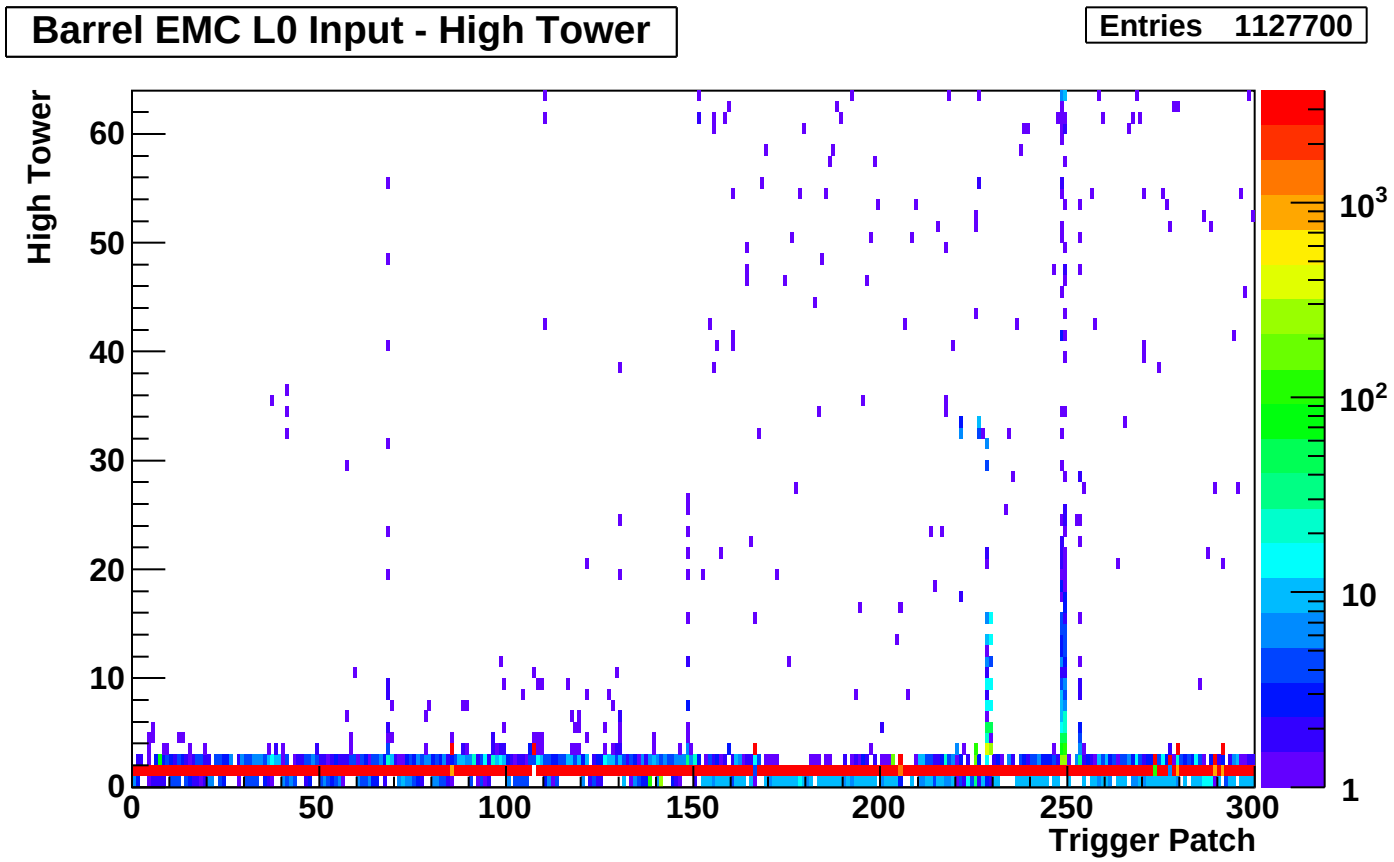
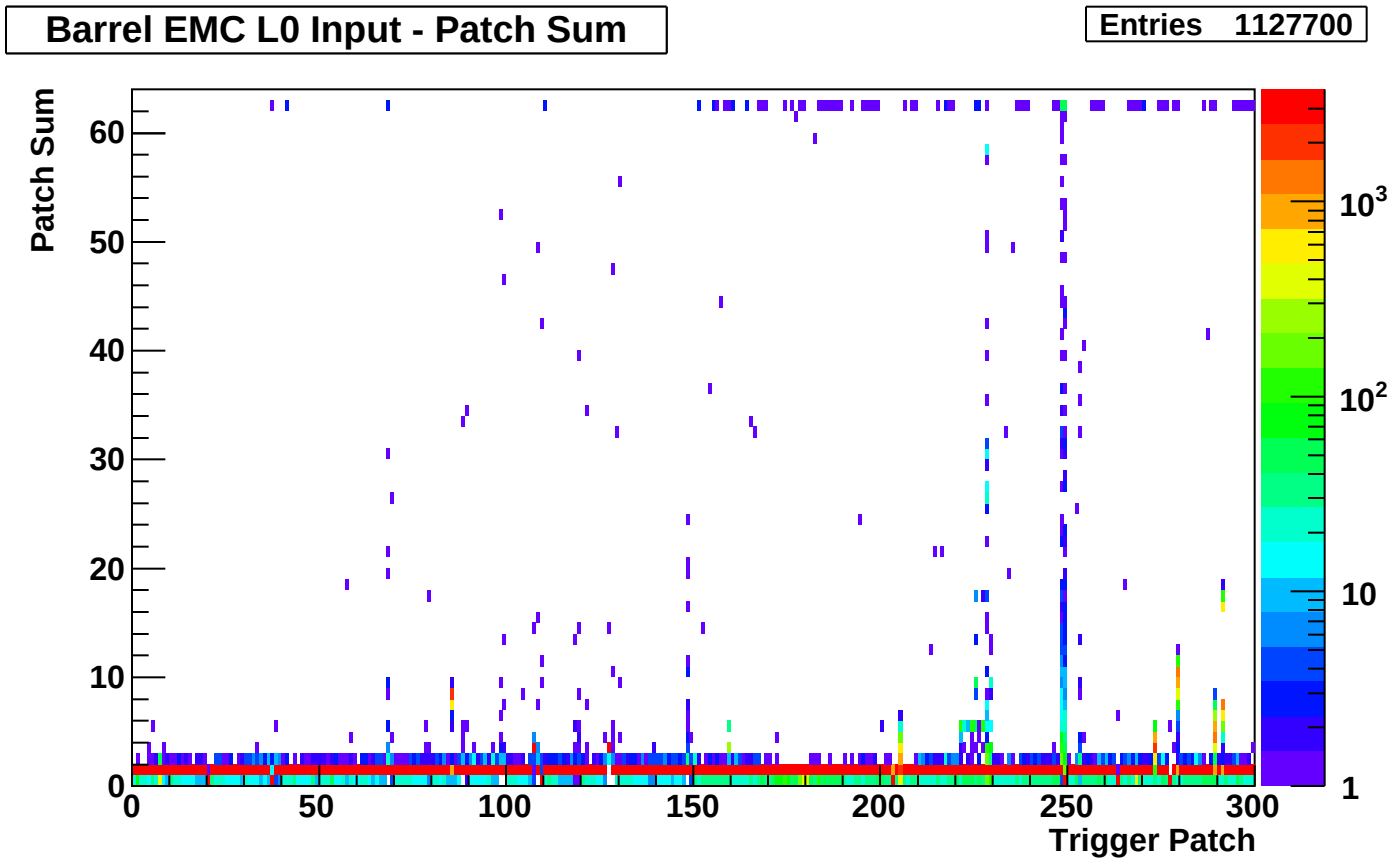
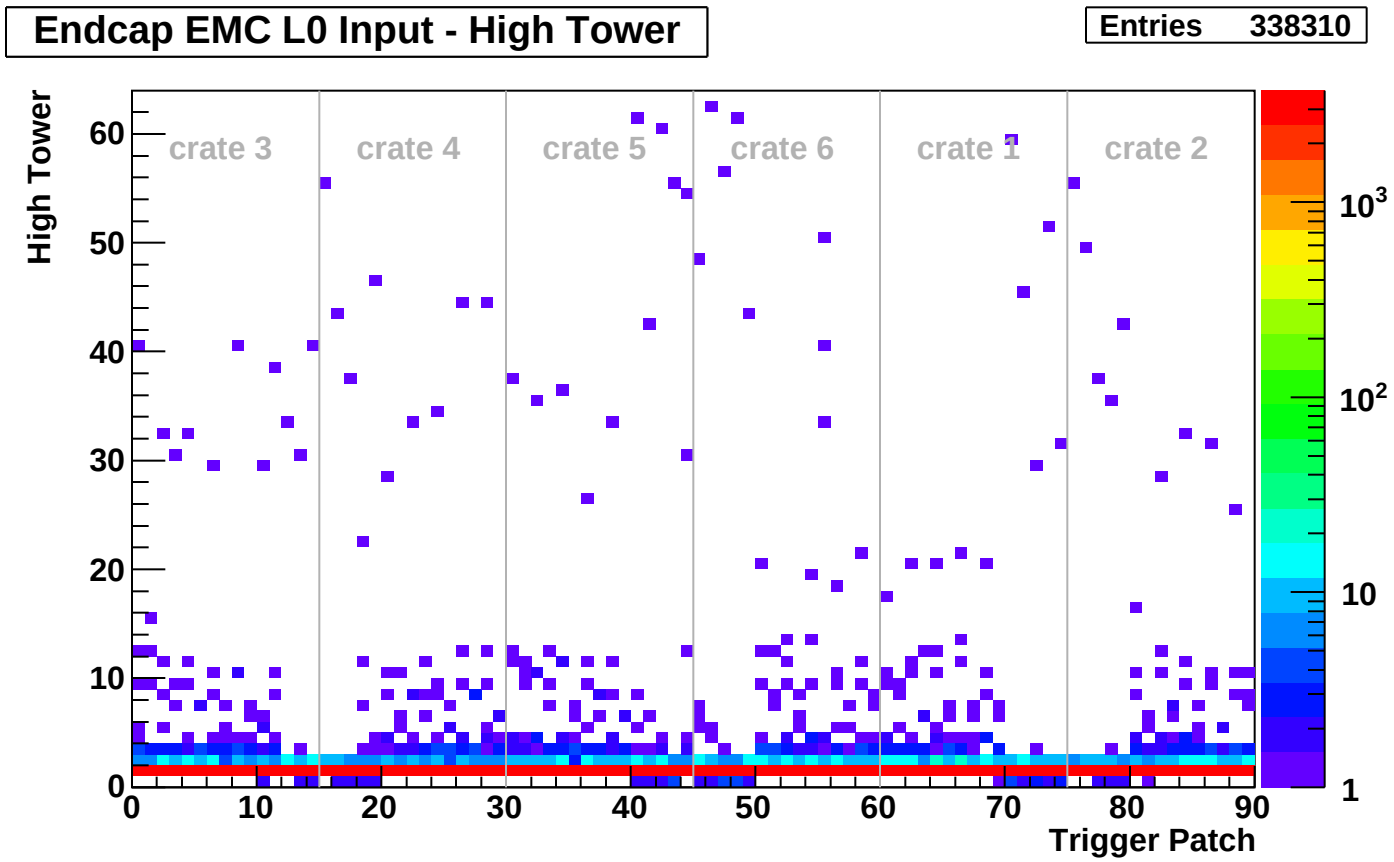
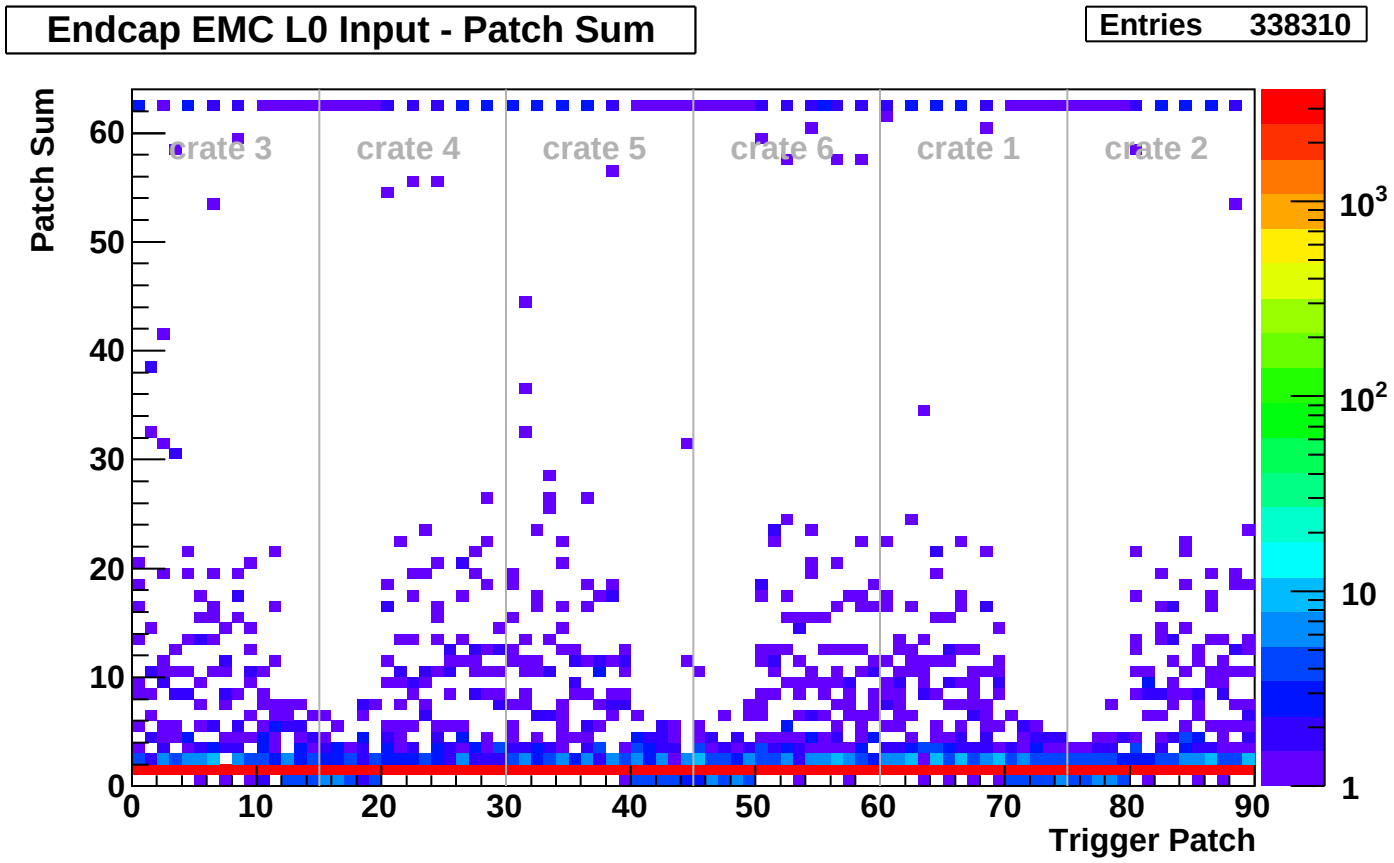
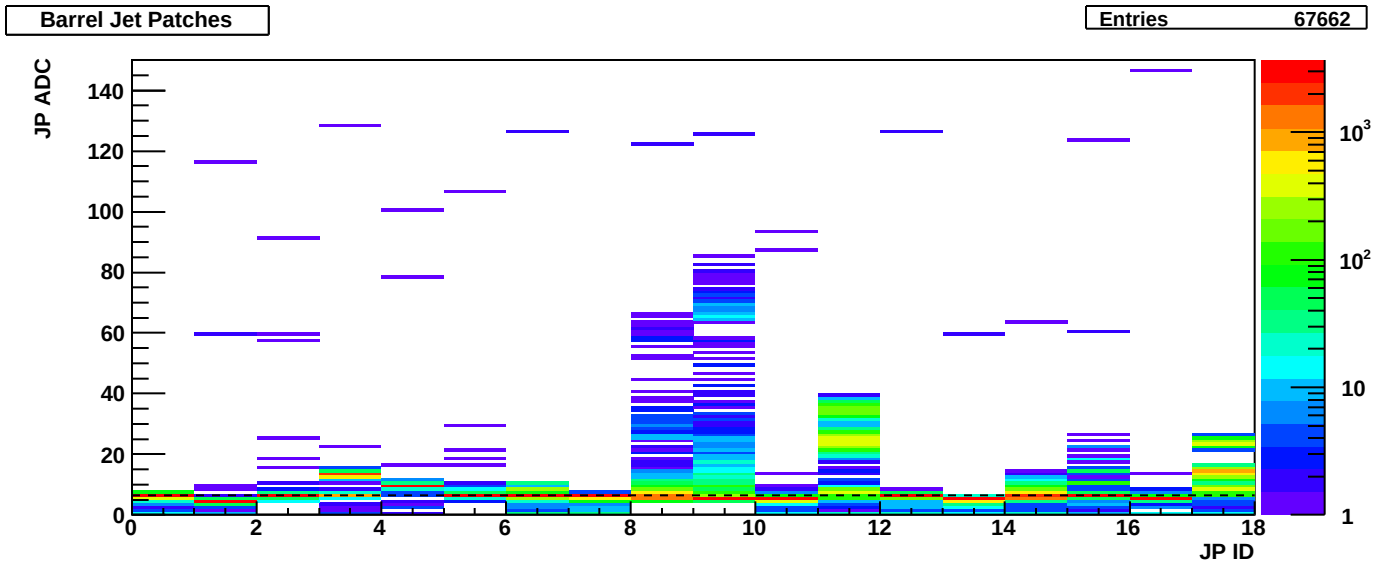
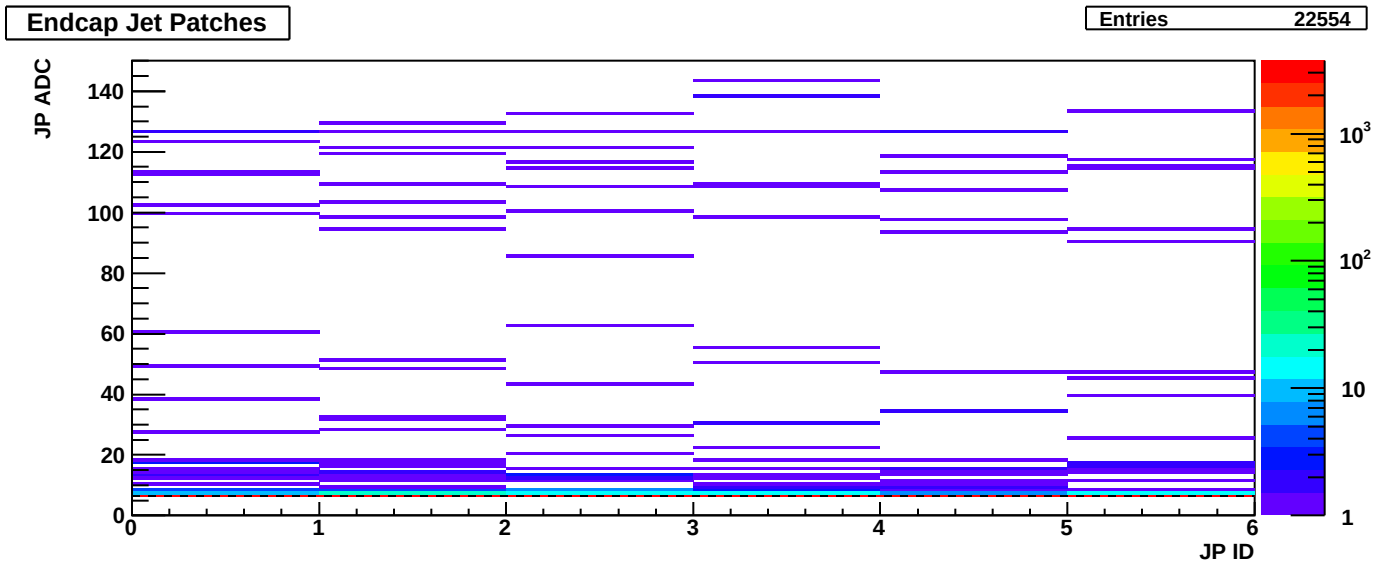

Barrel EMC L0 Input - High Tower
Entries 1127700
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

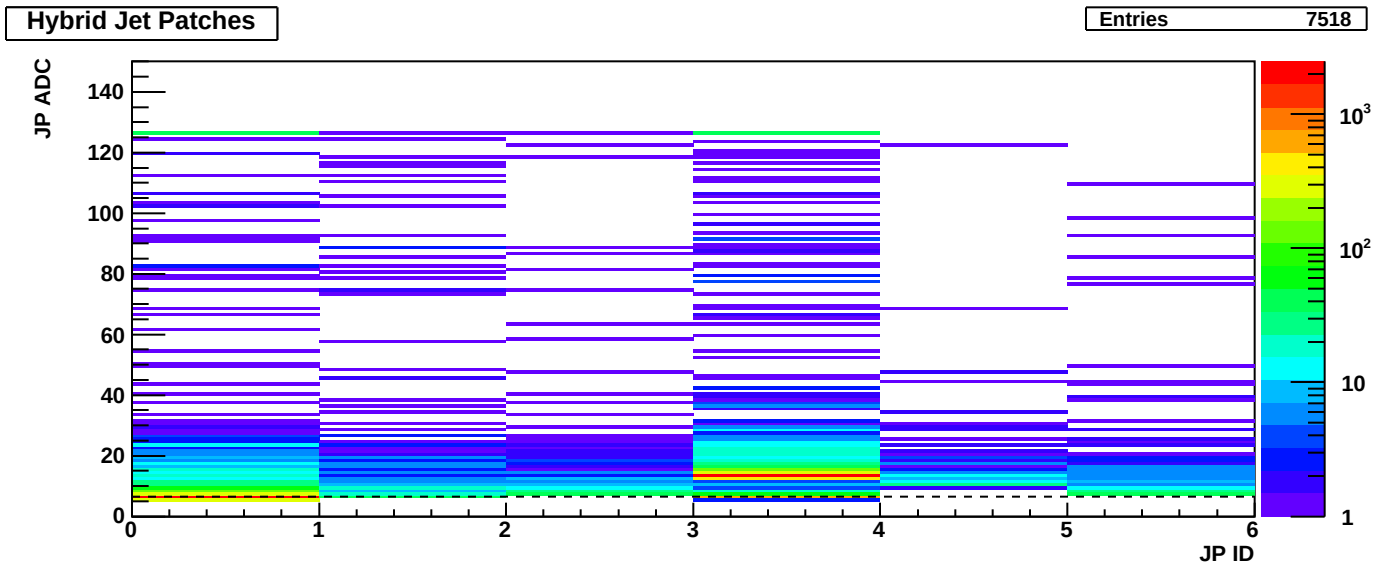

Barrel EMC L0 Input - Patch Sum
Entries 1127700
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

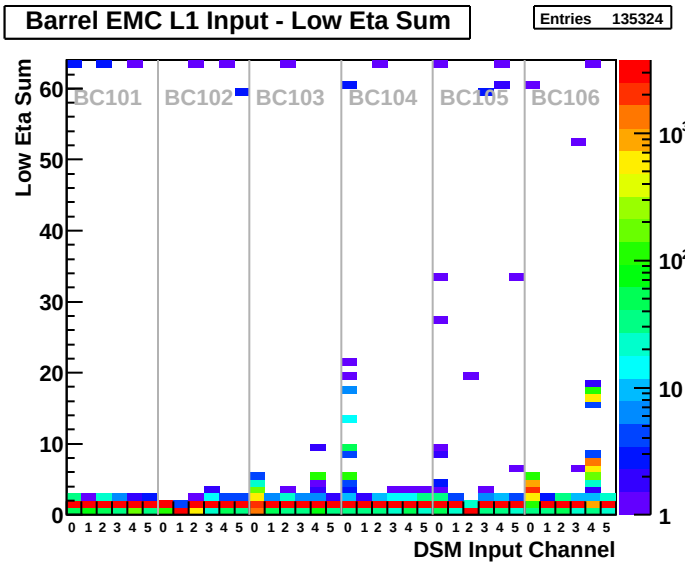

Endcap EMC L0 Input - High Tower
Entries 338310
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

