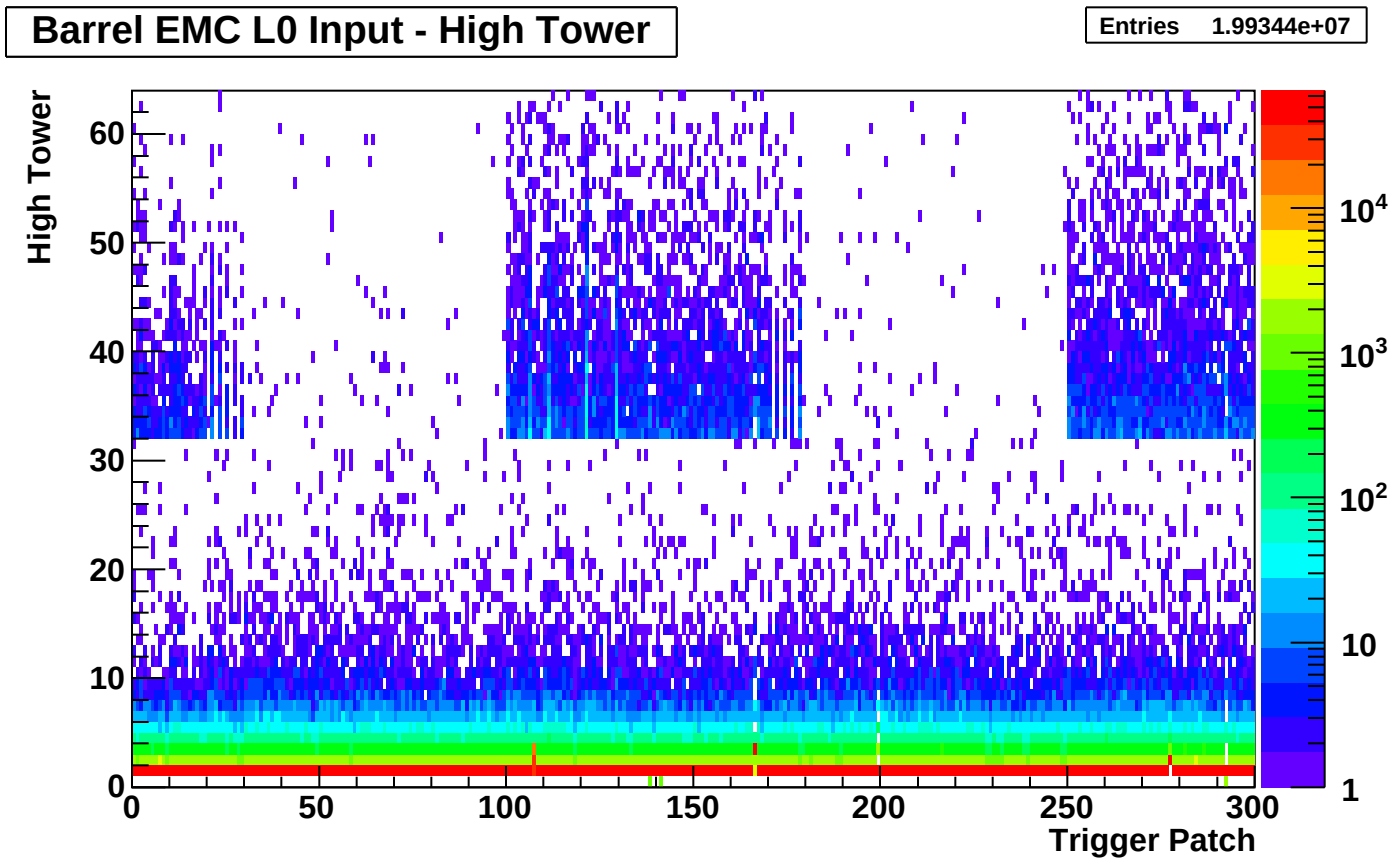
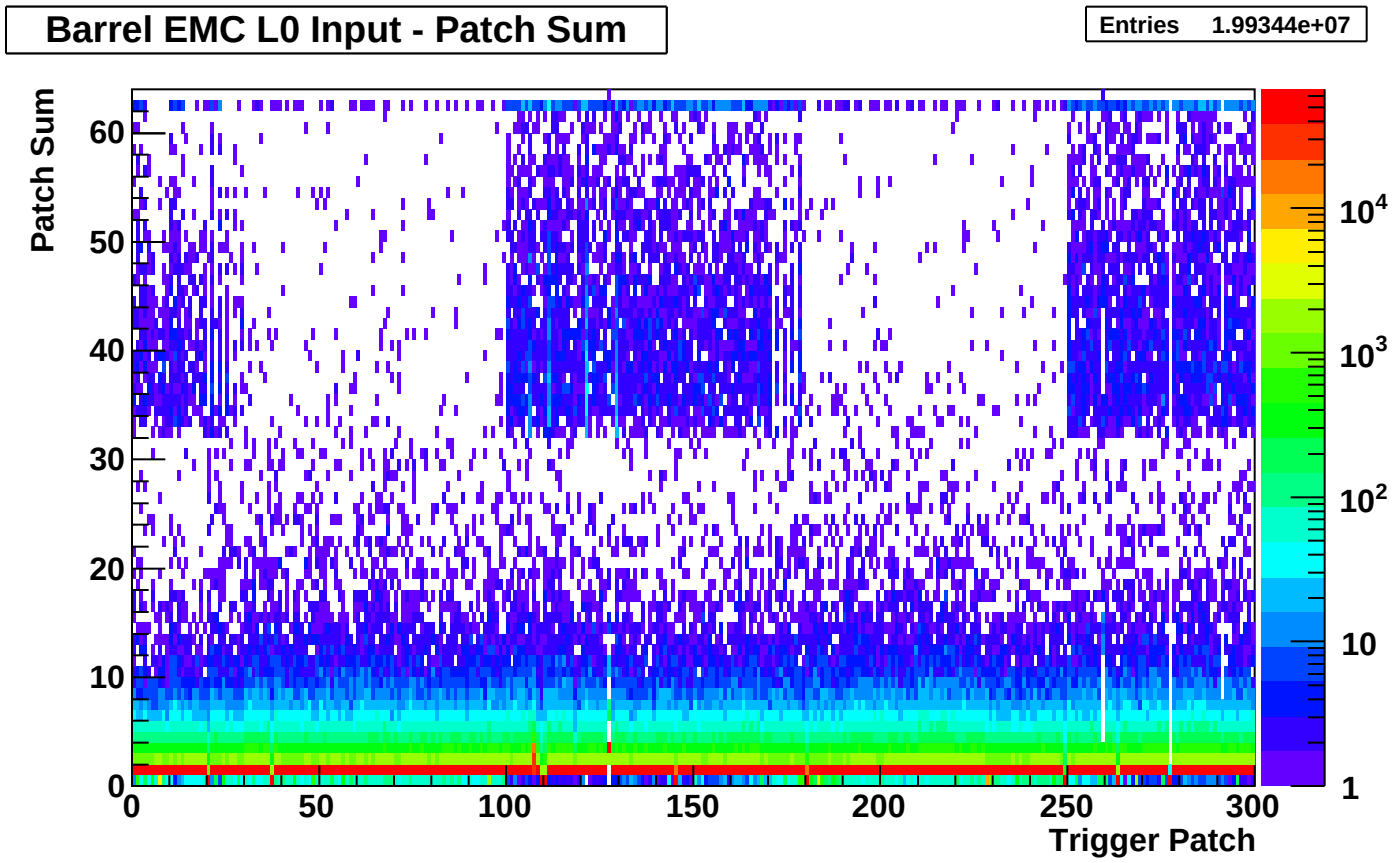
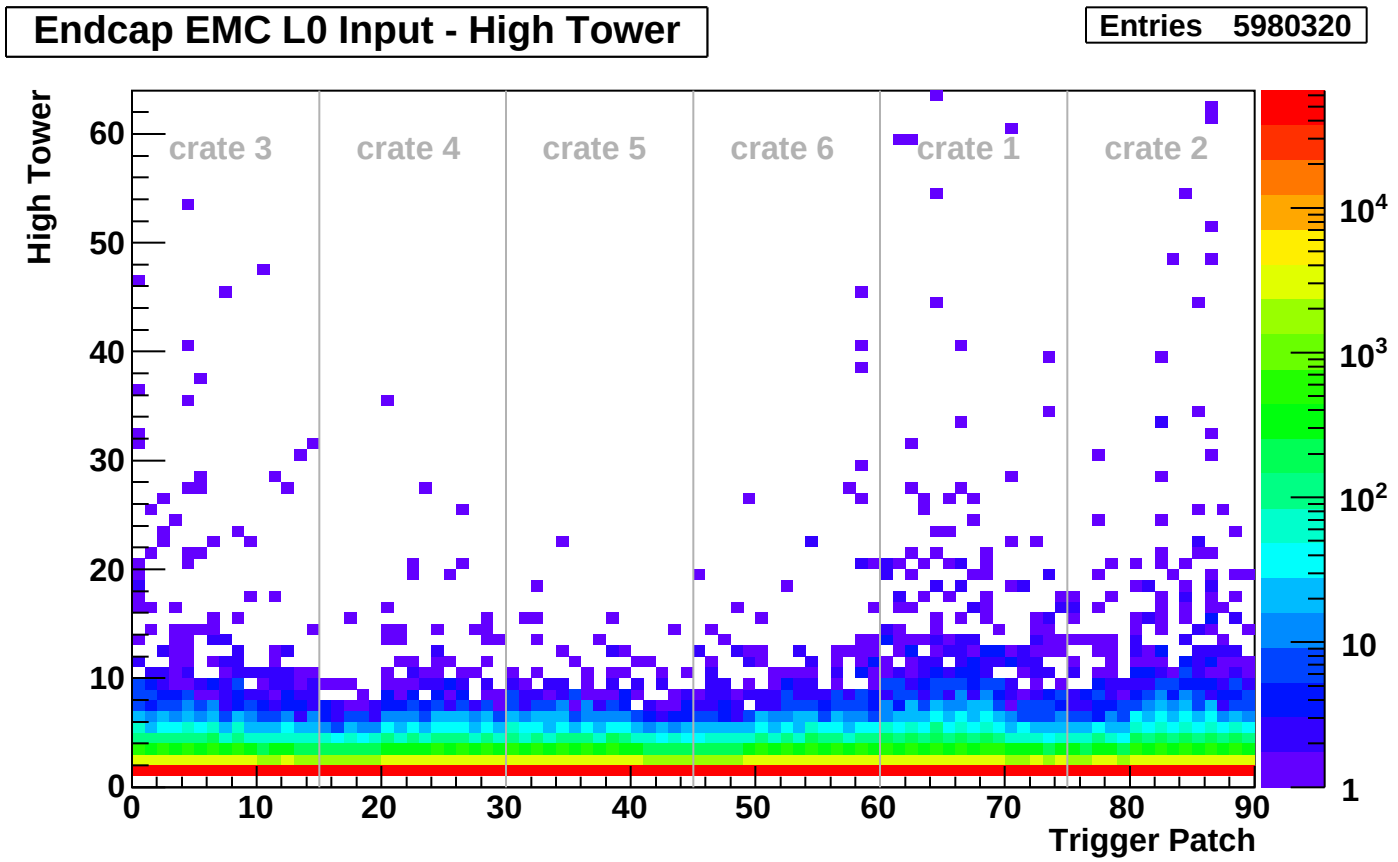
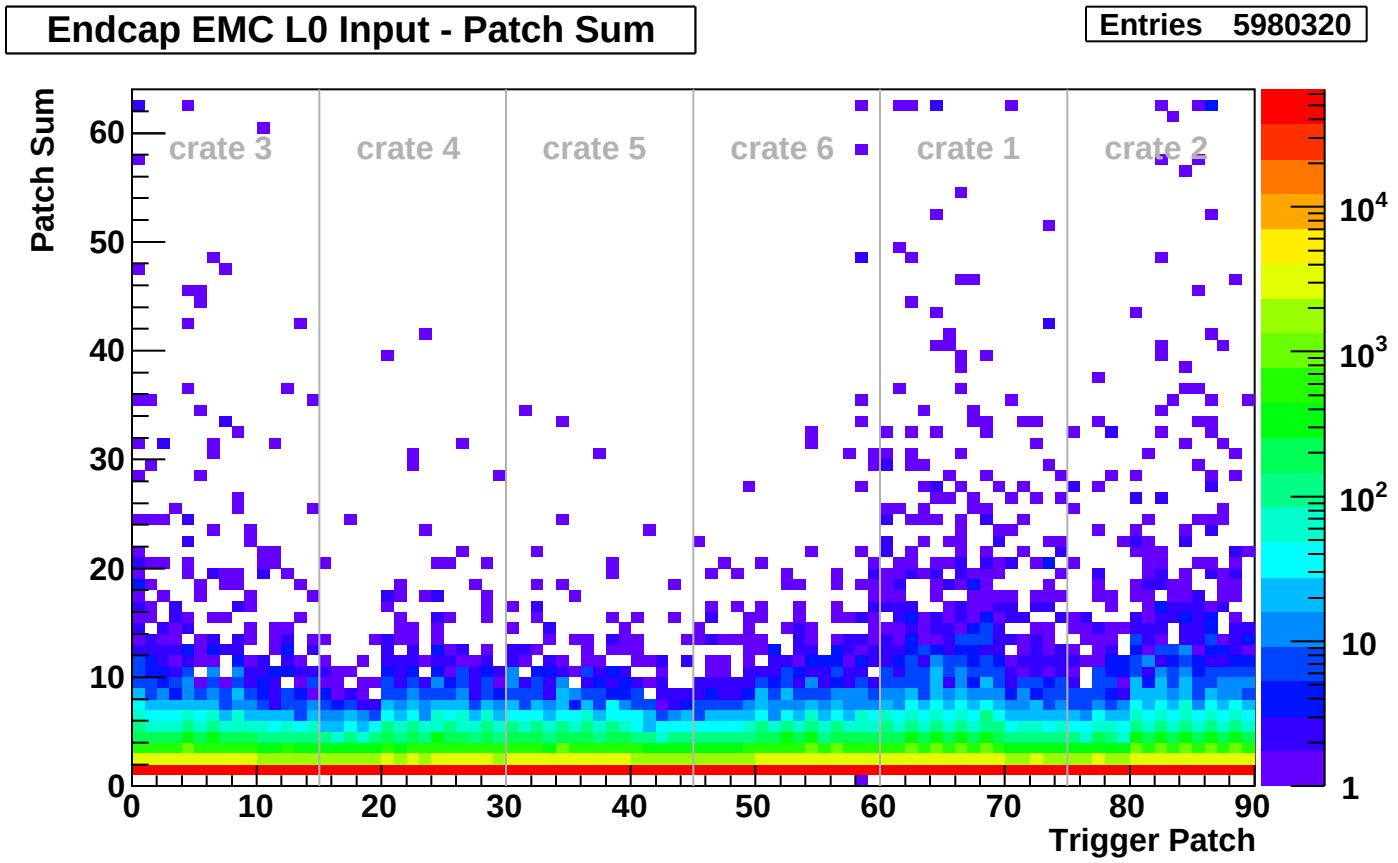
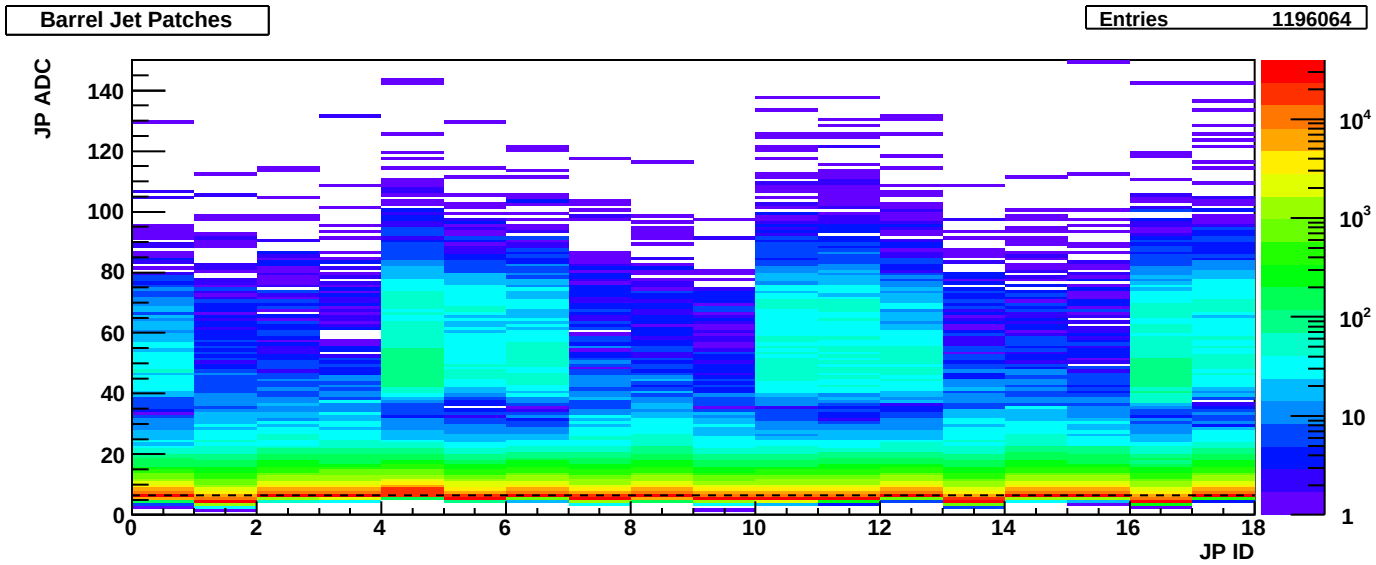
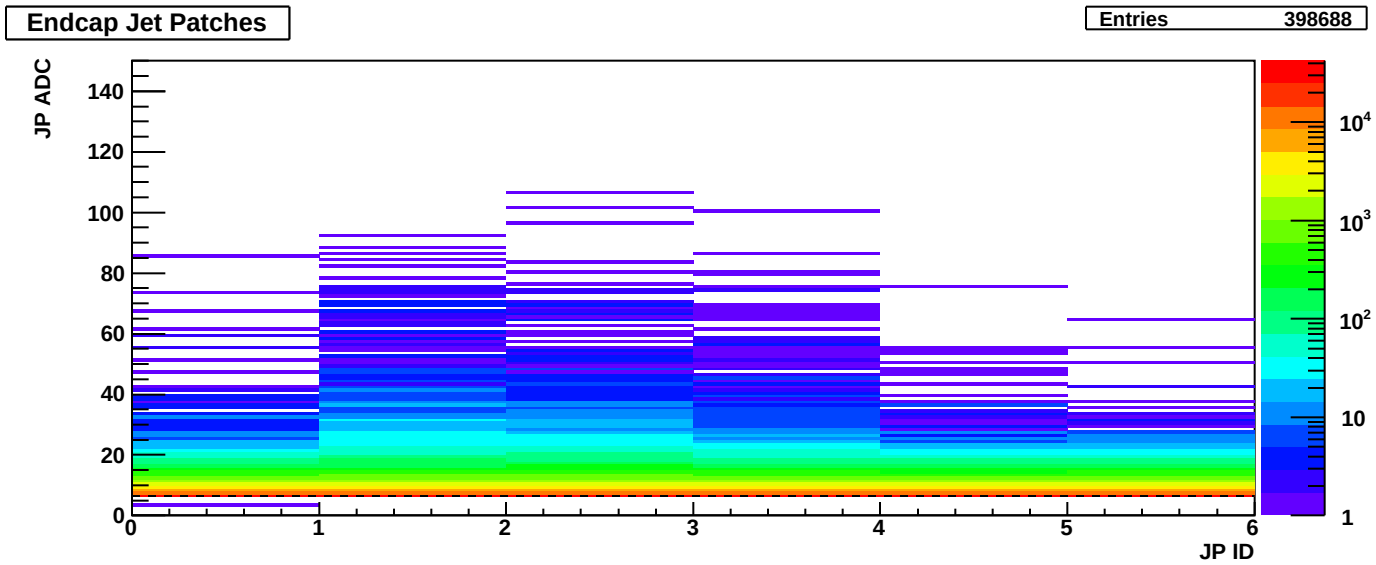

Barrel EMC L0 Input - High Tower
Entries 1.99344e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

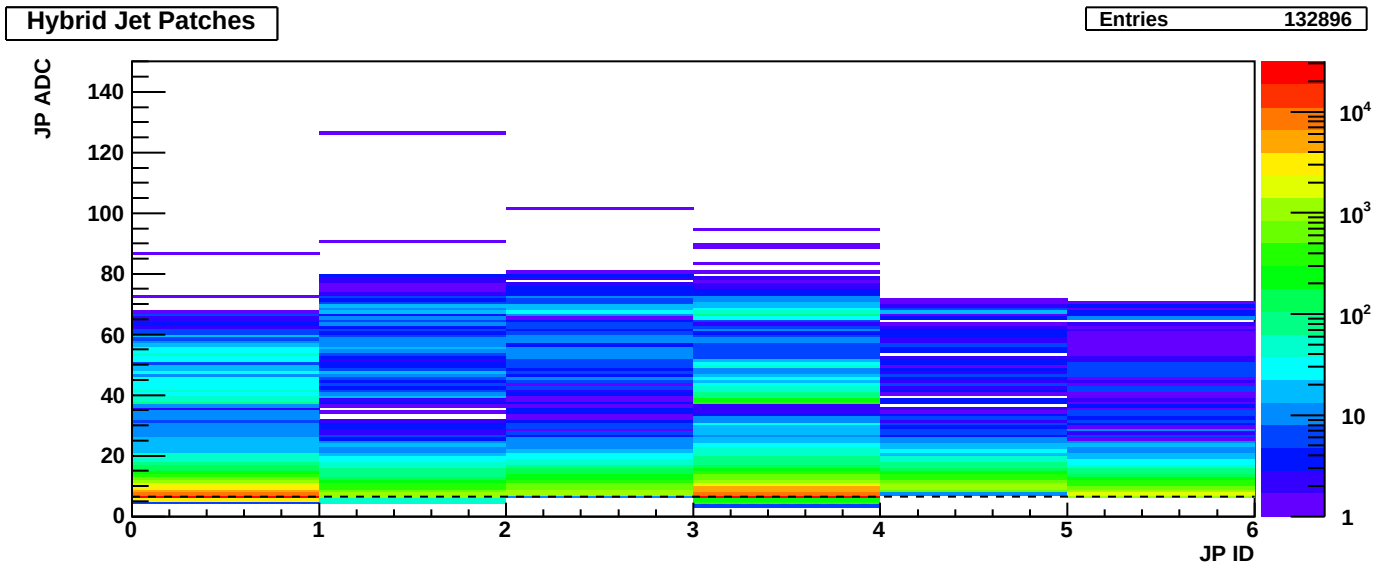

Barrel EMC L0 Input - Patch Sum
Entries 1.99344e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

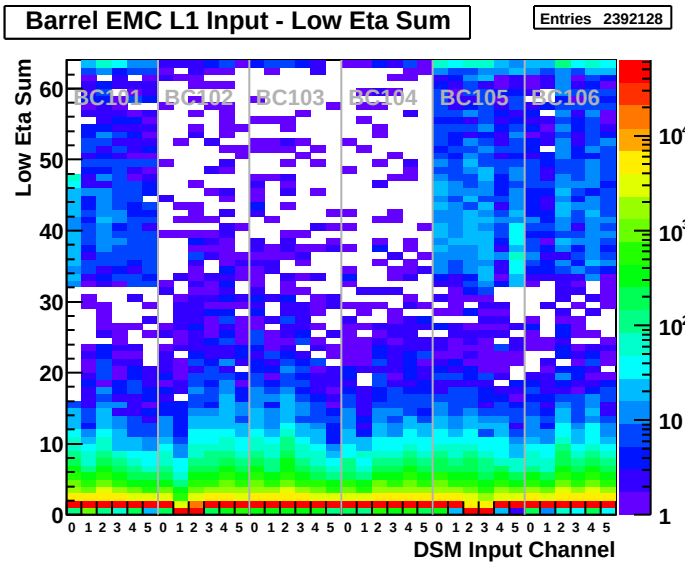

Endcap EMC L0 Input - High Tower
Entries 5980320
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

