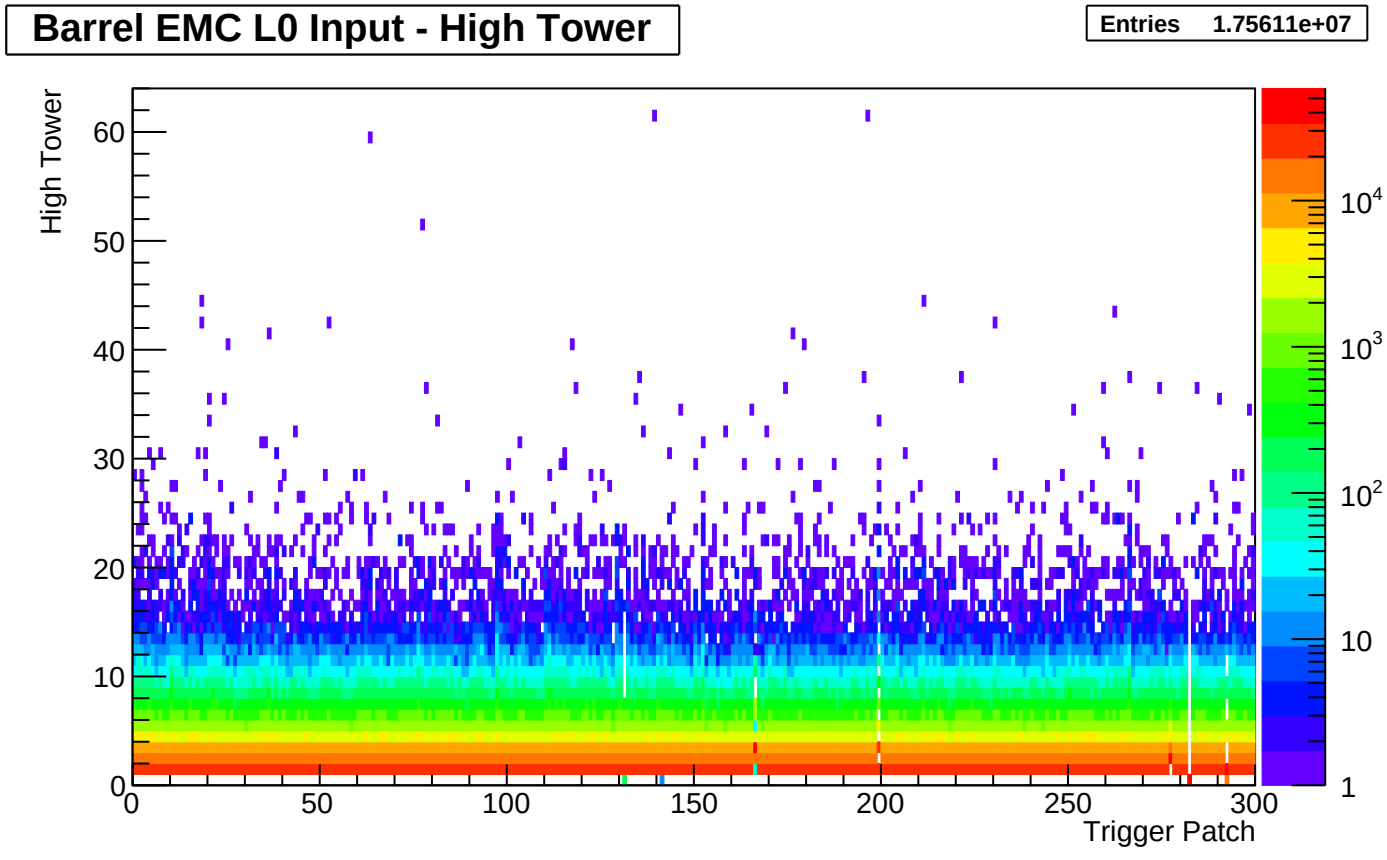
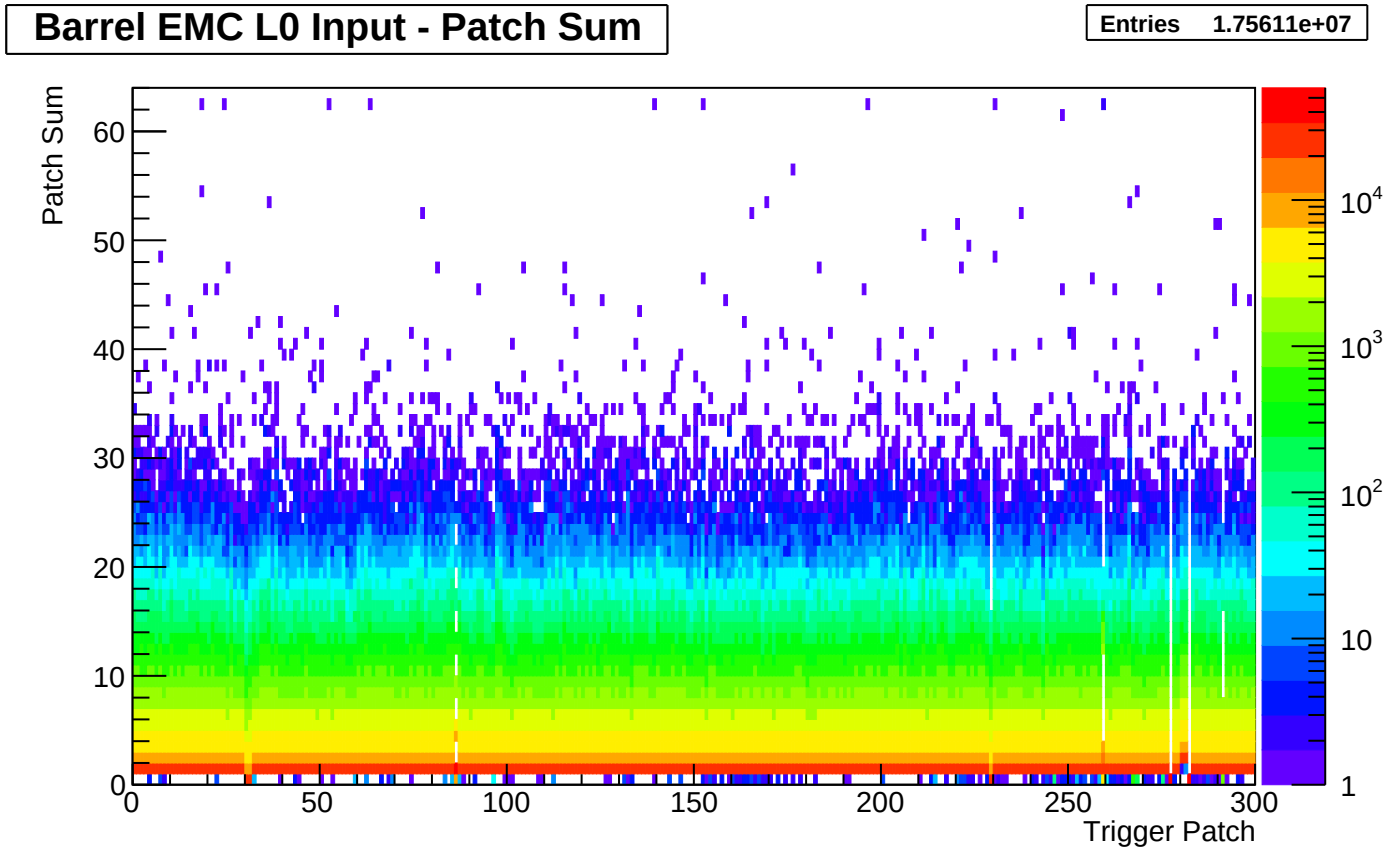
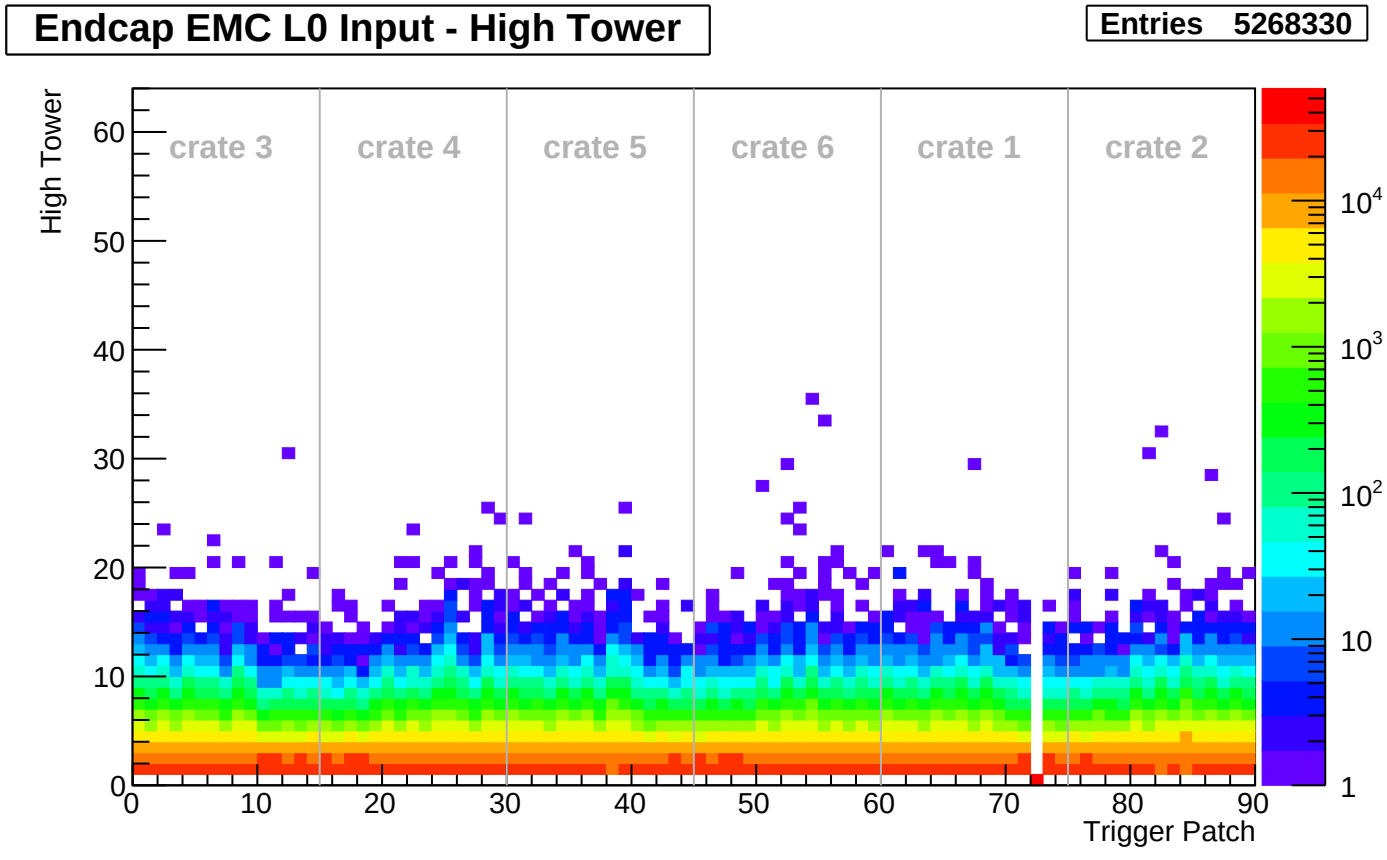
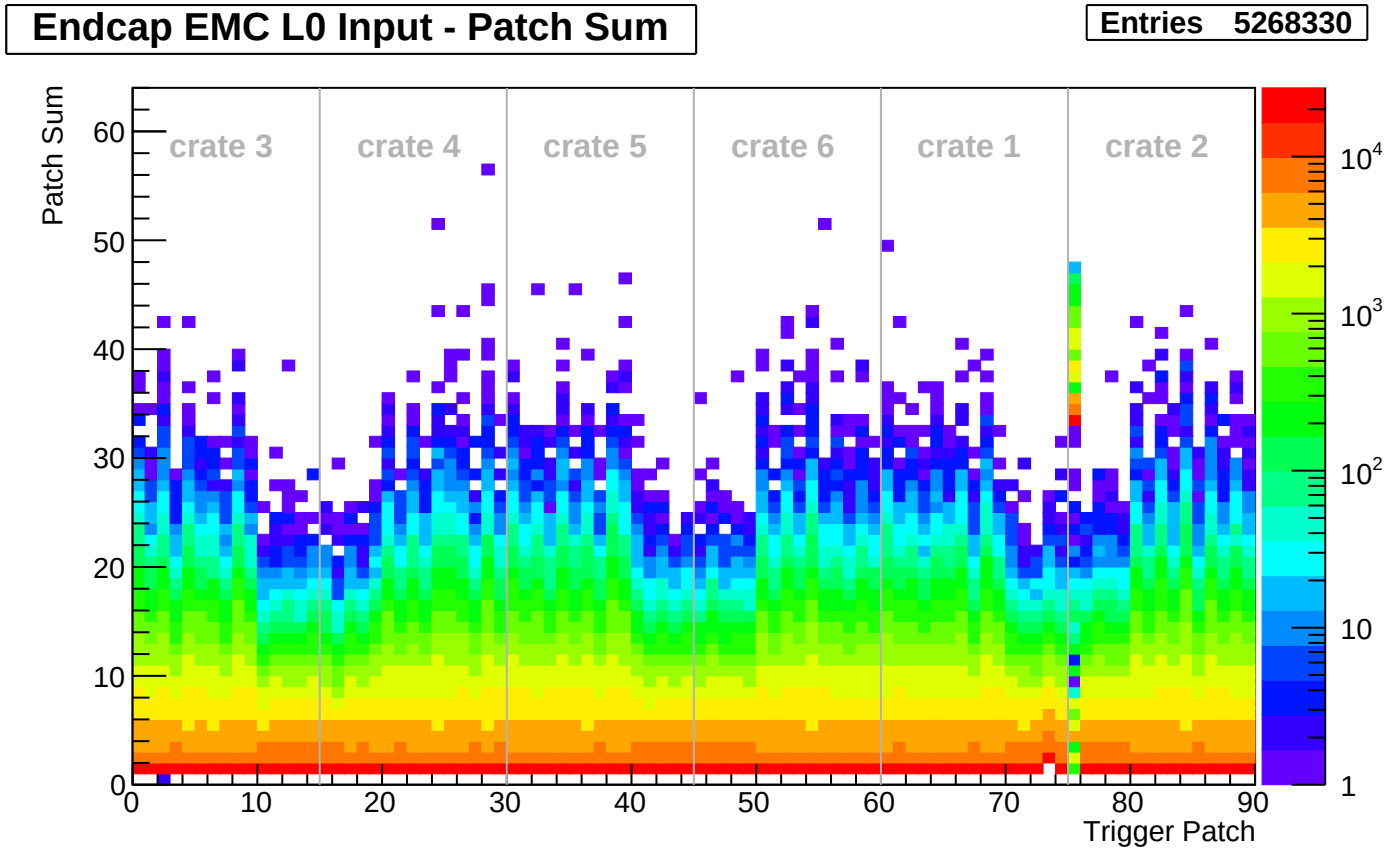
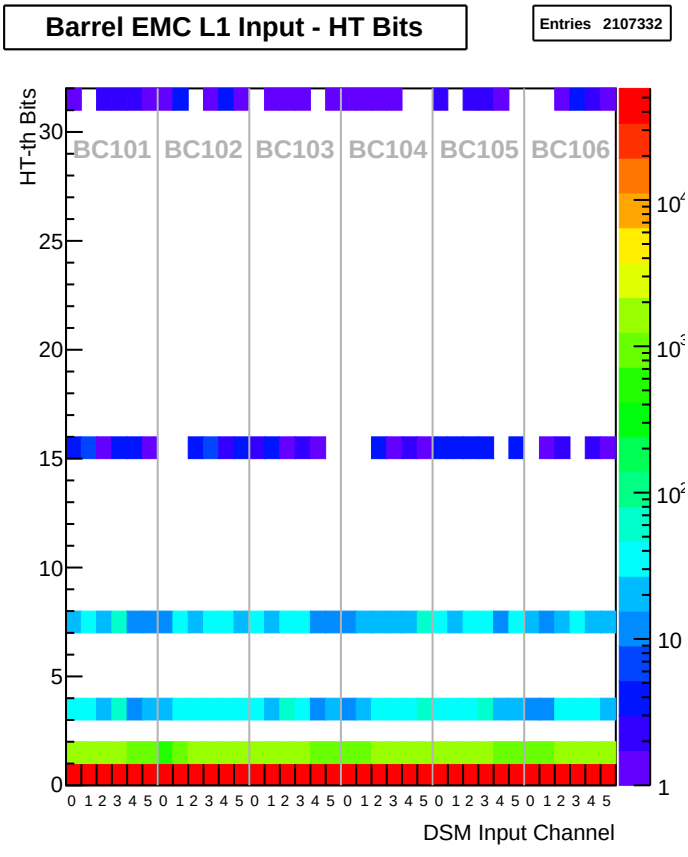
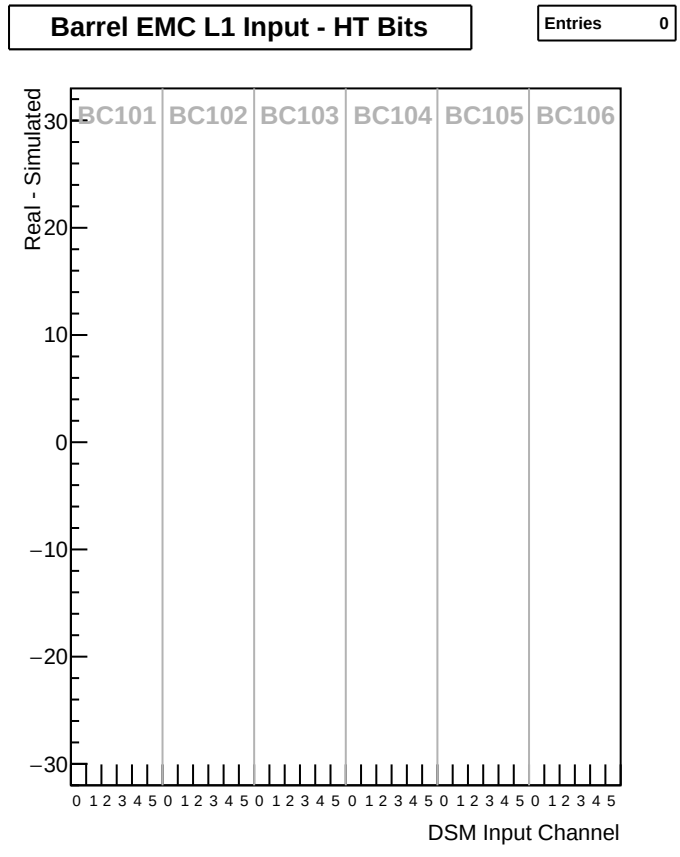

Barrel EMC L0 Input - High Tower
Entries 1.75611e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

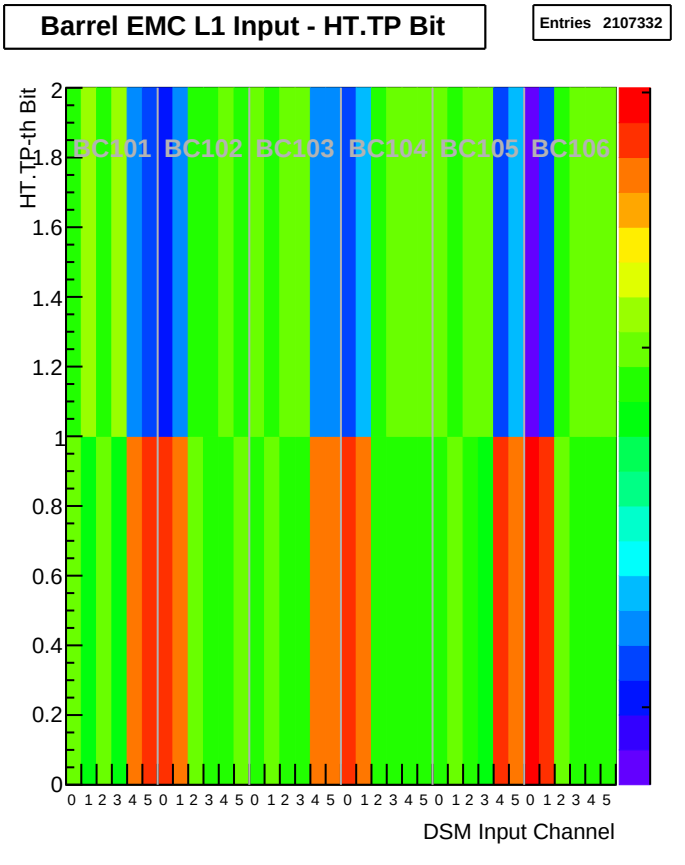

Barrel EMC L0 Input - Patch Sum
Entries 1.75611e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

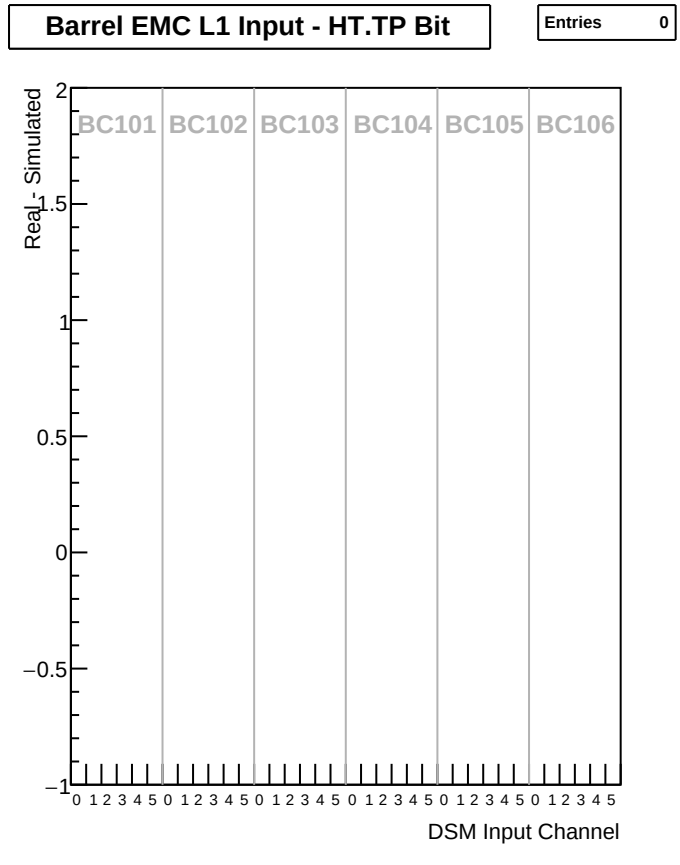

Endcap EMC L0 Input - High Tower
Entries 5268330
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

