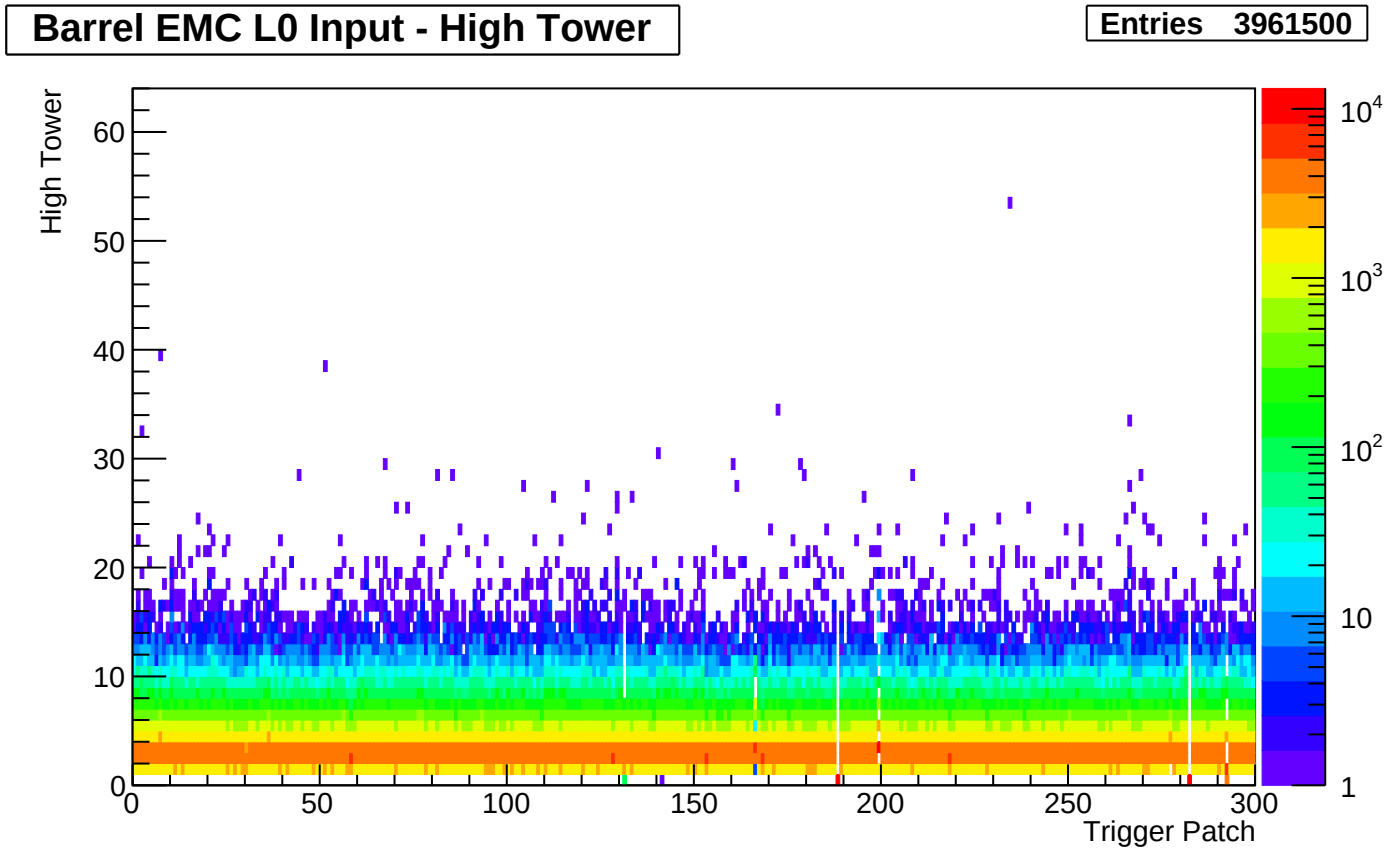
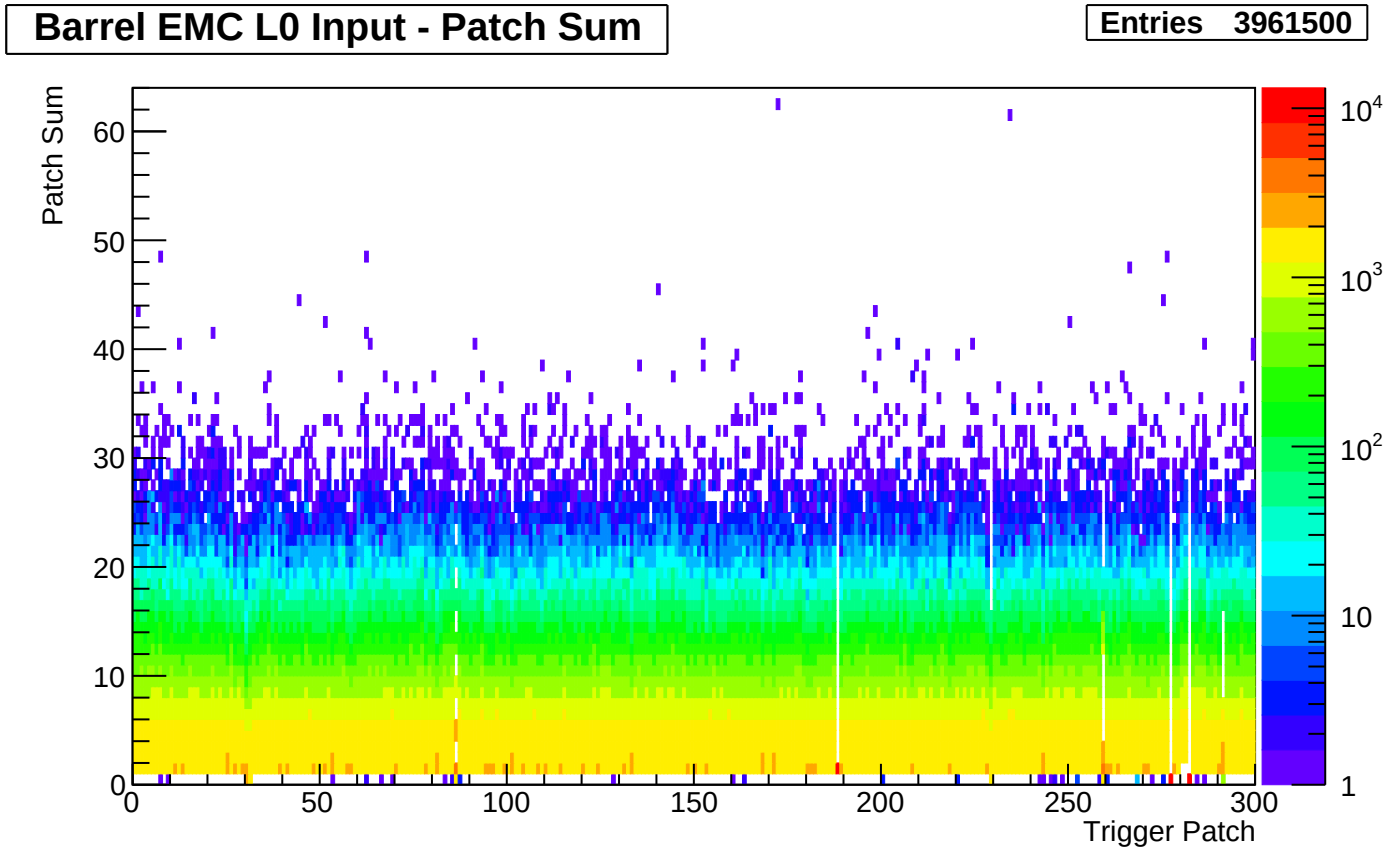
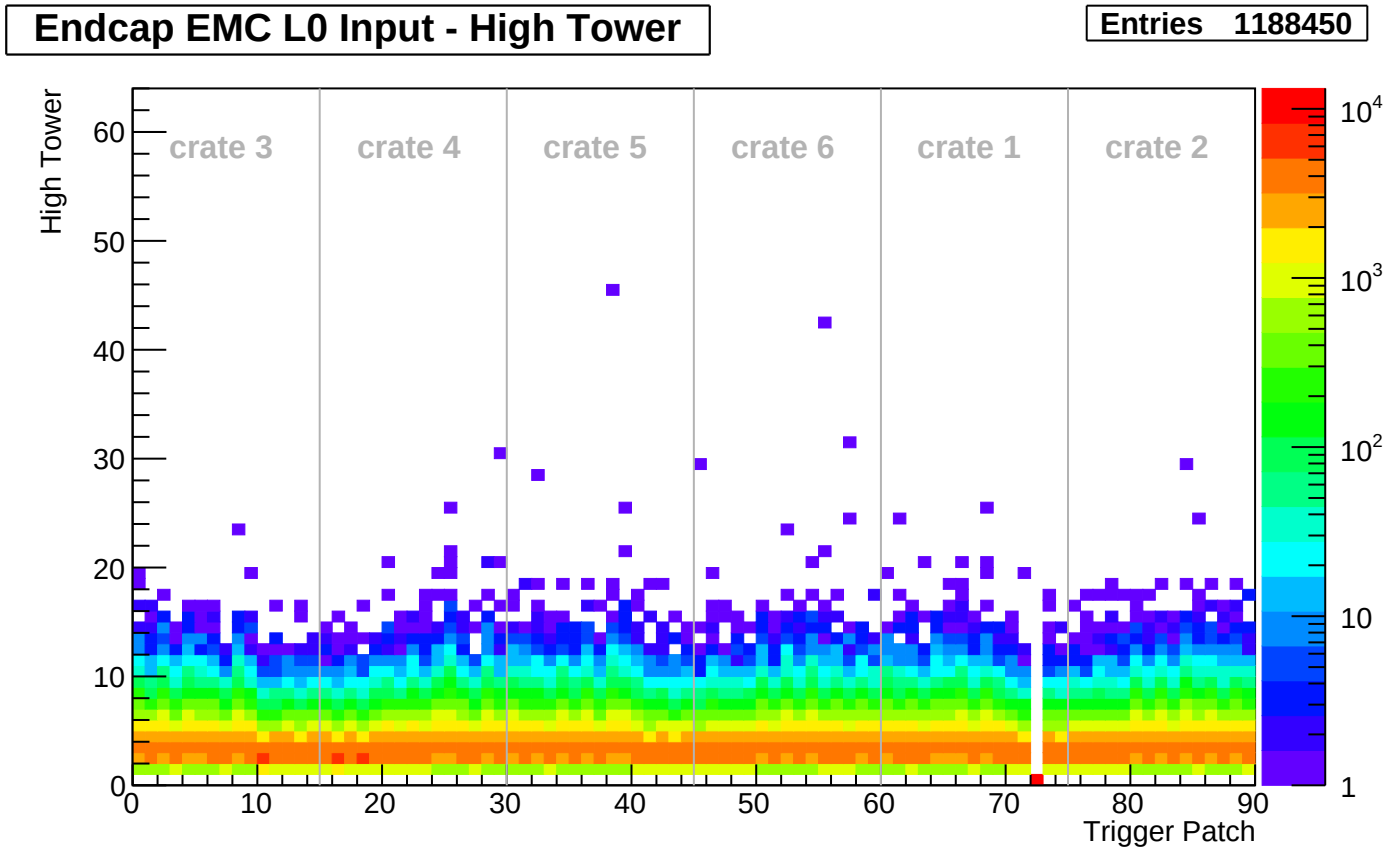
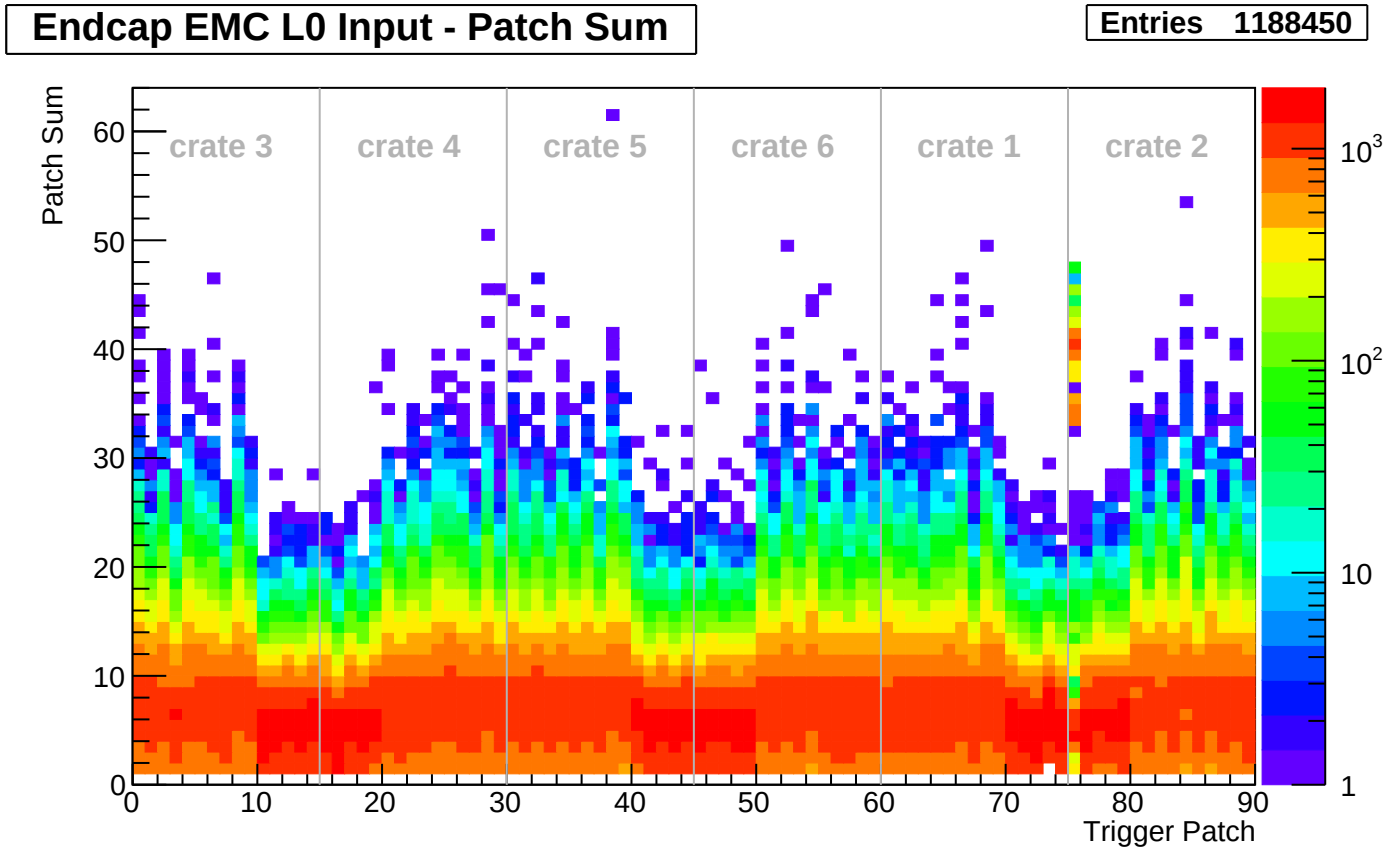
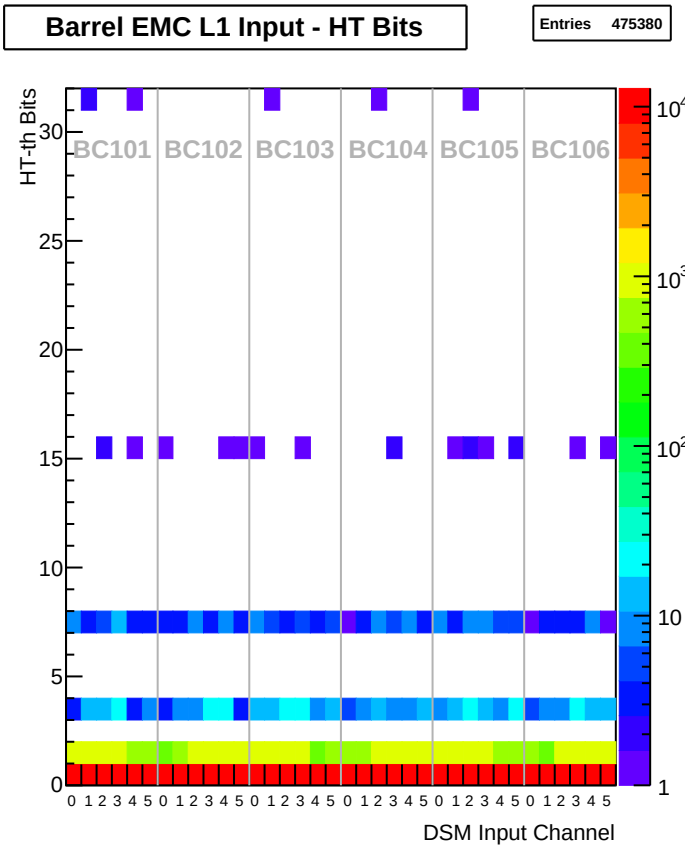
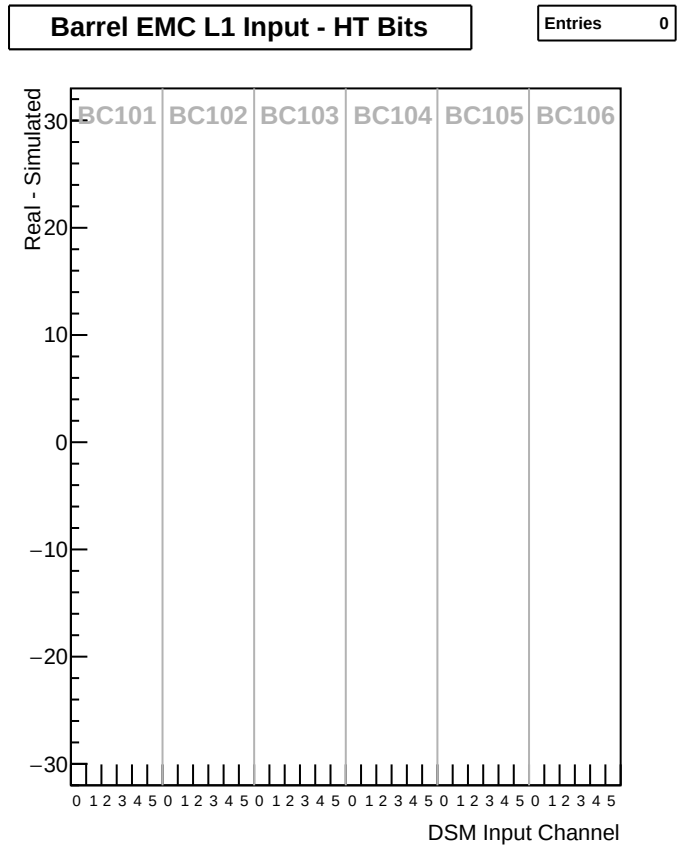

Barrel EMC L0 Input - High Tower
Entries 3961500
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

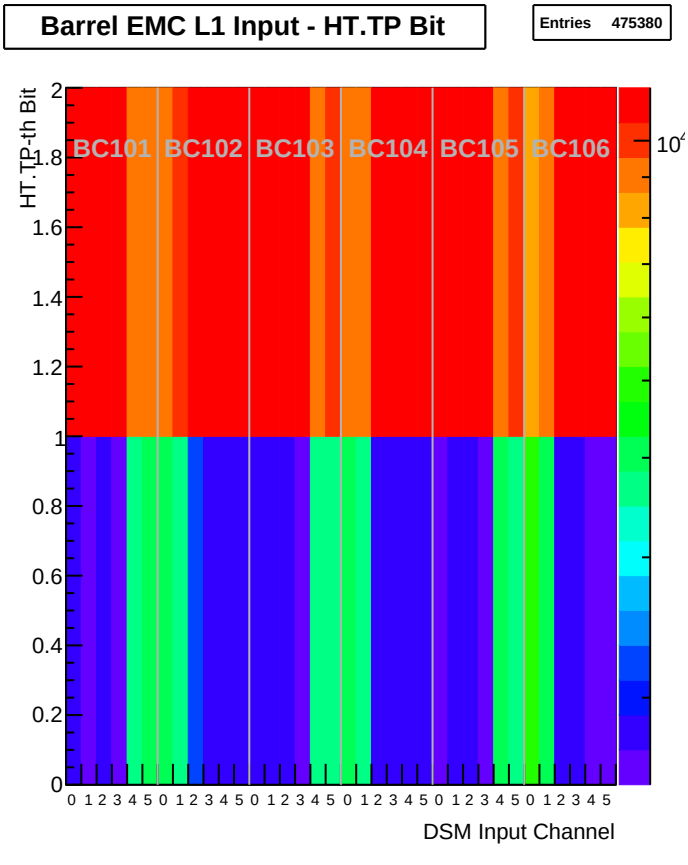

Barrel EMC L0 Input - Patch Sum
Entries 3961500
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

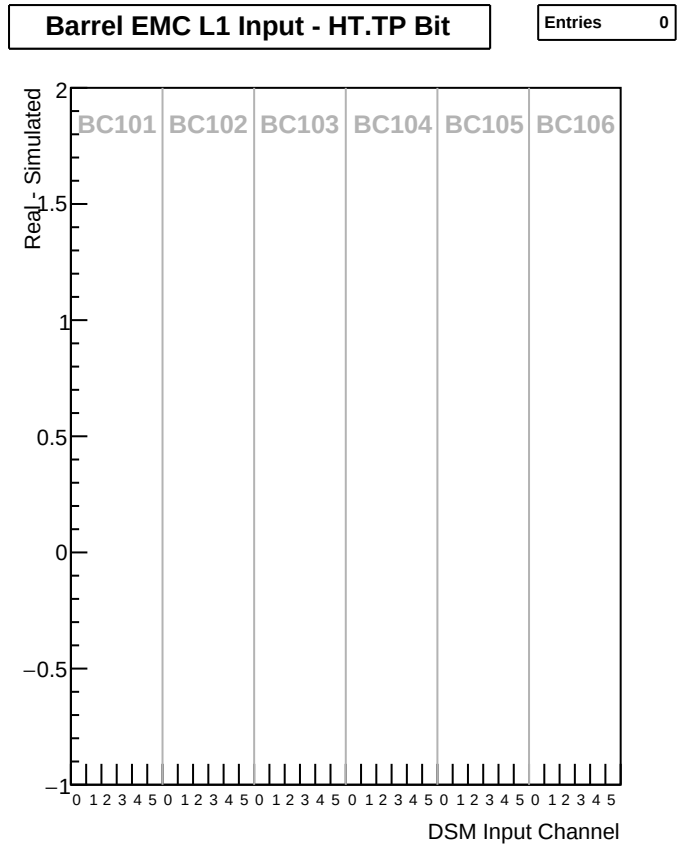

Endcap EMC L0 Input - High Tower
Entries 1188450
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

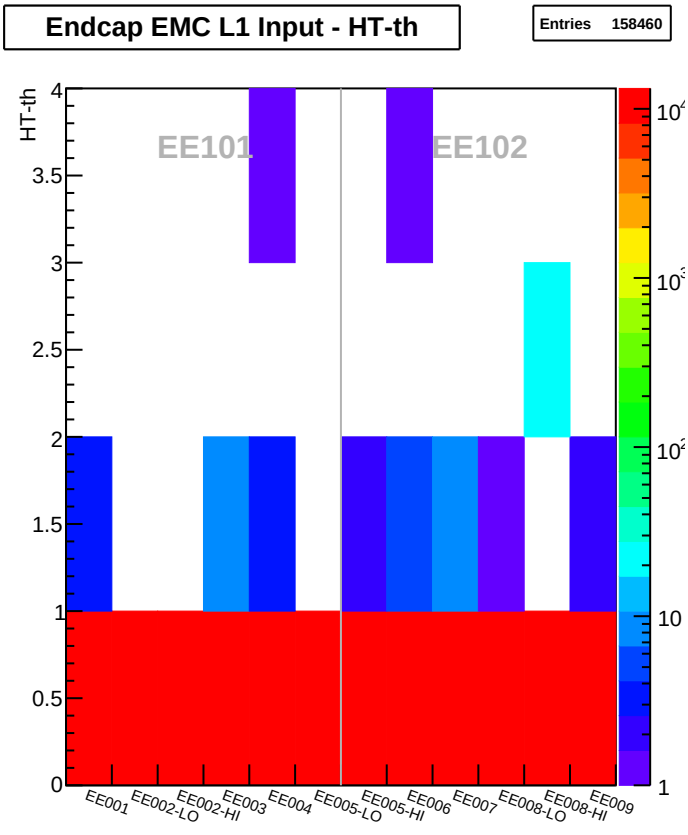

Endcap EMC L0 Input - Patch Sum
Entries 1188450
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

