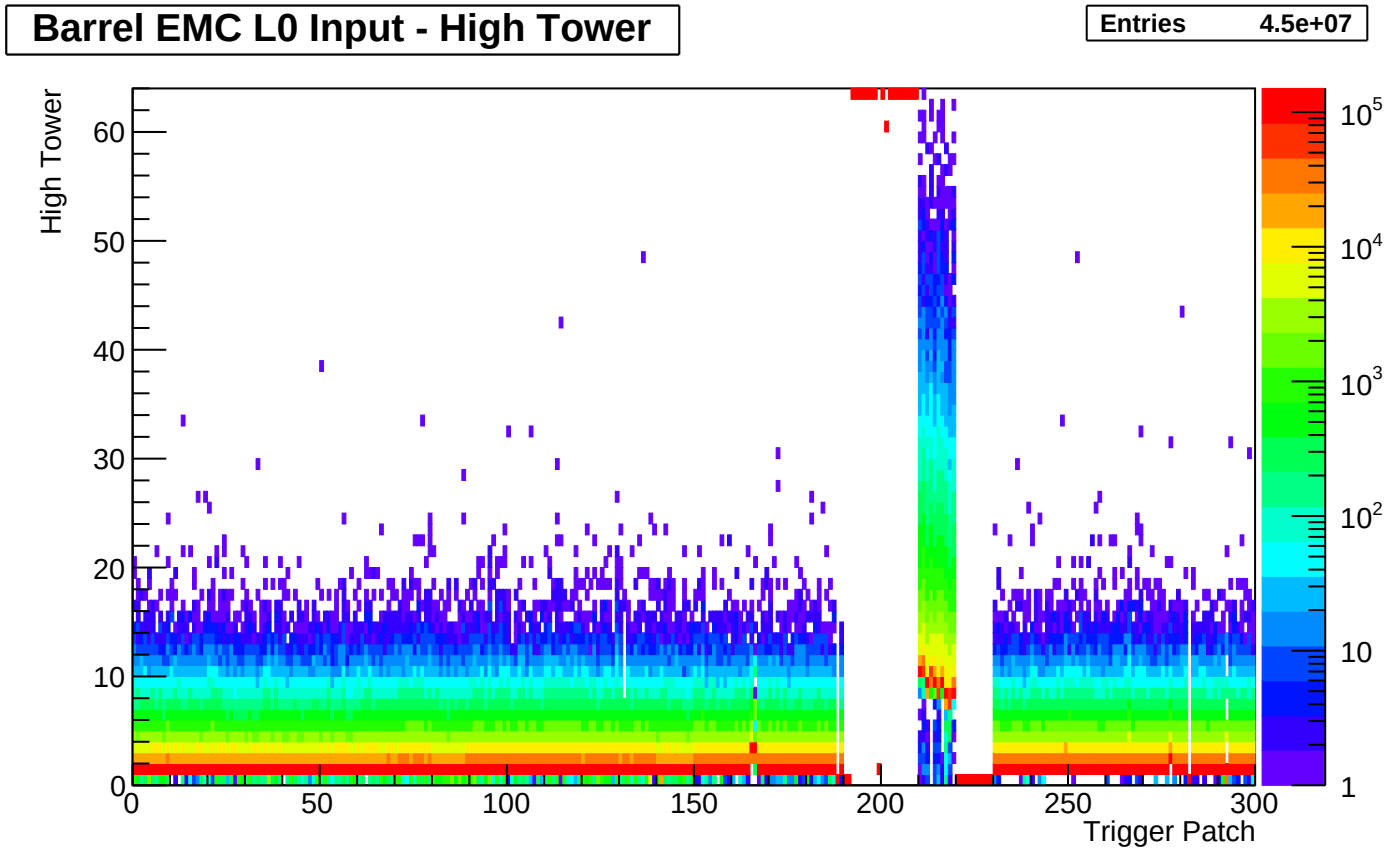
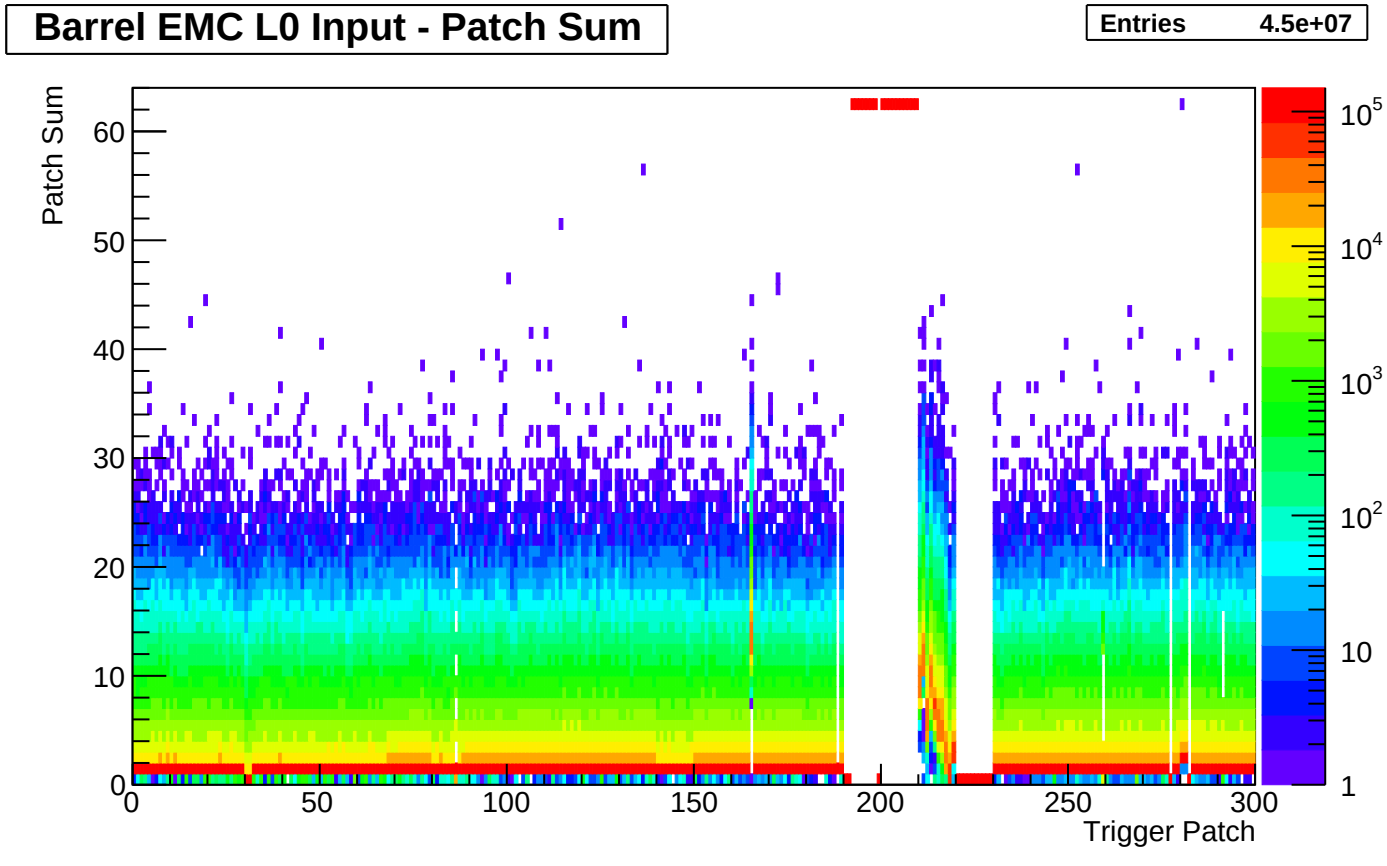
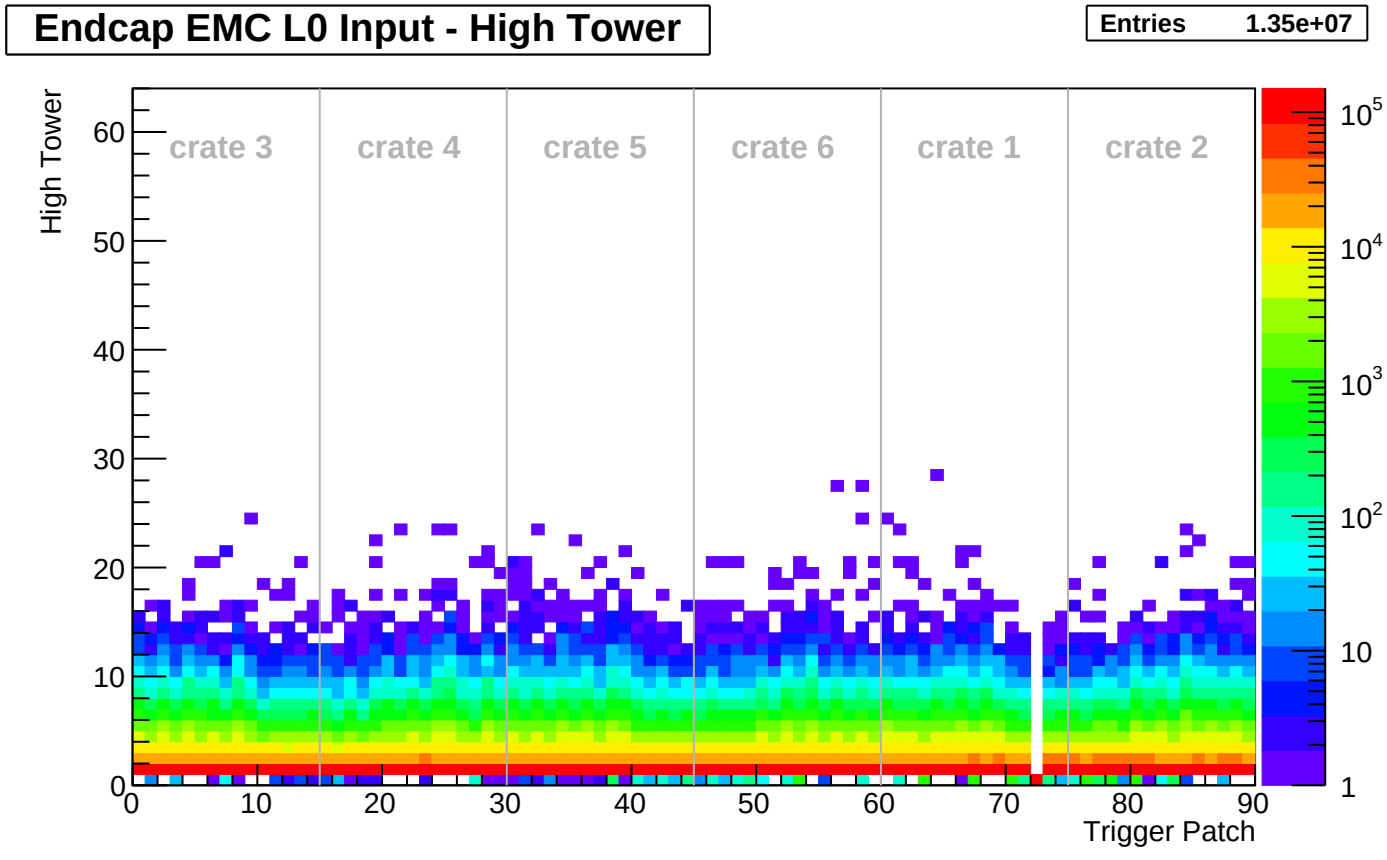
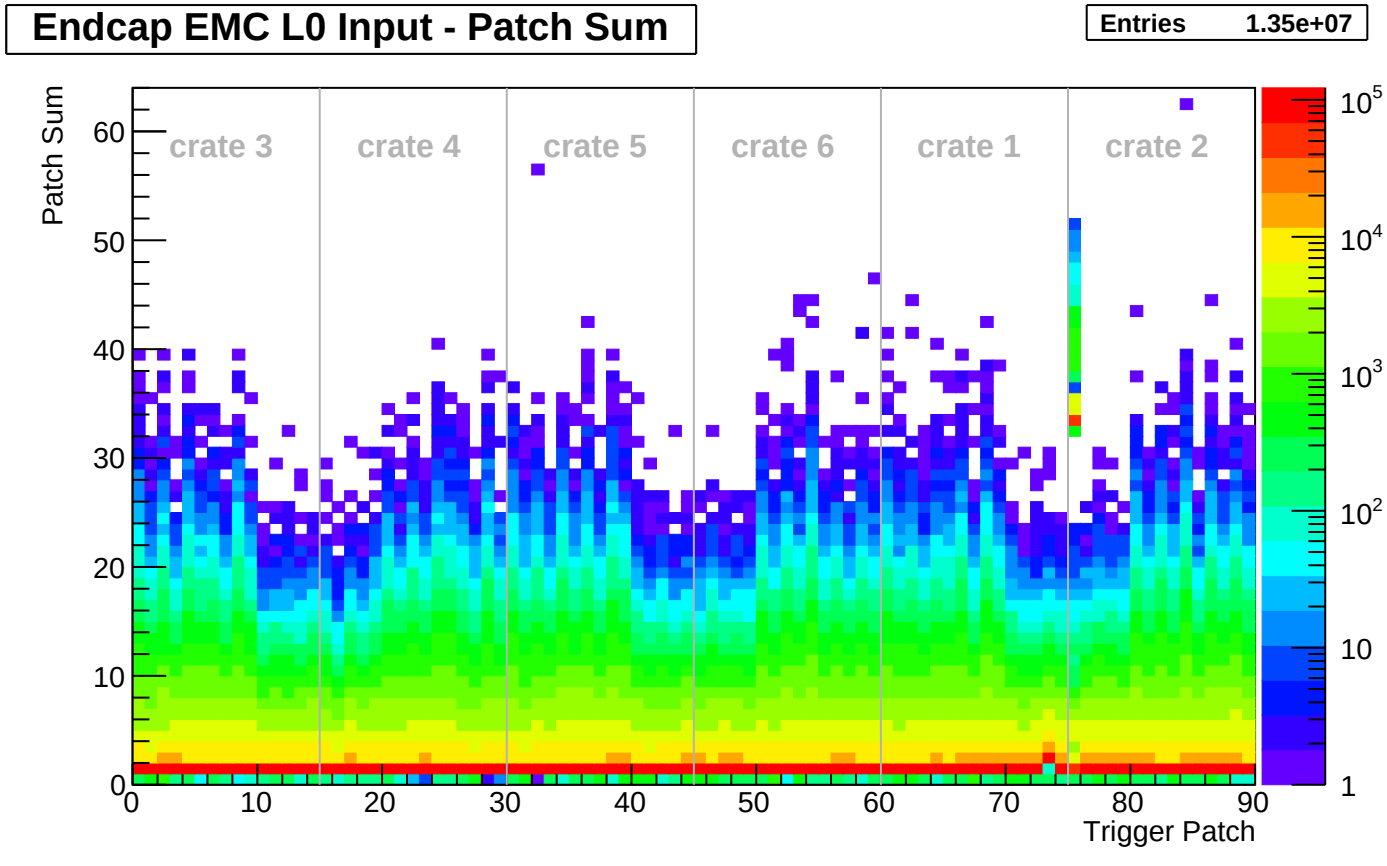
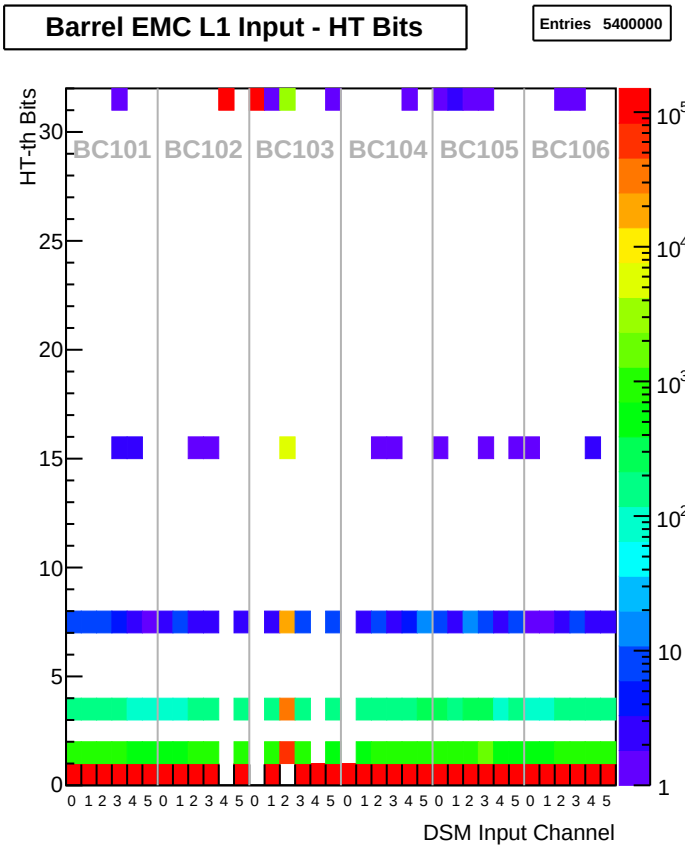
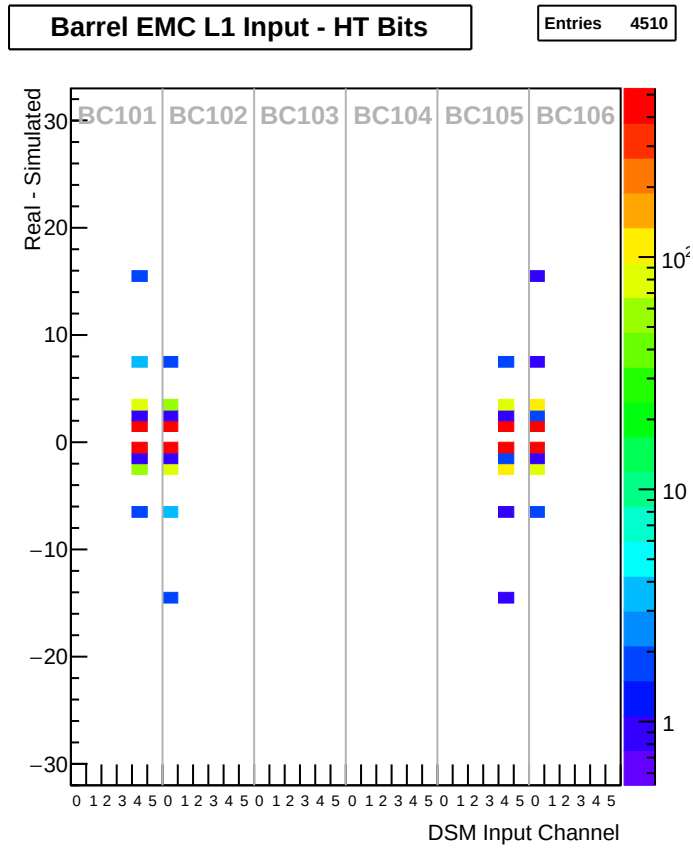

Barrel EMC L0 Input - High Tower
Entries 4.5e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

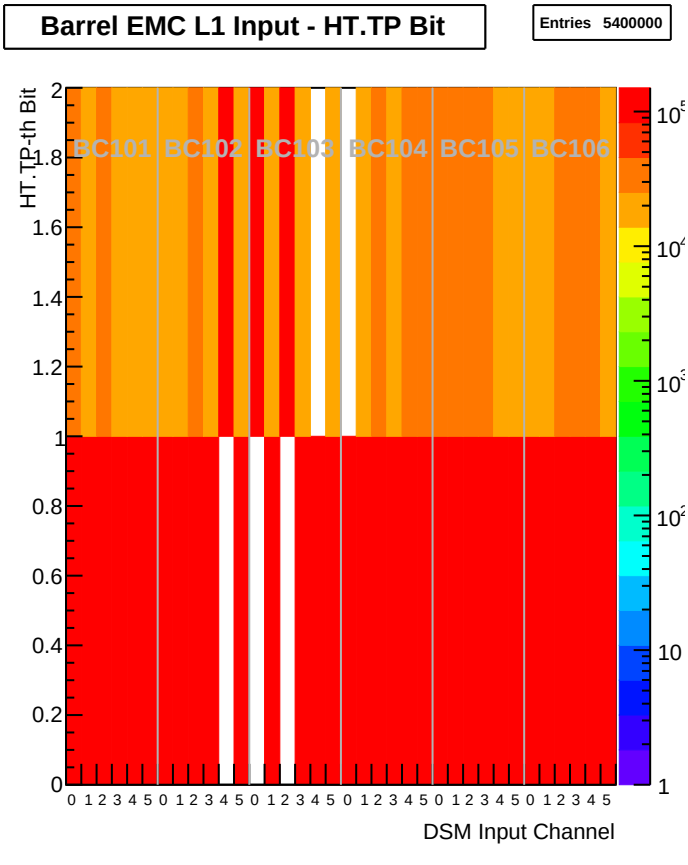

Barrel EMC L0 Input - Patch Sum
Entries 4.5e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

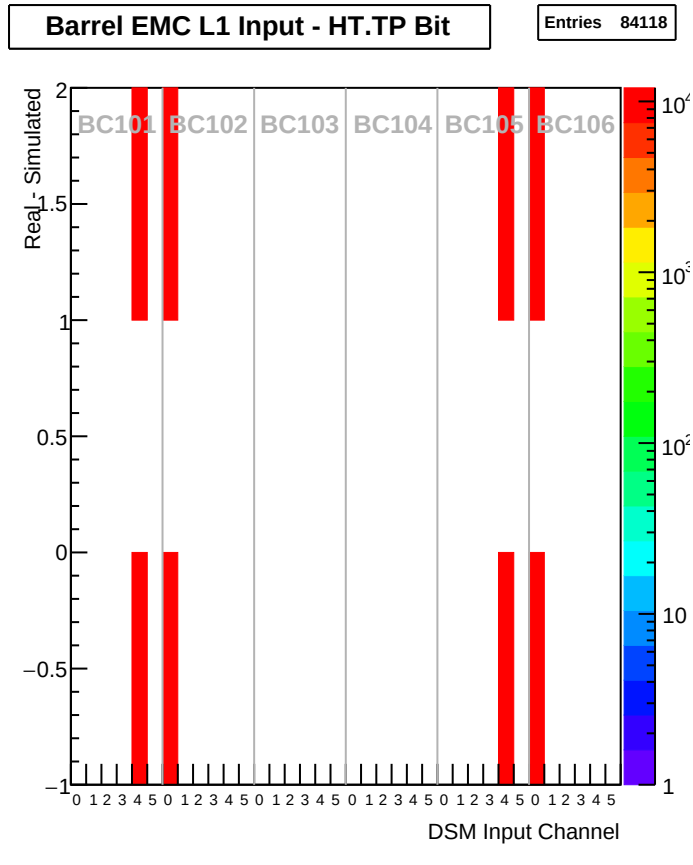

Endcap EMC L0 Input - High Tower
Entries 1.35e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

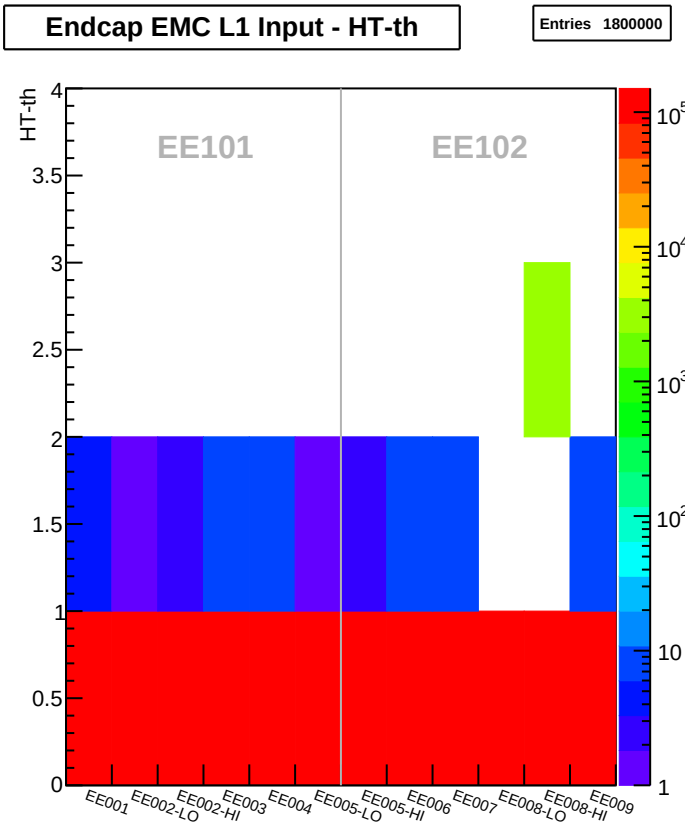

Endcap EMC L0 Input - Patch Sum
Entries 1.35e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

