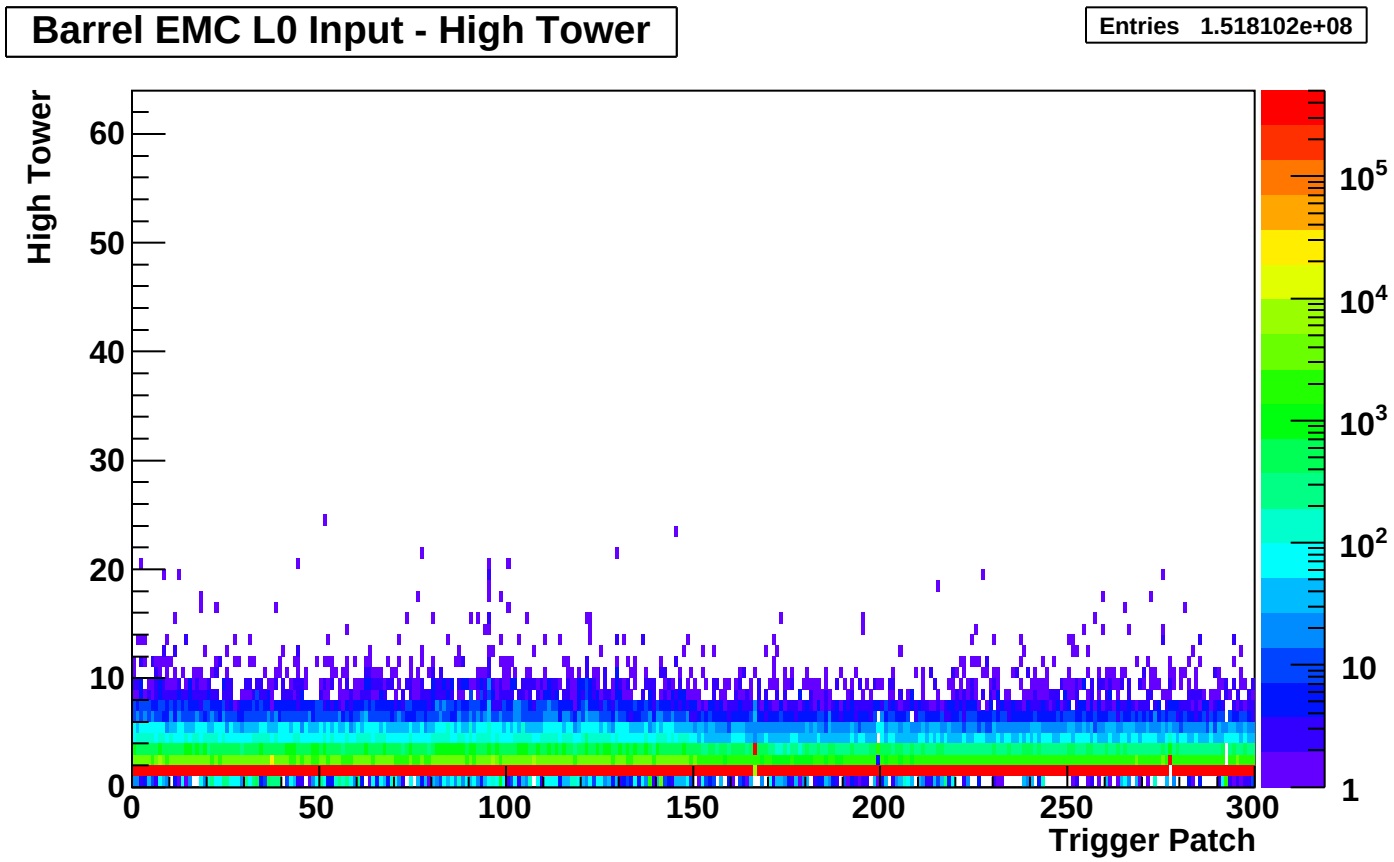
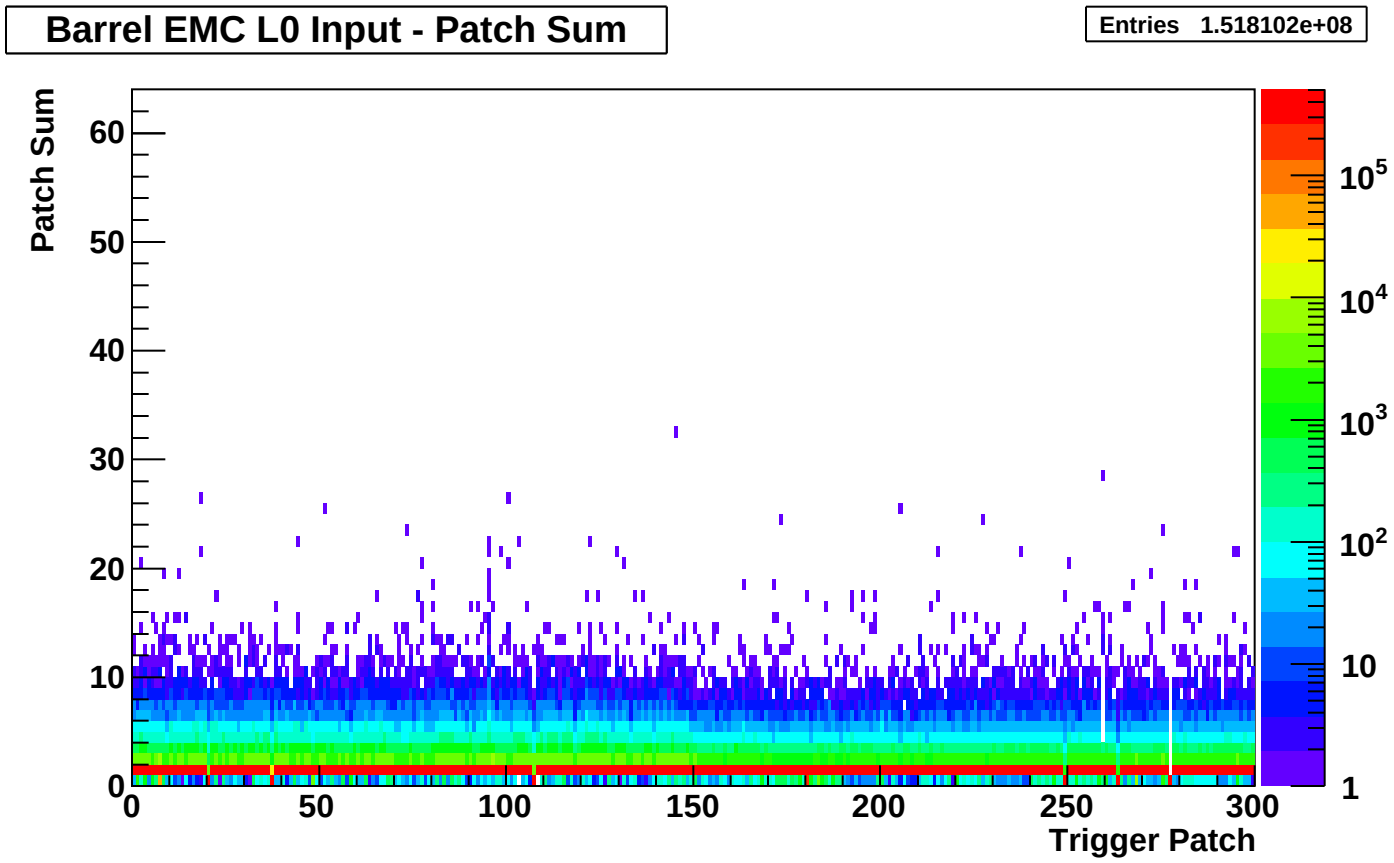
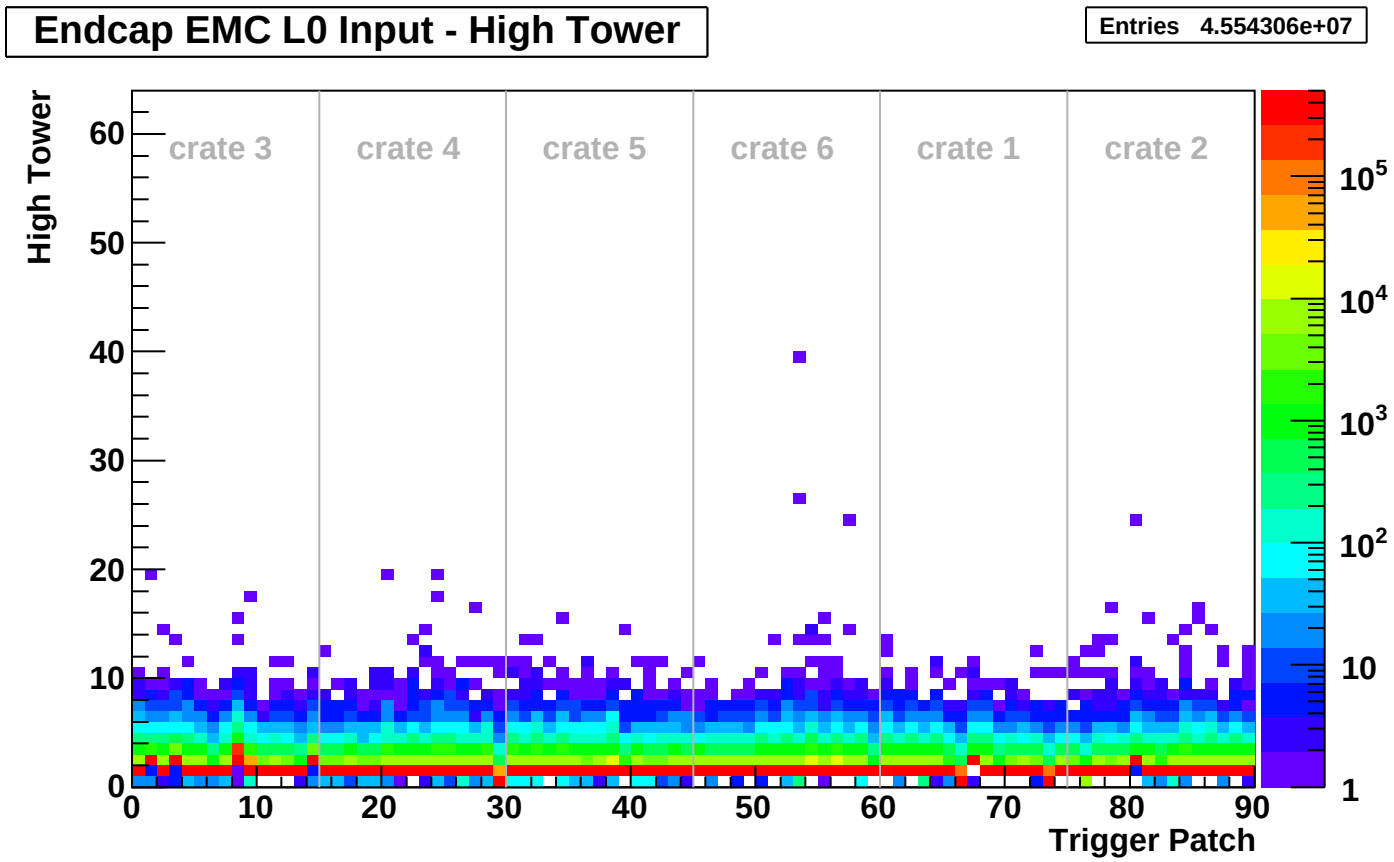
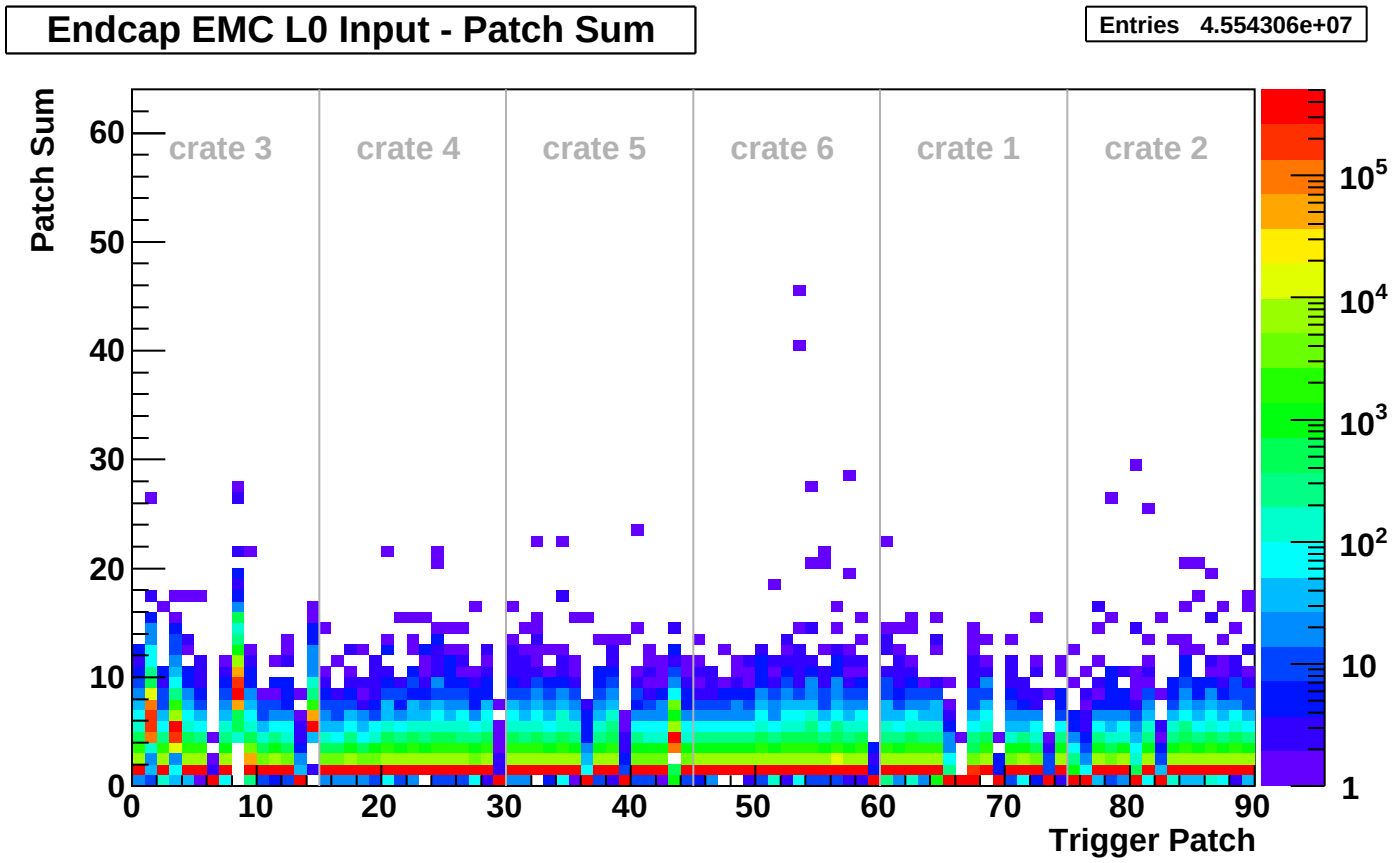
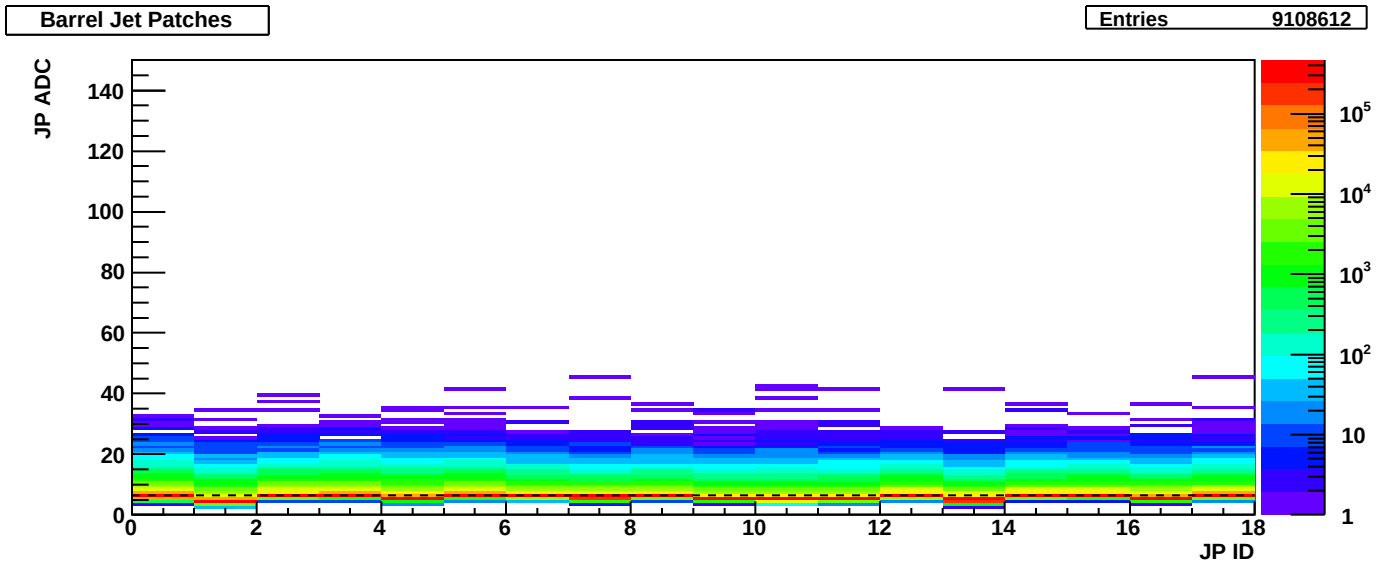
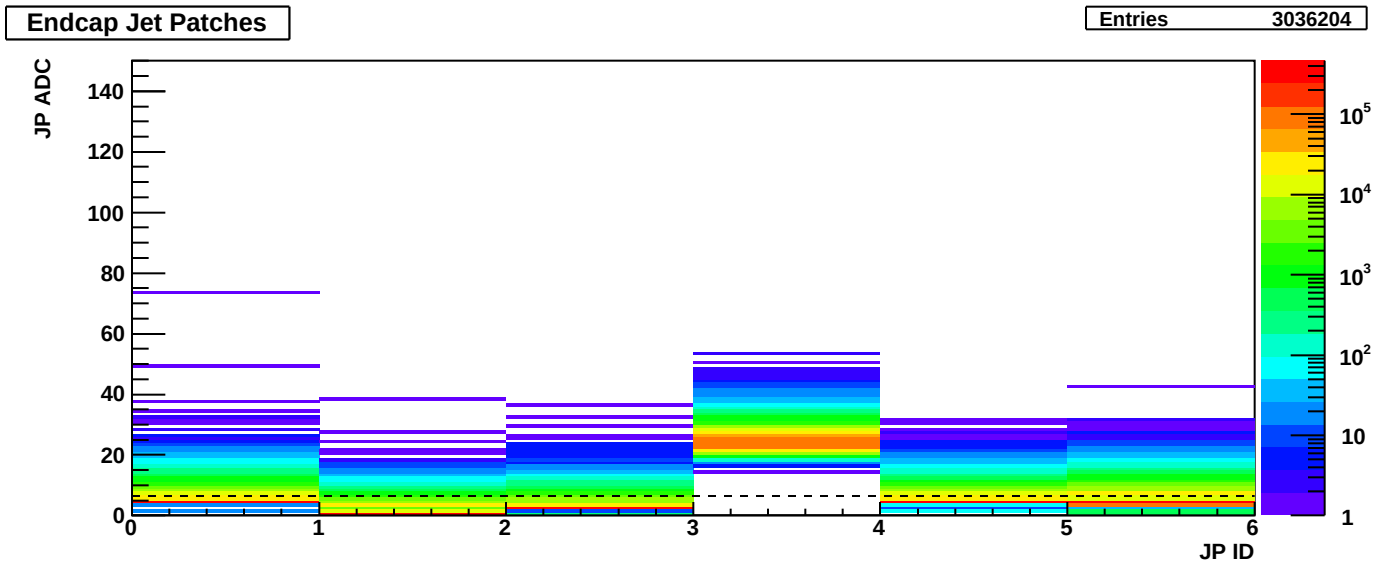

Barrel EMC L0 Input - High Tower
Entries 1.518102e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

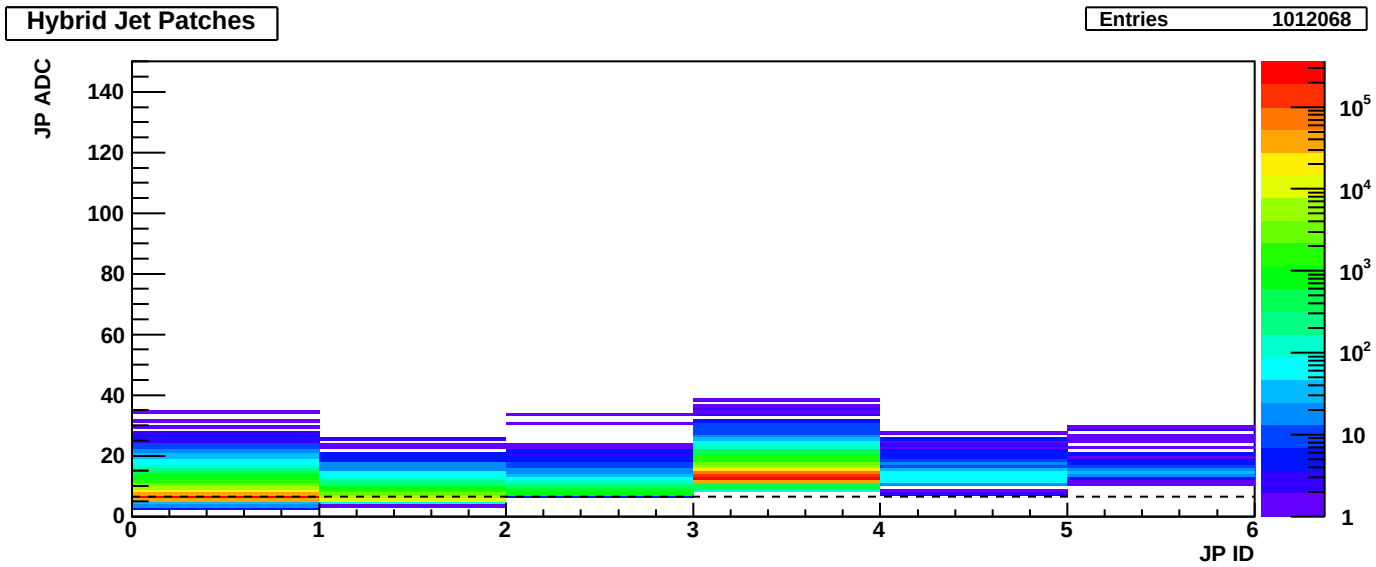

Barrel EMC L0 Input - Patch Sum
Entries 1.518102e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