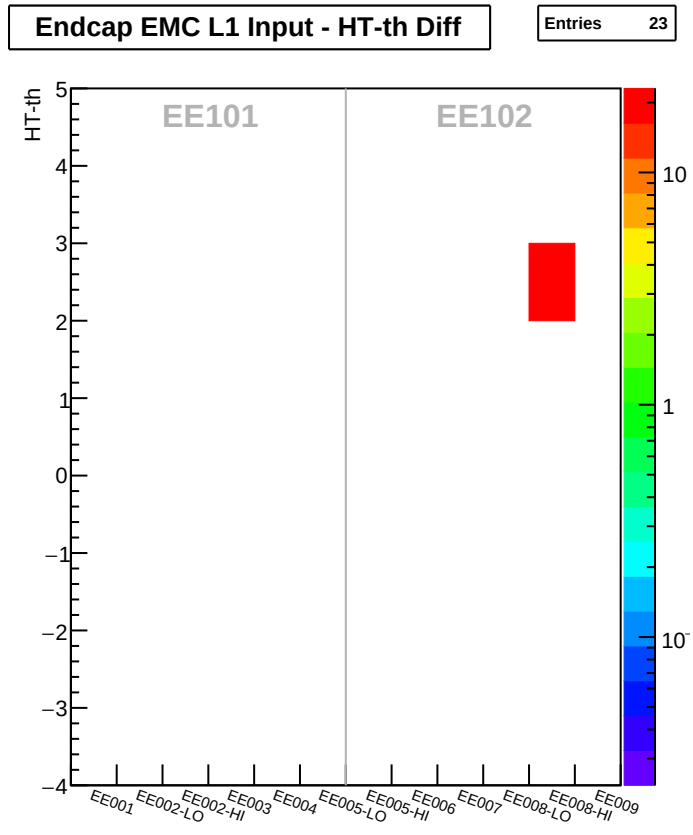

Barrel EMC L1 Input - HT Bits
Entries 475380
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

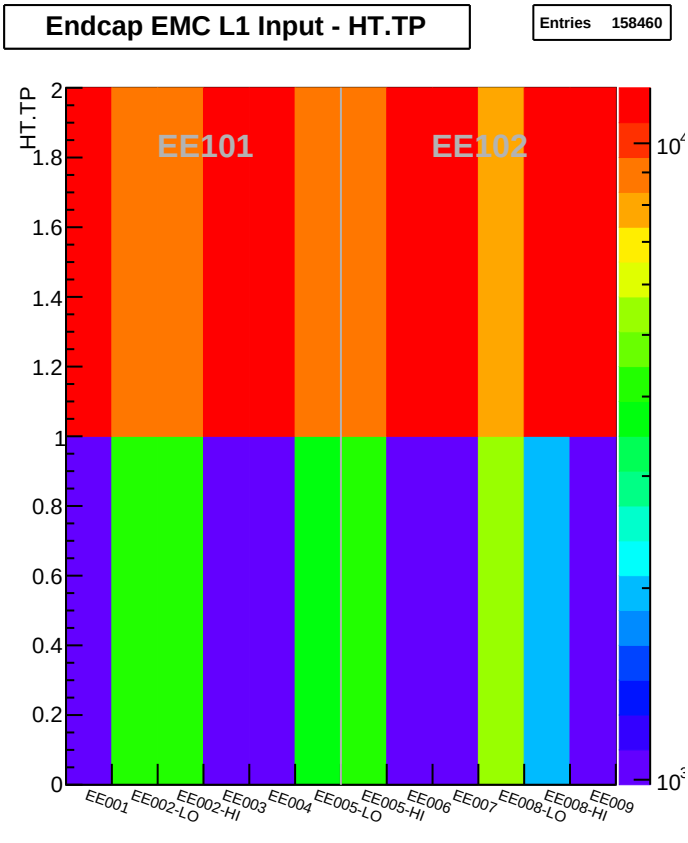

Barrel EMC L1 Input - HT Bits
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

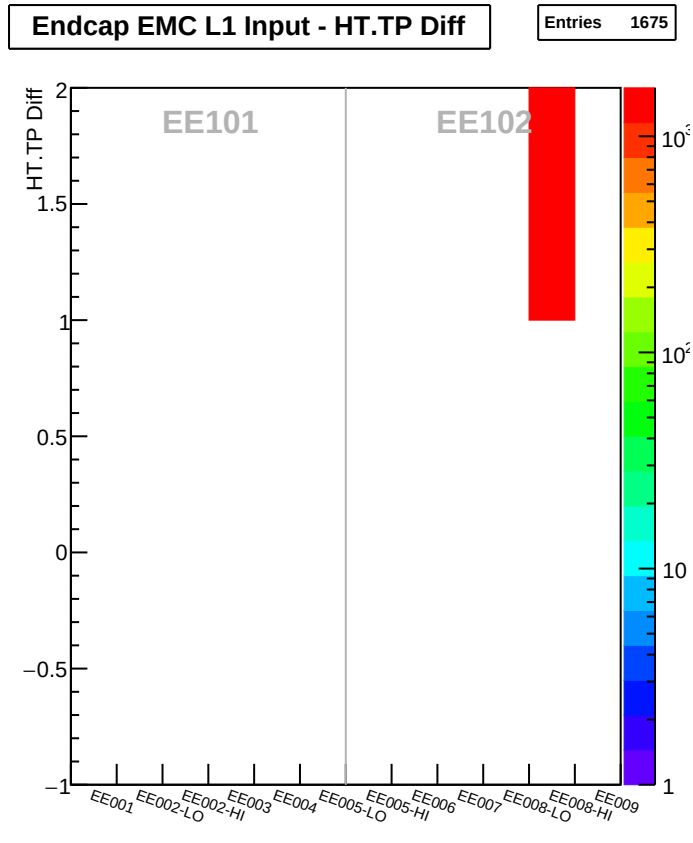

Barrel EMC L1 Input - HT.TP Bit
Entries 475380
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

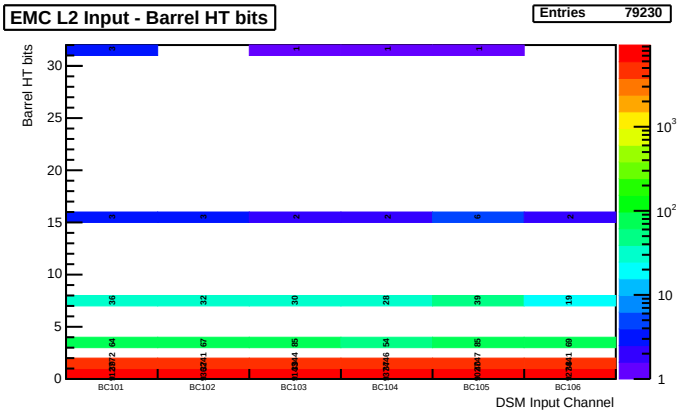

Barrel EMC L1 Input - HT.TP Bit
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

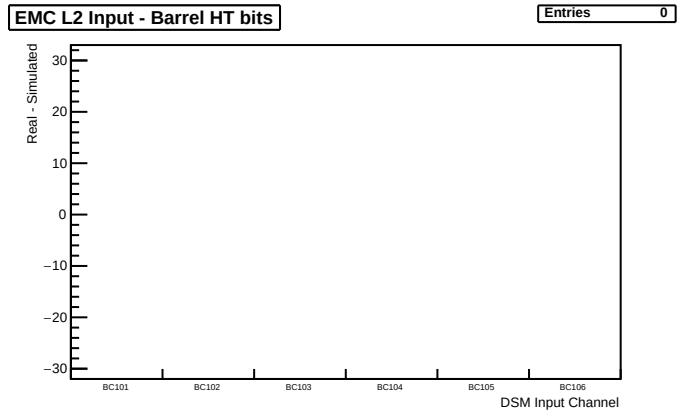

Endcap EMC L1 Input - HT-th
Entries 158460
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

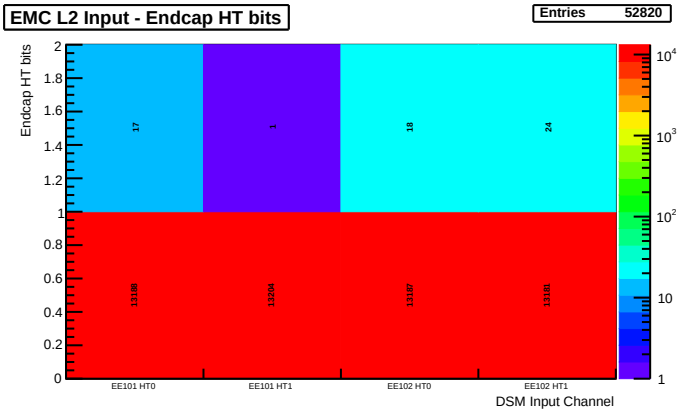

Endcap EMC L1 Input - HT-th Diff
Entries 23
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

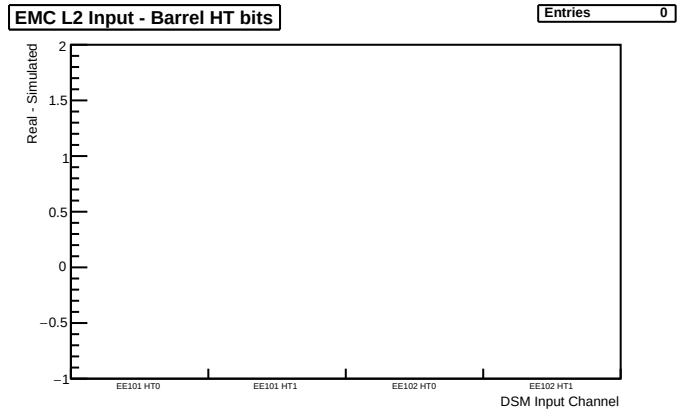

Endcap EMC L1 Input - HT.TP
Entries 158460
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

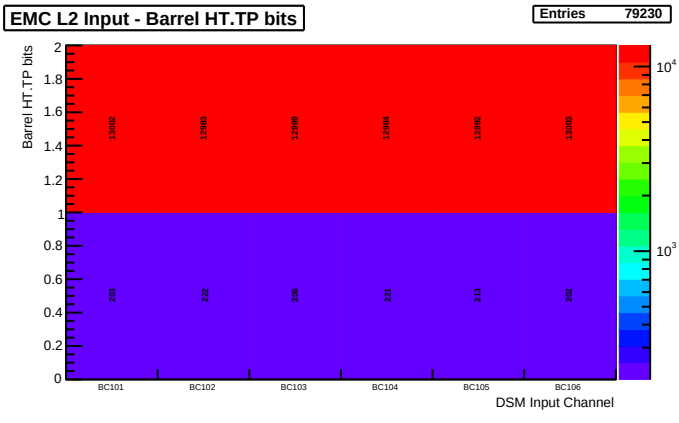

Endcap EMC L1 Input - HT.TP Diff
Entries 1675
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

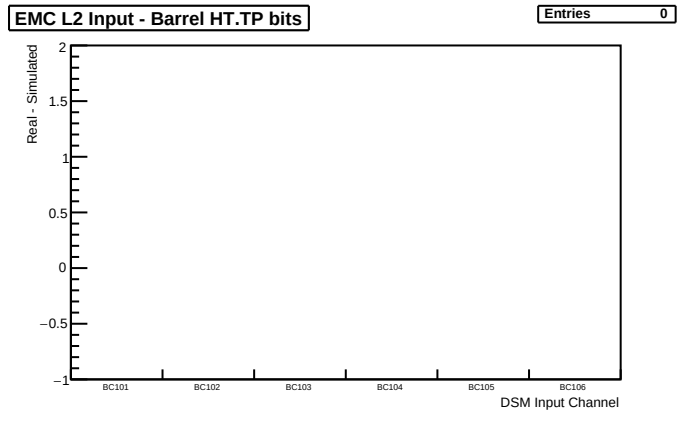

EMC L2 Input - Barrel HT bits
Entries 79230
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

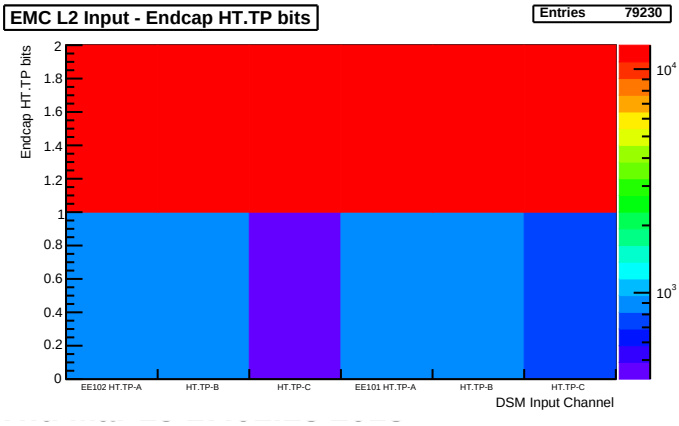

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

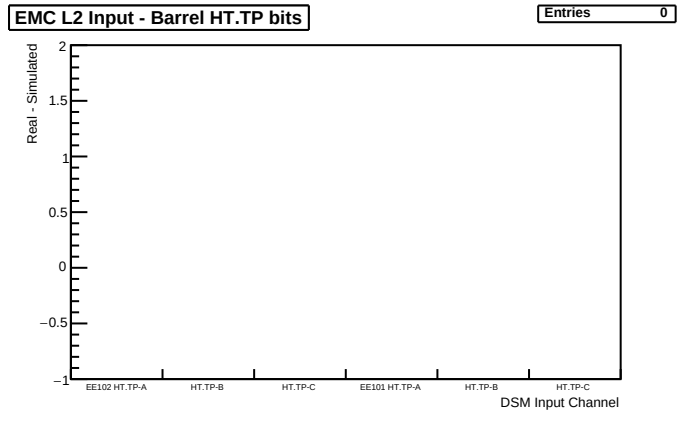

EMC L2 Input - Endcap HT bits
Entries 52820
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

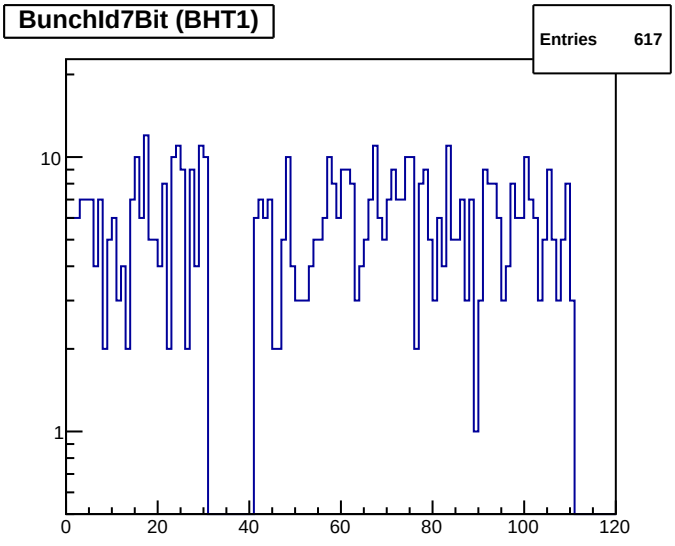

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

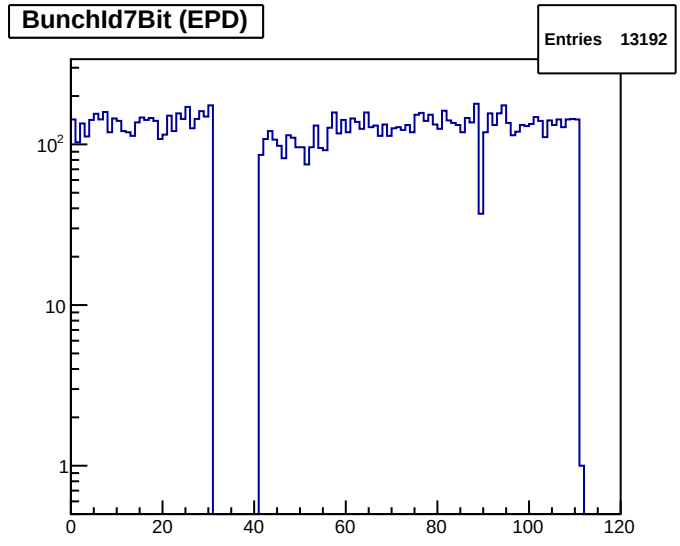

EMC L2 Input - Barrel HT.TP bits
Entries 79230
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

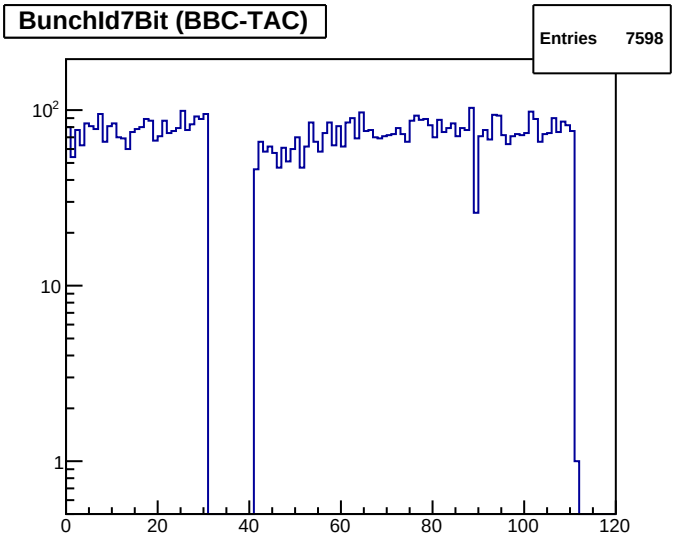

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

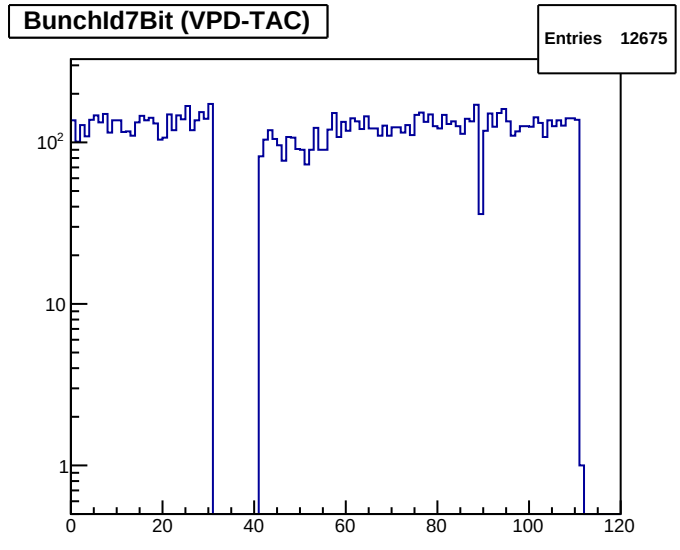

EMC L2 Input - Endcap HT.TP bits
Entries 79230
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

