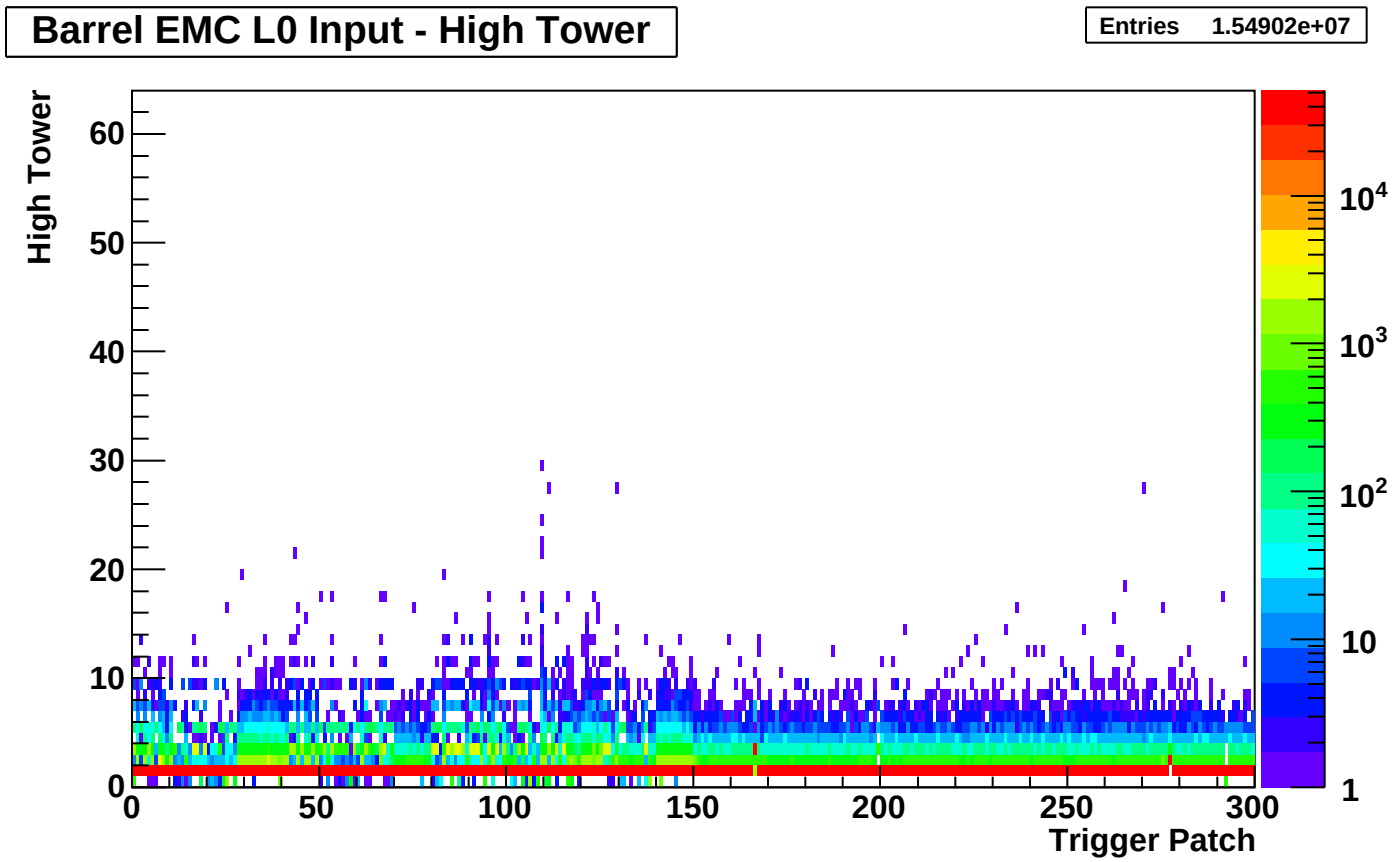
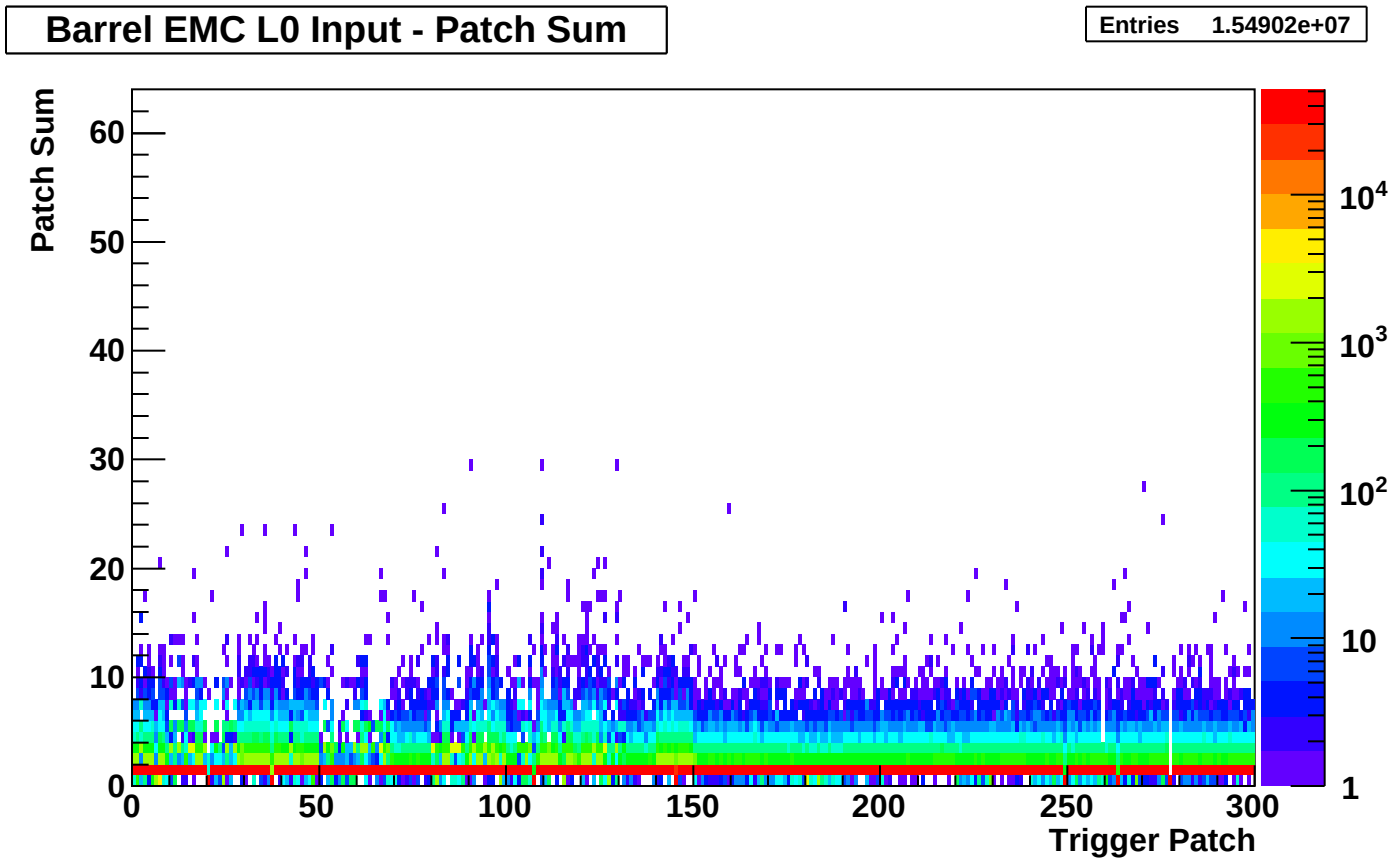
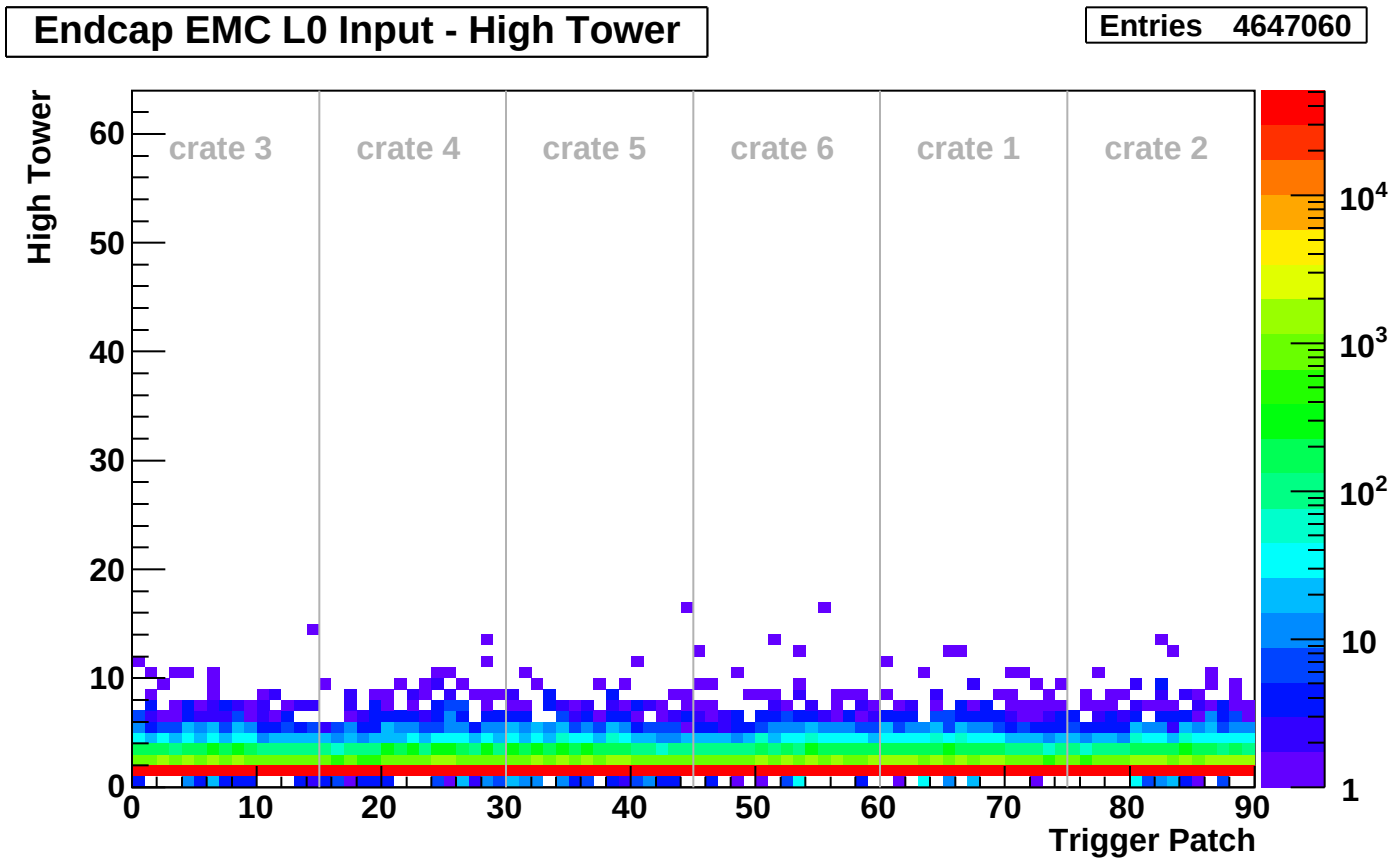
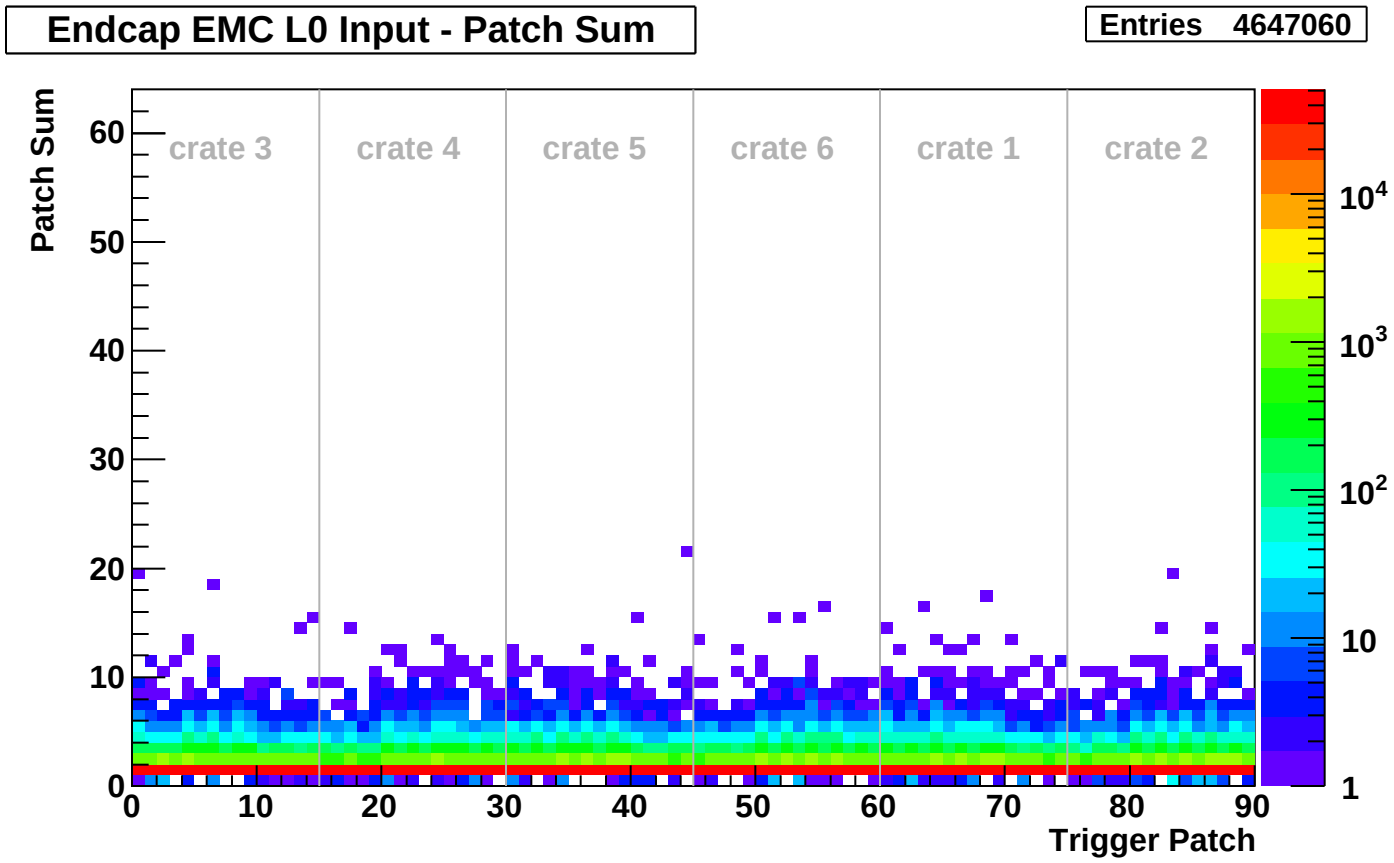
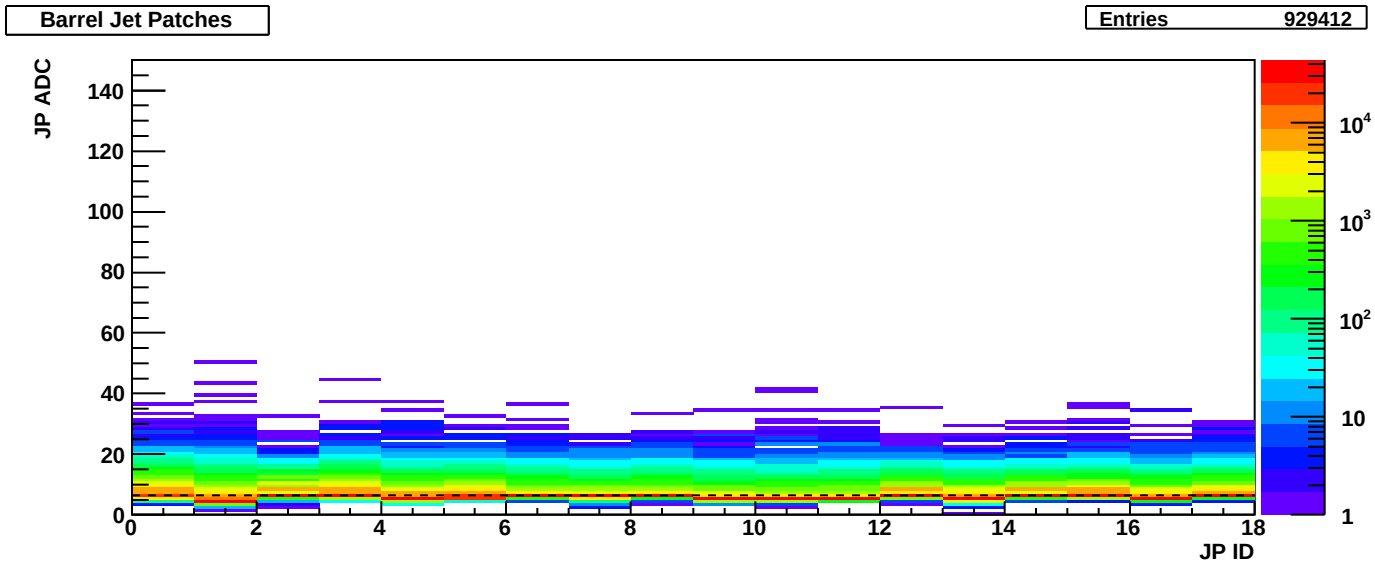
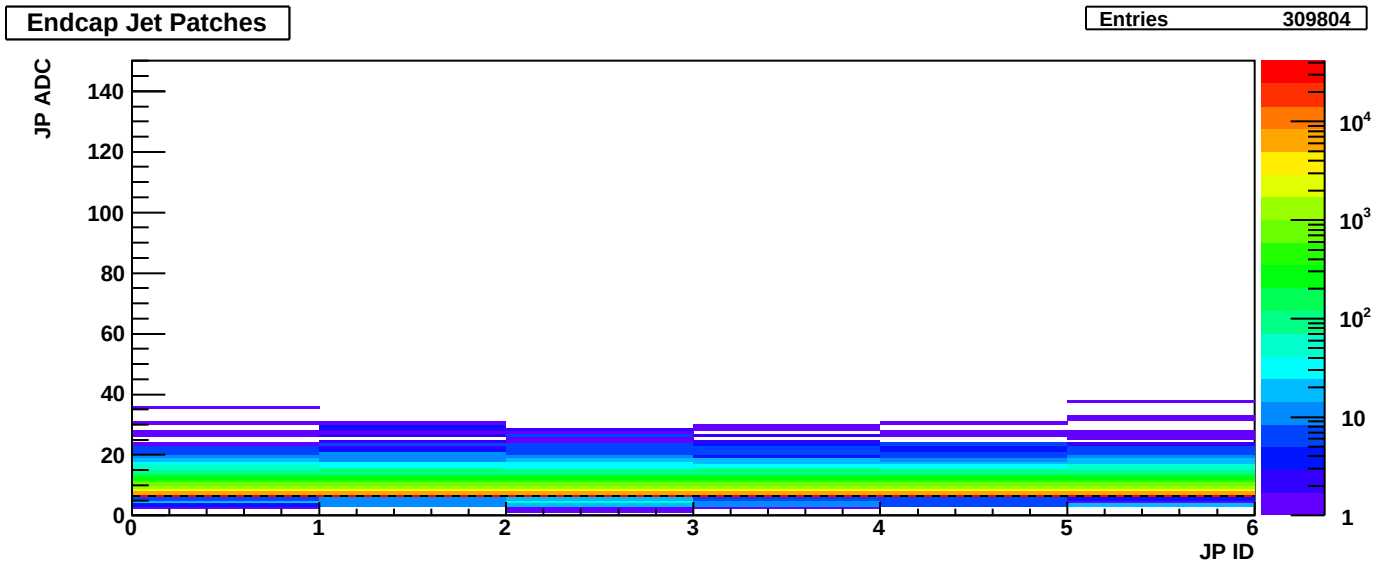

Barrel EMC L0 Input - High Tower
Entries 1.54902e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

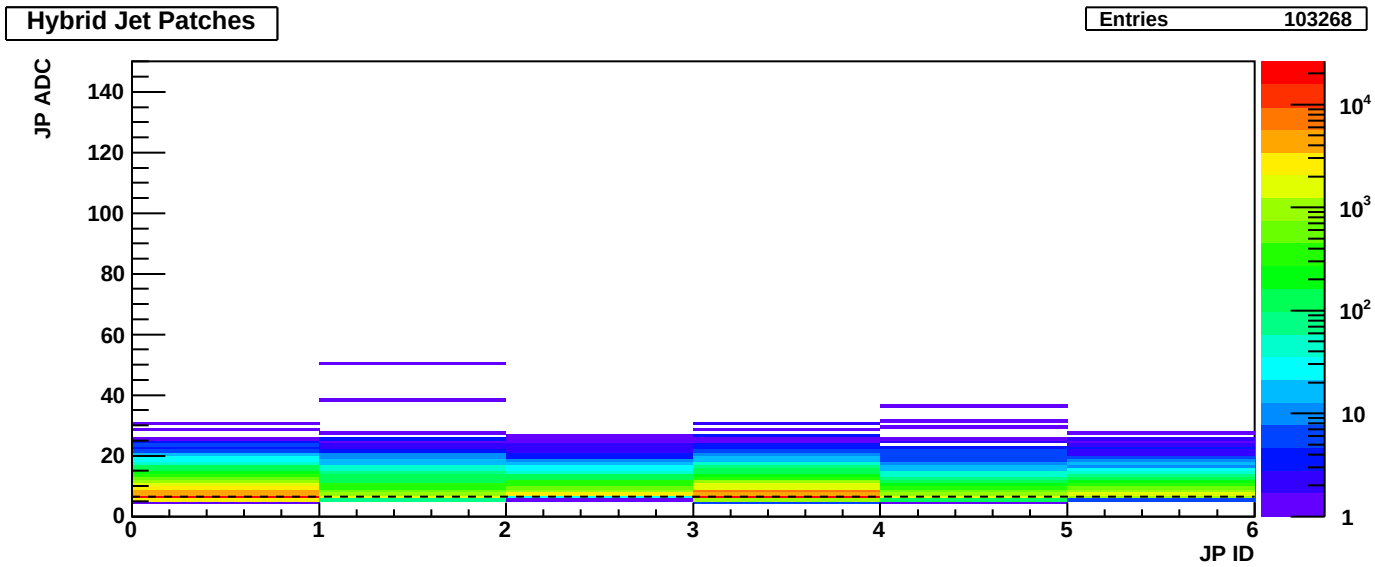

Barrel EMC L0 Input - Patch Sum
Entries 1.54902e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

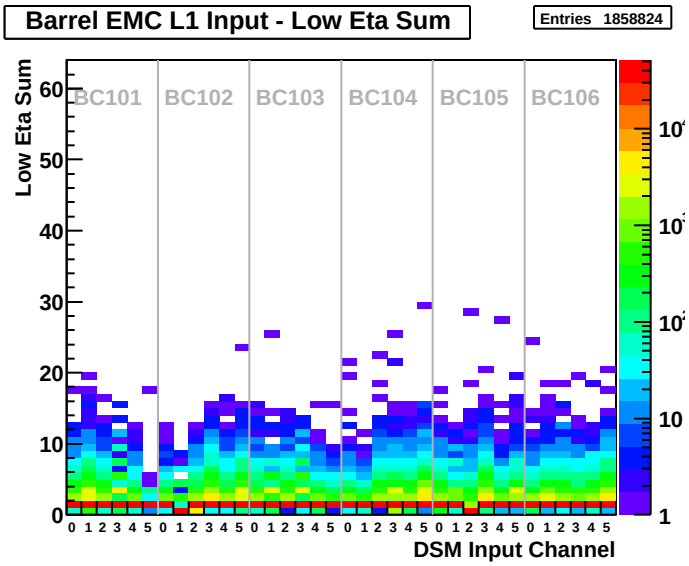

Endcap EMC L0 Input - High Tower
Entries 4647060
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

