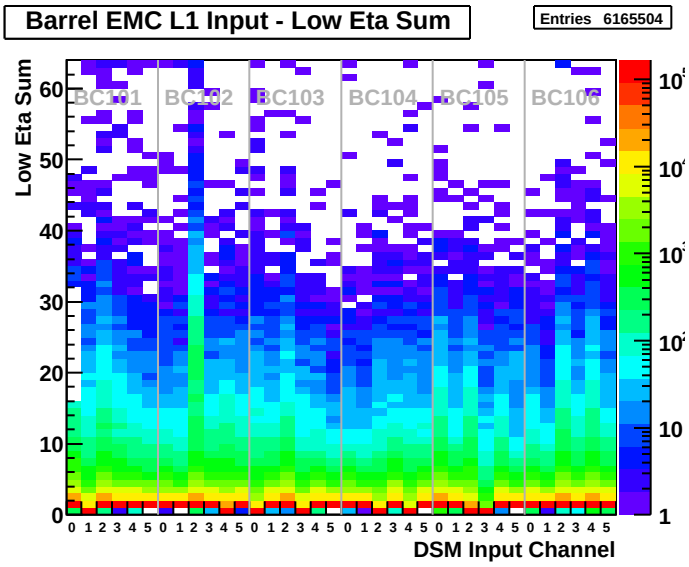
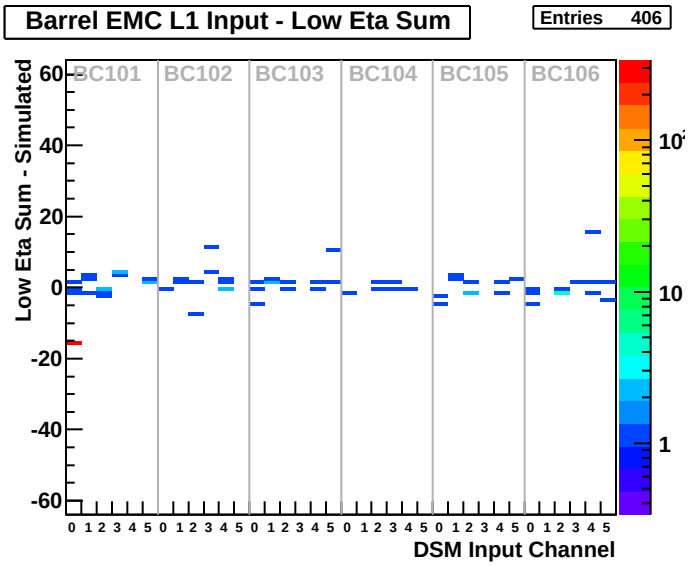
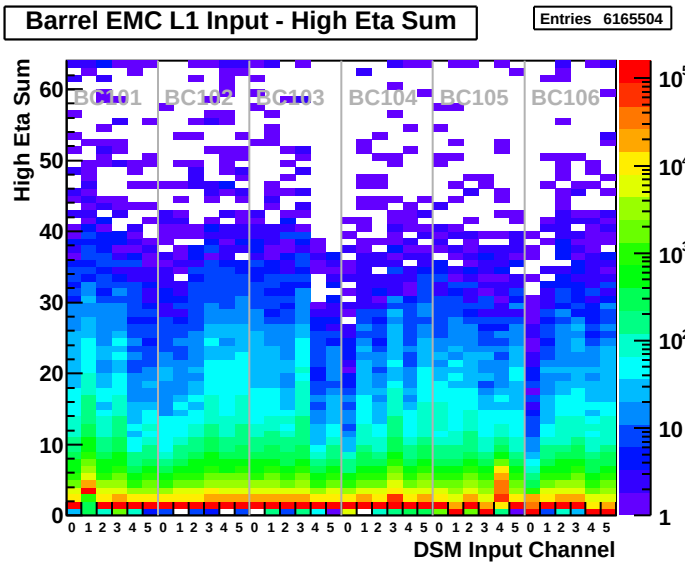
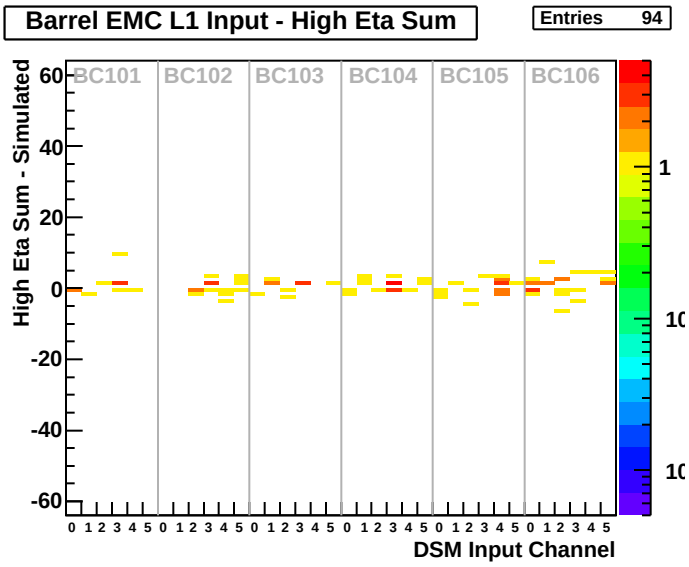
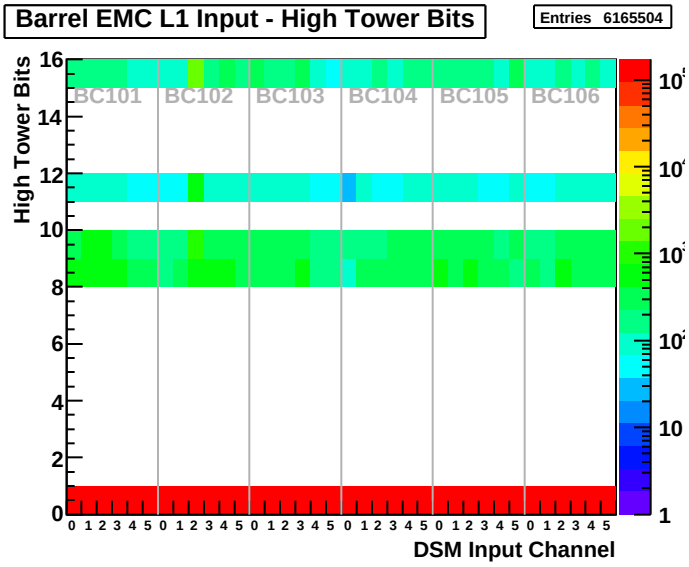
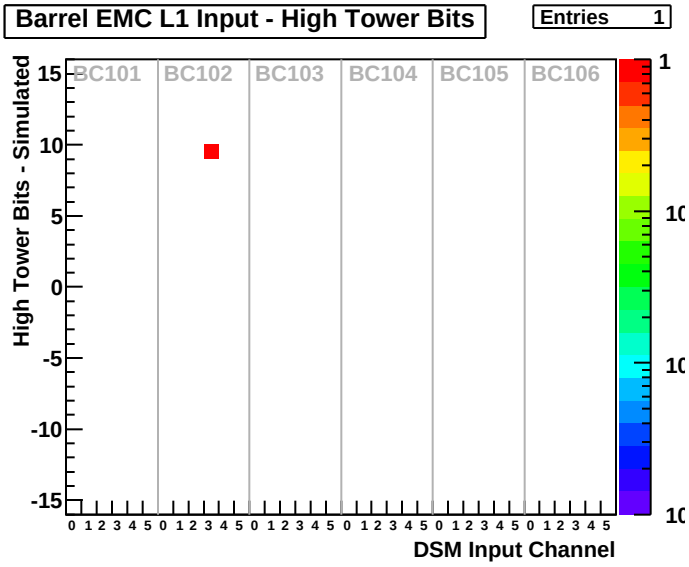

Barrel EMC L1 Input - Low Eta Sum
Entries 6165504
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

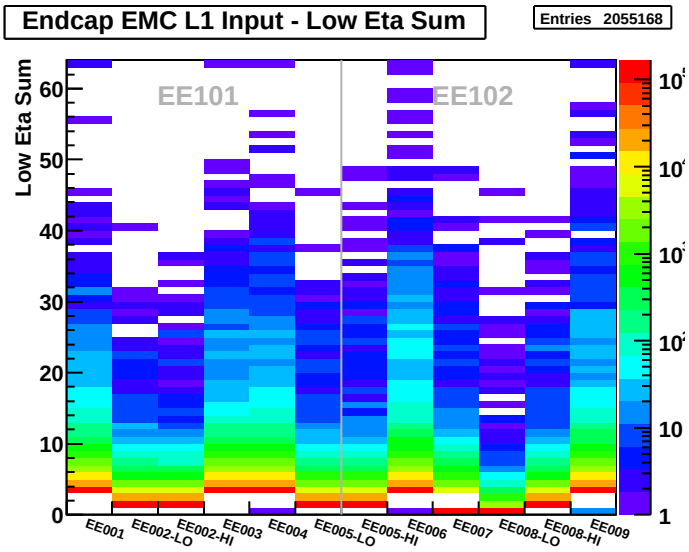

Barrel EMC L1 Input - Low Eta Sum
Entries 406
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

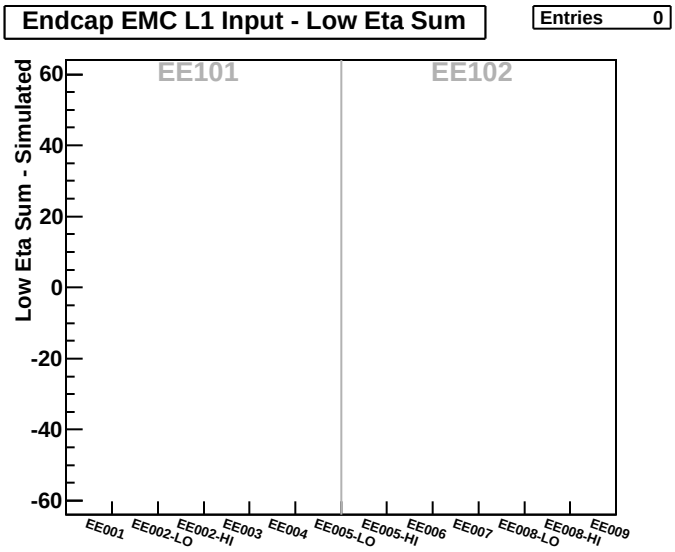

Barrel EMC L1 Input - High Eta Sum
Entries 6165504
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

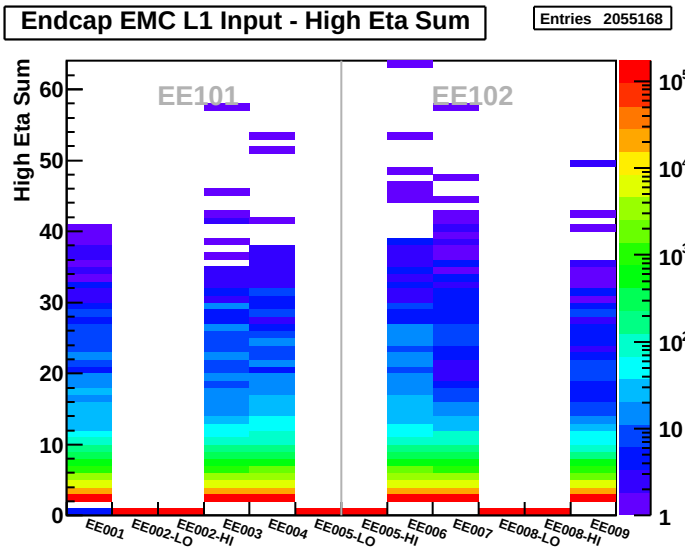

Barrel EMC L1 Input - High Eta Sum
Entries 94
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

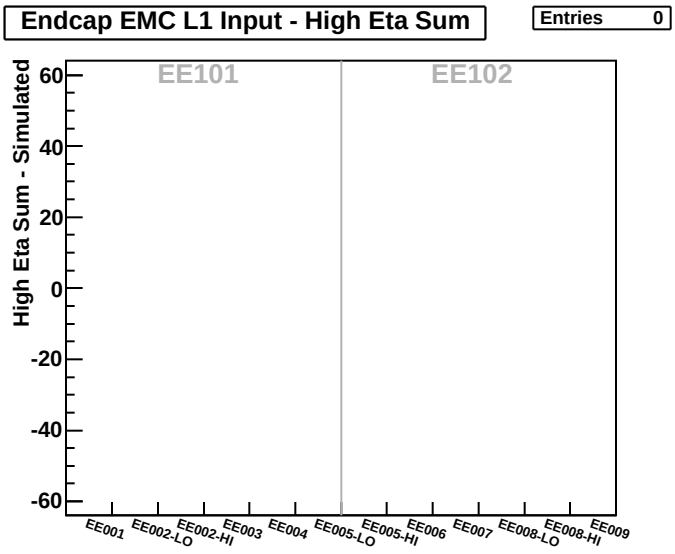

Barrel EMC L1 Input - High Tower Bits
Entries 6165504
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

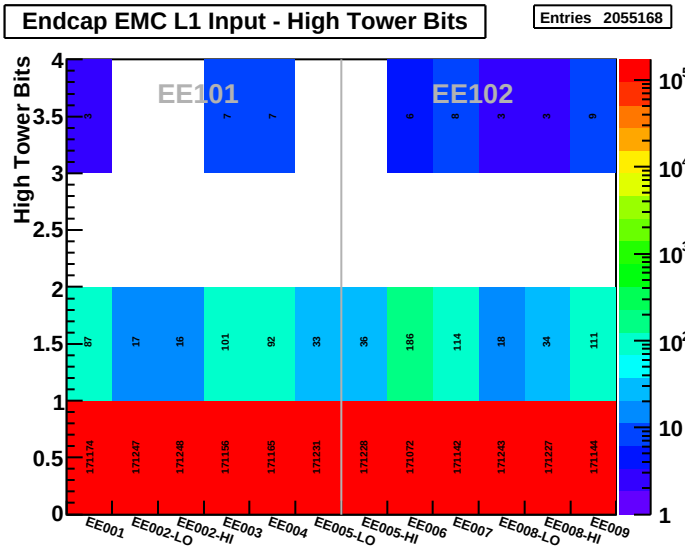

Barrel EMC L1 Input - High Tower Bits
Entries 1
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

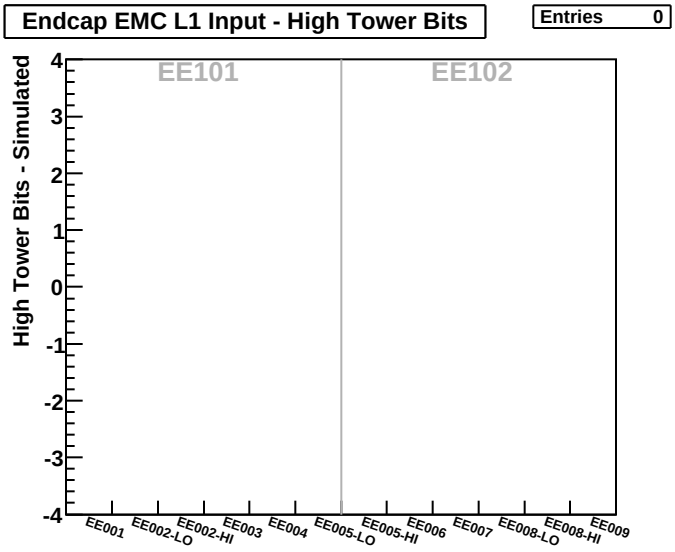

Endcap EMC L1 Input - Low Eta Sum
Entries 2055168
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

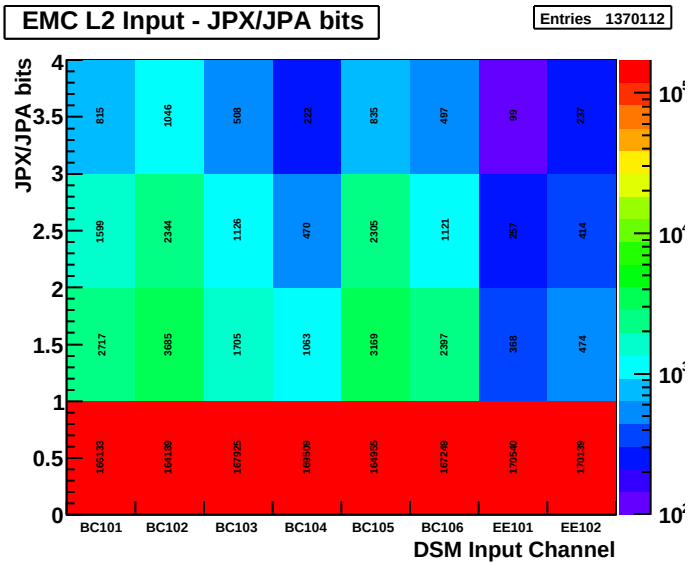

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

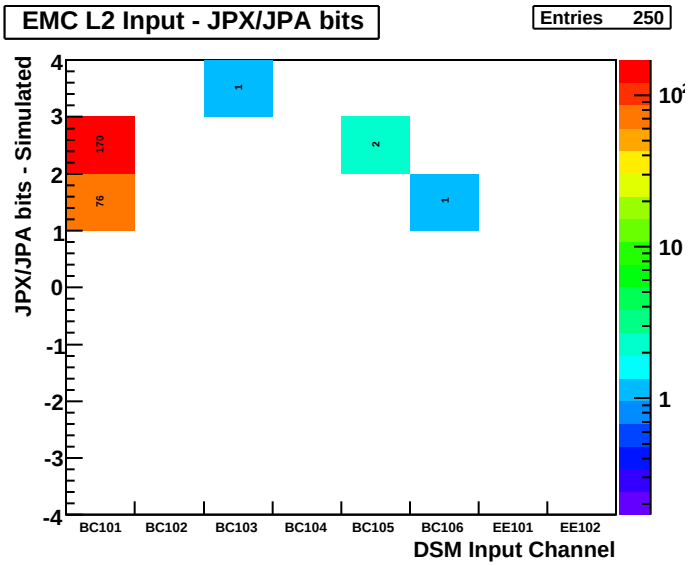

Endcap EMC L1 Input - High Eta Sum
Entries 2055168
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

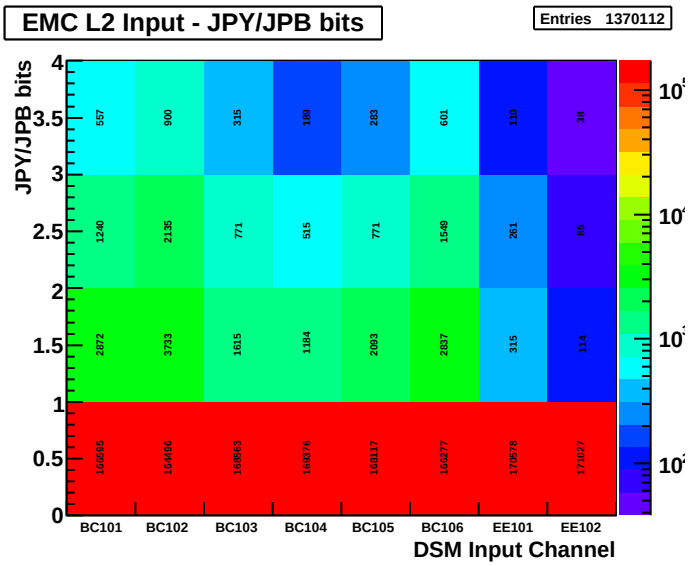

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

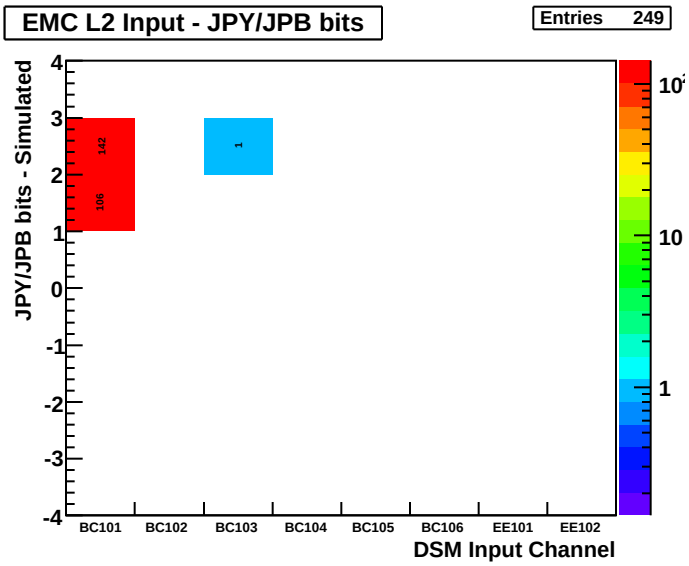

Endcap EMC L1 Input - High Tower Bits
Entries 2055168
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

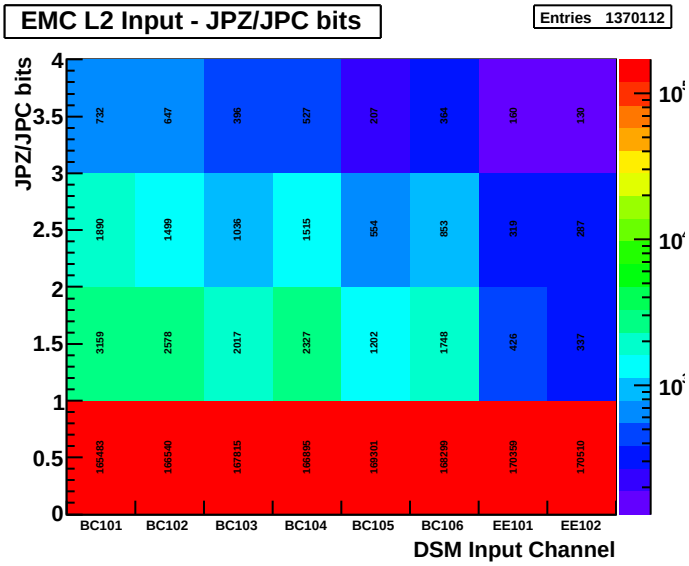

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

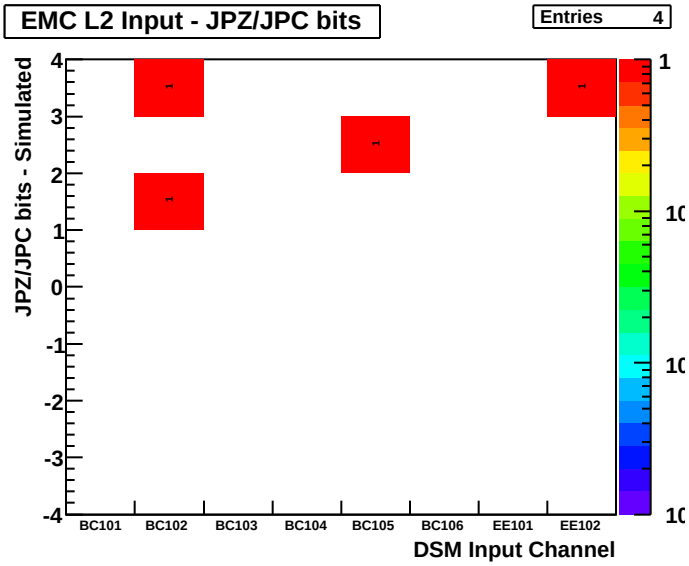

EMC L2 Input - JPX/JPA bits
Entries 1370112
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
815 1046 508 222 835 497 99 237
1599 2344 1126 470 2305 1121 257 414
2717 3685 1705 1063 3169 2397 368 474
166133 164189 167925 169509 164955 167249 170540 170139

