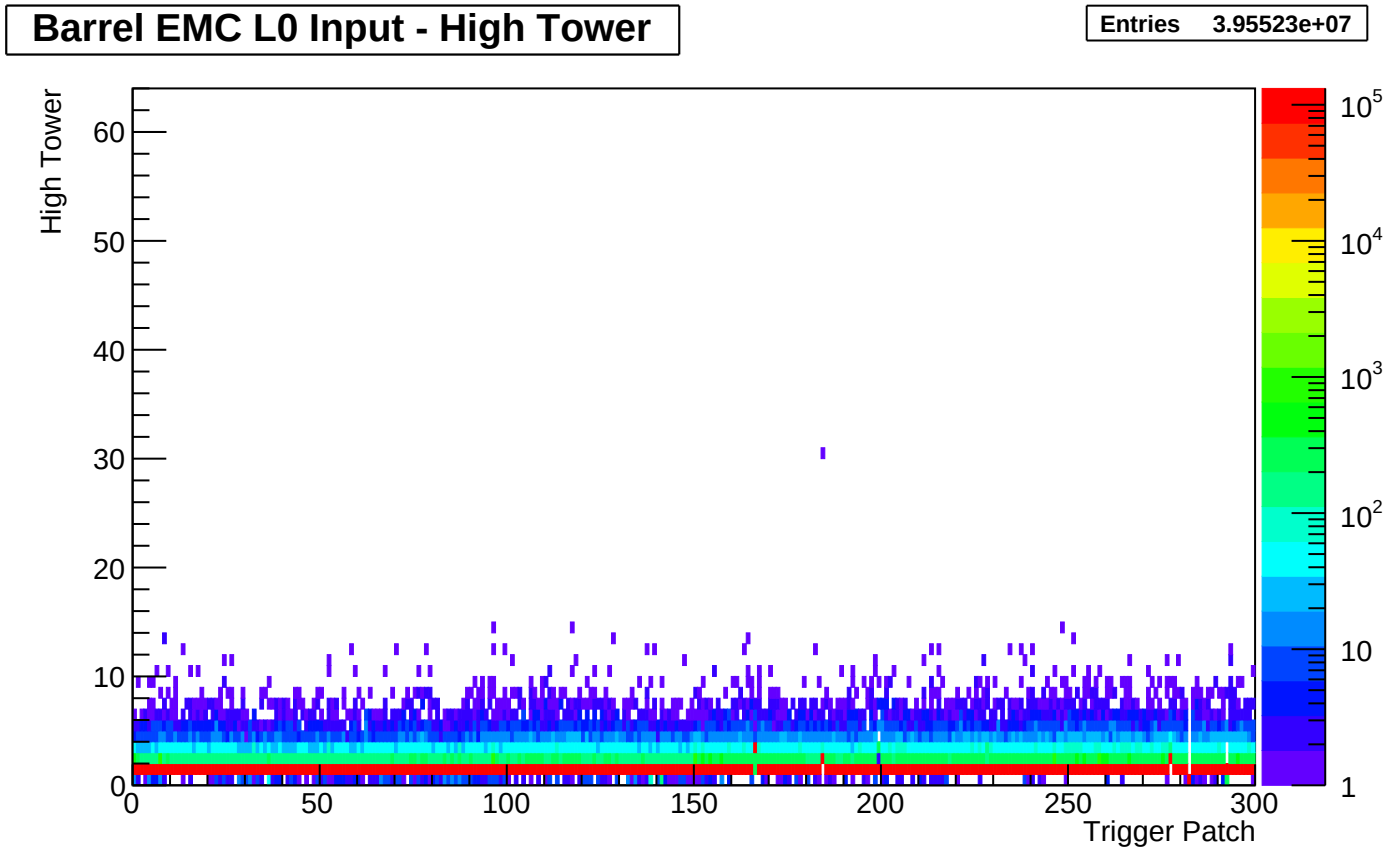
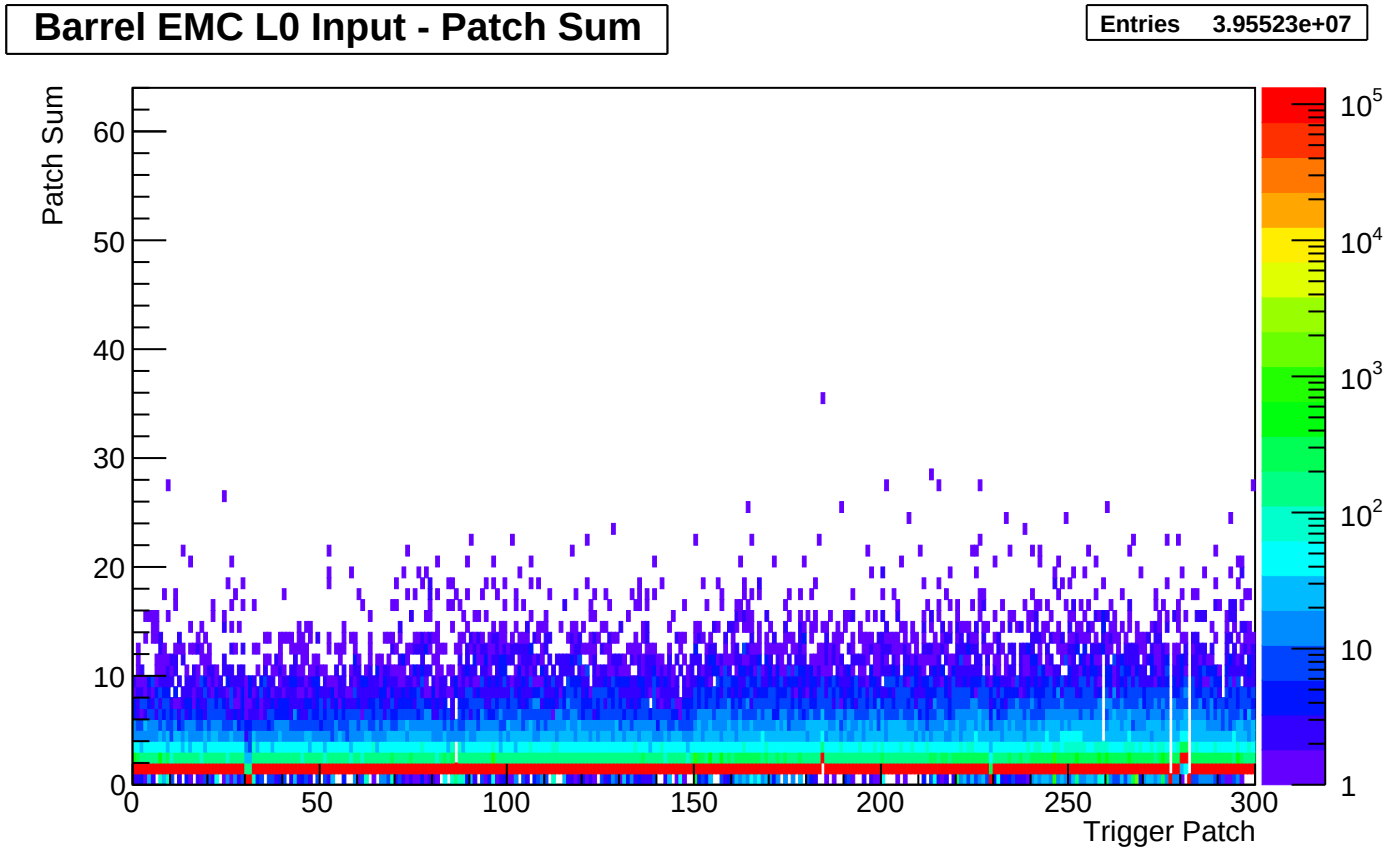
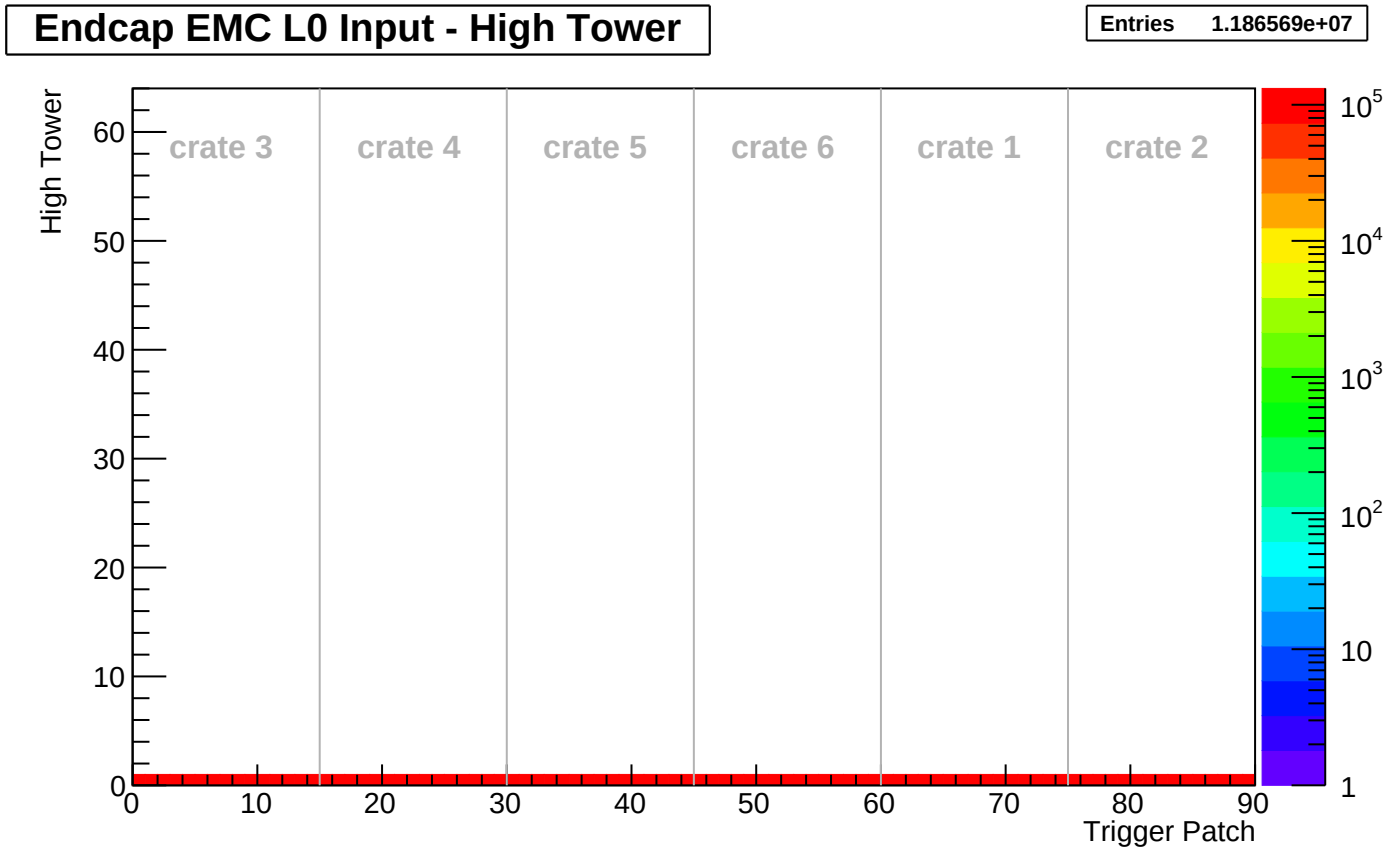
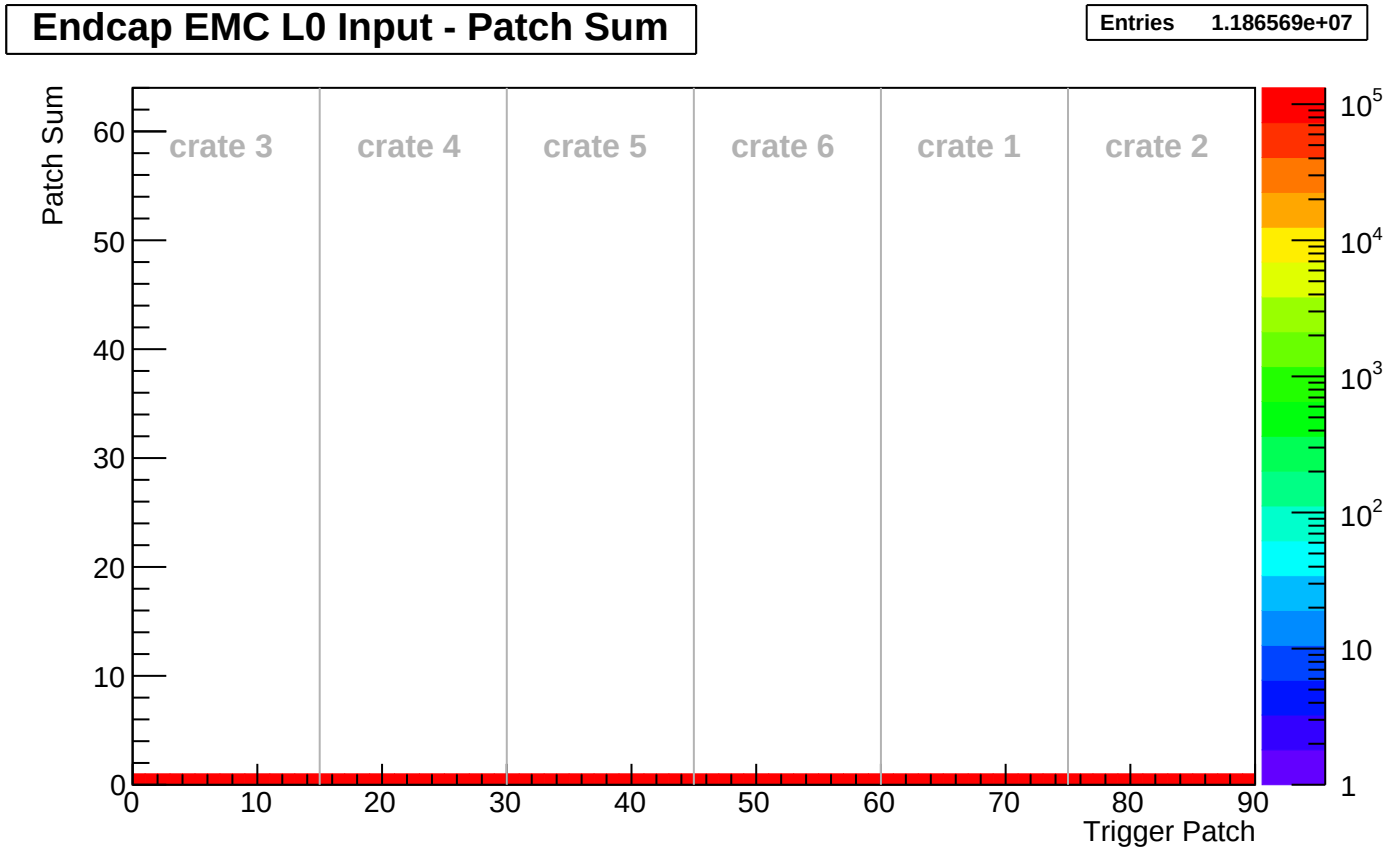
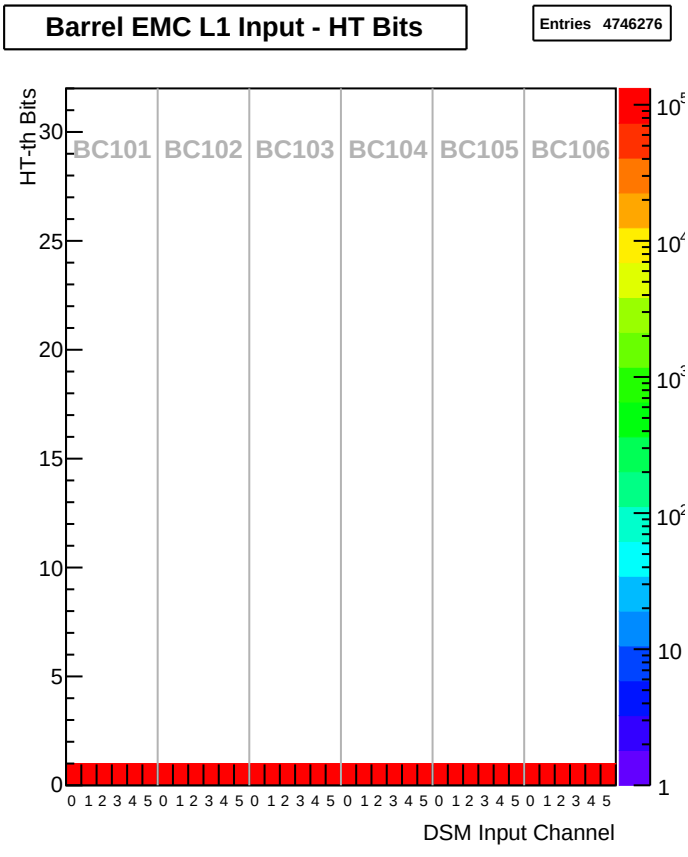
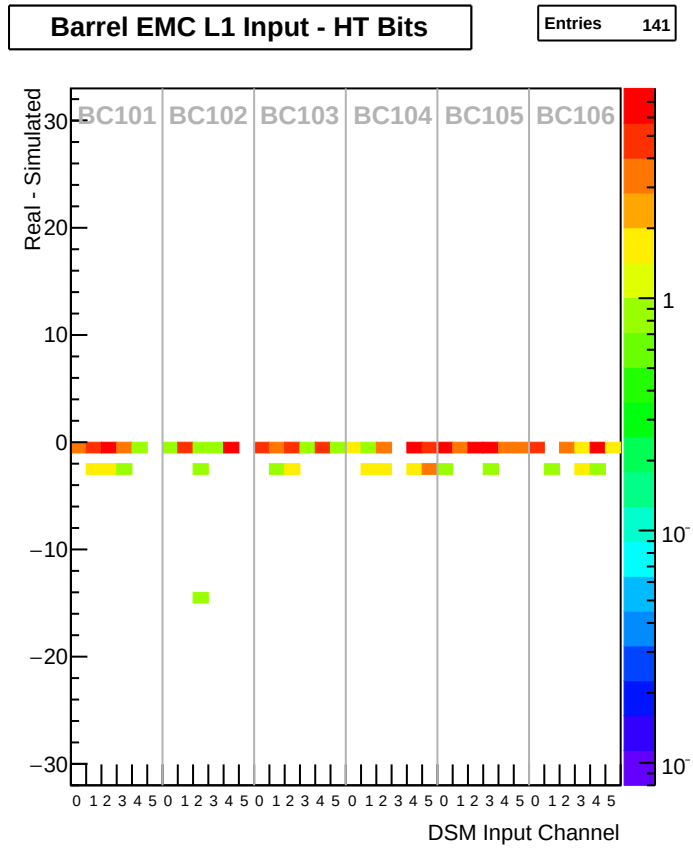

Barrel EMC L0 Input - High Tower
Entries 3.95523e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

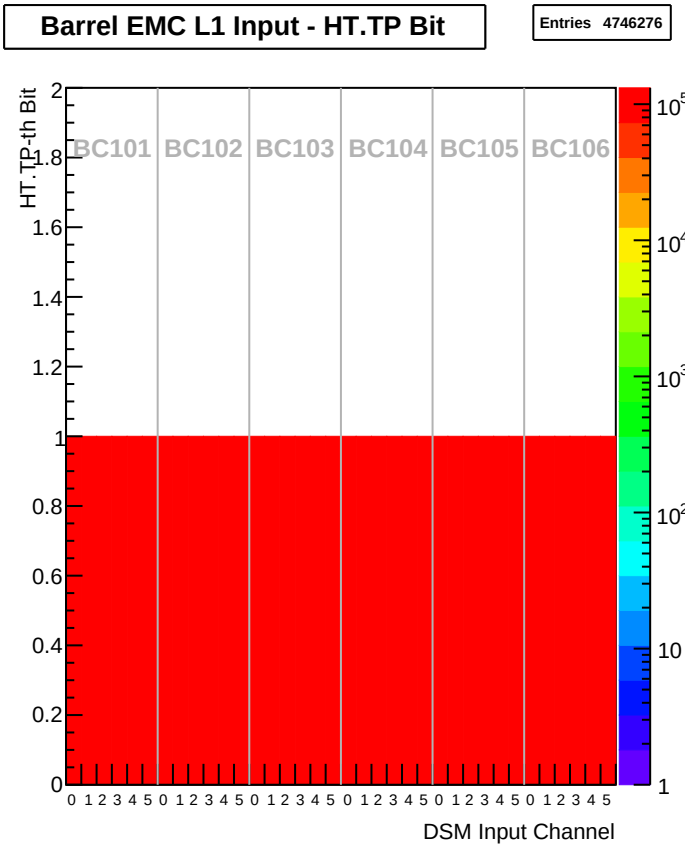

Barrel EMC L0 Input - Patch Sum
Entries 3.95523e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

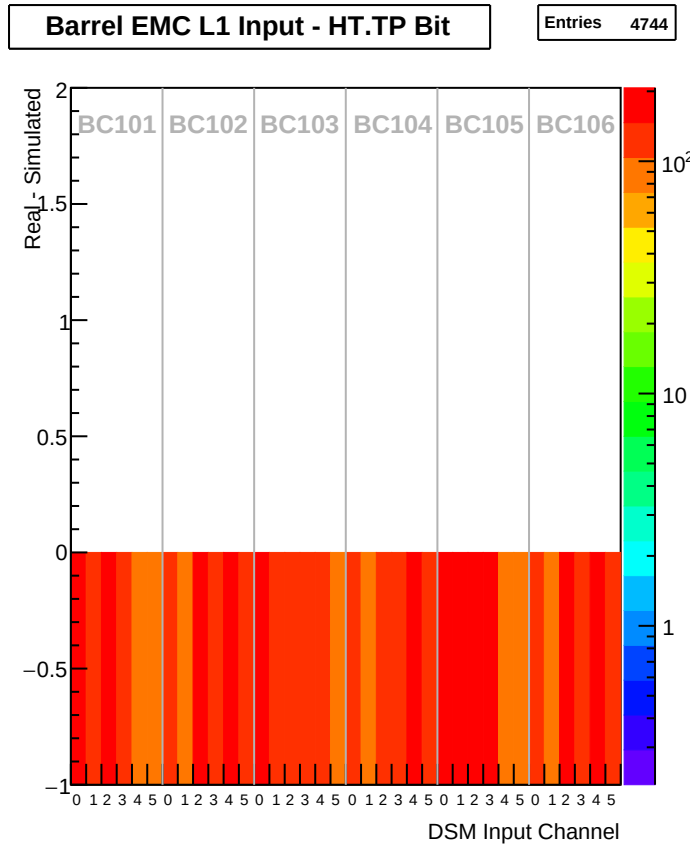

Endcap EMC L0 Input - High Tower
Entries 1.186569e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

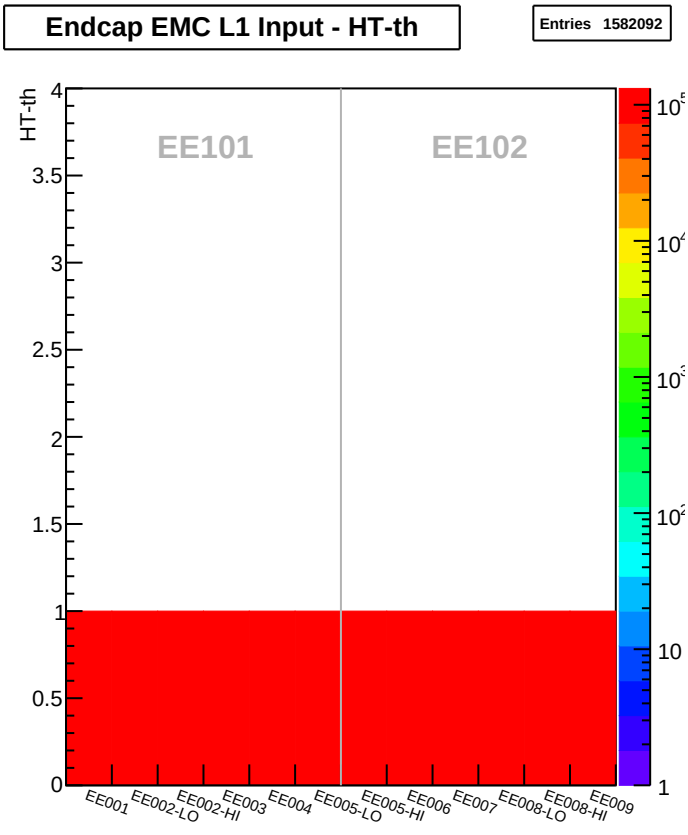

Endcap EMC L0 Input - Patch Sum
Entries 1.186569e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