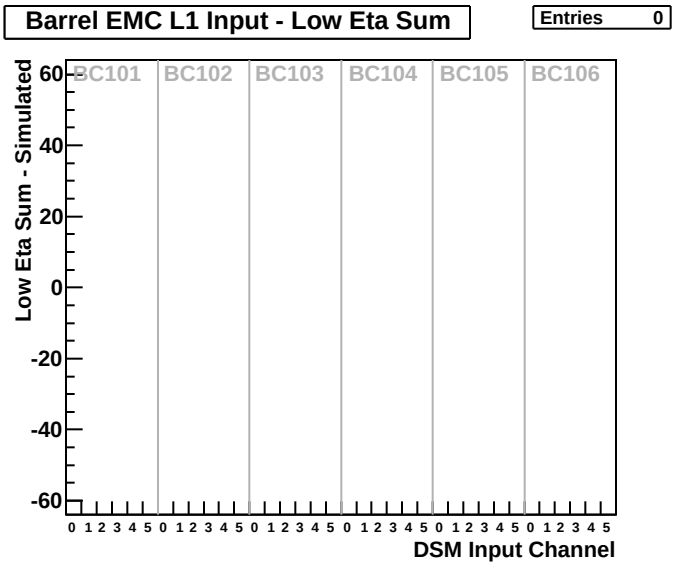

Endcap EMC L0 Input - Patch Sum
Entries 338310
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

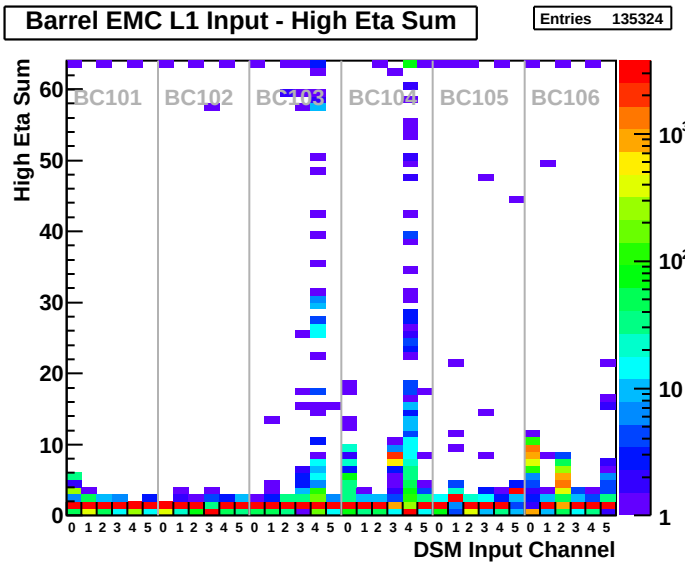

Barrel Jet Patches
Entries 67662
JP ADC
JP ID

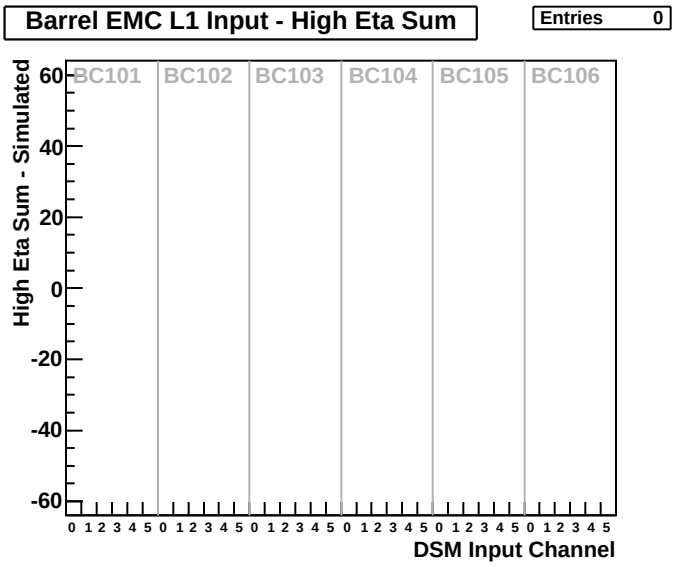

Endcap Jet Patches
Entries 22554
JP ADC
JP ID

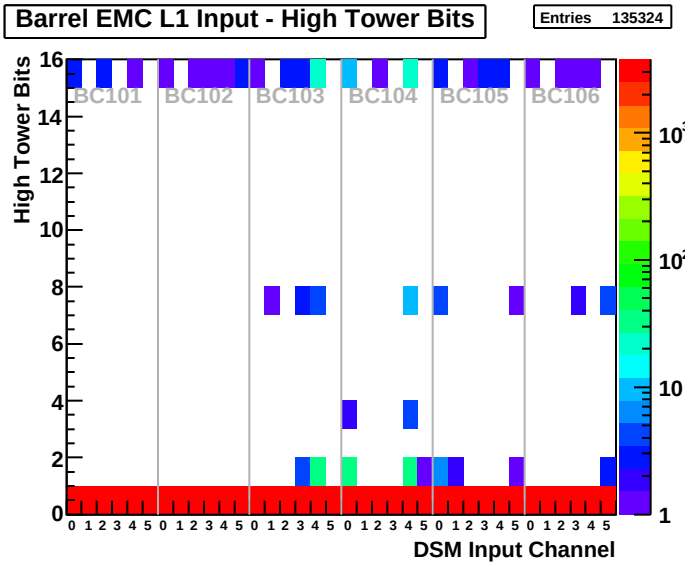

Hybrid Jet Patches
Entries 7518
JP ADC
JP ID

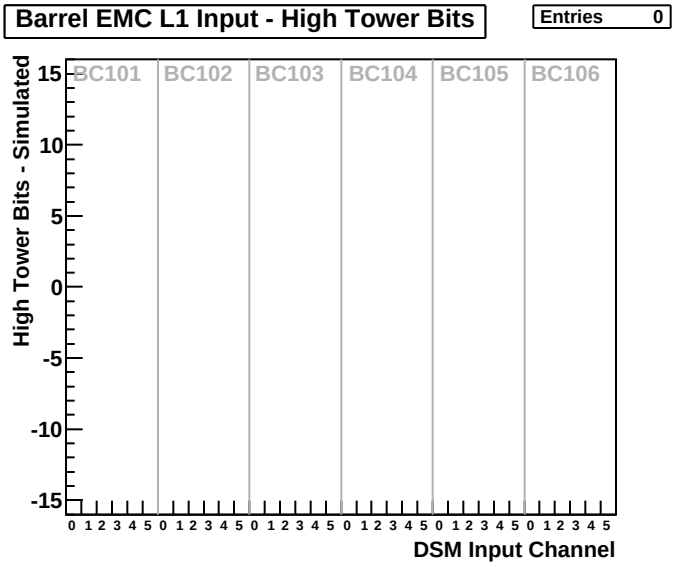

Barrel EMC L1 Input - Low Eta Sum
Entries 135324
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

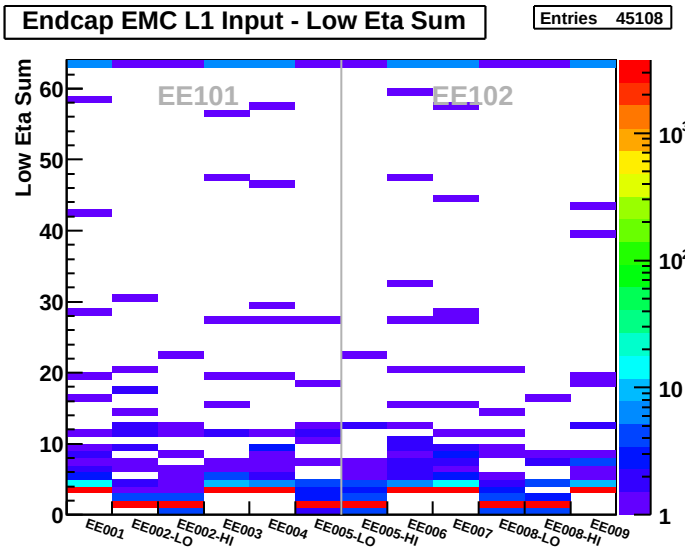

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

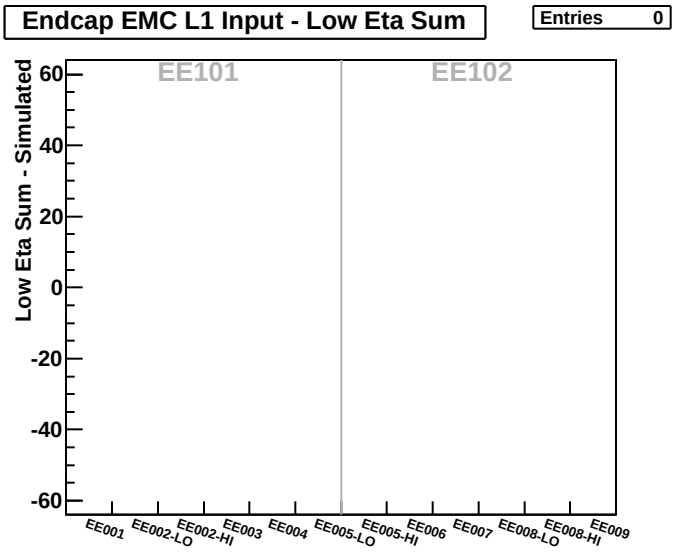

Barrel EMC L1 Input - High Eta Sum
Entries 135324
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

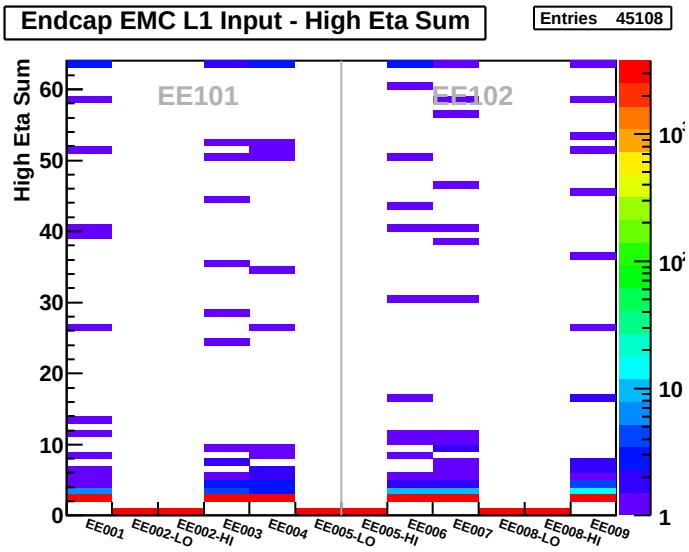

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

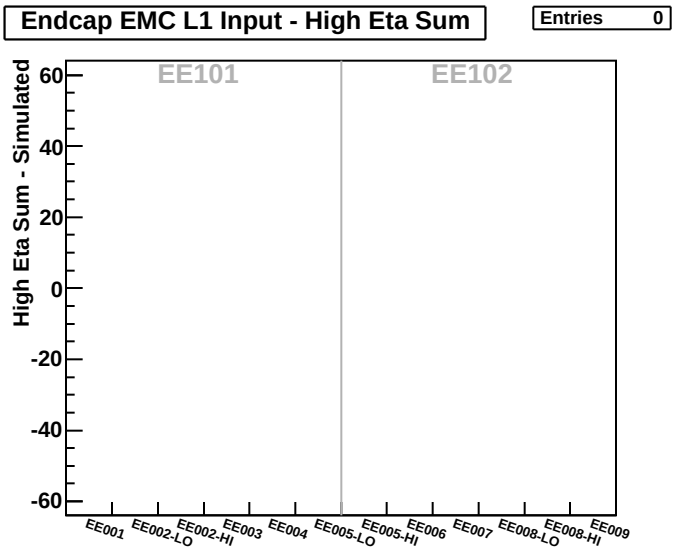

Barrel EMC L1 Input - High Tower Bits
Entries 135324
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

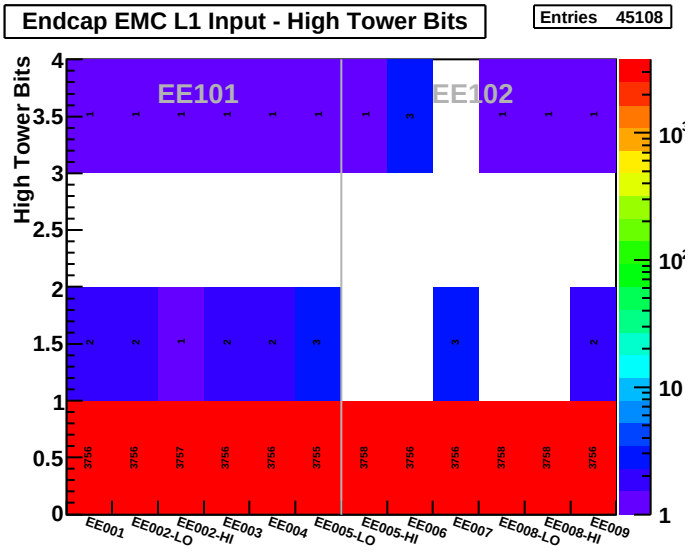

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

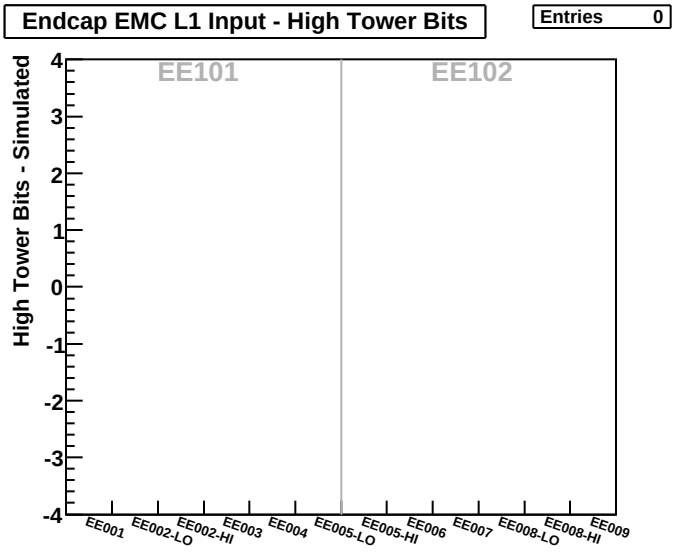

Endcap EMC L1 Input - Low Eta Sum
Entries 45108
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

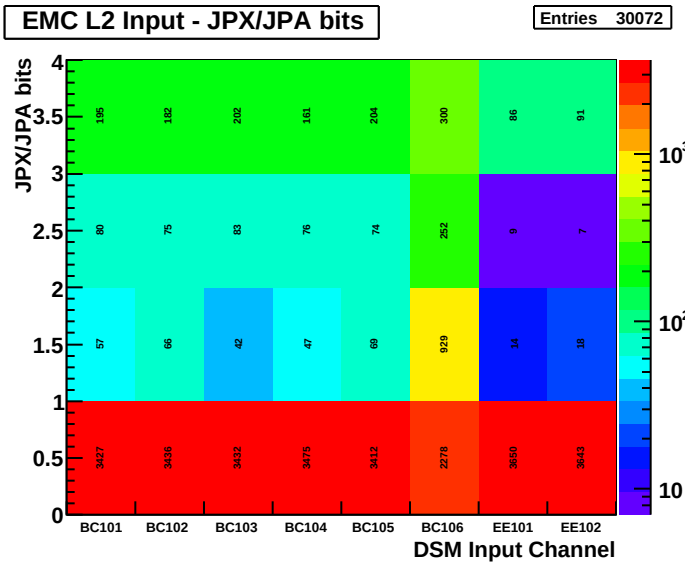

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

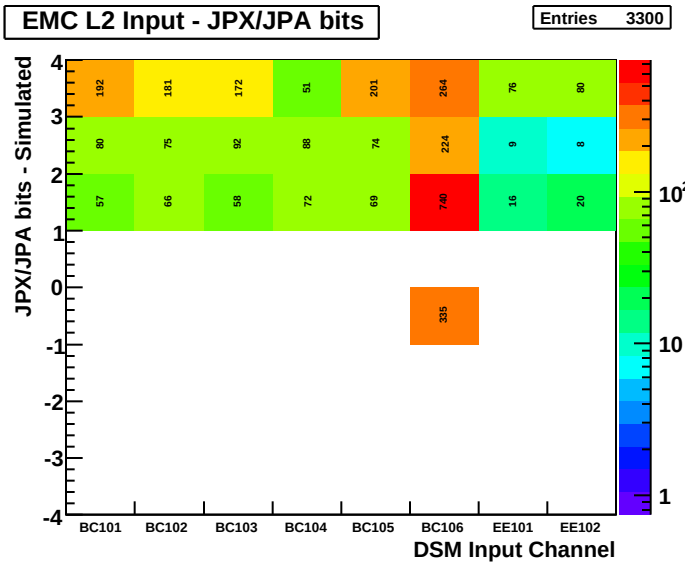

Endcap EMC L1 Input - High Eta Sum
Entries 45108
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

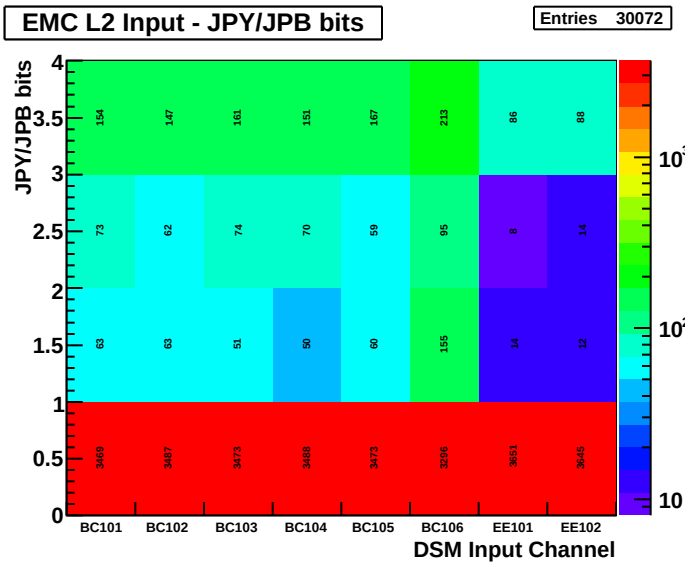

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

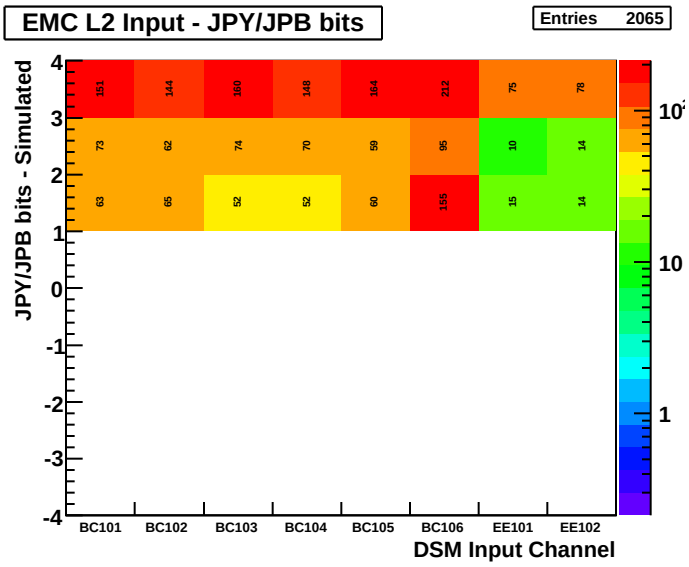

Endcap EMC L1 Input - High Tower Bits
Entries 45108
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

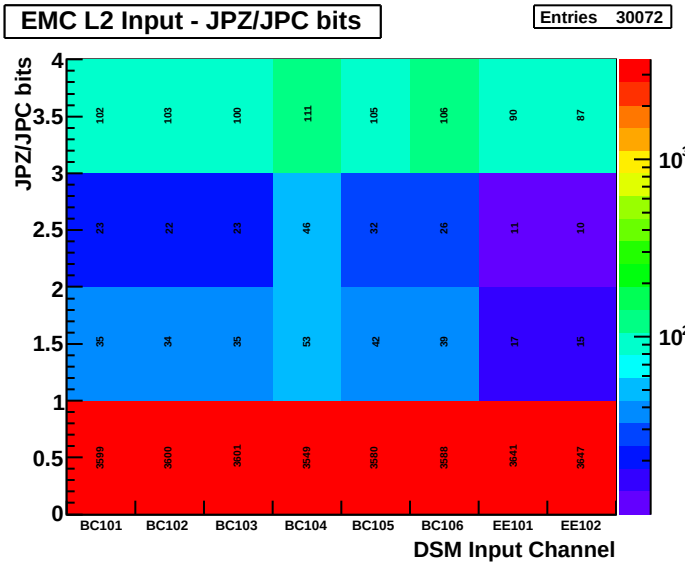

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

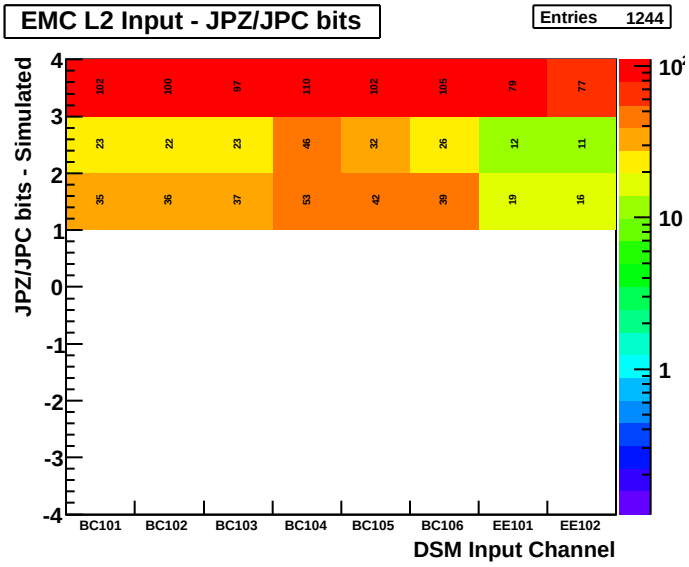

EMC L2 Input - JPX/JPA bits
Entries 30072
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
195 182 202 161 204 300 86 91
80 75 83 76 74 252 9 7
57 66 42 47 69 929 14 18
3427 3436 3432 3475 3412 2278 3550 3543

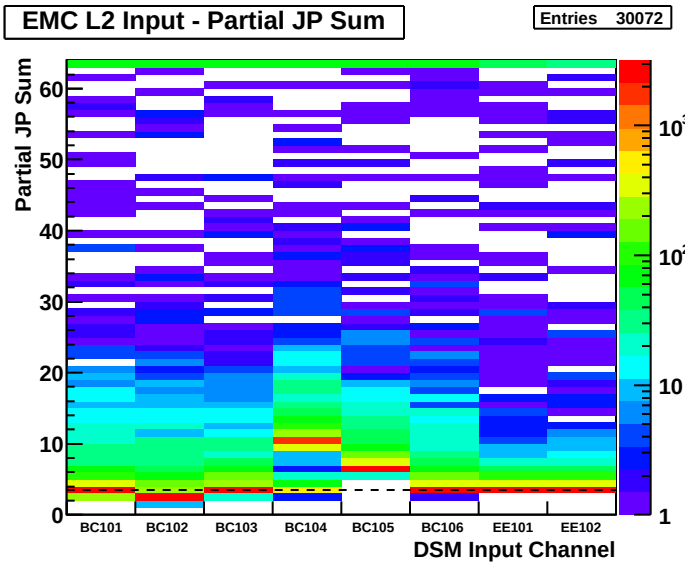

EMC L2 Input - JPX/JPA bits
Entries 3300
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
192 181 172 51 201 264 76 80
80 75 92 88 74 224 9 8
57 66 58 72 69 740 16 20
335

