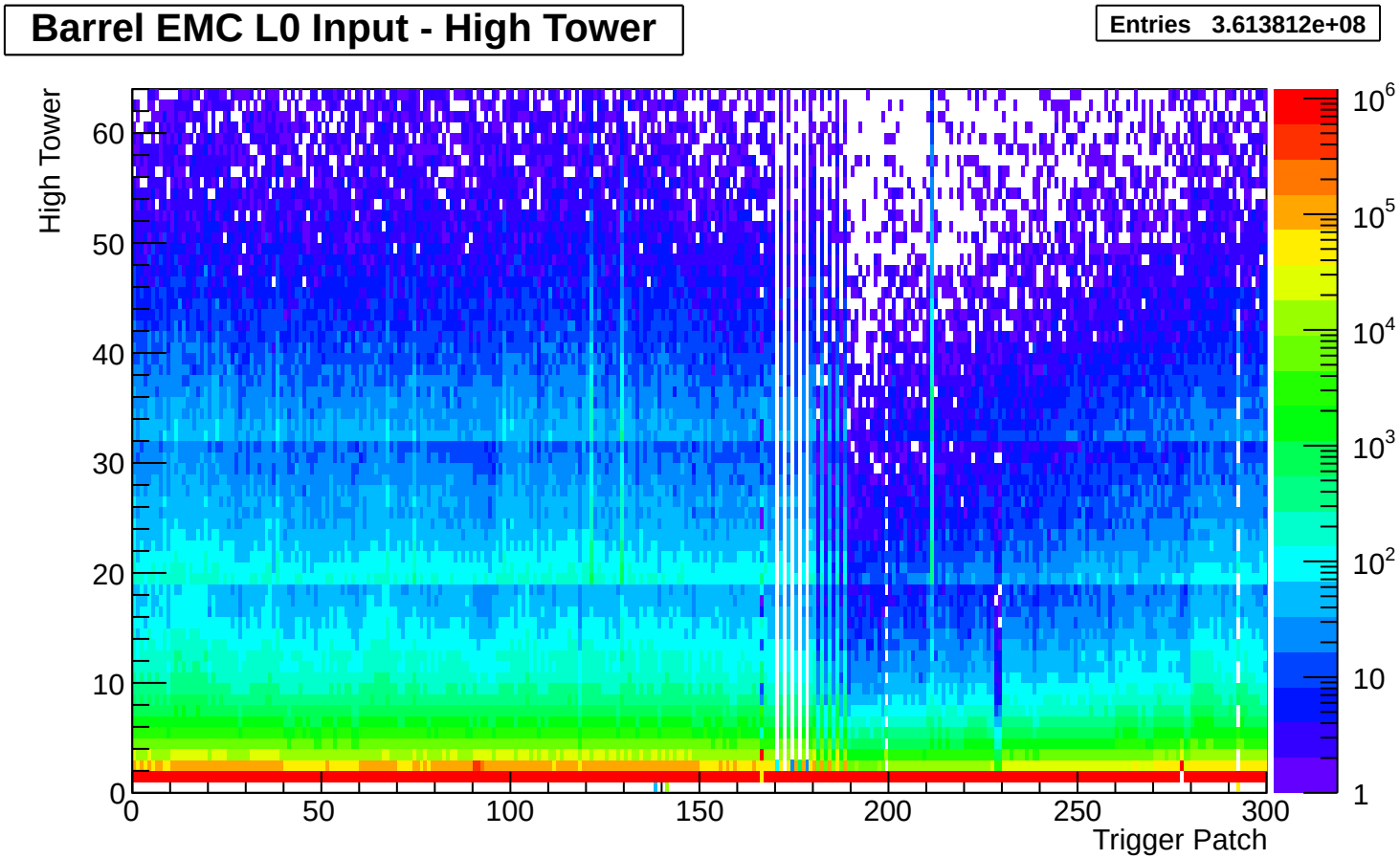
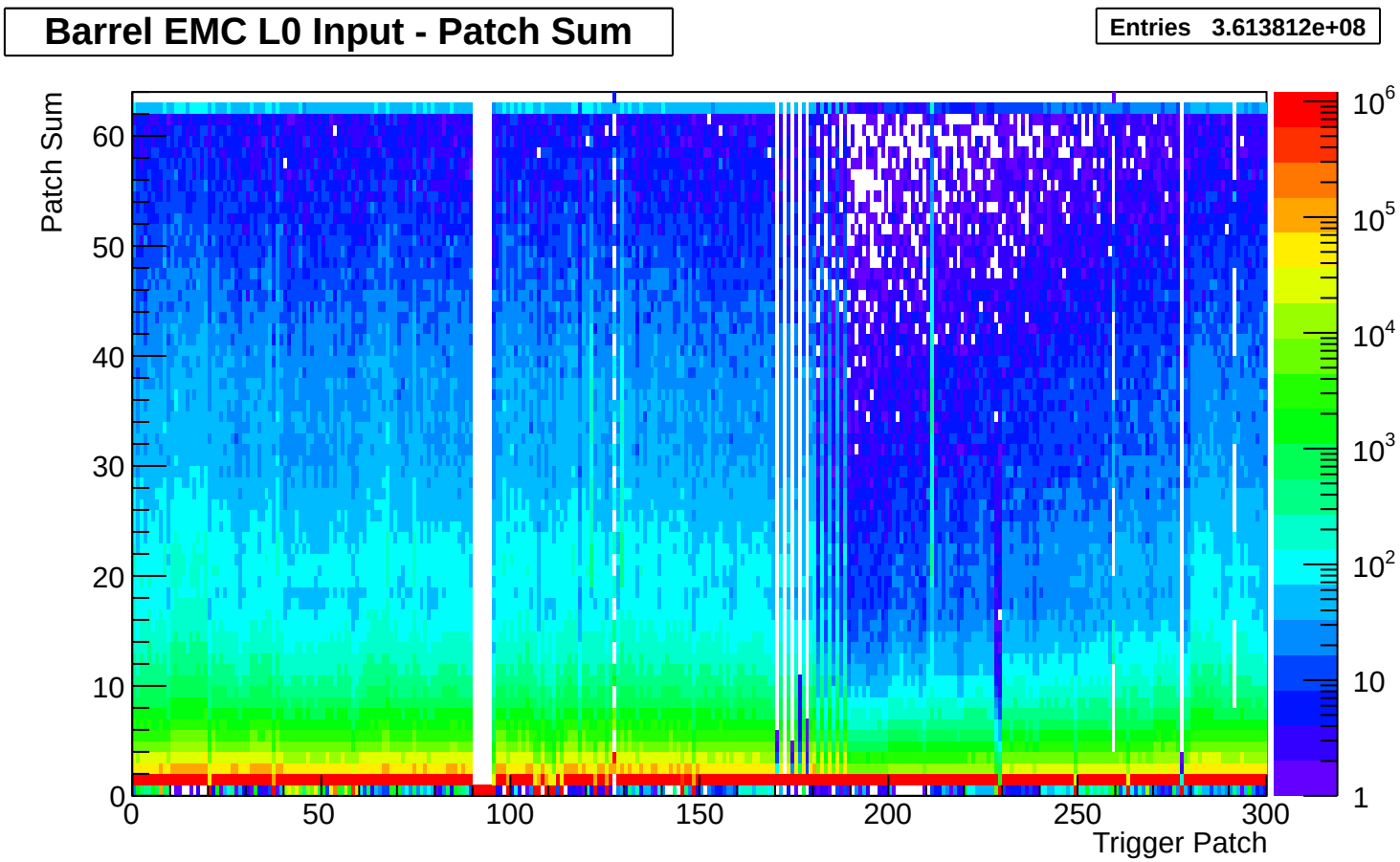
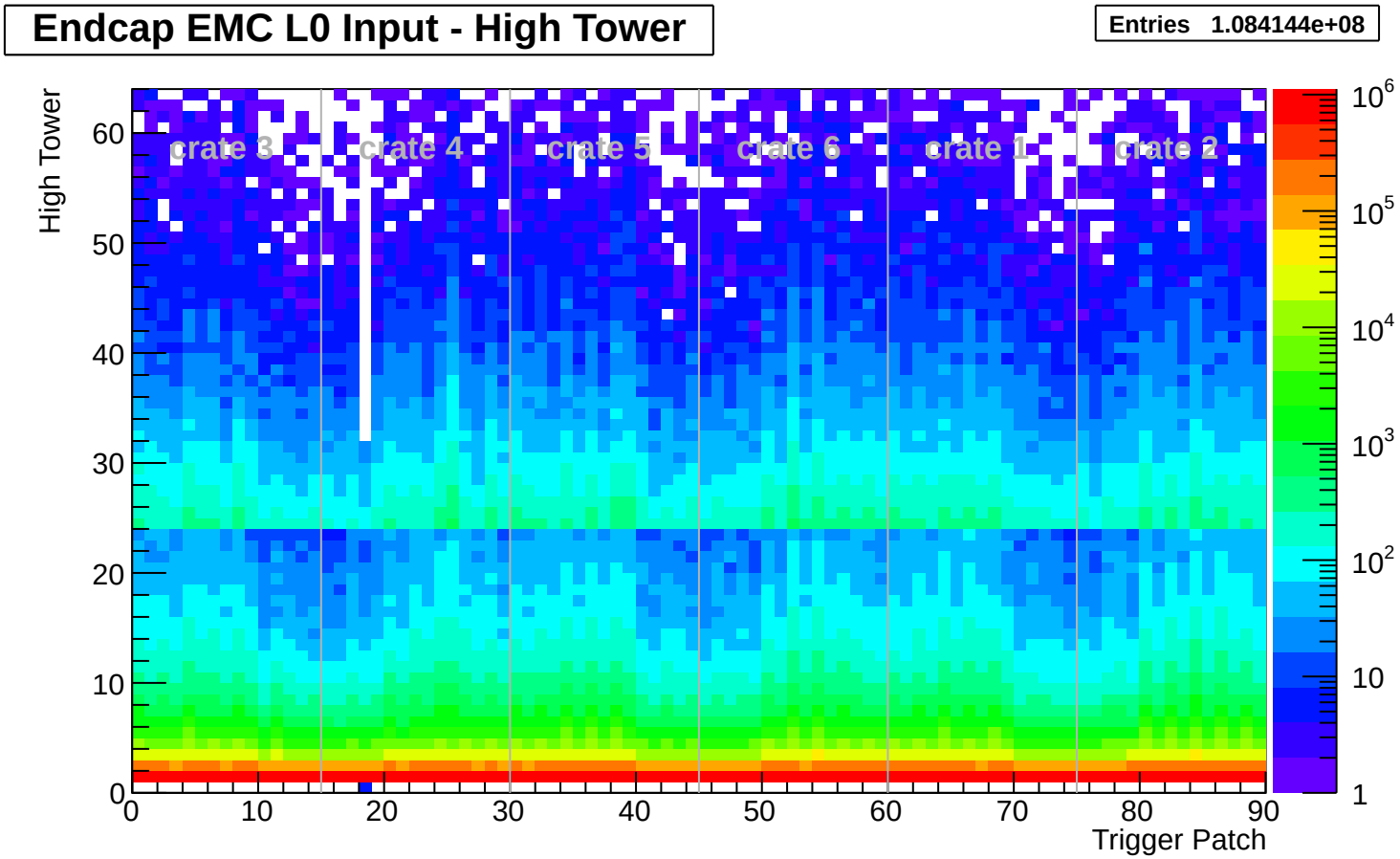
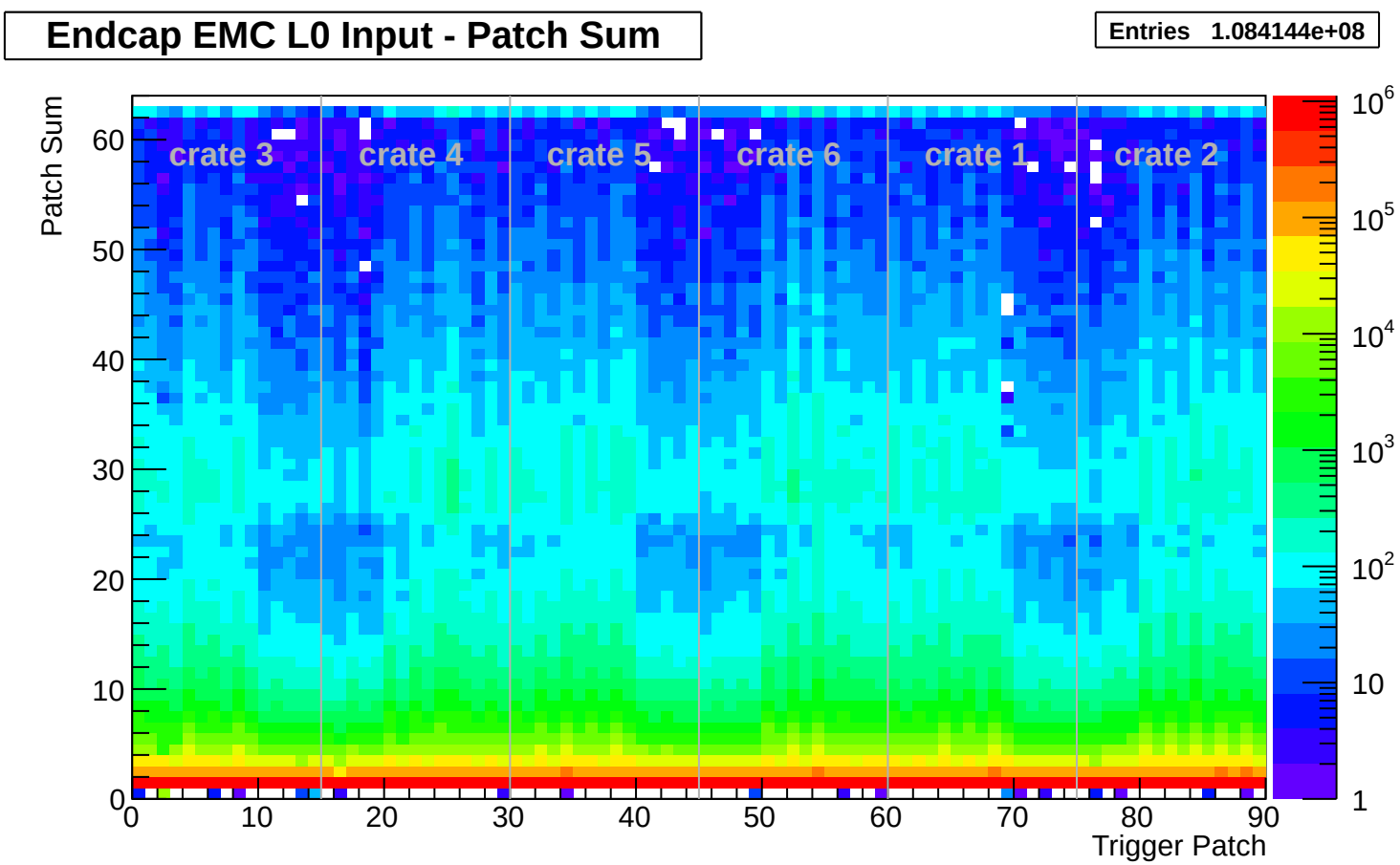
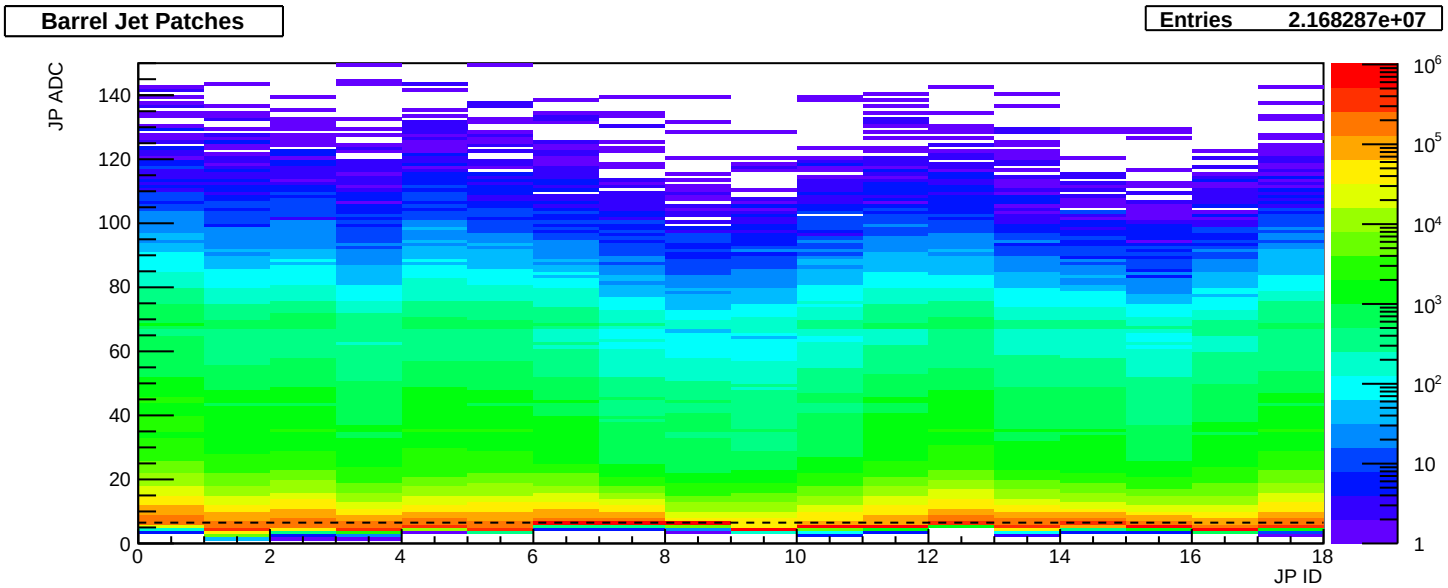
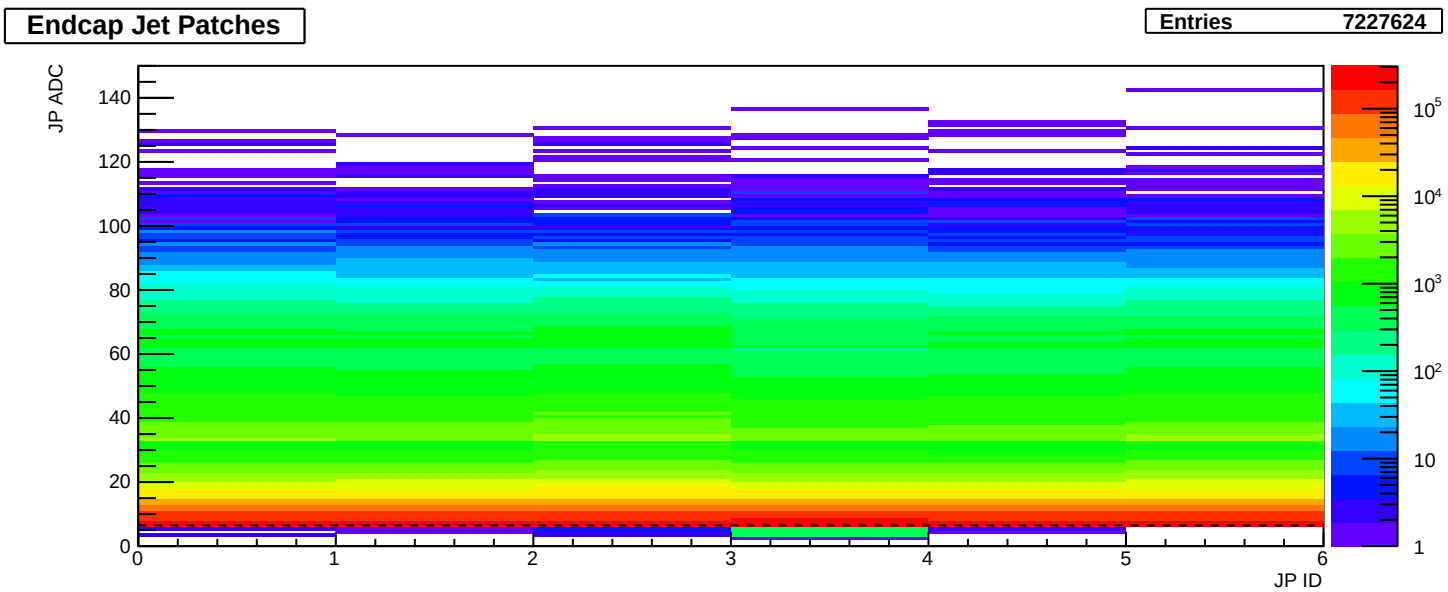

Barrel EMC L0 Input - High Tower
Entries 3.613812e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

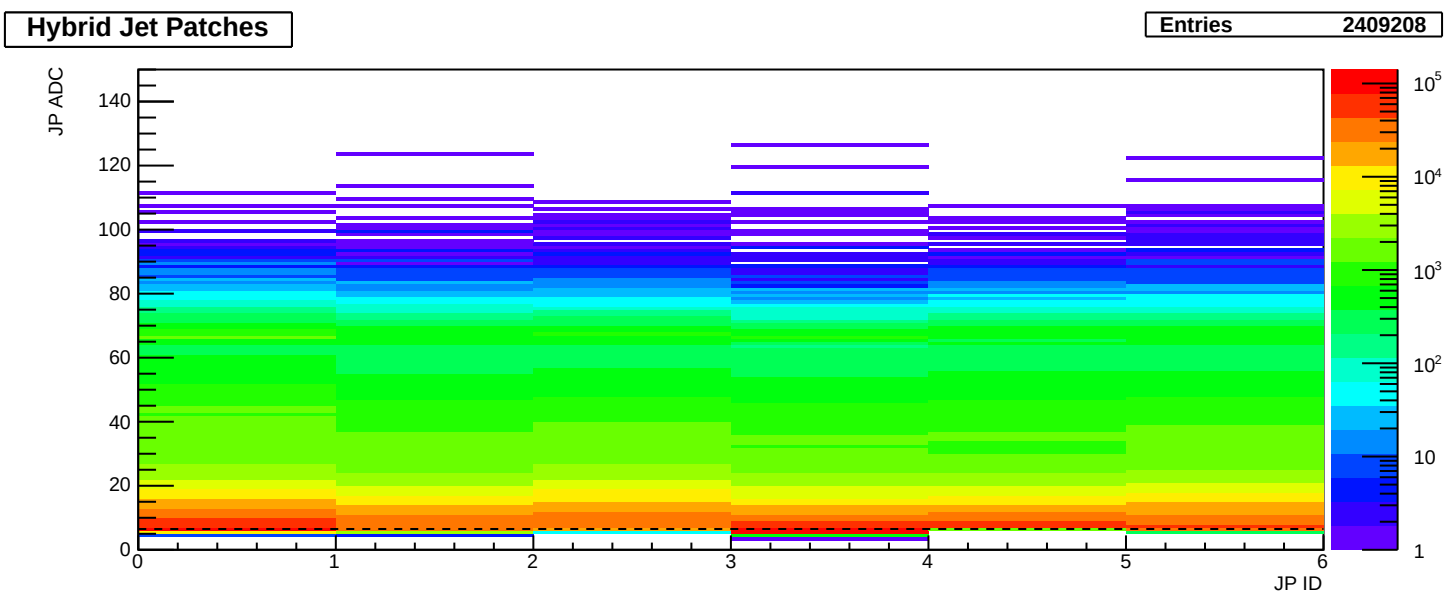

Barrel EMC L0 Input - Patch Sum
Entries 3.613812e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

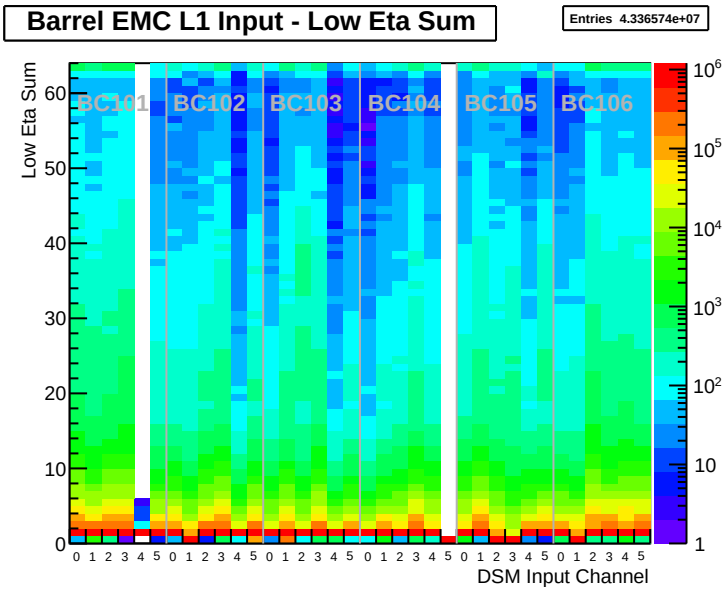

Endcap EMC L0 Input - High Tower
Entries 1.084144e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

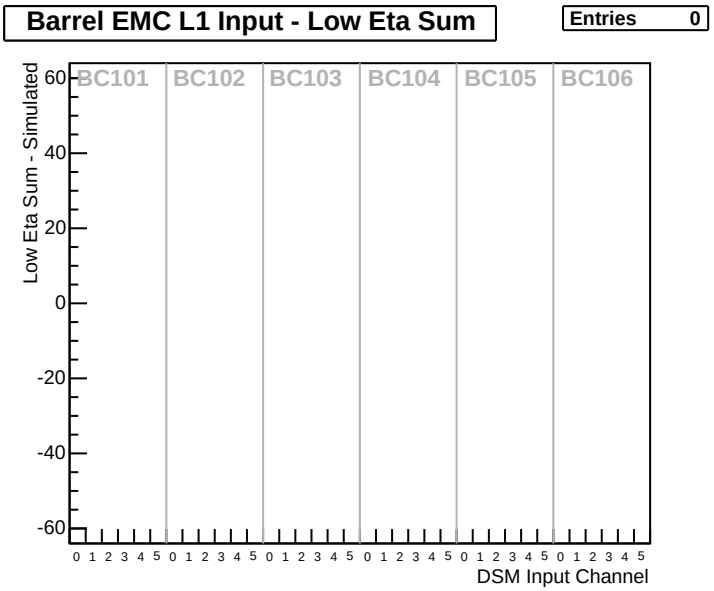

Endcap EMC L0 Input - Patch Sum
Entries 1.084144e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

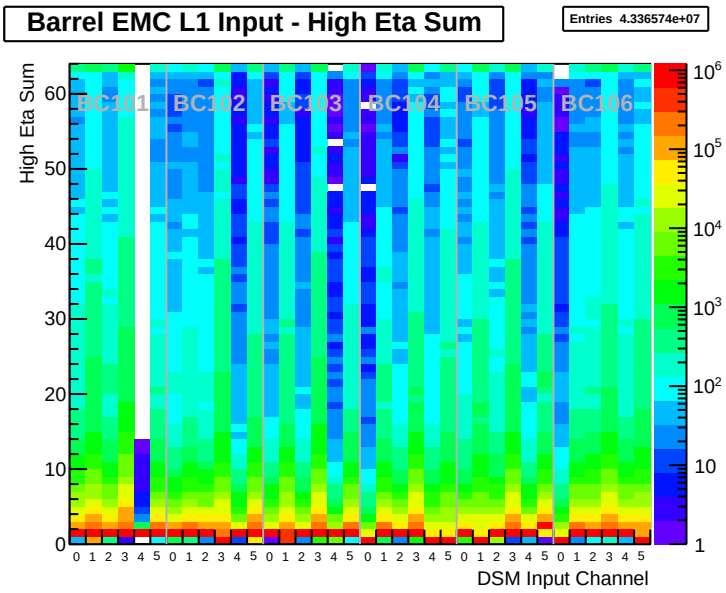

Barrel Jet Patches
Entries 2.168287e+07
JP ADC
JP ID

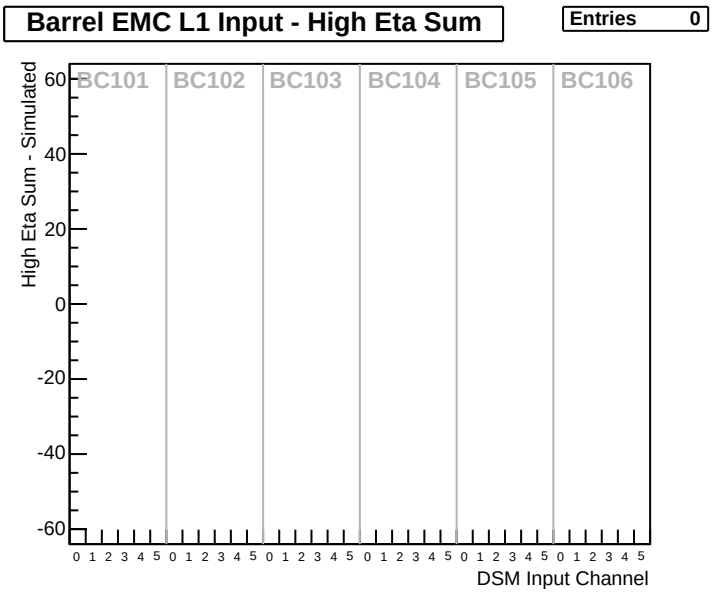

Endcap Jet Patches
Entries 7227624
JP ADC
JP ID

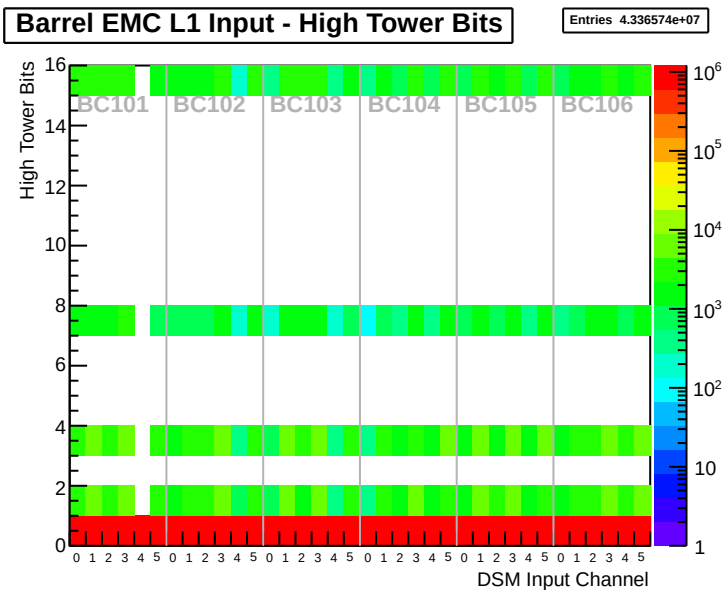

Hybrid Jet Patches
Entries 2409208
JP ADC
JP ID

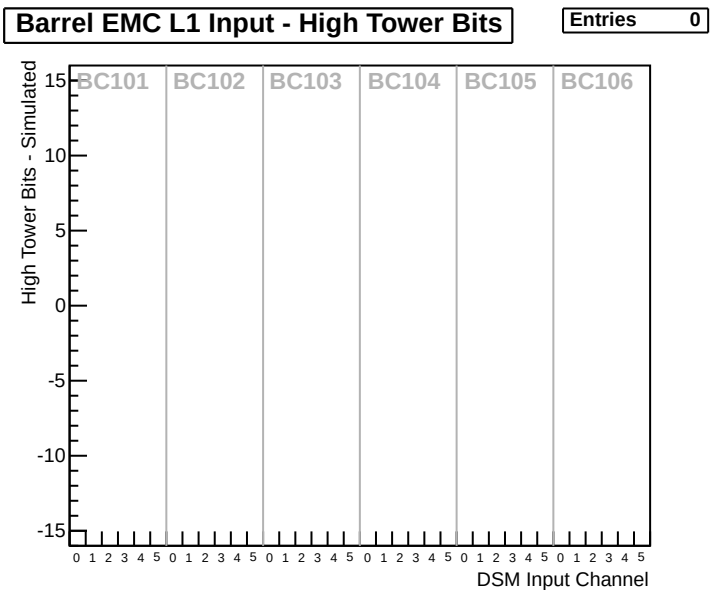

Barrel EMC L1 Input - Low Eta Sum
Entries 4.336574e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