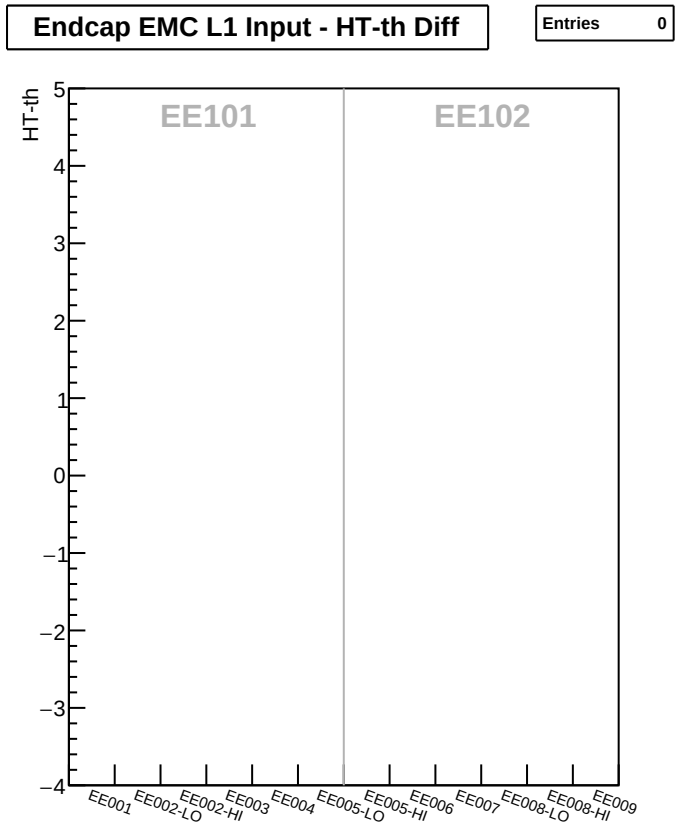

Barrel EMC L1 Input - HT Bits
Entries 4746276
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

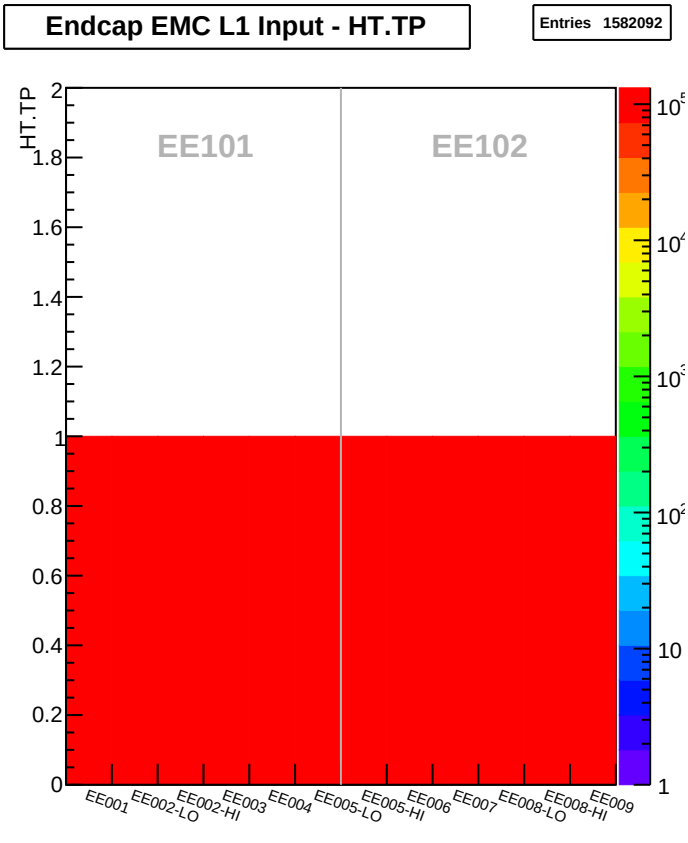

Barrel EMC L1 Input - HT Bits
Entries 141
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

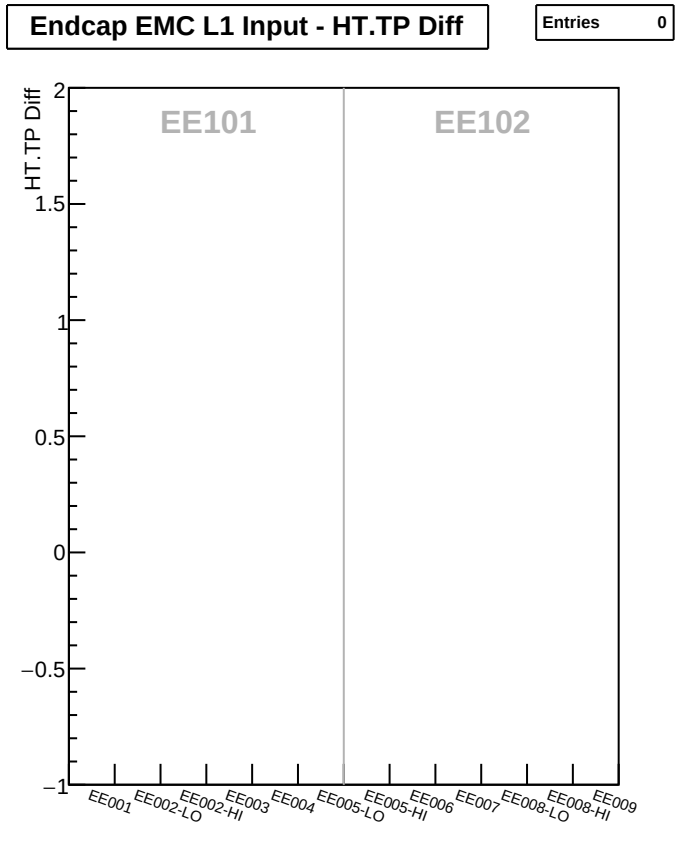

Barrel EMC L1 Input - HT.TP Bit
Entries 4746276
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

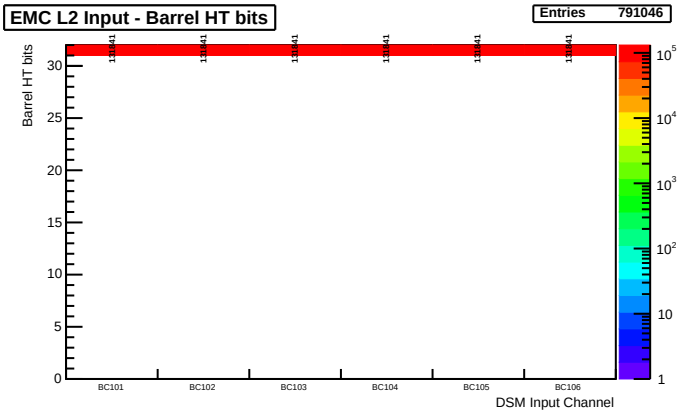

Barrel EMC L1 Input - HT.TP Bit
Entries 4744
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

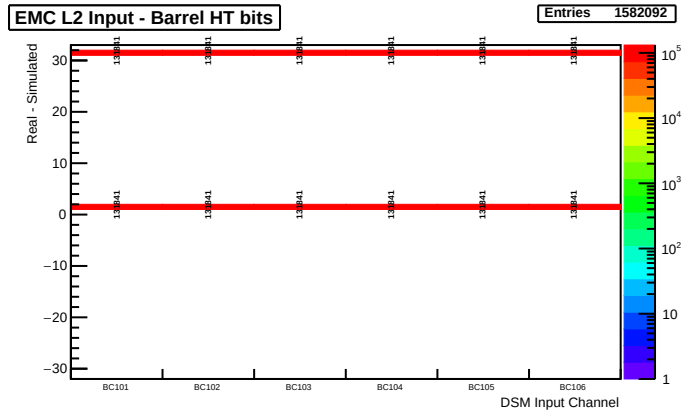

Endcap EMC L1 Input - HT-th
Entries 1582092
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

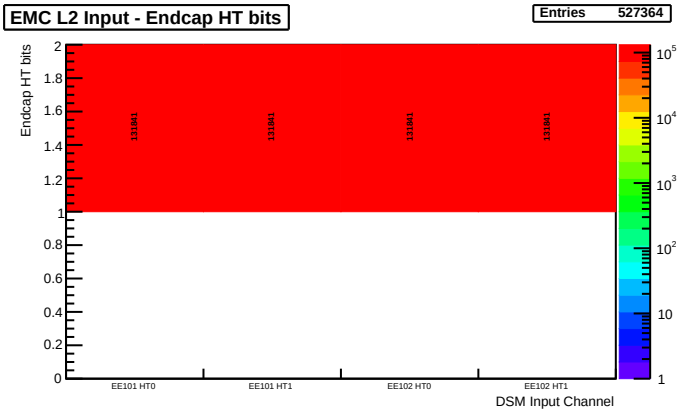

Endcap EMC L1 Input - HT-th Diff
Entries 0
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

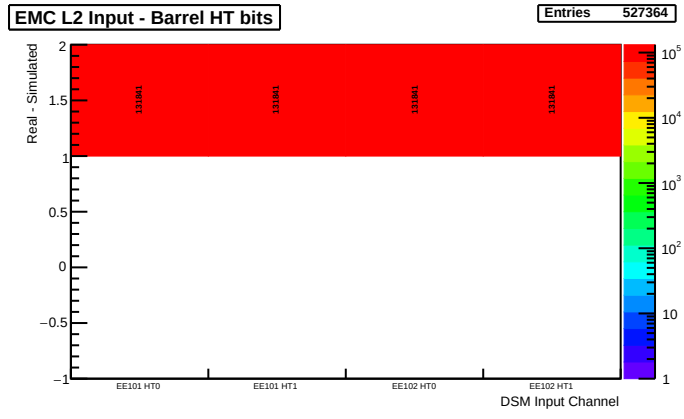

Endcap EMC L1 Input - HT.TP
Entries 1582092
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

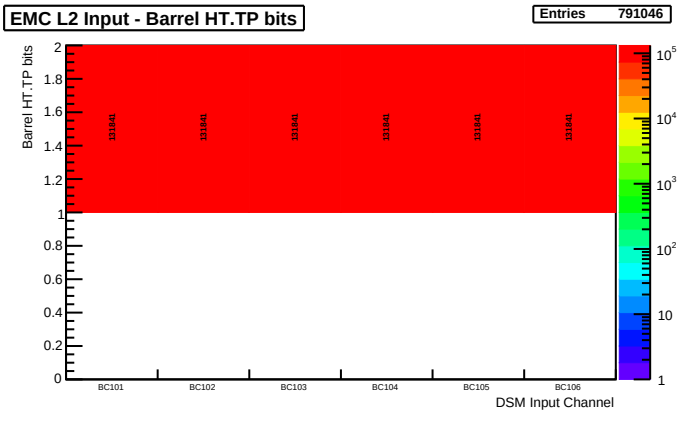

Endcap EMC L1 Input - HT.TP Diff
Entries 0
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

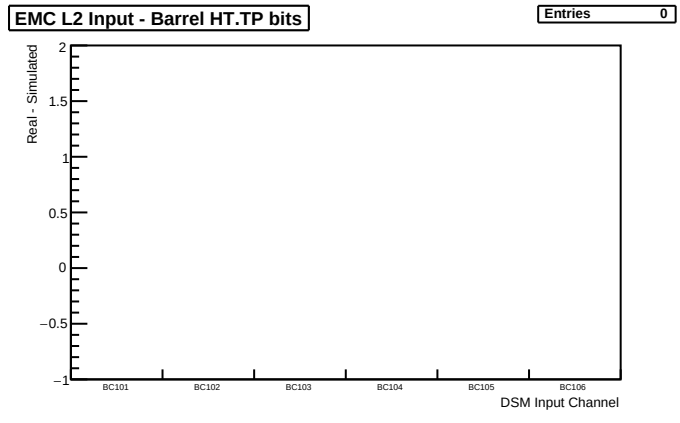

EMC L2 Input - Barrel HT bits
Entries 791046
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
131841

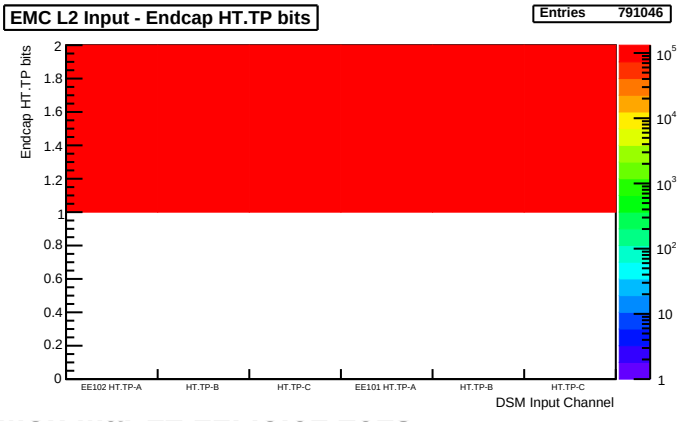

EMC L2 Input - Barrel HT bits
Entries 1582092
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
131841

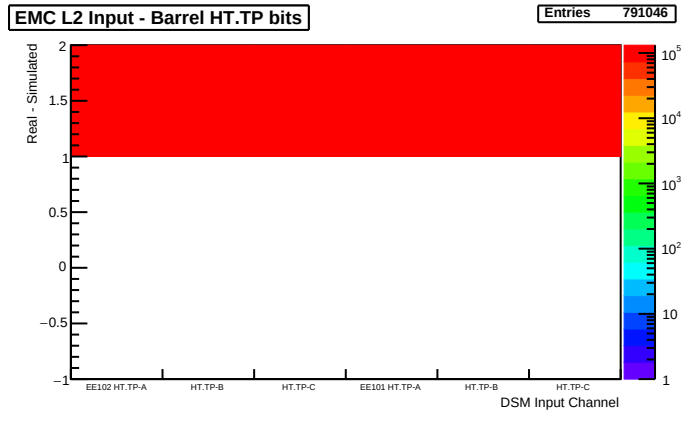

EMC L2 Input - Endcap HT bits
Entries 527364
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1
131841

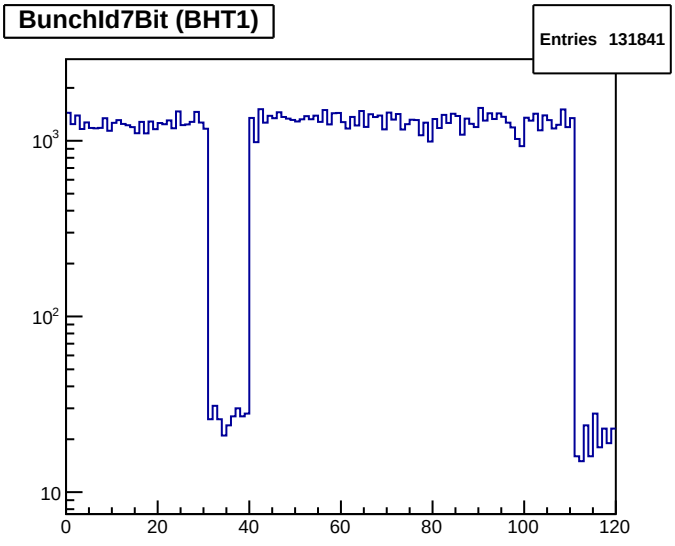

EMC L2 Input - Barrel HT bits
Entries 527364
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1
131841

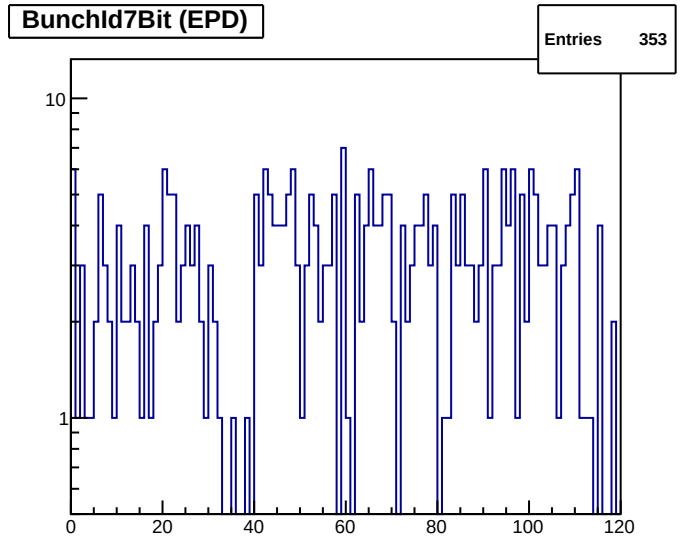

EMC L2 Input - Barrel HT.TP bits
Entries 791046
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
131841

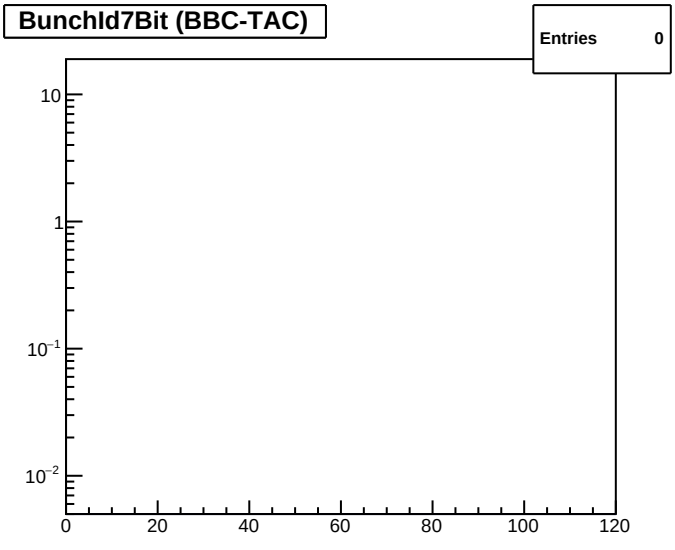

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

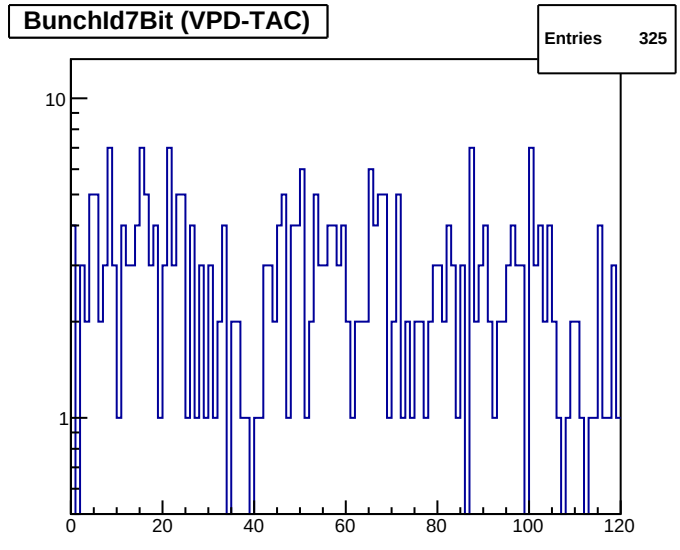

EMC L2 Input - Endcap HT.TP bits
Entries 791046
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

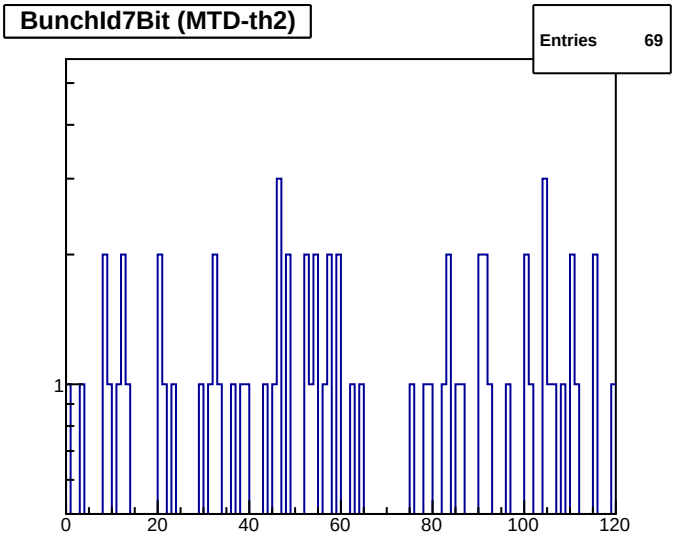

EMC L2 Input - Barrel HT.TP bits
Entries 791046
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

