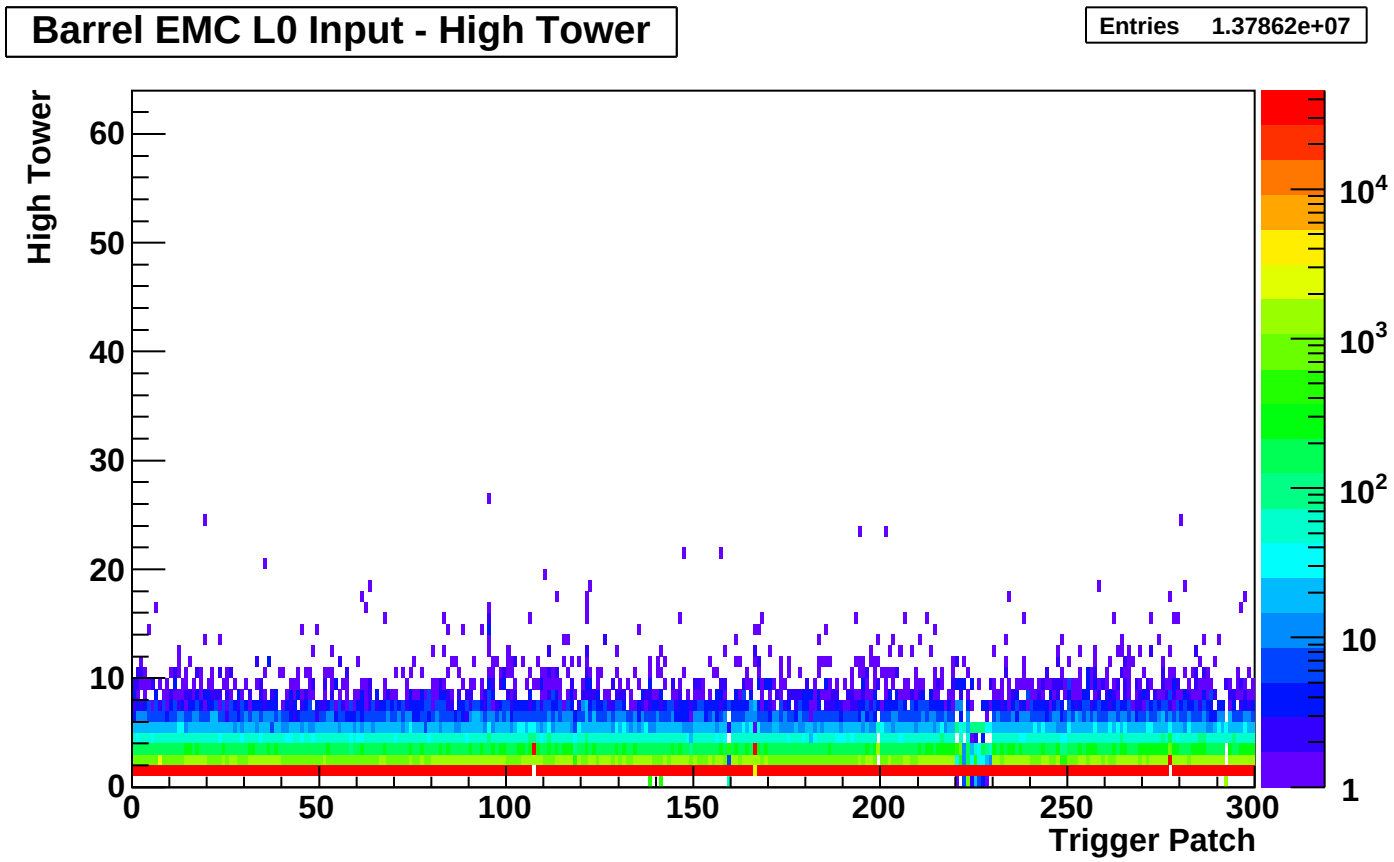
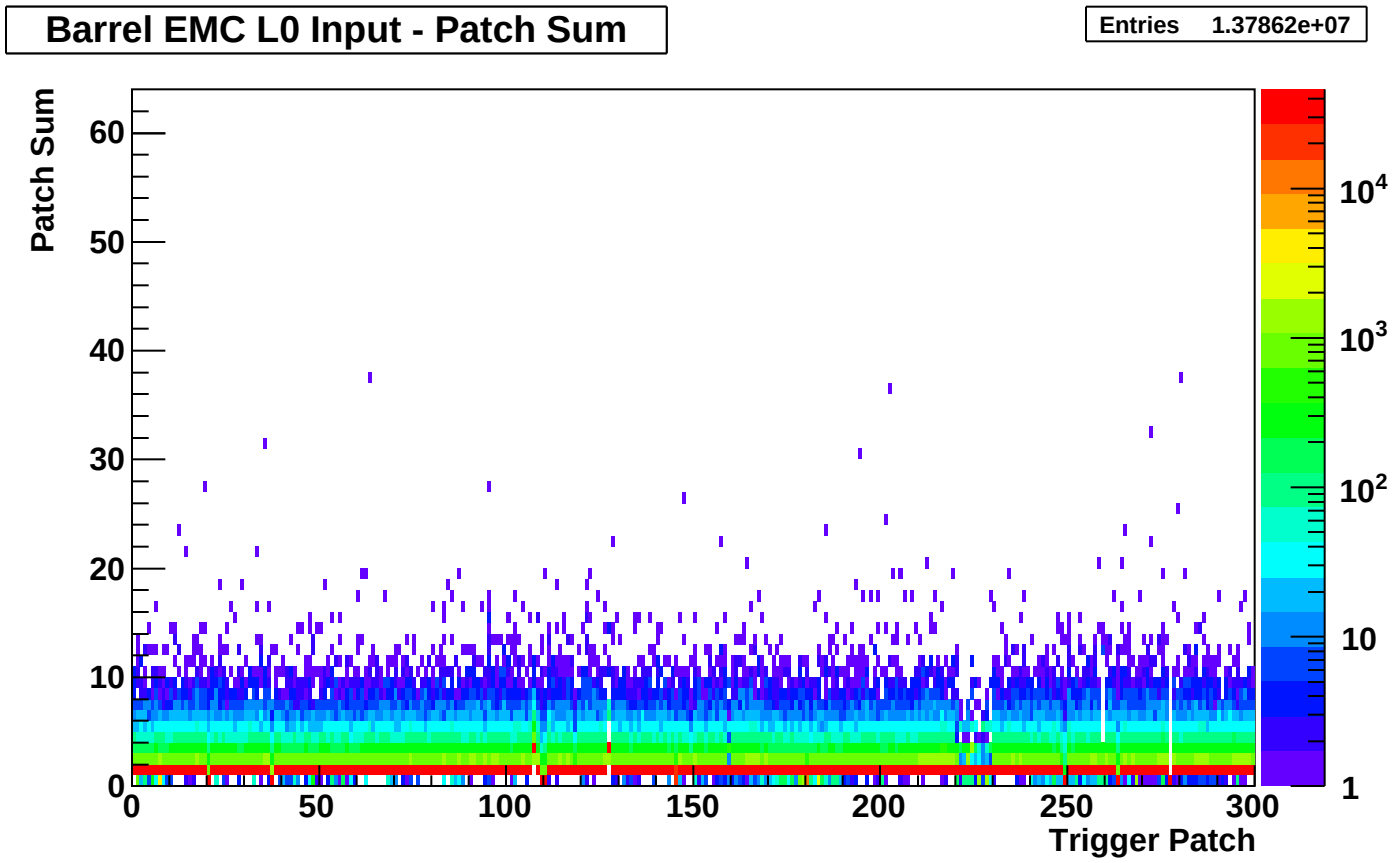
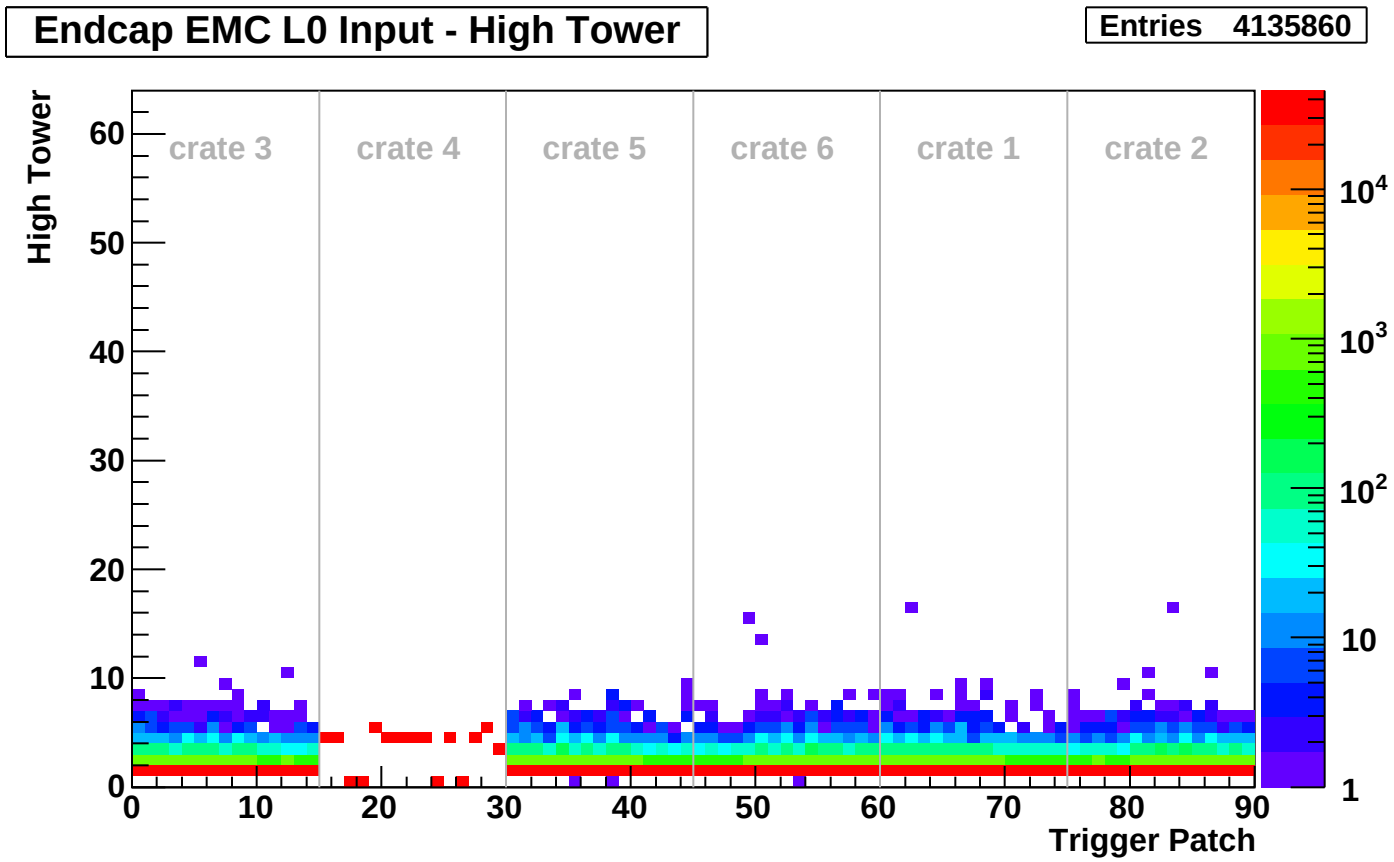
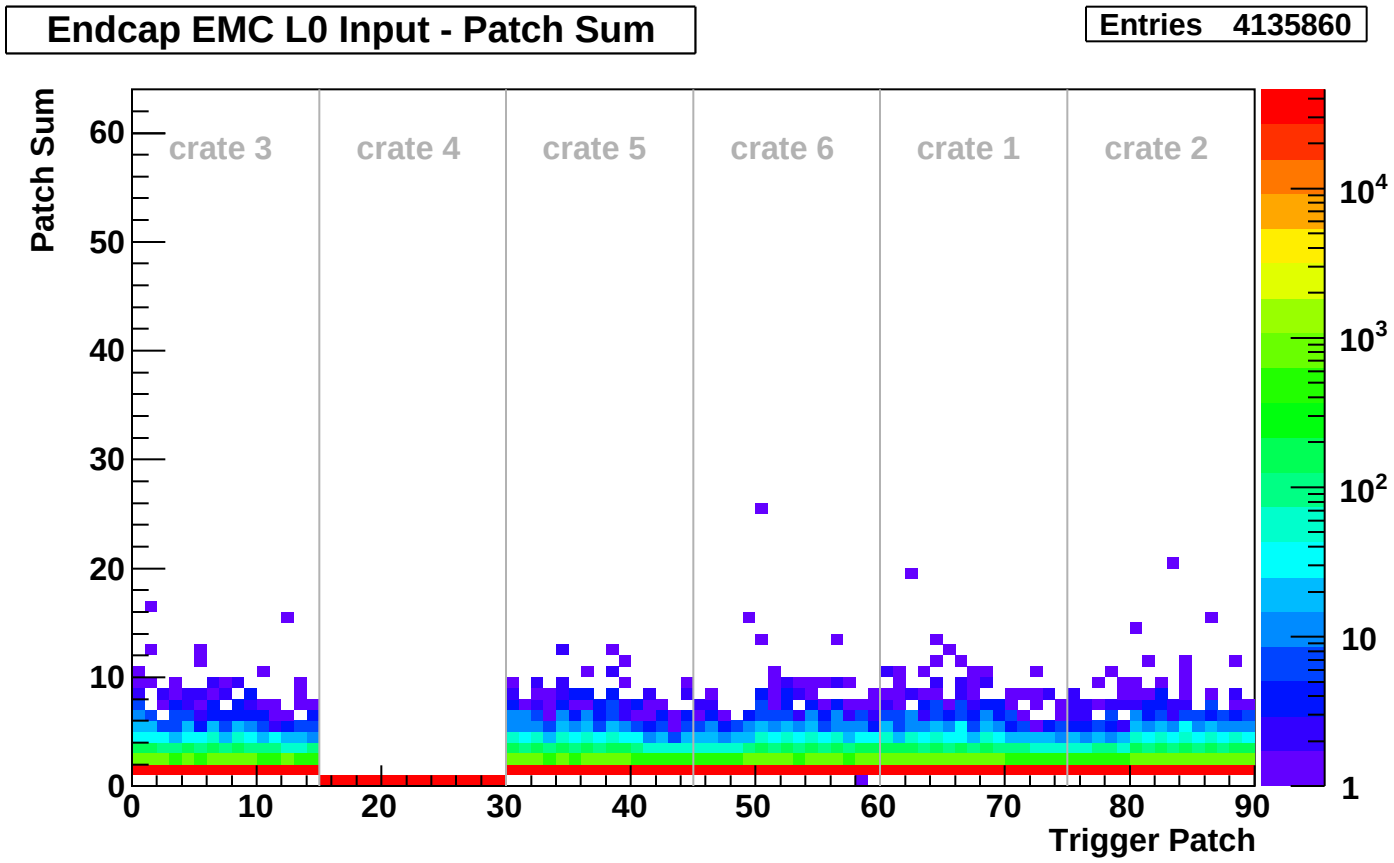
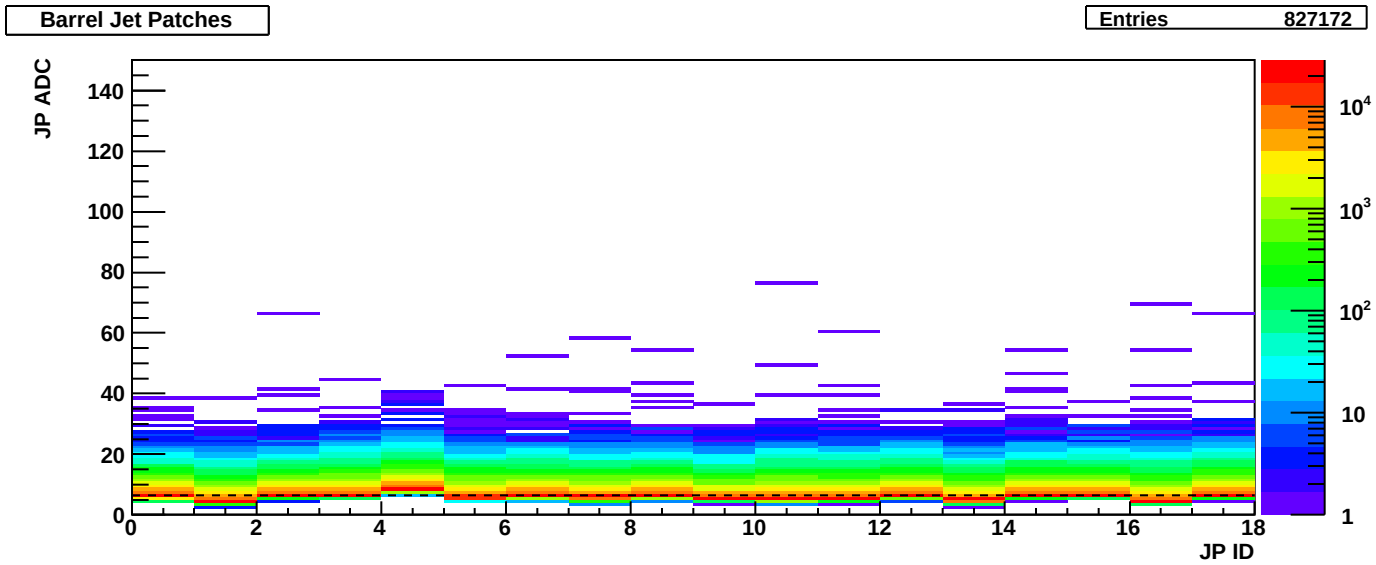
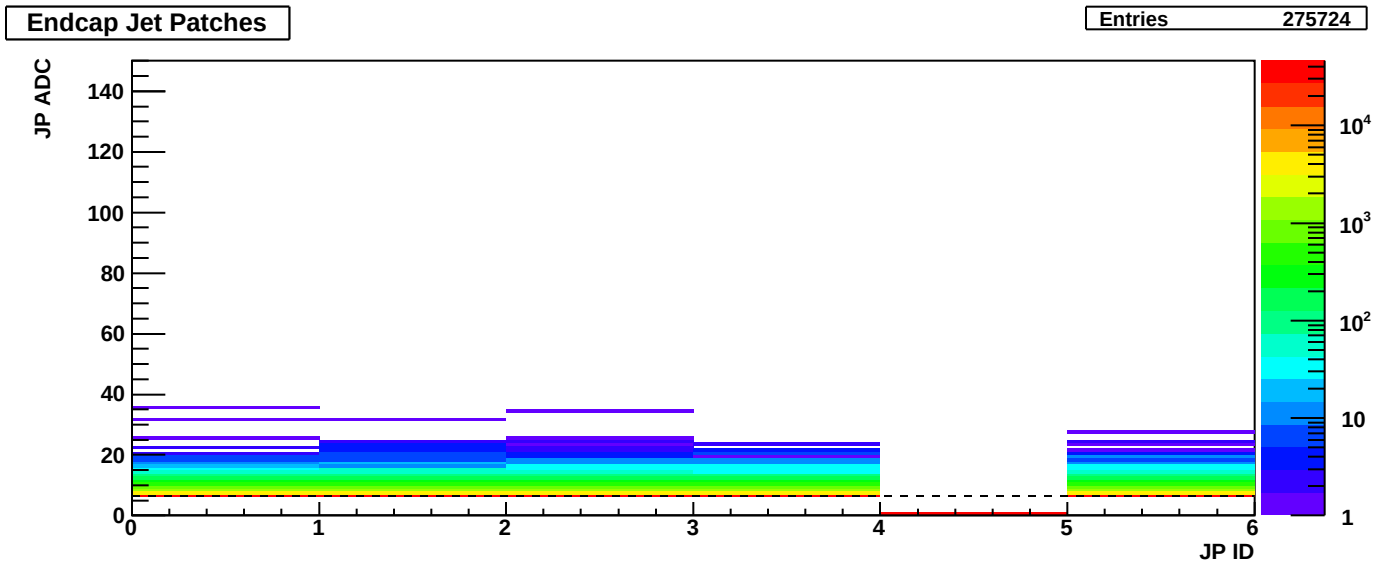

Barrel EMC L0 Input - High Tower
Entries 1.37862e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

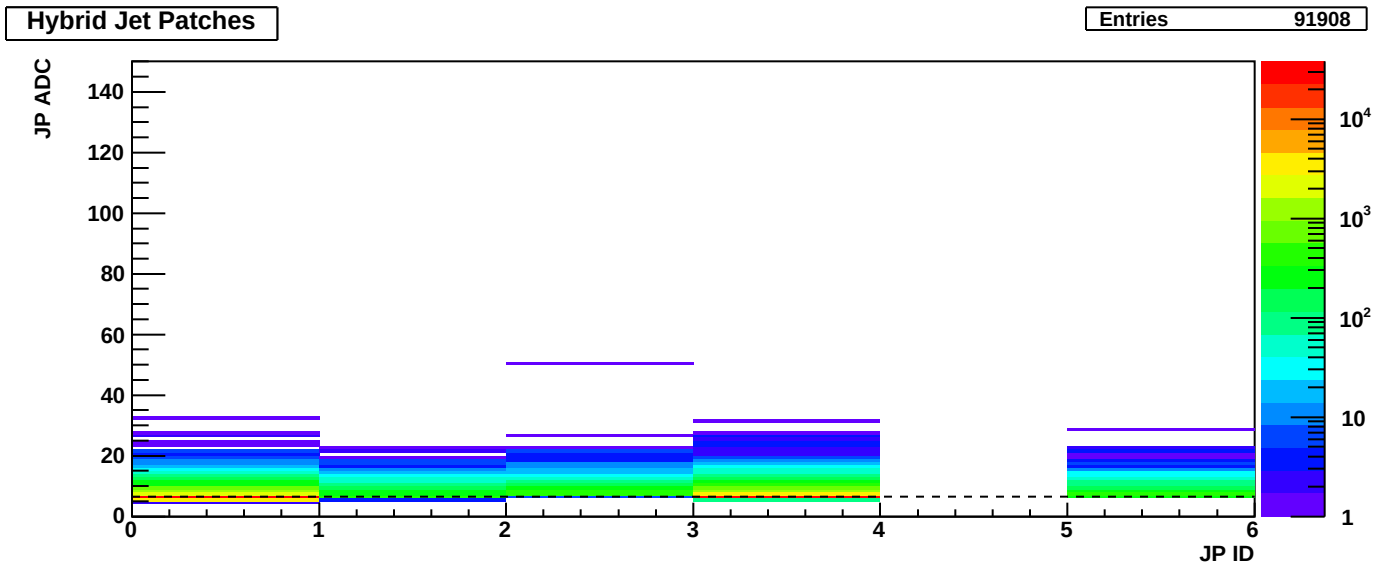

Barrel EMC L0 Input - Patch Sum
Entries 1.37862e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

