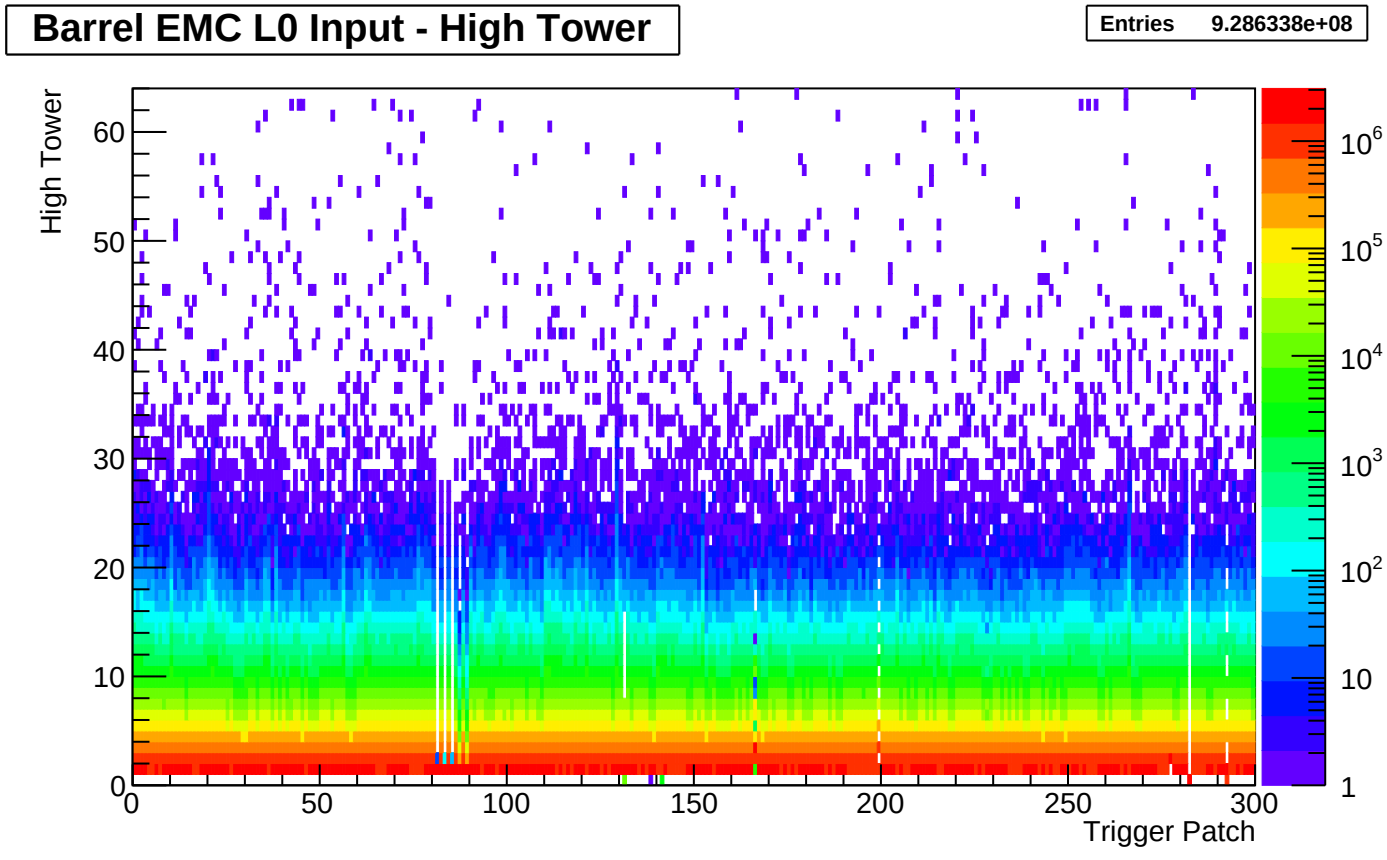
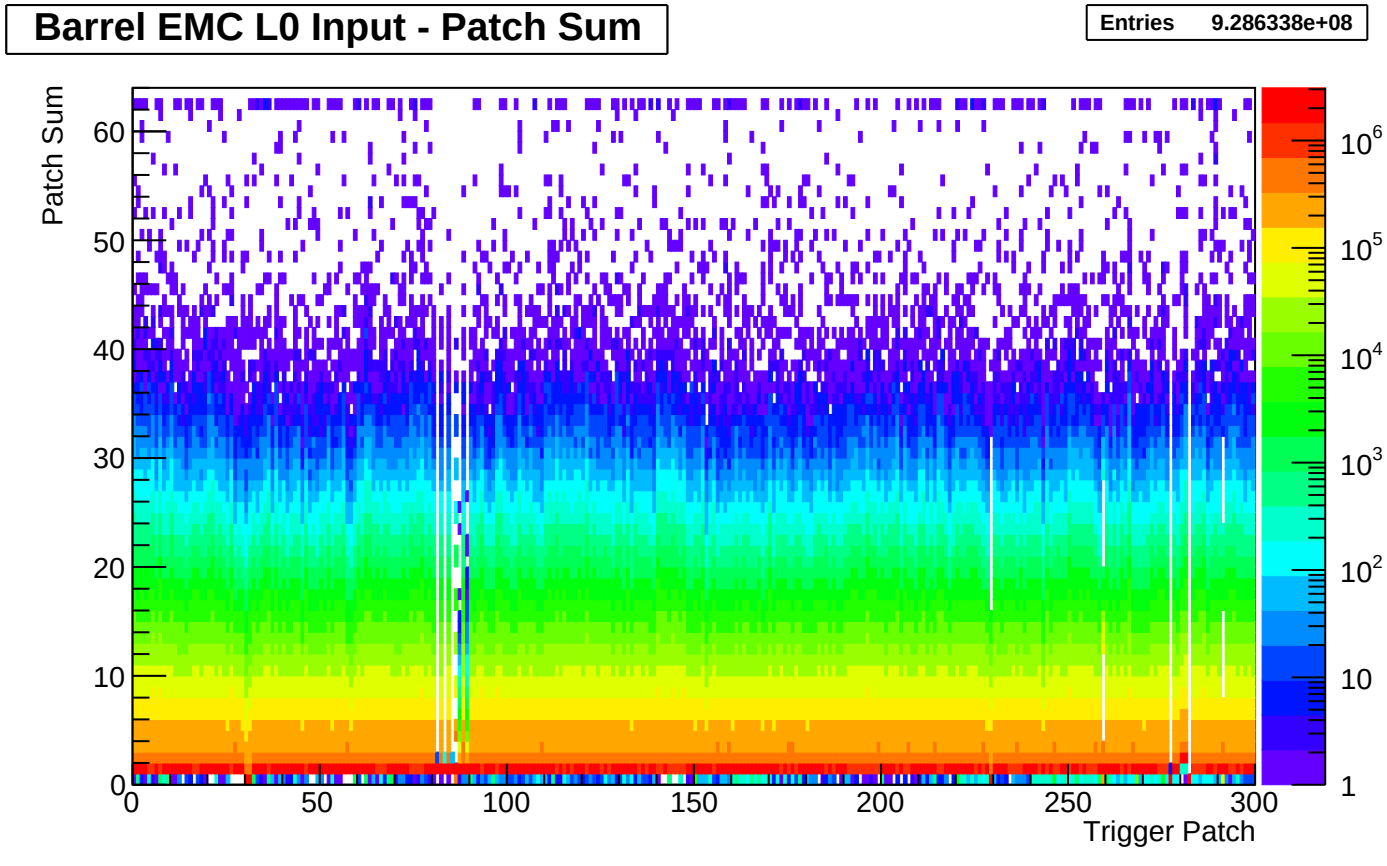
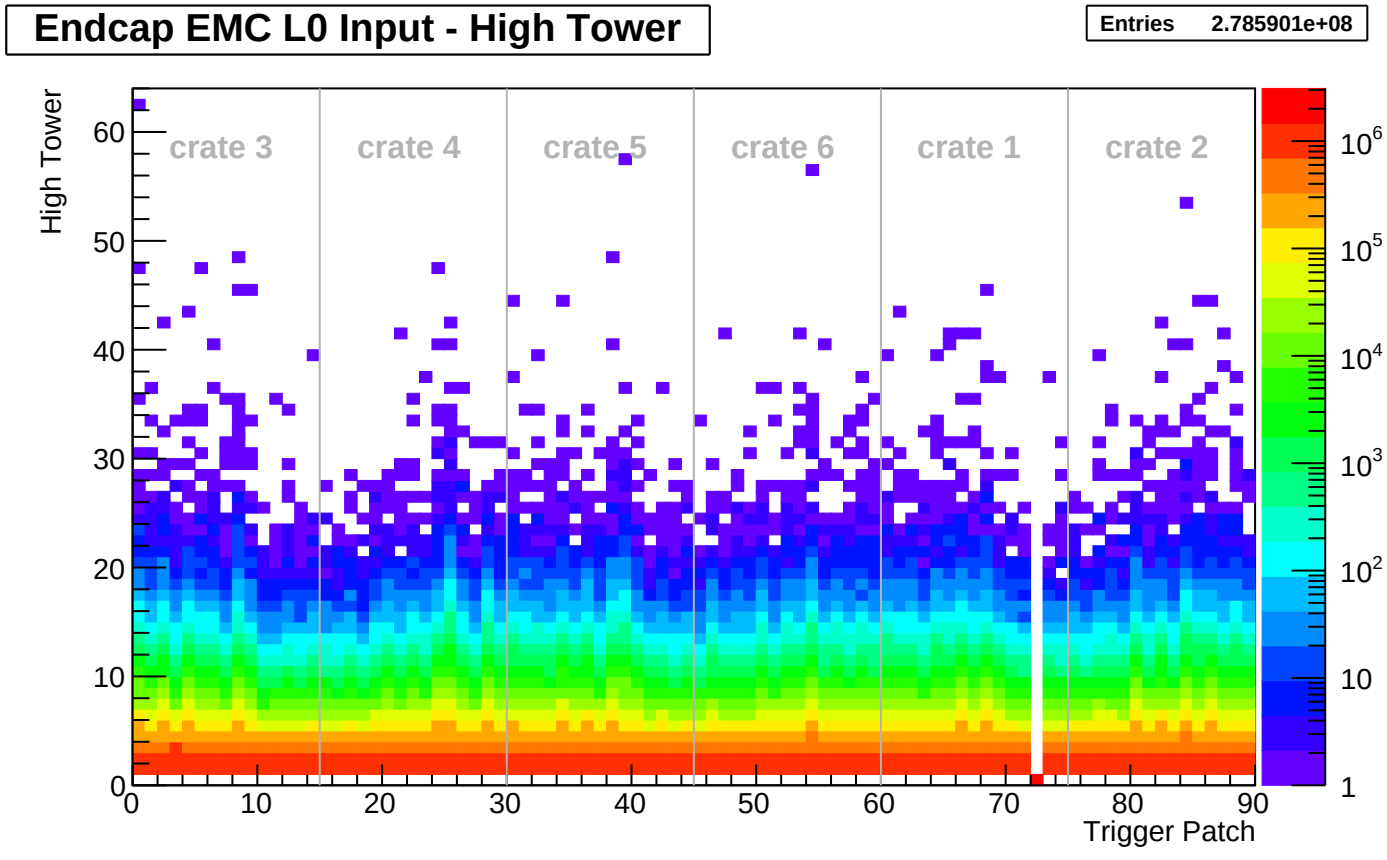
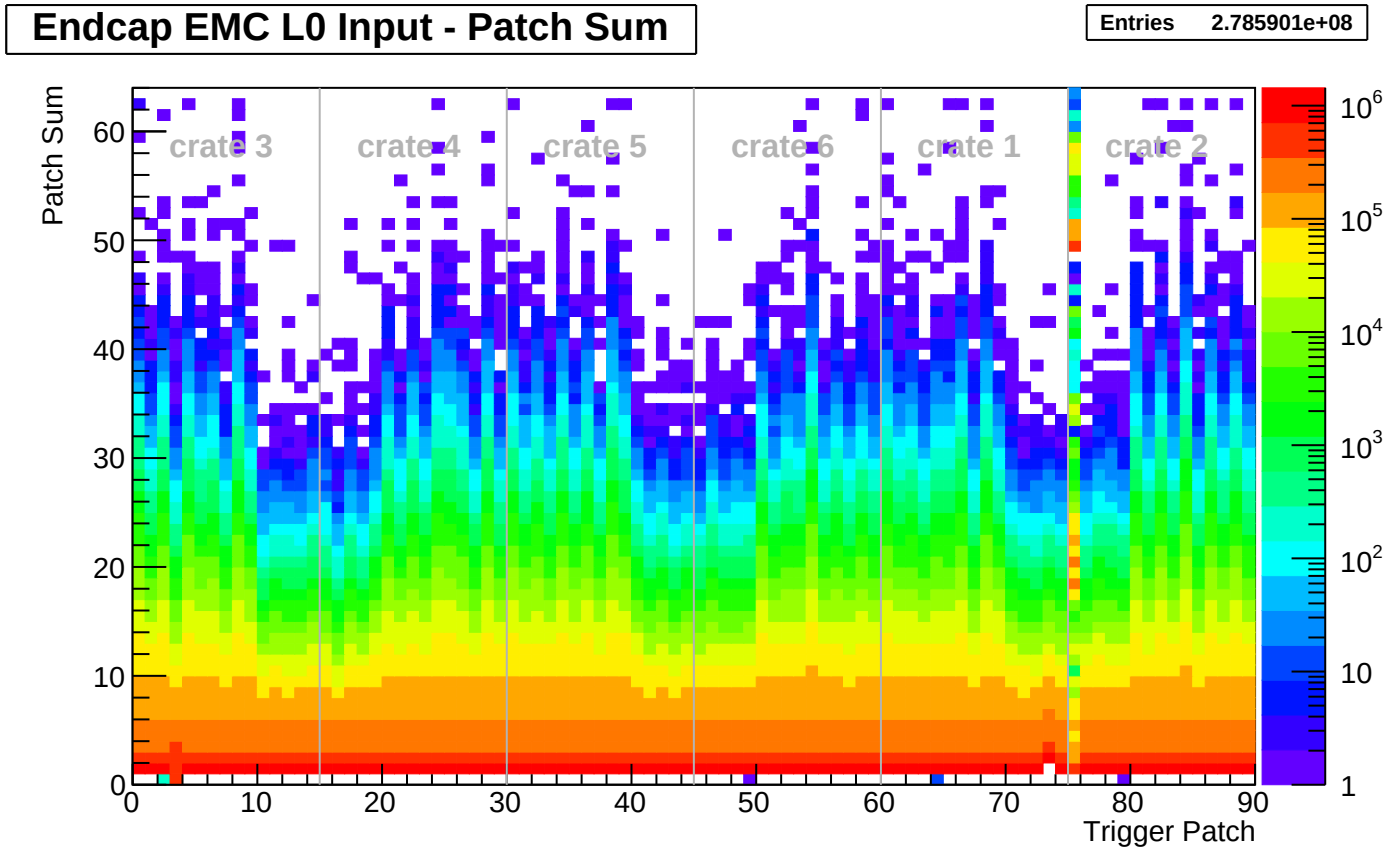
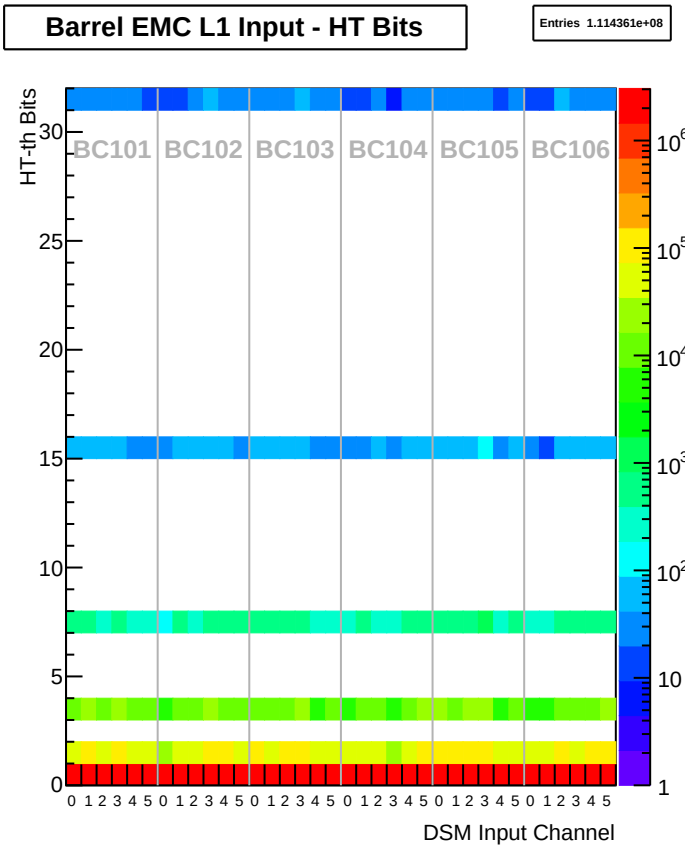
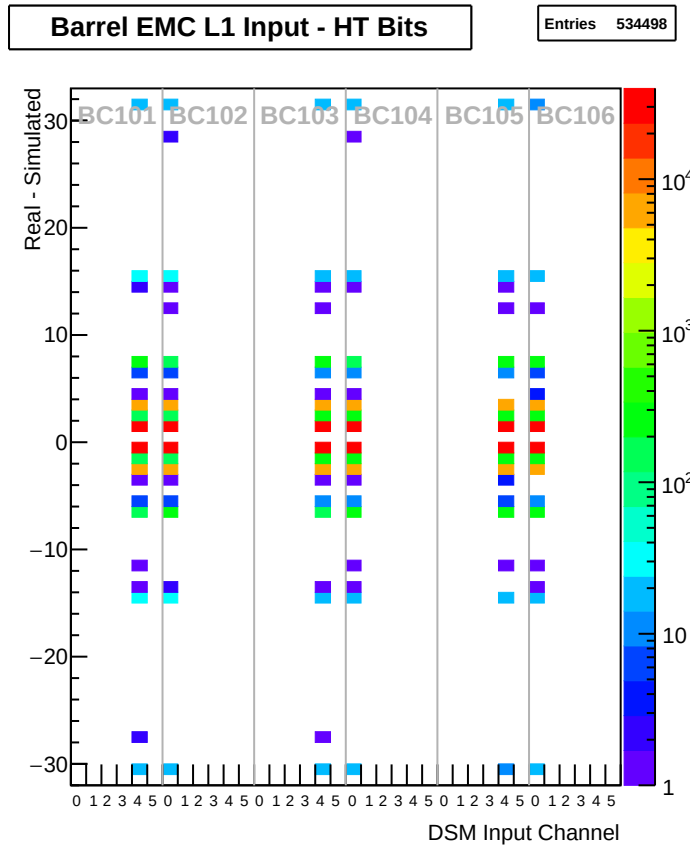

Barrel EMC L0 Input - High Tower
Entries 9.286338e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

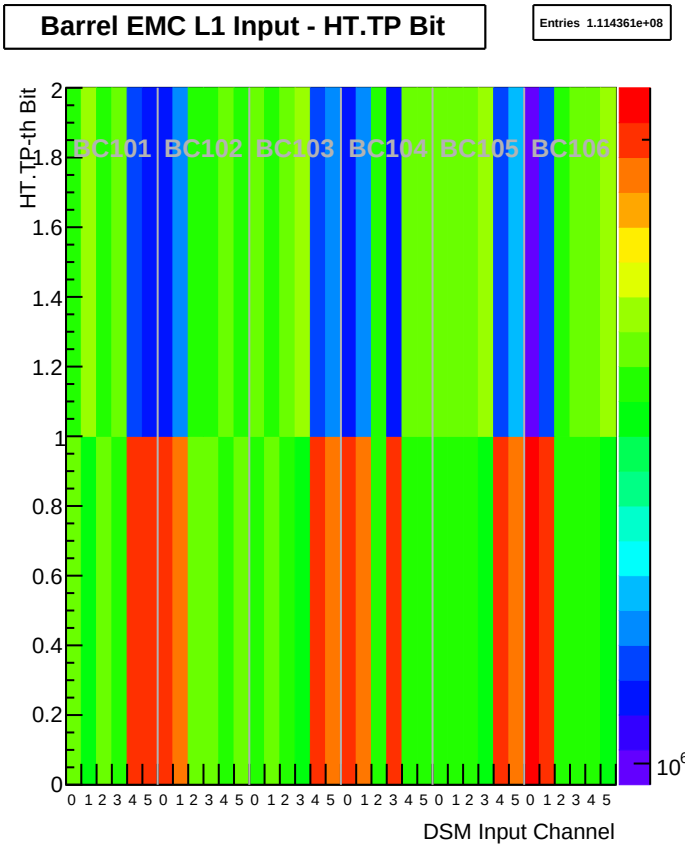

Barrel EMC L0 Input - Patch Sum
Entries 9.286338e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

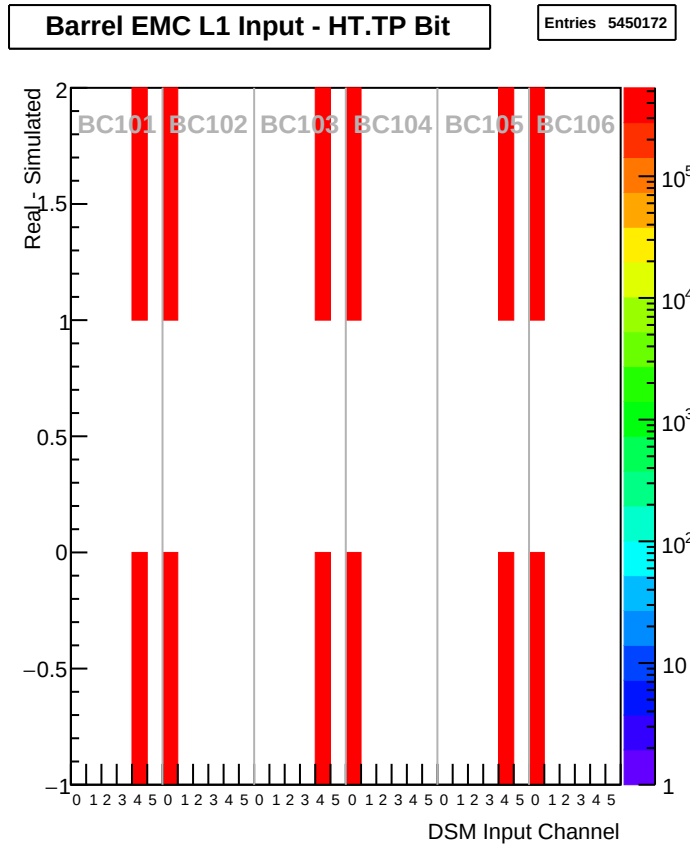

Endcap EMC L0 Input - High Tower
Entries 2.785901e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

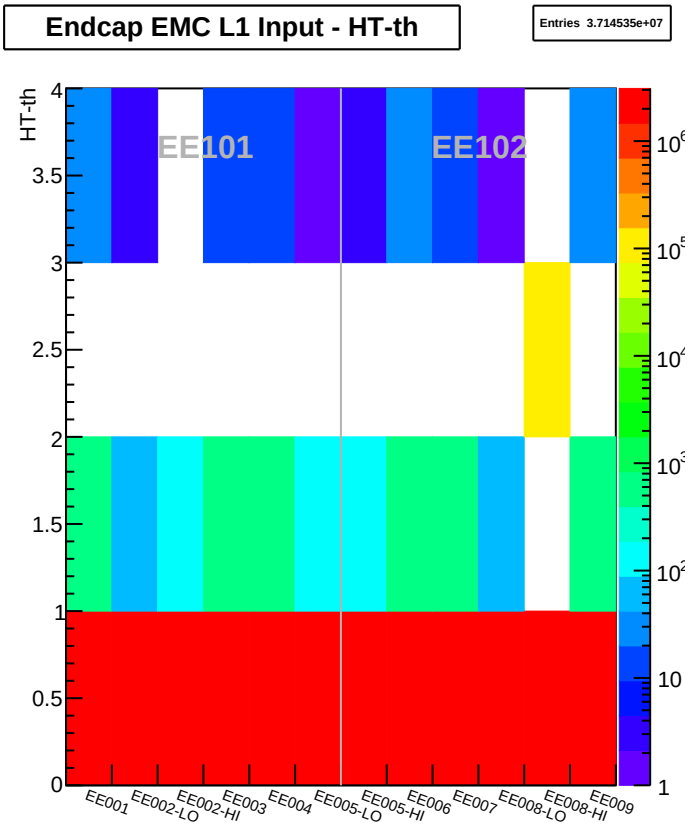

Endcap EMC L0 Input - Patch Sum
Entries 2.785901e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