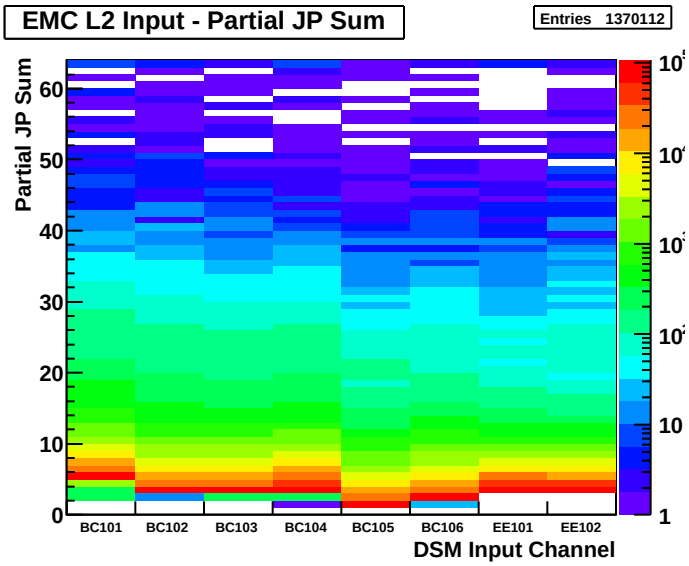

EMC L2 Input - JPX/JPA bits
Entries 250
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
170
76
1
2
1

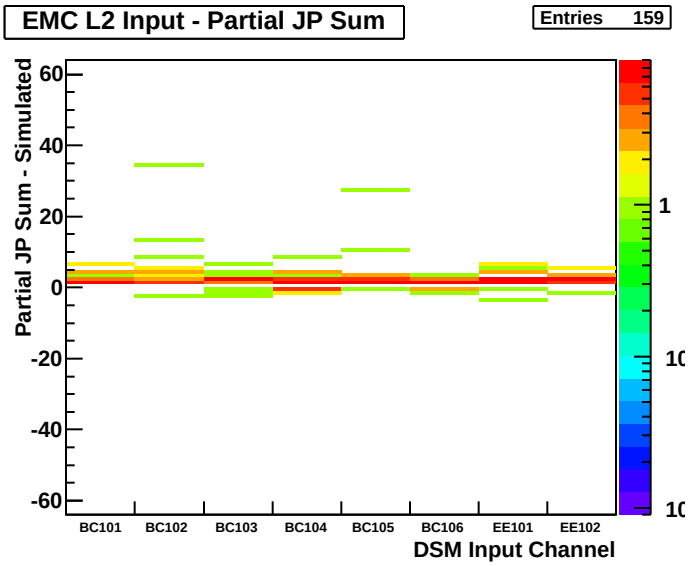

EMC L2 Input - JPY/JPB bits
Entries 1370112
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
557 900 315 189 283 601 110 38
1240 2135 771 515 771 1549 251 85
2872 3733 1615 1184 2093 2837 315 114
166595 164496 168563 169376 168117 166277 170578 171027

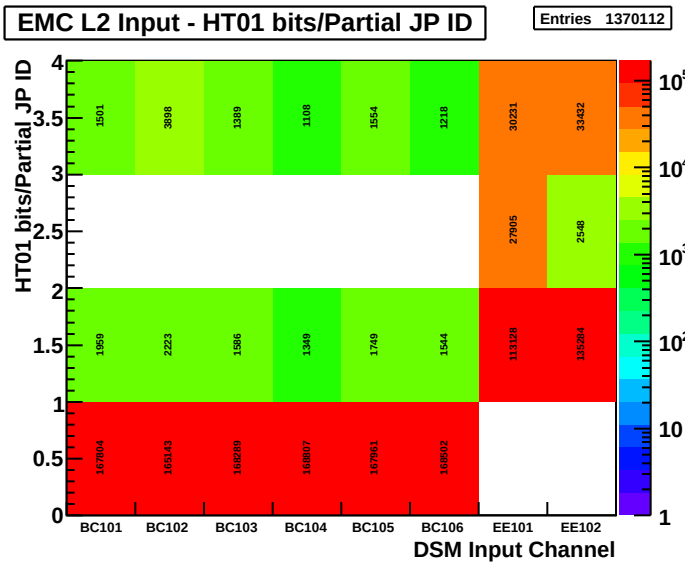

EMC L2 Input - JPY/JPB bits
Entries 249
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
142
106
1

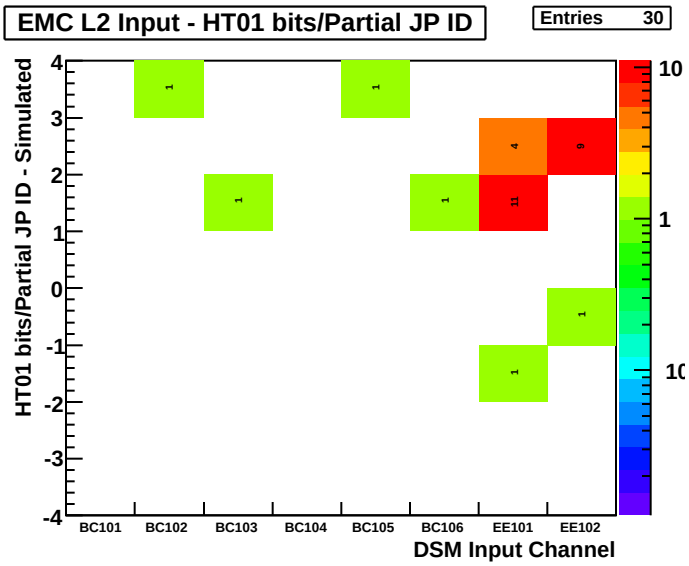

EMC L2 Input - JPZ/JPC bits
Entries 1370112
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
732 647 396 527 207 364 160 130
1890 1499 1036 1515 554 853 319 257
3159 2578 2017 2327 1202 1748 426 337
165483 166540 167815 166895 169301 168299 170359 170510

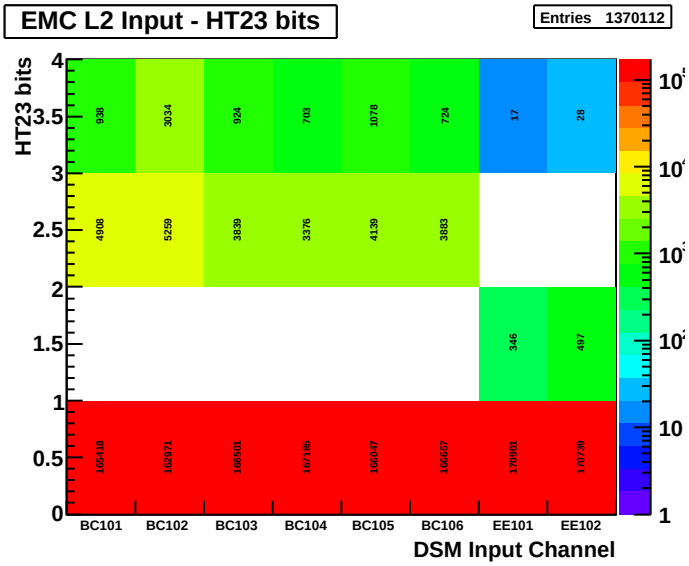

EMC L2 Input - JPZ/JPC bits
Entries 4
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
1
1
1

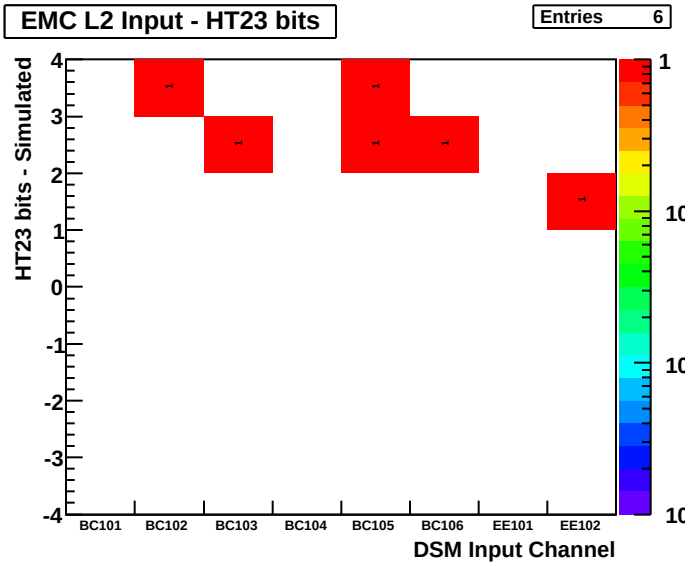

EMC L2 Input - Partial JP Sum
Entries 1370112
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

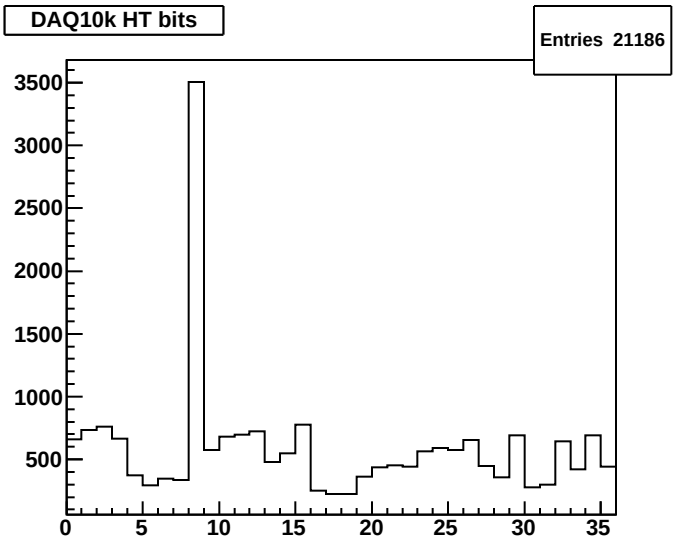

EMC L2 Input - Partial JP Sum
Entries 159
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

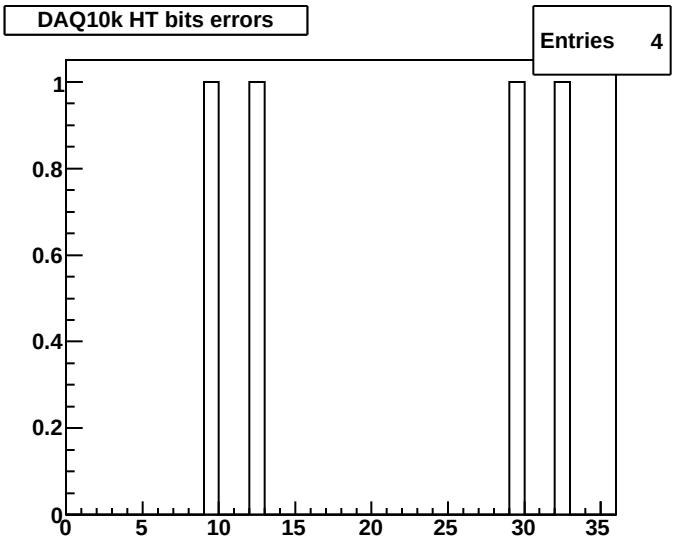

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1370112
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

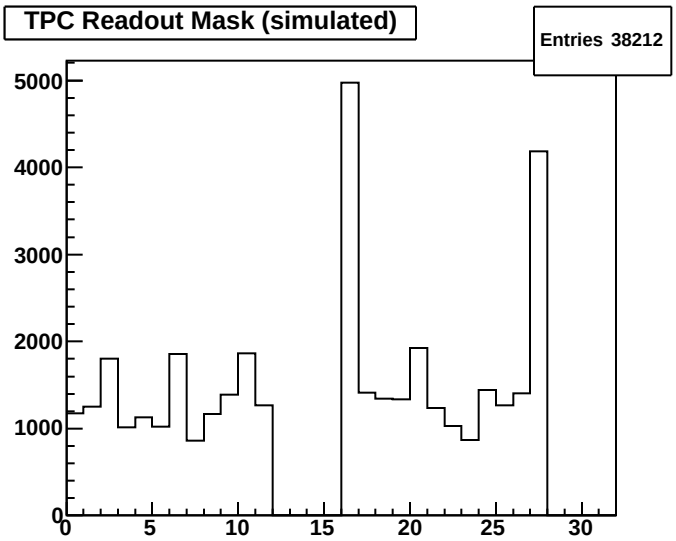

EMC L2 Input - HT01 bits/Partial JP ID
Entries 30
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

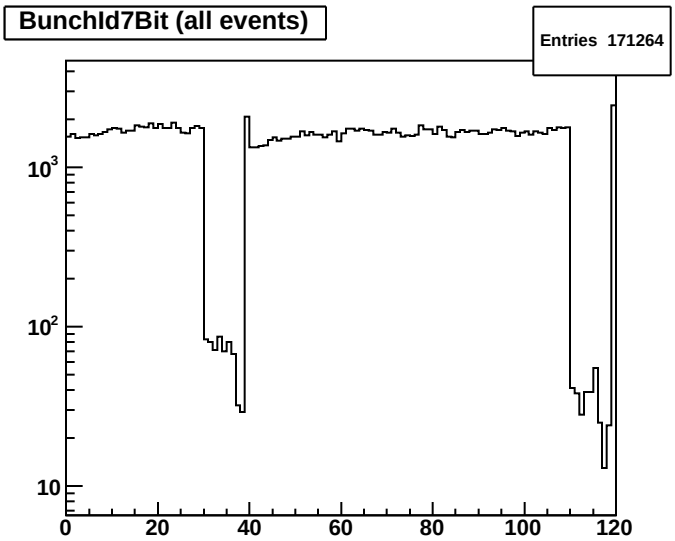

EMC L2 Input - HT23 bits
Entries 1370112
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

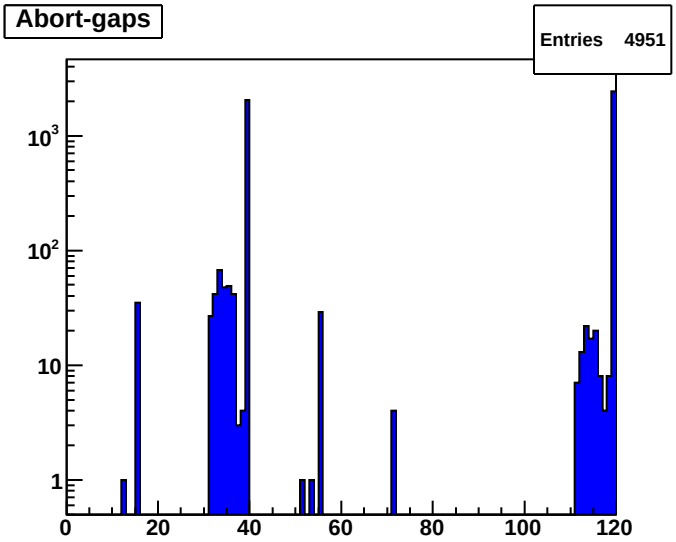

EMC L2 Input - HT23 bits
Entries 6
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

