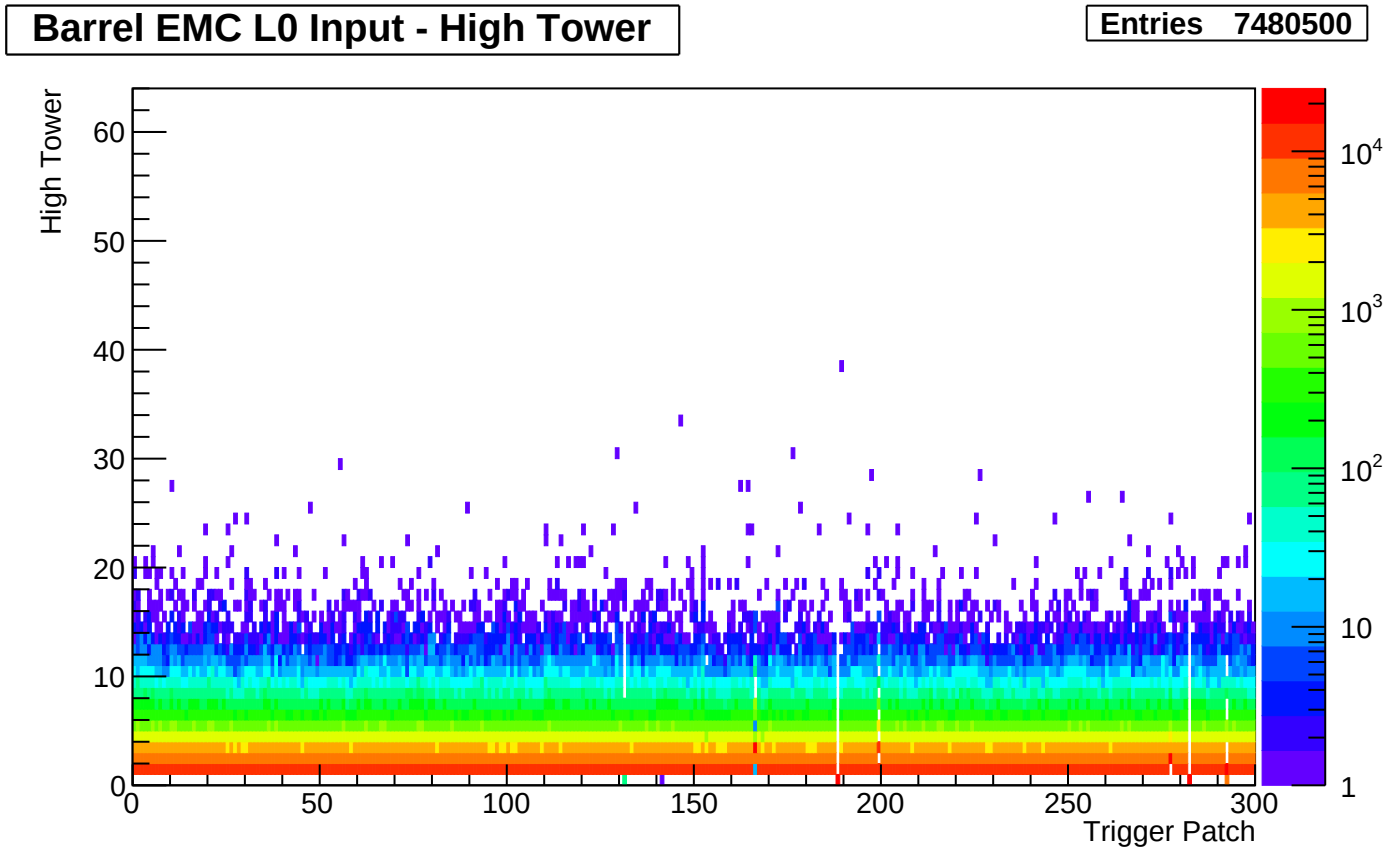
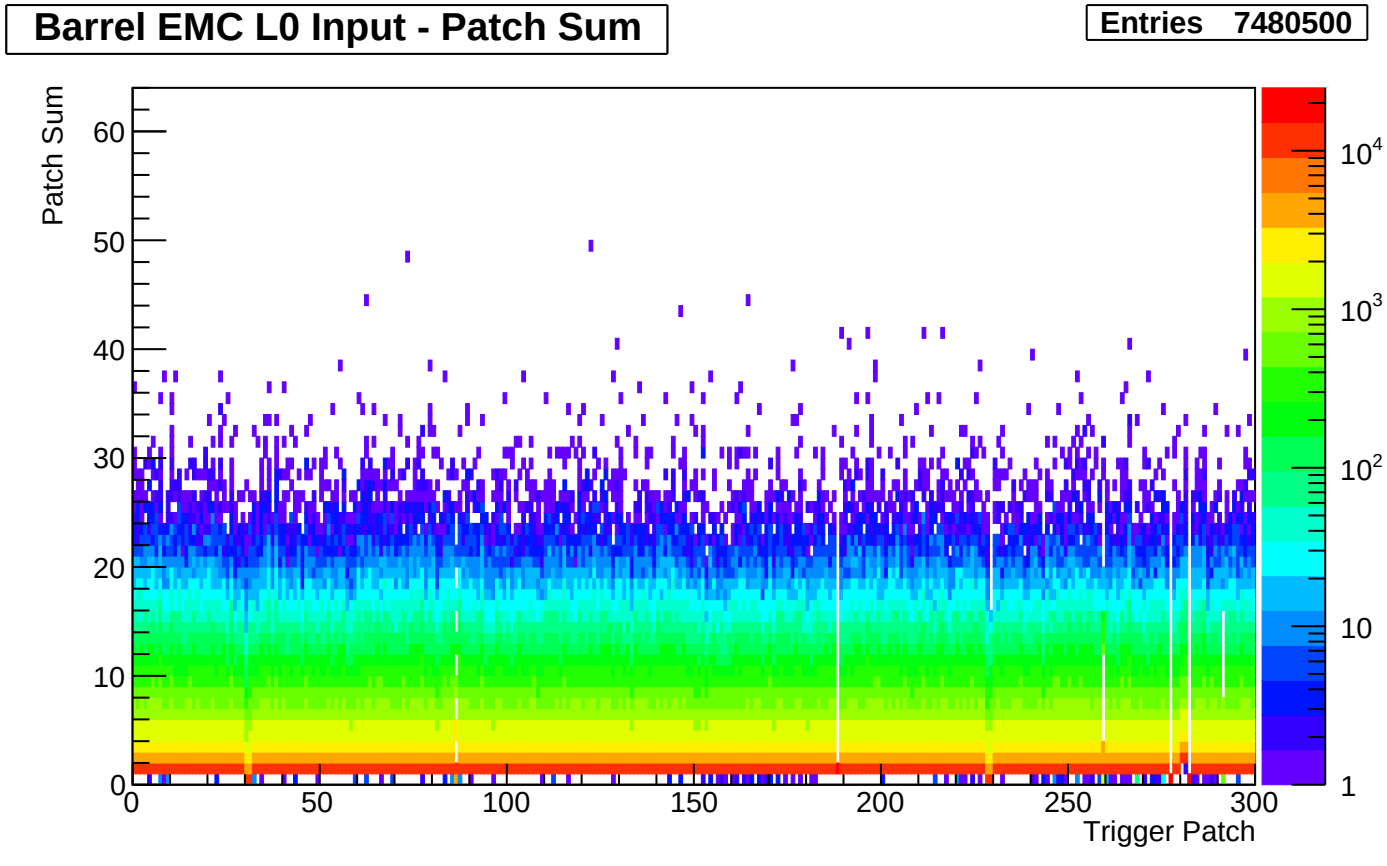
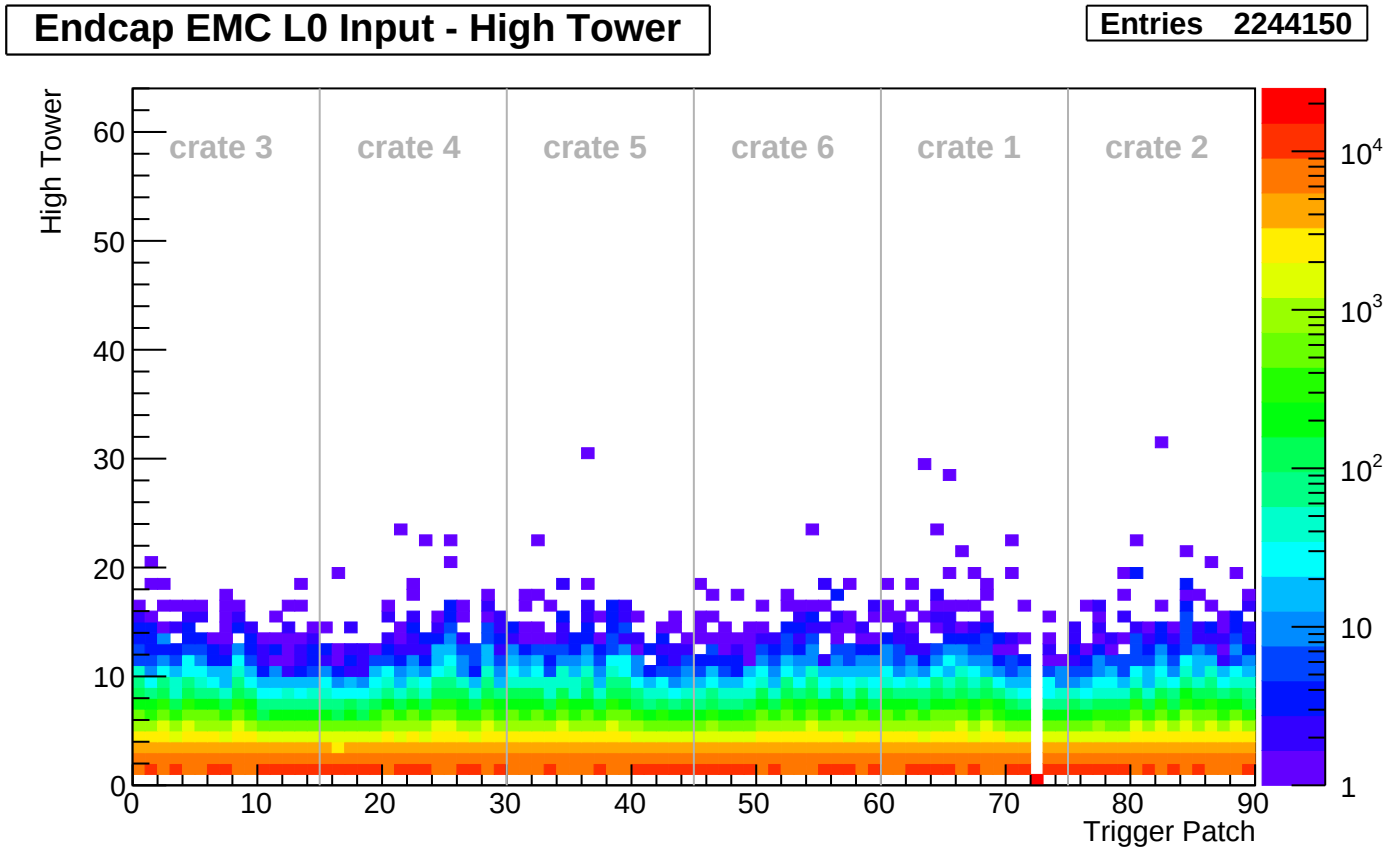
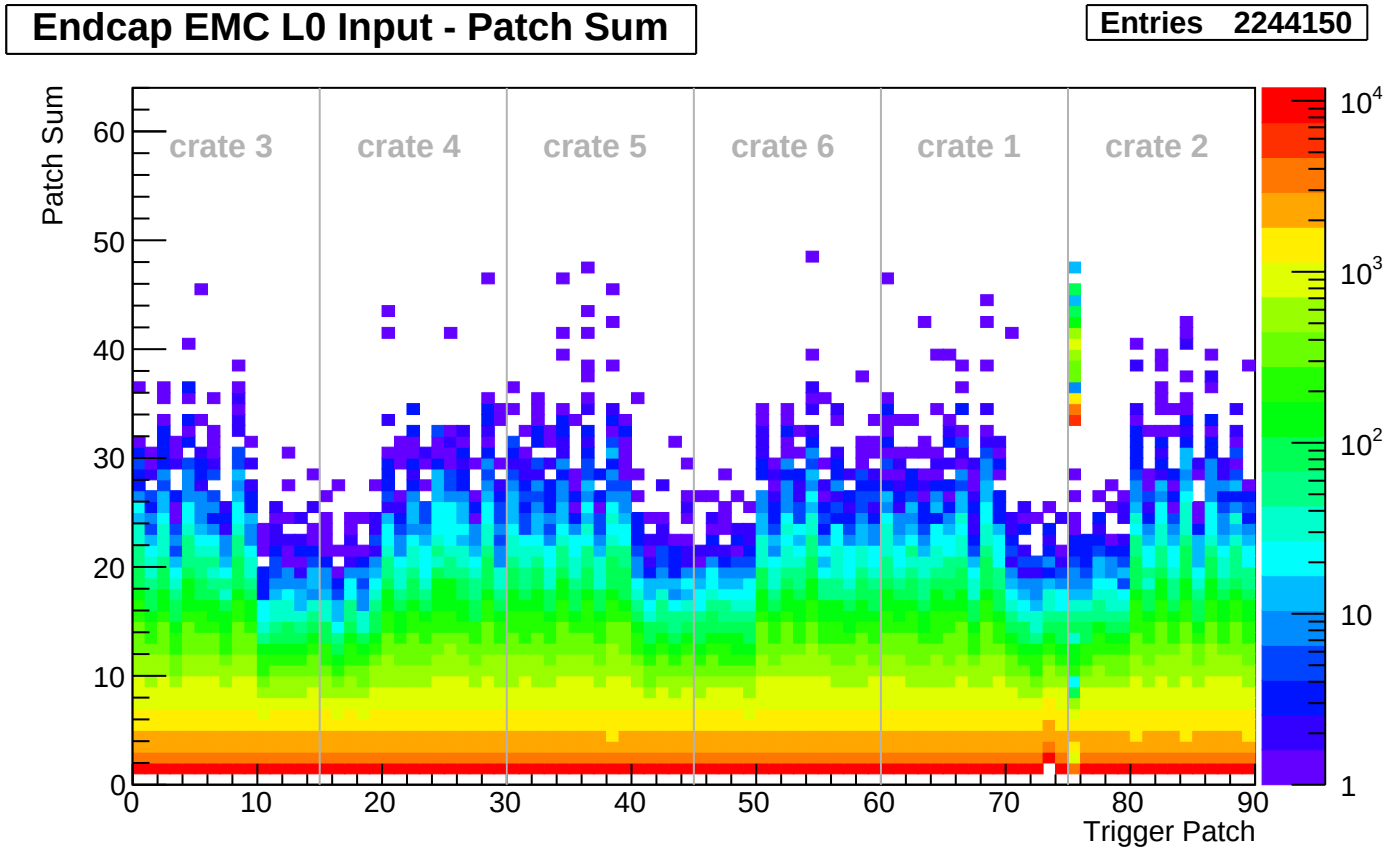
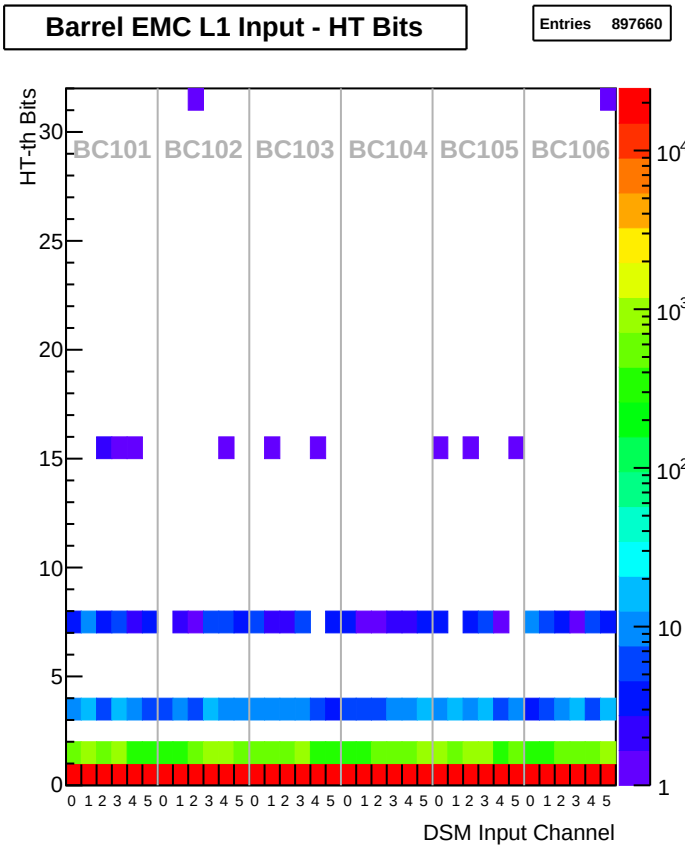
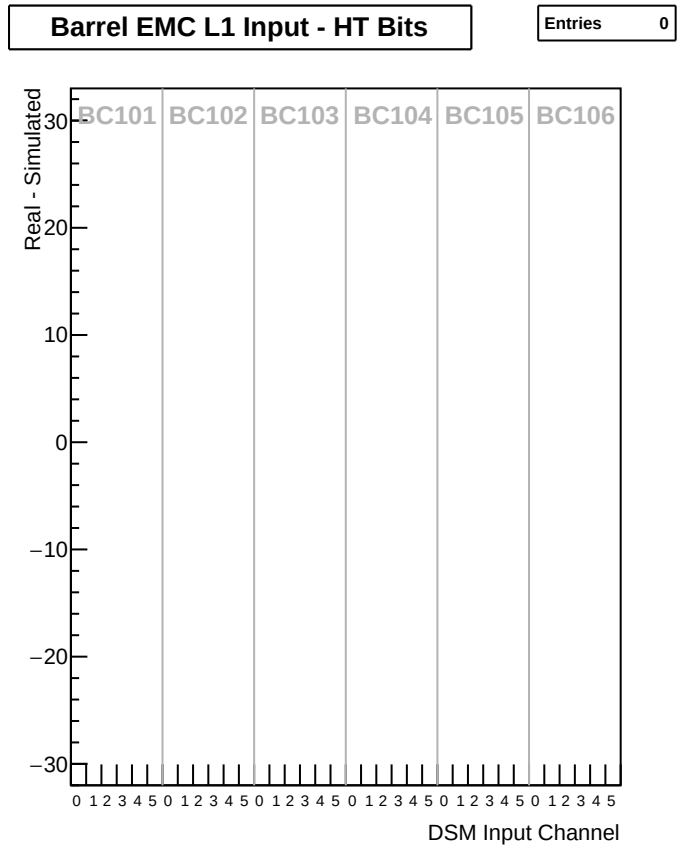

Barrel EMC L0 Input - High Tower
Entries 7480500
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

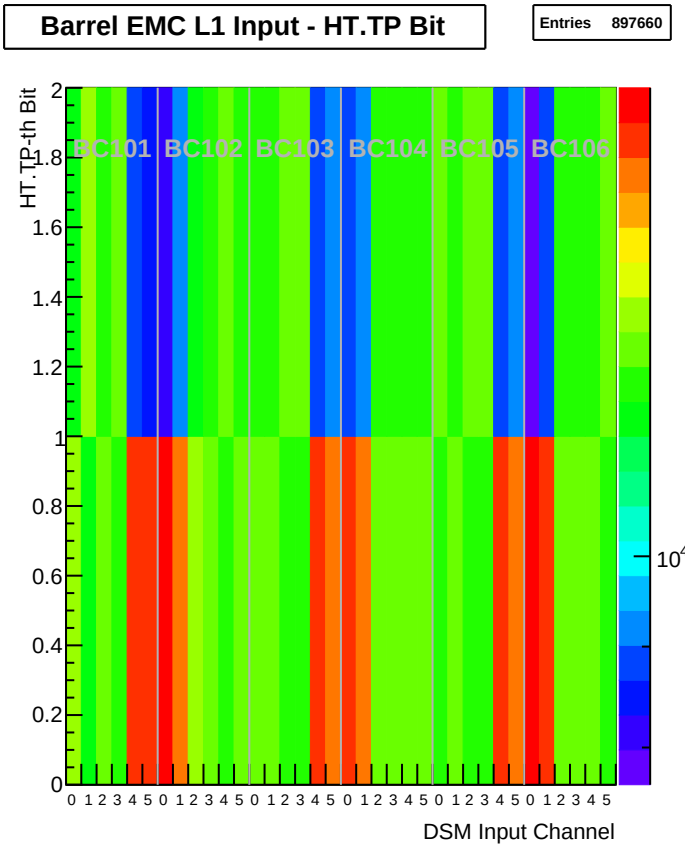

Barrel EMC L0 Input - Patch Sum
Entries 7480500
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

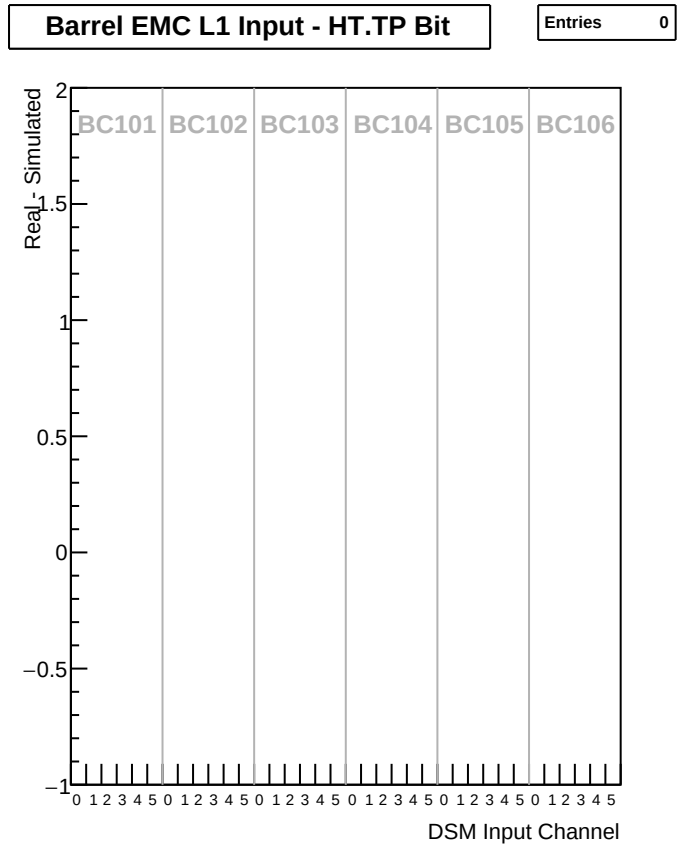

Endcap EMC L0 Input - High Tower
Entries 2244150
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

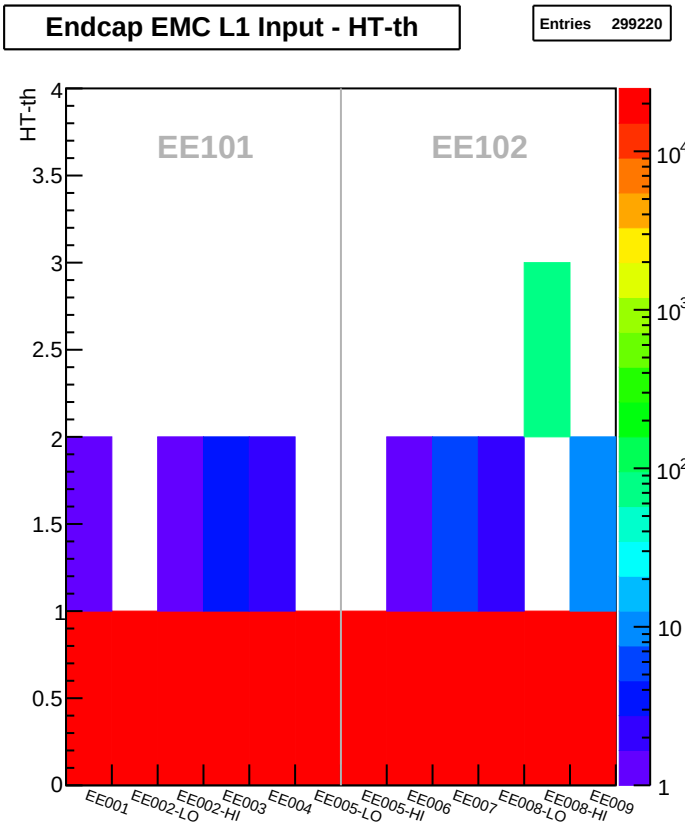

Endcap EMC L0 Input - Patch Sum
Entries 2244150
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

