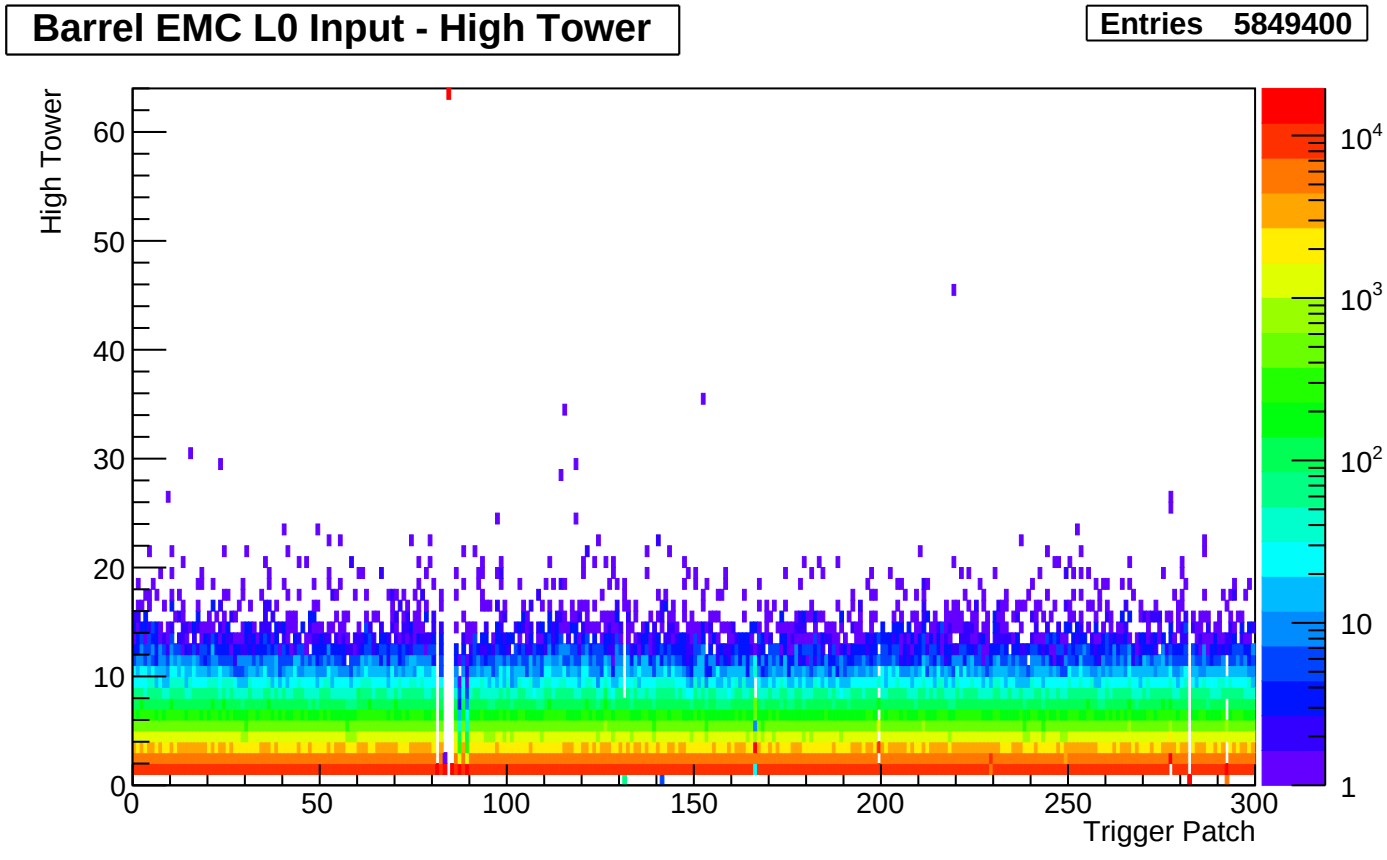
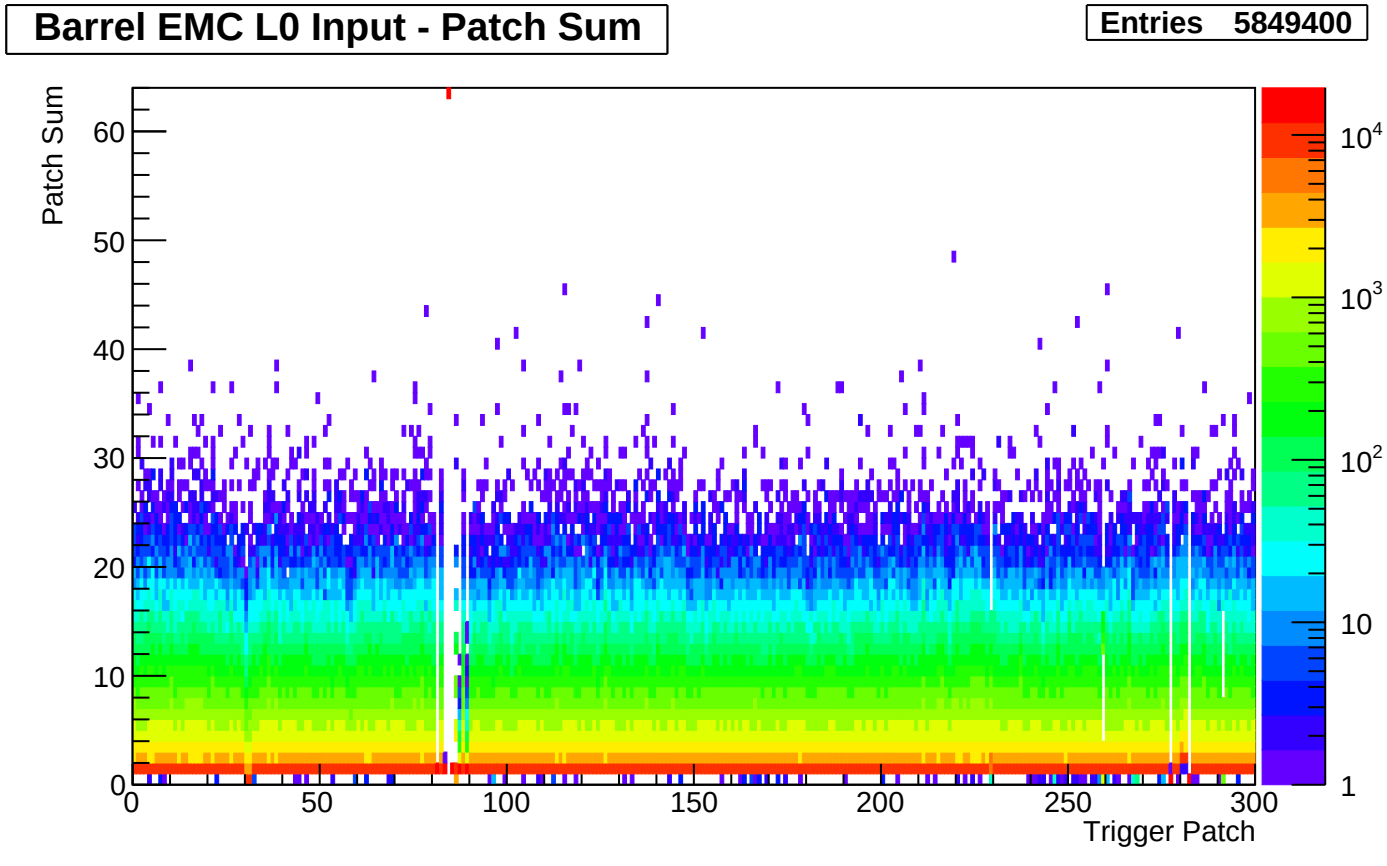
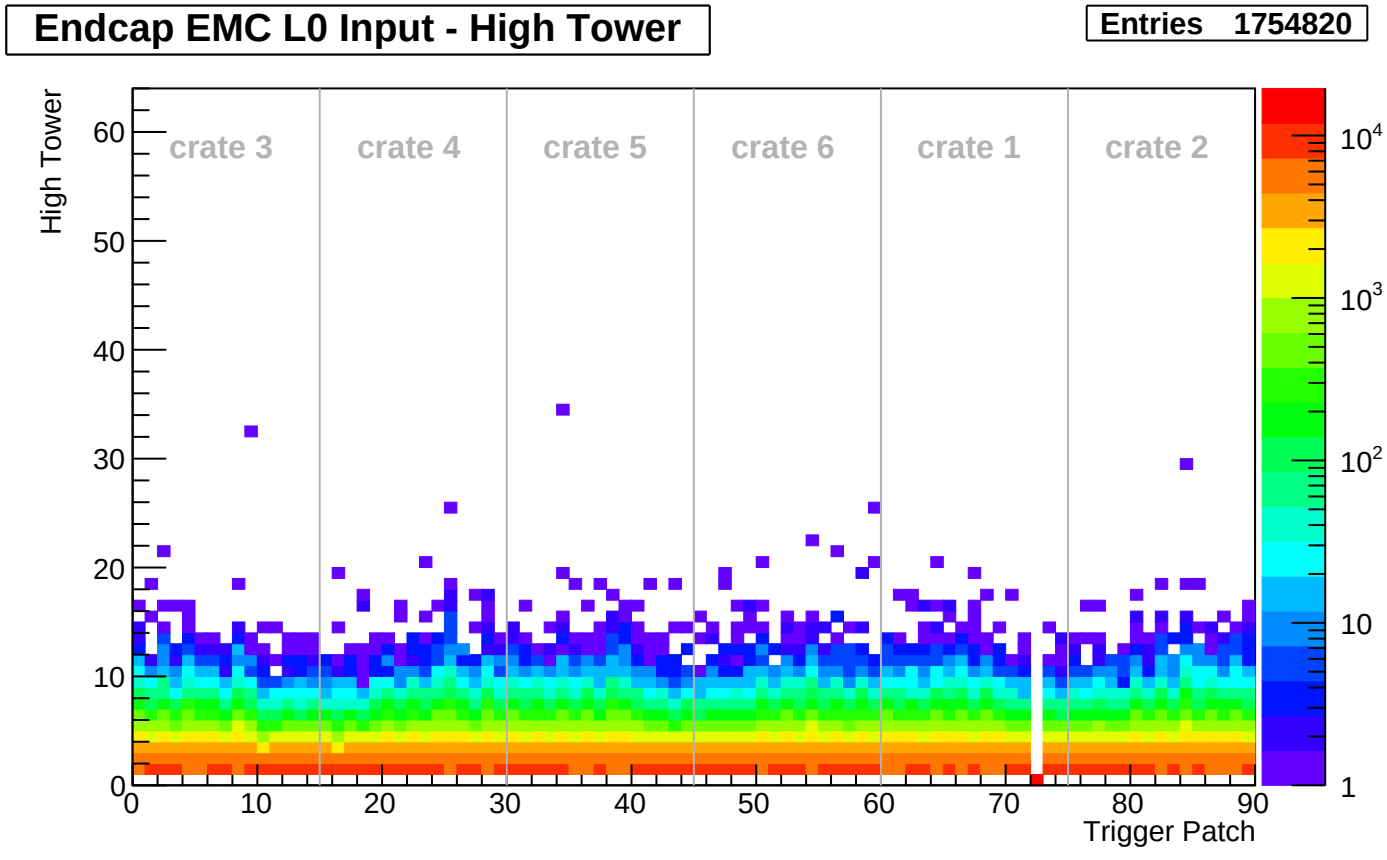
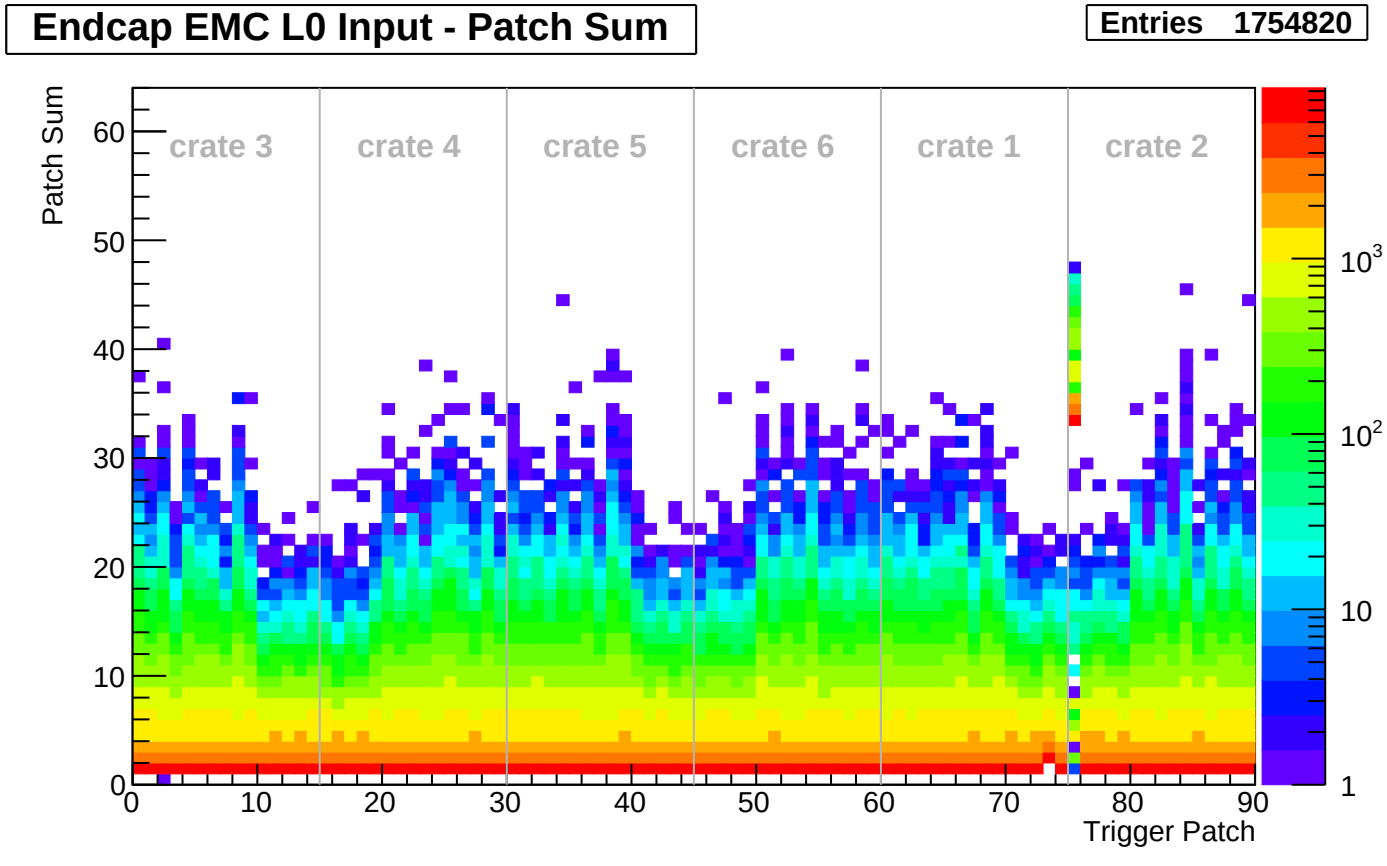
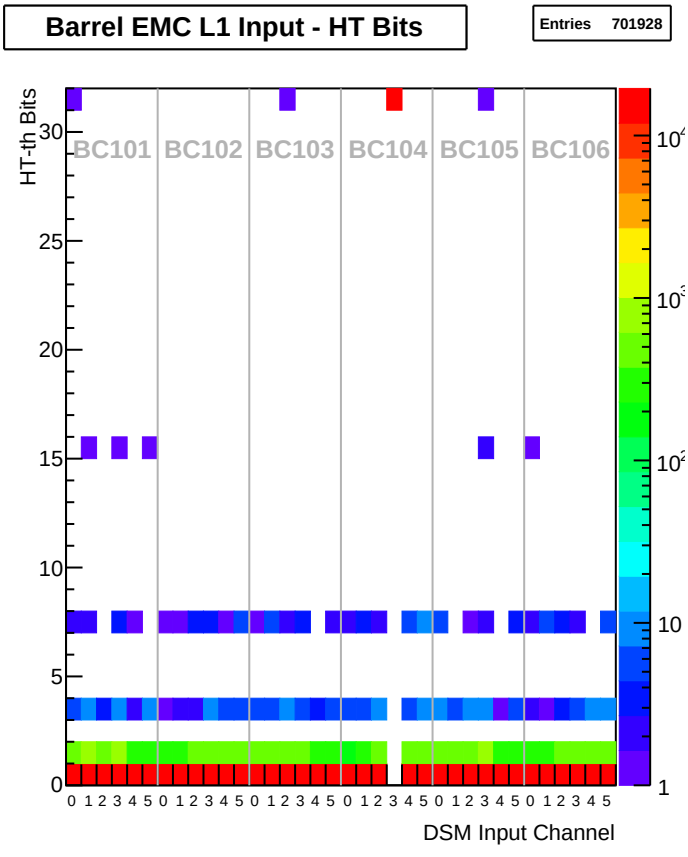
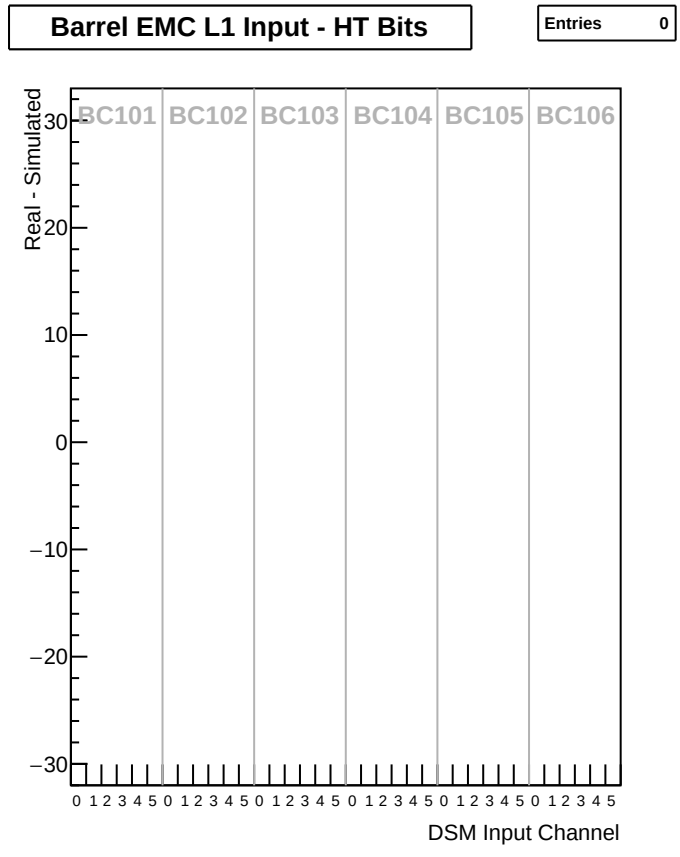

Barrel EMC L0 Input - High Tower
Entries 5849400
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

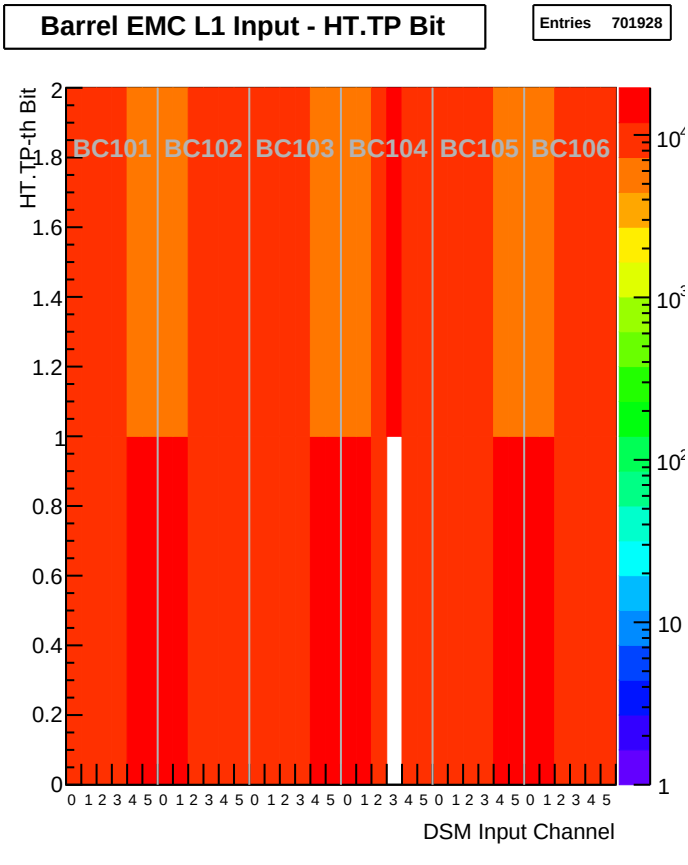

Barrel EMC L0 Input - Patch Sum
Entries 5849400
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

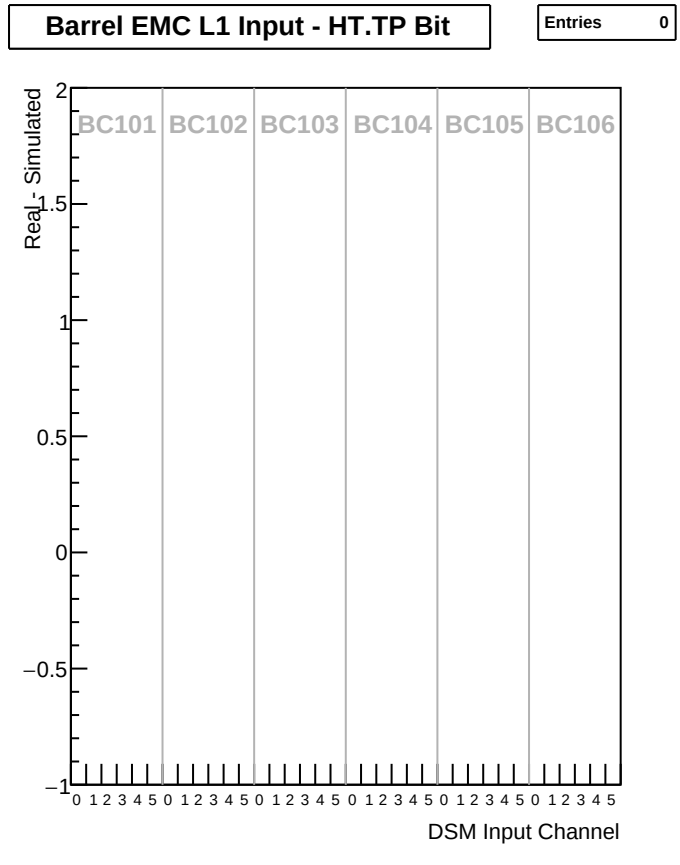

Endcap EMC L0 Input - High Tower
Entries 1754820
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

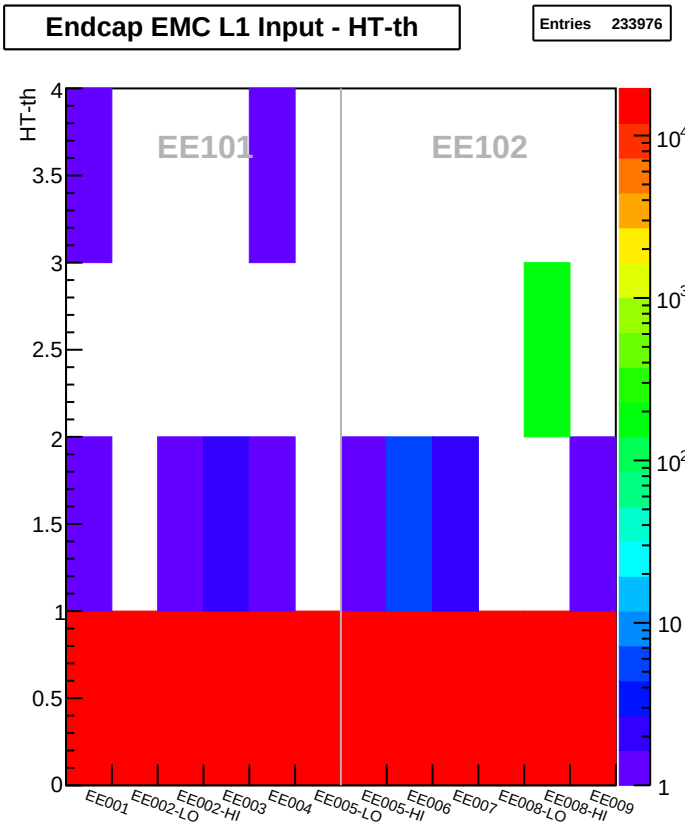

Endcap EMC L0 Input - Patch Sum
Entries 1754820
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

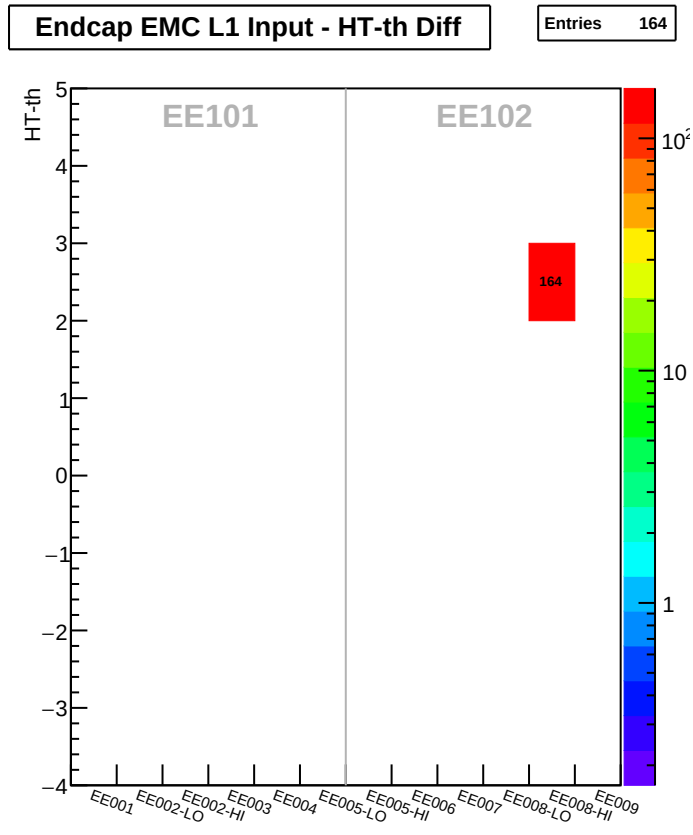

Barrel EMC L1 Input - HT Bits
Entries 701928
HT-th Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