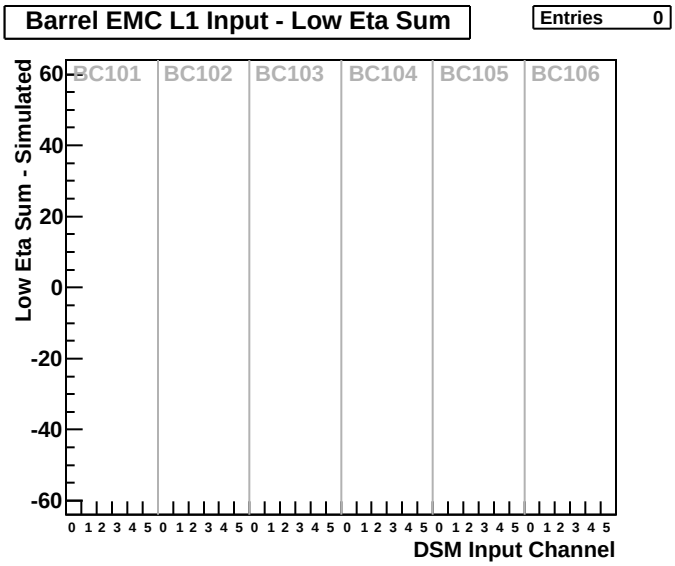

Endcap EMC L0 Input - Patch Sum
Entries 4647060
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

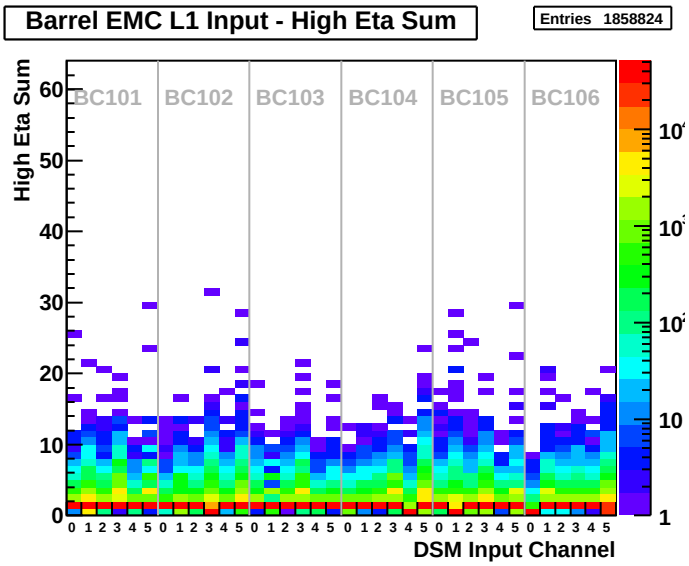

Barrel Jet Patches
Entries 929412
JP ADC
JP ID

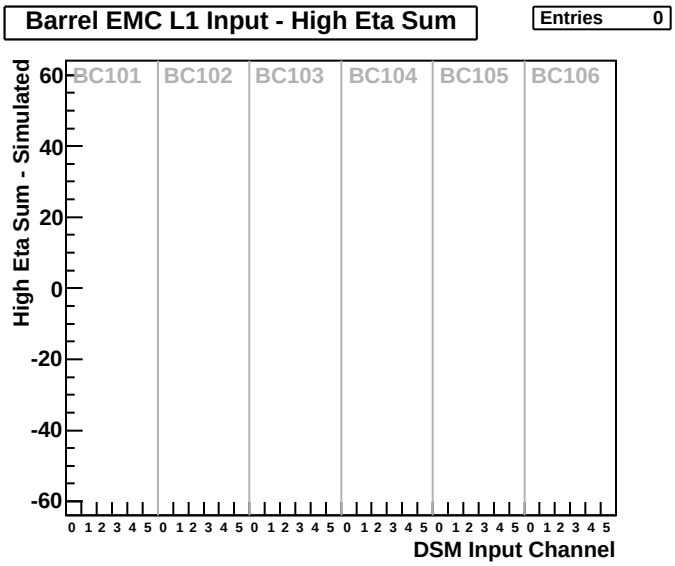

Endcap Jet Patches
Entries 309804
JP ADC
JP ID

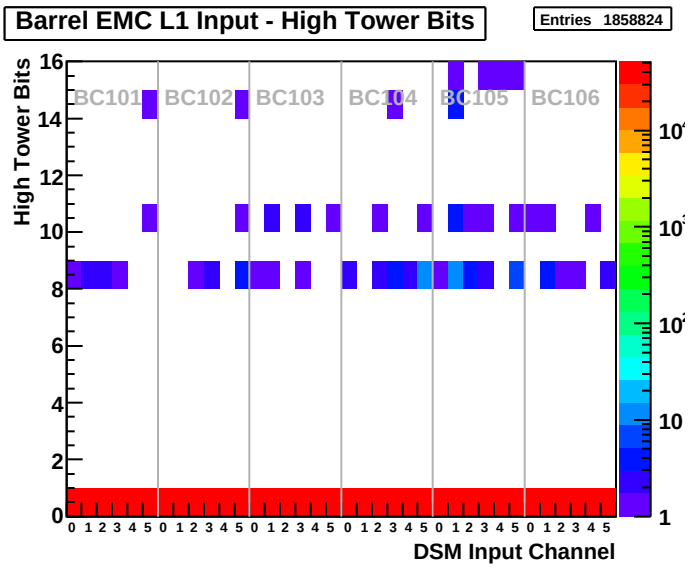

Hybrid Jet Patches
Entries 103268
JP ADC
JP ID

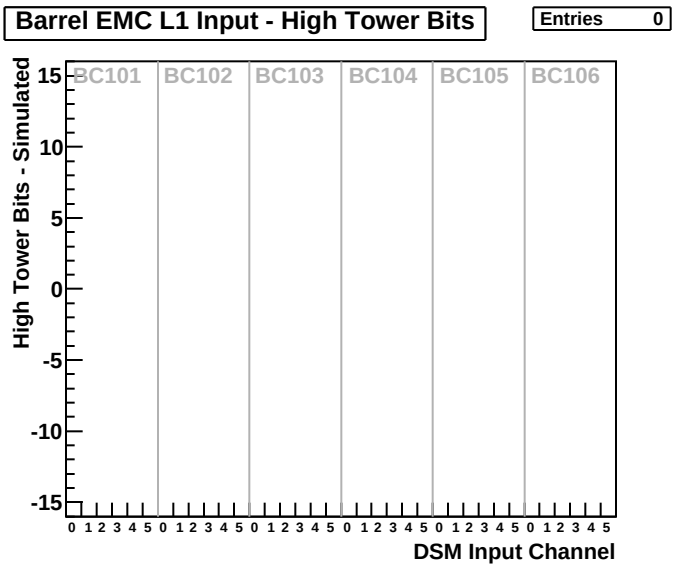

Barrel EMC L1 Input - Low Eta Sum
Entries 1858824
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

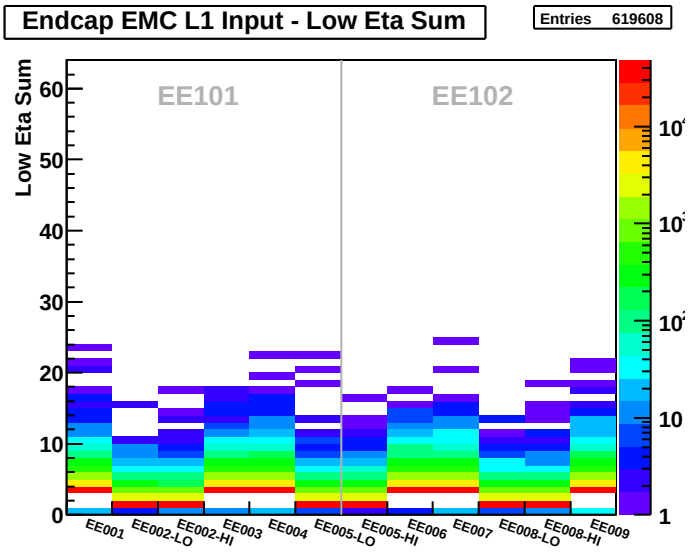

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

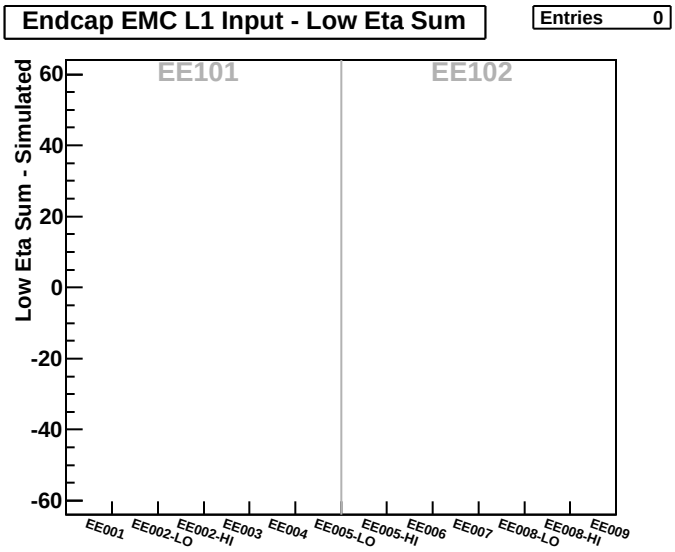

Barrel EMC L1 Input - High Eta Sum
Entries 1858824
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

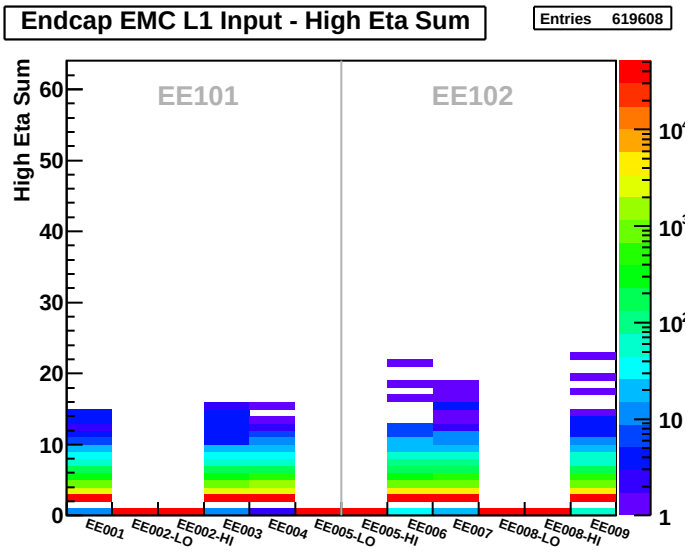

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

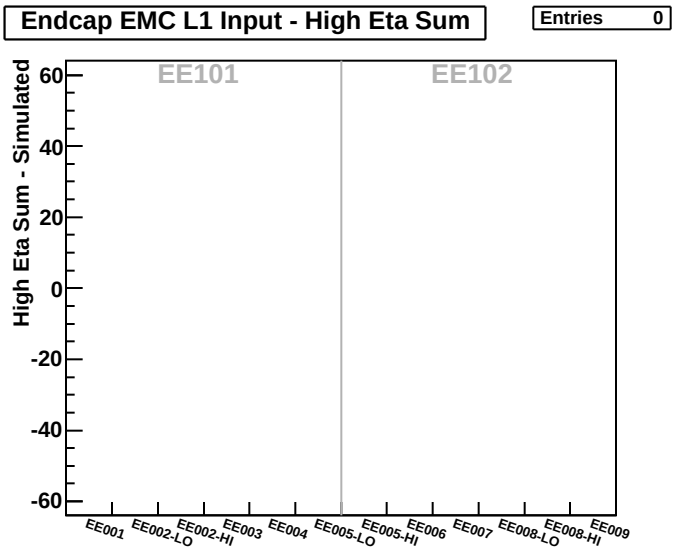

Barrel EMC L1 Input - High Tower Bits
Entries 1858824
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

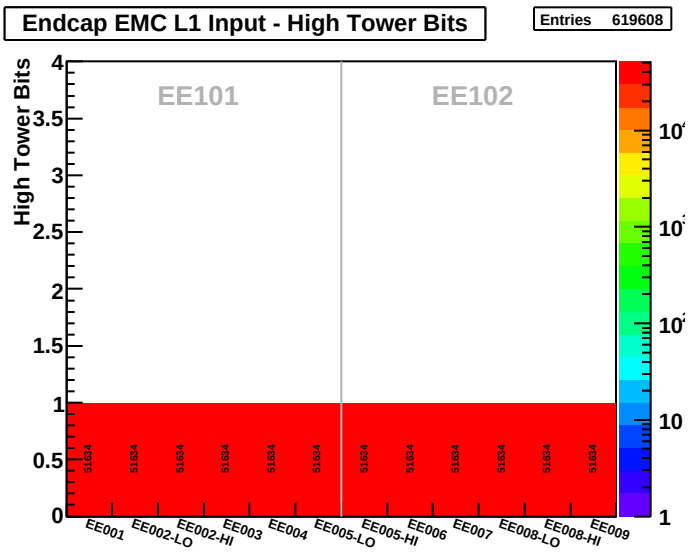

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

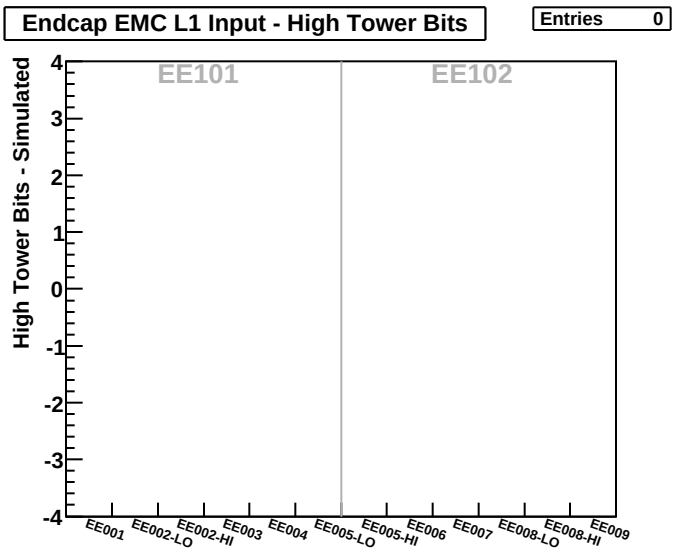

Endcap EMC L1 Input - Low Eta Sum
Entries 619608
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

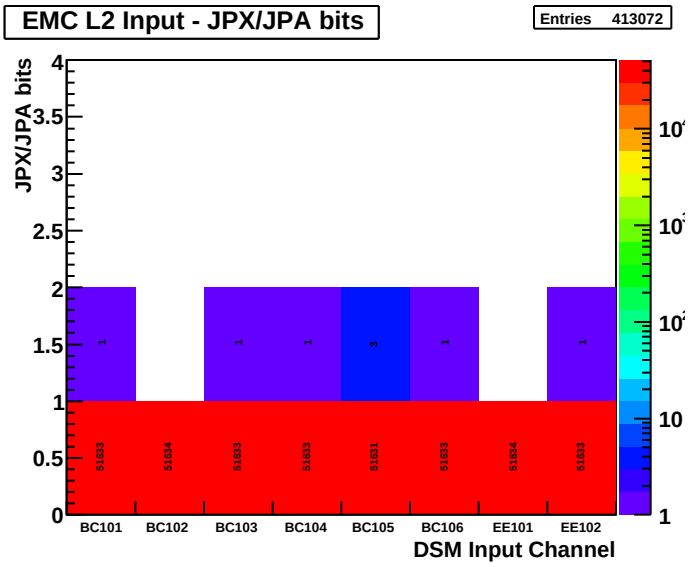

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

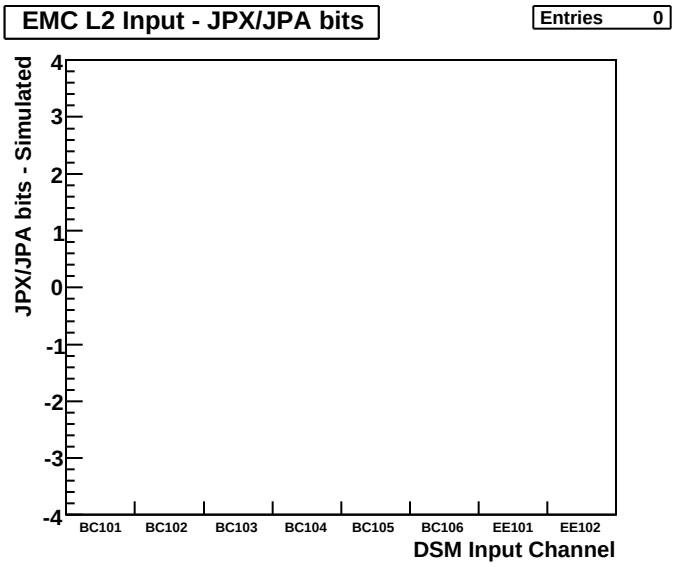

Endcap EMC L1 Input - High Eta Sum
Entries 619608
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

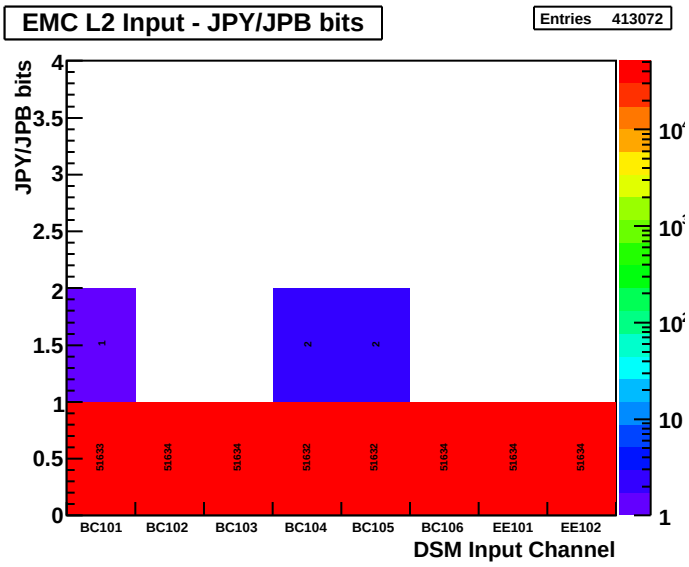

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

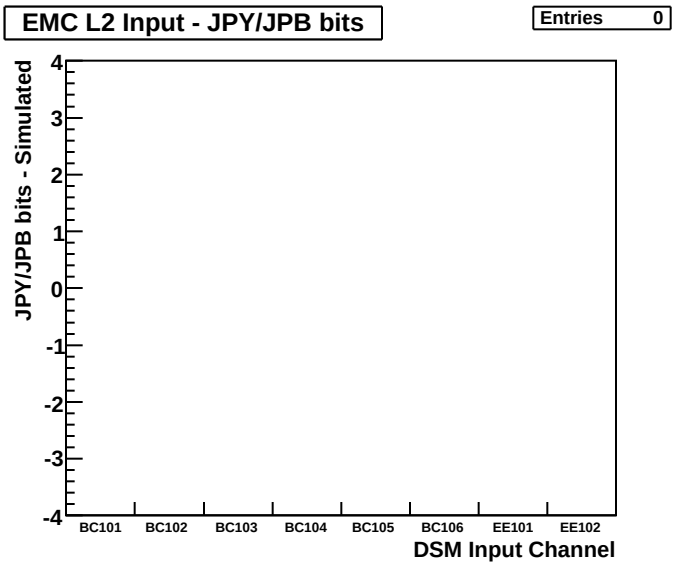

Endcap EMC L1 Input - High Tower Bits
Entries 619608
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

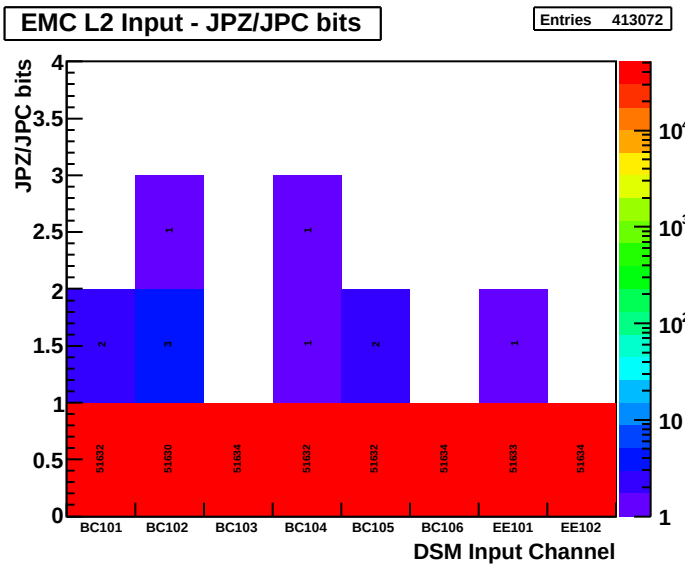

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

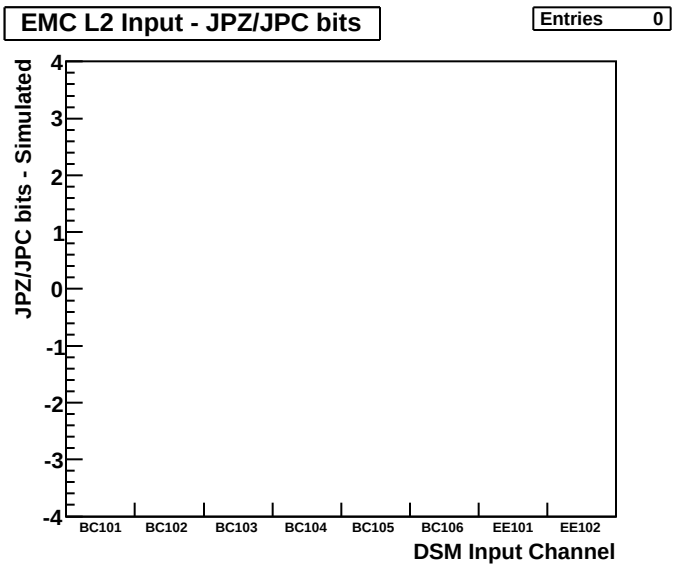

EMC L2 Input - JPX/JPA bits
Entries 413072
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

