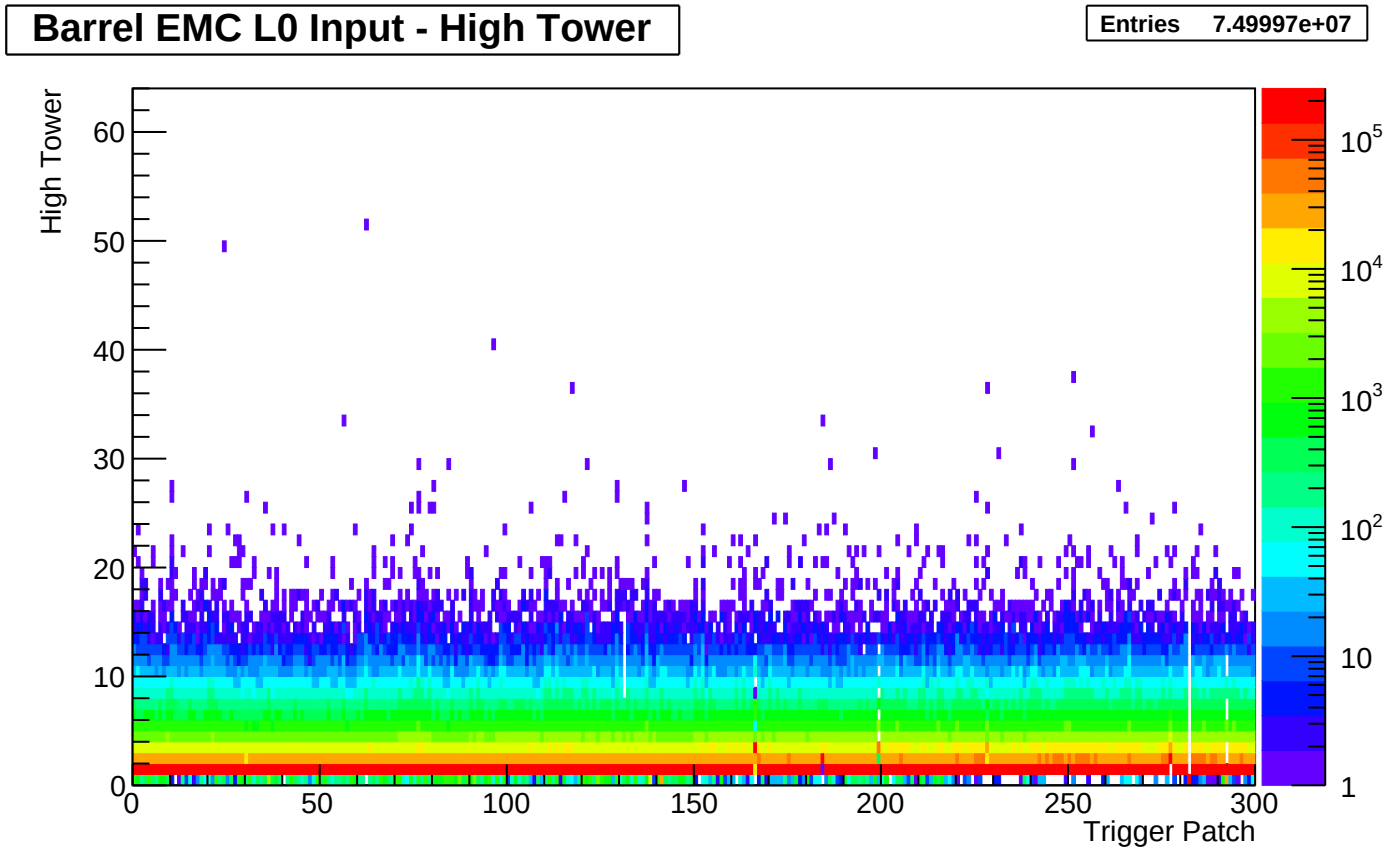
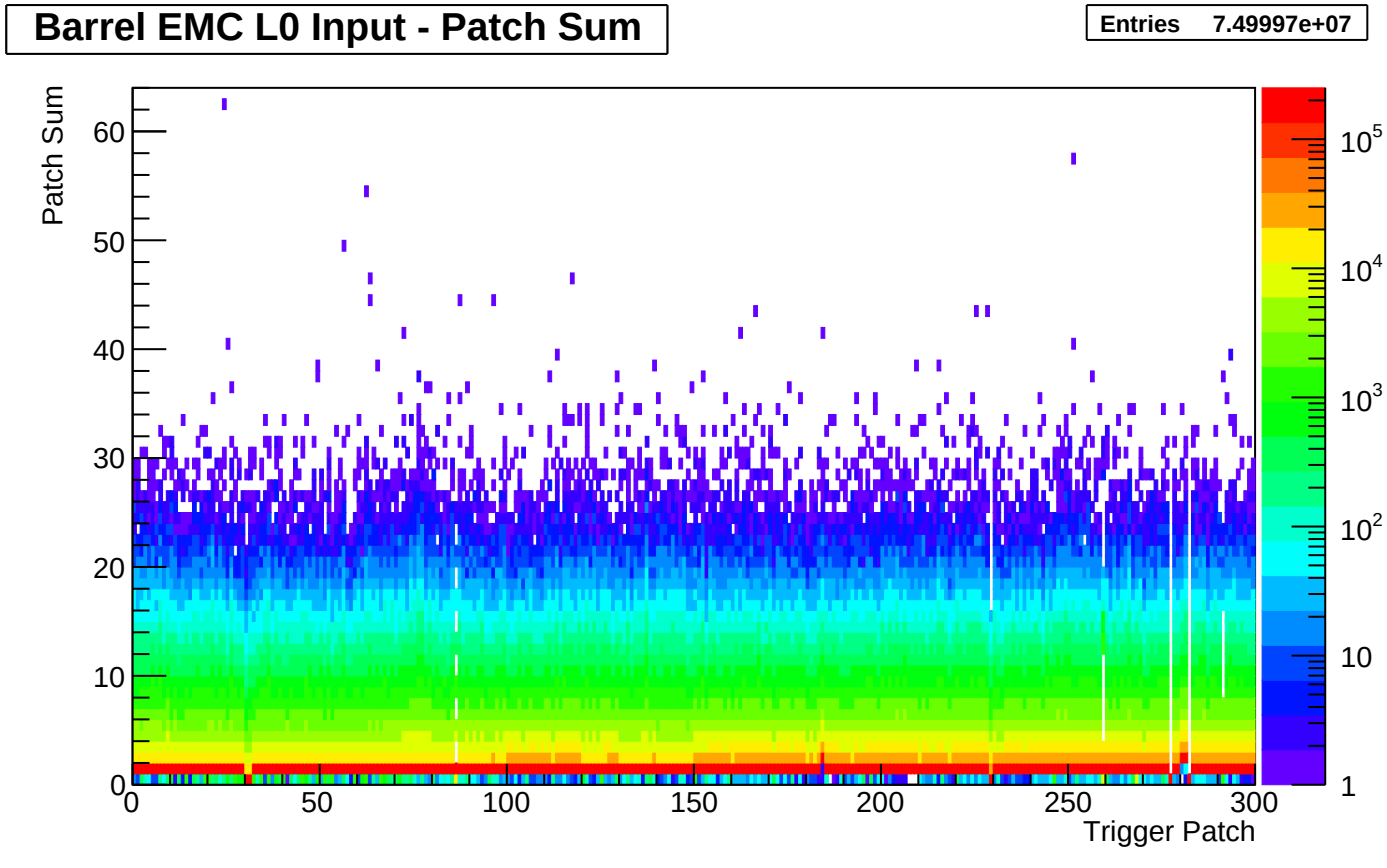
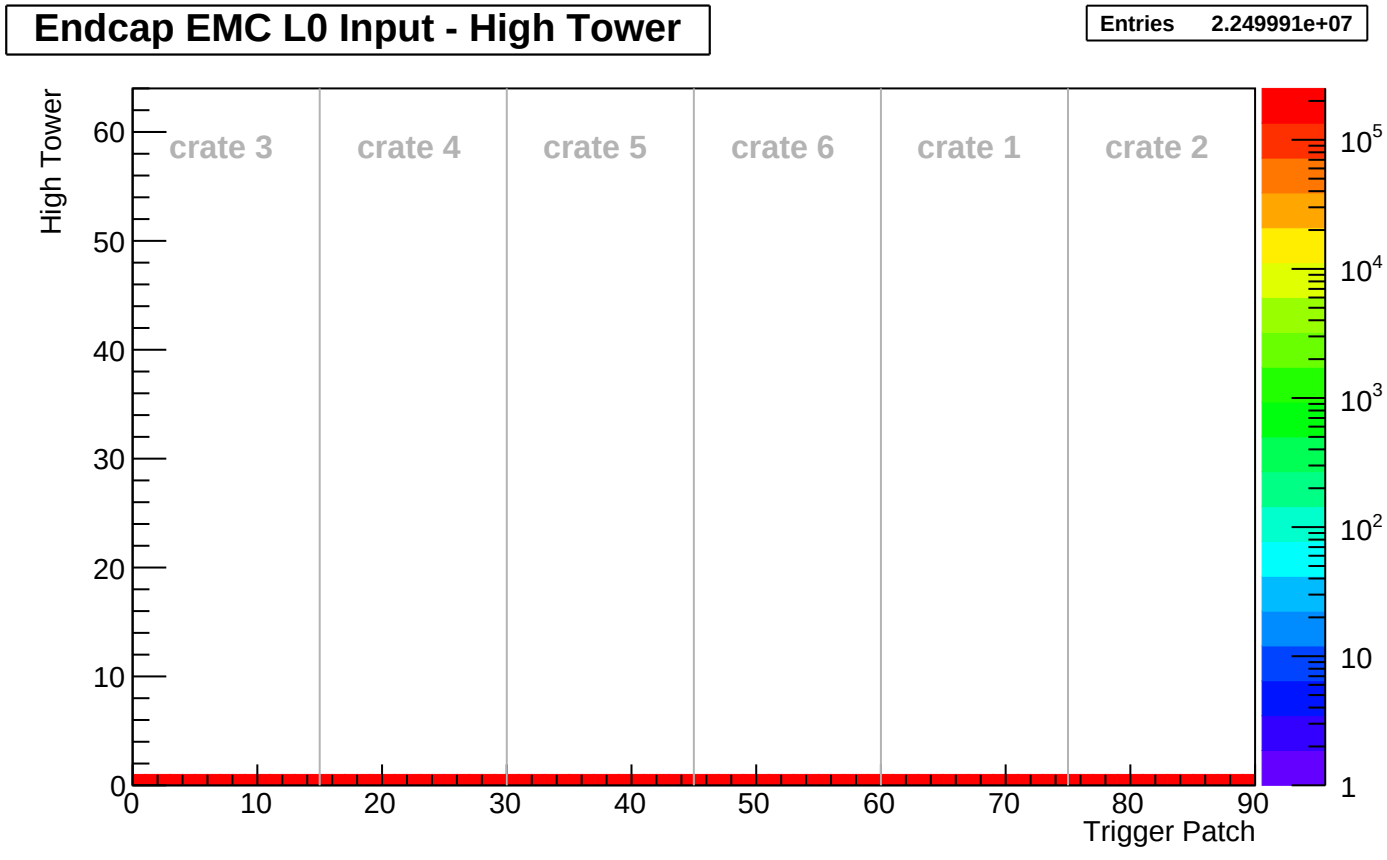
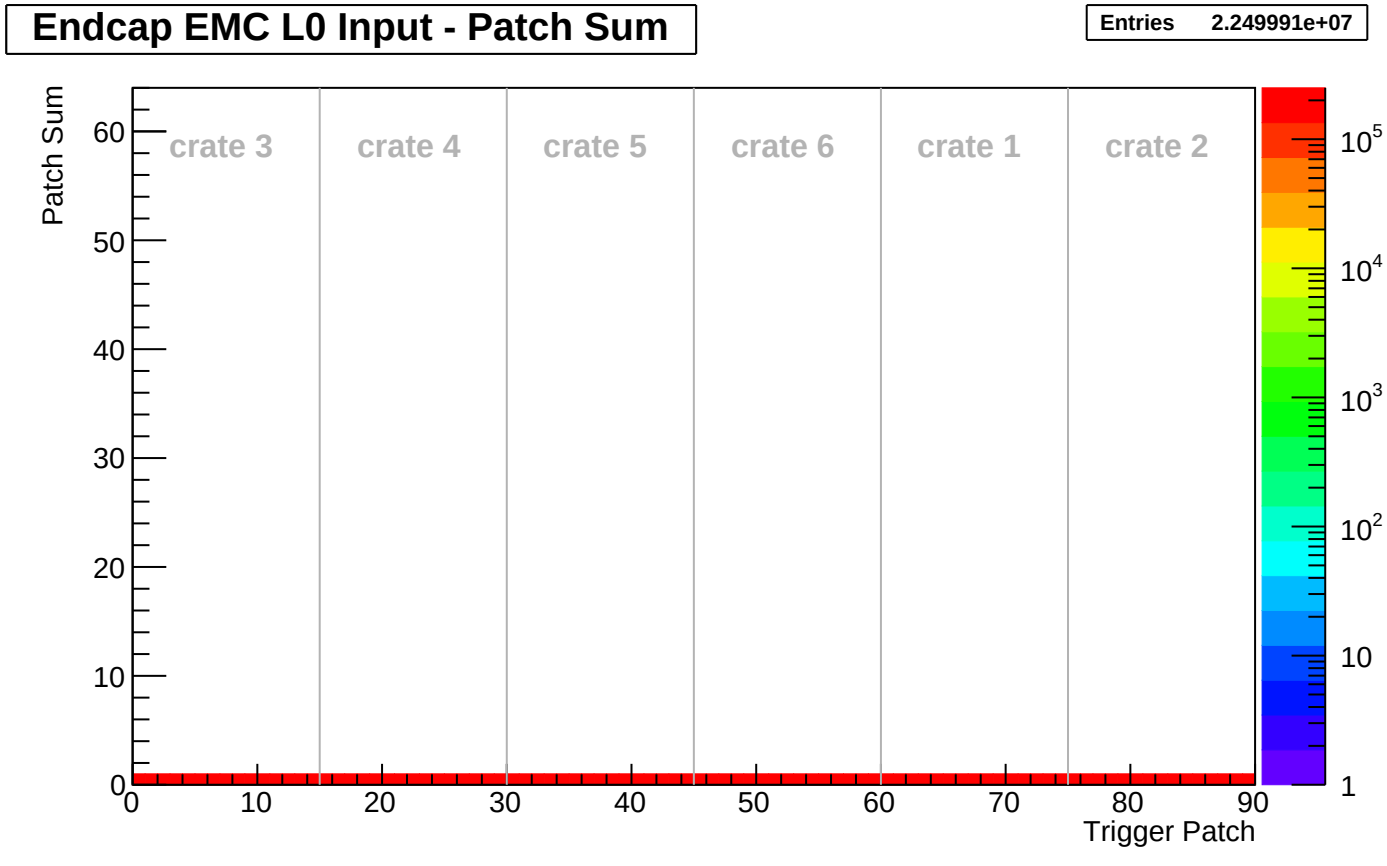
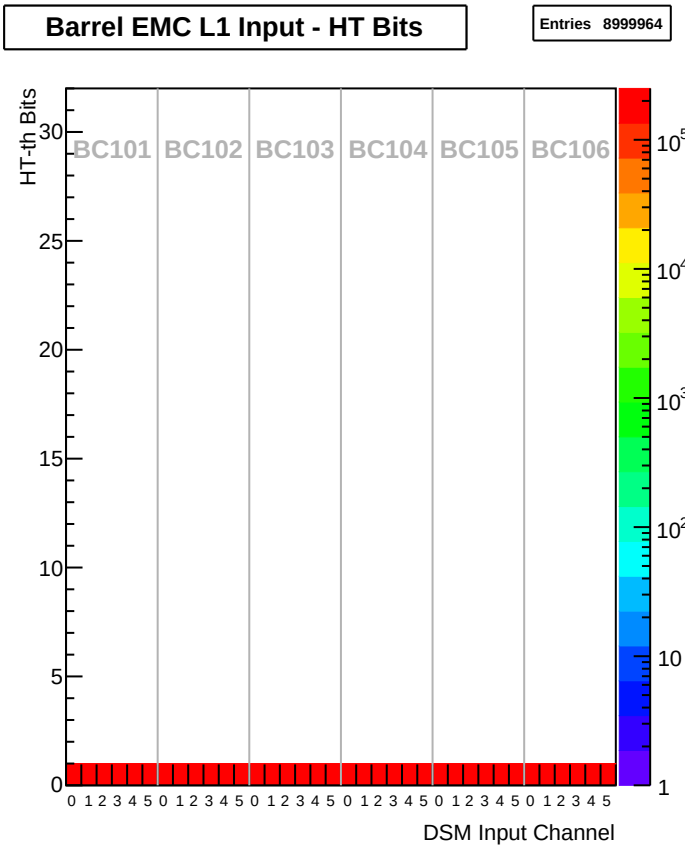
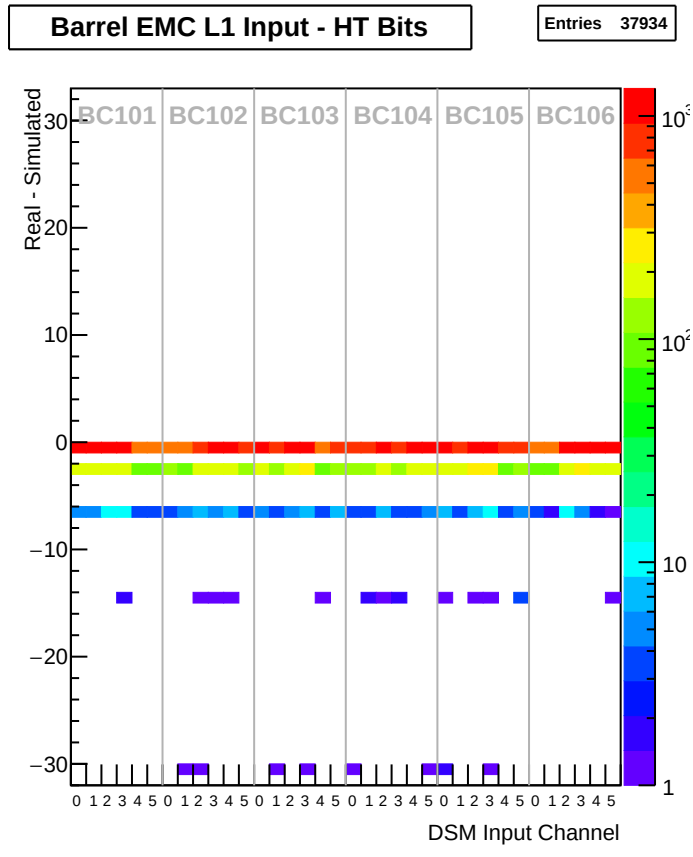

Barrel EMC L0 Input - High Tower
Entries 7.49997e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

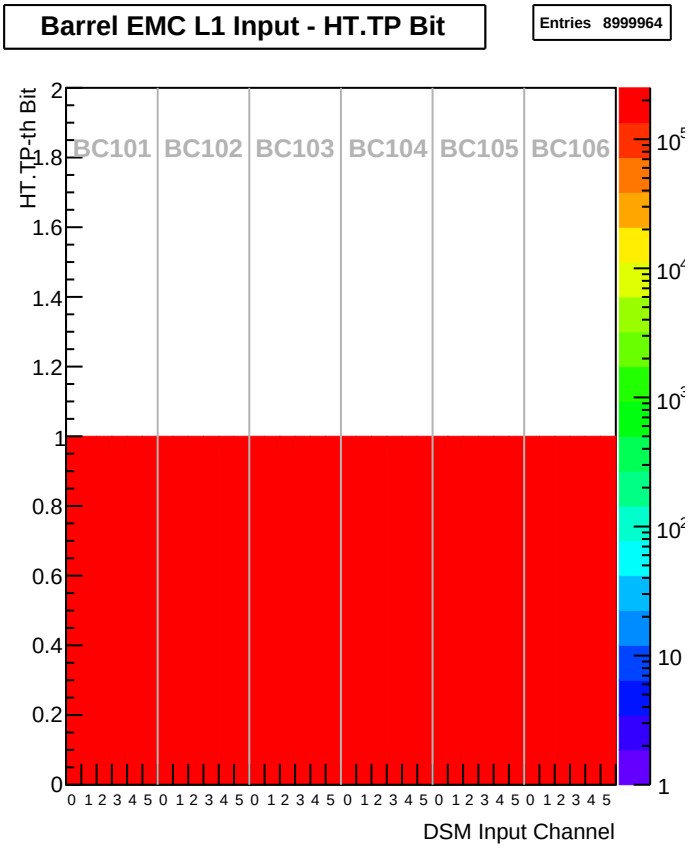

Barrel EMC L0 Input - Patch Sum
Entries 7.49997e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

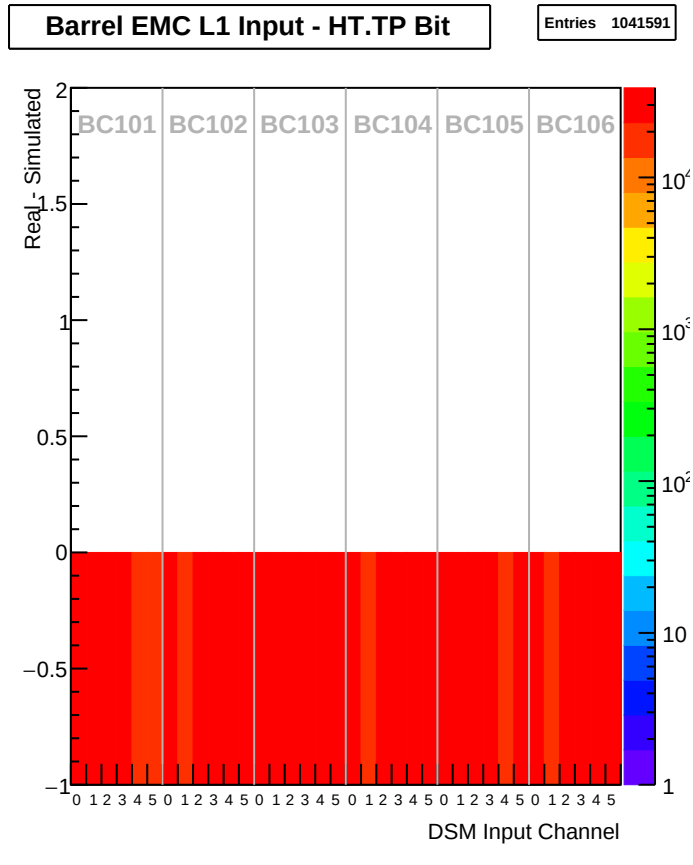

Endcap EMC L0 Input - High Tower
Entries 2.249991e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

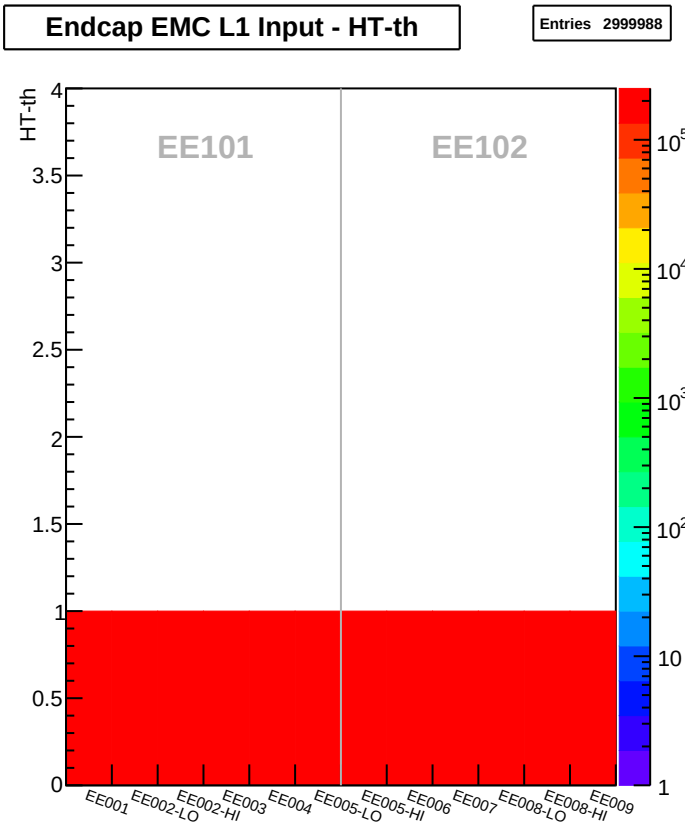

Endcap EMC L0 Input - Patch Sum
Entries 2.249991e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