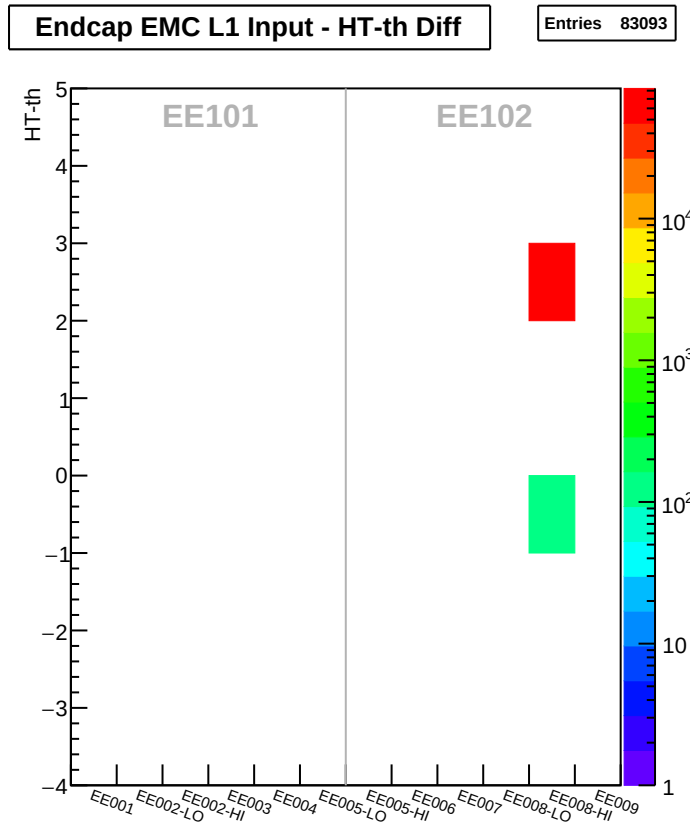

Barrel EMC L1 Input - HT Bits
Entries 1.114361e+08
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

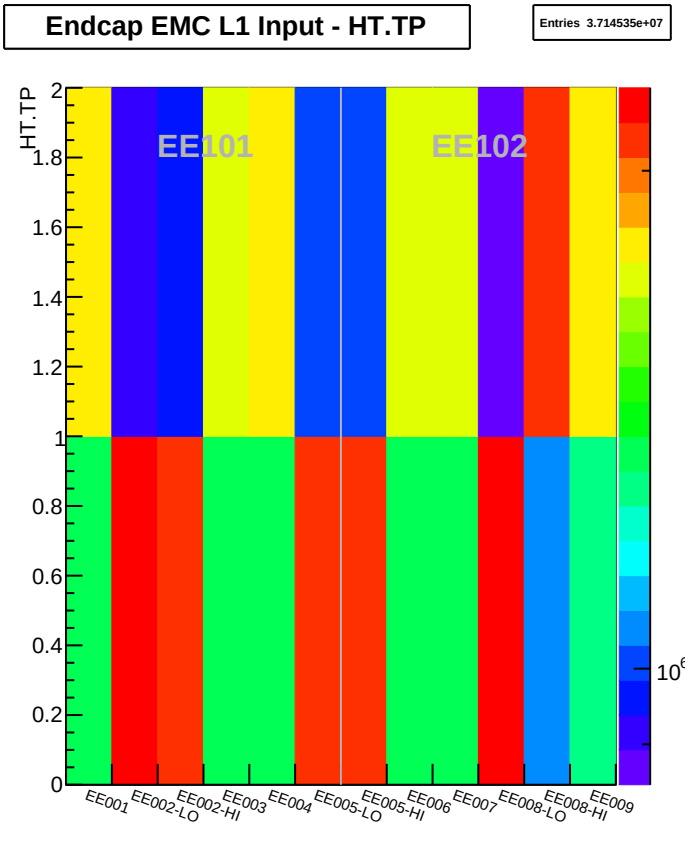

Barrel EMC L1 Input - HT Bits
Entries 534498
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

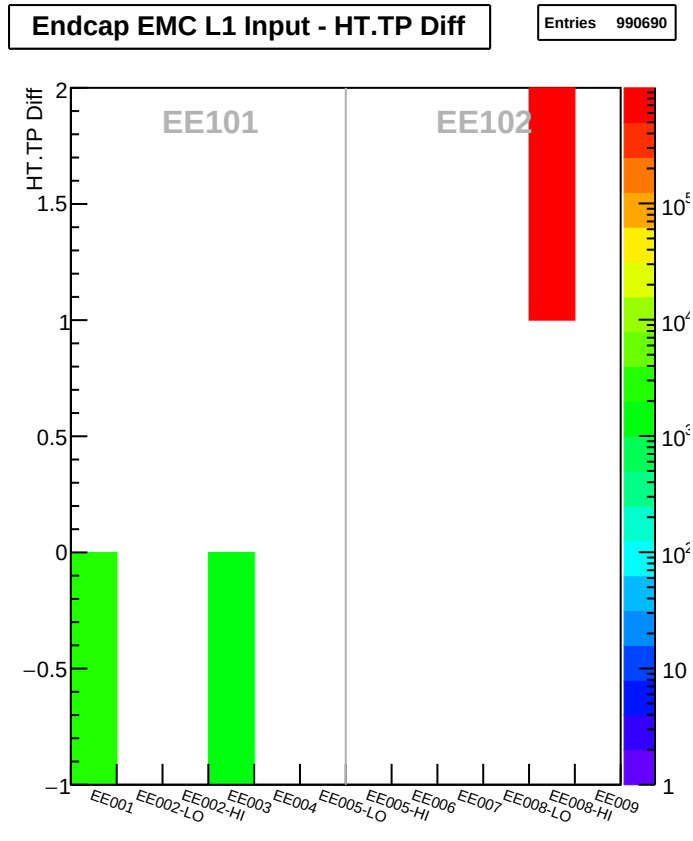

Barrel EMC L1 Input - HT.TP Bit
Entries 1.114361e+08
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

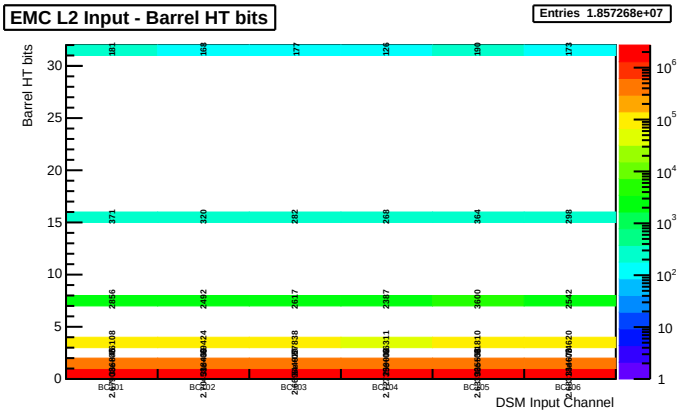

Barrel EMC L1 Input - HT.TP Bit
Entries 5450172
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

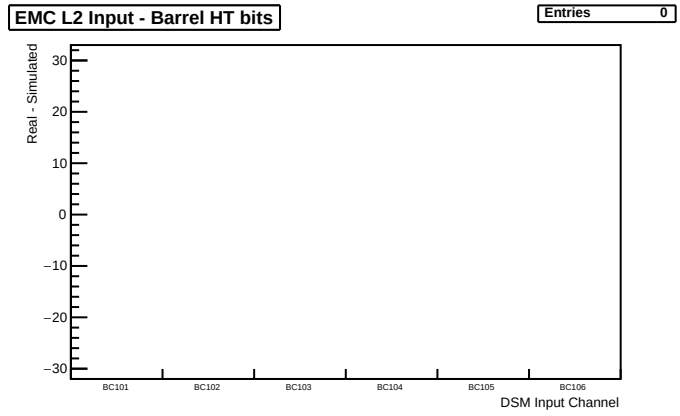

Endcap EMC L1 Input - HT-th
Entries 3.714535e+07
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

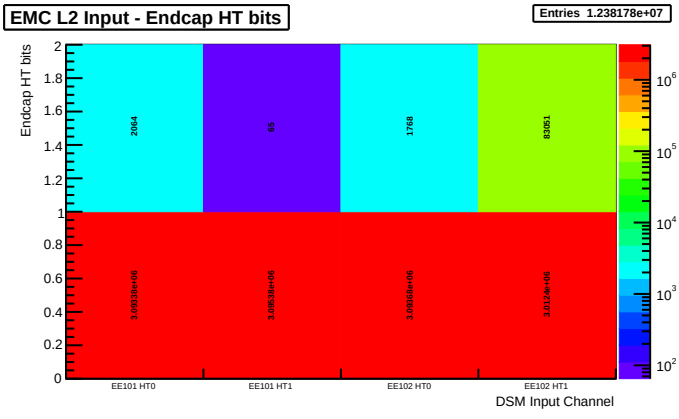

Endcap EMC L1 Input - HT-th Diff
Entries 83093
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

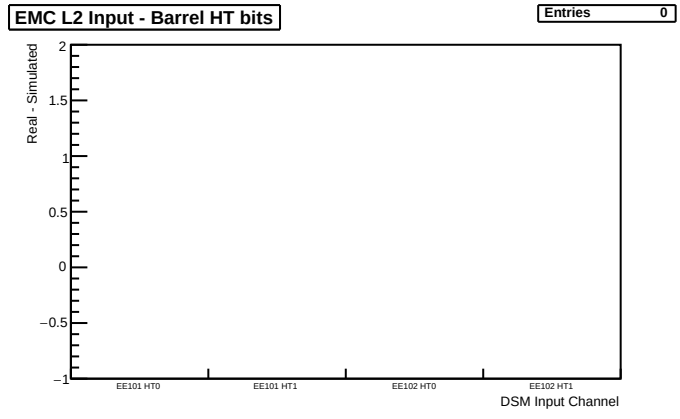

Endcap EMC L1 Input - HT.TP
Entries 3.714535e+07
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

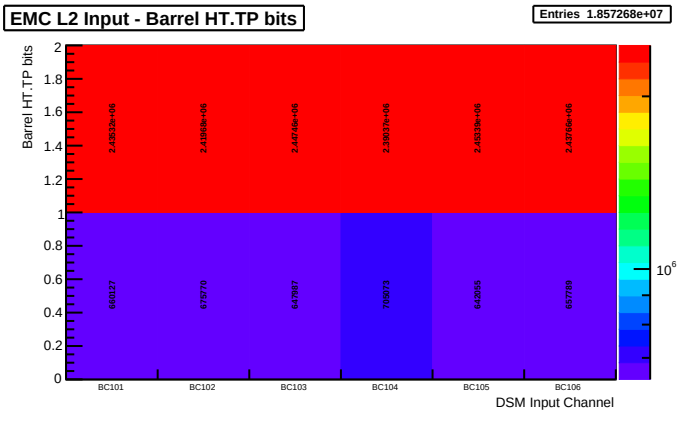

Endcap EMC L1 Input - HT.TP Diff
Entries 990690
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

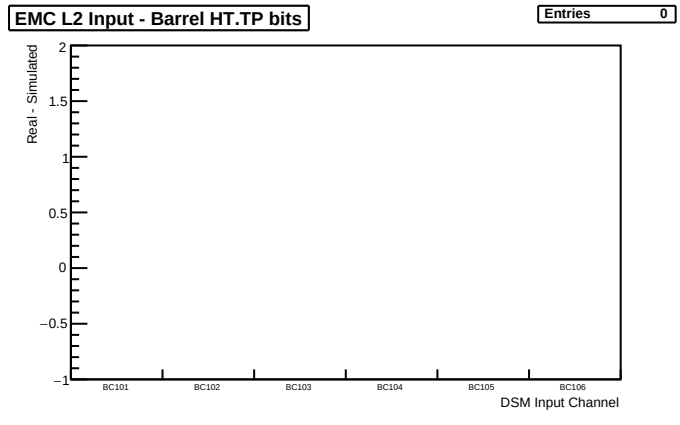

EMC L2 Input - Barrel HT bits
Entries 1.857268e+07
Barrel HT bits
DSM Input Channel

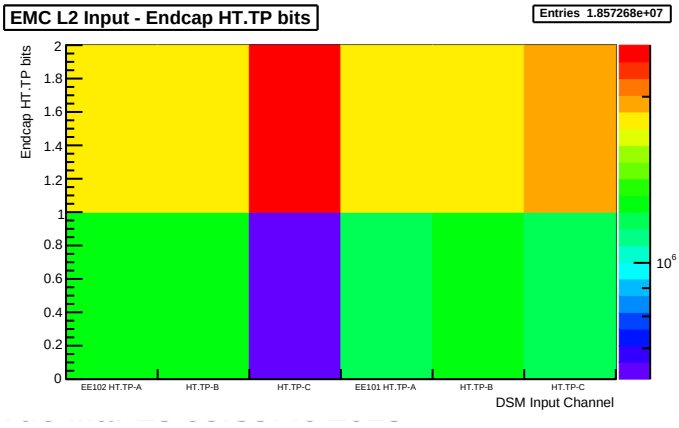

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel

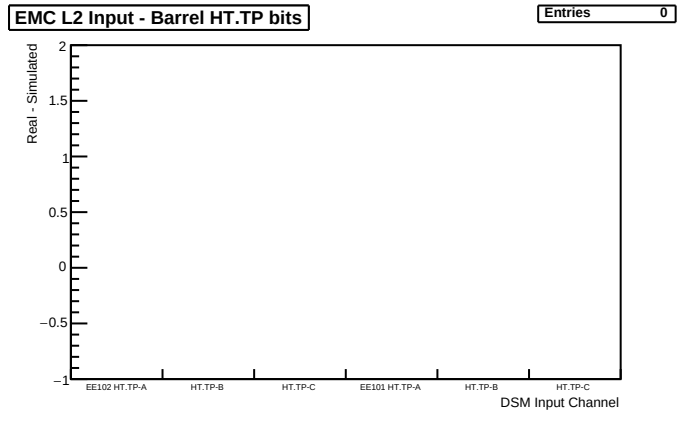

EMC L2 Input - Endcap HT bits
Entries 1.238178e+07
Endcap HT bits
DSM Input Channel

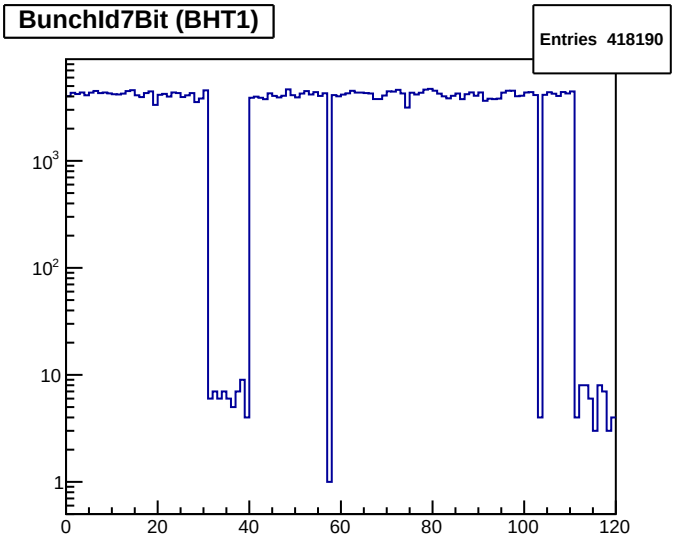

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel

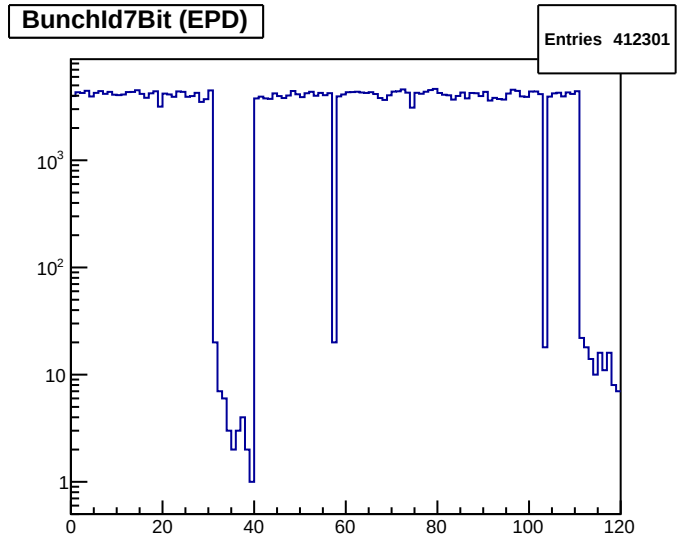

EMC L2 Input - Barrel HT.TP bits
Entries 1.857268e+07
Barrel HT.TP bits
DSM Input Channel

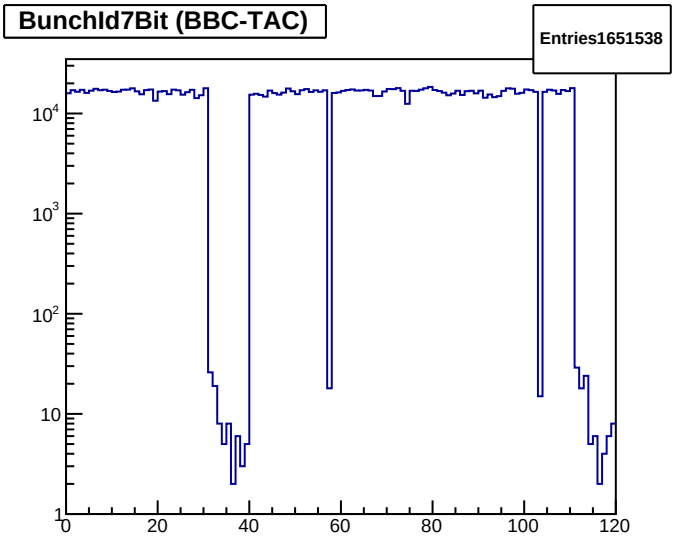

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel

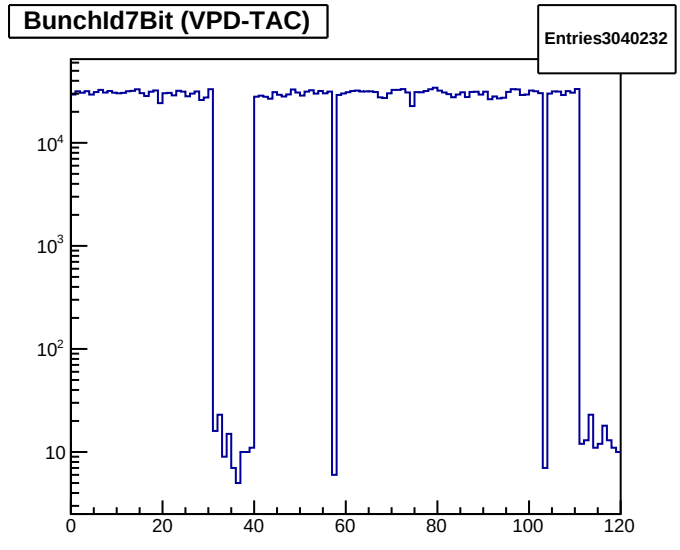

EMC L2 Input - Endcap HT.TP bits
Entries 1.857268e+07
Endcap HT.TP bits
DSM Input Channel