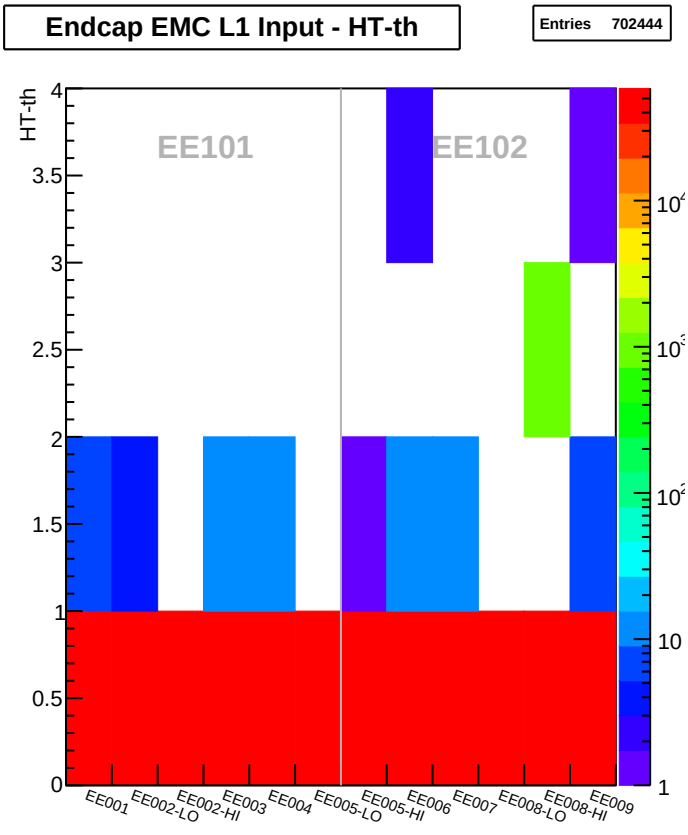

Endcap EMC L0 Input - Patch Sum
Entries 5268330
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

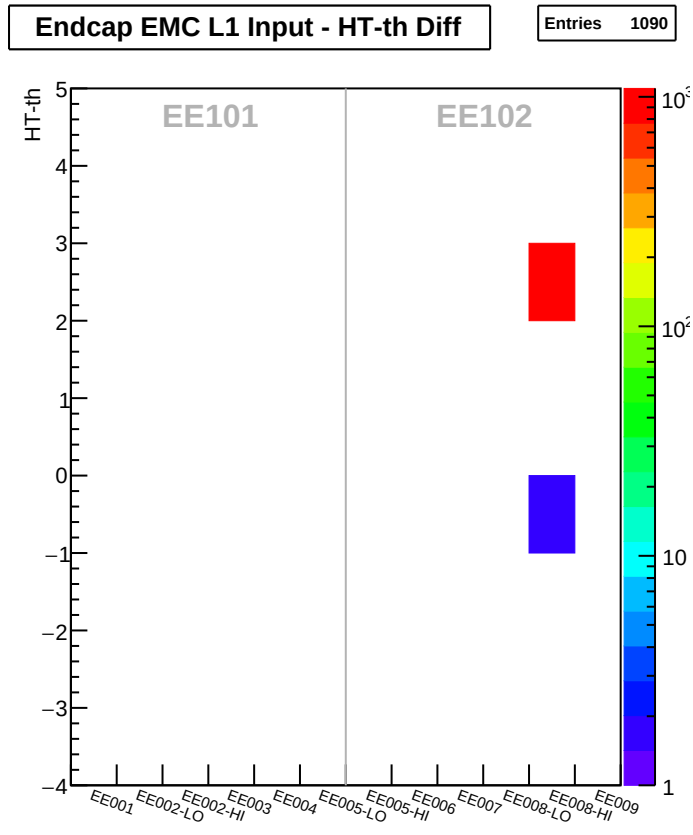

Barrel EMC L1 Input - HT Bits
Entries 2107332
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

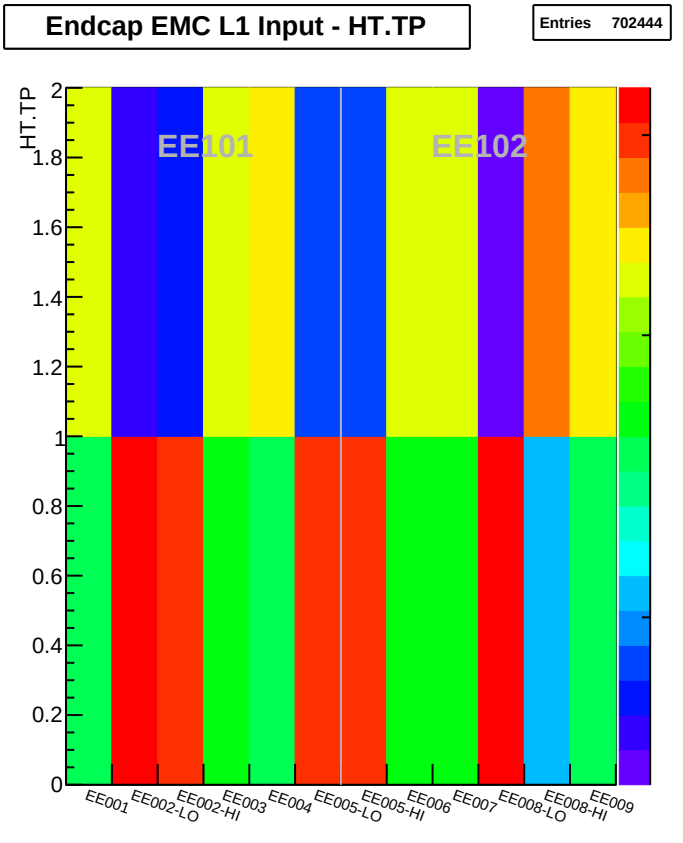

Barrel EMC L1 Input - HT Bits
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

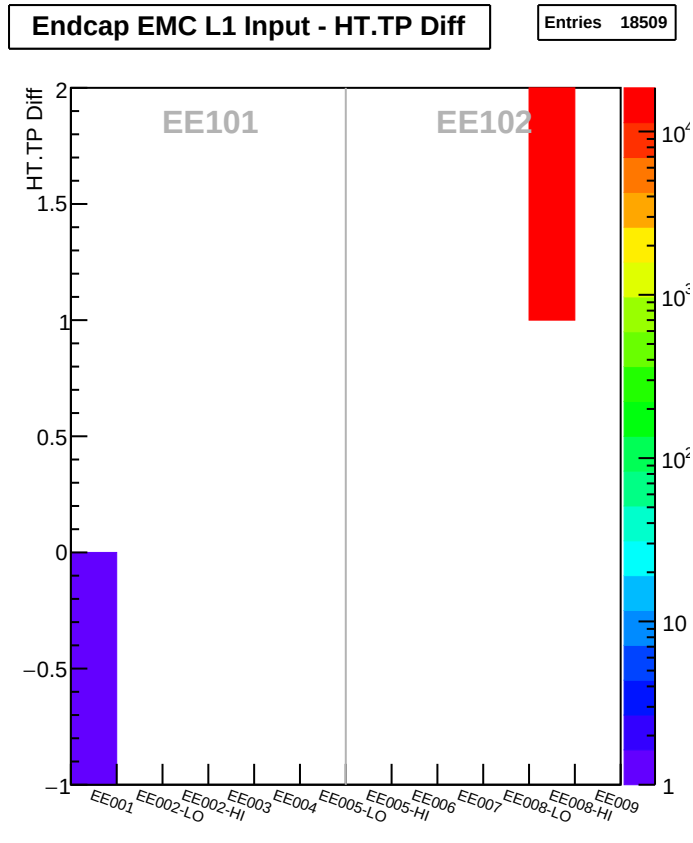

Barrel EMC L1 Input - HT.TP Bit
Entries 2107332
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

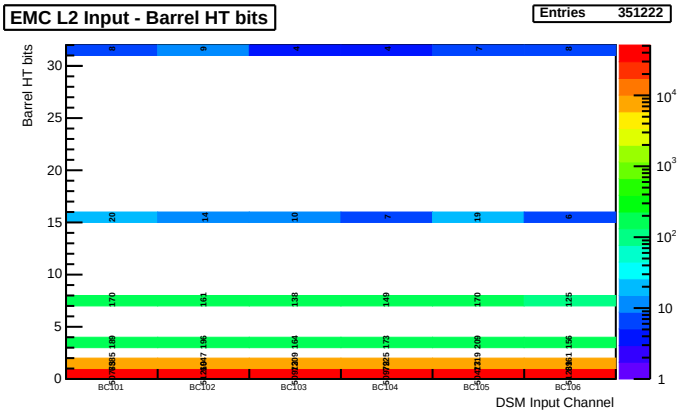

Barrel EMC L1 Input - HT.TP Bit
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

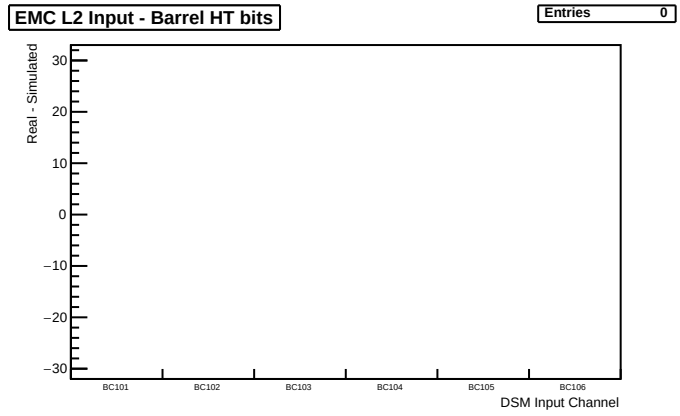

Endcap EMC L1 Input - HT-th
Entries 702444
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

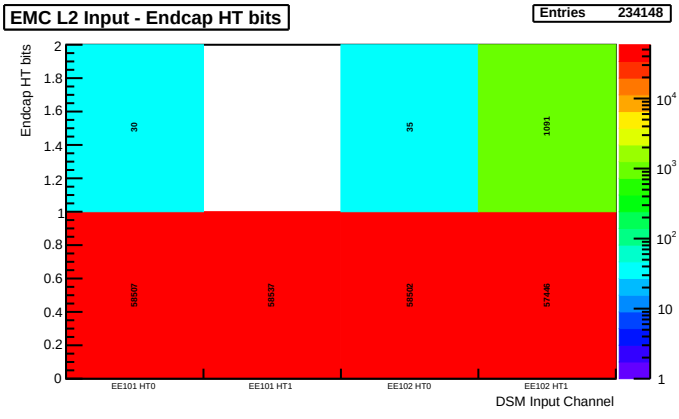

Endcap EMC L1 Input - HT-th Diff
Entries 1090
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

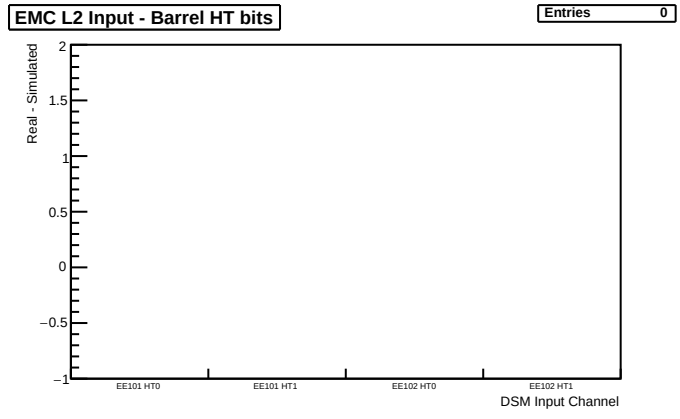

Endcap EMC L1 Input - HT.TP
Entries 702444
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

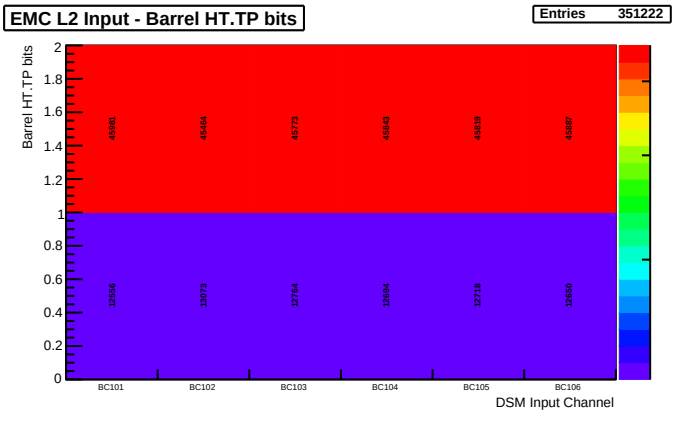

Endcap EMC L1 Input - HT.TP Diff
Entries 18509
HT.TP Diff
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

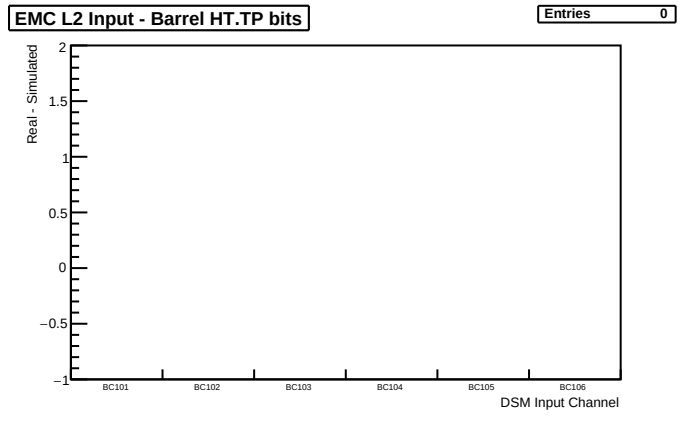

EMC L2 Input - Barrel HT bits
Entries 351222
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

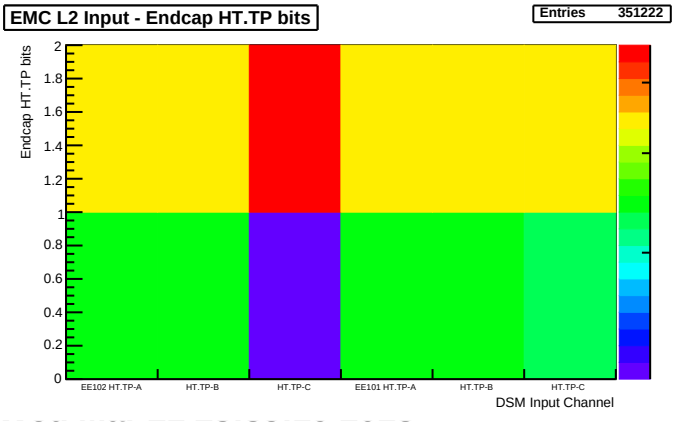

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

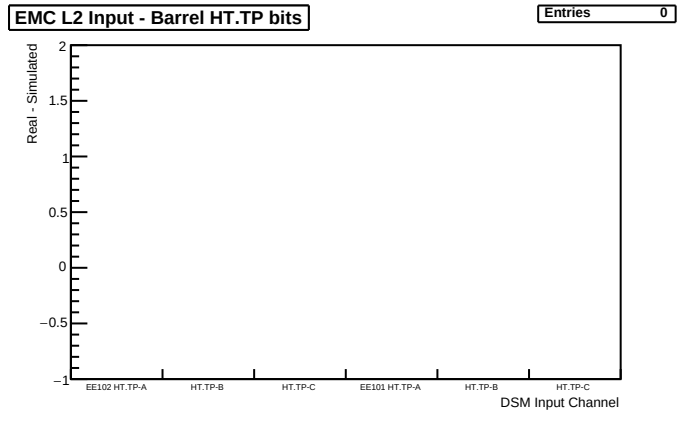

EMC L2 Input - Endcap HT bits
Entries 234148
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

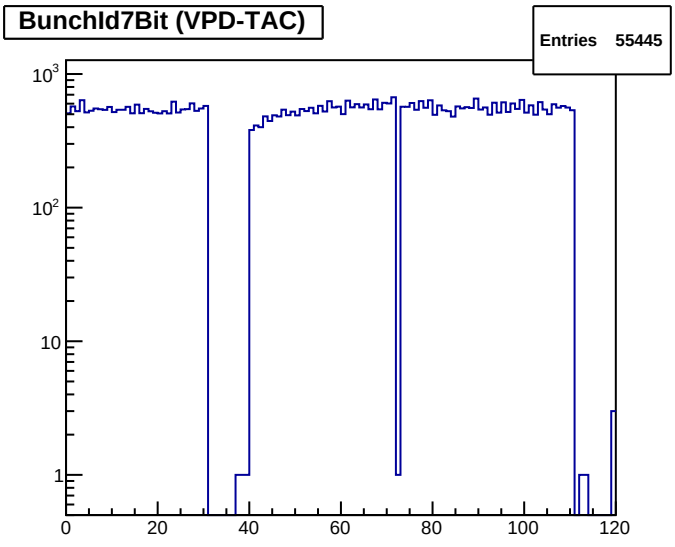

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

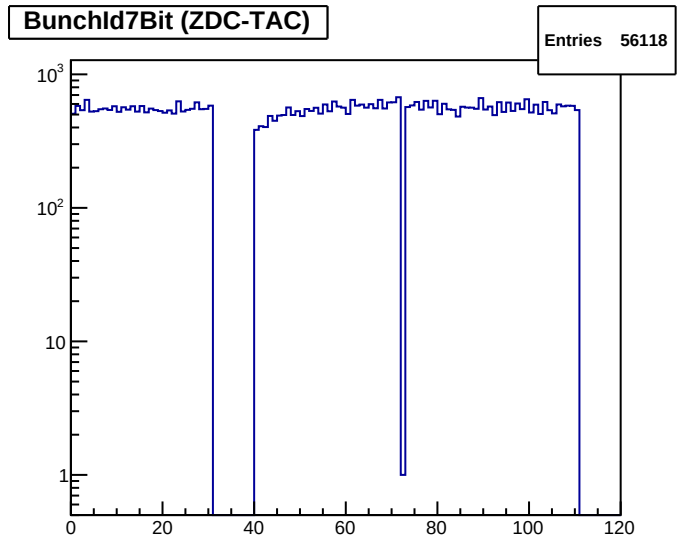

EMC L2 Input - Barrel HT.TP bits
Entries 351222
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

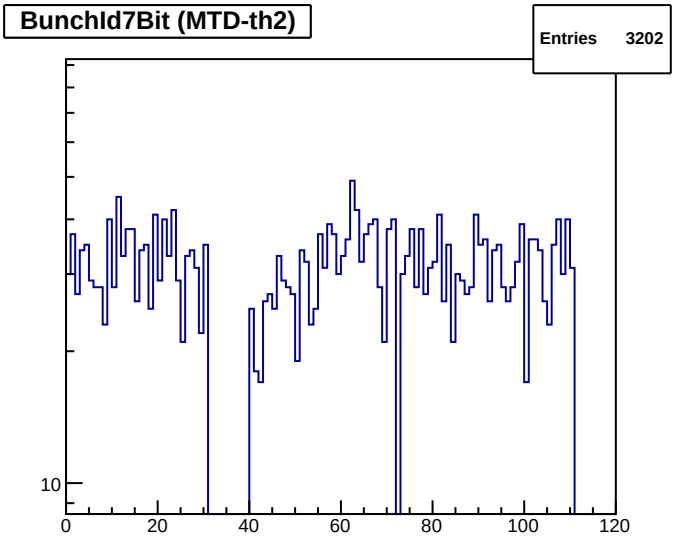

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

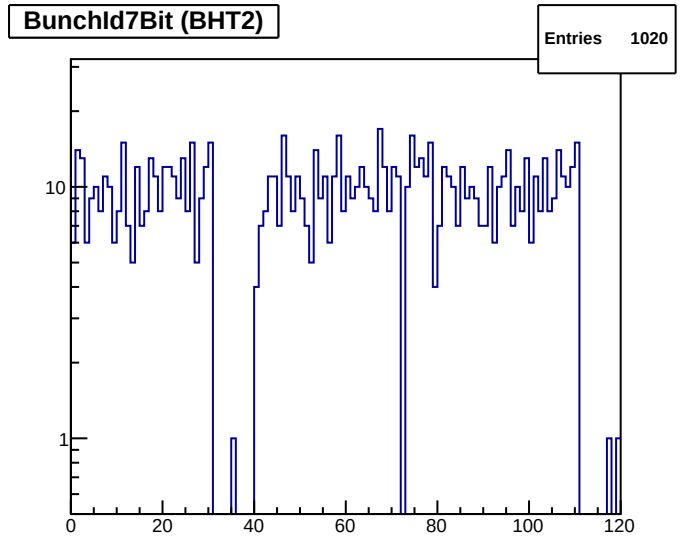

EMC L2 Input - Endcap HT.TP bits
Entries 351222
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