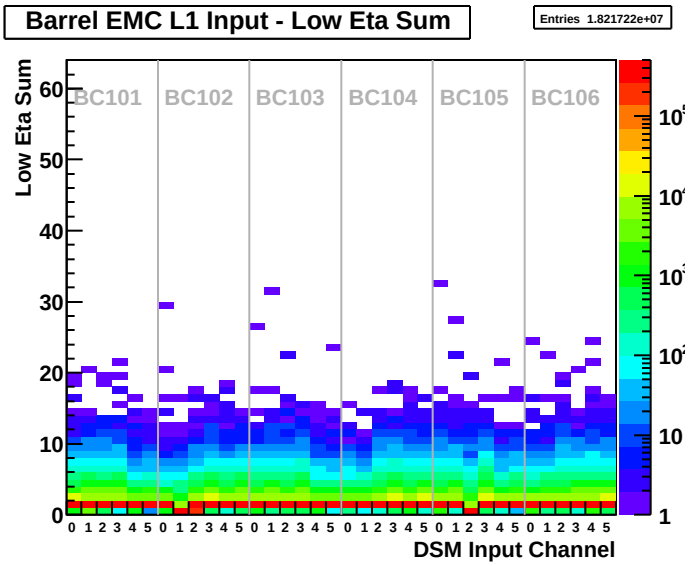

Endcap EMC L0 Input - High Tower
Entries 4.554306e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

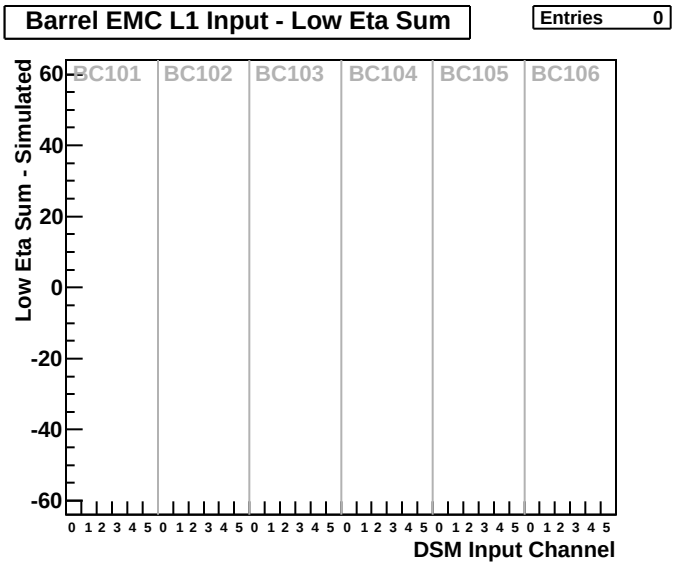

Endcap EMC L0 Input - Patch Sum
Entries 4.554306e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

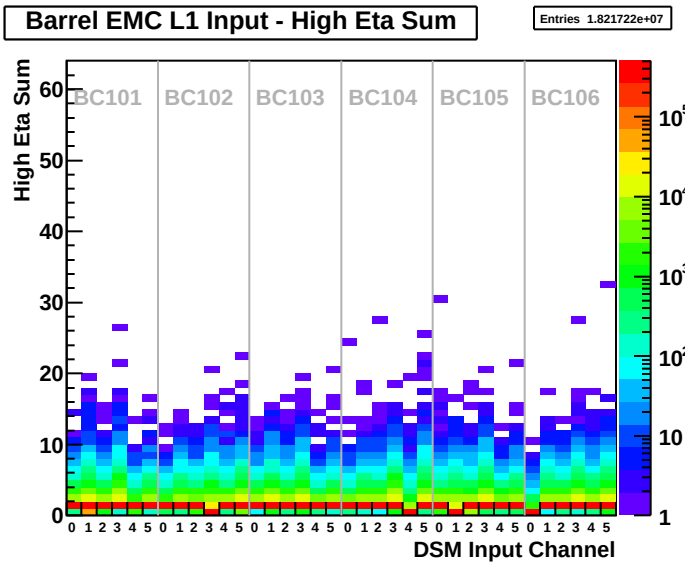

Barrel Jet Patches
Entries 9108612
JP ADC
JP ID

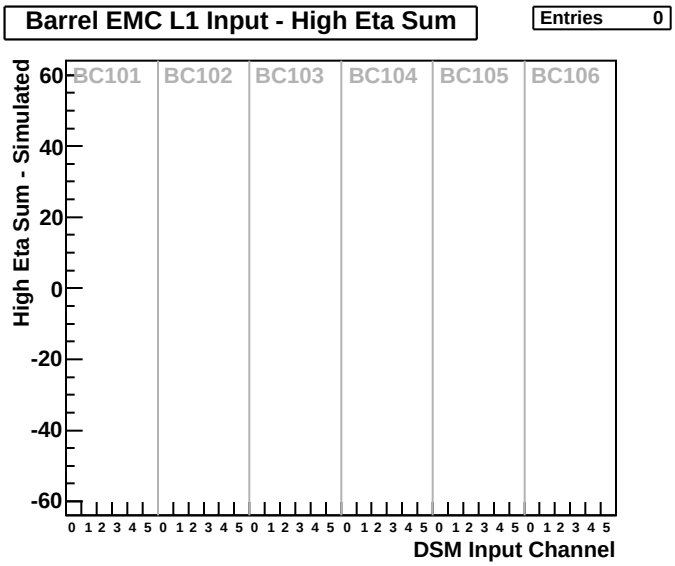

Endcap Jet Patches
Entries 3036204
JP ADC
JP ID

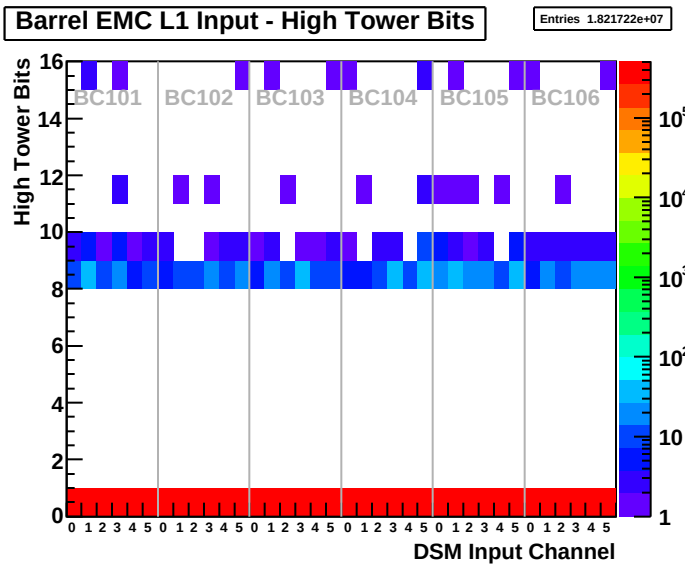

Hybrid Jet Patches
Entries 1012068
JP ADC
JP ID

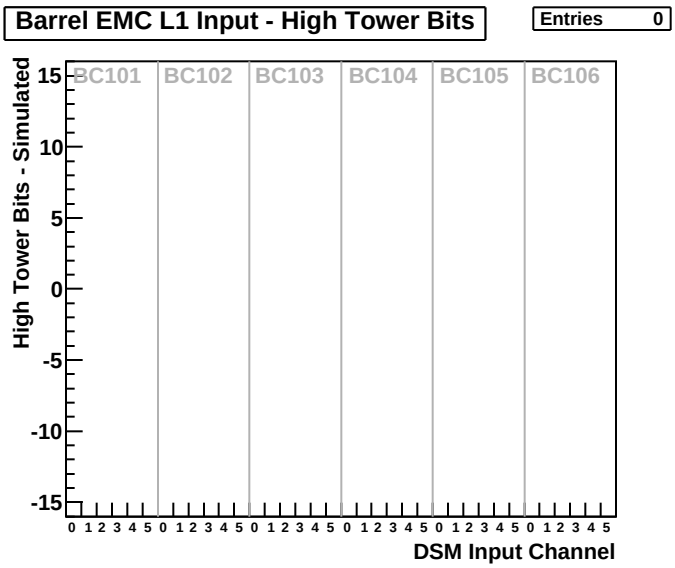

Barrel EMC L1 Input - Low Eta Sum
Entries 1.821722e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

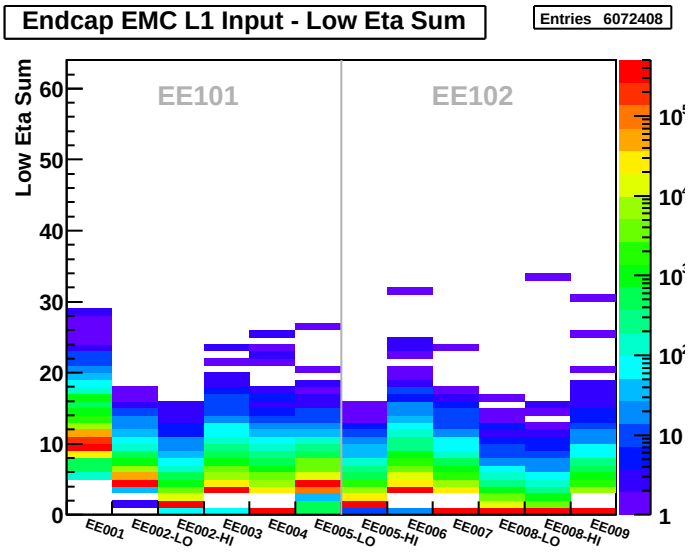

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

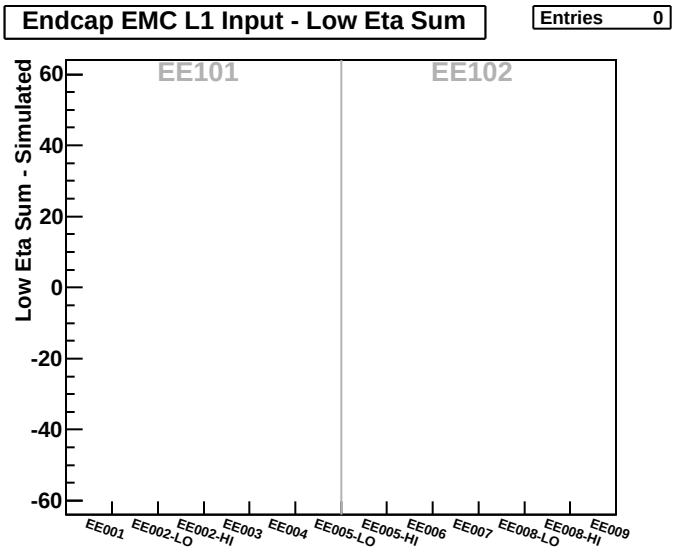

Barrel EMC L1 Input - High Eta Sum
Entries 1.821722e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

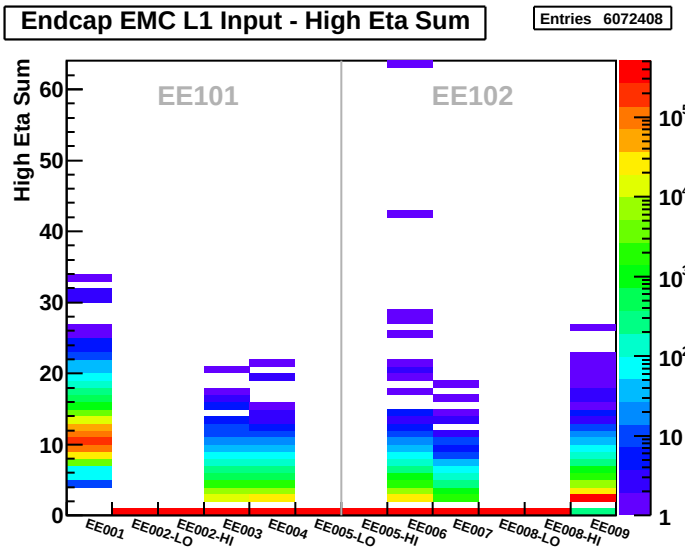

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

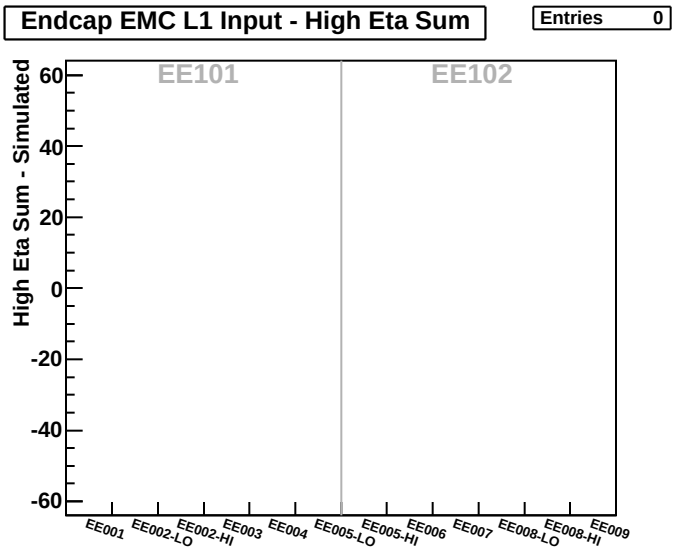

Barrel EMC L1 Input - High Tower Bits
Entries 1.821722e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

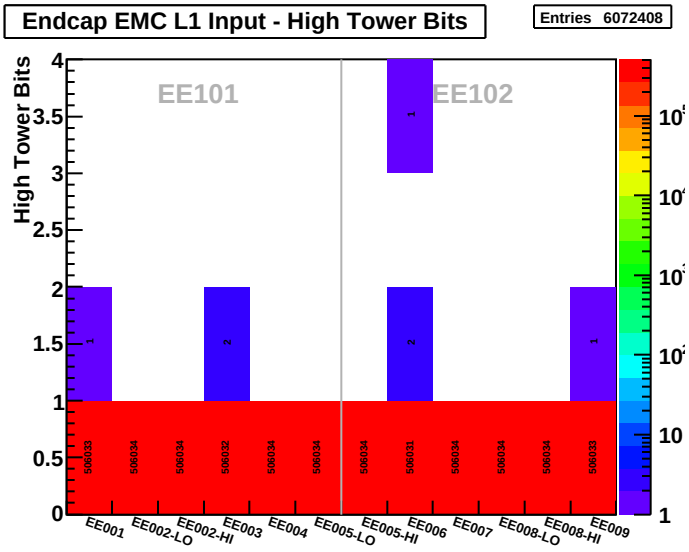

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

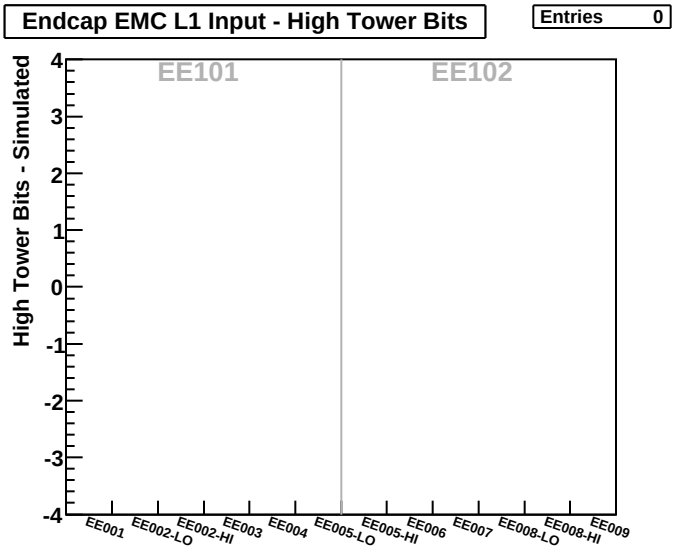

Endcap EMC L1 Input - Low Eta Sum
Entries 6072408
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

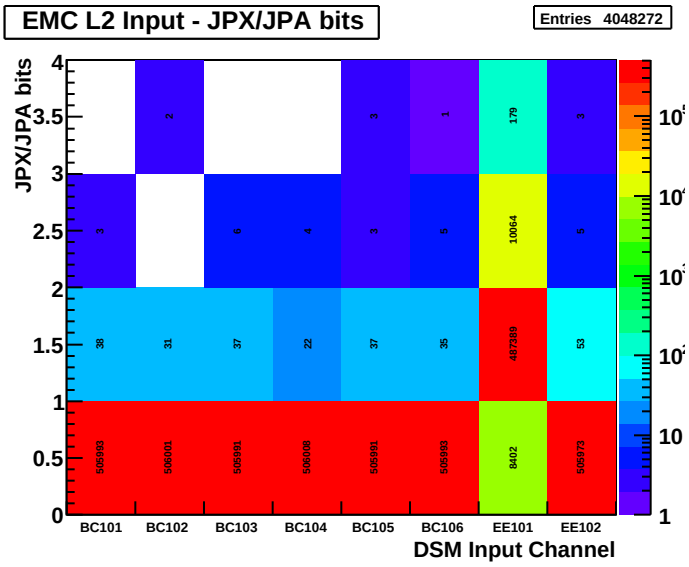

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

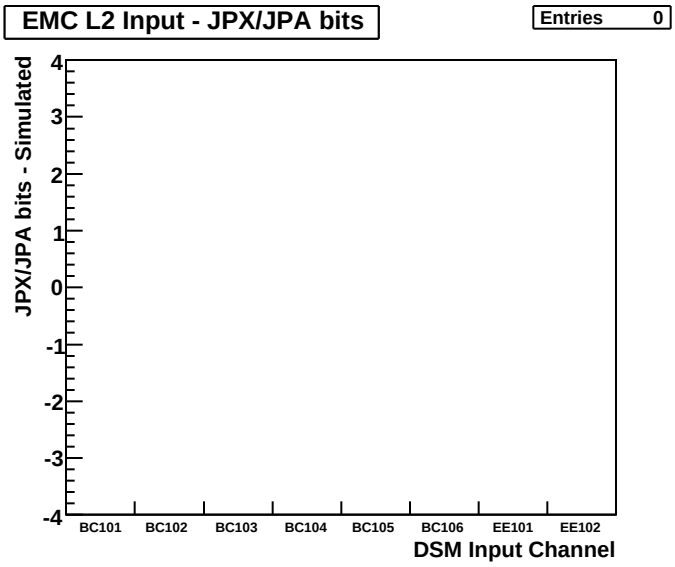

Endcap EMC L1 Input - High Eta Sum
Entries 6072408
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

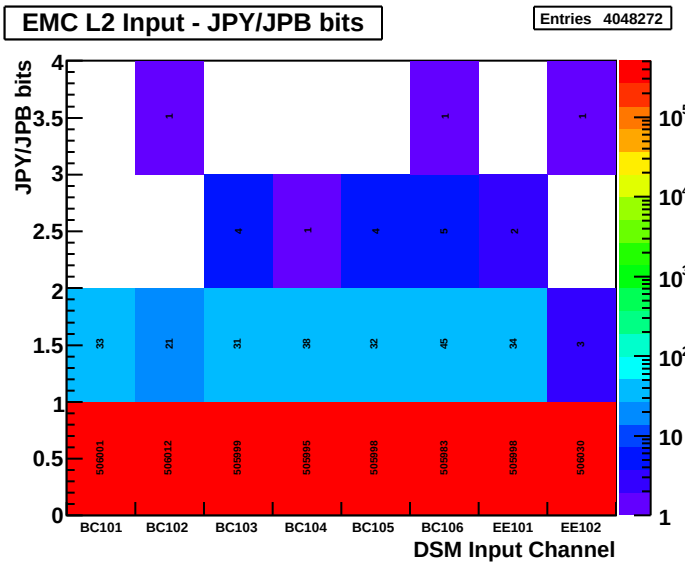

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

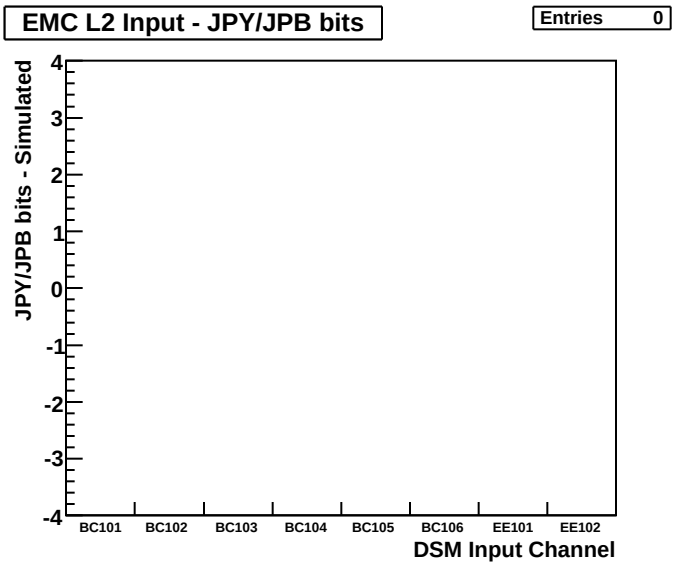

Endcap EMC L1 Input - High Tower Bits
Entries 6072408
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

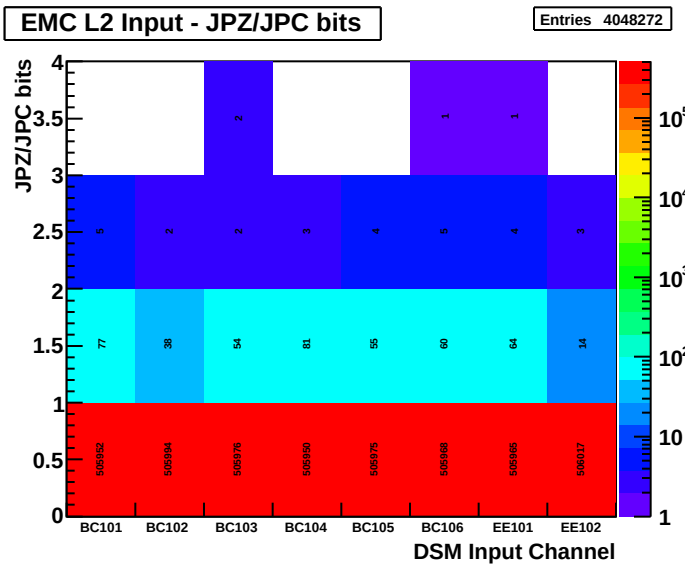

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

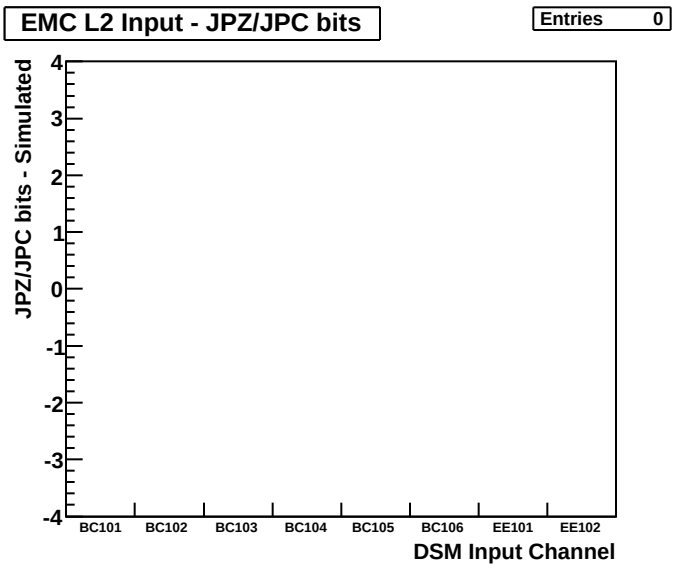

EMC L2 Input - JPX/JPA bits
Entries 4048272
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