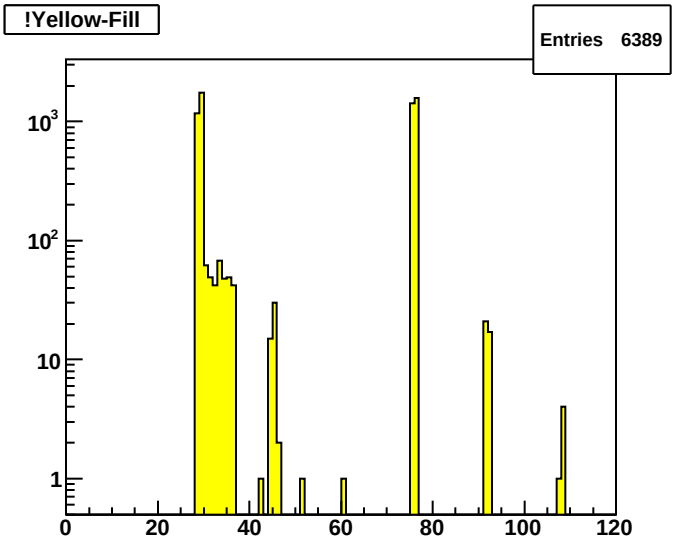

DAQ10k HT bits
Entries 21186

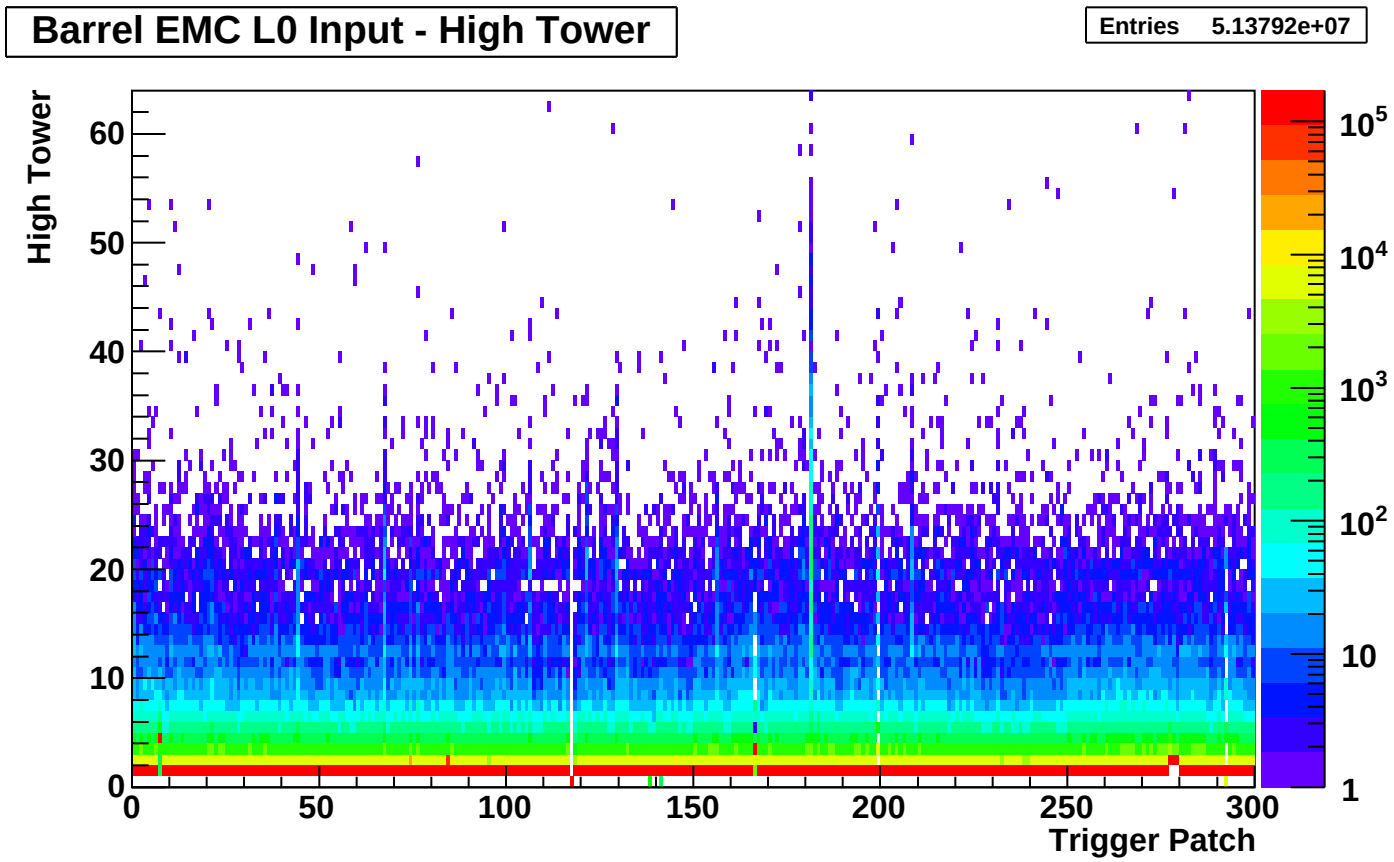

DAQ10k HT bits errors
Entries 4

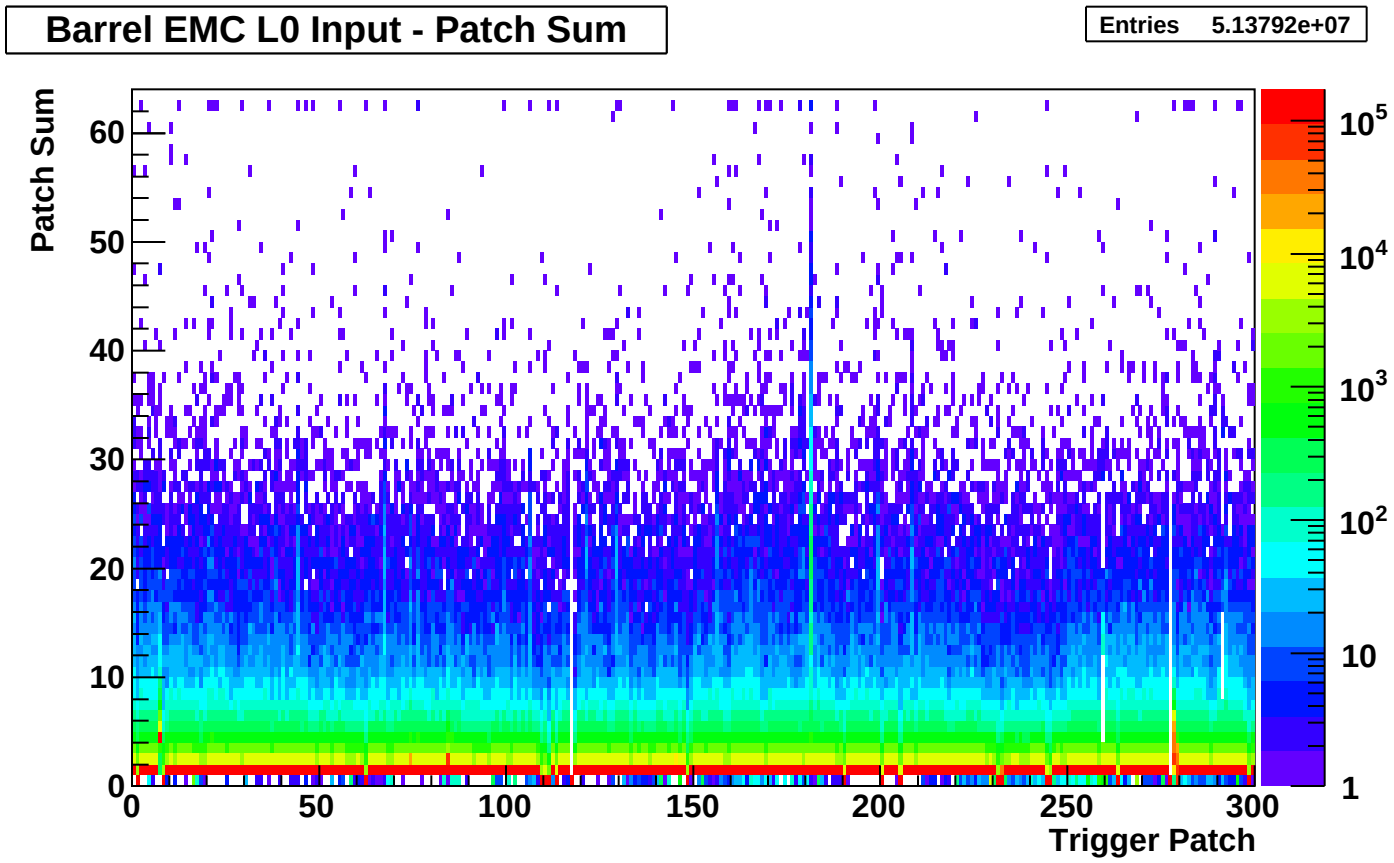

TPC Readout Mask (simulated)
Entries 38212

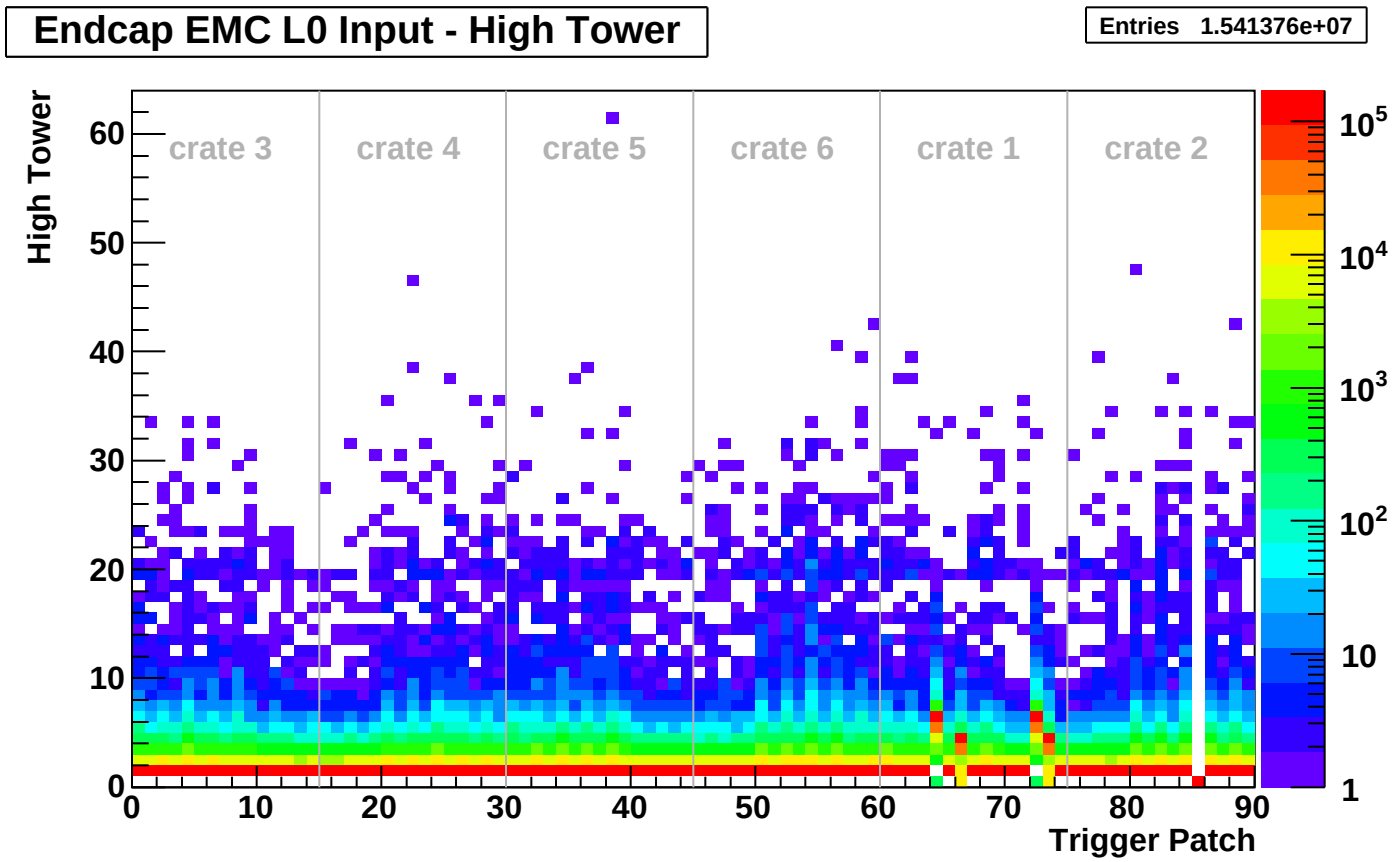

BunchId7Bit (all events)
Entries 171264

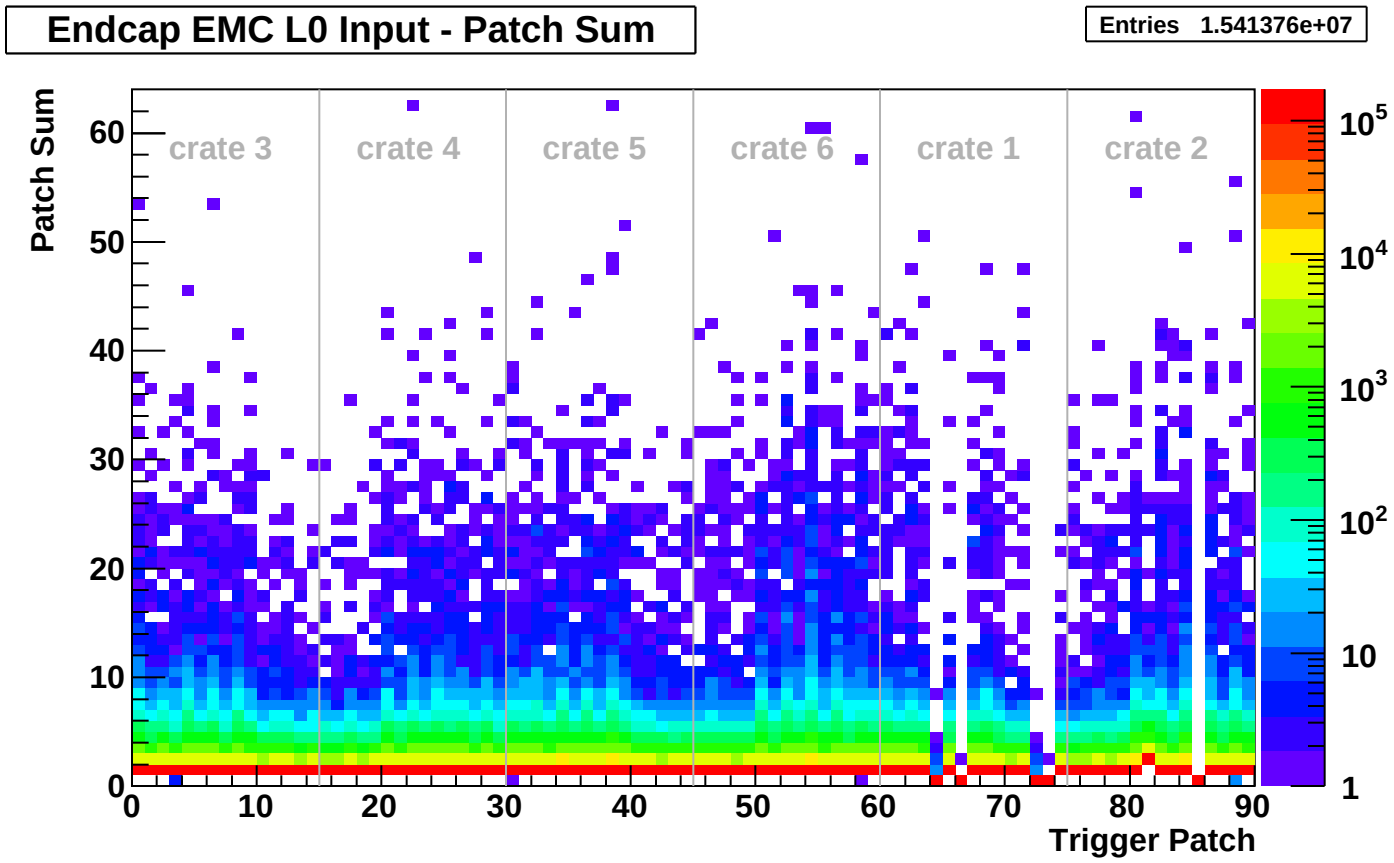

Abort-gaps
Entries 4951

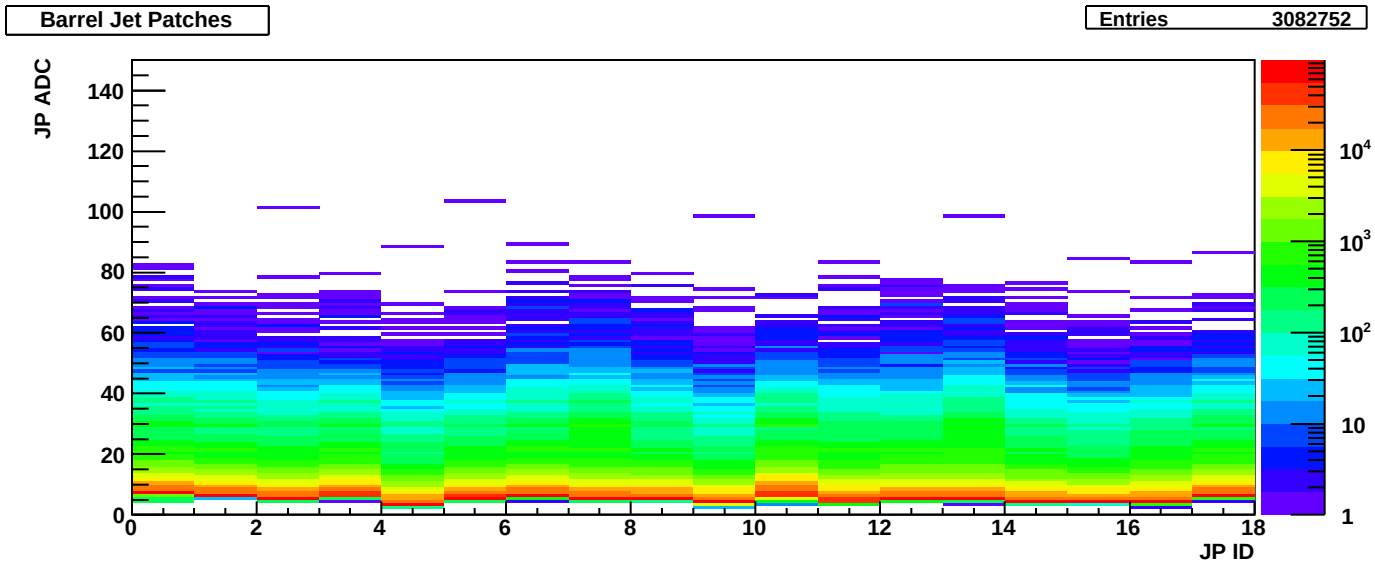

!Yellow-Fill
Entries 6389

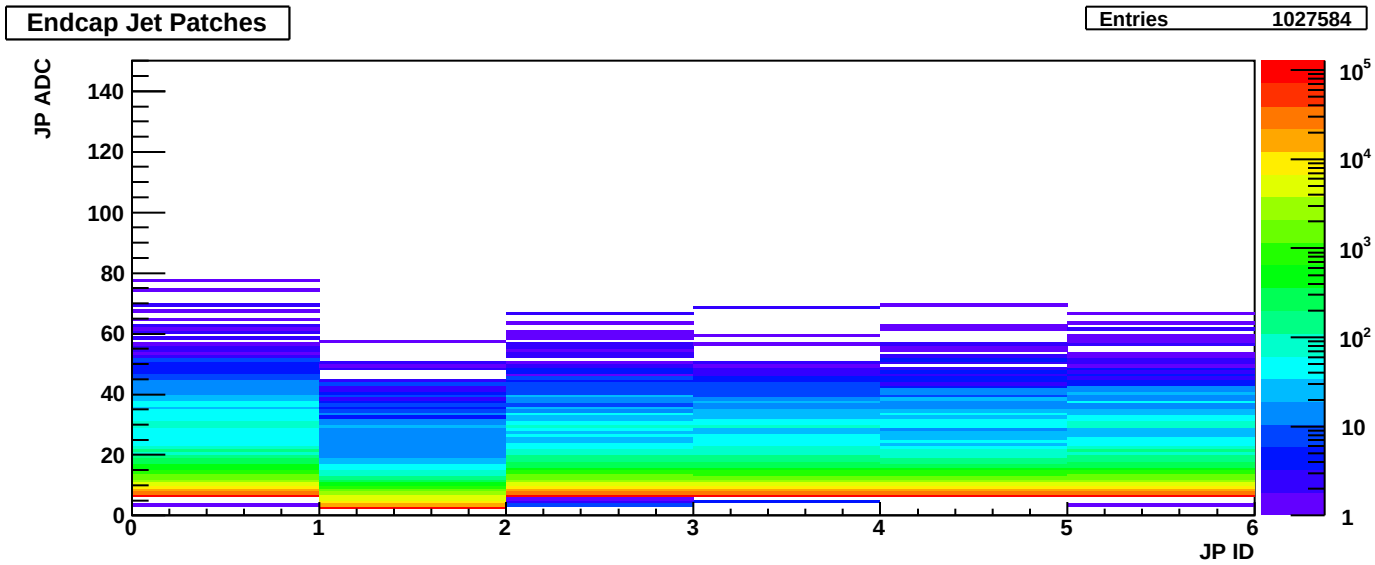

Barrel EMC L0 Input - High Tower
Entries 5.13792e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

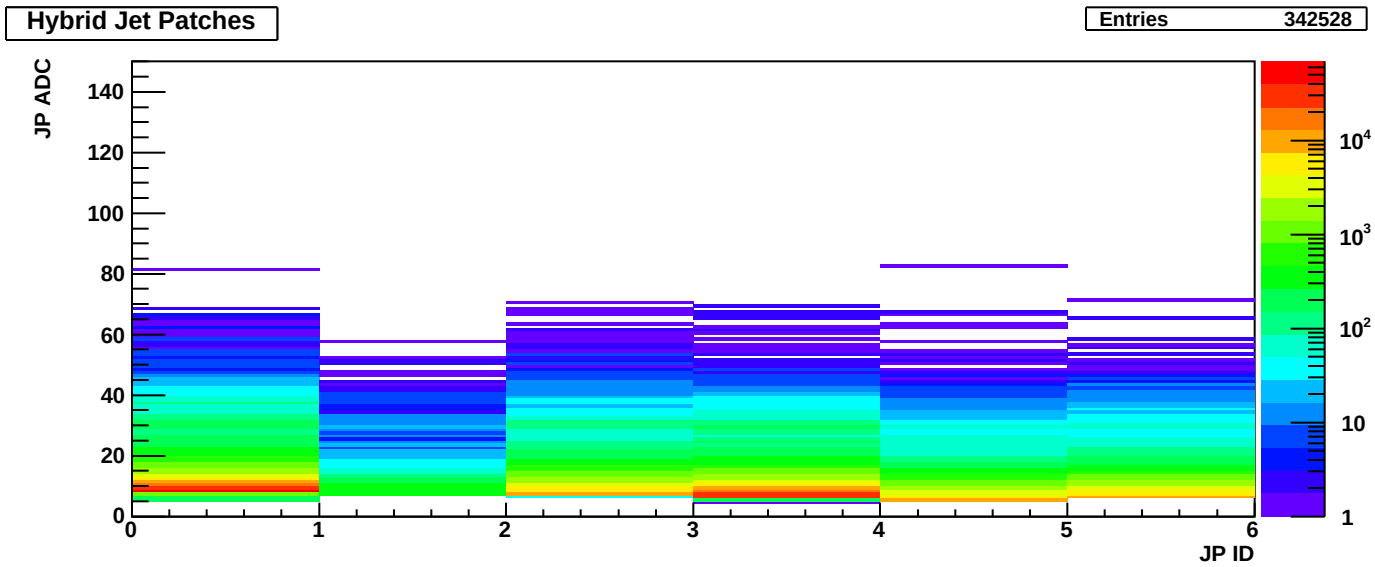

Barrel EMC L0 Input - Patch Sum
Entries 5.13792e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

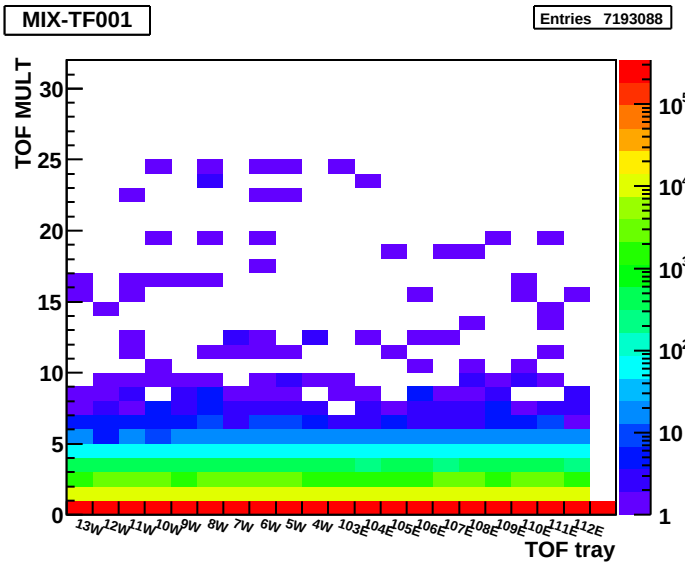

Endcap EMC L0 Input - High Tower
Entries 1.541376e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

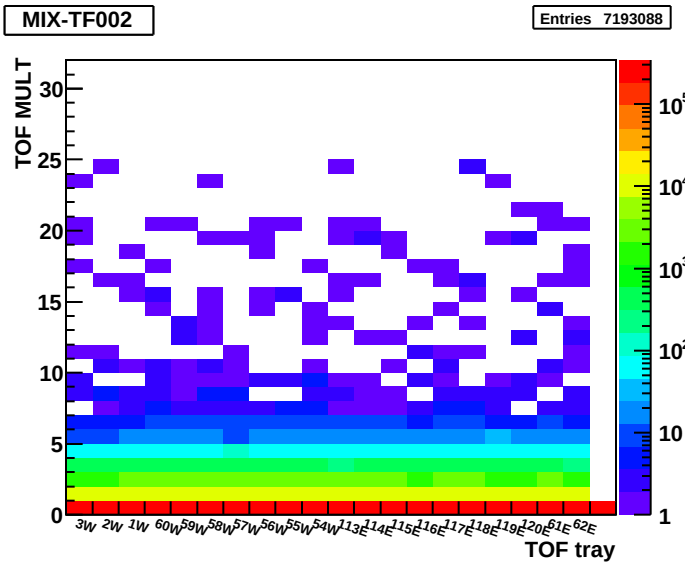

Endcap EMC L0 Input - Patch Sum
Entries 1.541376e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

