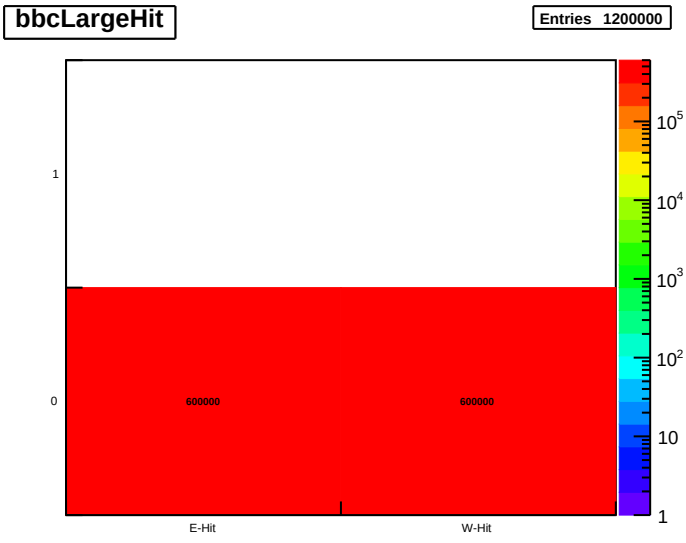

bbcSmallEastTacMaxVsSimu
Entries 9414
Data
Simu

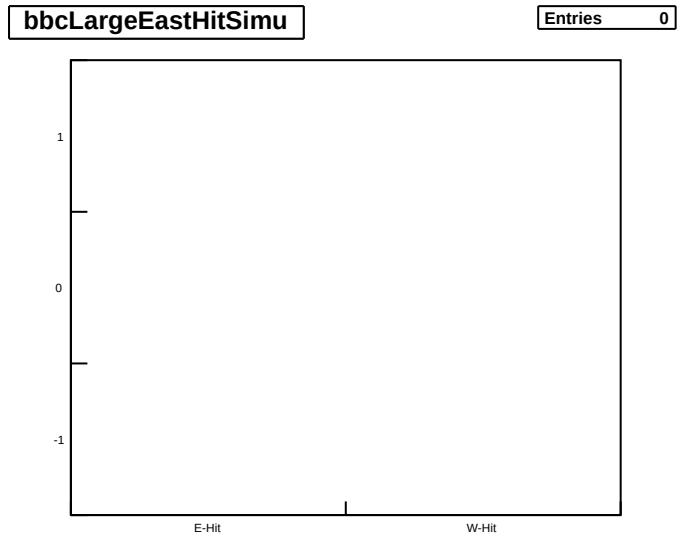

bbcSmallWestAdcSum
Entries 600000

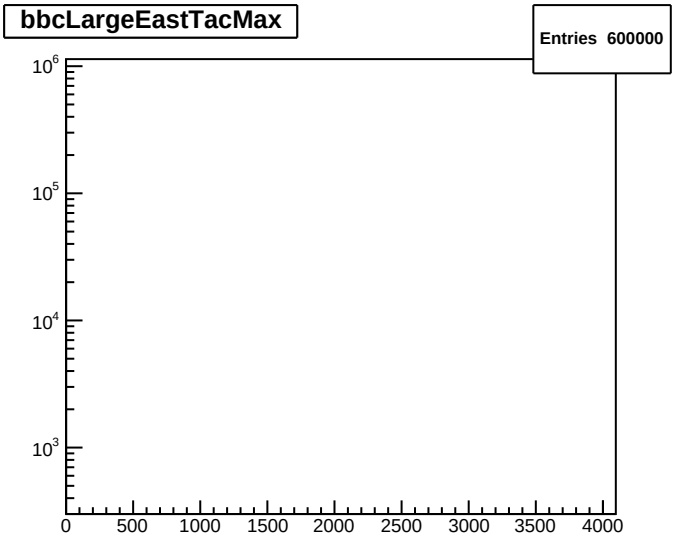

bbcSmallWestAdcSumVsSimu
Entries 592914
Data
Simu

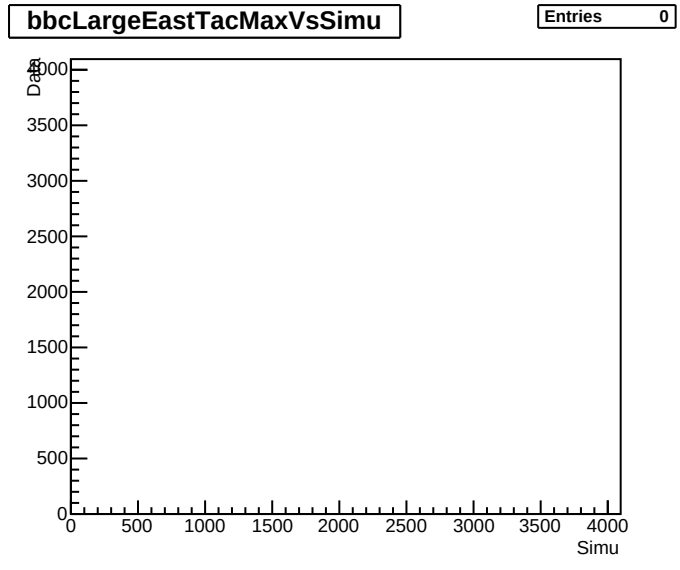

bbcSmallWestTacMax
Entries 600000

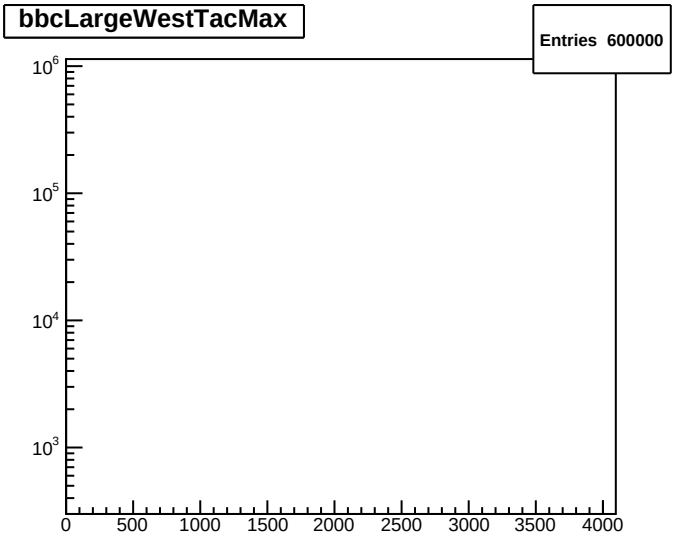

bbcSmallWestTacMaxVsSimu
Entries 592914
Data
Simu

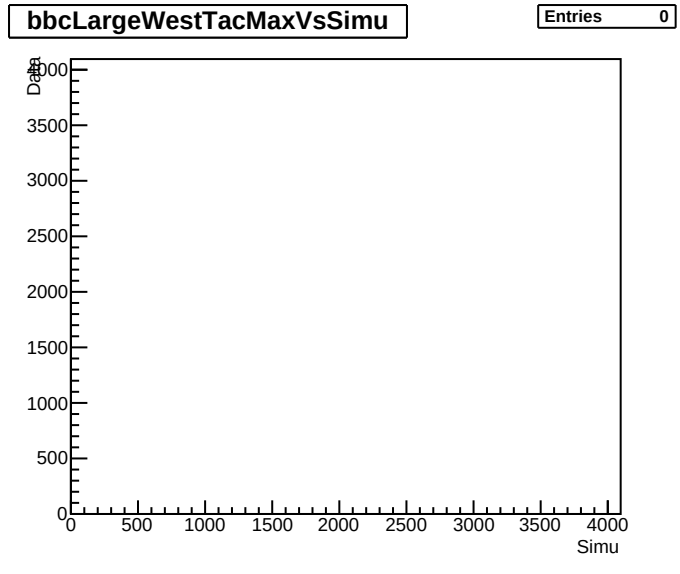

bbcLargeHit
Entries 1200000
600000
600000
E-Hit
W-Hit

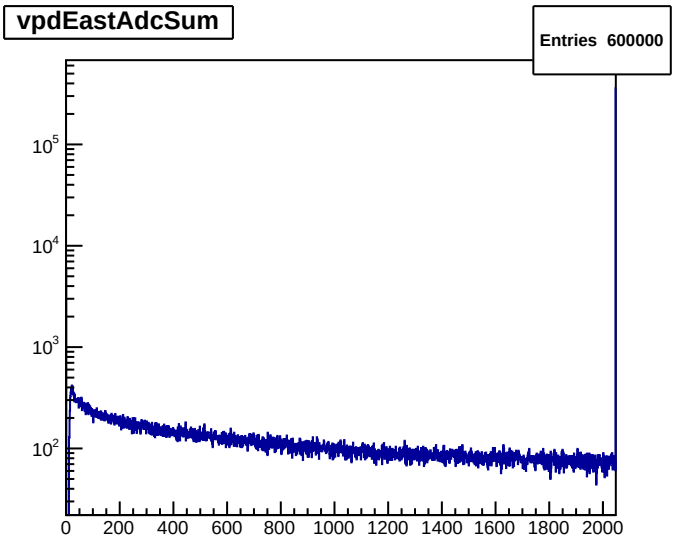

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

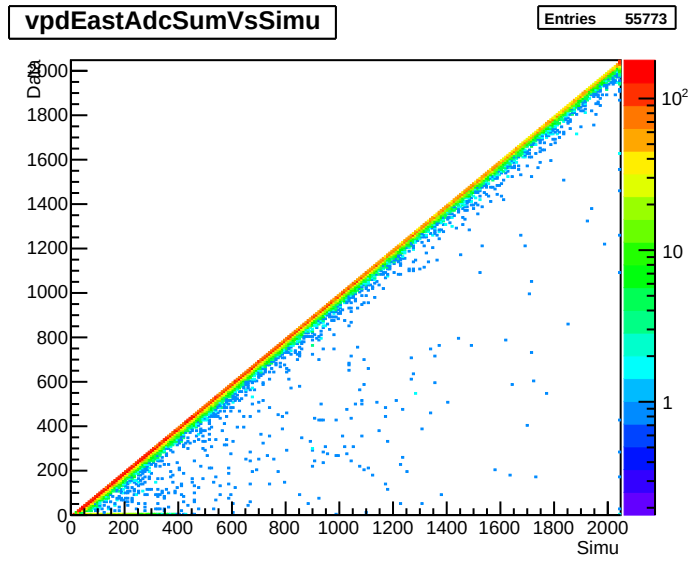

bbcLargeEastTacMax
Entries 600000

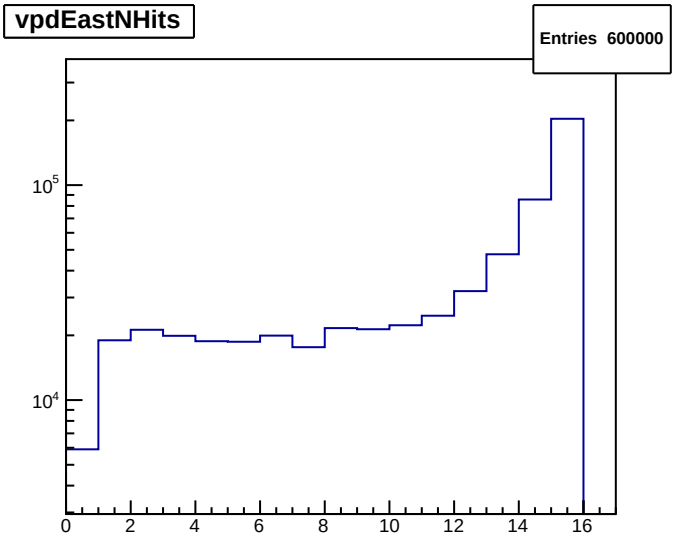