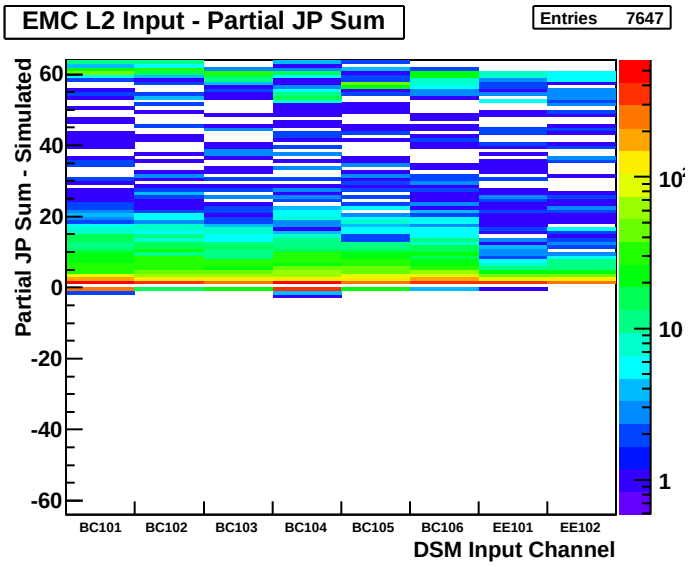

EMC L2 Input - JPY/JPB bits
Entries 30072
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
154 147 161 151 167 213 86 88
73 62 74 70 59 95 8 14
63 63 51 50 60 155 14 12
3469 3487 3473 3488 3473 3296 3551 3545

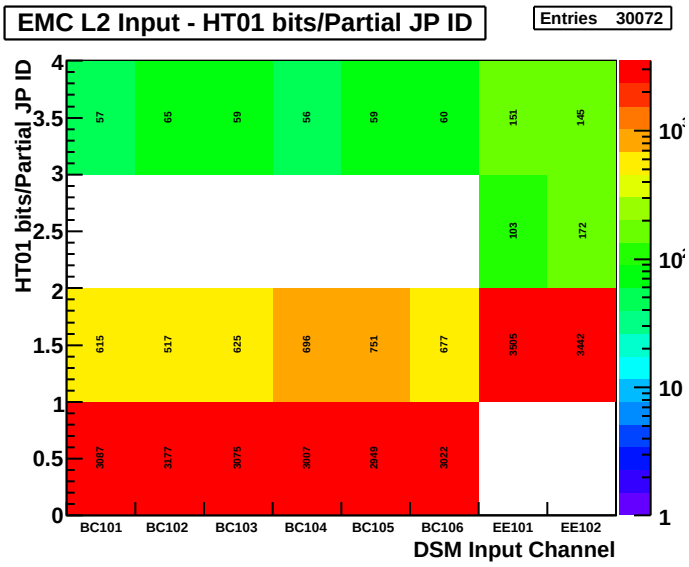

EMC L2 Input - JPY/JPB bits
Entries 2065
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
151 144 160 148 164 212 75 78
73 62 74 70 59 95 10 14
63 65 52 52 60 155 15 14

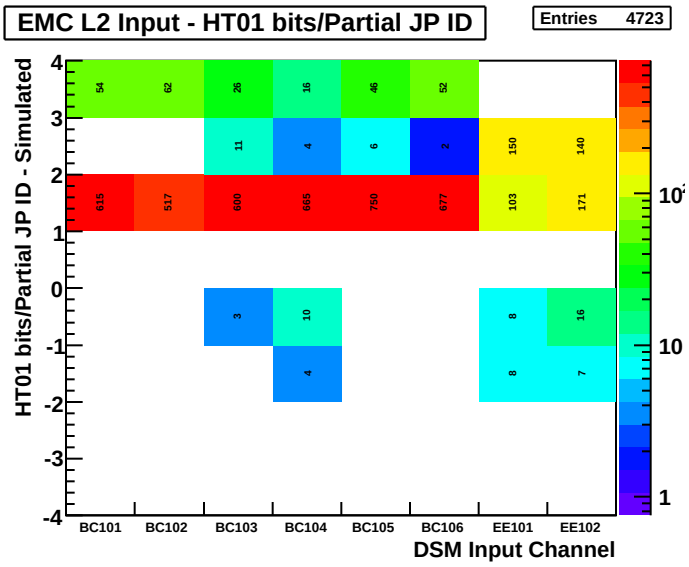

EMC L2 Input - JPZ/JPC bits
Entries 30072
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
102 103 100 111 105 106 90 87
23 22 23 46 32 26 11 10
35 34 35 53 42 39 17 15
3599 3600 3601 3549 3580 3588 3641 3647

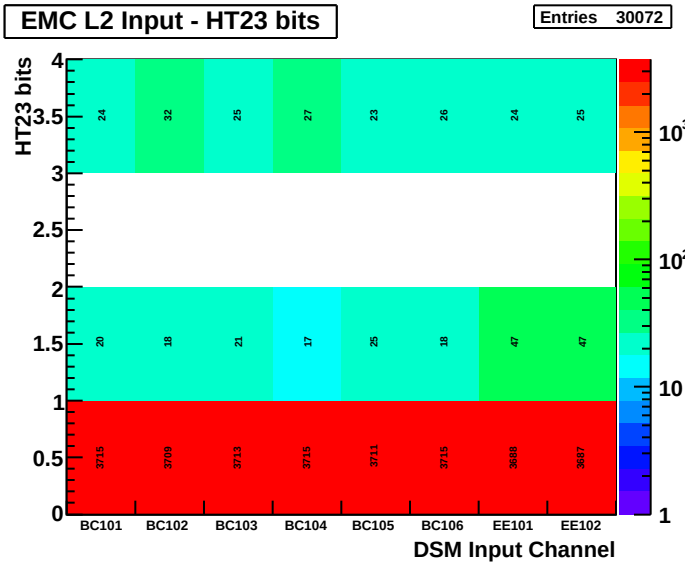

EMC L2 Input - JPZ/JPC bits
Entries 1244
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
102 100 97 110 102 105 79 77
23 22 23 46 32 26 12 11
35 36 37 53 42 39 19 16

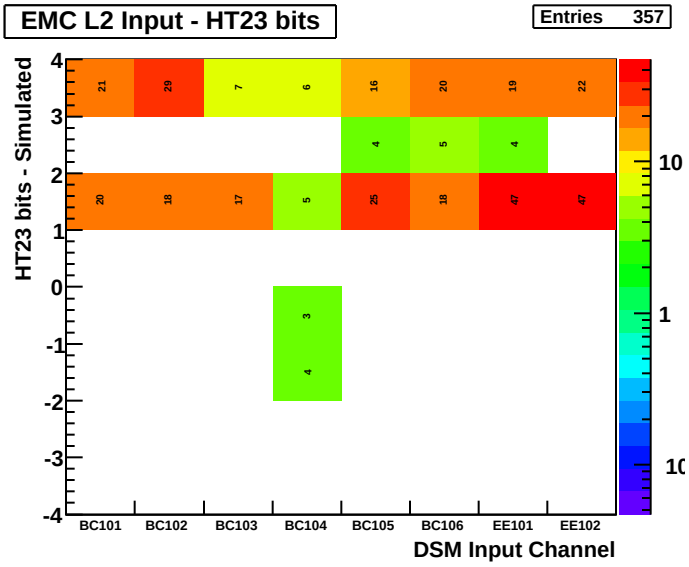

EMC L2 Input - Partial JP Sum
Entries 30072
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

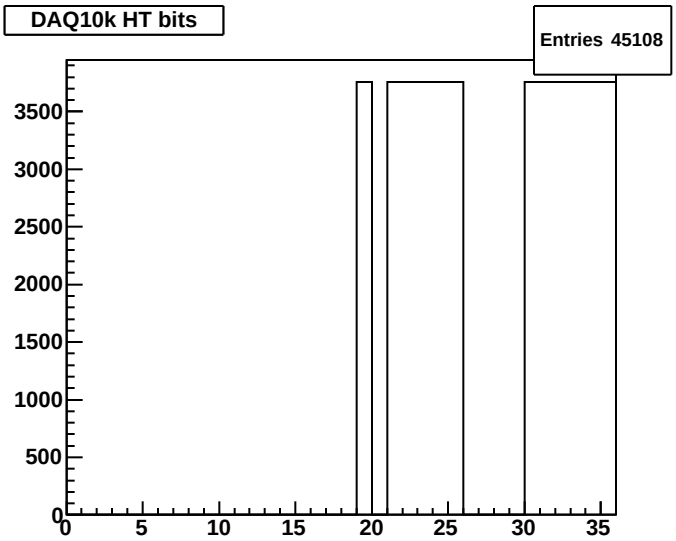

EMC L2 Input - Partial JP Sum
Entries 7647
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

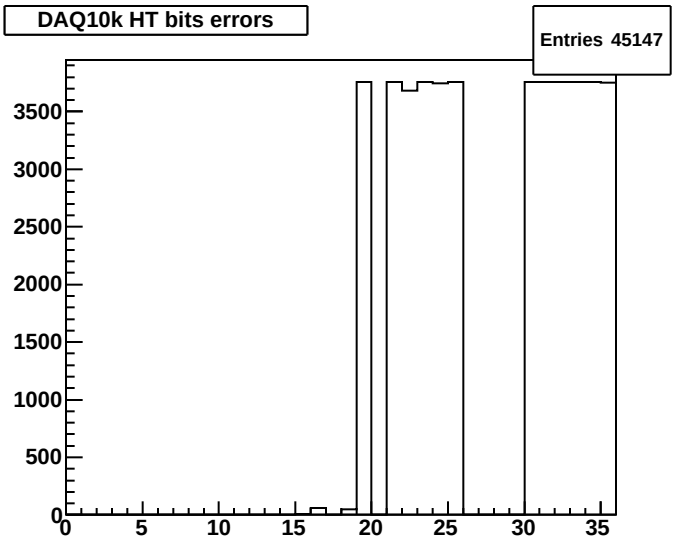

EMC L2 Input - HT01 bits/Partial JP ID
Entries 30072
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

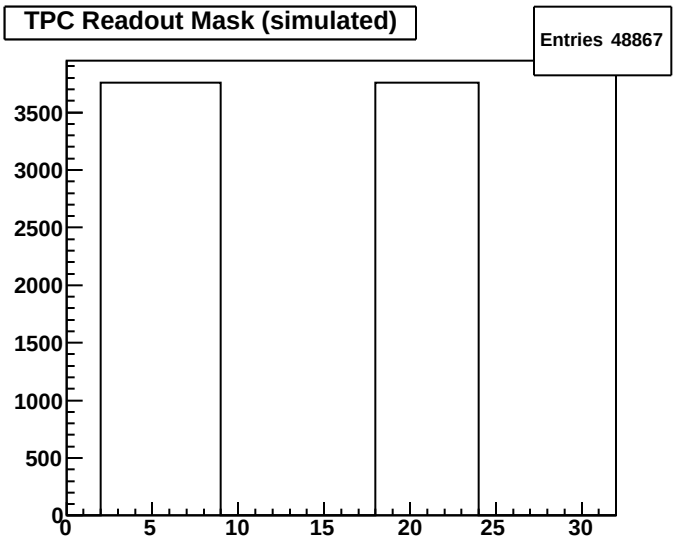

EMC L2 Input - HT01 bits/Partial JP ID
Entries 4723
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

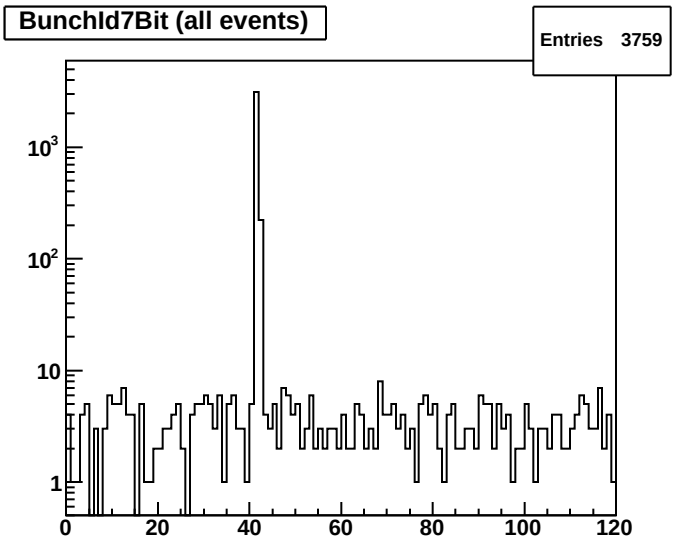

EMC L2 Input - HT23 bits
Entries 30072
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

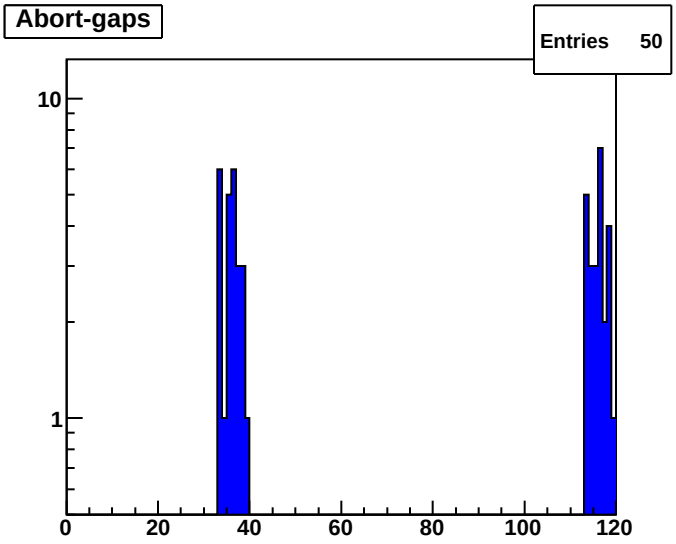

EMC L2 Input - HT23 bits
Entries 357
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