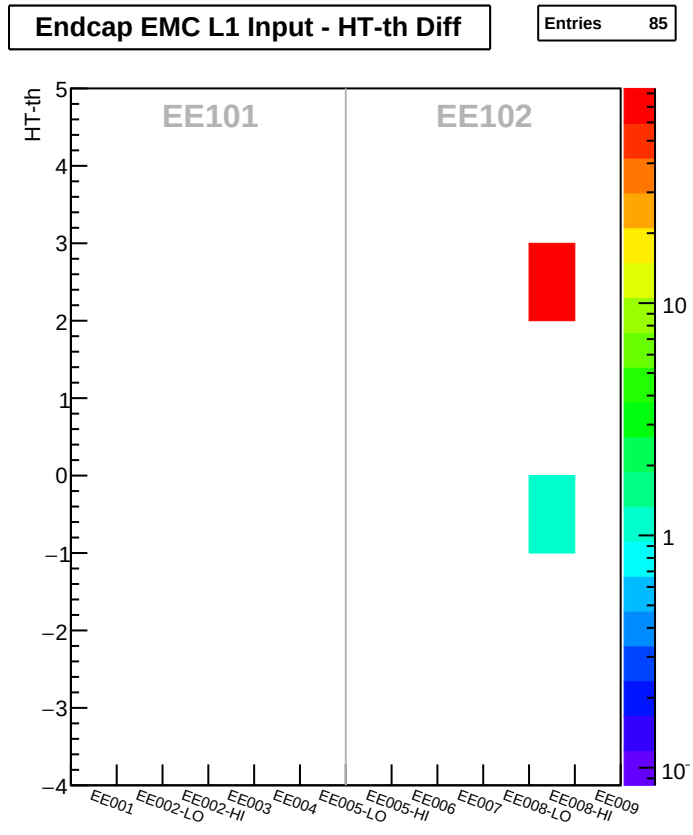

Barrel EMC L1 Input - HT Bits
Entries 897660
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

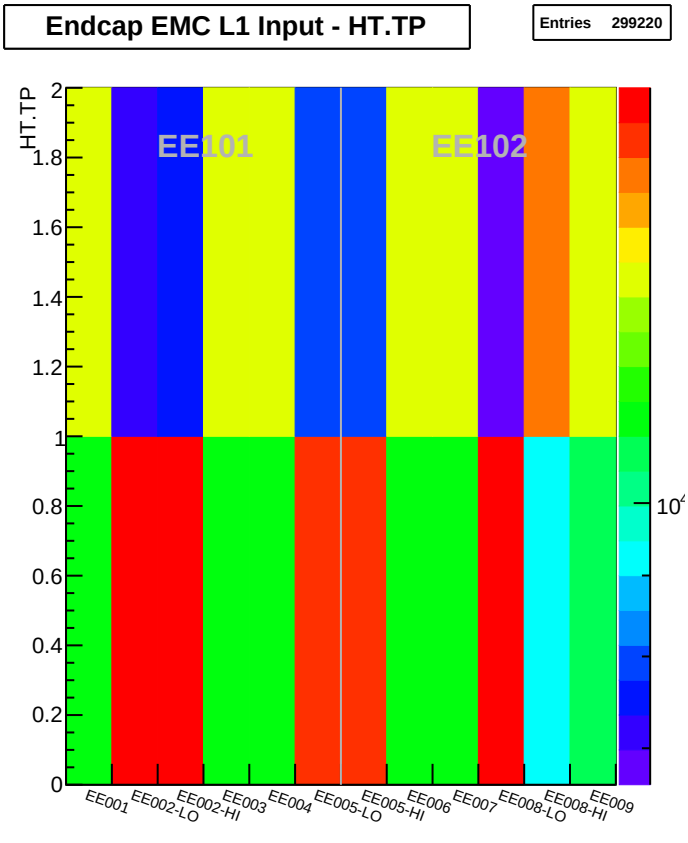

Barrel EMC L1 Input - HT Bits
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

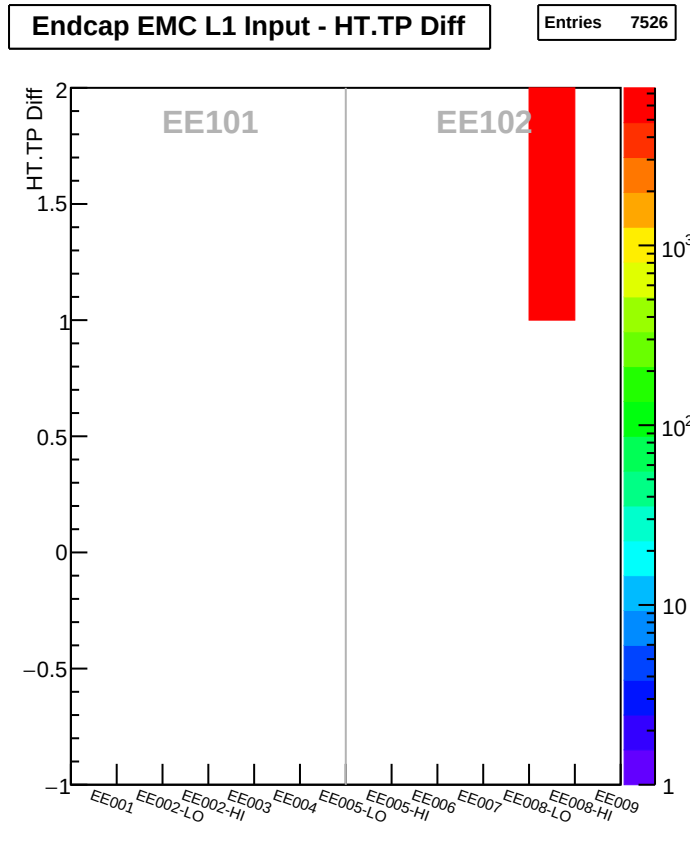

Barrel EMC L1 Input - HT.TP Bit
Entries 897660
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

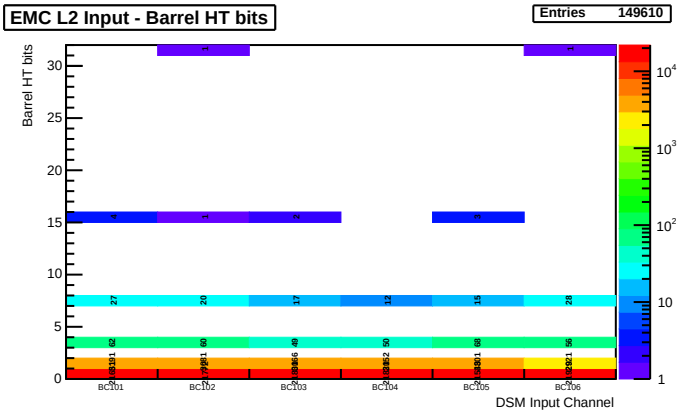

Barrel EMC L1 Input - HT.TP Bit
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

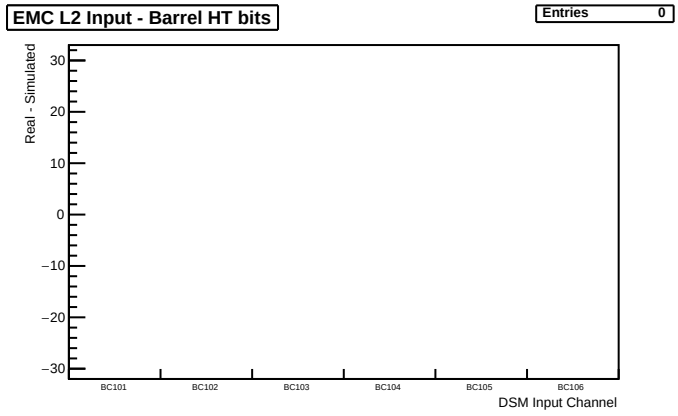

Endcap EMC L1 Input - HT-th
Entries 299220
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

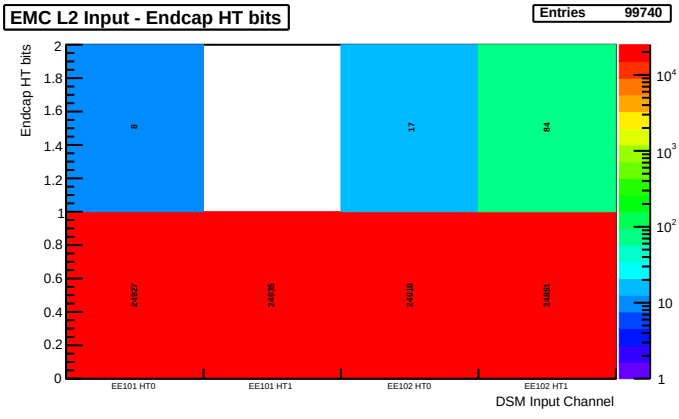

Endcap EMC L1 Input - HT-th Diff
Entries 85
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

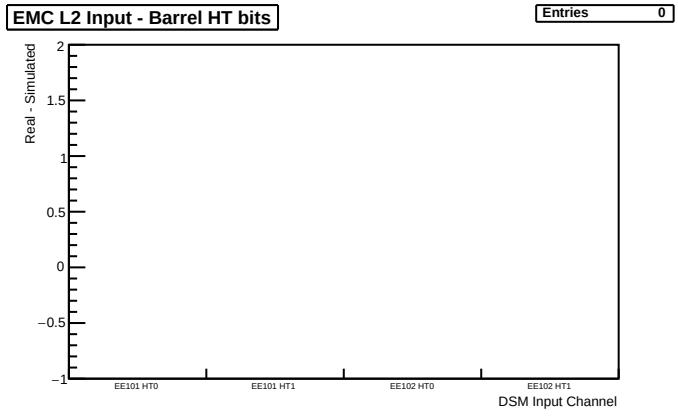

Endcap EMC L1 Input - HT.TP
Entries 299220
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

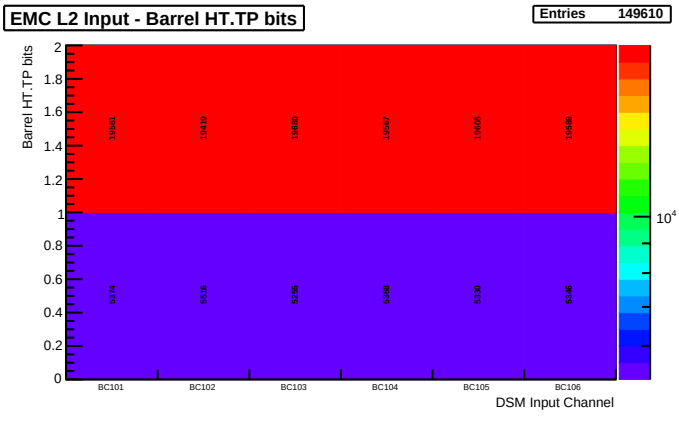

Endcap EMC L1 Input - HT.TP Diff
Entries 7526
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

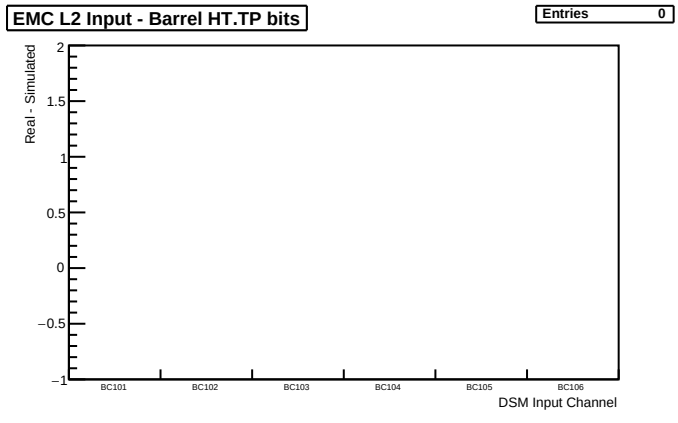

EMC L2 Input - Barrel HT bits
Entries 149610
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

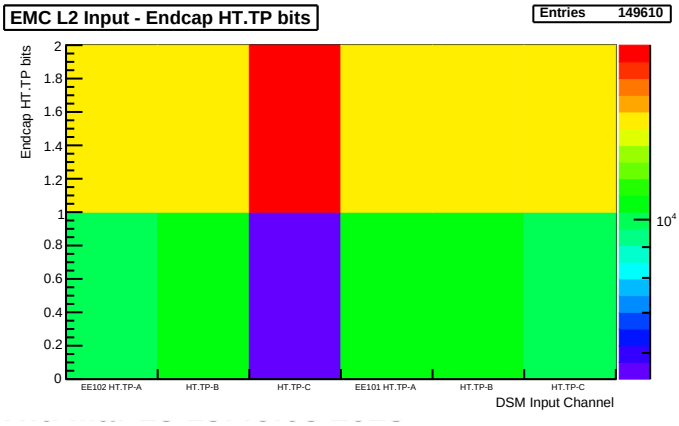

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

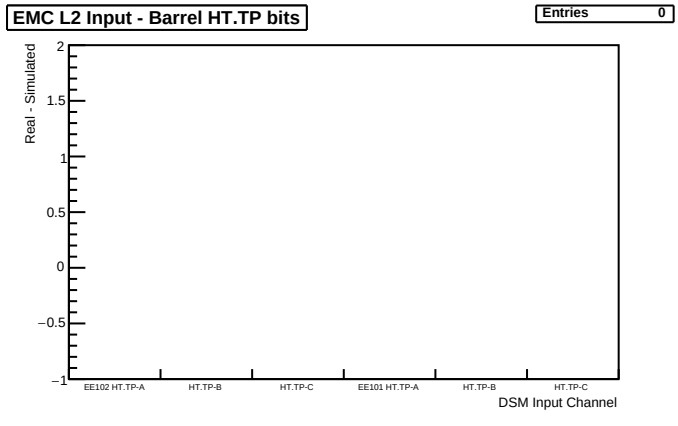

EMC L2 Input - Endcap HT bits
Entries 99740
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

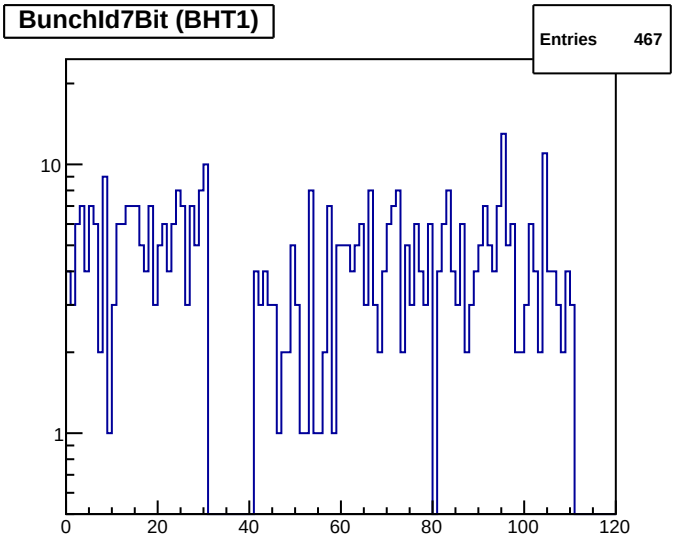

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

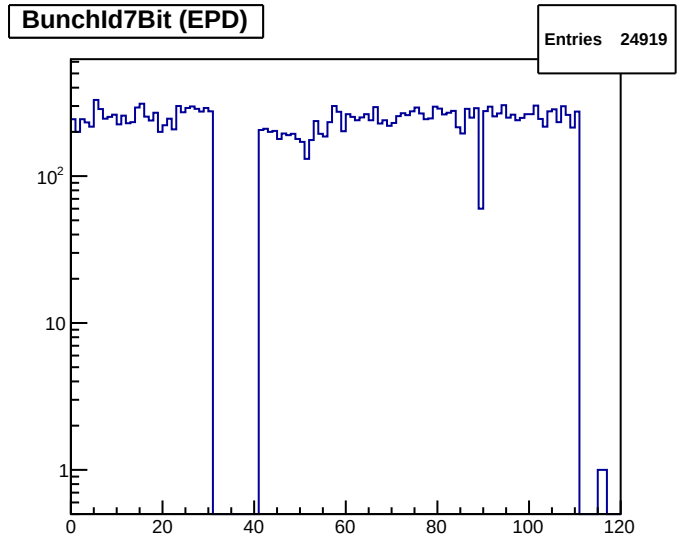

EMC L2 Input - Barrel HT.TP bits
Entries 149610
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

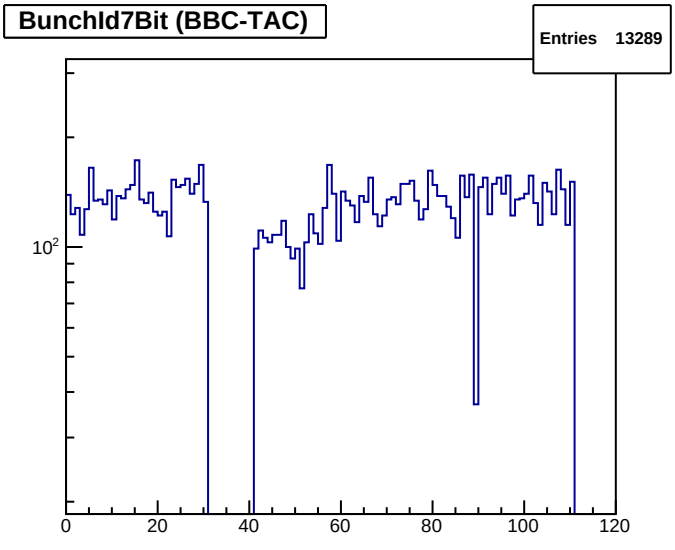

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

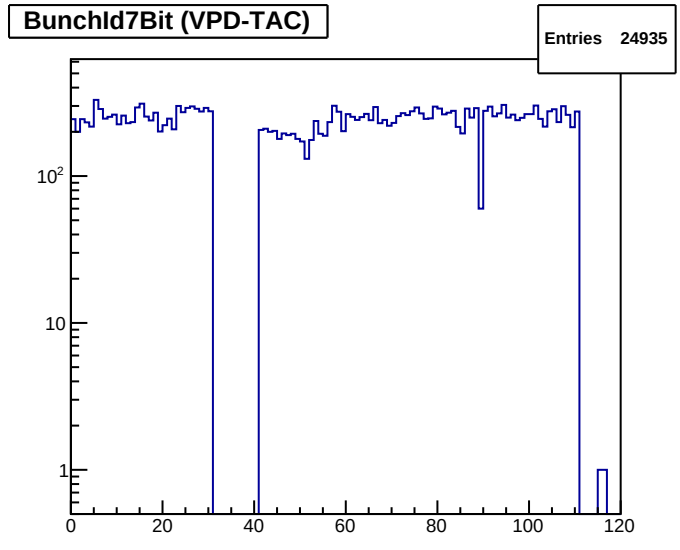

EMC L2 Input - Endcap HT.TP bits
Entries 149610
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

