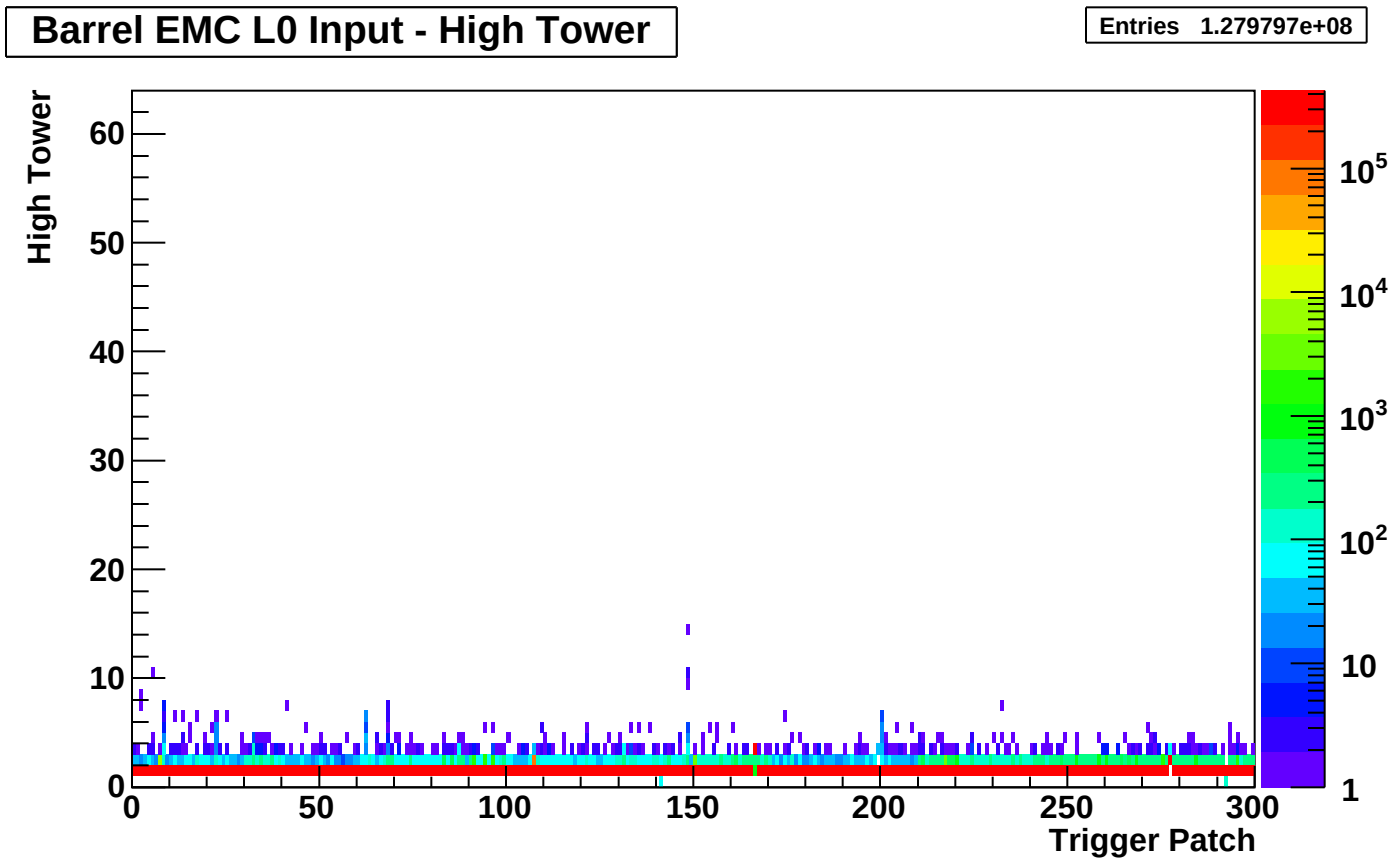
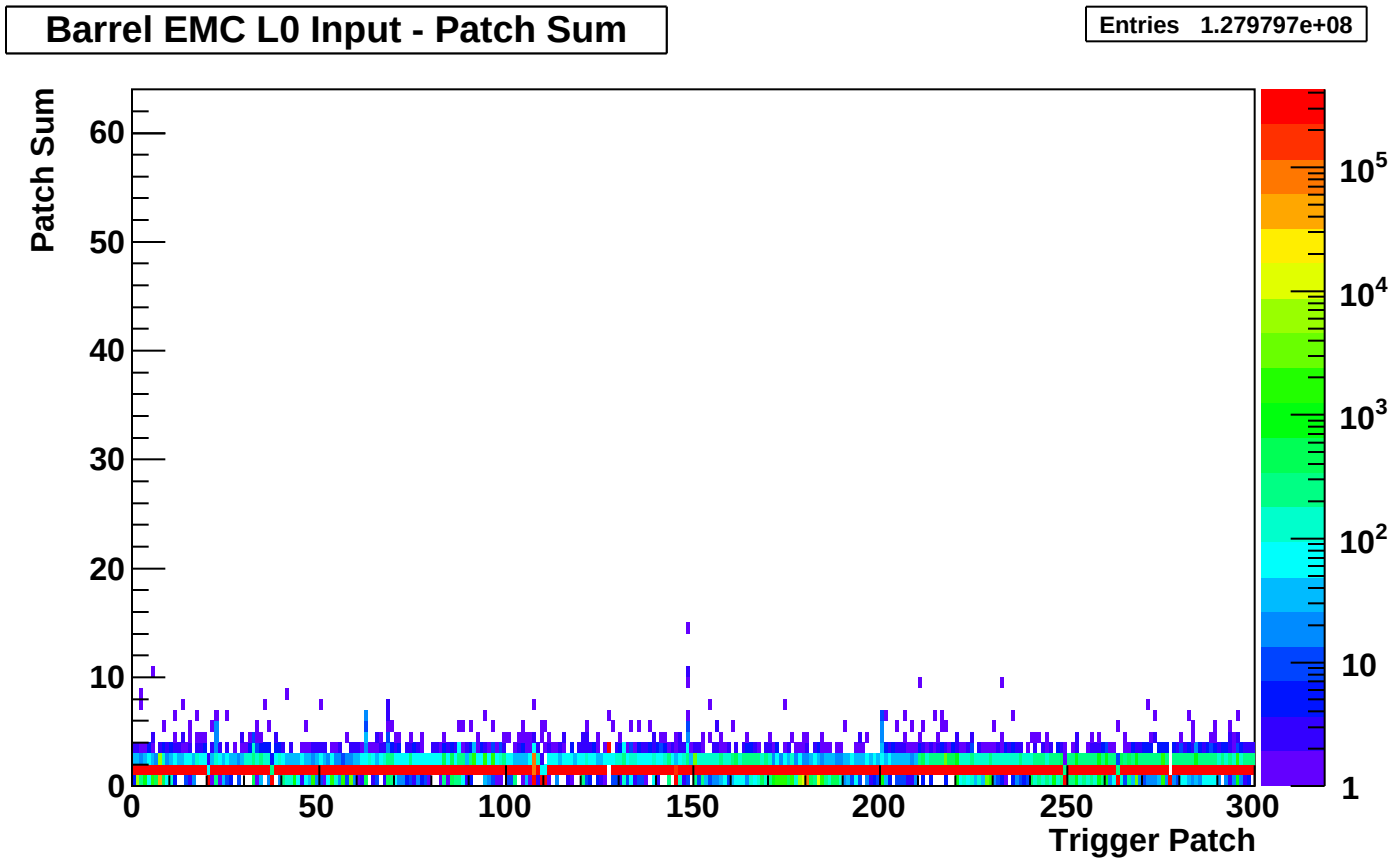
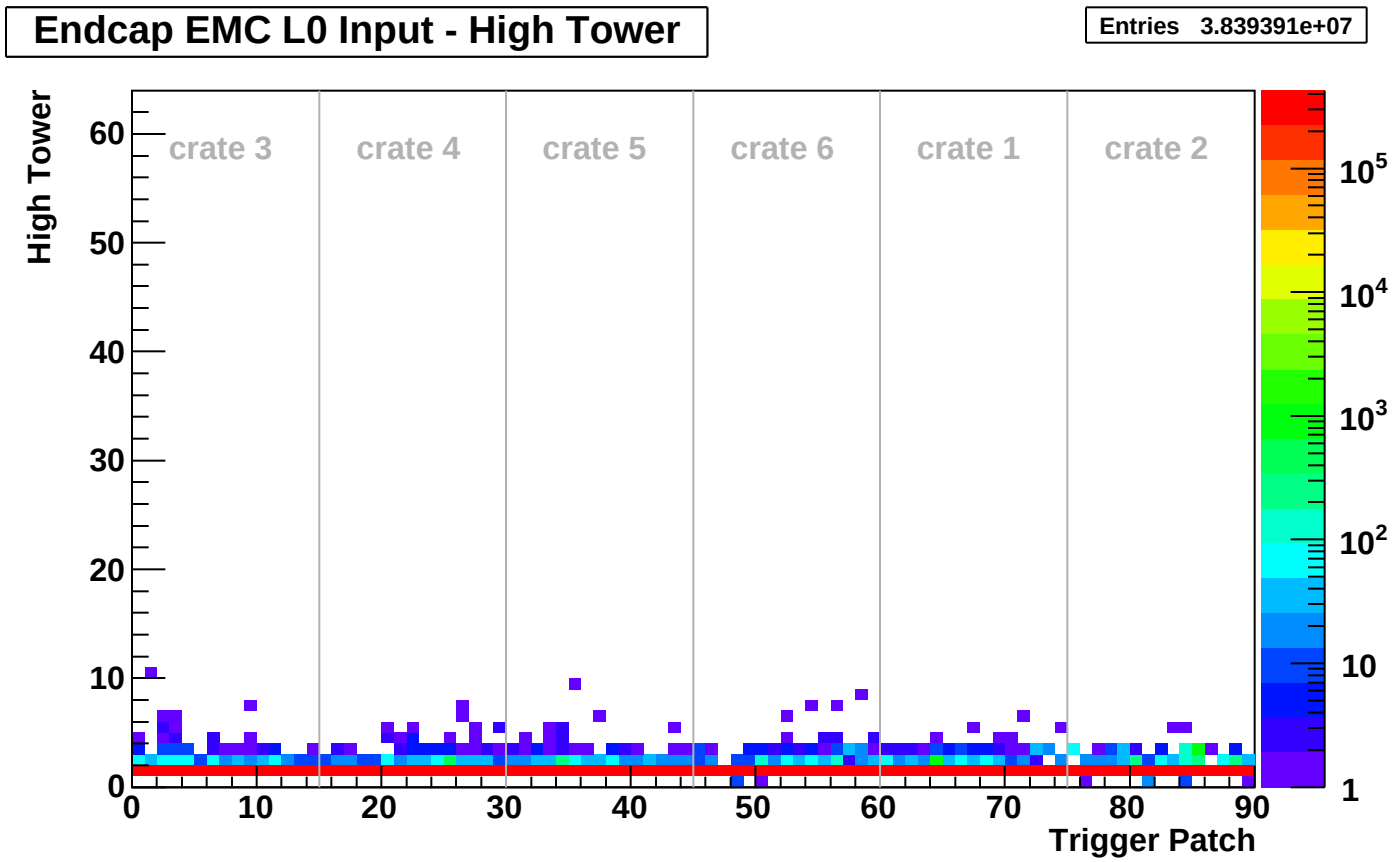
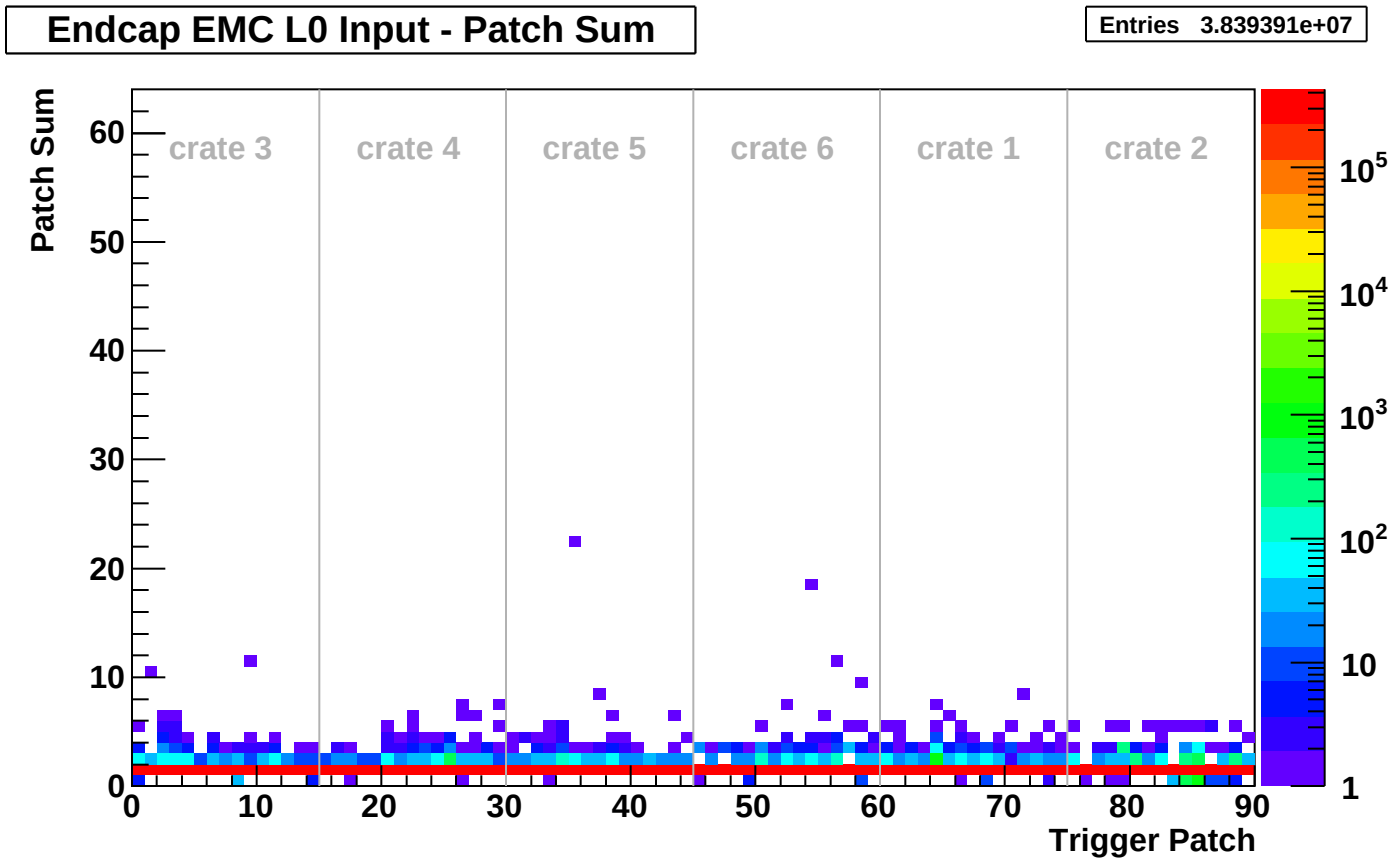
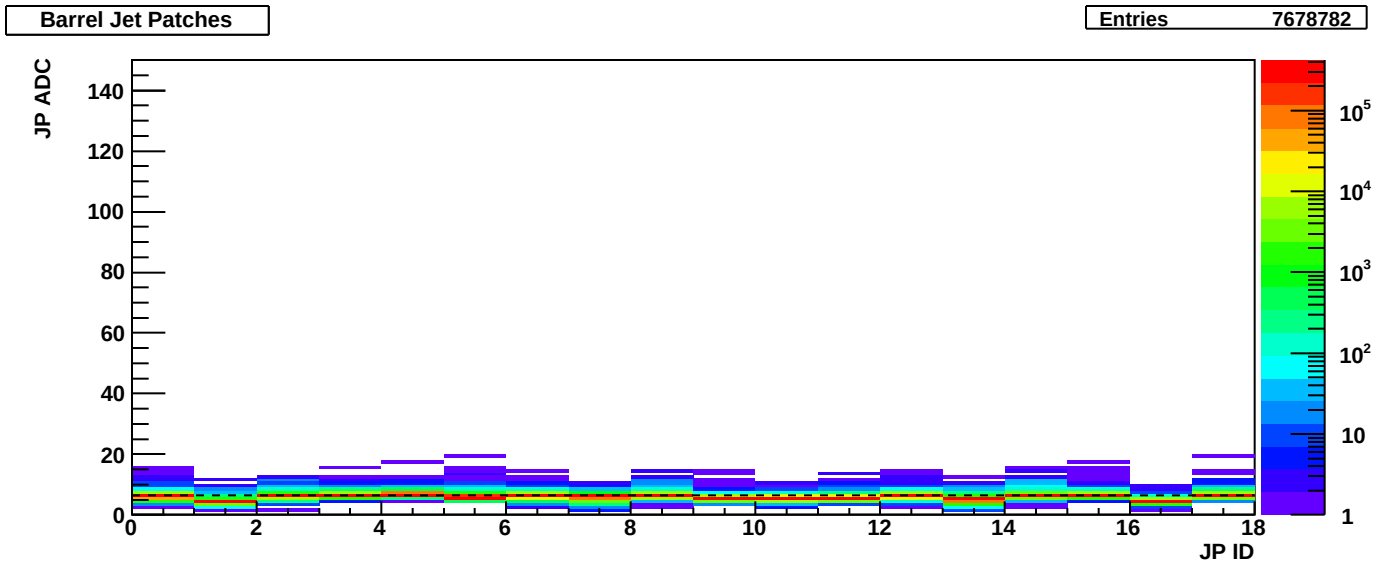
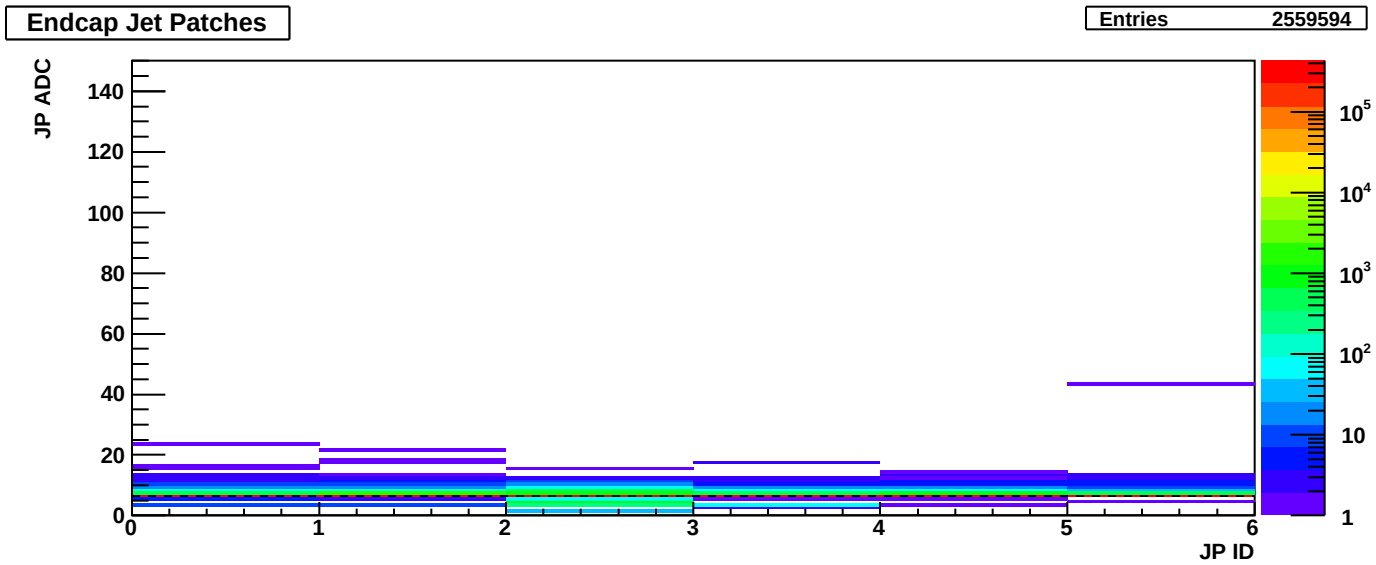

Barrel EMC L0 Input - High Tower
Entries 1.279797e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

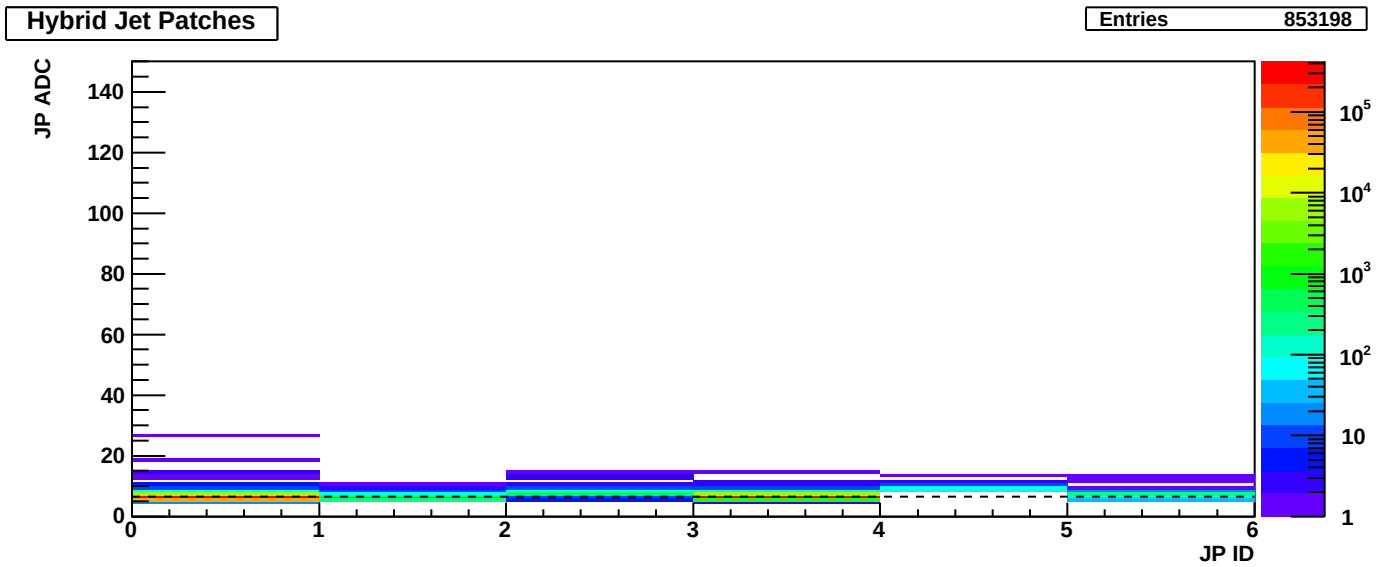

Barrel EMC L0 Input - Patch Sum
Entries 1.279797e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

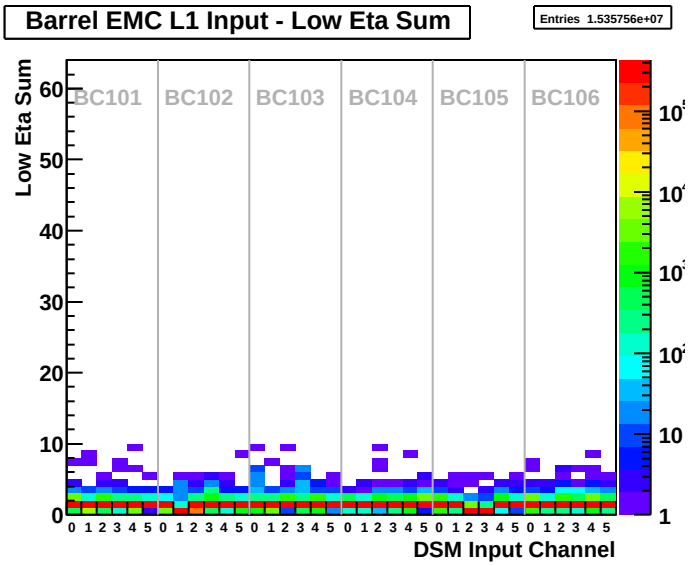

Endcap EMC L0 Input - High Tower
Entries 3.839391e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

