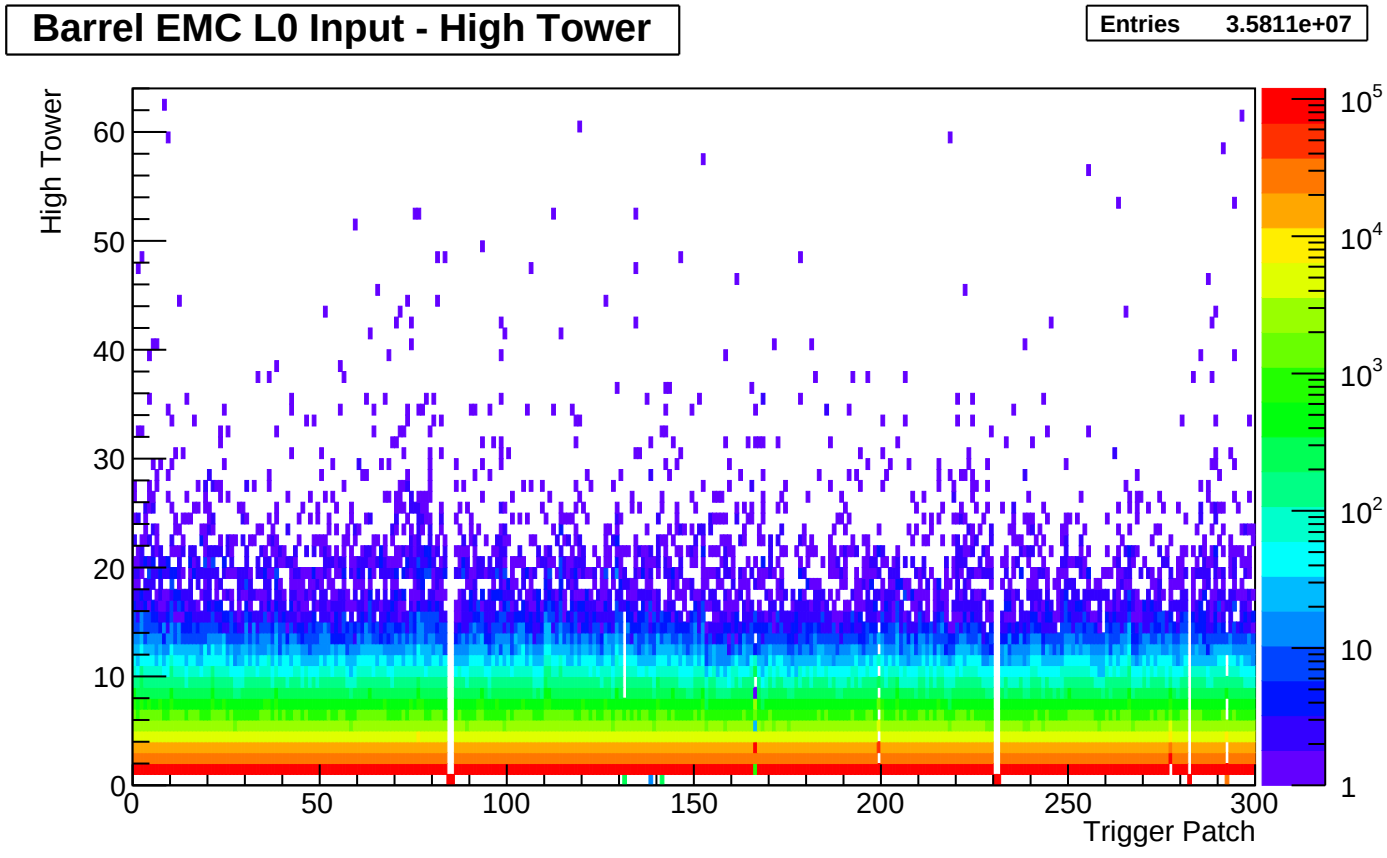
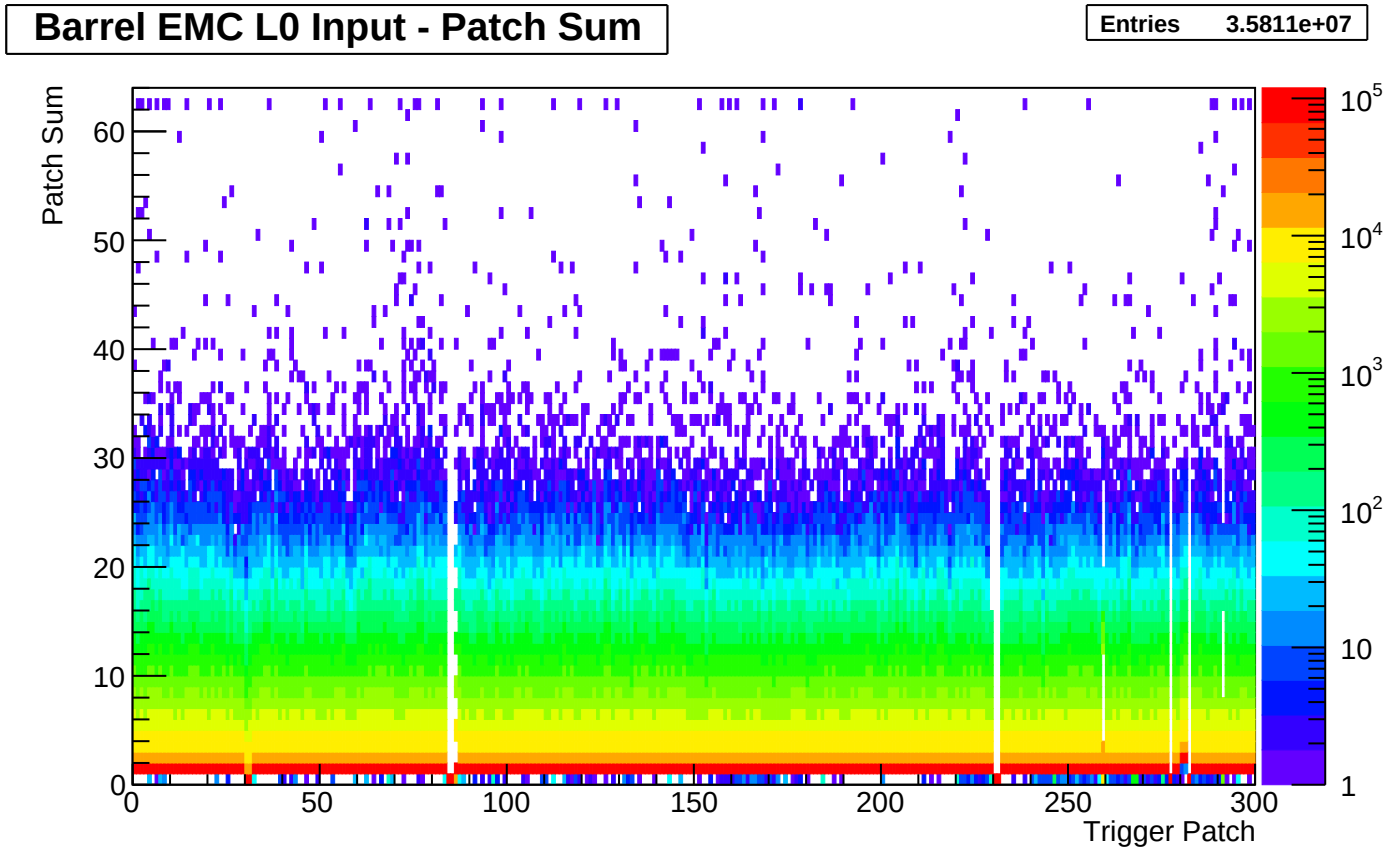
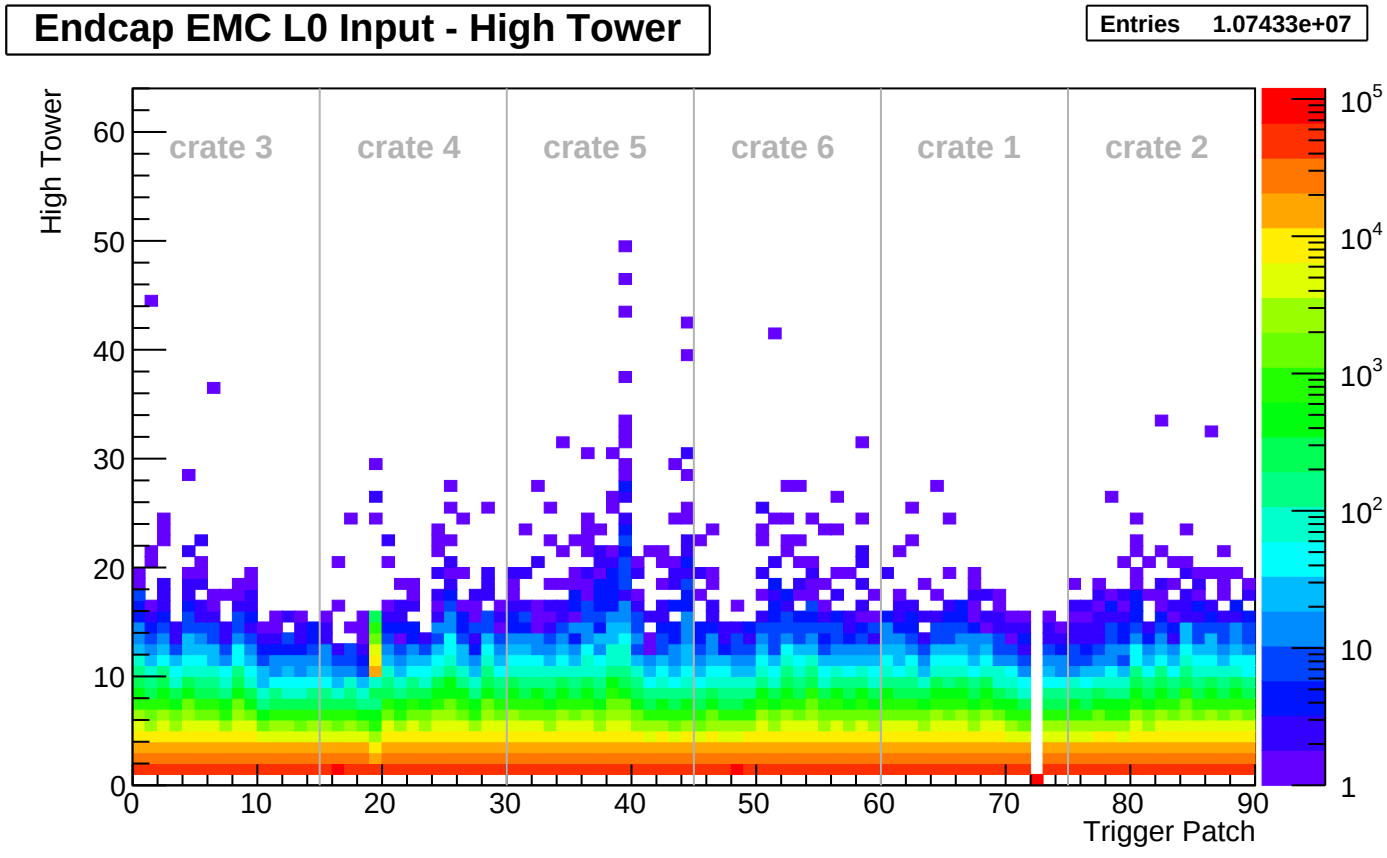
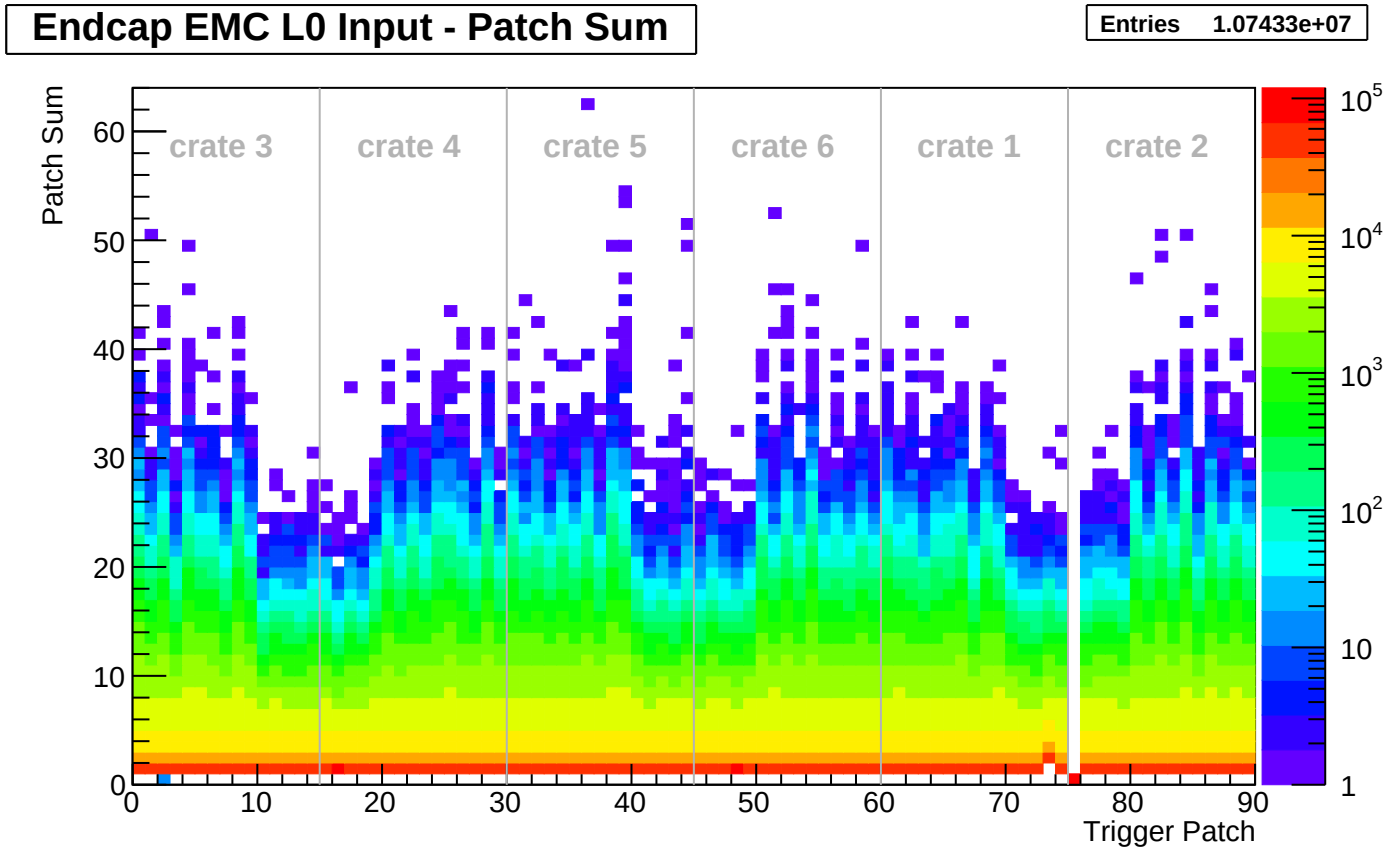
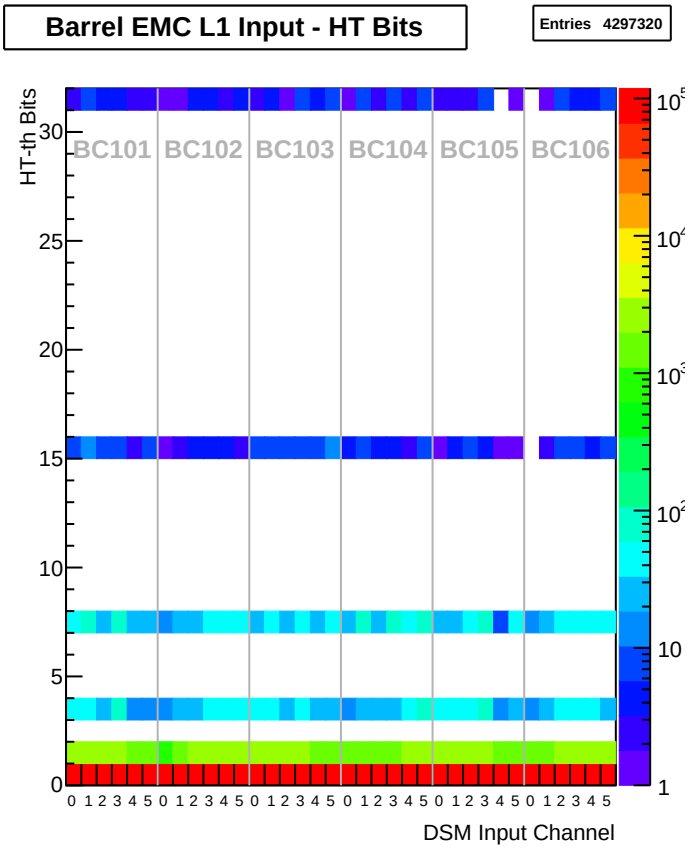
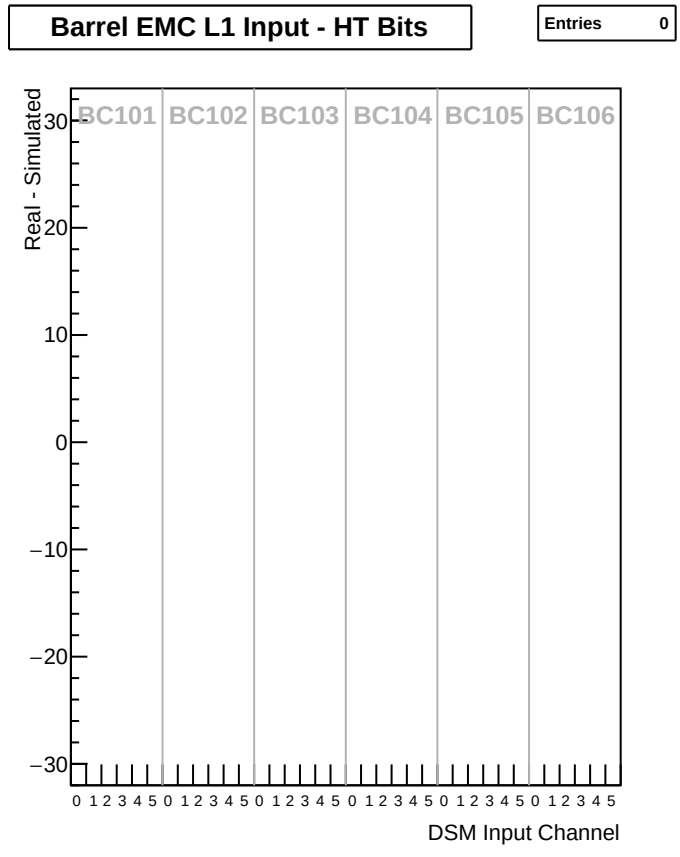

Barrel EMC L0 Input - High Tower
Entries 3.5811e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

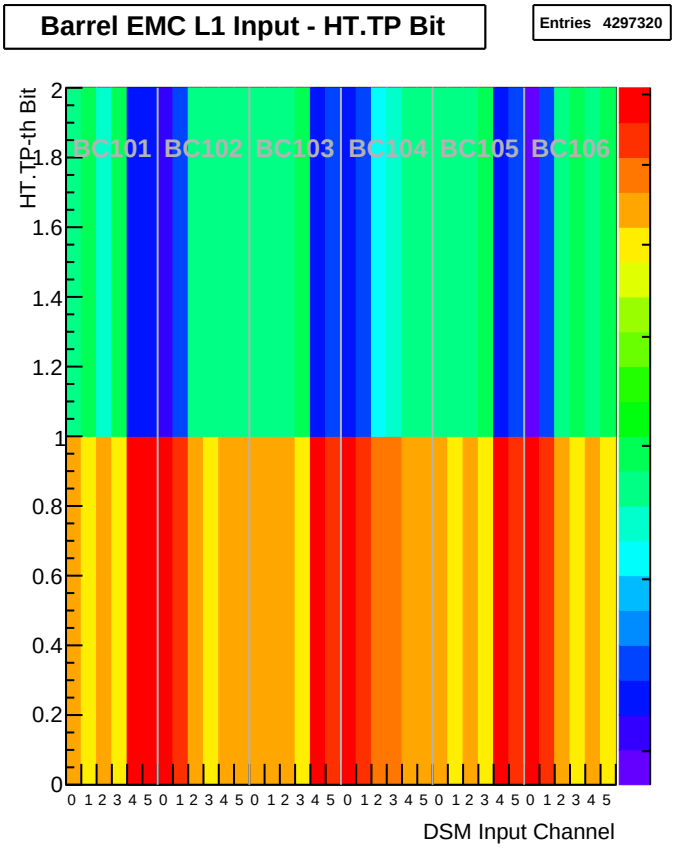

Barrel EMC L0 Input - Patch Sum
Entries 3.5811e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

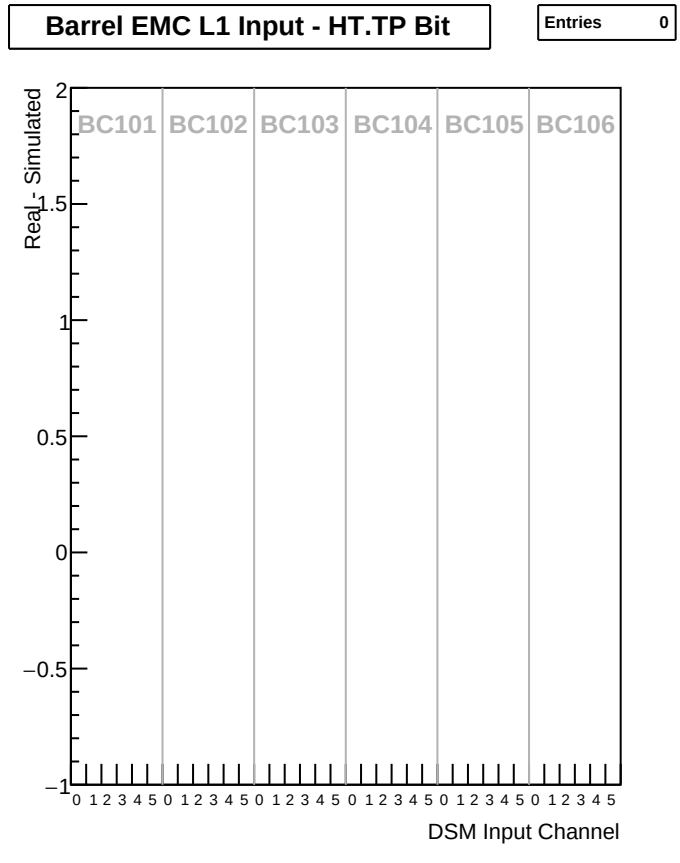

Endcap EMC L0 Input - High Tower
Entries 1.07433e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

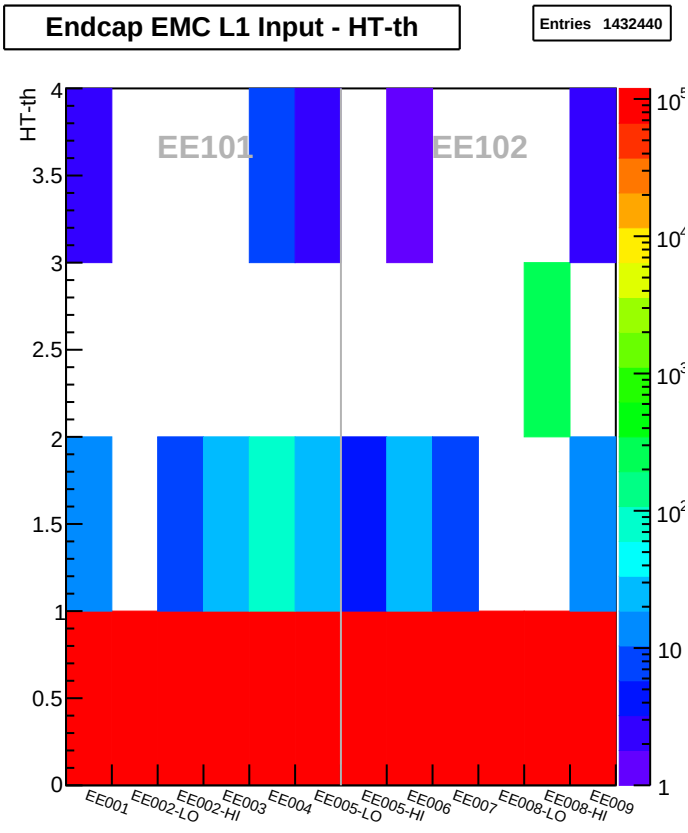

Endcap EMC L0 Input - Patch Sum
Entries 1.07433e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

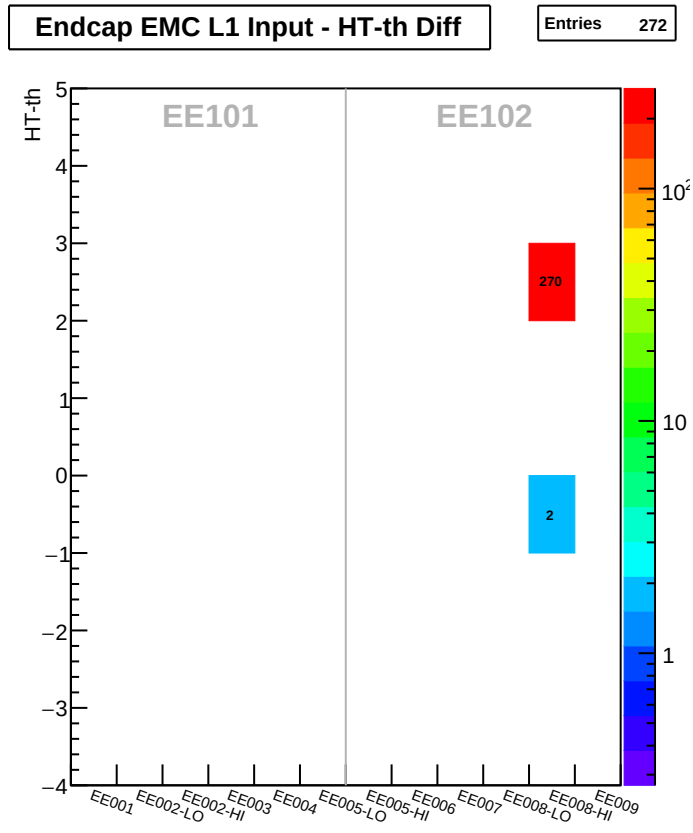

Barrel EMC L1 Input - HT Bits
Entries 4297320
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