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

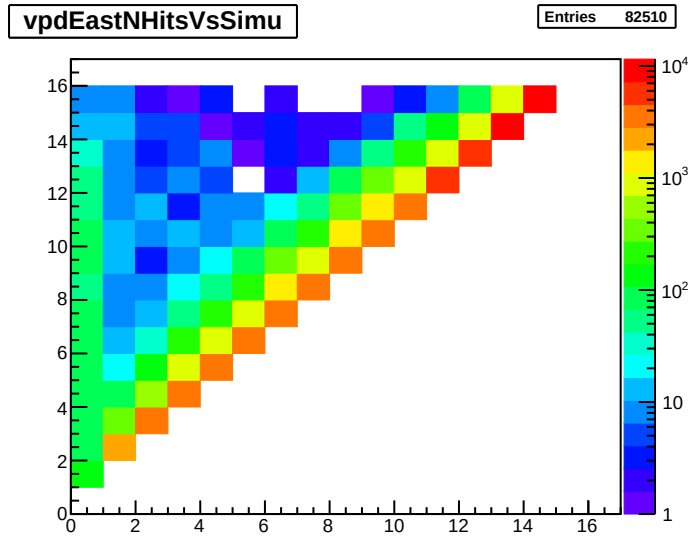

bbcLargeWestTacMax
Entries 600000

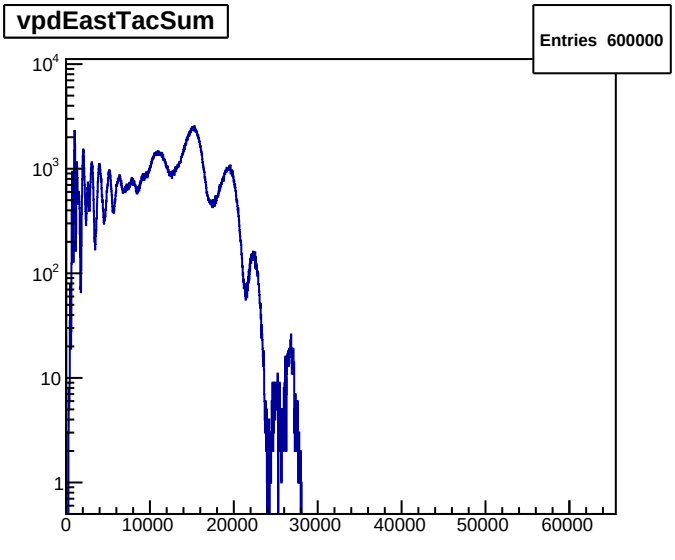

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

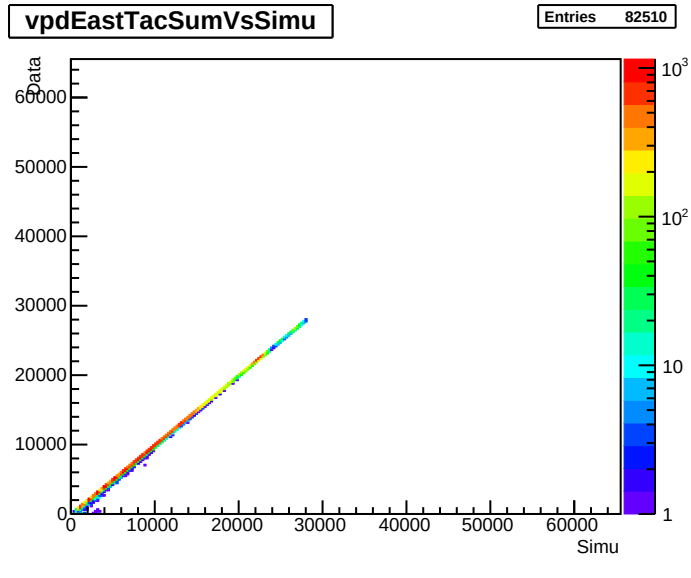

vpdEastAdcSum
Entries 600000

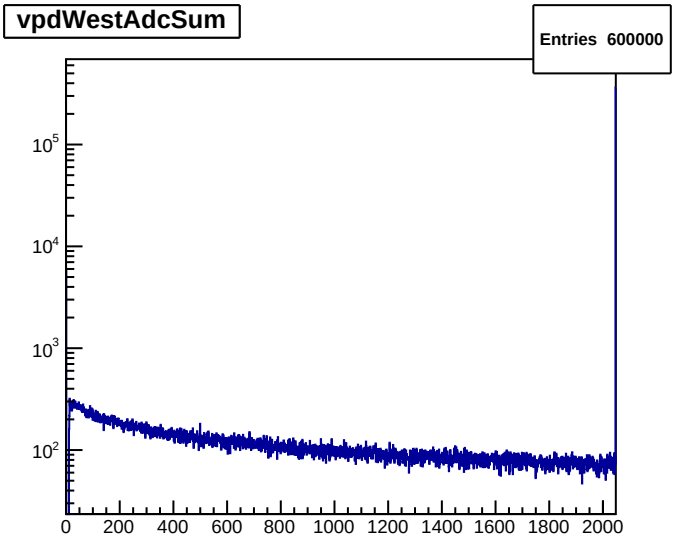

vpdEastAdcSumVsSimu
Entries 55773
Data
Simu

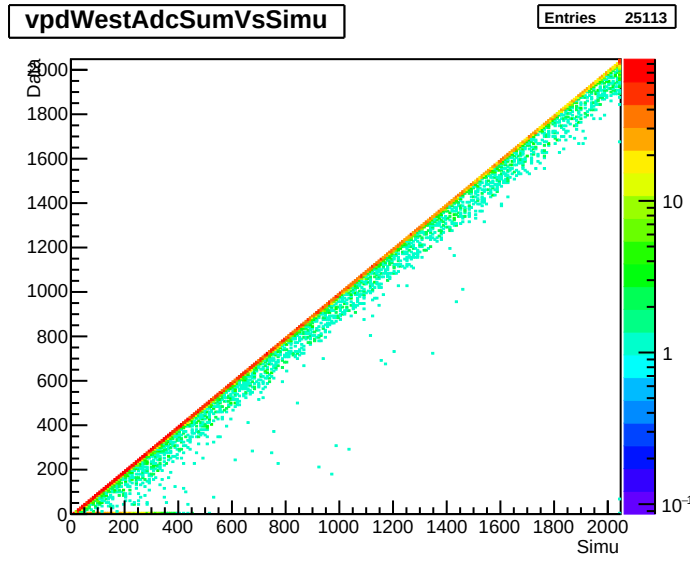

vpdEastNHits
Entries 600000

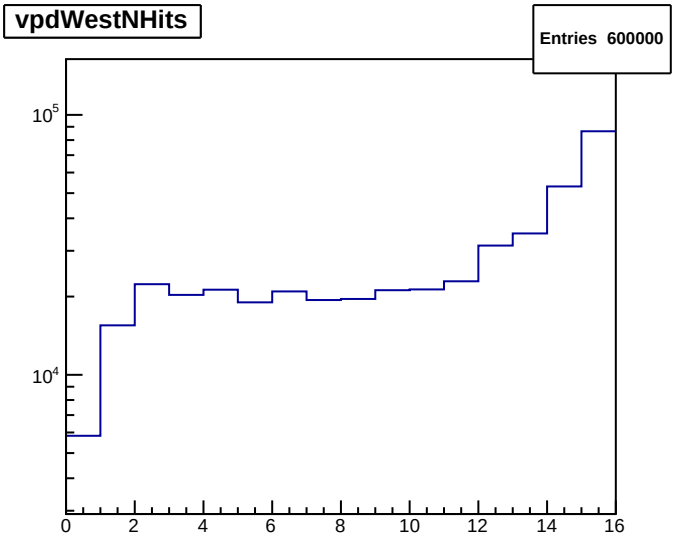

vpdEastNHitsVsSimu
Entries 82510

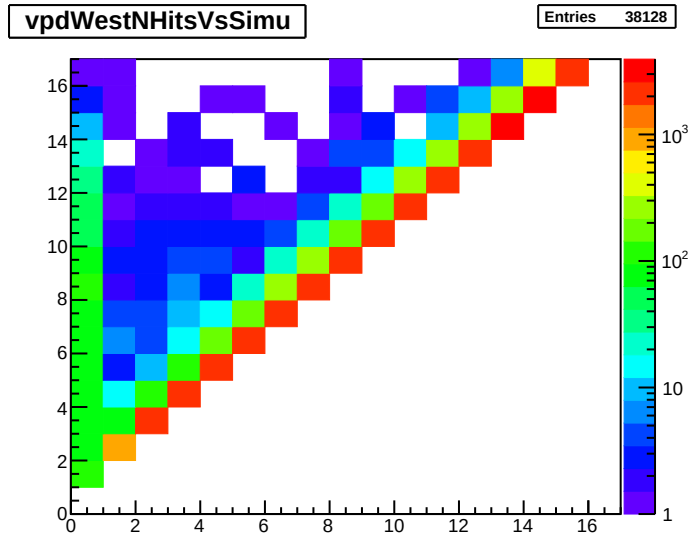

vpdEastTacSum
Entries 600000

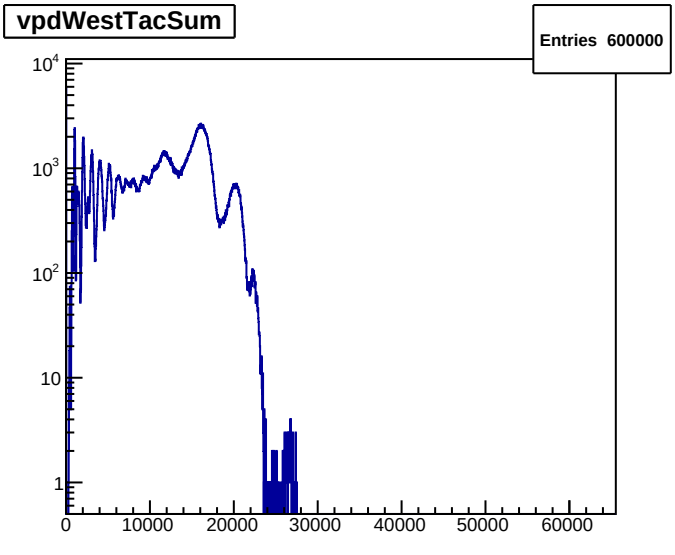

vpdEastTacSumVsSimu
Entries 82510
Data
Simu

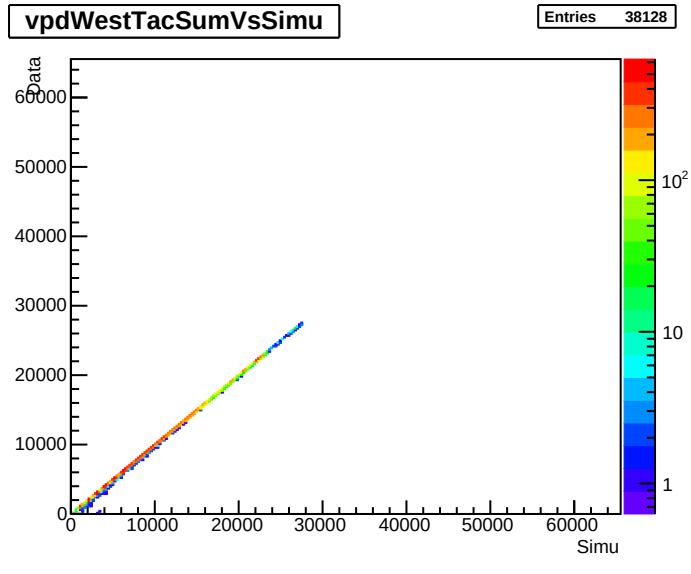

vpdWestAdcSum
Entries 600000