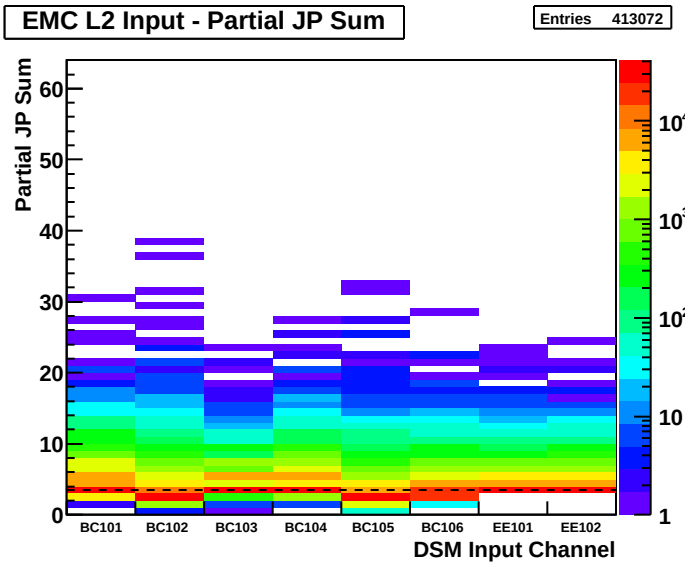

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

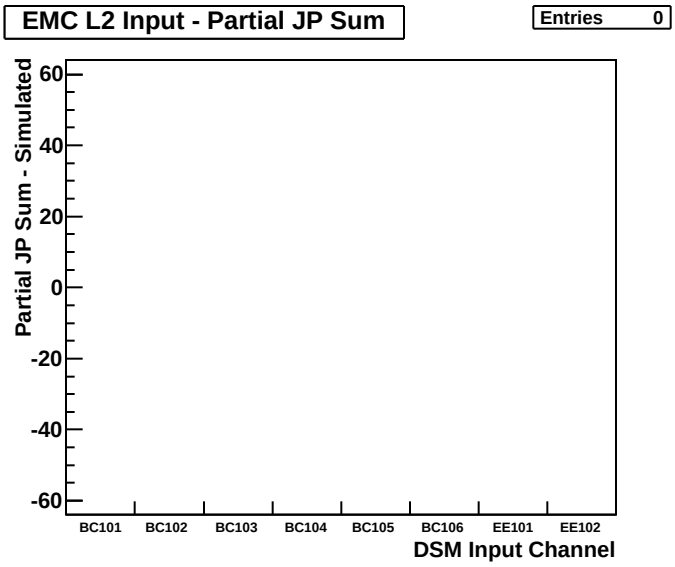

EMC L2 Input - JPY/JPB bits
Entries 413072
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

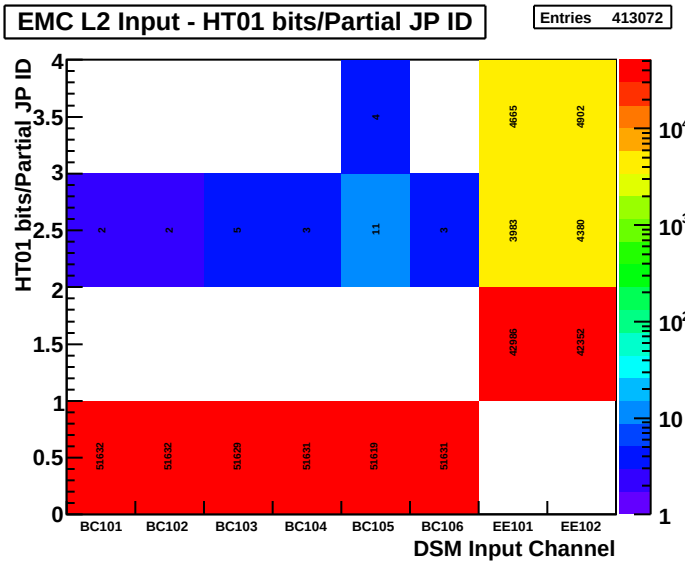

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

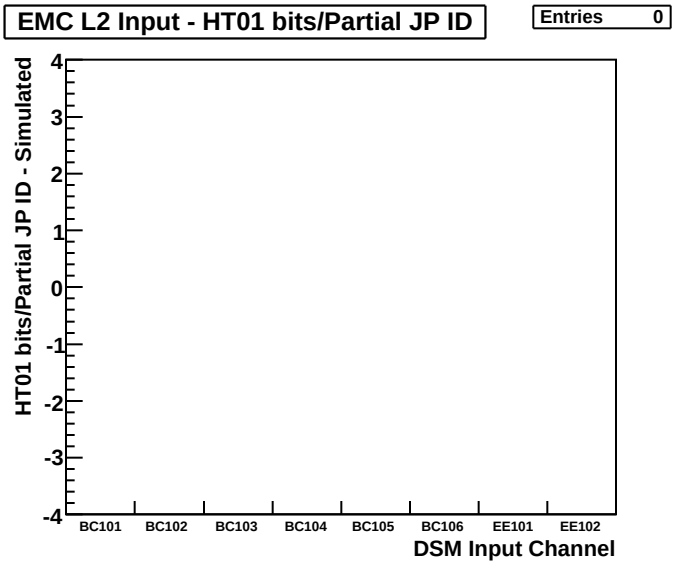

EMC L2 Input - JPZ/JPC bits
Entries 413072
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

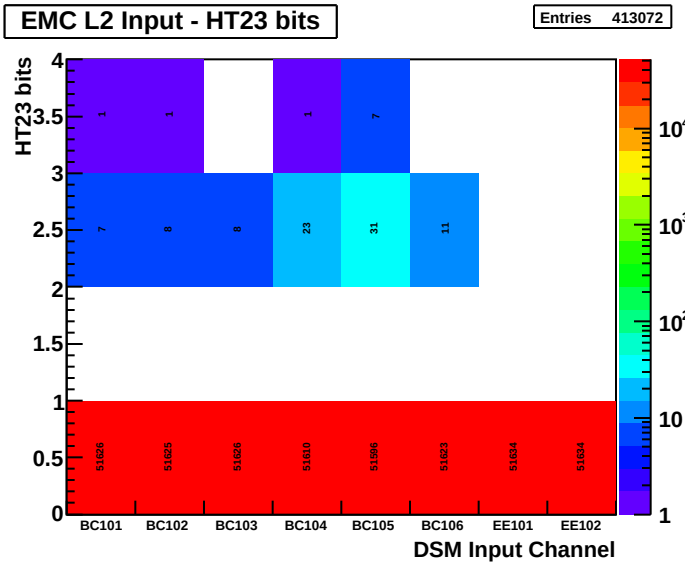

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

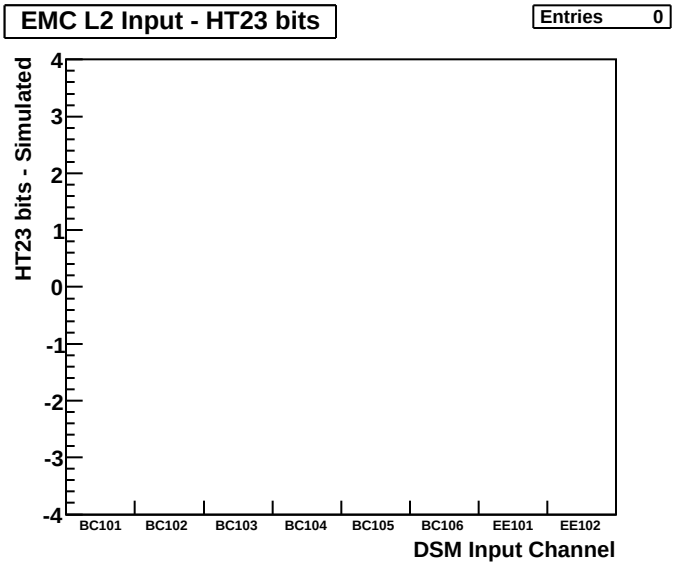

EMC L2 Input - Partial JP Sum
Entries 413072
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

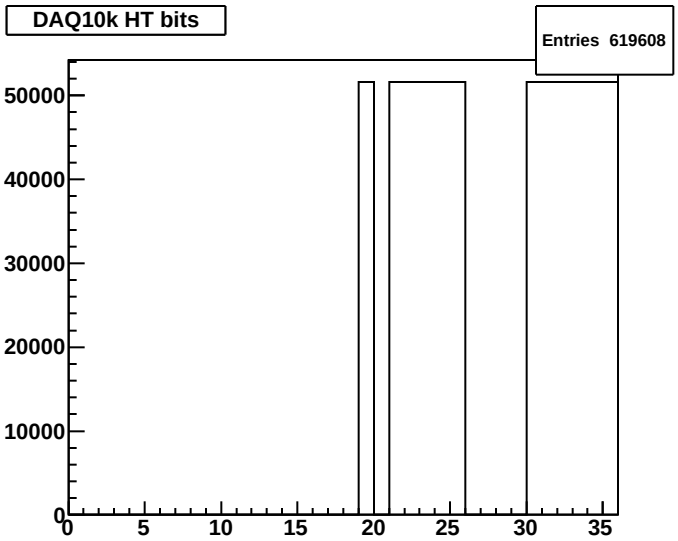

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

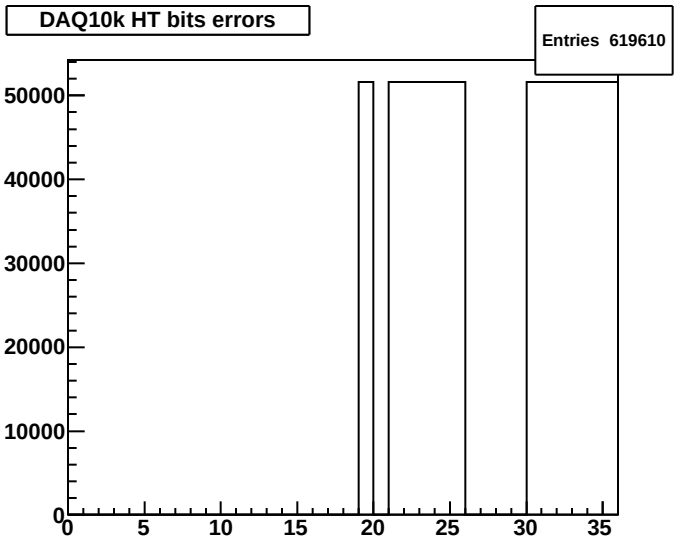

EMC L2 Input - HT01 bits/Partial JP ID
Entries 413072
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

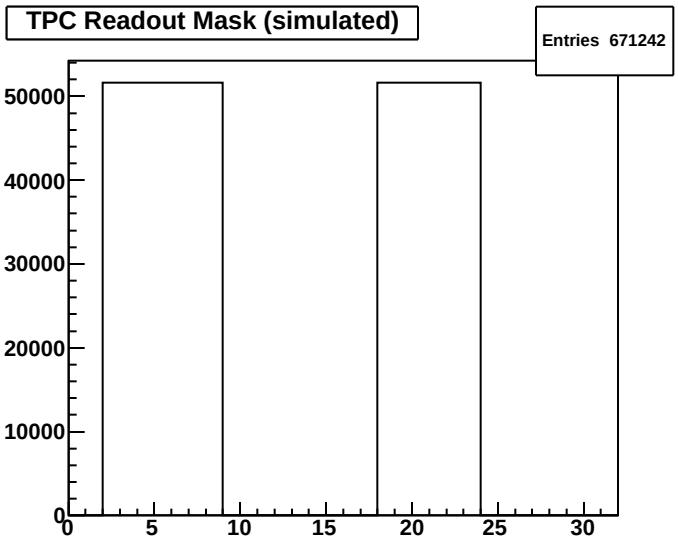

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

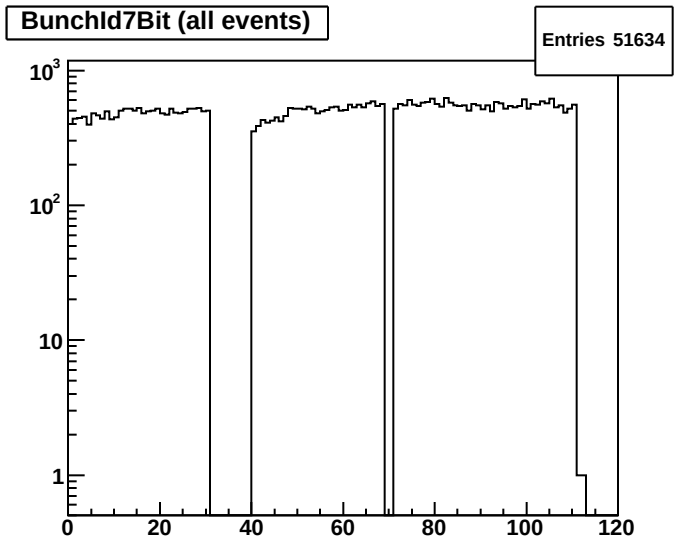

EMC L2 Input - HT23 bits
Entries 413072
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

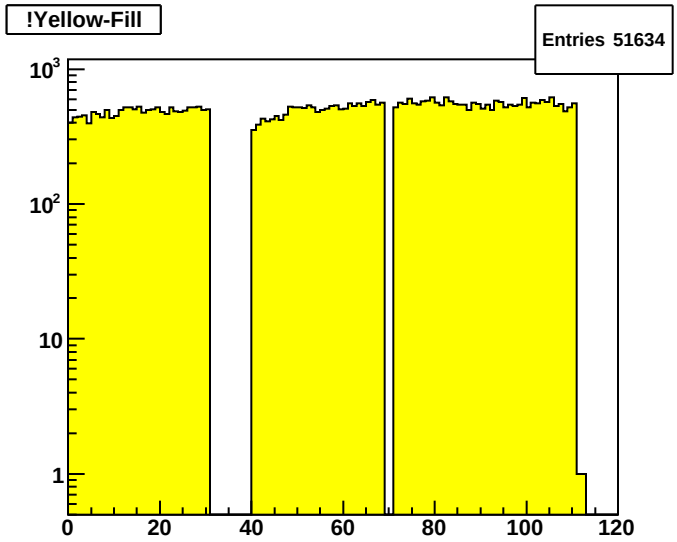

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

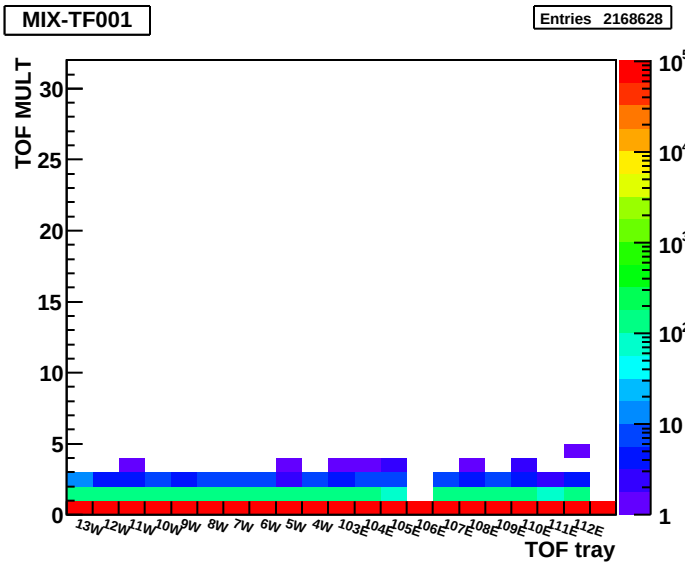

DAQ10k HT bits
Entries 619608
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30 35

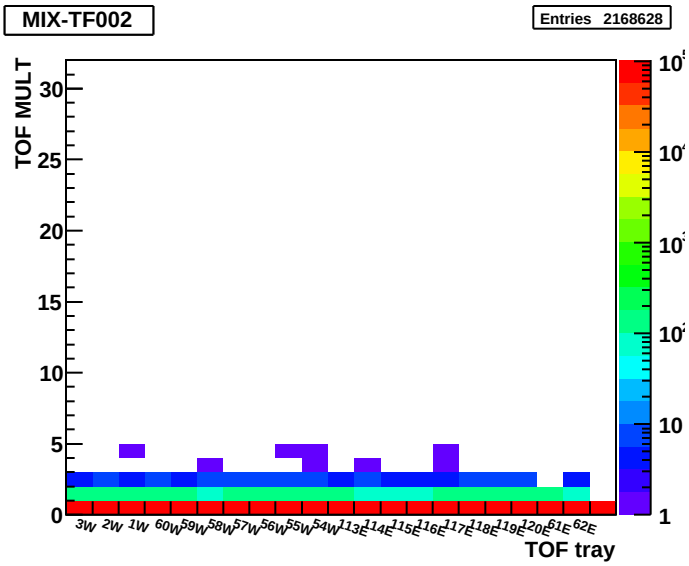

DAQ10k HT bits errors
Entries 619610
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30 35

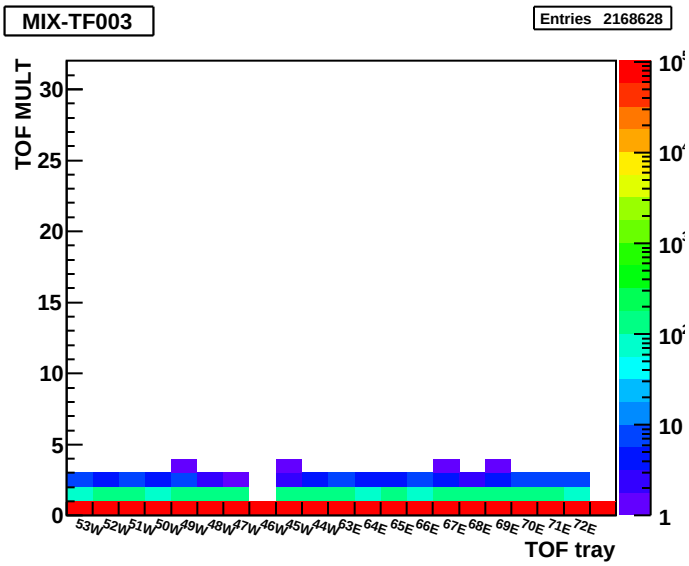

TPC Readout Mask (simulated)
Entries 671242
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30