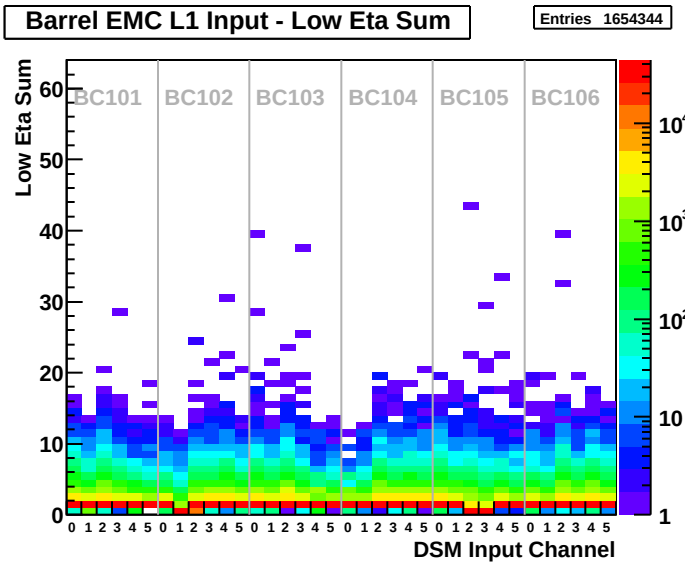

Endcap EMC L0 Input - High Tower
Entries 4135860
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

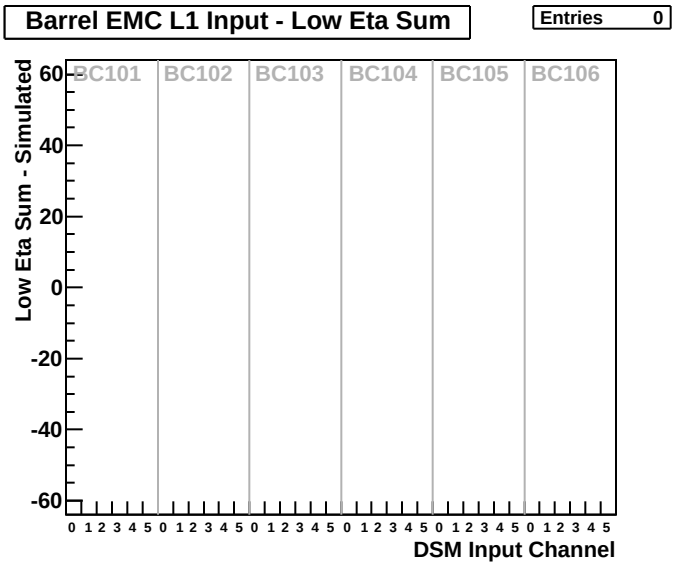

Endcap EMC L0 Input - Patch Sum
Entries 4135860
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

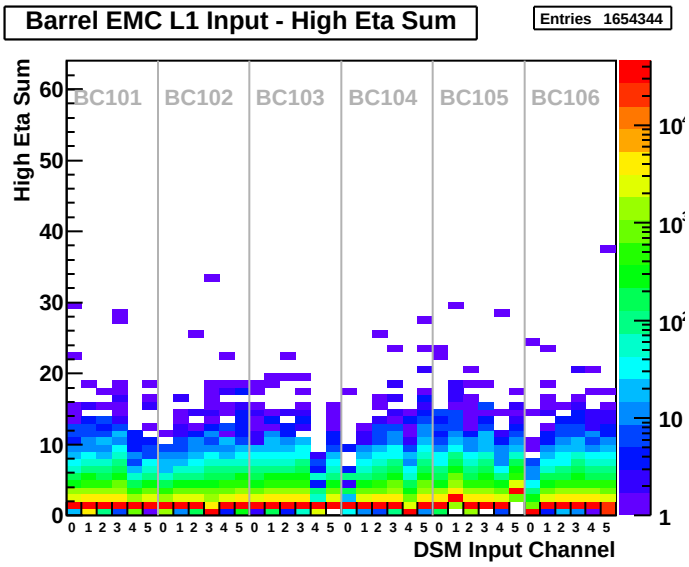

Barrel Jet Patches
Entries 827172
JP ADC
JP ID

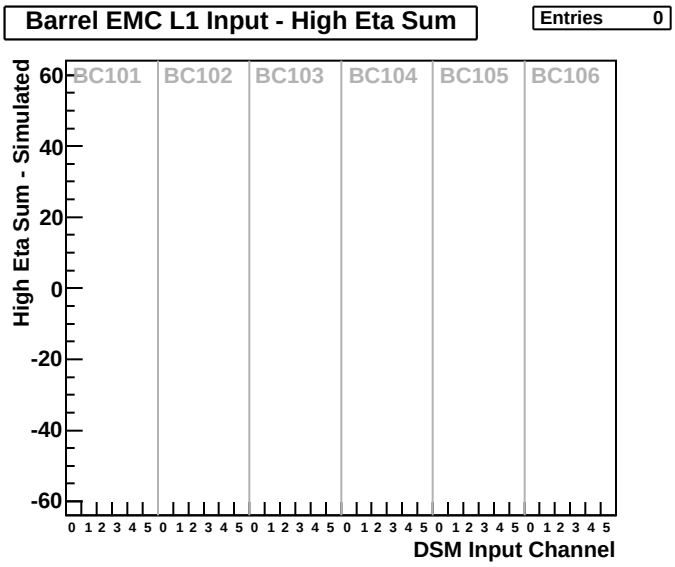

Endcap Jet Patches
Entries 275724
JP ADC
JP ID

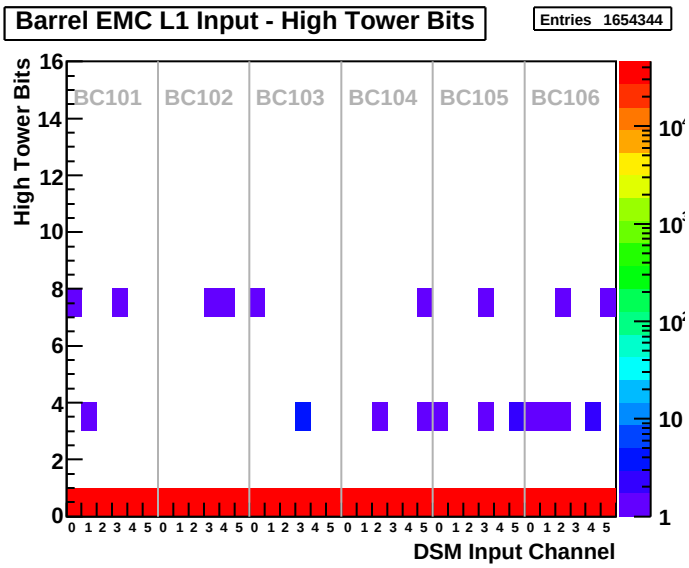

Hybrid Jet Patches
Entries 91908
JP ADC
JP ID

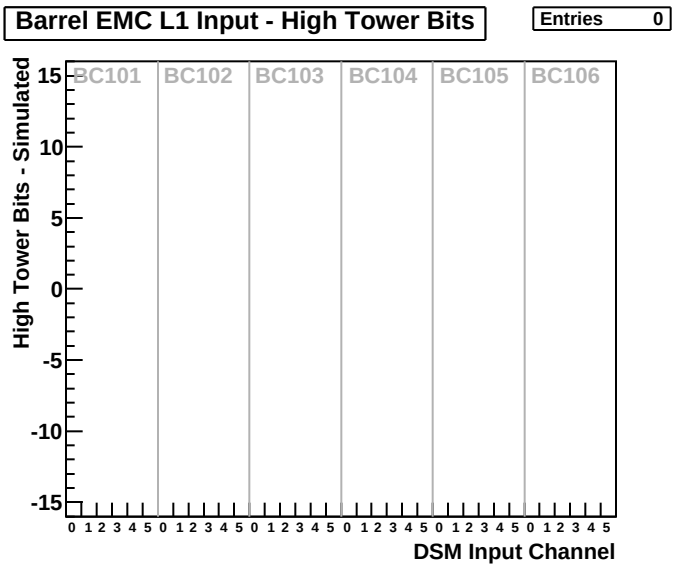

Barrel EMC L1 Input - Low Eta Sum
Entries 1654344
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

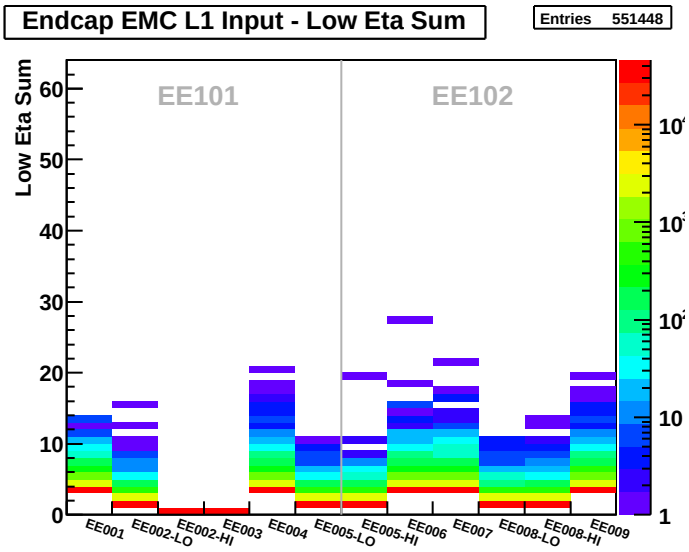

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

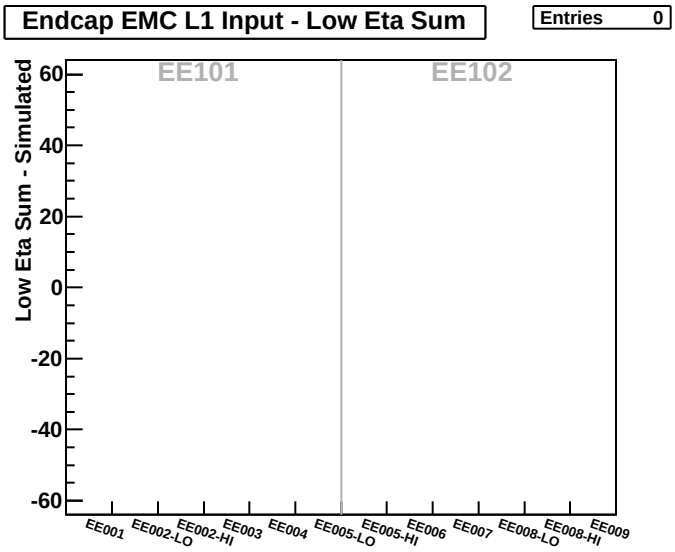

Barrel EMC L1 Input - High Eta Sum
Entries 1654344
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

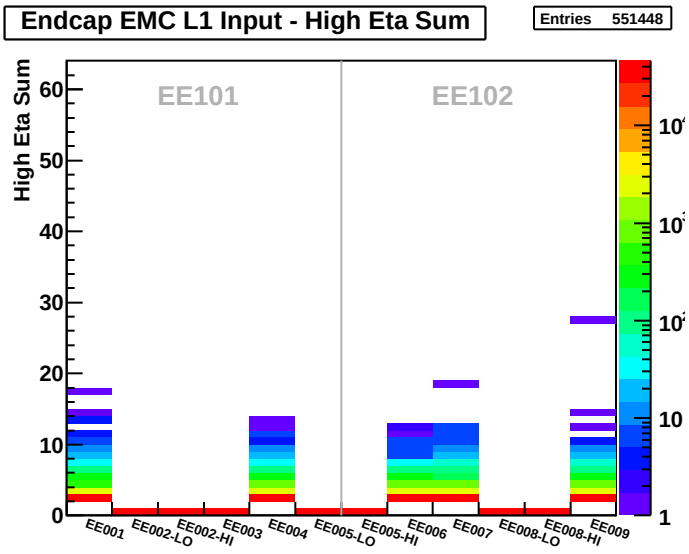

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

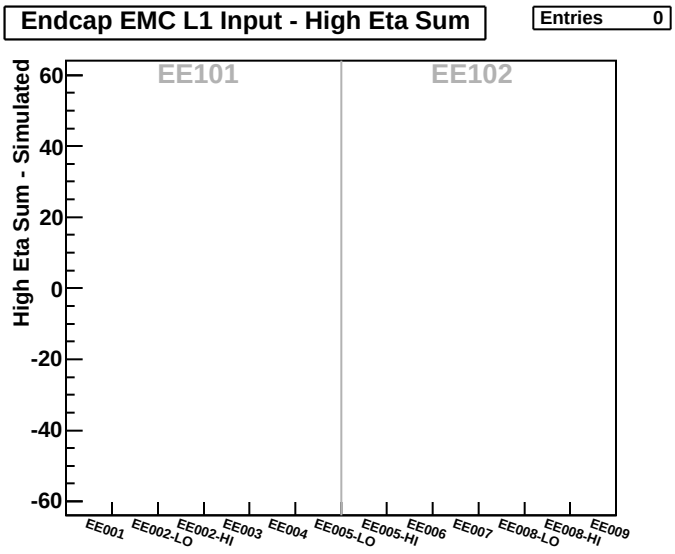

Barrel EMC L1 Input - High Tower Bits
Entries 1654344
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

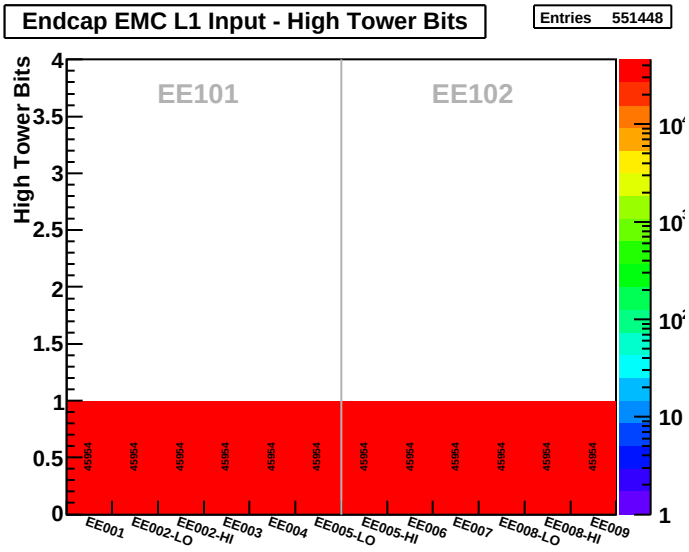

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

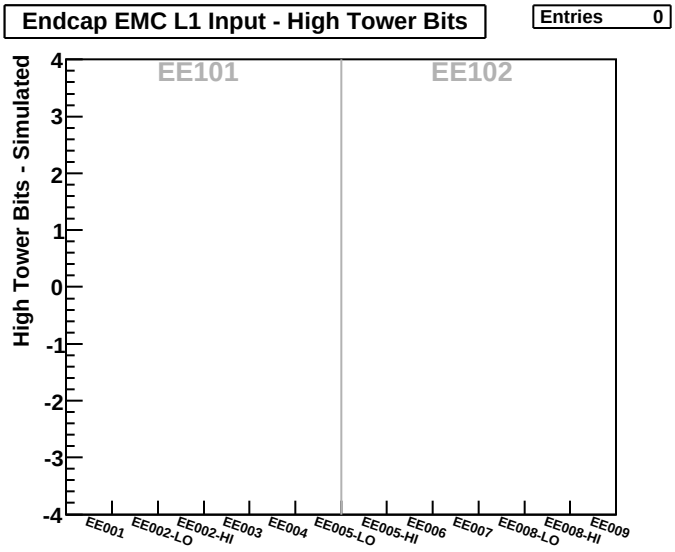

Endcap EMC L1 Input - Low Eta Sum
Entries 551448
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

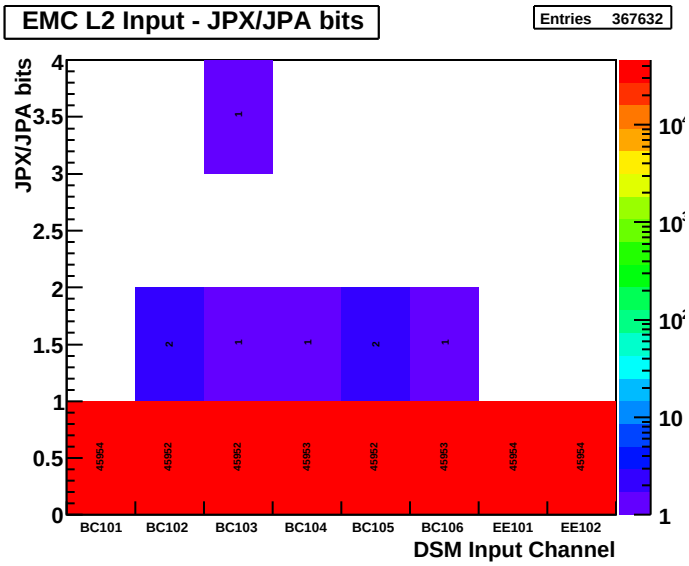

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

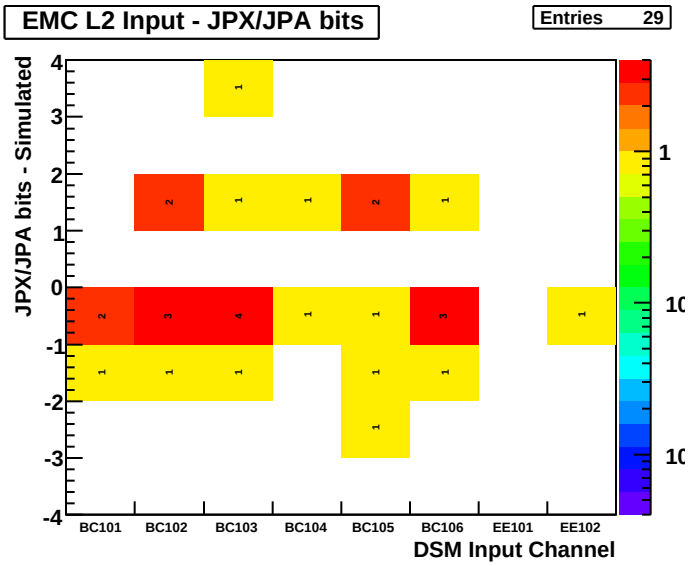

Endcap EMC L1 Input - High Eta Sum
Entries 551448
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

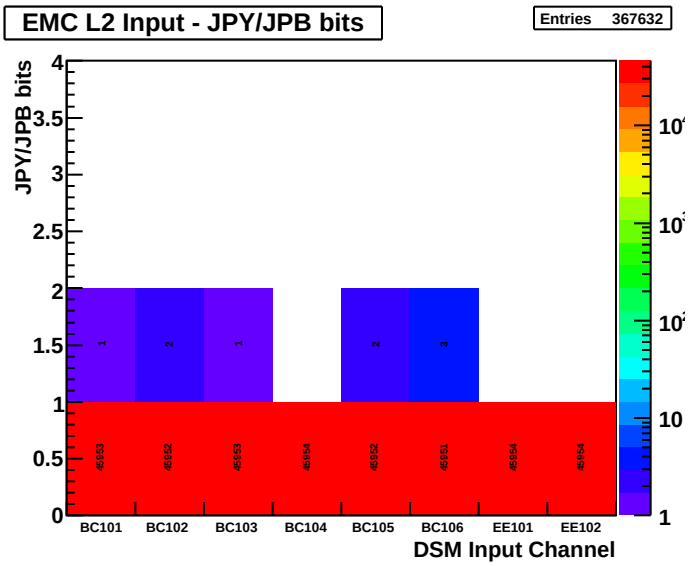

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

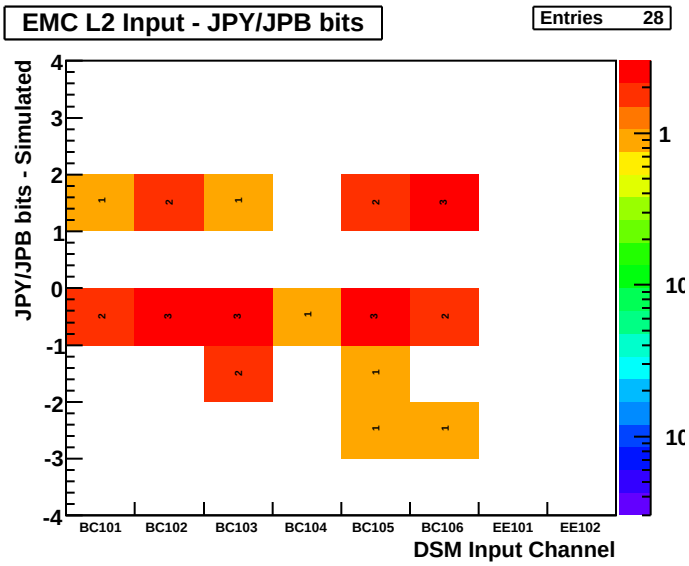

Endcap EMC L1 Input - High Tower Bits
Entries 551448
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

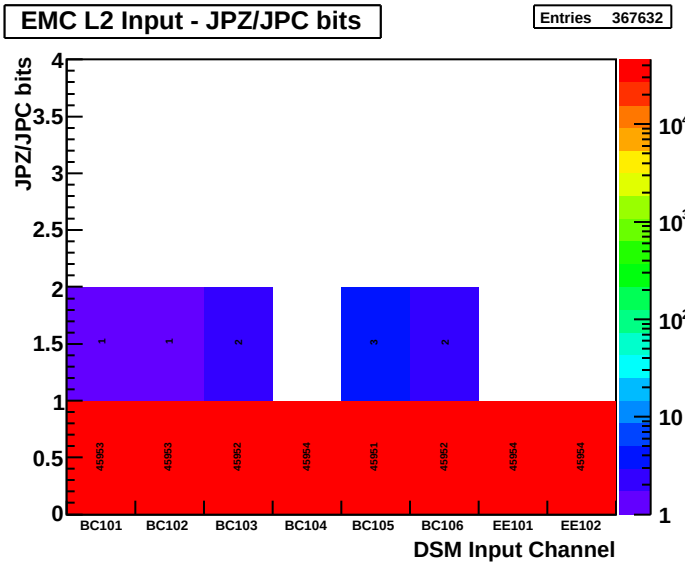

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

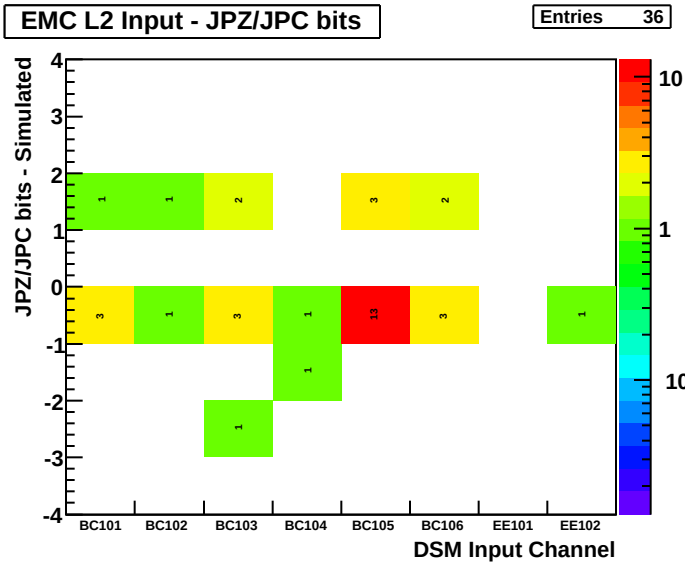

EMC L2 Input - JPX/JPA bits
Entries 367632
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