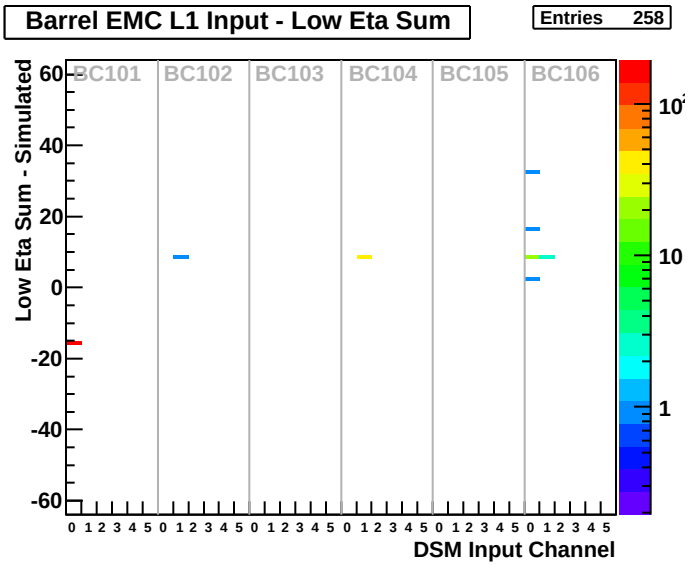

Endcap EMC L0 Input - Patch Sum
Entries 5980320
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

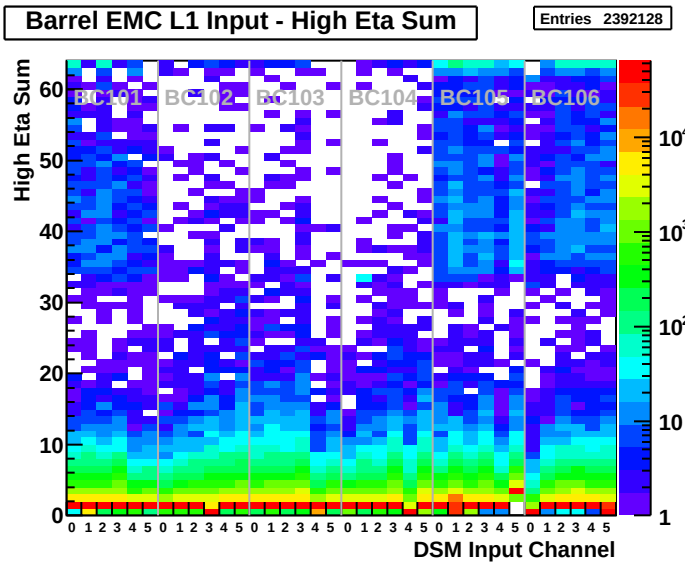

Barrel Jet Patches
Entries 1196064
JP ADC
JP ID

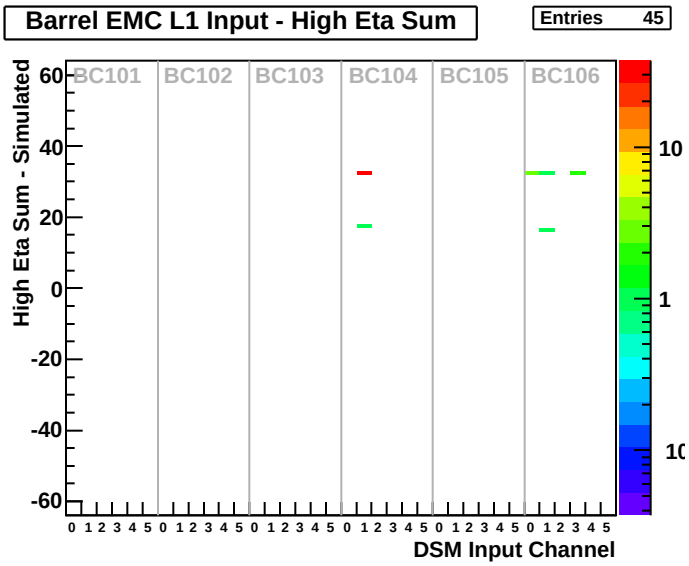

Endcap Jet Patches
Entries 398688
JP ADC
JP ID

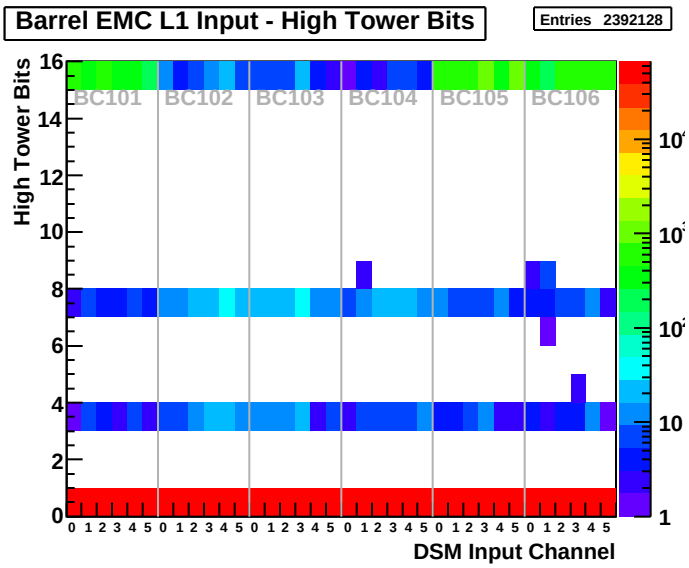

Hybrid Jet Patches
Entries 132896
JP ADC
JP ID

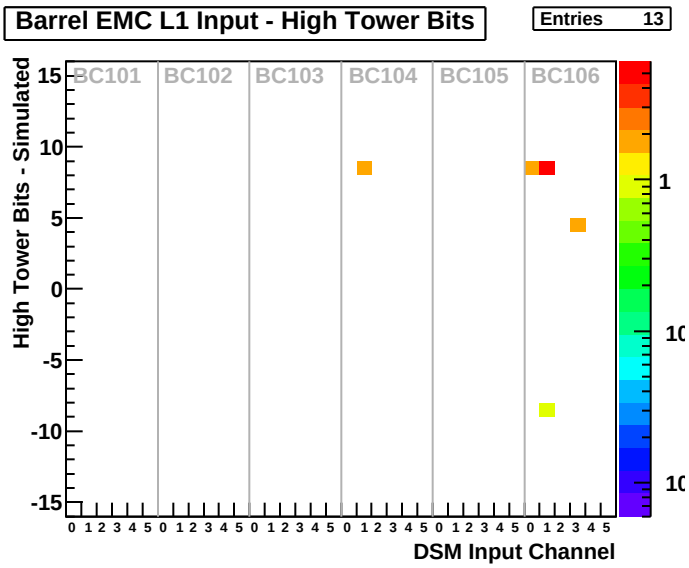

Barrel EMC L1 Input - Low Eta Sum
Entries 2392128
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

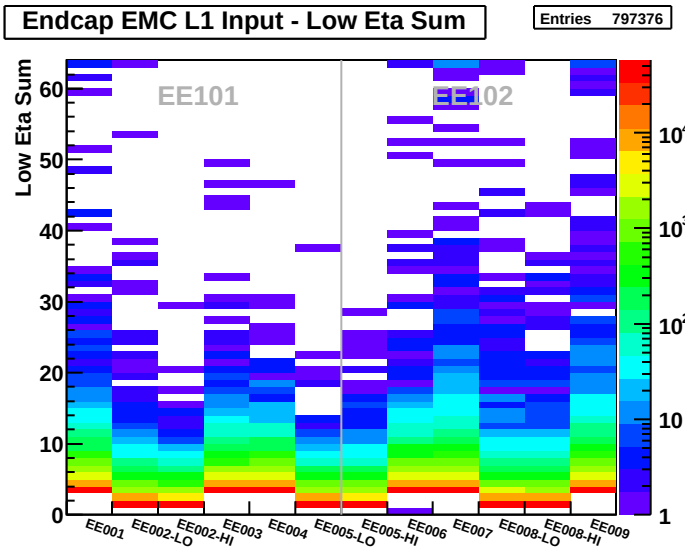

Barrel EMC L1 Input - Low Eta Sum
Entries 258
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

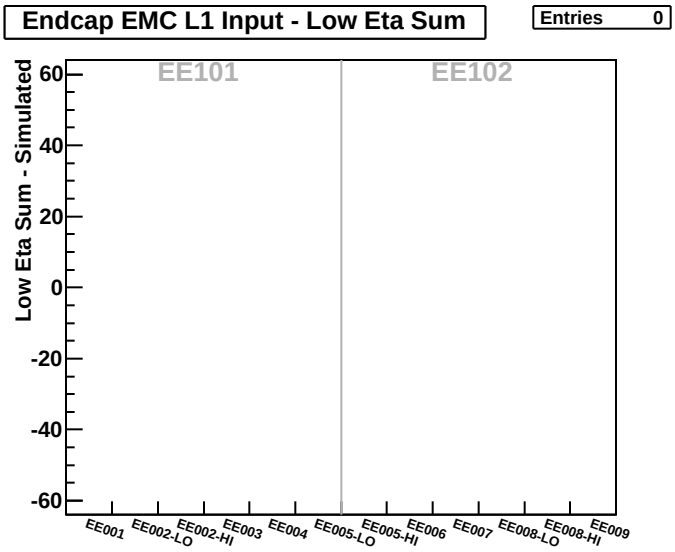

Barrel EMC L1 Input - High Eta Sum
Entries 2392128
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

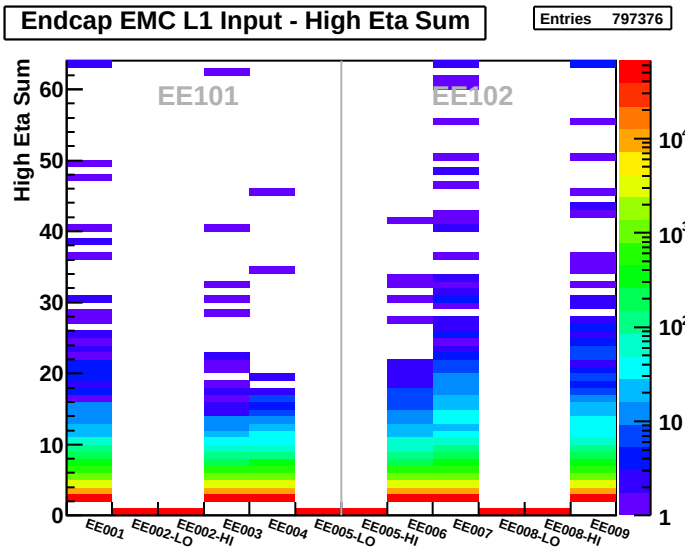

Barrel EMC L1 Input - High Eta Sum
Entries 45
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

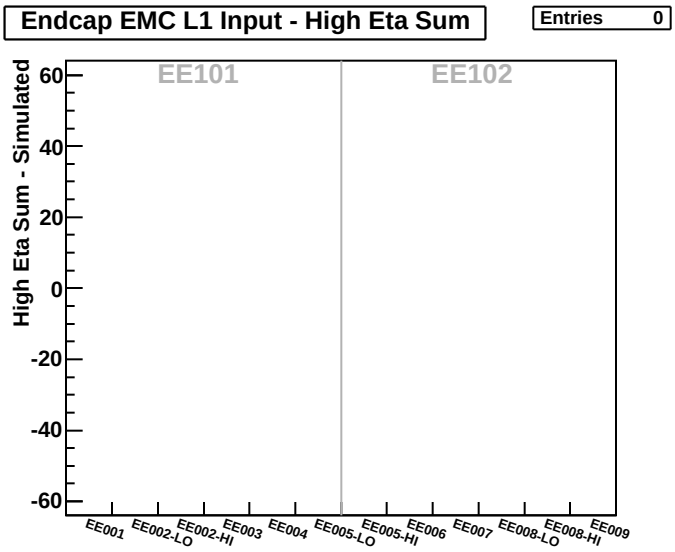

Barrel EMC L1 Input - High Tower Bits
Entries 2392128
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

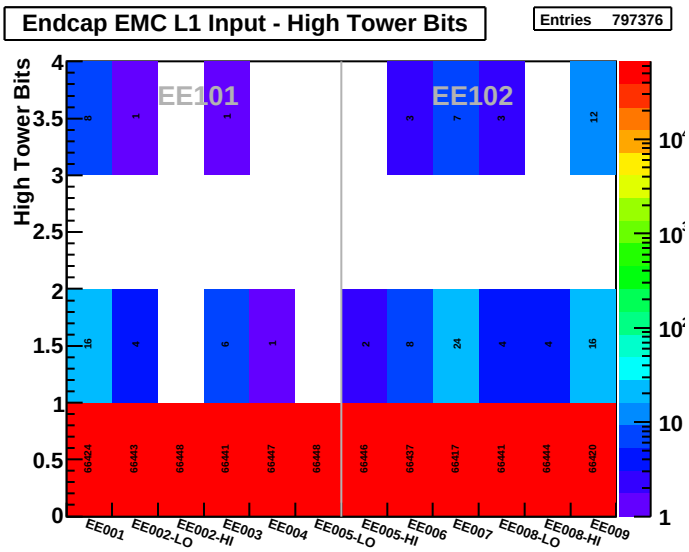

Barrel EMC L1 Input - High Tower Bits
Entries 13
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

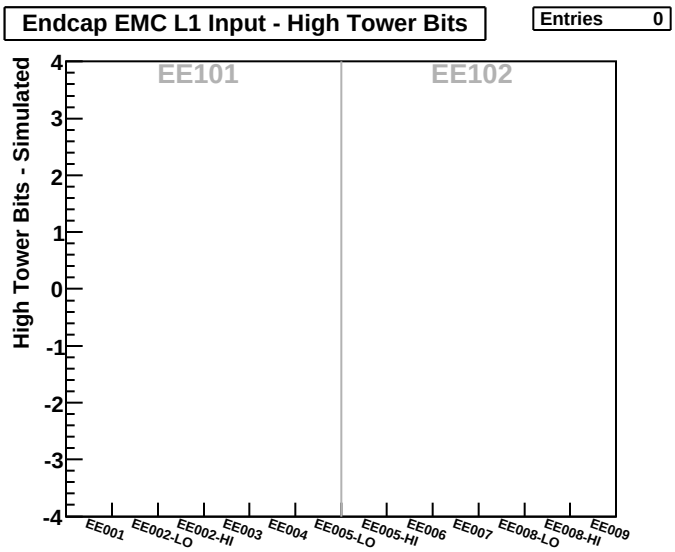

Endcap EMC L1 Input - Low Eta Sum
Entries 797376
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

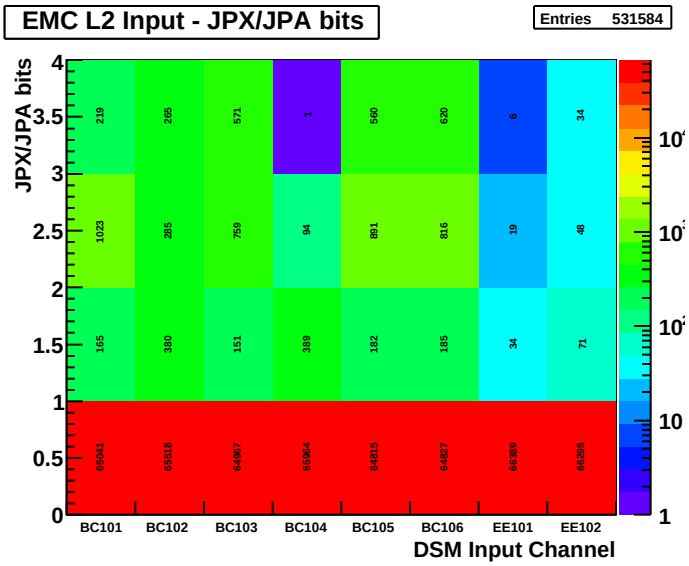

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

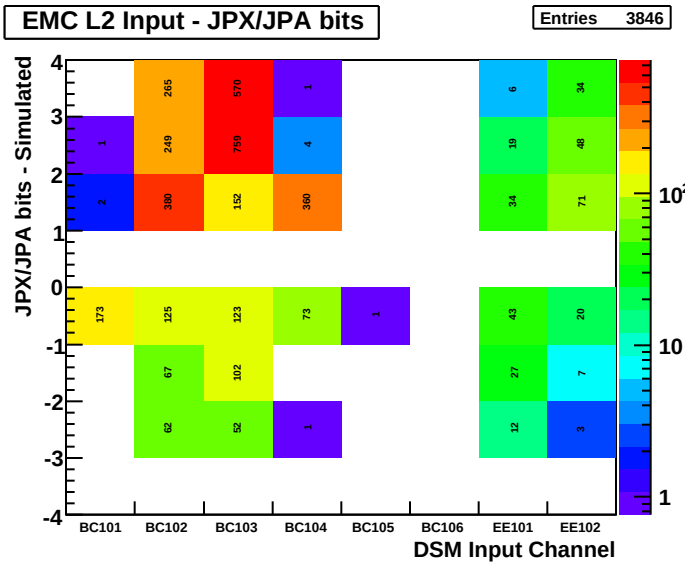

Endcap EMC L1 Input - High Eta Sum
Entries 797376
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

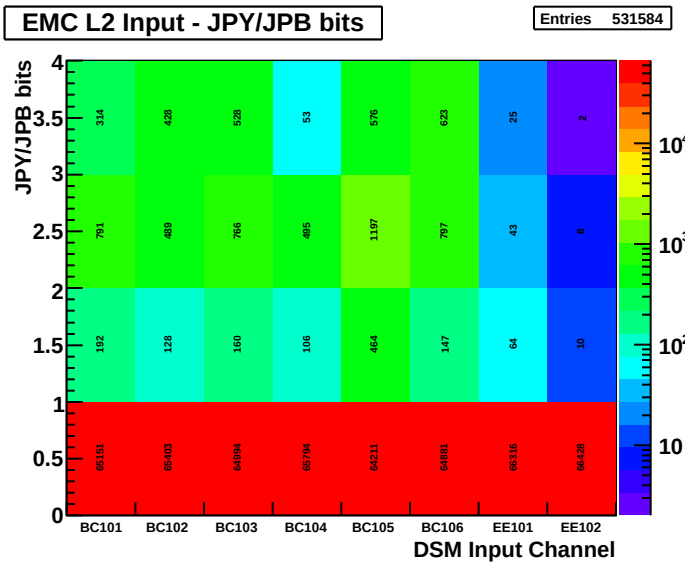

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

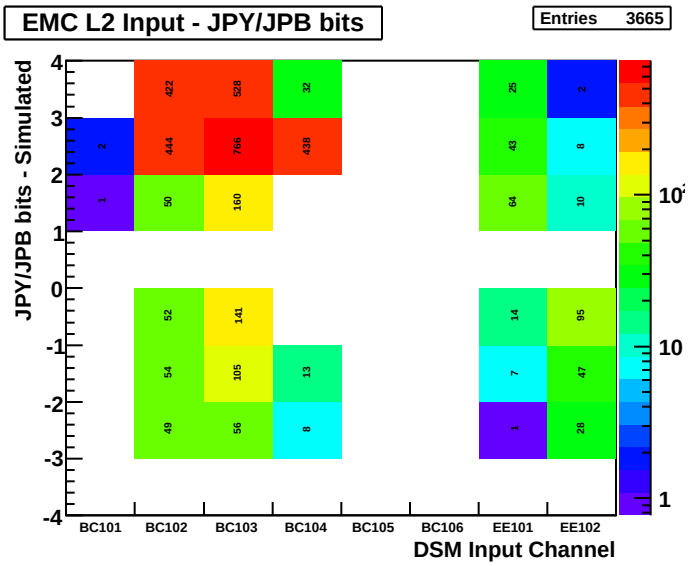

Endcap EMC L1 Input - High Tower Bits
Entries 797376
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

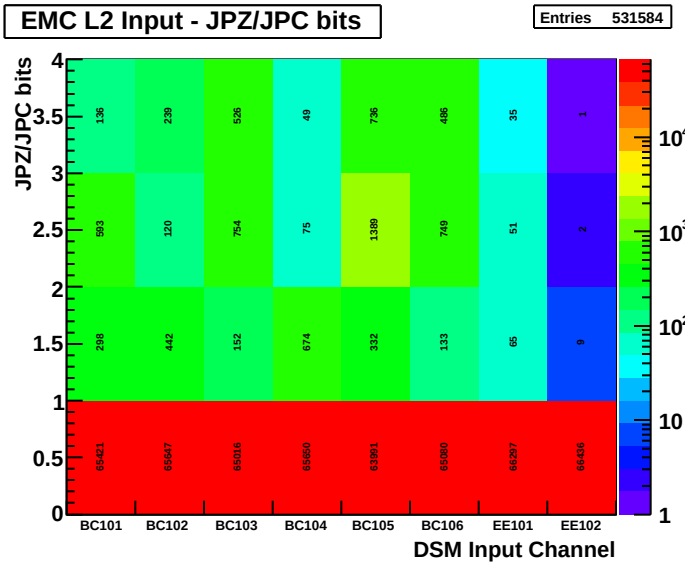

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

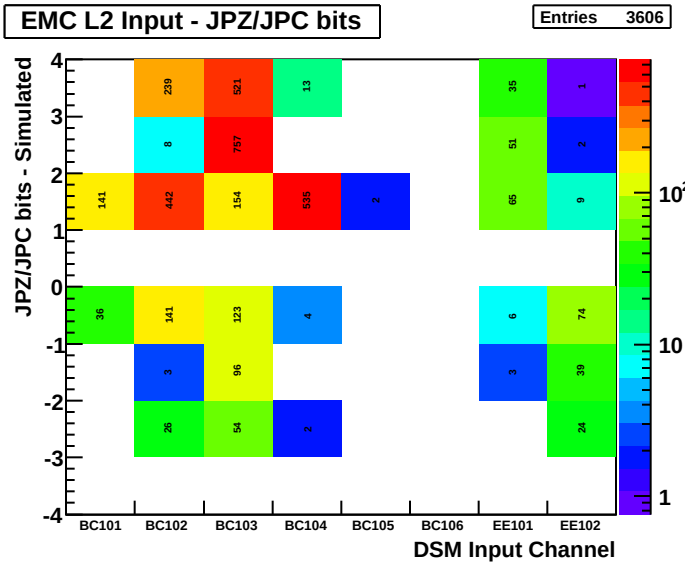

EMC L2 Input - JPX/JPA bits
Entries 531584
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