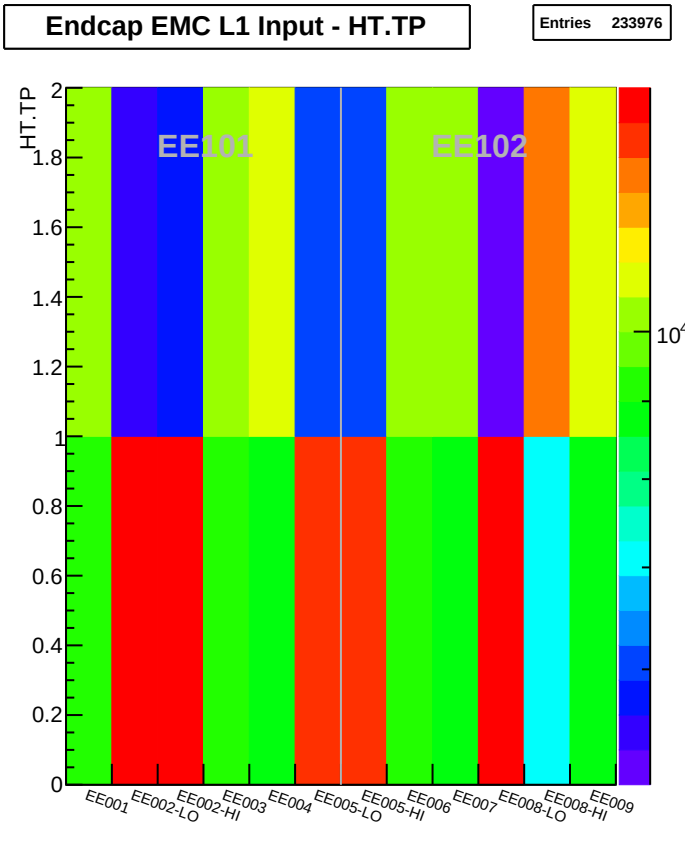

Barrel EMC L1 Input - HT Bits
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

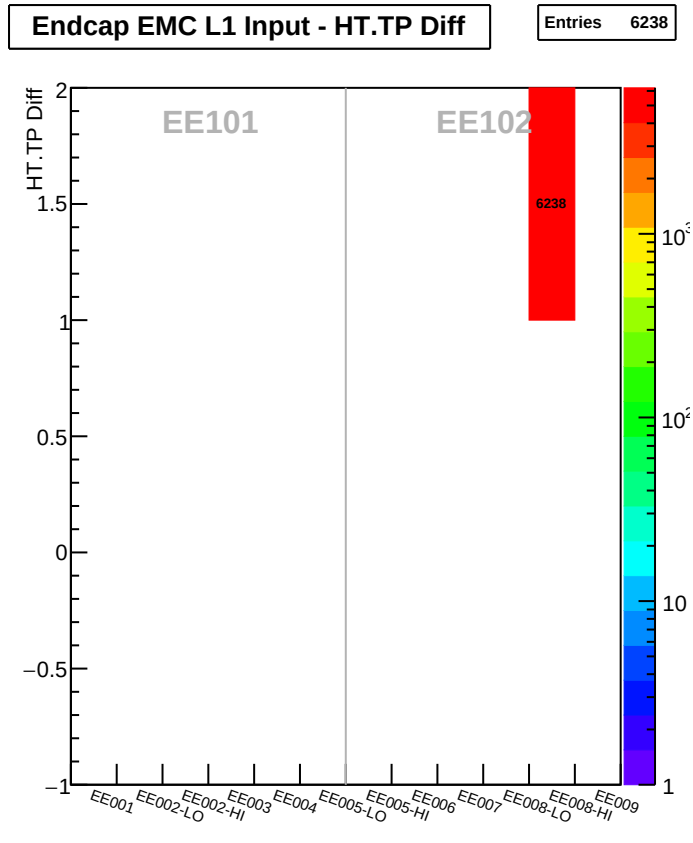

Barrel EMC L1 Input - HT.TP Bit
Entries 701928
HT.TP-th Bit
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

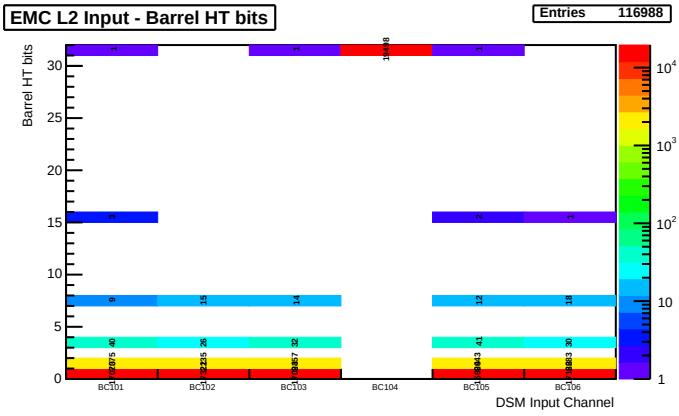

Barrel EMC L1 Input - HT.TP Bit
Entries 0
Real - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

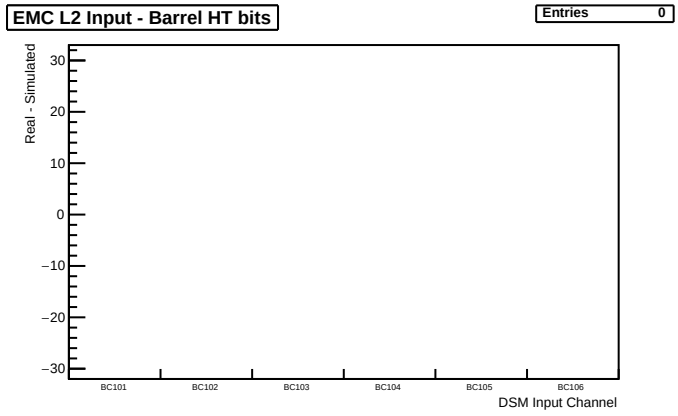

Endcap EMC L1 Input - HT-th
Entries 233976
HT-th
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

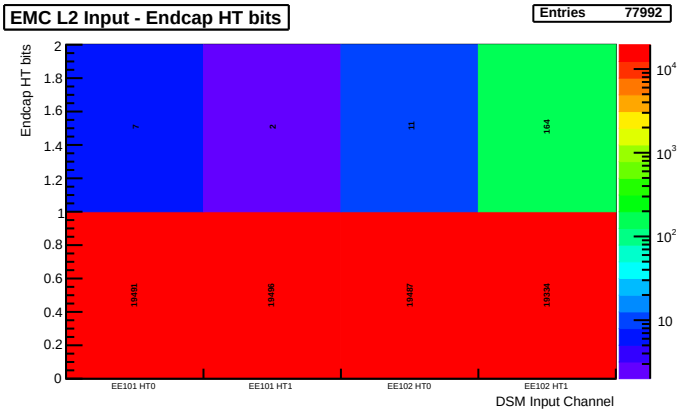

Endcap EMC L1 Input - HT-th Diff
Entries 164
HT-th
EE101
EE102
164
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

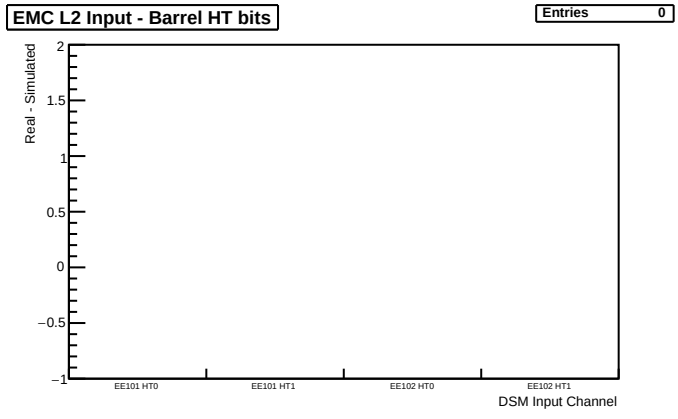

Endcap EMC L1 Input - HT.TP
Entries 233976
HT.TP
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

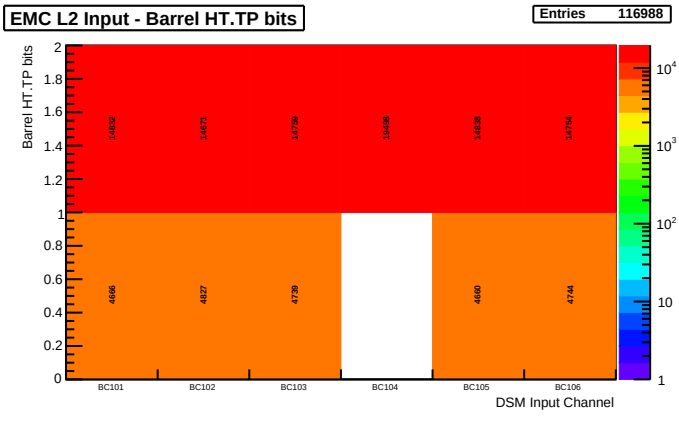

Endcap EMC L1 Input - HT.TP Diff
Entries 6238
HT.TP Diff
EE101
EE102
6238
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

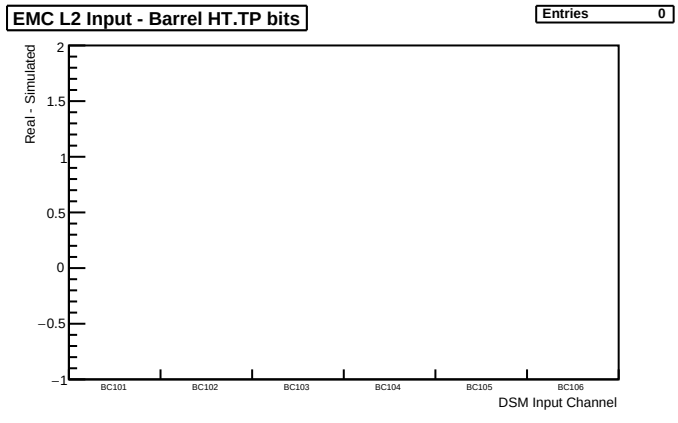

EMC L2 Input - Barrel HT bits
Entries 116988
Barrel HT bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

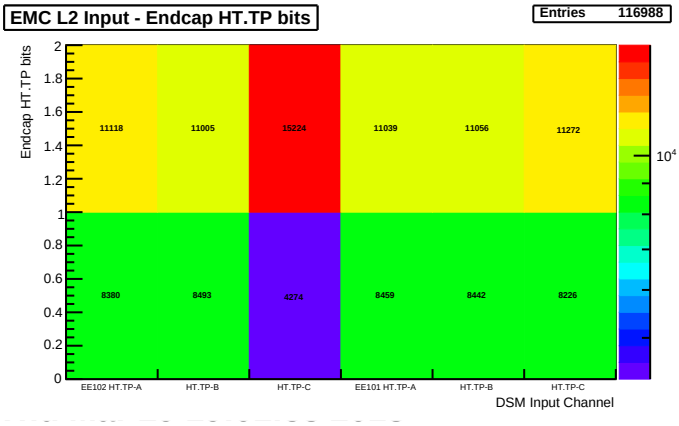

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

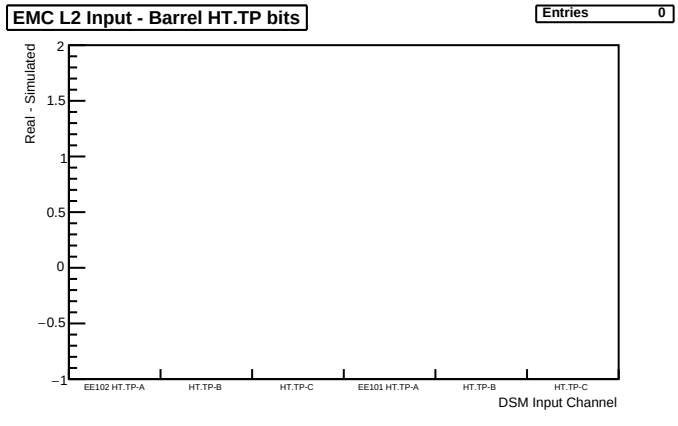

EMC L2 Input - Endcap HT bits
Entries 77992
Endcap HT bits
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

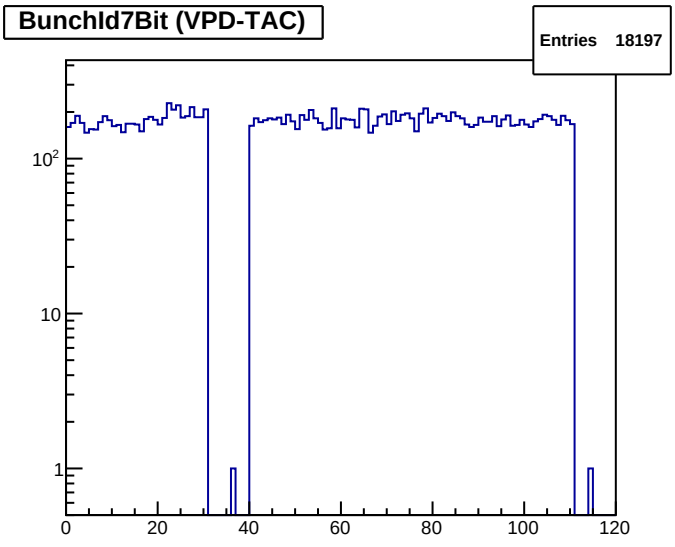

EMC L2 Input - Barrel HT bits
Entries 0
Real - Simulated
DSM Input Channel
EE101 HT0
EE101 HT1
EE102 HT0
EE102 HT1

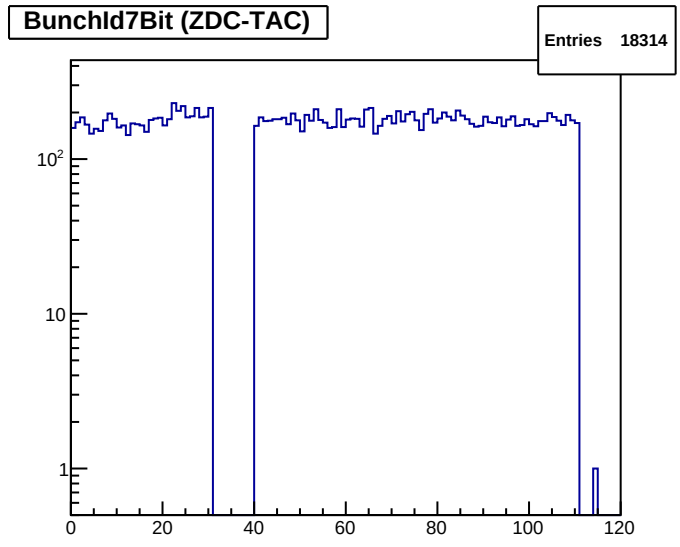

EMC L2 Input - Barrel HT.TP bits
Entries 116988
Barrel HT.TP bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

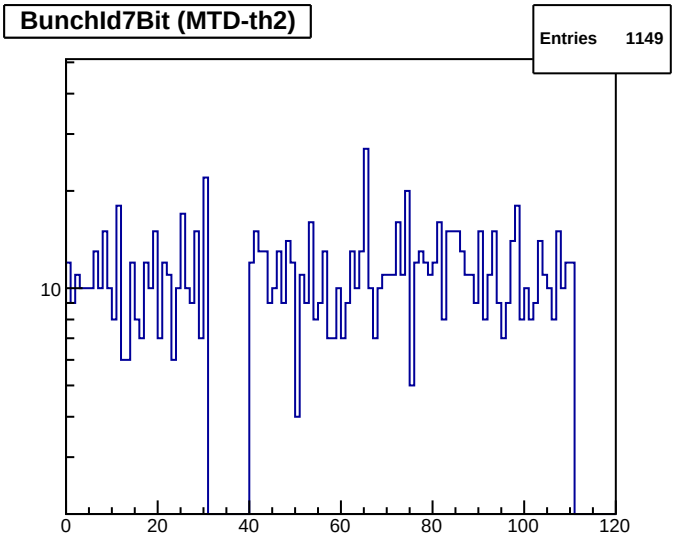

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106

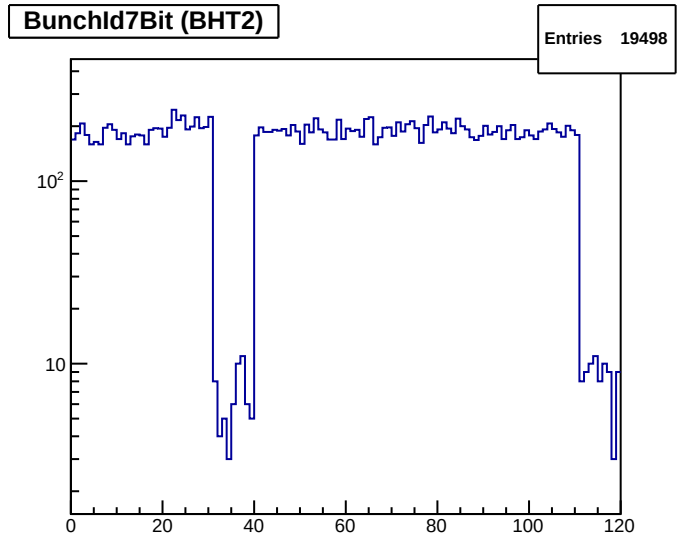

EMC L2 Input - Endcap HT.TP bits
Entries 116988
Endcap HT.TP bits
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

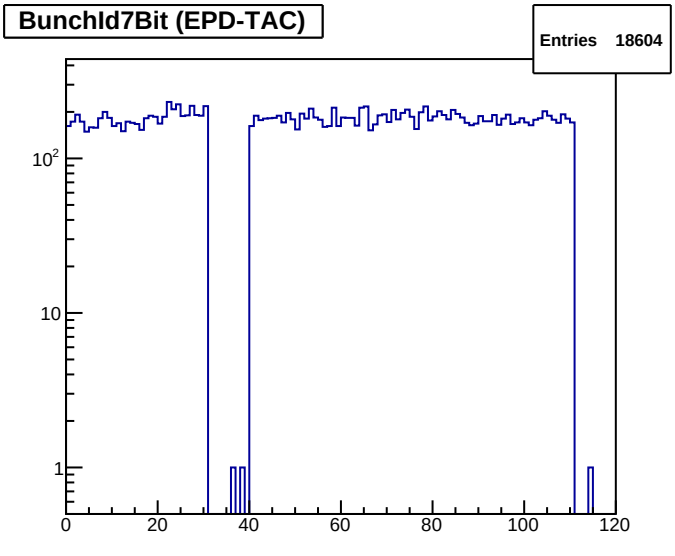

EMC L2 Input - Barrel HT.TP bits
Entries 0
Real - Simulated
DSM Input Channel
EE102 HT.TP-A
HT.TP-B
HT.TP-C
EE101 HT.TP-A
HT.TP-B
HT.TP-C