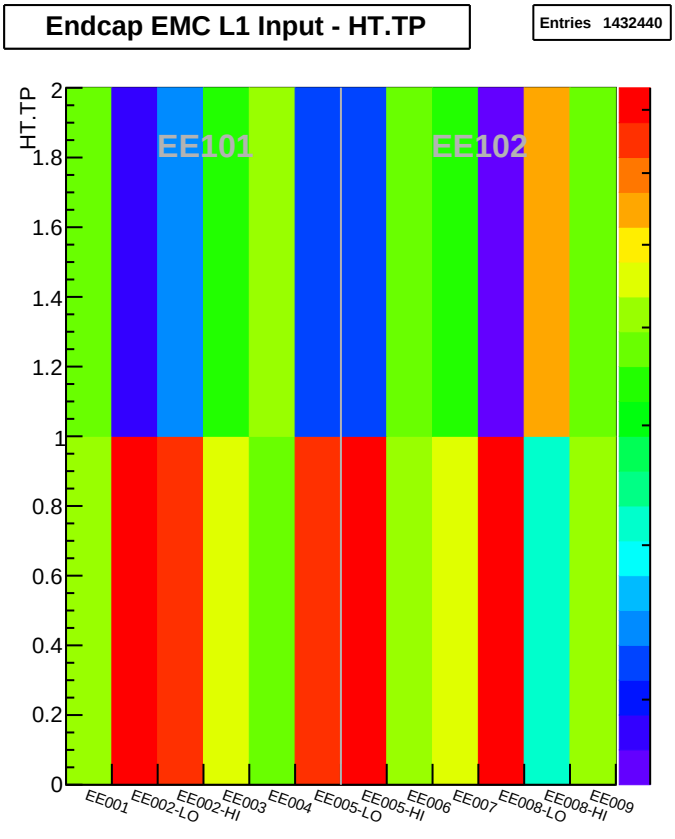

Barrel EMC L1 Input - HT Bits
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

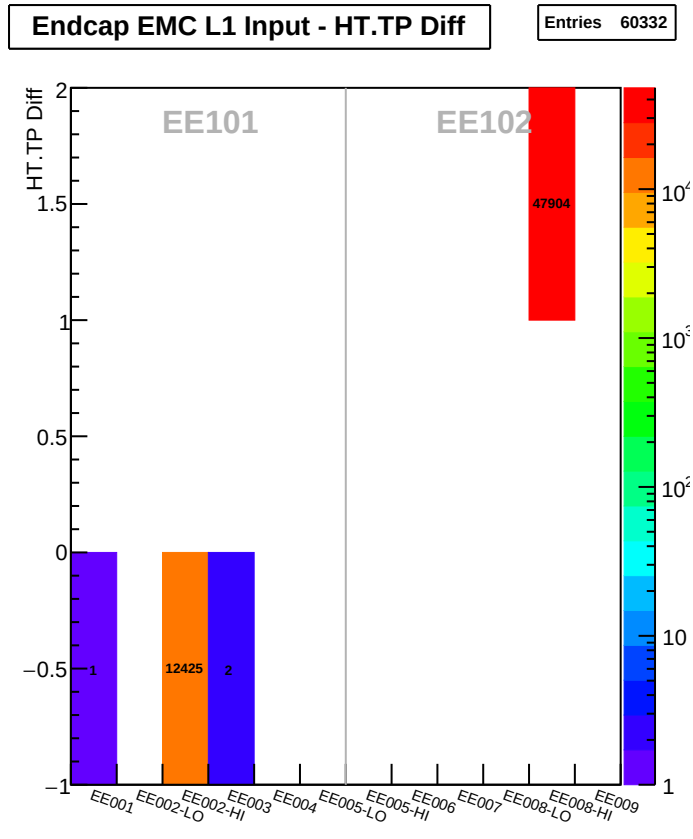

Barrel EMC L1 Input - HT.TP Bit
Entries 4297320
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

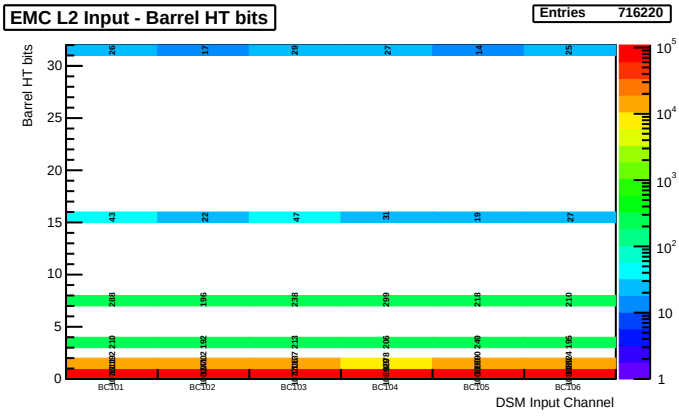

Barrel EMC L1 Input - HT.TP Bit
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

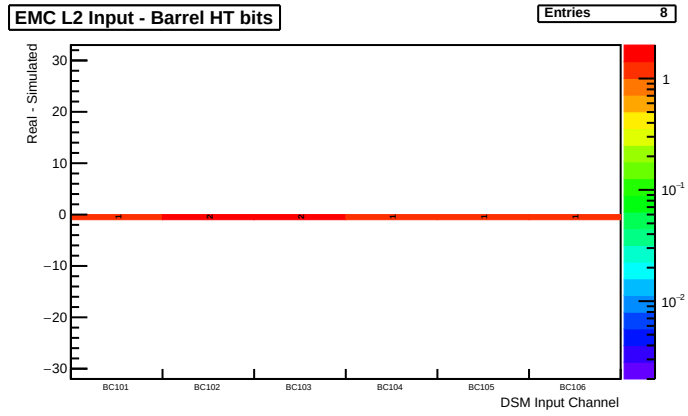

Endcap EMC L1 Input - HT-th
Entries 1432440
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

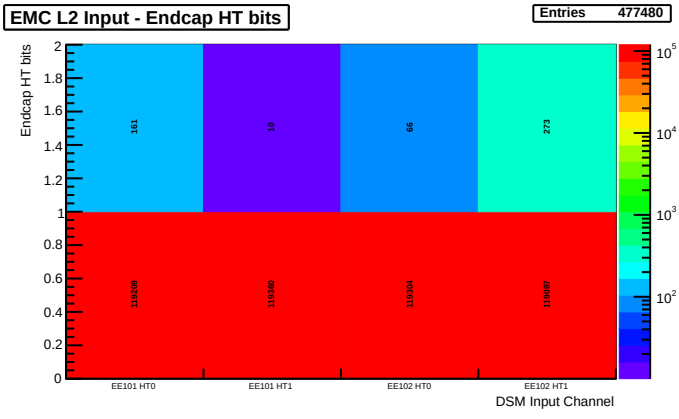

Endcap EMC L1 Input - HT-th Diff
Entries 272
HT-th
EE101
EE102
270
2
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

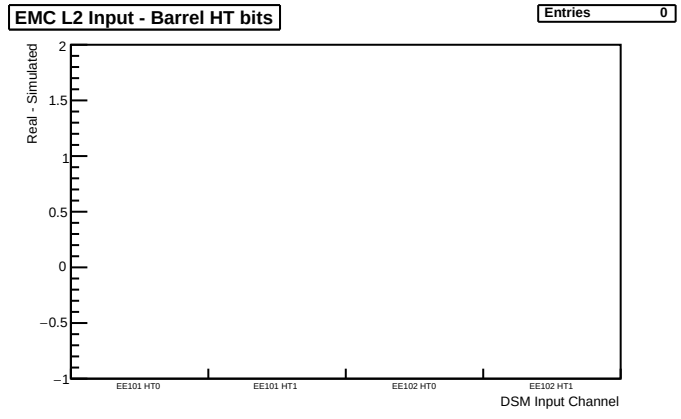

Endcap EMC L1 Input - HT.TP
Entries 1432440
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

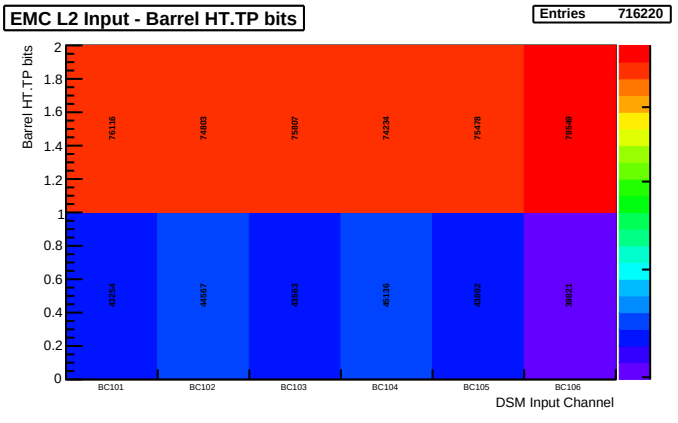

Endcap EMC L1 Input - HT.TP Diff
Entries 60332
HT.TP Diff
EE101
EE102
47904
1
12425
2
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

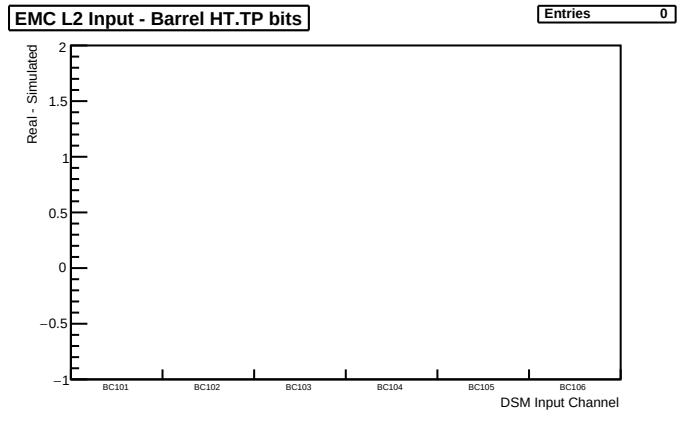

EMC L2 Input - Barrel HT bits
Entries 716220
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

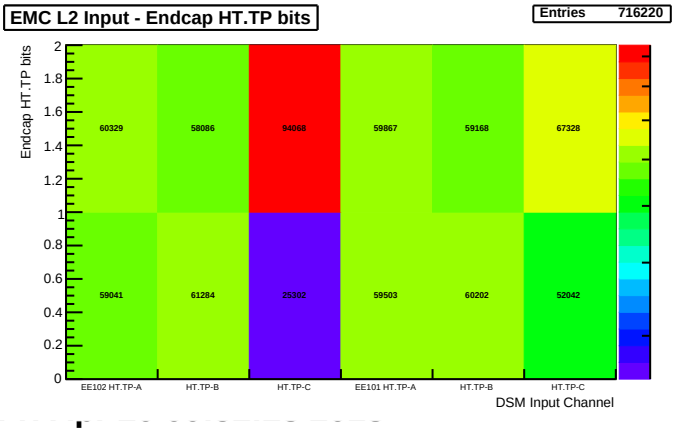

EMC L2 Input - Barrel HT bits
Entries 8
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

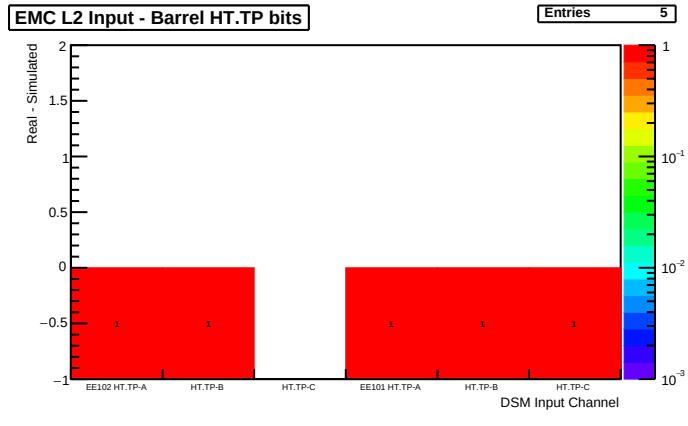

EMC L2 Input - Endcap HT bits
Entries 477480
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

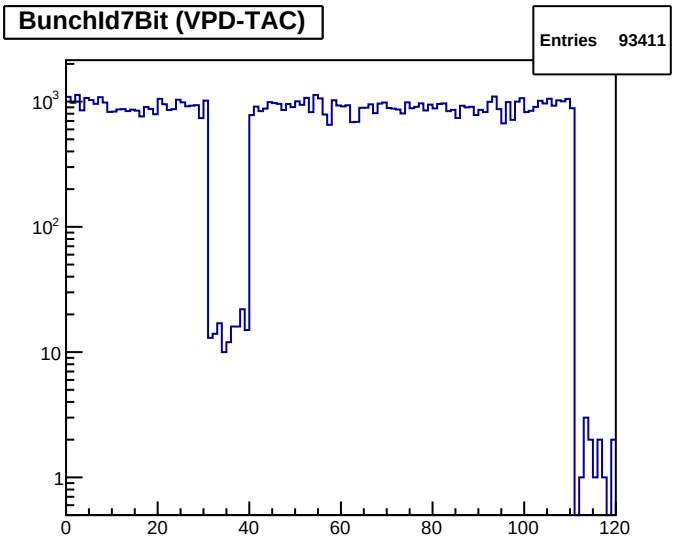

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

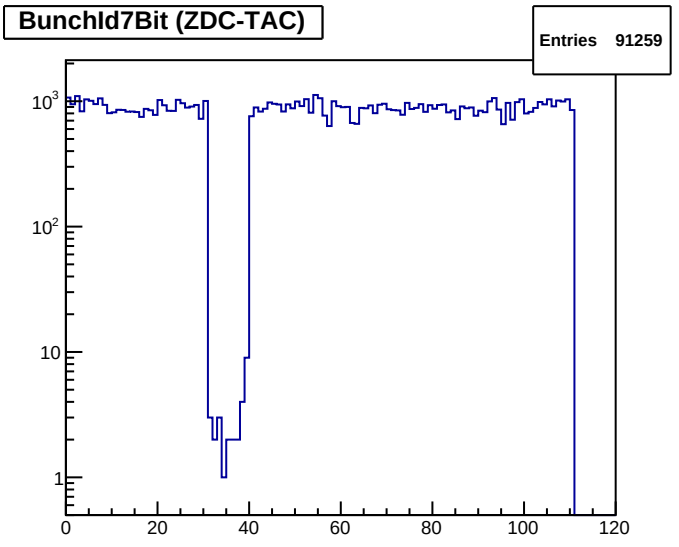

EMC L2 Input - Barrel HT.TP bits
Entries 716220
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

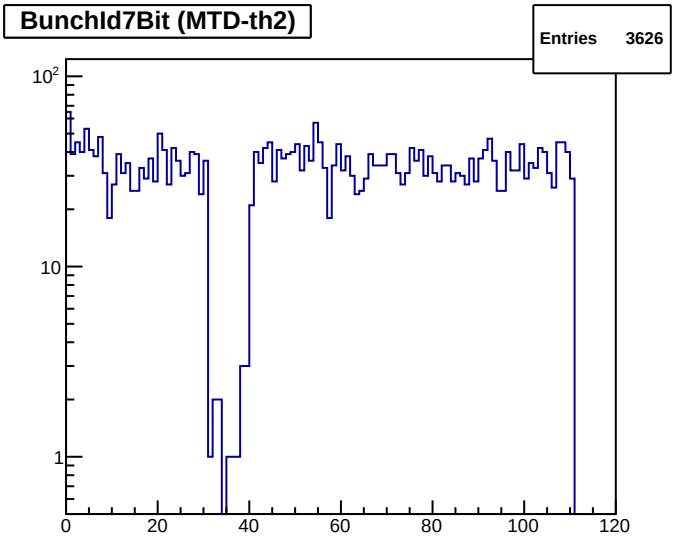

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

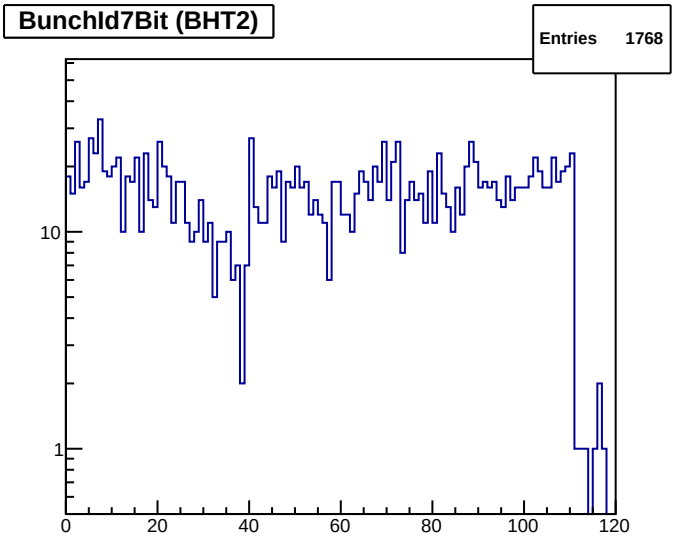

EMC L2 Input - Endcap HT.TP bits
Entries 716220
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

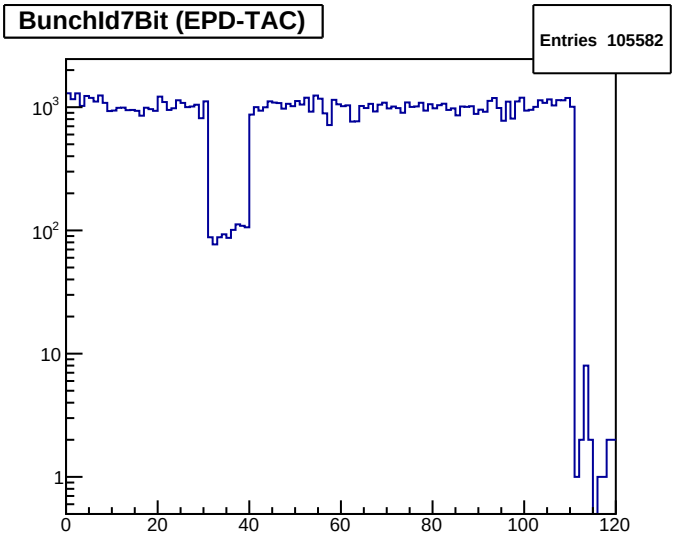

EMC L2 Input - Barrel HT.TP bits
Entries 5
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