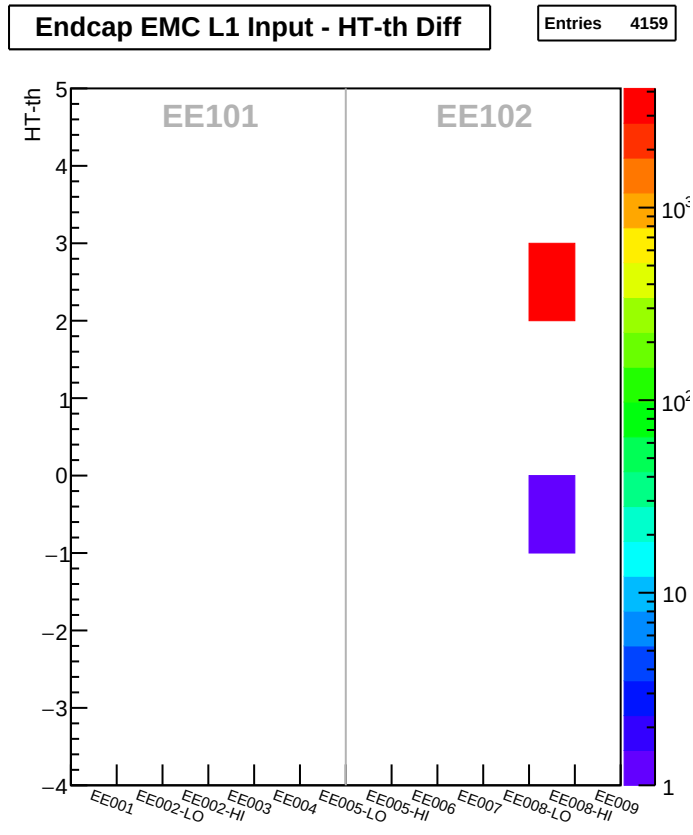

Barrel EMC L1 Input - HT Bits
Entries 5400000
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

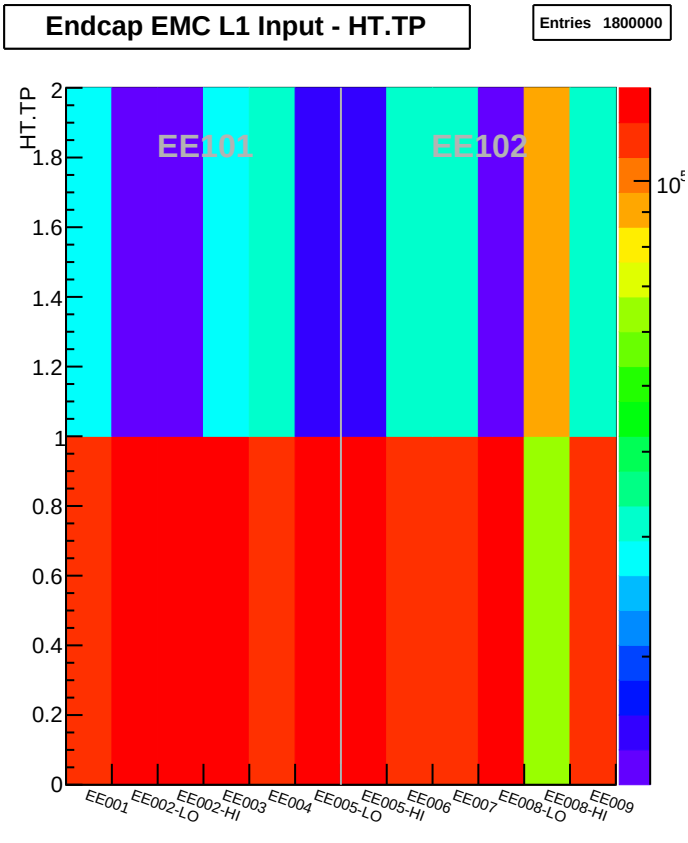

Barrel EMC L1 Input - HT Bits
Entries 4510
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

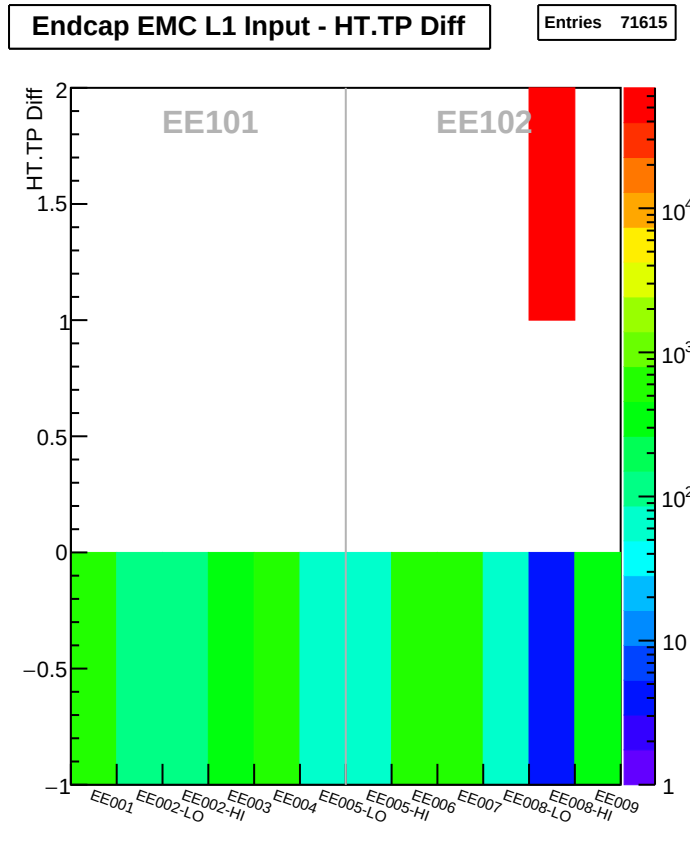

Barrel EMC L1 Input - HT.TP Bit
Entries 5400000
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

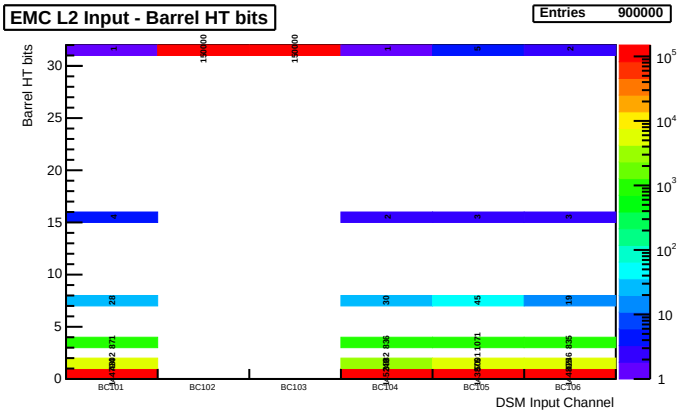

Barrel EMC L1 Input - HT.TP Bit
Entries 84118
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

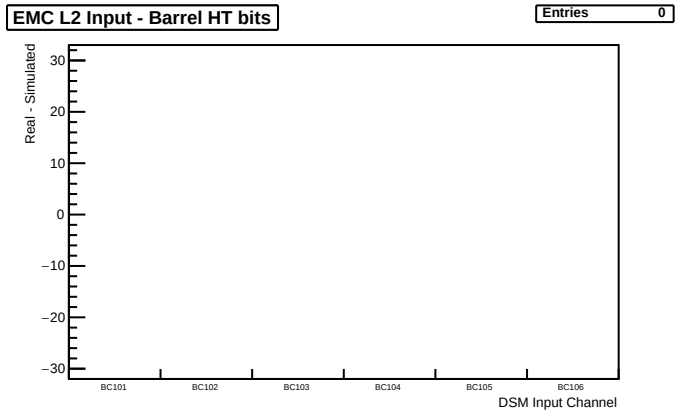

Endcap EMC L1 Input - HT-th
Entries 1800000
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

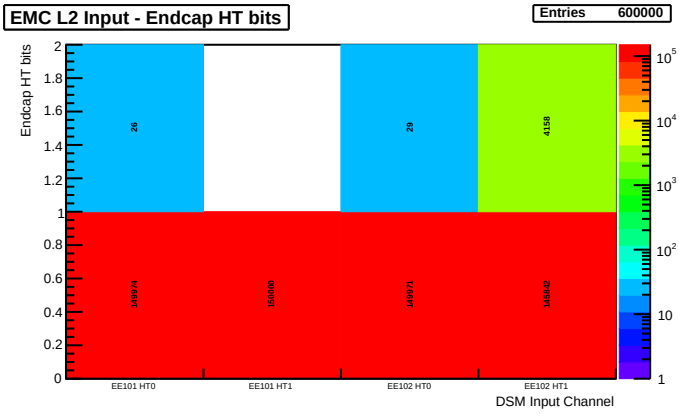

Endcap EMC L1 Input - HT-th Diff
Entries 4159
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

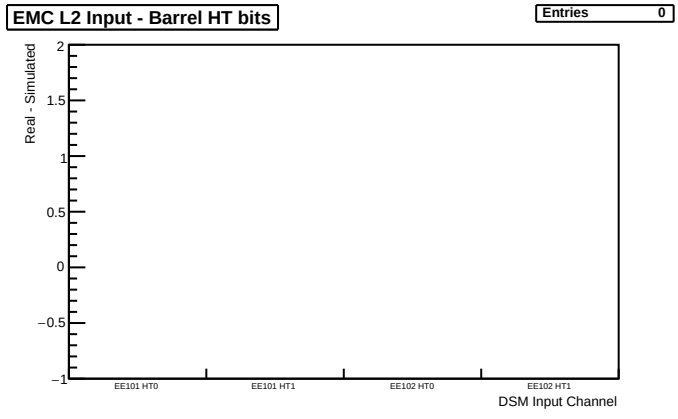

Endcap EMC L1 Input - HT.TP
Entries 1800000
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

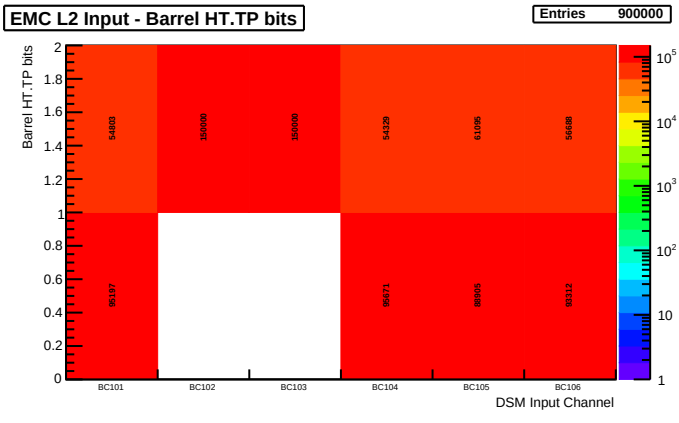

Endcap EMC L1 Input - HT.TP Diff
Entries 71615
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

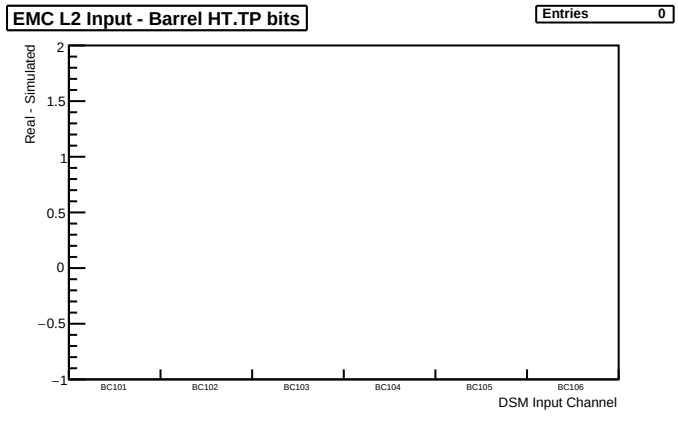

EMC L2 Input - Barrel HT bits
Entries 900000
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

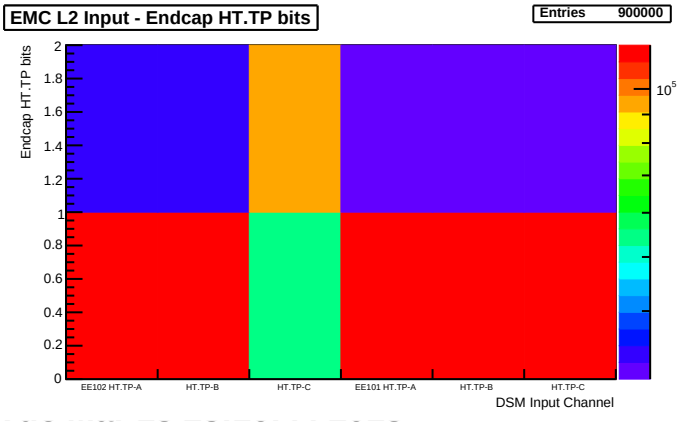

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

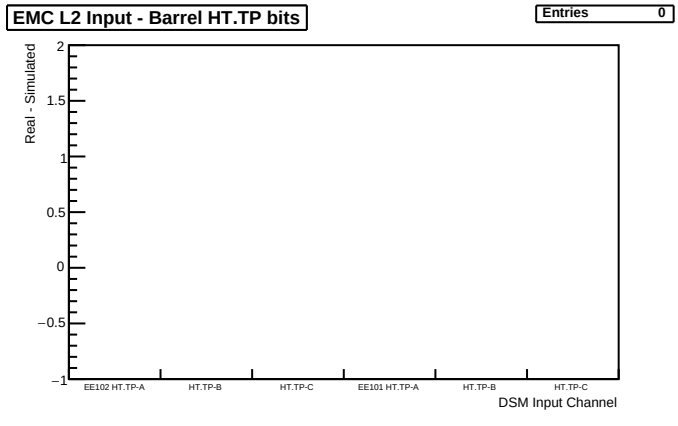

EMC L2 Input - Endcap HT bits
Entries 600000
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

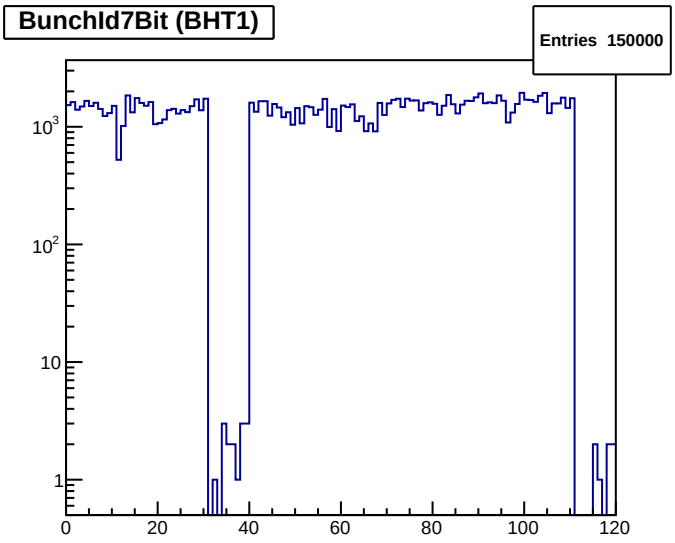

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

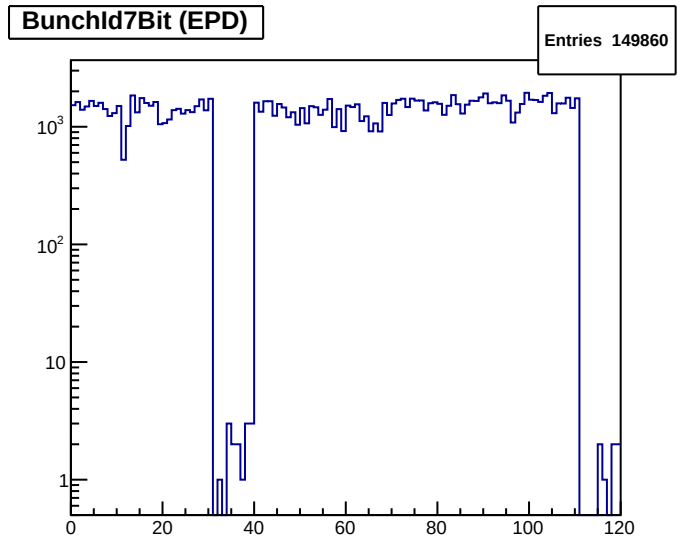

EMC L2 Input - Barrel HT.TP bits
Entries 900000
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

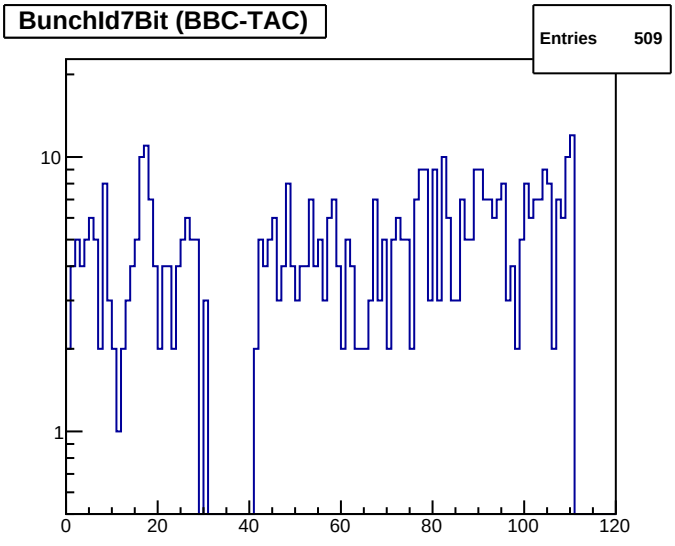

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

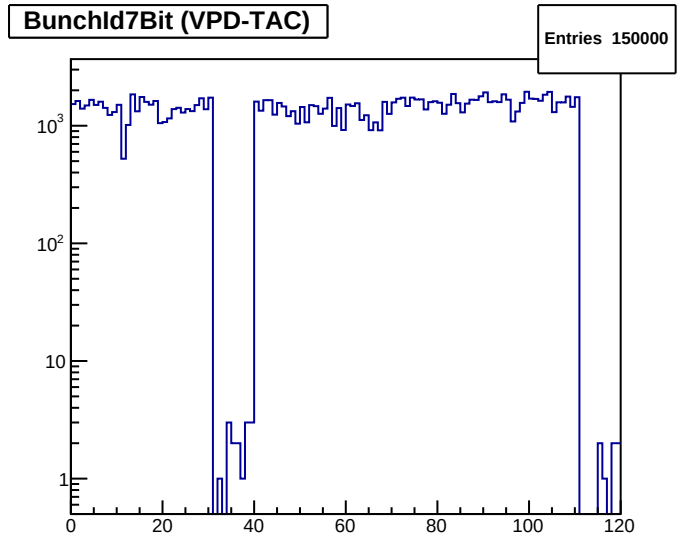

EMC L2 Input - Endcap HT.TP bits
Entries 900000
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