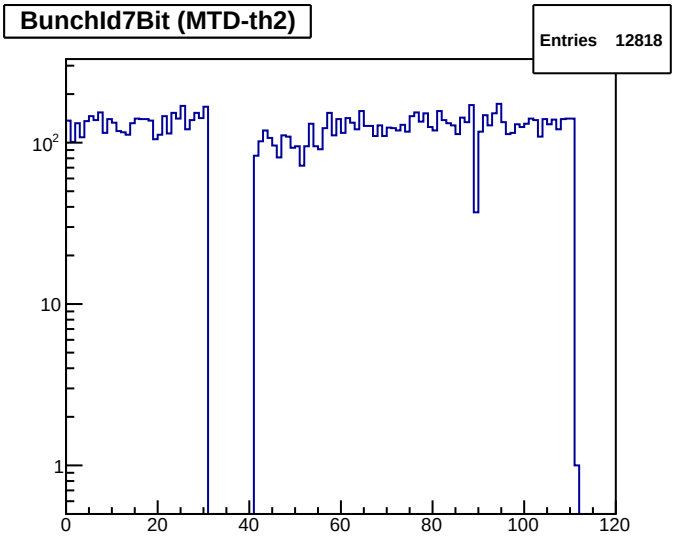

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

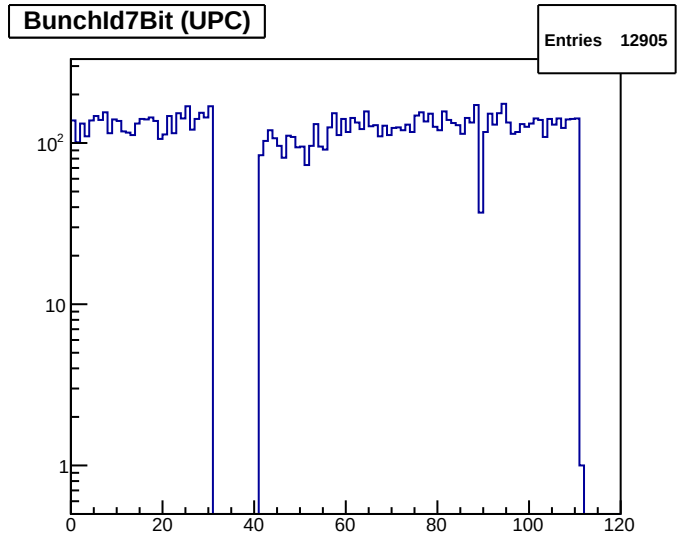

BunchId7Bit (BHT1)
Entries 617
10
1
0
20
40
60
80
100
120

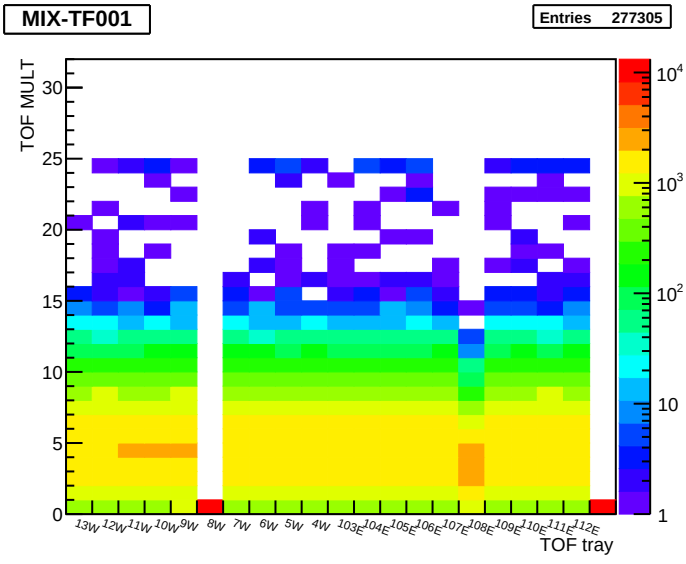

BunchId7Bit (EPD)
Entries 13192
10^2
10
1
0
20
40
60
80
100
120

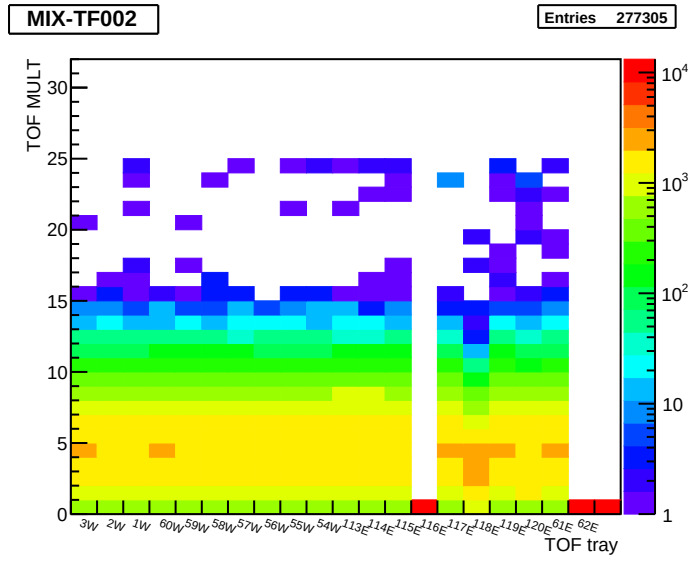

BunchId7Bit (BBC-TAC)
Entries 7598
10^2
10
1
0
20
40
60
80
100
120

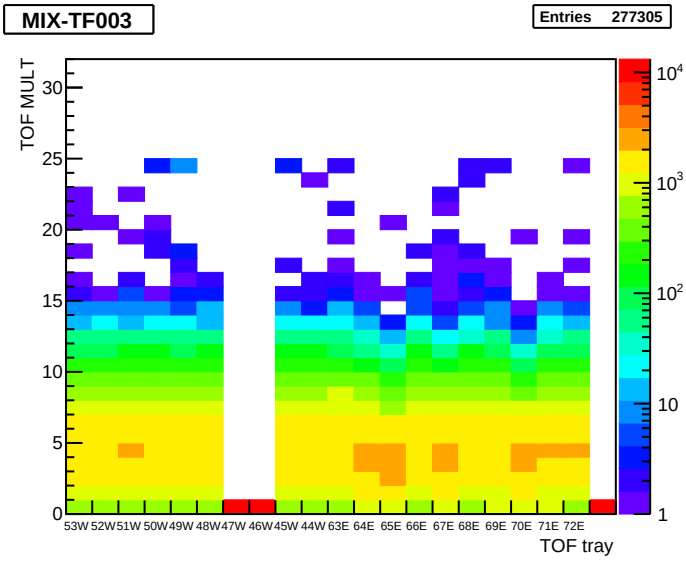

BunchId7Bit (VPD-TAC)
Entries 12675
10^2
10
1
0
20
40
60
80
100
120

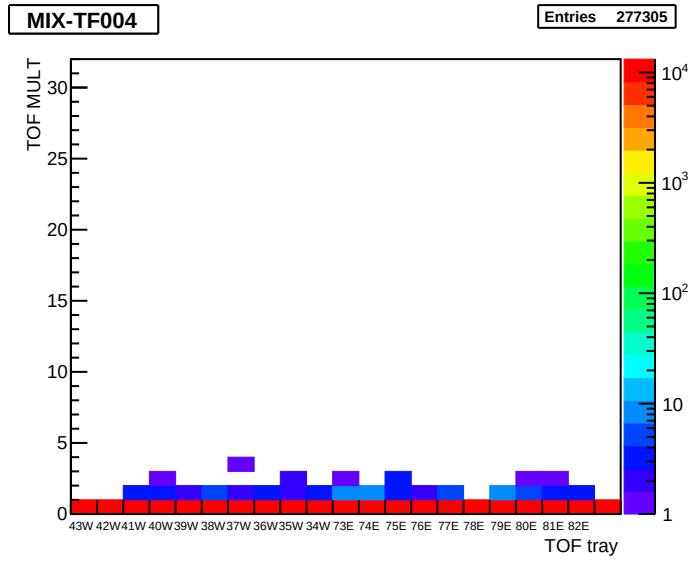

BunchId7Bit (MTD-th2)
Entries 12818
10^2
10
1
0
20
40
60
80
100
120

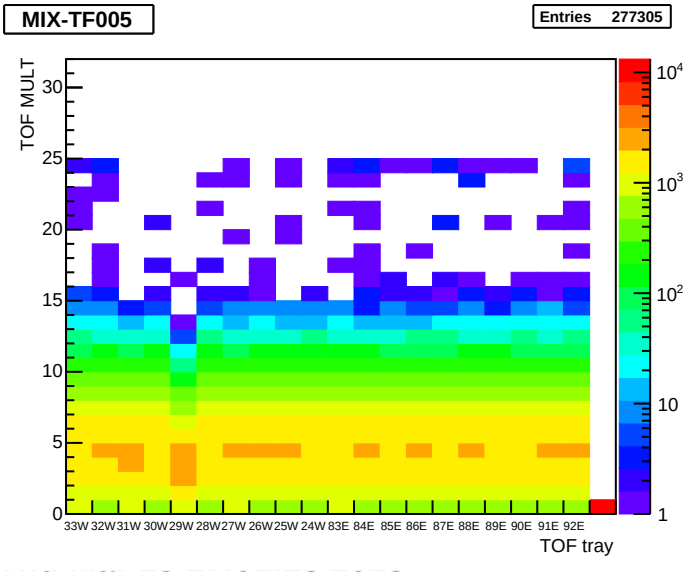

BunchId7Bit (UPC)
Entries 12905
10^2
10
1
0
20
40
60
80
100
120

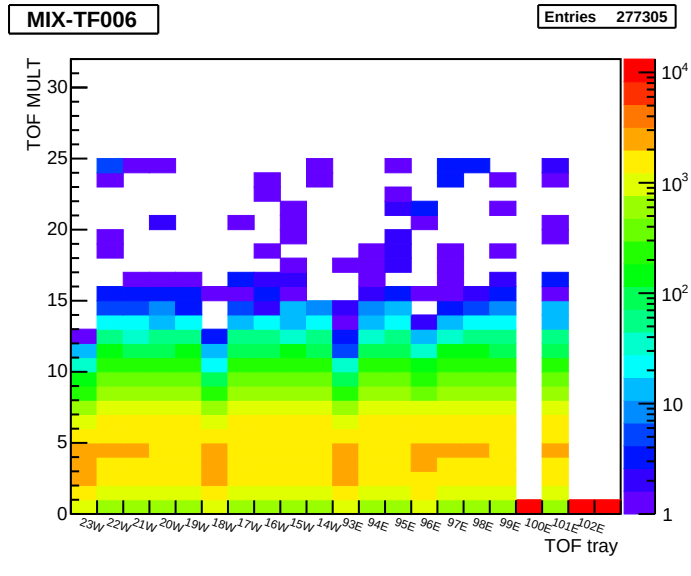

MIX-TF001
Entries 277305
TOF MULT
TOF tray

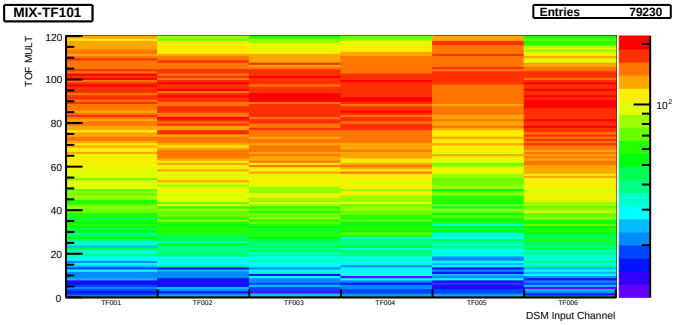

MIX-TF002
Entries 277305
TOF MULT
TOF tray

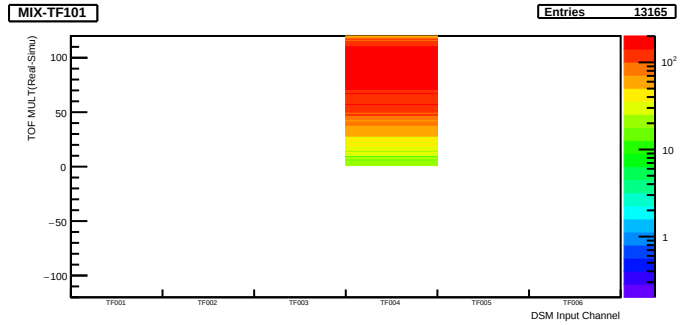

MIX-TF003
Entries 277305
TOF MULT
TOF tray

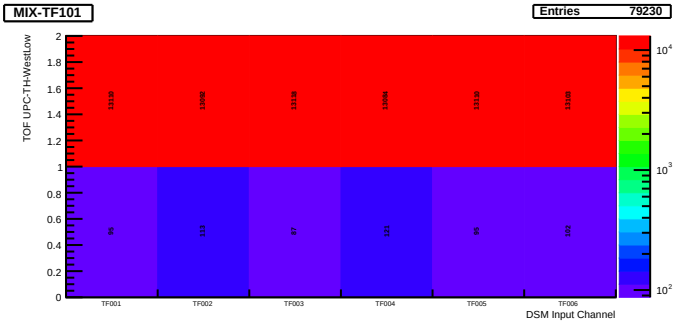

MIX-TF004
Entries 277305
TOF MULT
TOF tray

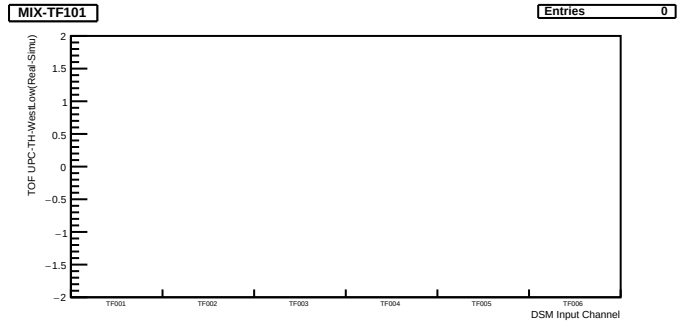

MIX-TF005
Entries 277305
TOF MULT
TOF tray

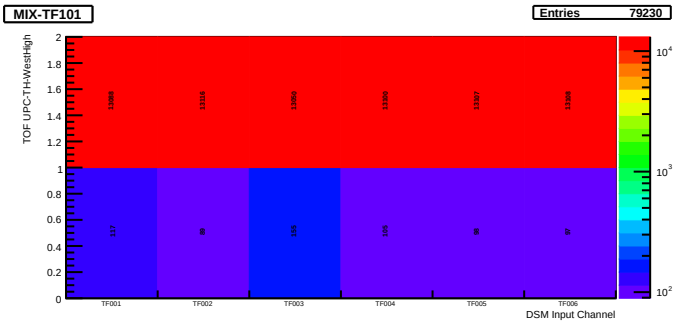

MIX-TF006
Entries 277305
TOF MULT
TOF tray

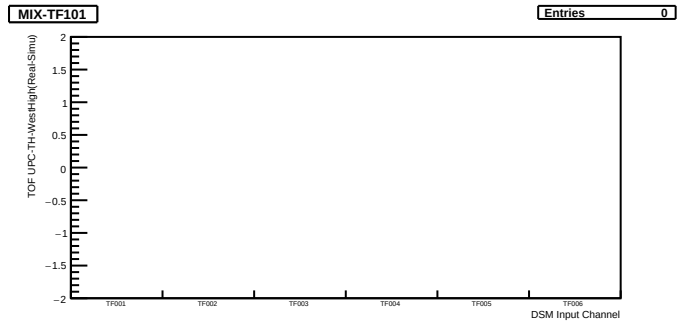

MIX-TF101
Entries 79230
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

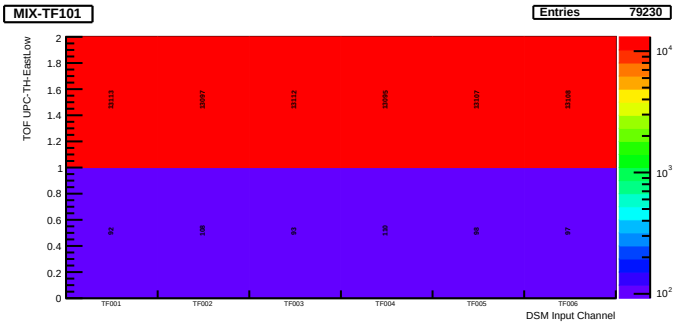

MIX-TF101
Entries 13165
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

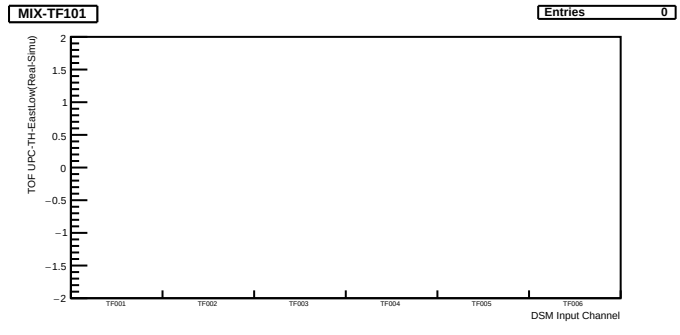

MIX-TF101
Entries 79230
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

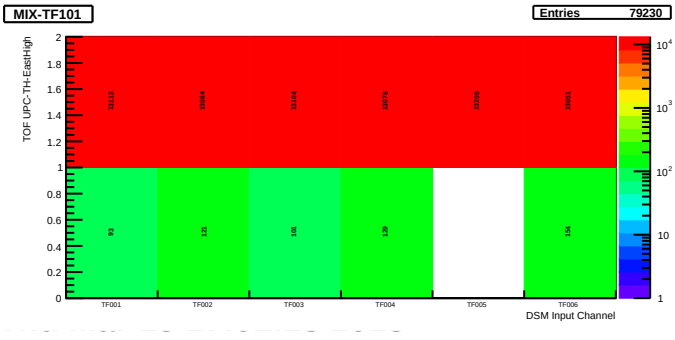

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

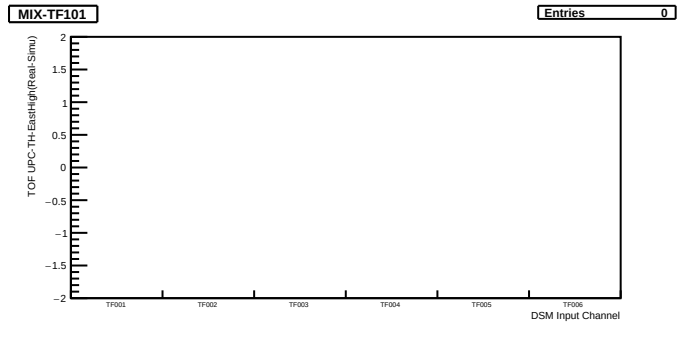

MIX-TF101
Entries 79230
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

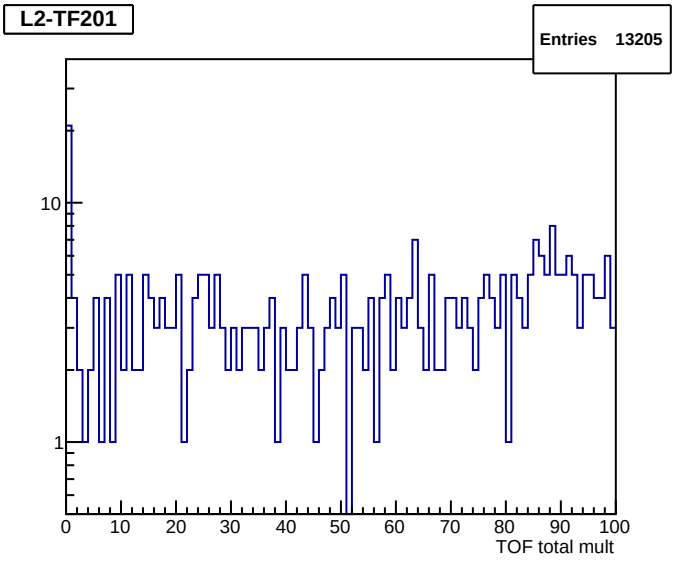

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

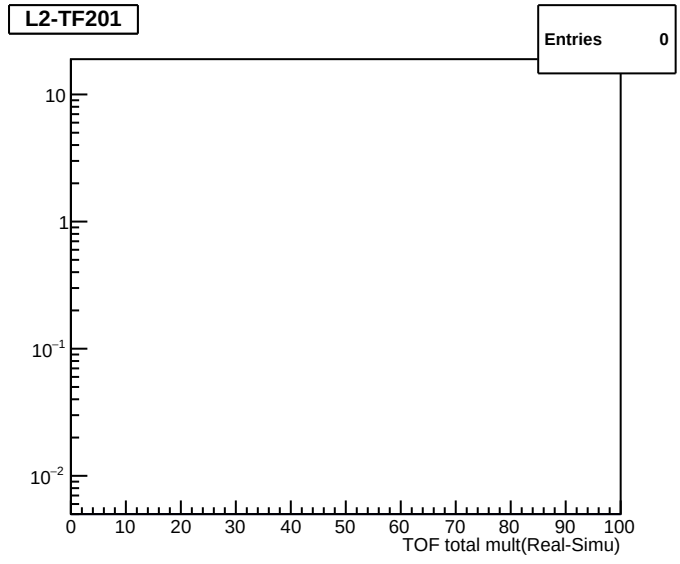

MIX-TF101
Entries 79230
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

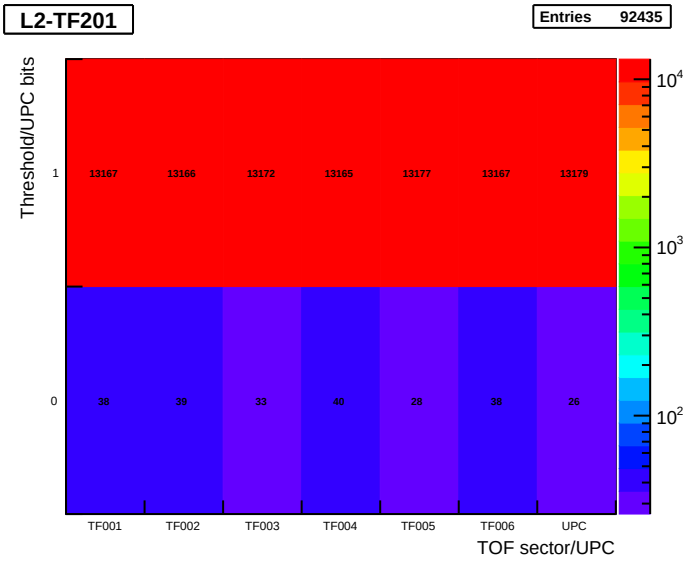

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

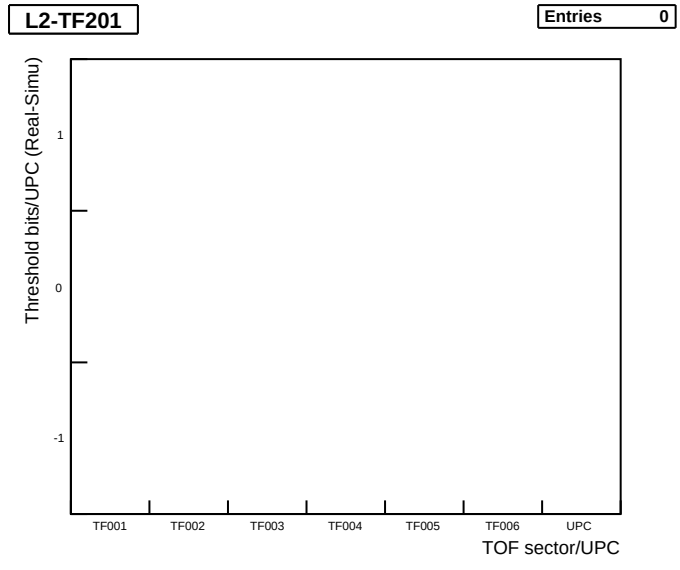

MIX-TF101
Entries 79230
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

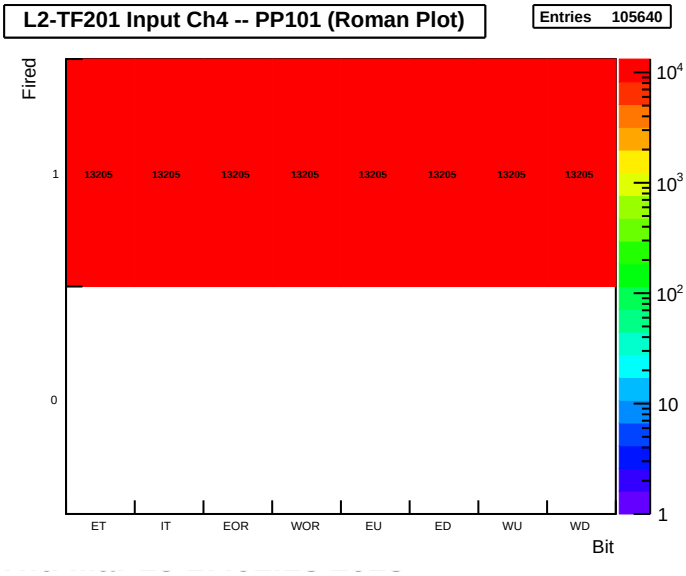

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

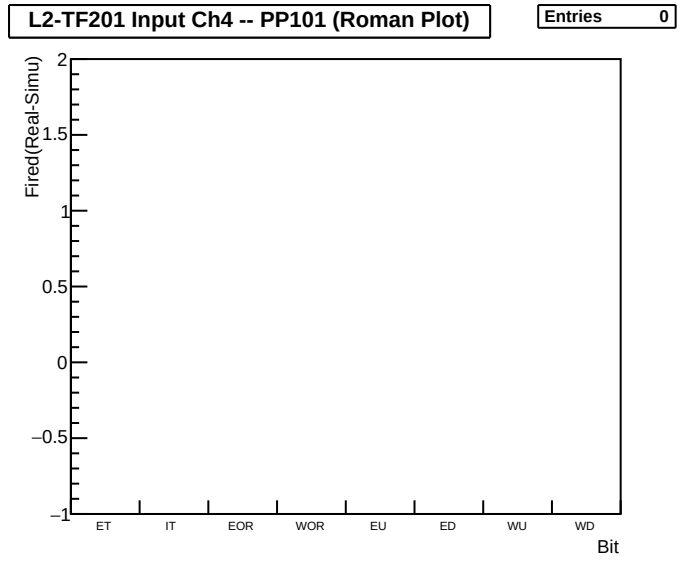

L2-TF201
Entries 13205
TOF total mult

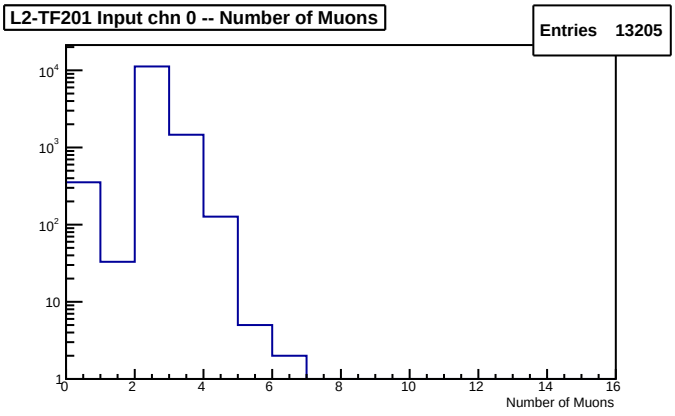

L2-TF201
Entries 0
TOF total mult(Real-Simu)

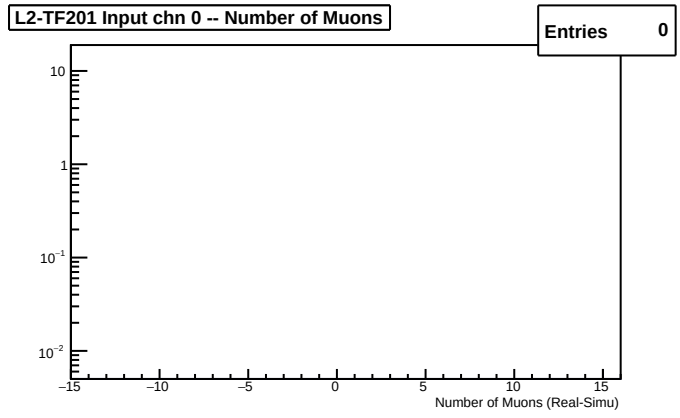

L2-TF201
Entries 92435
Threshold/UPC bits
13167 13166 13172 13165 13177 13167 13179
38 39 33 40 28 38 26
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

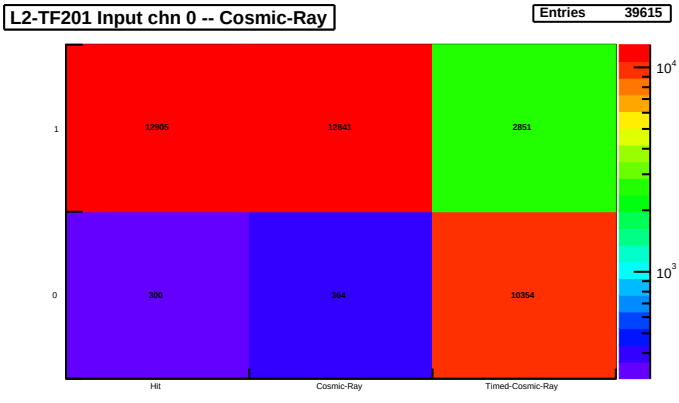

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

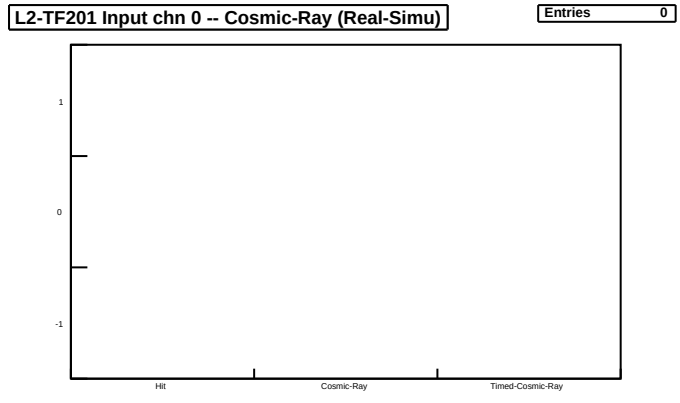

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 105640
Fired
13205 13205 13205 13205 13205 13205 13205 13205
ET IT EOR WOR EU ED WU WD
Bit