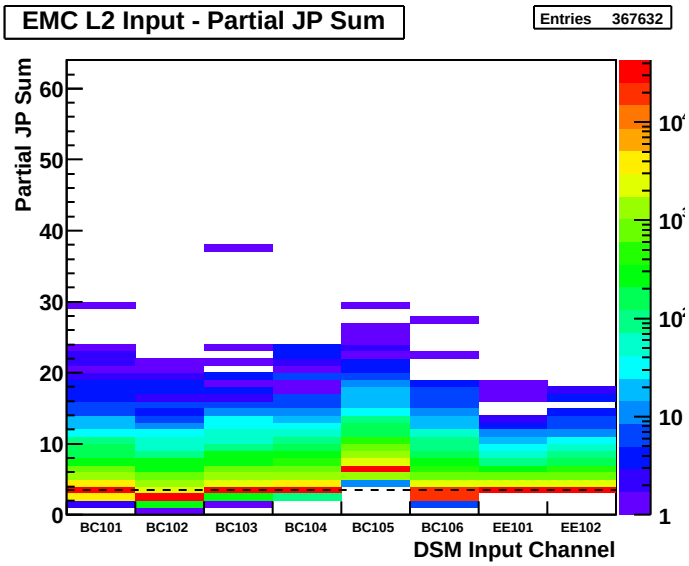

EMC L2 Input - JPX/JPA bits
Entries 29
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

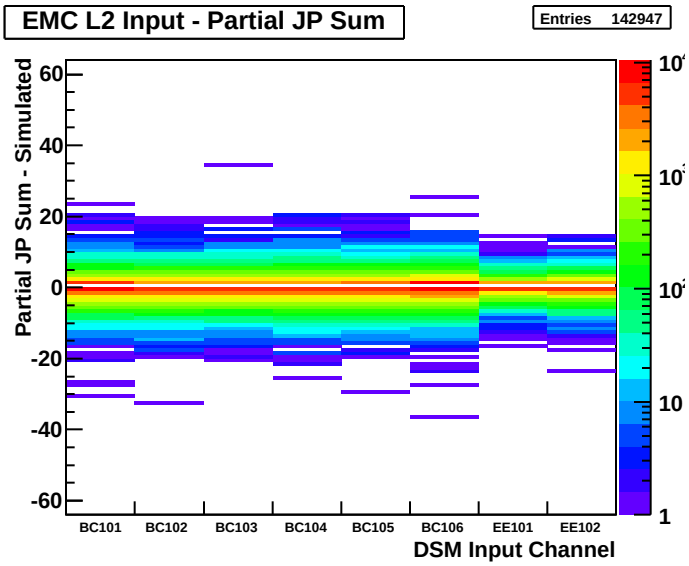

EMC L2 Input - JPY/JPB bits
Entries 367632
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

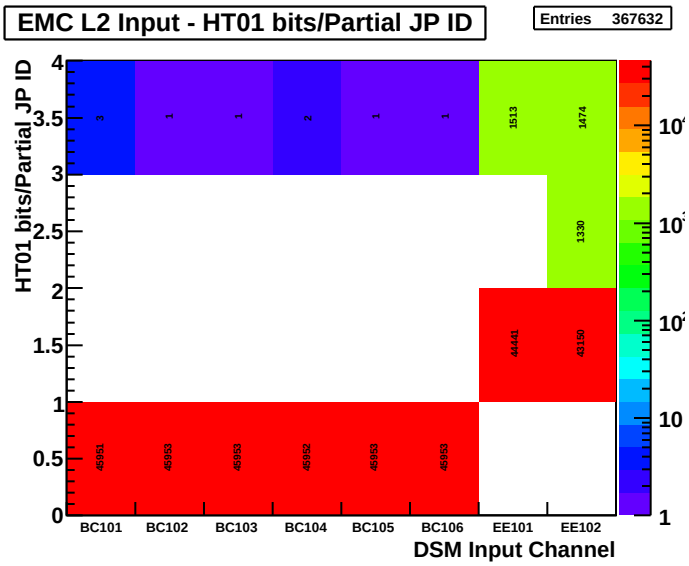

EMC L2 Input - JPY/JPB bits
Entries 28
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

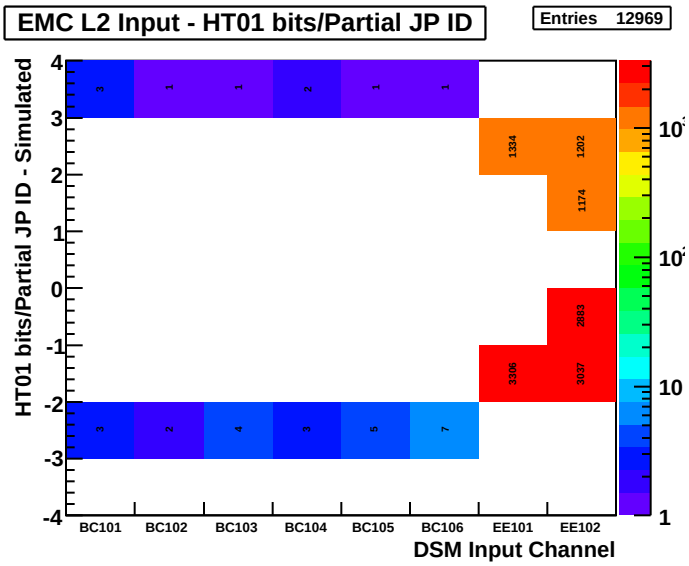

EMC L2 Input - JPZ/JPC bits
Entries 367632
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

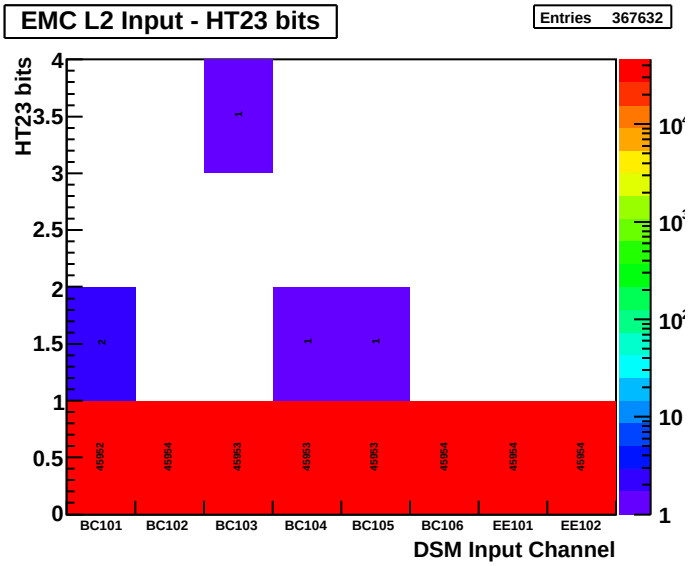

EMC L2 Input - JPZ/JPC bits
Entries 36
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

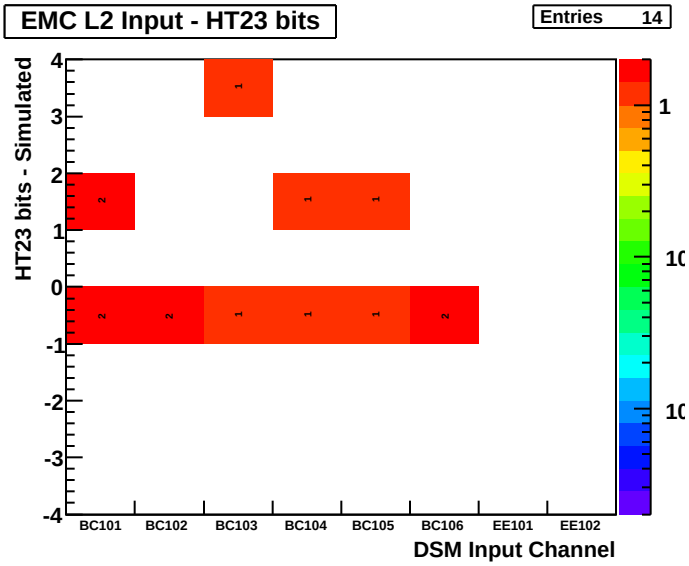

EMC L2 Input - Partial JP Sum
Entries 367632
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

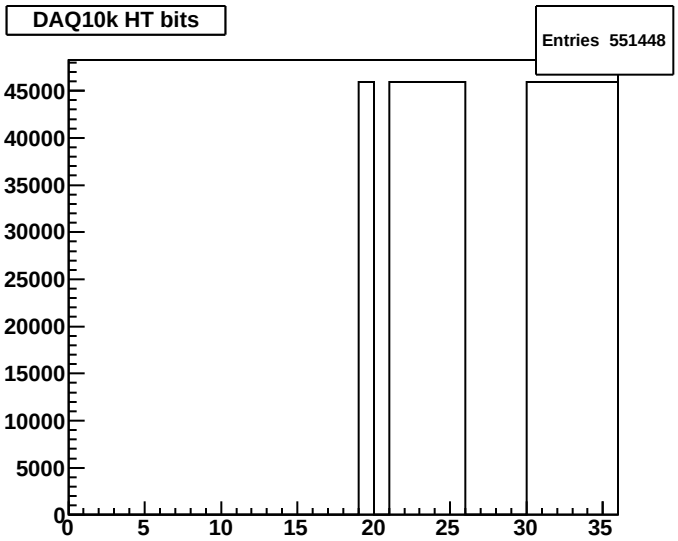

EMC L2 Input - Partial JP Sum
Entries 142947
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

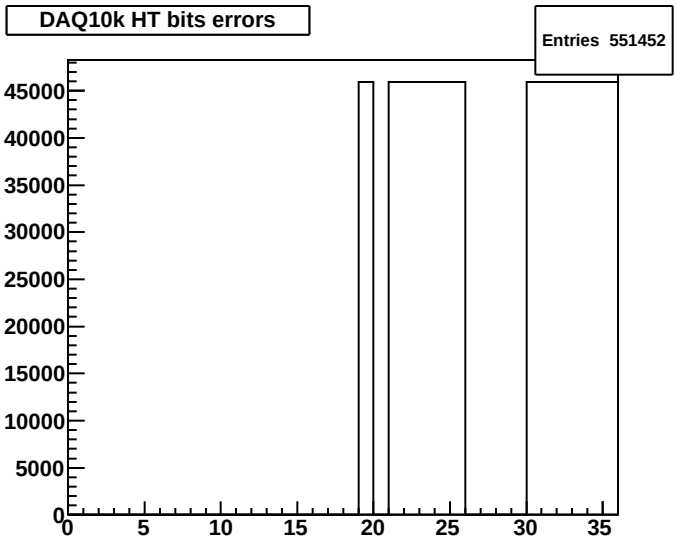

EMC L2 Input - HT01 bits/Partial JP ID
Entries 367632
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

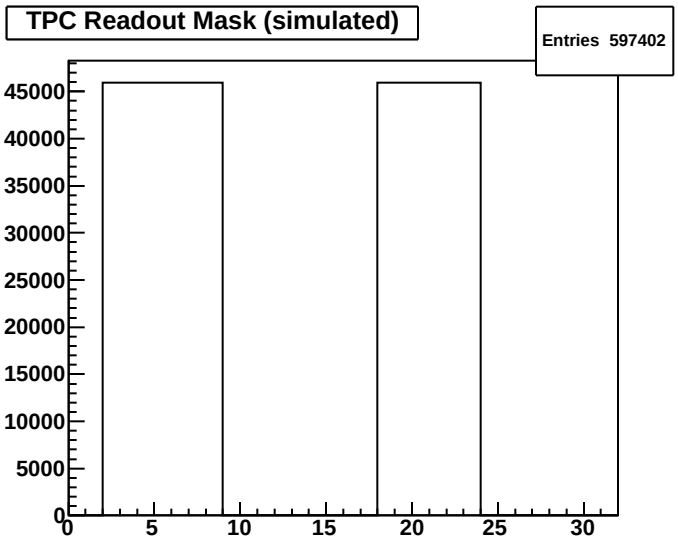

EMC L2 Input - HT01 bits/Partial JP ID
Entries 12969
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

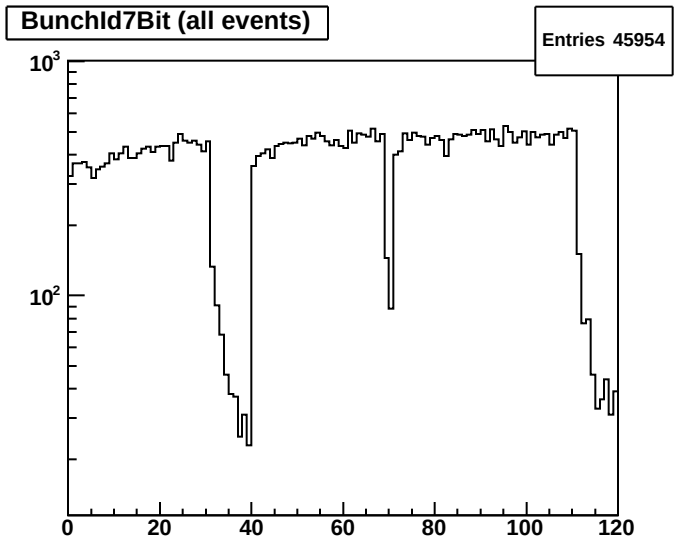

EMC L2 Input - HT23 bits
Entries 367632
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

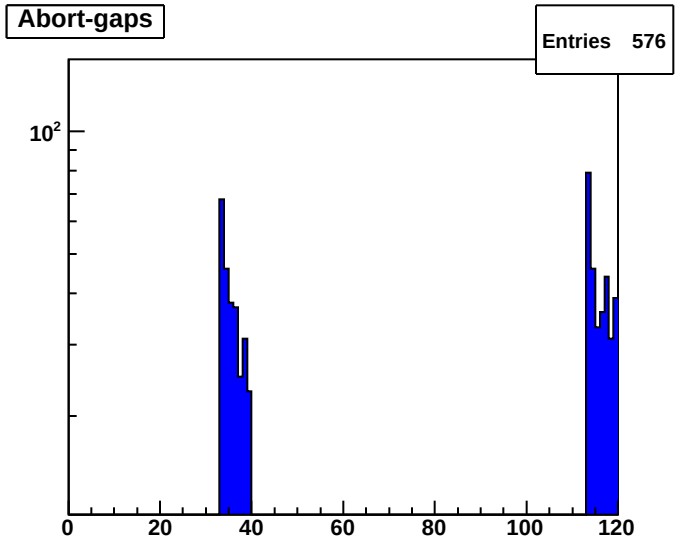

EMC L2 Input - HT23 bits
Entries 14
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

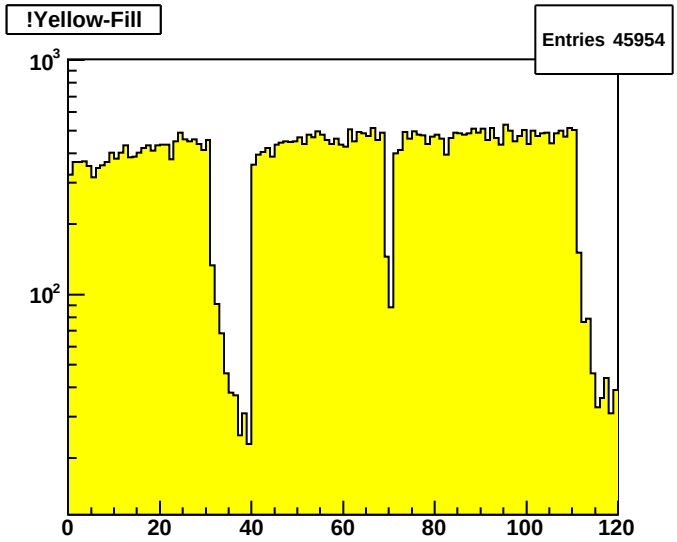

DAQ10k HT bits
Entries 551448
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30 35

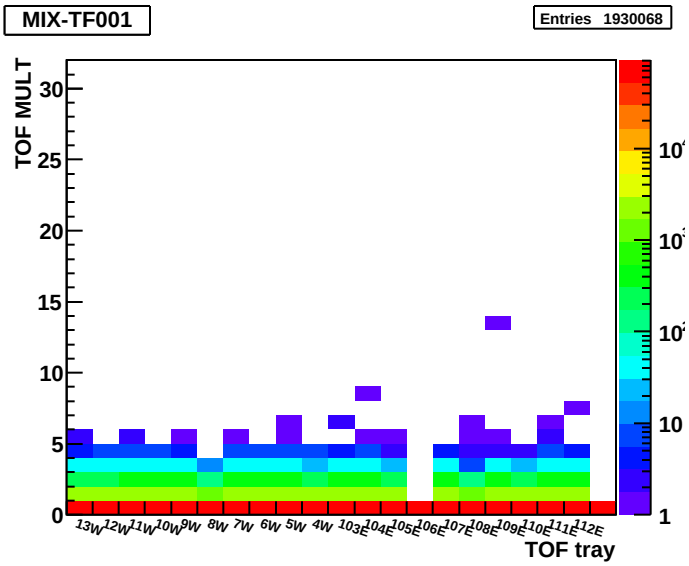

DAQ10k HT bits errors
Entries 551452
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30 35

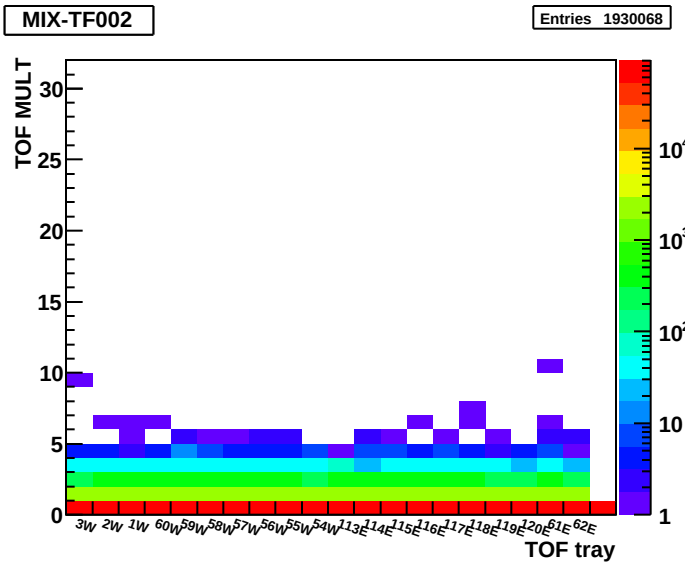

TPC Readout Mask (simulated)
Entries 597402
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30