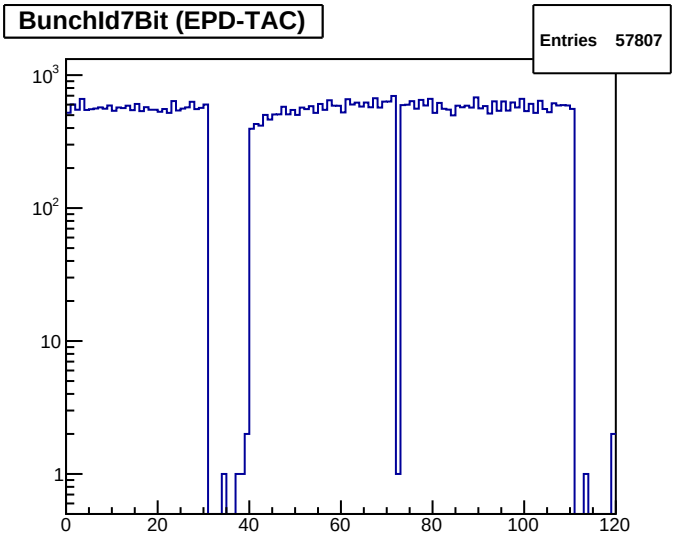

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

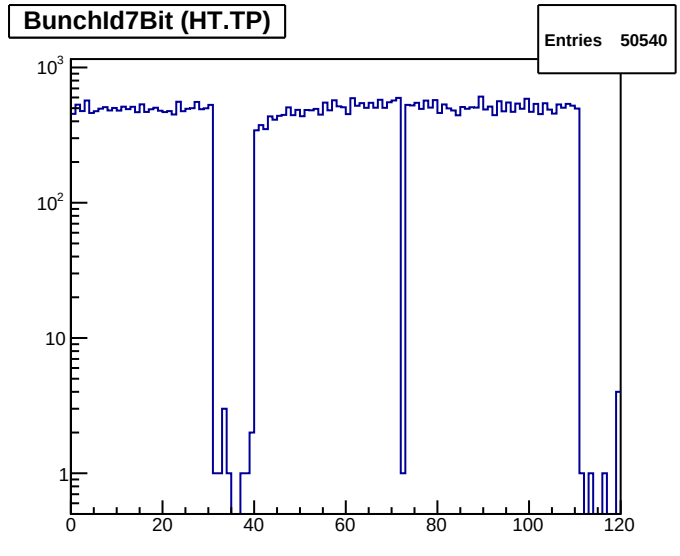

BunchId7Bit (VPD-TAC)
Entries 55445

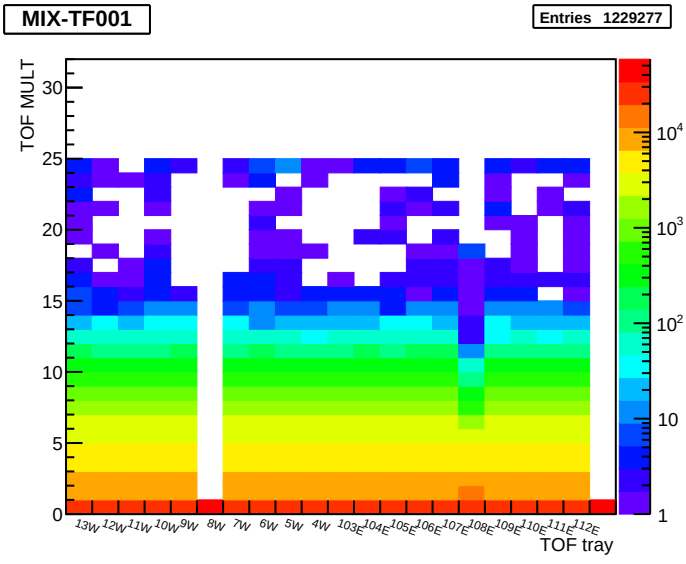

BunchId7Bit (ZDC-TAC)
Entries 56118

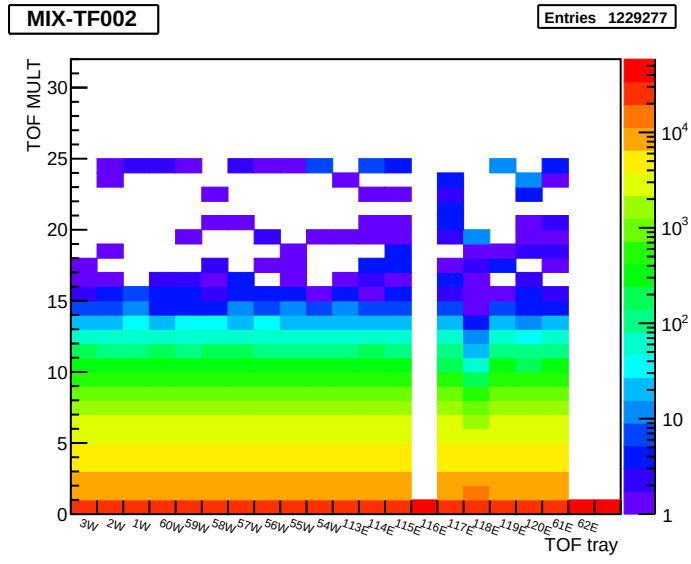

BunchId7Bit (MTD-th2)
Entries 3202

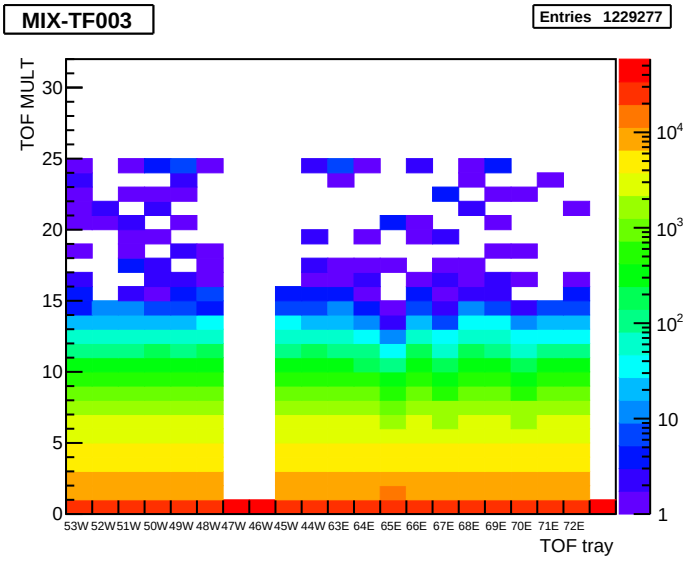

BunchId7Bit (BHT2)
Entries 1020

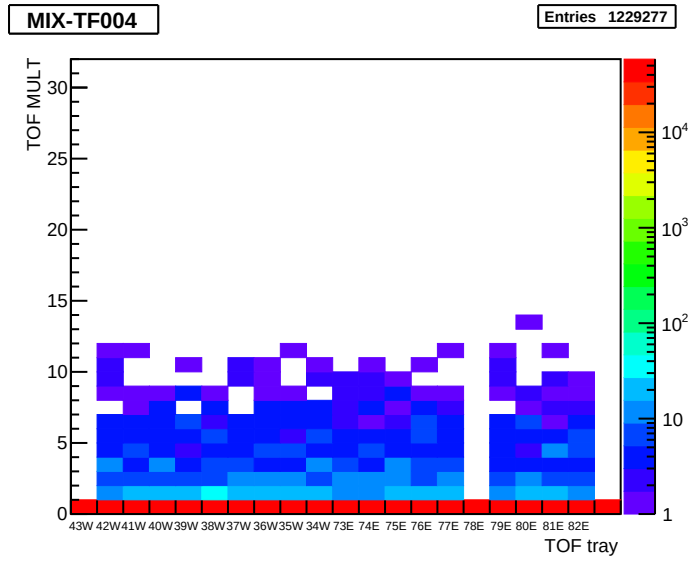

BunchId7Bit (EPD-TAC)
Entries 57807

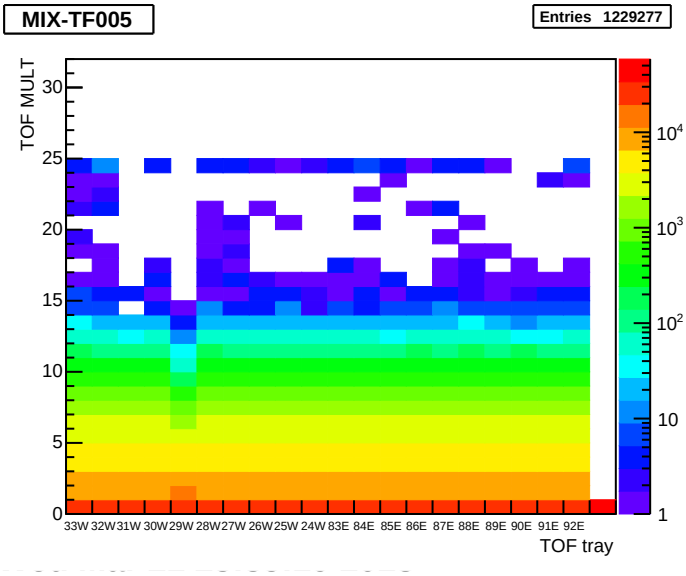

BunchId7Bit (HT.TP)
Entries 50540

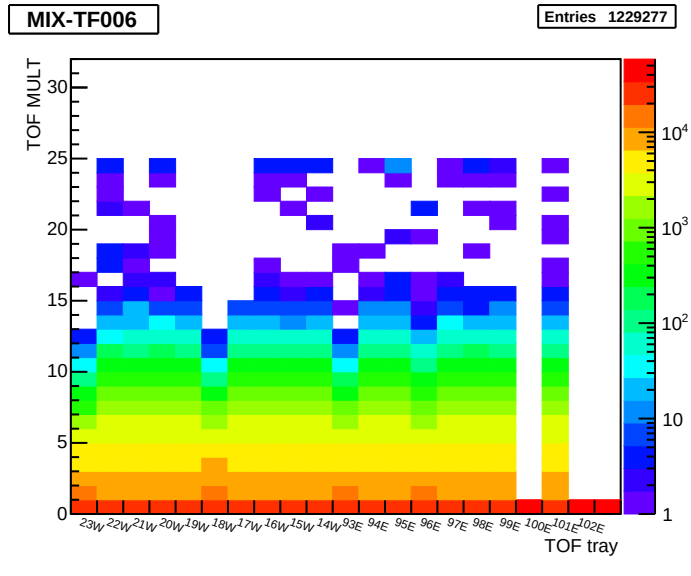

MIX-TF001
Entries 1229277
TOF MULT
TOF tray
13W 12W 11W 10W 9W 8W 7W 6W 5W 4W 103E 104E 105E 106E 107E 108E 109E 110E 111E 112E

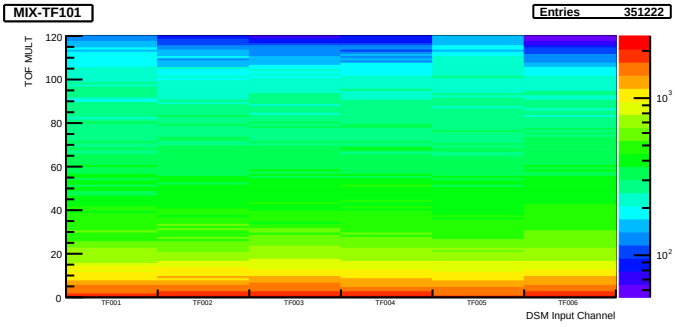

MIX-TF002
Entries 1229277
TOF MULT
TOF tray
3W 2W 1W 60W 59W 58W 57W 56W 55W 54W 113E 114E 115E 116E 117E 118E 119E 120E 61E 62E

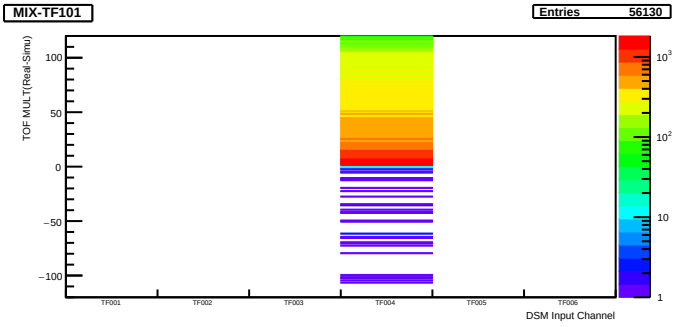

MIX-TF003
Entries 1229277
TOF MULT
TOF tray
53W 52W 51W 50W 49W 48W 47W 46W 45W 44W 63E 64E 65E 66E 67E 68E 69E 70E 71E 72E

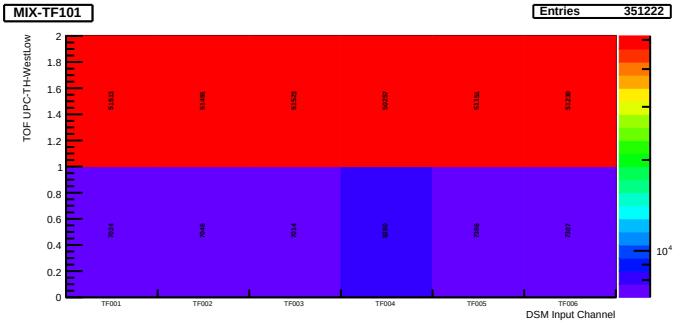

MIX-TF004
Entries 1229277
TOF MULT
TOF tray
43W 42W 41W 40W 39W 38W 37W 36W 35W 34W 73E 74E 75E 76E 77E 78E 79E 80E 81E 82E

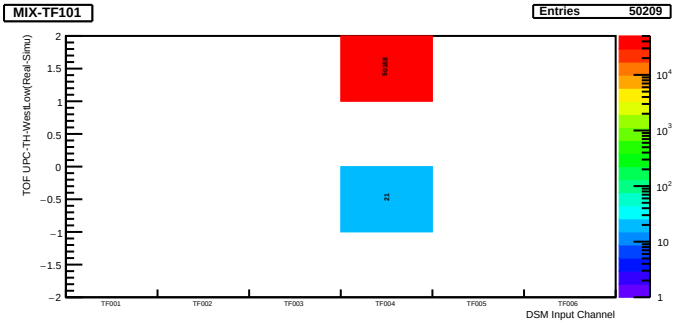

MIX-TF005
Entries 1229277
TOF MULT
TOF tray
33W 32W 31W 30W 29W 28W 27W 26W 25W 24W 83E 84E 85E 86E 87E 88E 89E 90E 91E 92E

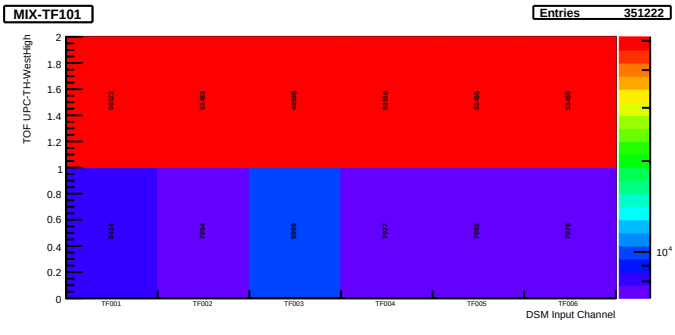

MIX-TF006
Entries 1229277
TOF MULT
TOF tray
23W 22W 21W 20W 19W 18W 17W 16W 15W 14W 93E 94E 95E 96E 97E 98E 99E 100E 101E 102E

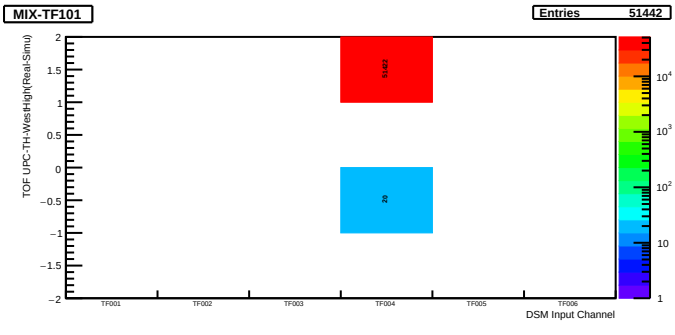

MIX-TF101
Entries 351222
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

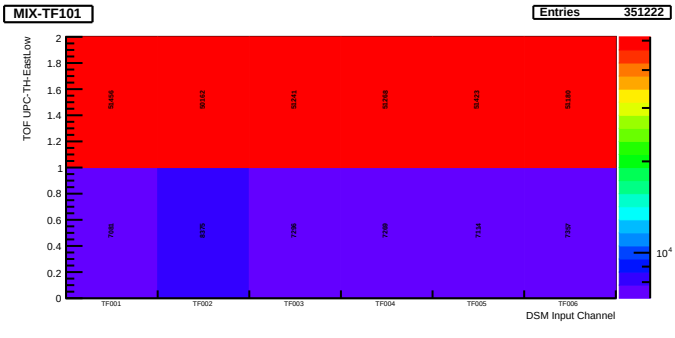

MIX-TF101
Entries 56130
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

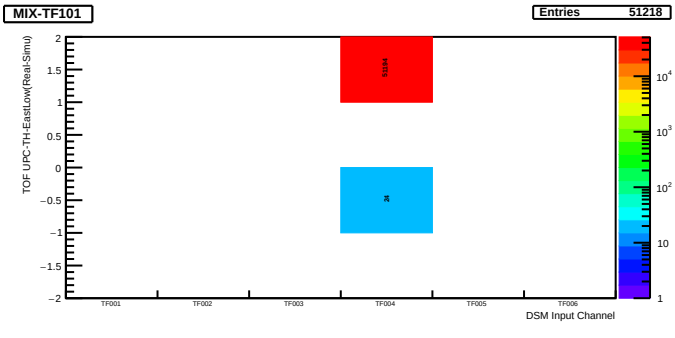

MIX-TF101
Entries 351222
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

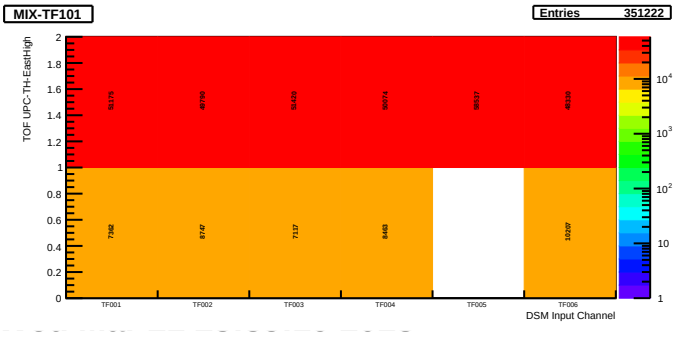

MIX-TF101
Entries 50209
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

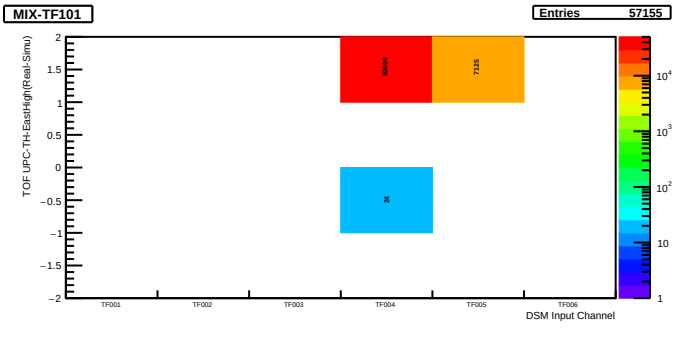

MIX-TF101
Entries 351222
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

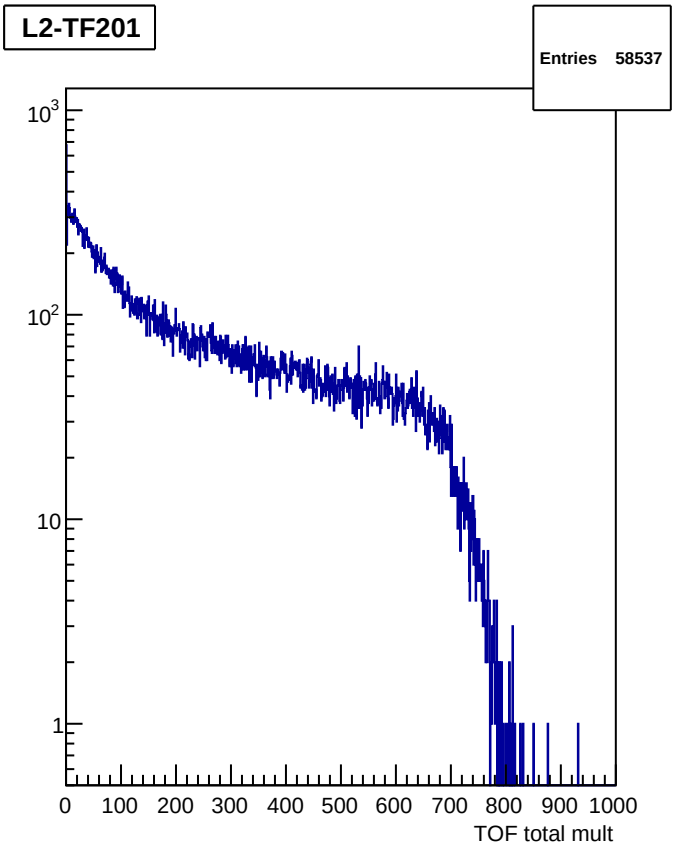

MIX-TF101
Entries 51442
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

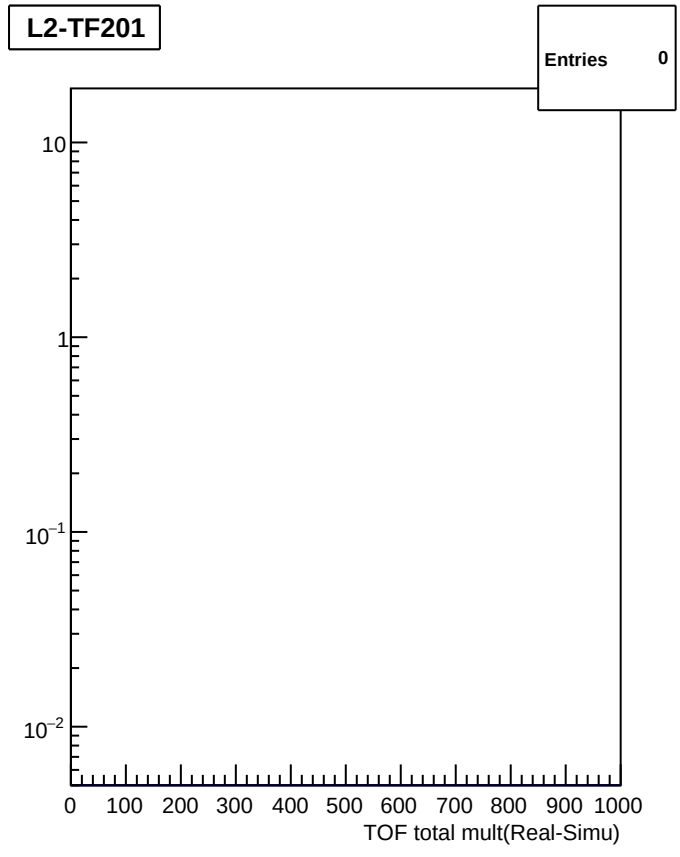

MIX-TF101
Entries 351222
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

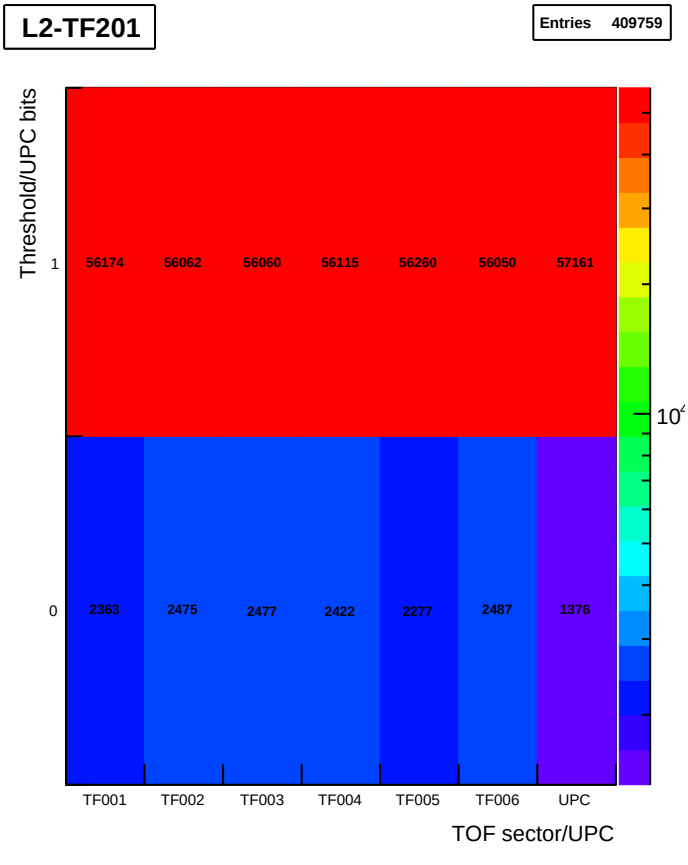

MIX-TF101
Entries 51218
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

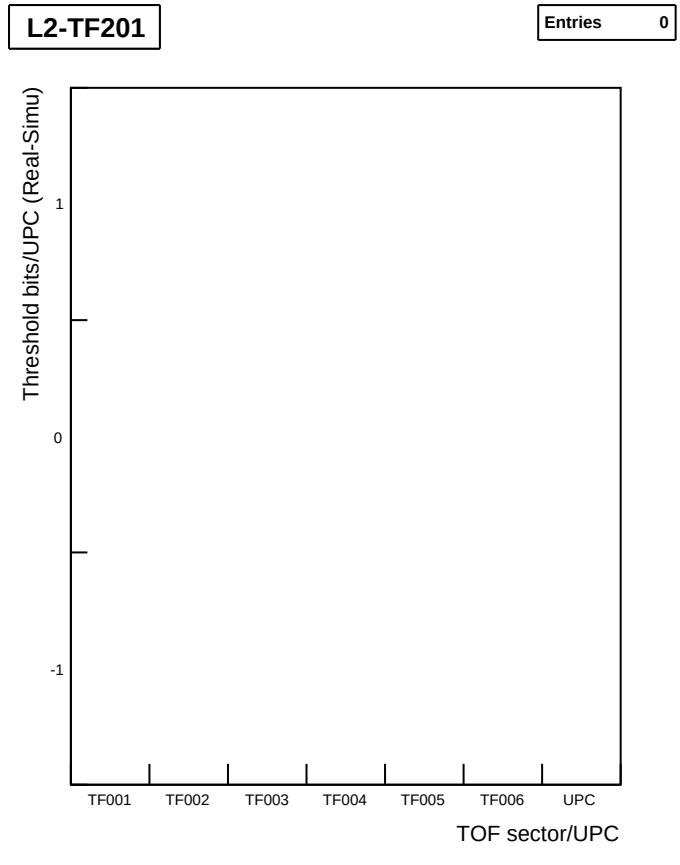

MIX-TF101
Entries 351222
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

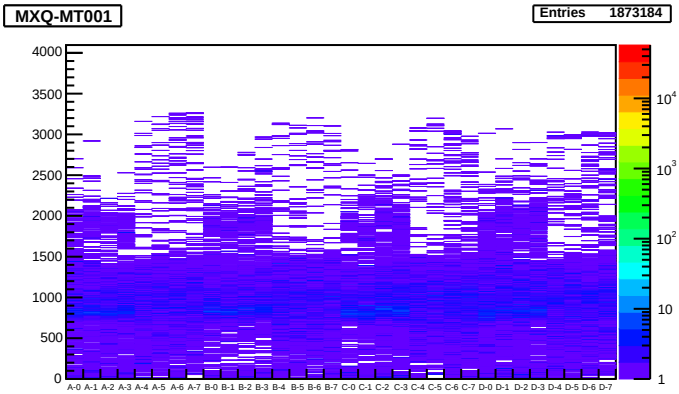

MIX-TF101
Entries 57155
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

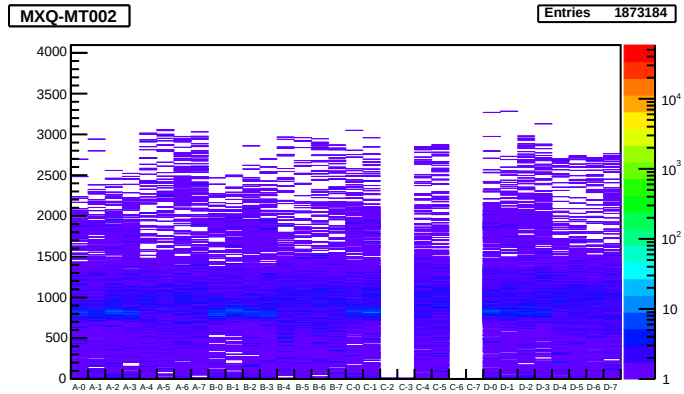

L2-TF201
Entries 58537
TOF total mult

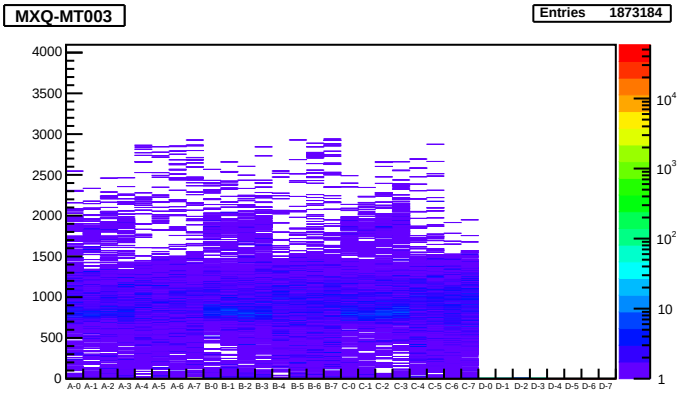

L2-TF201
Entries 0
TOF total mult(Real-Simu)