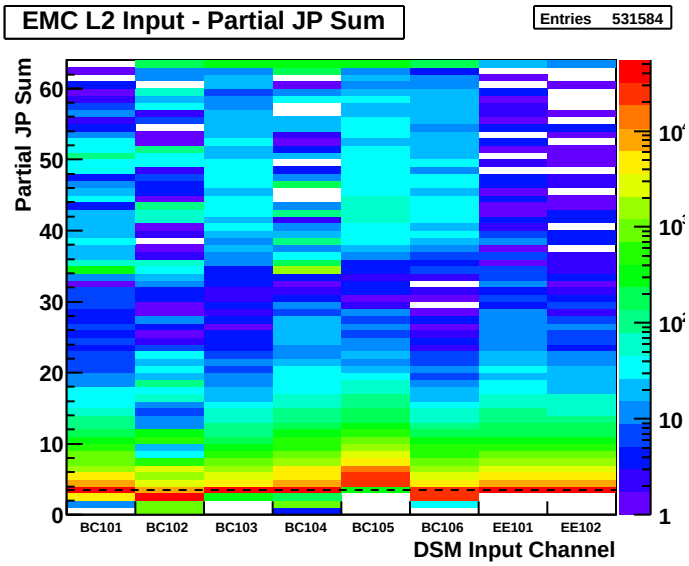

EMC L2 Input - JPX/JPA bits
Entries 3846
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

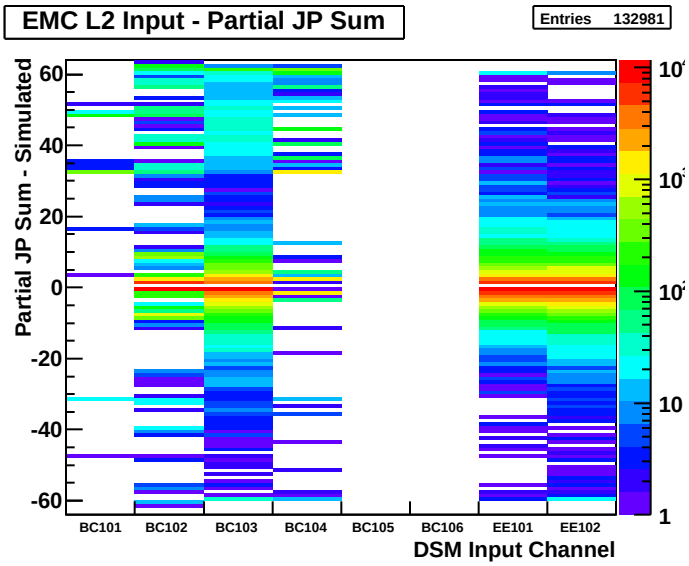

EMC L2 Input - JPY/JPB bits
Entries 531584
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

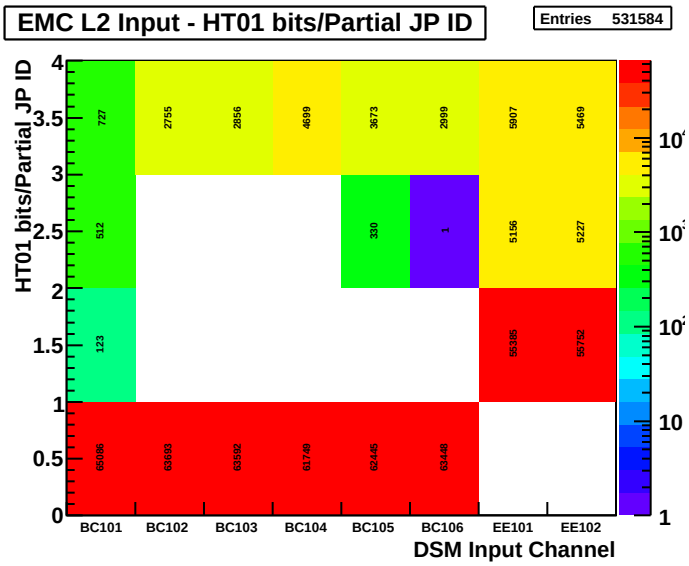

EMC L2 Input - JPY/JPB bits
Entries 3665
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

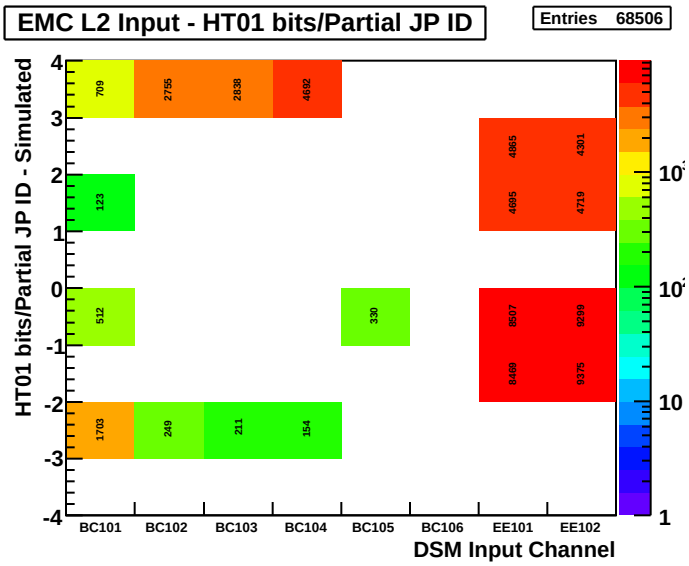

EMC L2 Input - JPZ/JPC bits
Entries 531584
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

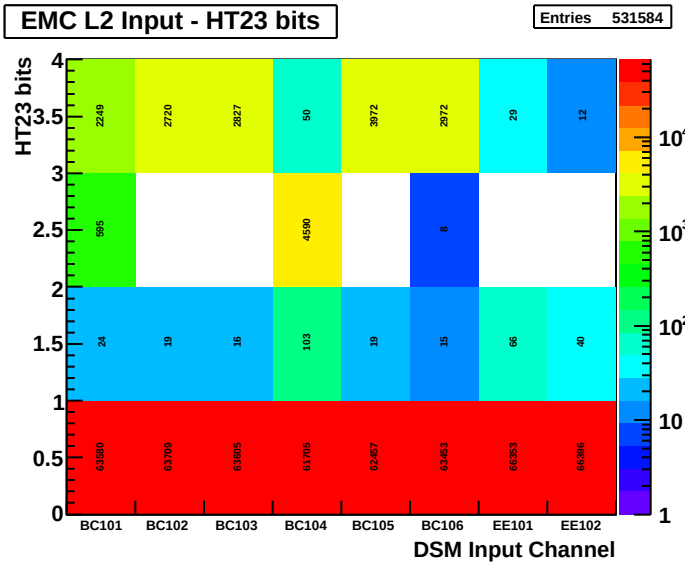

EMC L2 Input - JPZ/JPC bits
Entries 3606
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

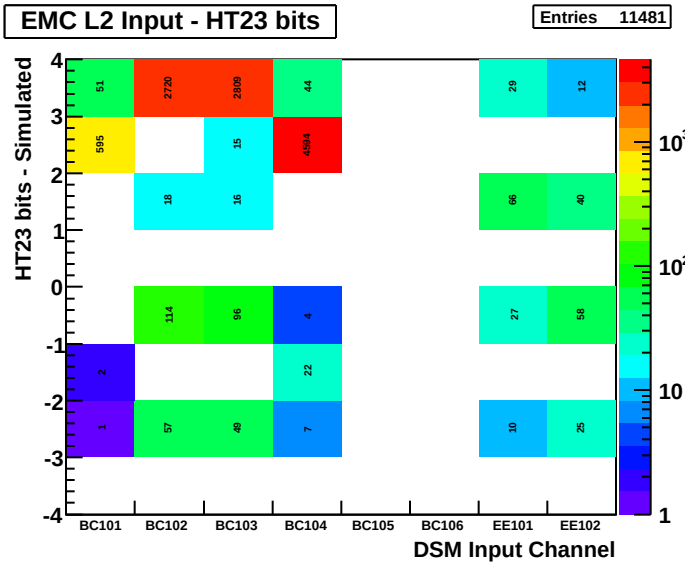

EMC L2 Input - Partial JP Sum
Entries 531584
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

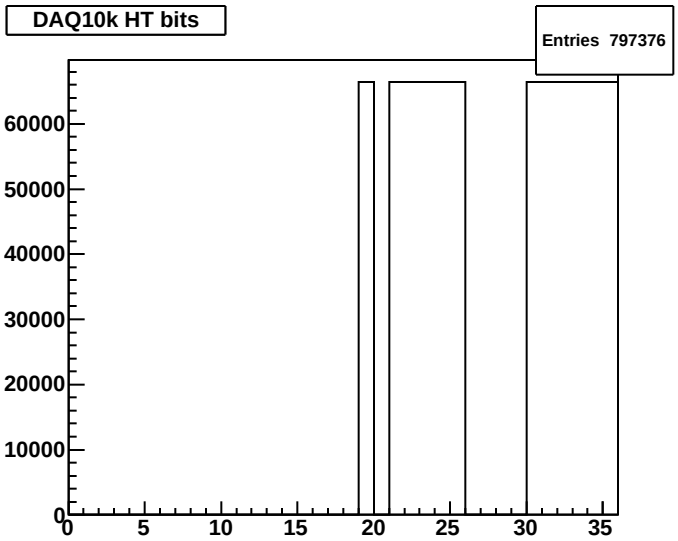

EMC L2 Input - Partial JP Sum
Entries 132981
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

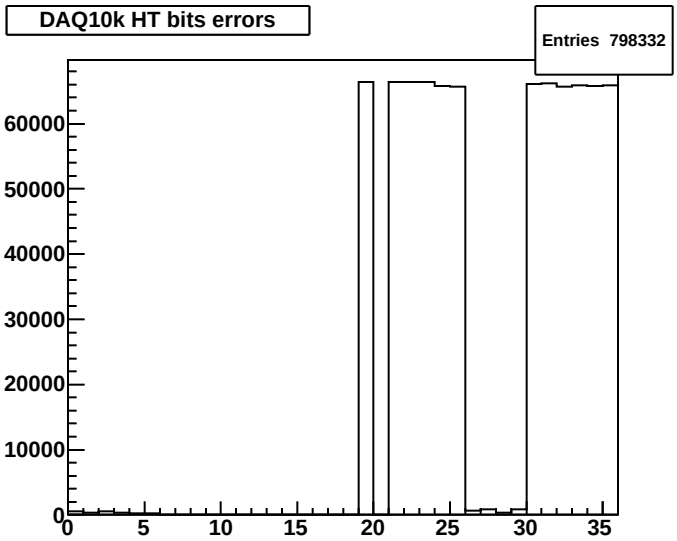

EMC L2 Input - HT01 bits/Partial JP ID
Entries 531584
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

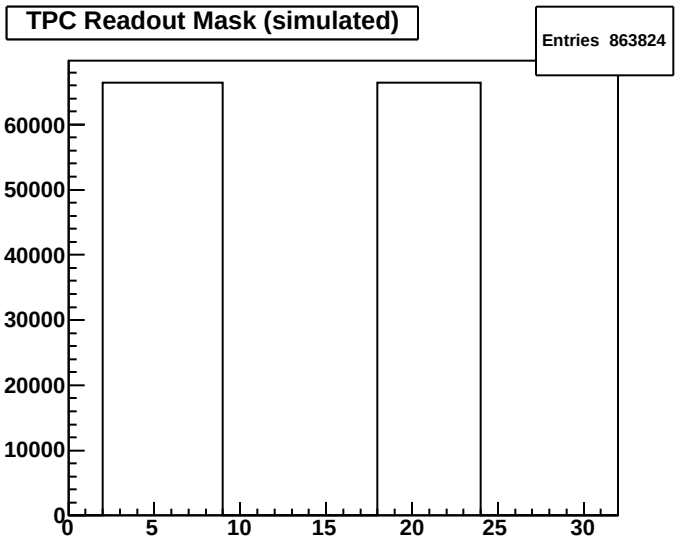

EMC L2 Input - HT01 bits/Partial JP ID
Entries 68506
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

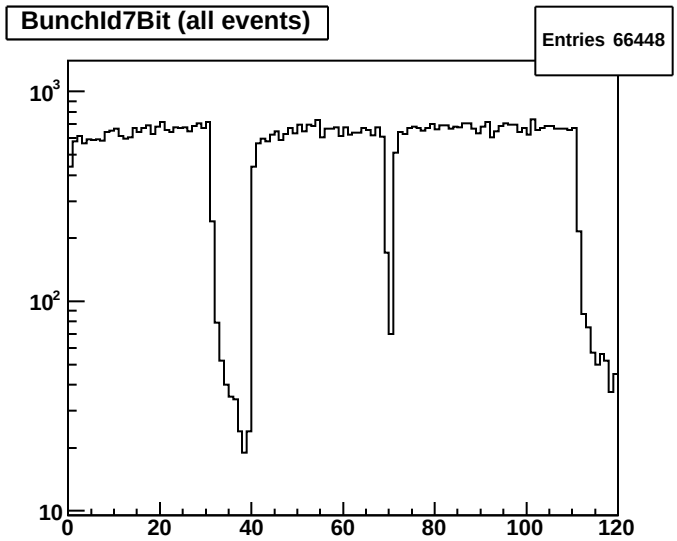

EMC L2 Input - HT23 bits
Entries 531584
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

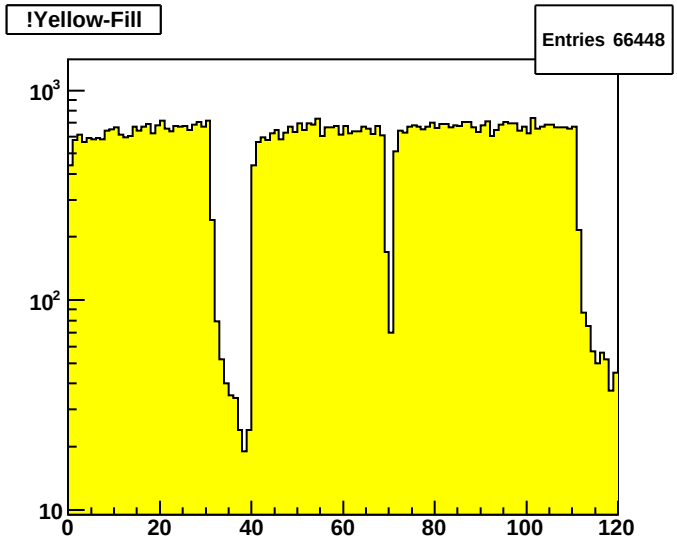

EMC L2 Input - HT23 bits
Entries 11481
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

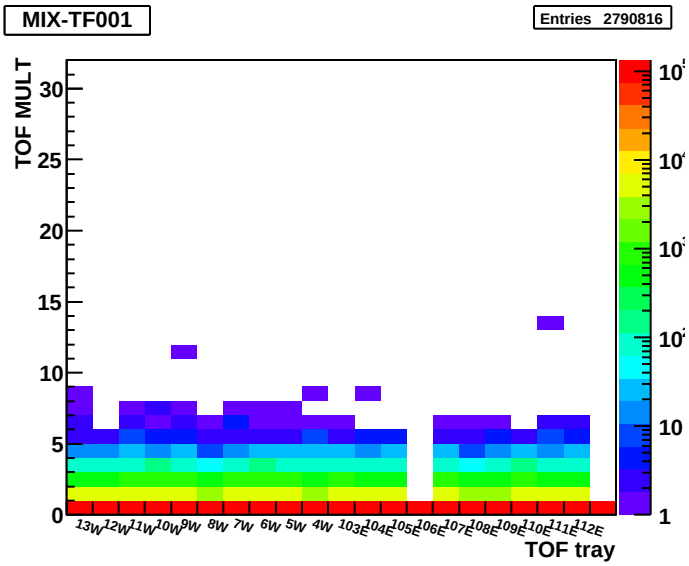

DAQ10k HT bits
Entries 797376
60000
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30 35

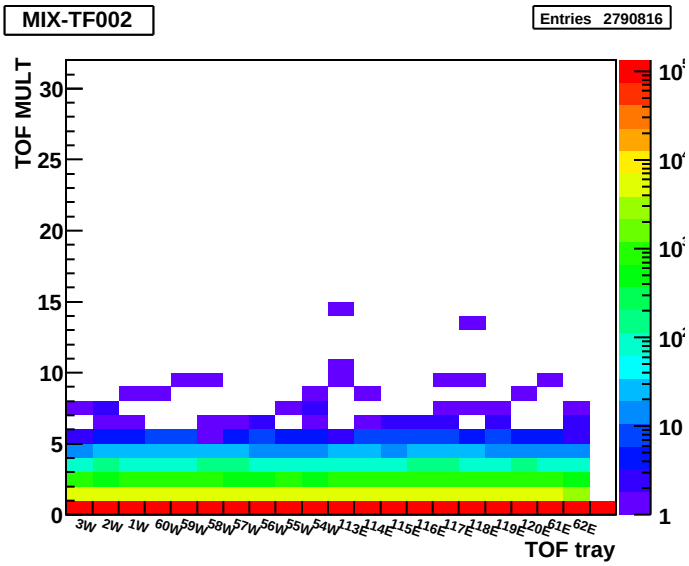

DAQ10k HT bits errors
Entries 798332
60000
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30 35

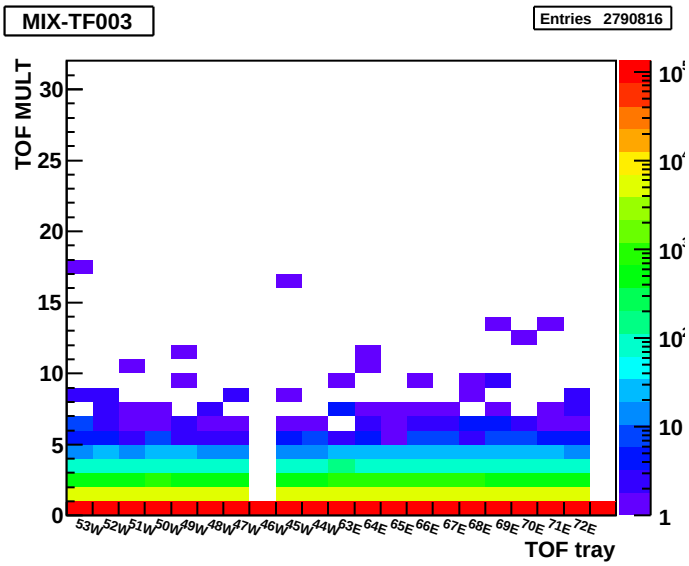

TPC Readout Mask (simulated)
Entries 863824
60000
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30