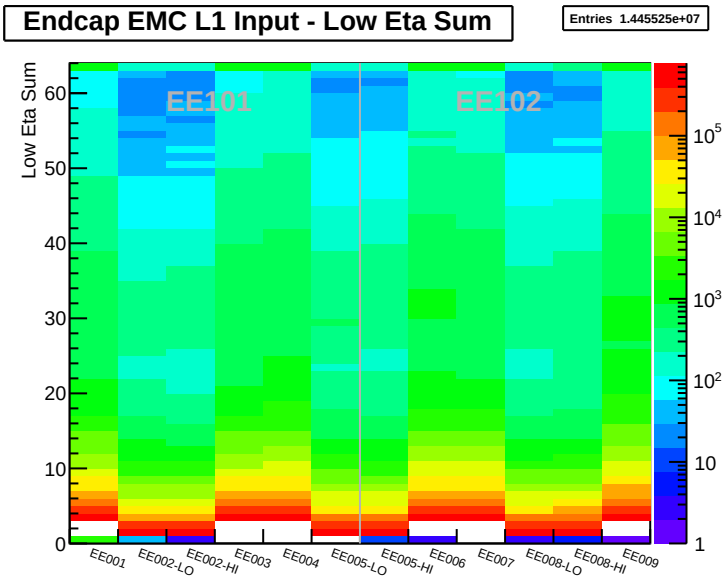

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

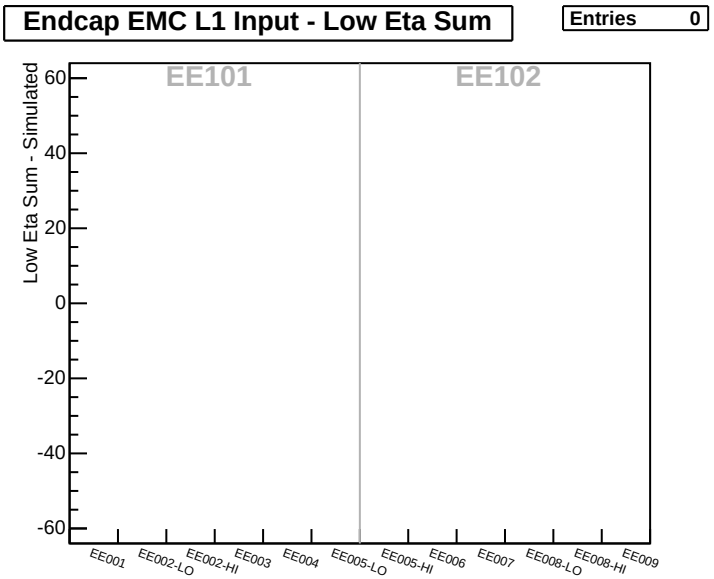

Barrel EMC L1 Input - High Eta Sum
Entries 4.336574e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

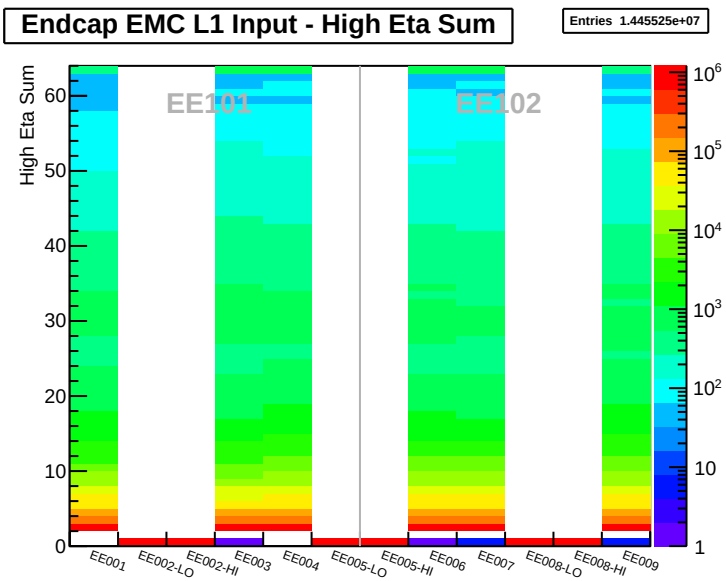

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

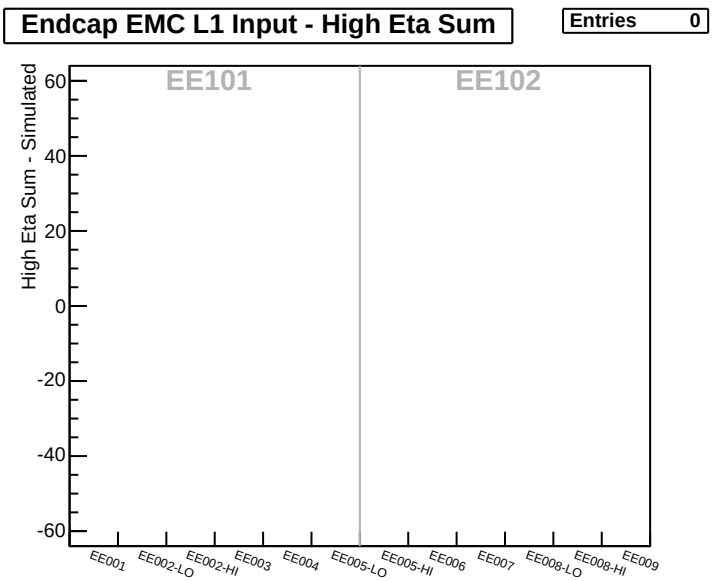

Barrel EMC L1 Input - High Tower Bits
Entries 4.336574e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

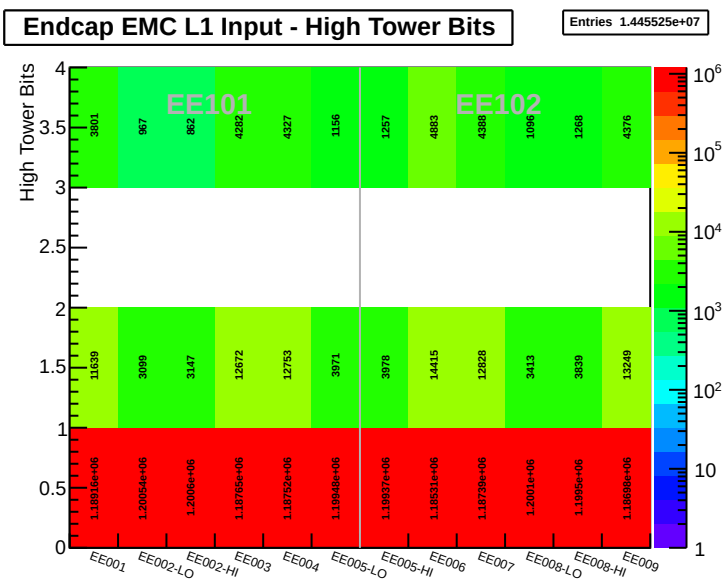

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

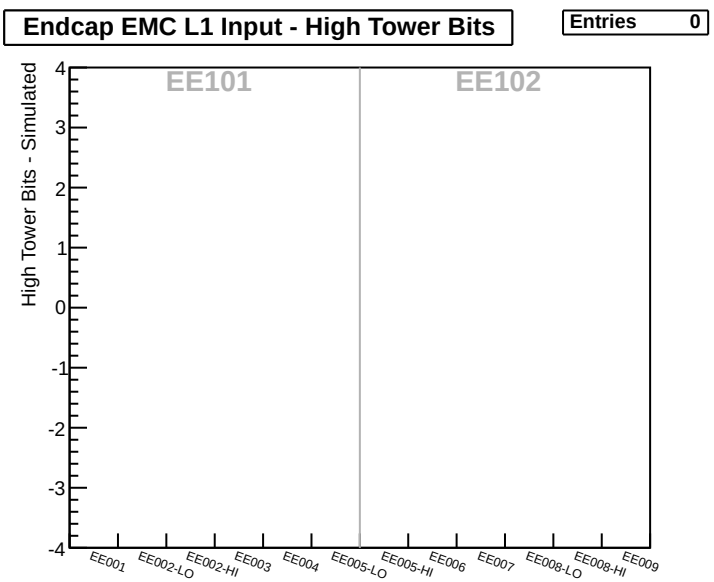

Endcap EMC L1 Input - Low Eta Sum
Entries 1.445525e+07
Low Eta Sum
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

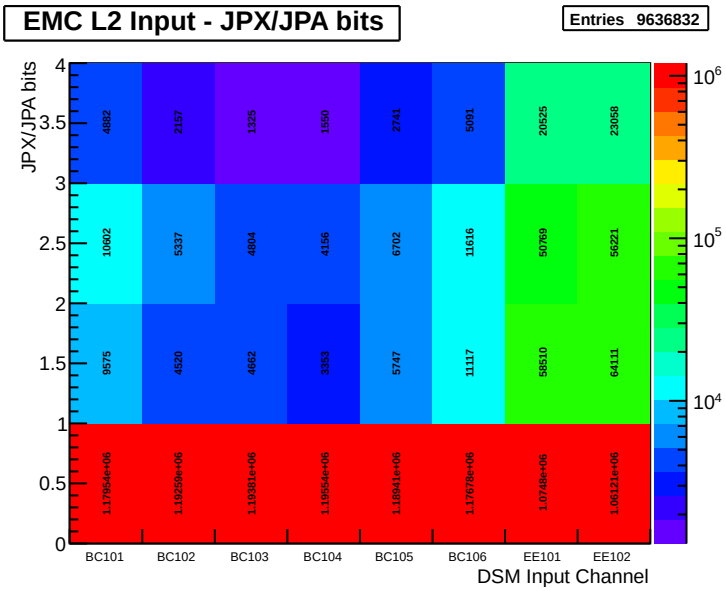

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

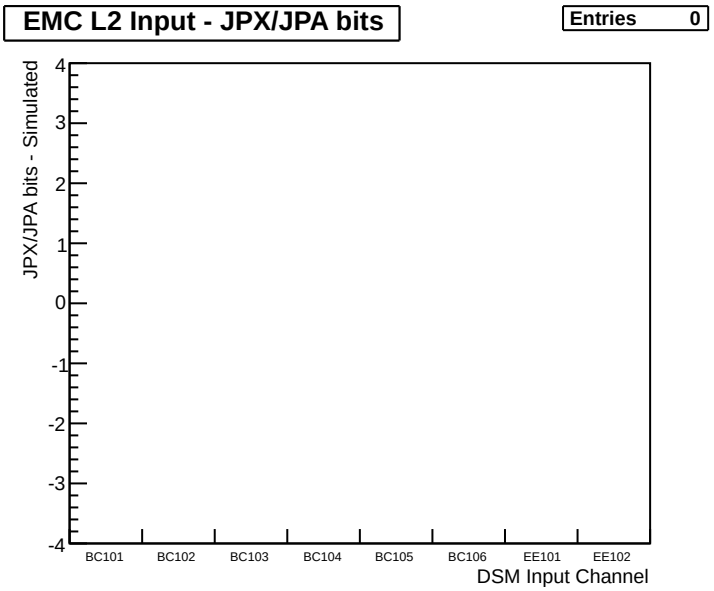

Endcap EMC L1 Input - High Eta Sum
Entries 1.445525e+07
High Eta Sum
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

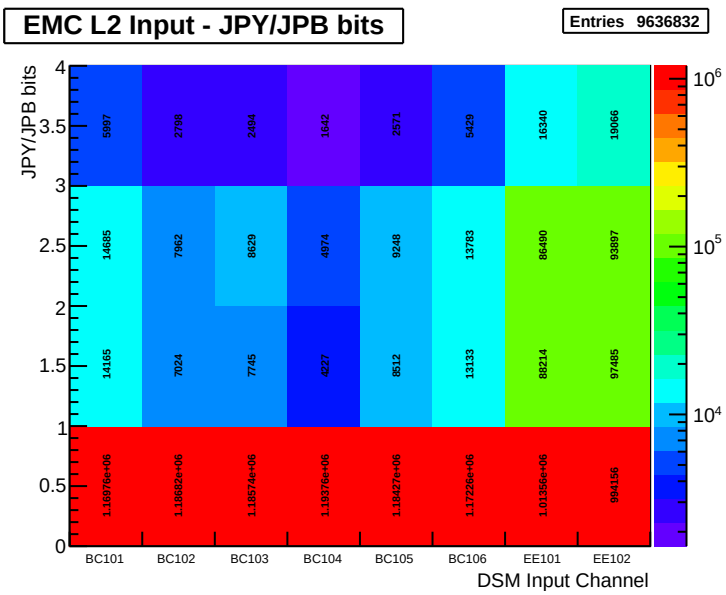

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

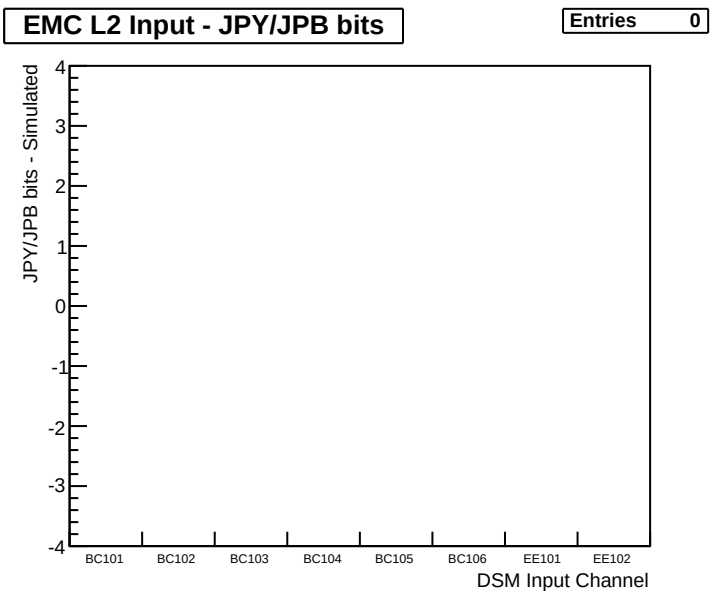

Endcap EMC L1 Input - High Tower Bits
Entries 1.445525e+07
High Tower Bits
EE101
EE102
3801
967
862
4282
4327
1156
1257
4883
4388
1096
1268
4376
11639
3099
3147
12672
12753
3971
3978
14415
12828
3413
3839
13249
1.18916e+06
1.20054e+06
1.2006e+06
1.18765e+06
1.18752e+06
1.19948e+06
1.19937e+06
1.18531e+06
1.18739e+06
1.2001e+06
1.1995e+06
1.18698e+06
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

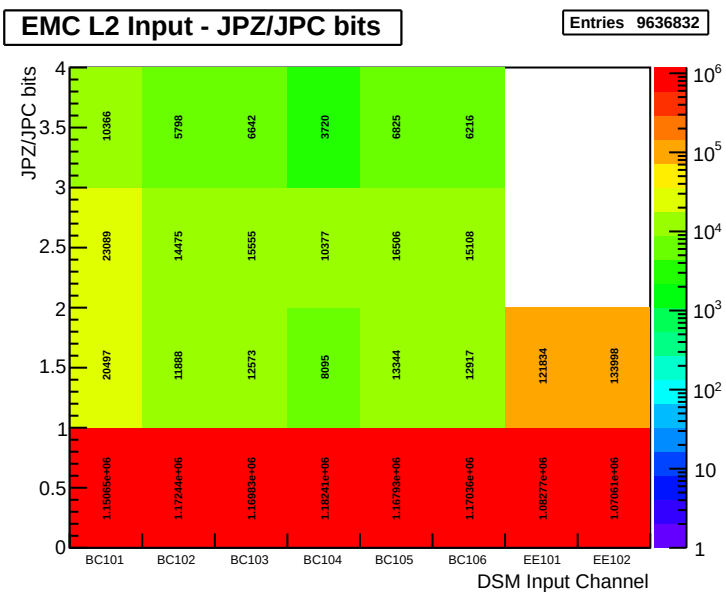

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

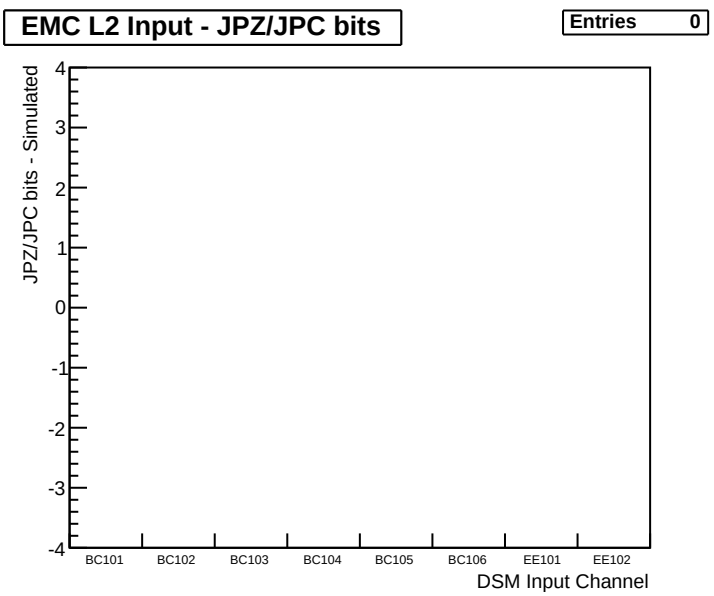

EMC L2 Input - JPX/JPA bits
Entries 9636832
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
4882 2157 1325 1550 2741 5091 20525 23058
10602 5337 4804 4156 6702 11616 50769 56221
9575 4520 4662 3353 5747 11117 58510 64111
1.17954e+06 1.19259e+06 1.19381e+06 1.19554e+06 1.18941e+06 1.17678e+06 1.0748e+06 1.06121e+06

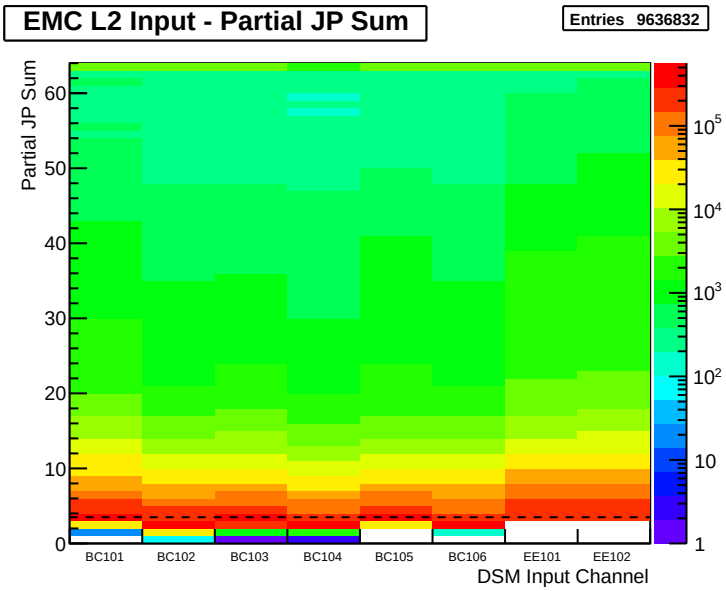

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

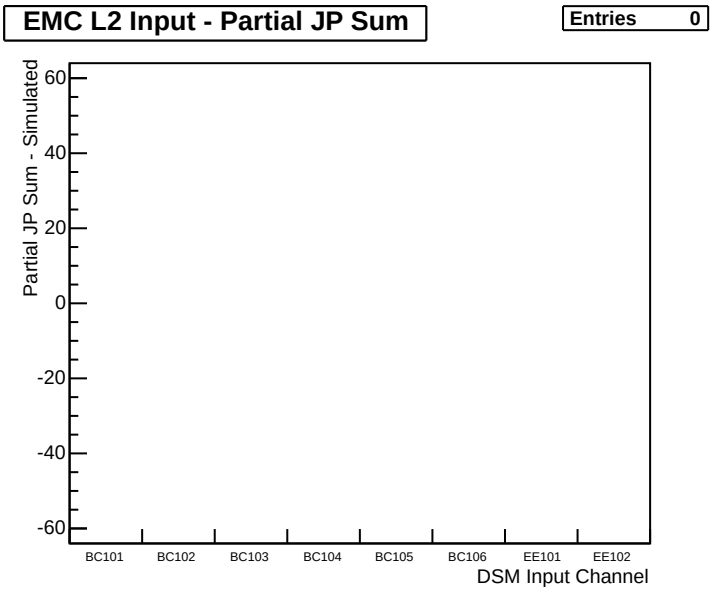

EMC L2 Input - JPY/JPB bits
Entries 9636832
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
5997 2798 2494 1642 2571 5429 16340 19066
14685 7962 8629 4974 9248 13783 86490 93897
14165 7024 7745 4227 8512 13133 88214 97485
1.16976e+06 1.18682e+06 1.18574e+06 1.19376e+06 1.18427e+06 1.17226e+06 1.01356e+06 994156

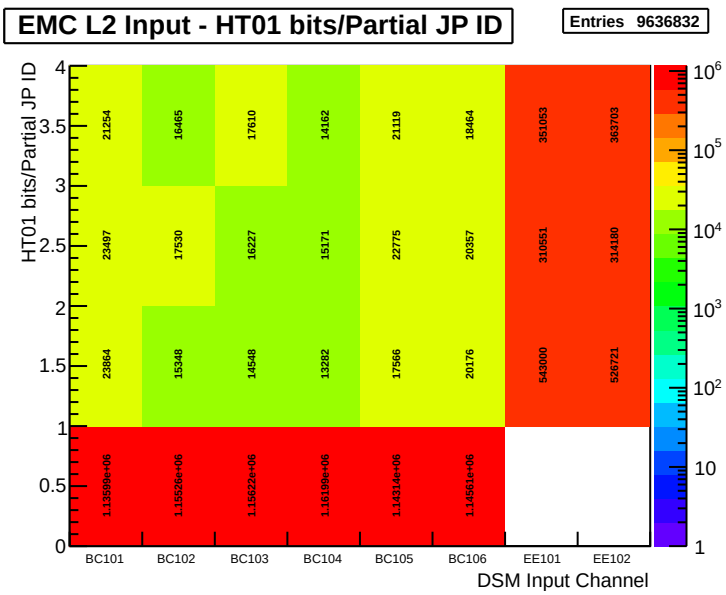

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

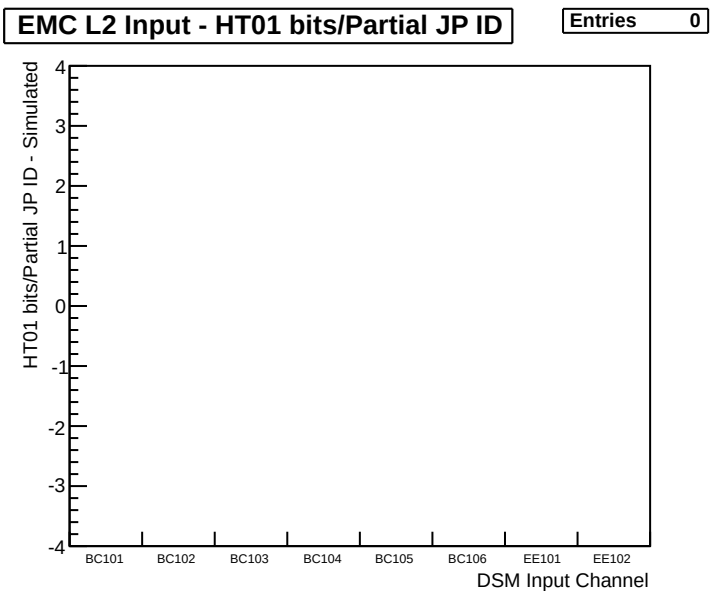

EMC L2 Input - JPZ/JPC bits
Entries 9636832
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
10366 5798 6642 3720 6825 6216
23089 14475 15555 10377 16506 15108
20497 11888 12573 8095 13344 12917 121834 133998
1.15065e+06 1.17244e+06 1.15993e+06 1.18241e+06 1.16793e+06 1.17036e+06 1.08277e+06 1.07061e+06

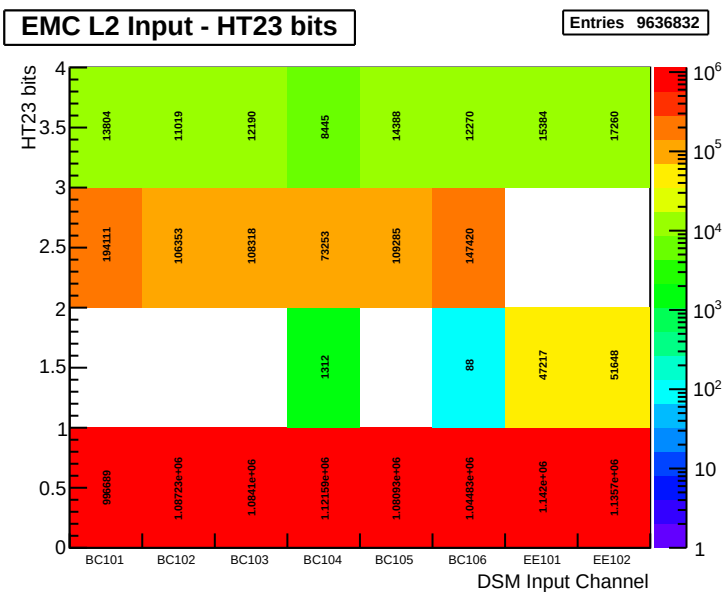

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

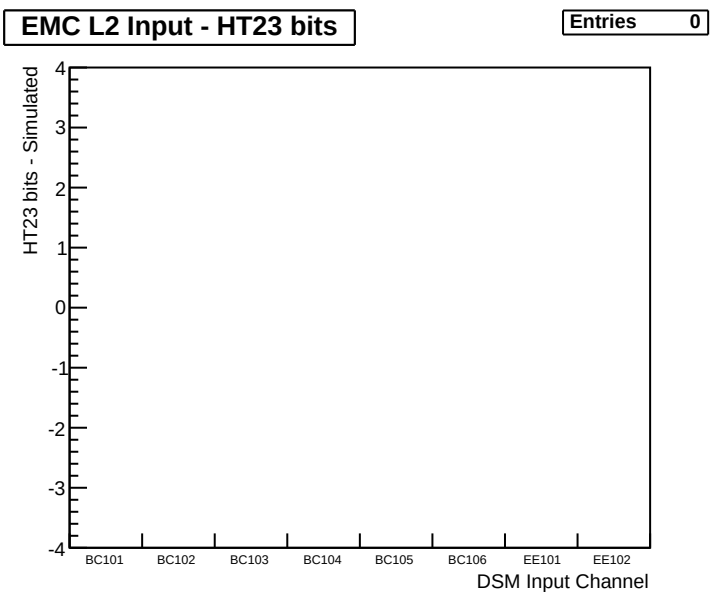

EMC L2 Input - Partial JP Sum
Entries 9636832
Partial JP Sum
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
EE101
EE102

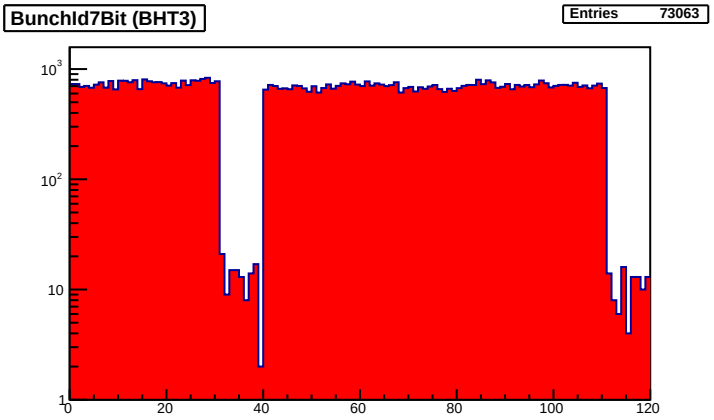

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
EE101
EE102

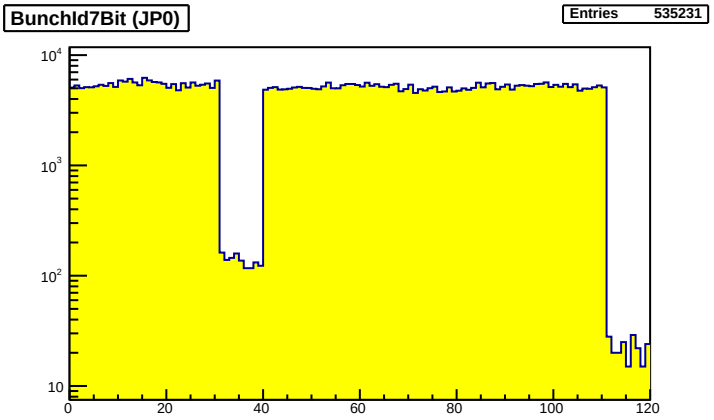

EMC L2 Input - HT01 bits/Partial JP ID
Entries 9636832
HT01 bits/Partial JP ID
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
EE101
EE102

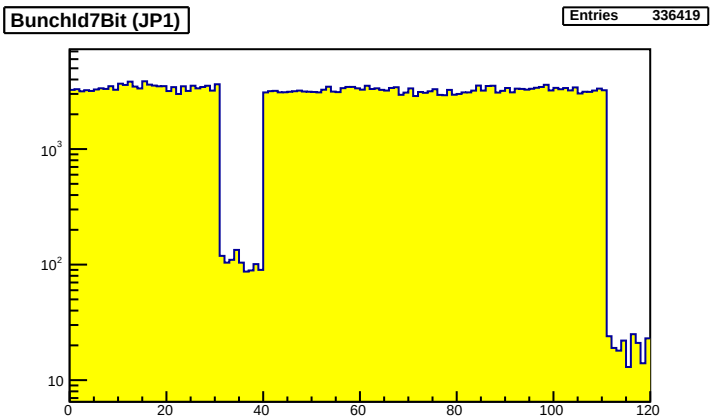

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
EE101
EE102

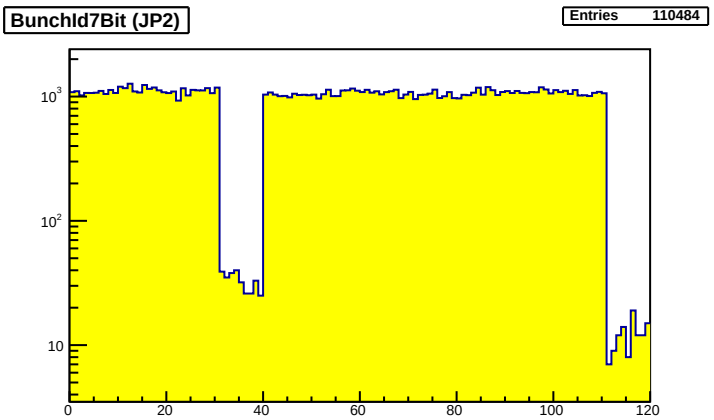

EMC L2 Input - HT23 bits
Entries 9636832
HT23 bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
EE101
EE102