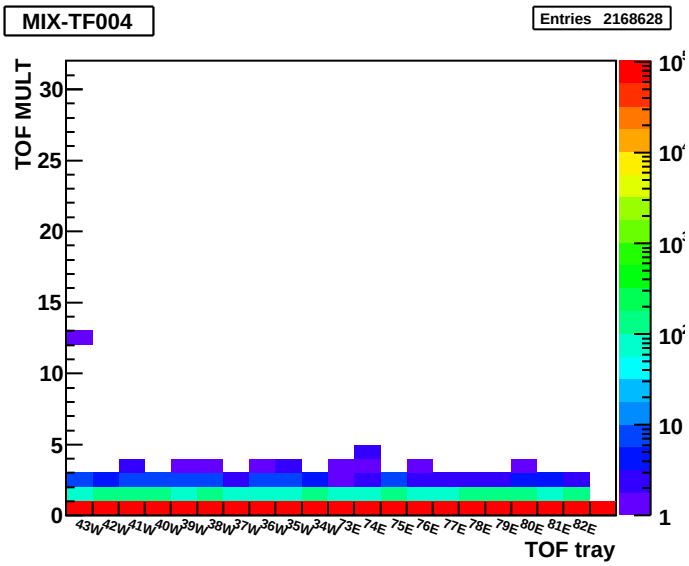

BunchId7Bit (all events)
Entries 51634
10^3
10^2
10
1
0 20 40 60 80 100 120

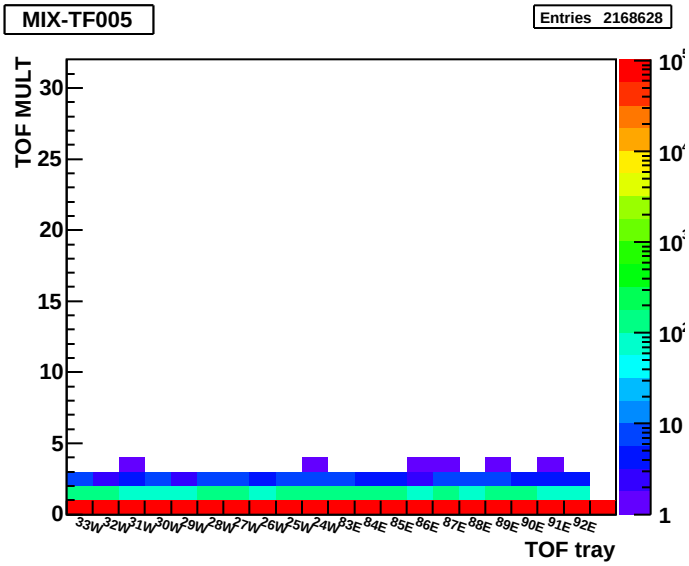

!Yellow-Fill
Entries 51634
10^3
10^2
10
1
0 20 40 60 80 100 120

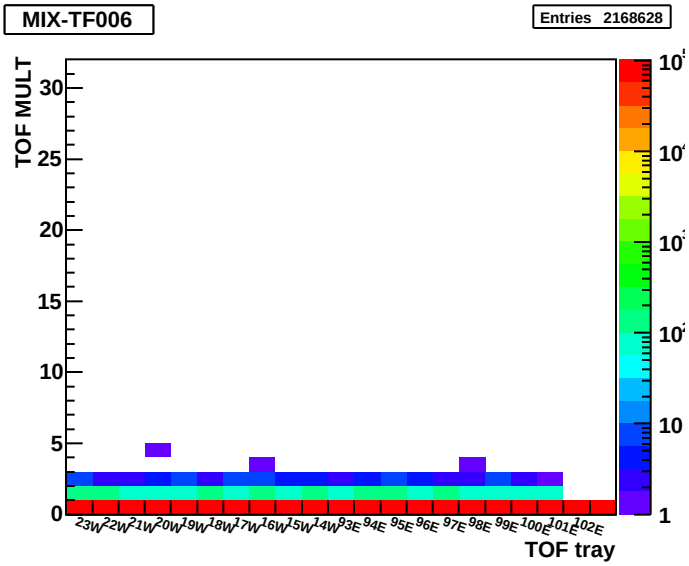

MIX-TF001
Entries 2168628
TOF MULT
TOF tray

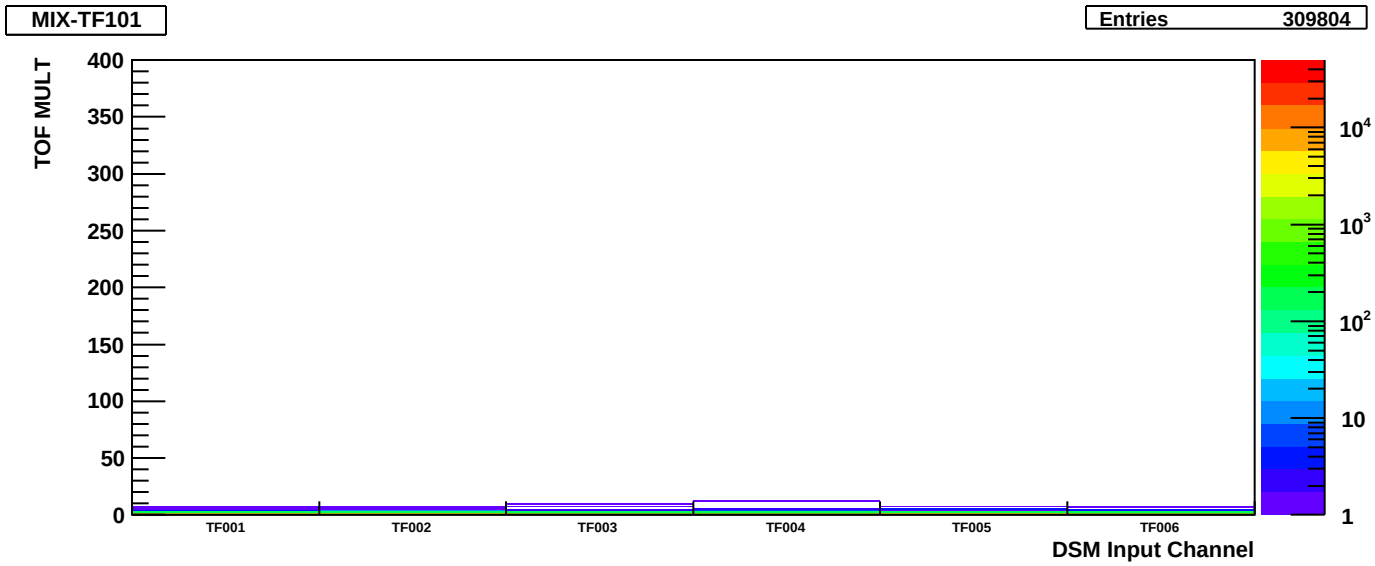

MIX-TF002
Entries 2168628
TOF MULT
TOF tray

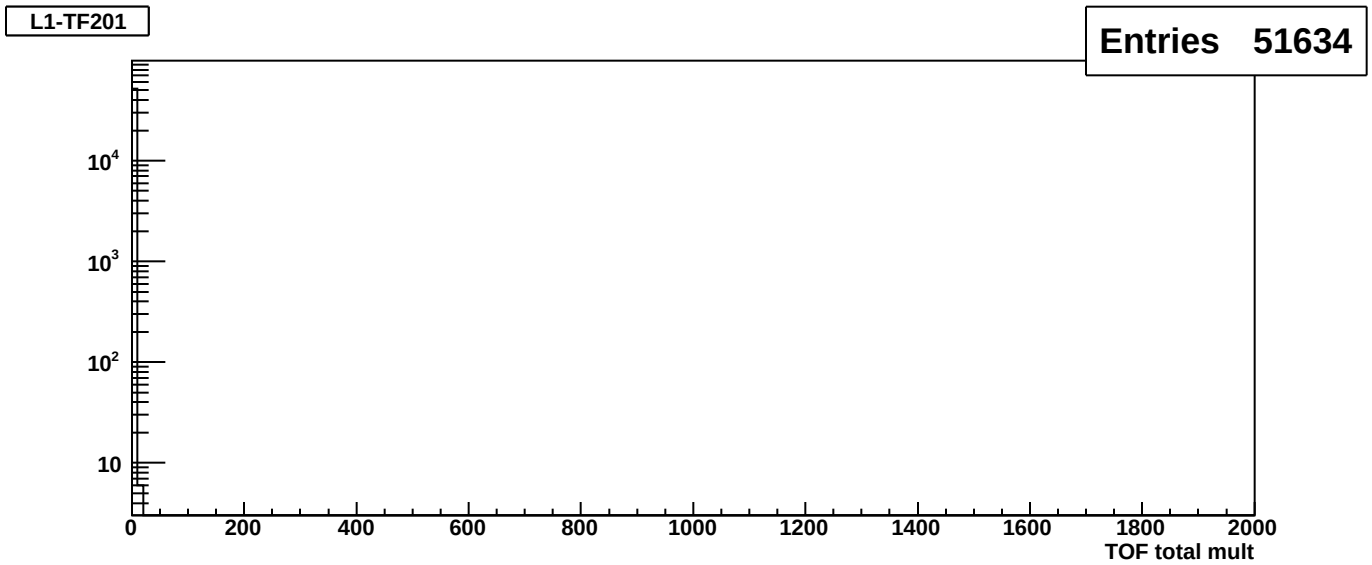

MIX-TF003
Entries 2168628
TOF MULT
TOF tray

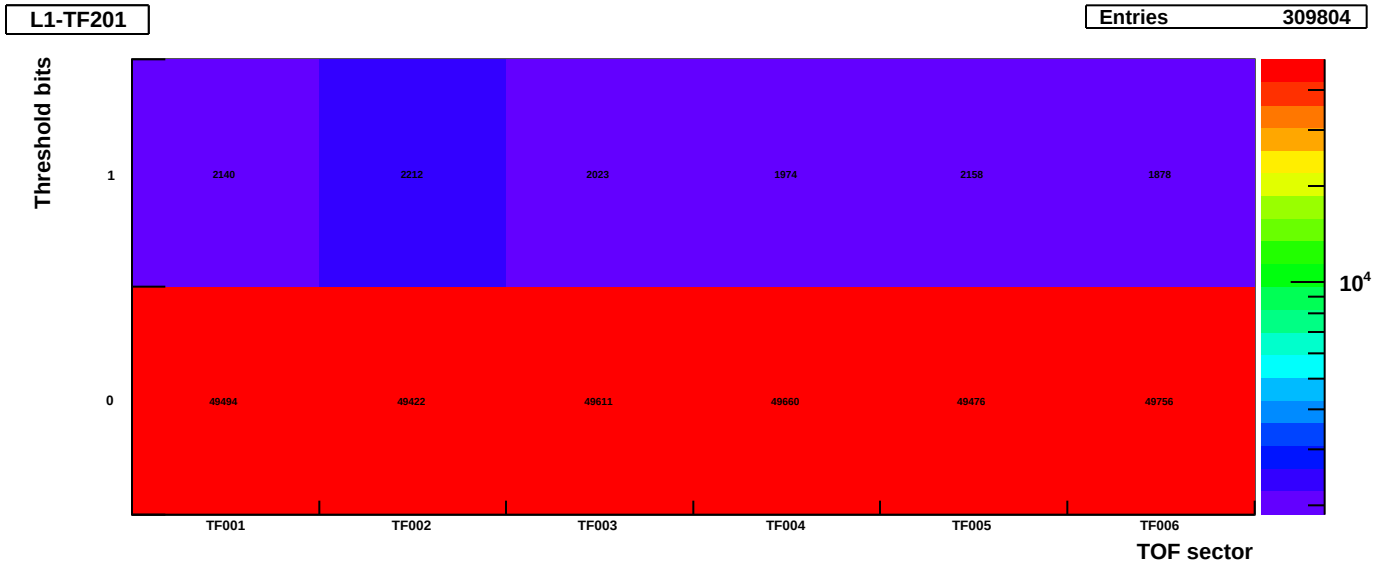

MIX-TF004
Entries 2168628
TOF MULT
TOF tray

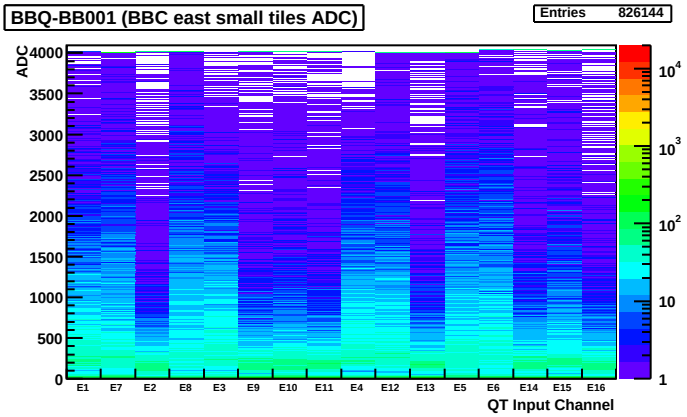

MIX-TF005
Entries 2168628
TOF MULT
TOF tray

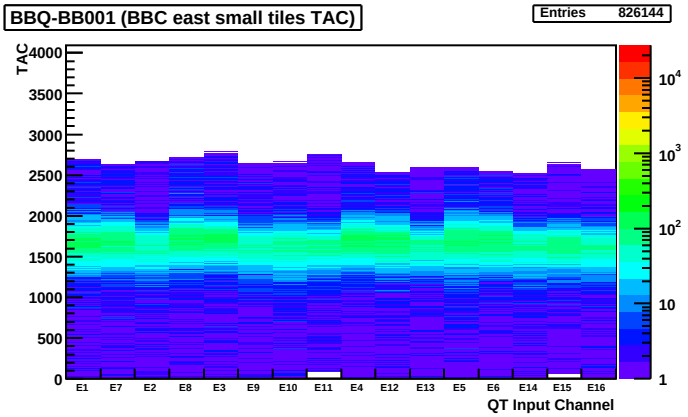

MIX-TF006
Entries 2168628
TOF MULT
TOF tray

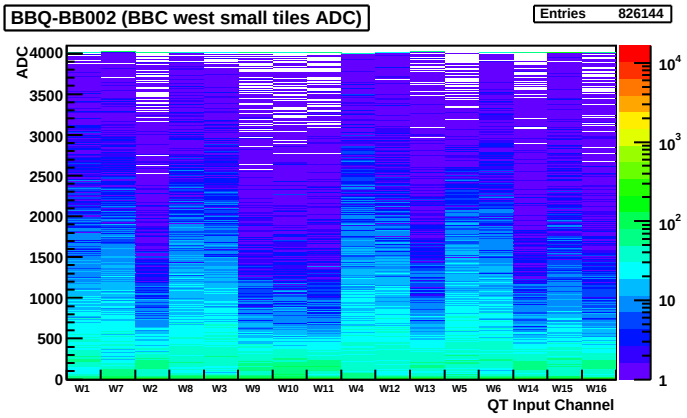

MIX-TF101
Entries 309804
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

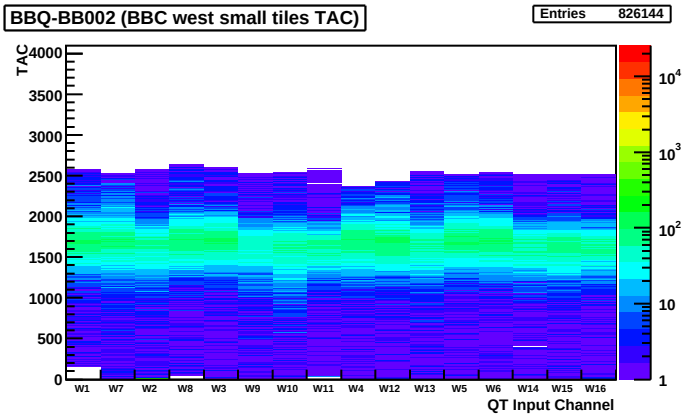

L1-TF201
Entries 51634
10^4
10^3
10^2
10
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

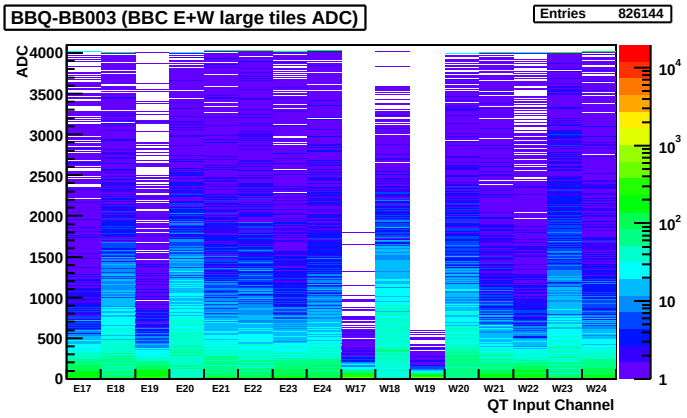

L1-TF201
Entries 309804
Threshold bits
1
0
2140
2212
2023
1974
2158
1878
49494
49422
49611
49660
49476
49756
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4

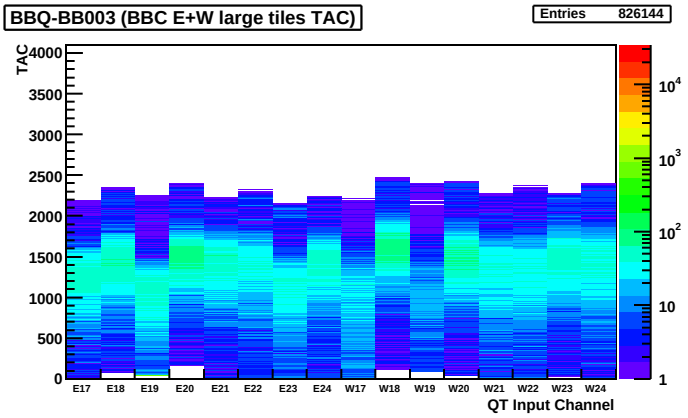

BBQ-BB001 (BBC east small tiles ADC)
Entries 826144
ADC
QT Input Channel

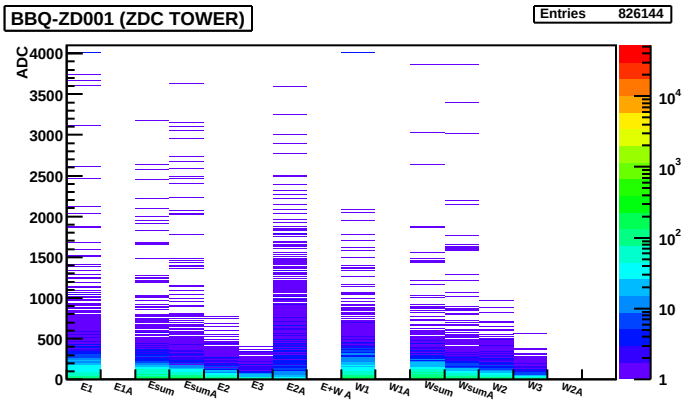

BBQ-BB001 (BBC east small tiles TAC)
Entries 826144
TAC
QT Input Channel

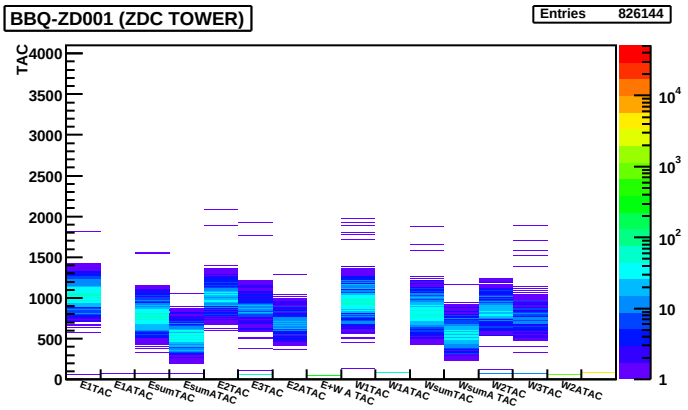

BBQ-BB002 (BBC west small tiles ADC)
Entries 826144
ADC
QT Input Channel

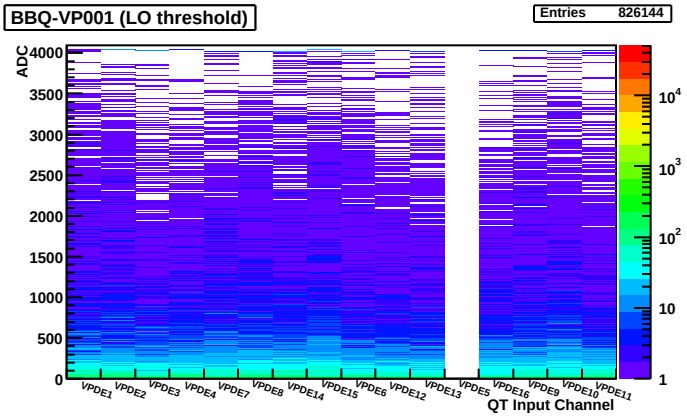

BBQ-BB002 (BBC west small tiles TAC)
Entries 826144
TAC
QT Input Channel

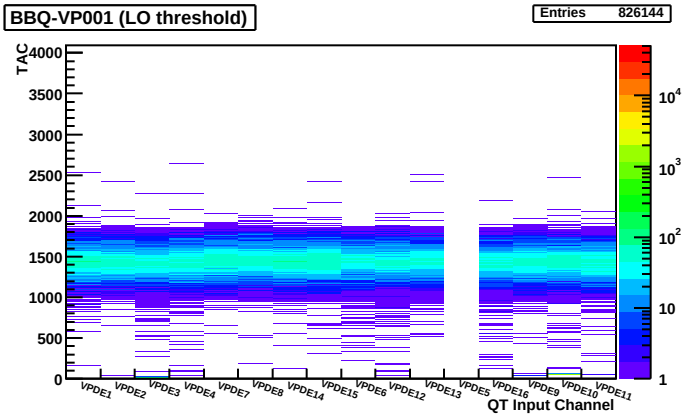

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 826144
ADC
QT Input Channel

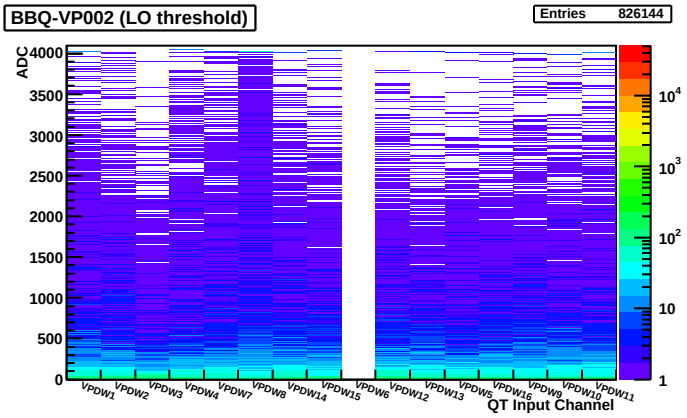

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 826144
TAC
QT Input Channel