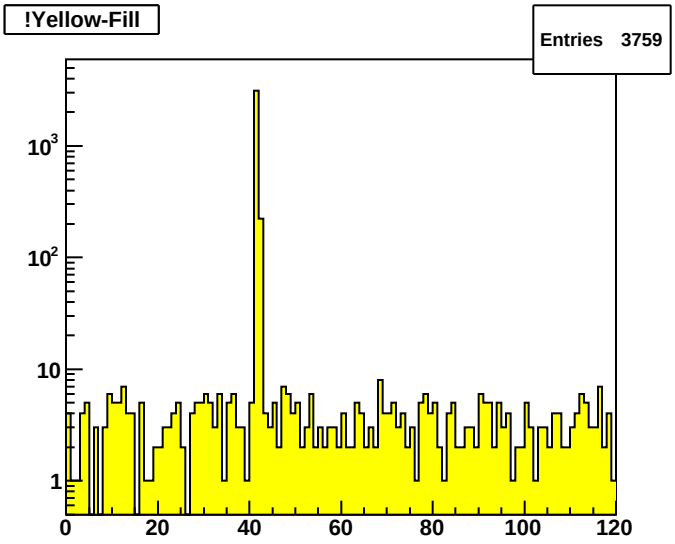

DAQ10k HT bits
Entries 45108

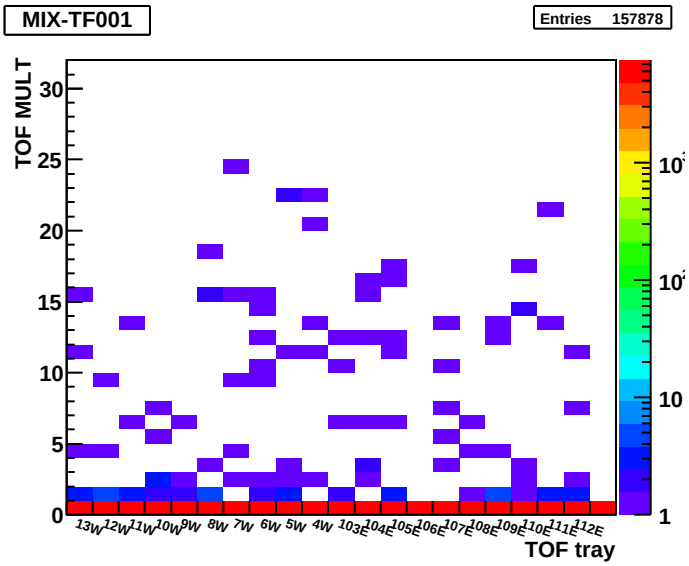

DAQ10k HT bits errors
Entries 45147

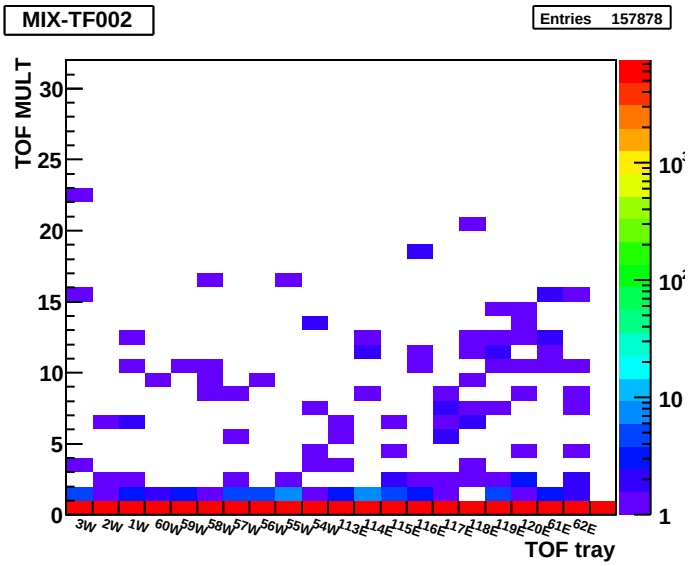

TPC Readout Mask (simulated)
Entries 48867

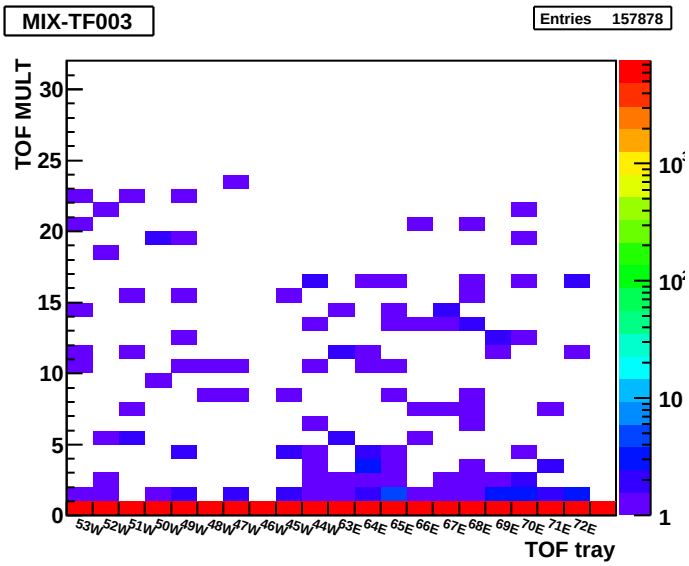

BunchId7Bit (all events)
Entries 3759

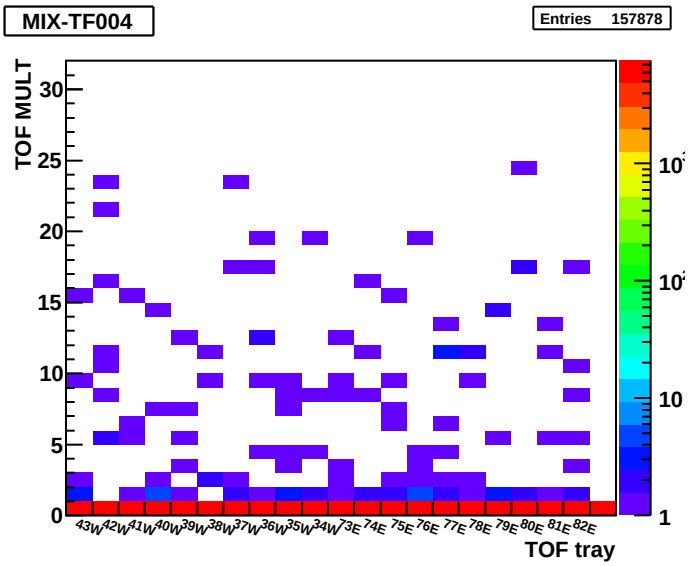

Abort-gaps
Entries 50

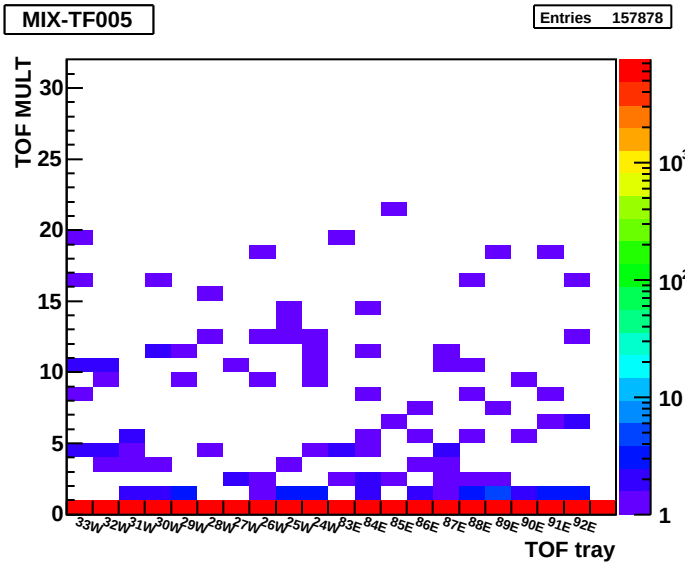

!Yellow-Fill
Entries 3759

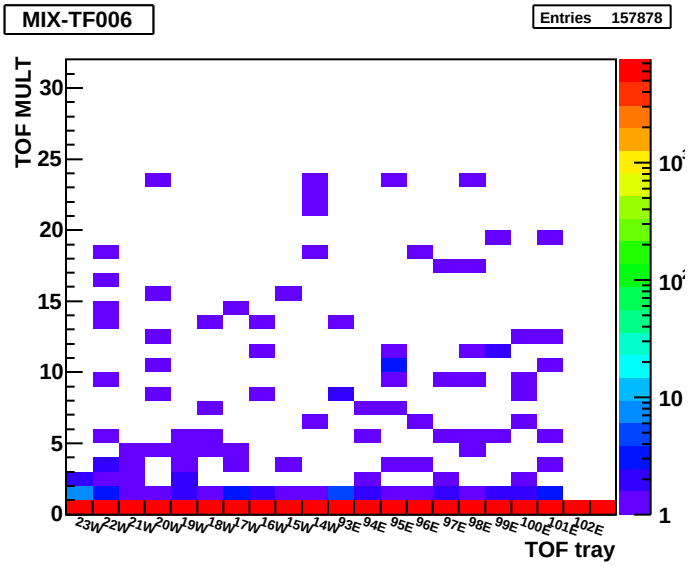

MIX-TF001
Entries 157878
TOF MULT
TOF tray

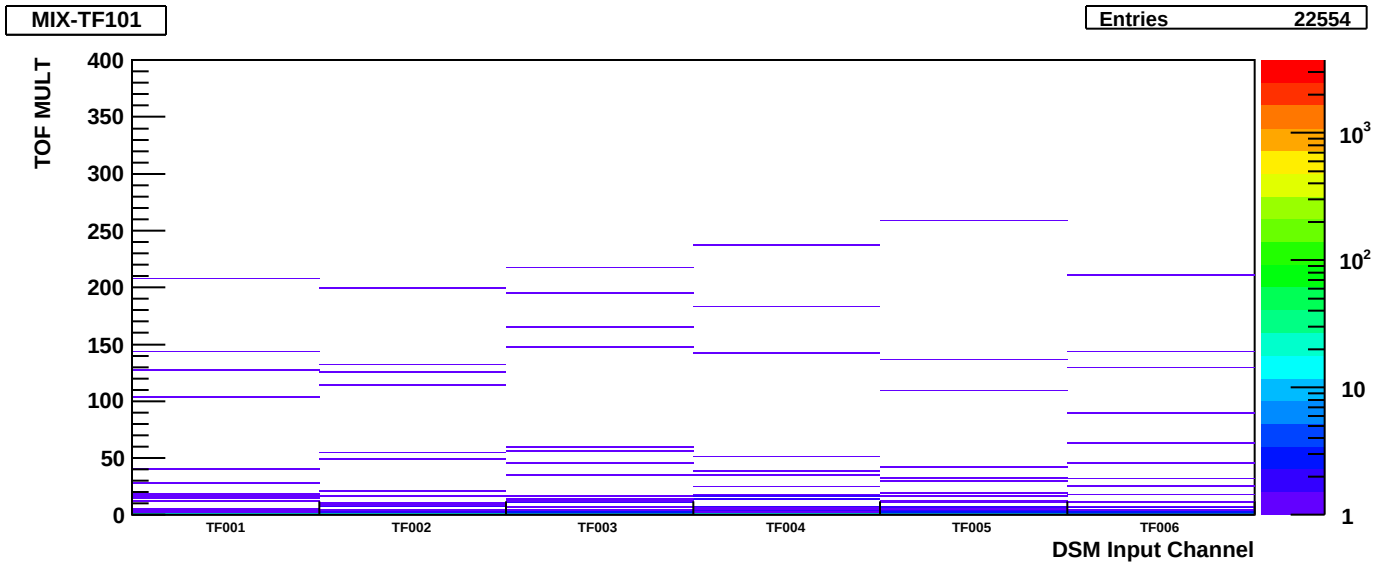

MIX-TF002
Entries 157878
TOF MULT
TOF tray

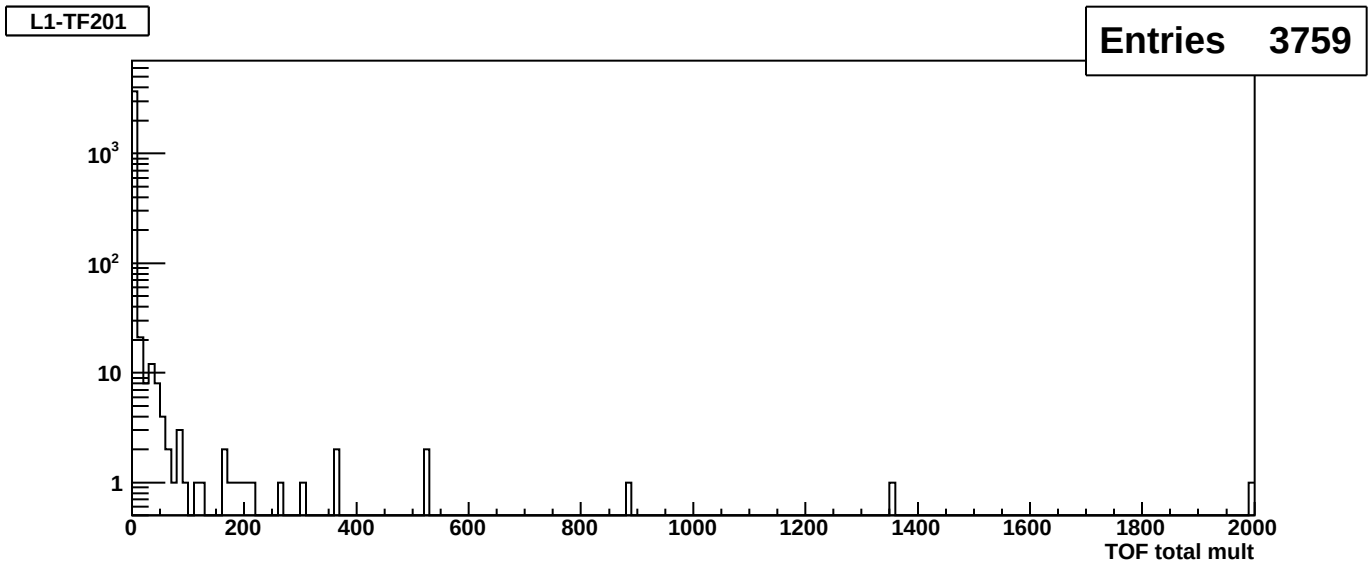

MIX-TF003
Entries 157878
TOF MULT
TOF tray

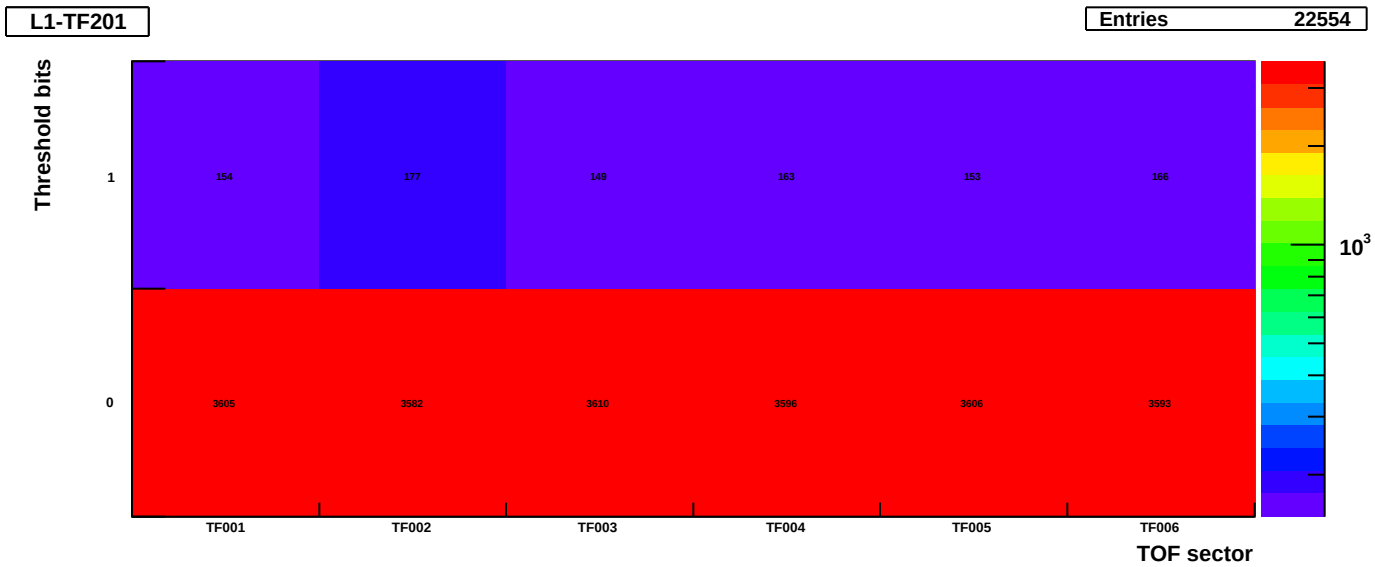

MIX-TF004
Entries 157878
TOF MULT
TOF tray

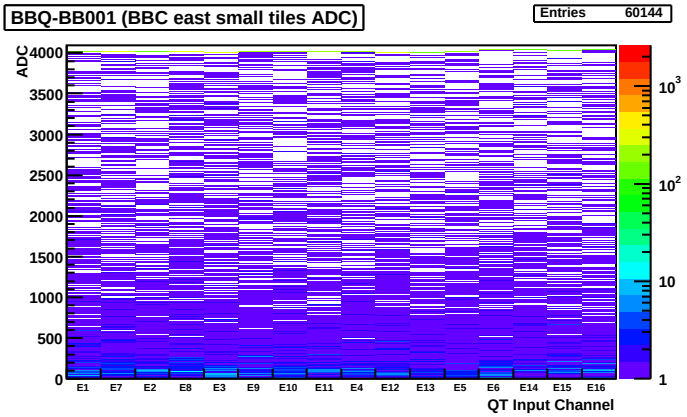

MIX-TF005
Entries 157878
TOF MULT
TOF tray

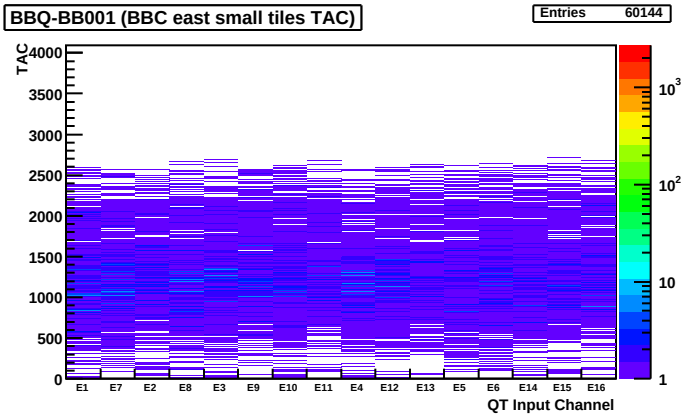

MIX-TF006
Entries 157878
TOF MULT
TOF tray

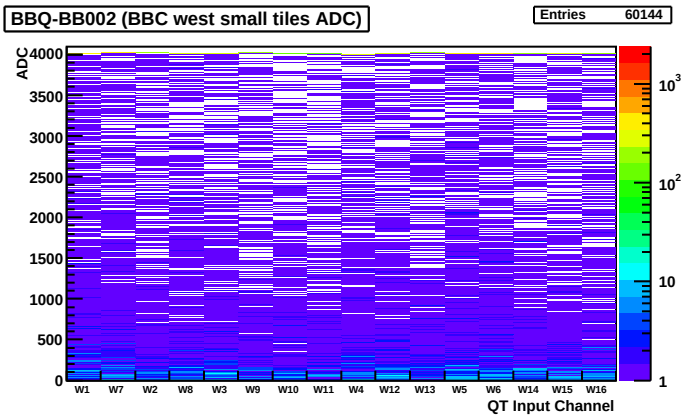

MIX-TF101
Entries 22554
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

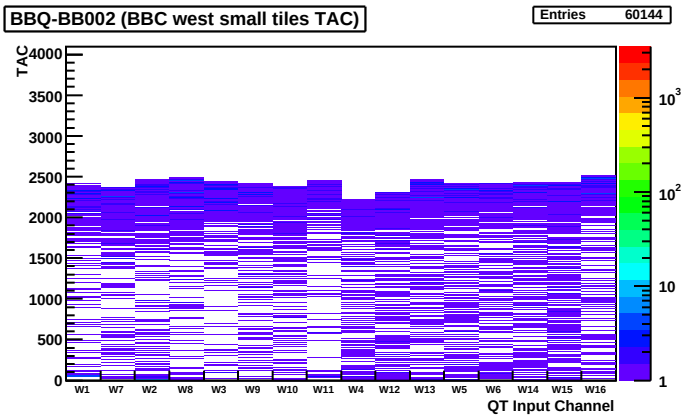

L1-TF201
Entries 3759
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

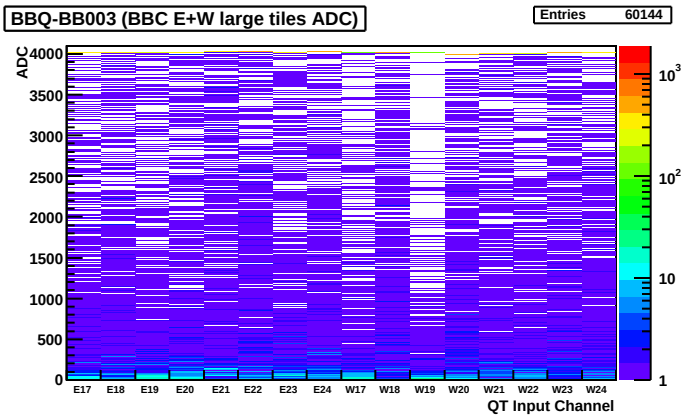

L1-TF201
Entries 22554
Threshold bits
1
0
154
177
149
163
153
166
3605
3582
3610
3596
3606
3593
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^3