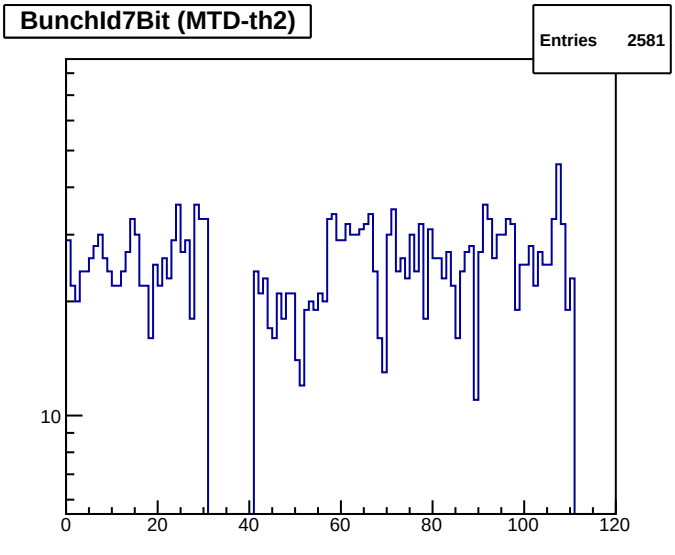

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

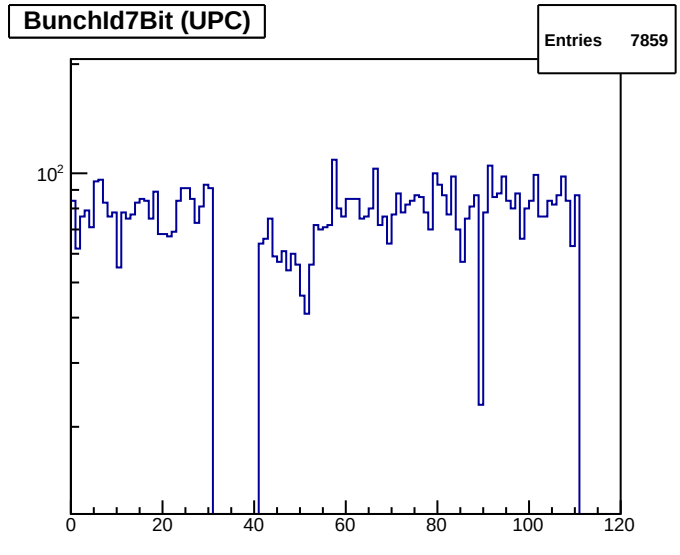

BunchId7Bit (BHT1)
Entries 467
10
1
0
20
40
60
80
100
120

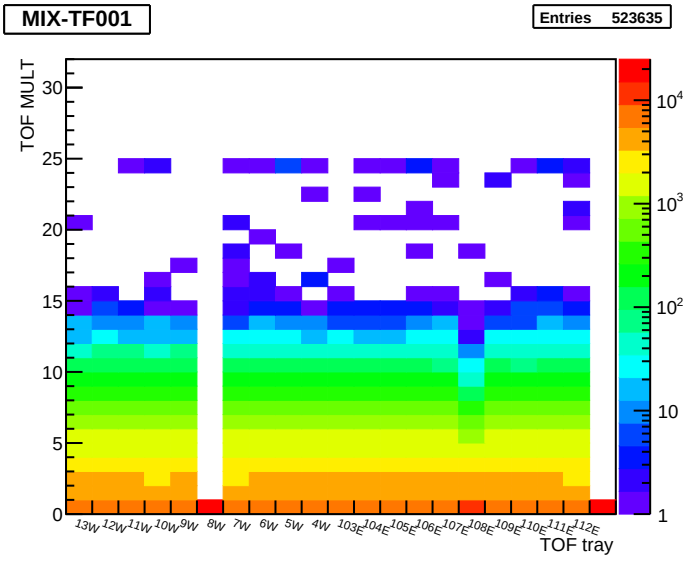

BunchId7Bit (EPD)
Entries 24919
10^2
10
1
0
20
40
60
80
100
120

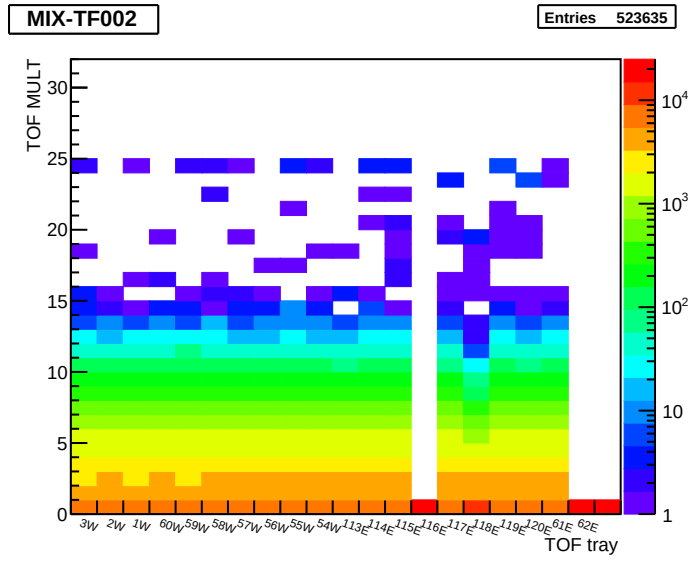

BunchId7Bit (BBC-TAC)
Entries 13289
10^2
0
20
40
60
80
100
120

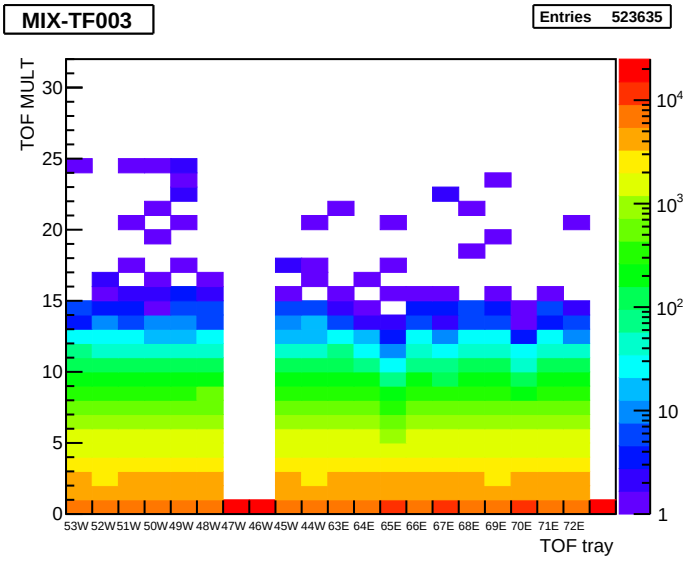

BunchId7Bit (VPD-TAC)
Entries 24935
10^2
10
1
0
20
40
60
80
100
120

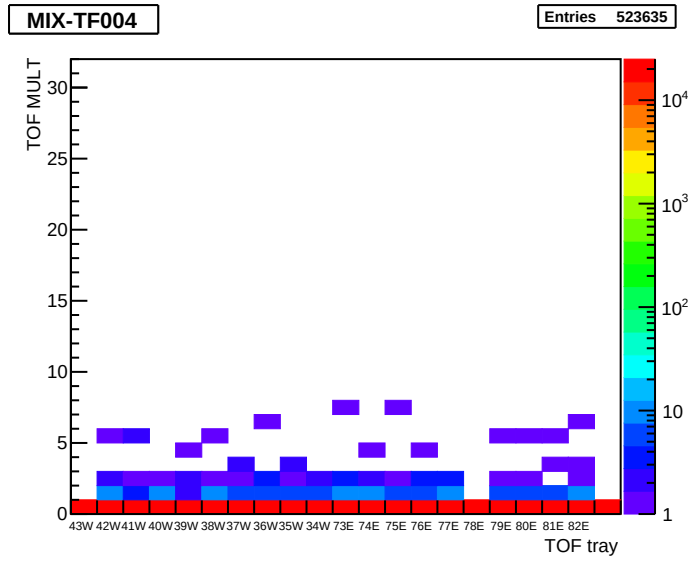

BunchId7Bit (MTD-th2)
Entries 2581
10
0
20
40
60
80
100
120

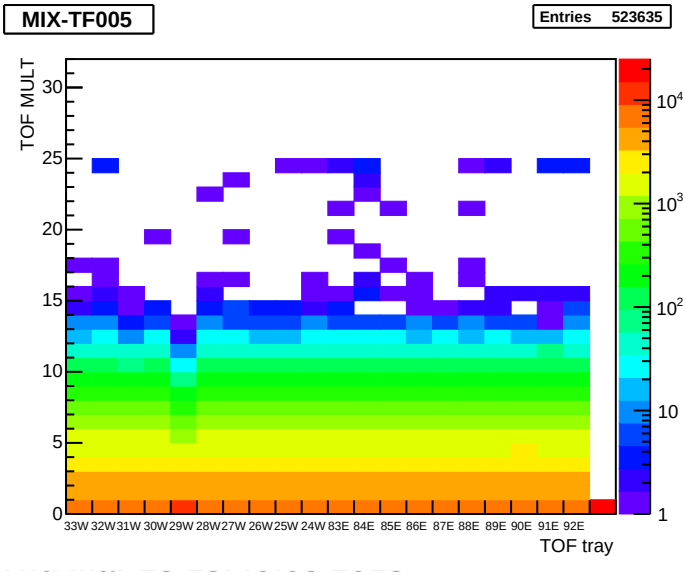

BunchId7Bit (UPC)
Entries 7859
10^2
0
20
40
60
80
100
120

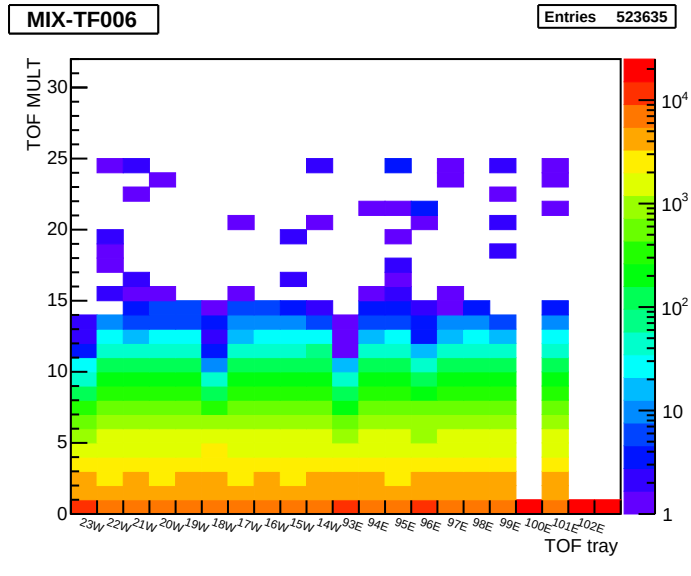

MIX-TF001
Entries 523635
TOF MULT
TOF tray

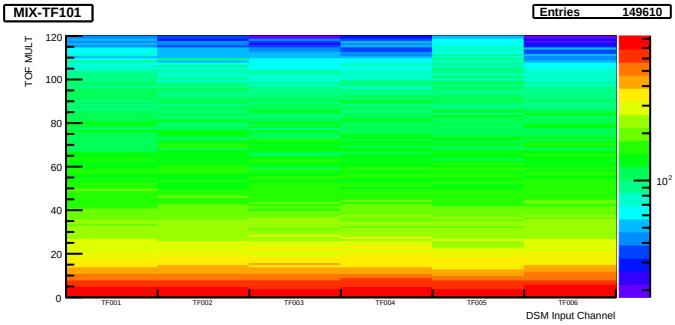

MIX-TF002
Entries 523635
TOF MULT
TOF tray

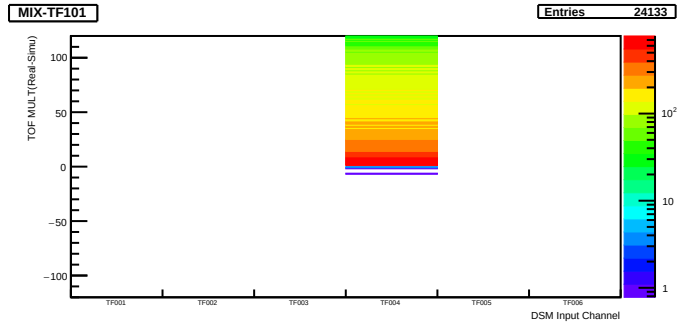

MIX-TF003
Entries 523635
TOF MULT
TOF tray

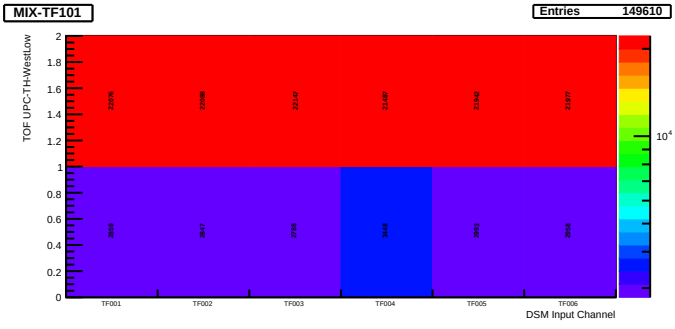

MIX-TF004
Entries 523635
TOF MULT
TOF tray

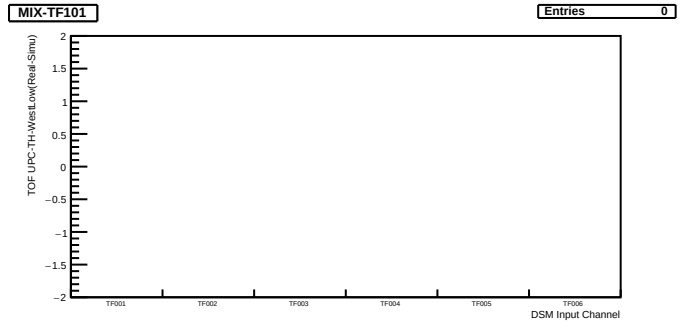

MIX-TF005
Entries 523635
TOF MULT
TOF tray

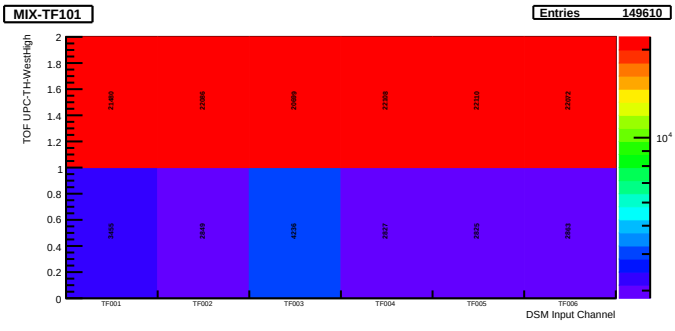

MIX-TF006
Entries 523635
TOF MULT
TOF tray

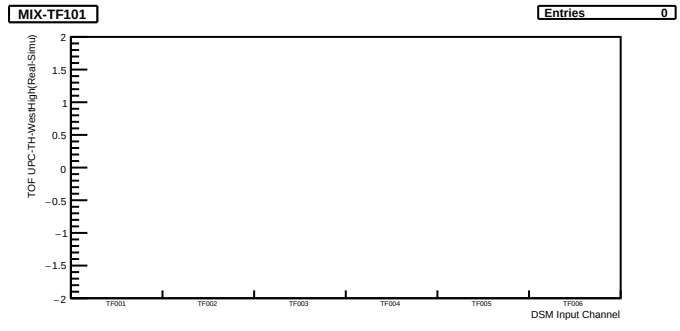

MIX-TF101
Entries 149610
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

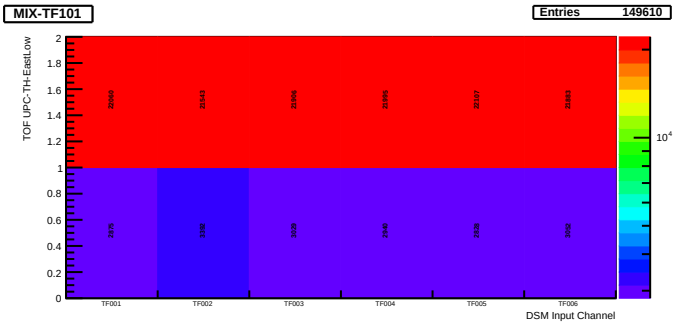

MIX-TF101
Entries 24133
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

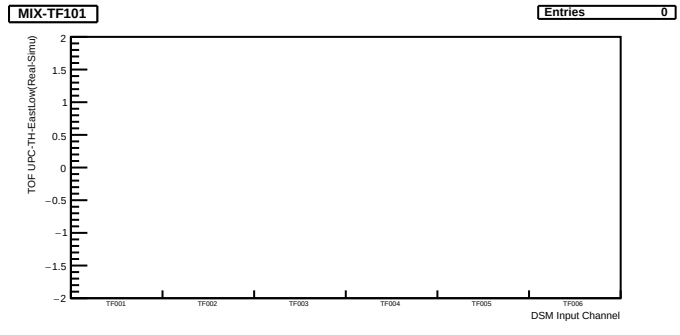

MIX-TF101
Entries 149610
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

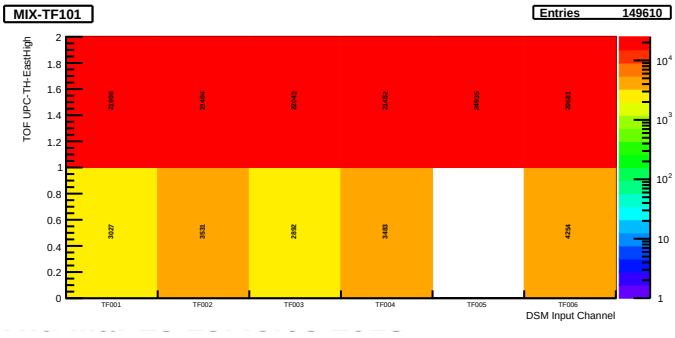

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

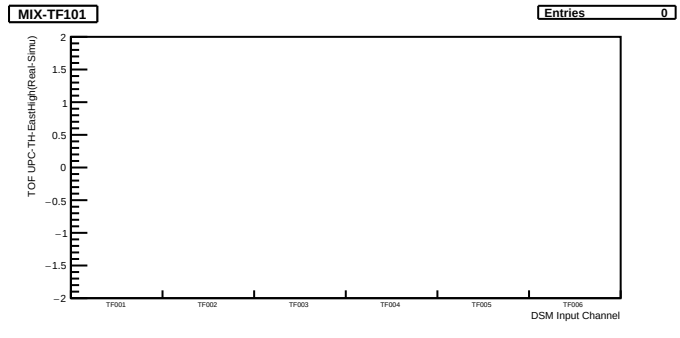

MIX-TF101
Entries 149610
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

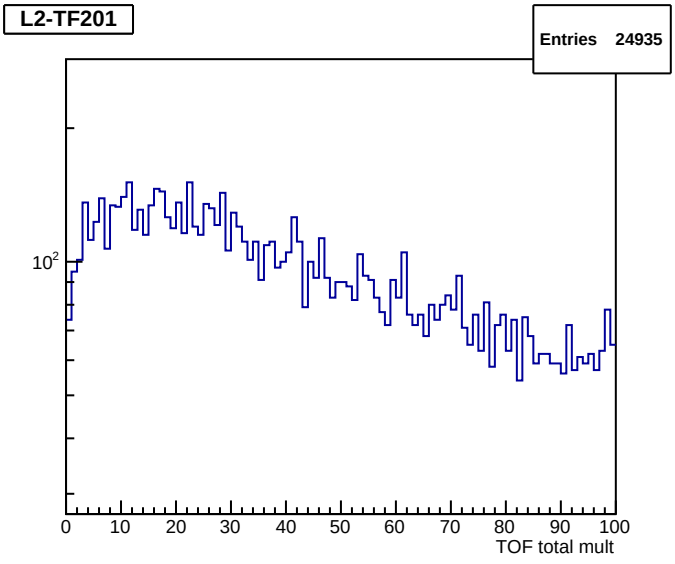

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

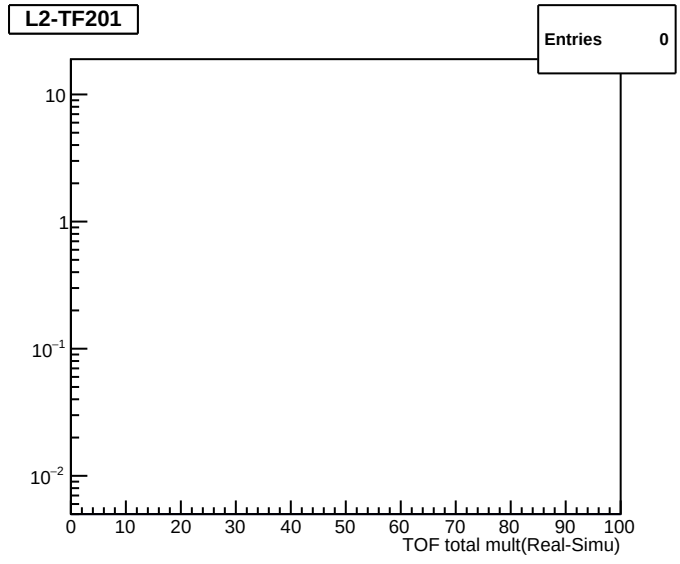

MIX-TF101
Entries 149610
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

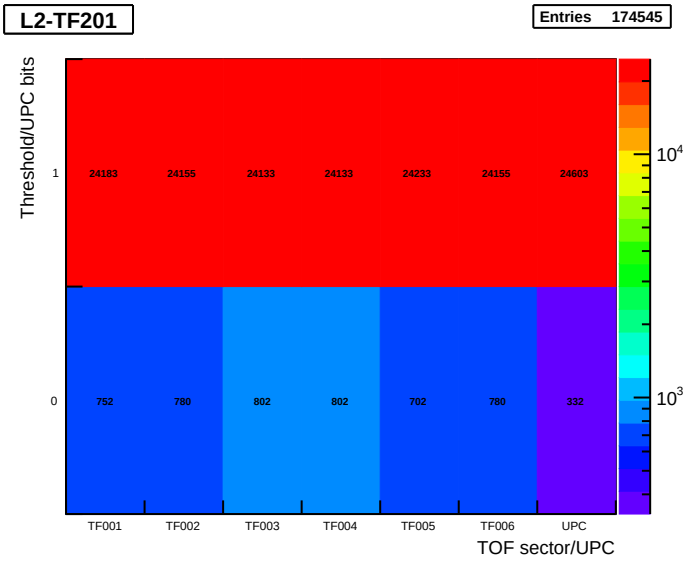

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

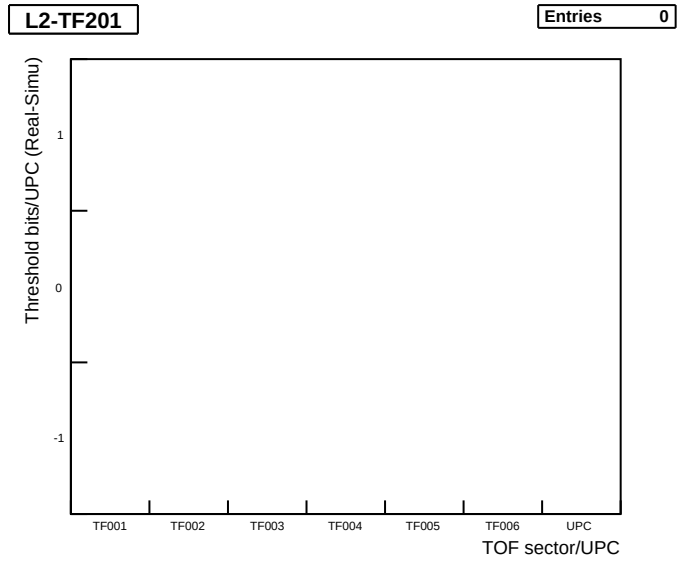

MIX-TF101
Entries 149610
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

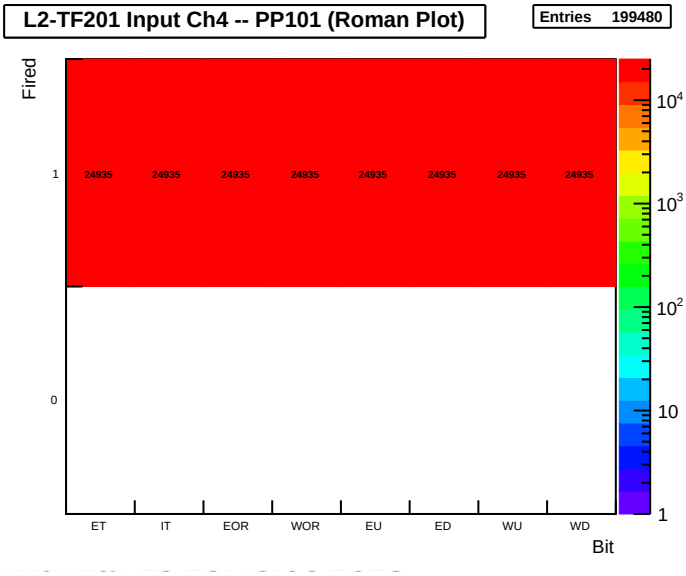

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

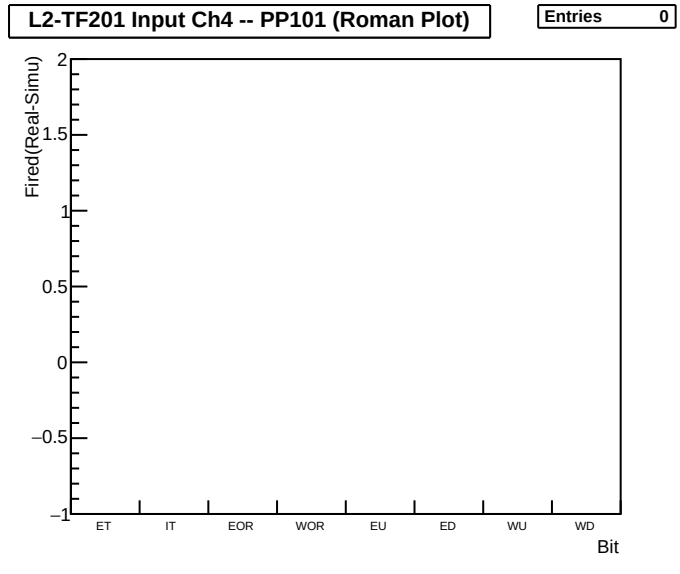

L2-TF201
Entries 24935
10^2
0 10 20 30 40 50 60 70 80 90 100
TOF total mult

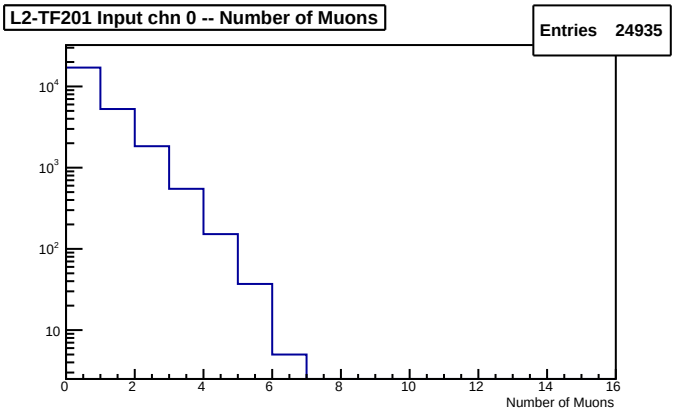

L2-TF201
Entries 0
10
1
10^{-1}
10^{-2}
0 10 20 30 40 50 60 70 80 90 100
TOF total mult(Real-Simu)

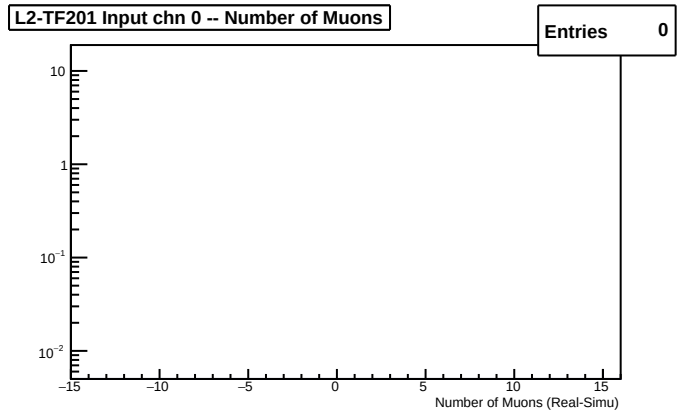

L2-TF201
Entries 174545
Threshold/UPC bits
1
0
24183 24155 24133 24133 24233 24155 24603
752 780 802 802 702 780 332
10^4
10^3
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

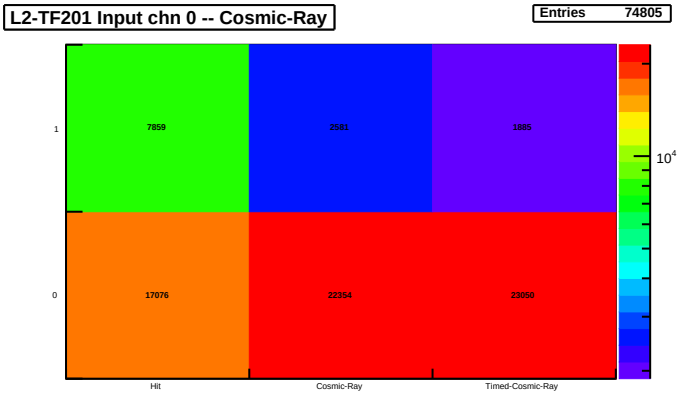

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
1
0
-1
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

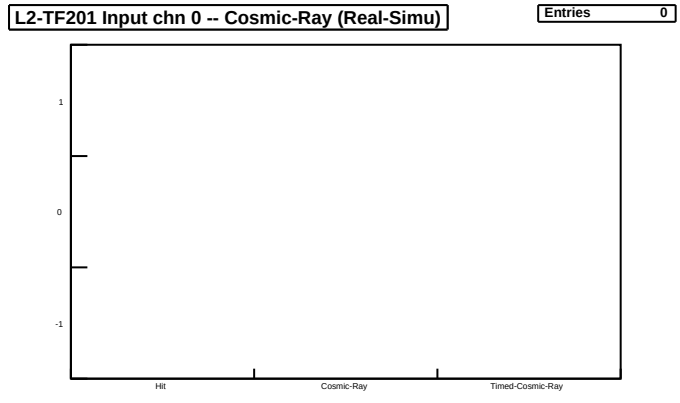

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 199480
Fired
1
0
24935 24935 24935 24935 24935 24935 24935 24935
10^4
10^3
10^2
10
1
ET IT EOR WOR EU ED WU WD
Bit