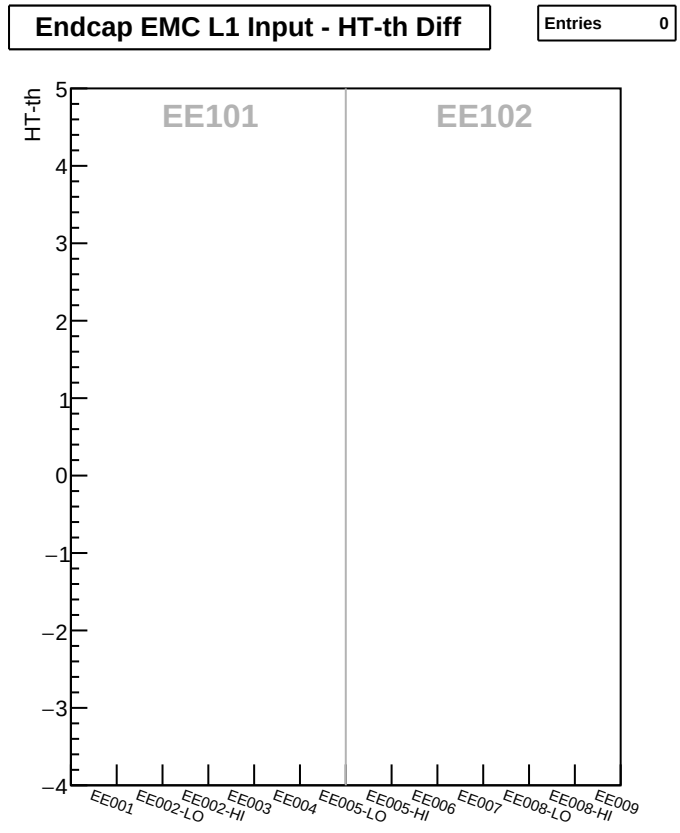

Barrel EMC L1 Input - HT Bits
Entries 8999964
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

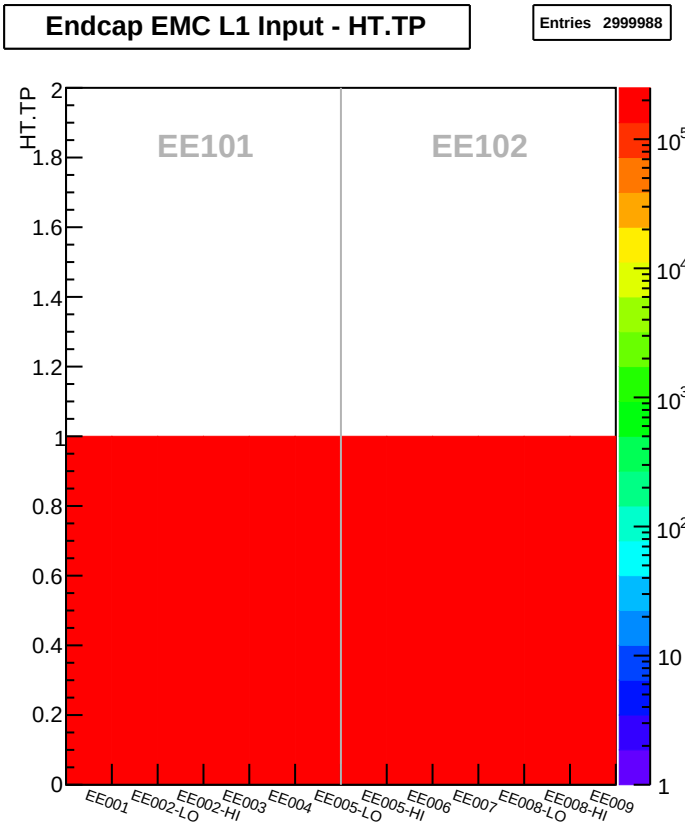

Barrel EMC L1 Input - HT Bits
Entries 37934
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

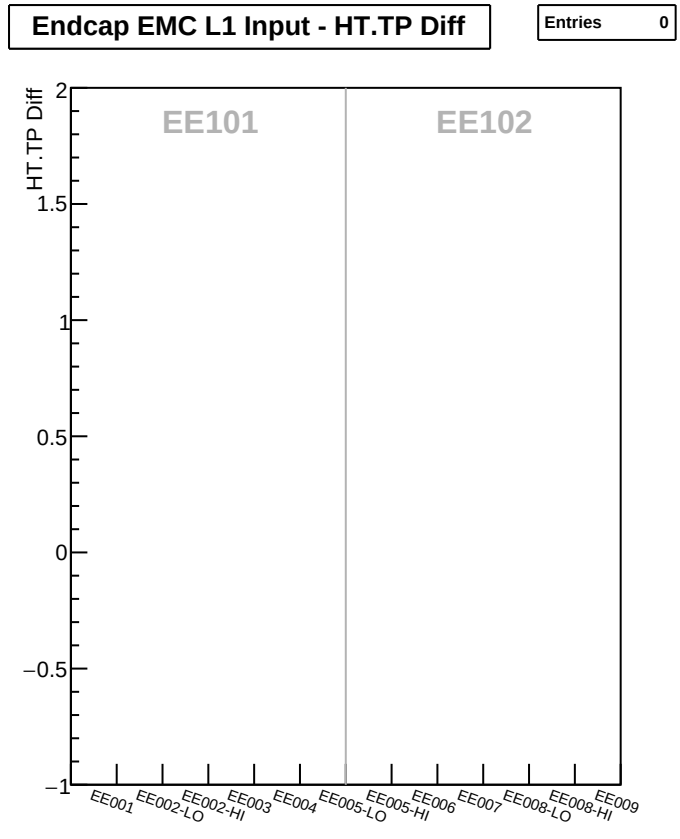

Barrel EMC L1 Input - HT.TP Bit
Entries 8999964
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

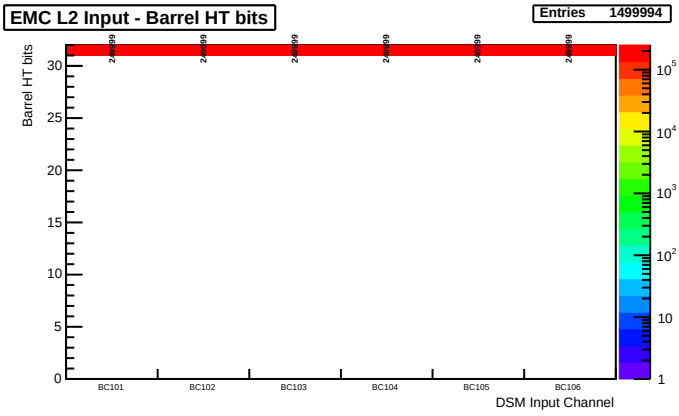

Barrel EMC L1 Input - HT.TP Bit
Entries 1041591
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

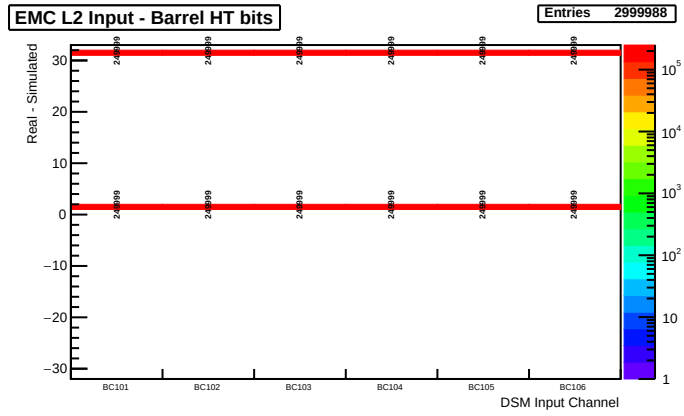

Endcap EMC L1 Input - HT-th
Entries 2999988
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

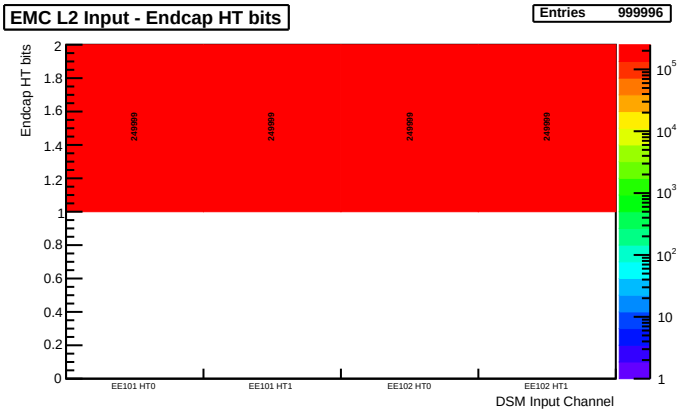

Endcap EMC L1 Input - HT-th Diff
Entries 0
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

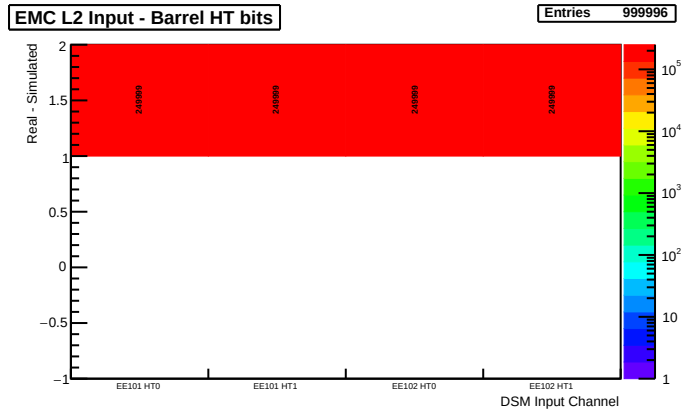

Endcap EMC L1 Input - HT.TP
Entries 2999988
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

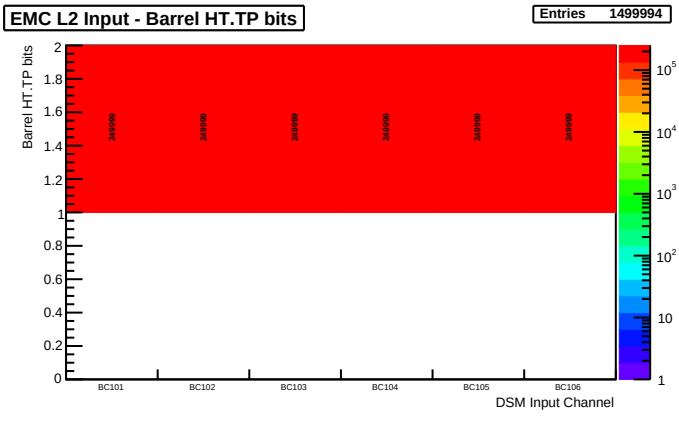

Endcap EMC L1 Input - HT.TP Diff
Entries 0
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

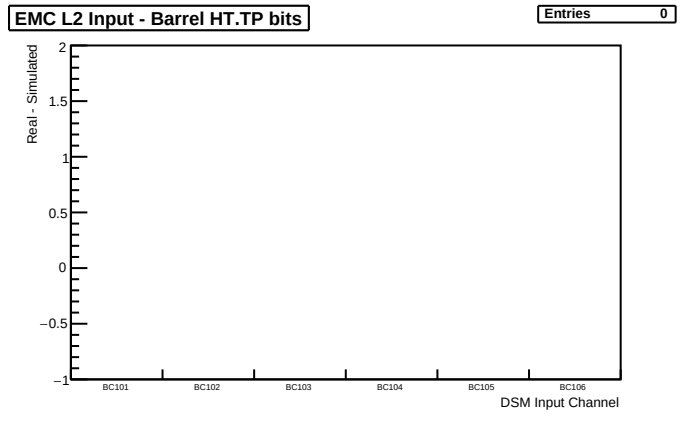

EMC L2 Input - Barrel HT bits
Entries 1499994
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

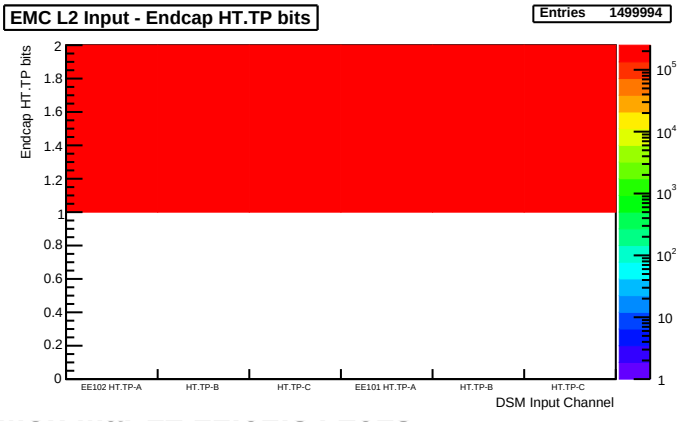

EMC L2 Input - Barrel HT bits
Entries 2999988
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

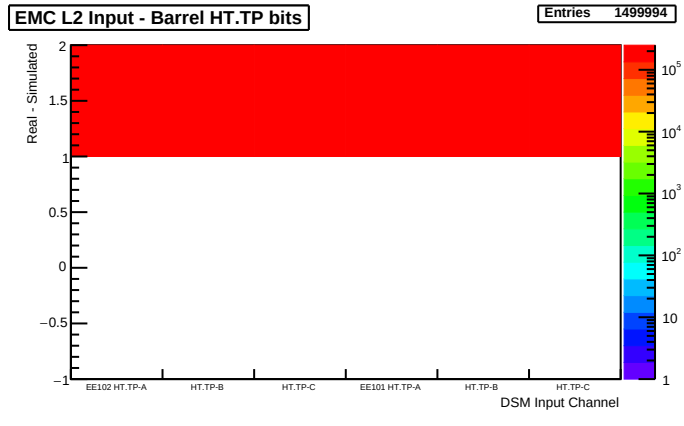

EMC L2 Input - Endcap HT bits
Entries 999996
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

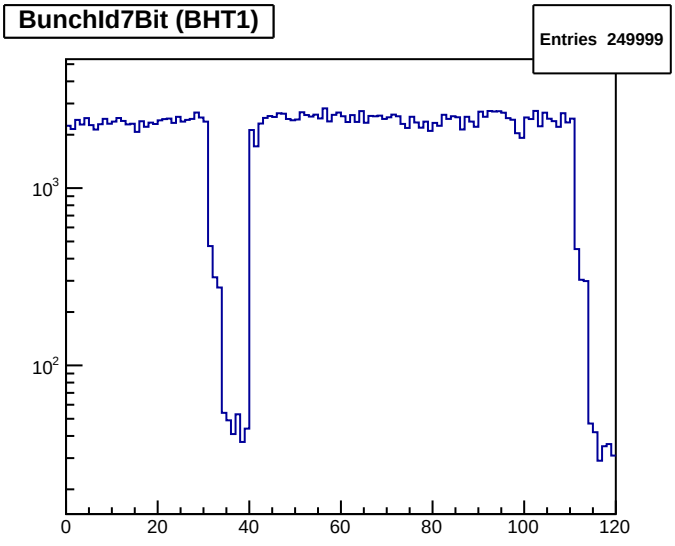

EMC L2 Input - Barrel HT bits
Entries 999996
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

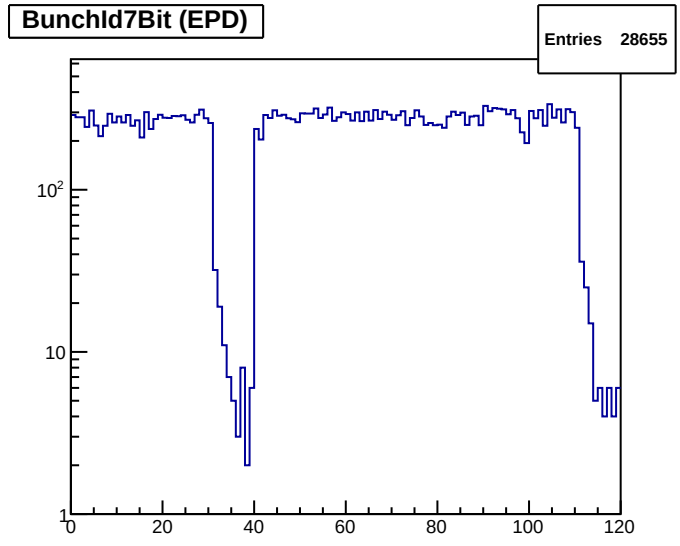

EMC L2 Input - Barrel HT.TP bits
Entries 1499994
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

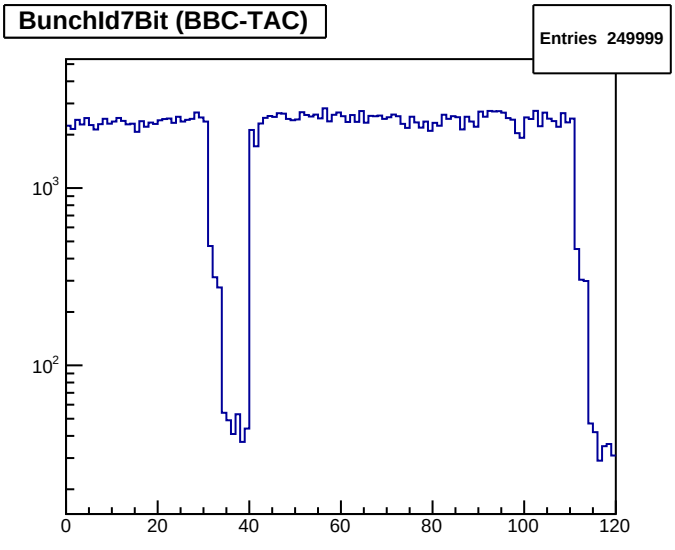

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

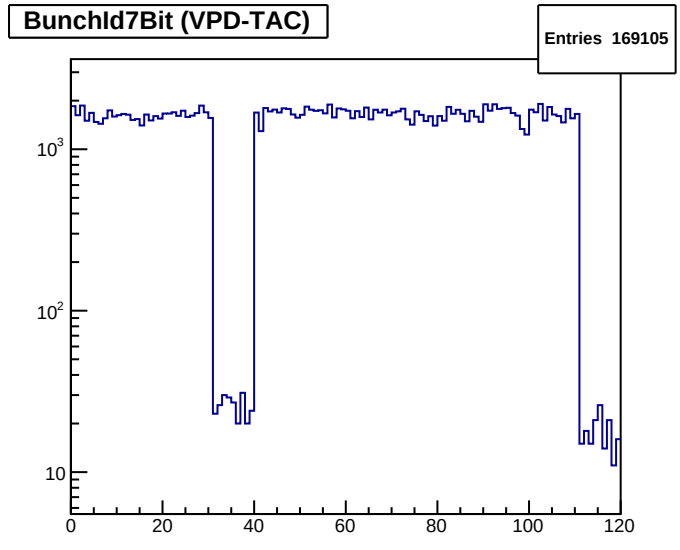

EMC L2 Input - Endcap HT.TP bits
Entries 1499994
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

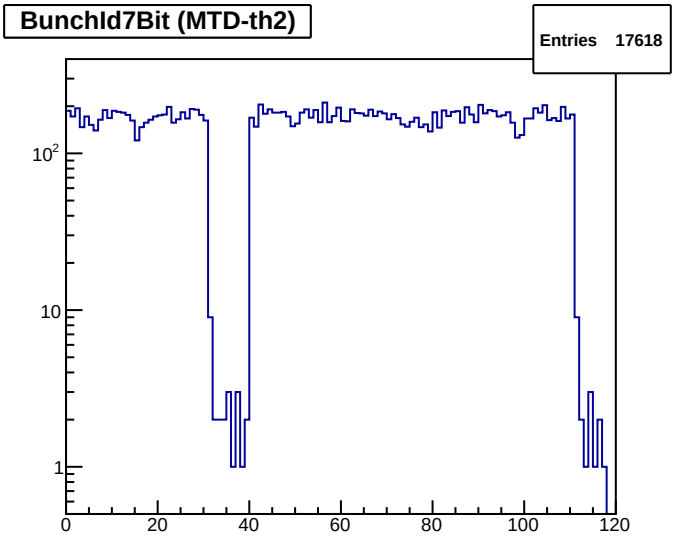

EMC L2 Input - Barrel HT.TP bits
Entries 1499994
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