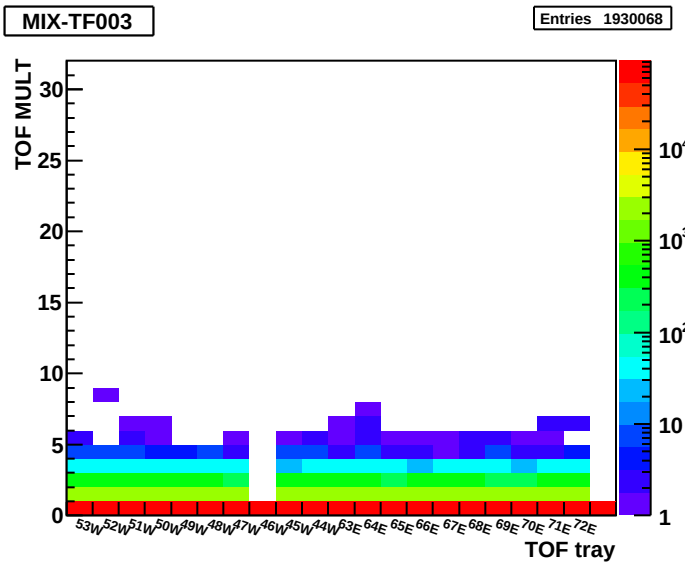

BunchId7Bit (all events)
Entries 45954
10^3
10^2
0 20 40 60 80 100 120

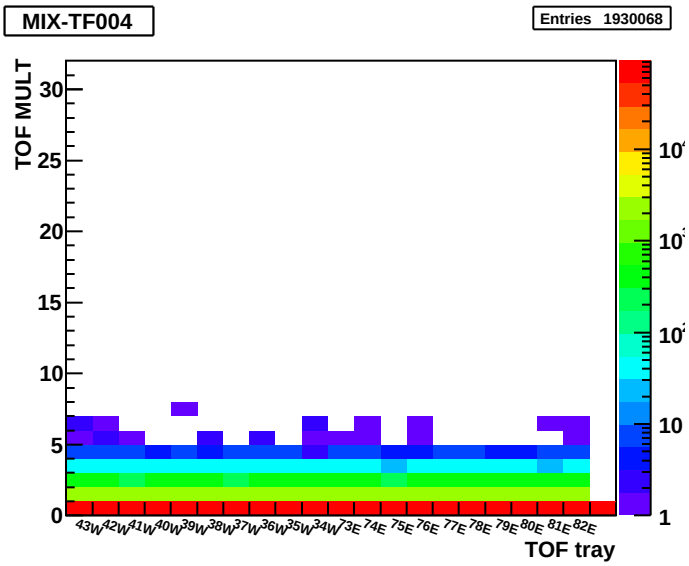

Abort-gaps
Entries 576
10^2
0 20 40 60 80 100 120

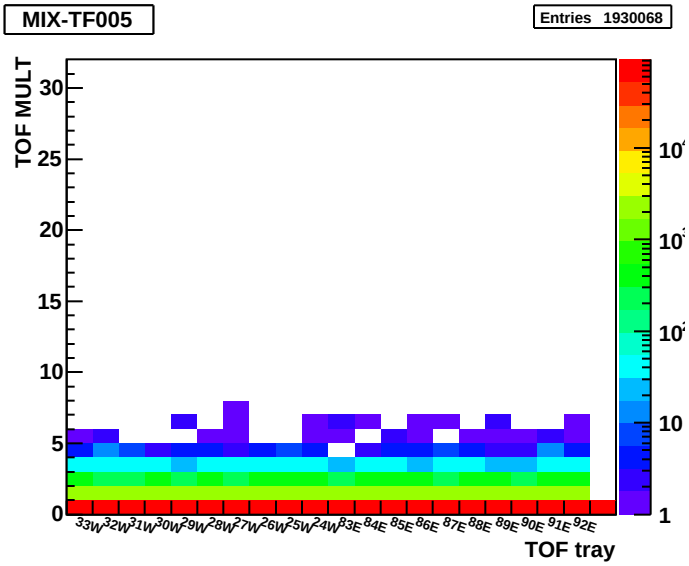

!Yellow-Fill
Entries 45954
10^3
10^2
0 20 40 60 80 100 120

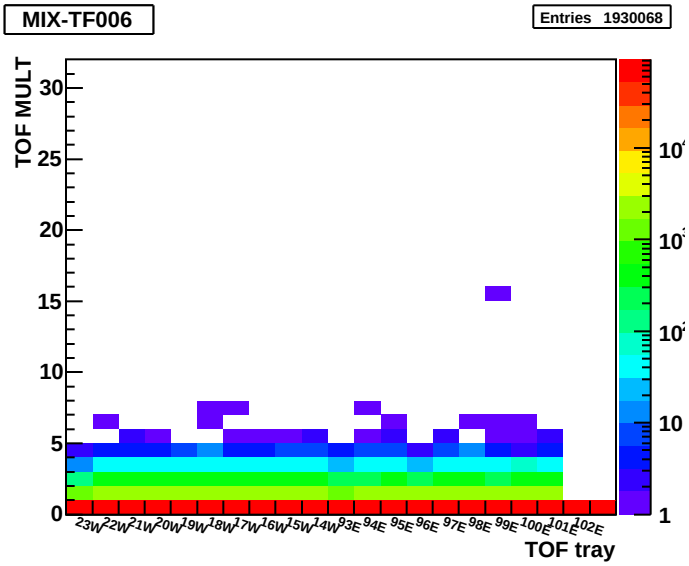

MIX-TF001
Entries 1930068
TOF MULT
TOF tray

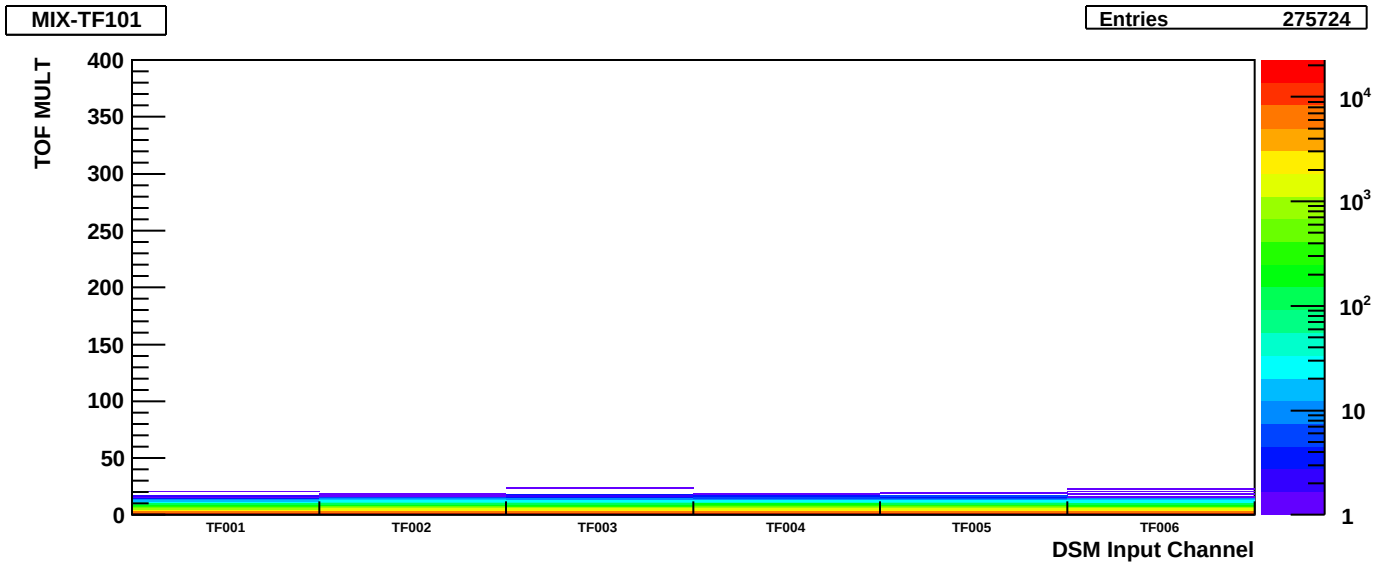

MIX-TF002
Entries 1930068
TOF MULT
TOF tray

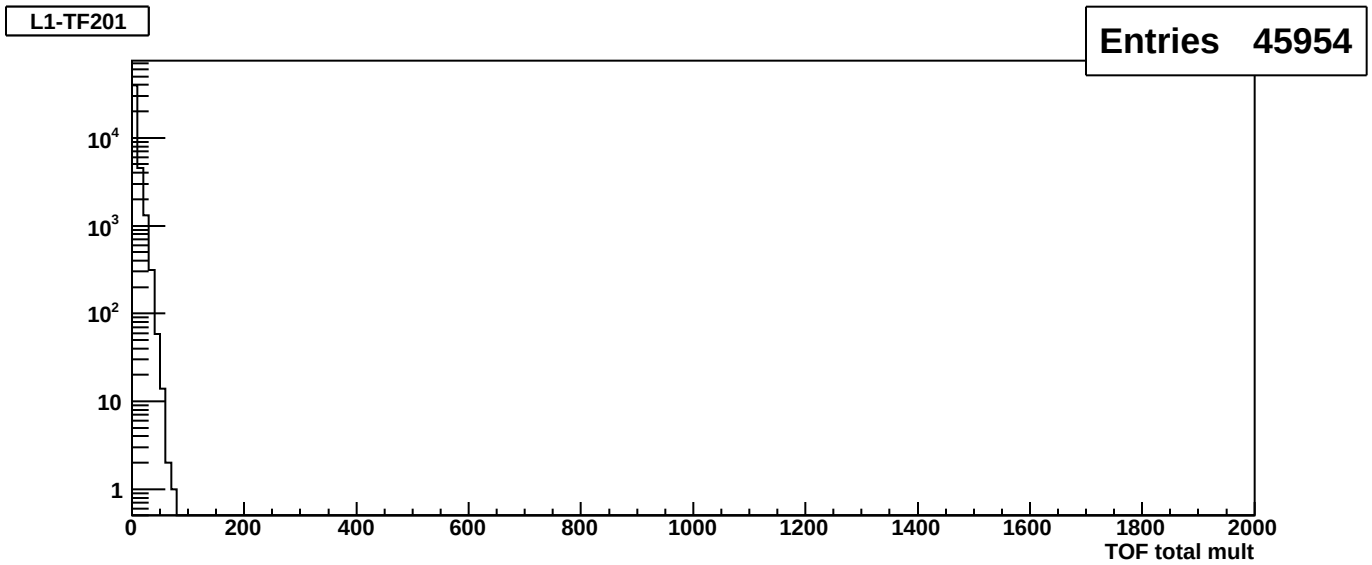

MIX-TF003
Entries 1930068
TOF MULT
TOF tray

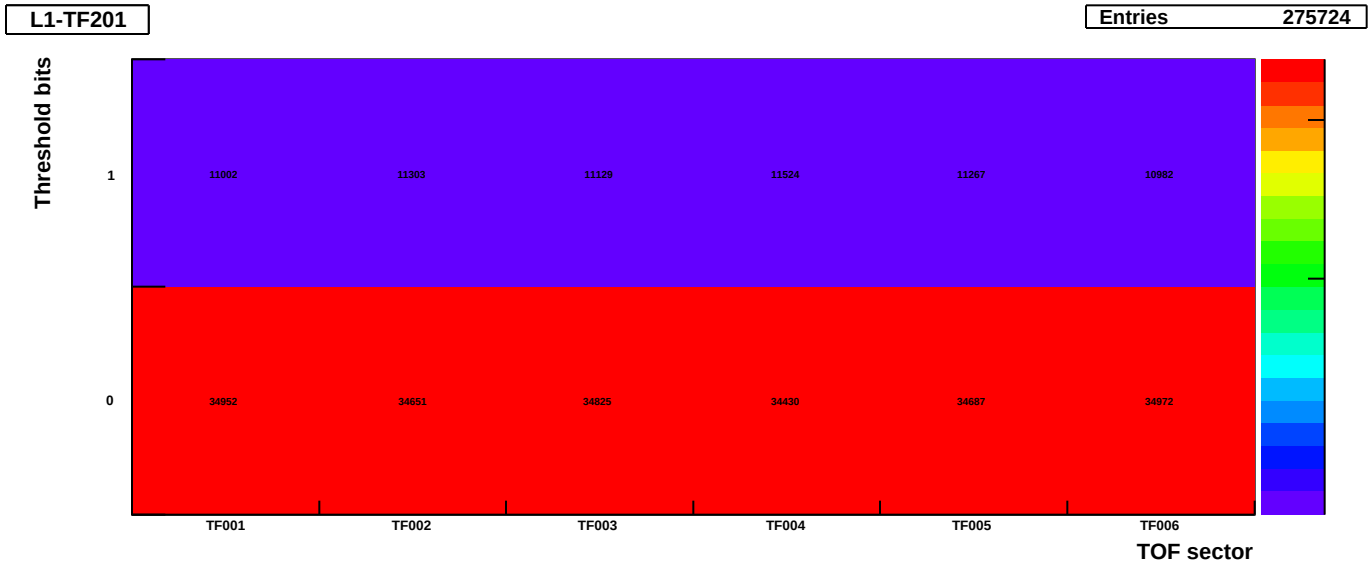

MIX-TF004
Entries 1930068
TOF MULT
TOF tray

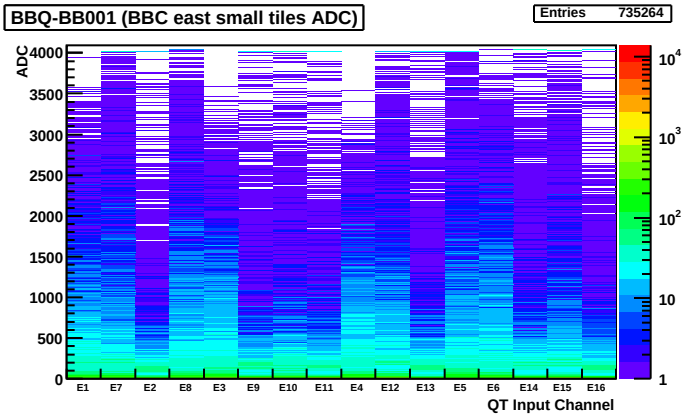

MIX-TF005
Entries 1930068
TOF MULT
TOF tray

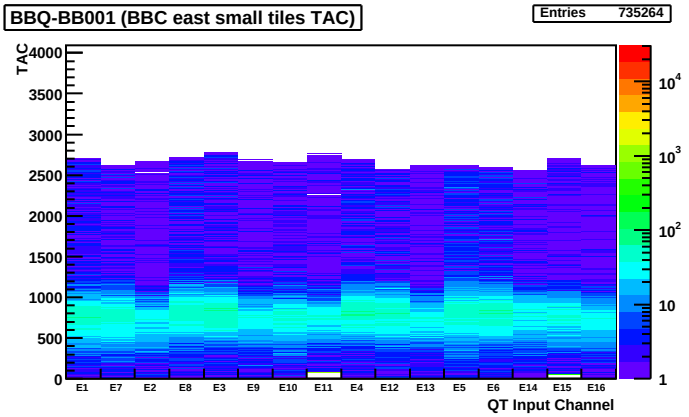

MIX-TF006
Entries 1930068
TOF MULT
TOF tray

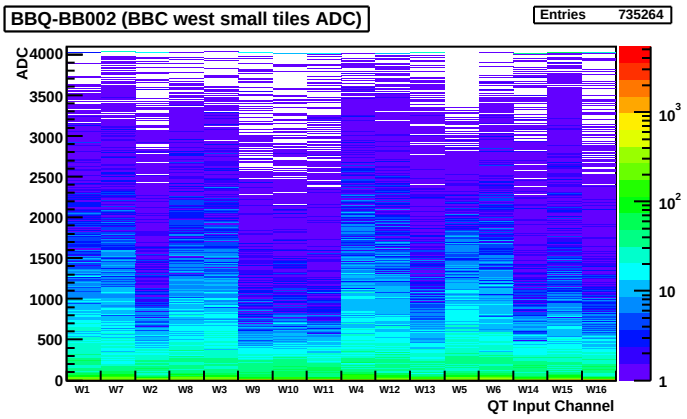

MIX-TF101
Entries 275724
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

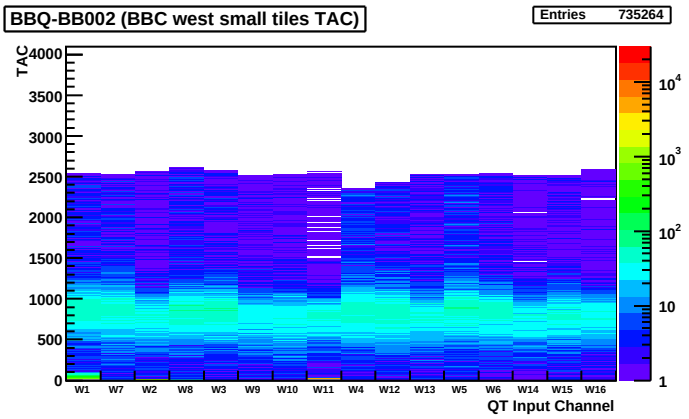

L1-TF201
Entries 45954
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

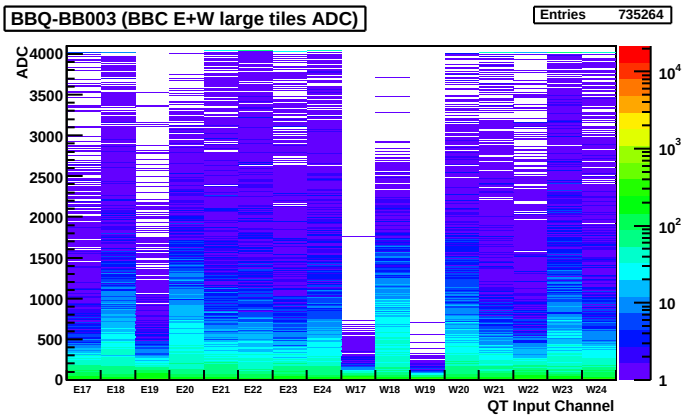

L1-TF201
Entries 275724
Threshold bits
1
0
11002
11303
11129
11524
11267
10982
34952
34651
34825
34430
34687
34972
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

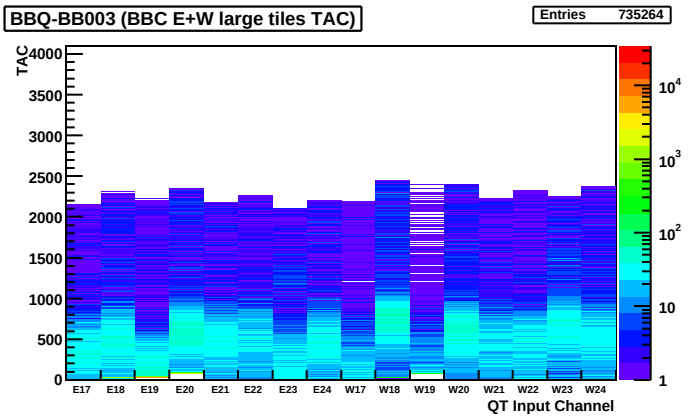

BBQ-BB001 (BBC east small tiles ADC)
Entries 735264
ADC
QT Input Channel

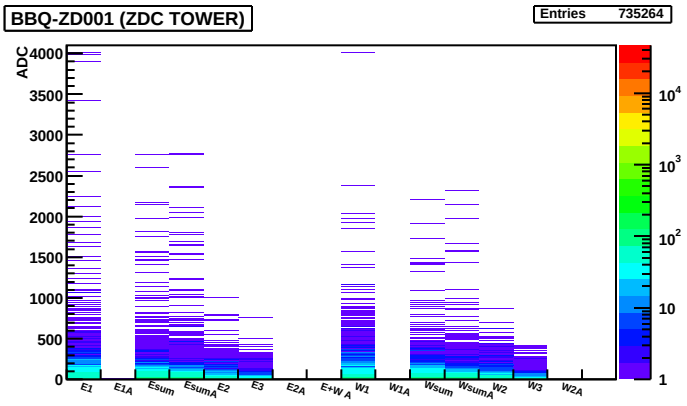

BBQ-BB001 (BBC east small tiles TAC)
Entries 735264
TAC
QT Input Channel

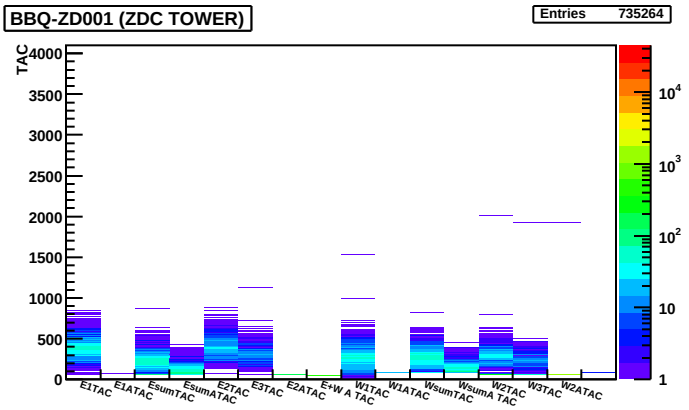

BBQ-BB002 (BBC west small tiles ADC)
Entries 735264
ADC
QT Input Channel

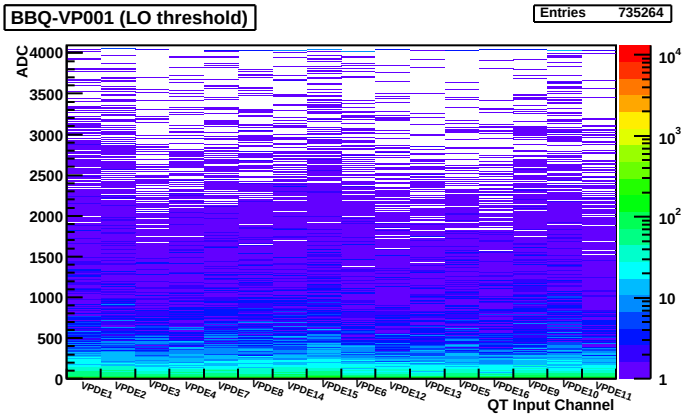

BBQ-BB002 (BBC west small tiles TAC)
Entries 735264
TAC
QT Input Channel

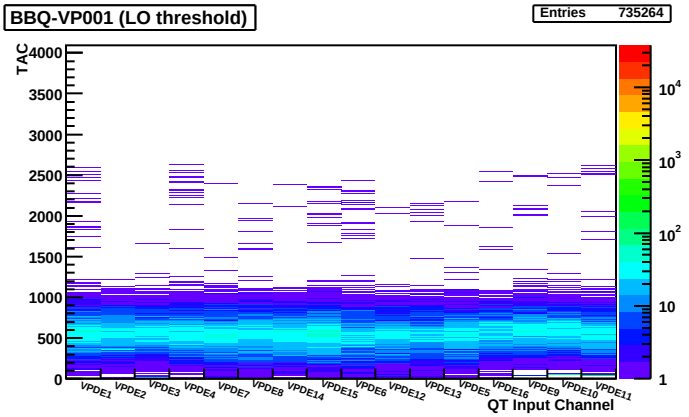

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 735264
ADC
QT Input Channel

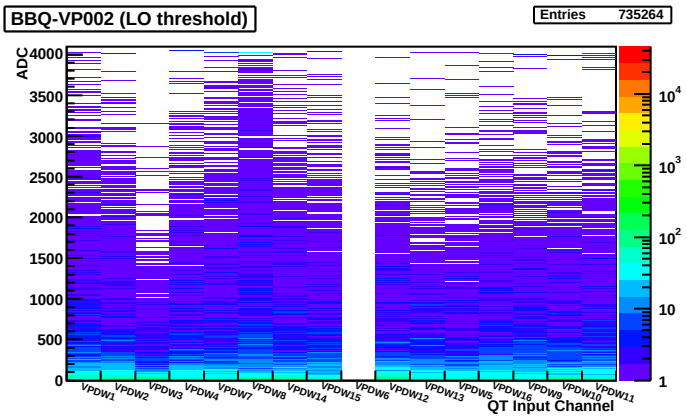

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 735264
TAC
QT Input Channel