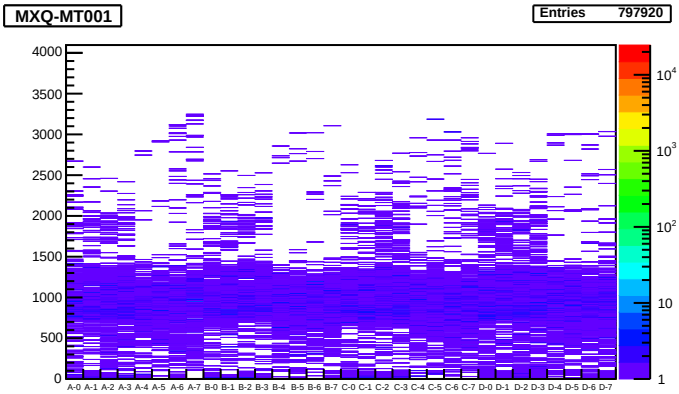

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 0
Fired(Real-Simu)
2
1.5
1
0.5
0
−0.5
−1
ET IT EOR WOR EU ED WU WD
Bit

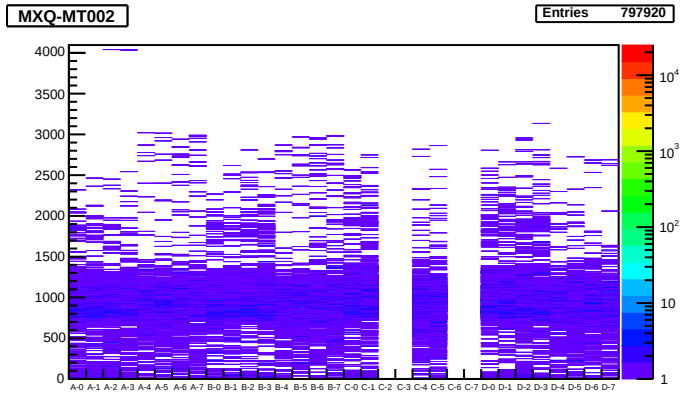

L2-TF201 Input chn 0 -- Number of Muons
Entries 24935
Number of Muons

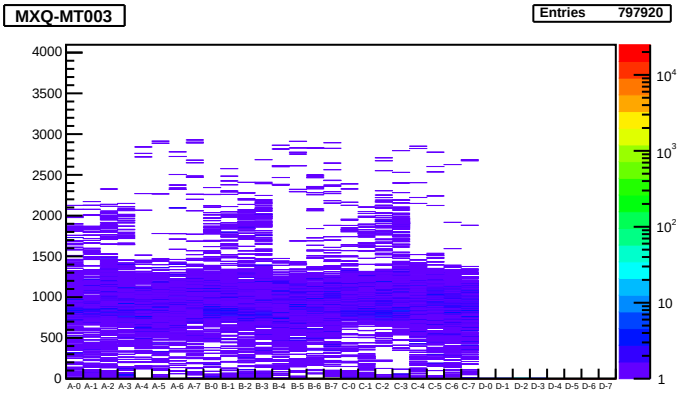

L2-TF201 Input chn 0 -- Number of Muons
Entries 0
Number of Muons (Real-Simu)

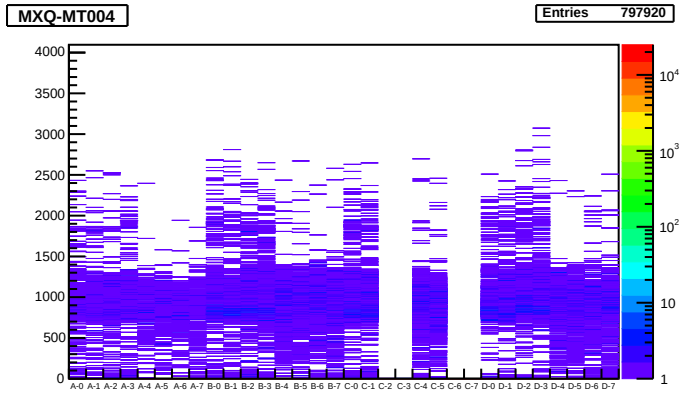

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 74805
7859
2581
1885
17076
22354
23050
Hit
Cosmic-Ray
Timed-Cosmic-Ray

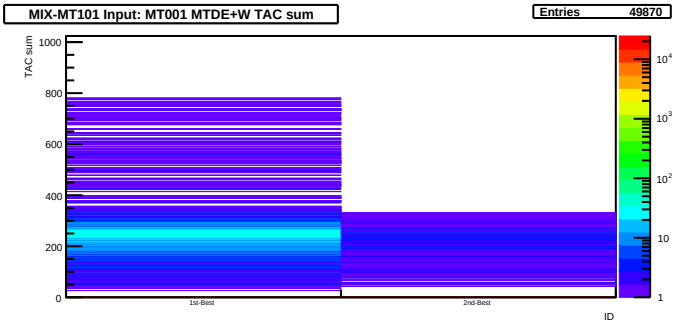

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 0
Hit
Cosmic-Ray
Timed-Cosmic-Ray

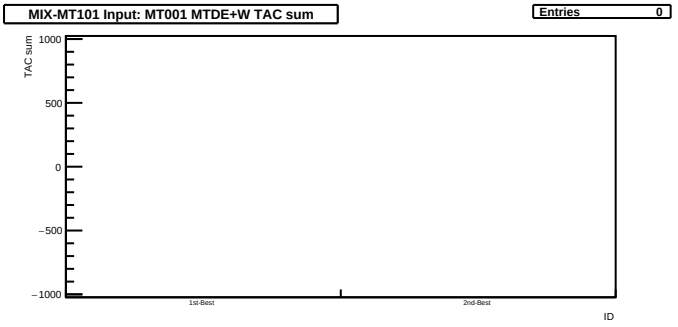

MXQ-MT001
Entries 797920

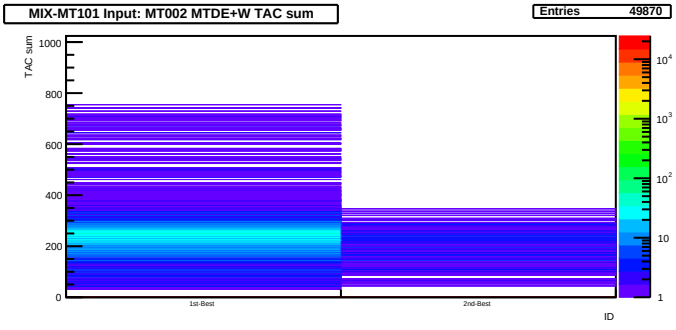

MXQ-MT002
Entries 797920

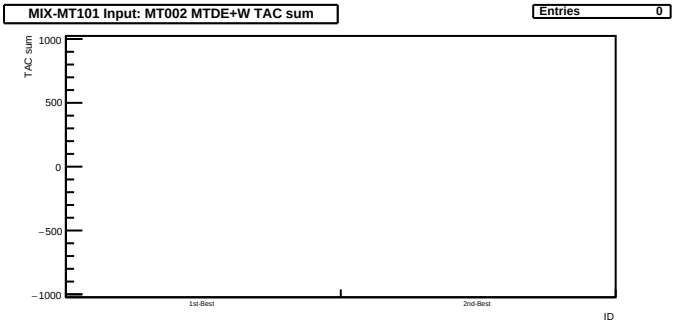

MXQ-MT003
Entries 797920

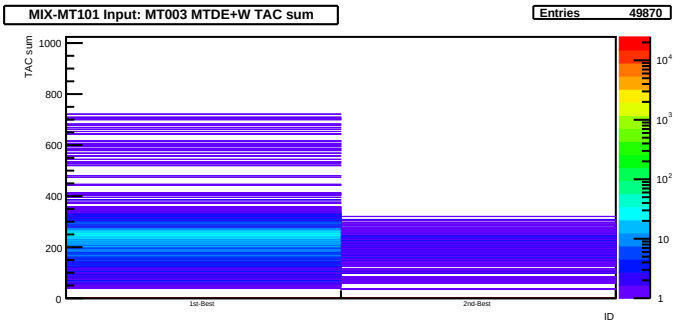

MXQ-MT004
Entries 797920

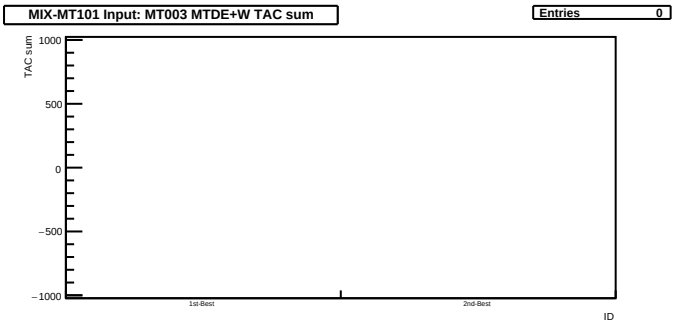

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 49870
TAC sum
ID
1st-Best
2nd-Best

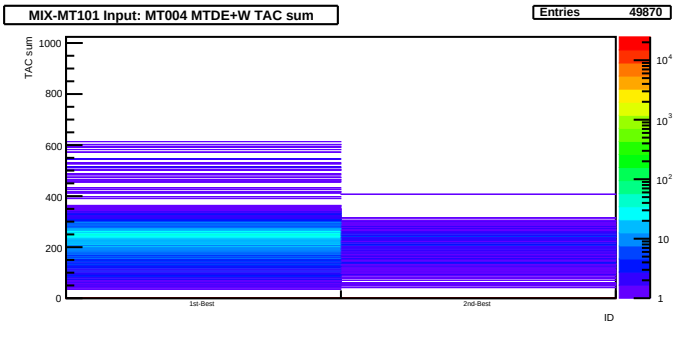

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 0
TAC sum
ID
1st-Best
2nd-Best

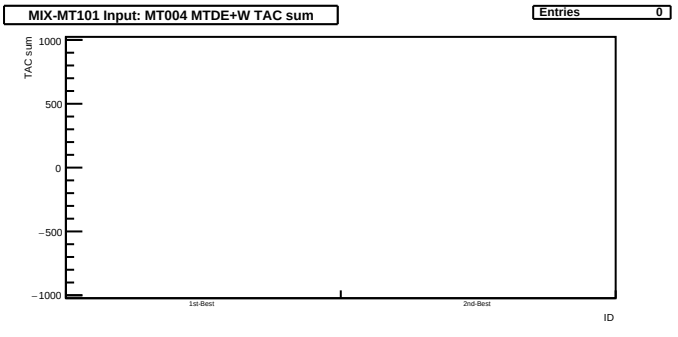

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 49870
TAC sum
ID
1st-Best
2nd-Best

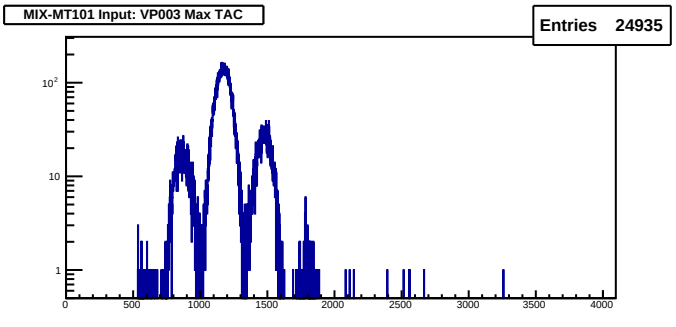

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 0
TAC sum
ID
1st-Best
2nd-Best

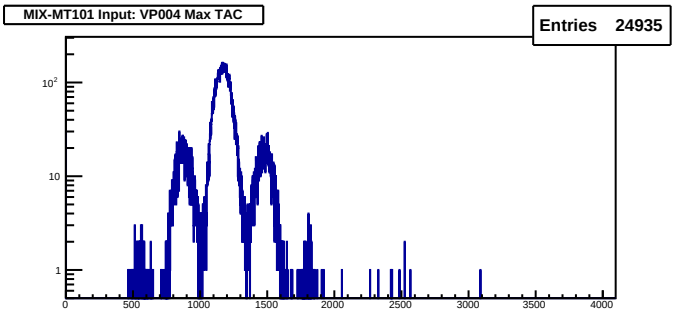

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 49870
TAC sum
ID
1st-Best
2nd-Best

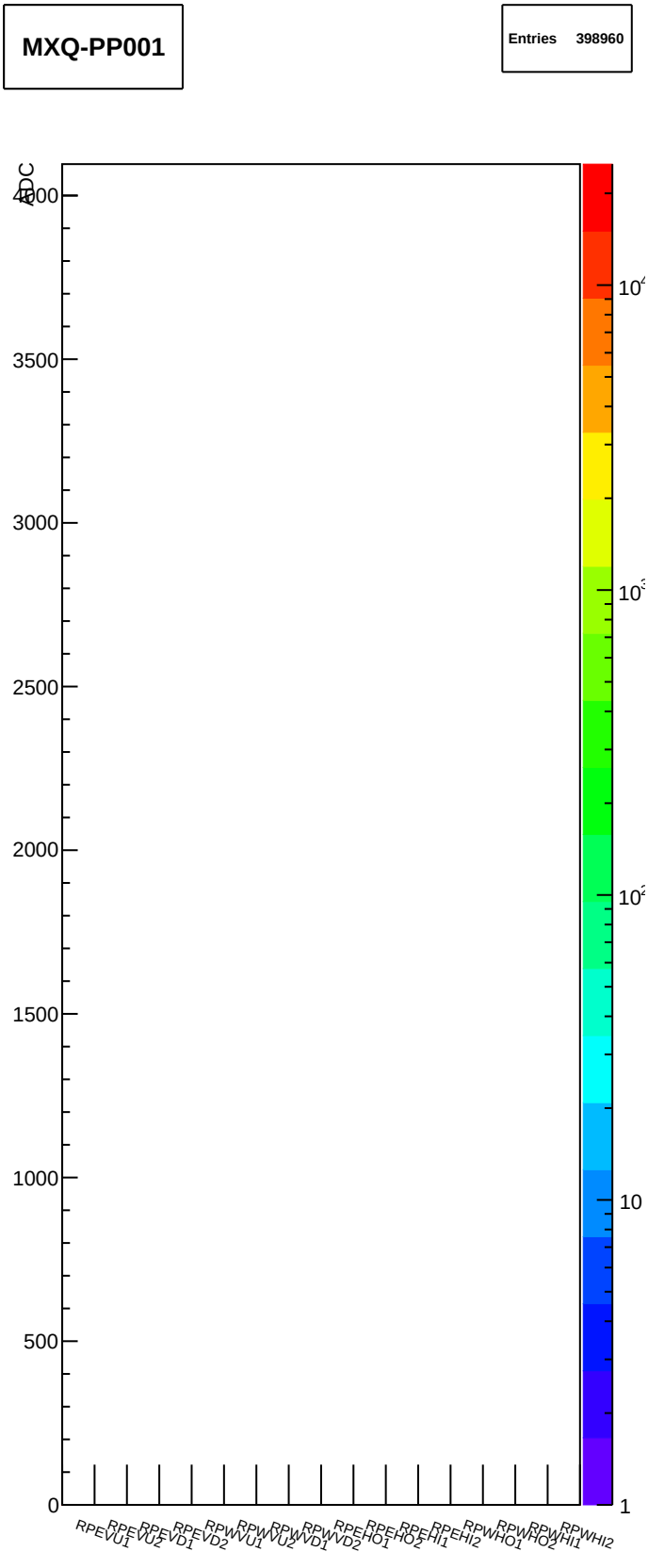

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 0
TAC sum
ID
1st-Best
2nd-Best

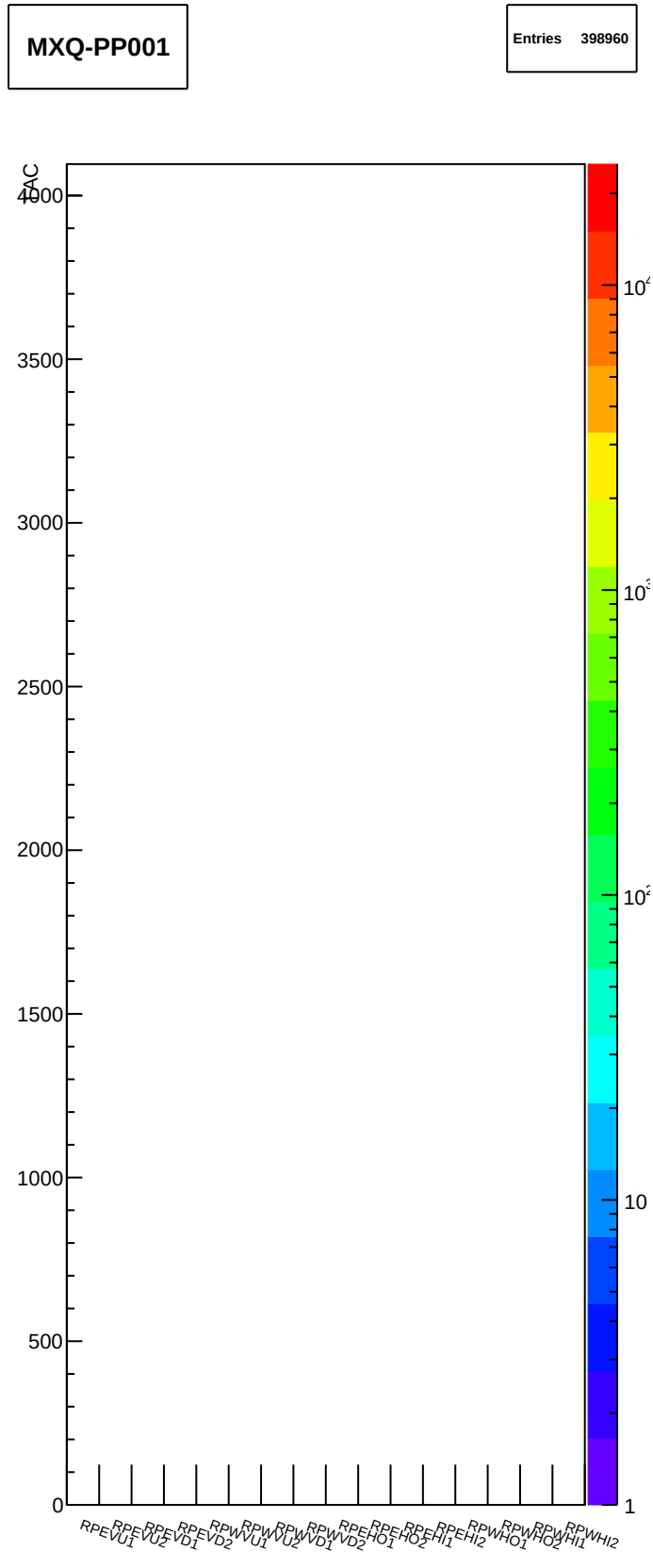

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 49870
TAC sum
ID
1st-Best
2nd-Best

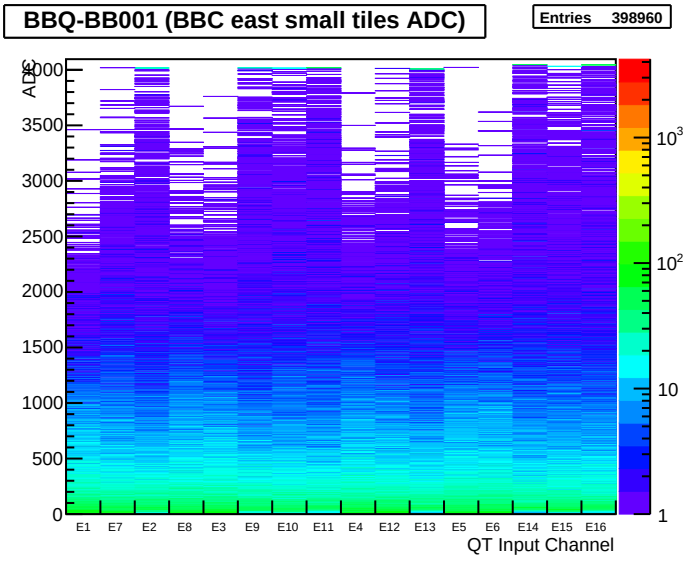

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 0
TAC sum
ID
1st-Best
2nd-Best