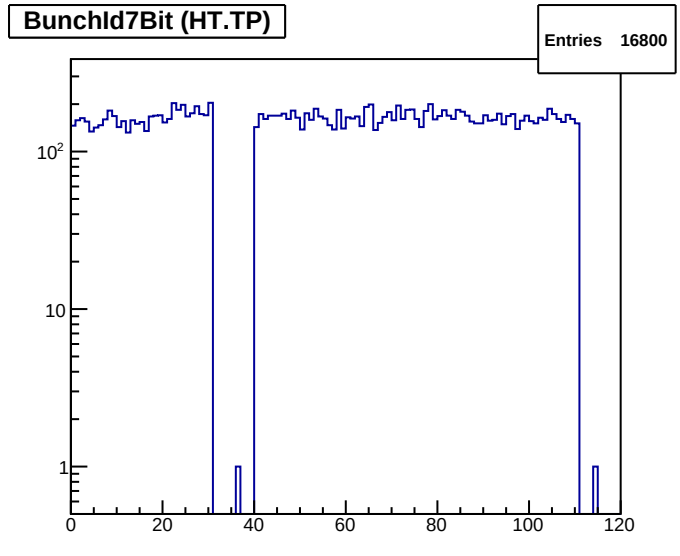

BunchId7Bit (VPD-TAC)
Entries 18197
10^2
10
1
0
20
40
60
80
100
120

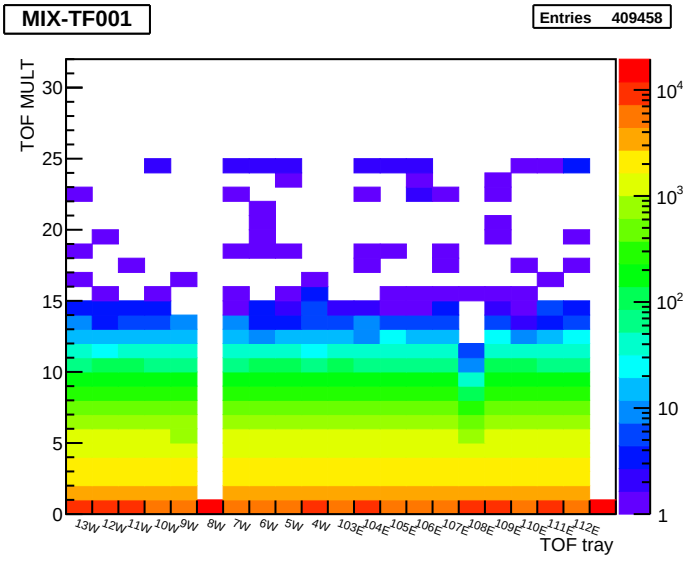

BunchId7Bit (ZDC-TAC)
Entries 18314
10^2
10
1
0
20
40
60
80
100
120

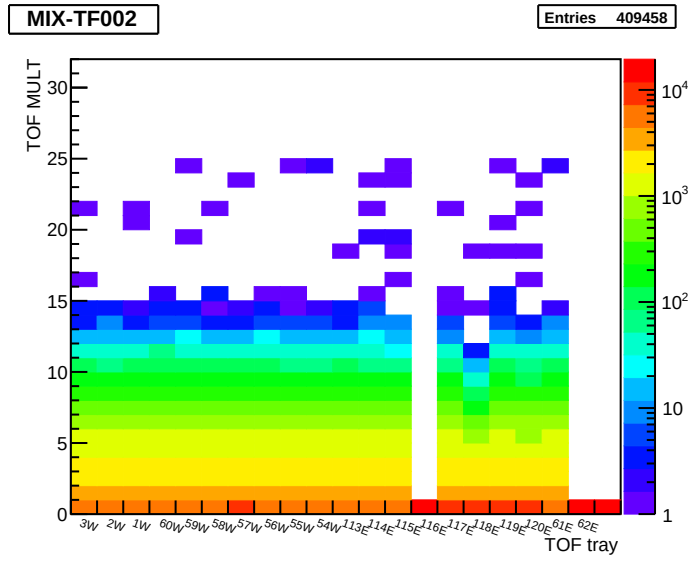

BunchId7Bit (MTD-th2)
Entries 1149
10
0
20
40
60
80
100
120

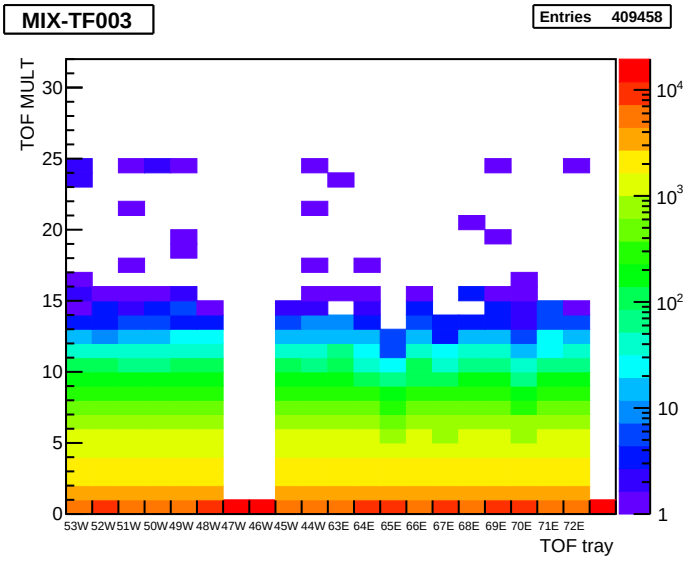

BunchId7Bit (BHT2)
Entries 19498
10^2
10
0
20
40
60
80
100
120

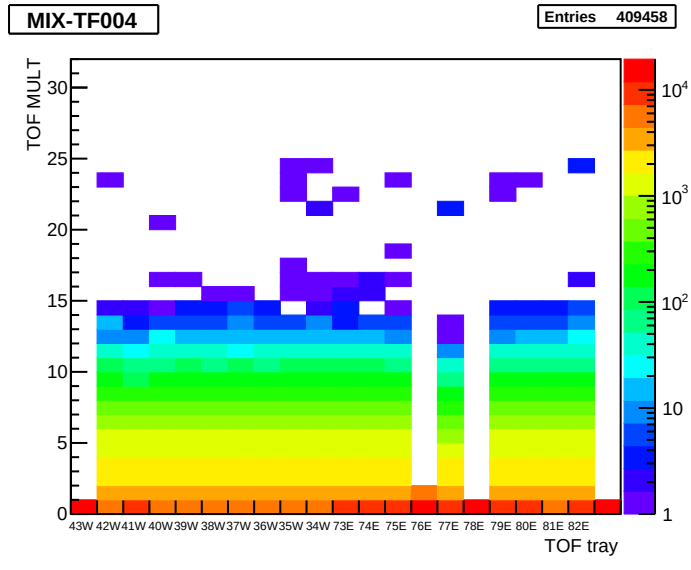

BunchId7Bit (EPD-TAC)
Entries 18604
10^2
10
1
0
20
40
60
80
100
120

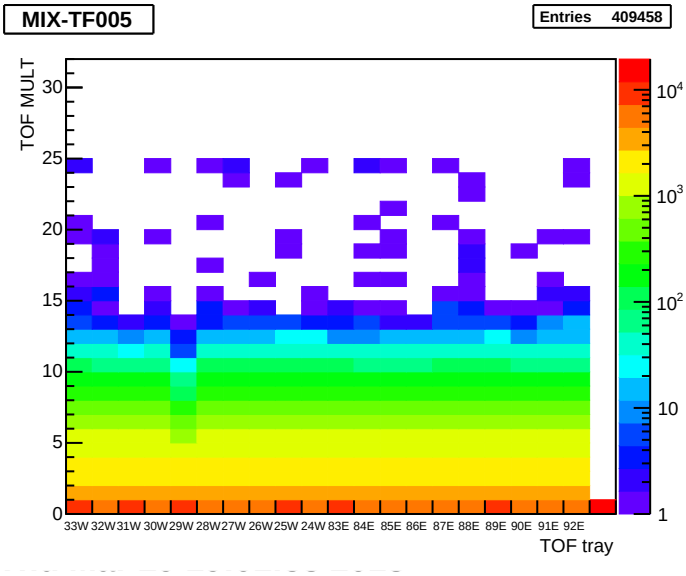

BunchId7Bit (HT.TP)
Entries 16800
10^2
10
1
0
20
40
60
80
100
120

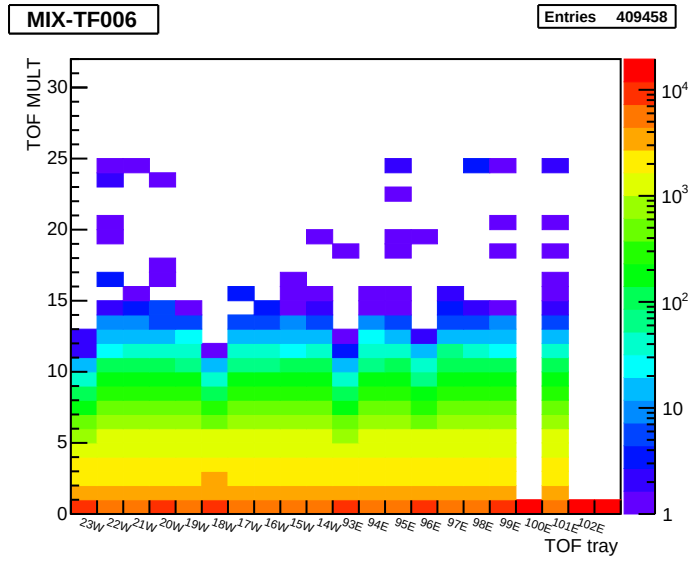

MIX-TF001
Entries 409458
TOF MULT
TOF tray

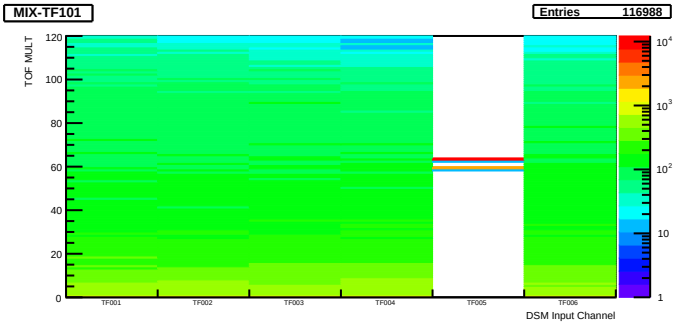

MIX-TF002
Entries 409458
TOF MULT
TOF tray

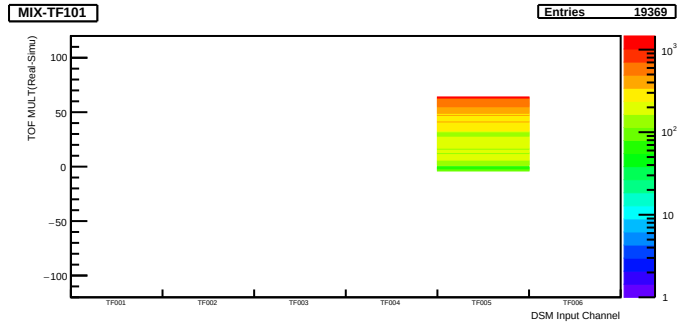

MIX-TF003
Entries 409458
TOF MULT
TOF tray

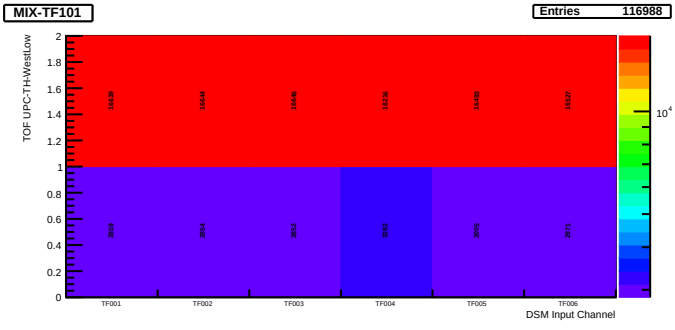

MIX-TF004
Entries 409458
TOF MULT
TOF tray

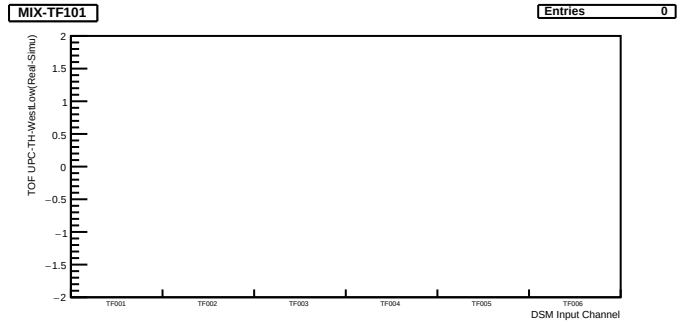

MIX-TF005
Entries 409458
TOF MULT
TOF tray

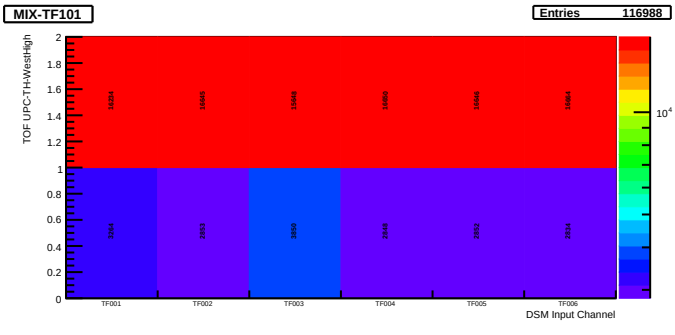

MIX-TF006
Entries 409458
TOF MULT
TOF tray

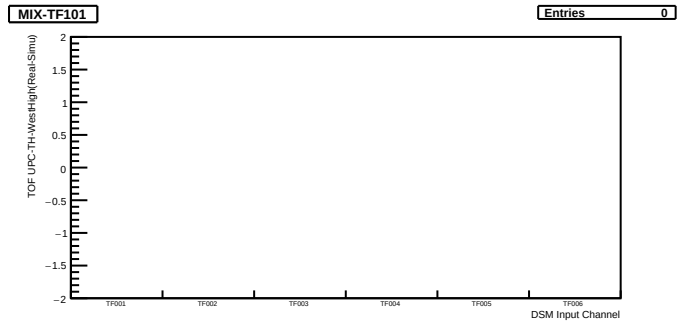

MIX-TF101
Entries 116988
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

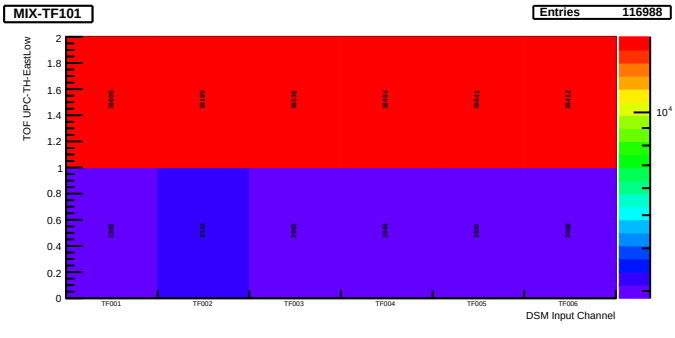

MIX-TF101
Entries 19369
TOF MULT(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

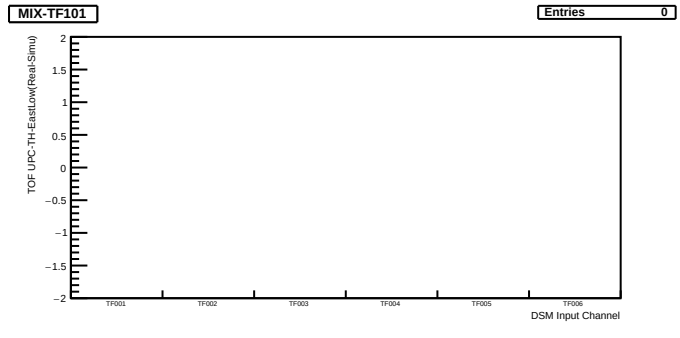

MIX-TF101
Entries 116988
TOF UPC-TH-WestLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

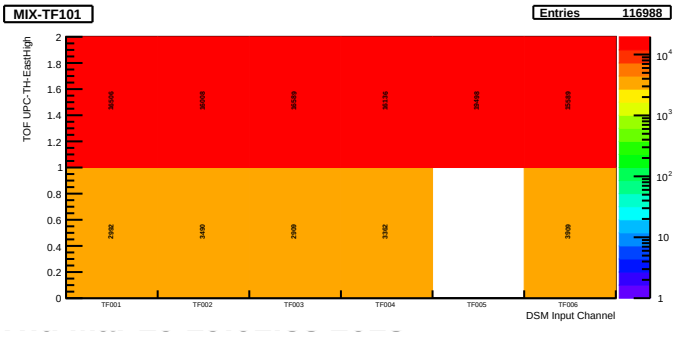

MIX-TF101
Entries 0
TOF UPC-TH-WestLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

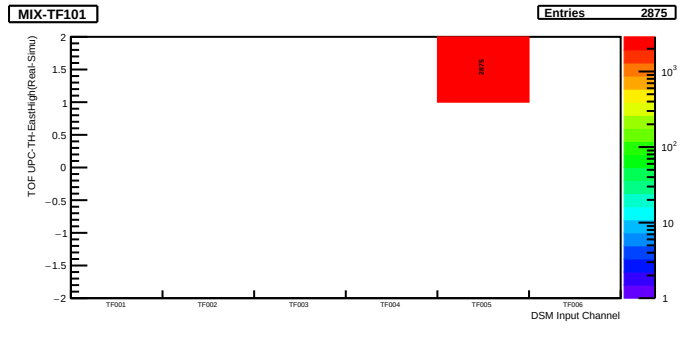

MIX-TF101
Entries 116988
TOF UPC-TH-WestHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

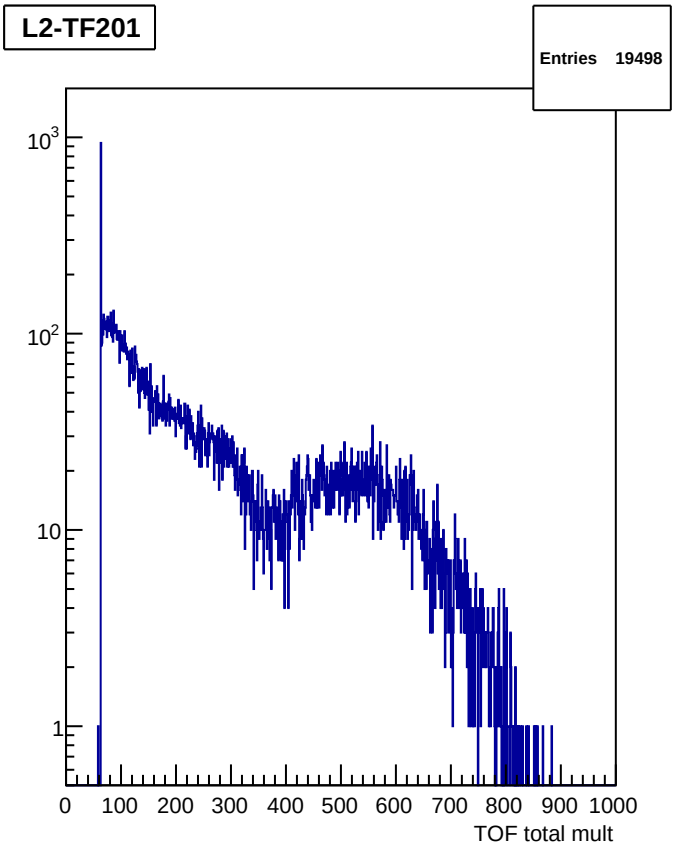

MIX-TF101
Entries 0
TOF UPC-TH-WestHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

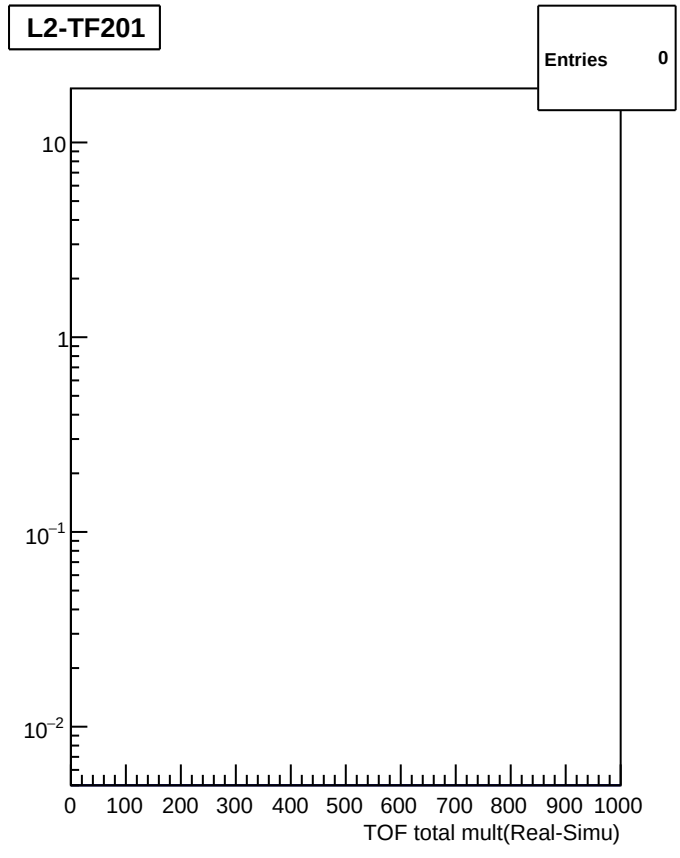

MIX-TF101
Entries 116988
TOF UPC-TH-EastLow
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

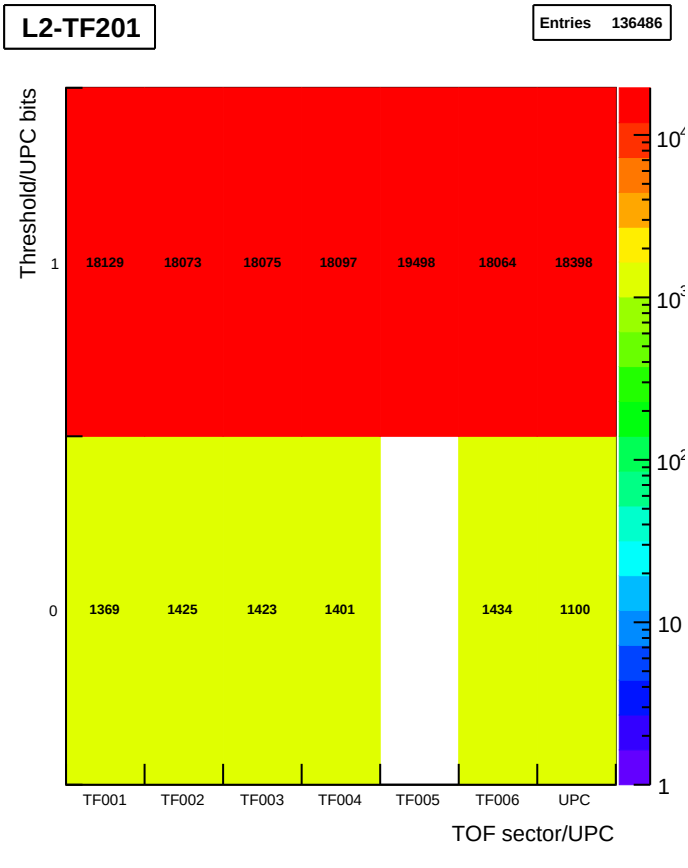

MIX-TF101
Entries 0
TOF UPC-TH-EastLow(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

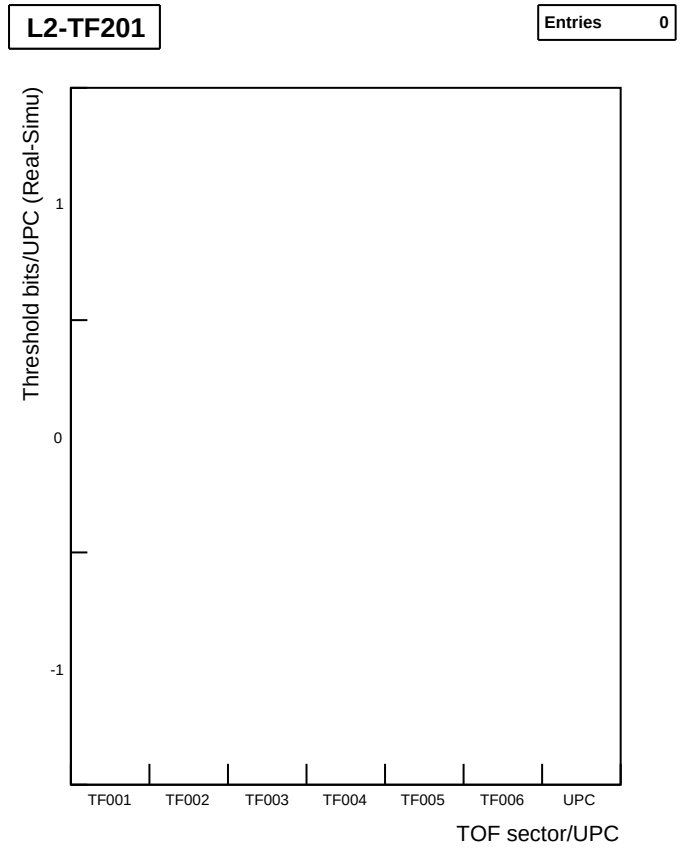

MIX-TF101
Entries 116988
TOF UPC-TH-EastHigh
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

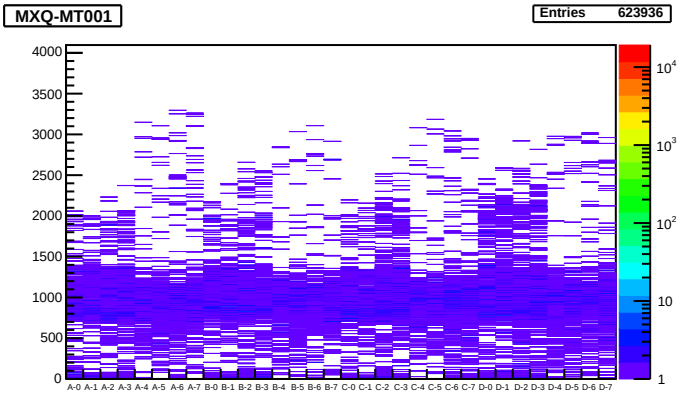

MIX-TF101
Entries 2875
TOF UPC-TH-EastHigh(Real-Simu)
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

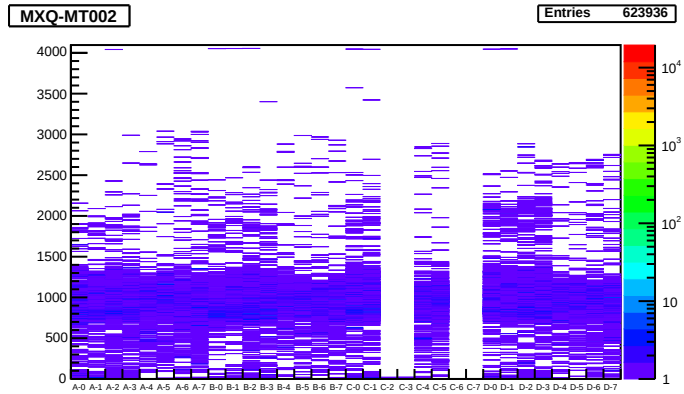

L2-TF201
Entries 19498
TOF total mult

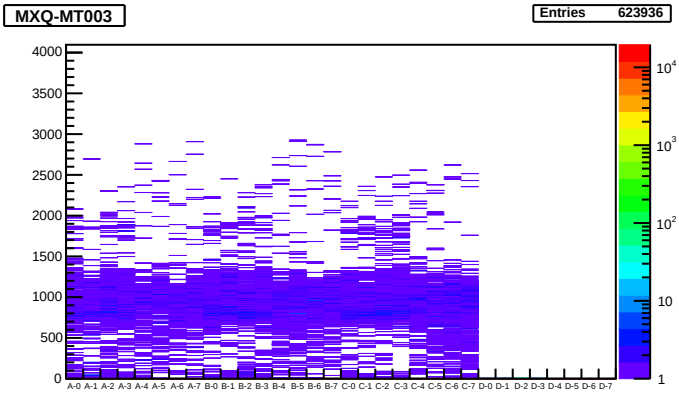

L2-TF201
Entries 0
TOF total mult(Real-Simu)

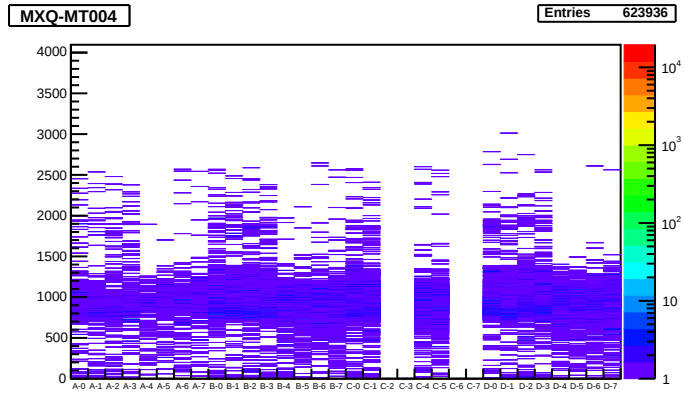

L2-TF201
Entries 136486
Threshold/UPC bits
18129 18073 18075 18097 19498 18064 18398
1369 1425 1423 1401 1434 1100
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

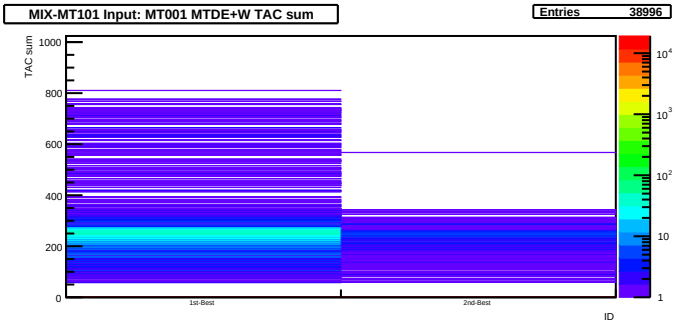

L2-TF201
Entries 0
Threshold bits/UPC (Real-Simu)
TF001 TF002 TF003 TF004 TF005 TF006 UPC
TOF sector/UPC