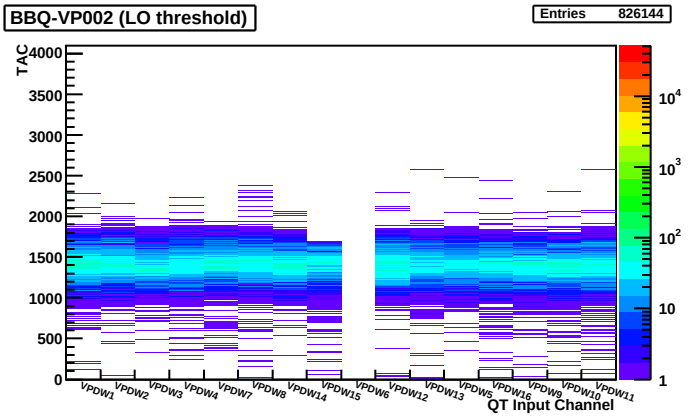

BBQ-ZD001 (ZDC TOWER)
Entries 826144
ADC

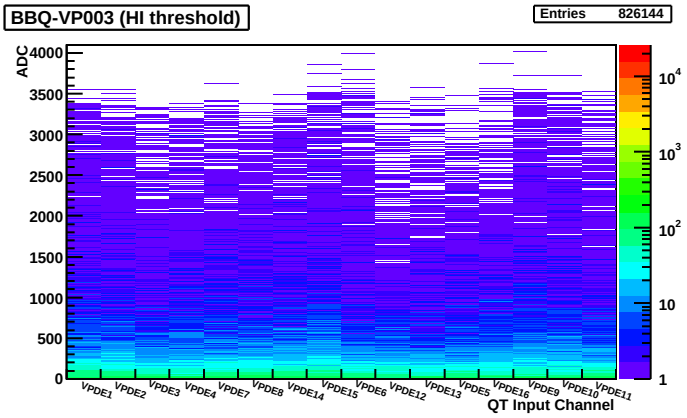

BBQ-ZD001 (ZDC TOWER)
Entries 826144
TAC

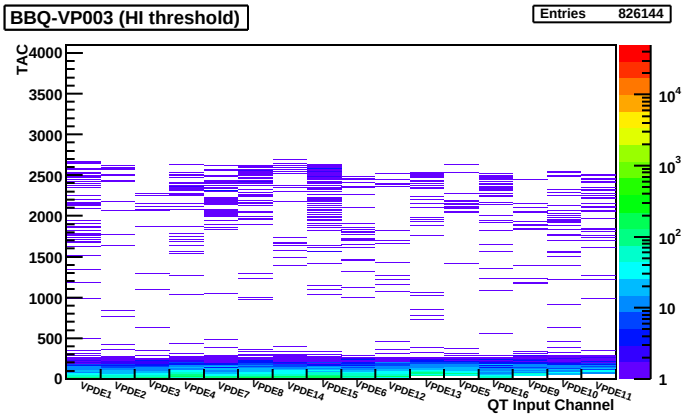

BBQ-VP001 (LO threshold)
Entries 826144
ADC
QT Input Channel

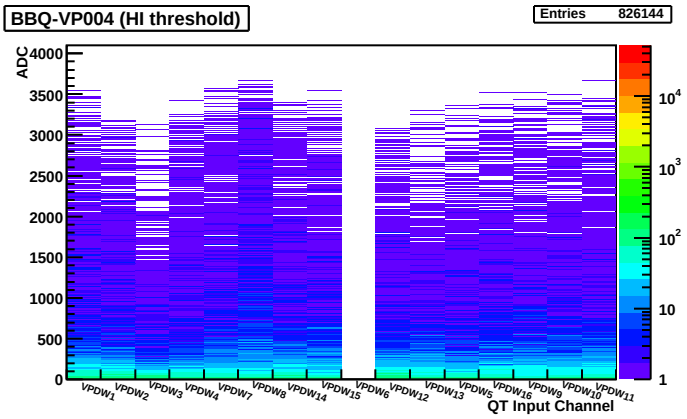

BBQ-VP001 (LO threshold)
Entries 826144
TAC
QT Input Channel

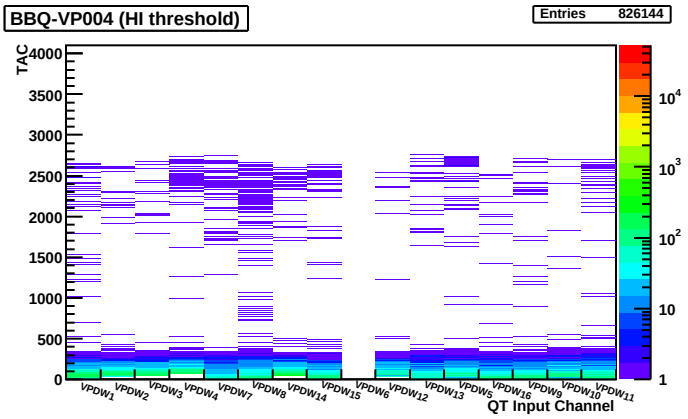

BBQ-VP002 (LO threshold)
Entries 826144
ADC
QT Input Channel

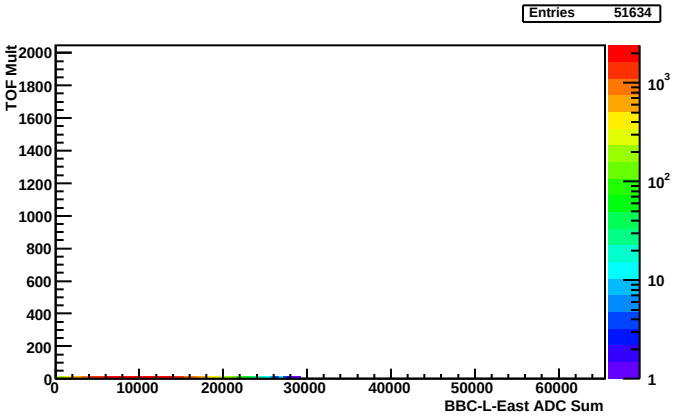

BBQ-VP002 (LO threshold)
Entries 826144
TAC
QT Input Channel

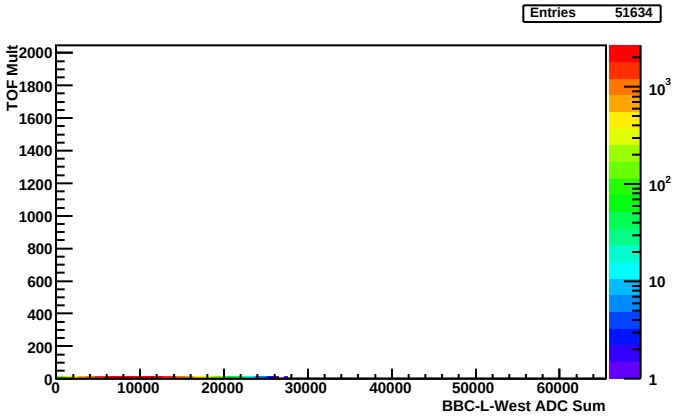

BBQ-VP003 (HI threshold)
Entries 826144
ADC
QT Input Channel

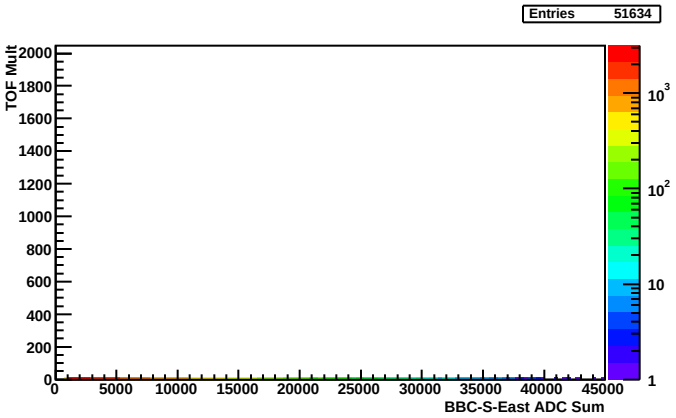

BBQ-VP003 (HI threshold)
Entries 826144
TAC
QT Input Channel

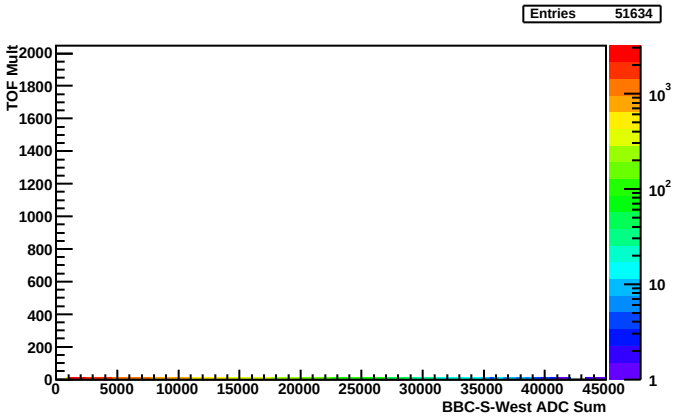

BBQ-VP004 (HI threshold)
Entries 826144
ADC
QT Input Channel

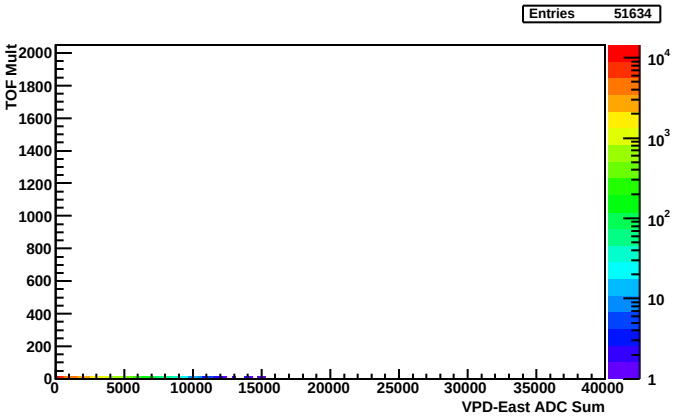

BBQ-VP004 (HI threshold)
Entries 826144
TAC
QT Input Channel

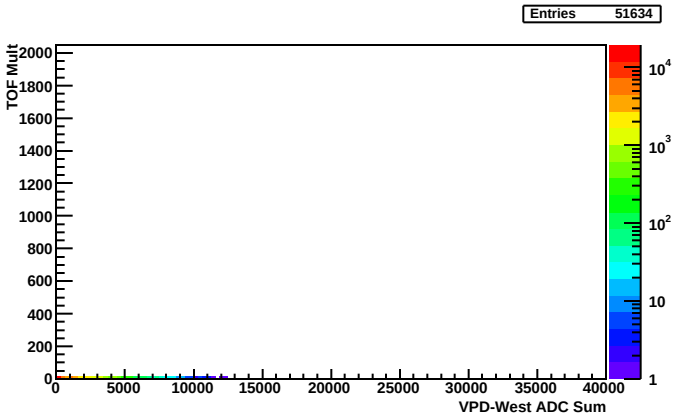

Entries 51634
TOF Mult
BBC-L-East ADC Sum

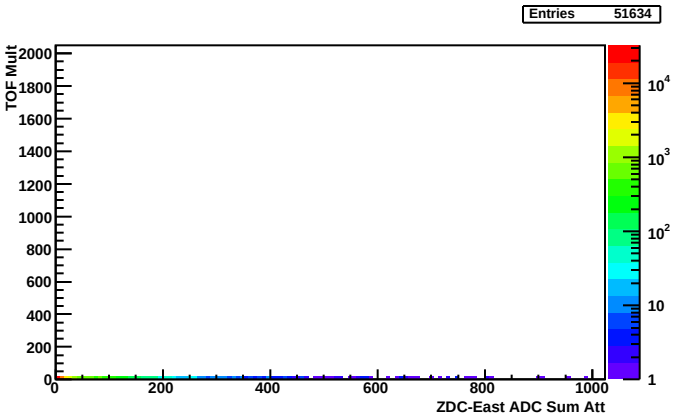

Entries 51634
TOF Mult
BBC-L-West ADC Sum

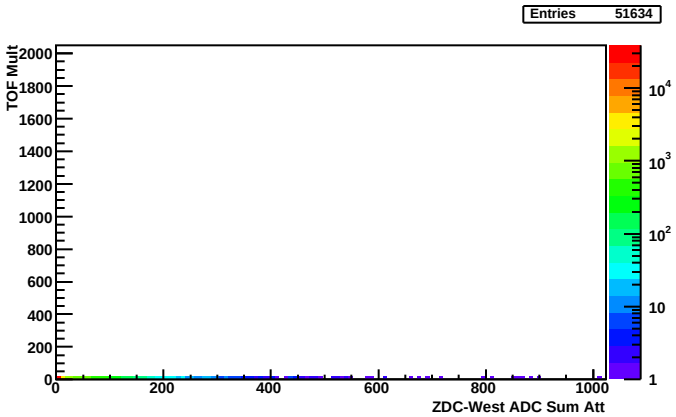

Entries 51634
TOF Mult
BBC-S-East ADC Sum

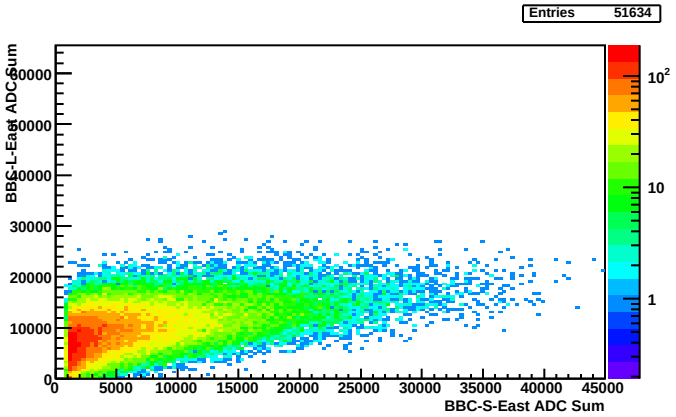

Entries 51634
TOF Mult
BBC-S-West ADC Sum

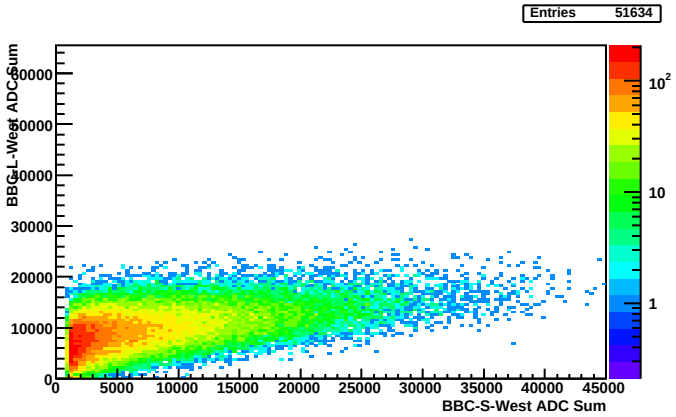

Entries 51634
TOF Mult
VPD-East ADC Sum

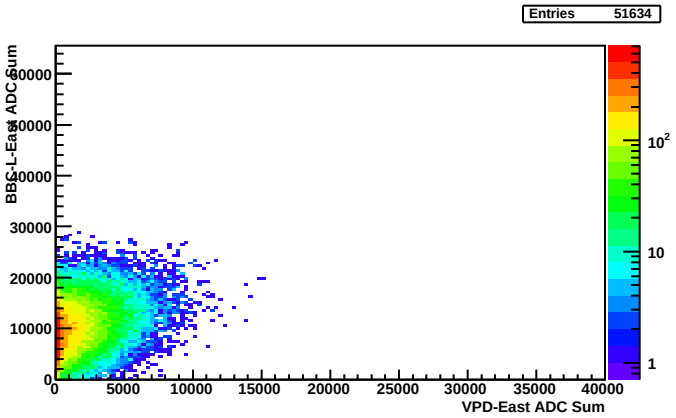

Entries 51634
TOF Mult
VPD-West ADC Sum

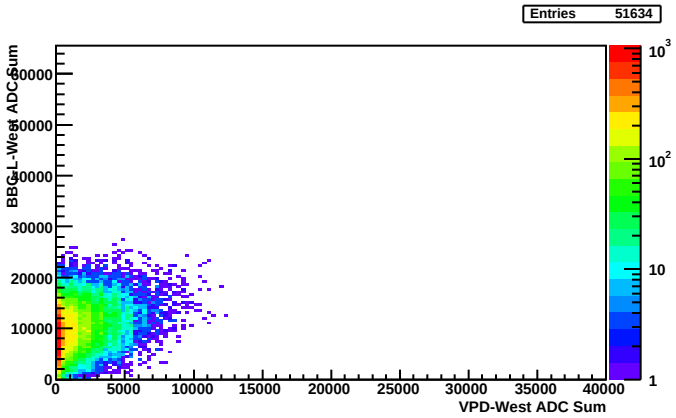

Entries 51634
TOF Mult
ZDC-East ADC Sum Att

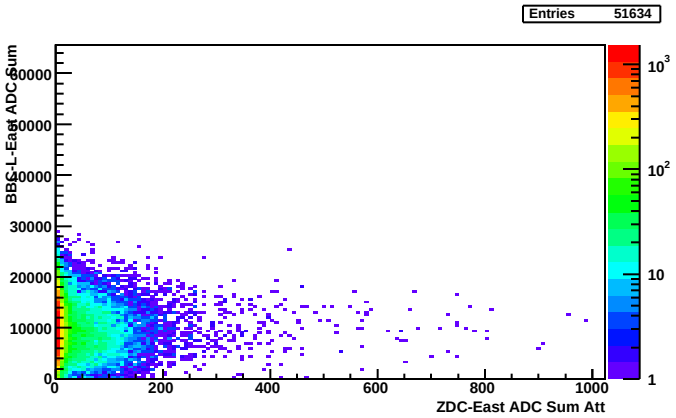

Entries 51634
TOF Mult
ZDC-West ADC Sum Att

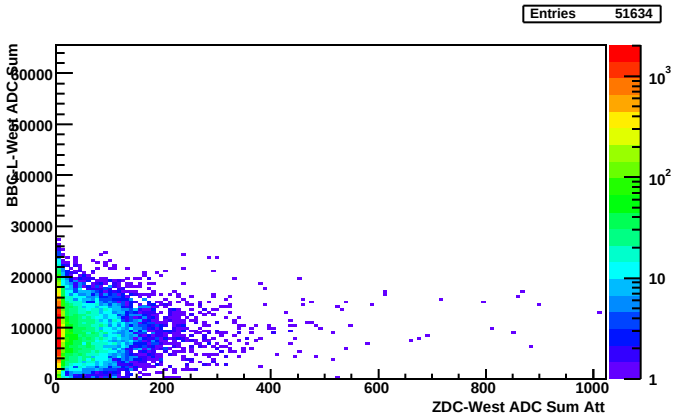

Entries 51634
BBC-L-East ADC Sum
BBC-S-East ADC Sum

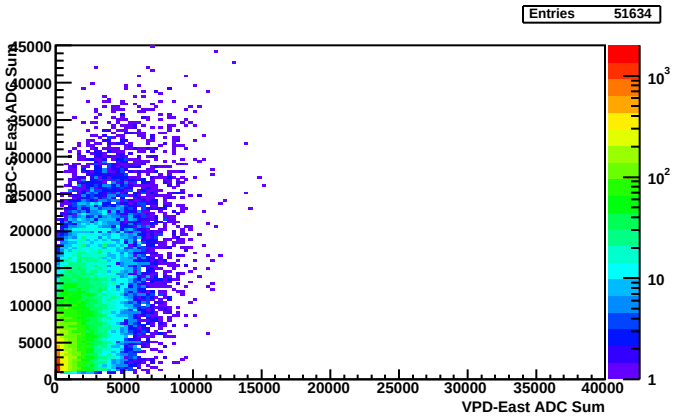

Entries 51634
BBC-L-West ADC Sum
BBC-S-West ADC Sum

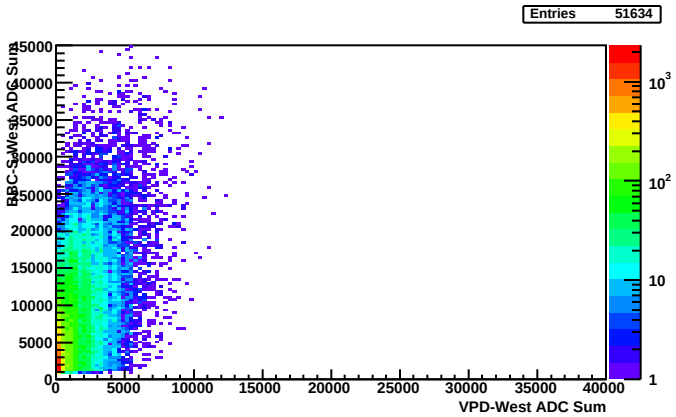

Entries 51634
BBC-L-East ADC Sum
VPD-East ADC Sum

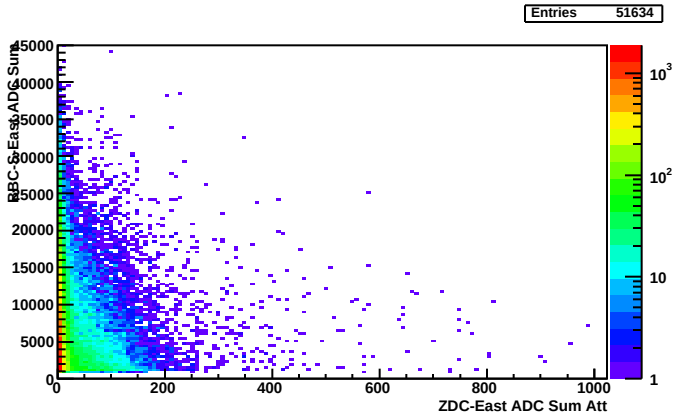

Entries 51634
BBC-L-West ADC Sum
VPD-West ADC Sum

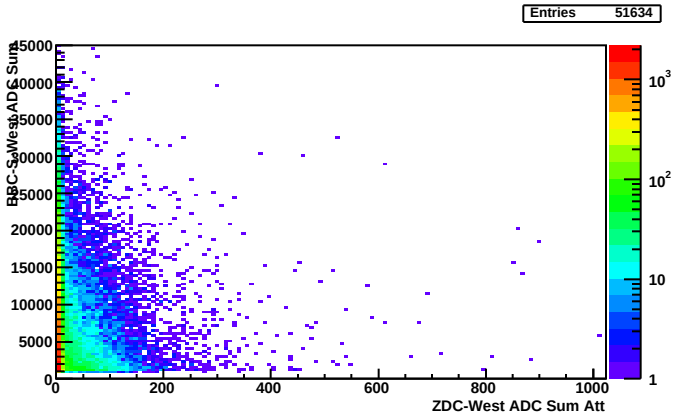

Entries 51634
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

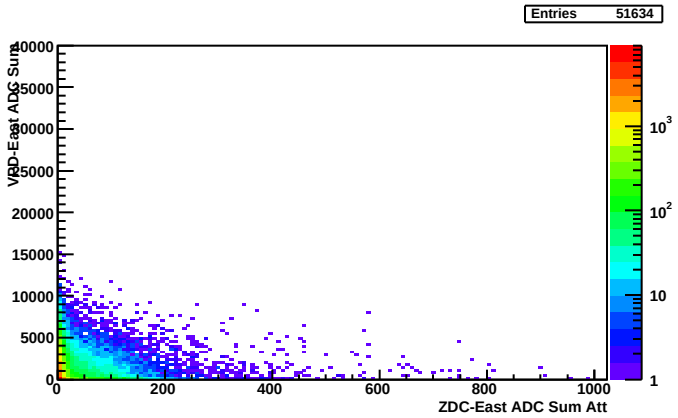

Entries 51634
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

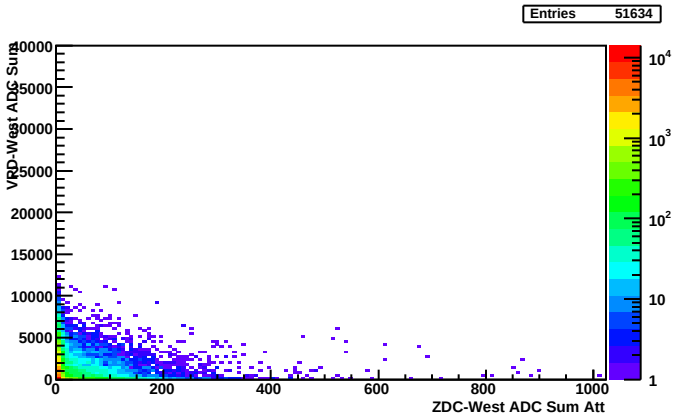

Entries 51634
BBC-S-East ADC Sum
VPD-East ADC Sum

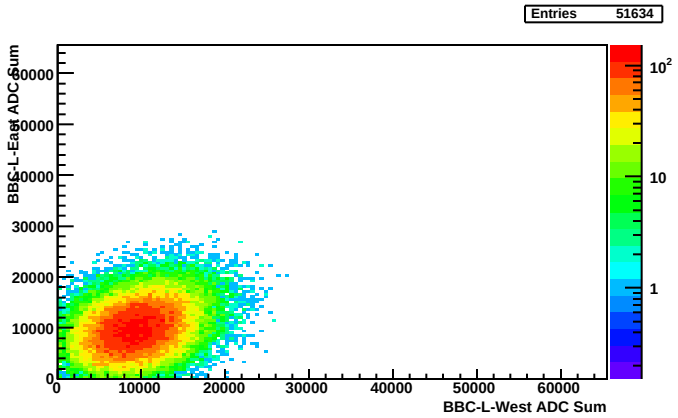

Entries 51634
BBC-S-West ADC Sum
VPD-West ADC Sum

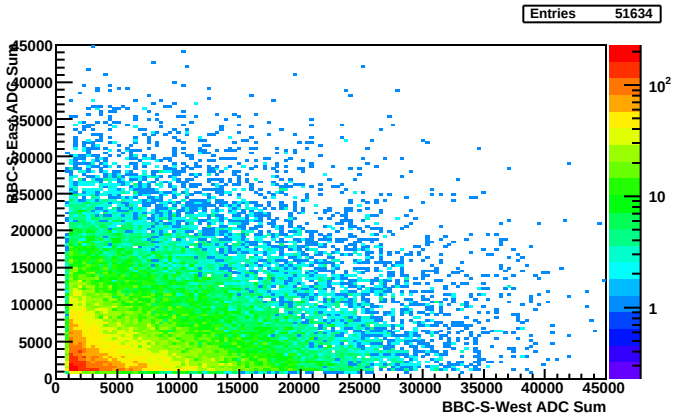

Entries 51634
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

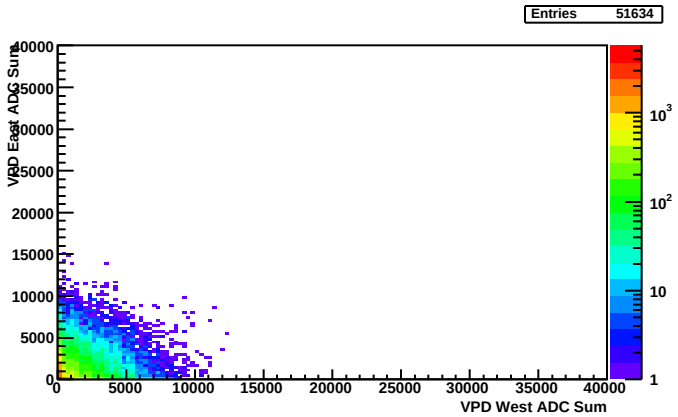

Entries 51634
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

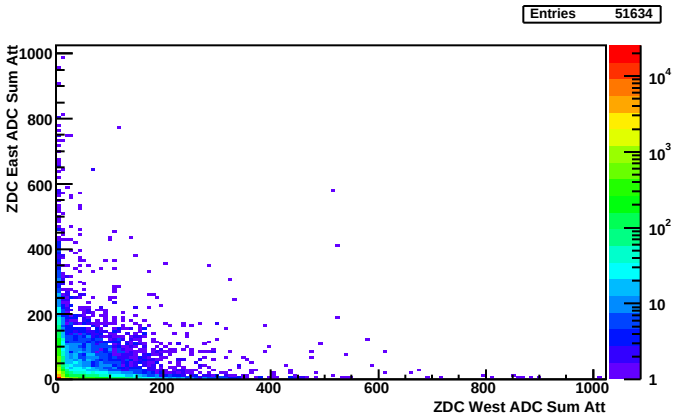

Entries 51634
VPD-East ADC Sum
ZDC-East ADC Sum Att

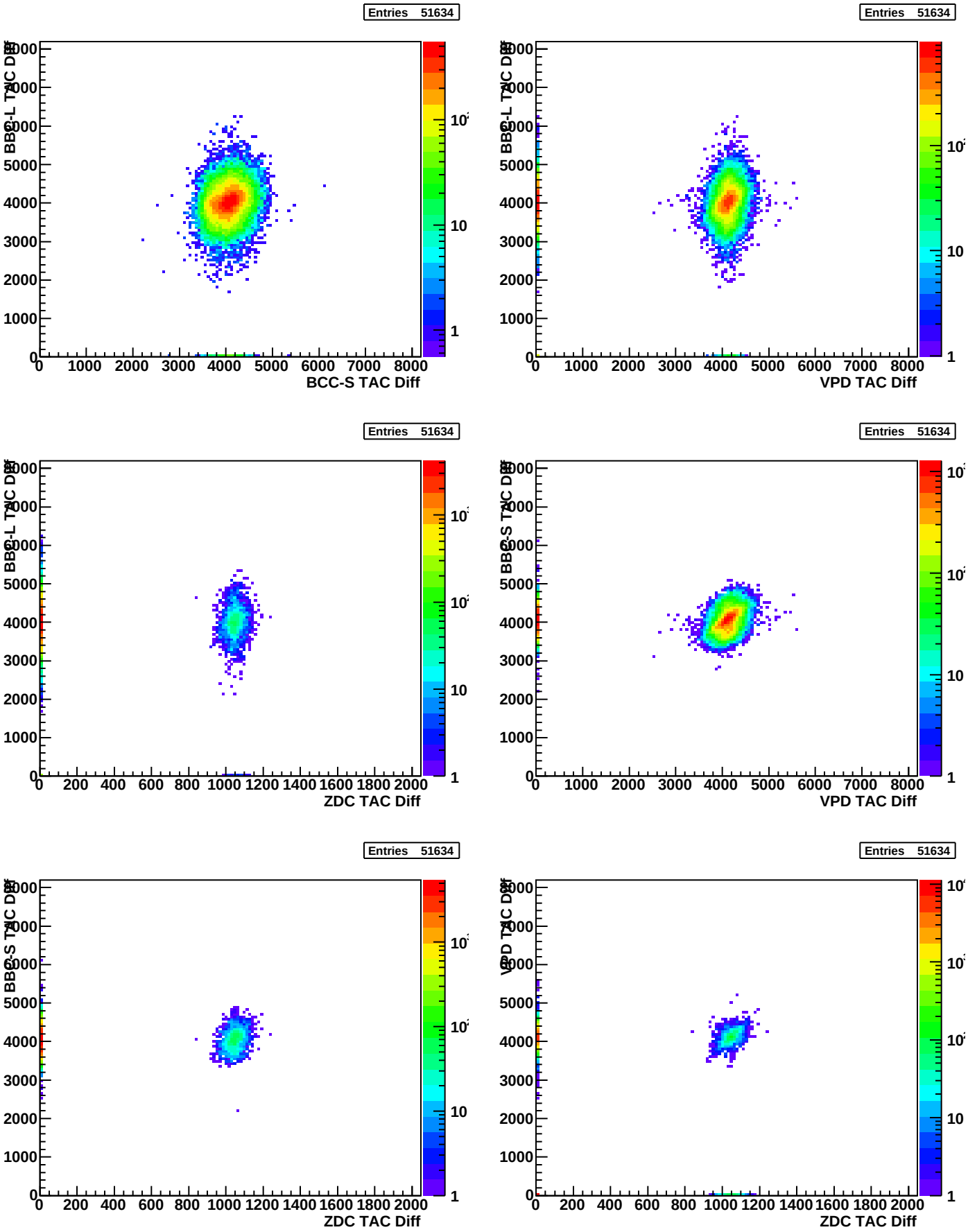

Entries 51634
VPD-West ADC Sum
ZDC-West ADC Sum Att

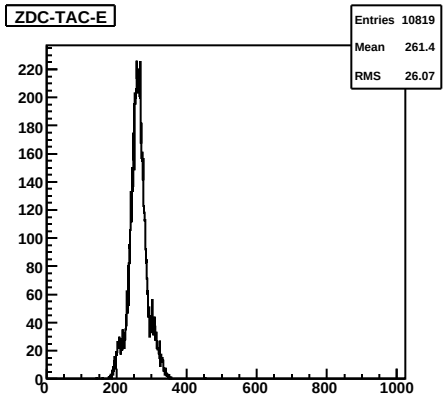

Entries 51634
BBC-L-East ADC Sum
BBC-L-West ADC Sum

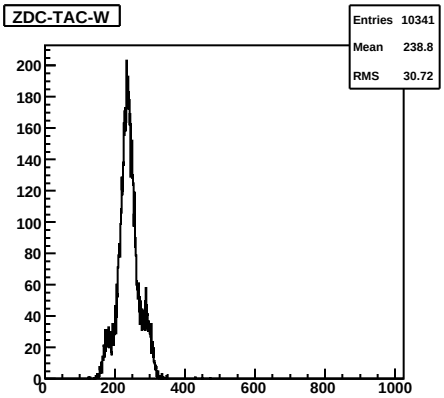

Entries 51634
BBC-S-East ADC Sum
BBC-S-West ADC Sum

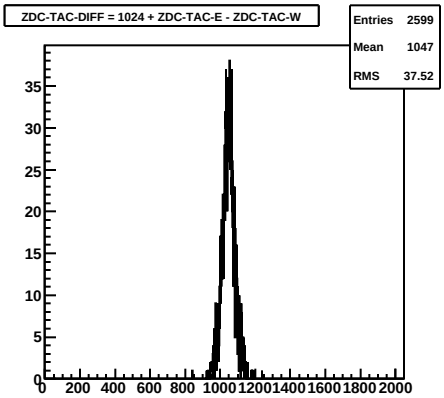

Entries 51634
VPD East ADC Sum
VPD West ADC Sum

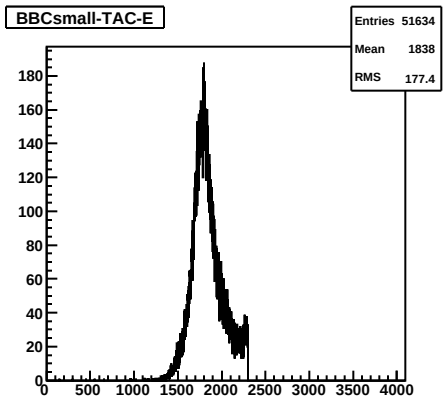

Entries 51634
ZDC East ADC Sum Att
ZDC West ADC Sum Att

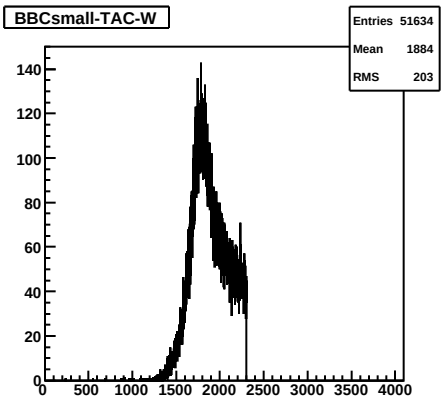

Entries 51634
BBC-L TAC Diff
BCC-S TAC Diff
Entries 51634
BBC-L TAC Diff
VPD TAC Diff
Entries 51634
BBC-L TAC Diff
ZDC TAC Diff
Entries 51634
BBC-S TAC Diff
VPD TAC Diff
Entries 51634
BBC-S TAC Diff
ZDC TAC Diff
Entries 51634
VPD TAC Diff
ZDC TAC Diff