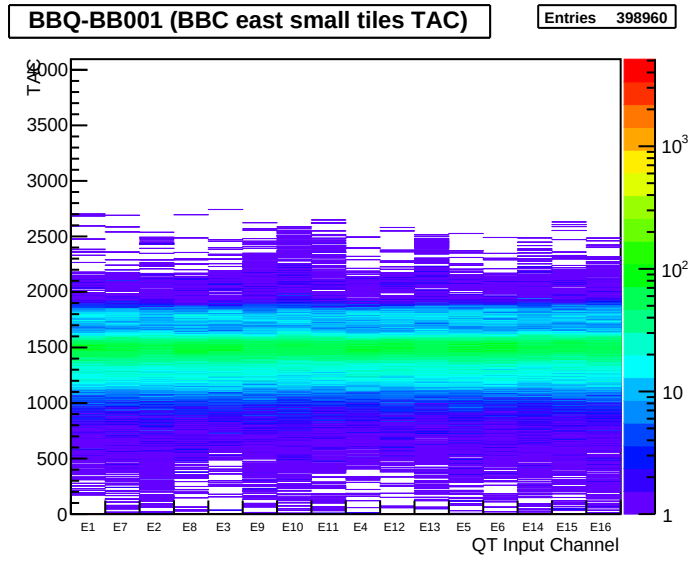

MIX-MT101 Input: VP003 Max TAC
Entries 24935

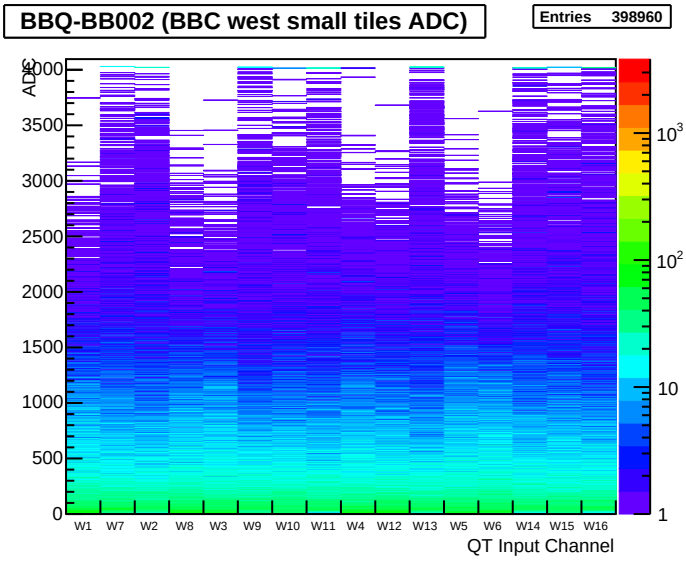

MIX-MT101 Input: VP004 Max TAC
Entries 24935

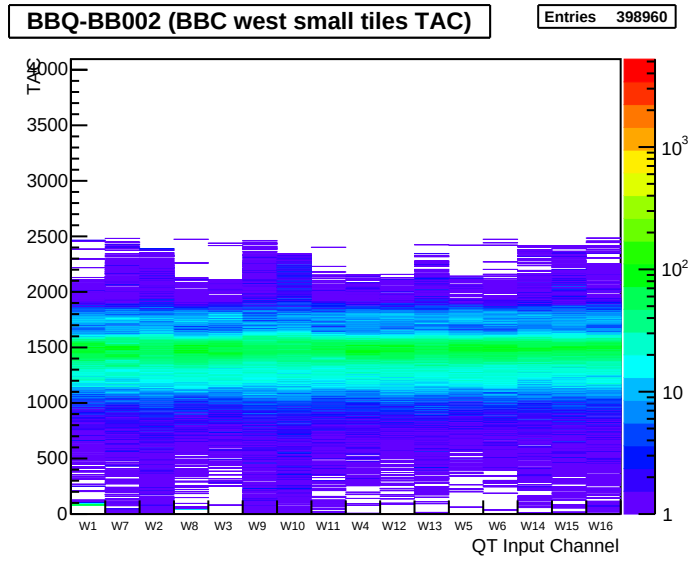

MXQ-PP001
Entries 398960
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

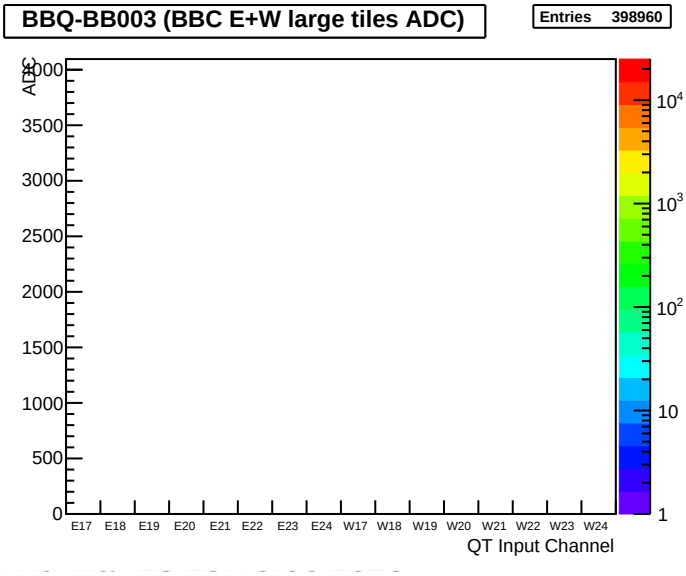

MXQ-PP001
Entries 398960
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

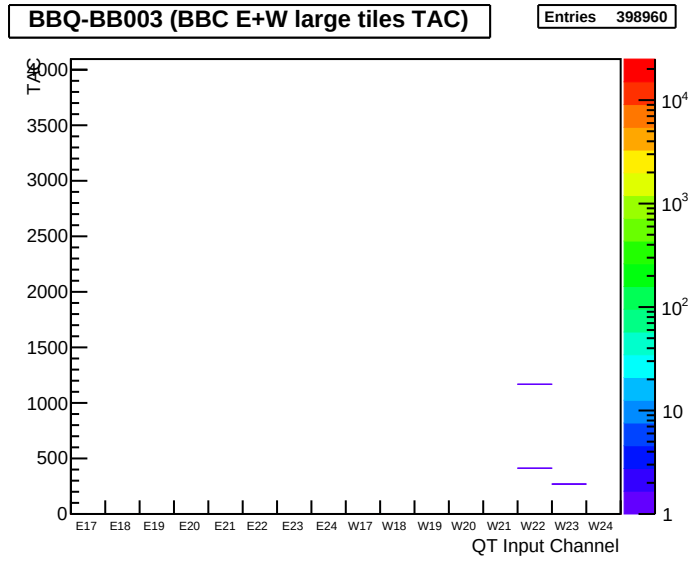

BBQ-BB001 (BBC east small tiles ADC)
Entries 398960
ADC
QT Input Channel

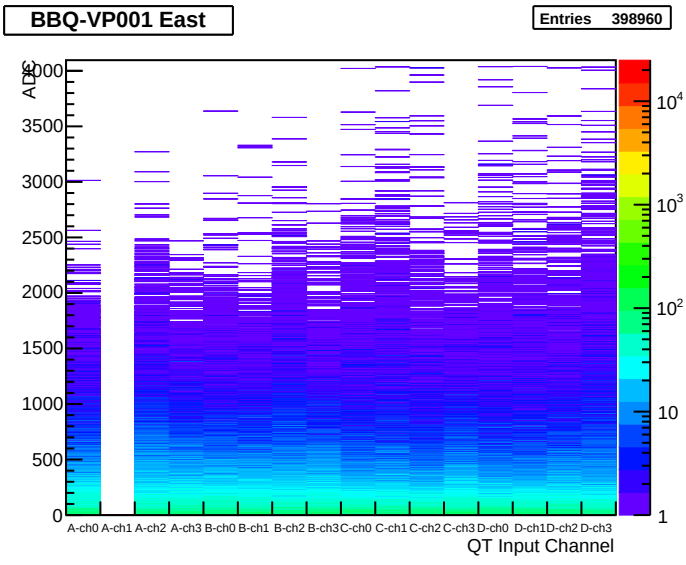

BBQ-BB001 (BBC east small tiles TAC)
Entries 398960
TAC
QT Input Channel

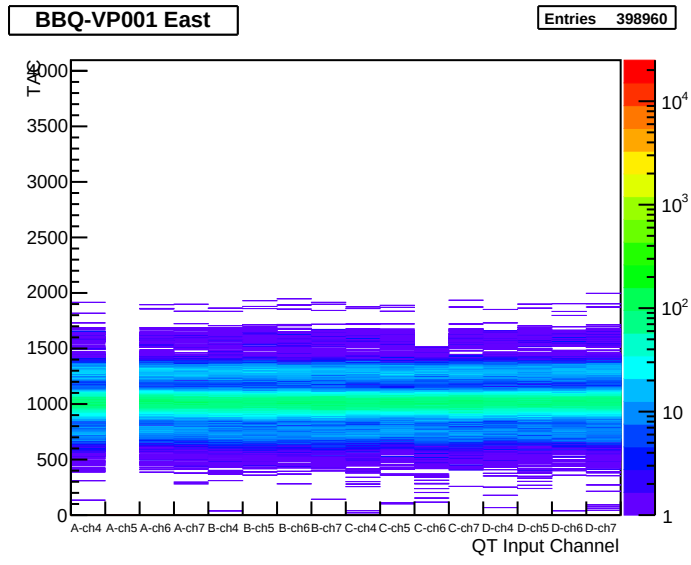

BBQ-BB002 (BBC west small tiles ADC)
Entries 398960
ADC
QT Input Channel

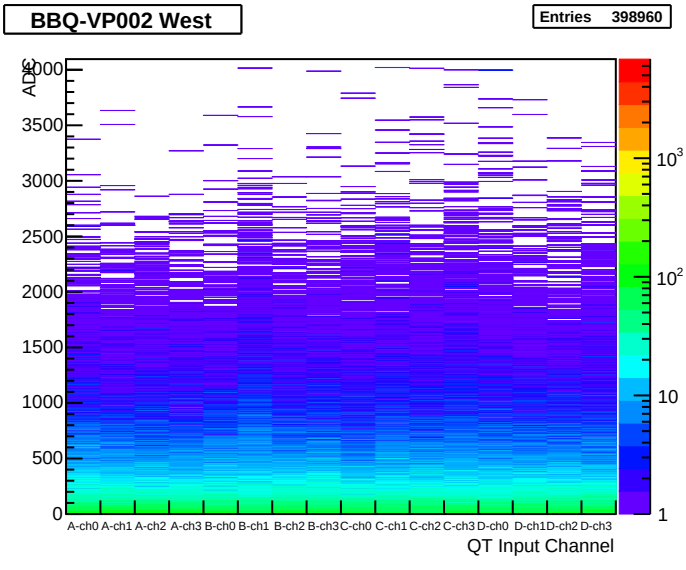

BBQ-BB002 (BBC west small tiles TAC)
Entries 398960
TAC
QT Input Channel

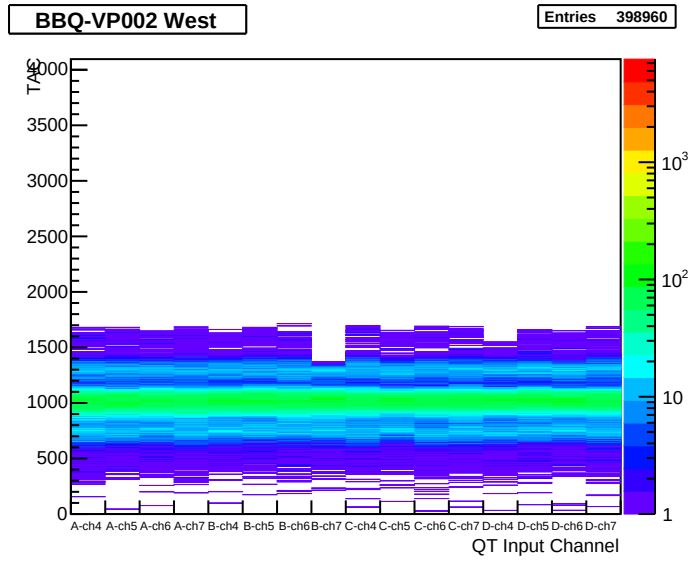

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 398960
ADC
QT Input Channel

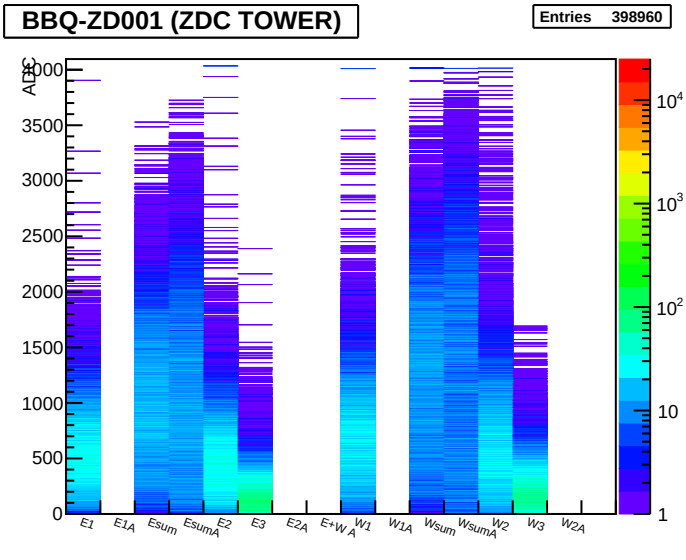

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 398960
TAC
QT Input Channel

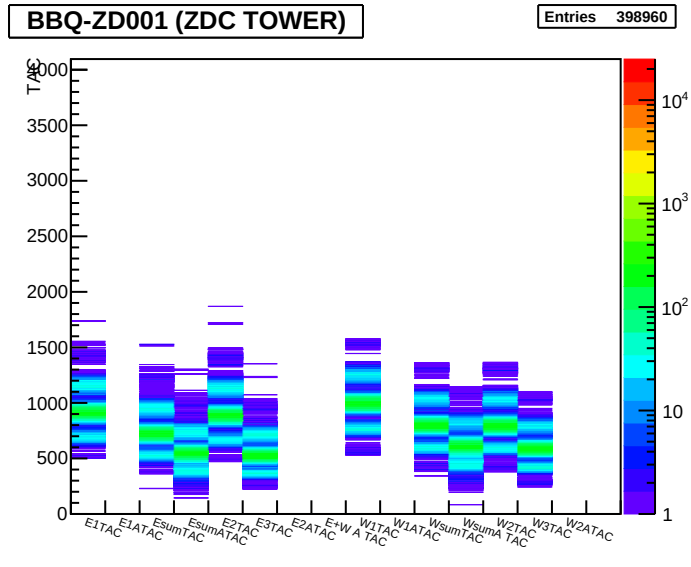

BBQ-VP001 East
Entries 398960
ADC
QT Input Channel

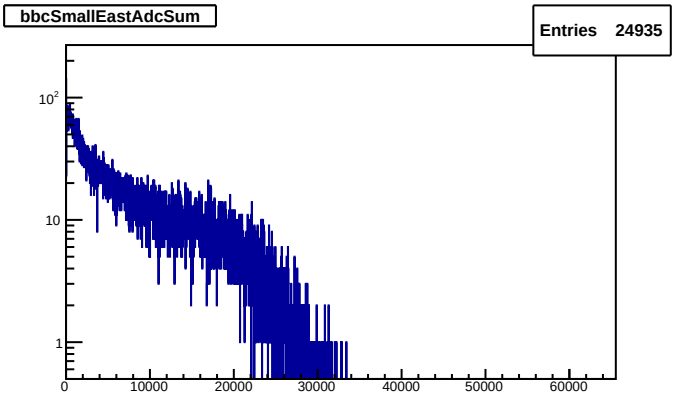

BBQ-VP001 East
Entries 398960
TAC
QT Input Channel

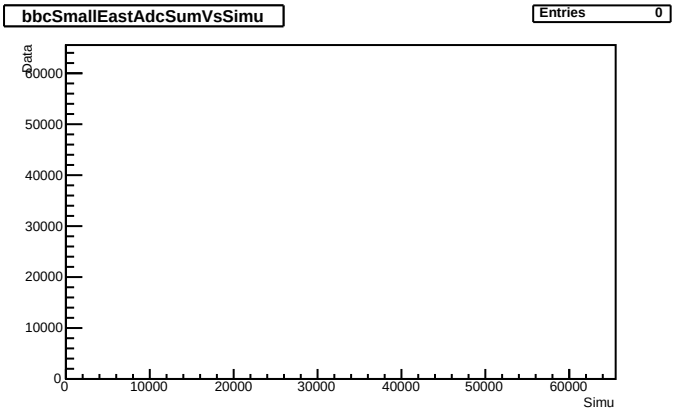

BBQ-VP002 West
Entries 398960
ADC
QT Input Channel

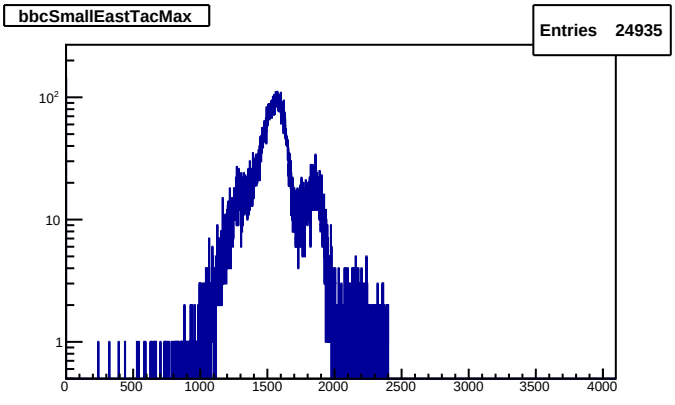

BBQ-VP002 West
Entries 398960
TAC
QT Input Channel

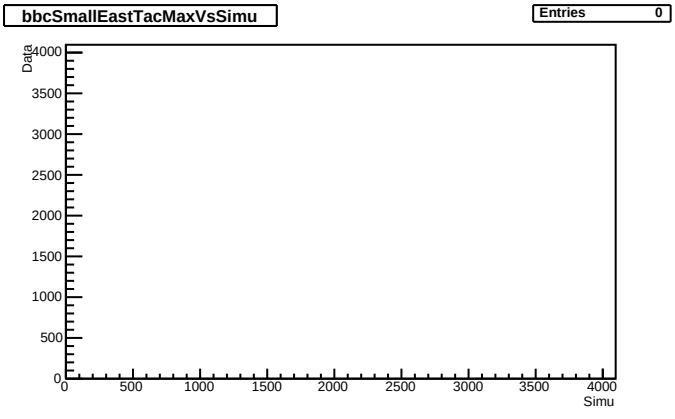

BBQ-ZD001 (ZDC TOWER)
Entries 398960
ADC

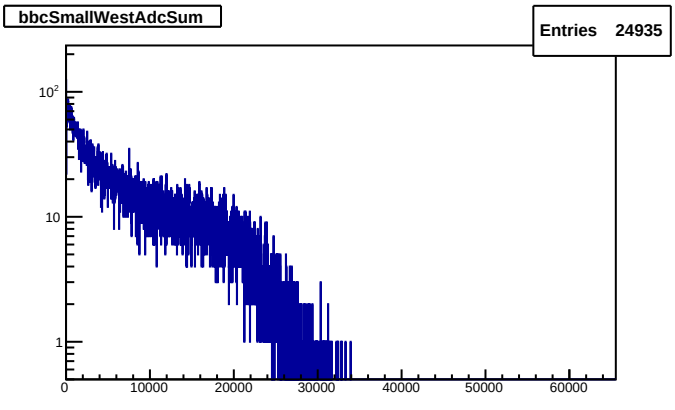

BBQ-ZD001 (ZDC TOWER)
Entries 398960
TAC

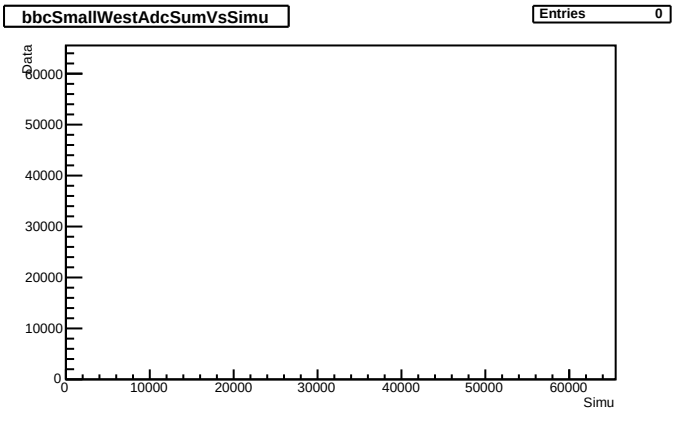

bbcSmallEastAdcSum
Entries 24935

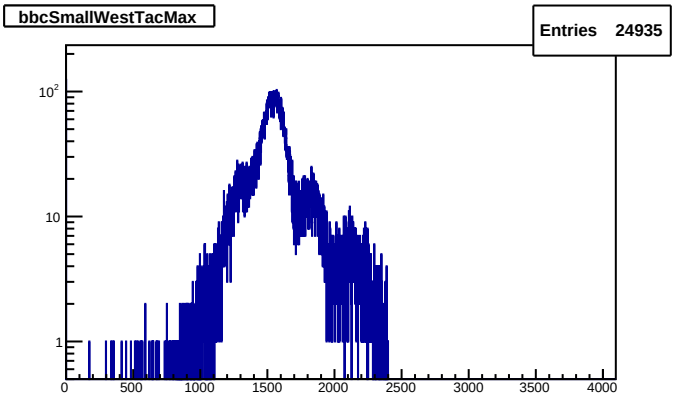

bbcSmallEastAdcSumVsSimu
Entries 0
Data
Simu

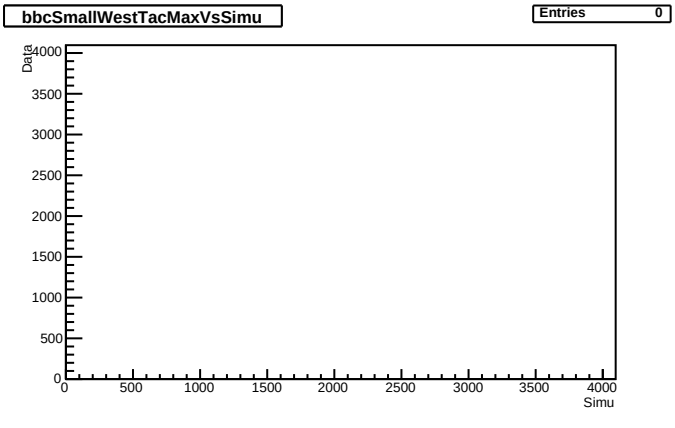

bbcSmallEastTacMax
Entries 24935

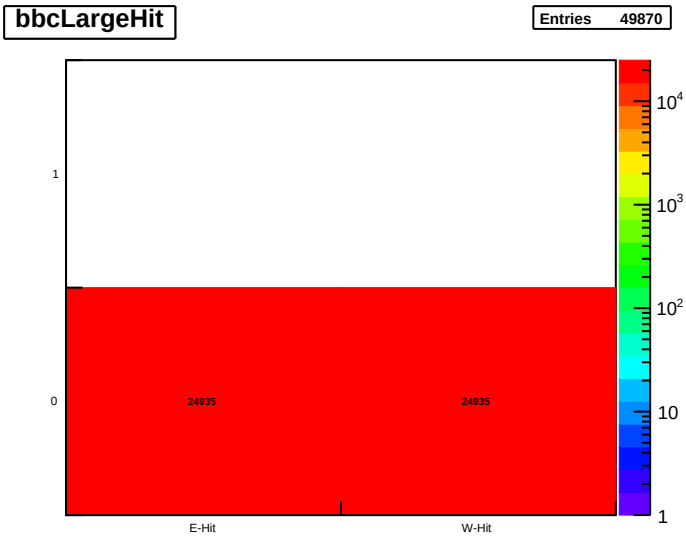

bbcSmallEastTacMaxVsSimu
Entries 0
Data
Simu

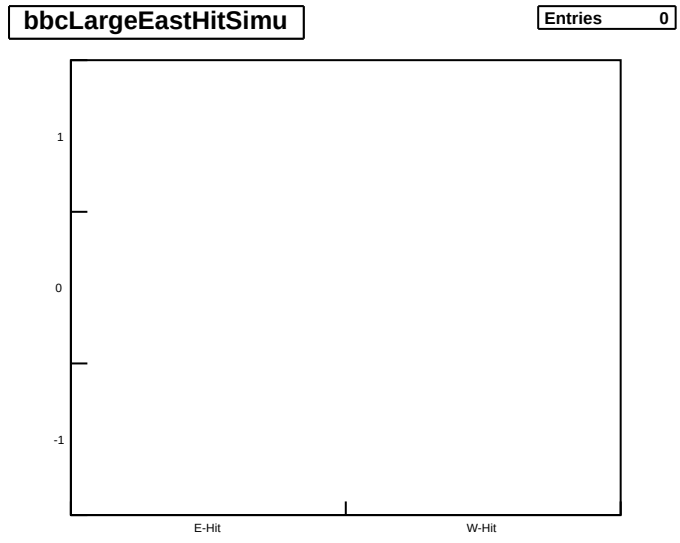

bbcSmallWestAdcSum
Entries 24935

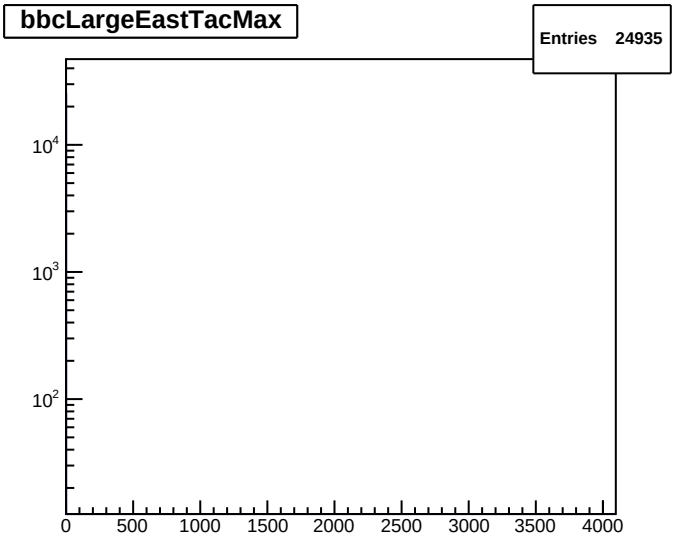

bbcSmallWestAdcSumVsSimu
Entries 0
Data
Simu

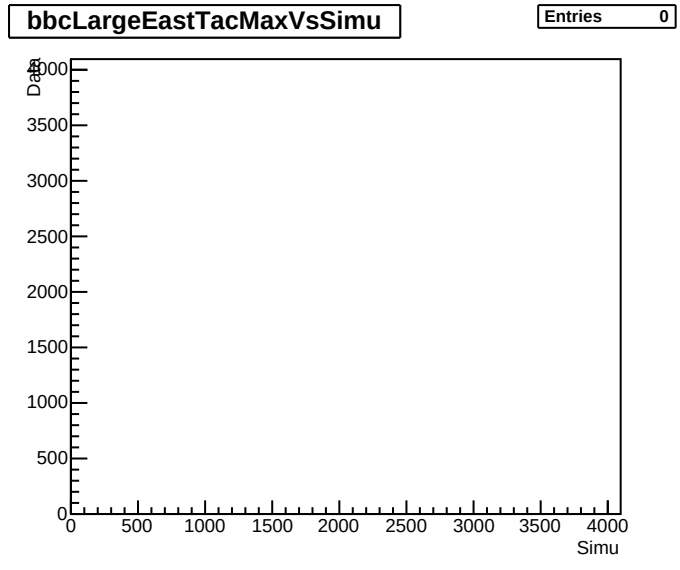

bbcSmallWestTacMax
Entries 24935

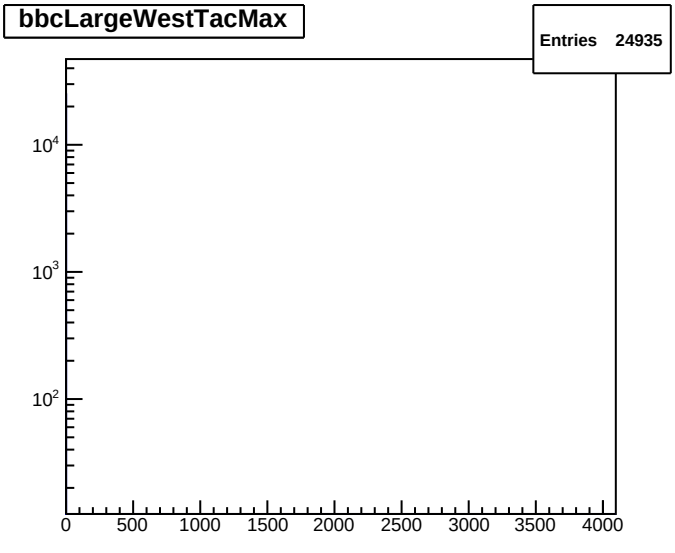

bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu

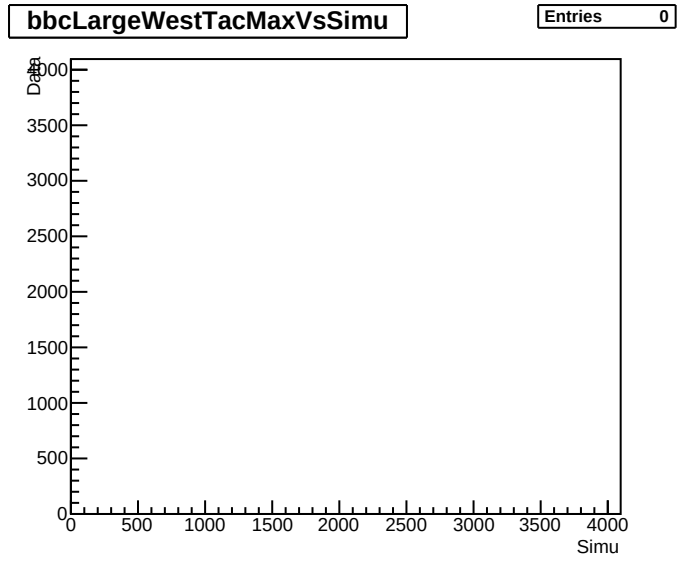

bbcLargeHit
Entries 49870
1
0
24935
24935
E-Hit
W-Hit
10^4
10^3
10^2
10
1

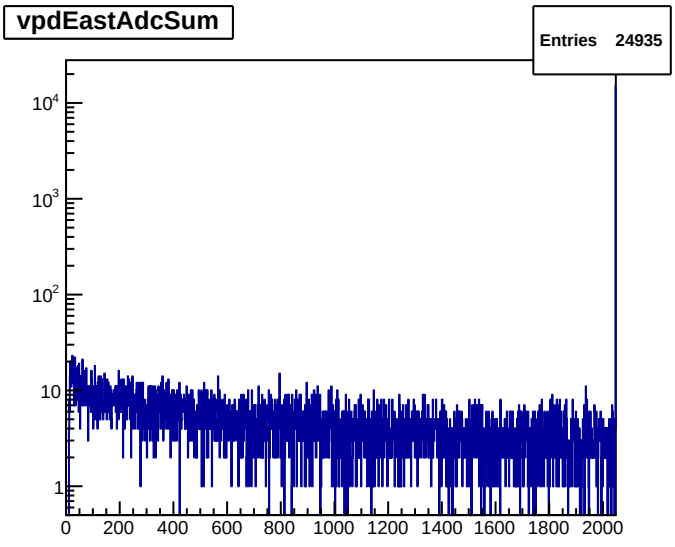

bbcLargeEastHitSimu
Entries 0
1
0
-1
E-Hit
W-Hit

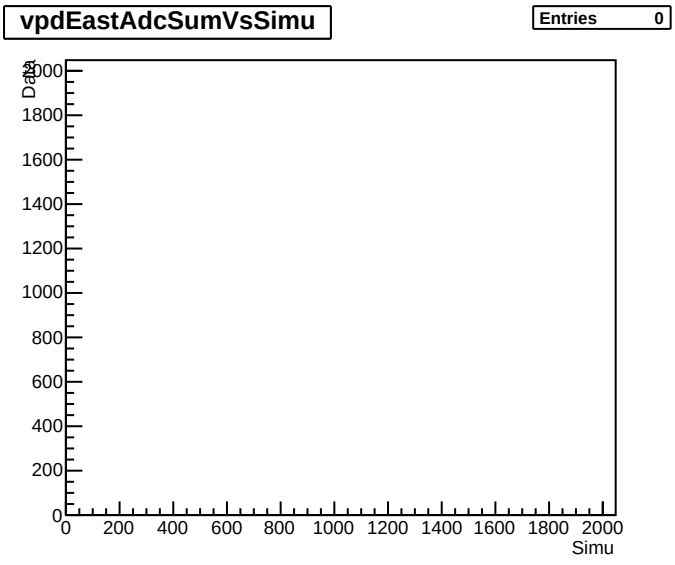

bbcLargeEastTacMax
Entries 24935
10^4
10^3
10^2
0
500
1000
1500
2000
2500
3000
3500
4000