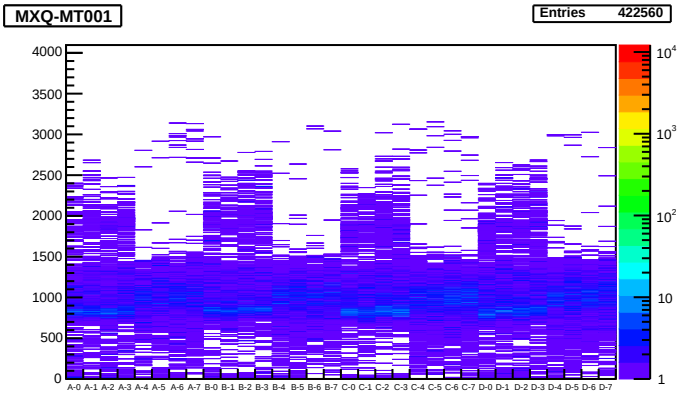

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 0
Fired(Real-Simu)
ET IT EOR WOR EU ED WU WD
Bit

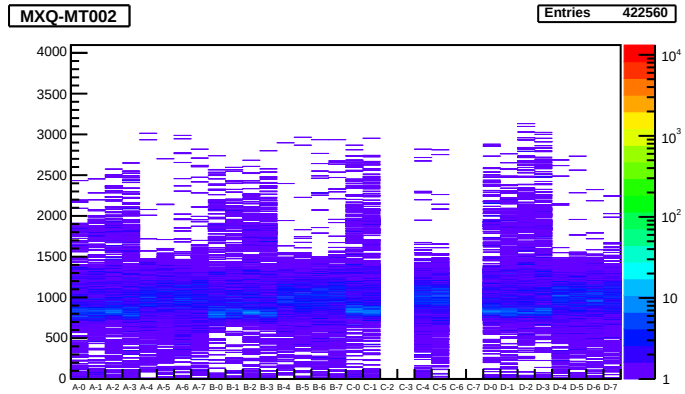

L2-TF201 Input chn 0 -- Number of Muons
Entries 13205
Number of Muons

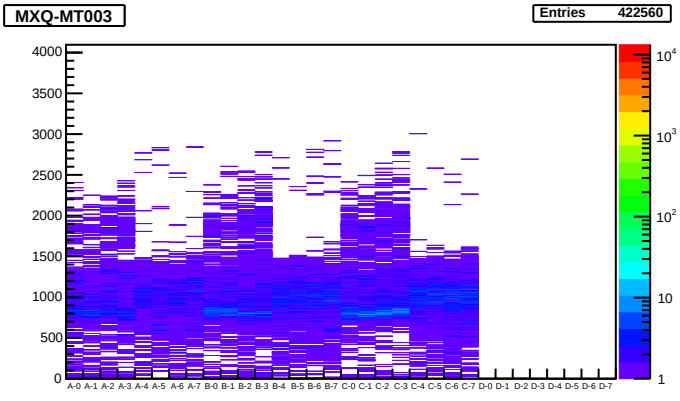

L2-TF201 Input chn 0 -- Number of Muons
Entries 0
Number of Muons (Real-Simu)

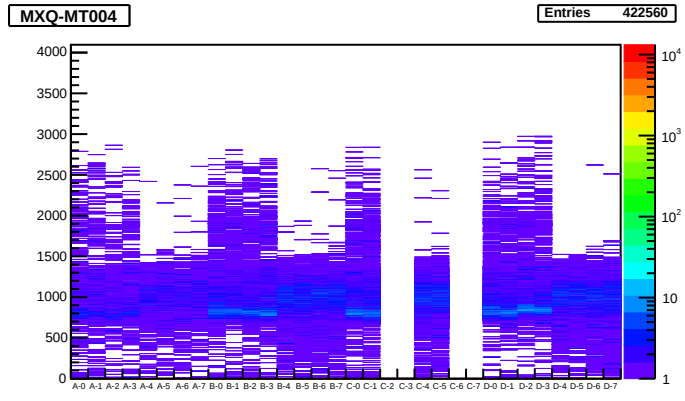

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 39615
12905
12841
2851
300
364
10354
Hit
Cosmic-Ray
Timed-Cosmic-Ray

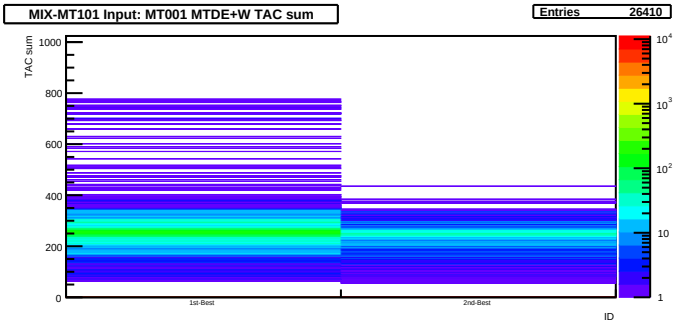

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 0
Hit
Cosmic-Ray
Timed-Cosmic-Ray

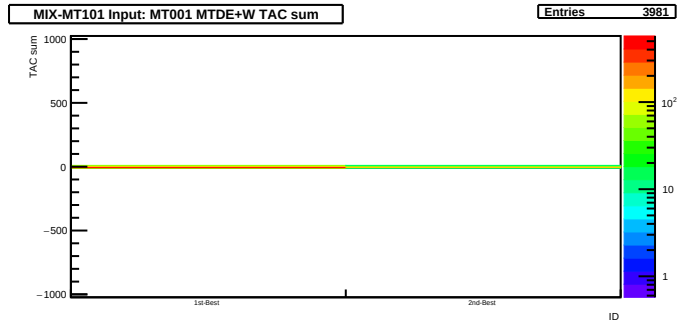

MXQ-MT001
Entries 422560
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

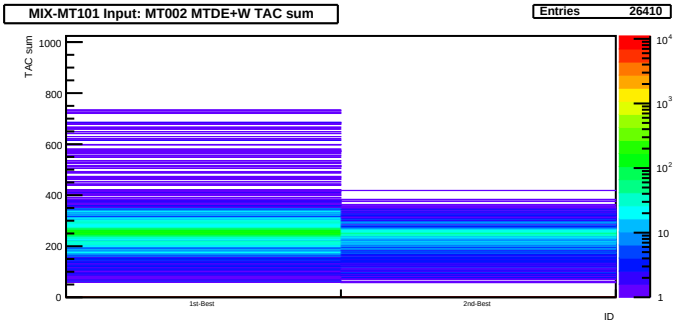

MXQ-MT002
Entries 422560
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

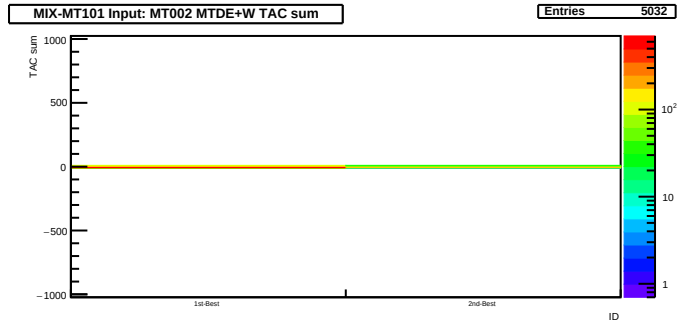

MXQ-MT003
Entries 422560
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

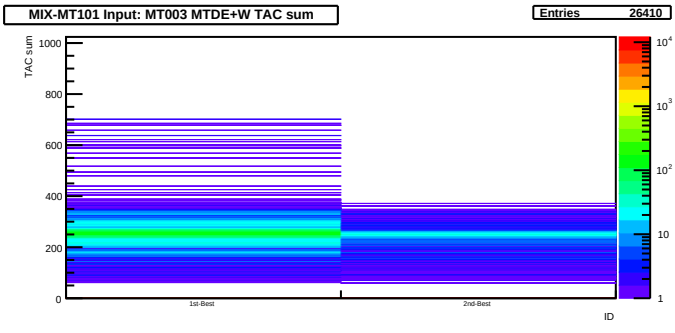

MXQ-MT004
Entries 422560
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

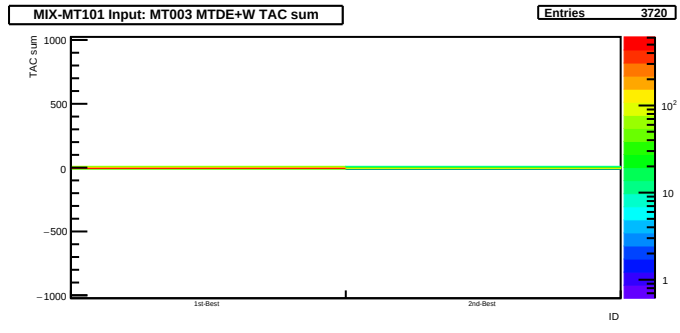

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 26410
TAC sum
1st-Best
2nd-Best
ID

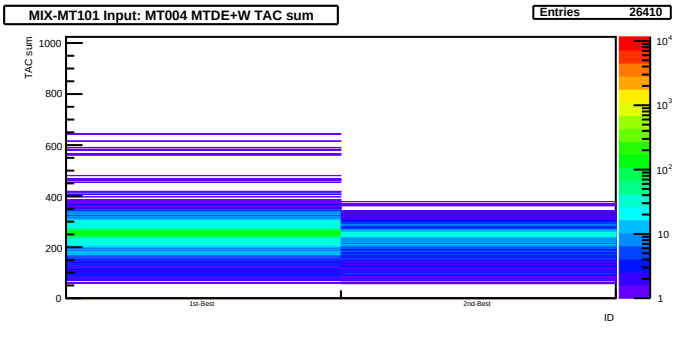

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 3981
TAC sum
1st-Best
2nd-Best
ID

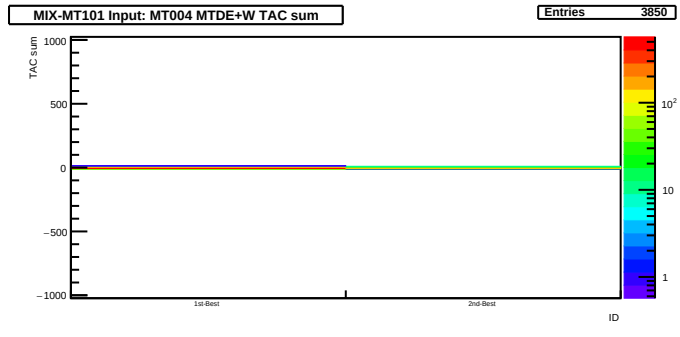

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 26410
TAC sum
1st-Best
2nd-Best
ID

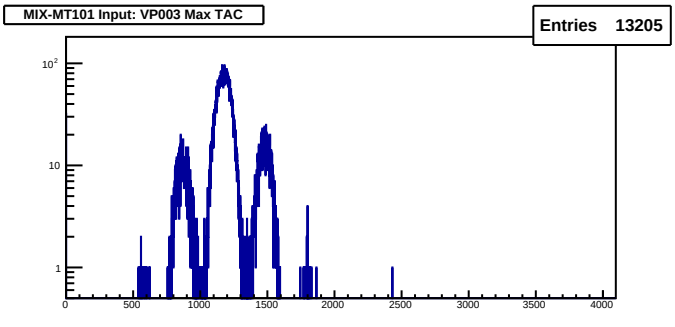

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 5032
TAC sum
1st-Best
2nd-Best
ID

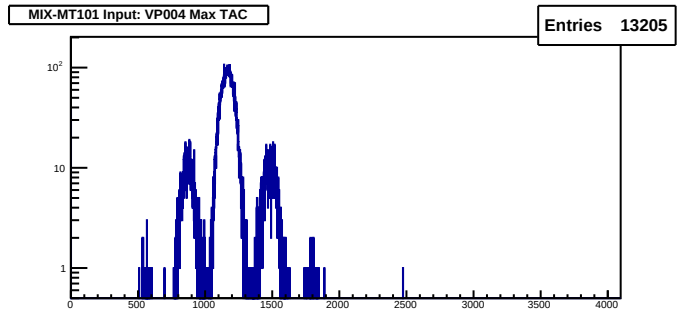

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 26410
TAC sum
1st-Best
2nd-Best
ID

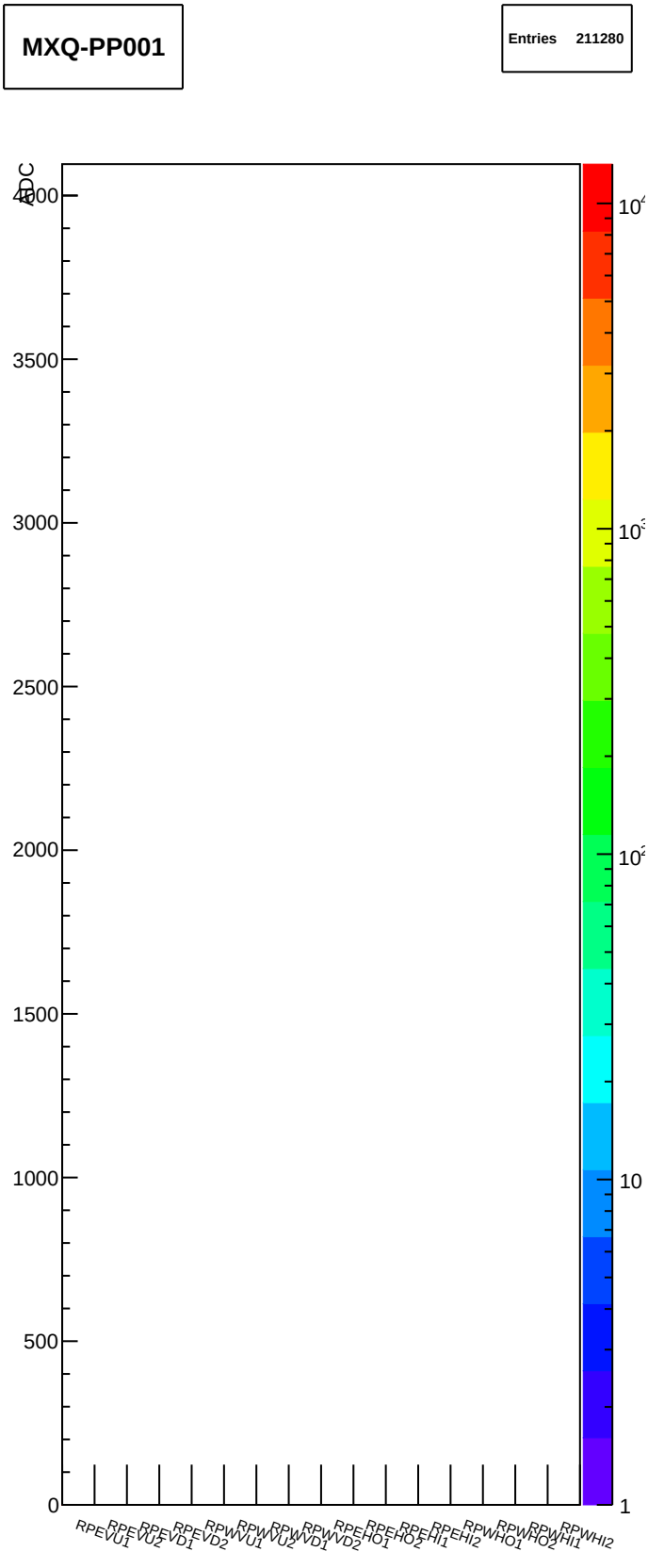

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 3720
TAC sum
1st-Best
2nd-Best
ID

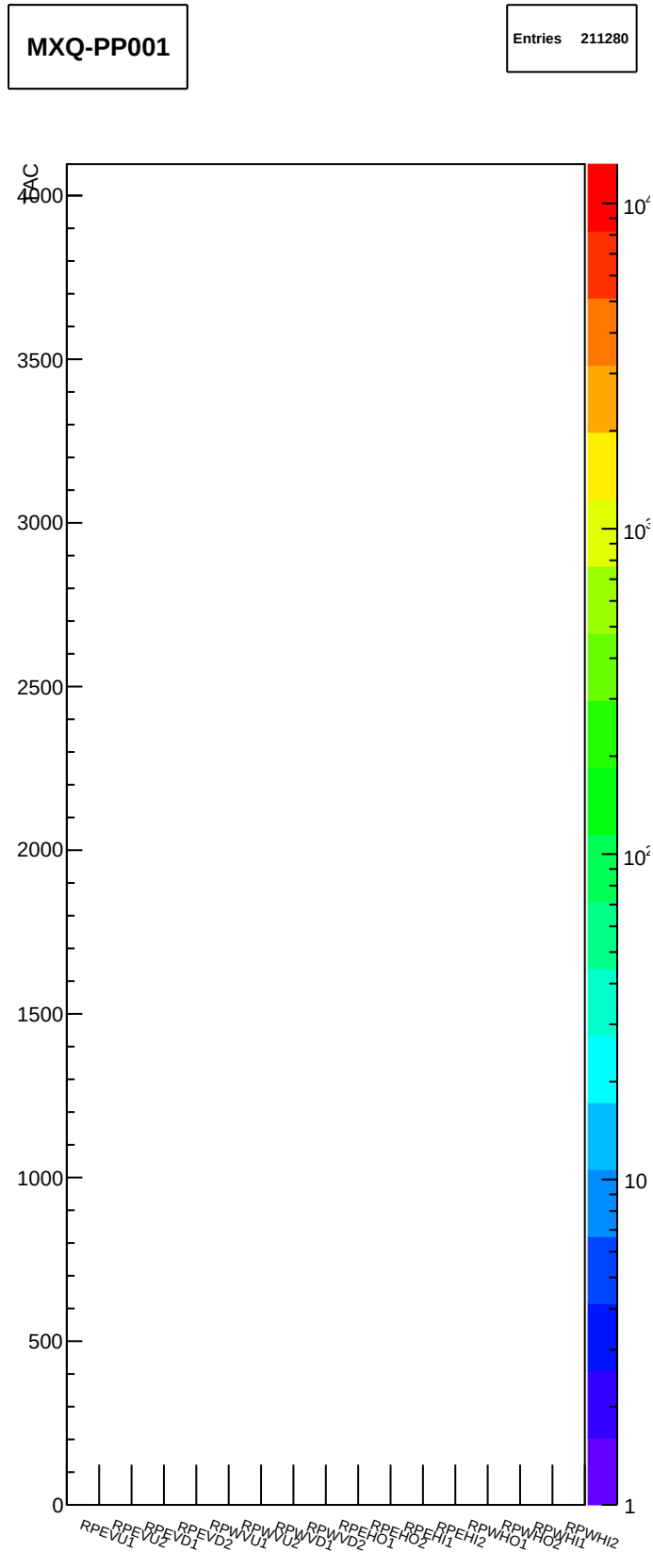

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 26410
TAC sum
1st-Best
2nd-Best
ID

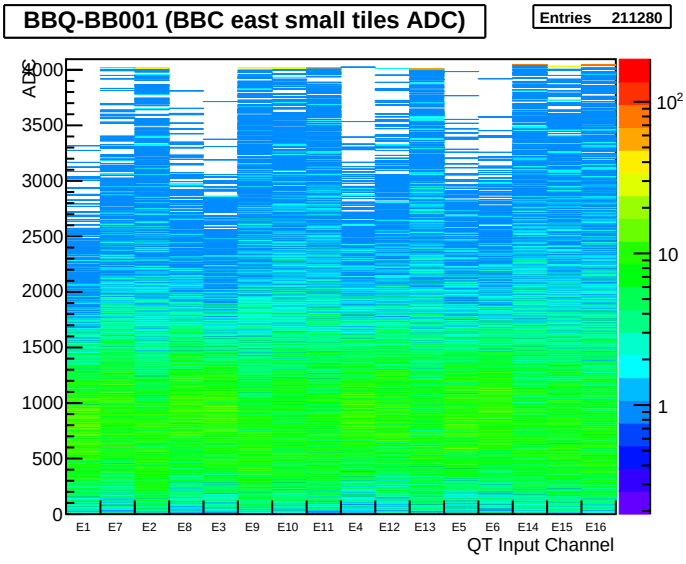

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 3850
TAC sum
1st-Best
2nd-Best
ID