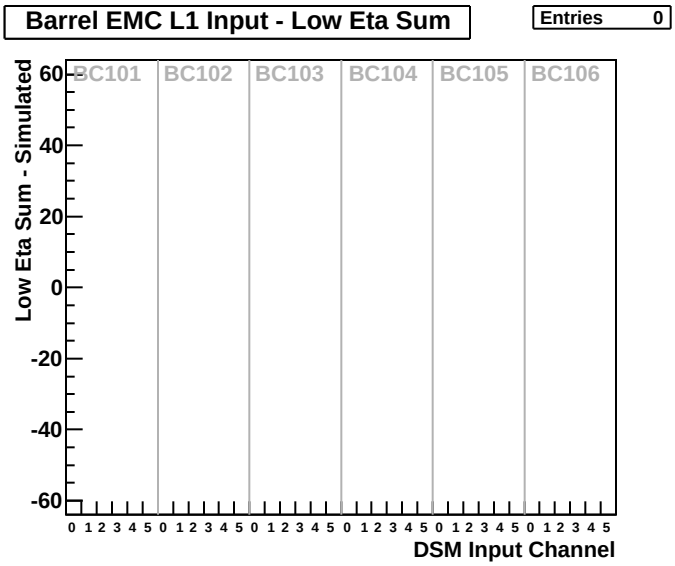

Endcap EMC L0 Input - Patch Sum
Entries 3.839391e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

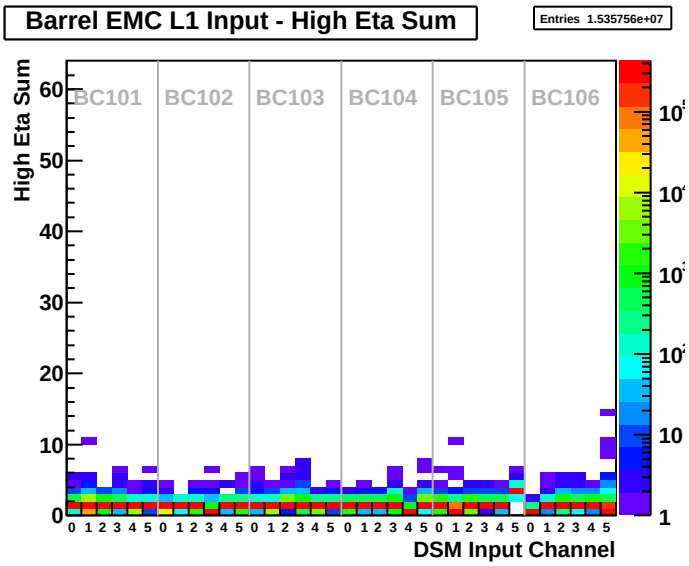

Barrel Jet Patches
Entries 7678782
JP ADC
JP ID

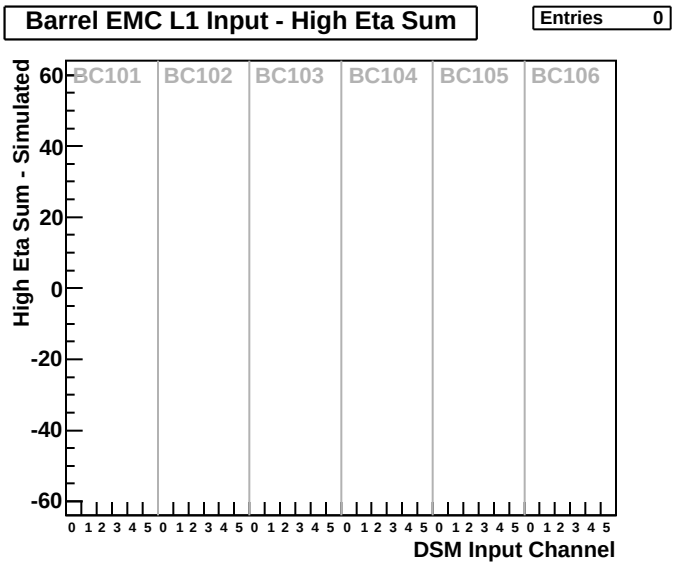

Endcap Jet Patches
Entries 2559594
JP ADC
JP ID

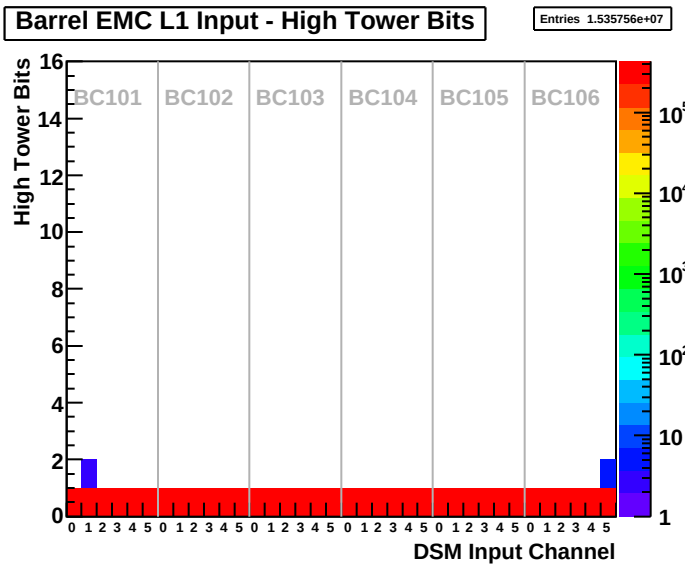

Hybrid Jet Patches
Entries 853198
JP ADC
JP ID

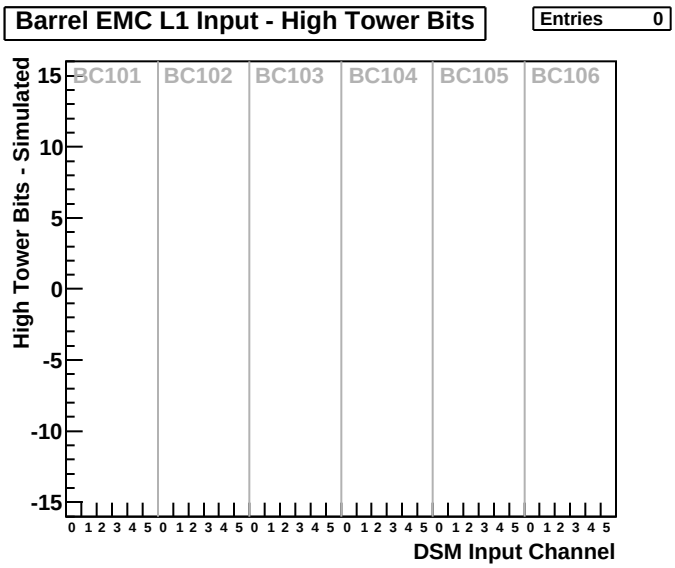

Barrel EMC L1 Input - Low Eta Sum
Entries 1.535756e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

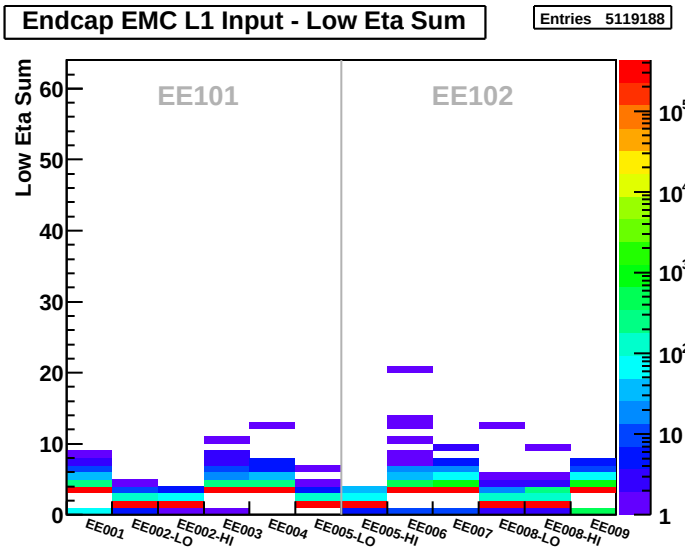

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

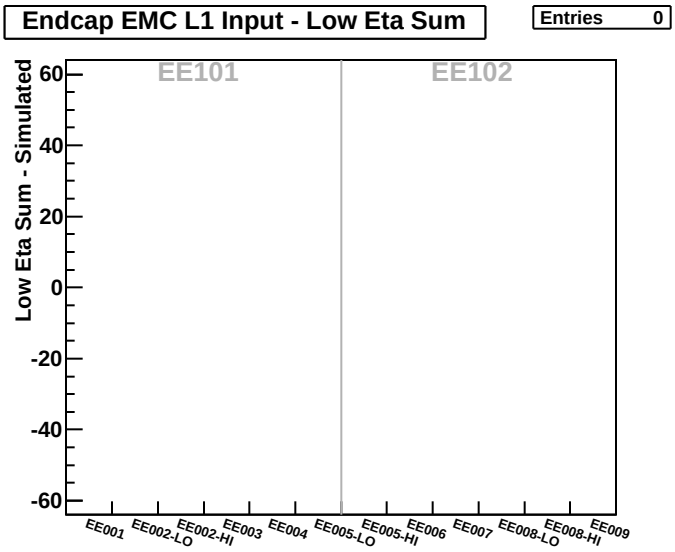

Barrel EMC L1 Input - High Eta Sum
Entries 1.535756e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

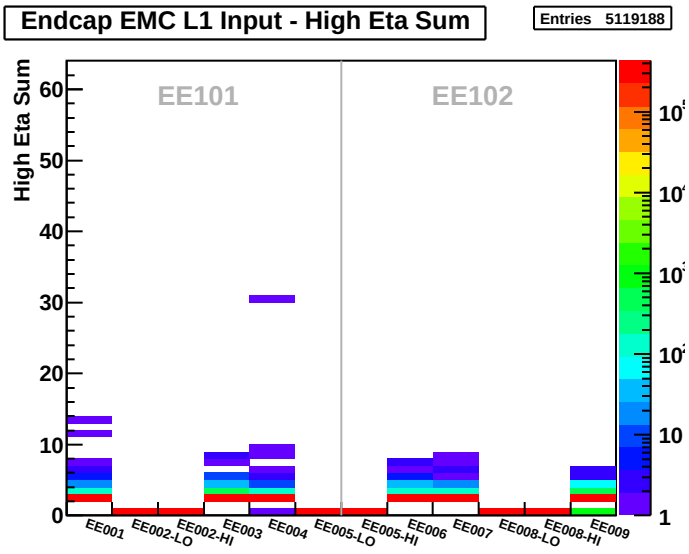

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

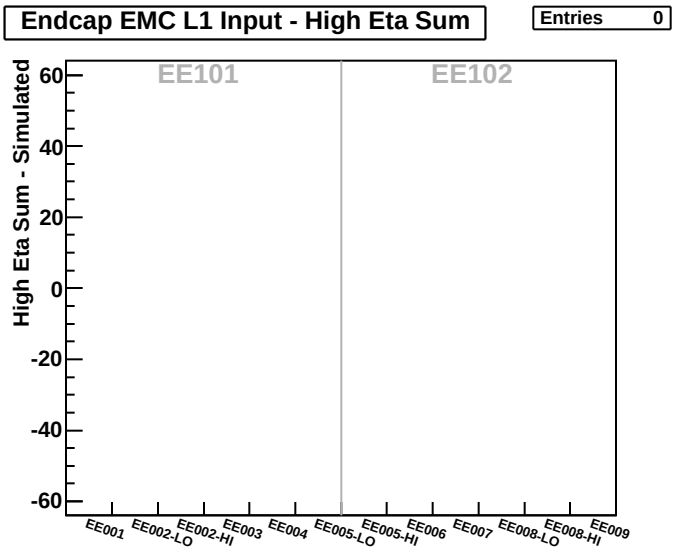

Barrel EMC L1 Input - High Tower Bits
Entries 1.535756e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

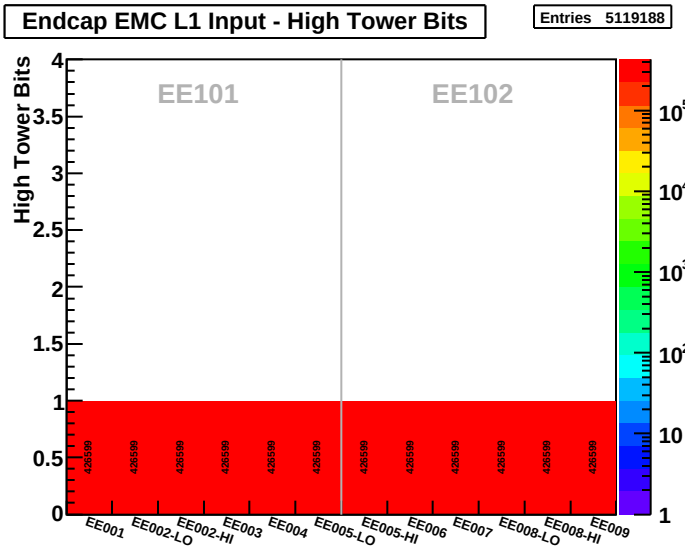

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

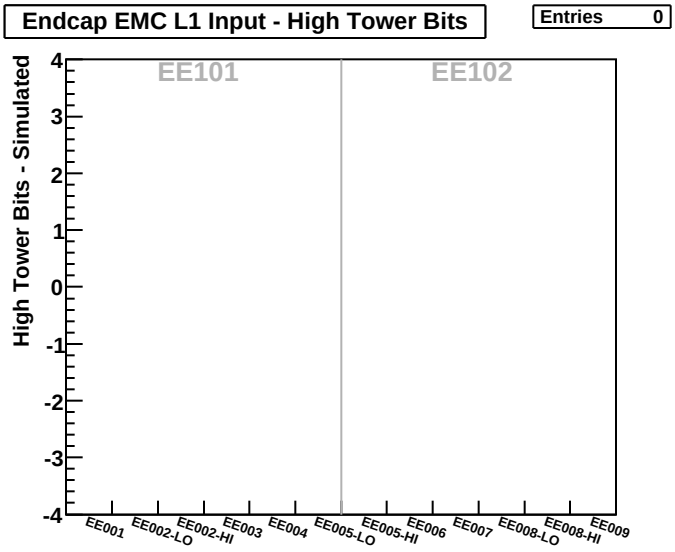

Endcap EMC L1 Input - Low Eta Sum
Entries 5119188
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

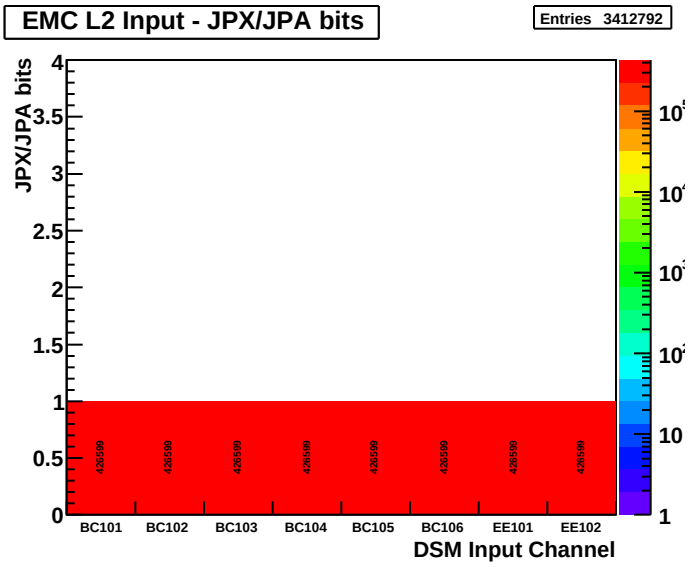

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

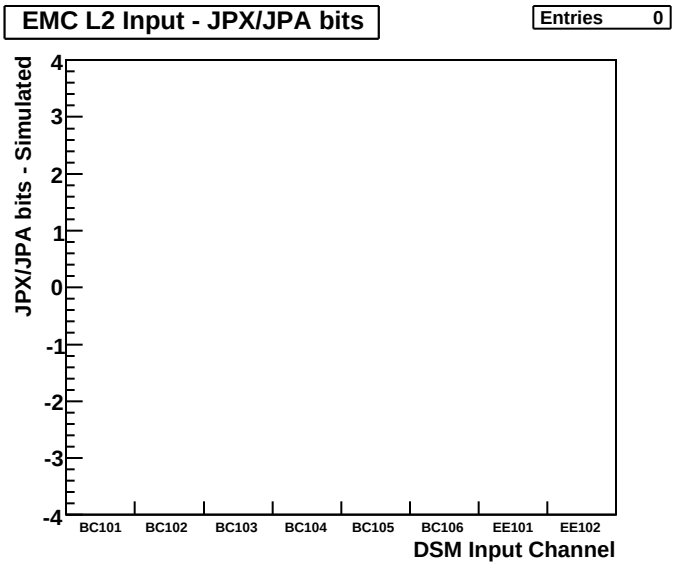

Endcap EMC L1 Input - High Eta Sum
Entries 5119188
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

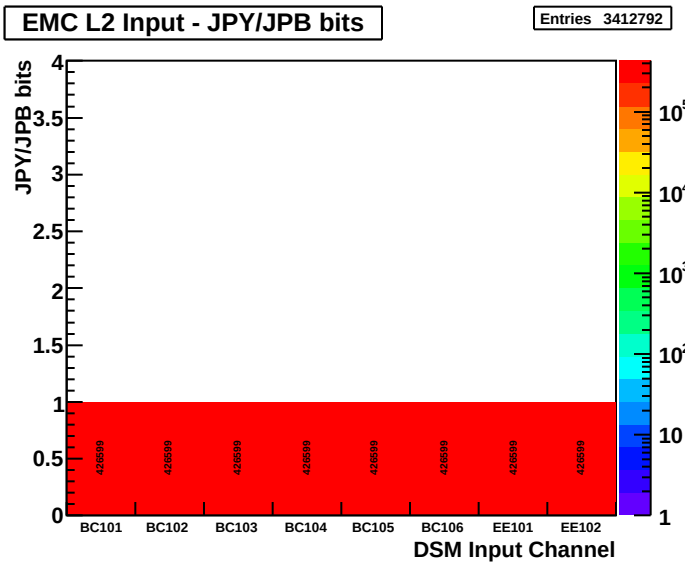

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

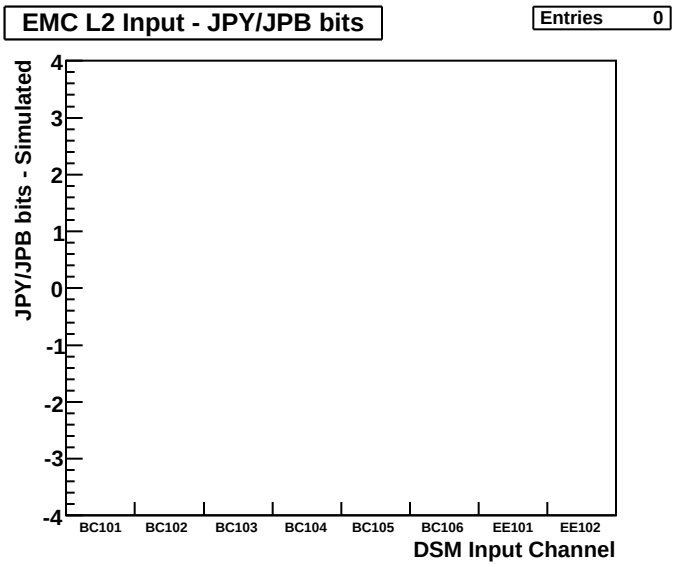

Endcap EMC L1 Input - High Tower Bits
Entries 5119188
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

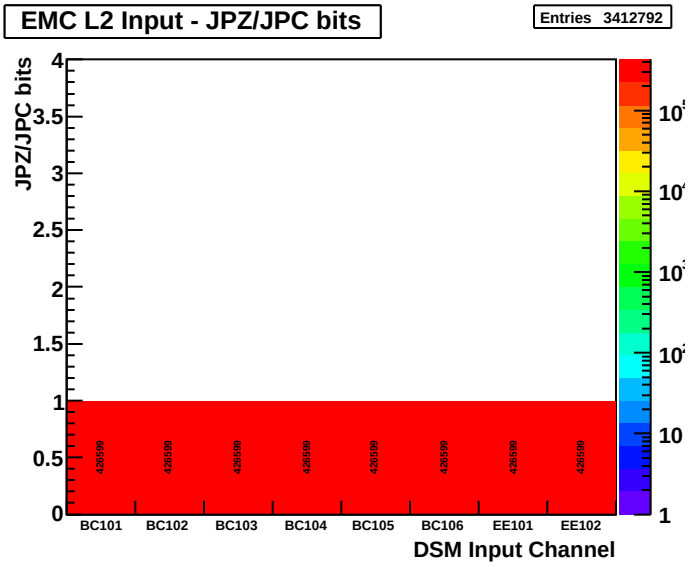

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

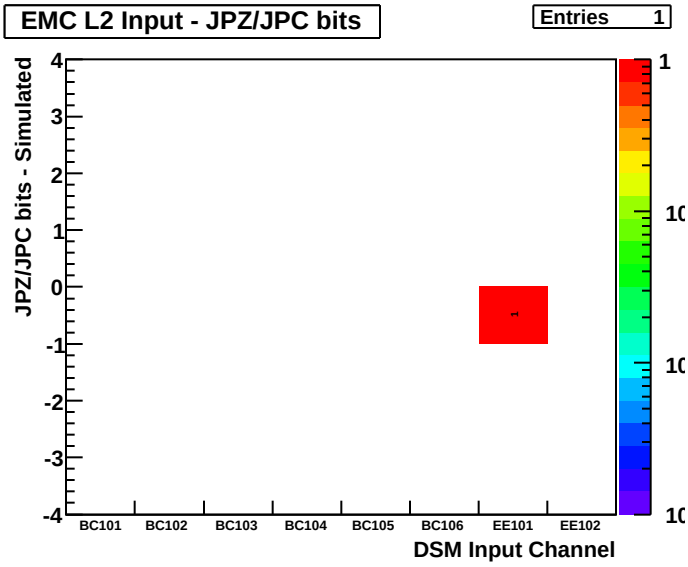

EMC L2 Input - JPX/JPA bits
Entries 3412792
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