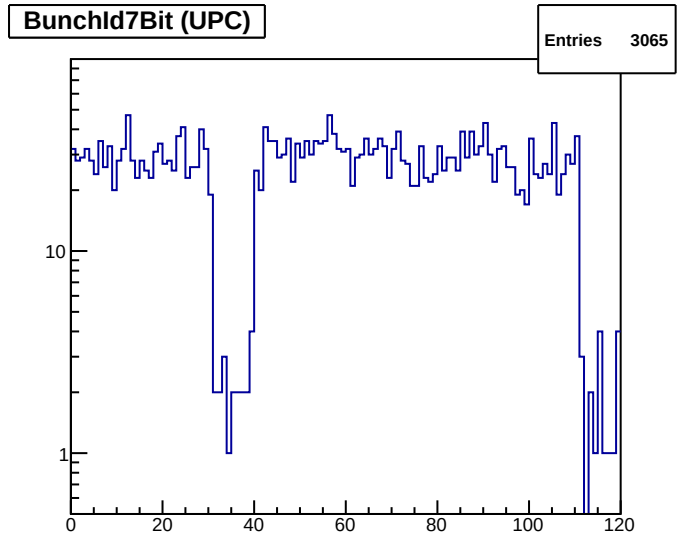

BunchId7Bit (BHT1)
Entries 131841
10^3
10^2
10
0 20 40 60 80 100 120

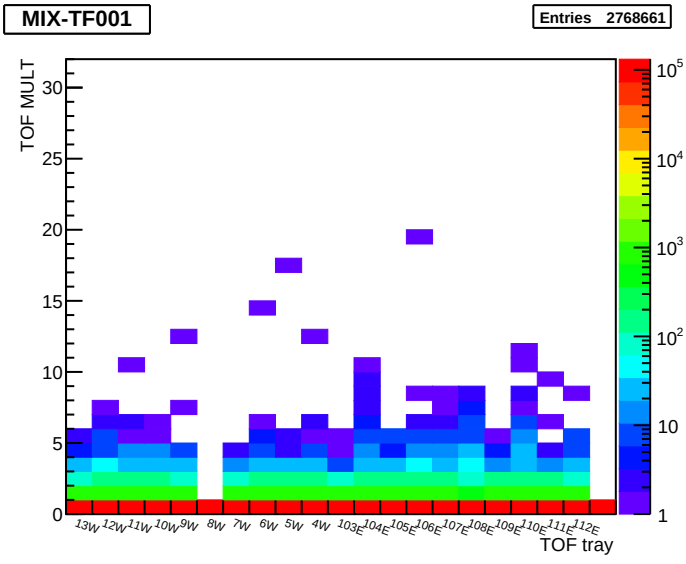

BunchId7Bit (EPD)
Entries 353
10
1
0 20 40 60 80 100 120

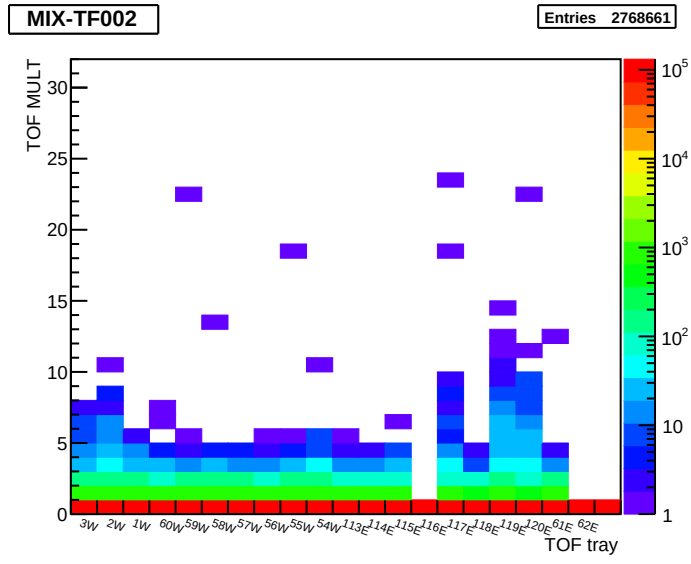

BunchId7Bit (BBC-TAC)
Entries 0
10
1
10^{-1}
10^{-2}
0 20 40 60 80 100 120

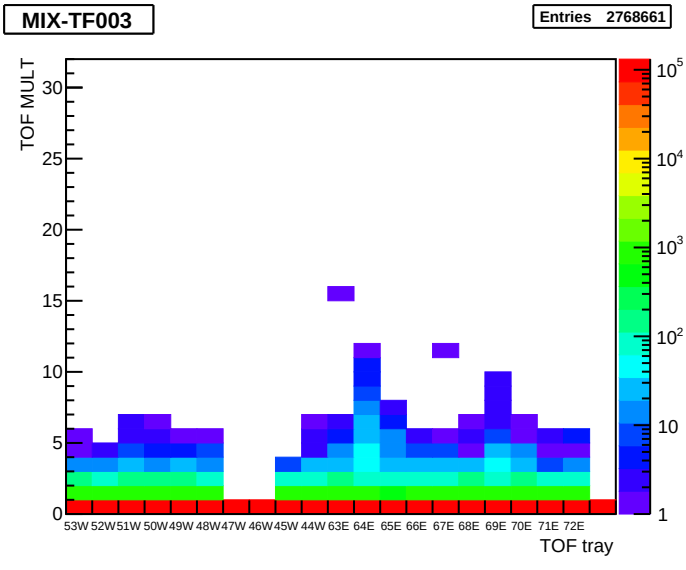

BunchId7Bit (VPD-TAC)
Entries 325
10
1
0 20 40 60 80 100 120

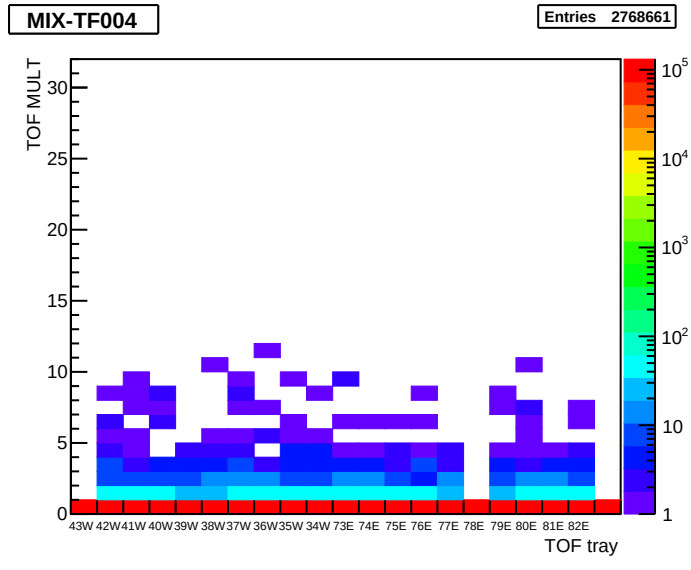

BunchId7Bit (MTD-th2)
Entries 69
1
0 20 40 60 80 100 120

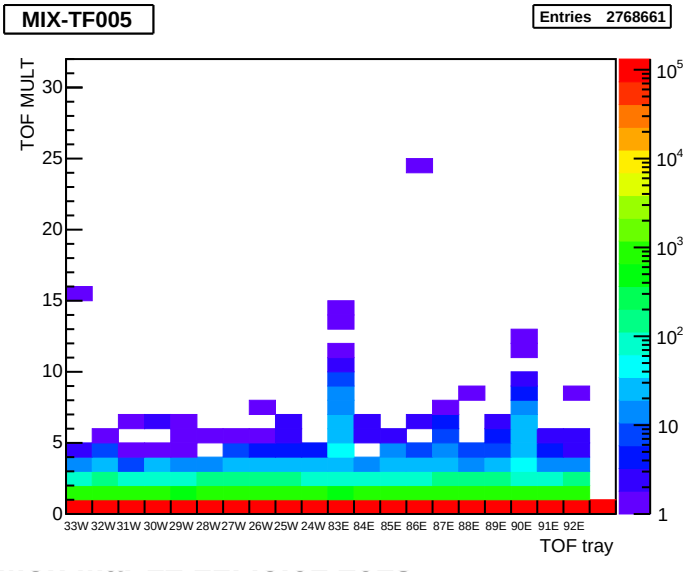

BunchId7Bit (UPC)
Entries 3065
10
1
0 20 40 60 80 100 120

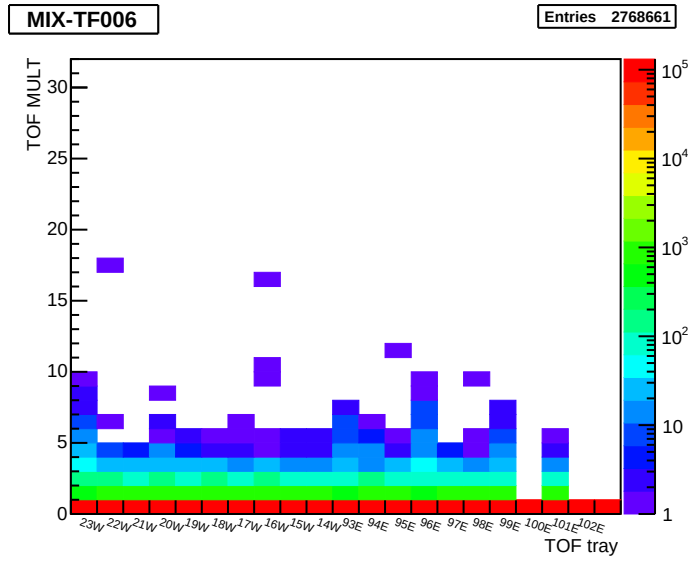

MIX-TF001
Entries 2768661
TOF MULT
TOF tray

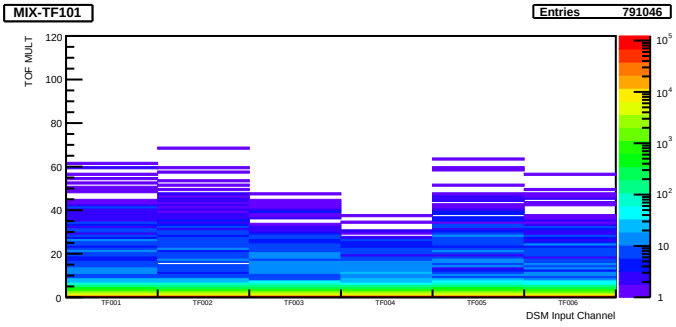

MIX-TF002
Entries 2768661
TOF MULT
TOF tray

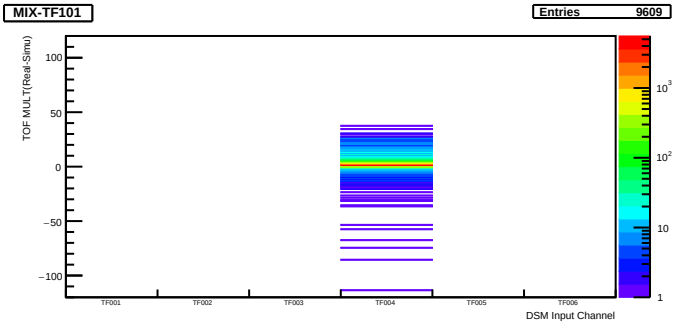

MIX-TF003
Entries 2768661
TOF MULT
TOF tray

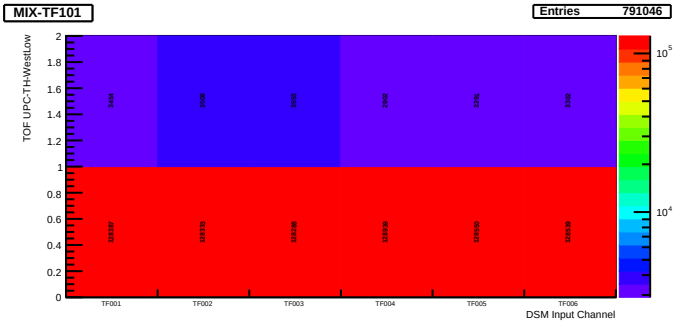

MIX-TF004
Entries 2768661
TOF MULT
TOF tray

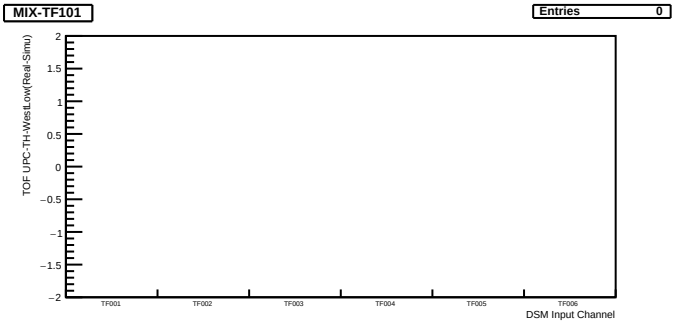

MIX-TF005
Entries 2768661
TOF MULT
TOF tray

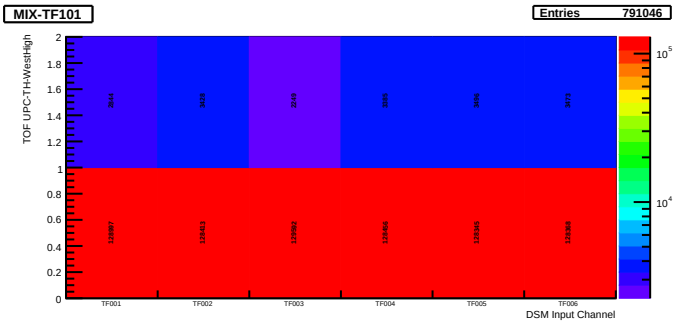

MIX-TF006
Entries 2768661
TOF MULT
TOF tray

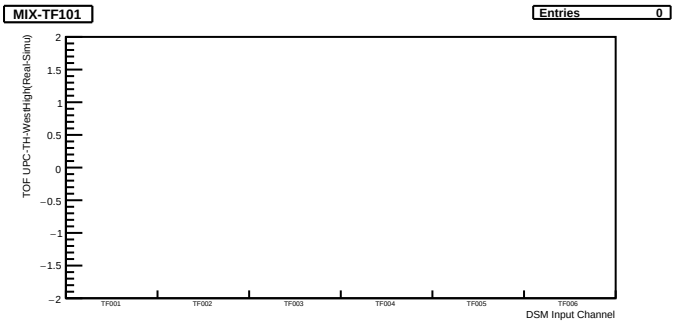

MIX-TF101
Entries 791046
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

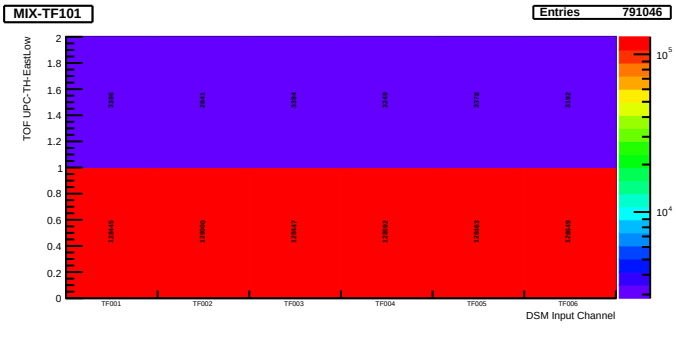

MIX-TF101
Entries 9609
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

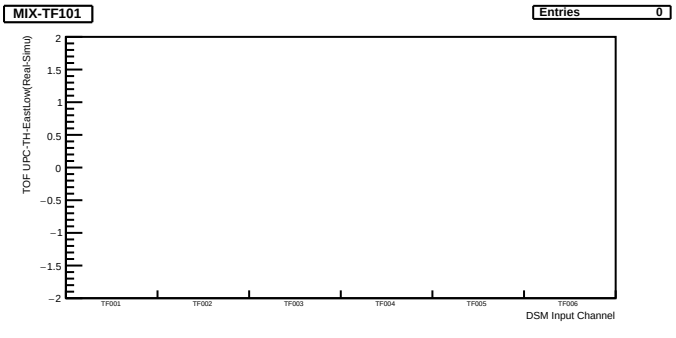

MIX-TF101
Entries 791046
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

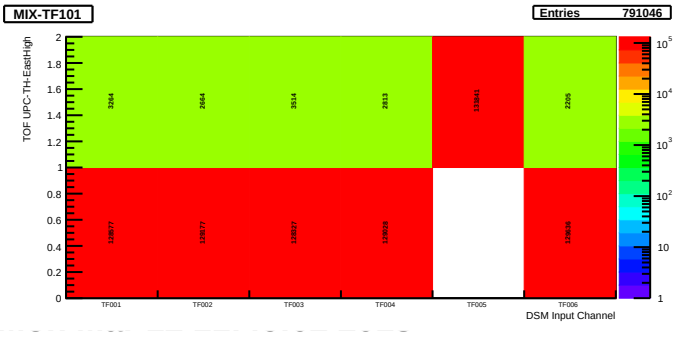

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

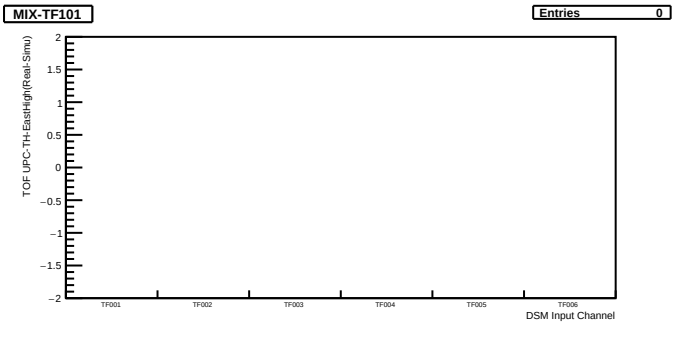

MIX-TF101
Entries 791046
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

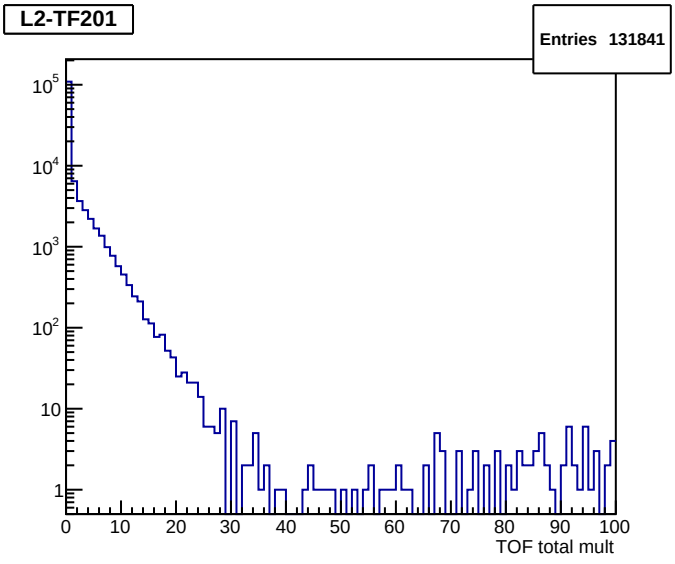

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

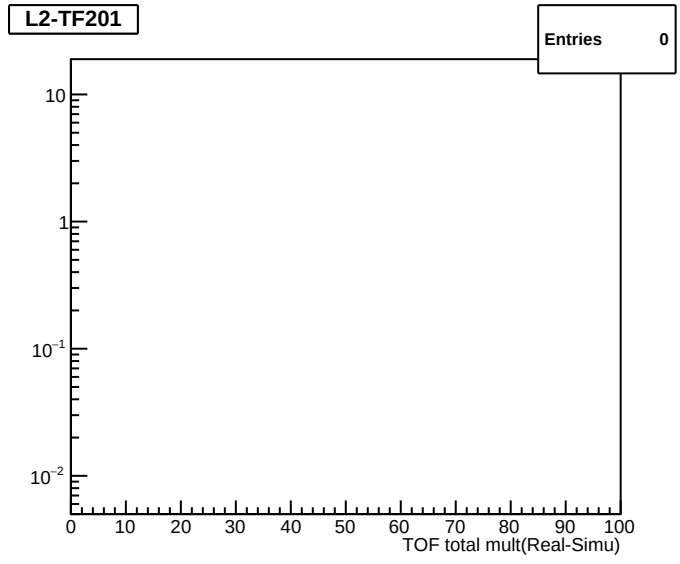

MIX-TF101
Entries 791046
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

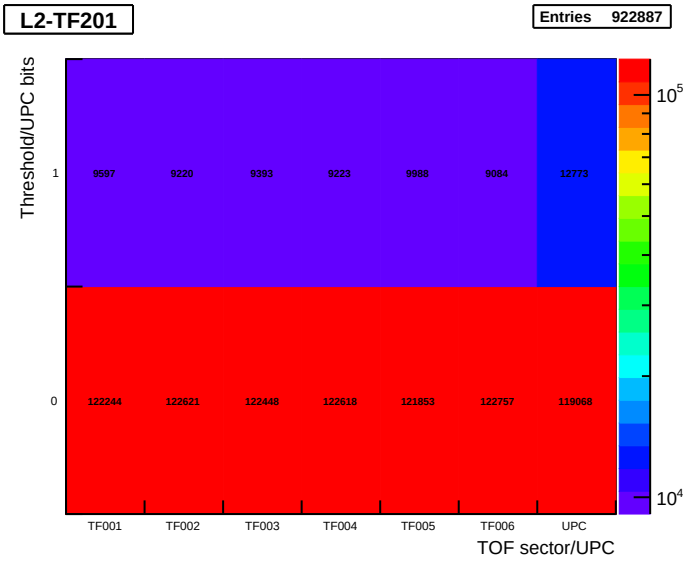

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

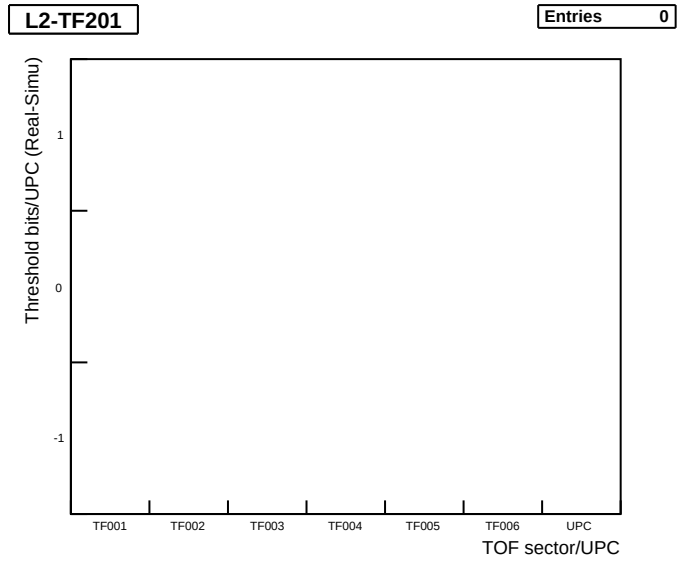

MIX-TF101
Entries 791046
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

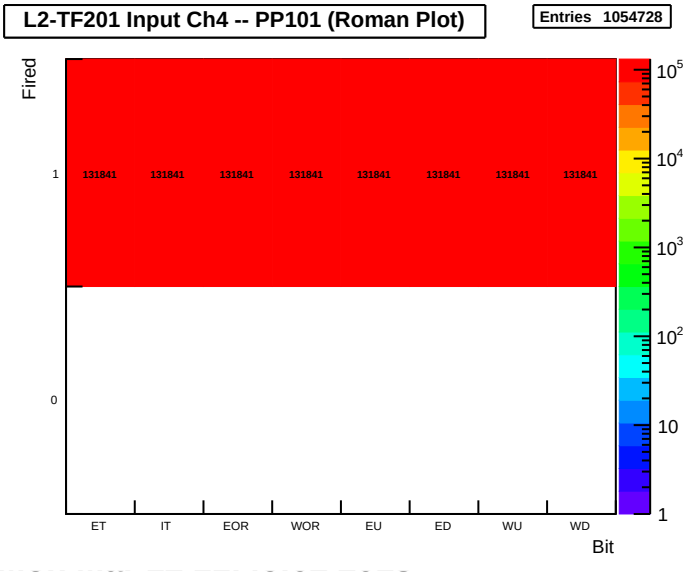

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

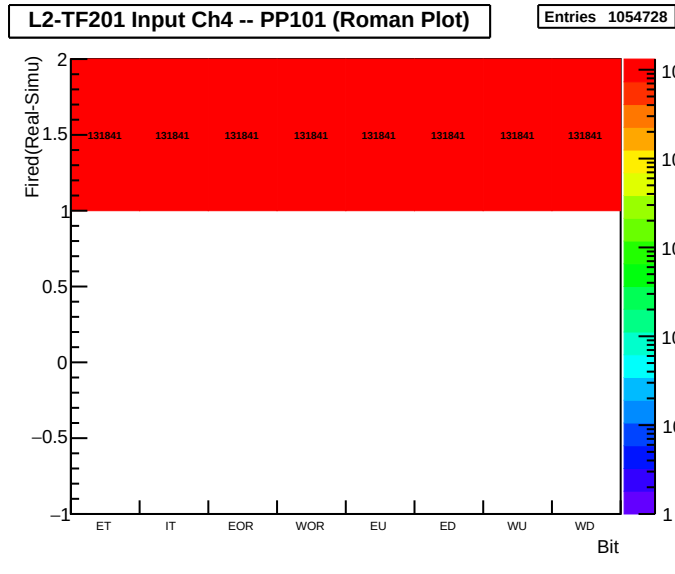

L2-TF201
Entries 131841
TOF total mult

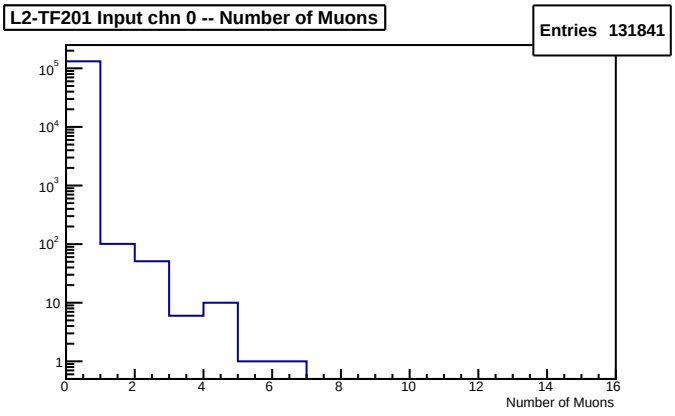

L2-TF201
Entries 0
TOF total mult(Real-Simu)

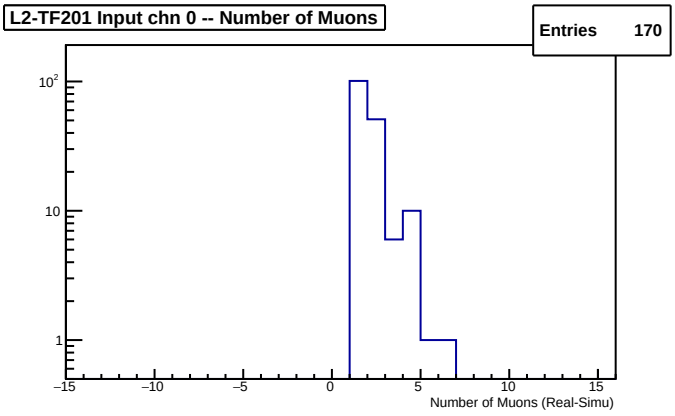

L2-TF201
Entries 922887
Threshold/UPC bits
9597 9220 9393 9223 9988 9084 12773
122244 122621 122448 122618 121853 122757 119068
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