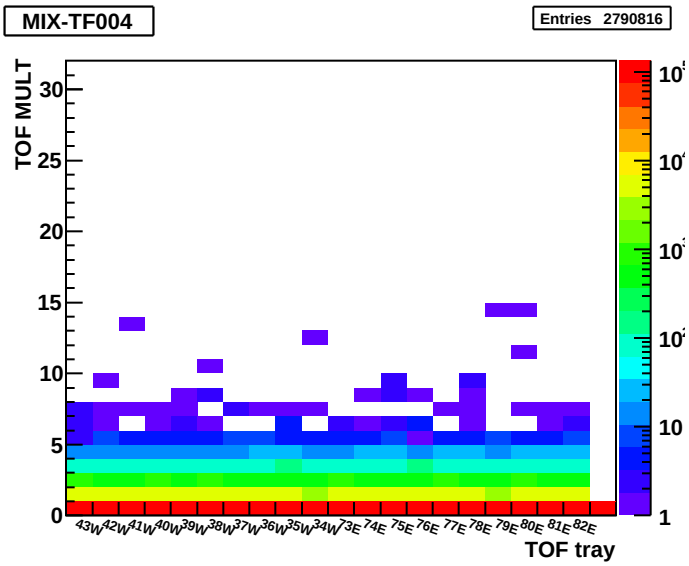

BunchId7Bit (all events)
Entries 66448
10^3
10^2
10
0 20 40 60 80 100 120

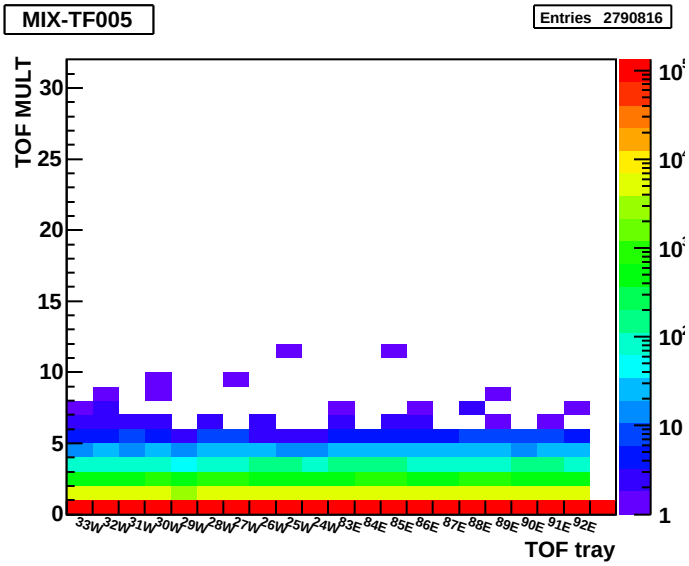

!Yellow-Fill
Entries 66448
10^3
10^2
10
0 20 40 60 80 100 120

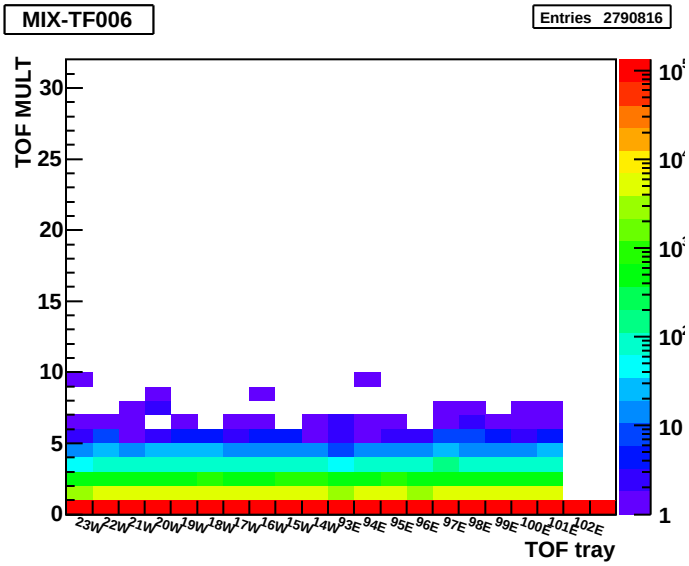

MIX-TF001
Entries 2790816
TOF MULT
TOF tray

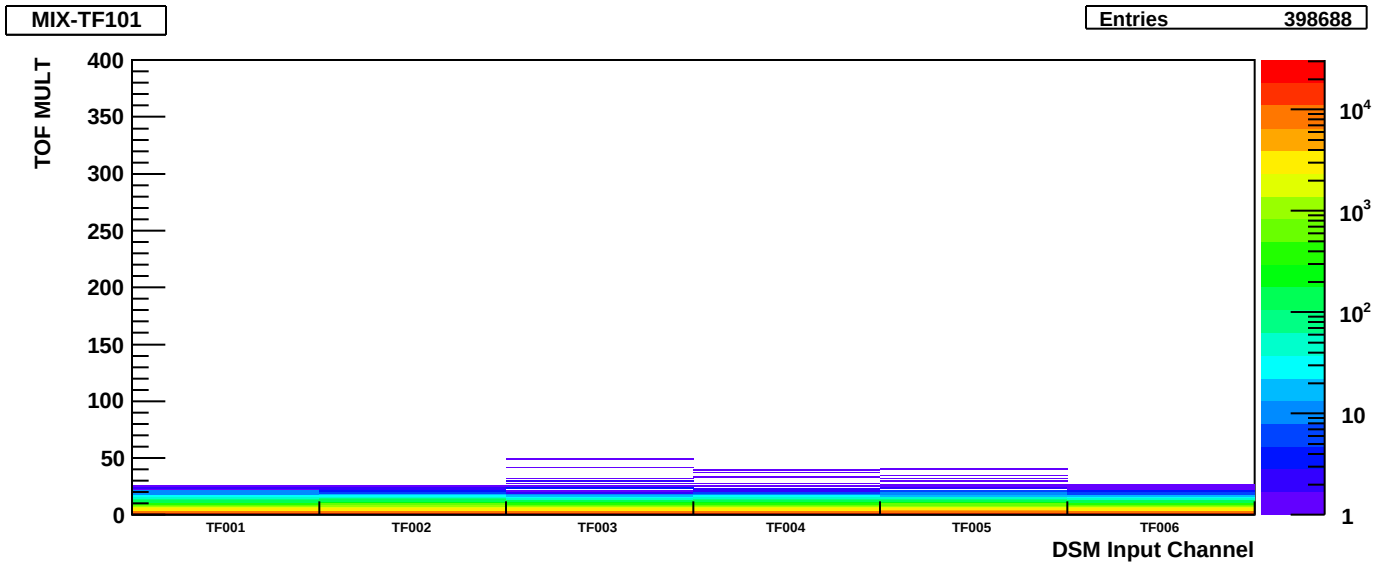

MIX-TF002
Entries 2790816
TOF MULT
TOF tray

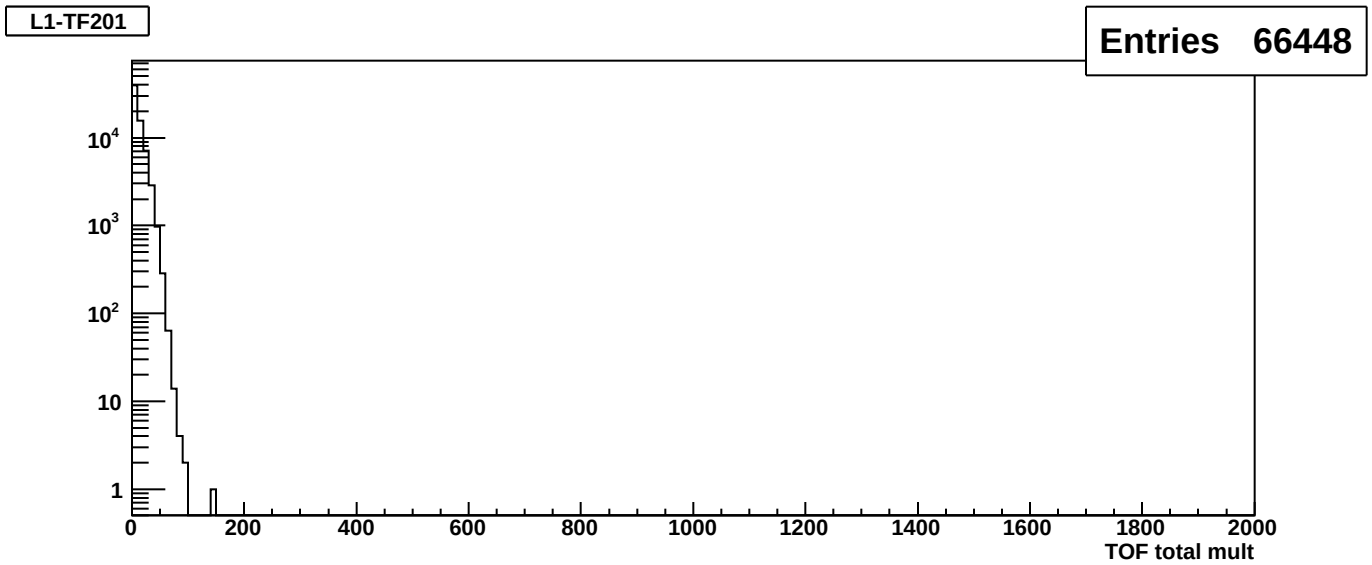

MIX-TF003
Entries 2790816
TOF MULT
TOF tray

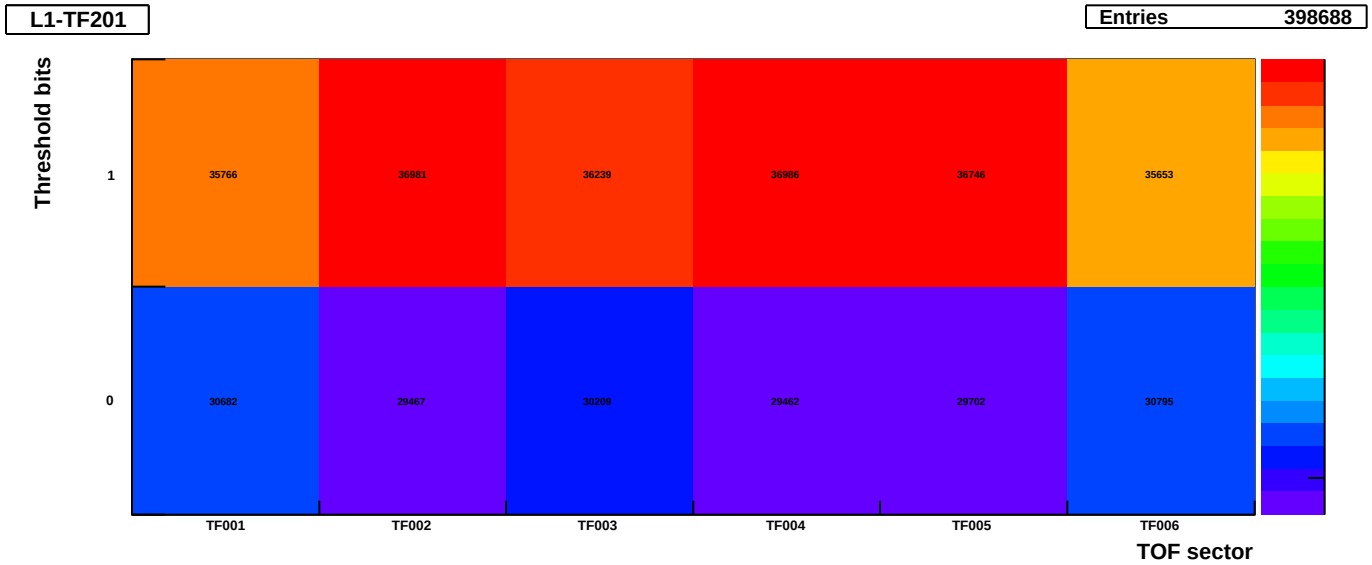

MIX-TF004
Entries 2790816
TOF MULT
TOF tray

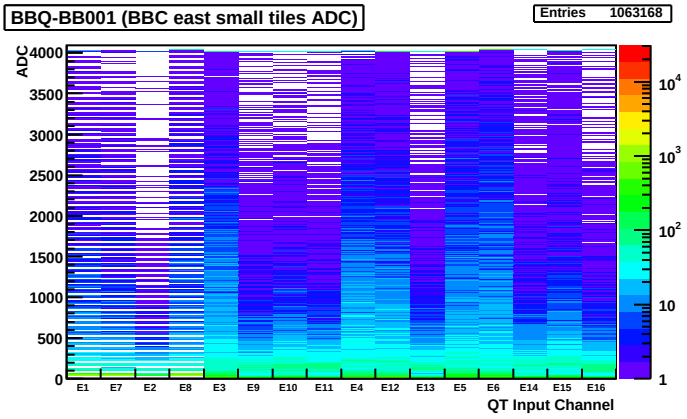

MIX-TF005
Entries 2790816
TOF MULT
TOF tray

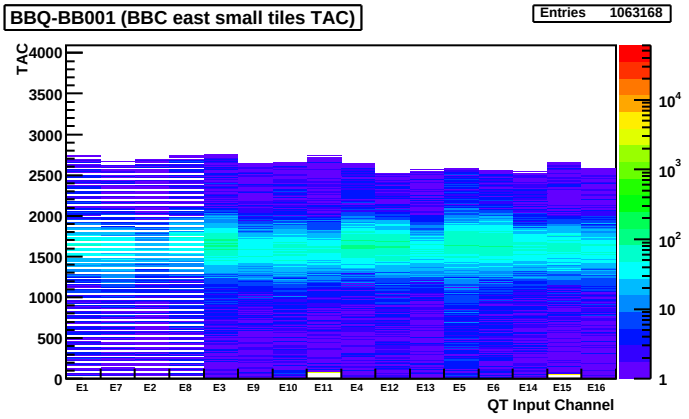

MIX-TF006
Entries 2790816
TOF MULT
TOF tray

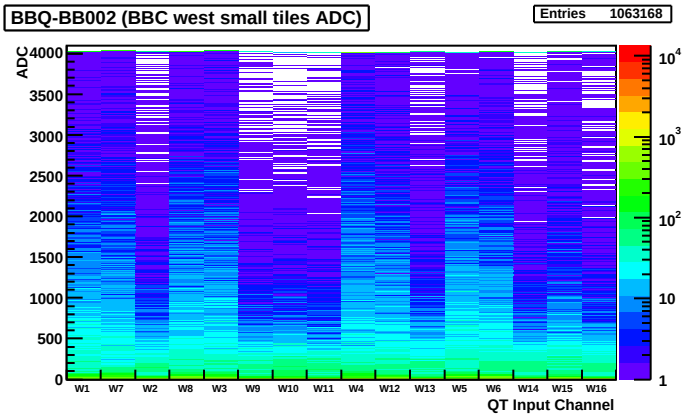

MIX-TF101
Entries 398688
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

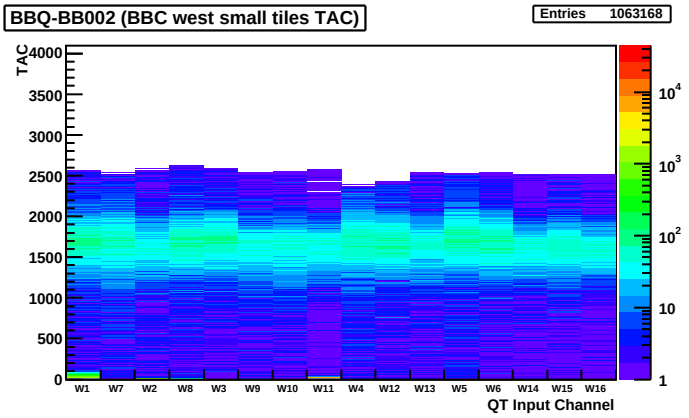

L1-TF201
Entries 66448
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

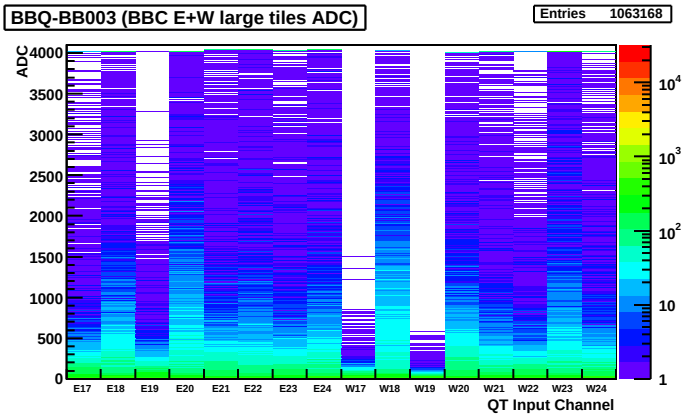

L1-TF201
Entries 398688
Threshold bits
1
0
35766
36981
36239
36986
36746
35653
30682
29467
30209
29462
29702
30795
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

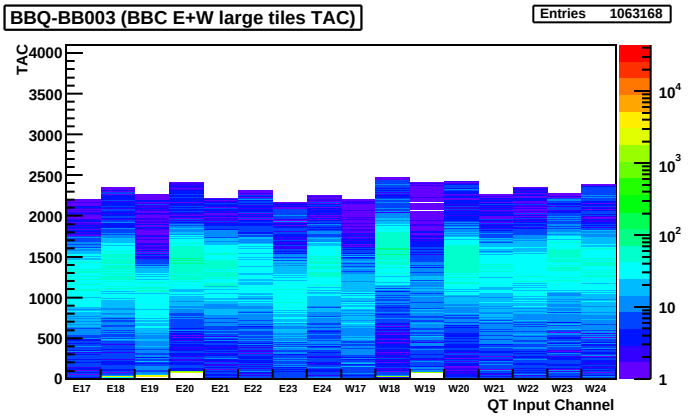

BBQ-BB001 (BBC east small tiles ADC)
Entries 1063168
ADC
QT Input Channel

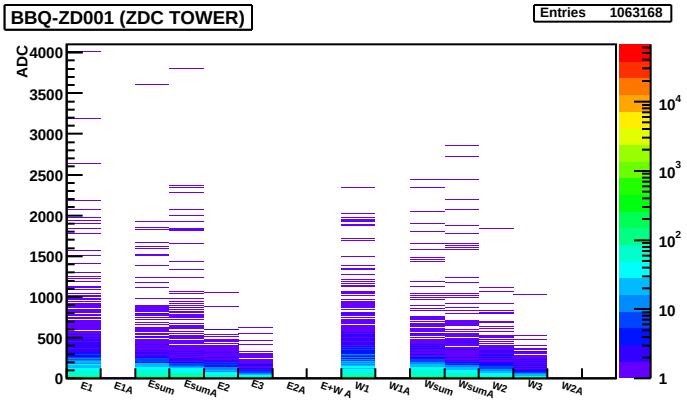

BBQ-BB001 (BBC east small tiles TAC)
Entries 1063168
TAC
QT Input Channel

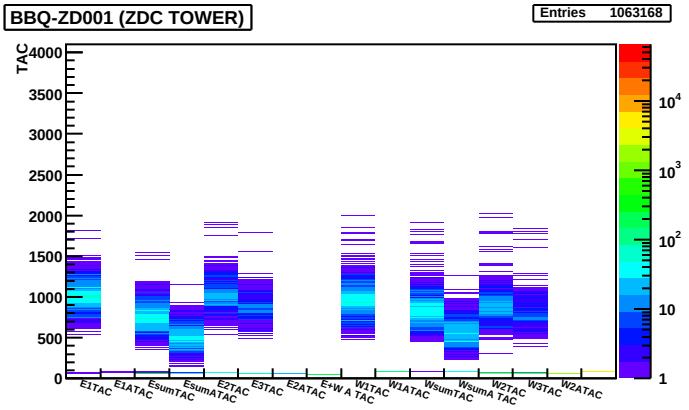

BBQ-BB002 (BBC west small tiles ADC)
Entries 1063168
ADC
QT Input Channel

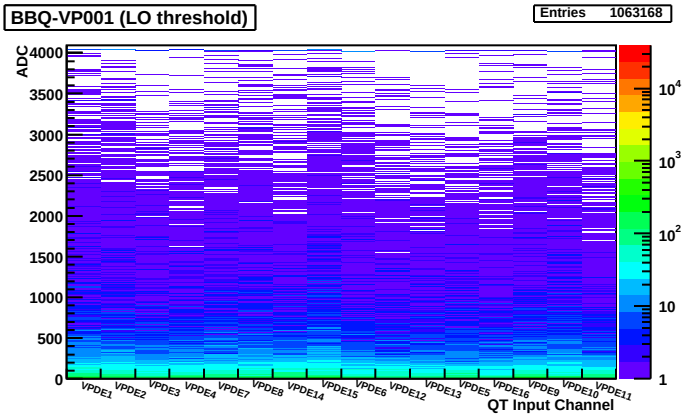

BBQ-BB002 (BBC west small tiles TAC)
Entries 1063168
TAC
QT Input Channel

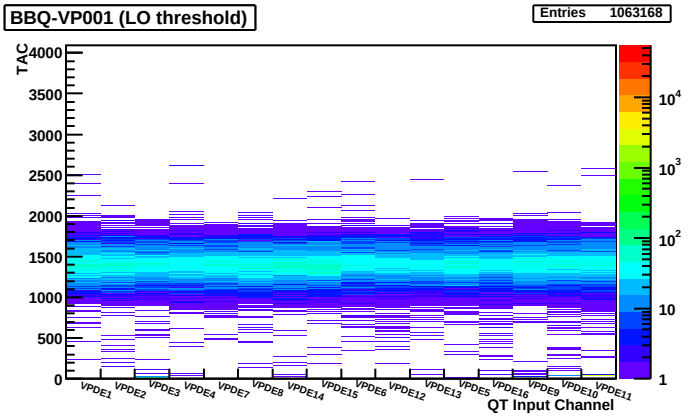

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1063168
ADC
QT Input Channel

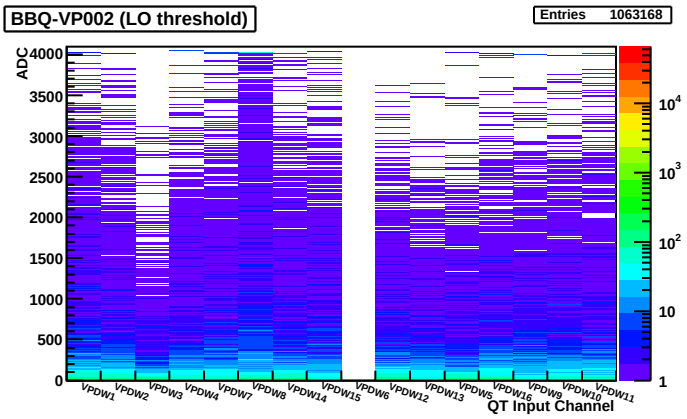

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1063168
TAC
QT Input Channel