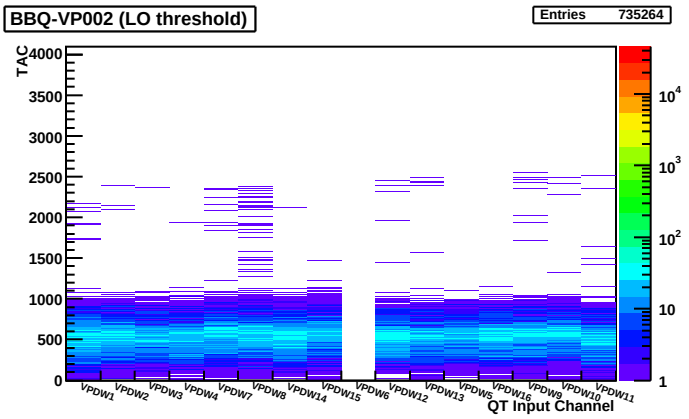

BBQ-ZD001 (ZDC TOWER)
Entries 735264
ADC

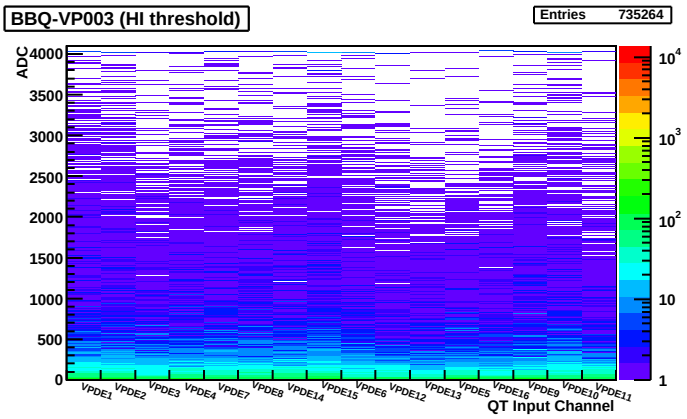

BBQ-ZD001 (ZDC TOWER)
Entries 735264
TAC

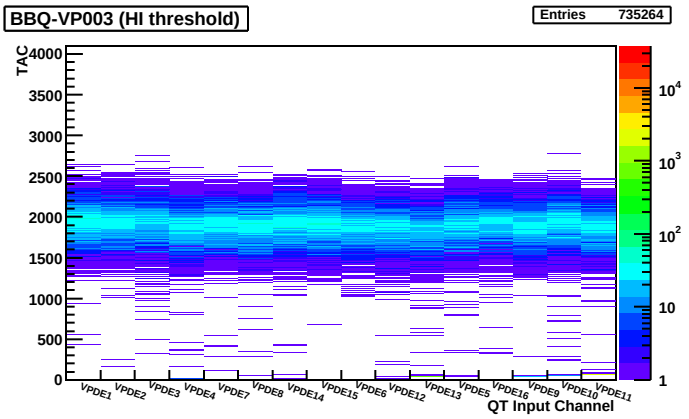

BBQ-VP001 (LO threshold)
Entries 735264
ADC
QT Input Channel

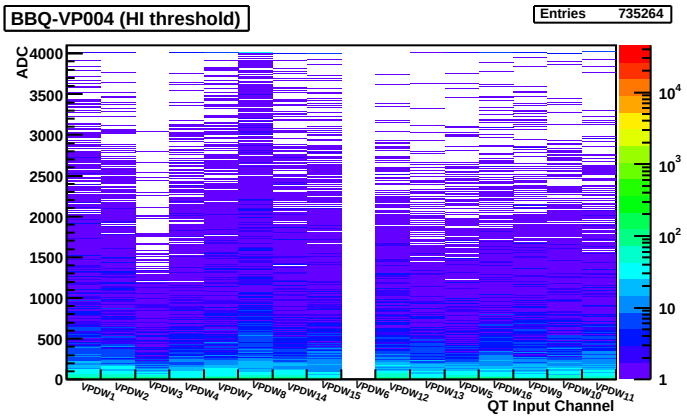

BBQ-VP001 (LO threshold)
Entries 735264
TAC
QT Input Channel

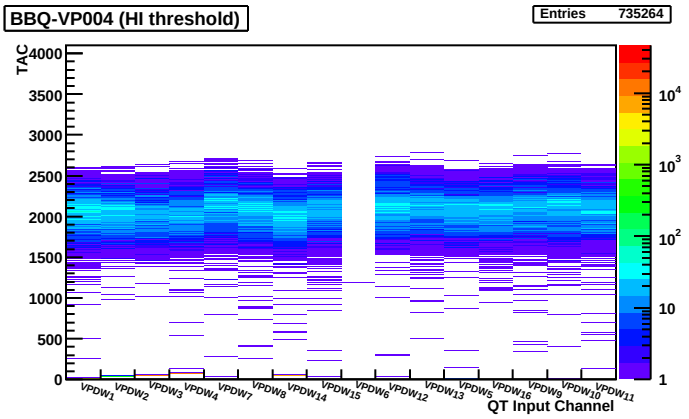

BBQ-VP002 (LO threshold)
Entries 735264
ADC
QT Input Channel

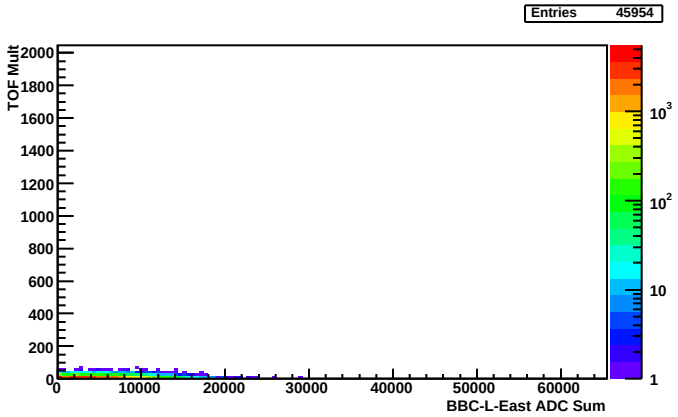

BBQ-VP002 (LO threshold)
Entries 735264
TAC
QT Input Channel

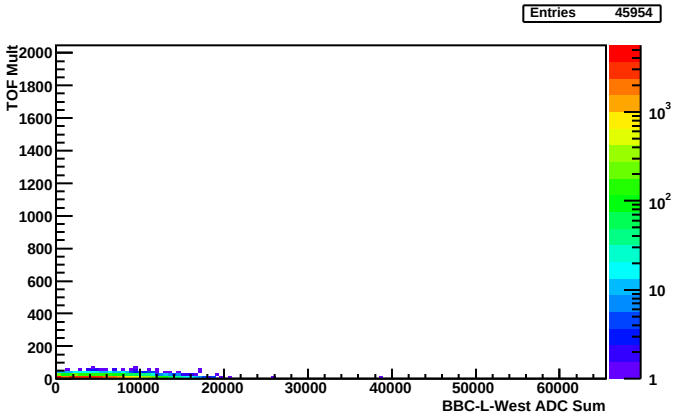

BBQ-VP003 (HI threshold)
Entries 735264
ADC
QT Input Channel

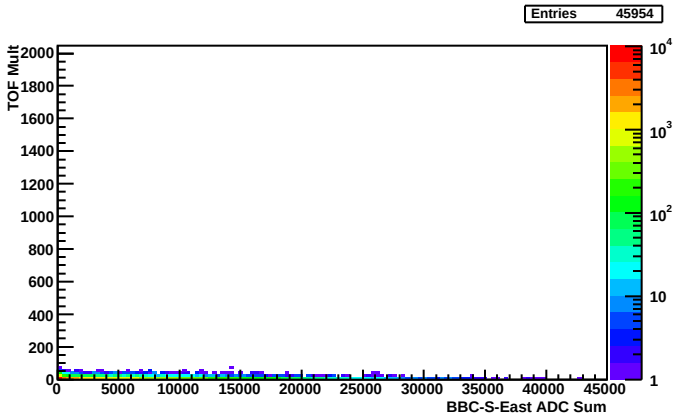

BBQ-VP003 (HI threshold)
Entries 735264
TAC
QT Input Channel

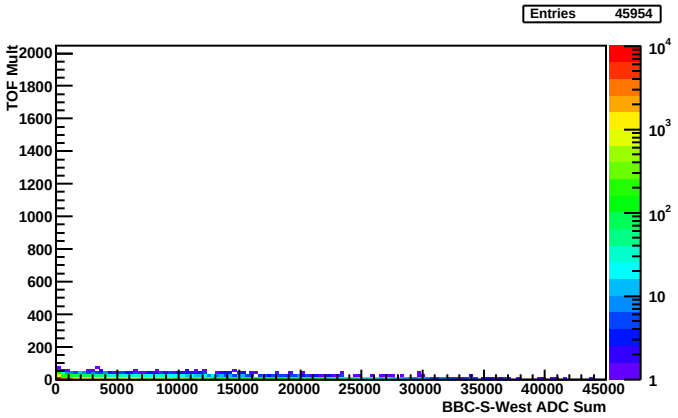

BBQ-VP004 (HI threshold)
Entries 735264
ADC
QT Input Channel

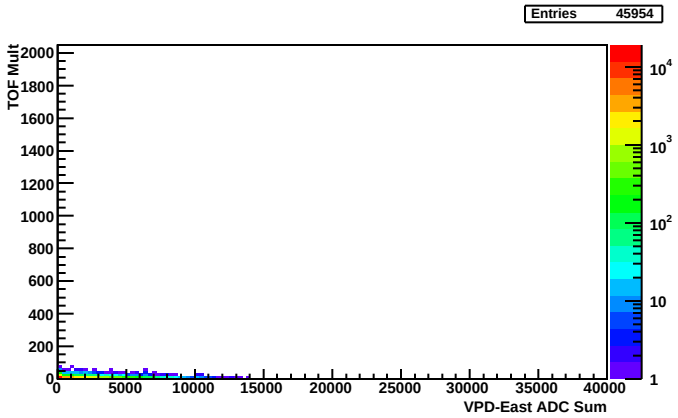

BBQ-VP004 (HI threshold)
Entries 735264
TAC
QT Input Channel

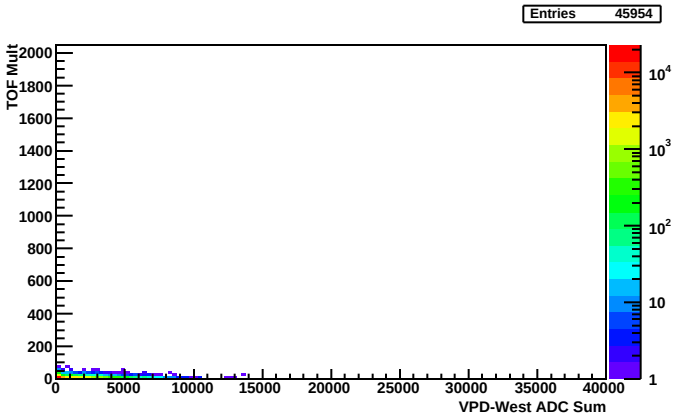

Entries 45954
TOF Mult
BBC-L-East ADC Sum

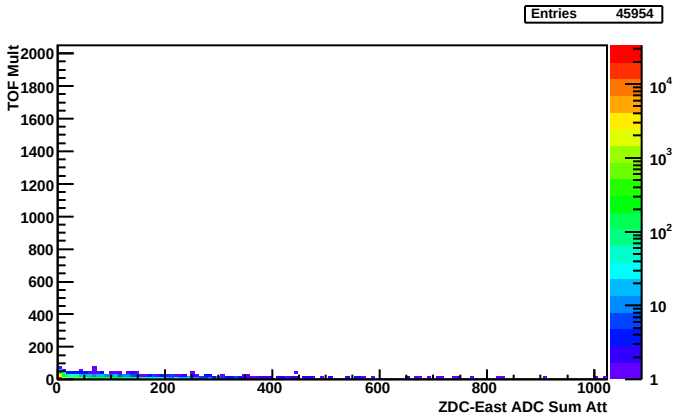

Entries 45954
TOF Mult
BBC-L-West ADC Sum

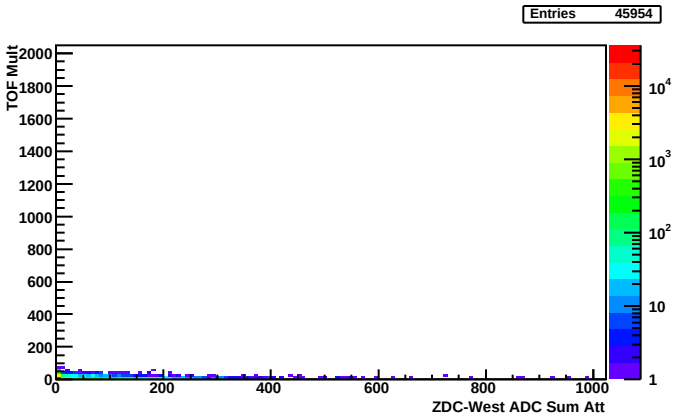

Entries 45954
TOF Mult
BBC-S-East ADC Sum

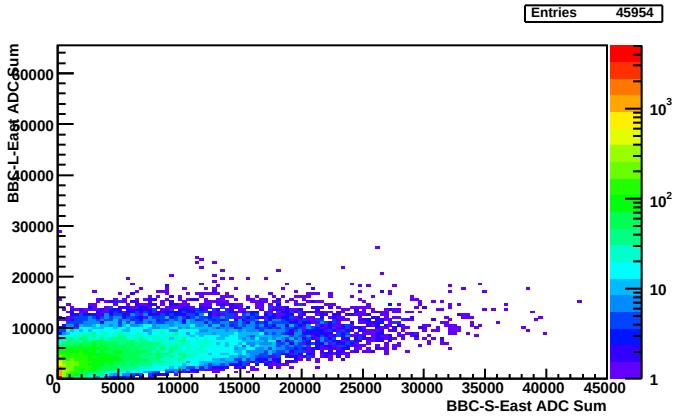

Entries 45954
TOF Mult
BBC-S-West ADC Sum

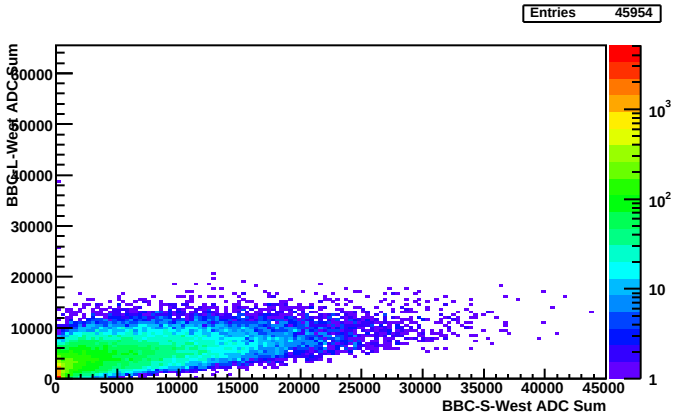

Entries 45954
TOF Mult
VPD-East ADC Sum

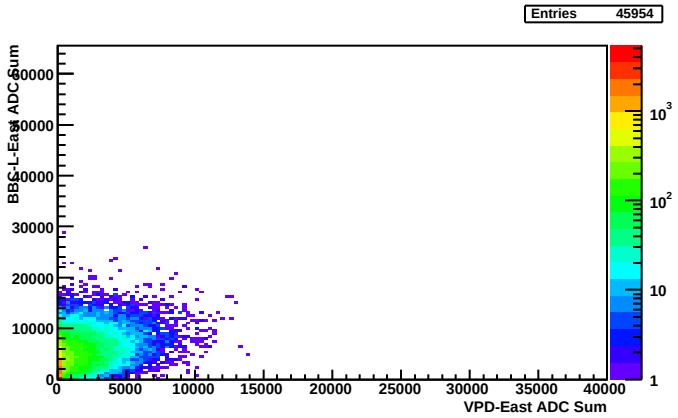

Entries 45954
TOF Mult
VPD-West ADC Sum

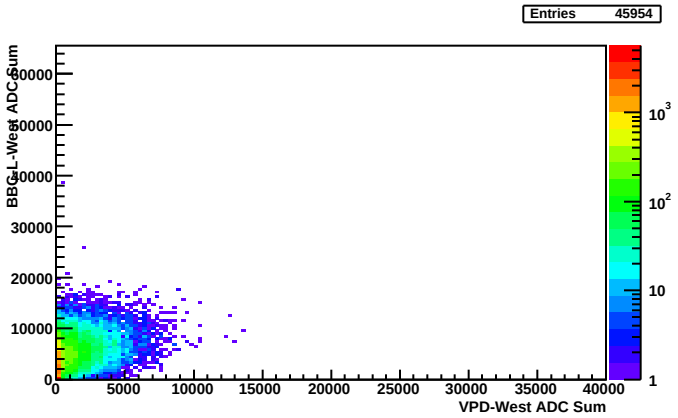

Entries 45954
TOF Mult
ZDC-East ADC Sum Att

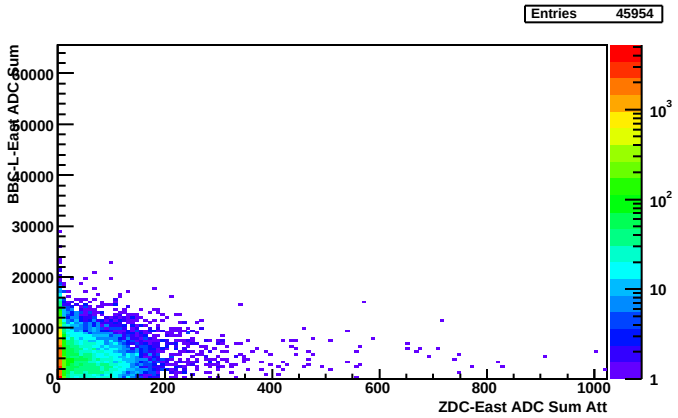

Entries 45954
TOF Mult
ZDC-West ADC Sum Att

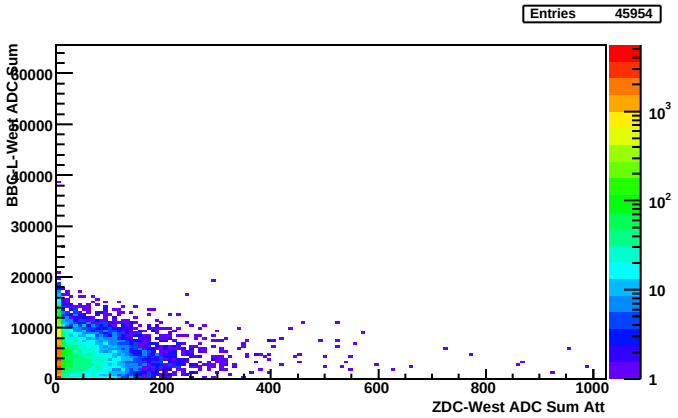

Entries 45954
BBC-L-East ADC Sum
BBC-S-East ADC Sum

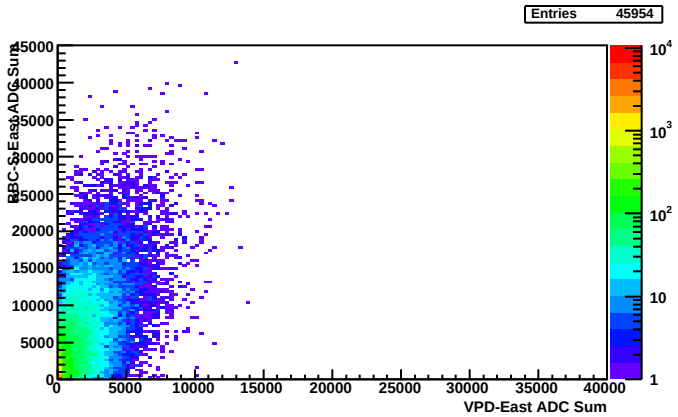

Entries 45954
BBC-L-West ADC Sum
BBC-S-West ADC Sum

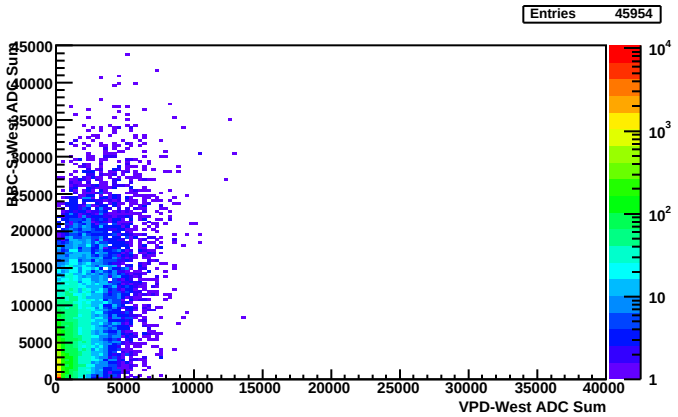

Entries 45954
BBC-L-East ADC Sum
VPD-East ADC Sum

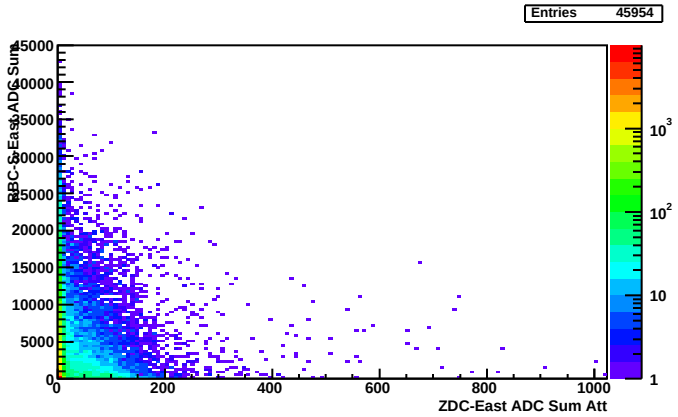

Entries 45954
BBC-L-West ADC Sum
VPD-West ADC Sum

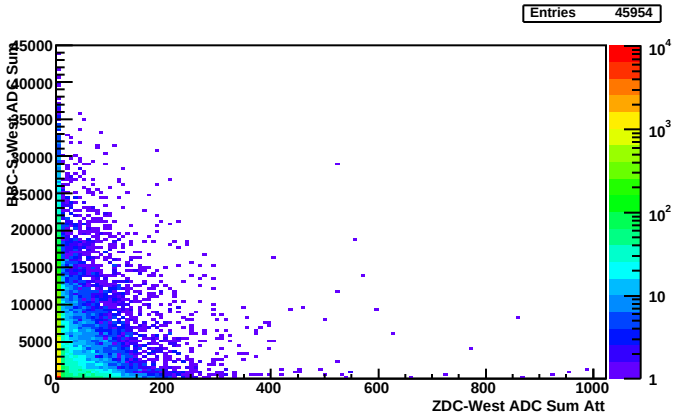

Entries 45954
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

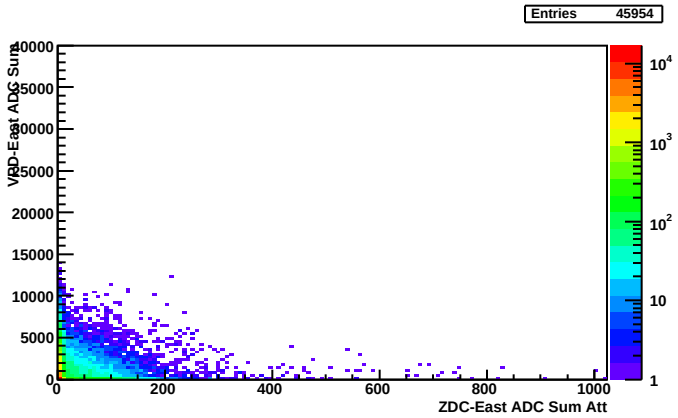

Entries 45954
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

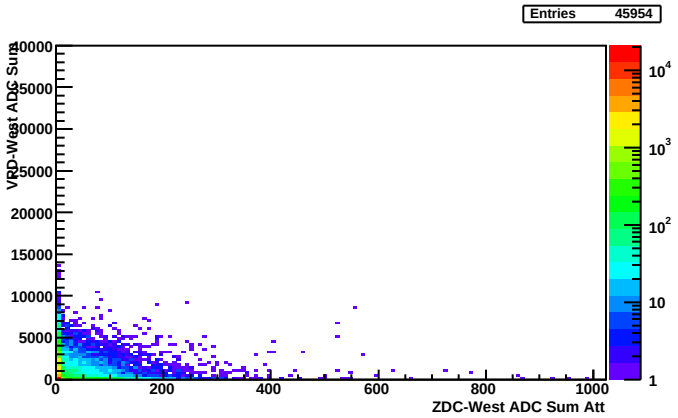

Entries 45954
BBC-S-East ADC Sum
VPD-East ADC Sum

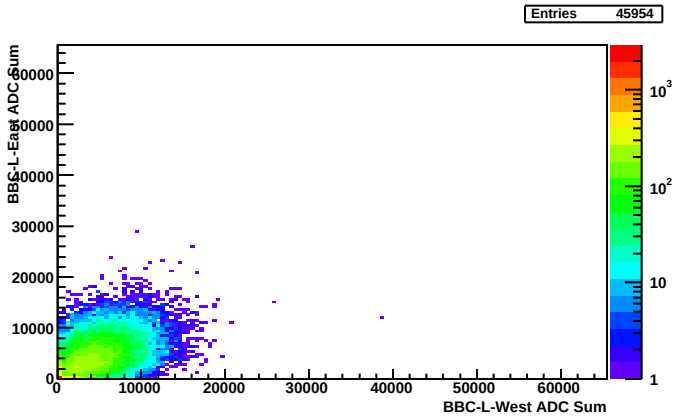

Entries 45954
BBC-S-West ADC Sum
VPD-West ADC Sum

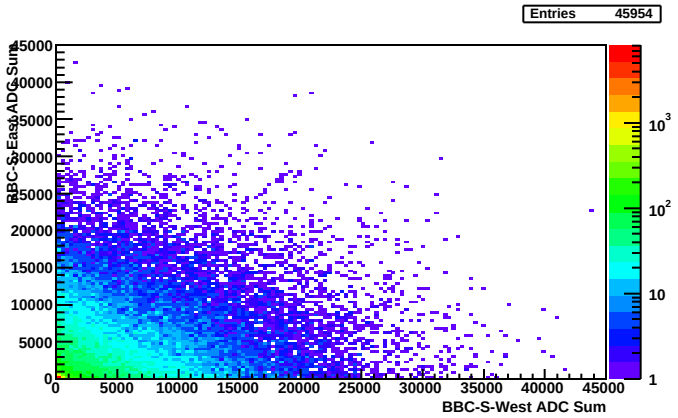

Entries 45954
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

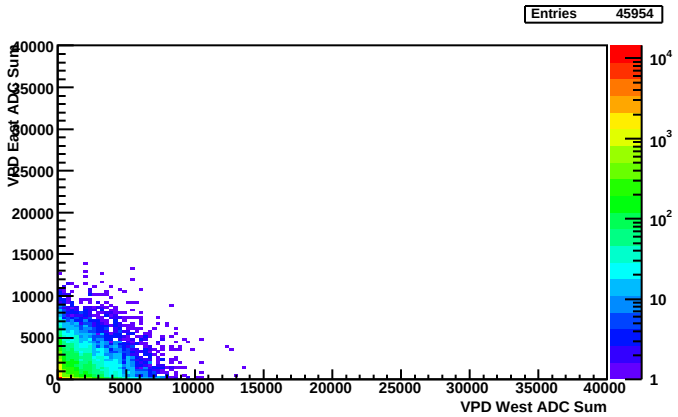

Entries 45954
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

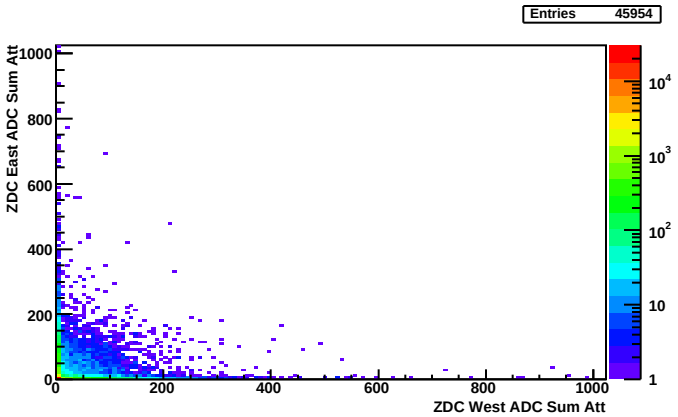

Entries 45954
VPD-East ADC Sum
ZDC-East ADC Sum Att

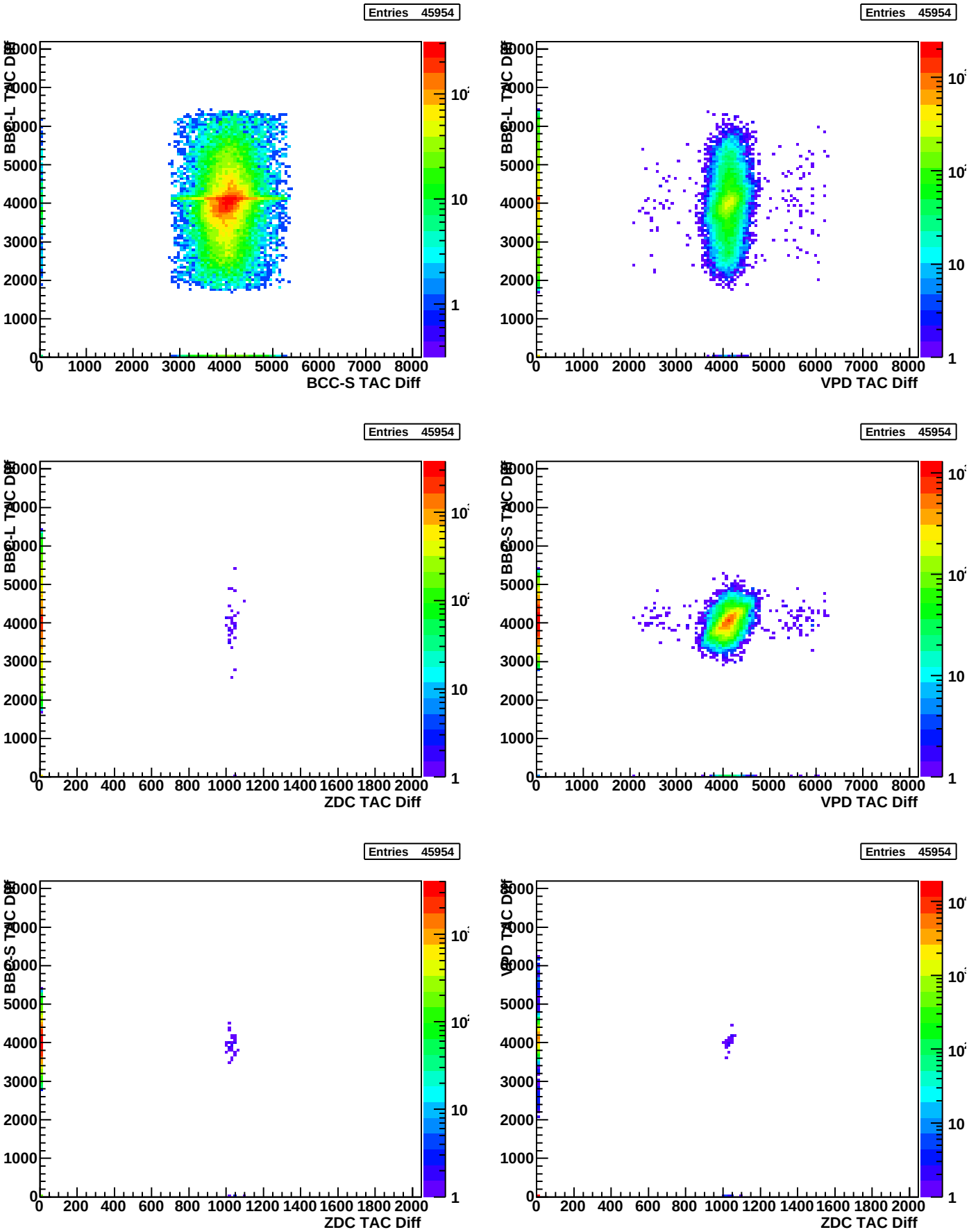

Entries 45954
VPD-West ADC Sum
ZDC-West ADC Sum Att

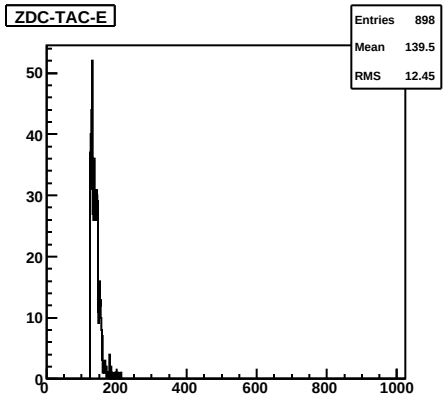

Entries 45954
BBC-L-East ADC Sum
BBC-L-West ADC Sum

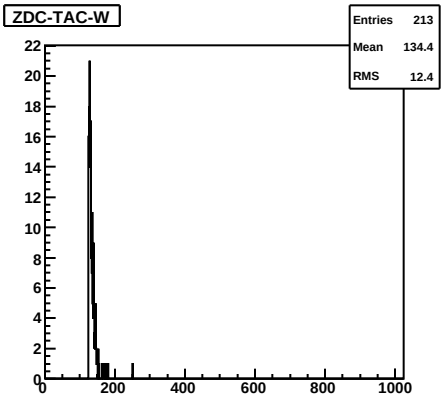

Entries 45954
BBC-S-East ADC Sum
BBC-S-West ADC Sum

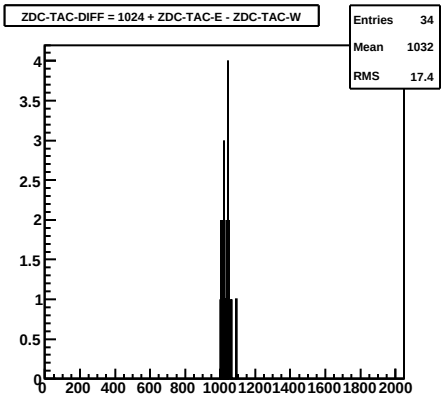

Entries 45954
VPD East ADC Sum
VPD West ADC Sum

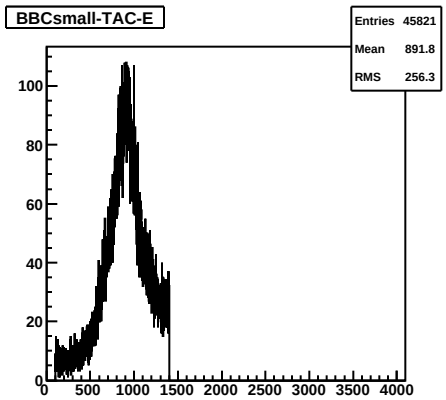

Entries 45954
ZDC East ADC Sum Att
ZDC West ADC Sum Att

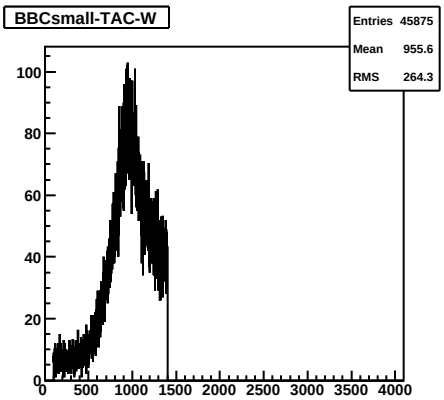

Entries 45954
BBC-L TAC Diff
BCC-S TAC Diff
Entries 45954
BBC-L TAC Diff
VPD TAC Diff
Entries 45954
BBC-L TAC Diff
ZDC TAC Diff
Entries 45954
BBC-S TAC Diff
VPD TAC Diff
Entries 45954
BBC-S TAC Diff
ZDC TAC Diff
Entries 45954
VPD TAC Diff
ZDC TAC Diff