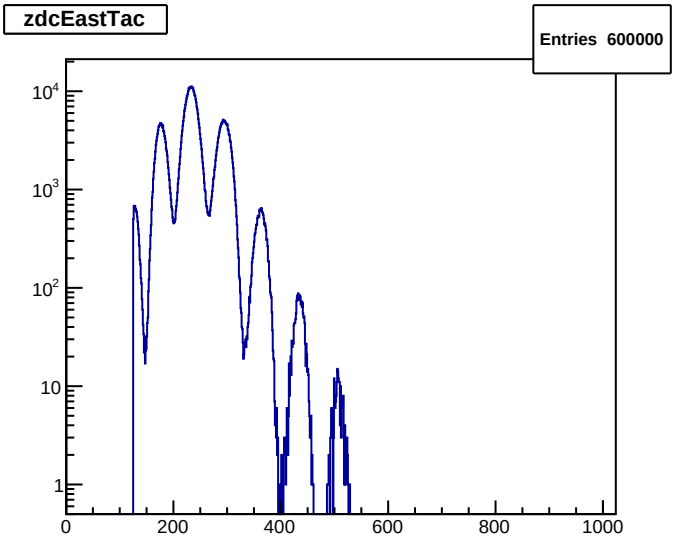

vpdWestAdcSumVsSimu
Entries 25113
Data
Simu

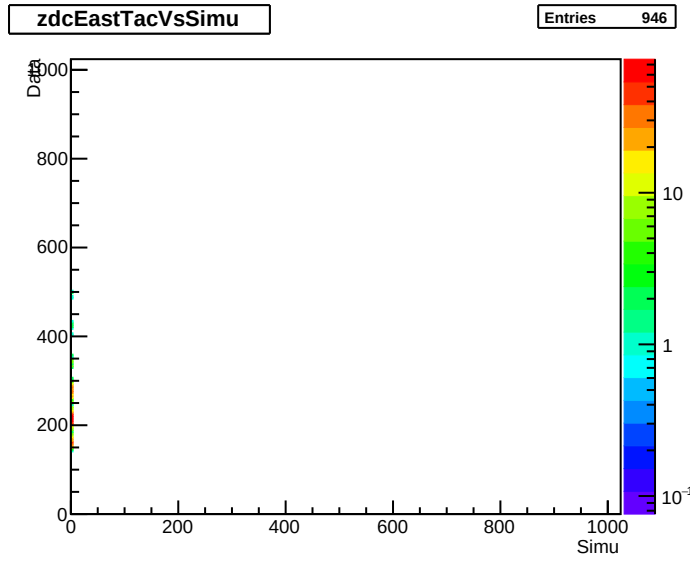

vpdWestNHits
Entries 600000

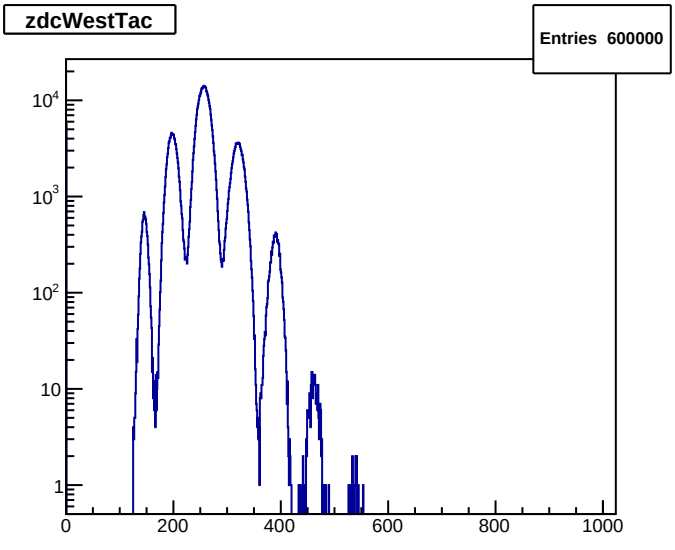

vpdWestNHitsVsSimu
Entries 38128

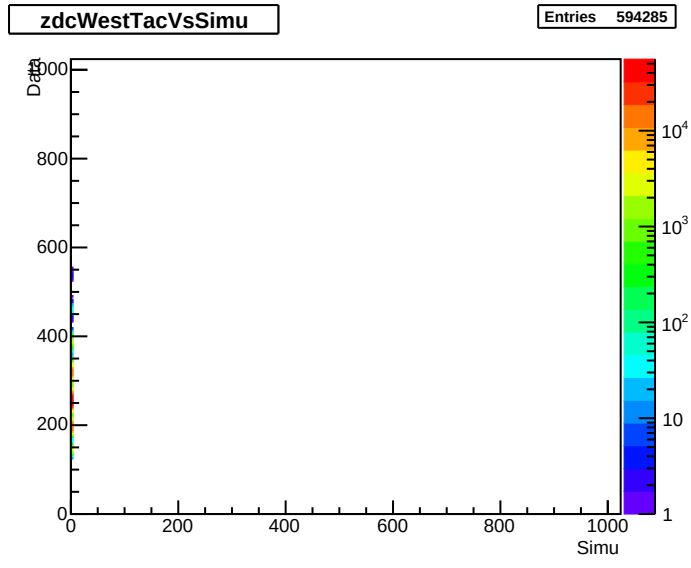

vpdWestTacSum
Entries 600000

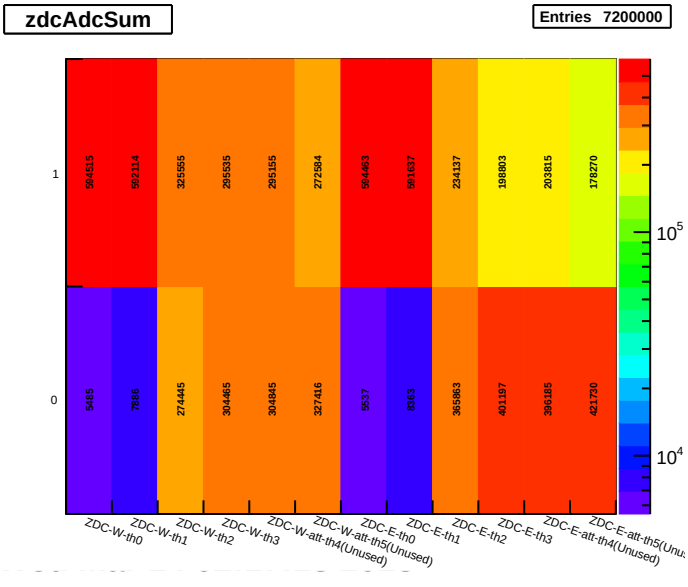

vpdWestTacSumVsSimu
Entries 38128
Data
Simu

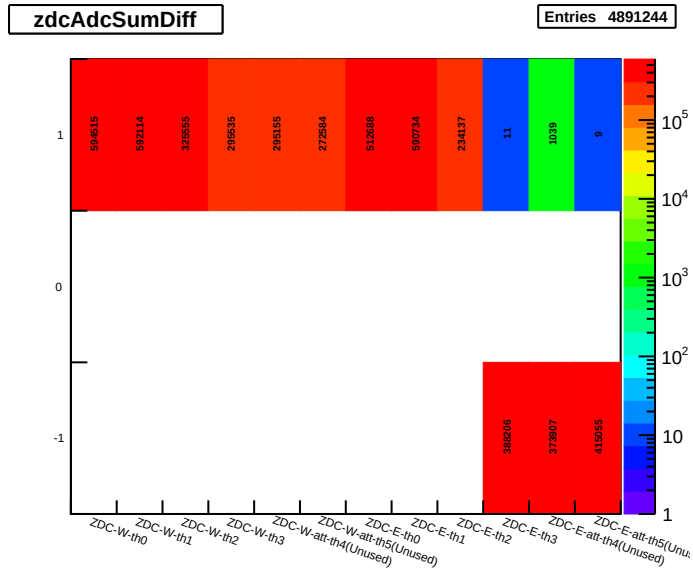

zdcEastTac
Entries 600000

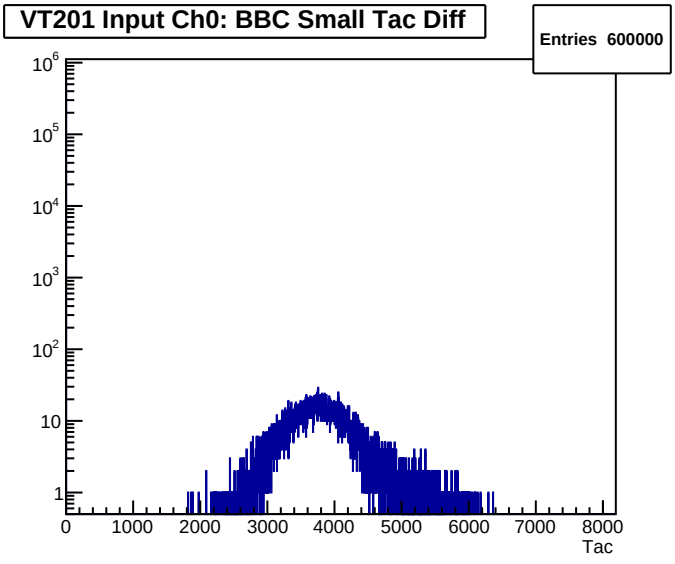

zdcEastTacVsSimu
Entries 946
Data
Simu

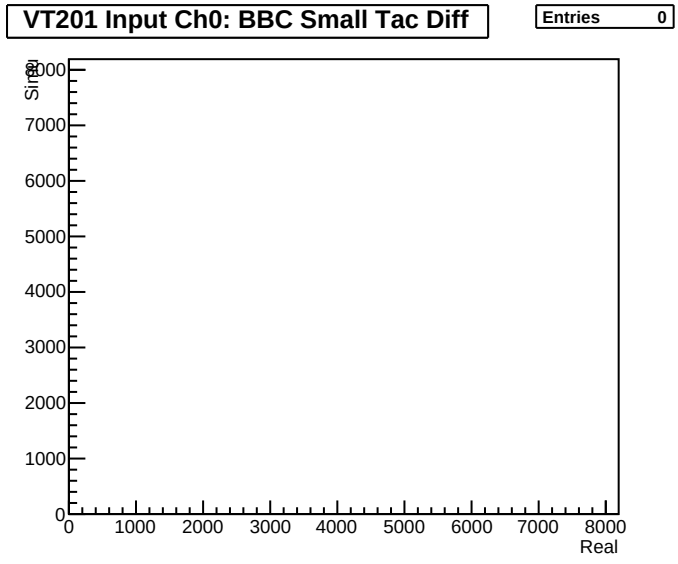

zdcWestTac
Entries 600000

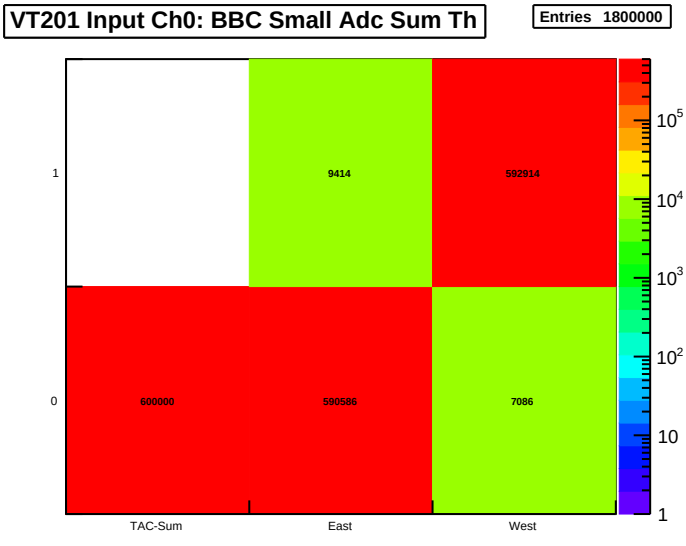

zdcWestTacVsSimu
Entries 594285
Data
Simu

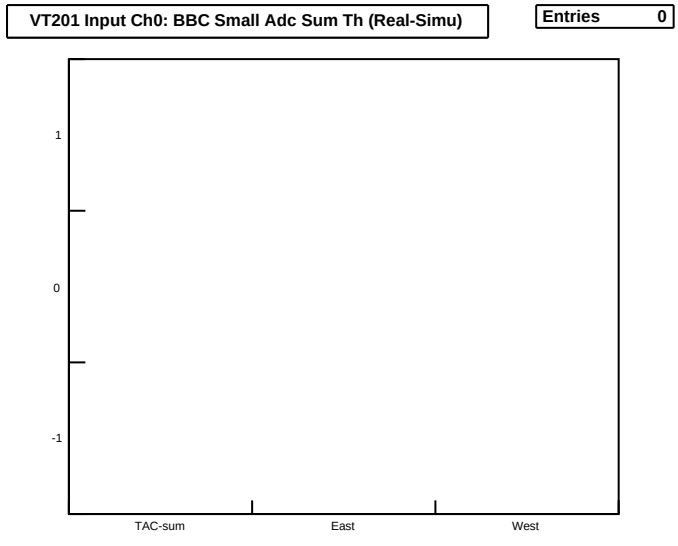

zdcAdcSum