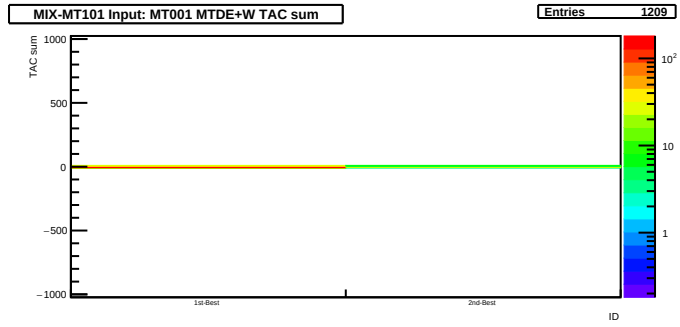

MXQ-MT001
Entries 623936
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

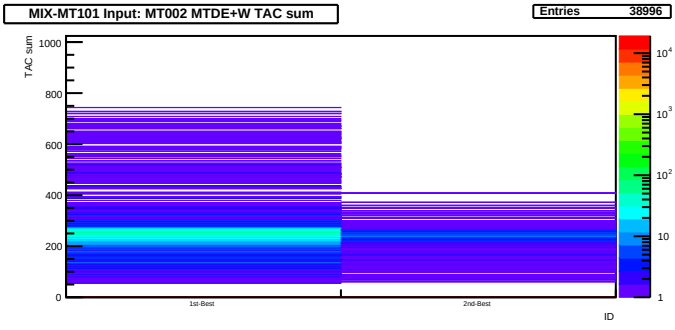

MXQ-MT002
Entries 623936
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

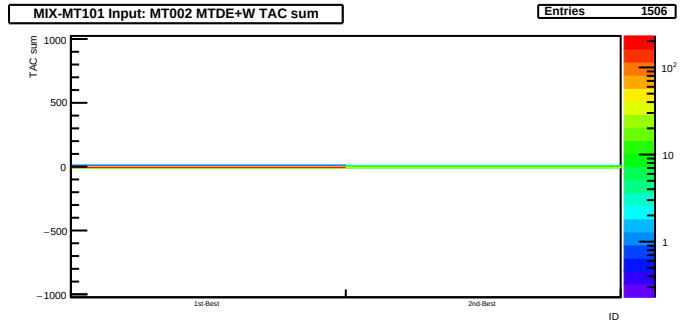

MXQ-MT003
Entries 623936
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

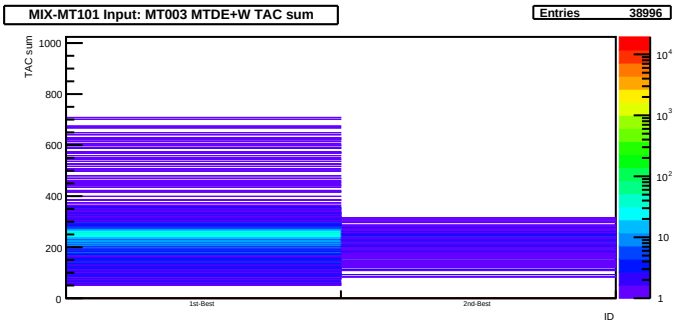

MXQ-MT004
Entries 623936
4000
3500
3000
2500
2000
1500
1000
500
0
A-0 A-1 A-2 A-3 A-4 A-5 A-6 A-7 B-0 B-1 B-2 B-3 B-4 B-5 B-6 B-7 C-0 C-1 C-2 C-3 C-4 C-5 C-6 C-7 D-0 D-1 D-2 D-3 D-4 D-5 D-6 D-7
10^4
10^3
10^2
10
1

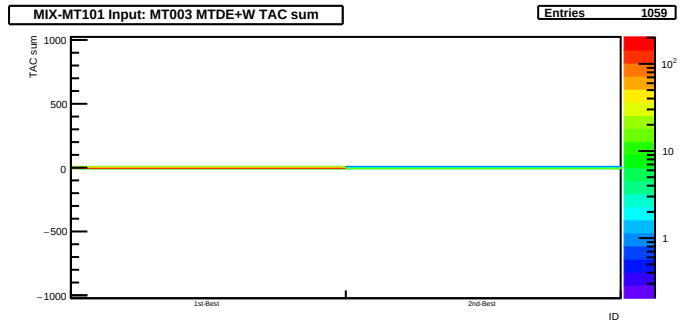

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 38996
TAC sum
1st-Best
2nd-Best
ID

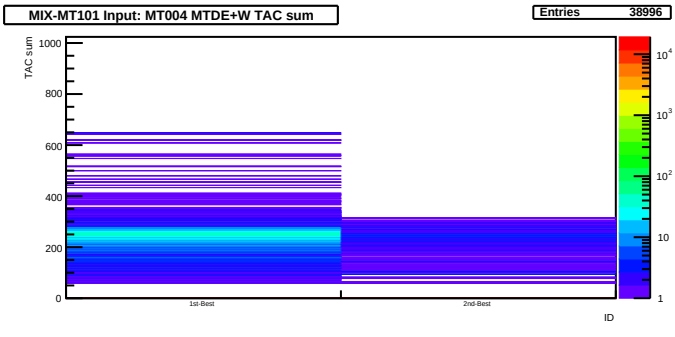

MIX-MT101 Input: MT001 MTDE+W TAC sum
Entries 1209
TAC sum
1st-Best
2nd-Best
ID

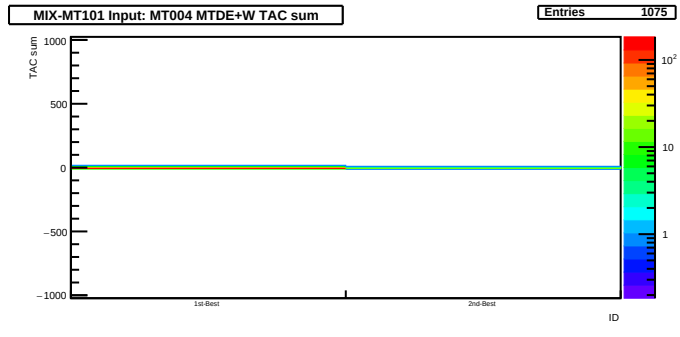

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 38996
TAC sum
1st-Best
2nd-Best
ID

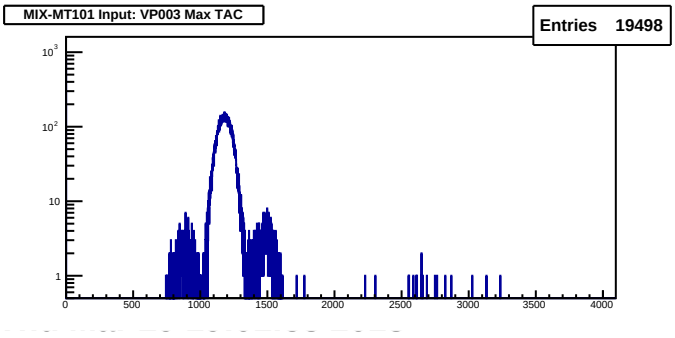

MIX-MT101 Input: MT002 MTDE+W TAC sum
Entries 1506
TAC sum
1st-Best
2nd-Best
ID

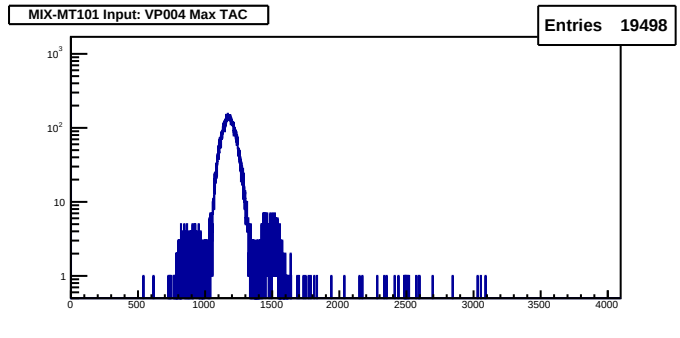

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 38996
TAC sum
1st-Best
2nd-Best
ID

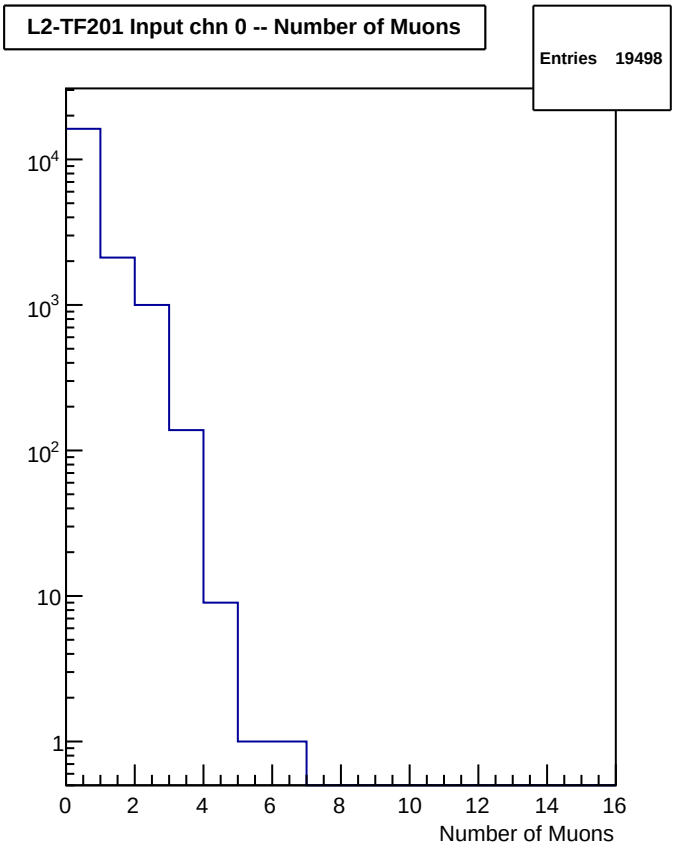

MIX-MT101 Input: MT003 MTDE+W TAC sum
Entries 1059
TAC sum
1st-Best
2nd-Best
ID

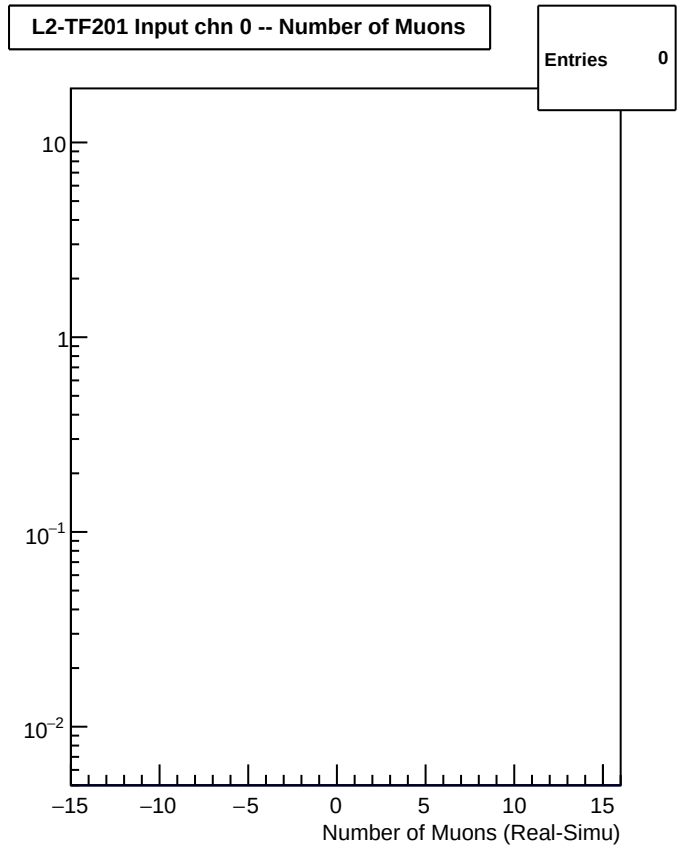

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 38996
TAC sum
1st-Best
2nd-Best
ID

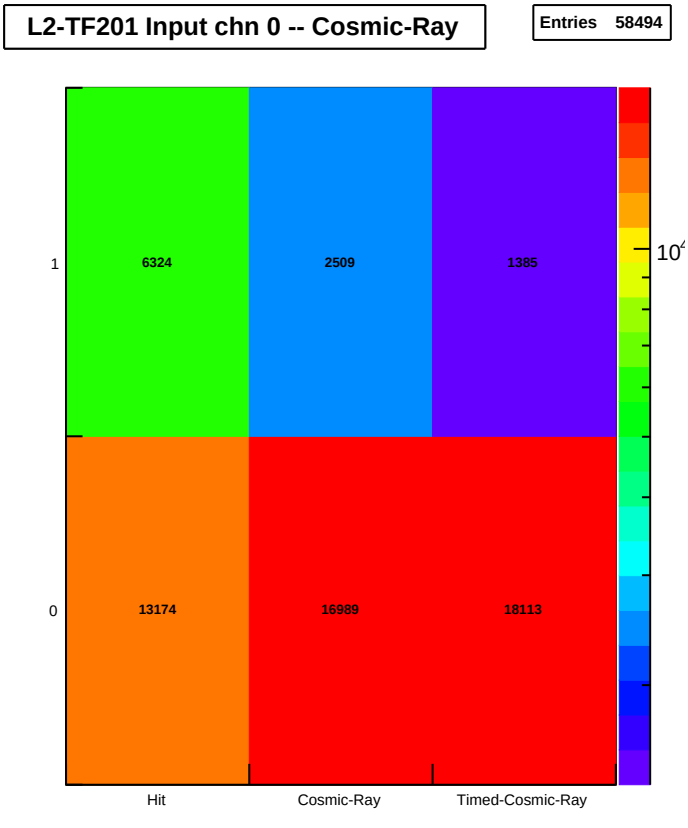

MIX-MT101 Input: MT004 MTDE+W TAC sum
Entries 1075
TAC sum
1st-Best
2nd-Best
ID

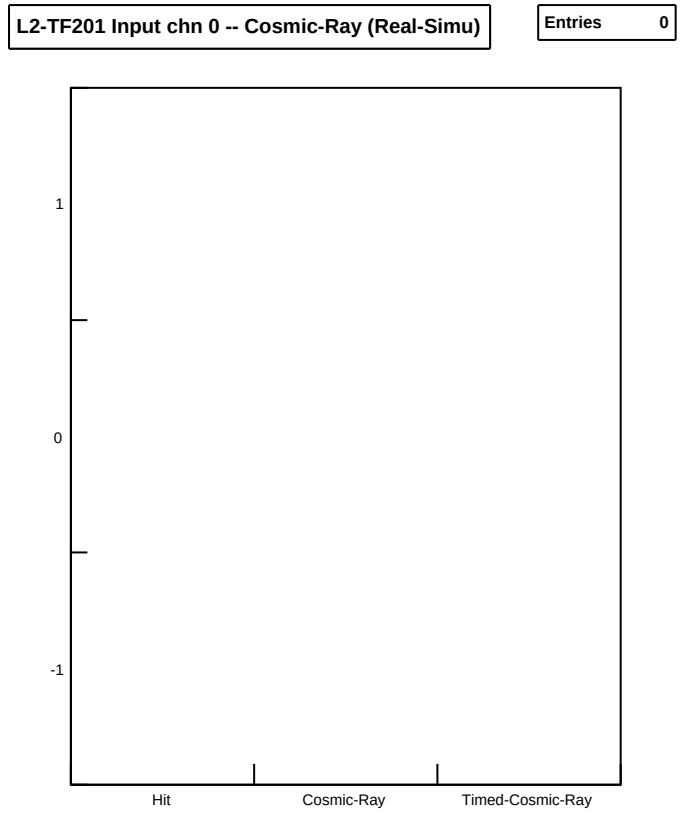

MIX-MT101 Input: VP003 Max TAC
Entries 19498

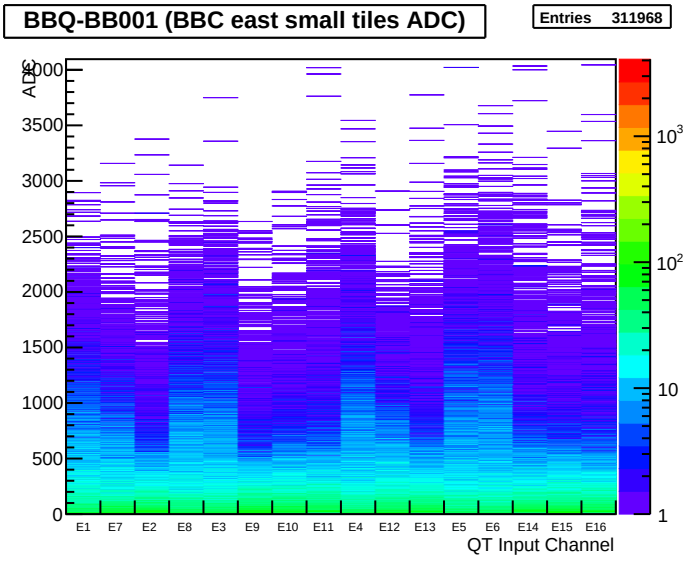

MIX-MT101 Input: VP004 Max TAC
Entries 19498

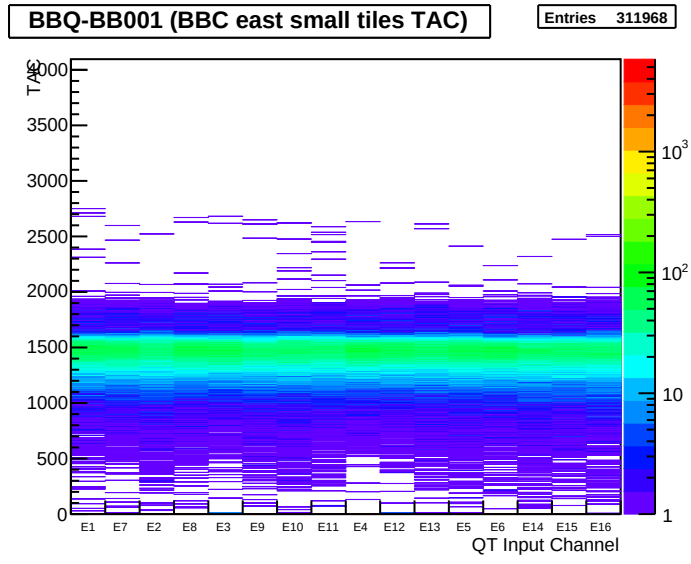

L2-TF201 Input chn 0 -- Number of Muons
Entries 19498
Number of Muons

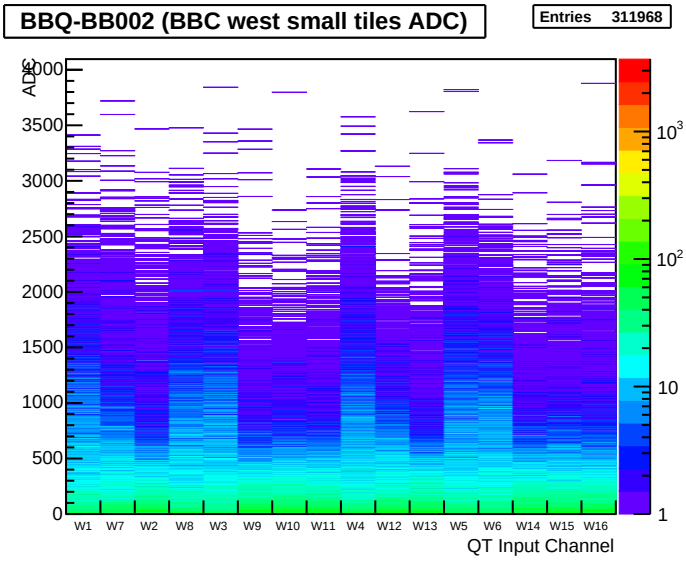

L2-TF201 Input chn 0 -- Number of Muons
Entries 0
Number of Muons (Real-Simu)

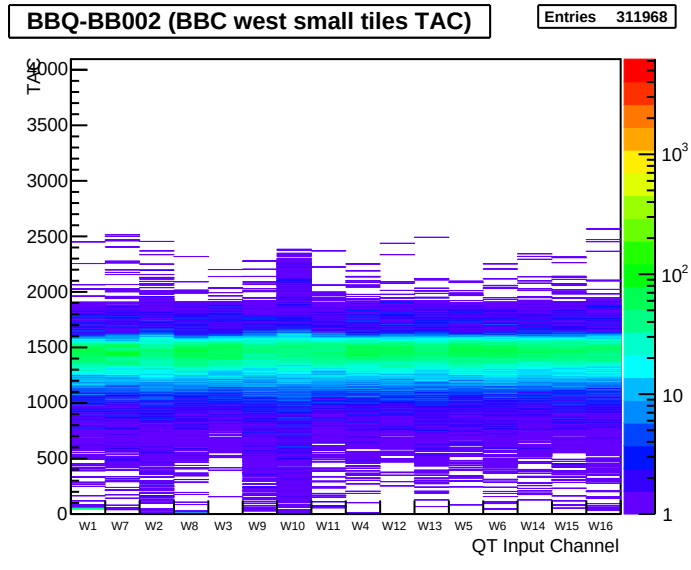

L2-TF201 Input chn 0 -- Cosmic-Ray
Entries 58494
6324
2509
1385
13174
16989
18113
Hit
Cosmic-Ray
Timed-Cosmic-Ray

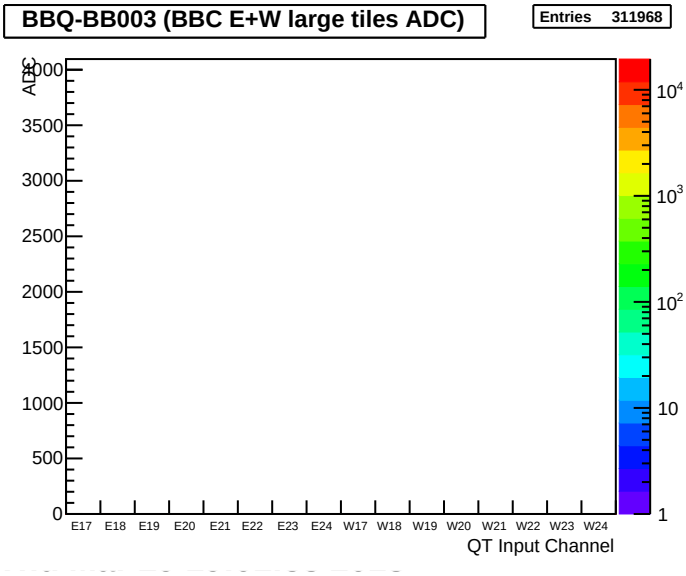

L2-TF201 Input chn 0 -- Cosmic-Ray (Real-Simu)
Entries 0
Hit
Cosmic-Ray
Timed-Cosmic-Ray

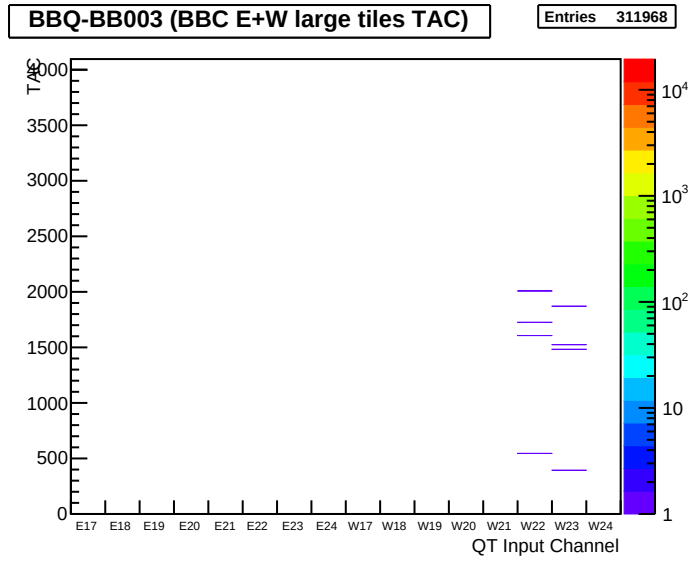

BBQ-BB001 (BBC east small tiles ADC)
Entries 311968
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

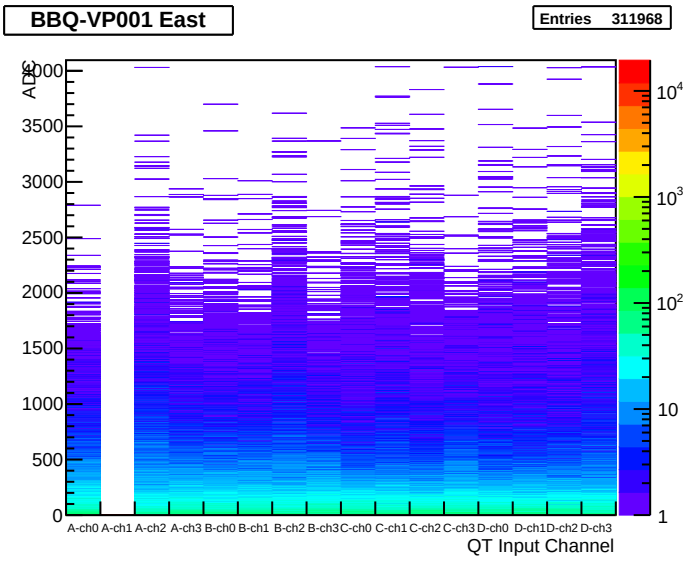

BBQ-BB001 (BBC east small tiles TAC)
Entries 311968
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

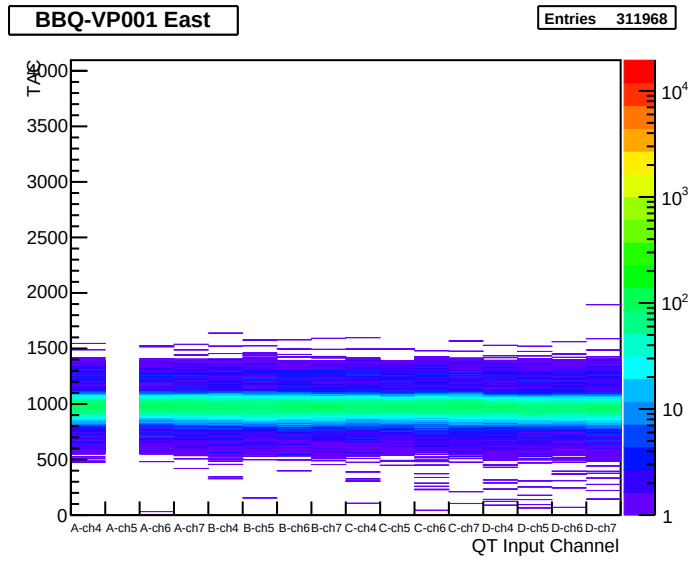

BBQ-BB002 (BBC west small tiles ADC)
Entries 311968
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