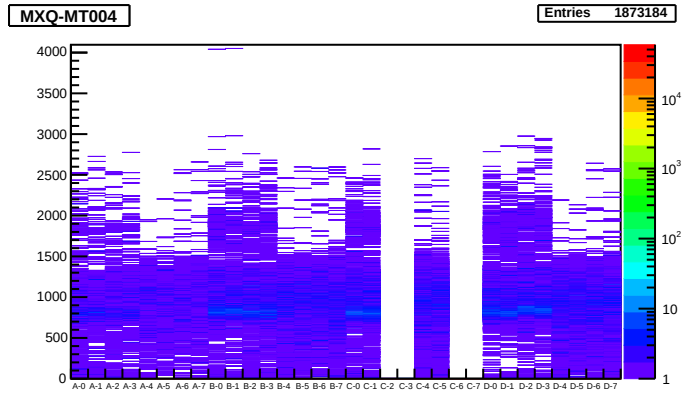

L2-TF201
Entries 409759
Threshold/UPC bits
56174 56062 56060 56115 56260 56050 57161
2363 2475 2477 2422 2277 2487 1376
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

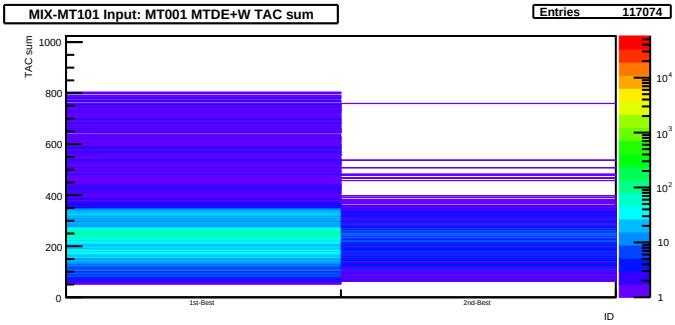

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

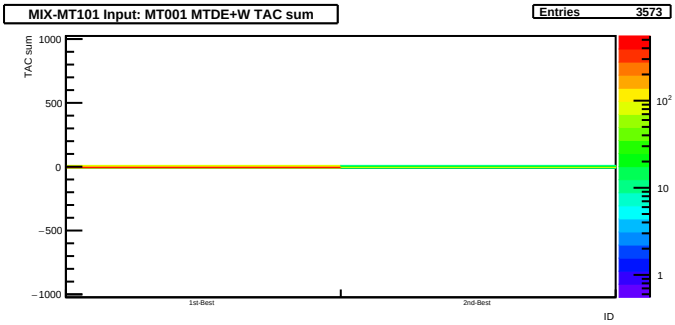

MXQ-MT001
Entries 1873184
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

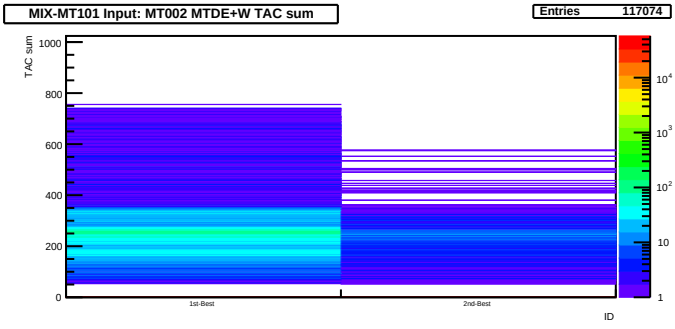

MXQ-MT002
Entries 1873184
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

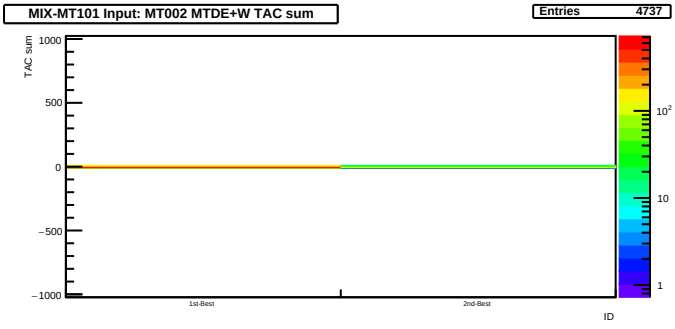

MXQ-MT003
Entries 1873184
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

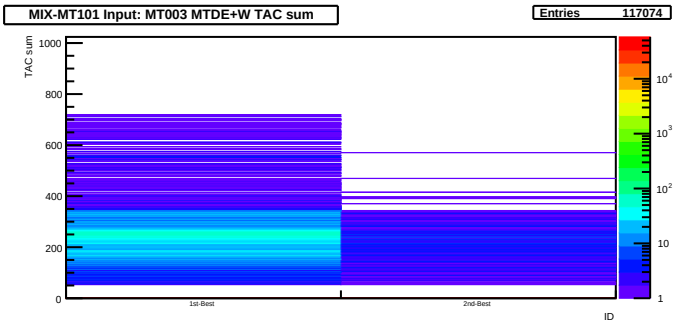

MXQ-MT004
Entries 1873184
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

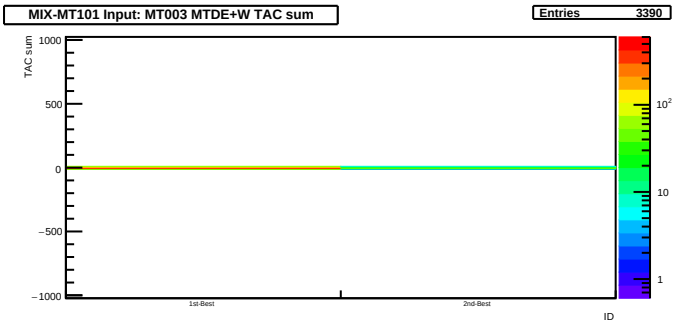

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 117074
TAC sum
1st-Best
2nd-Best
ID

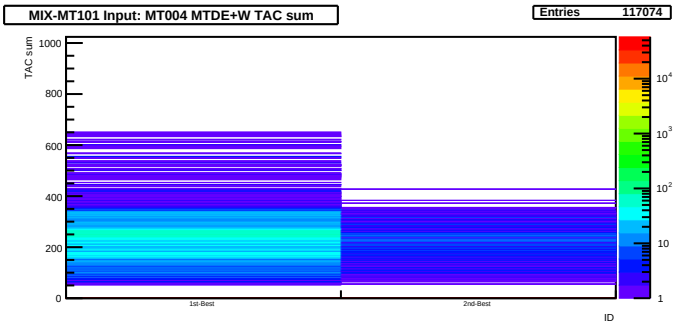

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 3573
TAC sum
1st-Best
2nd-Best
ID

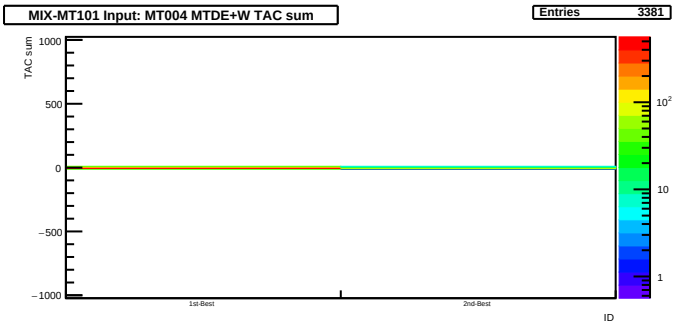

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 117074
TAC sum
1st-Best
2nd-Best
ID

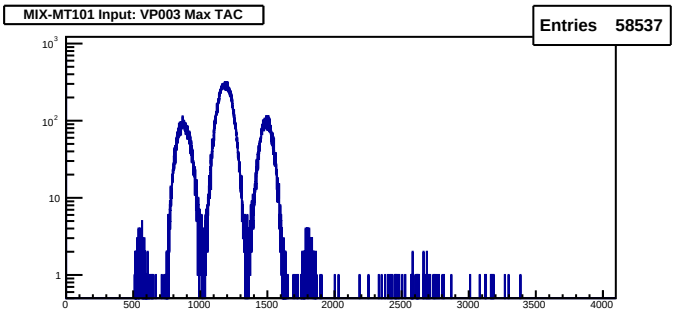

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 4737
TAC sum
1st-Best
2nd-Best
ID

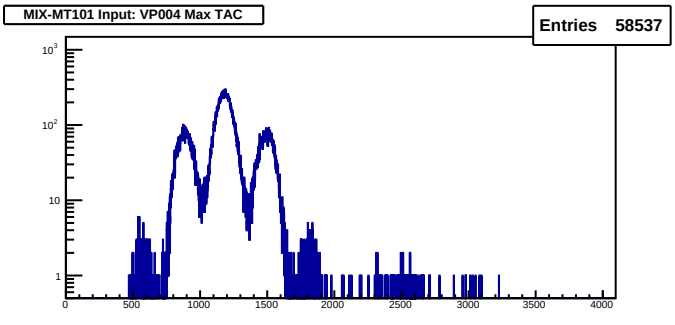

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 117074
TAC sum
1st-Best
2nd-Best
ID

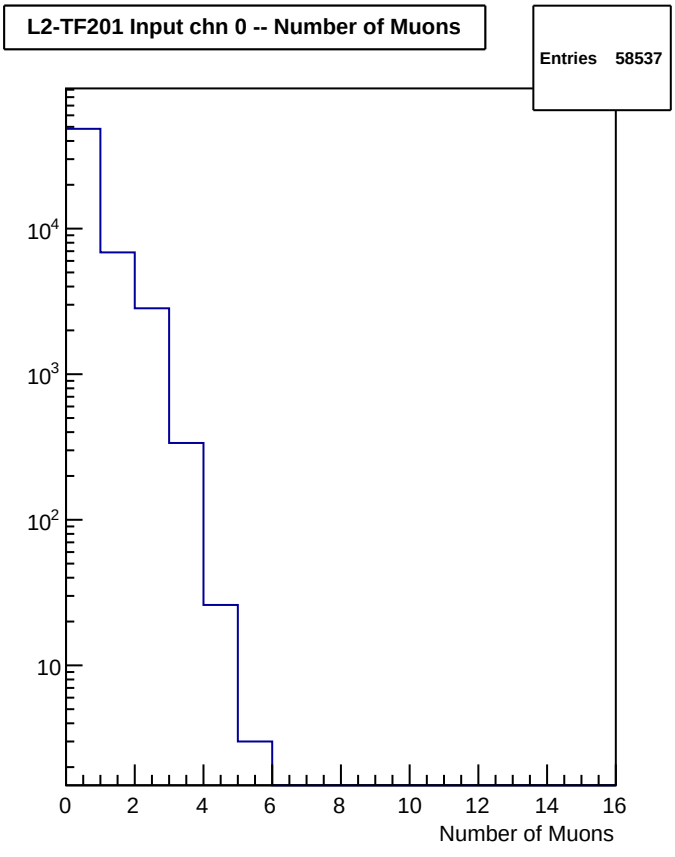

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 3390
TAC sum
1st-Best
2nd-Best
ID

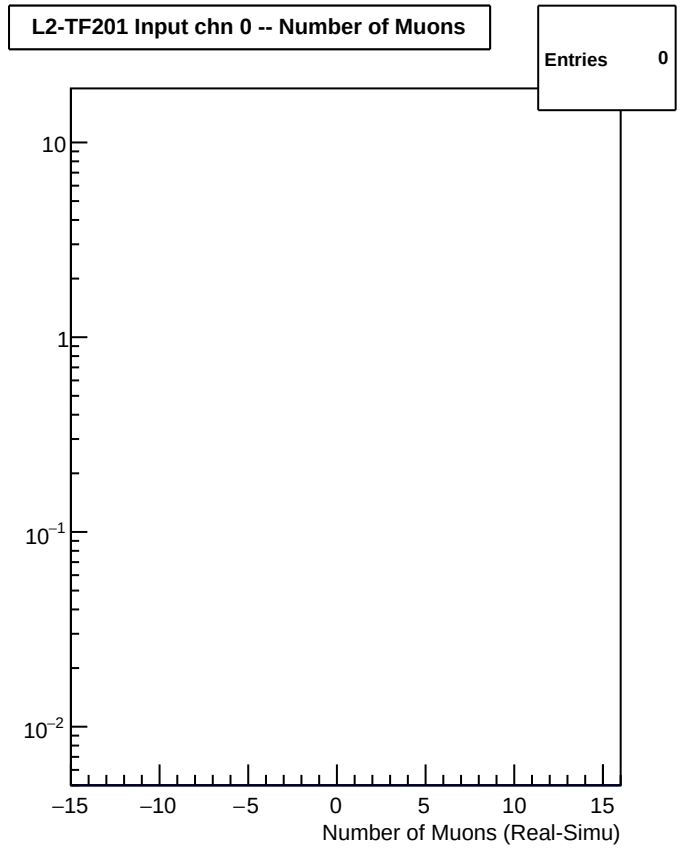

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 117074
TAC sum
1st-Best
2nd-Best
ID

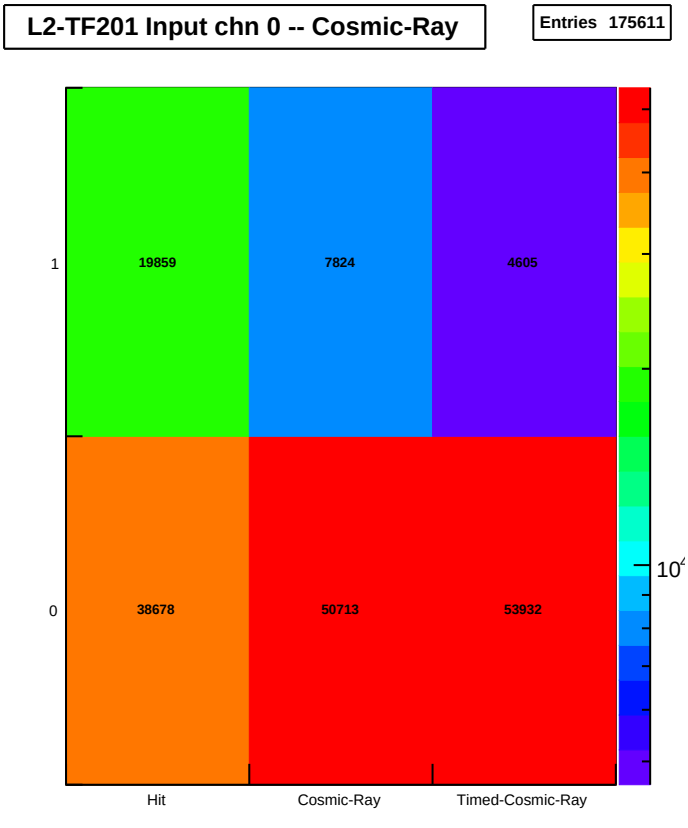

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 3381
TAC sum
1st-Best
2nd-Best
ID

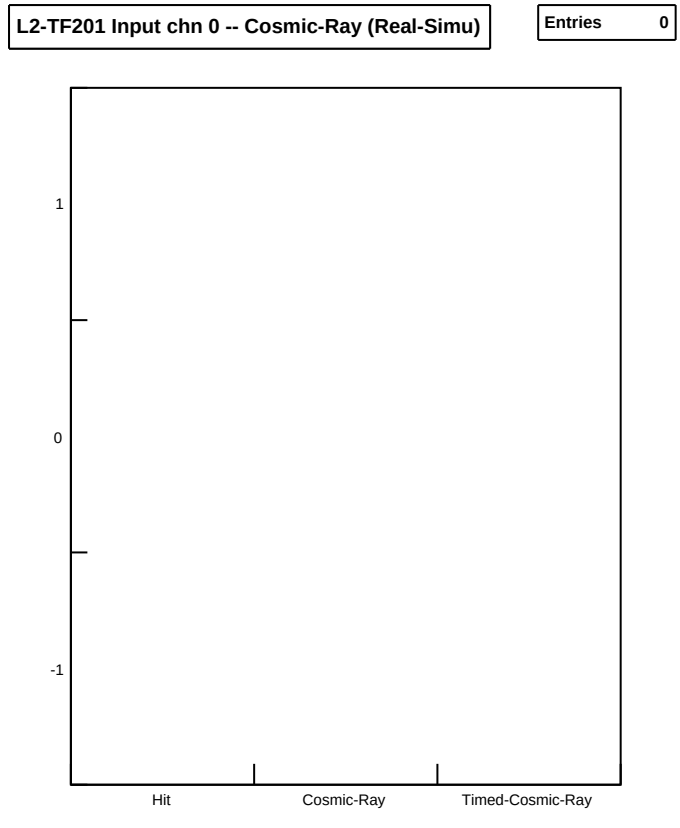

MIX-MT101 Input: VP003 Max TAC
Entries 58537

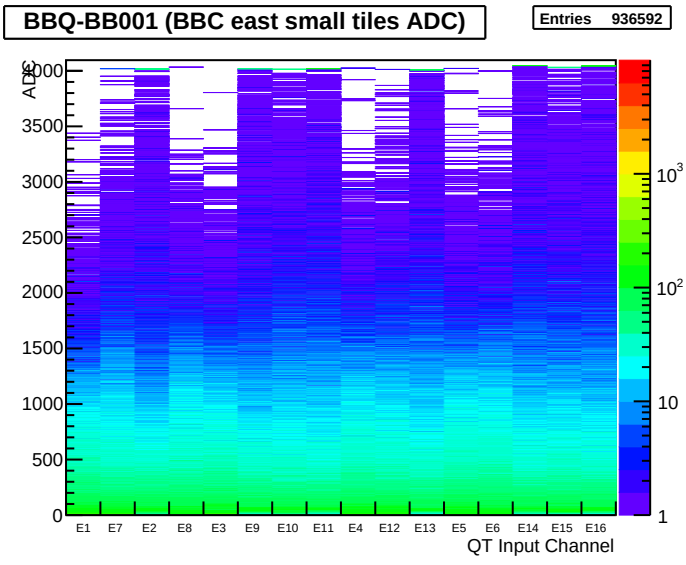

MIX-MT101 Input: VP004 Max TAC
Entries 58537

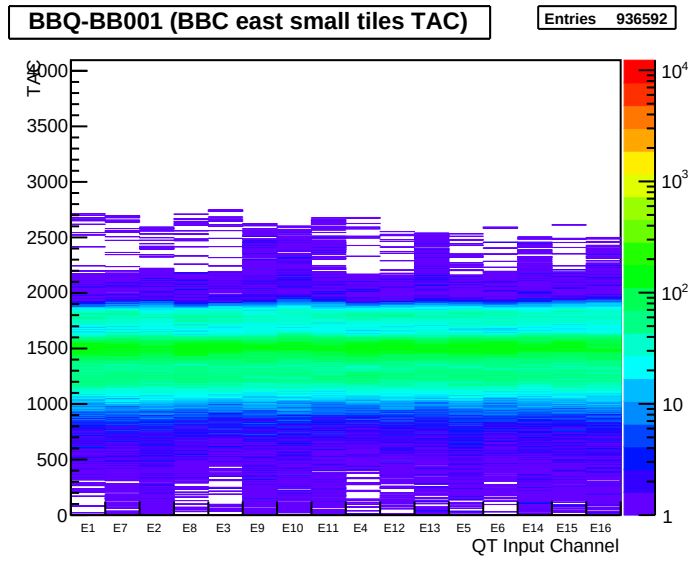

L2-TF201 Input chn 0 -- Number of Muons
Entries 58537
10^4
10^3
10^2
10
0 2 4 6 8 10 12 14 16
Number of Muons

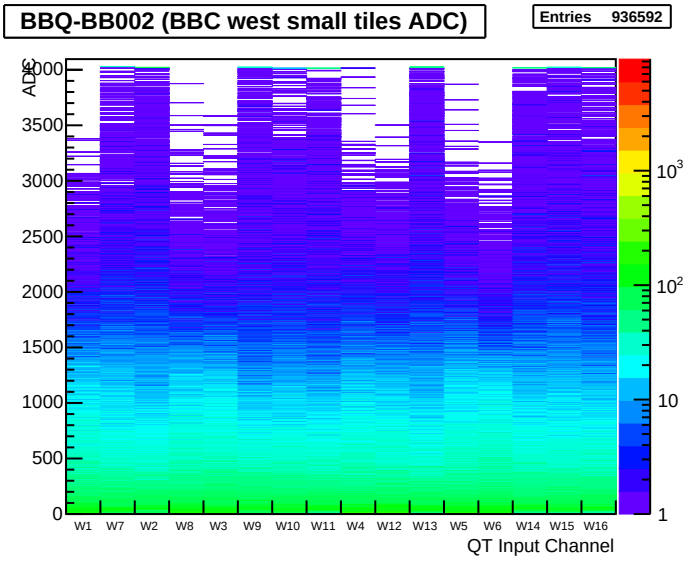

L2-TF201 Input chn 0 -- Number of Muons
Entries 0
10
1
10^{-1}
10^{-2}
–15 –10 –5 0 5 10 15
Number of Muons (Real-Simu)