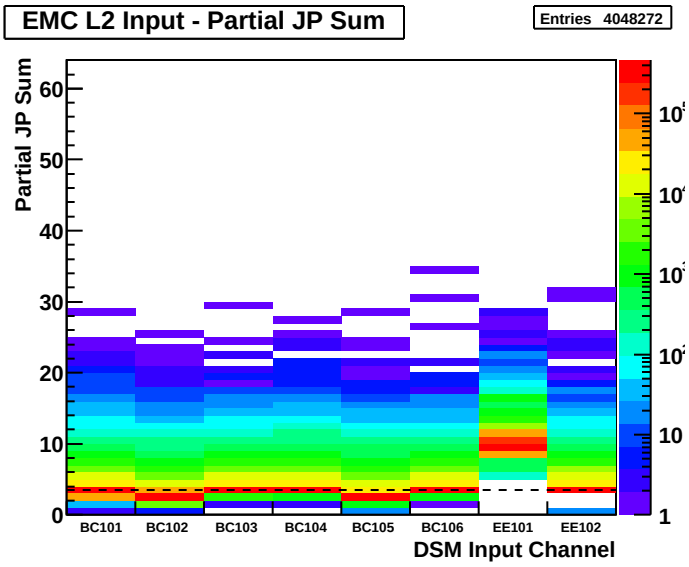

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

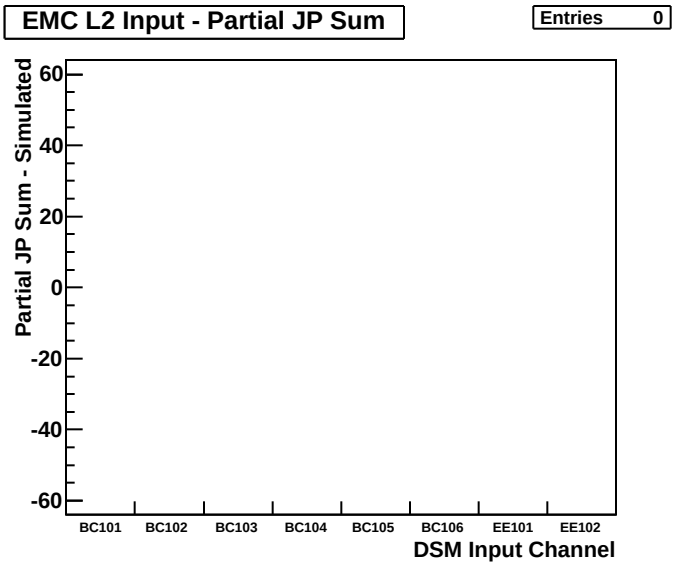

EMC L2 Input - JPY/JPB bits
Entries 4048272
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

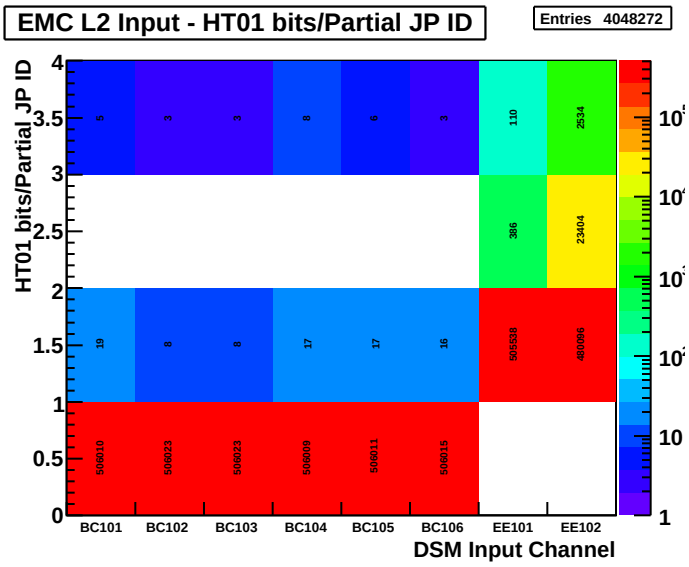

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

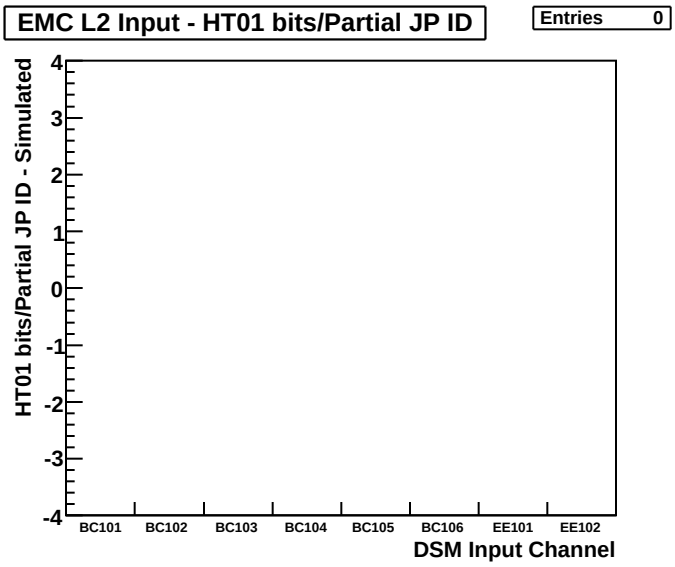

EMC L2 Input - JPZ/JPC bits
Entries 4048272
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

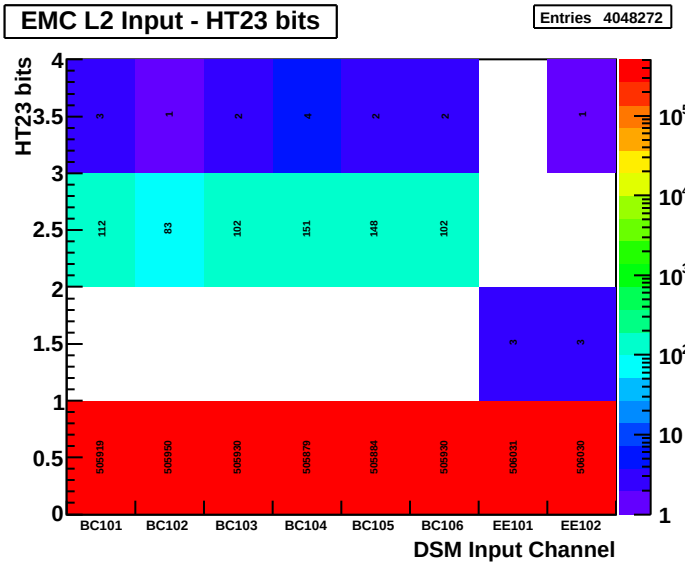

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

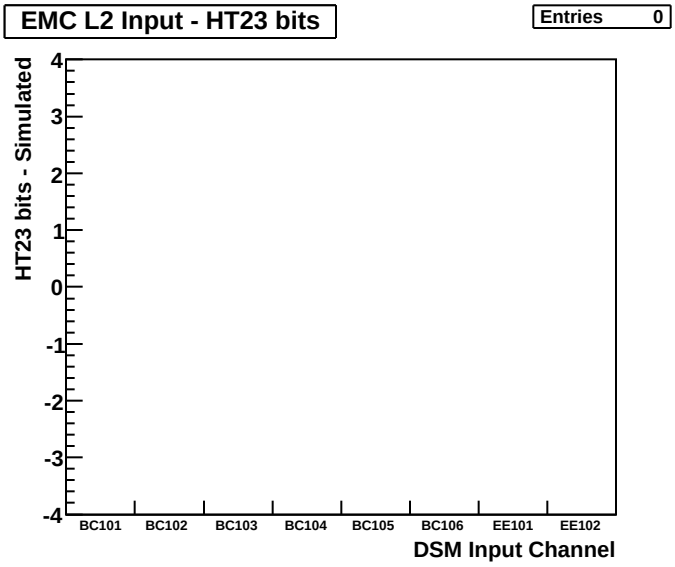

EMC L2 Input - Partial JP Sum
Entries 4048272
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

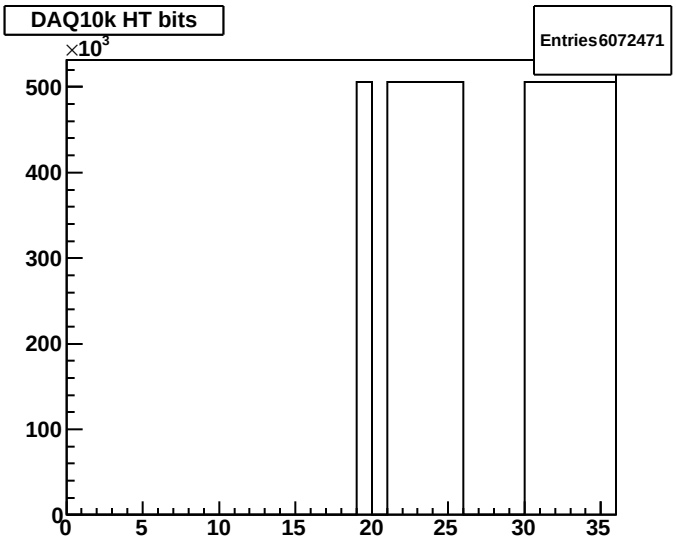

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

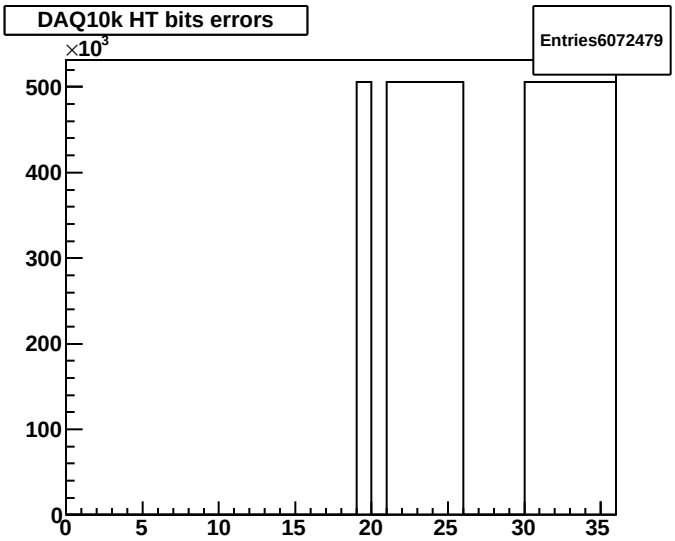

EMC L2 Input - HT01 bits/Partial JP ID
Entries 4048272
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

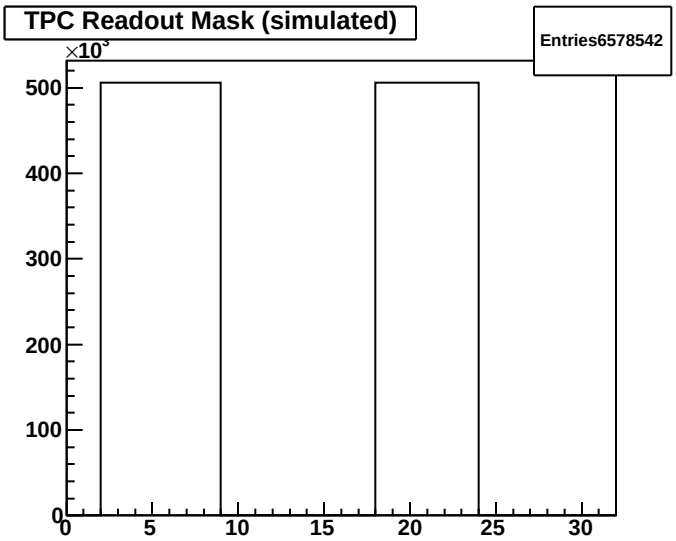

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

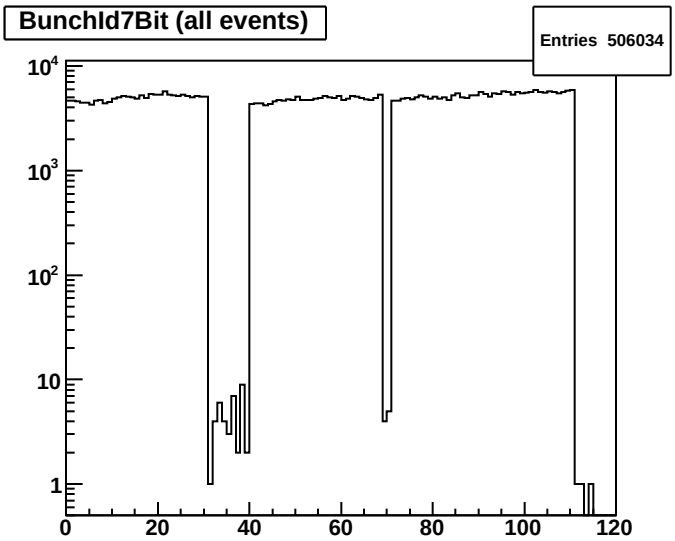

EMC L2 Input - HT23 bits
Entries 4048272
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

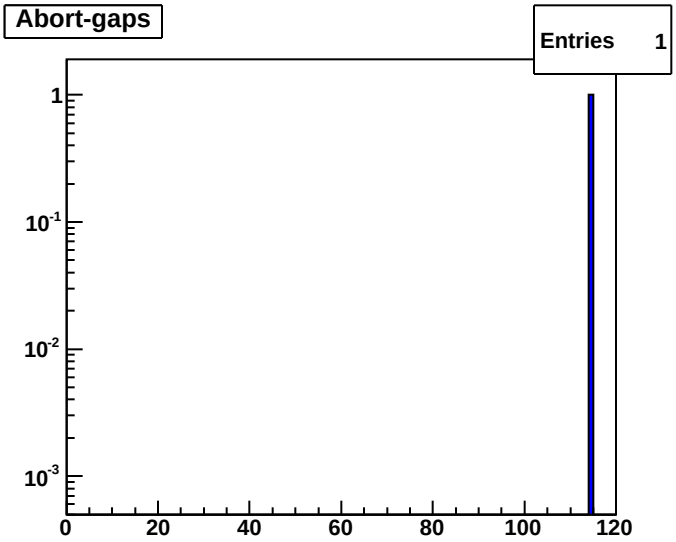

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

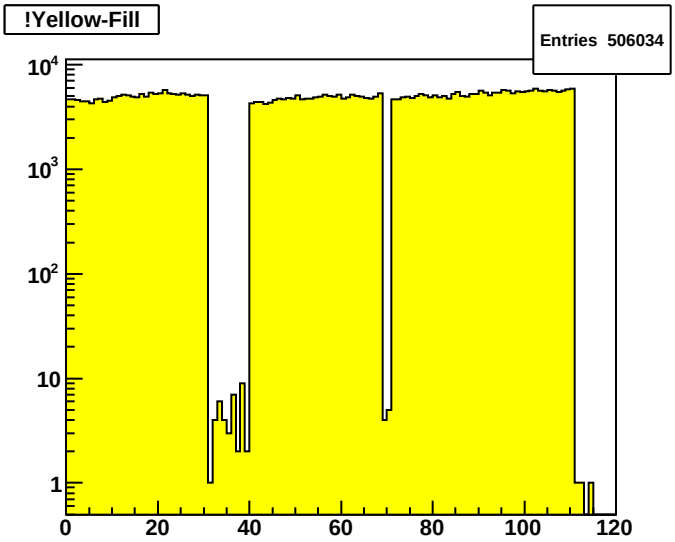

DAQ10k HT bits
Entries6072471
×10^3
500
400
300
200
100
0
0 5 10 15 20 25 30 35

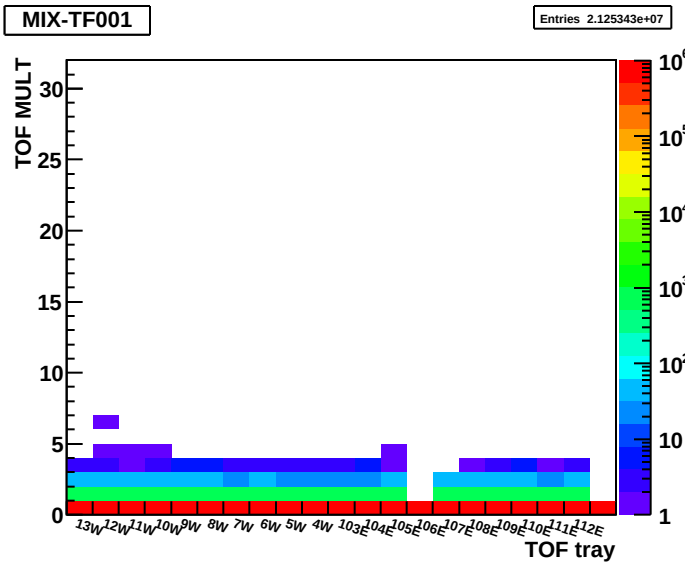

DAQ10k HT bits errors
Entries6072479
×10^3
500
400
300
200
100
0
0 5 10 15 20 25 30 35

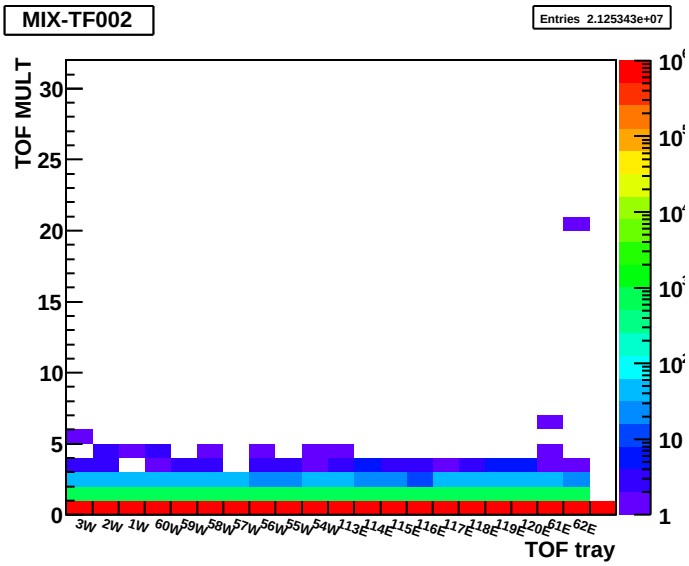

TPC Readout Mask (simulated)
Entries6578542
×10^3
500
400
300
200
100
0
0 5 10 15 20 25 30

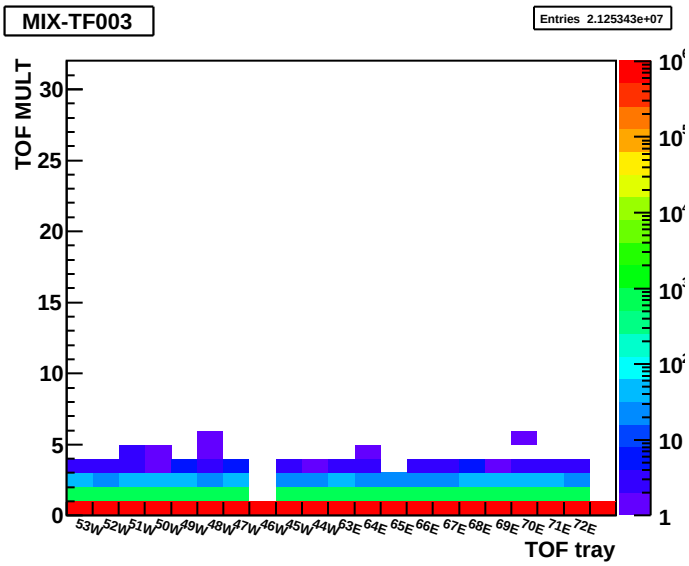

BunchId7Bit (all events)
Entries 506034
10^4
10^3
10^2
10
1
0 20 40 60 80 100 120