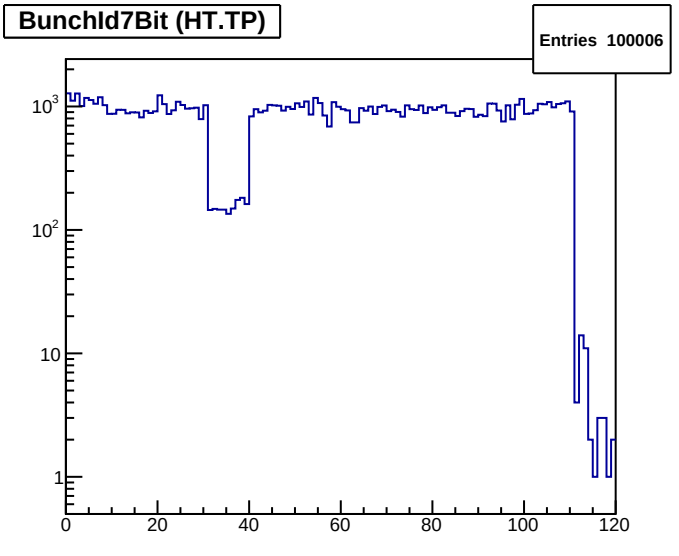

BunchId7Bit (VPD-TAC)
Entries 93411

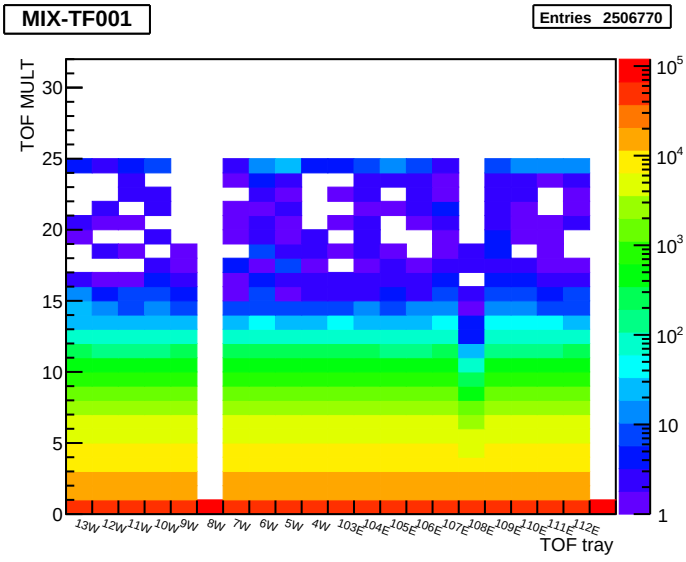

BunchId7Bit (ZDC-TAC)
Entries 91259

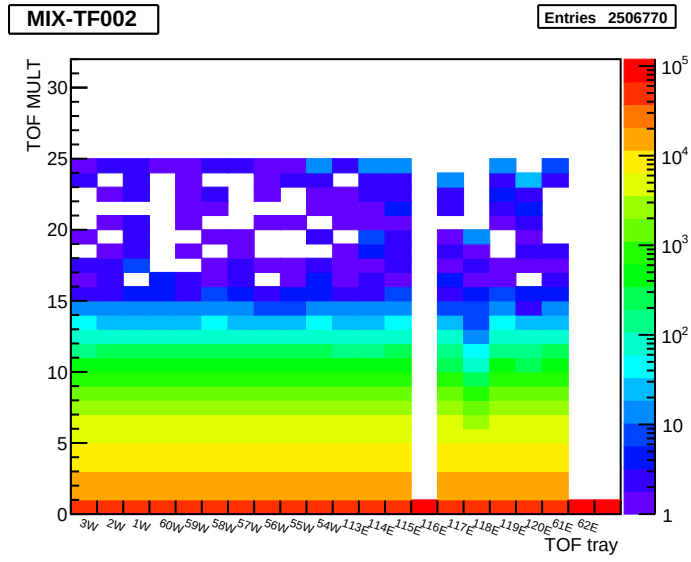

BunchId7Bit (MTD-th2)
Entries 3626

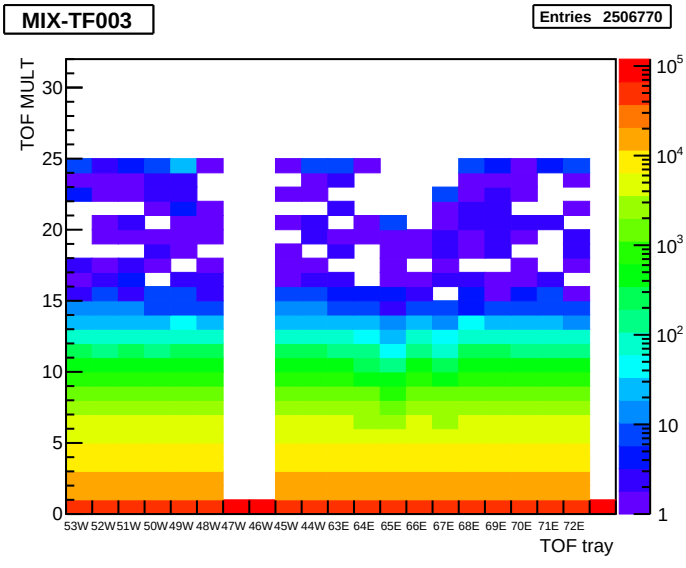

BunchId7Bit (BHT2)
Entries 1768

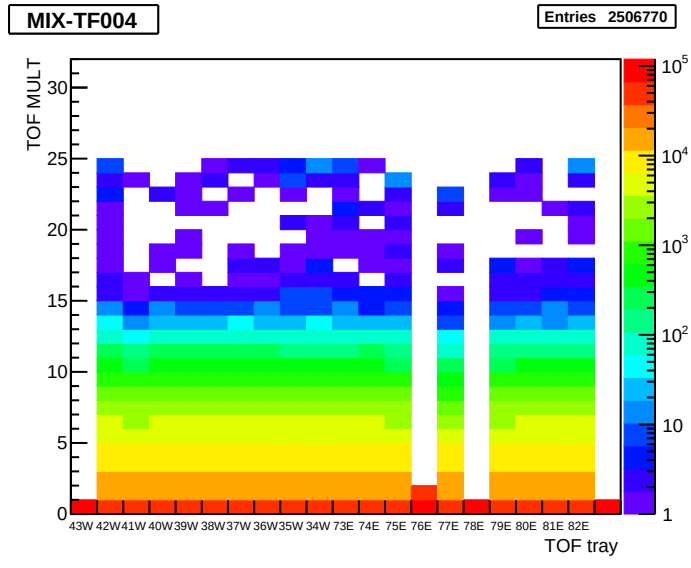

BunchId7Bit (EPD-TAC)
Entries 105582

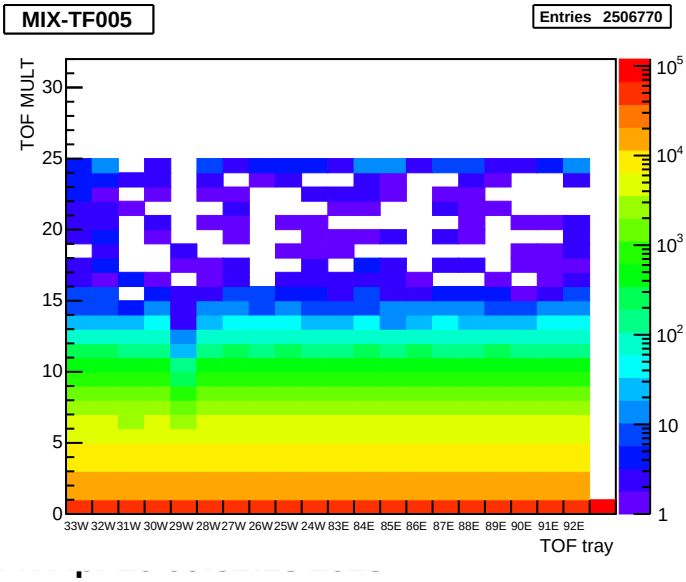

BunchId7Bit (HT.TP)
Entries 100006

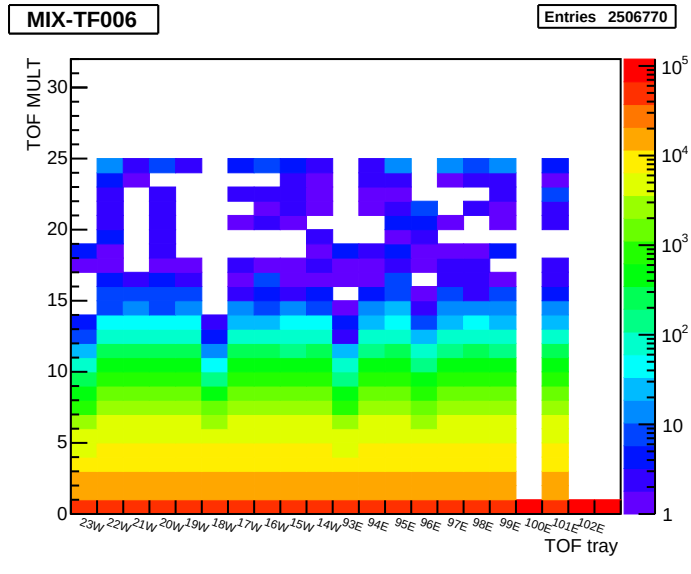

MIX-TF001
Entries 2506770
TOF MULT
TOF tray

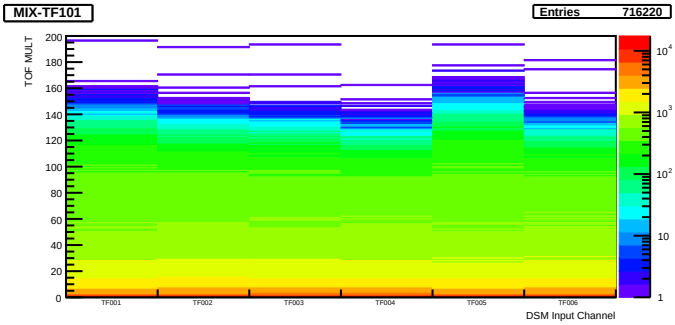

MIX-TF002
Entries 2506770
TOF MULT
TOF tray

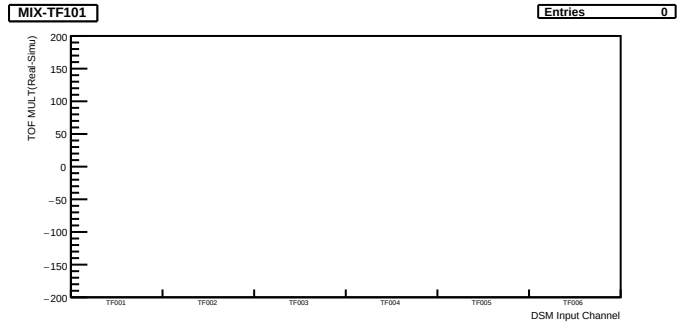

MIX-TF003
Entries 2506770
TOF MULT
TOF tray

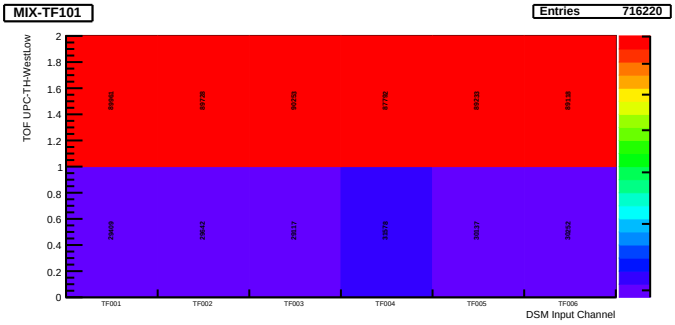

MIX-TF004
Entries 2506770
TOF MULT
TOF tray

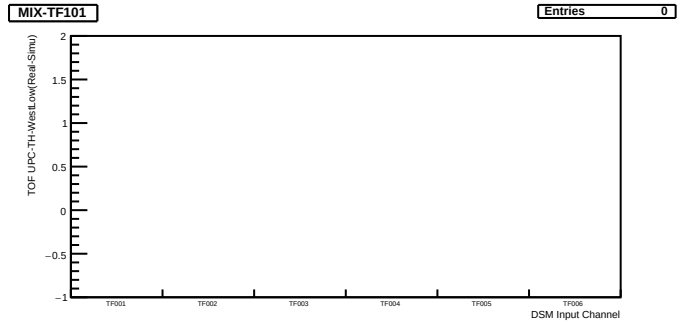

MIX-TF005
Entries 2506770
TOF MULT
TOF tray

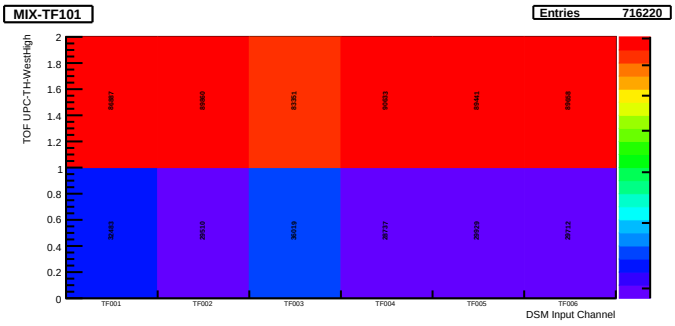

MIX-TF006
Entries 2506770
TOF MULT
TOF tray

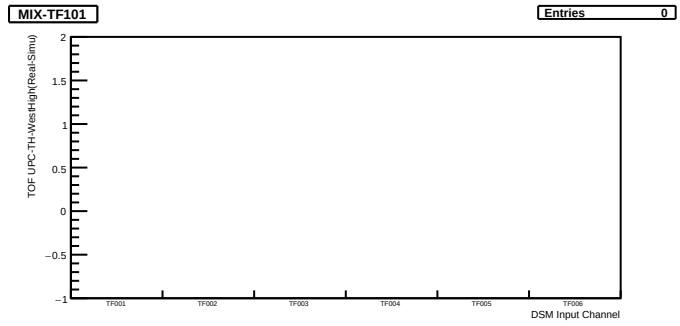

MIX-TF101
Entries 716220
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

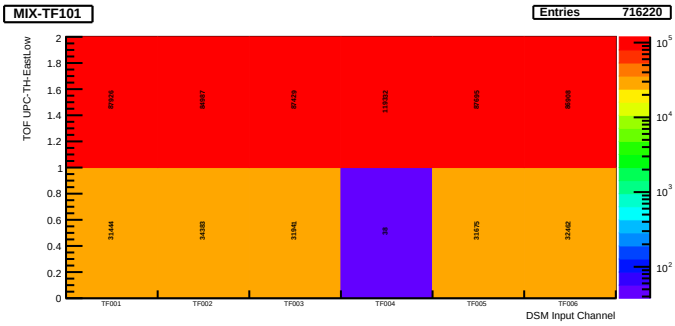

MIX-TF101
Entries 0
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

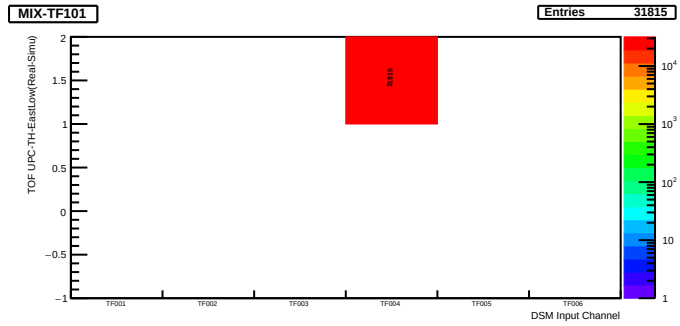

MIX-TF101
Entries 716220
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

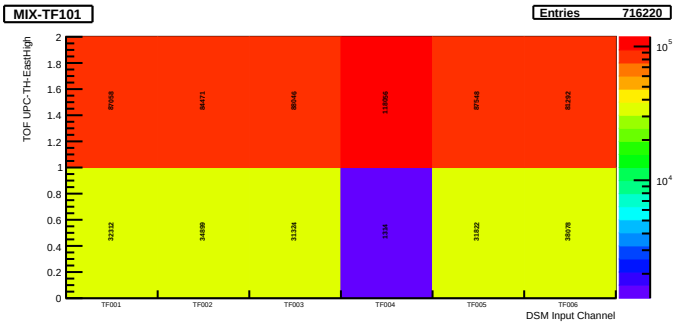

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

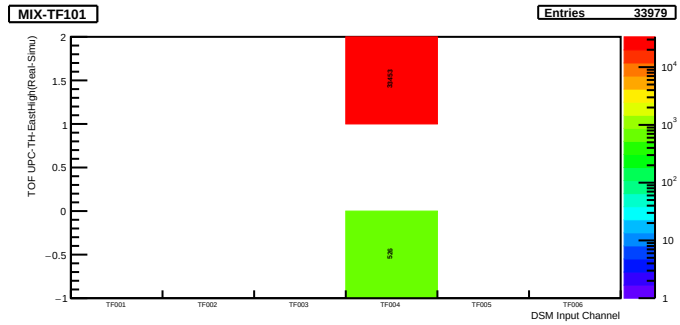

MIX-TF101
Entries 716220
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

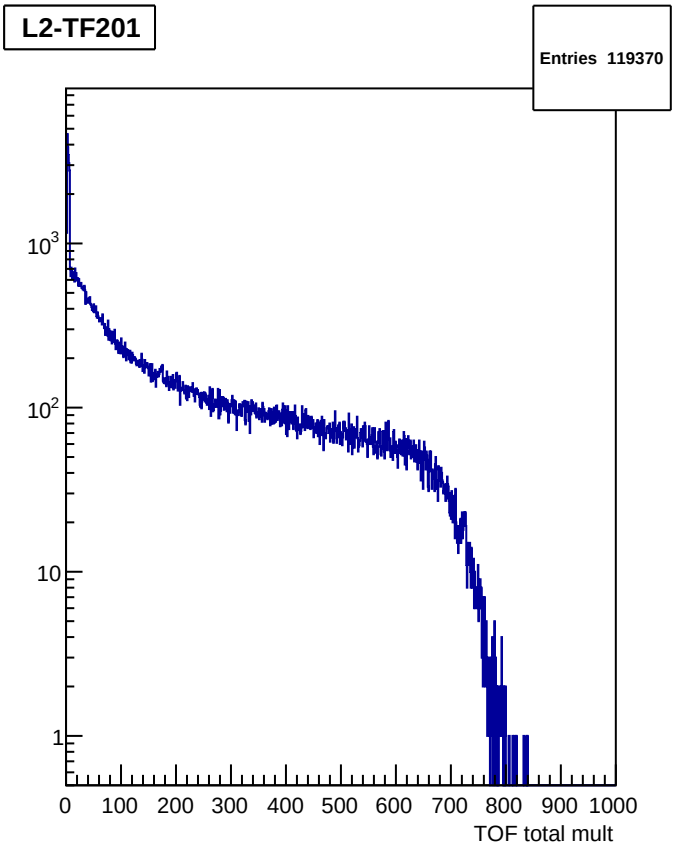

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

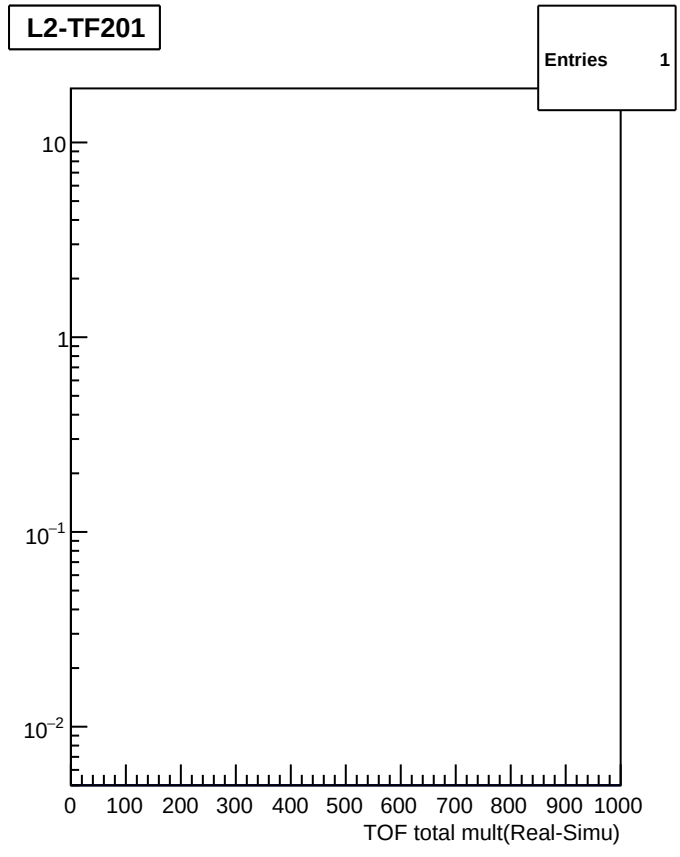

MIX-TF101
Entries 716220
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

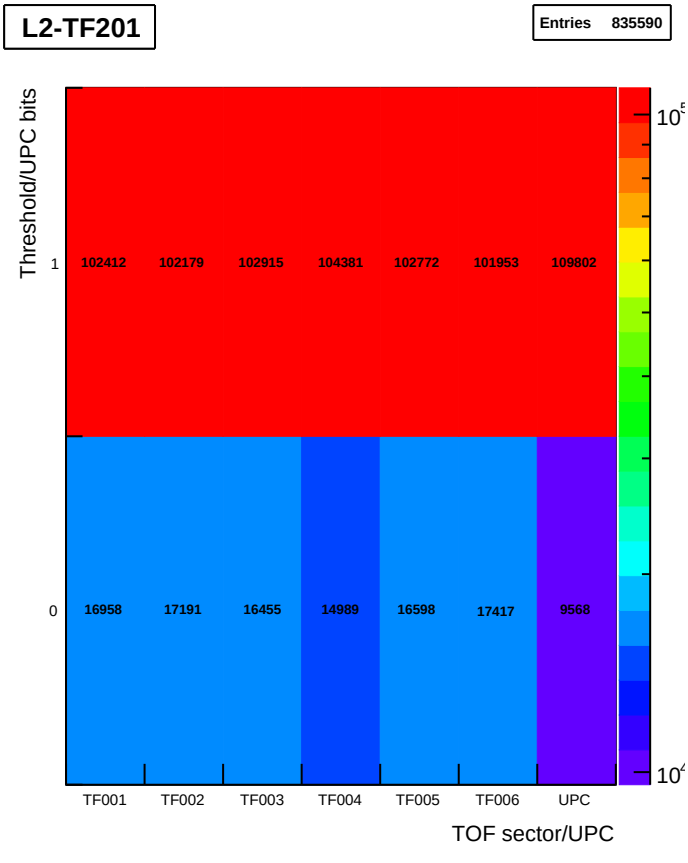

MIX-TF101
Entries 31815
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

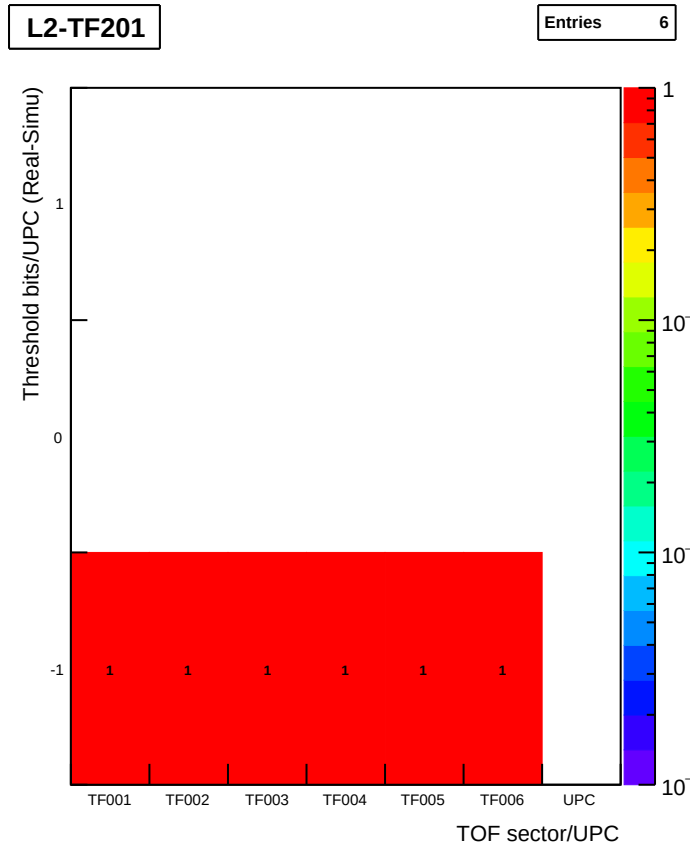

MIX-TF101
Entries 716220
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

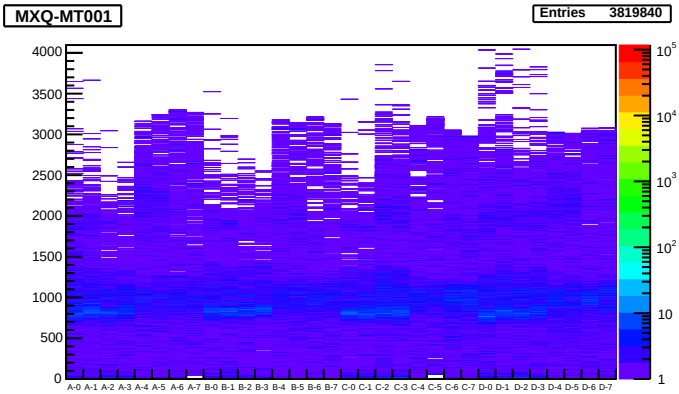

MIX-TF101
Entries 33979
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

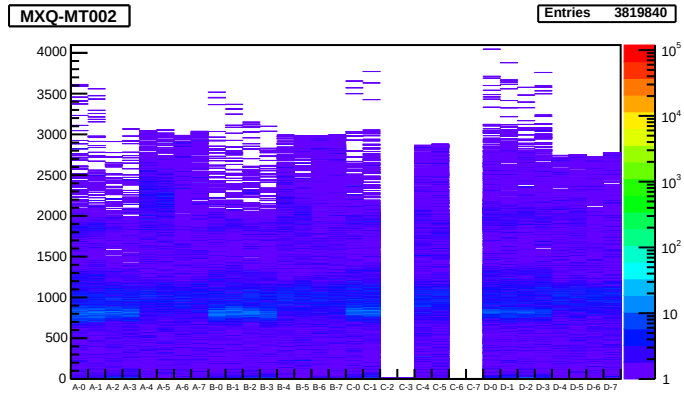

L2-TF201
Entries 119370
TOF total mult

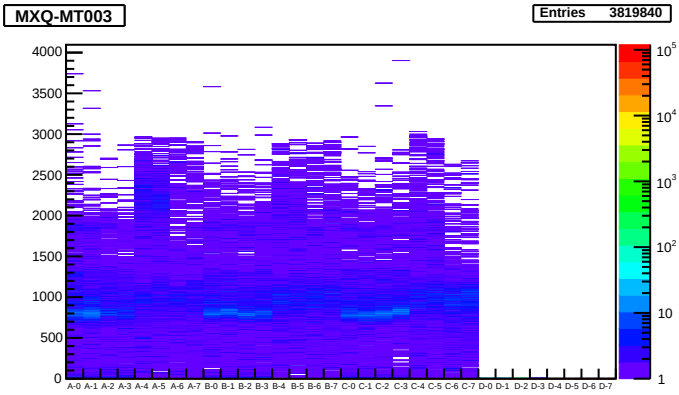

L2-TF201
Entries 1
TOF total mult(Real-Simu)

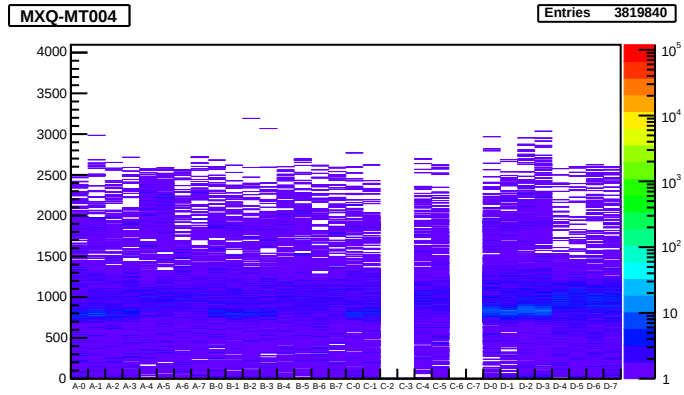

L2-TF201
Entries 835590
Threshold/UPC bits
102412 102179 102915 104381 102772 101953 109802
16958 17191 16455 14989 16598 17417 9568
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

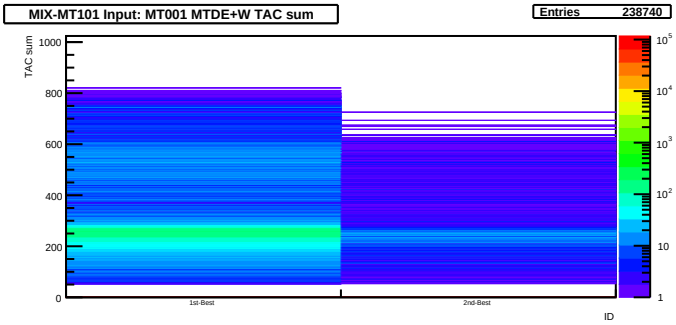

L2-TF201
Entries 6
Threshold bits/UPC (Real-Simu)
1 1 1 1 1 1
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

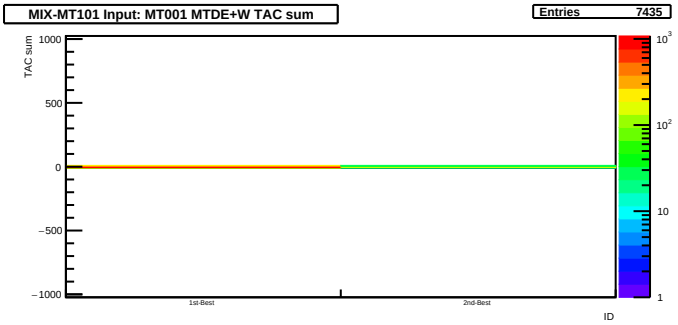

MXQ-MT001
Entries 3819840
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
$10^5$
$10^4$
$10^3$
$10^2$
10
1

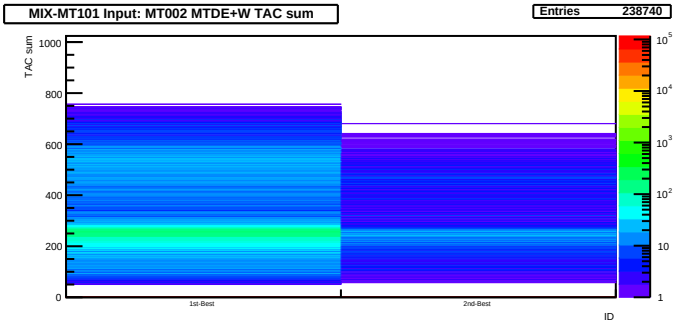

MXQ-MT002
Entries 3819840
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
$10^5$
$10^4$
$10^3$
$10^2$
10
1

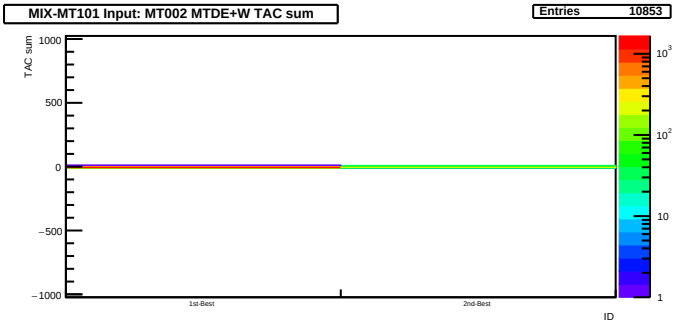

MXQ-MT003
Entries 3819840
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
$10^5$
$10^4$
$10^3$
$10^2$
10
1

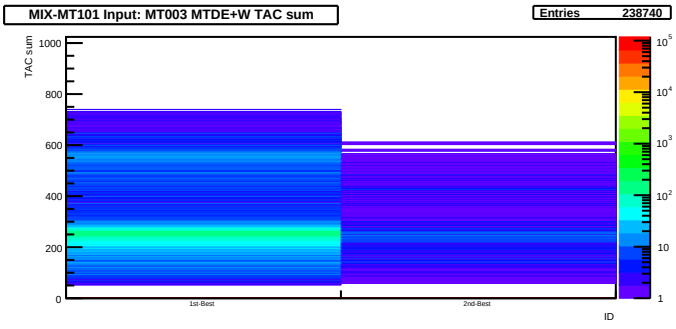

MXQ-MT004
Entries 3819840
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
$10^5$
$10^4$
$10^3$
$10^2$
10
1

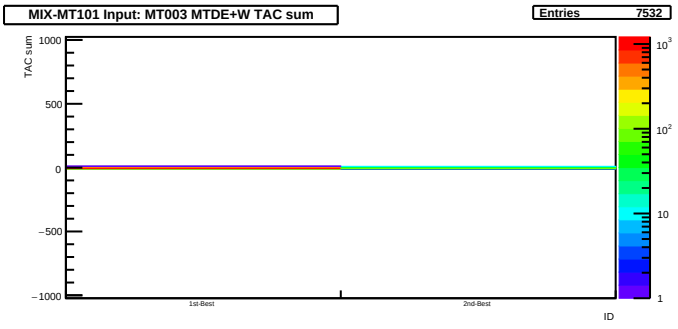

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 238740
TAC sum
1st-Best
2nd-Best
ID

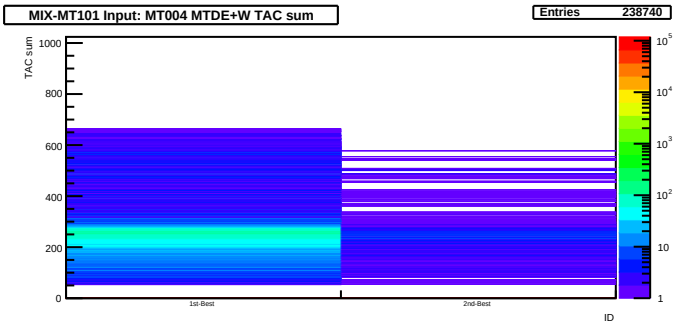

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 7435
TAC sum
1st-Best
2nd-Best
ID