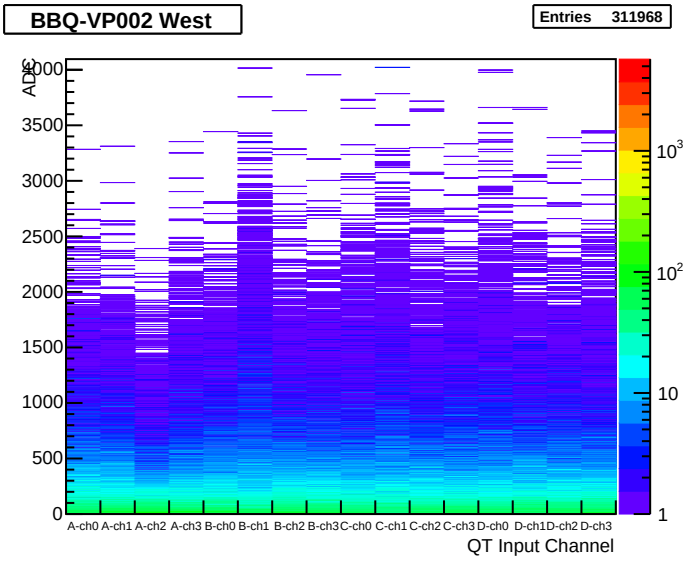

BBQ-BB002 (BBC west small tiles TAC)
Entries 311968
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

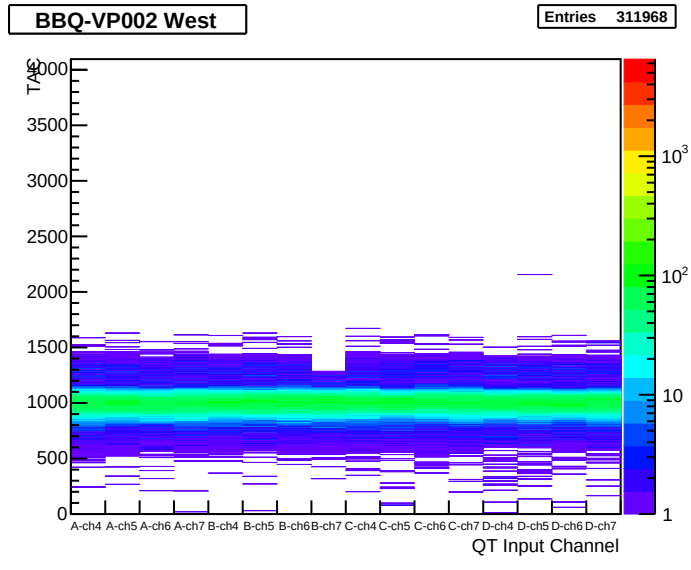

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 311968
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

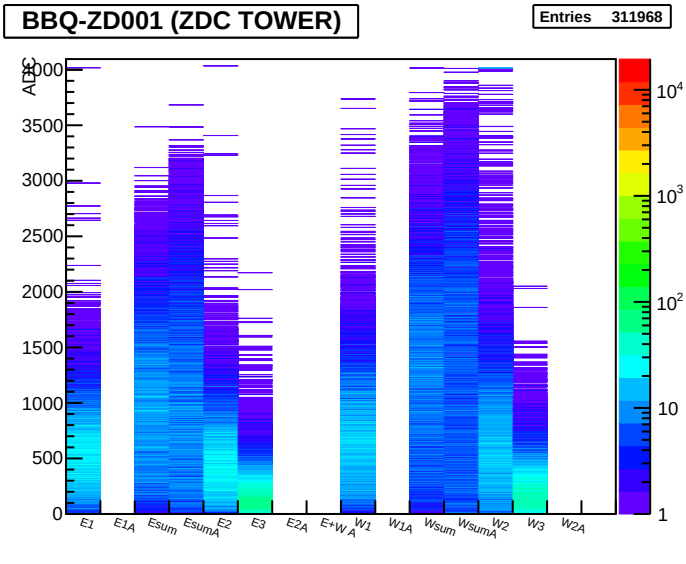

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 311968
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

