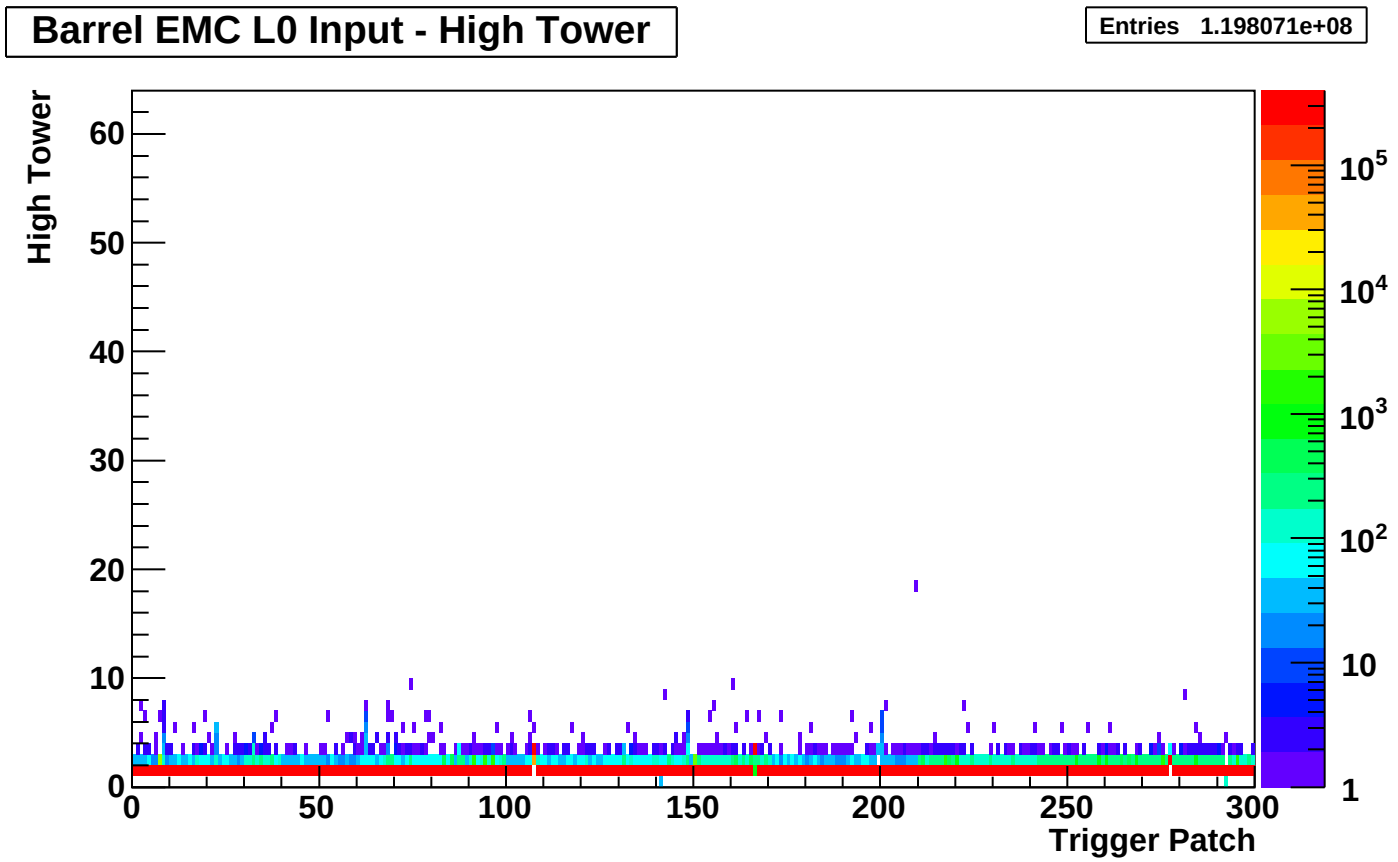
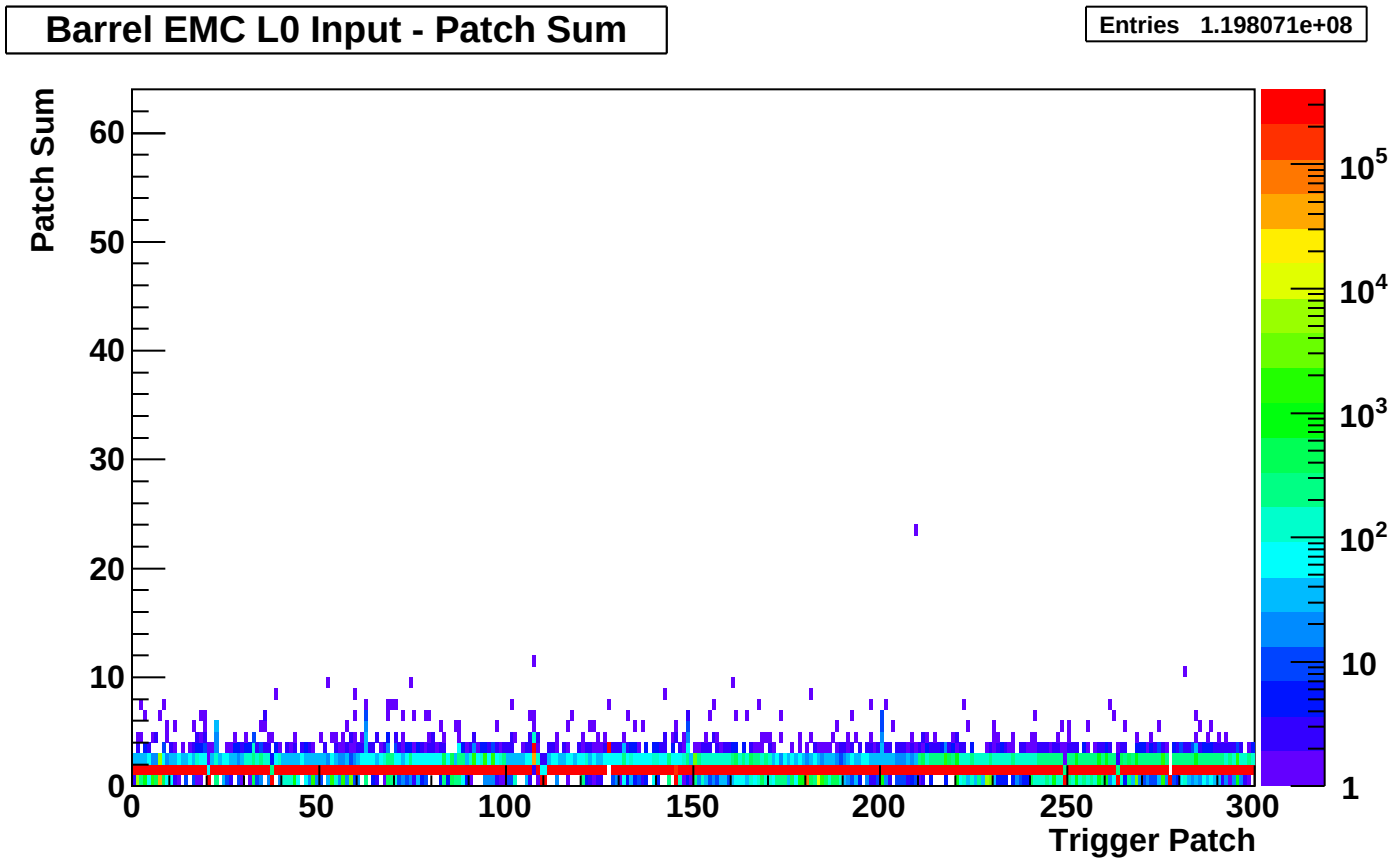
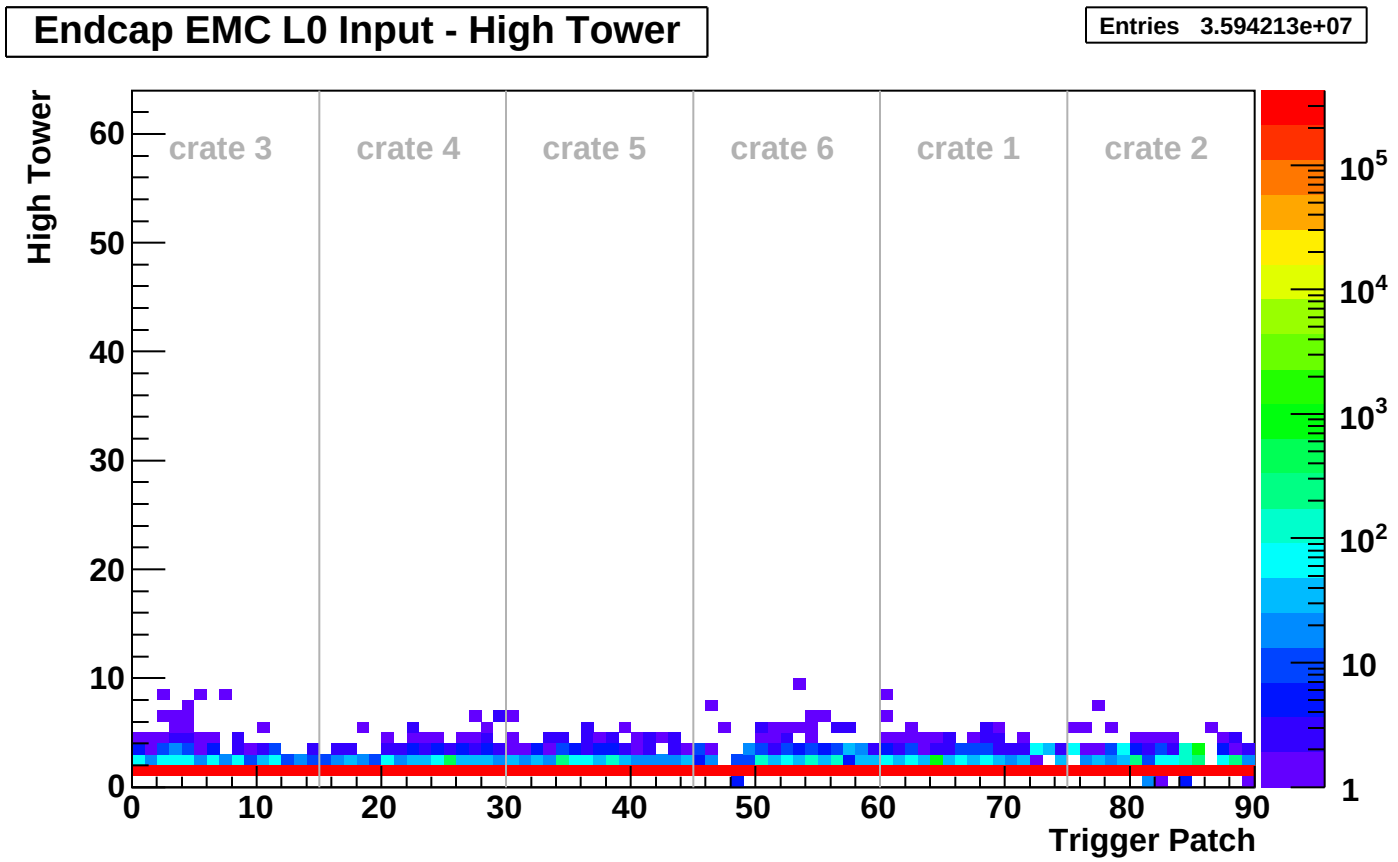
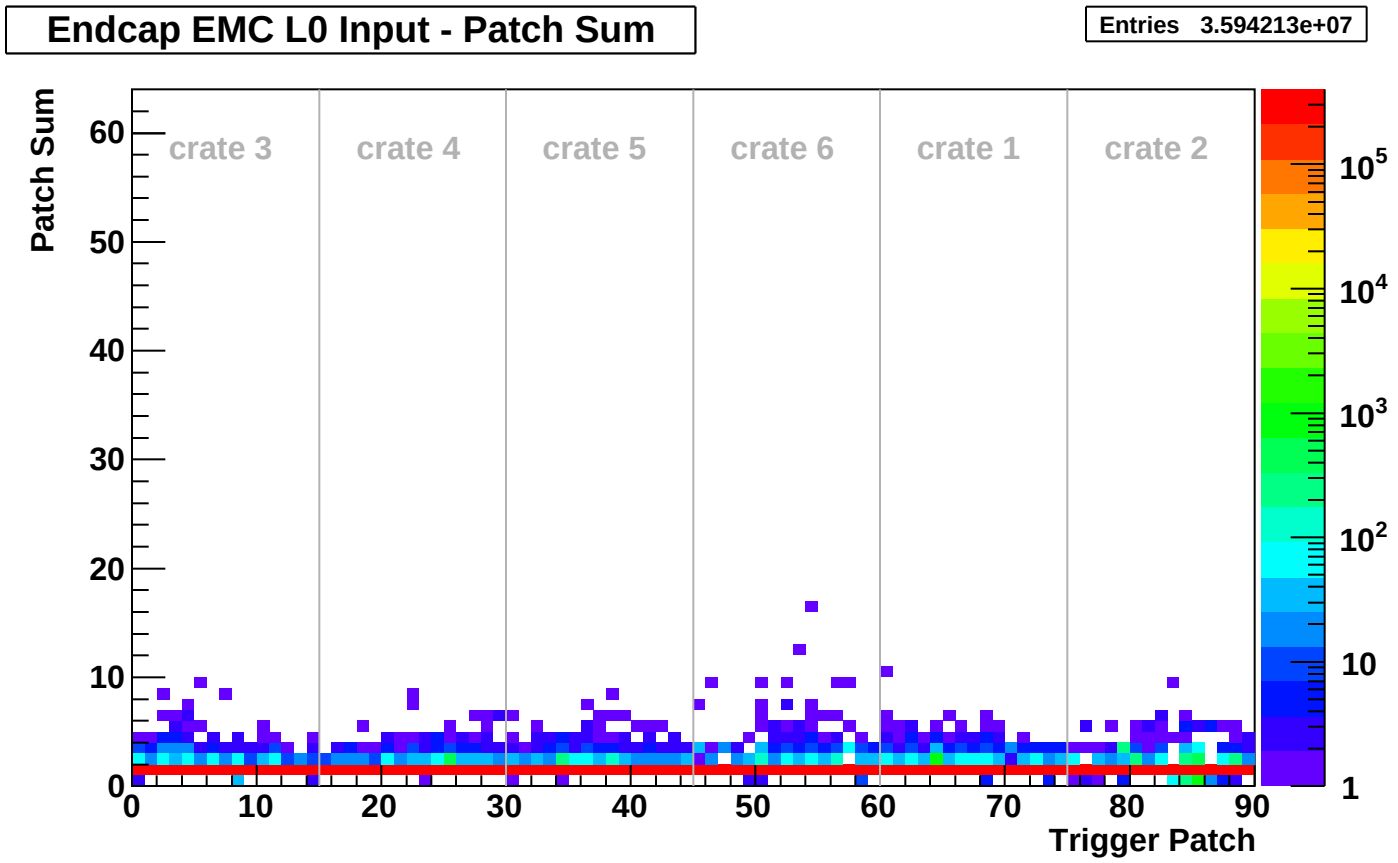
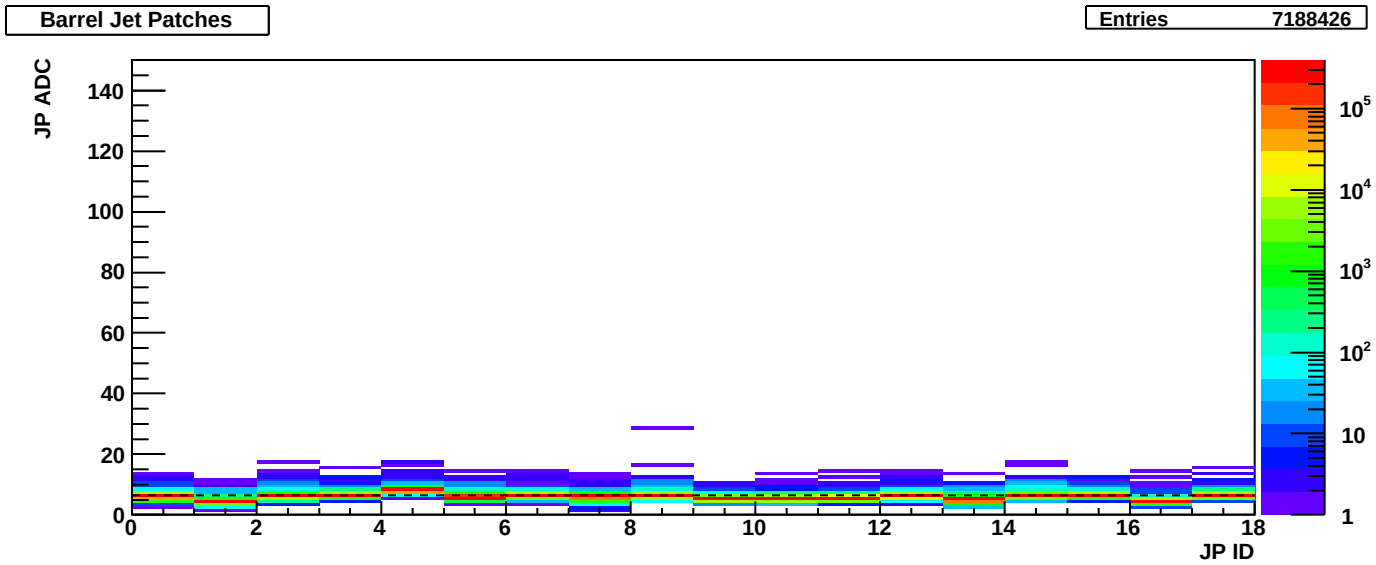
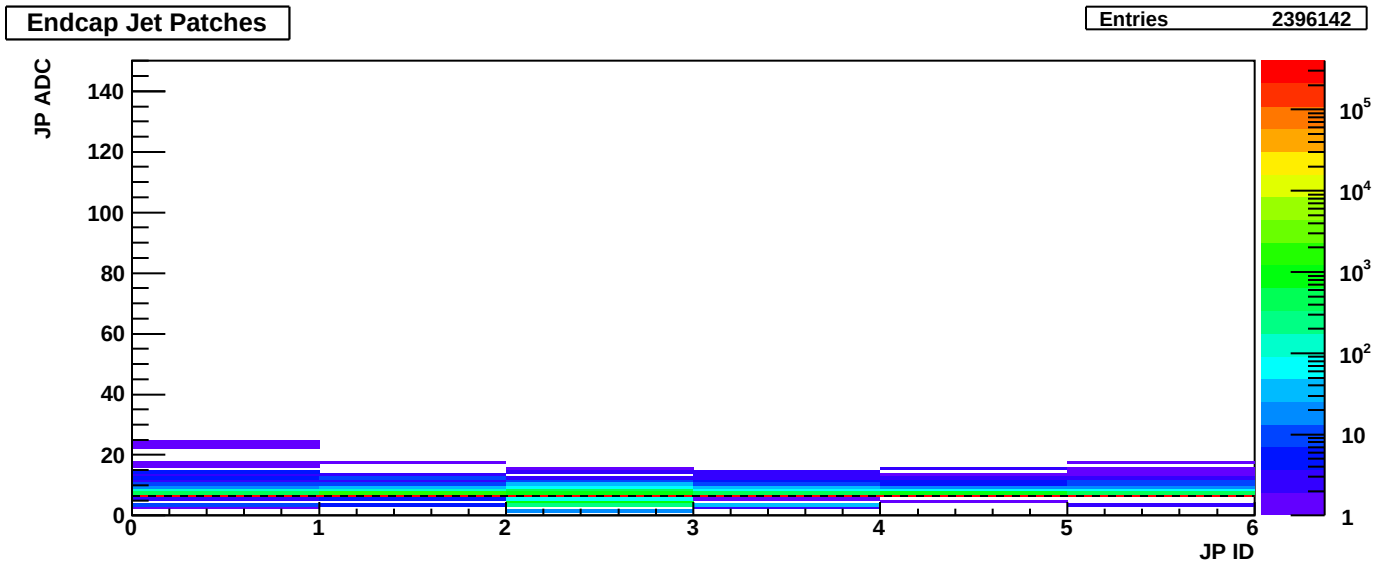

Barrel EMC L0 Input - High Tower
Entries 1.198071e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

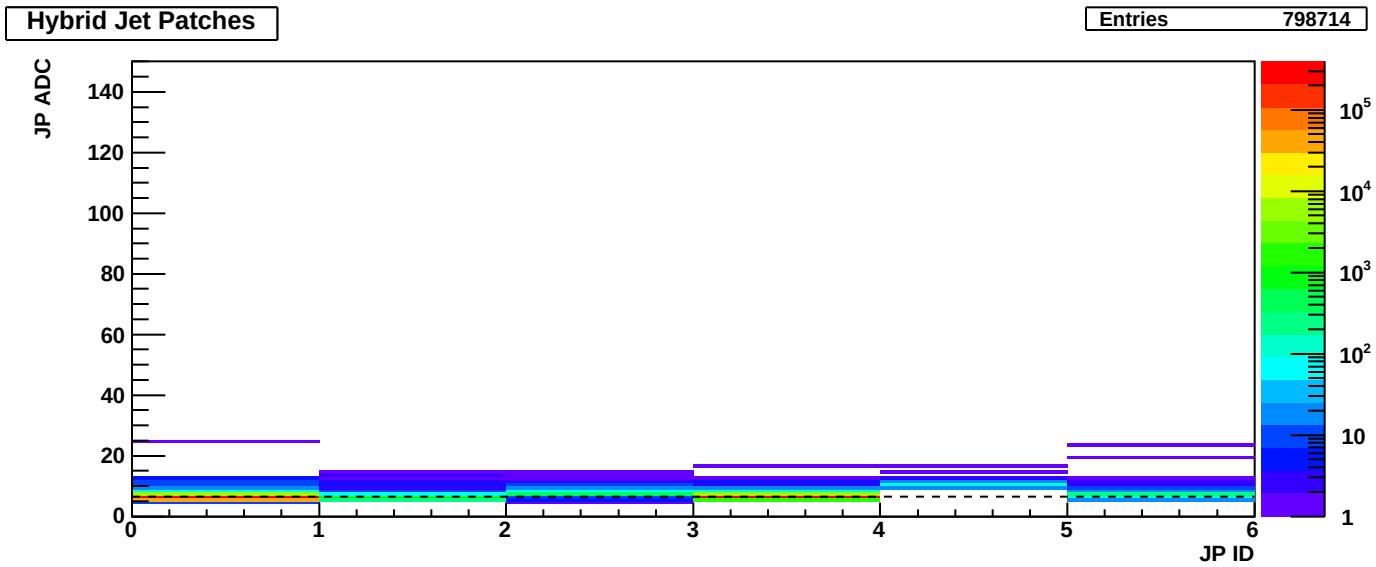

Barrel EMC L0 Input - Patch Sum
Entries 1.198071e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

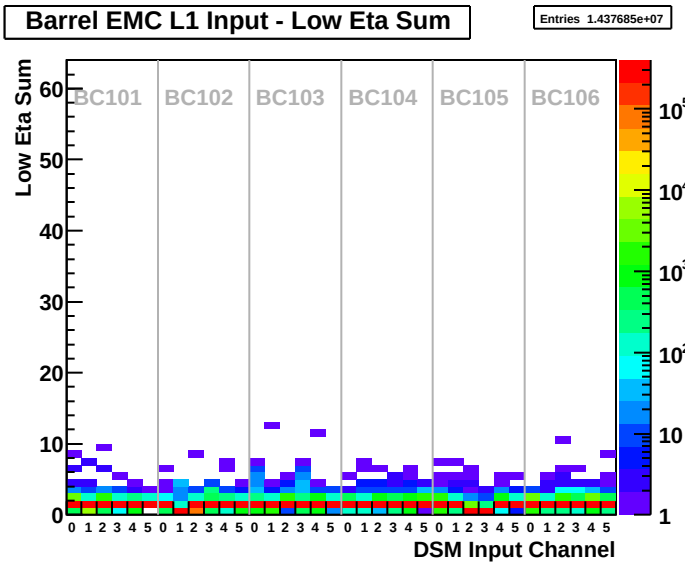

Endcap EMC L0 Input - High Tower
Entries 3.594213e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