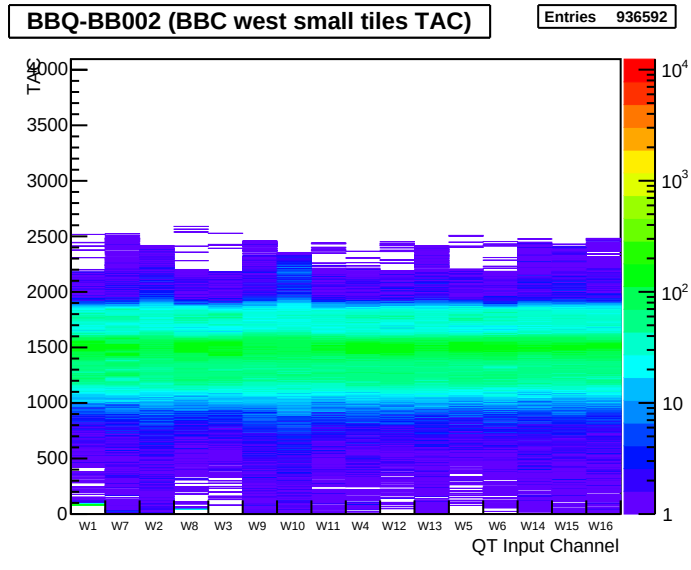

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 175611
1
0
19859
7824
4605
38678
50713
53932
10^4
Hit
Cosmic-Ray
Timed-Cosmic-Ray

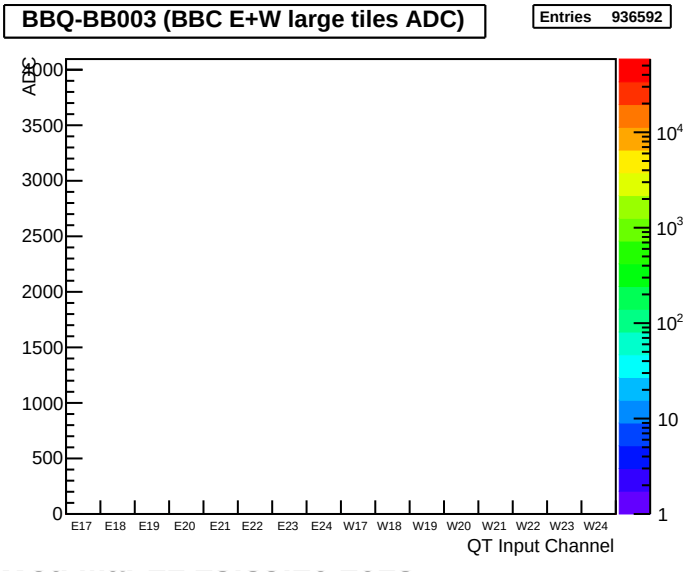

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 0
1
0
-1
Hit
Cosmic-Ray
Timed-Cosmic-Ray

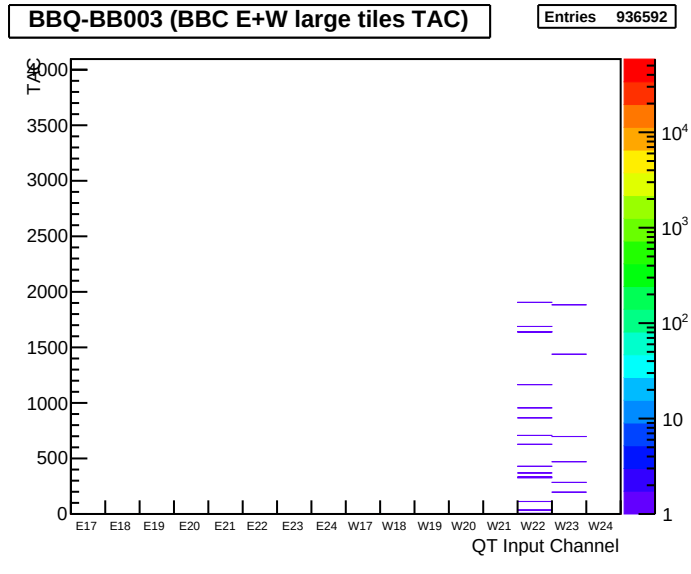

BBQ-BB001 (BBC east small tiles ADC)
Entries 936592
ADC
QT Input Channel

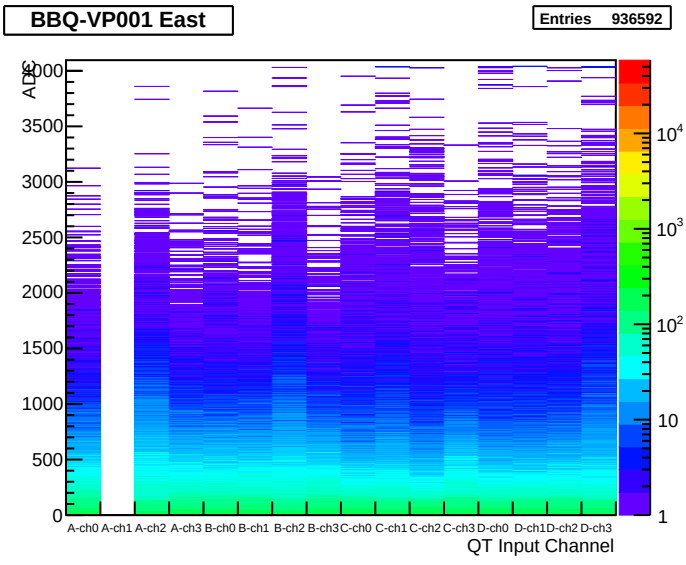

BBQ-BB001 (BBC east small tiles TAC)
Entries 936592
TAC
QT Input Channel

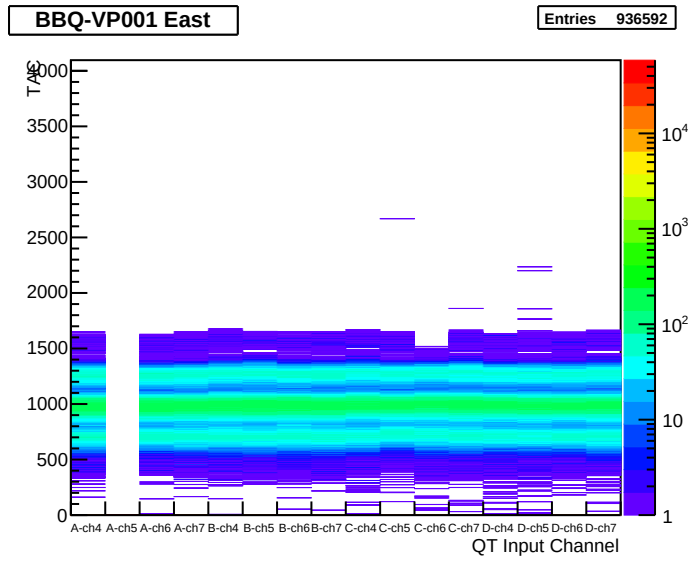

BBQ-BB002 (BBC west small tiles ADC)
Entries 936592
ADC
QT Input Channel

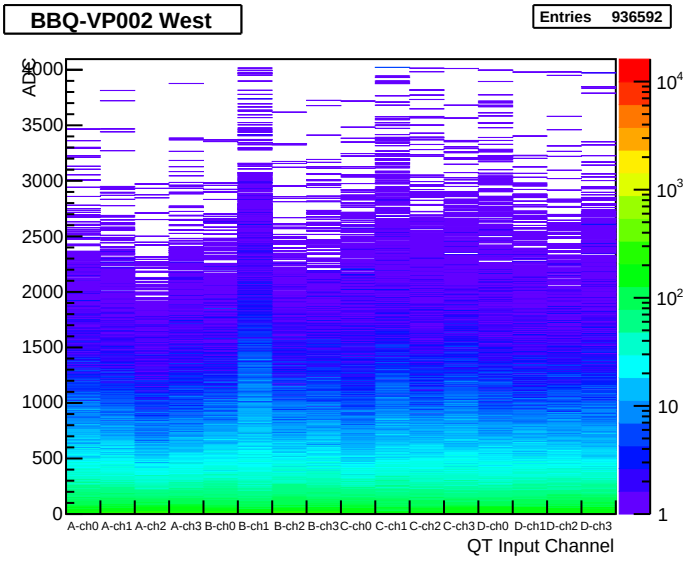

BBQ-BB002 (BBC west small tiles TAC)
Entries 936592
TAC
QT Input Channel

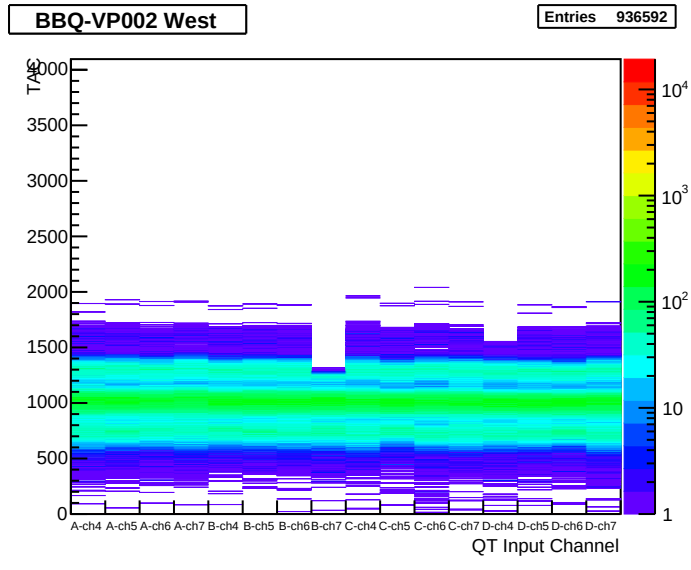

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 936592
ADC
QT Input Channel

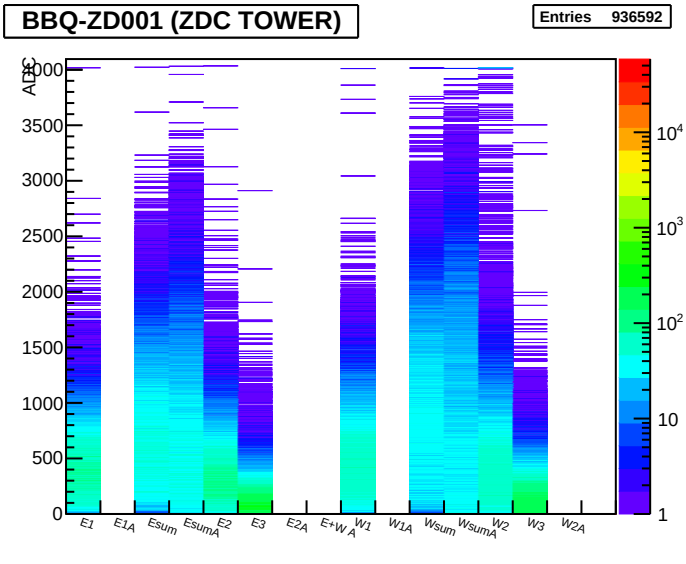

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 936592
TAC
QT Input Channel