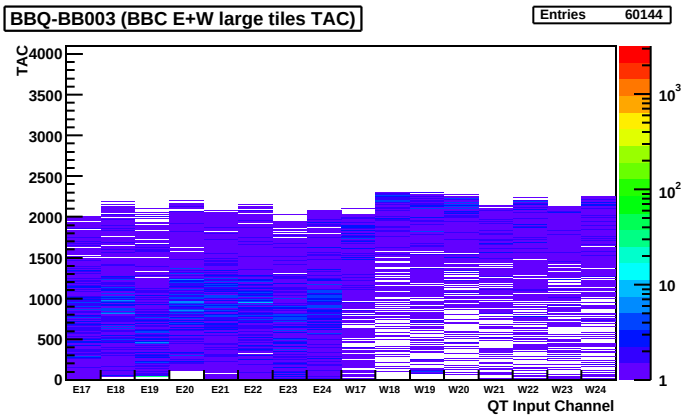

BBQ-BB001 (BBC east small tiles ADC)
Entries 60144
ADC
QT Input Channel

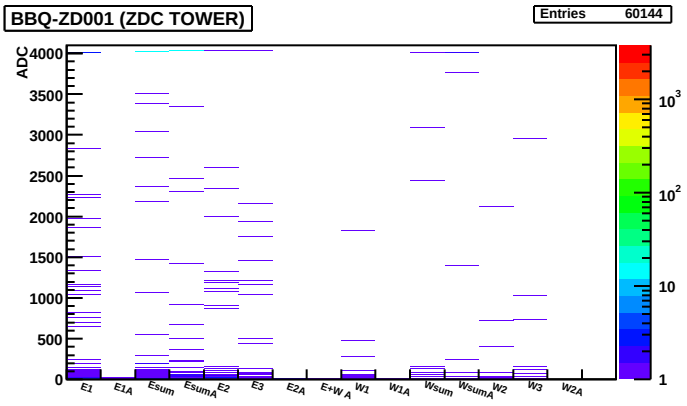

BBQ-BB001 (BBC east small tiles TAC)
Entries 60144
TAC
QT Input Channel

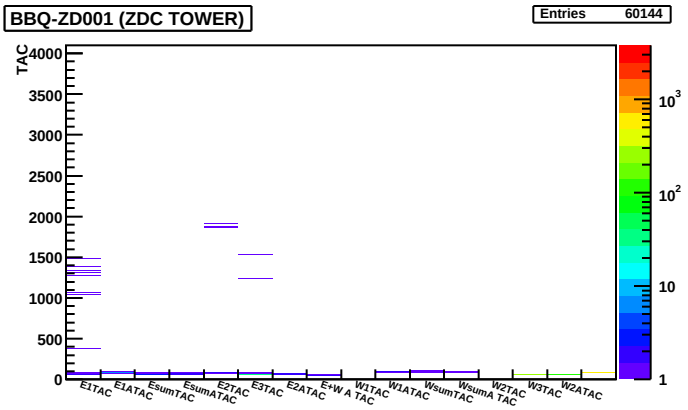

BBQ-BB002 (BBC west small tiles ADC)
Entries 60144
ADC
QT Input Channel

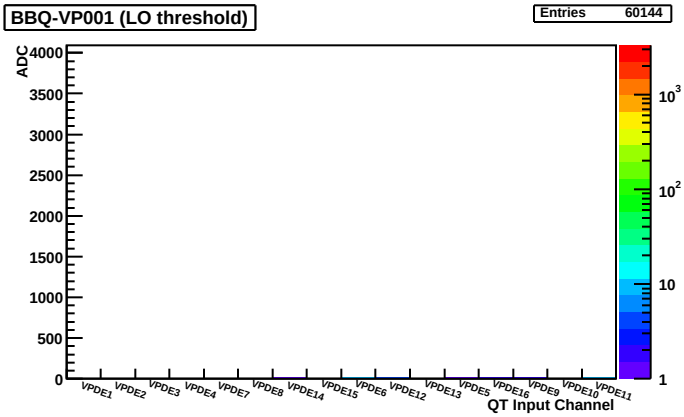

BBQ-BB002 (BBC west small tiles TAC)
Entries 60144
TAC
QT Input Channel

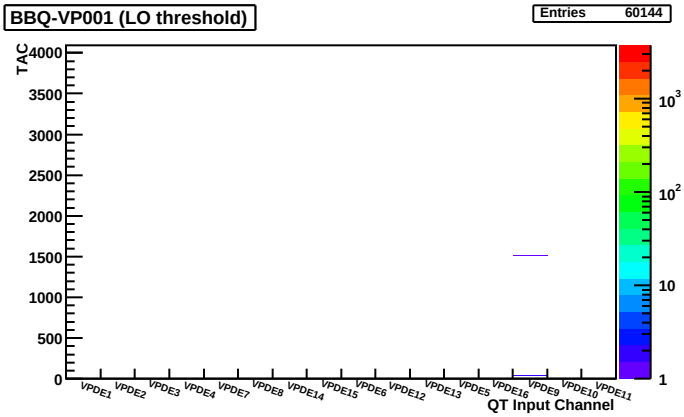

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 60144
ADC
QT Input Channel

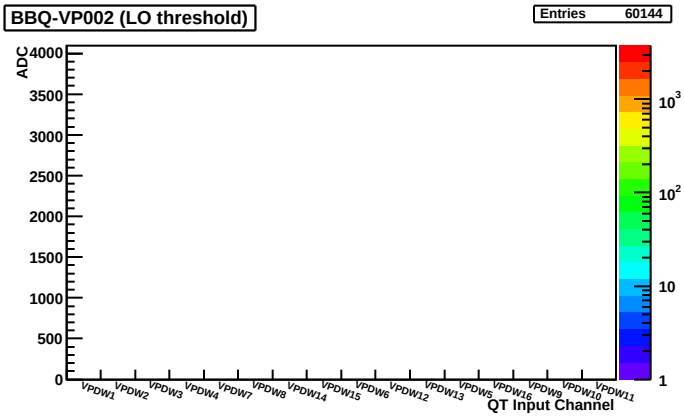

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 60144
TAC
QT Input Channel

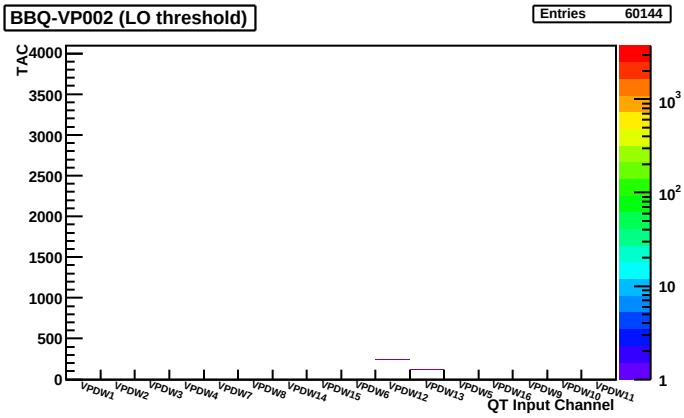

BBQ-ZD001 (ZDC TOWER)
Entries 60144
ADC

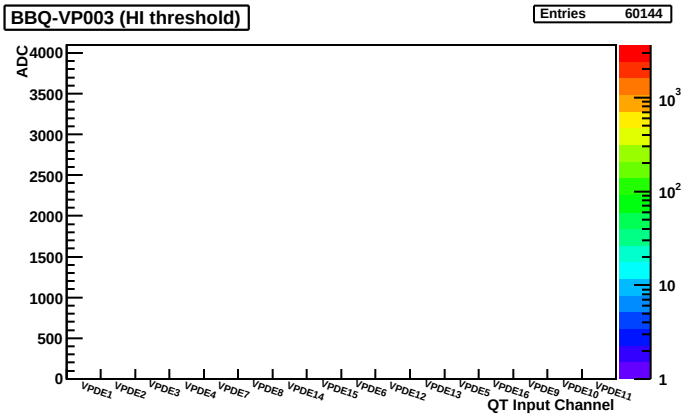

BBQ-ZD001 (ZDC TOWER)
Entries 60144
TAC

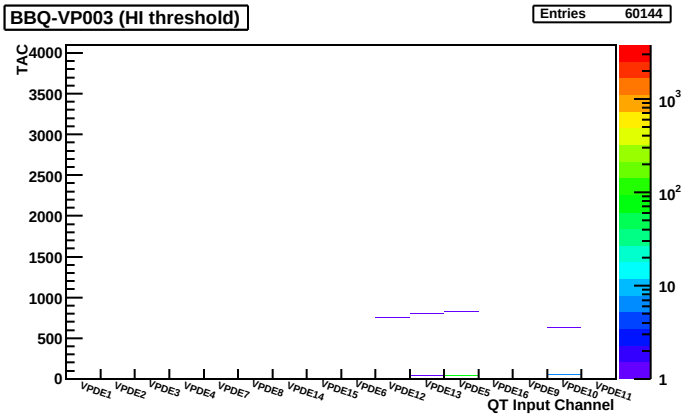

BBQ-VP001 (LO threshold)
Entries 60144
ADC
QT Input Channel

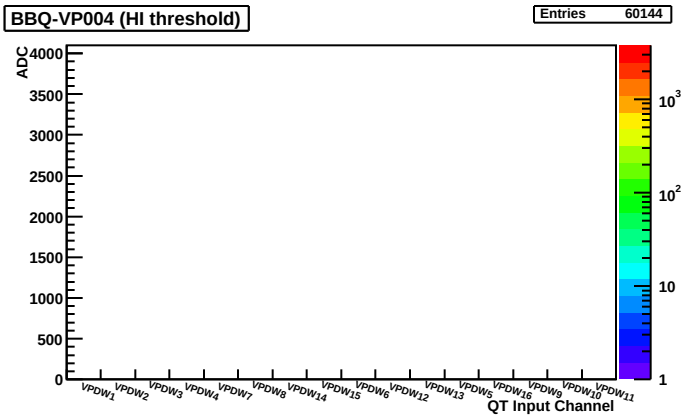

BBQ-VP001 (LO threshold)
Entries 60144
TAC
QT Input Channel

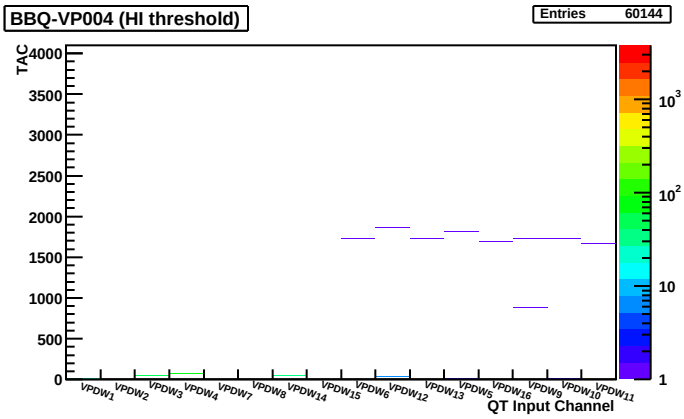

BBQ-VP002 (LO threshold)
Entries 60144
ADC
QT Input Channel

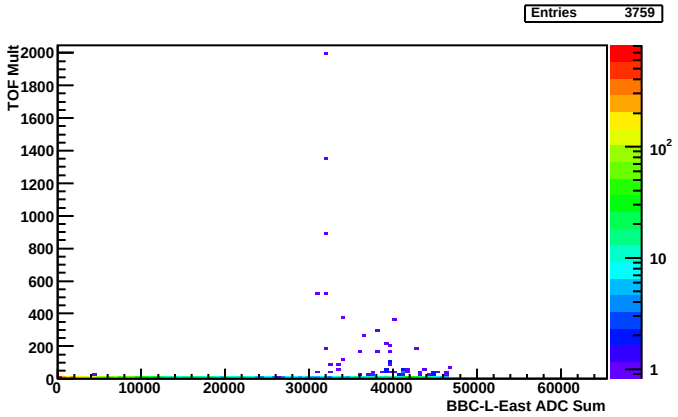

BBQ-VP002 (LO threshold)
Entries 60144
TAC
QT Input Channel

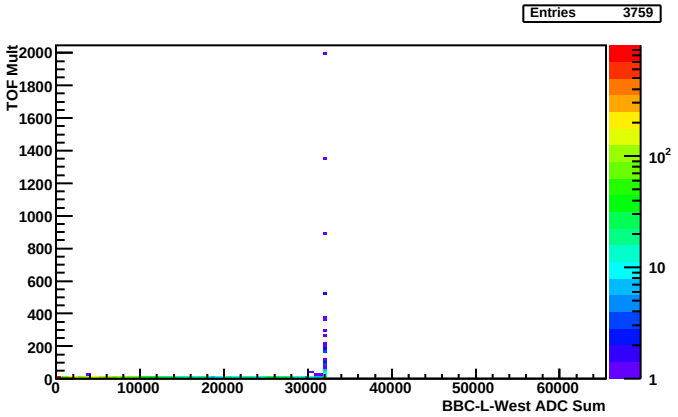

BBQ-VP003 (HI threshold)
Entries 60144
ADC
QT Input Channel

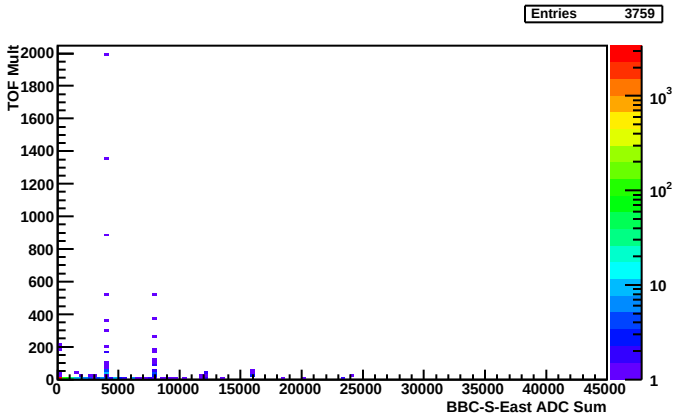

BBQ-VP003 (HI threshold)
Entries 60144
TAC
QT Input Channel

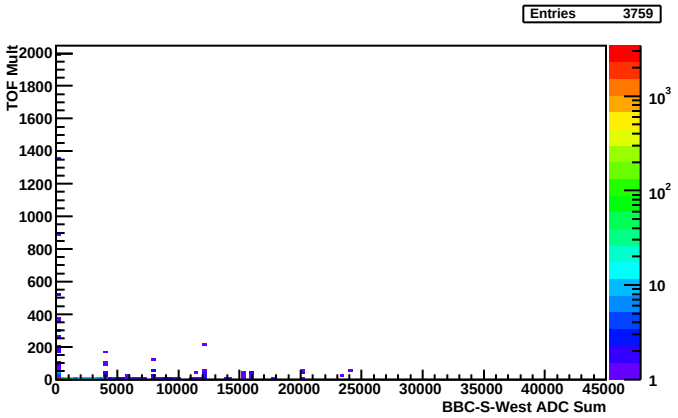

BBQ-VP004 (HI threshold)
Entries 60144
ADC
QT Input Channel

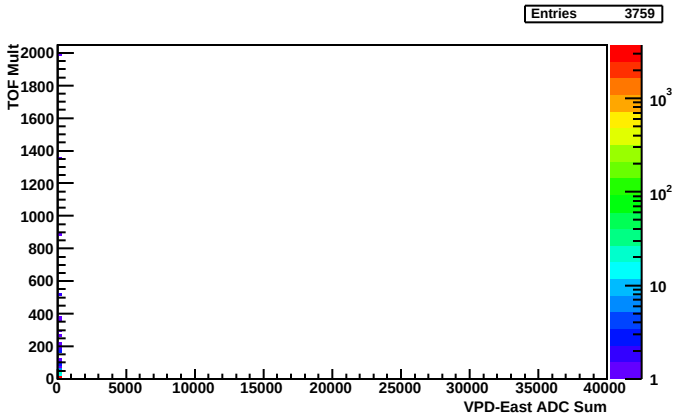

BBQ-VP004 (HI threshold)
Entries 60144
TAC
QT Input Channel

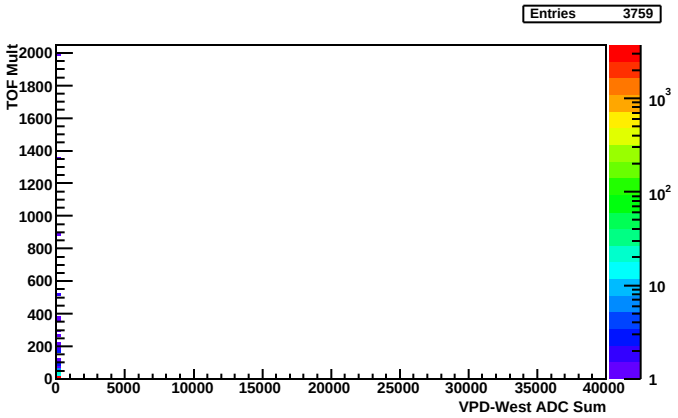

Entries 3759
TOF Mult
BBC-L-East ADC Sum

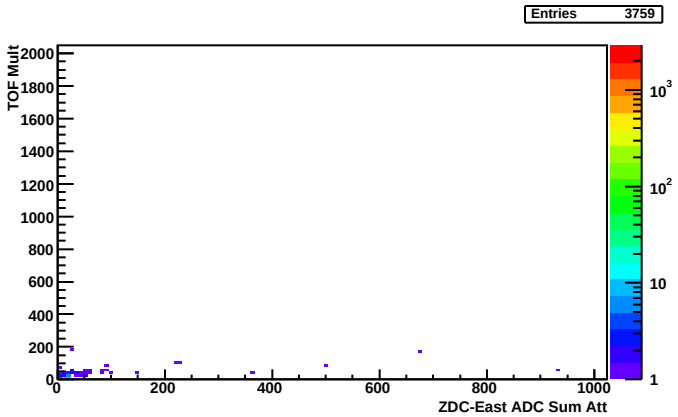

Entries 3759
TOF Mult
BBC-L-West ADC Sum

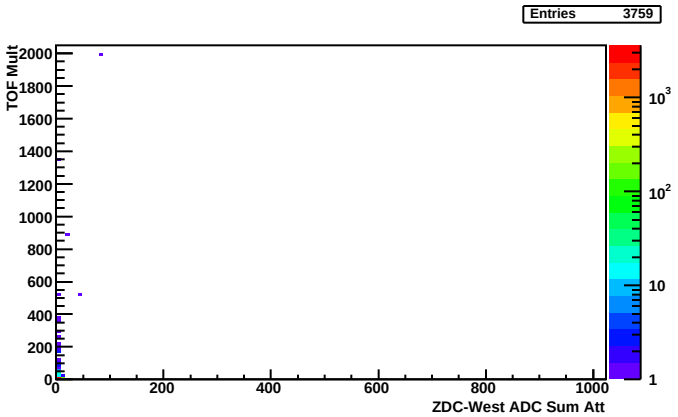

Entries 3759
TOF Mult
BBC-S-East ADC Sum

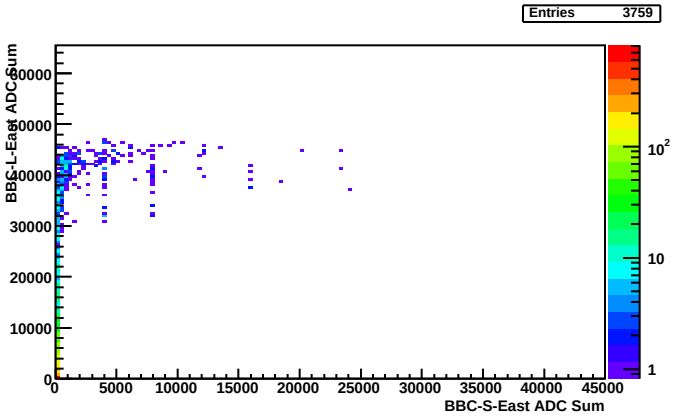

Entries 3759
TOF Mult
BBC-S-West ADC Sum

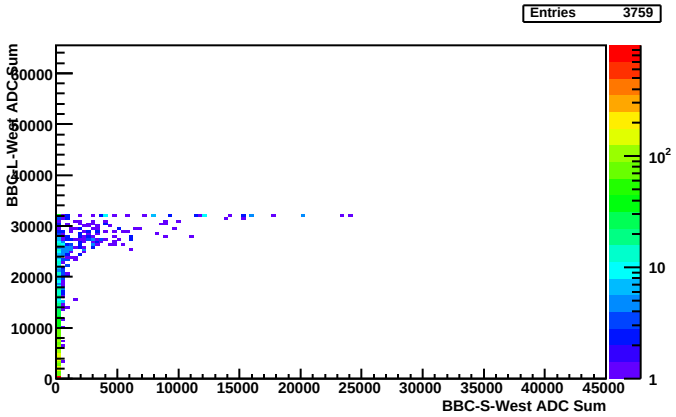

Entries 3759
TOF Mult
VPD-East ADC Sum

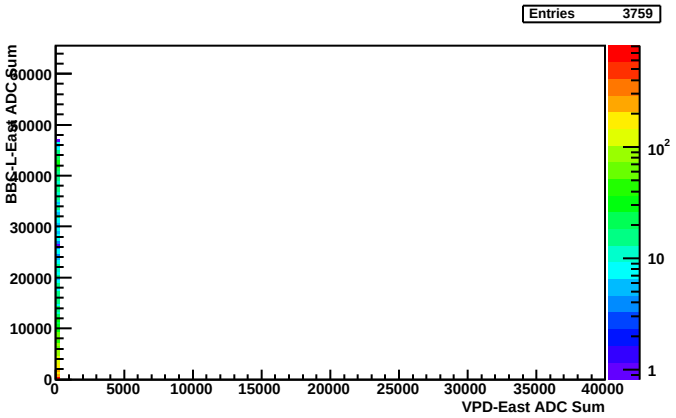

Entries 3759
TOF Mult
VPD-West ADC Sum

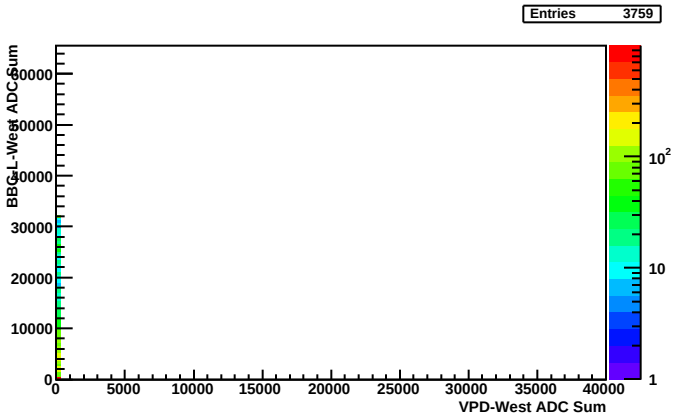

Entries 3759
TOF Mult
ZDC-East ADC Sum Att

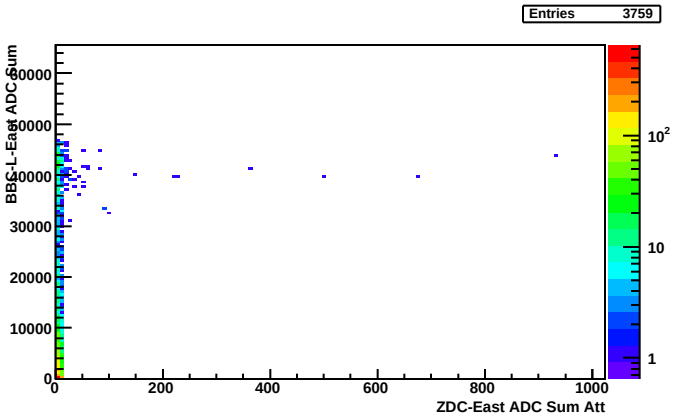

Entries 3759
TOF Mult
ZDC-West ADC Sum Att

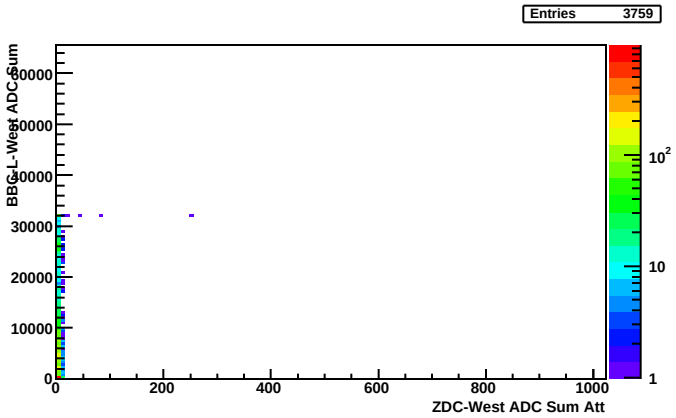

Entries 3759
BBC-L-East ADC Sum
BBC-S-East ADC Sum

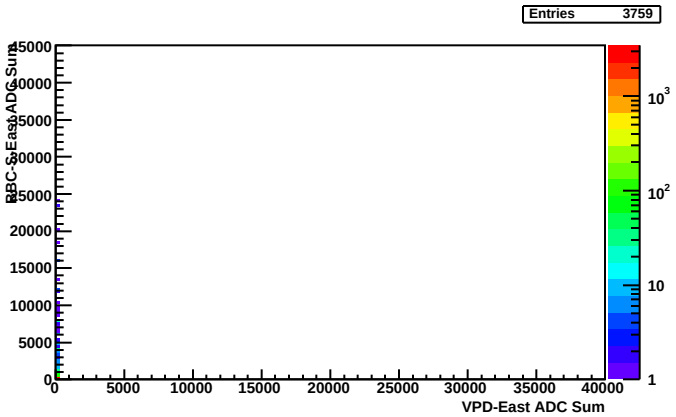

Entries 3759
BBC-L-West ADC Sum
BBC-S-West ADC Sum

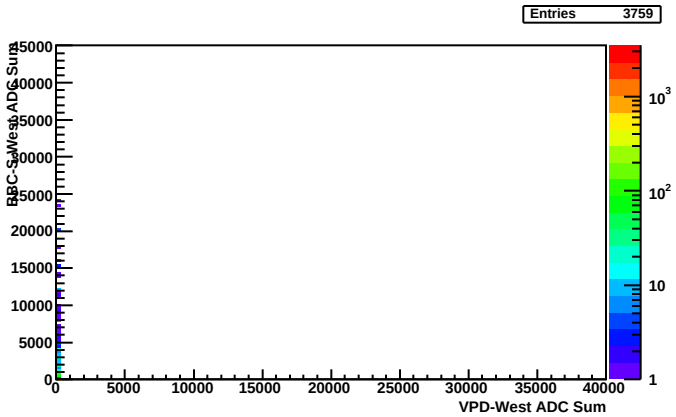

Entries 3759
BBC-L-East ADC Sum
VPD-East ADC Sum

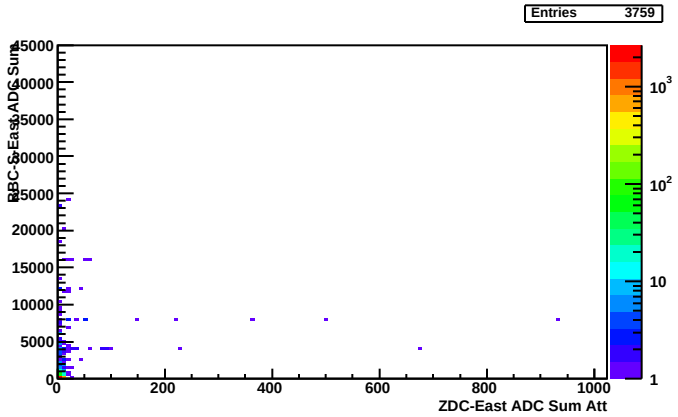

Entries 3759
BBC-L-West ADC Sum
VPD-West ADC Sum

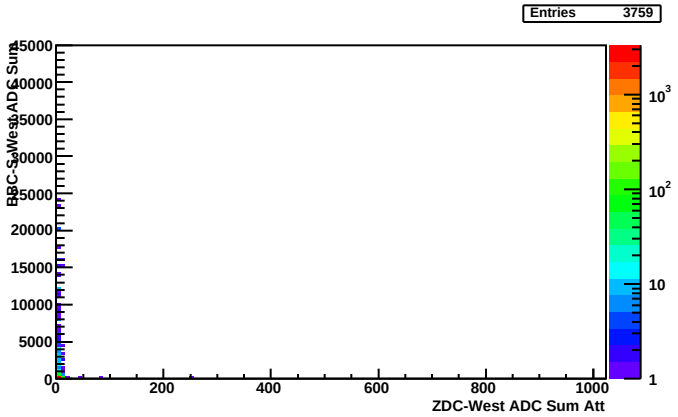

Entries 3759
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

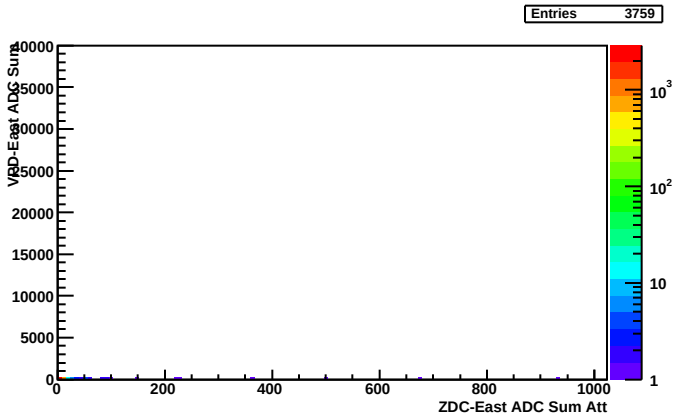

Entries 3759
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

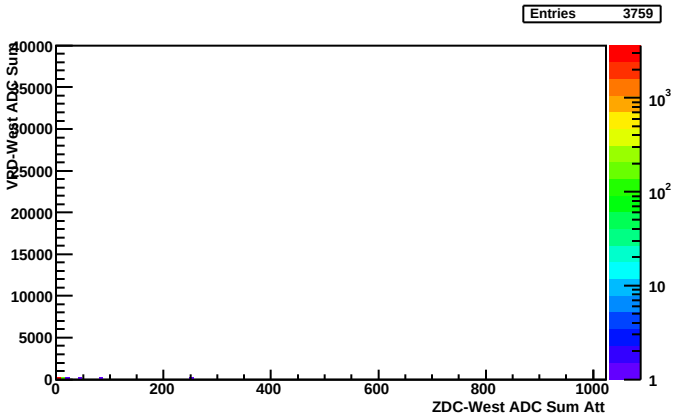

Entries 3759