Entries 7200000
594515
592114
325555
295535
295155
272584
594463
591637
234137
198803
203815
178270
5495
7886
274445
304465
304845
327416
5537
8363
365863
401197
396185
421730
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

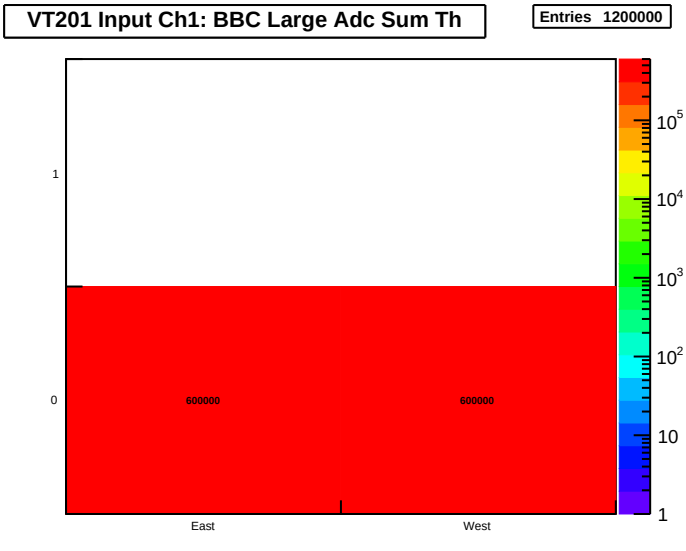

zdcAdcSumDiff
Entries 4891244
594515
592114
325555
295535
295155
272584
512688
590734
234137
11
1039
9
388206
373907
415055
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

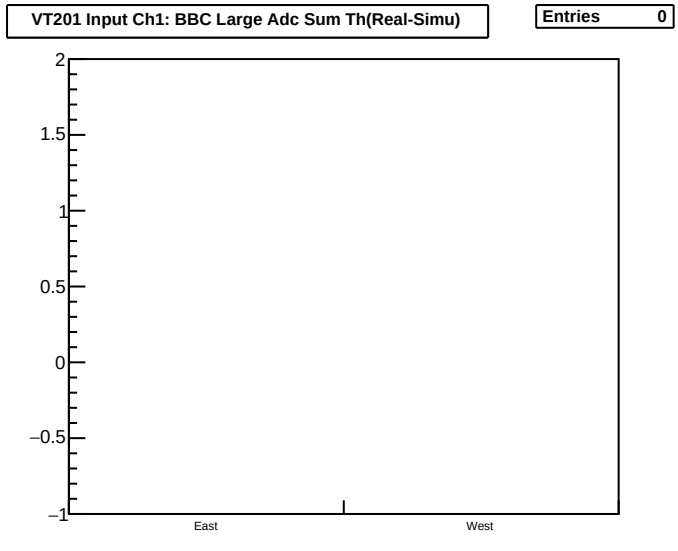

VT201 Input Ch0: BBC Small Tac Diff
Entries 600000
Tac


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

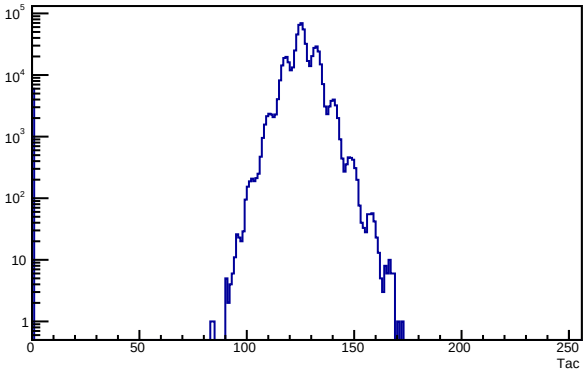

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 1800000
9414
592914
600000
590586
7086
TAC-Sum
East
West