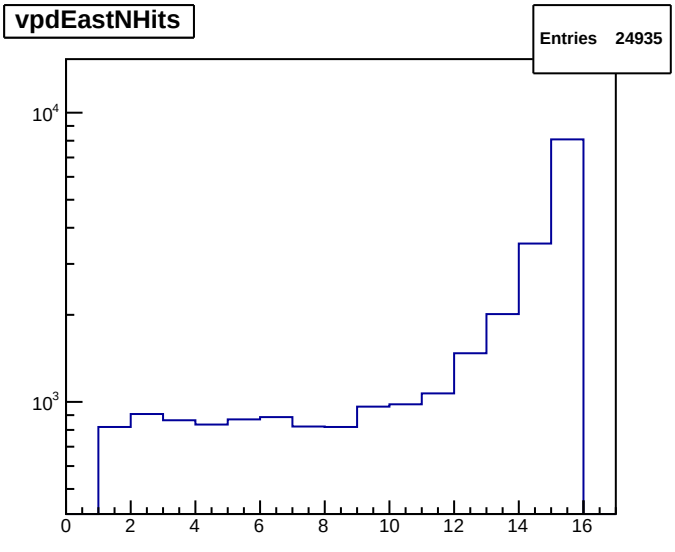

bbcLargeEastTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

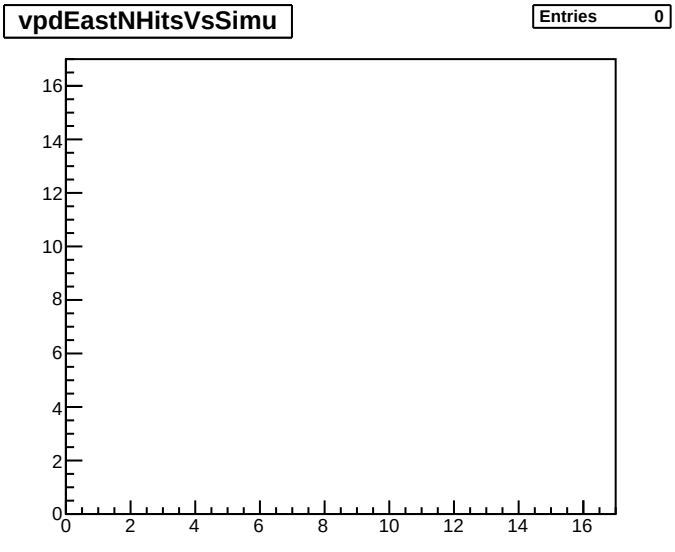

bbcLargeWestTacMax
Entries 24935
10^4
10^3
10^2
0
500
1000
1500
2000
2500
3000
3500
4000

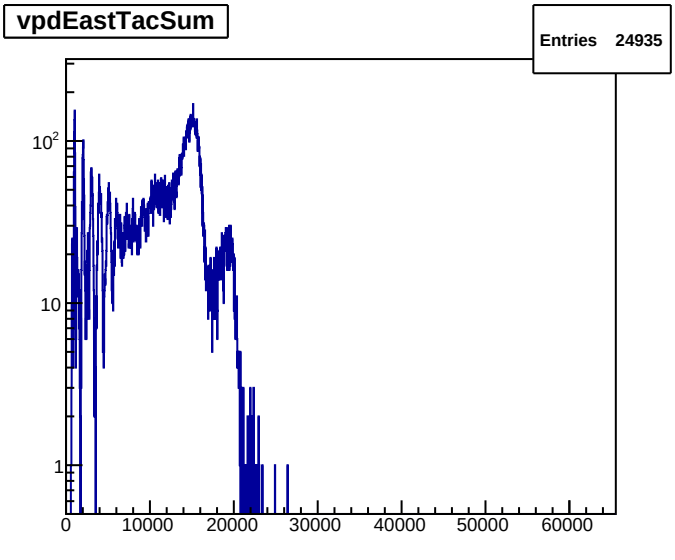

bbcLargeWestTacMaxVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0
500
1000
1500
2000
2500
3000
3500
4000
Simu

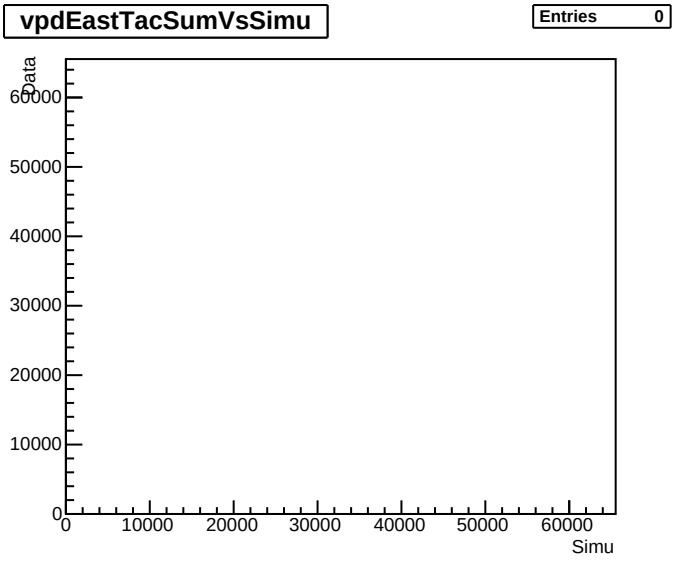

vpdEastAdcSum
Entries 24935

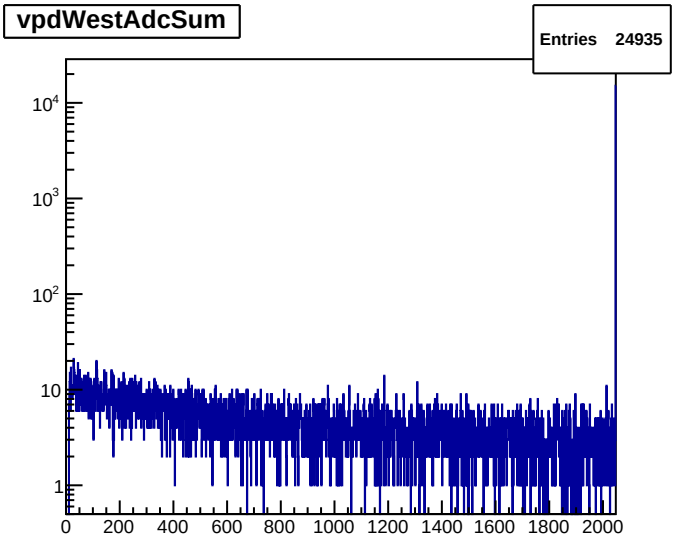

vpdEastAdcSumVsSimu
Entries 0
Data
Simu

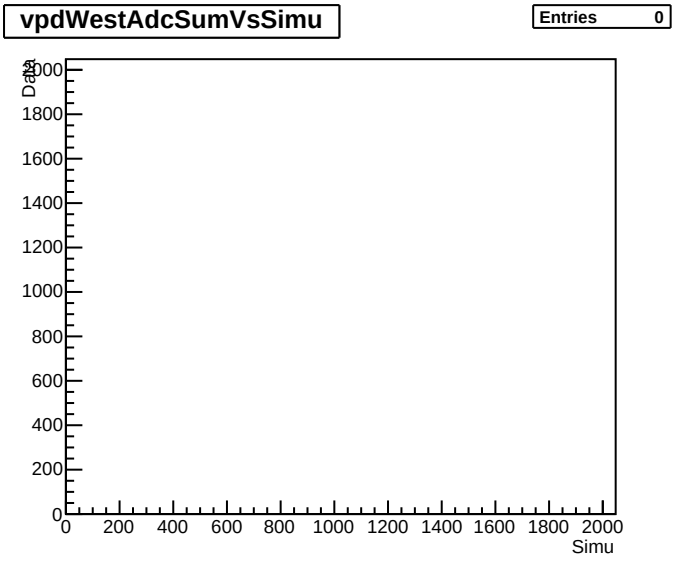

vpdEastNHits
Entries 24935

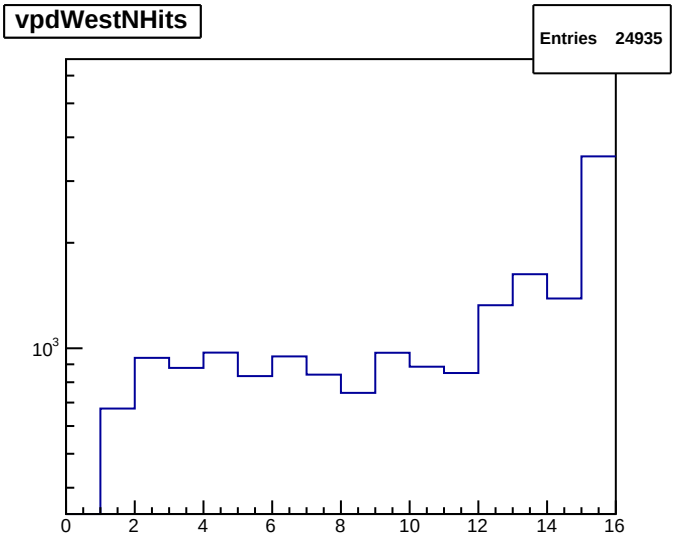

vpdEastNHitsVsSimu
Entries 0

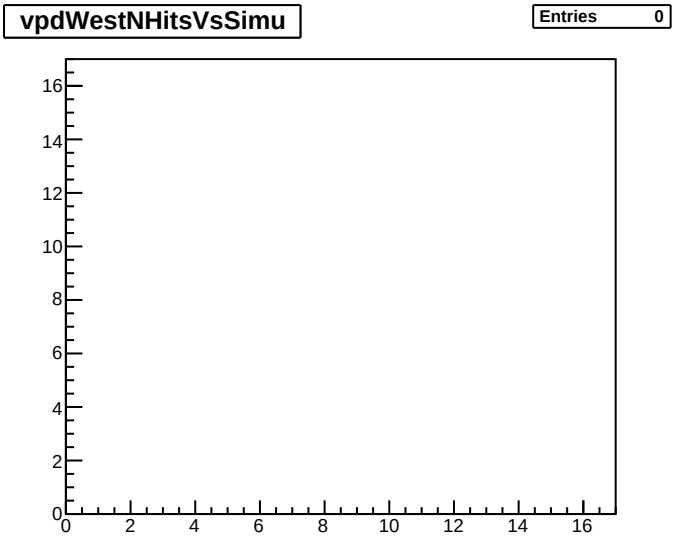

vpdEastTacSum
Entries 24935

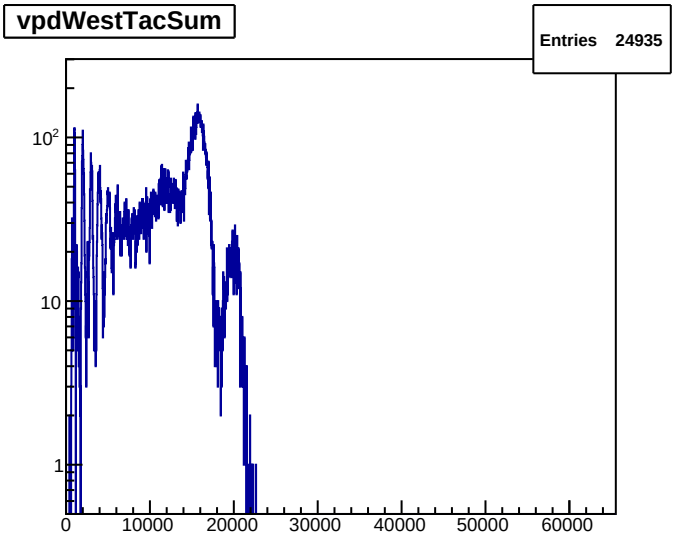

vpdEastTacSumVsSimu
Entries 0
Data
Simu

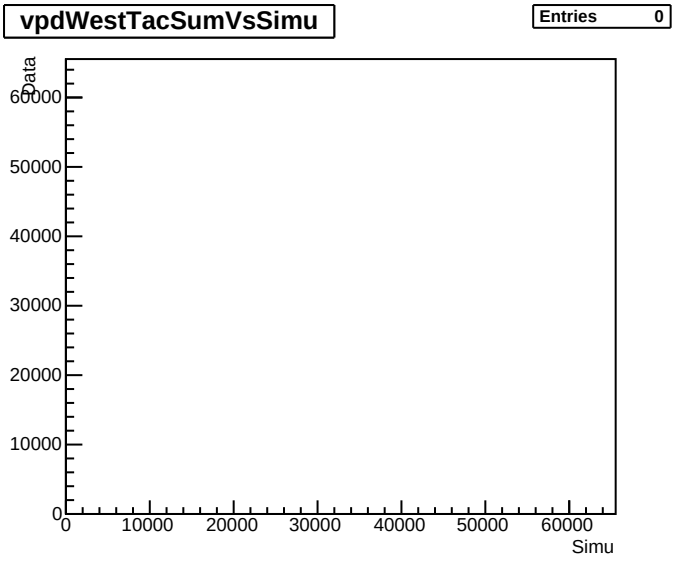

vpdWestAdcSum
Entries 24935
10^4
10^3
10^2
10
1
0 200 400 600 800 1000 1200 1400 1600 1800 2000

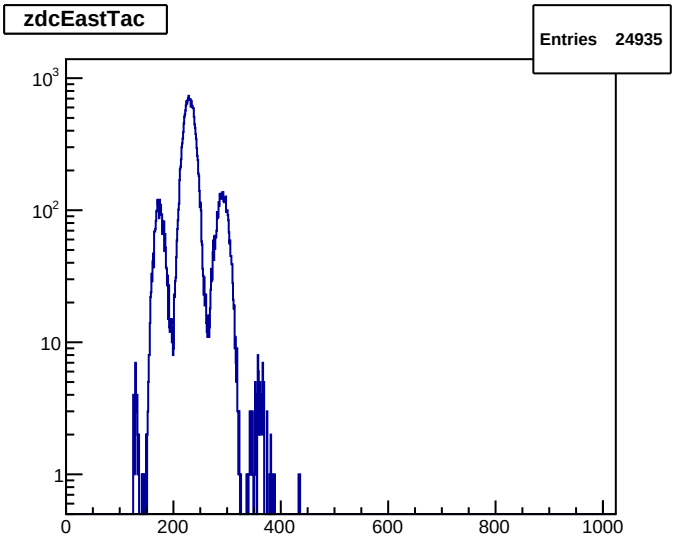

vpdWestAdcSumVsSimu
Entries 0
Data
2000
1800
1600
1400
1200
1000
800
600
400
200
0
0 200 400 600 800 1000 1200 1400 1600 1800 2000
Simu

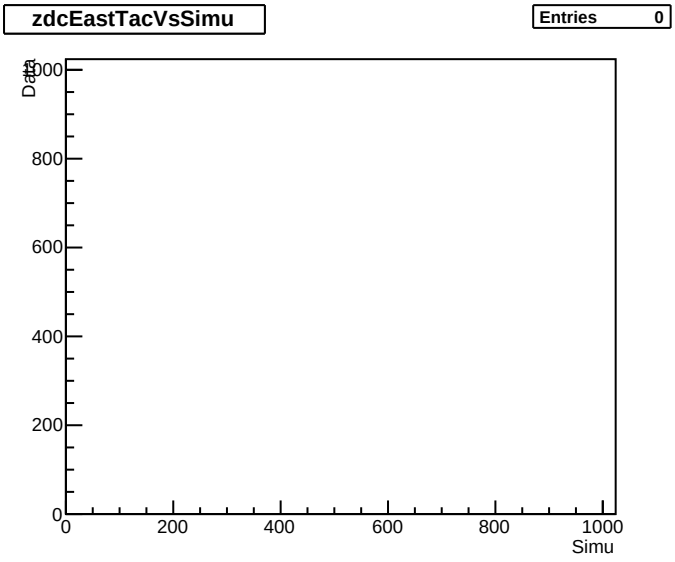

vpdWestNHits
Entries 24935
10^3
0 2 4 6 8 10 12 14 16

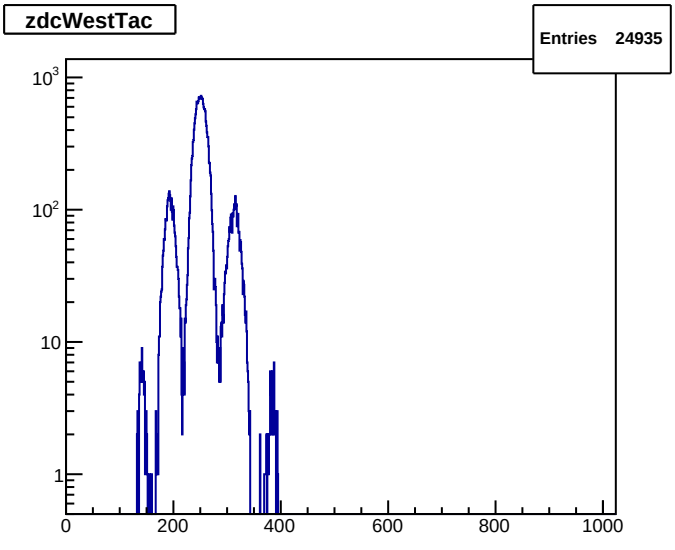

vpdWestNHitsVsSimu
Entries 0
16
14
12
10
8
6
4
2
0
0 2 4 6 8 10 12 14 16

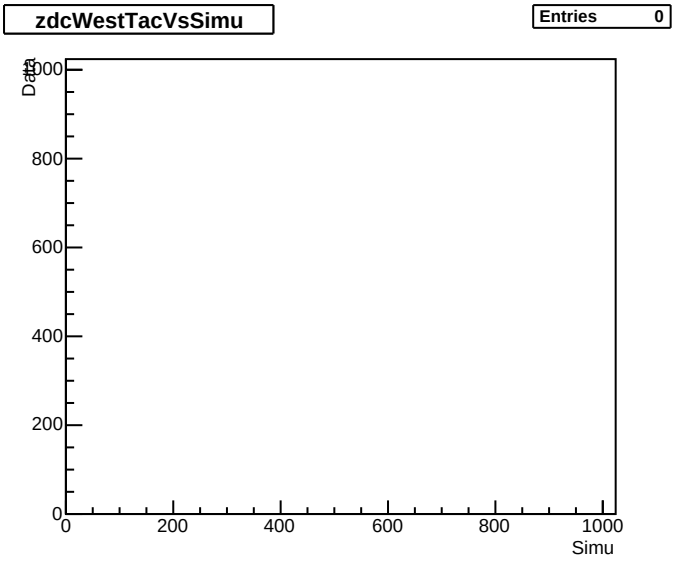

vpdWestTacSum
Entries 24935
10^2
10
1
0 10000 20000 30000 40000 50000 60000

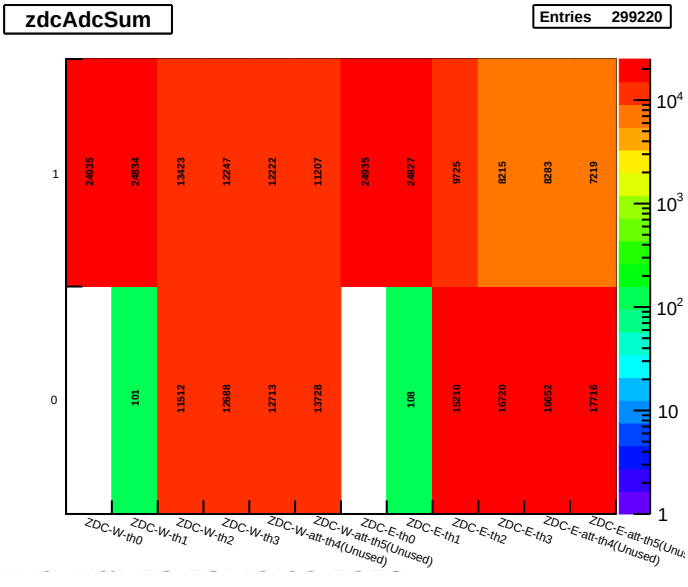

vpdWestTacSumVsSimu
Entries 0
Data
60000
50000
40000
30000
20000
10000
0
0 10000 20000 30000 40000 50000 60000
Simu