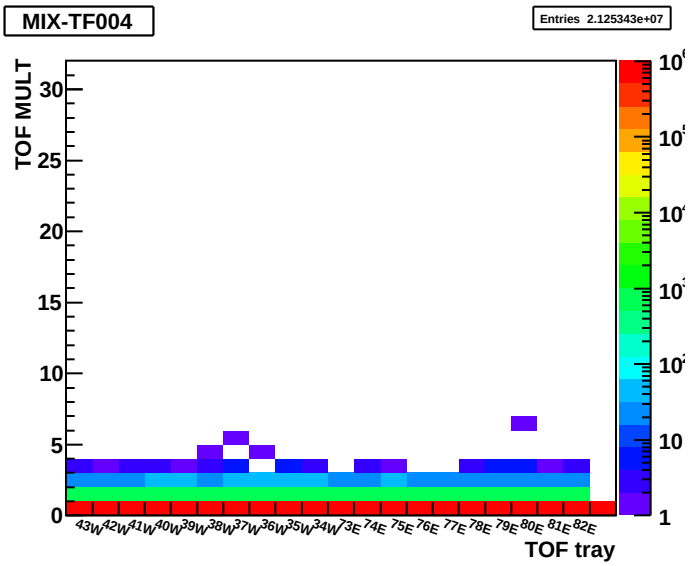

Abort-gaps
Entries 1
1
10^-1
10^-2
10^-3
0 20 40 60 80 100 120

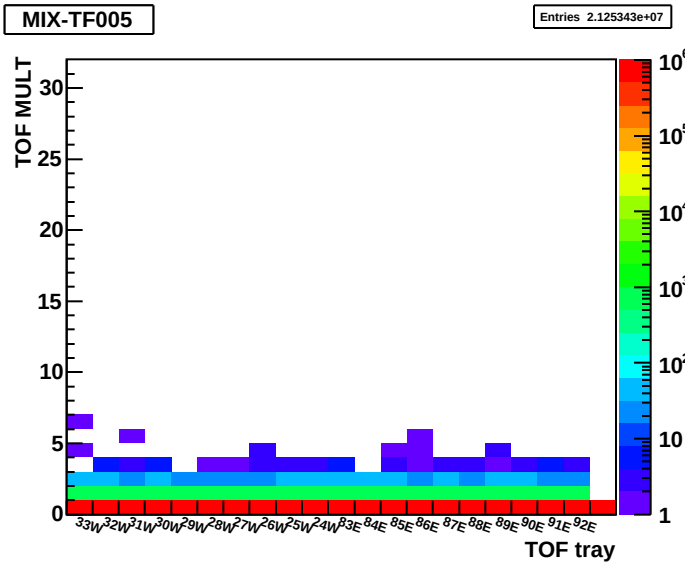

!Yellow-Fill
Entries 506034
10^4
10^3
10^2
10
1
0 20 40 60 80 100 120

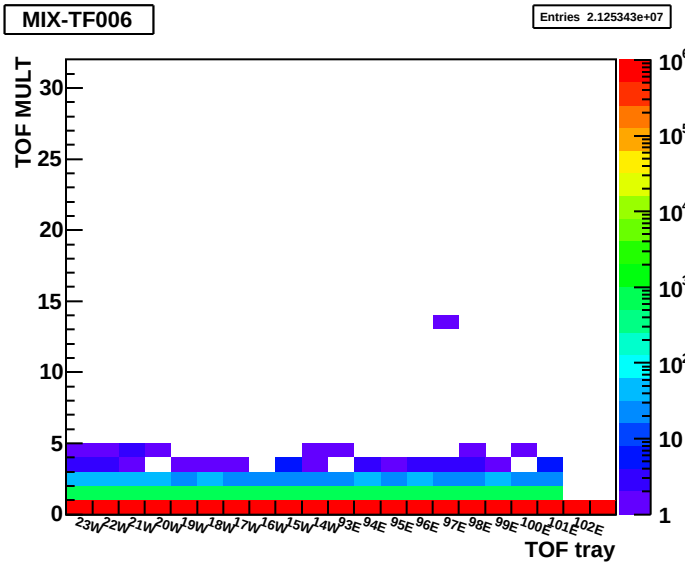

MIX-TF001
Entries 2.125343e+07
TOF MULT
TOF tray

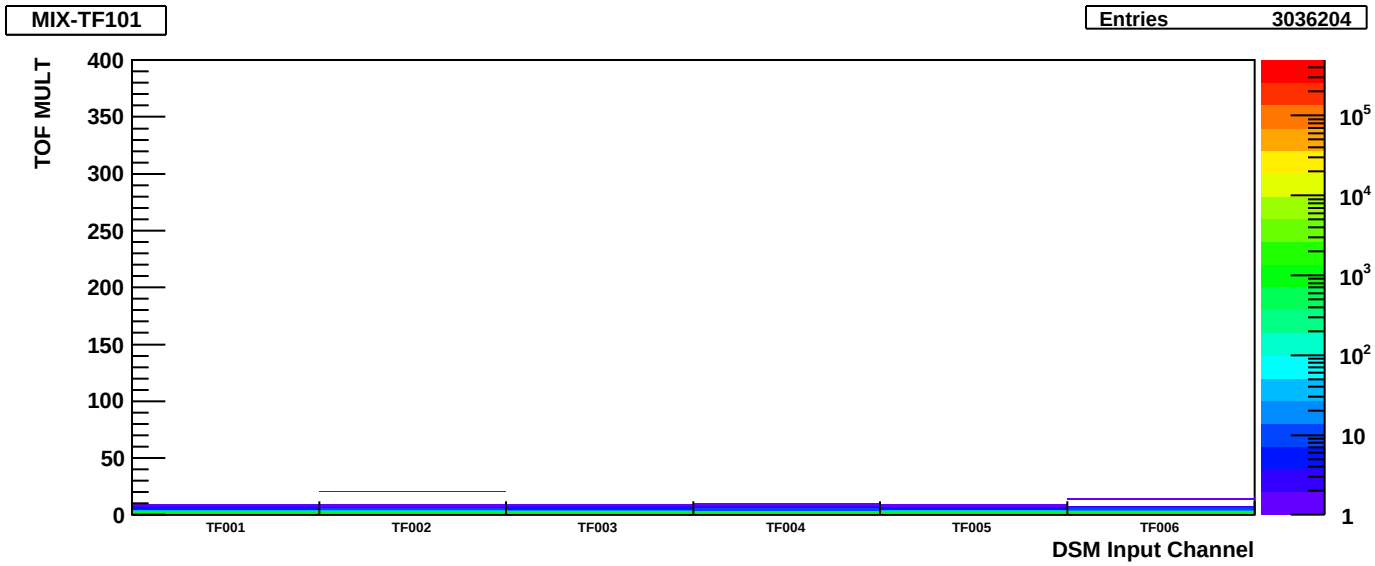

MIX-TF002
Entries 2.125343e+07
TOF MULT
TOF tray

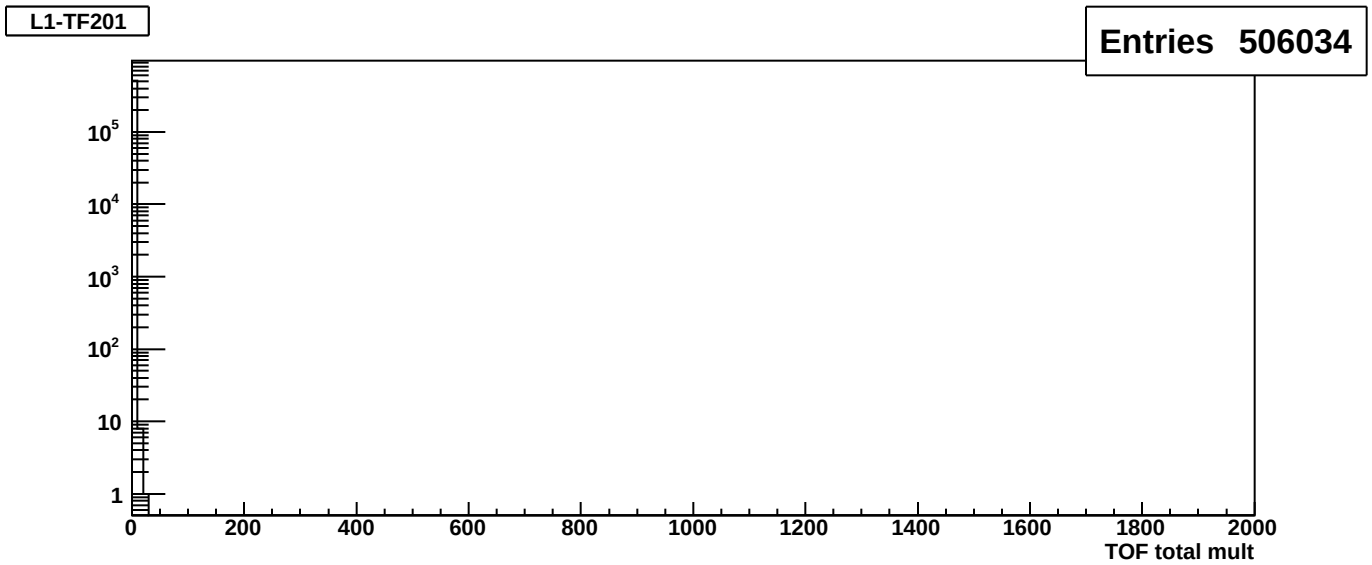

MIX-TF003
Entries 2.125343e+07
TOF MULT
TOF tray

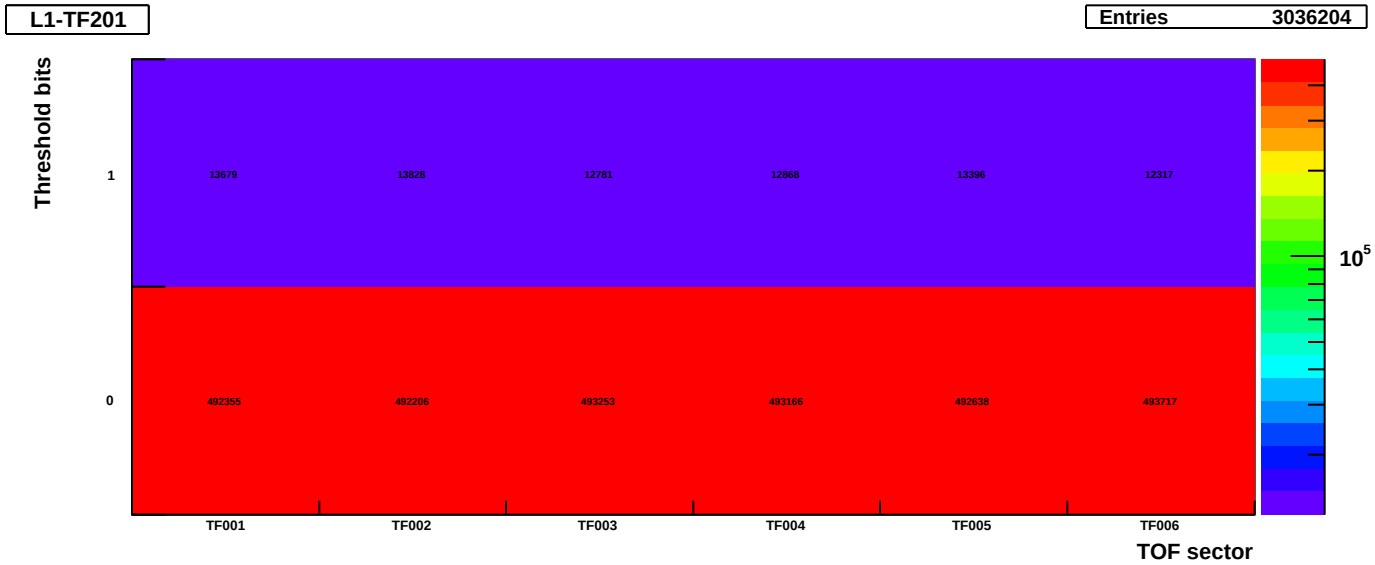

MIX-TF004
Entries 2.125343e+07
TOF MULT
TOF tray

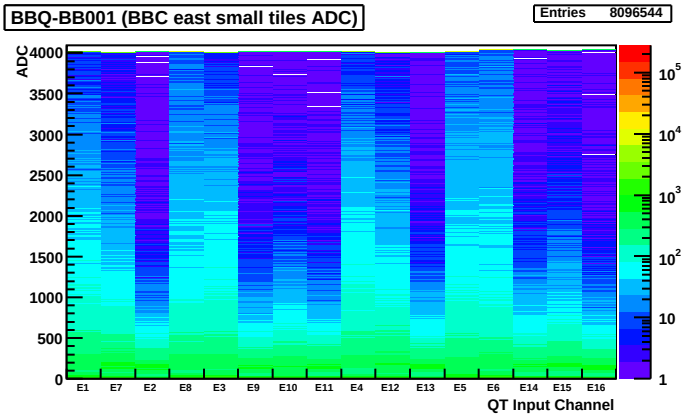

MIX-TF005
Entries 2.125343e+07
TOF MULT
TOF tray

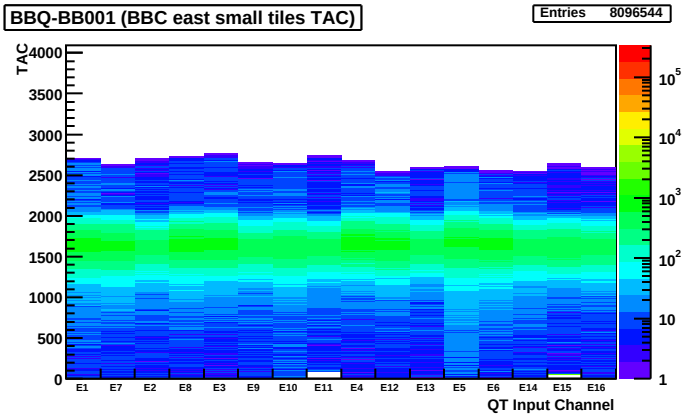

MIX-TF006
Entries 2.125343e+07
TOF MULT
TOF tray

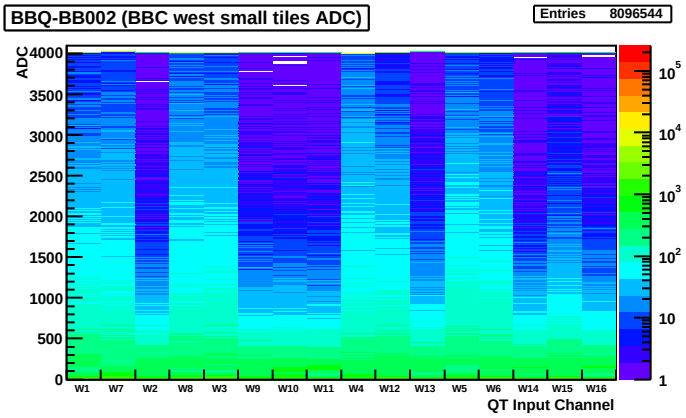

MIX-TF101
Entries 3036204
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

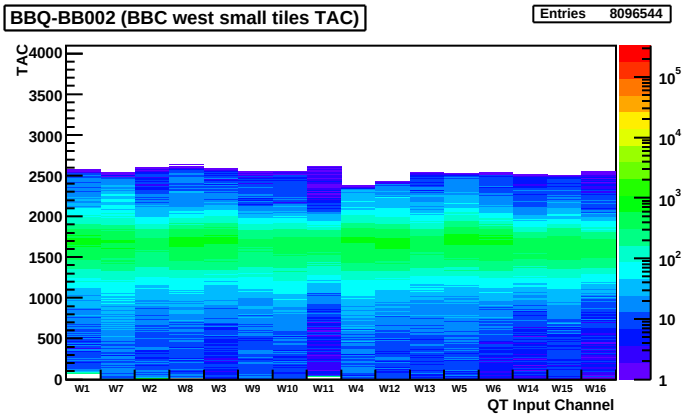

L1-TF201
Entries 506034
10^5
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

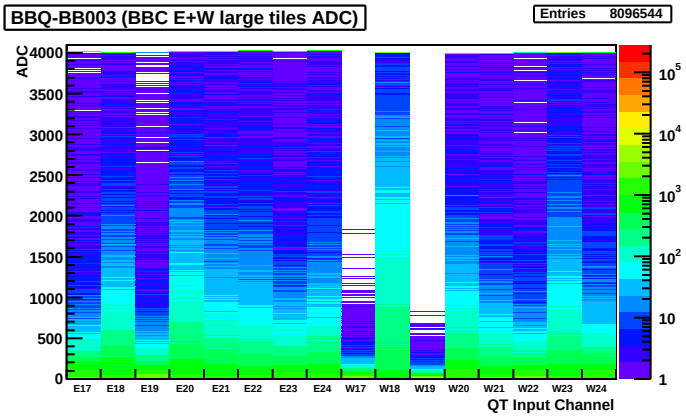

L1-TF201
Entries 3036204
Threshold bits
1
0
13679
13828
12781
12868
13396
12317
492355
492206
493253
493166
492638
493717
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

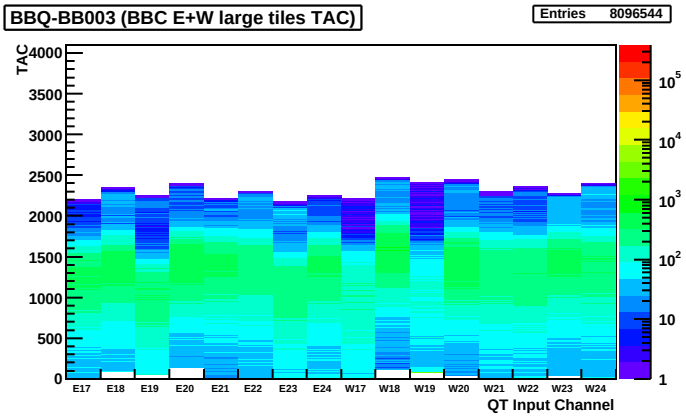

BBQ-BB001 (BBC east small tiles ADC)
Entries 8096544
ADC
QT Input Channel

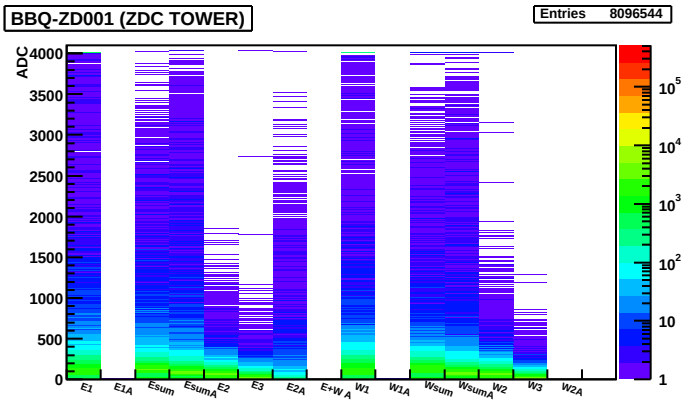

BBQ-BB001 (BBC east small tiles TAC)
Entries 8096544
TAC
QT Input Channel

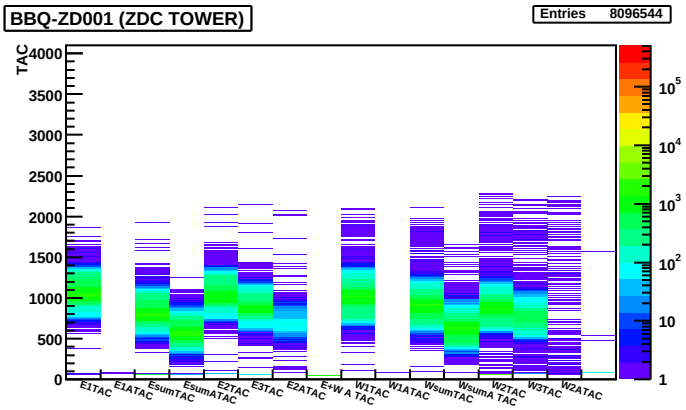

BBQ-BB002 (BBC west small tiles ADC)
Entries 8096544
ADC
QT Input Channel

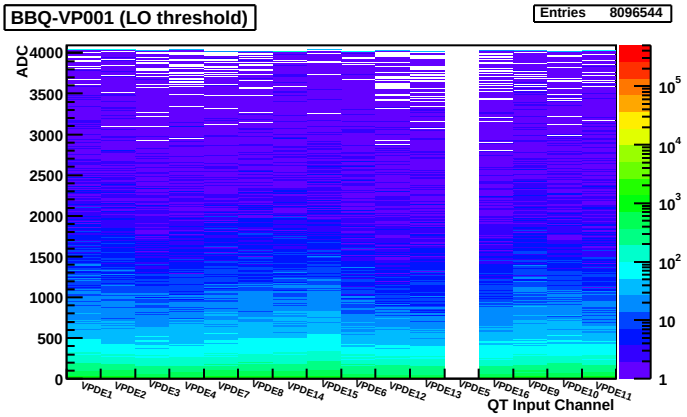

BBQ-BB002 (BBC west small tiles TAC)
Entries 8096544
TAC
QT Input Channel

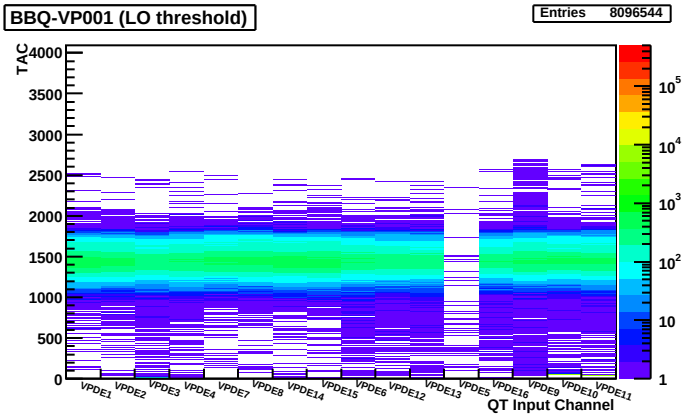

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 8096544
ADC
QT Input Channel

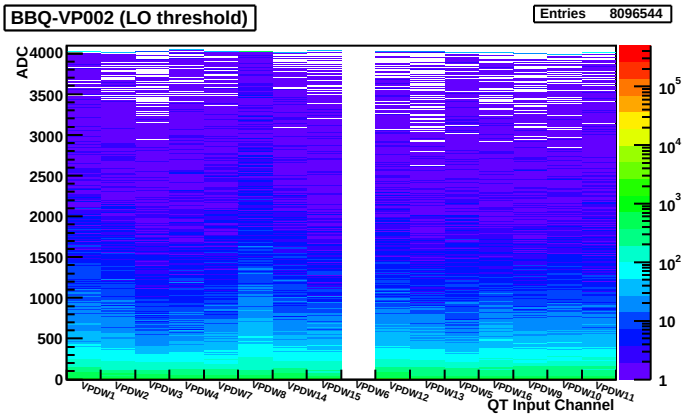

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 8096544
TAC
QT Input Channel