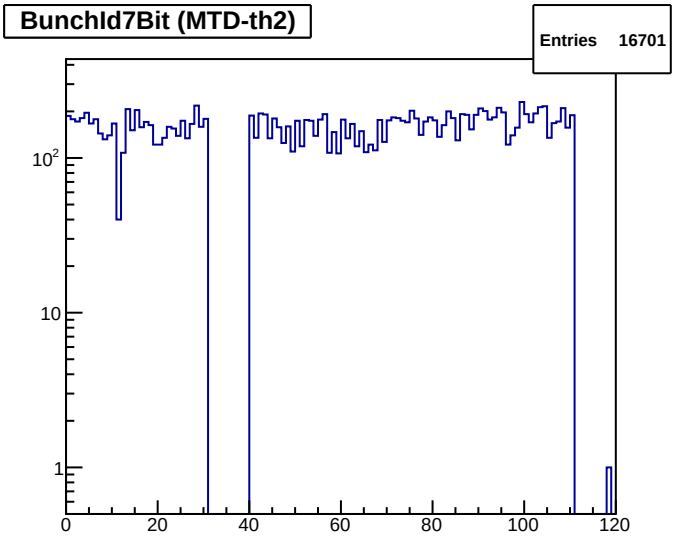

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

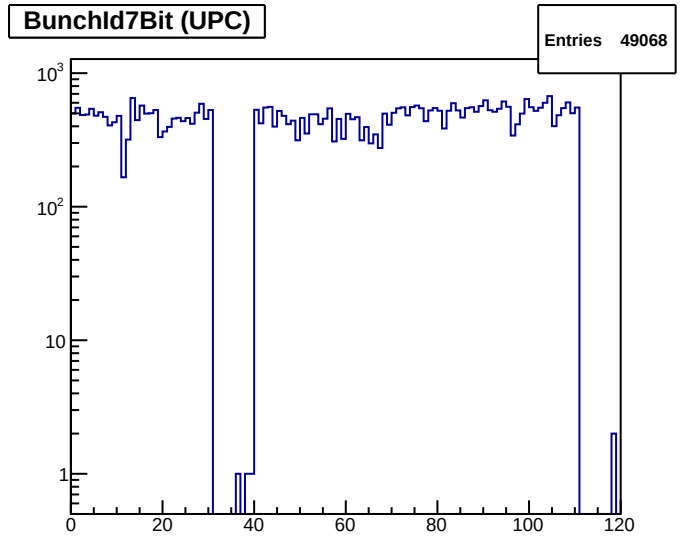

BunchId7Bit (BHT1)
Entries 150000

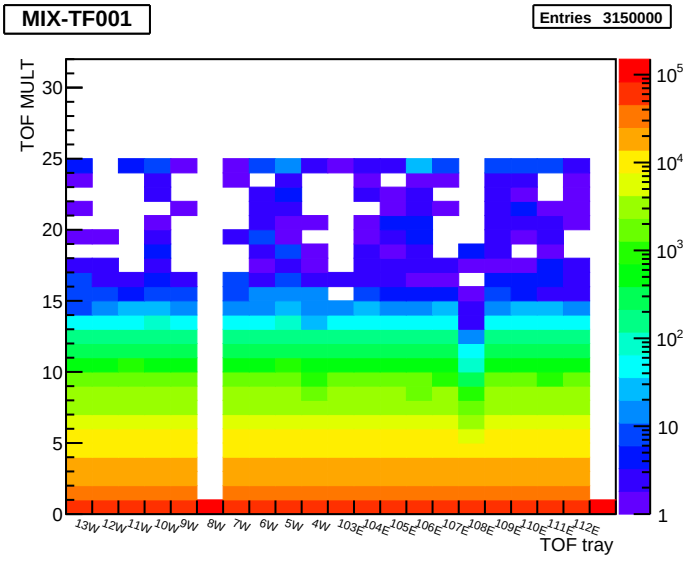

BunchId7Bit (EPD)
Entries 149860

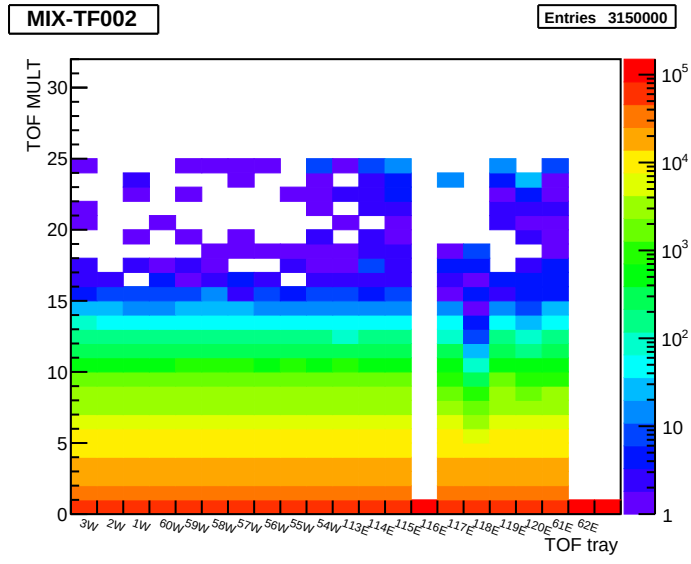

BunchId7Bit (BBC-TAC)
Entries 509

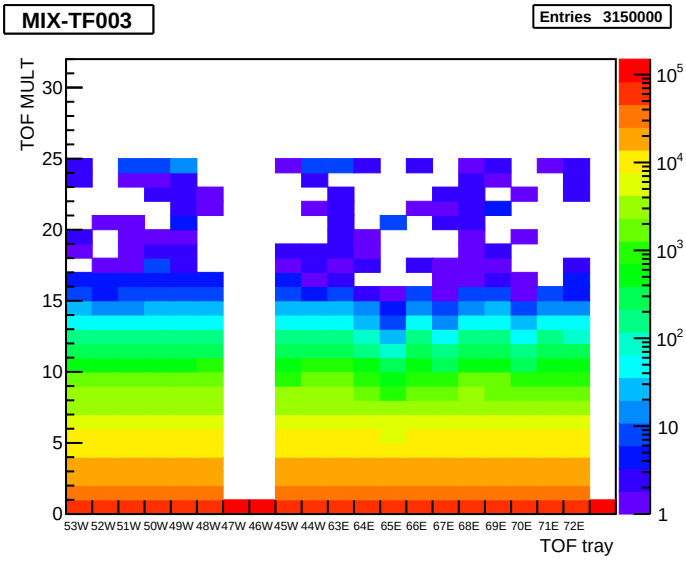

BunchId7Bit (VPD-TAC)
Entries 150000

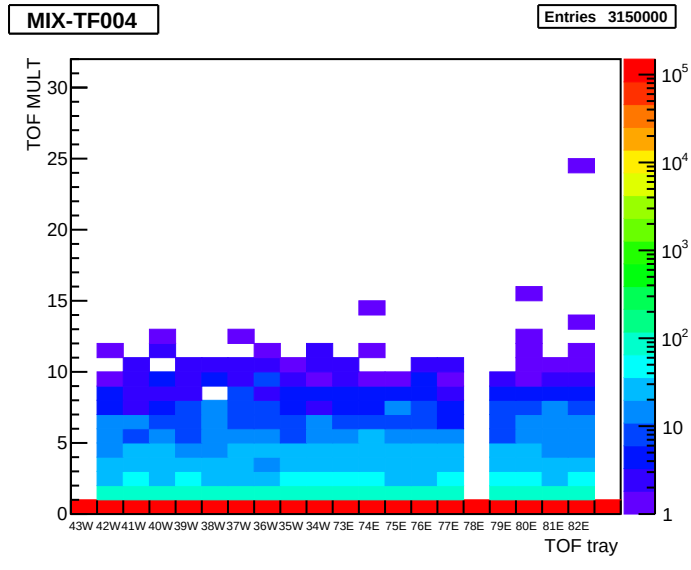

BunchId7Bit (MTD-th2)
Entries 16701

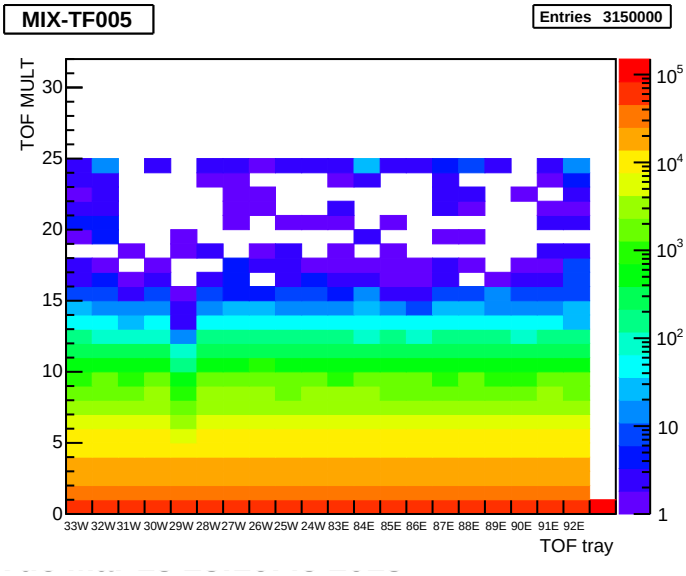

BunchId7Bit (UPC)
Entries 49068

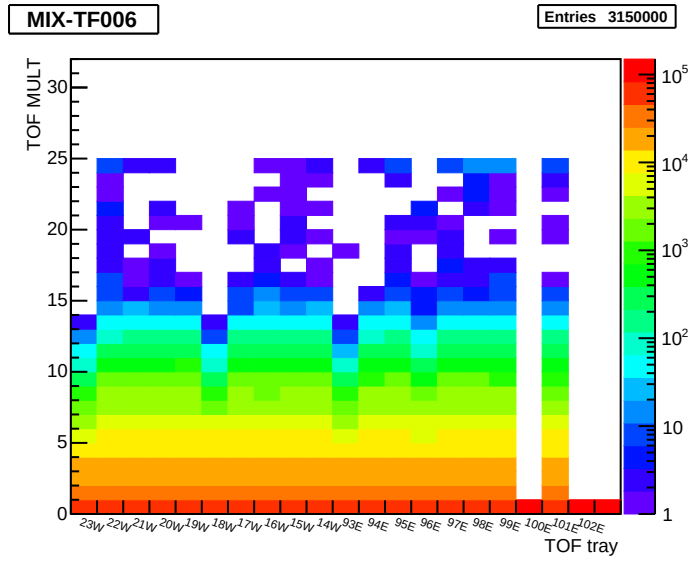

MIX-TF001
Entries 3150000
TOF MULT
TOF tray

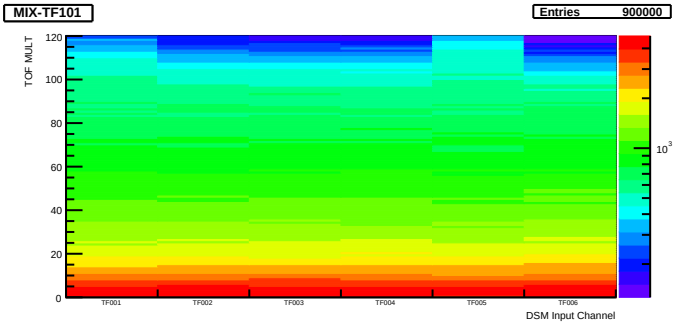

MIX-TF002
Entries 3150000
TOF MULT
TOF tray

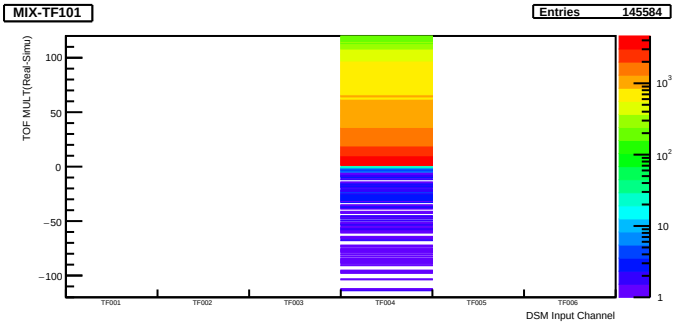

MIX-TF003
Entries 3150000
TOF MULT
TOF tray

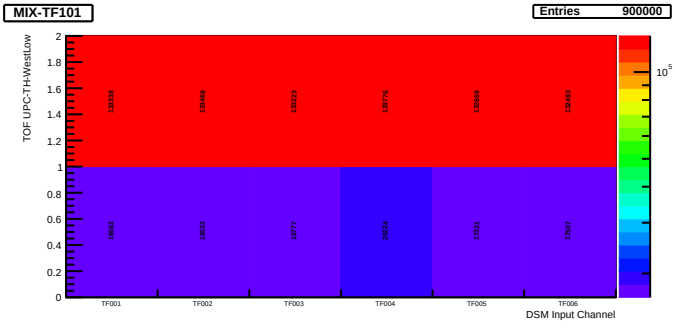

MIX-TF004
Entries 3150000
TOF MULT
TOF tray

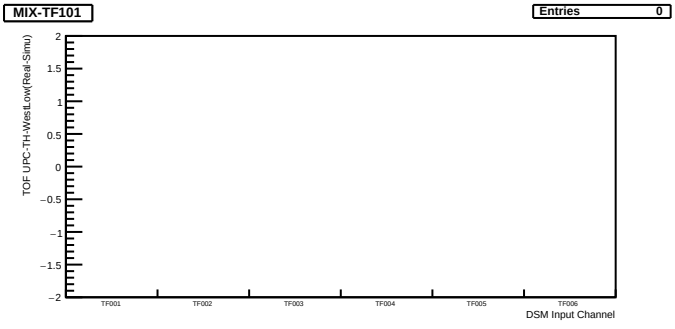

MIX-TF005
Entries 3150000
TOF MULT
TOF tray

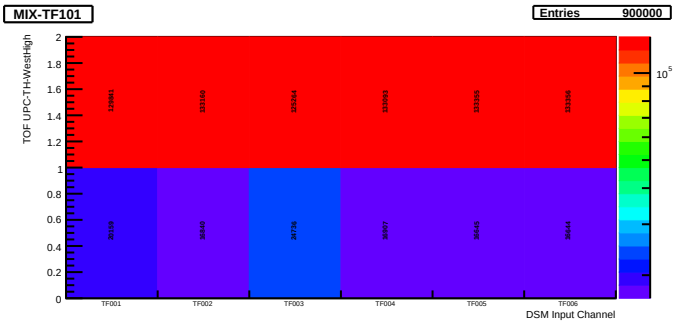

MIX-TF006
Entries 3150000
TOF MULT
TOF tray

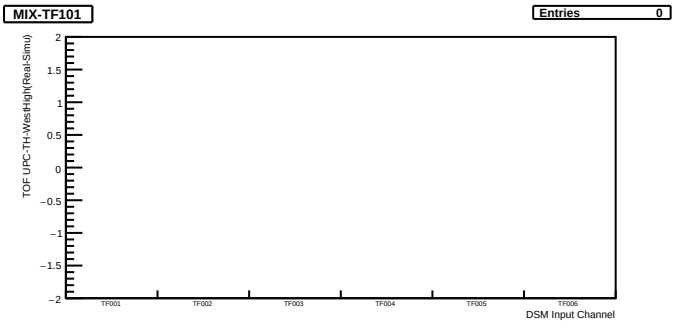

MIX-TF101
Entries 900000
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

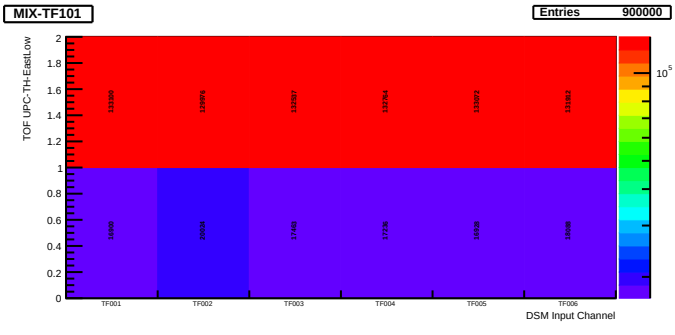

MIX-TF101
Entries 145584
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

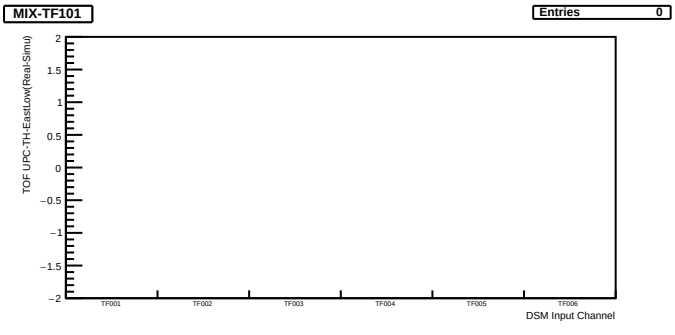

MIX-TF101
Entries 900000
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

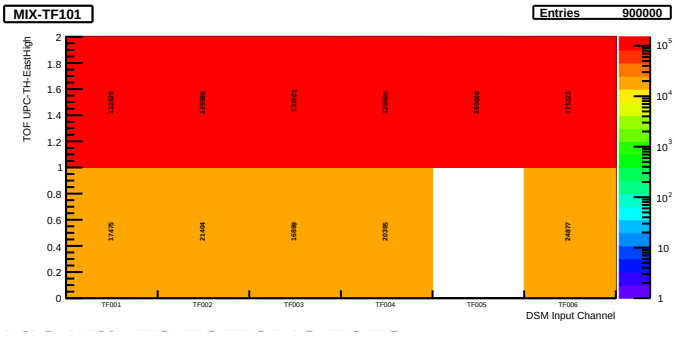

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

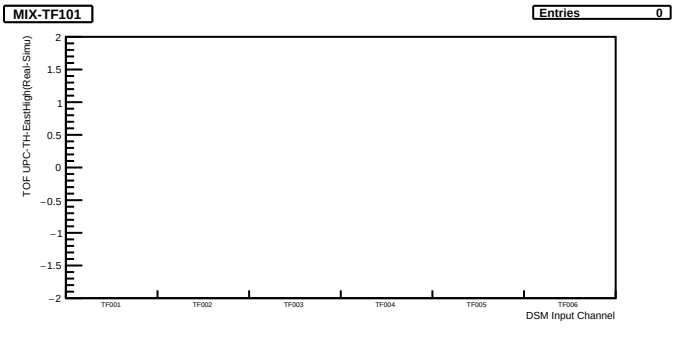

MIX-TF101
Entries 900000
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

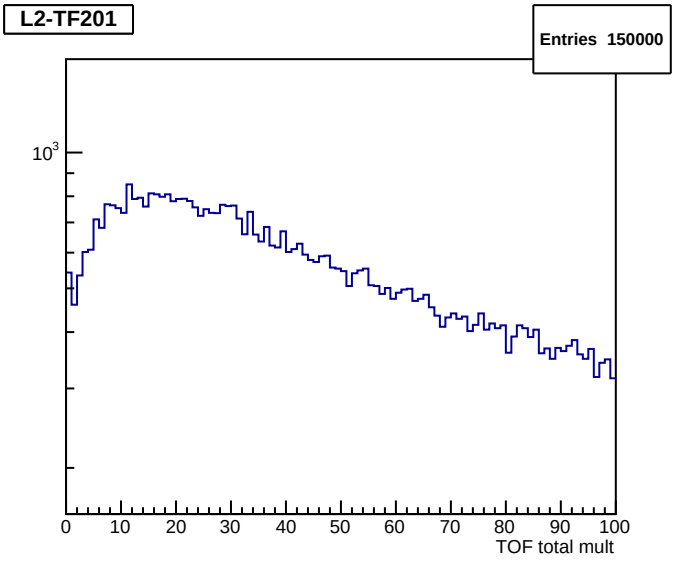

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

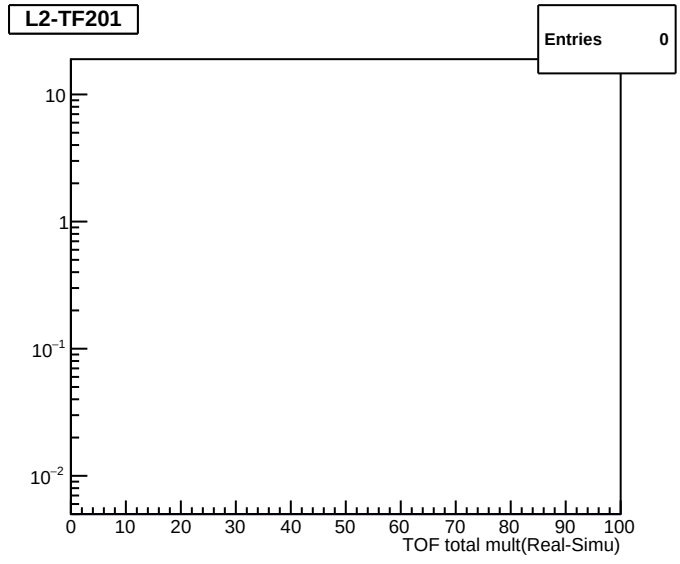

MIX-TF101
Entries 900000
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

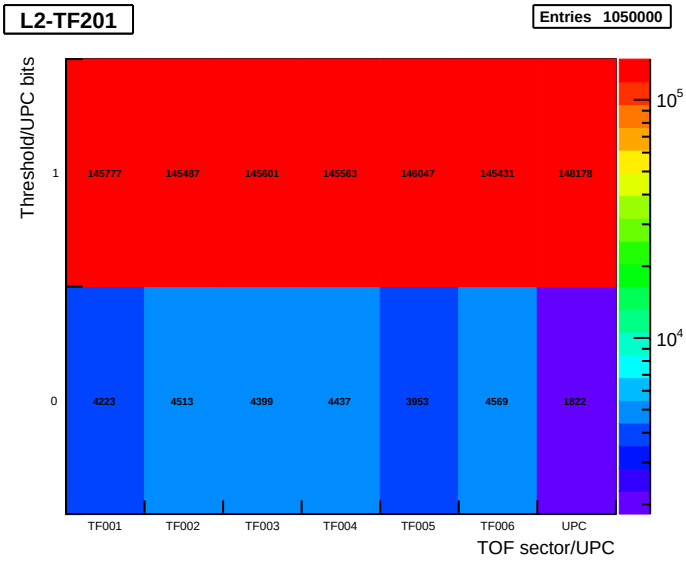

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

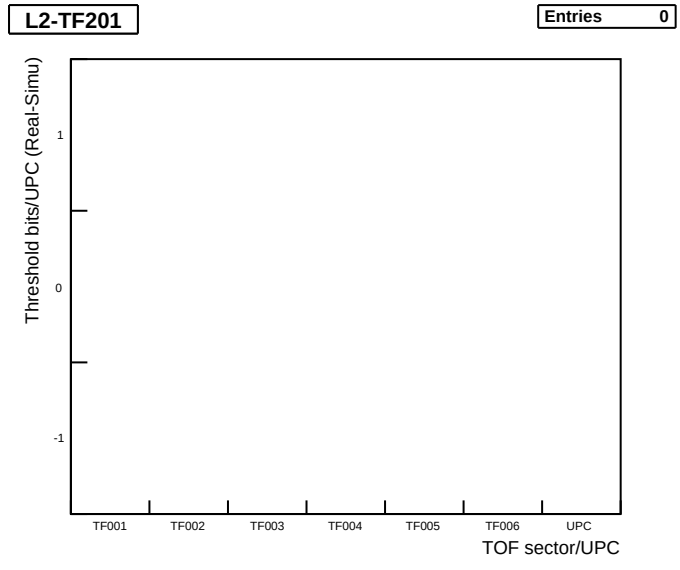

MIX-TF101
Entries 900000
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

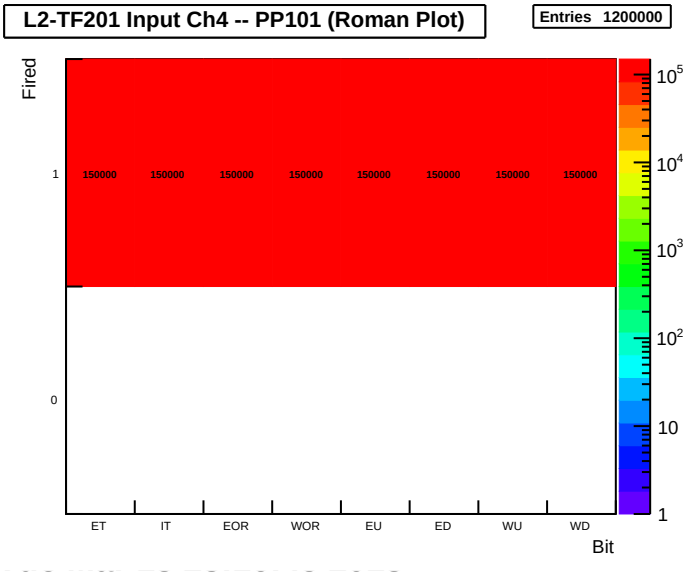

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

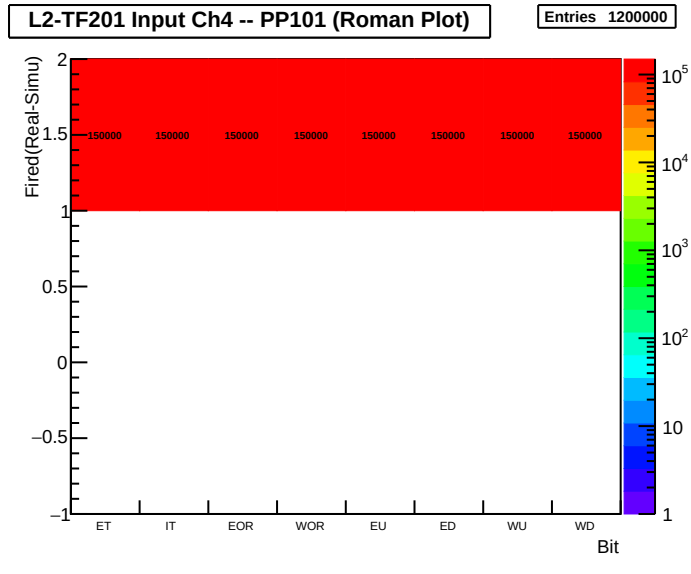

L2-TF201
Entries 150000
10^3
0 10 20 30 40 50 60 70 80 90 100
TOF total mult

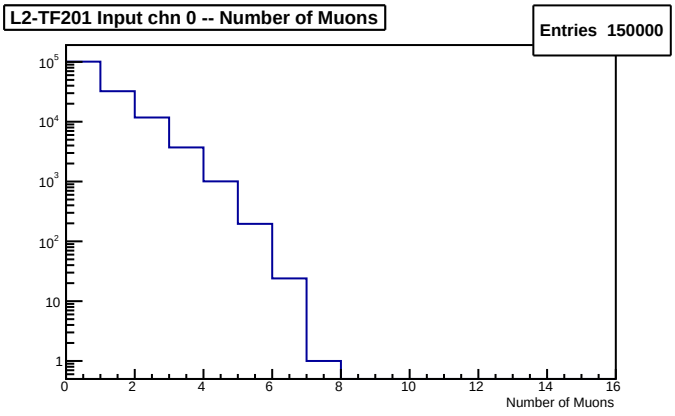

L2-TF201
Entries 0
10
1
10^{-1}
10^{-2}
0 10 20 30 40 50 60 70 80 90 100
TOF total mult(Real-Simu)

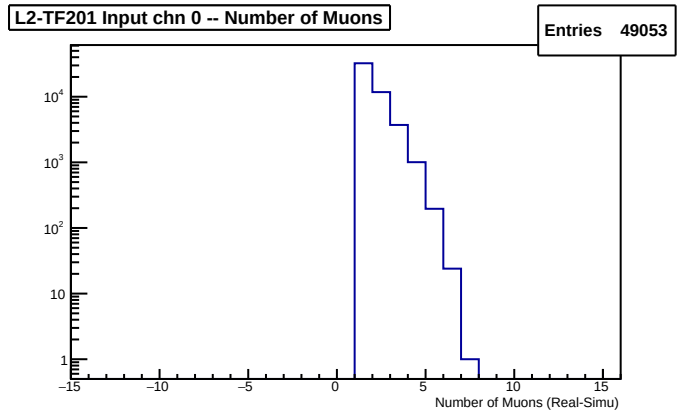

L2-TF201
Entries 1050000
Threshold/UPC bits
1
0
145777 145487 145601 145563 146047 145431 148178
4223 4513 4399 4437 3953 4569 1822
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC
10^5
10^4

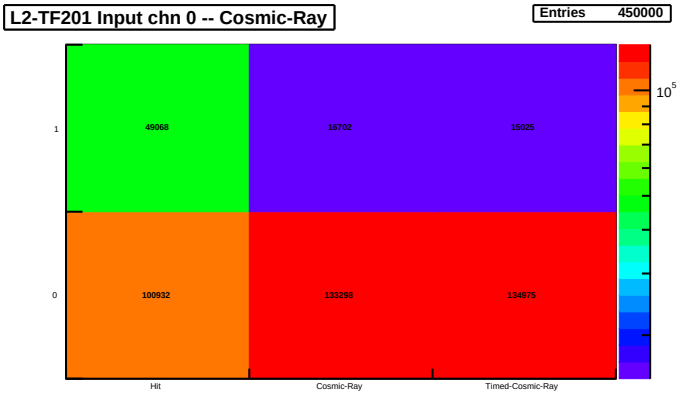

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
1
0
-1
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