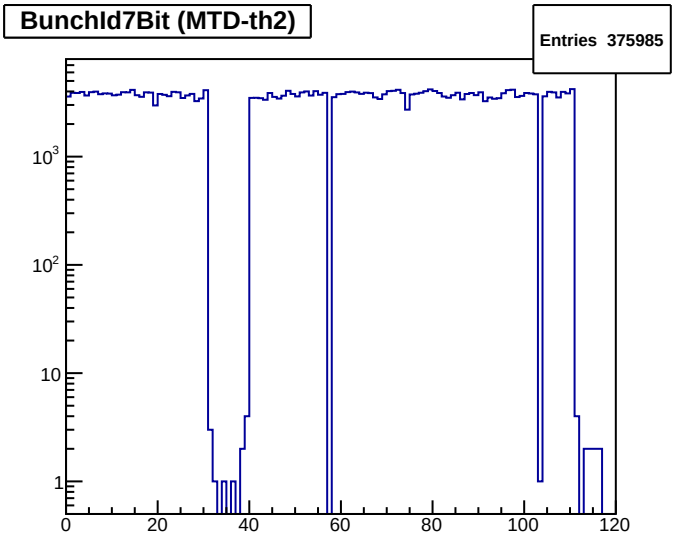

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel

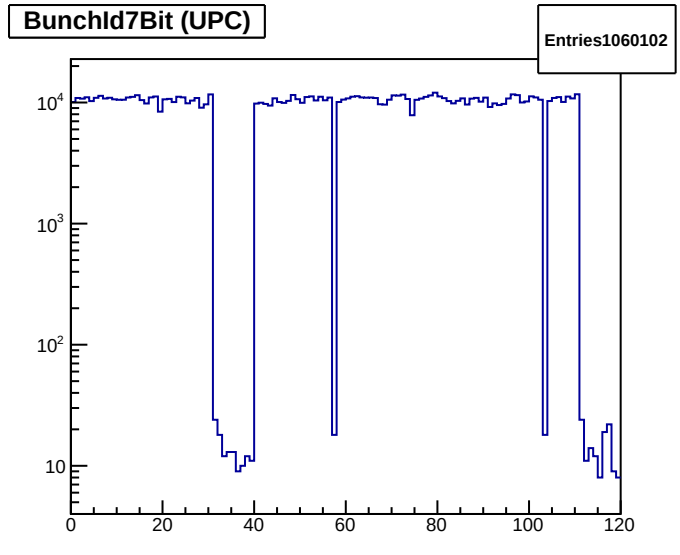

BunchId7Bit (BHT1)
Entries 418190

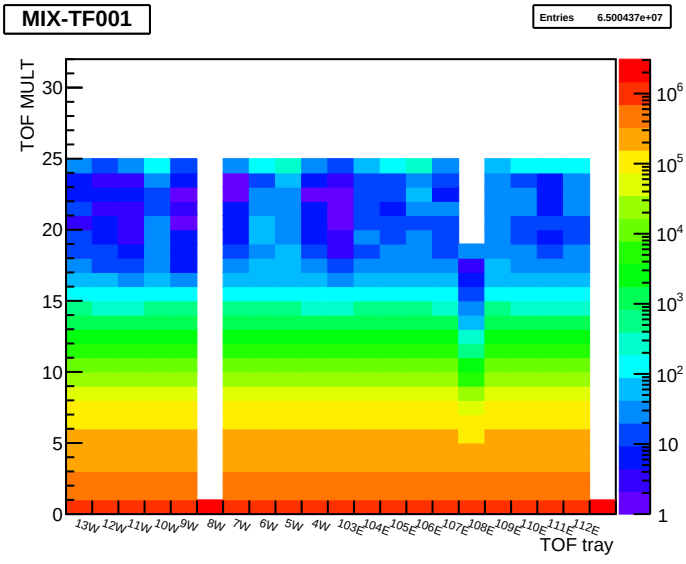

BunchId7Bit (EPD)
Entries 412301

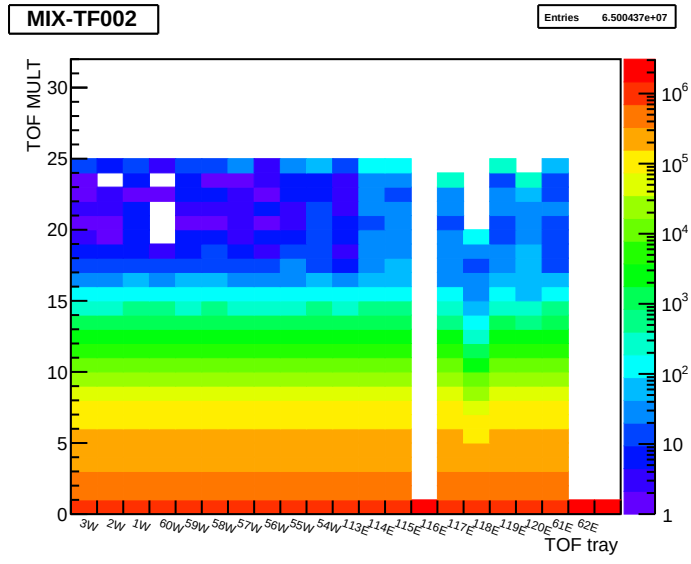

BunchId7Bit (BBC-TAC)
Entries1651538

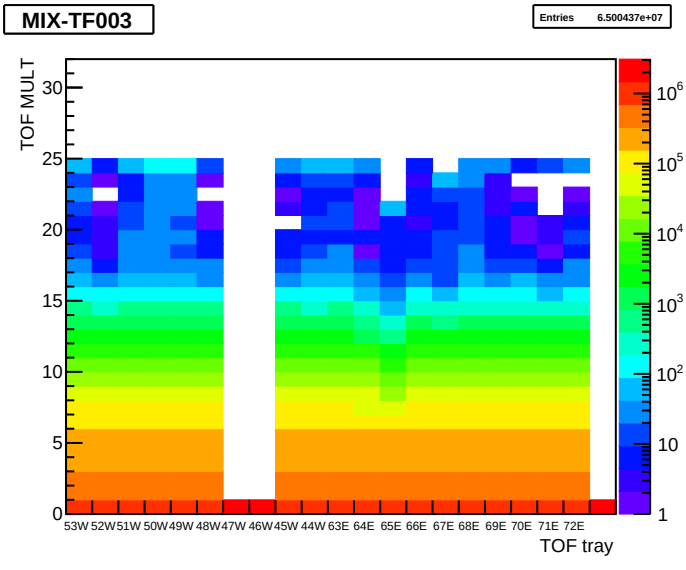

BunchId7Bit (VPD-TAC)
Entries3040232

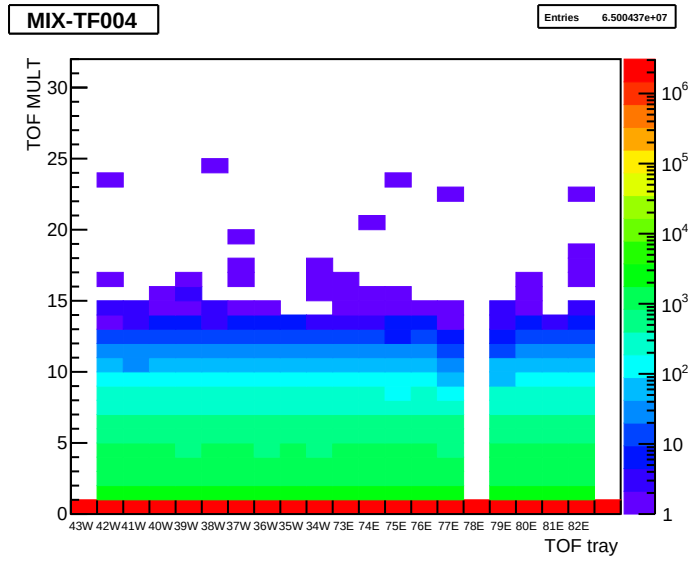

BunchId7Bit (MTD-th2)
Entries 375985

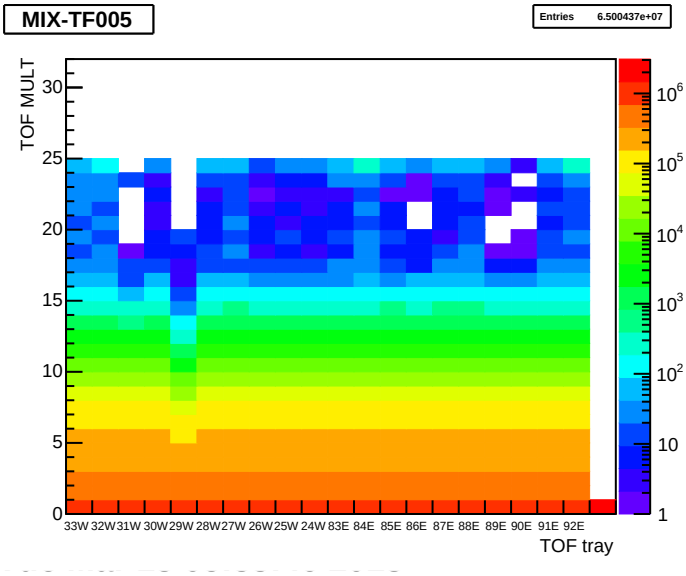

BunchId7Bit (UPC)
Entries1060102

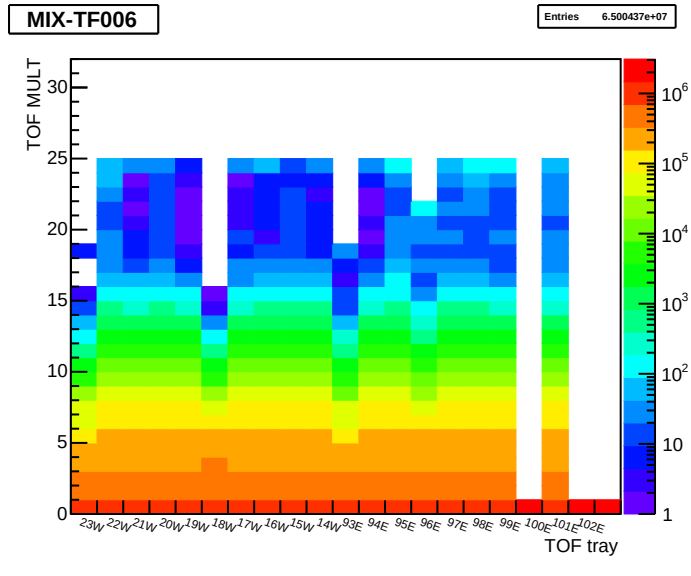

MIX-TF001
Entries 6.500437e+07
TOF MULT
TOF tray

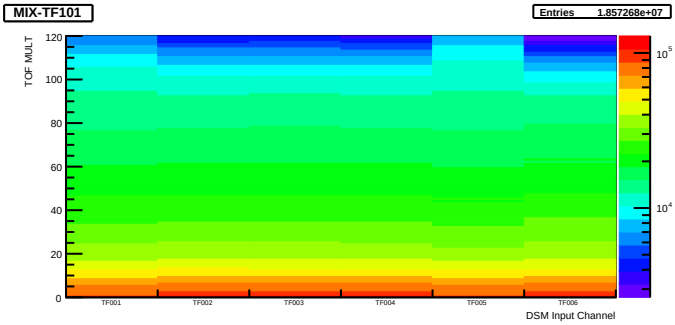

MIX-TF002
Entries 6.500437e+07
TOF MULT
TOF tray

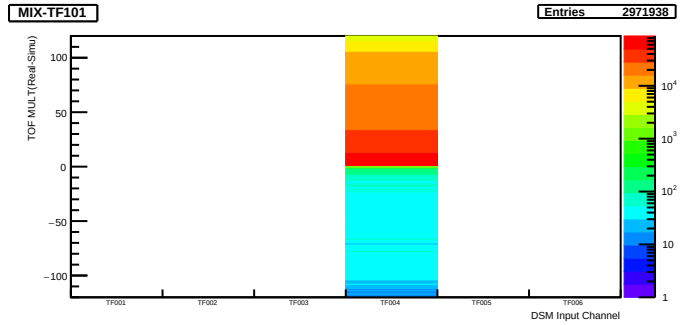

MIX-TF003
Entries 6.500437e+07
TOF MULT
TOF tray

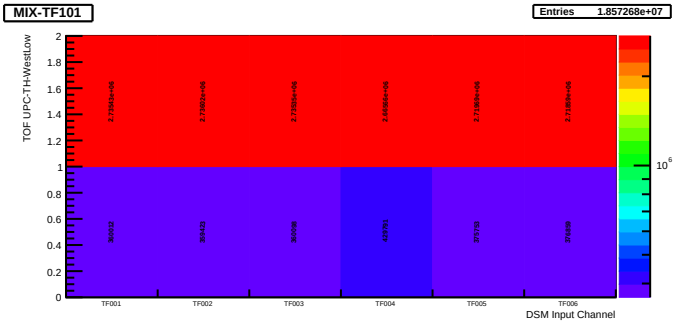

MIX-TF004
Entries 6.500437e+07
TOF MULT
TOF tray

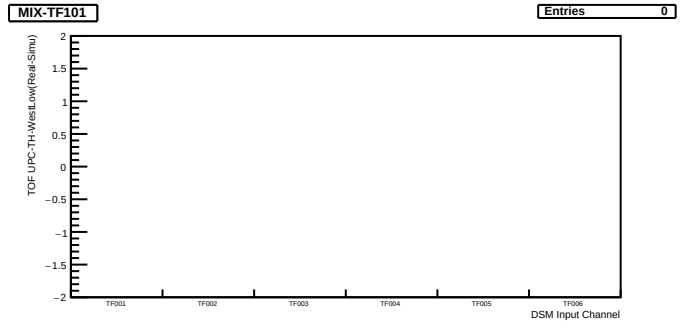

MIX-TF005
Entries 6.500437e+07
TOF MULT
TOF tray

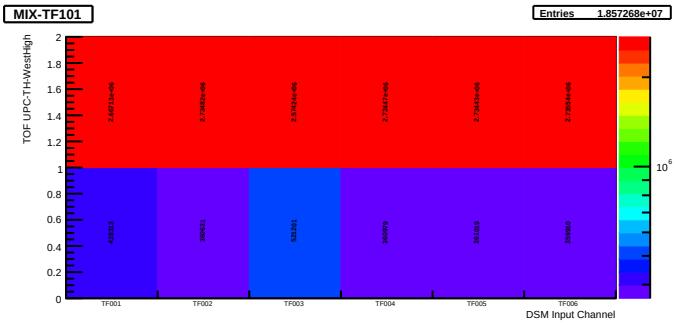

MIX-TF006
Entries 6.500437e+07
TOF MULT
TOF tray

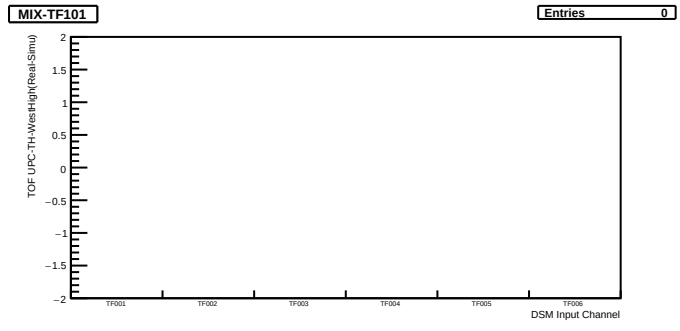

MIX-TF101
Entries 1.857268e+07
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

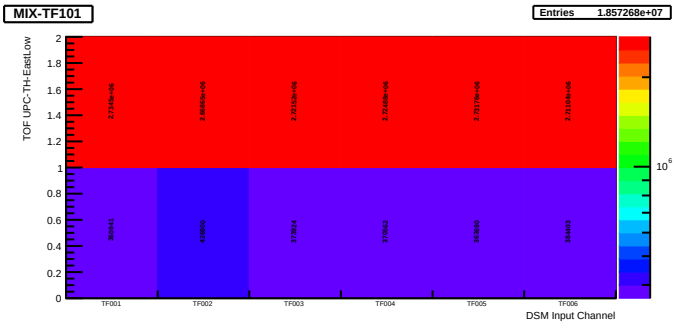

MIX-TF101
Entries 2971938
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

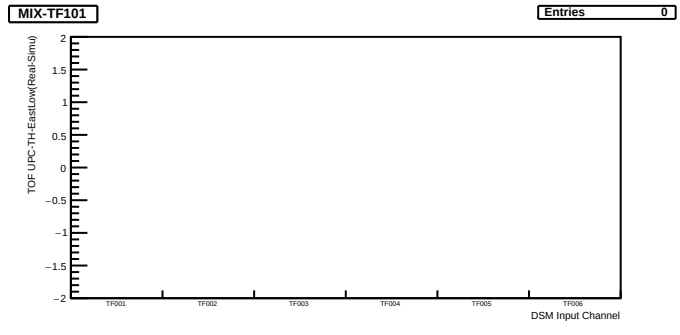

MIX-TF101
Entries 1.857268e+07
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

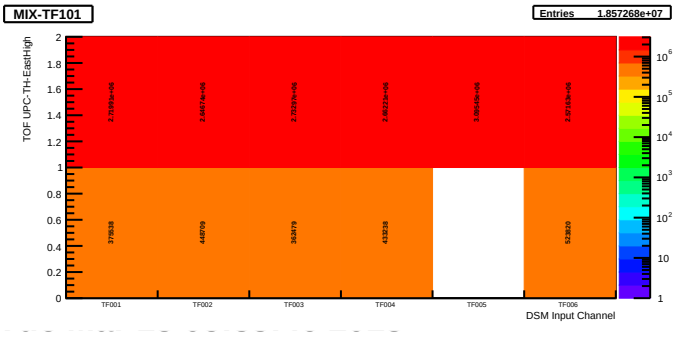

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

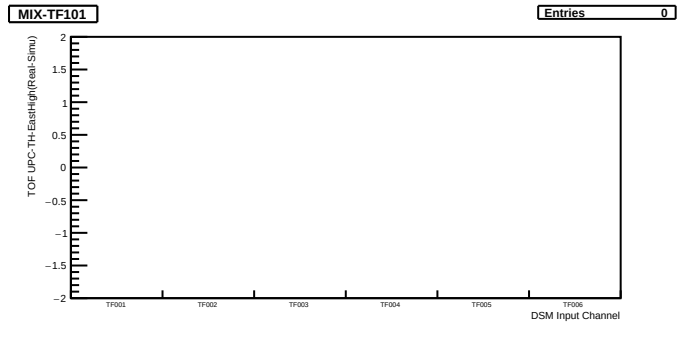

MIX-TF101
Entries 1.857268e+07
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

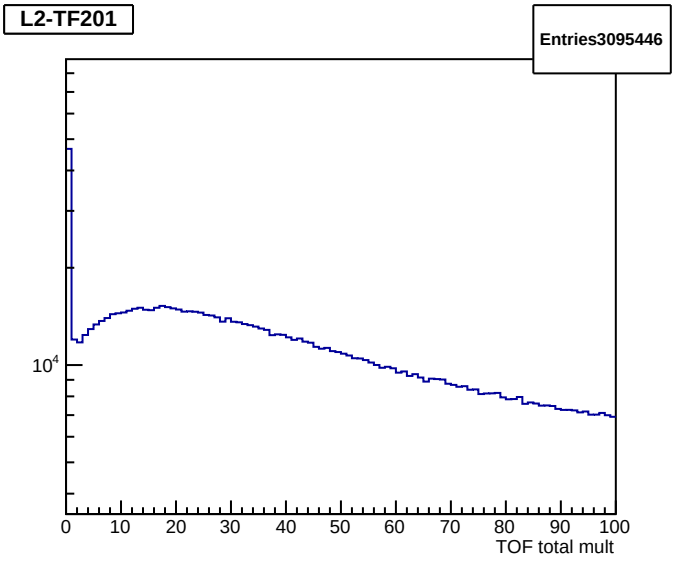

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

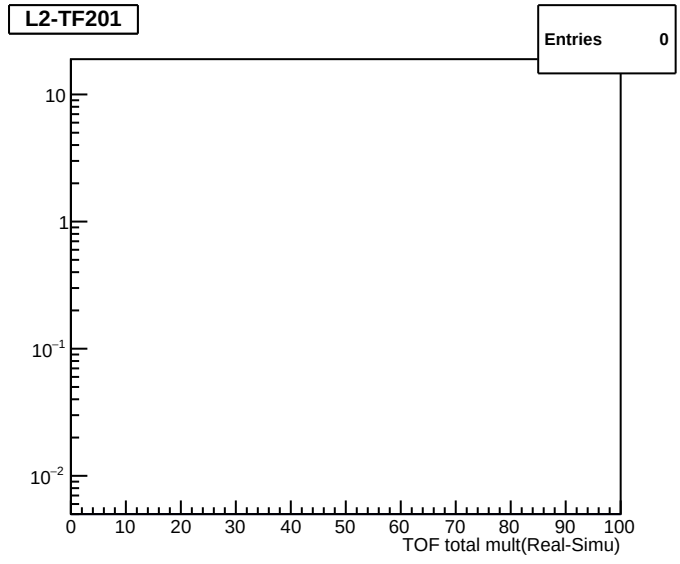

MIX-TF101
Entries 1.857268e+07
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

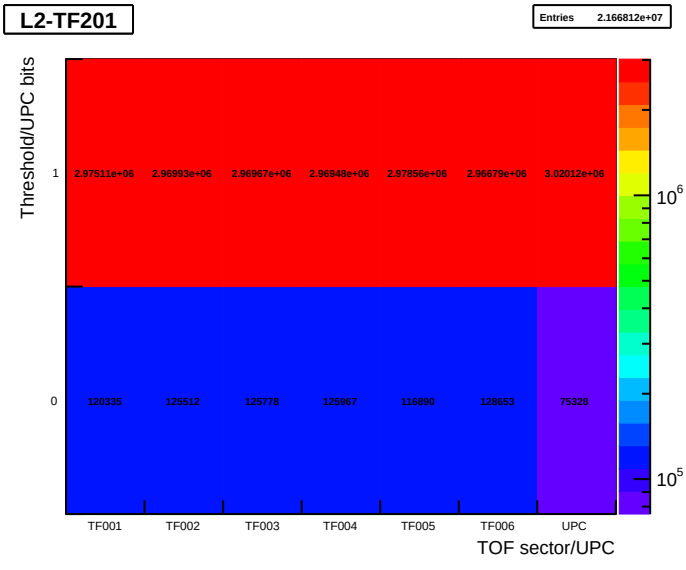

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

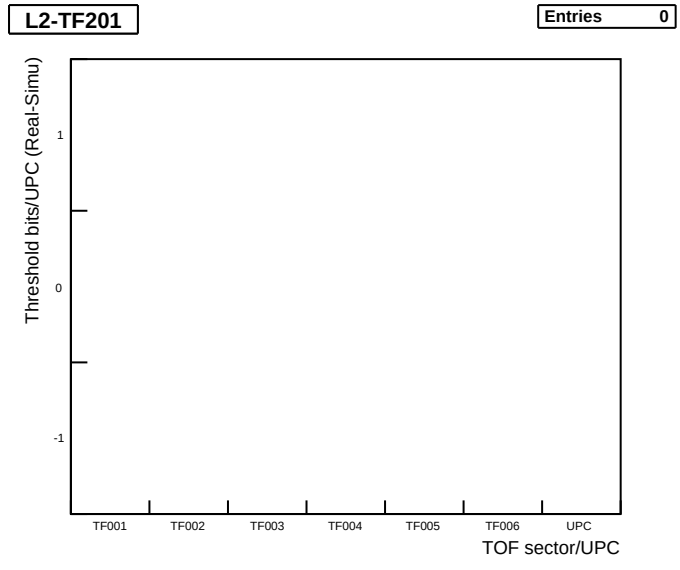

MIX-TF101
Entries 1.857268e+07
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

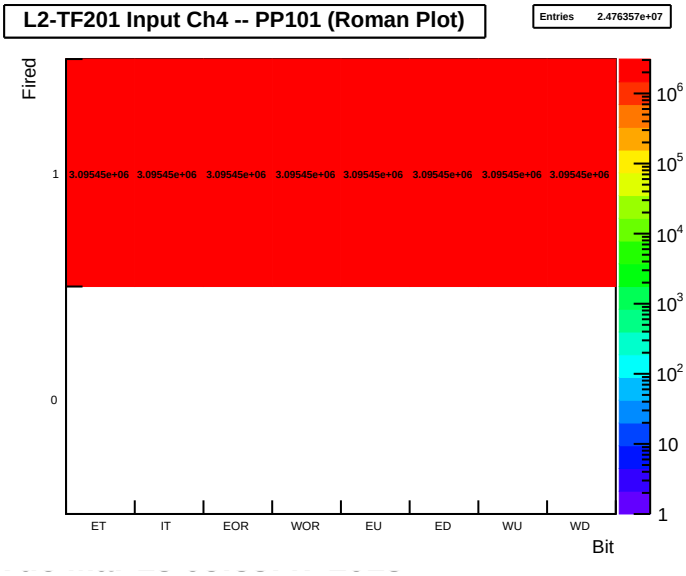

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

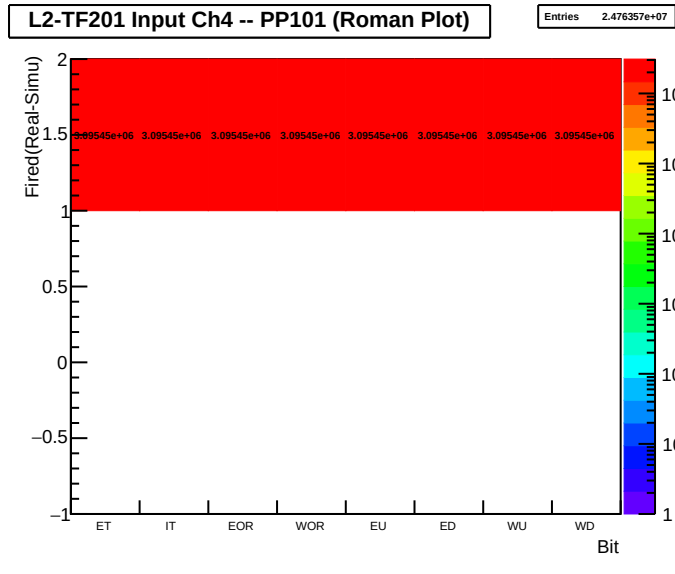

L2-TF201
Entries3095446
10^4
0 10 20 30 40 50 60 70 80 90 100
TOF total mult

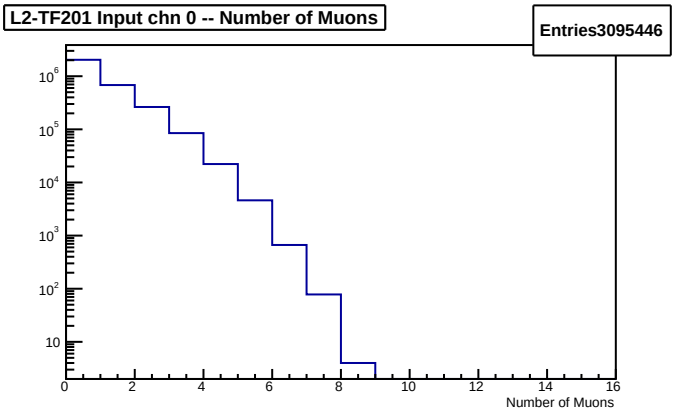

L2-TF201
Entries 0
10
1
10^{-1}
10^{-2}
0 10 20 30 40 50 60 70 80 90 100
TOF total mult(Real-Simu)

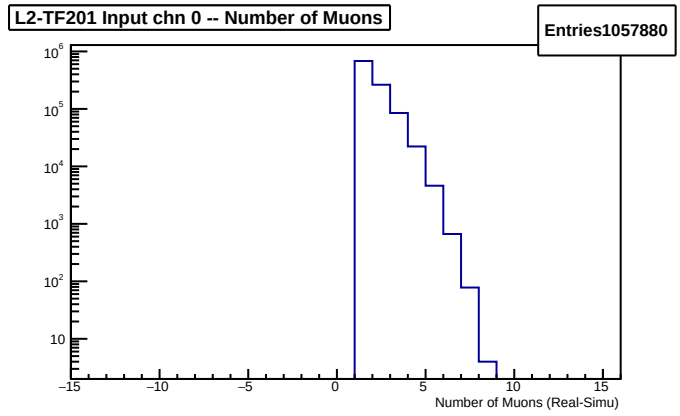

L2-TF201
Entries 2.166812e+07
Threshold/UPC bits
1
0
2.97511e+06 2.96993e+06 2.96967e+06 2.96948e+06 2.97856e+06 2.96679e+06 3.02012e+06
120335 125512 125778 125967 116890 128653 75328
10^6
10^5
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

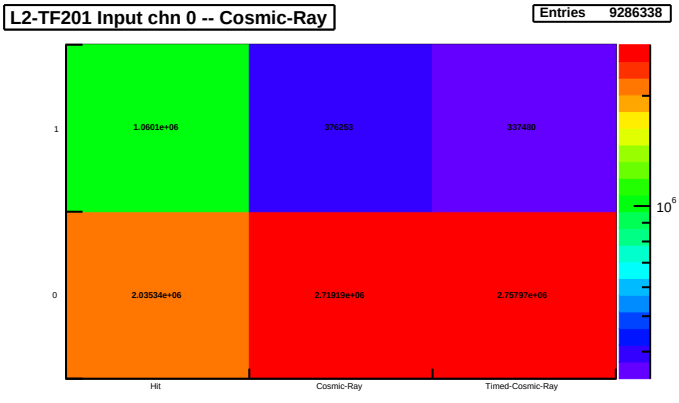

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
1
0
-1
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

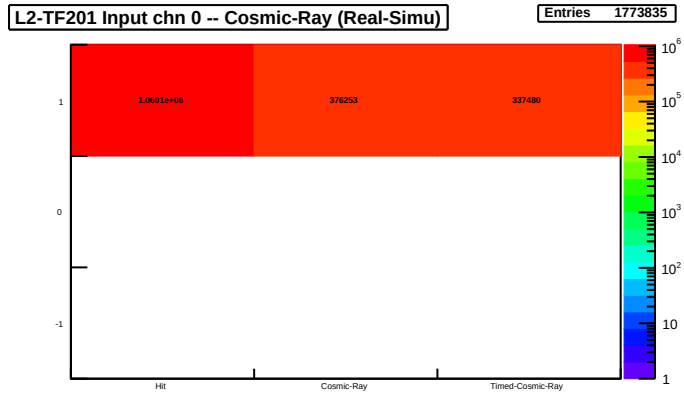

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 2.476357e+07
Fired
1
0
3.09545e+06 3.09545e+06 3.09545e+06 3.09545e+06 3.09545e+06 3.09545e+06 3.09545e+06 3.09545e+06
10^6
10^5
10^4
10^3
10^2
10
1
ET IT EOR WOR EU ED WU WD
Bit