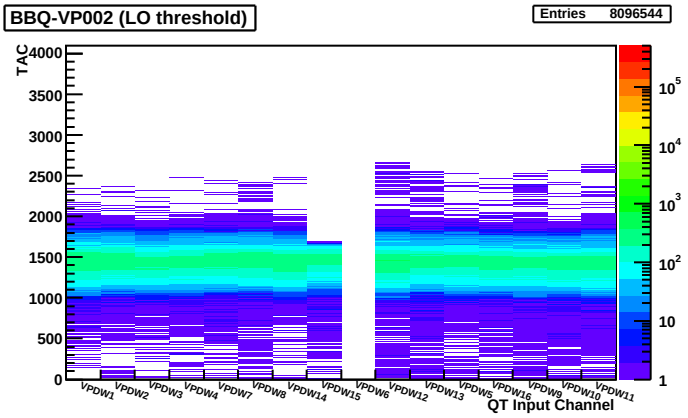

BBQ-ZD001 (ZDC TOWER)
Entries 8096544
ADC

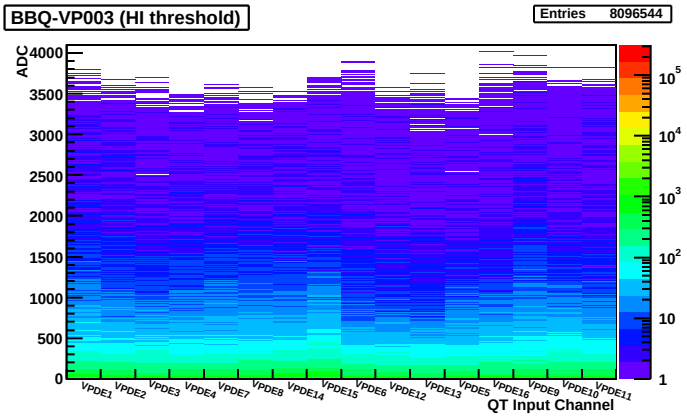

BBQ-ZD001 (ZDC TOWER)
Entries 8096544
TAC

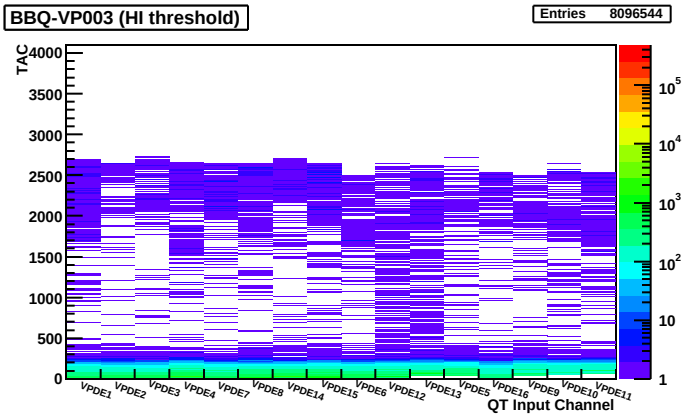

BBQ-VP001 (LO threshold)
Entries 8096544
ADC
QT Input Channel

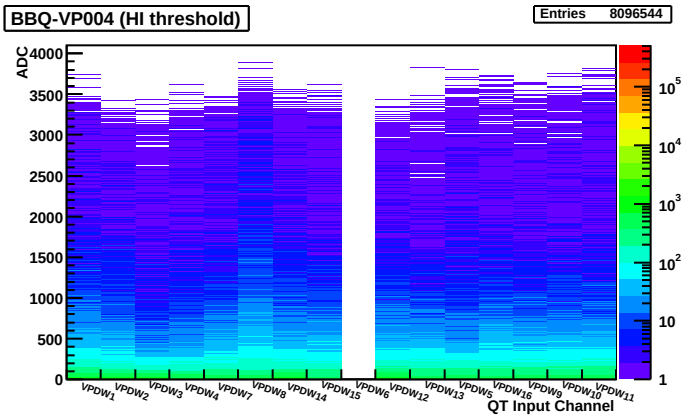

BBQ-VP001 (LO threshold)
Entries 8096544
TAC
QT Input Channel

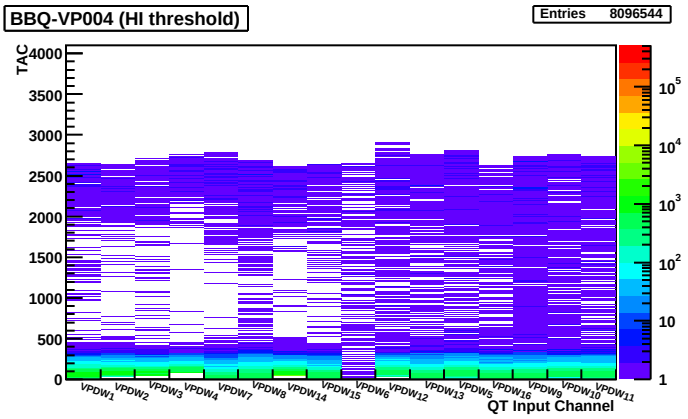

BBQ-VP002 (LO threshold)
Entries 8096544
ADC
QT Input Channel

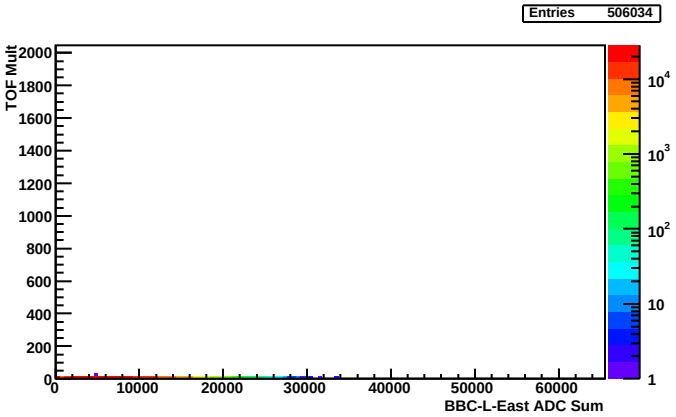

BBQ-VP002 (LO threshold)
Entries 8096544
TAC
QT Input Channel

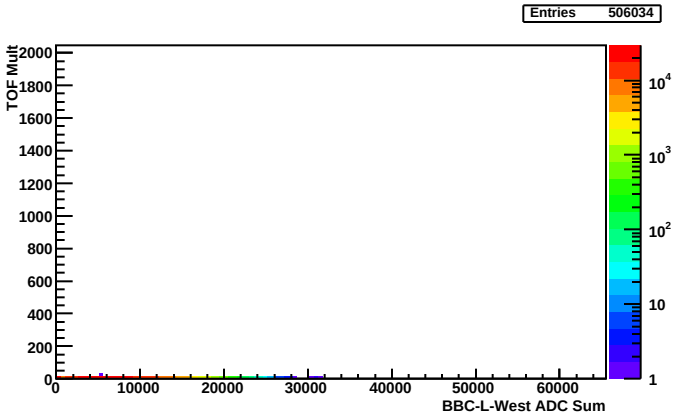

BBQ-VP003 (HI threshold)
Entries 8096544
ADC
QT Input Channel

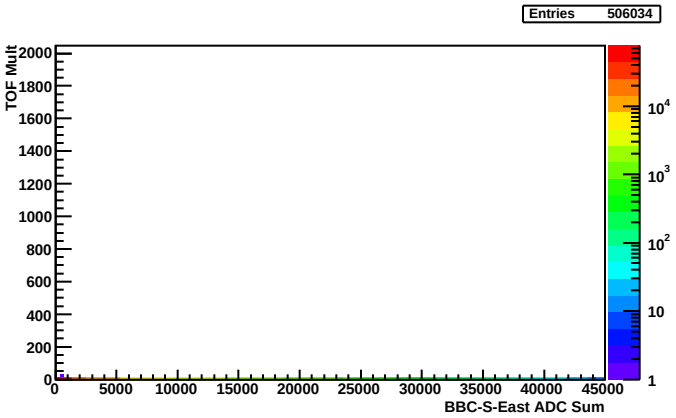

BBQ-VP003 (HI threshold)
Entries 8096544
TAC
QT Input Channel

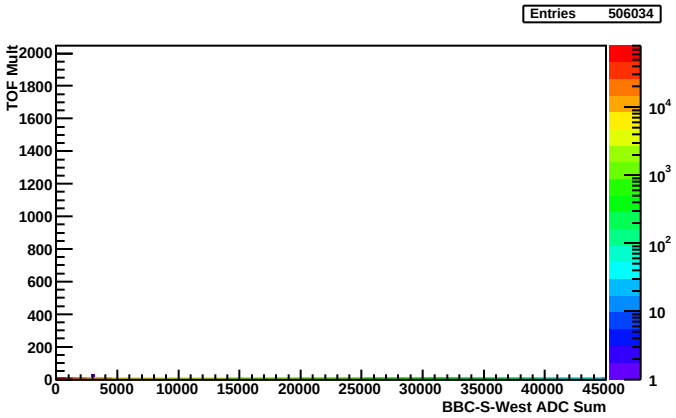

BBQ-VP004 (HI threshold)
Entries 8096544
ADC
QT Input Channel

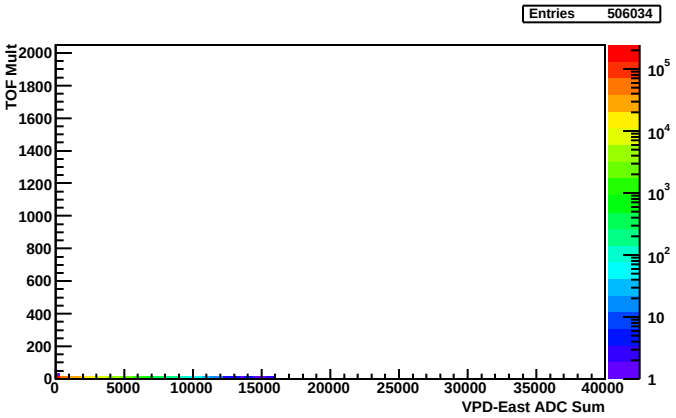

BBQ-VP004 (HI threshold)
Entries 8096544
TAC
QT Input Channel

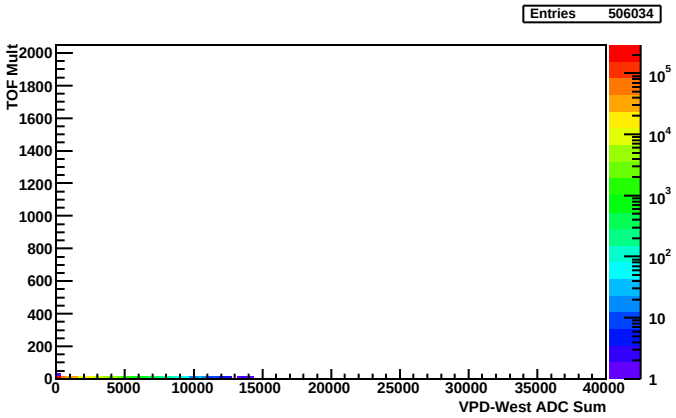

Entries 506034
TOF Mult
BBC-L-East ADC Sum

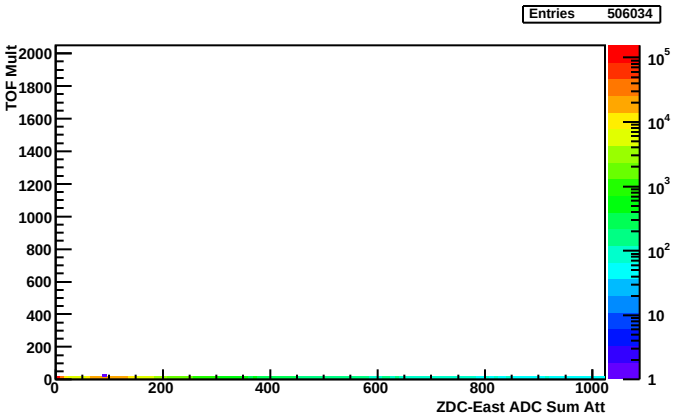

Entries 506034
TOF Mult
BBC-L-West ADC Sum

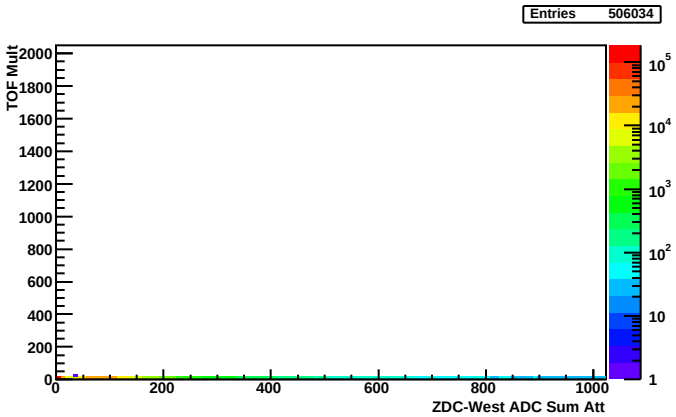

Entries 506034
TOF Mult
BBC-S-East ADC Sum

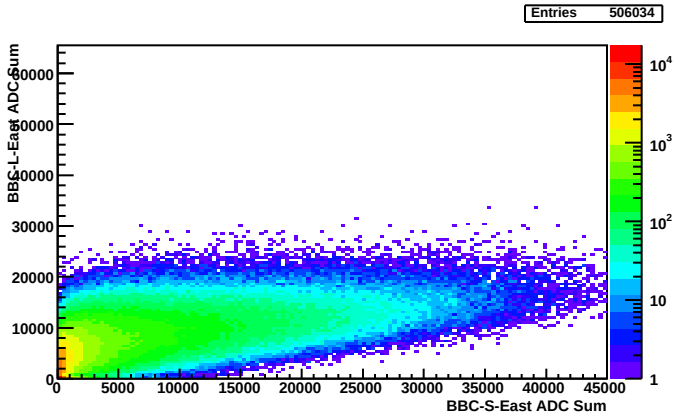

Entries 506034
TOF Mult
BBC-S-West ADC Sum

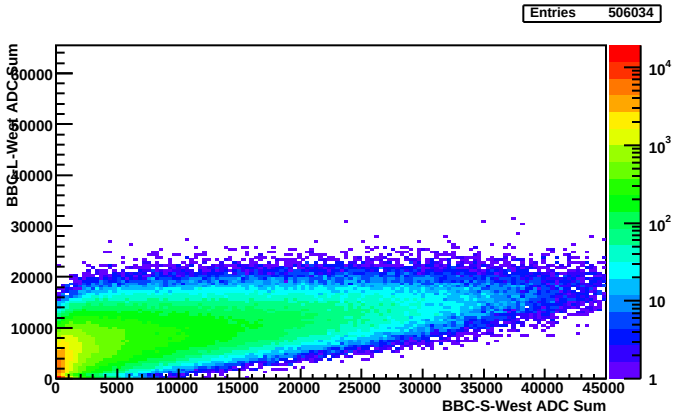

Entries 506034
TOF Mult
VPD-East ADC Sum

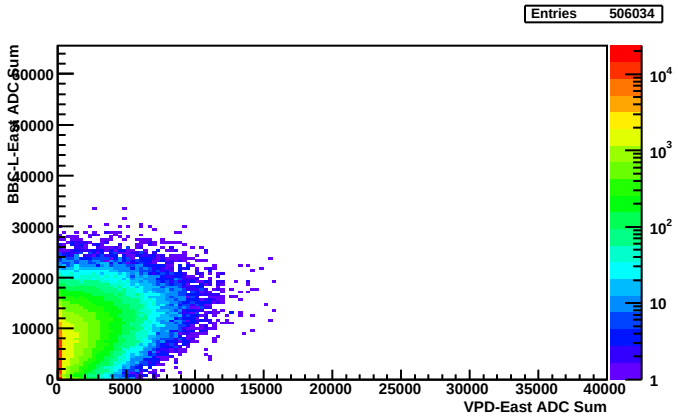

Entries 506034
TOF Mult
VPD-West ADC Sum

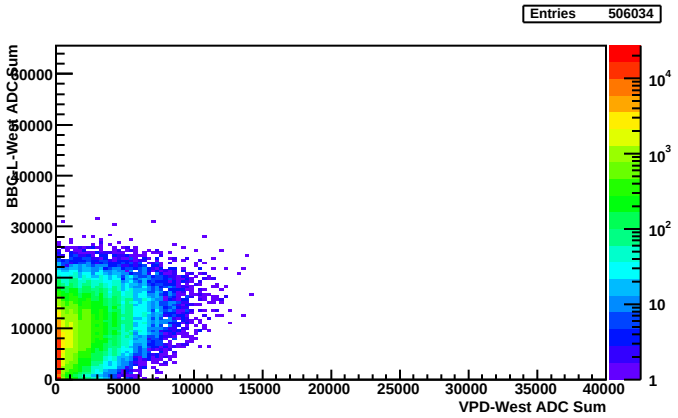

Entries 506034
TOF Mult
ZDC-East ADC Sum Att

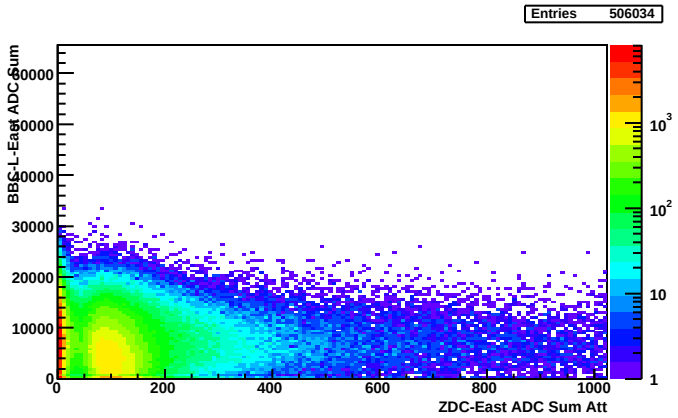

Entries 506034
TOF Mult
ZDC-West ADC Sum Att

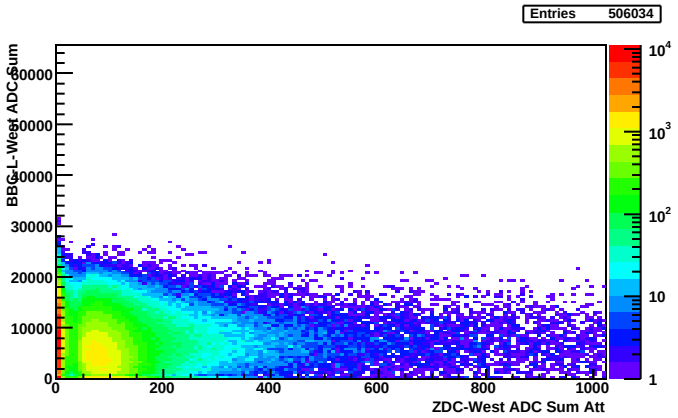

Entries 506034
BBC-L-East ADC Sum
BBC-S-East ADC Sum

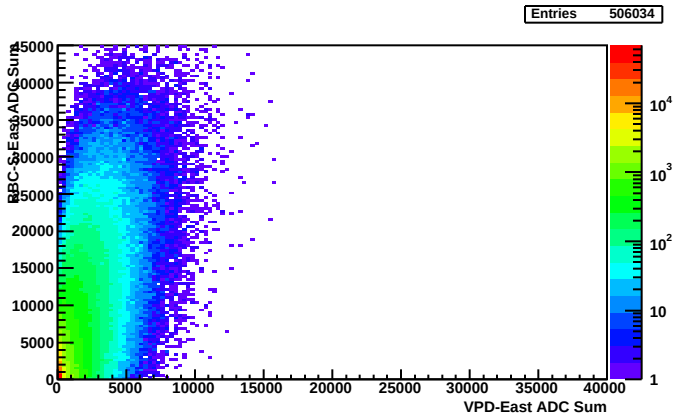

Entries 506034
BBC-L-West ADC Sum
BBC-S-West ADC Sum

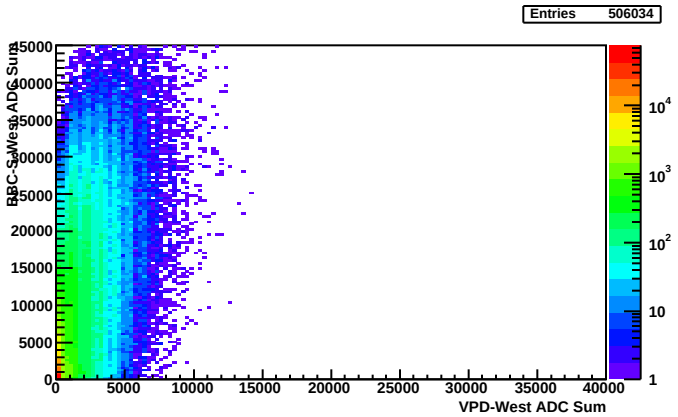

Entries 506034
BBC-L-East ADC Sum
VPD-East ADC Sum

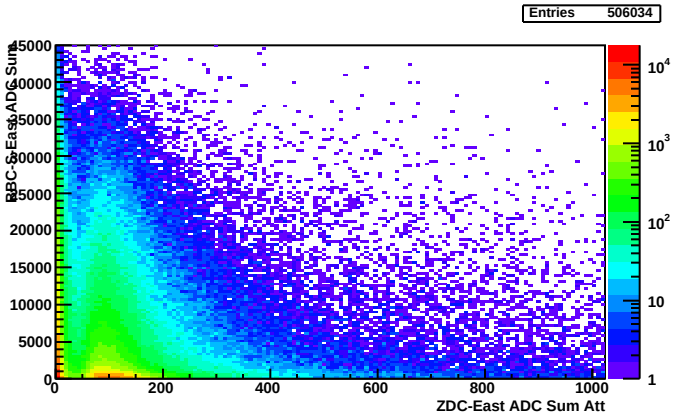

Entries 506034
BBC-L-West ADC Sum
VPD-West ADC Sum

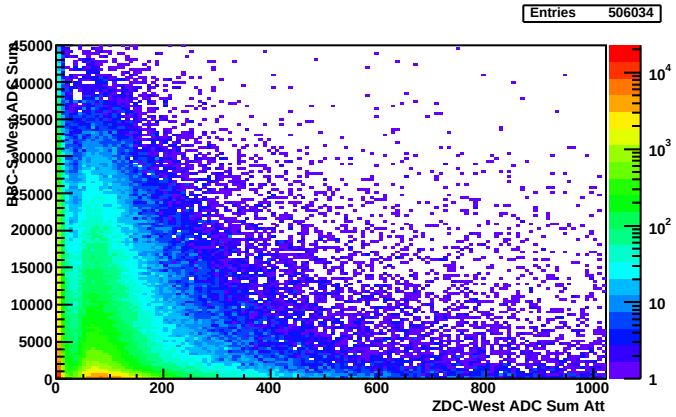

Entries 506034
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

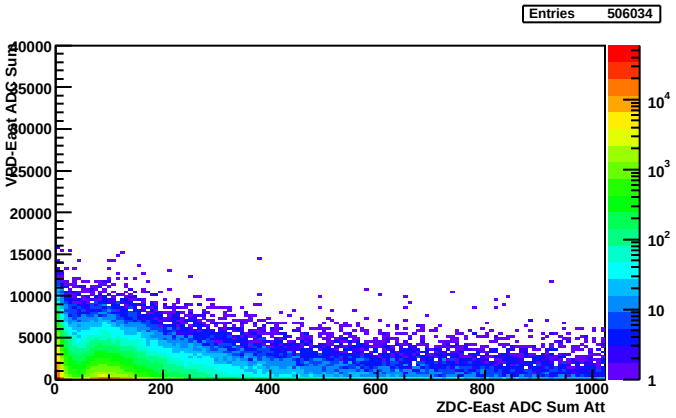

Entries 506034
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

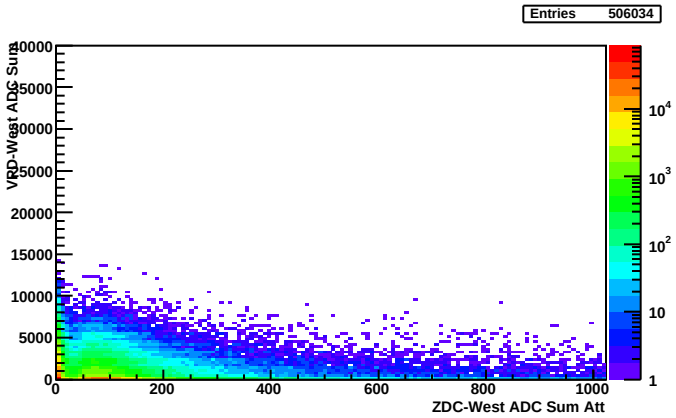

Entries 506034
BBC-S-East ADC Sum
VPD-East ADC Sum

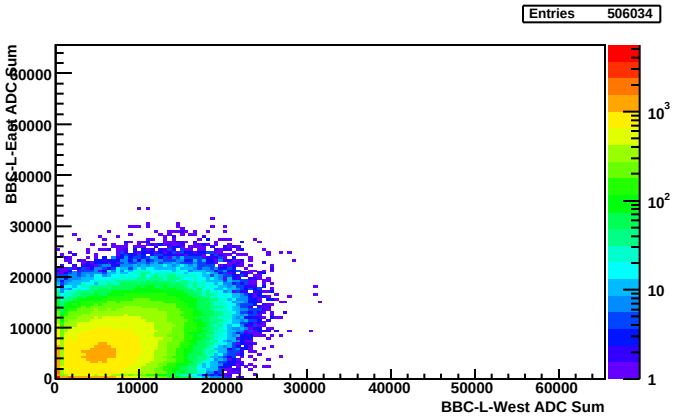

Entries 506034
BBC-S-West ADC Sum
VPD-West ADC Sum

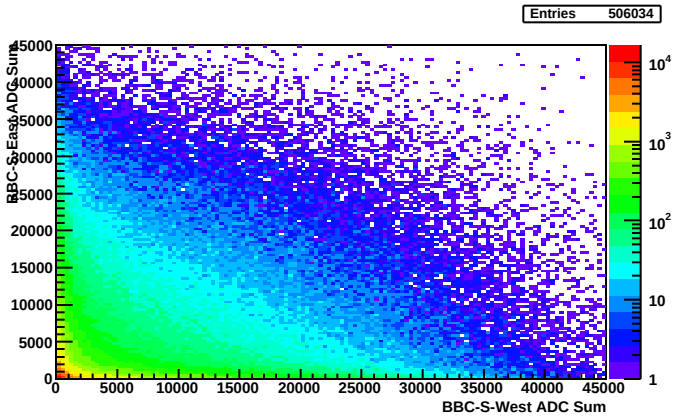

Entries 506034
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

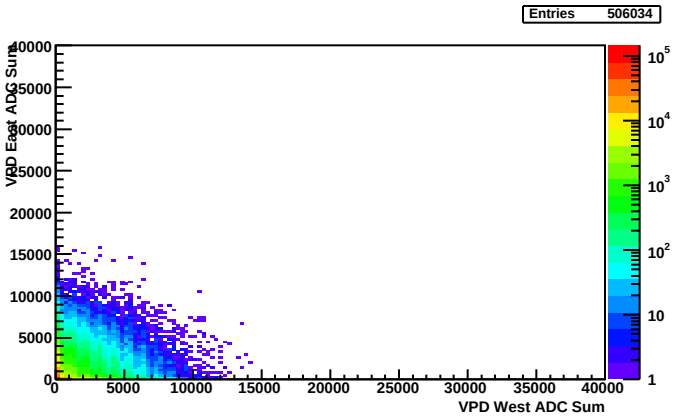

Entries 506034
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

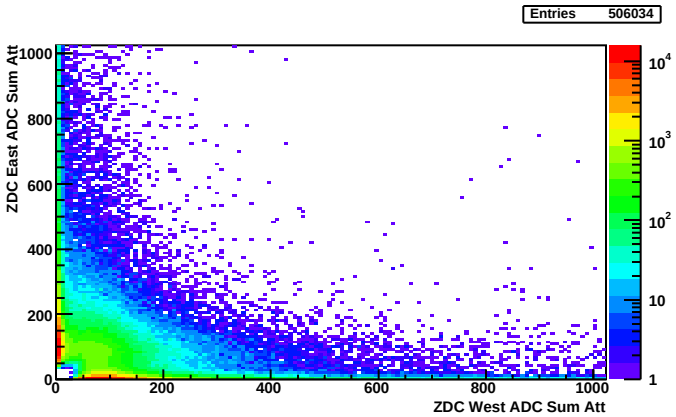

Entries 506034
VPD-East ADC Sum
ZDC-East ADC Sum Att

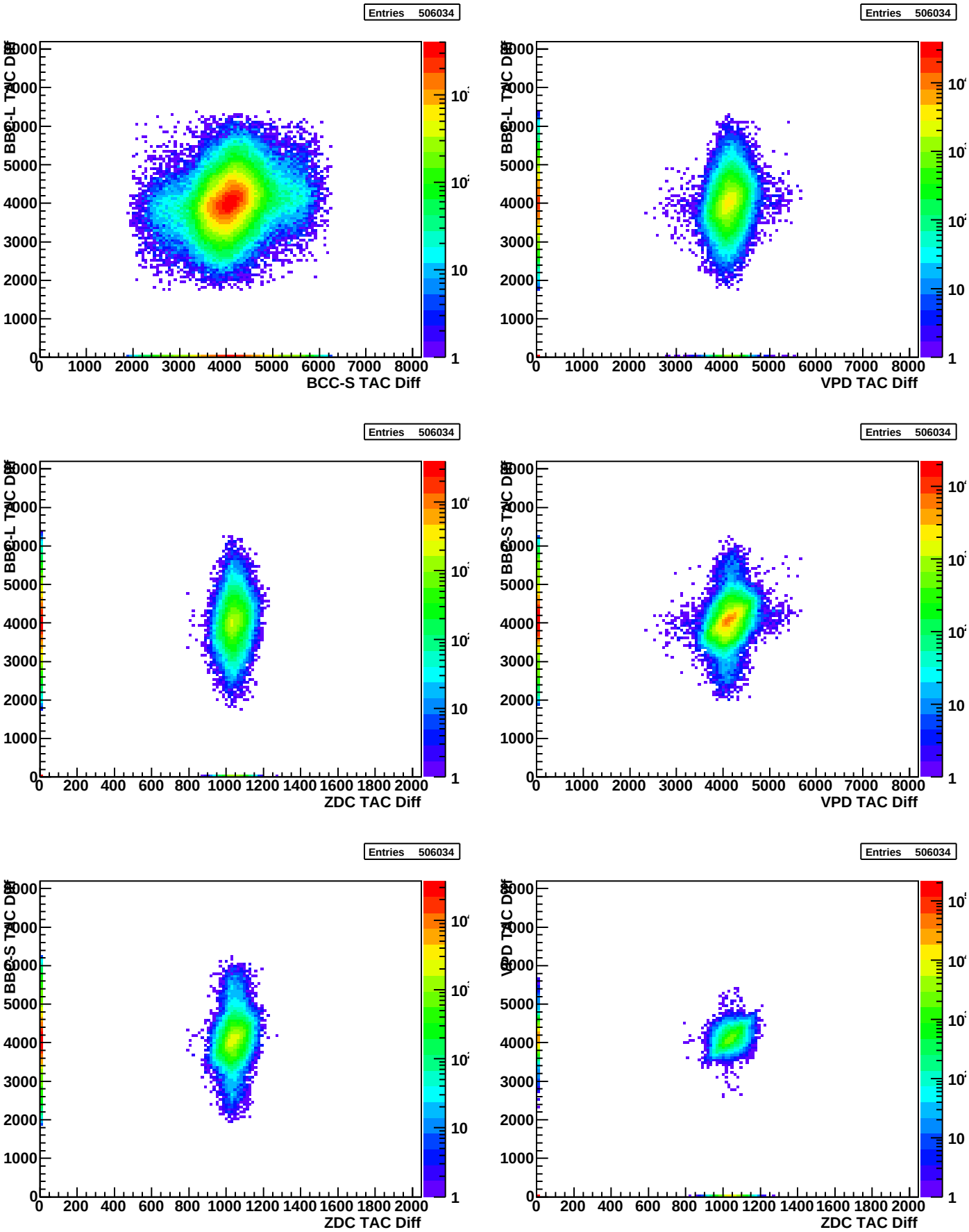

Entries 506034
VPD-West ADC Sum
ZDC-West ADC Sum Att

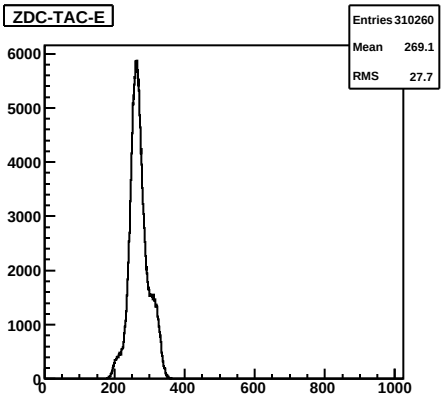

Entries 506034
BBC-L-East ADC Sum
BBC-L-West ADC Sum

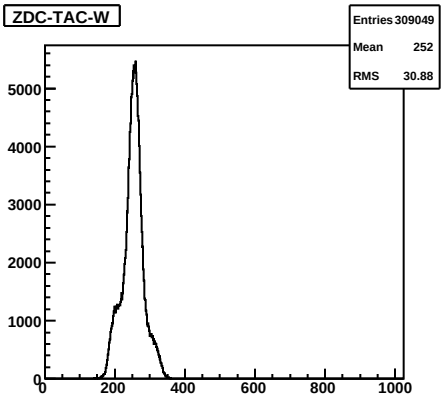

Entries 506034
BBC-S-East ADC Sum
BBC-S-West ADC Sum

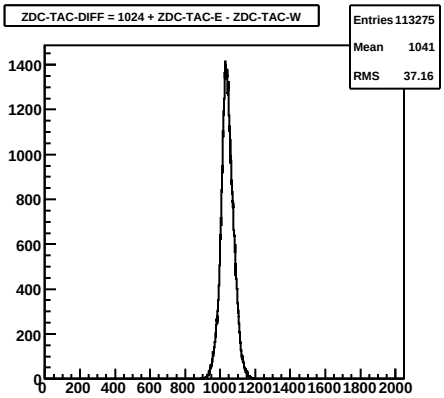

Entries 506034
VPD East ADC Sum
VPD West ADC Sum

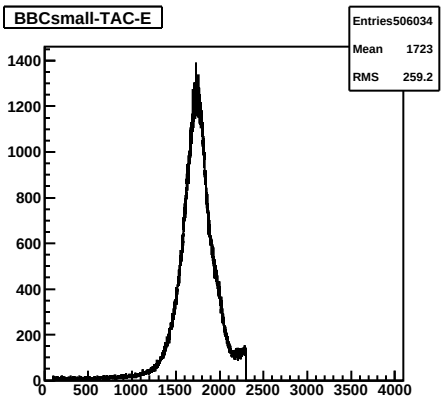

Entries 506034
ZDC East ADC Sum Att
ZDC West ADC Sum Att

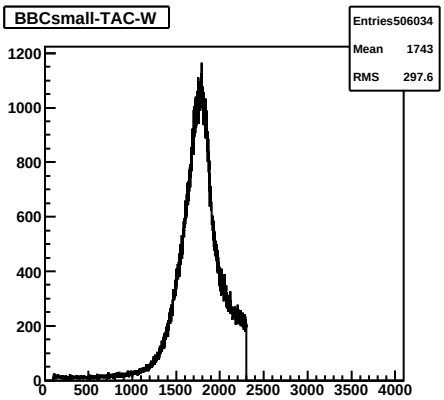

Entries 506034
BBC-L TAC Diff
BCC-S TAC Diff
Entries 506034
BBC-L TAC Diff
VPD TAC Diff
Entries 506034
BBC-L TAC Diff
ZDC TAC Diff
Entries 506034
BBC-S TAC Diff
VPD TAC Diff
Entries 506034
BBC-S TAC Diff
ZDC TAC Diff
Entries 506034
VPD TAC Diff
ZDC TAC Diff