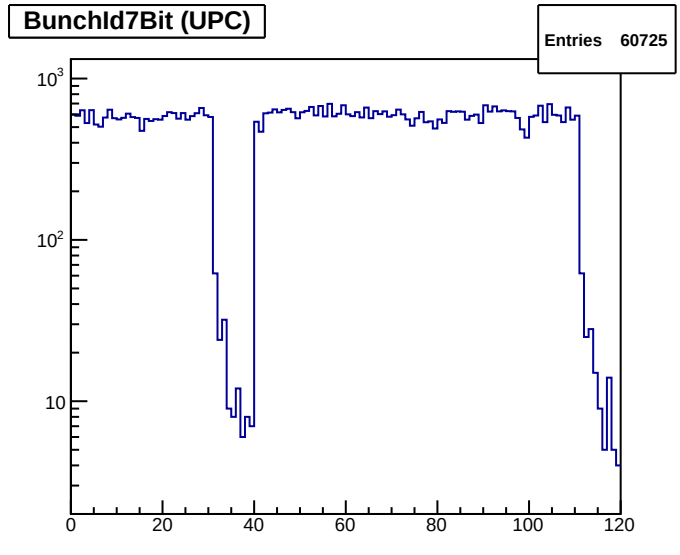

BunchId7Bit (BHT1)
Entries 249999
10^3
10^2
0 20 40 60 80 100 120

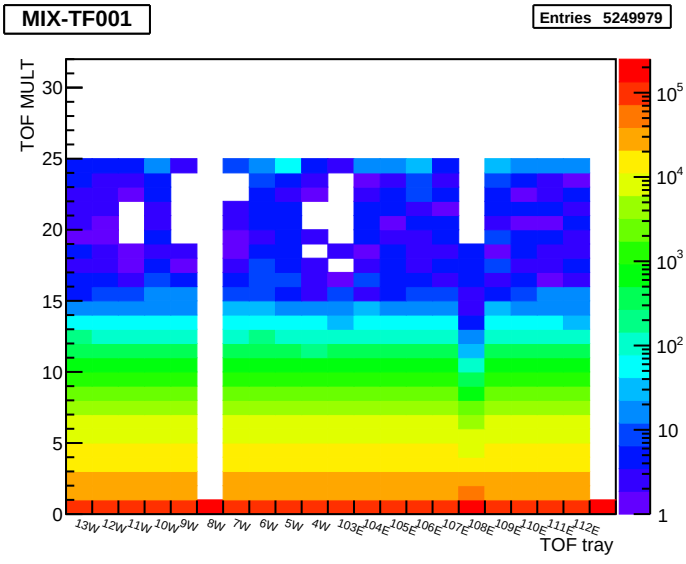

BunchId7Bit (EPD)
Entries 28655
10^2
10
1
0 20 40 60 80 100 120

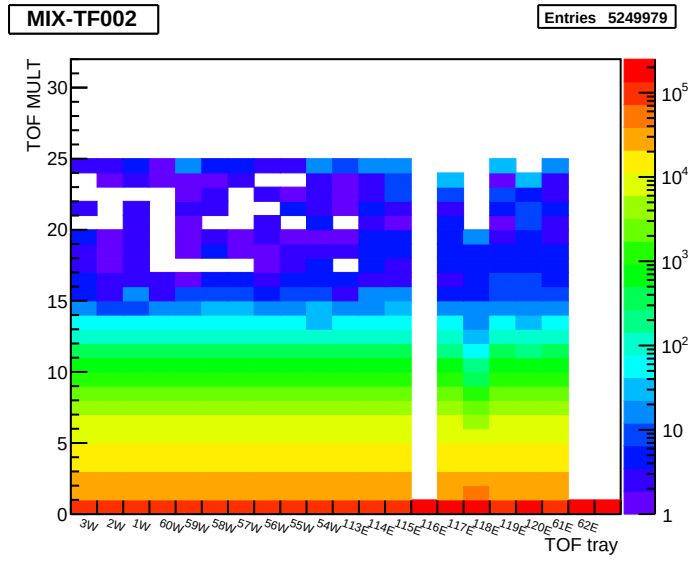

BunchId7Bit (BBC-TAC)
Entries 249999
10^3
10^2
0 20 40 60 80 100 120

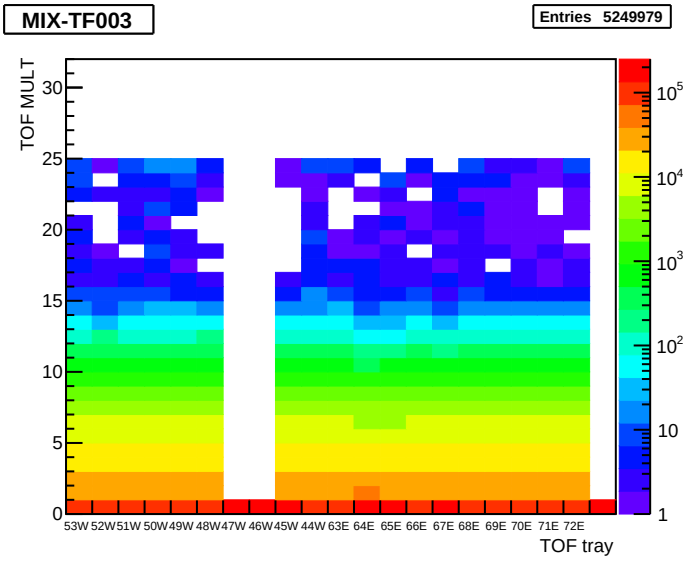

BunchId7Bit (VPD-TAC)
Entries 169105
10^3
10^2
10
0 20 40 60 80 100 120

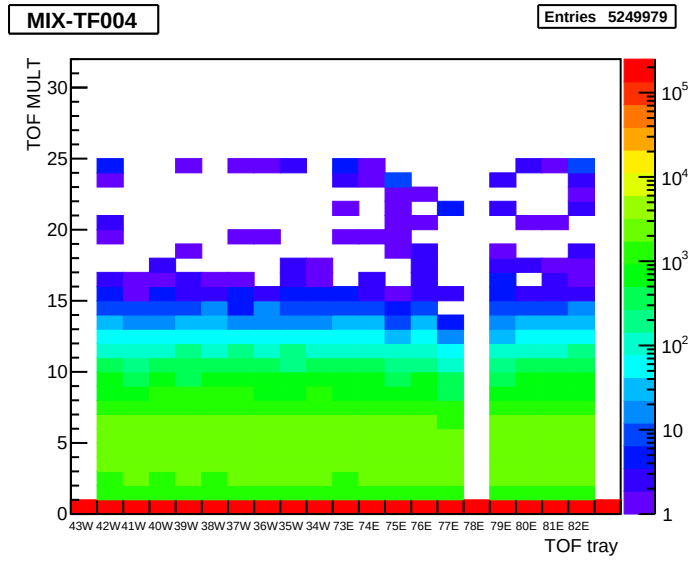

BunchId7Bit (MTD-th2)
Entries 17618
10^2
10
1
0 20 40 60 80 100 120

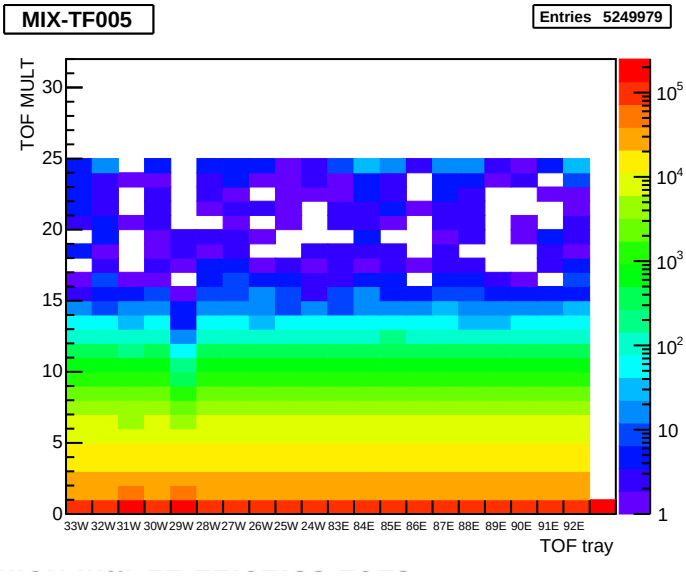

BunchId7Bit (UPC)
Entries 60725
10^3
10^2
10
0 20 40 60 80 100 120

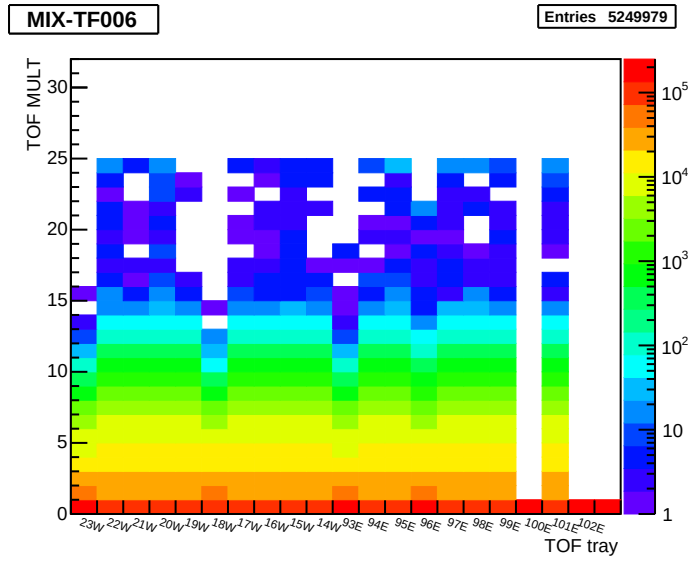

MIX-TF001
Entries 5249979
TOF MULT
TOF tray

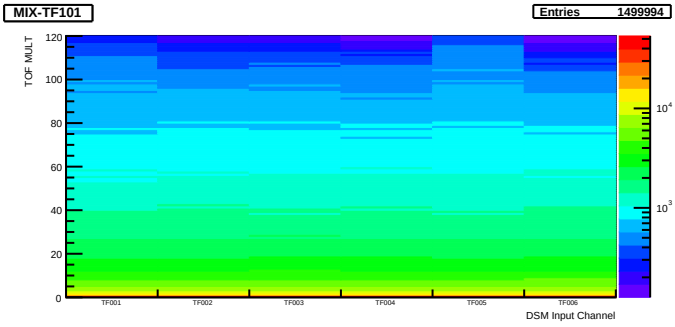

MIX-TF002
Entries 5249979
TOF MULT
TOF tray

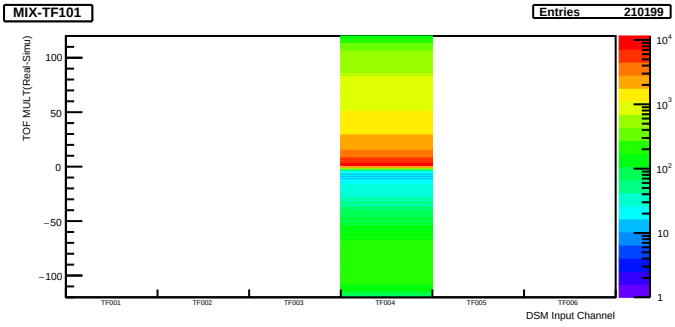

MIX-TF003
Entries 5249979
TOF MULT
TOF tray

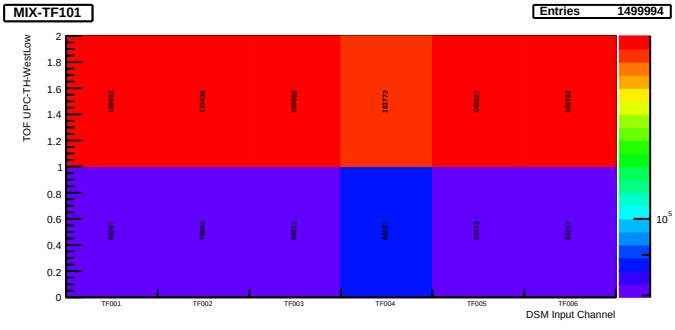

MIX-TF004
Entries 5249979
TOF MULT
TOF tray

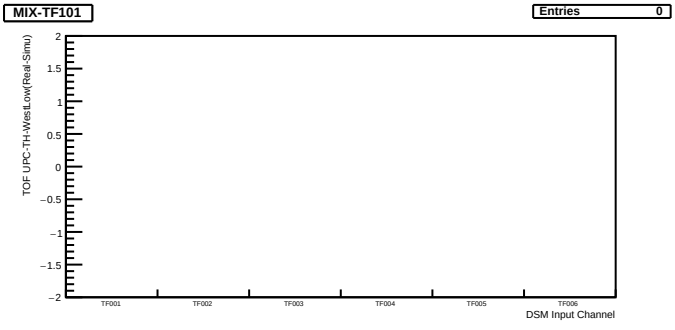

MIX-TF005
Entries 5249979
TOF MULT
TOF tray

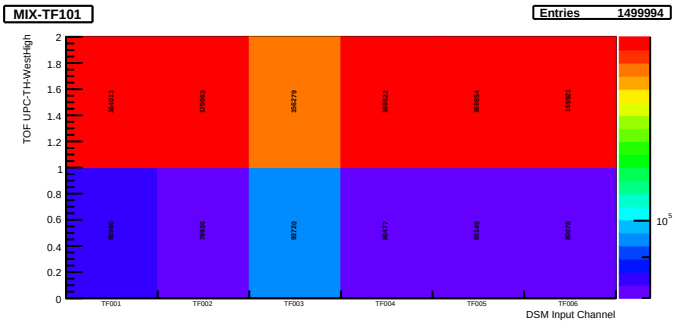

MIX-TF006
Entries 5249979
TOF MULT
TOF tray

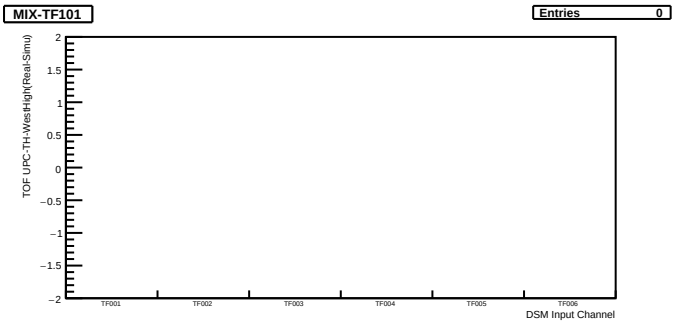

MIX-TF101
Entries 1499994
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

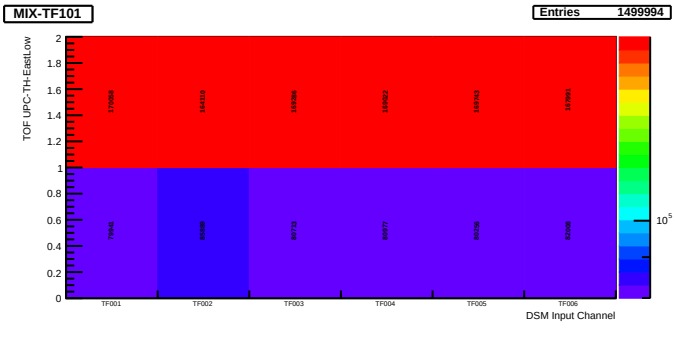

MIX-TF101
Entries 210199
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

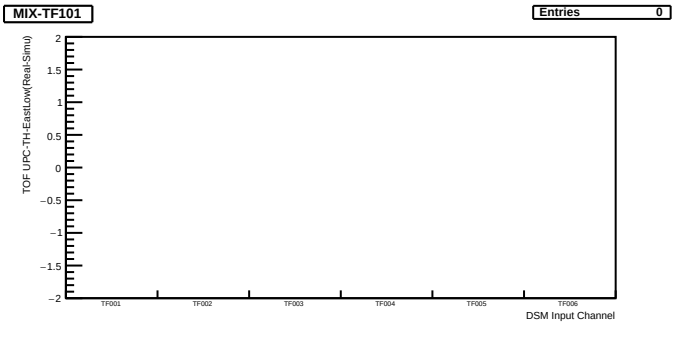

MIX-TF101
Entries 1499994
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

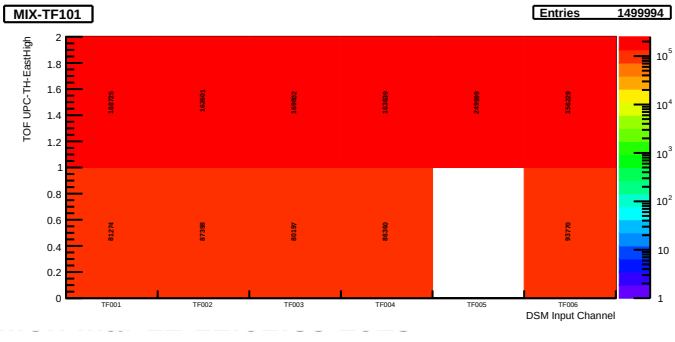

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

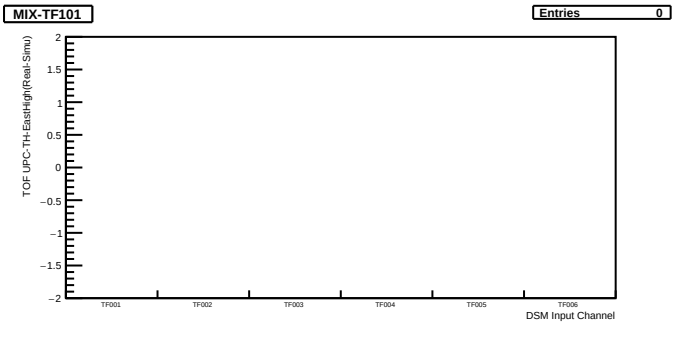

MIX-TF101
Entries 1499994
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

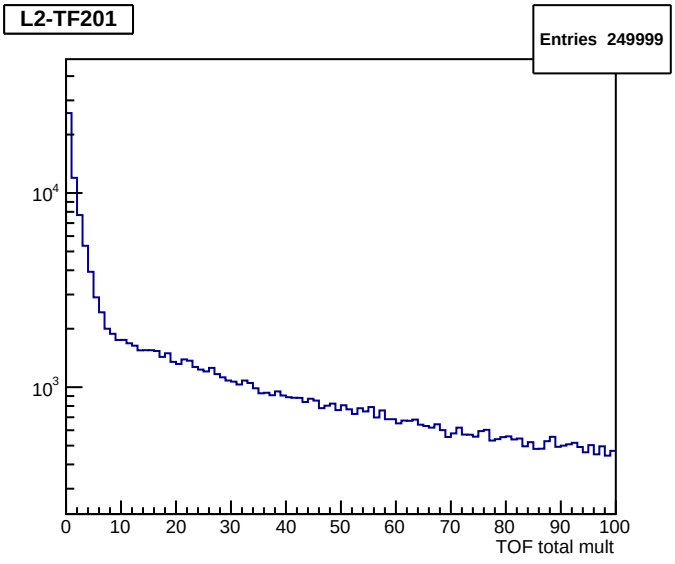

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

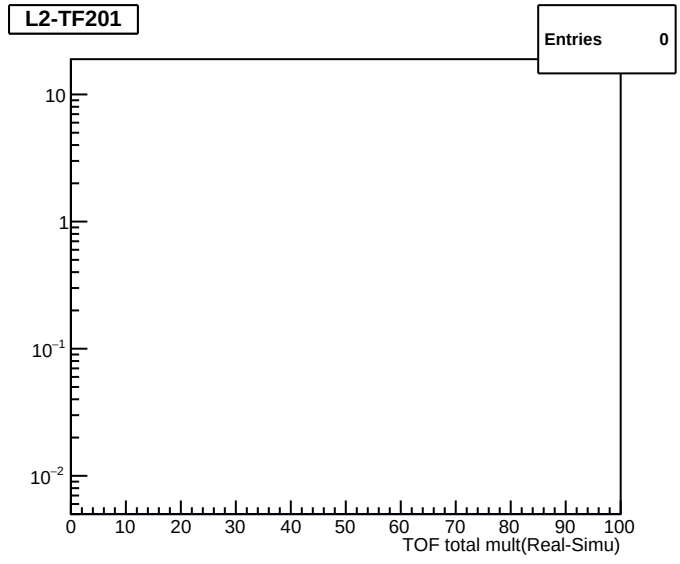

MIX-TF101
Entries 1499994
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

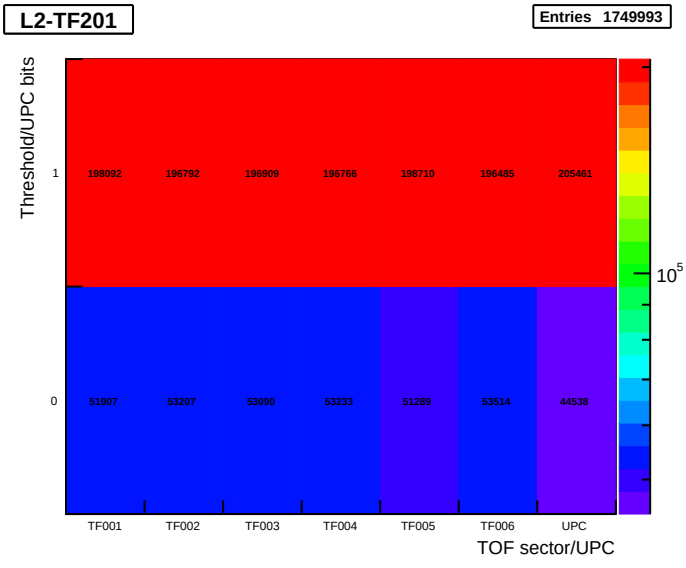

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

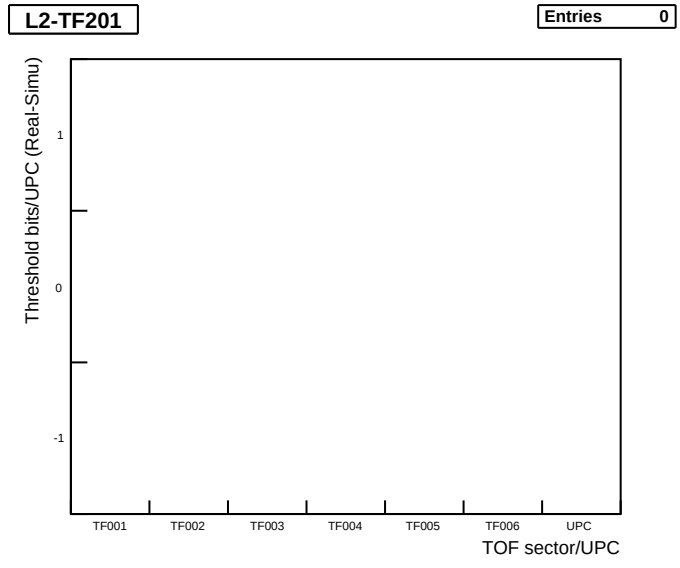

MIX-TF101
Entries 1499994
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

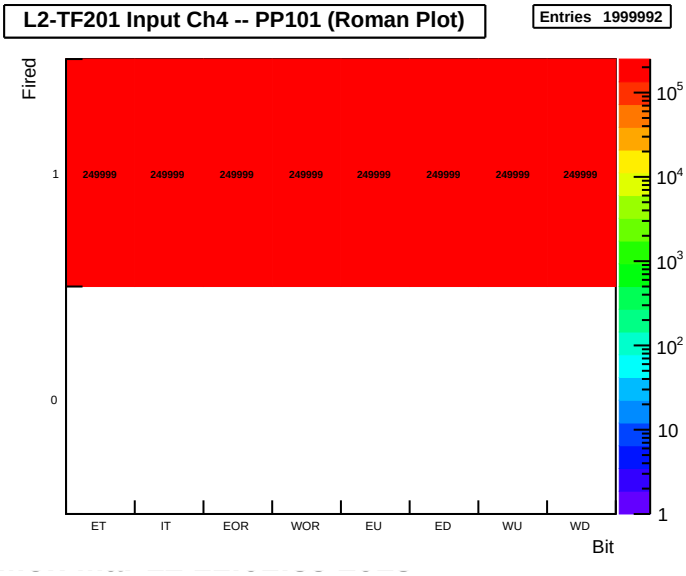

MIX-TF101
Entries 0
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

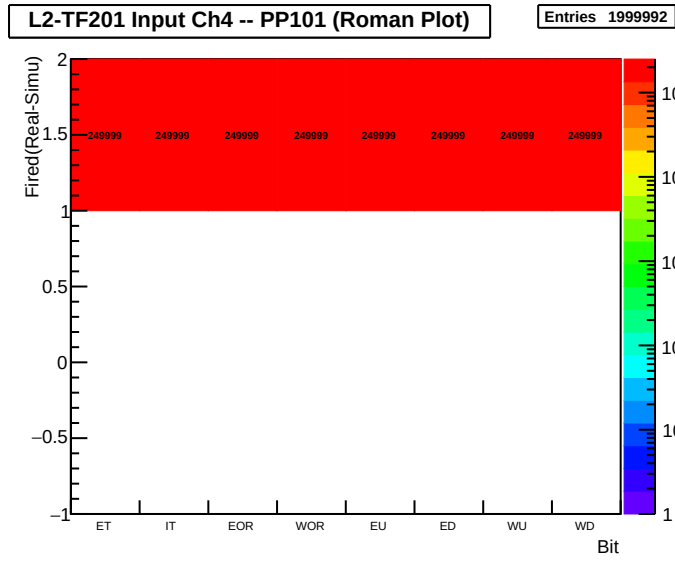

L2-TF201
Entries 249999
TOF total mult

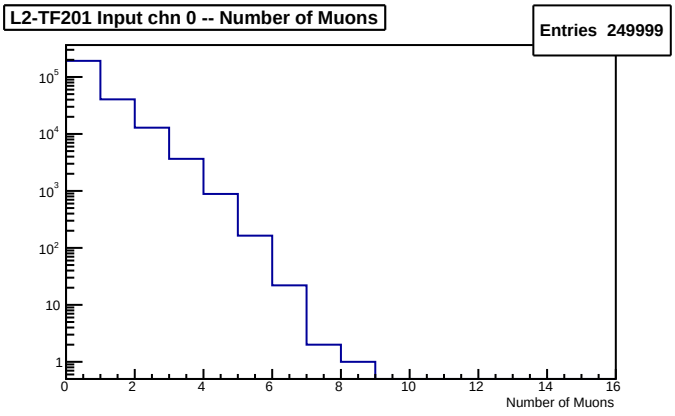

L2-TF201
Entries 0
TOF total mult(Real-Simu)

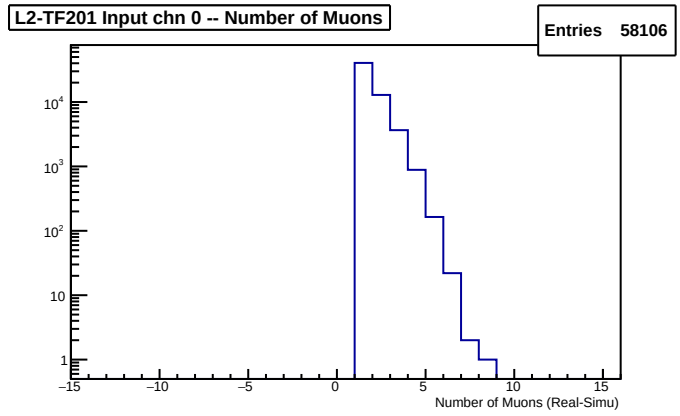

L2-TF201
Entries 1749993
Threshold/UPC bits
198092 196792 196909 196766 198710 196485 205461
51907 53207 53090 53233 51289 53514 44538
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

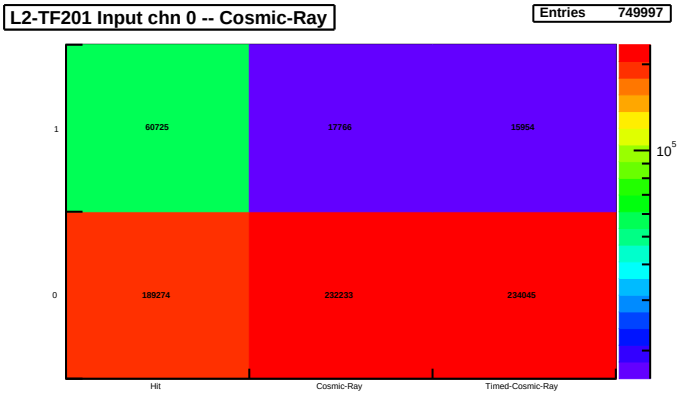

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

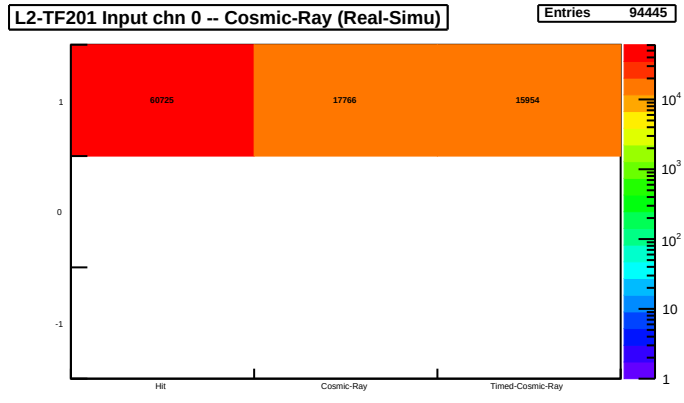

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 1999992
Fired
249999 249999 249999 249999 249999 249999 249999 249999
ET IT EOR WOR EU ED WU WD
Bit