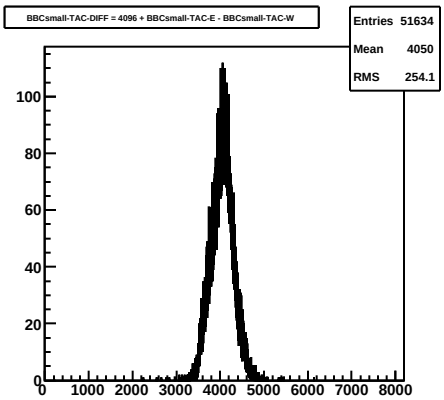

ZDC-TAC-E
Entries 10819
Mean 261.4
RMS 26.07

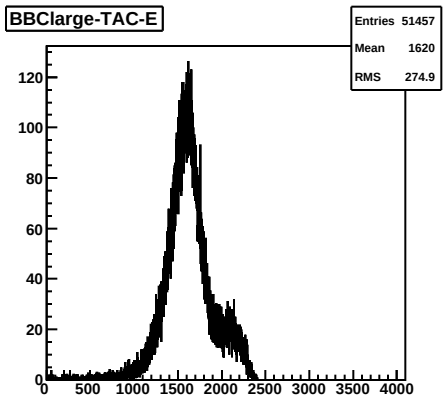

ZDC-TAC-W
Entries 10341
Mean 238.8
RMS 30.72

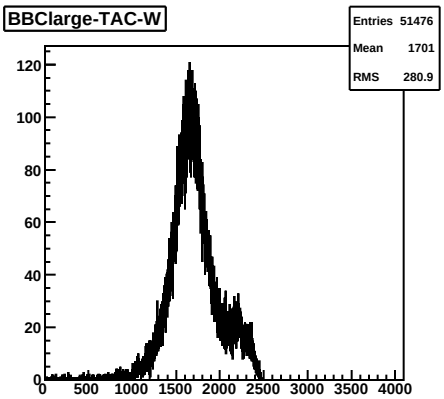

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 2599
Mean 1047
RMS 37.52

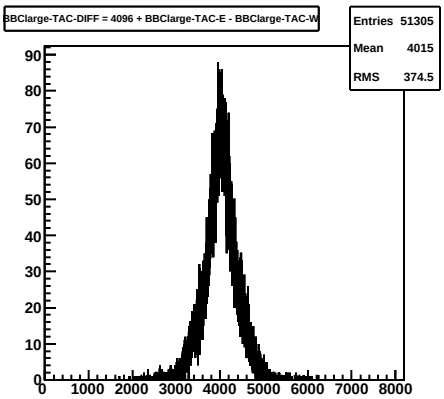

BBCsmall-TAC-E
Entries 51634
Mean 1838
RMS 177.4

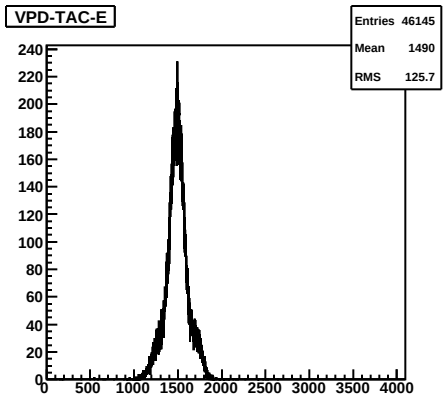

BBCsmall-TAC-W
Entries 51634
Mean 1884
RMS 203

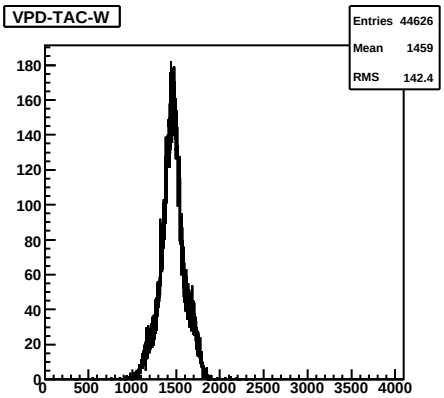

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 51634
Mean 4050
RMS 254.1

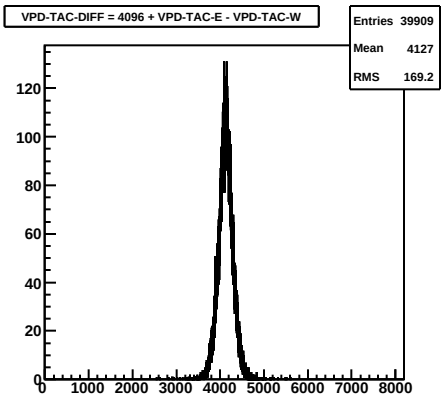

BBClarge-TAC-E
Entries 51457
Mean 1620
RMS 274.9

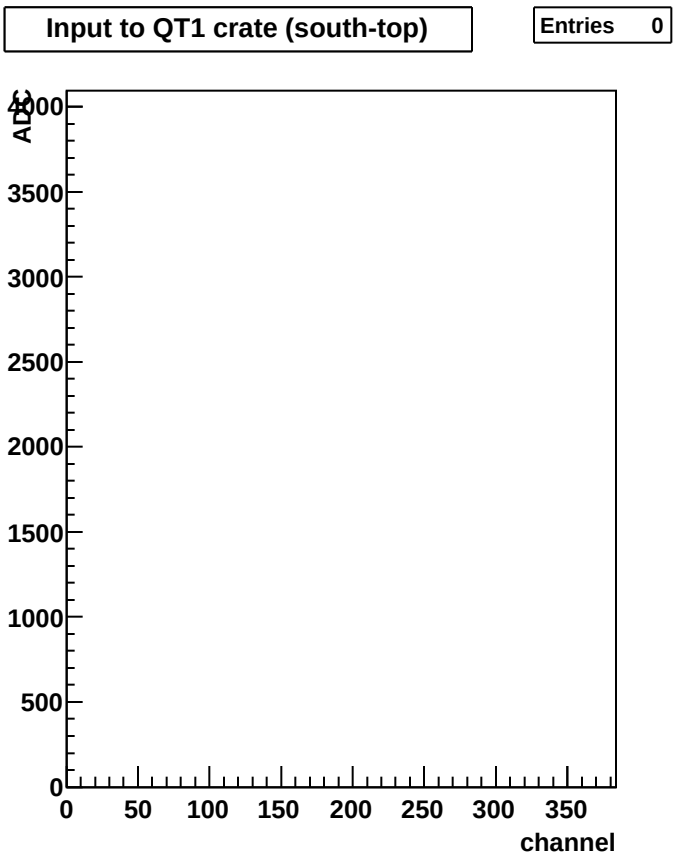

BBClarge-TAC-W
Entries 51476
Mean 1701
RMS 280.9

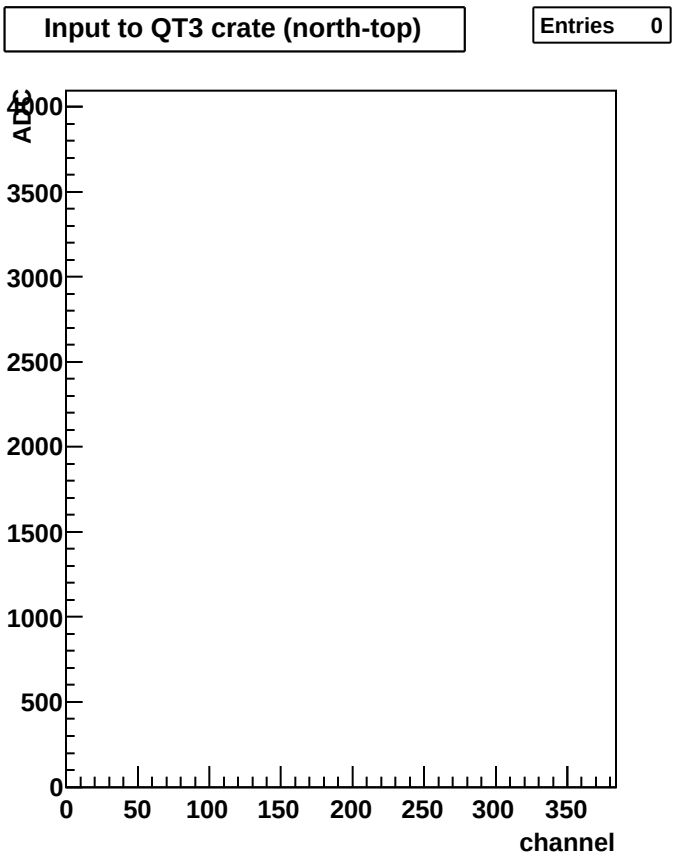

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 51305
Mean 4015
RMS 374.5

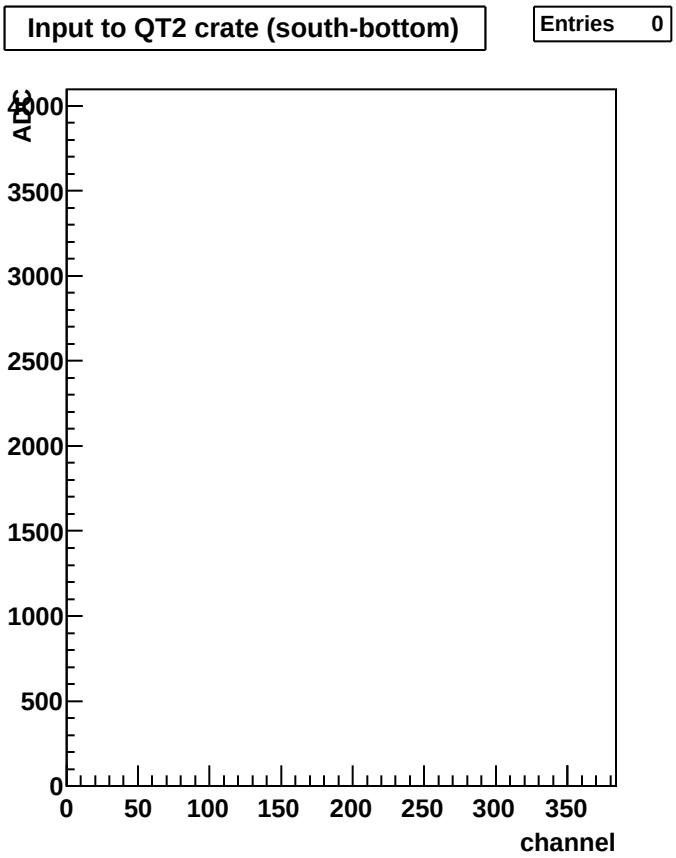

VPD-TAC-E
Entries 46145
Mean 1490
RMS 125.7

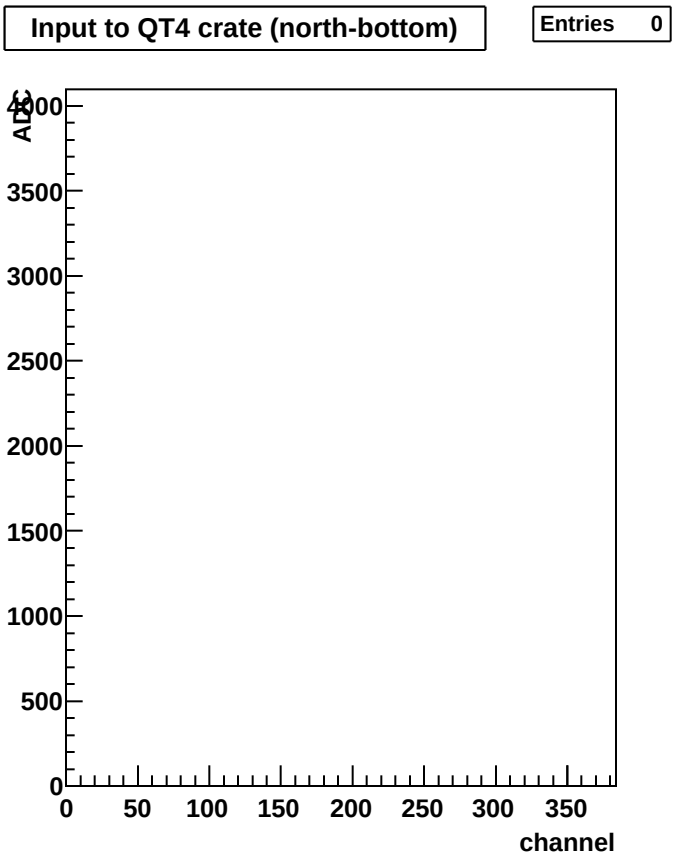

VPD-TAC-W
Entries 44626
Mean 1459
RMS 142.4

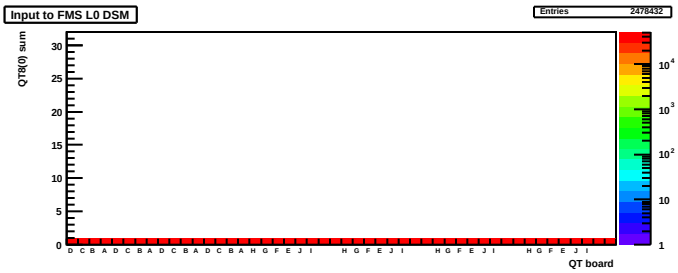

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 39909
Mean 4127
RMS 169.2

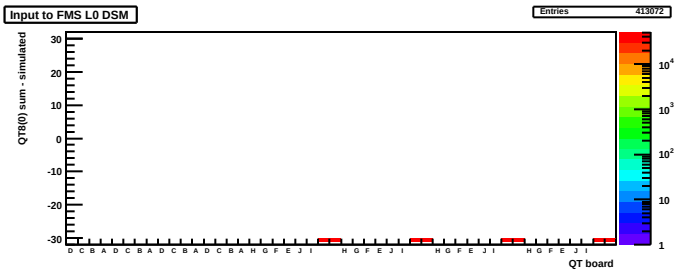

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

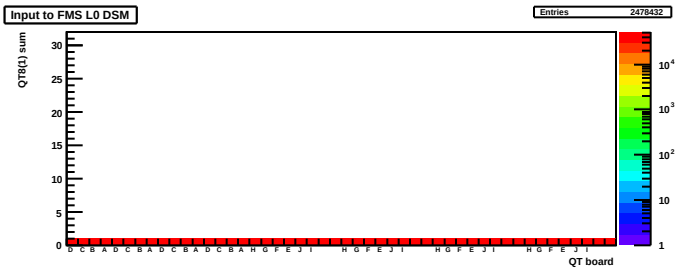

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

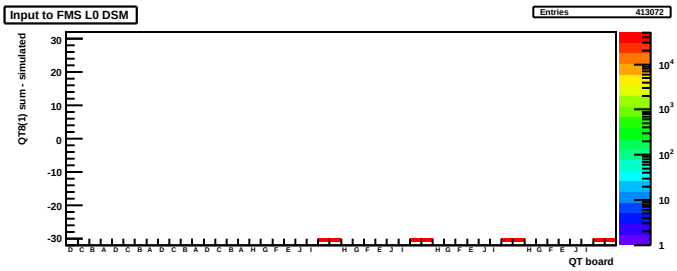

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

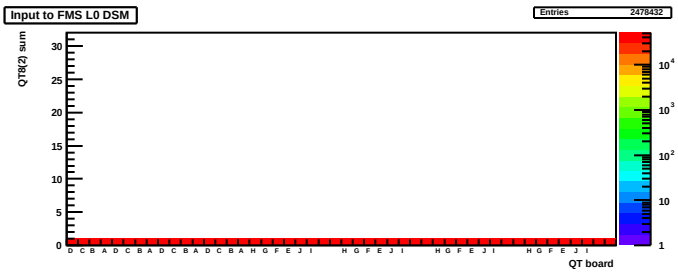

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

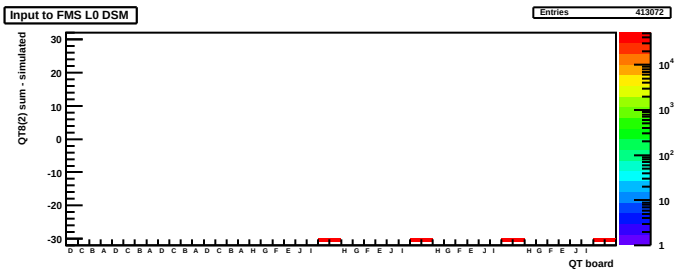

Input to FMS L0 DSM
Entries 2478432
QT8(0) sum
QT board

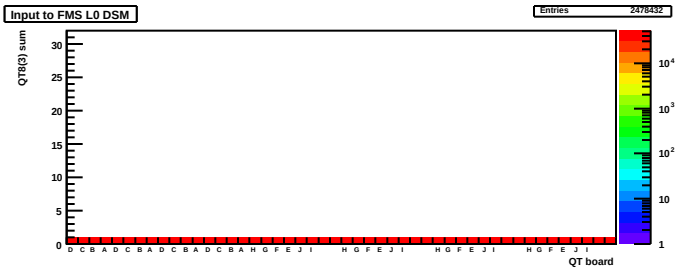

Input to FMS L0 DSM
Entries 413072
QT8(0) sum - simulated
QT board

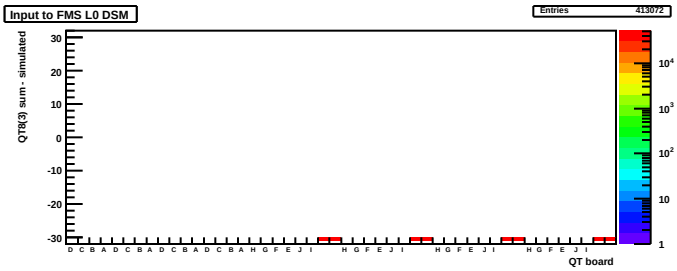

Input to FMS L0 DSM
Entries 2478432
QT8(1) sum
QT board

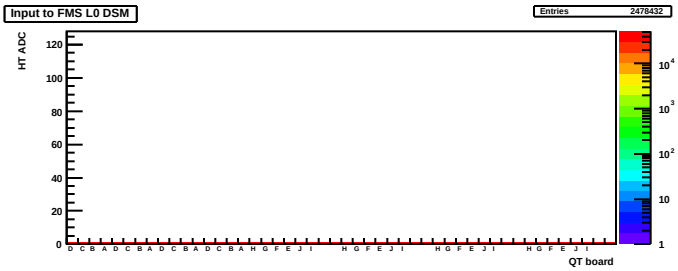

Input to FMS L0 DSM
Entries 413072
QT8(1) sum - simulated
QT board

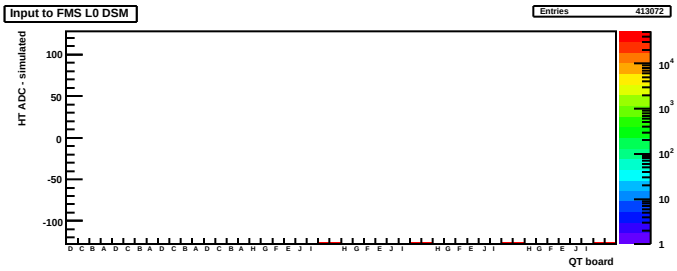

Input to FMS L0 DSM
Entries 2478432
QT8(2) sum
QT board

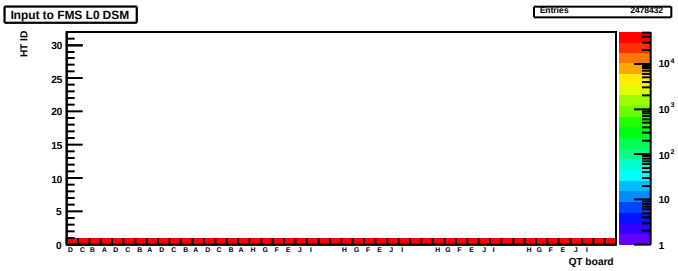

Input to FMS L0 DSM
Entries 413072
QT8(2) sum - simulated
QT board

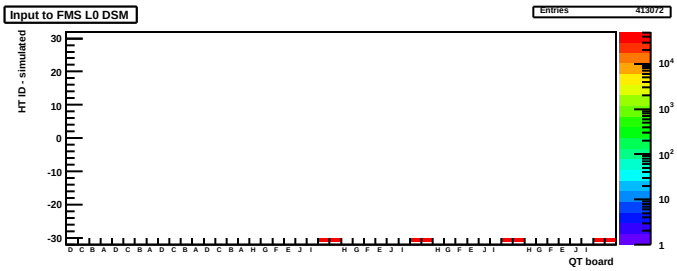

Input to FMS L0 DSM
