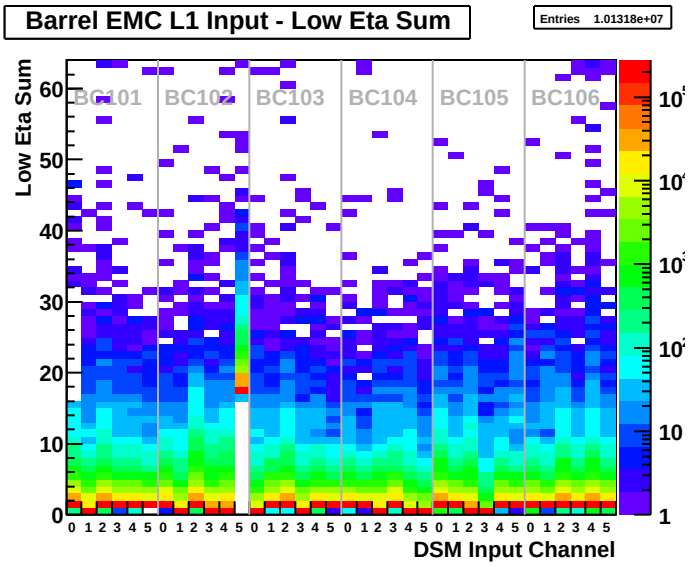
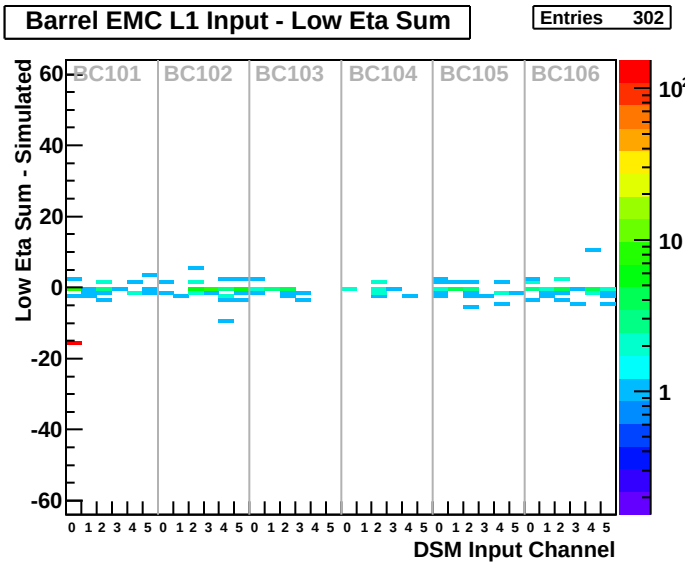
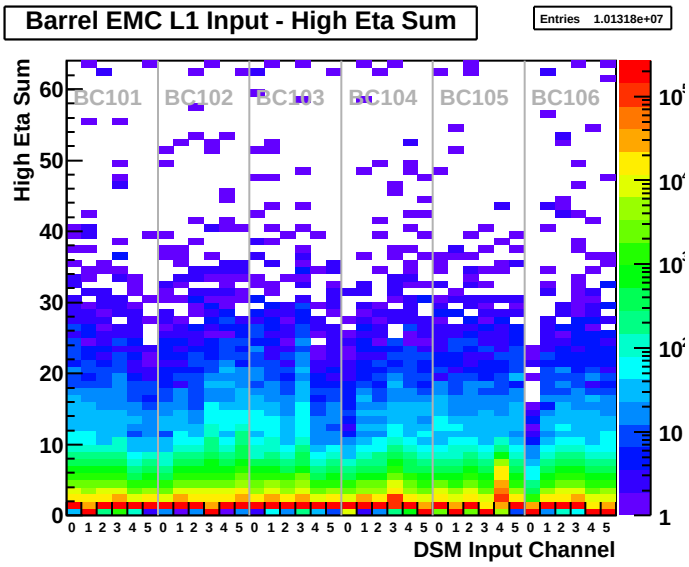
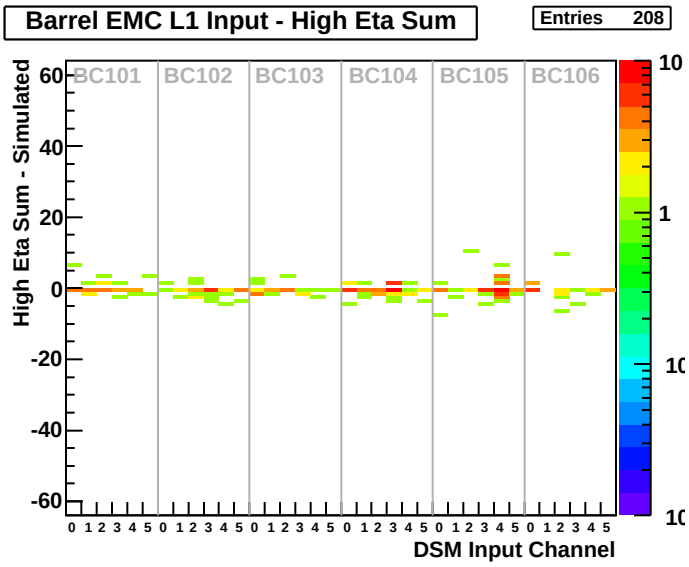