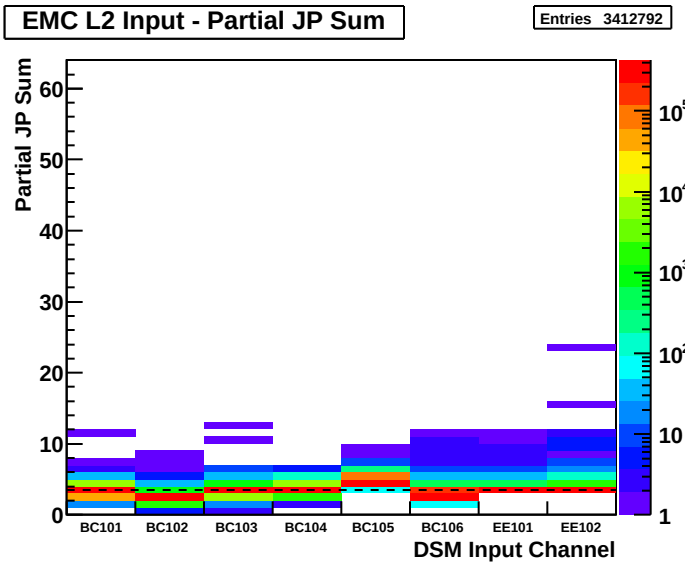

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

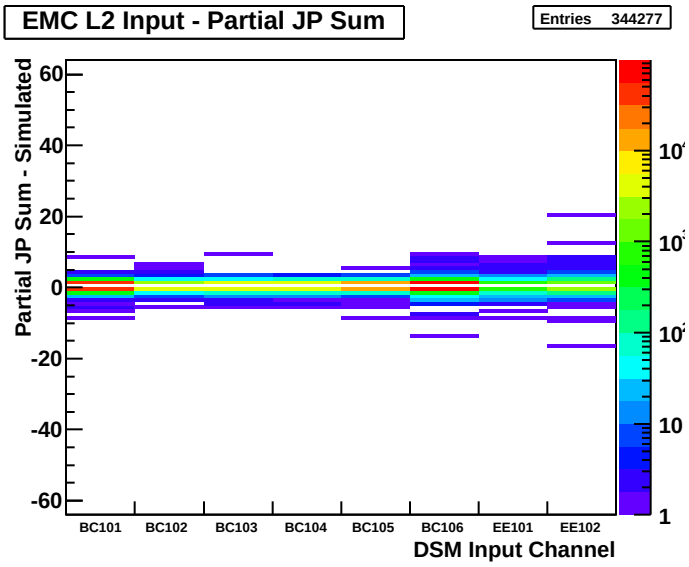

EMC L2 Input - JPY/JPB bits
Entries 3412792
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

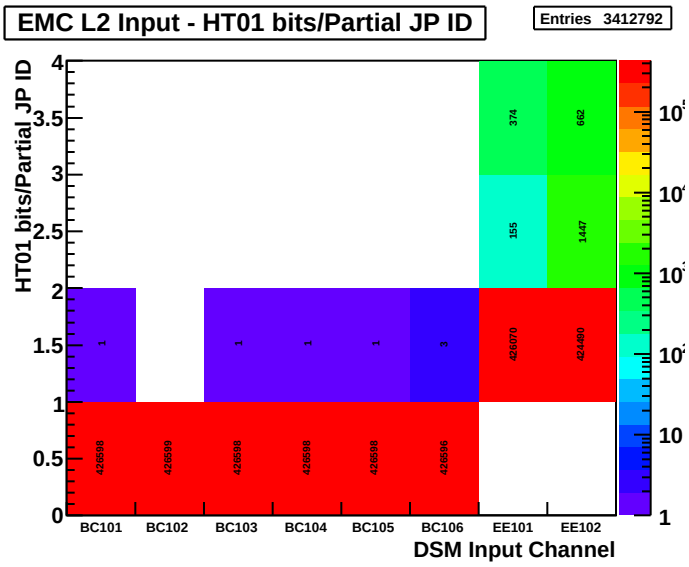

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

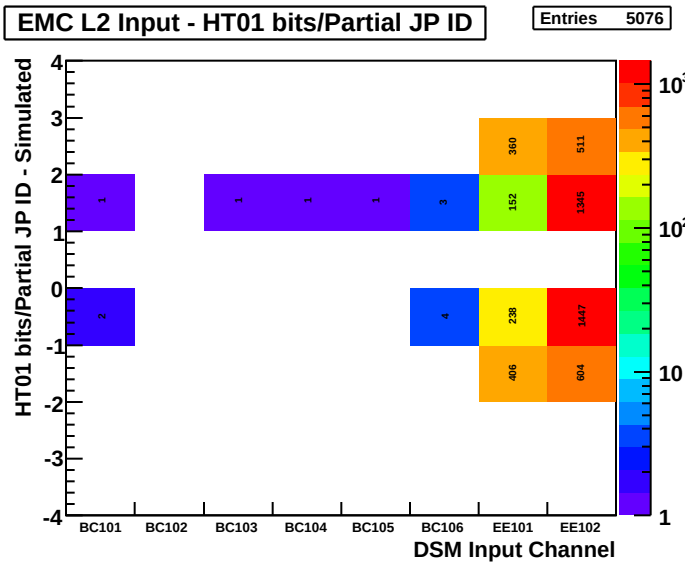

EMC L2 Input - JPZ/JPC bits
Entries 3412792
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

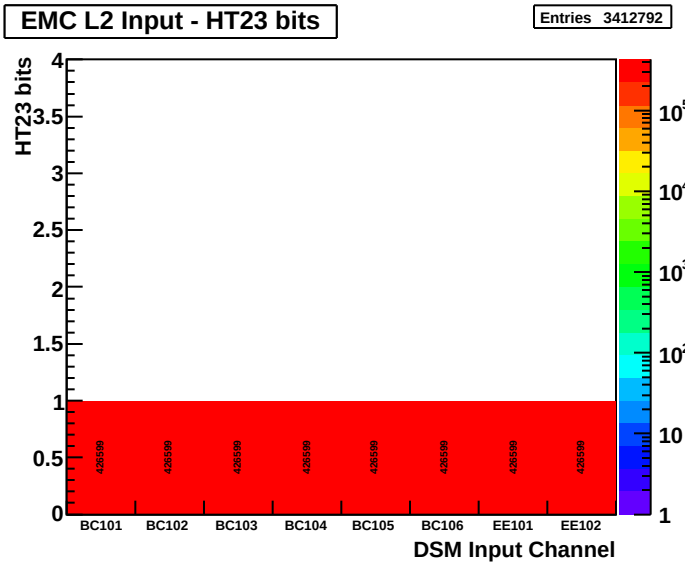

EMC L2 Input - JPZ/JPC bits
Entries 1
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

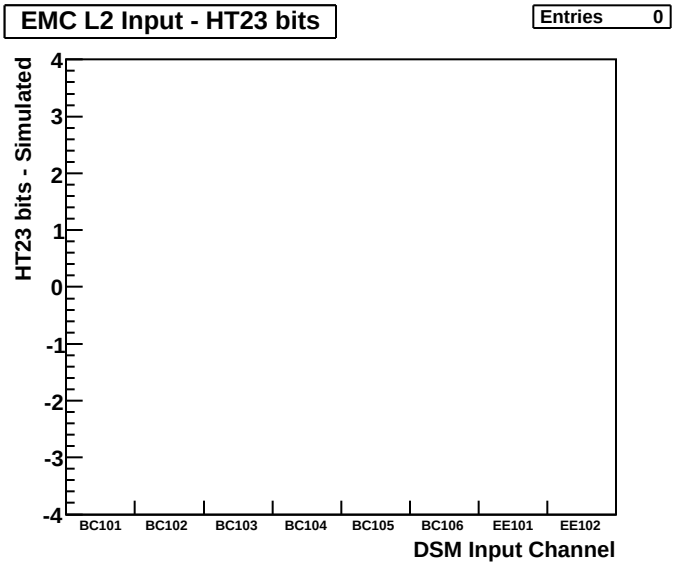

EMC L2 Input - Partial JP Sum
Entries 3412792
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

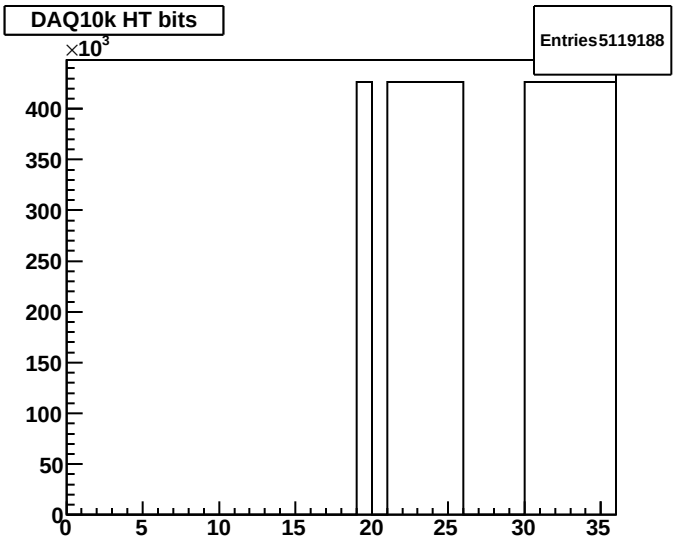

EMC L2 Input - Partial JP Sum
Entries 344277
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

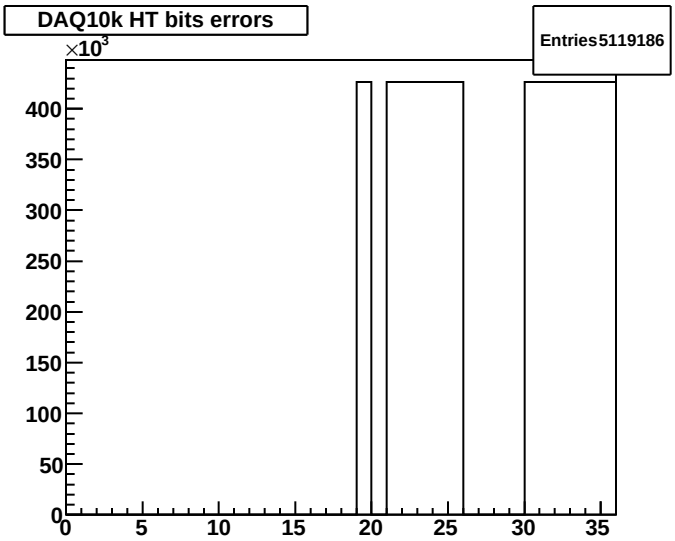

EMC L2 Input - HT01 bits/Partial JP ID
Entries 3412792
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

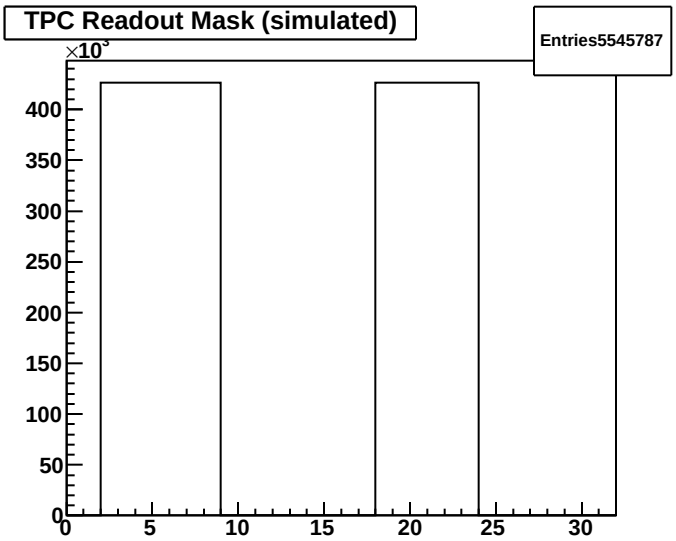

EMC L2 Input - HT01 bits/Partial JP ID
Entries 5076
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

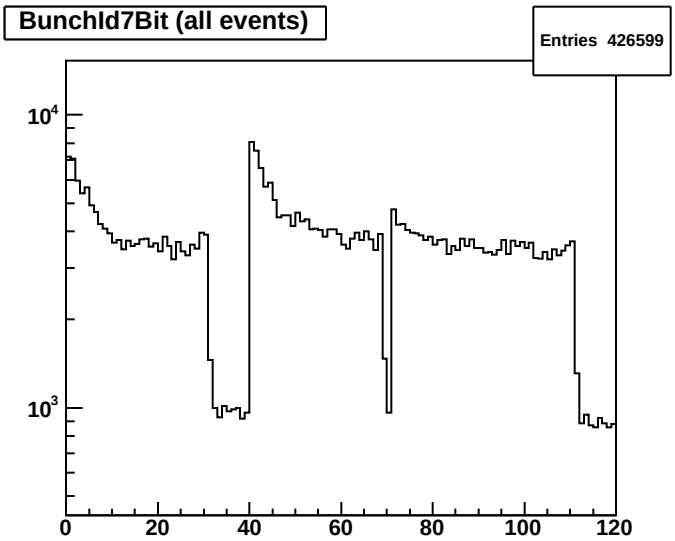

EMC L2 Input - HT23 bits
Entries 3412792
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

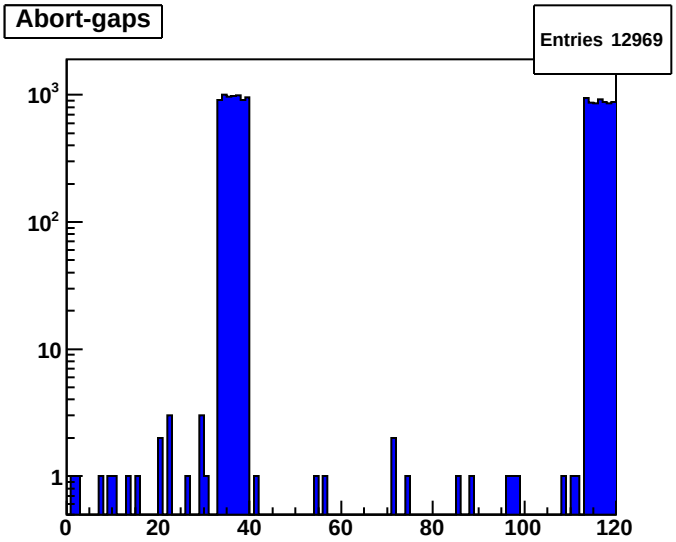

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

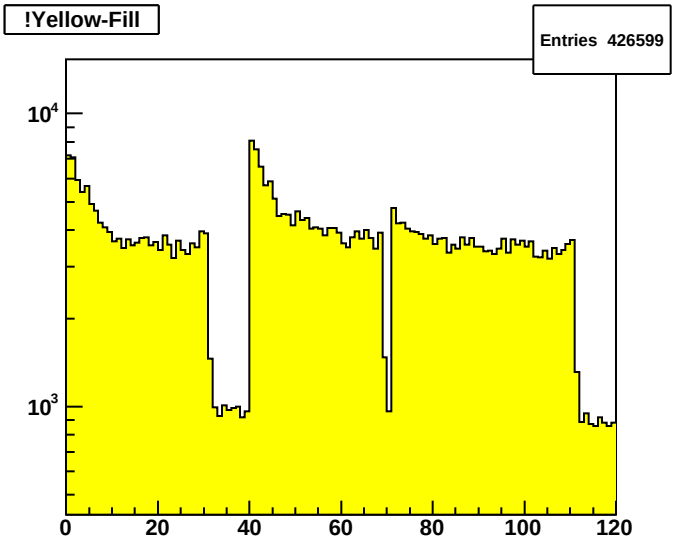

DAQ10k HT bits
Entries5119188
×10^3
400
350
300
250
200
150
100
50
0
0 5 10 15 20 25 30 35

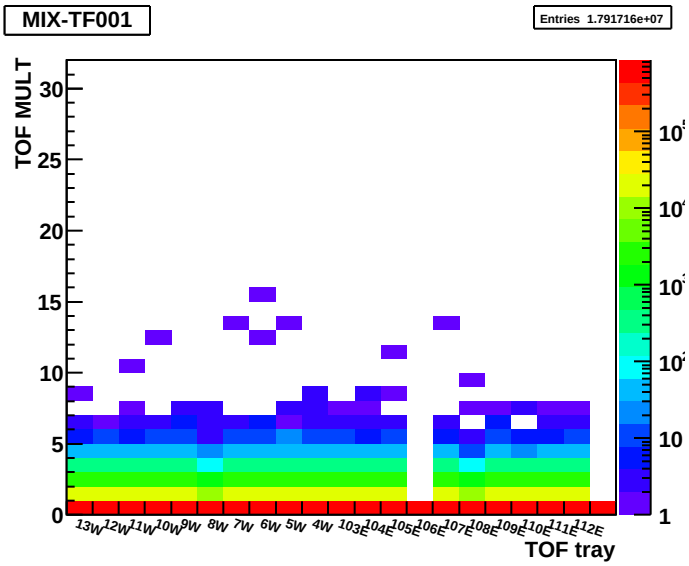

DAQ10k HT bits errors
Entries5119186
×10^3
400
350
300
250
200
150
100
50
0
0 5 10 15 20 25 30 35

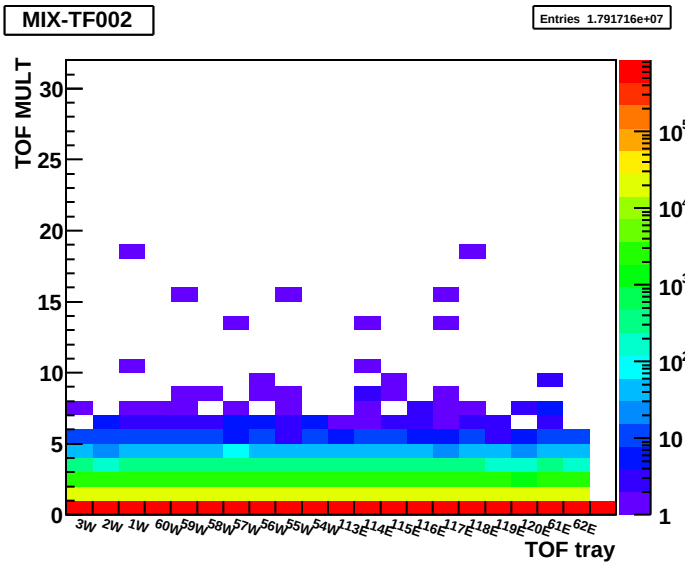

TPC Readout Mask (simulated)
Entries5545787
×10^3
400
350
300
250
200
150
100
50
0
0 5 10 15 20 25 30