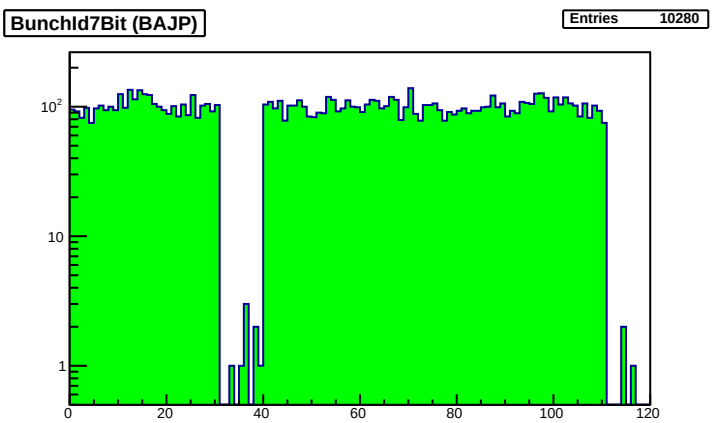

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
EE101
EE102

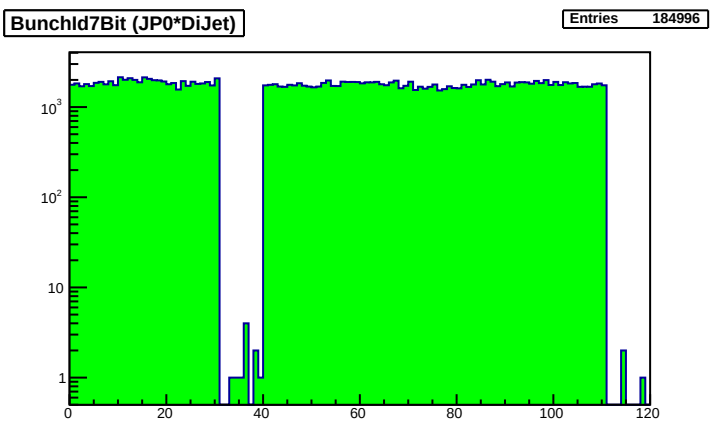

BunchId7Bit (BHT3)
Entries 73063

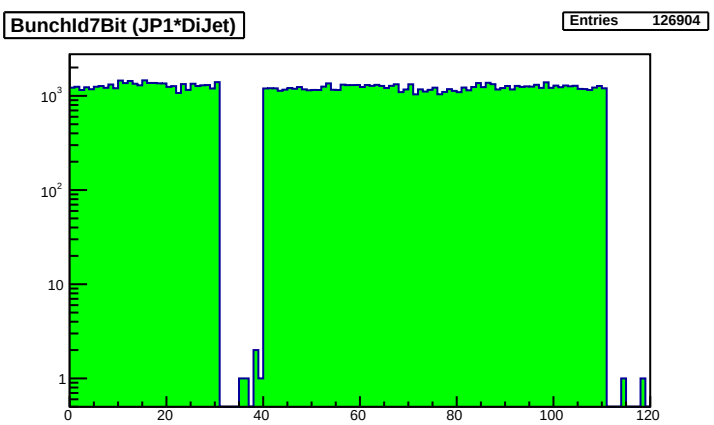

BunchId7Bit (JP0)
Entries 535231

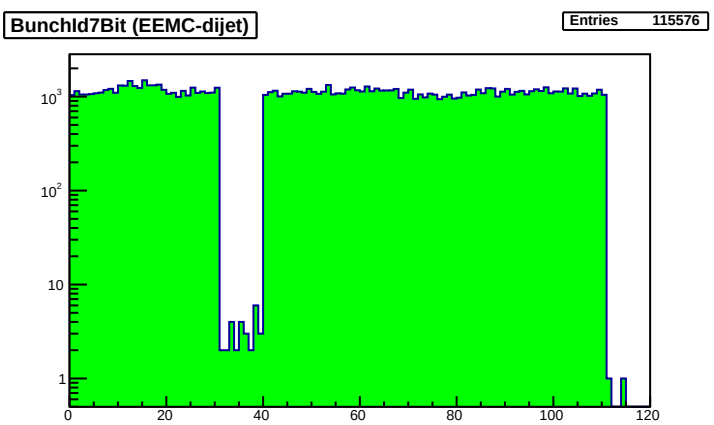

BunchId7Bit (JP1)
Entries 336419

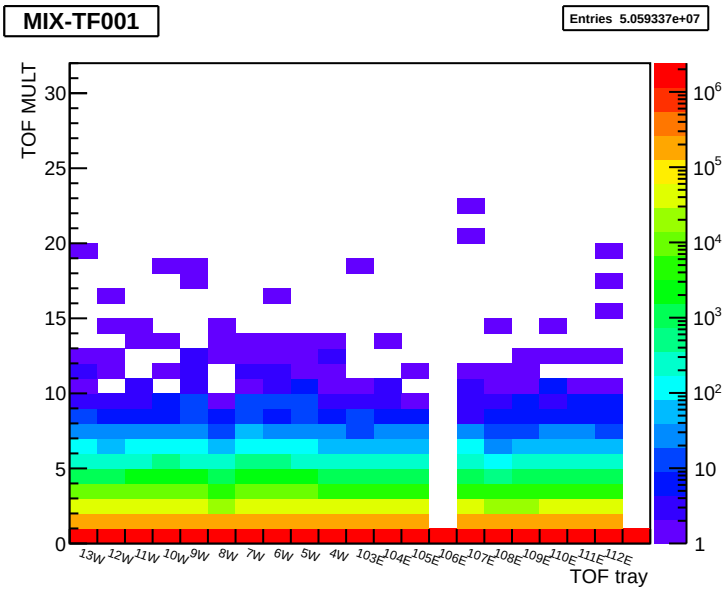

BunchId7Bit (JP2)
Entries 110484

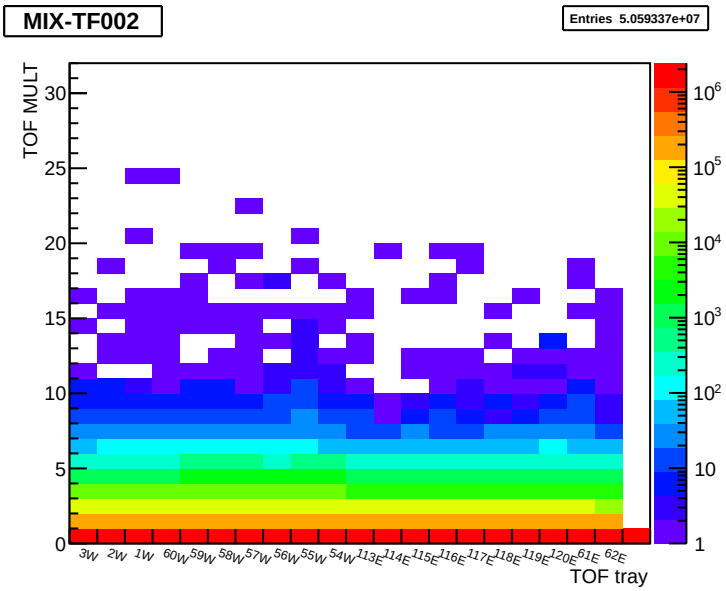

BunchId7Bit (BAJP)
Entries 10280

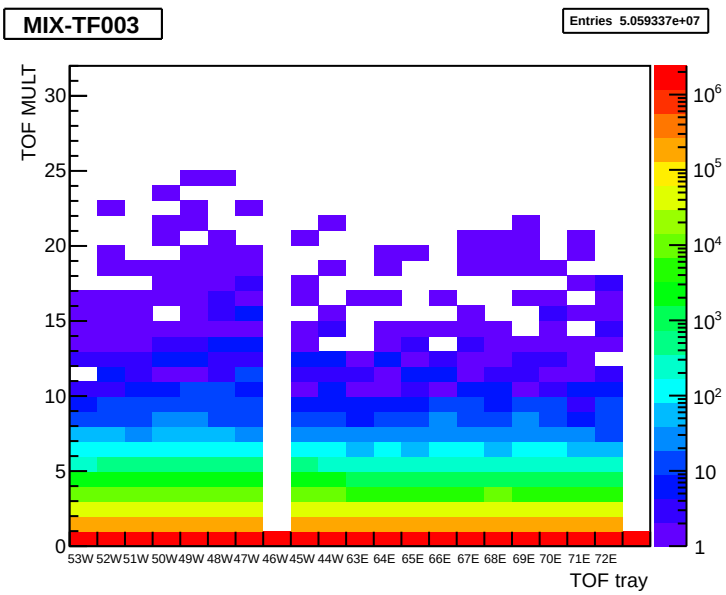

BunchId7Bit (JP0*DiJet)
Entries 184996

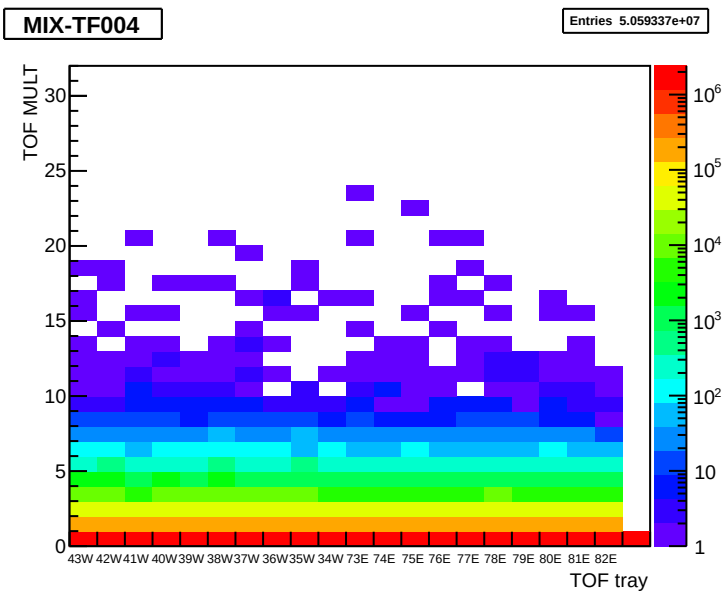

BunchId7Bit (JP1*DiJet)
Entries 126904

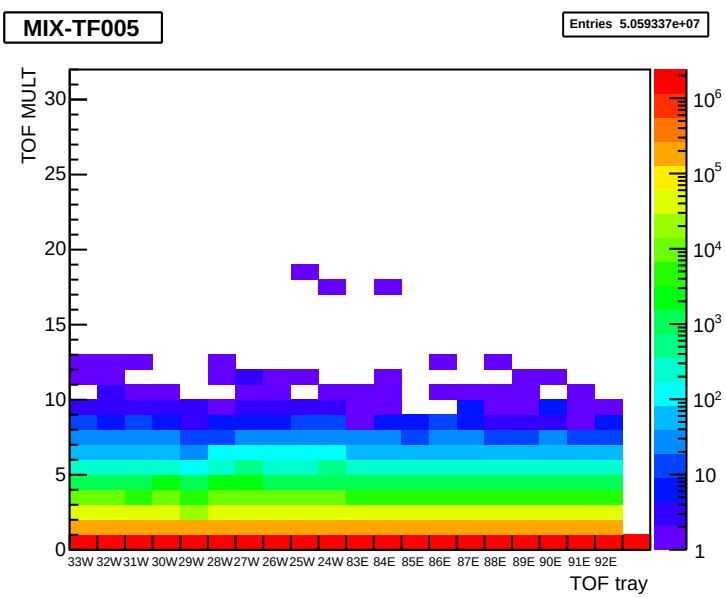

BunchId7Bit (EEMC-dijet)
Entries 115576

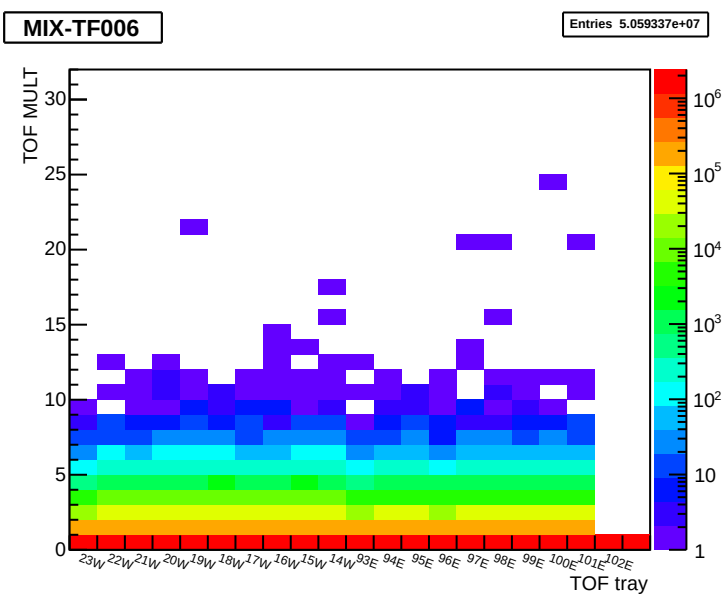

MIX-TF001
Entries 5.059337e+07
TOF MULT
TOF tray

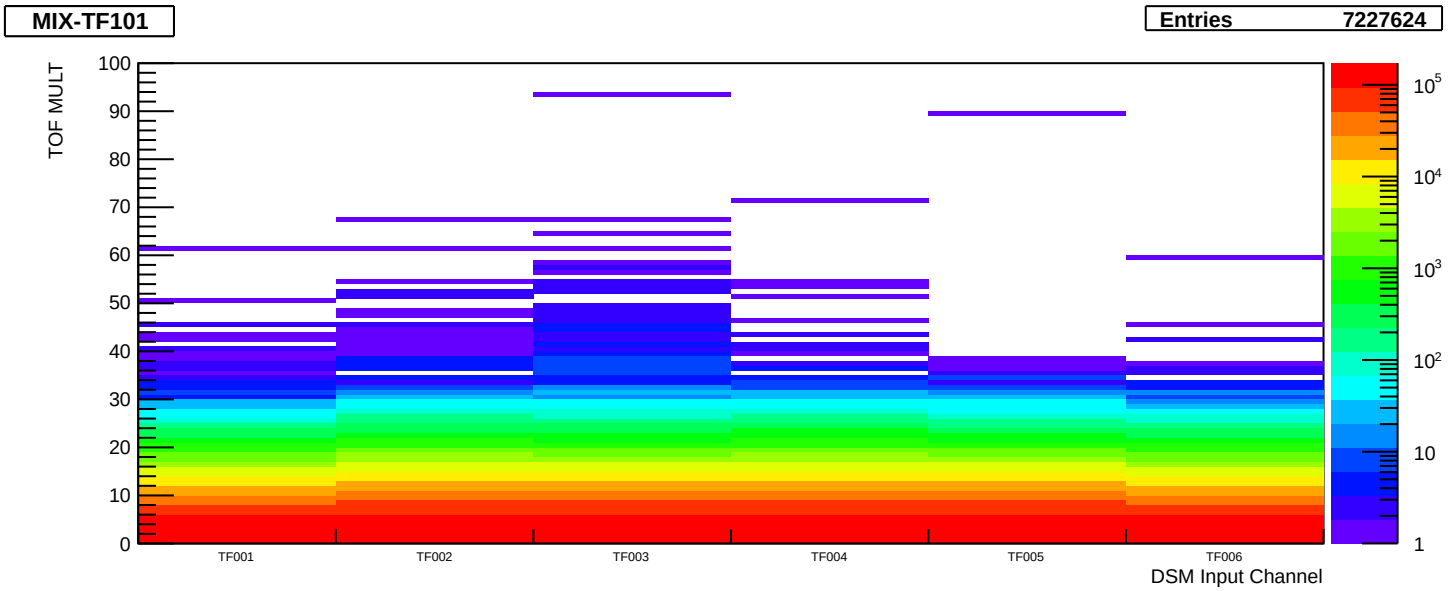

MIX-TF002
Entries 5.059337e+07
TOF MULT
TOF tray

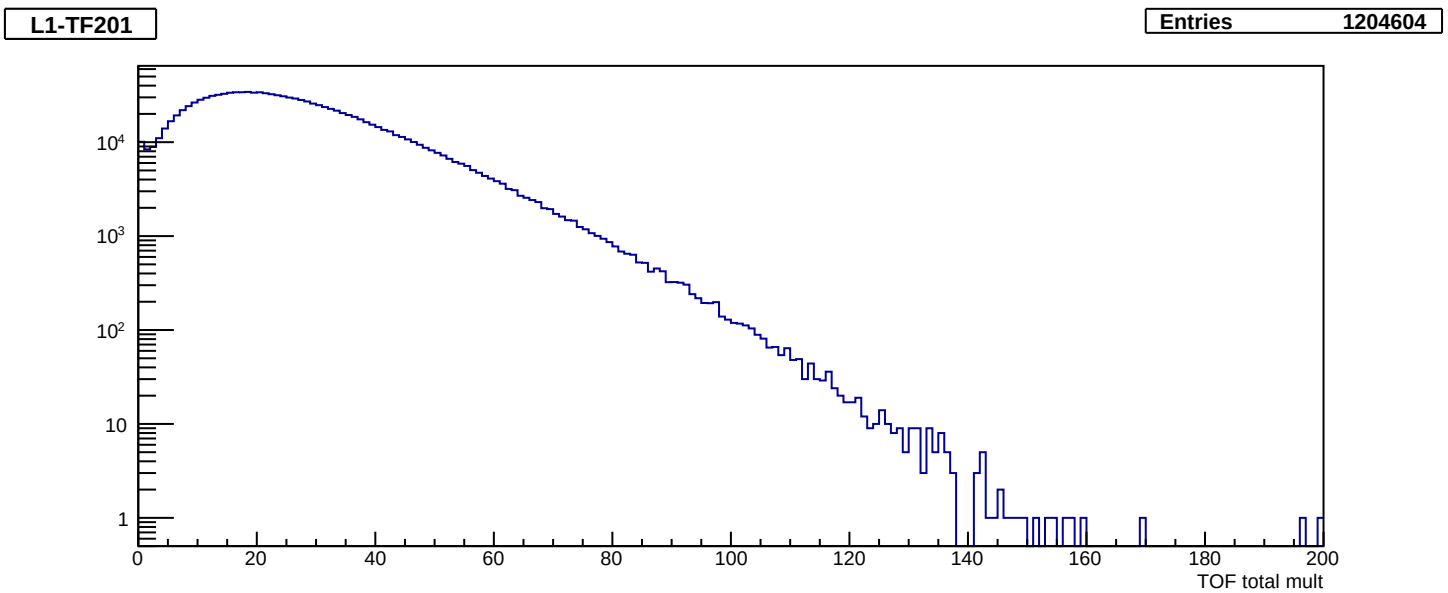

MIX-TF003
Entries 5.059337e+07
TOF MULT
TOF tray

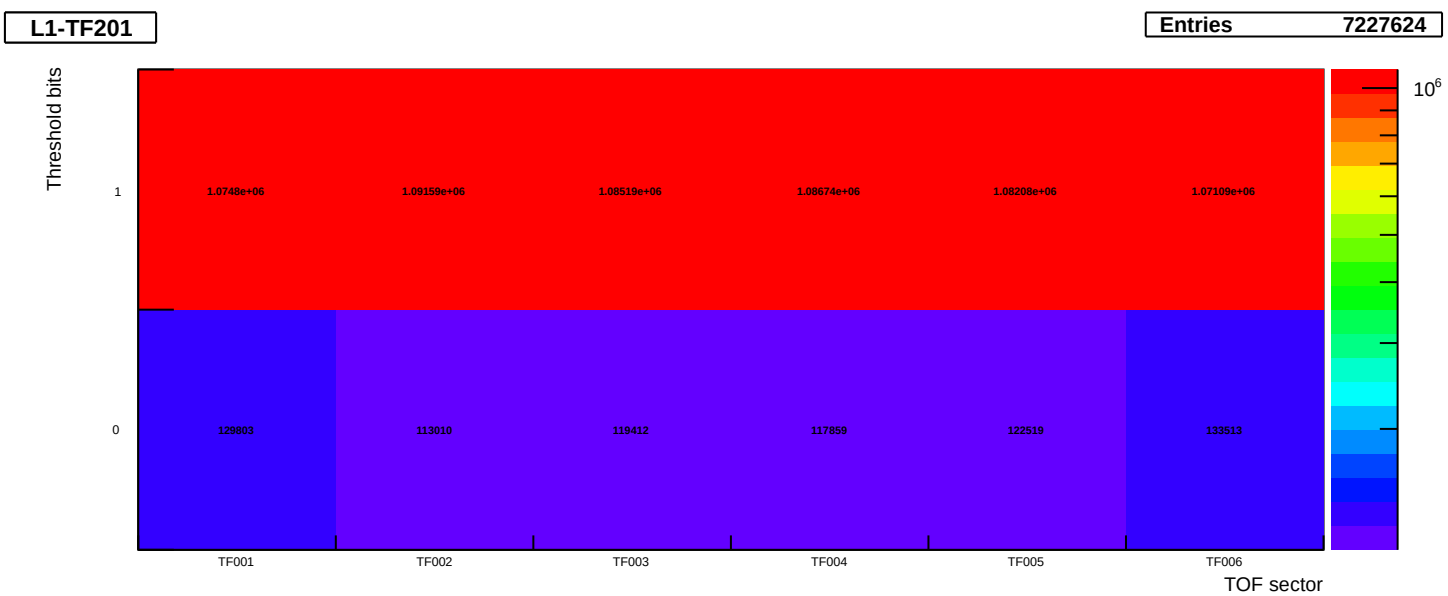

MIX-TF004
Entries 5.059337e+07
TOF MULT
TOF tray

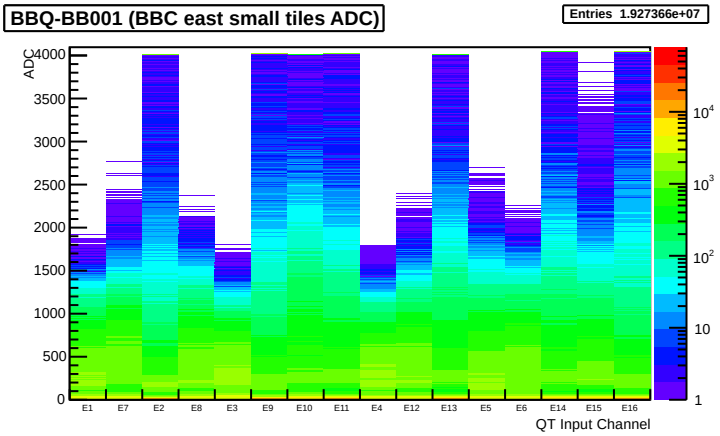

MIX-TF005
Entries 5.059337e+07
TOF MULT
TOF tray

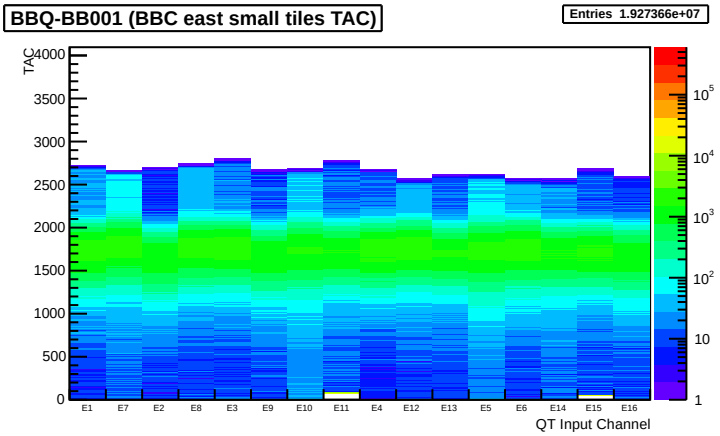

MIX-TF006
Entries 5.059337e+07
TOF MULT
TOF tray

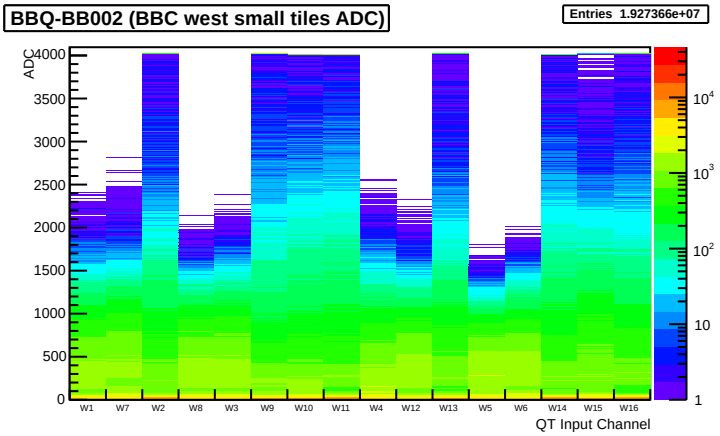

MIX-TF101
Entries 7227624
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

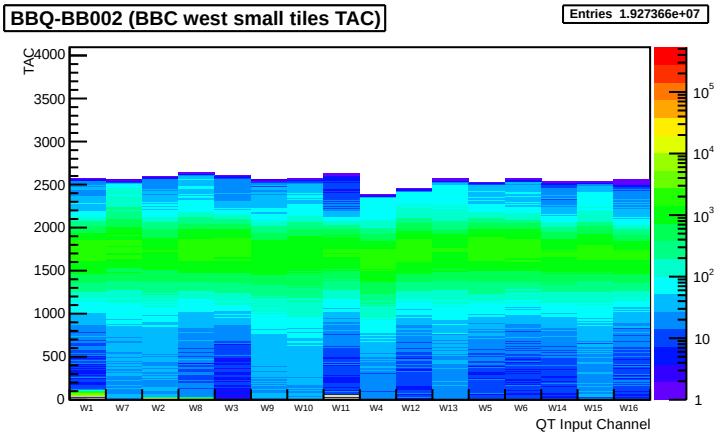

L1-TF201
Entries 1204604
TOF total mult

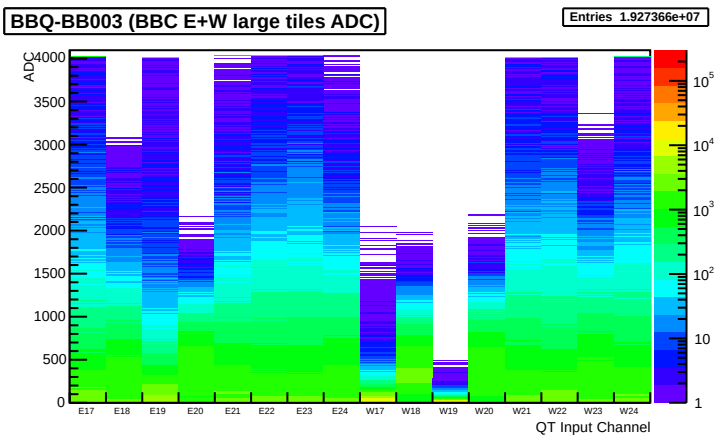

L1-TF201
Entries 7227624
Threshold bits
1.0748e+06
1.09159e+06
1.08519e+06
1.08674e+06
1.08208e+06
1.07109e+06
129803
113010
119412
117859
122519
133513
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

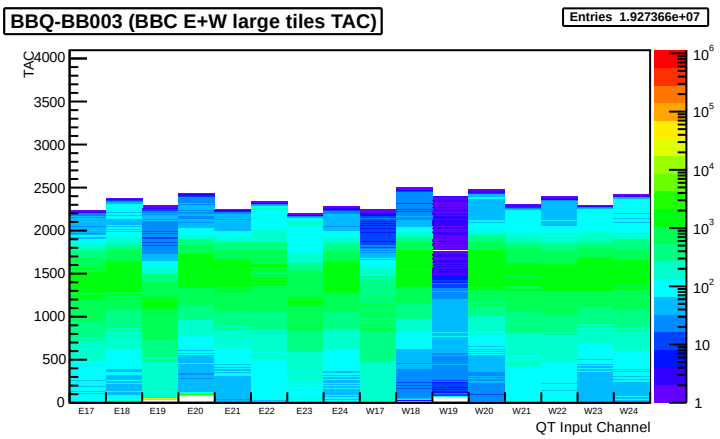

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.927366e+07
ADC
QT Input Channel

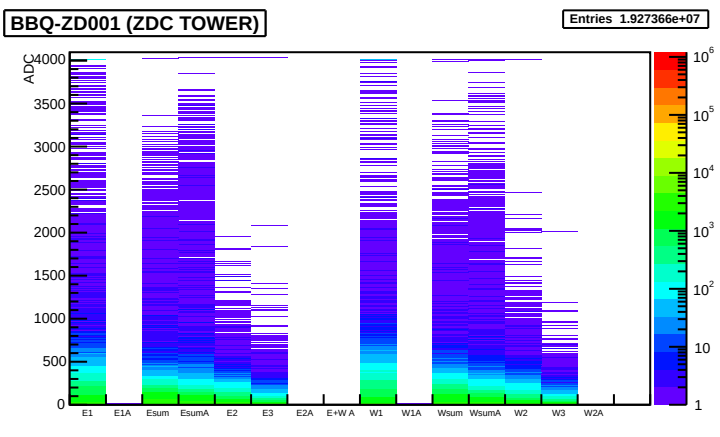

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.927366e+07
TAC
QT Input Channel

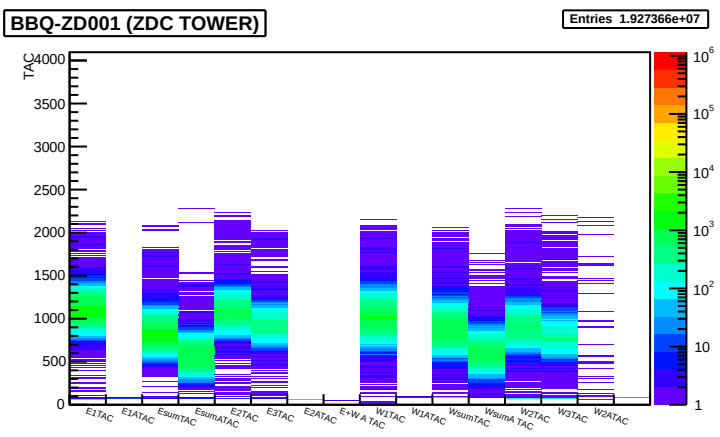

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.927366e+07
ADC
QT Input Channel

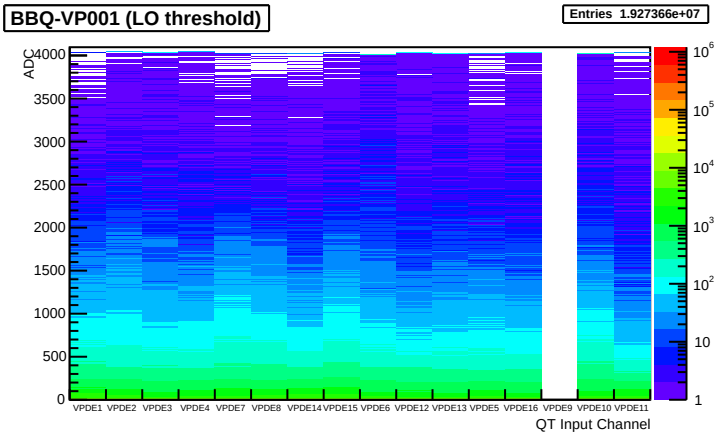

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.927366e+07
TAC
QT Input Channel

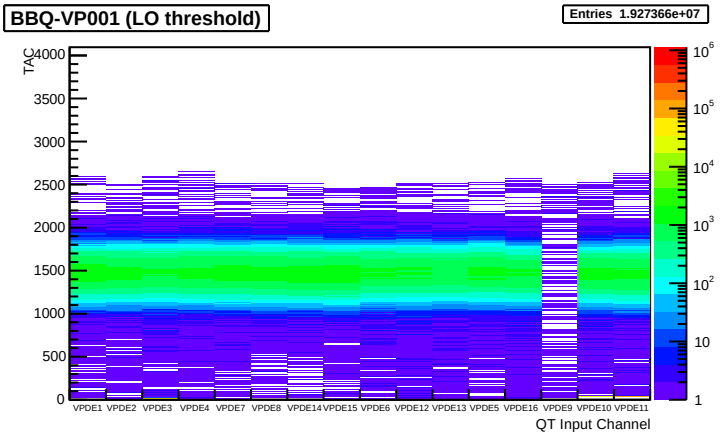

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.927366e+07
ADC
QT Input Channel