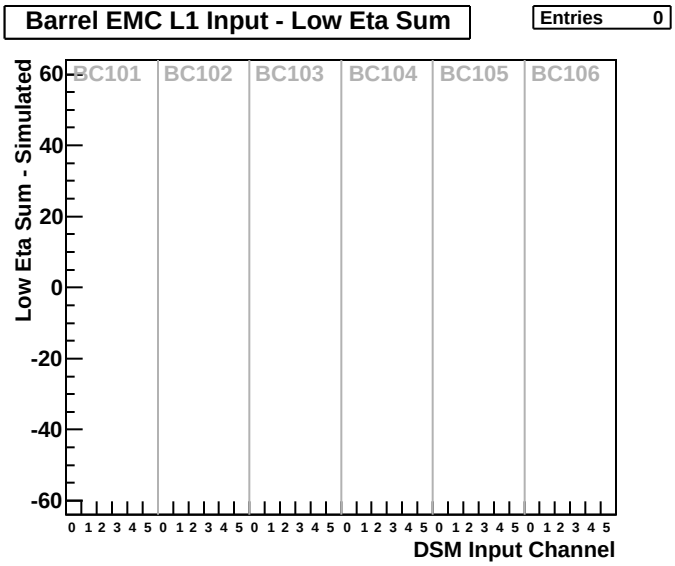

Endcap EMC L0 Input - Patch Sum
Entries 3.594213e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

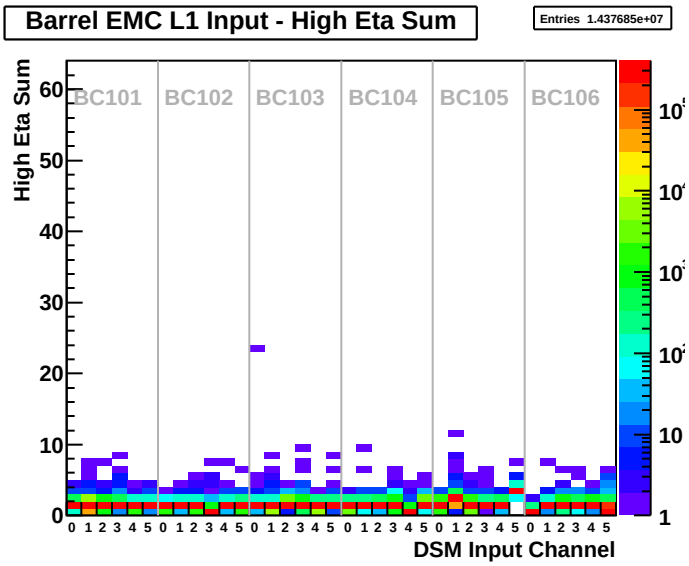

Barrel Jet Patches
Entries 7188426
JP ADC
JP ID

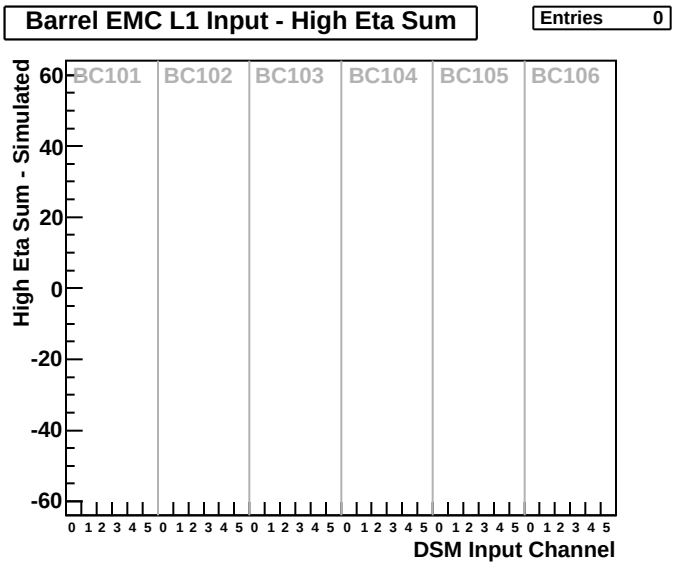

Endcap Jet Patches
Entries 2396142
JP ADC
JP ID

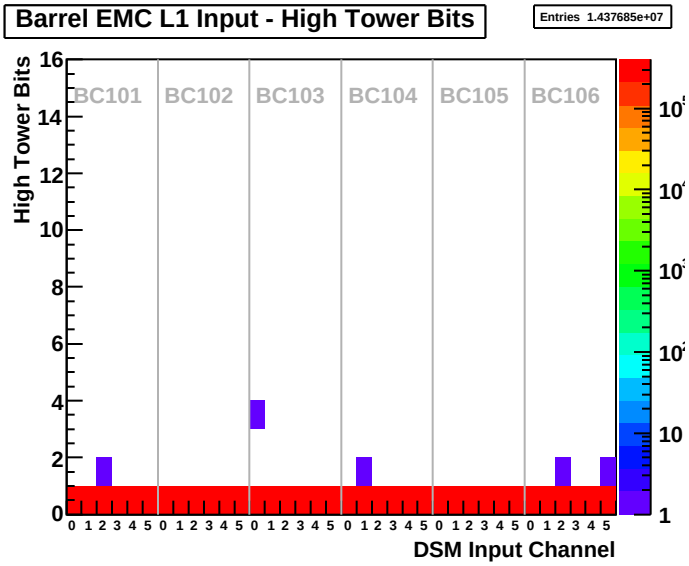

Hybrid Jet Patches
Entries 798714
JP ADC
JP ID

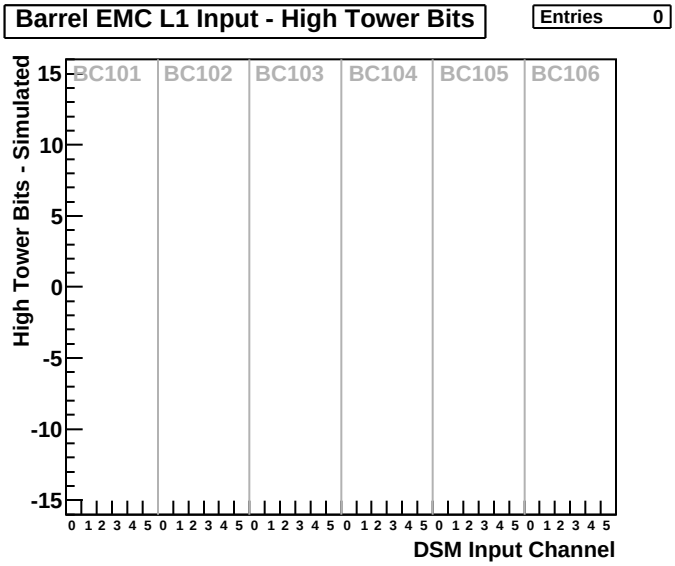

Barrel EMC L1 Input - Low Eta Sum
Entries 1.437685e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

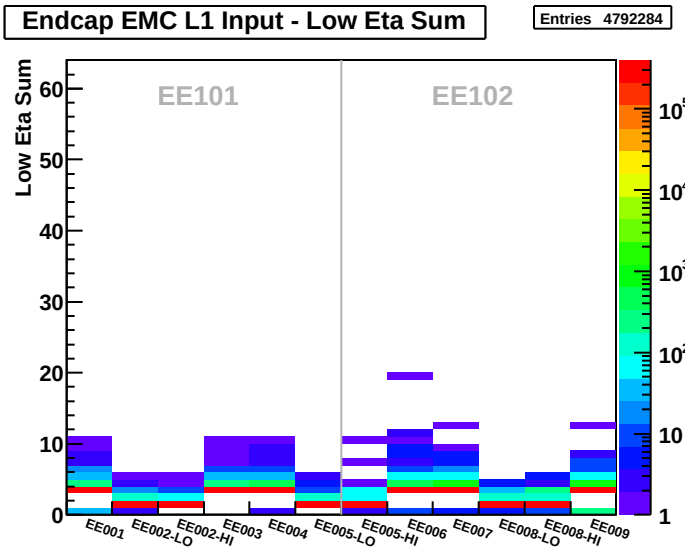

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

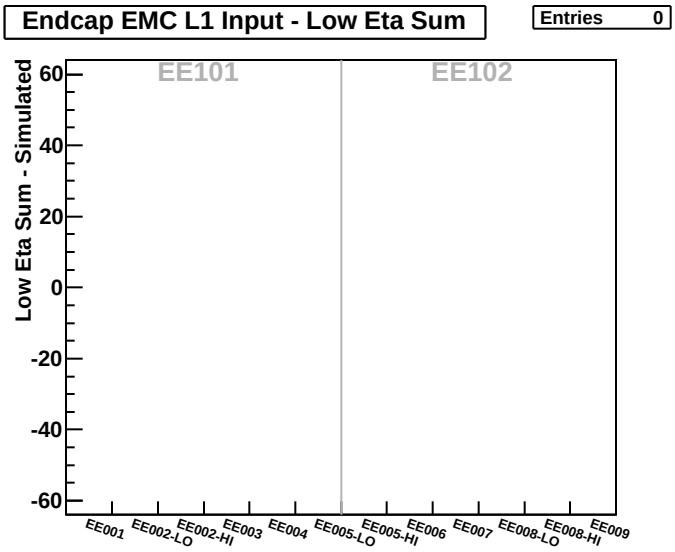

Barrel EMC L1 Input - High Eta Sum
Entries 1.437685e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

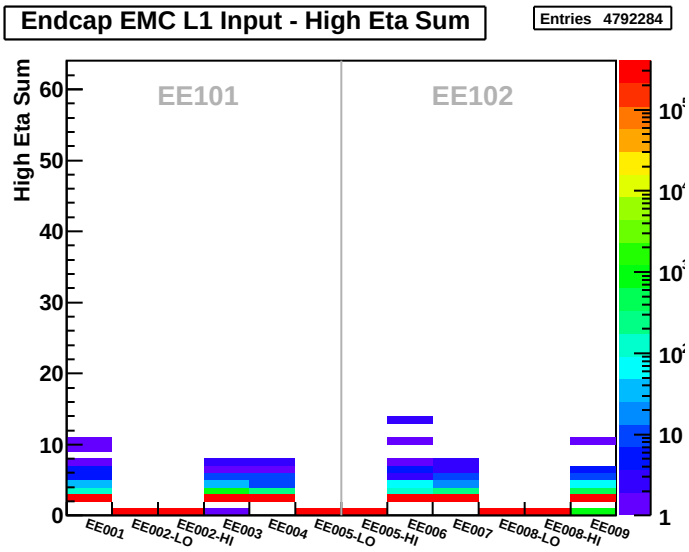

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

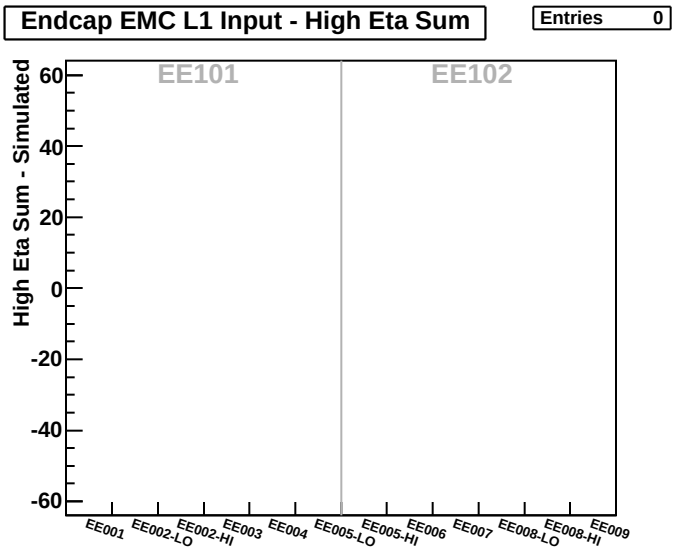

Barrel EMC L1 Input - High Tower Bits
Entries 1.437685e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

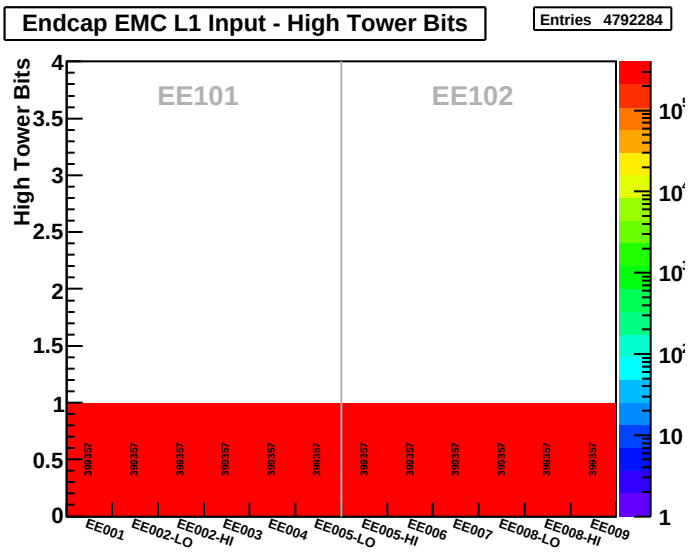

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

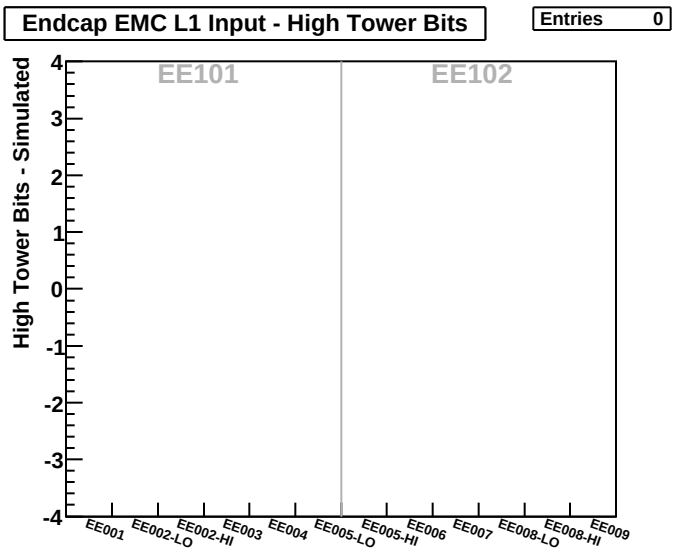

Endcap EMC L1 Input - Low Eta Sum
Entries 4792284
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

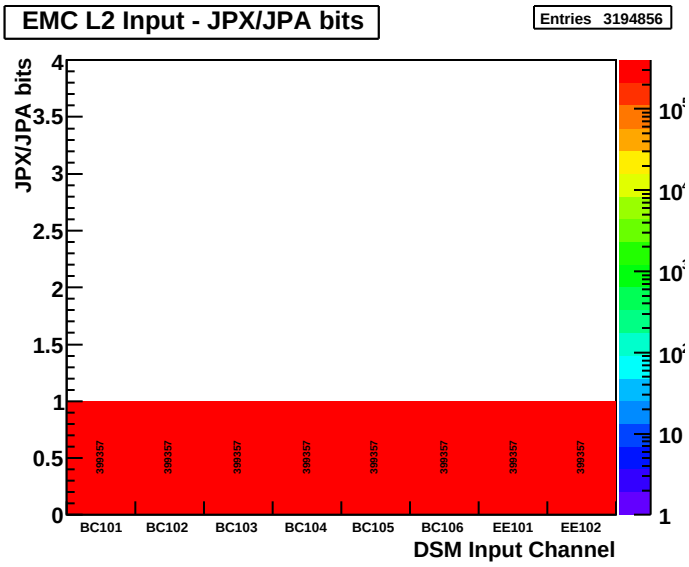

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

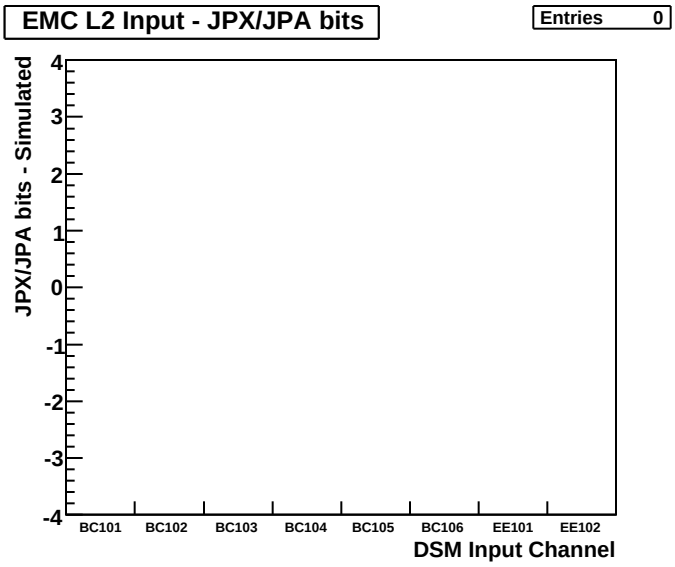

Endcap EMC L1 Input - High Eta Sum
Entries 4792284
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

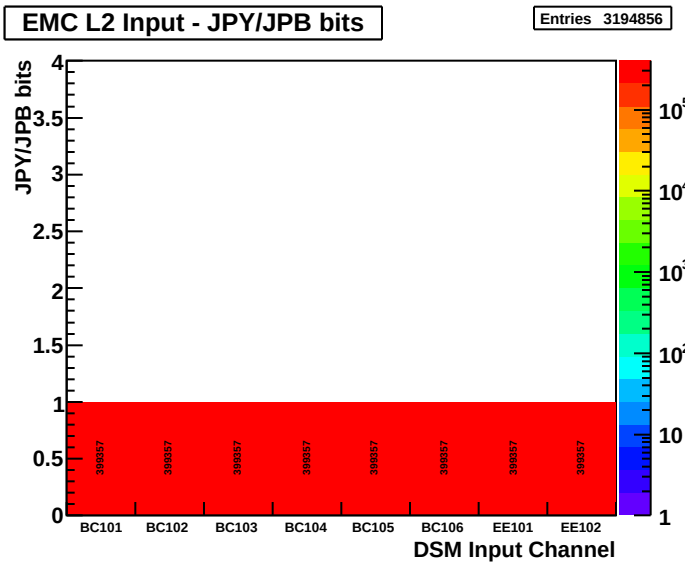

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

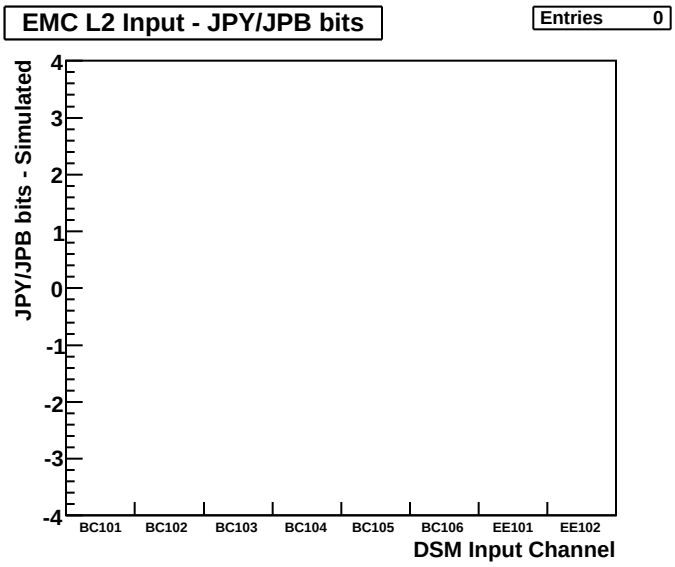

Endcap EMC L1 Input - High Tower Bits
Entries 4792284
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

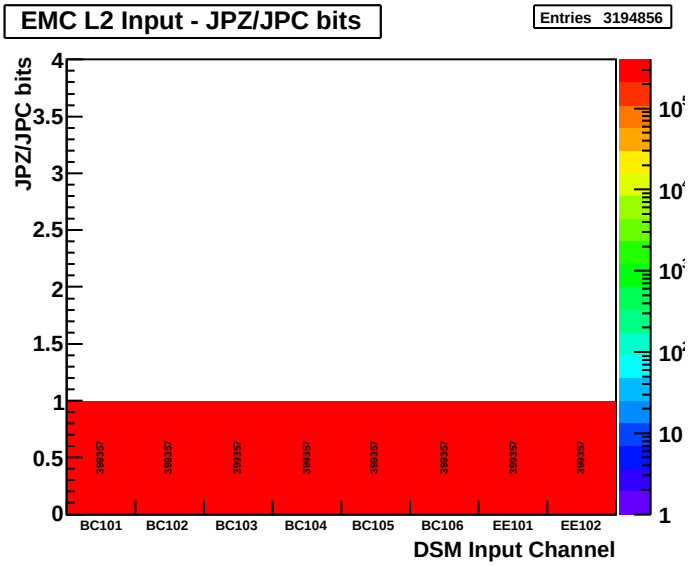

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

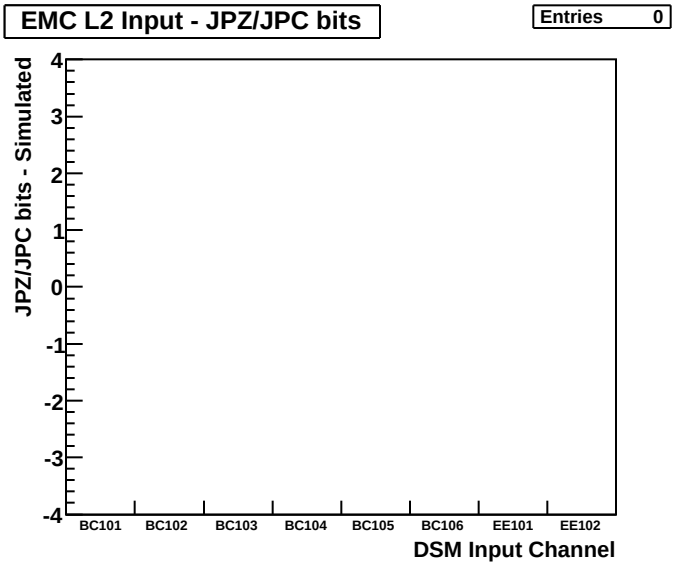

EMC L2 Input - JPX/JPA bits
Entries 3194856
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
399357