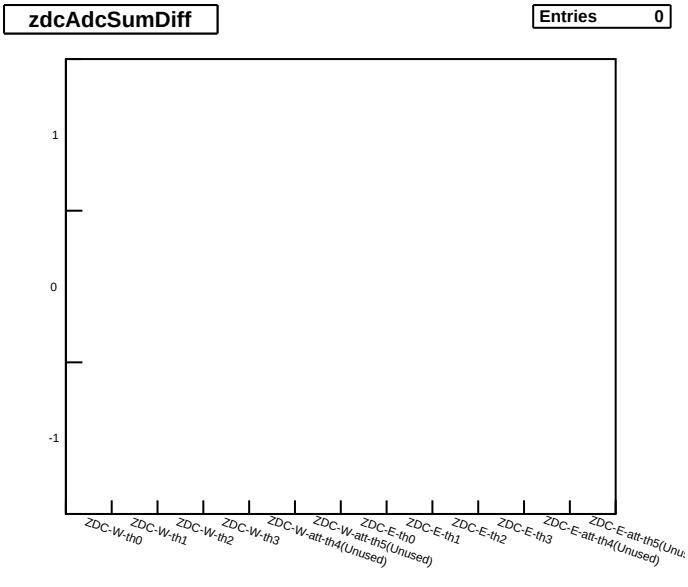

zdcEastTac
Entries 24935
10^3
10^2
10
1
0
200
400
600
800
1000

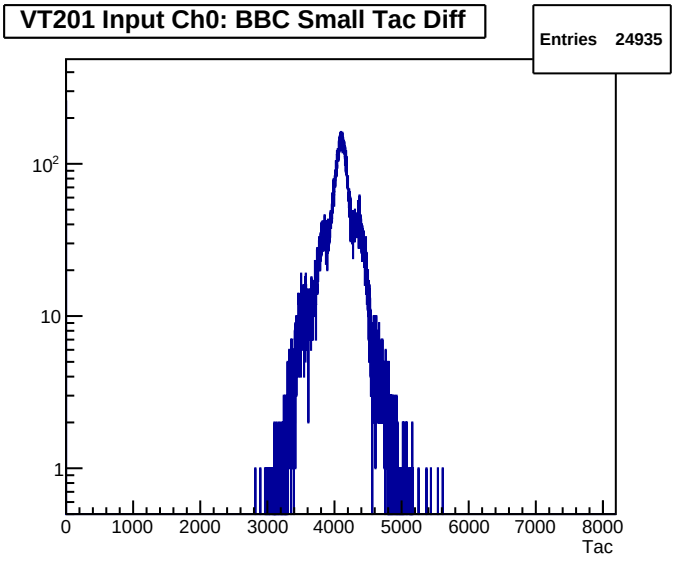

zdcEastTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

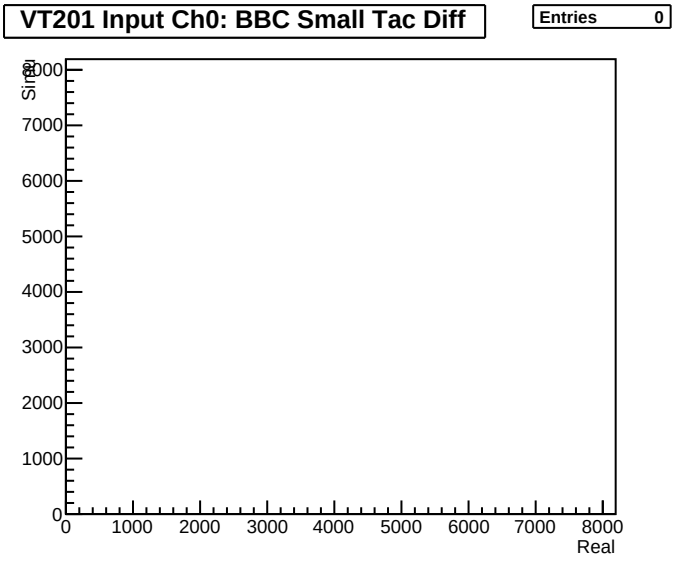

zdcWestTac
Entries 24935
10^3
10^2
10
1
0
200
400
600
800
1000

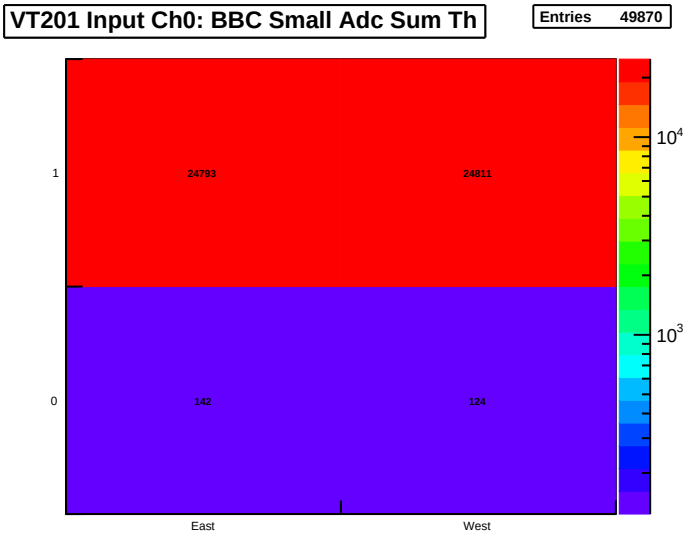

zdcWestTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

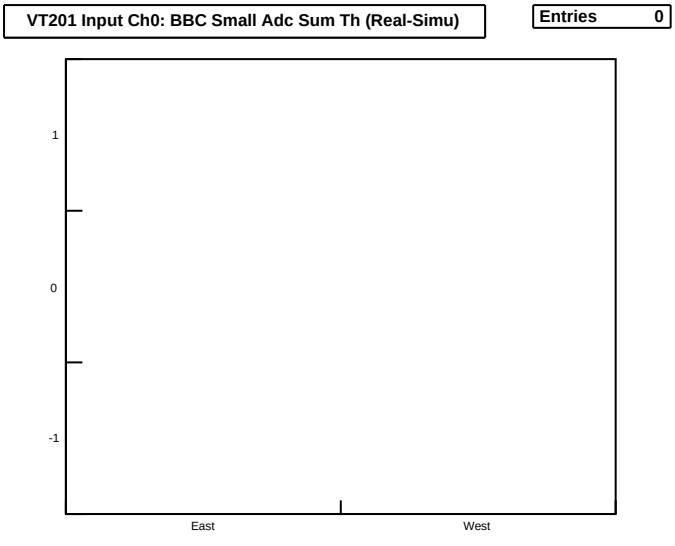

zdcAdcSum
Entries 299220
1
0
24835
24834
13423
12247
12222
11207
24835
24827
9725
8215
8283
7219
101
11512
12688
12713
13728
108
15210
16720
16652
17716
10^4
10^3
10^2
10
1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

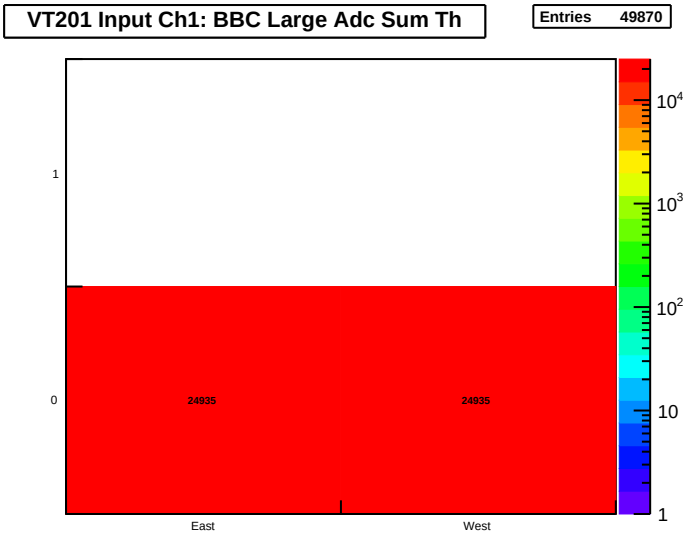

zdcAdcSumDiff
Entries 0
1
0
-1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

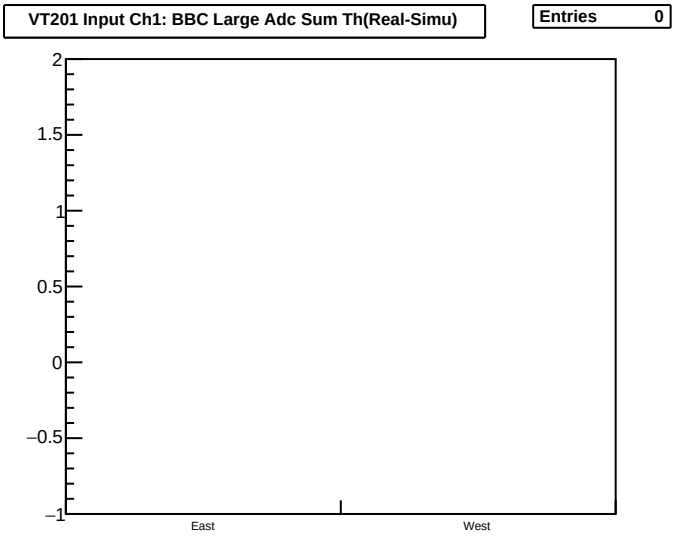

VT201 Input Ch0: BBC Small Tac Diff
Entries 24935
Tac

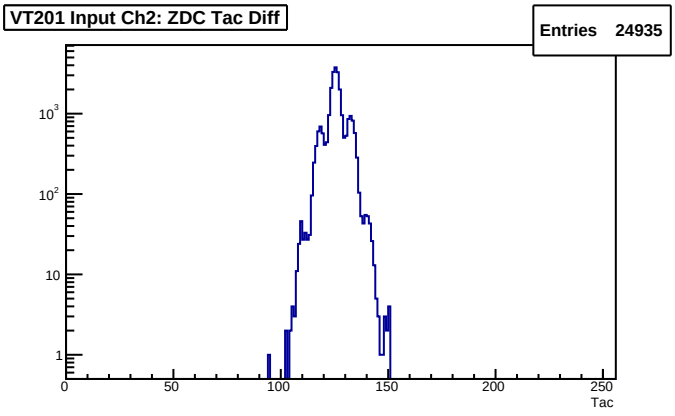

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

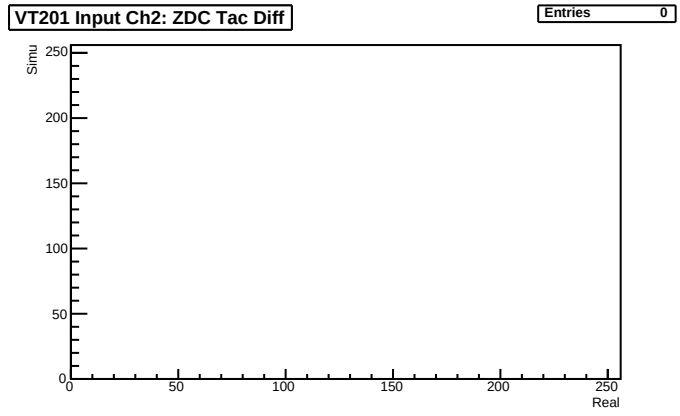

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 49870
24793
24811
142
124
East
West

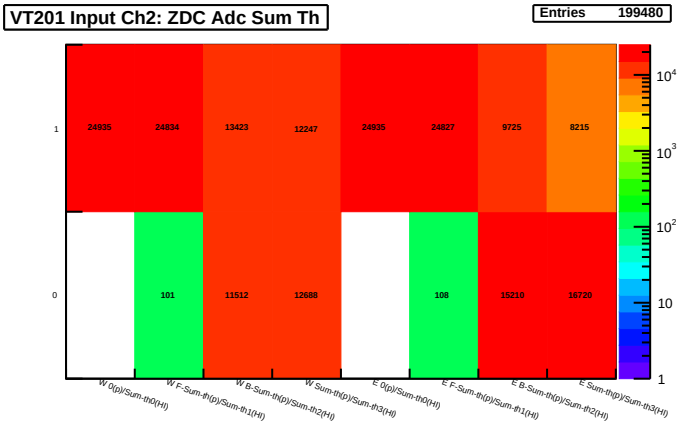

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

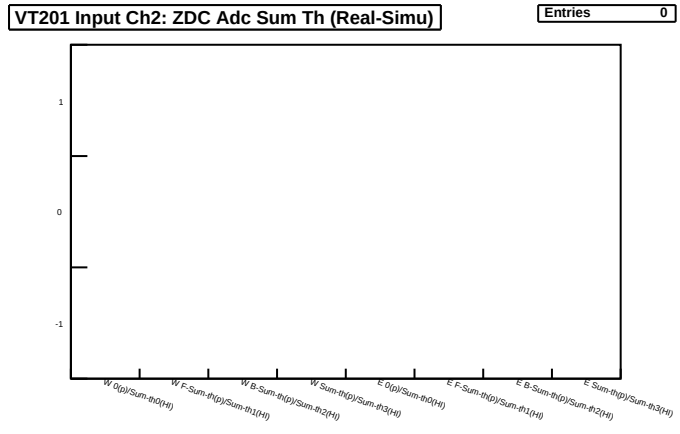

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 49870
24935
24935
East
West

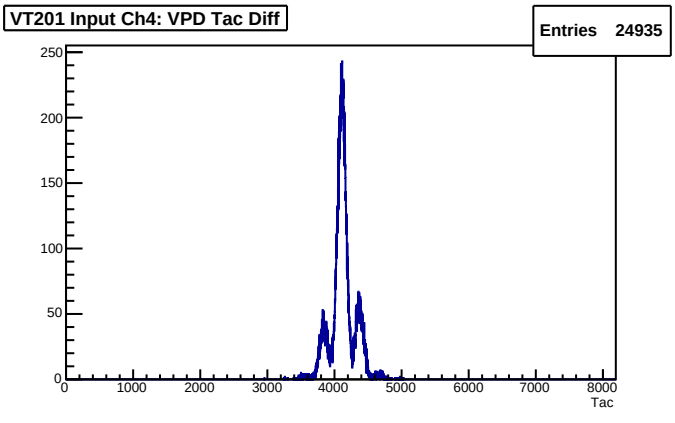

VT201 Input Ch1: BBC Large Adc Sum Th(Real-Simu)
Entries 0
East
West

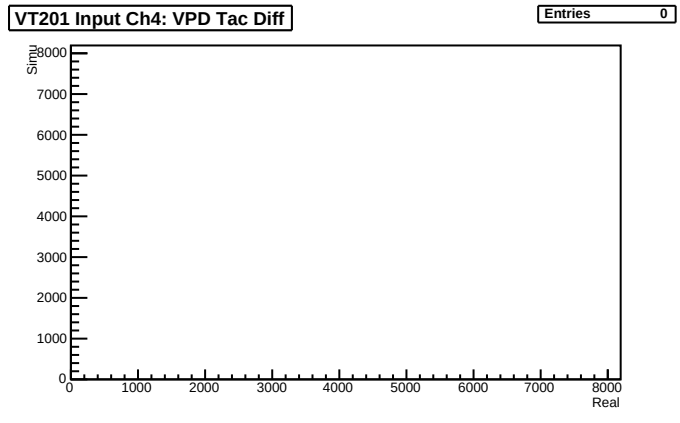

VT201 Input Ch2: ZDC Tac Diff
Entries 24935
Tac

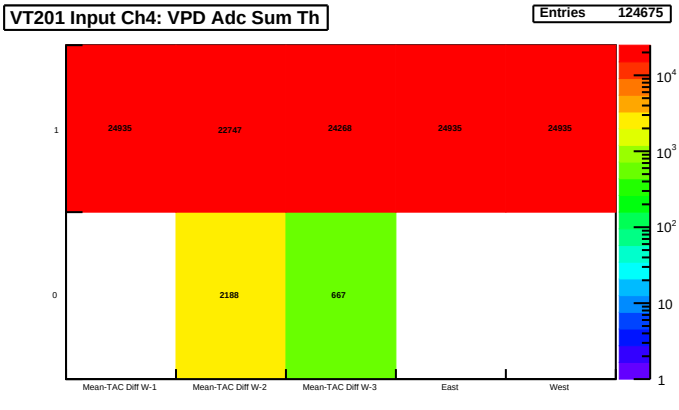

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

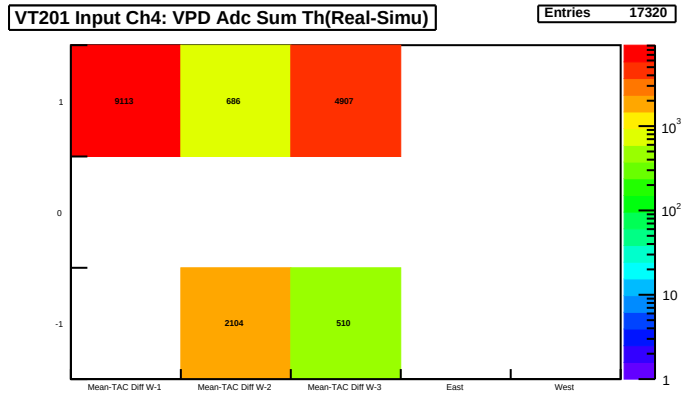

VT201 Input Ch2: ZDC Adc Sum Th
Entries 199480
24935
24834
13423
12247
24935
24827
9725
8215
101
11512
12688
108
15210
16720
W 0(p)/Sum-th0(Hi)
W F-Sum-th(p)/Sum-th1(Hi)
W B-Sum-th(p)/Sum-th2(Hi)
W Sum-th(p)/Sum-th3(Hi)
E 0(p)/Sum-th0(Hi)
E F-Sum-th(p)/Sum-th1(Hi)
E B-Sum-th(p)/Sum-th2(Hi)
E Sum-th(p)/Sum-th3(Hi)

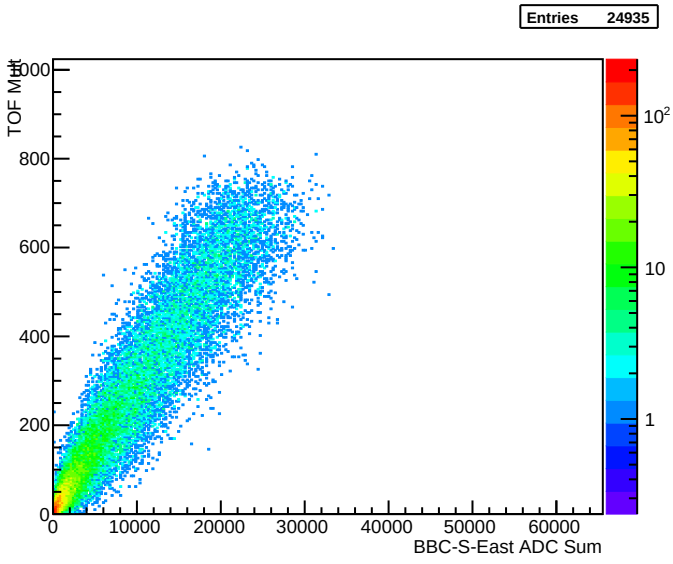

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(Hi)
W F-Sum-th(p)/Sum-th1(Hi)
W B-Sum-th(p)/Sum-th2(Hi)
W Sum-th(p)/Sum-th3(Hi)
E 0(p)/Sum-th0(Hi)
E F-Sum-th(p)/Sum-th1(Hi)
E B-Sum-th(p)/Sum-th2(Hi)
E Sum-th(p)/Sum-th3(Hi)

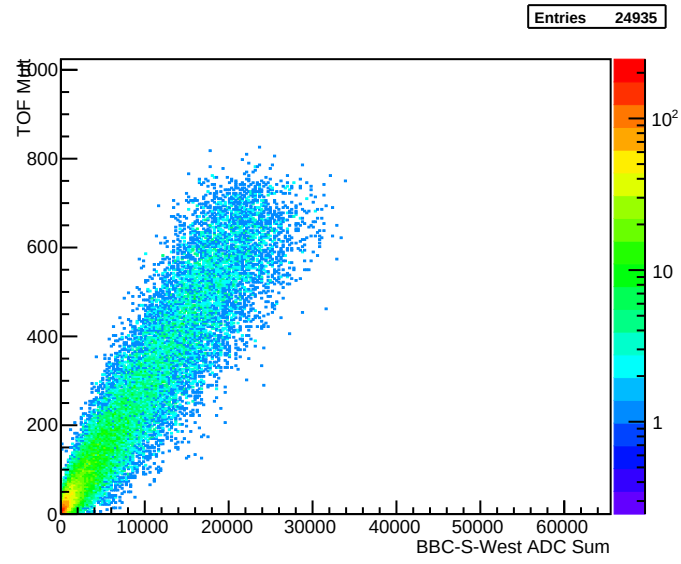

VT201 Input Ch4: VPD Tac Diff
Entries 24935
Tac

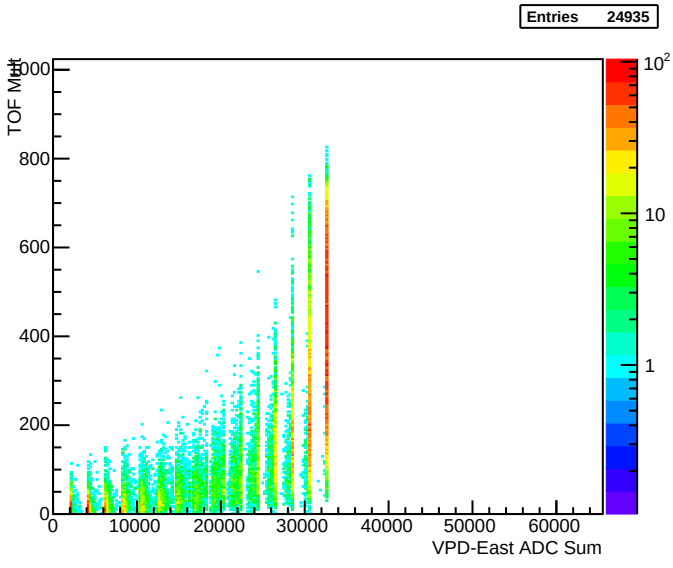

VT201 Input Ch4: VPD Tac Diff
Entries 0
Simu
Real

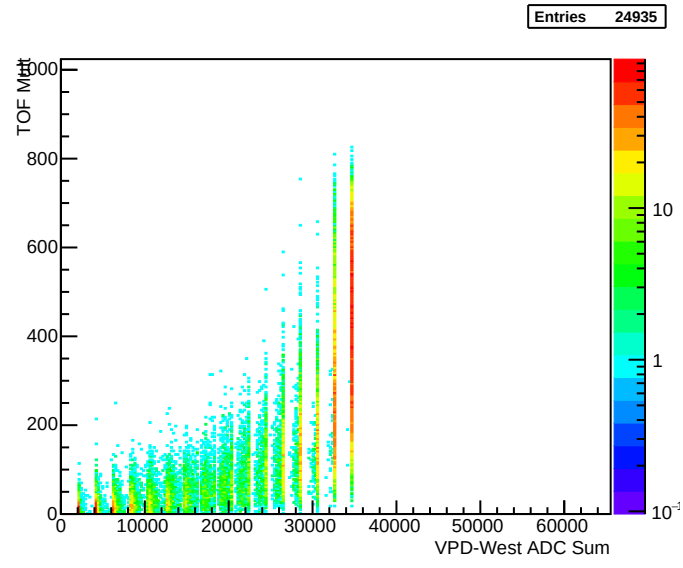

VT201 Input Ch4: VPD Adc Sum Th
Entries 124675
24935
22747
24268
24935
24935
2188
667
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

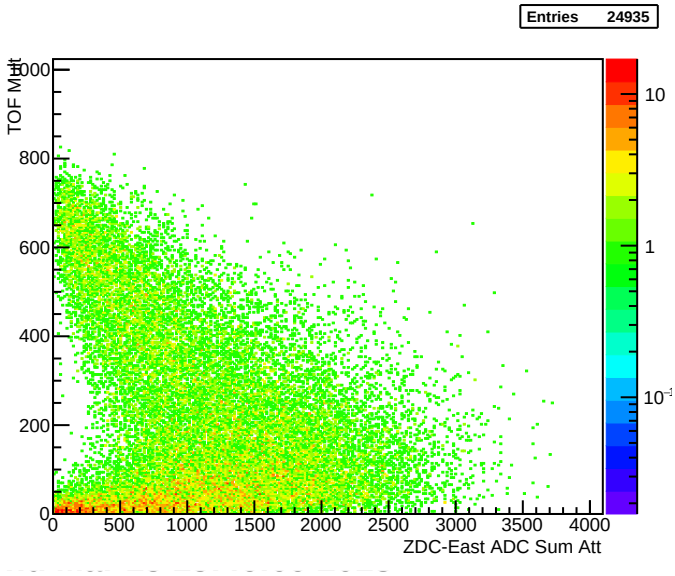

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 17320
9113
686
4907
2104
510
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