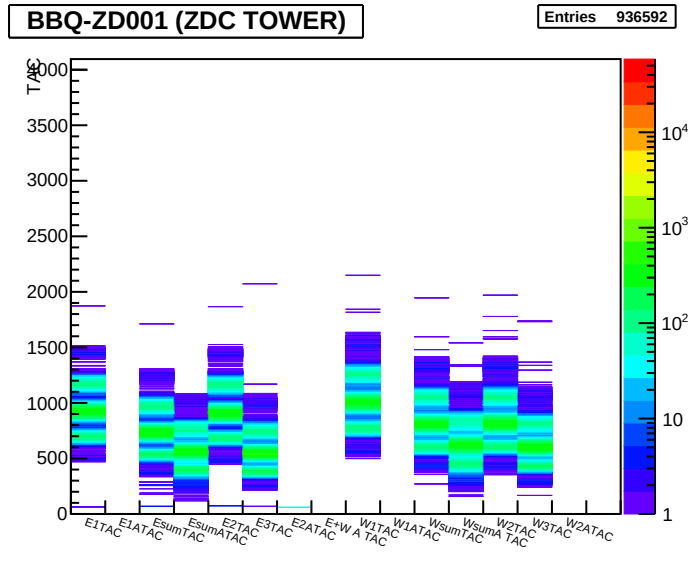

BBQ-VP001 East
Entries 936592
ADC
QT Input Channel

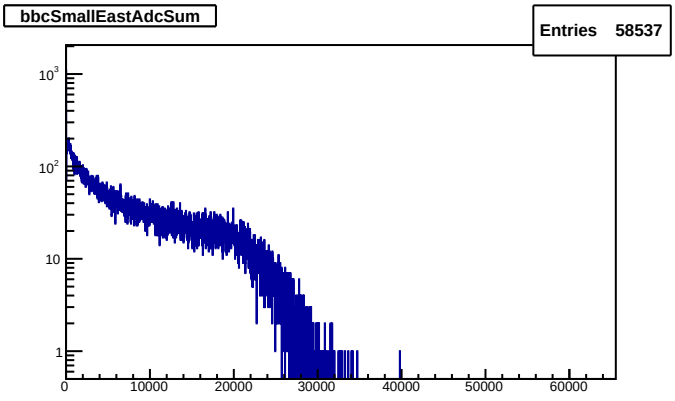

BBQ-VP001 East
Entries 936592
TAC
QT Input Channel

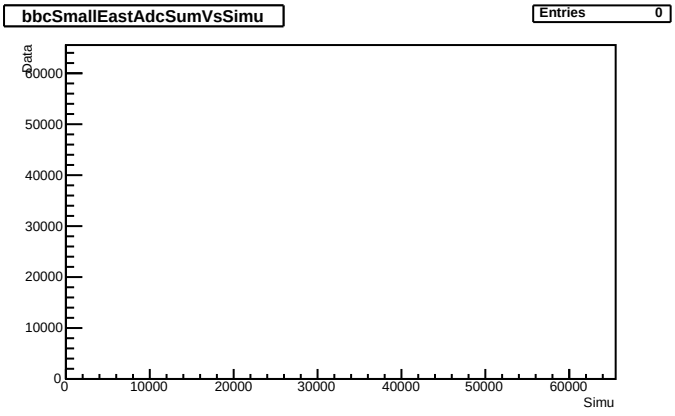

BBQ-VP002 West
Entries 936592
ADC
QT Input Channel

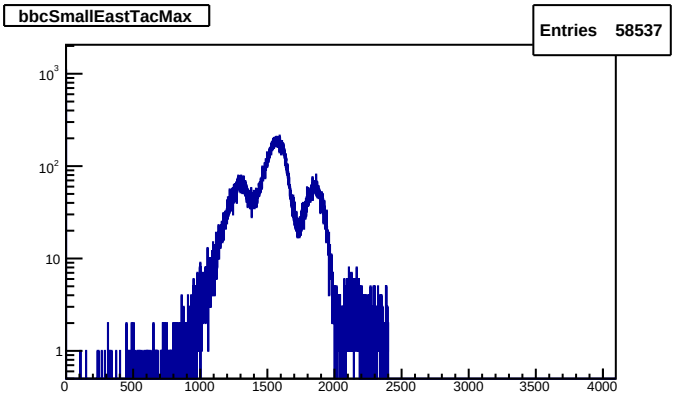

BBQ-VP002 West
Entries 936592
TAC
QT Input Channel

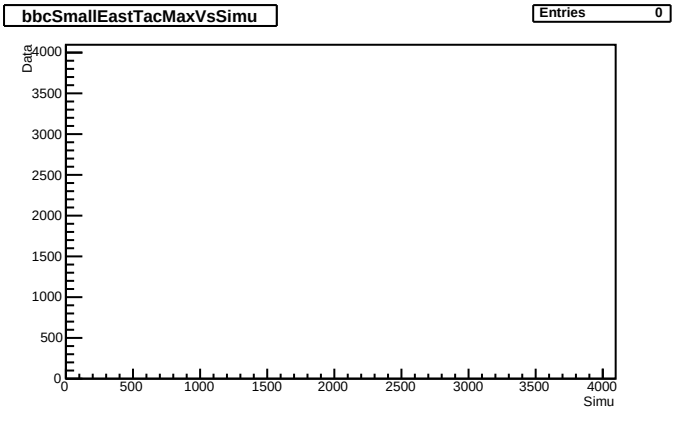

BBQ-ZD001 (ZDC TOWER)
Entries 936592
ADC

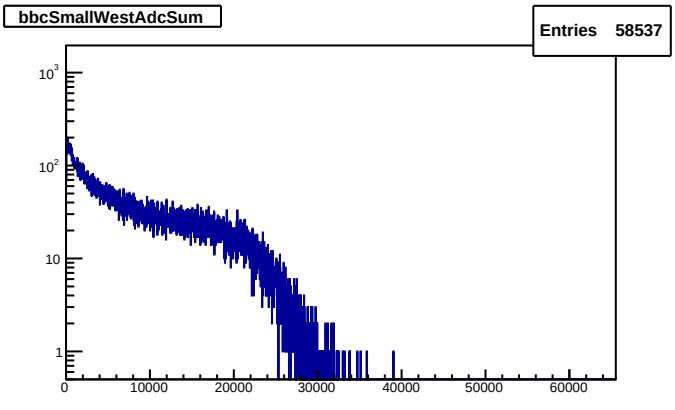

BBQ-ZD001 (ZDC TOWER)
Entries 936592
TAC

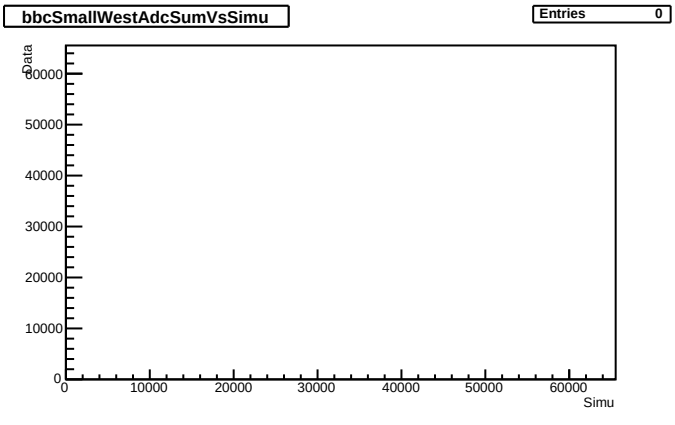

bbcSmallEastAdcSum
Entries 58537

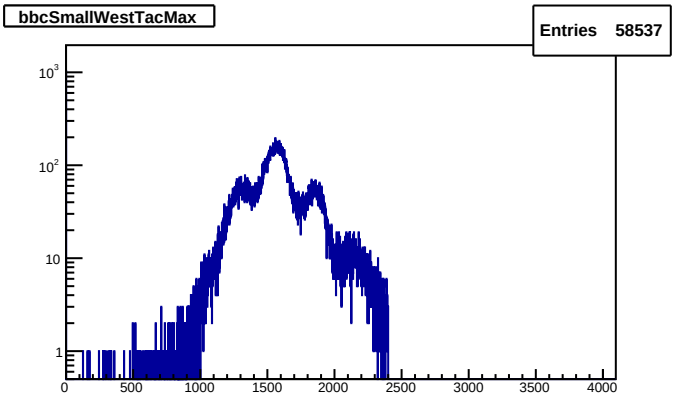

bbcSmallEastAdcSumVsSimu
Entries 0
Data
Simu

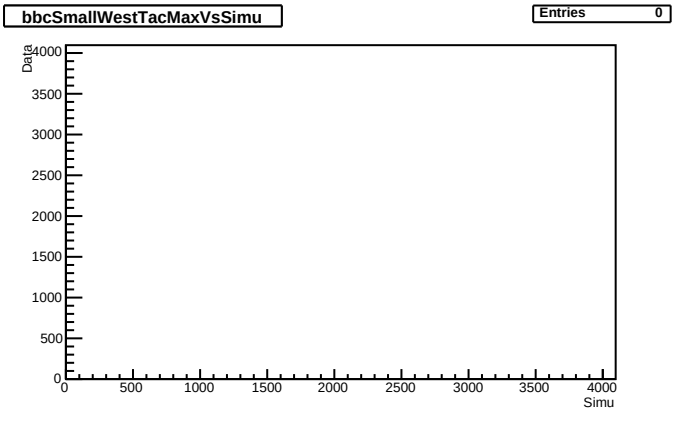

bbcSmallEastTacMax
Entries 58537

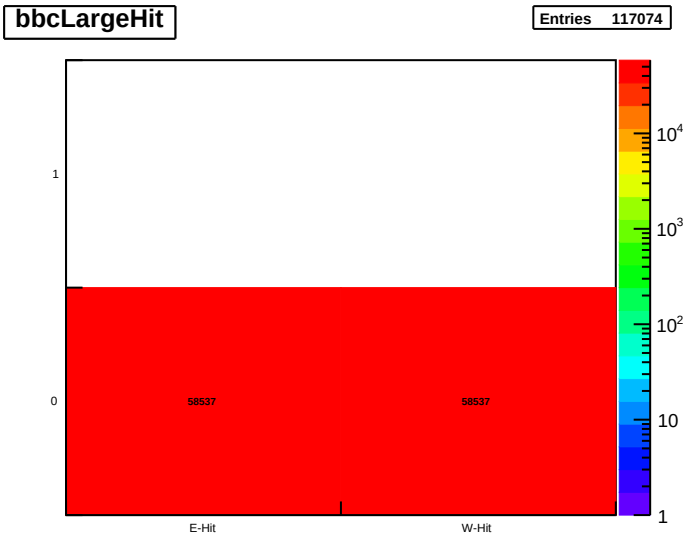

bbcSmallEastTacMaxVsSimu
Entries 0
Data
Simu

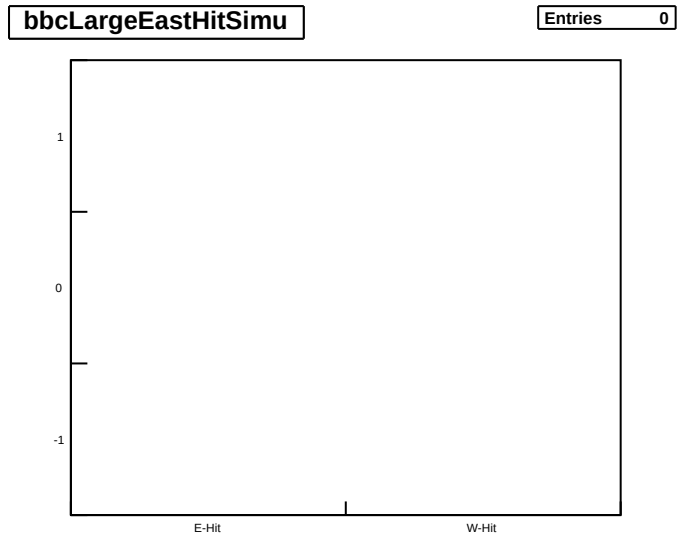

bbcSmallWestAdcSum
Entries 58537

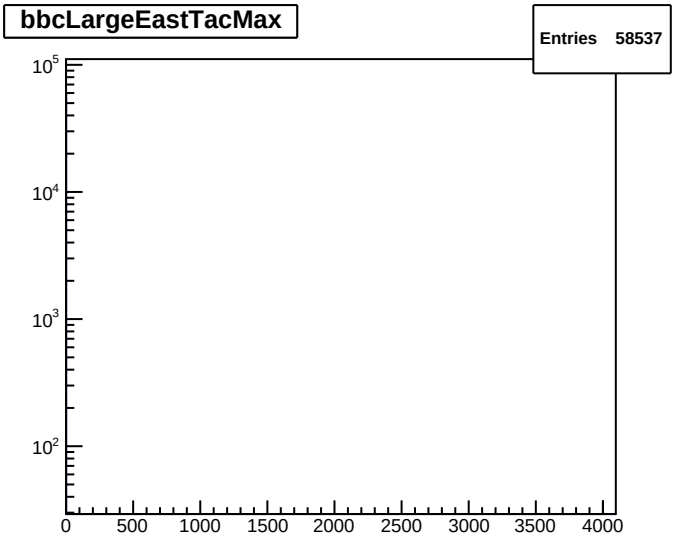

bbcSmallWestAdcSumVsSimu
Entries 0
Data
Simu

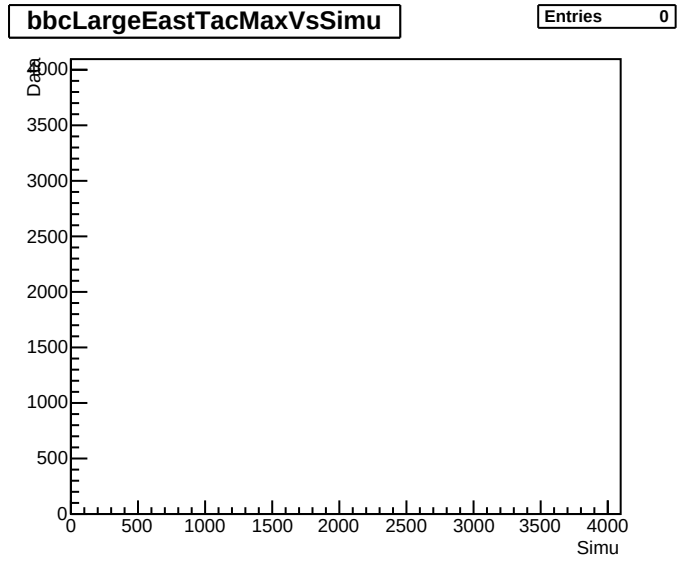

bbcSmallWestTacMax
Entries 58537

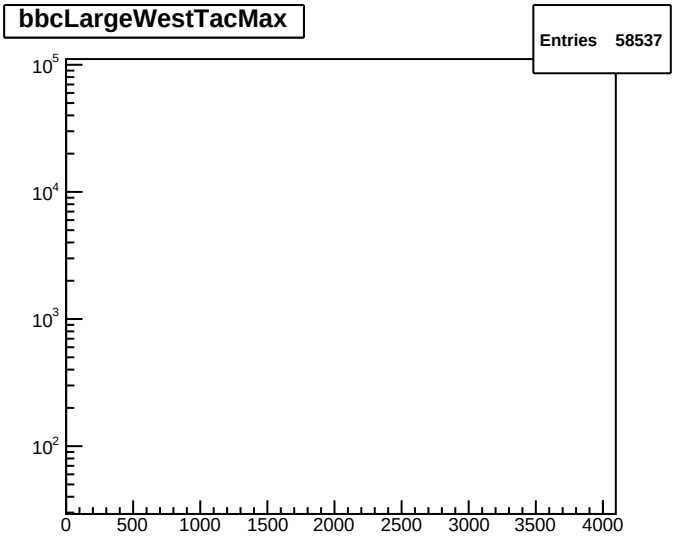

bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu

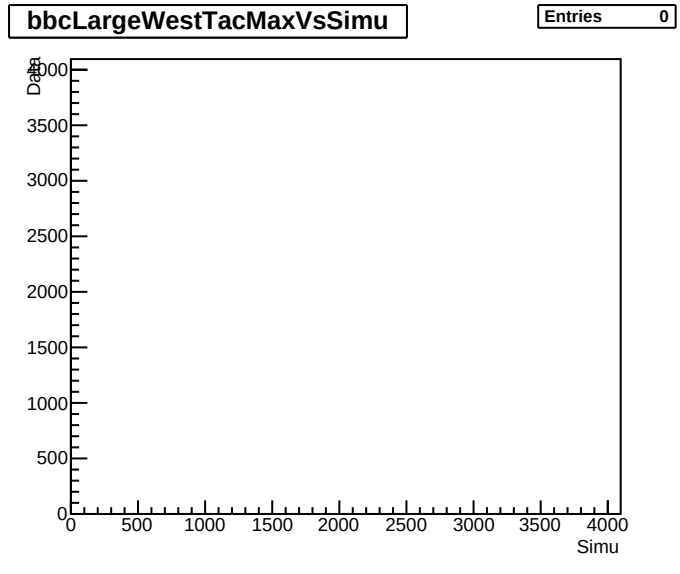

bbcLargeHit
Entries 117074
58537
58537
E-Hit
W-Hit

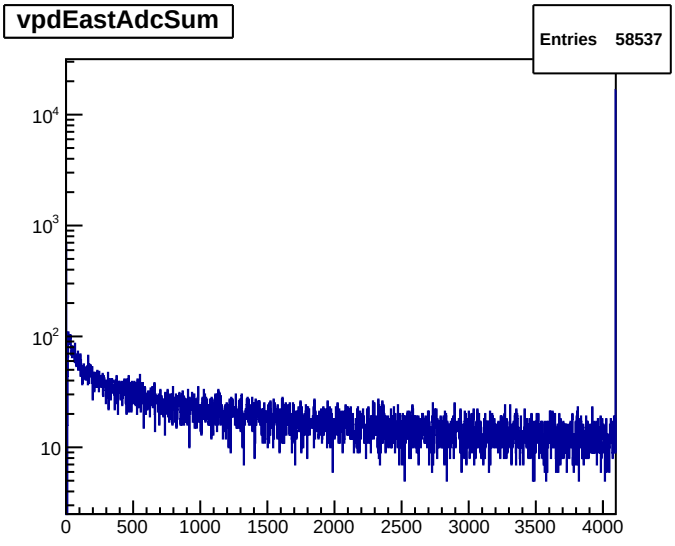

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

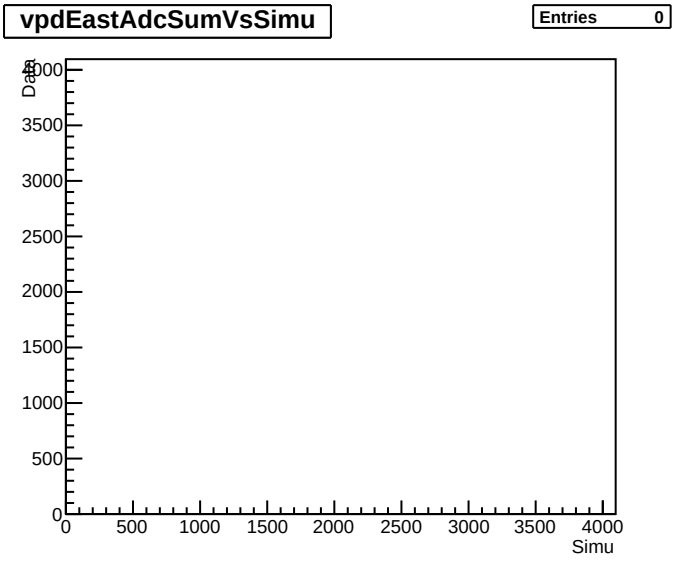

bbcLargeEastTacMax
Entries 58537

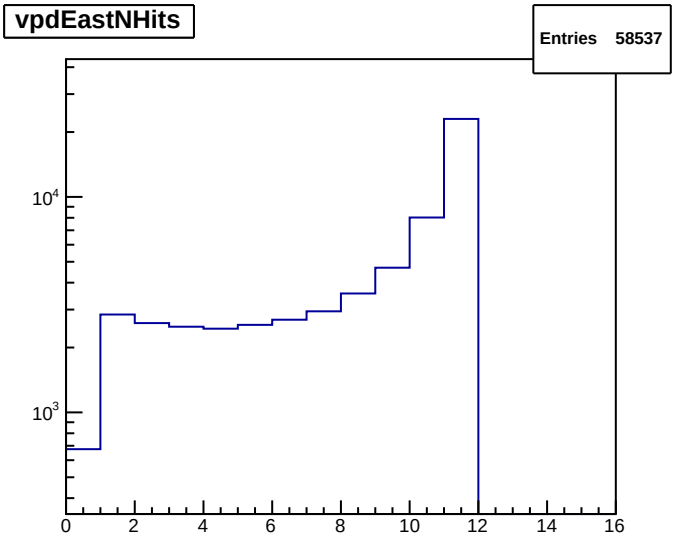

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

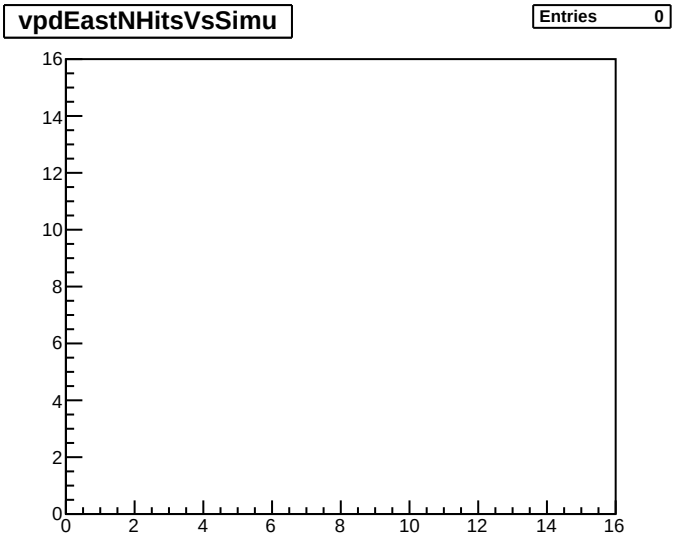

bbcLargeWestTacMax
Entries 58537

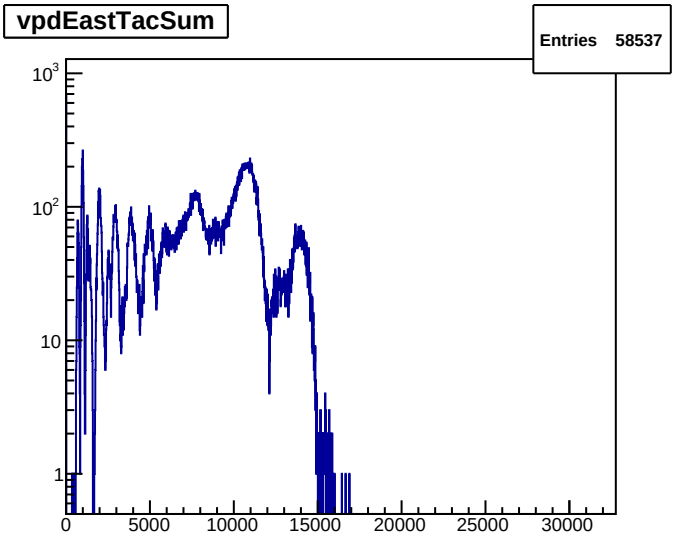

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

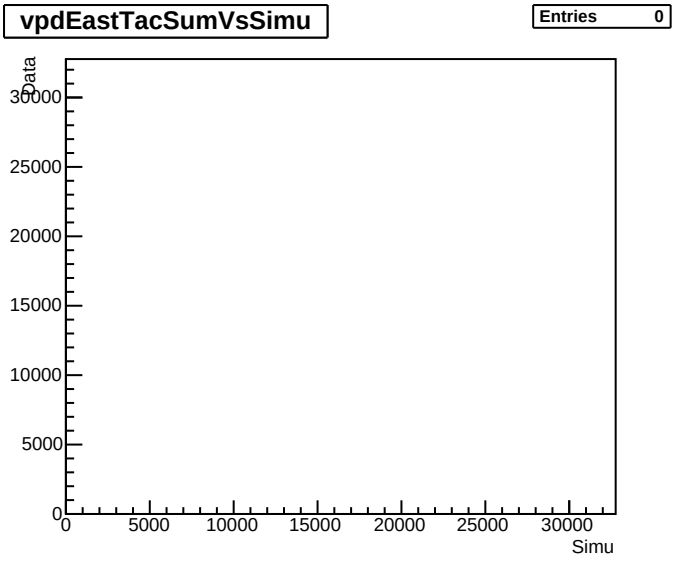

vpdEastAdcSum
Entries 58537
10^4
10^3
10^2
10
0 500 1000 1500 2000 2500 3000 3500 4000

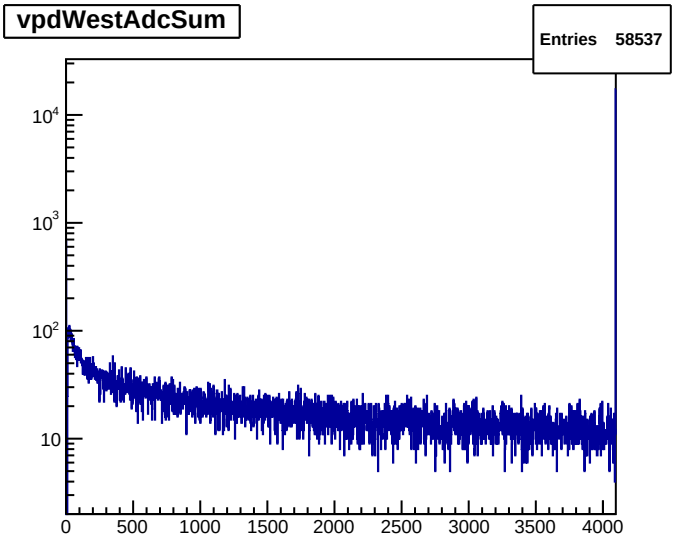

vpdEastAdcSumVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

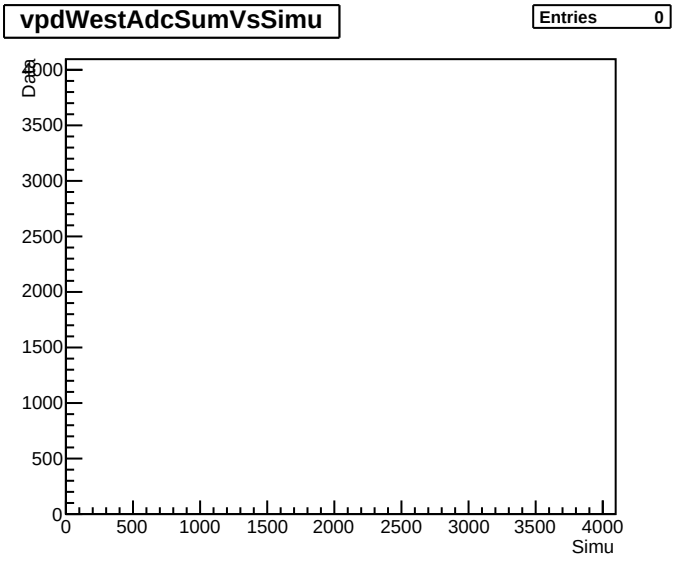

vpdEastNHits
Entries 58537
10^4
10^3
0 2 4 6 8 10 12 14 16

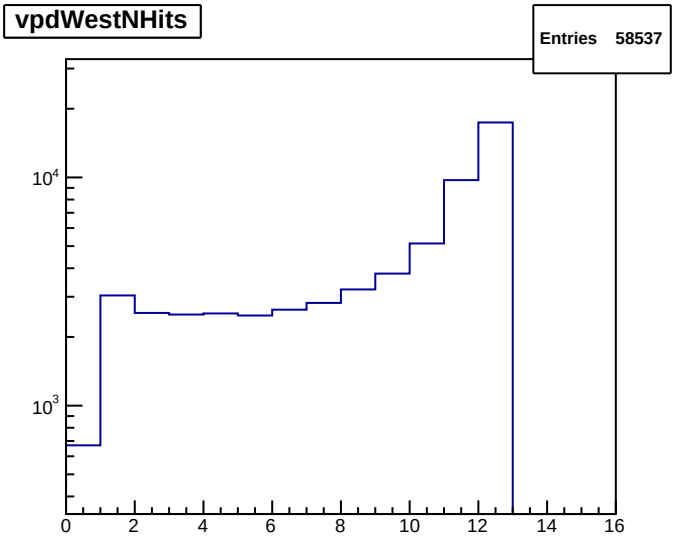

vpdEastNHitsVsSimu
Entries 0
16
14
12
10
8
6
4
2
0
0 2 4 6 8 10 12 14 16

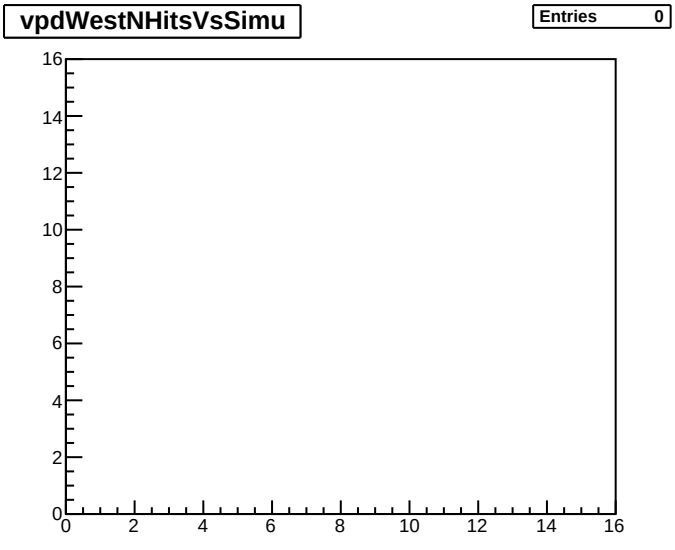

vpdEastTacSum
Entries 58537
10^3
10^2
10
1
0 5000 10000 15000 20000 25000 30000

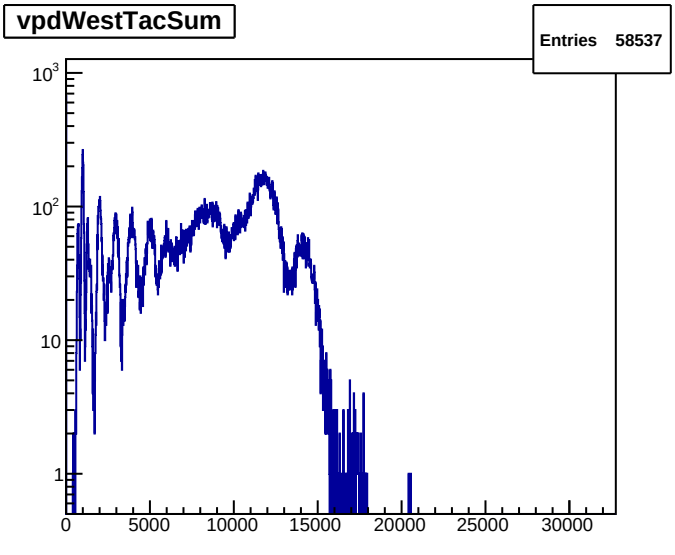

vpdEastTacSumVsSimu
Entries 0
Data
30000
25000
20000
15000
10000
5000
0
0 5000 10000 15000 20000 25000 30000
Simu

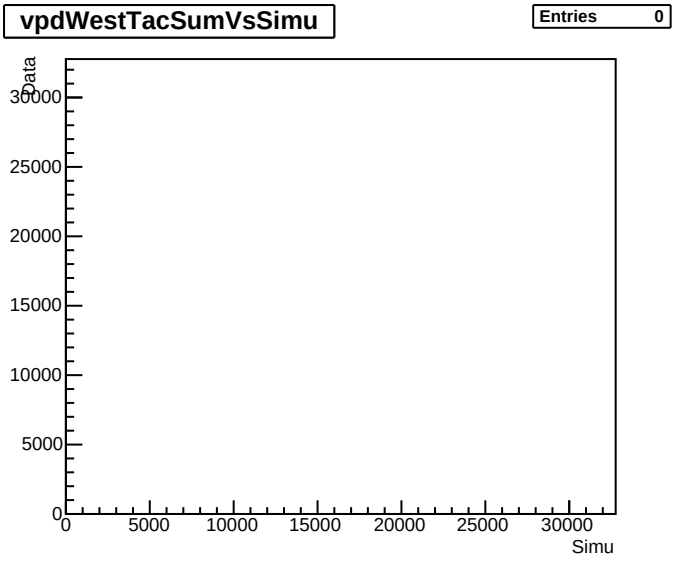

vpdWestAdcSum
Entries 58537
10^4
10^3
10^2
10
0 500 1000 1500 2000 2500 3000 3500 4000