BBC-S-East ADC Sum
VPD-East ADC Sum

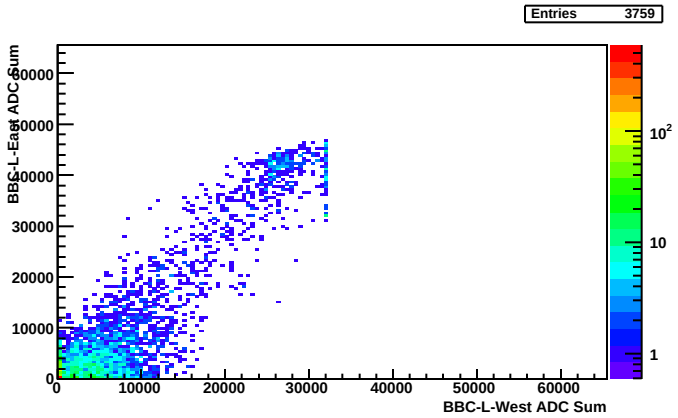

Entries 3759
BBC-S-West ADC Sum
VPD-West ADC Sum

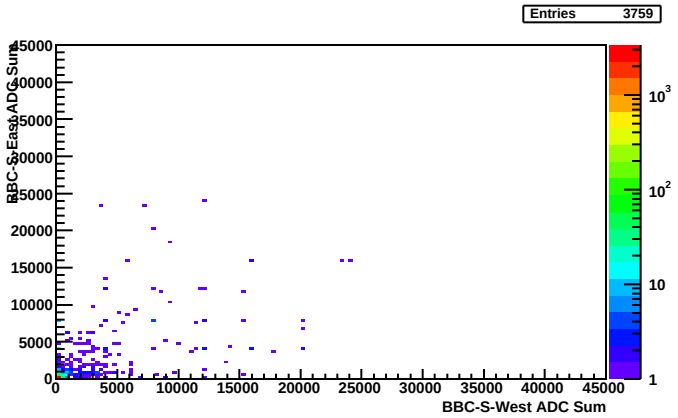

Entries 3759
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

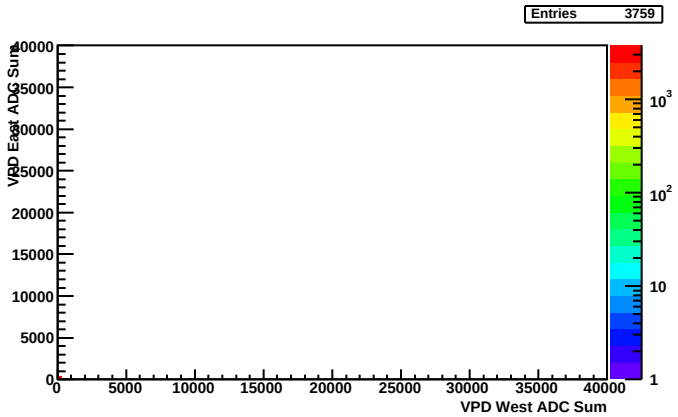

Entries 3759
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

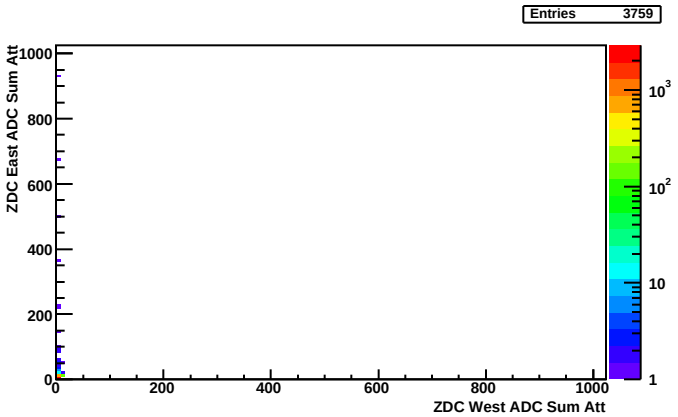

Entries 3759
VPD-East ADC Sum
ZDC-East ADC Sum Att

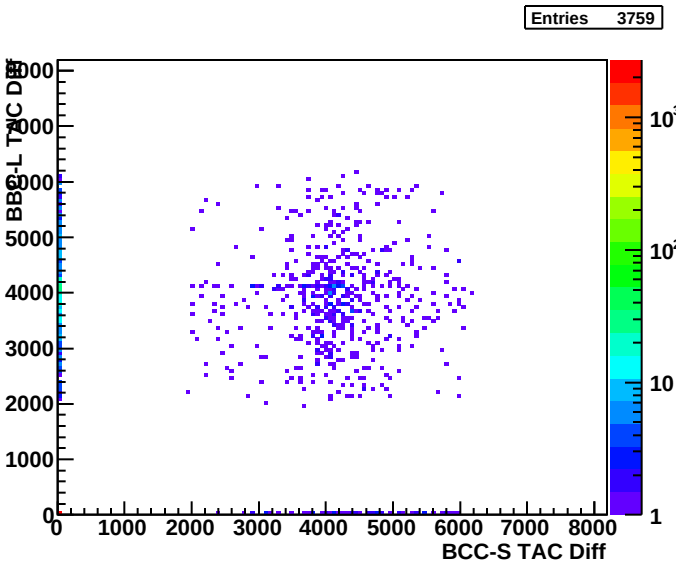

Entries 3759
VPD-West ADC Sum
ZDC-West ADC Sum Att

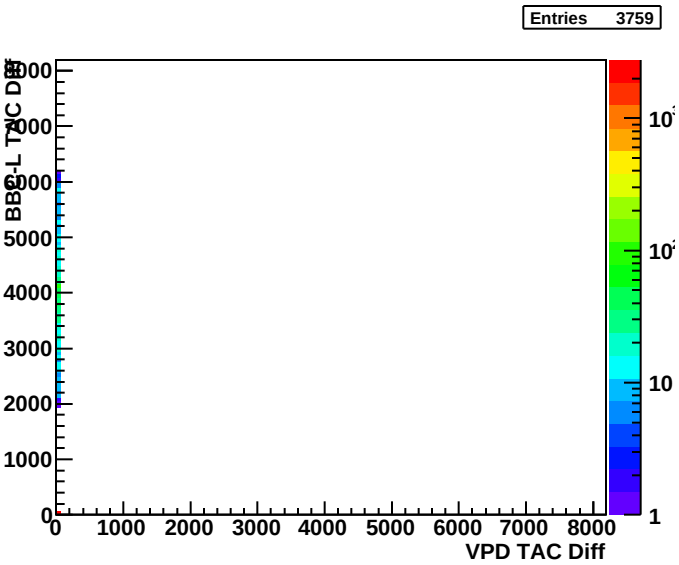

Entries 3759
BBC-L-East ADC Sum
BBC-L-West ADC Sum

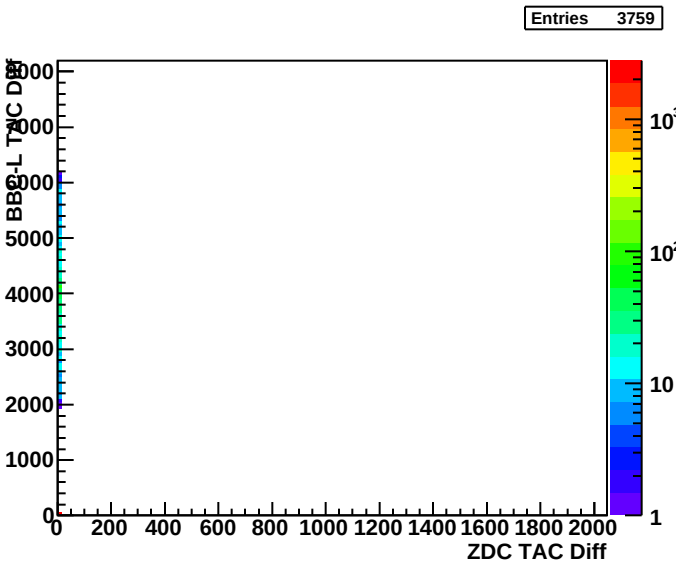

Entries 3759
BBC-S-East ADC Sum
BBC-S-West ADC Sum

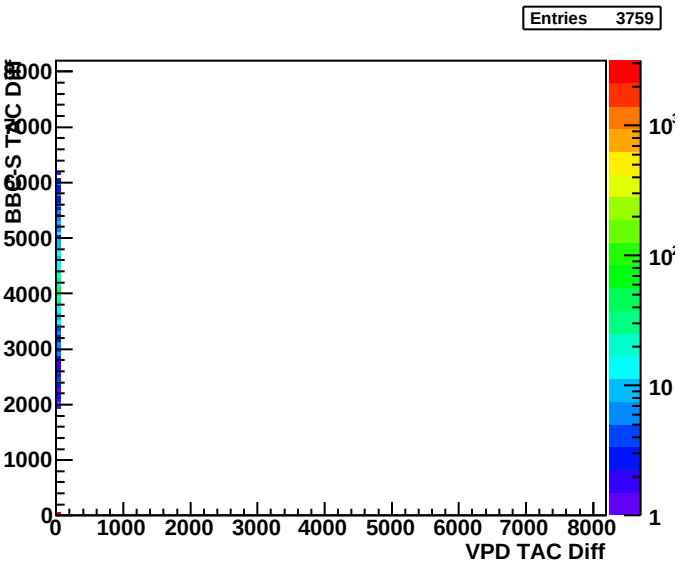

Entries 3759
VPD East ADC Sum
VPD West ADC Sum

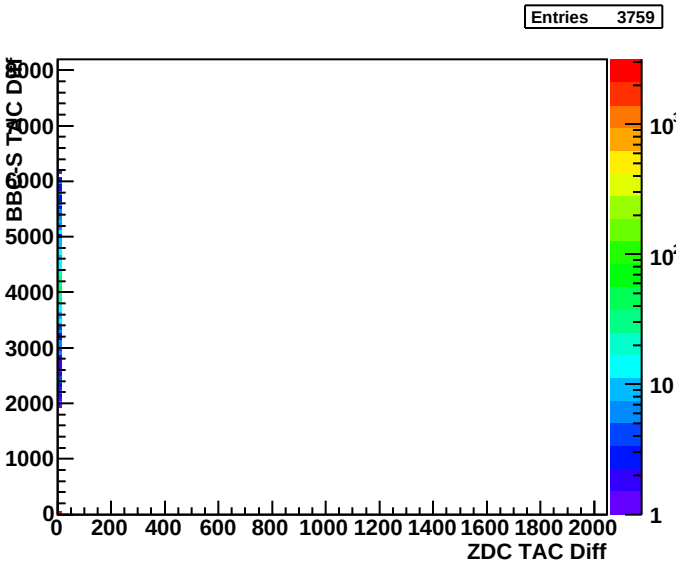

Entries 3759
ZDC East ADC Sum Att
ZDC West ADC Sum Att

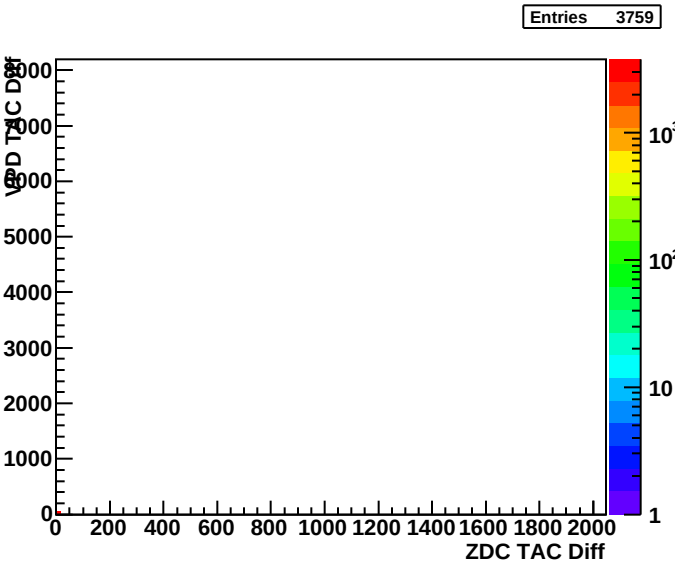

Entries 3759
BBC-L TAC Diff
BCC-S TAC Diff

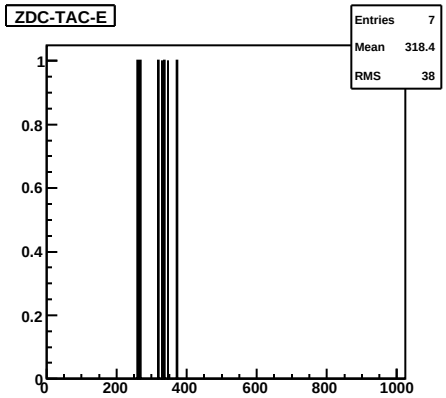

Entries 3759
BBC-L TAC Diff
VPD TAC Diff

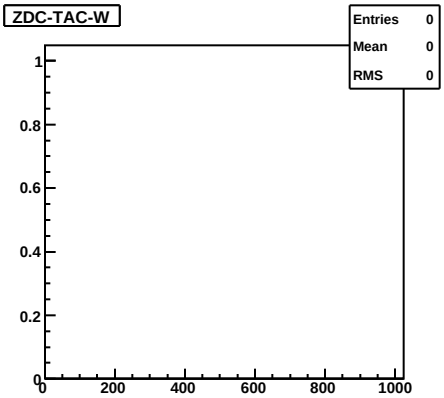

Entries 3759
BBC-L TAC Diff
ZDC TAC Diff

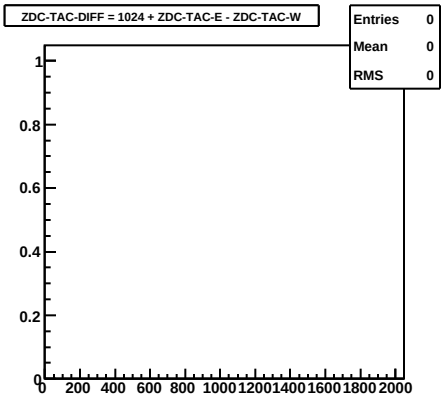

Entries 3759
BBC-S TAC Diff
VPD TAC Diff

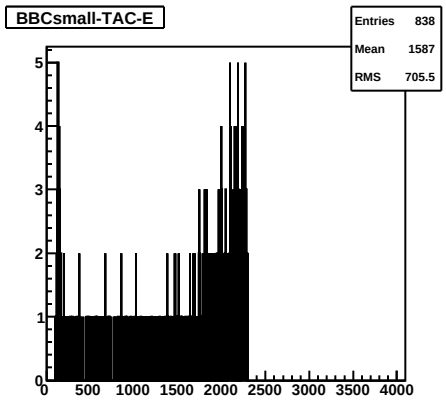

Entries 3759
BBC-S TAC Diff
ZDC TAC Diff

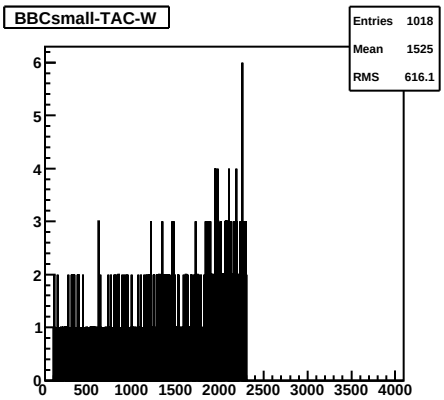

Entries 3759
VPD TAC Diff
ZDC TAC Diff

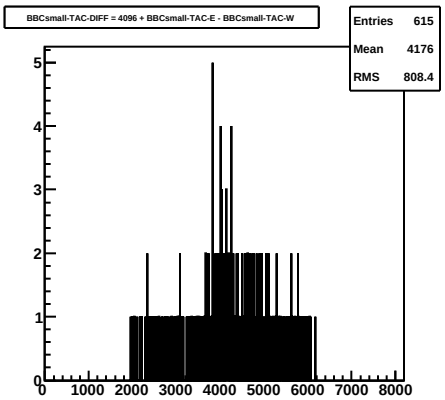

ZDC-TAC-E
Entries 7
Mean 318.4
RMS 38

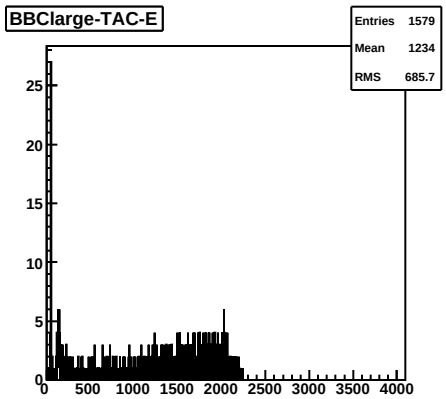

ZDC-TAC-W
Entries 0
Mean 0
RMS 0

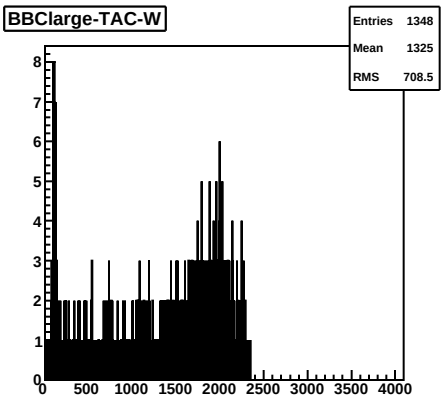

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 0
Mean 0
RMS 0

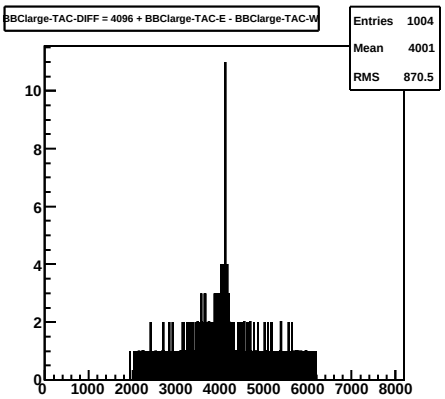

BBCsmall-TAC-E
Entries 838
Mean 1587
RMS 705.5

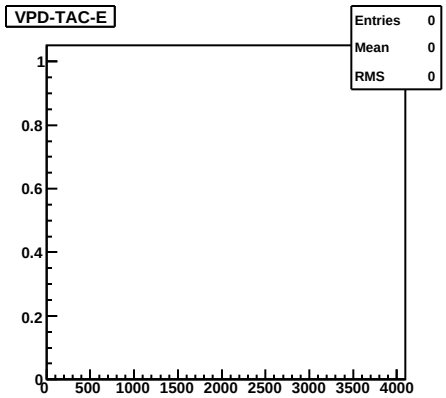

BBCsmall-TAC-W
Entries 1018
Mean 1525
RMS 616.1

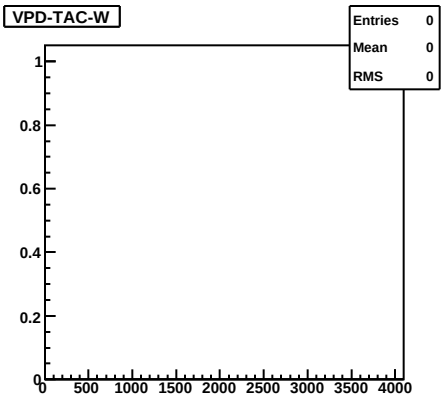

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 615
Mean 4176
RMS 808.4

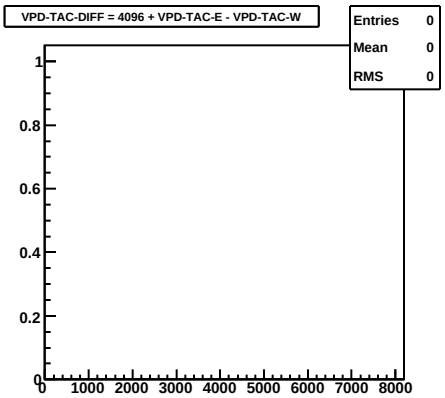

BBClarge-TAC-E
Entries 1579
Mean 1234
RMS 685.7

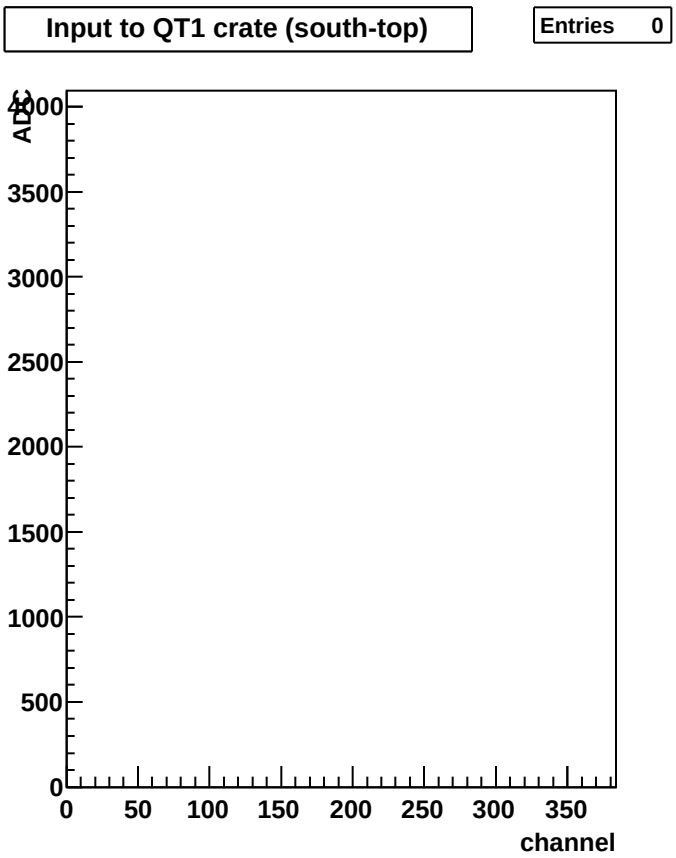

BBClarge-TAC-W
Entries 1348
Mean 1325
RMS 708.5

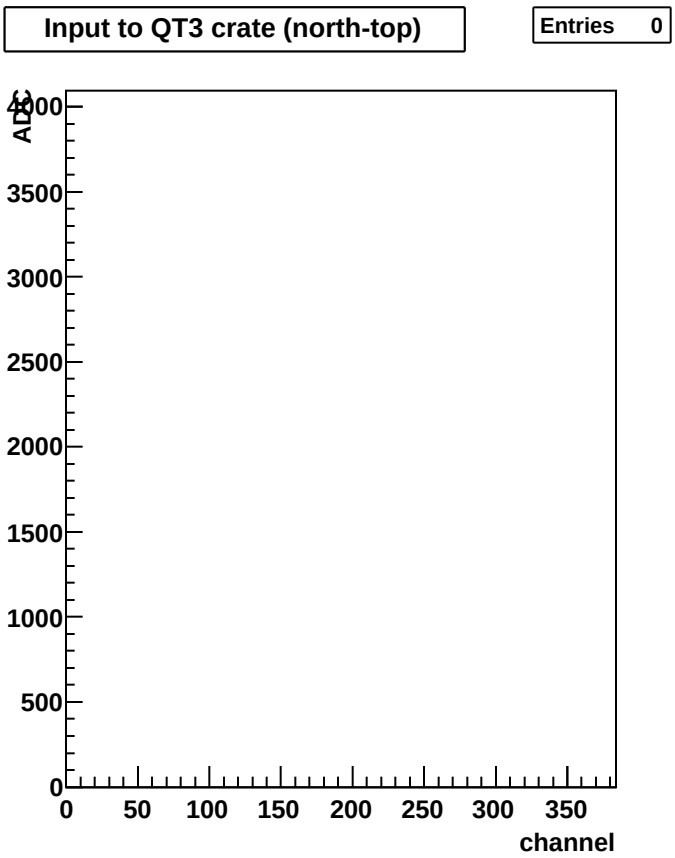

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 1004
Mean 4001
RMS 870.5

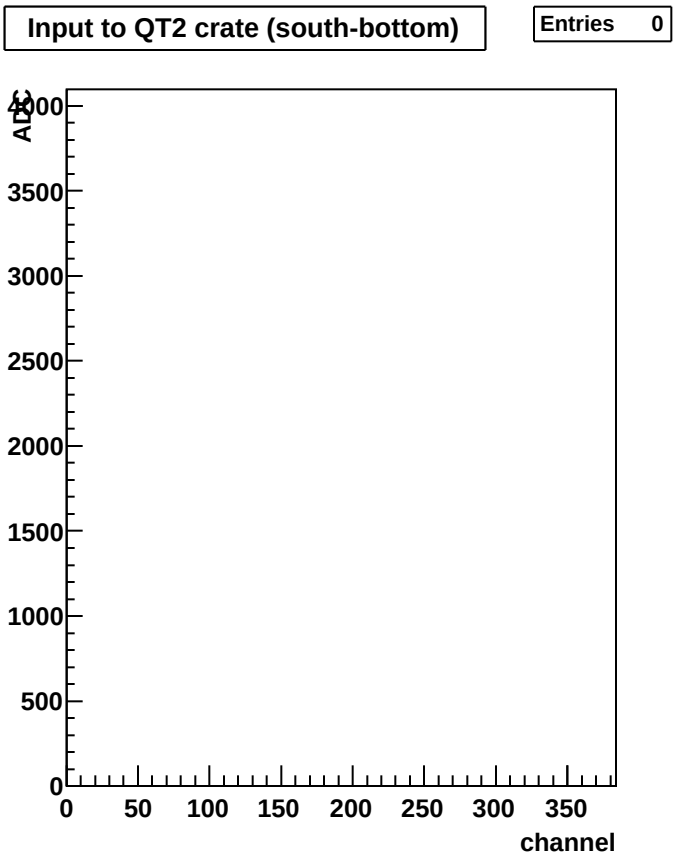

VPD-TAC-E
Entries 0
Mean 0
RMS 0

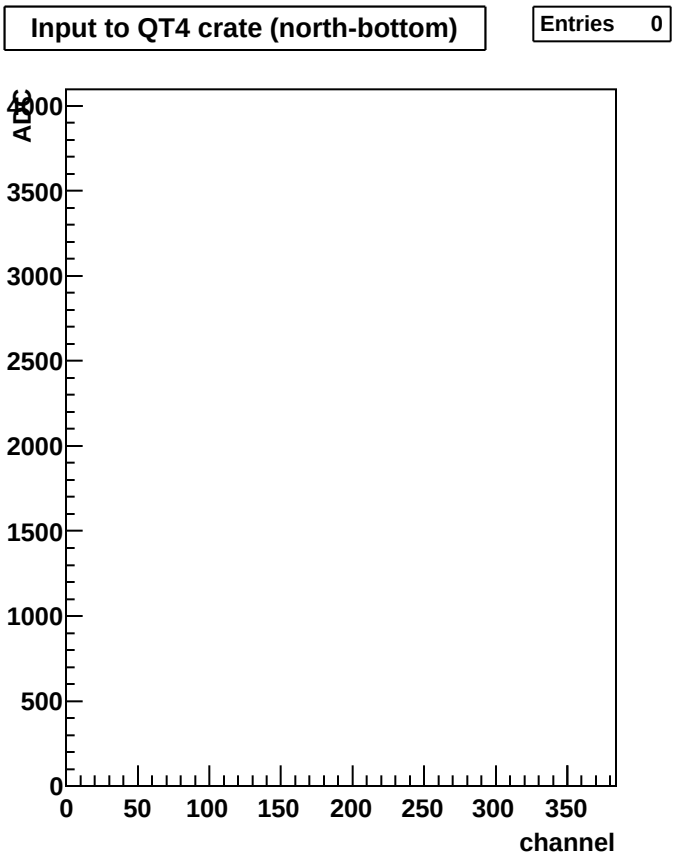

VPD-TAC-W
Entries 0
Mean 0
RMS 0

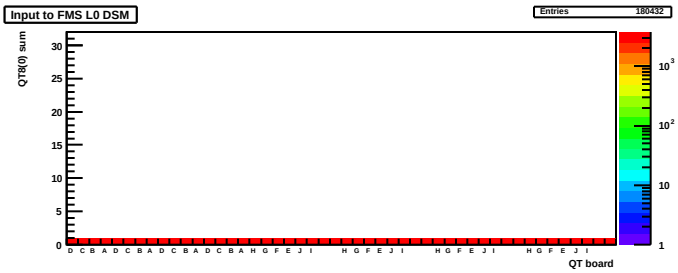

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 0
Mean 0
RMS 0

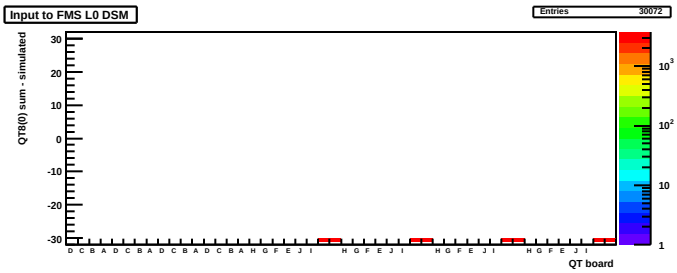

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

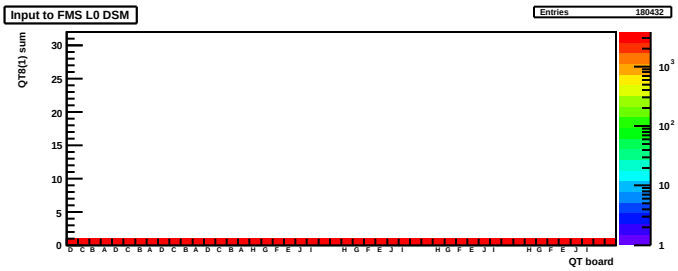

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

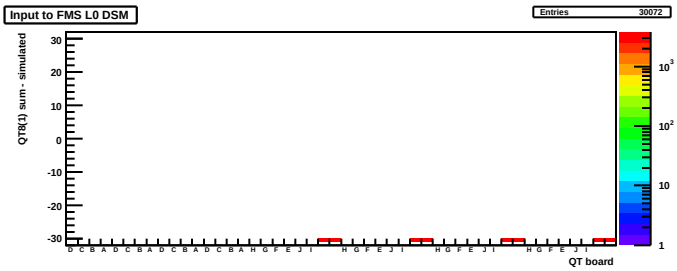

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

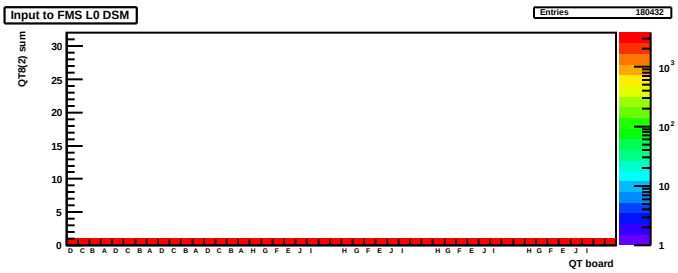

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

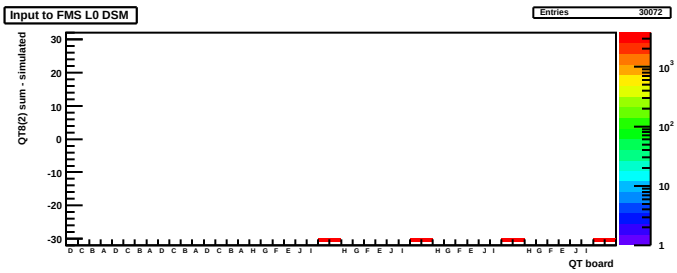

Input to FMS L0 DSM