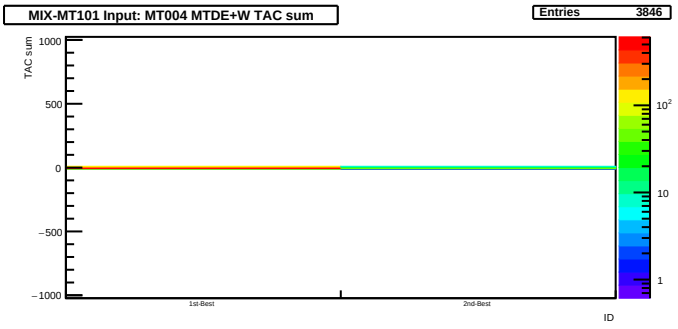

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 238740
TAC sum
1st-Best
2nd-Best
ID

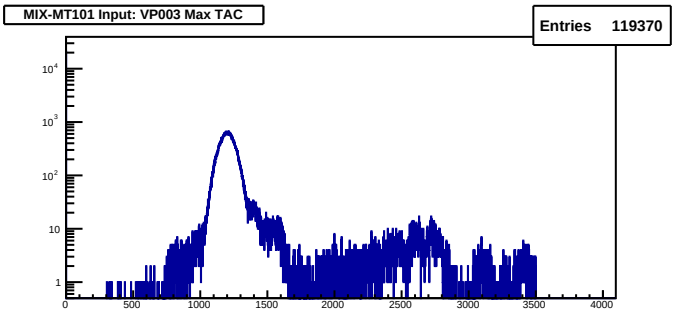

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 10853
TAC sum
1st-Best
2nd-Best
ID

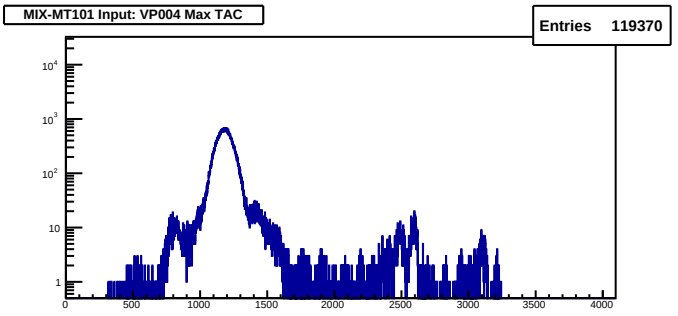

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 238740
TAC sum
1st-Best
2nd-Best
ID

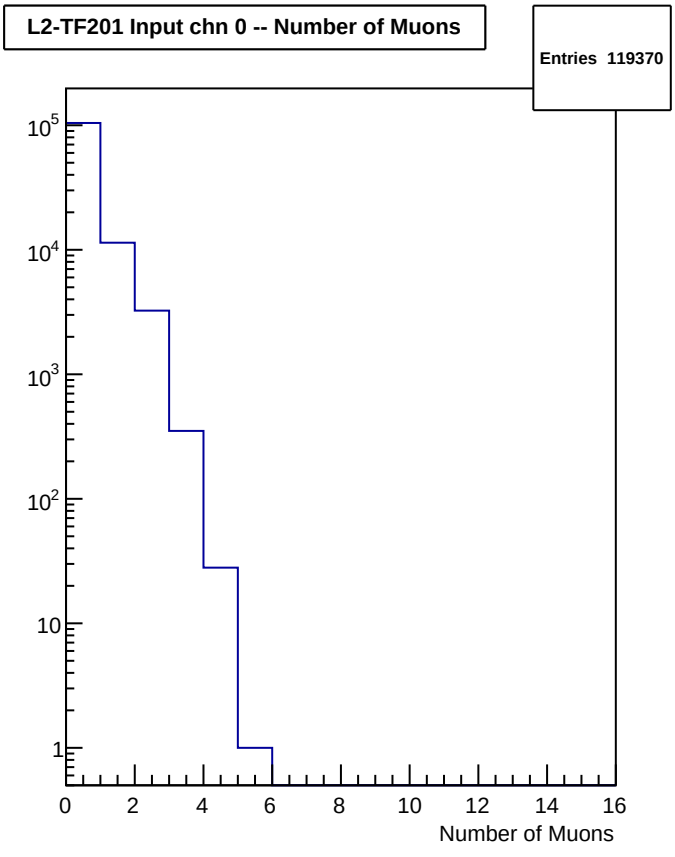

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 7532
TAC sum
1st-Best
2nd-Best
ID

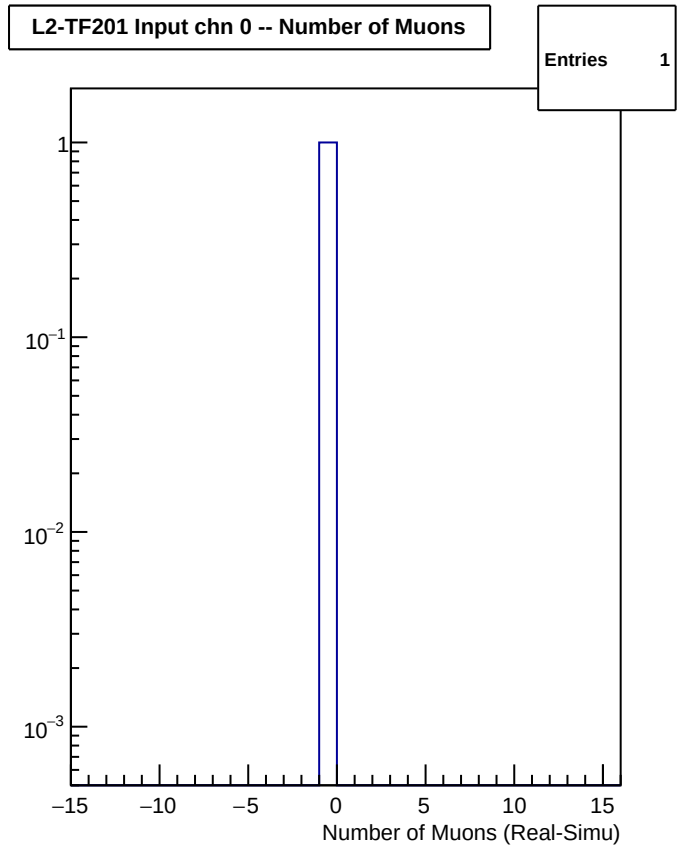

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 238740
TAC sum
1st-Best
2nd-Best
ID

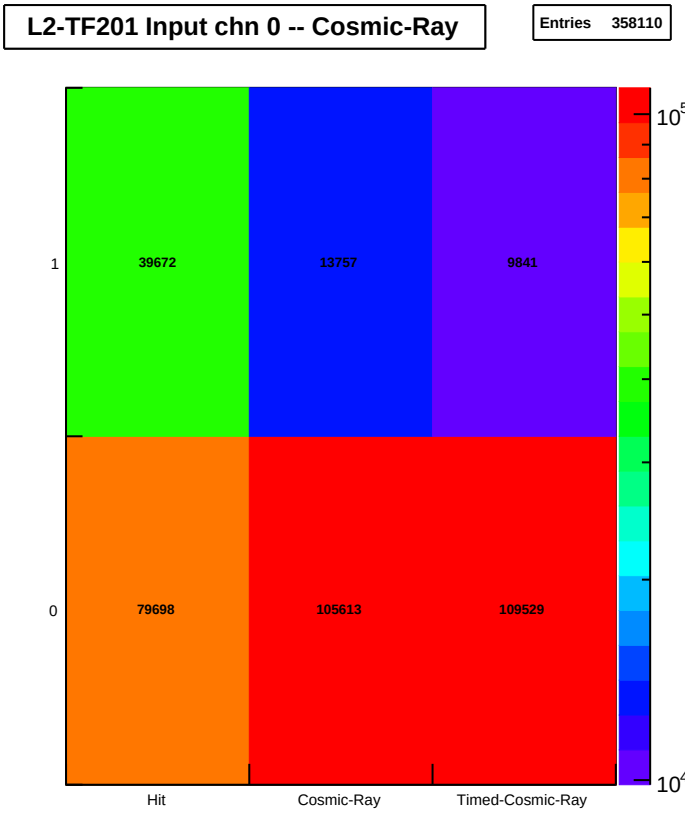

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 3846
TAC sum
1st-Best
2nd-Best
ID

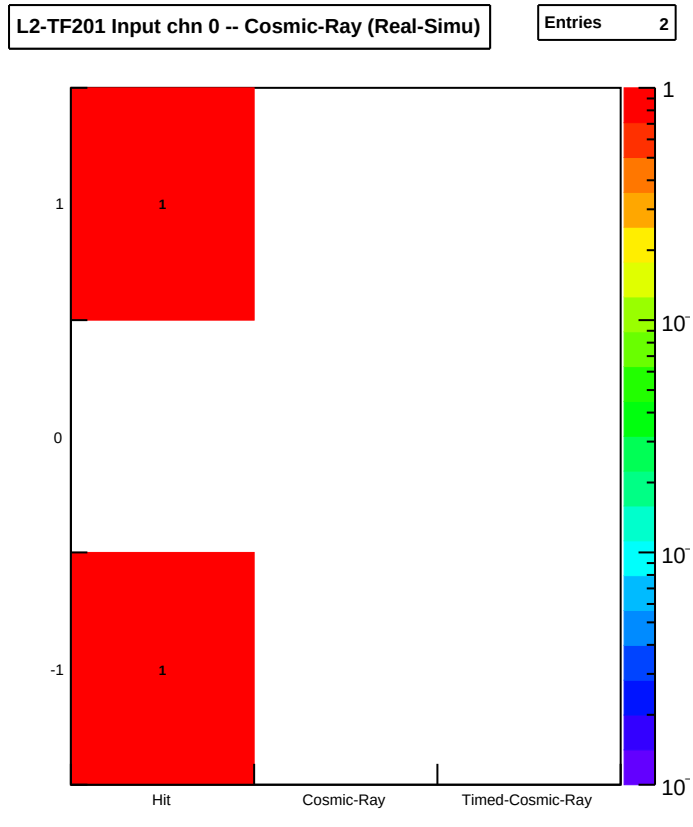

MIX-MT101 Input: VP003 Max TAC
Entries 119370

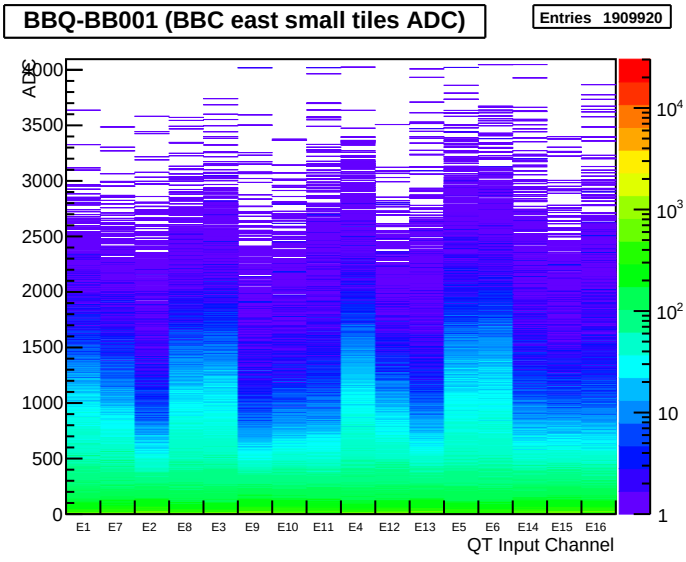

MIX-MT101 Input: VP004 Max TAC
Entries 119370

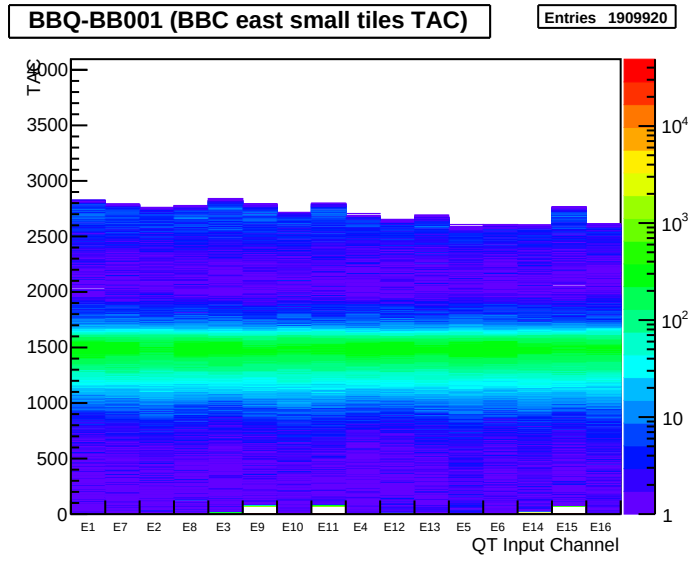

L2-TF201 Input chn 0 -- Number of Muons
Entries 119370
Number of Muons

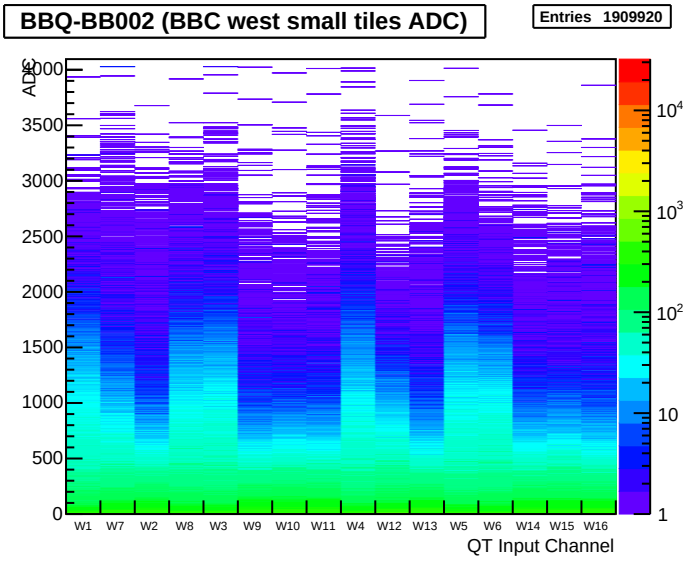

L2-TF201 Input chn 0 -- Number of Muons
Entries 1
Number of Muons (Real-Simu)

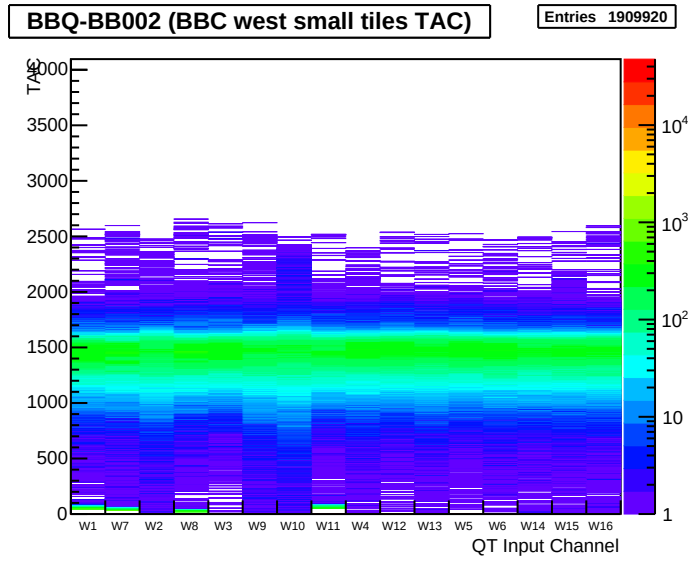

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 358110
39672
13757
9841
79698
105613
109529
Hit
Cosmic-Ray
Timed-Cosmic-Ray

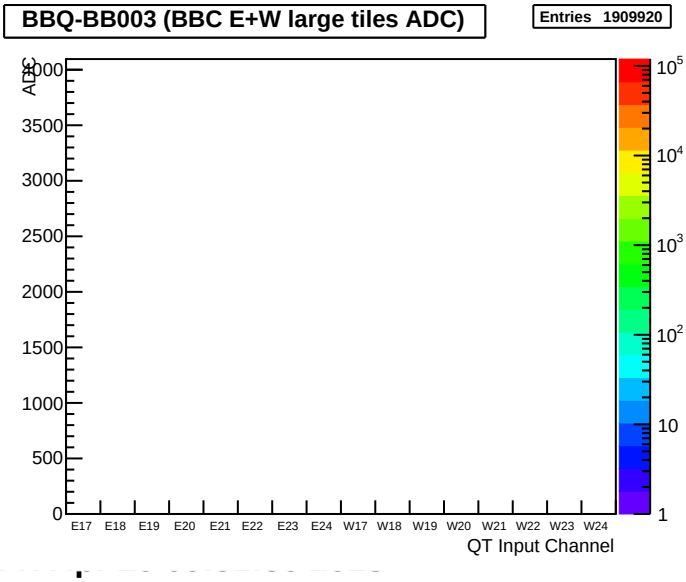

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 2
1
1
Hit
Cosmic-Ray
Timed-Cosmic-Ray

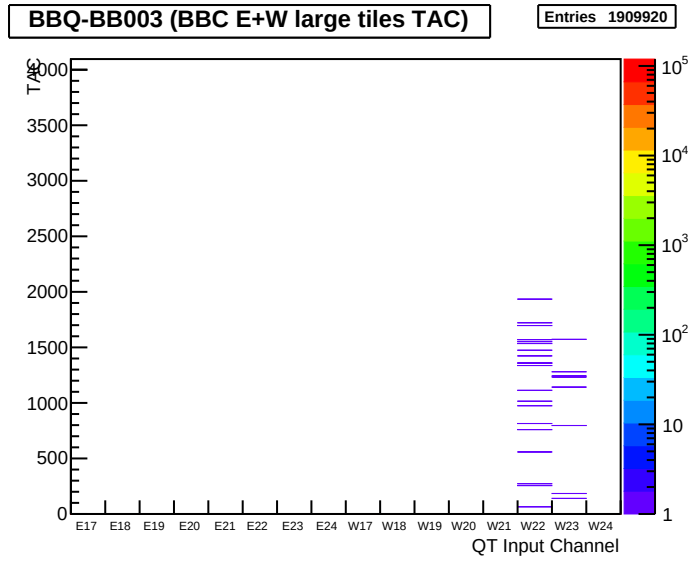

BBQ-BB001 (BBC east small tiles ADC)
Entries 1909920
ADC
QT Input Channel

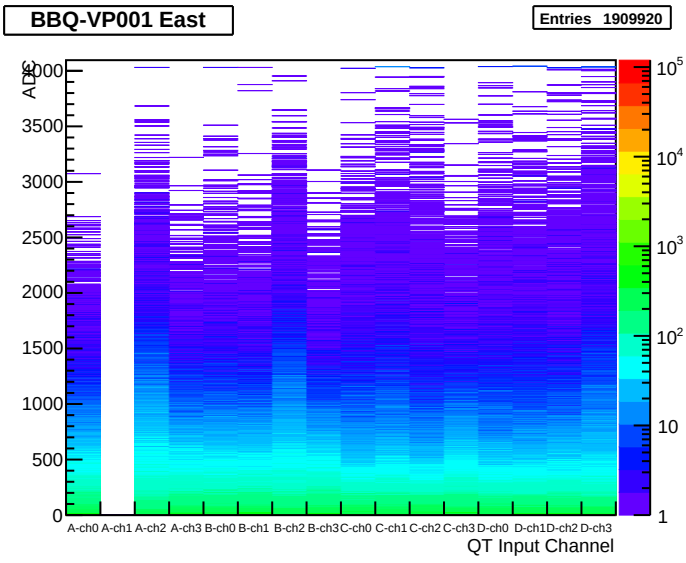

BBQ-BB001 (BBC east small tiles TAC)
Entries 1909920
TAC
QT Input Channel

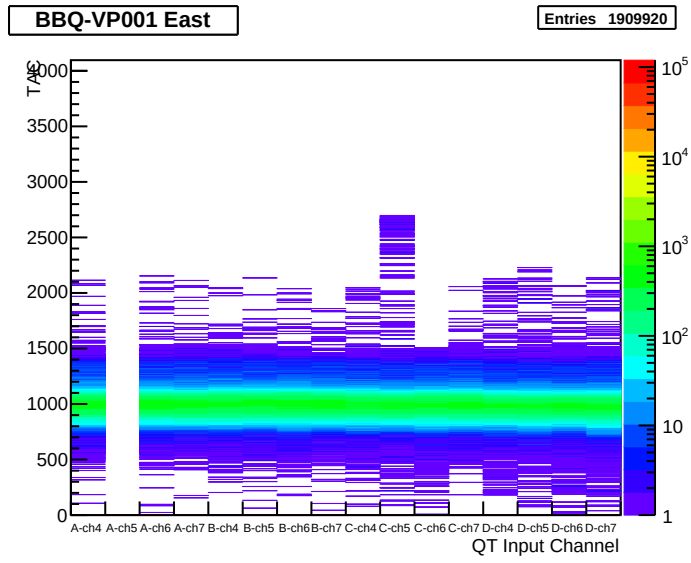

BBQ-BB002 (BBC west small tiles ADC)
Entries 1909920
ADC
QT Input Channel

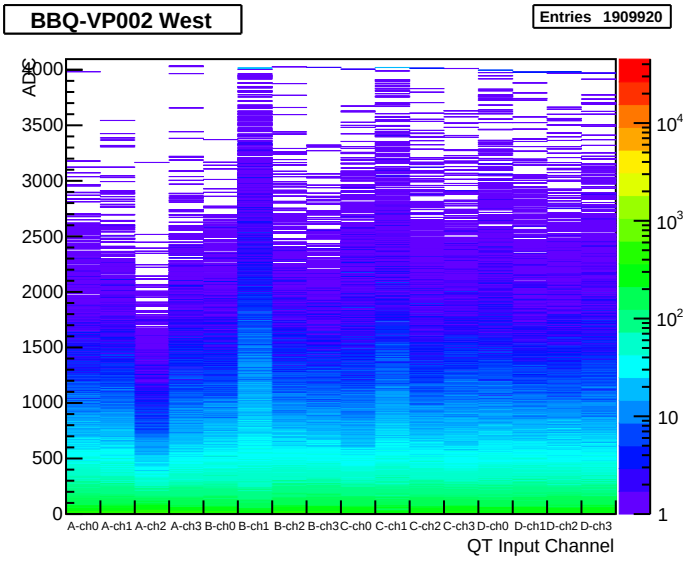

BBQ-BB002 (BBC west small tiles TAC)
Entries 1909920
TAC
QT Input Channel

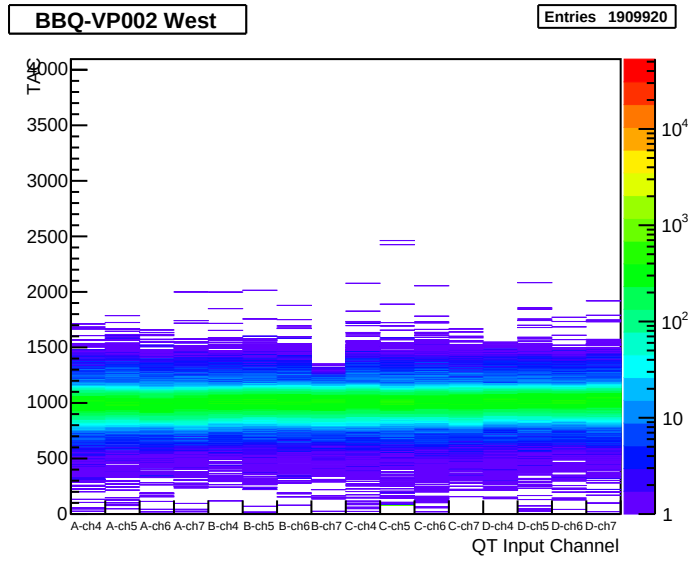

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1909920
ADC
QT Input Channel

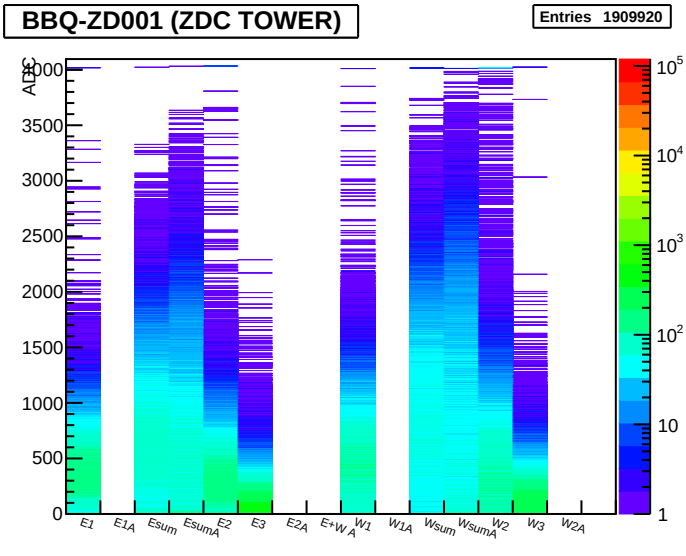

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1909920
TAC
QT Input Channel