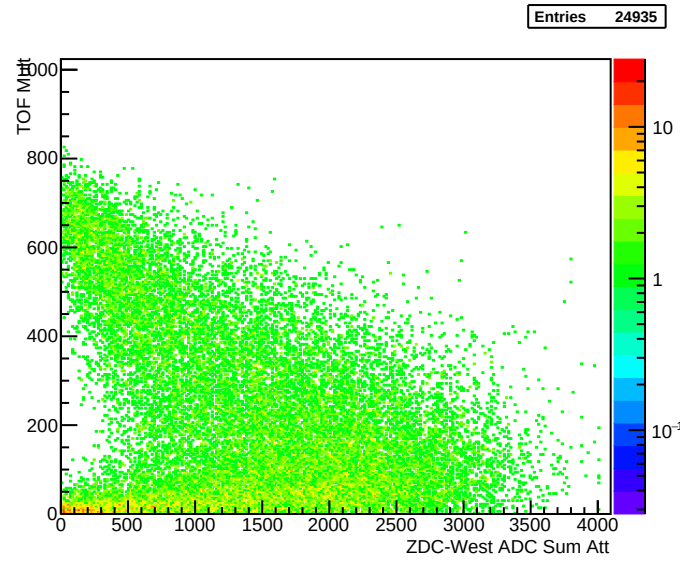

Entries 24935
TOF Mult
BBC-S-East ADC Sum

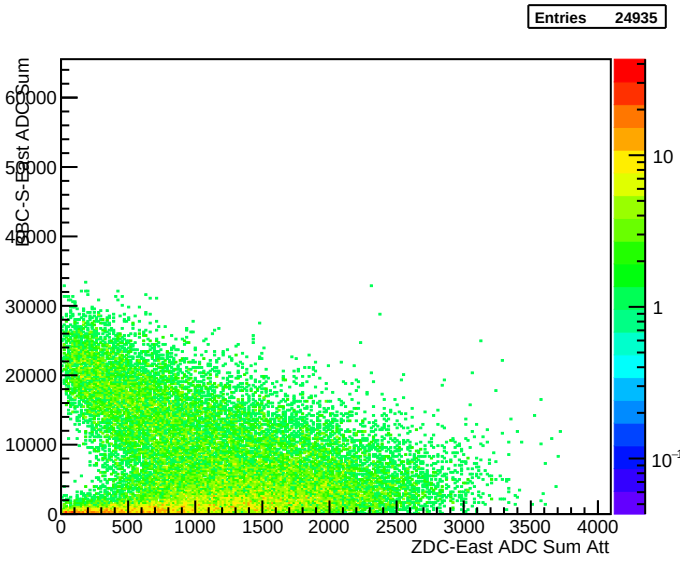

Entries 24935
TOF Mult
BBC-S-West ADC Sum

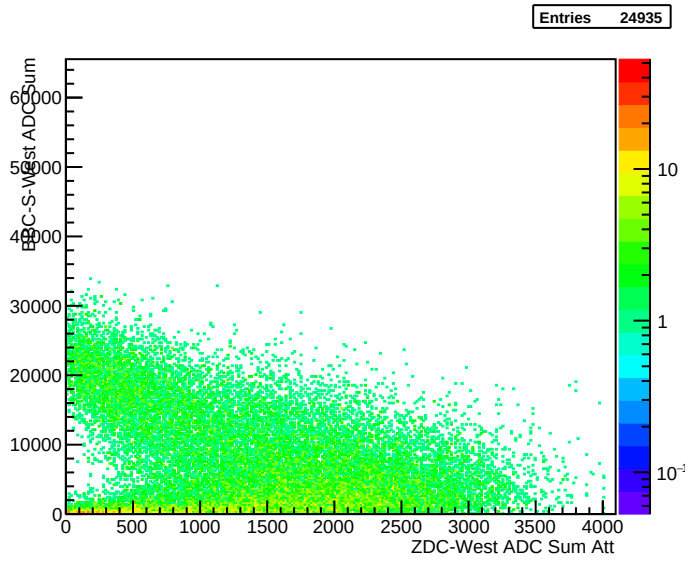

Entries 24935
TOF Mult
VPD-East ADC Sum

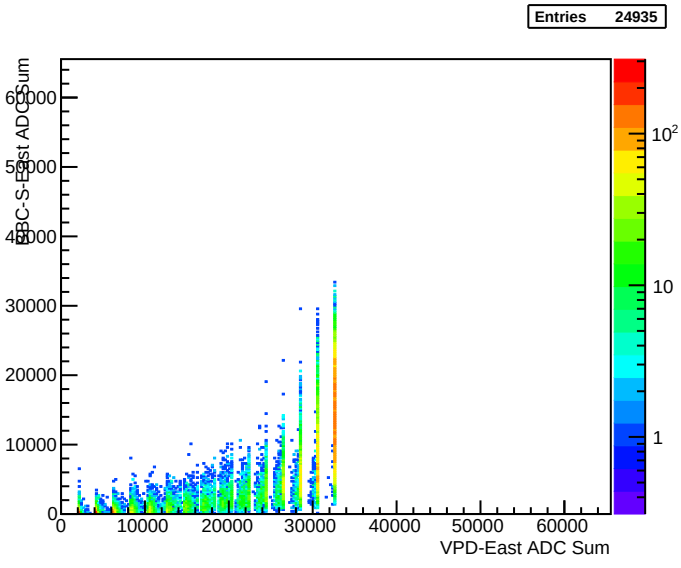

Entries 24935
TOF Mult
VPD-West ADC Sum

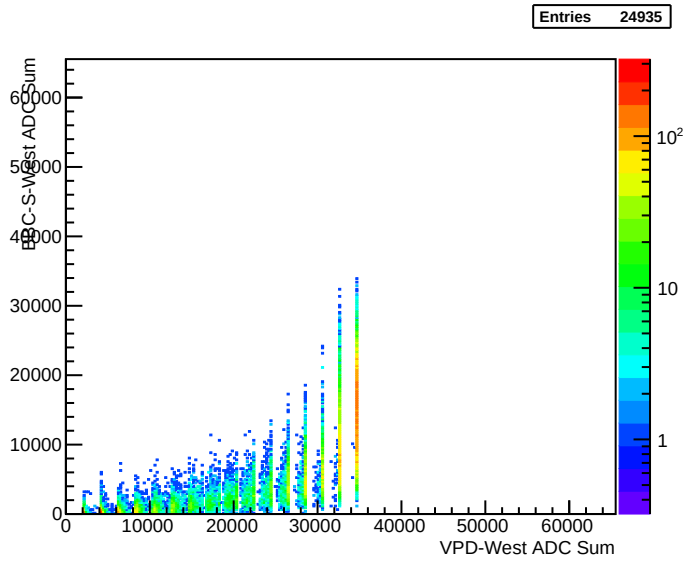

Entries 24935
TOF Mult
ZDC-East ADC Sum Att

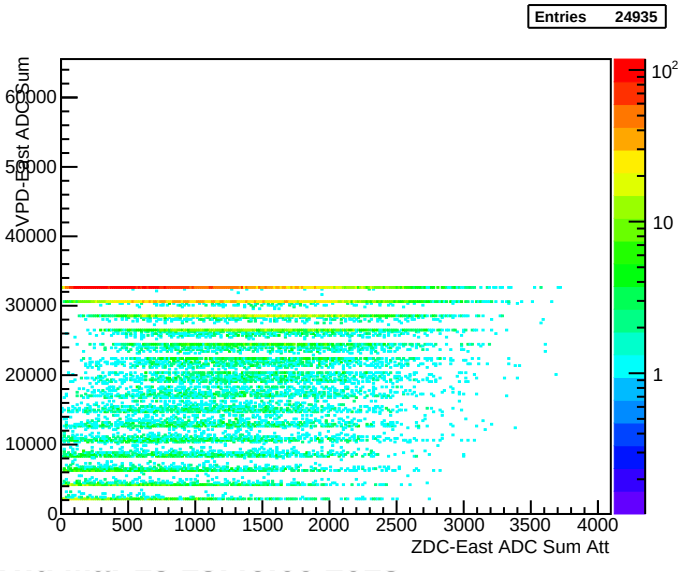

Entries 24935
TOF Mult
ZDC-West ADC Sum Att

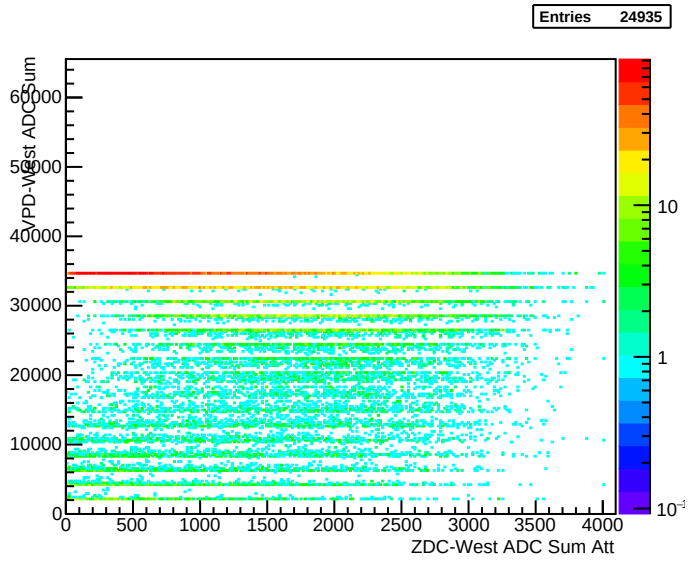

Entries 24935
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

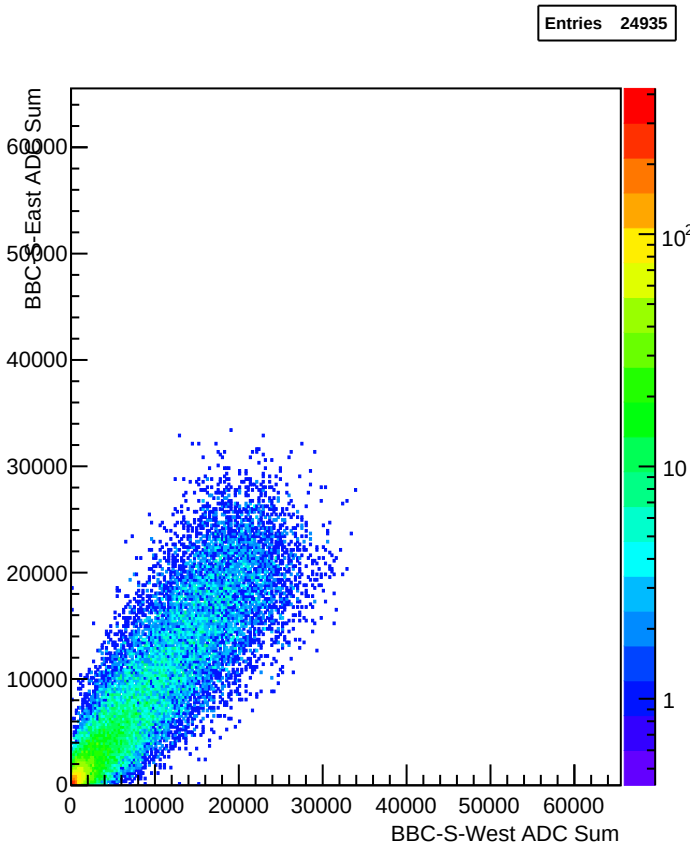

Entries 24935
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

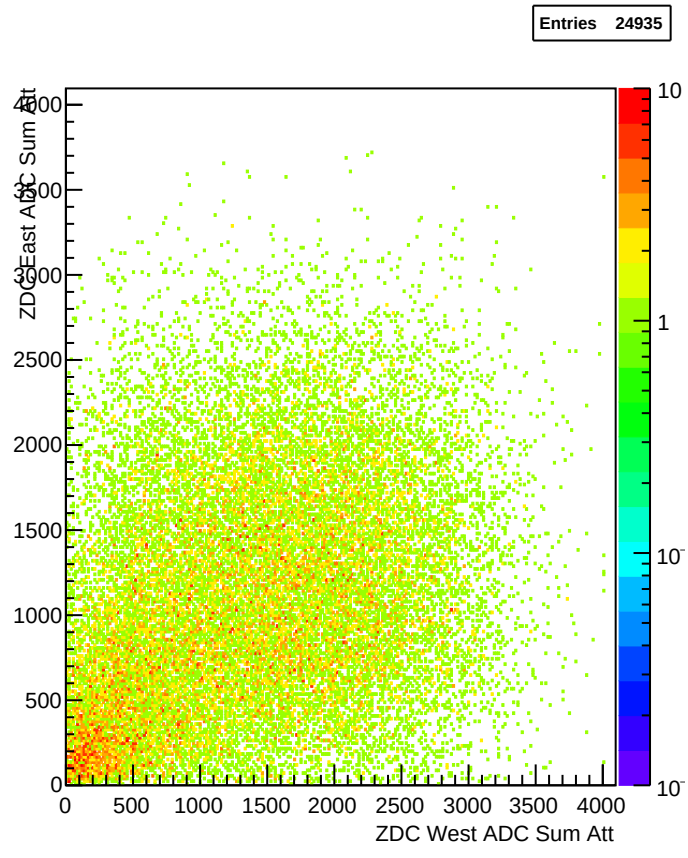

Entries 24935
BBC-S-East ADC Sum
VPD-East ADC Sum

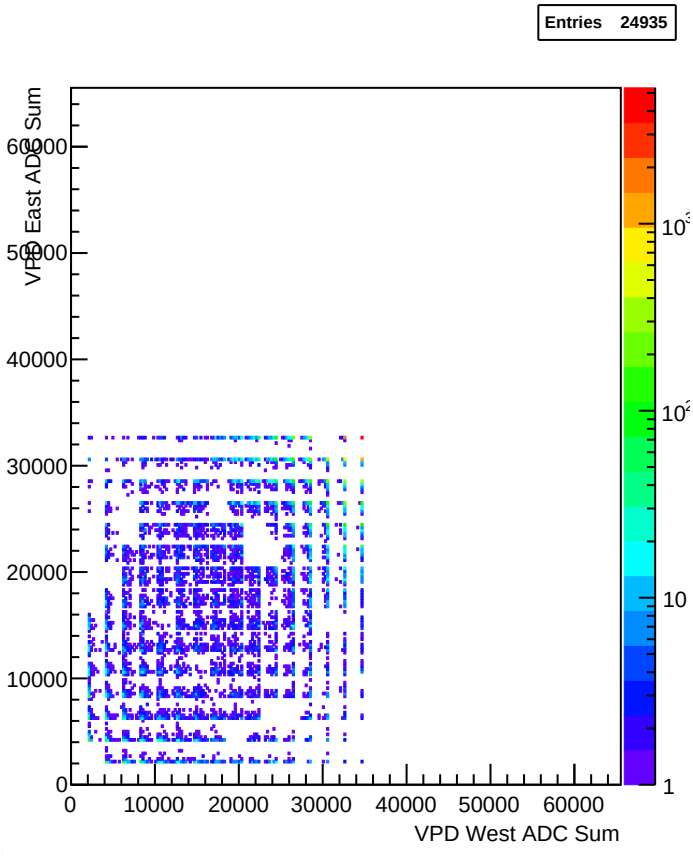

Entries 24935
BBC-S-West ADC Sum
VPD-West ADC Sum

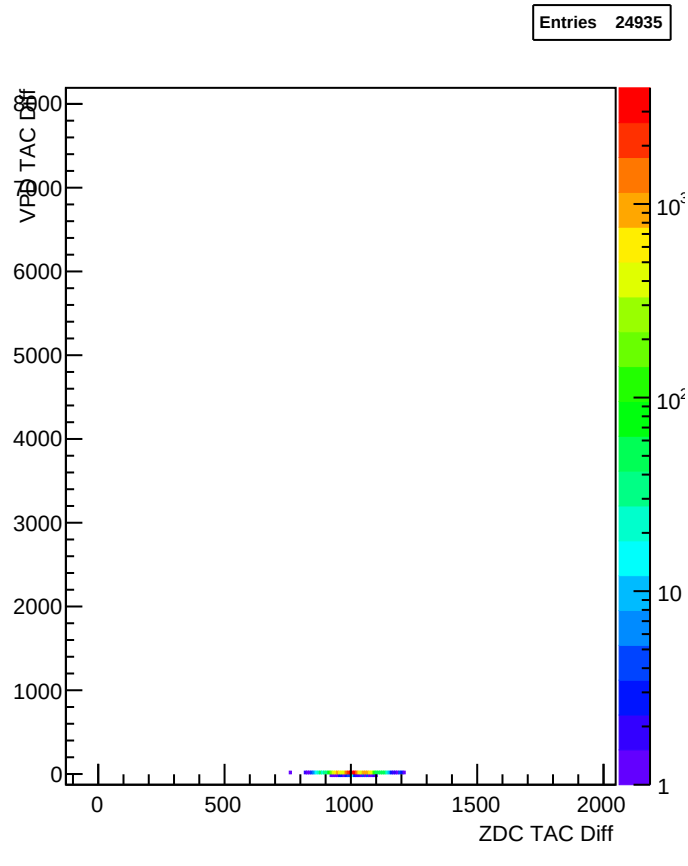

Entries 24935
VPD-East ADC Sum
ZDC-East ADC Sum Att

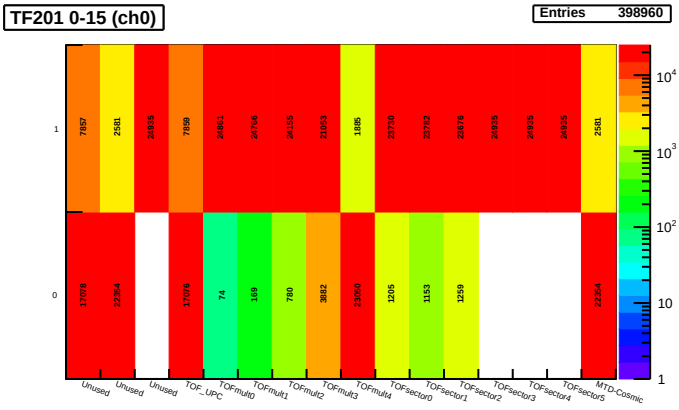

Entries 24935
VPD-West ADC Sum
ZDC-West ADC Sum Att

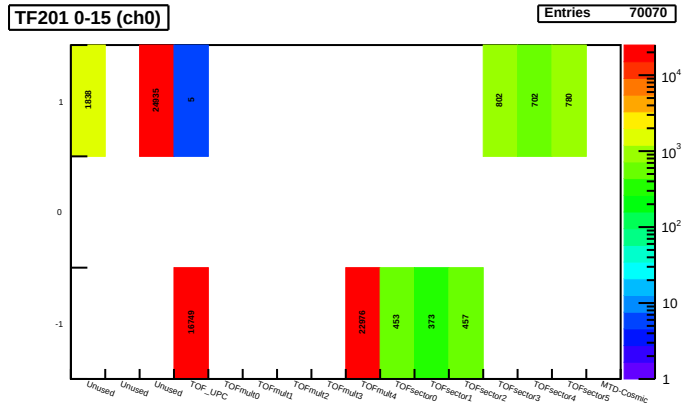

Entries 24935
BBC-S-East ADC Sum
BBC-S-West ADC Sum

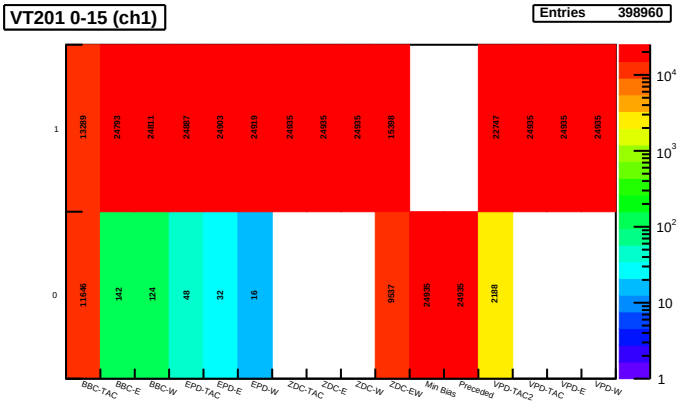

Entries 24935
ZDC East ADC Sum Att
ZDC West ADC Sum Att

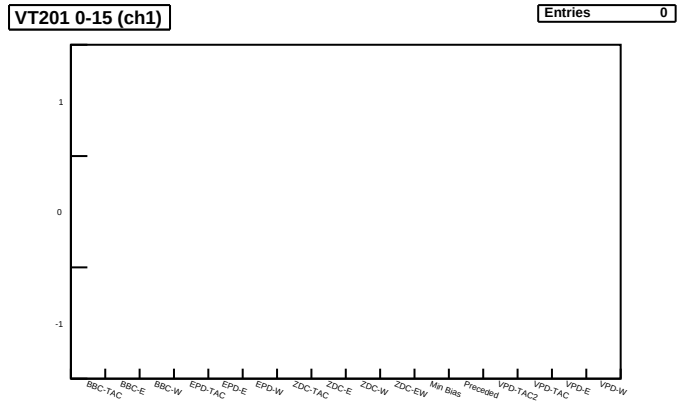

Entries 24935
VPD East ADC Sum
VPD West ADC Sum

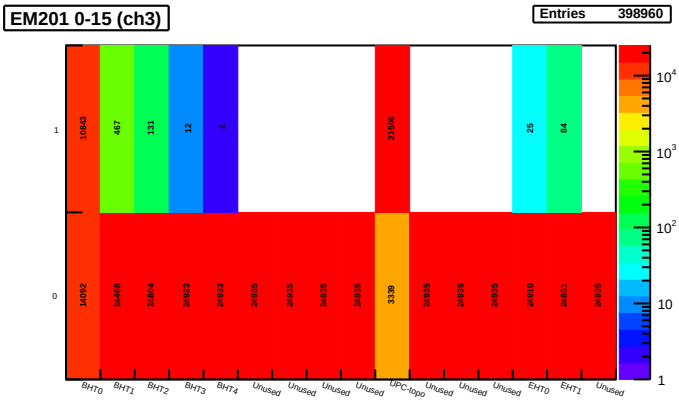

Entries 24935
VPD TAC Diff
ZDC TAC Diff

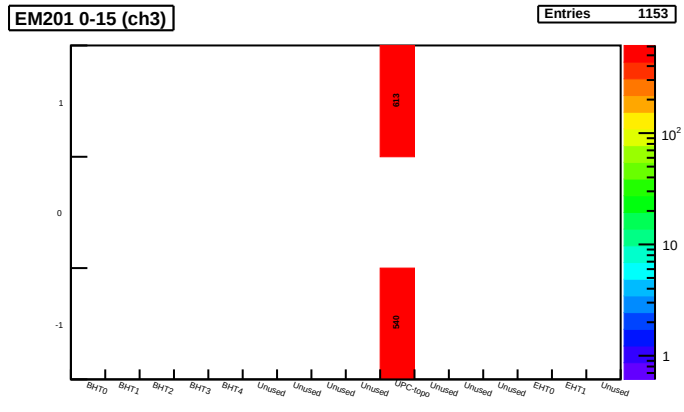

TF201 0-15 (ch0)
Entries 398960
7857 2581 24035 7859 24061 24766 24155 21053 1885 23730 23782 23676 24035 24035 24035 2581
17078 22354 17076 74 169 790 3882 23060 1205 1153 1259 22354
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

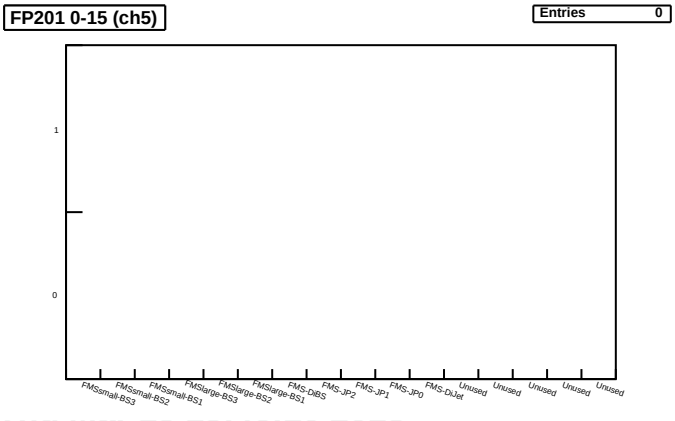

TF201 0-15 (ch0)
Entries 70070
1838 24035 5 802 702 780
16749 22976 453 373 457
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

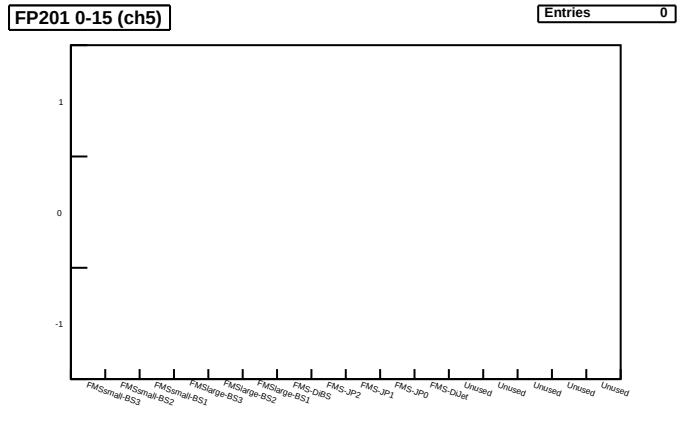

VT201 0-15 (ch1)
Entries 398960
13289 24793 24811 24887 24903 24919 24935 24995 24935 15898 22747 24935 24995 24935
11646 142 124 48 32 16 9537 24935 24935 2188
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 0
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 398960
10943 467 131 12 2 21596 25 84
14092 24468 24804 24923 24933 24935 24935 24935 24935 3339 24935 24935 24935 24910 24851 24935
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


EM201 0-15 (ch3)
Entries 1153
613
540
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


FP201 0-15 (ch5)
Entries 0
FMSsmall-BS3 FMSsmall-BS2 FMSsmall-BS1 FMSlarge-BS3 FMSlarge-BS2 FMSlarge-BS1 FMS-DiBS FMS-JP2 FMS-JP1 FMS-JP0 FMS-DiJet Unused Unused Unused Unused Unused


FP201 0-15 (ch5)
Entries 0
FMSsmall-BS3 FMSsmall-BS2 FMSsmall-BS1 FMSlarge-BS3 FMSlarge-BS2 FMSlarge-BS1 FMS-DiBS FMS-JP2 FMS-JP1 FMS-JP0 FMS-DiJet Unused Unused Unused Unused Unused