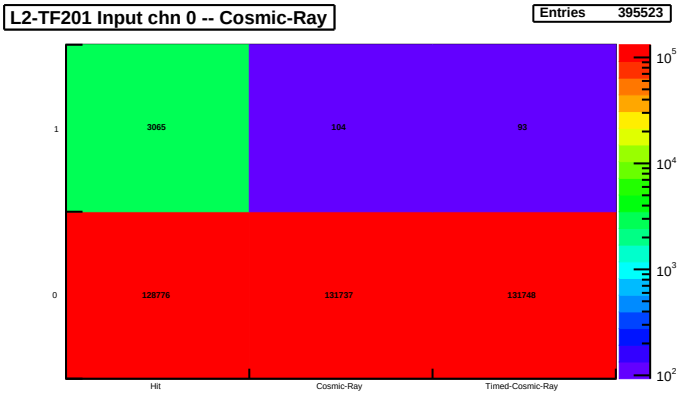

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

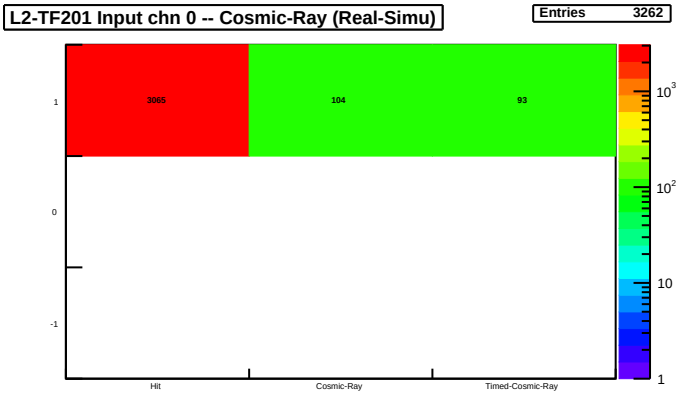

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 1054728
Fired
131841 131841 131841 131841 131841 131841 131841 131841
ET IT EOR WOR EU ED WU WD
Bit

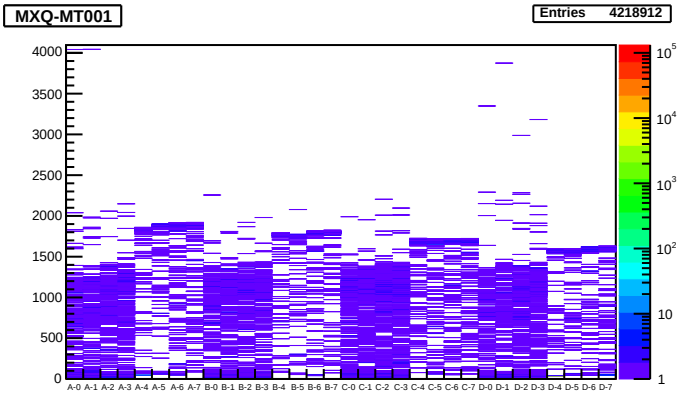

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 1054728
Fired(Real-Simu)
131841 131841 131841 131841 131841 131841 131841 131841
ET IT EOR WOR EU ED WU WD
Bit

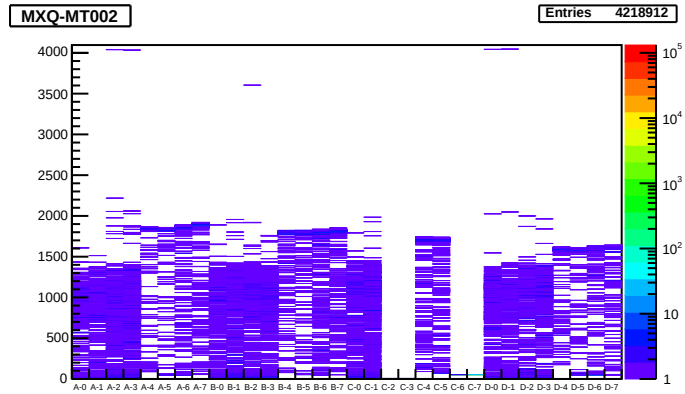

L2-TF201 Input chn 0 -- Number of Muons
Entries 131841
Number of Muons

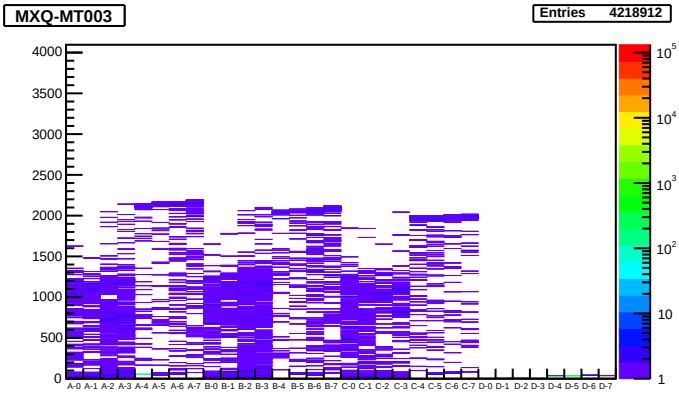

L2-TF201 Input chn 0 -- Number of Muons
Entries 170
Number of Muons (Real-Simu)

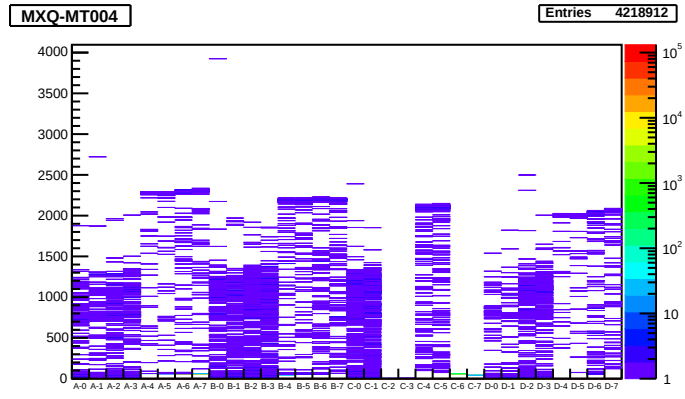

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 395523
3065
104
93
128776
131737
131748
Hit
Cosmic-Ray
Timed-Cosmic-Ray

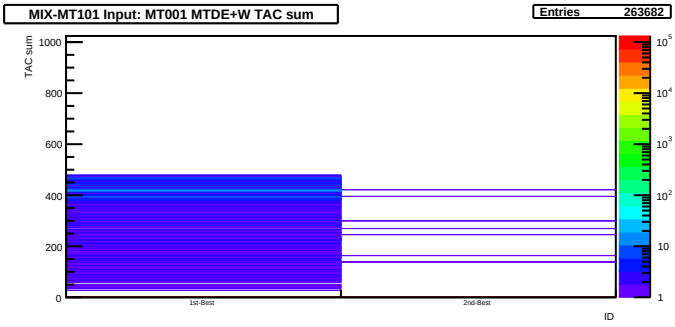

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 3262
3065
104
93
Hit
Cosmic-Ray
Timed-Cosmic-Ray

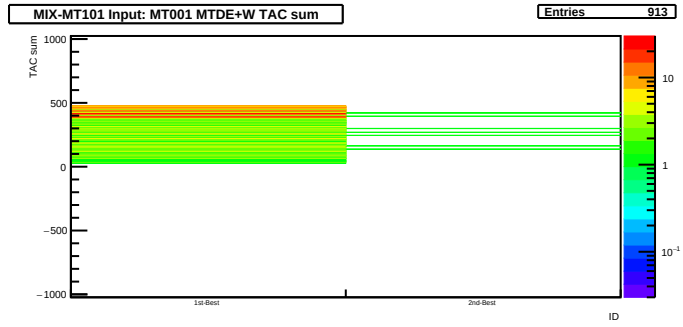

MXQ-MT001
Entries 4218912

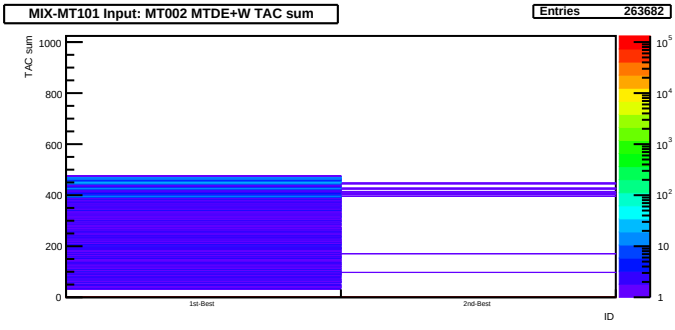

MXQ-MT002
Entries 4218912

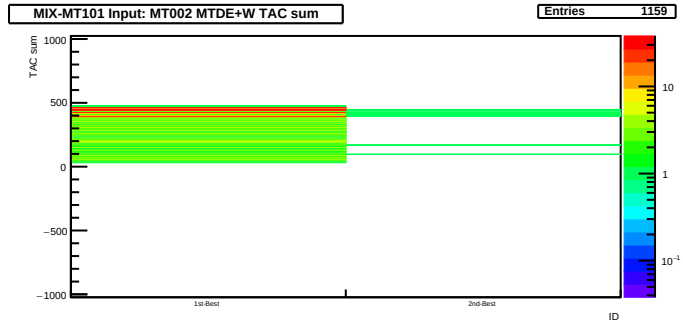

MXQ-MT003
Entries 4218912

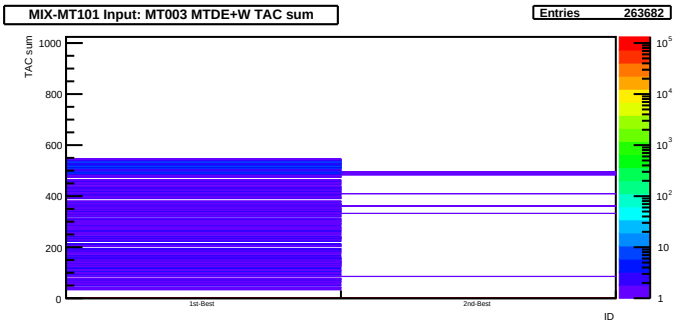

MXQ-MT004
Entries 4218912

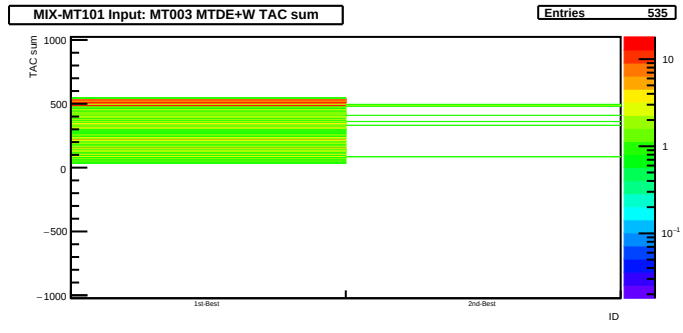

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 263682
TAC sum
1st-Best
2nd-Best
ID

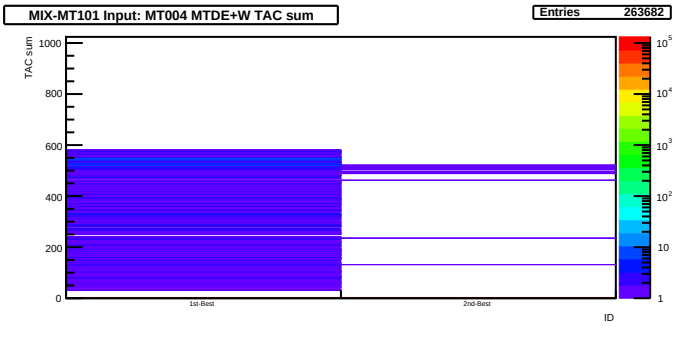

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 913
TAC sum
1st-Best
2nd-Best
ID

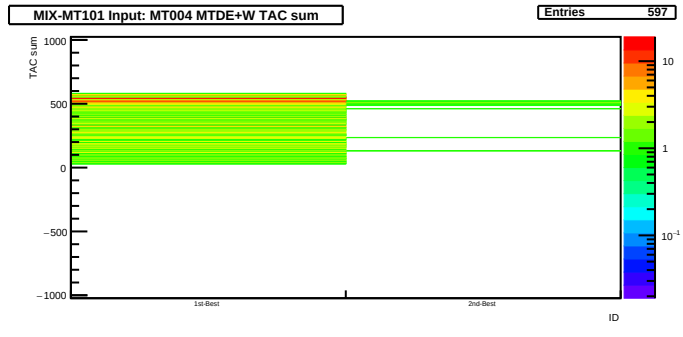

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 263682
TAC sum
1st-Best
2nd-Best
ID

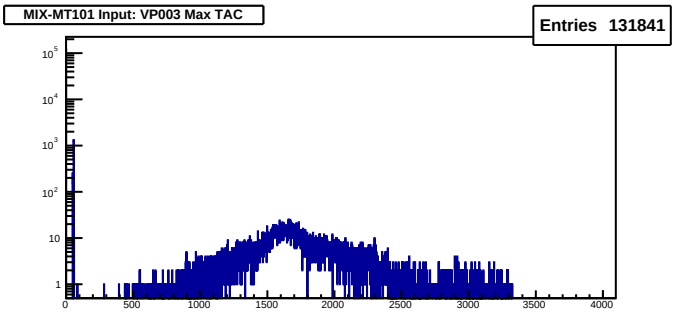

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 1159
TAC sum
1st-Best
2nd-Best
ID

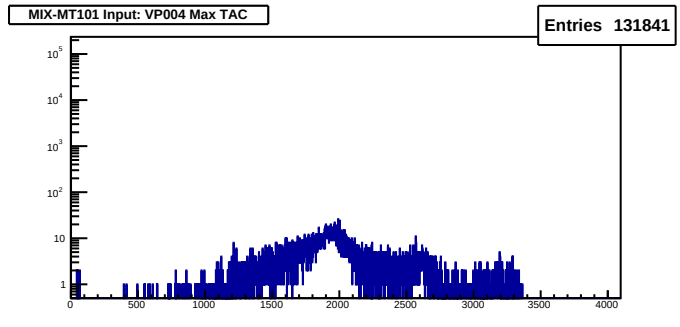

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 263682
TAC sum
1st-Best
2nd-Best
ID

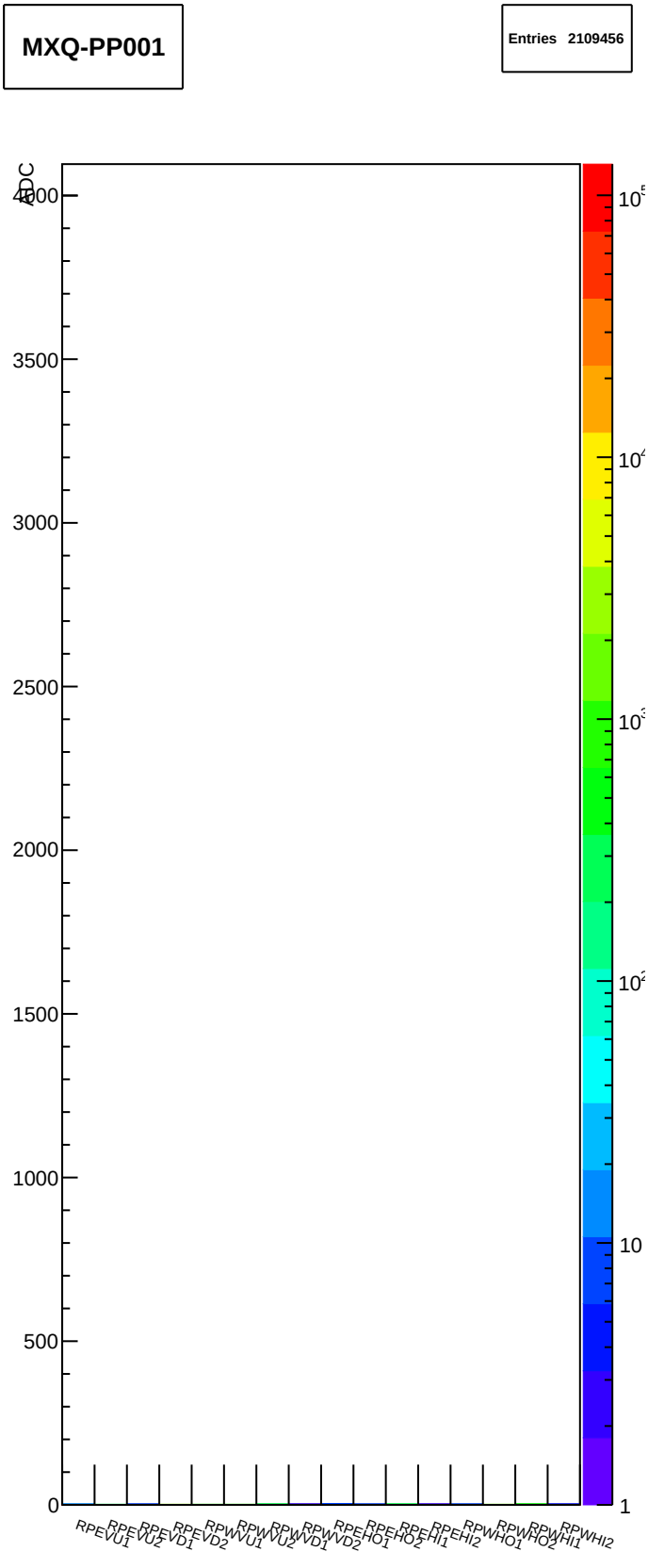

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 535
TAC sum
1st-Best
2nd-Best
ID

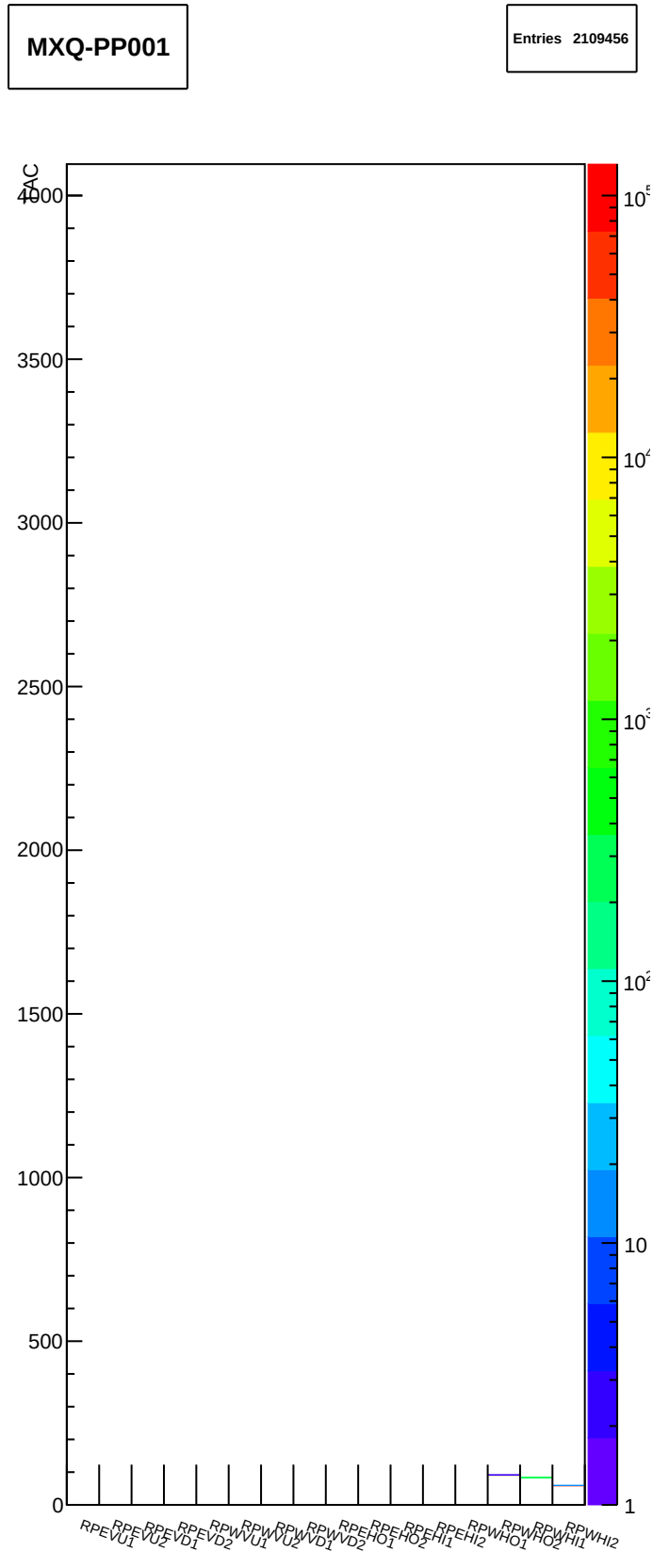

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 263682
TAC sum
1st-Best
2nd-Best
ID

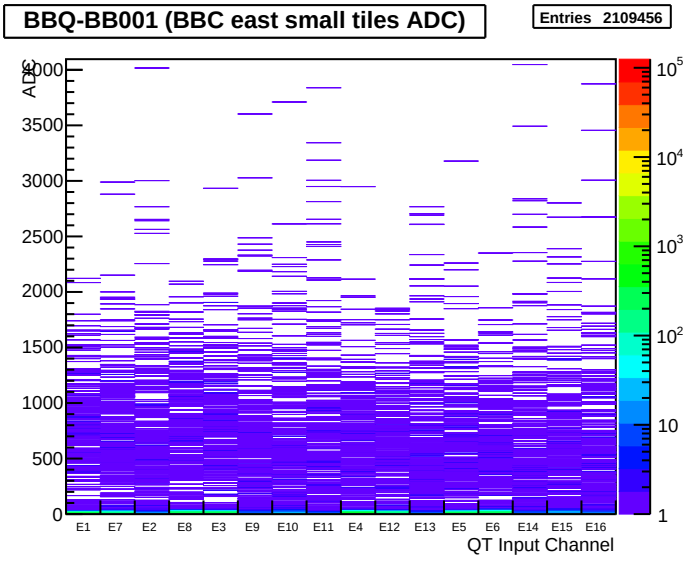

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 597
TAC sum
1st-Best
2nd-Best
ID