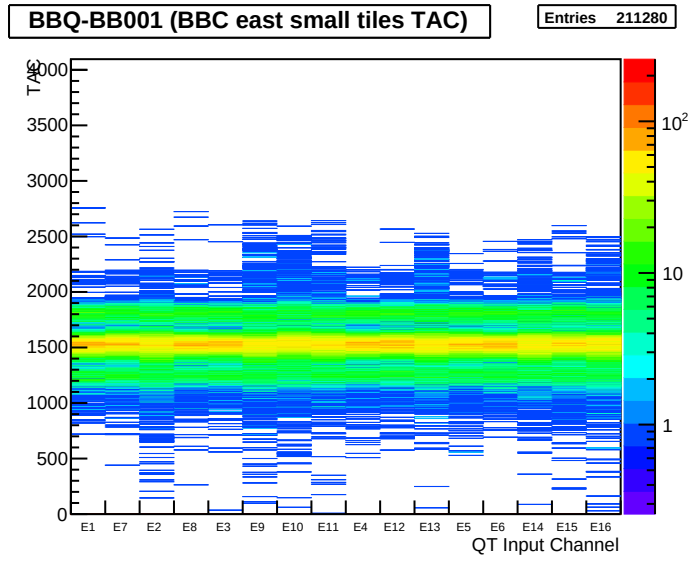

MIX-MT101 Input: VP003 Max TAC
Entries 13205

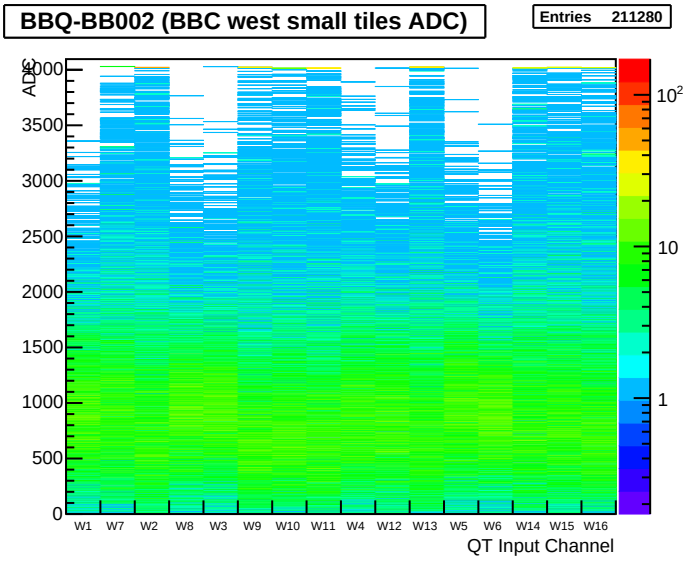

MIX-MT101 Input: VP004 Max TAC
Entries 13205

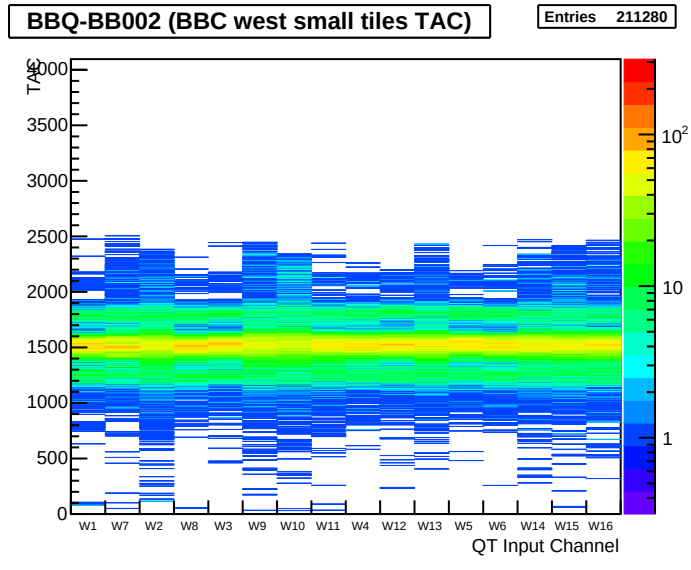

MXQ-PP001
Entries 211280
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

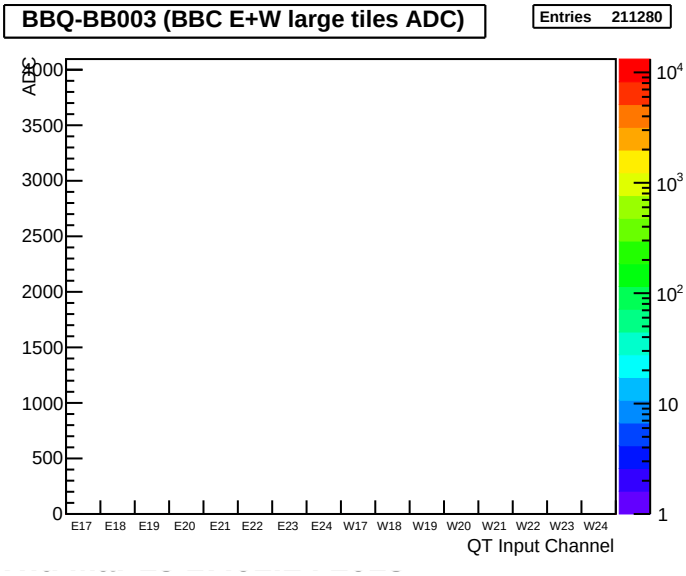

MXQ-PP001
Entries 211280
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

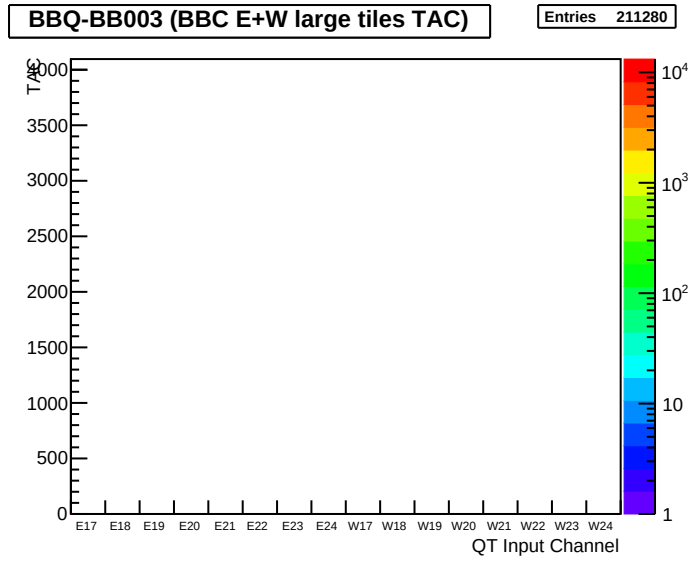

BBQ-BB001 (BBC east small tiles ADC)
Entries 211280
ADC
QT Input Channel

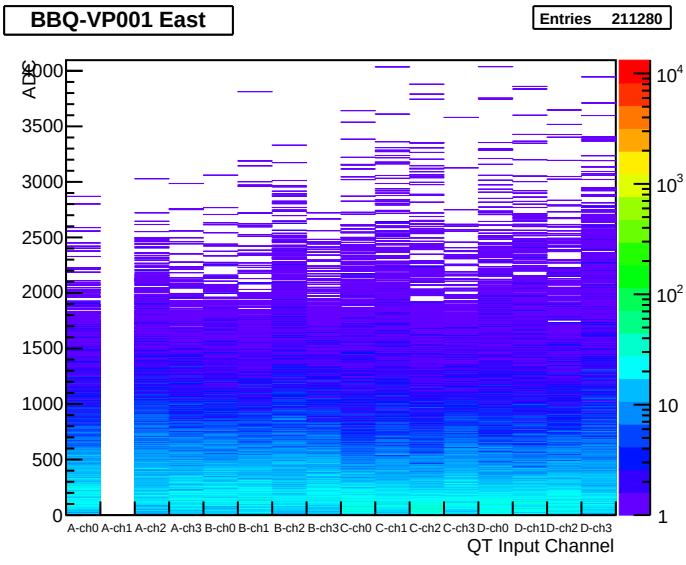

BBQ-BB001 (BBC east small tiles TAC)
Entries 211280
TAC
QT Input Channel

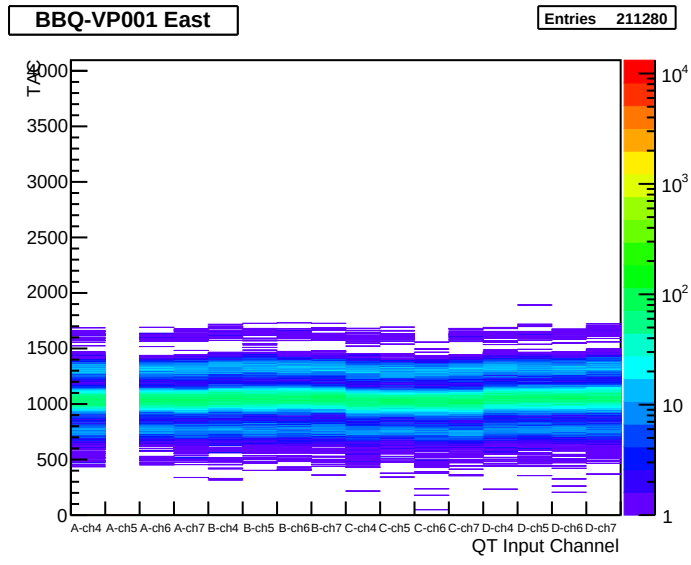

BBQ-BB002 (BBC west small tiles ADC)
Entries 211280
ADC
QT Input Channel

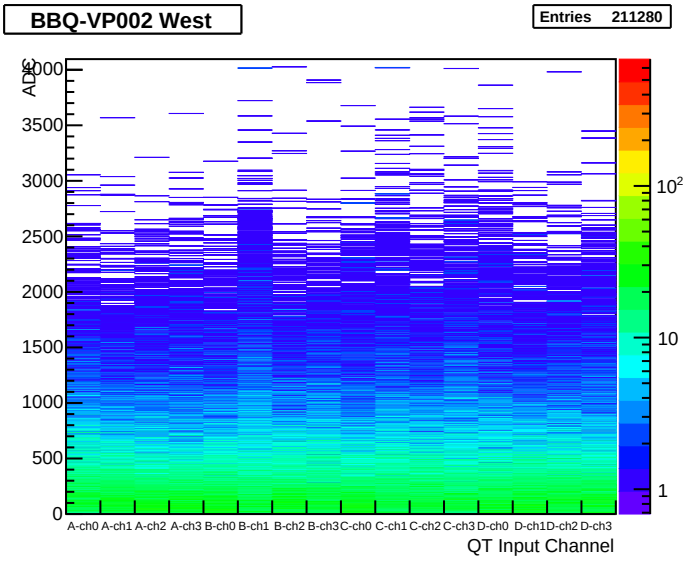

BBQ-BB002 (BBC west small tiles TAC)
Entries 211280
TAC
QT Input Channel

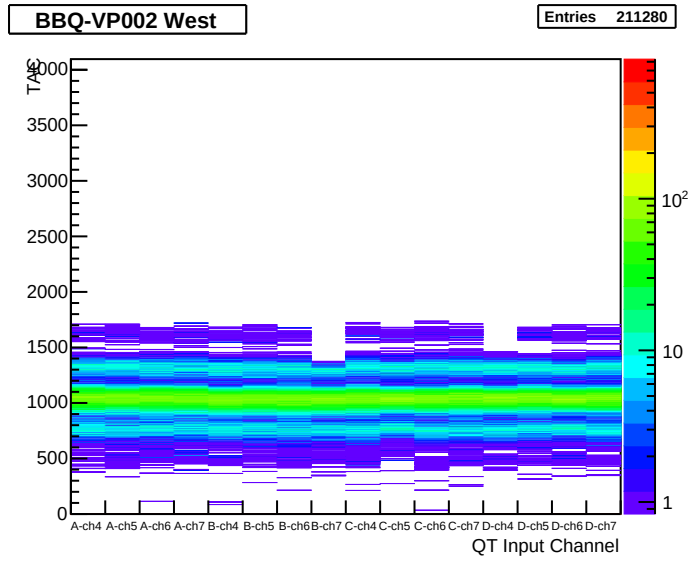

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 211280
ADC
QT Input Channel

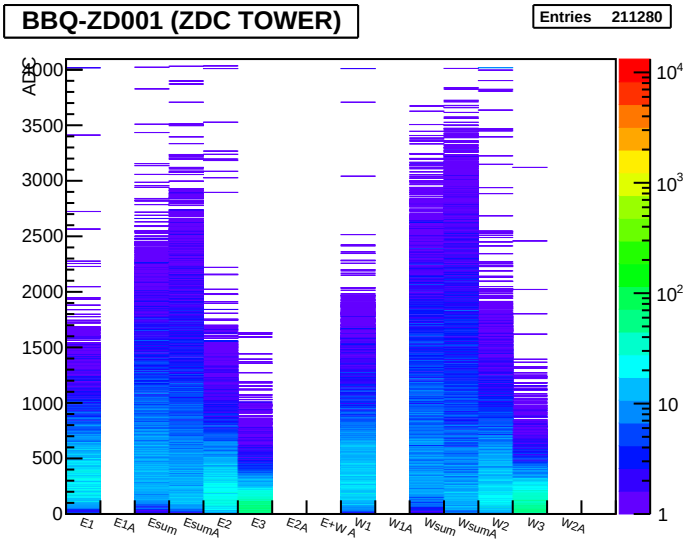

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 211280
TAC
QT Input Channel