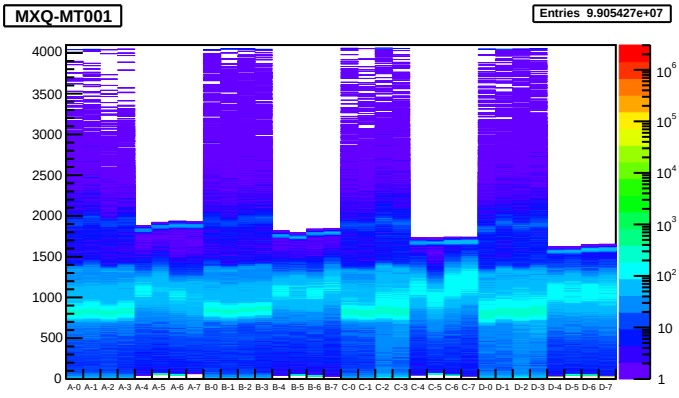

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 2.476357e+07
Fired(Real-Simu)
2
1.5
1
0.5
0
−0.5
−1
3.09545e+06 3.09545e+06 3.09545e+06 3.09545e+06 3.09545e+06 3.09545e+06 3.09545e+06 3.09545e+06
10^6
10^5
10^4
10^3
10^2
10
1
ET IT EOR WOR EU ED WU WD
Bit

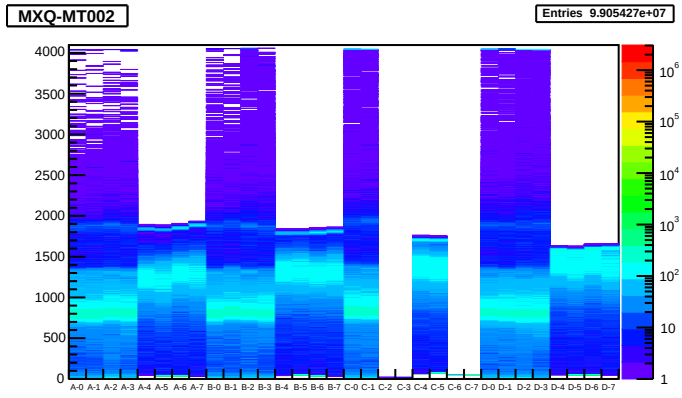

L2-TF201 Input chn 0 -- Number of Muons
Entries3095446
Number of Muons

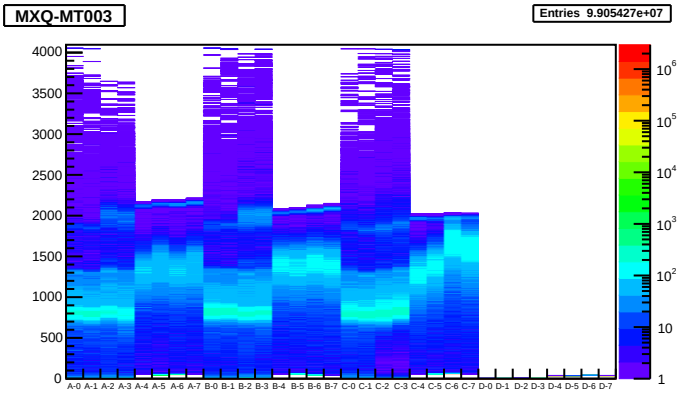

L2-TF201 Input chn 0 -- Number of Muons
Entries1057880
Number of Muons (Real-Simu)

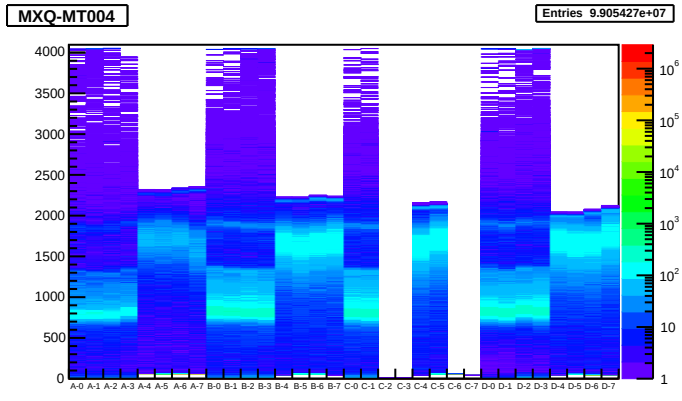

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 9286338
1.0601e+06
376253
337480
2.03534e+06
2.71919e+06
2.75797e+06
Hit
Cosmic-Ray
Timed-Cosmic-Ray

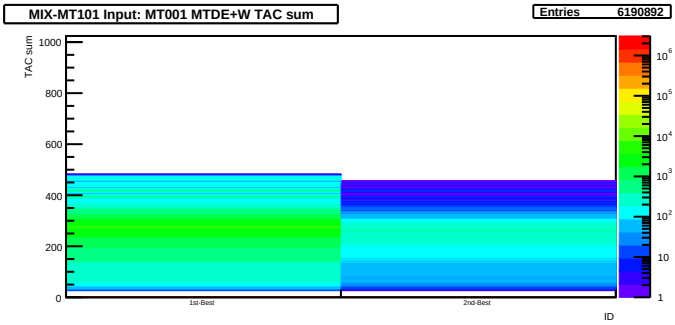

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 1773835
1.0601e+06
376253
337480
Hit
Cosmic-Ray
Timed-Cosmic-Ray

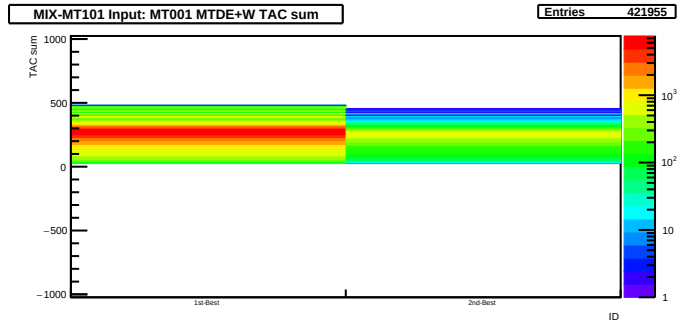

MXQ-MT001
Entries 9.905427e+07

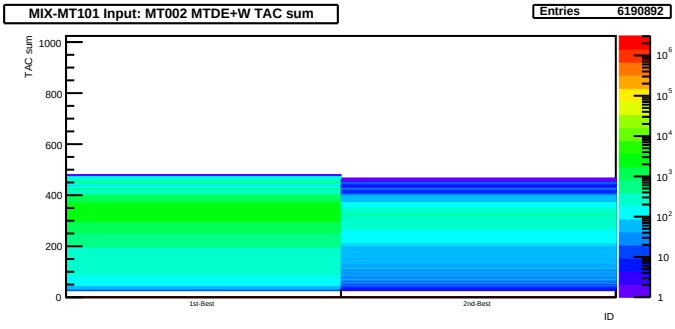

MXQ-MT002
Entries 9.905427e+07

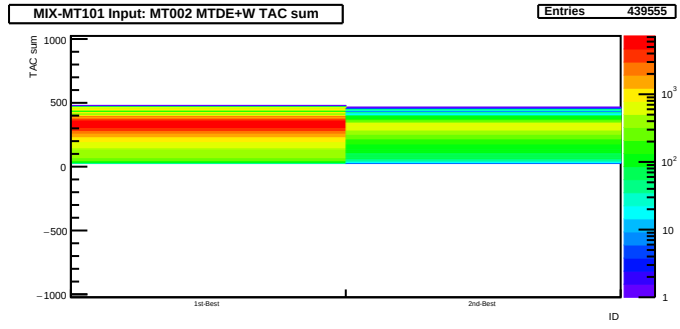

MXQ-MT003
Entries 9.905427e+07

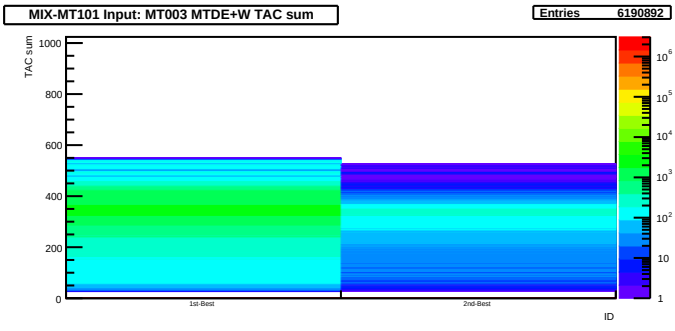

MXQ-MT004
Entries 9.905427e+07

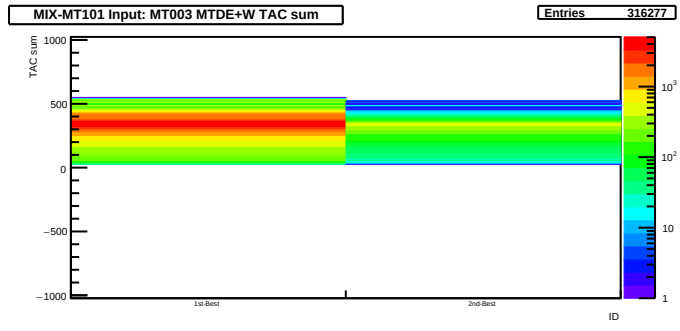

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 6190892
TAC sum
1st-Best
2nd-Best
ID

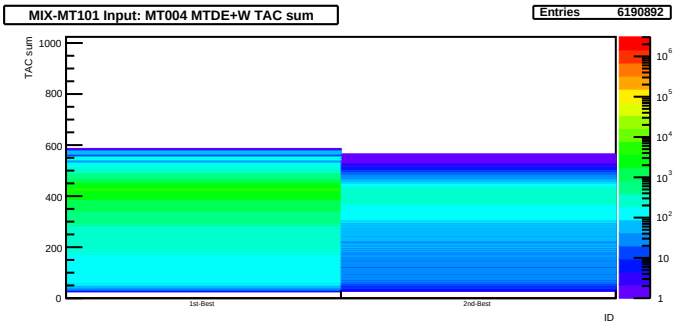

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 421955
TAC sum
1st-Best
2nd-Best
ID

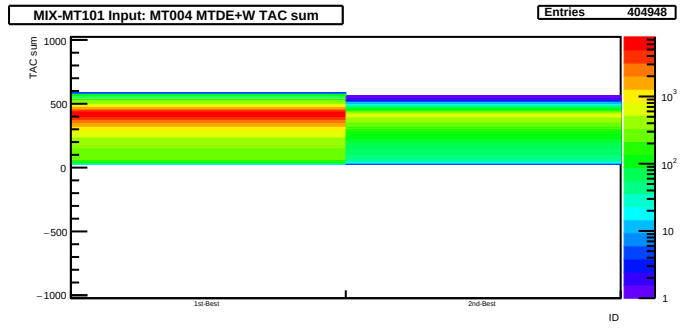

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 6190892
TAC sum
1st-Best
2nd-Best
ID

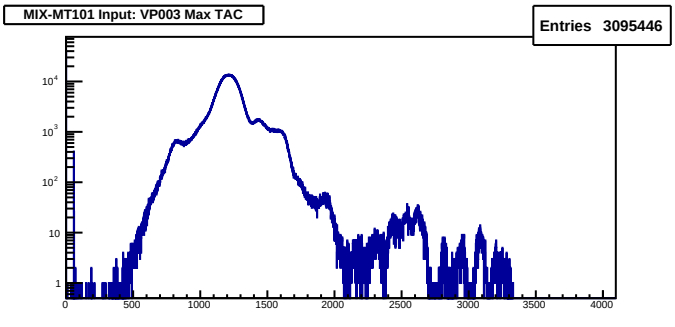

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 439555
TAC sum
1st-Best
2nd-Best
ID

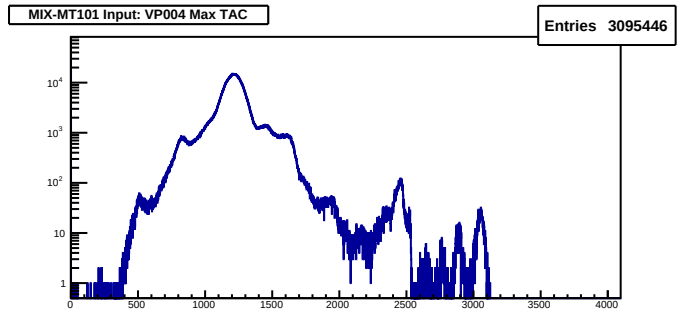

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 6190892
TAC sum
1st-Best
2nd-Best
ID

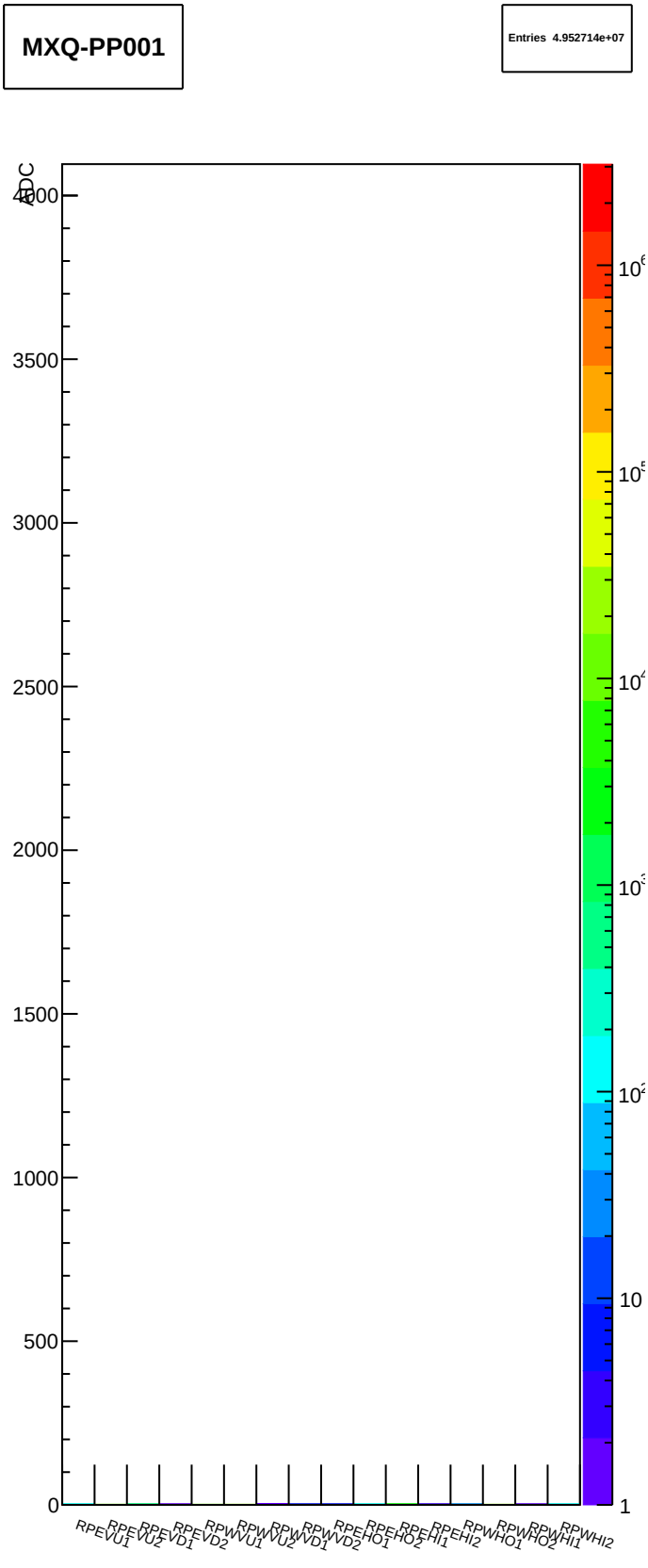

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 316277
TAC sum
1st-Best
2nd-Best
ID

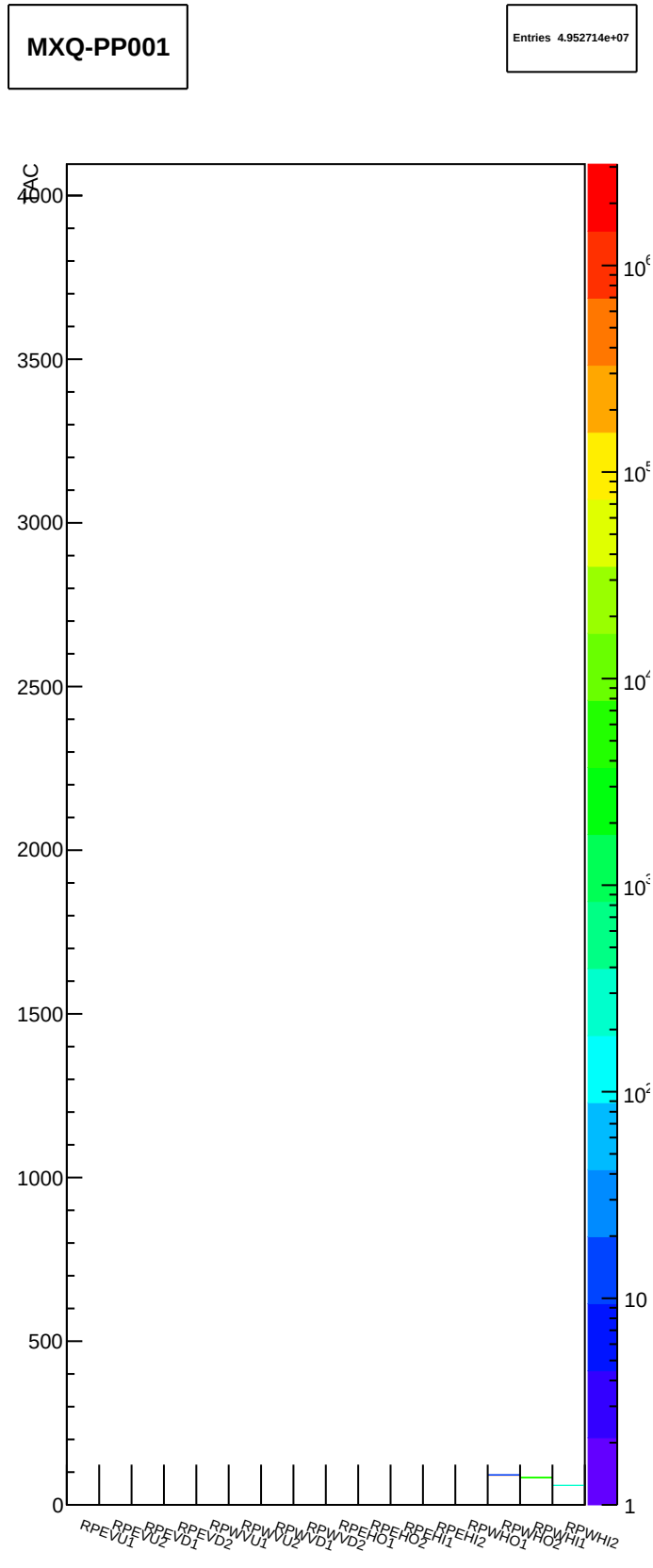

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 6190892
TAC sum
1st-Best
2nd-Best
ID

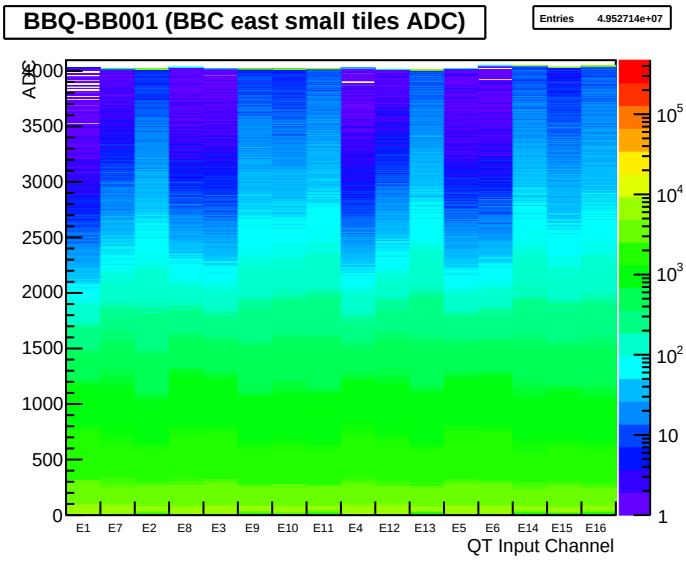

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 404948
TAC sum
1st-Best
2nd-Best
ID

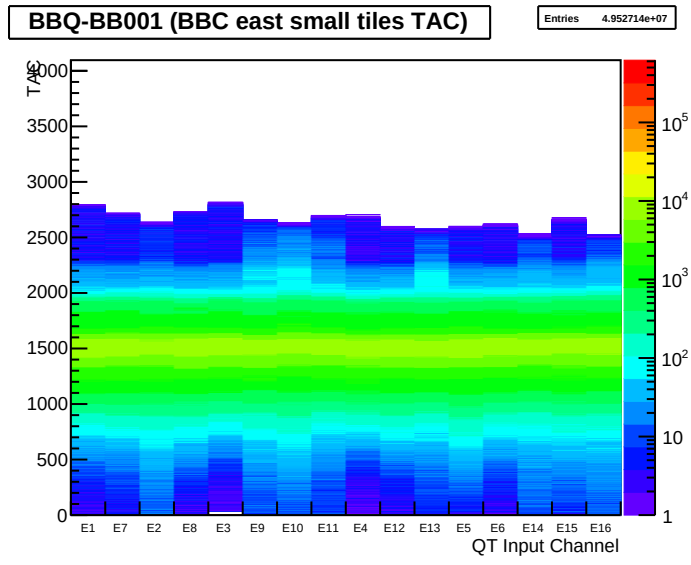

MIX-MT101 Input: VP003 Max TAC
Entries 3095446

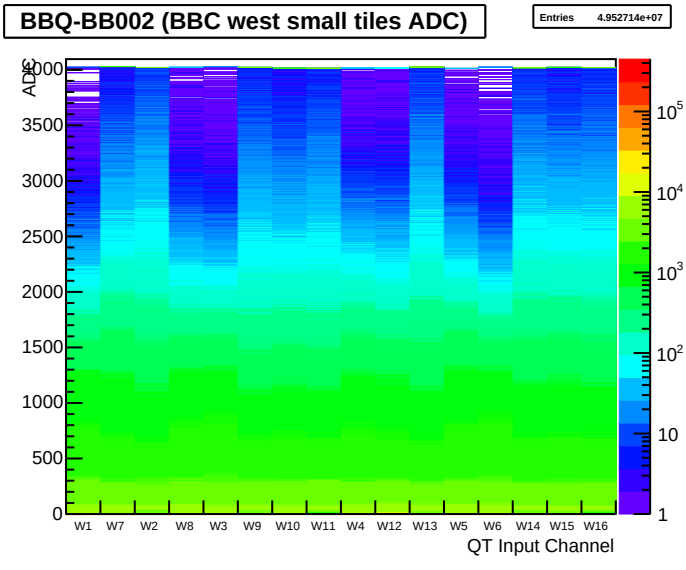

MIX-MT101 Input: VP004 Max TAC
Entries 3095446

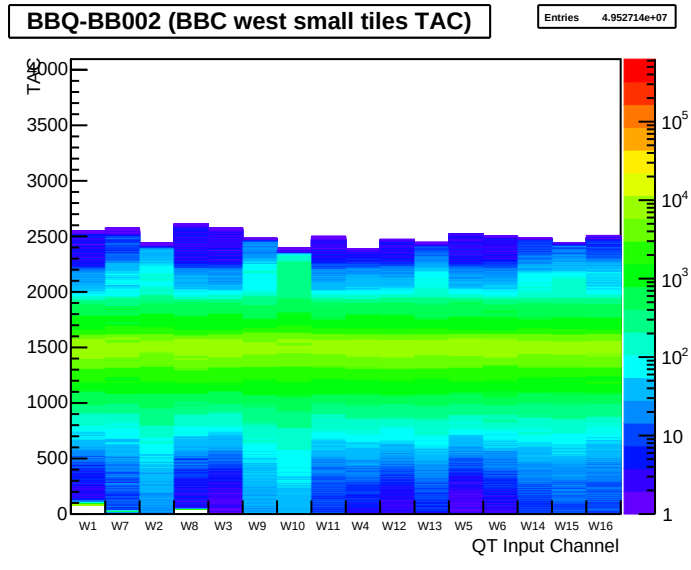

MXQ-PP001
Entries 4.952714e+07
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10^6
10^5
10^4
10^3
10^2
10
1