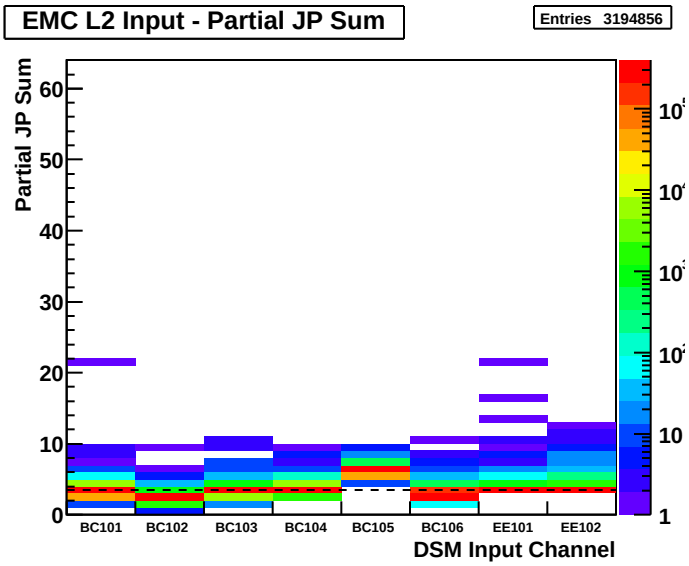

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

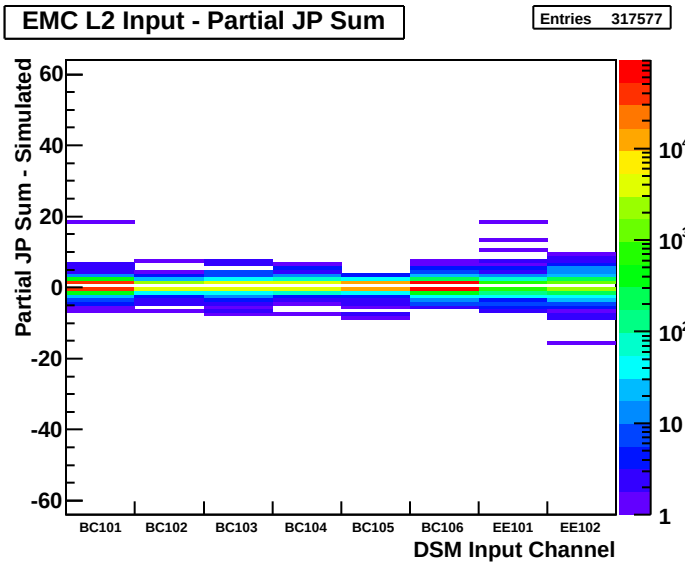

EMC L2 Input - JPY/JPB bits
Entries 3194856
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
399357

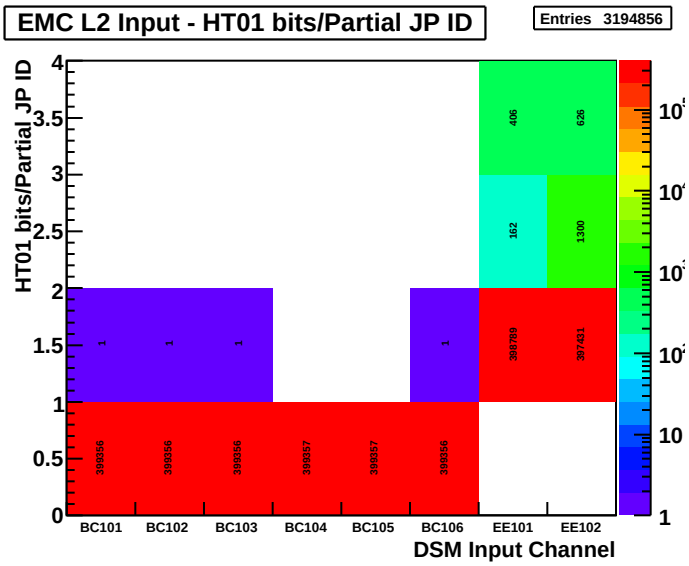

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

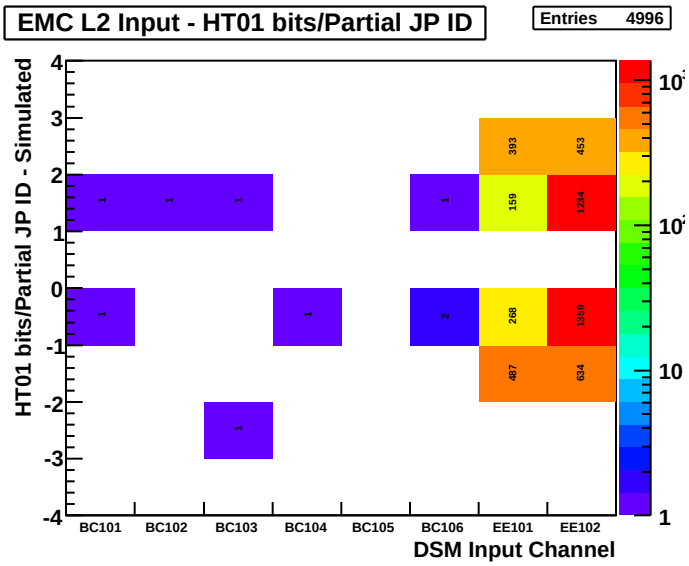

EMC L2 Input - JPZ/JPC bits
Entries 3194856
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
399357

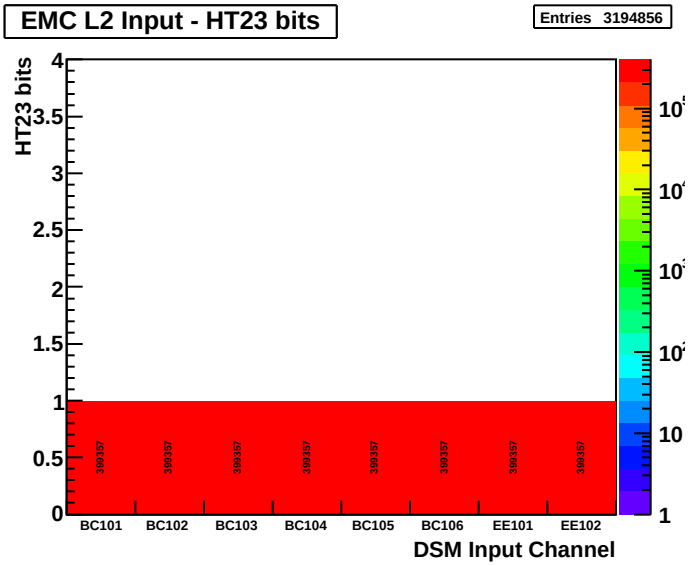

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

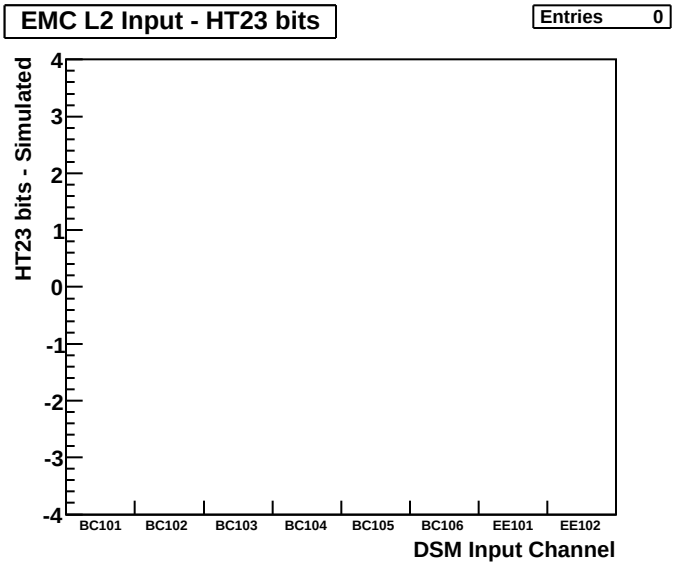

EMC L2 Input - Partial JP Sum
Entries 3194856
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

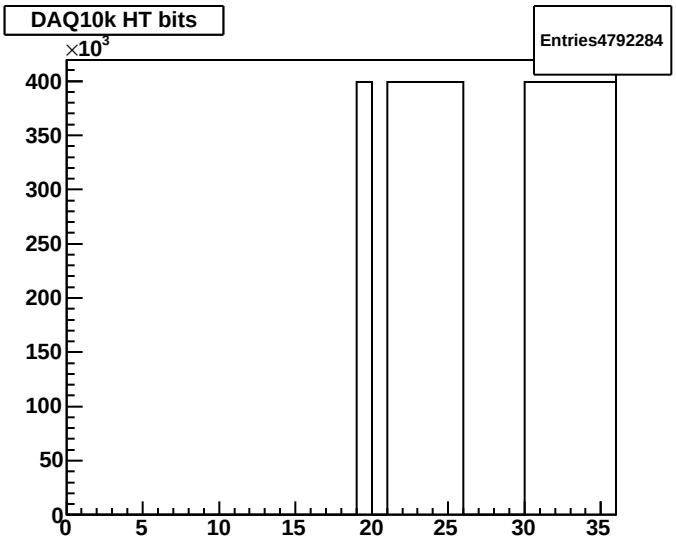

EMC L2 Input - Partial JP Sum
Entries 317577
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

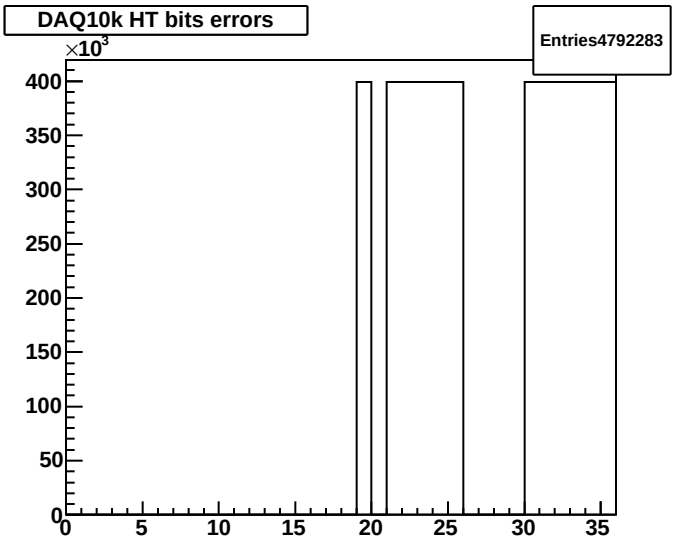

EMC L2 Input - HT01 bits/Partial JP ID
Entries 3194856
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

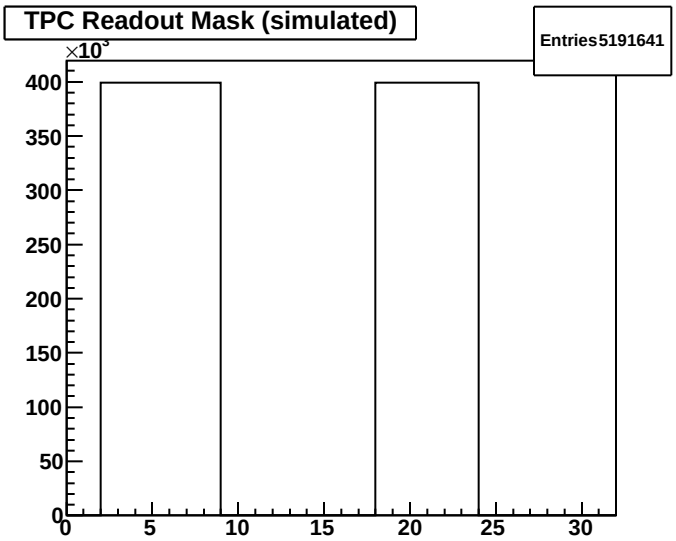

EMC L2 Input - HT01 bits/Partial JP ID
Entries 4996
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

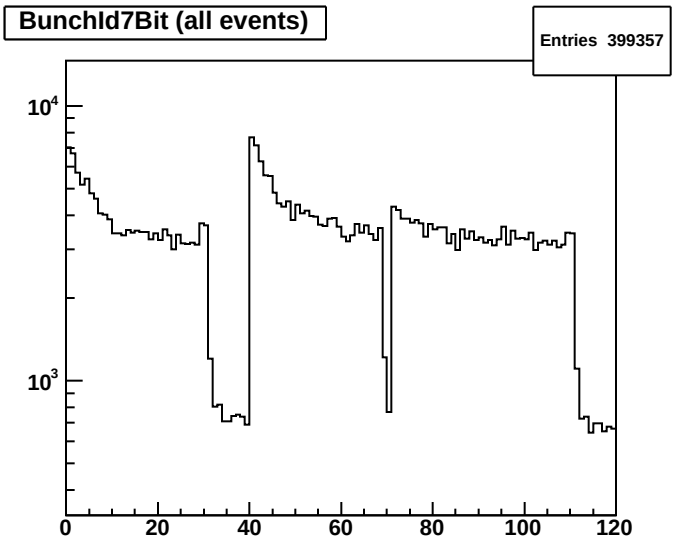

EMC L2 Input - HT23 bits
Entries 3194856
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

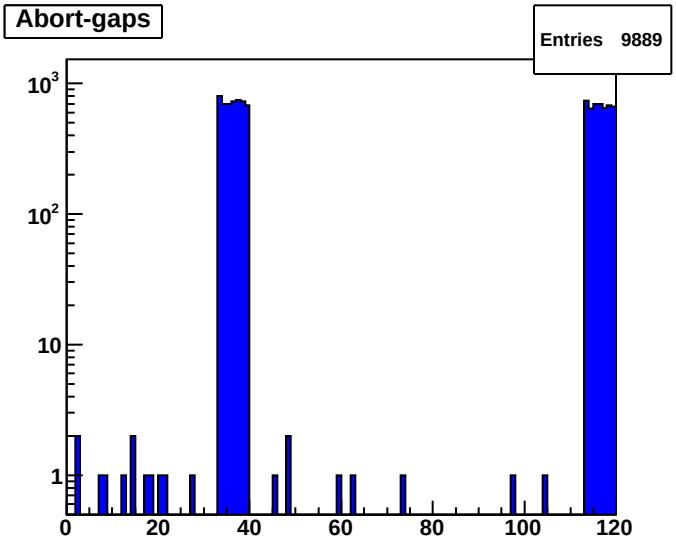

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

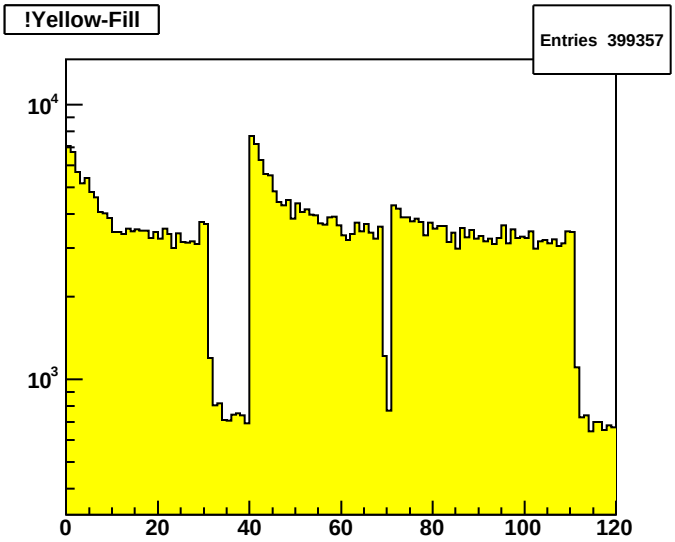

DAQ10k HT bits
Entries4792284
×10^3
400
350
300
250
200
150
100
50
0
0 5 10 15 20 25 30 35

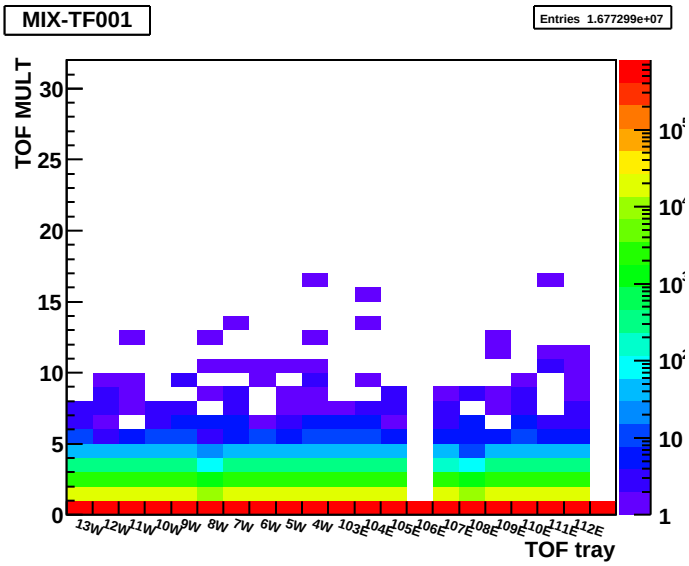

DAQ10k HT bits errors
Entries4792283
×10^3
400
350
300
250
200
150
100
50
0
0 5 10 15 20 25 30 35

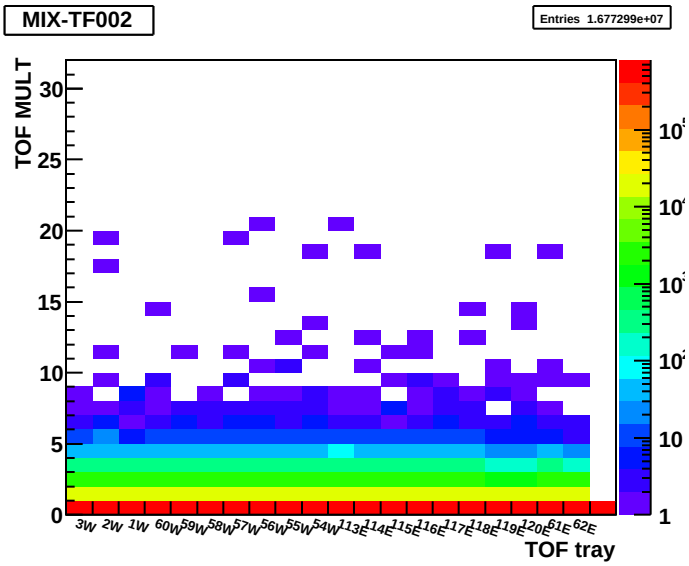

TPC Readout Mask (simulated)
Entries5191641
×10^3
400
350
300
250
200
150
100
50
0
0 5 10 15 20 25 30