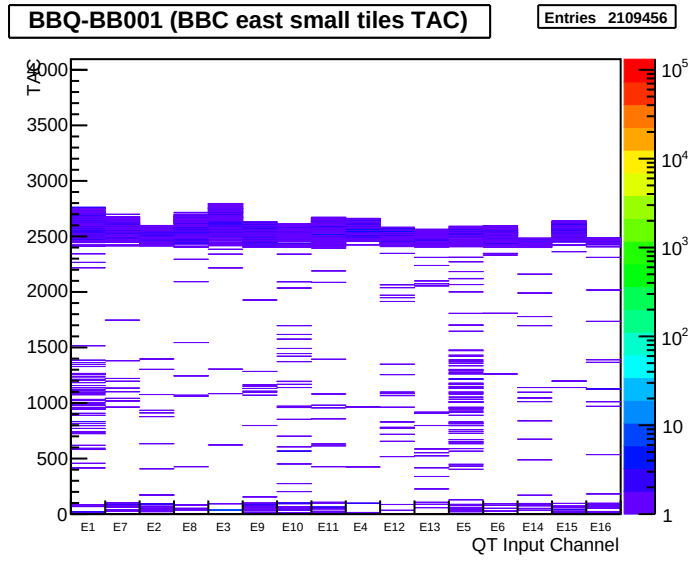

MIX-MT101 Input: VP003 Max TAC
Entries 131841

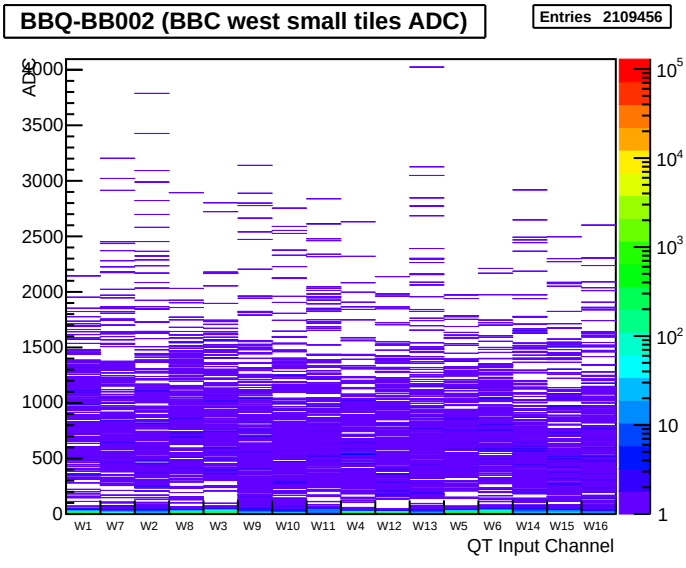

MIX-MT101 Input: VP004 Max TAC
Entries 131841

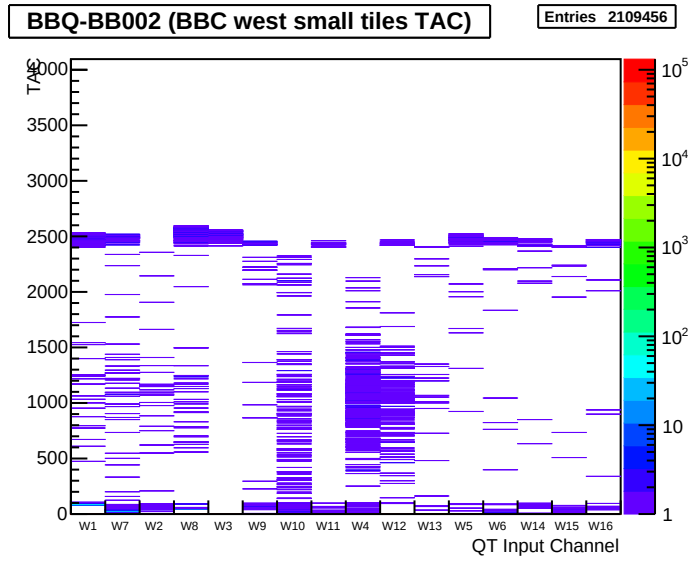

MXQ-PP001
Entries 2109456
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

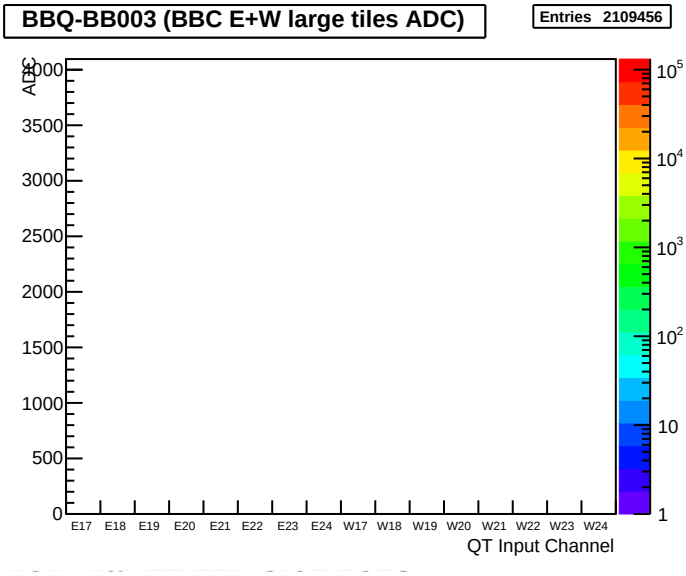

MXQ-PP001
Entries 2109456
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

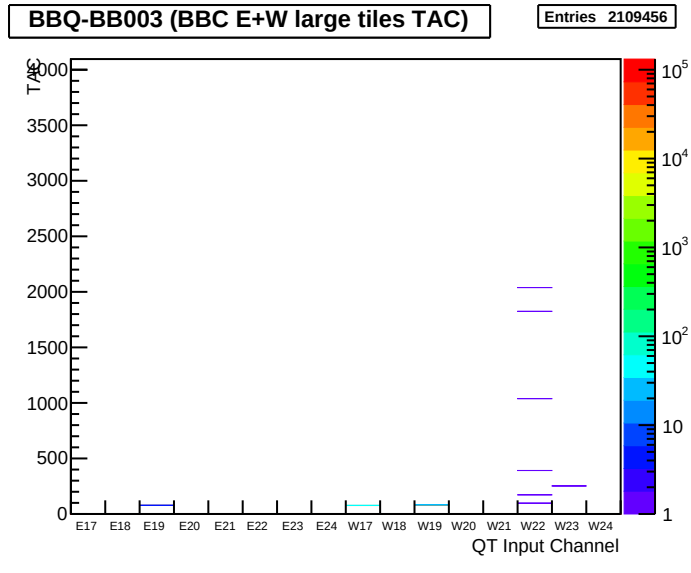

BBQ-BB001 (BBC east small tiles ADC)
Entries 2109456
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

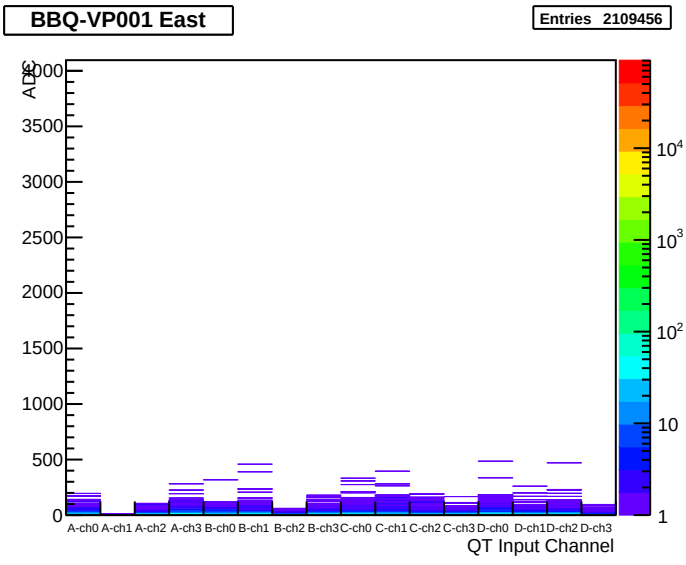

BBQ-BB001 (BBC east small tiles TAC)
Entries 2109456
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

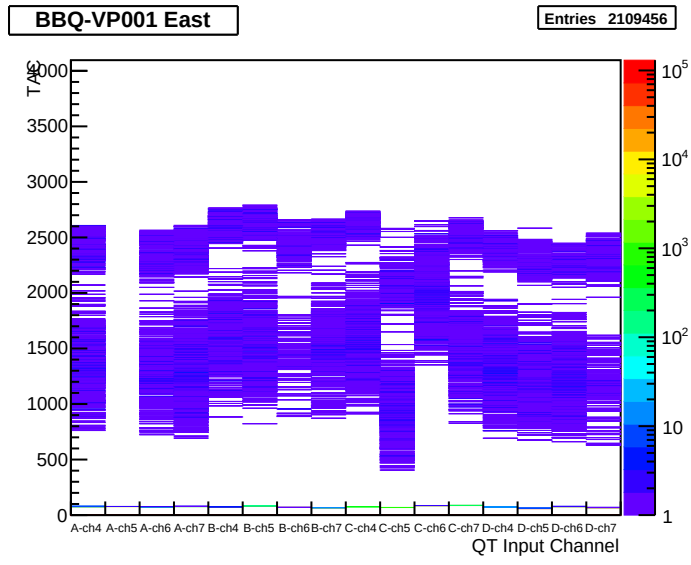

BBQ-BB002 (BBC west small tiles ADC)
Entries 2109456
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

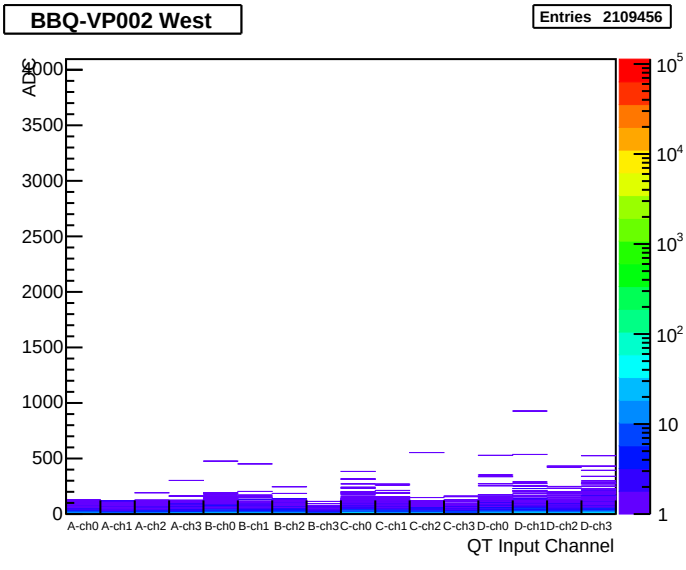

BBQ-BB002 (BBC west small tiles TAC)
Entries 2109456
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

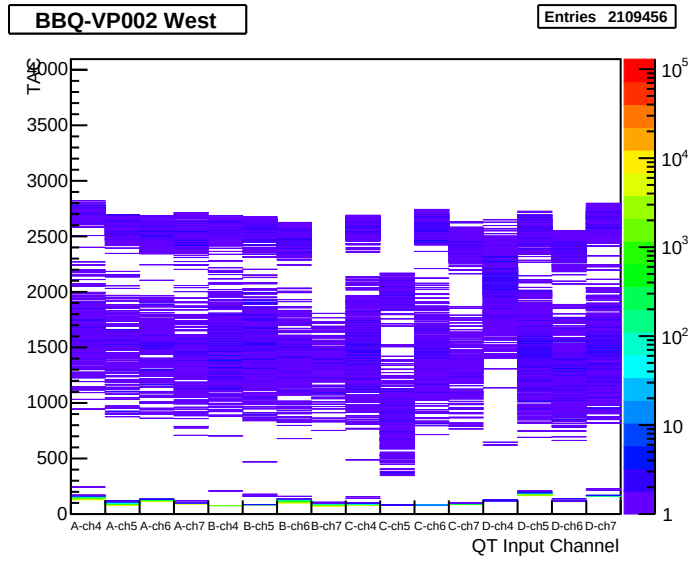

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2109456
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

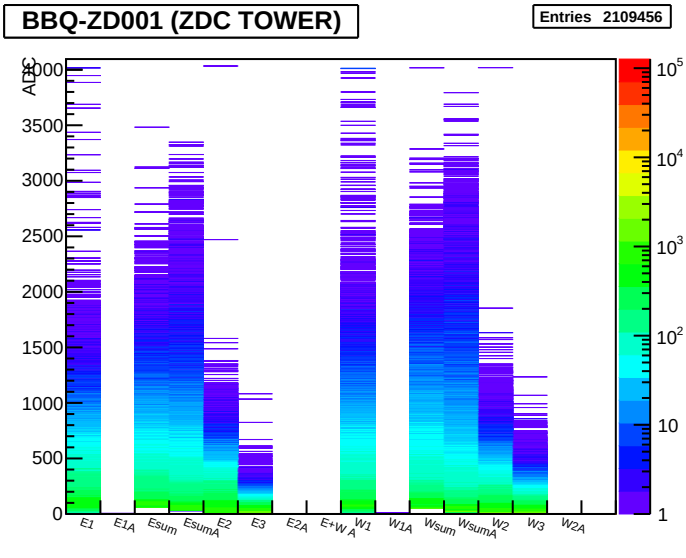

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2109456
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