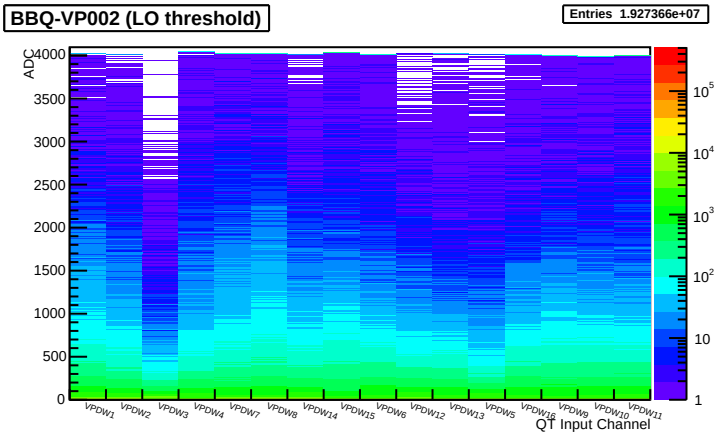

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.927366e+07
TAC
QT Input Channel

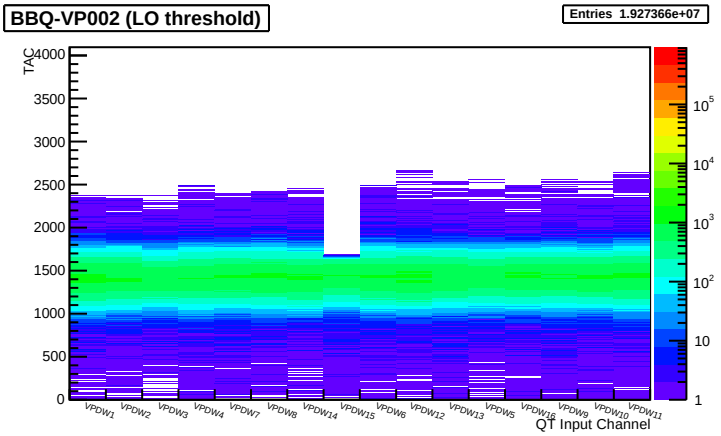

BBQ-ZD001 (ZDC TOWER)
Entries 1.927366e+07
ADC

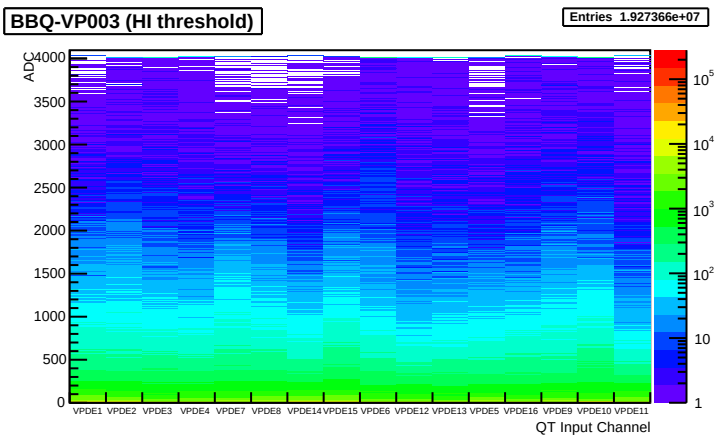

BBQ-ZD001 (ZDC TOWER)
Entries 1.927366e+07
TAC

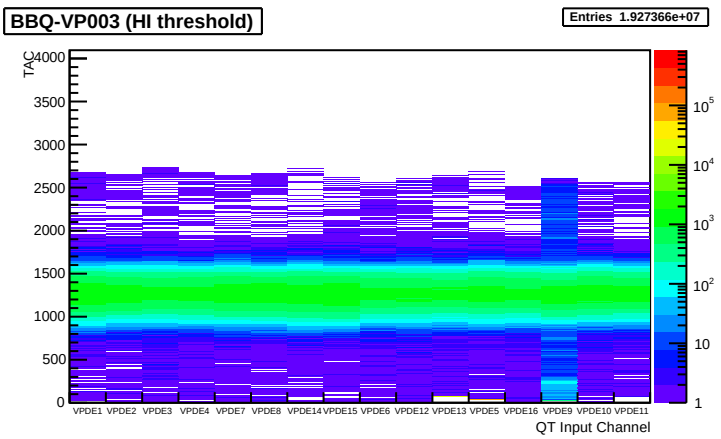

BBQ-VP001 (LO threshold)
Entries 1.927366e+07
ADC
QT Input Channel

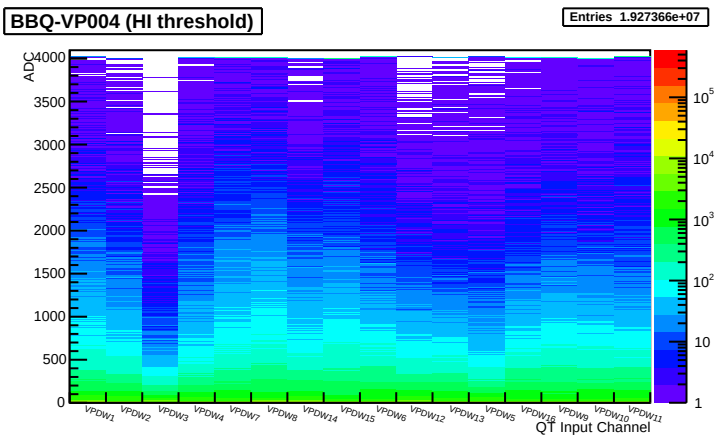

BBQ-VP001 (LO threshold)
Entries 1.927366e+07
TAC
QT Input Channel

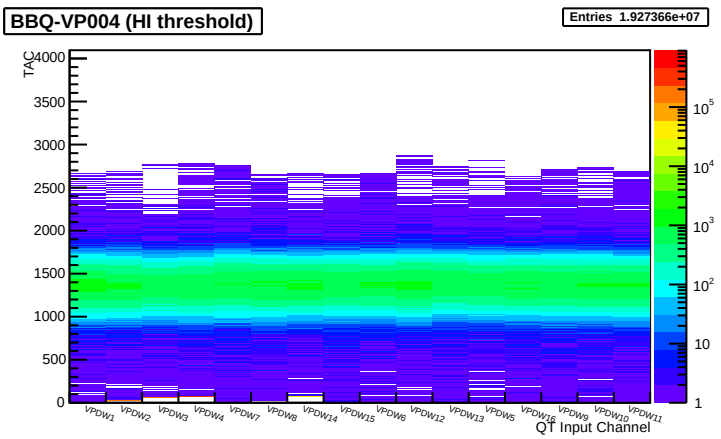

BBQ-VP002 (LO threshold)
Entries 1.927366e+07
ADC
QT Input Channel

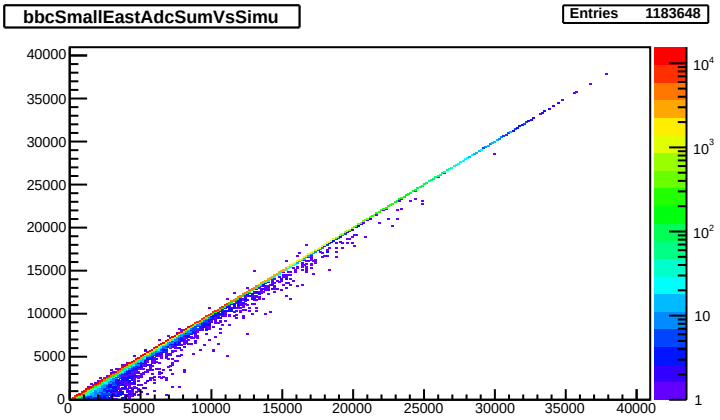

BBQ-VP002 (LO threshold)
Entries 1.927366e+07
TAC
QT Input Channel

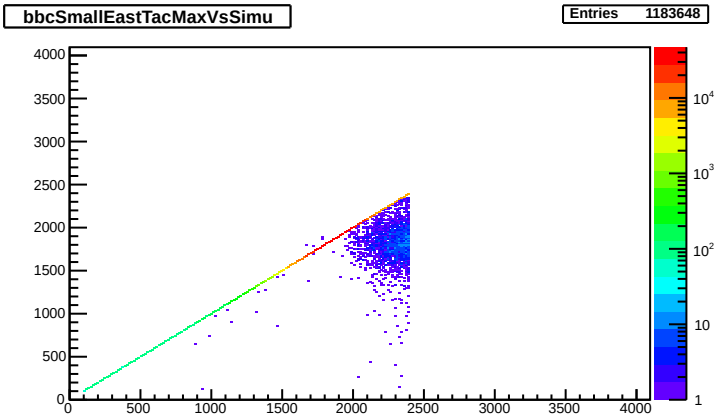

BBQ-VP003 (HI threshold)
Entries 1.927366e+07
ADC
QT Input Channel

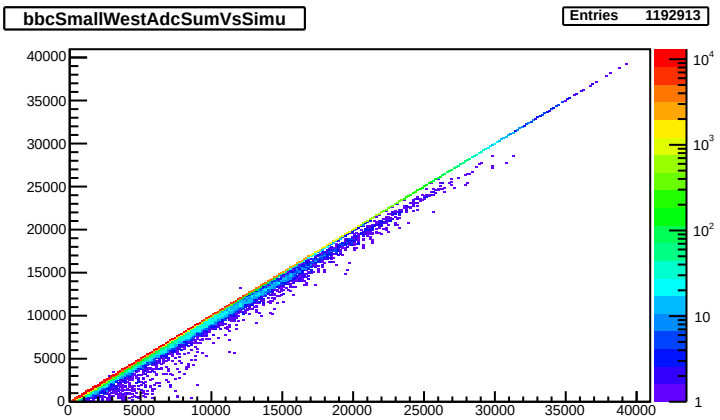

BBQ-VP003 (HI threshold)
Entries 1.927366e+07
TAC
QT Input Channel

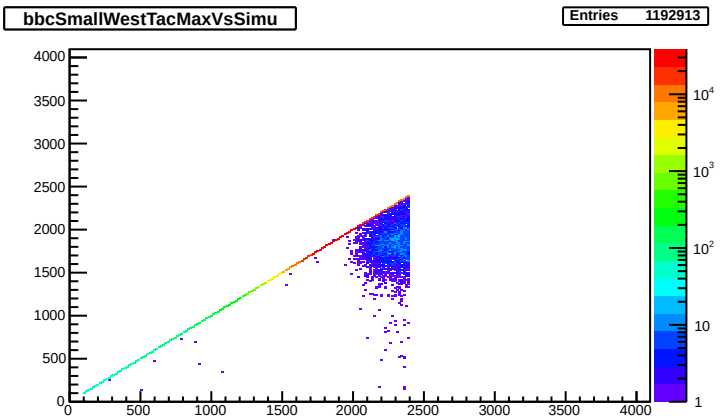

BBQ-VP004 (HI threshold)
Entries 1.927366e+07
ADC
QT Input Channel

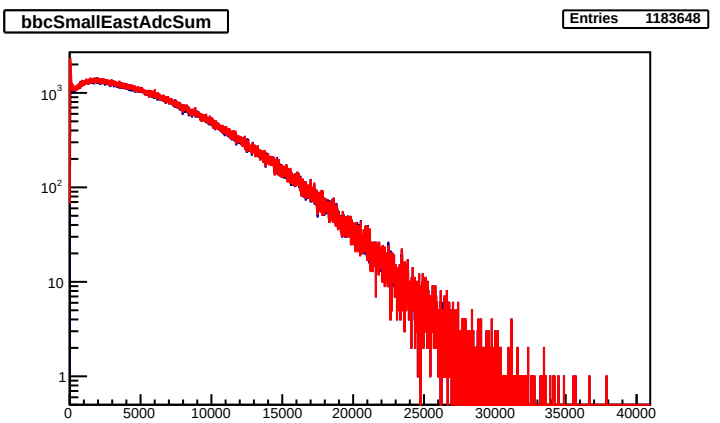

BBQ-VP004 (HI threshold)
Entries 1.927366e+07
TAC
QT Input Channel

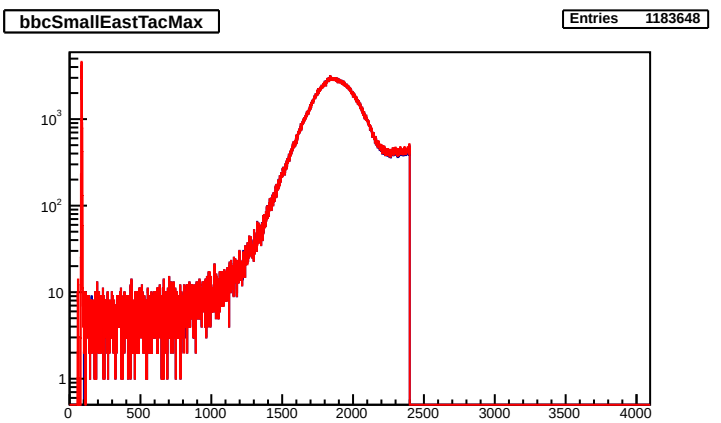

bbcSmallEastAdcSumVsSimu
Entries 1183648

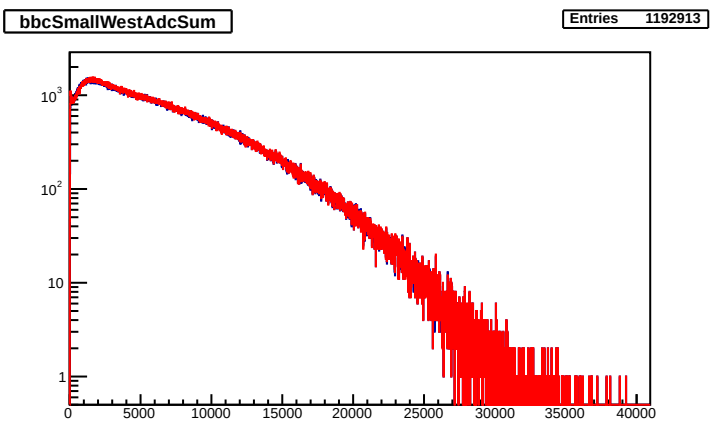

bbcSmallEastTacMaxVsSimu
Entries 1183648

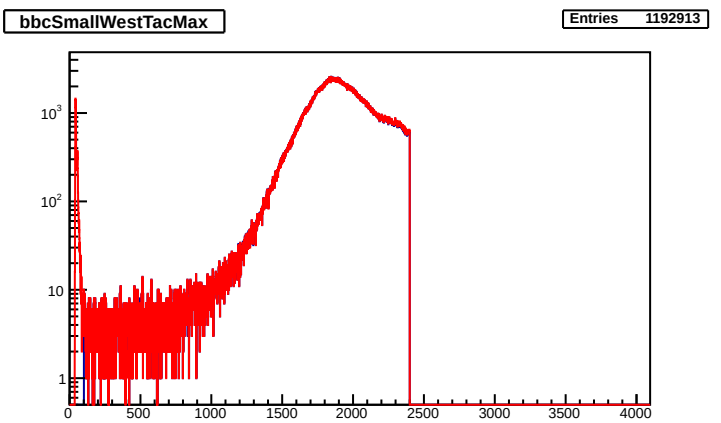

bbcSmallWestAdcSumVsSimu
Entries 1192913

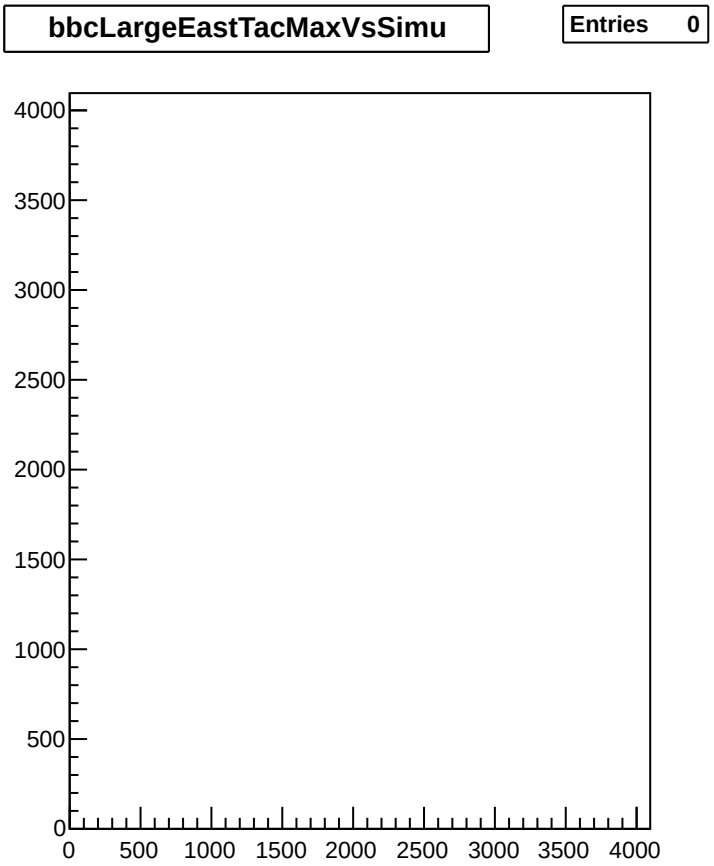

bbcSmallWestTacMaxVsSimu
Entries 1192913

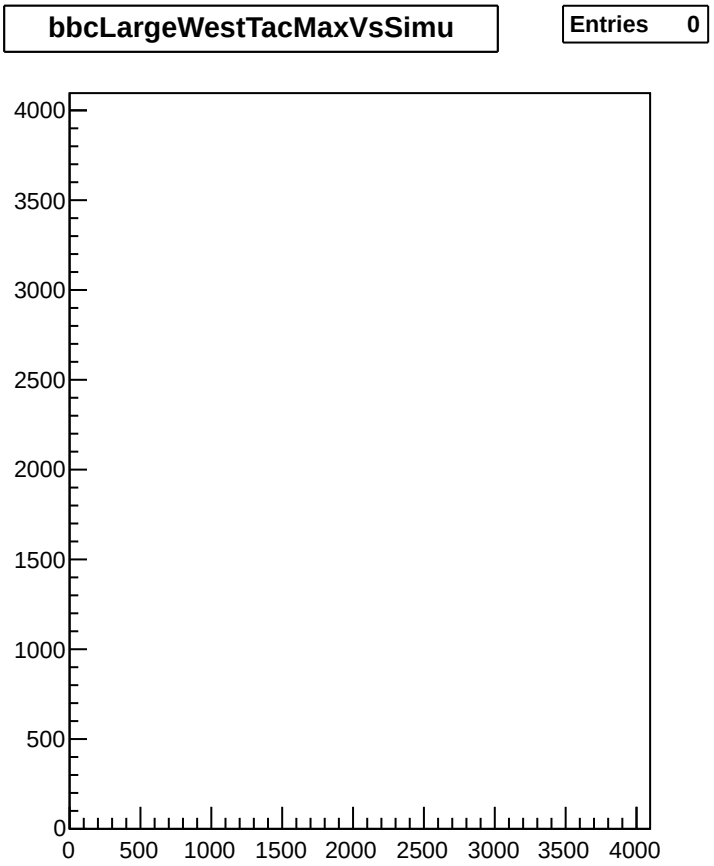

bbcSmallEastAdcSum
Entries 1183648

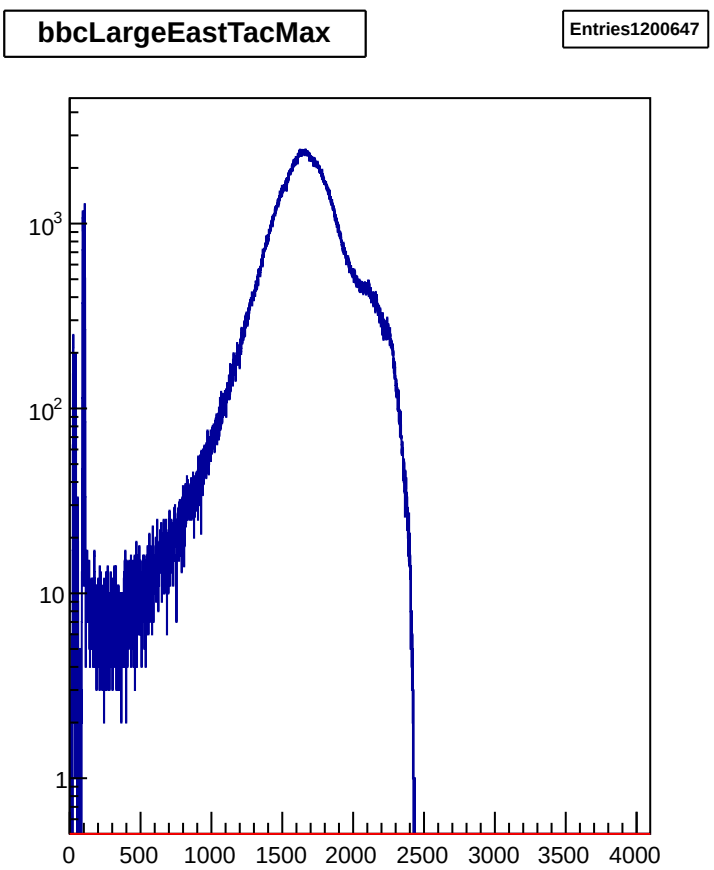

bbcSmallEastTacMax
Entries 1183648

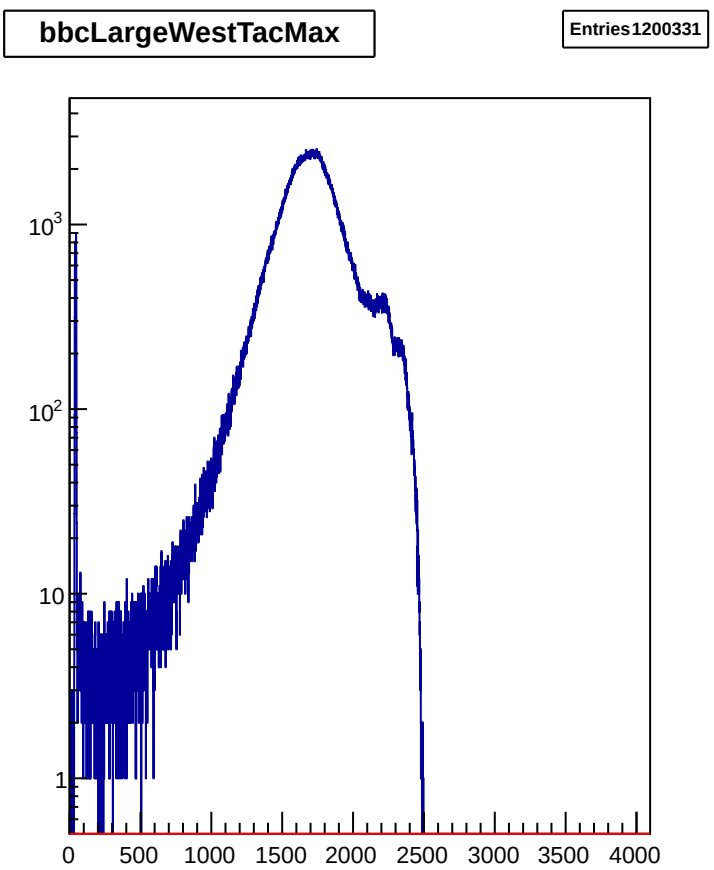

bbcSmallWestAdcSum
Entries 1192913


bbcSmallWestTacMax
Entries 1192913


bbcLargeEastTacMaxVsSimu
Entries 0
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000


bbcLargeWestTacMaxVsSimu
Entries 0
4000
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000


bbcLargeEastTacMax
Entries1200647
10^3
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000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Entries1200331
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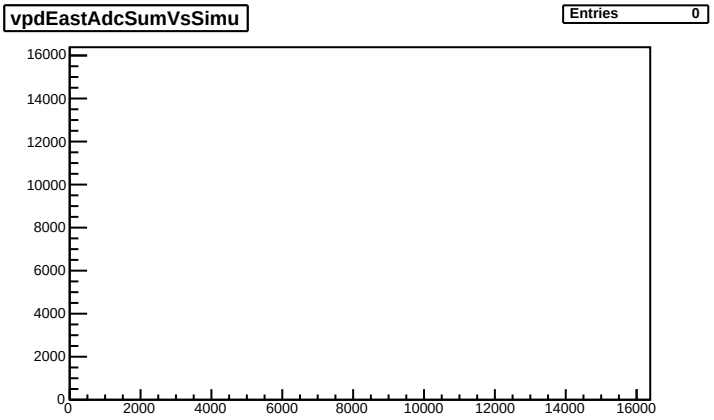
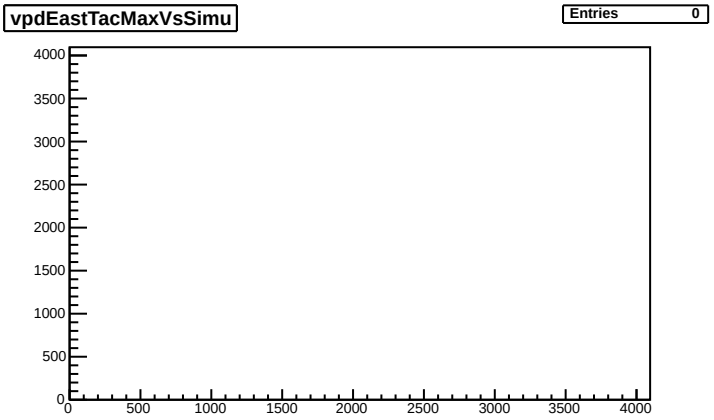
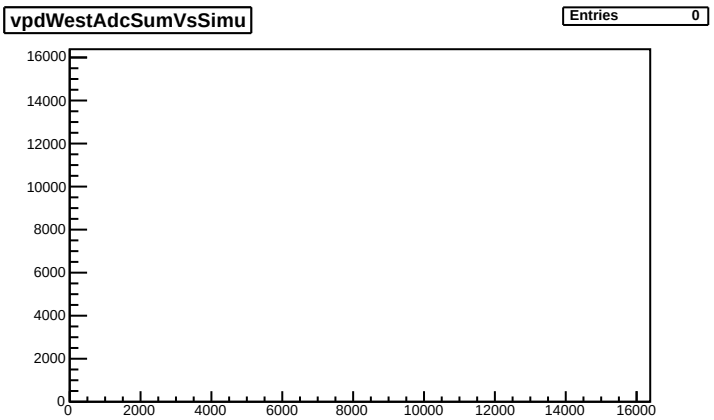
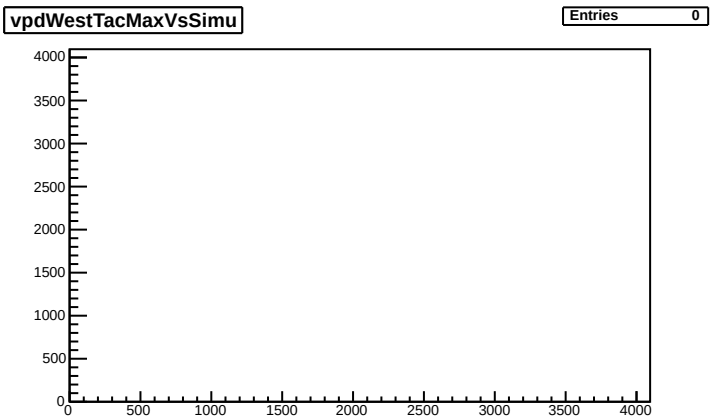
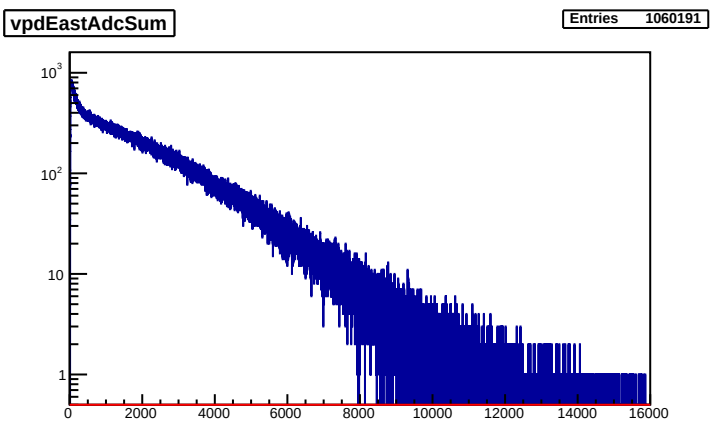
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