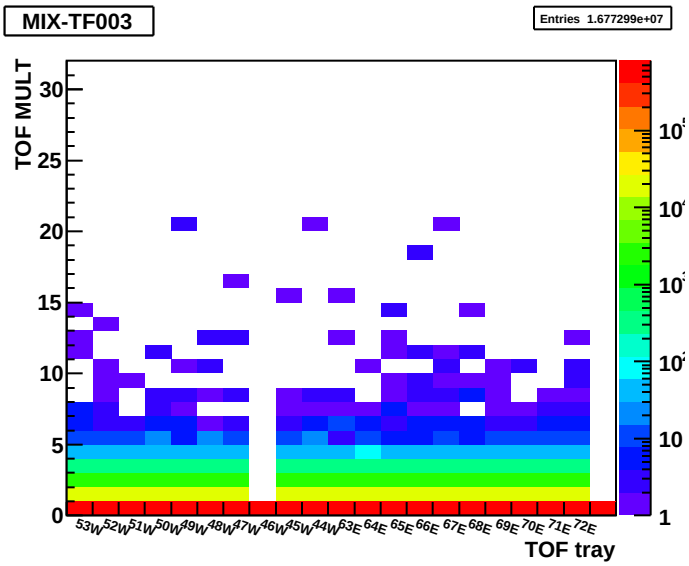

BunchId7Bit (all events)
Entries 399357
10^4
10^3
0 20 40 60 80 100 120

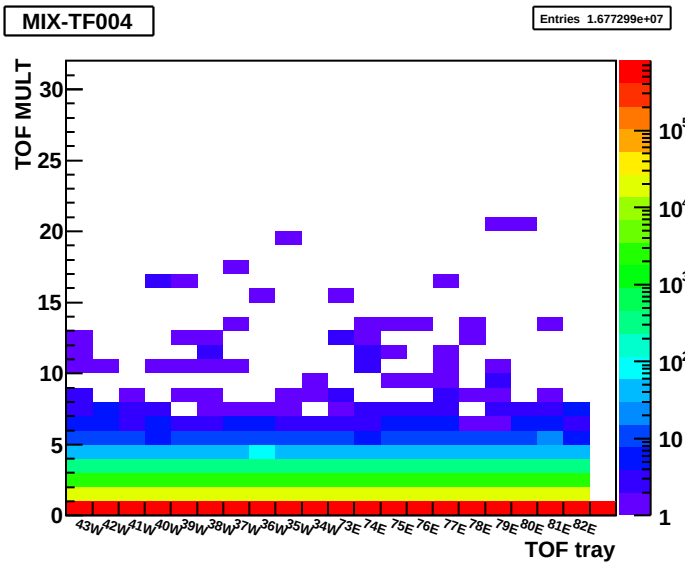

Abort-gaps
Entries 9889
10^3
10^2
10
1
0 20 40 60 80 100 120

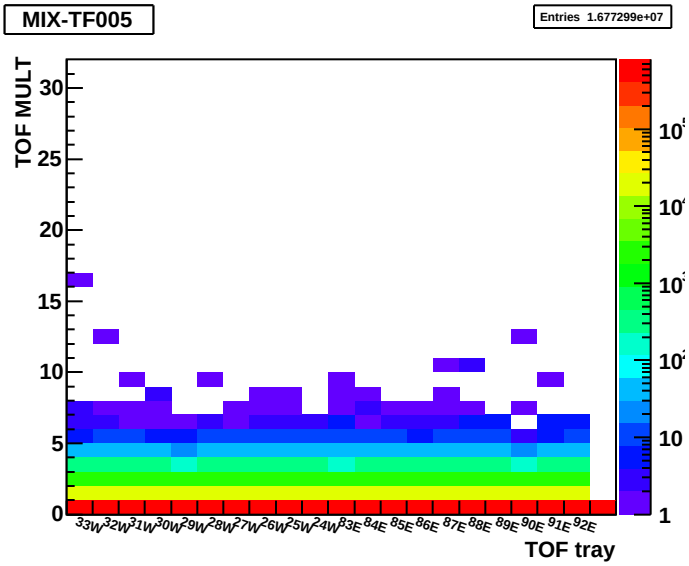

!Yellow-Fill
Entries 399357
10^4
10^3
0 20 40 60 80 100 120

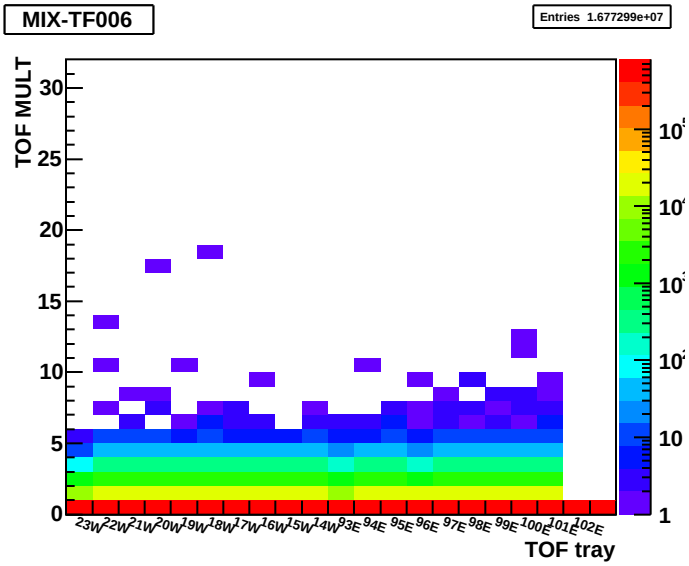

MIX-TF001
Entries 1.677299e+07
TOF MULT
TOF tray

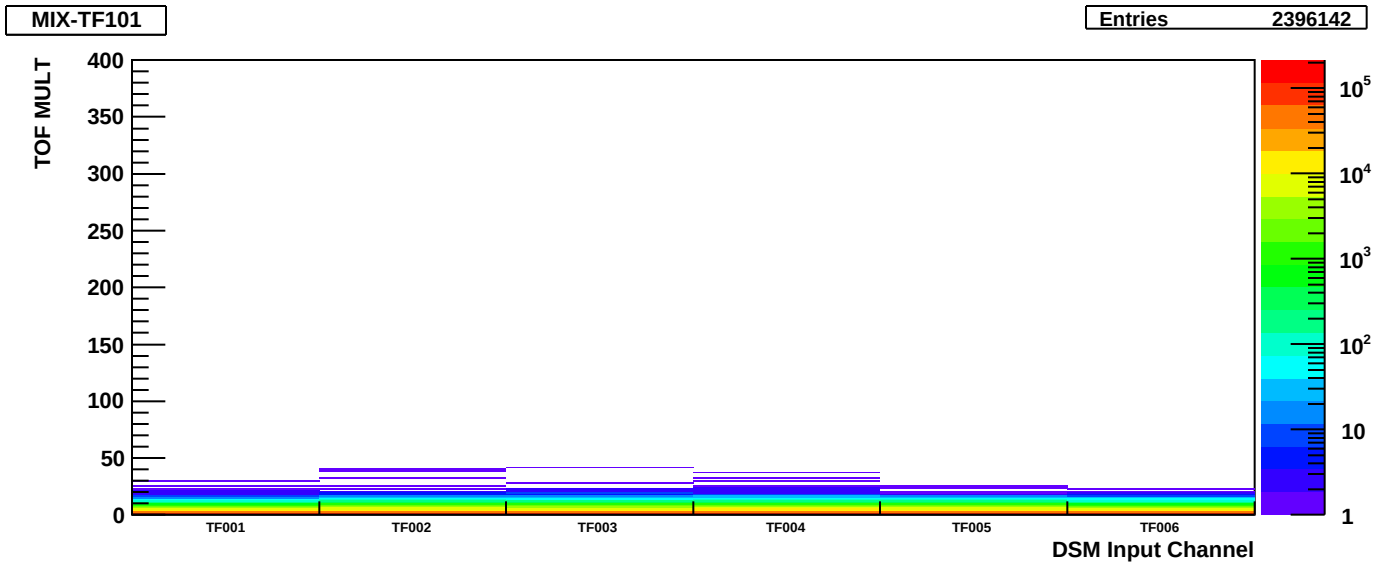

MIX-TF002
Entries 1.677299e+07
TOF MULT
TOF tray

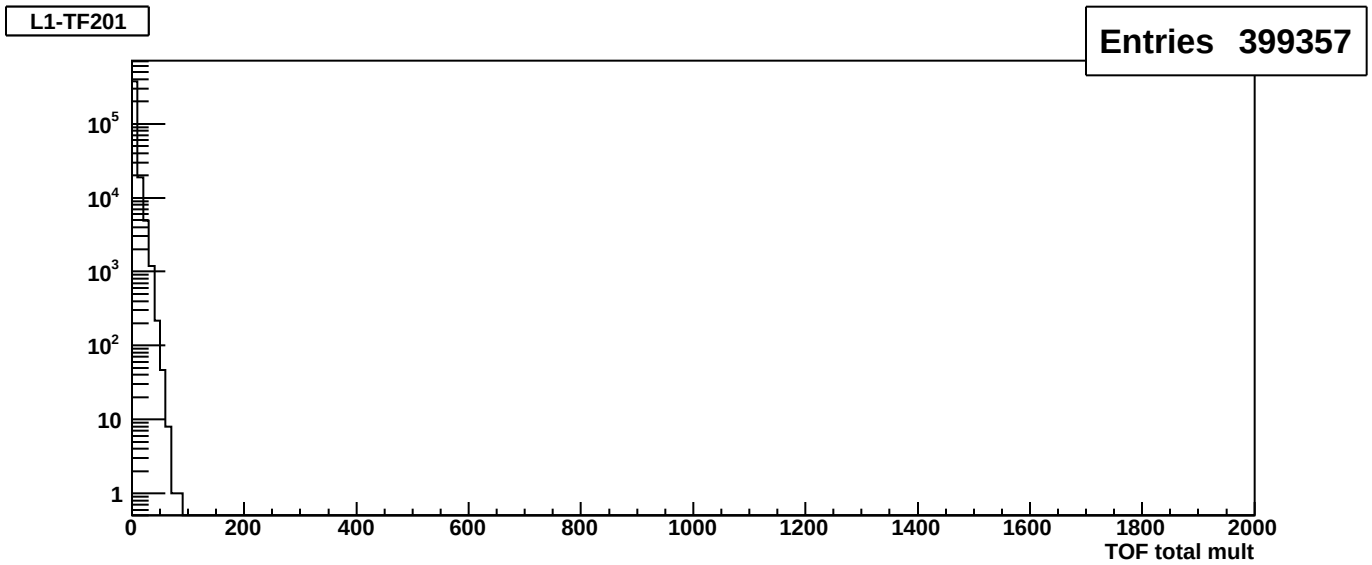

MIX-TF003
Entries 1.677299e+07
TOF MULT
TOF tray

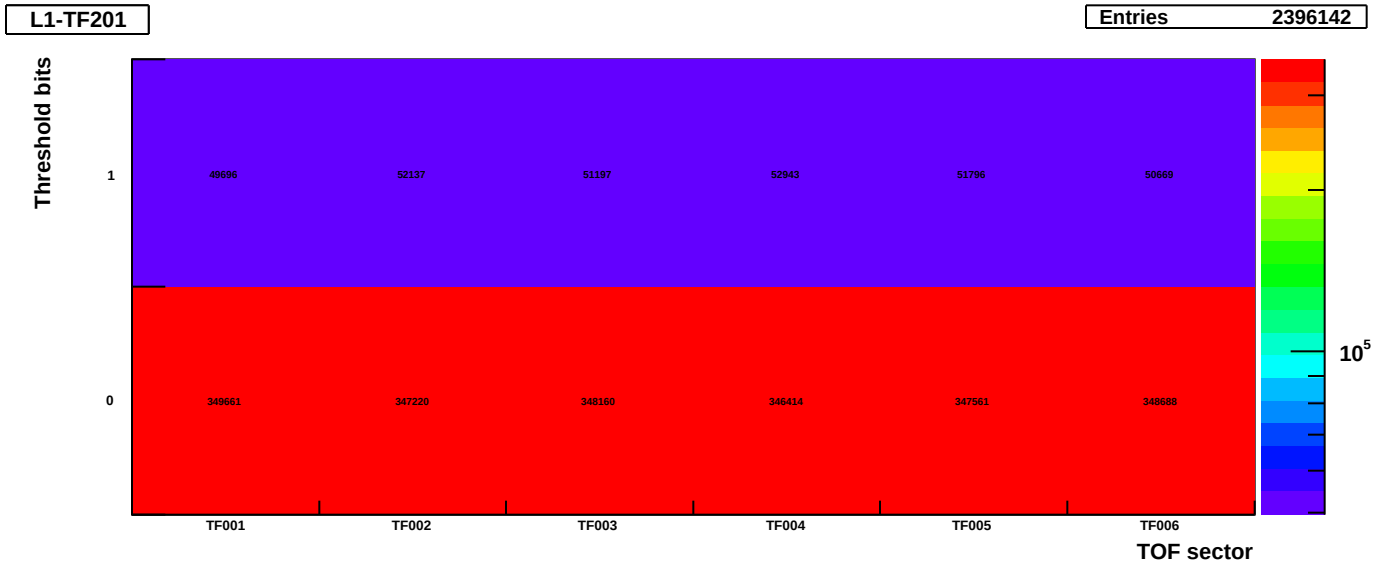

MIX-TF004
Entries 1.677299e+07
TOF MULT
TOF tray

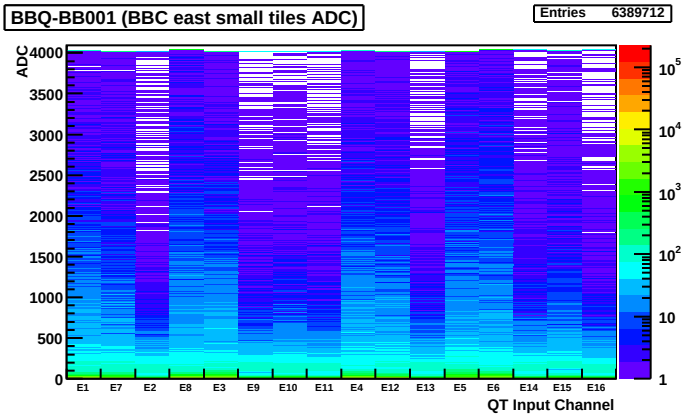

MIX-TF005
Entries 1.677299e+07
TOF MULT
TOF tray

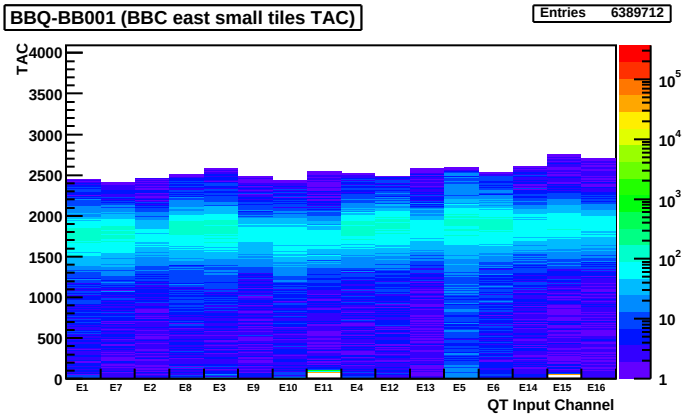

MIX-TF006
Entries 1.677299e+07
TOF MULT
TOF tray

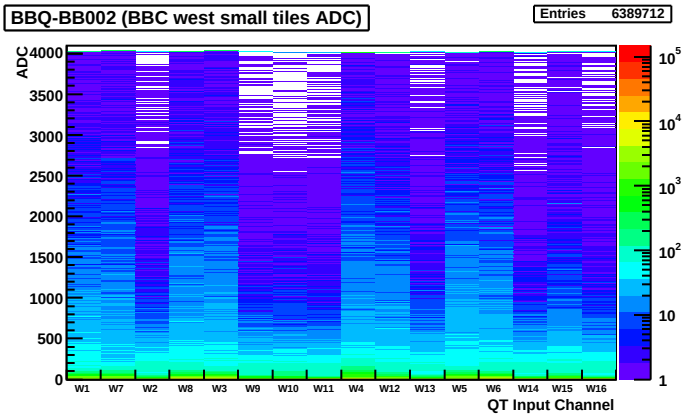

MIX-TF101
Entries 2396142
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

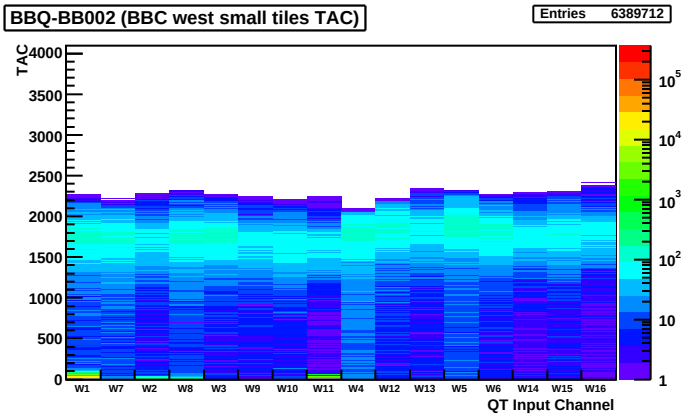

L1-TF201
Entries 399357
10^5
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

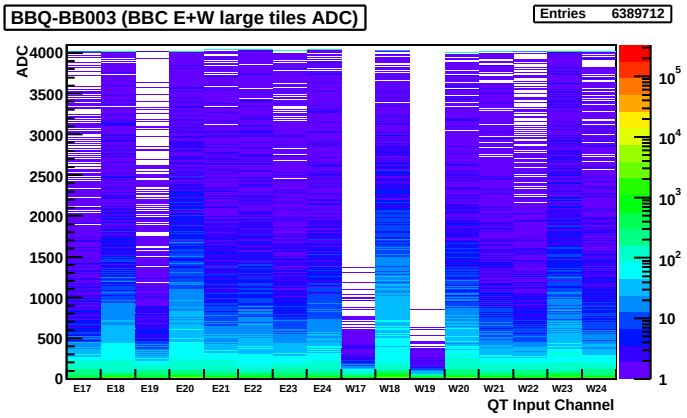

L1-TF201
Entries 2396142
Threshold bits
1
0
49696
52137
51197
52943
51796
50669
349661
347220
348160
346414
347561
348688
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

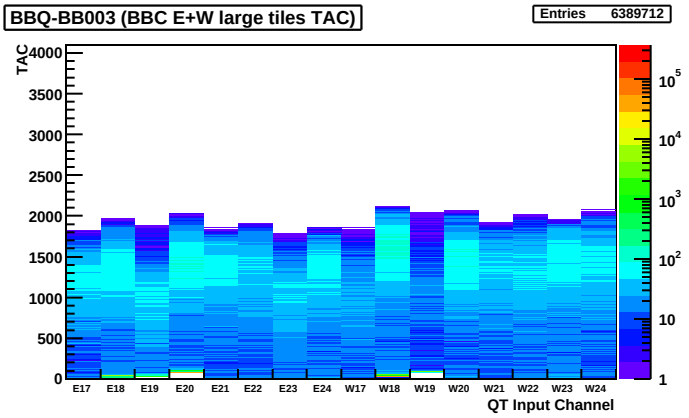

BBQ-BB001 (BBC east small tiles ADC)
Entries 6389712
ADC
QT Input Channel

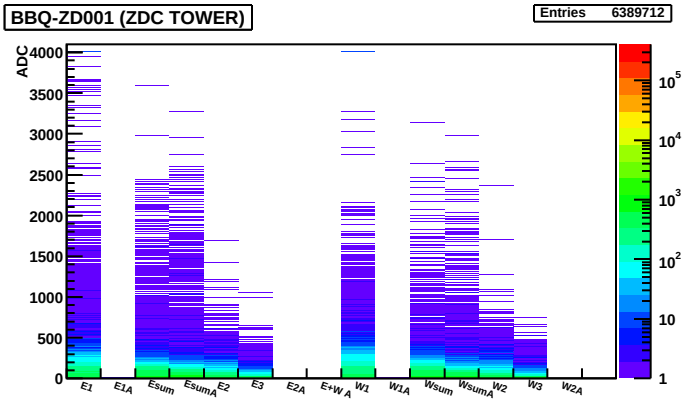

BBQ-BB001 (BBC east small tiles TAC)
Entries 6389712
TAC
QT Input Channel

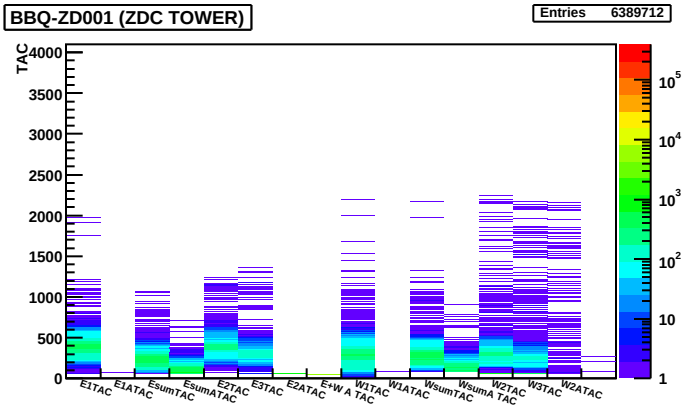

BBQ-BB002 (BBC west small tiles ADC)
Entries 6389712
ADC
QT Input Channel

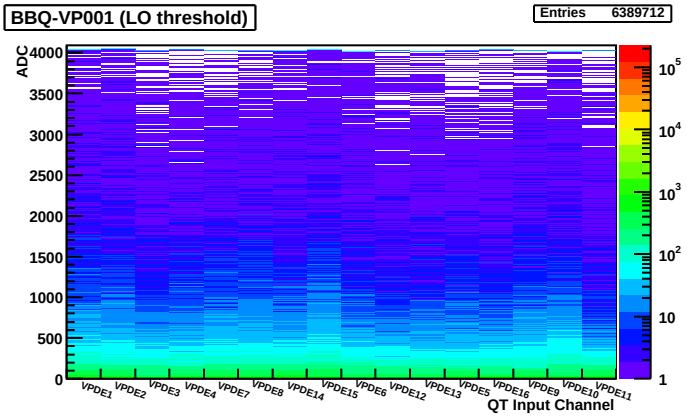

BBQ-BB002 (BBC west small tiles TAC)
Entries 6389712
TAC
QT Input Channel

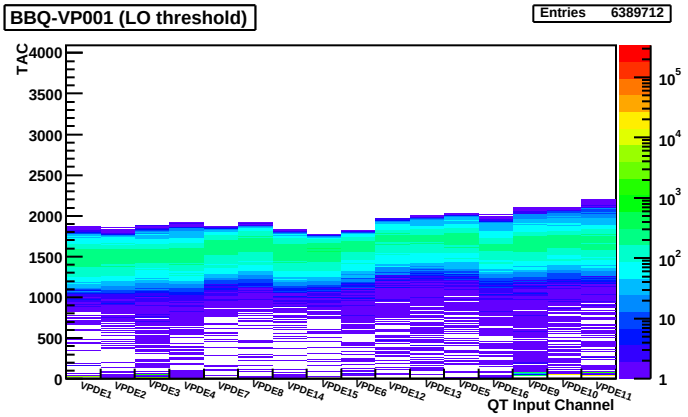

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 6389712
ADC
QT Input Channel

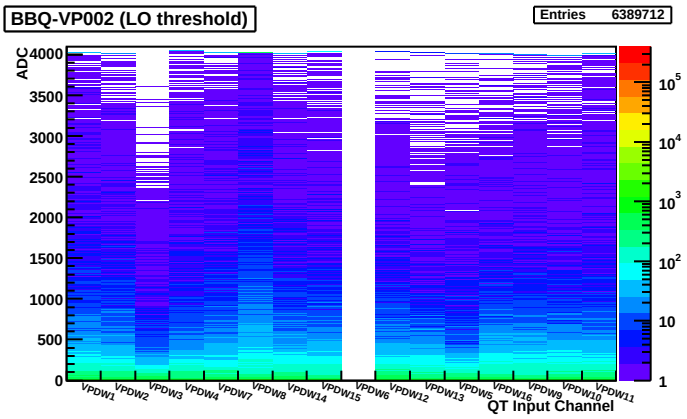

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 6389712
TAC
QT Input Channel