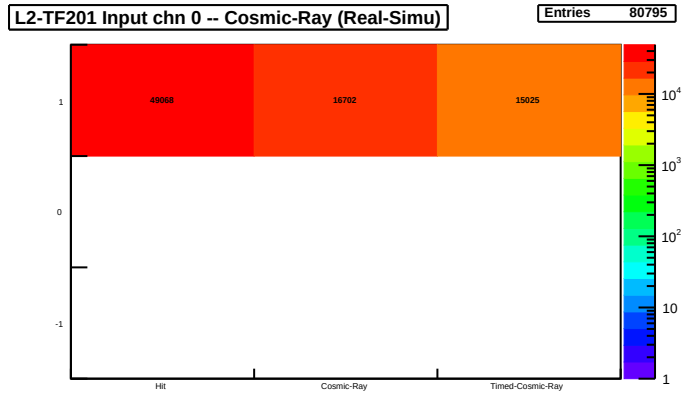

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 1200000
Fired
1
0
150000 150000 150000 150000 150000 150000 150000 150000
ET IT EOR WOR EU ED WU WD
Bit
10^5
10^4
10^3
10^2
10
1

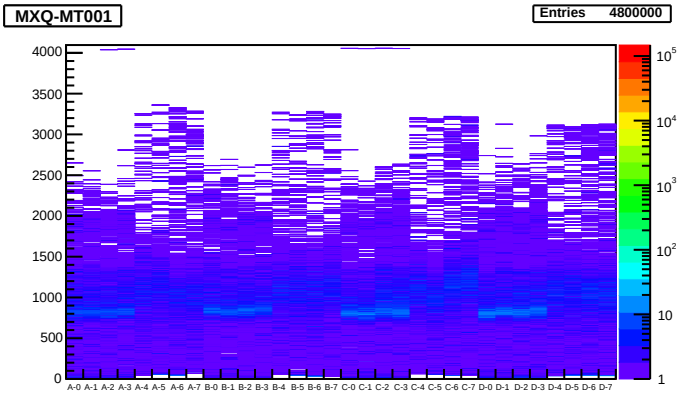

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 1200000
Fired(Real-Simu)
2
1.5
1
0.5
0
−0.5
−1
150000 150000 150000 150000 150000 150000 150000 150000
ET IT EOR WOR EU ED WU WD
Bit
10^5
10^4
10^3
10^2
10
1

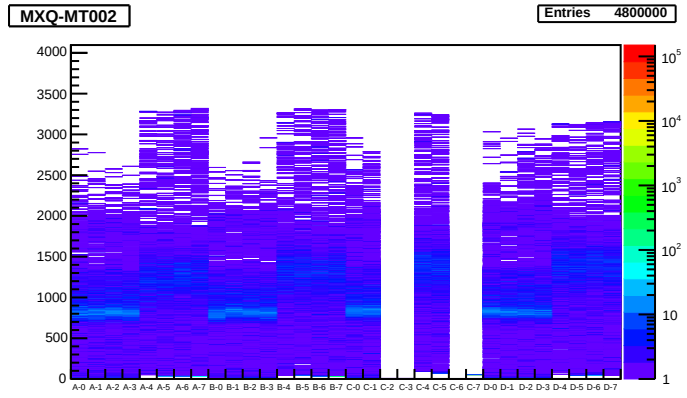

L2-TF201 Input chn 0 -- Number of Muons
Entries 150000
Number of Muons

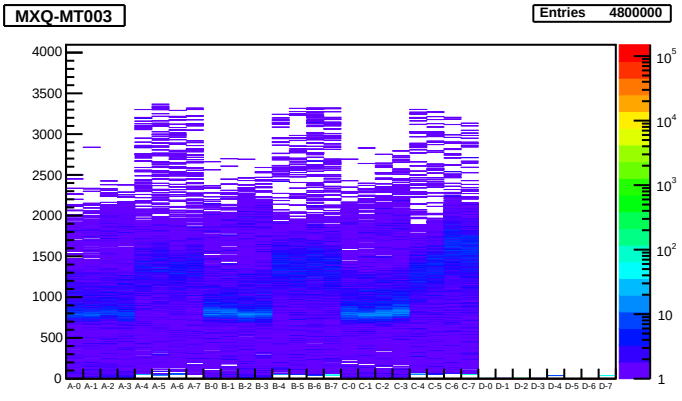

L2-TF201 Input chn 0 -- Number of Muons
Entries 49053
Number of Muons (Real-Simu)

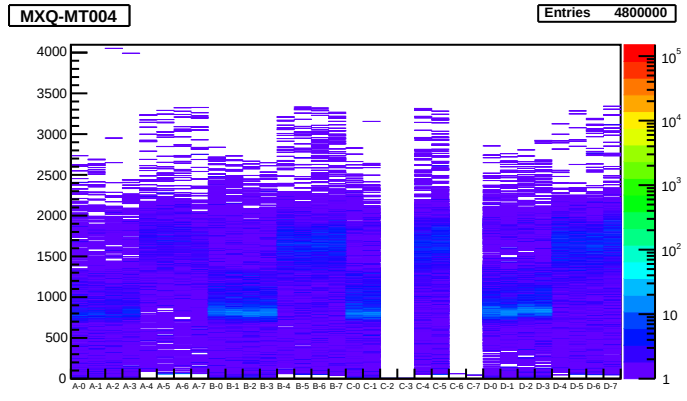

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 450000
49068
16702
15025
100932
133298
134975
Hit
Cosmic-Ray
Timed-Cosmic-Ray

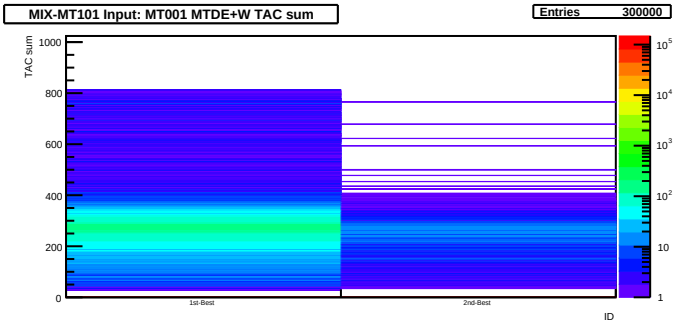

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 80795
49068
16702
15025
Hit
Cosmic-Ray
Timed-Cosmic-Ray

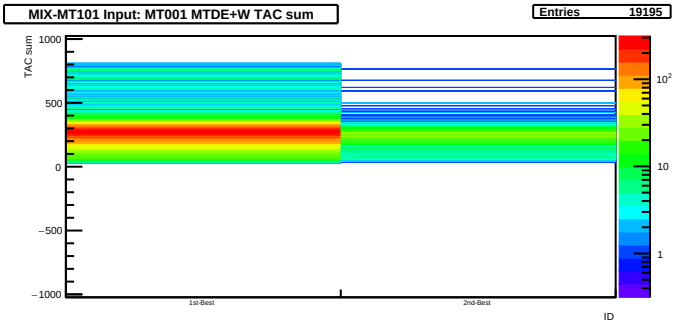

MXQ-MT001
Entries 4800000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

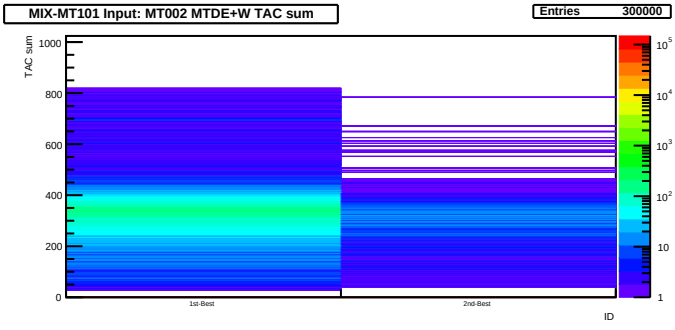

MXQ-MT002
Entries 4800000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

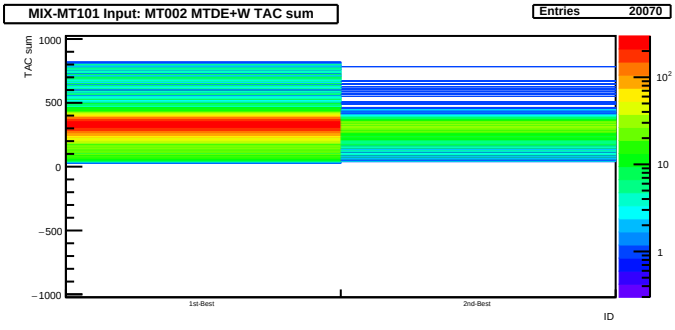

MXQ-MT003
Entries 4800000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

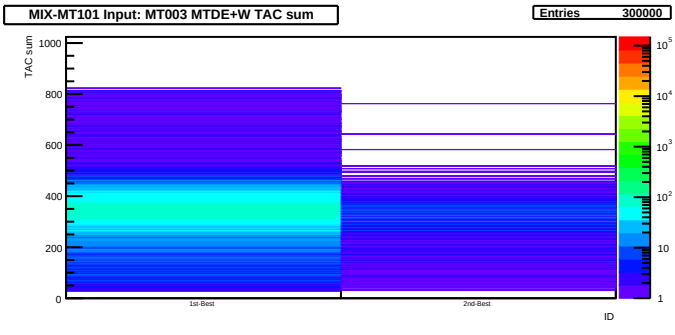

MXQ-MT004
Entries 4800000
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

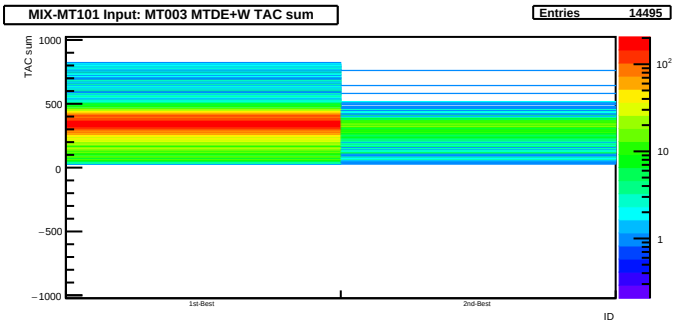

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 300000
TAC sum
1st-Best
2nd-Best
ID

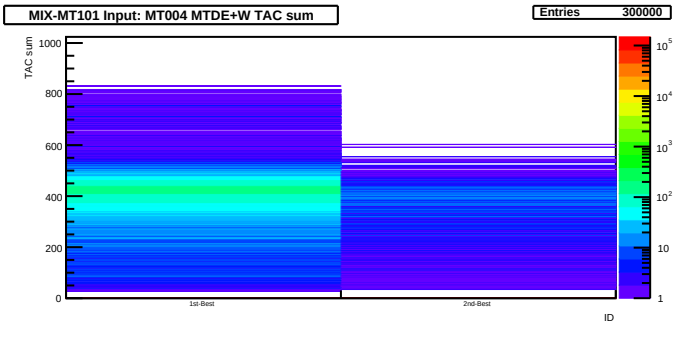

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 19195
TAC sum
1st-Best
2nd-Best
ID

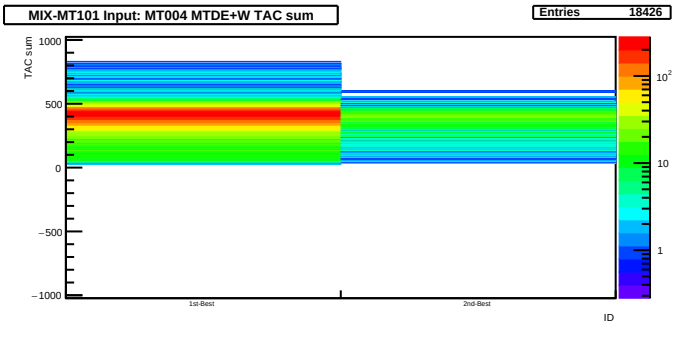

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 300000
TAC sum
1st-Best
2nd-Best
ID

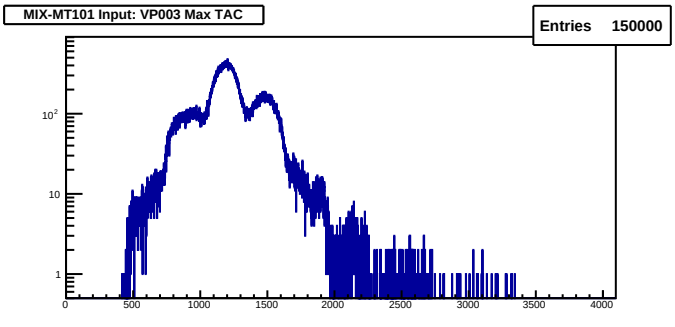

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 20070
TAC sum
1st-Best
2nd-Best
ID

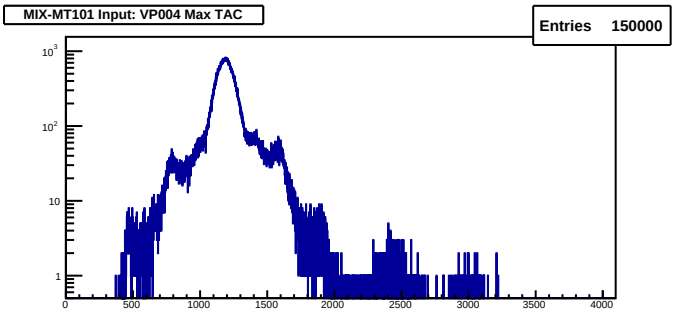

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 300000
TAC sum
1st-Best
2nd-Best
ID

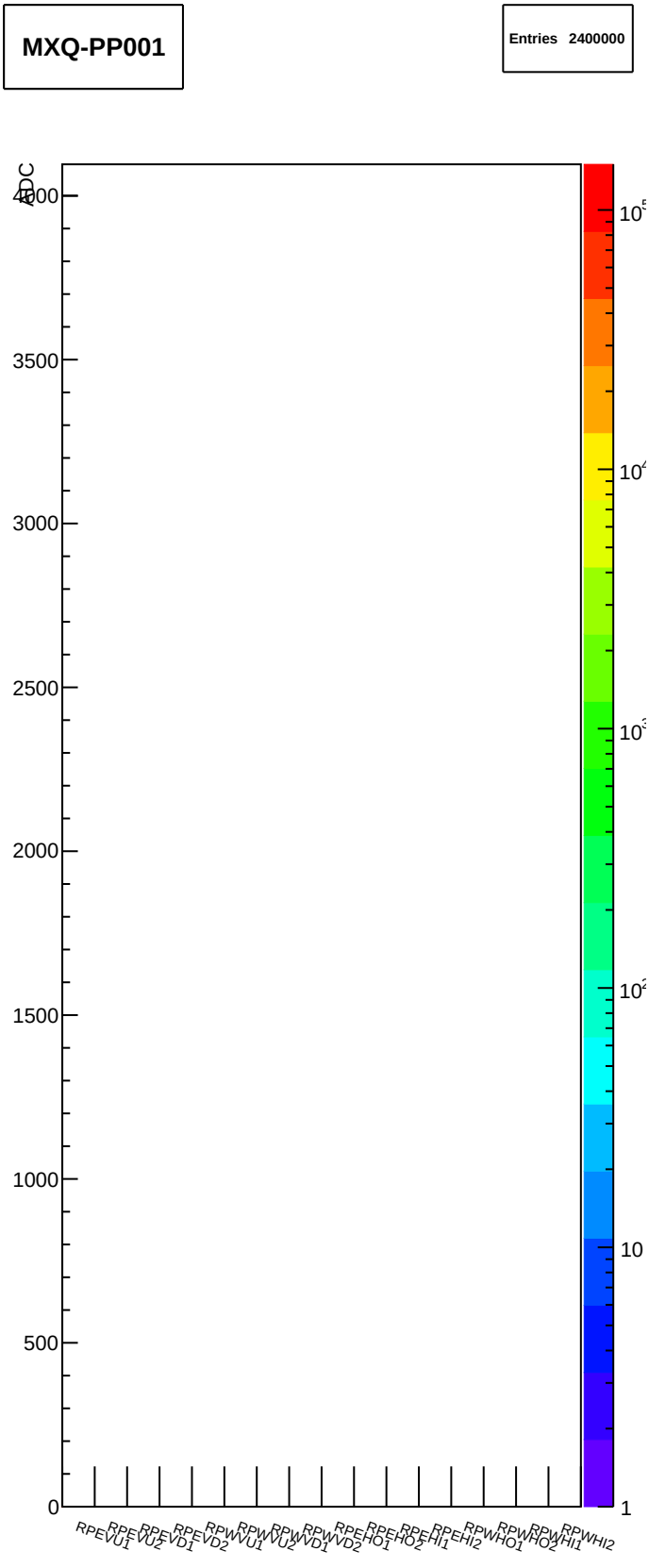

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 14495
TAC sum
1st-Best
2nd-Best
ID

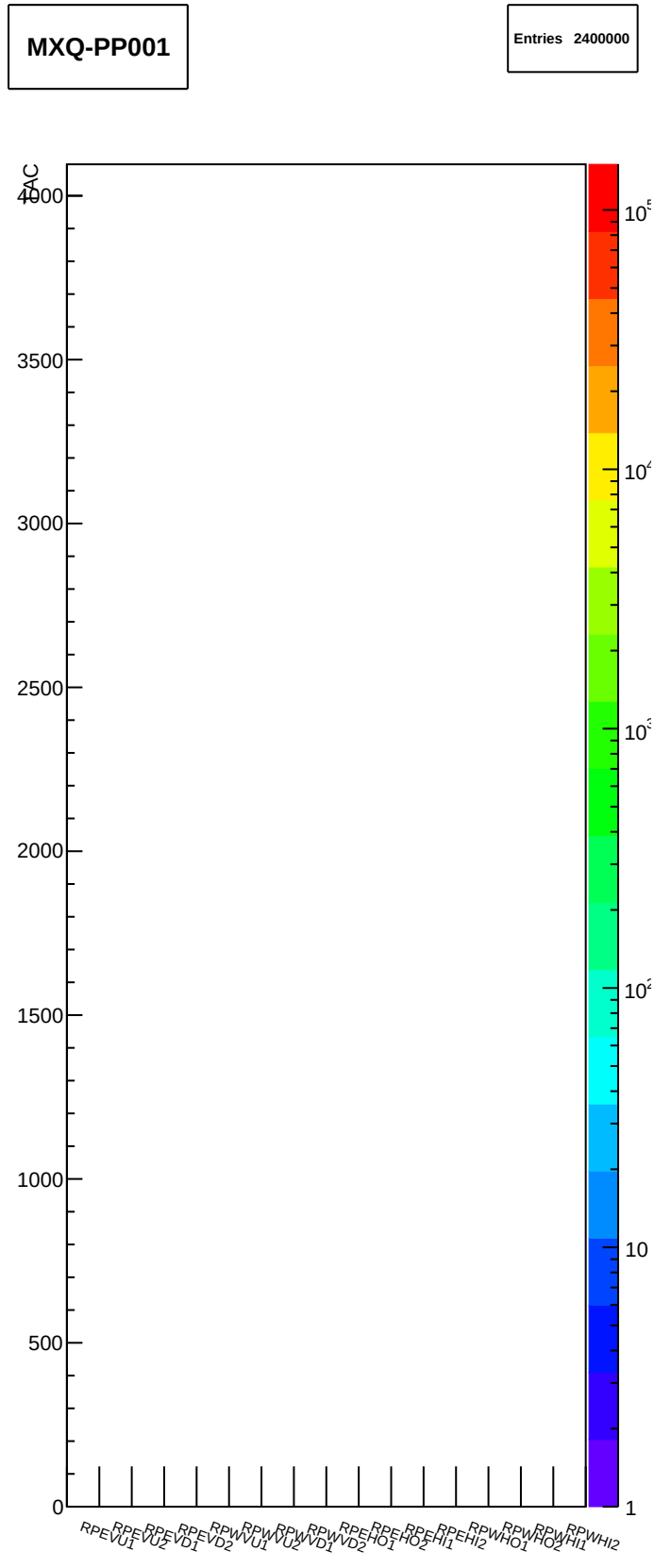

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 300000
TAC sum
1st-Best
2nd-Best
ID

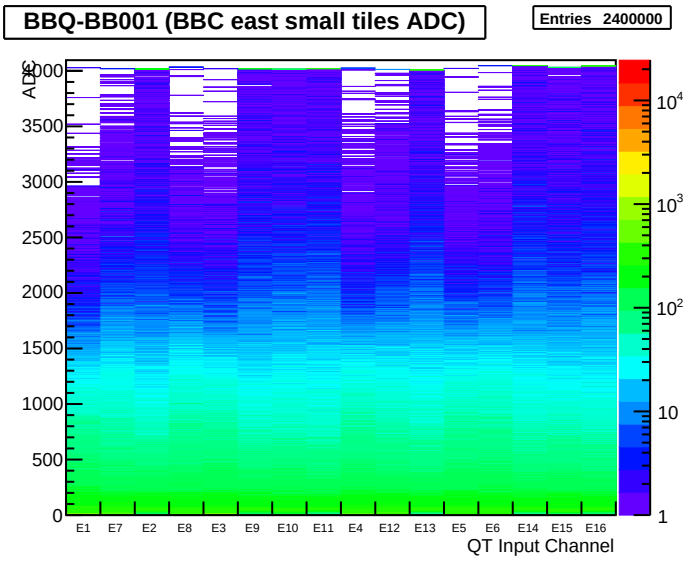

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 18426
TAC sum
1st-Best
2nd-Best
ID

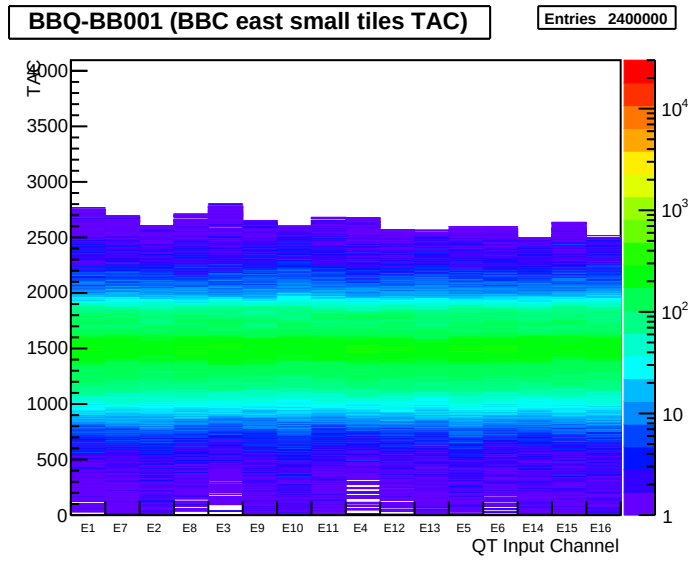

MIX-MT101 Input: VP003 Max TAC
Entries 150000

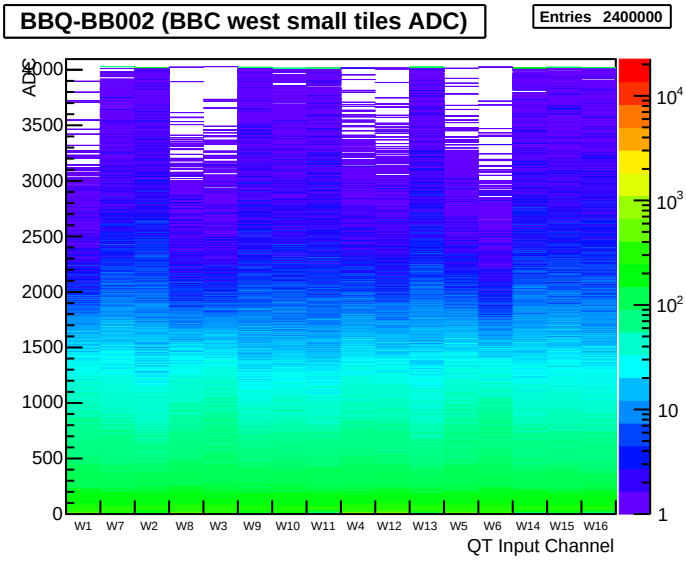

MIX-MT101 Input: VP004 Max TAC
Entries 150000

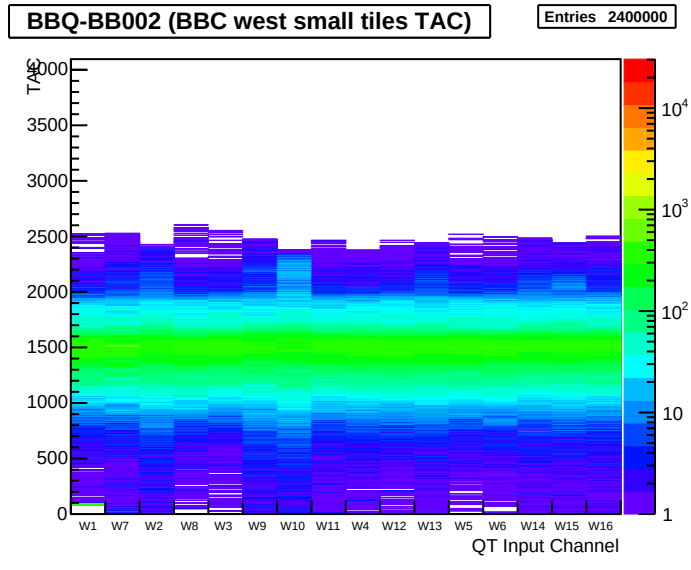

MXQ-PP001
Entries 2400000
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

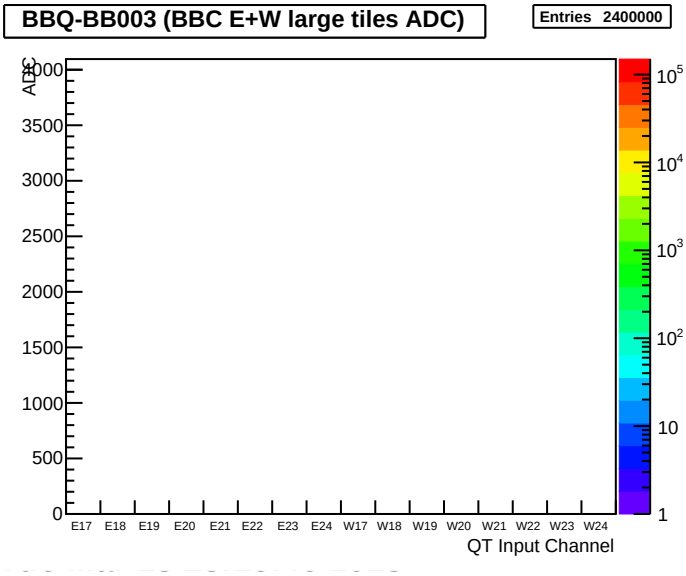

MXQ-PP001
Entries 2400000
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10
1