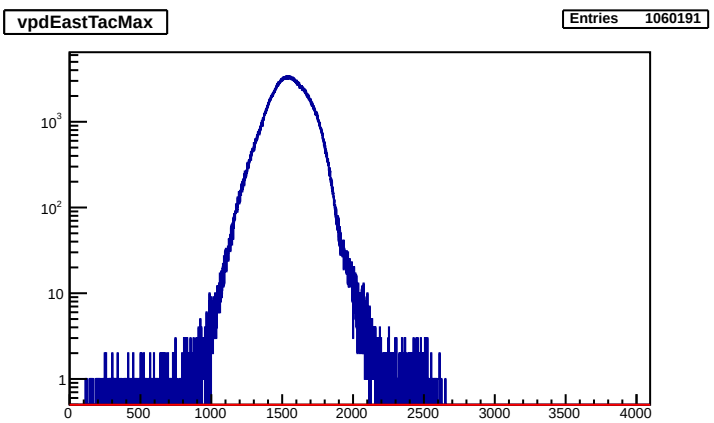

vpdEastAdcSumVsSimu
Entries 0

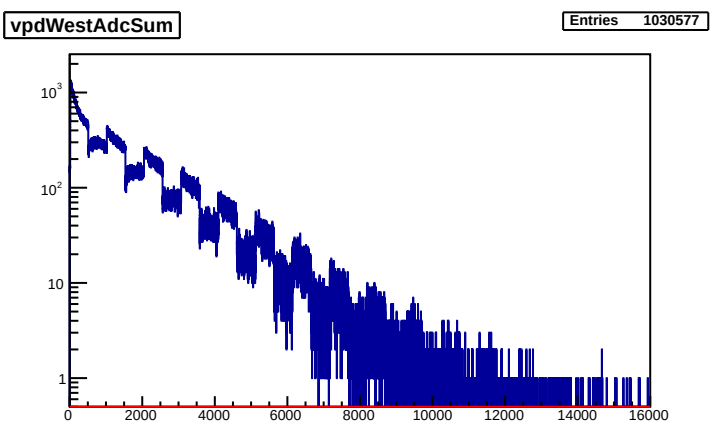

vpdEastTacMaxVsSimu
Entries 0

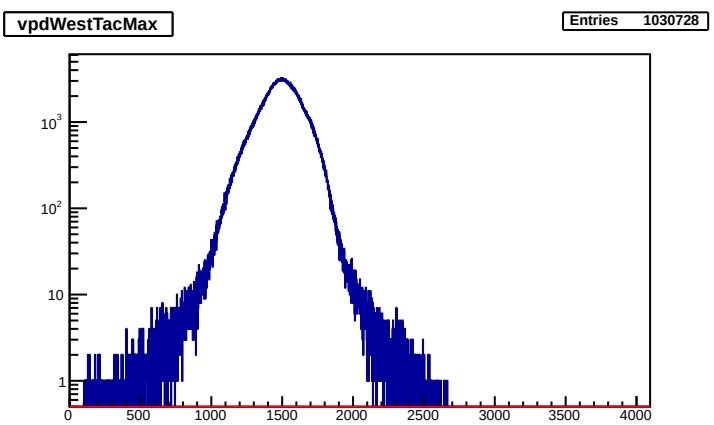

vpdWestAdcSumVsSimu
Entries 0

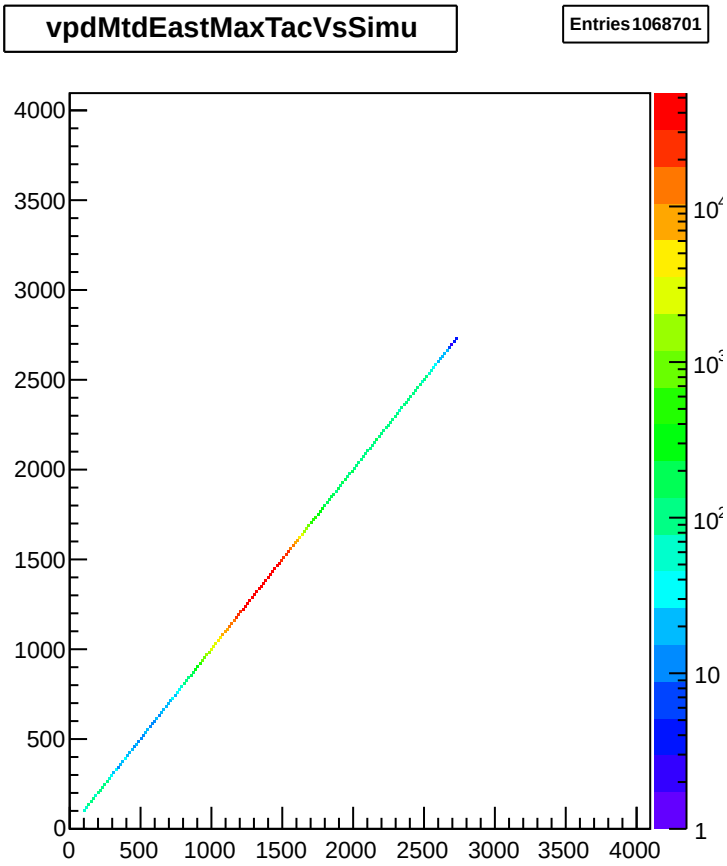

vpdWestTacMaxVsSimu
Entries 0


vpdEastAdcSum
Entries 1060191


vpdEastTacMax
Entries 1060191


vpdWestAdcSum
Entries 1030577


vpdWestTacMax
Entries 1030728


vpdMtdEastMaxTacVsSimu
Entries 1068701
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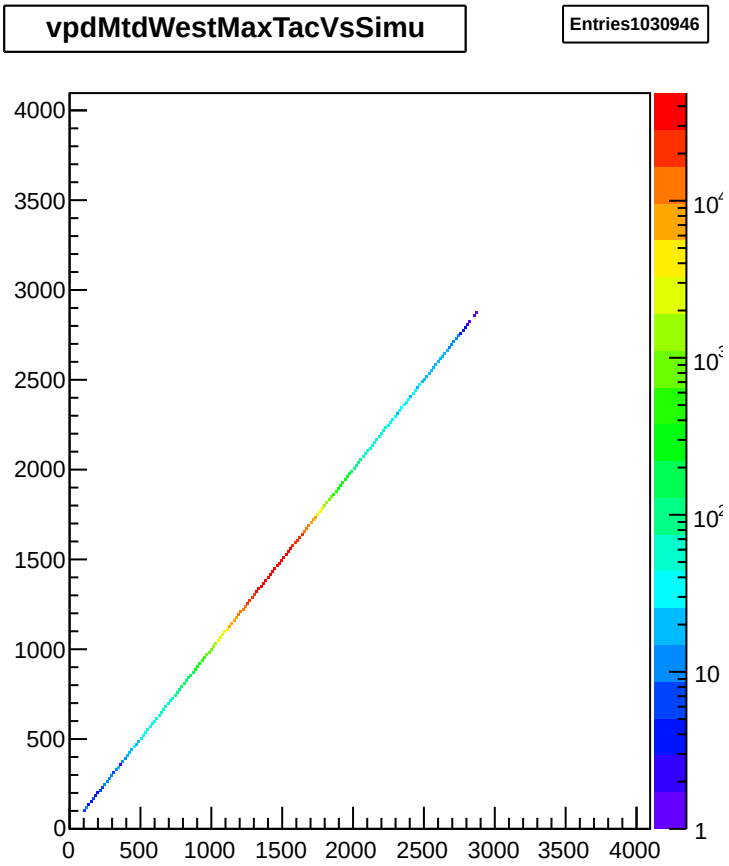
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000
10
1


vpdMtdWestMaxTacVsSimu
Entries 1030946
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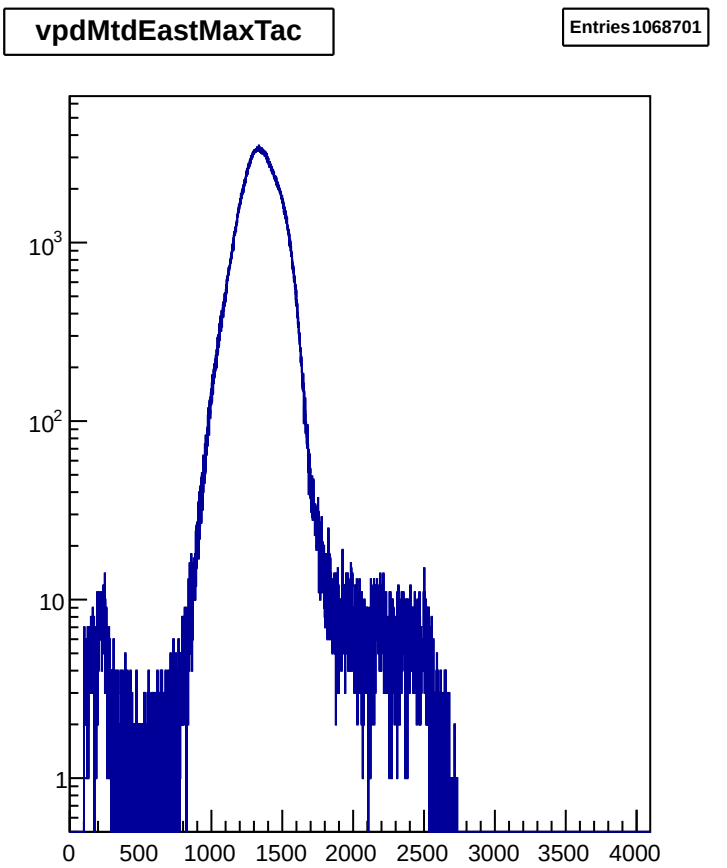
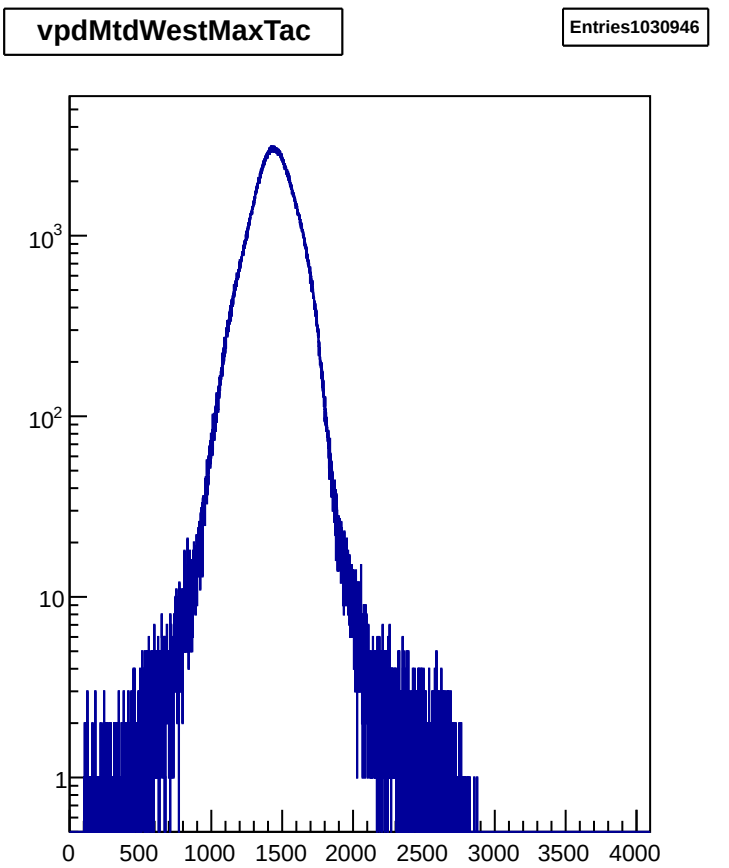
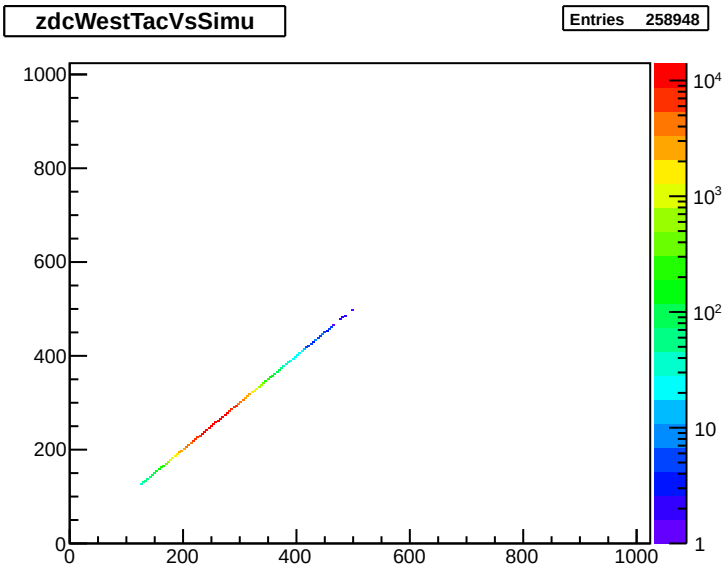
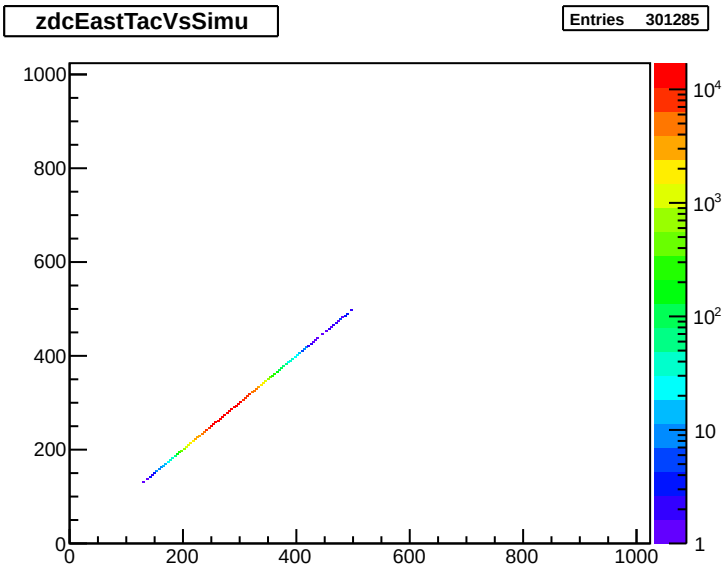
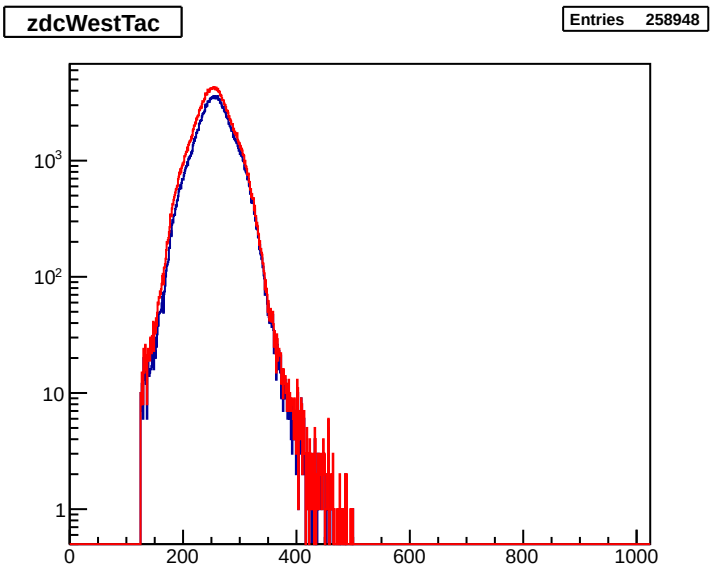
3500
3000
2500
2000
1500
1000
500
0
0 500 1000 1500 2000 2500 3000 3500 4000
10
1

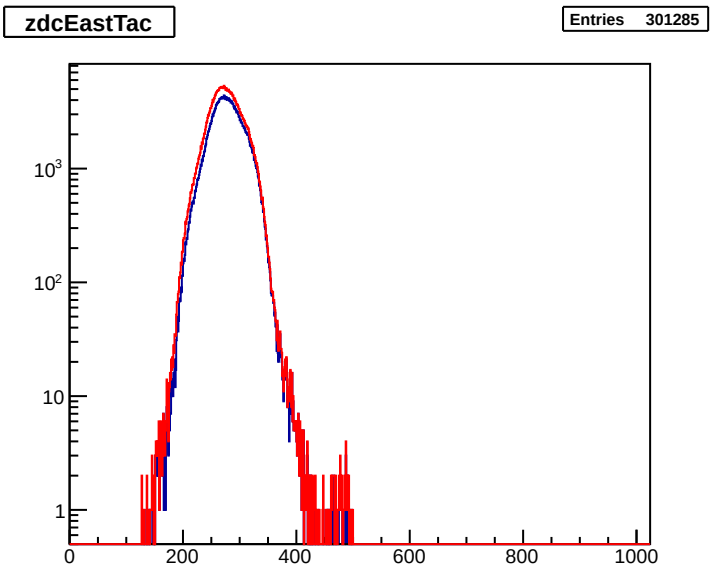

vpdMtdEastMaxTac
Entries 1068701
10^3
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

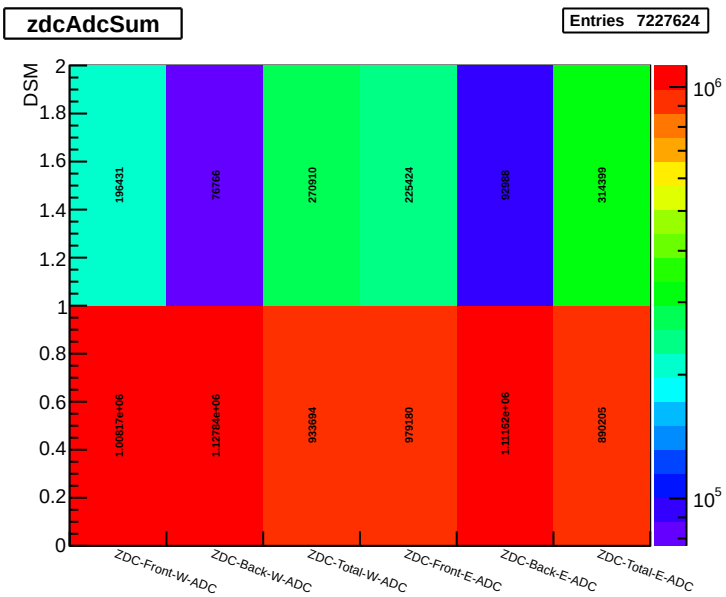

vpdMtdWestMaxTac
Entries 1030946
10^3
10^2
10
1
0 500 1000 1500 2000 2500 3000 3500 4000

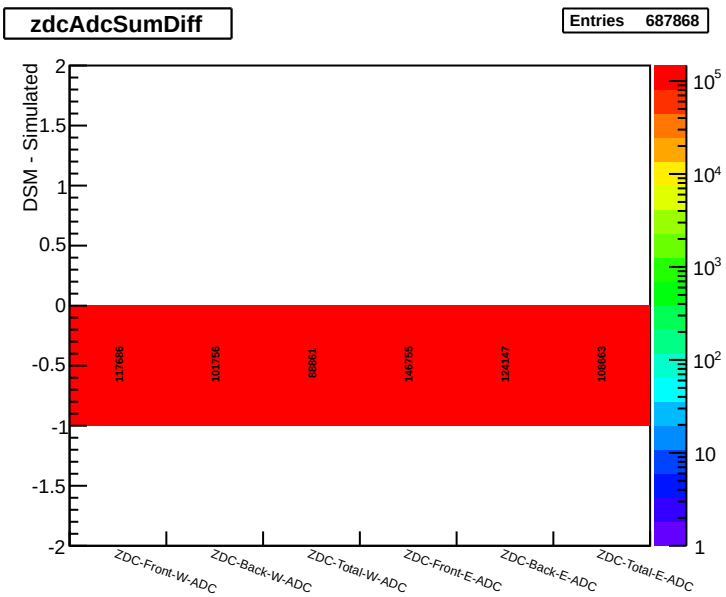

zdcWestTacVsSimu
Entries 258948

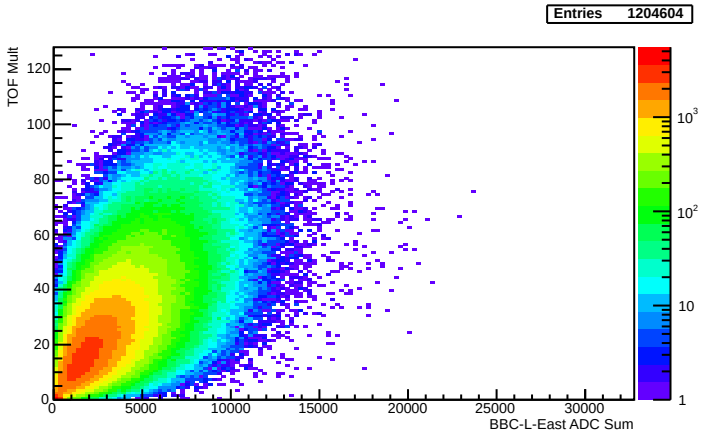

zdcEastTacVsSimu
Entries 301285

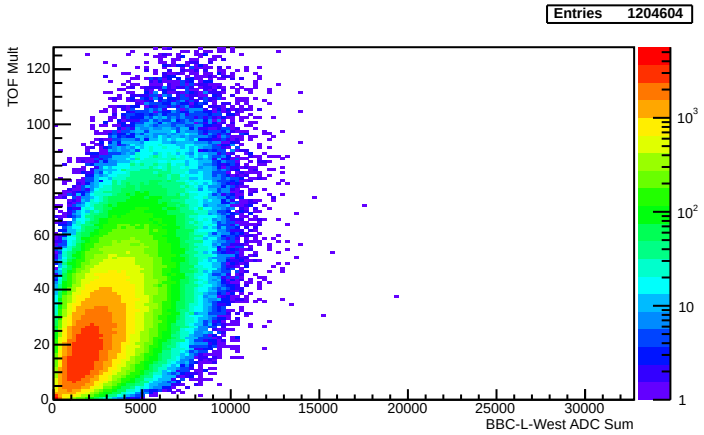

zdcWestTac
Entries 258948

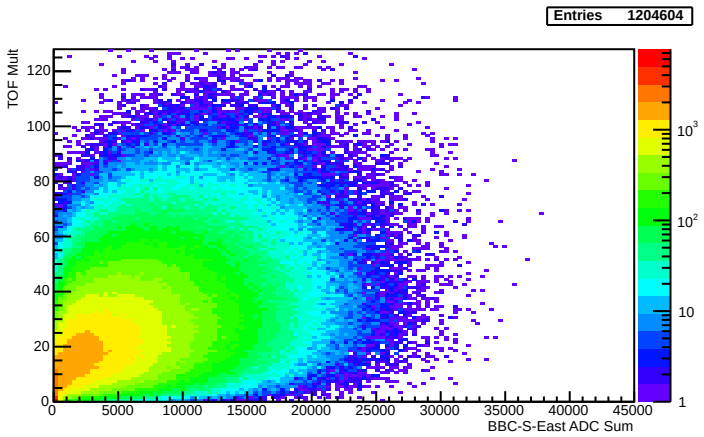

zdcEastTac
Entries 301285

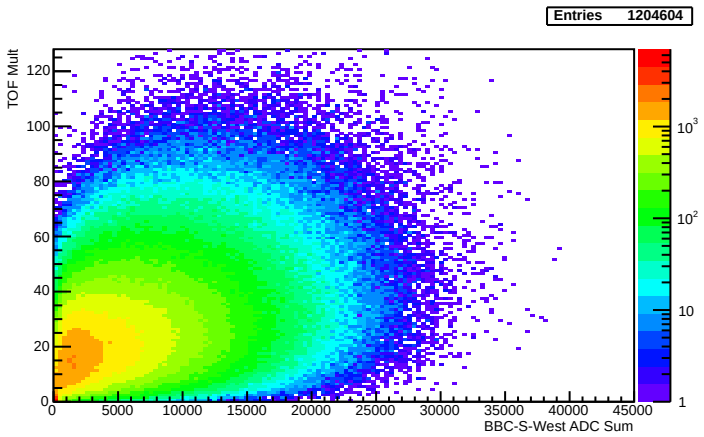

zdcAdcSum
Entries 7227624
DSM
196431
76766
270910
225424
92958
314399
1.00817e+06
1.12784e+06
933694
979180
1.11162e+06
890205
ZDC-Front-W-ADC
ZDC-Back-W-ADC
ZDC-Total-W-ADC
ZDC-Front-E-ADC
ZDC-Back-E-ADC
ZDC-Total-E-ADC

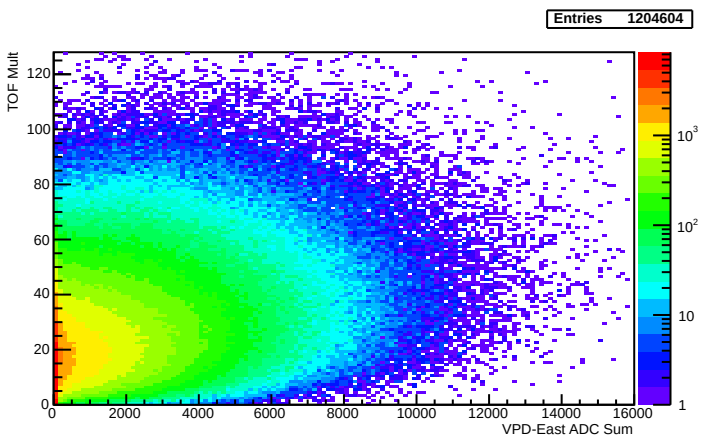

zdcAdcSumDiff
Entries 687868
DSM - Simulated
117686
101756
88861
146755
124147
108653
ZDC-Front-W-ADC
ZDC-Back-W-ADC
ZDC-Total-W-ADC
ZDC-Front-E-ADC
ZDC-Back-E-ADC
ZDC-Total-E-ADC