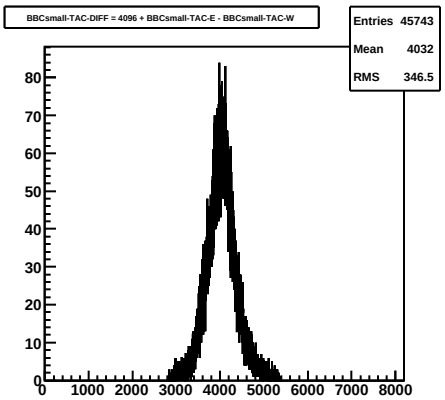

ZDC-TAC-E
Entries 898
Mean 139.5
RMS 12.45

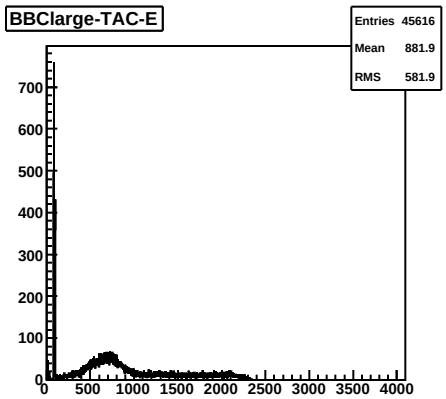

ZDC-TAC-W
Entries 213
Mean 134.4
RMS 12.4

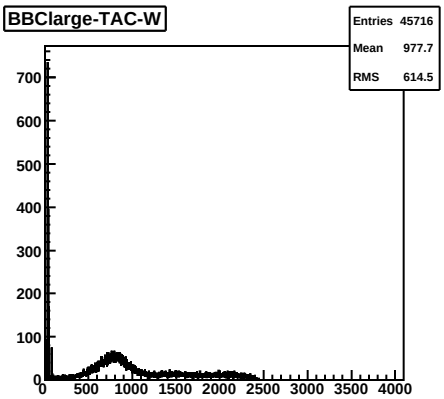

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 34
Mean 1032
RMS 17.4

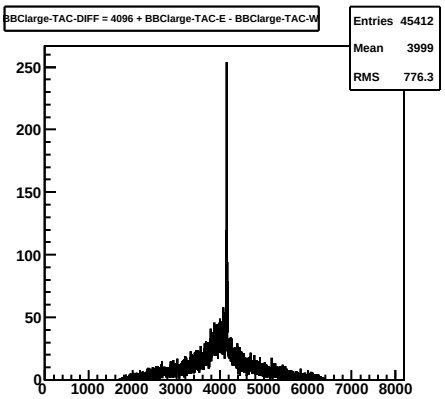

BBCsmall-TAC-E
Entries 45821
Mean 891.8
RMS 256.3

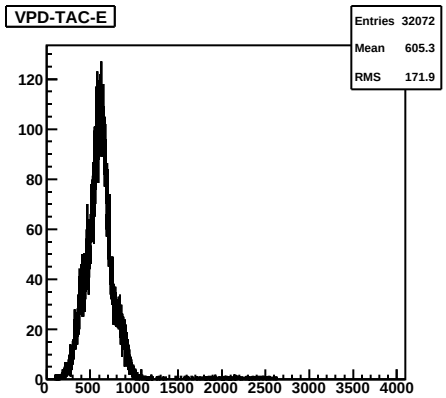

BBCsmall-TAC-W
Entries 45875
Mean 955.6
RMS 264.3

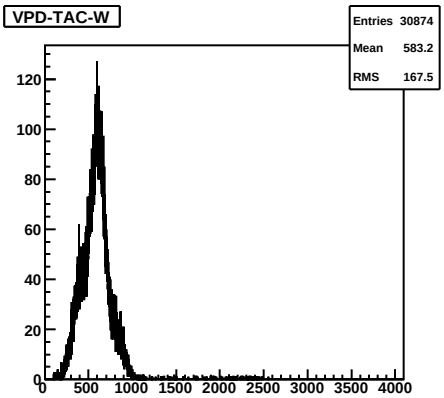

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 45743
Mean 4032
RMS 346.5

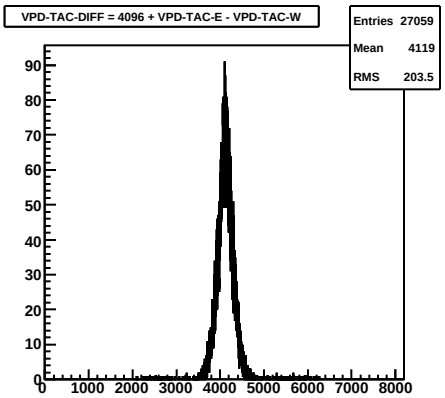

BBClarge-TAC-E
Entries 45616
Mean 881.9
RMS 581.9

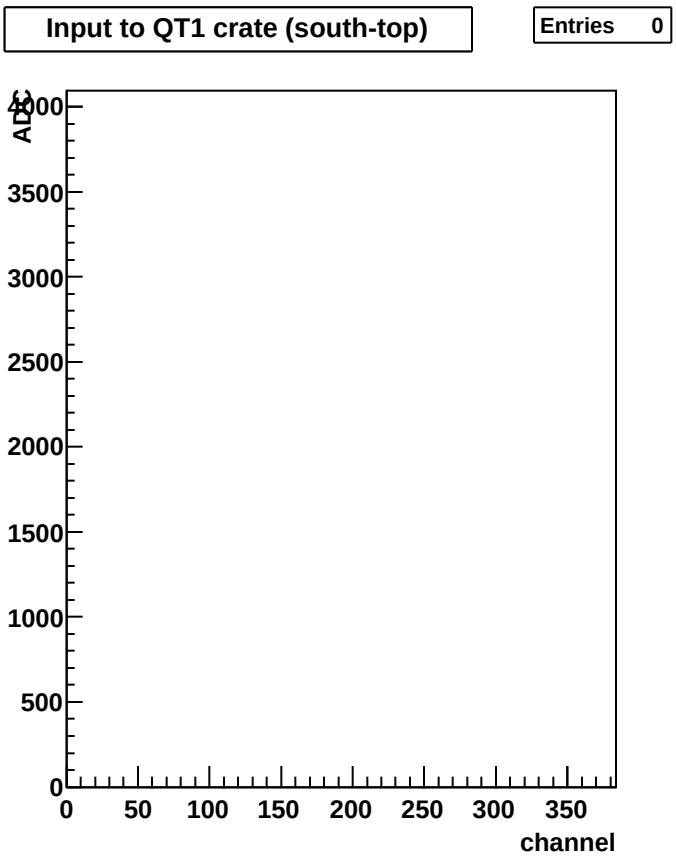

BBClarge-TAC-W
Entries 45716
Mean 977.7
RMS 614.5

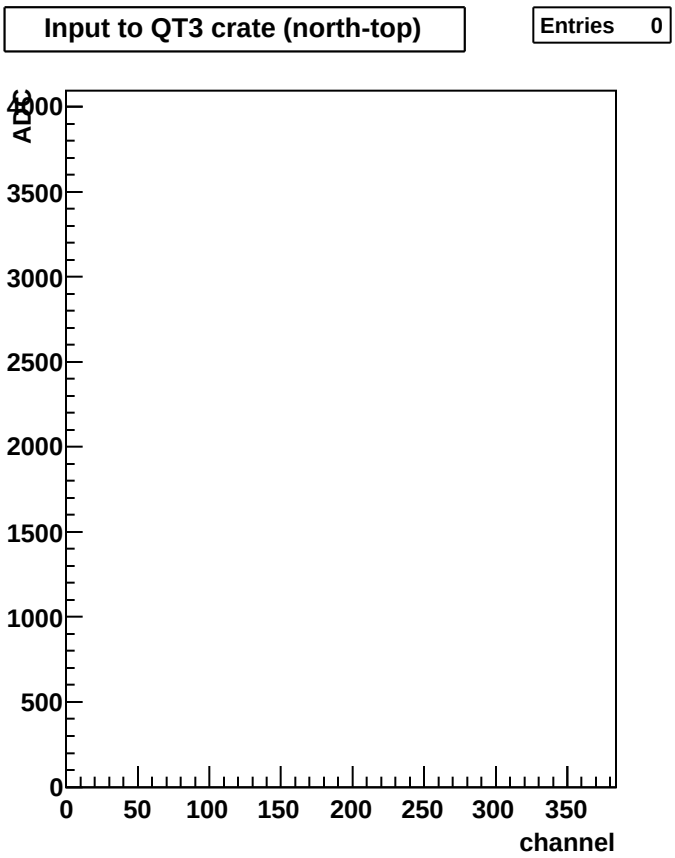

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 45412
Mean 3999
RMS 776.3

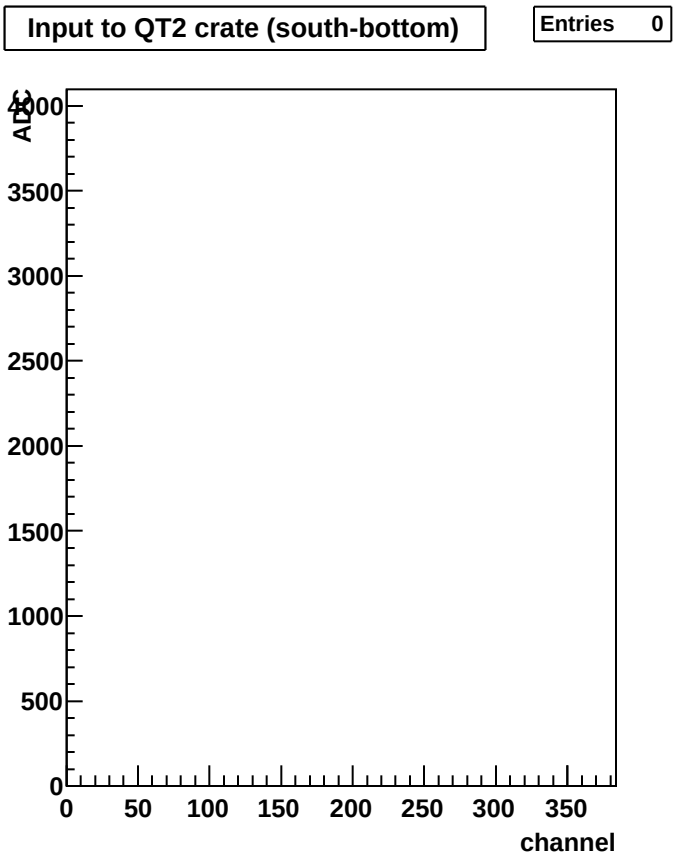

VPD-TAC-E
Entries 32072
Mean 605.3
RMS 171.9

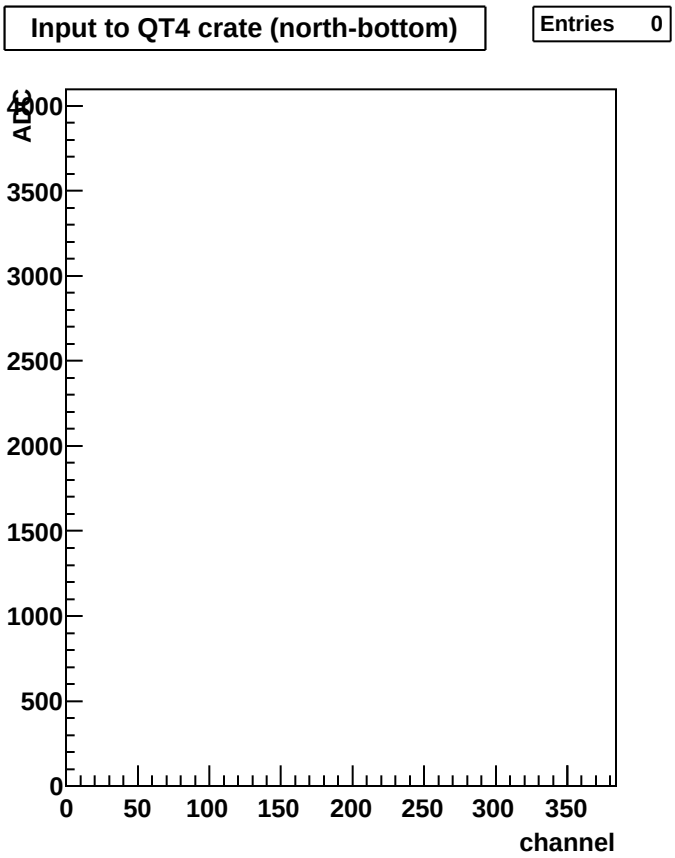

VPD-TAC-W
Entries 30874
Mean 583.2
RMS 167.5

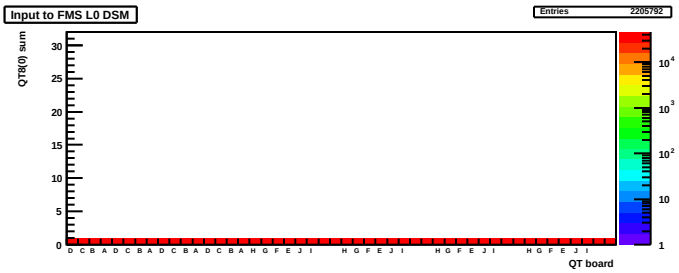

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 27059
Mean 4119
RMS 203.5

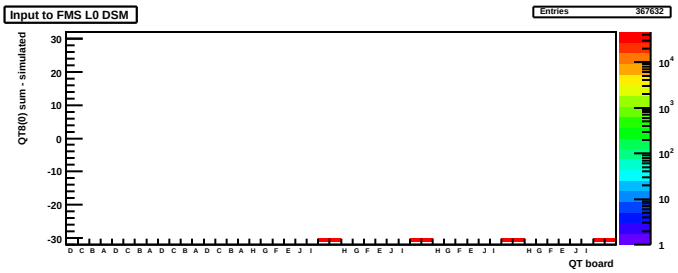

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

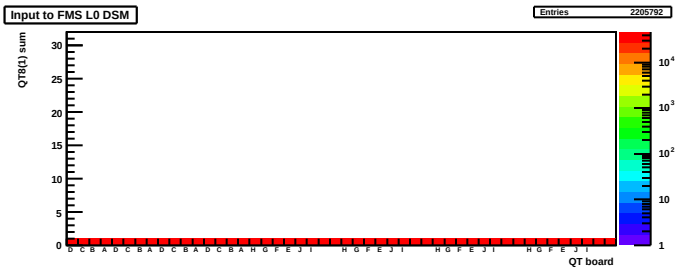

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

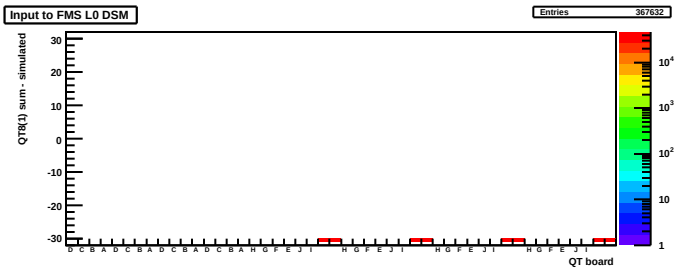

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

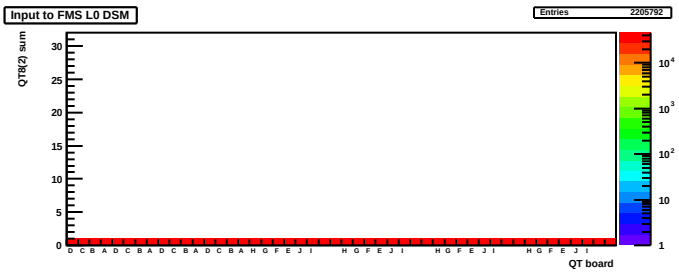

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

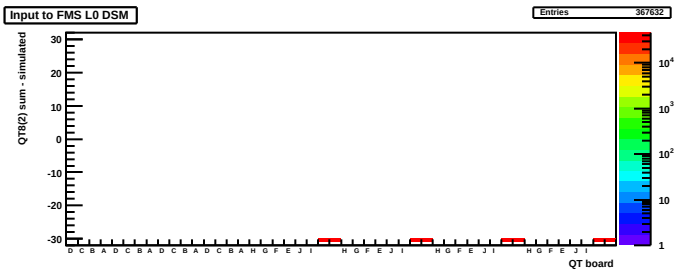

Input to FMS L0 DSM
Entries 2205792
QT8(0) sum
QT board

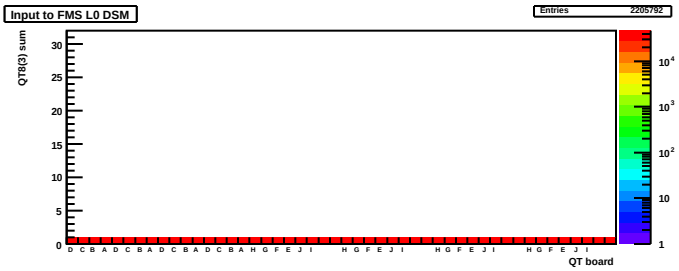

Input to FMS L0 DSM
Entries 367632
QT8(0) sum - simulated
QT board

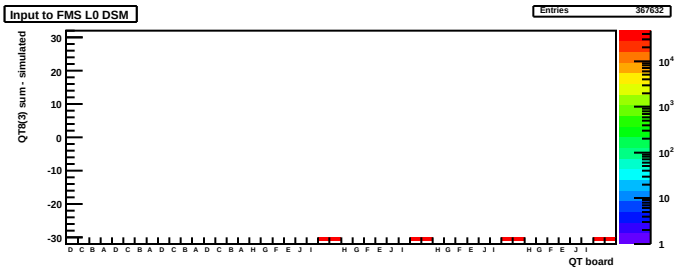

Input to FMS L0 DSM
Entries 2205792
QT8(1) sum
QT board

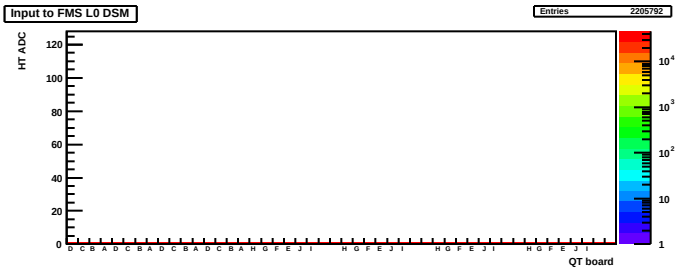

Input to FMS L0 DSM
Entries 367632
QT8(1) sum - simulated
QT board

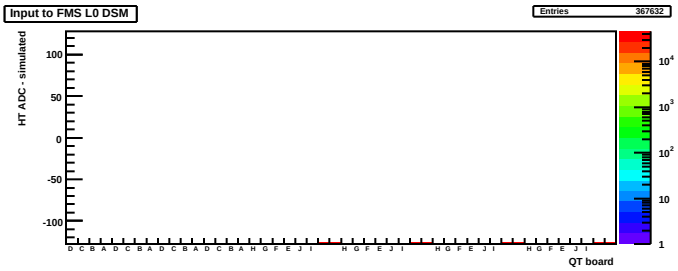

Input to FMS L0 DSM
Entries 2205792
QT8(2) sum
QT board

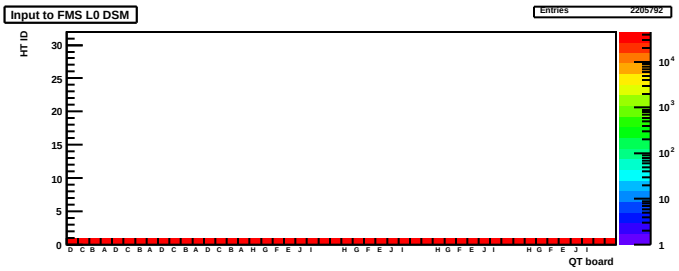

Input to FMS L0 DSM
Entries 367632
QT8(2) sum - simulated
QT board