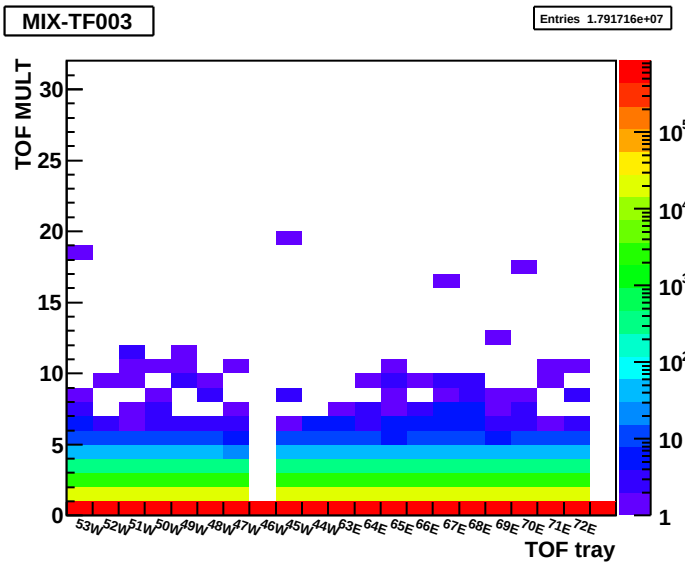

BunchId7Bit (all events)
Entries 426599
10^4
10^3
0 20 40 60 80 100 120

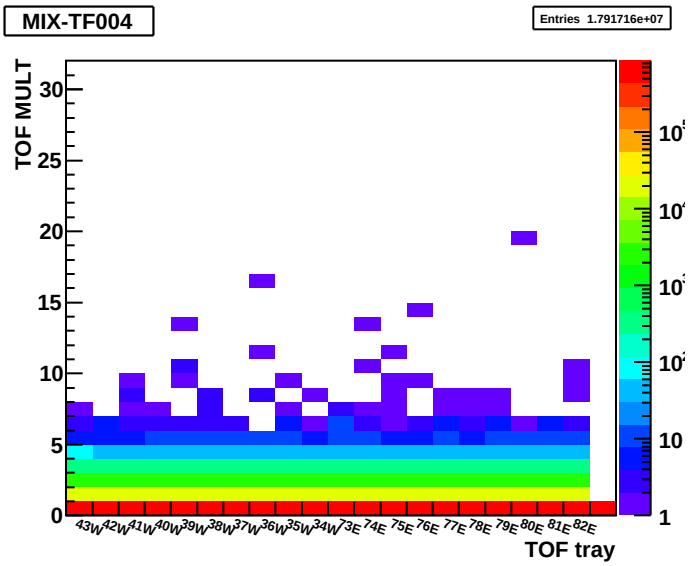

Abort-gaps
Entries 12969
10^3
10^2
10
1
0 20 40 60 80 100 120

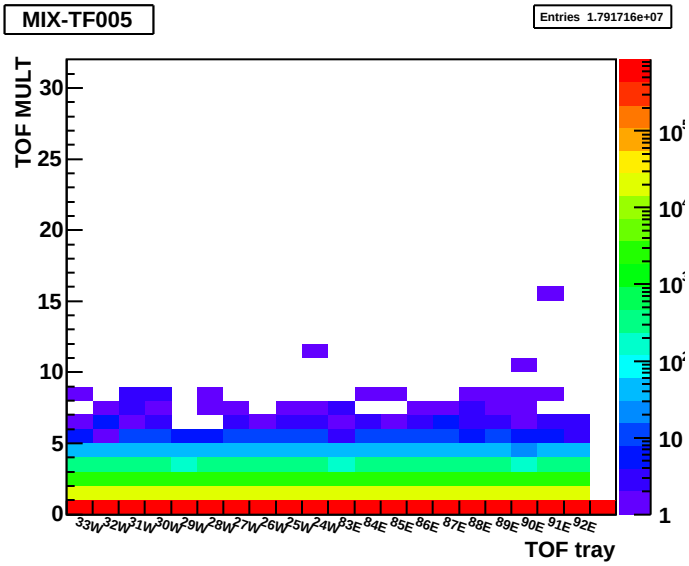

!Yellow-Fill
Entries 426599
10^4
10^3
0 20 40 60 80 100 120

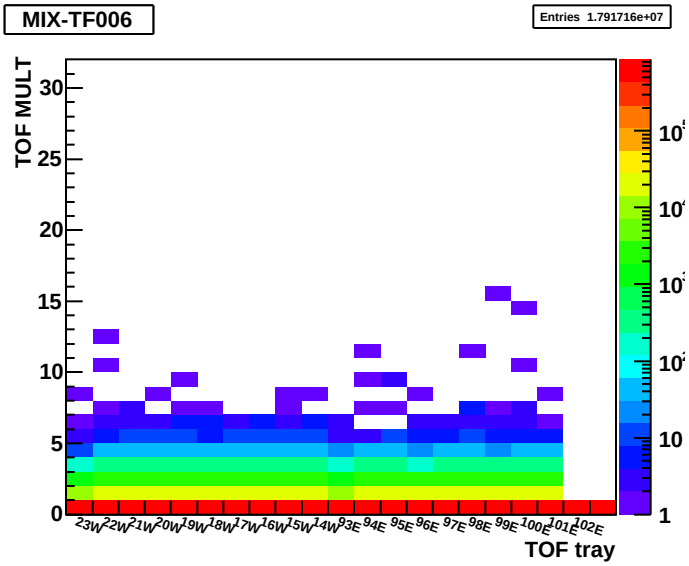

MIX-TF001
Entries 1.791716e+07
TOF MULT
TOF tray

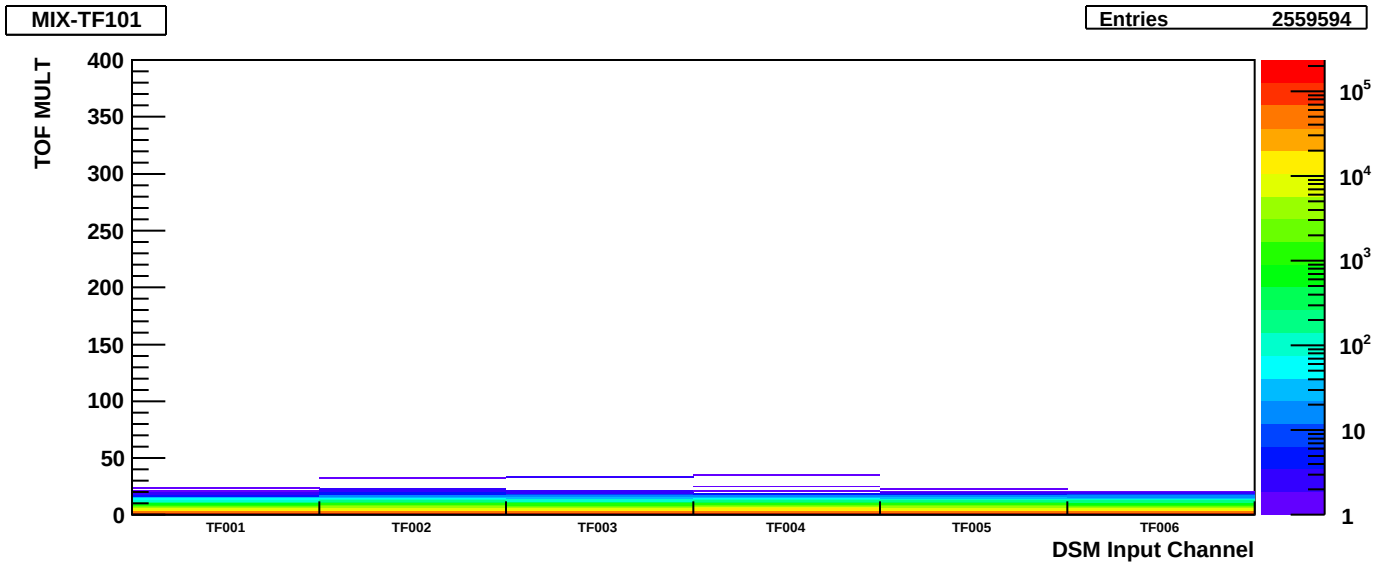

MIX-TF002
Entries 1.791716e+07
TOF MULT
TOF tray

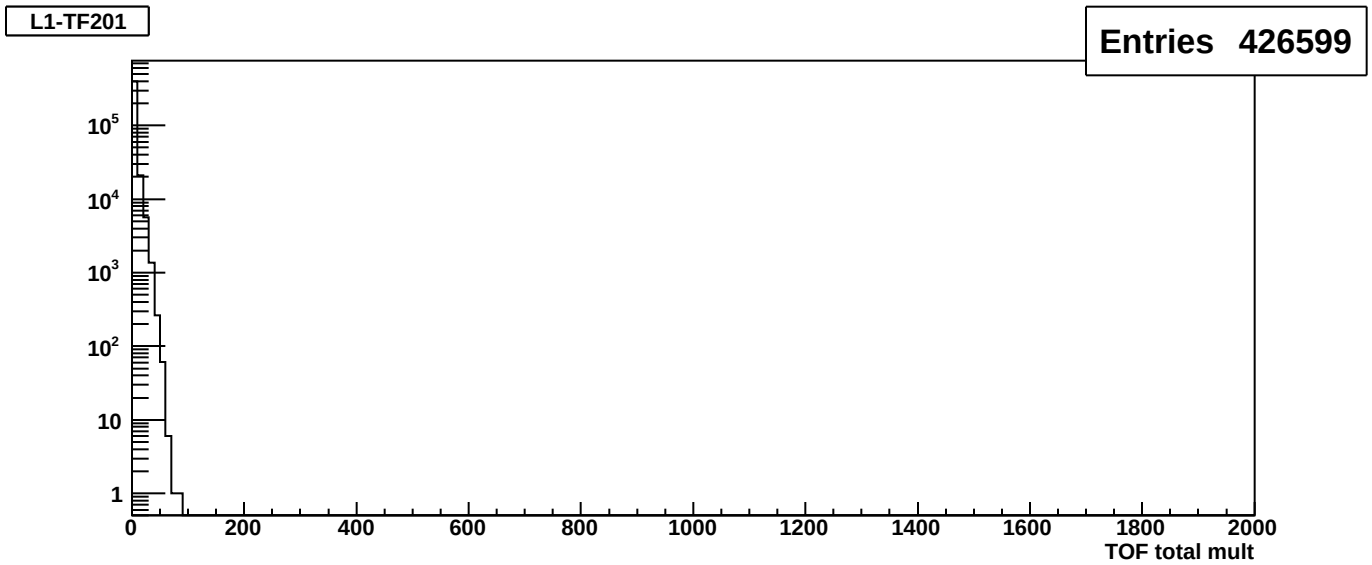

MIX-TF003
Entries 1.791716e+07
TOF MULT
TOF tray

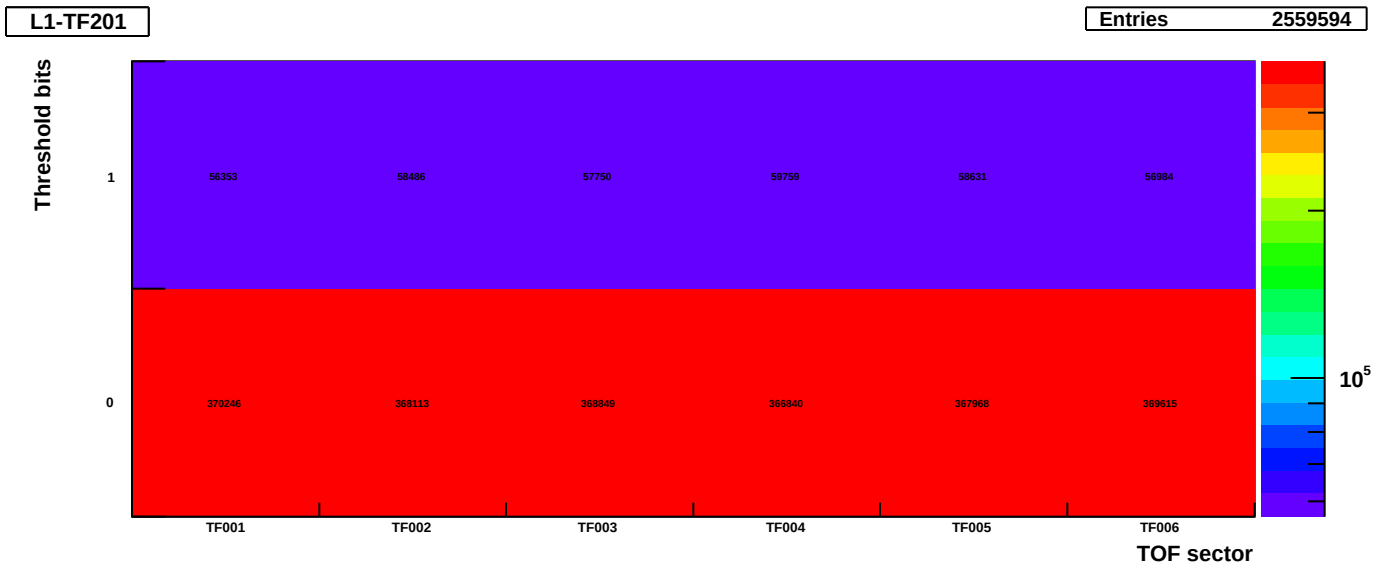

MIX-TF004
Entries 1.791716e+07
TOF MULT
TOF tray

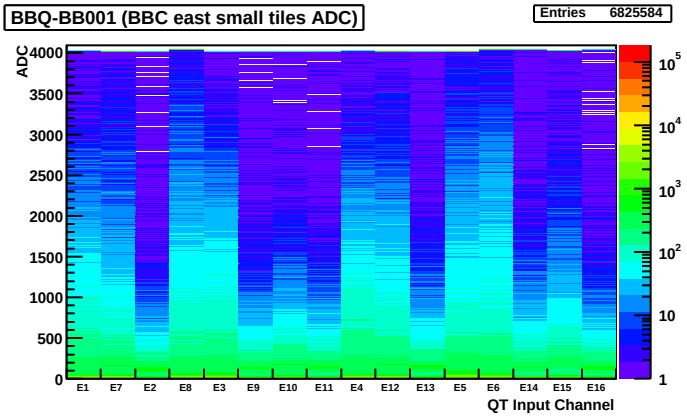

MIX-TF005
Entries 1.791716e+07
TOF MULT
TOF tray

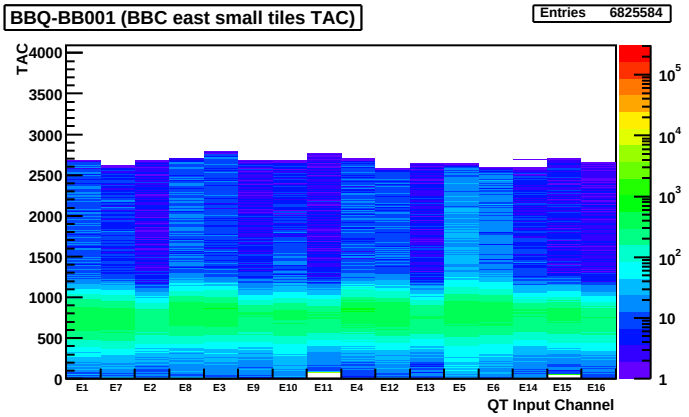

MIX-TF006
Entries 1.791716e+07
TOF MULT
TOF tray

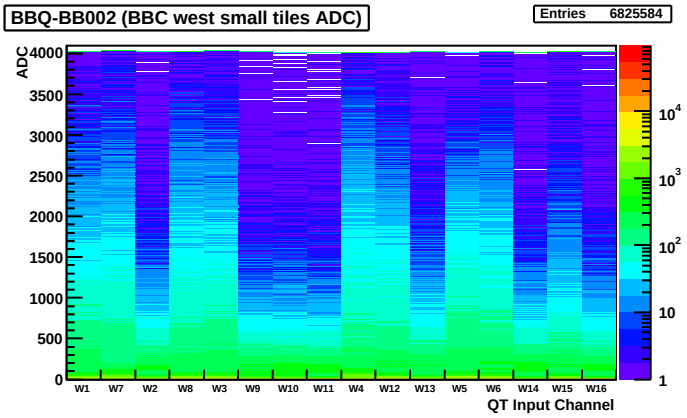

MIX-TF101
Entries 2559594
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

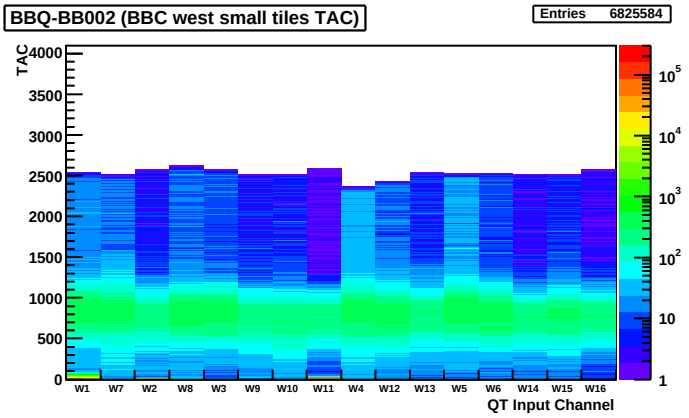

L1-TF201
Entries 426599
10^5
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

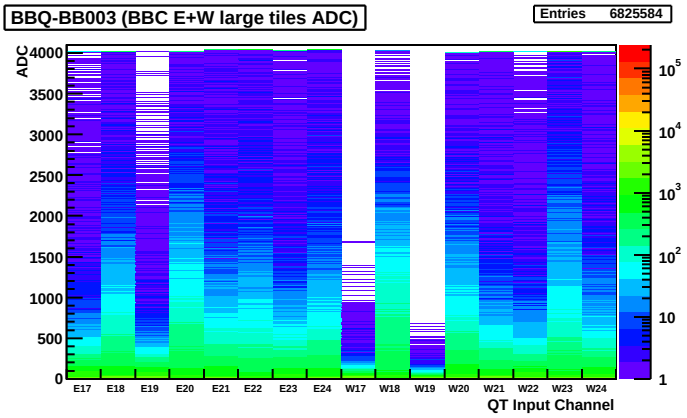

L1-TF201
Entries 2559594
Threshold bits
1
0
56353
58486
57750
59759
58631
56984
370246
368113
368849
366840
367968
369615
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

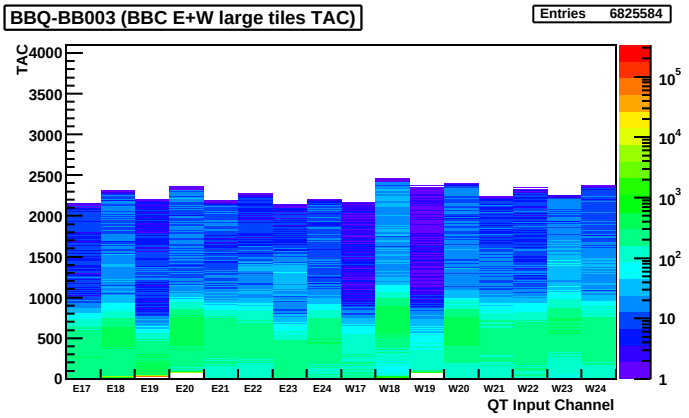

BBQ-BB001 (BBC east small tiles ADC)
Entries 6825584
ADC
QT Input Channel

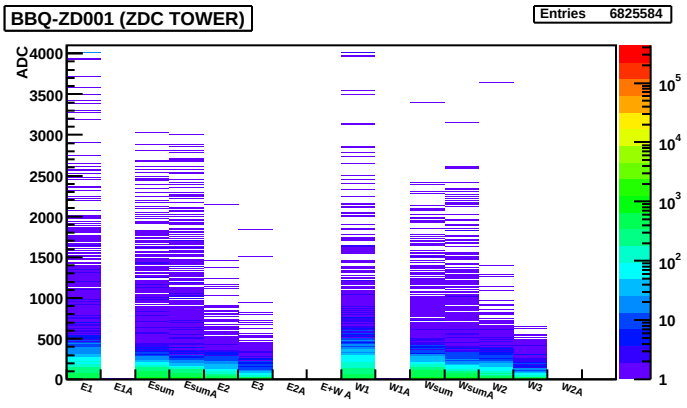

BBQ-BB001 (BBC east small tiles TAC)
Entries 6825584
TAC
QT Input Channel

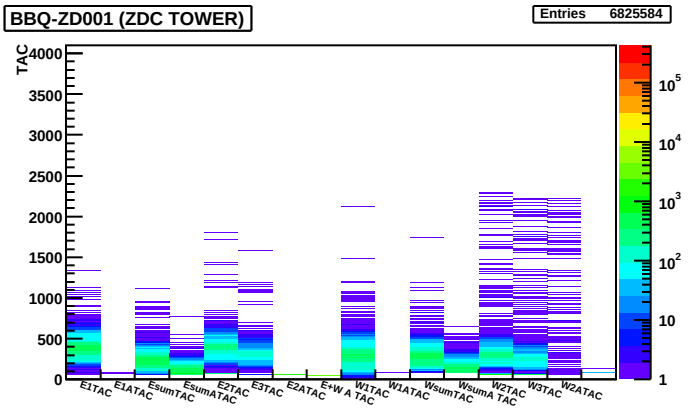

BBQ-BB002 (BBC west small tiles ADC)
Entries 6825584
ADC
QT Input Channel

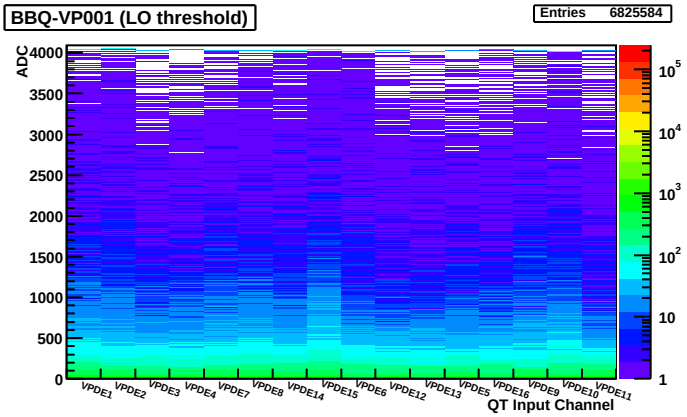

BBQ-BB002 (BBC west small tiles TAC)
Entries 6825584
TAC
QT Input Channel

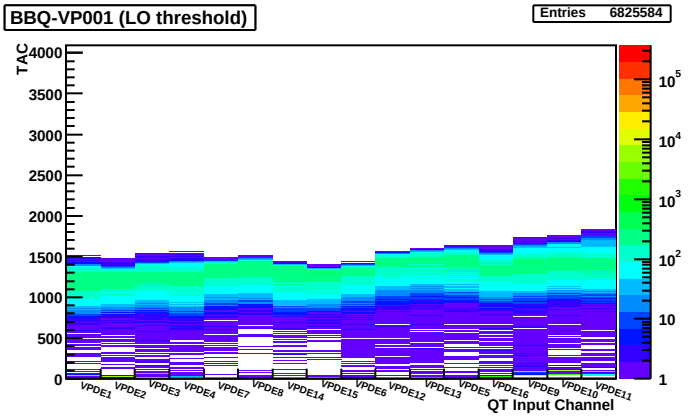

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 6825584
ADC
QT Input Channel

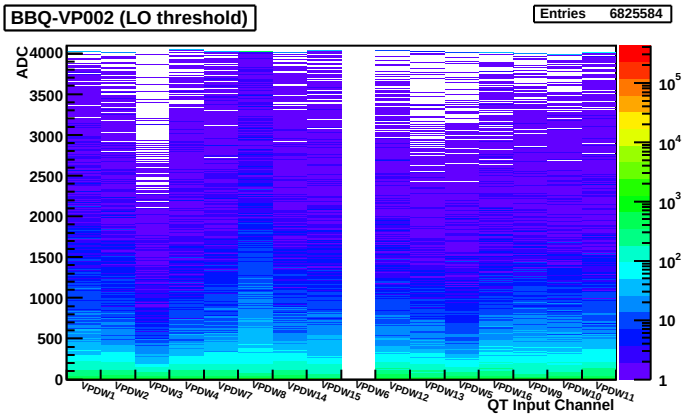

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 6825584
TAC
QT Input Channel