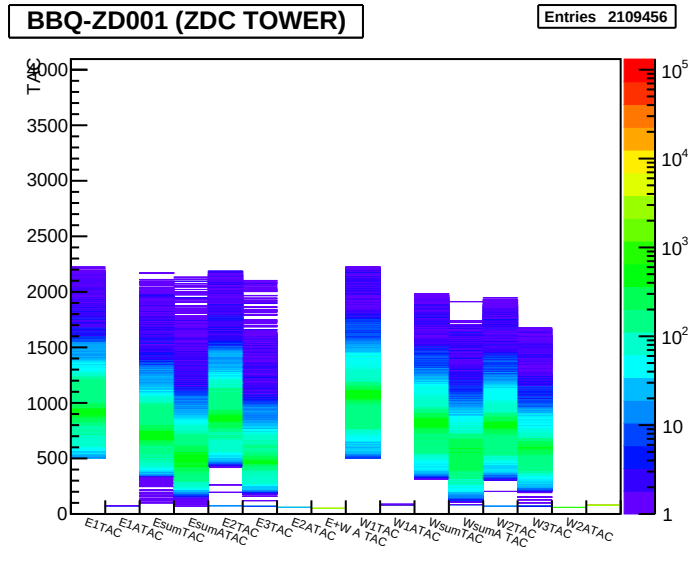

BBQ-VP001 East
Entries 2109456
ADC
QT Input Channel

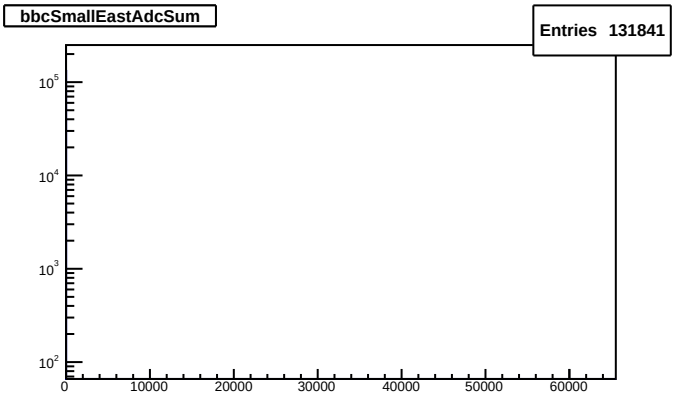

BBQ-VP001 East
Entries 2109456
TAC
QT Input Channel

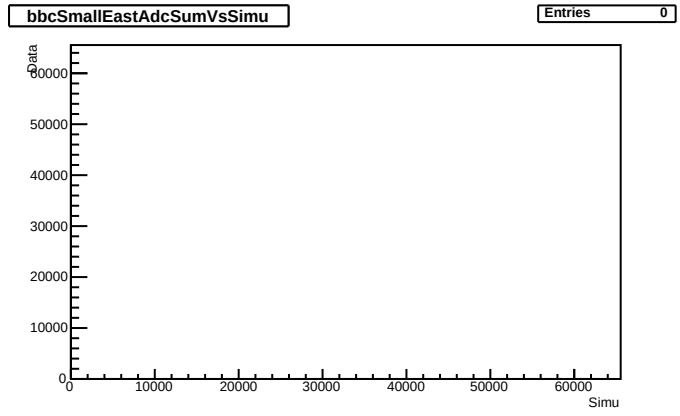

BBQ-VP002 West
Entries 2109456
ADC
QT Input Channel

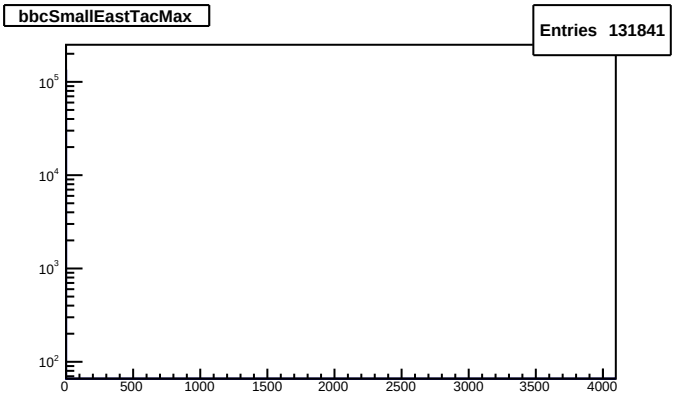

BBQ-VP002 West
Entries 2109456
TAC
QT Input Channel

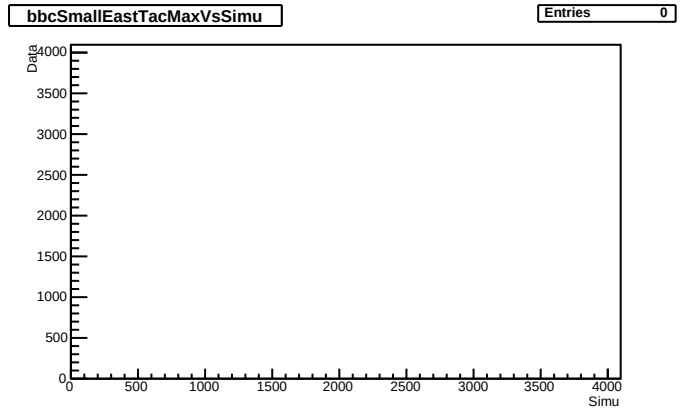

BBQ-ZD001 (ZDC TOWER)
Entries 2109456
ADC

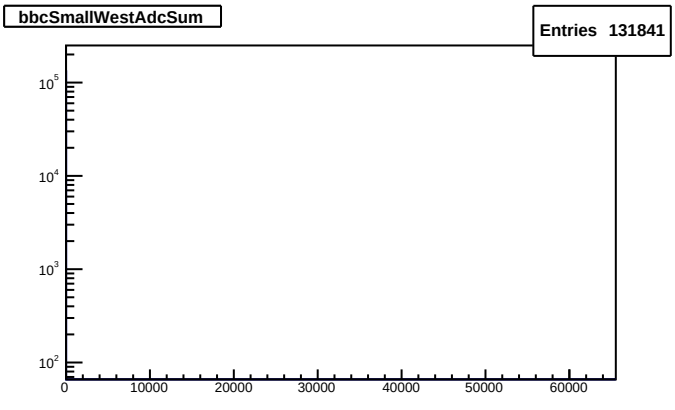

BBQ-ZD001 (ZDC TOWER)
Entries 2109456
TAC

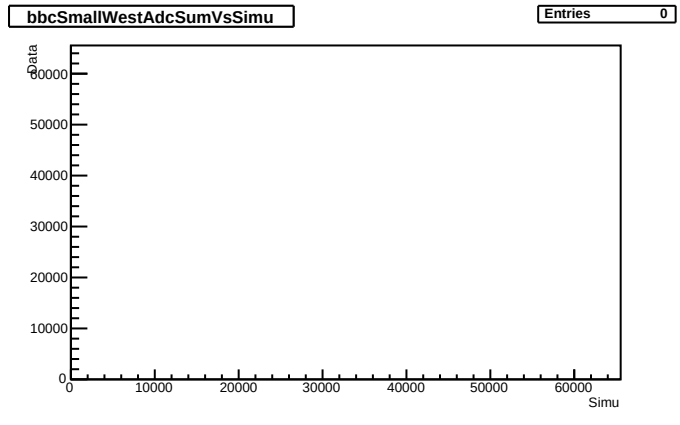

bbcSmallEastAdcSum
Entries 131841

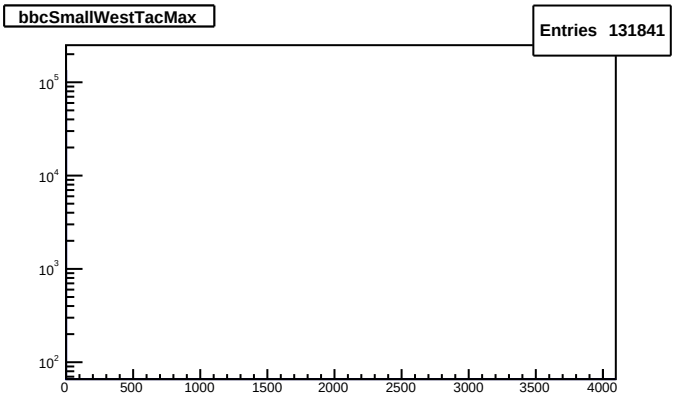

bbcSmallEastAdcSumVsSimu
Entries 0
Data
Simu

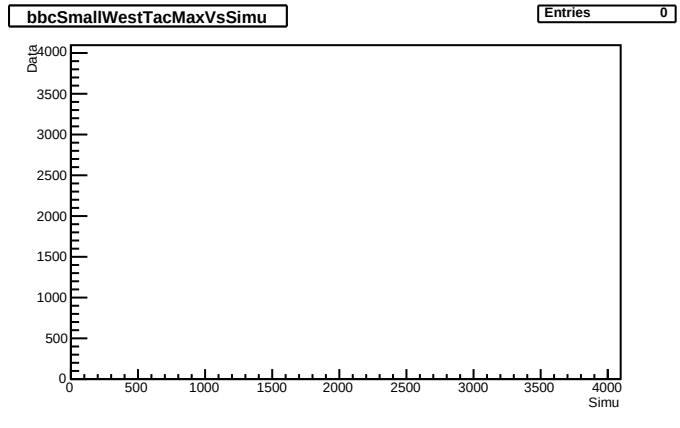

bbcSmallEastTacMax
Entries 131841

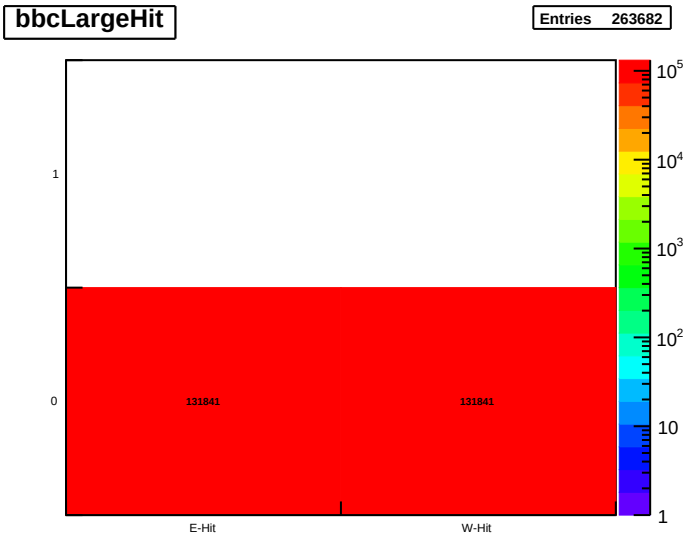

bbcSmallEastTacMaxVsSimu
Entries 0
Data
Simu

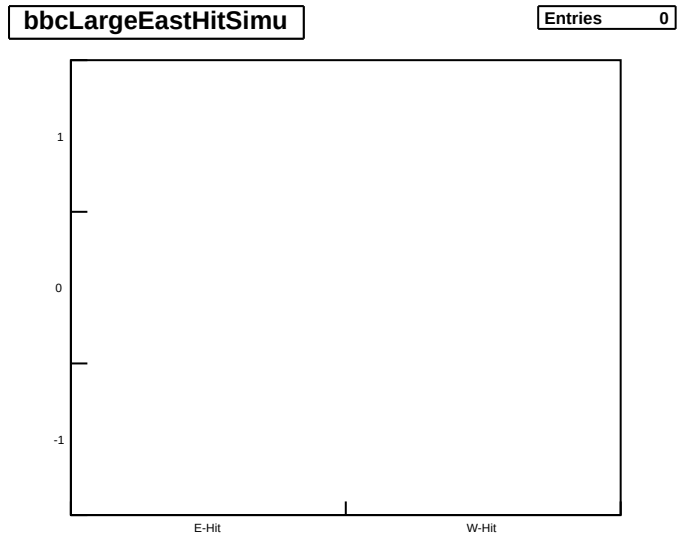

bbcSmallWestAdcSum
Entries 131841

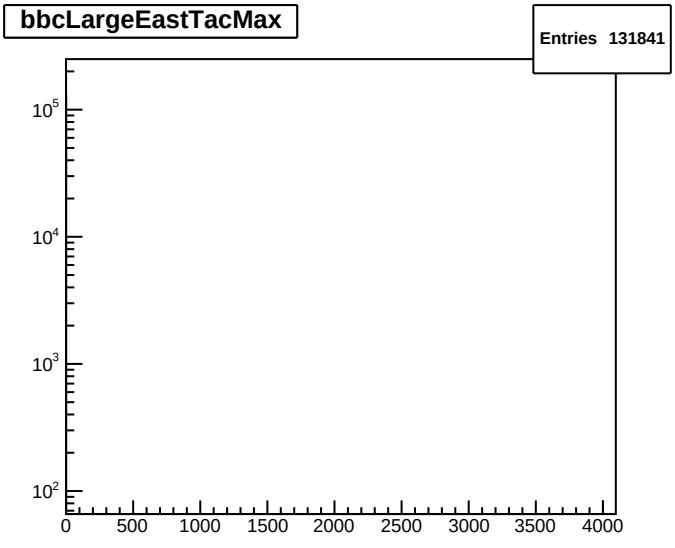

bbcSmallWestAdcSumVsSimu
Entries 0
Data
Simu

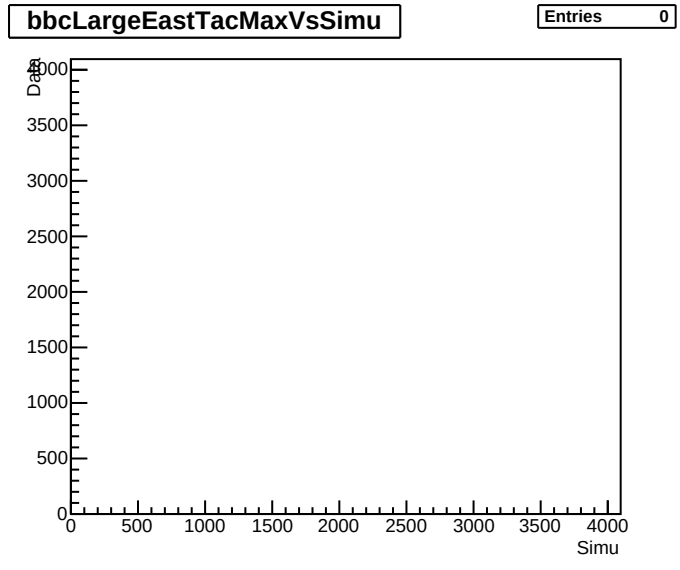

bbcSmallWestTacMax
Entries 131841

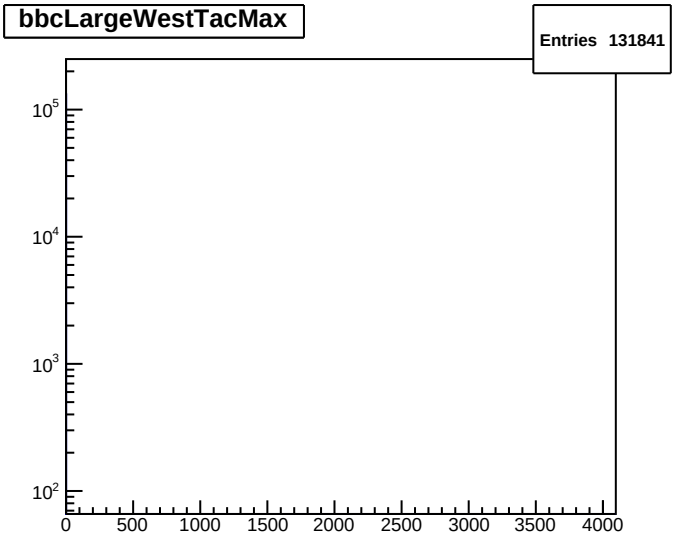

bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu

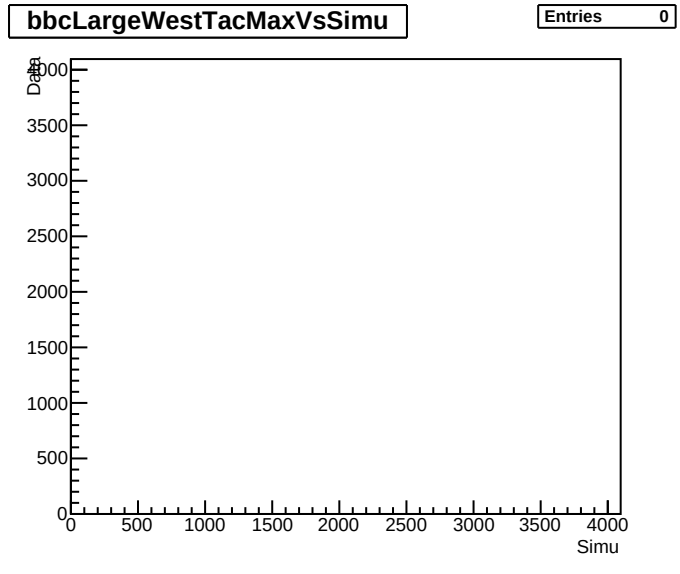

bbcLargeHit
Entries 263682
131841
131841
E-Hit
W-Hit

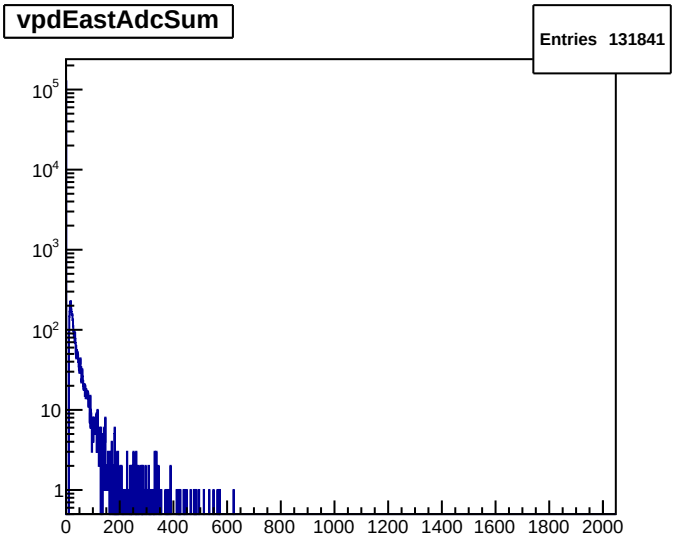

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

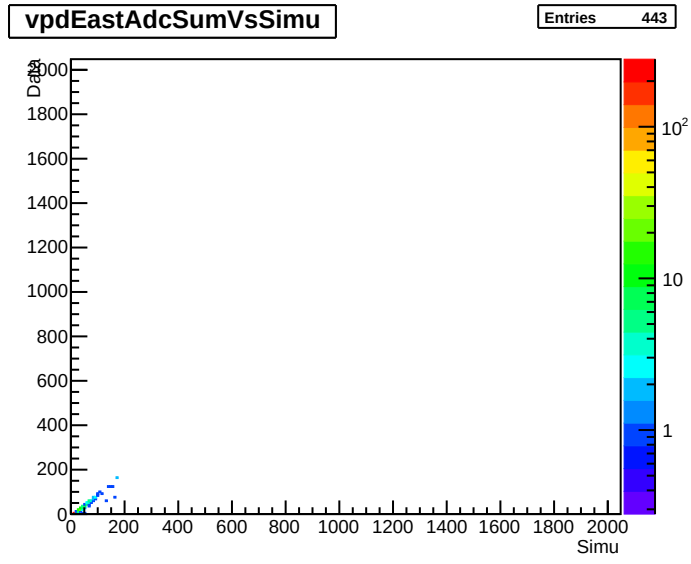

bbcLargeEastTacMax
Entries 131841

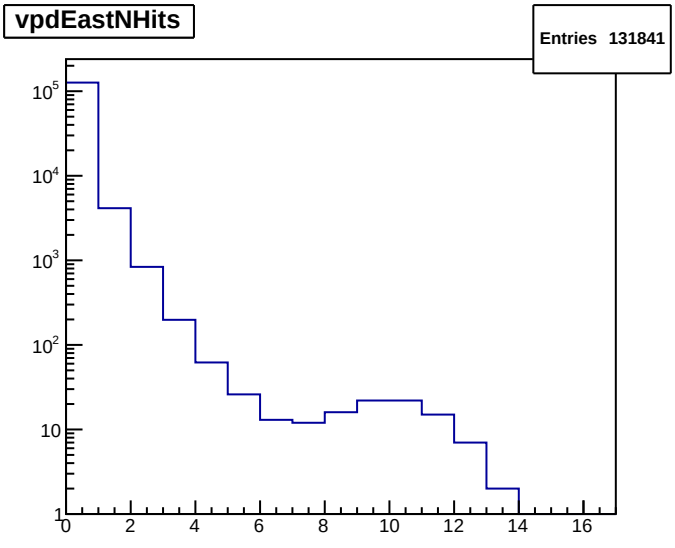

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

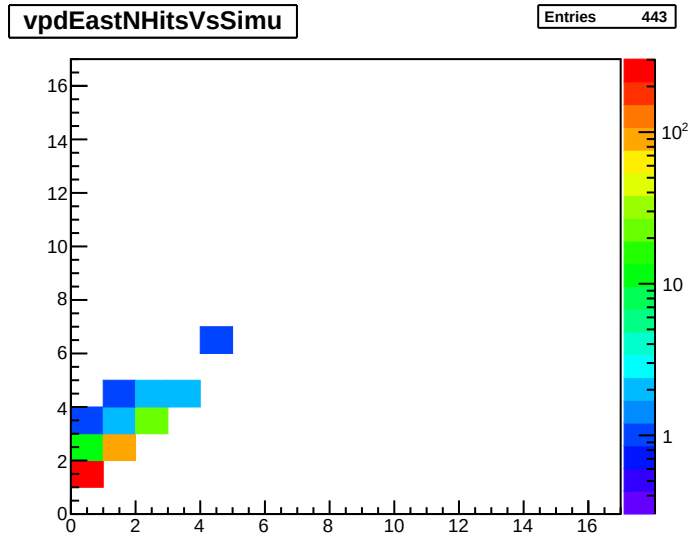

bbcLargeWestTacMax
Entries 131841

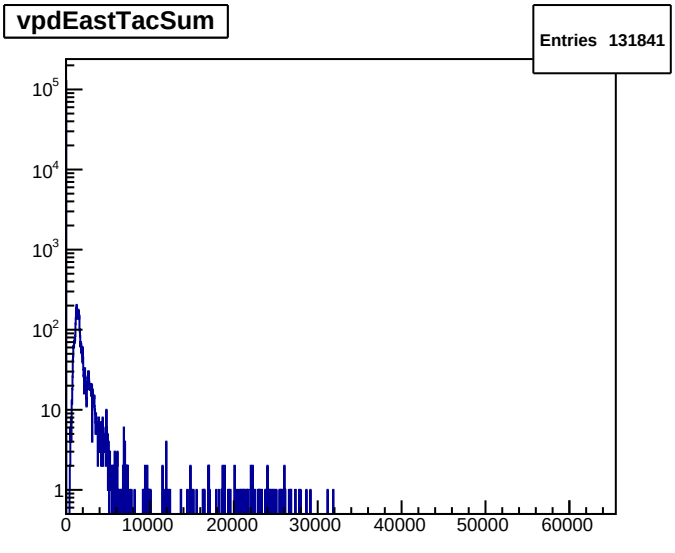

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

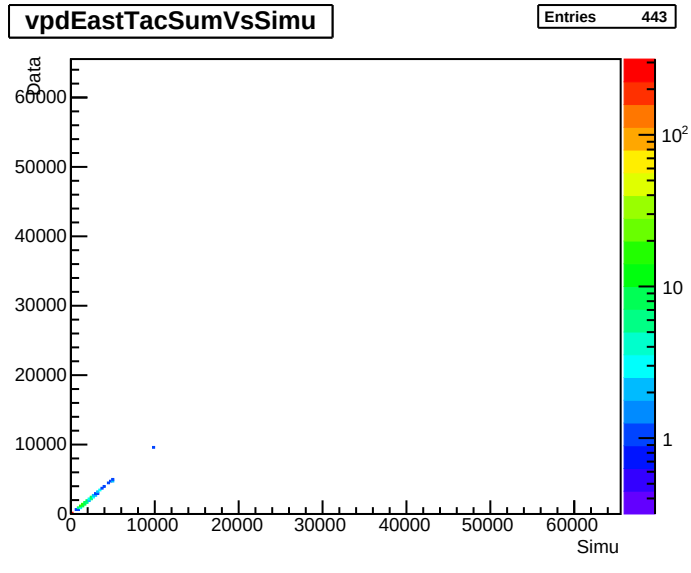

vpdEastAdcSum
Entries 131841

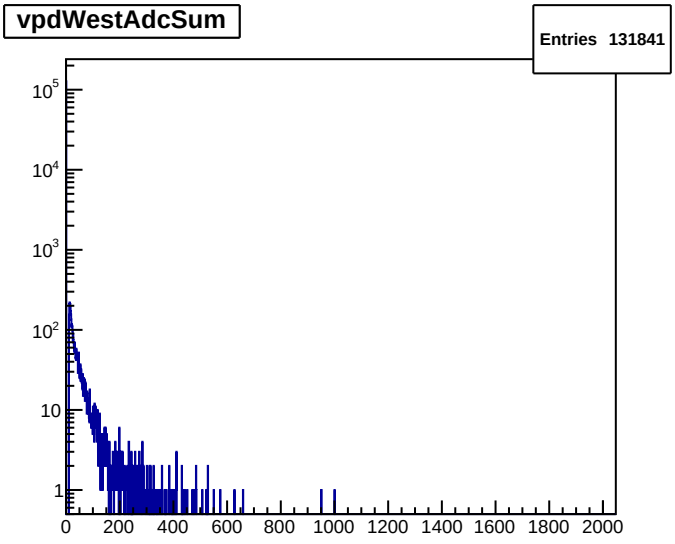

vpdEastAdcSumVsSimu
Entries 443
Data
Simu

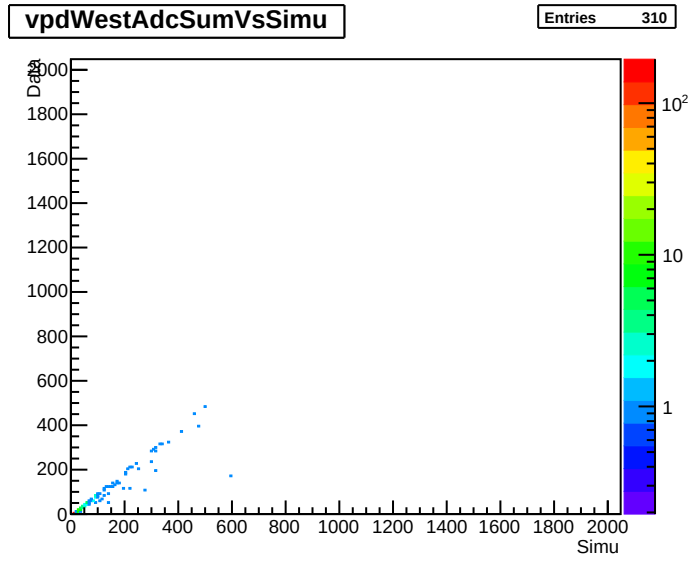

vpdEastNHits
Entries 131841

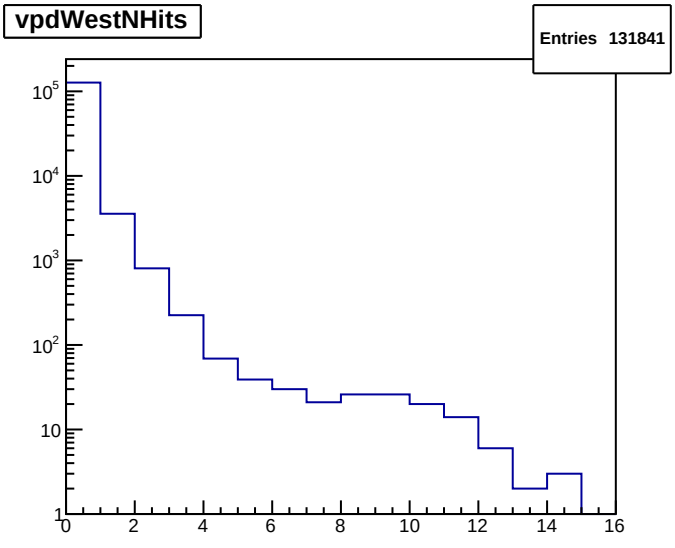

vpdEastNHitsVsSimu
Entries 443

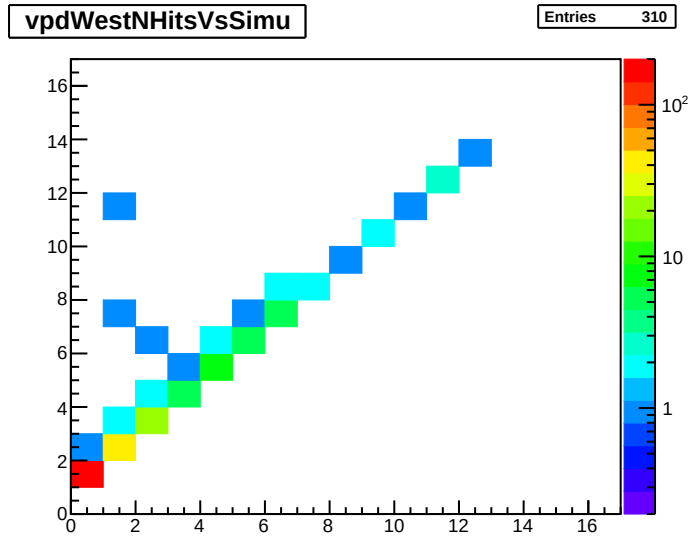

vpdEastTacSum
Entries 131841

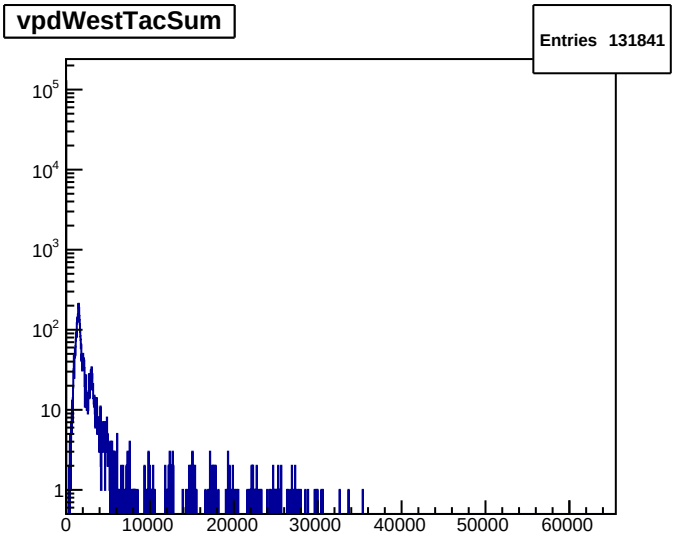

vpdEastTacSumVsSimu
Entries 443
Data
Simu

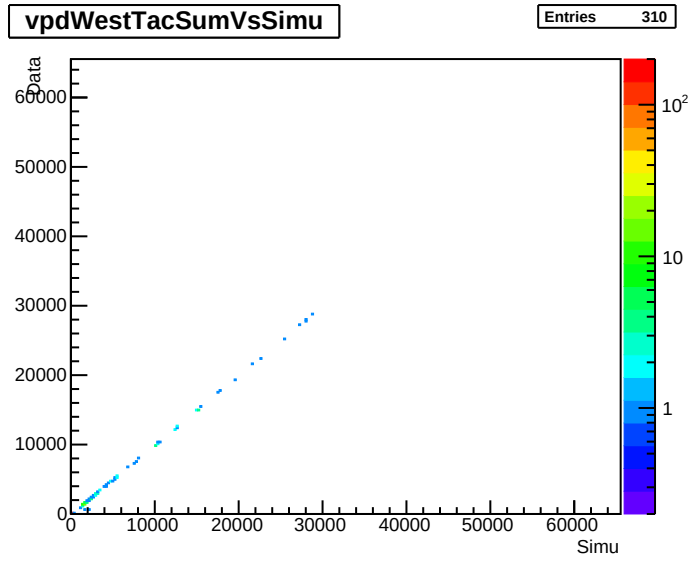

vpdWestAdcSum
Entries 131841

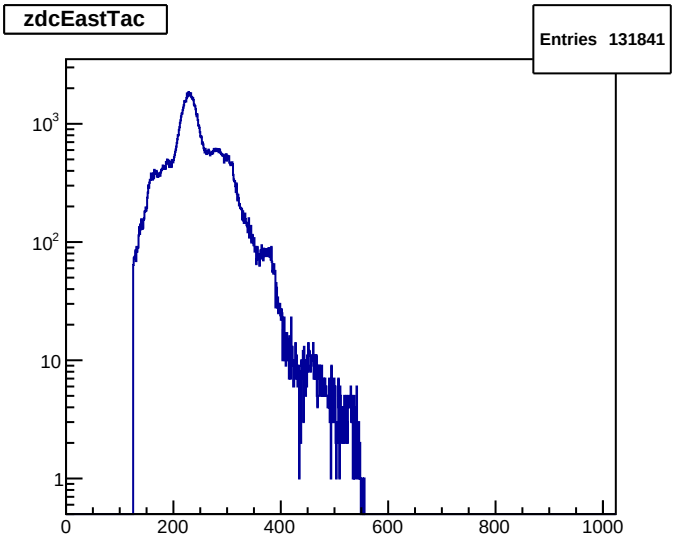

vpdWestAdcSumVsSimu