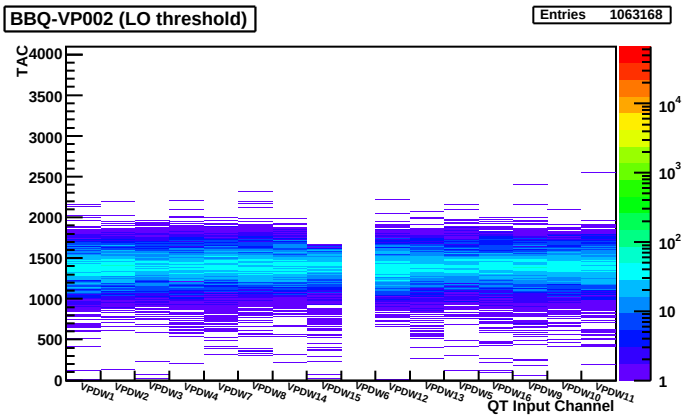

BBQ-ZD001 (ZDC TOWER)
Entries 1063168
ADC

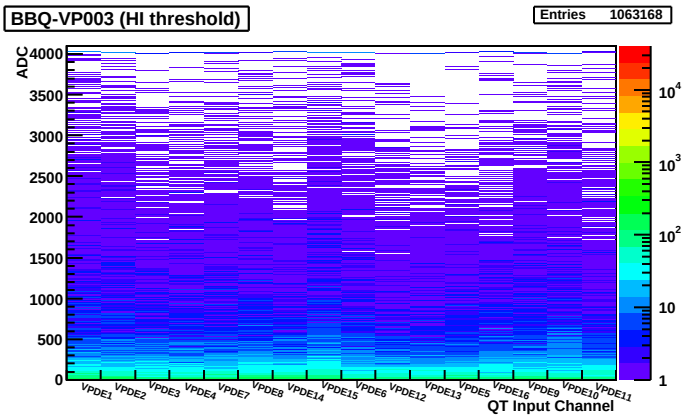

BBQ-ZD001 (ZDC TOWER)
Entries 1063168
TAC

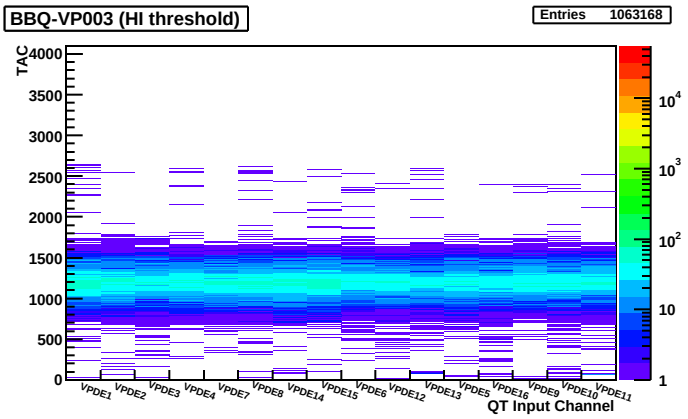

BBQ-VP001 (LO threshold)
Entries 1063168
ADC
QT Input Channel

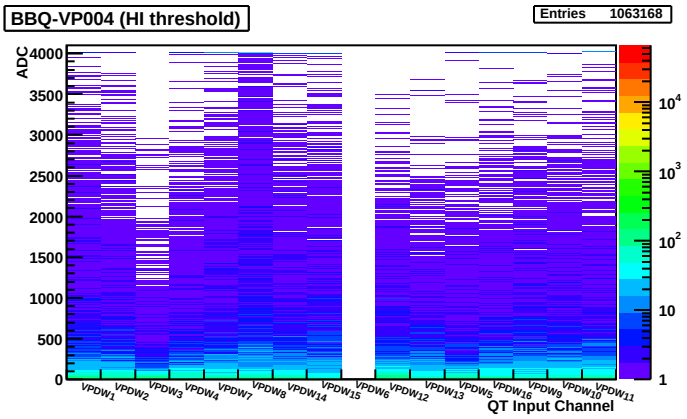

BBQ-VP001 (LO threshold)
Entries 1063168
TAC
QT Input Channel

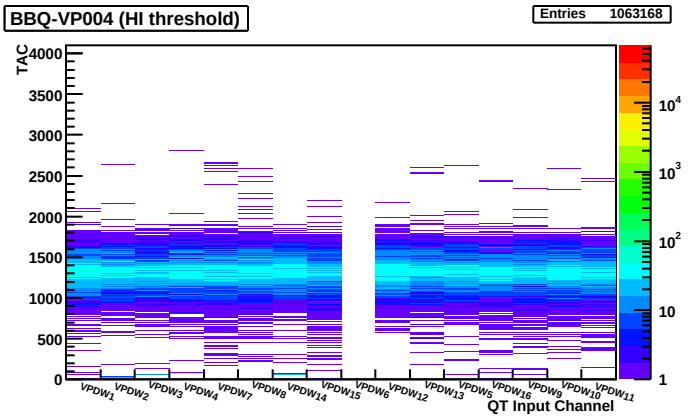

BBQ-VP002 (LO threshold)
Entries 1063168
ADC
QT Input Channel

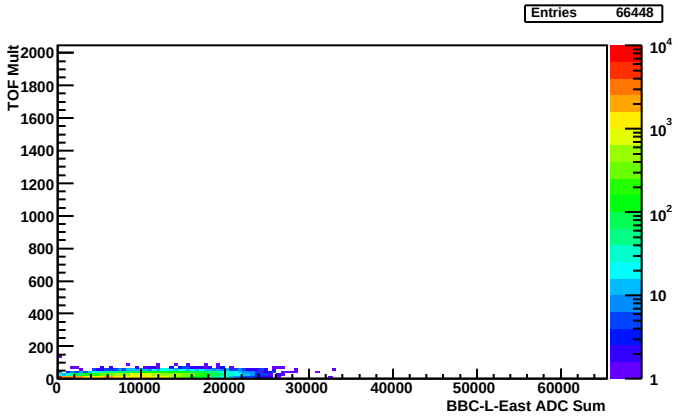

BBQ-VP002 (LO threshold)
Entries 1063168
TAC
QT Input Channel

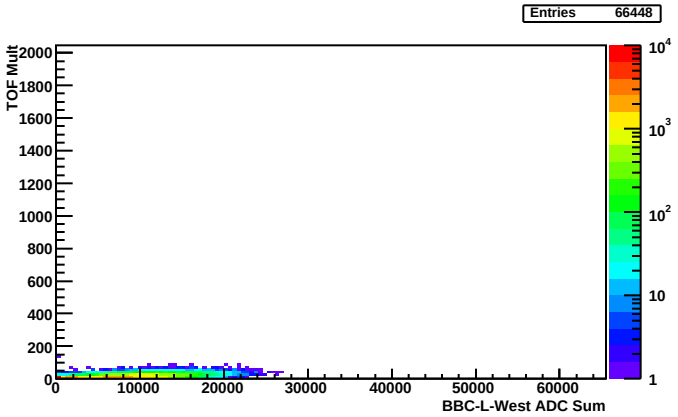

BBQ-VP003 (HI threshold)
Entries 1063168
ADC
QT Input Channel

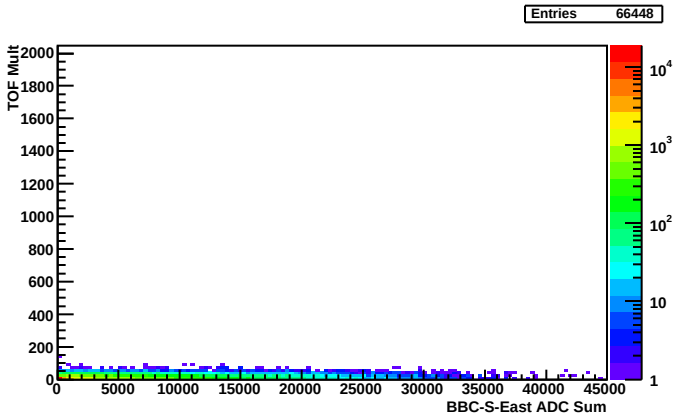

BBQ-VP003 (HI threshold)
Entries 1063168
TAC
QT Input Channel

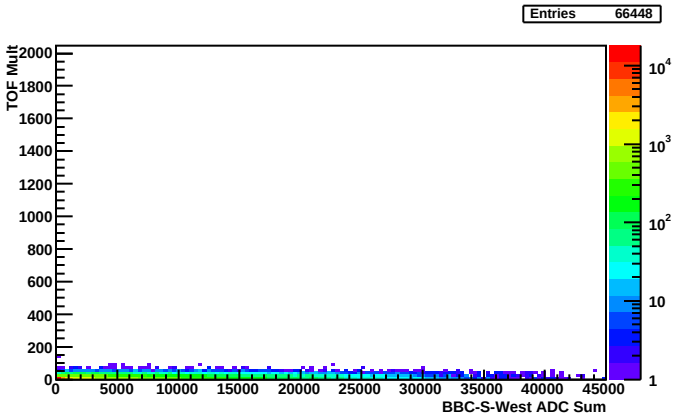

BBQ-VP004 (HI threshold)
Entries 1063168
ADC
QT Input Channel

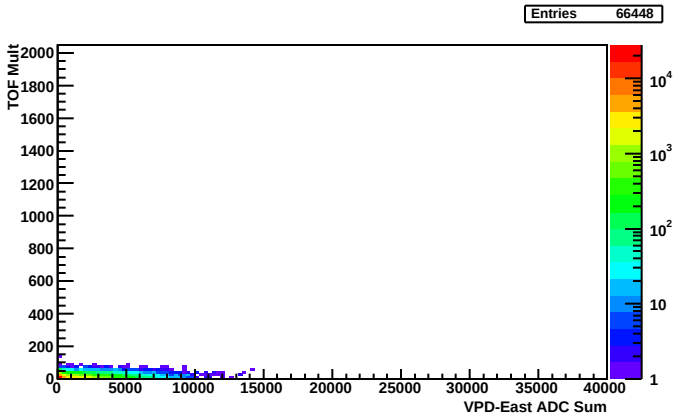

BBQ-VP004 (HI threshold)
Entries 1063168
TAC
QT Input Channel

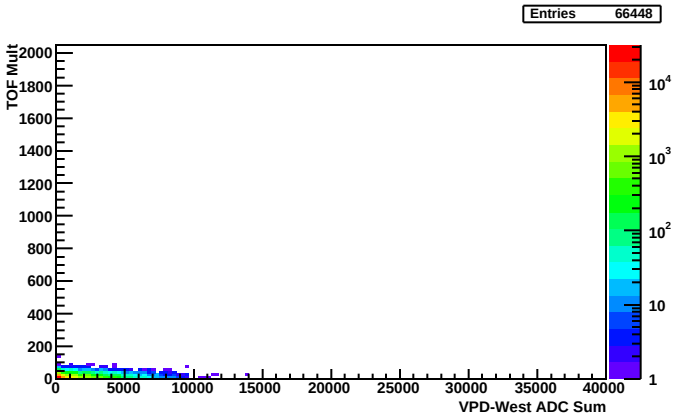

Entries 66448
TOF Mult
BBC-L-East ADC Sum

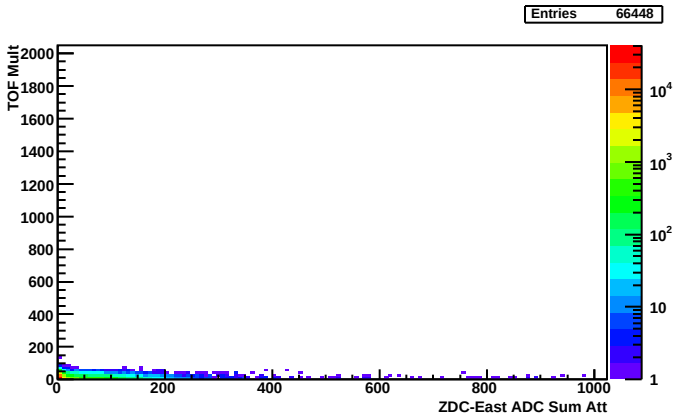

Entries 66448
TOF Mult
BBC-L-West ADC Sum

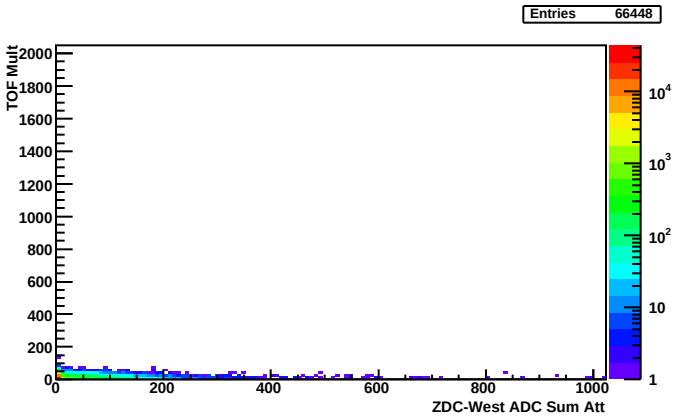

Entries 66448
TOF Mult
BBC-S-East ADC Sum

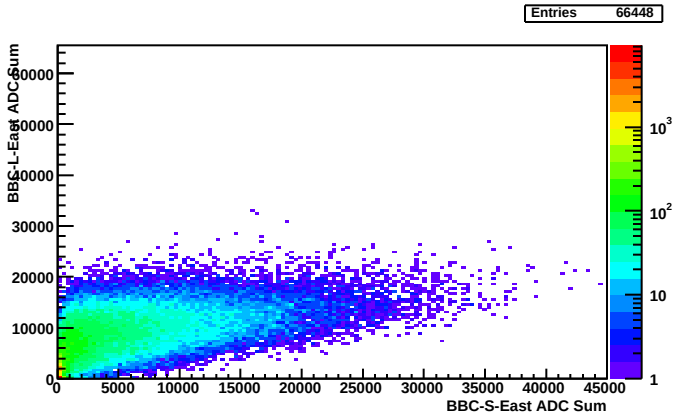

Entries 66448
TOF Mult
BBC-S-West ADC Sum

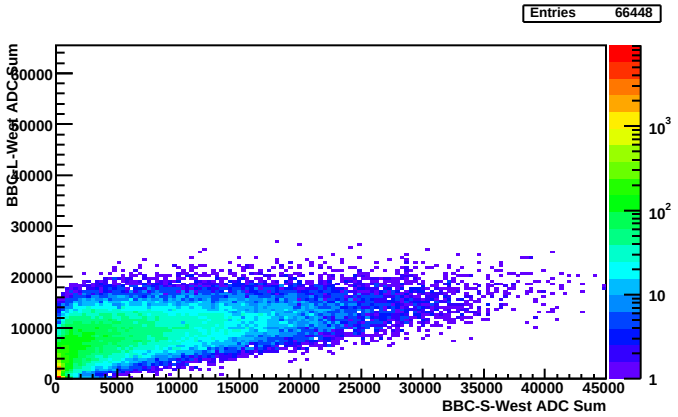

Entries 66448
TOF Mult
VPD-East ADC Sum

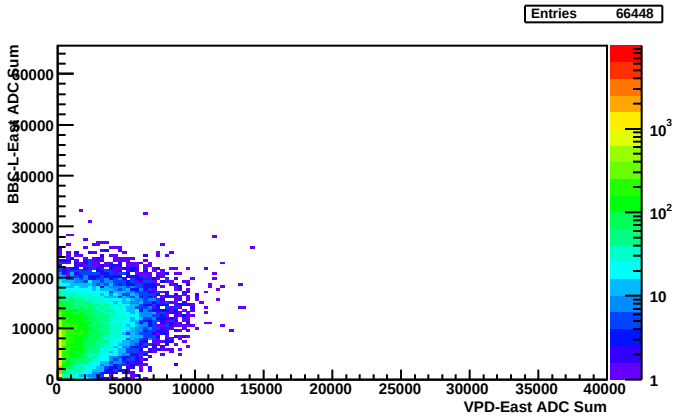

Entries 66448
TOF Mult
VPD-West ADC Sum

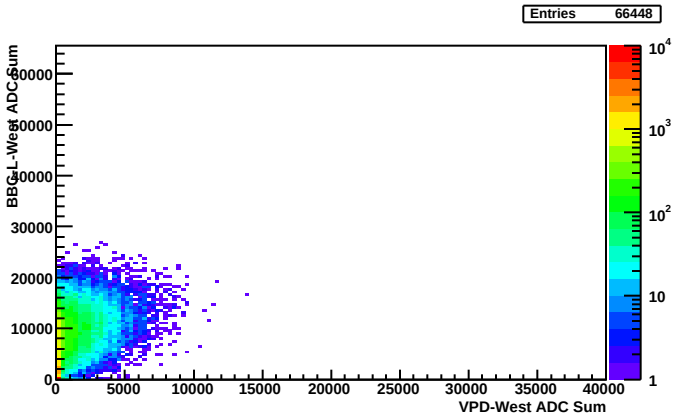

Entries 66448
TOF Mult
ZDC-East ADC Sum Att


Entries 66448
TOF Mult
ZDC-West ADC Sum Att


Entries 66448
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 66448
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 66448
BBC-L-East ADC Sum
VPD-East ADC Sum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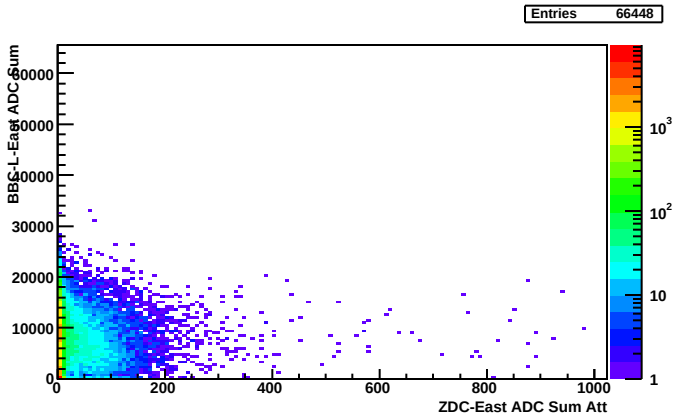
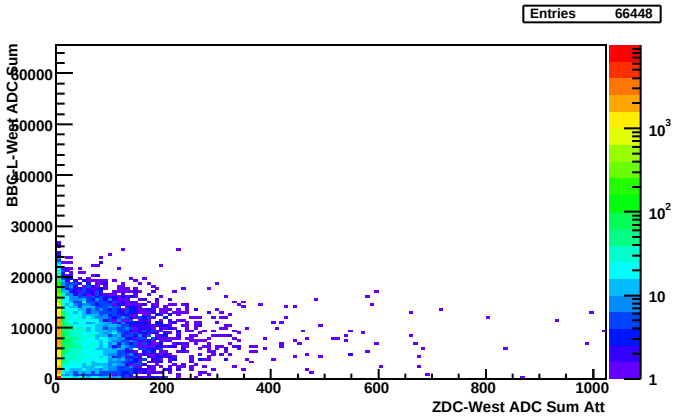
BBC-L-West ADC Sum
VPD-West ADC Sum


Entries 66448
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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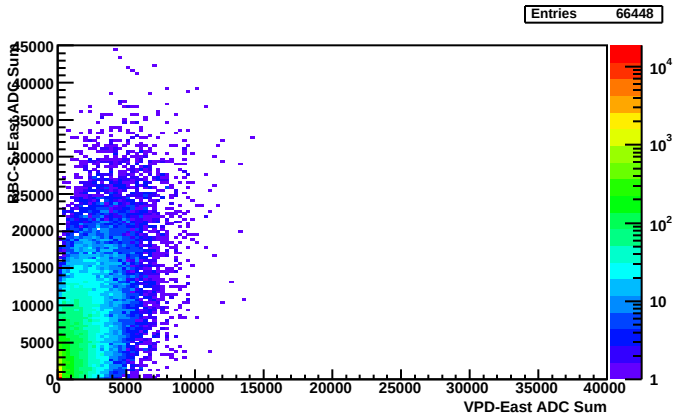
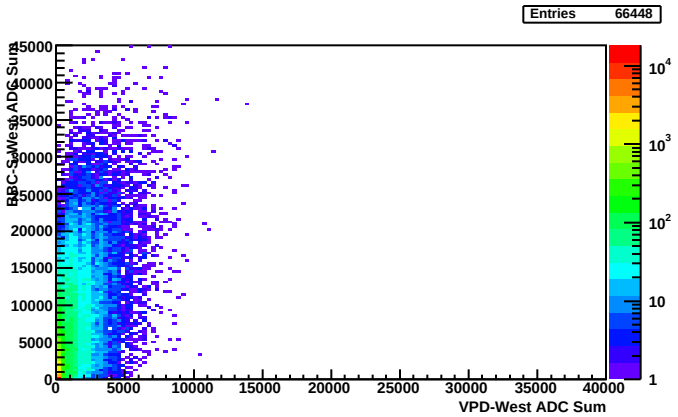
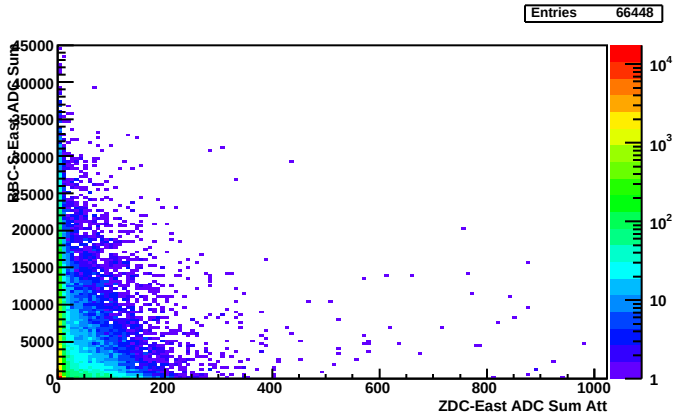
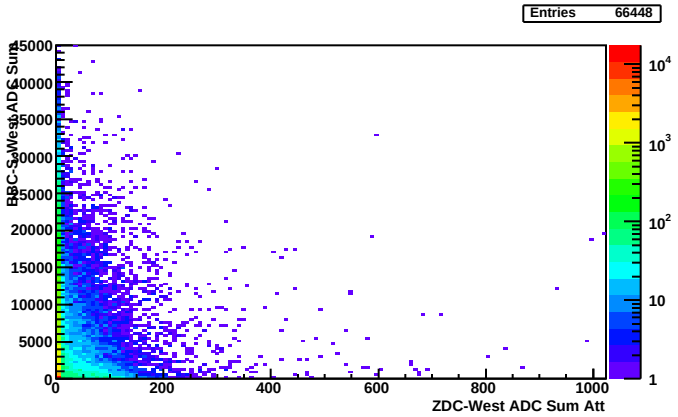
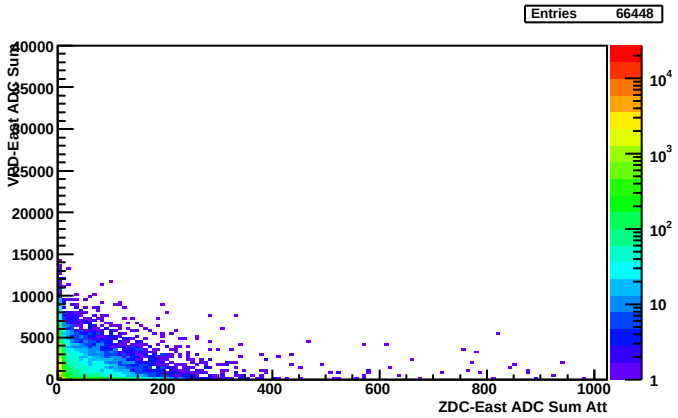
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

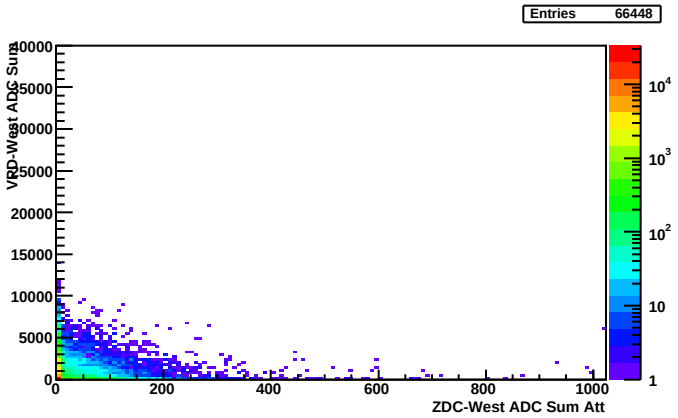

Entries 66448
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 66448
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 66448
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 66448
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 66448
VPD-East ADC Sum
ZDC-East ADC Sum Att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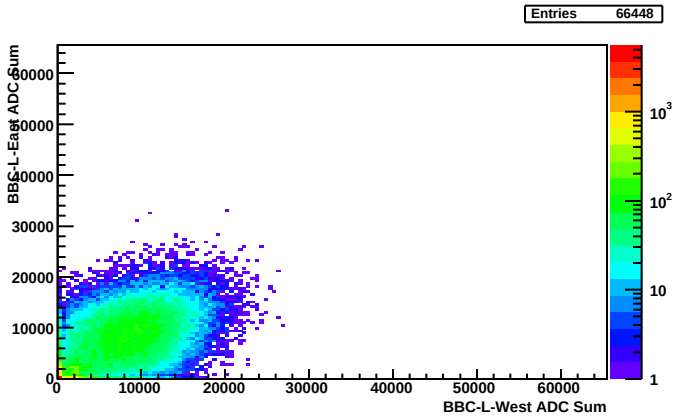
VPD-West ADC Sum
ZDC-West ADC Sum Att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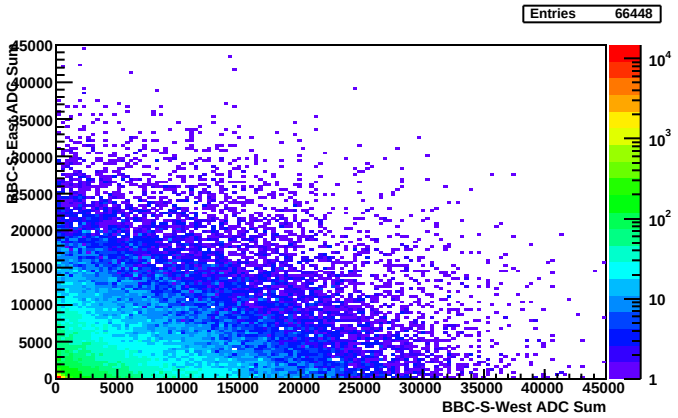
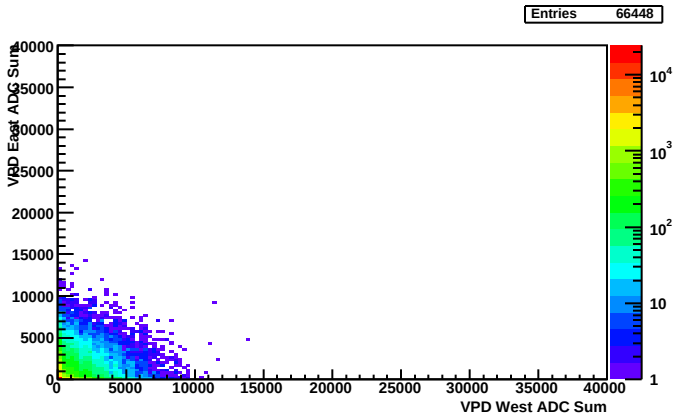
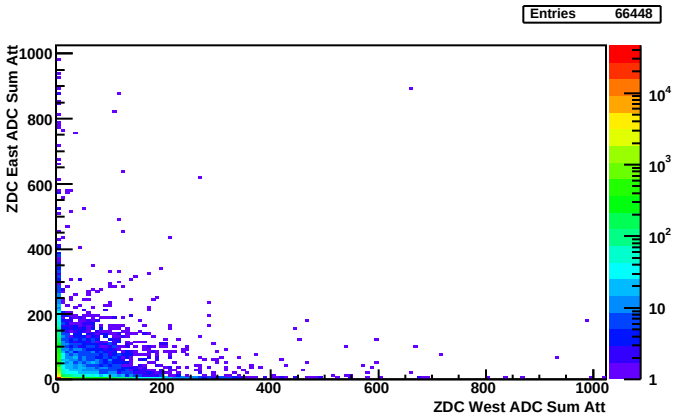
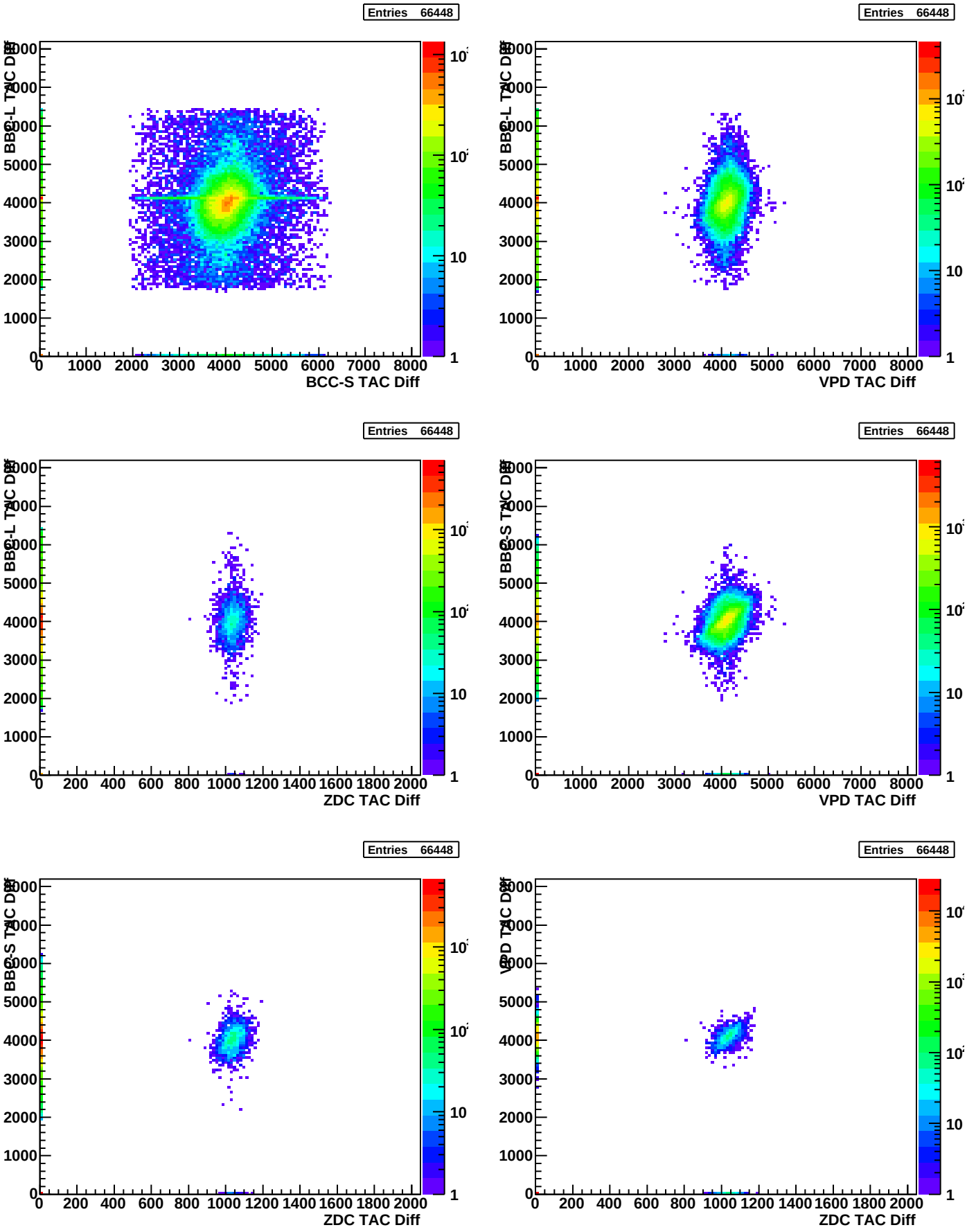
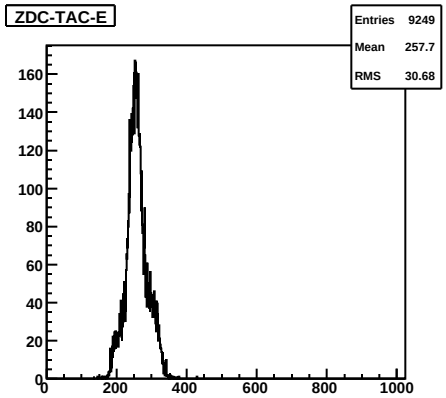
BBC-L-East ADC Sum
BBC-L-West ADC Sum