Entries 2478432
QT8(3) sum
QT board

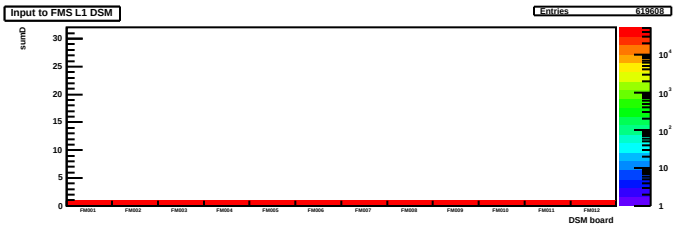

Input to FMS L0 DSM
Entries 413072
QT8(3) sum - simulated
QT board

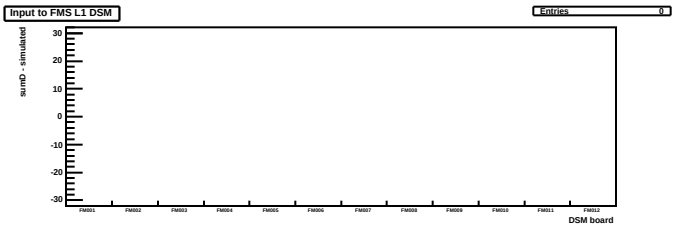

Input to FMS L0 DSM
Entries 2478432
HT ADC
QT board

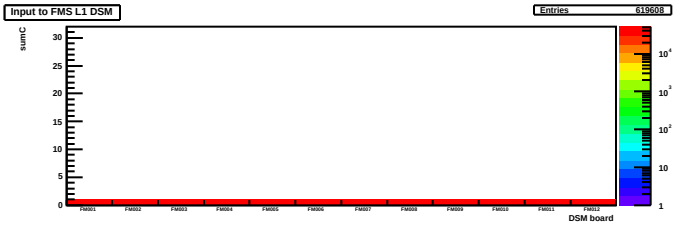

Input to FMS L0 DSM
Entries 413072
HT ADC - simulated
QT board

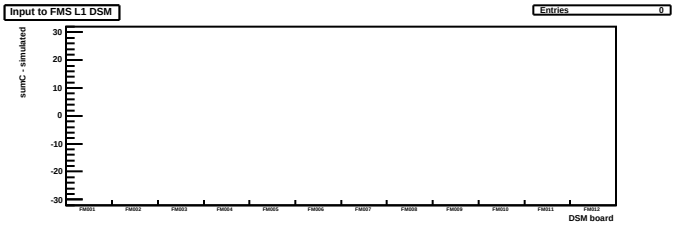

Input to FMS L0 DSM
Entries 2478432
HT ID
QT board

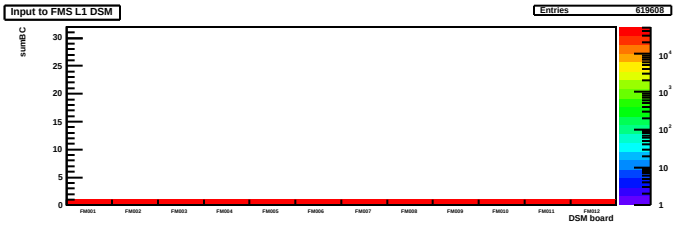

Input to FMS L0 DSM
Entries 413072
HT ID - simulated
QT board

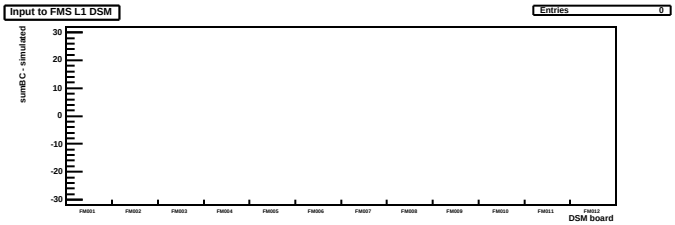

Input to FMS L1 DSM
Entries 619608
sumD
DSM board

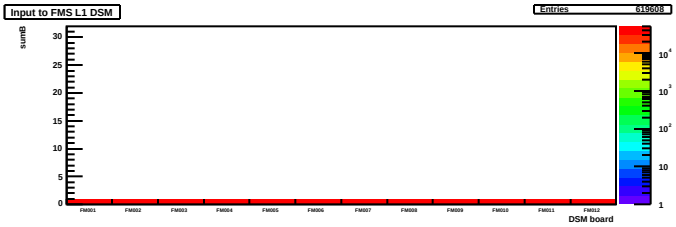

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

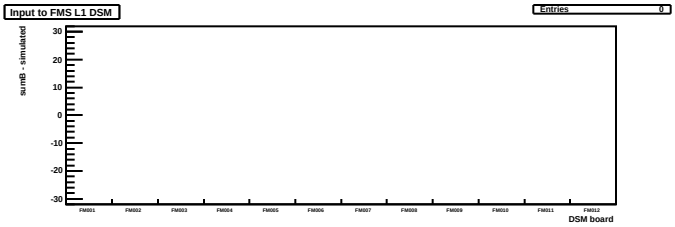

Input to FMS L1 DSM
Entries 619608
sumC
DSM board

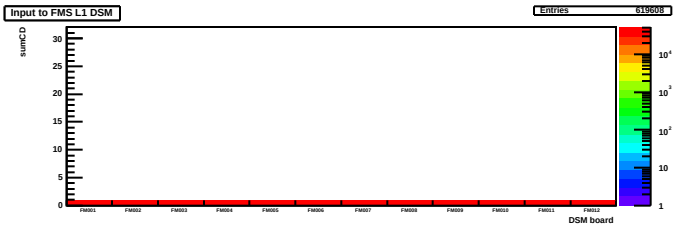

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

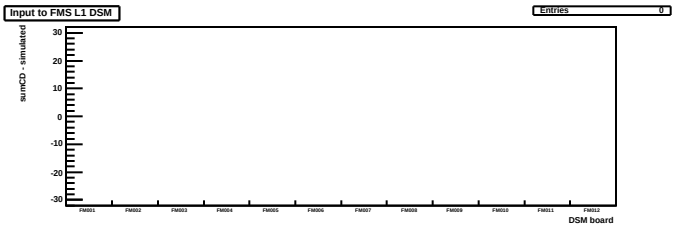

Input to FMS L1 DSM
Entries 619608
sumBC
DSM board

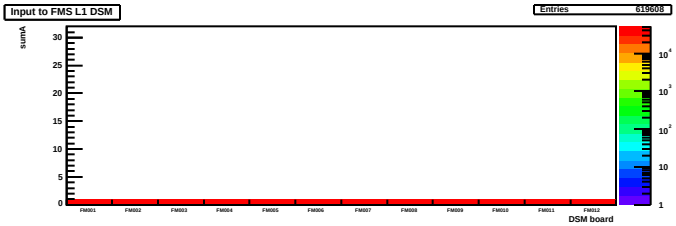

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

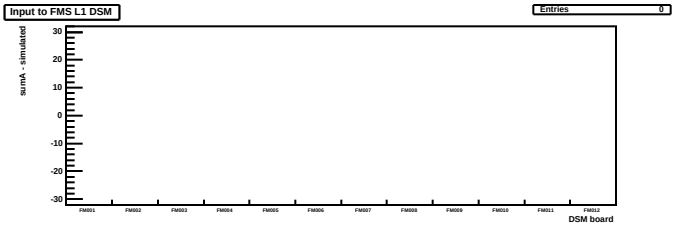

Input to FMS L1 DSM
Entries 619608
sumB
DSM board

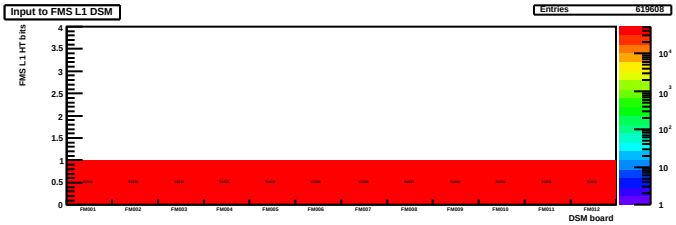

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

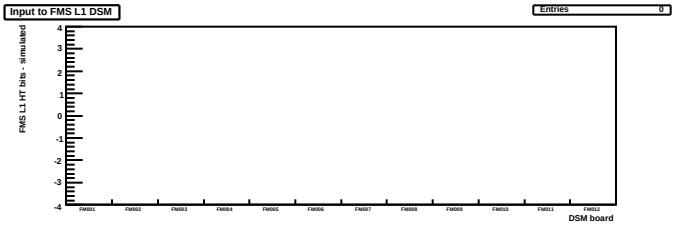

Input to FMS L1 DSM
Entries 619608
sumCD
DSM board

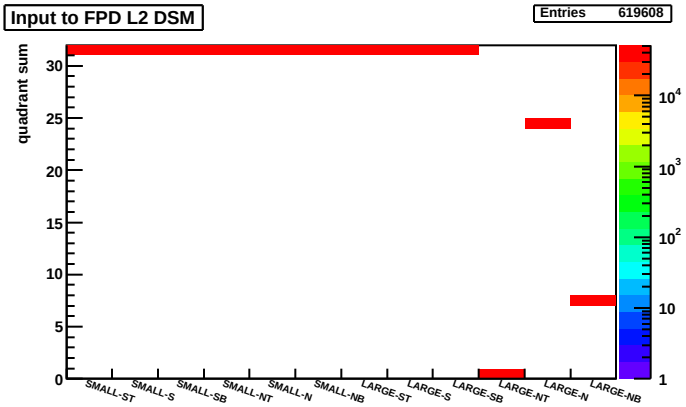

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

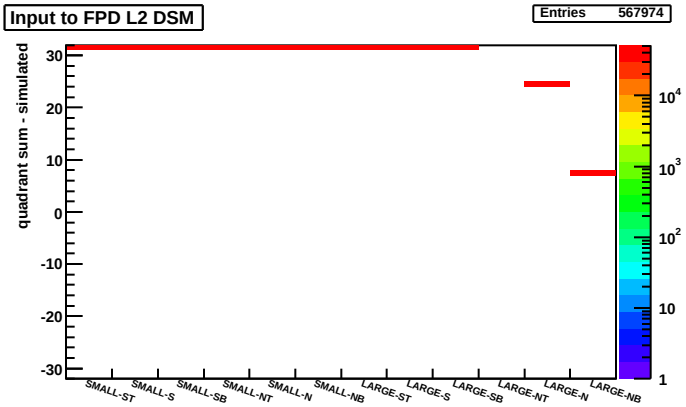

Input to FMS L1 DSM
Entries 619608
sumA
DSM board

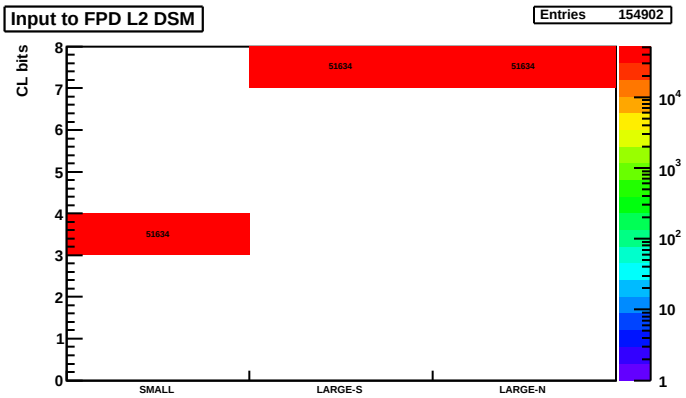

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

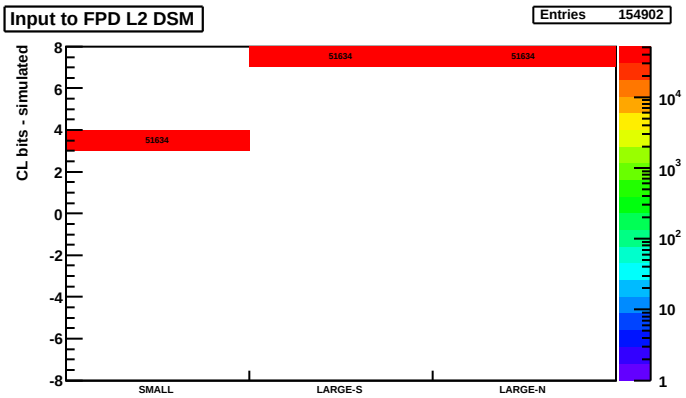

Input to FMS L1 DSM
Entries 619608
FMS L1 HT bits
DSM board

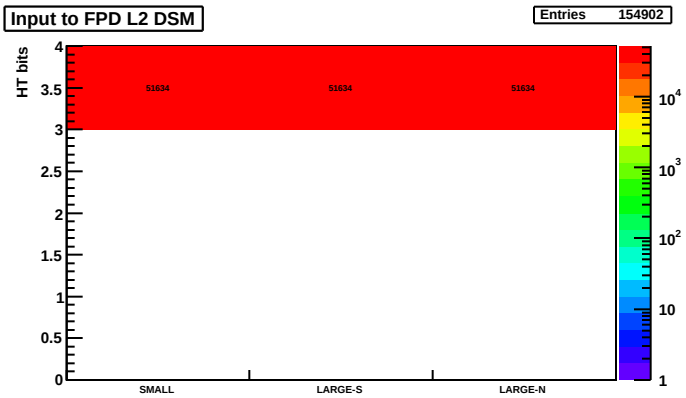

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

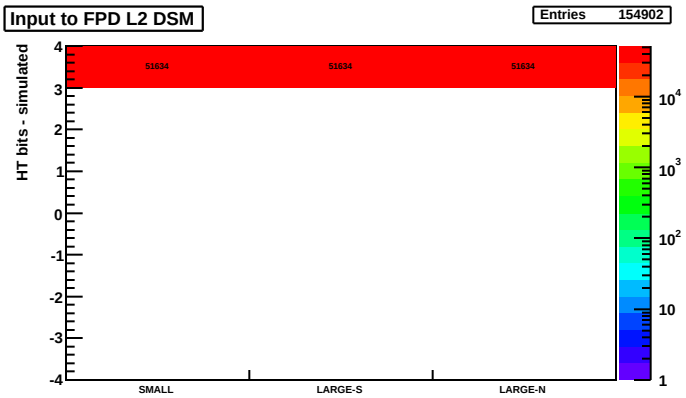

Input to FPD L2 DSM
Entries 619608
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

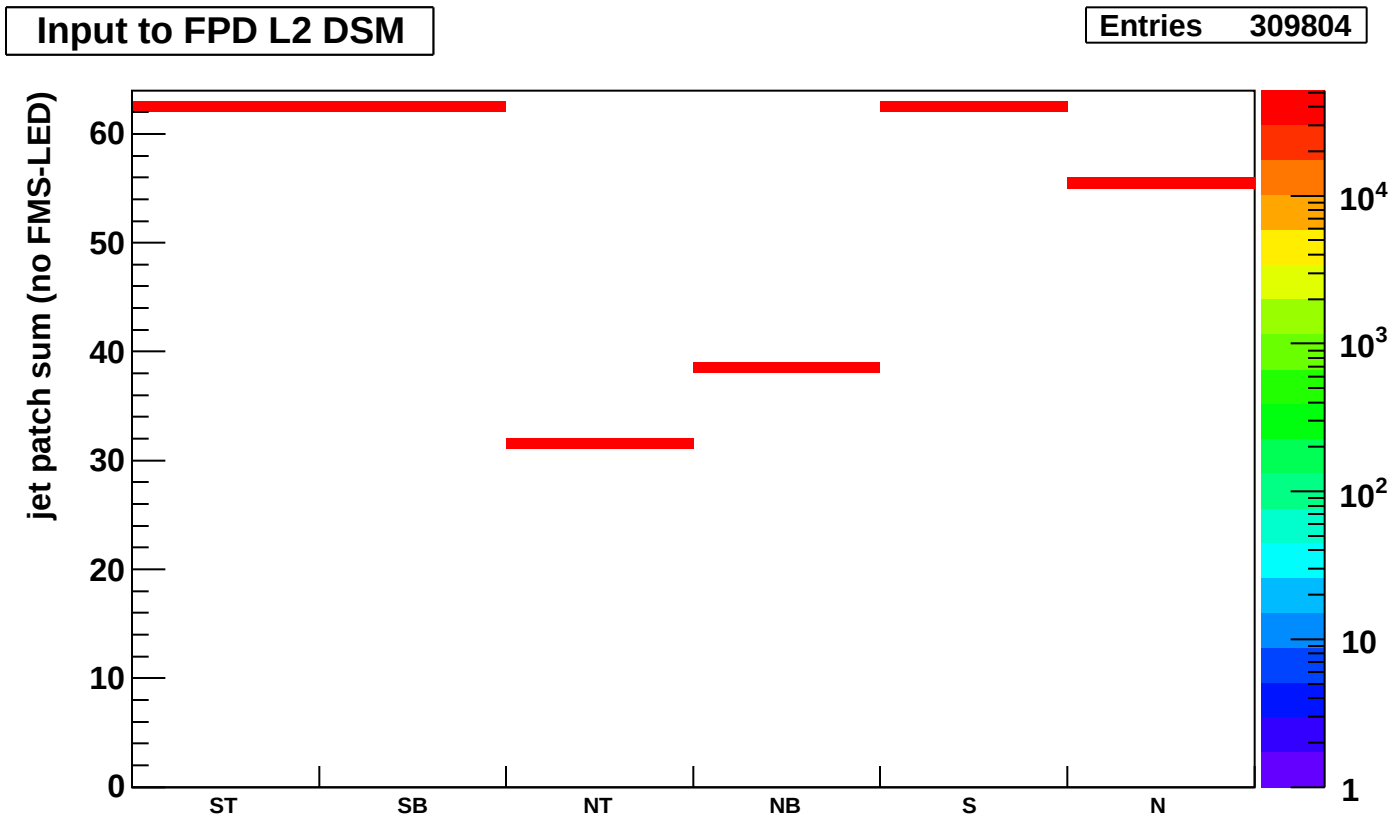

Input to FPD L2 DSM
Entries 567974
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

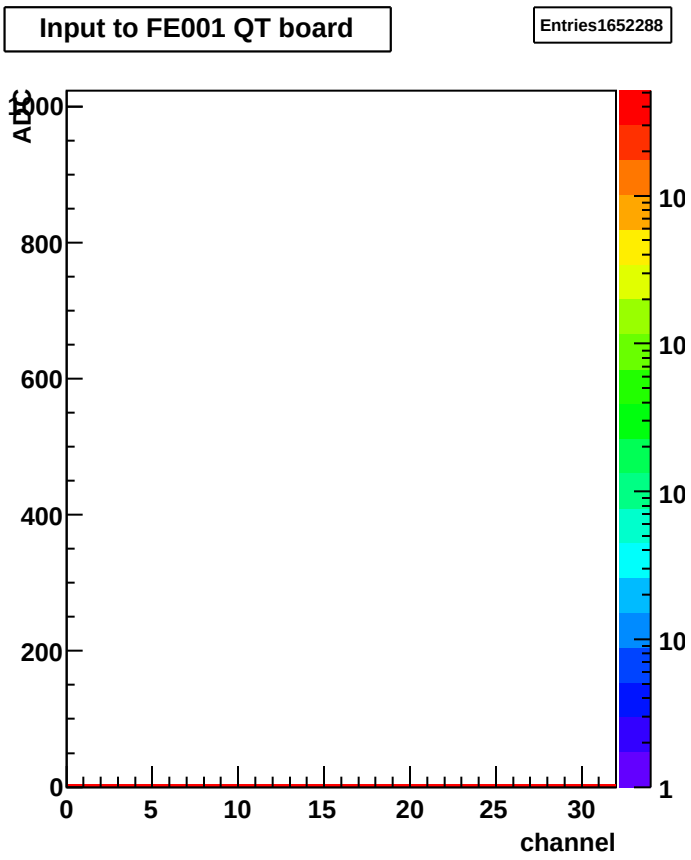

Input to FPD L2 DSM
Entries 154902
CL bits
51634
51634
51634
SMALL
LARGE-S
LARGE-N