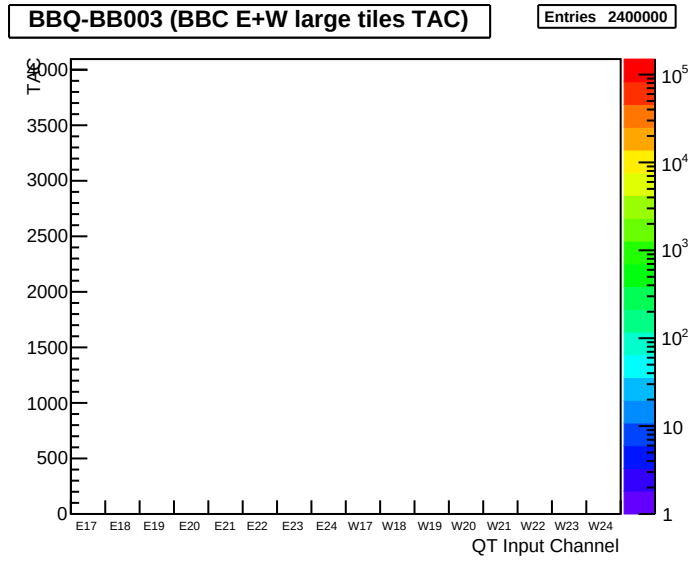

BBQ-BB001 (BBC east small tiles ADC)
Entries 2400000
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

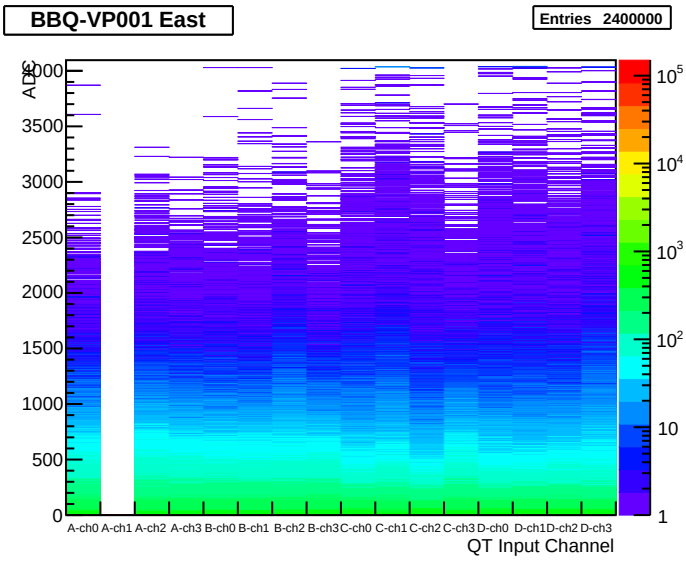

BBQ-BB001 (BBC east small tiles TAC)
Entries 2400000
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

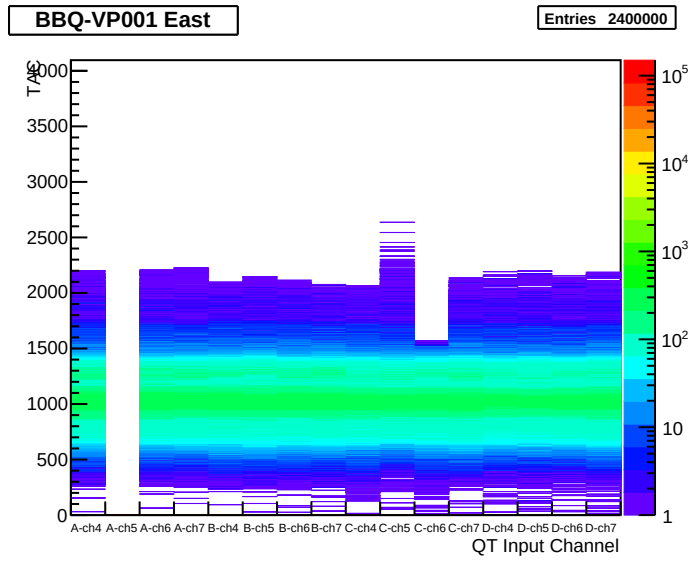

BBQ-BB002 (BBC west small tiles ADC)
Entries 2400000
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

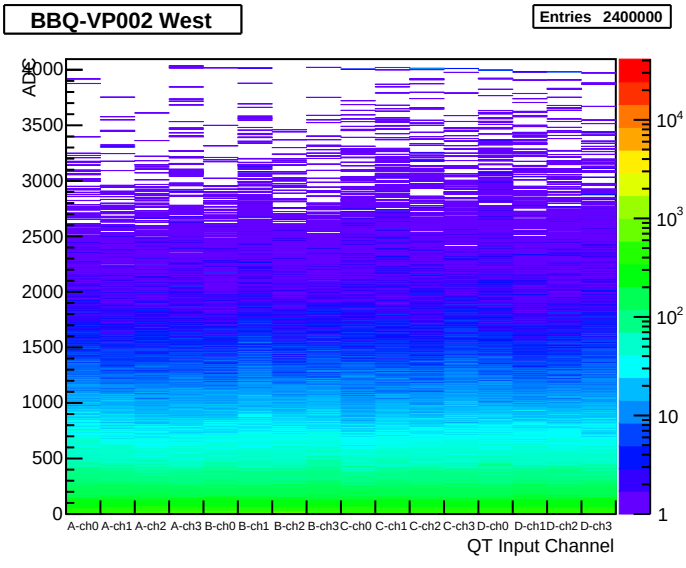

BBQ-BB002 (BBC west small tiles TAC)
Entries 2400000
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

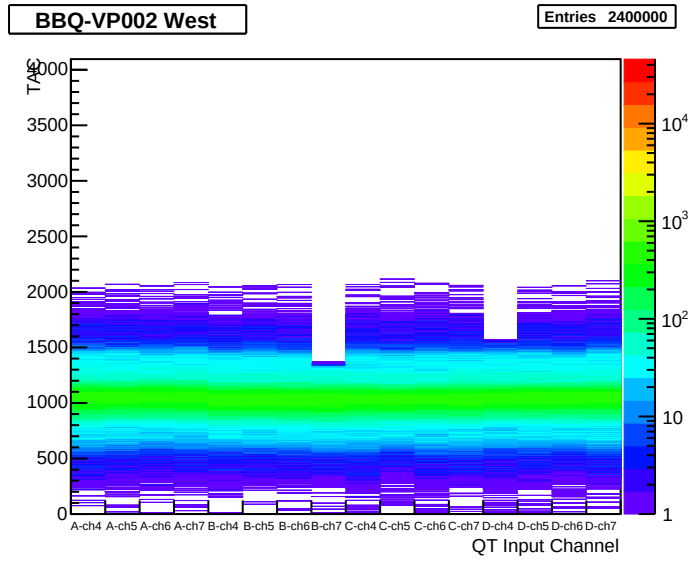

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2400000
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

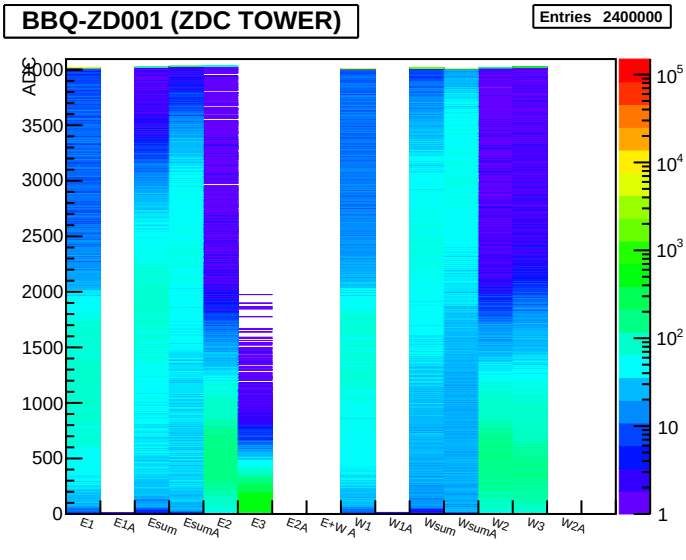

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2400000
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