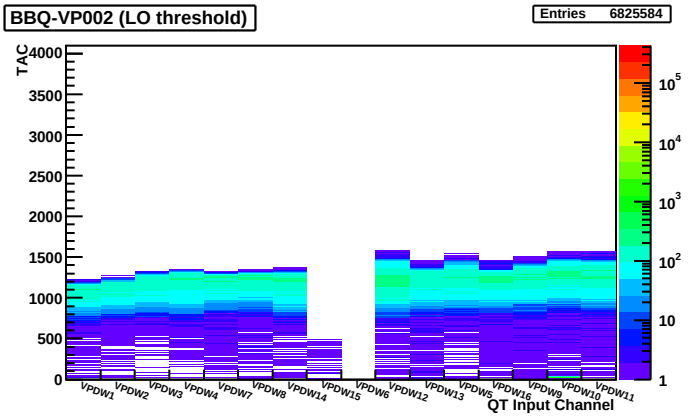

BBQ-ZD001 (ZDC TOWER)
Entries 6825584
ADC

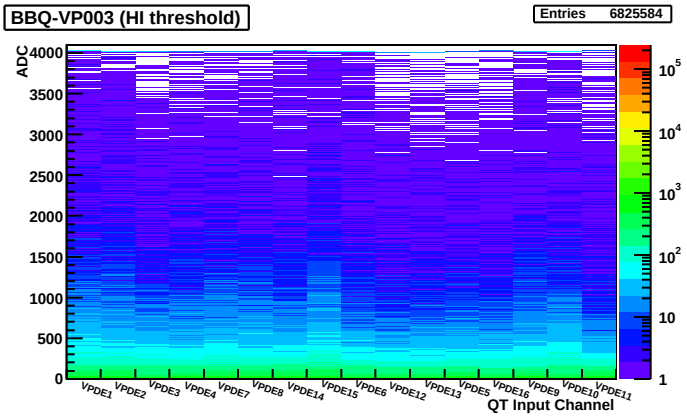

BBQ-ZD001 (ZDC TOWER)
Entries 6825584
TAC

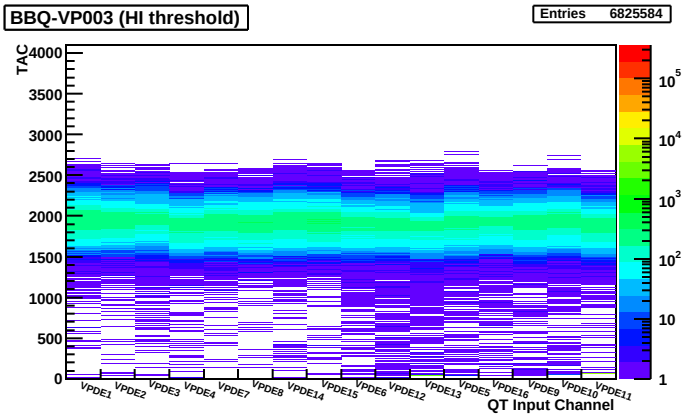

BBQ-VP001 (LO threshold)
Entries 6825584
ADC
QT Input Channel

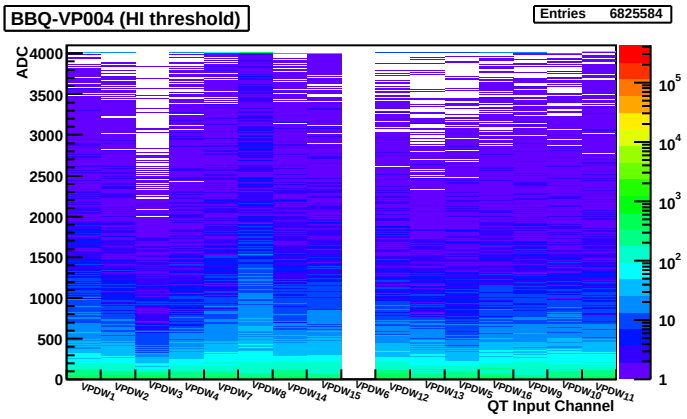

BBQ-VP001 (LO threshold)
Entries 6825584
TAC
QT Input Channel

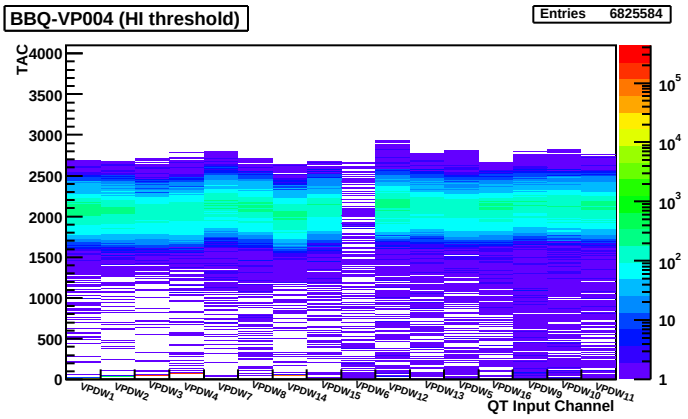

BBQ-VP002 (LO threshold)
Entries 6825584
ADC
QT Input Channel

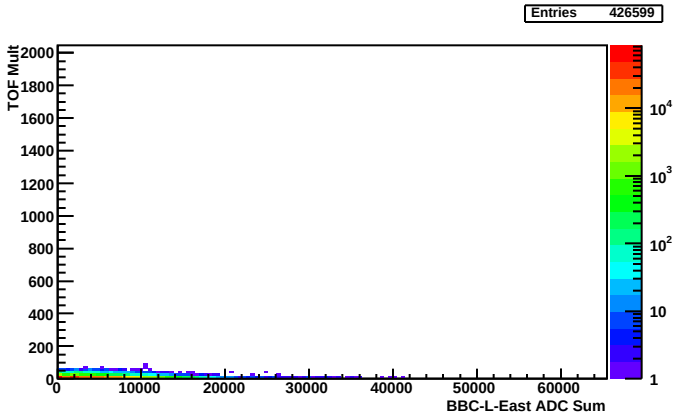

BBQ-VP002 (LO threshold)
Entries 6825584
TAC
QT Input Channel

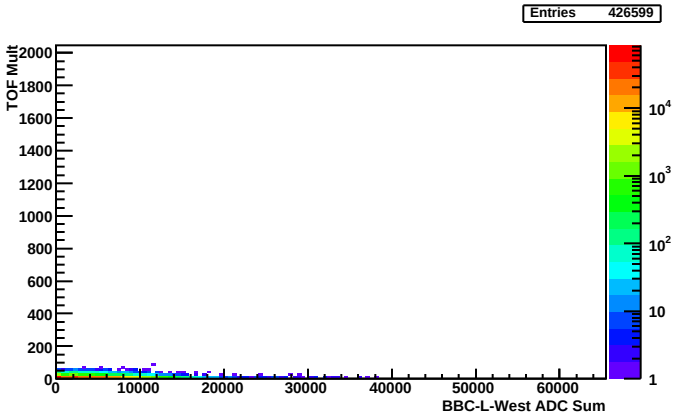

BBQ-VP003 (HI threshold)
Entries 6825584
ADC
QT Input Channel

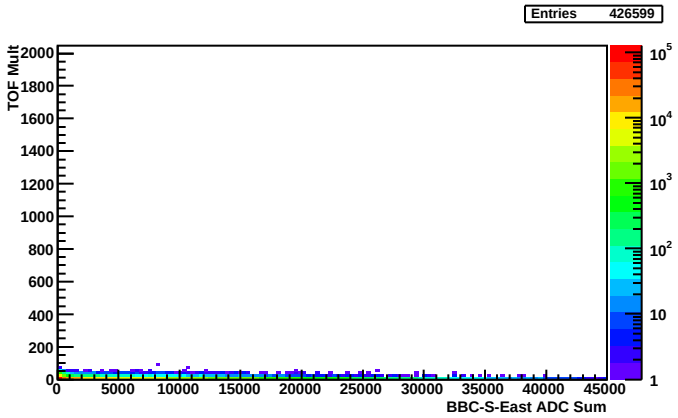

BBQ-VP003 (HI threshold)
Entries 6825584
TAC
QT Input Channel

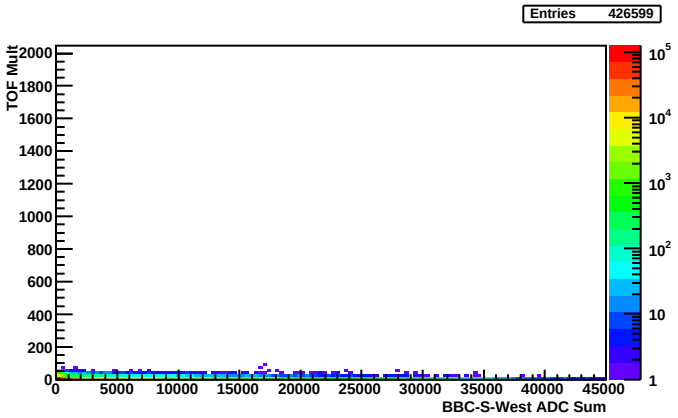

BBQ-VP004 (HI threshold)
Entries 6825584
ADC
QT Input Channel

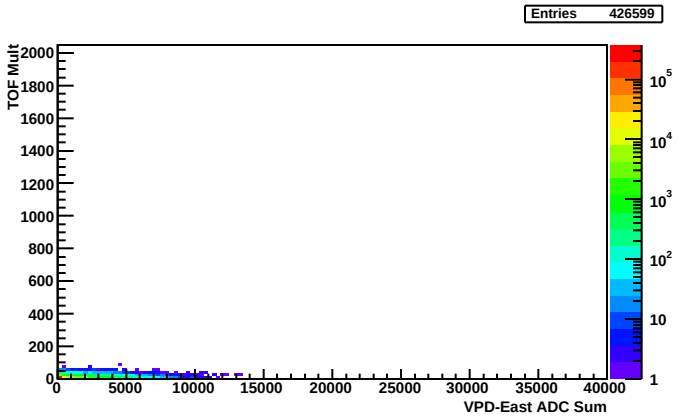

BBQ-VP004 (HI threshold)
Entries 6825584
TAC
QT Input Channel

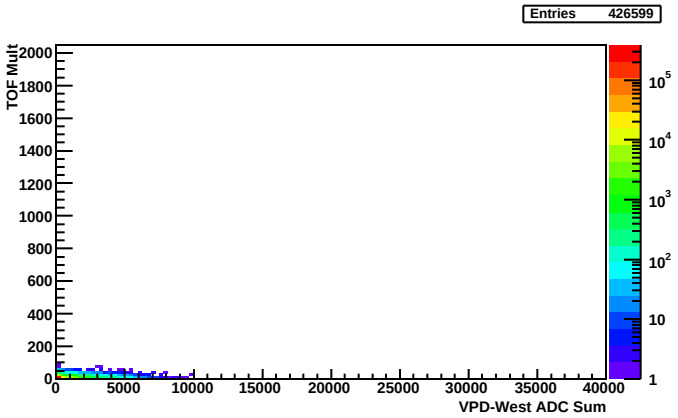

Entries 426599
TOF Mult
BBC-L-East ADC Sum

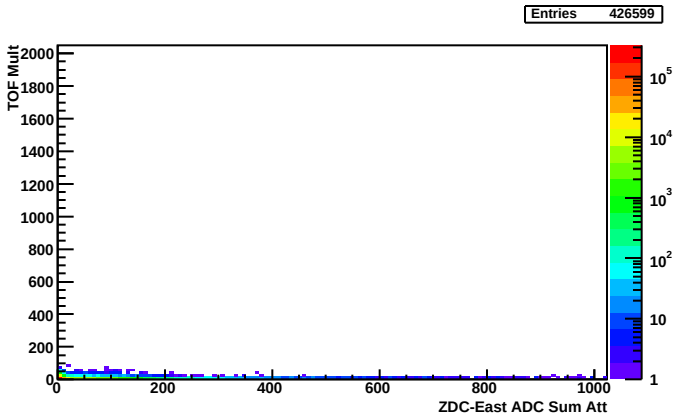

Entries 426599
TOF Mult
BBC-L-West ADC Sum

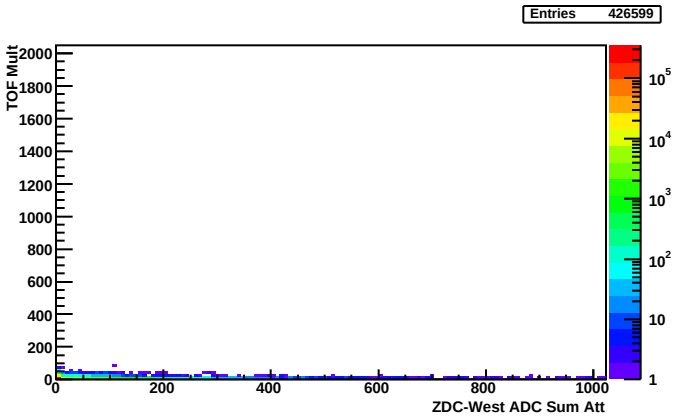

Entries 426599
TOF Mult
BBC-S-East ADC Sum

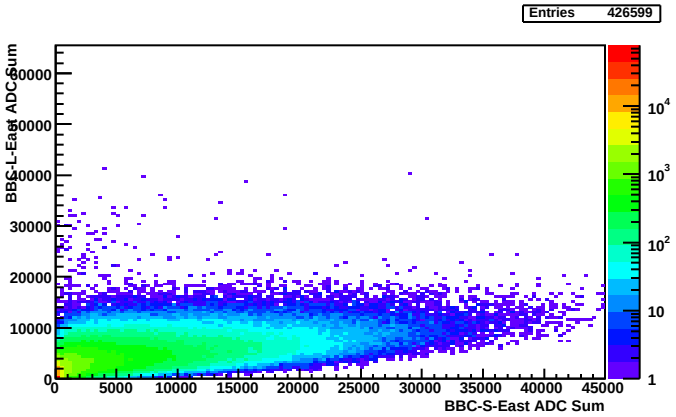

Entries 426599
TOF Mult
BBC-S-West ADC Sum

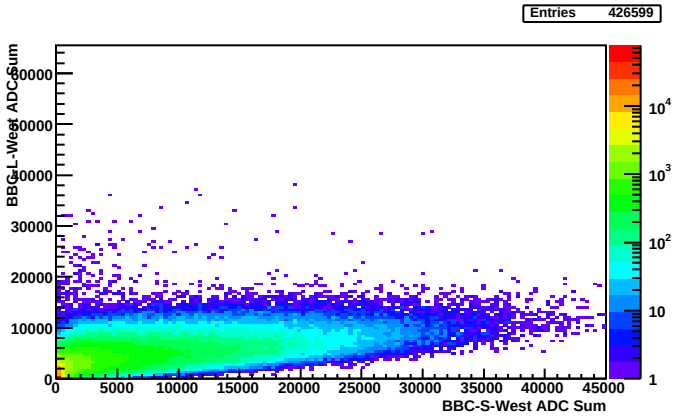

Entries 426599
TOF Mult
VPD-East ADC Sum

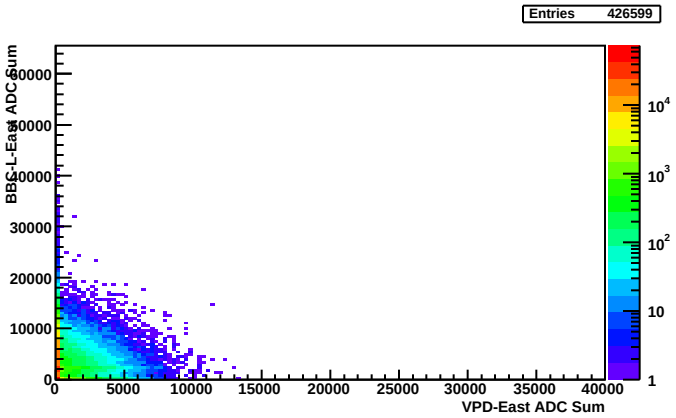

Entries 426599
TOF Mult
VPD-West ADC Sum

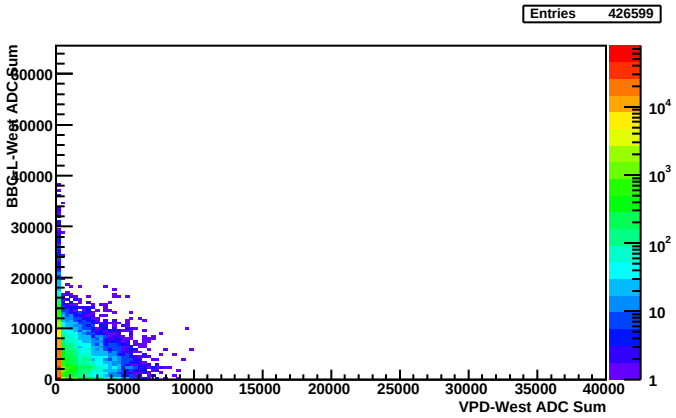

Entries 426599
TOF Mult
ZDC-East ADC Sum Att

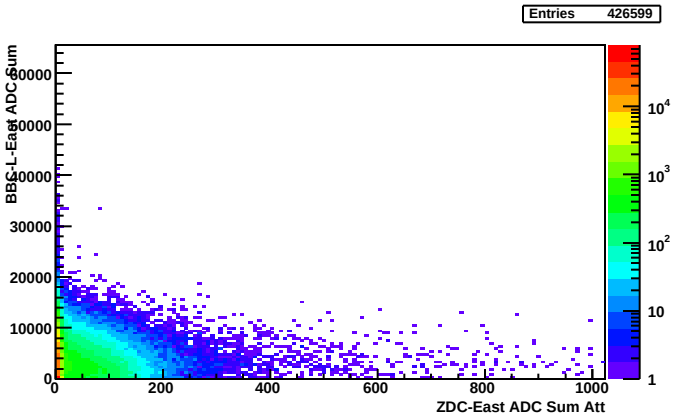

Entries 426599
TOF Mult
ZDC-West ADC Sum Att

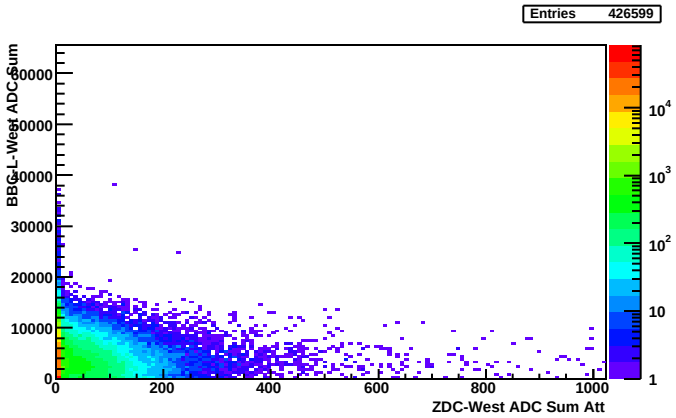

Entries 426599
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 426599
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 426599
BBC-L-East ADC Sum
VPD-East ADC Sum


Entries 426599
BBC-L-West ADC Sum
VPD-West ADC Sum


Entries 426599
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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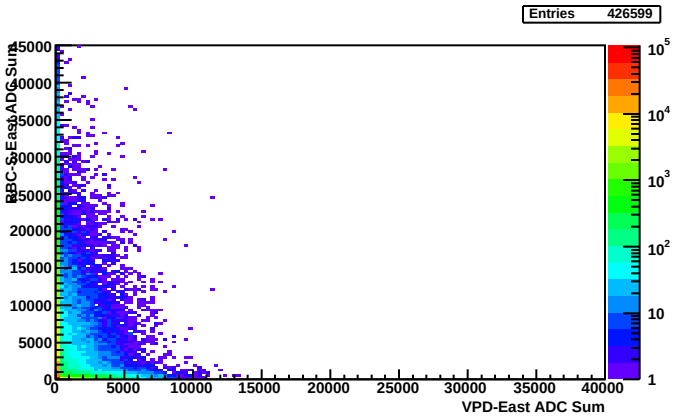
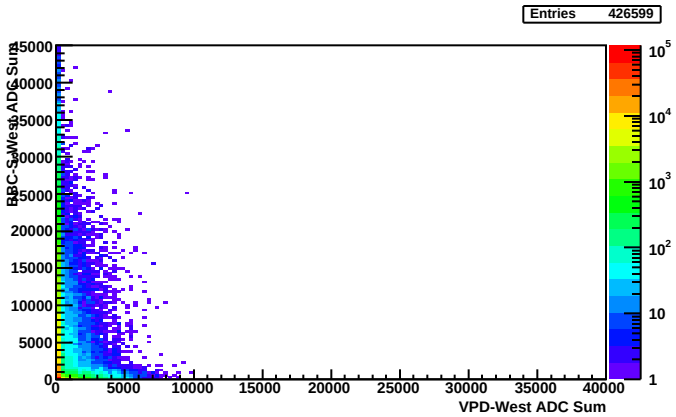
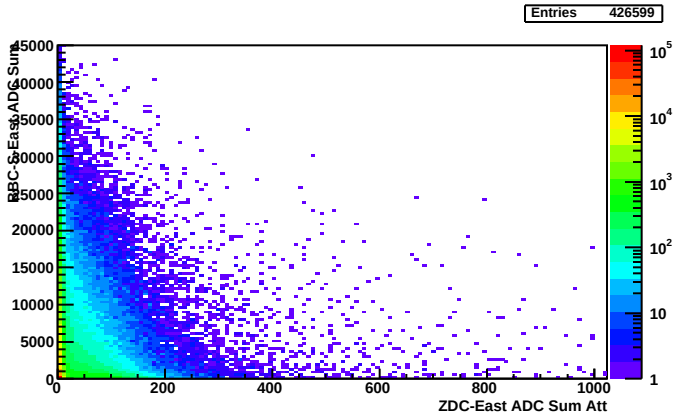
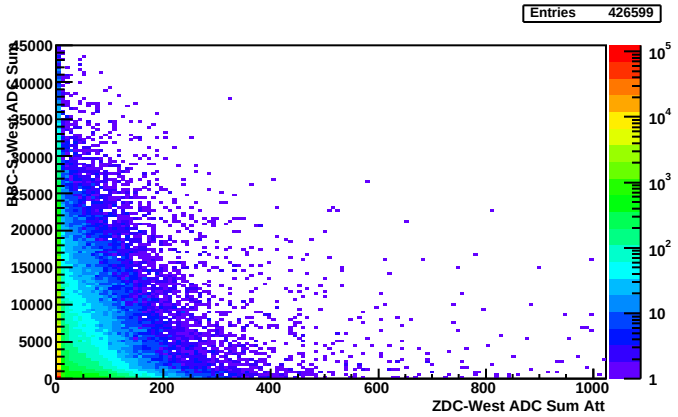
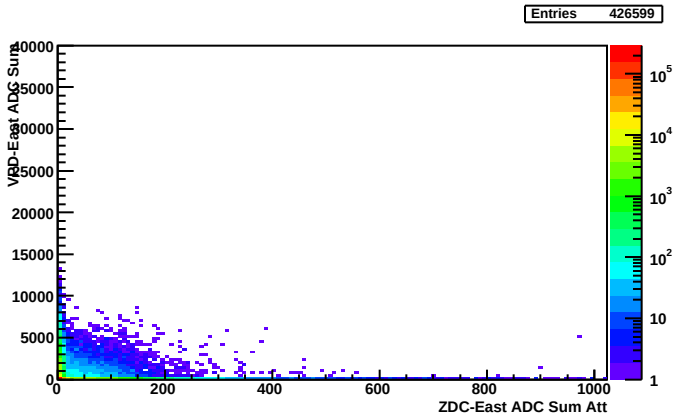
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