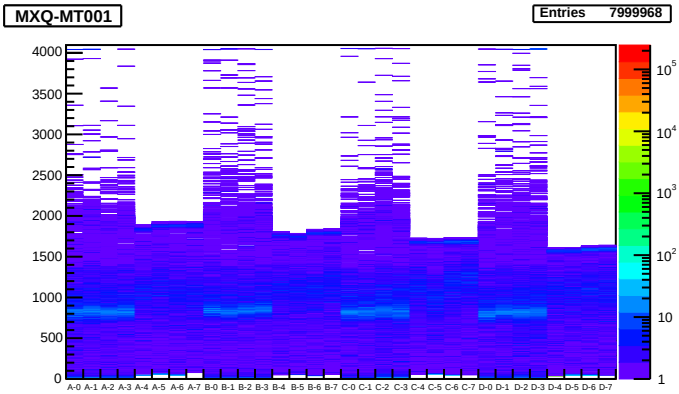

L2-TF201 Input Ch4 -- PP101 (Roman Plot)
Entries 1999992
Fired(Real-Simu)
249999 249999 249999 249999 249999 249999 249999 249999
ET IT EOR WOR EU ED WU WD
Bit

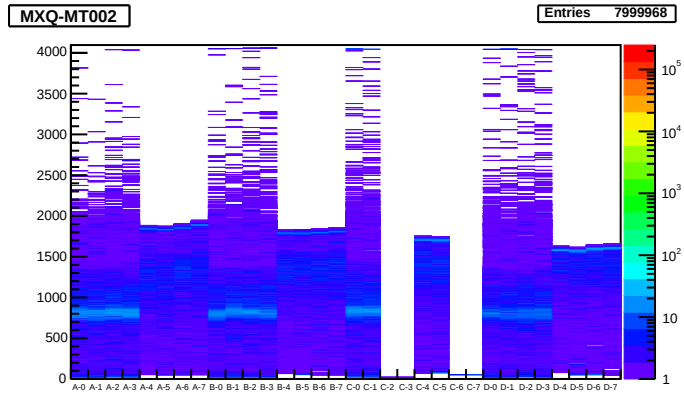

L2-TF201 Input chn 0 -- Number of Muons
Entries 249999
Number of Muons

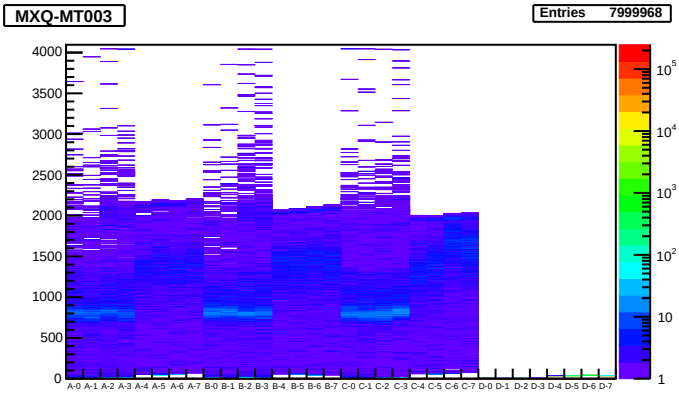

L2-TF201 Input chn 0 -- Number of Muons
Entries 58106
Number of Muons (Real-Simu)

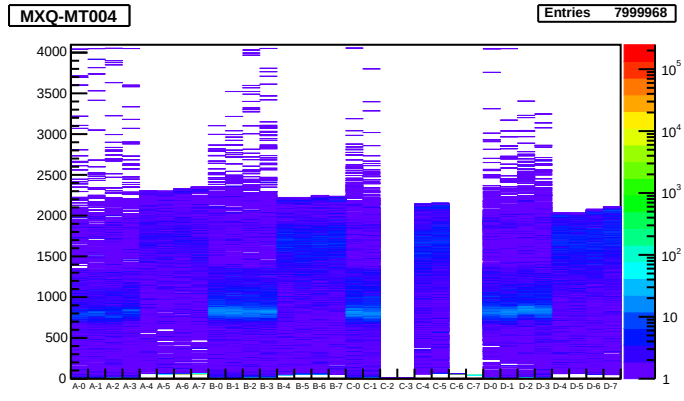

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 749997
60725
17766
15954
189274
232233
234045
Hit
Cosmic-Ray
Timed-Cosmic-Ray

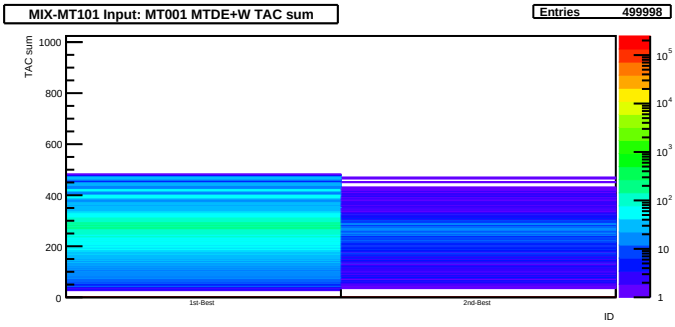

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 94445
60725
17766
15954
Hit
Cosmic-Ray
Timed-Cosmic-Ray

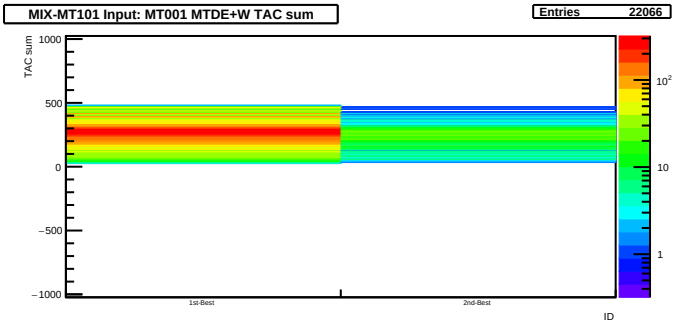

MXQ-MT001
Entries 7999968
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

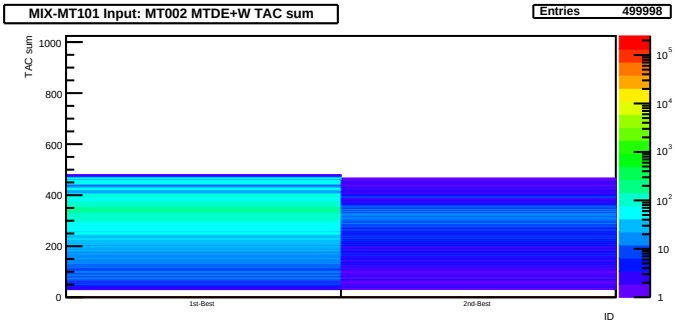

MXQ-MT002
Entries 7999968
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

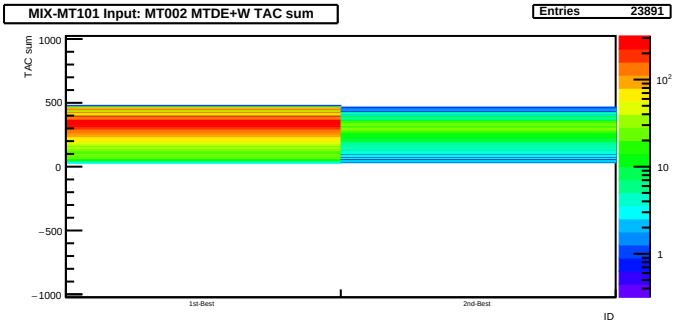

MXQ-MT003
Entries 7999968
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

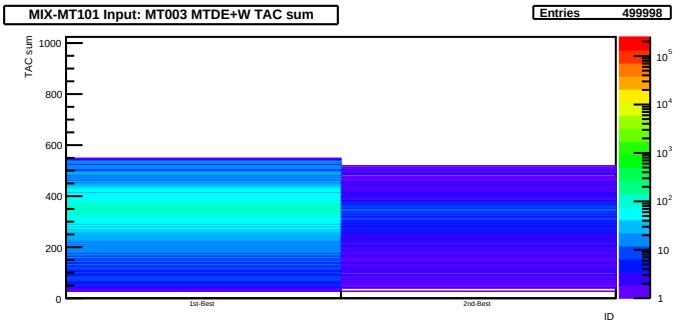

MXQ-MT004
Entries 7999968
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^5
10^4
10^3
10^2
10
1

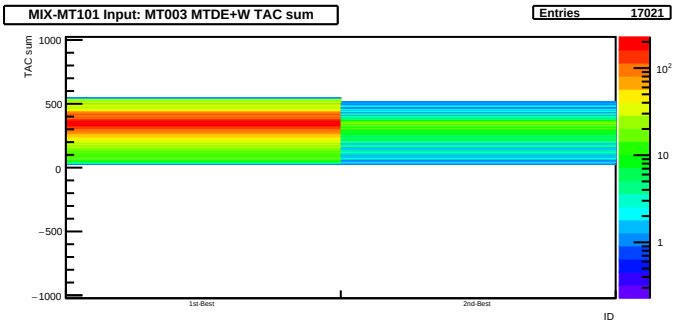

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 499998
TAC sum
1st-Best
2nd-Best
ID

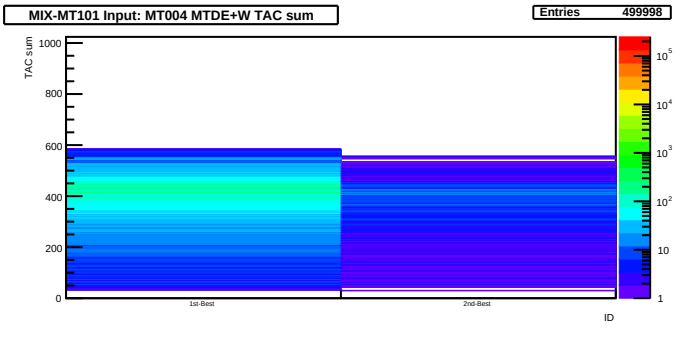

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 22066
TAC sum
1st-Best
2nd-Best
ID

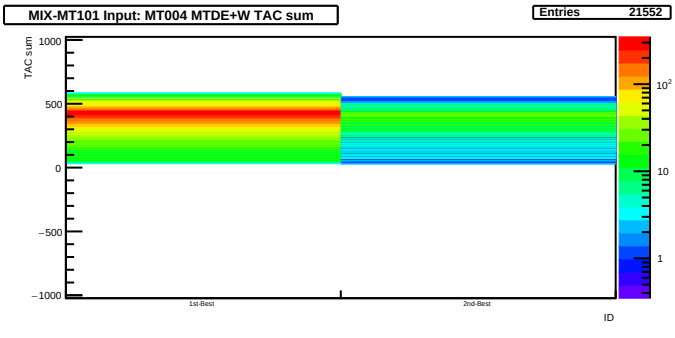

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 499998
TAC sum
1st-Best
2nd-Best
ID

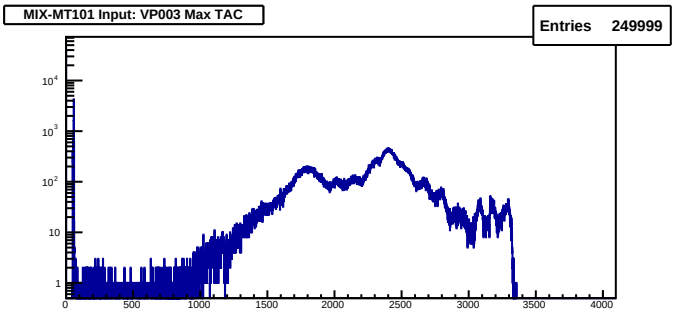

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 23891
TAC sum
1st-Best
2nd-Best
ID

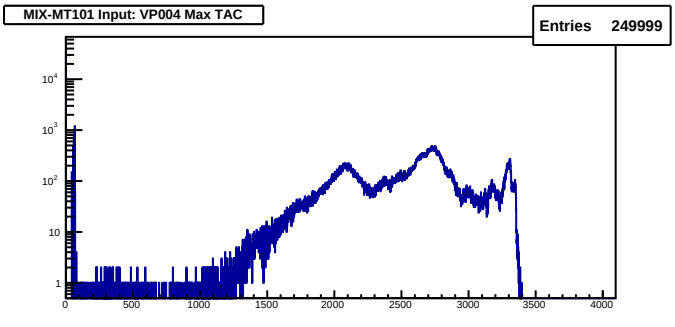

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 499998
TAC sum
1st-Best
2nd-Best
ID

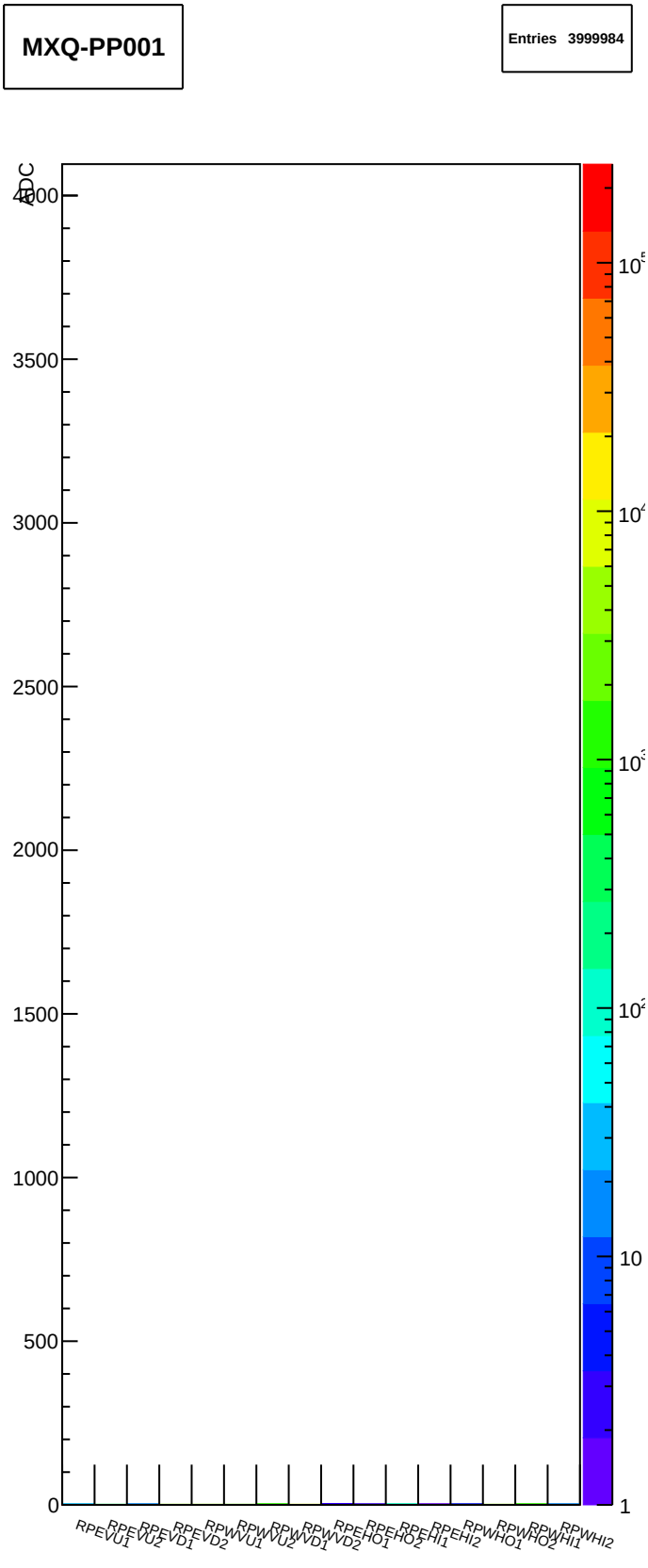

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 17021
TAC sum
1st-Best
2nd-Best
ID

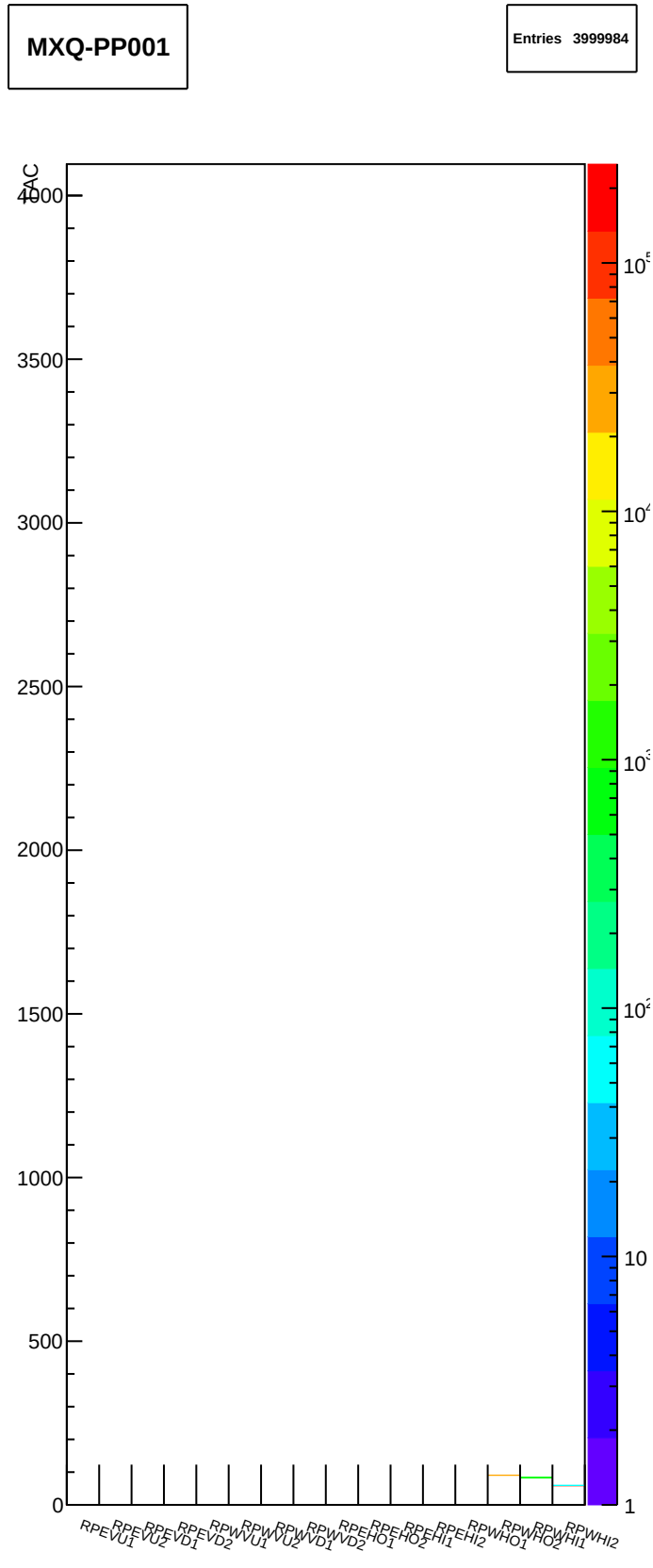

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 499998
TAC sum
1st-Best
2nd-Best
ID

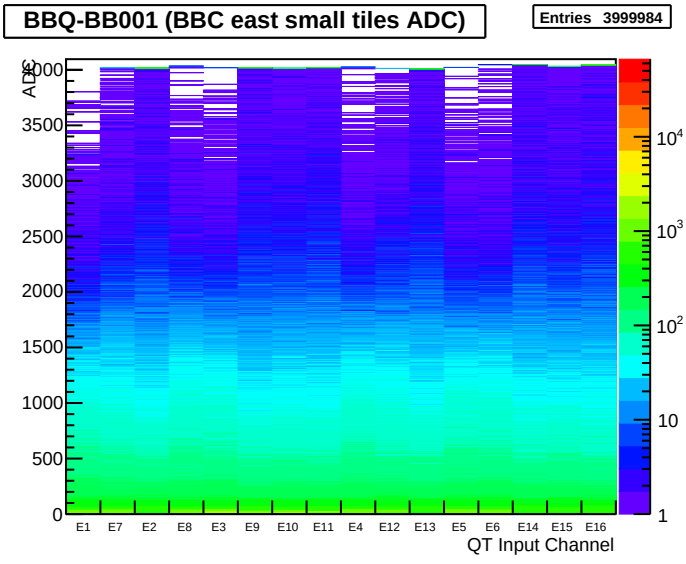

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 21552
TAC sum
1st-Best
2nd-Best
ID

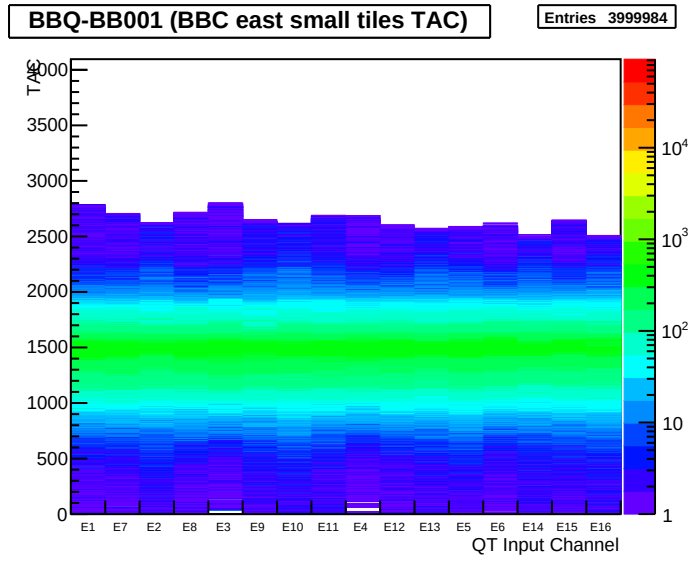

MIX-MT101 Input: VP003 Max TAC
Entries 249999

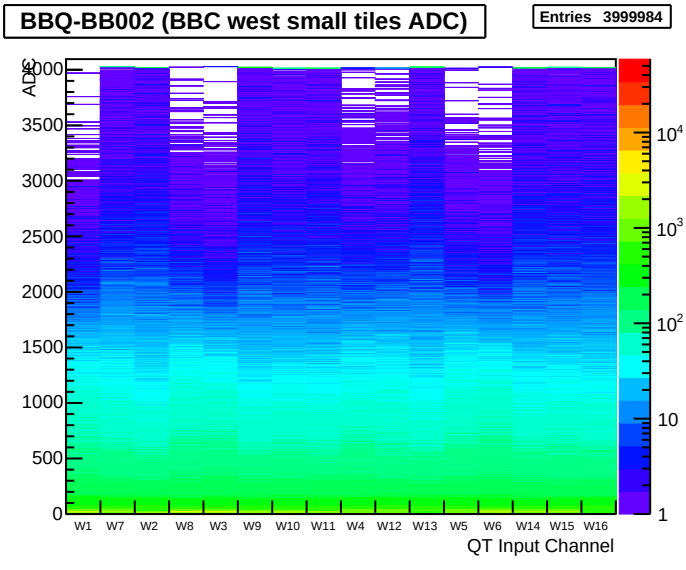

MIX-MT101 Input: VP004 Max TAC
Entries 249999

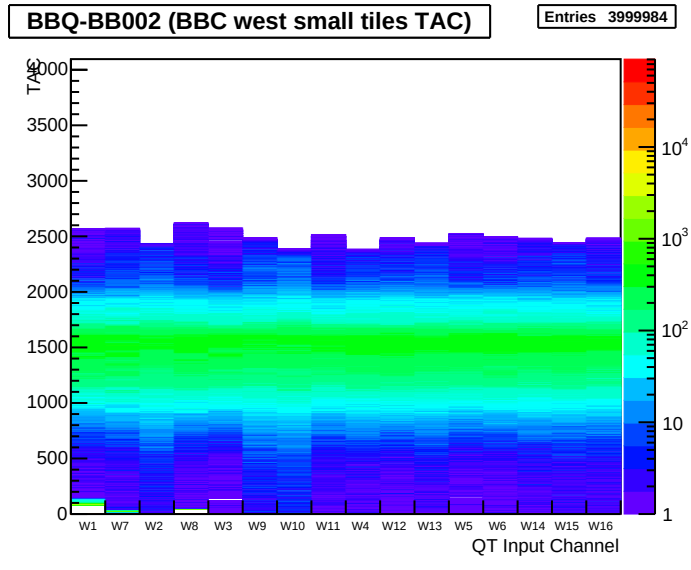

MXQ-PP001
Entries 3999984
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10^5
10^4
10^3
10^2
10
1