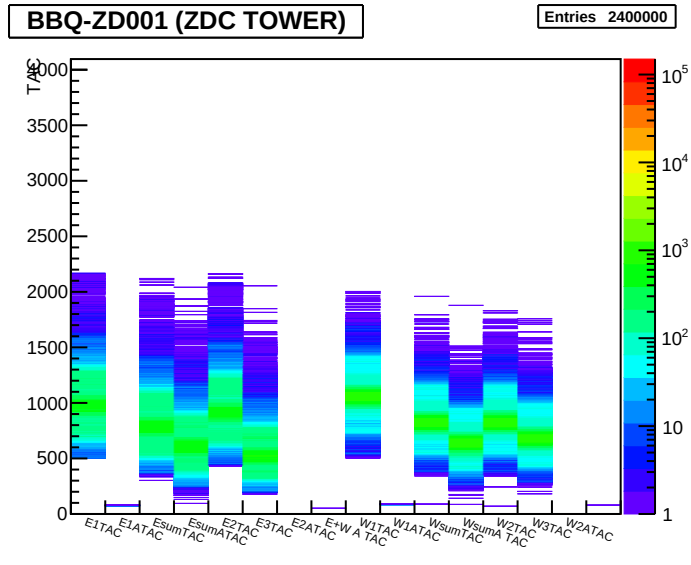

BBQ-VP001 East
Entries 2400000
ADC
QT Input Channel

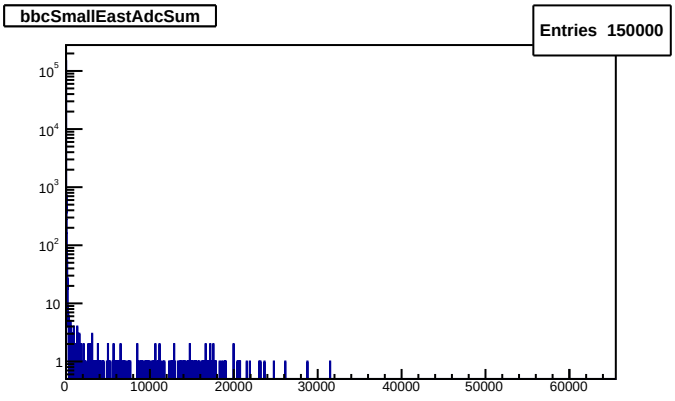

BBQ-VP001 East
Entries 2400000
TAC
QT Input Channel

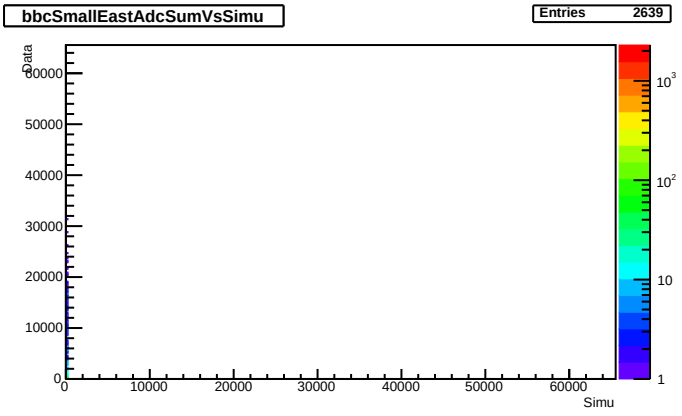

BBQ-VP002 West
Entries 2400000
ADC
QT Input Channel

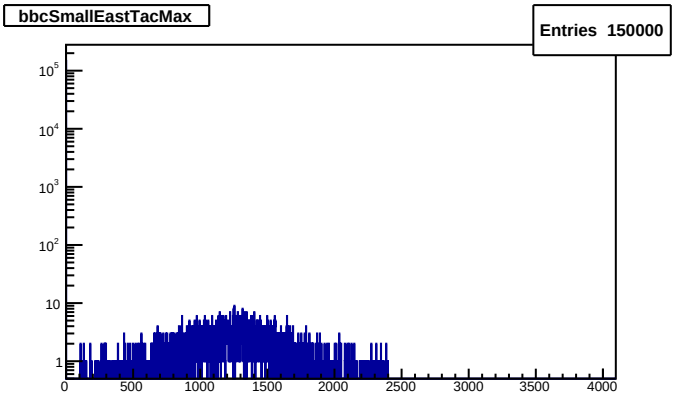

BBQ-VP002 West
Entries 2400000
TAC
QT Input Channel

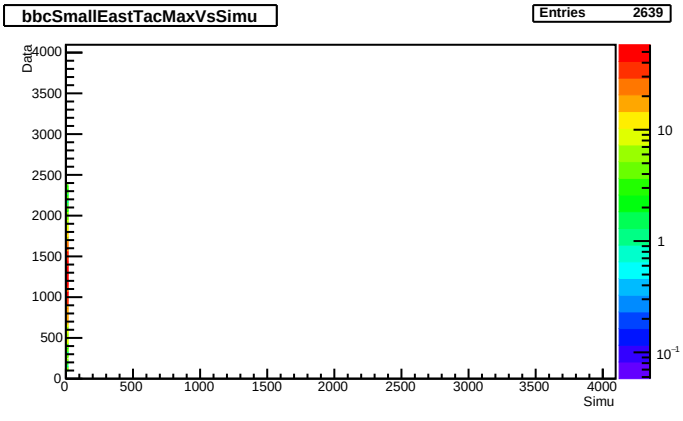

BBQ-ZD001 (ZDC TOWER)
Entries 2400000
ADC

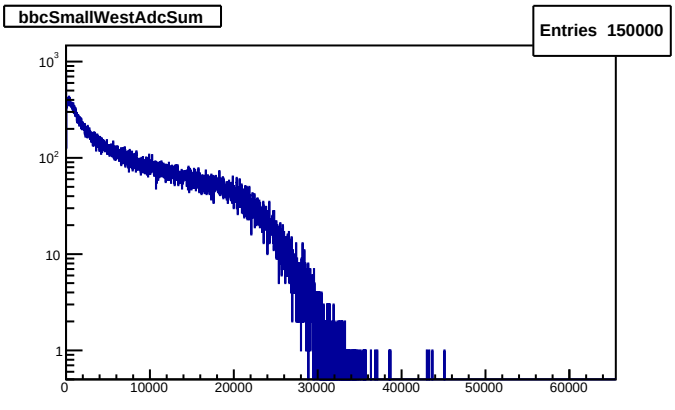

BBQ-ZD001 (ZDC TOWER)
Entries 2400000
TAC

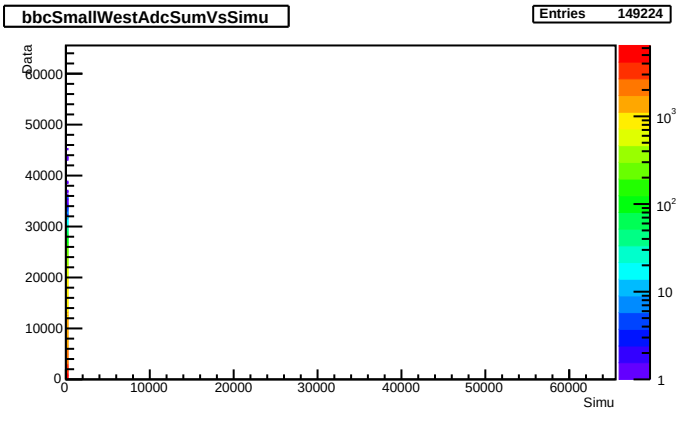

bbcSmallEastAdcSum
Entries 150000

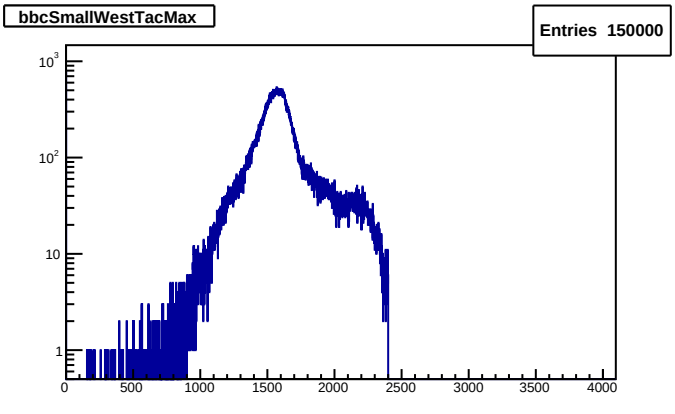

bbcSmallEastAdcSumVsSimu
Entries 2639
Data
Simu

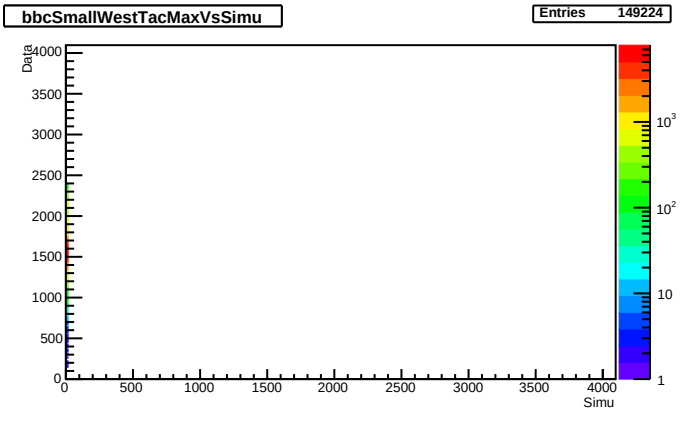

bbcSmallEastTacMax
Entries 150000

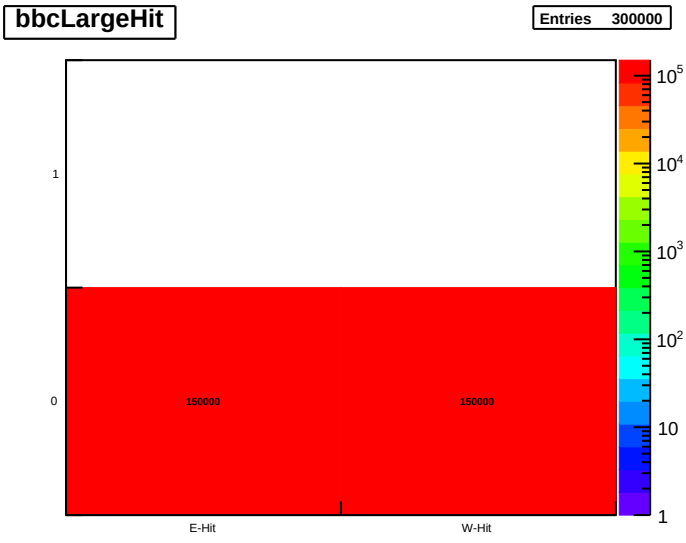

bbcSmallEastTacMaxVsSimu
Entries 2639
Data
Simu

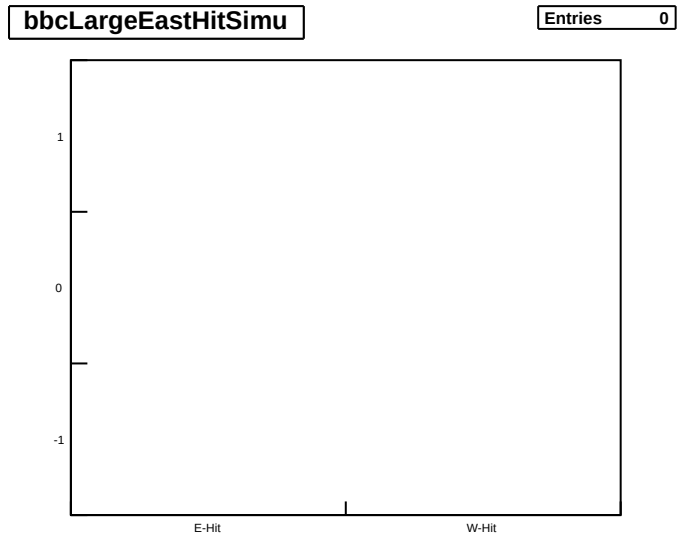

bbcSmallWestAdcSum
Entries 150000

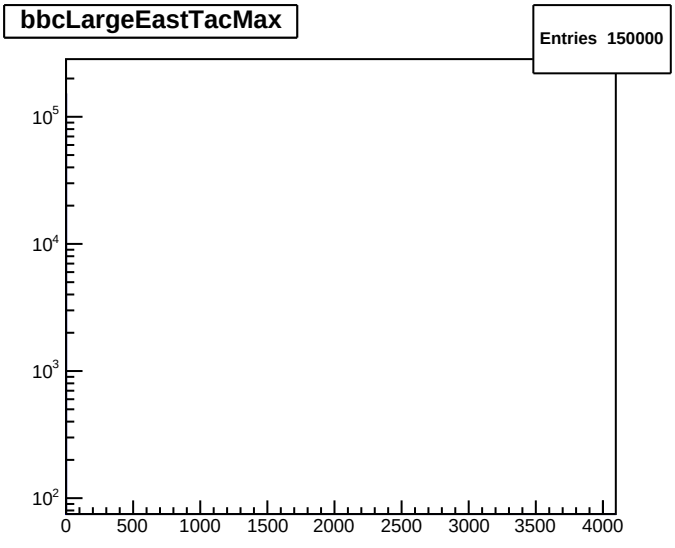

bbcSmallWestAdcSumVsSimu
Entries 149224
Data
Simu

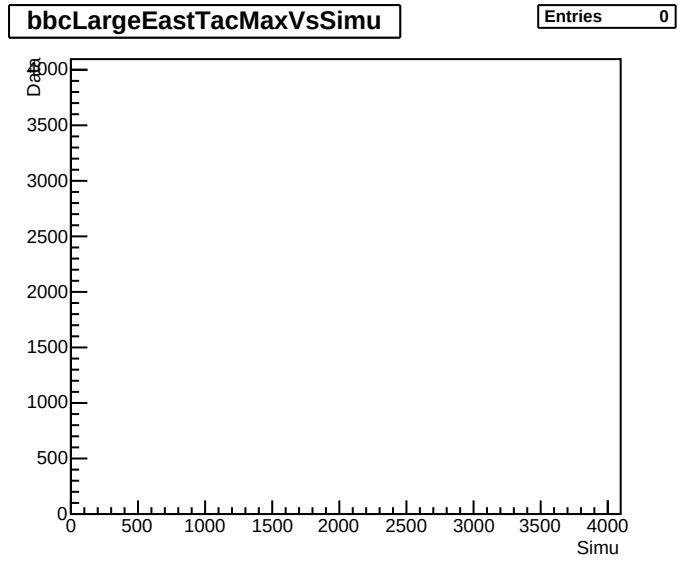

bbcSmallWestTacMax
Entries 150000

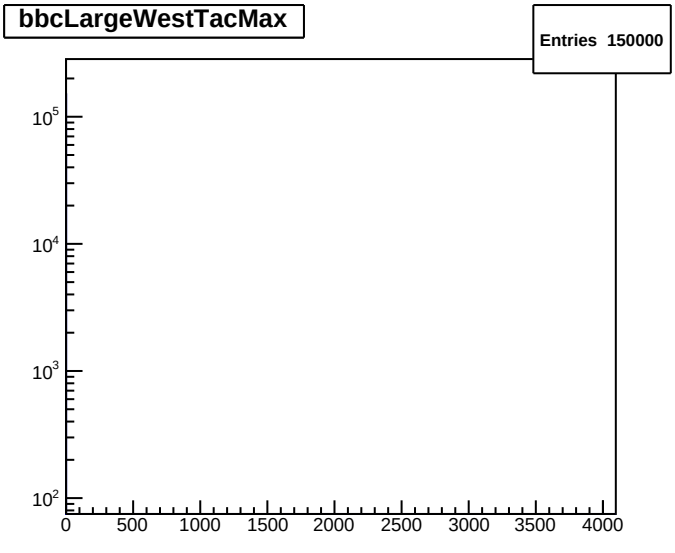

bbcSmallWestTacMaxVsSimu
Entries 149224
Data
Simu

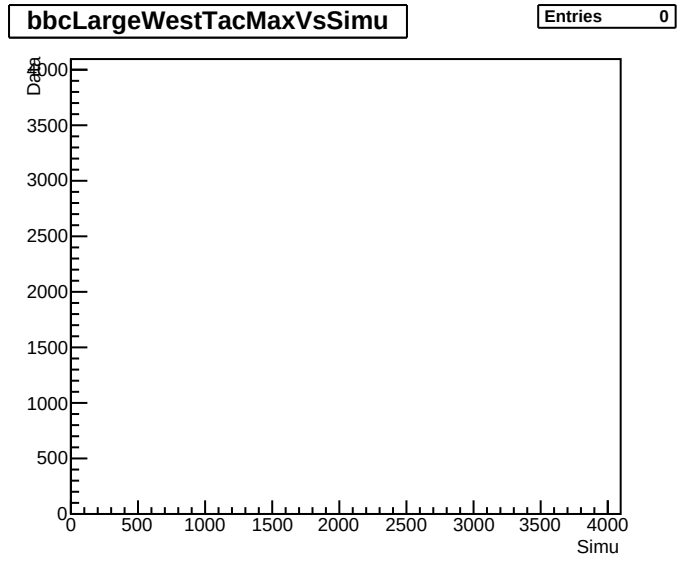

bbcLargeHit
Entries 300000
150000
150000
E-Hit
W-Hit

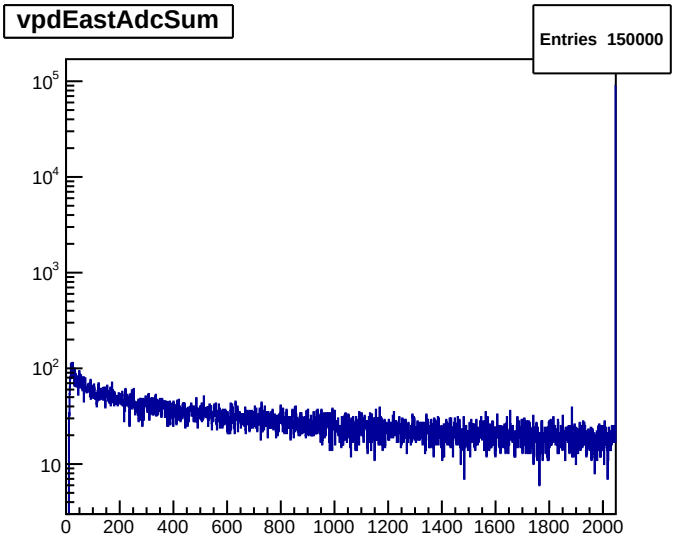

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

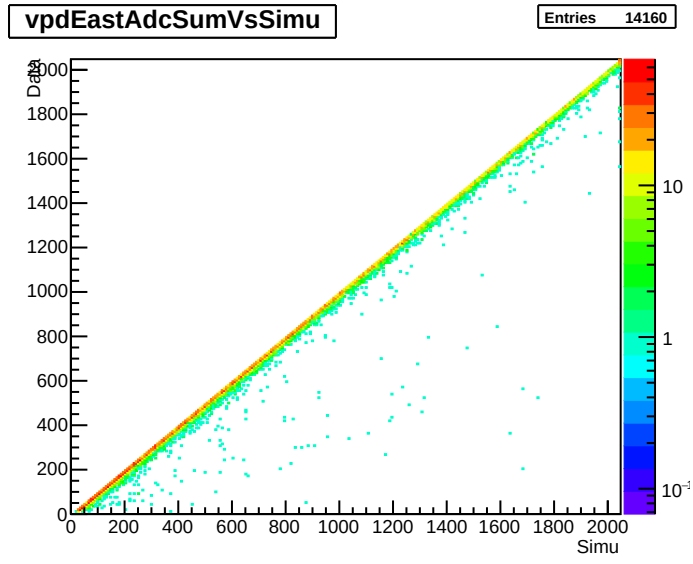

bbcLargeEastTacMax
Entries 150000

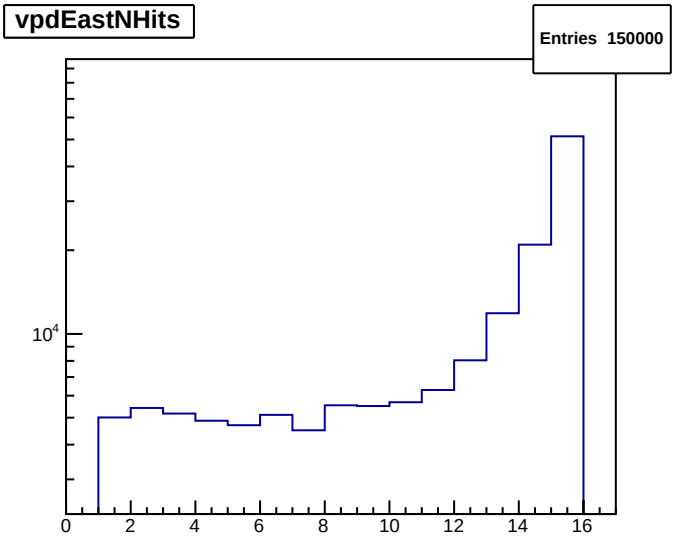

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

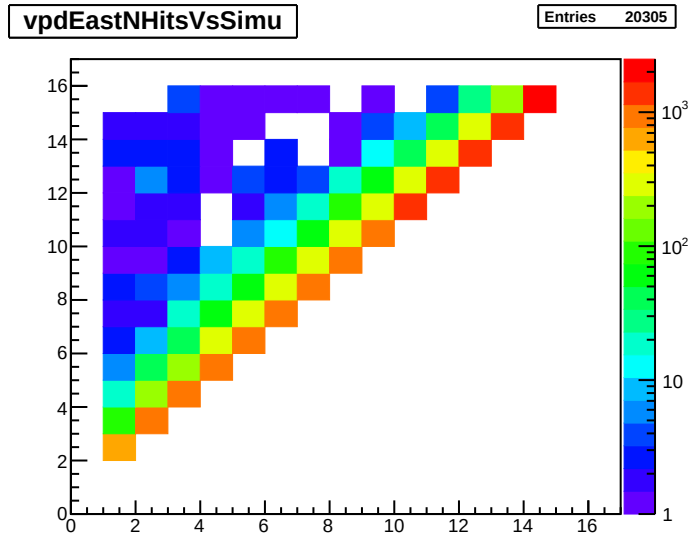

bbcLargeWestTacMax
Entries 150000

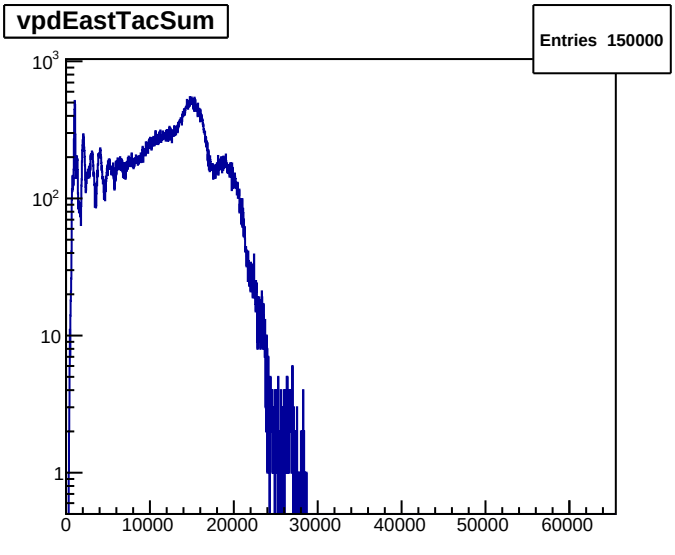

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

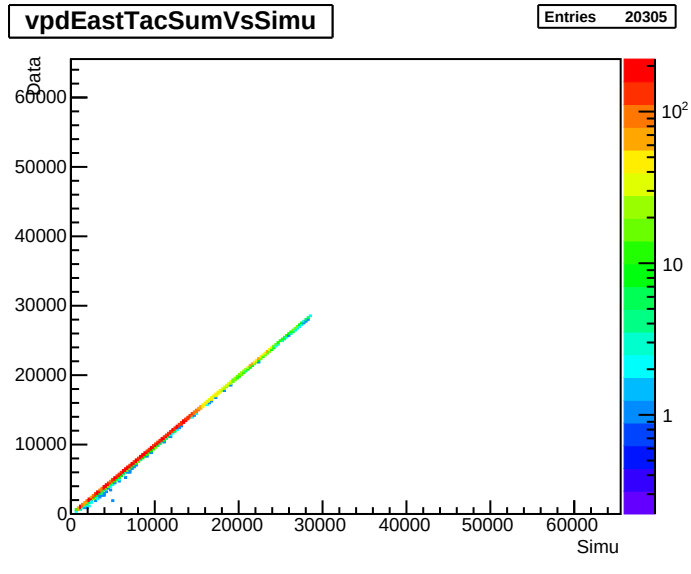

vpdEastAdcSum
Entries 150000

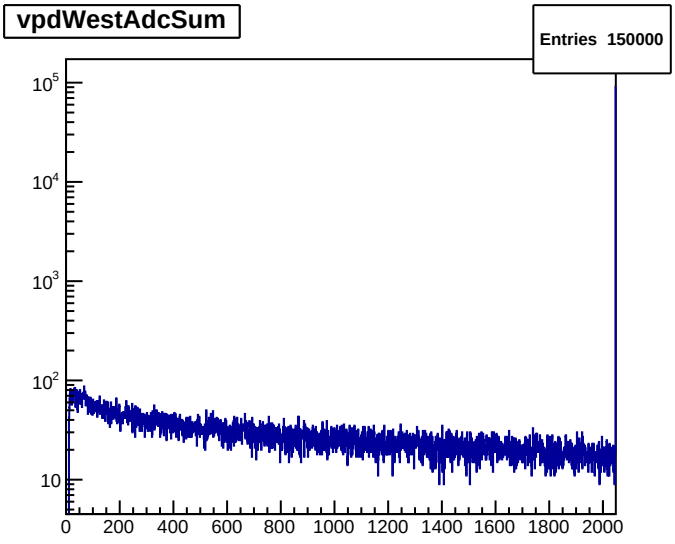

vpdEastAdcSumVsSimu
Entries 14160
Data
Simu

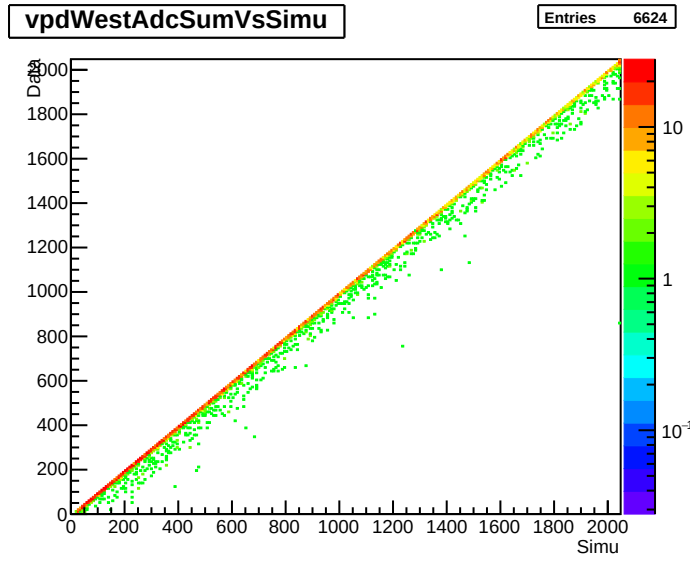

vpdEastNHits
Entries 150000

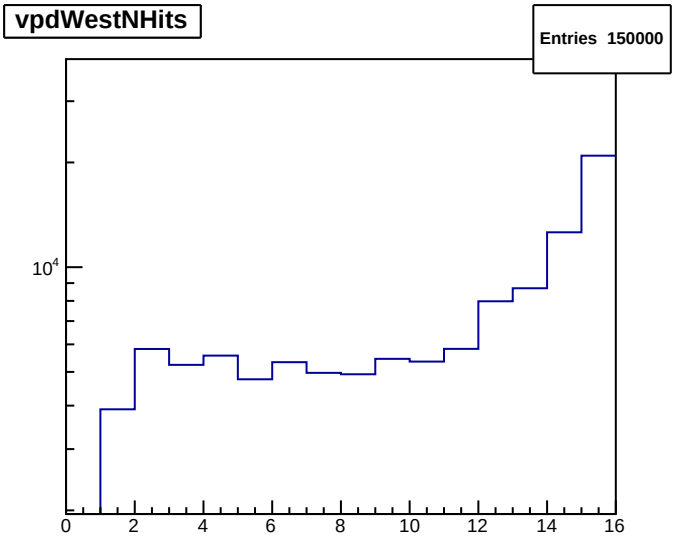

vpdEastNHitsVsSimu
Entries 20305

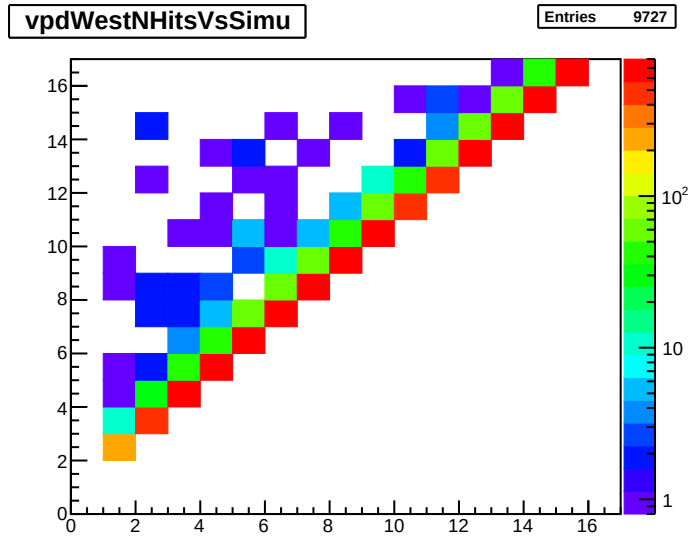

vpdEastTacSum
Entries 150000

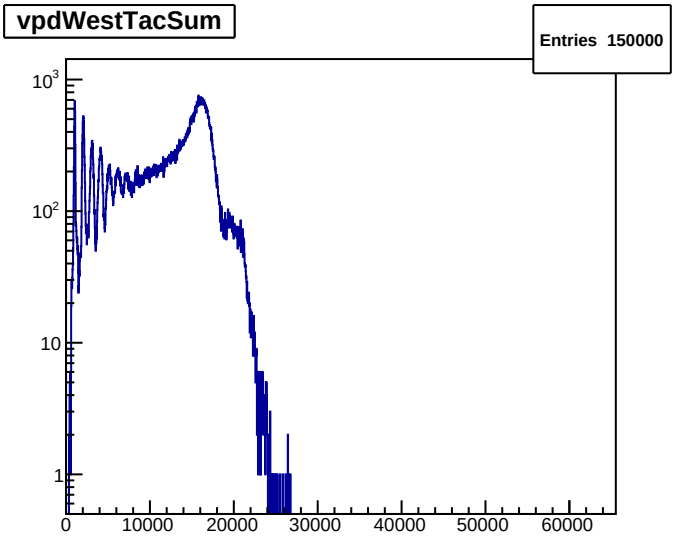

vpdEastTacSumVsSimu
Entries 20305
Data
Simu

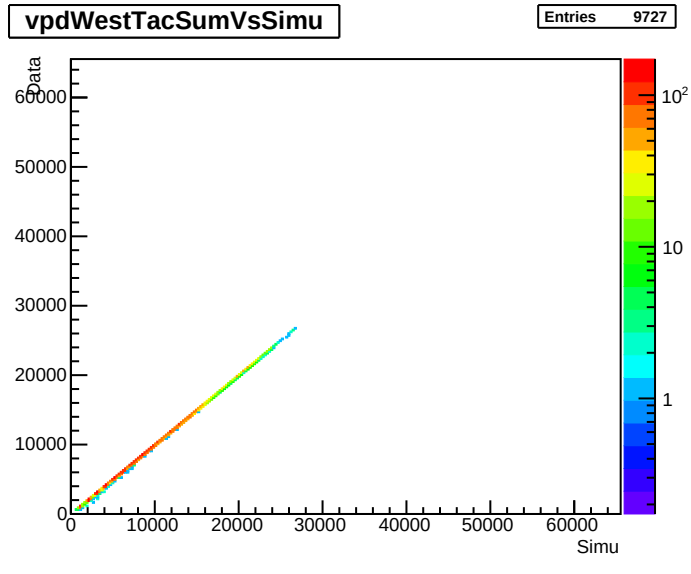

vpdWestAdcSum
Entries 150000

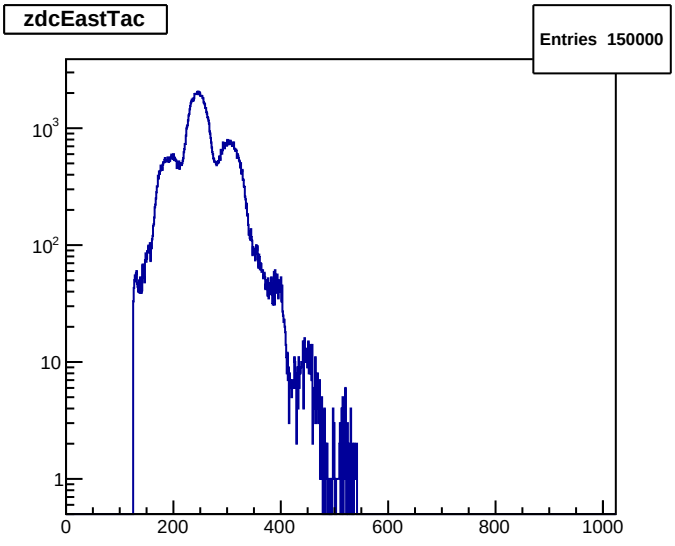

vpdWestAdcSumVsSimu
Entries 6624