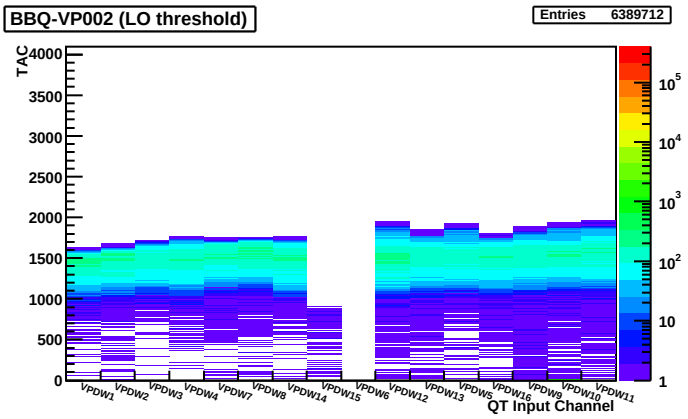

BBQ-ZD001 (ZDC TOWER)
Entries 6389712
ADC

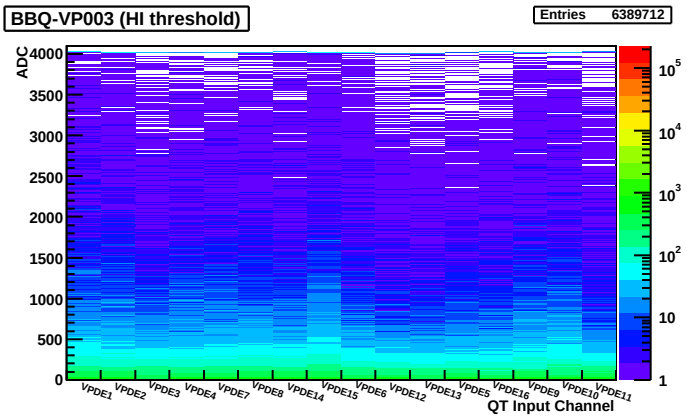

BBQ-ZD001 (ZDC TOWER)
Entries 6389712
TAC

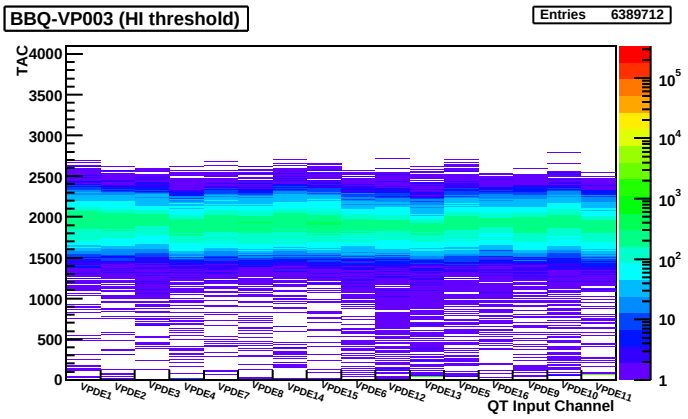

BBQ-VP001 (LO threshold)
Entries 6389712
ADC
QT Input Channel

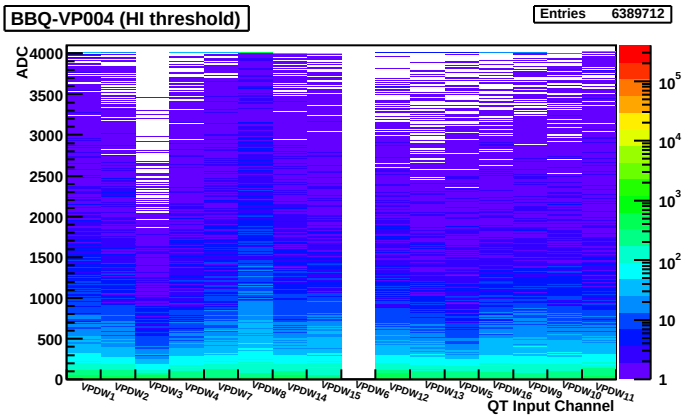

BBQ-VP001 (LO threshold)
Entries 6389712
TAC
QT Input Channel

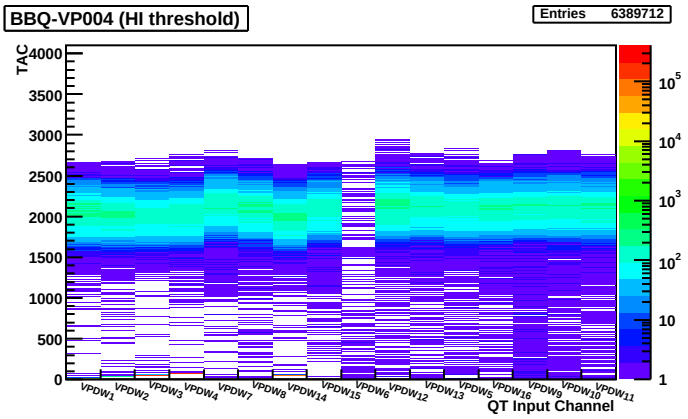

BBQ-VP002 (LO threshold)
Entries 6389712
ADC
QT Input Channel

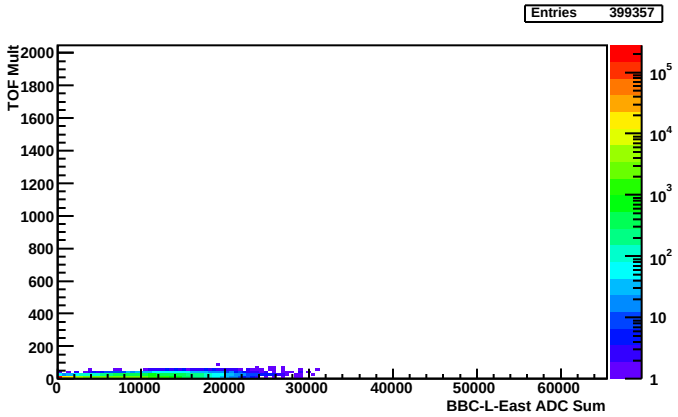

BBQ-VP002 (LO threshold)
Entries 6389712
TAC
QT Input Channel

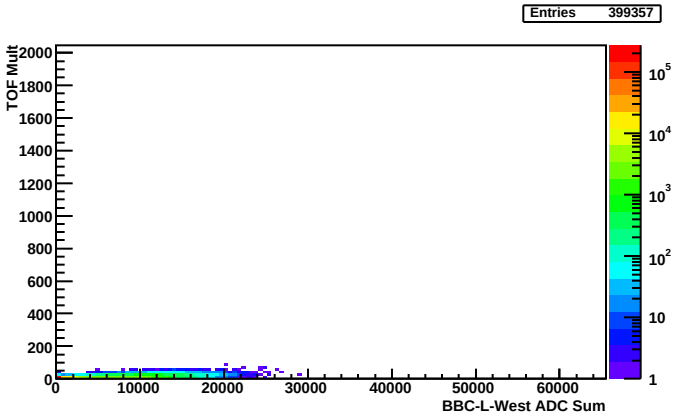

BBQ-VP003 (HI threshold)
Entries 6389712
ADC
QT Input Channel

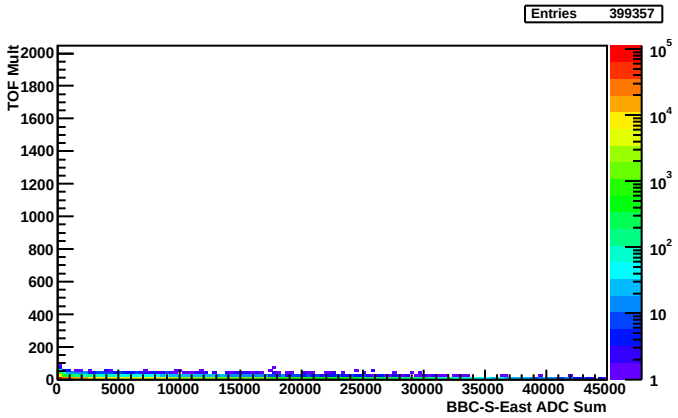

BBQ-VP003 (HI threshold)
Entries 6389712
TAC
QT Input Channel

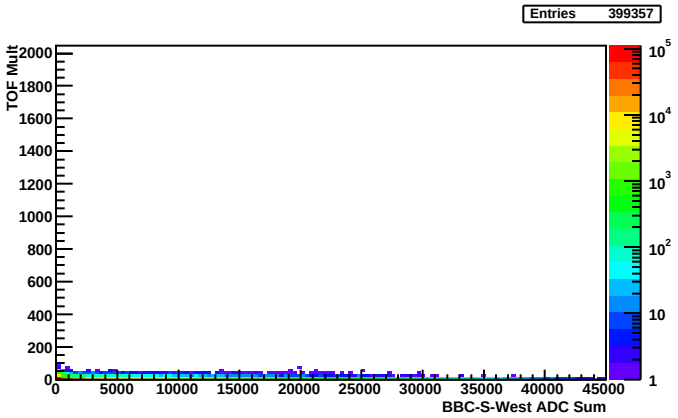

BBQ-VP004 (HI threshold)
Entries 6389712
ADC
QT Input Channel

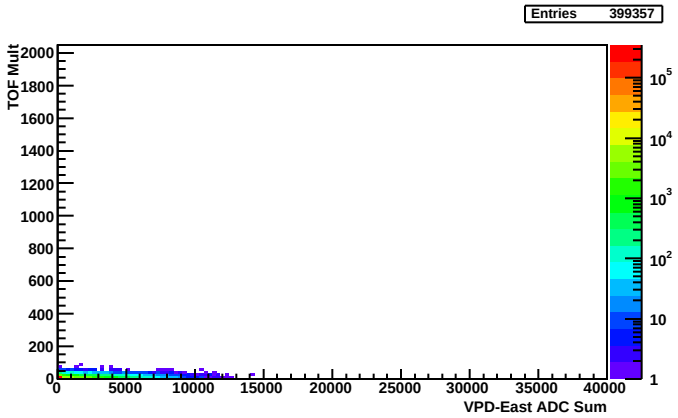

BBQ-VP004 (HI threshold)
Entries 6389712
TAC
QT Input Channel

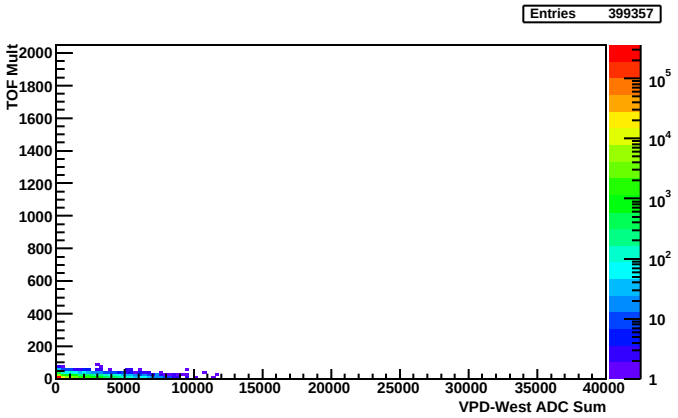

Entries 399357
TOF Mult
BBC-L-East ADC Sum

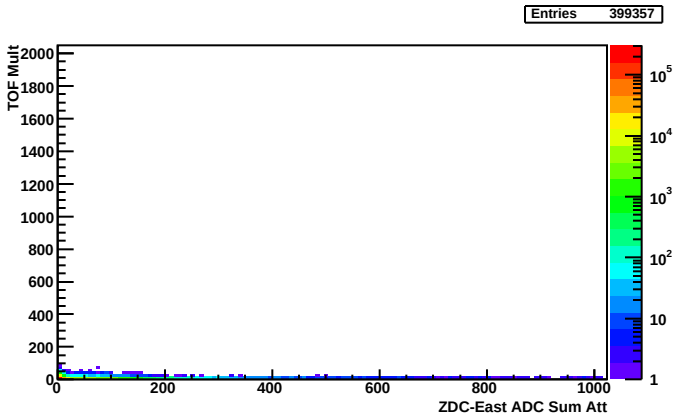

Entries 399357
TOF Mult
BBC-L-West ADC Sum

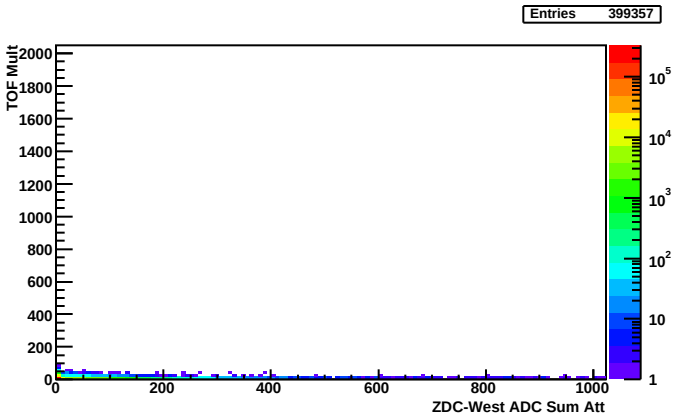

Entries 399357
TOF Mult
BBC-S-East ADC Sum

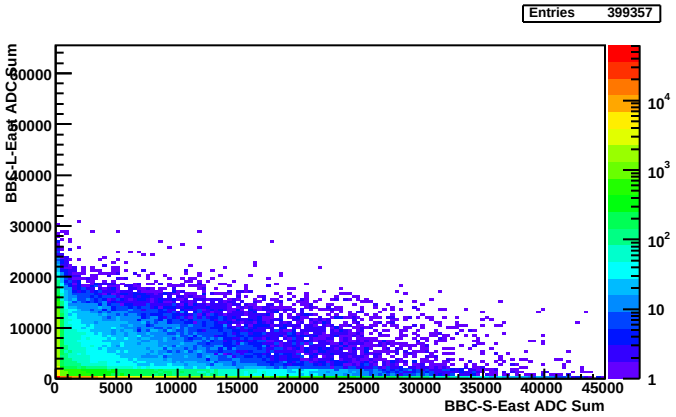

Entries 399357
TOF Mult
BBC-S-West ADC Sum

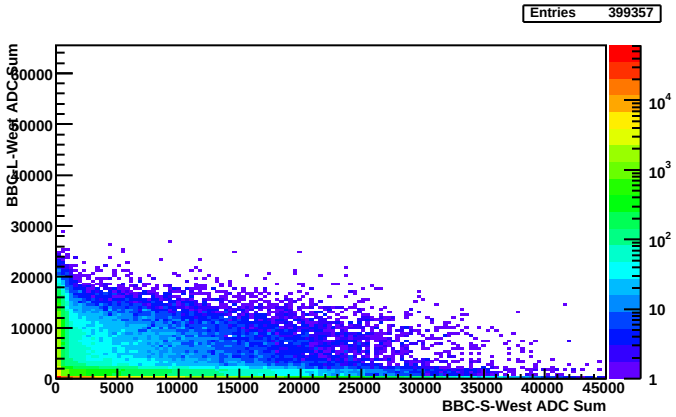

Entries 399357
TOF Mult
VPD-East ADC Sum

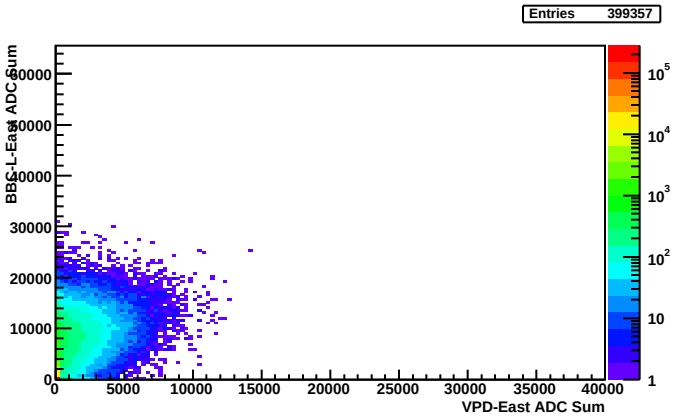

Entries 399357
TOF Mult
VPD-West ADC Sum

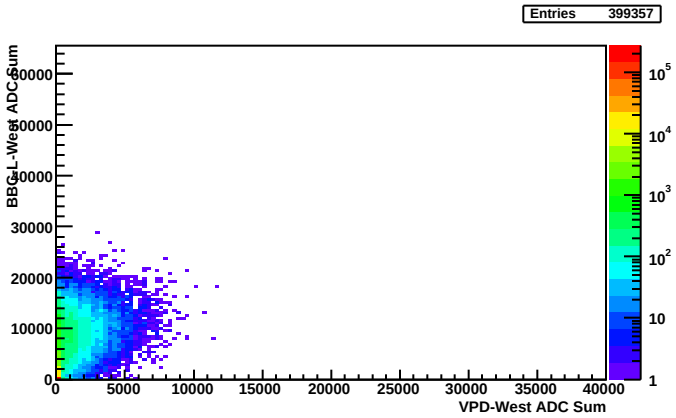

Entries 399357
TOF Mult
ZDC-East ADC Sum Att

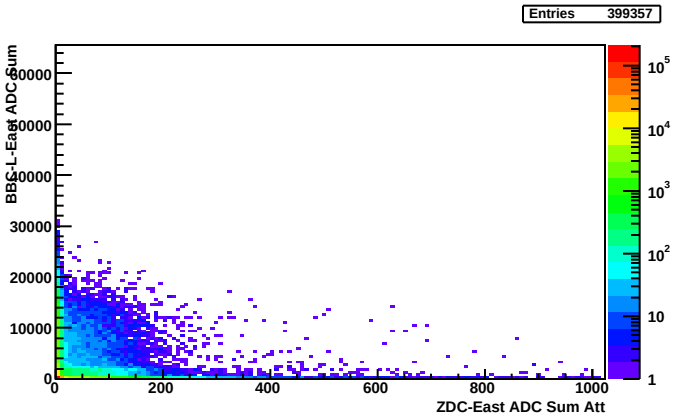

Entries 399357
TOF Mult
ZDC-West ADC Sum Att

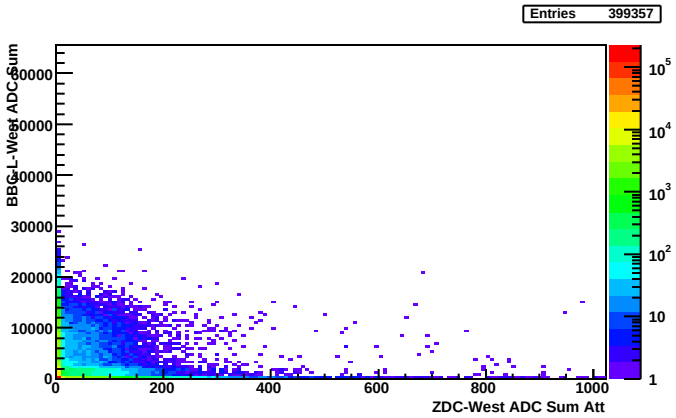

Entries 399357
BBC-L-East ADC Sum
BBC-S-East ADC Sum

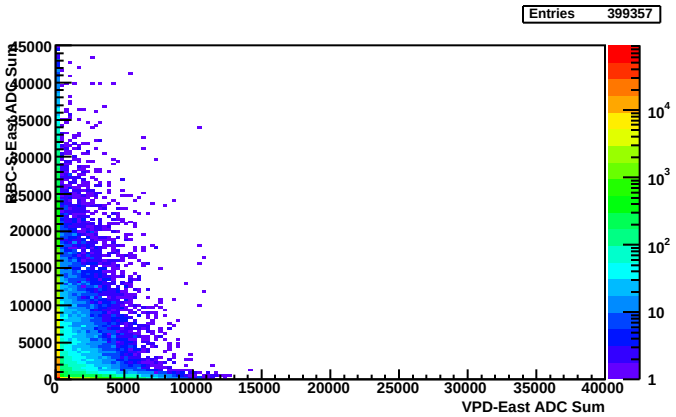

Entries 399357
BBC-L-West ADC Sum
BBC-S-West ADC Sum

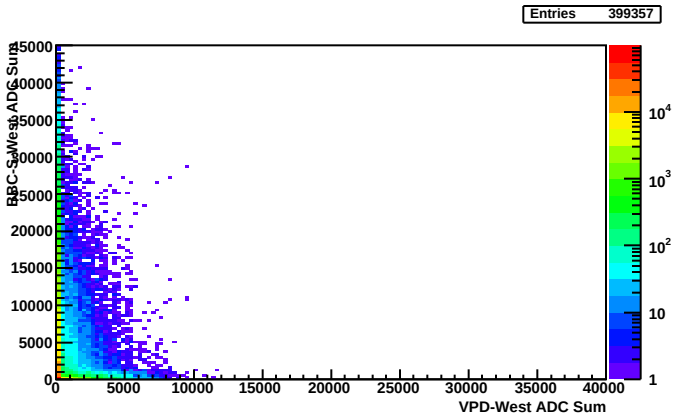

Entries 399357
BBC-L-East ADC Sum
VPD-East ADC Sum

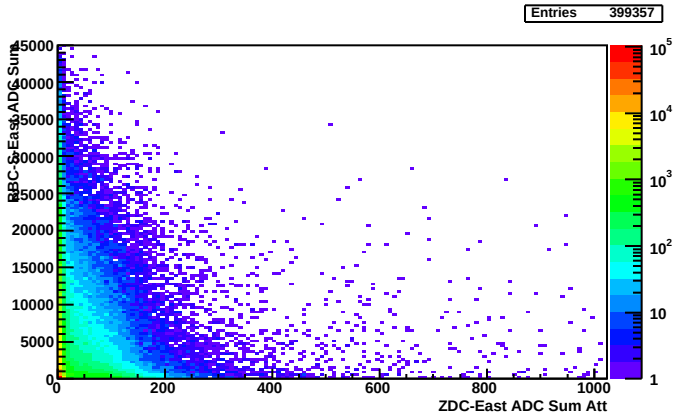

Entries 399357
BBC-L-West ADC Sum
VPD-West ADC Sum

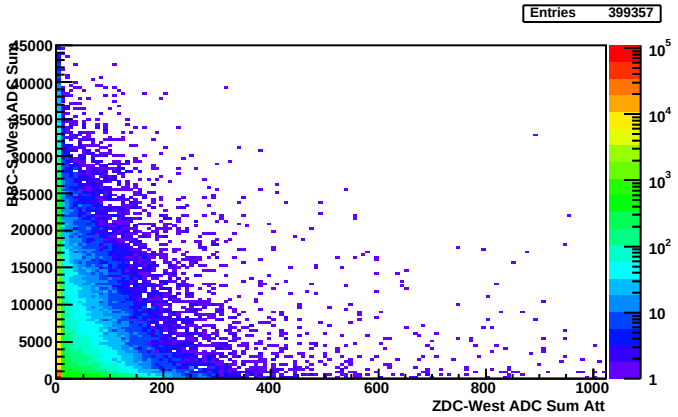

Entries 399357
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

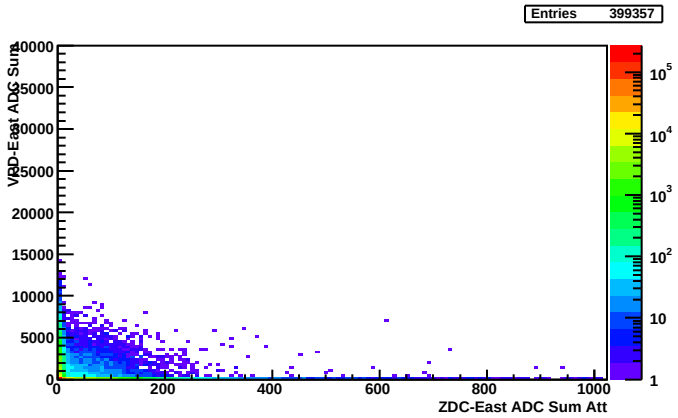

Entries 399357
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

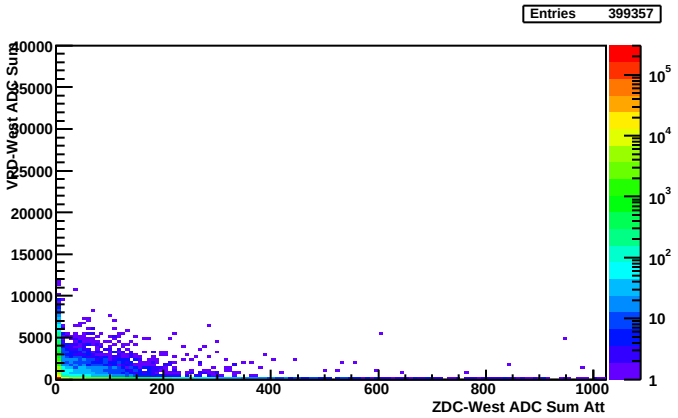

Entries 399357
BBC-S-East ADC Sum
VPD-East ADC Sum

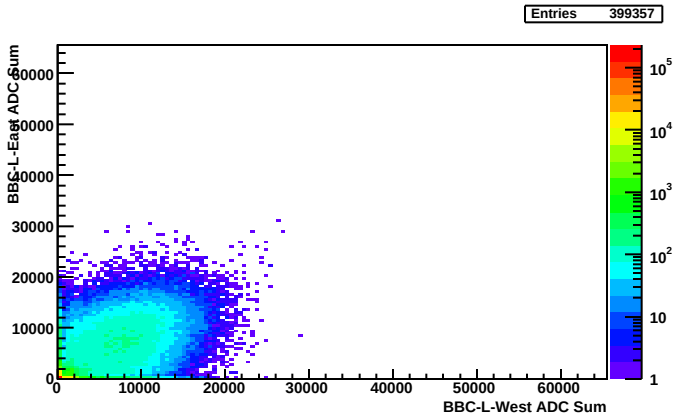

Entries 399357
BBC-S-West ADC Sum
VPD-West ADC Sum

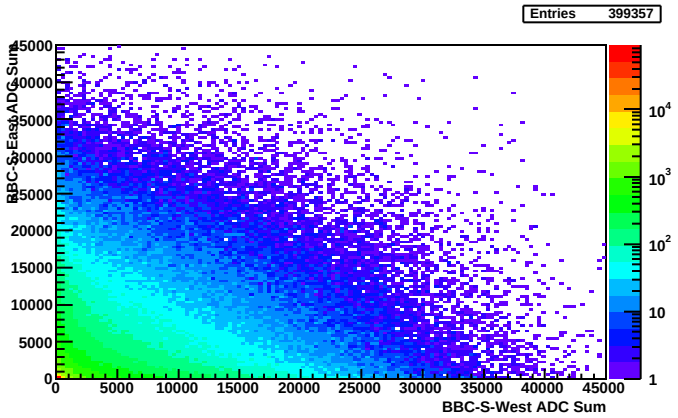

Entries 399357
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

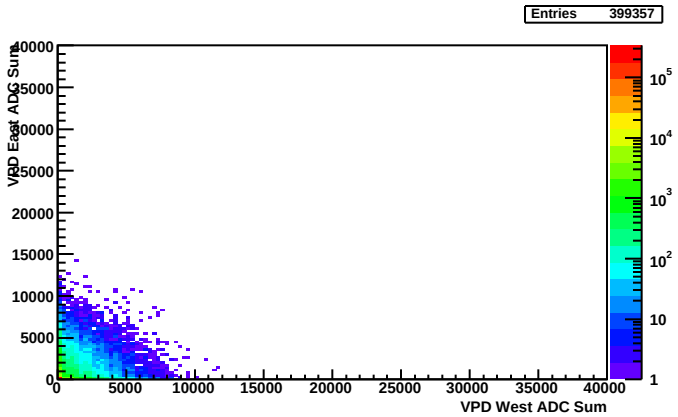

Entries 399357
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

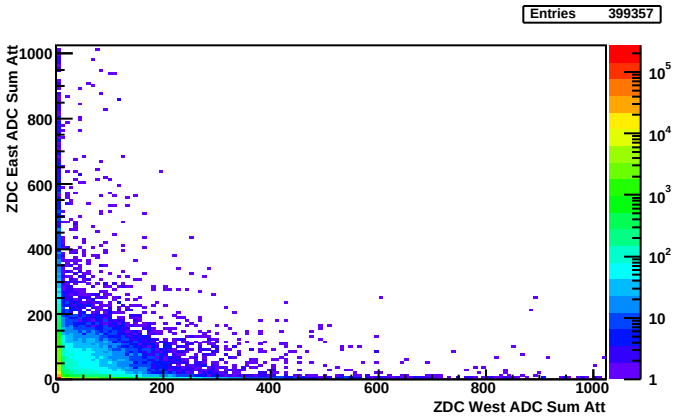

Entries 399357
VPD-East ADC Sum
ZDC-East ADC Sum Att

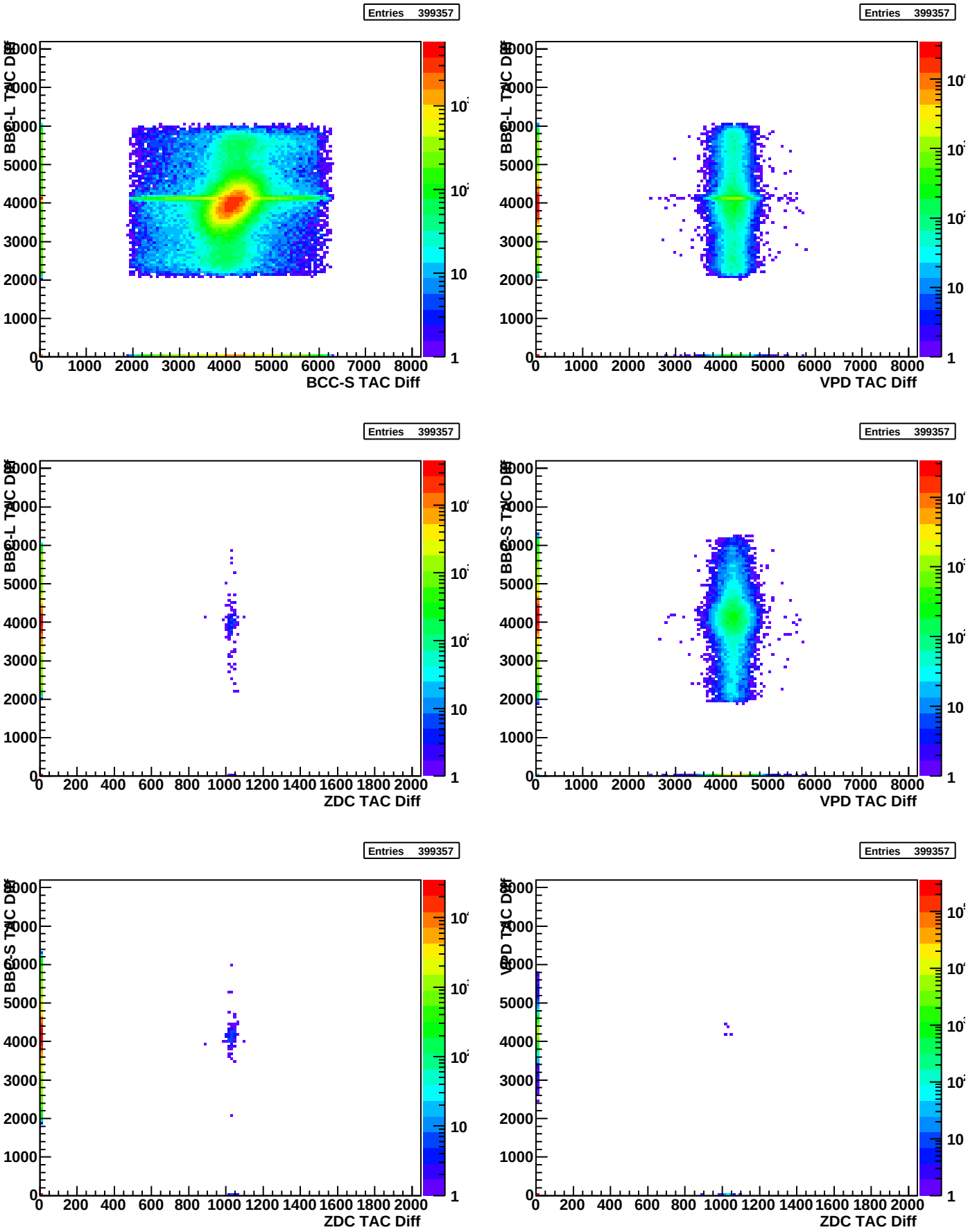

Entries 399357
VPD-West ADC Sum
ZDC-West ADC Sum Att

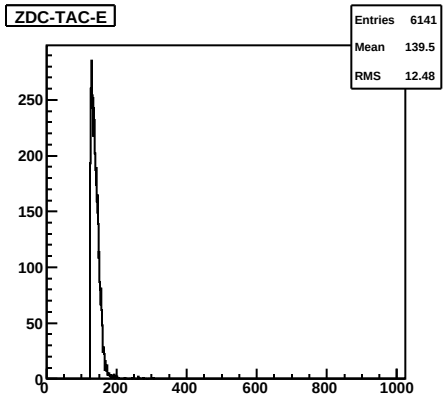

Entries 399357
BBC-L-East ADC Sum
BBC-L-West ADC Sum

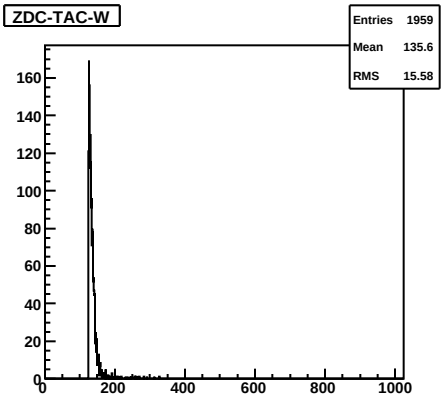

Entries 399357
BBC-S-East ADC Sum
BBC-S-West ADC Sum

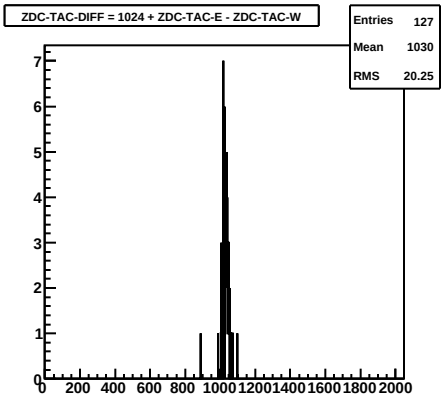

Entries 399357
VPD East ADC Sum
VPD West ADC Sum

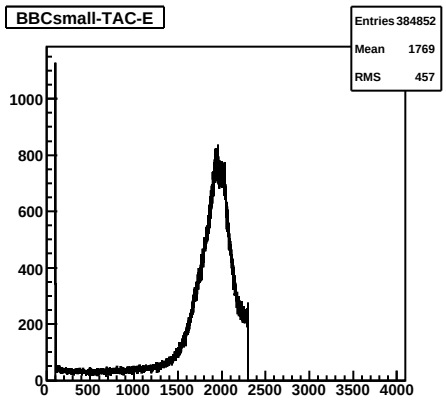

Entries 399357
ZDC East ADC Sum Att
ZDC West ADC Sum Att

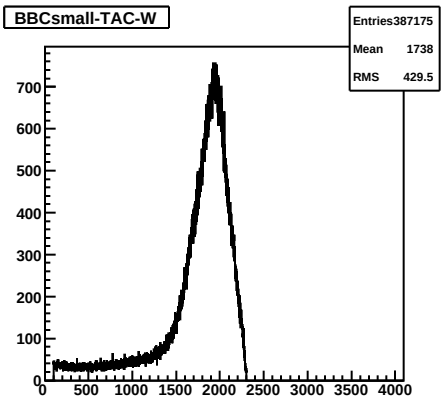

Entries 399357
BBC-L TAC Diff
BCC-S TAC Diff
Entries 399357
BBC-L TAC Diff
VPD TAC Diff
Entries 399357
BBC-L TAC Diff
ZDC TAC Diff
Entries 399357
BBC-S TAC Diff
VPD TAC Diff
Entries 399357
BBC-S TAC Diff
ZDC TAC Diff
Entries 399357
VPD TAC Diff
ZDC TAC Diff