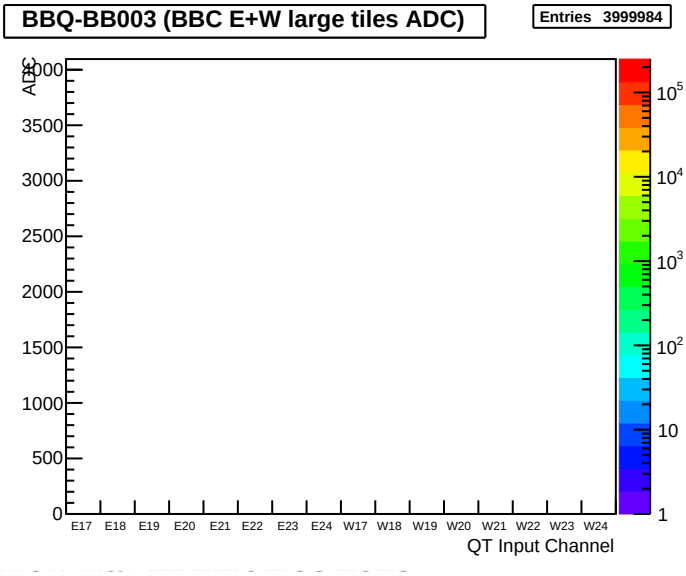

MXQ-PP001
Entries 3999984
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
RPEVU1
RPEVU2
RPEVD1
RPEVD2
RPWVU1
RPWVU2
RPWVD1
RPWVD2
RPEHO1
RPEHO2
RPEHI1
RPEHI2
RPWHO1
RPWHO2
RPWHI1
RPWHI2
10^5
10^4
10^3
10^2
10
1

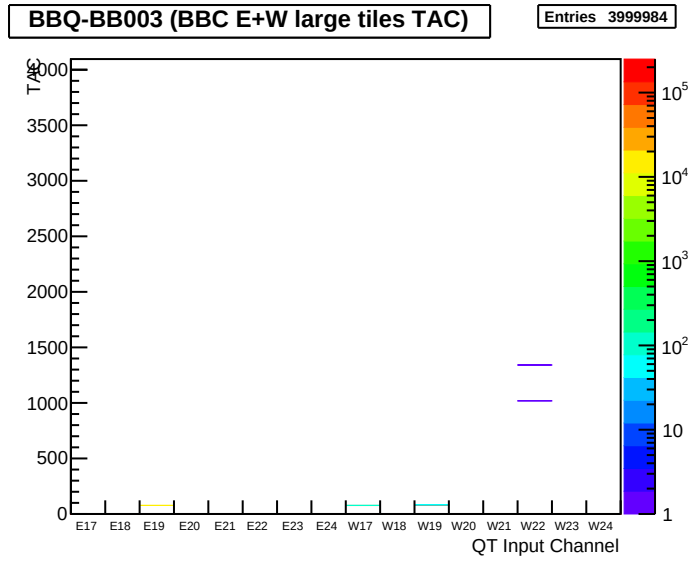

BBQ-BB001 (BBC east small tiles ADC)
Entries 3999984
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

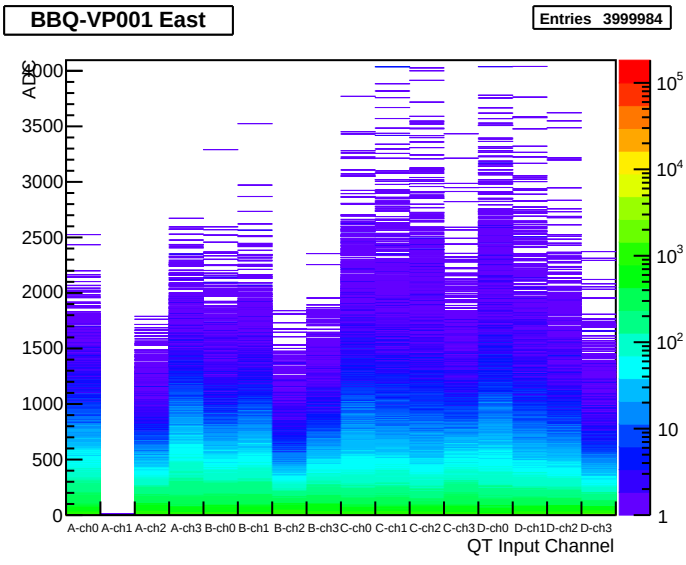

BBQ-BB001 (BBC east small tiles TAC)
Entries 3999984
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

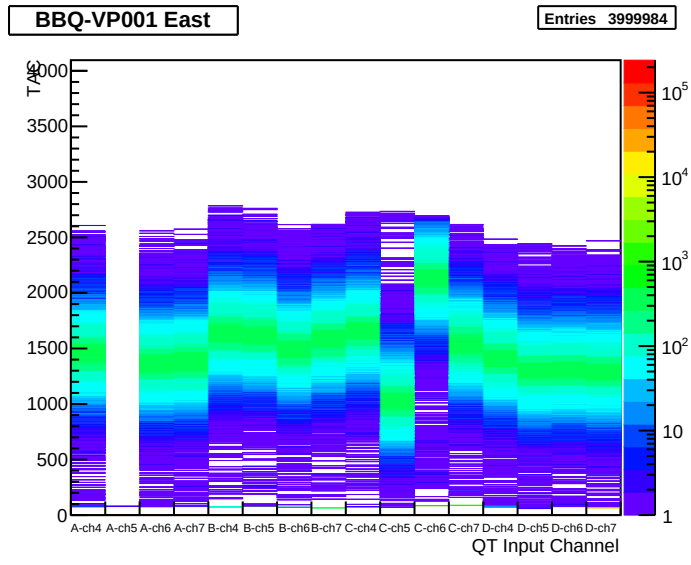

BBQ-BB002 (BBC west small tiles ADC)
Entries 3999984
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

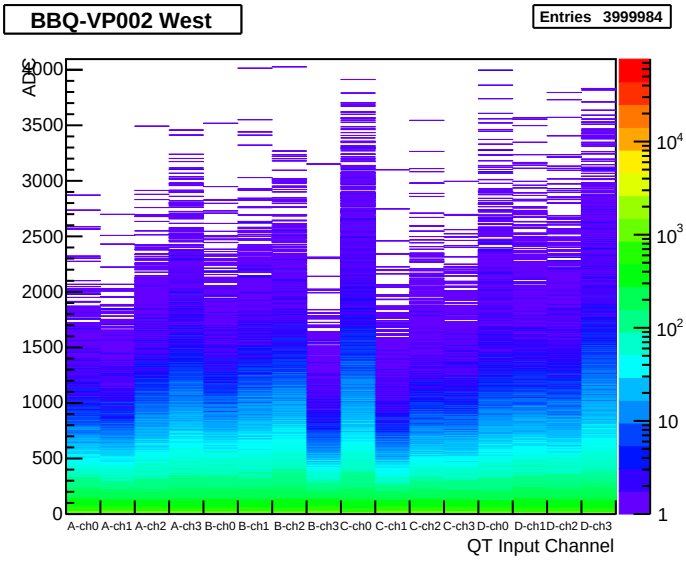

BBQ-BB002 (BBC west small tiles TAC)
Entries 3999984
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

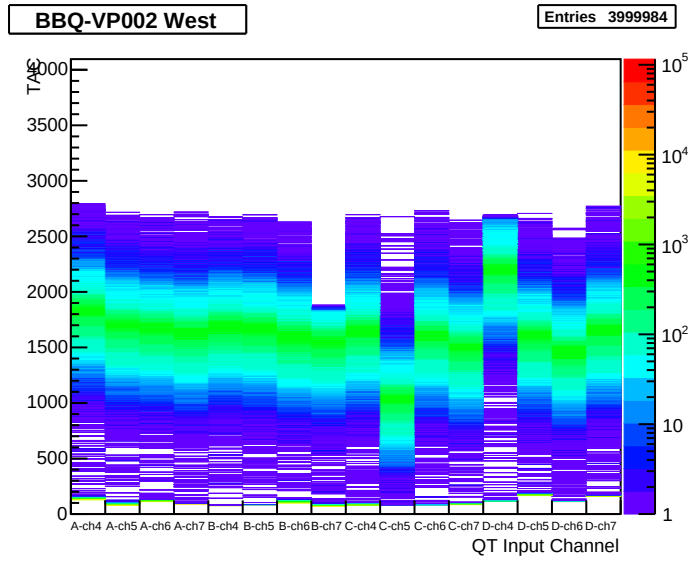

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3999984
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

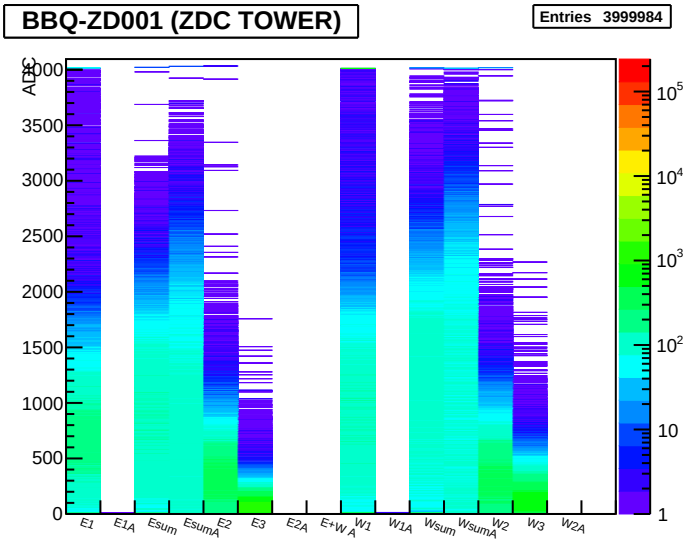

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3999984
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