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

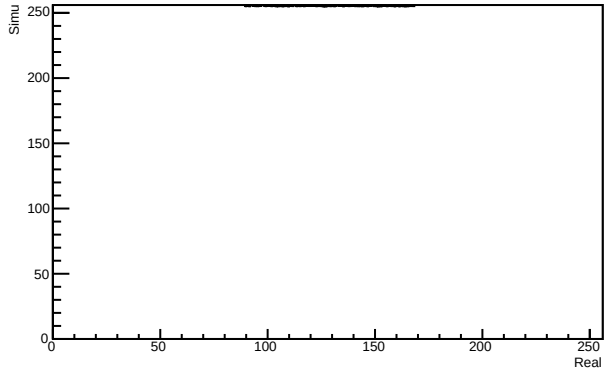

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 1200000
600000
600000
East
West


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

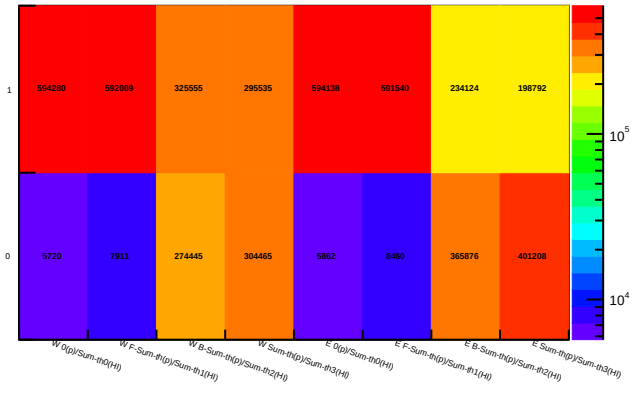
VT201 Input Ch2: ZDC Tac Diff



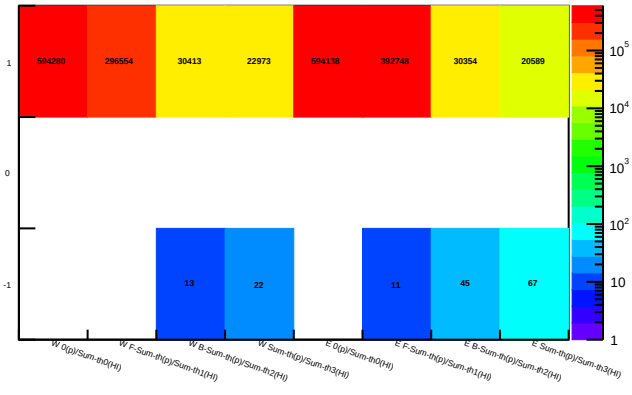
VT201 Input Ch2: ZDC Tac Diff



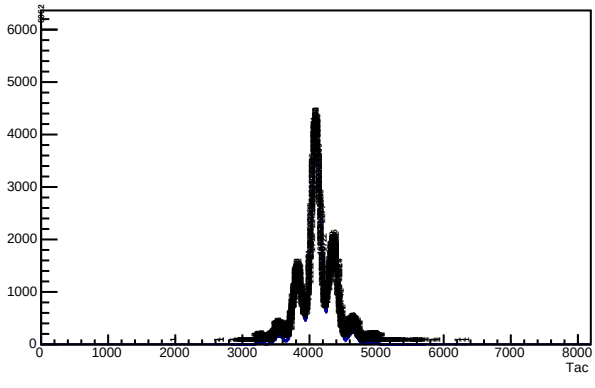
VT201 Input Ch2: ZDC Adc Sum Th



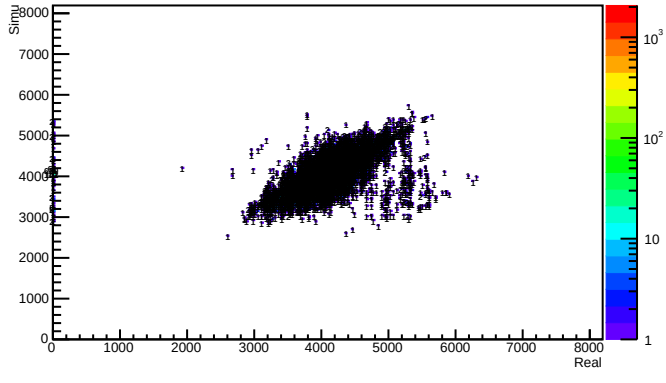
VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)