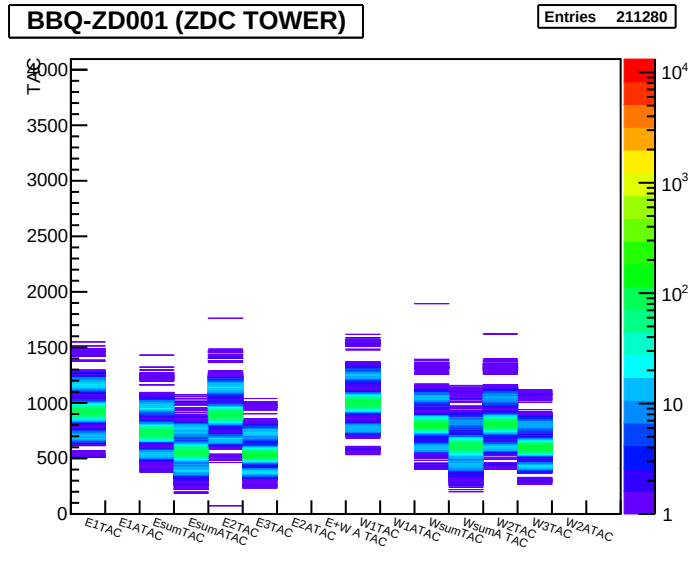

BBQ-VP001 East
Entries 211280
ADC
QT Input Channel

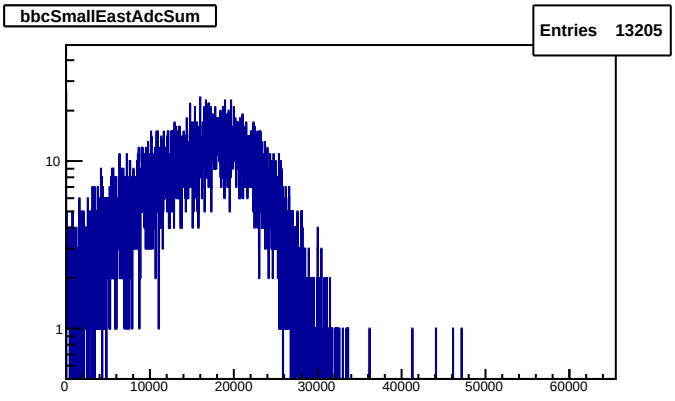

BBQ-VP001 East
Entries 211280
TAC
QT Input Channel

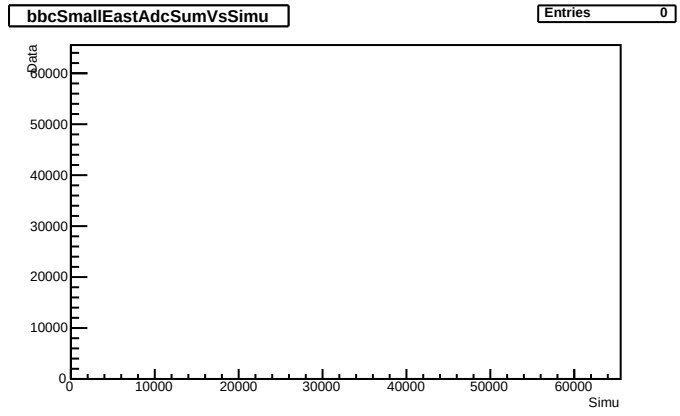

BBQ-VP002 West
Entries 211280
ADC
QT Input Channel

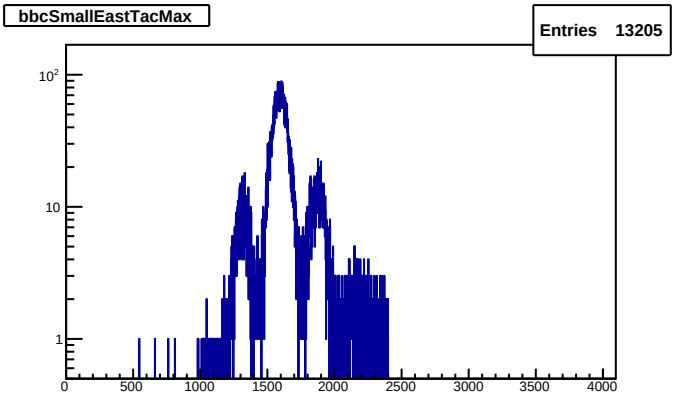

BBQ-VP002 West
Entries 211280
TAC
QT Input Channel

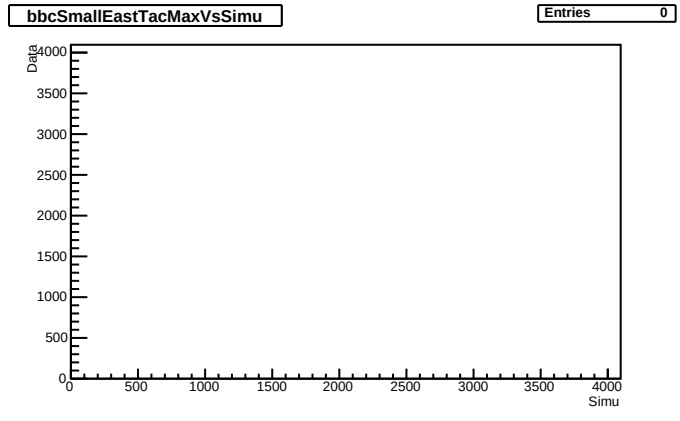

BBQ-ZD001 (ZDC TOWER)
Entries 211280
ADC

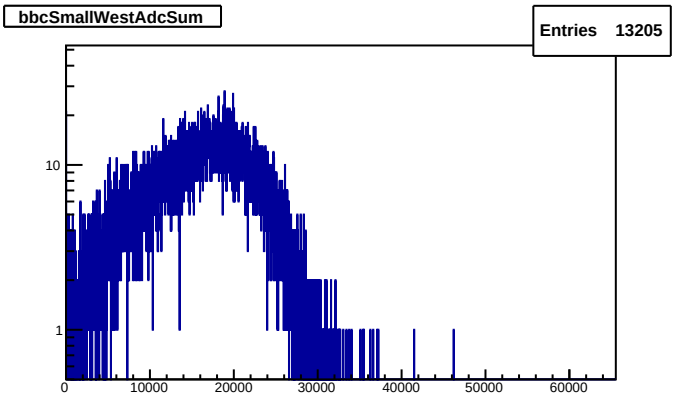

BBQ-ZD001 (ZDC TOWER)
Entries 211280
TAC

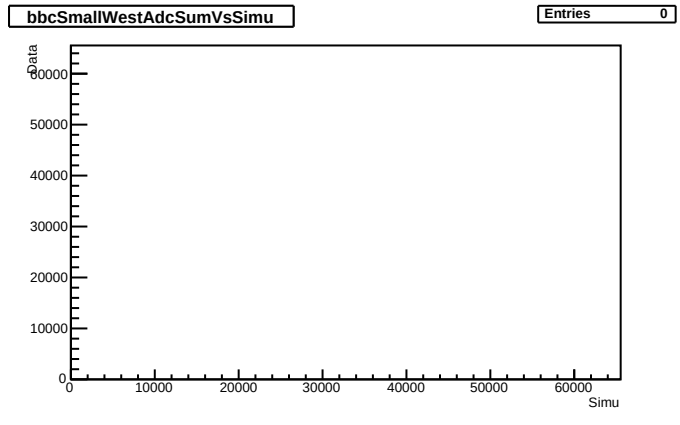

bbcSmallEastAdcSum
Entries 13205

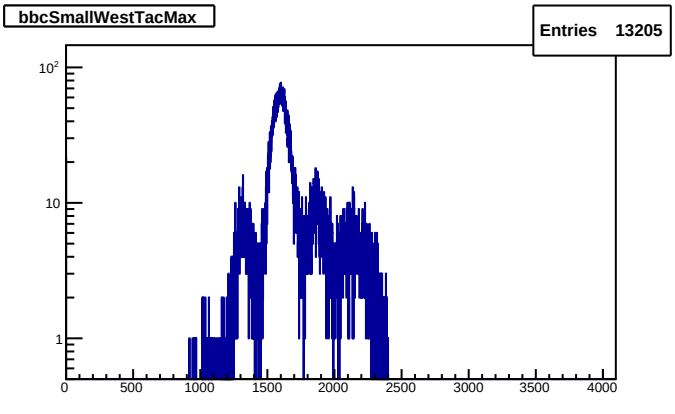

bbcSmallEastAdcSumVsSimu
Entries 0
Data
Simu

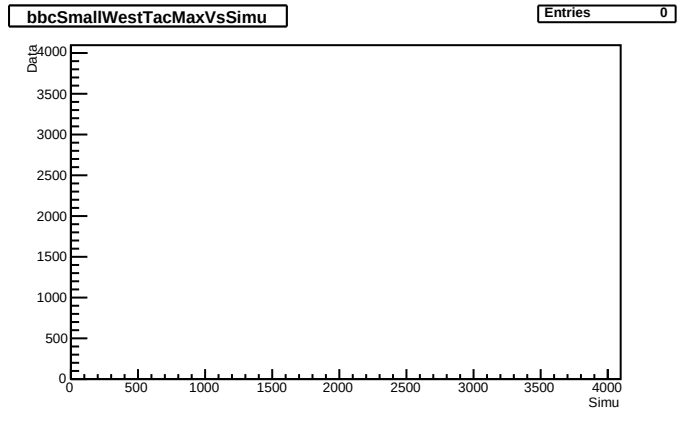

bbcSmallEastTacMax
Entries 13205

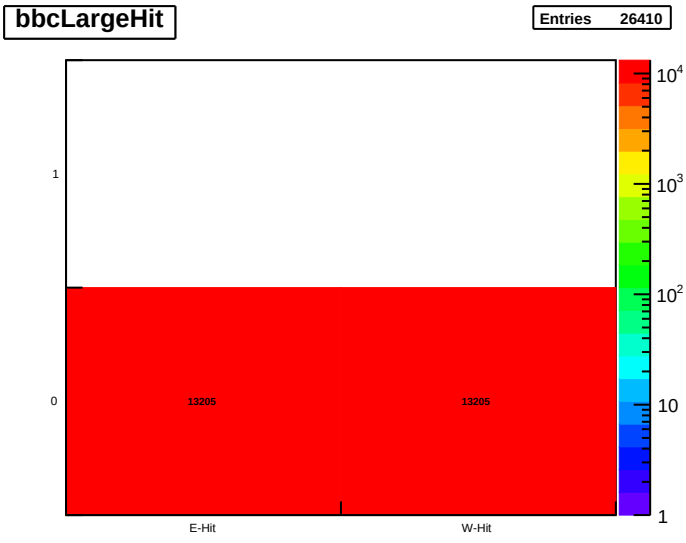

bbcSmallEastTacMaxVsSimu
Entries 0
Data
Simu

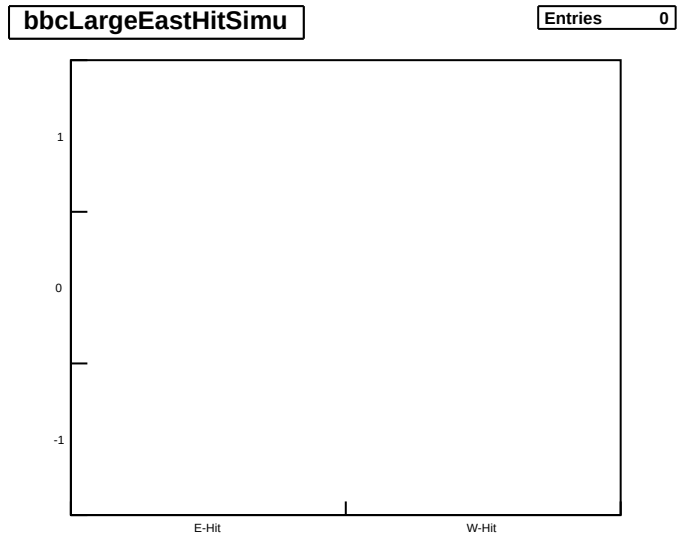

bbcSmallWestAdcSum
Entries 13205

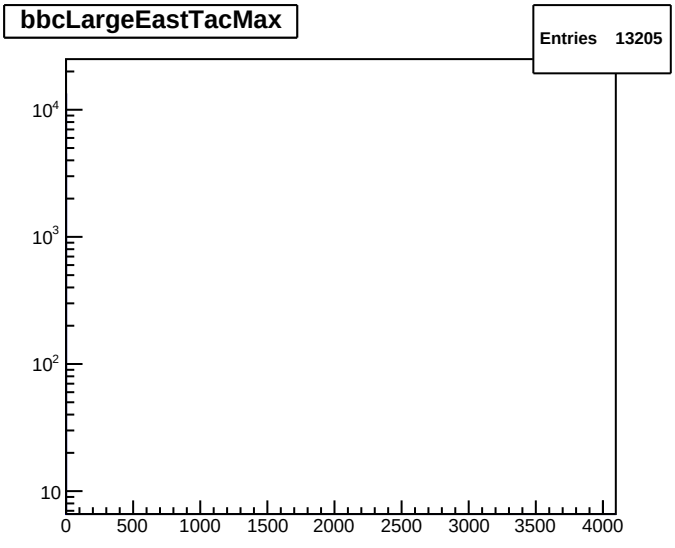

bbcSmallWestAdcSumVsSimu
Entries 0
Data
Simu

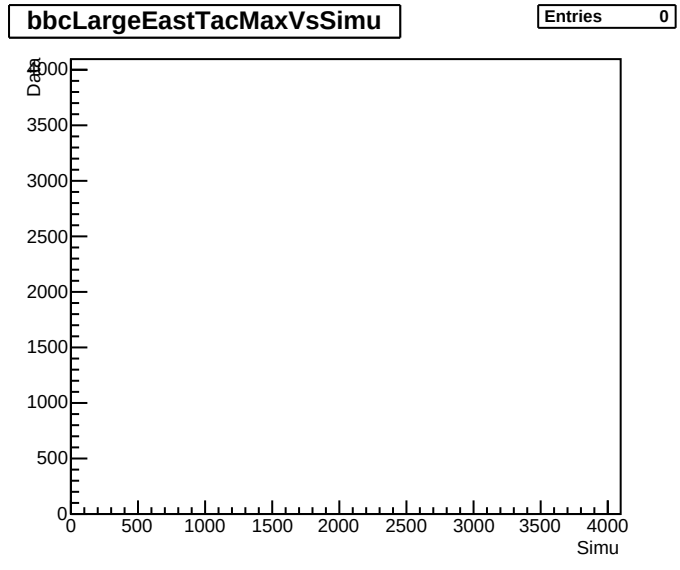

bbcSmallWestTacMax
Entries 13205

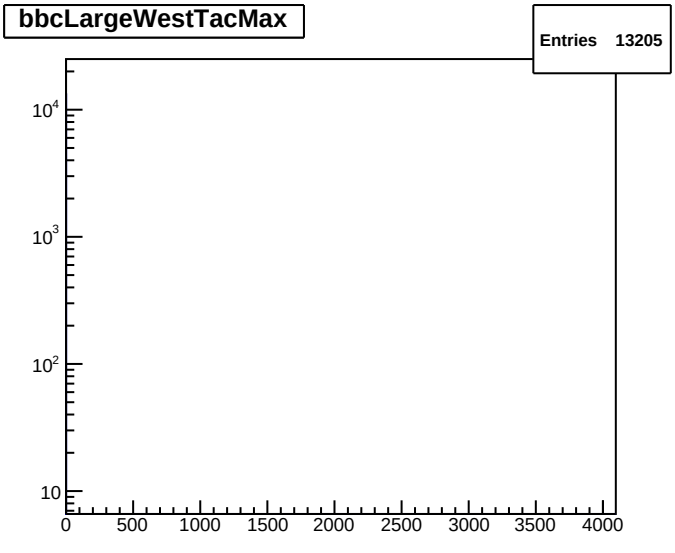

bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu

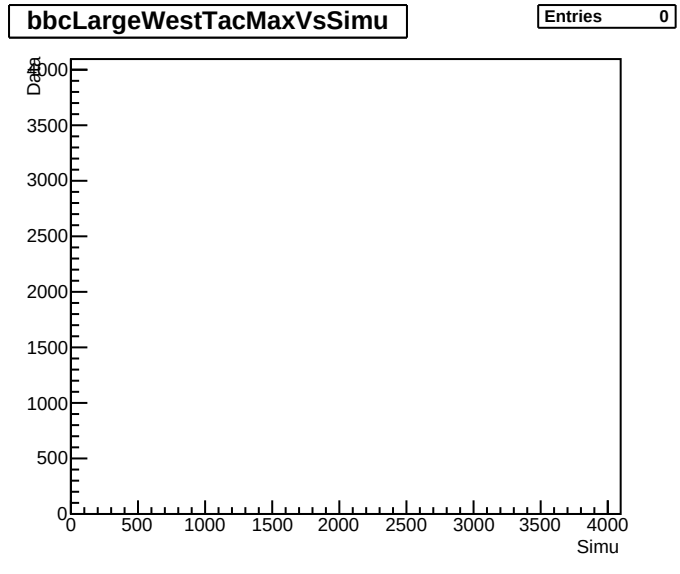

bbcLargeHit
Entries 26410
13205
13205
E-Hit
W-Hit

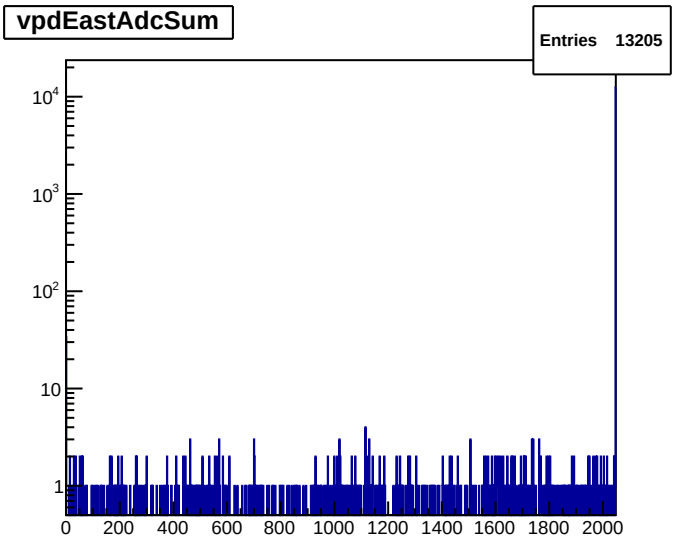

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

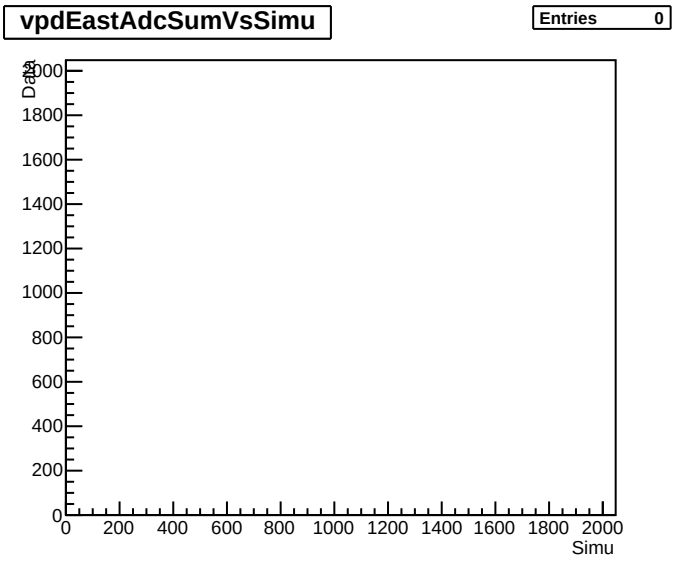

bbcLargeEastTacMax
Entries 13205

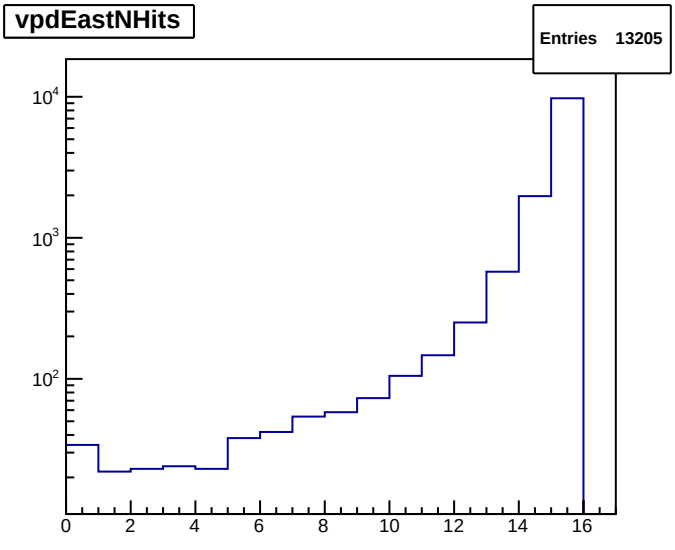

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

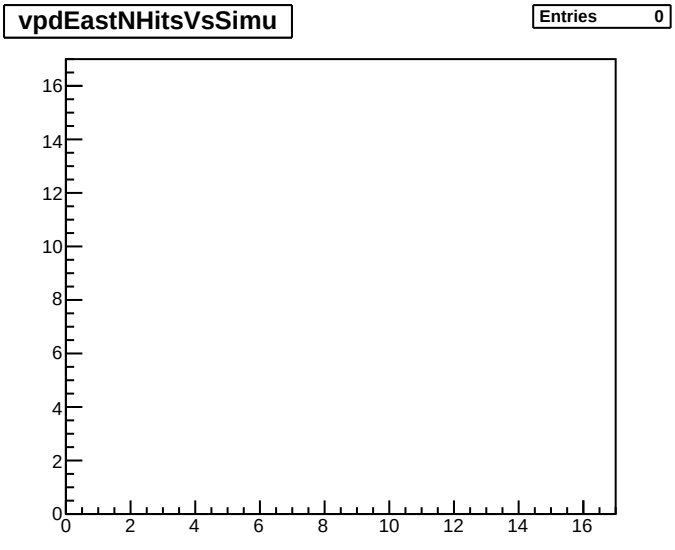

bbcLargeWestTacMax
Entries 13205

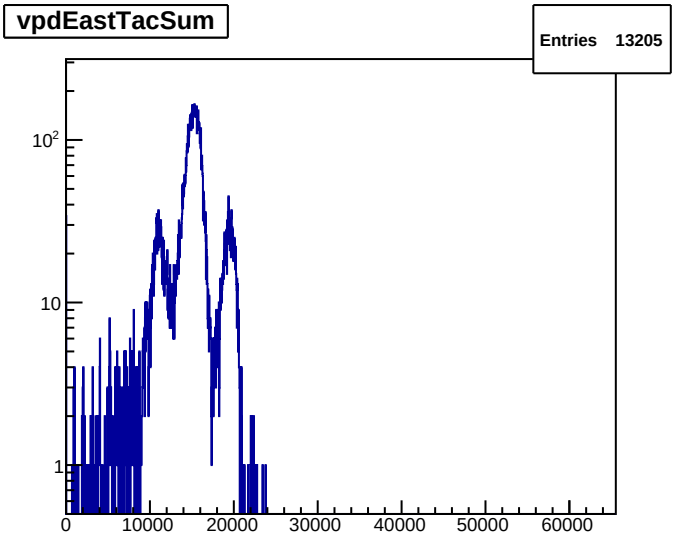

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

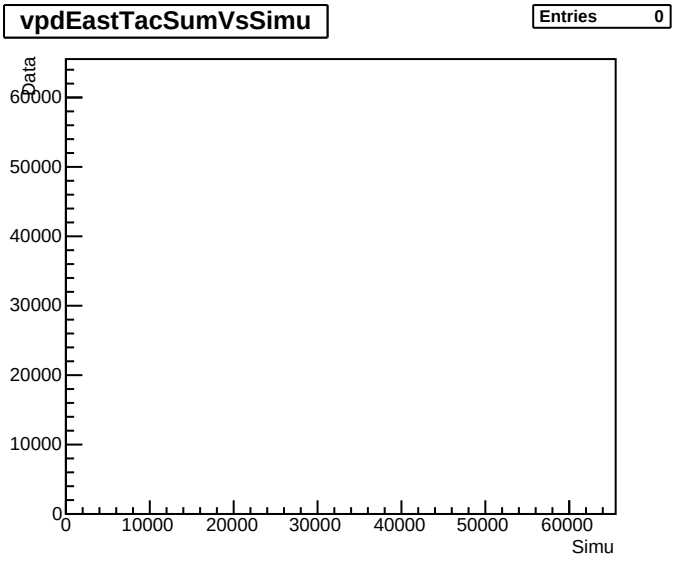

vpdEastAdcSum
Entries 13205

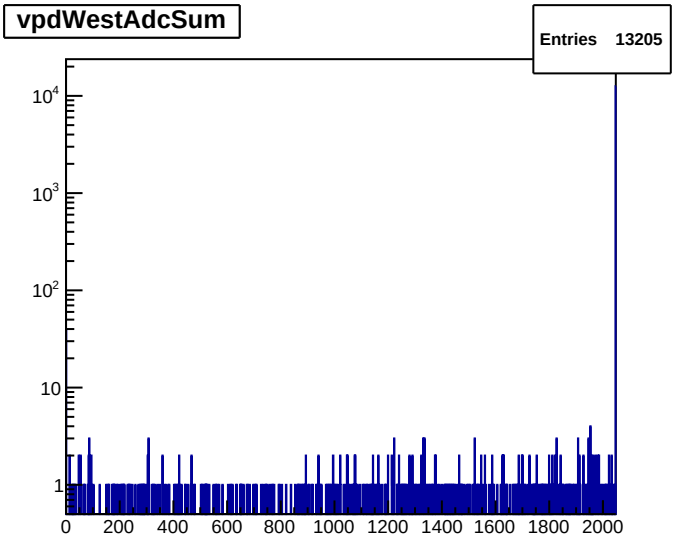

vpdEastAdcSumVsSimu
Entries 0
Data
Simu

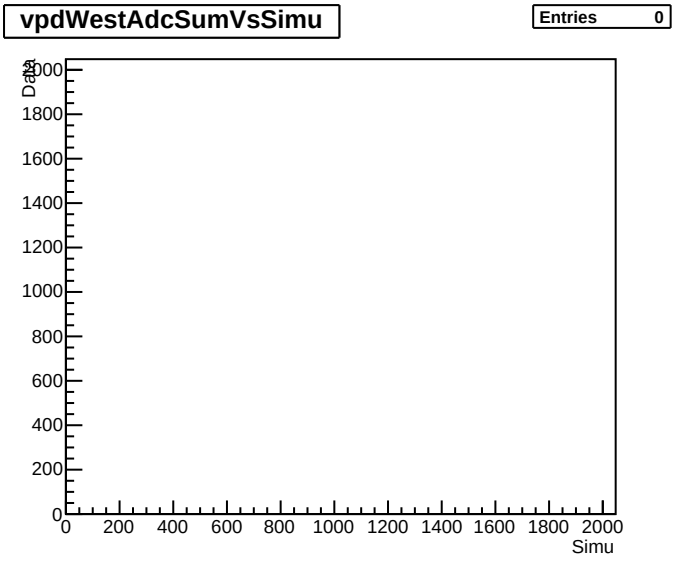

vpdEastNHits
Entries 13205

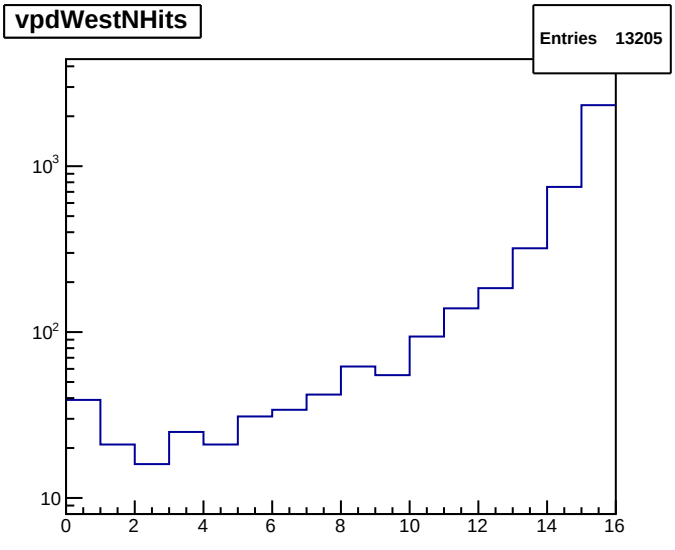

vpdEastNHitsVsSimu
Entries 0

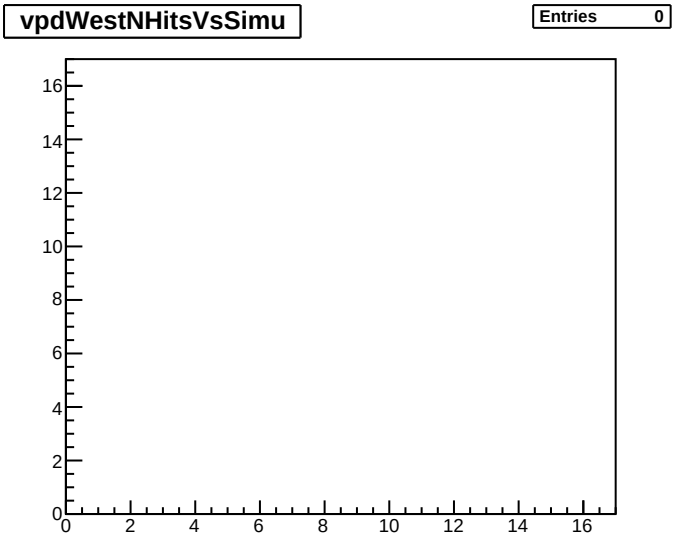

vpdEastTacSum
Entries 13205

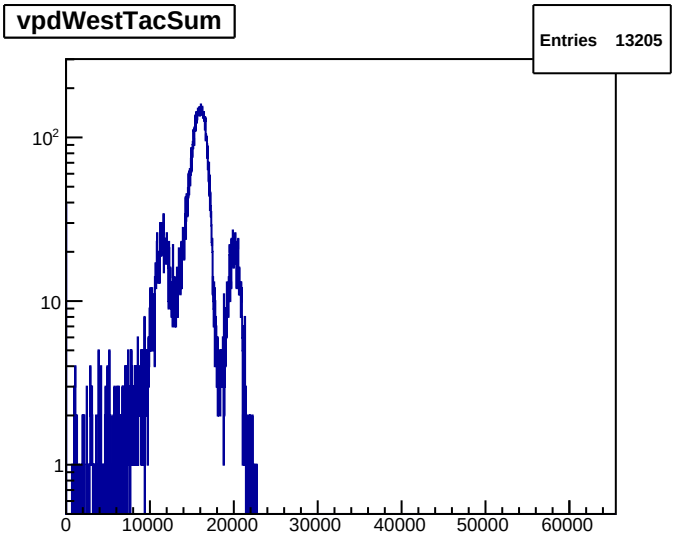

vpdEastTacSumVsSimu
Entries 0
Data
Simu

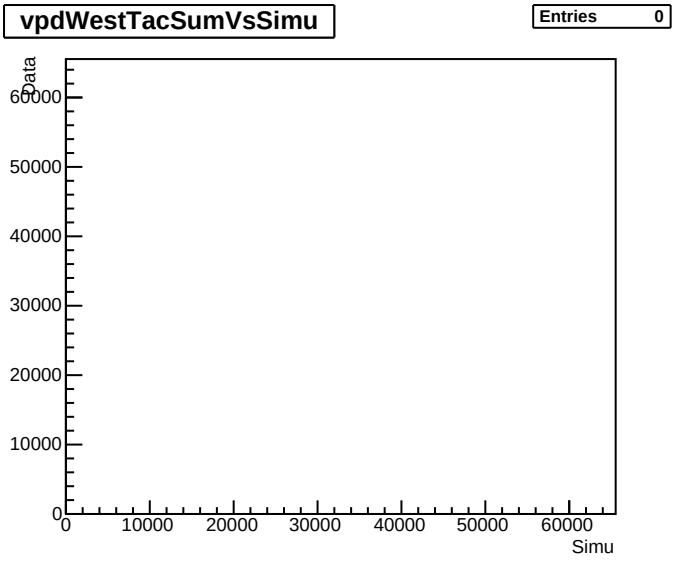

vpdWestAdcSum
Entries 13205

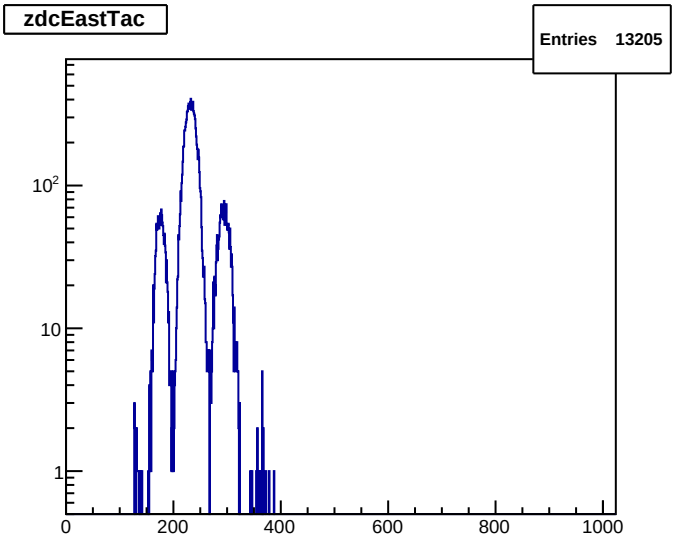

vpdWestAdcSumVsSimu
Entries 0
Data
Simu

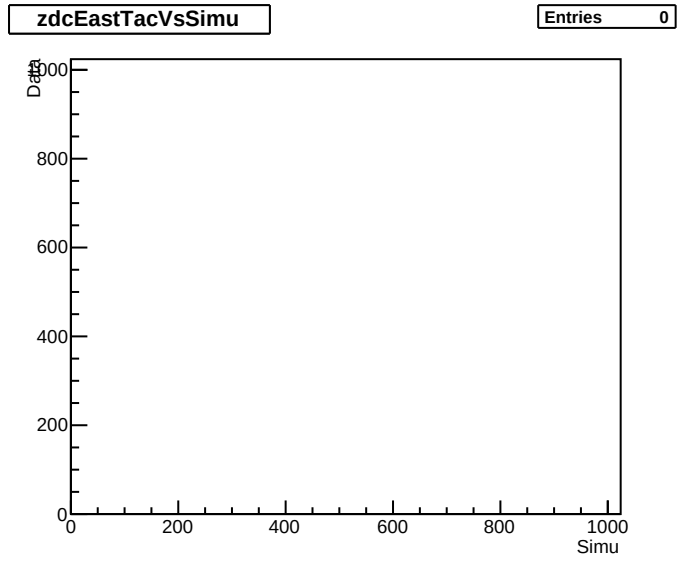

vpdWestNHits
Entries 13205

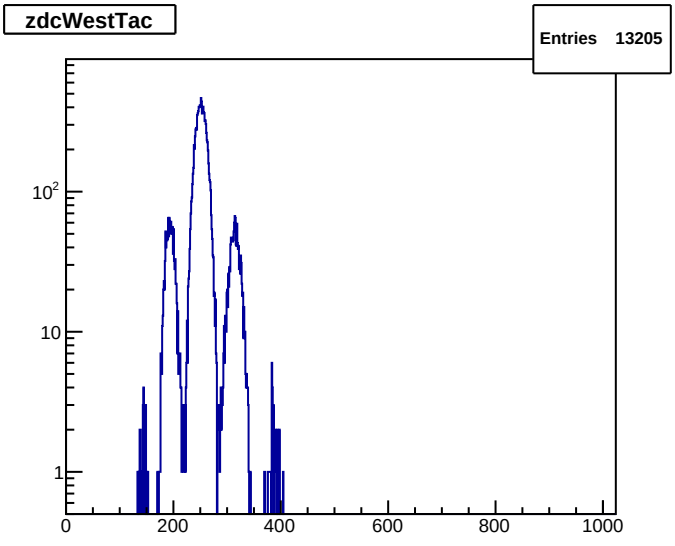

vpdWestNHitsVsSimu
Entries 0

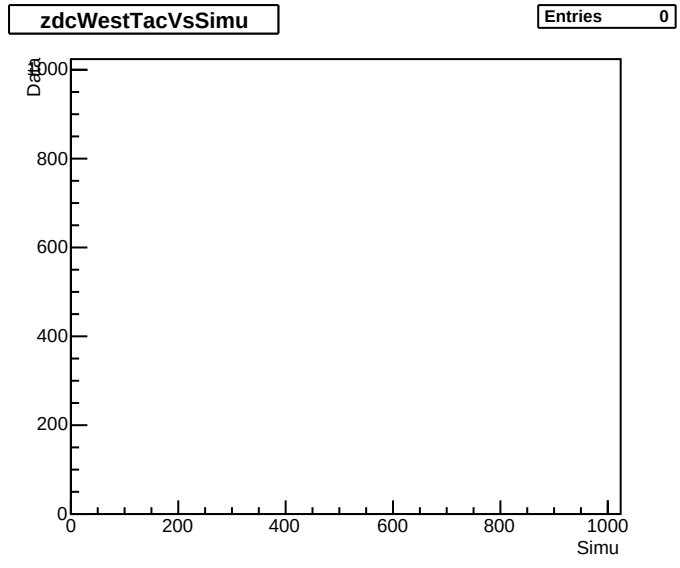

vpdWestTacSum
Entries 13205

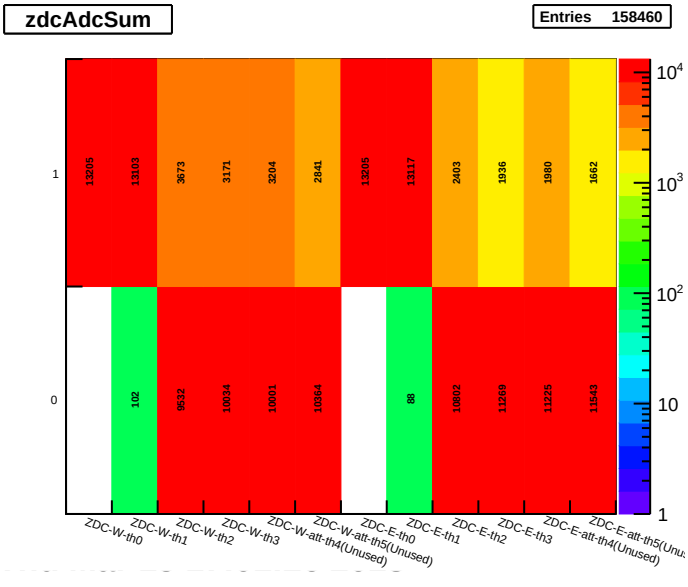

vpdWestTacSumVsSimu
Entries 0
Data
Simu

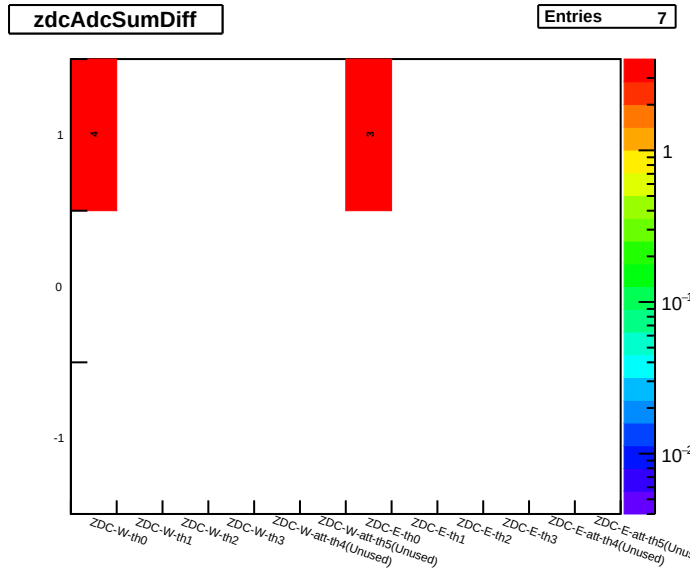

zdcEastTac
Entries 13205
10^2
10
1
0
200
400
600
800