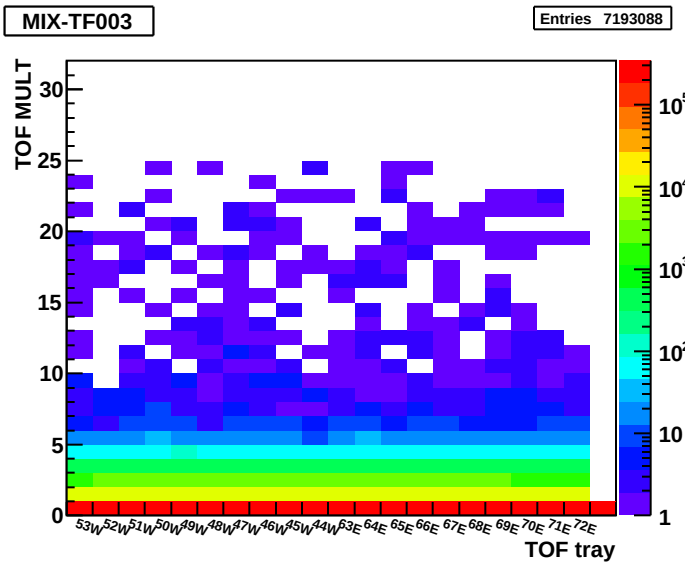

Barrel Jet Patches
Entries 3082752
JP ADC
JP ID

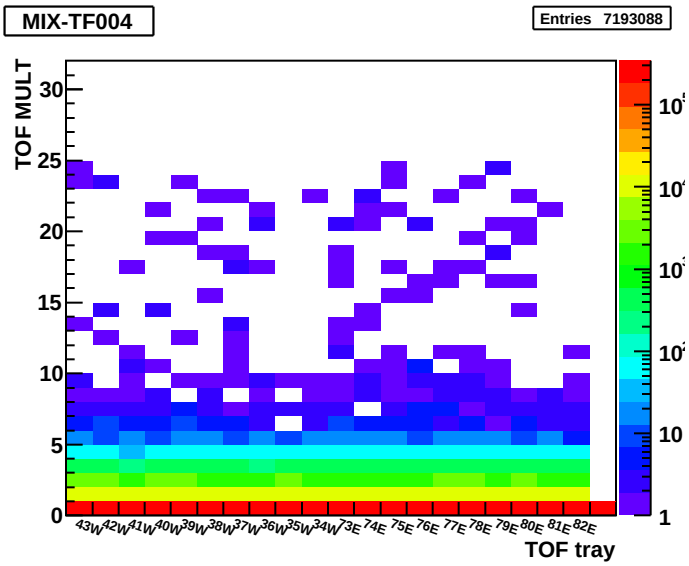

Endcap Jet Patches
Entries 1027584
JP ADC
JP ID

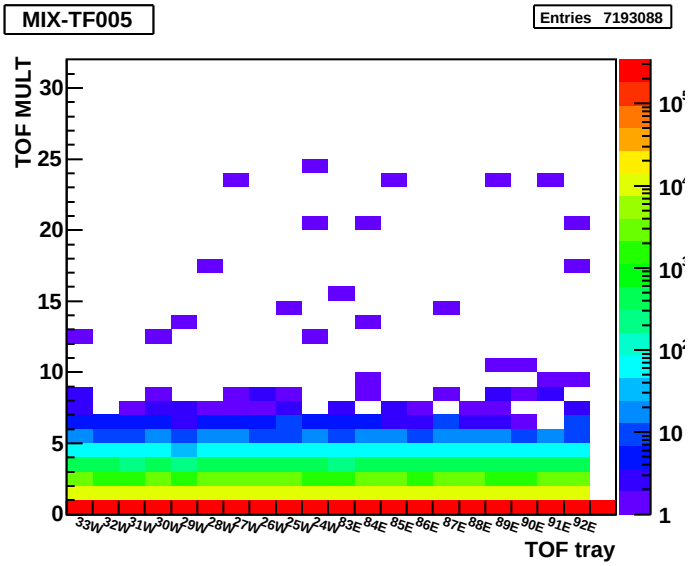

Hybrid Jet Patches
Entries 342528
JP ADC
JP ID

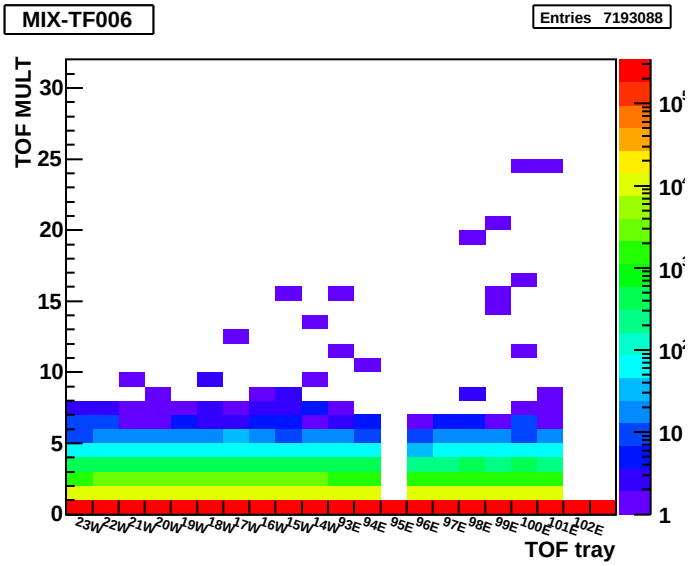

MIX-TF001
Entries 7193088
TOF MULT
TOF tray

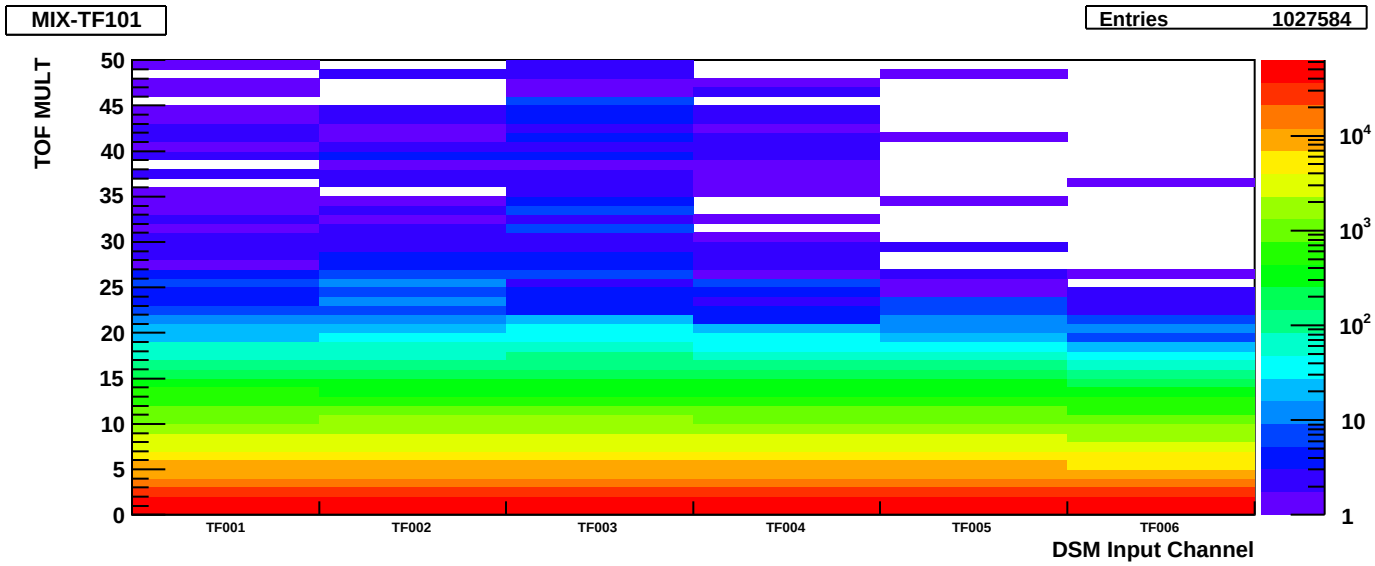

MIX-TF002
Entries 7193088
TOF MULT
TOF tray

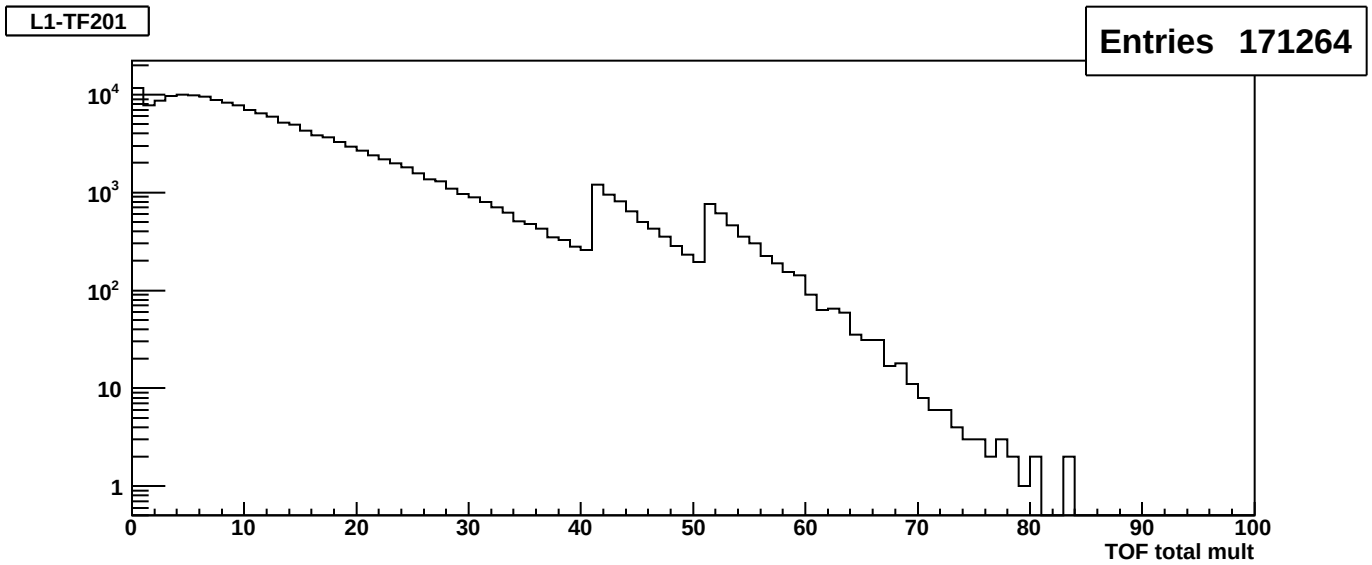

MIX-TF003
Entries 7193088
TOF MULT
TOF tray

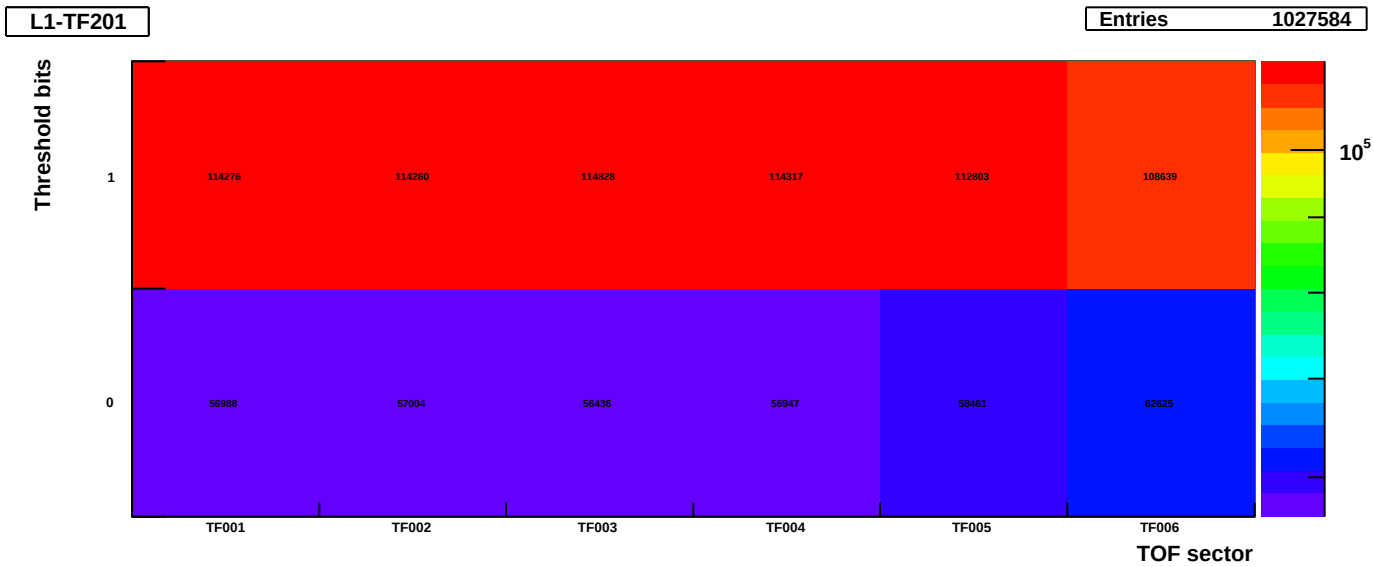

MIX-TF004
Entries 7193088
TOF MULT
TOF tray

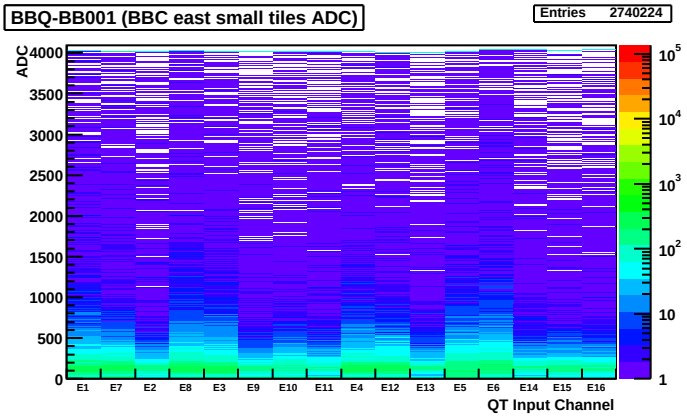

MIX-TF005
Entries 7193088
TOF MULT
TOF tray

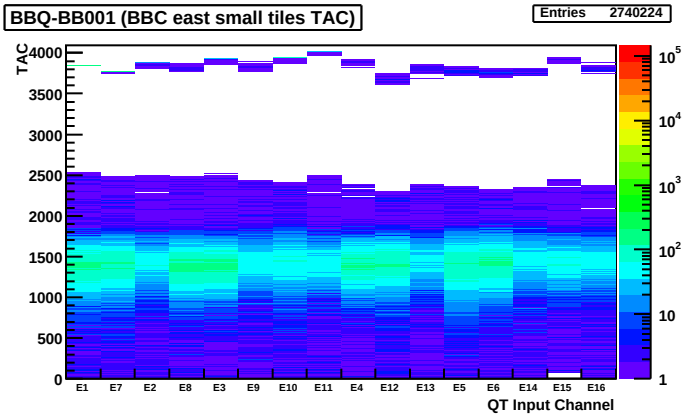

MIX-TF006
Entries 7193088
TOF MULT
TOF tray

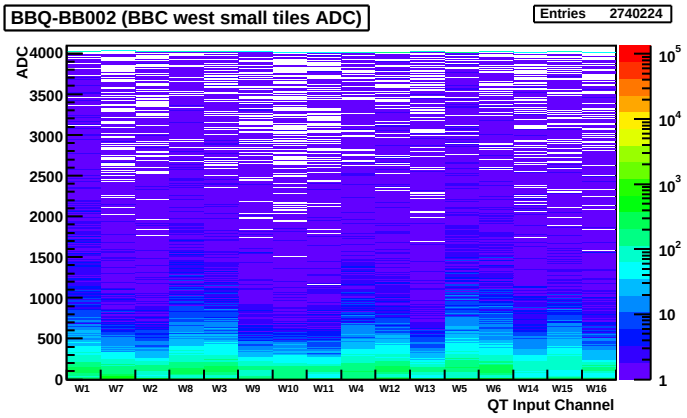

MIX-TF101
Entries 1027584
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

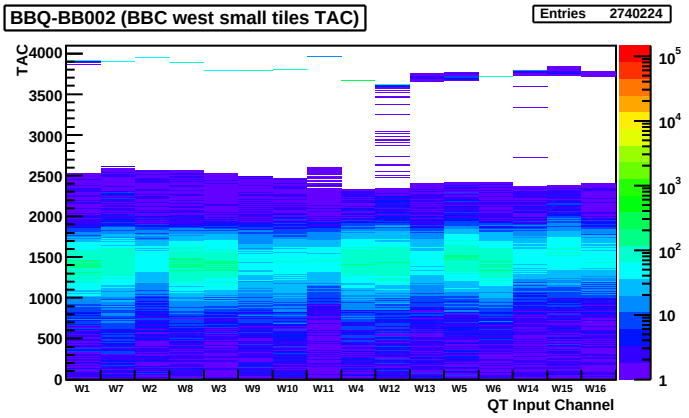

L1-TF201
Entries 171264
10^4
10^3
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
TOF total mult

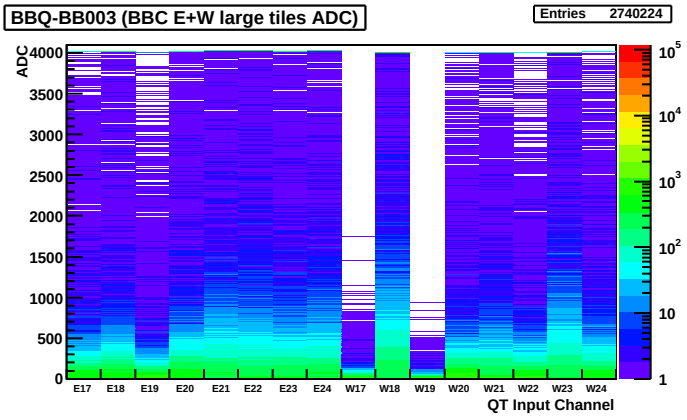

L1-TF201
Entries 1027584
Threshold bits
1
0
114276
114260
114828
114317
112803
108639
56988
57004
56436
56947
58461
62625
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

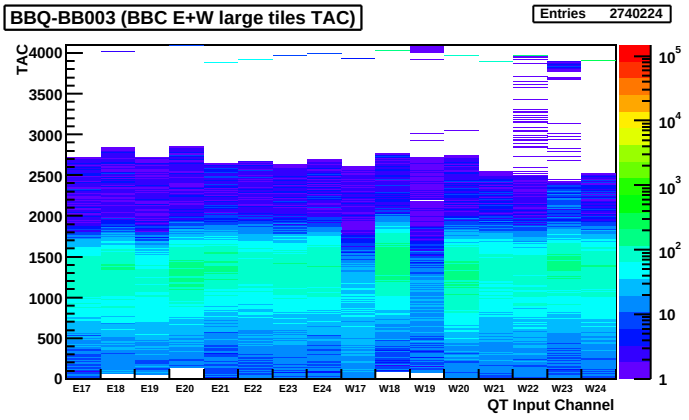

BBQ-BB001 (BBC east small tiles ADC)
Entries 2740224
ADC
QT Input Channel

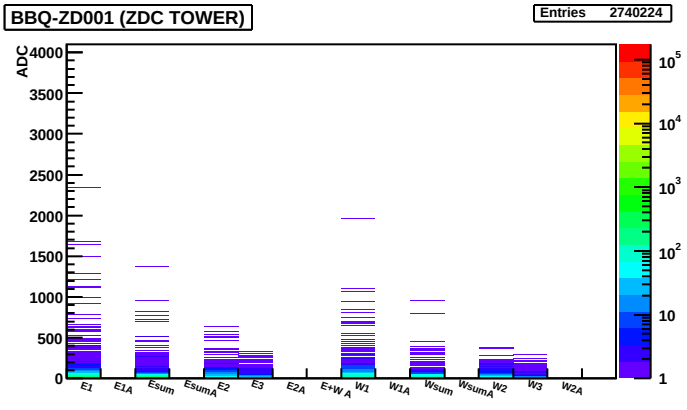

BBQ-BB001 (BBC east small tiles TAC)
Entries 2740224
TAC
QT Input Channel

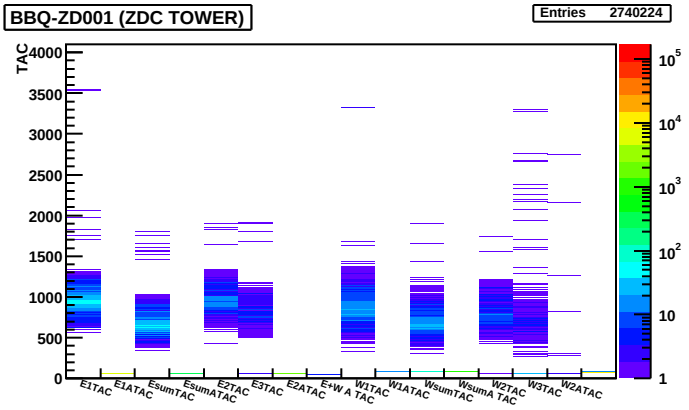

BBQ-BB002 (BBC west small tiles ADC)
Entries 2740224
ADC
QT Input Channel

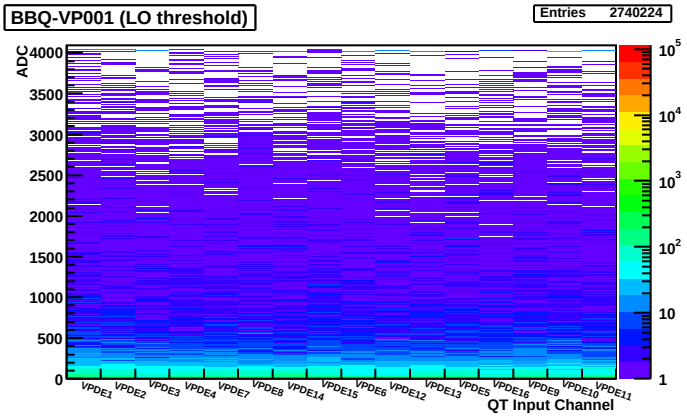

BBQ-BB002 (BBC west small tiles TAC)
Entries 2740224
TAC
QT Input Channel

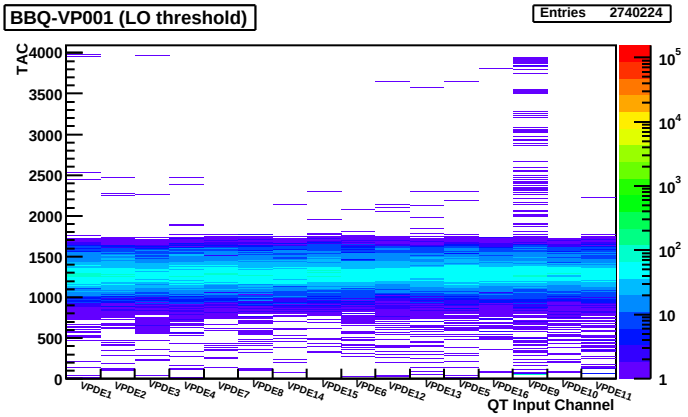

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2740224
ADC
QT Input Channel

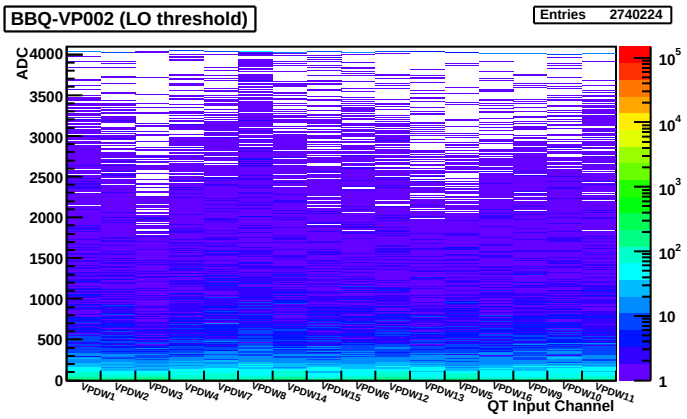

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2740224
TAC
QT Input Channel