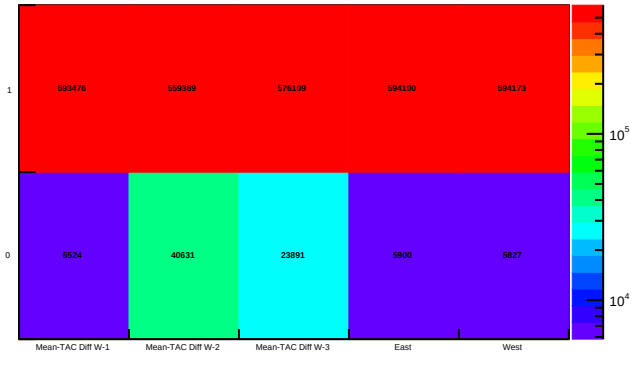
VT201 Input Ch4: VPD Tac Diff



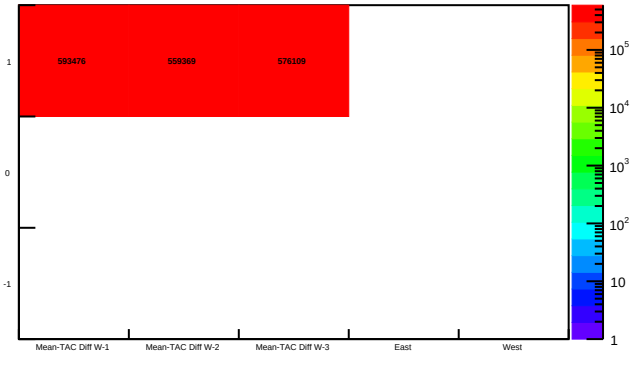
VT201 Input Ch4: VPD Tac Diff

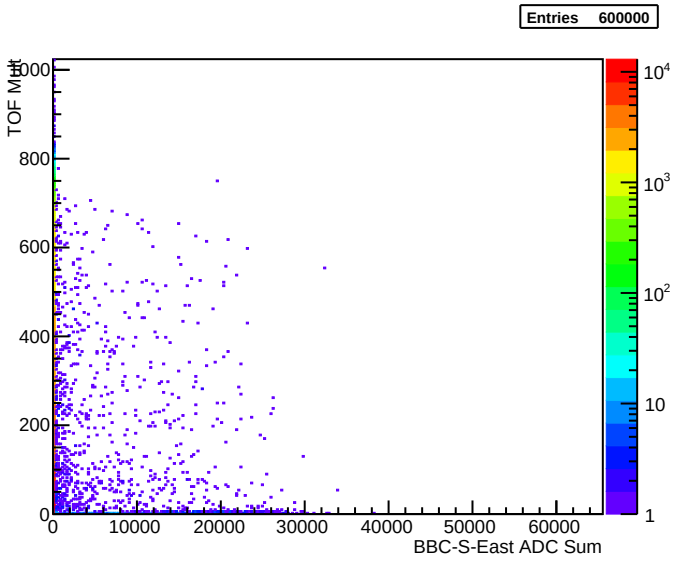


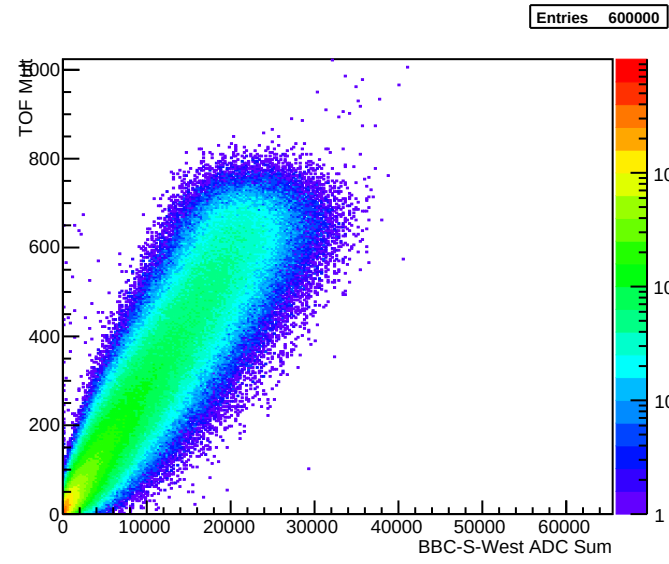
VT201 Input Ch4: VPD Adc Sum Th

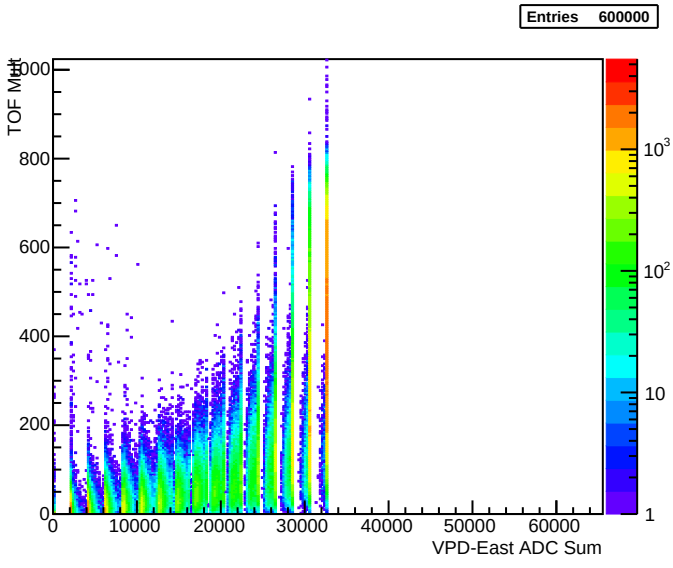


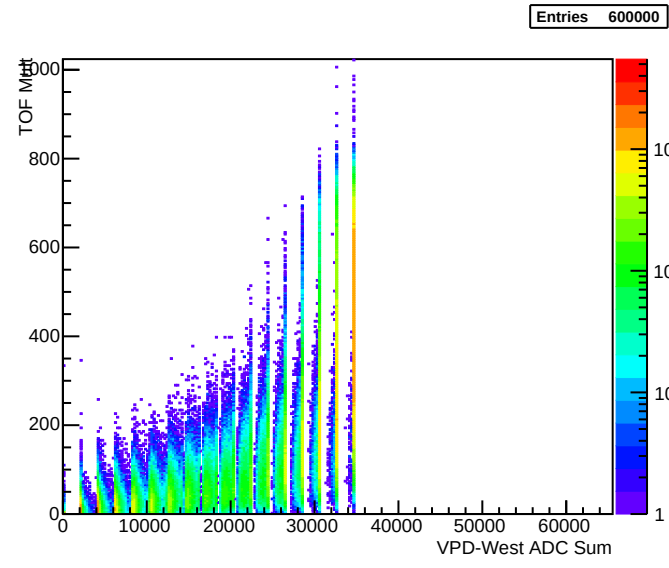
VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)