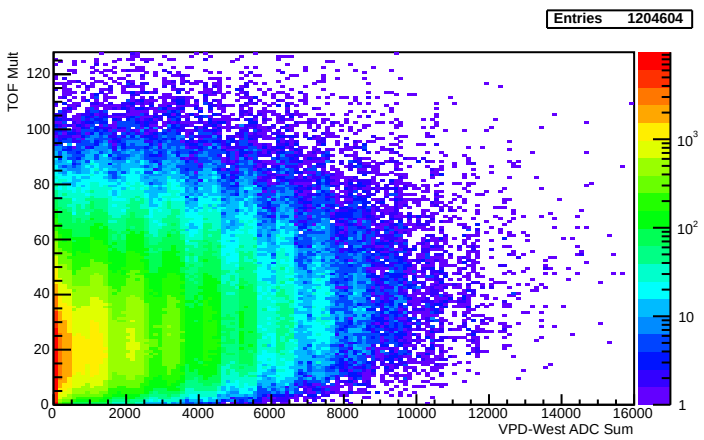

Entries 1204604
TOF Mult
BBC-L-East ADC Sum

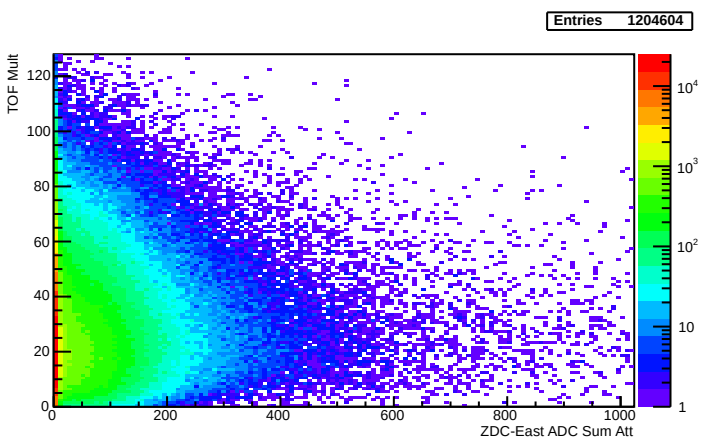

Entries 1204604
TOF Mult
BBC-L-West ADC Sum

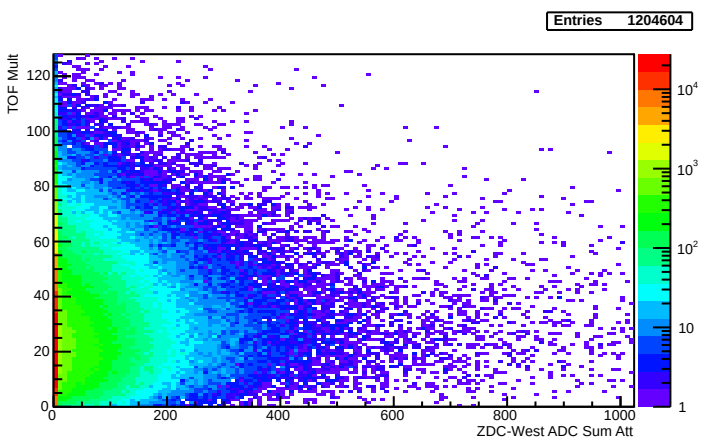

Entries 1204604
TOF Mult
BBC-S-East ADC Sum

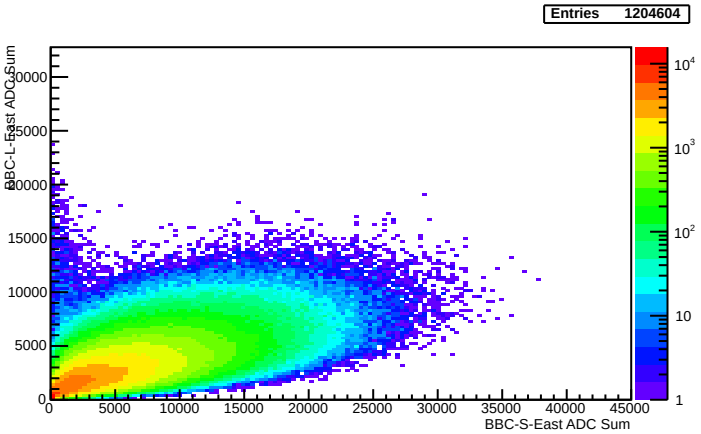

Entries 1204604
TOF Mult
BBC-S-West ADC Sum

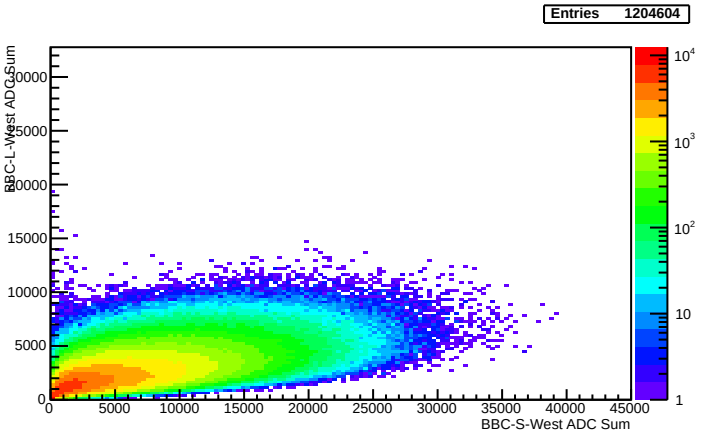

Entries 1204604
TOF Mult
VPD-East ADC Sum

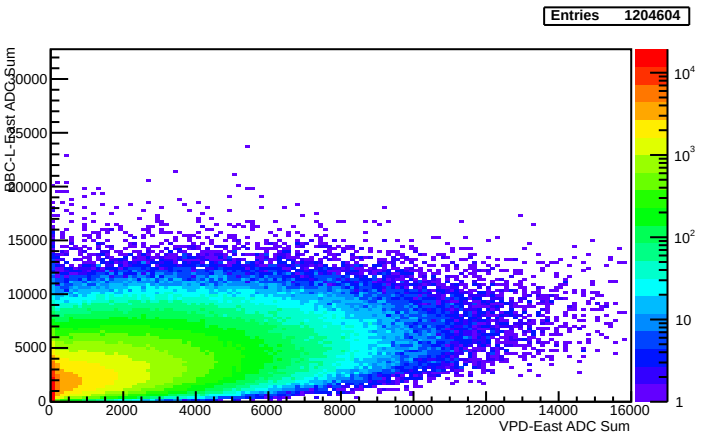

Entries 1204604
TOF Mult
VPD-West ADC Sum

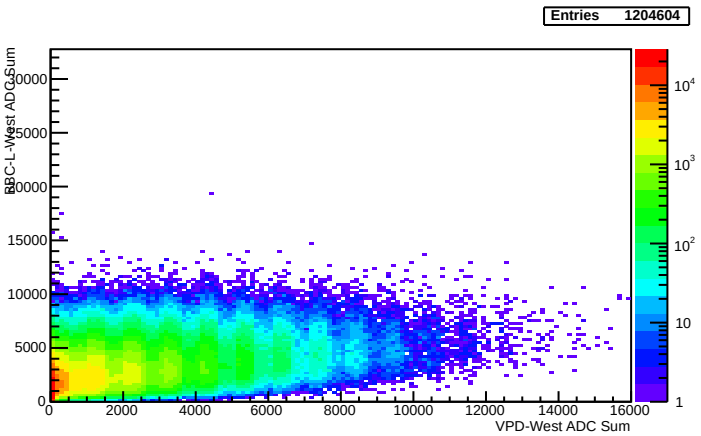

Entries 1204604
TOF Mult
ZDC-East ADC Sum Att

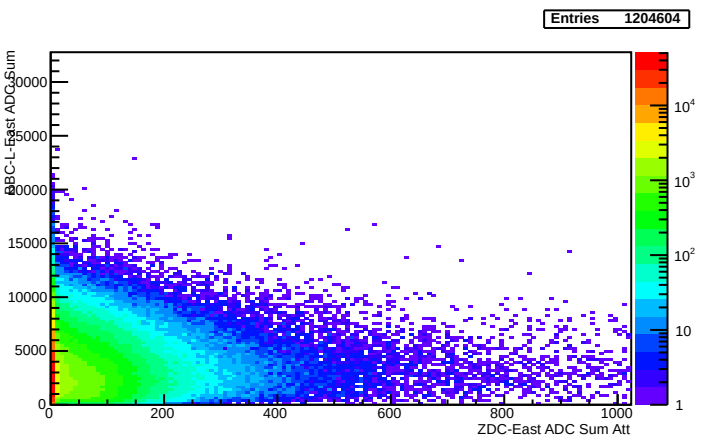

Entries 1204604
TOF Mult
ZDC-West ADC Sum Att

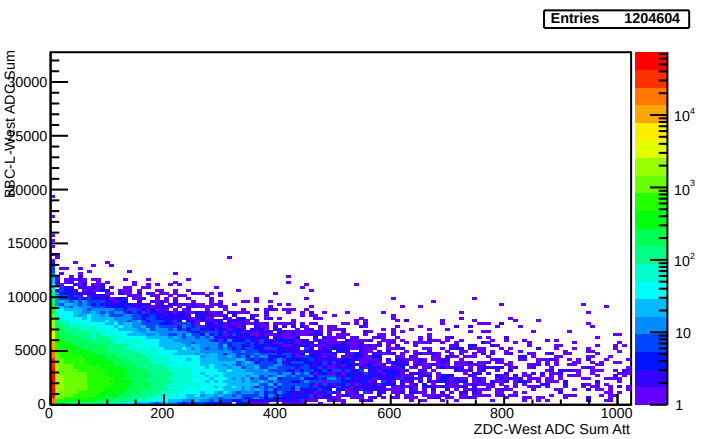

Entries 1204604
BBC-L-East ADC Sum
BBC-S-East ADC Sum

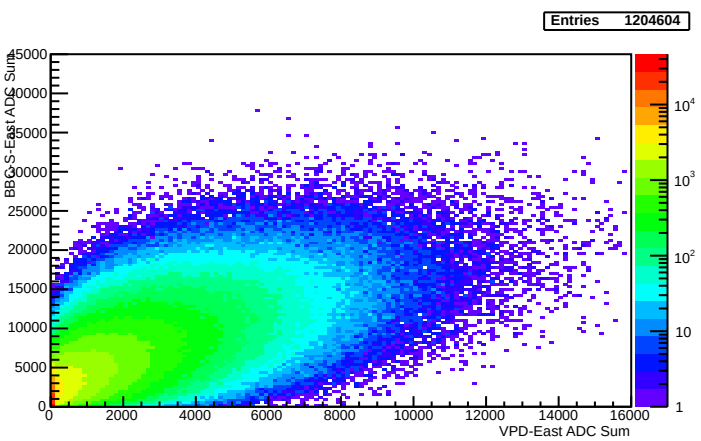

Entries 1204604
BBC-L-West ADC Sum
BBC-S-West ADC Sum

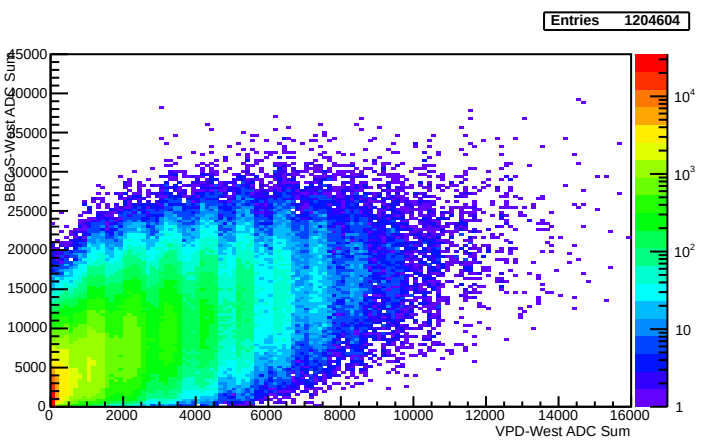

Entries 1204604
BBC-L-East ADC Sum
VPD-East ADC Sum

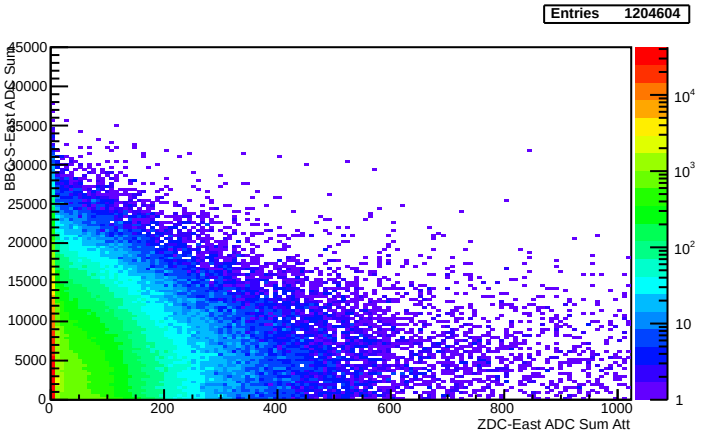

Entries 1204604
BBC-L-West ADC Sum
VPD-West ADC Sum

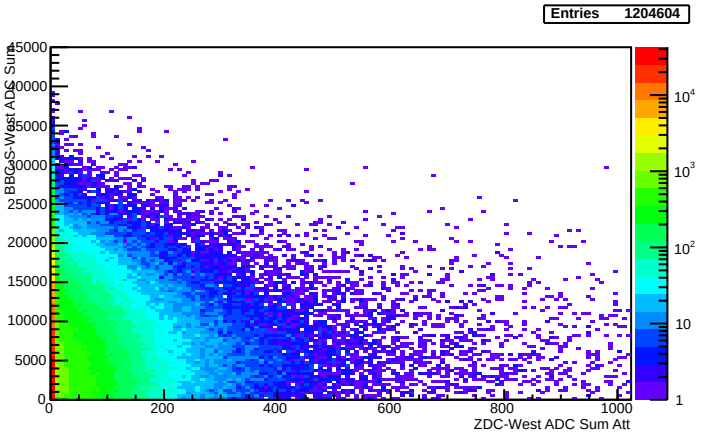

Entries 1204604
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

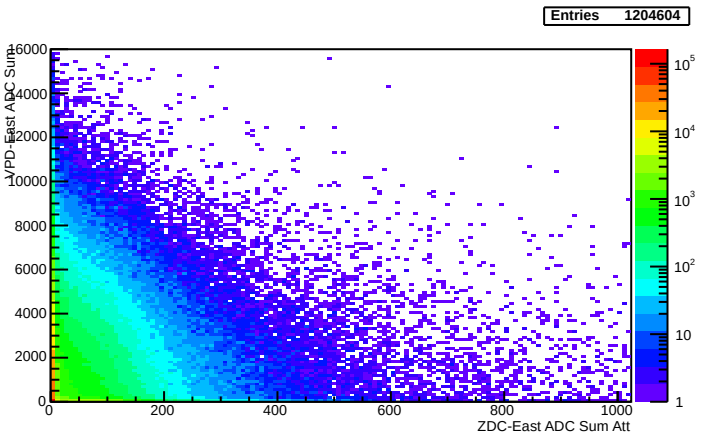

Entries 1204604
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

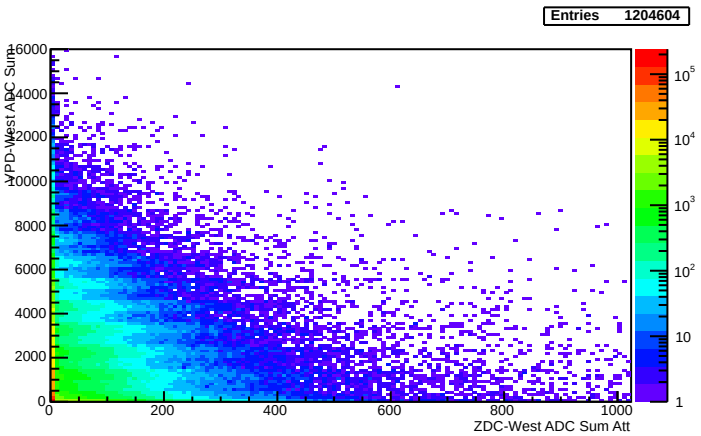

Entries 1204604
BBC-S-East ADC Sum
VPD-East ADC Sum

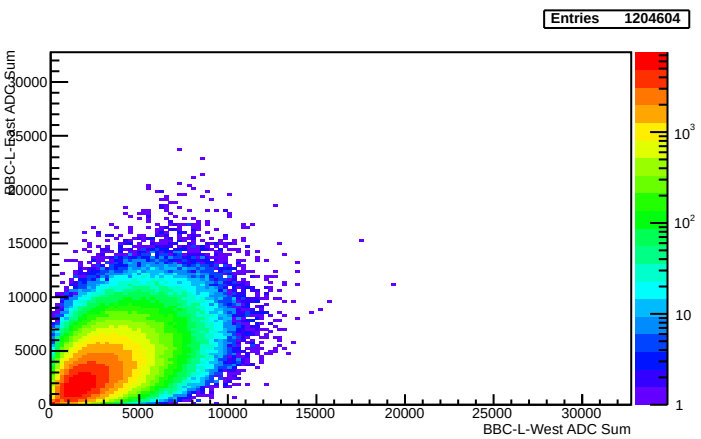

Entries 1204604
BBC-S-West ADC Sum
VPD-West ADC Sum

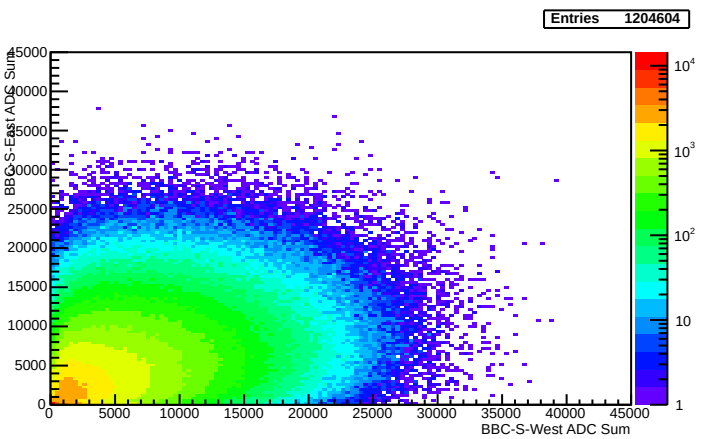

Entries 1204604
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

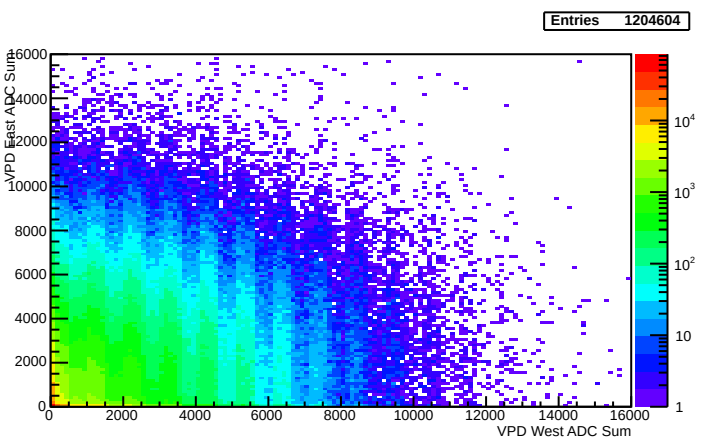

Entries 1204604
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

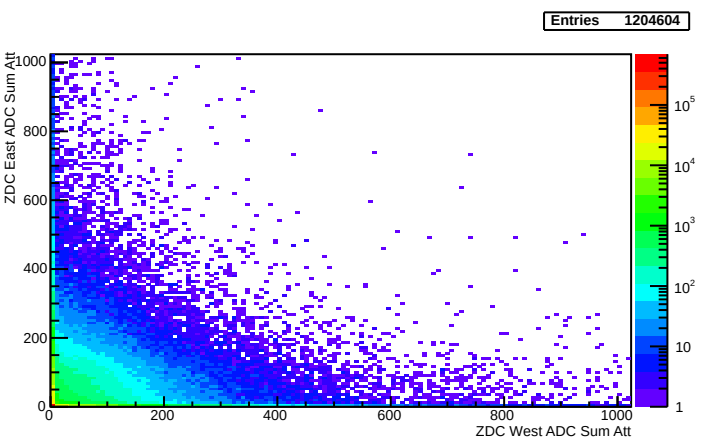

Entries 1204604
VPD-East ADC Sum
ZDC-East ADC Sum Att

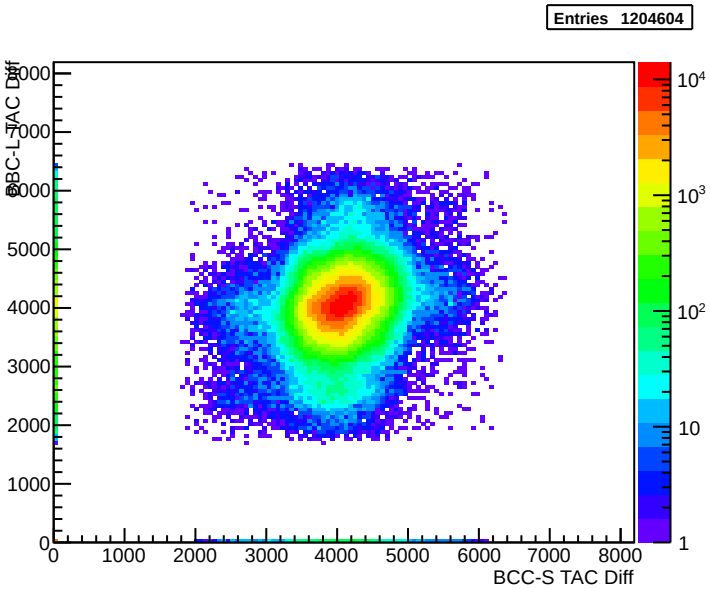

Entries 1204604
VPD-West ADC Sum
ZDC-West ADC Sum Att

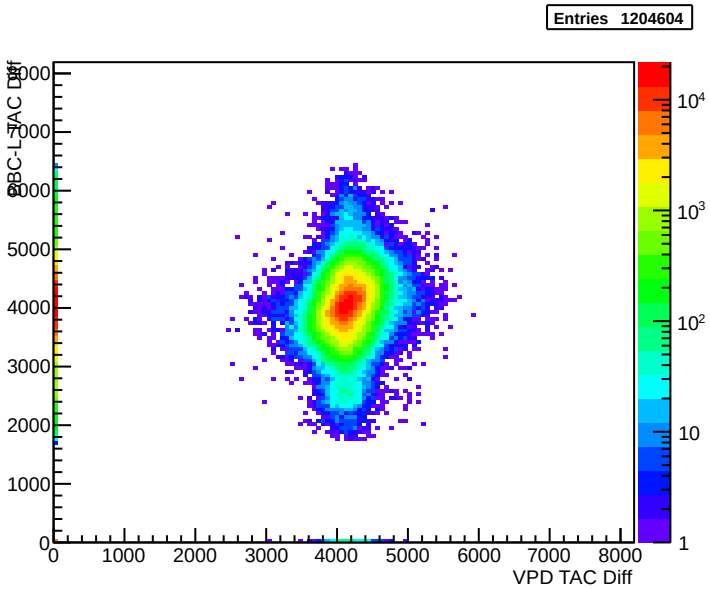

Entries 1204604
BBC-L-East ADC Sum
BBC-L-West ADC Sum

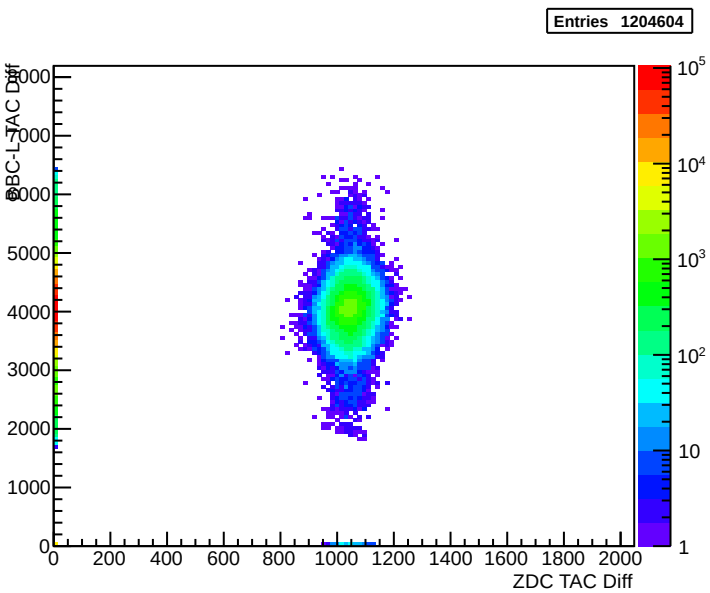

Entries 1204604
BBC-S-East ADC Sum
BBC-S-West ADC Sum

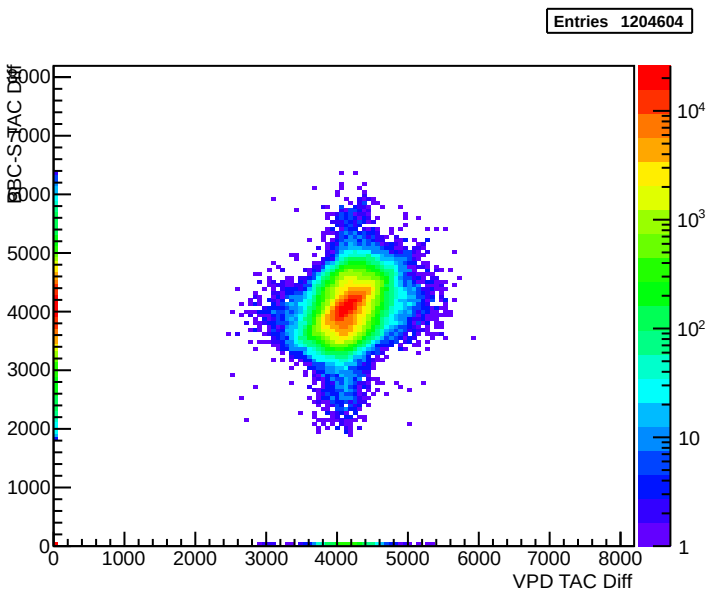

Entries 1204604
VPD East ADC Sum
VPD West ADC Sum

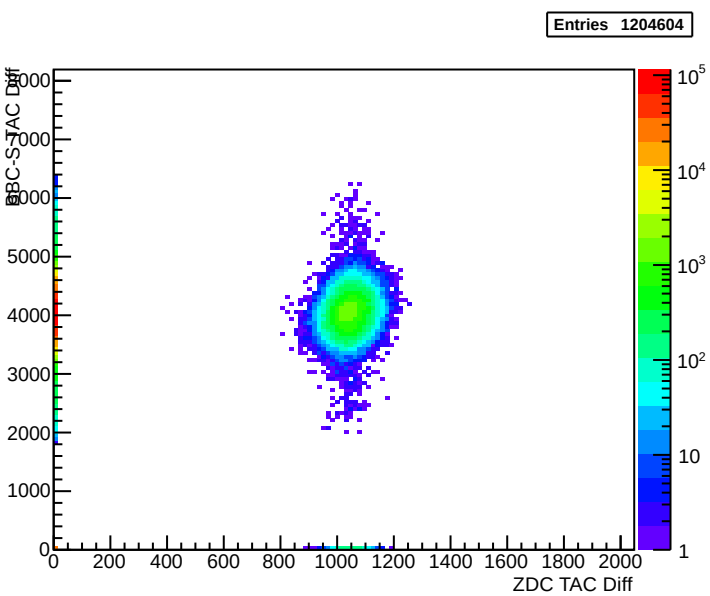

Entries 1204604
ZDC East ADC Sum Att
ZDC West ADC Sum Att

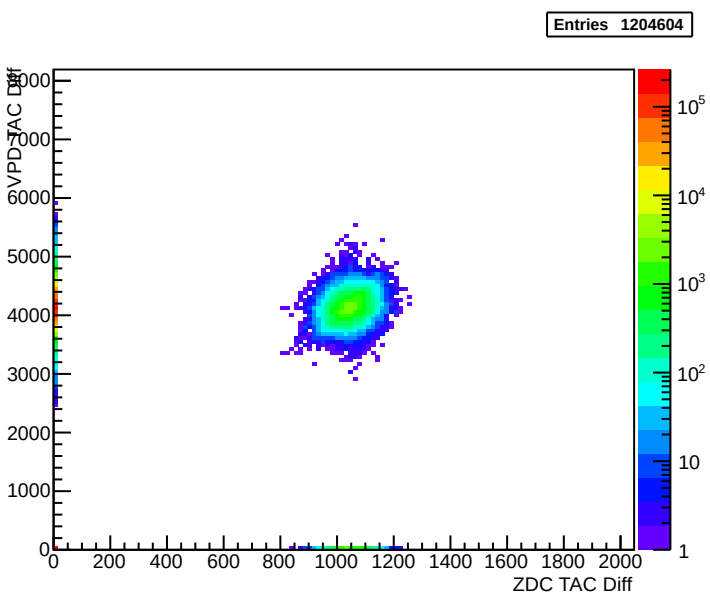

Entries 1204604
BBC-L TAC Diff
BCC-S TAC Diff

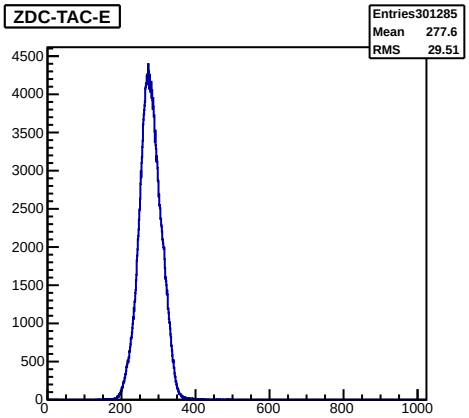

Entries 1204604
BBC-L TAC Diff
VPD TAC Diff

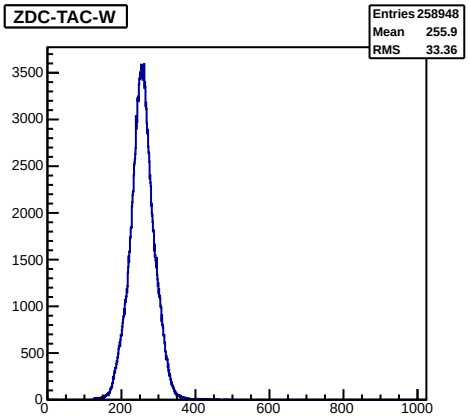

Entries 1204604
BBC-L TAC Diff
ZDC TAC Diff

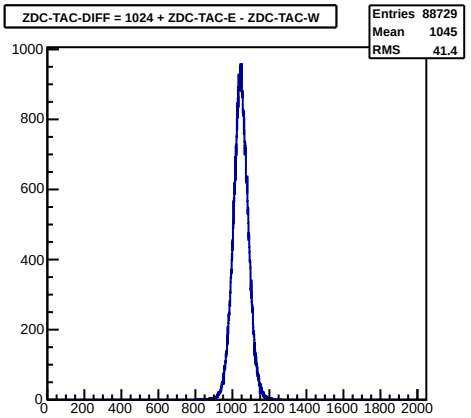

Entries 1204604
BBC-S TAC Diff
VPD TAC Diff

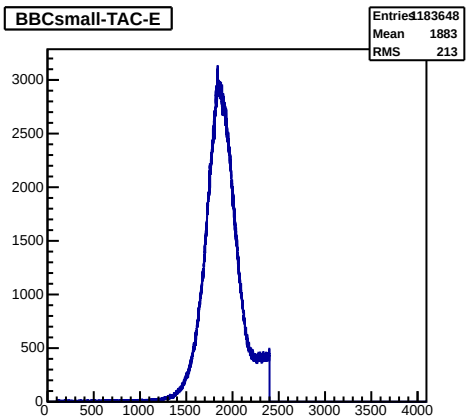

Entries 1204604
BBC-S TAC Diff
ZDC TAC Diff

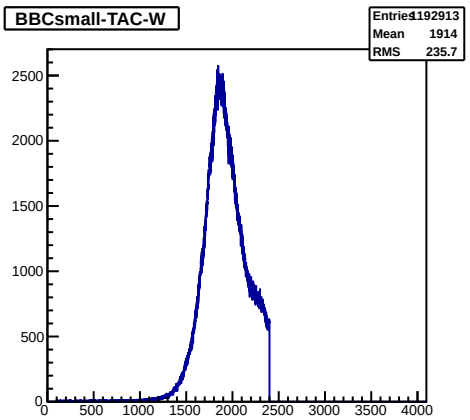

Entries 1204604
VPD TAC Diff
ZDC TAC Diff

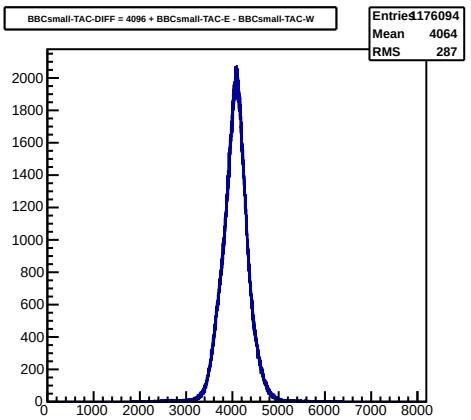

ZDC-TAC-E
Entries 301285
Mean 277.6
RMS 29.51

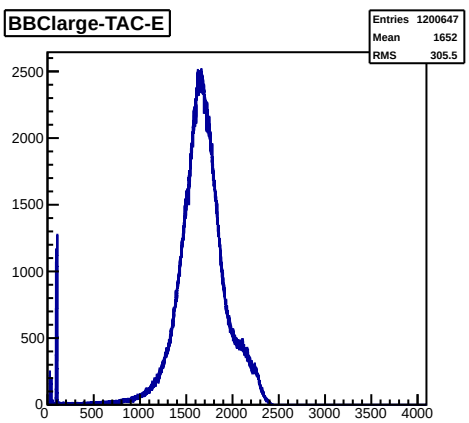

ZDC-TAC-W
Entries 258948
Mean 255.9
RMS 33.36

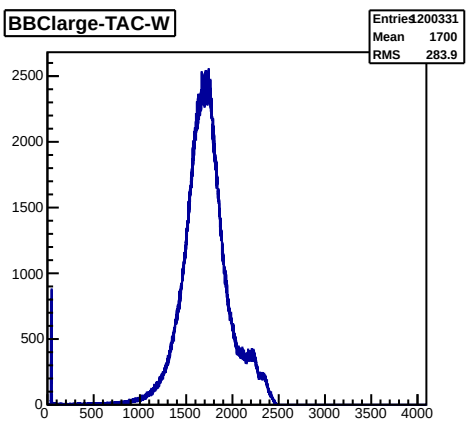

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 88729
Mean 1045
RMS 41.4

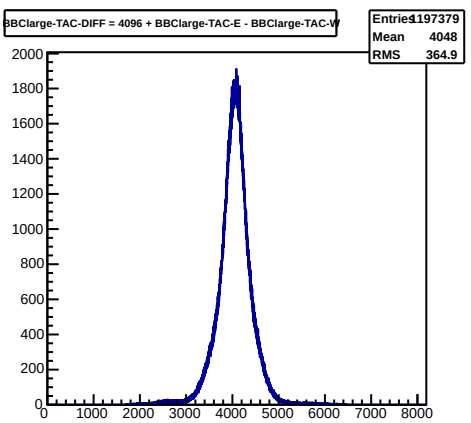

BBCsmall-TAC-E
Entries 1183648
Mean 1883
RMS 213

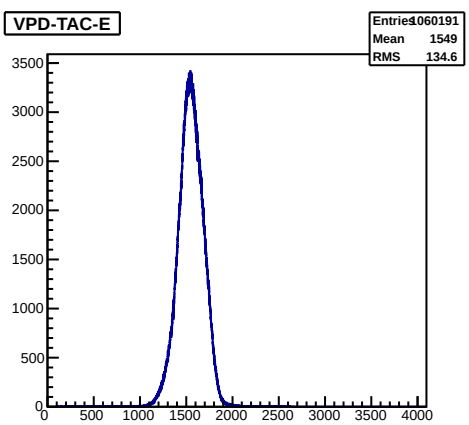

BBCsmall-TAC-W
Entries 1192913
Mean 1914
RMS 235.7

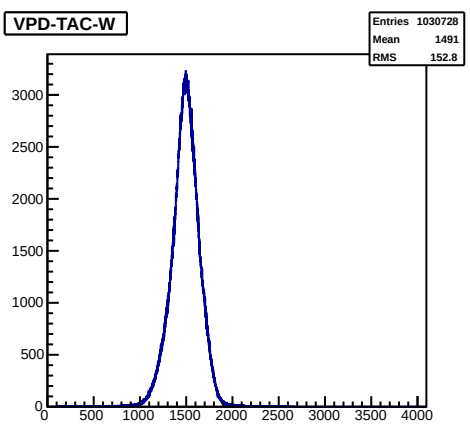

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 1176094
Mean 4064
RMS 287

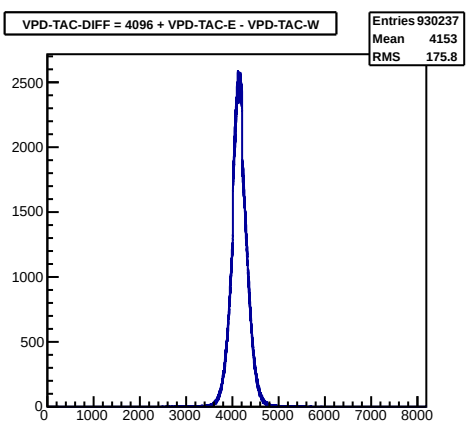

BBClarge-TAC-E
Entries 1200647
Mean 1652
RMS 305.5

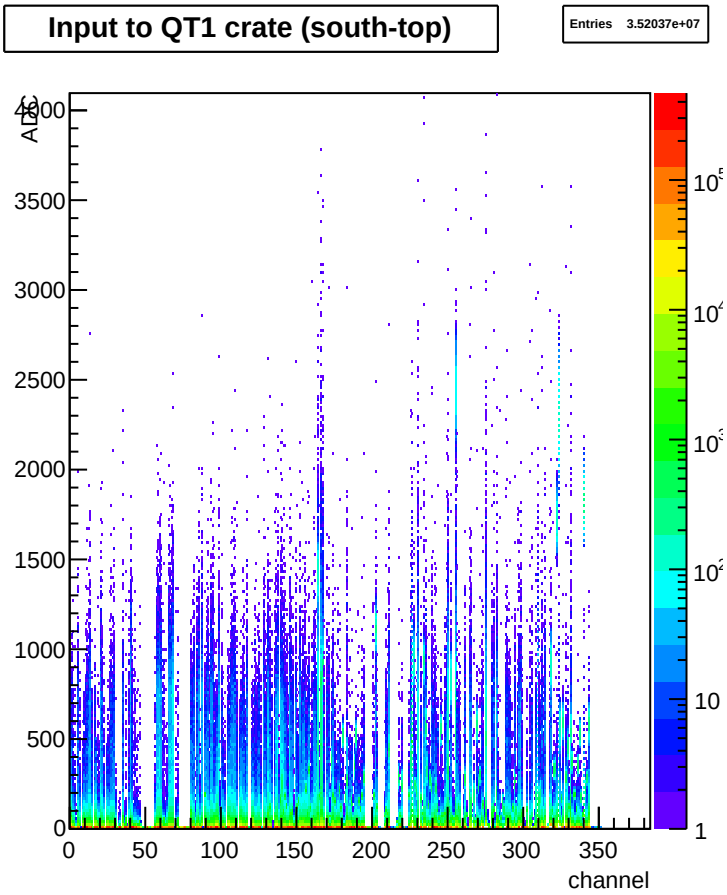

BBClarge-TAC-W
Entries 1200331
Mean 1700
RMS 283.9

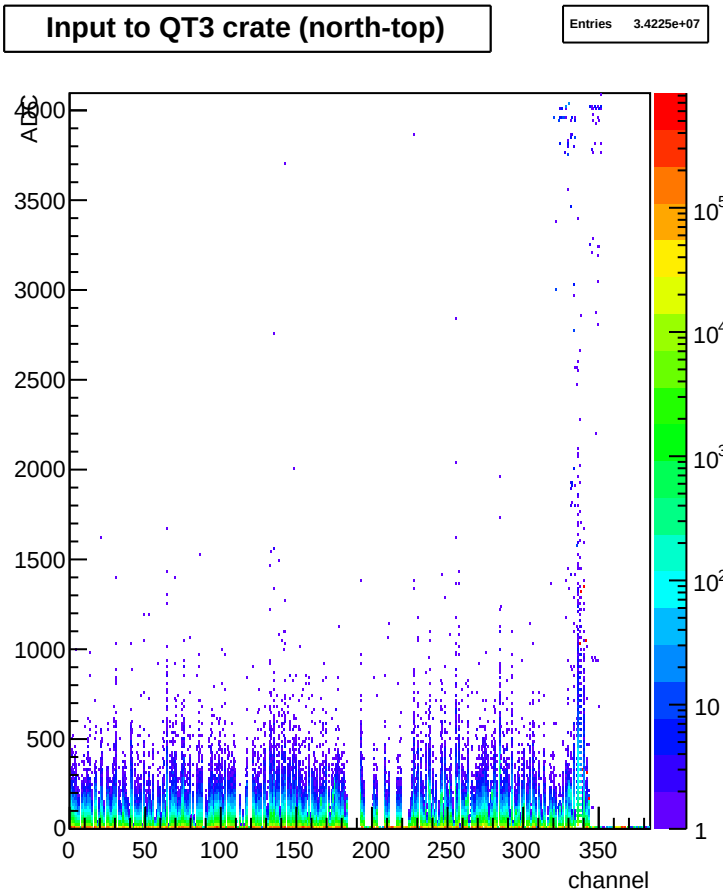

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 1197379
Mean 4048
RMS 364.9