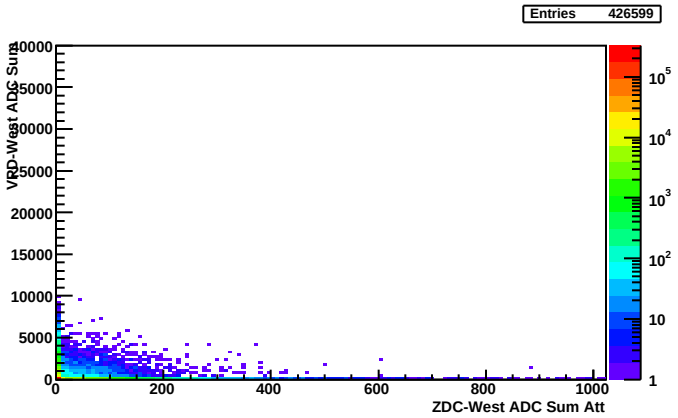

Entries 426599
BBC-S-East ADC Sum
VPD-East ADC Sum

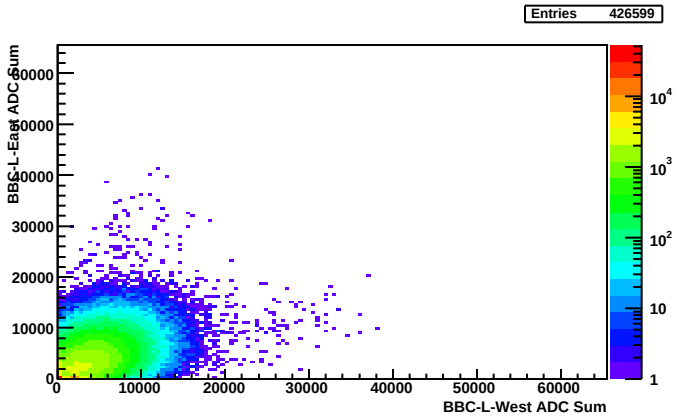

Entries 426599
BBC-S-West ADC Sum
VPD-West ADC Sum

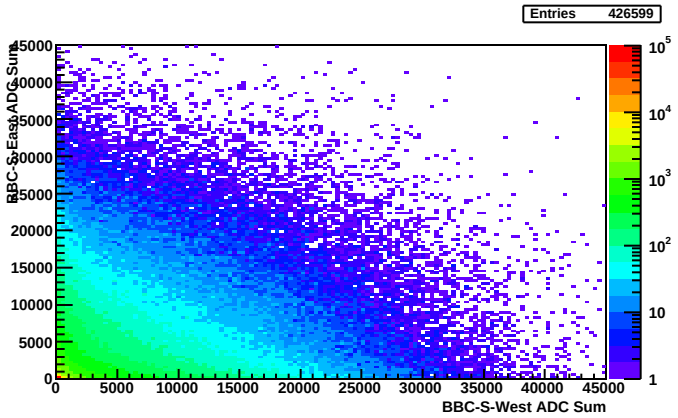

Entries 426599
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

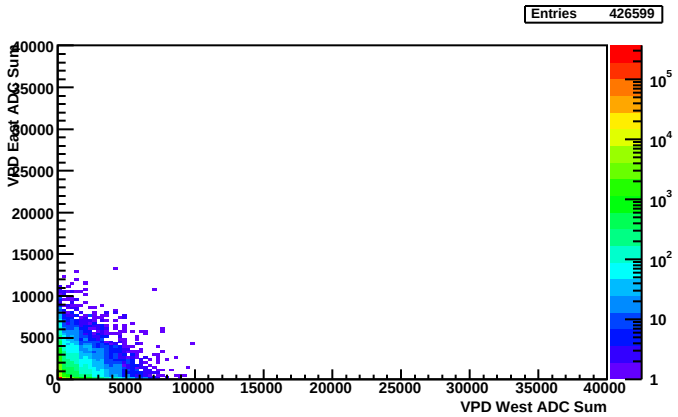

Entries 426599
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

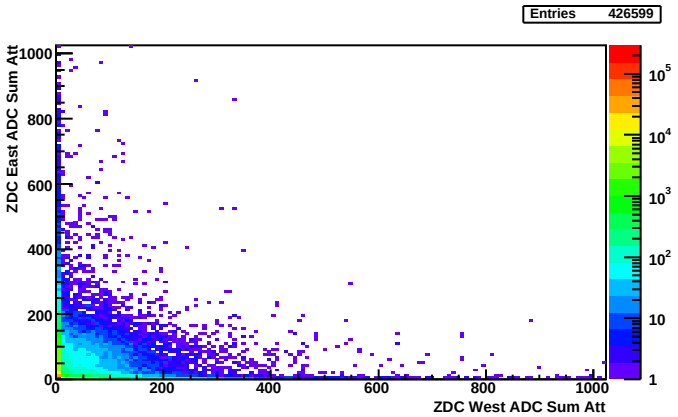

Entries 426599
VPD-East ADC Sum
ZDC-East ADC Sum Att

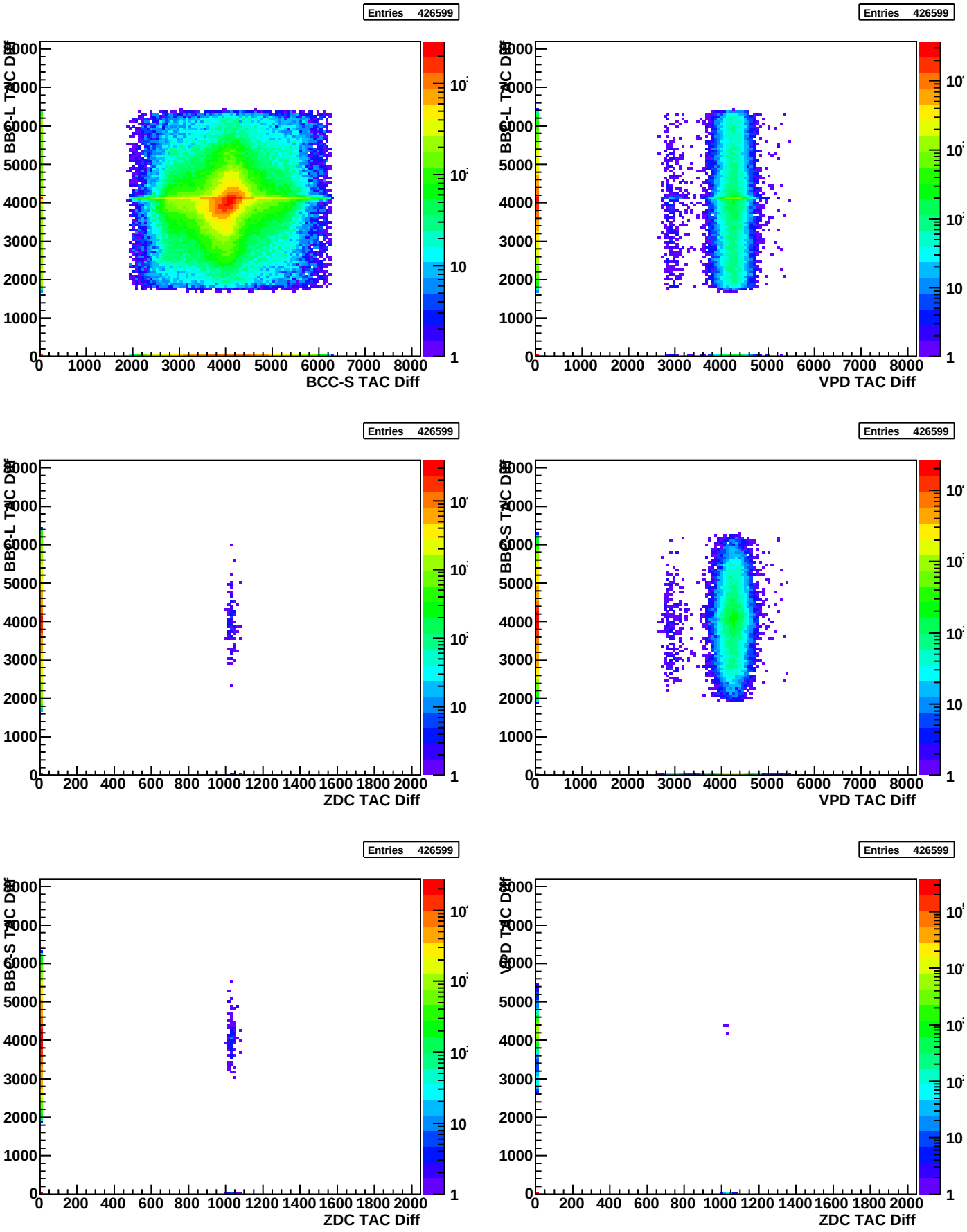

Entries 426599
VPD-West ADC Sum
ZDC-West ADC Sum Att

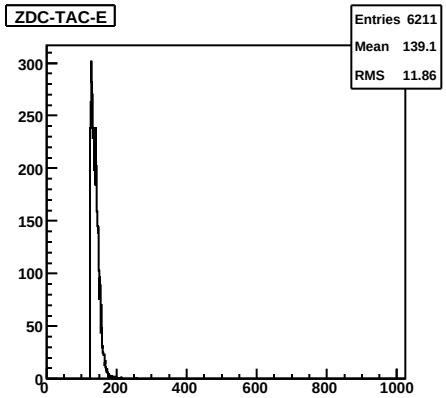

Entries 426599
BBC-L-East ADC Sum
BBC-L-West ADC Sum

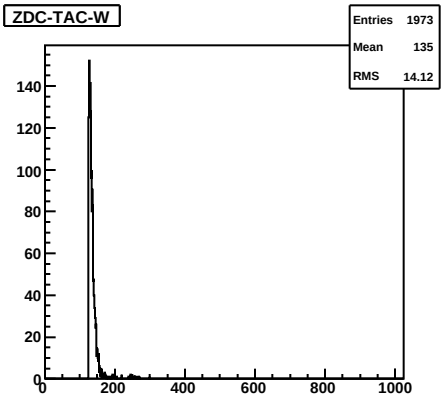

Entries 426599
BBC-S-East ADC Sum
BBC-S-West ADC Sum

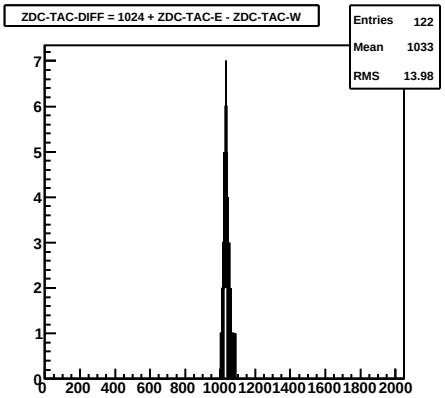

Entries 426599
VPD East ADC Sum
VPD West ADC Sum

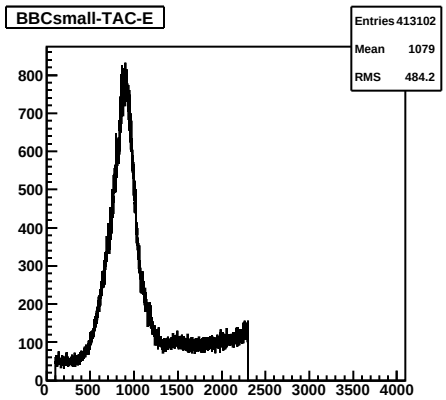

Entries 426599
ZDC East ADC Sum Att
ZDC West ADC Sum Att

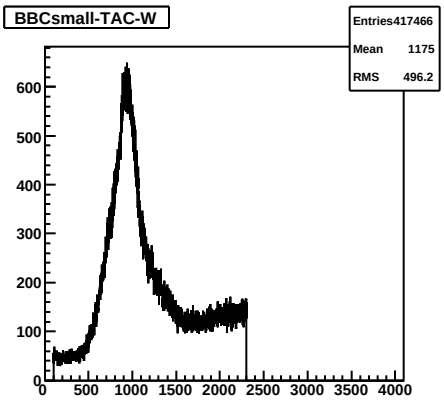

Entries 426599
BBC-L TAC Diff
BCC-S TAC Diff
Entries 426599
BBC-L TAC Diff
VPD TAC Diff
Entries 426599
BBC-L TAC Diff
ZDC TAC Diff
Entries 426599
BBC-S TAC Diff
VPD TAC Diff
Entries 426599
BBC-S TAC Diff
ZDC TAC Diff
Entries 426599
VPD TAC Diff
ZDC TAC Diff