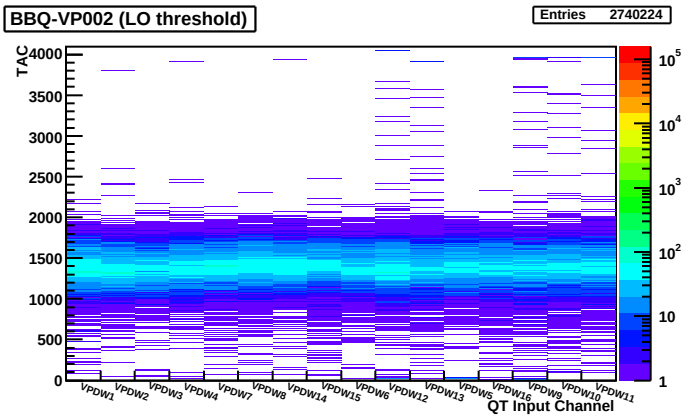

BBQ-ZD001 (ZDC TOWER)
Entries 2740224
ADC

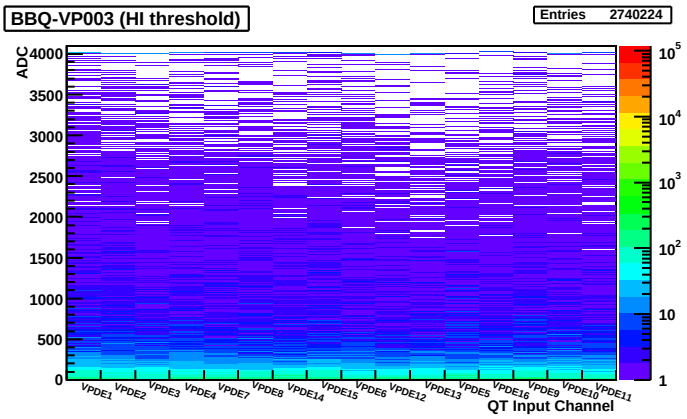

BBQ-ZD001 (ZDC TOWER)
Entries 2740224
TAC

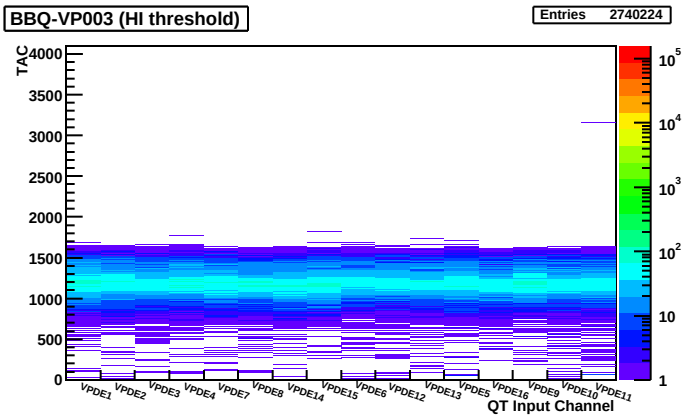

BBQ-VP001 (LO threshold)
Entries 2740224
ADC
QT Input Channel

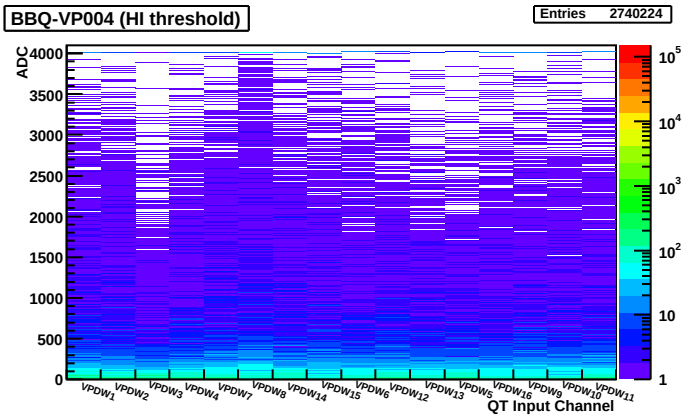

BBQ-VP001 (LO threshold)
Entries 2740224
TAC
QT Input Channel

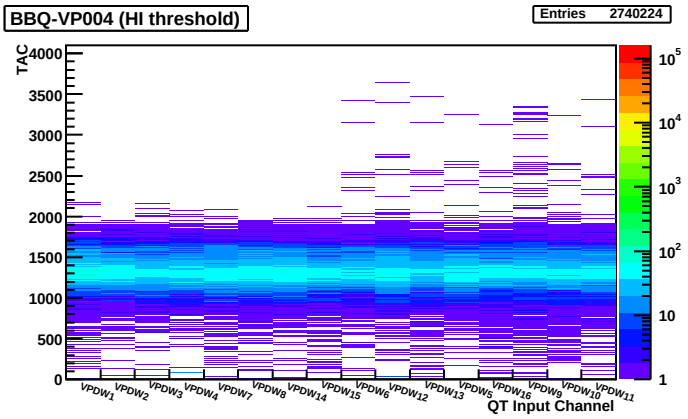

BBQ-VP002 (LO threshold)
Entries 2740224
ADC
QT Input Channel

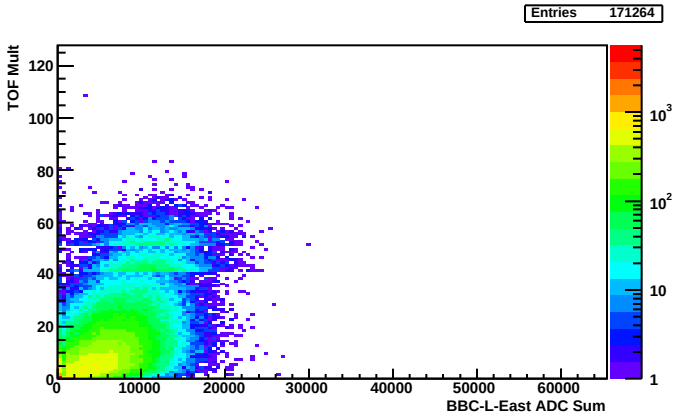

BBQ-VP002 (LO threshold)
Entries 2740224
TAC
QT Input Channel

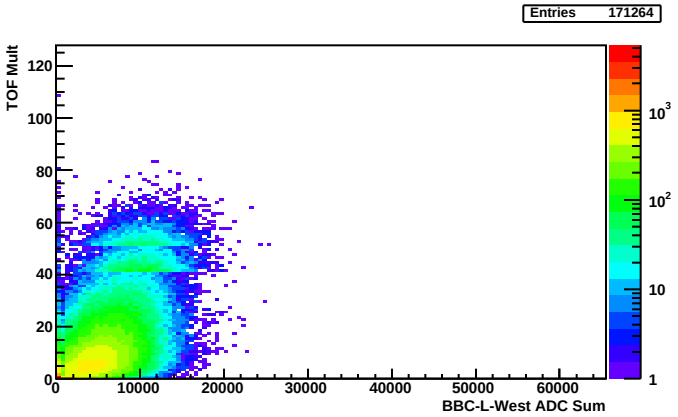

BBQ-VP003 (HI threshold)
Entries 2740224
ADC
QT Input Channel

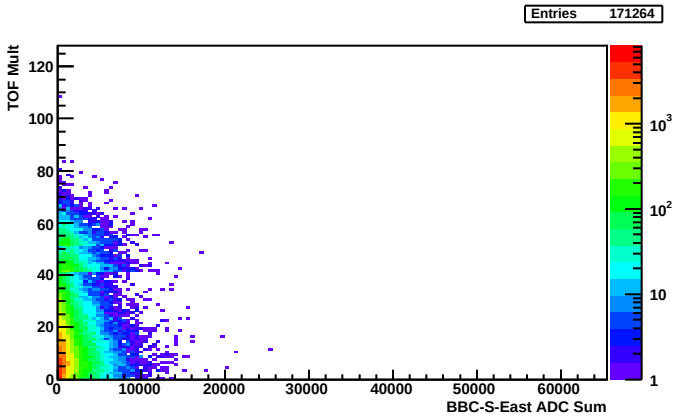

BBQ-VP003 (HI threshold)
Entries 2740224
TAC
QT Input Channel

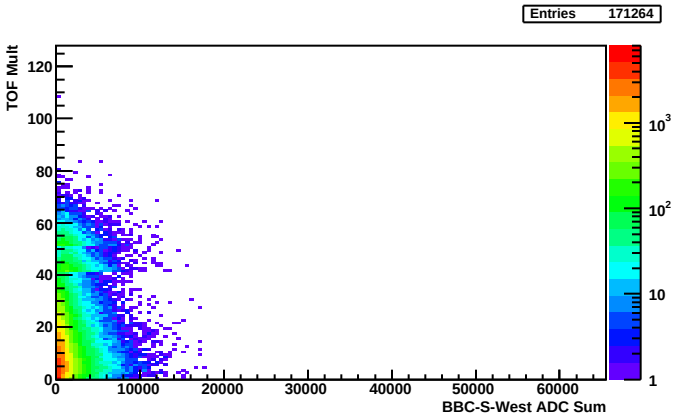

BBQ-VP004 (HI threshold)
Entries 2740224
ADC
QT Input Channel

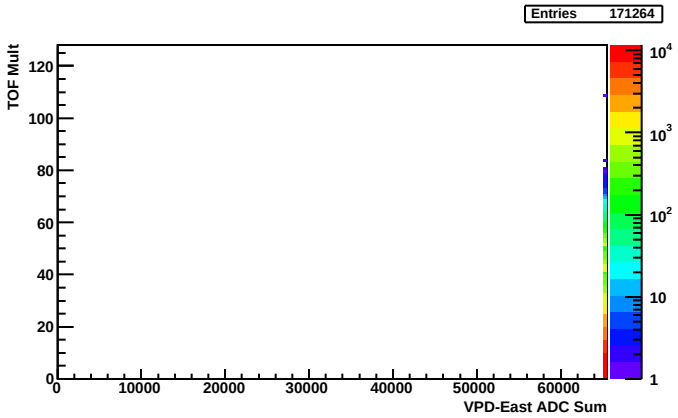

BBQ-VP004 (HI threshold)
Entries 2740224
TAC
QT Input Channel

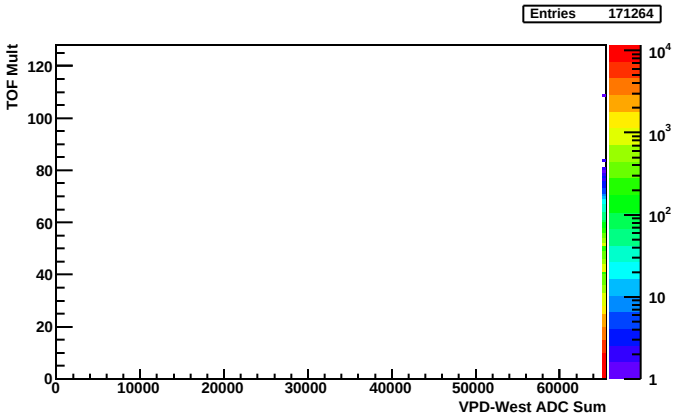

Entries 171264
TOF Mult
BBC-L-East ADC Sum

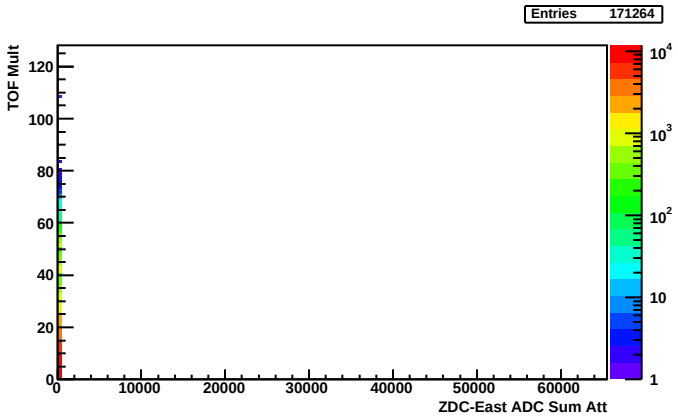

Entries 171264
TOF Mult
BBC-L-West ADC Sum

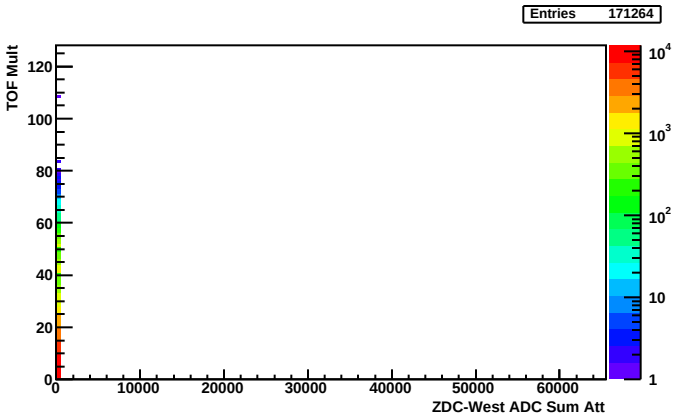

Entries 171264
TOF Mult
BBC-S-East ADC Sum

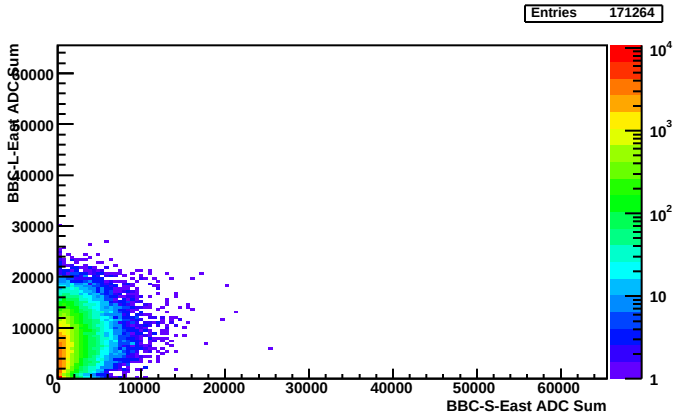

Entries 171264
TOF Mult
BBC-S-West ADC Sum

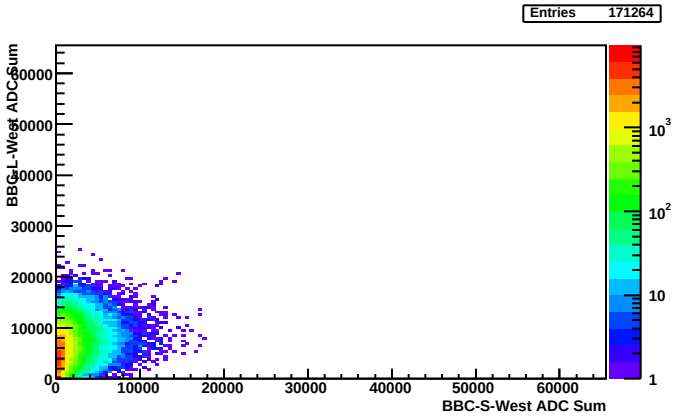

Entries 171264
TOF Mult
VPD-East ADC Sum

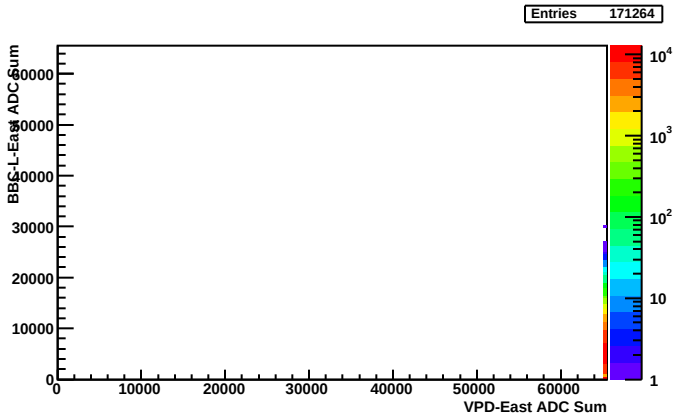

Entries 171264
TOF Mult
VPD-West ADC Sum

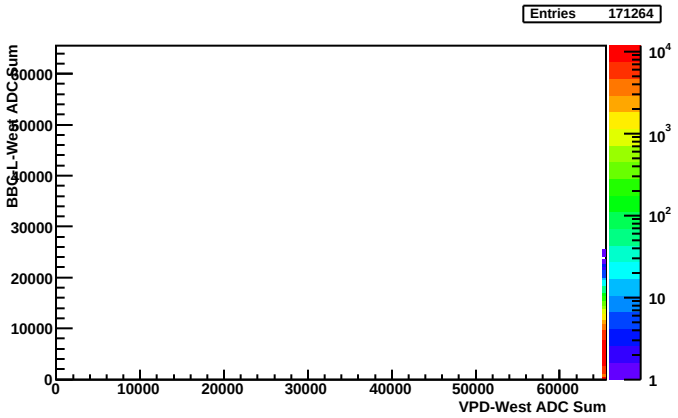

Entries 171264
TOF Mult
ZDC-East ADC Sum Att

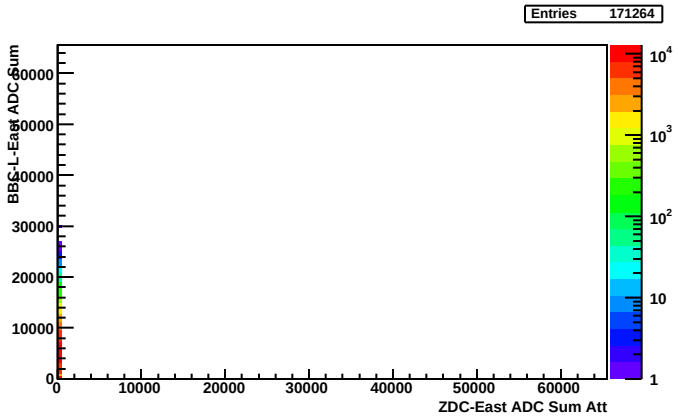

Entries 171264
TOF Mult
ZDC-West ADC Sum Att

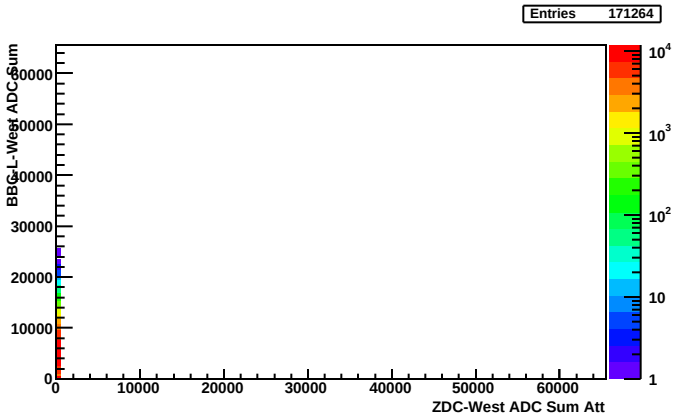

Entries 171264
BBC-L-East ADC Sum
BBC-S-East ADC Sum

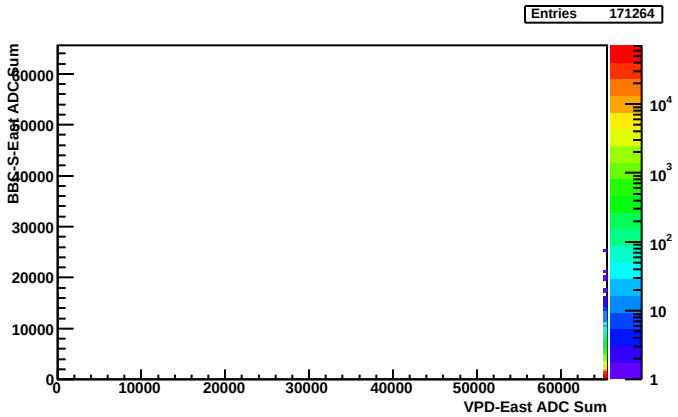

Entries 171264
BBC-L-West ADC Sum
BBC-S-West ADC Sum

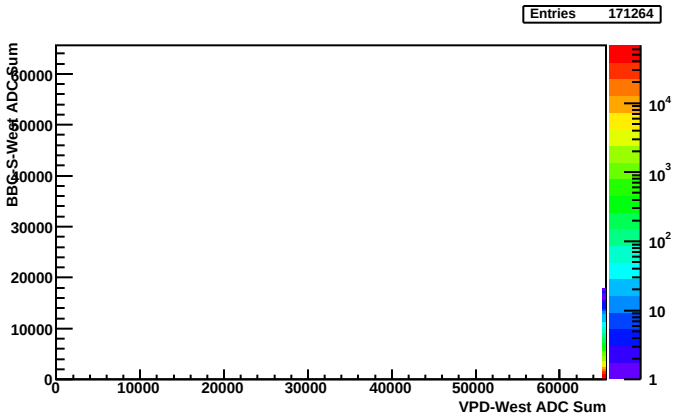

Entries 171264
BBC-L-East ADC Sum
VPD-East ADC Sum

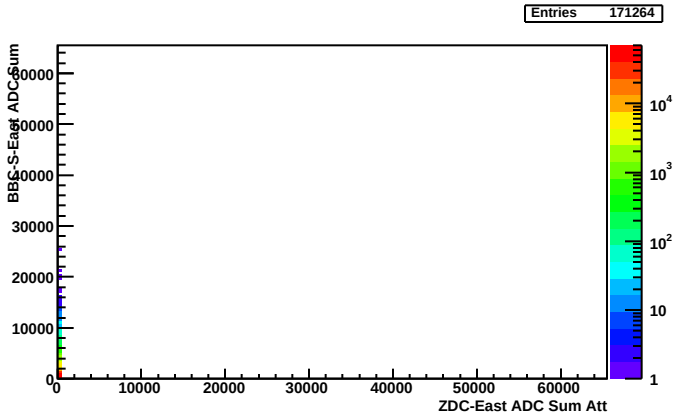

Entries 171264
BBC-L-West ADC Sum
VPD-West ADC Sum

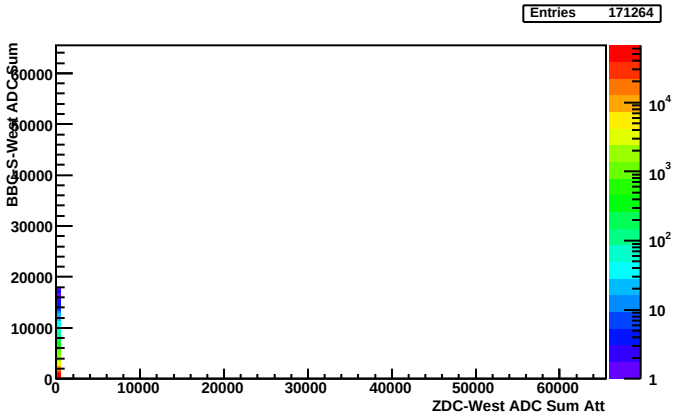

Entries 171264
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

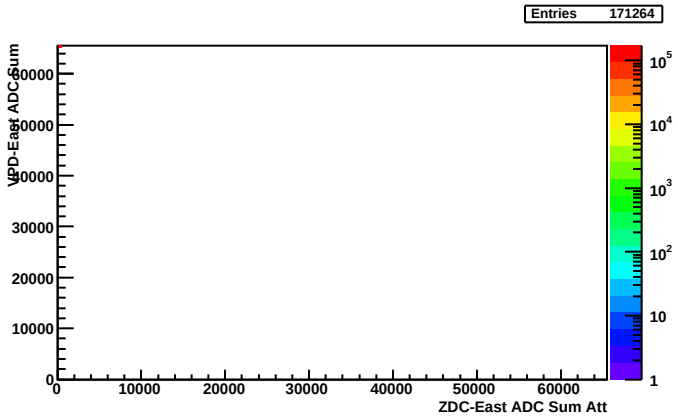

Entries 171264
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

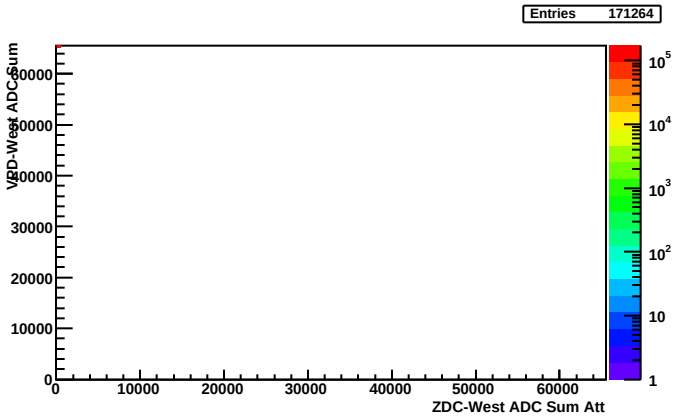

Entries 171264
BBC-S-East ADC Sum
VPD-East ADC Sum

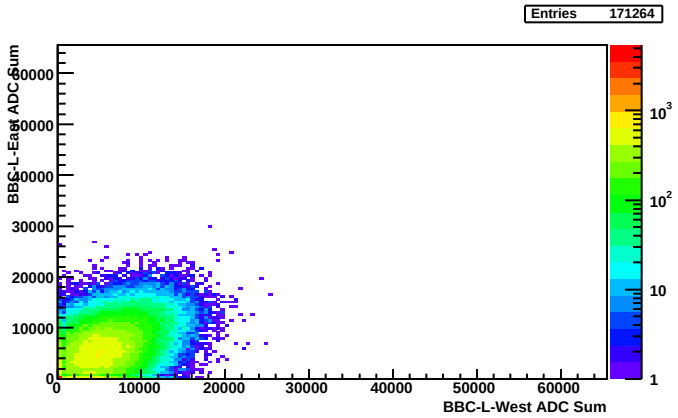

Entries 171264
BBC-S-West ADC Sum
VPD-West ADC Sum

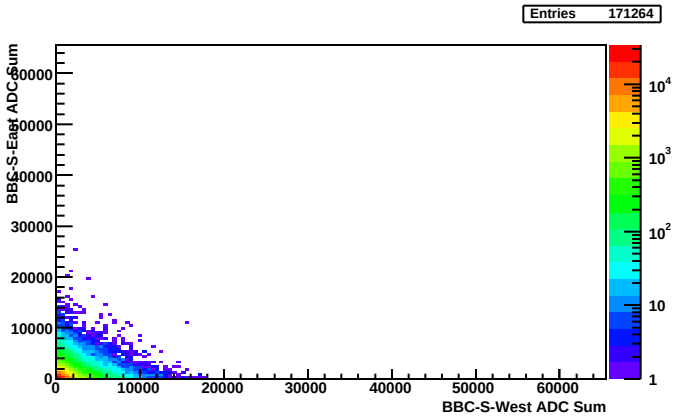

Entries 171264
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

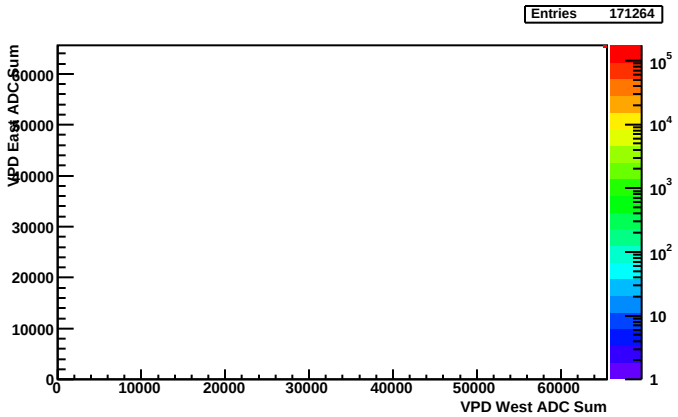

Entries 171264
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

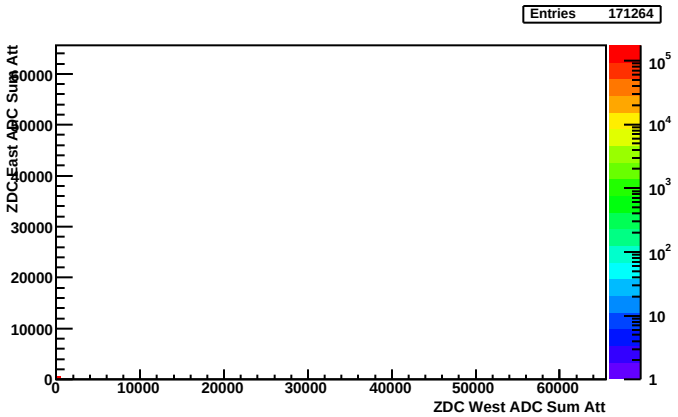

Entries 171264
VPD-East ADC Sum
ZDC-East ADC Sum Att

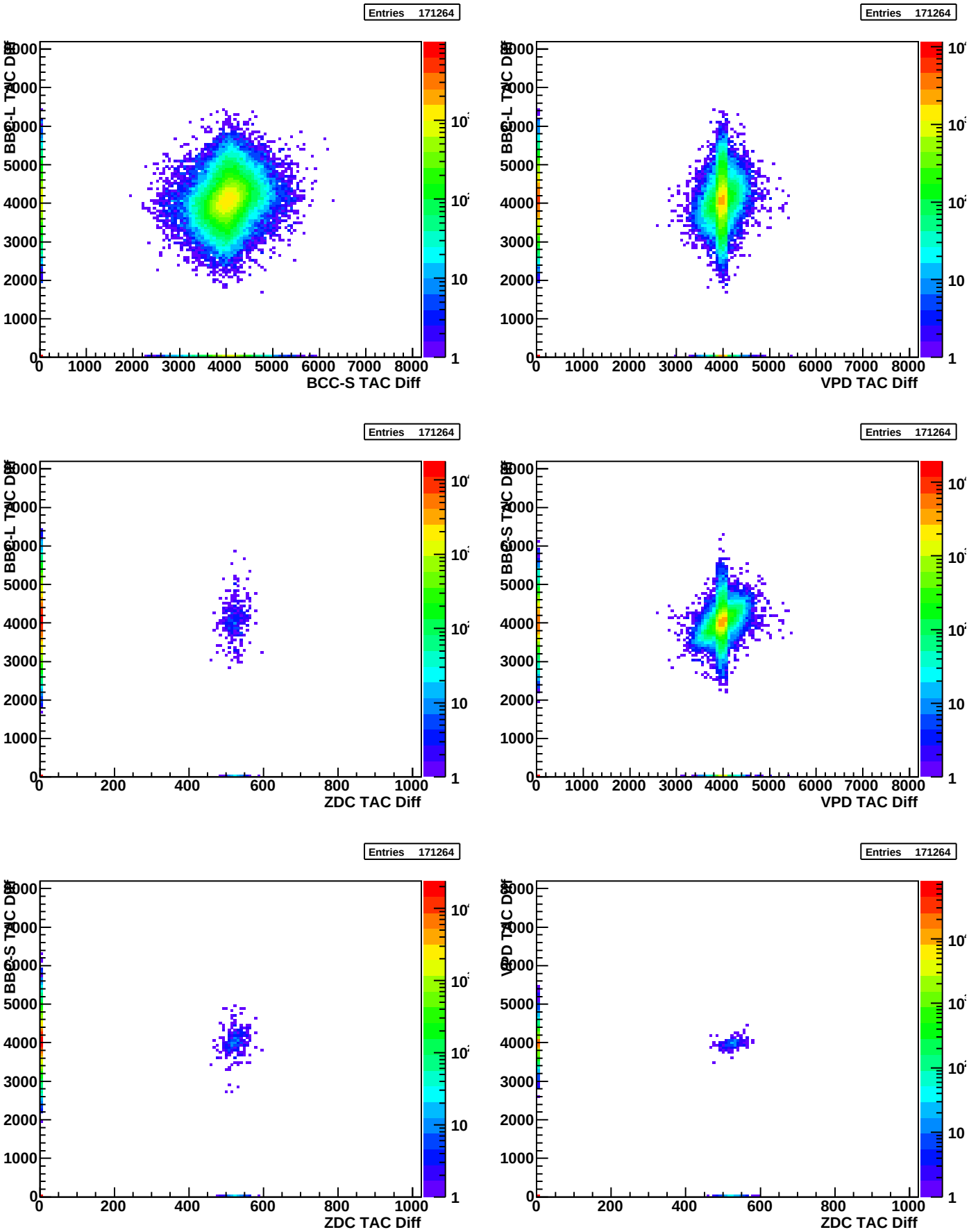

Entries 171264
VPD-West ADC Sum
ZDC-West ADC Sum Att

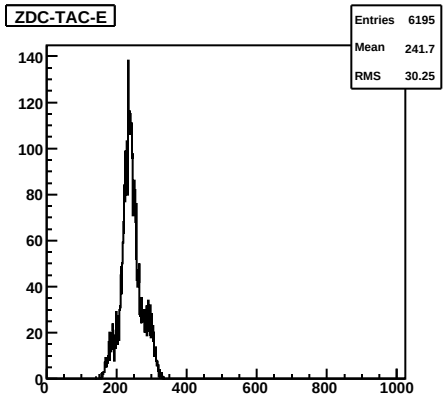

Entries 171264
BBC-L-East ADC Sum
BBC-L-West ADC Sum

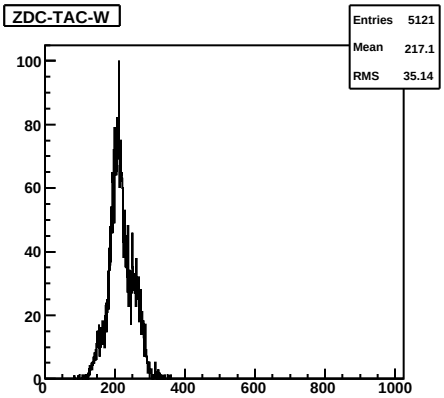

Entries 171264
BBC-S-East ADC Sum
BBC-S-West ADC Sum

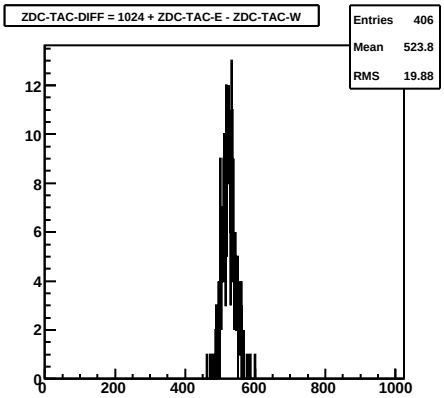

Entries 171264
VPD East ADC Sum
VPD West ADC Sum

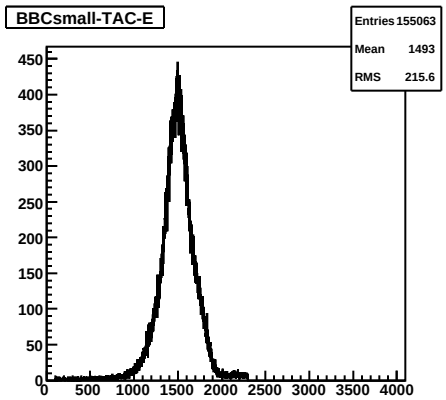

Entries 171264
ZDC East ADC Sum Att
ZDC West ADC Sum Att

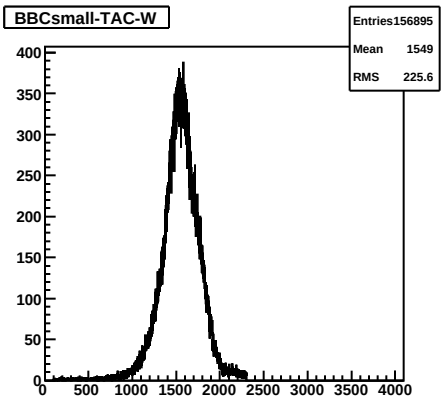

Entries 171264
BBC-L TAC Diff
BCC-S TAC Diff
Entries 171264
BBC-L TAC Diff
VPD TAC Diff
Entries 171264
BBC-L TAC Diff
ZDC TAC Diff
Entries 171264
BBC-S TAC Diff
VPD TAC Diff
Entries 171264
BBC-S TAC Diff
ZDC TAC Diff
Entries 171264
VPD TAC Diff
ZDC TAC Diff