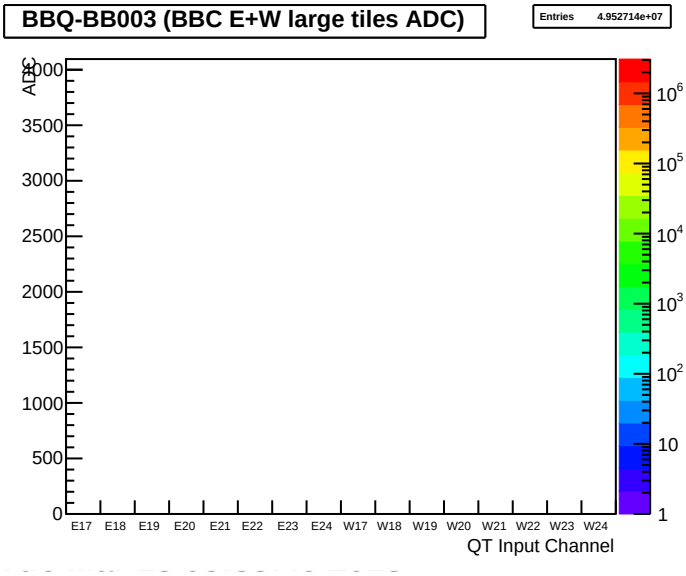

MXQ-PP001
Entries 4.952714e+07
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10^6
10^5
10^4
10^3
10^2
10
1

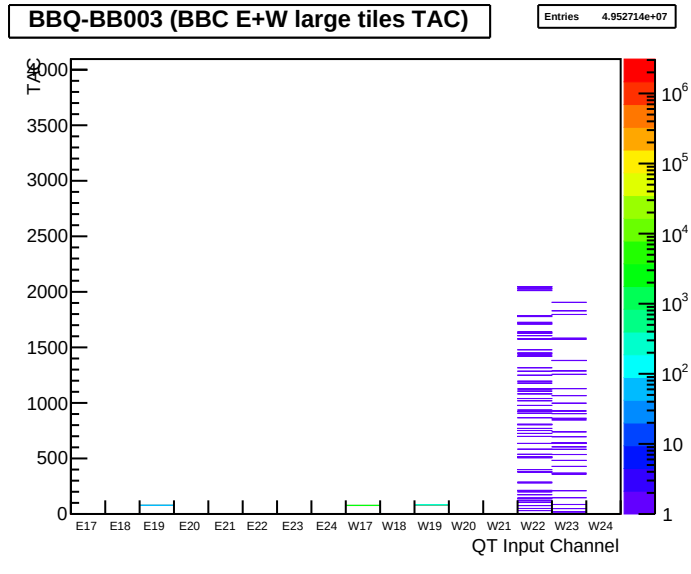

BBQ-BB001 (BBC east small tiles ADC)
Entries 4.952714e+07
ADC
QT Input Channel

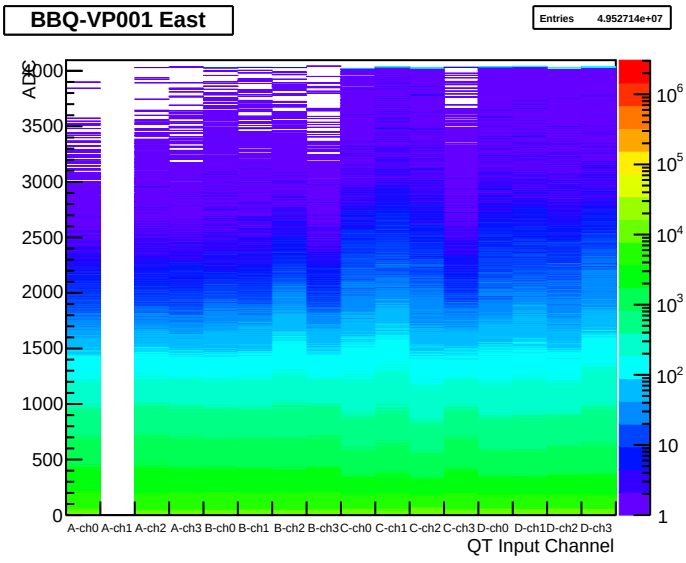

BBQ-BB001 (BBC east small tiles TAC)
Entries 4.952714e+07
TAC
QT Input Channel

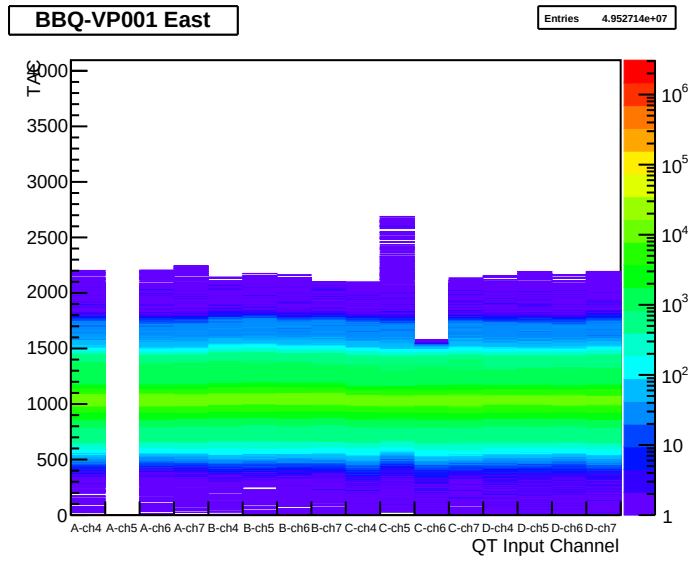

BBQ-BB002 (BBC west small tiles ADC)
Entries 4.952714e+07
ADC
QT Input Channel

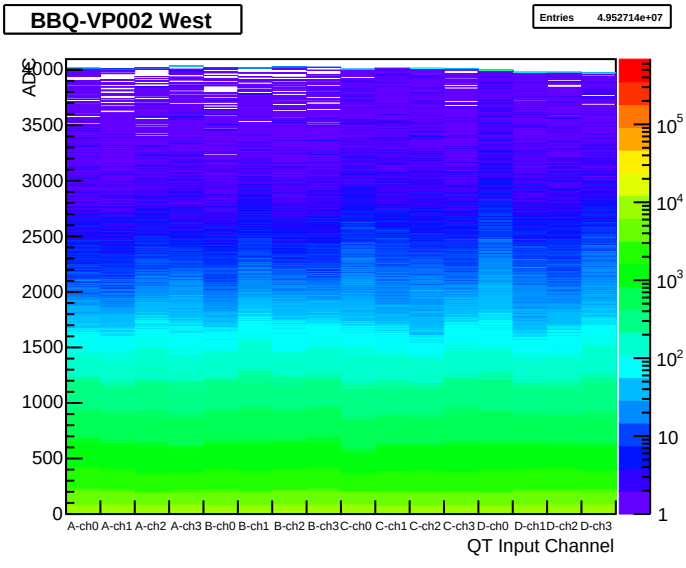

BBQ-BB002 (BBC west small tiles TAC)
Entries 4.952714e+07
TAC
QT Input Channel

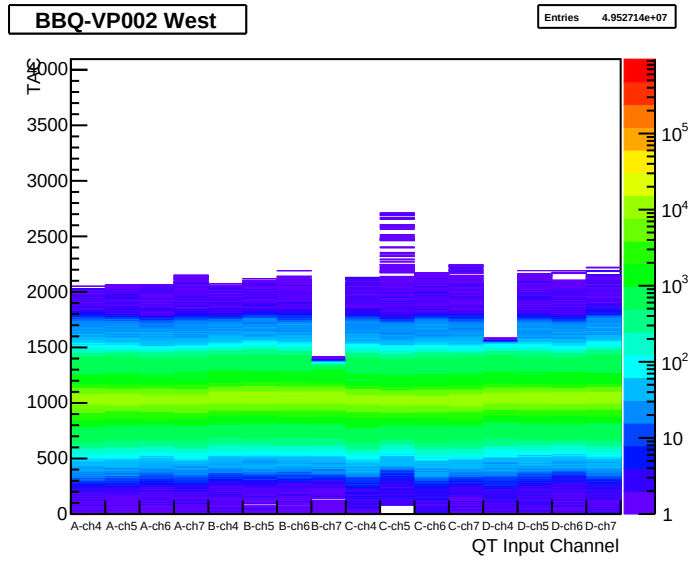

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4.952714e+07
ADC
QT Input Channel

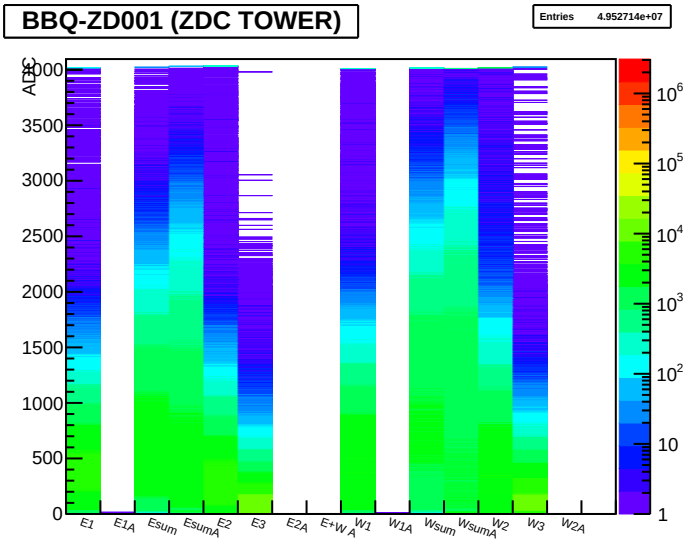

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4.952714e+07
TAC
QT Input Channel

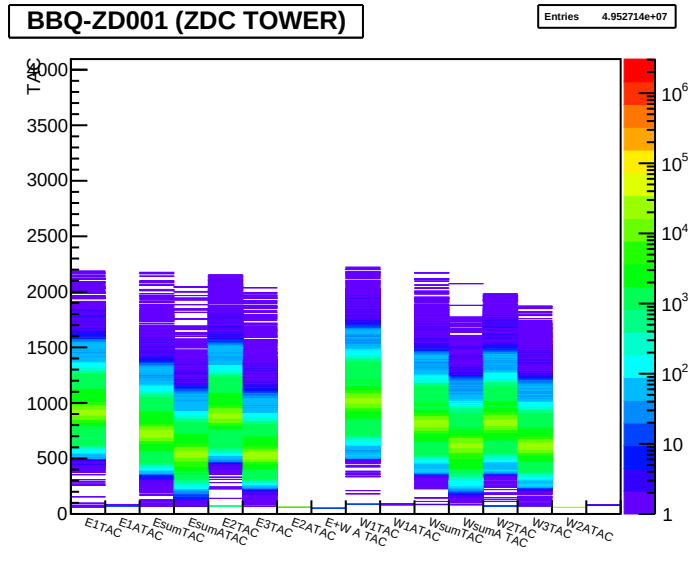

BBQ-VP001 East
Entries 4.952714e+07
ADC
A-ch0 A-ch1 A-ch2 A-ch3 B-ch0 B-ch1 B-ch2 B-ch3 C-ch0 C-ch1 C-ch2 C-ch3 D-ch0 D-ch1 D-ch2 D-ch3
QT Input Channel

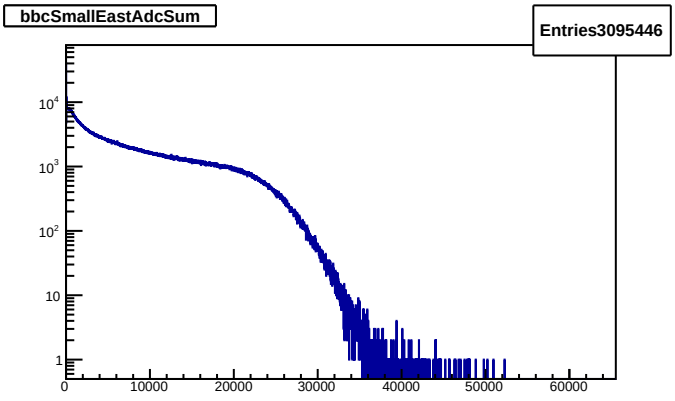

BBQ-VP001 East
Entries 4.952714e+07
TAC
A-ch4 A-ch5 A-ch6 A-ch7 B-ch4 B-ch5 B-ch6 B-ch7 C-ch4 C-ch5 C-ch6 C-ch7 D-ch4 D-ch5 D-ch6 D-ch7
QT Input Channel

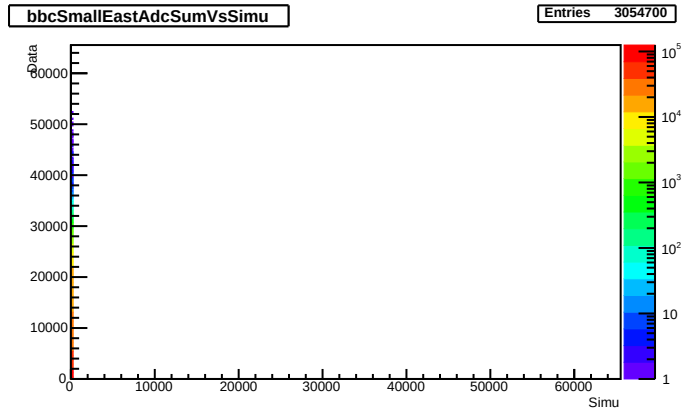

BBQ-VP002 West
Entries 4.952714e+07
ADC
A-ch0 A-ch1 A-ch2 A-ch3 B-ch0 B-ch1 B-ch2 B-ch3 C-ch0 C-ch1 C-ch2 C-ch3 D-ch0 D-ch1 D-ch2 D-ch3
QT Input Channel

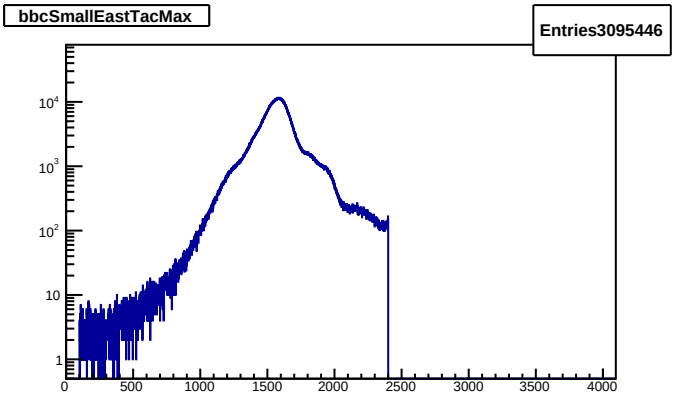

BBQ-VP002 West
Entries 4.952714e+07
TAC
A-ch4 A-ch5 A-ch6 A-ch7 B-ch4 B-ch5 B-ch6 B-ch7 C-ch4 C-ch5 C-ch6 C-ch7 D-ch4 D-ch5 D-ch6 D-ch7
QT Input Channel

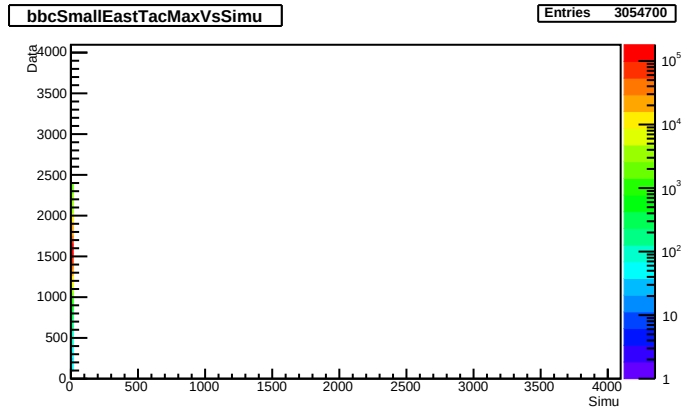

BBQ-ZD001 (ZDC TOWER)
Entries 4.952714e+07
ADC
E1 E1A Esum EsumA E2 E3 E2A E+W A W1 W1A Wsum WsumA W2 W3 W2A

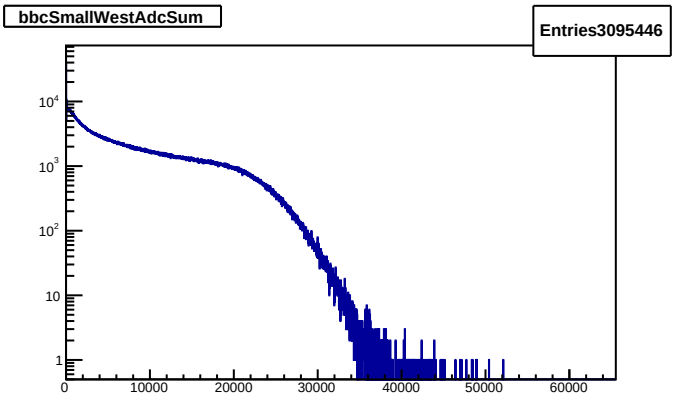

BBQ-ZD001 (ZDC TOWER)
Entries 4.952714e+07
TAC
E1TAC E1ATAC EsumTAC EsumATAC E2TAC E3TAC E2ATAC E+W A TAC W1TAC W1ATAC WsumTAC WsumA TAC W2TAC W3TAC W2ATAC

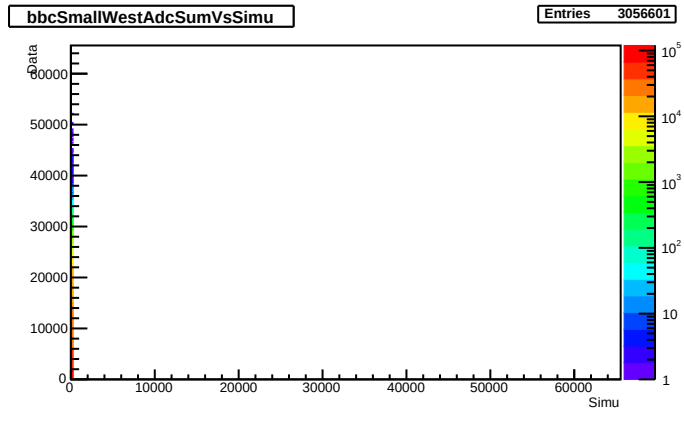

bbcSmallEastAdcSum
Entries3095446

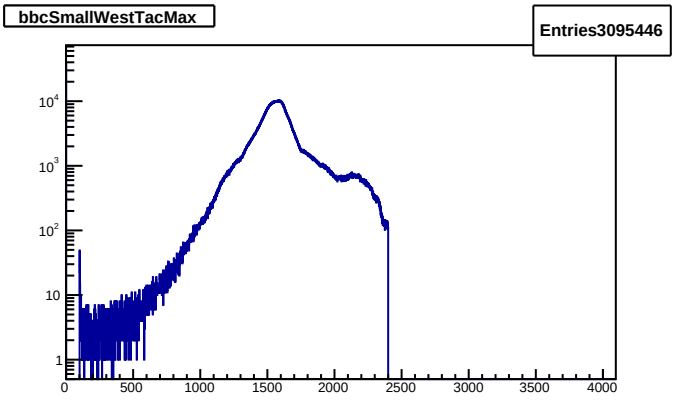

bbcSmallEastAdcSumVsSimu
Entries 3054700
Data
Simu

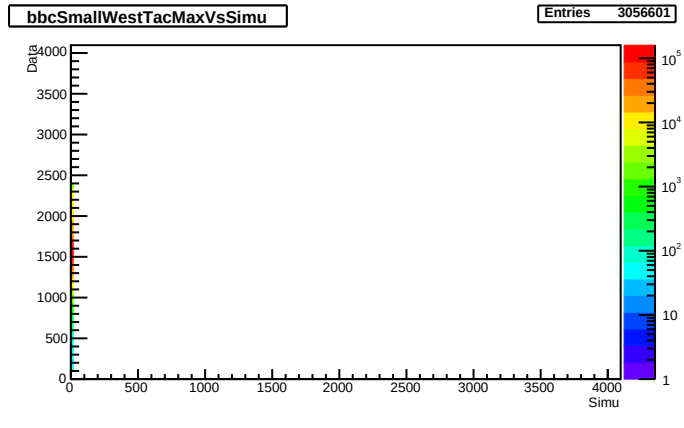

bbcSmallEastTacMax
Entries3095446

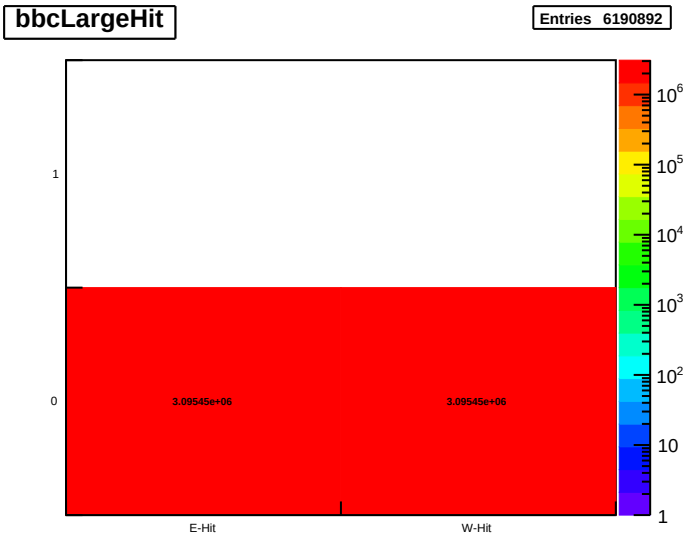

bbcSmallEastTacMaxVsSimu
Entries 3054700
Data
Simu

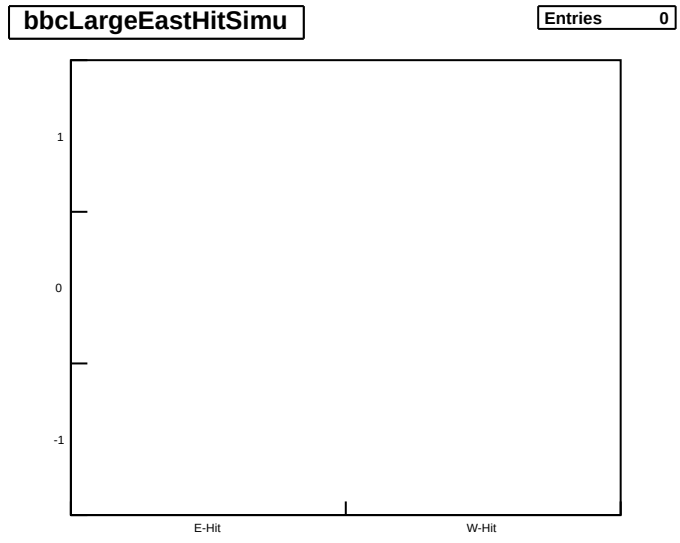

bbcSmallWestAdcSum
Entries3095446

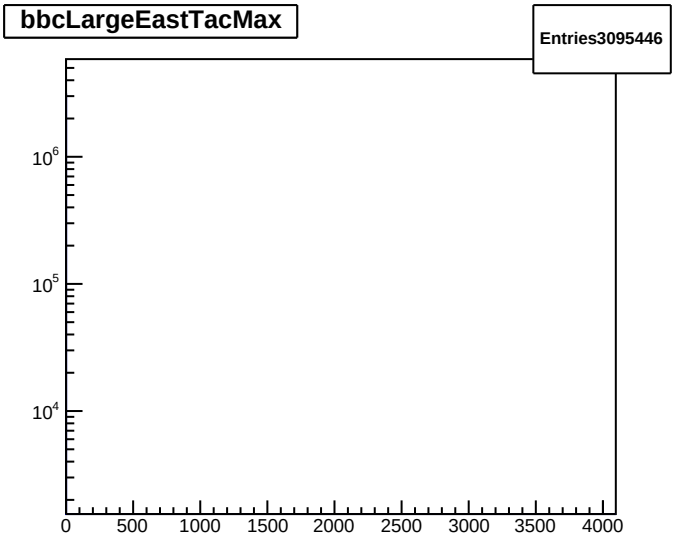

bbcSmallWestAdcSumVsSimu
Entries 3056601
Data
Simu

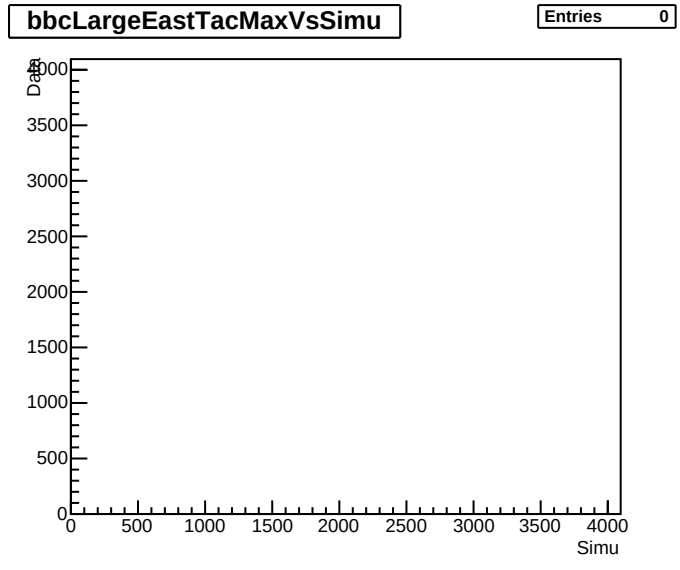

bbcSmallWestTacMax
Entries3095446

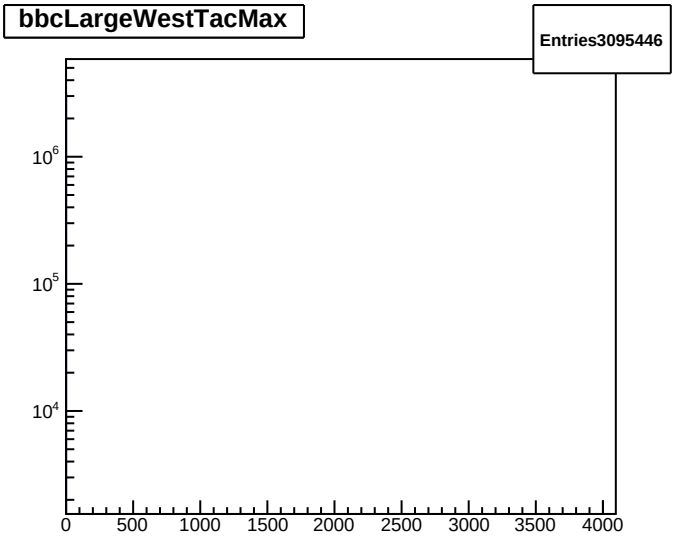

bbcSmallWestTacMaxVsSimu
Entries 3056601
Data
Simu

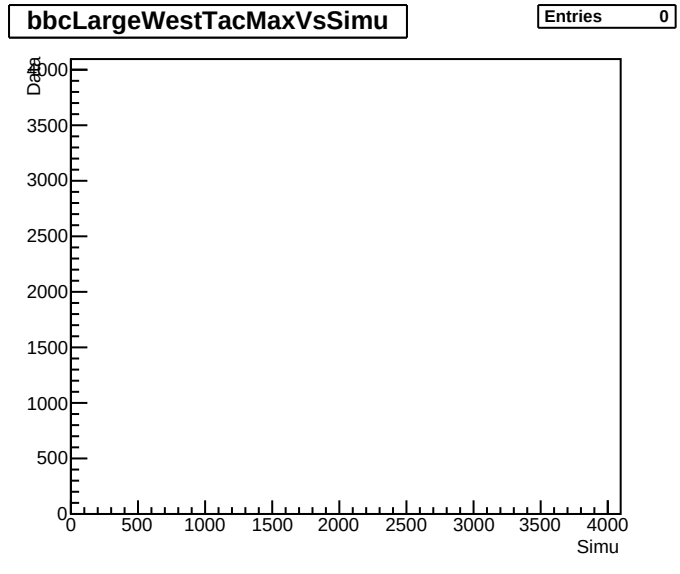

bbcLargeHit
Entries 6190892
1
0
3.09545e+06
3.09545e+06
E-Hit
W-Hit
10^6
10^5
10^4
10^3
10^2
10
1