Entries 180432
QT8(0) sum
QT board

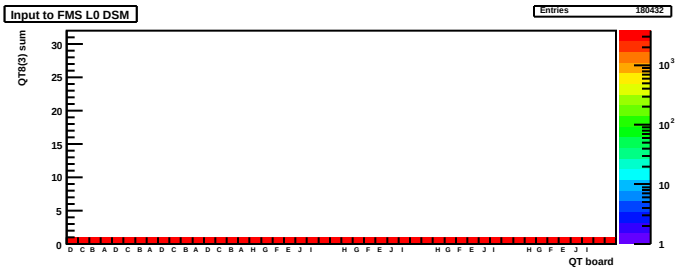

Input to FMS L0 DSM
Entries 30072
QT8(0) sum - simulated
QT board

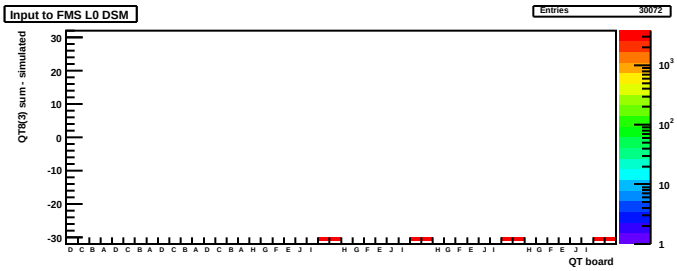

Input to FMS L0 DSM
Entries 180432
QT8(1) sum
QT board

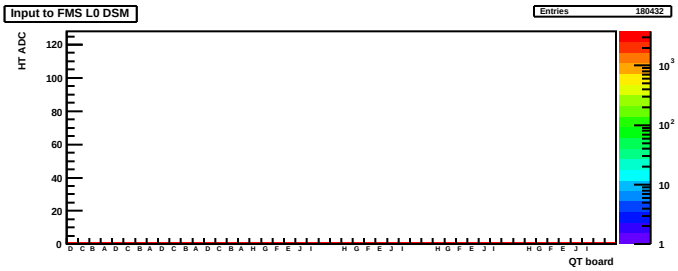

Input to FMS L0 DSM
Entries 30072
QT8(1) sum - simulated
QT board

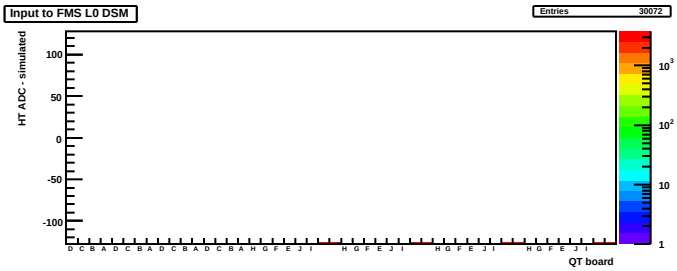

Input to FMS L0 DSM
Entries 180432
QT8(2) sum
QT board

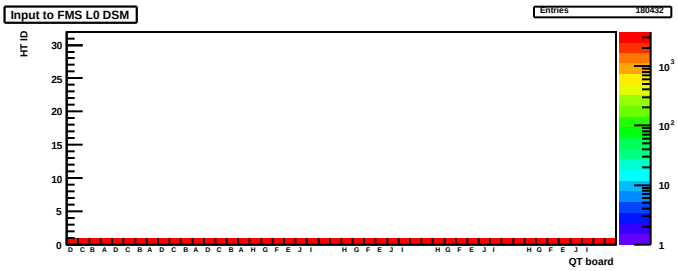

Input to FMS L0 DSM
Entries 30072
QT8(2) sum - simulated
QT board

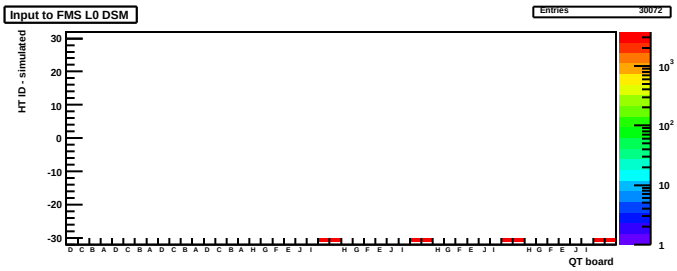

Input to FMS L0 DSM
Entries 180432
QT8(3) sum
QT board

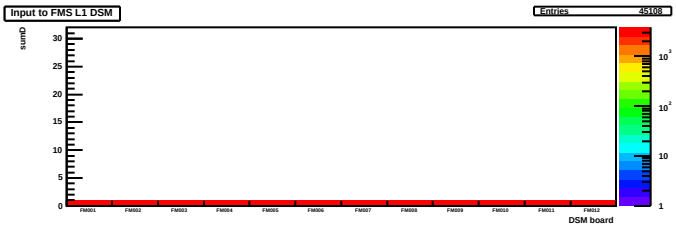

Input to FMS L0 DSM
Entries 30072
QT8(3) sum - simulated
QT board

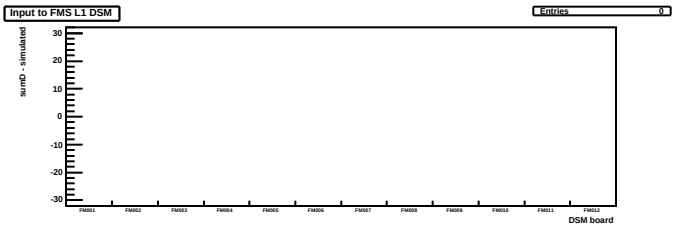

Input to FMS L0 DSM
Entries 180432
HT ADC
QT board

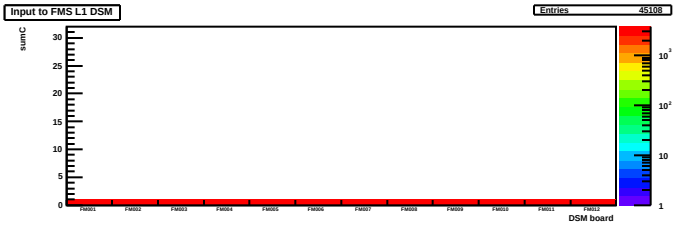

Input to FMS L0 DSM
Entries 30072
HT ADC - simulated
QT board

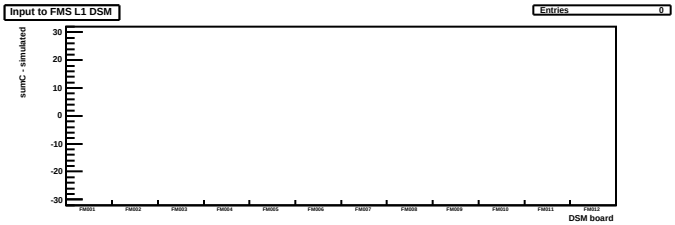

Input to FMS L0 DSM
Entries 180432
HT ID
QT board

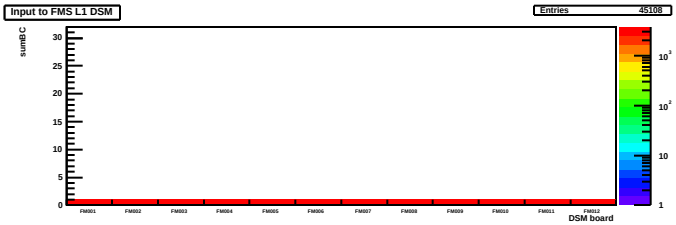

Input to FMS L0 DSM
Entries 30072
HT ID - simulated
QT board

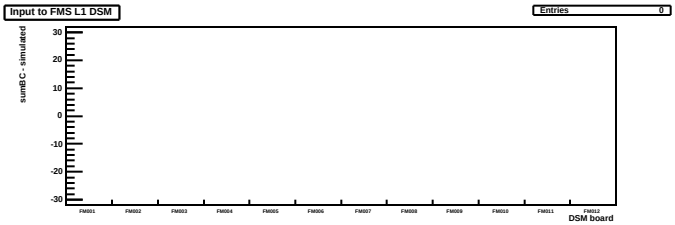

Input to FMS L1 DSM
Entries 45108
sumD
DSM board

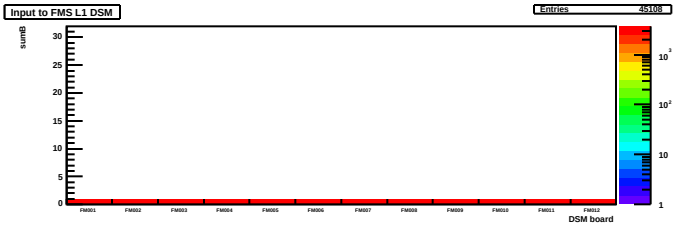

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

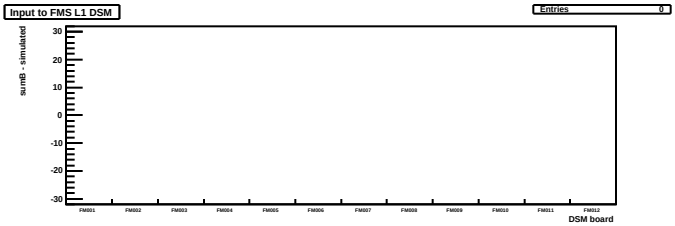

Input to FMS L1 DSM
Entries 45108
sumC
DSM board

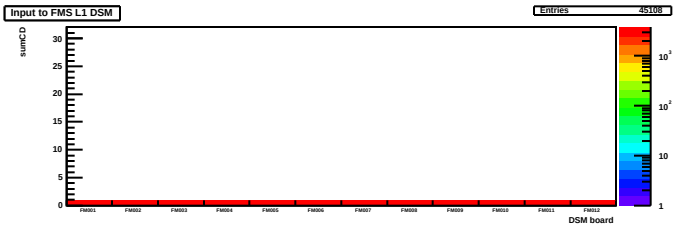

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

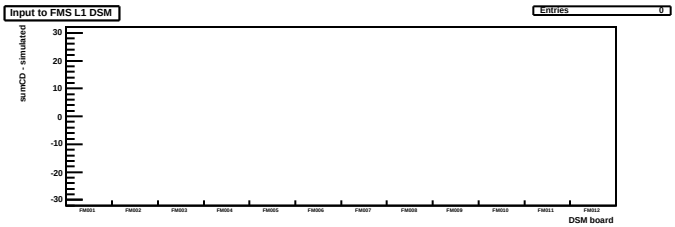

Input to FMS L1 DSM
Entries 45108
sumBC
DSM board

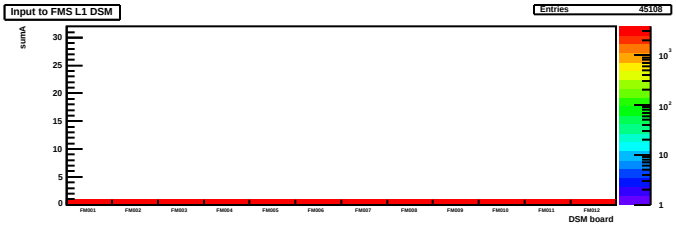

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

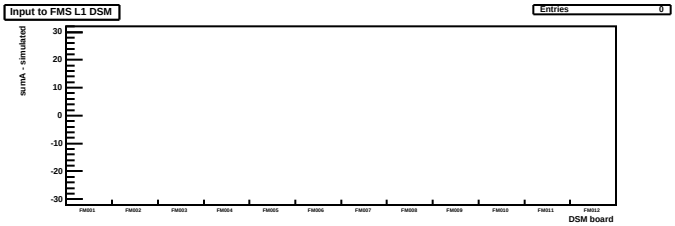

Input to FMS L1 DSM
Entries 45108
sumB
DSM board

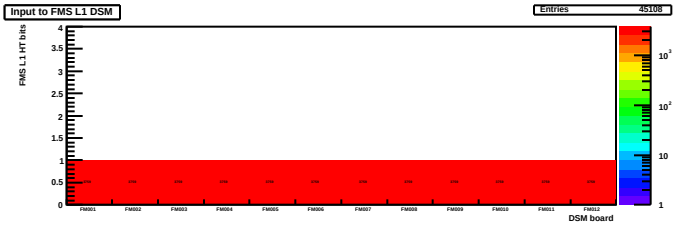

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

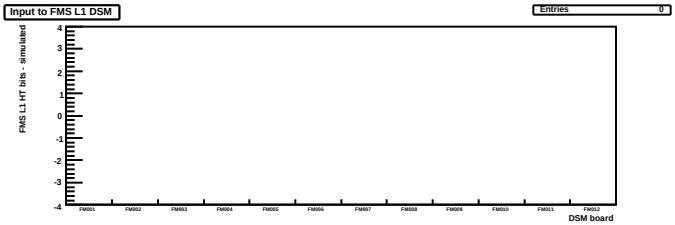

Input to FMS L1 DSM
Entries 45108
sumCD
DSM board

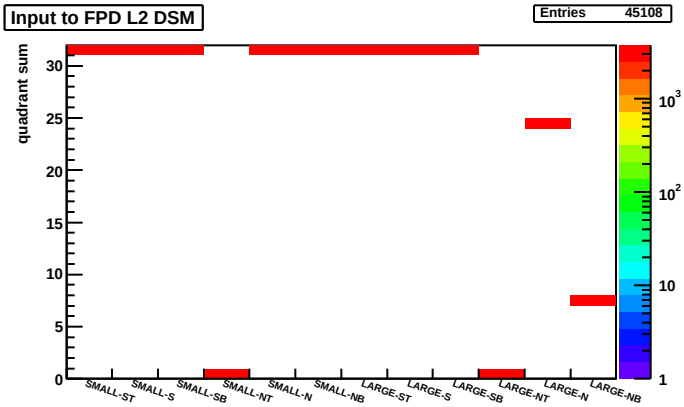

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

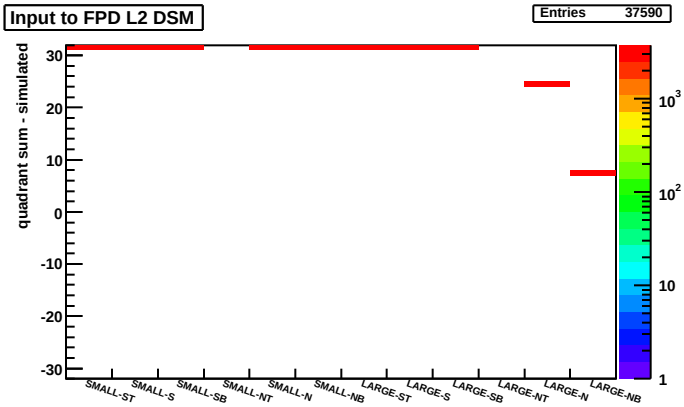

Input to FMS L1 DSM
Entries 45108
sumA
DSM board

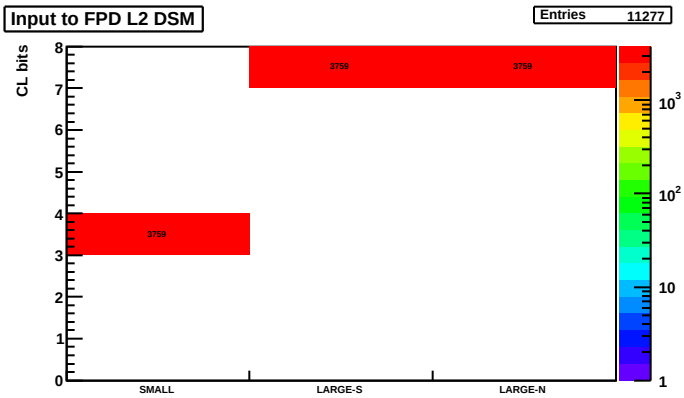

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

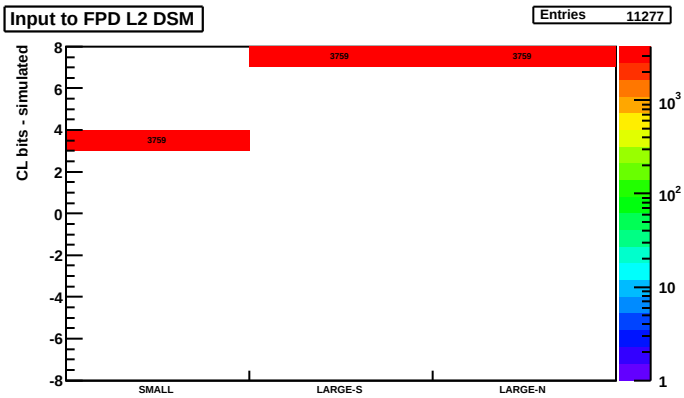

Input to FMS L1 DSM
Entries 45108
FMS L1 HT bits
DSM board

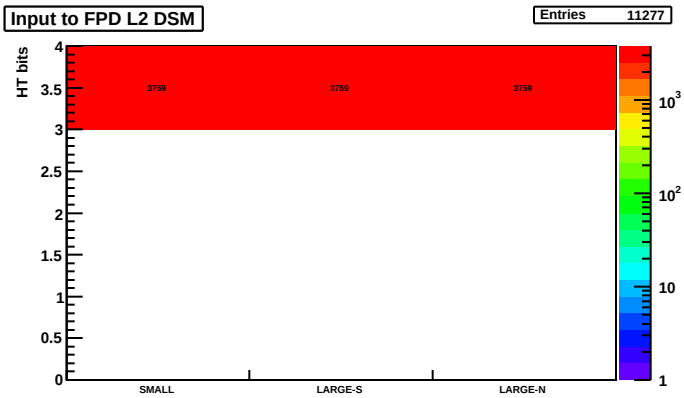

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

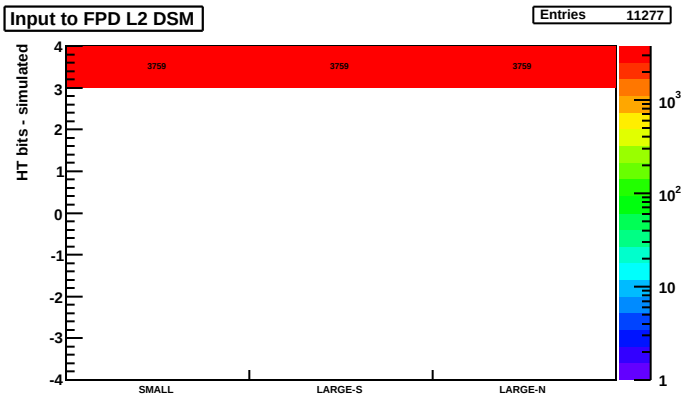

Input to FPD L2 DSM
Entries 45108
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

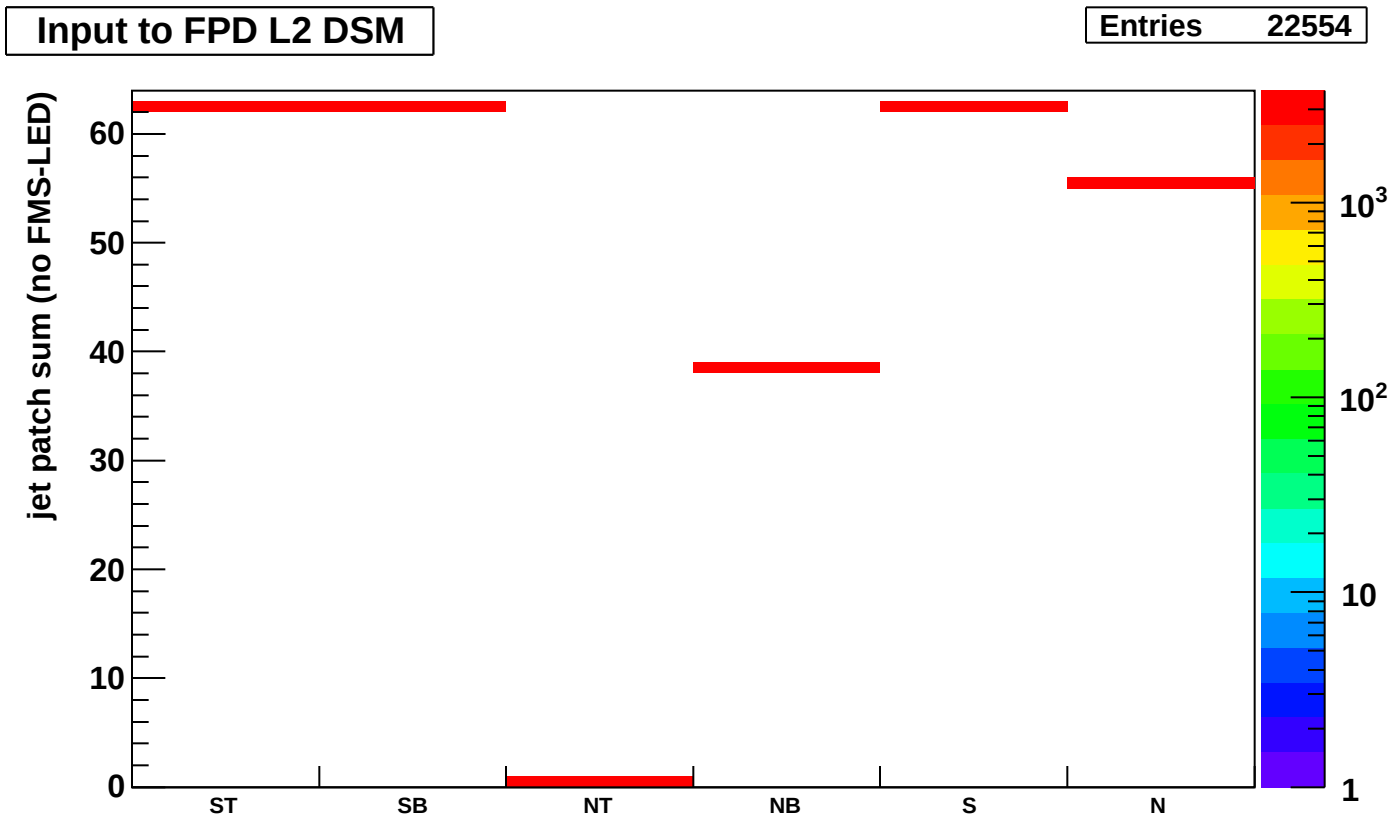

Input to FPD L2 DSM
Entries 37590
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

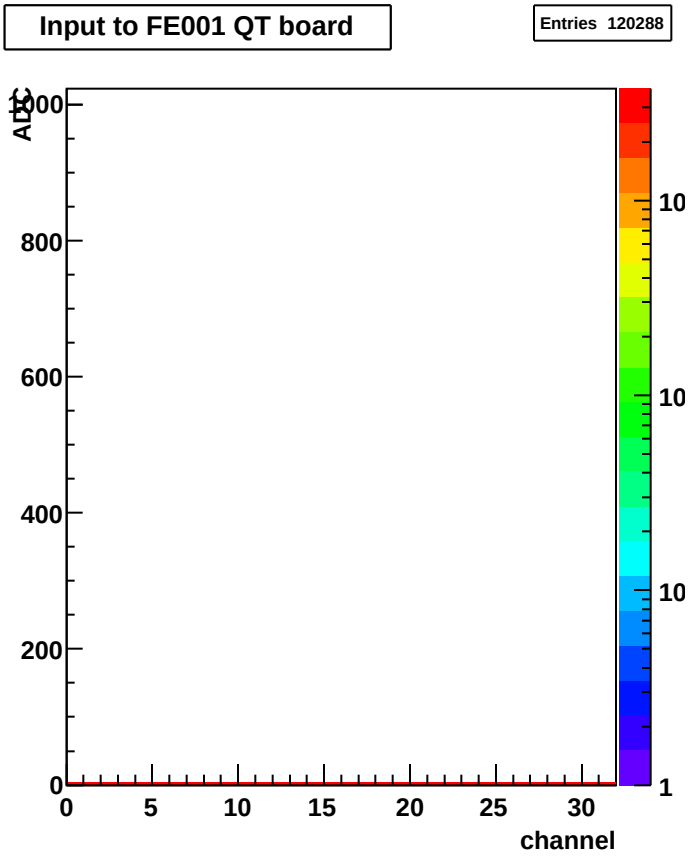

Input to FPD L2 DSM
Entries 11277
CL bits
3759
3759
3759
SMALL
LARGE-S
LARGE-N

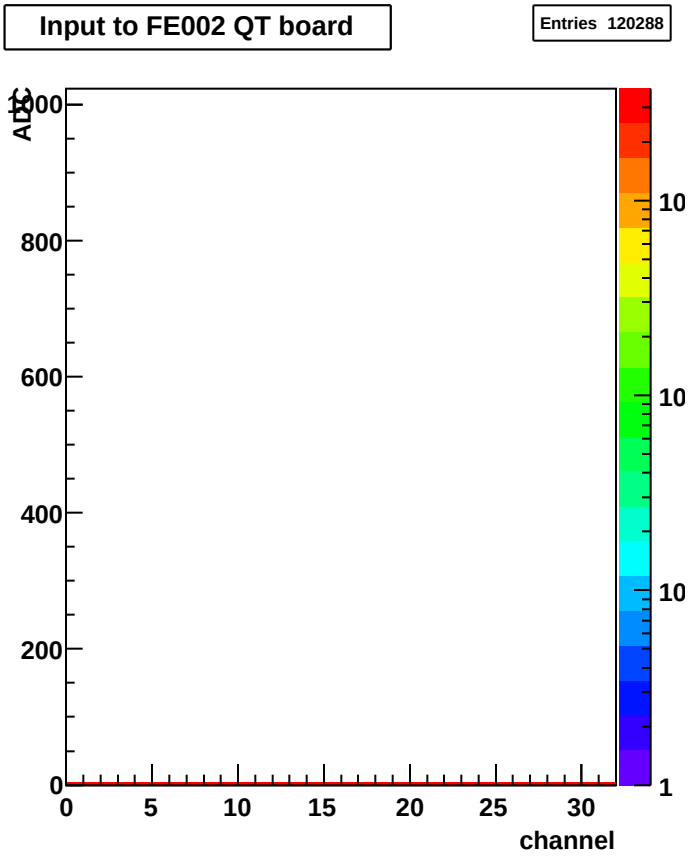

Input to FPD L2 DSM
Entries 11277
CL bits - simulated
3759
3759
3759
SMALL
LARGE-S
LARGE-N