Data
Simu

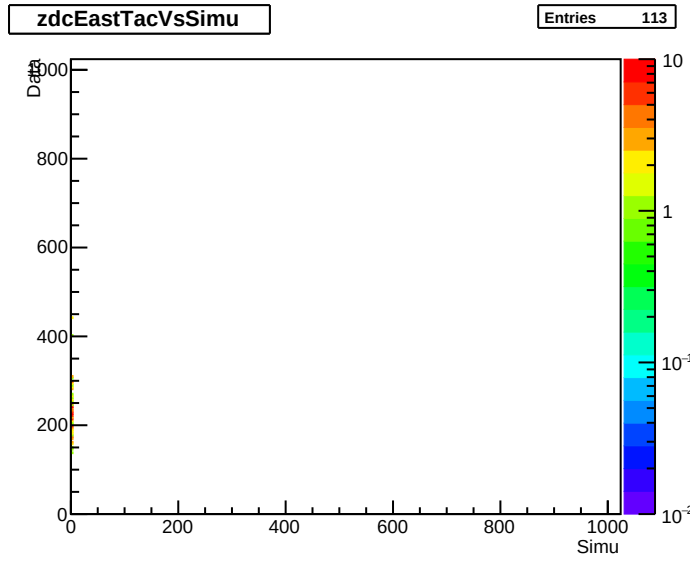

vpdWestNHits
Entries 150000

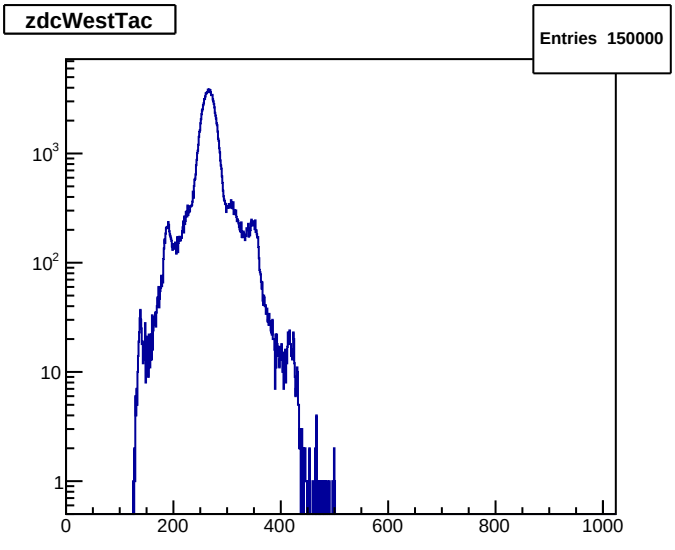

vpdWestNHitsVsSimu
Entries 9727

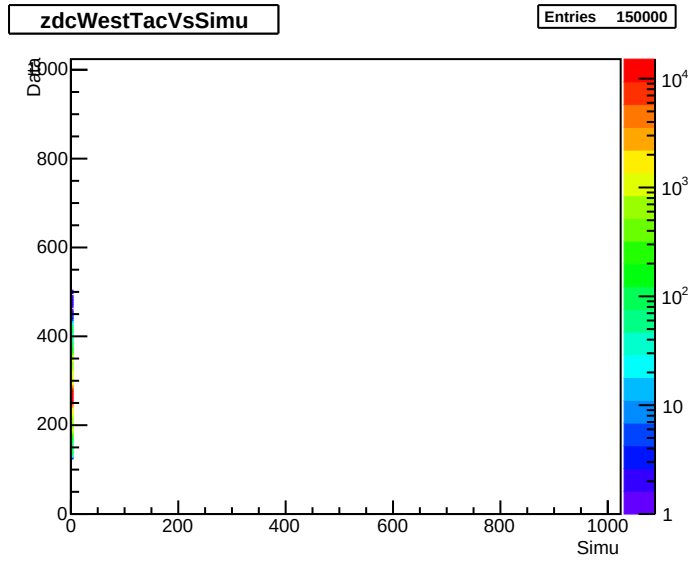

vpdWestTacSum
Entries 150000

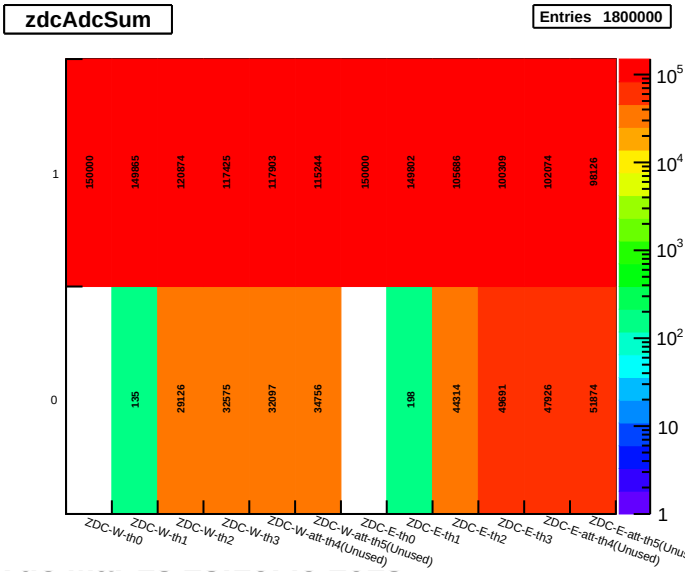

vpdWestTacSumVsSimu
Entries 9727
Data
Simu

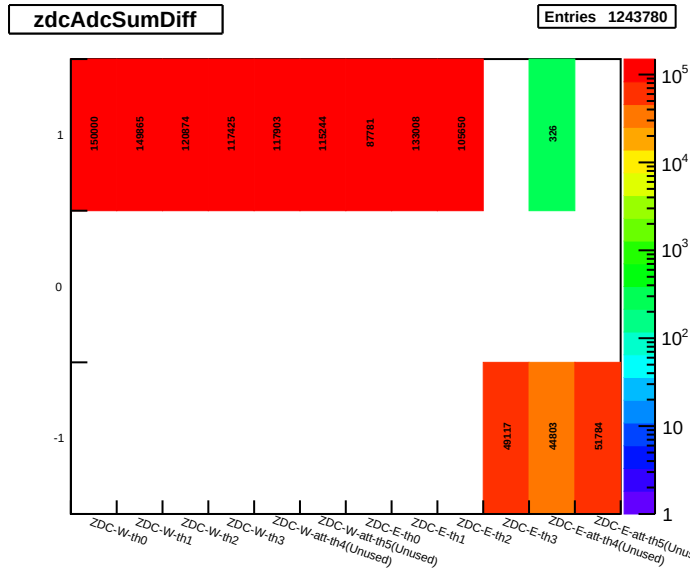

zdcEastTac
Entries 150000

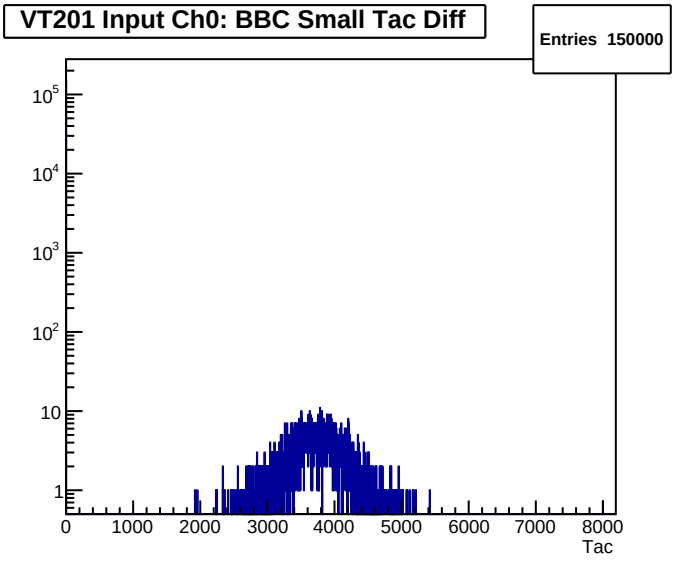

zdcEastTacVsSimu
Entries 113
Data
Simu

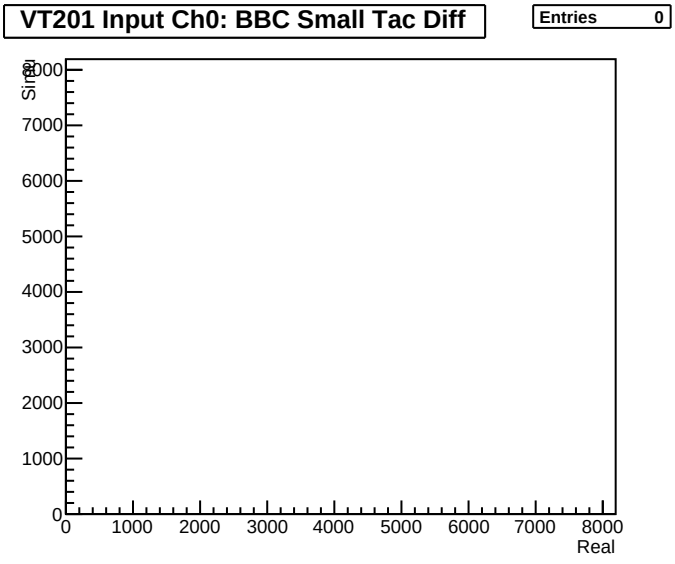

zdcWestTac
Entries 150000

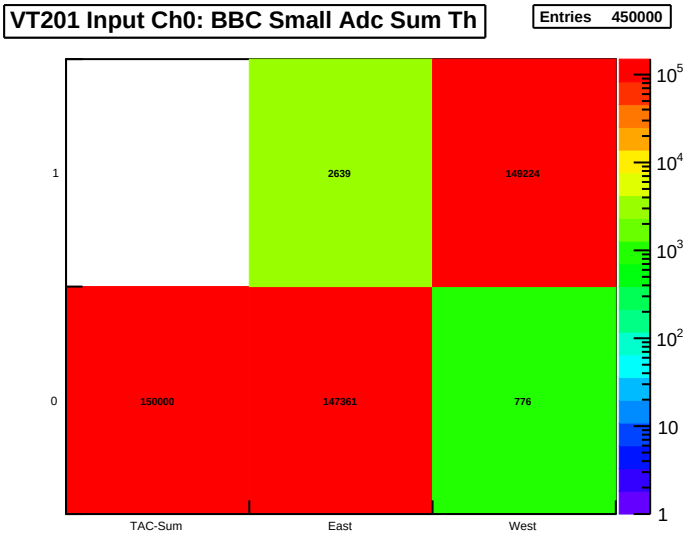

zdcWestTacVsSimu
Entries 150000
Data
Simu

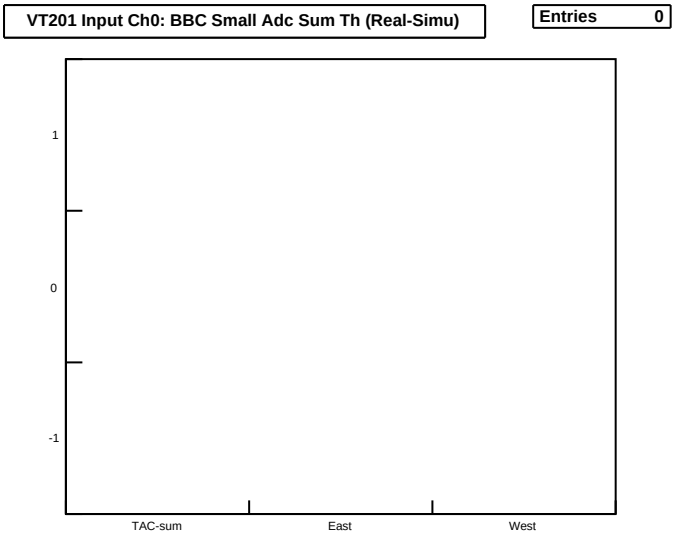

zdcAdcSum
Entries 1800000
150000
149865
120874
117425
117903
115244
150000
149802
105686
100309
102074
98126
135
29126
32575
32097
34756
198
44314
49691
47926
51874
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

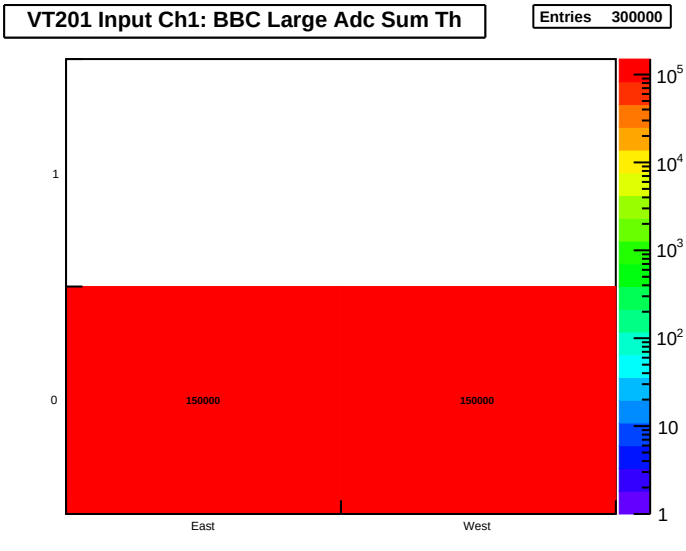

zdcAdcSumDiff
Entries 1243780
150000
149865
120874
117425
117903
115244
87781
133008
105650
326
49117
44803
51784
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

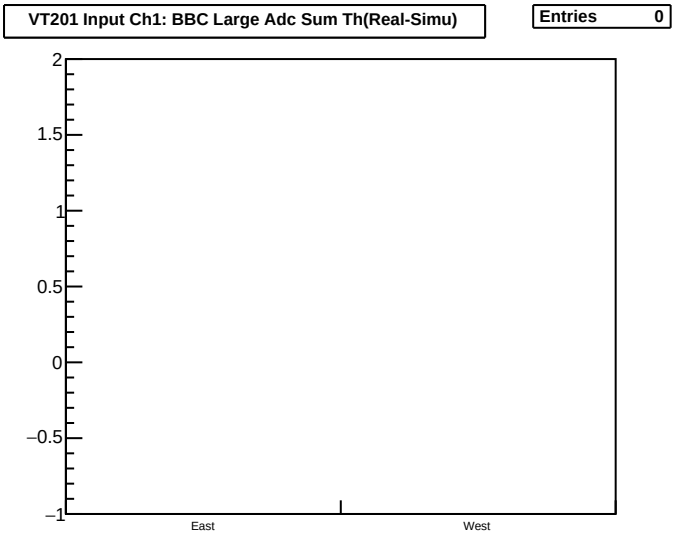

VT201 Input Ch0: BBC Small Tac Diff
Entries 150000
Tac


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

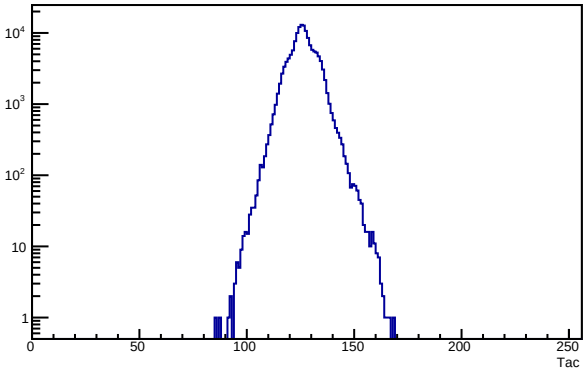

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 450000
2639
149224
150000
147361
776
TAC-Sum
East
West


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

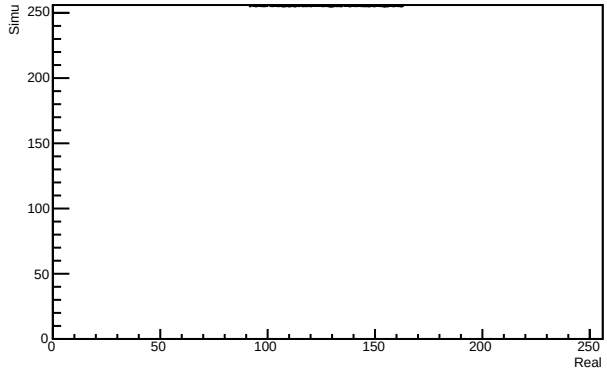

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 300000
150000
150000
East
West


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

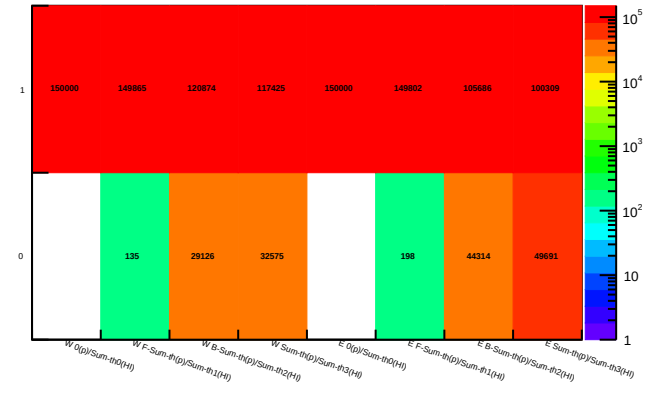
VT201 Input Ch2: ZDC Tac Diff



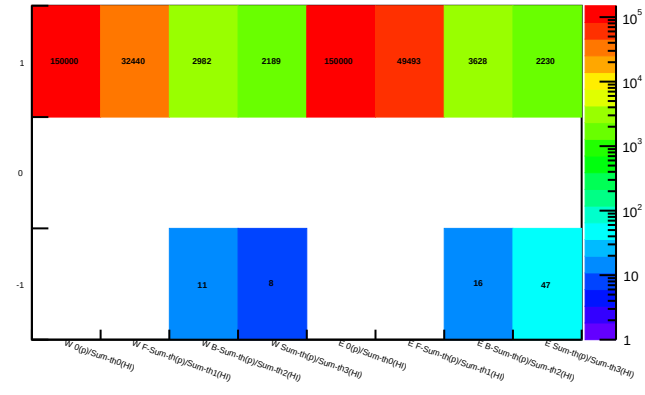
VT201 Input Ch2: ZDC Tac Diff



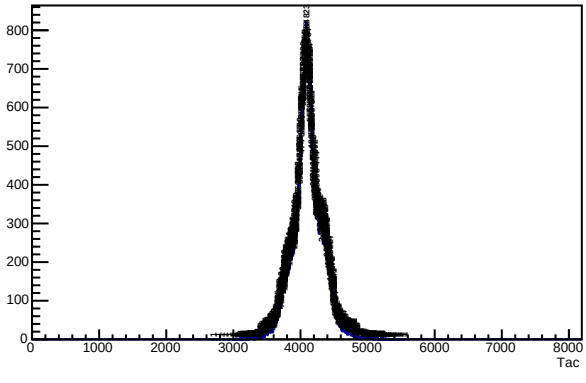
VT201 Input Ch2: ZDC Adc Sum Th



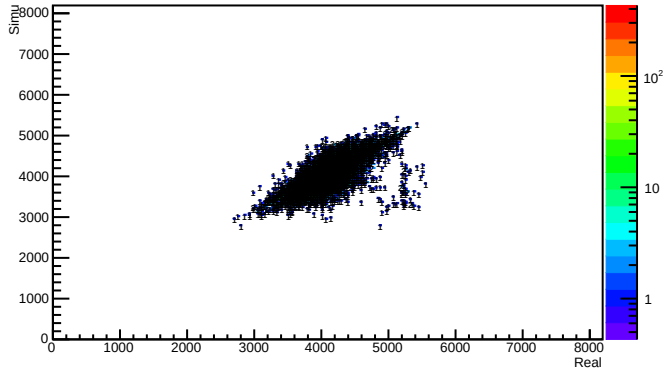
VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)



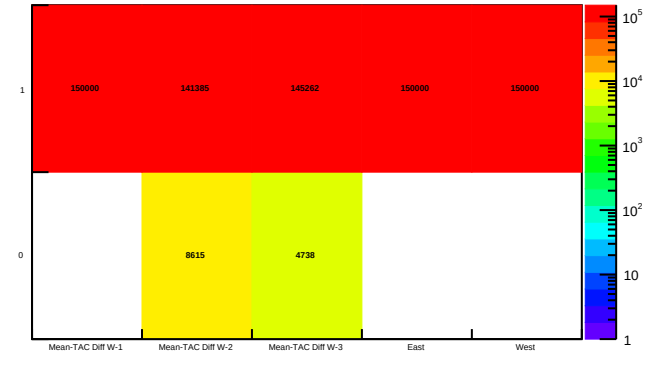
VT201 Input Ch4: VPD Tac Diff



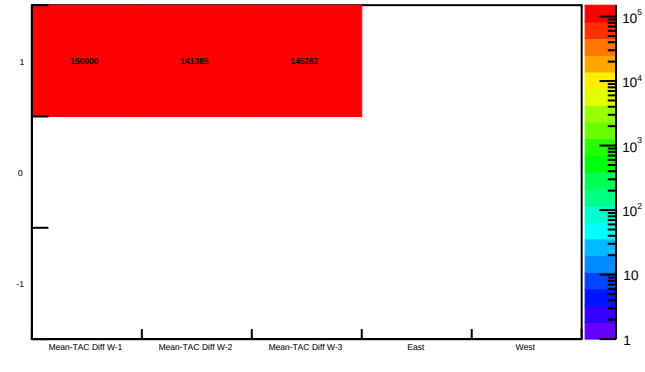
VT201 Input Ch4: VPD Tac Diff

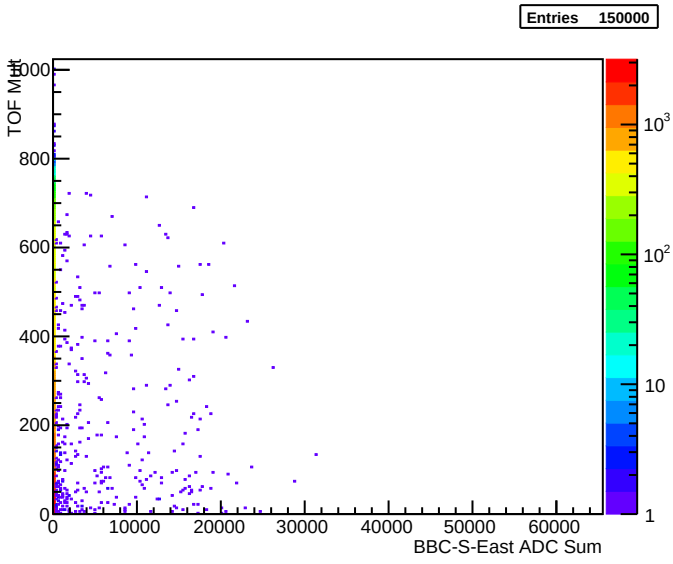


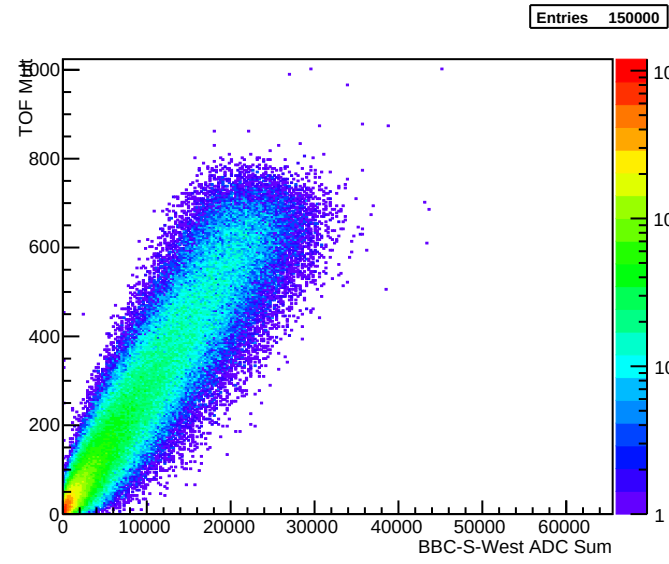
VT201 Input Ch4: VPD Adc Sum Th

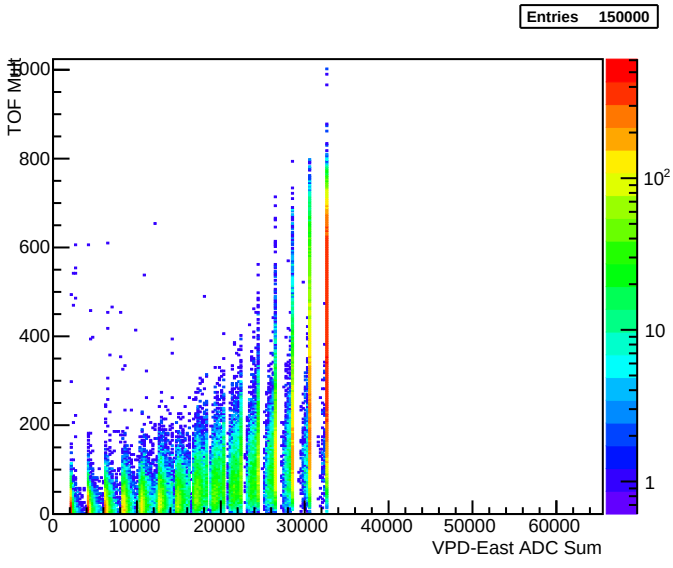


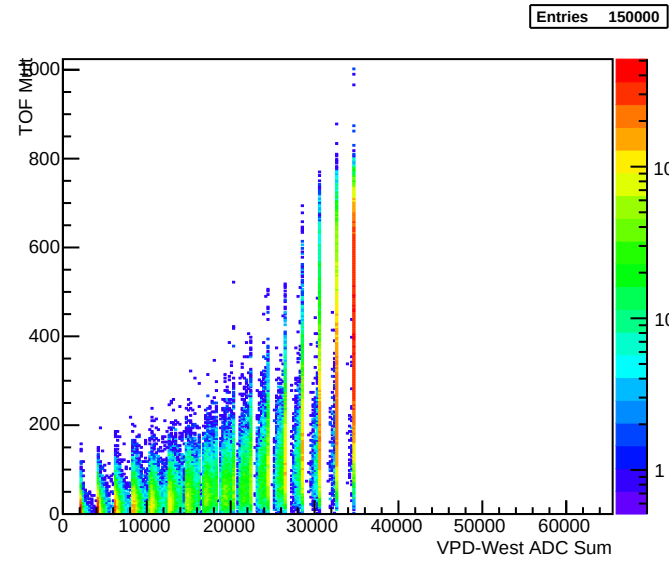
VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)