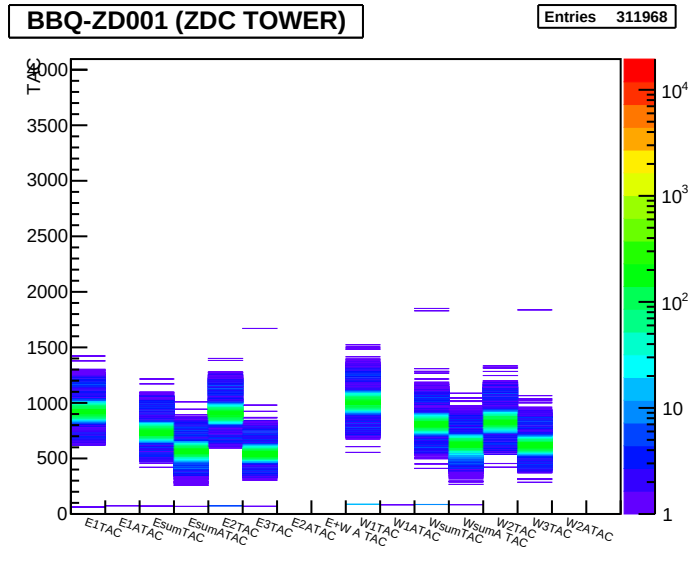

BBQ-VP001 East
Entries 311968
ADC
QT Input Channel

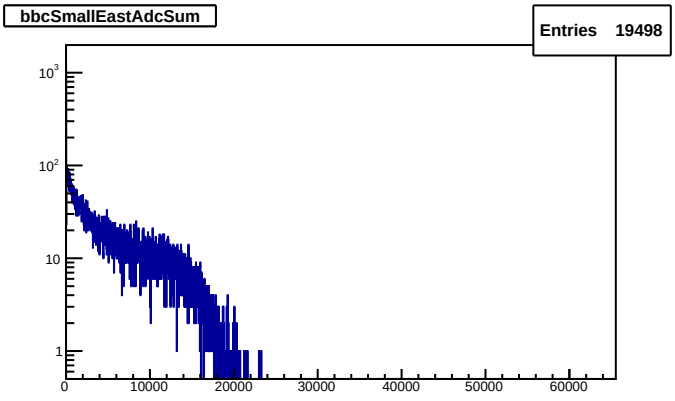

BBQ-VP001 East
Entries 311968
TAC
QT Input Channel

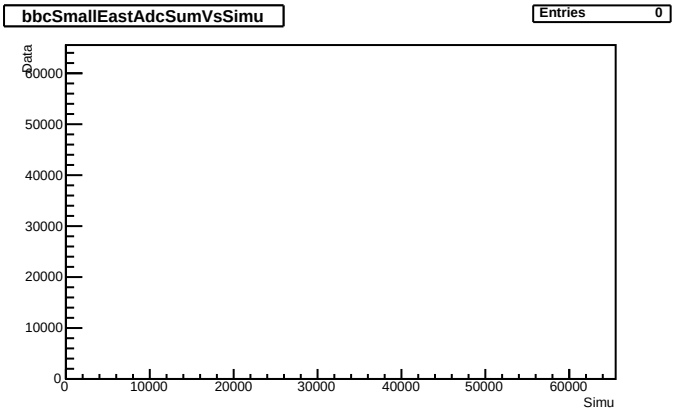

BBQ-VP002 West
Entries 311968
ADC
QT Input Channel

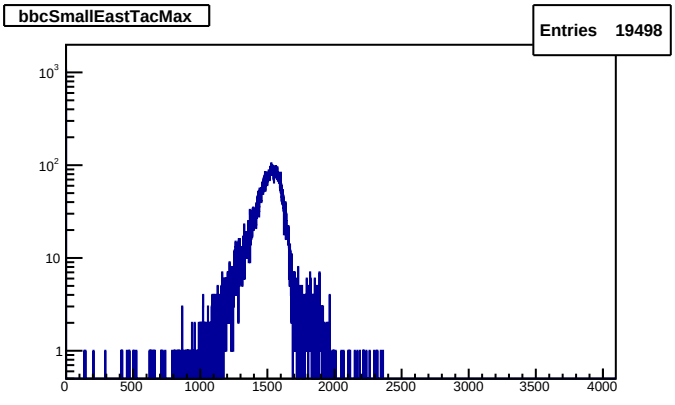

BBQ-VP002 West
Entries 311968
TAC
QT Input Channel

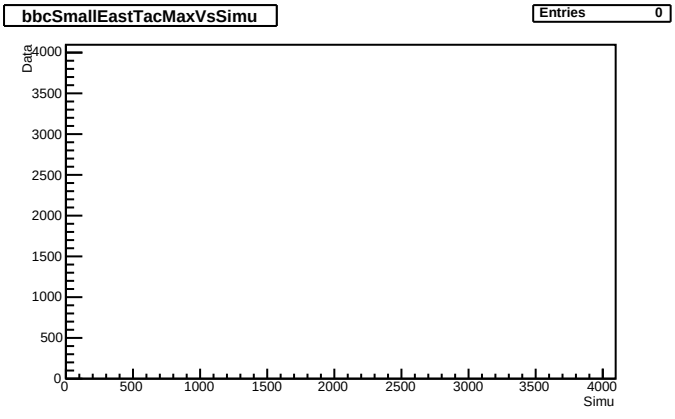

BBQ-ZD001 (ZDC TOWER)
Entries 311968
ADC

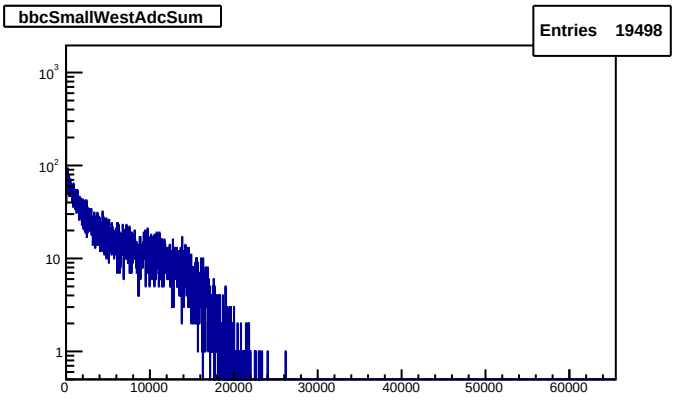

BBQ-ZD001 (ZDC TOWER)
Entries 311968
TAC

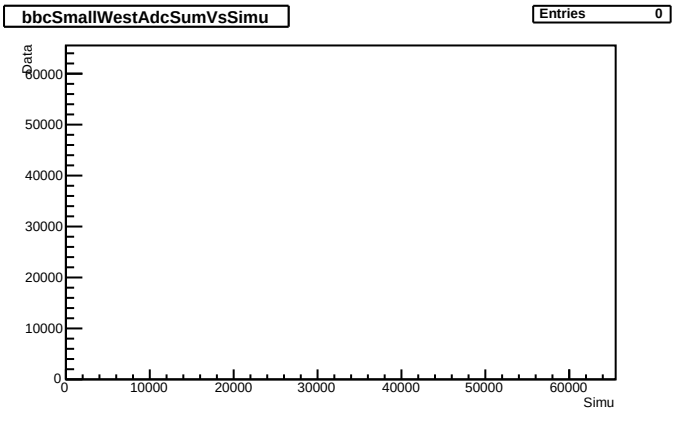

bbcSmallEastAdcSum
Entries 19498

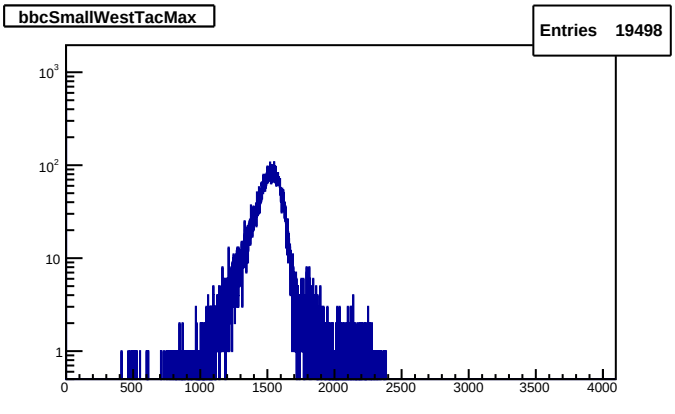

bbcSmallEastAdcSumVsSimu
Entries 0
Data
Simu

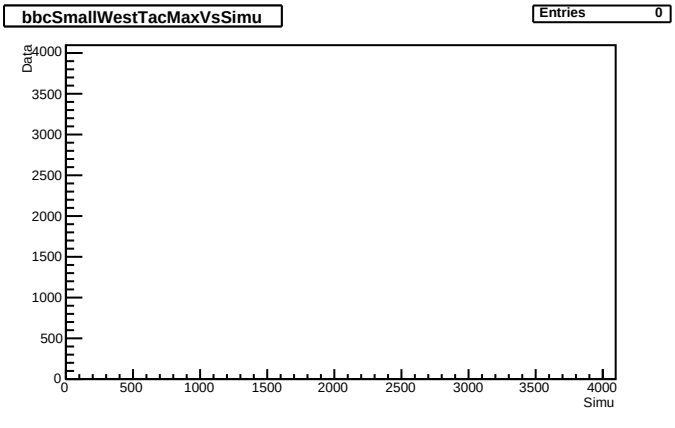

bbcSmallEastTacMax
Entries 19498

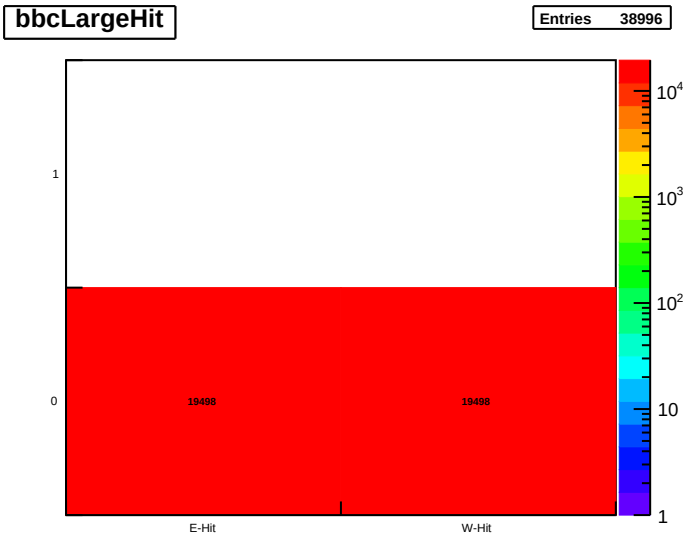

bbcSmallEastTacMaxVsSimu
Entries 0
Data
Simu

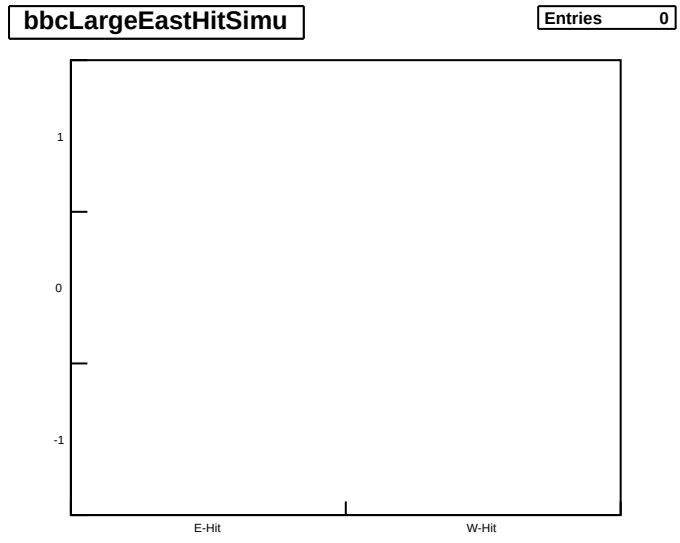

bbcSmallWestAdcSum
Entries 19498

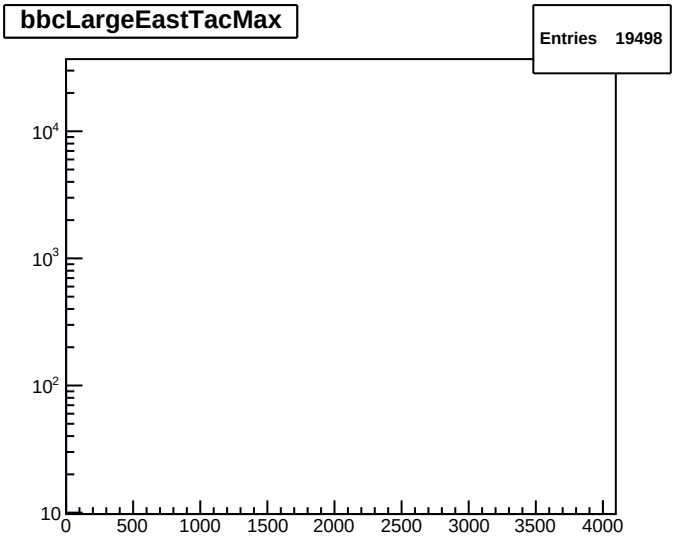

bbcSmallWestAdcSumVsSimu
Entries 0
Data
Simu

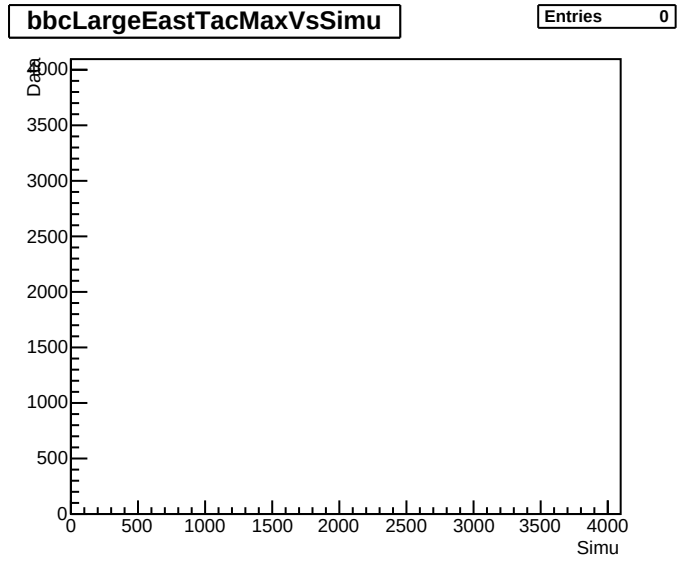

bbcSmallWestTacMax
Entries 19498

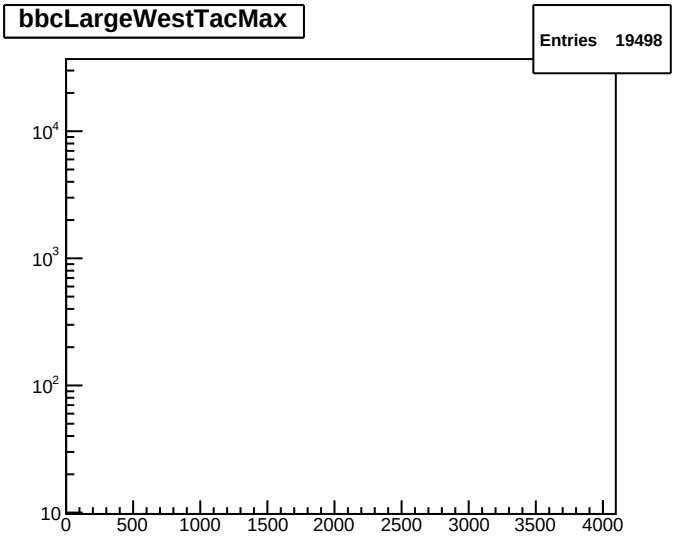

bbcSmallWestTacMaxVsSimu
Entries 0
Data
Simu

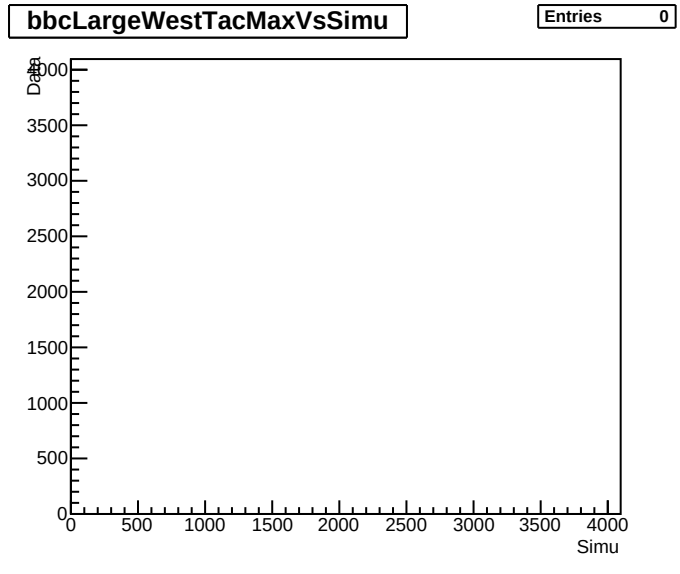

bbcLargeHit
Entries 38996
19498
19498
E-Hit
W-Hit

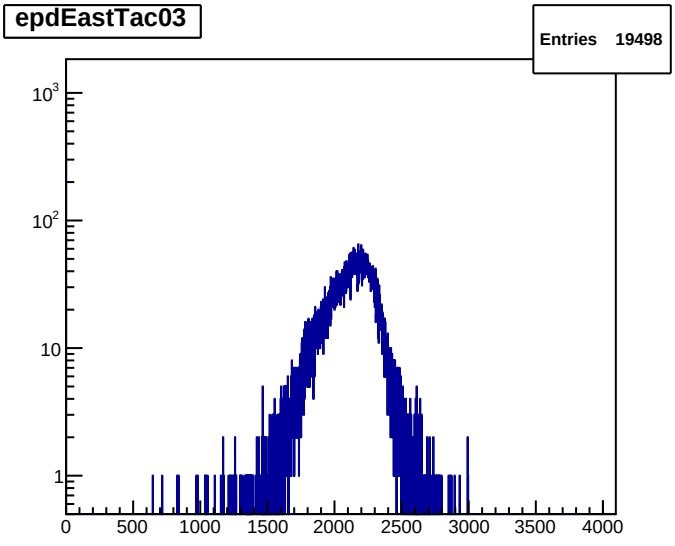

bbcLargeEastHitSimu
Entries 0
E-Hit
W-Hit

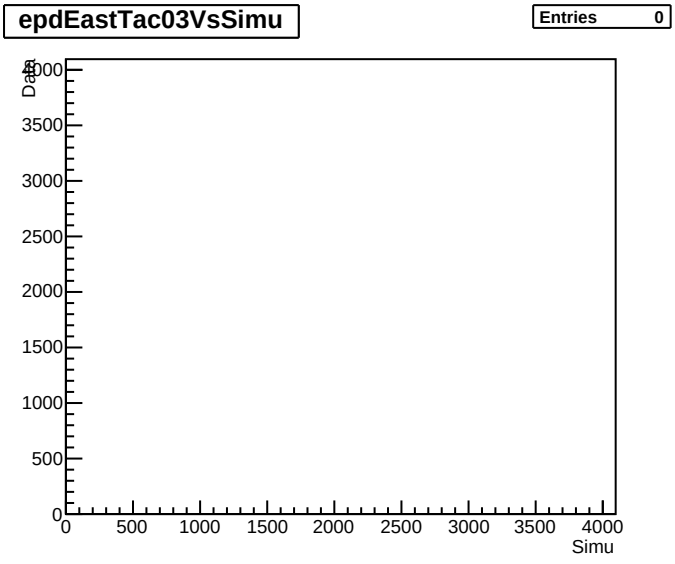

bbcLargeEastTacMax
Entries 19498

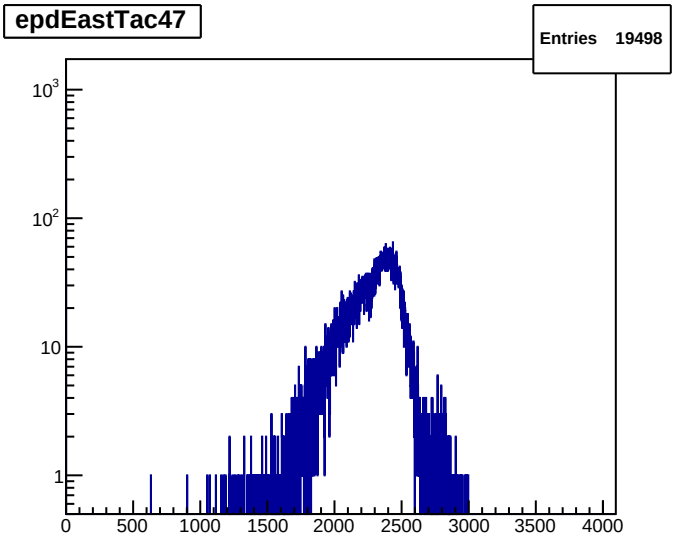

bbcLargeEastTacMaxVsSimu
Entries 0
Data
Simu

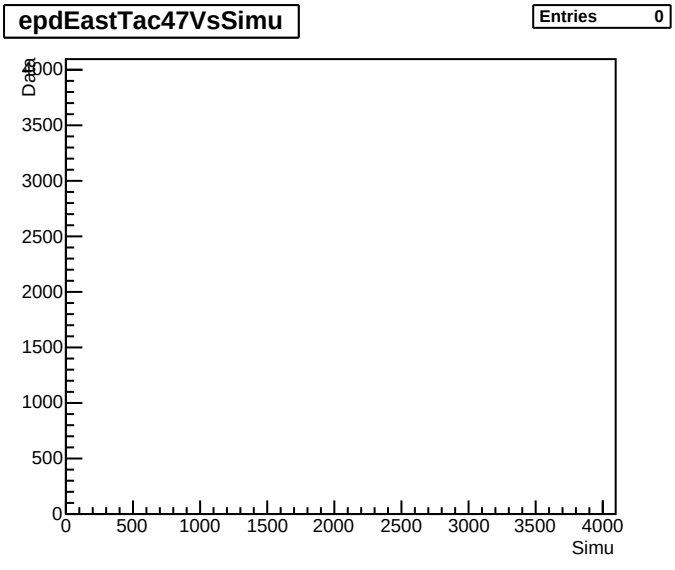

bbcLargeWestTacMax
Entries 19498

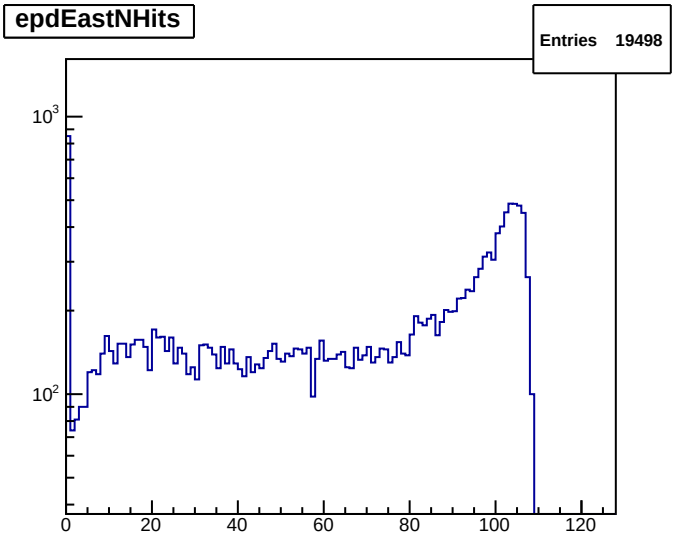

bbcLargeWestTacMaxVsSimu
Entries 0
Data
Simu

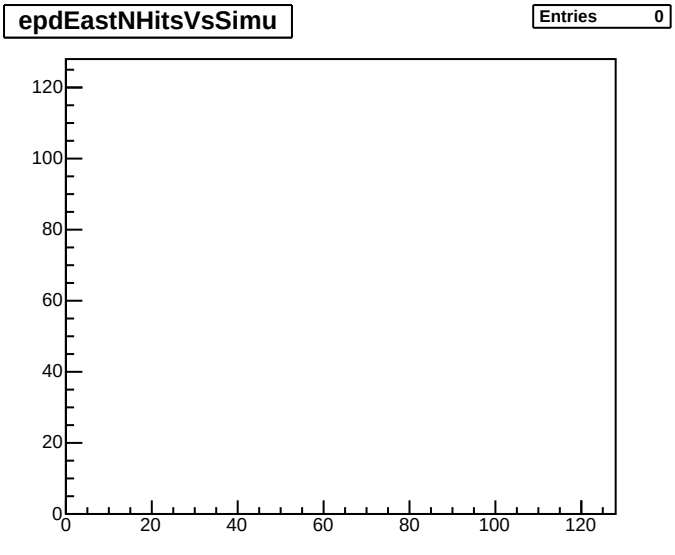

epdEastTac03
Entries 19498

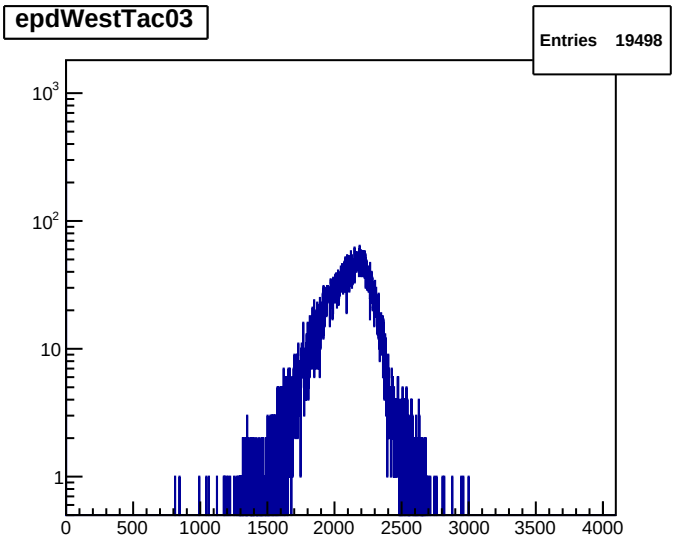

epdEastTac03VsSimu
Entries 0
Data
Simu

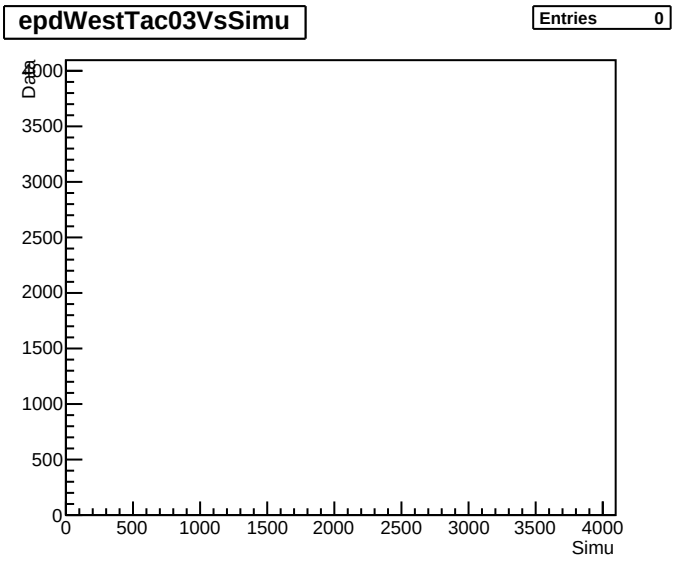

epdEastTac47
Entries 19498

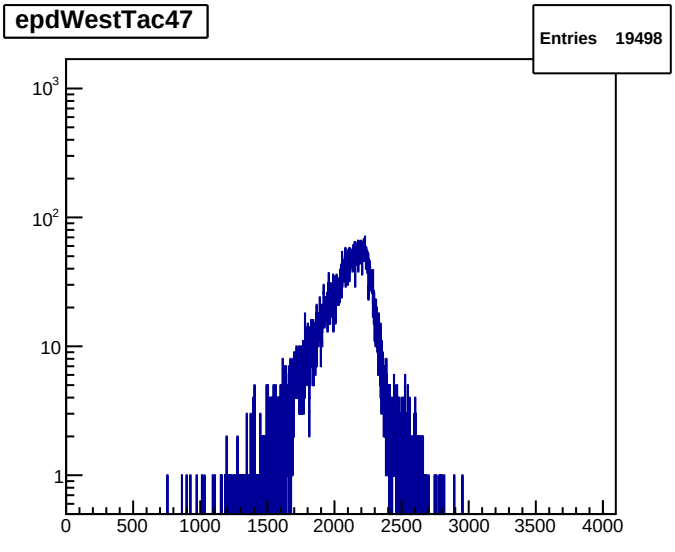

epdEastTac47VsSimu
Entries 0
Data
Simu

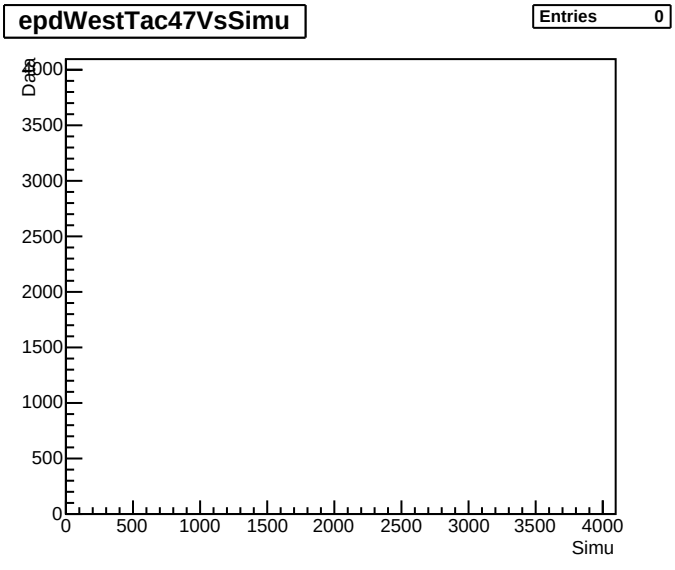

epdEastNHits
Entries 19498

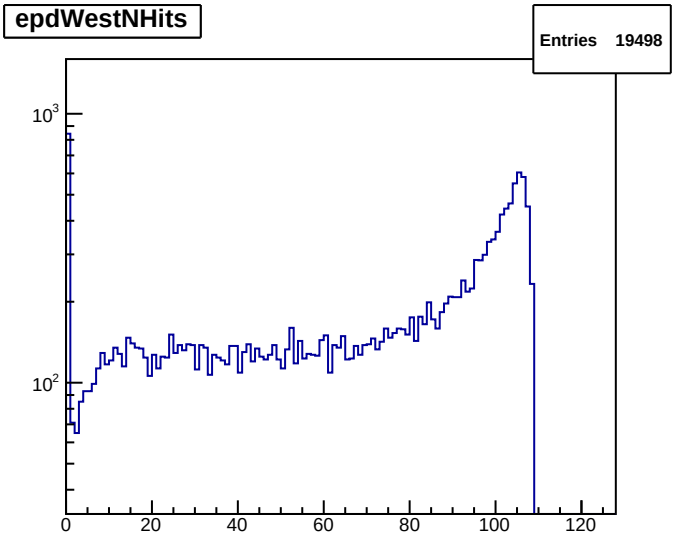

epdEastNHitsVsSimu
Entries 0

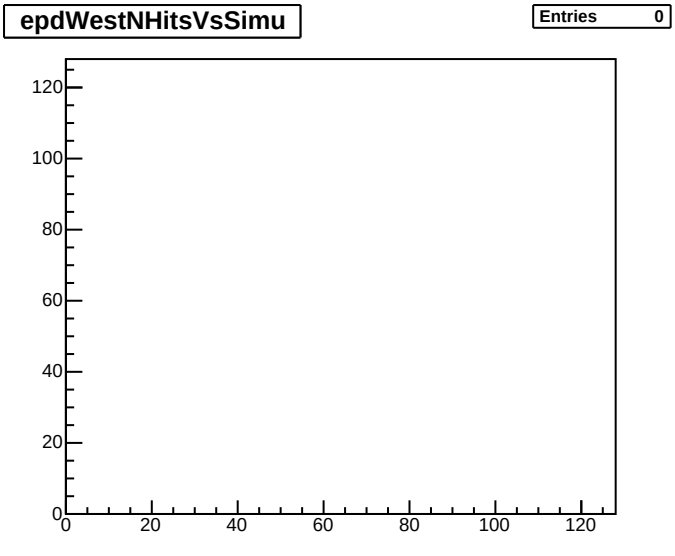

epdWestTac03
Entries 19498
10^3
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

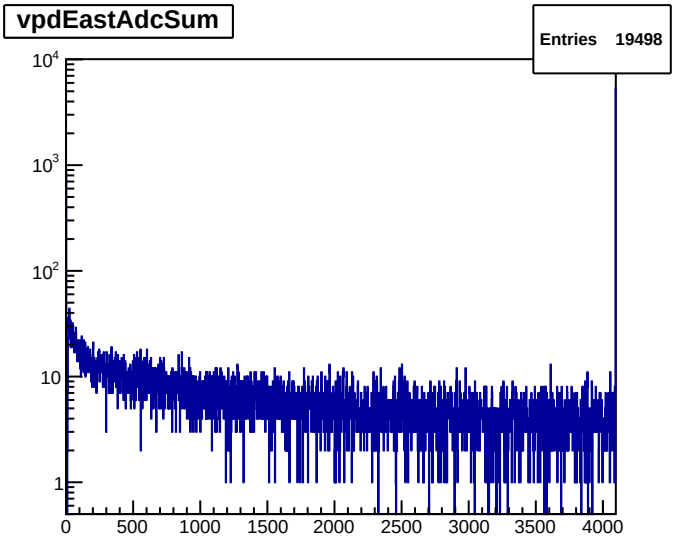

epdWestTac03VsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

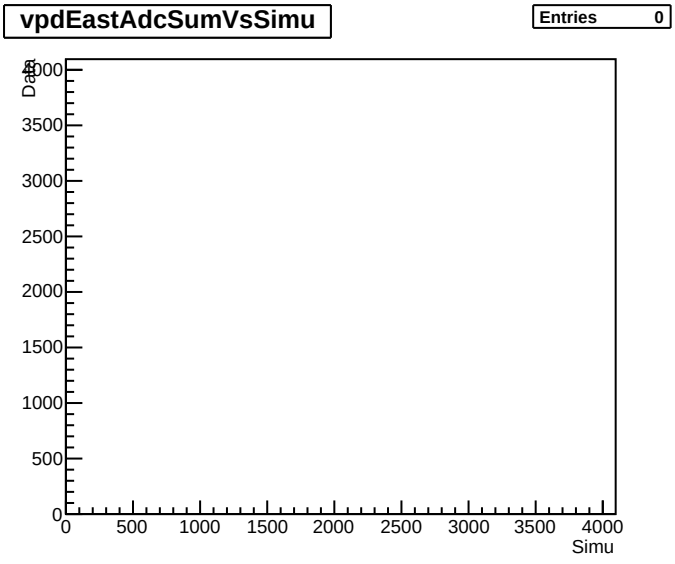

epdWestTac47
Entries 19498
10^3
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

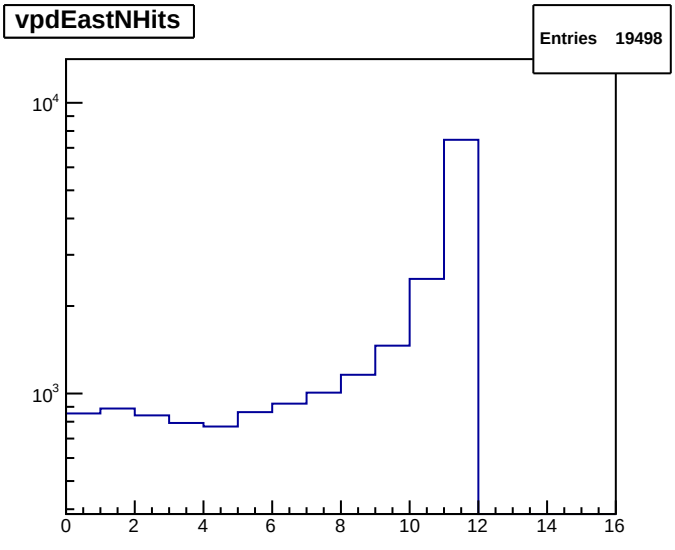

epdWestTac47VsSimu
Entries 0
Data
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000
Simu