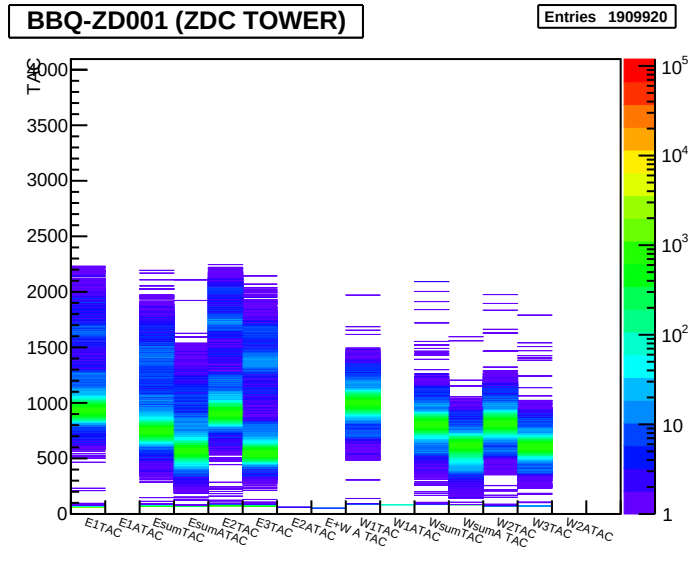

BBQ-VP001 East
Entries 1909920
ADC
QT Input Channel

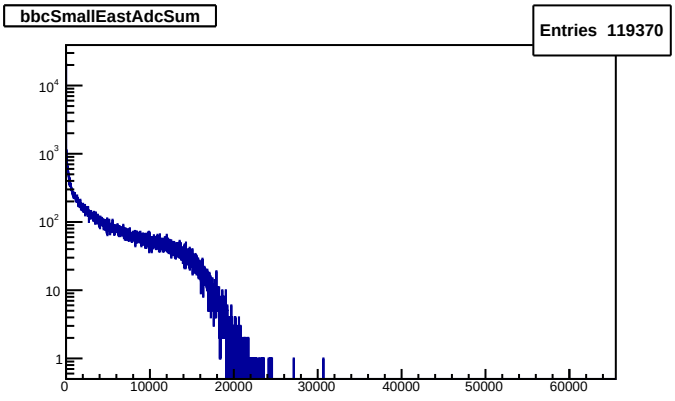

BBQ-VP001 East
Entries 1909920
TAC
QT Input Channel

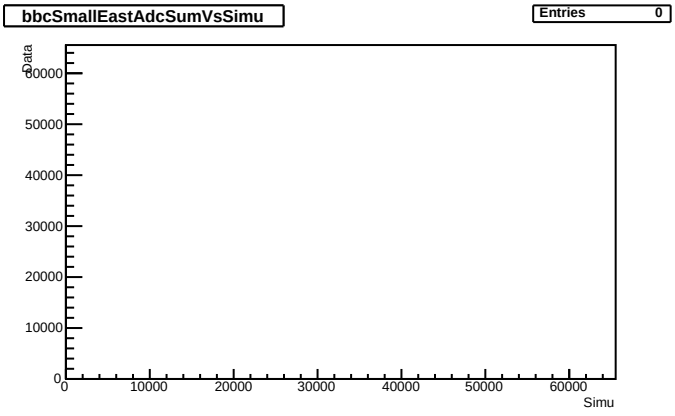

BBQ-VP002 West
Entries 1909920
ADC
QT Input Channel

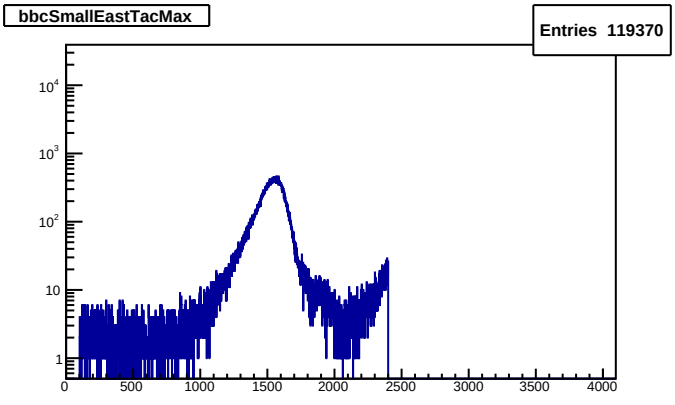

BBQ-VP002 West
Entries 1909920
TAC
QT Input Channel

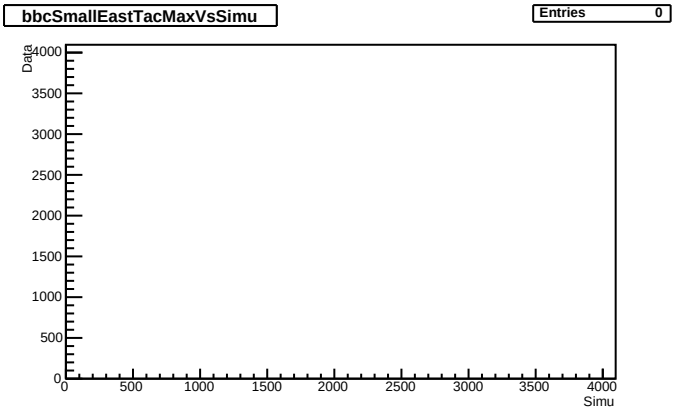

BBQ-ZD001 (ZDC TOWER)
Entries 1909920
ADC

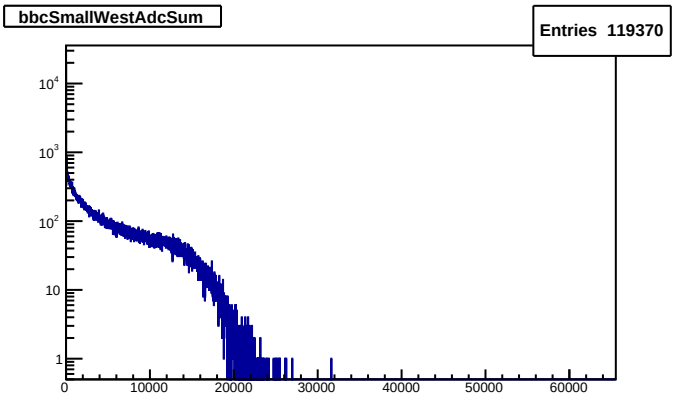

BBQ-ZD001 (ZDC TOWER)
Entries 1909920
TAC

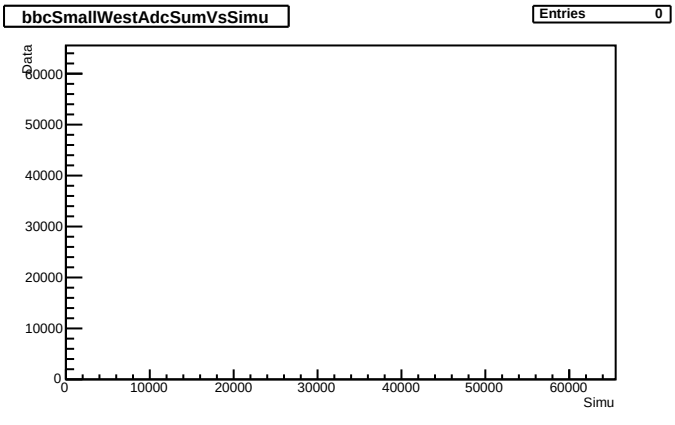

bbcSmallEastAdcSum
Entries 119370

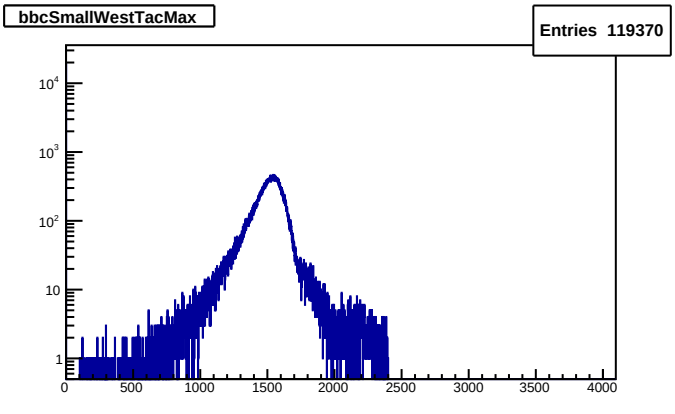

bbcSmallEastAdcSumVsSimu
Entries 0
Data
Simu

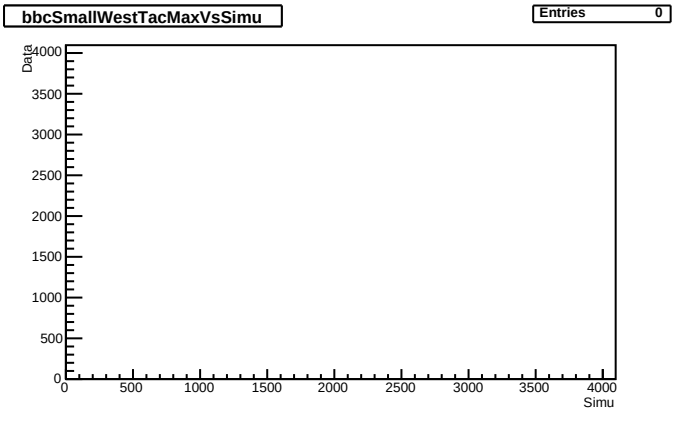

bbcSmallEastTacMax
Entries 119370

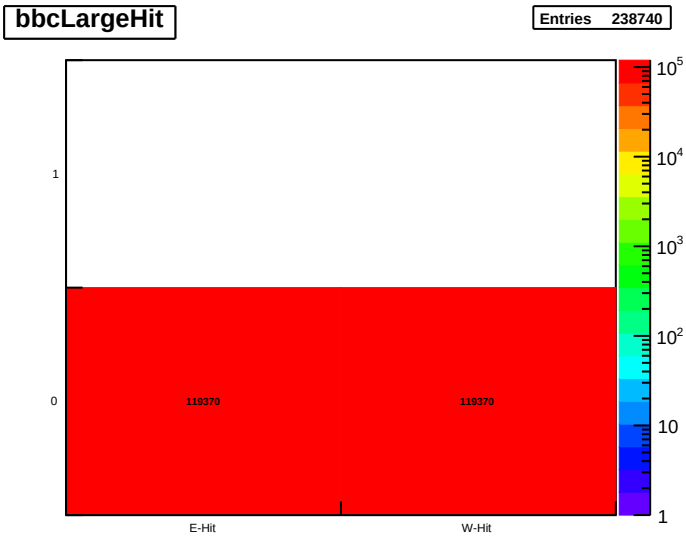

bbcSmallEastTacMaxVsSimu
Entries 0
Data
Simu

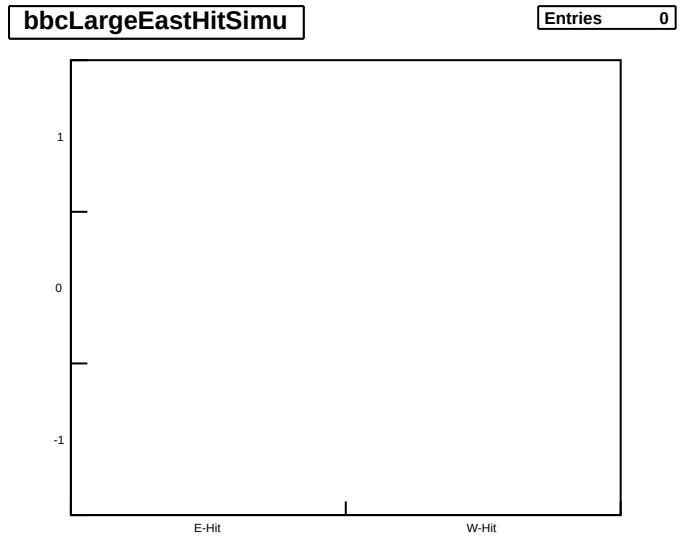

bbcSmallWestAdcSum
Entries 119370

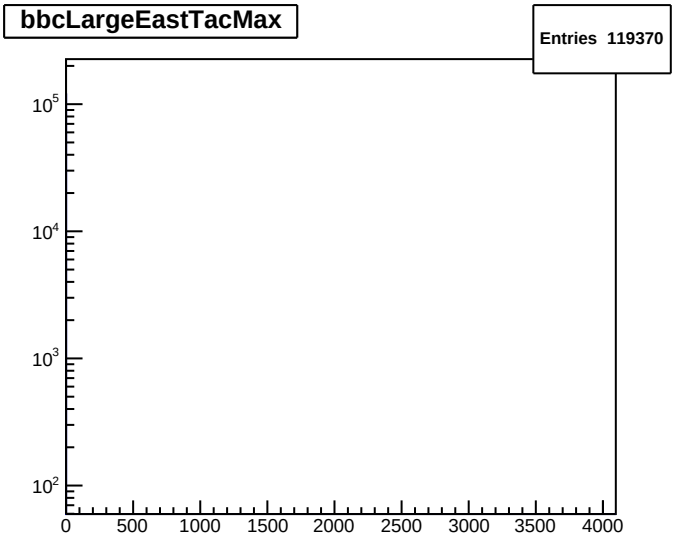

bbcSmallWestAdcSumVsSimu
Entries 0
Data
Simu

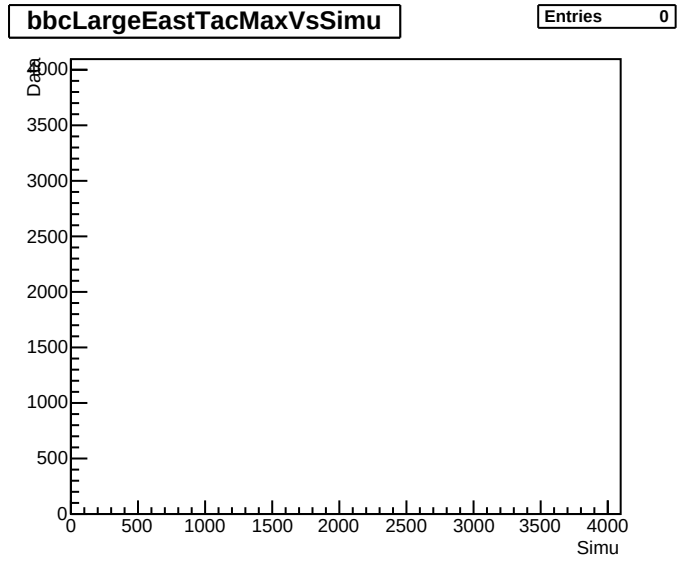

bbcSmallWestTacMax
Entries 119370

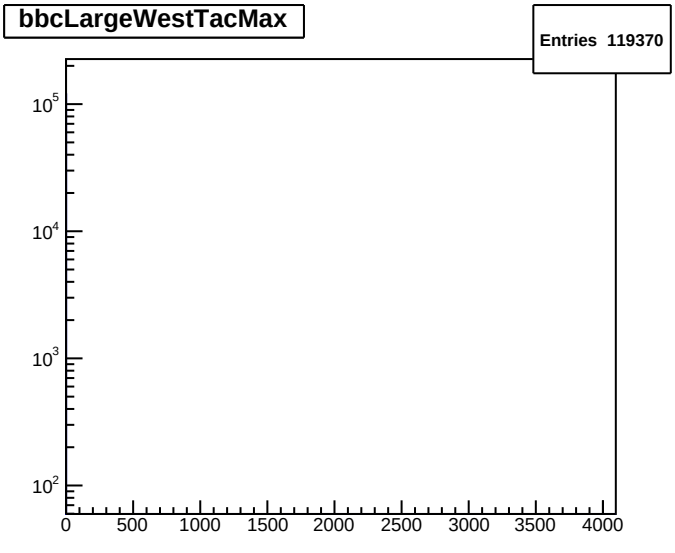

bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu

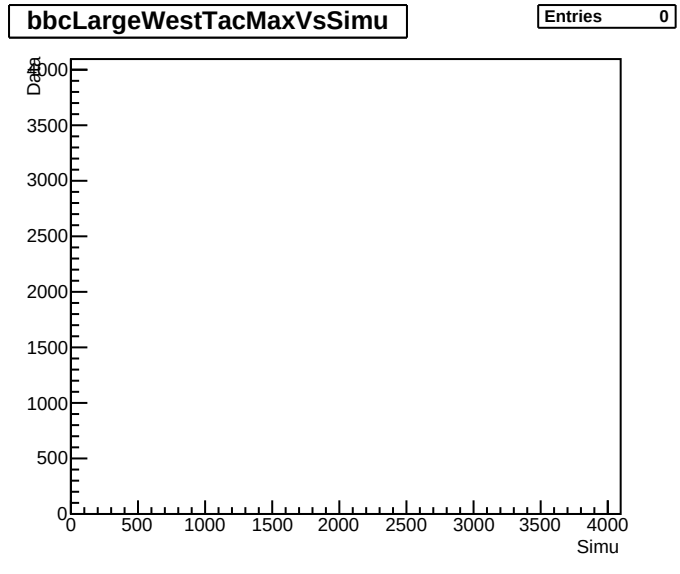

bbcLargeHit
Entries 238740
119370
119370
E-Hit
W-Hit

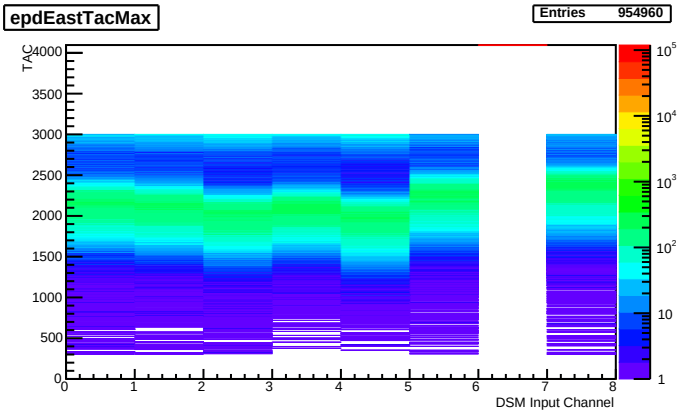

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

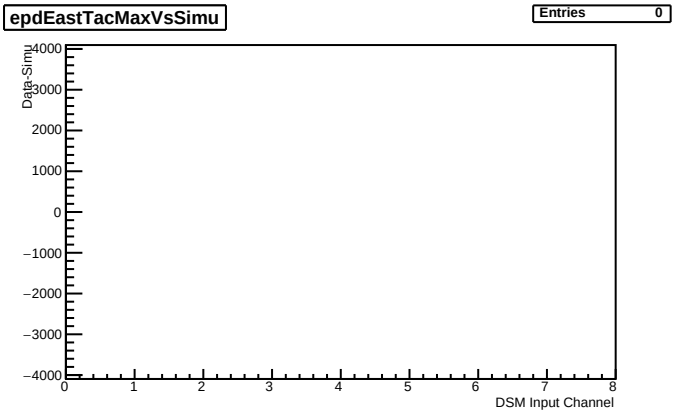

bbcLargeEastTacMax
Entries 119370

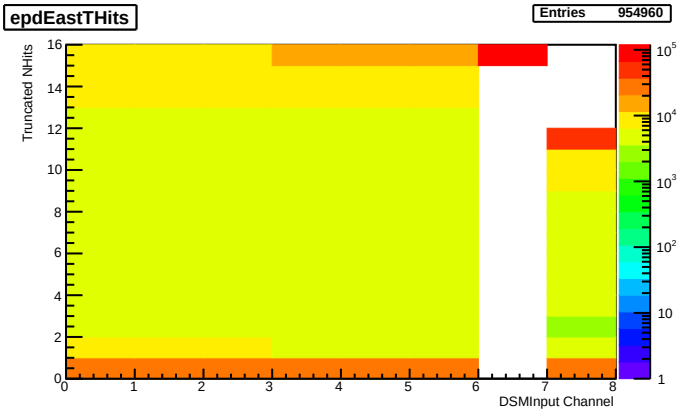

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

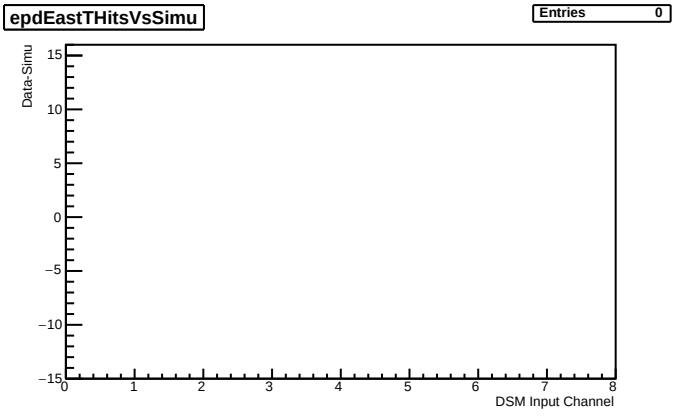

bbcLargeWestTacMax
Entries 119370

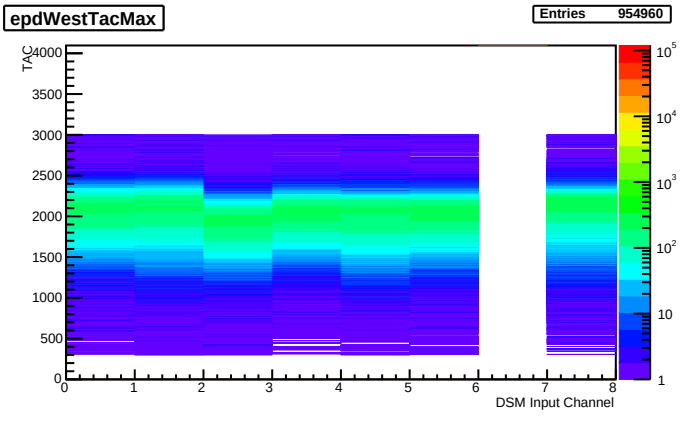

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

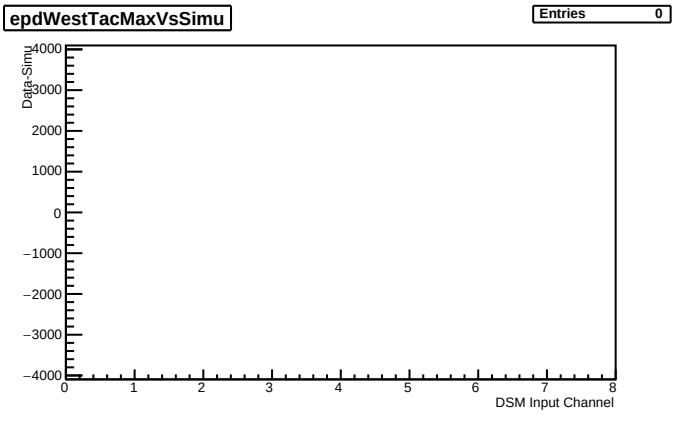

epdEastTacMax
Entries 954960
TAC
DSM Input Channel

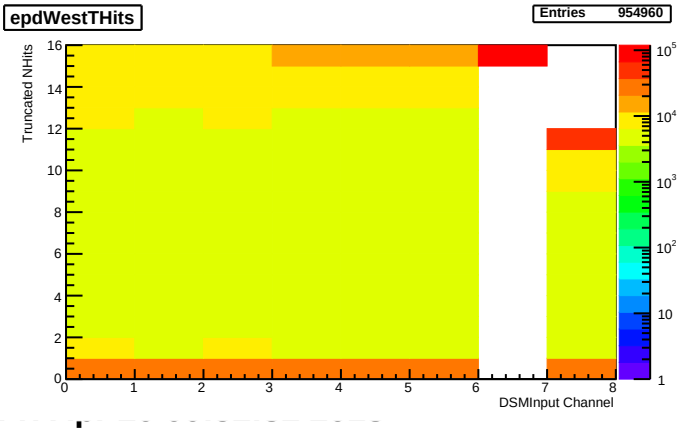

epdEastTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel

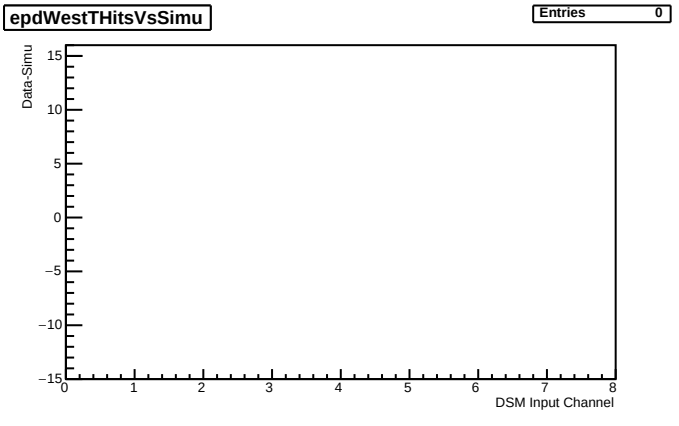

epdEastTHits
Entries 954960
Truncated NHits