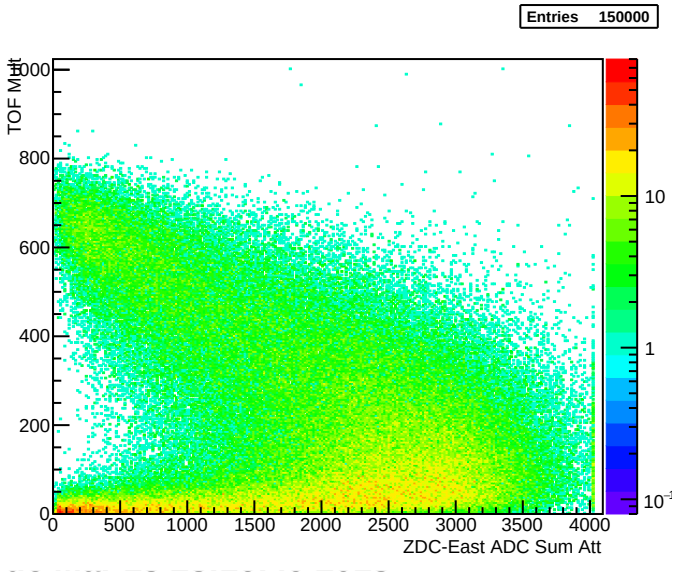


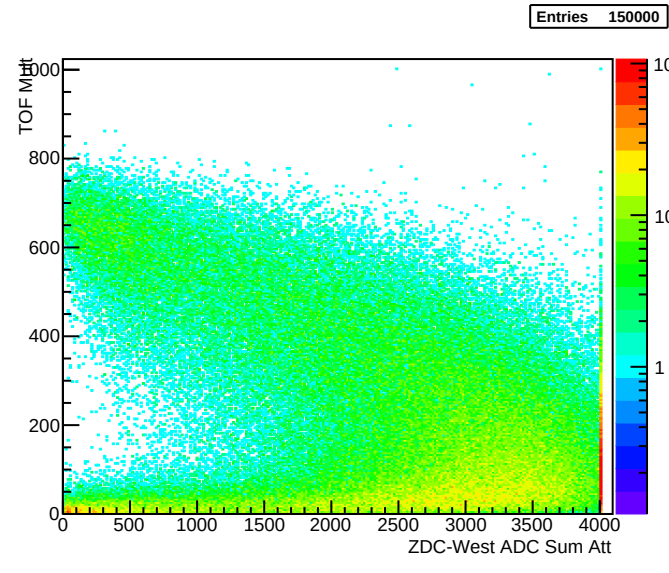

Entries 150000
TOF Mult
BBC-S-East ADC Sum

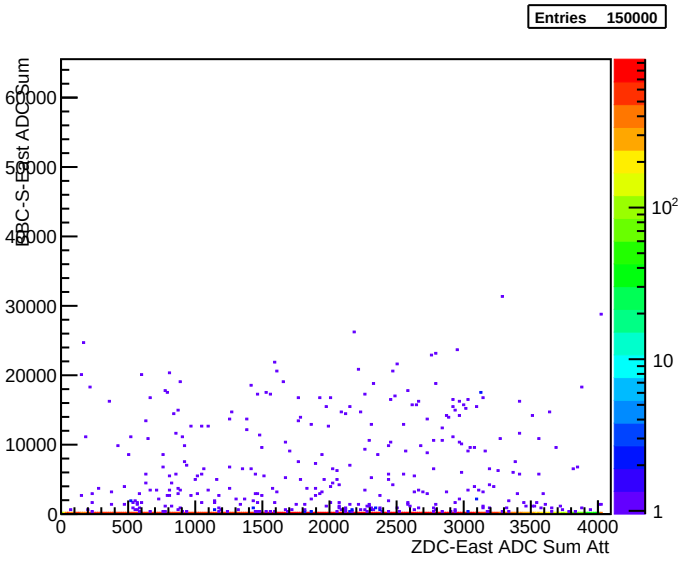

Entries 150000
TOF Mult
BBC-S-West ADC Sum

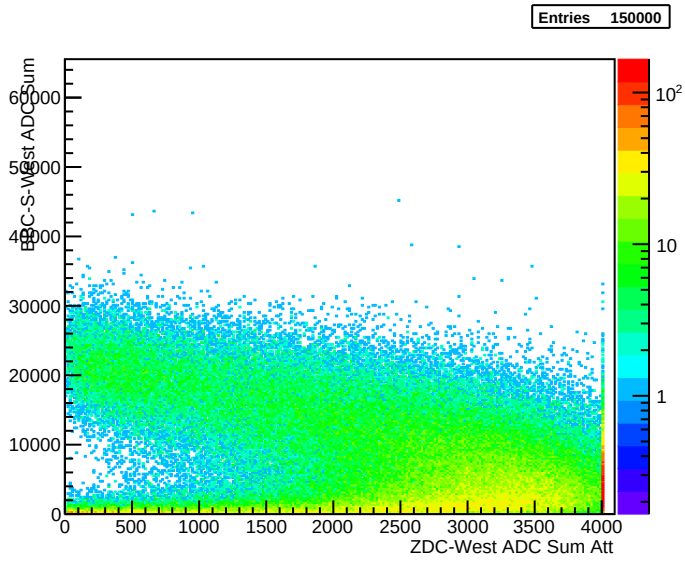

Entries 150000
TOF Mult
VPD-East ADC Sum

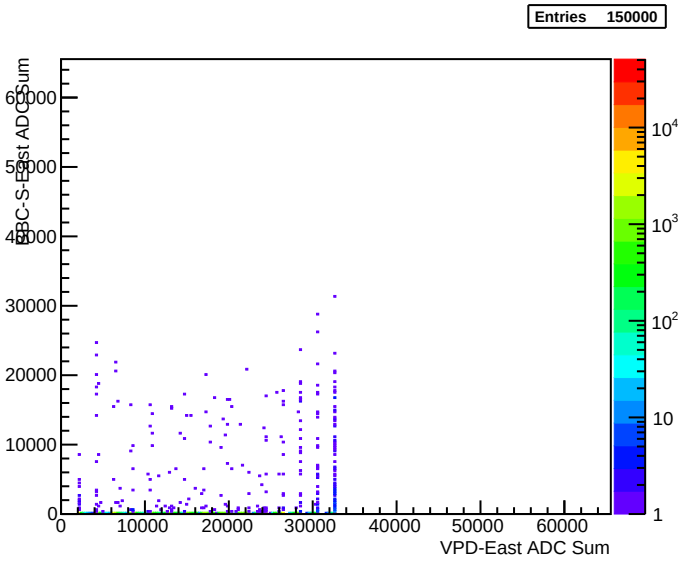

Entries 150000
TOF Mult
VPD-West ADC Sum

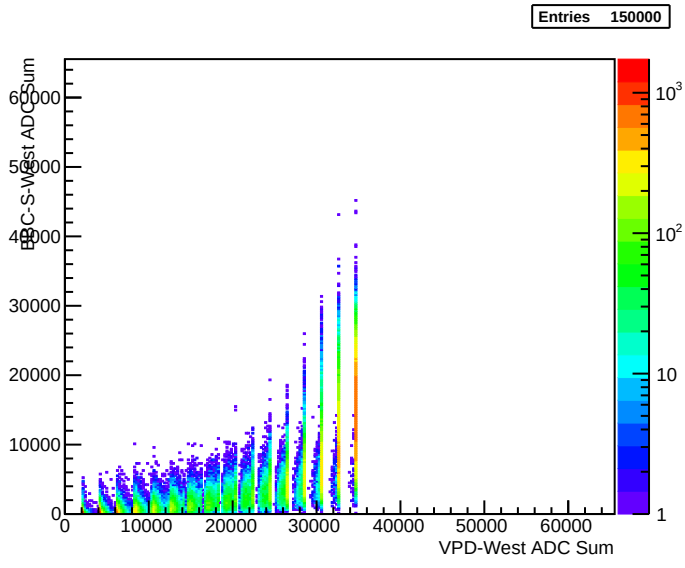

Entries 150000
TOF Mult
ZDC-East ADC Sum Att

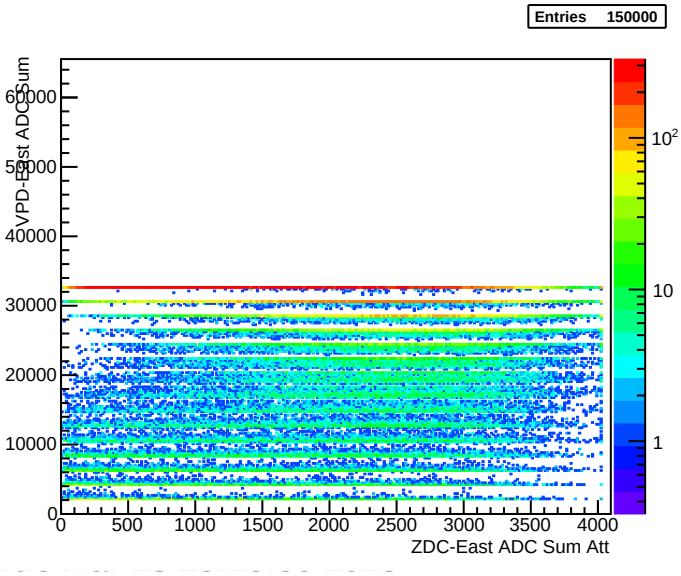

Entries 150000
TOF Mult
ZDC-West ADC Sum Att

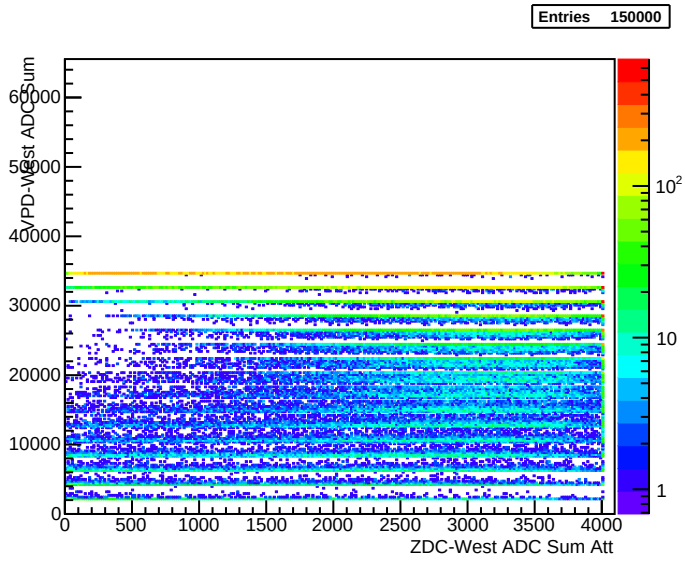

Entries 150000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

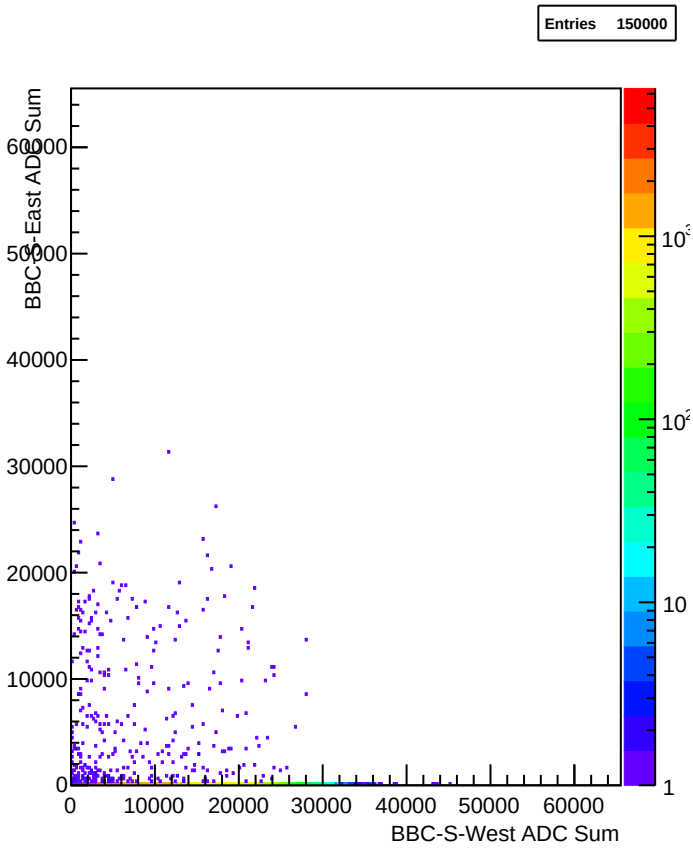

Entries 150000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

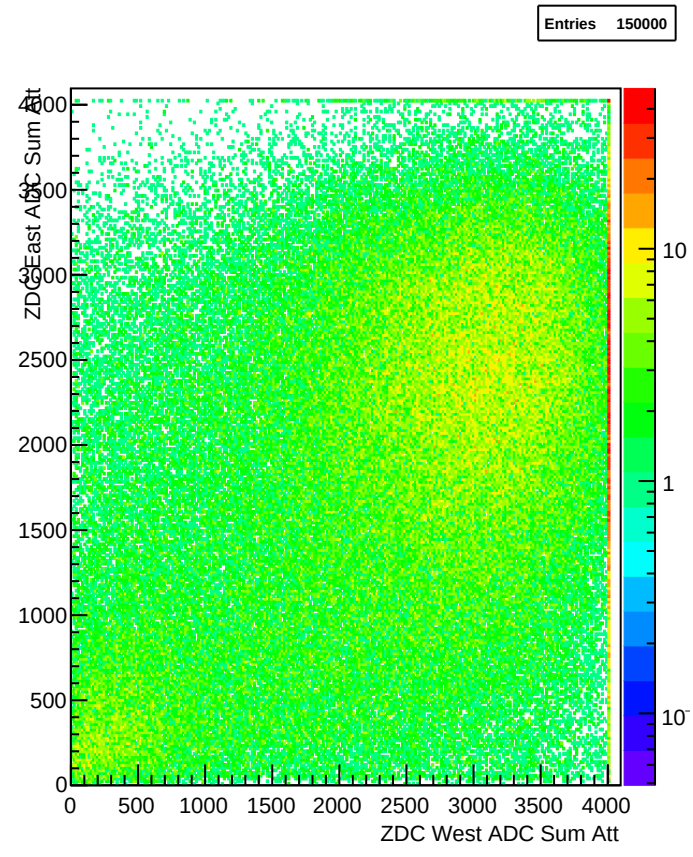

Entries 150000
BBC-S-East ADC Sum
VPD-East ADC Sum

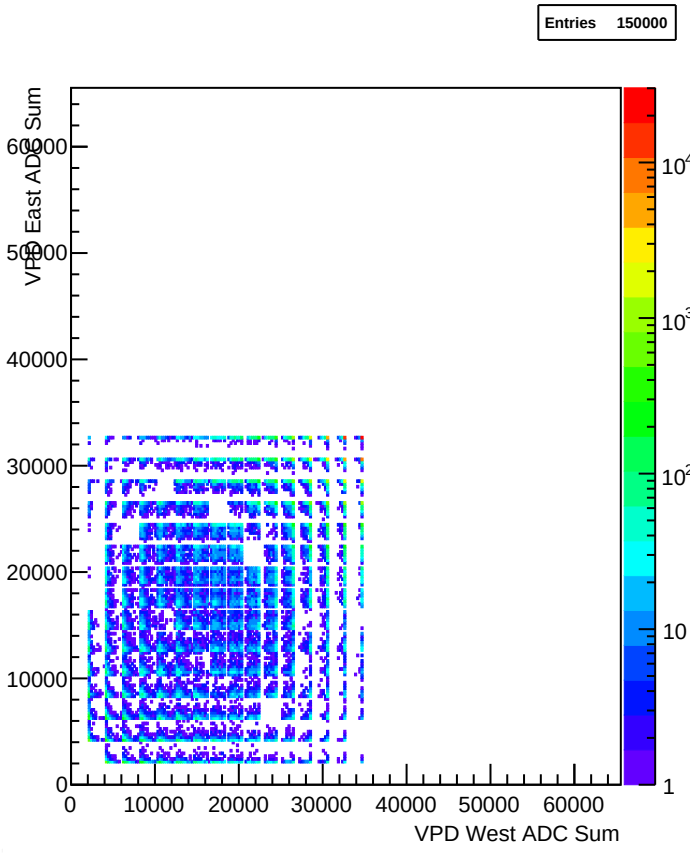

Entries 150000
BBC-S-West ADC Sum
VPD-West ADC Sum

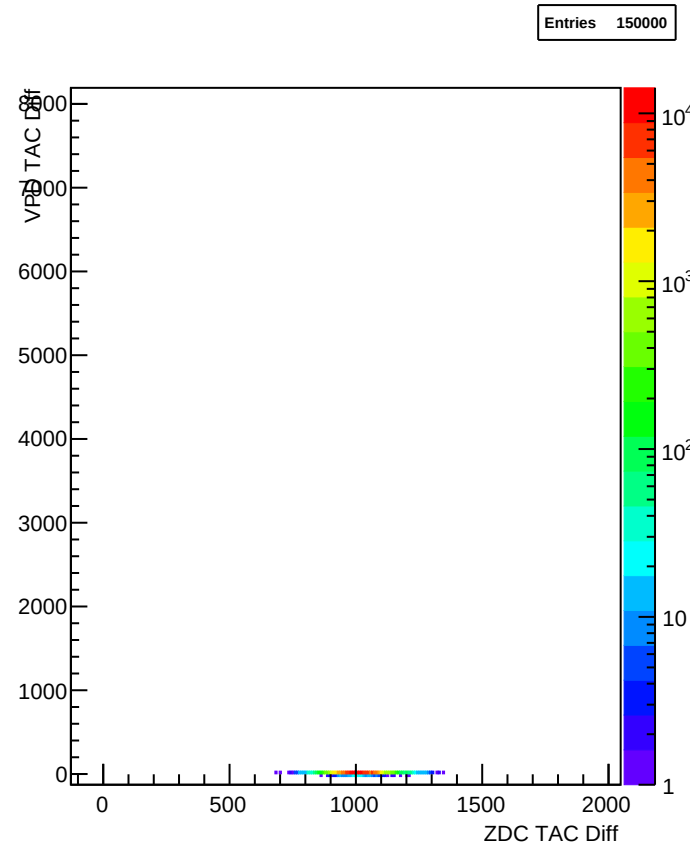

Entries 150000
VPD-East ADC Sum
ZDC-East ADC Sum Att

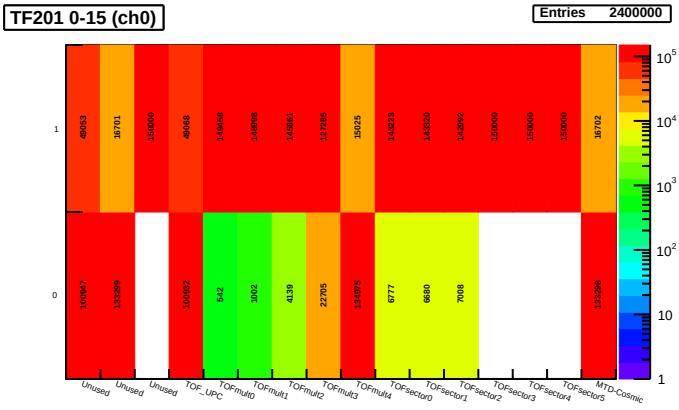

Entries 150000
VPD-West ADC Sum
ZDC-West ADC Sum Att

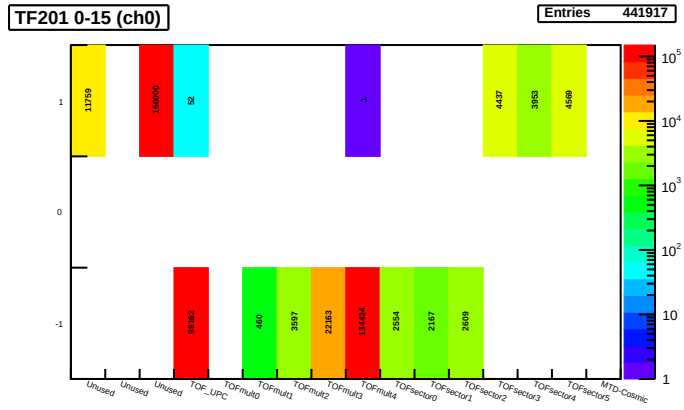

Entries 150000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

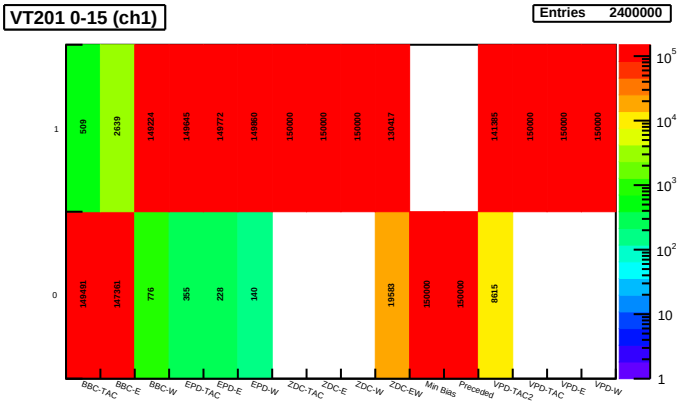

Entries 150000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

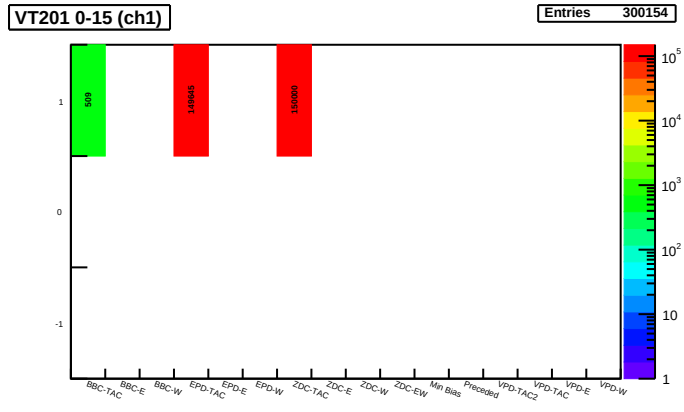

Entries 150000
VPD East ADC Sum
VPD West ADC Sum

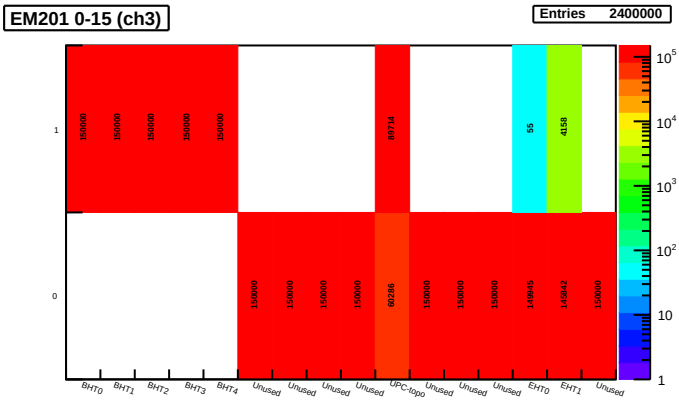

Entries 150000
VPD TAC Diff
ZDC TAC Diff

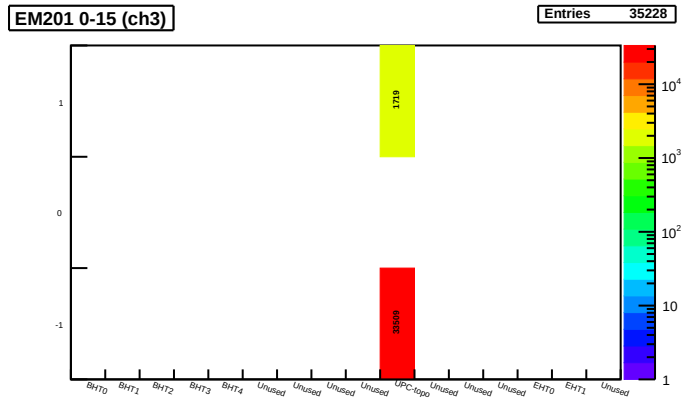

TF201 0-15 (ch0)
Entries 2400000
1
0
49053 16701 150000 49068 149458 148998 149861 127295 15025 143223 143320 142392 150000 150000 150000 16702
100947 133299 100932 542 1002 4139 22705 134975 6777 6680 7008 133298
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic
10^5 10^4 10^3 10^2 10 1

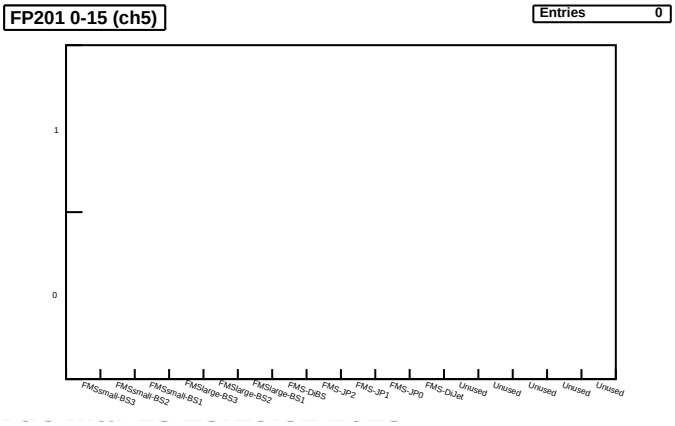

TF201 0-15 (ch0)
Entries 441917
1
0
-1
11759 150000 52 1 4437 3953 4569
99162 460 3597 22163 134434 2554 2167 2609
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic
10^5 10^4 10^3 10^2 10 1

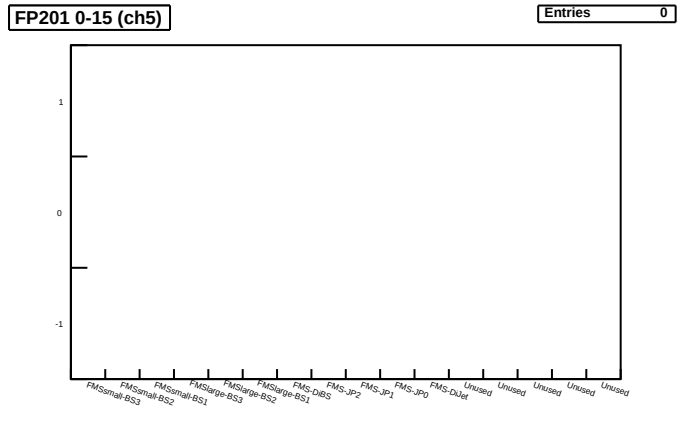

VT201 0-15 (ch1)
Entries 2400000
1
0
509 2639 149324 149645 149772 149860 150000 150000 150000 139417 141385 150000 150000 150000
149491 147361 776 365 228 140 19583 150000 150000 8615
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W
10^5 10^4 10^3 10^2 10 1


VT201 0-15 (ch1)
Entries 300154
1
0
-1
509 149665 150000
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
10^5 10^4 10^3 10^2 10 1


EM201 0-15 (ch3)
Entries 2400000
1
0
150000 150000 150000 150000 150000 89714 55 4158
150000 150000 150000 150000 60286 150000 150000 150000 149945 149842 150000
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused
10^5 10^4 10^3 10^2 10 1


EM201 0-15 (ch3)
Entries 35228
1
0
-1
1719
33509
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused
10^4 10^3 10^2 10 1


FP201 0-15 (ch5)
Entries 0
1
0
FMSsmall-BS3 FMSsmall-BS2 FMSsmall-BS1 FMSlarge-BS3 FMSlarge-BS2 FMSlarge-BS1 FMS-DiBS FMS-JP2 FMS-JP1 FMS-JP0 FMS-DiJet Unused Unused Unused Unused Unused


FP201 0-15 (ch5)
Entries 0
1
0
-1
FMSsmall-BS3 FMSsmall-BS2 FMSsmall-BS1 FMSlarge-BS3 FMSlarge-BS2 FMSlarge-BS1 FMS-DiBS FMS-JP2 FMS-JP1 FMS-JP0 FMS-DiJet Unused Unused Unused Unused Unused