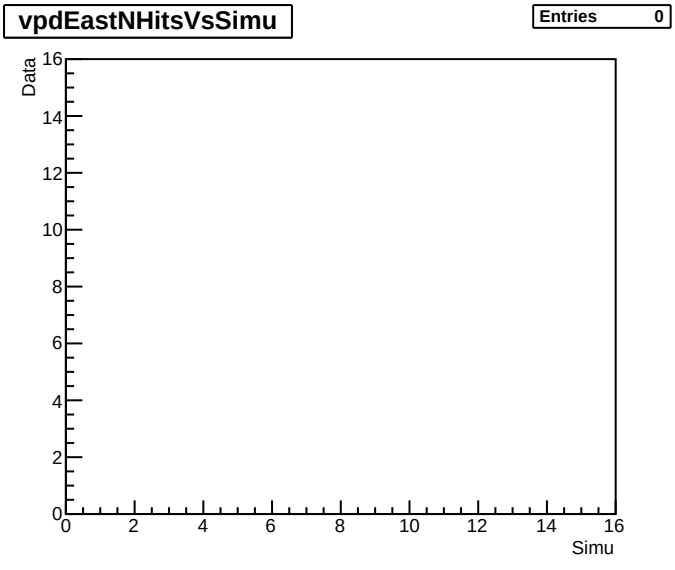

epdWestNHits
Entries 19498
10^3
10^2
0 20 40 60 80 100 120

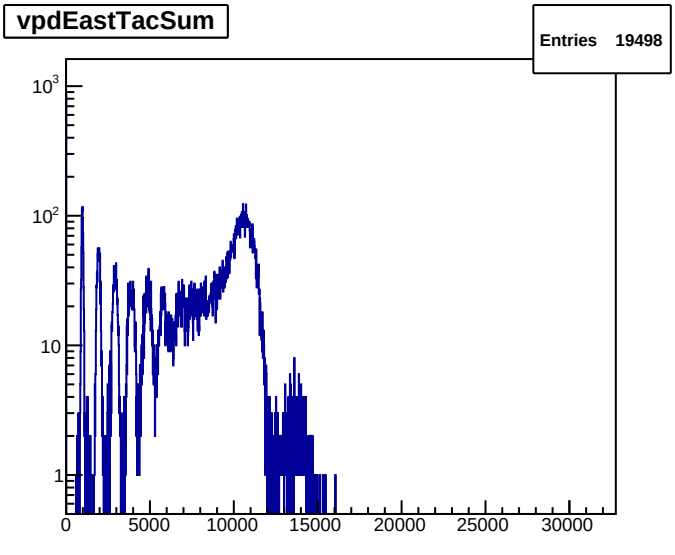

epdWestNHitsVsSimu
Entries 0
120
100
80
60
40
20
0
0 20 40 60 80 100 120

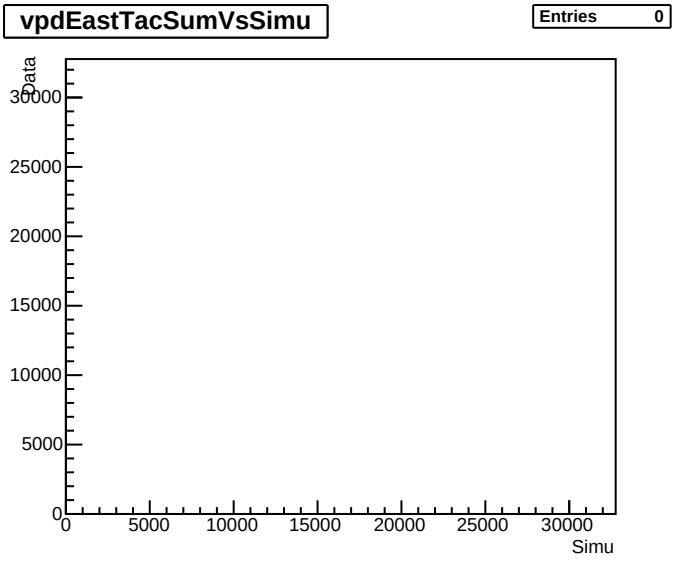

vpdEastAdcSum
Entries 19498

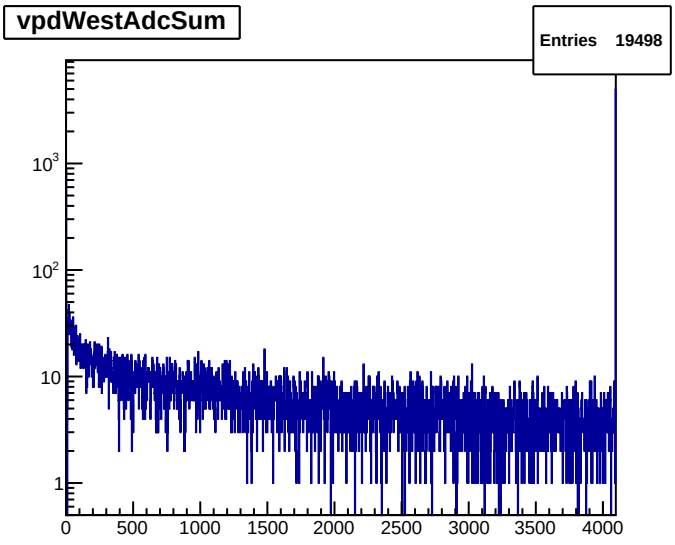

vpdEastAdcSumVsSimu
Entries 0
Data
Simu

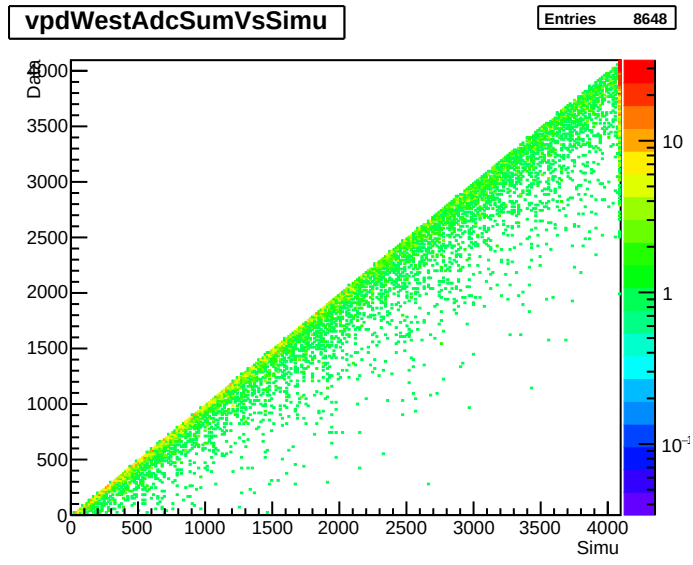

vpdEastNHits
Entries 19498

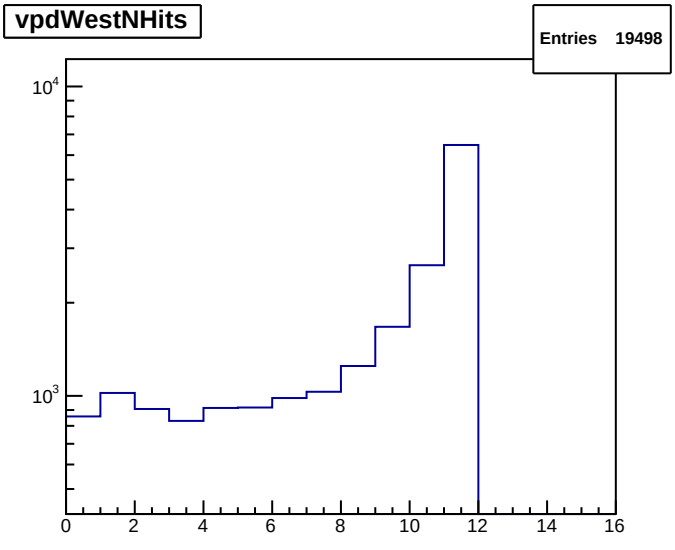

vpdEastNHitsVsSimu
Entries 0
Data
Simu

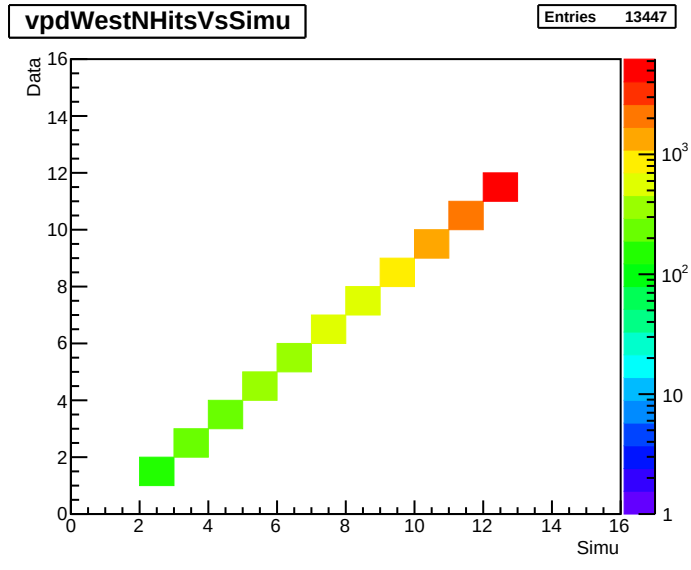

vpdEastTacSum
Entries 19498

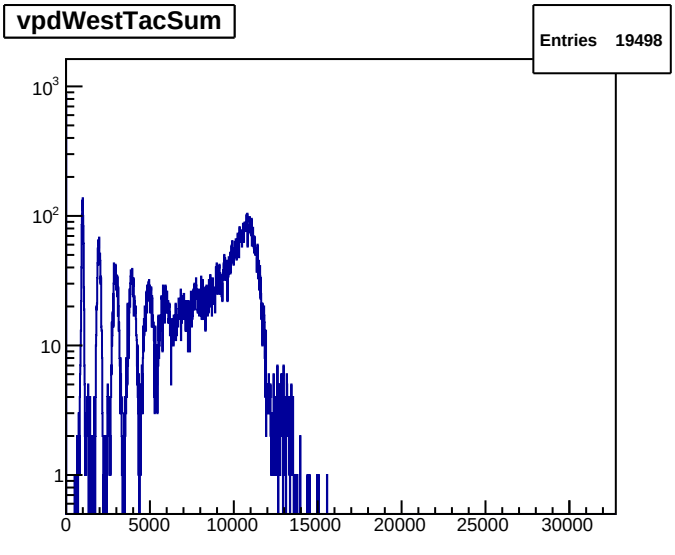

vpdEastTacSumVsSimu
Entries 0
Data
Simu

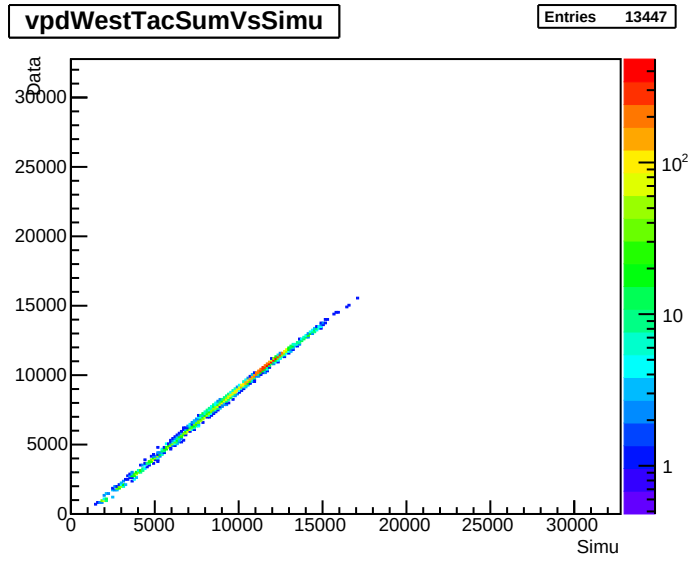

vpdWestAdcSum
Entries 19498

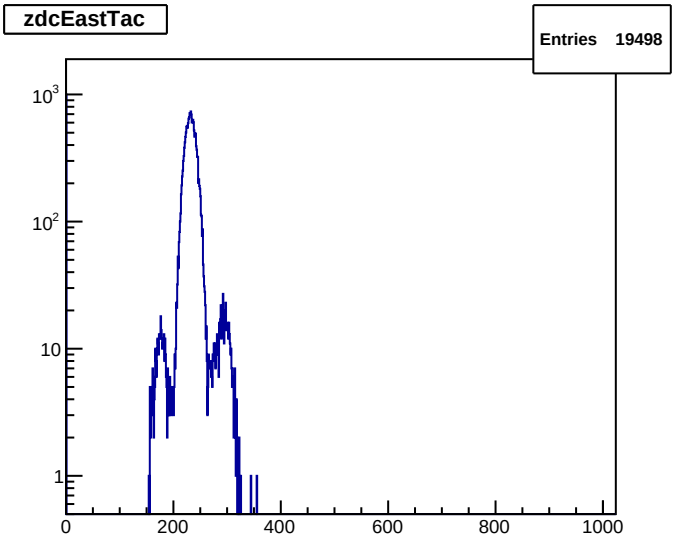

vpdWestAdcSumVsSimu
Entries 8648
Data
Simu

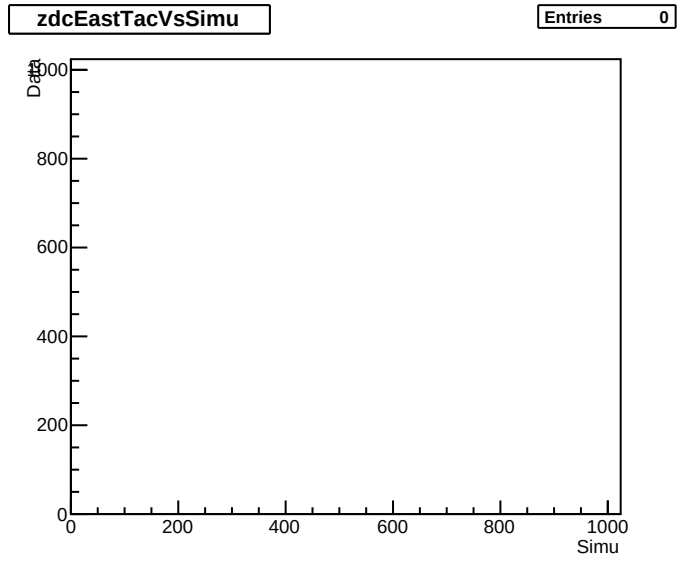

vpdWestNHits
Entries 19498

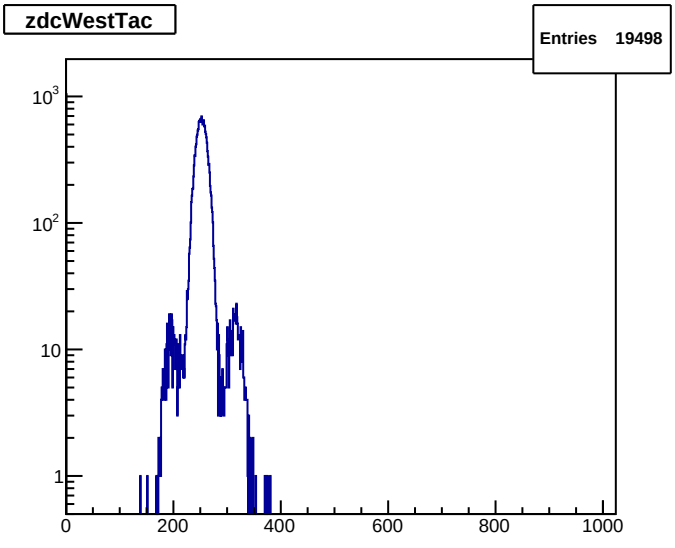

vpdWestNHitsVsSimu
Entries 13447
Data
Simu

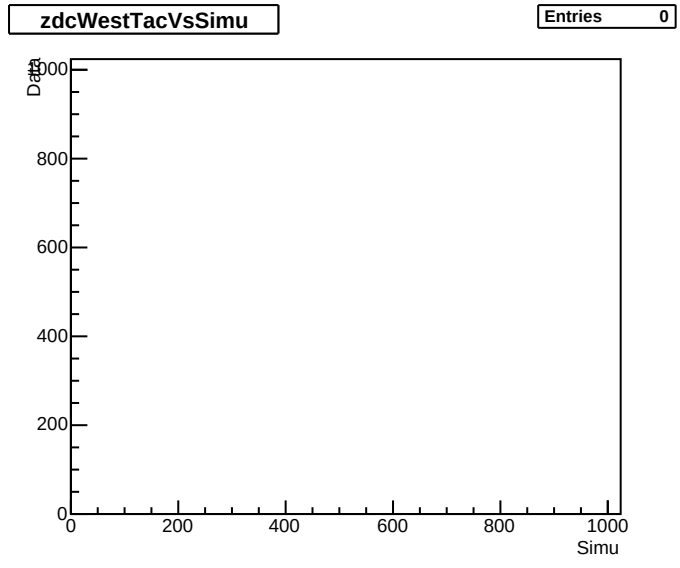

vpdWestTacSum
Entries 19498

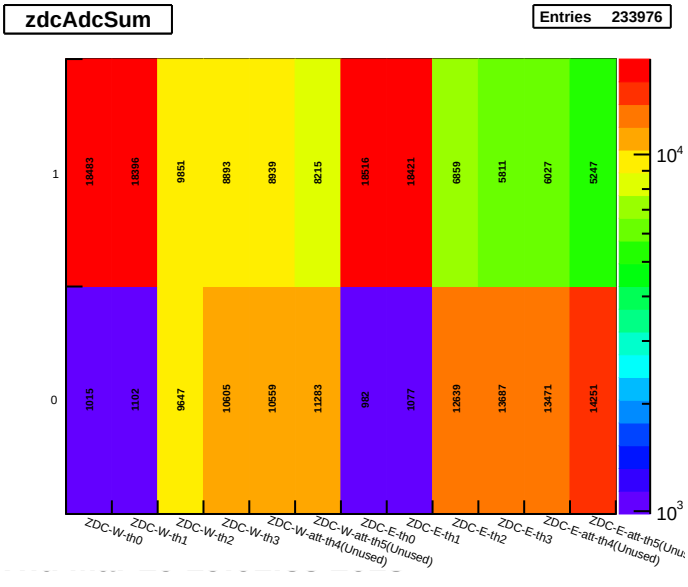

vpdWestTacSumVsSimu
Entries 13447
Data
Simu

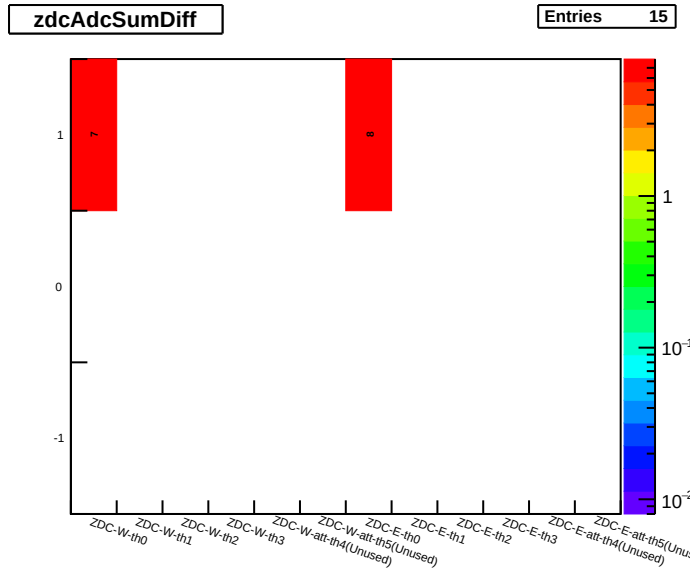

zdcEastTac
Entries 19498
10^3
10^2
10
1
0
200
400
600
800
1000

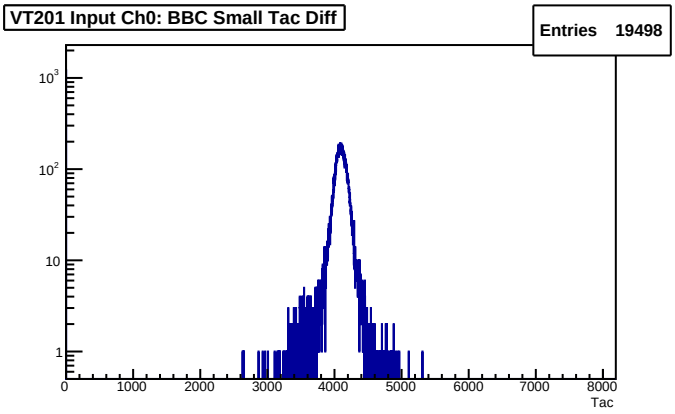

zdcEastTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

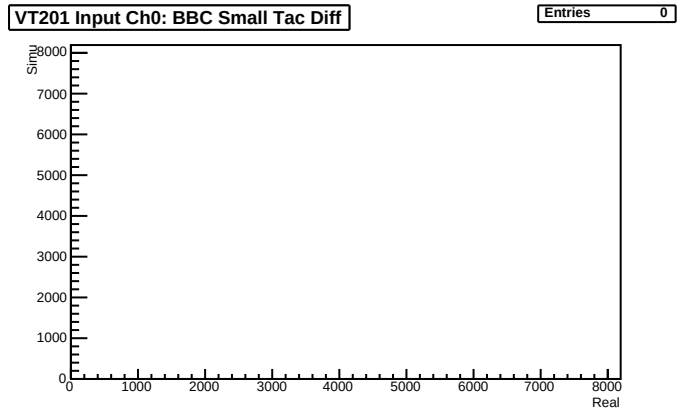

zdcWestTac
Entries 19498
10^3
10^2
10
1
0
200
400
600
800
1000

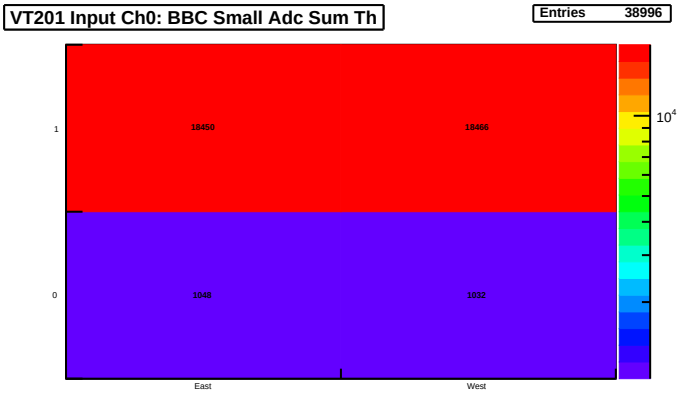

zdcWestTacVsSimu
Entries 0
Data
1000
800
600
400
200
0
0
200
400
600
800
1000
Simu

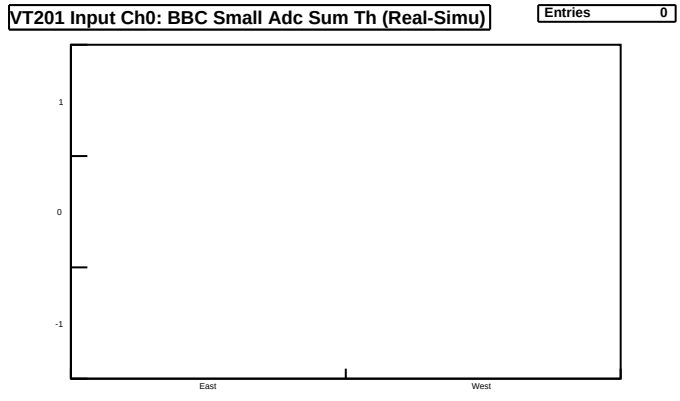

zdcAdcSum
Entries 233976
1
0
16483
18396
9851
8893
8939
8215
18516
18421
6859
5811
6027
5247
1015
1102
9647
10605
10559
11283
982
1077
12639
13687
13471
14251
10^4
10^3
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

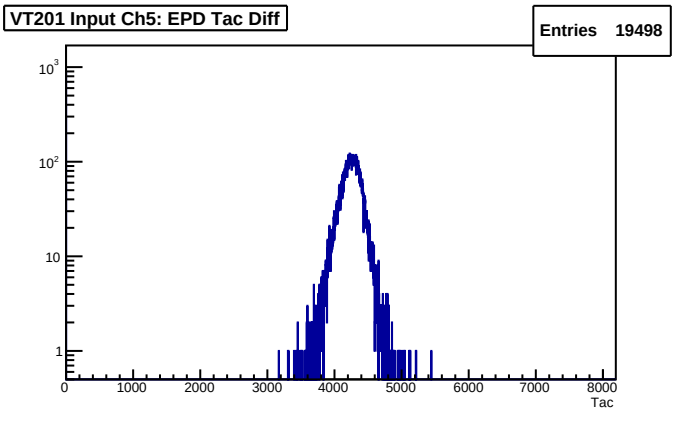

zdcAdcSumDiff
Entries 15
1
0
-1
7
8
1
ZDC-W-th0
ZDC-W-th1
ZDC-W-th2
ZDC-W-th3
ZDC-W-att-th4(Unused)
ZDC-W-att-th5(Unused)
ZDC-E-th0
ZDC-E-th1
ZDC-E-th2
ZDC-E-th3
ZDC-E-att-th4(Unused)

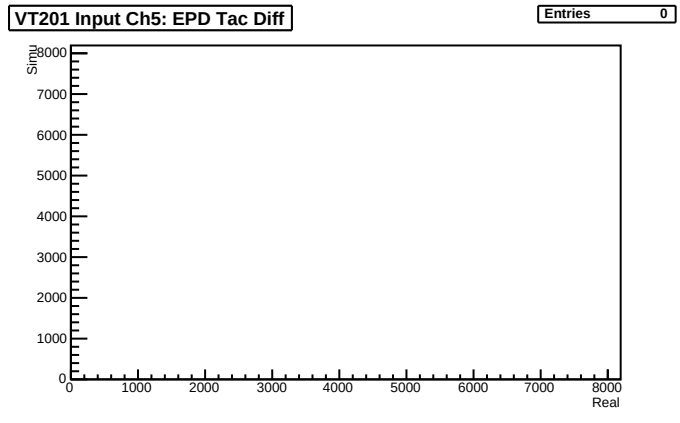

VT201 Input Ch0: BBC Small Tac Diff
Entries 19498
Tac

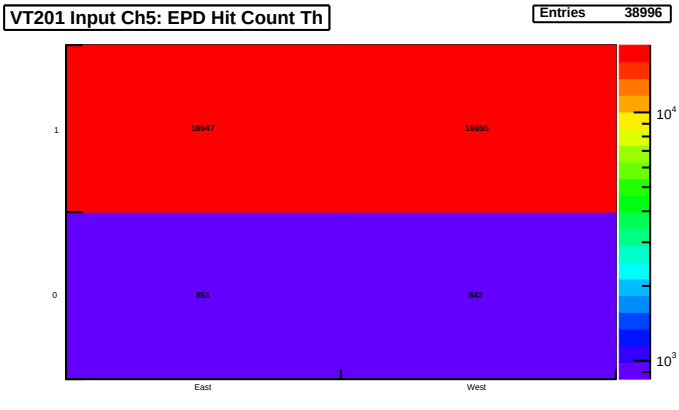

VT201 Input Ch0: BBC Small Tac Diff
Entries 0
Simu
Real

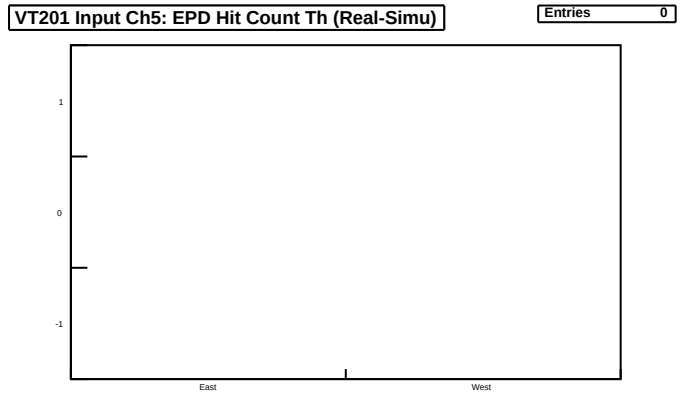

VT201 Input Ch0: BBC Small Adc Sum Th
Entries 38996
18450
18466
1048
1032
East
West

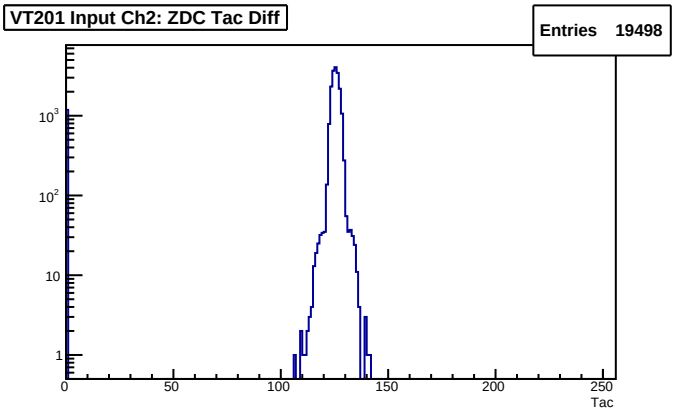

VT201 Input Ch0: BBC Small Adc Sum Th (Real-Simu)
Entries 0
East
West

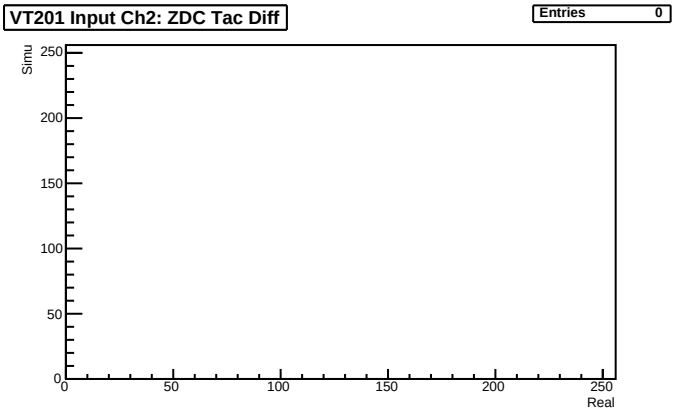

VT201 Input Ch5: EPD Tac Diff
Entries 19498
Tac

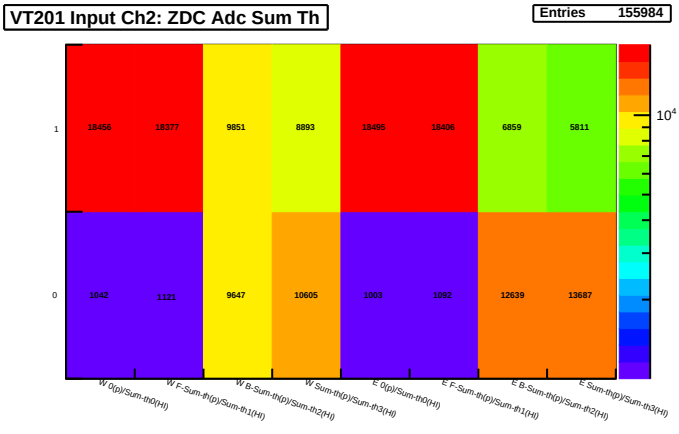

VT201 Input Ch5: EPD Tac Diff
Entries 0
Simu
Real

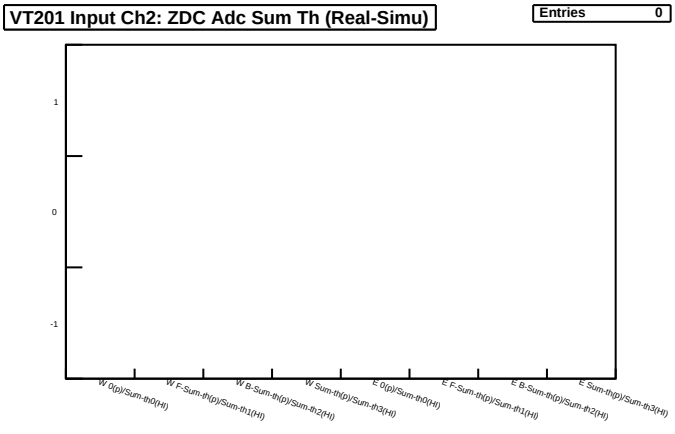

VT201 Input Ch5: EPD Hit Count Th
Entries 38996
18647
18655
851
843
East
West

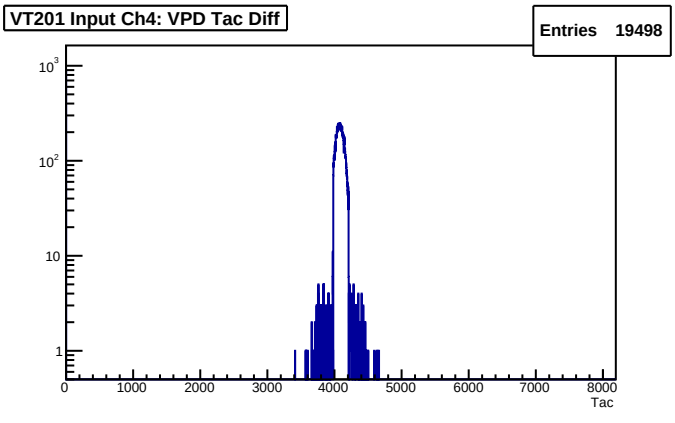

VT201 Input Ch5: EPD Hit Count Th (Real-Simu)
Entries 0
East
West

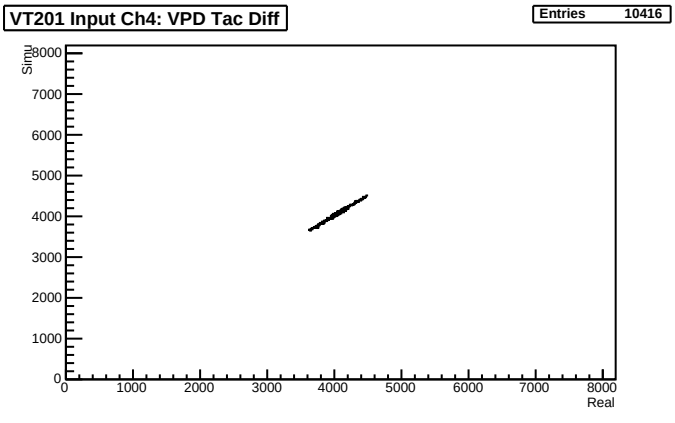

VT201 Input Ch2: ZDC Tac Diff
Entries 19498
Tac

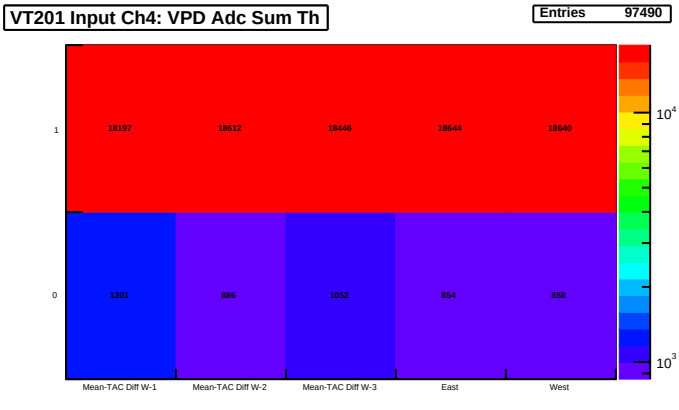

VT201 Input Ch2: ZDC Tac Diff
Entries 0
Simu
Real

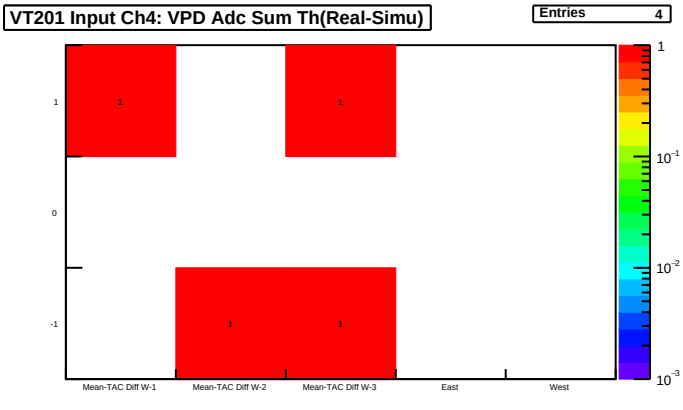

VT201 Input Ch2: ZDC Adc Sum Th
Entries 155984
18456
18377
9851
8893
18495
18406
6859
5811
1042
1121
9647
10605
1003
1092
12639
13687
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