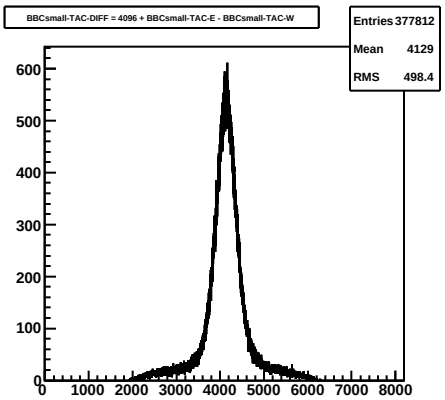

ZDC-TAC-E
Entries 6141
Mean 139.5
RMS 12.48

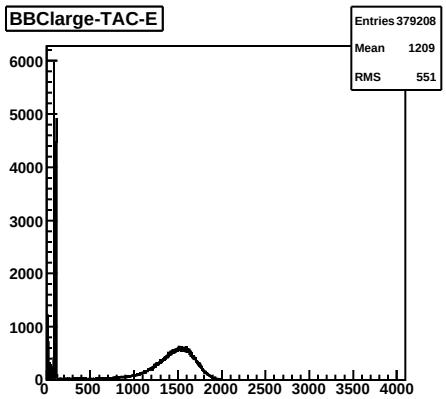

ZDC-TAC-W
Entries 1959
Mean 135.6
RMS 15.58

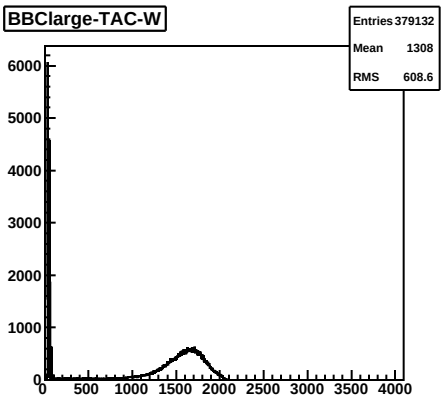

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 127
Mean 1030
RMS 20.25

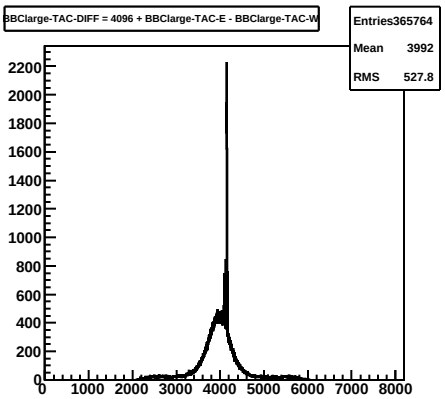

BBCsmall-TAC-E
Entries 384852
Mean 1769
RMS 457

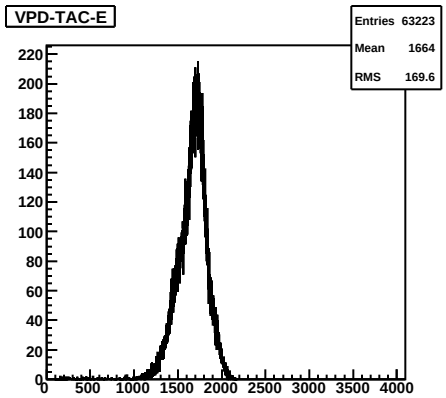

BBCsmall-TAC-W
Entries 387175
Mean 1738
RMS 429.5

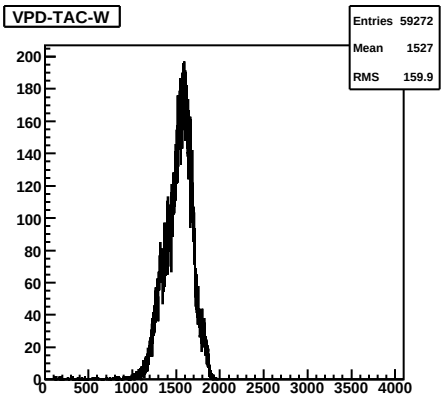

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 377812
Mean 4129
RMS 498.4

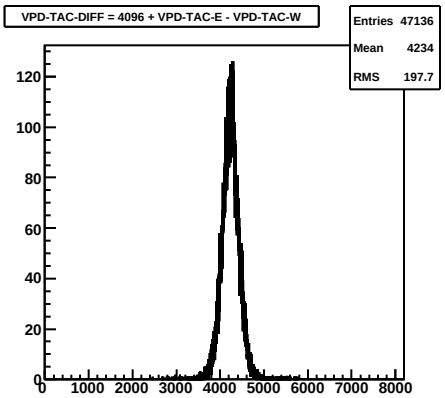

BBClarge-TAC-E
Entries 379208
Mean 1209
RMS 551

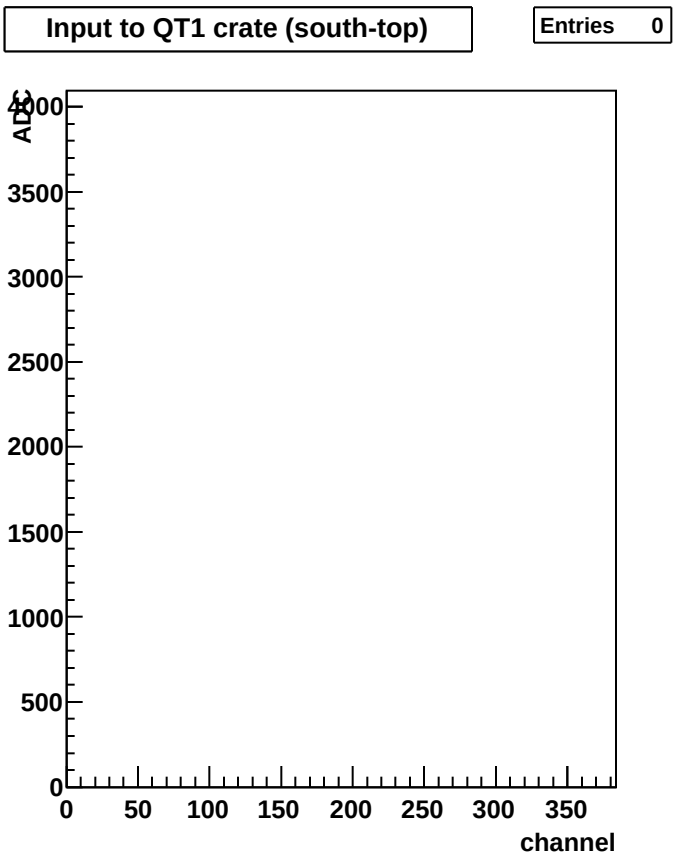

BBClarge-TAC-W
Entries 379132
Mean 1308
RMS 608.6

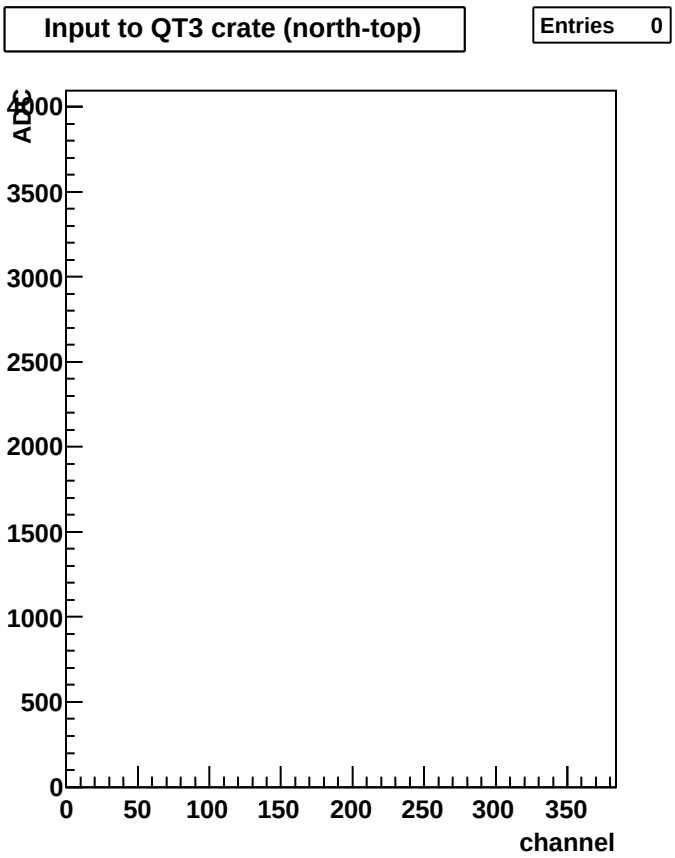

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 365764
Mean 3992
RMS 527.8

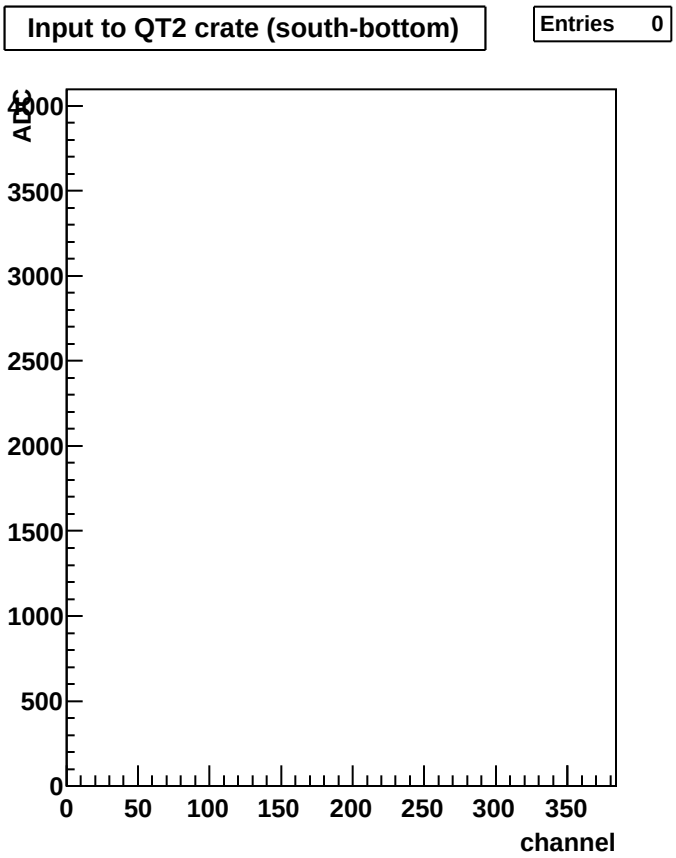

VPD-TAC-E
Entries 63223
Mean 1664
RMS 169.6

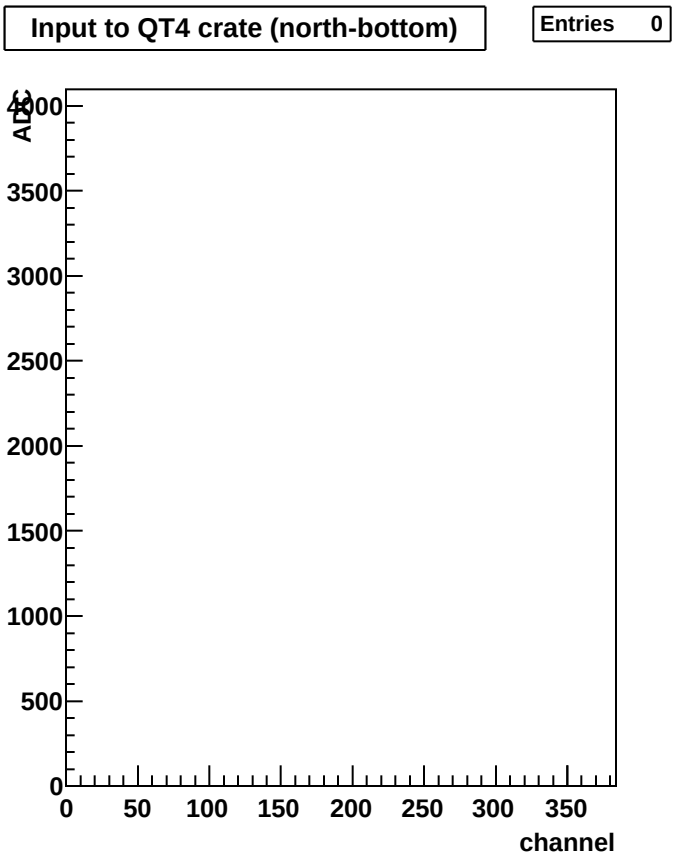

VPD-TAC-W
Entries 59272
Mean 1527
RMS 159.9

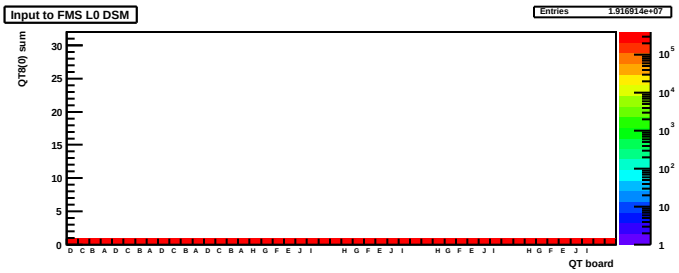

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 47136
Mean 4234
RMS 197.7

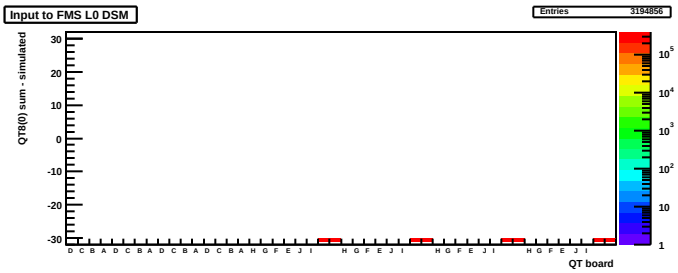

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

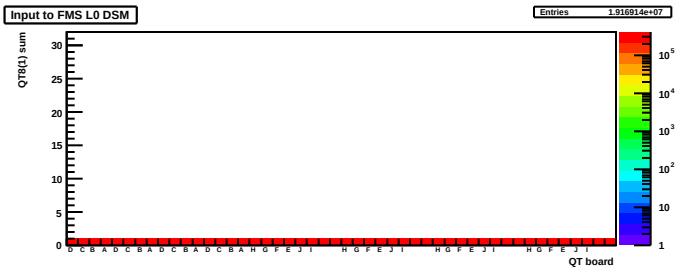

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

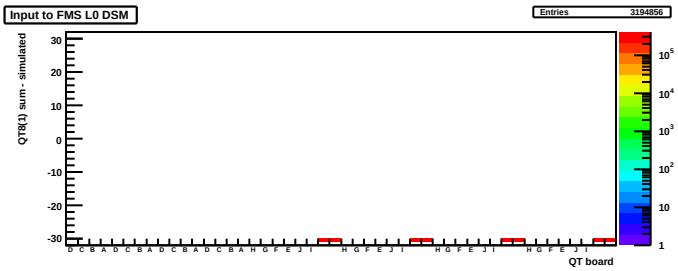

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

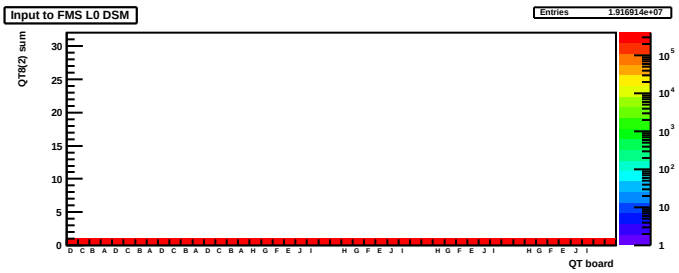

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

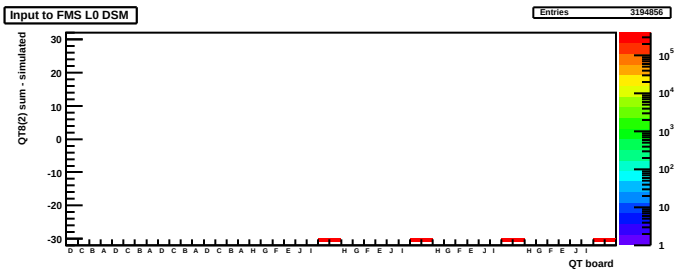

Input to FMS L0 DSM
Entries 1.916914e+07
QT8(0) sum
QT board

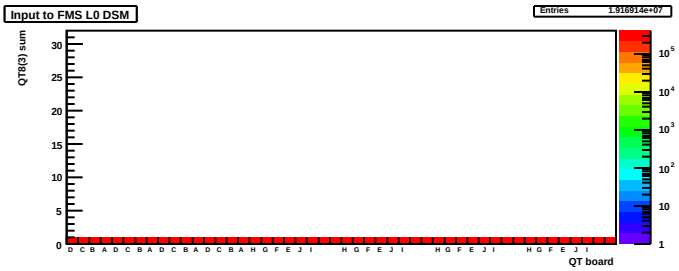

Input to FMS L0 DSM
Entries 3194856
QT8(0) sum - simulated
QT board

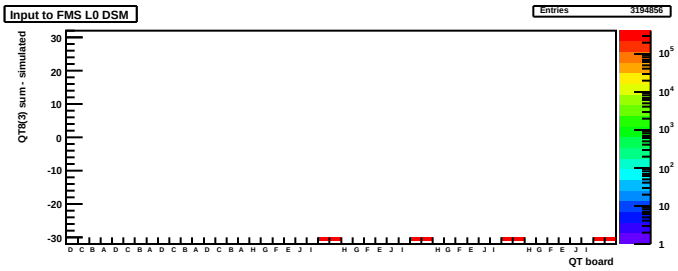

Input to FMS L0 DSM
Entries 1.916914e+07
QT8(1) sum
QT board

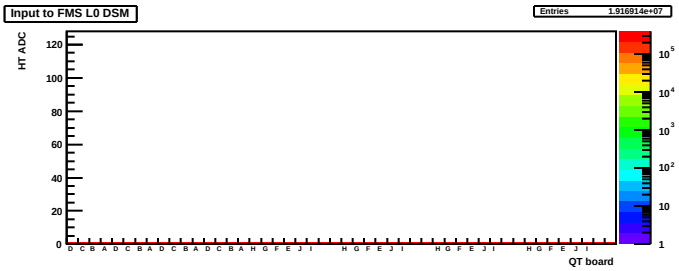

Input to FMS L0 DSM
Entries 3194856
QT8(1) sum - simulated
QT board

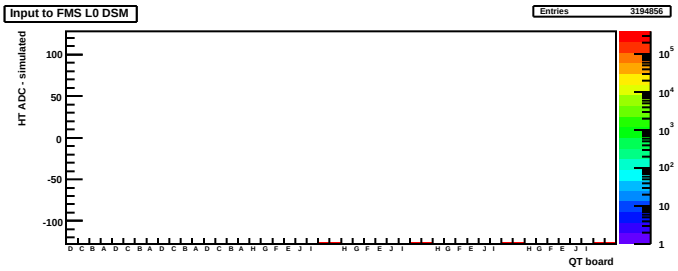

Input to FMS L0 DSM
Entries 1.916914e+07
QT8(2) sum
QT board

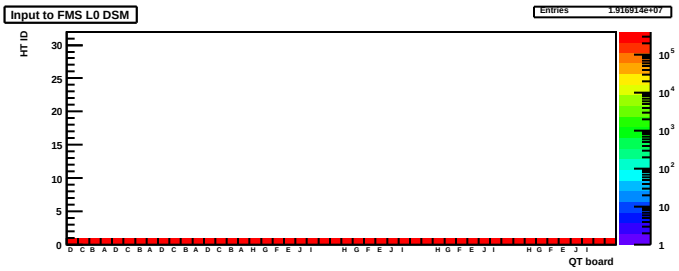

Input to FMS L0 DSM
Entries 3194856
QT8(2) sum - simulated
QT board

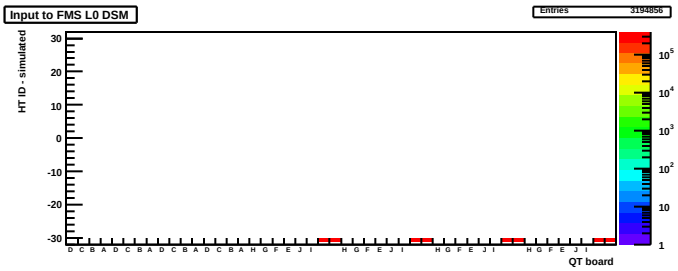

Input to FMS L0 DSM