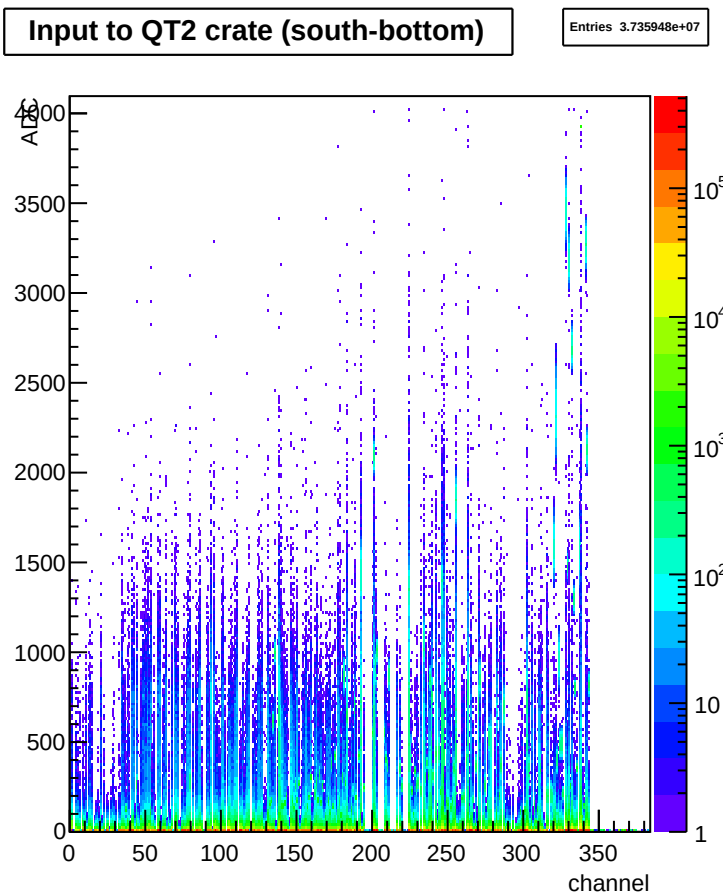

VPD-TAC-E
Entries 1060191
Mean 1549
RMS 134.6

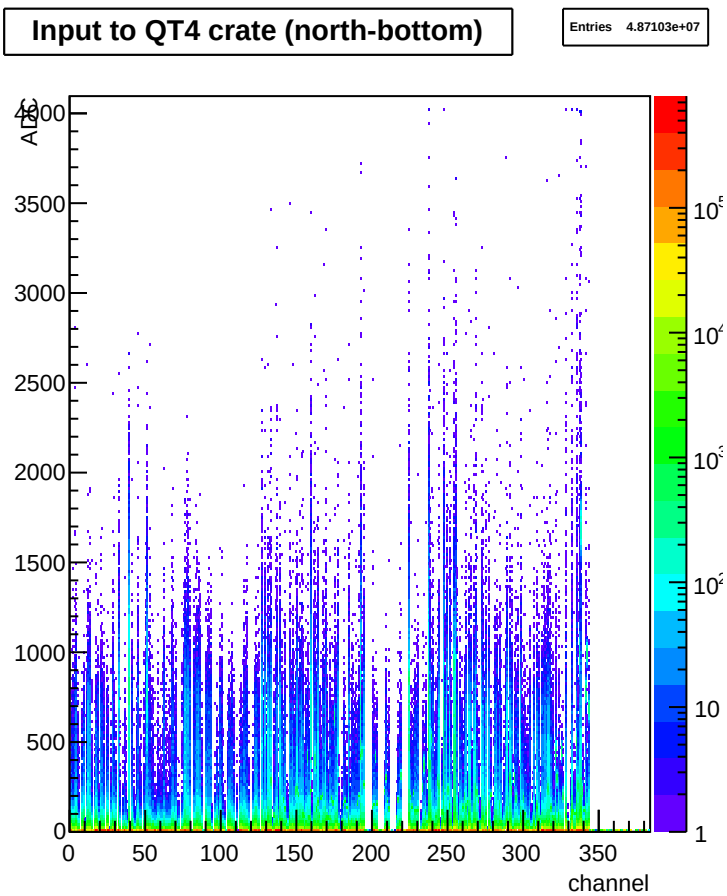

VPD-TAC-W
Entries 1030728
Mean 1491
RMS 152.8

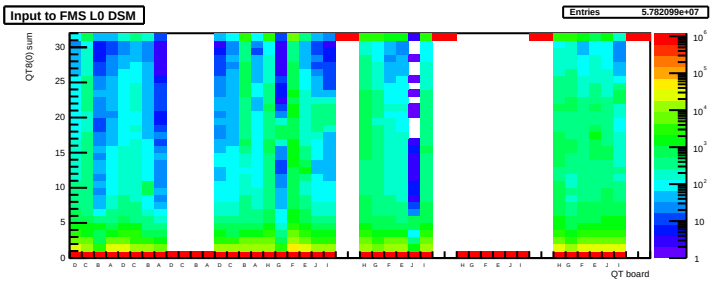

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 930237
Mean 4153
RMS 175.8

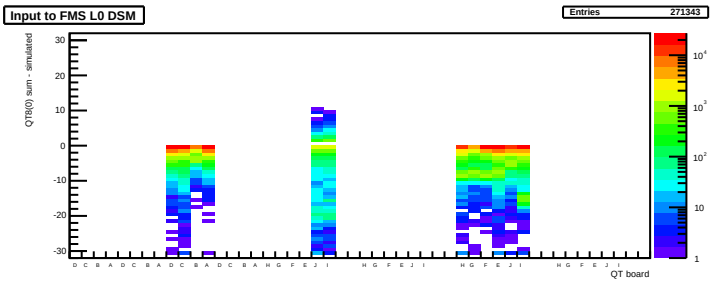

Input to QT1 crate (south-top)
Entries 3.52037e+07
ADC
channel

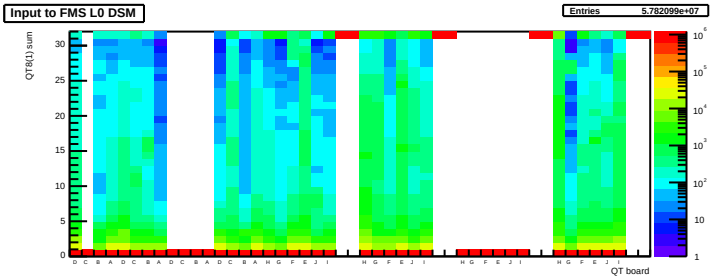

Input to QT3 crate (north-top)
Entries 3.4225e+07
ADC
channel

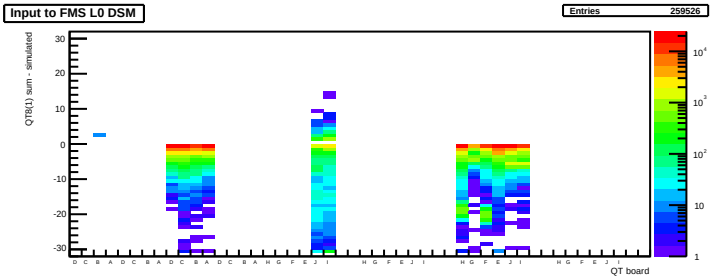

Input to QT2 crate (south-bottom)
Entries 3.735948e+07
ADC
channel

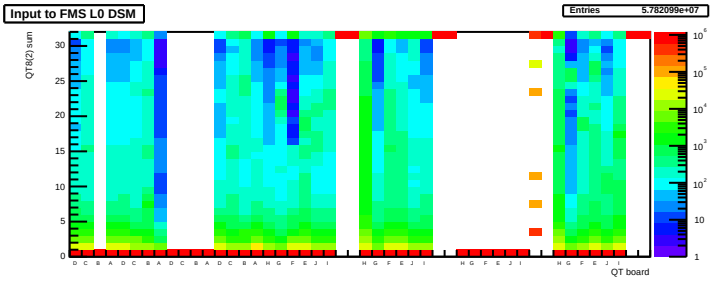

Input to QT4 crate (north-bottom)
Entries 4.87103e+07
ADC
channel

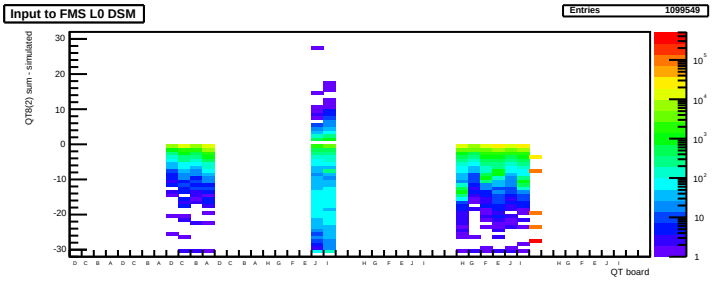

Input to FMS L0 DSM
Entries 5.782099e+07
QT8(0) sum
QT board

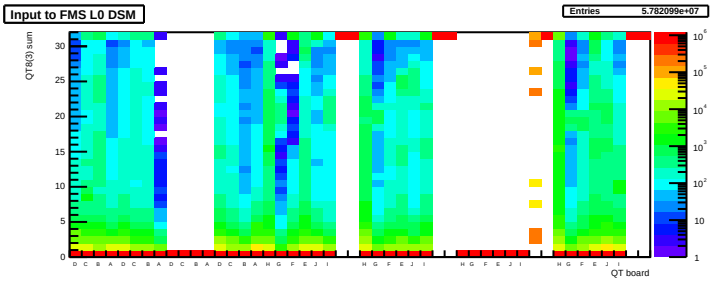

Input to FMS L0 DSM
Entries 271343
QT8(0) sum - simulated
QT board

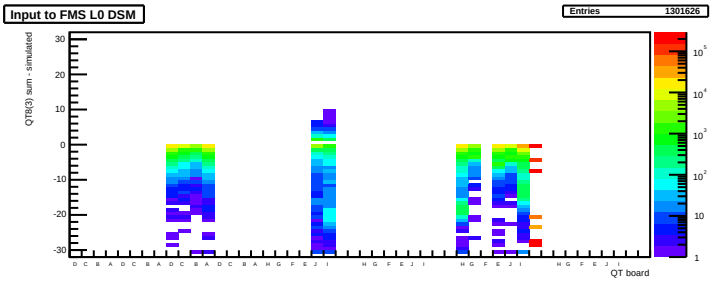

Input to FMS L0 DSM
Entries 5.782099e+07
QT8(1) sum
QT board

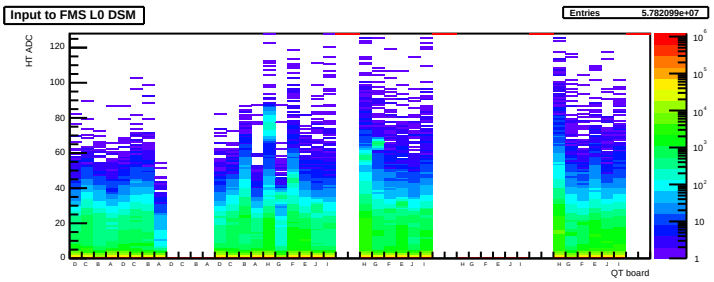

Input to FMS L0 DSM
Entries 259526
QT8(1) sum - simulated
QT board

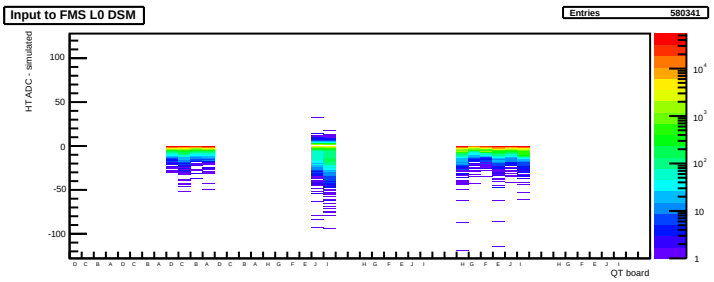

Input to FMS L0 DSM
Entries 5.782099e+07
QT8(2) sum
QT board

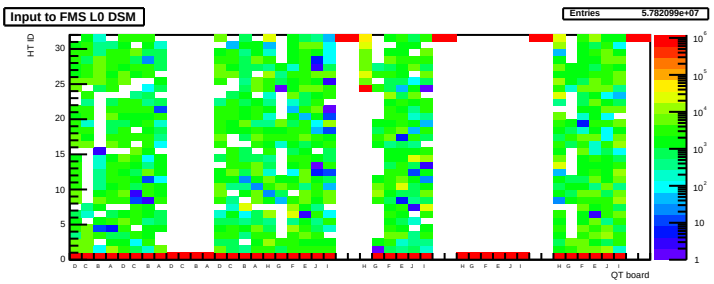

Input to FMS L0 DSM
Entries 1099549
QT8(2) sum - simulated
QT board

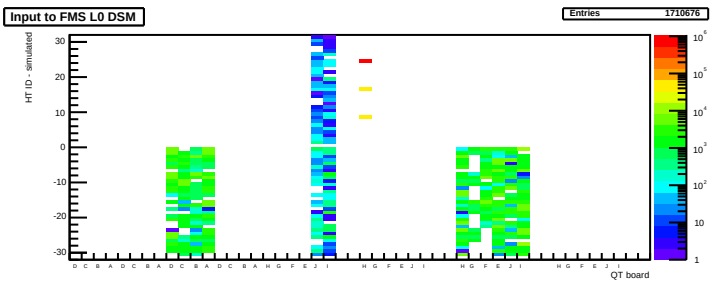

Input to FMS L0 DSM
Entries 5.782099e+07
QT8(3) sum
QT board

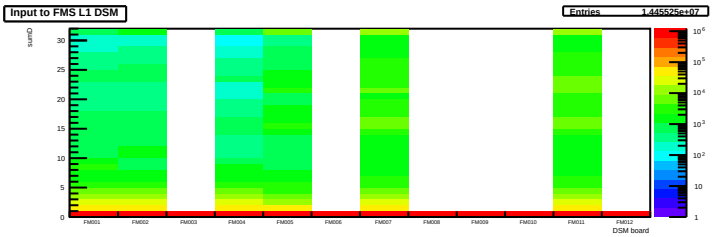

Input to FMS L0 DSM
Entries 1301626
QT8(3) sum - simulated
QT board

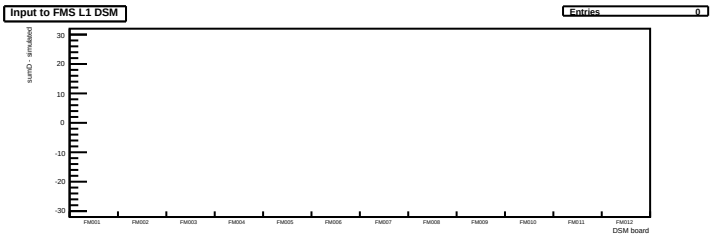

Input to FMS L0 DSM
Entries 5.782099e+07
HT ADC
QT board

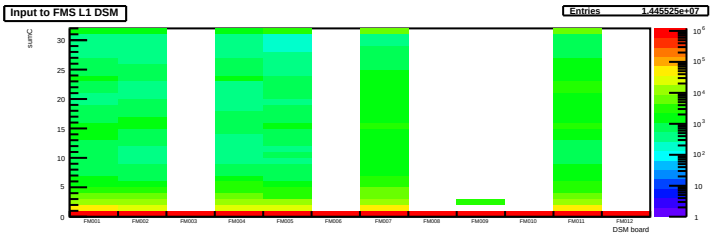

Input to FMS L0 DSM
Entries 580341
HT ADC - simulated
QT board

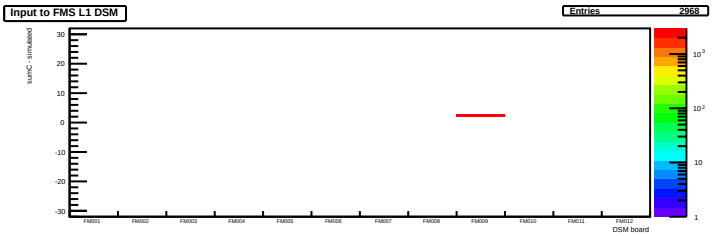

Input to FMS L0 DSM
Entries 5.782099e+07
HT ID
QT board

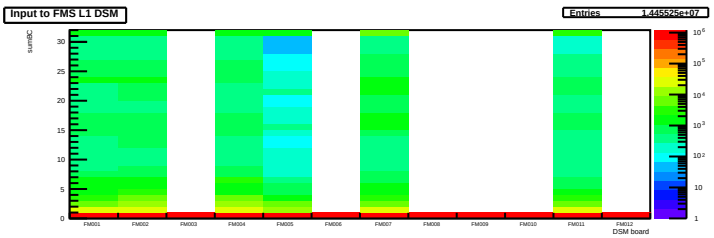

Input to FMS L0 DSM
Entries 1710676
HT ID - simulated
QT board

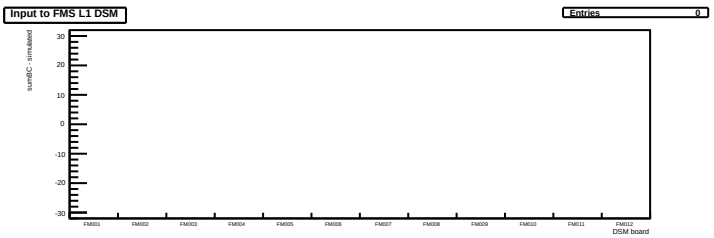

Input to FMS L1 DSM
Entries 1.445525e+07
sumD
DSM board

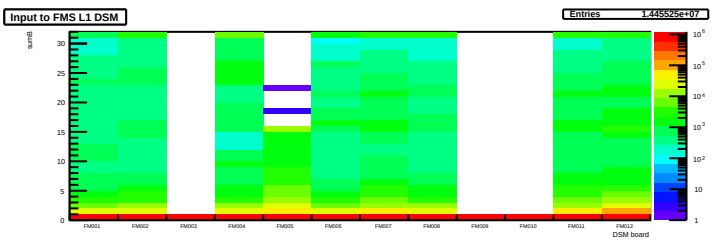

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

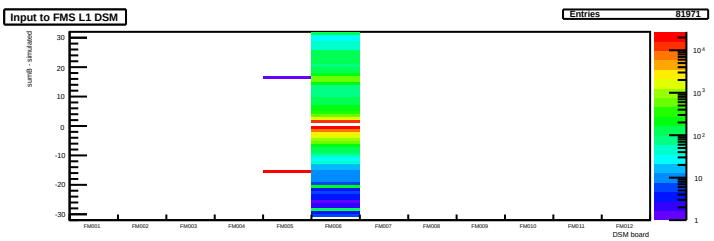

Input to FMS L1 DSM
Entries 1.445525e+07
sumC
DSM board

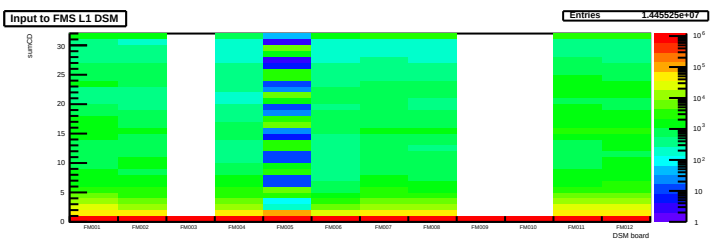

Input to FMS L1 DSM
Entries 2968
sumC - simulated
DSM board

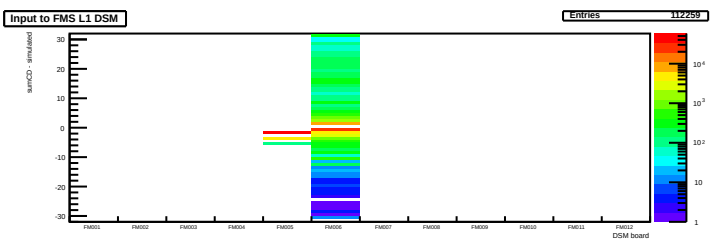

Input to FMS L1 DSM
Entries 1.445525e+07
sumBC
DSM board

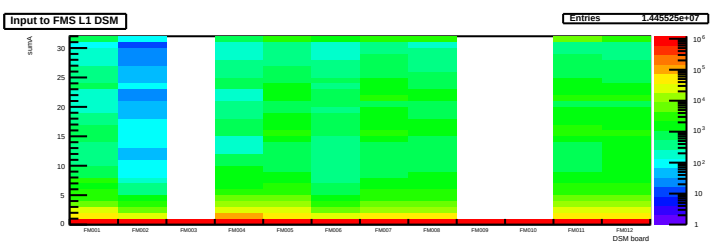

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

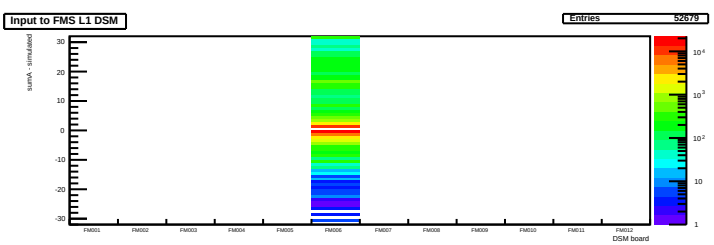

Input to FMS L1 DSM
Entries 1.445525e+07
sumB
DSM board

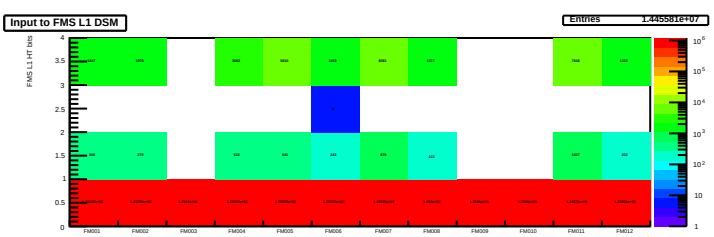

Input to FMS L1 DSM
Entries 81971
sumB - simulated
DSM board

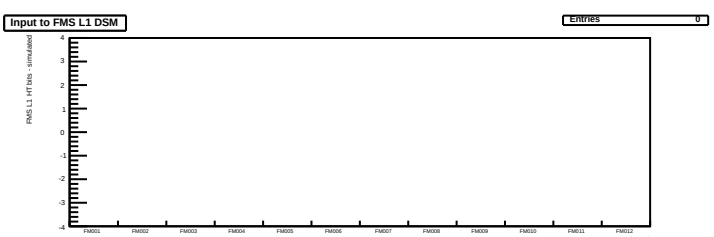

Input to FMS L1 DSM
Entries 1.445525e+07
sumCD
DSM board

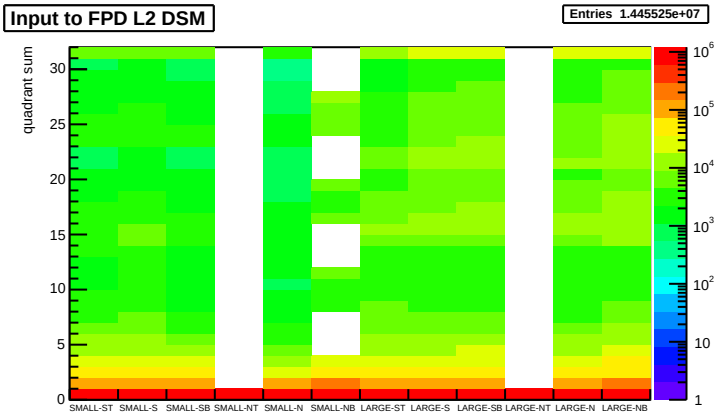

Input to FMS L1 DSM
Entries 112259
sumCD - simulated
DSM board

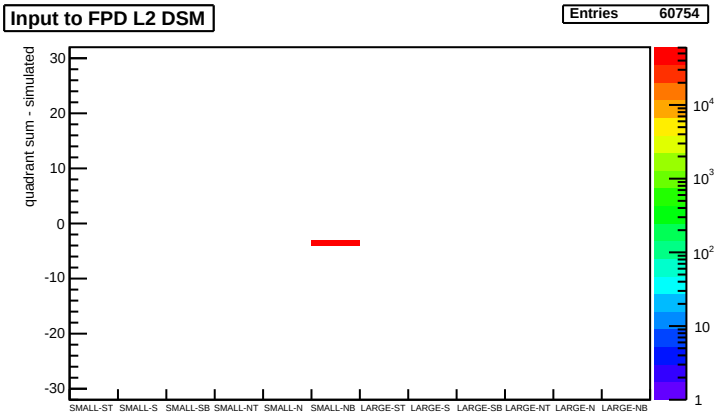

Input to FMS L1 DSM
Entries 1.445525e+07
sumA
DSM board

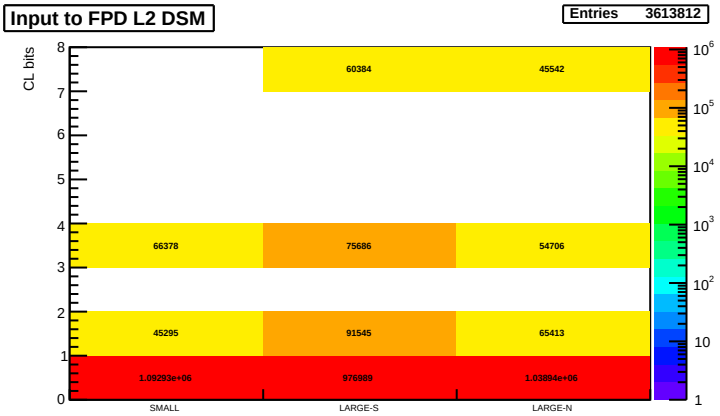

Input to FMS L1 DSM
Entries 52679
sumA - simulated
DSM board

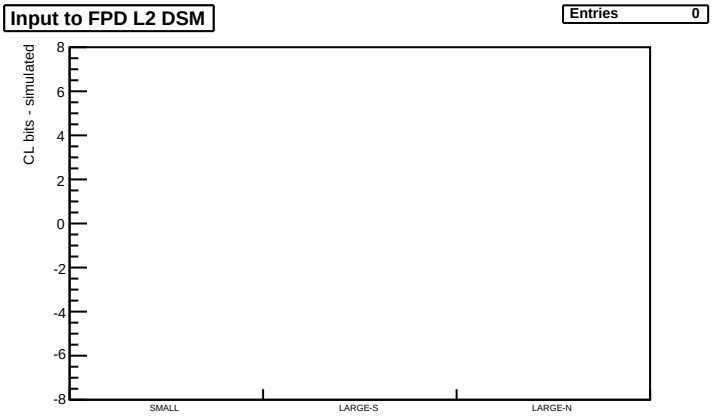

Input to FMS L1 DSM
Entries 1.445581e+07
FMS L1 HT bits
DSM board

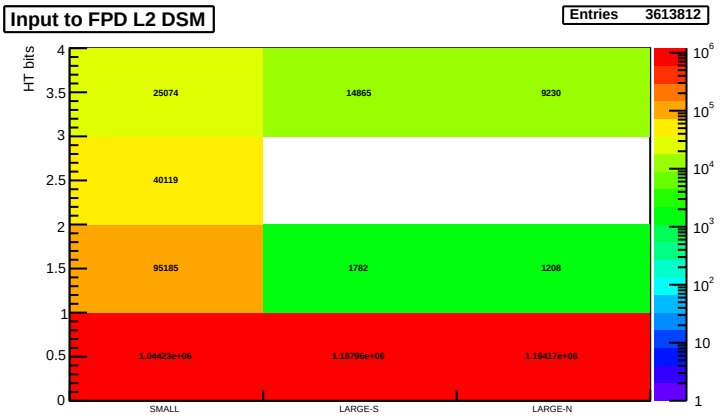

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

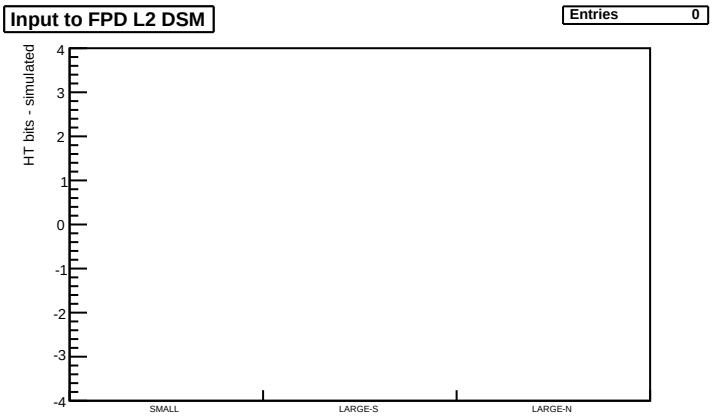

Input to FPD L2 DSM
Entries 1.445525e+07
quadrant sum
SMALL-ST SMALL-S SMALL-SB SMALL-NT SMALL-N SMALL-NB LARGE-ST LARGE-S LARGE-SB LARGE-NT LARGE-N LARGE-NB