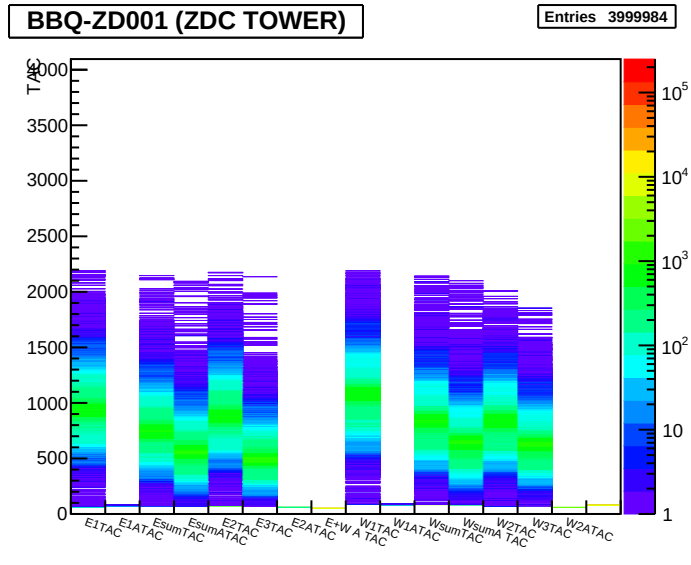

BBQ-VP001 East
Entries 3999984
ADC
QT Input Channel

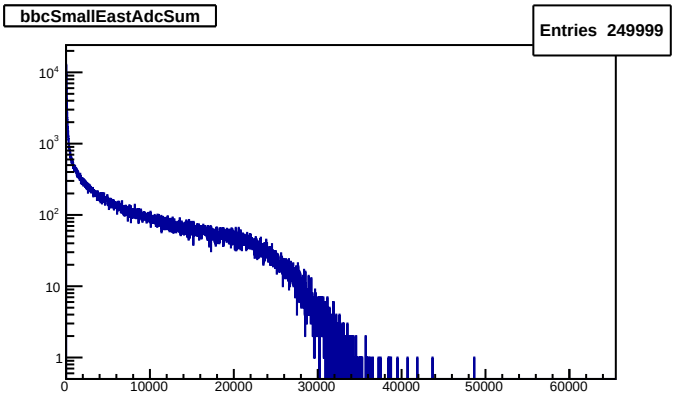

BBQ-VP001 East
Entries 3999984
TAC
QT Input Channel

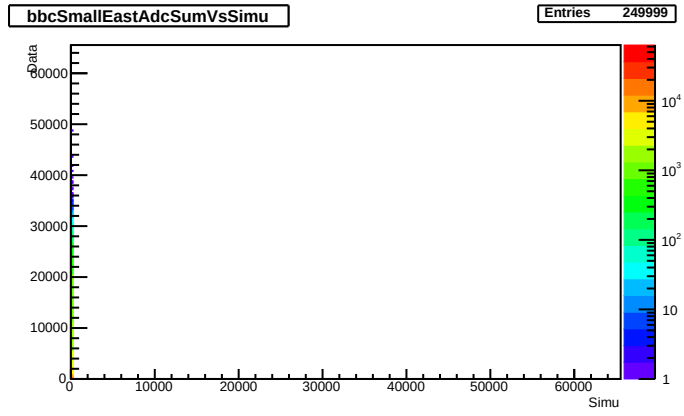

BBQ-VP002 West
Entries 3999984
ADC
QT Input Channel

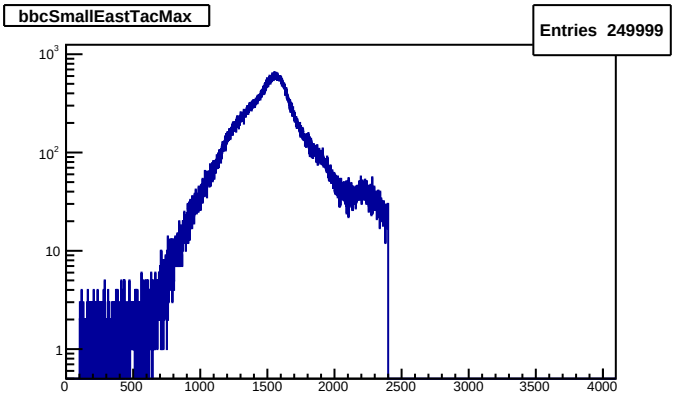

BBQ-VP002 West
Entries 3999984
TAC
QT Input Channel

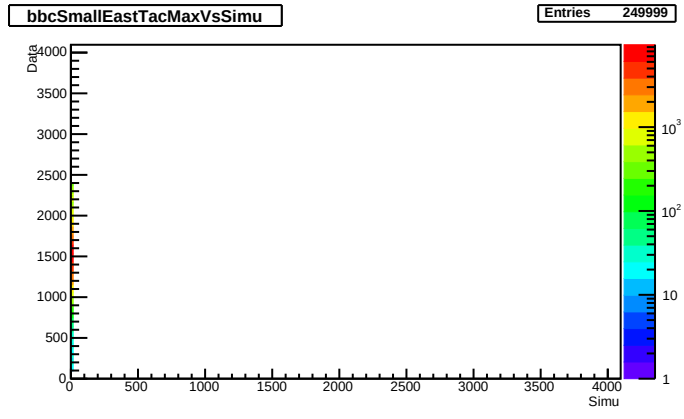

BBQ-ZD001 (ZDC TOWER)
Entries 3999984
ADC

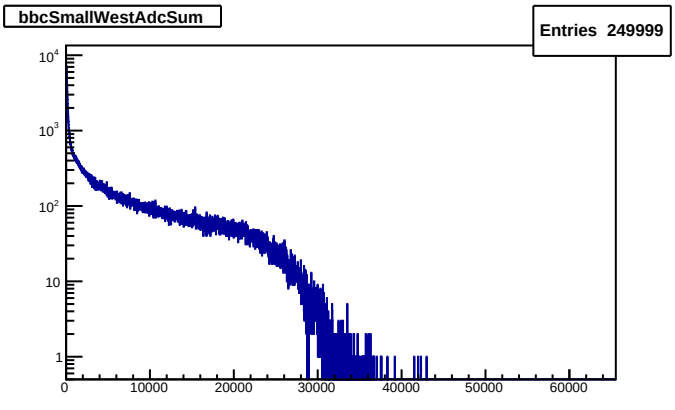

BBQ-ZD001 (ZDC TOWER)
Entries 3999984
TAC

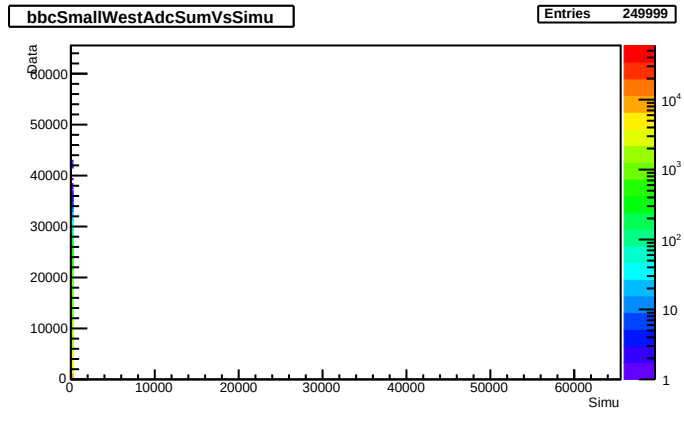

bbcSmallEastAdcSum
Entries 249999

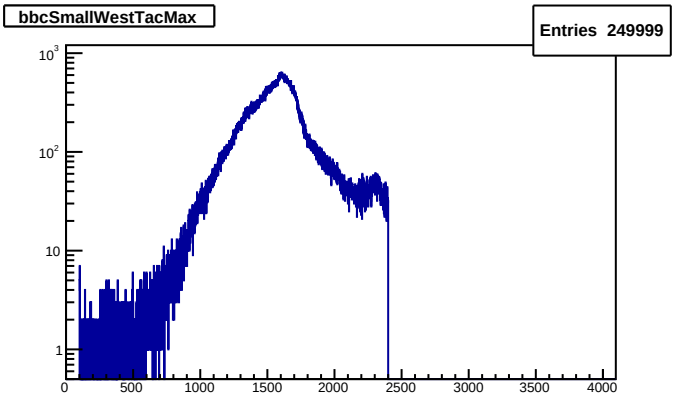

bbcSmallEastAdcSumVsSimu
Entries 249999
Data
Simu

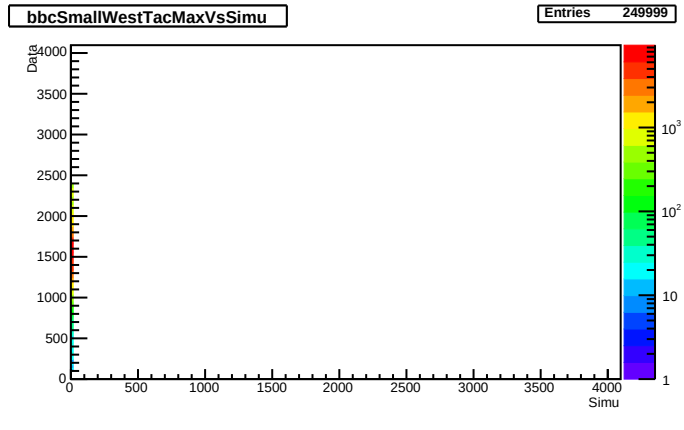

bbcSmallEastTacMax
Entries 249999

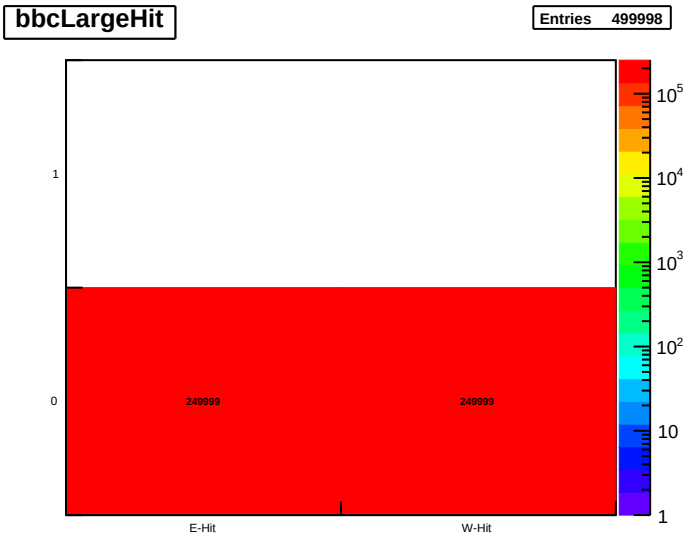

bbcSmallEastTacMaxVsSimu
Entries 249999
Data
Simu

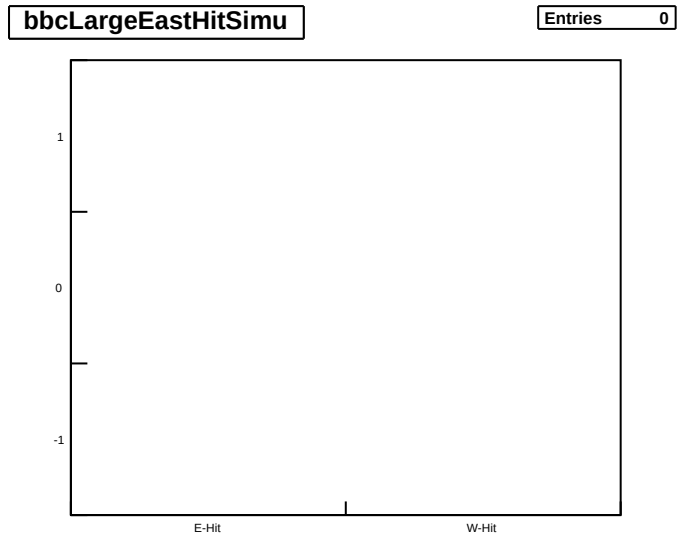

bbcSmallWestAdcSum
Entries 249999

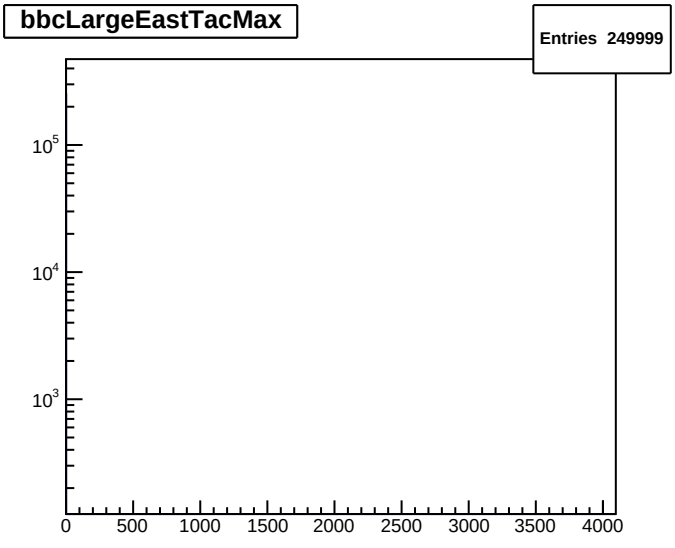

bbcSmallWestAdcSumVsSimu
Entries 249999
Data
Simu

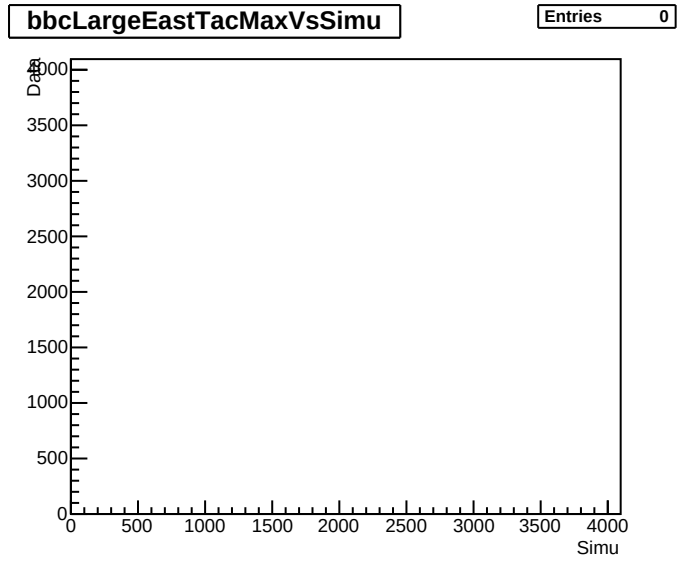

bbcSmallWestTacMax
Entries 249999

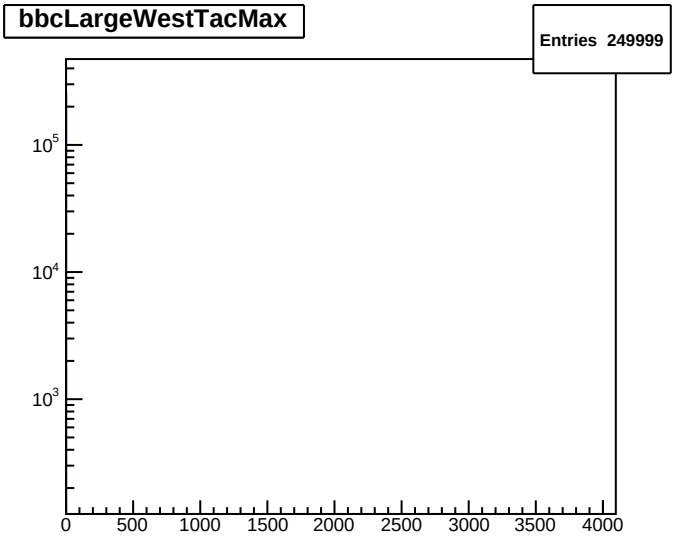

bbcSmallWestTacMaxVsSimu
Entries 249999
Data
Simu

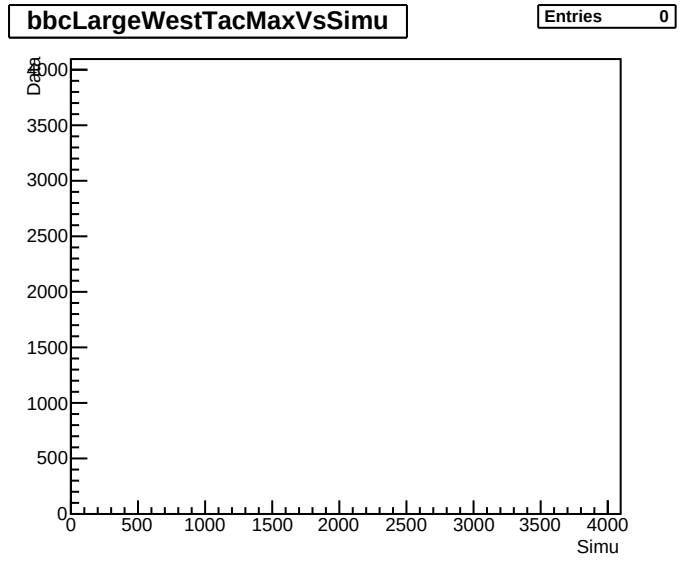

bbcLargeHit
Entries 499998
249999
249999
E-Hit
W-Hit

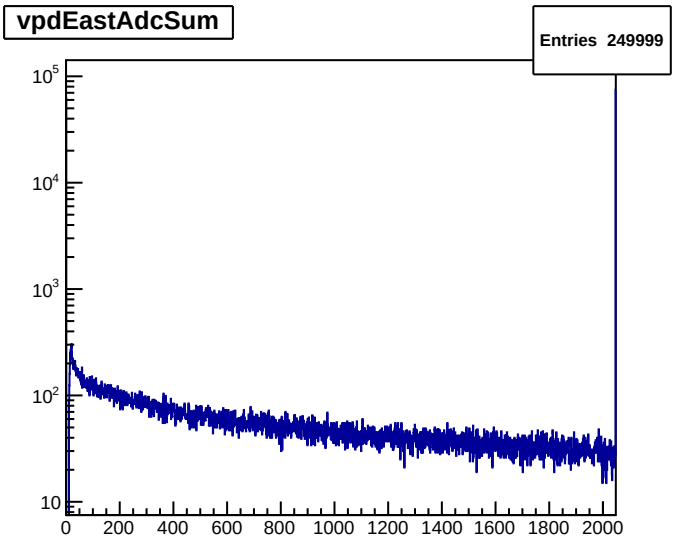

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

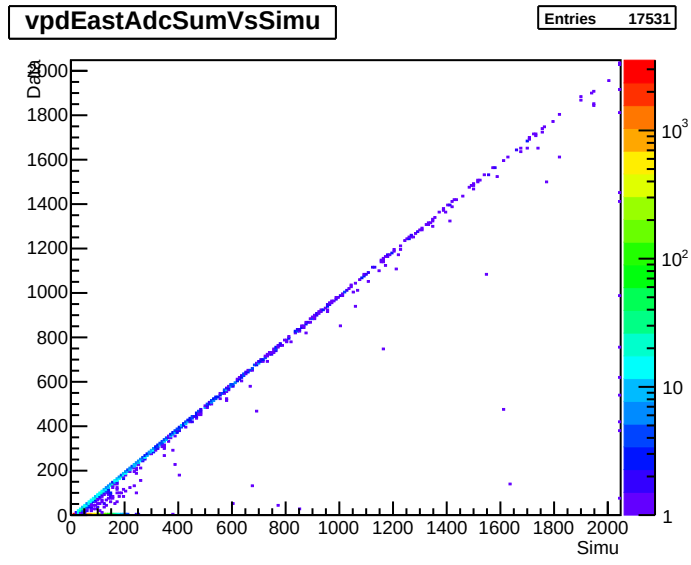

bbcLargeEastTacMax
Entries 249999

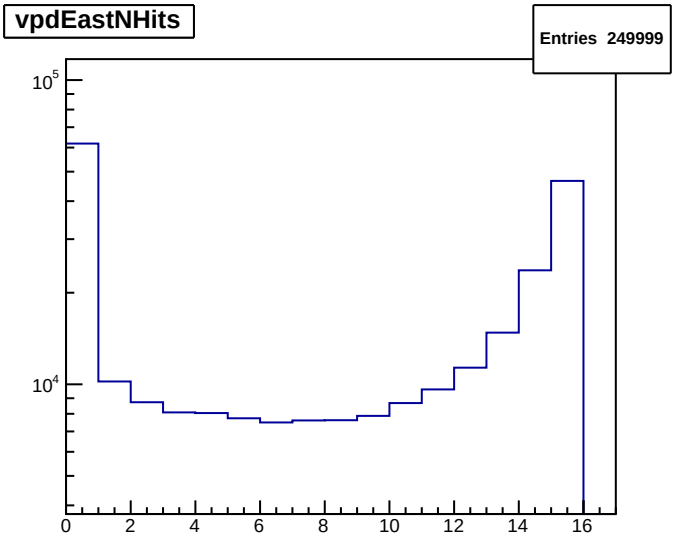

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

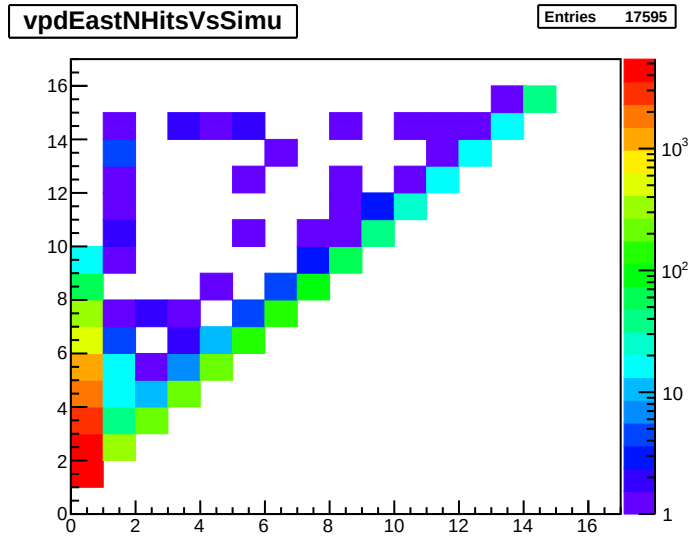

bbcLargeWestTacMax
Entries 249999

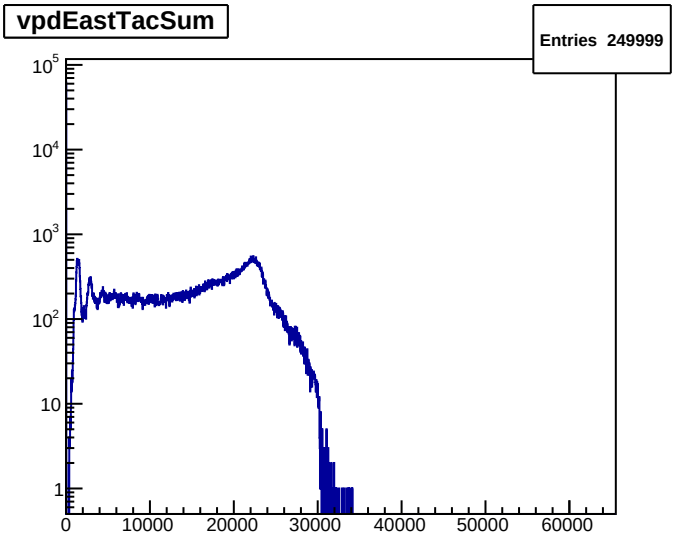

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

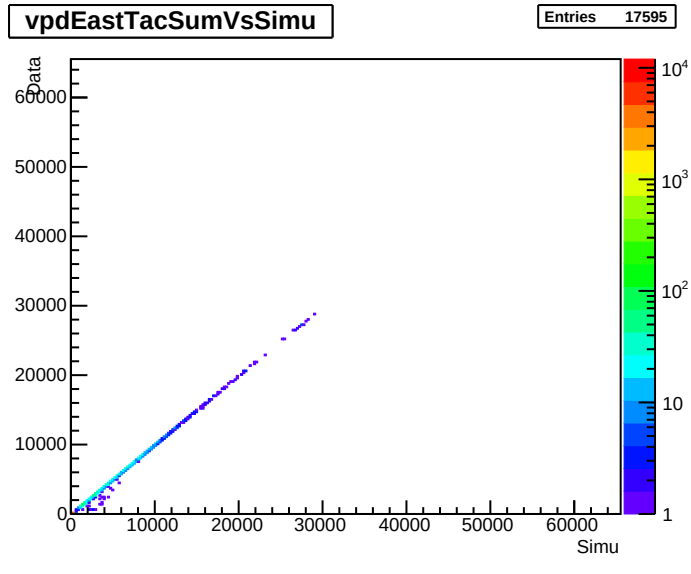

vpdEastAdcSum
Entries 249999

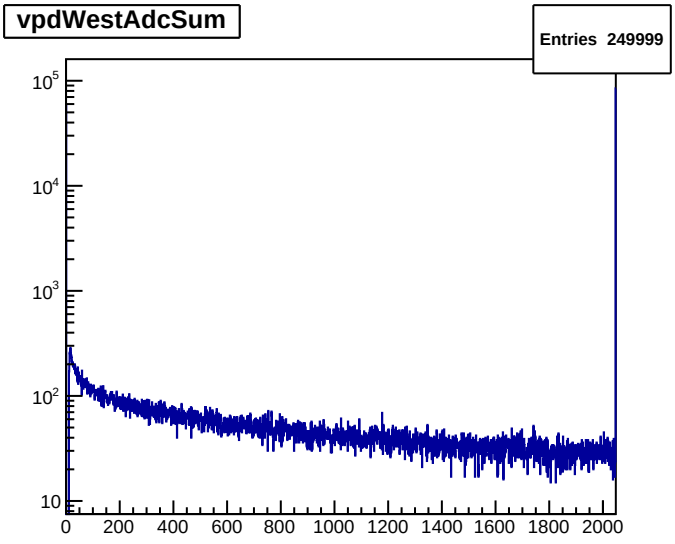

vpdEastAdcSumVsSimu
Entries 17531
Data
Simu

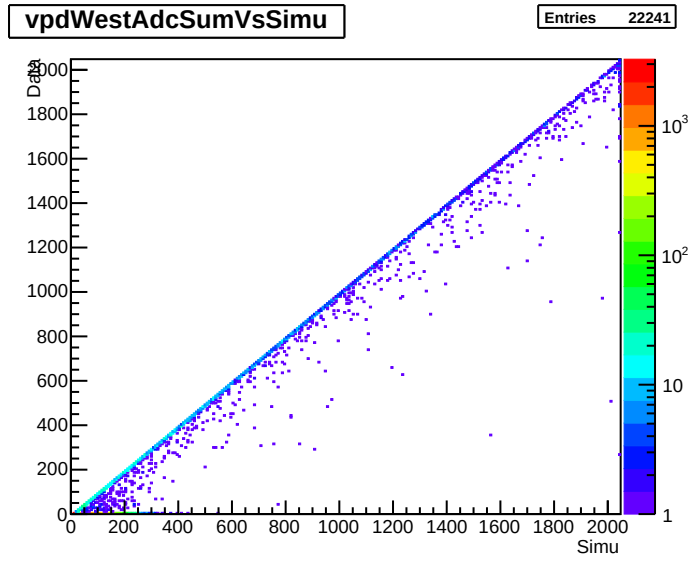

vpdEastNHits
Entries 249999

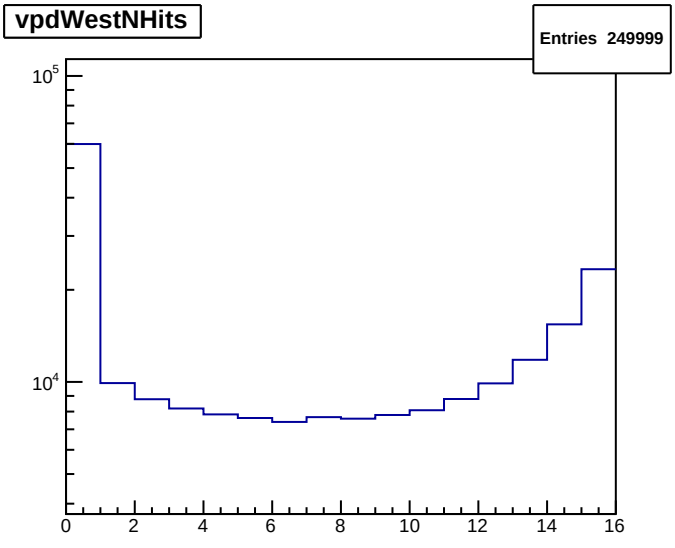

vpdEastNHitsVsSimu
Entries 17595

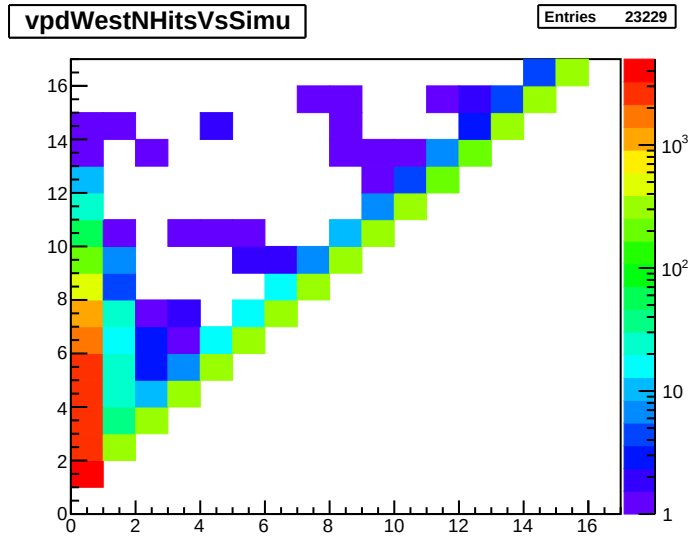

vpdEastTacSum
Entries 249999

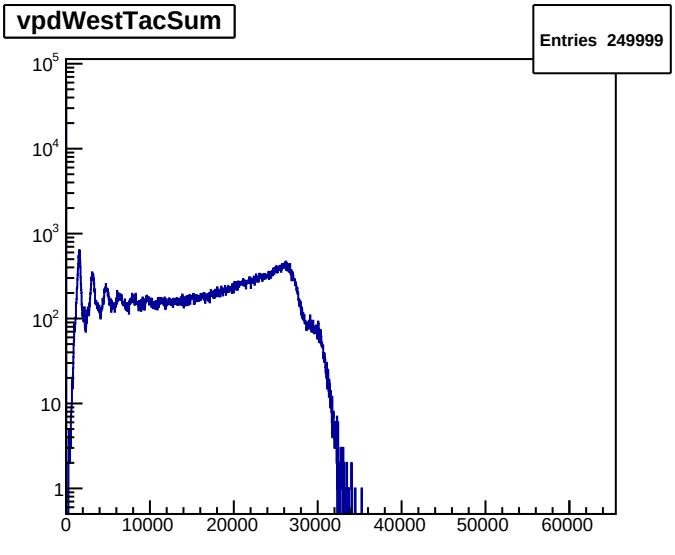

vpdEastTacSumVsSimu
Entries 17595
Data
Simu

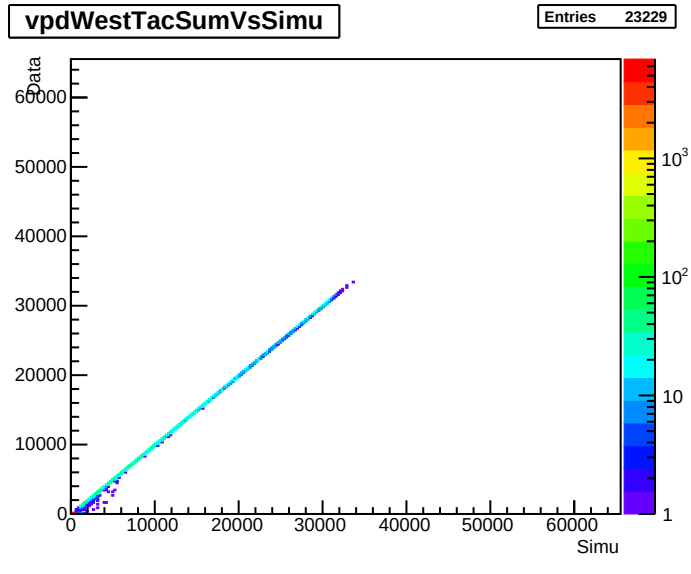

vpdWestAdcSum
Entries 249999

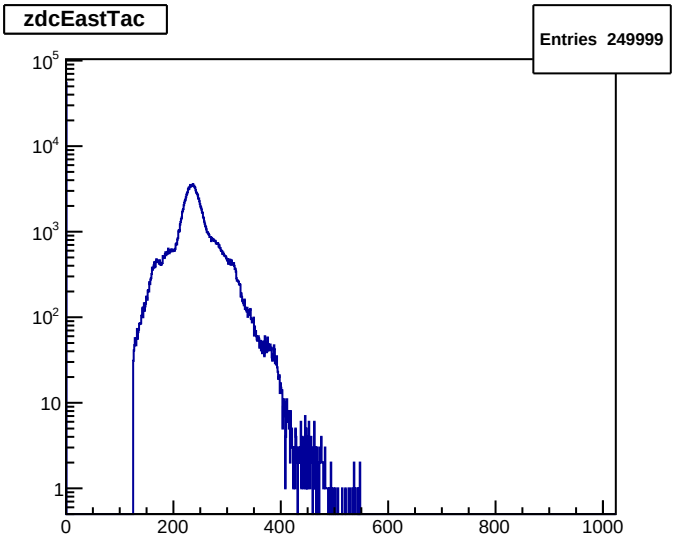

vpdWestAdcSumVsSimu
Entries 22241
Data
Simu

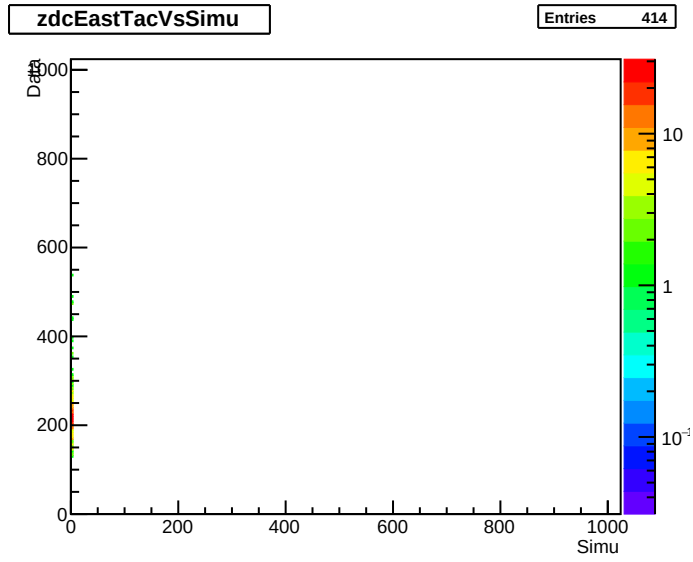

vpdWestNHits
Entries 249999

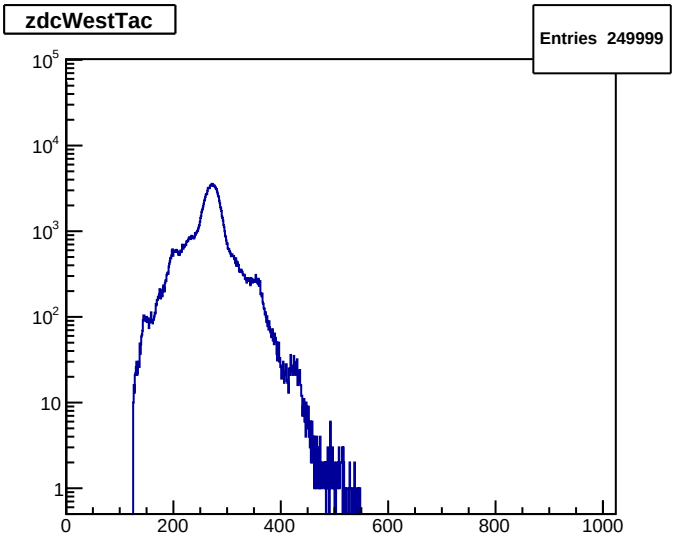