Entries 1.916914e+07
QT8(3) sum
QT board

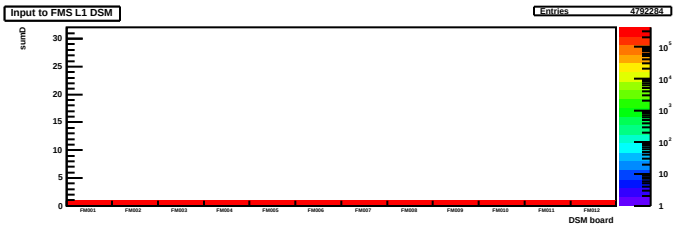

Input to FMS L0 DSM
Entries 3194856
QT8(3) sum - simulated
QT board

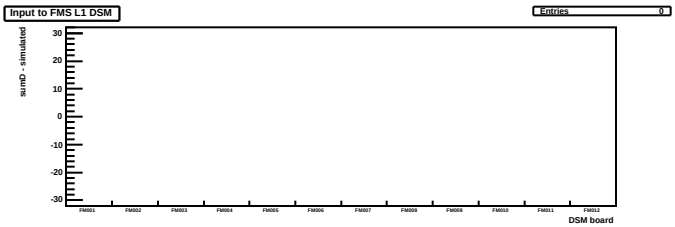

Input to FMS L0 DSM
Entries 1.916914e+07
HT ADC
QT board

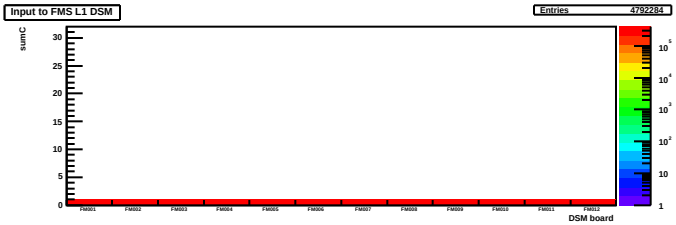

Input to FMS L0 DSM
Entries 3194856
HT ADC - simulated
QT board

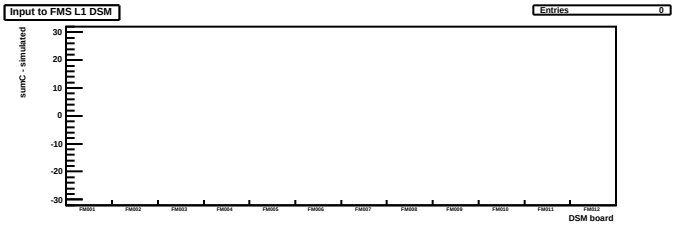

Input to FMS L0 DSM
Entries 1.916914e+07
HT ID
QT board

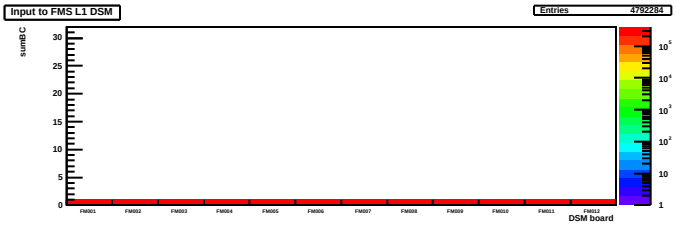

Input to FMS L0 DSM
Entries 3194856
HT ID - simulated
QT board

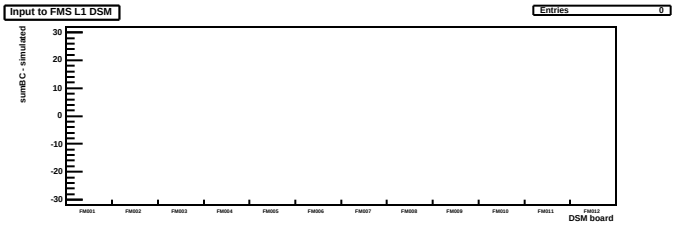

Input to FMS L1 DSM
Entries 4792284
sumD
DSM board

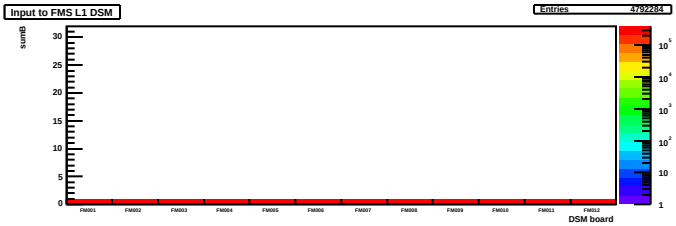

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

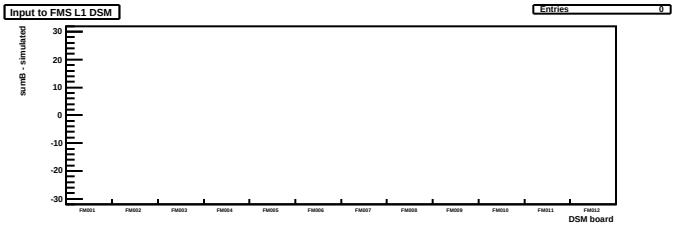

Input to FMS L1 DSM
Entries 4792284
sumC
DSM board

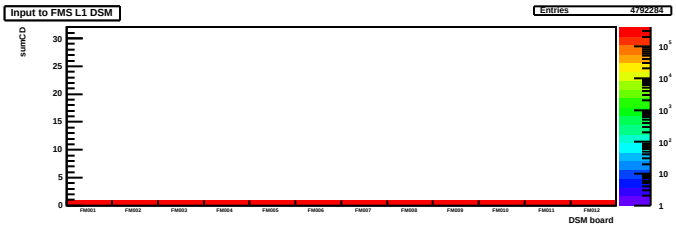

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

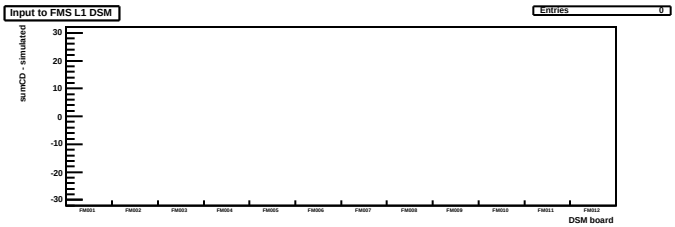

Input to FMS L1 DSM
Entries 4792284
sumBC
DSM board

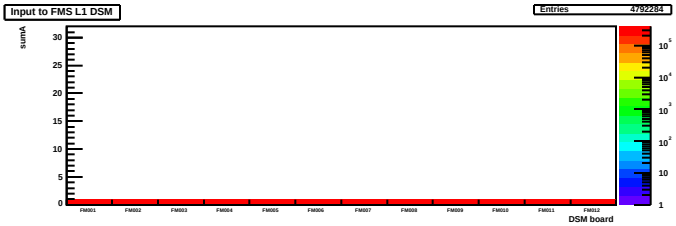

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

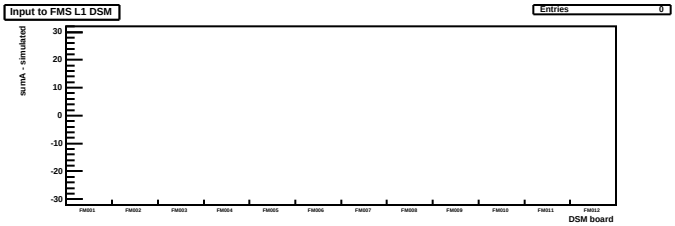

Input to FMS L1 DSM
Entries 4792284
sumB
DSM board

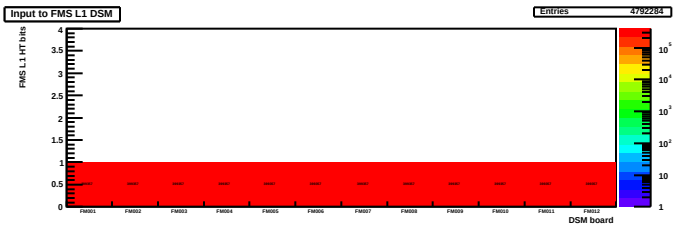

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

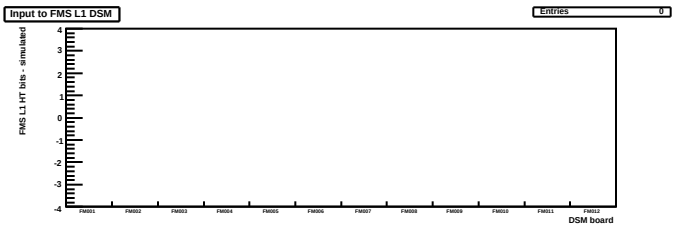

Input to FMS L1 DSM
Entries 4792284
sumCD
DSM board

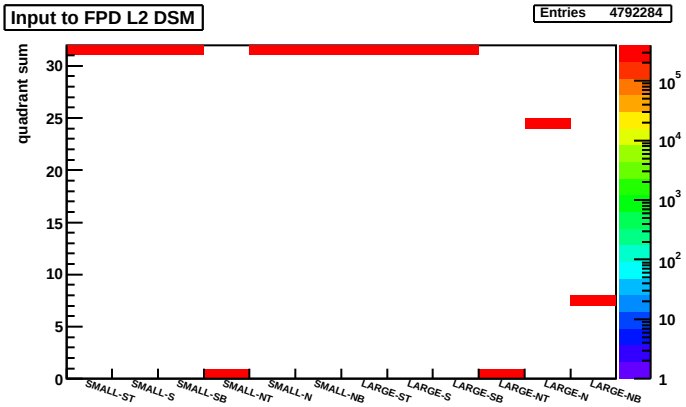

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

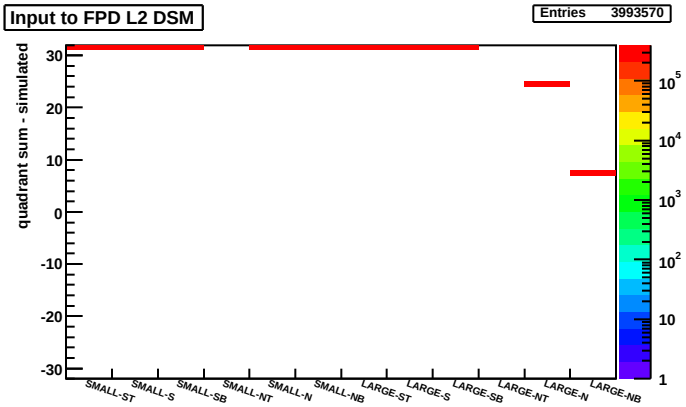

Input to FMS L1 DSM
Entries 4792284
sumA
DSM board

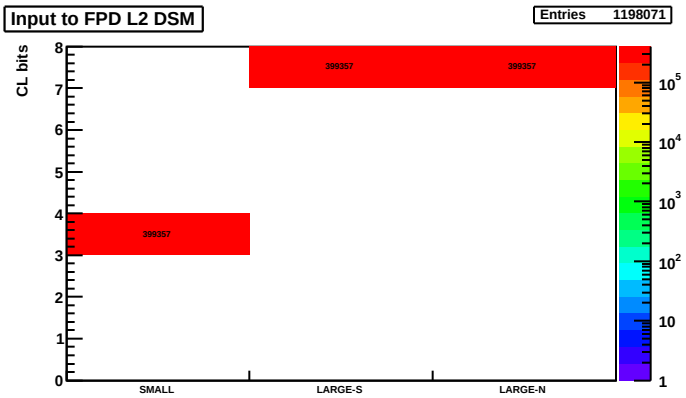

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

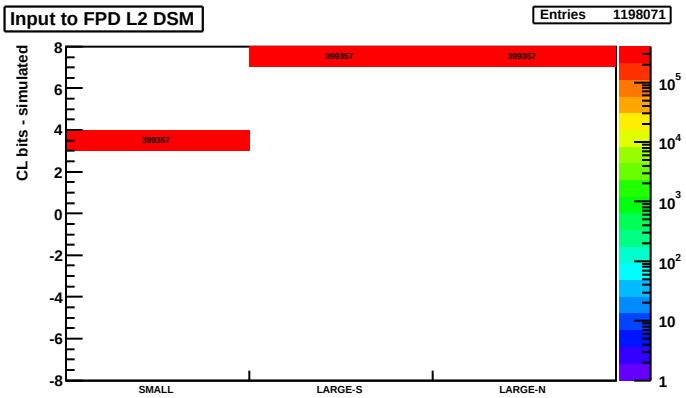

Input to FMS L1 DSM
Entries 4792284
FMS L1 HT bits
DSM board

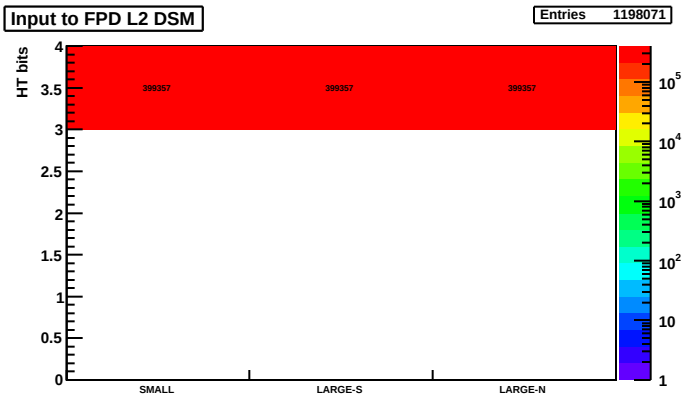

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

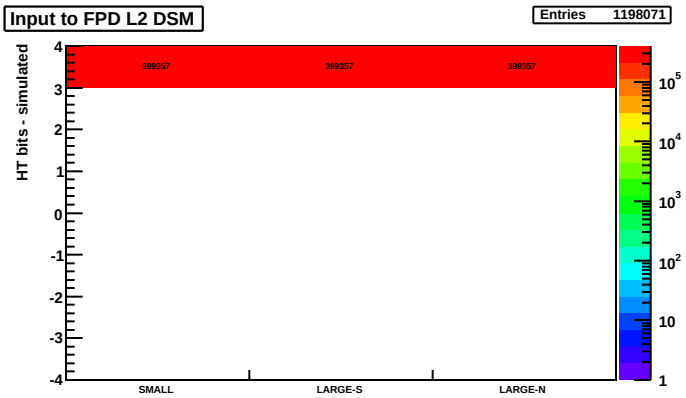

Input to FPD L2 DSM
Entries 4792284
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

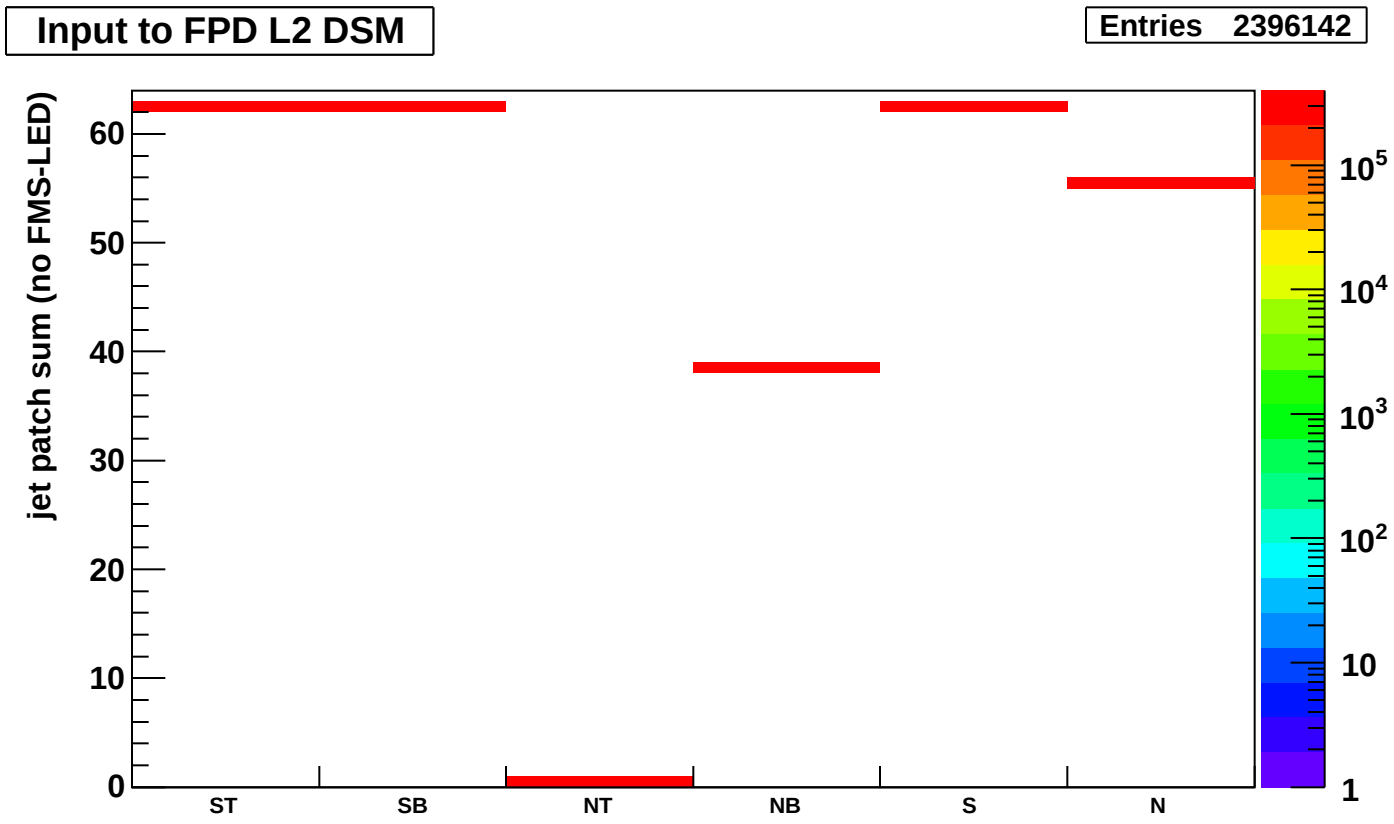

Input to FPD L2 DSM
Entries 3993570
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

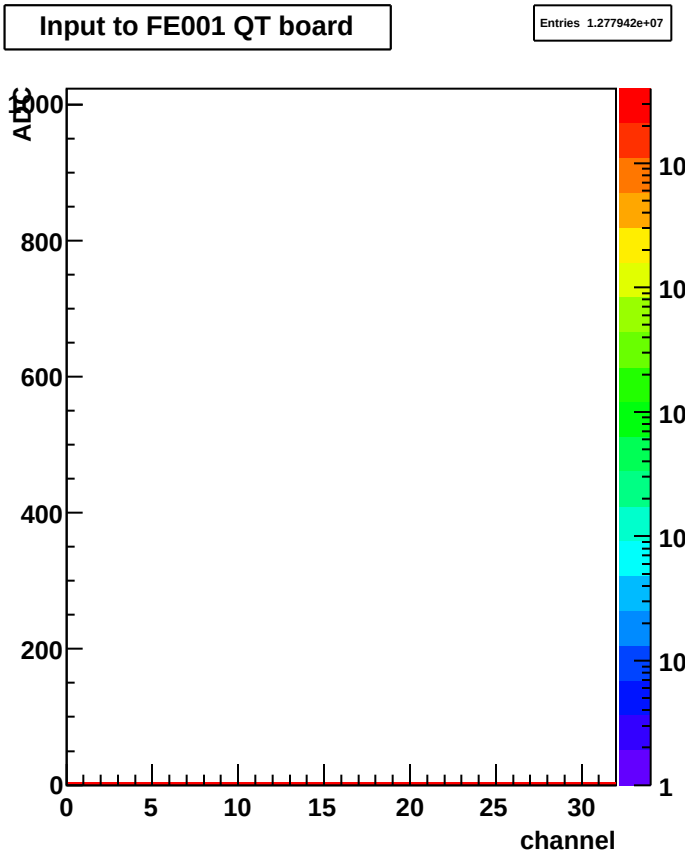

Input to FPD L2 DSM
Entries 1198071
CL bits
399357
399357
399357
SMALL
LARGE-S
LARGE-N