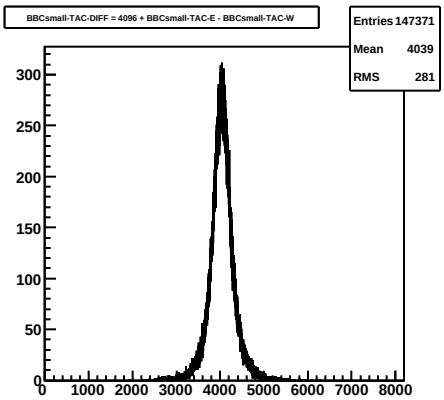

ZDC-TAC-E
Entries 6195
Mean 241.7
RMS 30.25

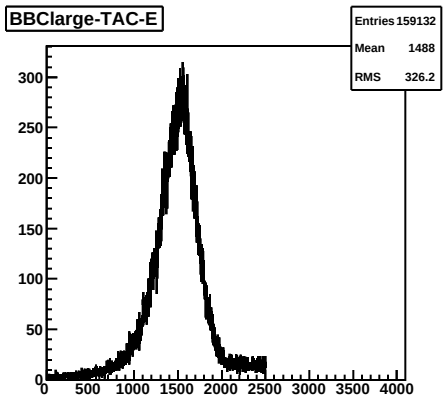

ZDC-TAC-W
Entries 5121
Mean 217.1
RMS 35.14

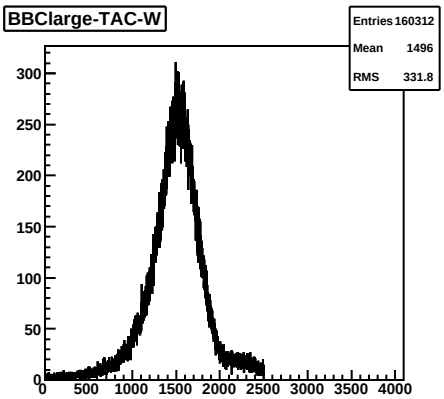

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 406
Mean 523.8
RMS 19.88

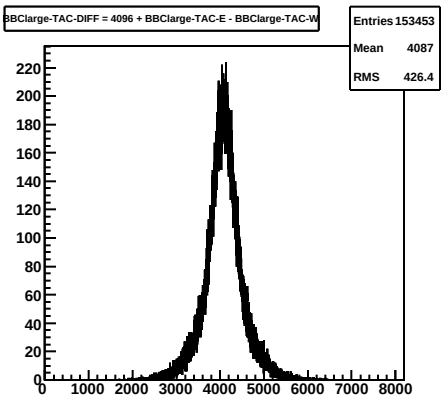

BBCsmall-TAC-E
Entries 155063
Mean 1493
RMS 215.6

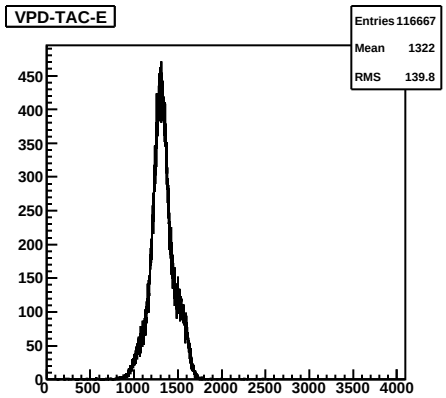

BBCsmall-TAC-W
Entries 156895
Mean 1549
RMS 225.6

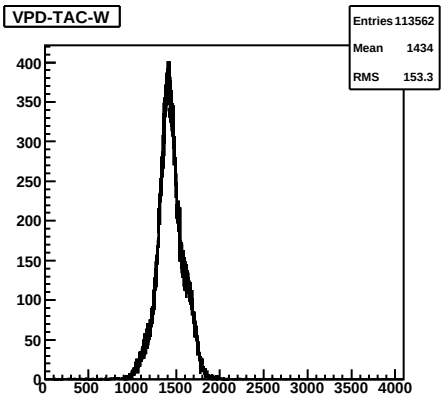

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 147371
Mean 4039
RMS 281

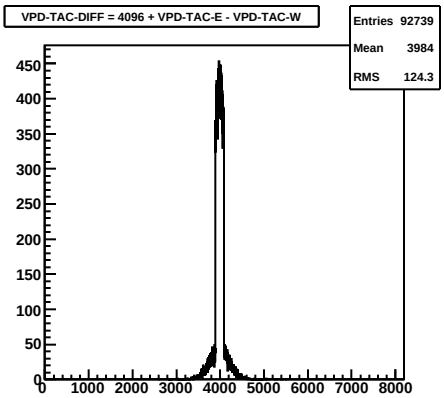

BBClarge-TAC-E
Entries 159132
Mean 1488
RMS 326.2

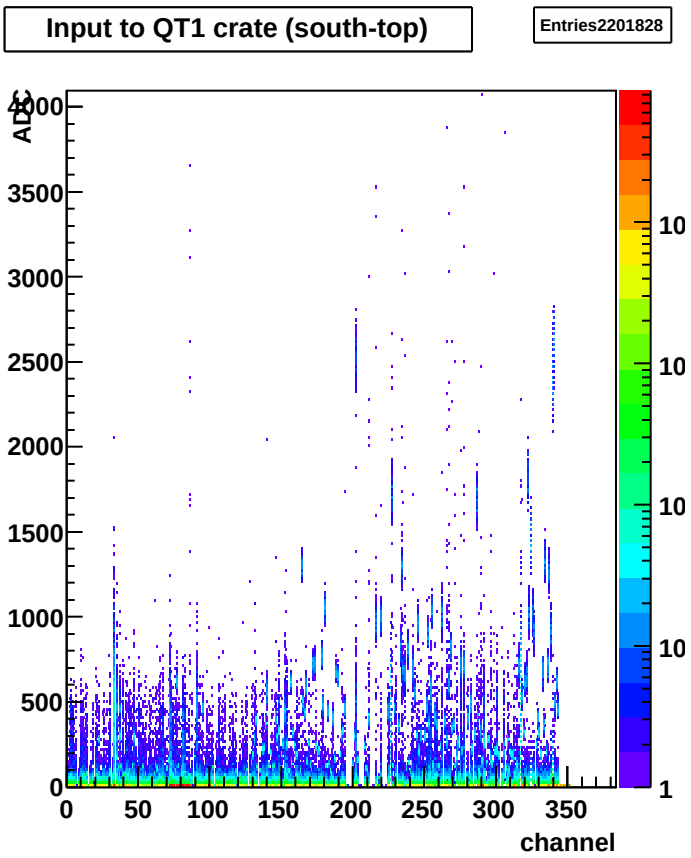

BBClarge-TAC-W
Entries 160312
Mean 1496
RMS 331.8

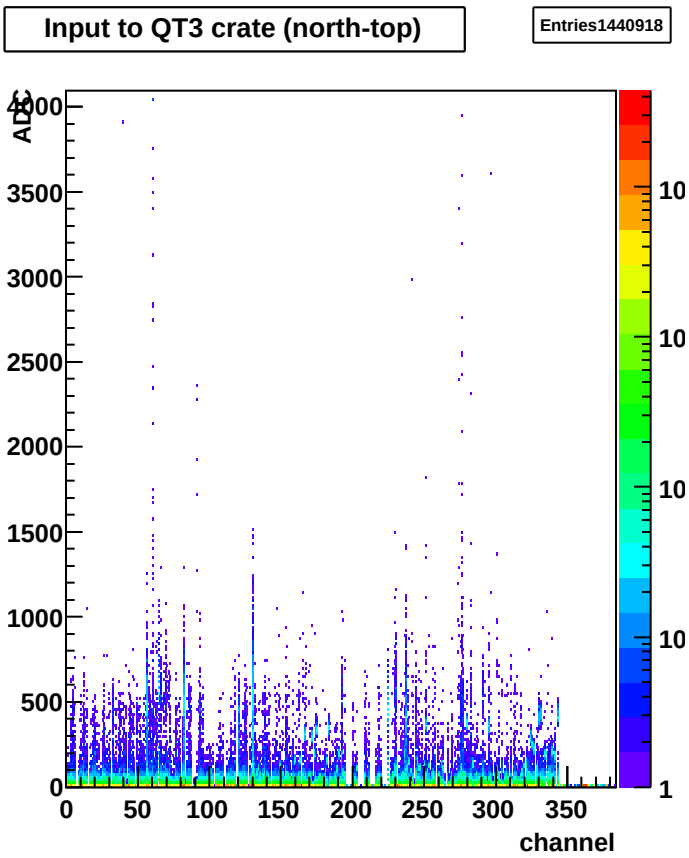

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 153453
Mean 4087
RMS 426.4

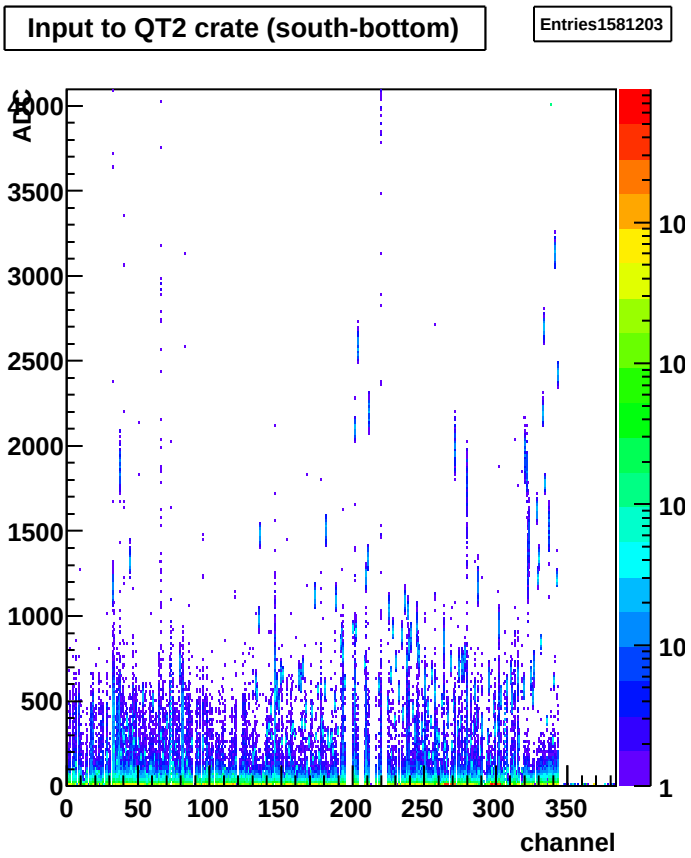

VPD-TAC-E
Entries 116667
Mean 1322
RMS 139.8

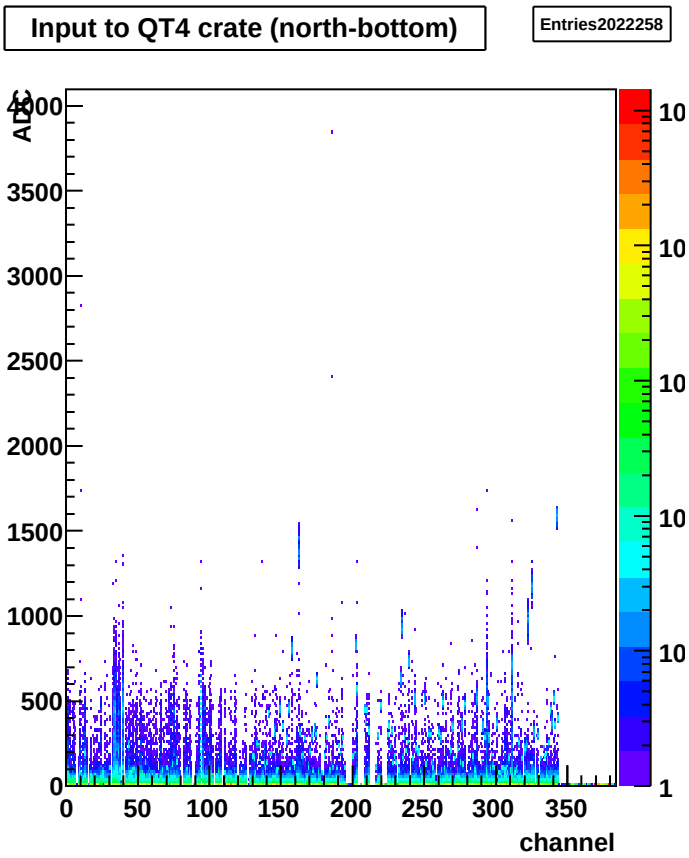

VPD-TAC-W
Entries 113562
Mean 1434
RMS 153.3

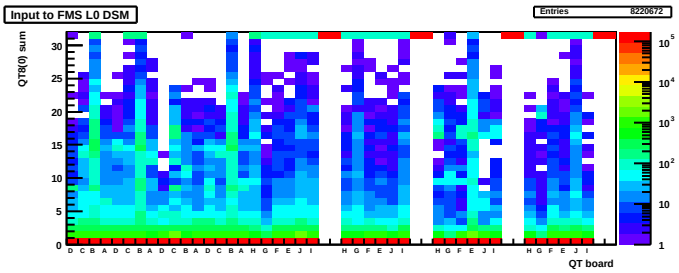

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 92739
Mean 3984
RMS 124.3

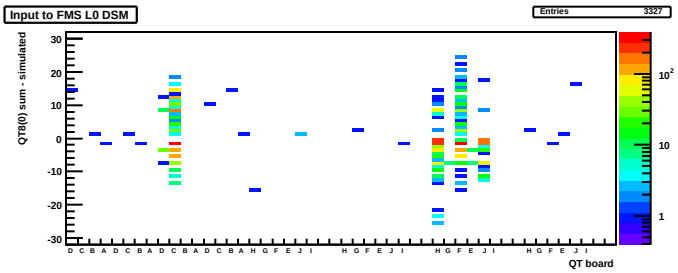

Input to QT1 crate (south-top)
Entries2201828
ADC
channel

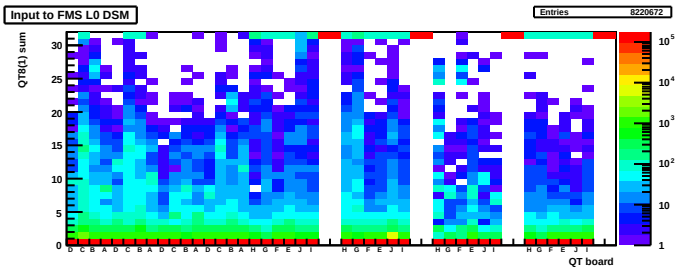

Input to QT3 crate (north-top)
Entries1440918
ADC
channel

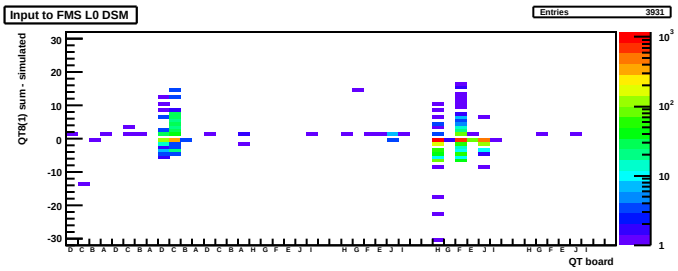

Input to QT2 crate (south-bottom)
Entries1581203
ADC
channel

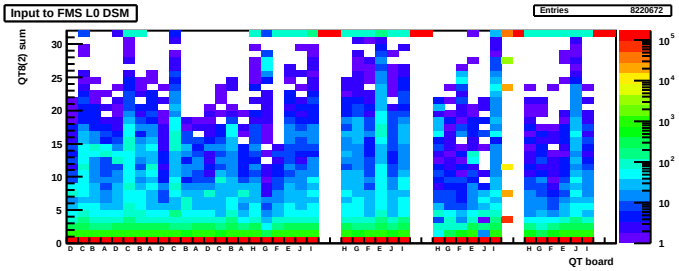

Input to QT4 crate (north-bottom)
Entries2022258
ADC
channel

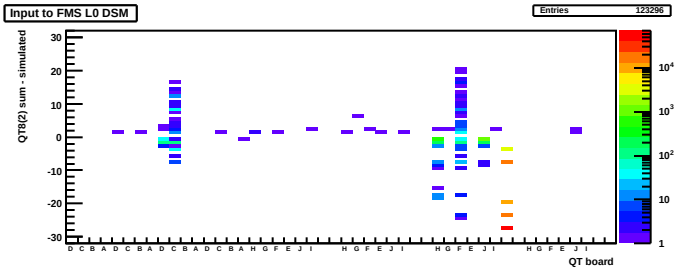

Input to FMS L0 DSM
Entries 8220672
QT8(0) sum
QT board

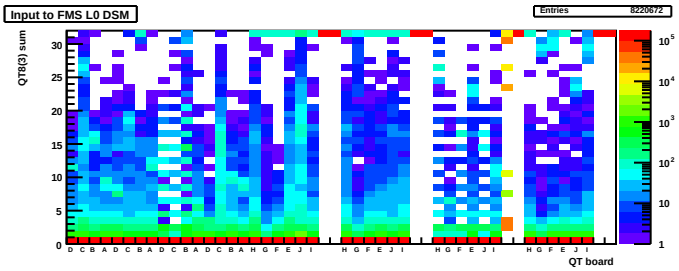

Input to FMS L0 DSM
Entries 3327
QT8(0) sum - simulated
QT board

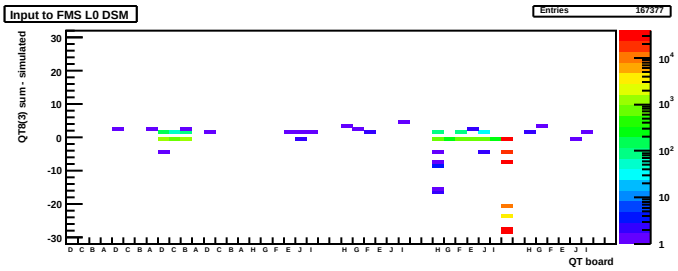

Input to FMS L0 DSM
Entries 8220672
QT8(1) sum
QT board

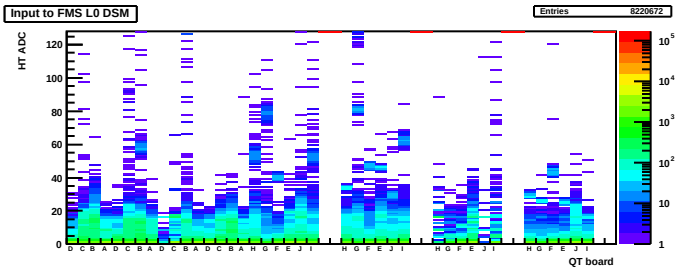

Input to FMS L0 DSM
Entries 3931
QT8(1) sum - simulated
QT board

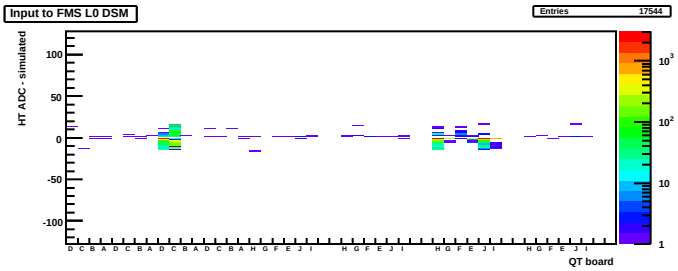

Input to FMS L0 DSM
Entries 8220672
QT8(2) sum
QT board

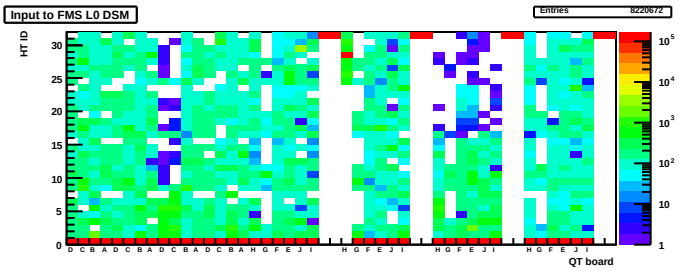

Input to FMS L0 DSM
Entries 123296
QT8(2) sum - simulated
QT board

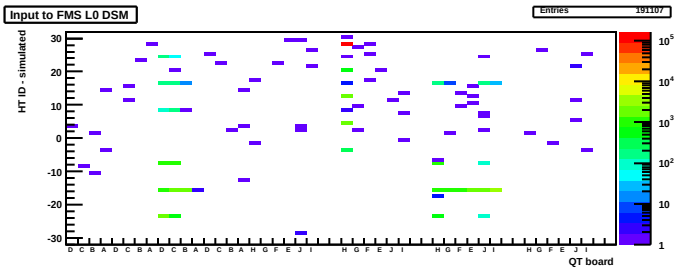

Input to FMS L0 DSM
Entries 8220672