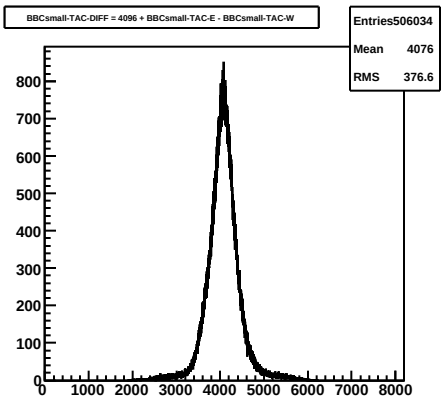

ZDC-TAC-E
Entries 310260
Mean 269.1
RMS 27.7

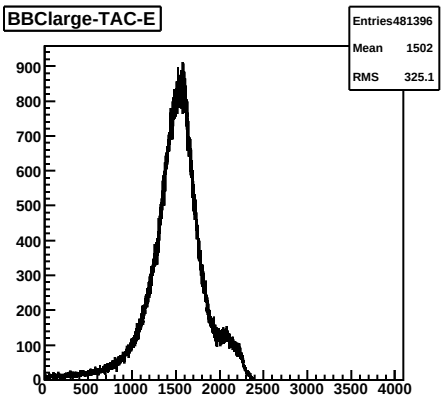

ZDC-TAC-W
Entries 309049
Mean 252
RMS 30.88

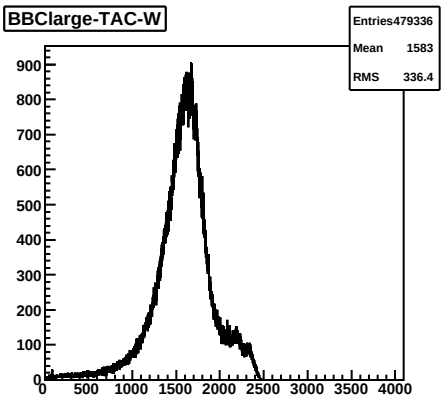

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 113275
Mean 1041
RMS 37.16

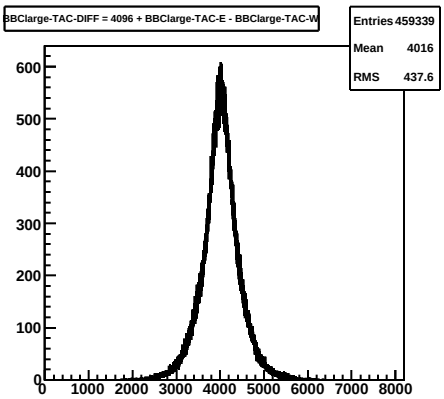

BBCsmall-TAC-E
Entries 506034
Mean 1723
RMS 259.2

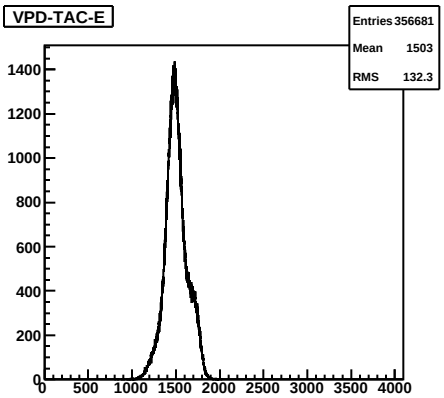

BBCsmall-TAC-W
Entries 506034
Mean 1743
RMS 297.6

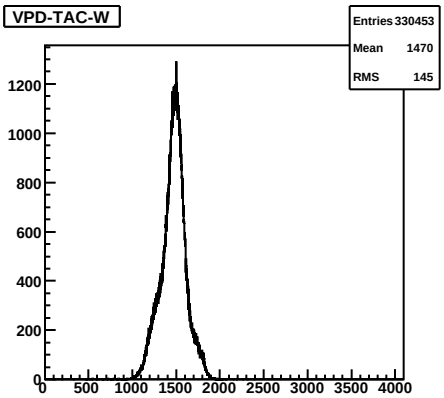

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 506034
Mean 4076
RMS 376.6

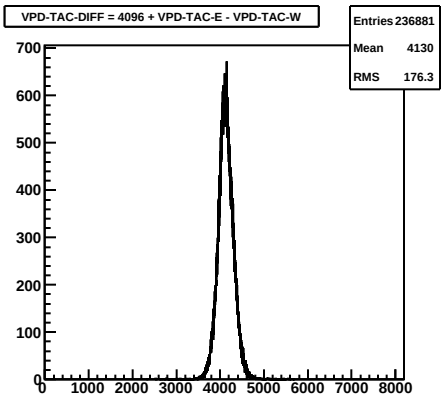

BBClarge-TAC-E
Entries 481396
Mean 1502
RMS 325.1

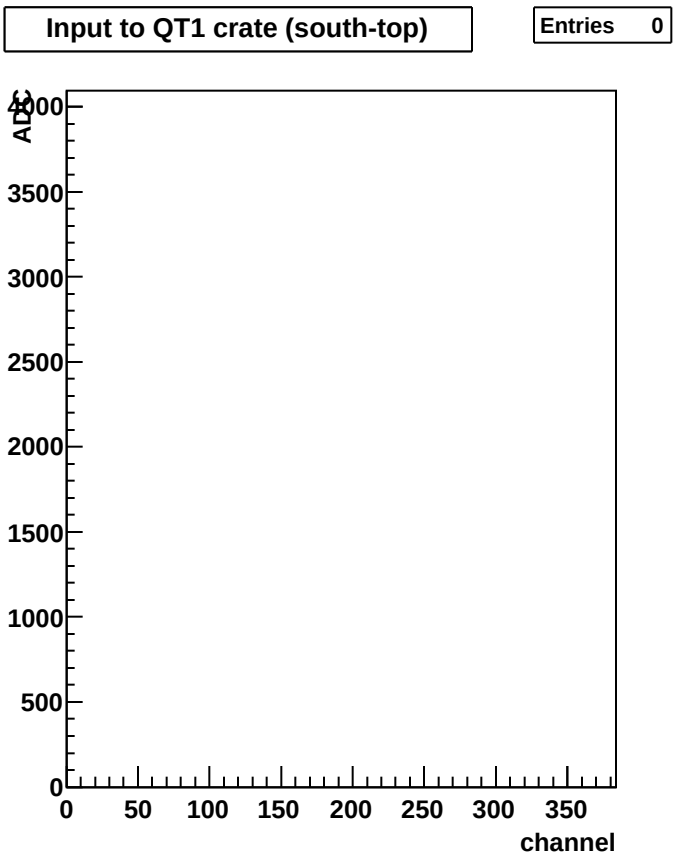

BBClarge-TAC-W
Entries 479336
Mean 1583
RMS 336.4

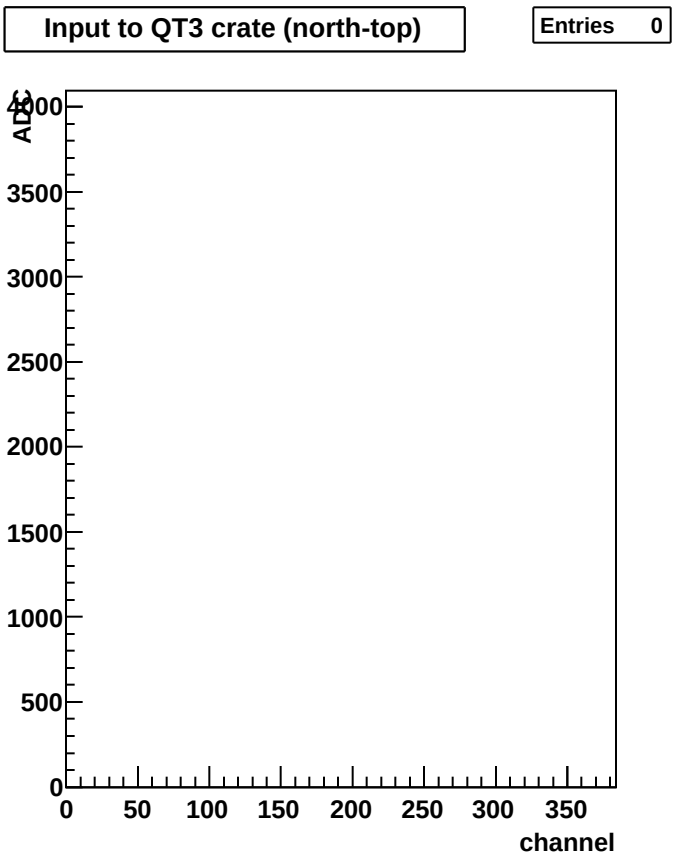

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 459339
Mean 4016
RMS 437.6

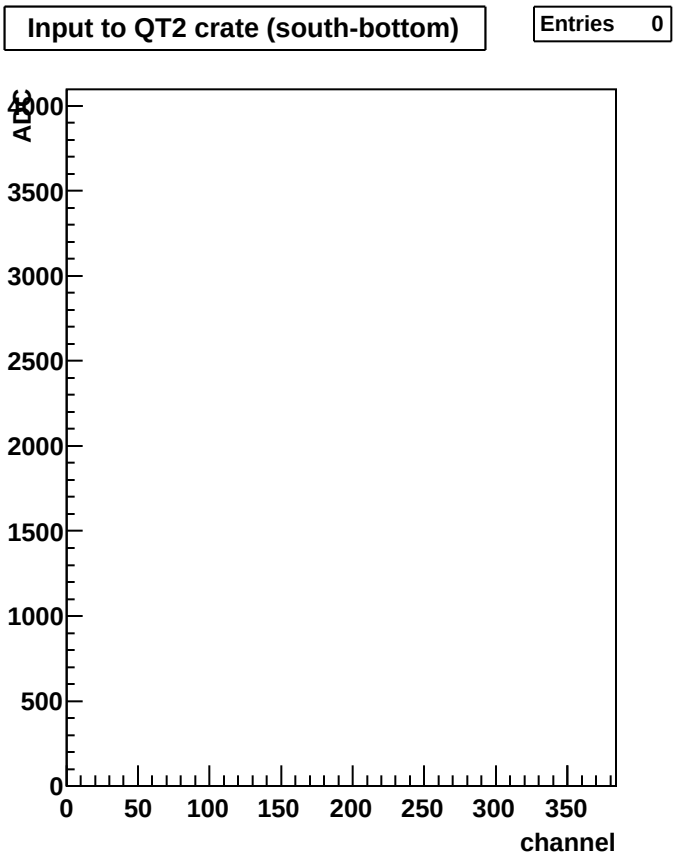

VPD-TAC-E
Entries 356681
Mean 1503
RMS 132.3

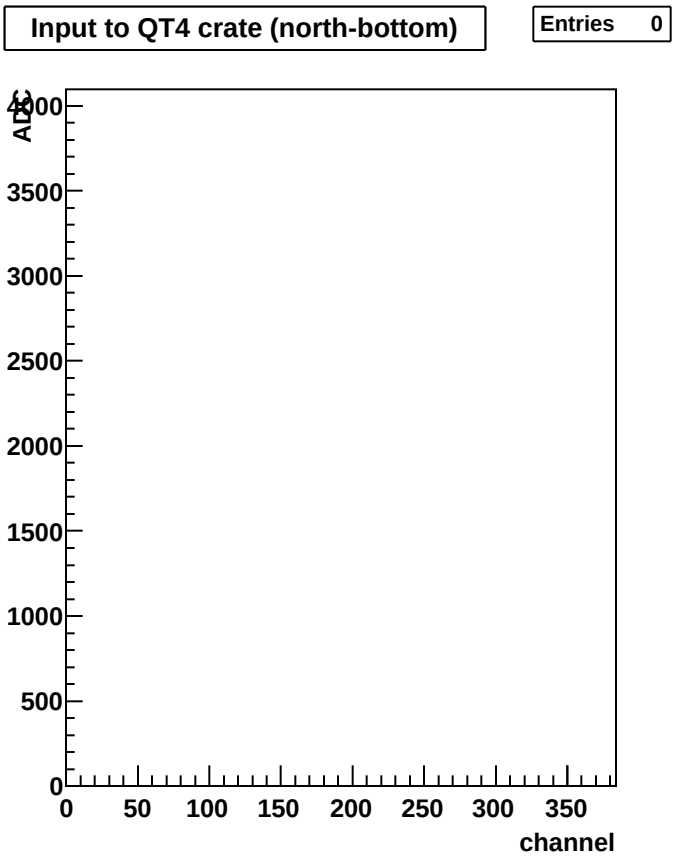

VPD-TAC-W
Entries 330453
Mean 1470
RMS 145

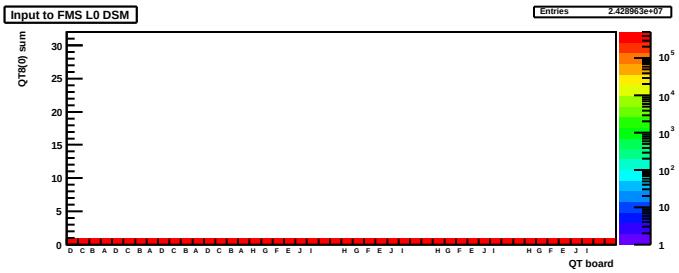

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 236881
Mean 4130
RMS 176.3

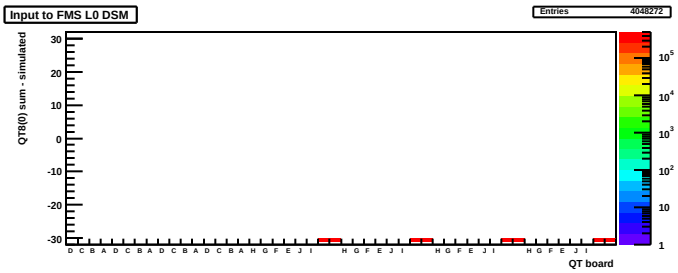

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

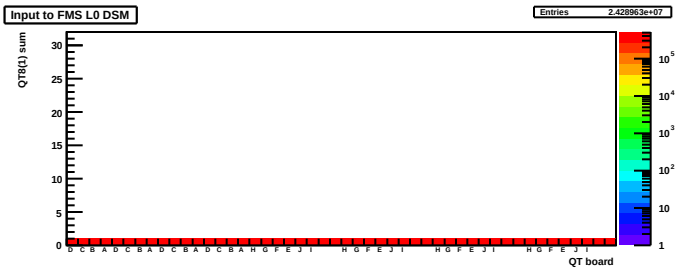

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

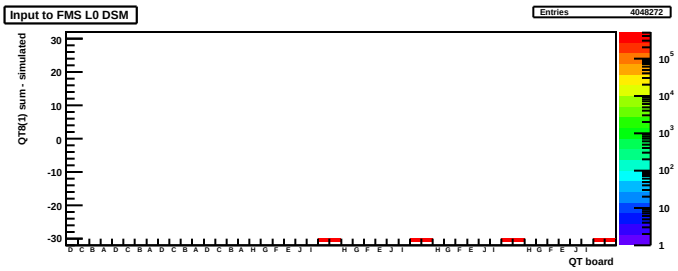

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

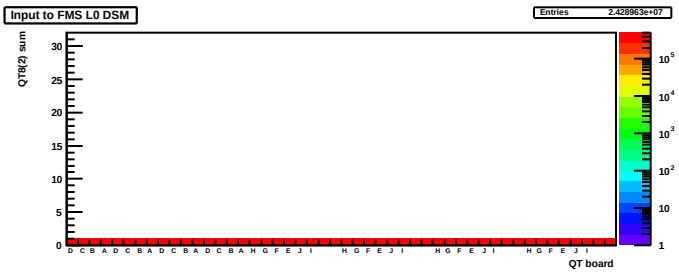

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

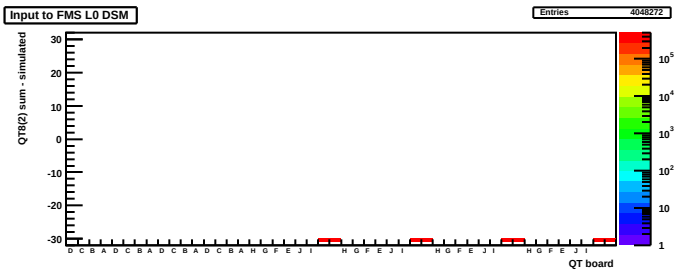

Input to FMS L0 DSM
Entries 2.428963e+07
QT8(0) sum
QT board

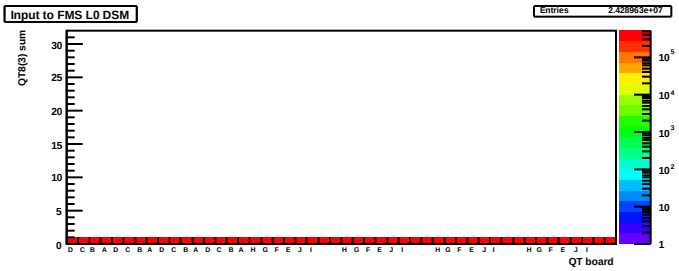

Input to FMS L0 DSM
Entries 4048272
QT8(0) sum - simulated
QT board

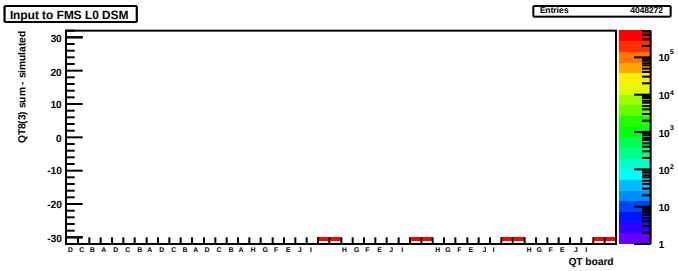

Input to FMS L0 DSM
Entries 2.428963e+07
QT8(1) sum
QT board

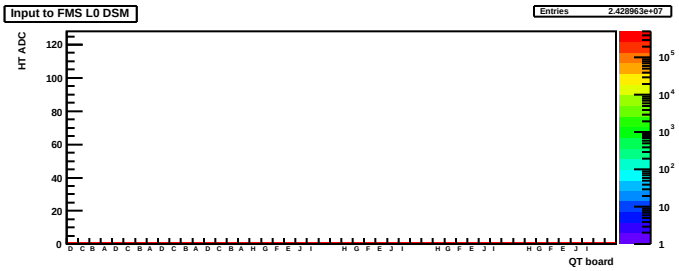

Input to FMS L0 DSM
Entries 4048272
QT8(1) sum - simulated
QT board

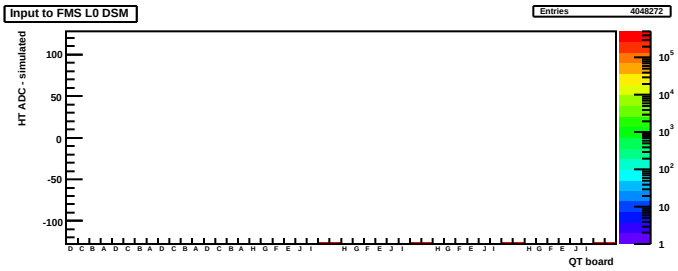

Input to FMS L0 DSM
Entries 2.428963e+07
QT8(2) sum
QT board

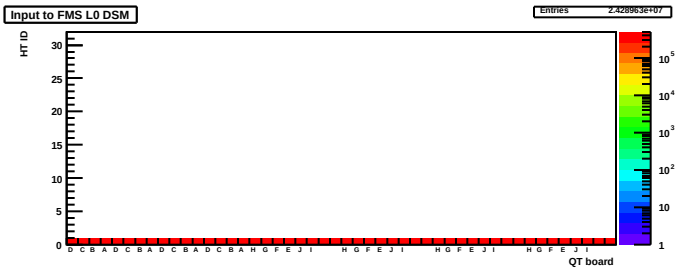

Input to FMS L0 DSM
Entries 4048272
QT8(2) sum - simulated
QT board