DSMInput Channel

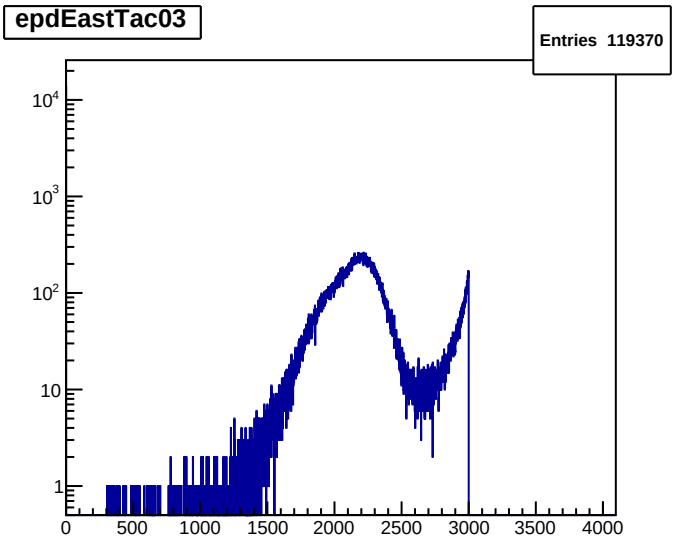

epdEastTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel

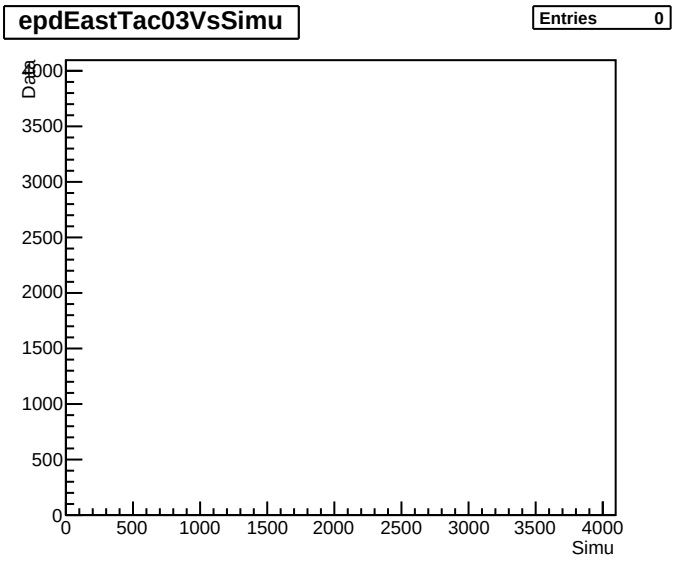

epdWestTacMax
Entries 954960
TAC
DSM Input Channel

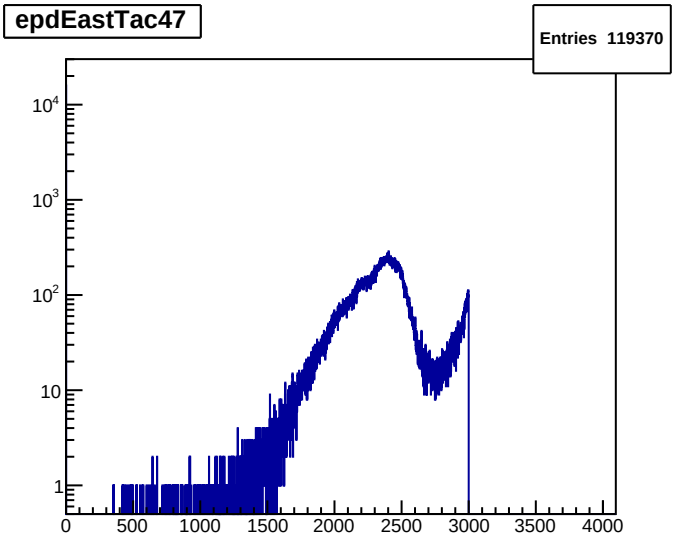

epdWestTacMaxVsSimu
Entries 0
Data-Simu
DSM Input Channel

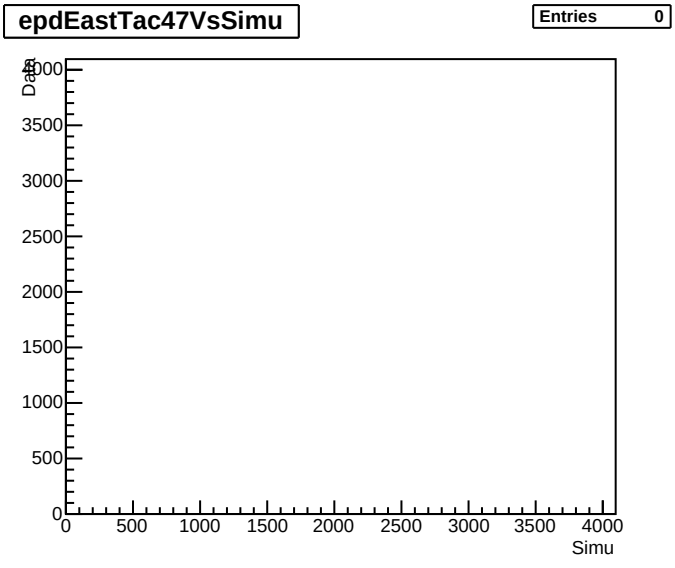

epdWestTHits
Entries 954960
Truncated NHits
DSMInput Channel

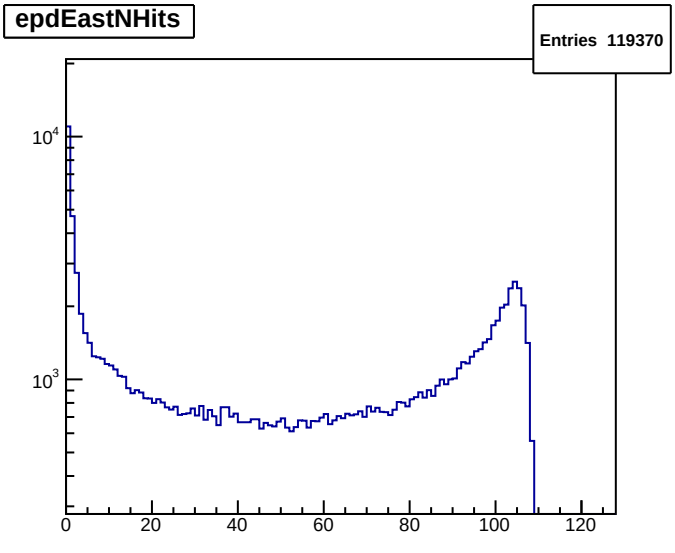

epdWestTHitsVsSimu
Entries 0
Data-Simu
DSM Input Channel

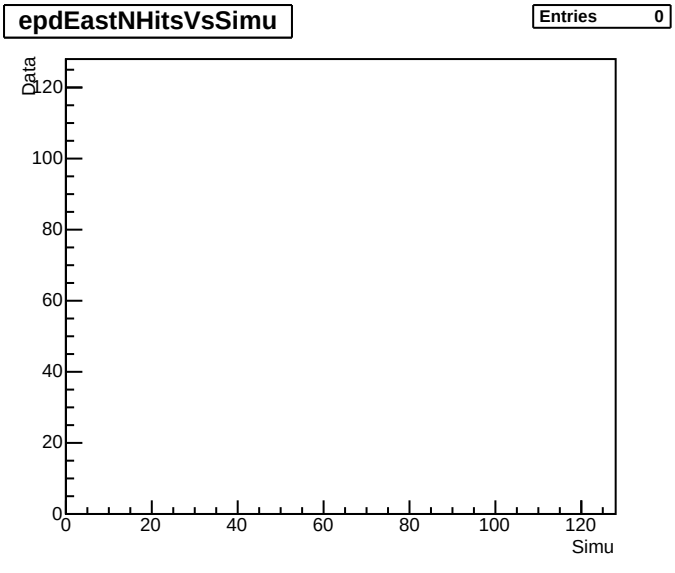

epdEastTac03
Entries 119370

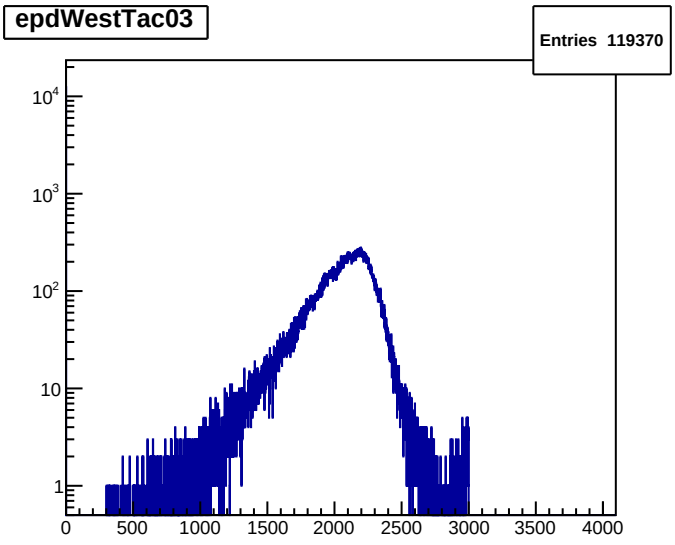

epdEastTac03VsSimu
Entries 0
Data
Simu

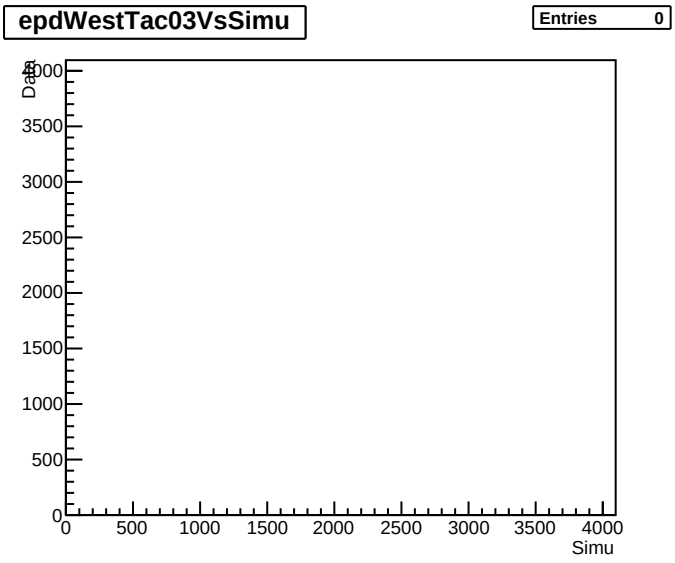

epdEastTac47
Entries 119370

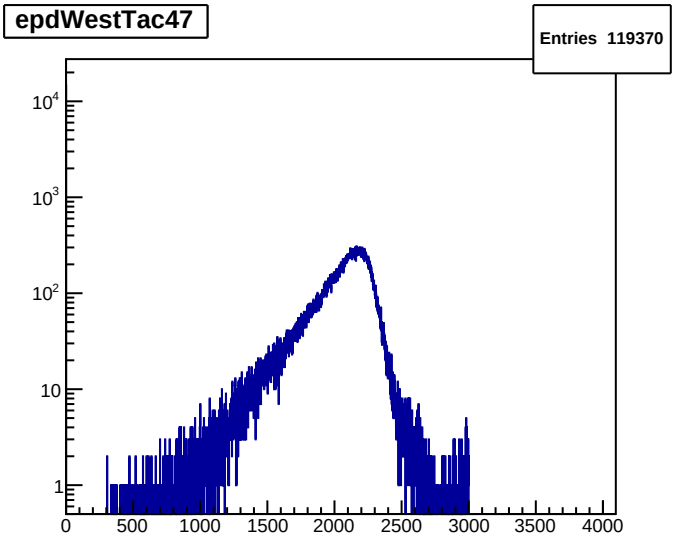

epdEastTac47VsSimu
Entries 0
Data
Simu

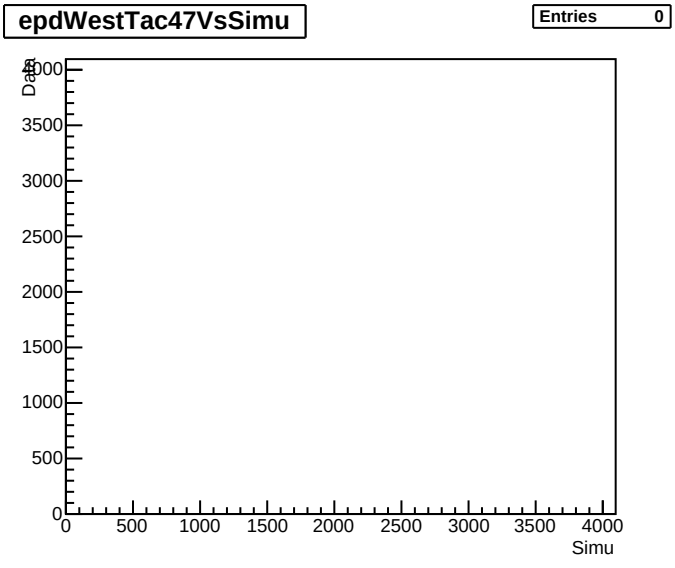

epdEastNHits
Entries 119370

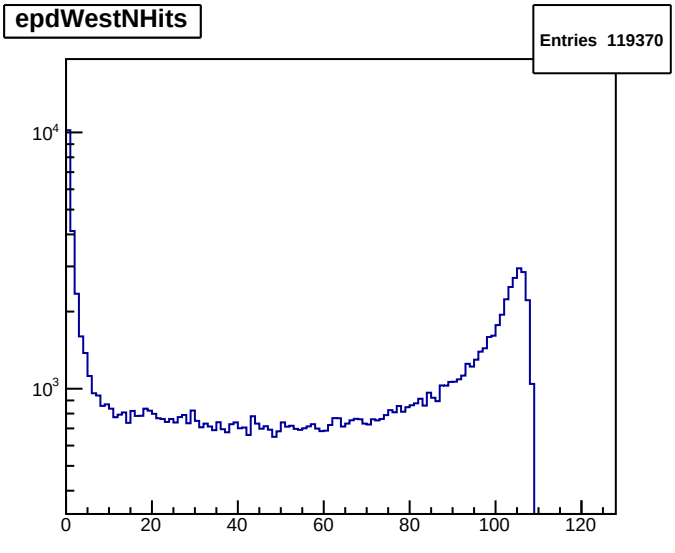

epdEastNHitsVsSimu
Entries 0
Data
Simu

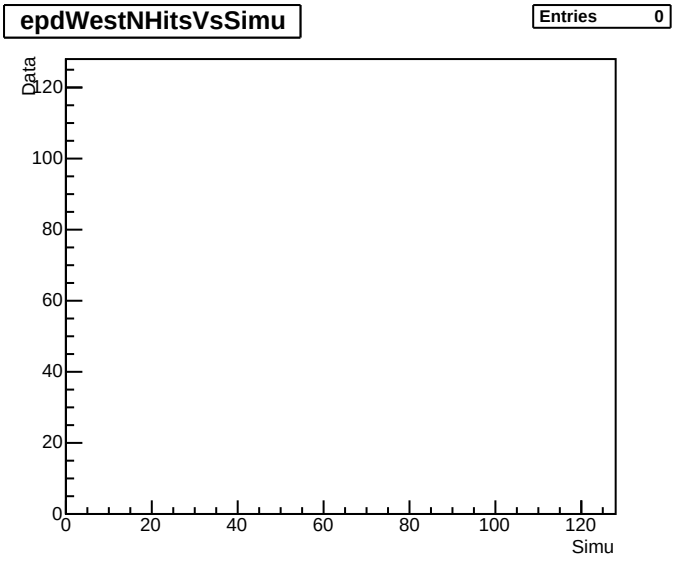

epdWestTac03
Entries 119370

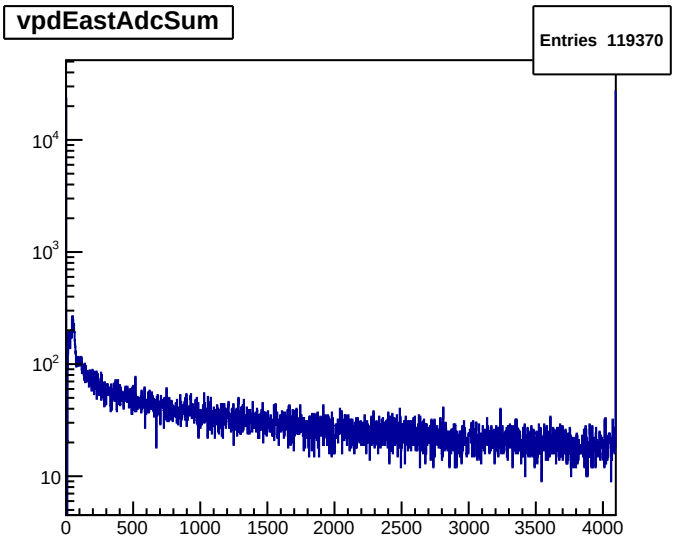

epdWestTac03VsSimu
Entries 0
Data
Simu

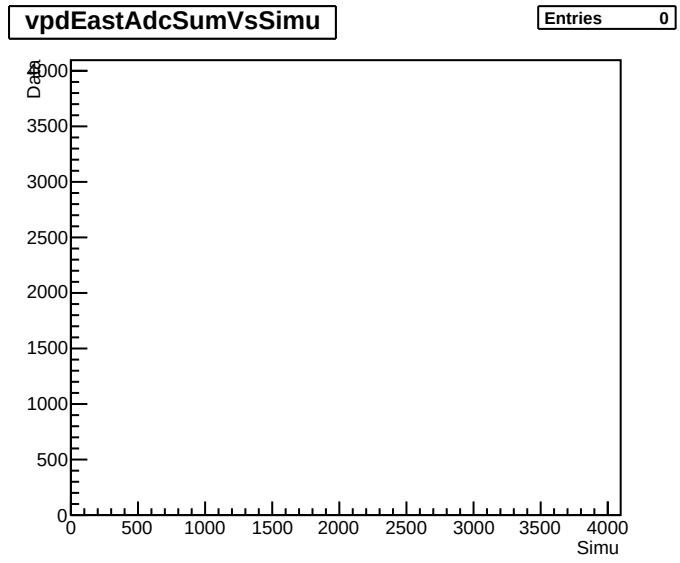

epdWestTac47
Entries 119370

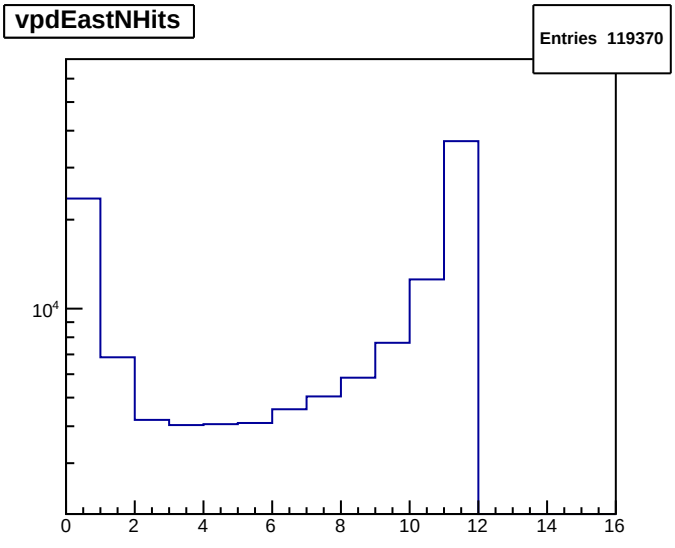

epdWestTac47VsSimu
Entries 0
Data
Simu

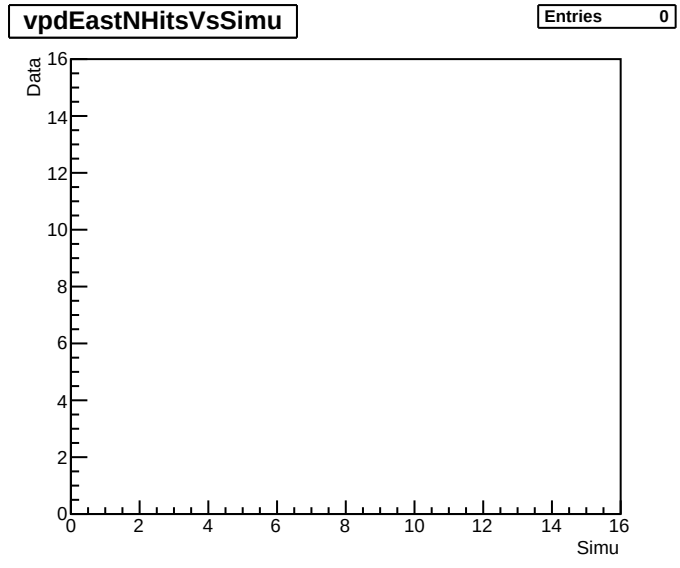

epdWestNHits
Entries 119370

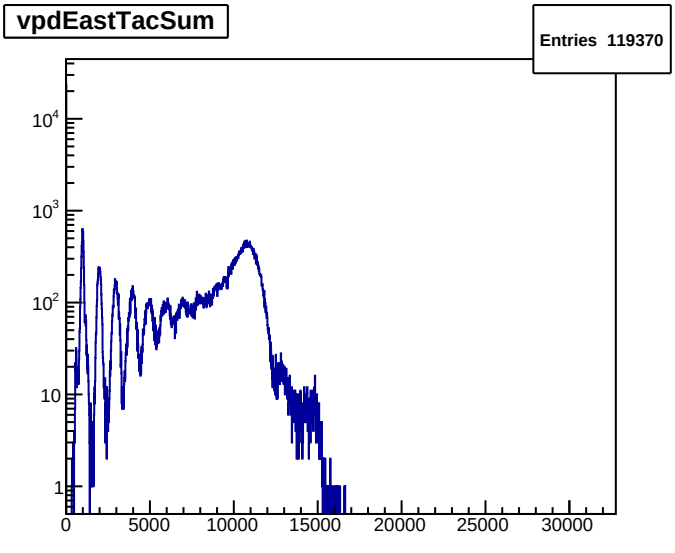

epdWestNHitsVsSimu
Entries 0
Data
Simu

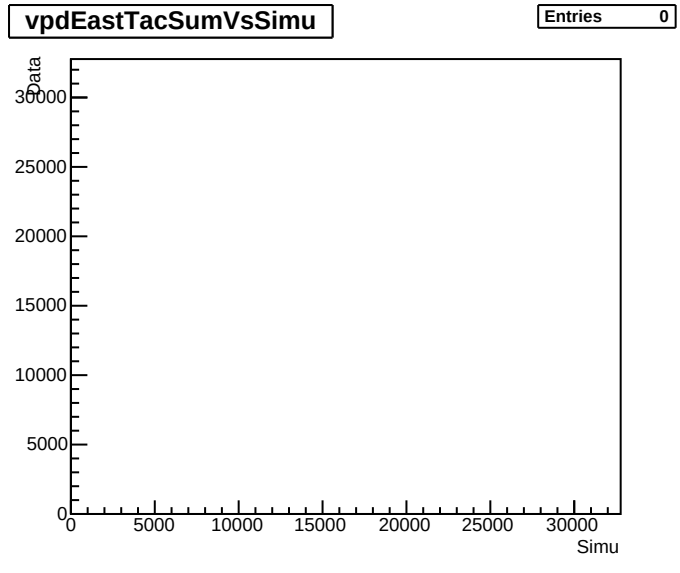

vpdEastAdcSum
Entries 119370
$10^4$
$10^3$
$10^2$
10
0 500 1000 1500 2000 2500 3000 3500 4000

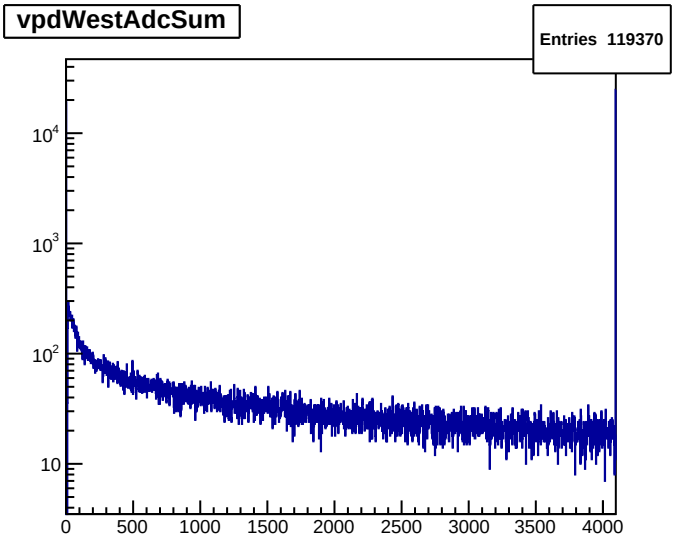

vpdEastAdcSumVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

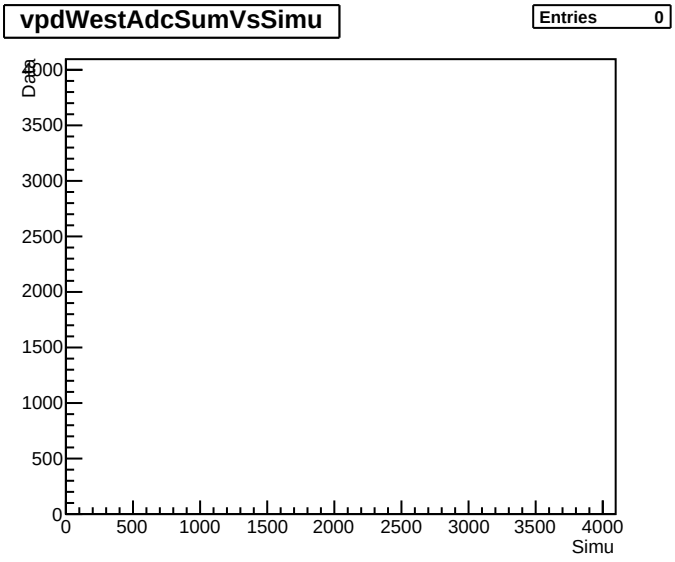

vpdEastNHits
Entries 119370
$10^4$
0 2 4 6 8 10 12 14 16

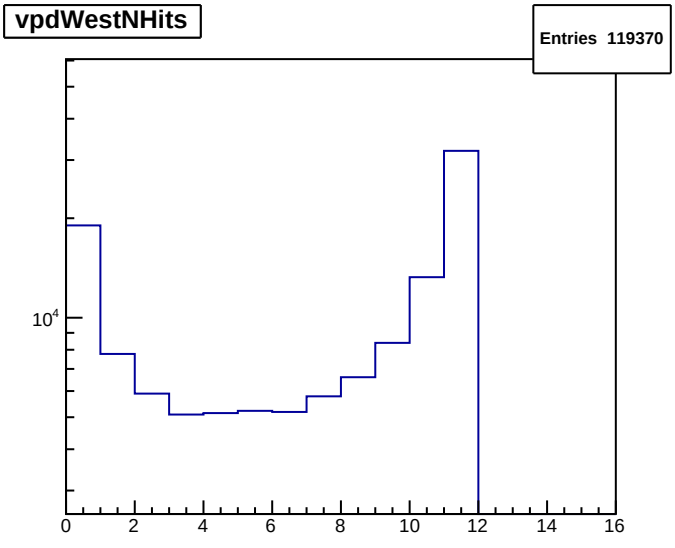

vpdEastNHitsVsSimu
Entries 0
Data
16
14
12
10
8
6
4
2
0
0 2 4 6 8 10 12 14 16
Simu

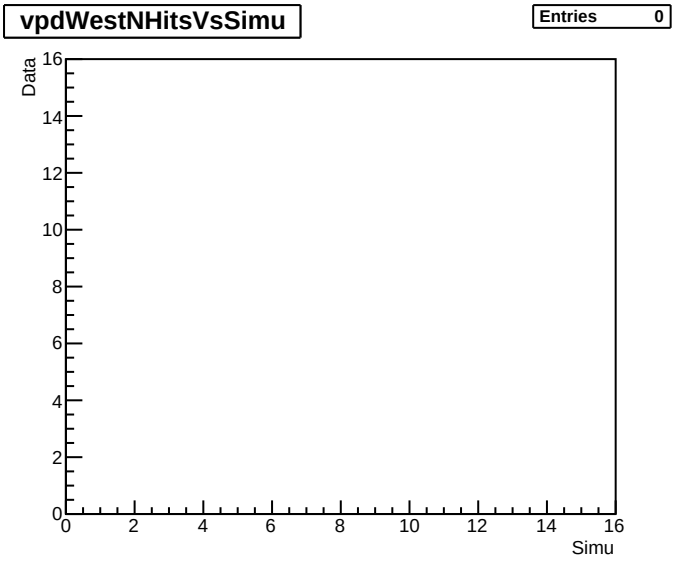

vpdEastTacSum
Entries 119370
$10^4$
$10^3$
$10^2$
10
1
0 5000 10000 15000 20000 25000 30000