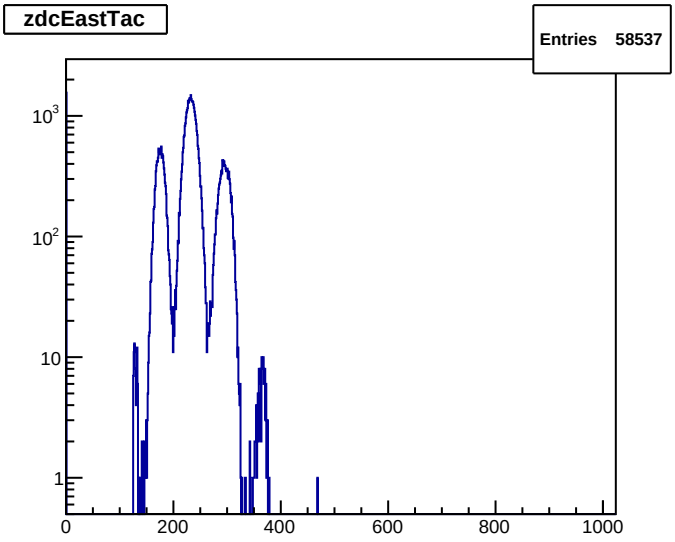

vpdWestAdcSumVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

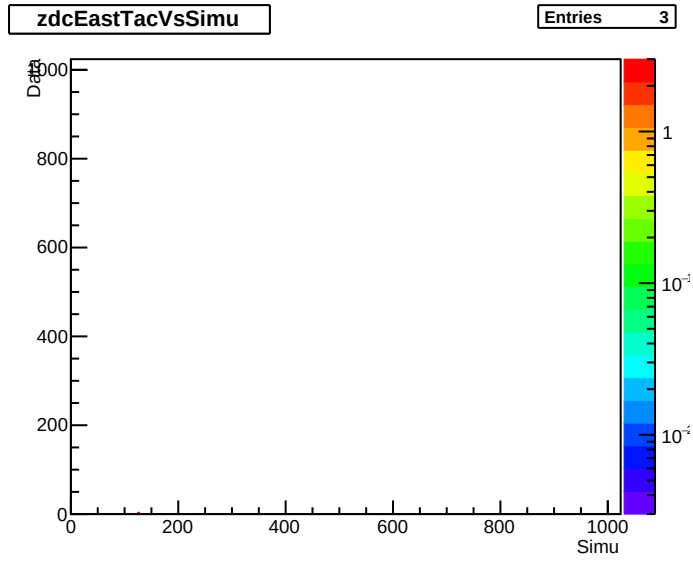

vpdWestNHits
Entries 58537
10^4
10^3
0 2 4 6 8 10 12 14 16

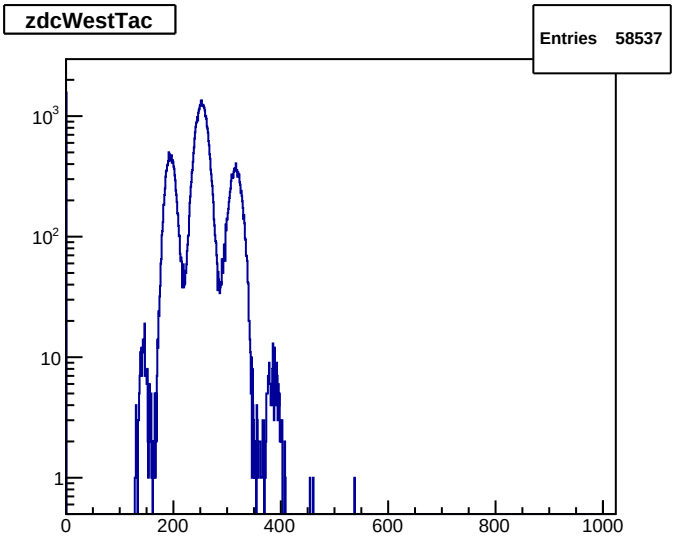

vpdWestNHitsVsSimu
Entries 0
16
14
12
10
8
6
4
2
0
0 2 4 6 8 10 12 14 16

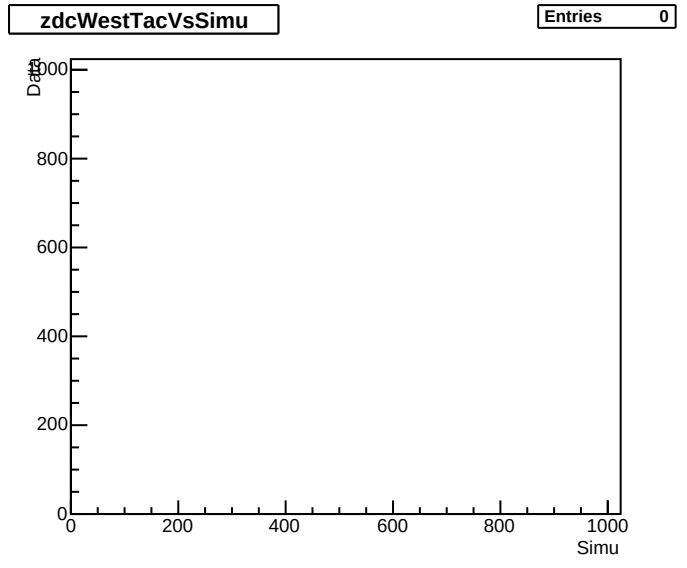

vpdWestTacSum
Entries 58537
10^3
10^2
10
1
0 5000 10000 15000 20000 25000 30000

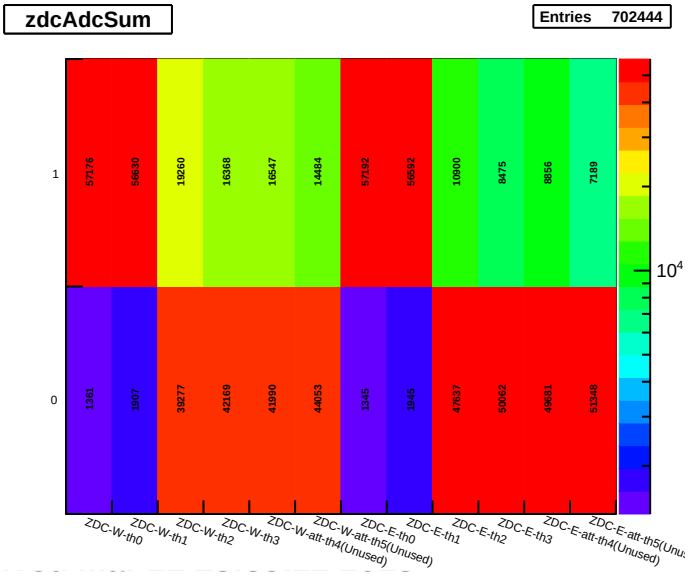

vpdWestTacSumVsSimu
Entries 0
Data
30000
25000
20000
15000
10000
5000
0
0 5000 10000 15000 20000 25000 30000
Simu

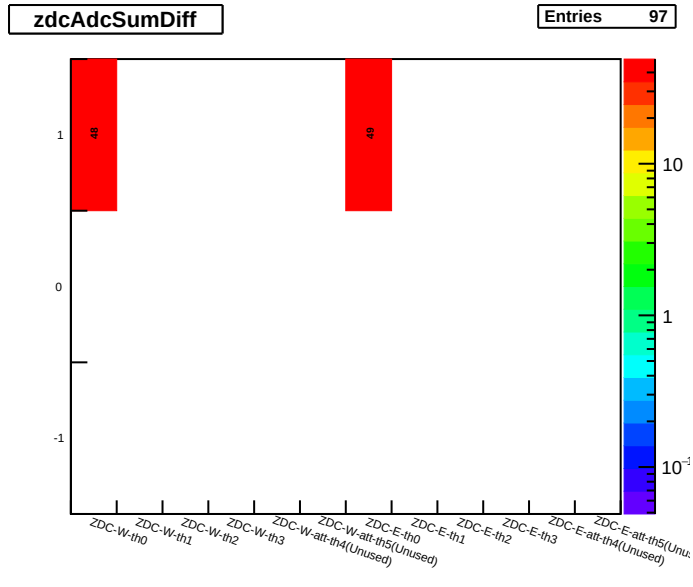

zdcEastTac
Entries 58537
10^3
10^2
10
1
0
200
400
600
800
1000

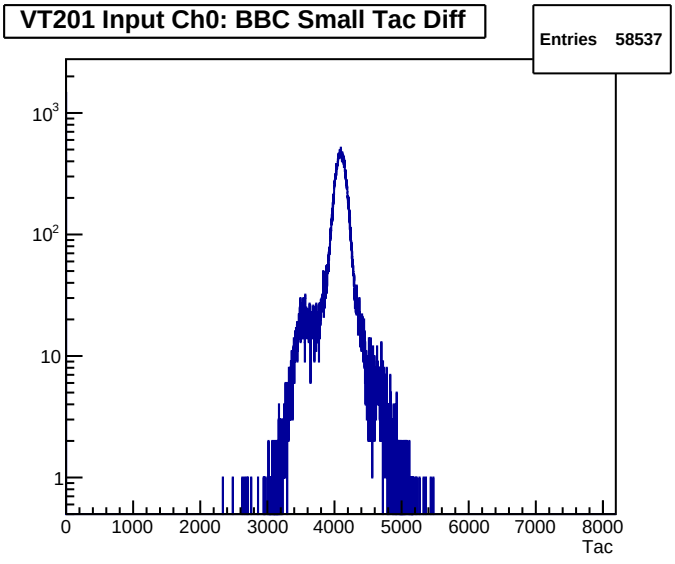

zdcEastTacVsSimu
Entries 3
Data
Simu
0
200
400
600
800
1000
1
10^{-1}
10^{-2}

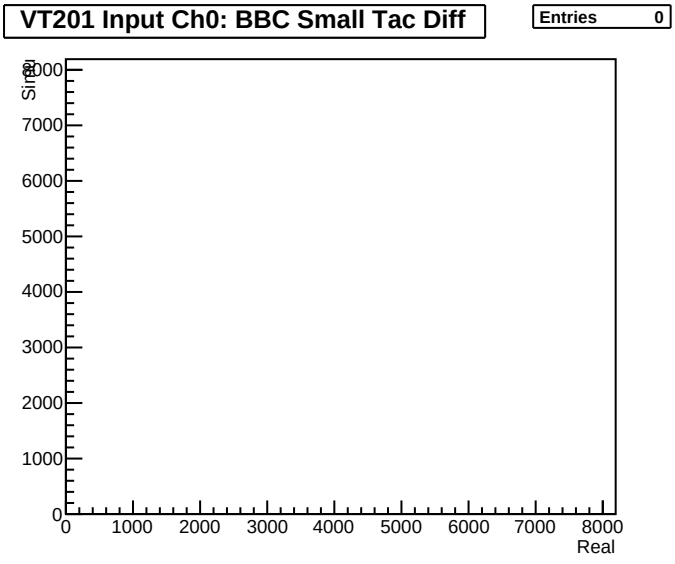

zdcWestTac
Entries 58537
10^3
10^2
10
1
0
200
400
600
800
1000

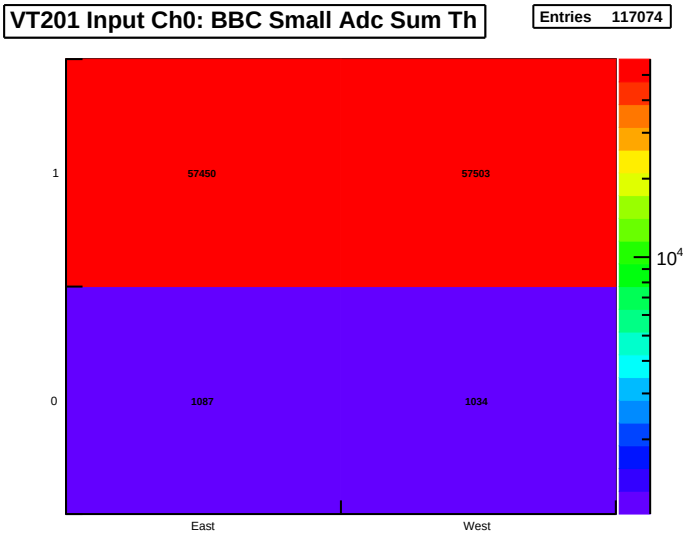

zdcWestTacVsSimu
Entries 0
Data
Simu
0
200
400
600
800
1000

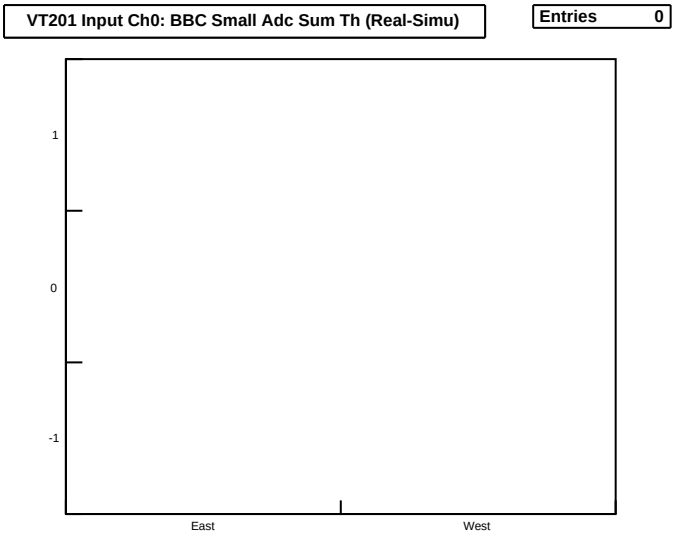

zdcAdcSum
Entries 702444
1
0
57176
56630
19260
16368
16547
14484
57192
56592
10600
8475
8856
7189
1361
1907
39277
42169
41990
44053
1345
1945
47637
50062
49681
51348
10^4
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

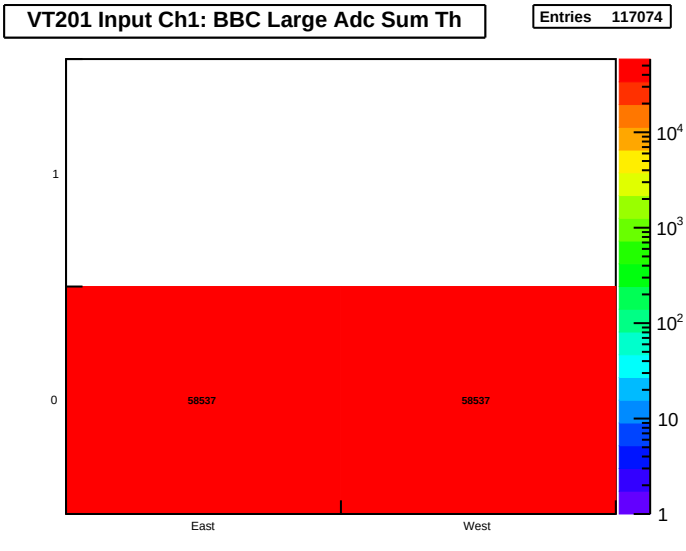

zdcAdcSumDiff
Entries 97
1
0
-1
48
49
10
1
10^{-1}
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)
ZDC-E-att-th5(Unu

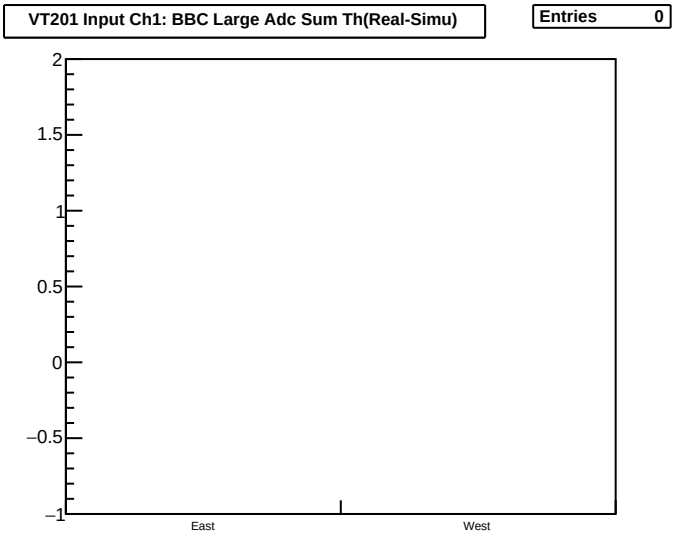

VT201 Input Ch0: BBC Small Tac Diff
Entries 58537
Tac

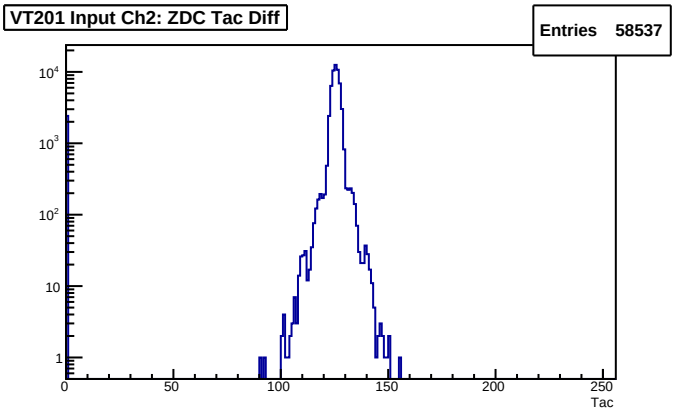

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

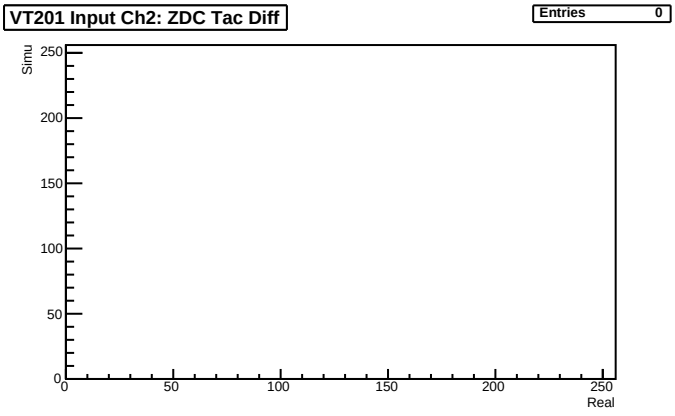

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 117074
57450
57503
1087
1034
East
West

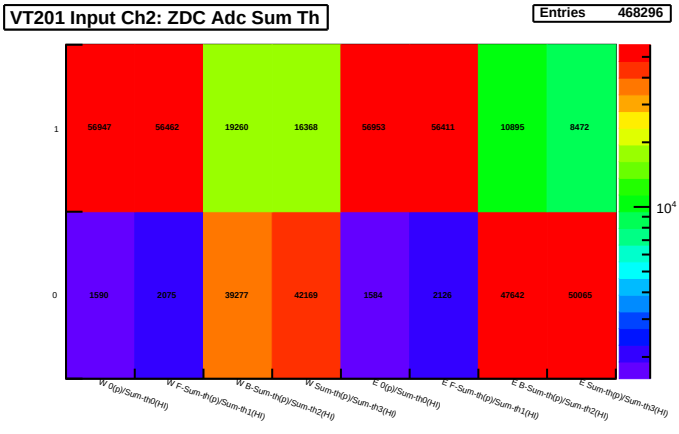

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

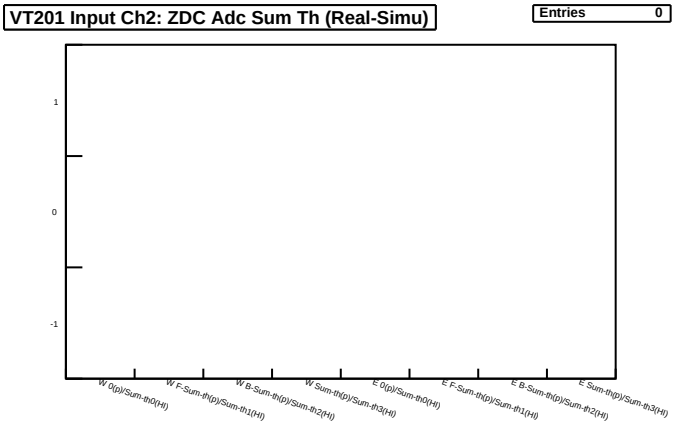

VT201 Input Ch1: BBC Large Adc Sum Th
Entries 117074
58537
58537
East
West

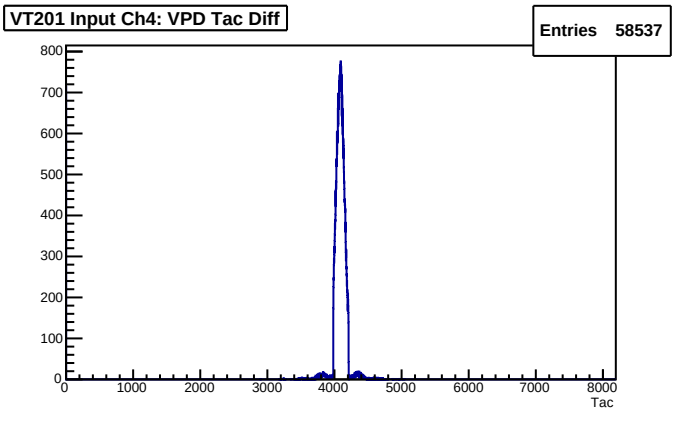

VT201 Input Ch1: BBC Large Adc Sum Th(Real-Simu)
Entries 0
East
West

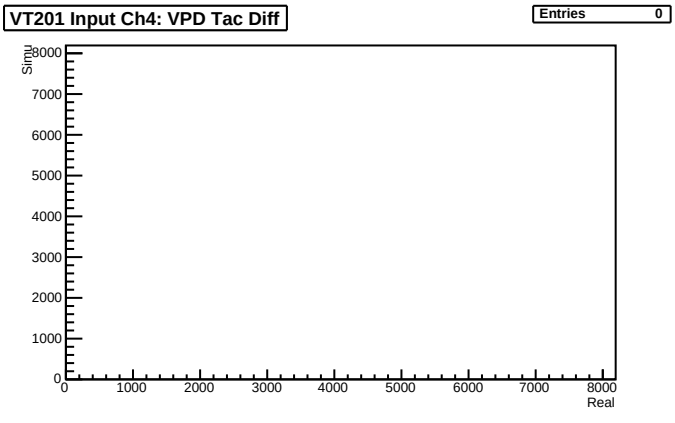

VT201 Input Ch2: ZDC Tac Diff
Entries 58537
Tac

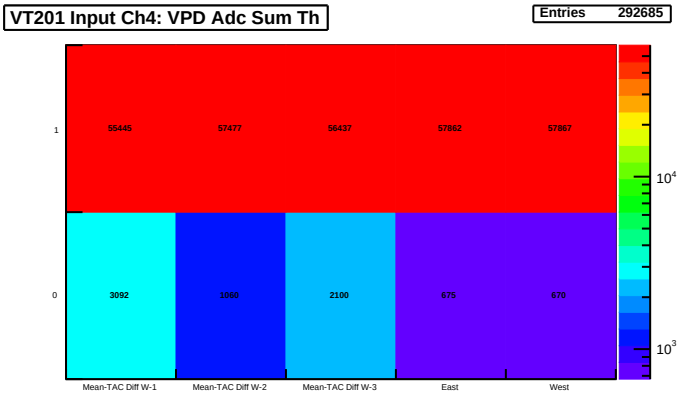

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

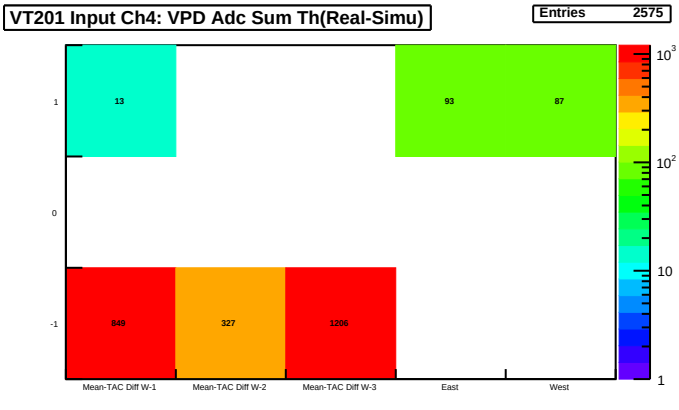

VT201 Input Ch2: ZDC Adc Sum Th
Entries 468296
56947
56462
19260
16368
56953
56411
10895
8472
1590
2075
39277
42169
1584
2126
47642
50065
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