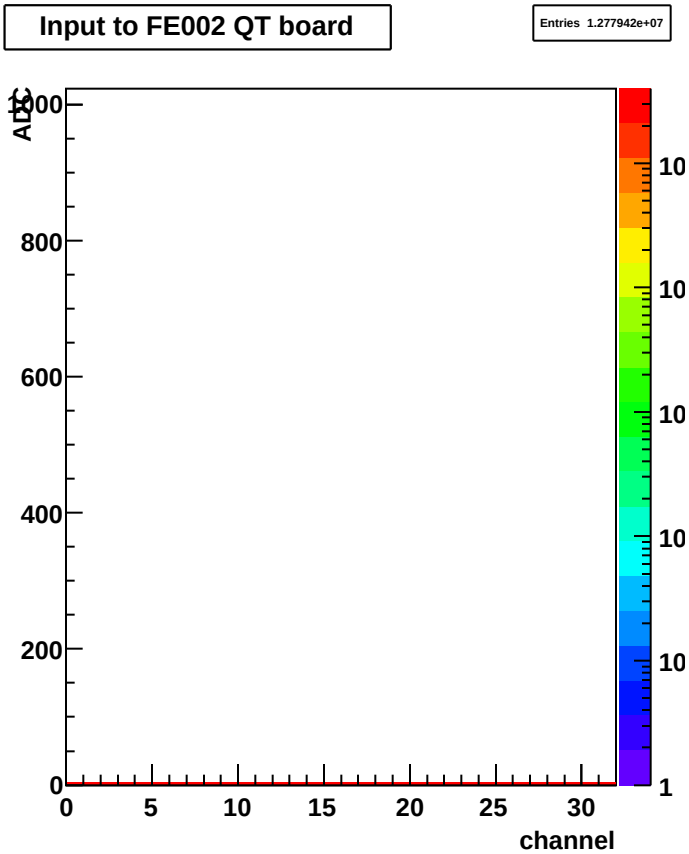

Input to FPD L2 DSM
Entries 1198071
CL bits - simulated
399357
399357
399357
SMALL
LARGE-S
LARGE-N

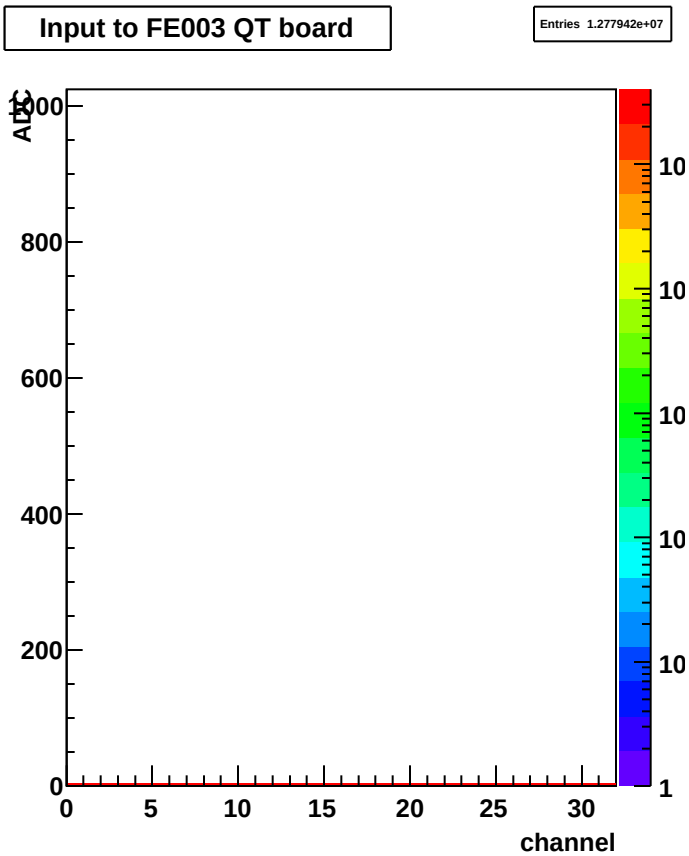

Input to FPD L2 DSM
Entries 1198071
HT bits
399357
399357
399357
SMALL
LARGE-S
LARGE-N

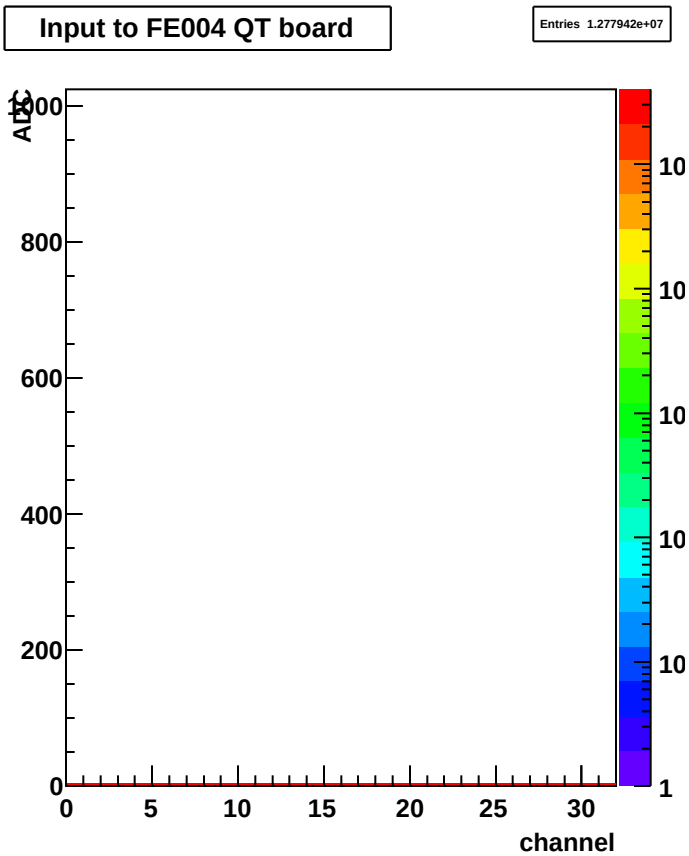

Input to FPD L2 DSM
Entries 1198071
HT bits - simulated
399357
399357
399357
SMALL
LARGE-S
LARGE-N

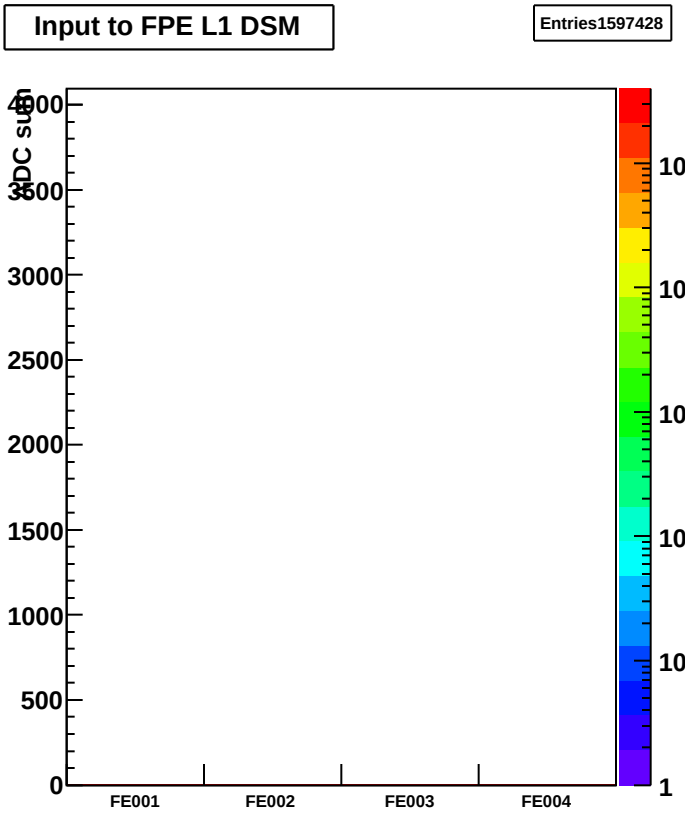

Input to FPD L2 DSM
Entries 2396142
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

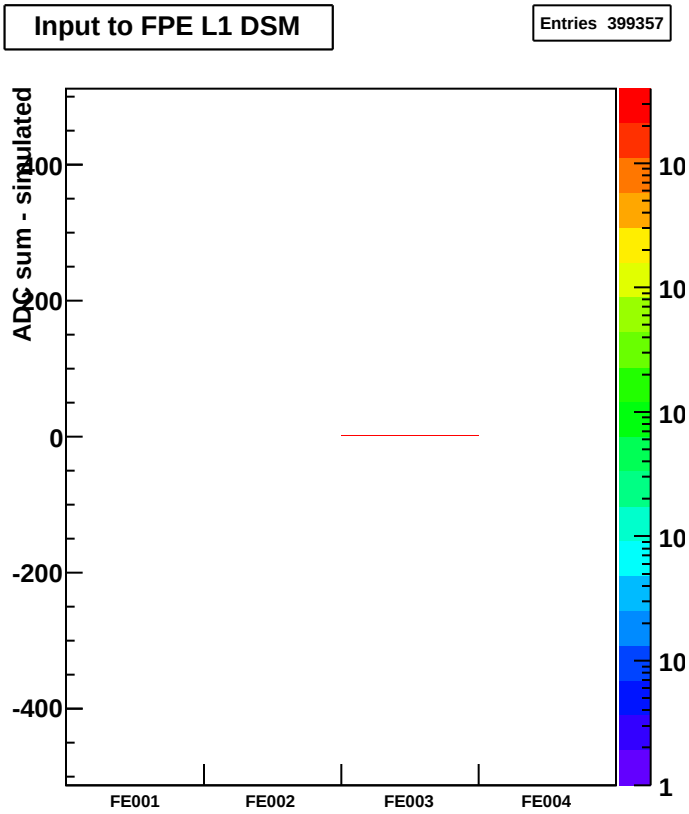

Input to FE001 QT board
Entries 1.277942e+07
ADC
channel

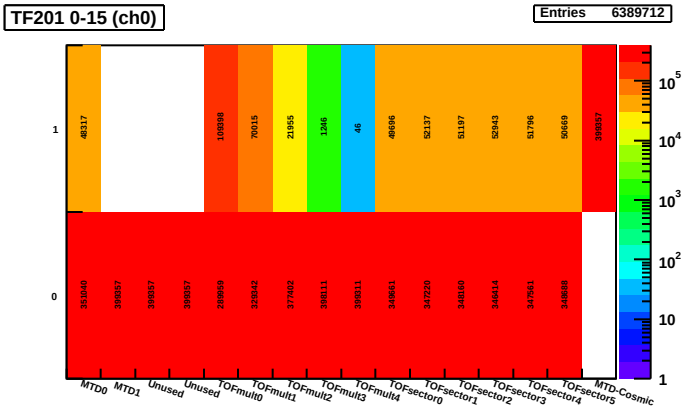

Input to FE002 QT board
Entries 1.277942e+07
ADC
channel

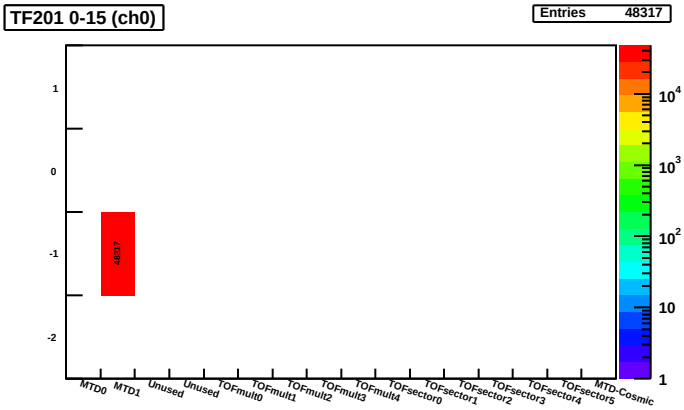

Input to FE003 QT board
Entries 1.277942e+07
ADC
channel

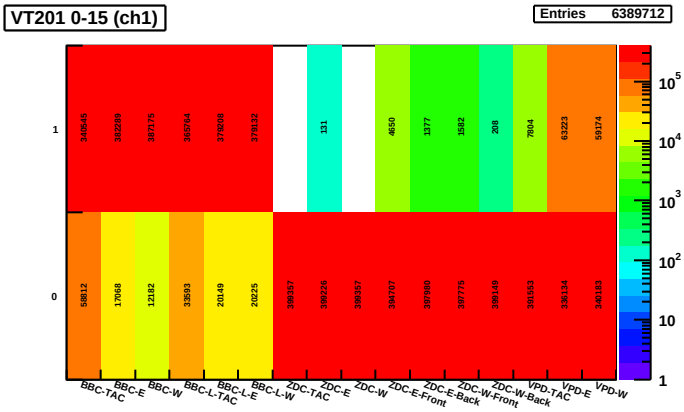

Input to FE004 QT board
Entries 1.277942e+07
ADC
channel

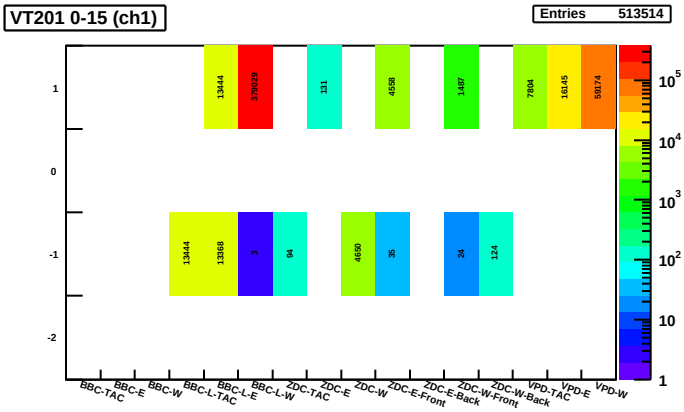

Input to FPE L1 DSM
Entries1597428
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 399357
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
10
1


TF201 0-15 (ch0)
Entries 6389712
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 48317
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 6389712
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 513514
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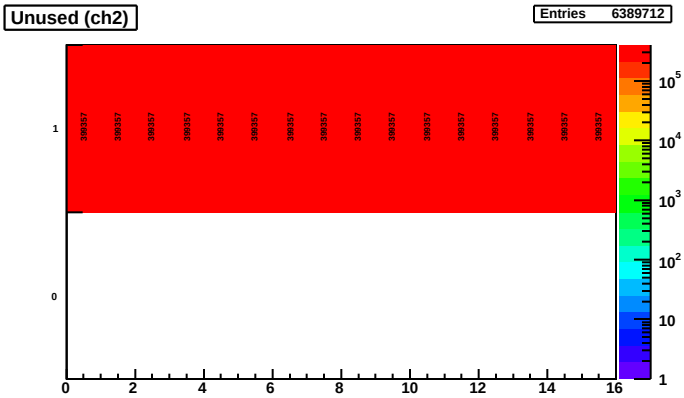
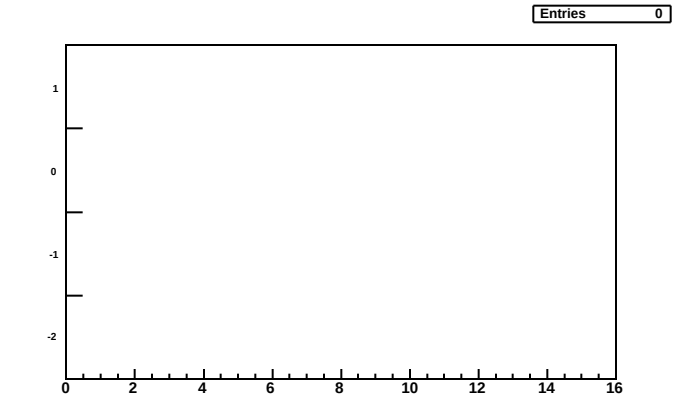
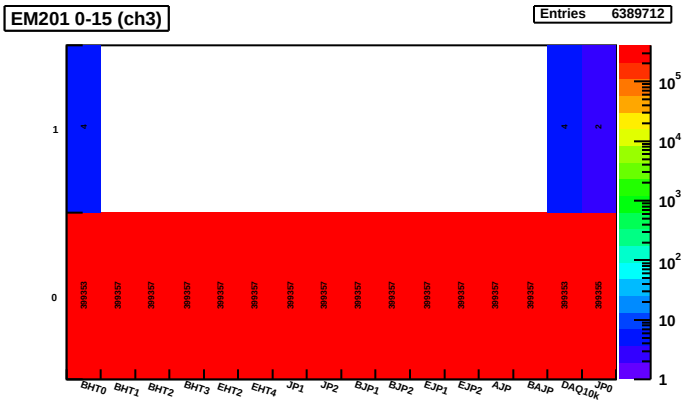

Unused (ch2)
Entries 6389712


Entries 0


EM201 0-15 (ch3)
Entries 6389712
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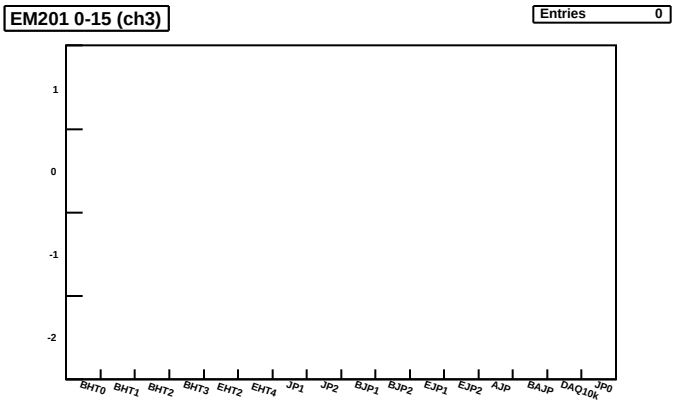
EM201 0-15 (ch3)
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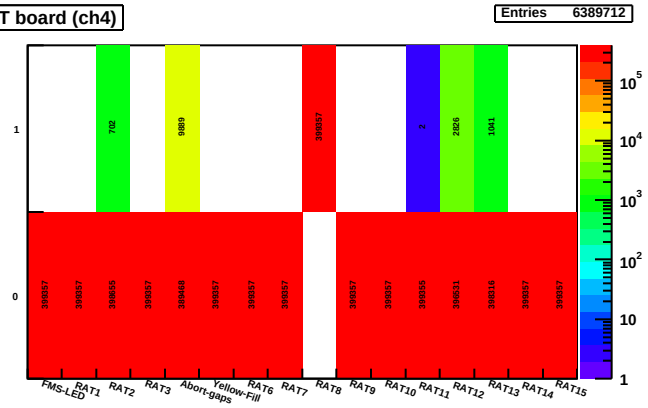
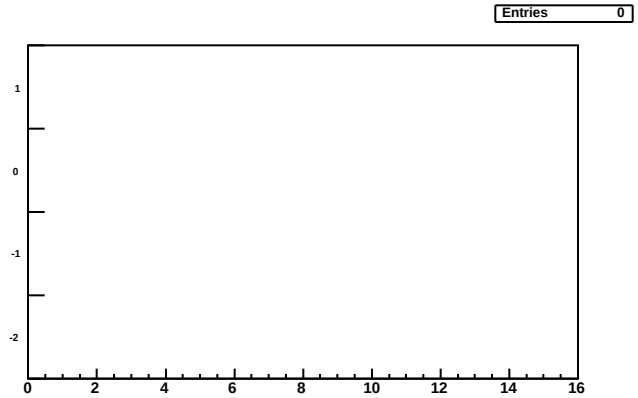
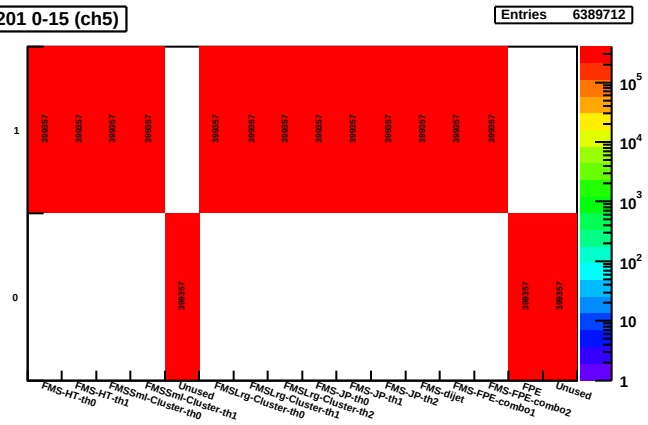
RAT board (ch4)





FP201 0-15 (ch5)



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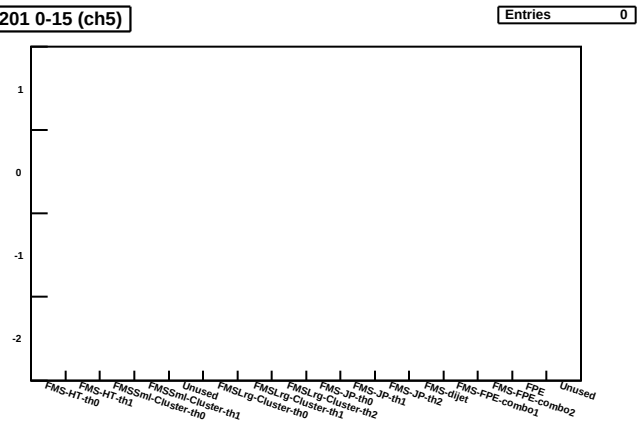
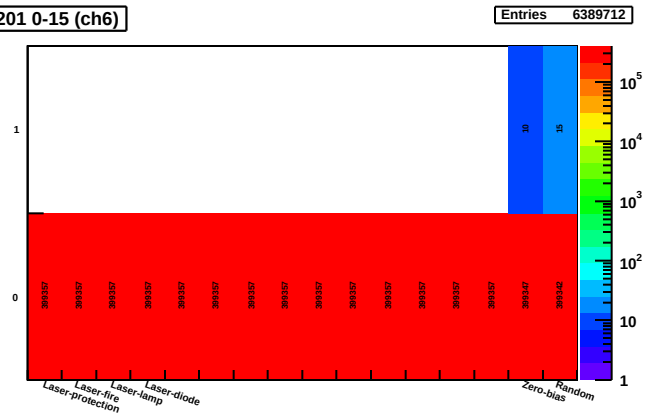
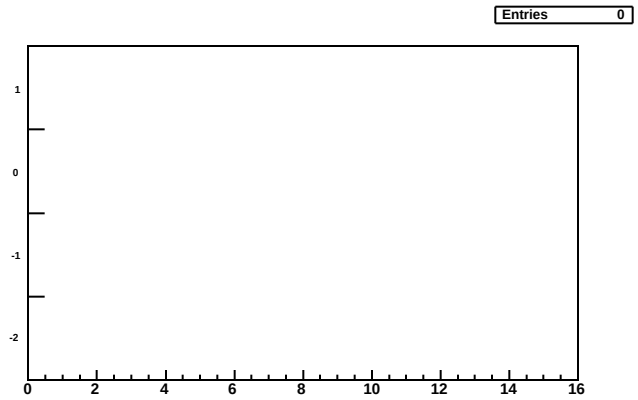
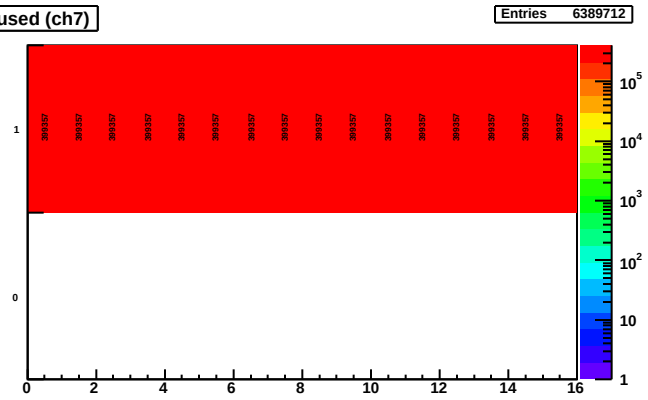
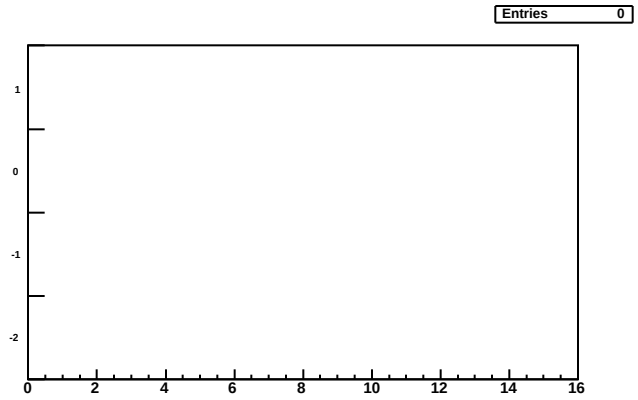


ST201 0-15 (ch6)





Unused (ch7)