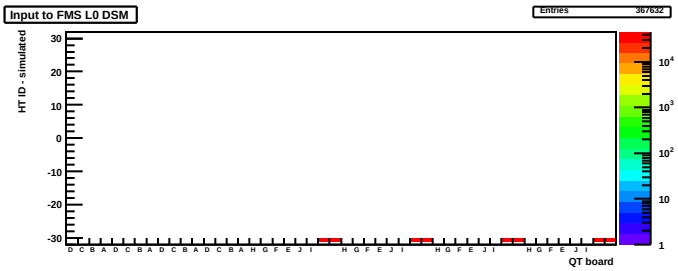

Input to FMS L0 DSM
Entries 2205792
QT8(3) sum
QT board

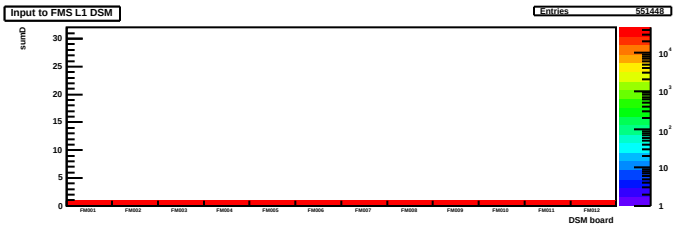

Input to FMS L0 DSM
Entries 367632
QT8(3) sum - simulated
QT board

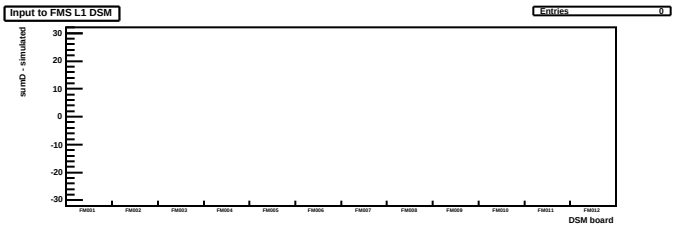

Input to FMS L0 DSM
Entries 2205792
HT ADC
QT board

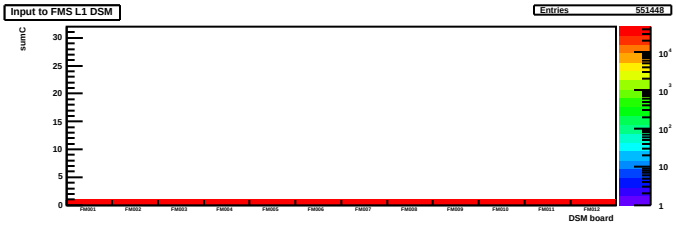

Input to FMS L0 DSM
Entries 367632
HT ADC - simulated
QT board

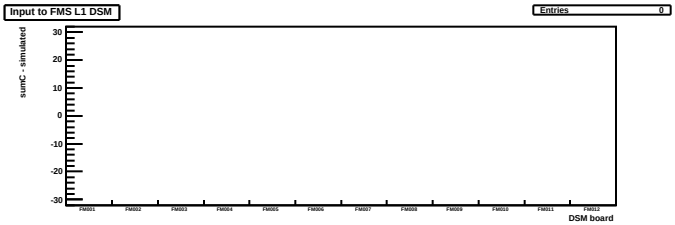

Input to FMS L0 DSM
Entries 2205792
HT ID
QT board

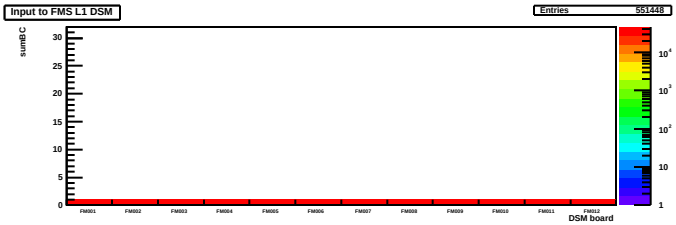

Input to FMS L0 DSM
Entries 367632
HT ID - simulated
QT board

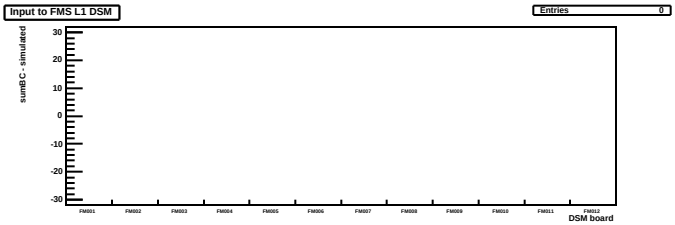

Input to FMS L1 DSM
Entries 551448
sumD
DSM board

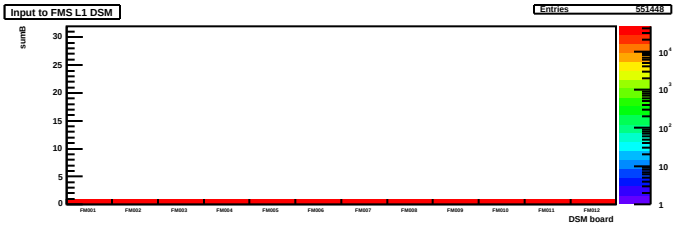

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

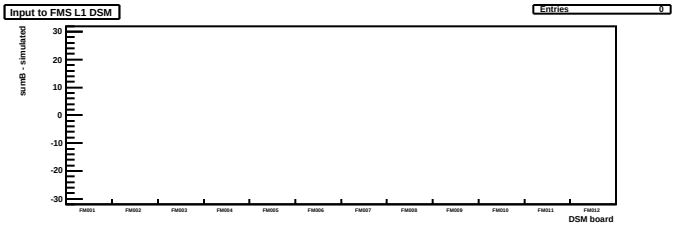

Input to FMS L1 DSM
Entries 551448
sumC
DSM board

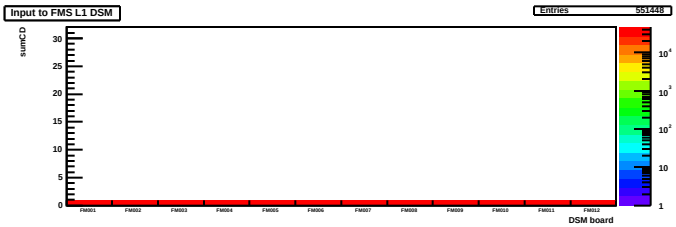

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

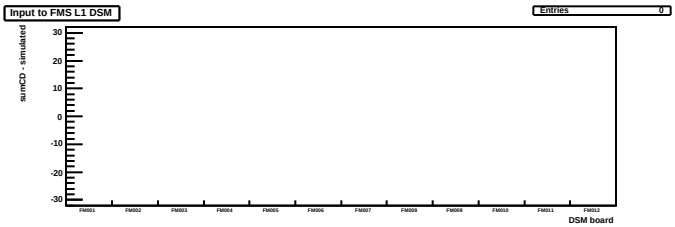

Input to FMS L1 DSM
Entries 551448
sumBC
DSM board

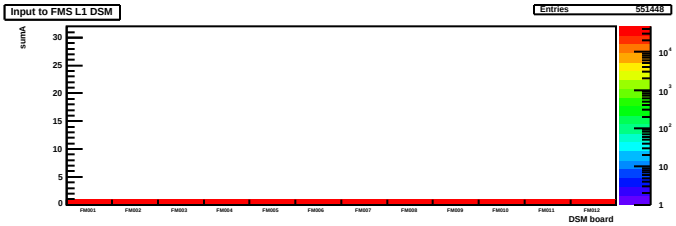

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

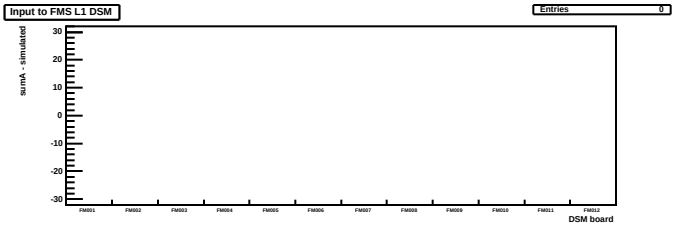

Input to FMS L1 DSM
Entries 551448
sumB
DSM board

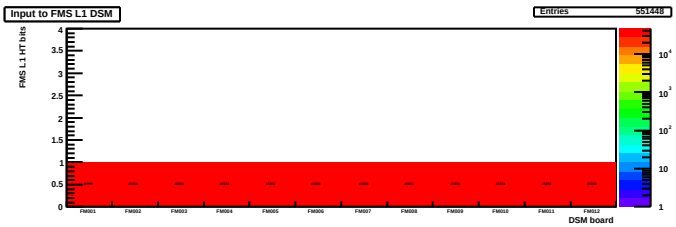

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

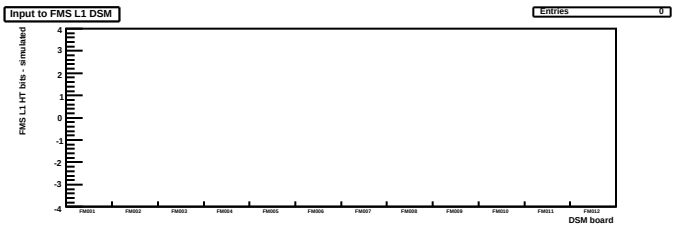

Input to FMS L1 DSM
Entries 551448
sumCD
DSM board

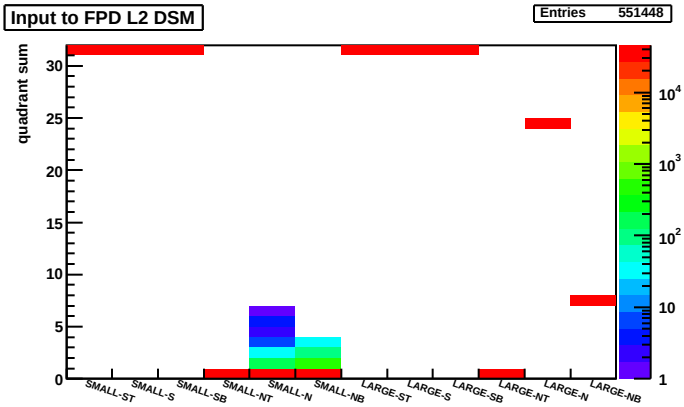

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

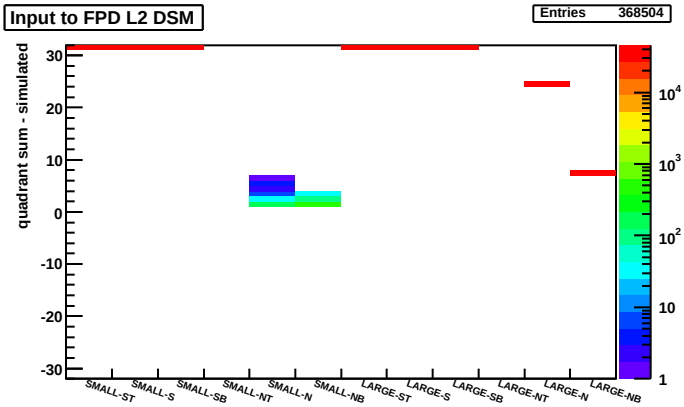

Input to FMS L1 DSM
Entries 551448
sumA
DSM board

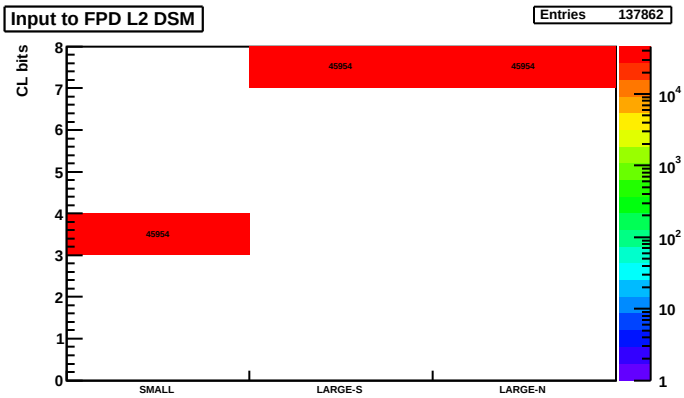

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

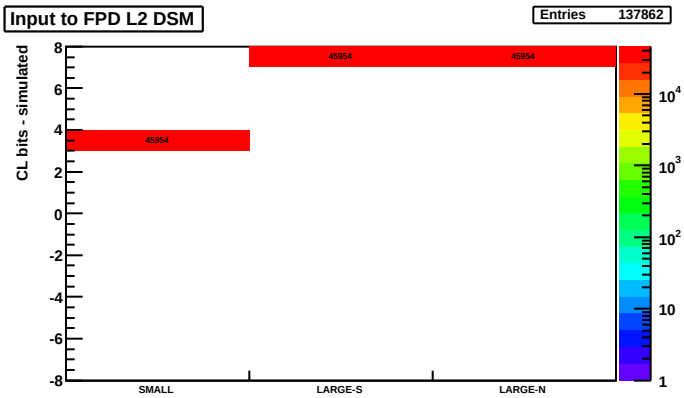

Input to FMS L1 DSM
Entries 551448
FMS L1 HT bits
DSM board

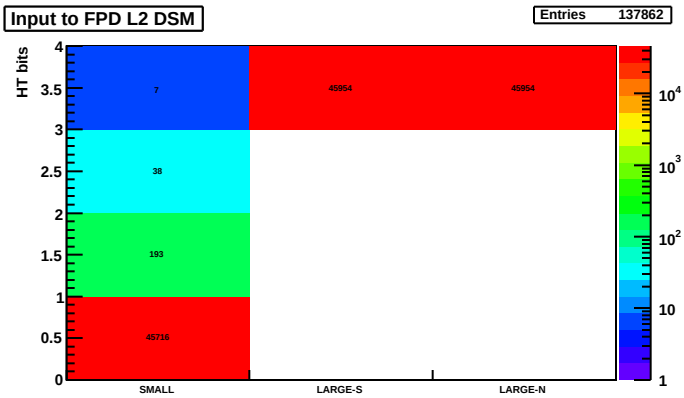

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

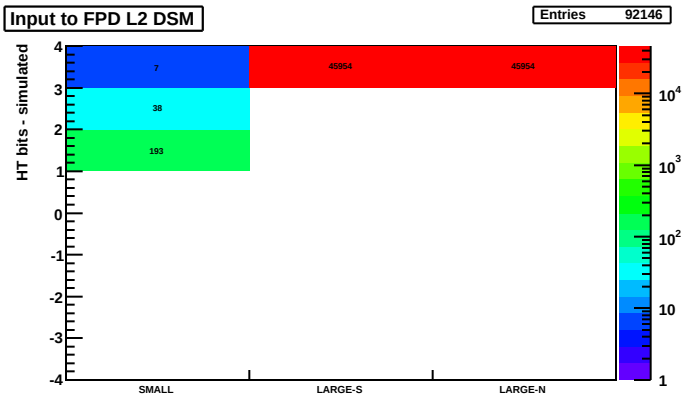

Input to FPD L2 DSM
Entries 551448
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

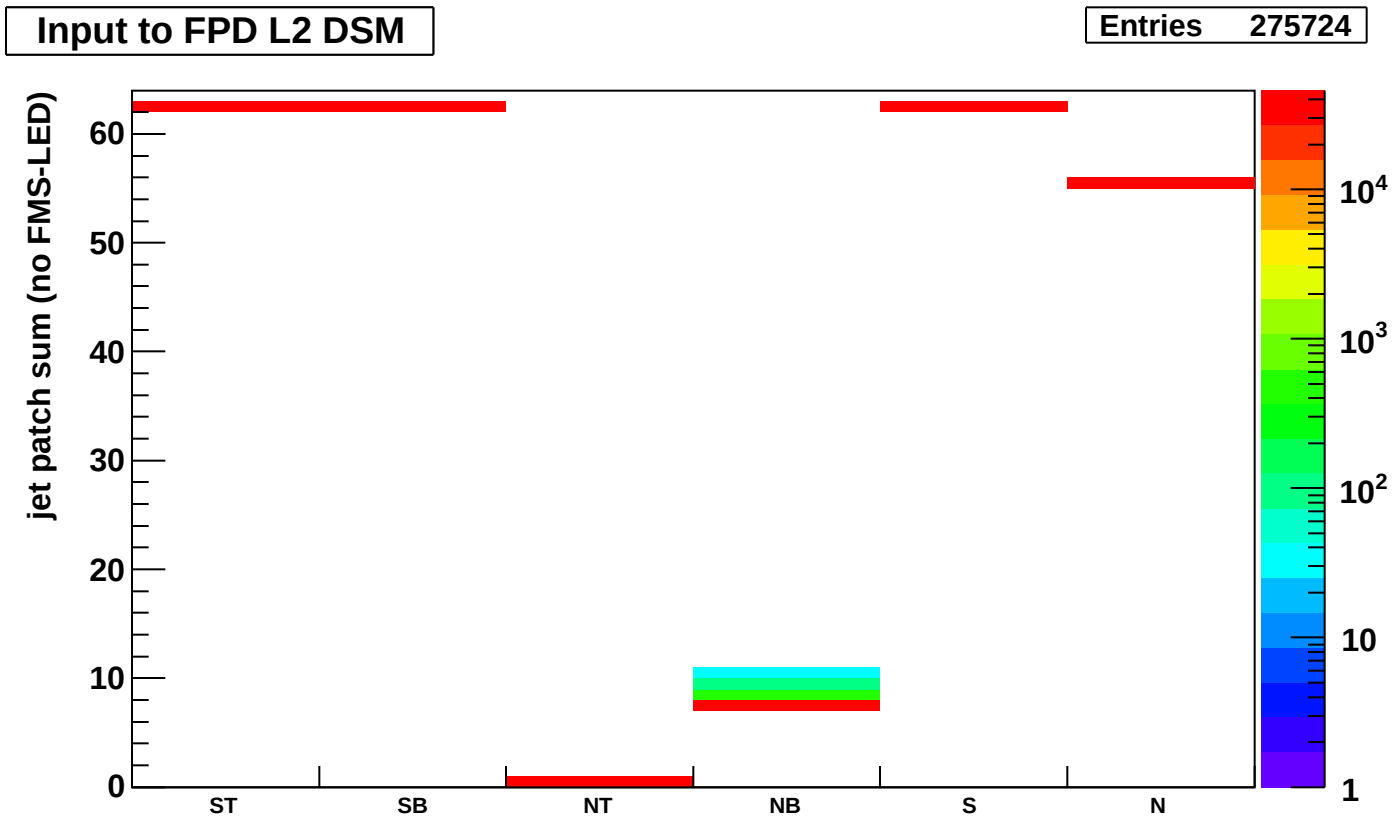

Input to FPD L2 DSM
Entries 368504
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