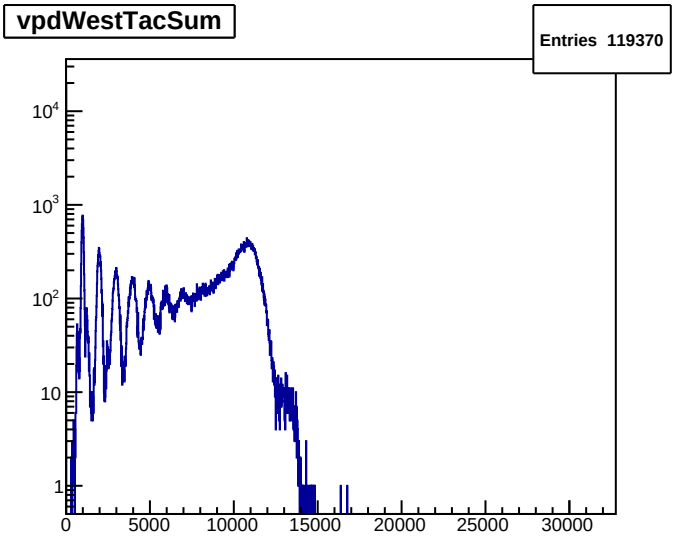

vpdEastTacSumVsSimu
Entries 0
Data
30000
25000
20000
15000
10000
5000
0
0 5000 10000 15000 20000 25000 30000
Simu

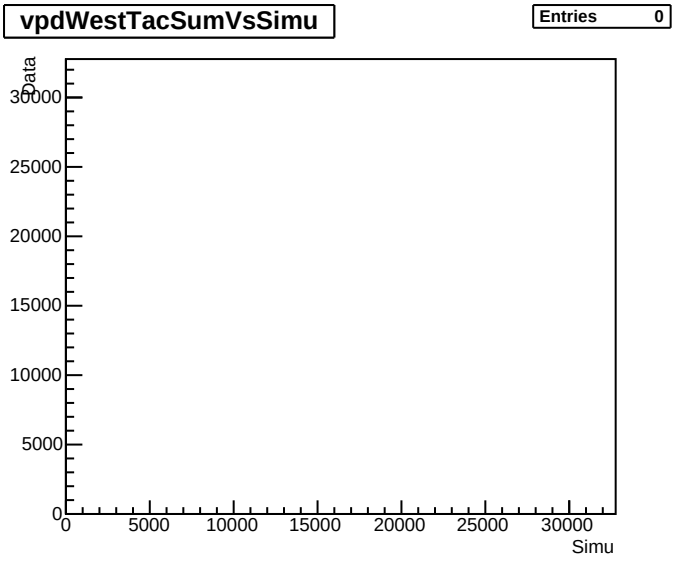

vpdWestAdcSum
Entries 119370
$10^4$
$10^3$
$10^2$
10
0 500 1000 1500 2000 2500 3000 3500 4000

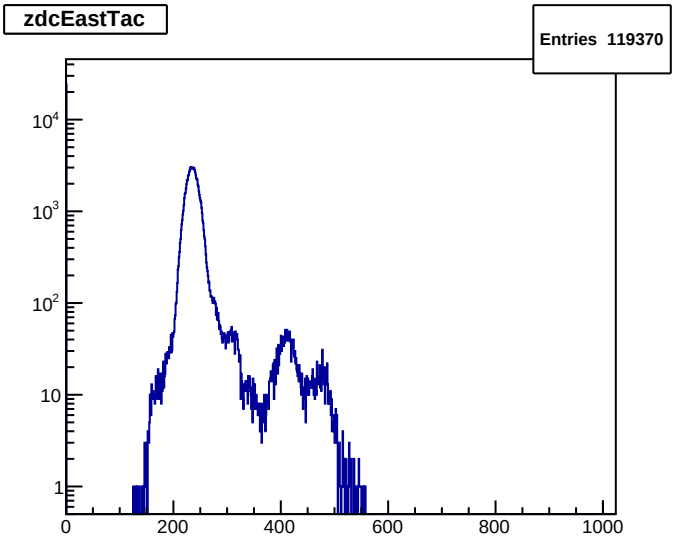

vpdWestAdcSumVsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

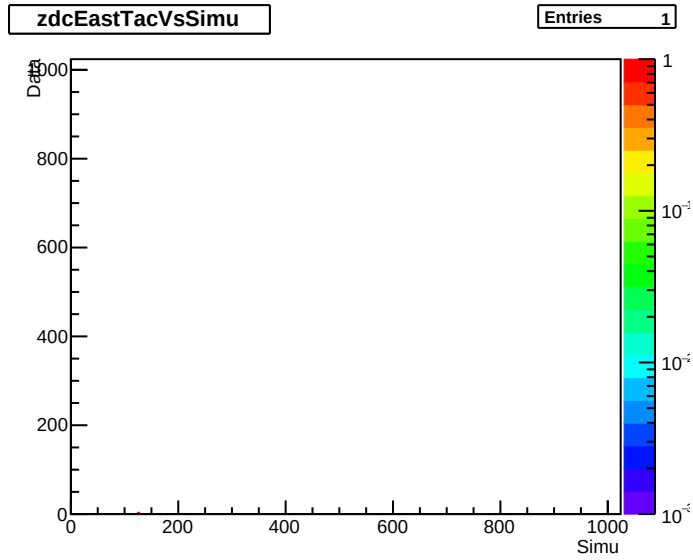

vpdWestNHits
Entries 119370
$10^4$
0 2 4 6 8 10 12 14 16

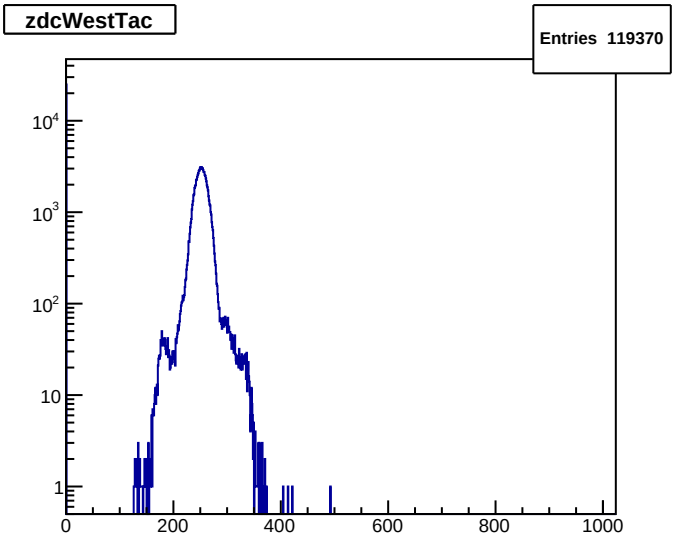

vpdWestNHitsVsSimu
Entries 0
Data
16
14
12
10
8
6
4
2
0
0 2 4 6 8 10 12 14 16
Simu

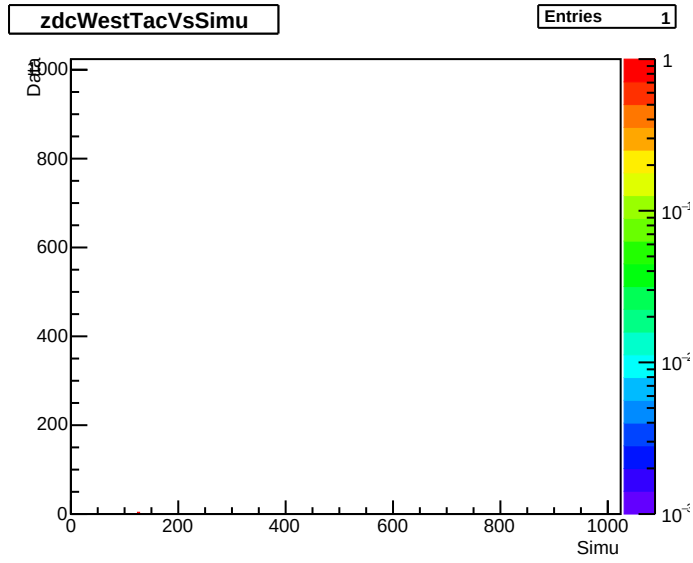

vpdWestTacSum
Entries 119370
$10^4$
$10^3$
$10^2$
10
1
0 5000 10000 15000 20000 25000 30000

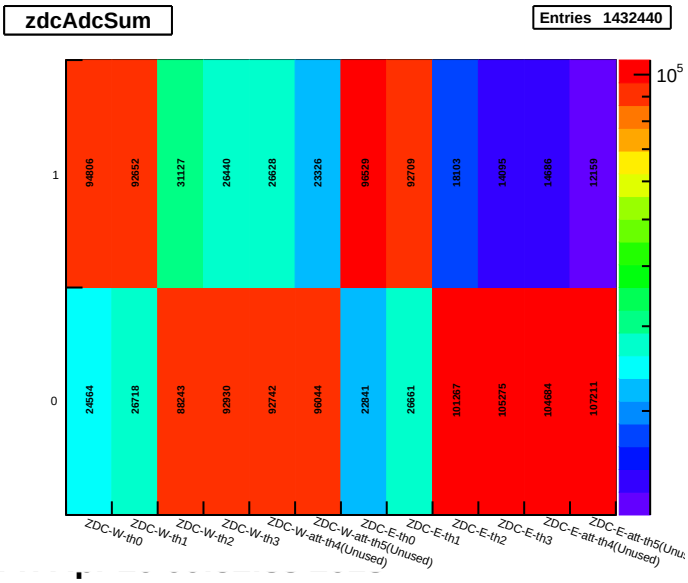

vpdWestTacSumVsSimu
Entries 0
Data
30000
25000
20000
15000
10000
5000
0
0 5000 10000 15000 20000 25000 30000
Simu

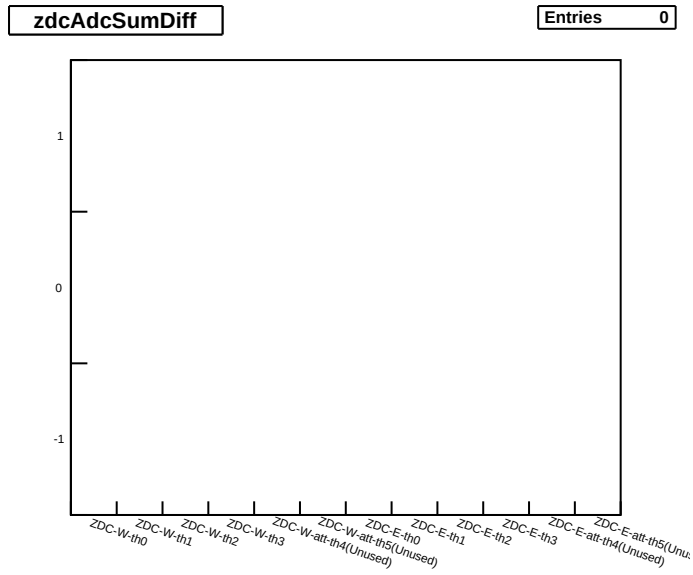

zdcEastTac
Entries 119370

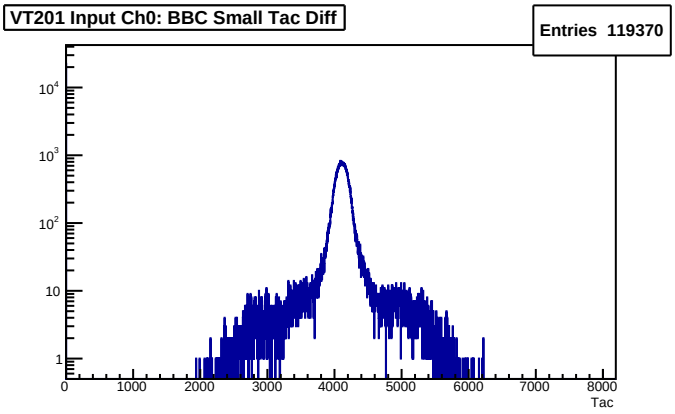

zdcEastTacVsSimu
Entries 1
Data
Simu

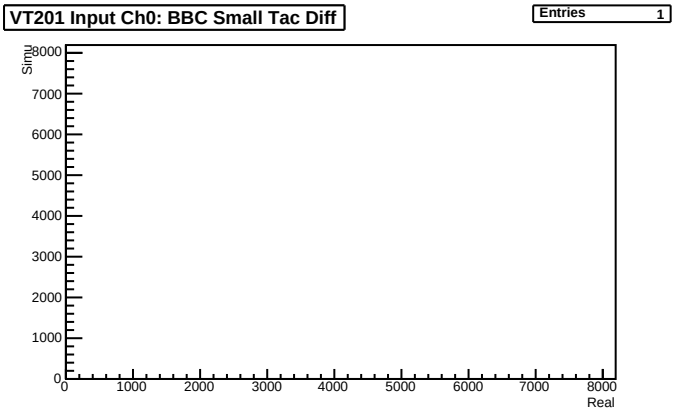

zdcWestTac
Entries 119370

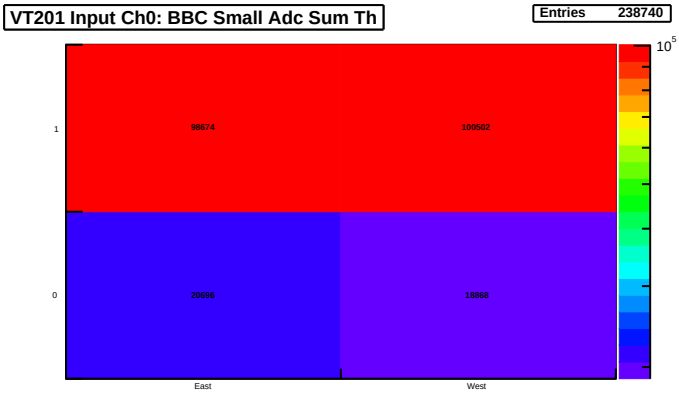

zdcWestTacVsSimu
Entries 1
Data
Simu

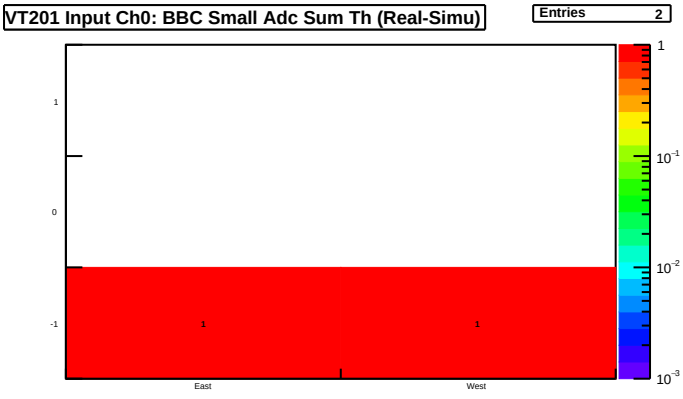

zdcAdcSum
Entries 1432440
94806
92652
31127
26440
26628
23326
96529
92709
18103
14095
14686
12159
24564
26718
88243
92930
92742
96044
22841
26661
101267
105275
104684
107211
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

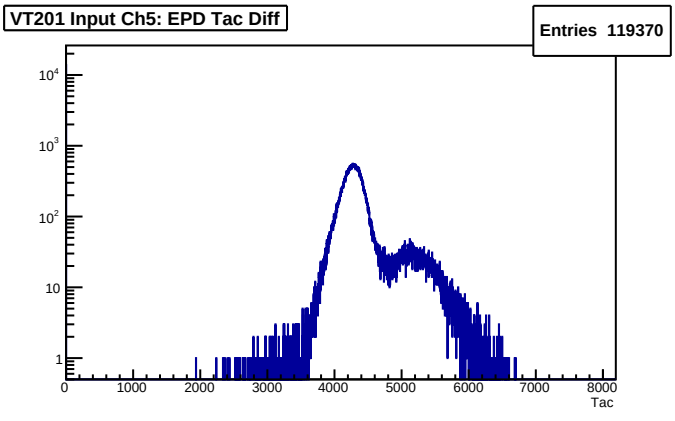

zdcAdcSumDiff
Entries 0
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

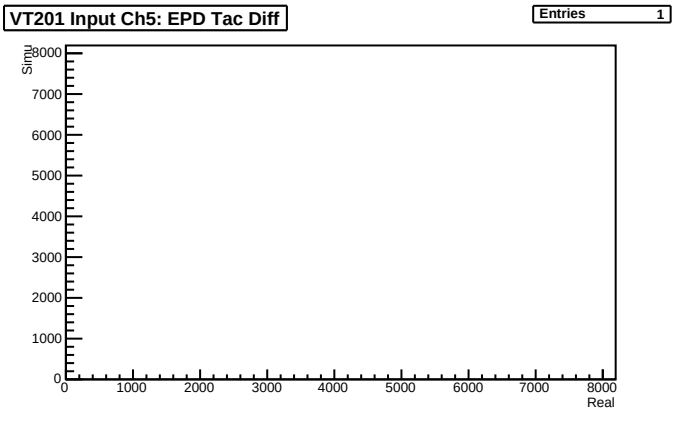

VT201 Input Ch0: BBC Small Tac Diff
Entries 119370
Tac

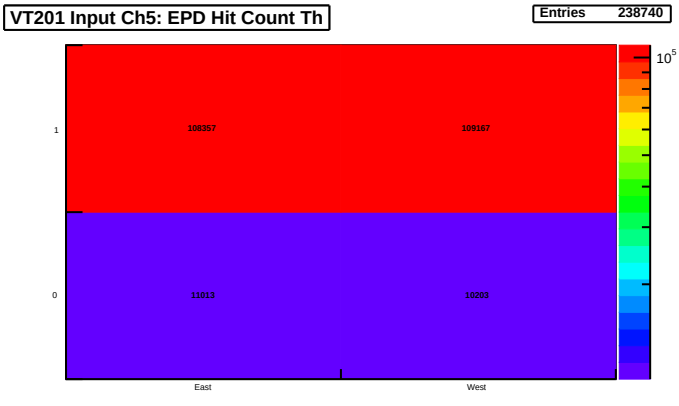

VT201 Input Ch0: BBC Small Tac Diff
Entries 1
Simu
Real

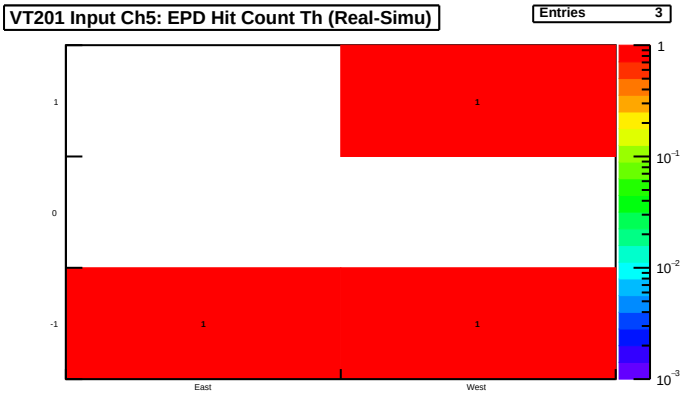

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 238740
98674
100502
20696
18868
East
West

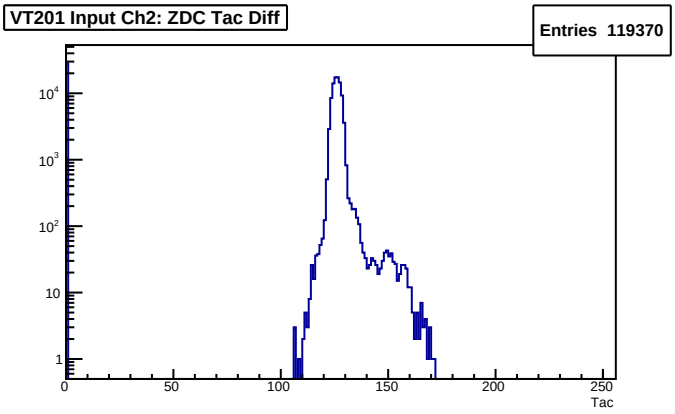

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 2
1
1
East
West

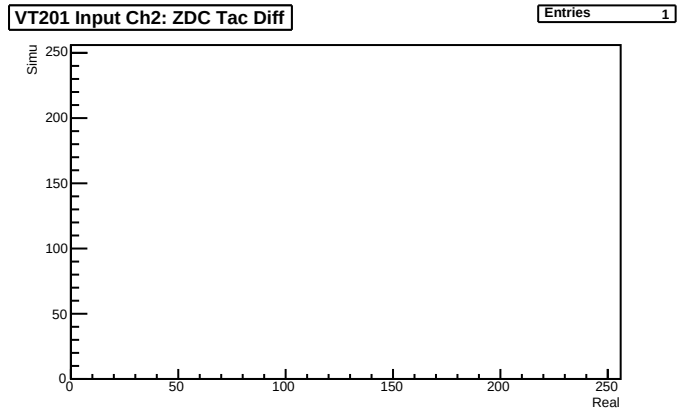

VT201 Input Ch5: EPD Tac Diff
Entries 119370
Tac

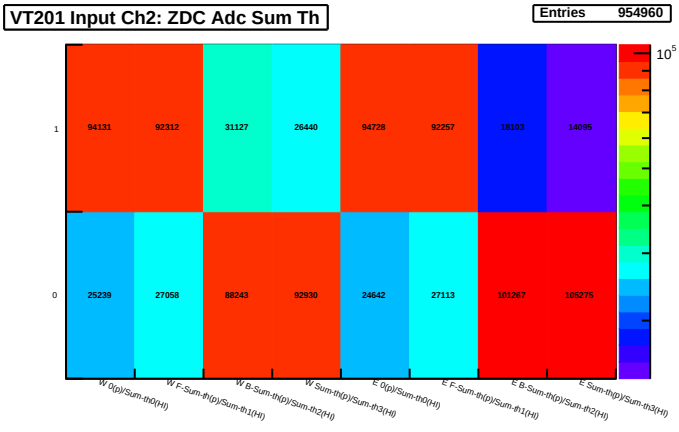

VT201 Input Ch5: EPD Tac Diff
Entries 1
Simu
Real

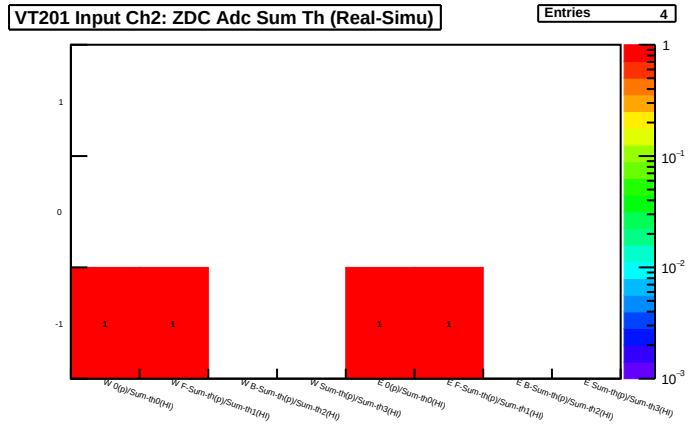

VT201 Input Ch5: EPD Hit Count Th
Entries 238740
108357
109167
11013
10203
East
West

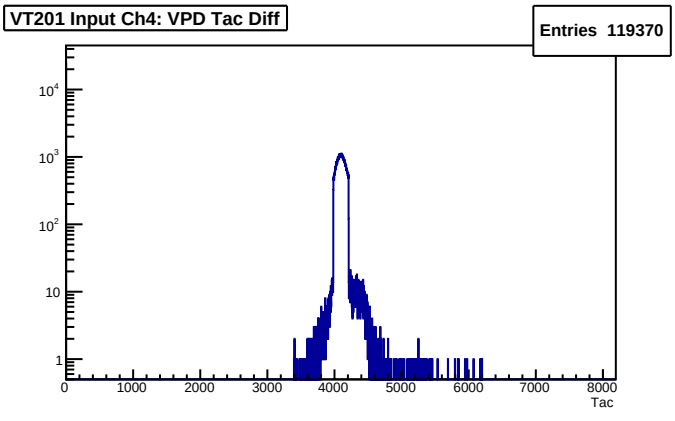

VT201 Input Ch5: EPD Hit Count Th (Real-Simu)
Entries 3
1
1
East
West

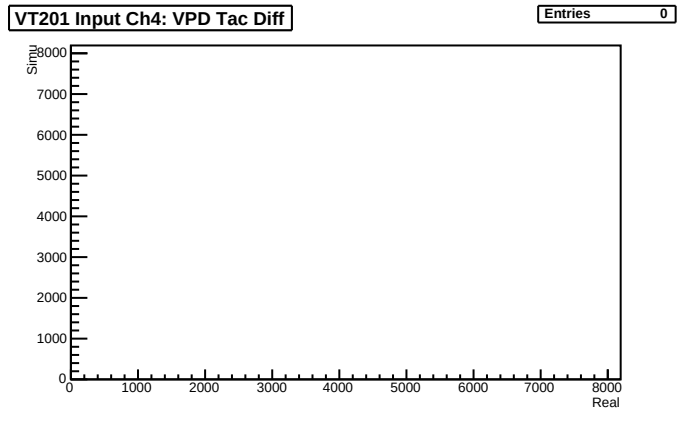

VT201 Input Ch2: ZDC Tac Diff
Entries 119370
Tac

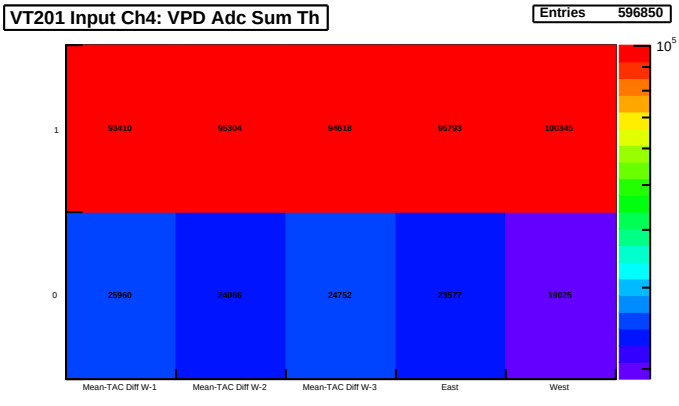

VT201 Input Ch2: ZDC Tac Diff
Entries 1
Simu
Real

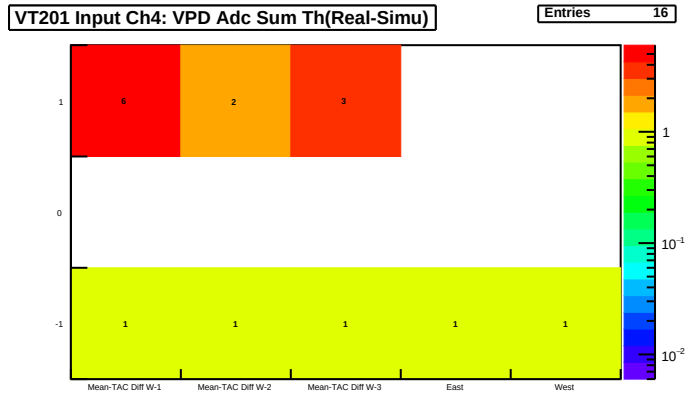

VT201 Input Ch2: ZDC Adc Sum Th
Entries 954960
94131 92312 31127 26440 94728 92257 16103 14095
25239 27058 88243 92930 24642 27113 101267 105275
W 0(p)/Sum-th0(Hi)
W F-Sum-th(p)/Sum-th1(Hi)
W B-Sum-th(p)/Sum-th2(Hi)
W Sum-th(p)/Sum-th3(Hi)
E 0(p)/Sum-th0(Hi)
E F-Sum-th(p)/Sum-th1(Hi)
E B-Sum-th(p)/Sum-th2(Hi)
E Sum-th(p)/Sum-th3(Hi)