1000

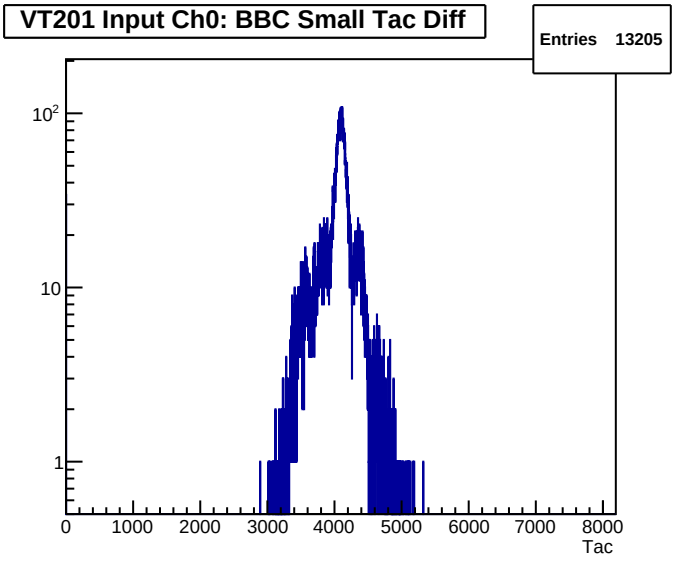

zdcEastTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

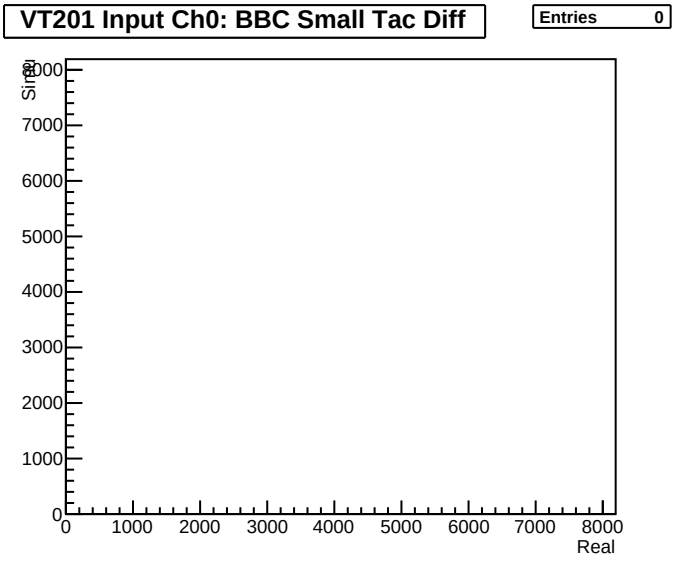

zdcWestTac
Entries 13205
10^2
10
1
0
200
400
600
800
1000

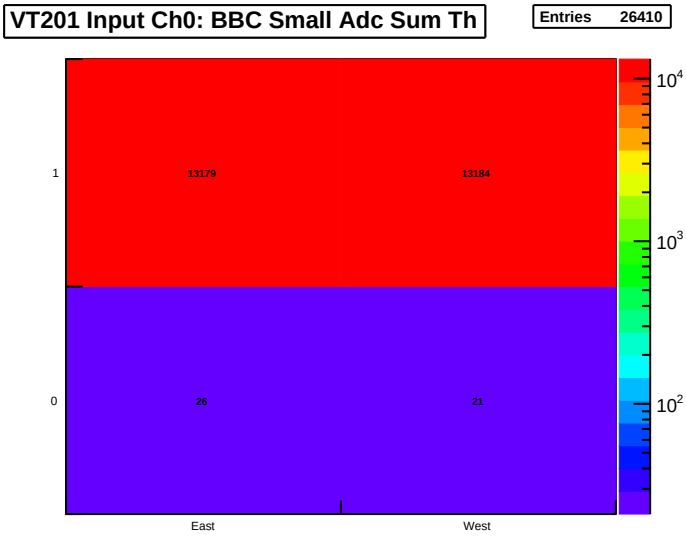

zdcWestTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

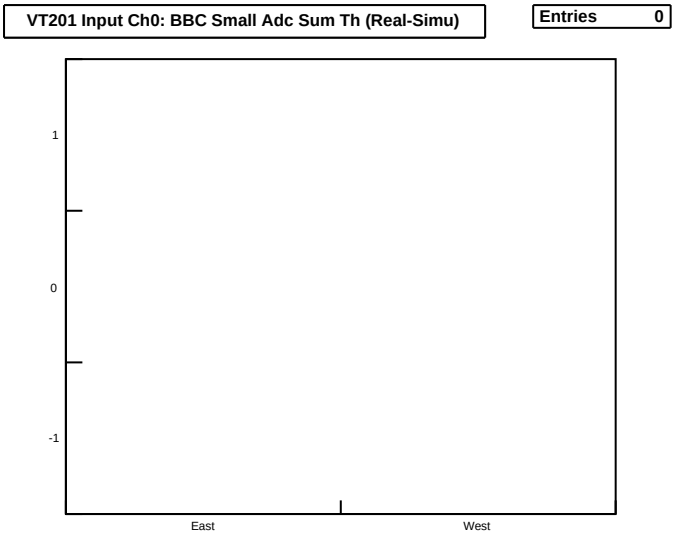

zdcAdcSum
Entries 158460
1
0
13205
13103
3673
3171
3204
2841
13205
13117
2403
1936
1980
1662
102
9532
10034
10001
10364
88
10802
11269
11225
11543
10^4
10^3
10^2
10
1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

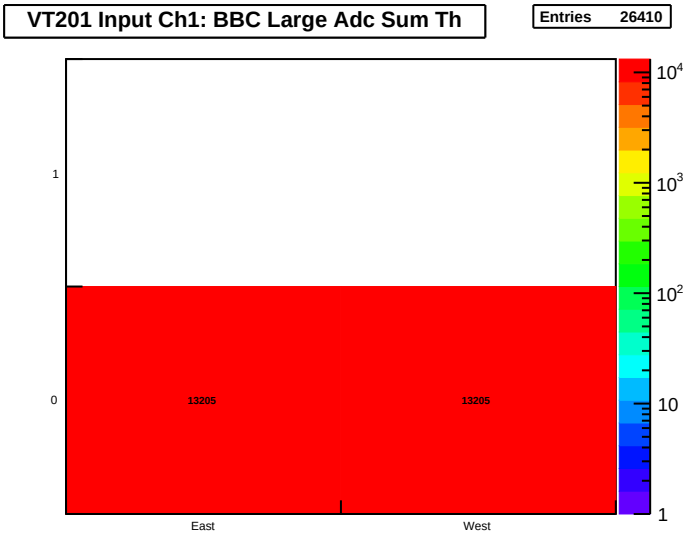

zdcAdcSumDiff
Entries 7
1
0
-1
4
3
1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

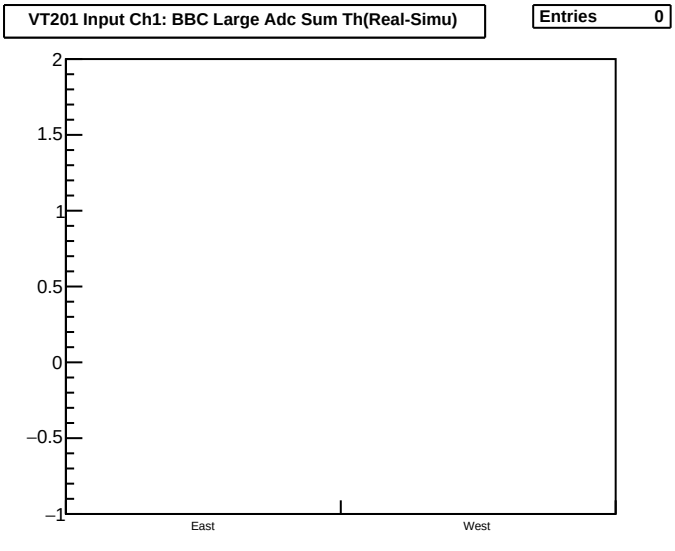

VT201 Input Ch0: BBC Small Tac Diff
Entries 13205
Tac

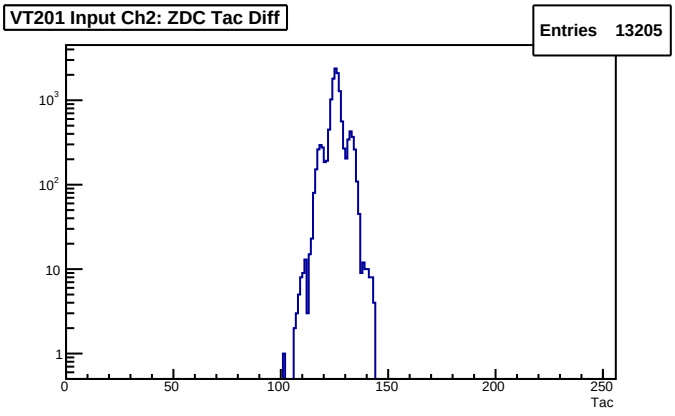

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

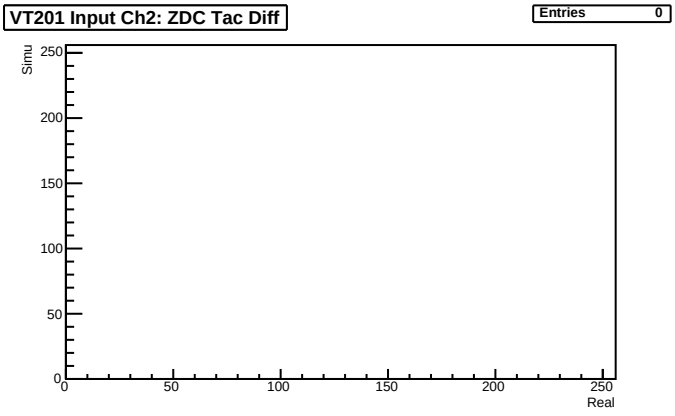

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 26410
13179
13184
26
21
East
West

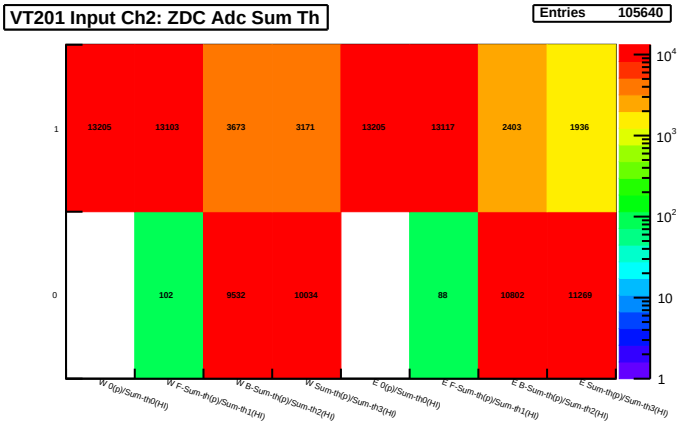

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

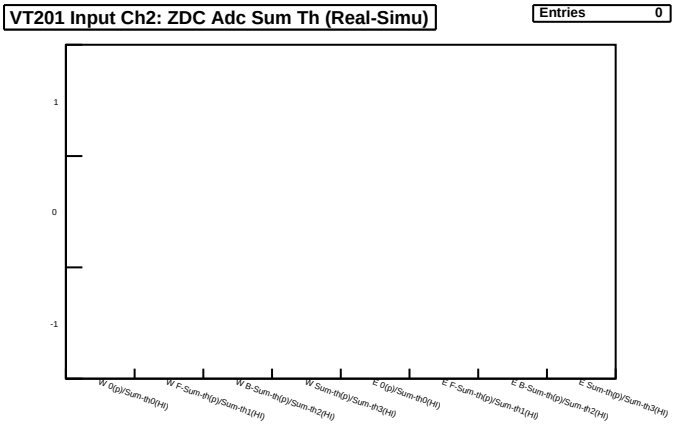

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 26410
13205
13205
East
West

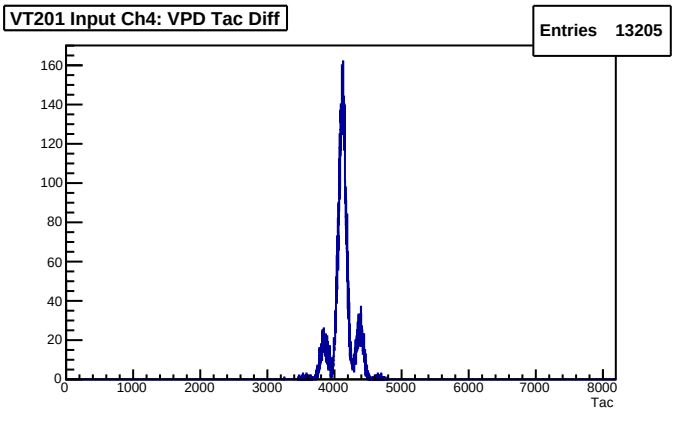

VT201 Input Ch1: BBC Large Adc Sum Th(Real-Simu)
Entries 0
East
West

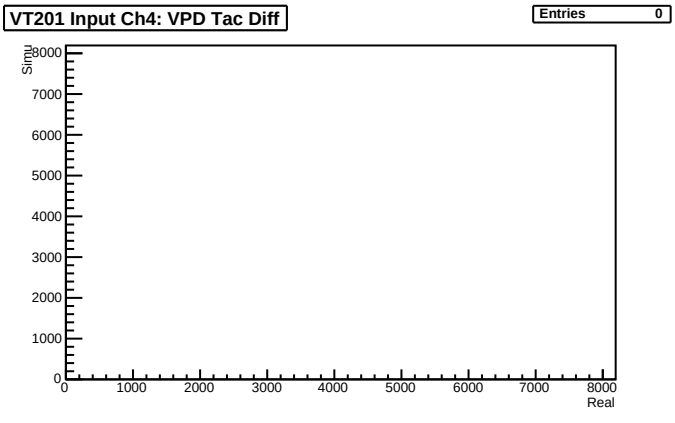

VT201 Input Ch2: ZDC Tac Diff
Entries 13205
Tac

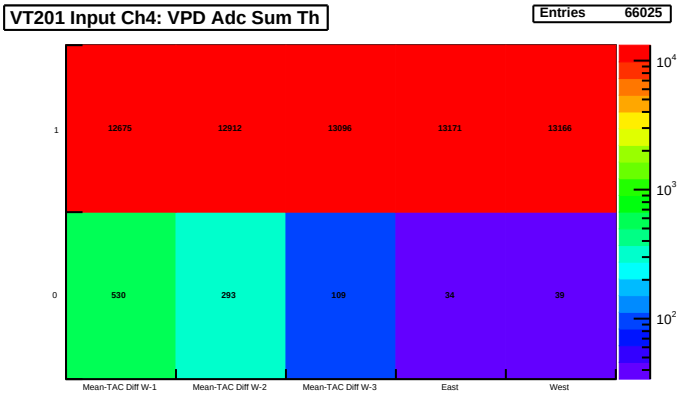

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

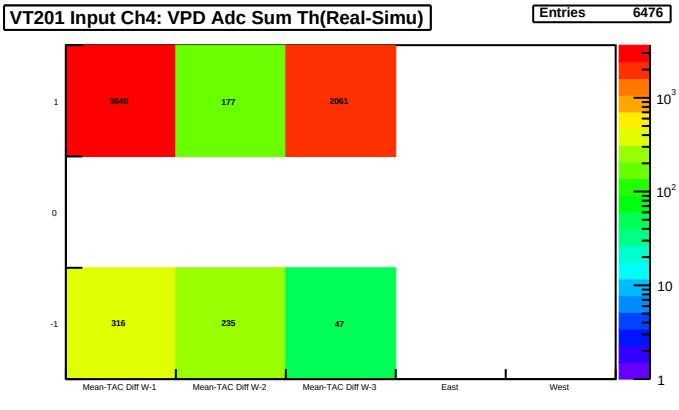

VT201 Input Ch2: ZDC Adc Sum Th
Entries 105640
13205 13103 3673 3171 13205 13117 2403 1936
102 9532 10034 88 10802 11269
W 0(p)/Sum-th0(Hi)
W F-Sum-th(p)/Sum-th1(Hi)
W B-Sum-th(p)/Sum-th2(Hi)
W Sum-th(p)/Sum-th3(Hi)
E 0(p)/Sum-th0(Hi)
E F-Sum-th(p)/Sum-th1(Hi)
E B-Sum-th(p)/Sum-th2(Hi)
E Sum-th(p)/Sum-th3(Hi)

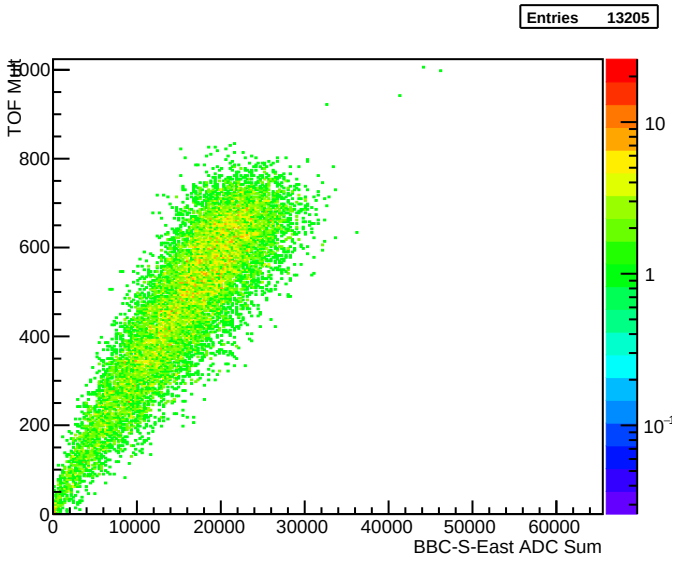

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(Hi)
W F-Sum-th(p)/Sum-th1(Hi)
W B-Sum-th(p)/Sum-th2(Hi)
W Sum-th(p)/Sum-th3(Hi)
E 0(p)/Sum-th0(Hi)
E F-Sum-th(p)/Sum-th1(Hi)
E B-Sum-th(p)/Sum-th2(Hi)
E Sum-th(p)/Sum-th3(Hi)

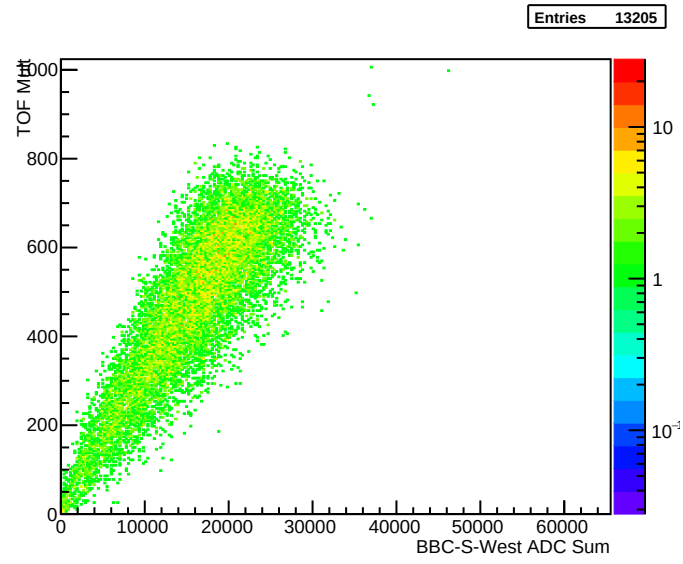

VT201 Input Ch4: VPD Tac Diff
Entries 13205
Tac

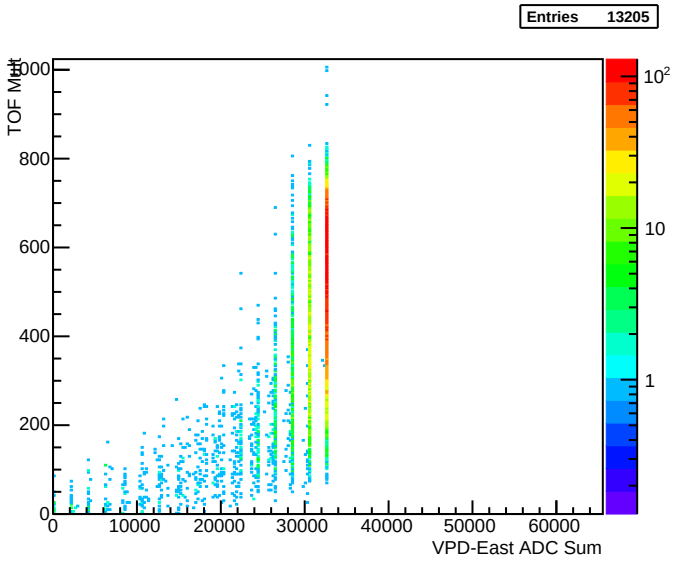

VT201 Input Ch4: VPD Tac Diff
Entries 0
Simu
Real

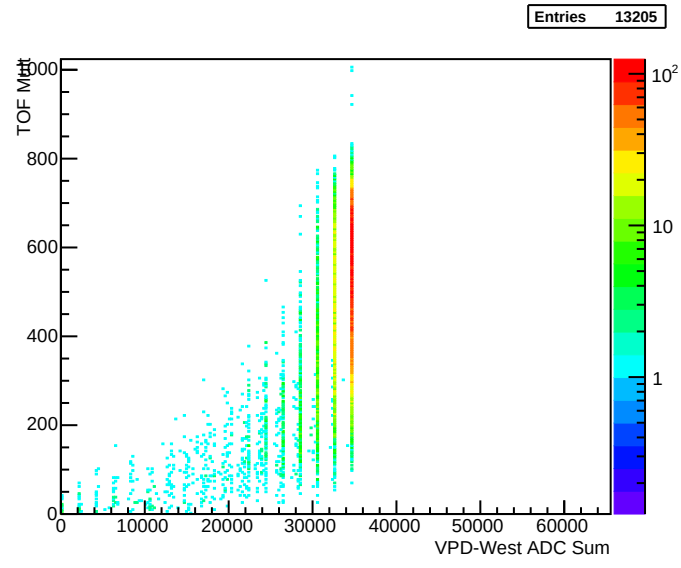

VT201 Input Ch4: VPD Adc Sum Th
Entries 66025
12675 12912 13096 13171 13166
530 293 109 34 39
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

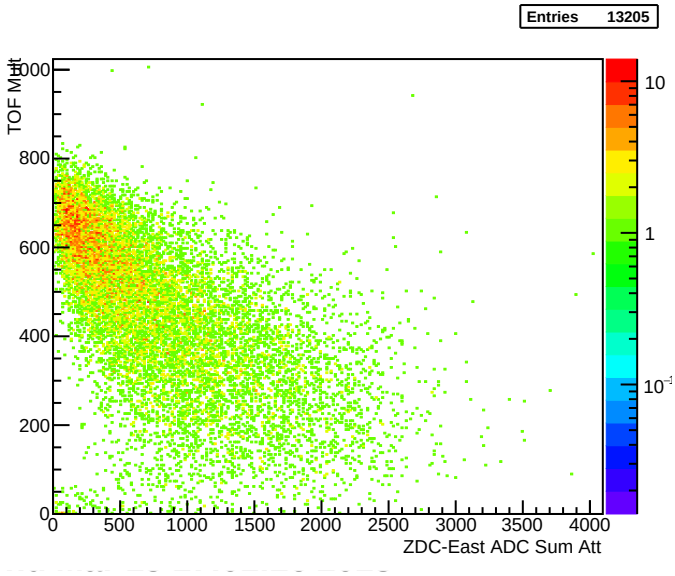

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 6476
3640 177 2061
316 235 47
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