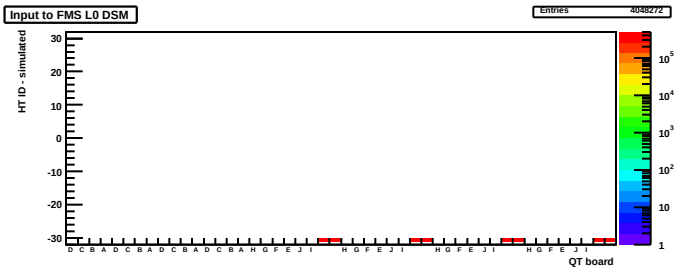

Input to FMS L0 DSM
Entries 2.428963e+07
QT8(3) sum
QT board

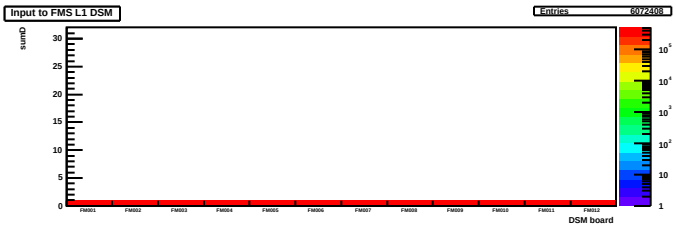

Input to FMS L0 DSM
Entries 4048272
QT8(3) sum - simulated
QT board

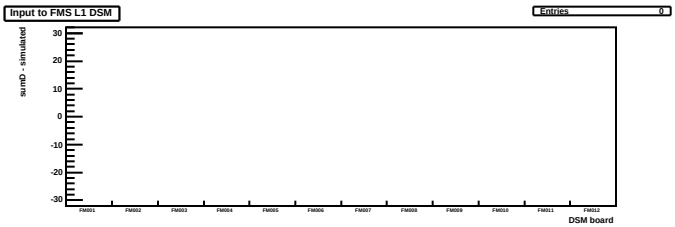

Input to FMS L0 DSM
Entries 2.428963e+07
HT ADC
QT board

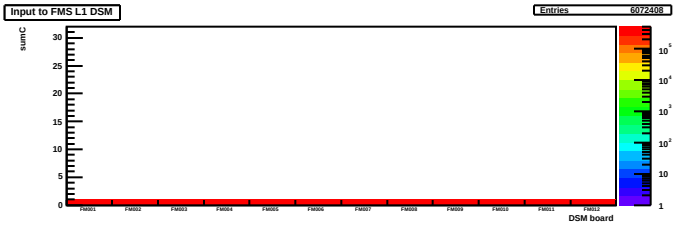

Input to FMS L0 DSM
Entries 4048272
HT ADC - simulated
QT board

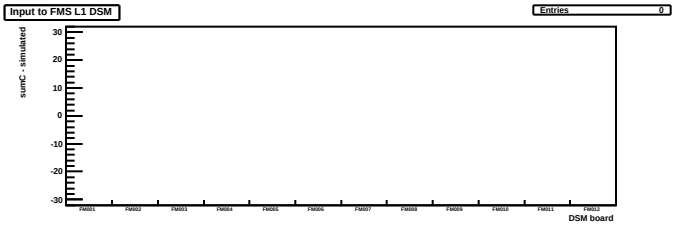

Input to FMS L0 DSM
Entries 2.428963e+07
HT ID
QT board

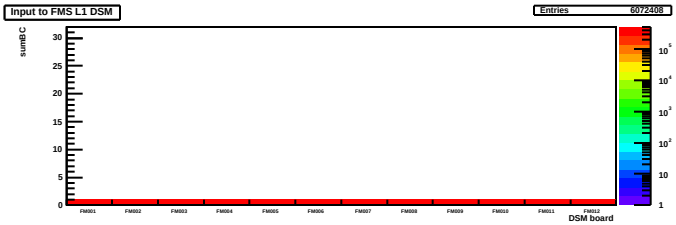

Input to FMS L0 DSM
Entries 4048272
HT ID - simulated
QT board

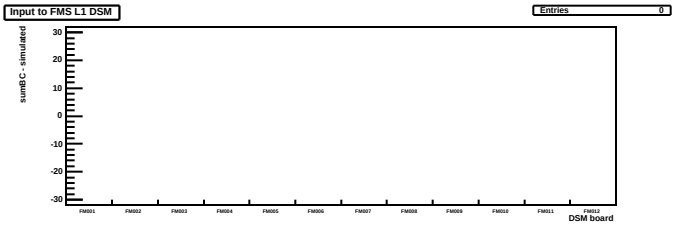

Input to FMS L1 DSM
Entries 6072408
sumD
DSM board

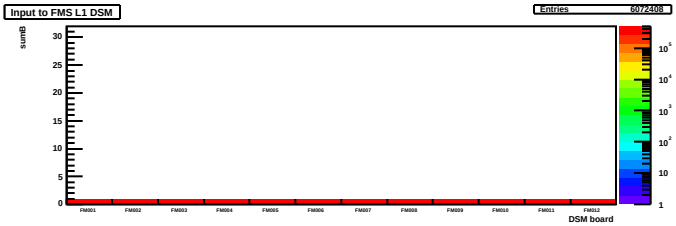

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

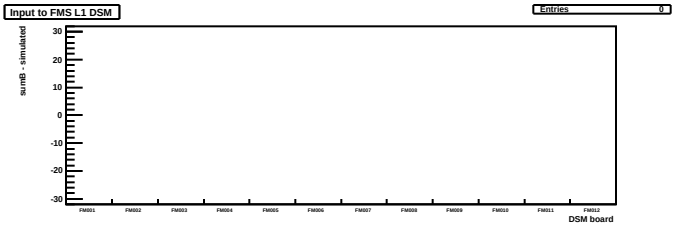

Input to FMS L1 DSM
Entries 6072408
sumC
DSM board

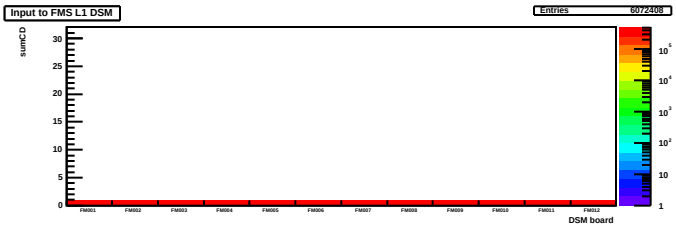

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

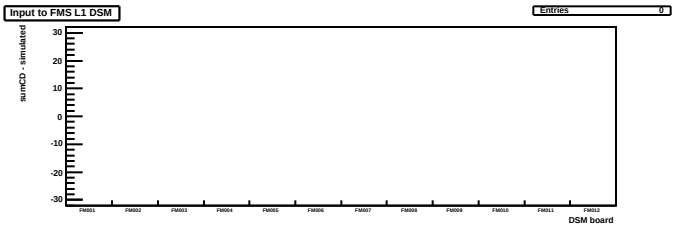

Input to FMS L1 DSM
Entries 6072408
sumBC
DSM board

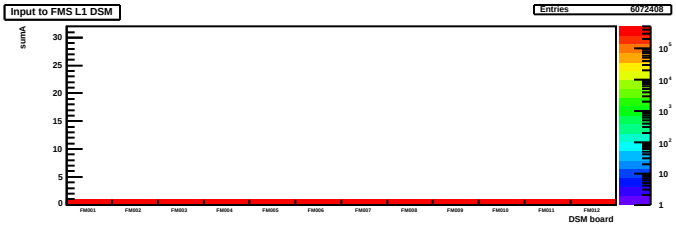

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

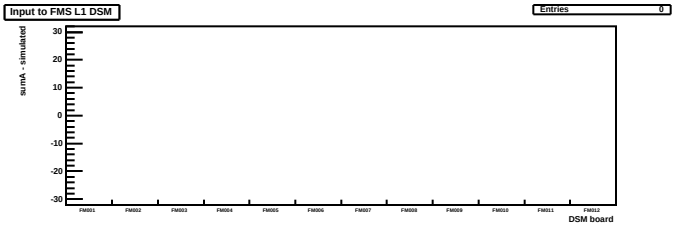

Input to FMS L1 DSM
Entries 6072408
sumB
DSM board

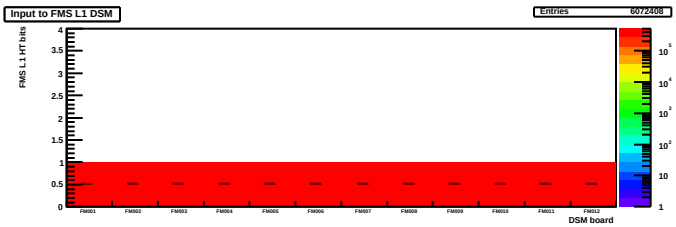

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

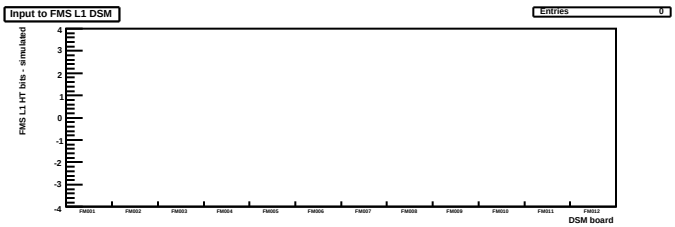

Input to FMS L1 DSM
Entries 6072408
sumCD
DSM board

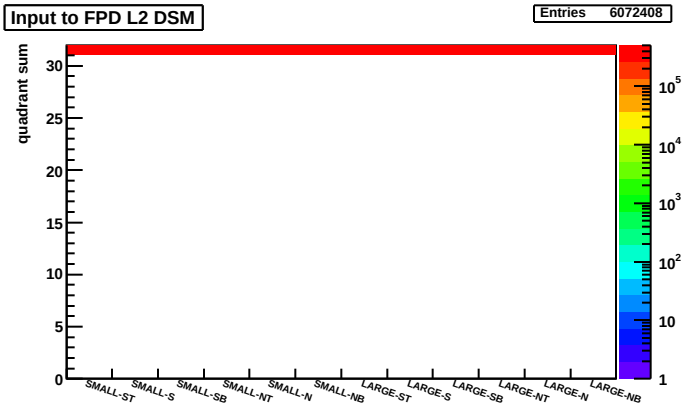

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

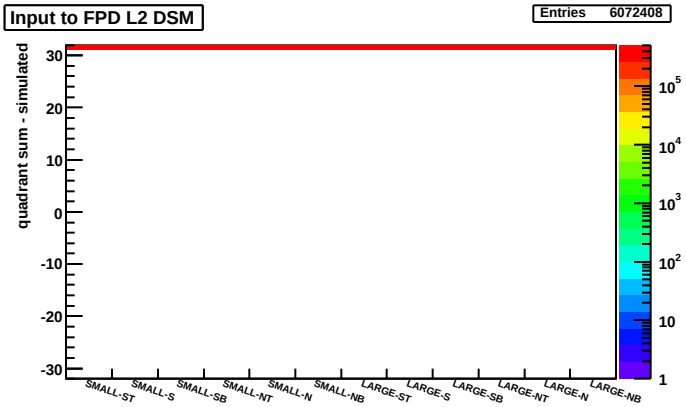

Input to FMS L1 DSM
Entries 6072408
sumA
DSM board

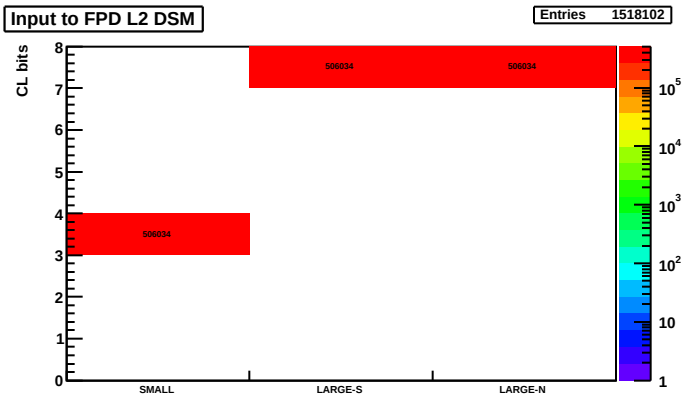

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

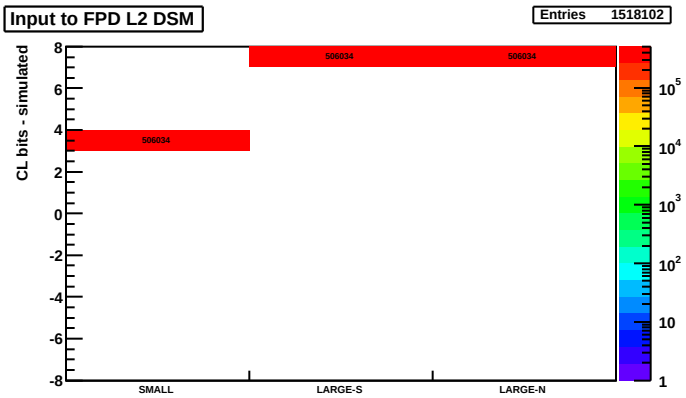

Input to FMS L1 DSM
Entries 6072408
FMS L1 HT bits
DSM board

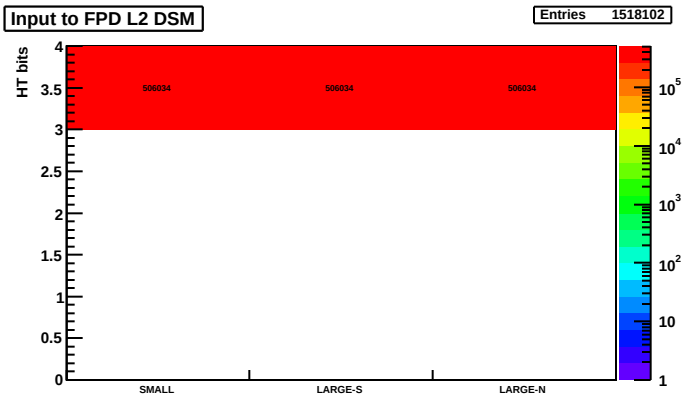

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

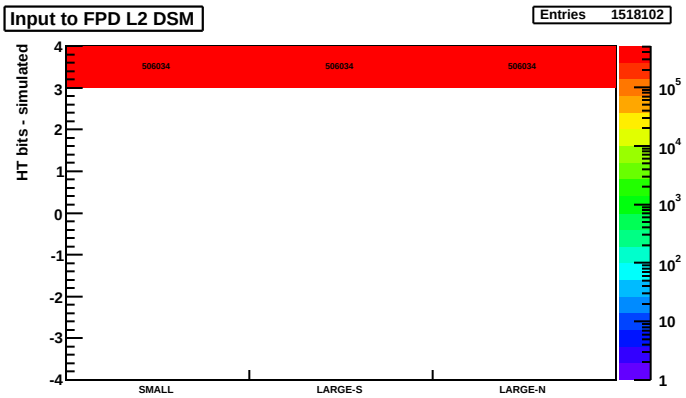

Input to FPD L2 DSM
Entries 6072408
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

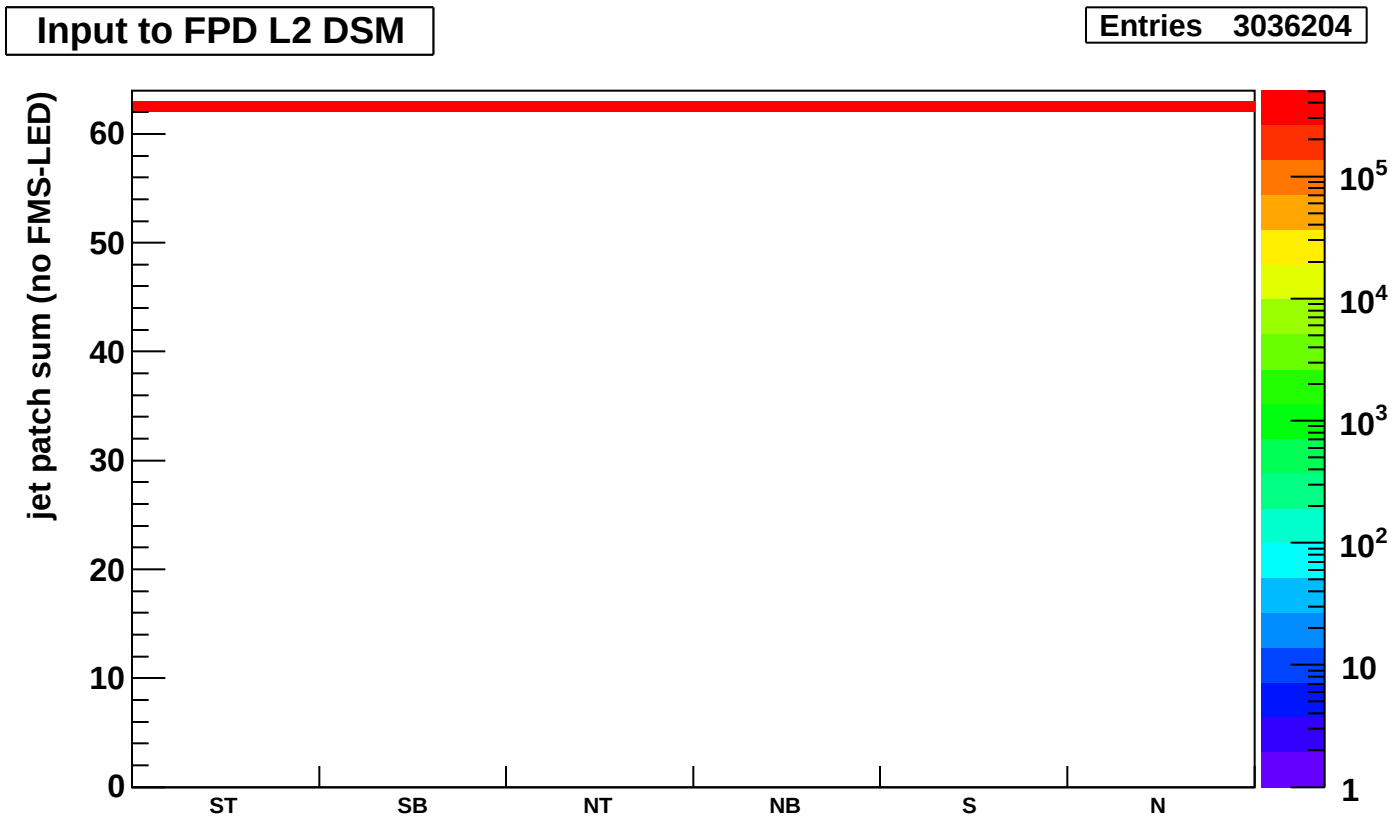

Input to FPD L2 DSM
Entries 6072408
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