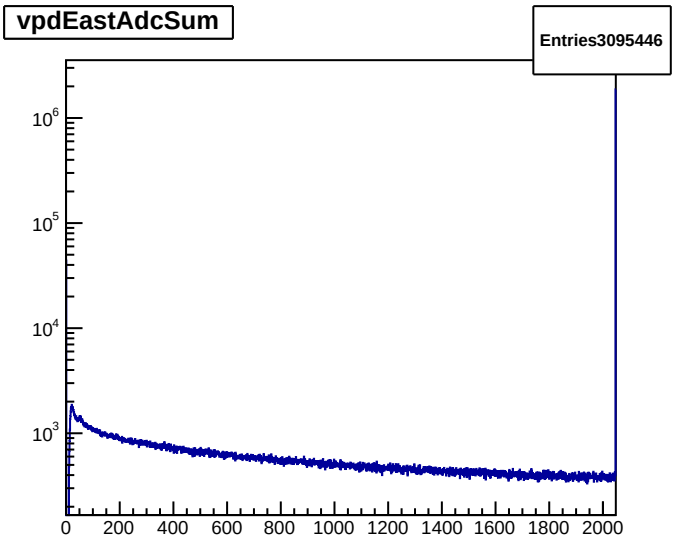

bbcLargeEastHitSimu
Entries 0
1
0
-1
E-Hit
W-Hit

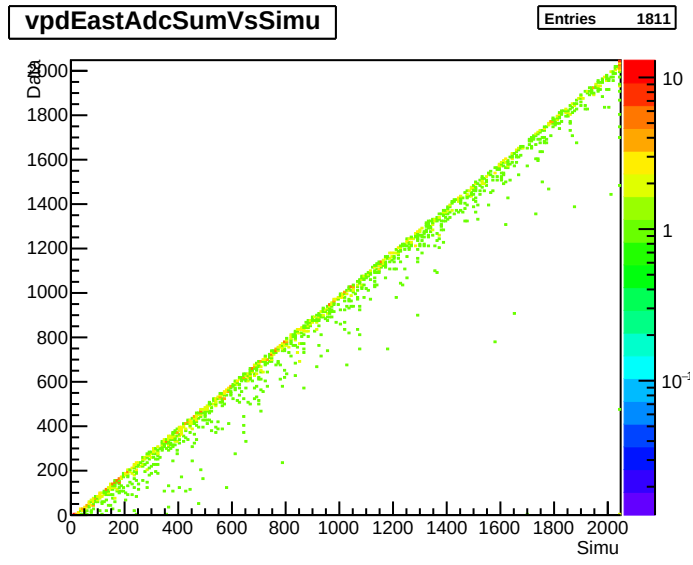

bbcLargeEastTacMax
Entries3095446
10^6
10^5
10^4
0
500
1000
1500
2000
2500
3000
3500
4000

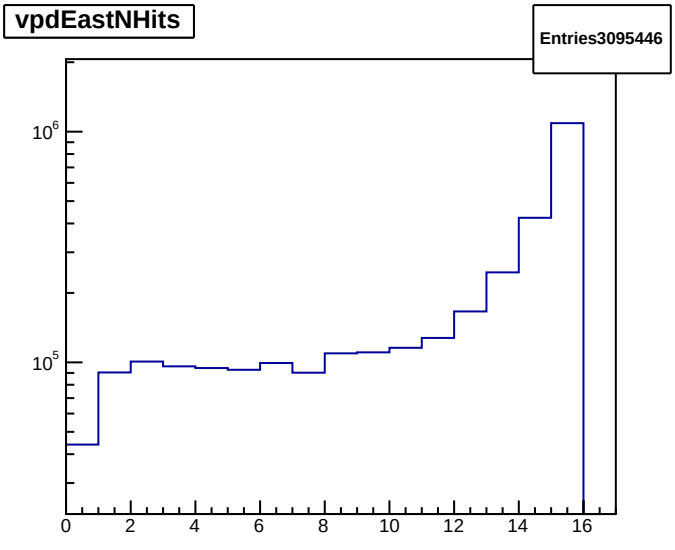

bbcLargeEastTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

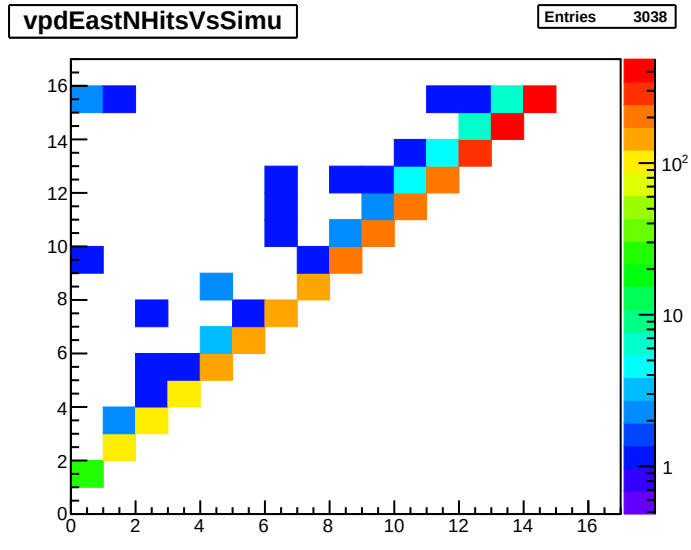

bbcLargeWestTacMax
Entries3095446
10^6
10^5
10^4
0
500
1000
1500
2000
2500
3000
3500
4000