QT8(3) sum
QT board

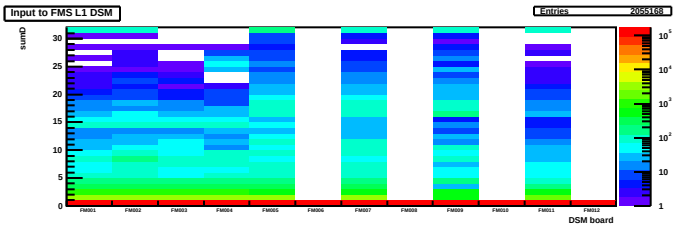

Input to FMS L0 DSM
Entries 167377
QT8(3) sum - simulated
QT board

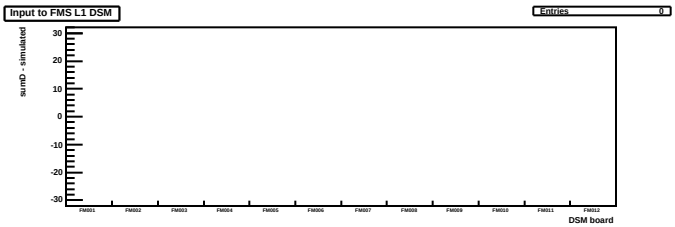

Input to FMS L0 DSM
Entries 8220672
HT ADC
QT board

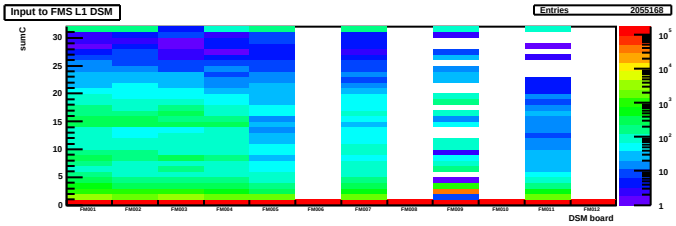

Input to FMS L0 DSM
Entries 17544
HT ADC - simulated
QT board

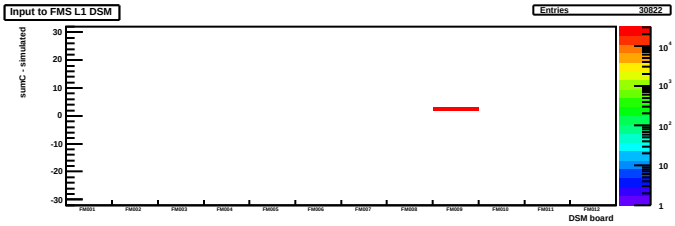

Input to FMS L0 DSM
Entries 8220672
HT ID
QT board

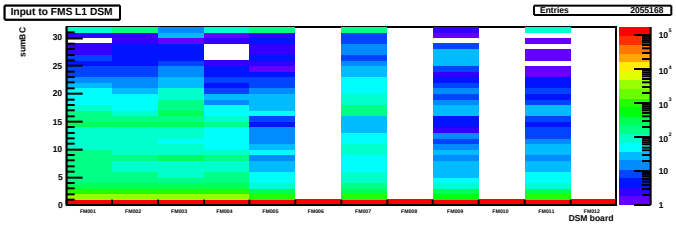

Input to FMS L0 DSM
Entries 191107
HT ID - simulated
QT board

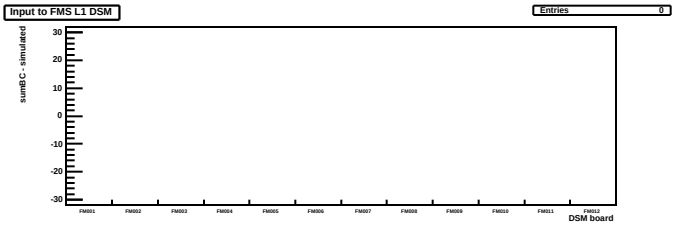

Input to FMS L1 DSM
Entries 2055168
sumD
DSM board

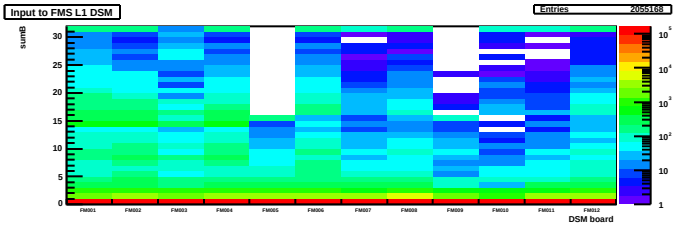

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

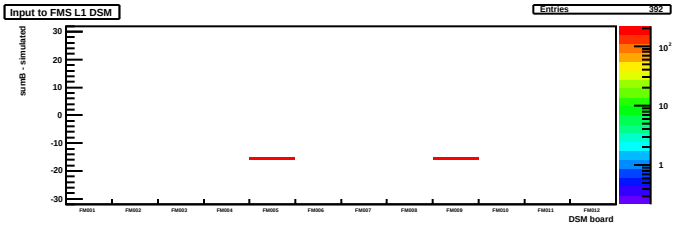

Input to FMS L1 DSM
Entries 2055168
sumC
DSM board

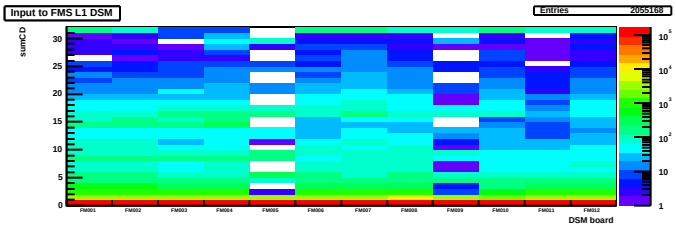

Input to FMS L1 DSM
Entries 30822
sumC - simulated
DSM board

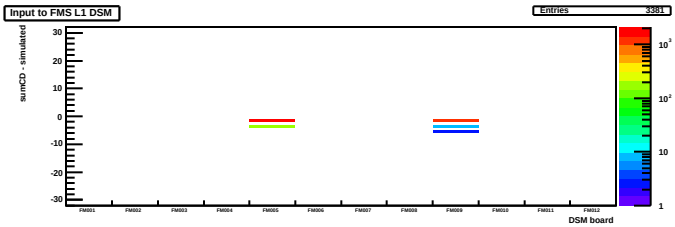

Input to FMS L1 DSM
Entries 2055168
sumBC
DSM board

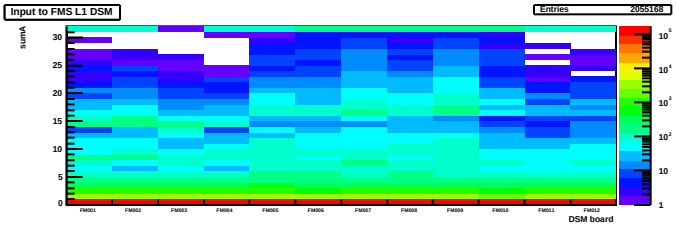

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

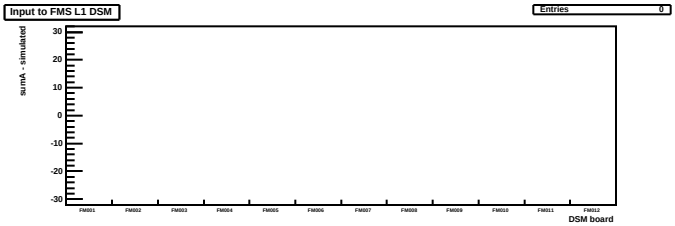

Input to FMS L1 DSM
Entries 2055168
sumB
DSM board

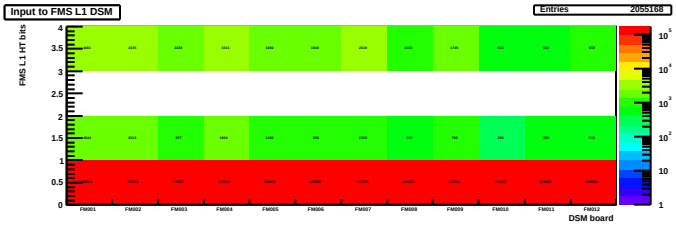

Input to FMS L1 DSM
Entries 392
sumB - simulated
DSM board

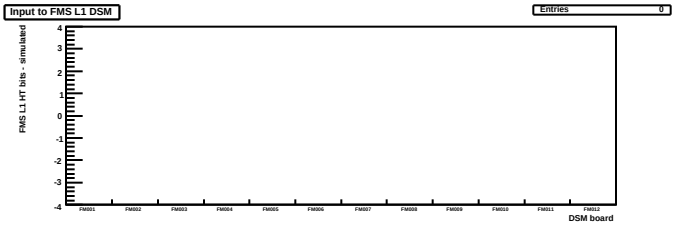

Input to FMS L1 DSM
Entries 2055168
sumCD
DSM board

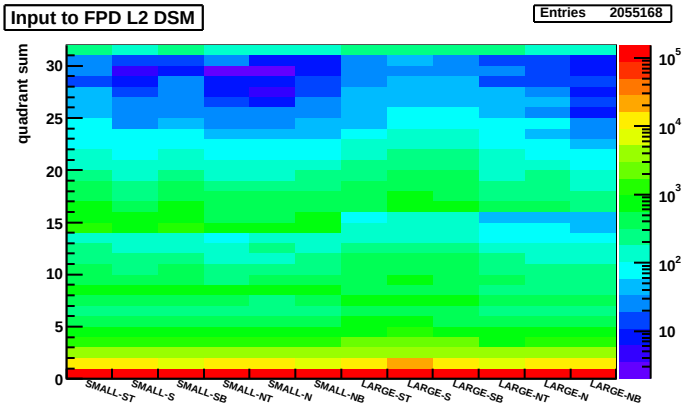

Input to FMS L1 DSM
Entries 3381
sumCD - simulated
DSM board

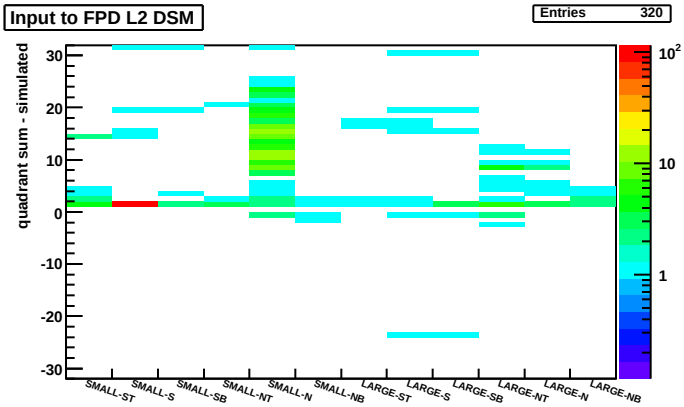

Input to FMS L1 DSM
Entries 2055168
sumA
DSM board

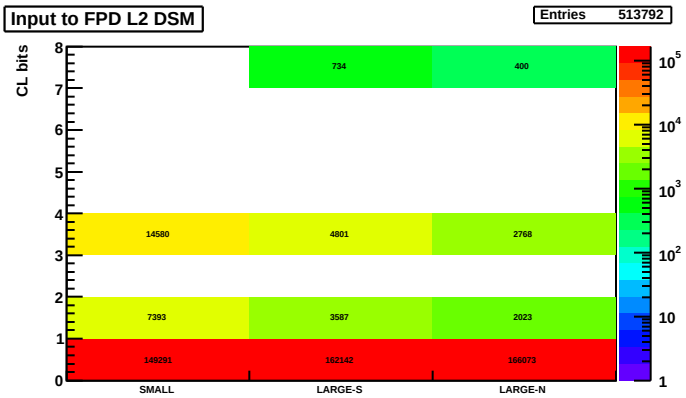

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

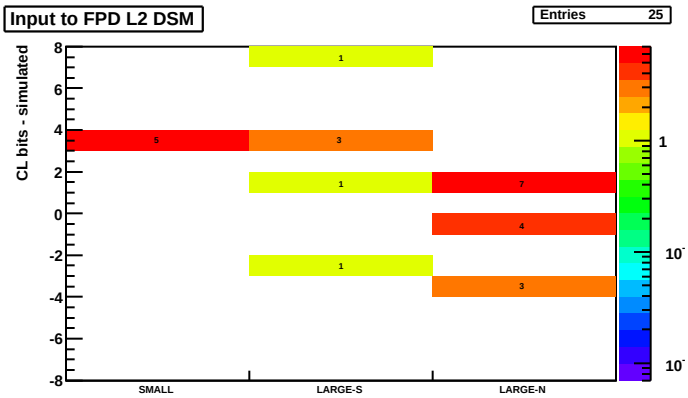

Input to FMS L1 DSM
Entries 2055168
FMS L1 HT bits
DSM board

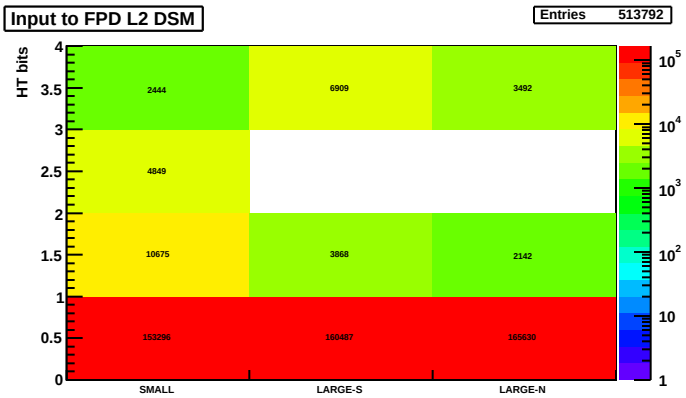

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

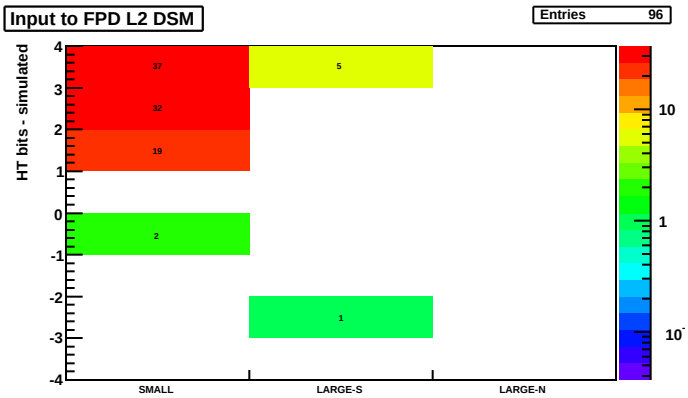

Input to FPD L2 DSM
Entries 2055168
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

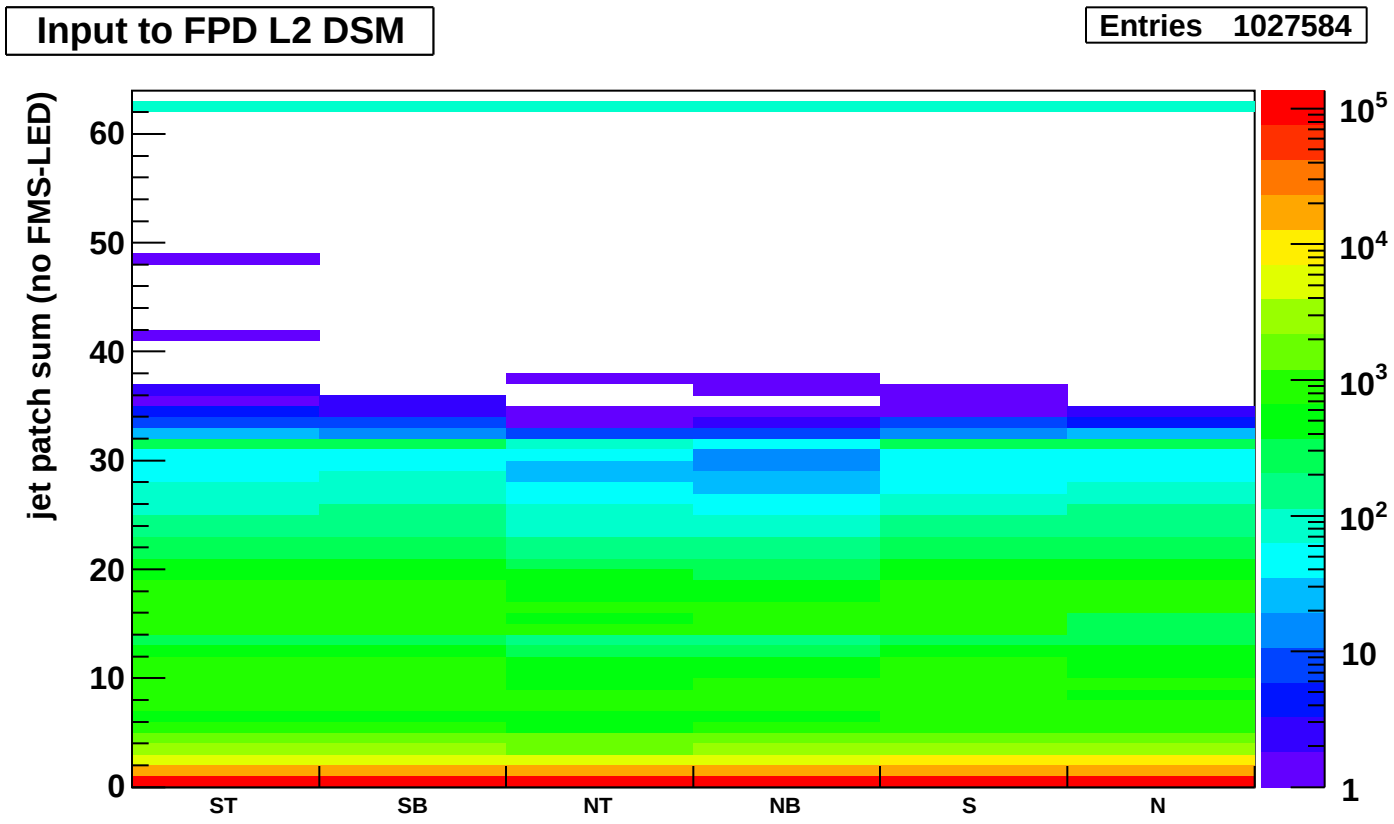

Input to FPD L2 DSM
Entries 320
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

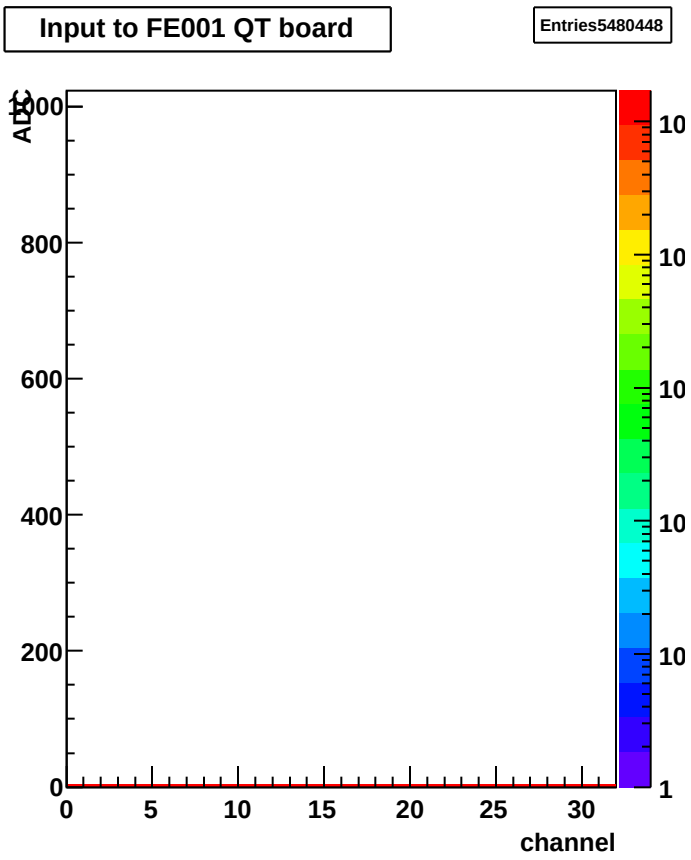

Input to FPD L2 DSM
Entries 513792
CL bits
734
400
14580
4801
2768
7393
3587
2023
149291
162142
166073
SMALL
LARGE-S
LARGE-N