Entries 310
Data
Simu

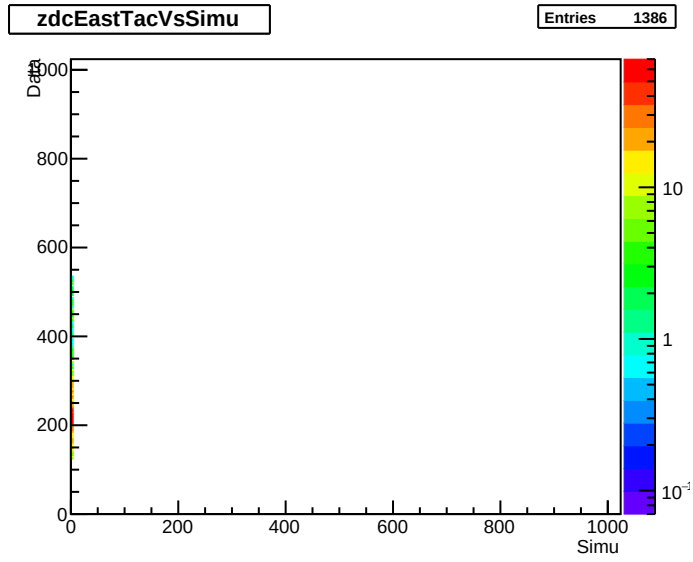

vpdWestNHits
Entries 131841

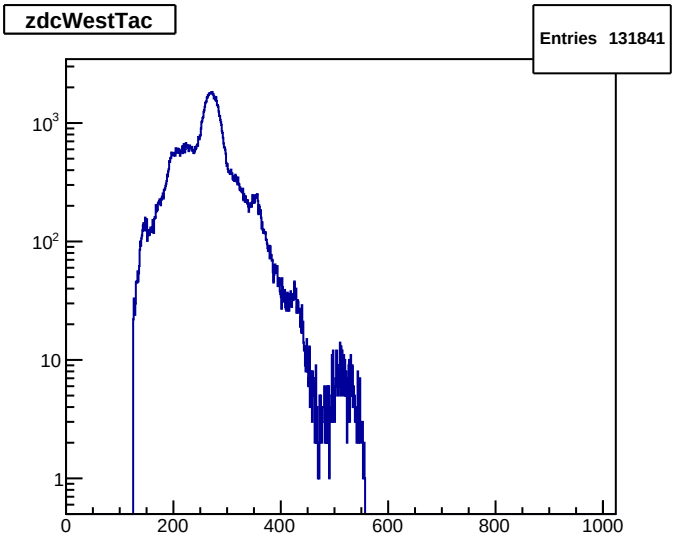

vpdWestNHitsVsSimu
Entries 310

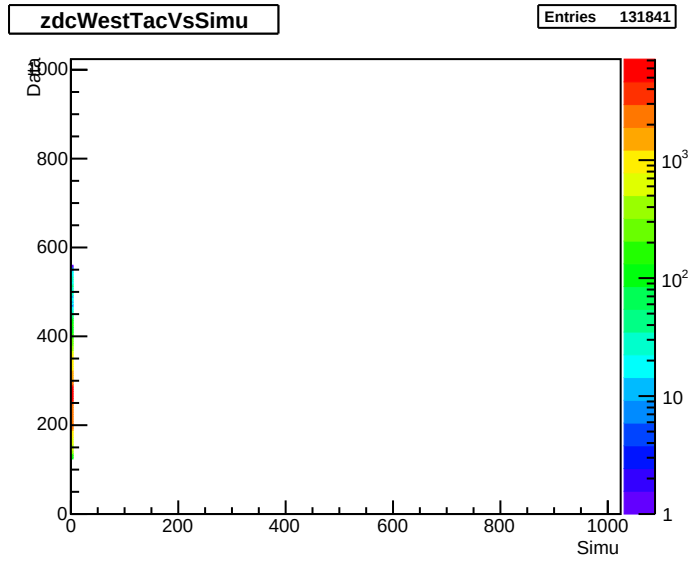

vpdWestTacSum
Entries 131841

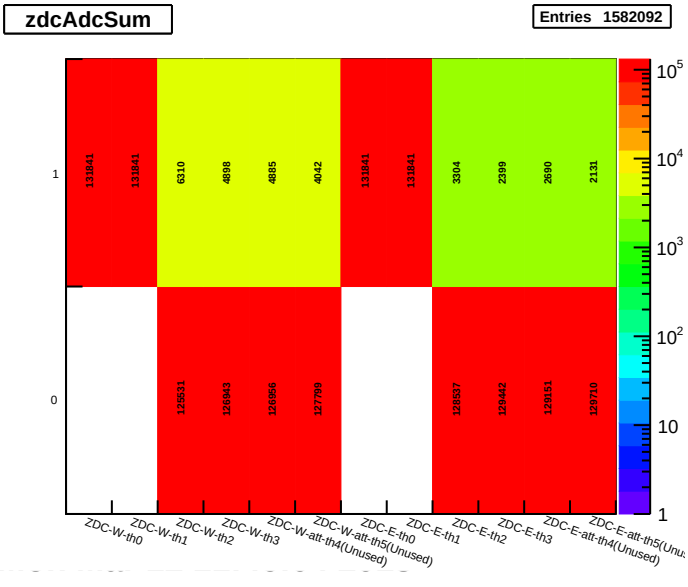

vpdWestTacSumVsSimu
Entries 310
Data
Simu

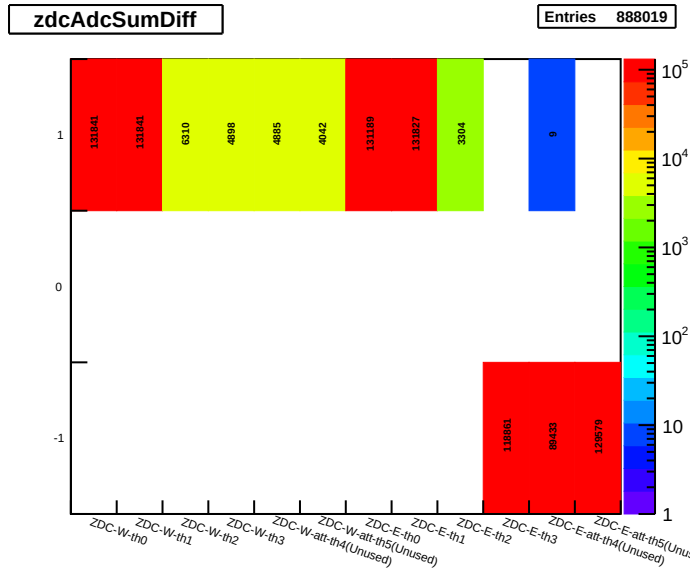

zdcEastTac
Entries 131841

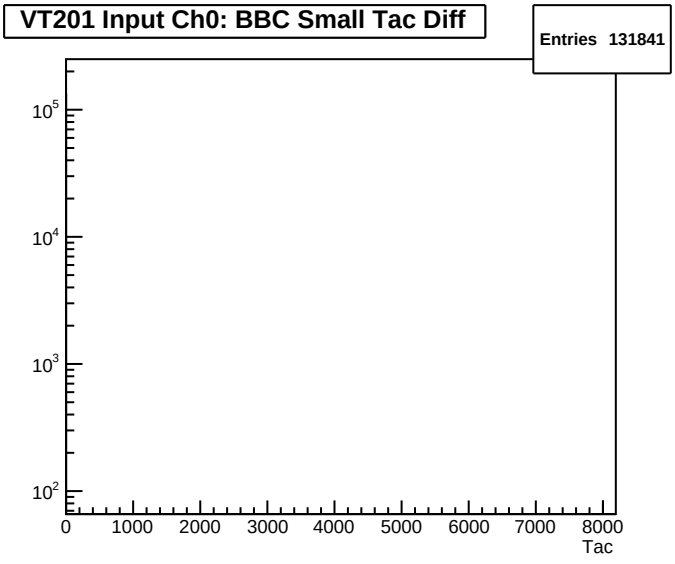

zdcEastTacVsSimu
Entries 1386
Data
Simu

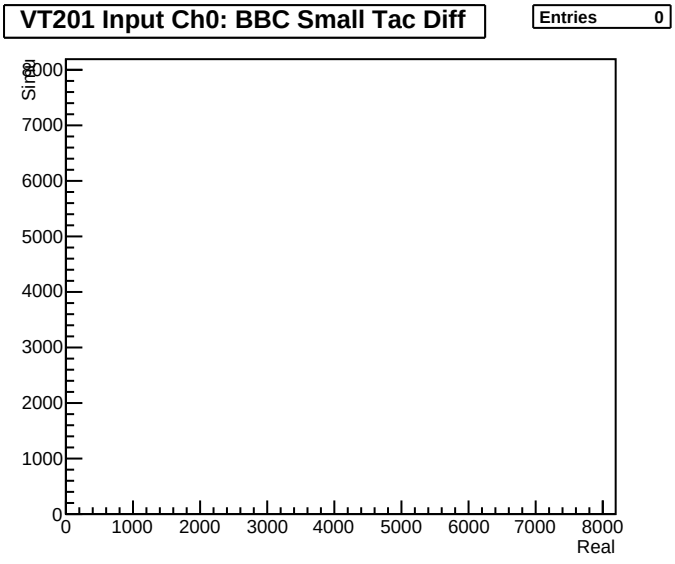

zdcWestTac
Entries 131841

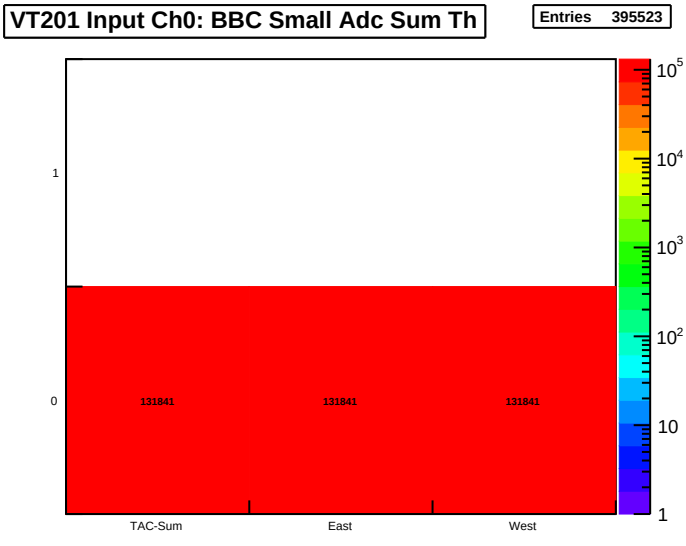

zdcWestTacVsSimu
Entries 131841
Data
Simu

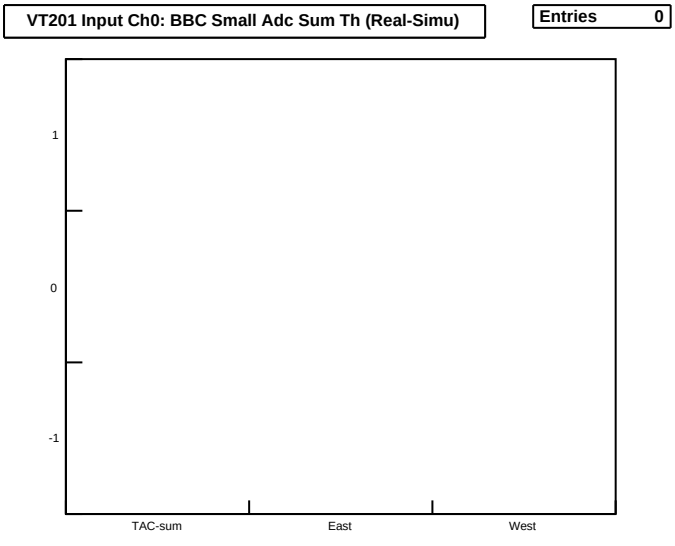

zdcAdcSum
Entries 1582092
131841
131841
6310
4898
4885
4042
131841
131841
3304
2399
2690
2131
125531
126943
126856
127799
128537
129442
129151
129710
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

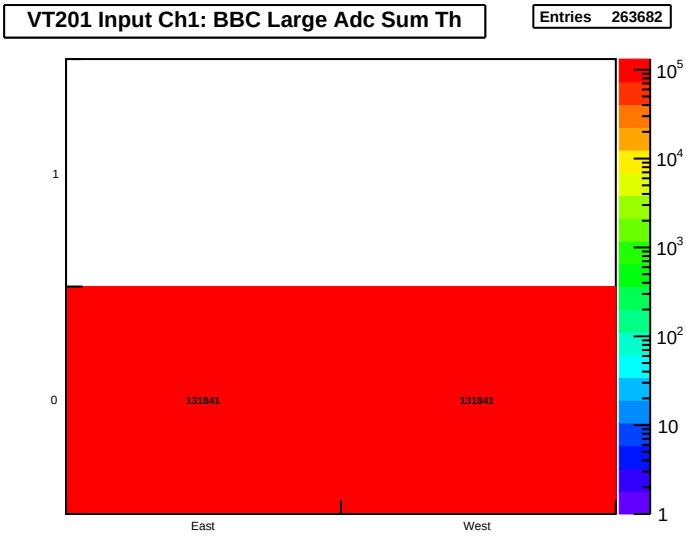

zdcAdcSumDiff
Entries 888019
131841
131841
6310
4898
4885
4042
131189
131827
3304
9
118861
89433
126579
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

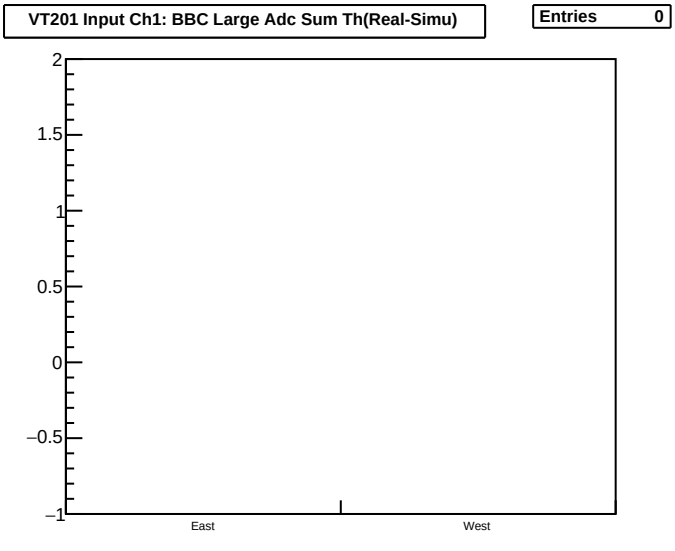

VT201 Input Ch0: BBC Small Tac Diff
Entries 131841
Tac


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

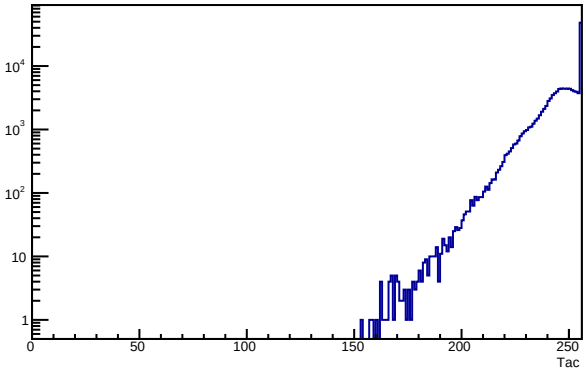

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 395523
131841
131841
131841
TAC-Sum
East
West


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

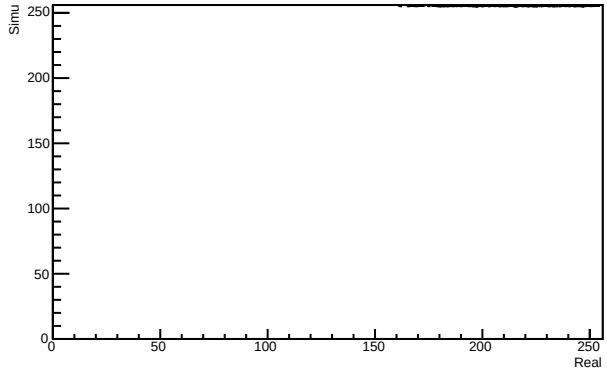

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 263682
131841
131841
East
West


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

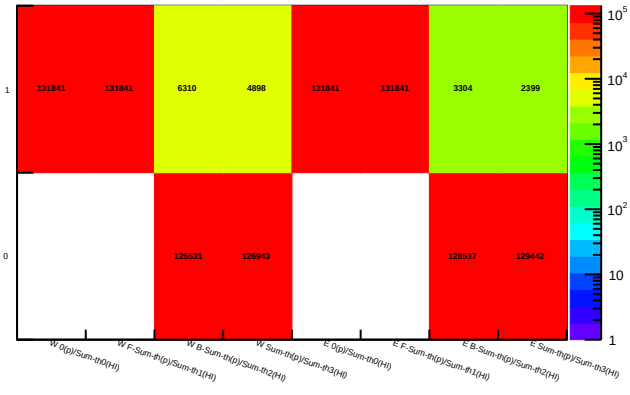
VT201 Input Ch2: ZDC Tac Diff



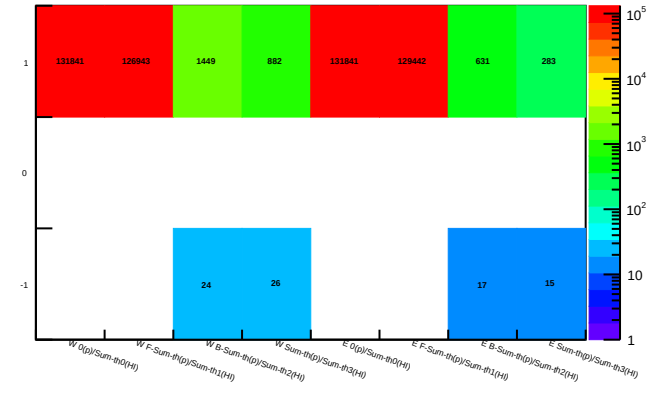
VT201 Input Ch2: ZDC Tac Diff



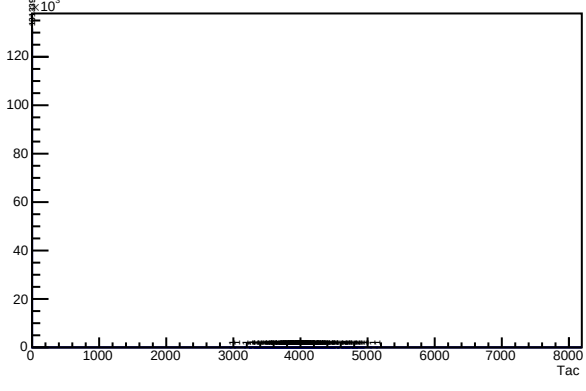
VT201 Input Ch2: ZDC Adc Sum Th



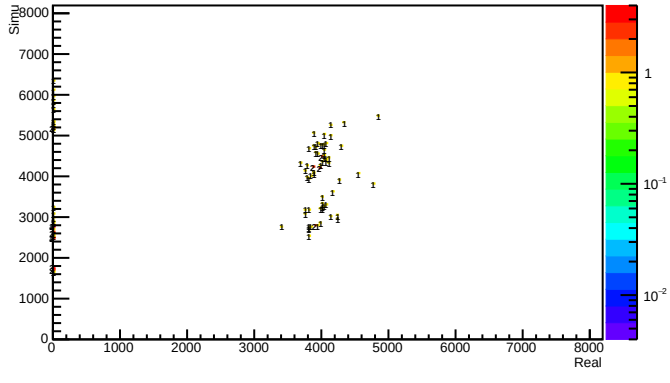
VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)



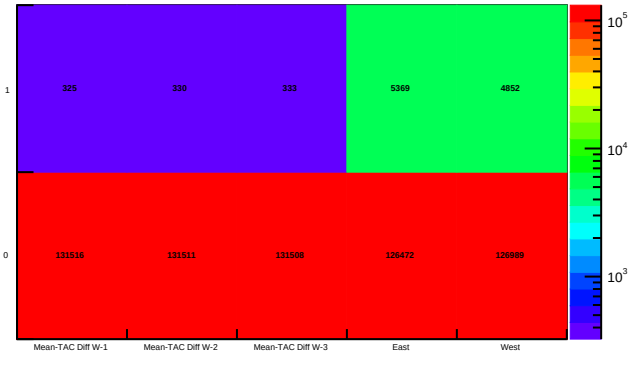
VT201 Input Ch4: VPD Tac Diff



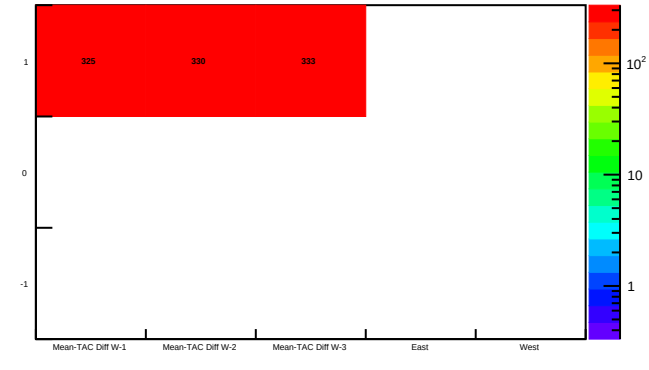
VT201 Input Ch4: VPD Tac Diff

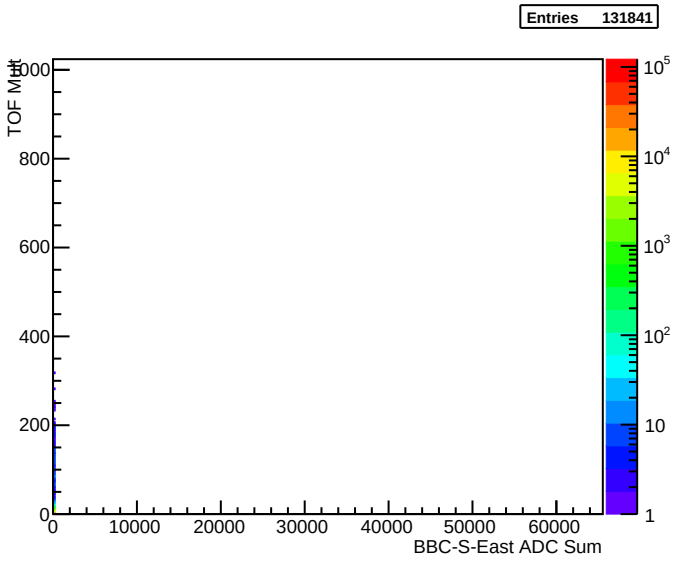


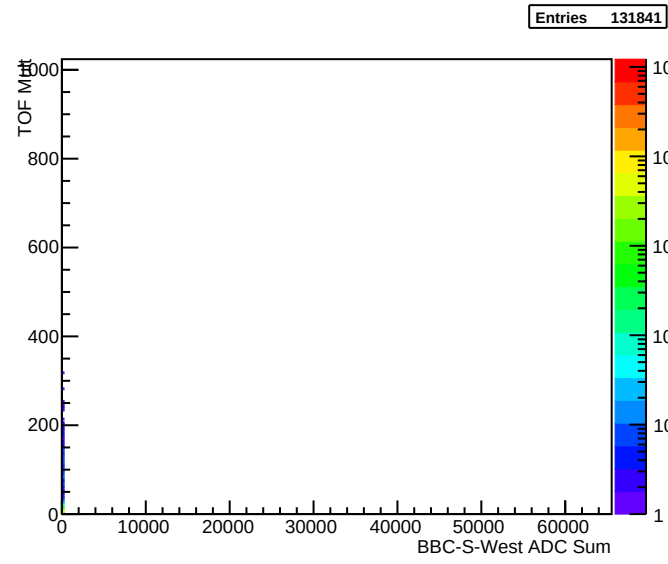
VT201 Input Ch4: VPD Adc Sum Th

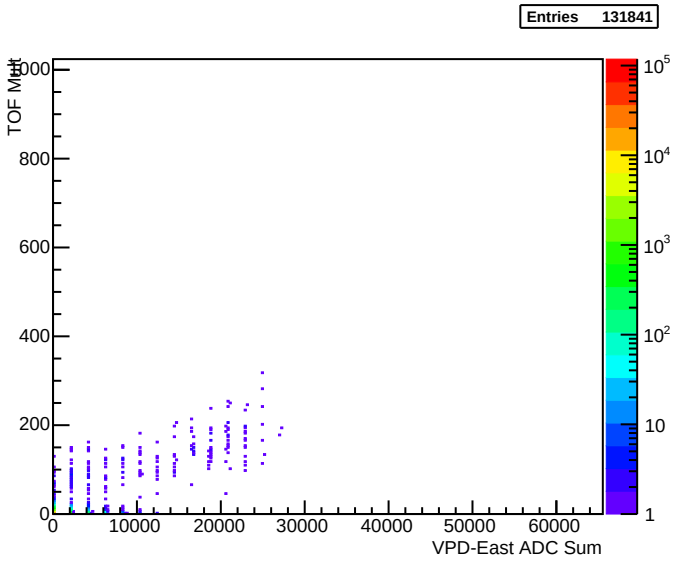


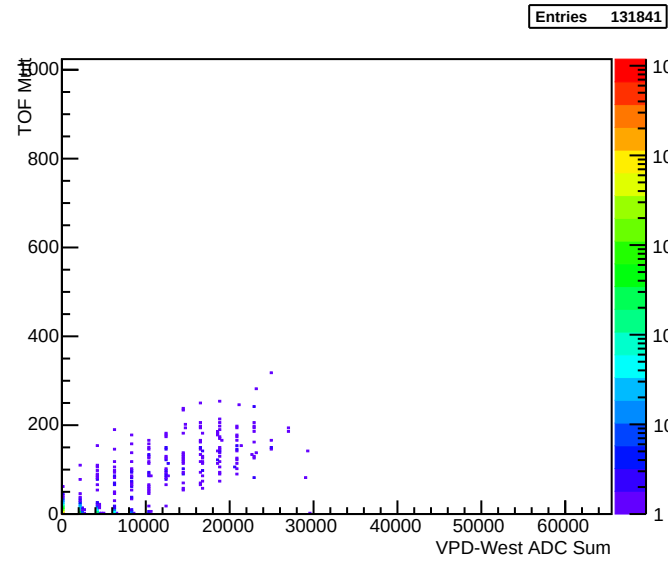
VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)