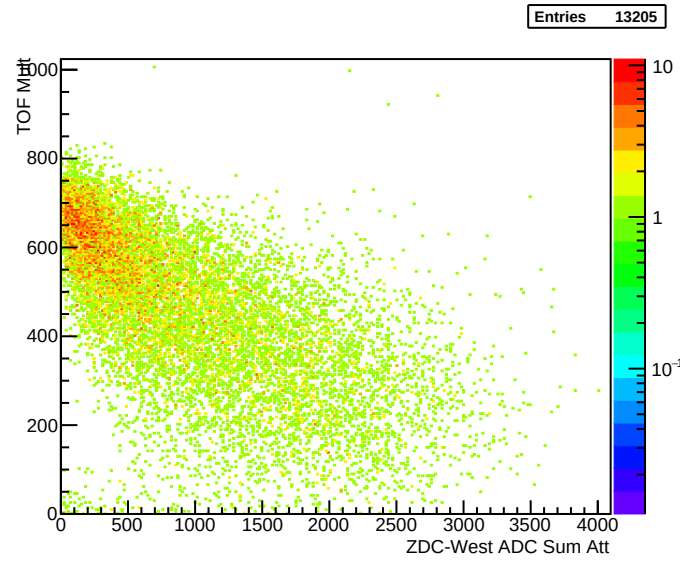

Entries 13205
TOF Mult
BBC-S-East ADC Sum

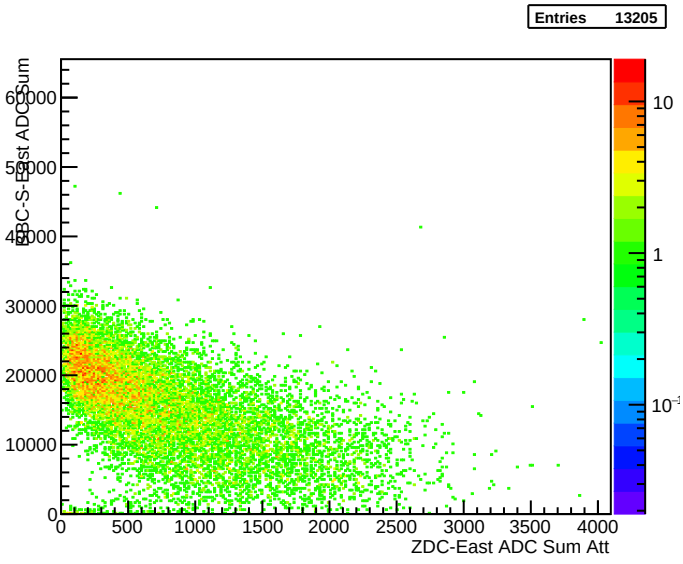

Entries 13205
TOF Mult
BBC-S-West ADC Sum

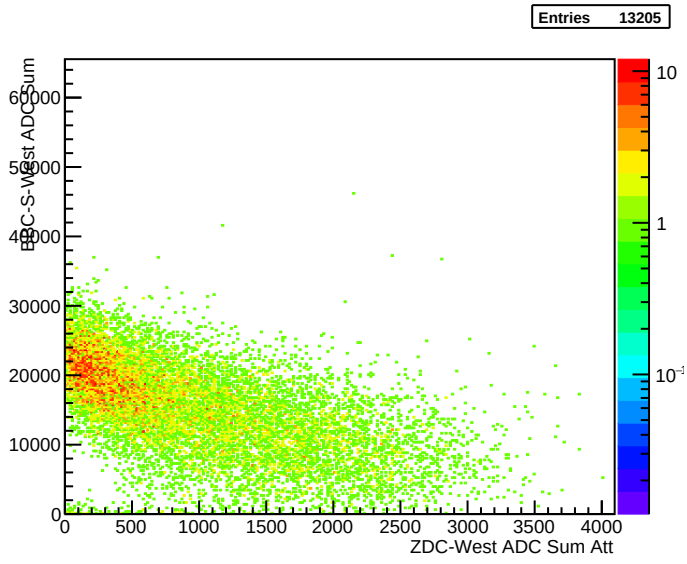

Entries 13205
TOF Mult
VPD-East ADC Sum

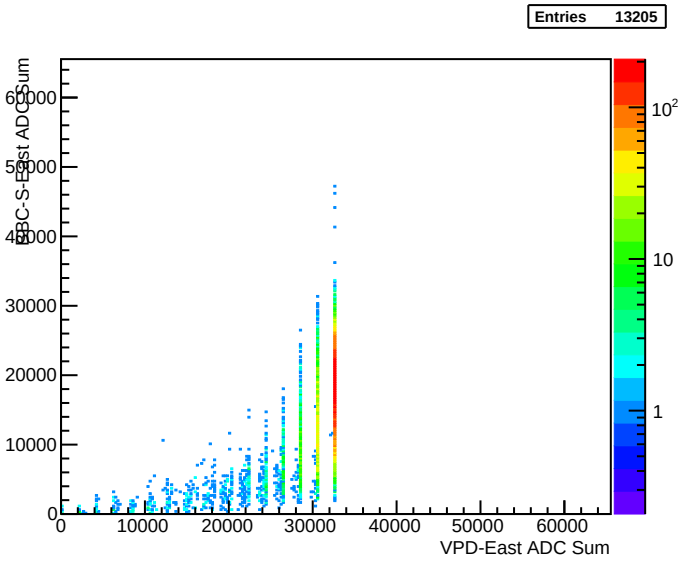

Entries 13205
TOF Mult
VPD-West ADC Sum

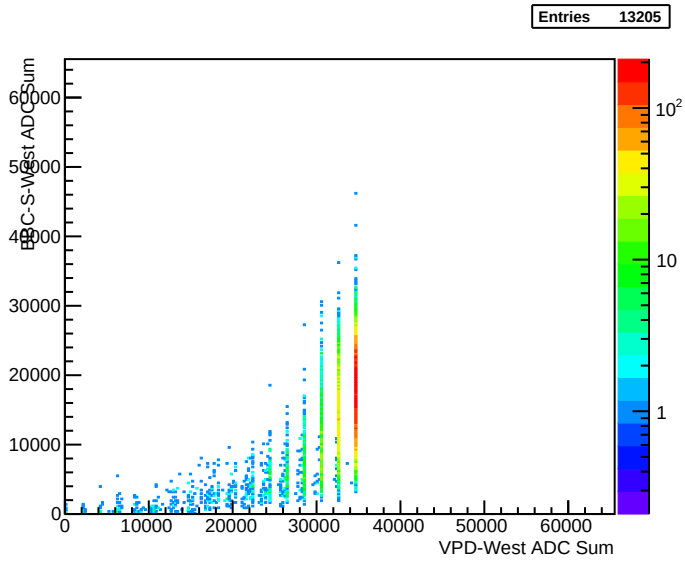

Entries 13205
TOF Mult
ZDC-East ADC Sum Att

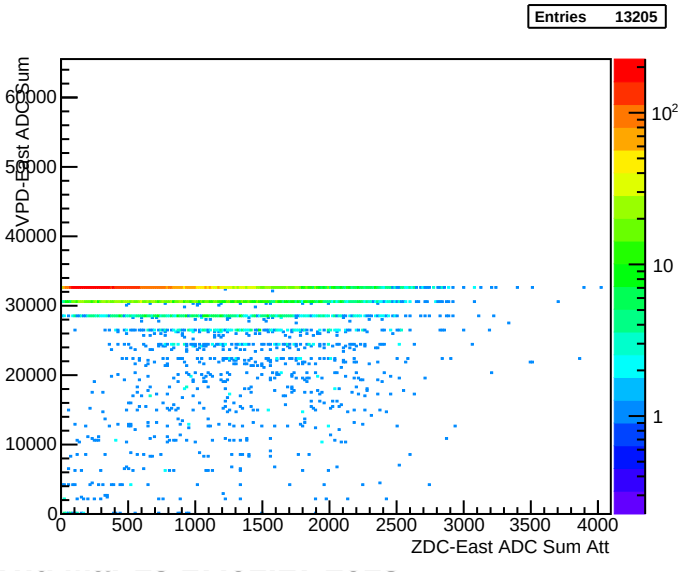

Entries 13205
TOF Mult
ZDC-West ADC Sum Att

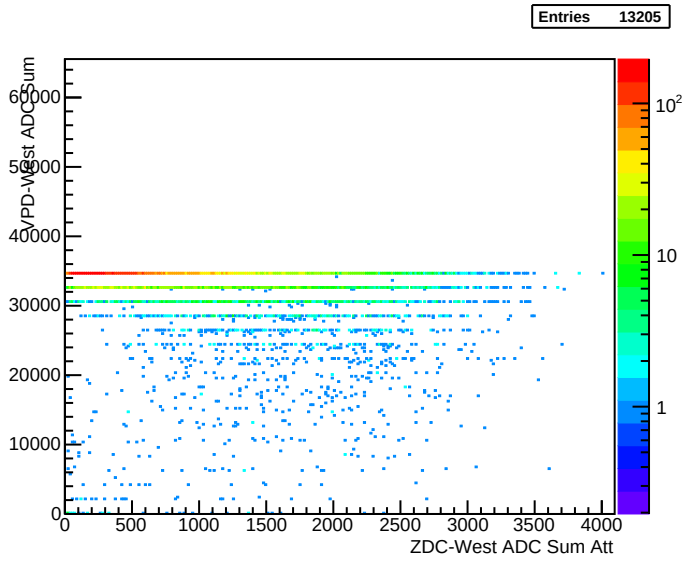

Entries 13205
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

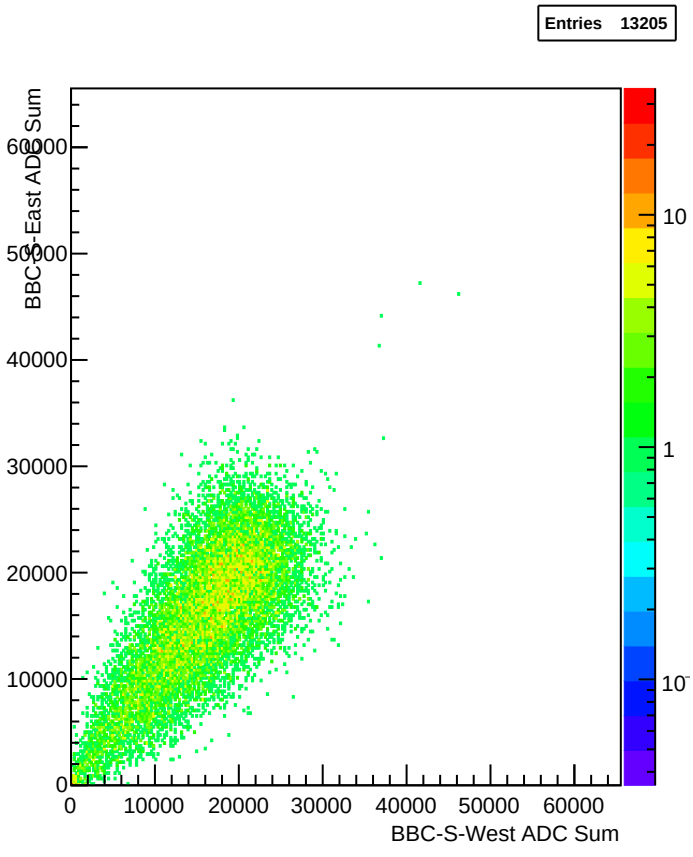

Entries 13205
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

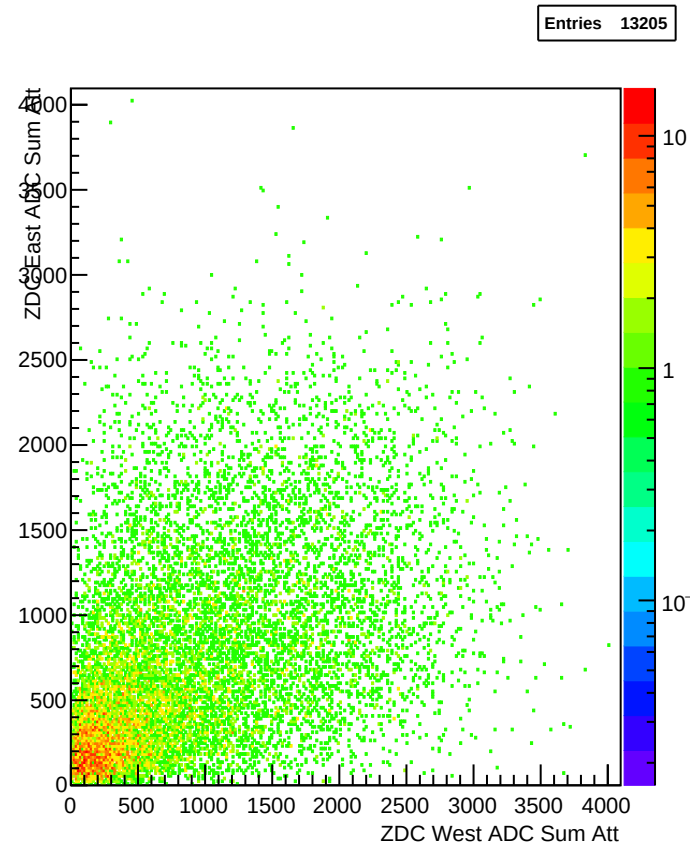

Entries 13205
BBC-S-East ADC Sum
VPD-East ADC Sum

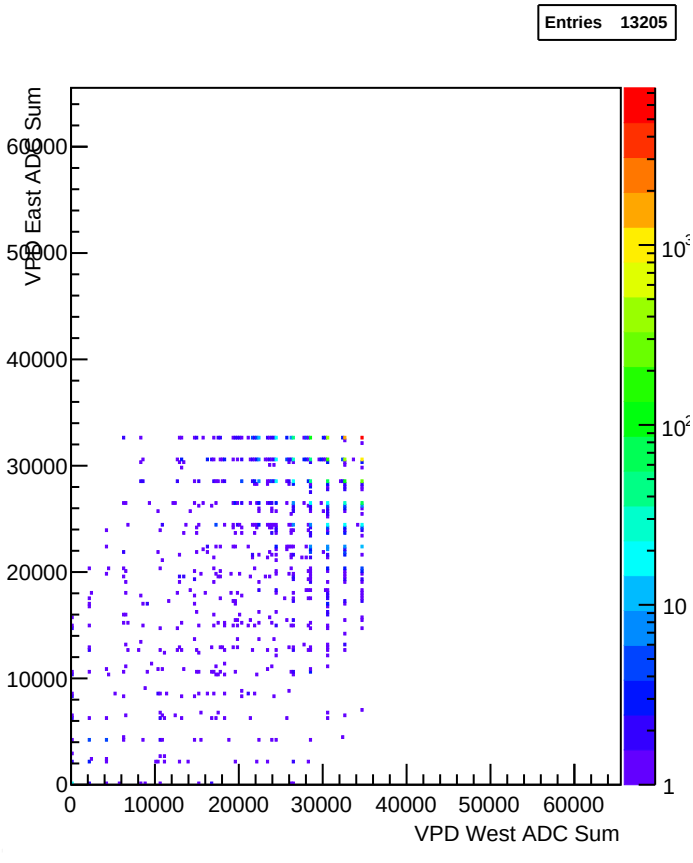

Entries 13205
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 13205
VPD-East ADC Sum
ZDC-East ADC Sum Att


Entries 13205
VPD-West ADC Sum
ZDC-West ADC Sum Att


Entries 13205
BBC-S-East ADC Sum
BBC-S-West ADC Sum


Entries 13205
ZDC East ADC Sum Att
ZDC West ADC Sum Att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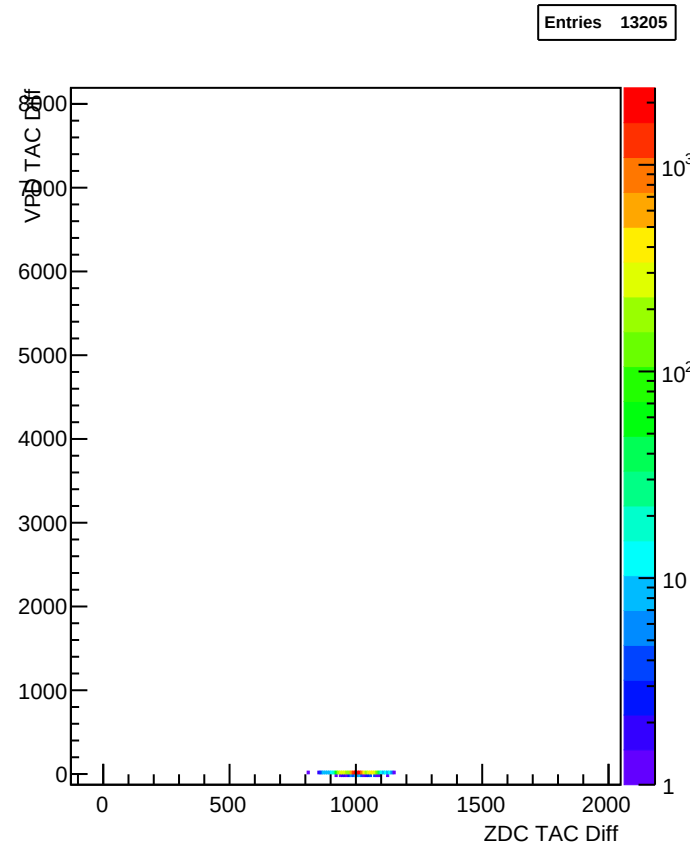
VPD East ADC Sum
VPD West ADC Sum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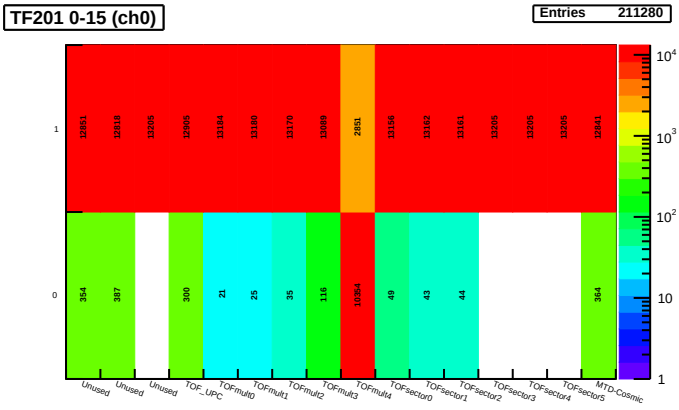
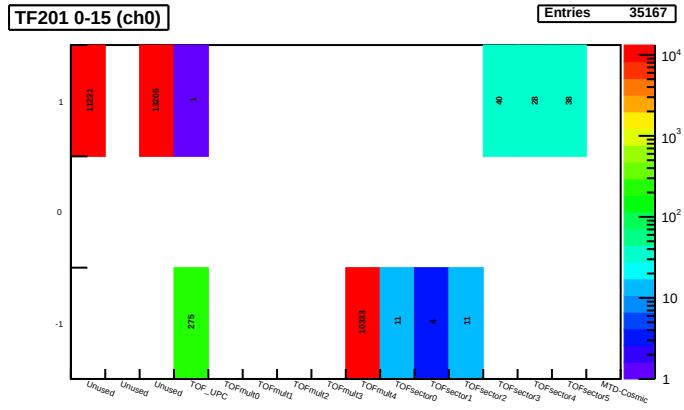
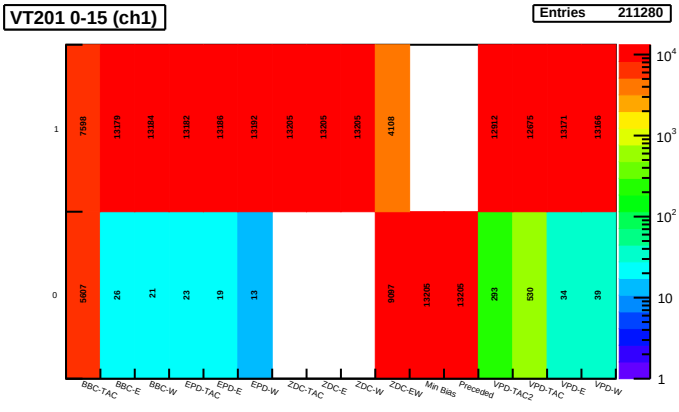
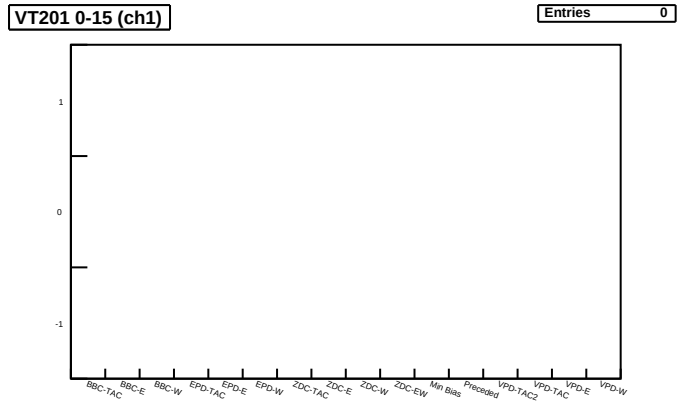
ZDC TAC Diff


TF201 0-15 (ch0)
Entries 211280
12851 12818 12205 12205 13184 13180 13170 13089 2851 13156 13162 13161 13205 13205 13205 12841
354 387 300 21 25 35 116 10354 49 43 44 364
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 35167
11221 13205 1 40 28 38
275 10333 11 4 11
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 211280
7598 13179 13184 13182 13186 13192 13205 13205 13205 4108 12912 12975 13171 13186
5607 26 21 23 19 13 9697 13205 13205 293 503 34 39
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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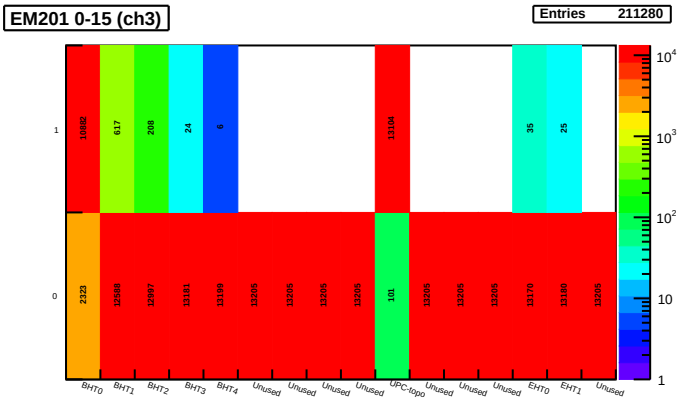
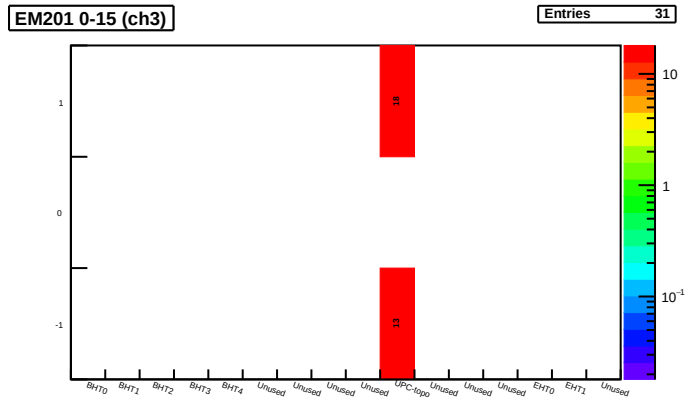
Entries 0
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W


EM201 0-15 (ch3)
Entries 211280
10582 617 208 24 6 13104 35 25
2323 12588 12997 13181 13199 13205 13205 13205 13205 101 13205 13205 13205 13170 13180 13205
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


EM201 0-15 (ch3)
Entries 31
18
13
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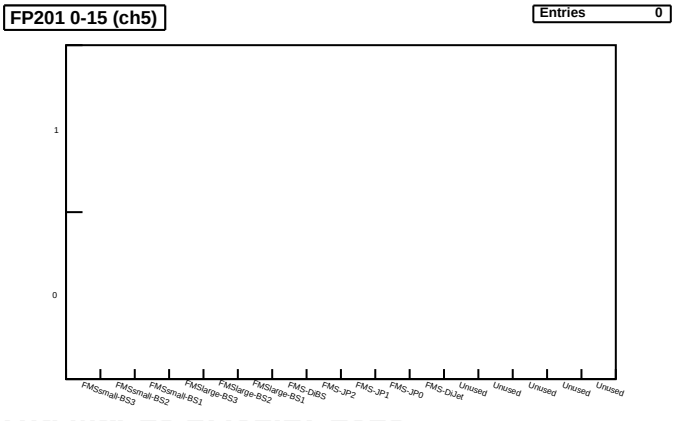
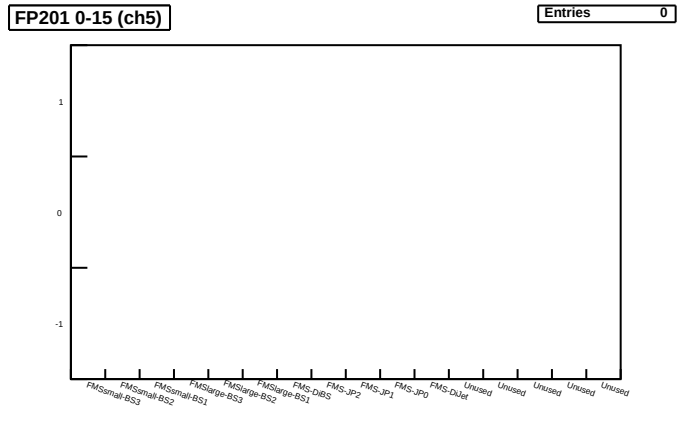

FP201 0-15 (ch5)
Entries 0
FMSsmall-BS3 FMSsmall-BS2 FMSsmall-BS1 FMSlarge-BS3 FMSlarge-BS2 FMSlarge-BS1 FMS-DiBS FMS-JP2 FMS-JP1 FMS-JP0 FMS-DiJet Unused Unused Unused Unused Unused


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