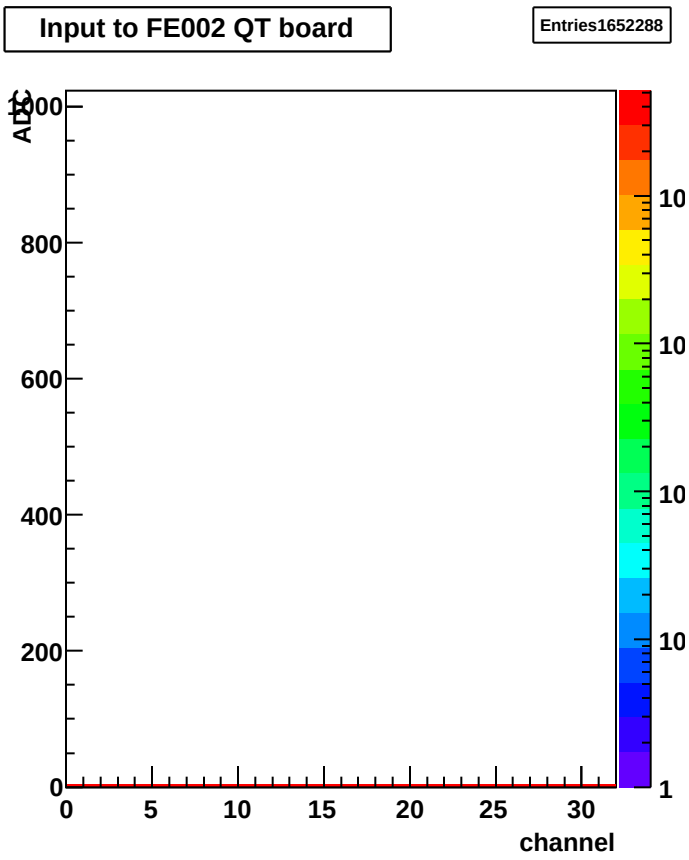

Input to FPD L2 DSM
Entries 154902
CL bits - simulated
51634
51634
51634
SMALL
LARGE-S
LARGE-N

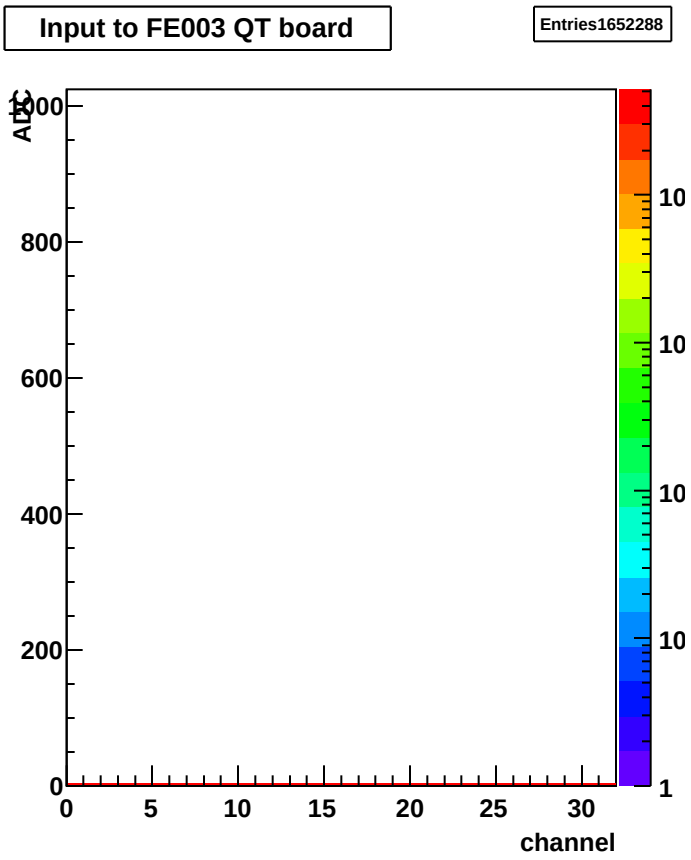

Input to FPD L2 DSM
Entries 154902
HT bits
51634
51634
51634
SMALL
LARGE-S
LARGE-N

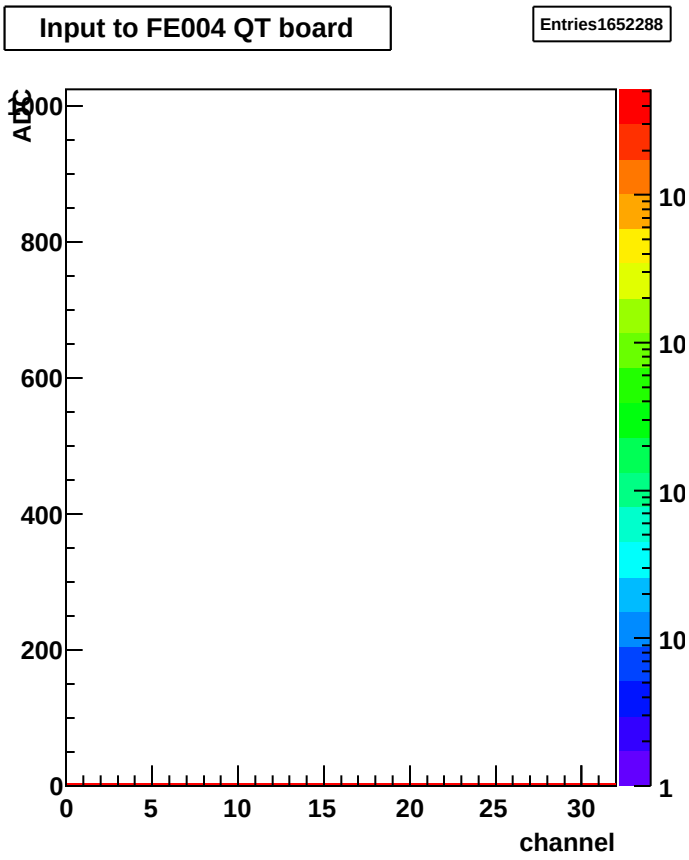

Input to FPD L2 DSM
Entries 154902
HT bits - simulated
51634
51634
51634
SMALL
LARGE-S
LARGE-N

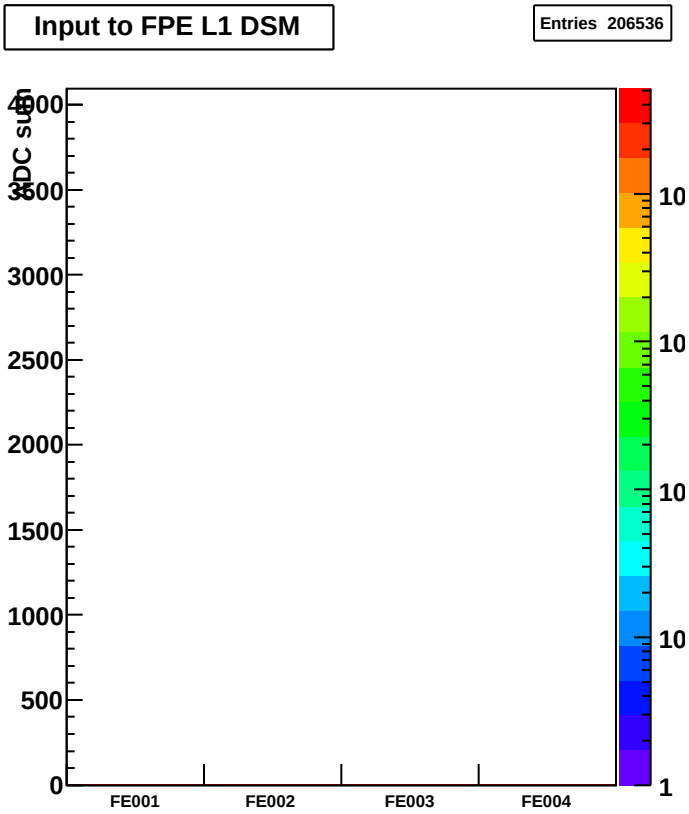

Input to FPD L2 DSM
Entries 309804
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

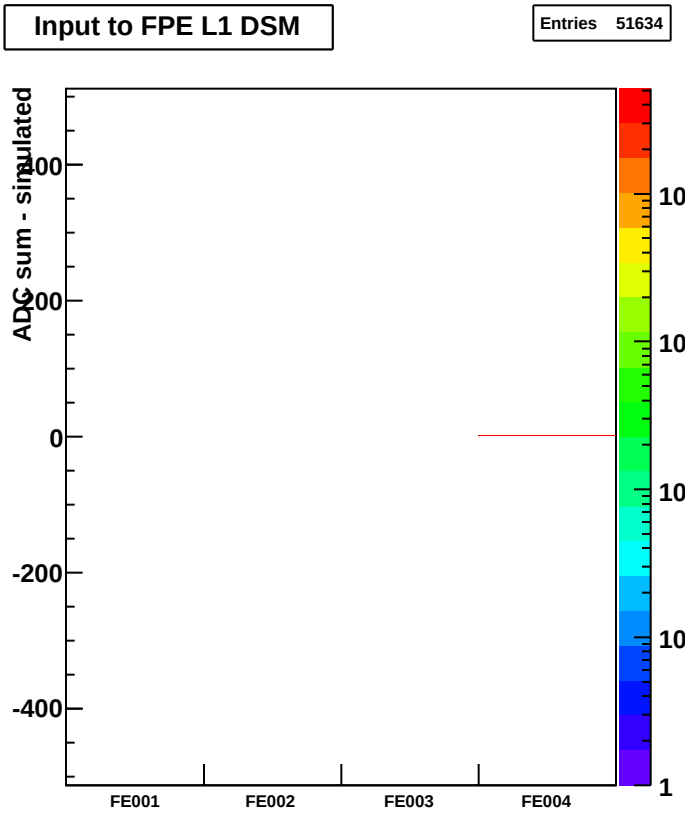

Input to FE001 QT board
Entries1652288
ADC
channel

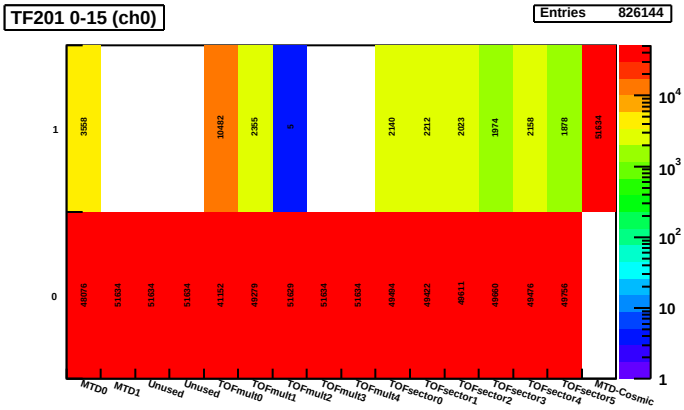

Input to FE002 QT board
Entries1652288
ADC
channel

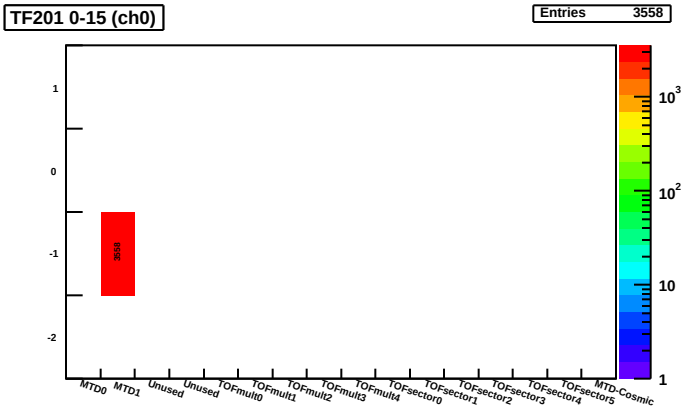

Input to FE003 QT board
Entries1652288
ADC
channel

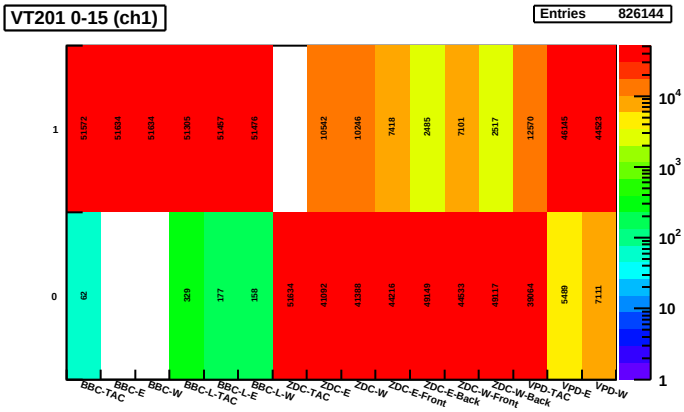

Input to FE004 QT board
Entries1652288
ADC
channel

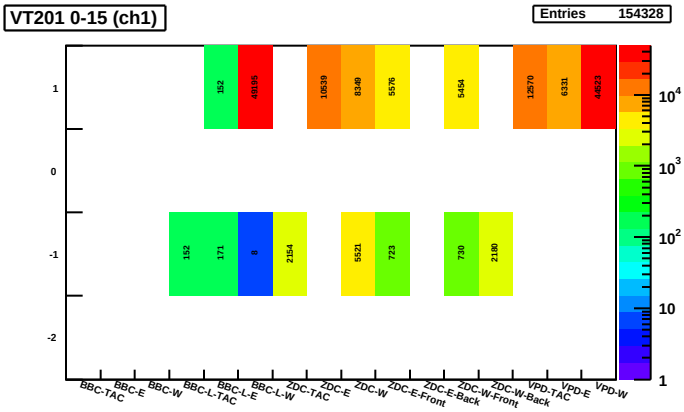

Input to FPE L1 DSM
Entries 206536
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

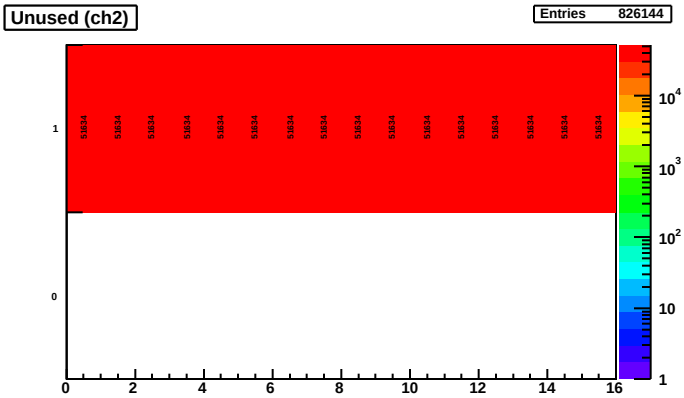

Input to FPE L1 DSM
Entries 51634
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1


TF201 0-15 (ch0)
Entries 826144
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 3558
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 826144
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 154328
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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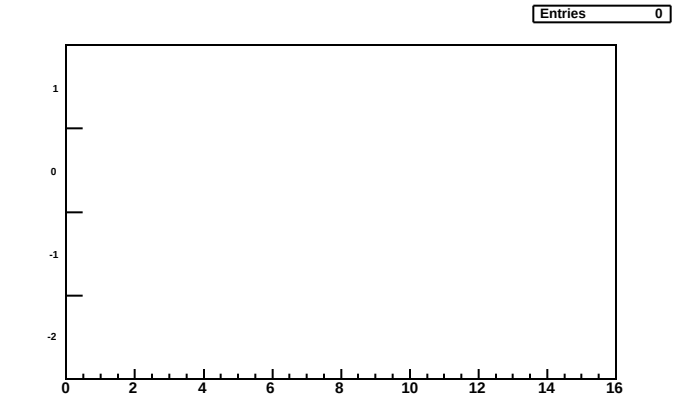
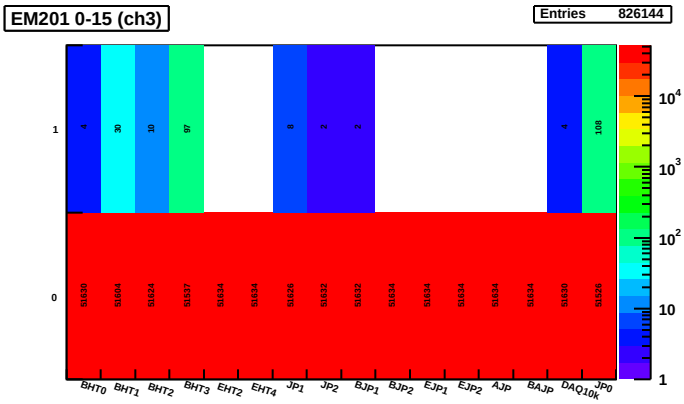
Entries 826144


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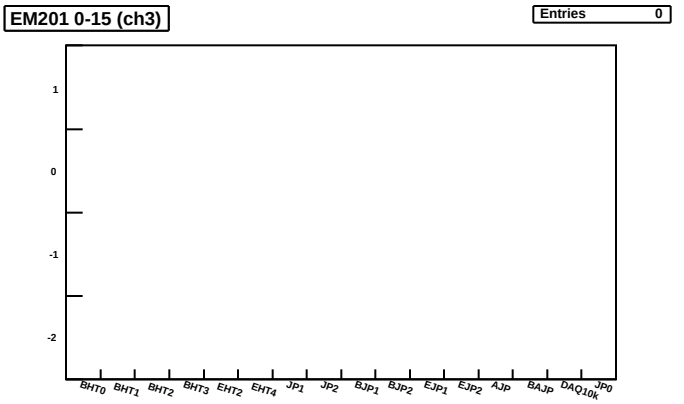
EM201 0-15 (ch3)
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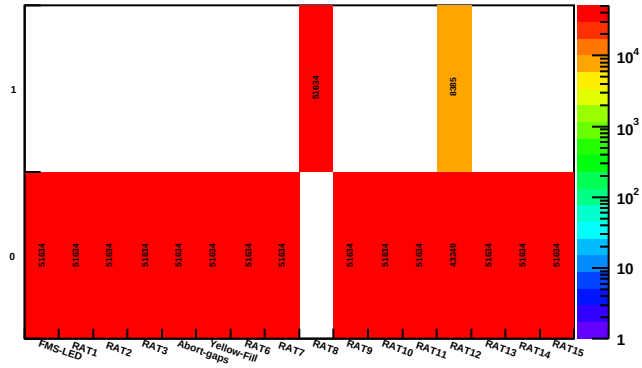
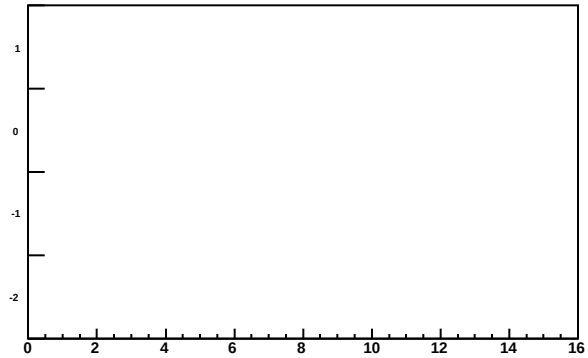
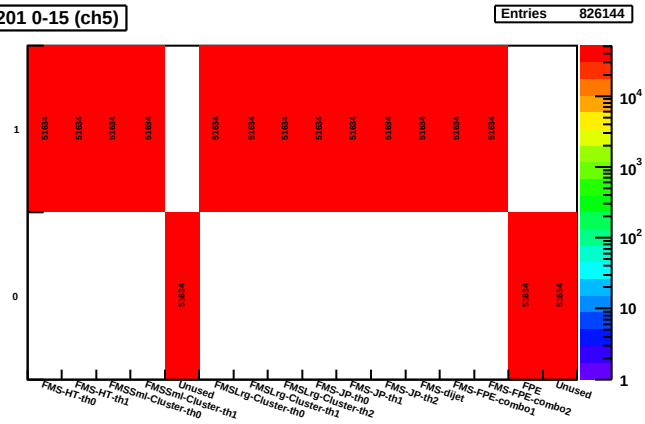
RAT board (ch4)





FP201 0-15 (ch5)



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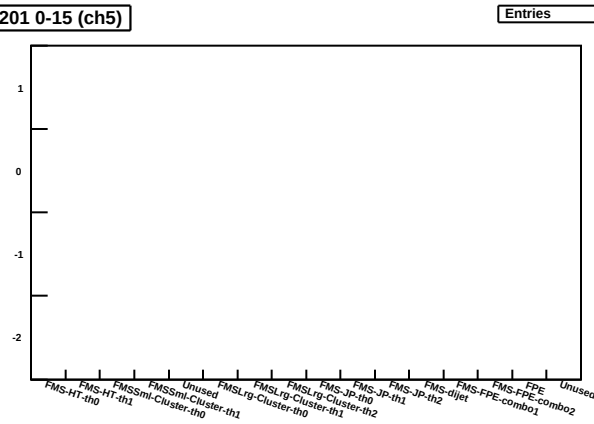
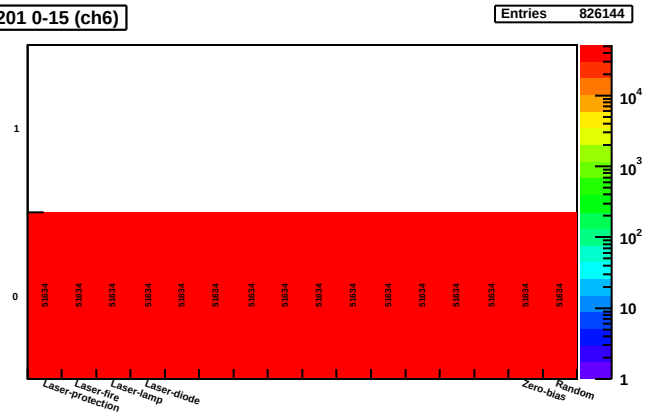
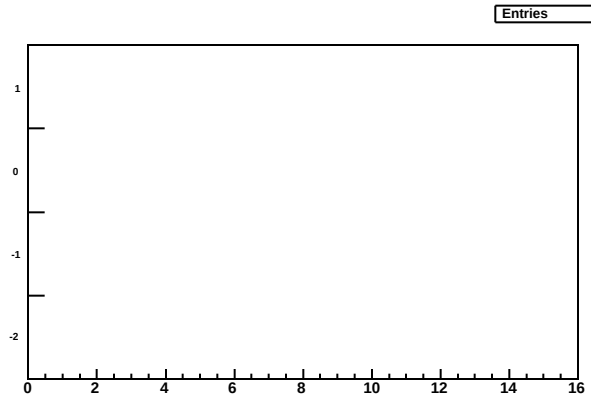
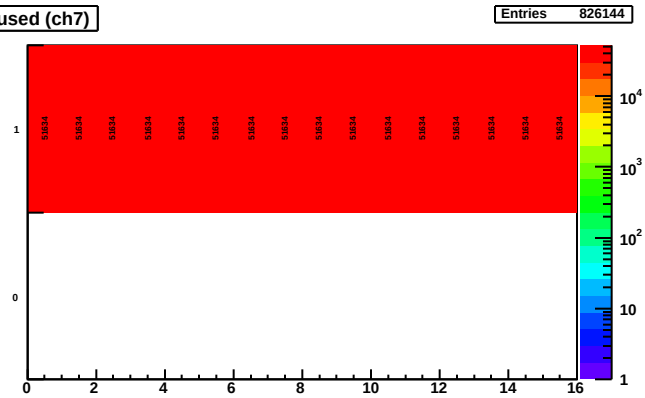
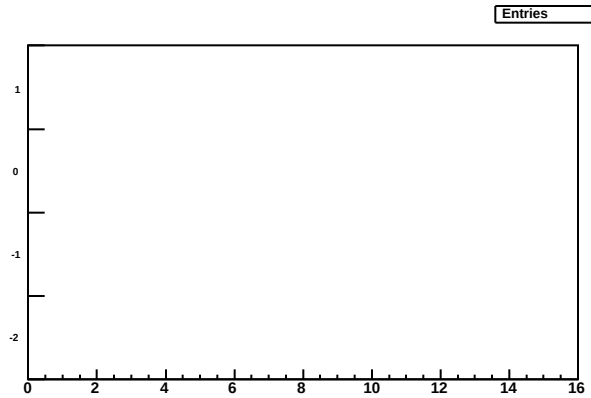


ST201 0-15 (ch6)





Unused (ch7)