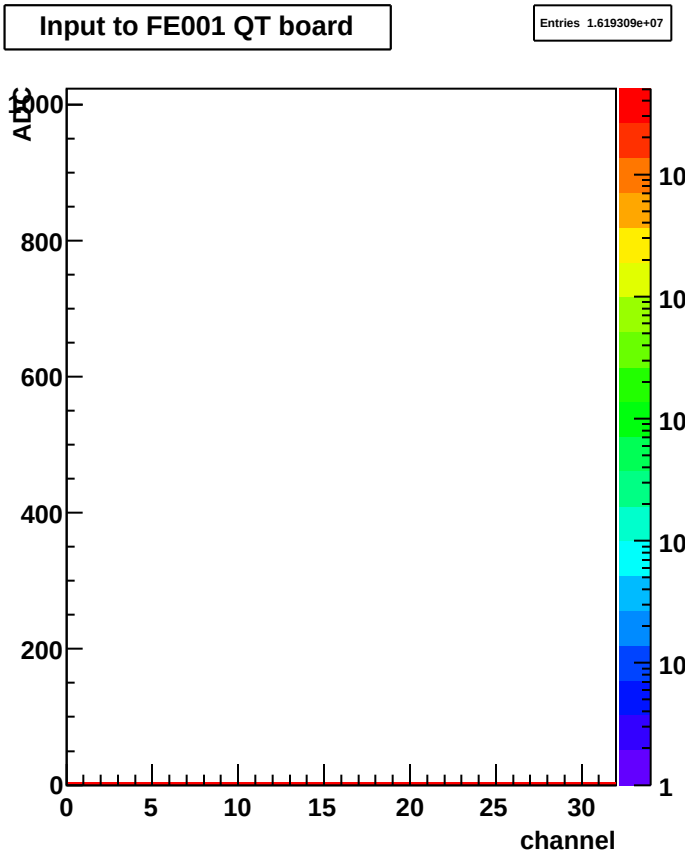

Input to FPD L2 DSM
Entries 1518102
CL bits
506034
506034
506034
SMALL
LARGE-S
LARGE-N

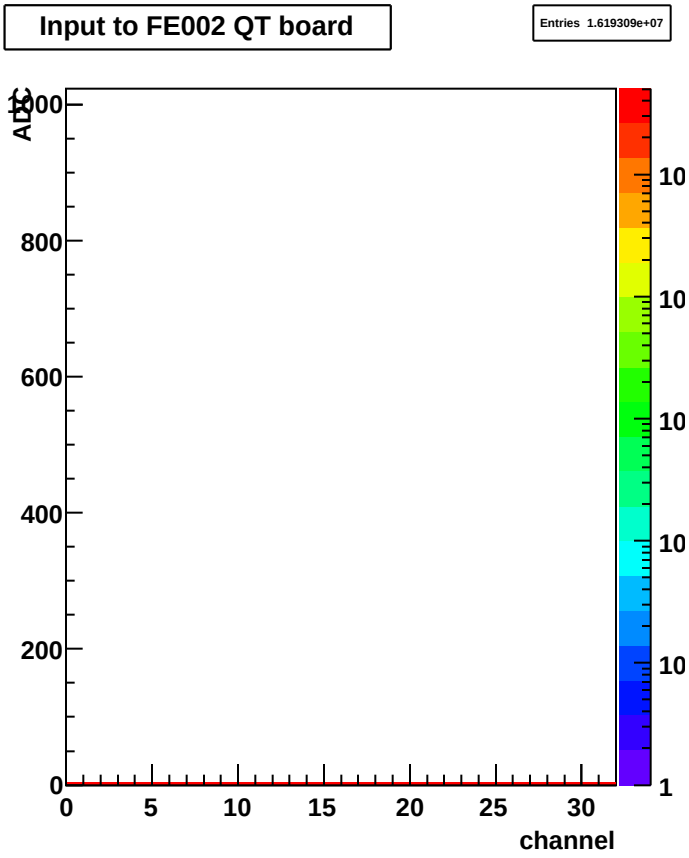

Input to FPD L2 DSM
Entries 1518102
CL bits - simulated
506034
506034
506034
SMALL
LARGE-S
LARGE-N

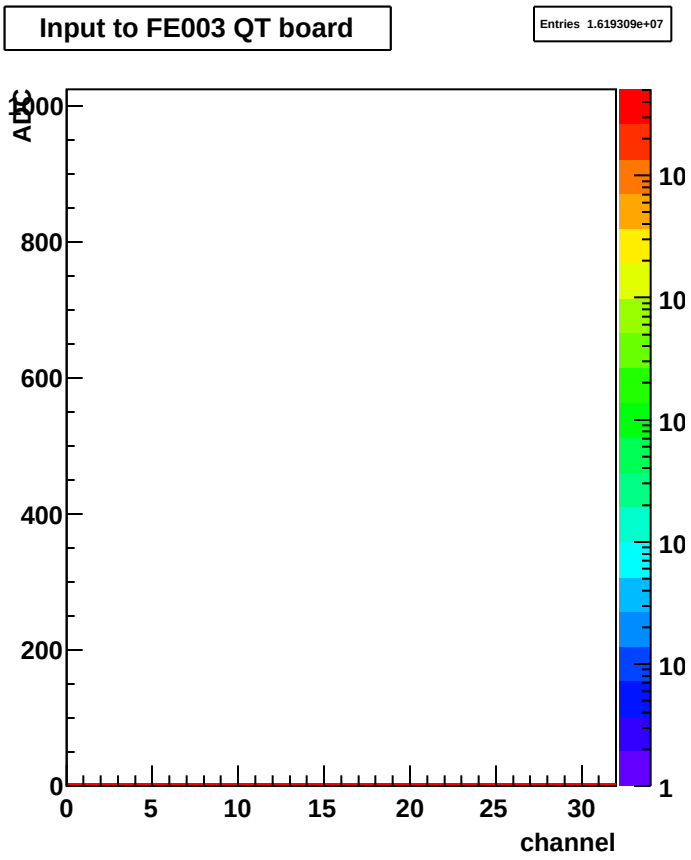

Input to FPD L2 DSM
Entries 1518102
HT bits
506034
506034
506034
SMALL
LARGE-S
LARGE-N

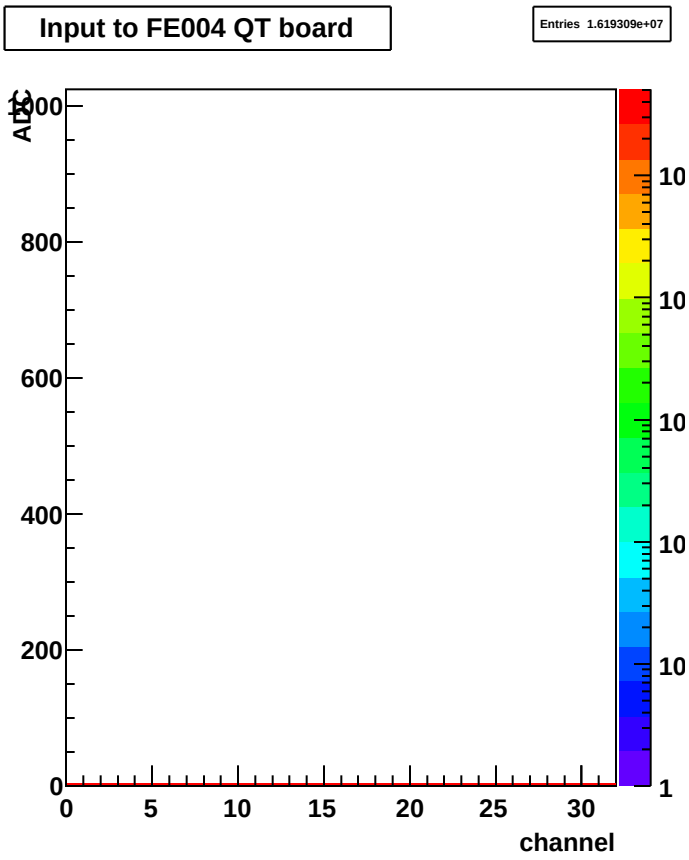

Input to FPD L2 DSM
Entries 1518102
HT bits - simulated
506034
506034
506034
SMALL
LARGE-S
LARGE-N


Input to FPD L2 DSM
Entries 3036204
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

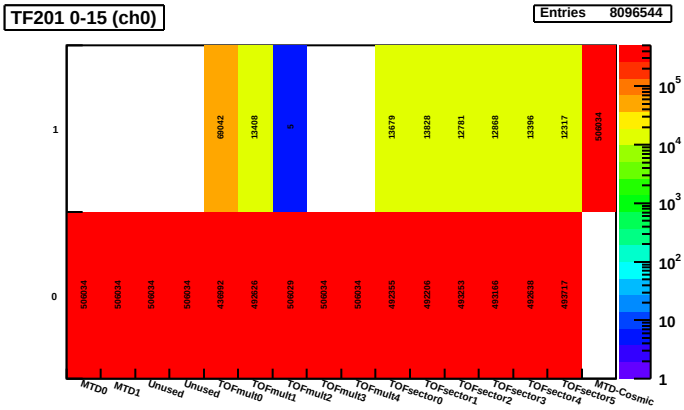

Input to FE001 QT board
Entries 1.619309e+07
ADC
channel


Input to FE002 QT board
Entries 1.619309e+07
ADC
channel

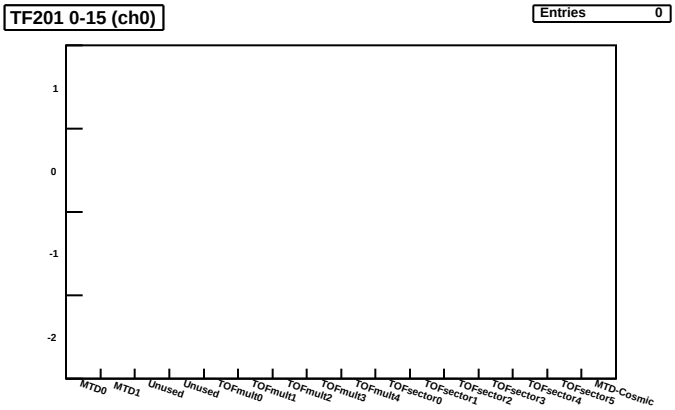

Input to FE003 QT board
Entries 1.619309e+07
ADC
channel


Input to FE004 QT board
Entries 1.619309e+07
ADC
channel

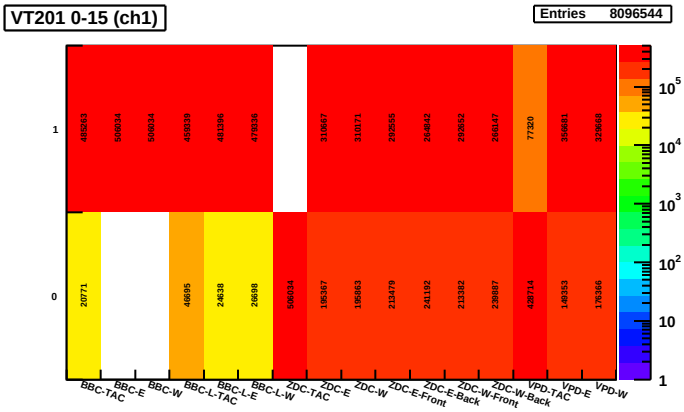
TF201 0-15 (ch0)



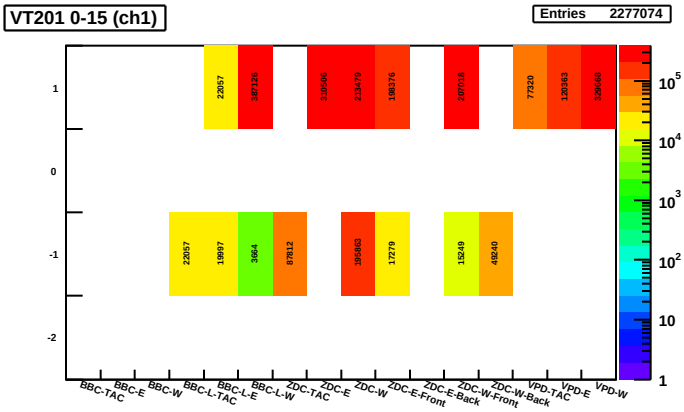
TF201 0-15 (ch0)



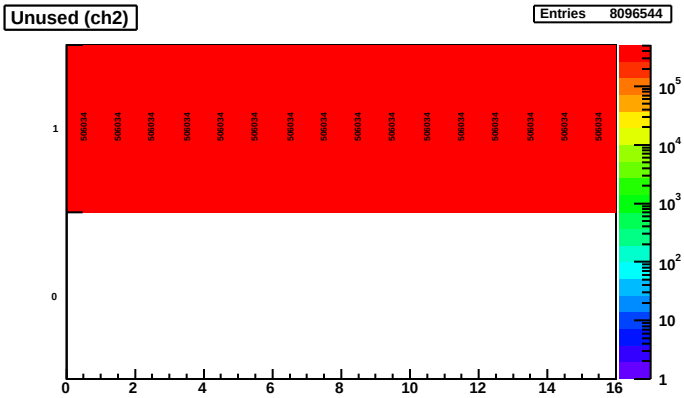
VT201 0-15 (ch1)

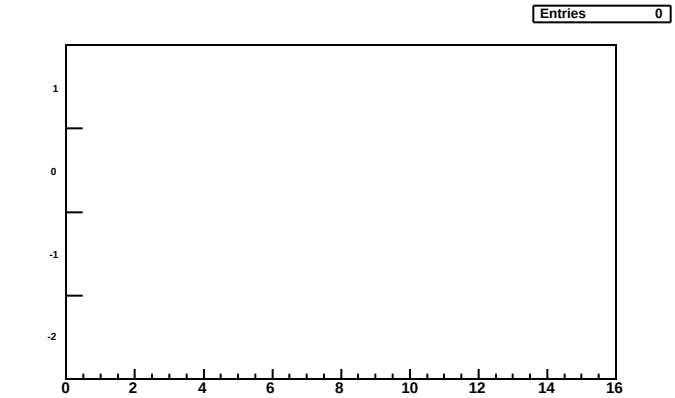


VT201 0-15 (ch1)

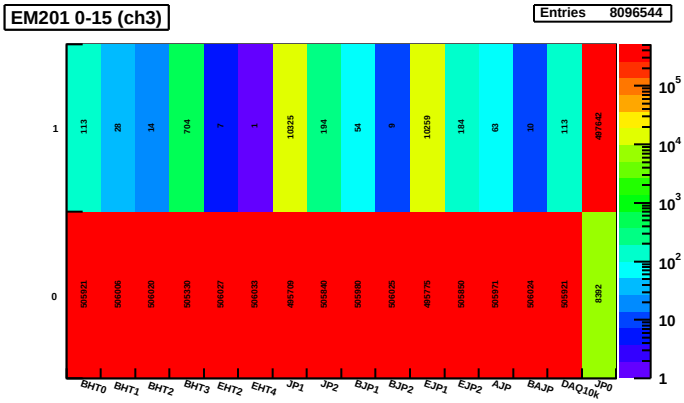


Unused (ch2)





EM201 0-15 (ch3)



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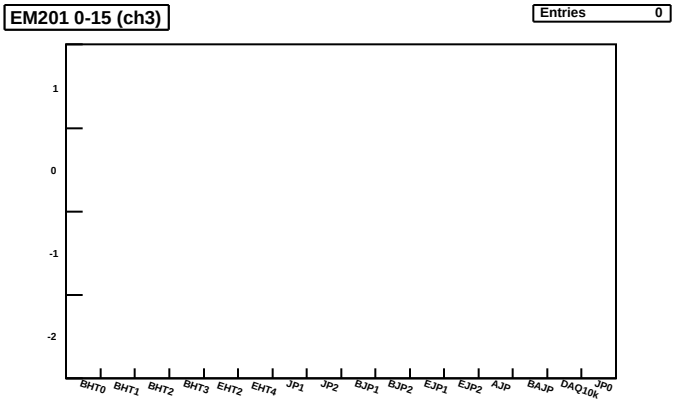
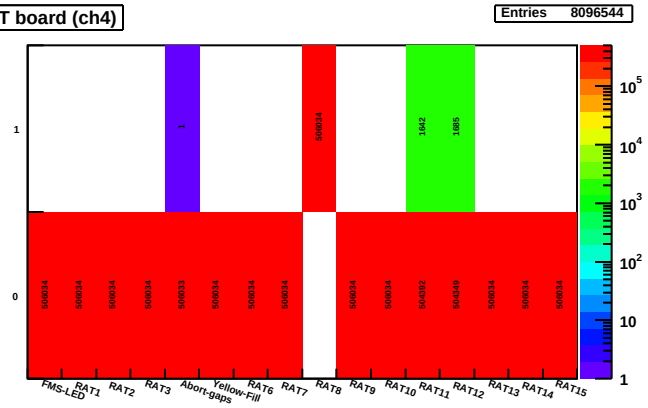
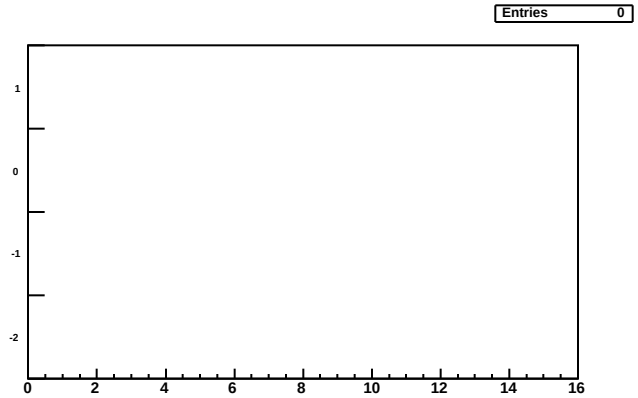
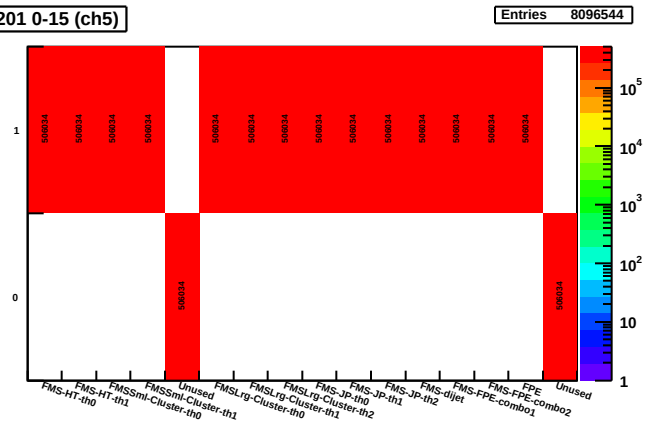


RAT board (ch4)





FP201 0-15 (ch5)



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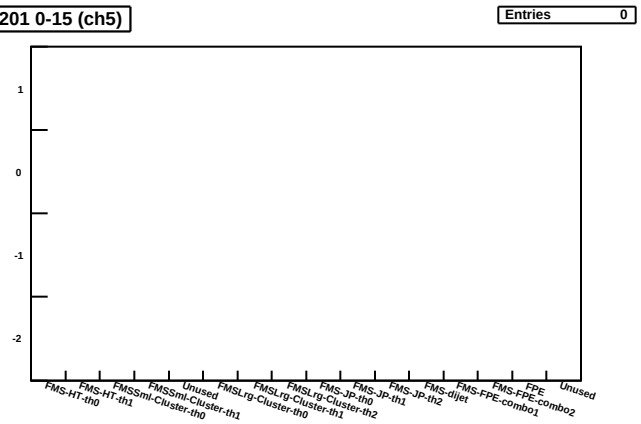

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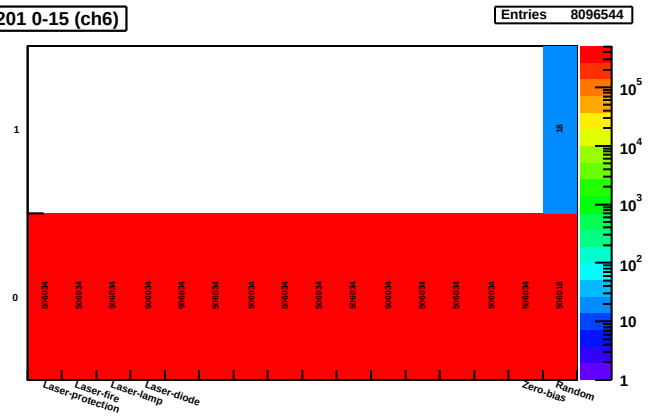

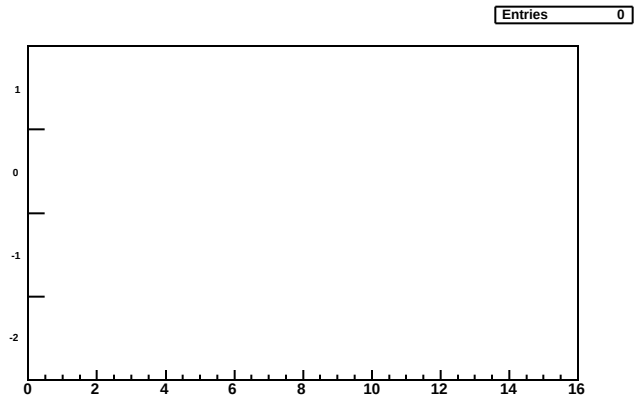
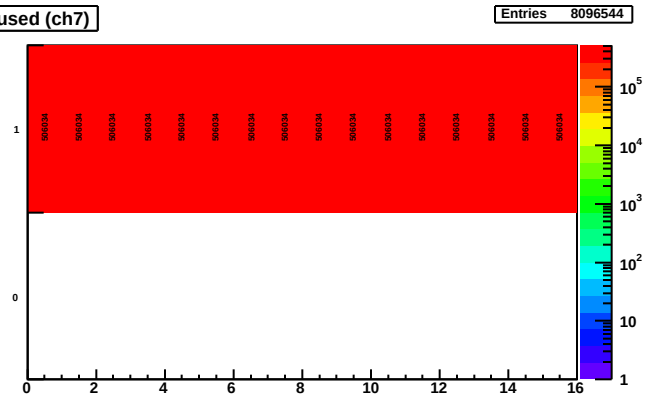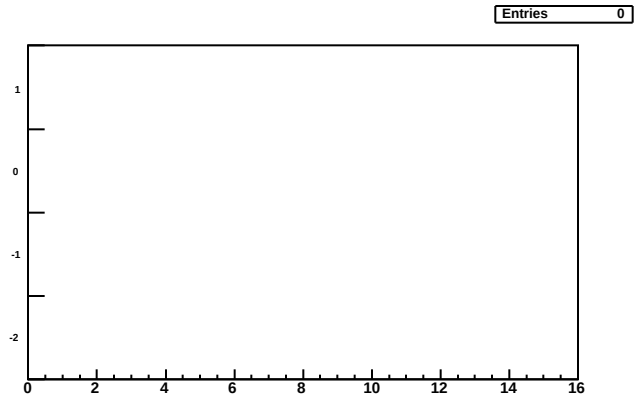
Unused (ch7)