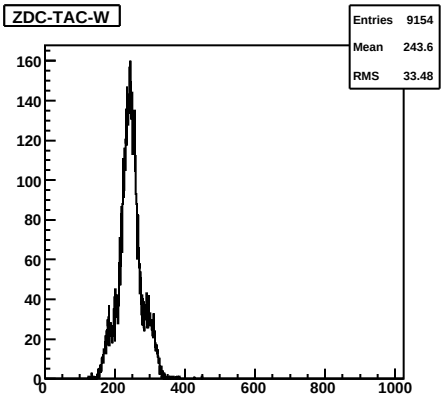

Entries 66448
BBC-S-East ADC Sum
BBC-S-West ADC Sum

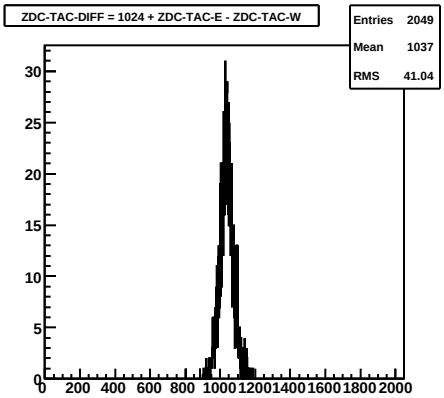

Entries 66448
VPD East ADC Sum
VPD West ADC Sum

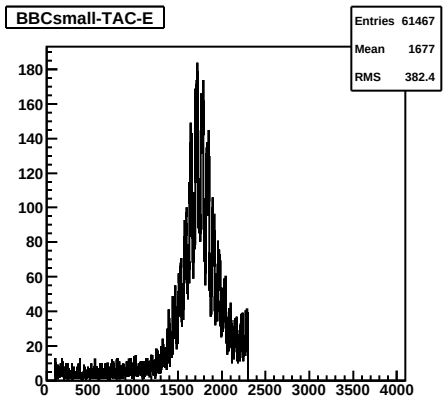

Entries 66448
ZDC East ADC Sum Att
ZDC West ADC Sum Att

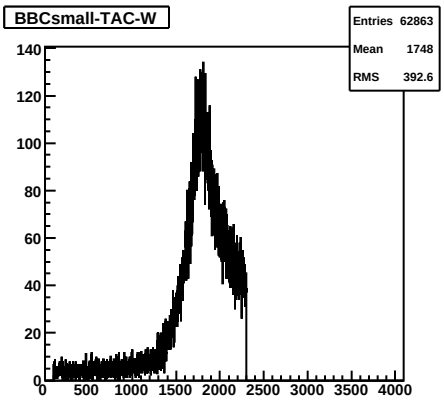

Entries 66448
BBC-L TAC Diff
BCC-S TAC Diff
Entries 66448
BBC-L TAC Diff
VPD TAC Diff
Entries 66448
BBC-L TAC Diff
ZDC TAC Diff
Entries 66448
BBC-S TAC Diff
VPD TAC Diff
Entries 66448
BBC-S TAC Diff
ZDC TAC Diff
Entries 66448
VPD TAC Diff
ZDC TAC Diff