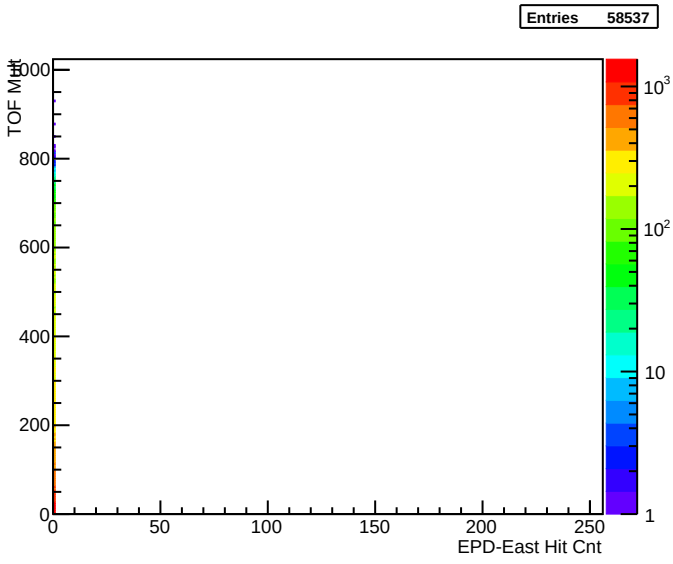

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

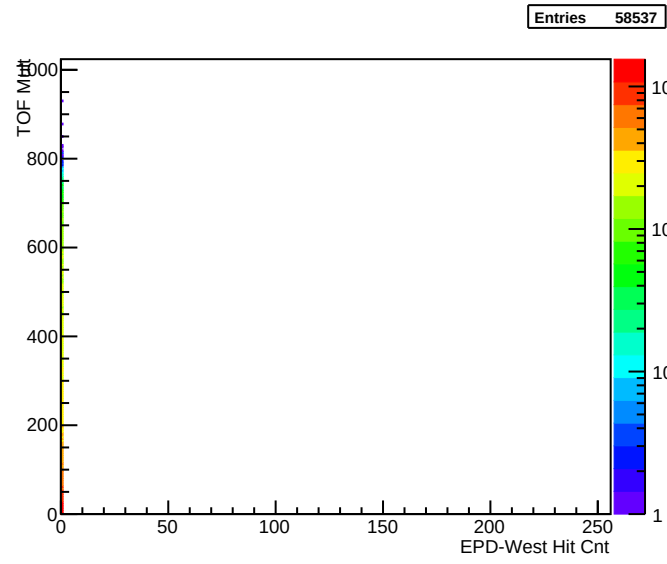

VT201 Input Ch4: VPD Tac Diff
Entries 58537
Tac

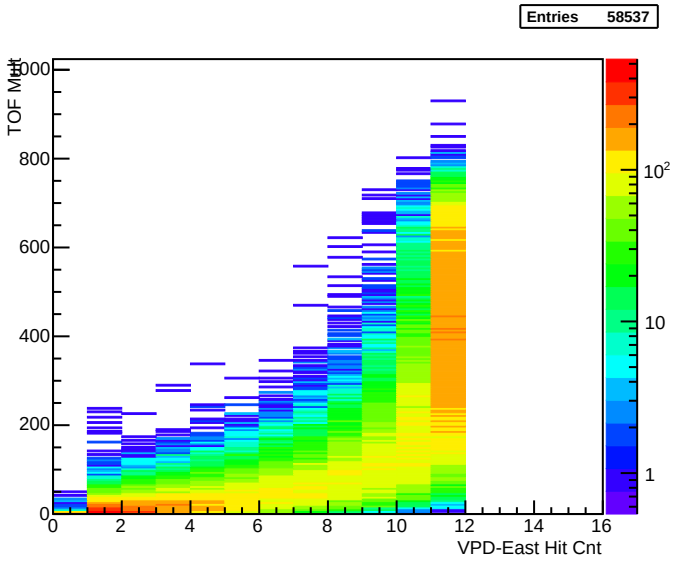

VT201 Input Ch4: VPD Tac Diff
Entries 0
Simu
Real

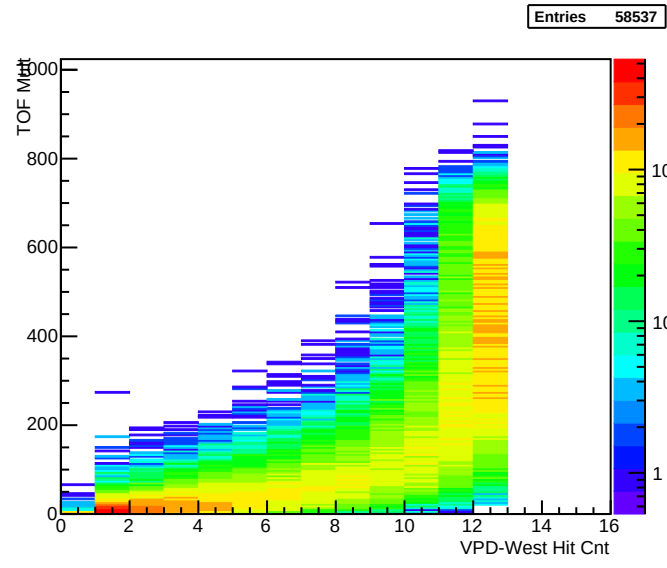

VT201 Input Ch4: VPD Adc Sum Th
Entries 292685
55445
57477
56437
57862
57867
3092
1060
2100
675
670
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

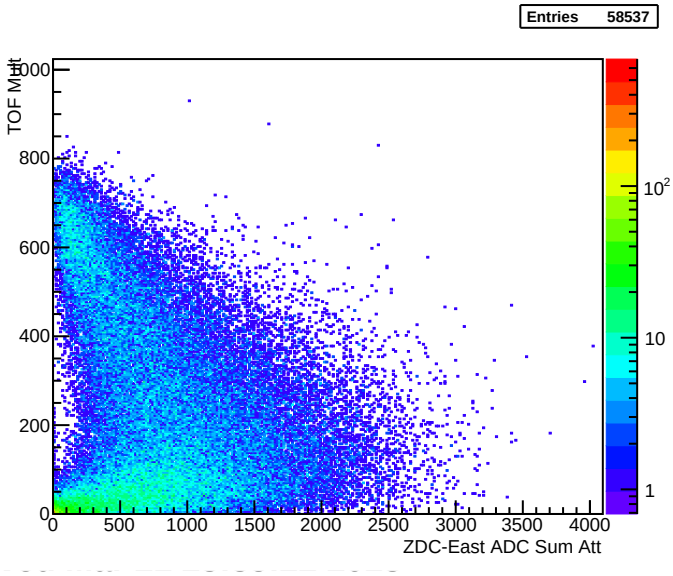

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 2575
13
93
87
849
327
1206
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

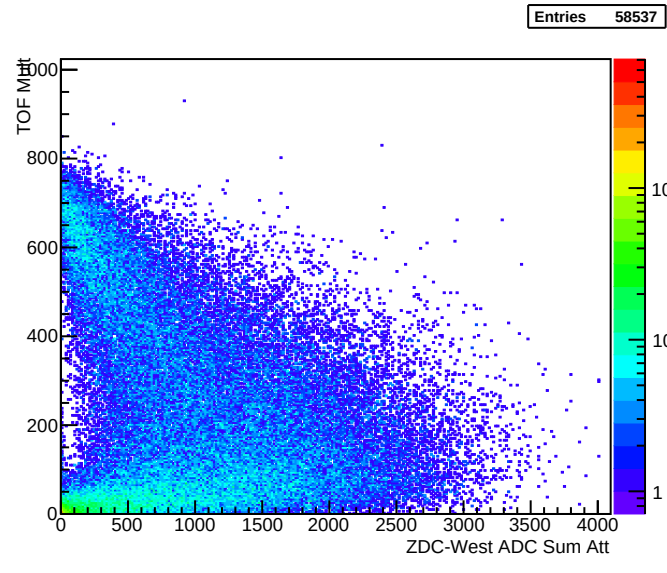

Entries 58537
TOF Mult
EPD-East Hit Cnt

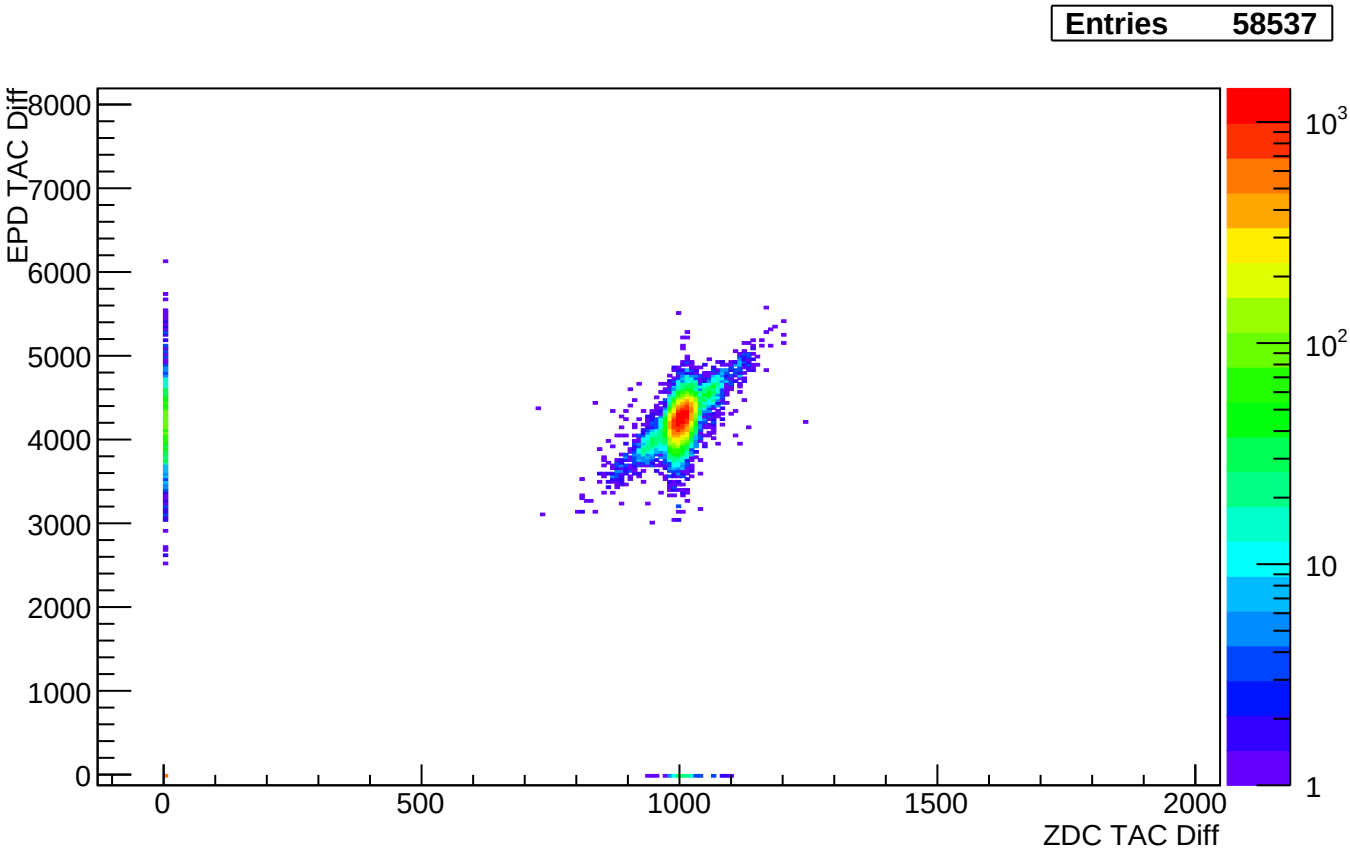

Entries 58537
TOF Mult
EPD-West Hit Cnt

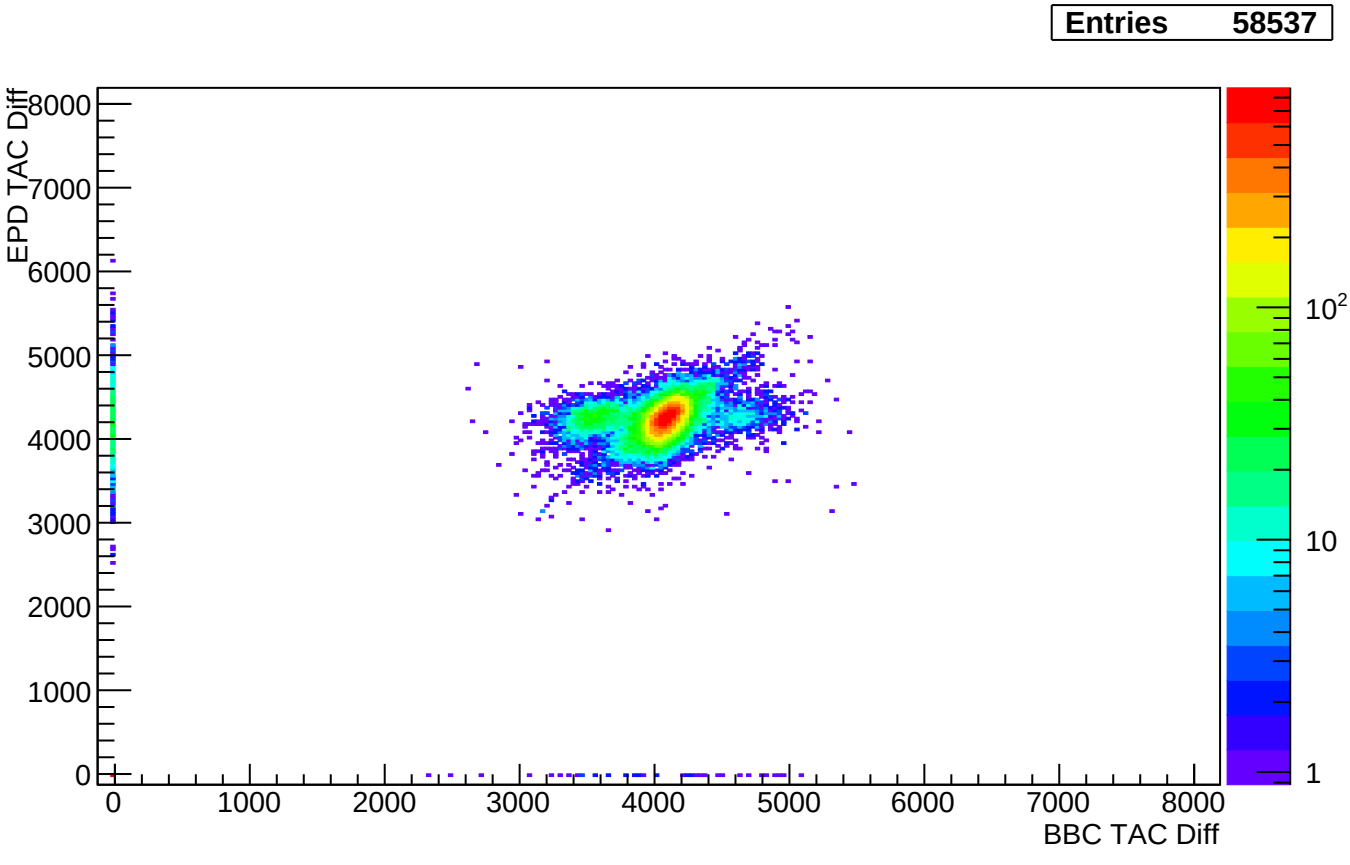

Entries 58537
TOF Mult
VPD-East Hit Cnt

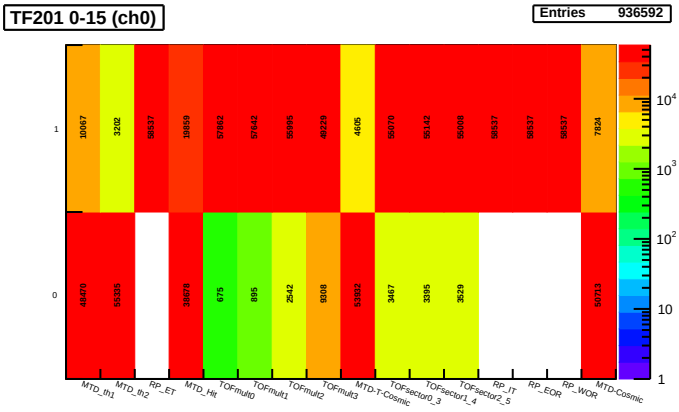

Entries 58537
TOF Mult
VPD-West Hit Cnt

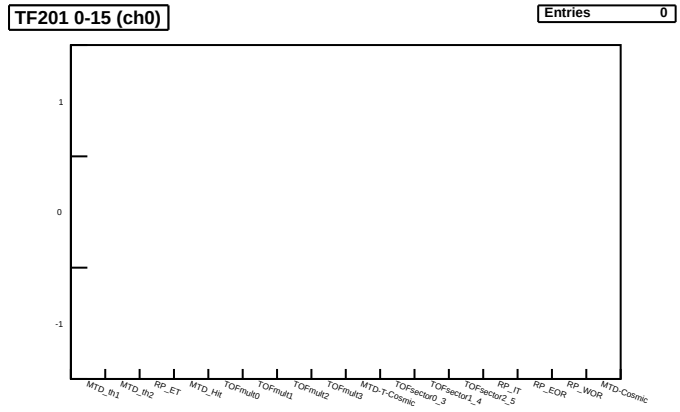

Entries 58537
TOF Mult
ZDC-East ADC Sum Att

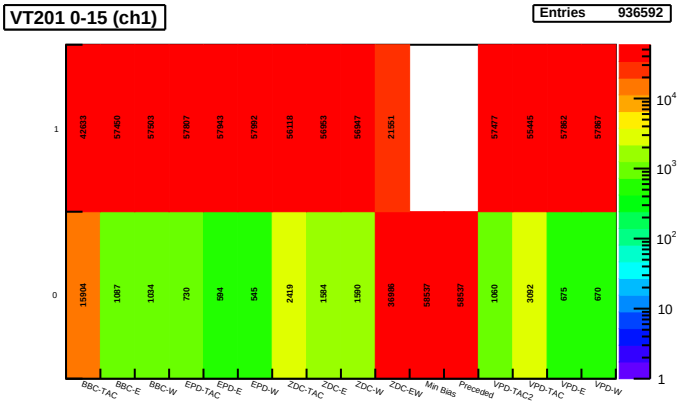

Entries 58537
TOF Mult
ZDC-West ADC Sum Att

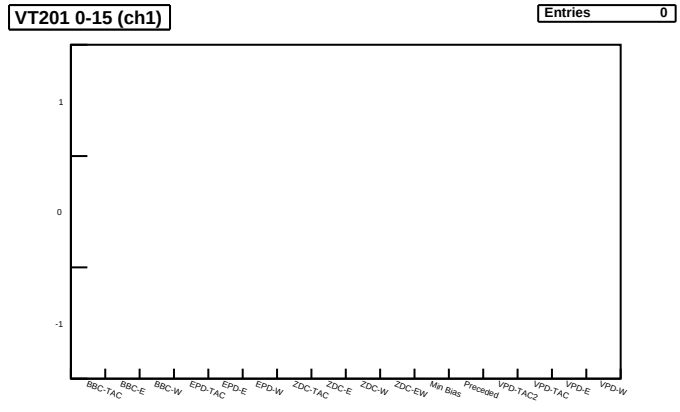

Entries 58537
EPD TAC Diff
ZDC TAC Diff
0
1000
2000
3000
4000
5000
6000
7000
8000
0
500
1000
1500
2000
1
10
10^2
10^3

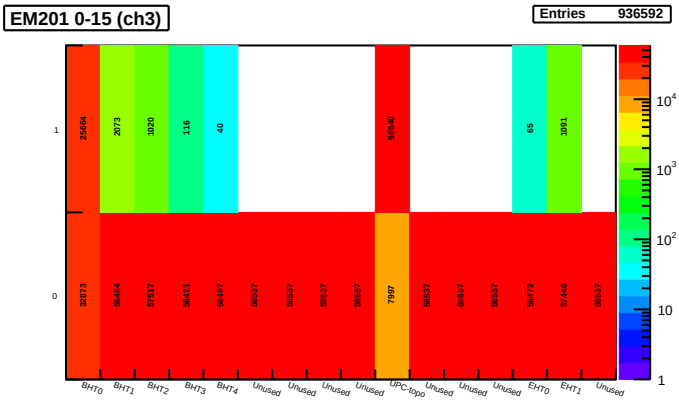

Entries 58537
EPD TAC Diff
BBC TAC Diff
0
1000
2000
3000
4000
5000
6000
7000
8000
0
1000
2000
3000
4000
5000
6000
7000
8000
1
10
10^2


TF201 0-15 (ch0)
Entries 936592
10067 3202 58537 19859 57862 57642 56995 49229 4605 55070 55142 55008 58537 58537 58537 7824
48470 55335 38678 675 895 2542 9308 53932 3467 3395 3529 50713
MTD_tfl1 MTD_tfh2 RP_ET MTD_Hit TOFmult0 TOFmult1 TOFmult2 TOFmult3 MTD-T-Cosmic TOFsector0_3 TOFsector1_4 TOFsector2_5 RP_IT RP_EOR RP_WOR MTD-Cosmic


TF201 0-15 (ch0)
Entries 0
MTD_tfl1 MTD_tfh2 RP_ET MTD_Hit TOFmult0 TOFmult1 TOFmult2 TOFmult3 MTD-T-Cosmic TOFsector0_3 TOFsector1_4 TOFsector2_5 RP_IT RP_EOR RP_WOR MTD-Cosmic


VT201 0-15 (ch1)
Entries 936592
42633 57450 57503 57607 57943 57992 55118 56953 56947 21551 57477 55445 57862 57867
15904 1087 1034 720 994 945 2419 1584 1590 36986 58537 58537 1060 3092 675 670
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W


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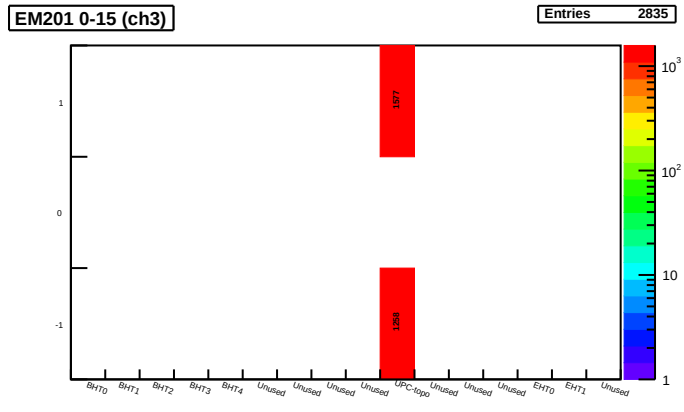
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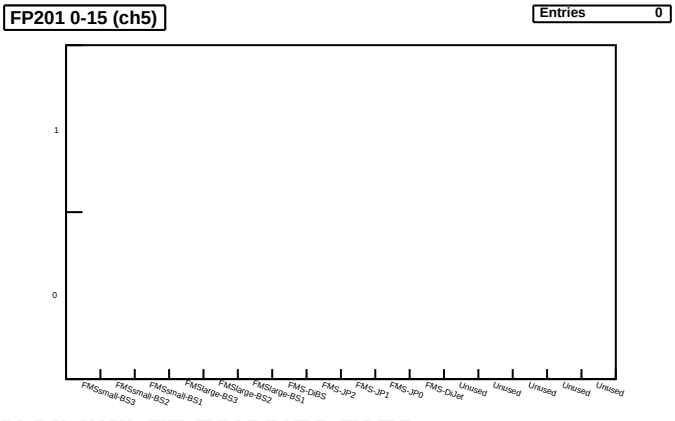
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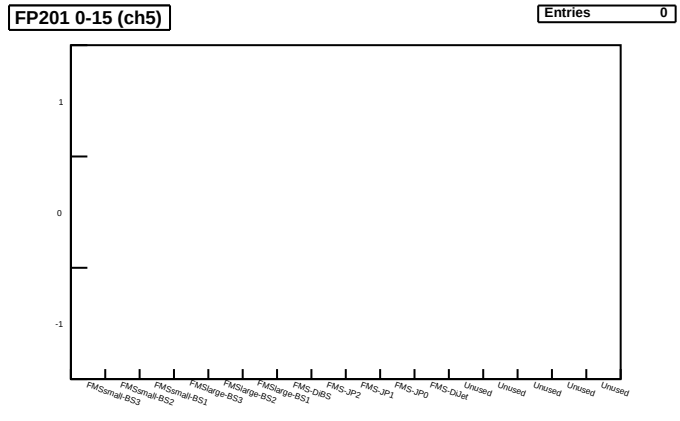
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