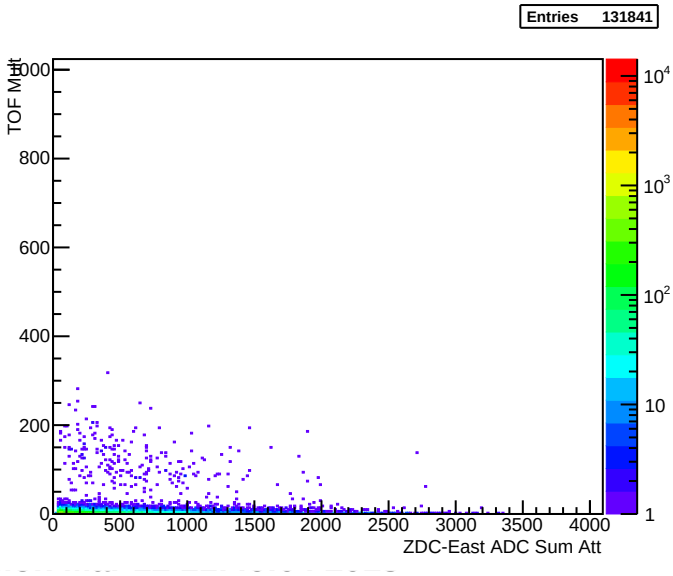


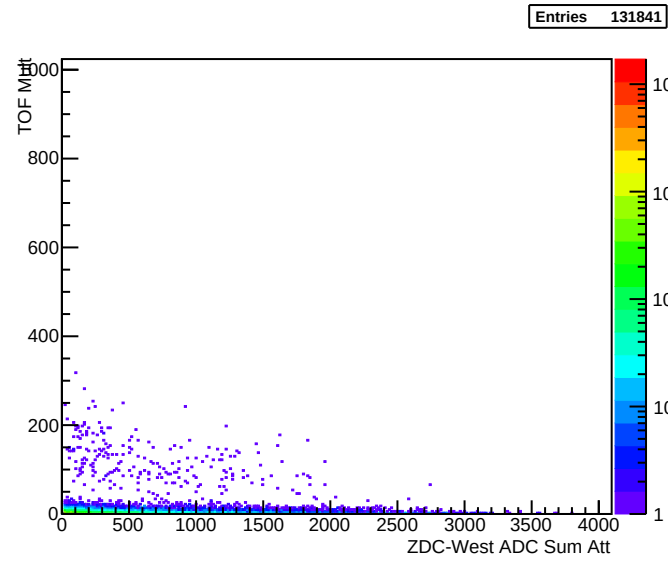

Entries 131841
TOF Mult
BBC-S-East ADC Sum

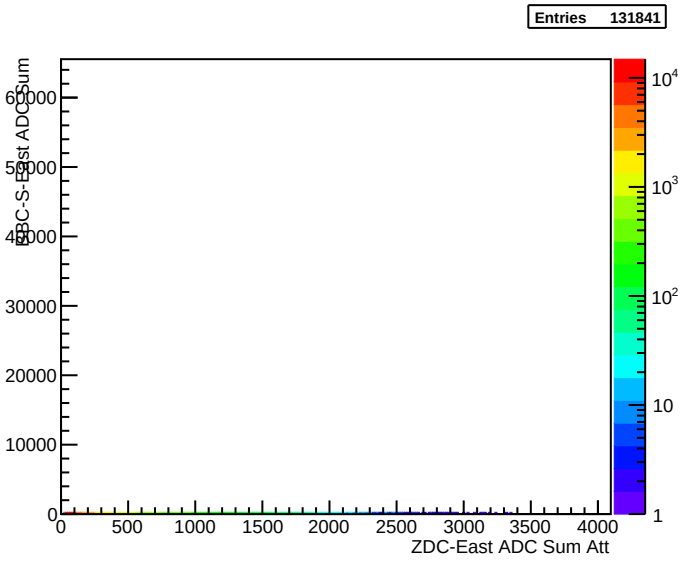

Entries 131841
TOF Mult
BBC-S-West ADC Sum

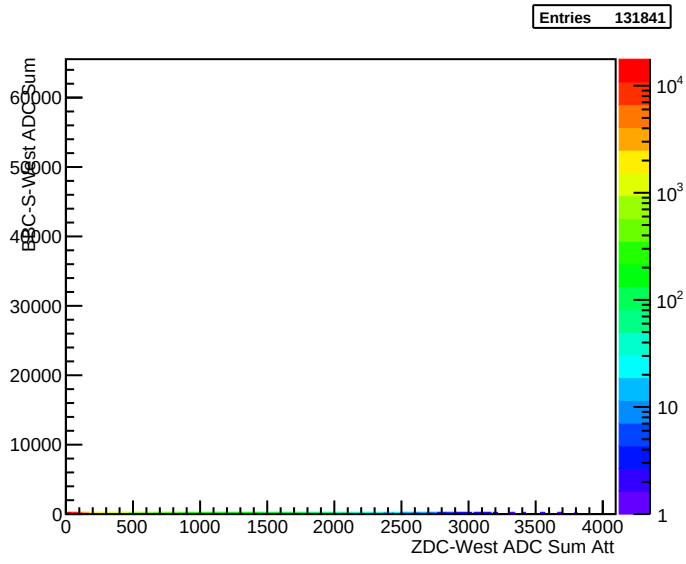

Entries 131841
TOF Mult
VPD-East ADC Sum

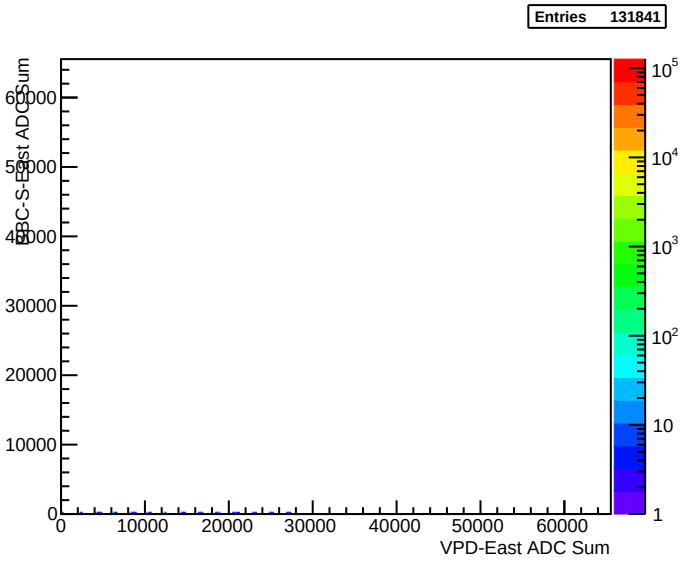

Entries 131841
TOF Mult
VPD-West ADC Sum

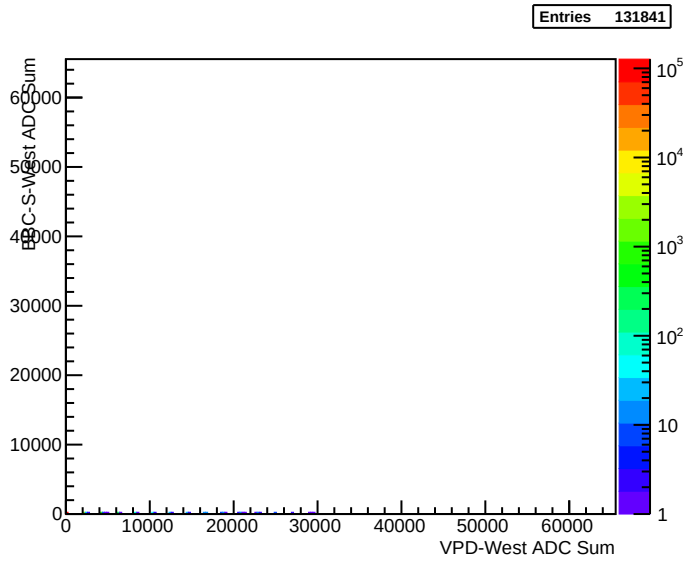

Entries 131841
TOF Mult
ZDC-East ADC Sum Att

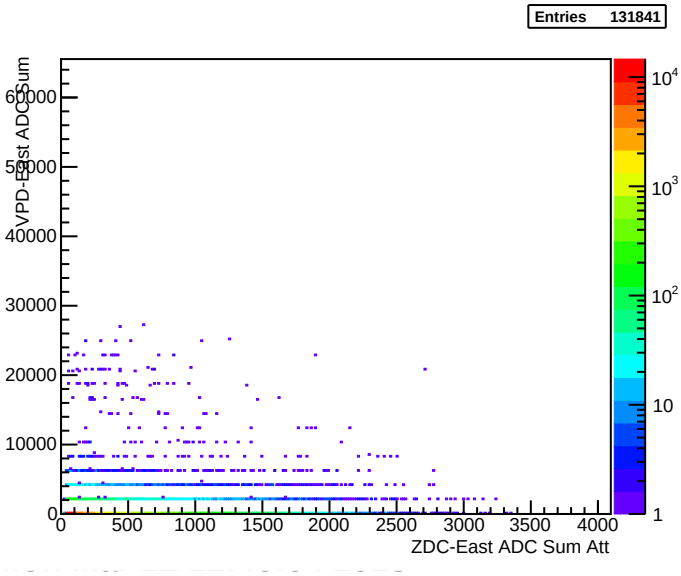

Entries 131841
TOF Mult
ZDC-West ADC Sum Att

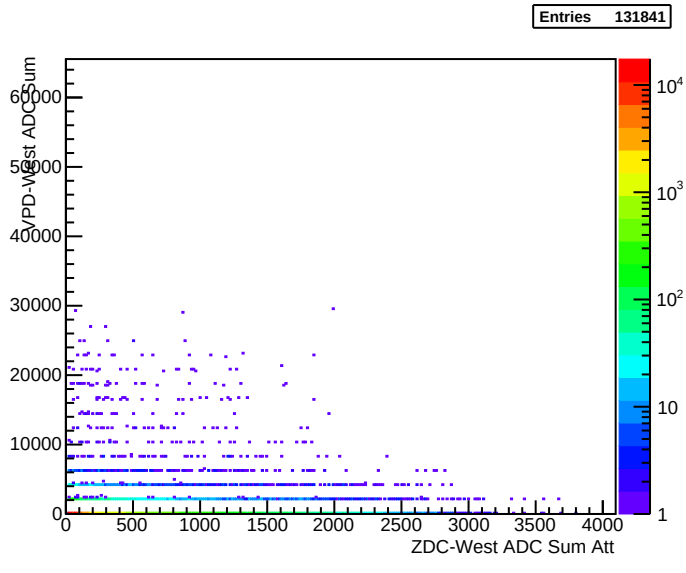

Entries 131841
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

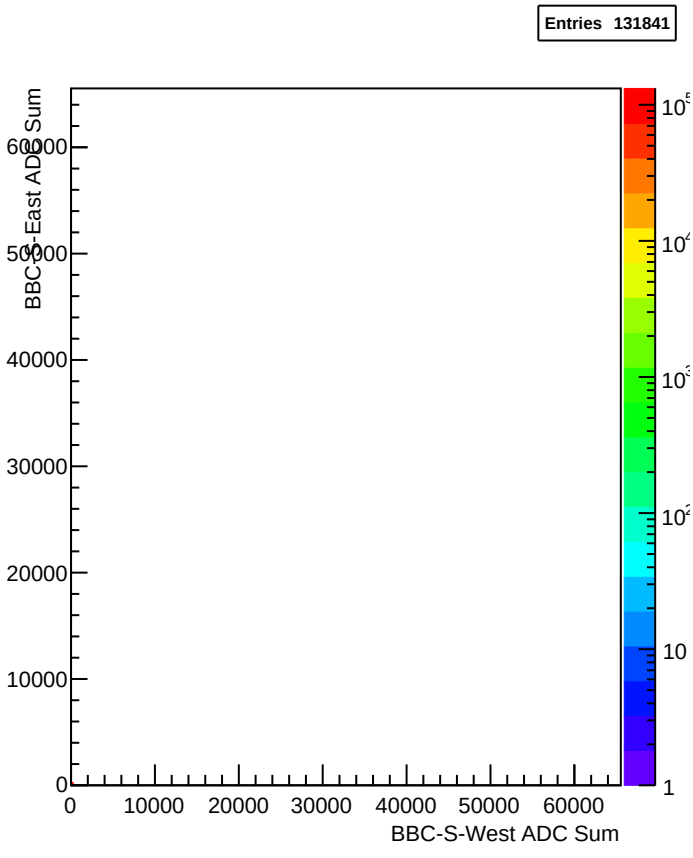

Entries 131841
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

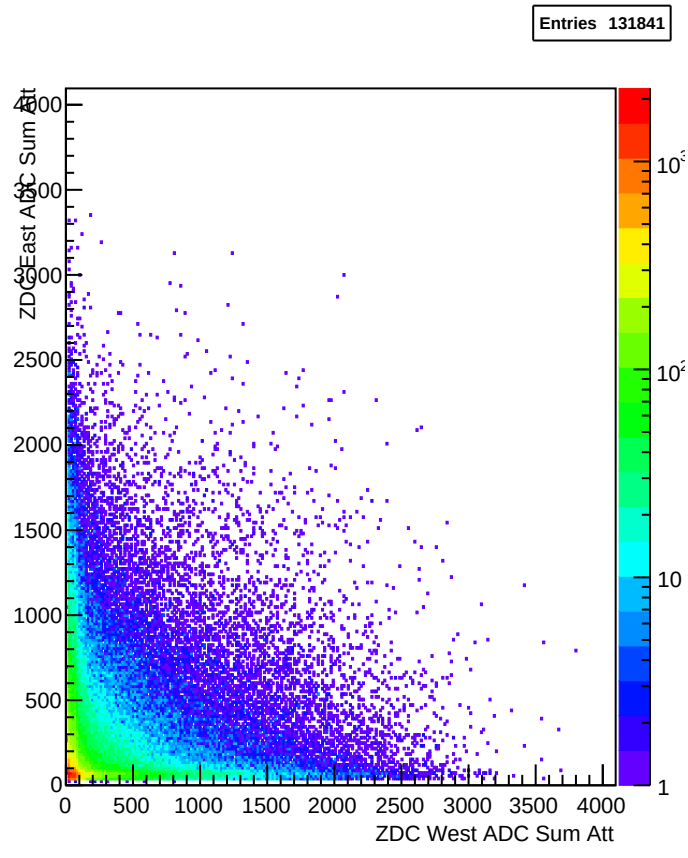

Entries 131841
BBC-S-East ADC Sum
VPD-East ADC Sum

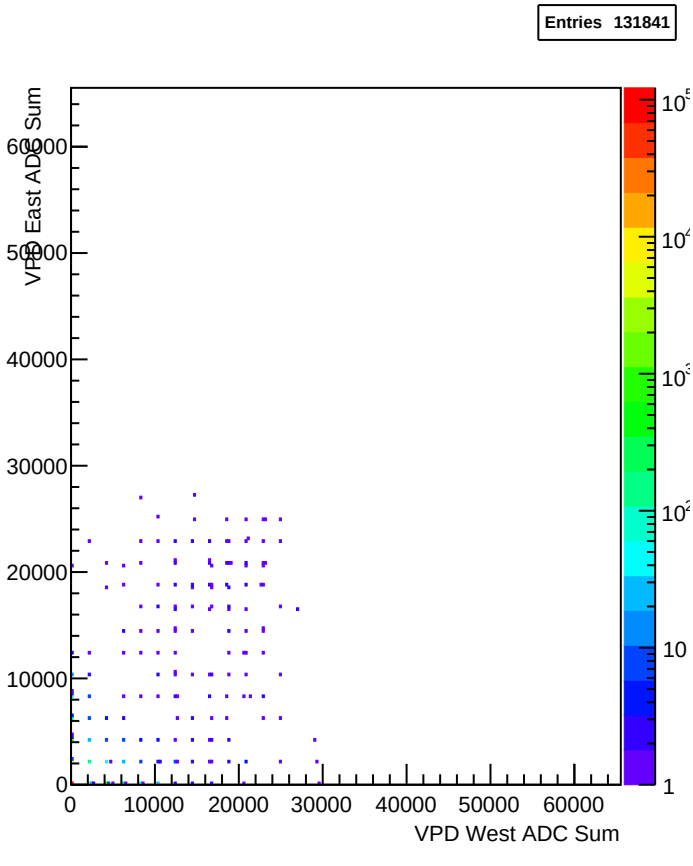

Entries 131841
BBC-S-West ADC Sum
VPD-West ADC Sum

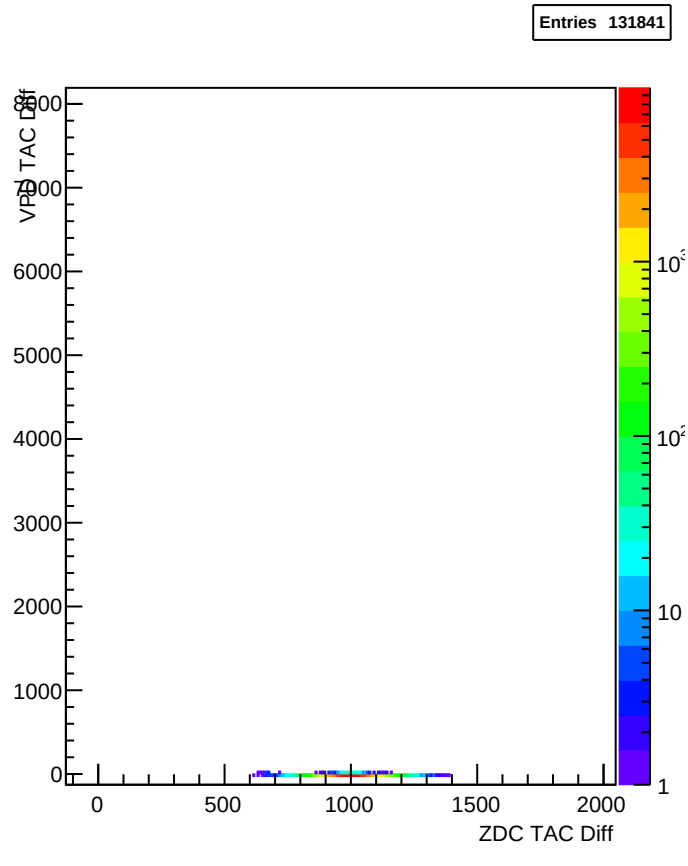

Entries 131841
VPD-East ADC Sum
ZDC-East ADC Sum Att

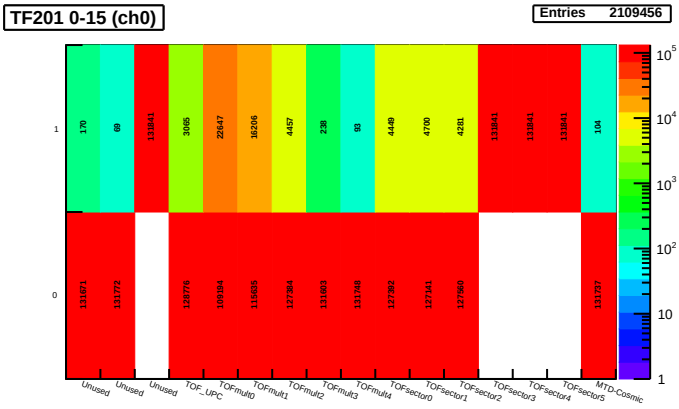

Entries 131841
VPD-West ADC Sum
ZDC-West ADC Sum Att

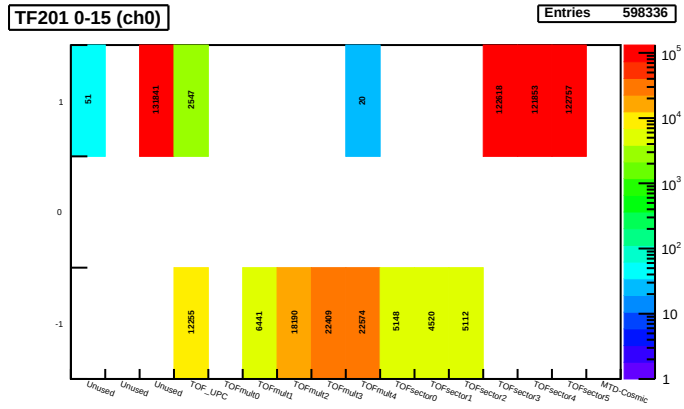

Entries 131841
BBC-S-East ADC Sum
BBC-S-West ADC Sum

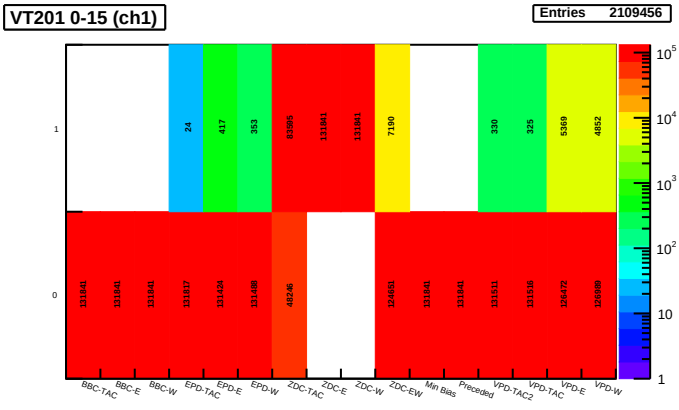

Entries 131841
ZDC East ADC Sum Att
ZDC West ADC Sum Att


Entries 131841
VPD East ADC Sum
VPD West ADC Sum


Entries 131841
VPD TAC Diff
ZDC TAC Diff


TF201 0-15 (ch0)
Entries 2109456
170 69 131841 3065 22647 16206 4457 238 93 4449 4700 4281 131841 131841 131841 104
131671 131772 128776 109184 115635 127384 131603 131749 127392 127141 127560 131737
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 598336
51 131841 2547 20 122518 121853 122757
12255 6441 18390 22409 22574 5148 4520 5112
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic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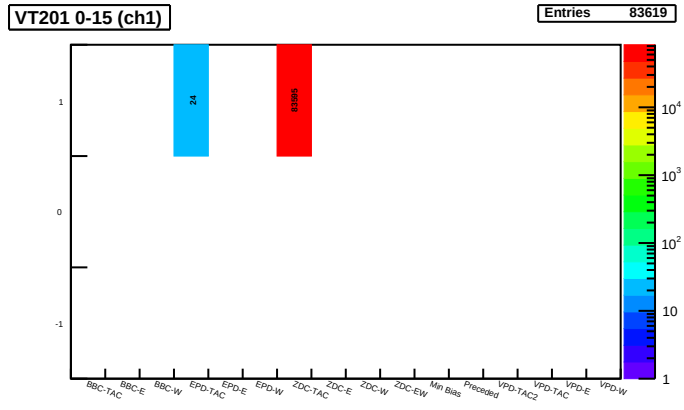
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W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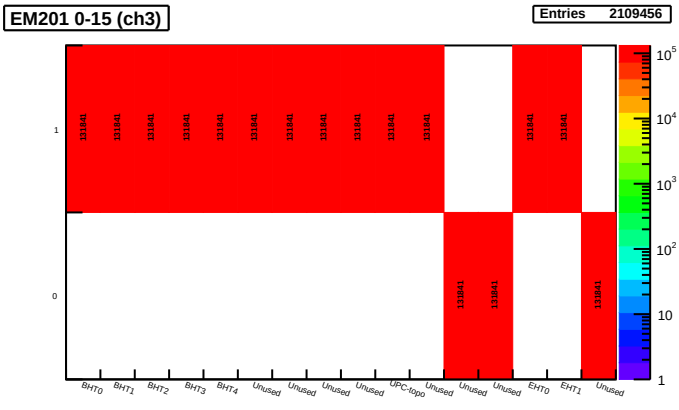
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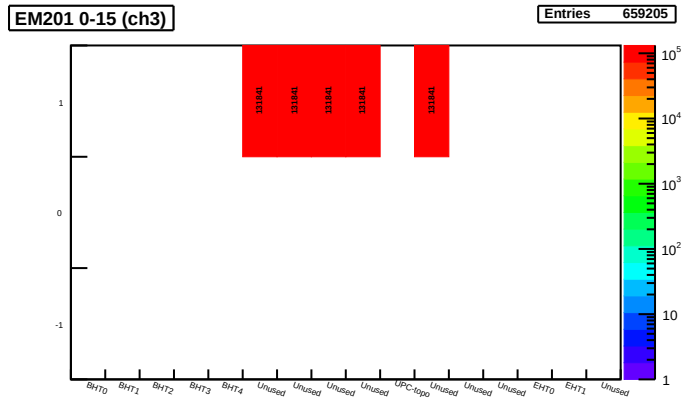
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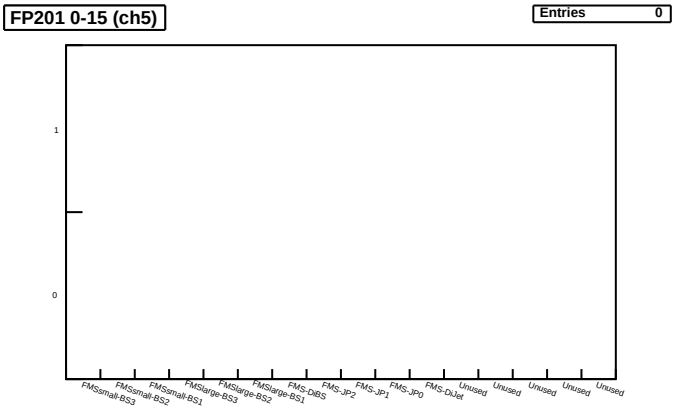
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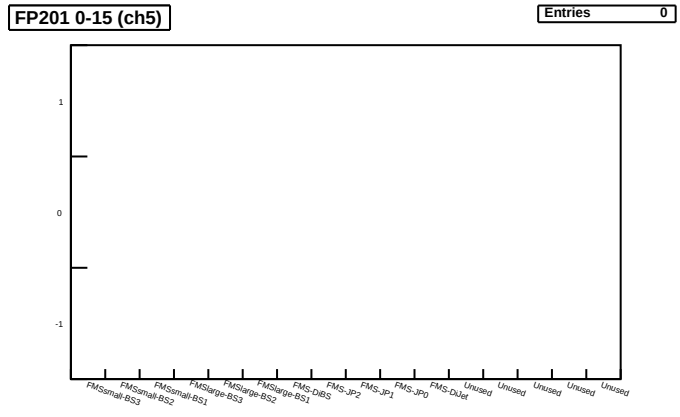
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