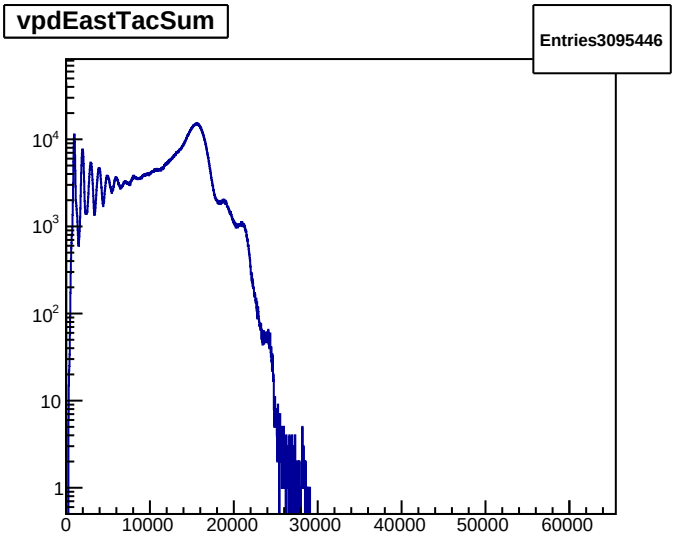

bbcLargeWestTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

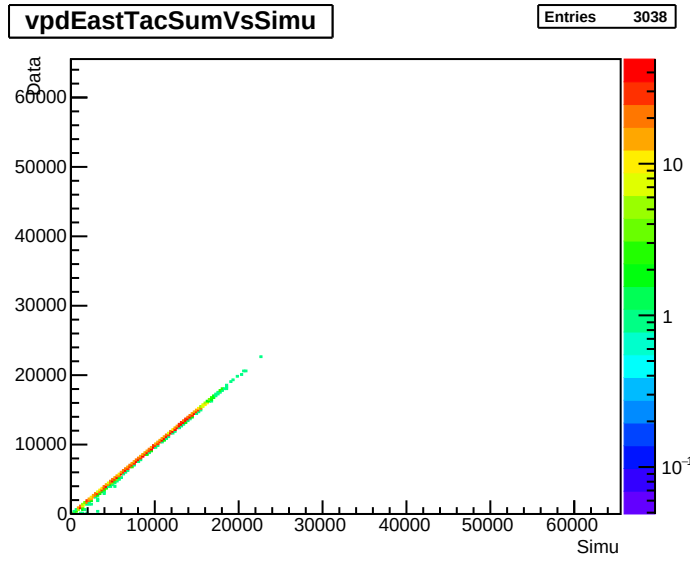

vpdEastAdcSum
Entries3095446

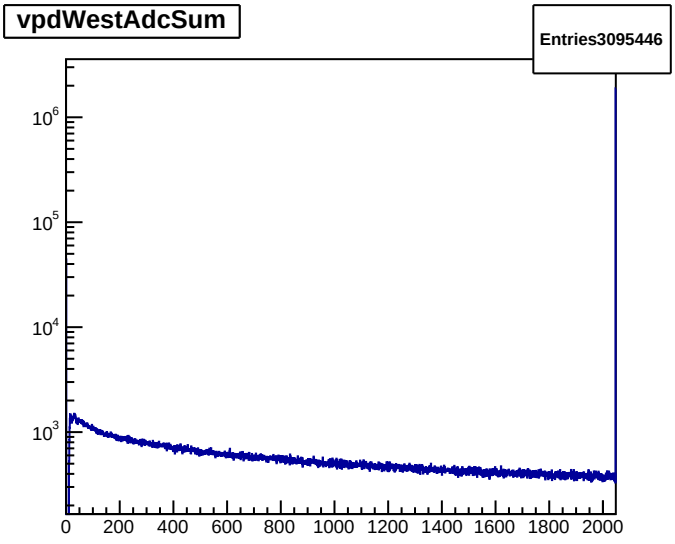

vpdEastAdcSumVsSimu
Entries 1811
Data
Simu

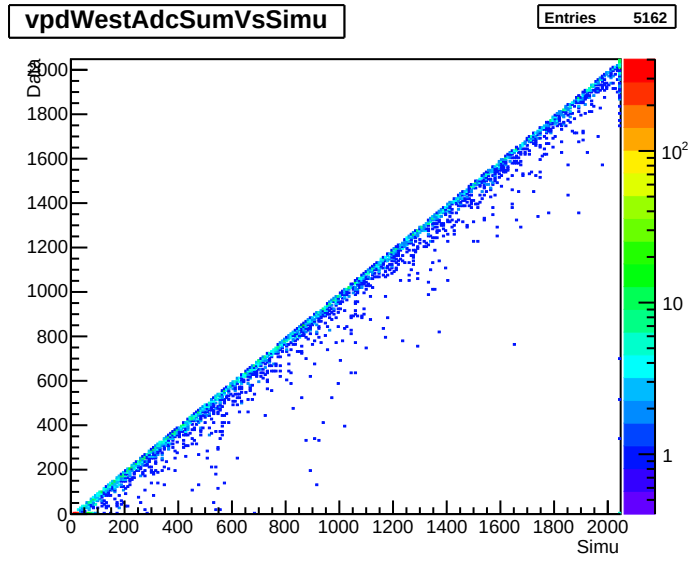

vpdEastNHits
Entries3095446

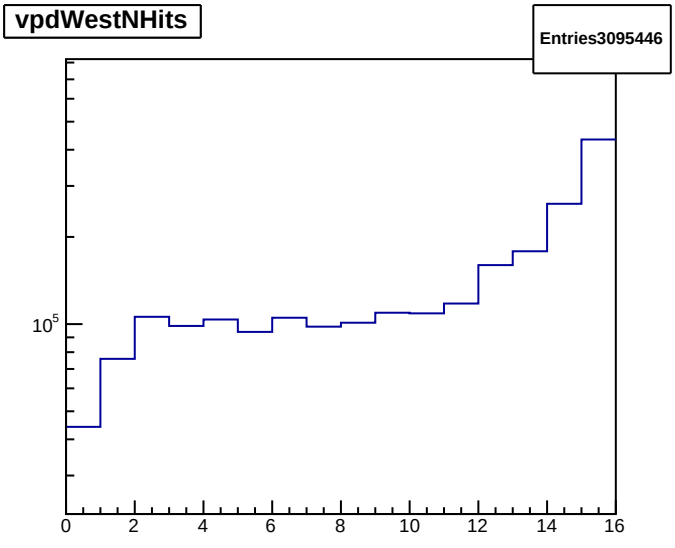

vpdEastNHitsVsSimu
Entries 3038

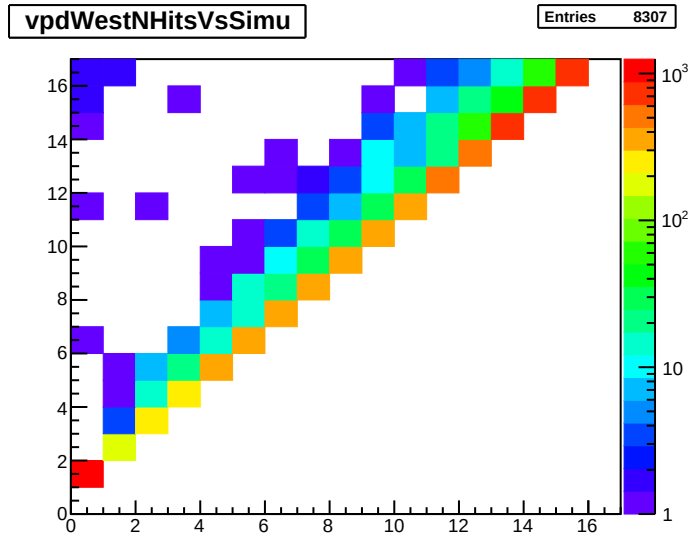

vpdEastTacSum
Entries3095446

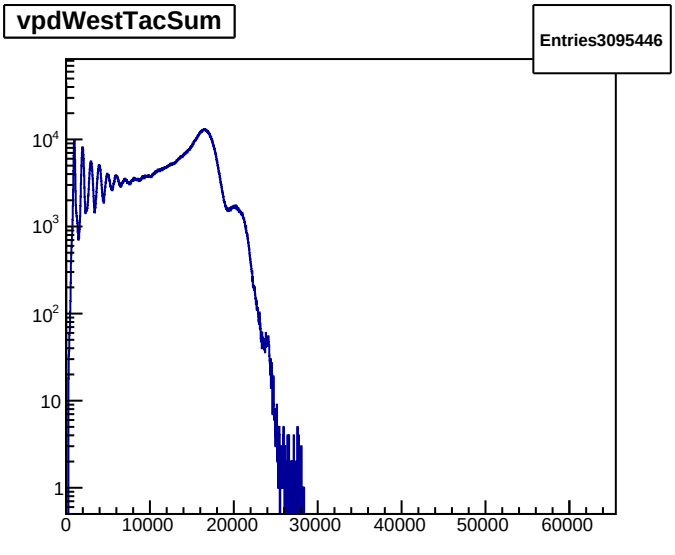

vpdEastTacSumVsSimu
Entries 3038
Data
Simu

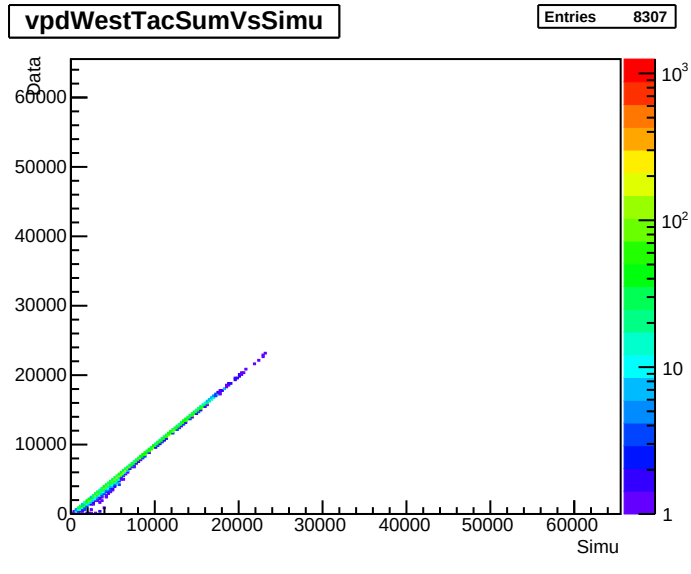

vpdWestAdcSum
Entries3095446

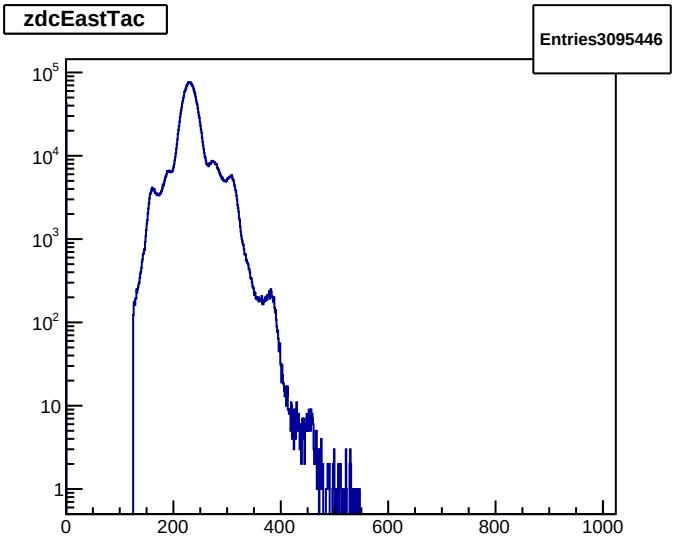

vpdWestAdcSumVsSimu
Entries 5162
Data
Simu

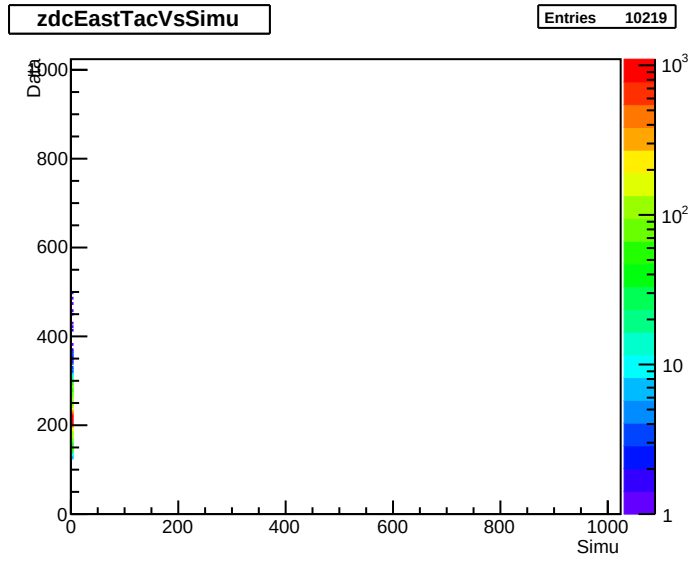

vpdWestNHits
Entries3095446

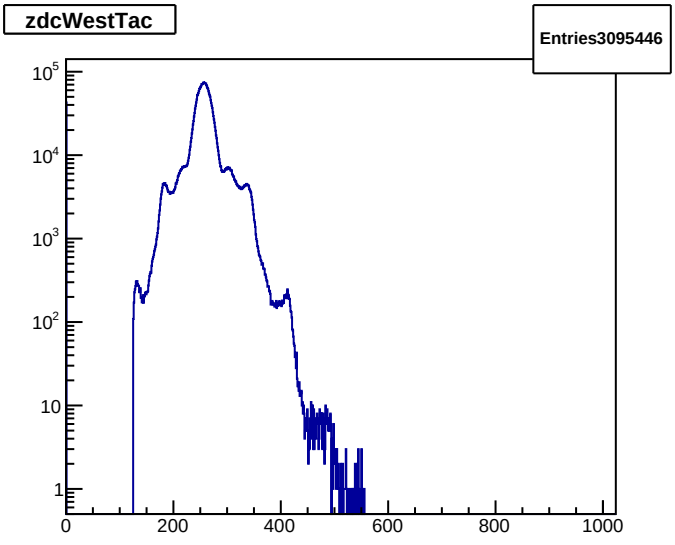

vpdWestNHitsVsSimu
Entries 8307

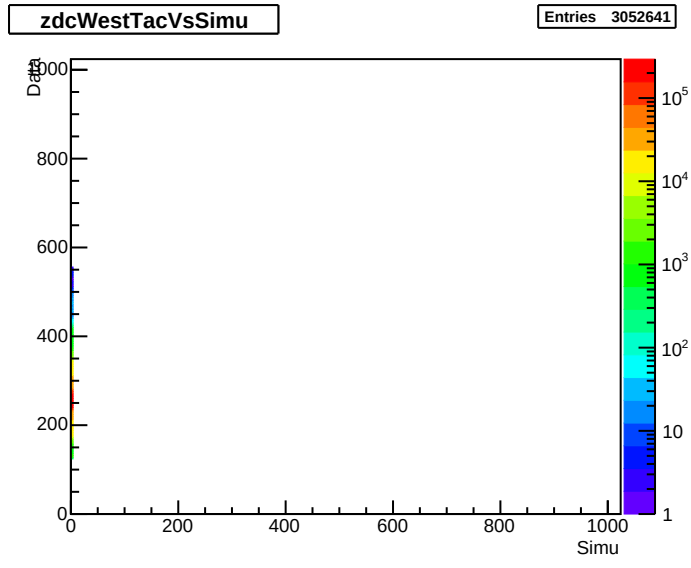

vpdWestTacSum
Entries3095446

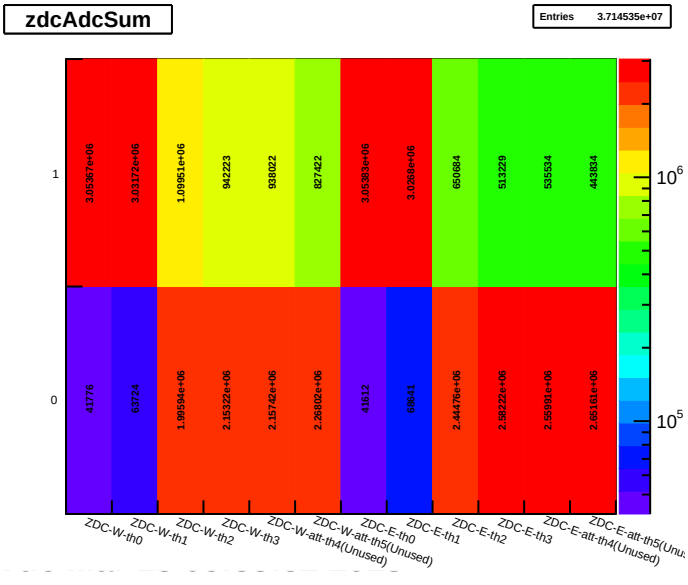

vpdWestTacSumVsSimu
Entries 8307
Data
Simu

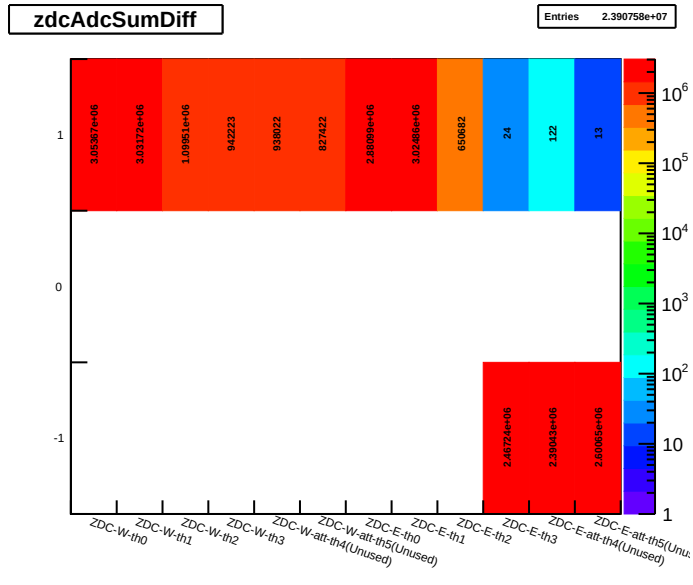

zdcEastTac
Entries3095446

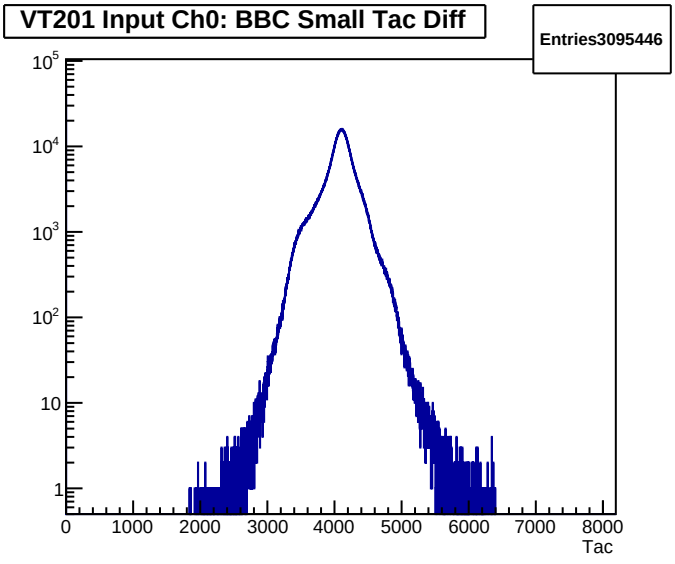

zdcEastTacVsSimu
Entries 10219
Data
Simu

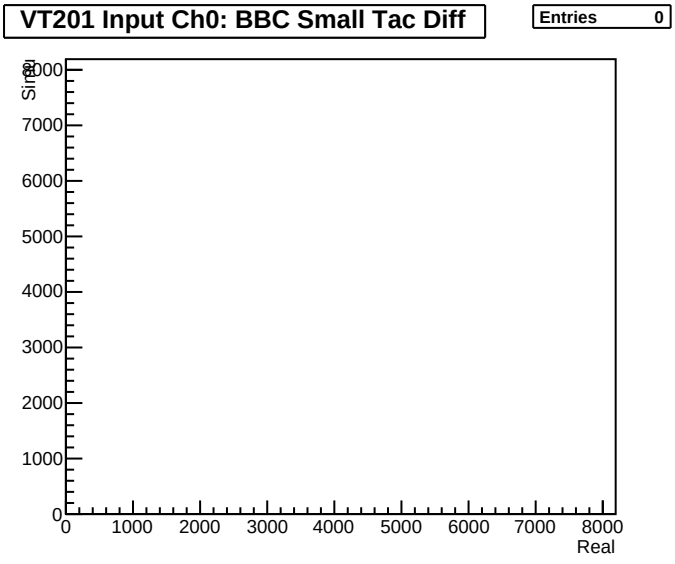

zdcWestTac
Entries3095446

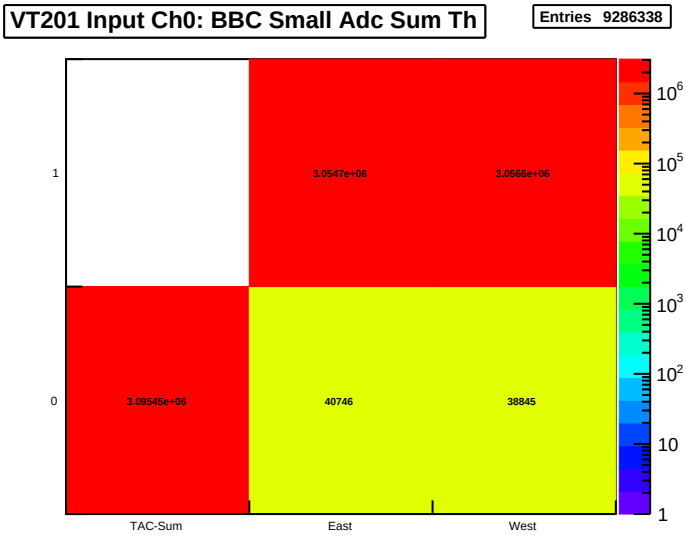

zdcWestTacVsSimu
Entries 3052641
Data
Simu

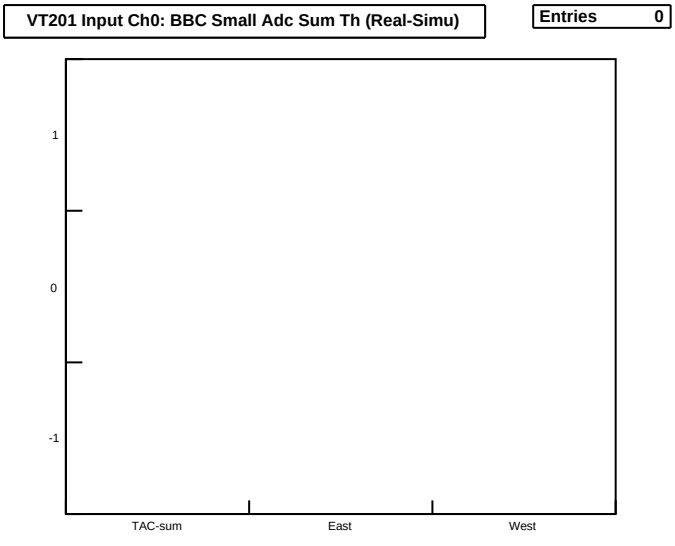

zdcAdcSum
Entries 3.714535e+07
3.05387e+06
3.03172e+06
1.09951e+06
942223
938022
827422
3.05383e+06
3.0268e+06
650684
513229
535534
443834
41776
63724
1.99594e+06
2.15322e+06
2.15742e+06
2.26802e+06
41612
68841
2.44476e+06
2.50222e+06
2.59991e+06
2.65161e+06
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

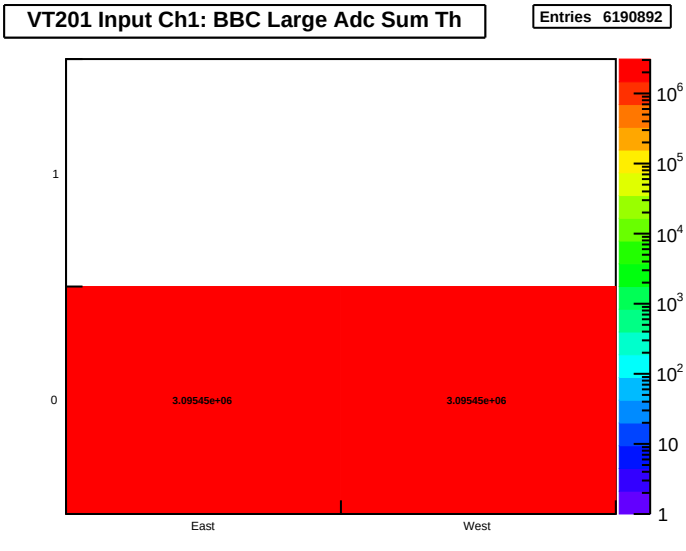

zdcAdcSumDiff
Entries 2.390758e+07
3.05387e+06
3.03172e+06
1.09951e+06
942223
938022
827422
2.88099e+06
3.02486e+06
650682
24
122
13
2.46724e+06
2.39043e+06
2.60065e+06
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

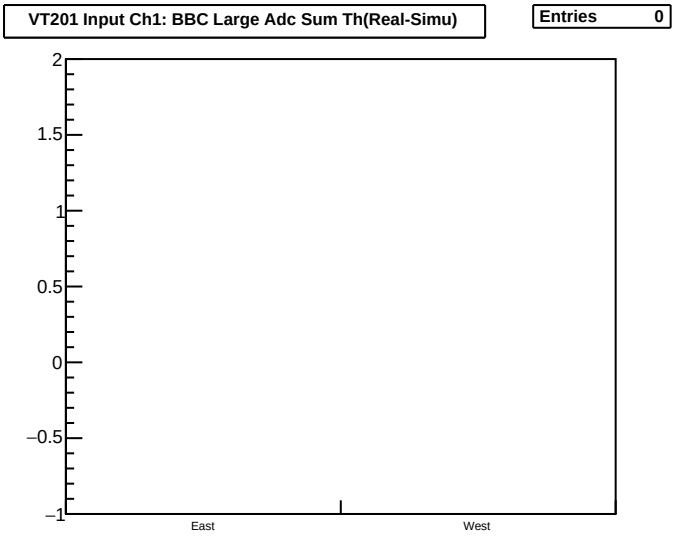

VT201 Input Ch0: BBC Small Tac Diff
Entries3095446
Tac


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

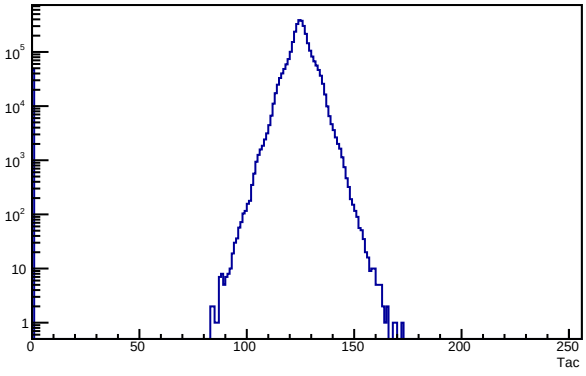

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 9286338
3.0547e+06
3.0566e+06
3.09545e+06
40746
38845
TAC-Sum
East
West


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

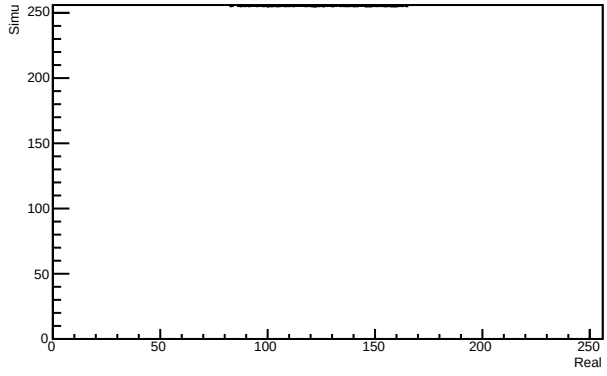

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 6190892
3.09545e+06
3.09545e+06
East
West


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

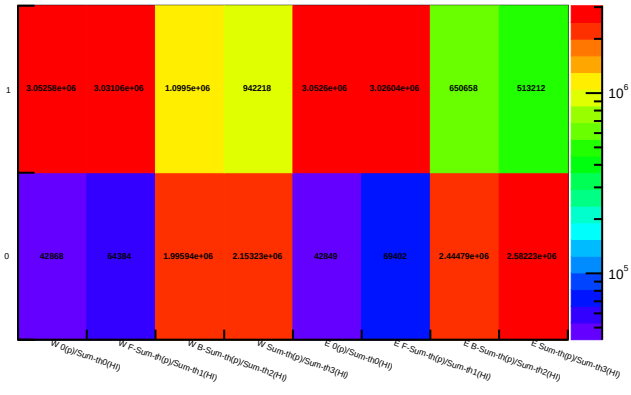
VT201 Input Ch2: ZDC Tac Diff



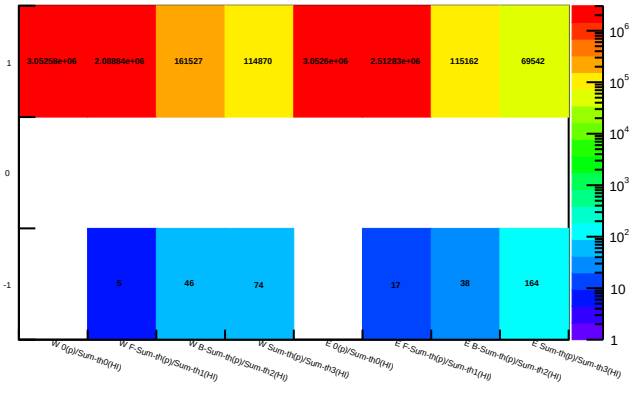
VT201 Input Ch2: ZDC Tac Diff



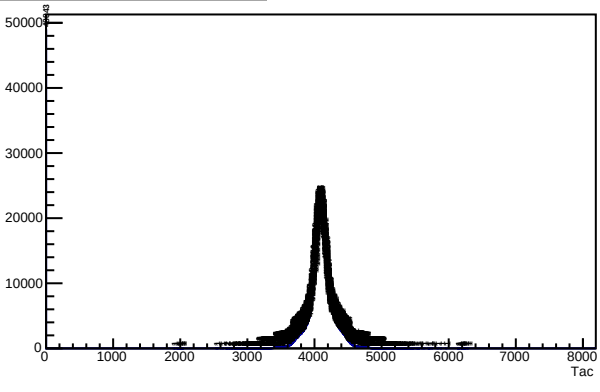
VT201 Input Ch2: ZDC Adc Sum Th



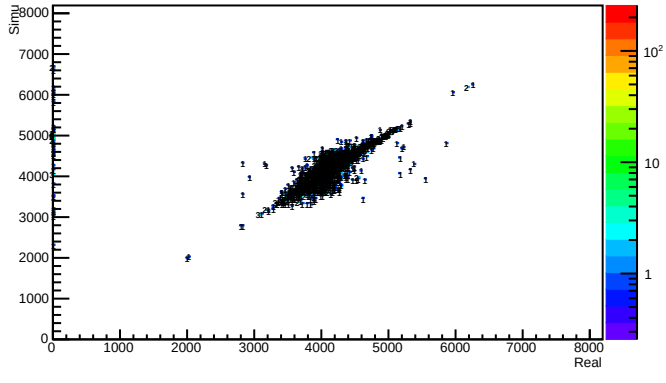
VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)



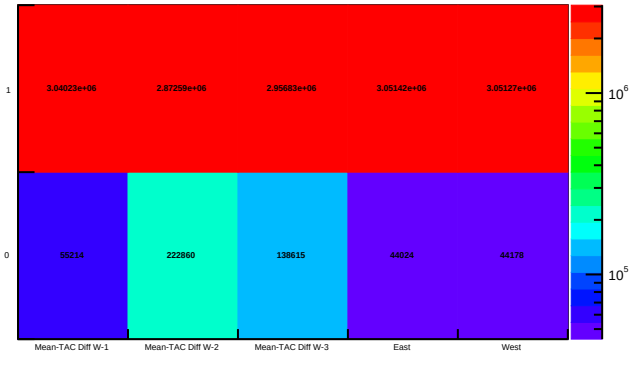
VT201 Input Ch4: VPD Tac Diff



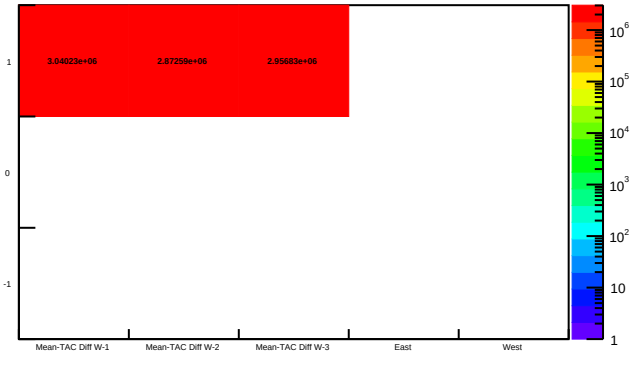
VT201 Input Ch4: VPD Tac Diff

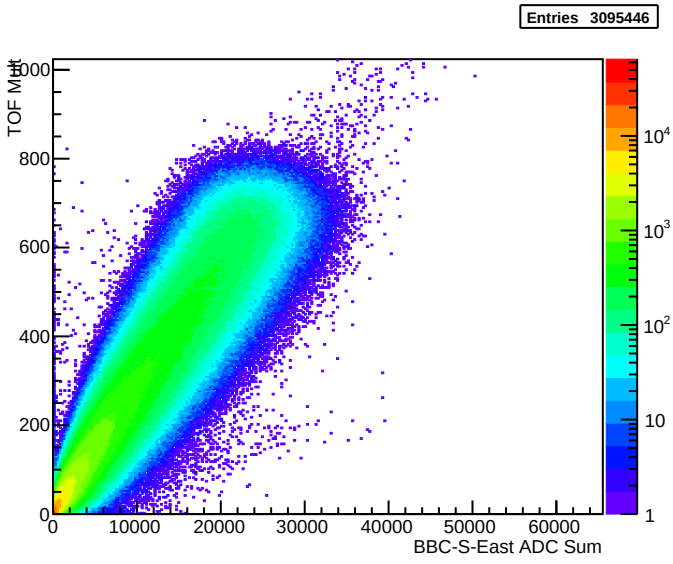


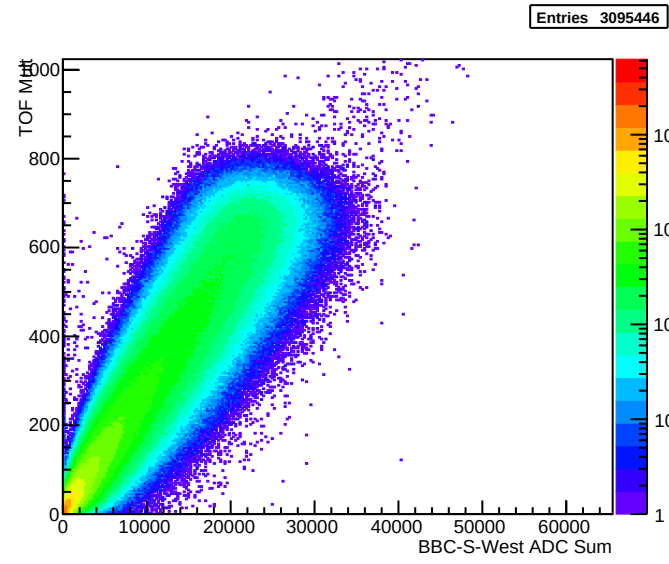
VT201 Input Ch4: VPD Adc Sum Th

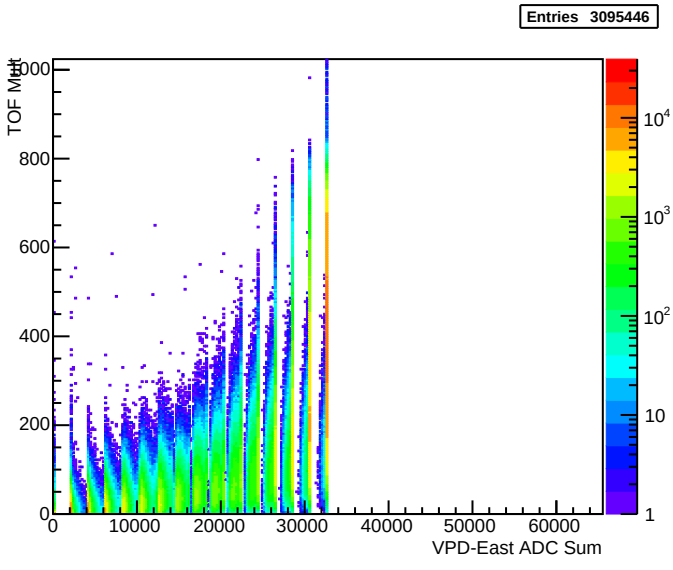


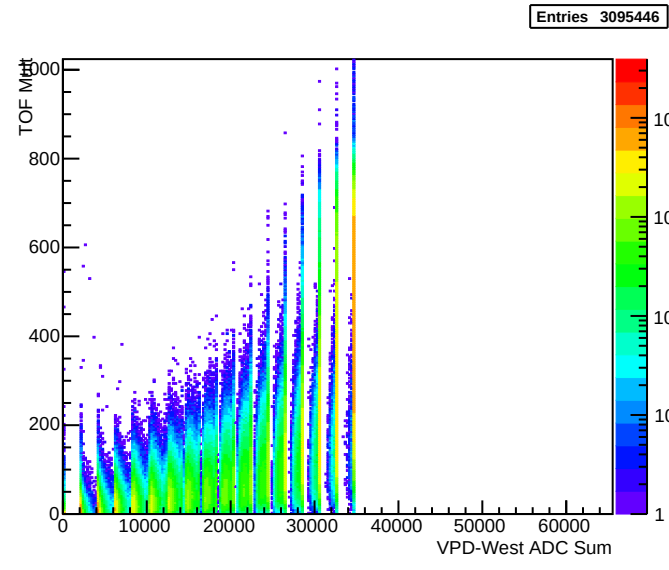
VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)