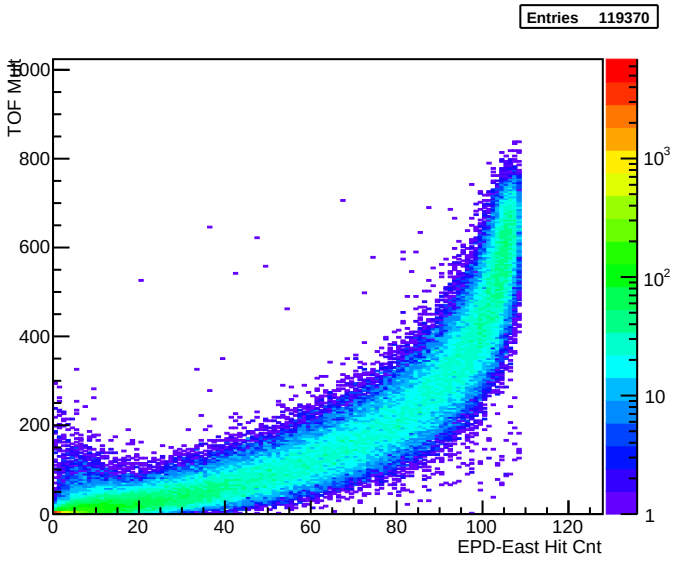

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 4
1 1 1 1
W 0(p)/Sum-th0(Hi)
W F-Sum-th(p)/Sum-th1(Hi)
W B-Sum-th(p)/Sum-th2(Hi)
W Sum-th(p)/Sum-th3(Hi)
E 0(p)/Sum-th0(Hi)
E F-Sum-th(p)/Sum-th1(Hi)
E B-Sum-th(p)/Sum-th2(Hi)
E Sum-th(p)/Sum-th3(Hi)

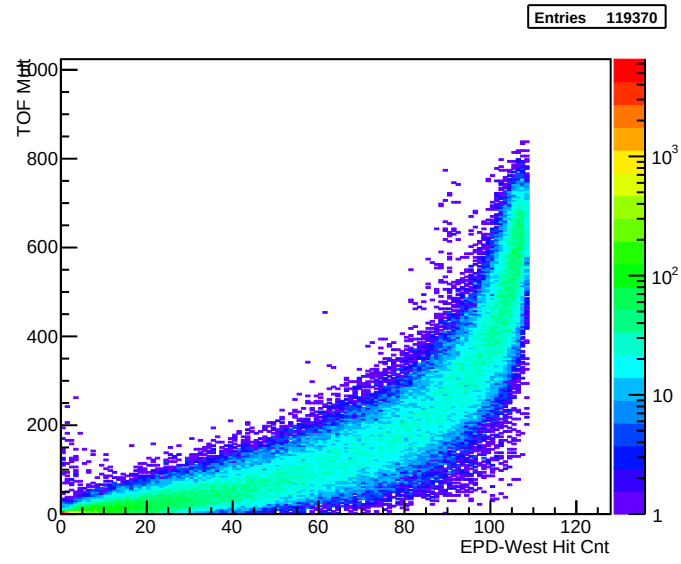

VT201 Input Ch4: VPD Tac Diff
Entries 119370
Tac

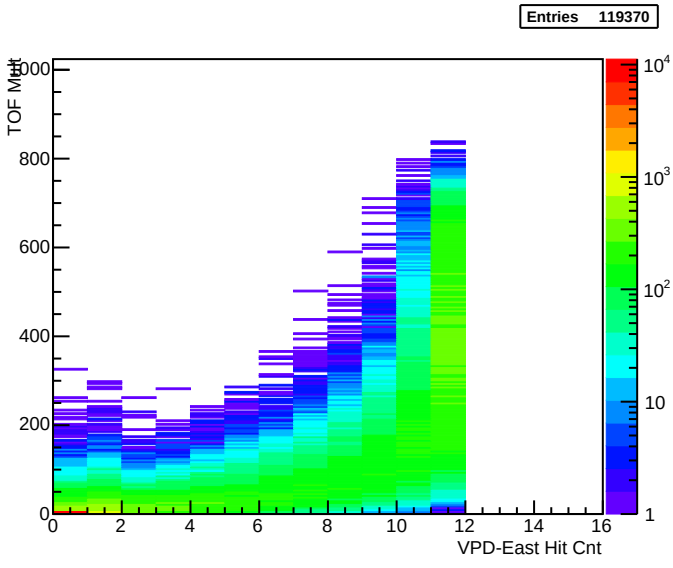

VT201 Input Ch4: VPD Tac Diff
Entries 0
Simu
Real

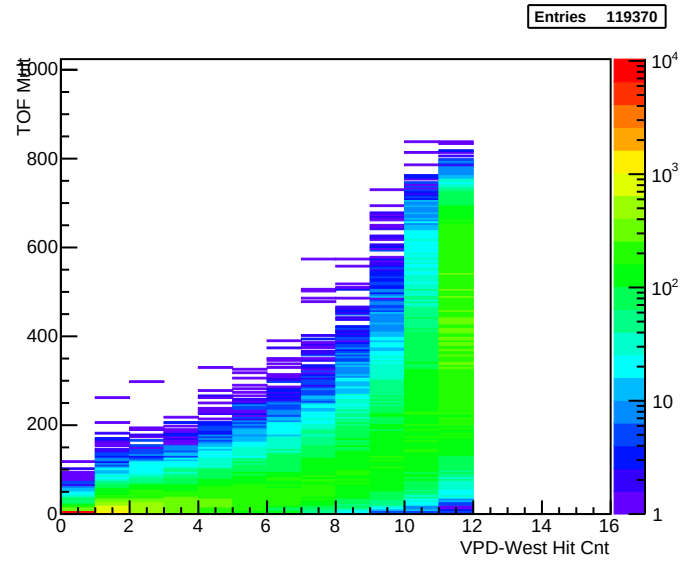

VT201 Input Ch4: VPD Adc Sum Th
Entries 596850
93410 95304 94618 95793 100345
25960 24066 24752 23577 19025
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

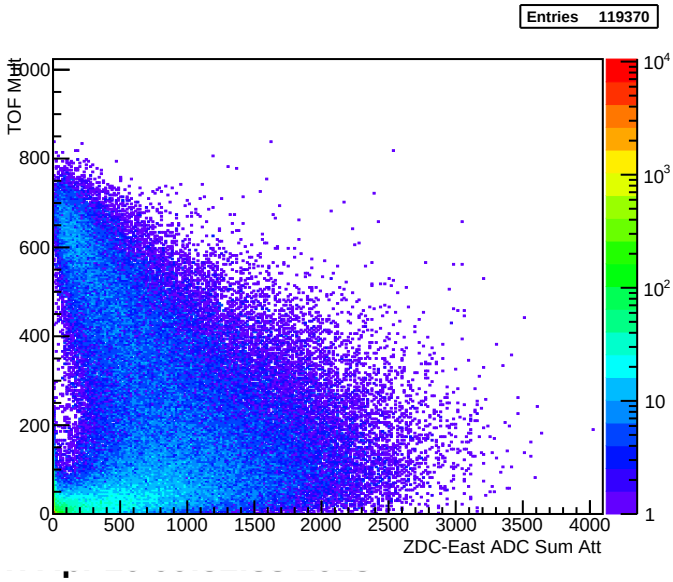

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 16
6 2 3
1 1 1 1 1
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

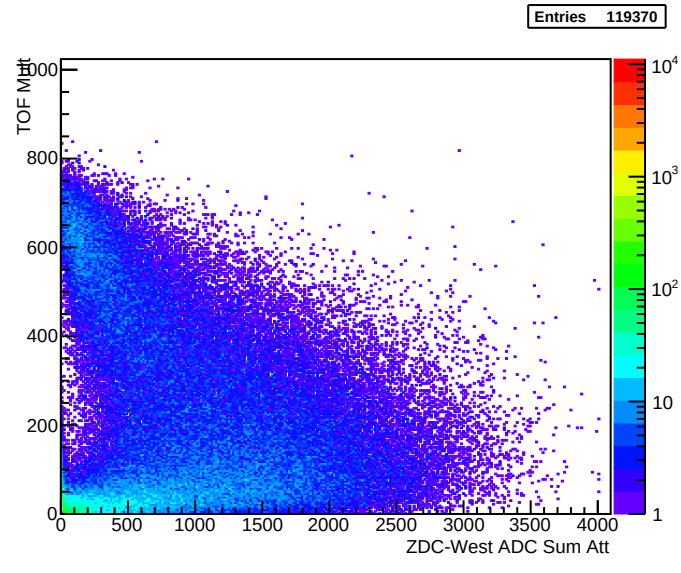

Entries 119370
TOF Mult
EPD-East Hit Cnt

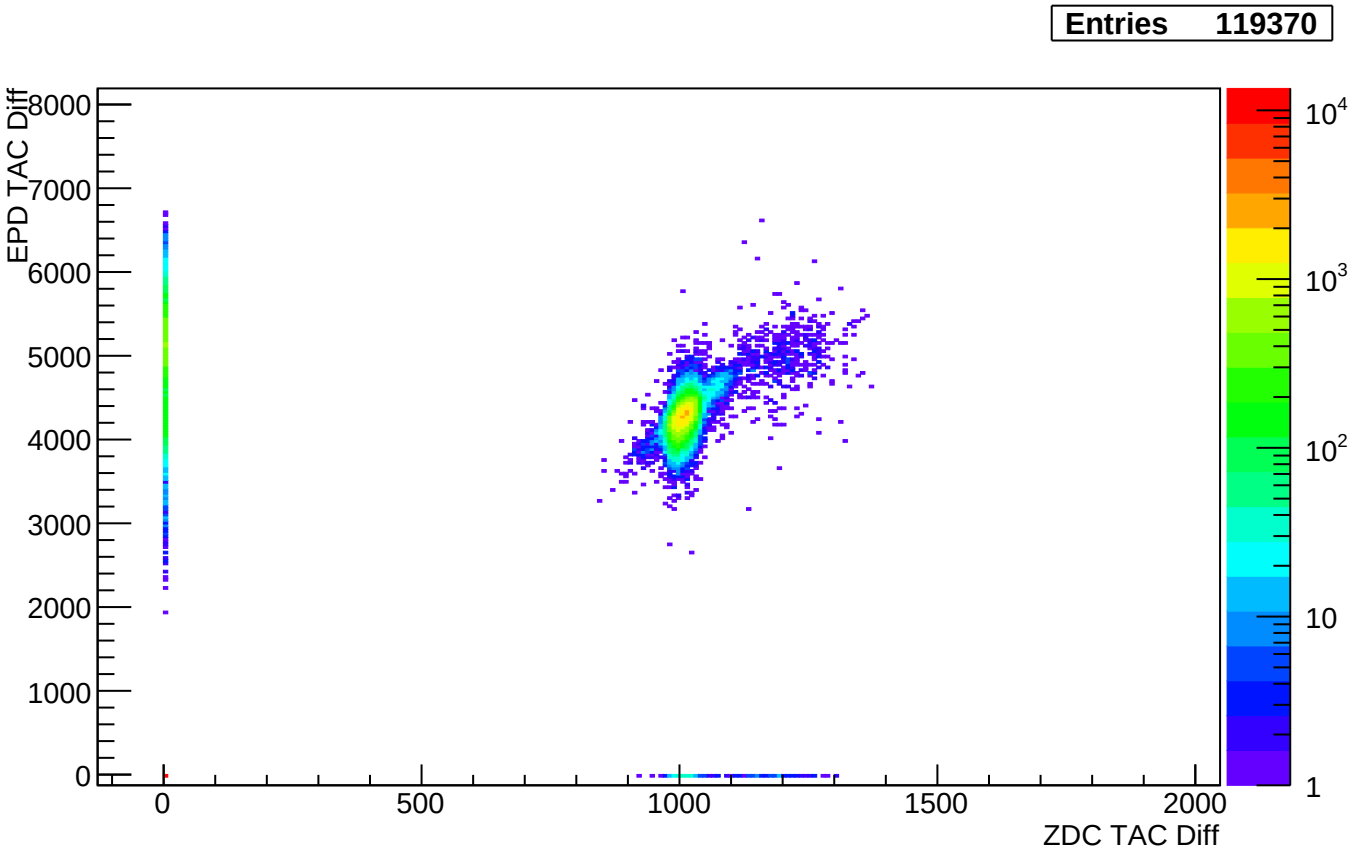

Entries 119370
TOF Mult
EPD-West Hit Cnt

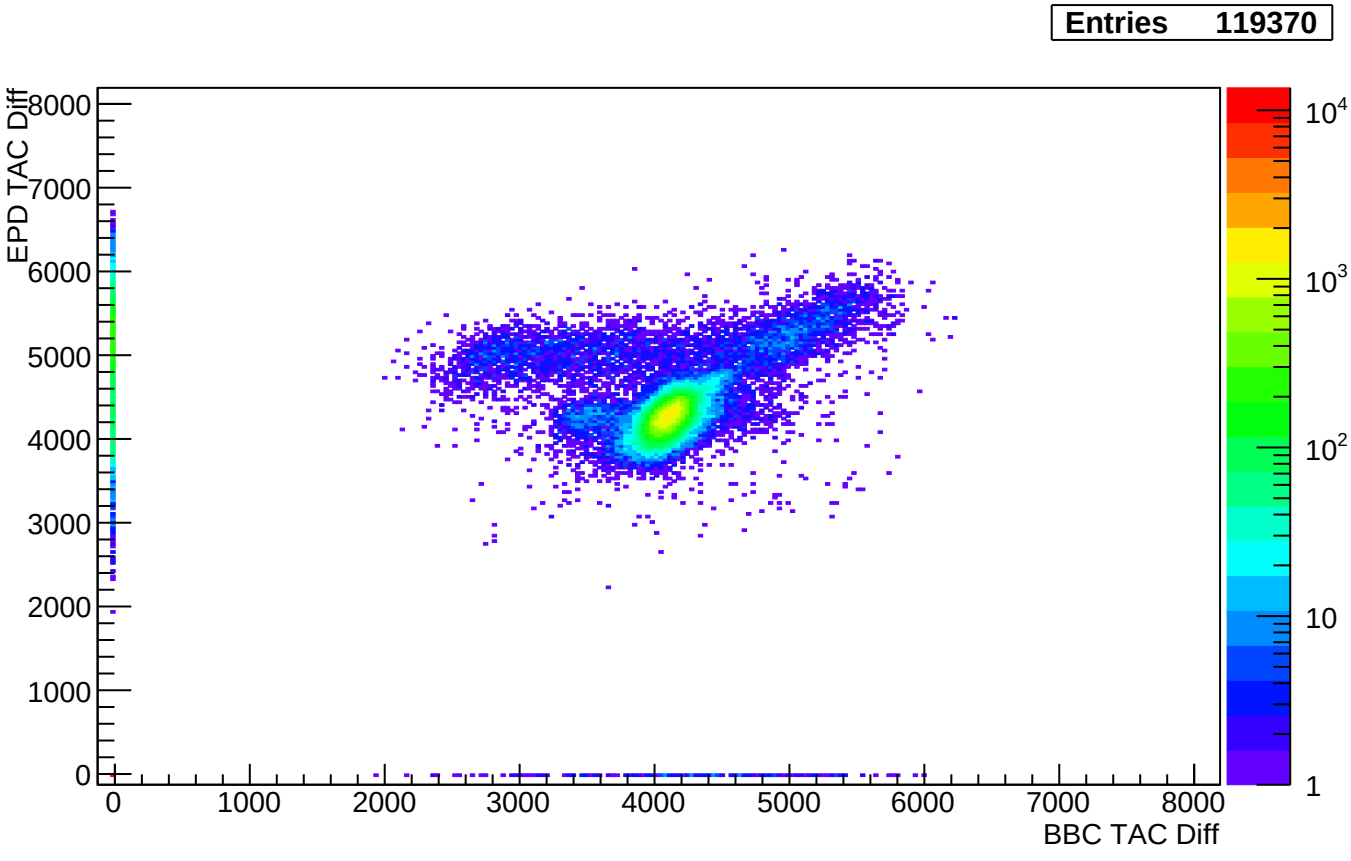

Entries 119370
TOF Mult
VPD-East Hit Cnt

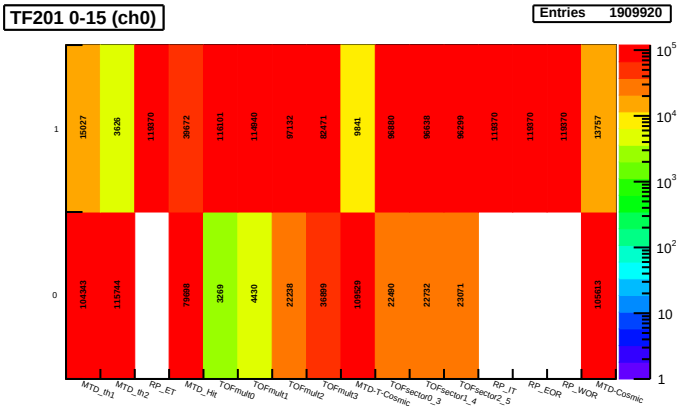

Entries 119370
TOF Mult
VPD-West Hit Cnt

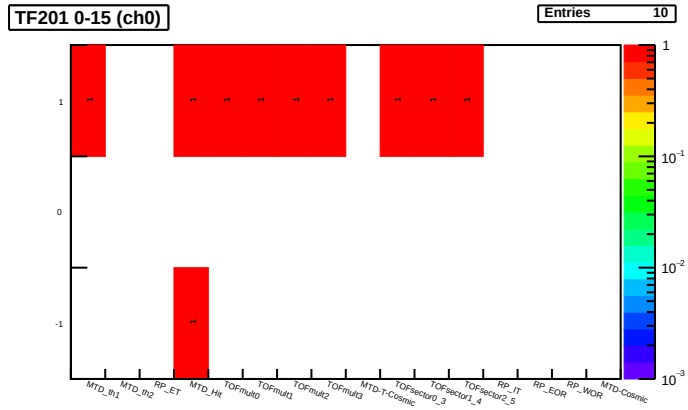

Entries 119370
TOF Mult
ZDC-East ADC Sum Att

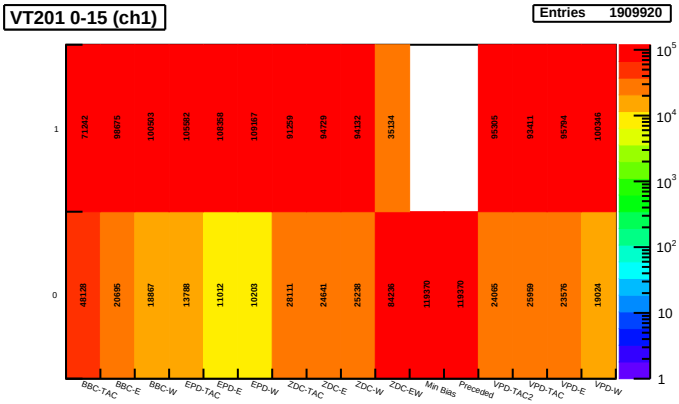

Entries 119370
TOF Mult
ZDC-West ADC Sum Att

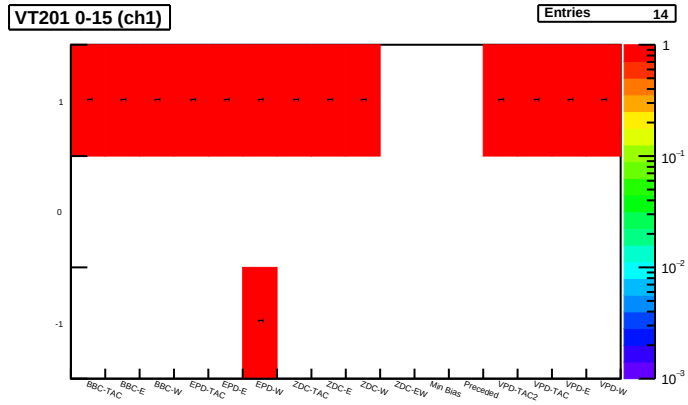

Entries 119370
EPD TAC Diff
ZDC TAC Diff
0
500
1000
1500
2000
1000
2000
3000
4000
5000
6000
7000
8000
1
10
$10^2$
$10^3$
$10^4$

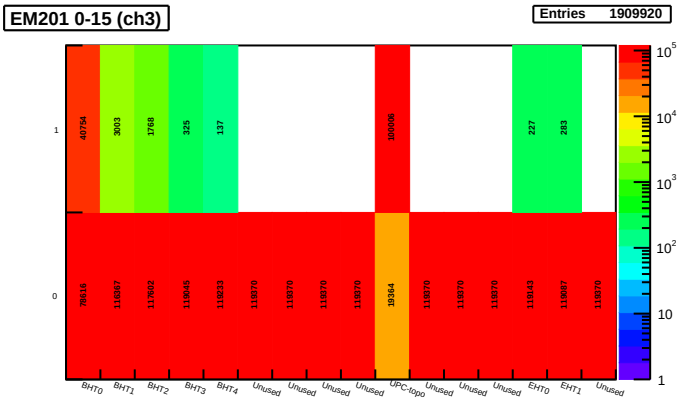

Entries 119370
EPD TAC Diff
BBC TAC Diff
0
1000
2000
3000
4000
5000
6000
7000
8000
1
10
$10^2$
$10^3$
$10^4$

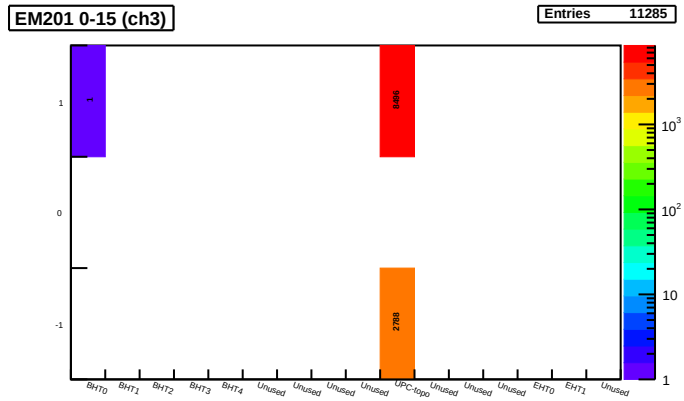

TF201 0-15 (ch0)
Entries 1909920
MTD_th1
MTD_th2
RP_ET
MTD_Hit
TOFmult0
TOFmult1
TOFmult2
TOFmult3
MTD-T-Cosmic
TOFsector0_3
TOFsector1_4
TOFsector2_5
RP_IT
RP_EOR
RP_WOR
MTD-Cosmic

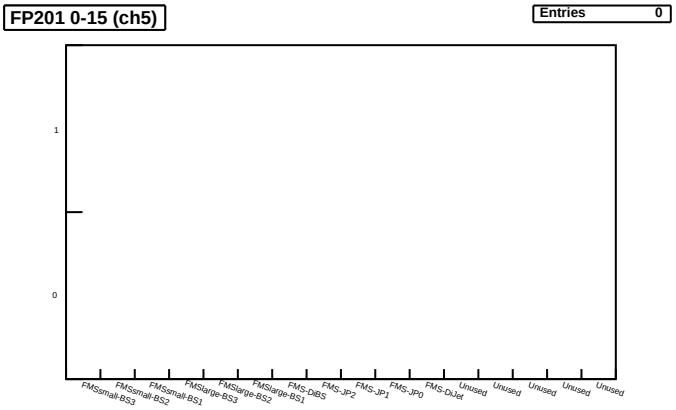

TF201 0-15 (ch0)
Entries 10
MTD_th1
MTD_th2
RP_ET
MTD_Hit
TOFmult0
TOFmult1
TOFmult2
TOFmult3
MTD-T-Cosmic
TOFsector0_3
TOFsector1_4
TOFsector2_5
RP_IT
RP_EOR
RP_WOR
MTD-Cosmic

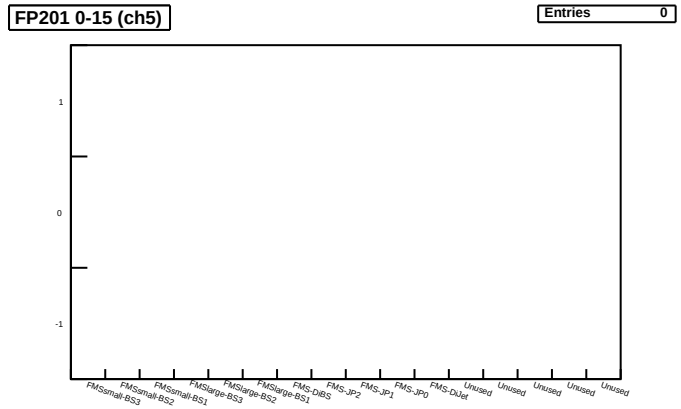

VT201 0-15 (ch1)
Entries 1909920
BBC-TAC
BBC-E
BBC-W
EPD-TAC
EPD-E
EPD-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-EW
Min Bias
Preceded
VPD-TAC2
VPD-TAC
VPD-E
VPD-W


VT201 0-15 (ch1)
Entries 14
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 1909920
BHT0
BHT1
BHT2
BHT3
BHT4
Unused
UPC-topo
EHT0
EHT1


EM201 0-15 (ch3)
Entries 11285
BHT0
BHT1
BHT2
BHT3
BHT4
Unused
UPC-topo
EHT0
EHT1


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


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