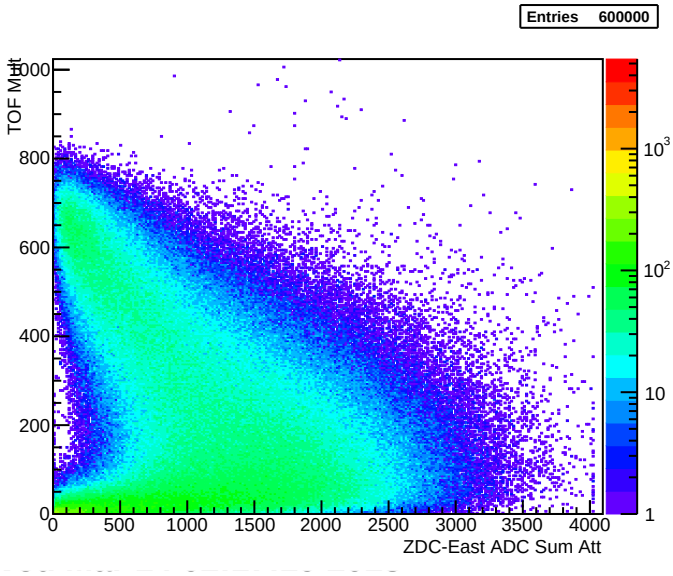


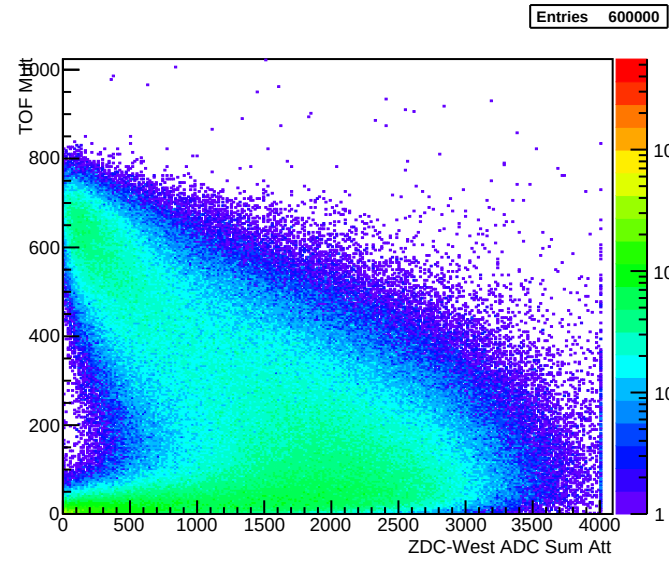

Entries 600000
TOF Mult
BBC-S-East ADC Sum

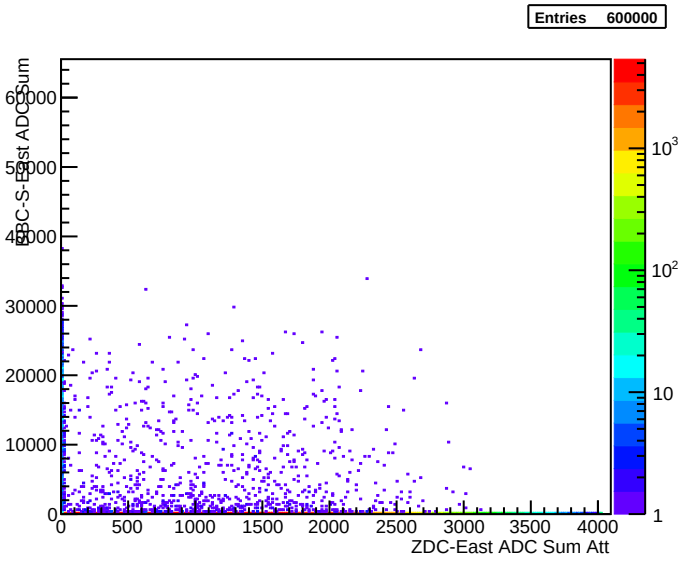

Entries 600000
TOF Mult
BBC-S-West ADC Sum

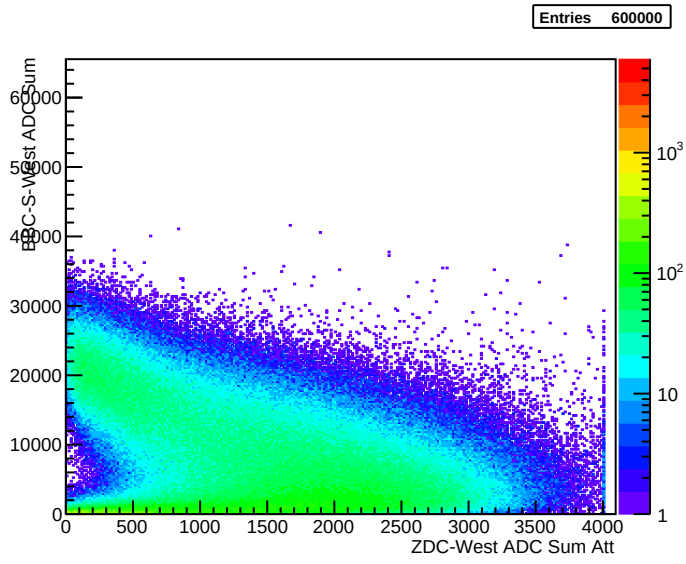

Entries 600000
TOF Mult
VPD-East ADC Sum

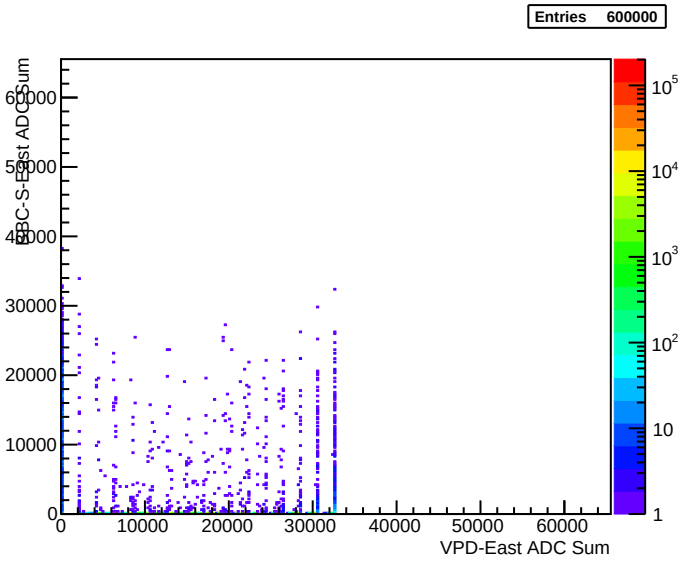

Entries 600000
TOF Mult
VPD-West ADC Sum

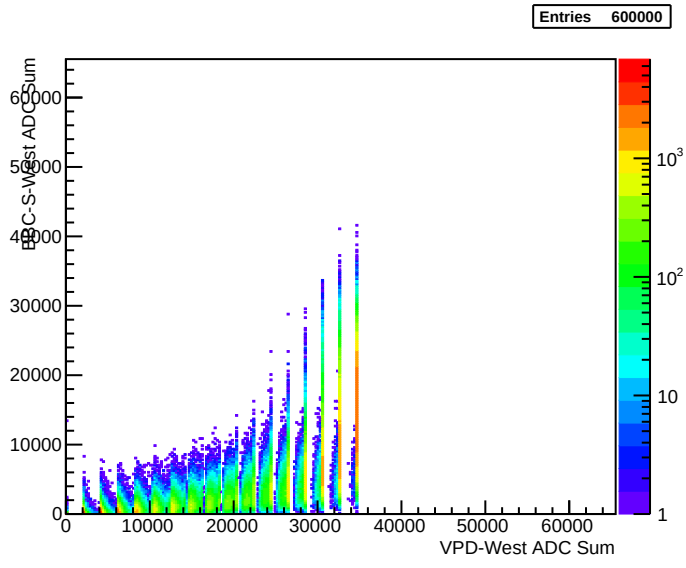

Entries 600000
TOF Mult
ZDC-East ADC Sum Att

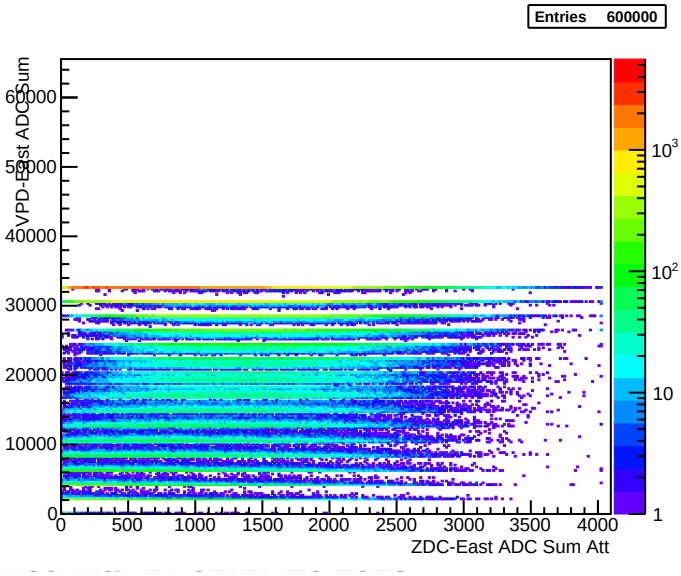

Entries 600000
TOF Mult
ZDC-West ADC Sum Att

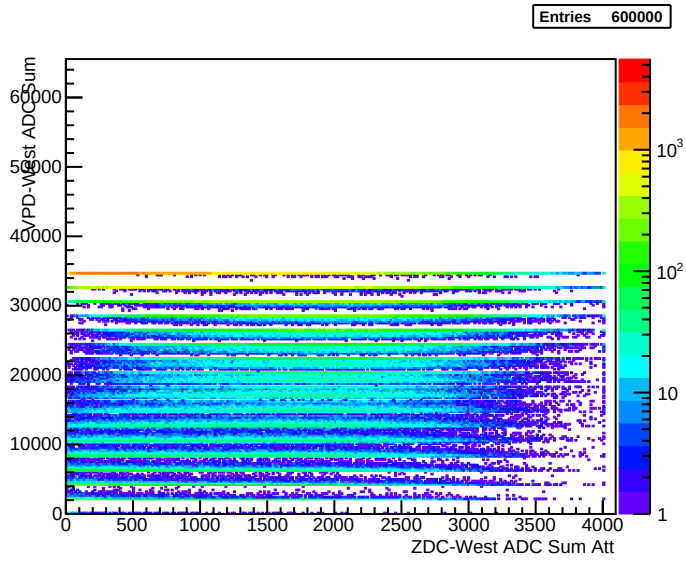

Entries 600000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

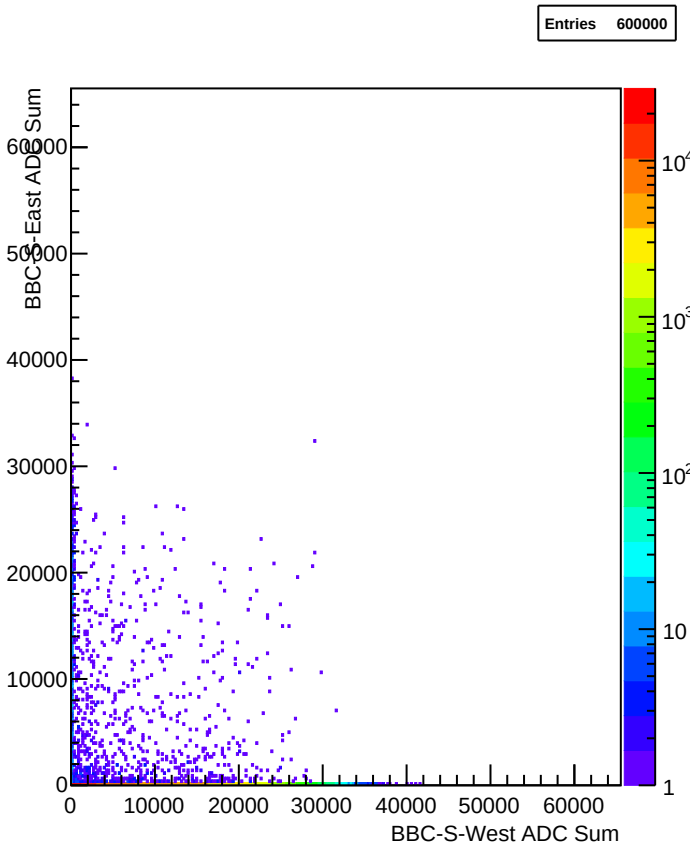

Entries 600000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

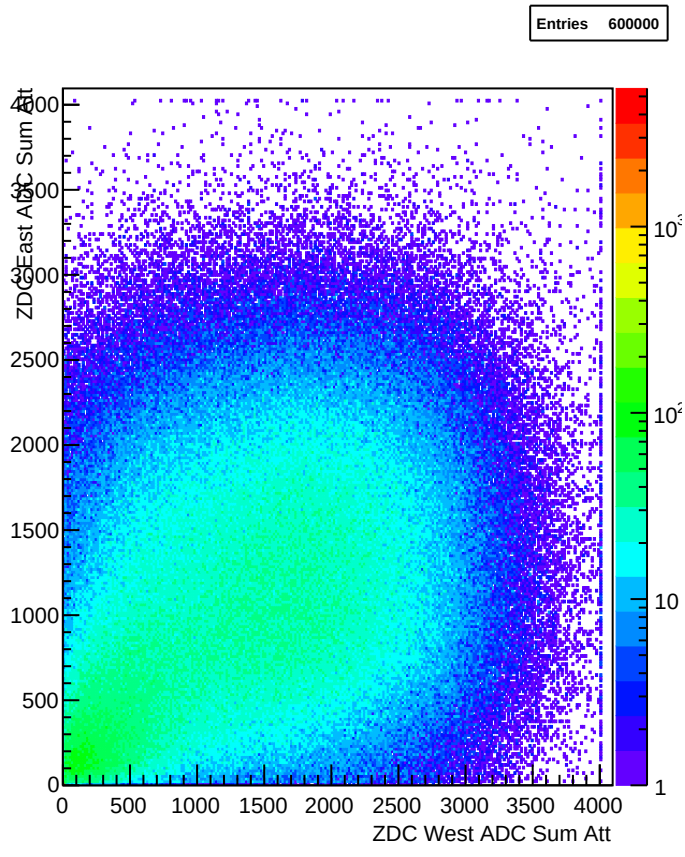

Entries 600000
BBC-S-East ADC Sum
VPD-East ADC Sum

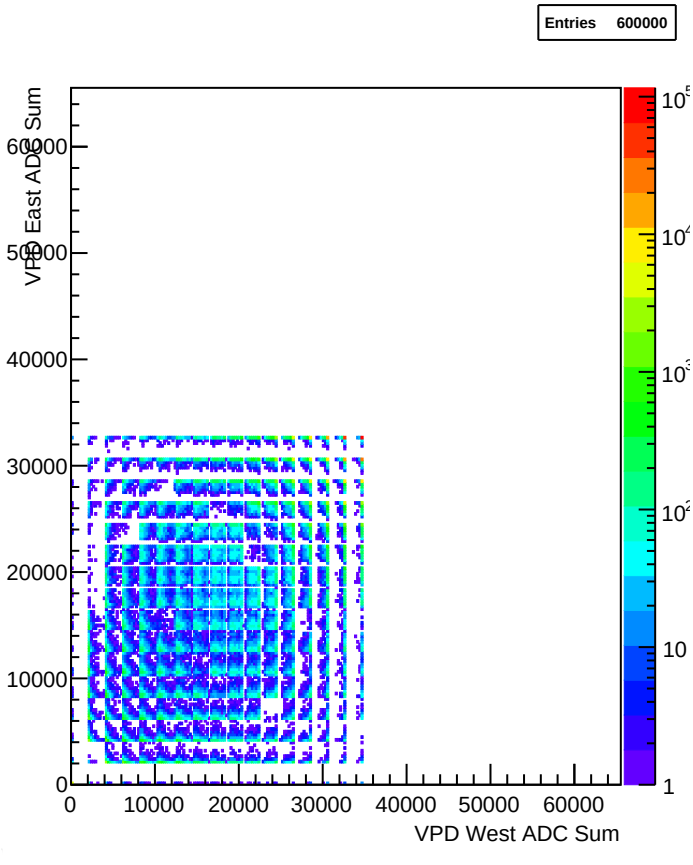

Entries 600000
BBC-S-West ADC Sum
VPD-West ADC Sum

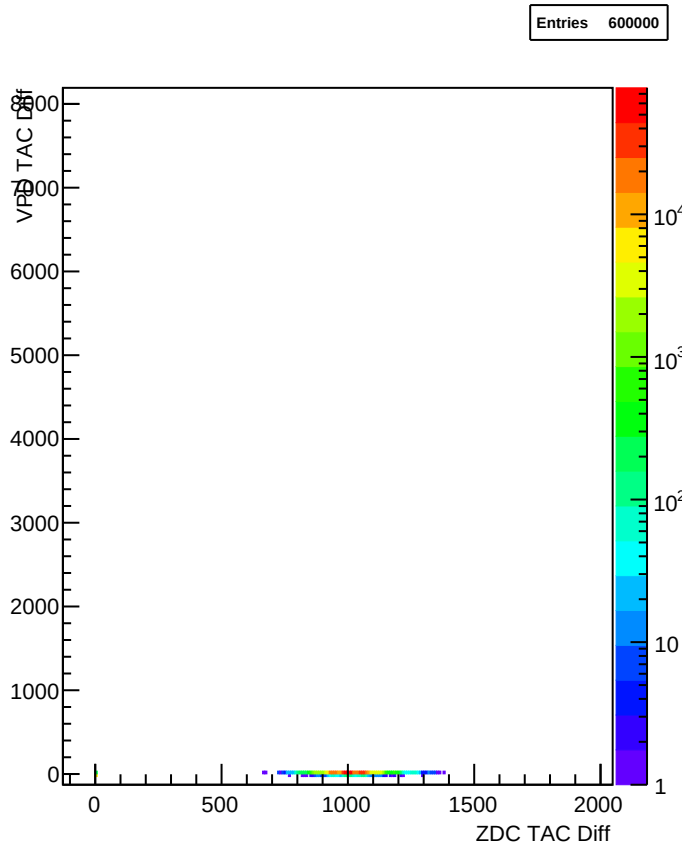

Entries 600000
VPD-East ADC Sum
ZDC-East ADC Sum Att

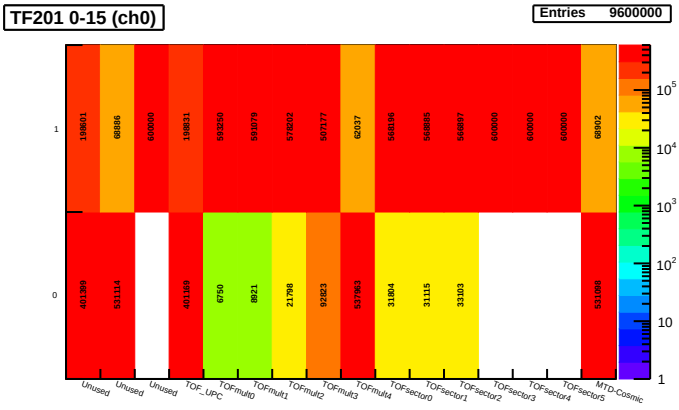

Entries 600000
VPD-West ADC Sum
ZDC-West ADC Sum Att

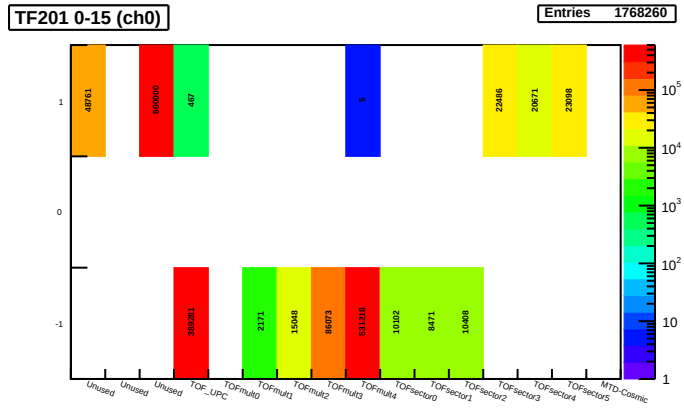

Entries 600000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

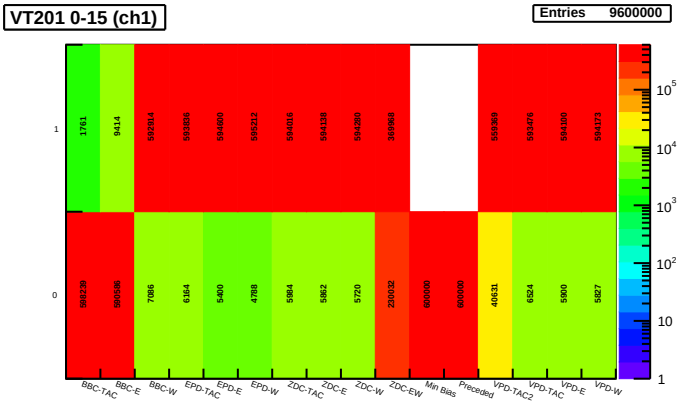

Entries 600000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

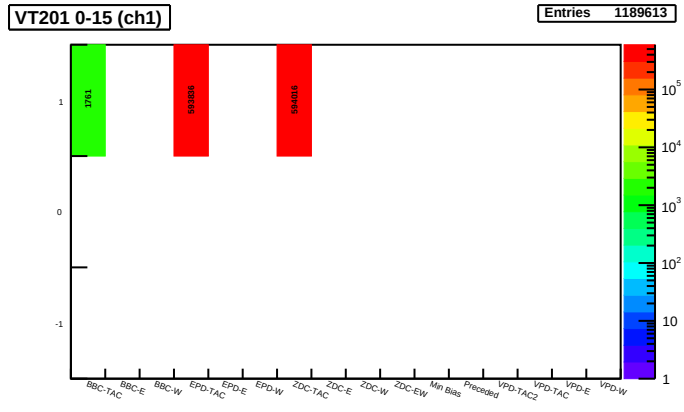

Entries 600000
VPD East ADC Sum
VPD West ADC Sum

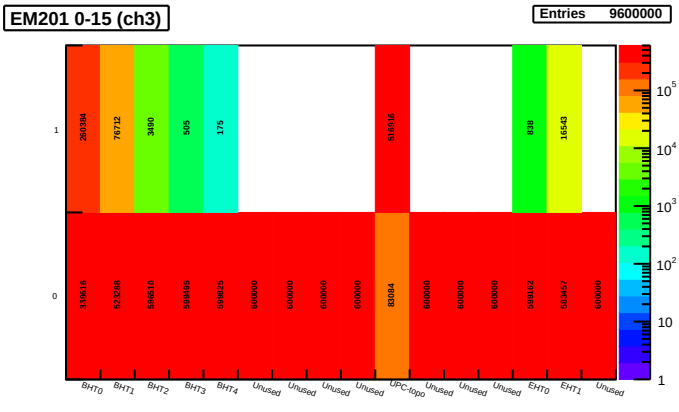

Entries 600000
VPD TAC Diff
ZDC TAC Diff

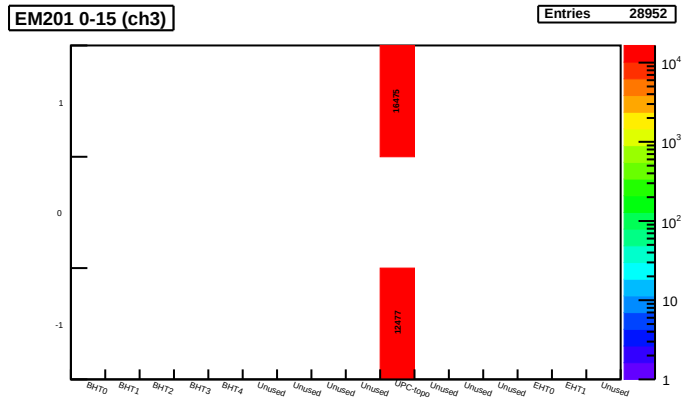