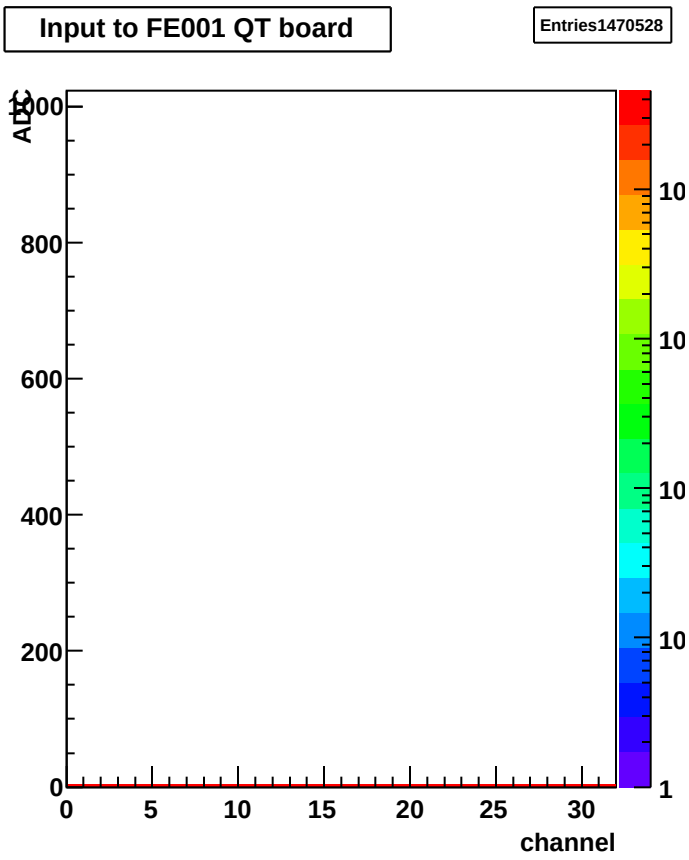

Input to FPD L2 DSM
Entries 137862
CL bits
45954
45954
45954
SMALL
LARGE-S
LARGE-N

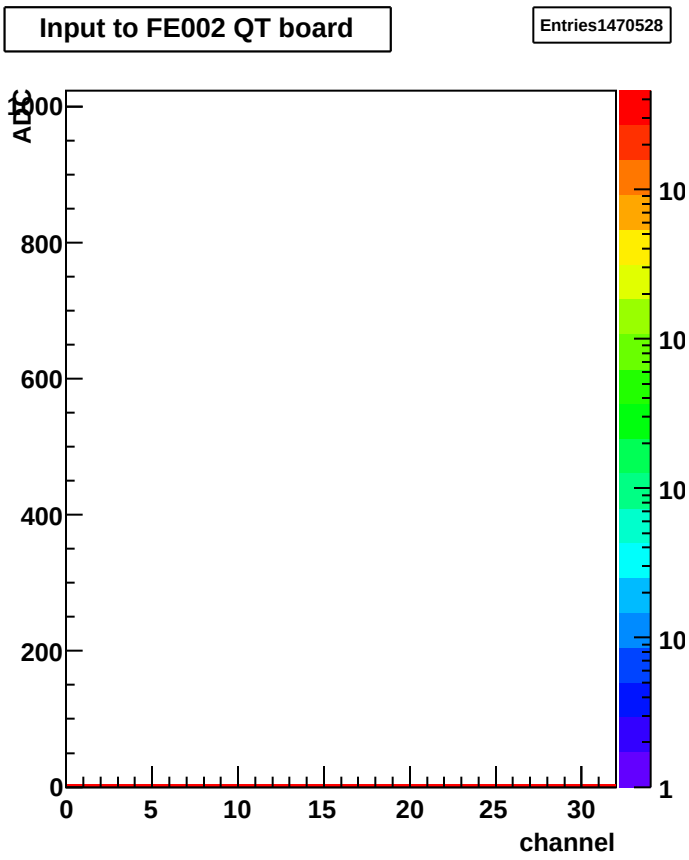

Input to FPD L2 DSM
Entries 137862
CL bits - simulated
45954
45954
45954
SMALL
LARGE-S
LARGE-N

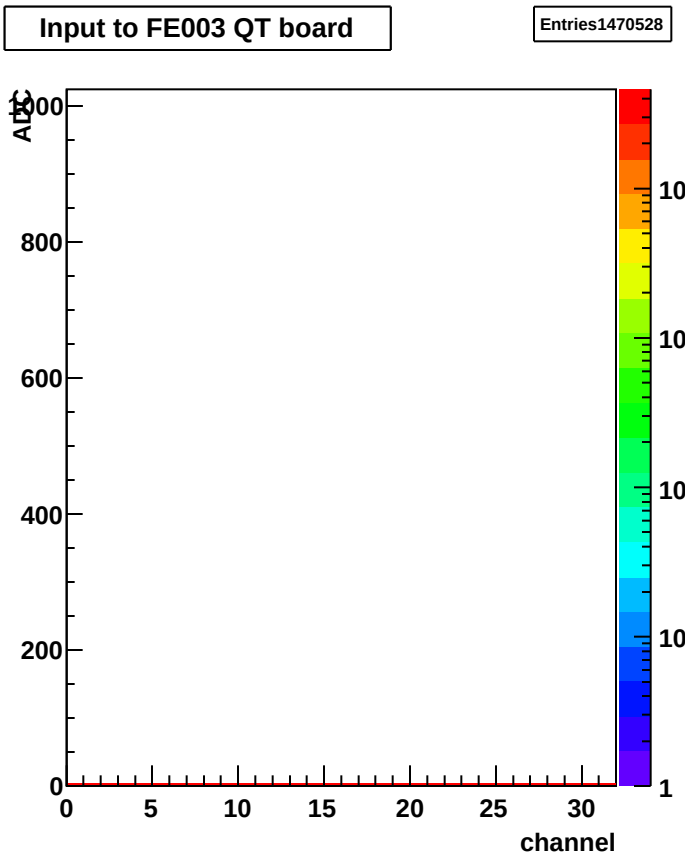

Input to FPD L2 DSM
Entries 137862
HT bits
7
38
193
45716
45954
45954
SMALL
LARGE-S
LARGE-N

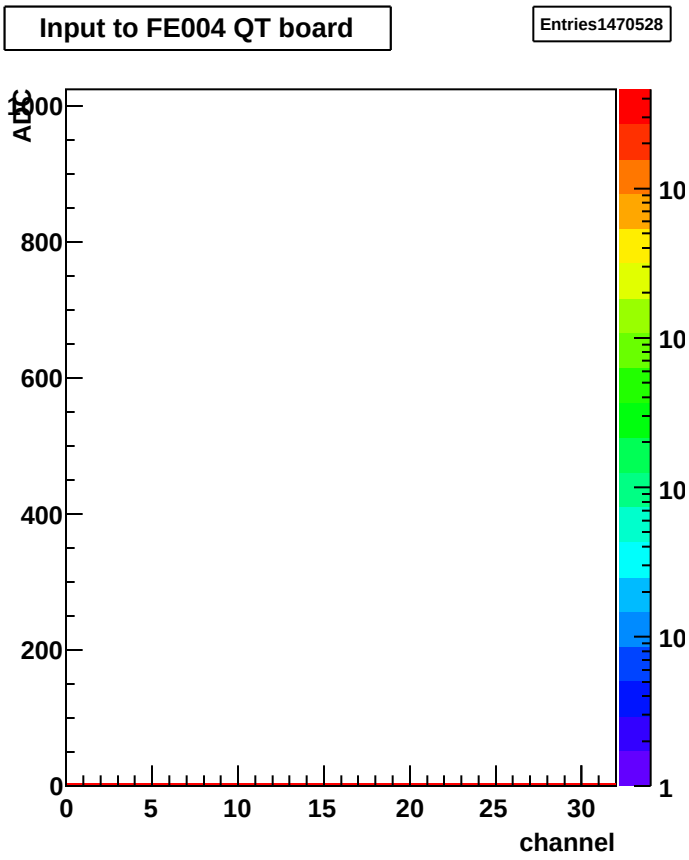

Input to FPD L2 DSM
Entries 92146
HT bits - simulated
7
38
193
45954
45954
SMALL
LARGE-S
LARGE-N

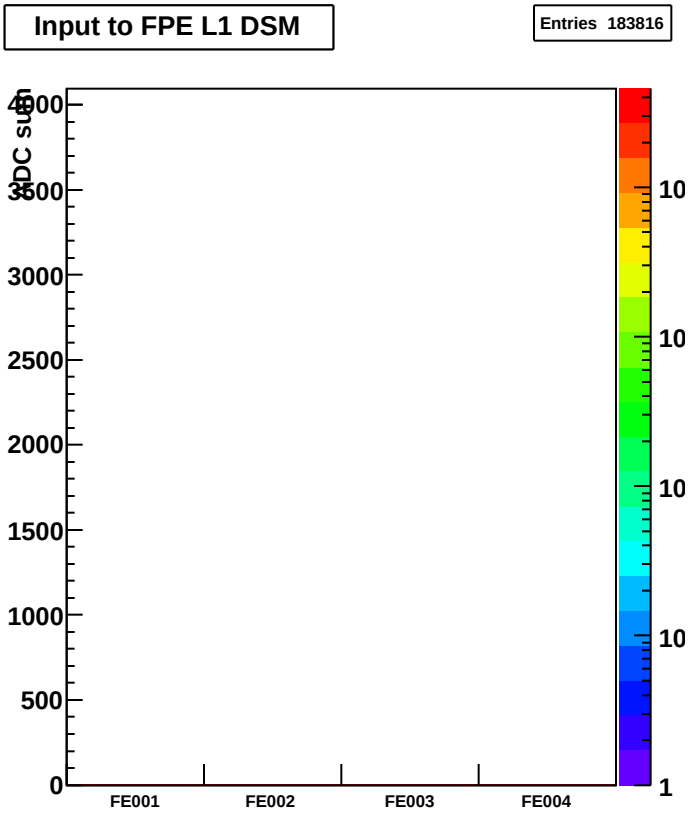

Input to FPD L2 DSM
Entries 275724
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

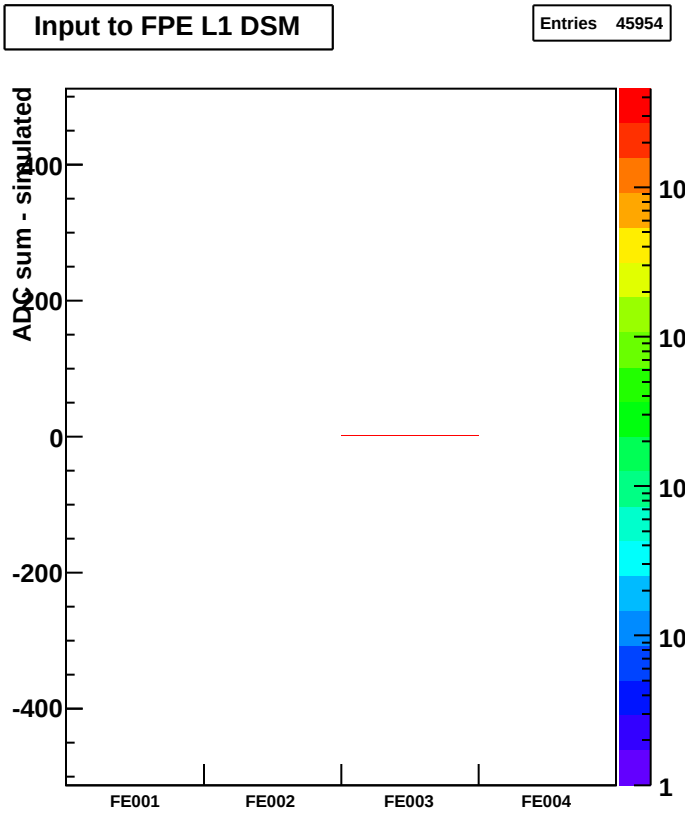

Input to FE001 QT board
Entries1470528
ADC
channel

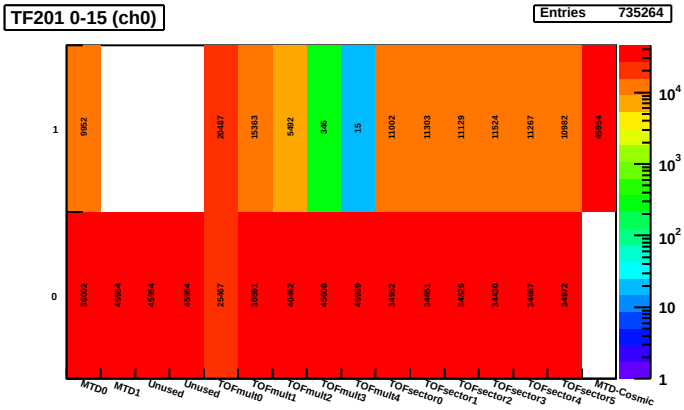

Input to FE002 QT board
Entries1470528
ADC
channel

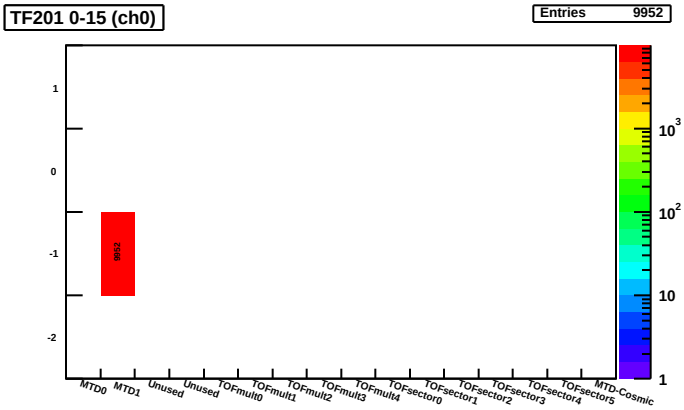

Input to FE003 QT board
Entries1470528
ADC
channel

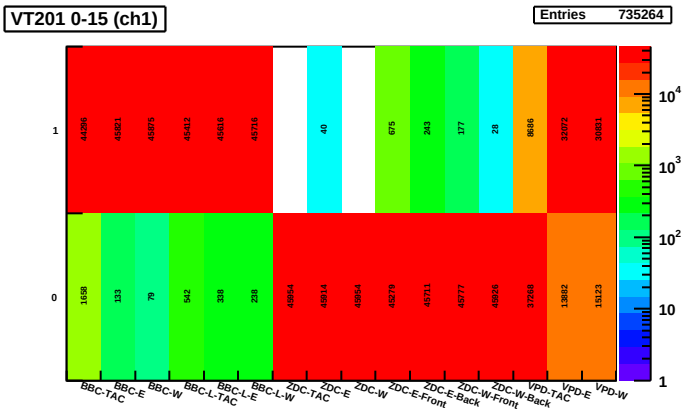

Input to FE004 QT board
Entries1470528
ADC
channel

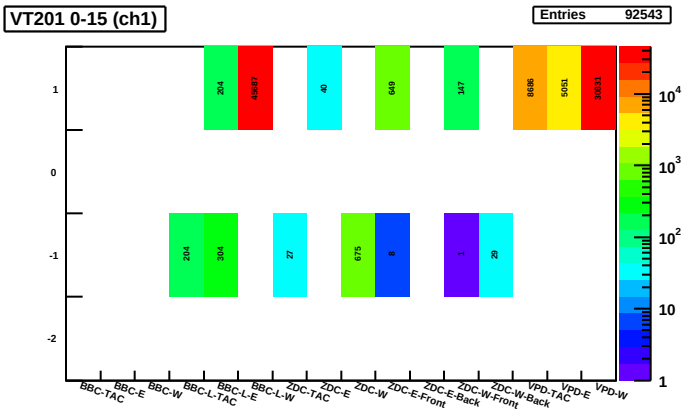

Input to FPE L1 DSM
Entries 183816
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

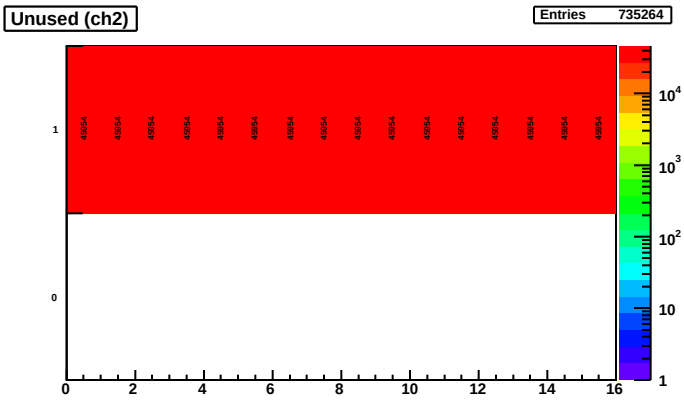

Input to FPE L1 DSM
Entries 45954
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1

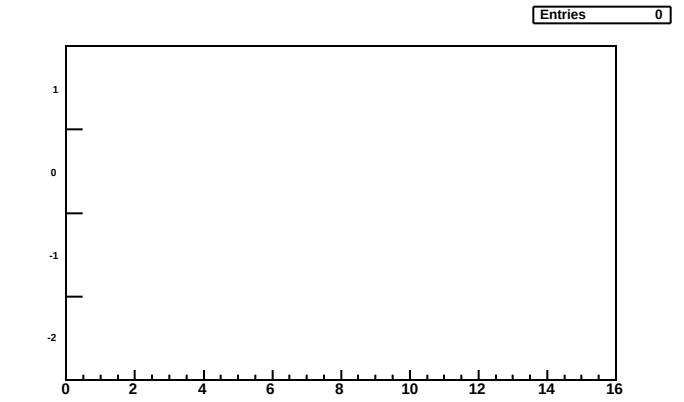

TF201 0-15 (ch0)
Entries 735264
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

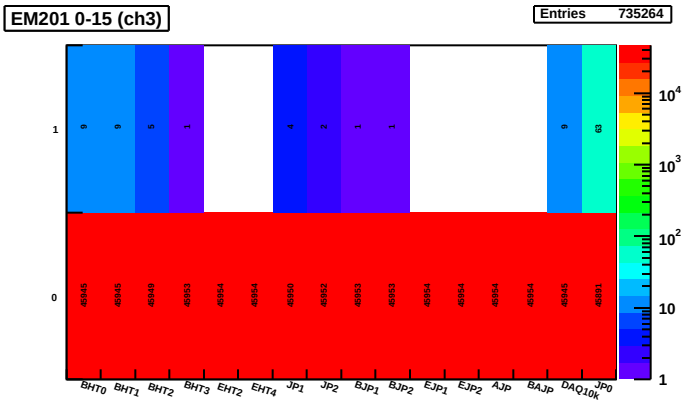

TF201 0-15 (ch0)
Entries 9952
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

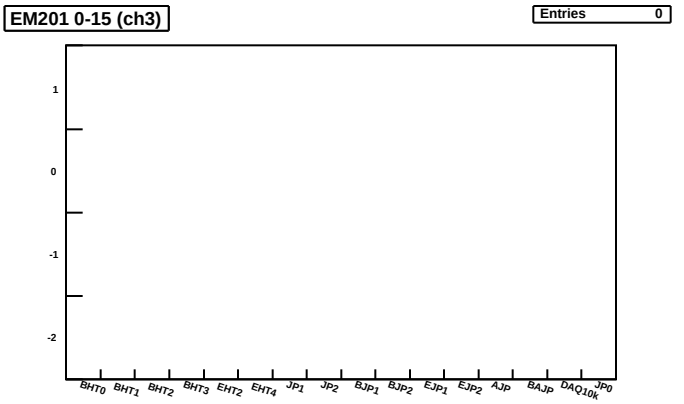

VT201 0-15 (ch1)
Entries 735264
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W

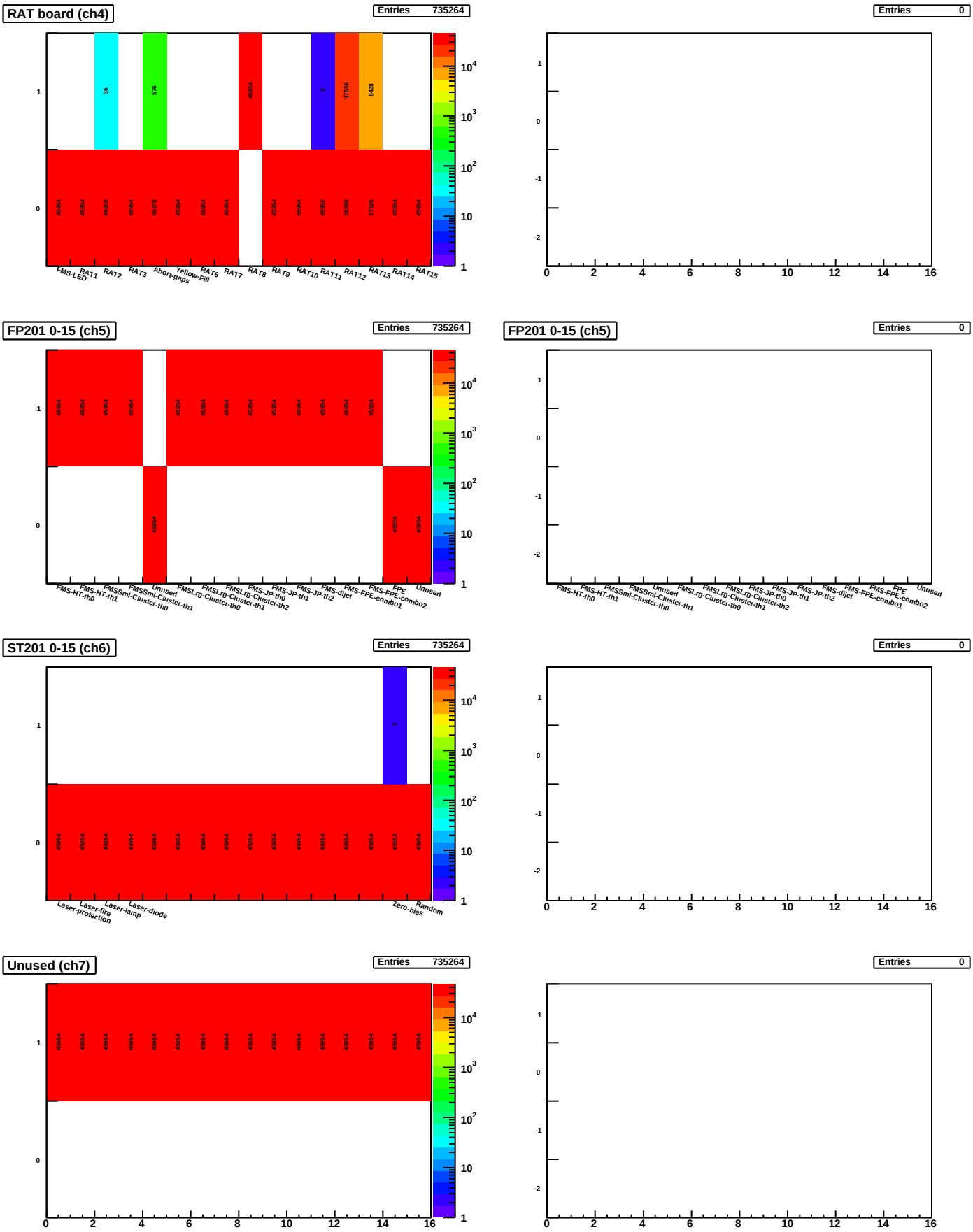

VT201 0-15 (ch1)
Entries 92543
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


Unused (ch2)
Entries 735264


Entries 0


EM201 0-15 (ch3)
Entries 735264
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0


EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0


RAT board (ch4)
Entries 735264
Entries 0
FP201 0-15 (ch5)
Entries 735264
FP201 0-15 (ch5)
Entries 0
ST201 0-15 (ch6)
Entries 735264
Entries 0
Unused (ch7)
Entries 735264
Entries 0