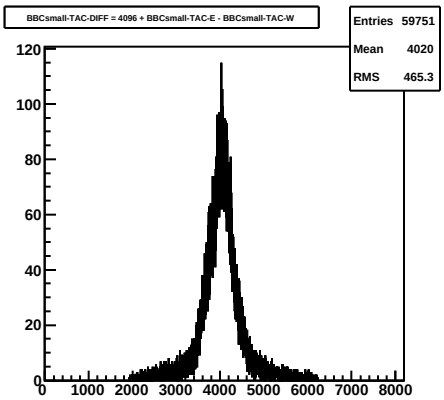

ZDC-TAC-E
Entries 9249
Mean 257.7
RMS 30.68

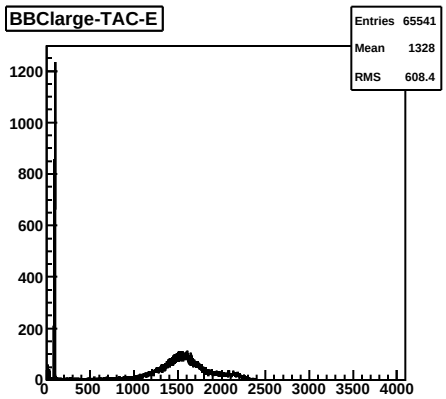

ZDC-TAC-W
Entries 9154
Mean 243.6
RMS 33.48

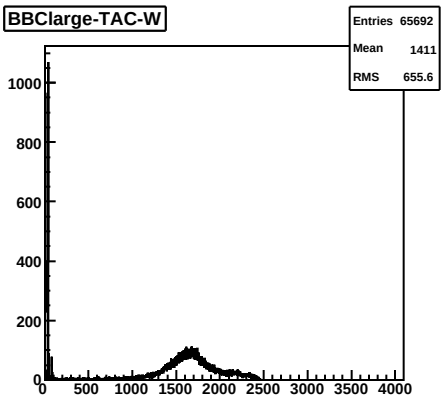

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 2049
Mean 1037
RMS 41.04

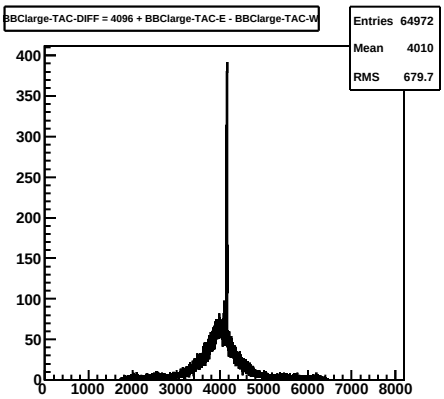

BBCsmall-TAC-E
Entries 61467
Mean 1677
RMS 382.4

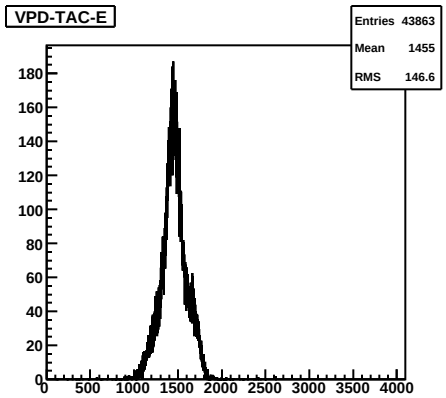

BBCsmall-TAC-W
Entries 62863
Mean 1748
RMS 392.6

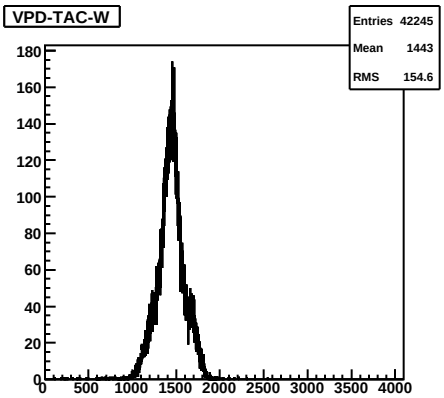

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 59751
Mean 4020
RMS 465.3

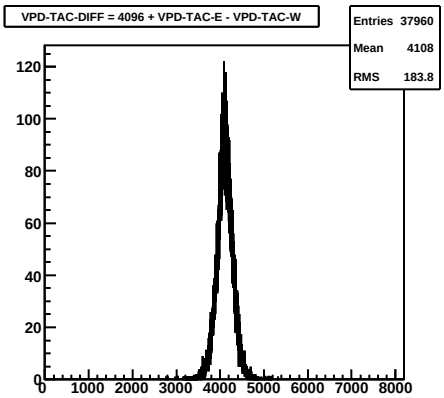

BBClarge-TAC-E
Entries 65541
Mean 1328
RMS 608.4

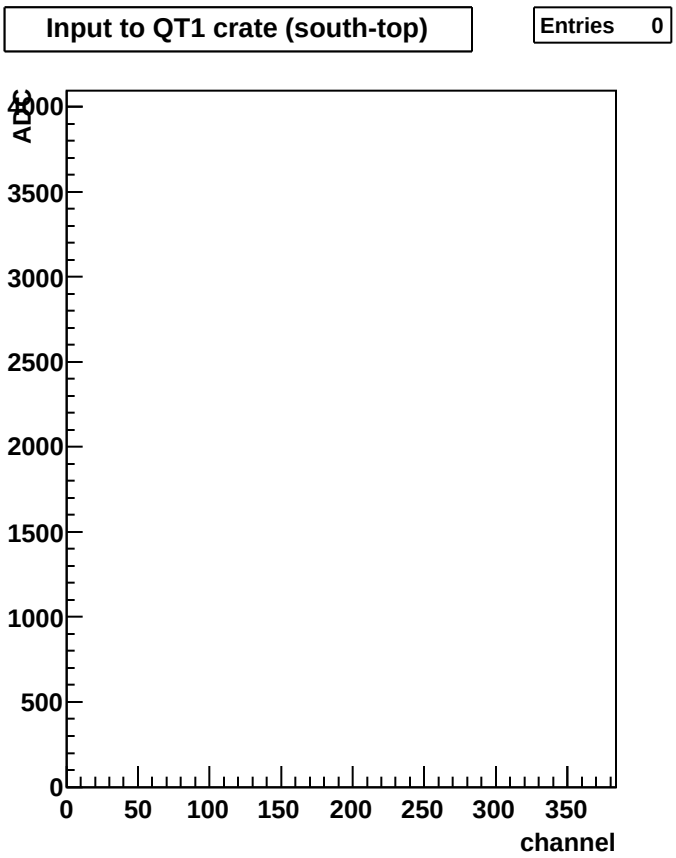

BBClarge-TAC-W
Entries 65692
Mean 1411
RMS 655.6

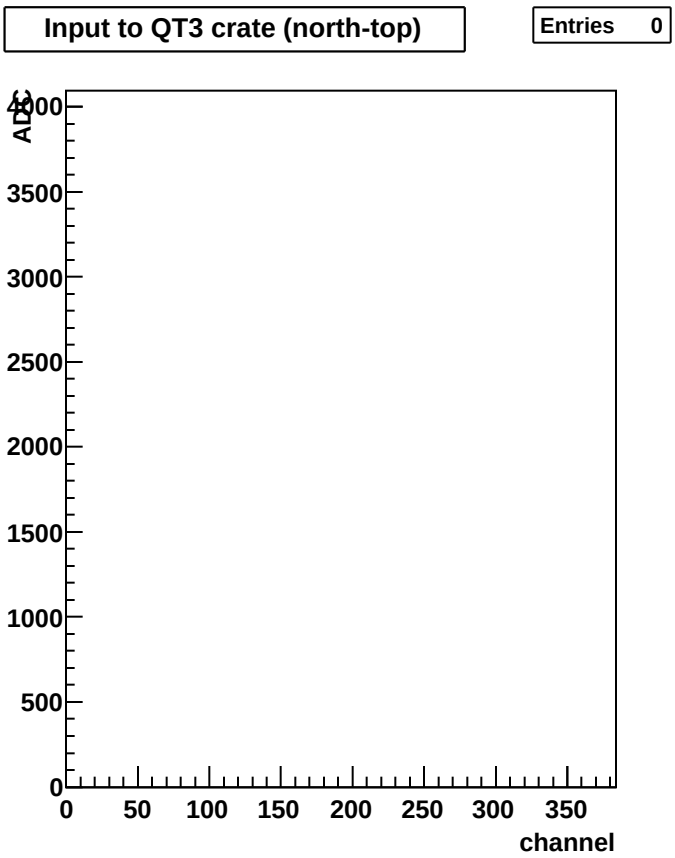

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 64972
Mean 4010
RMS 679.7

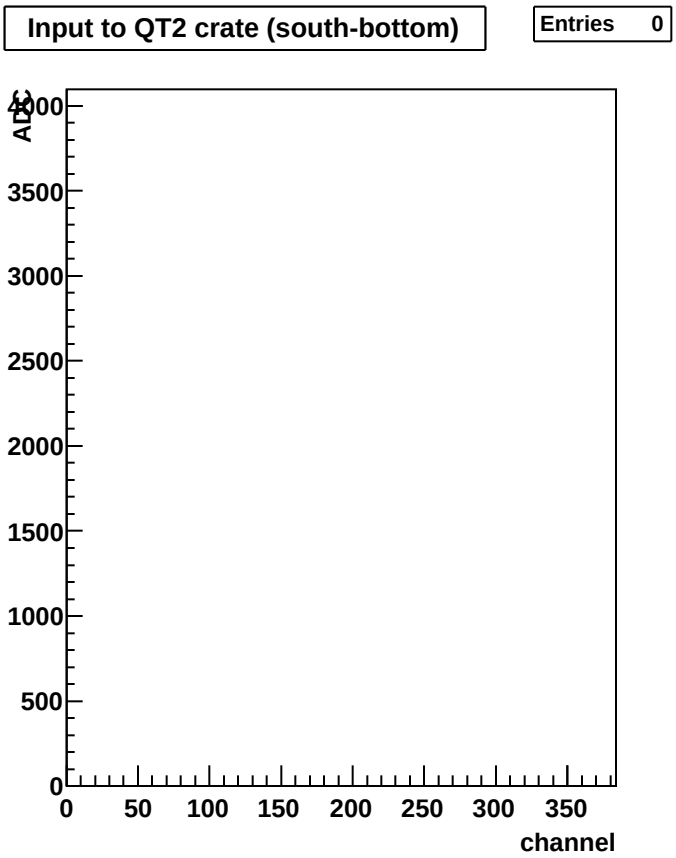

VPD-TAC-E
Entries 43863
Mean 1455
RMS 146.6

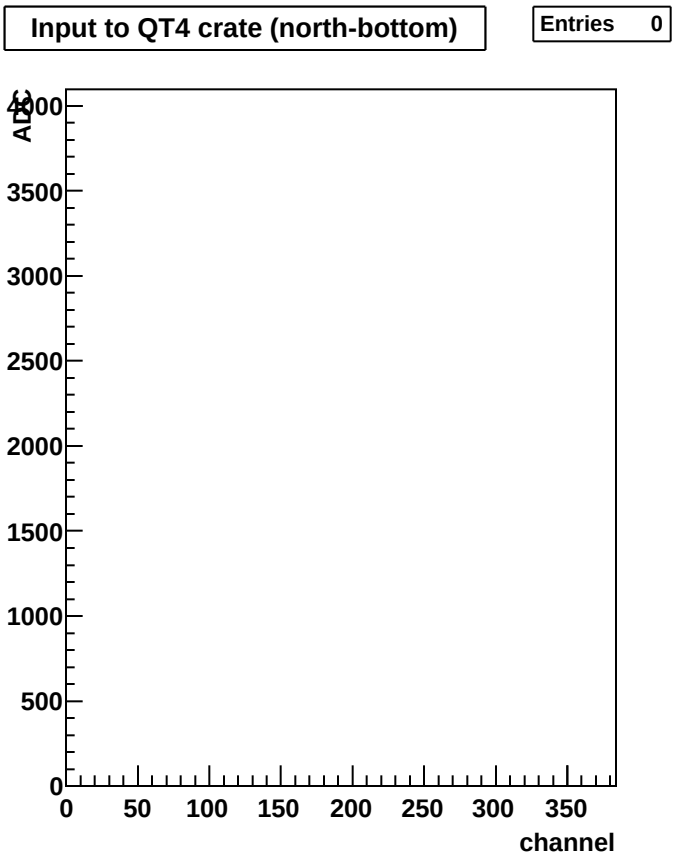

VPD-TAC-W
Entries 42245
Mean 1443
RMS 154.6

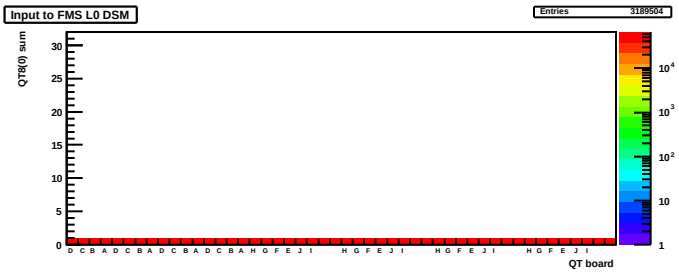

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 37960
Mean 4108
RMS 183.8

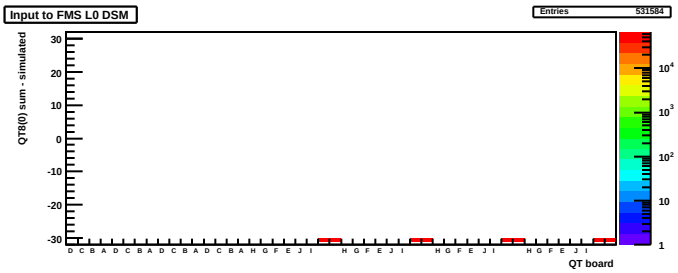

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

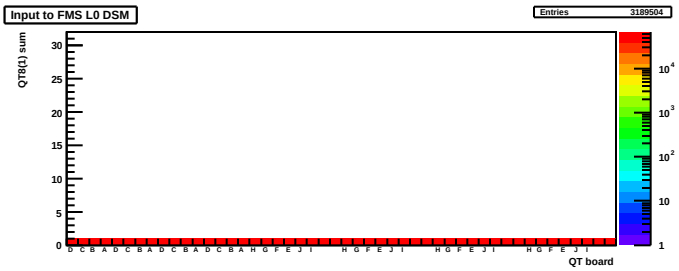

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

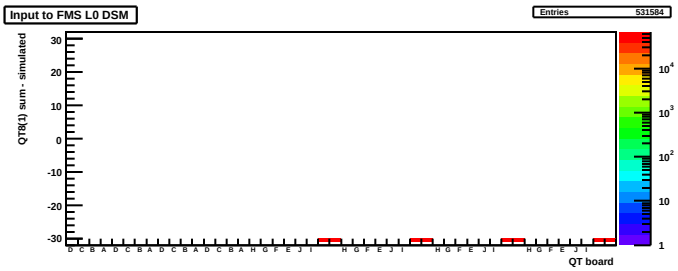

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

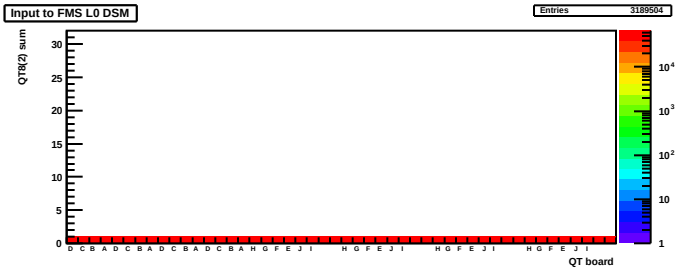

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

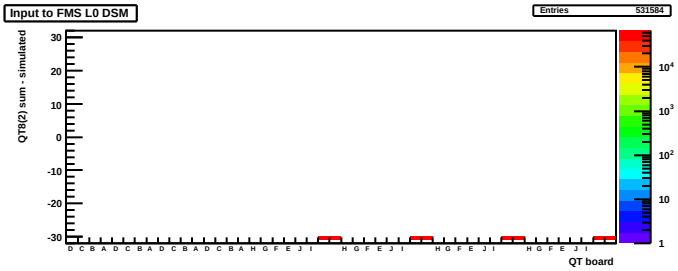

Input to FMS L0 DSM
Entries 3189504
QT8(0) sum
QT board

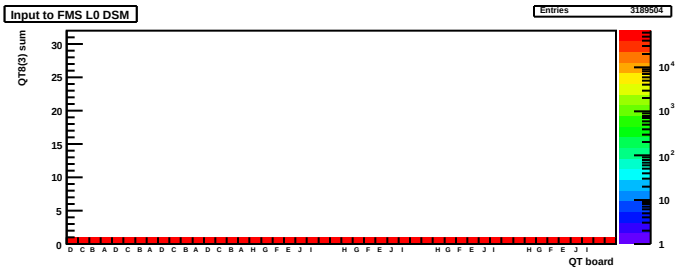

Input to FMS L0 DSM
Entries 531584
QT8(0) sum - simulated
QT board

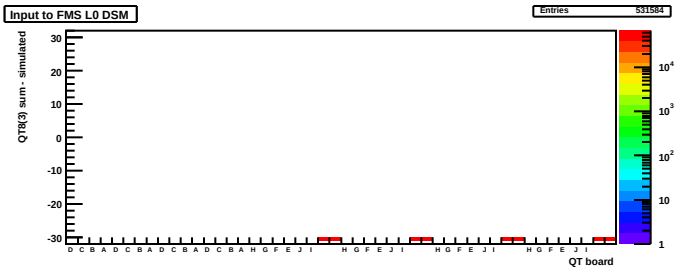

Input to FMS L0 DSM
Entries 3189504
QT8(1) sum
QT board

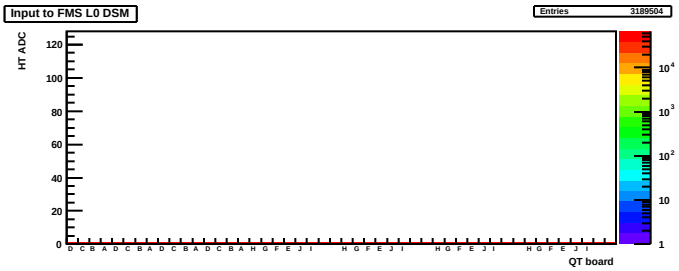

Input to FMS L0 DSM
Entries 531584
QT8(1) sum - simulated
QT board

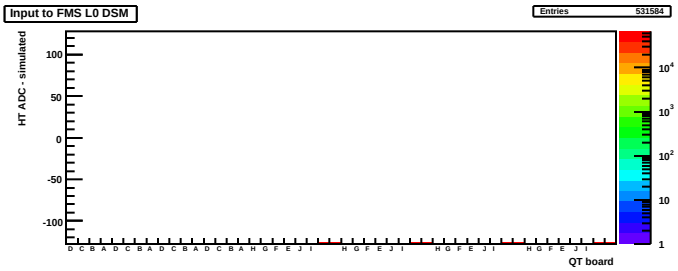

Input to FMS L0 DSM
Entries 3189504
QT8(2) sum
QT board

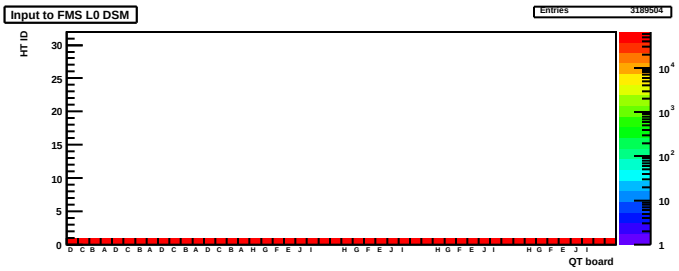

Input to FMS L0 DSM
Entries 531584
QT8(2) sum - simulated
QT board

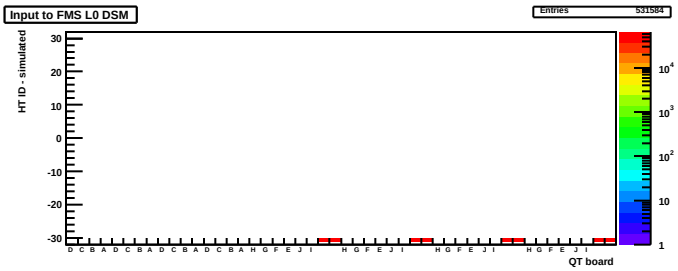

Input to FMS L0 DSM
Entries 3189504
QT8(3) sum
QT board

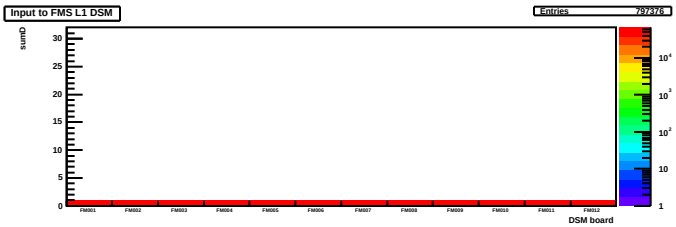

Input to FMS L0 DSM
Entries 531584
QT8(3) sum - simulated
QT board

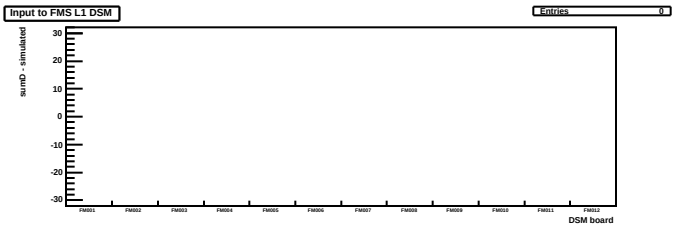

Input to FMS L0 DSM
Entries 3189504
HT ADC
QT board

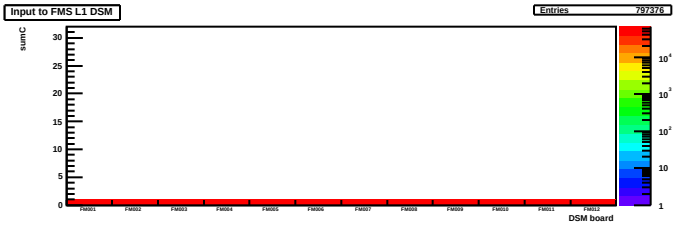

Input to FMS L0 DSM
Entries 531584
HT ADC - simulated
QT board

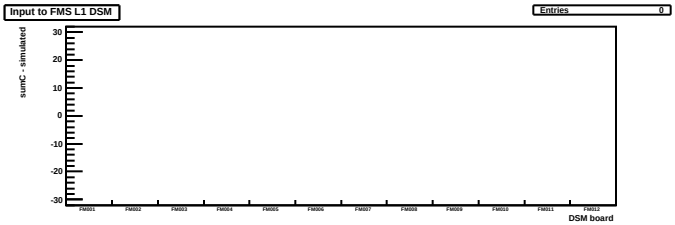

Input to FMS L0 DSM
Entries 3189504
HT ID
QT board

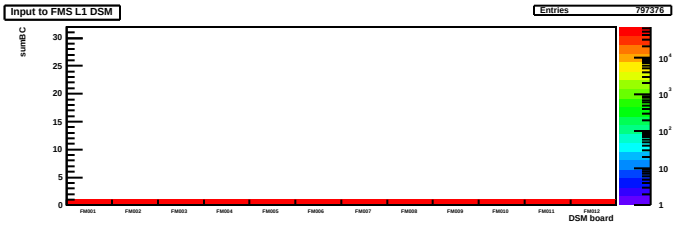

Input to FMS L0 DSM
Entries 531584
HT ID - simulated
QT board

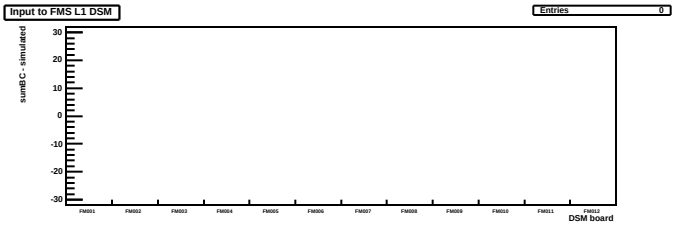

Input to FMS L1 DSM
Entries 797376
sumD
DSM board

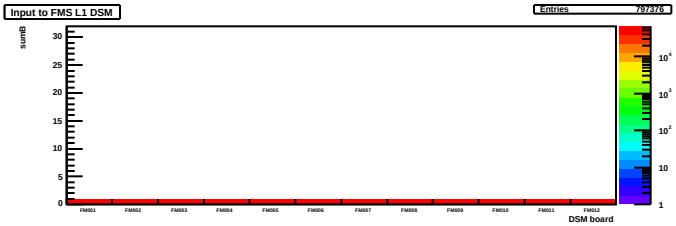

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

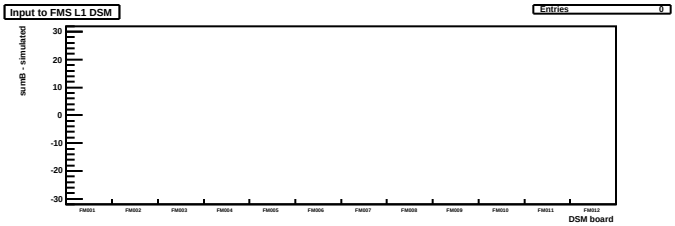

Input to FMS L1 DSM
Entries 797376
sumC
DSM board

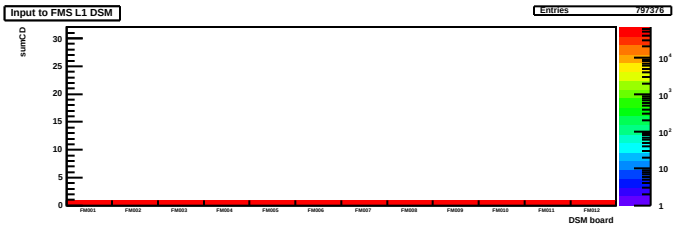

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

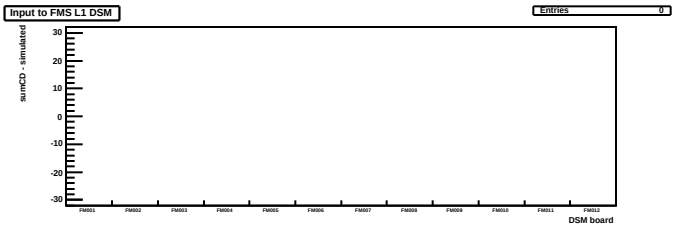

Input to FMS L1 DSM
Entries 797376
sumBC
DSM board

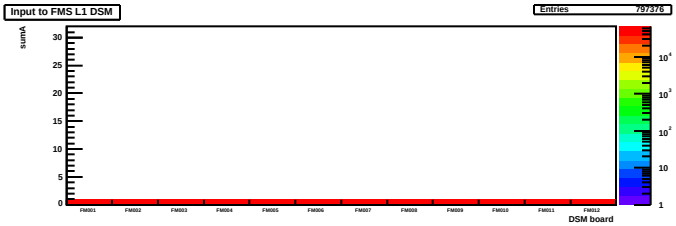

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

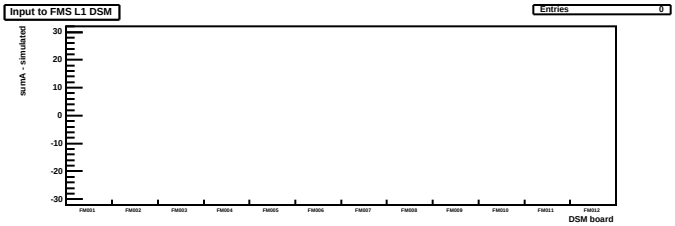

Input to FMS L1 DSM
Entries 797376
sumB
DSM board

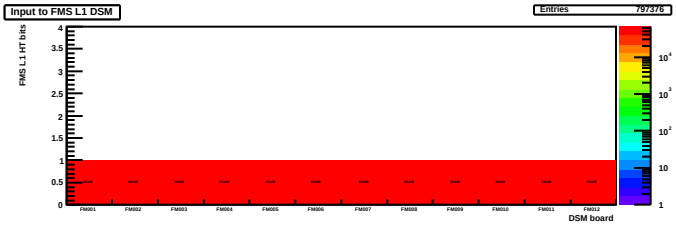

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

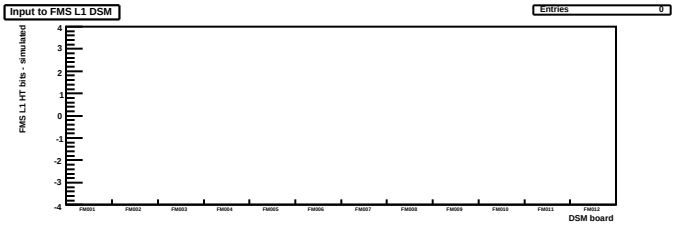

Input to FMS L1 DSM
Entries 797376
sumCD
DSM board

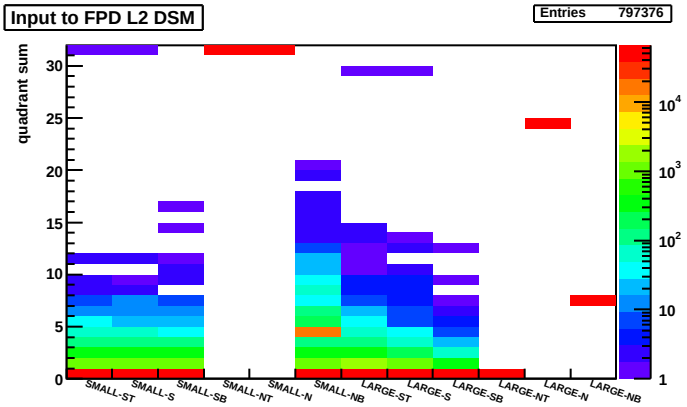

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

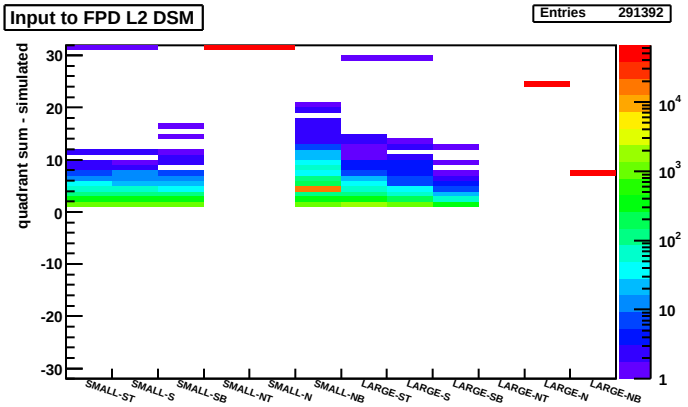

Input to FMS L1 DSM
Entries 797376
sumA
DSM board

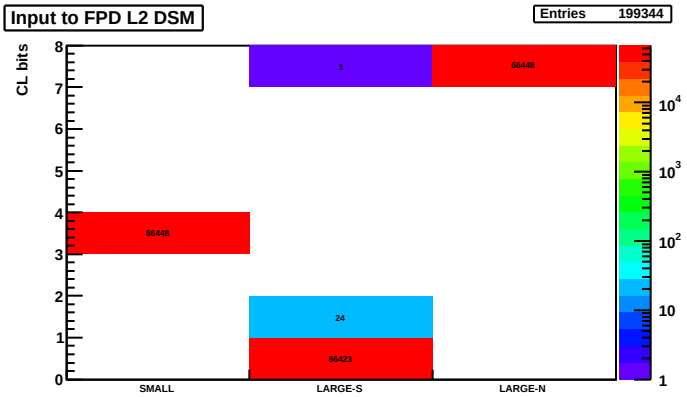

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

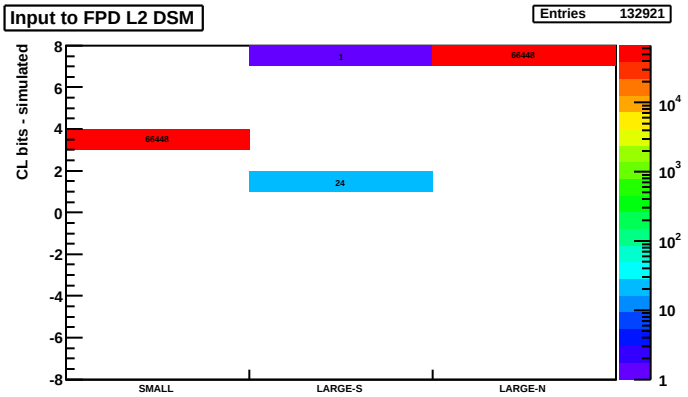

Input to FMS L1 DSM
Entries 797376
FMS L1 HT bits
DSM board

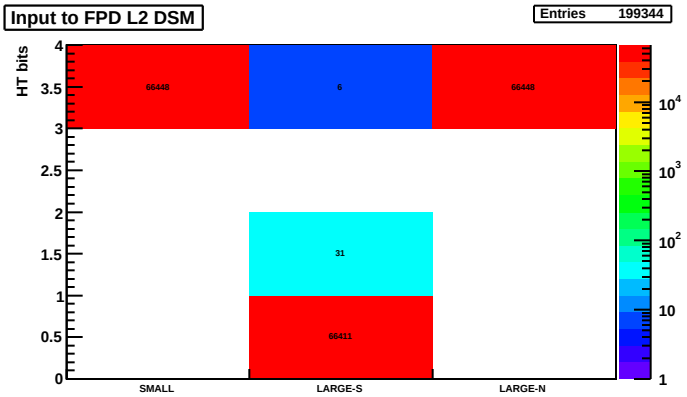

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

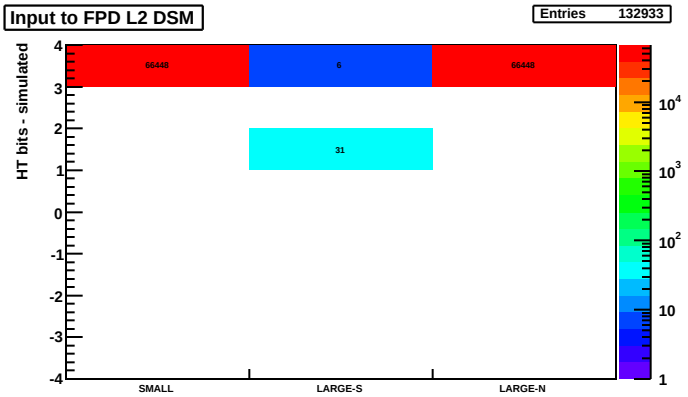

Input to FPD L2 DSM
Entries 797376
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

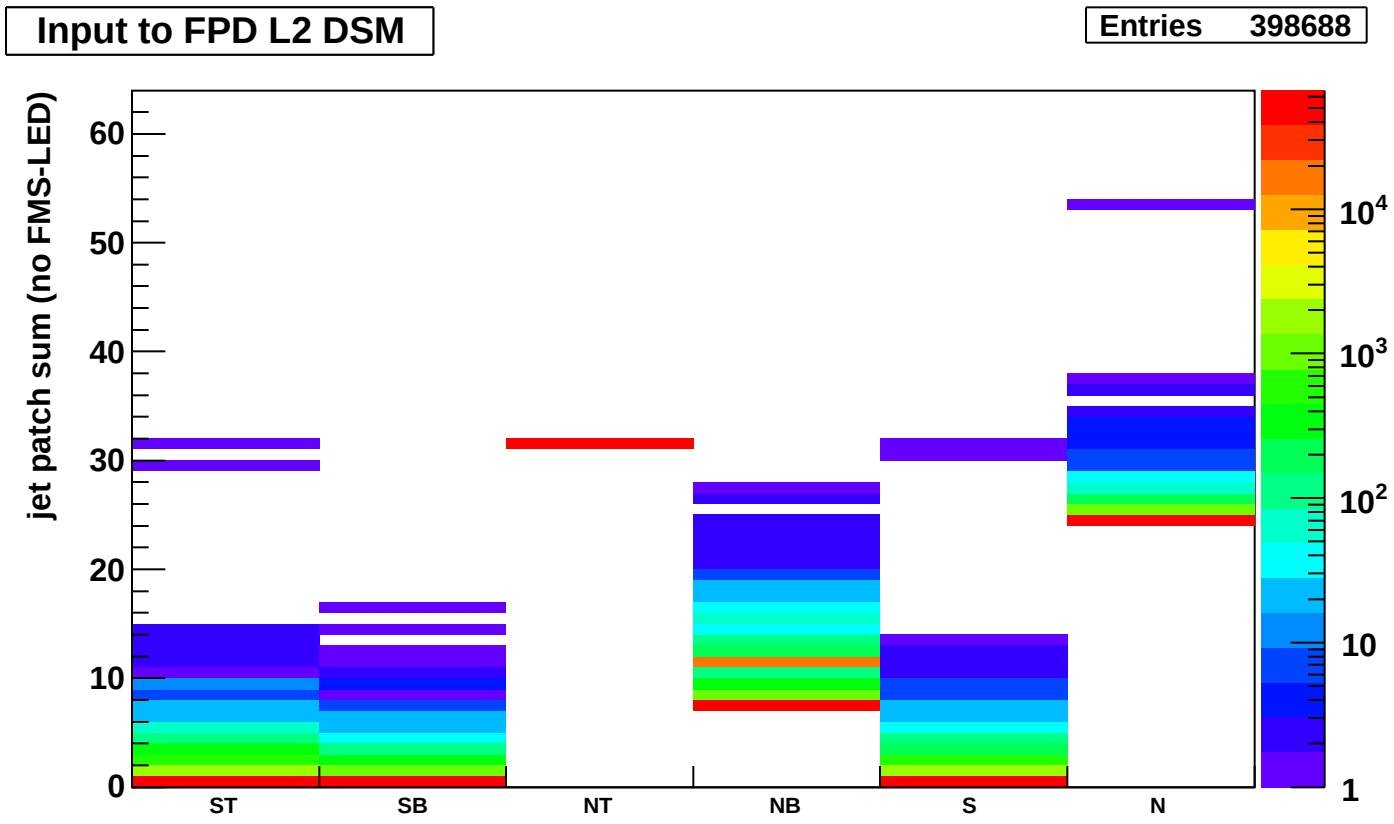

Input to FPD L2 DSM
Entries 291392
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

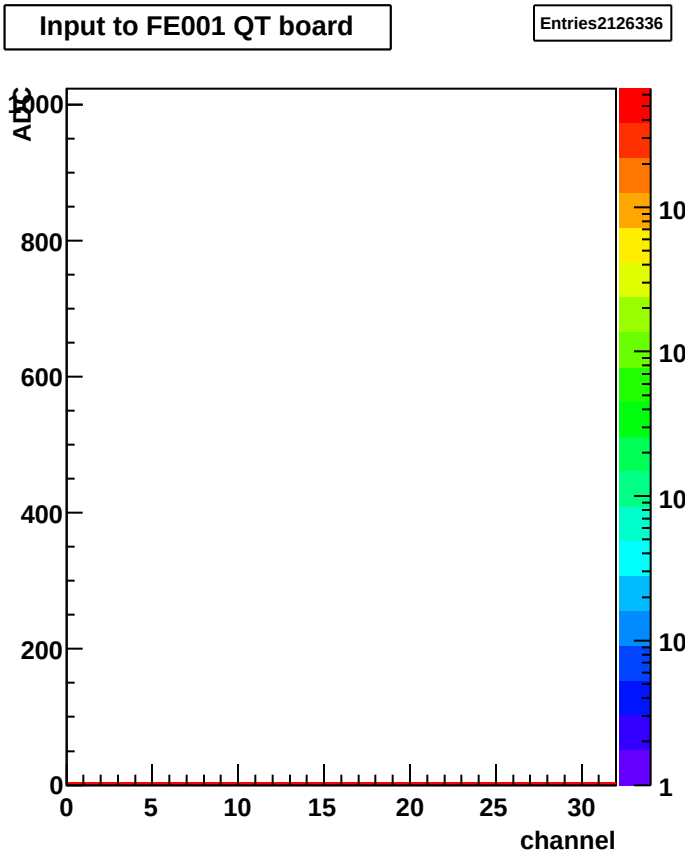

Input to FPD L2 DSM
Entries 199344
CL bits
1
66448
66448
24
66423
SMALL
LARGE-S
LARGE-N

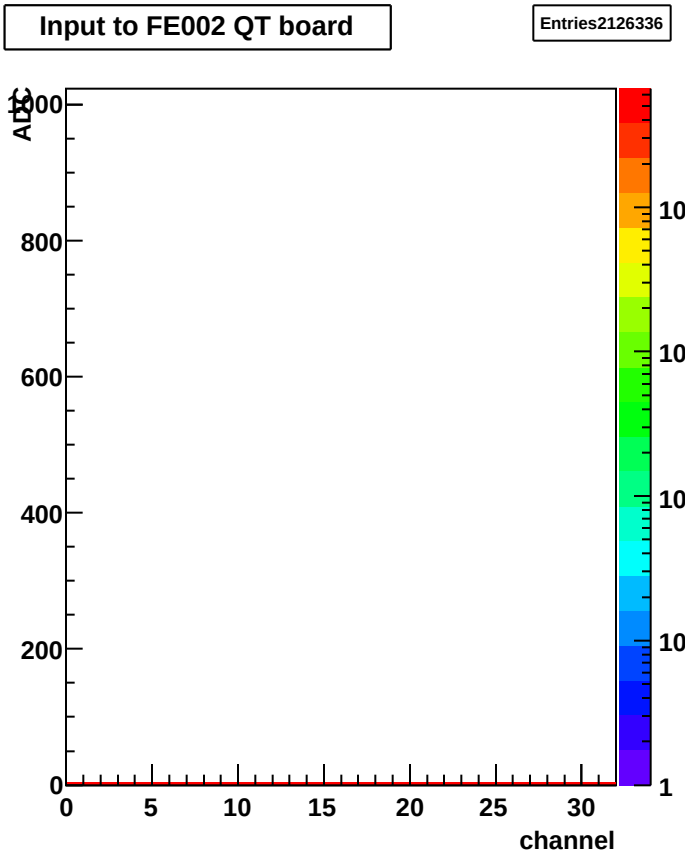

Input to FPD L2 DSM
Entries 132921
CL bits - simulated
1
66448
66448
24
SMALL
LARGE-S
LARGE-N