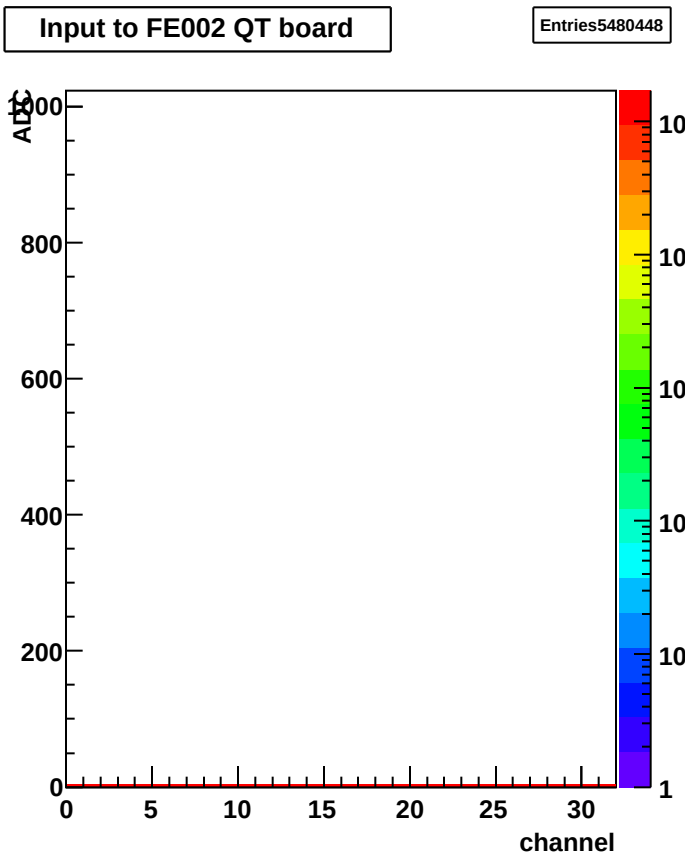

Input to FPD L2 DSM
Entries 25
CL bits - simulated
1
5
3
1
7
4
1
3
SMALL
LARGE-S
LARGE-N

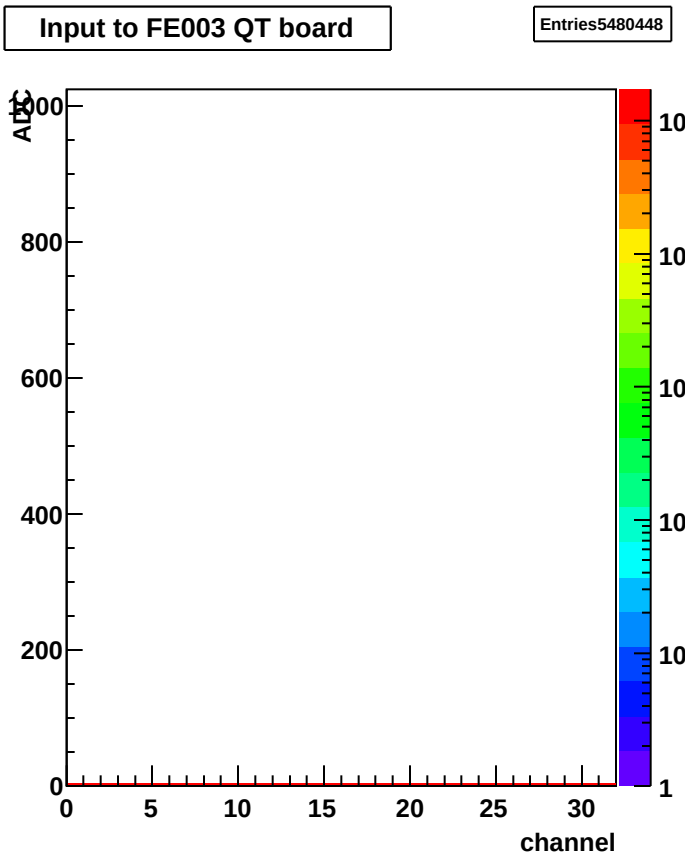

Input to FPD L2 DSM
Entries 513792
HT bits
2444
6909
3492
4849
10675
3868
2142
153296
160487
165630
SMALL
LARGE-S
LARGE-N

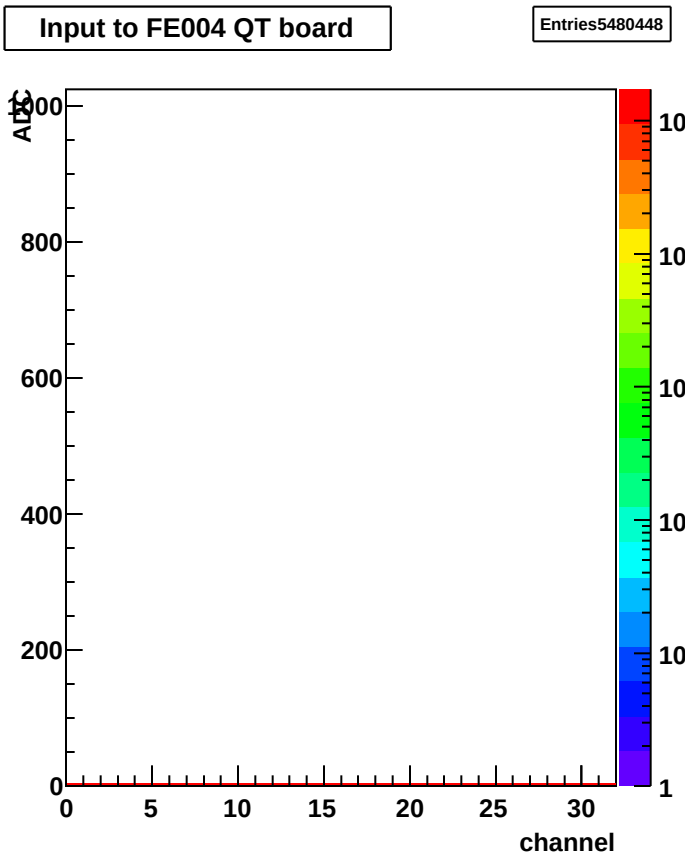

Input to FPD L2 DSM
Entries 96
HT bits - simulated
37
5
32
19
2
1
SMALL
LARGE-S
LARGE-N

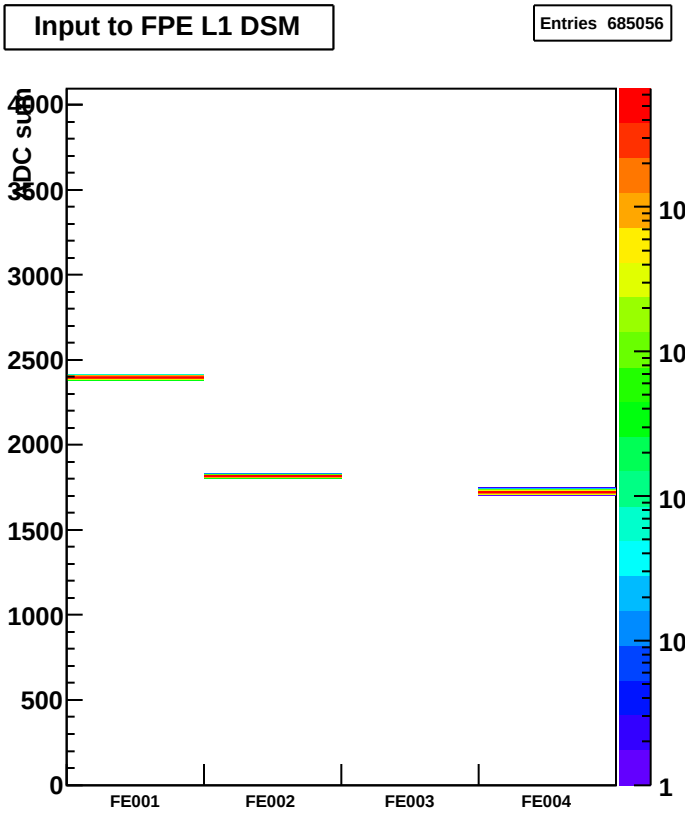

Input to FPD L2 DSM
Entries 1027584
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

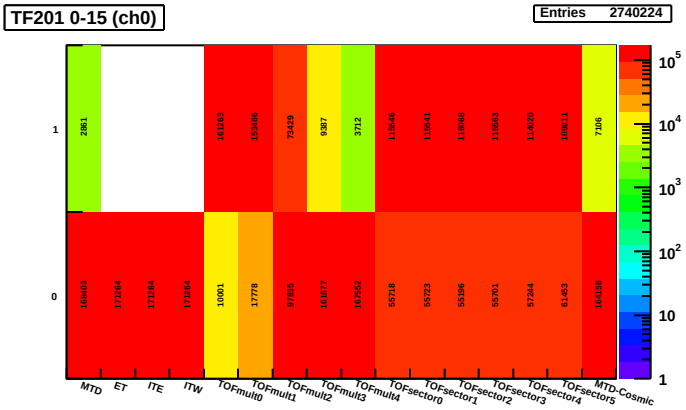

Input to FE001 QT board
Entries5480448
ADC
channel

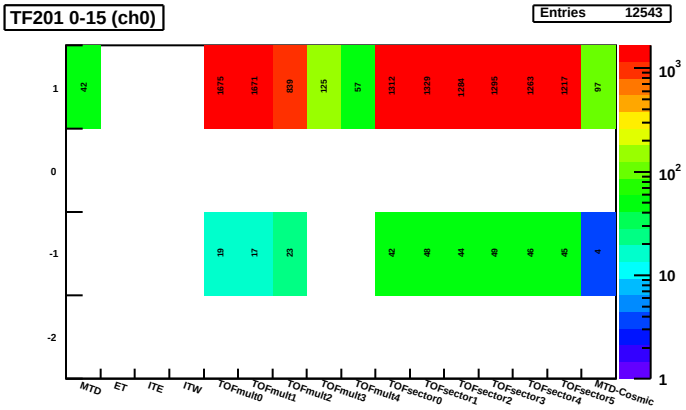

Input to FE002 QT board
Entries5480448
ADC
channel

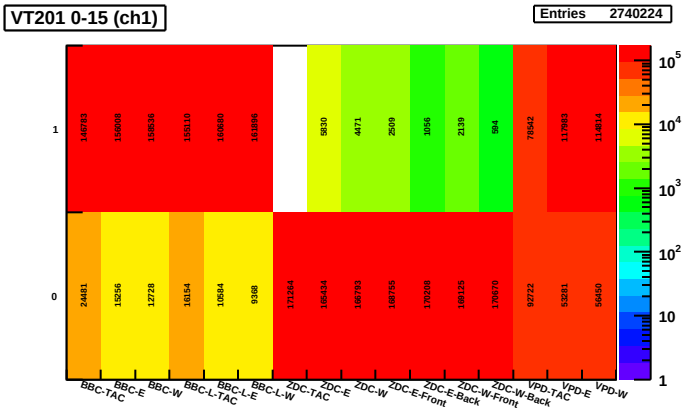

Input to FE003 QT board
Entries5480448
ADC
channel

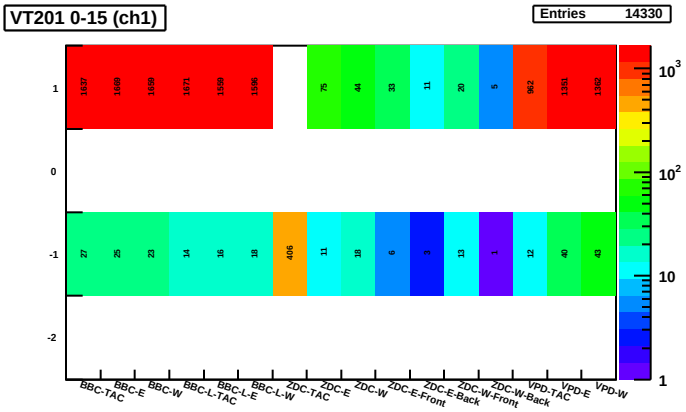

Input to FE004 QT board
Entries5480448
ADC
channel

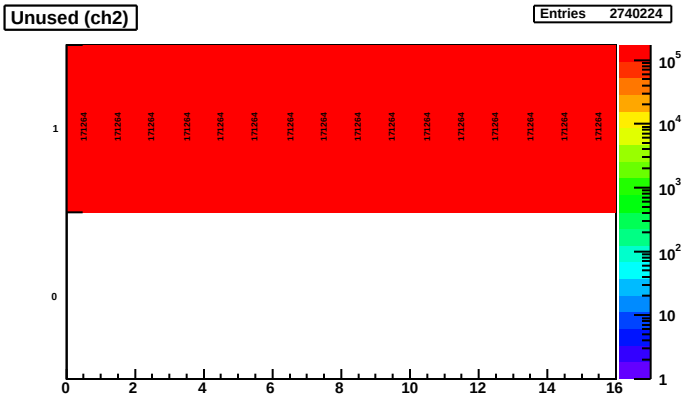

Input to FPE L1 DSM
Entries 685056
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

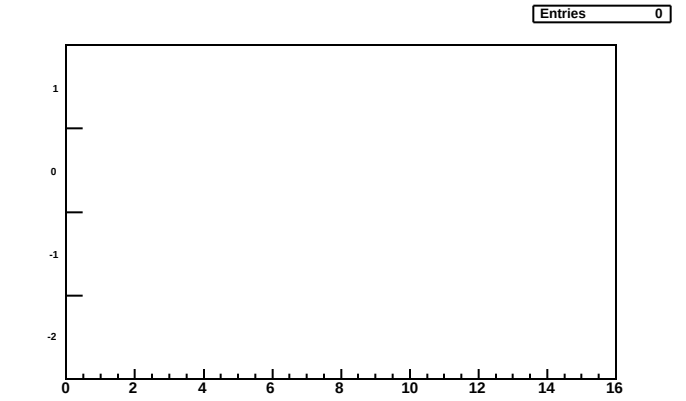

TF201 0-15 (ch0)
Entries 2740224
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

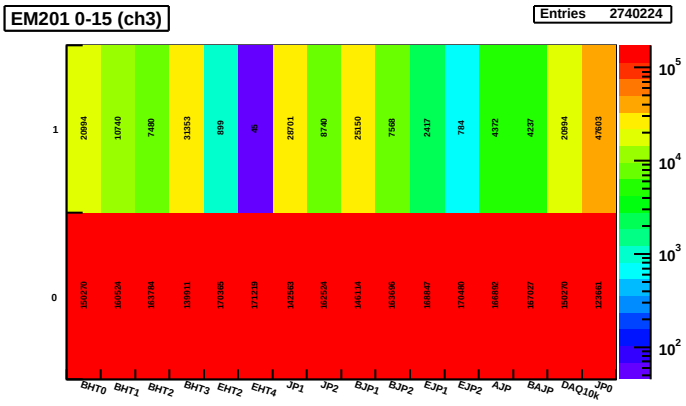

TF201 0-15 (ch0)
Entries 12543
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

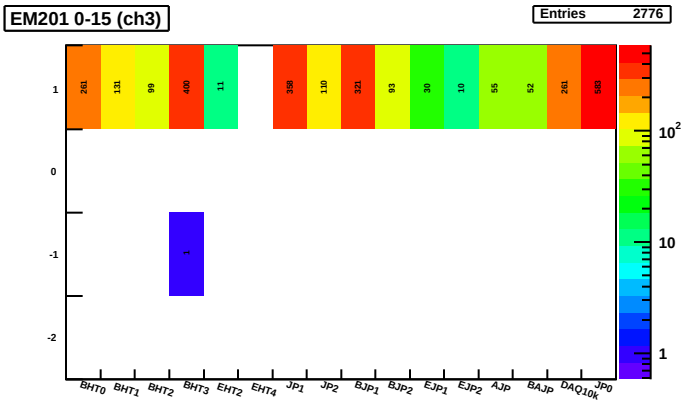

VT201 0-15 (ch1)
Entries 2740224
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 14330
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

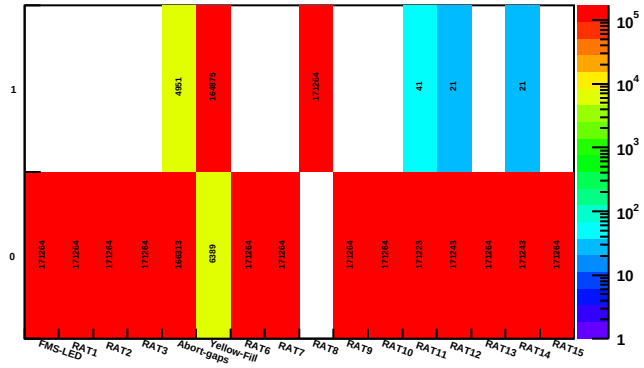

Unused (ch2)
Entries 2740224

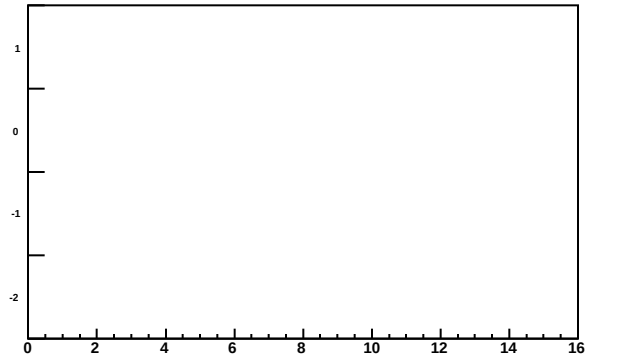

Entries 0


EM201 0-15 (ch3)
Entries 2740224
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

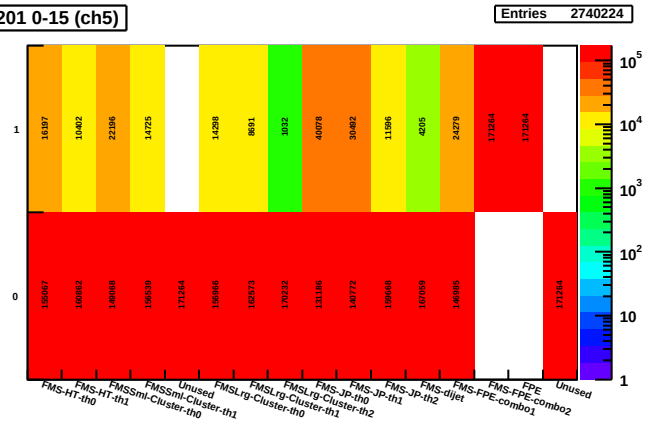

EM201 0-15 (ch3)
Entries 2776
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

RAT board (ch4)

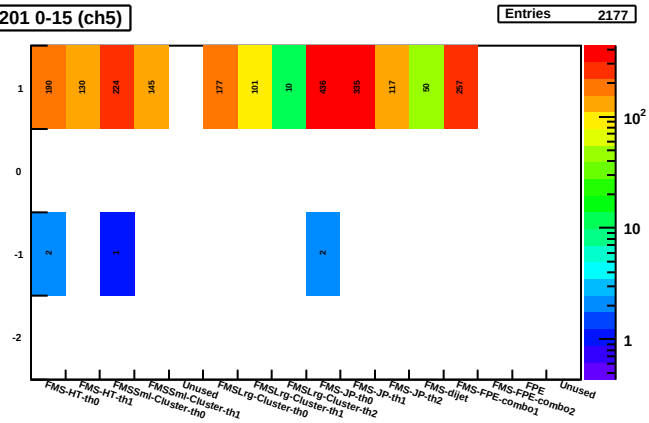




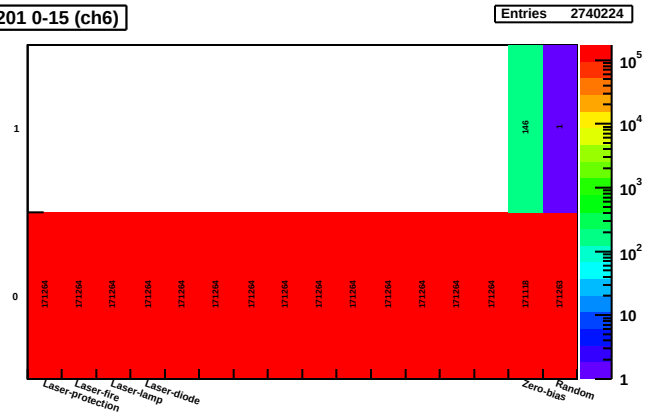
FP201 0-15 (ch5)

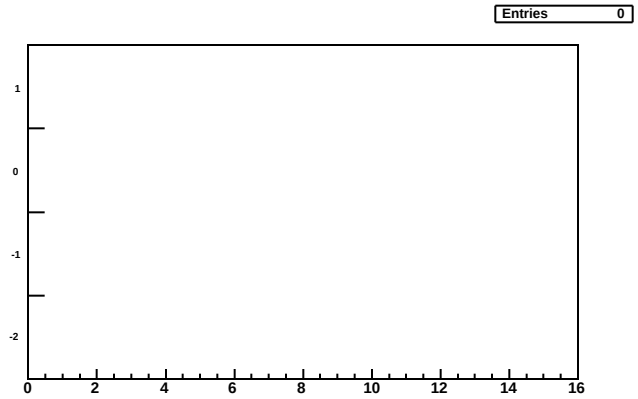
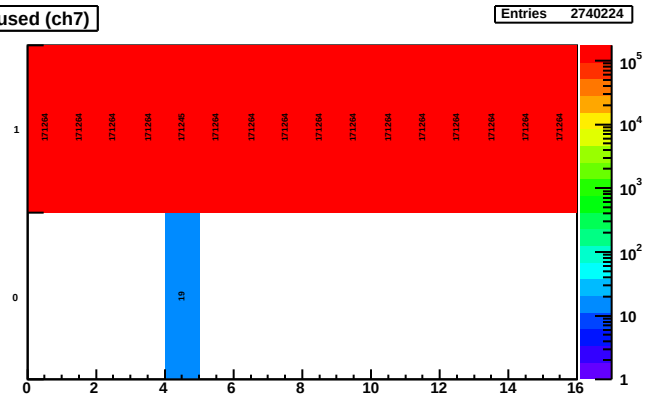
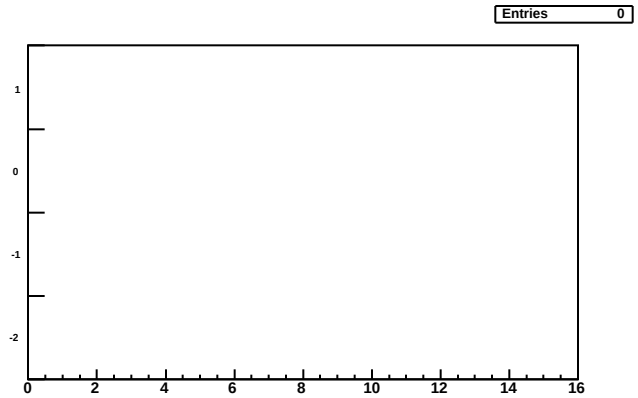


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)