TF201 0-15 (ch0)
Entries 9600000
1 199601 68886 600000 199831 593250 599379 578202 597177 62037 568196 568885 566897 600000 600000 600000 68902
0 401399 531114 401169 6750 8921 21798 92823 537963 31804 31115 33103 531098
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic
1 10 10^2 10^3 10^4 10^5

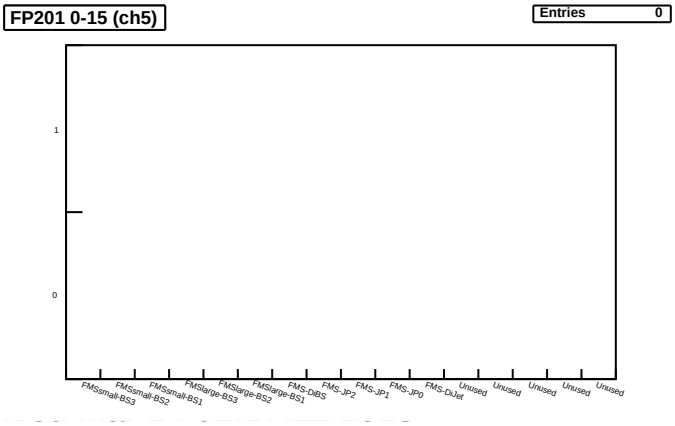

TF201 0-15 (ch0)
Entries 1768260
1 48761 600000 467 5 23486 20671 23098
0 389281 2171 15948 86073 531218 10302 8471 10408
-1
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic
1 10 10^2 10^3 10^4

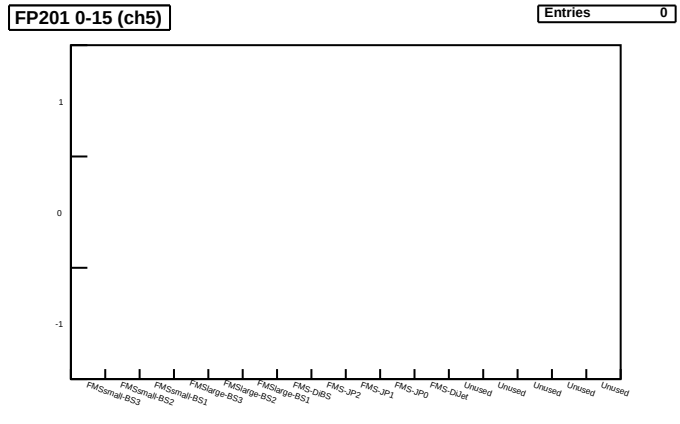

VT201 0-15 (ch1)
Entries 9600000
1 1761 9414 592814 593856 594600 595212 594016 594138 594290 309968 593969 593476 594100 594173
0 598239 590586 7086 6164 5400 4788 5984 5862 5720 230032 600000 600000 40631 6524 5900 5827
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W
1 10 10^2 10^3 10^4 10^5


VT201 0-15 (ch1)
Entries 1189613
1 1761 593856 594016
0
-1
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
1 10 10^2 10^3 10^4 10^5


EM201 0-15 (ch3)
Entries 9600000
1 260384 76712 3490 505 175 516916 838 16543
0 339616 522288 598510 599495 599825 600000 600000 600000 600000 83084 600000 600000 600000 599162 583457 600000
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused
1 10 10^2 10^3 10^4 10^5


EM201 0-15 (ch3)
Entries 28952
1 16475
0 12477
-1
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused
1 10 10^2 10^3 10^4


FP201 0-15 (ch5)
Entries 0
1
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
1
0
-1
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