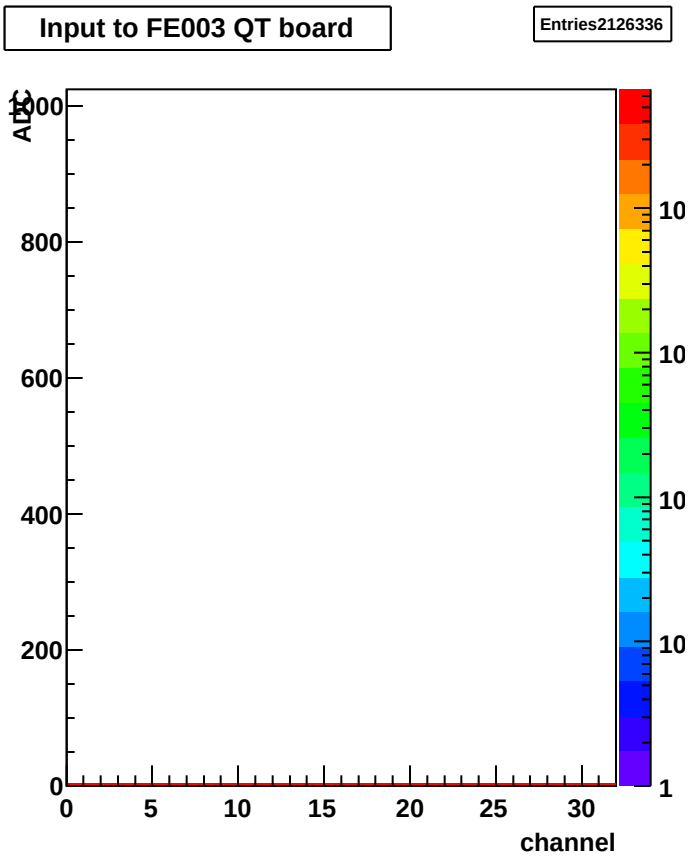

Input to FPD L2 DSM
Entries 199344
HT bits
66448
6
66448
31
66411
SMALL
LARGE-S
LARGE-N

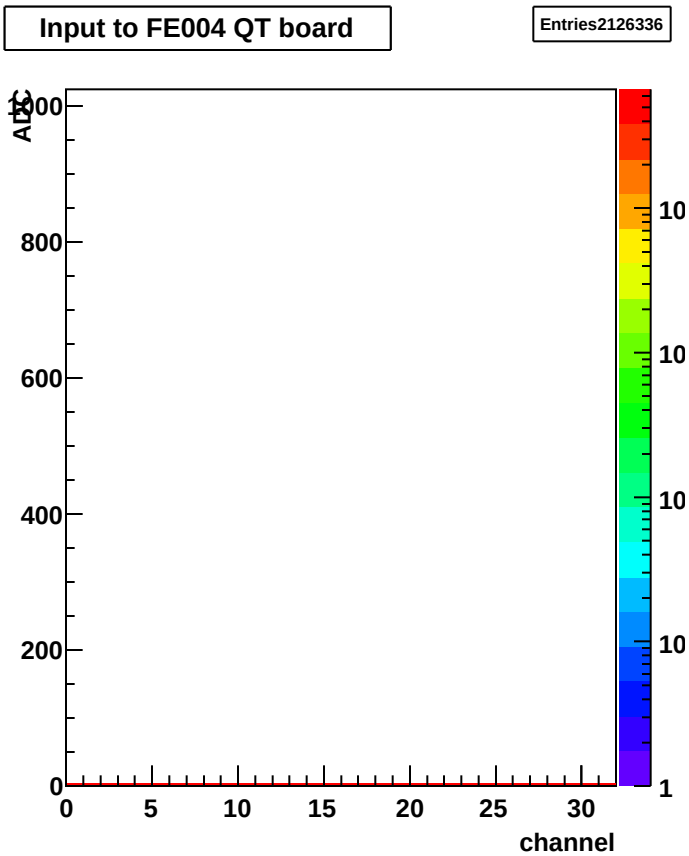

Input to FPD L2 DSM
Entries 132933
HT bits - simulated
66448
6
66448
31
SMALL
LARGE-S
LARGE-N

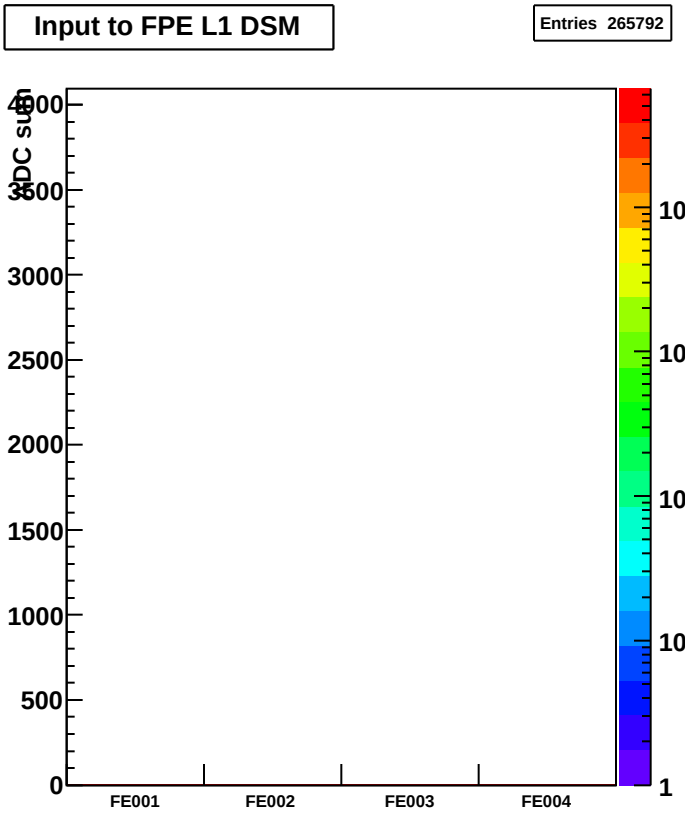

Input to FPD L2 DSM
Entries 398688
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

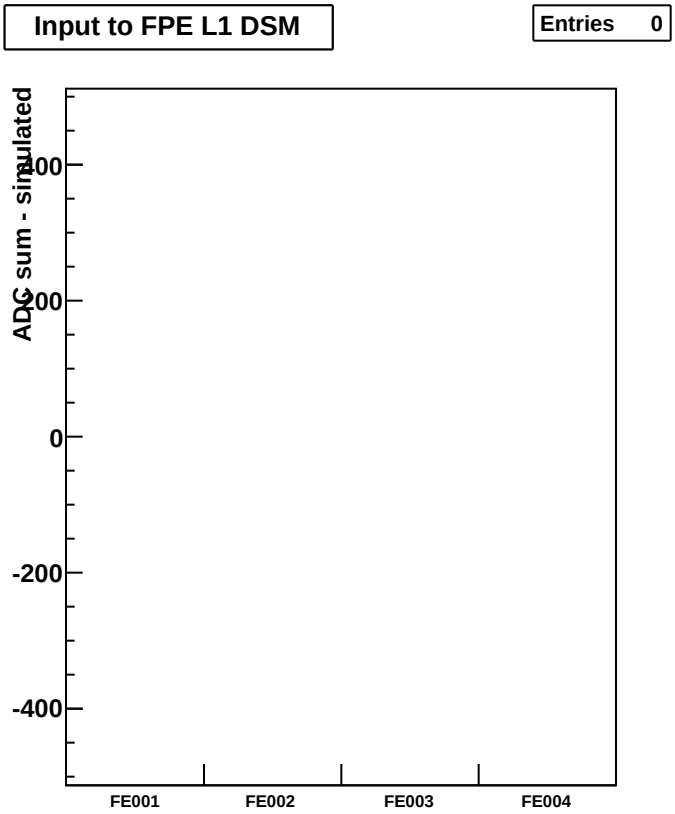

Input to FE001 QT board
Entries2126336
ADC
channel

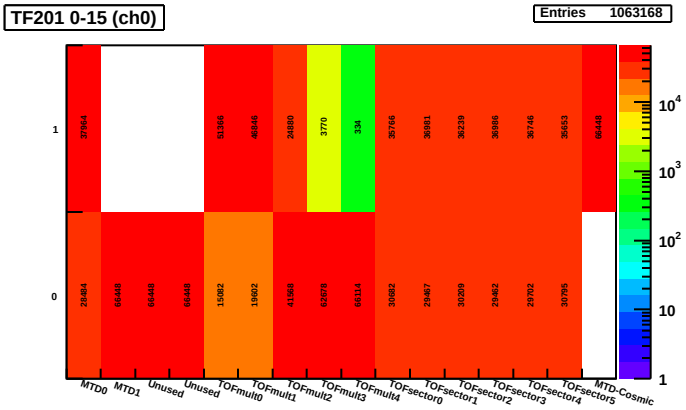

Input to FE002 QT board
Entries2126336
ADC
channel

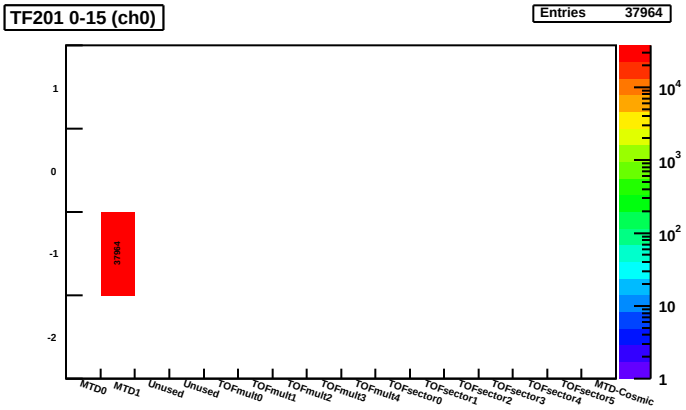

Input to FE003 QT board
Entries2126336
ADC
channel

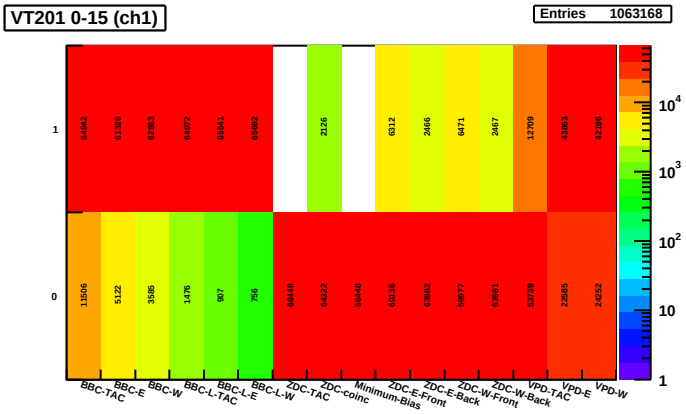

Input to FE004 QT board
Entries2126336
ADC
channel

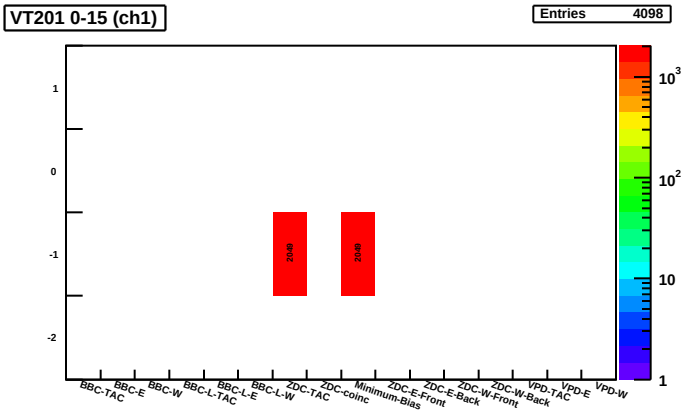

Input to FPE L1 DSM
Entries 265792
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

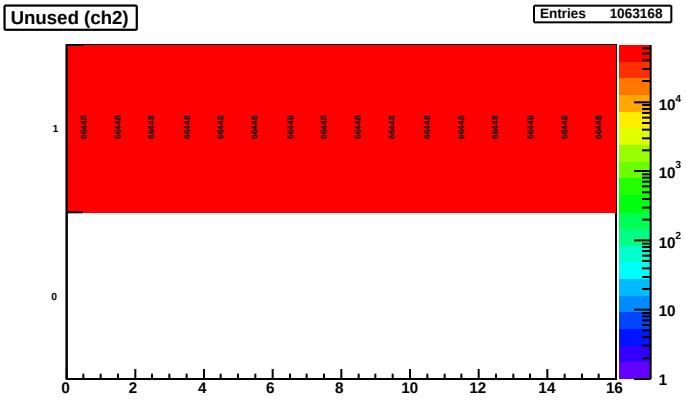

Input to FPE L1 DSM
Entries 0
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004

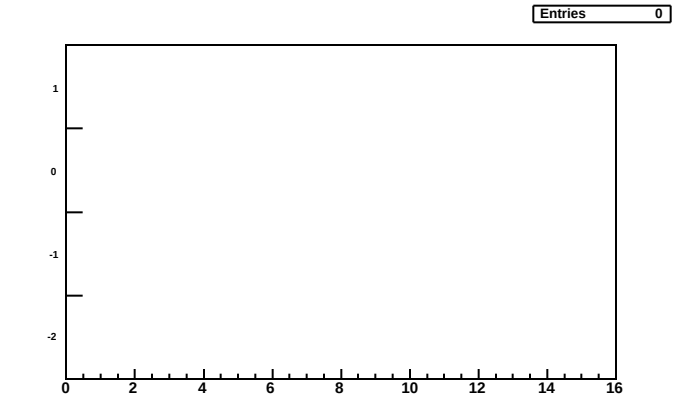

TF201 0-15 (ch0)
Entries 1063168
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

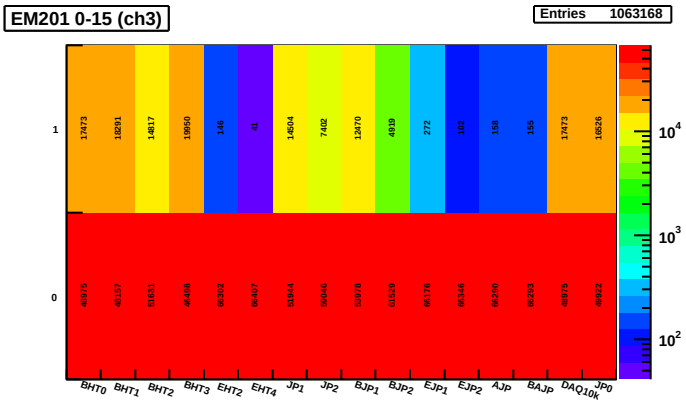

TF201 0-15 (ch0)
Entries 37964
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

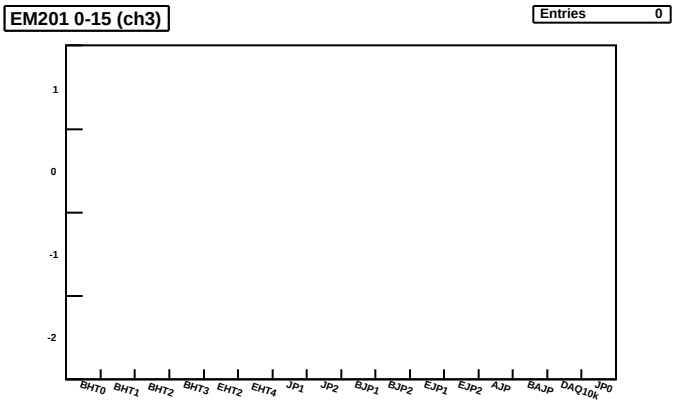

VT201 0-15 (ch1)
Entries 1063168
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-coinc Minimum-Bias ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 4098
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-coinc Minimum-Bias ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W

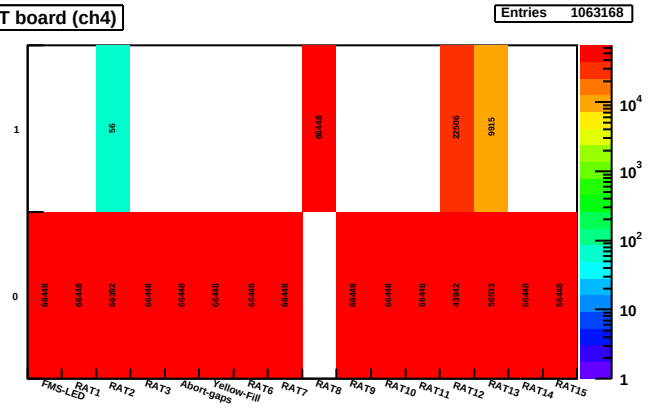

Unused (ch2)
Entries 1063168

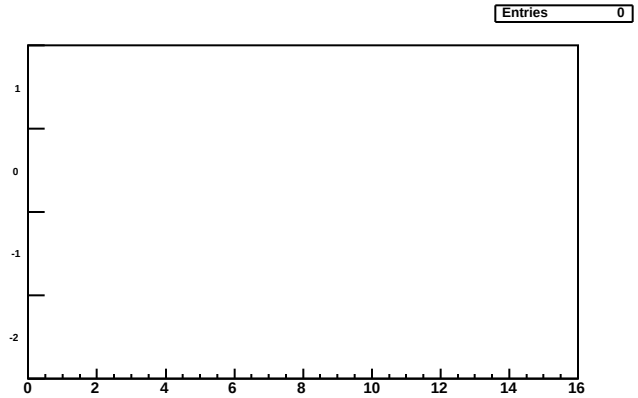

Entries 0


EM201 0-15 (ch3)
Entries 1063168
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

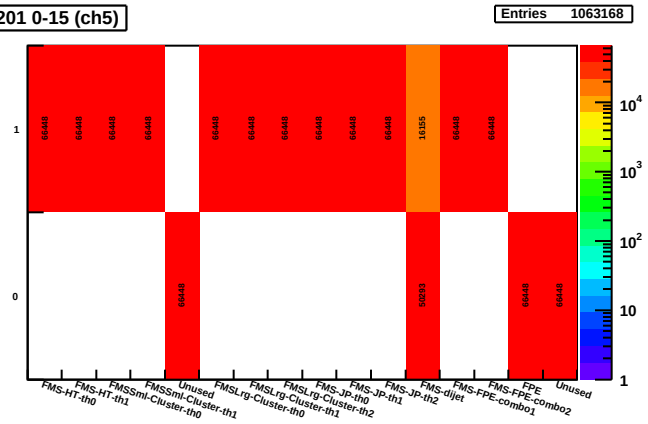

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

RAT board (ch4)

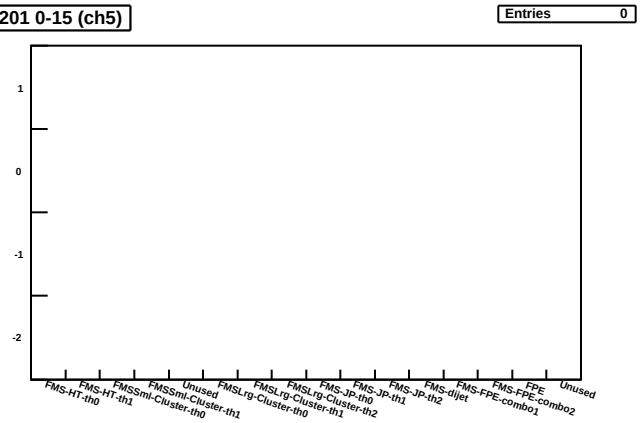




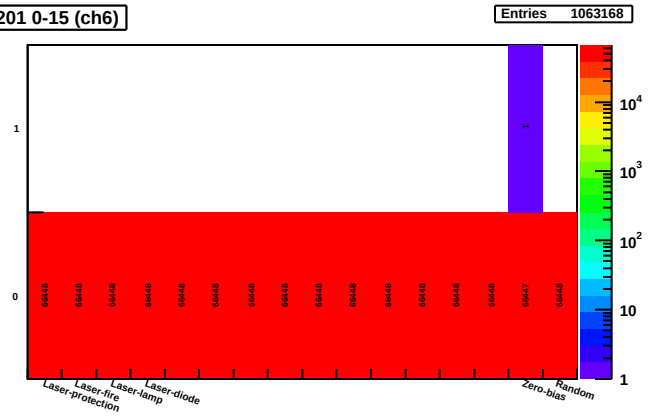
FP201 0-15 (ch5)

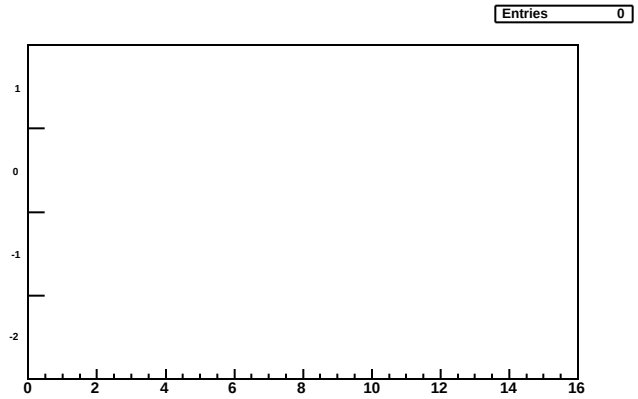
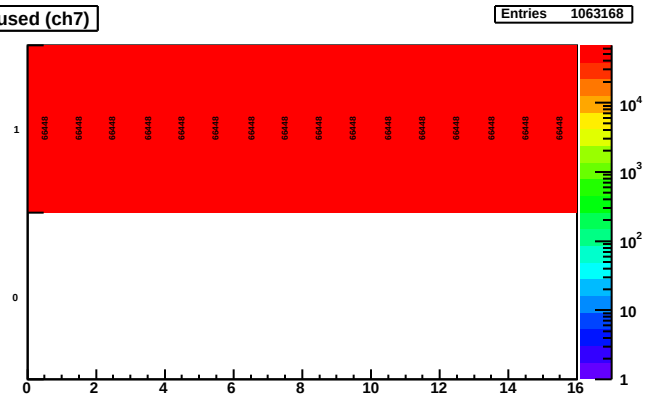
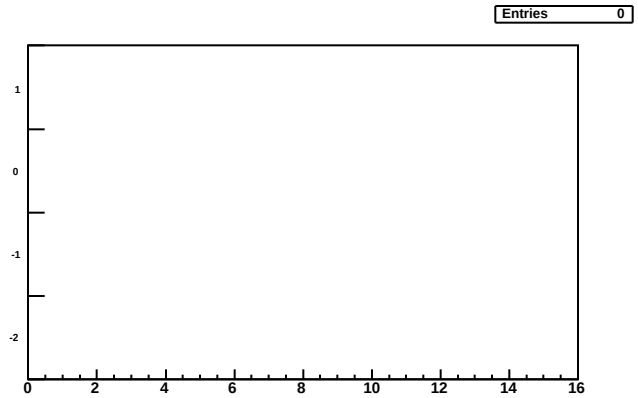


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)