vpdWestNHitsVsSimu
Entries 23229

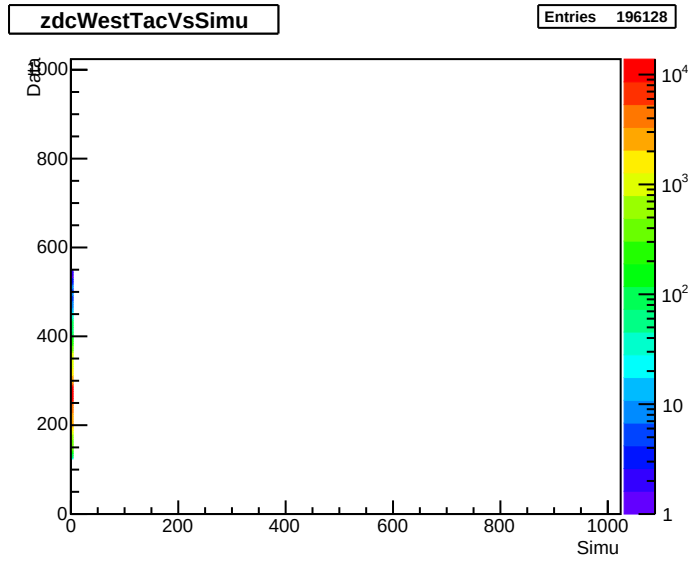

vpdWestTacSum
Entries 249999

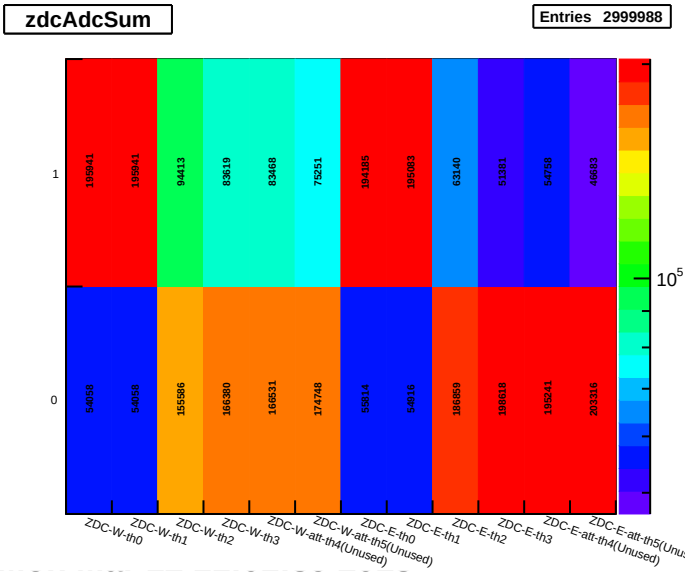

vpdWestTacSumVsSimu
Entries 23229
Data
Simu

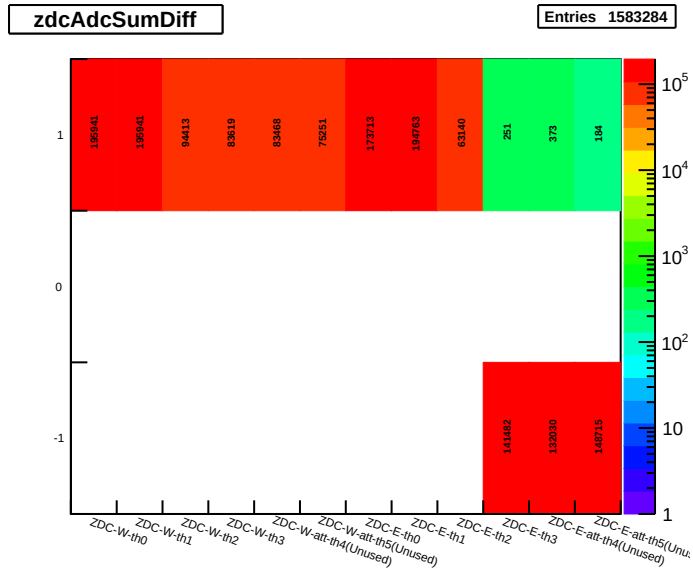

zdcEastTac
Entries 249999

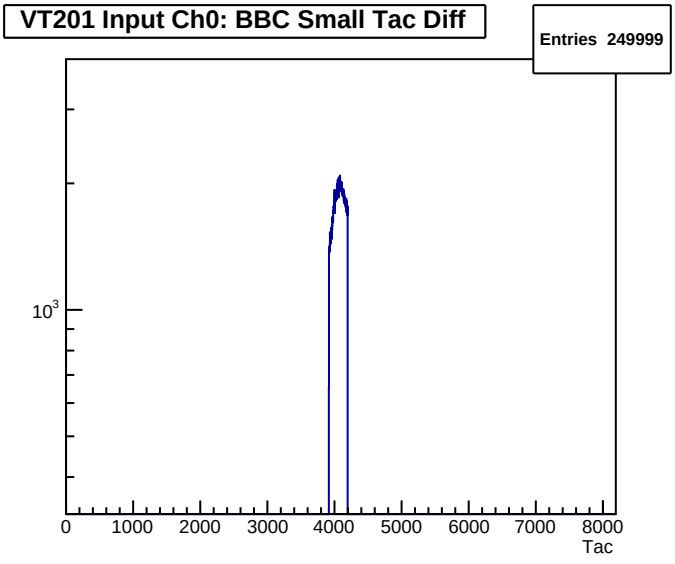

zdcEastTacVsSimu
Entries 414
Data
Simu

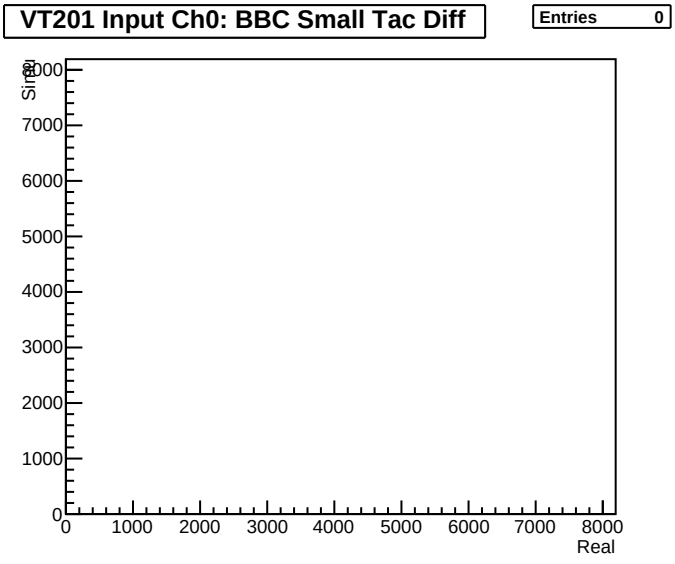

zdcWestTac
Entries 249999

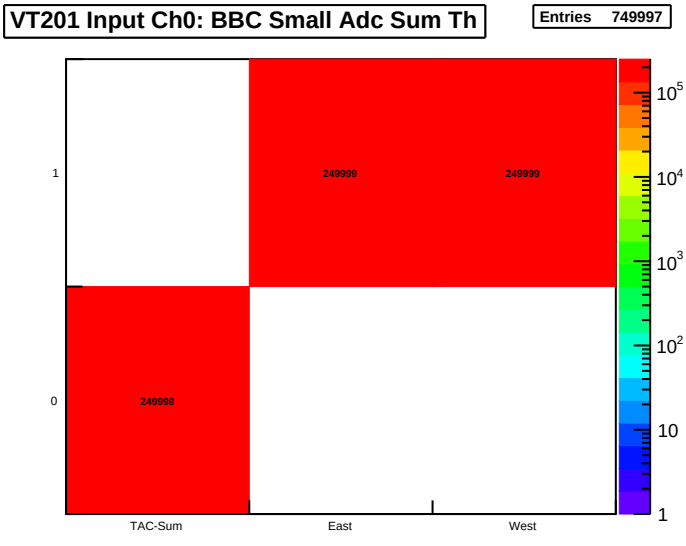

zdcWestTacVsSimu
Entries 196128
Data
Simu

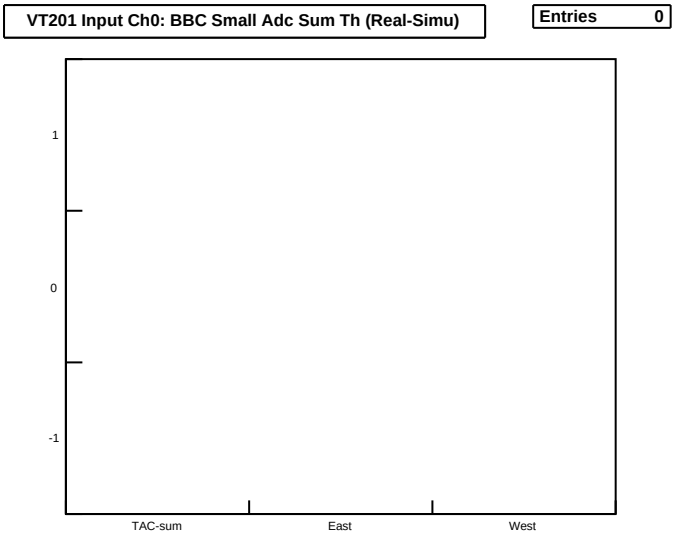

zdcAdcSum
Entries 2999988
195941
195941
94413
83619
83468
75251
194185
195083
63140
51381
54758
46683
54058
54058
155586
166380
166531
174748
58114
54916
186859
198618
195241
203316
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

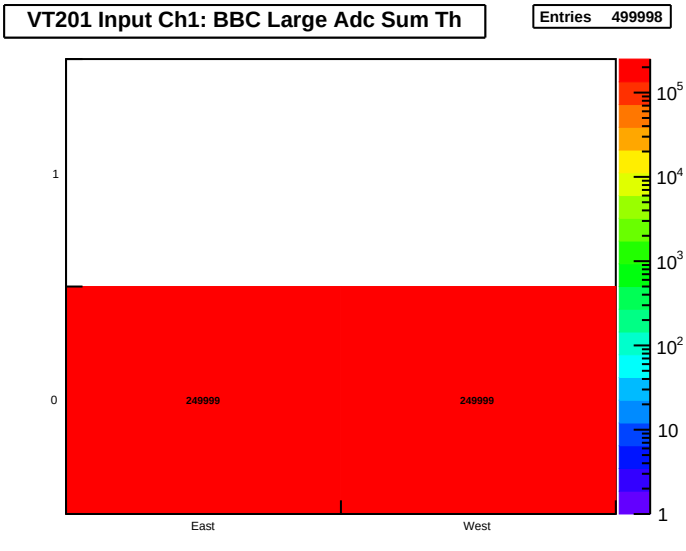

zdcAdcSumDiff
Entries 1583284
195941
195941
94413
83619
83468
75251
173713
194763
63140
251
373
184
141482
132030
148715
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

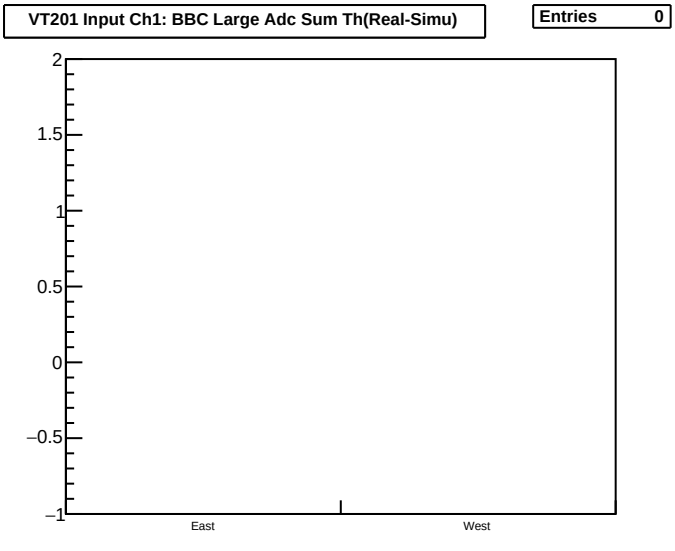

VT201 Input Ch0: BBC Small Tac Diff
Entries 249999
10^3
0 1000 2000 3000 4000 5000 6000 7000 8000
Tac


VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
0 1000 2000 3000 4000 5000 6000 7000 8000
Real

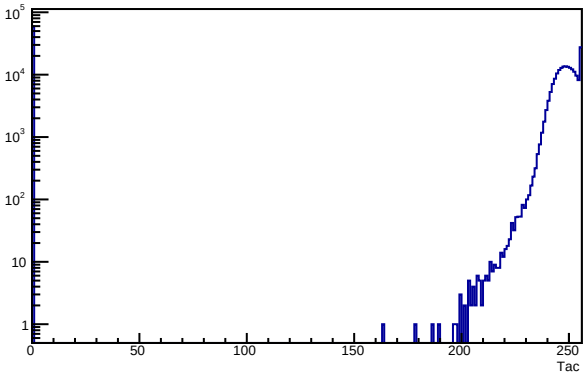

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 749997
249999
249999
249999
1
0
TAC-Sum
East
West
10^5
10^4
10^3
10^2
10
1


VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
1
0
-1
TAC-sum
East
West

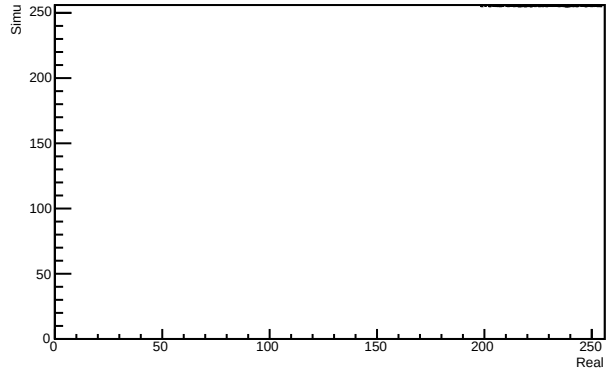

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 499998
249999
249999
1
0
East
West
10^5
10^4
10^3
10^2
10
1


VT201 Input Ch1: BBC Large Adc Sum Th(Real-Simu)
Entries 0
2
1.5
1
0.5
0
−0.5
−1
East
West

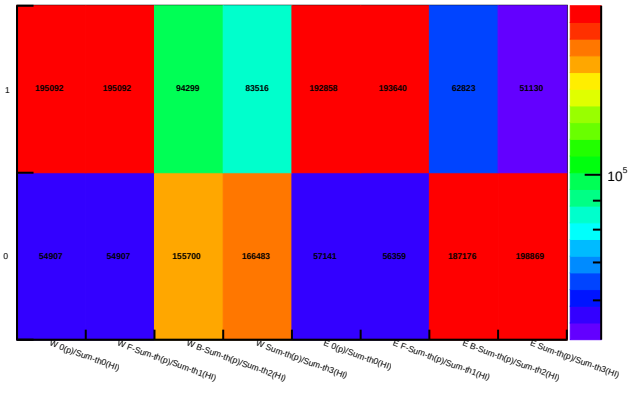
VT201 Input Ch2: ZDC Tac Diff



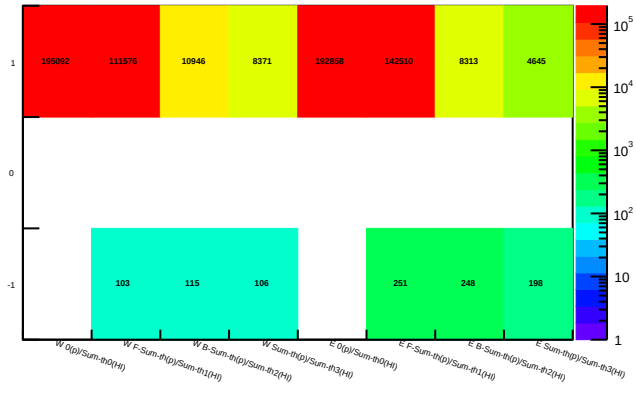
VT201 Input Ch2: ZDC Tac Diff



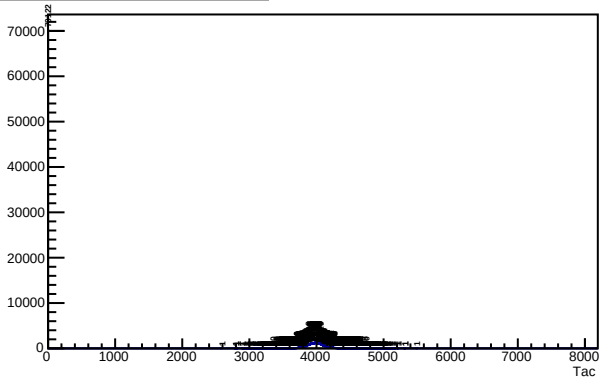
VT201 Input Ch2: ZDC Adc Sum Th



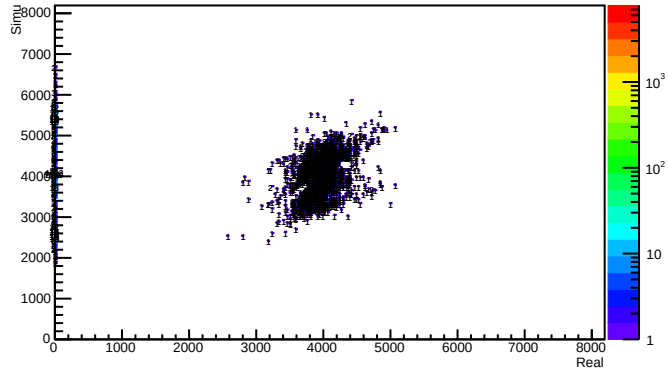
VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)



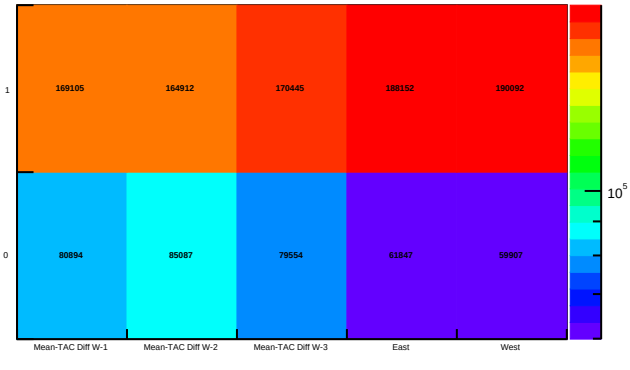
VT201 Input Ch4: VPD Tac Diff



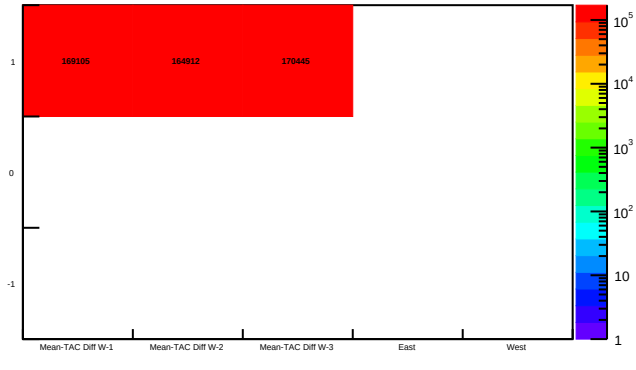
VT201 Input Ch4: VPD Tac Diff

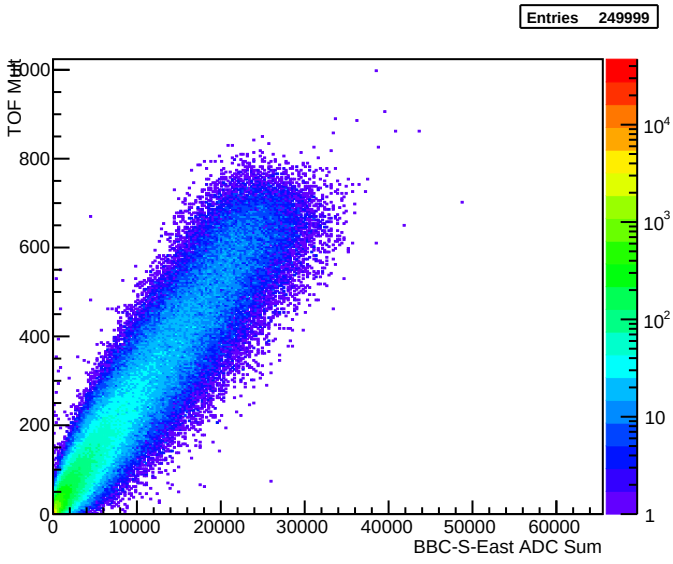


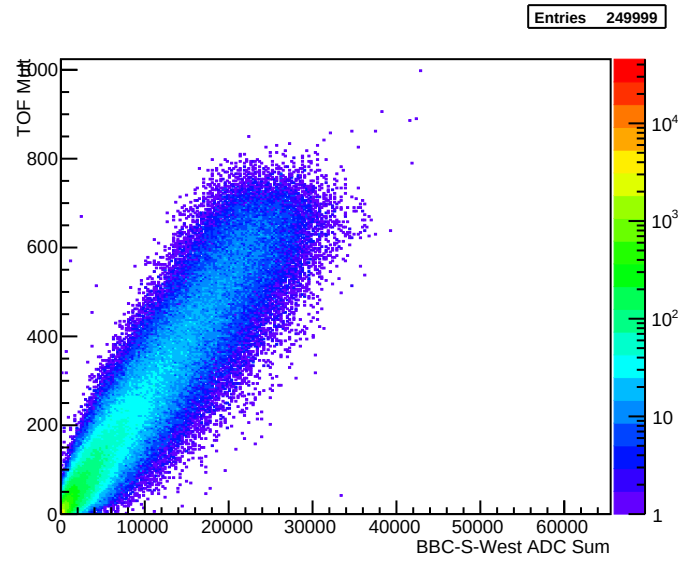
VT201 Input Ch4: VPD Adc Sum Th

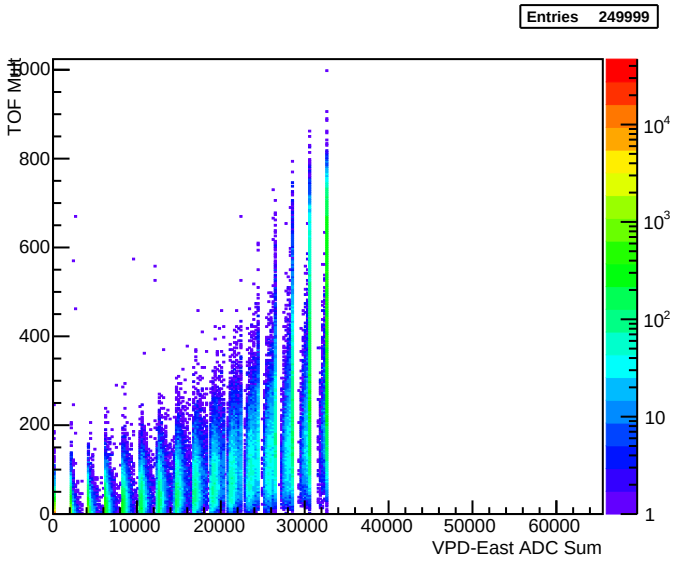


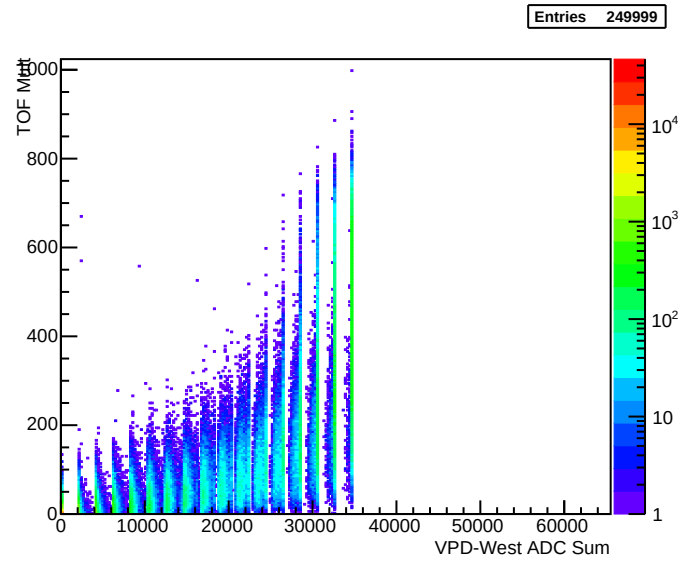
VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)