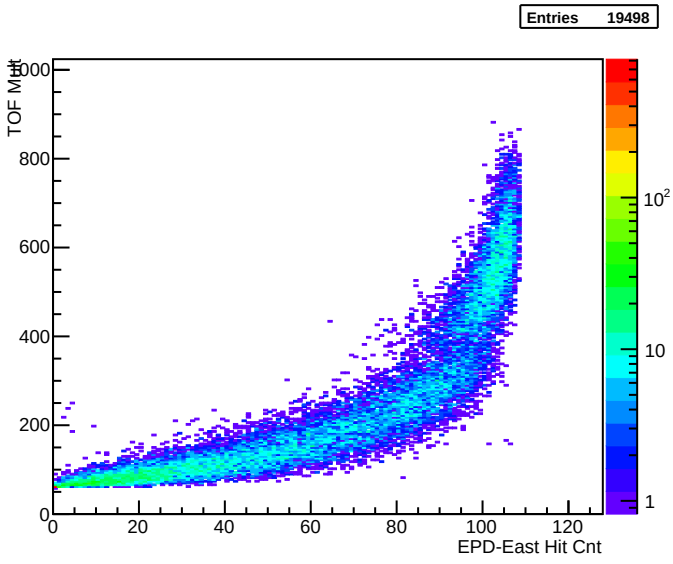

VT201 Input Ch2: ZDC Adc Sum Th (Real-Simu)
Entries 0
W 0(p)/Sum-th0(H)
W F-Sum-th(p)/Sum-th1(H)
W B-Sum-th(p)/Sum-th2(H)
W Sum-th(p)/Sum-th3(H)
E 0(p)/Sum-th0(H)
E F-Sum-th(p)/Sum-th1(H)
E B-Sum-th(p)/Sum-th2(H)
E Sum-th(p)/Sum-th3(H)

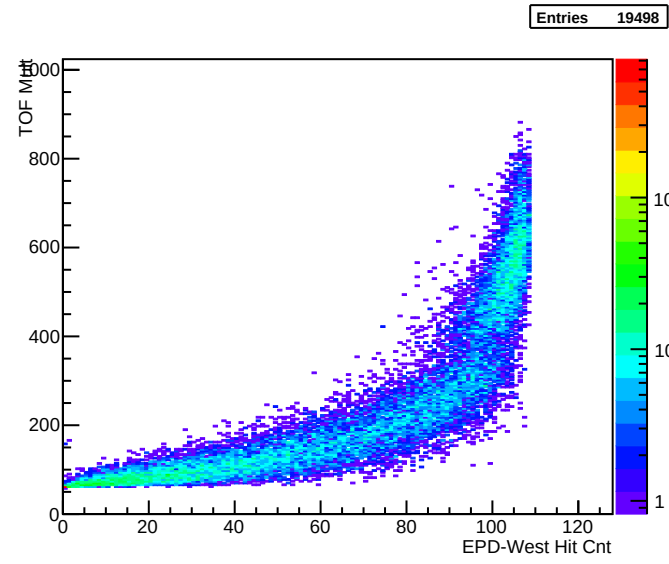

VT201 Input Ch4: VPD Tac Diff
Entries 19498
Tac

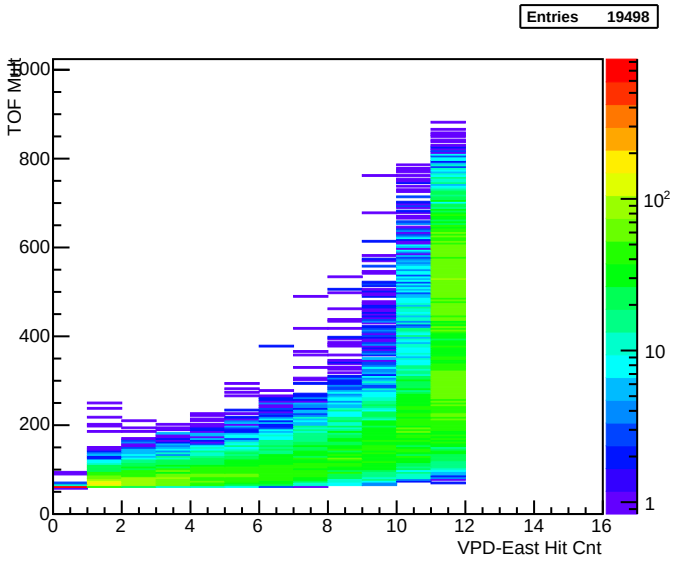

VT201 Input Ch4: VPD Tac Diff
Entries 10416
Simu
Real

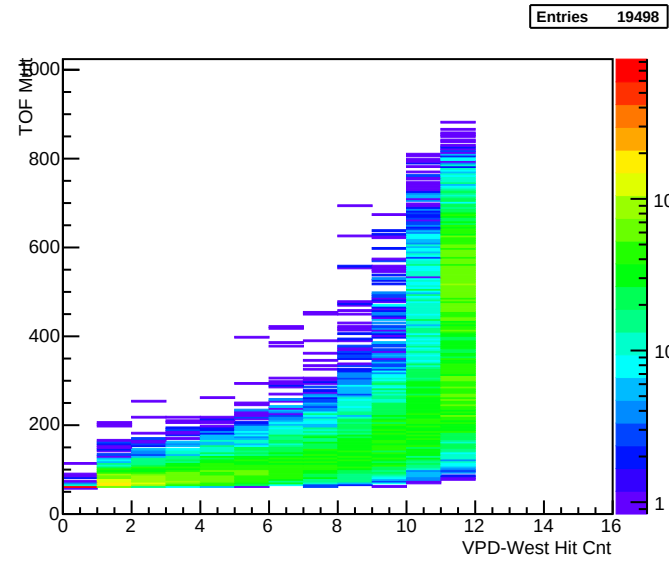

VT201 Input Ch4: VPD Adc Sum Th
Entries 97490
18197
18612
18446
18644
18640
1301
886
1052
854
858
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

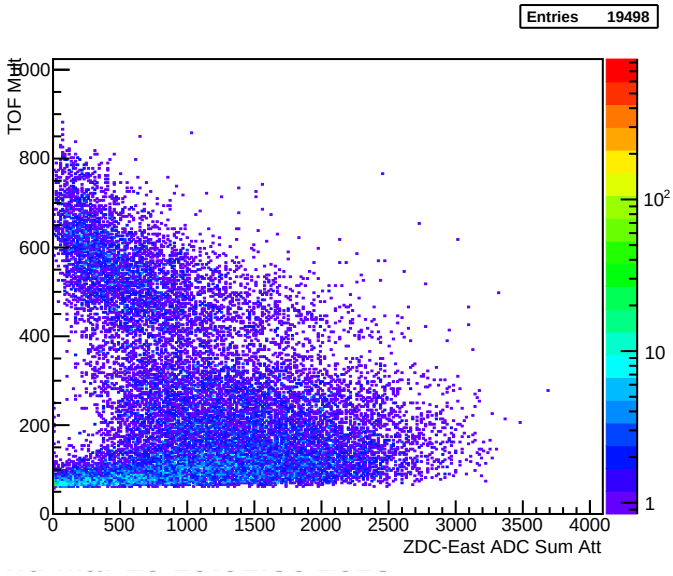

VT201 Input Ch4: VPD Adc Sum Th(Real-Simu)
Entries 4
Mean-TAC Diff W-1
Mean-TAC Diff W-2
Mean-TAC Diff W-3
East
West

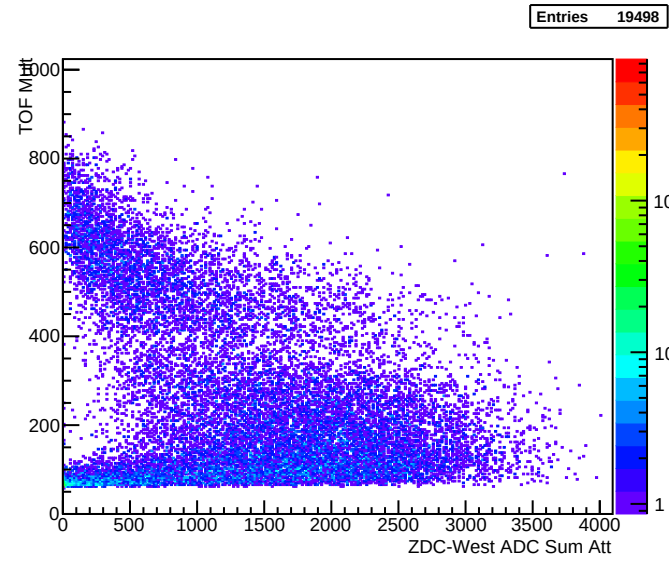

Entries 19498
TOF Mult
EPD-East Hit Cnt

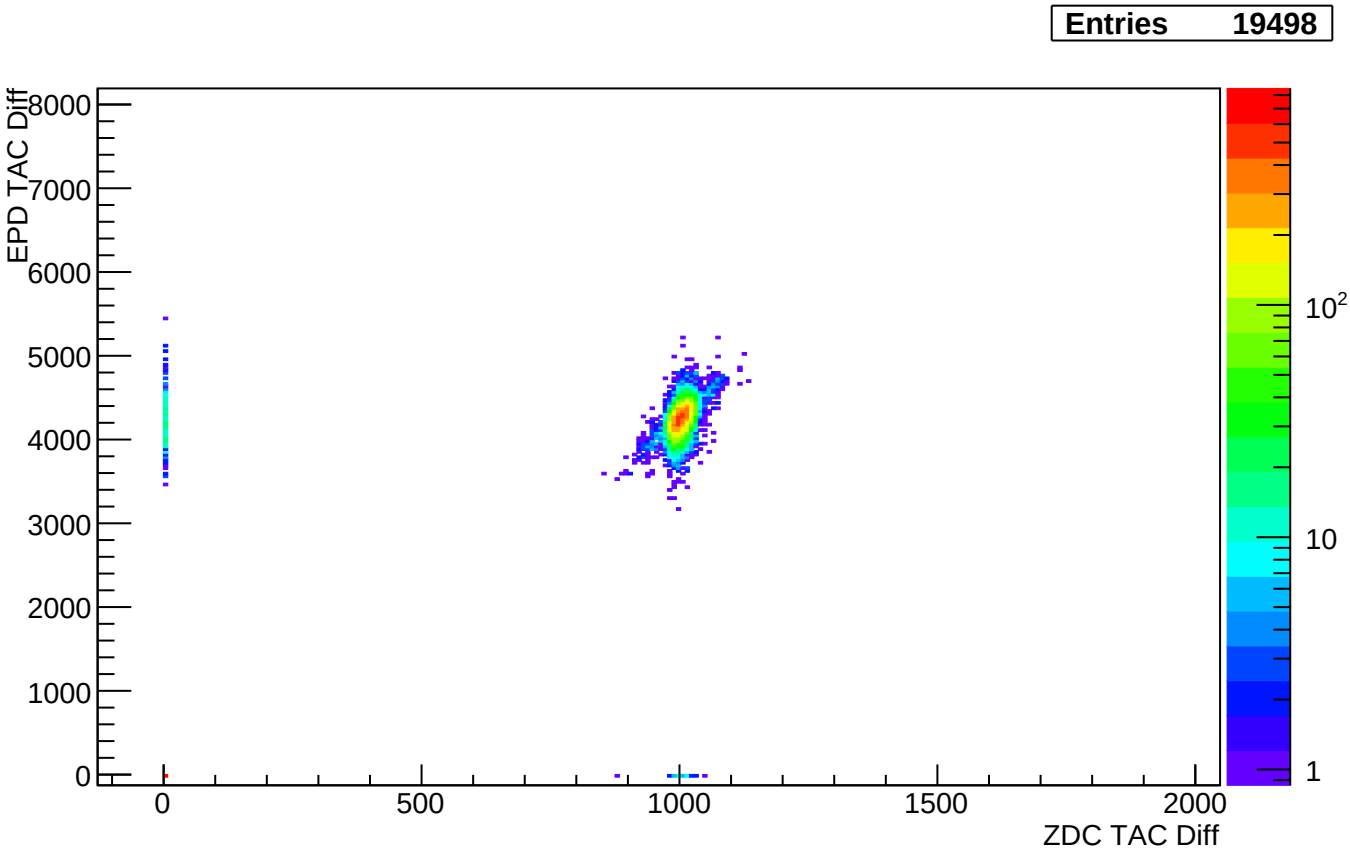

Entries 19498
TOF Mult
EPD-West Hit Cnt

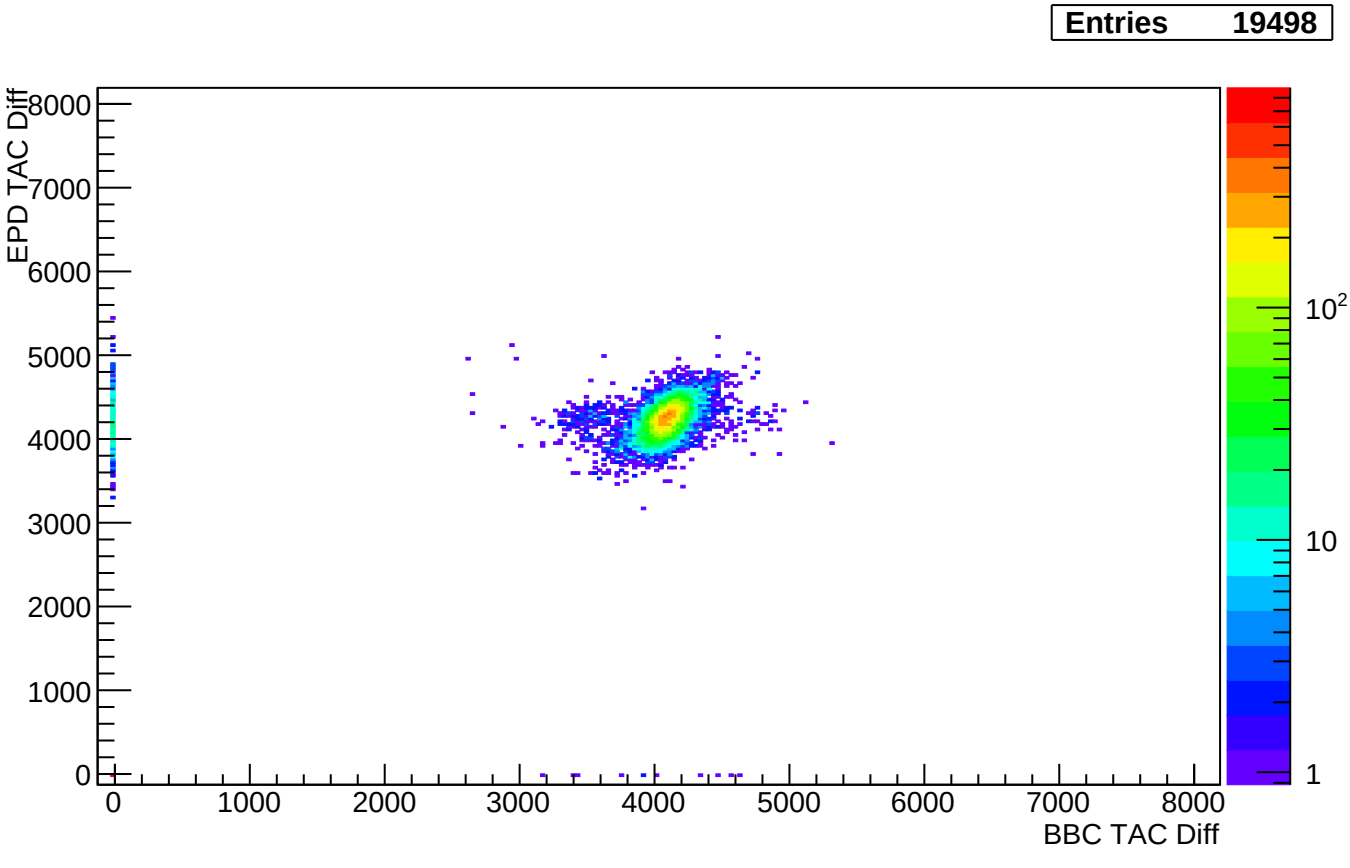

Entries 19498
TOF Mult
VPD-East Hit Cnt

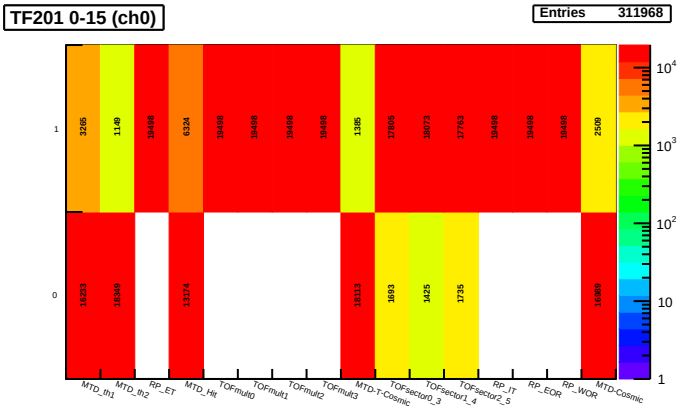

Entries 19498
TOF Mult
VPD-West Hit Cnt

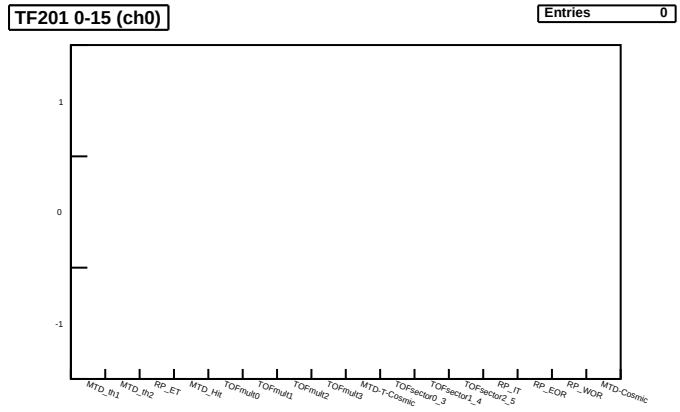

Entries 19498
TOF Mult
ZDC-East ADC Sum Att

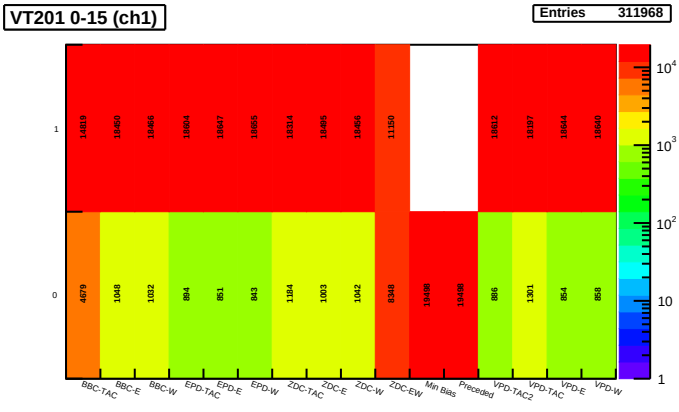

Entries 19498
TOF Mult
ZDC-West ADC Sum Att

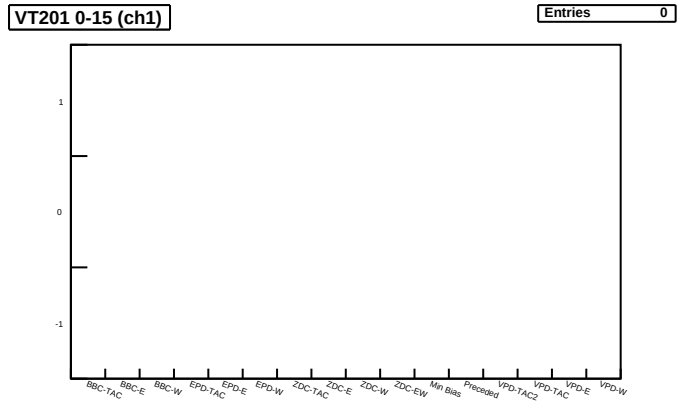

Entries 19498
EPD TAC Diff
ZDC TAC Diff
0
1000
2000
3000
4000
5000
6000
7000
8000
0
500
1000
1500
2000
1
10
10^2

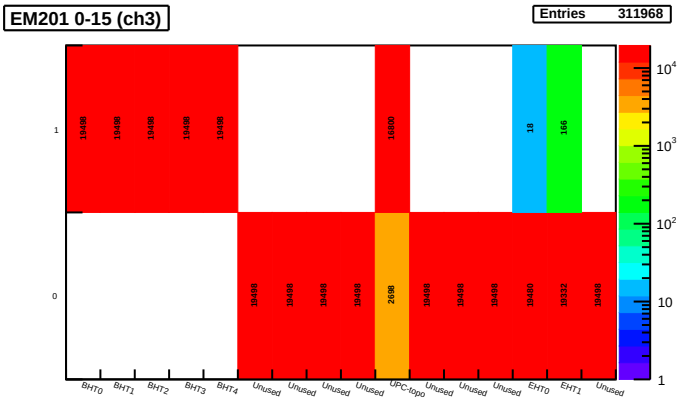

Entries 19498
EPD TAC Diff
BBC TAC Diff
0
1000
2000
3000
4000
5000
6000
7000
8000
0
1000
2000
3000
4000
5000
6000
7000
8000
1
10
10^2

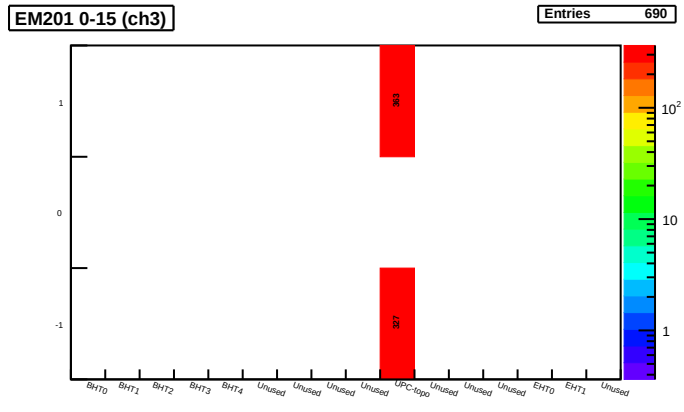

TF201 0-15 (ch0)
Entries 311968
3265 1149 19498 6324 19498 19498 19498 19498 1385 17805 18073 17763 19498 19498 19498 2509
16253 18349 13374 18113 1693 1425 1735 16889
MTD_th1 MTD_th2 RP_ET MTD_Hit TOFmult0 TOFmult1 TOFmult2 TOFmult3 MTD-T-Cosmic TOFsector0_3 TOFsector1_4 TOFsector2_5 RP_IT RP_EOR RP_WOR MTD-Cosmic

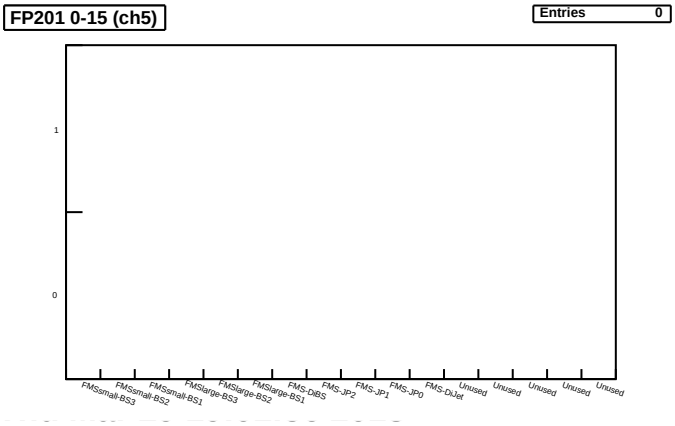

TF201 0-15 (ch0)
Entries 0
MTD_th1 MTD_th2 RP_ET MTD_Hit TOFmult0 TOFmult1 TOFmult2 TOFmult3 MTD-T-Cosmic TOFsector0_3 TOFsector1_4 TOFsector2_5 RP_IT RP_EOR RP_WOR MTD-Cosmic

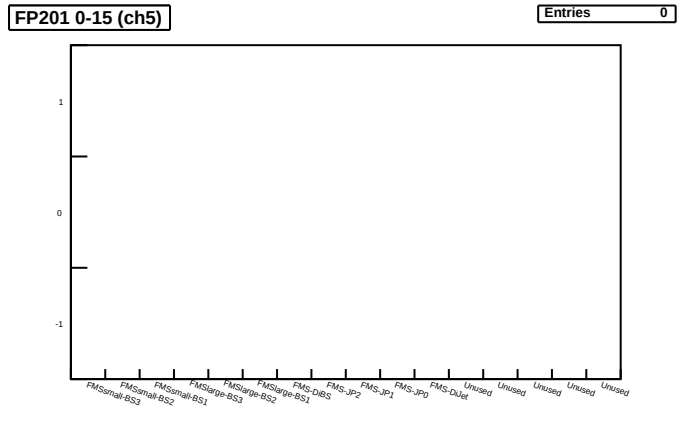

VT201 0-15 (ch1)
Entries 311968
14819 19450 19466 19604 19647 19665 19314 19495 19456 11150 19612 19397 19644 19640
4679 1048 1032 884 851 843 1184 1003 1042 8348 19498 19498 886 1301 854 858
BBC-TAC BBC-E BBC-W EPD-TAC EPD-E EPD-W ZDC-TAC ZDC-E ZDC-W ZDC-EW Min Bias Preceded VPD-TAC2 VPD-TAC VPD-E VPD-W


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


EM201 0-15 (ch3)
Entries 311968
19498 19498 19498 19498 19498 16300 18 166
19498 19498 19498 19498 2698 19498 19498 19498 19480 19332 19498
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


EM201 0-15 (ch3)
Entries 690
363
327
BHT0 BHT1 BHT2 BHT3 BHT4 Unused Unused Unused Unused UPC-topo Unused Unused Unused EHT0 EHT1 Unused


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


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