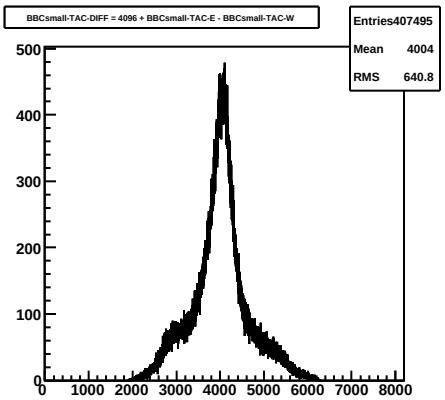

ZDC-TAC-E
Entries 6211
Mean 139.1
RMS 11.86

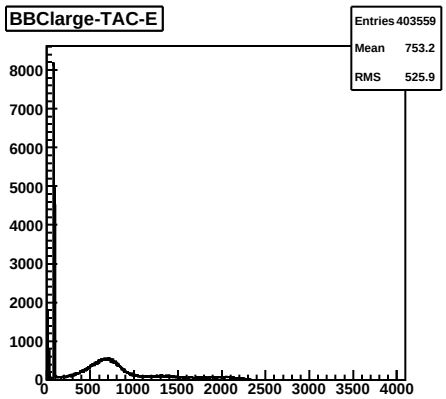

ZDC-TAC-W
Entries 1973
Mean 135
RMS 14.12

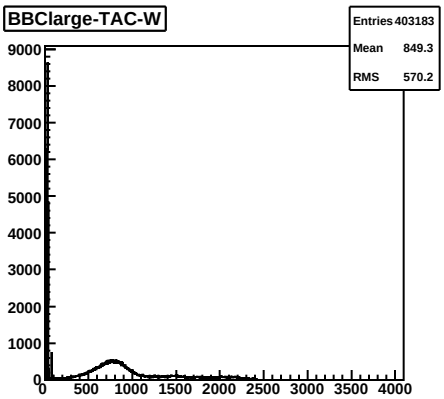

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 122
Mean 1033
RMS 13.98

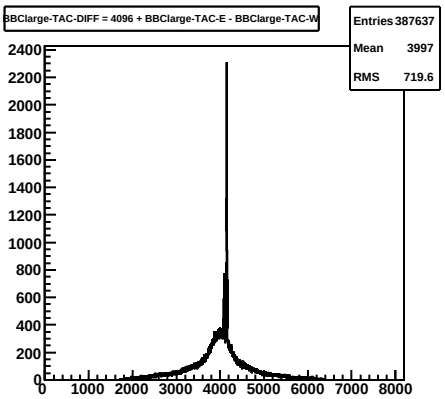

BBCsmall-TAC-E
Entries 413102
Mean 1079
RMS 484.2

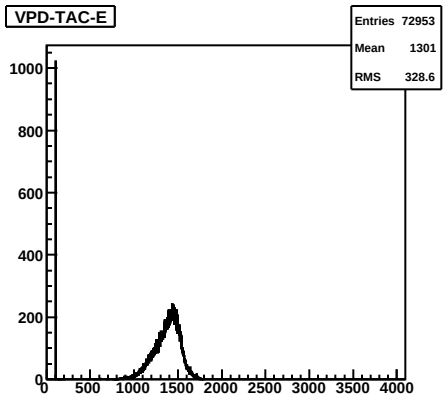

BBCsmall-TAC-W
Entries 417466
Mean 1175
RMS 496.2

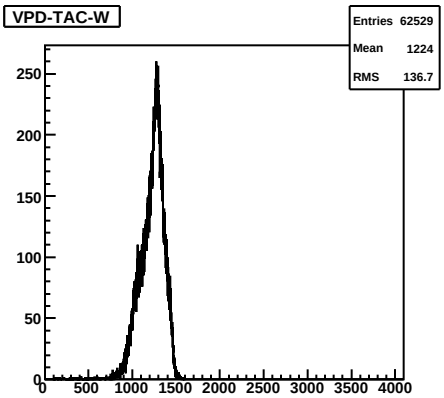

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 407495
Mean 4004
RMS 640.8

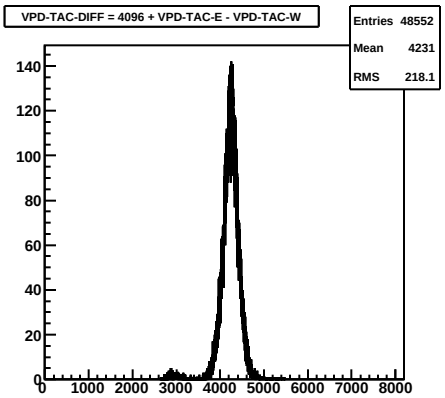

BBClarge-TAC-E
Entries 403559
Mean 753.2
RMS 525.9

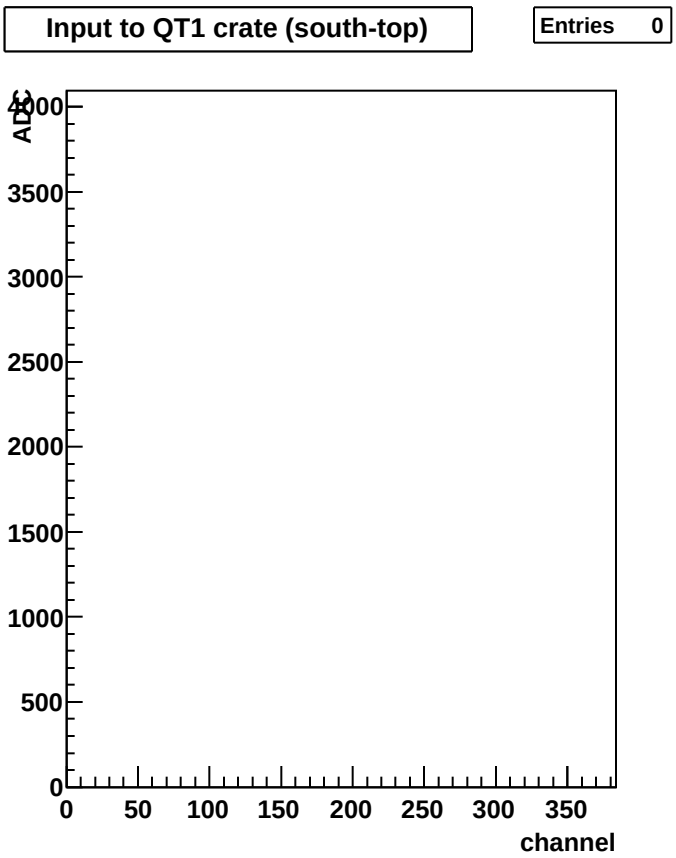

BBClarge-TAC-W
Entries 403183
Mean 849.3
RMS 570.2

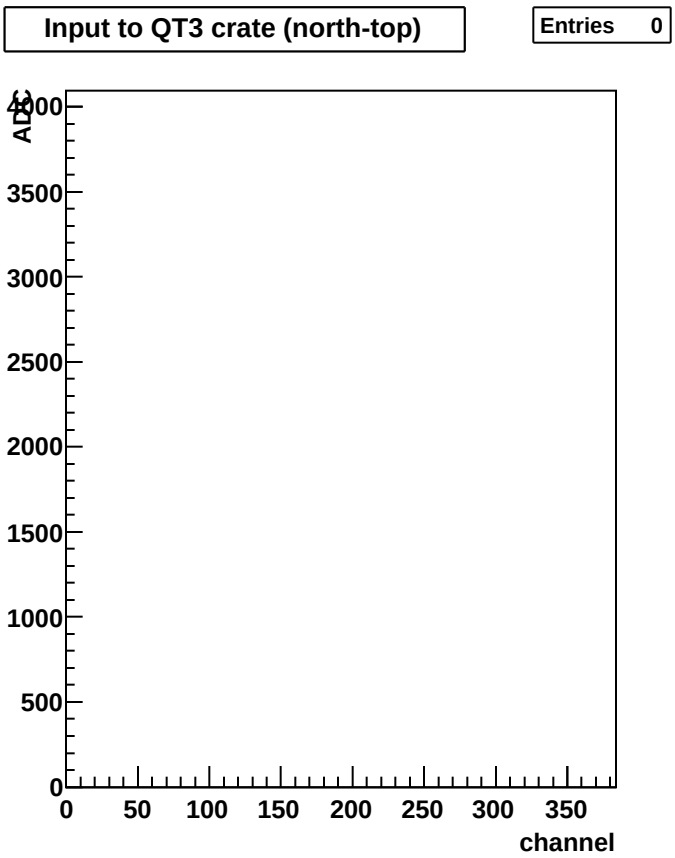

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 387637
Mean 3997
RMS 719.6

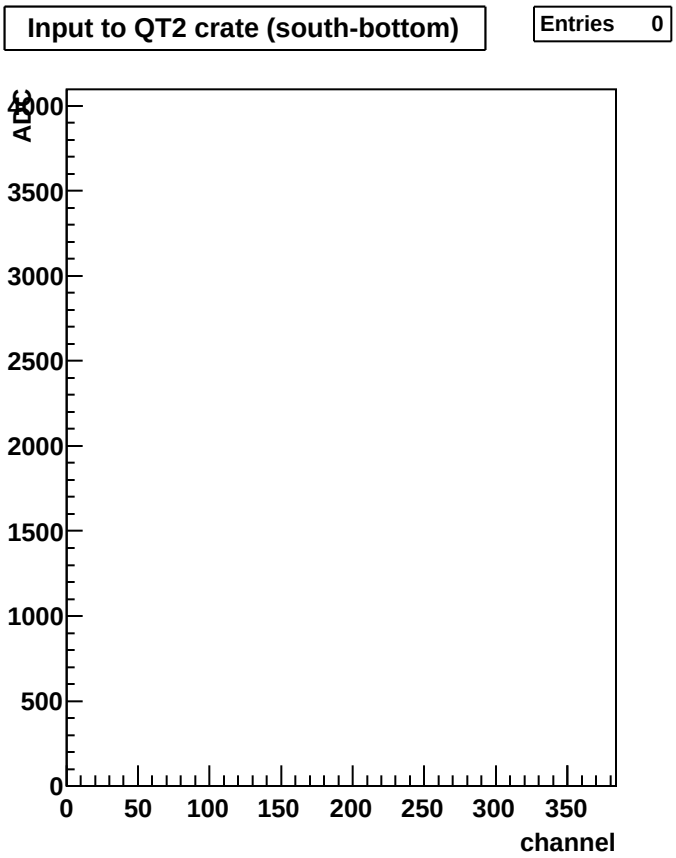

VPD-TAC-E
Entries 72953
Mean 1301
RMS 328.6

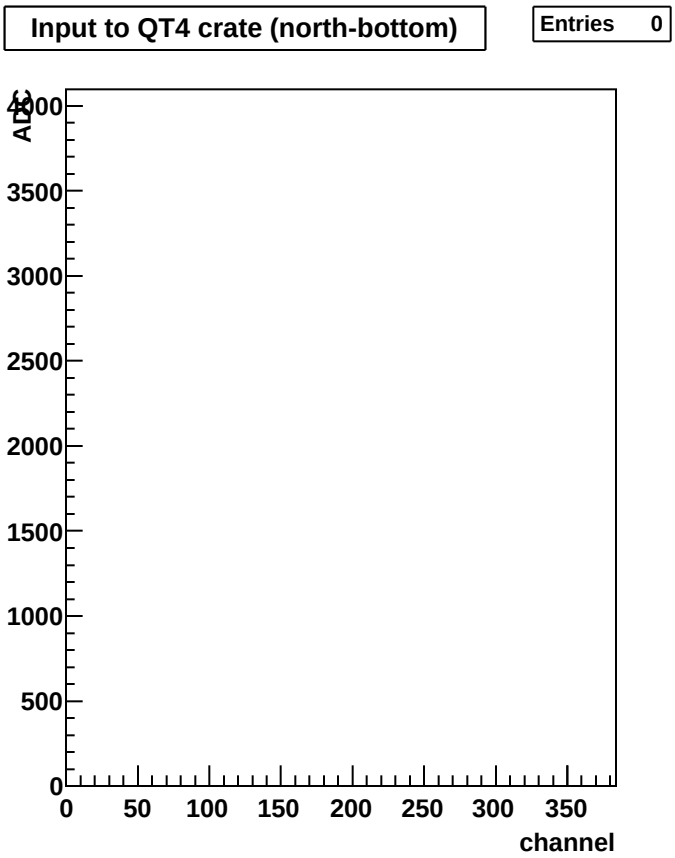

VPD-TAC-W
Entries 62529
Mean 1224
RMS 136.7

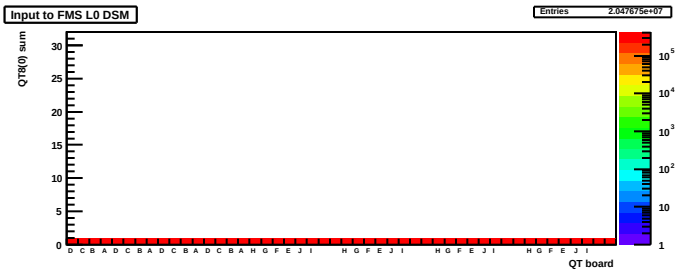

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 48552
Mean 4231
RMS 218.1

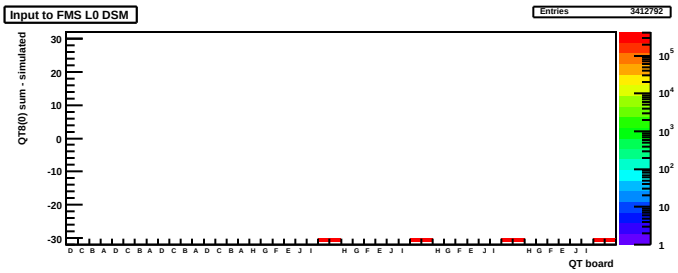

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

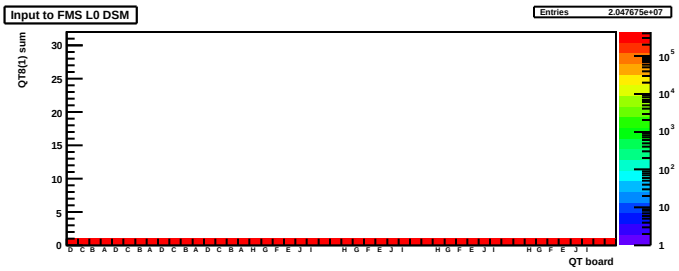

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

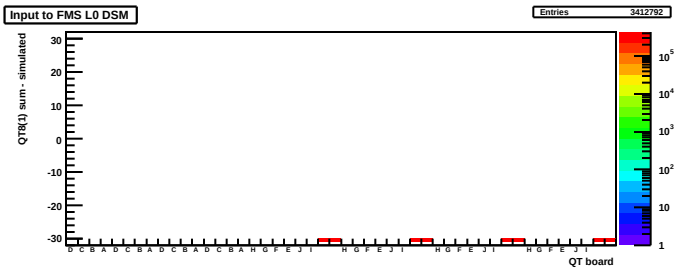

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

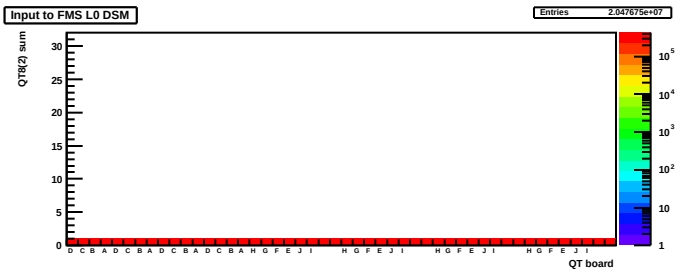

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

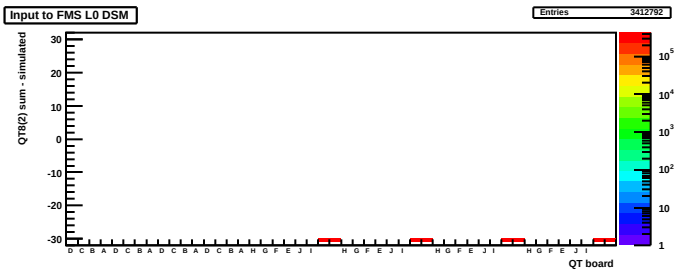

Input to FMS L0 DSM
Entries 2.047675e+07
QT8(0) sum
QT board

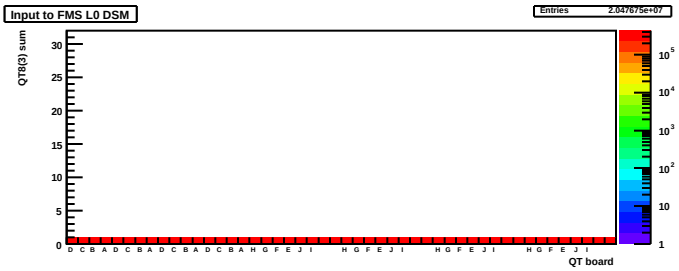

Input to FMS L0 DSM
Entries 3412792
QT8(0) sum - simulated
QT board

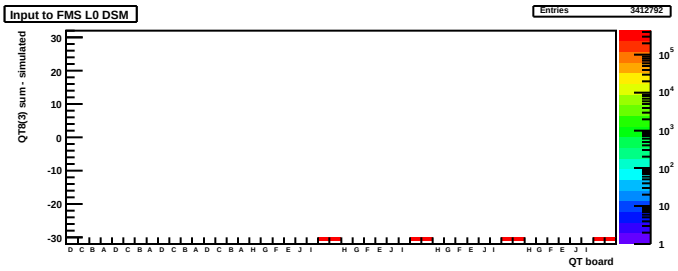

Input to FMS L0 DSM
Entries 2.047675e+07
QT8(1) sum
QT board

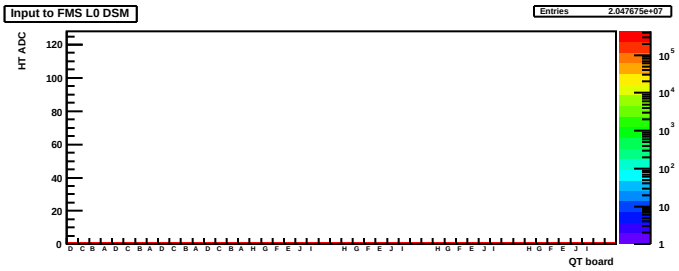

Input to FMS L0 DSM
Entries 3412792
QT8(1) sum - simulated
QT board

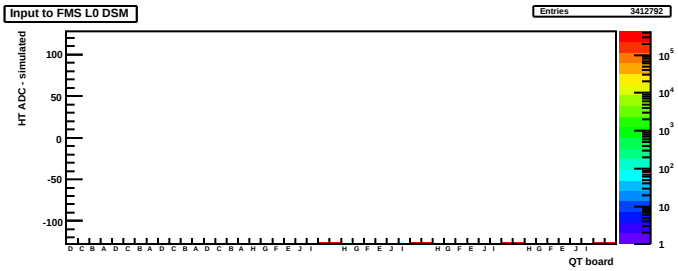

Input to FMS L0 DSM
Entries 2.047675e+07
QT8(2) sum
QT board

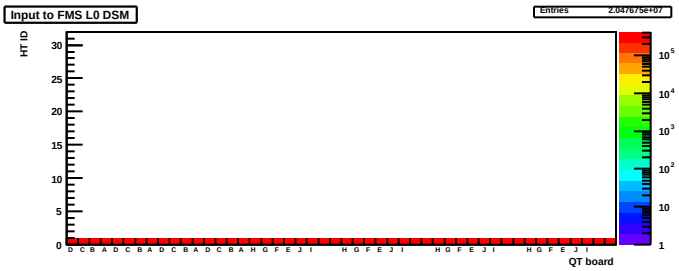

Input to FMS L0 DSM
Entries 3412792
QT8(2) sum - simulated
QT board

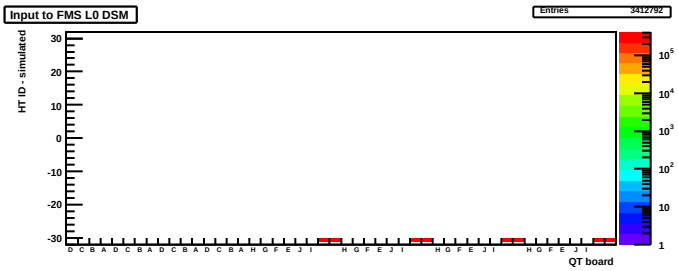

Input to FMS L0 DSM
Entries 2.047675e+07
QT8(3) sum
QT board

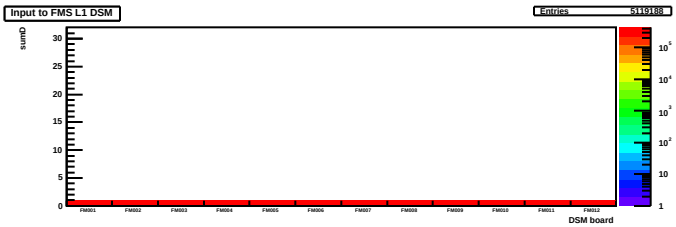

Input to FMS L0 DSM
Entries 3412792
QT8(3) sum - simulated
QT board

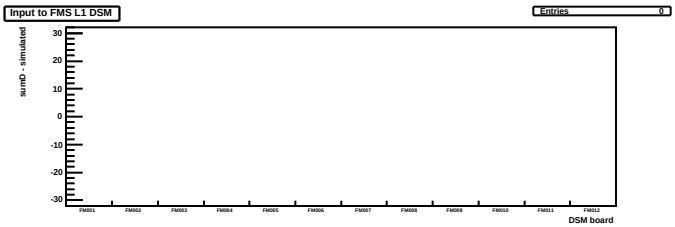

Input to FMS L0 DSM
Entries 2.047675e+07
HT ADC
QT board

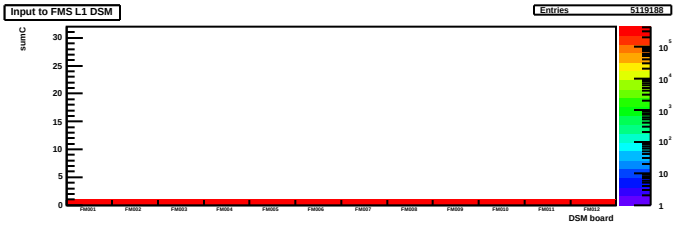

Input to FMS L0 DSM
Entries 3412792
HT ADC - simulated
QT board

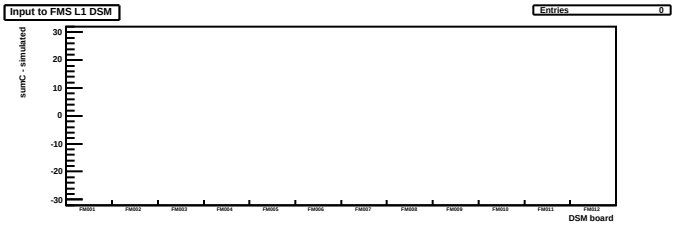

Input to FMS L0 DSM
Entries 2.047675e+07
HT ID
QT board

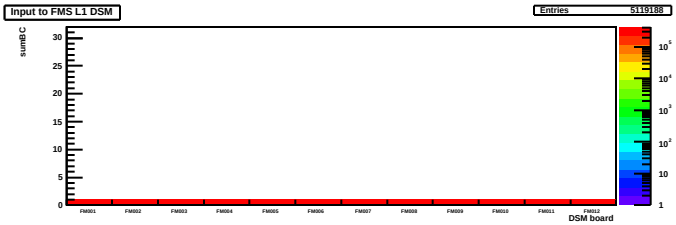

Input to FMS L0 DSM
Entries 3412792
HT ID - simulated
QT board

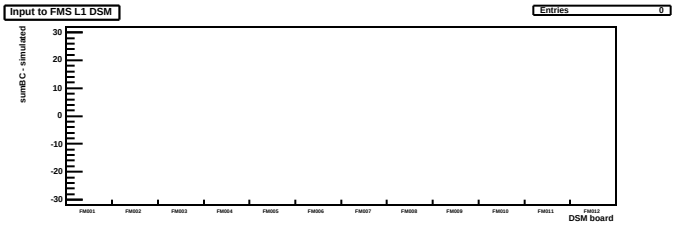

Input to FMS L1 DSM
Entries 5119188
sumD
DSM board

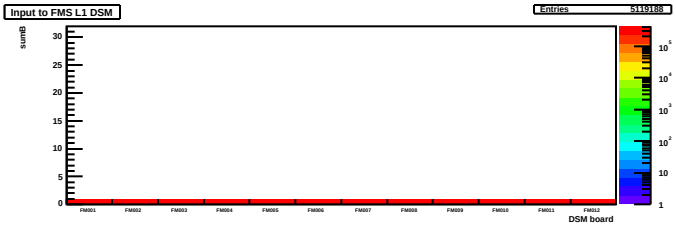

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

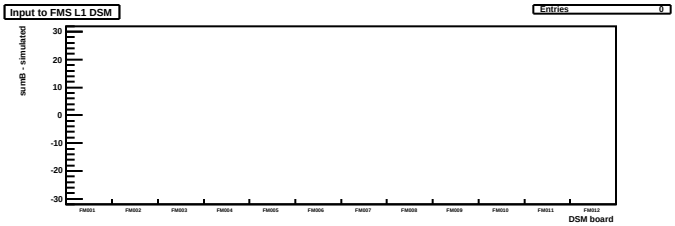

Input to FMS L1 DSM
Entries 5119188
sumC
DSM board

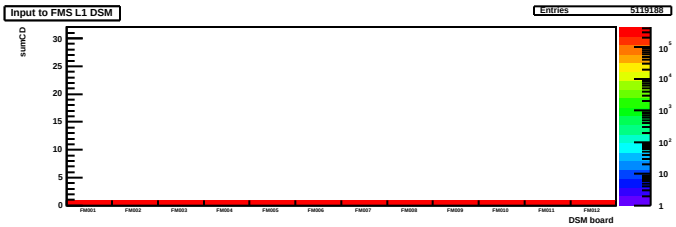

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

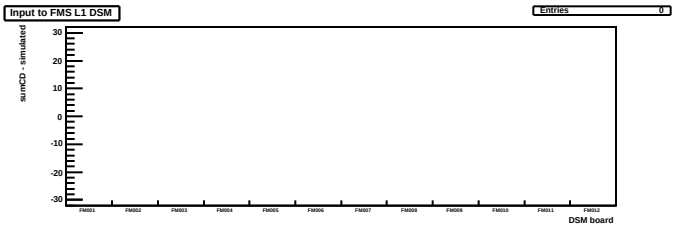

Input to FMS L1 DSM
Entries 5119188
sumBC
DSM board

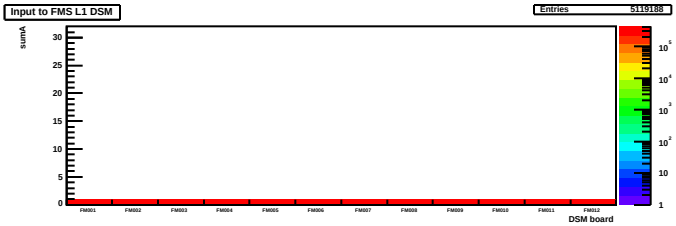

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

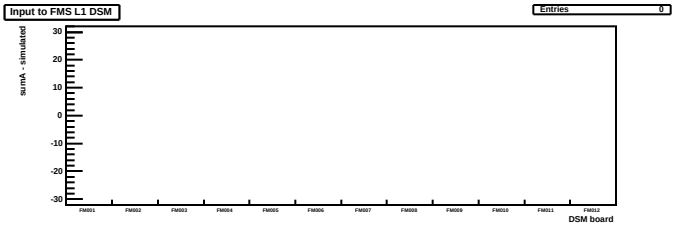

Input to FMS L1 DSM
Entries 5119188
sumB
DSM board

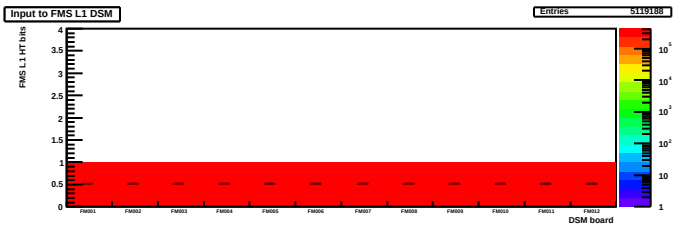

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

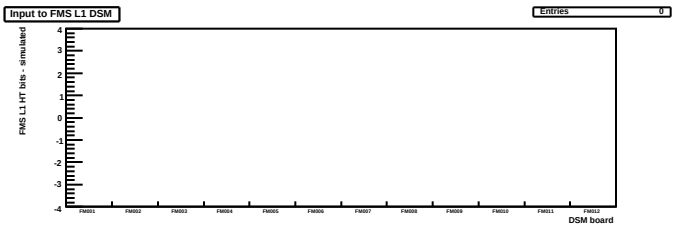

Input to FMS L1 DSM
Entries 5119188
sumCD
DSM board

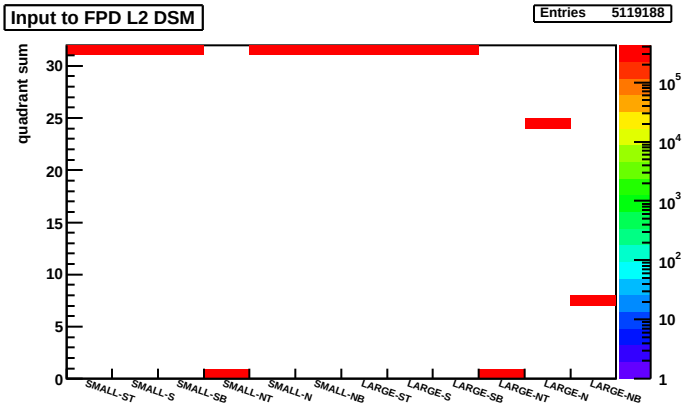

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

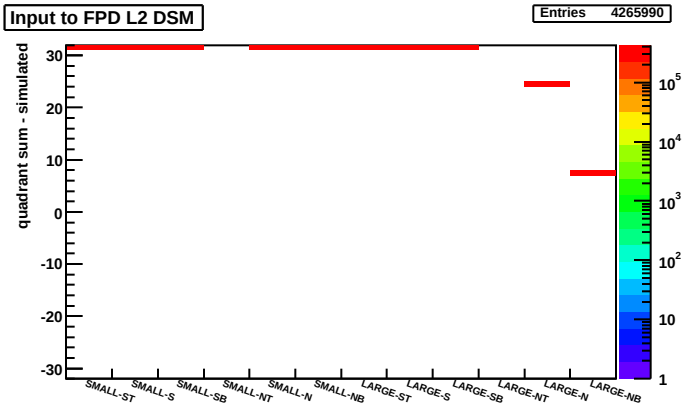

Input to FMS L1 DSM
Entries 5119188
sumA
DSM board

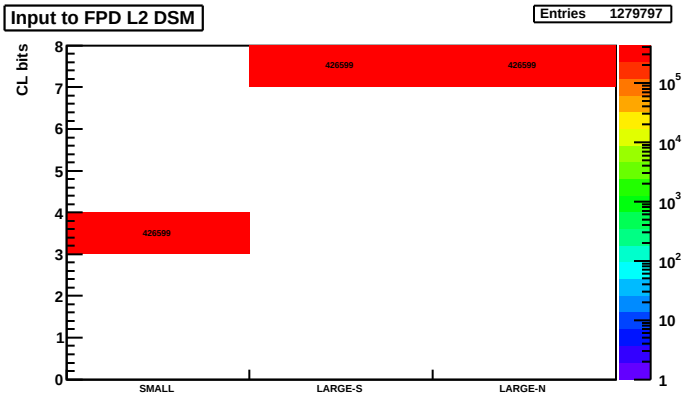

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

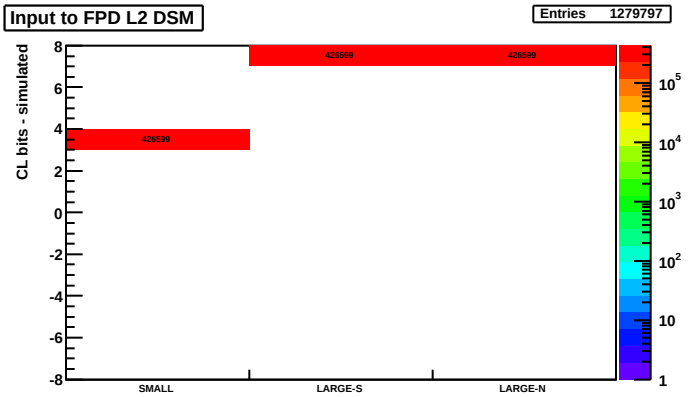

Input to FMS L1 DSM
Entries 5119188
FMS L1 HT bits
DSM board

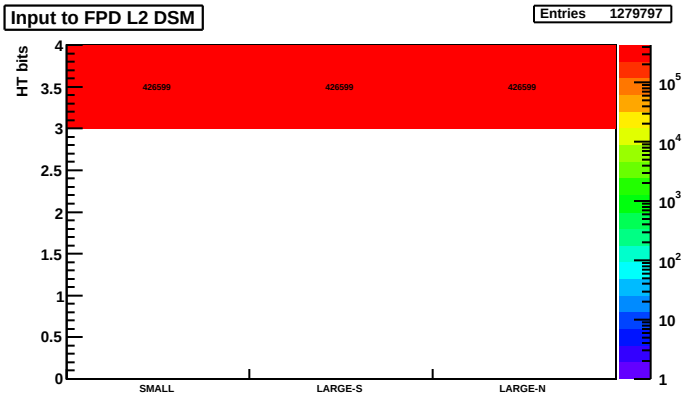

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

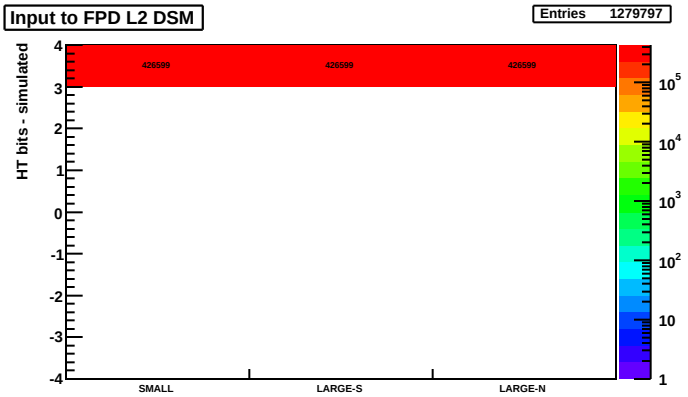

Input to FPD L2 DSM
Entries 5119188
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

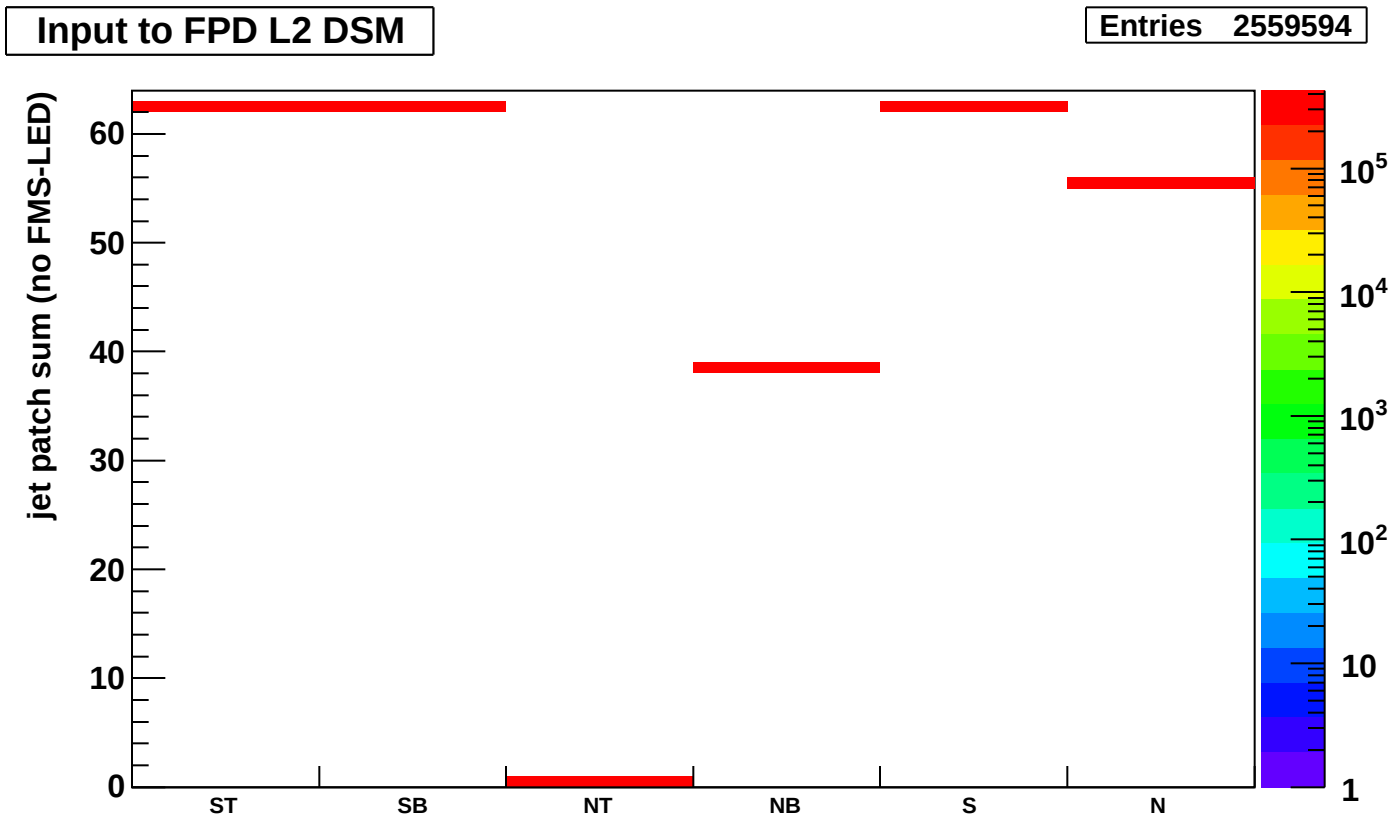

Input to FPD L2 DSM
Entries 4265990
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

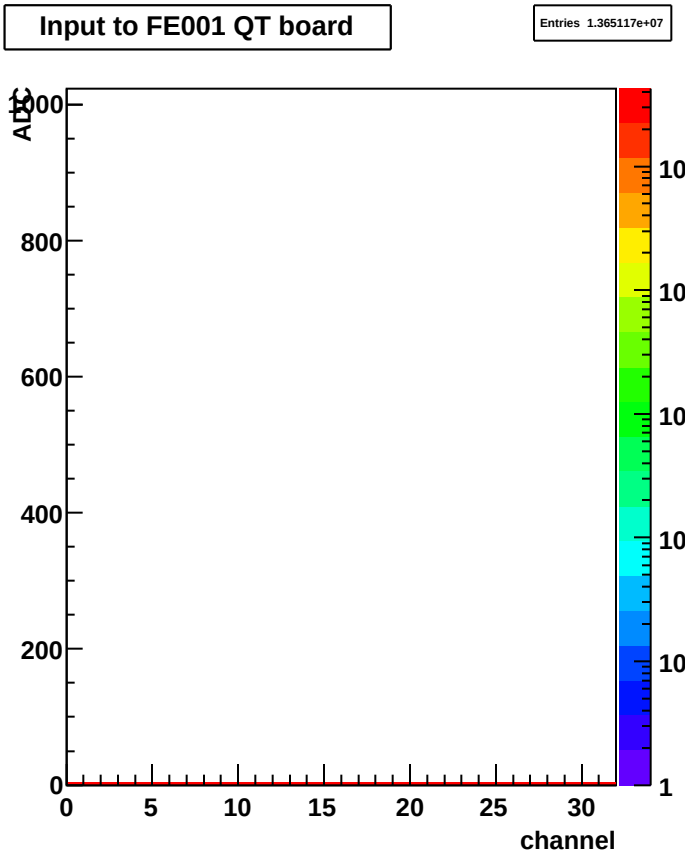

Input to FPD L2 DSM
Entries 1279797
CL bits
426599
426599
426599
SMALL
LARGE-S
LARGE-N