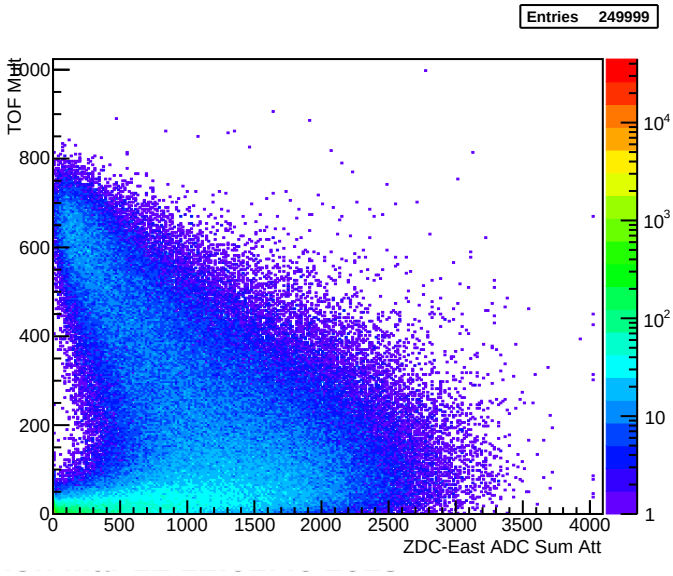


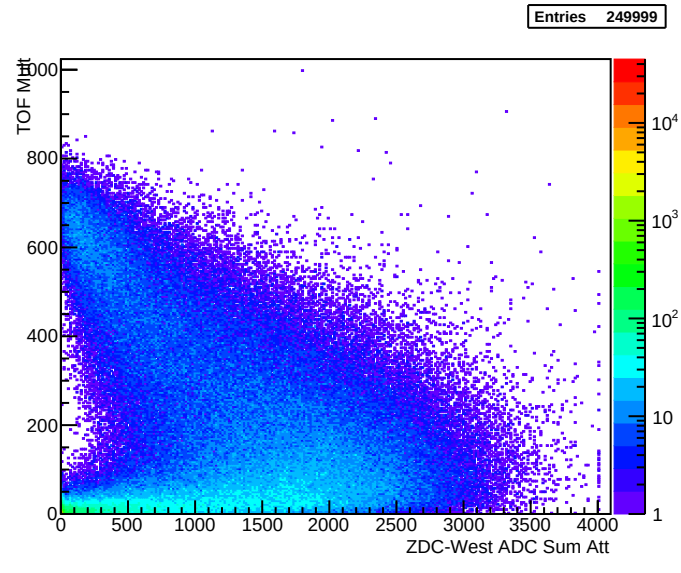

Entries 249999
TOF Mult
BBC-S-East ADC Sum

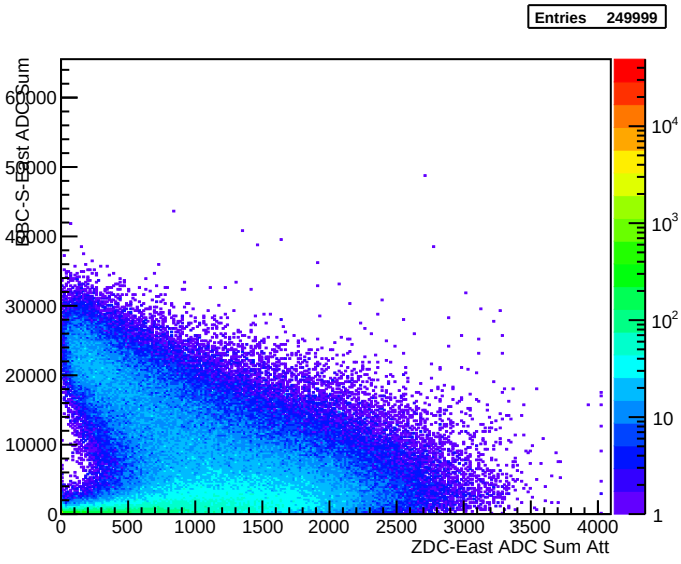

Entries 249999
TOF Mult
BBC-S-West ADC Sum

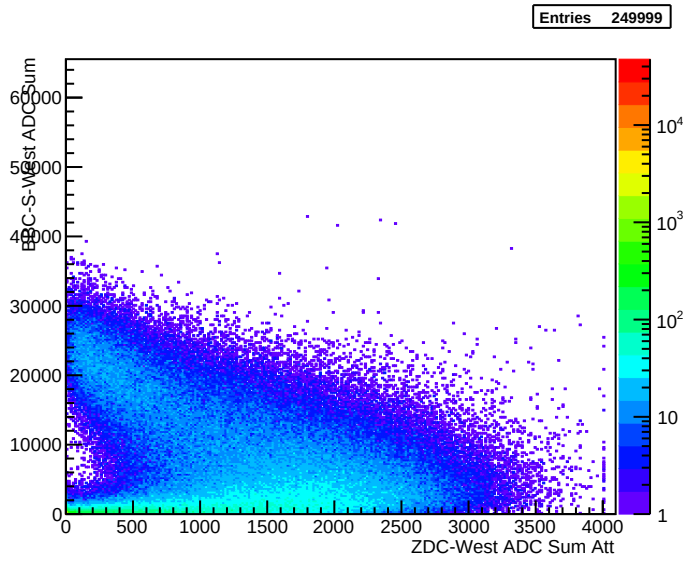

Entries 249999
TOF Mult
VPD-East ADC Sum

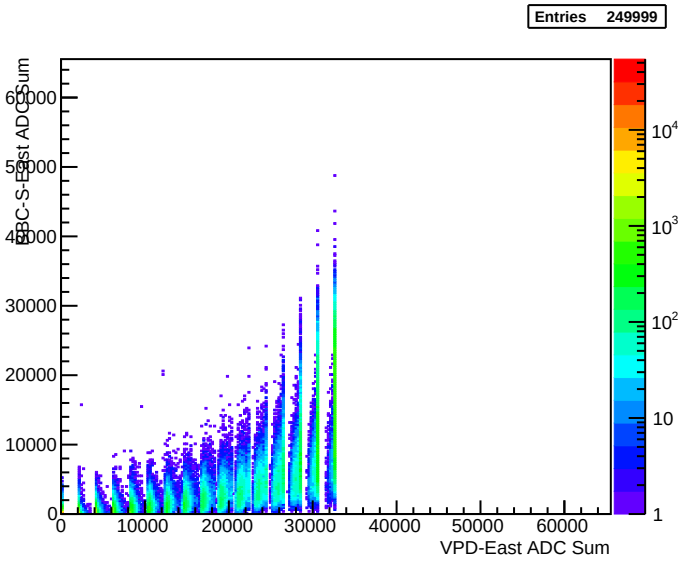

Entries 249999
TOF Mult
VPD-West ADC Sum

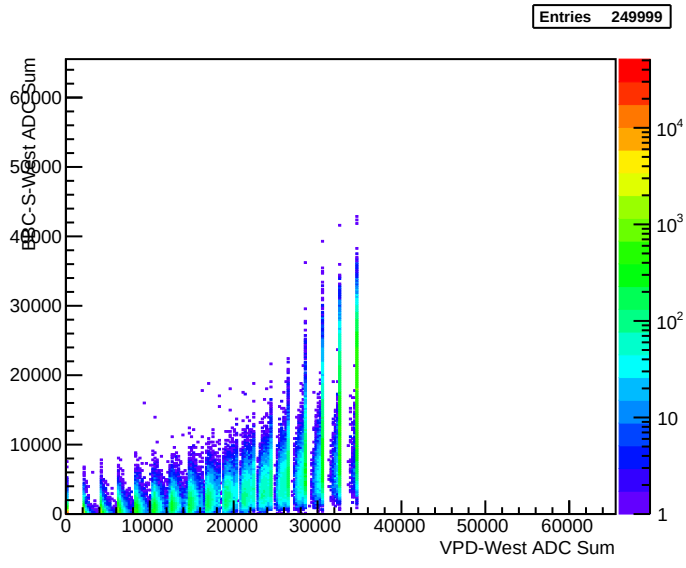

Entries 249999
TOF Mult
ZDC-East ADC Sum Att

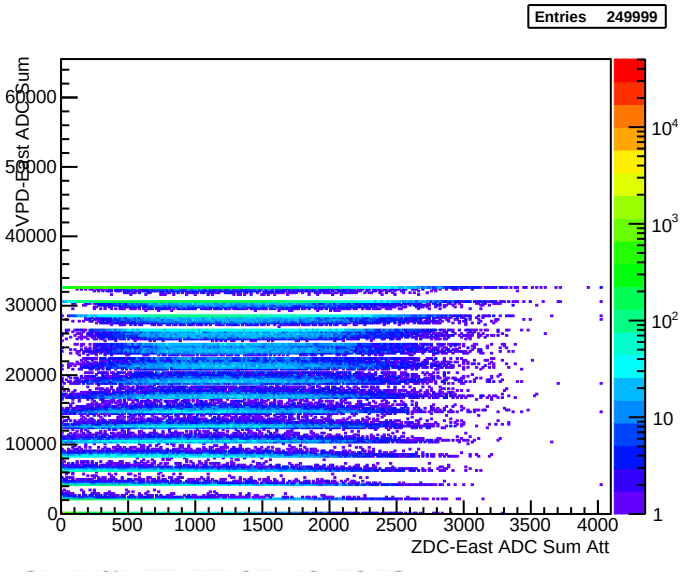

Entries 249999
TOF Mult
ZDC-West ADC Sum Att

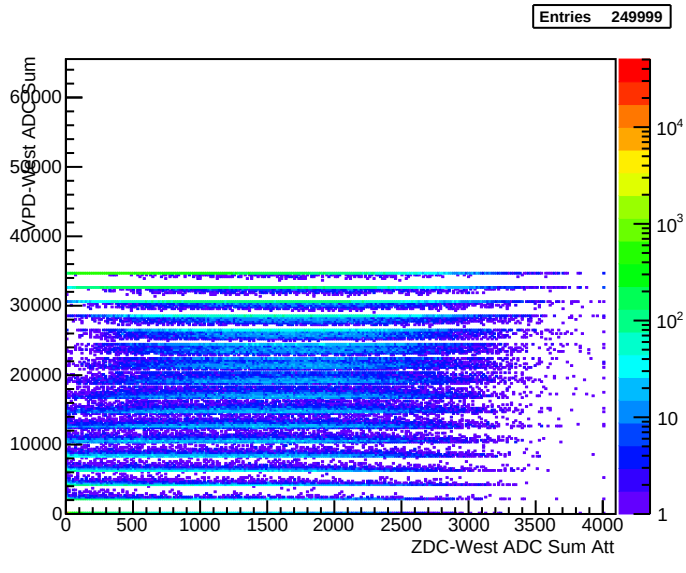

Entries 249999
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

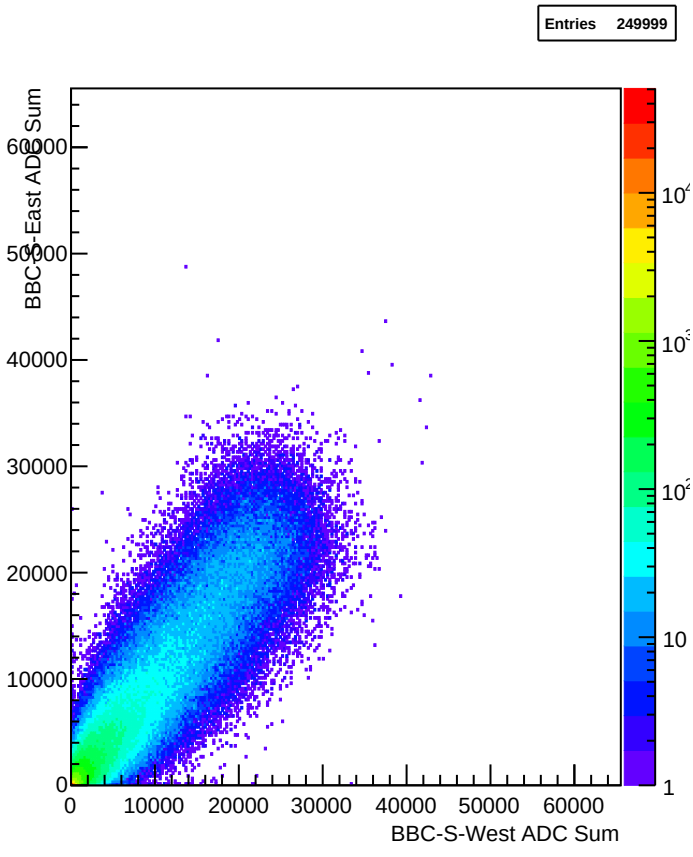

Entries 249999
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

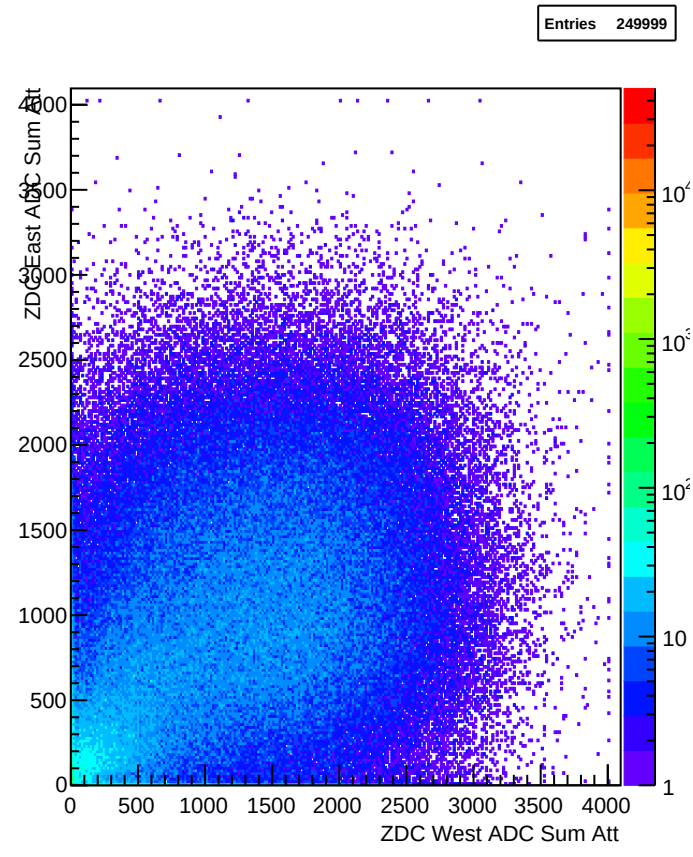

Entries 249999
BBC-S-East ADC Sum
VPD-East ADC Sum

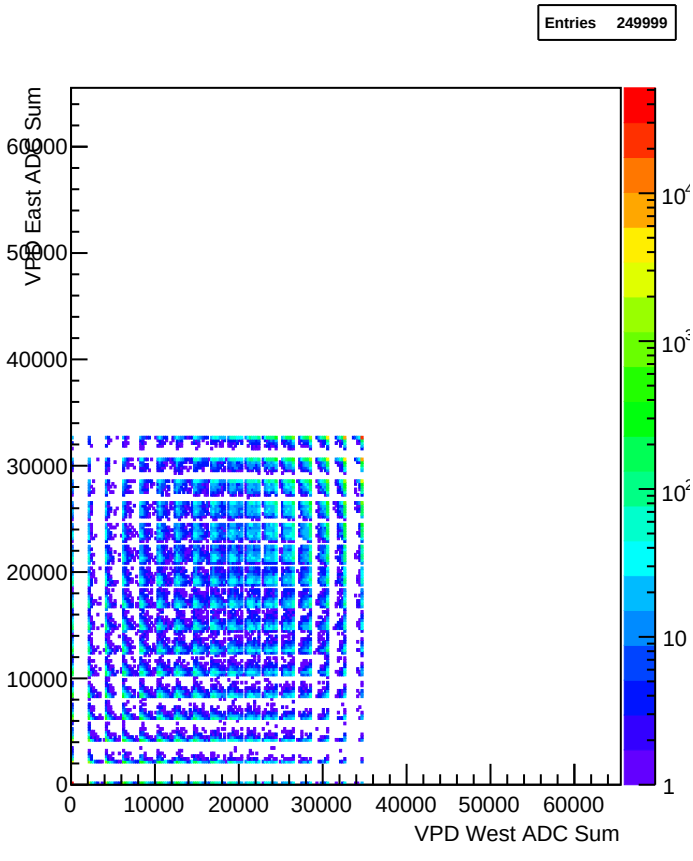

Entries 249999
BBC-S-West ADC Sum
VPD-West ADC Sum

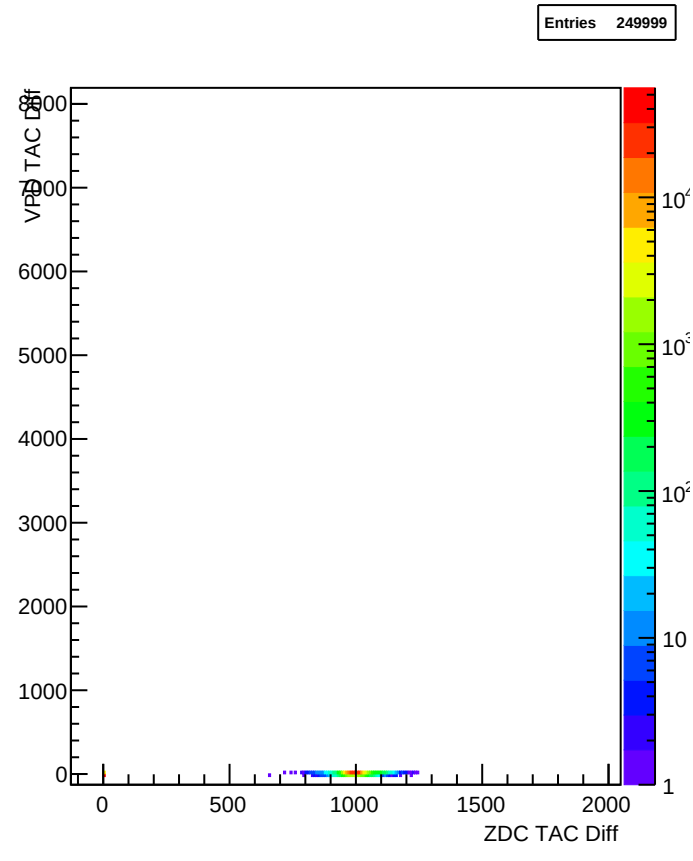

Entries 249999
VPD-East ADC Sum
ZDC-East ADC Sum Att

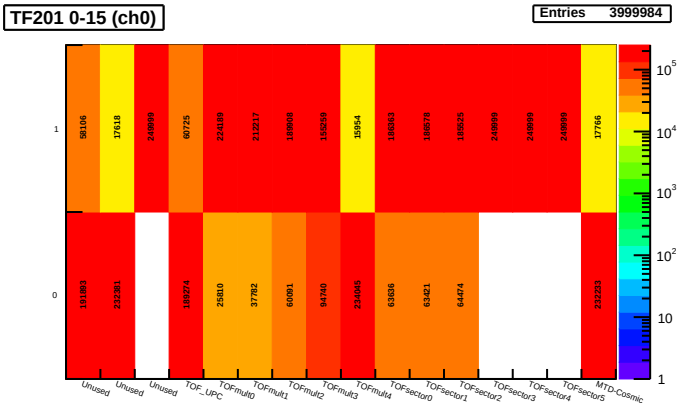

Entries 249999
VPD-West ADC Sum
ZDC-West ADC Sum Att

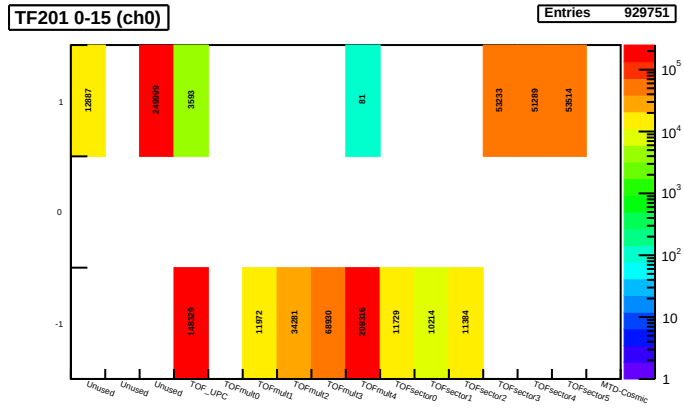

Entries 249999
BBC-S-East ADC Sum
BBC-S-West ADC Sum

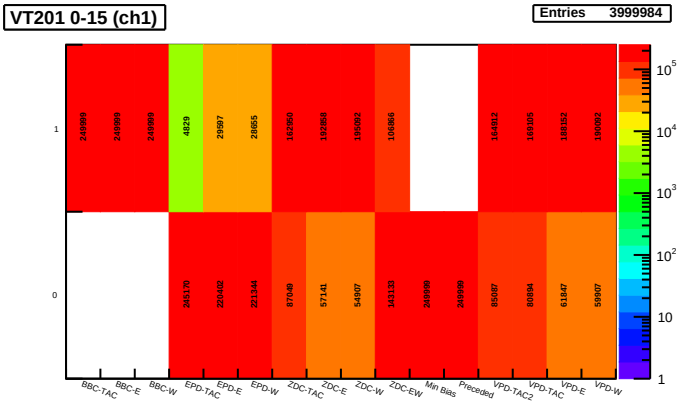

Entries 249999
ZDC East ADC Sum Att
ZDC West ADC Sum Att

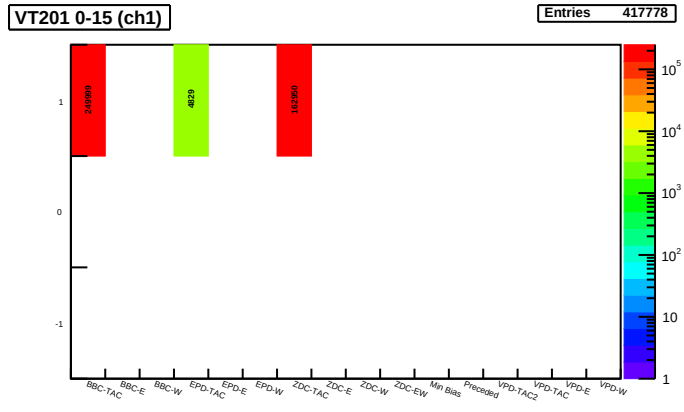

Entries 249999
VPD East ADC Sum
VPD West ADC Sum

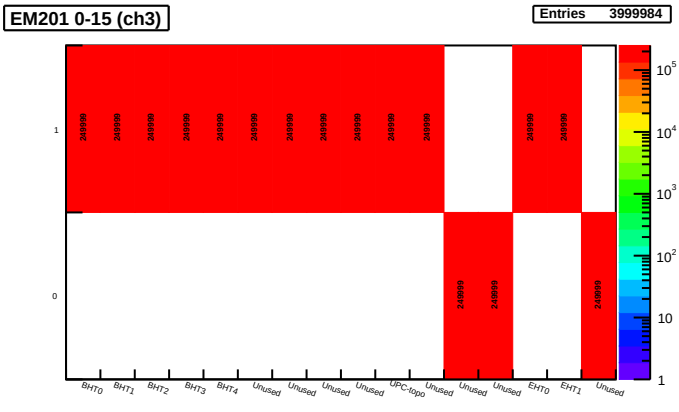

Entries 249999
VPD TAC Diff
ZDC TAC Diff


TF201 0-15 (ch0)
Entries 3999984
98106 17618 249999 60725 224189 212217 189908 155259 15954 186363 186578 185825 249999 249999 249999 17766
191893 232381 189274 25810 37782 60091 94740 234045 63636 63421 64474 232233
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 929751
12887 249999 3593 81 53233 51289 53514
148329 11972 34281 68930 208316 11729 10214 11384
Unused Unused Unused TOF_UPC TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 3999984
249999 249999 249999 4829 29997 28655 162850 192858 195092 108866 164912 169105 183152 190082
245170 220402 221344 87048 57141 54907 143133 249999 249999 85087 80694 61847 59007
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 417778
249999 4829 162850
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W


EM201 0-15 (ch3)
Entries 3999984
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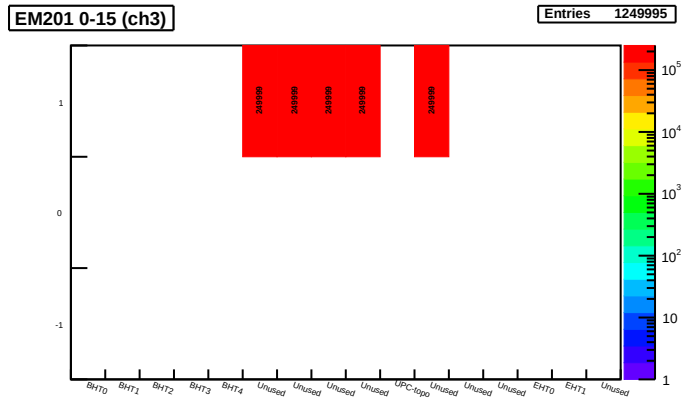
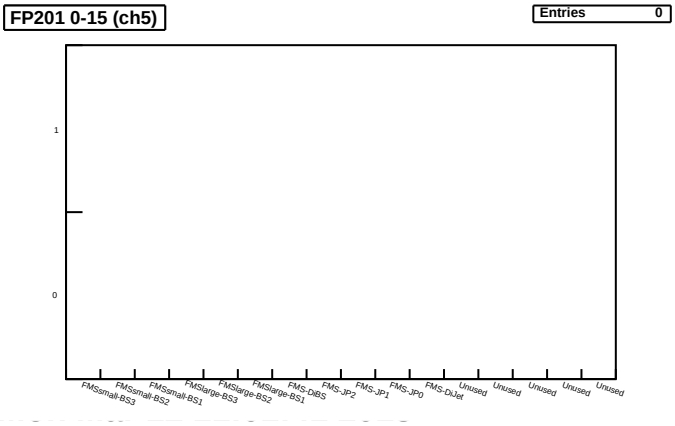
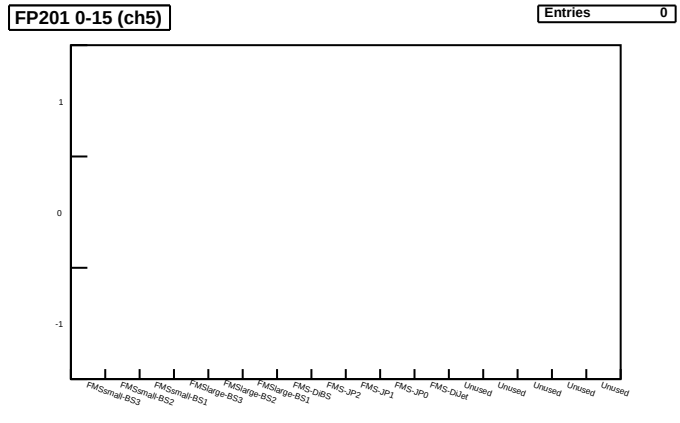
249999 249999 249999
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


EM201 0-15 (ch3)
Entries 1249995
249999 249999 249999 249999 249999
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


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


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