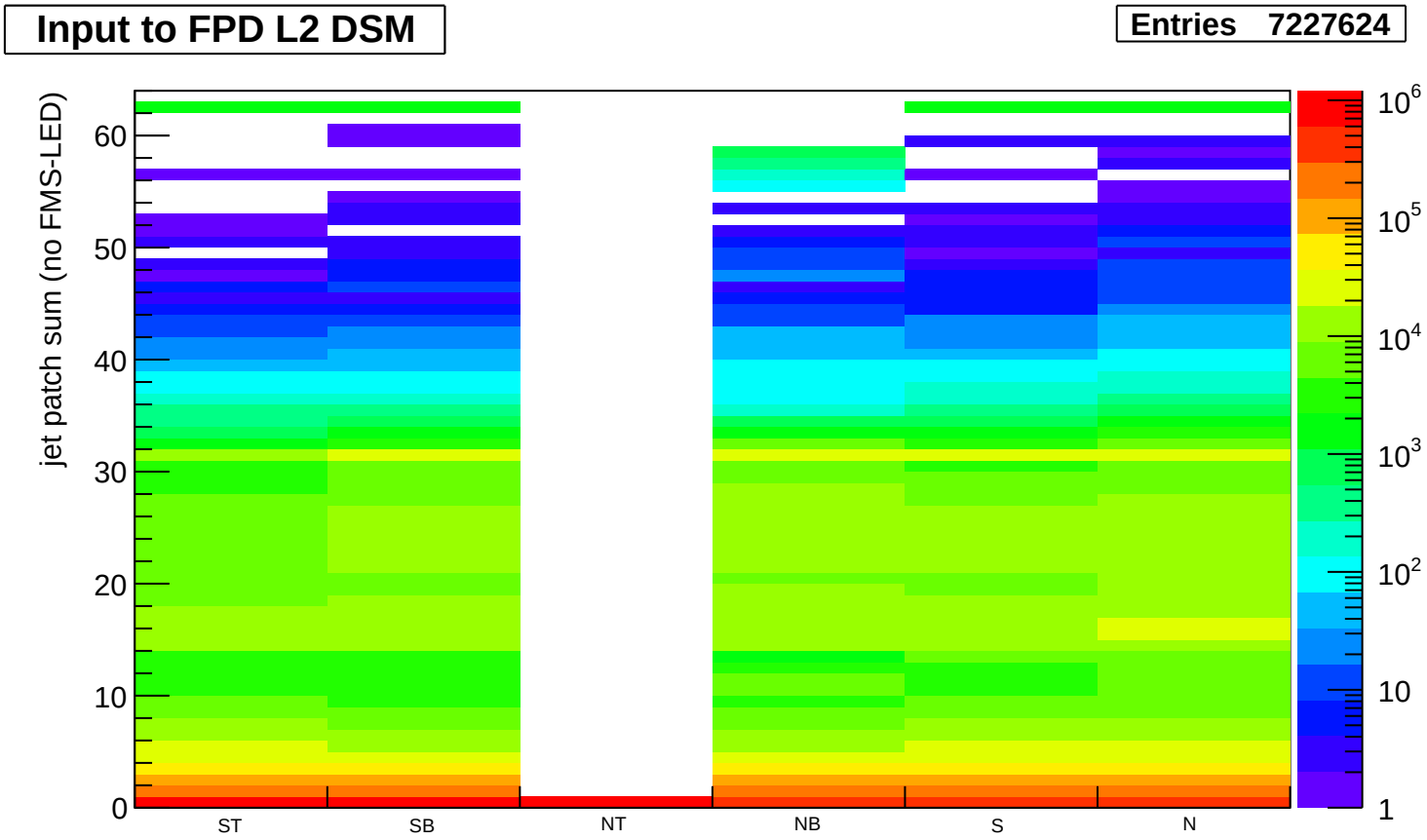

Input to FPD L2 DSM
Entries 60754
quadrant sum - simulated
SMALL-ST SMALL-S SMALL-SB SMALL-NT SMALL-N SMALL-NB LARGE-ST LARGE-S LARGE-SB LARGE-NT LARGE-N LARGE-NB

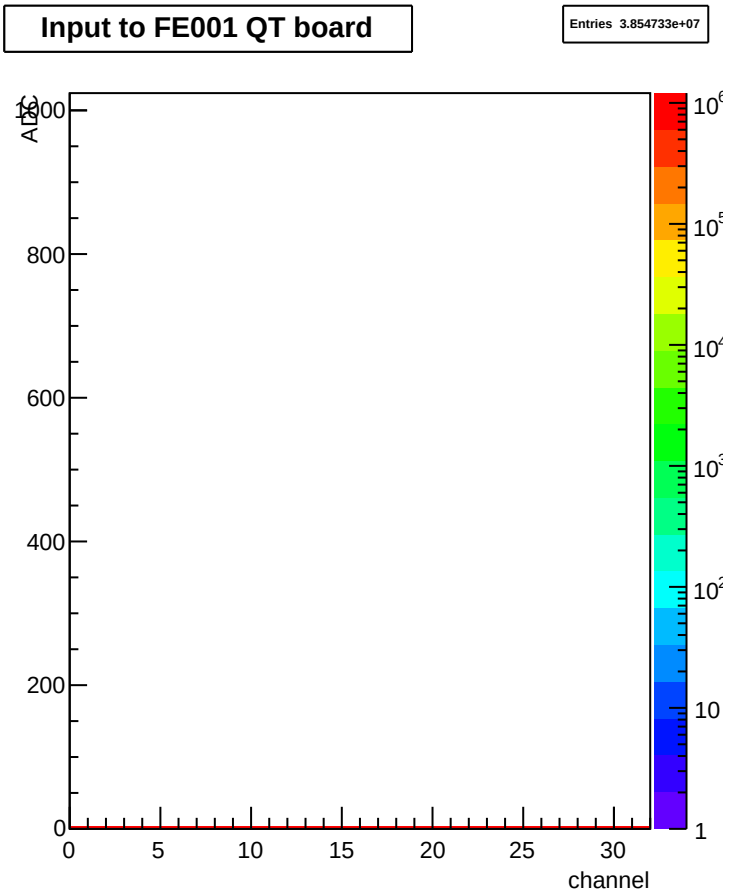

Input to FPD L2 DSM
Entries 3613812
CL bits
60384
45542
66378
75686
54706
45295
91545
65413
1.09293e+06
976989
1.03894e+06
SMALL
LARGE-S
LARGE-N

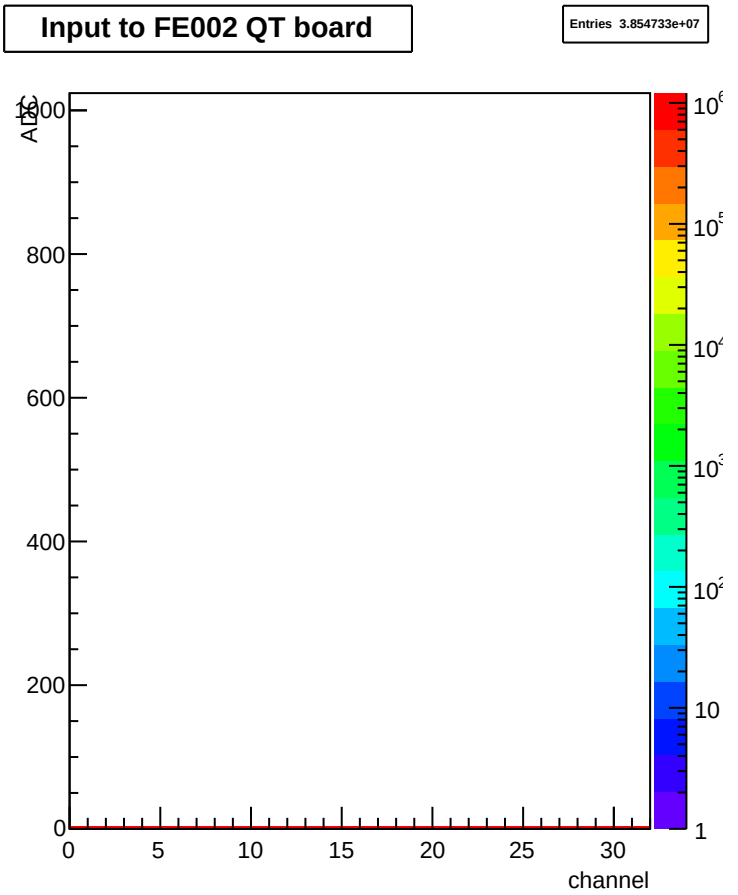

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

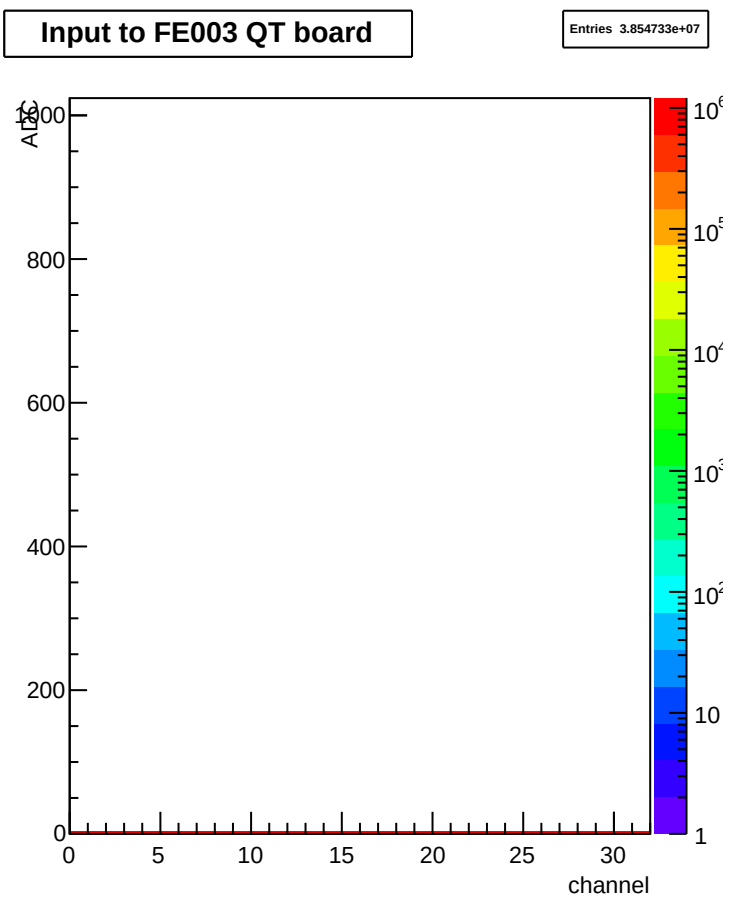

Input to FPD L2 DSM
Entries 3613812
HT bits
25074
14865
9230
40119
95185
1782
1208
1.04423e+06
1.18796e+06
1.19417e+06
SMALL
LARGE-S
LARGE-N

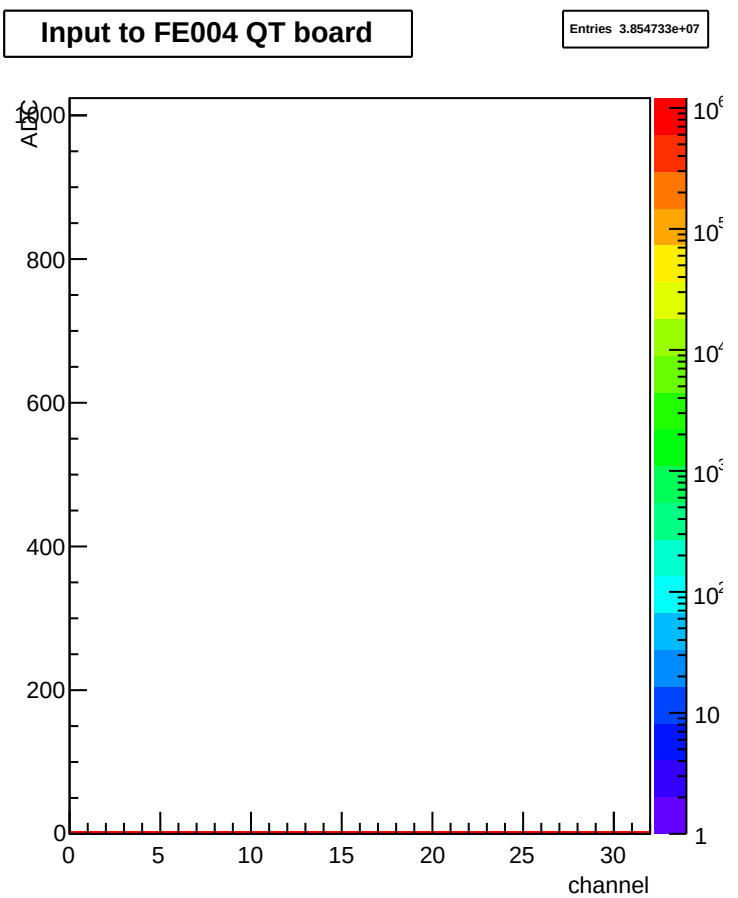

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

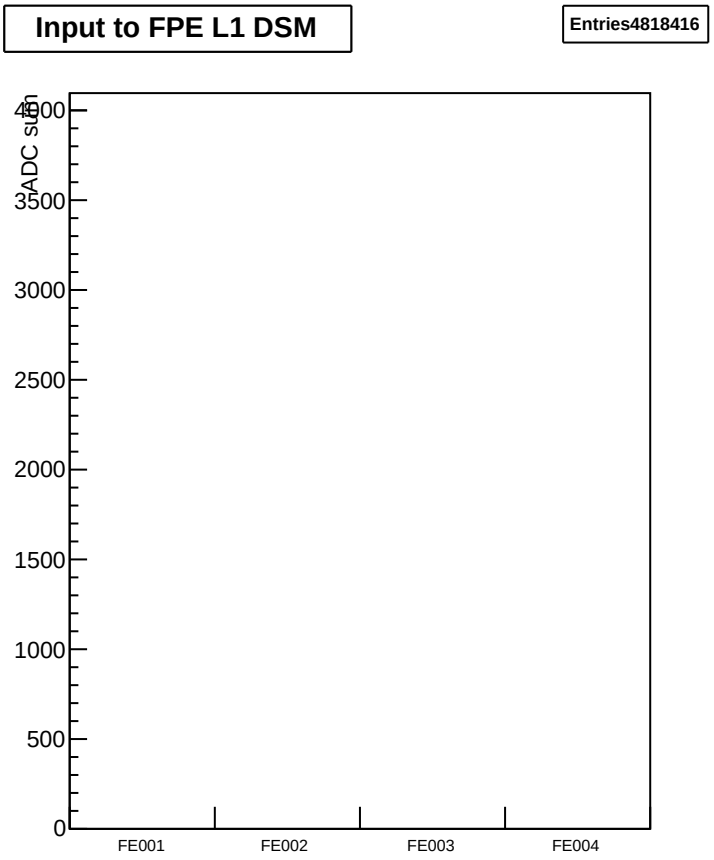

Input to FPD L2 DSM
Entries 7227624
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

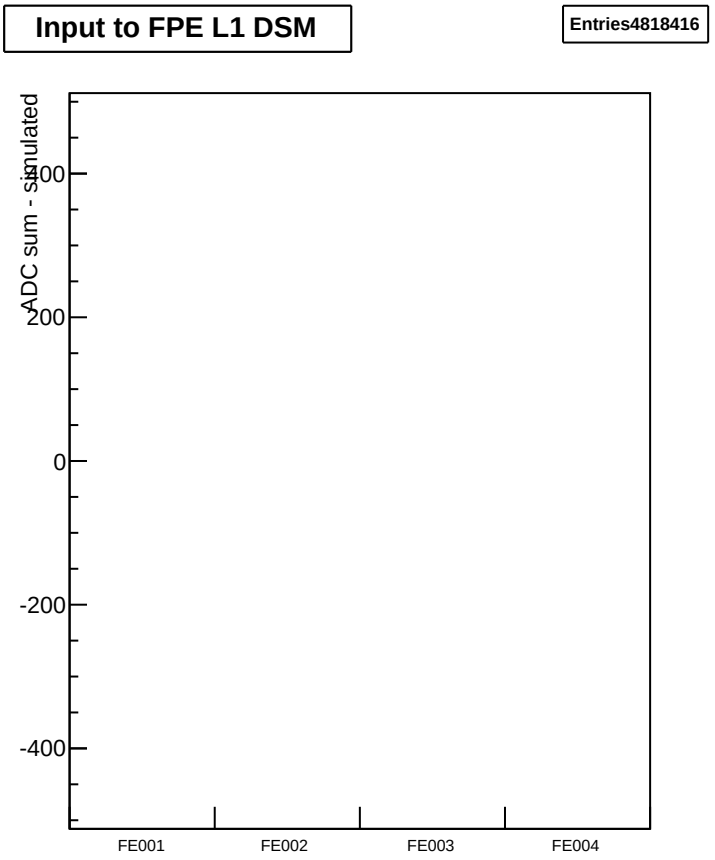

Input to FE001 QT board
Entries 3.854733e+07
ADC
channel

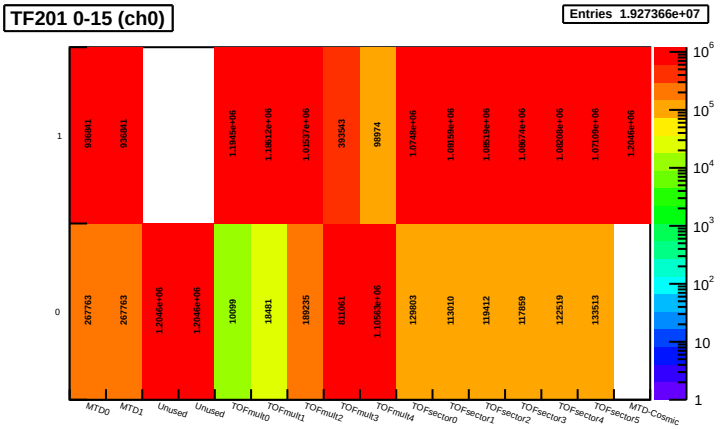

Input to FE002 QT board
Entries 3.854733e+07
ADC
channel

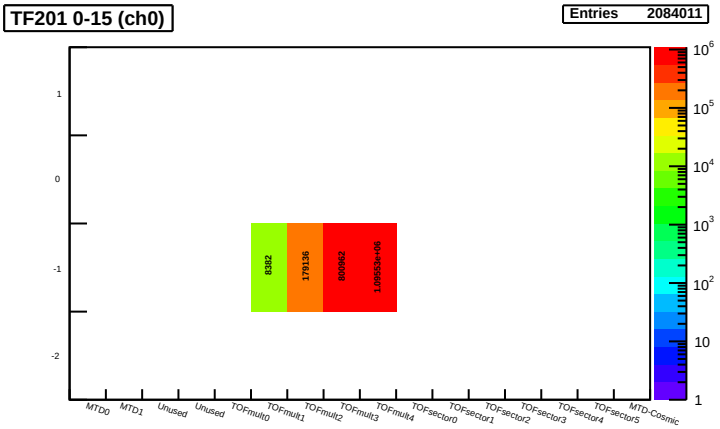

Input to FE003 QT board
Entries 3.854733e+07
ADC
channel

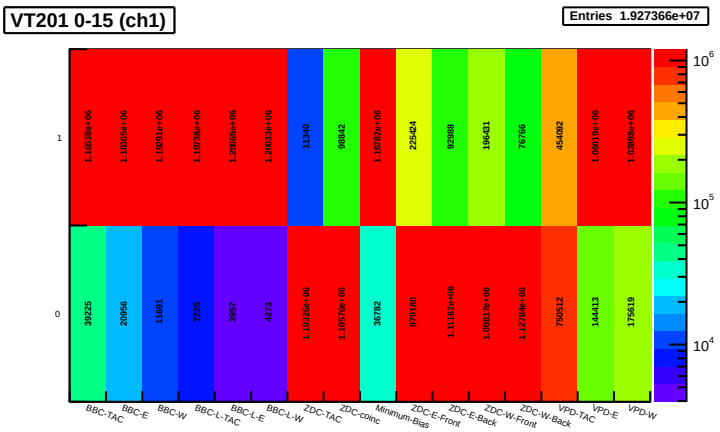

Input to FE004 QT board
Entries 3.854733e+07
ADC
channel

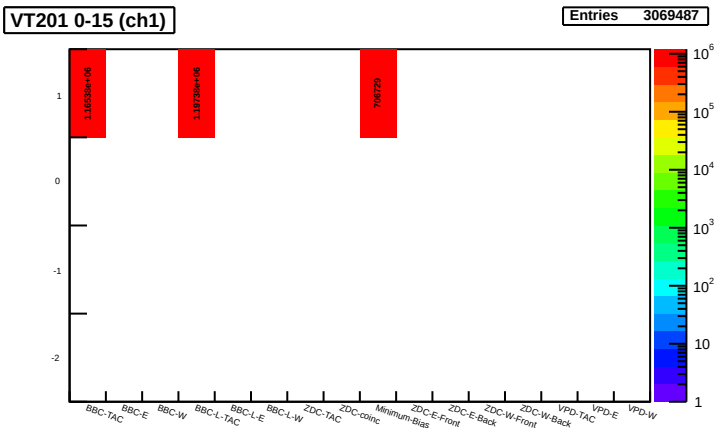

Input to FPE L1 DSM
Entries4818416
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004

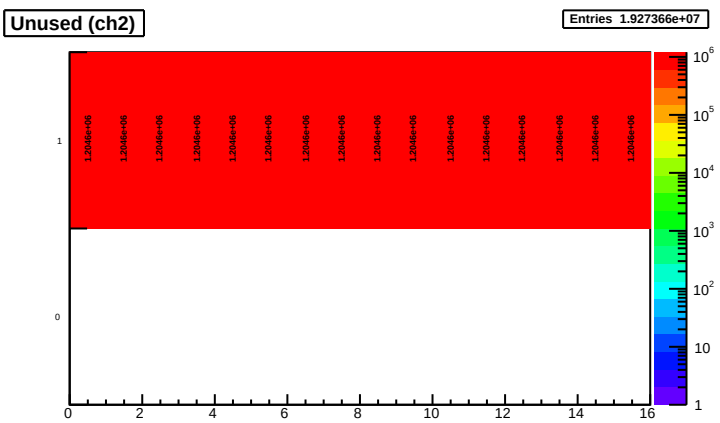

Input to FPE L1 DSM
Entries4818416
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004

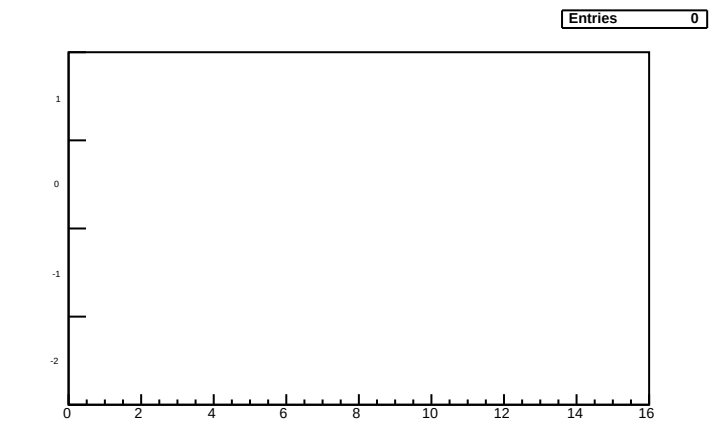

TF201 0-15 (ch0)
Entries 1.927366e+07
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

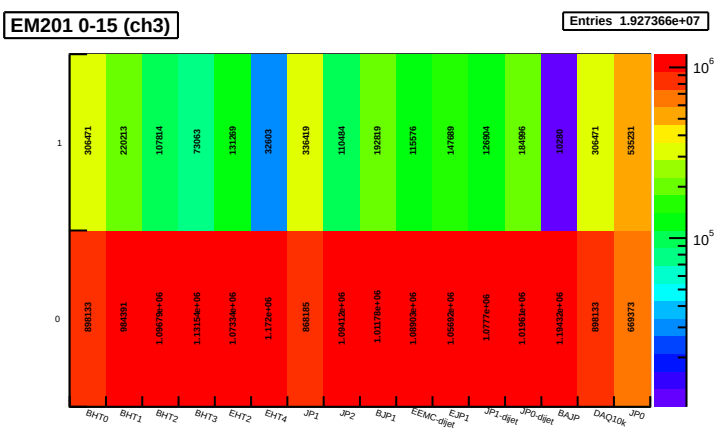

TF201 0-15 (ch0)
Entries 2084011
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

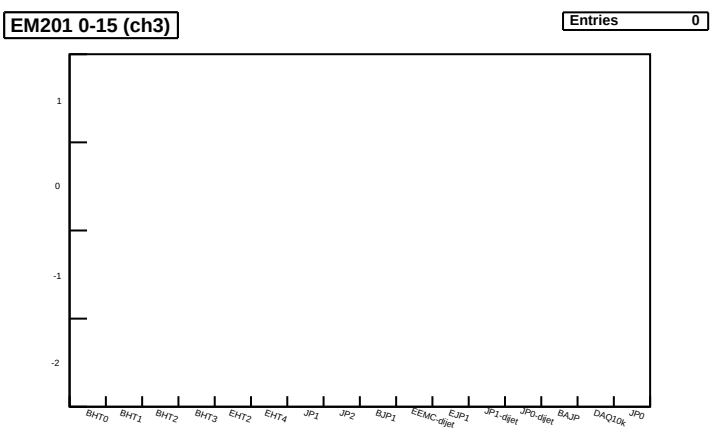

VT201 0-15 (ch1)
Entries 1.927366e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-coinc Minimum-Bias ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 3069487
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-coinc Minimum-Bias ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W

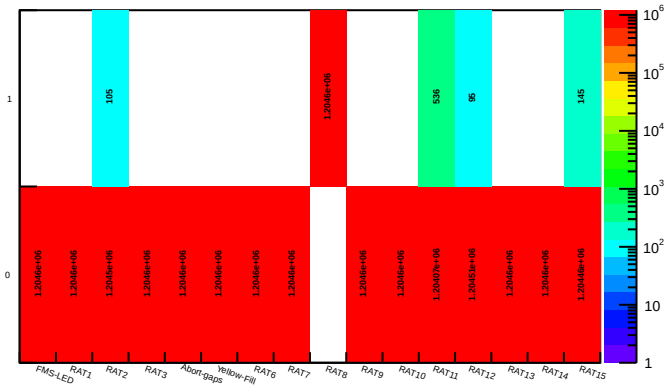

Unused (ch2)
Entries 1.927366e+07

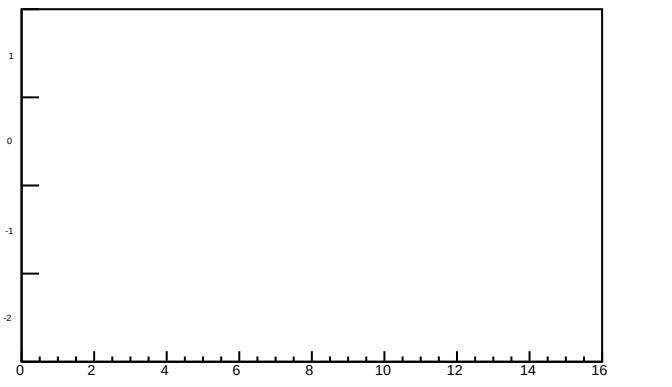

Entries 0


EM201 0-15 (ch3)
Entries 1.927366e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 EEMC-dijet EJP1 JP1-dijet JP0-dijet BAJP DAQ10k JP0

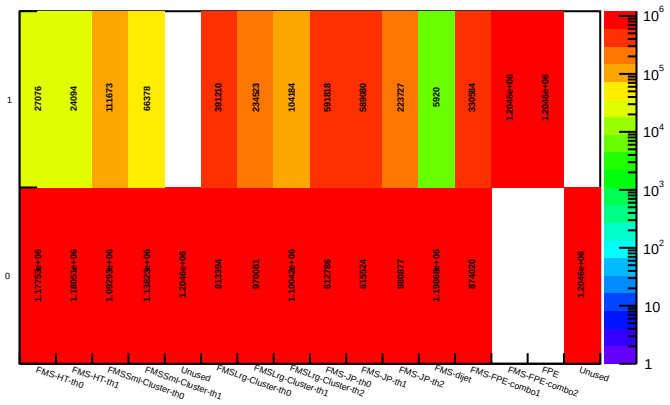

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 EEMC-dijet EJP1 JP1-dijet JP0-dijet BAJP DAQ10k JP0

RAT board (ch4)

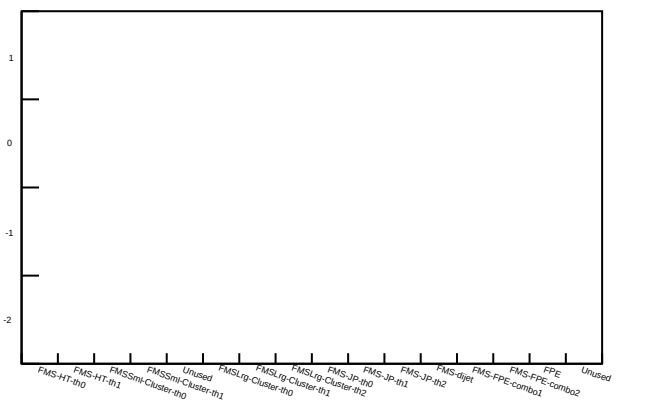




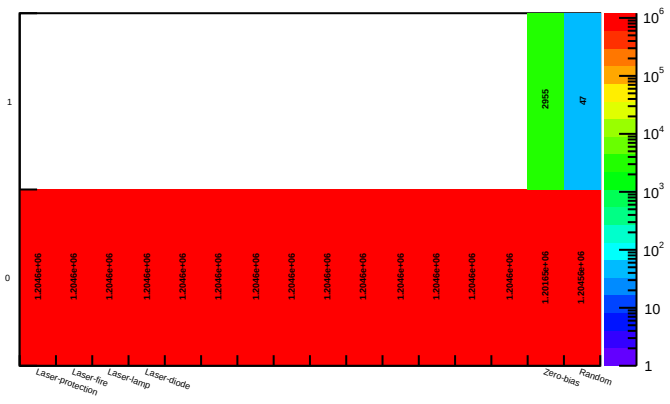
FP201 0-15 (ch5)

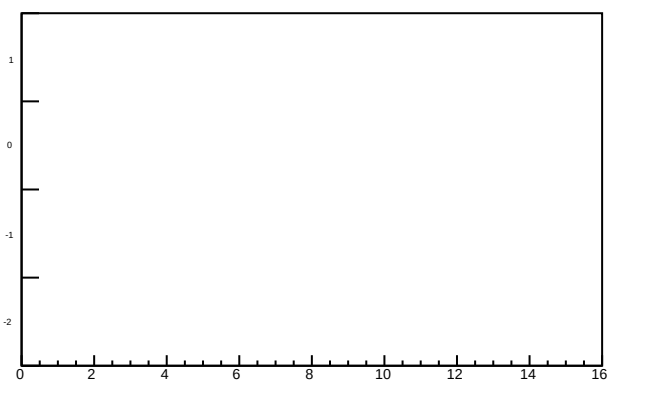
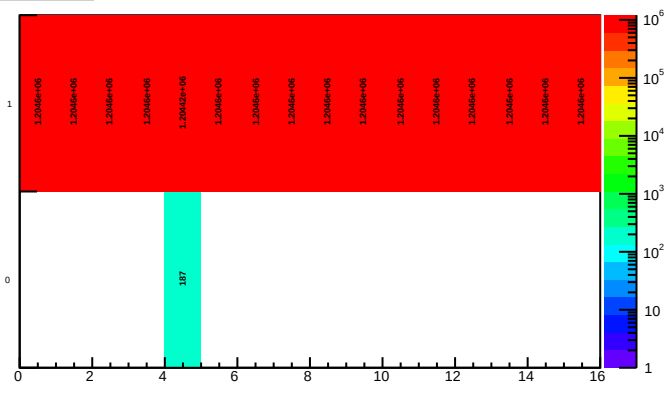
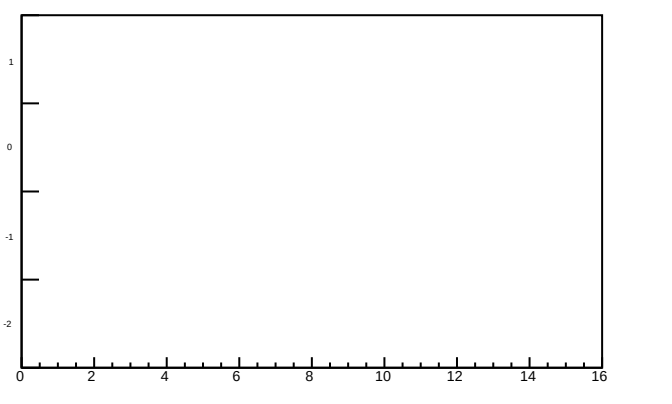


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)