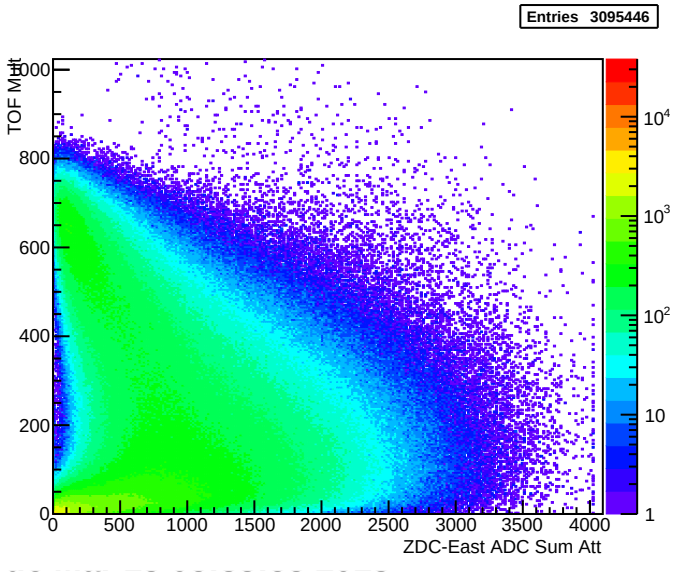


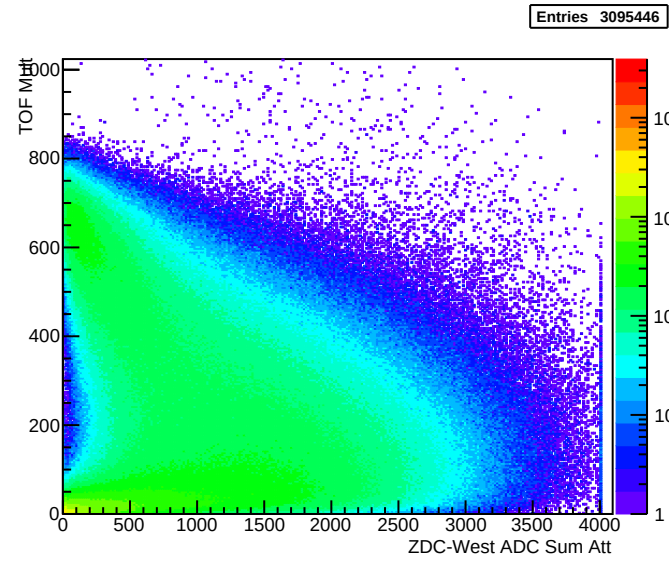

Entries 3095446
TOF Mult
BBC-S-East ADC Sum

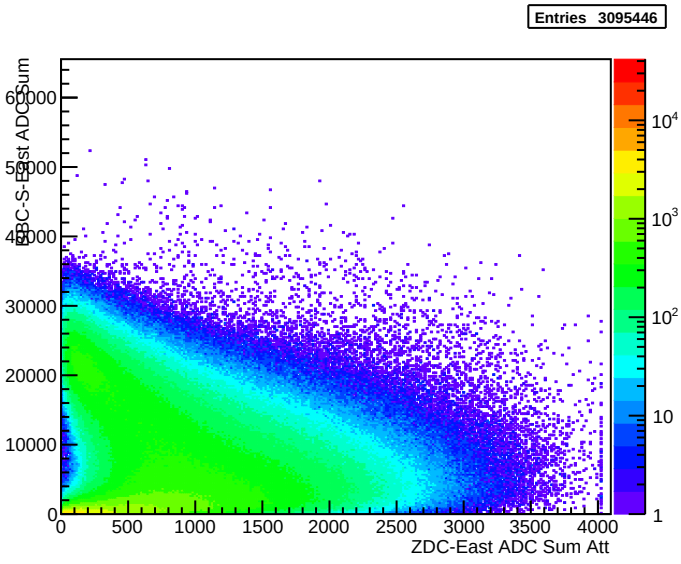

Entries 3095446
TOF Mult
BBC-S-West ADC Sum

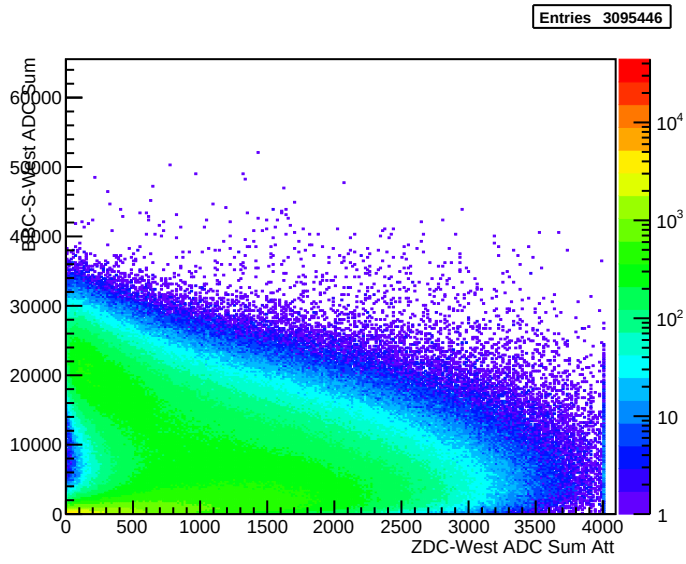

Entries 3095446
TOF Mult
VPD-East ADC Sum

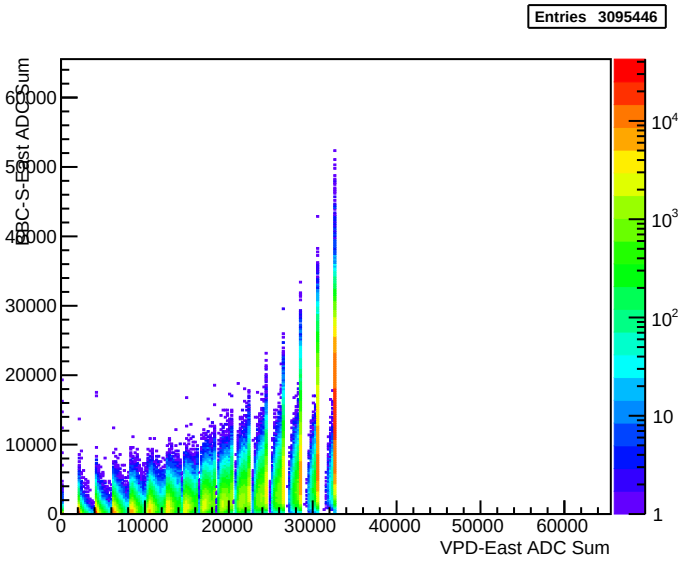

Entries 3095446
TOF Mult
VPD-West ADC Sum

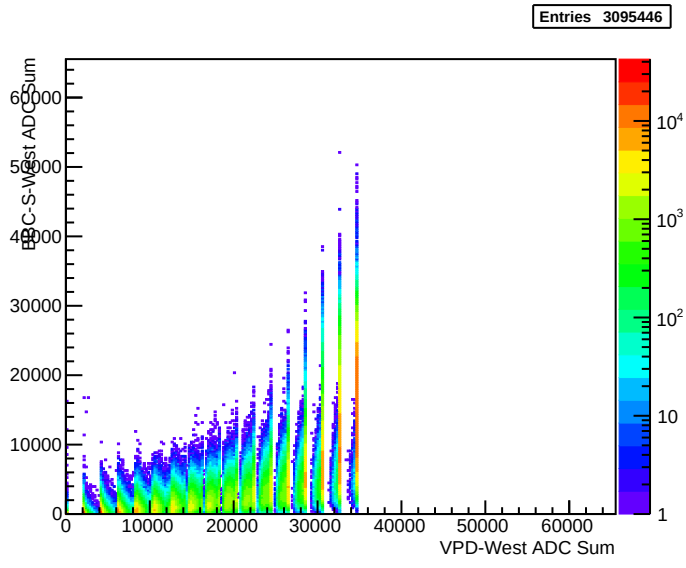

Entries 3095446
TOF Mult
ZDC-East ADC Sum Att

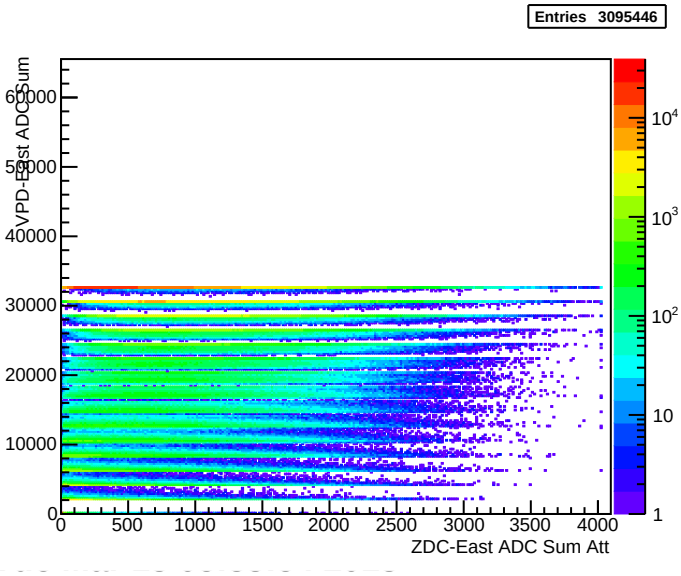

Entries 3095446
TOF Mult
ZDC-West ADC Sum Att

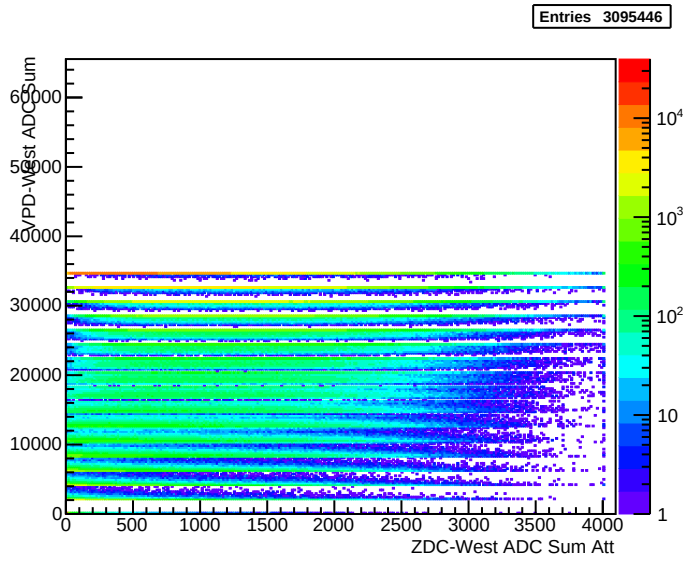

Entries 3095446
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

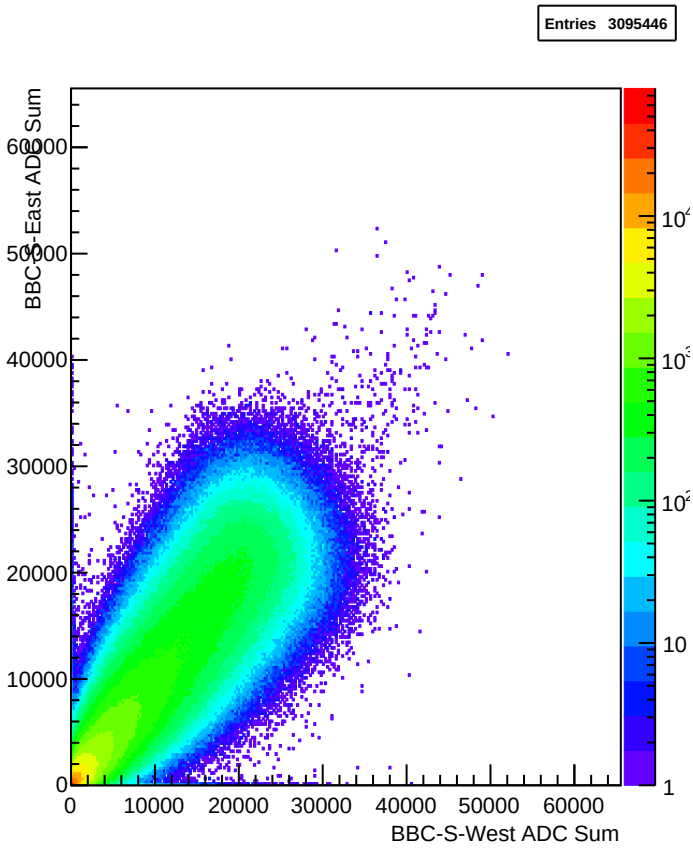

Entries 3095446
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

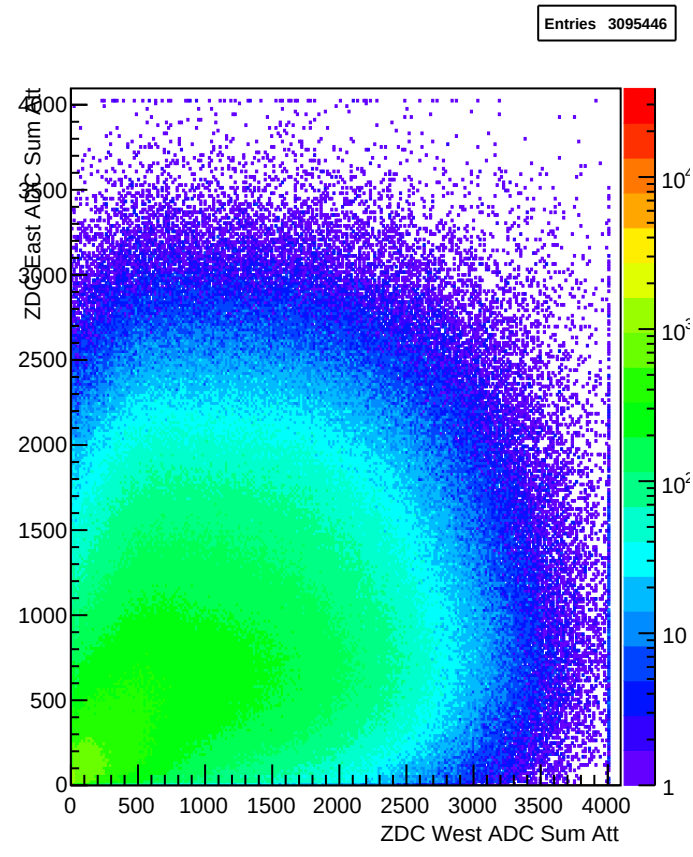

Entries 3095446
BBC-S-East ADC Sum
VPD-East ADC Sum

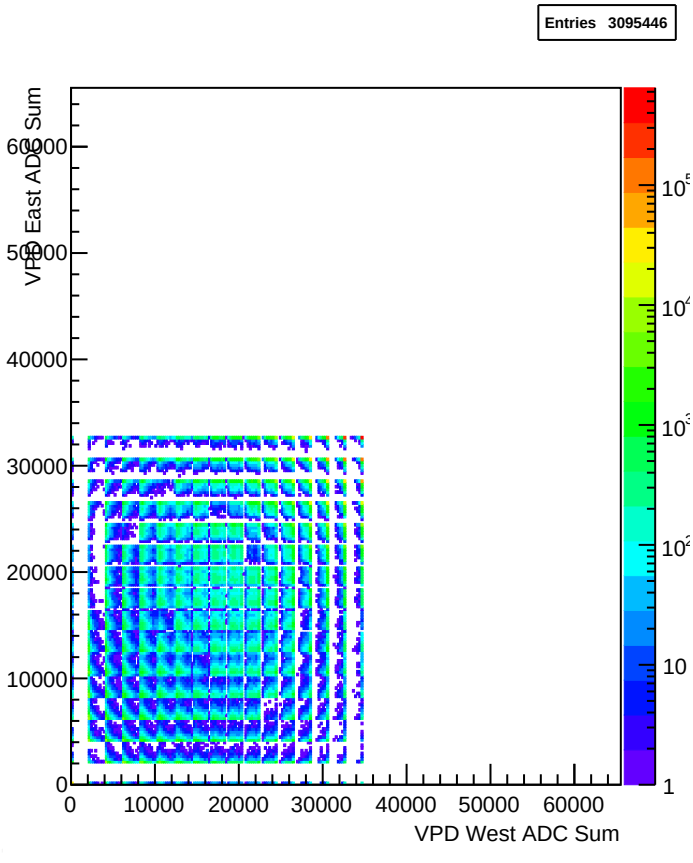

Entries 3095446
BBC-S-West ADC Sum
VPD-West ADC Sum

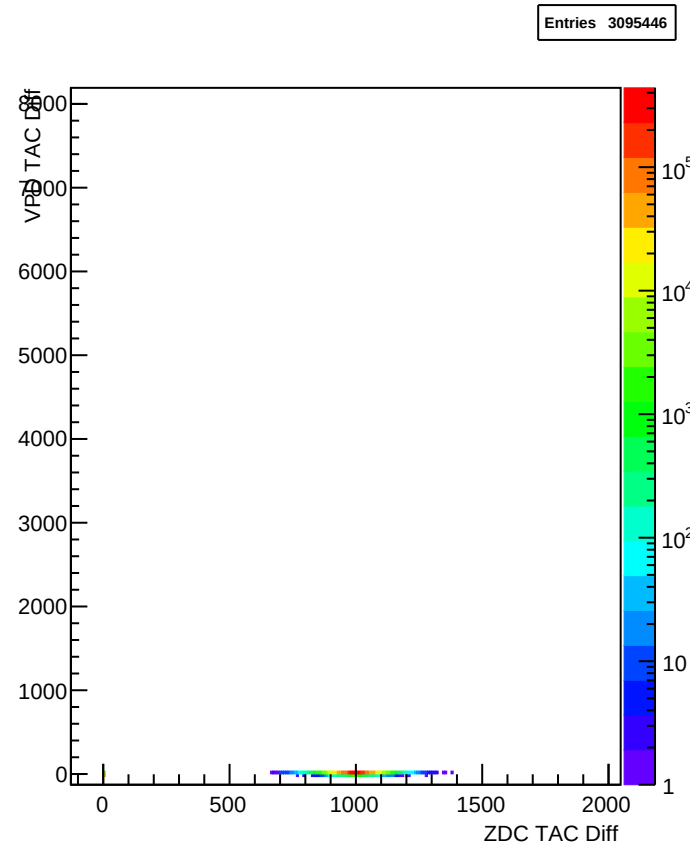

Entries 3095446
VPD-East ADC Sum
ZDC-East ADC Sum Att

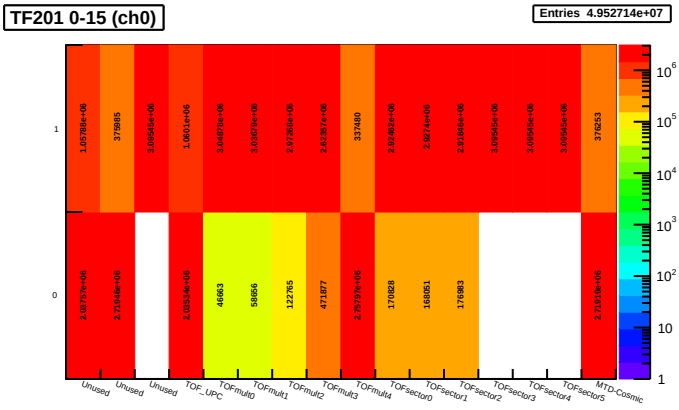

Entries 3095446
VPD-West ADC Sum
ZDC-West ADC Sum Att

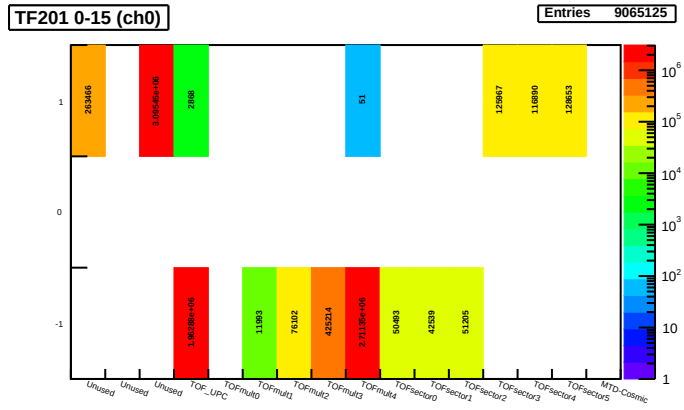

Entries 3095446
BBC-S-East ADC Sum
BBC-S-West ADC Sum

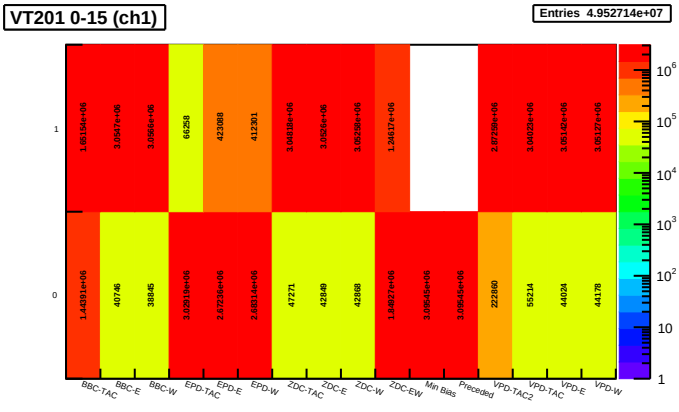

Entries 3095446
ZDC East ADC Sum Att
ZDC West ADC Sum Att

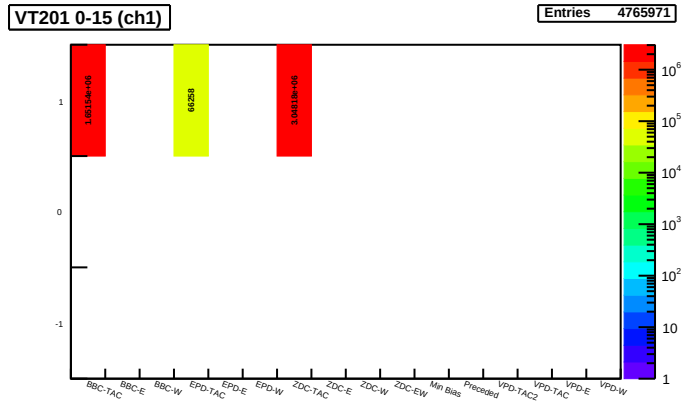

Entries 3095446
VPD East ADC Sum
VPD West ADC Sum

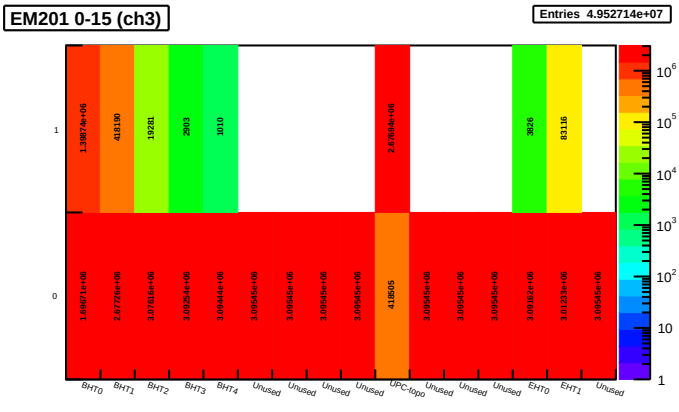

Entries 3095446
VPD TAC Diff
ZDC TAC Diff

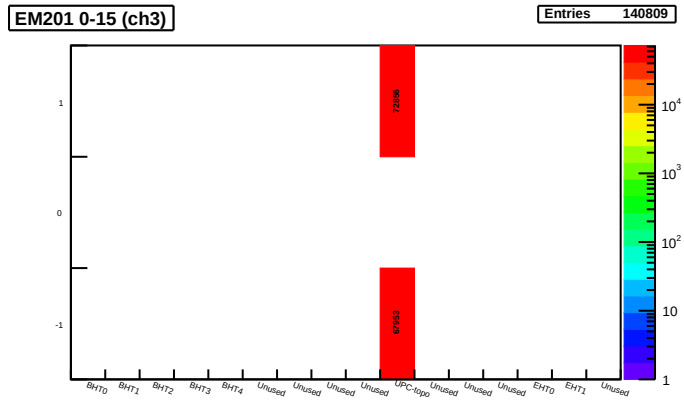

TF201 0-15 (ch0)
Entries 4.952714e+07
Unused
TOF_-UPC
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5
MTD-Cosmic

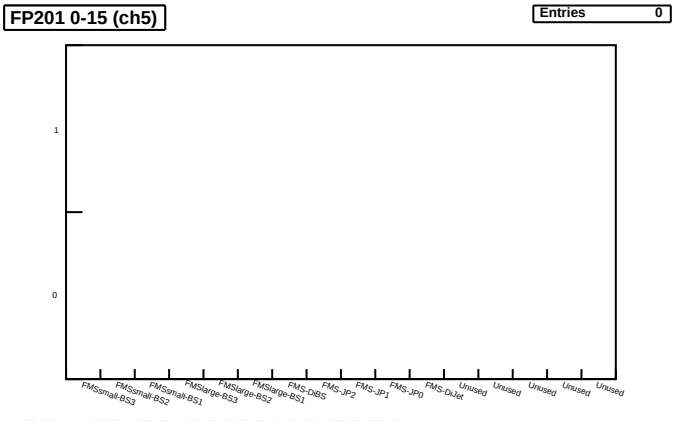

TF201 0-15 (ch0)
Entries 9065125
Unused
TOF_-UPC
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5
MTD-Cosmic

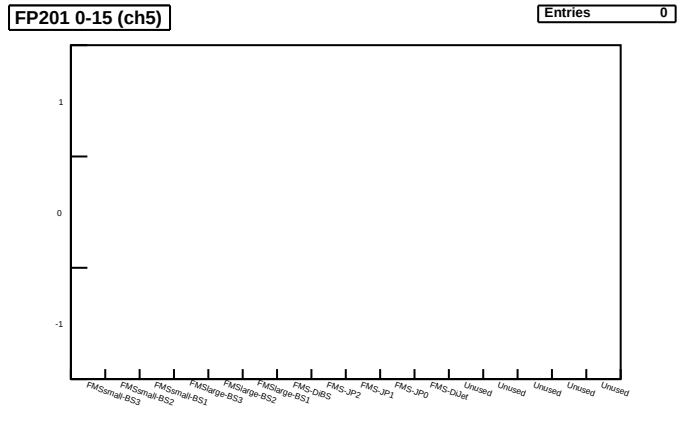

VT201 0-15 (ch1)
Entries 4.952714e+07
BBC-TAC
BBC-E
BBC-W
EPD-TAC
EPD-E
EPD-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-EW
Min Bias
Preceded
VPD-TAC2
VPD-TAC
VPD-E
VPD-W


VT201 0-15 (ch1)
Entries 4765971
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 4.952714e+07
BHT0
BHT1
BHT2
BHT3
BHT4
Unused
UPC-topo
EHT0
EHT1


EM201 0-15 (ch3)
Entries 140809
BHT0
BHT1
BHT2
BHT3
BHT4
Unused
UPC-topo
EHT0
EHT1


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


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