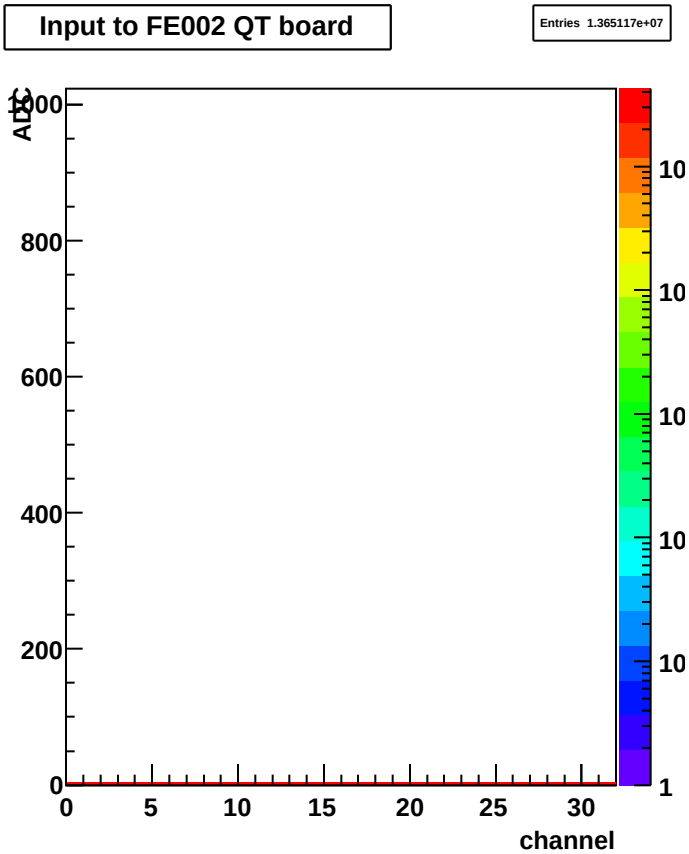

Input to FPD L2 DSM
Entries 1279797
CL bits - simulated
426599
426599
426599
SMALL
LARGE-S
LARGE-N

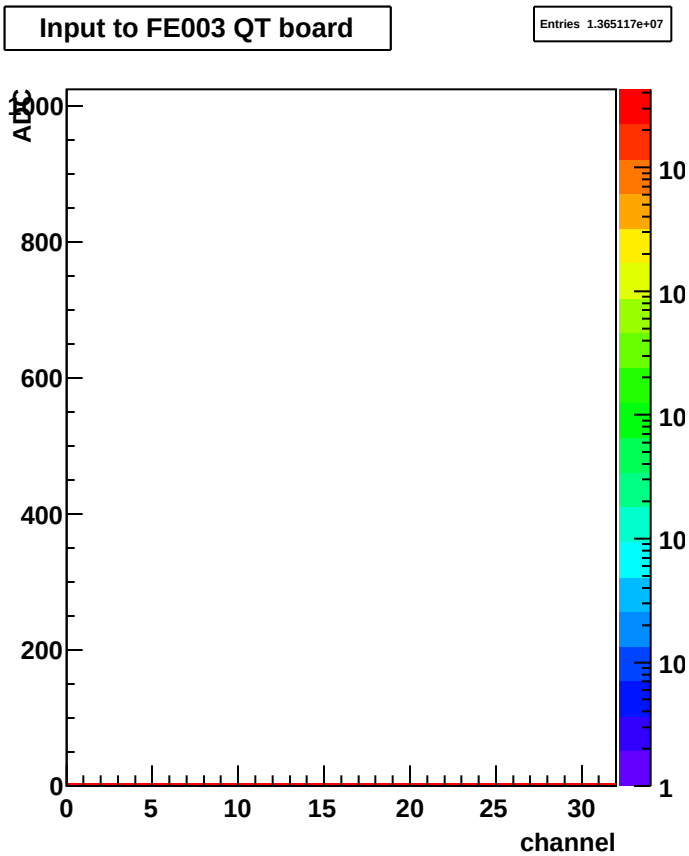

Input to FPD L2 DSM
Entries 1279797
HT bits
426599
426599
426599
SMALL
LARGE-S
LARGE-N

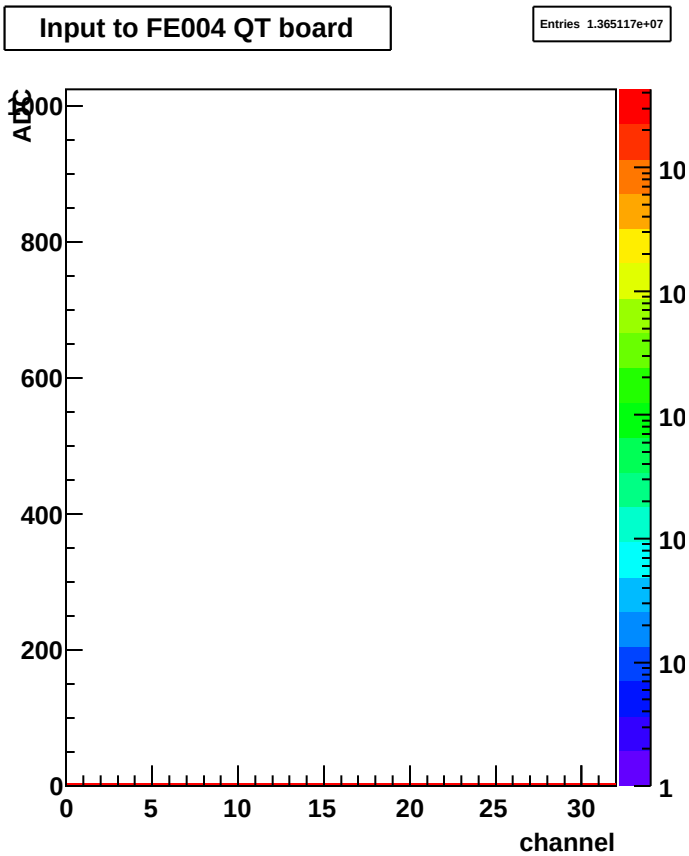

Input to FPD L2 DSM
Entries 1279797
HT bits - simulated
426599
426599
426599
SMALL
LARGE-S
LARGE-N

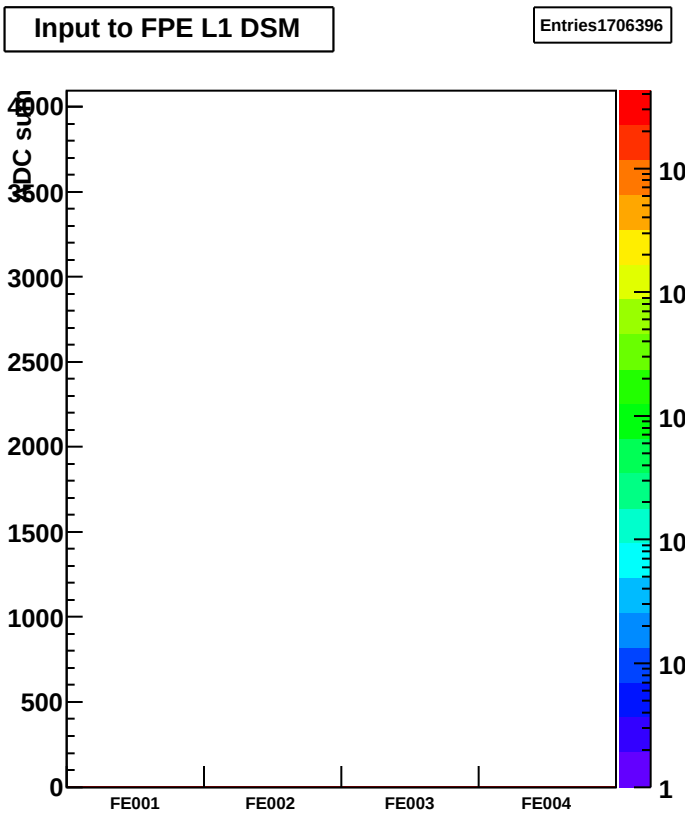

Input to FPD L2 DSM
Entries 2559594
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

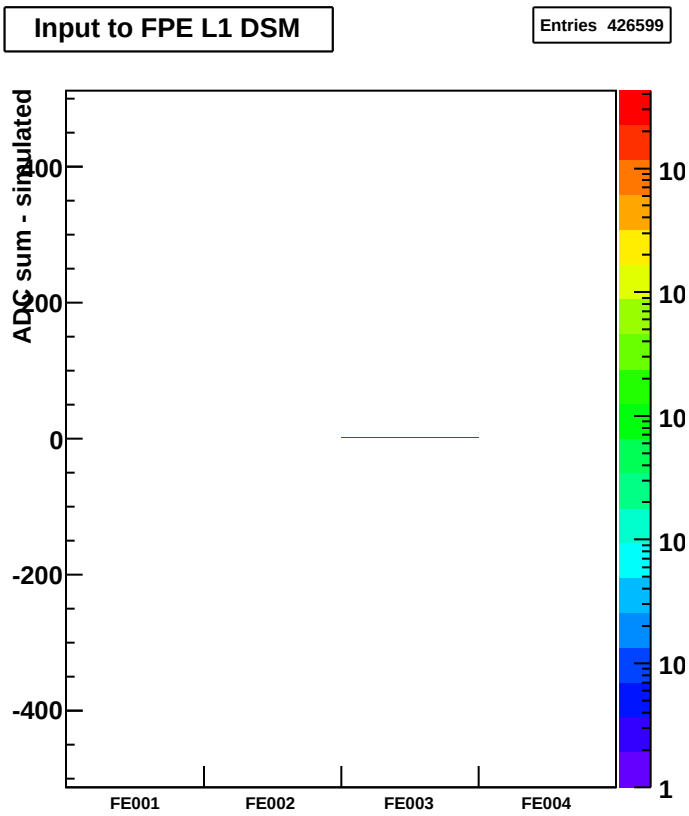

Input to FE001 QT board
Entries 1.365117e+07
ADC
channel

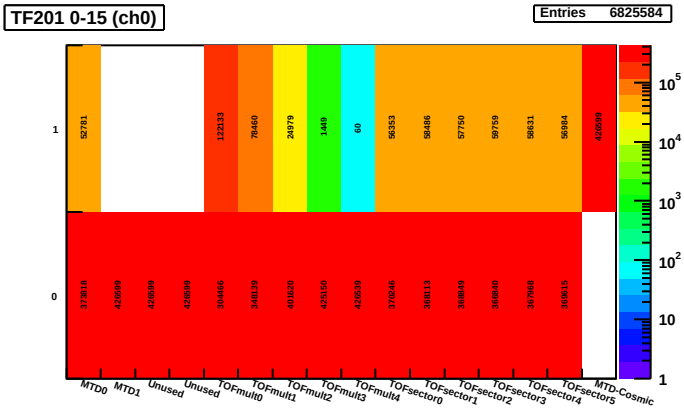

Input to FE002 QT board
Entries 1.365117e+07
ADC
channel

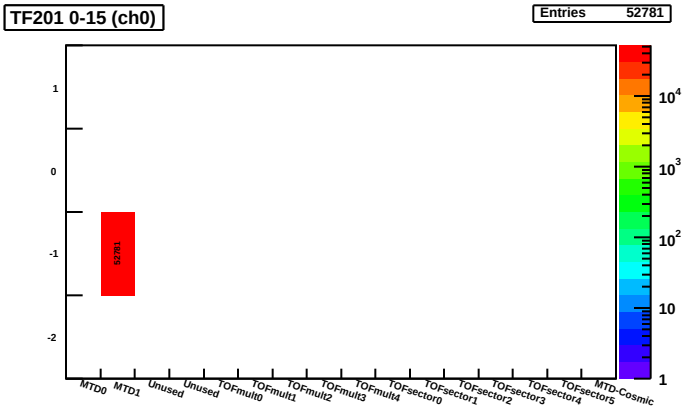

Input to FE003 QT board
Entries 1.365117e+07
ADC
channel

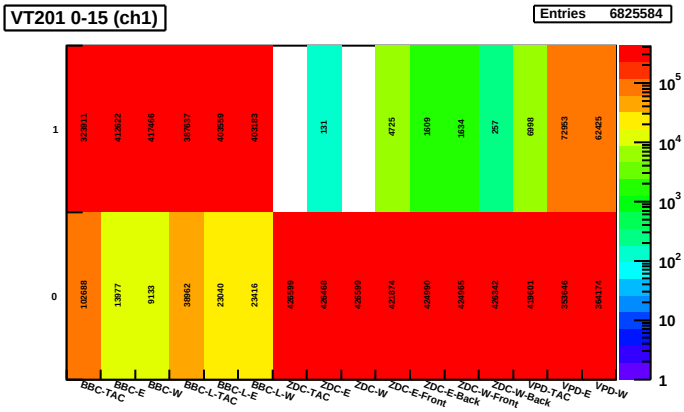

Input to FE004 QT board
Entries 1.365117e+07
ADC
channel

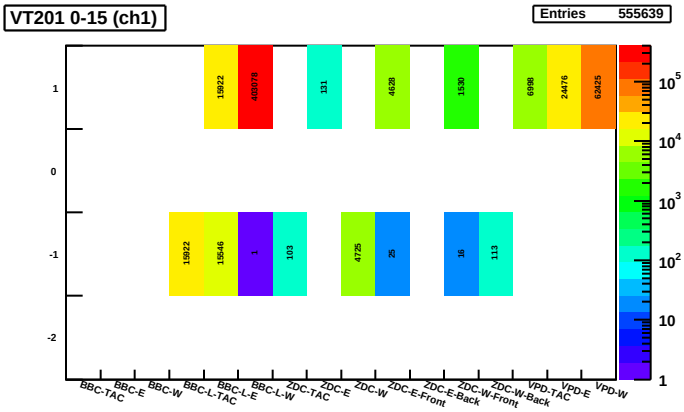

Input to FPE L1 DSM
Entries1706396
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 426599
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
10
1


TF201 0-15 (ch0)
Entries 6825584
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 52781
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 6825584
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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Entries 555639
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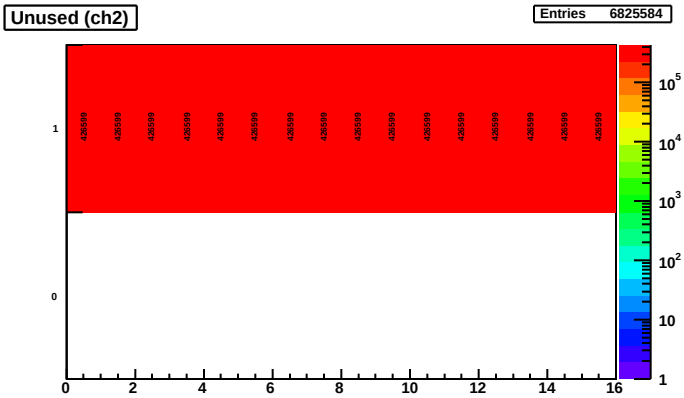
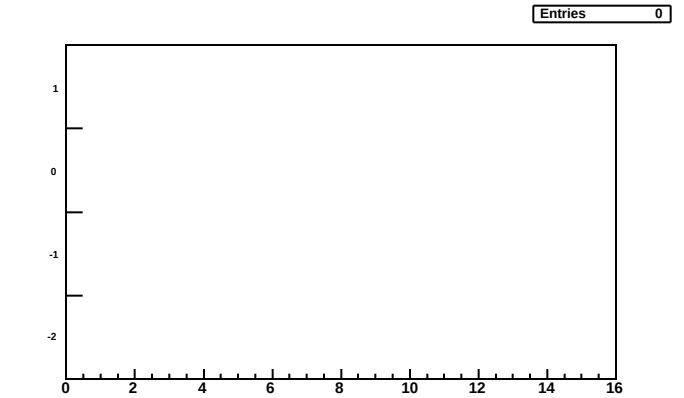
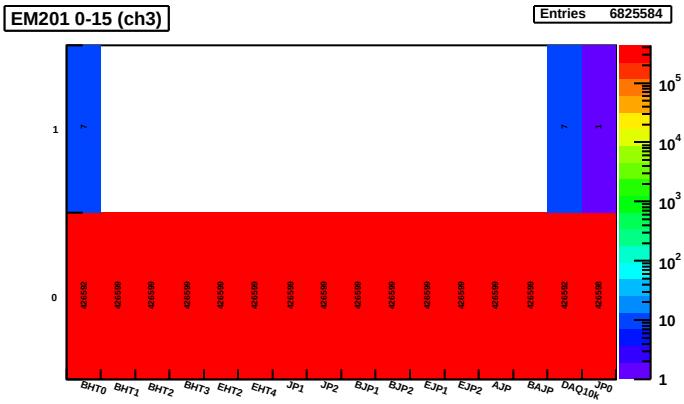
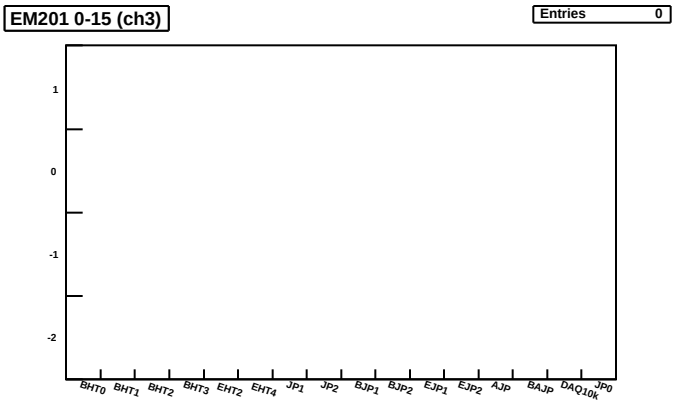

Unused (ch2)
Entries 6825584


Entries 0


EM201 0-15 (ch3)
Entries 6825584
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0


EM201 0-15 (ch3)
Entries 0
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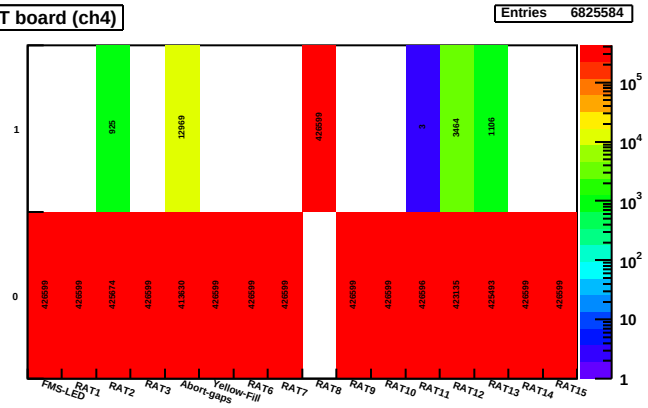
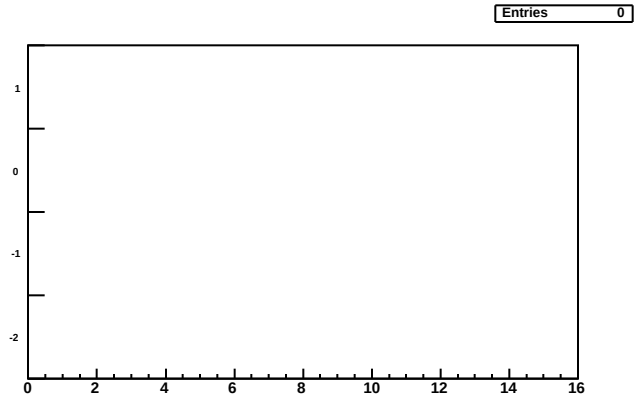
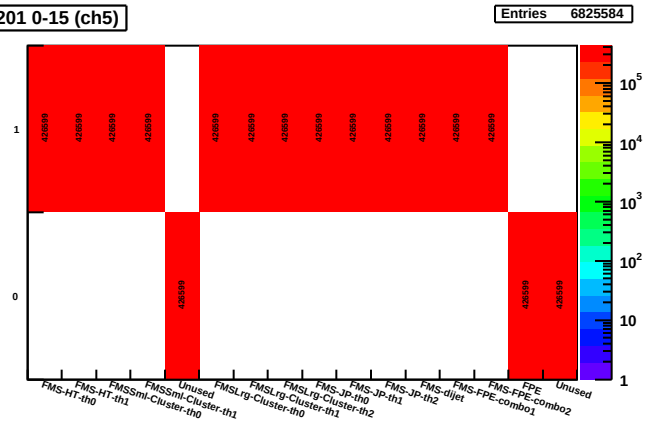
RAT board (ch4)





FP201 0-15 (ch5)



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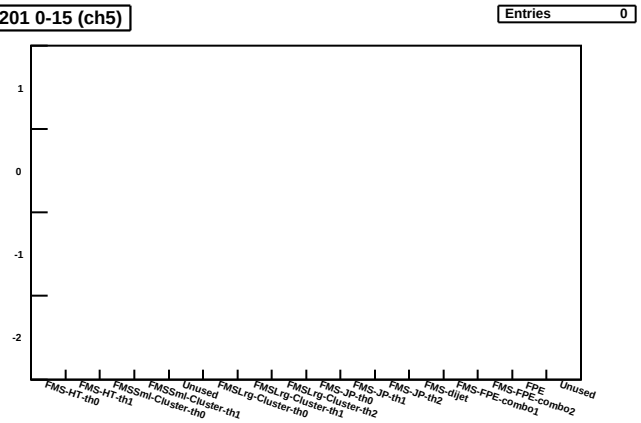
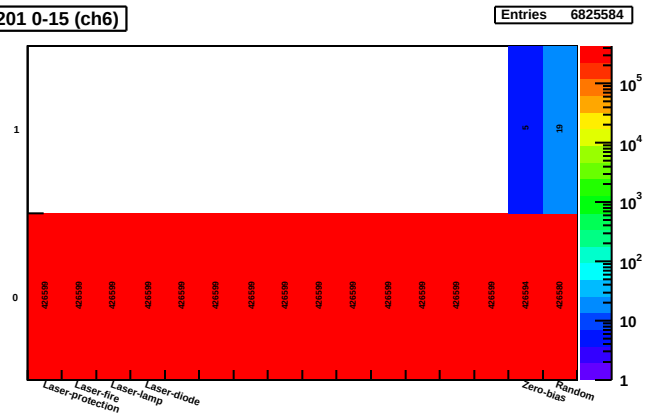
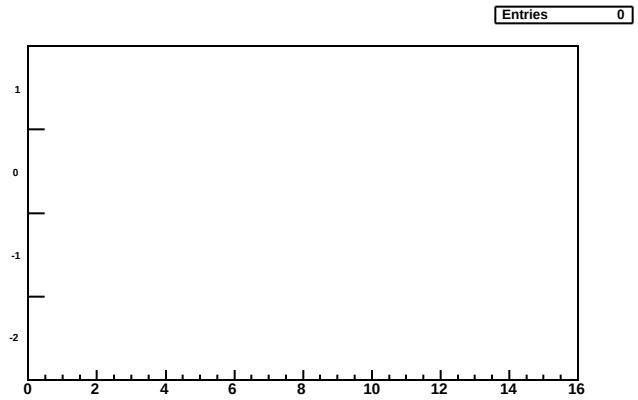
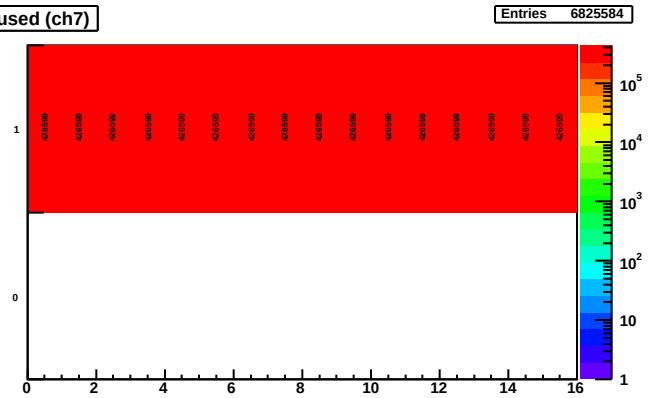
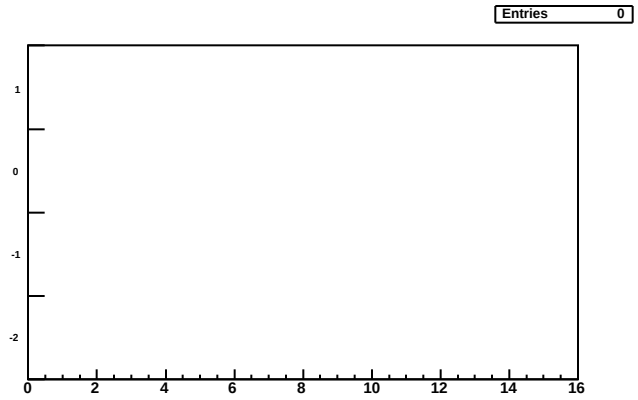


ST201 0-15 (ch6)





Unused (ch7)