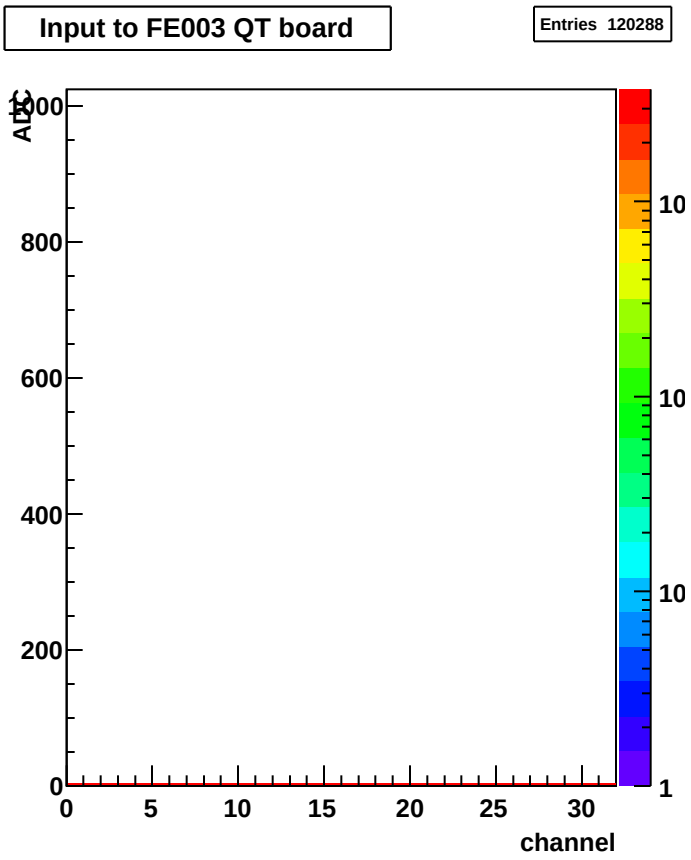

Input to FPD L2 DSM
Entries 11277
HT bits
3759
3759
3759
SMALL
LARGE-S
LARGE-N

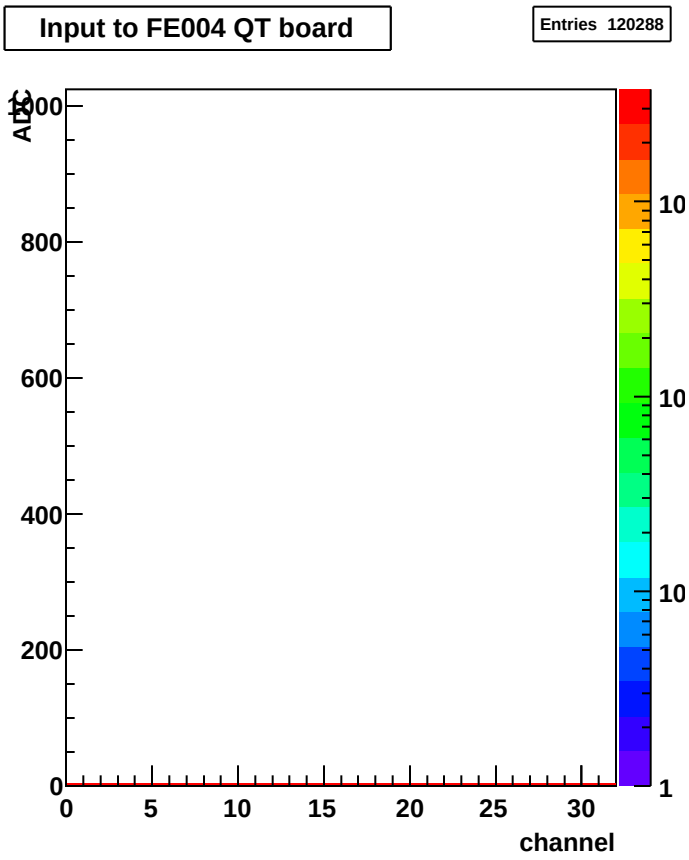

Input to FPD L2 DSM
Entries 11277
HT bits - simulated
3759
3759
3759
SMALL
LARGE-S
LARGE-N

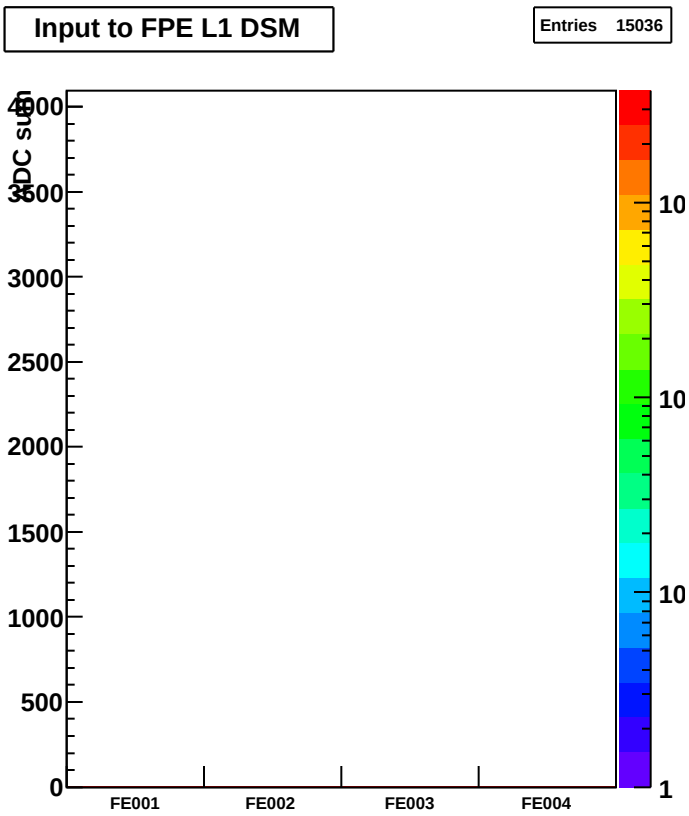

Input to FPD L2 DSM
Entries 22554
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3

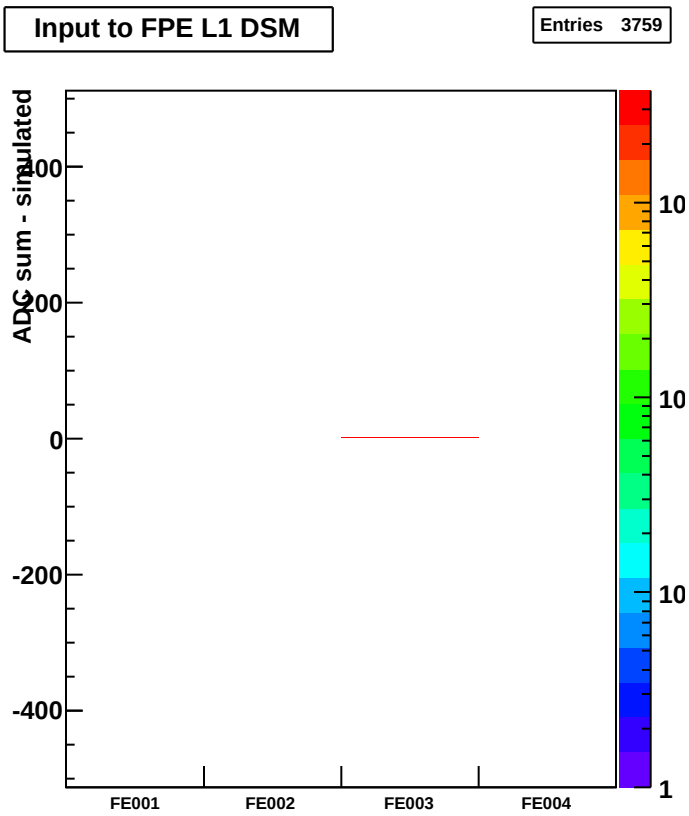

Input to FE001 QT board
Entries 120288
ADC
1000
800
600
400
200
0
0
5
10
15
20
25
30
channel
10
10
10
1

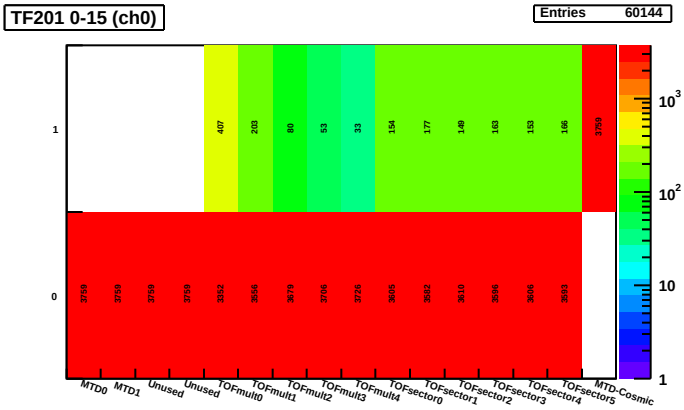

Input to FE002 QT board
Entries 120288
ADC
1000
800
600
400
200
0
0
5
10
15
20
25
30
channel
10
10
10
1

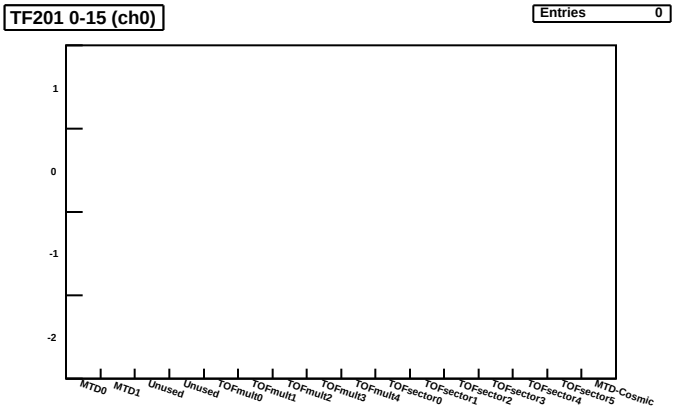

Input to FE003 QT board
Entries 120288
ADC
1000
800
600
400
200
0
0
5
10
15
20
25
30
channel
10
10
10
1

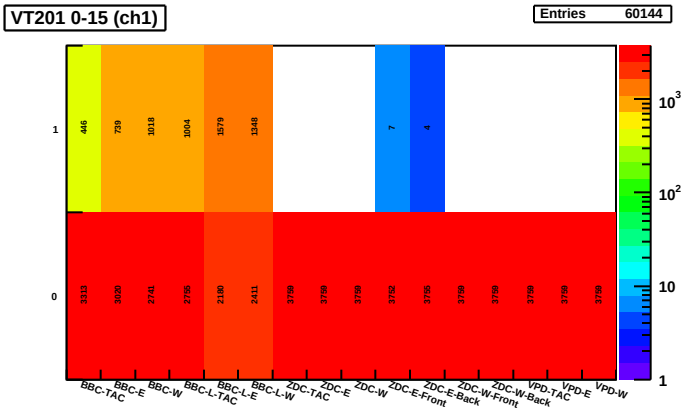

Input to FE004 QT board
Entries 120288
ADC
1000
800
600
400
200
0
0
5
10
15
20
25
30
channel
10
10
10
1

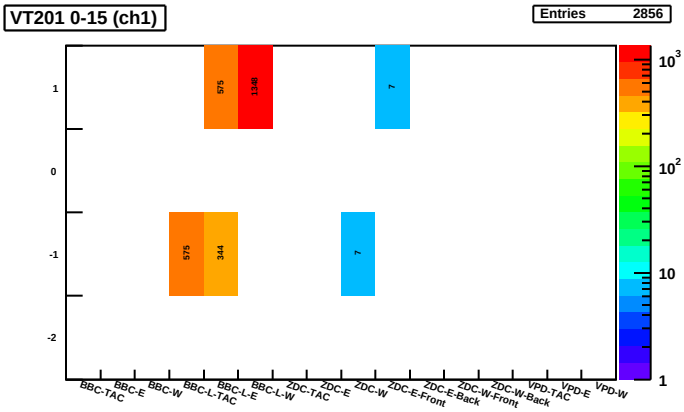

Input to FPE L1 DSM
Entries 15036
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
1

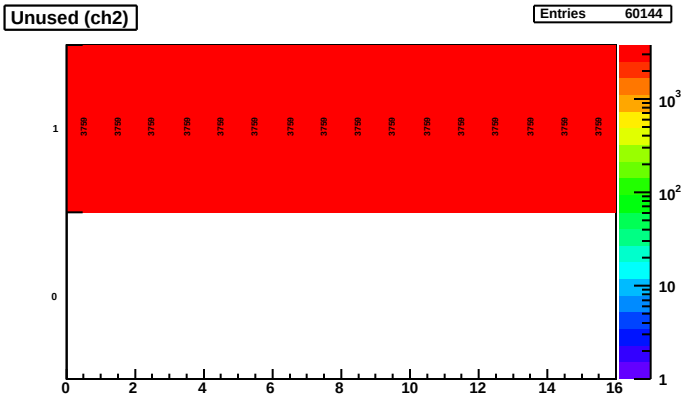

Input to FPE L1 DSM
Entries 3759
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
1

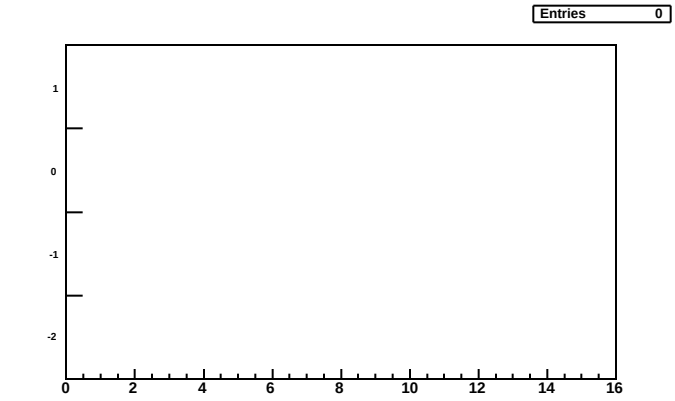

TF201 0-15 (ch0)
Entries 60144
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

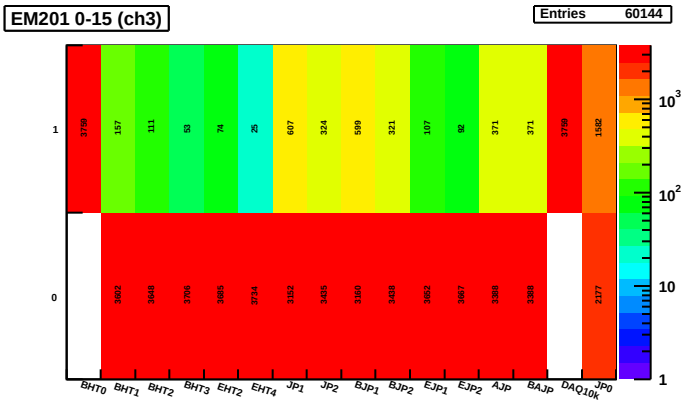

TF201 0-15 (ch0)
Entries 0
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

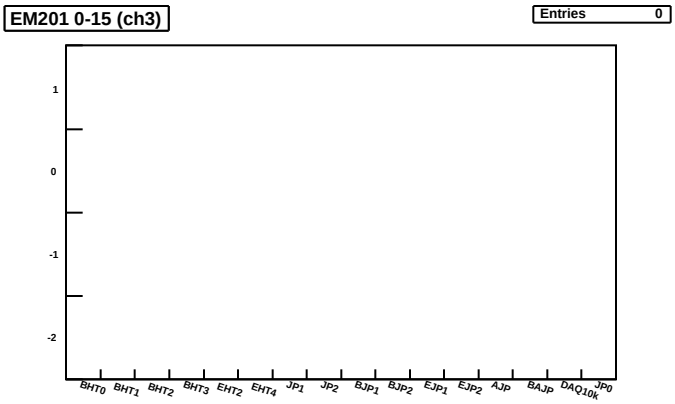

VT201 0-15 (ch1)
Entries 60144
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 2856
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

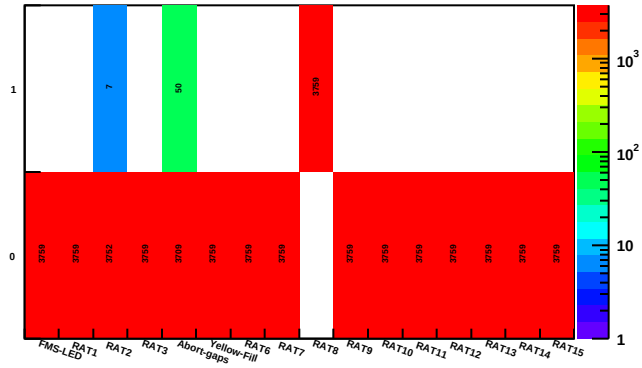

Unused (ch2)
Entries 60144

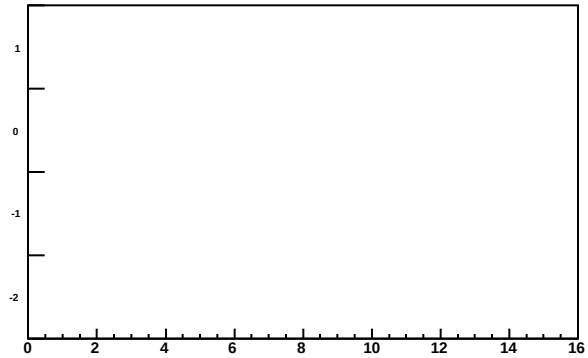

Entries 0


EM201 0-15 (ch3)
Entries 60144
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

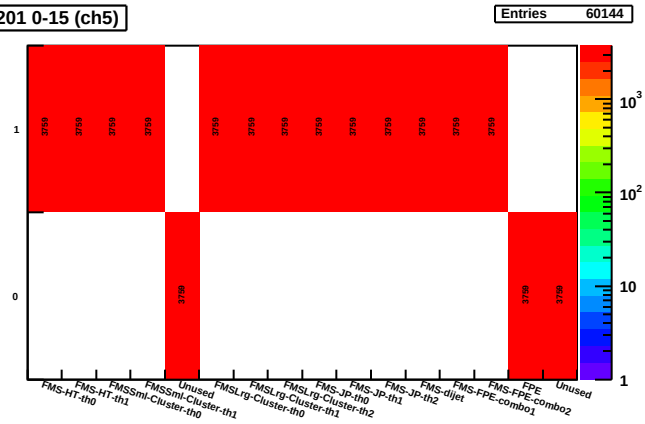

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

RAT board (ch4)

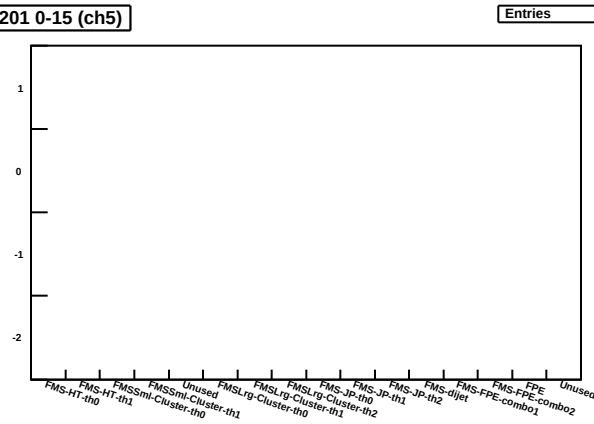




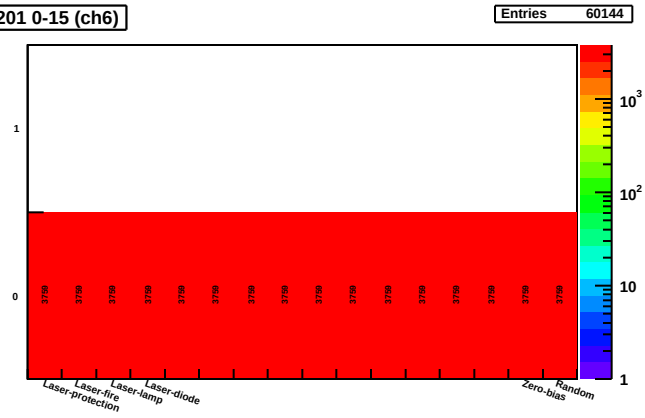
FP201 0-15 (ch5)

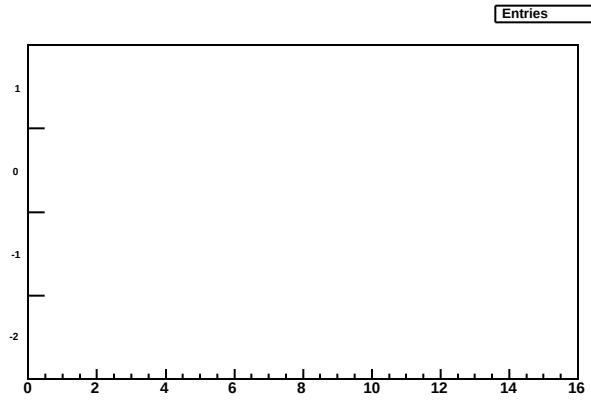
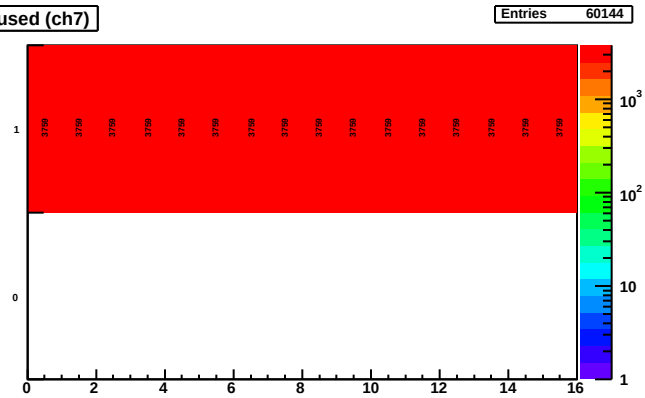
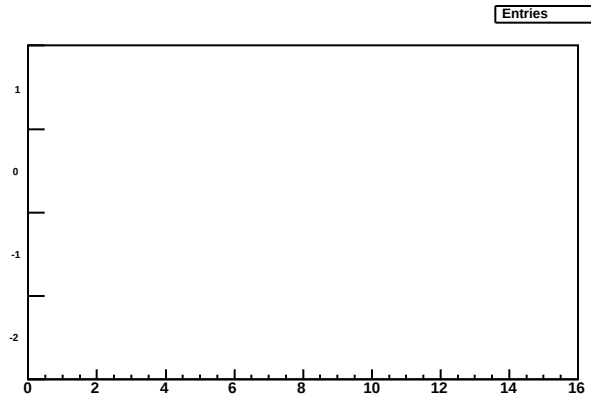


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)