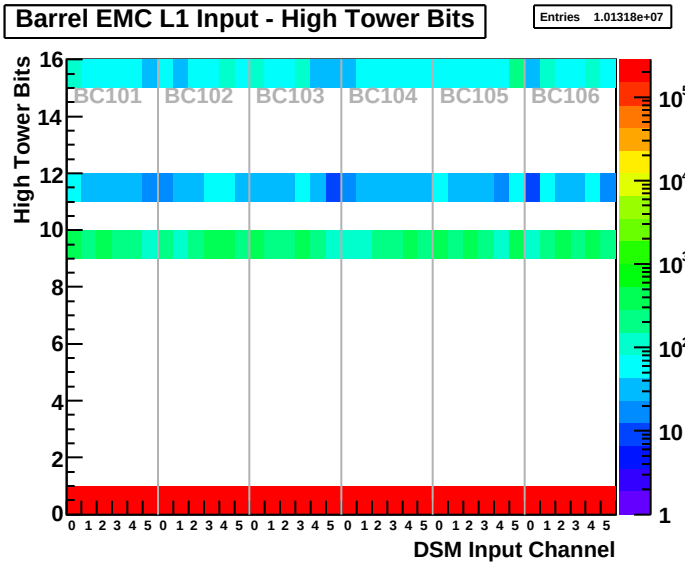
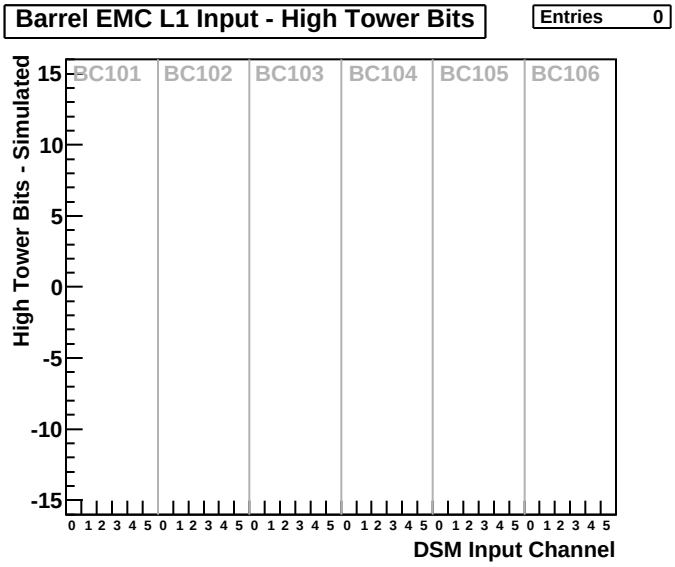

Barrel EMC L1 Input - Low Eta Sum
Entries 1.01318e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

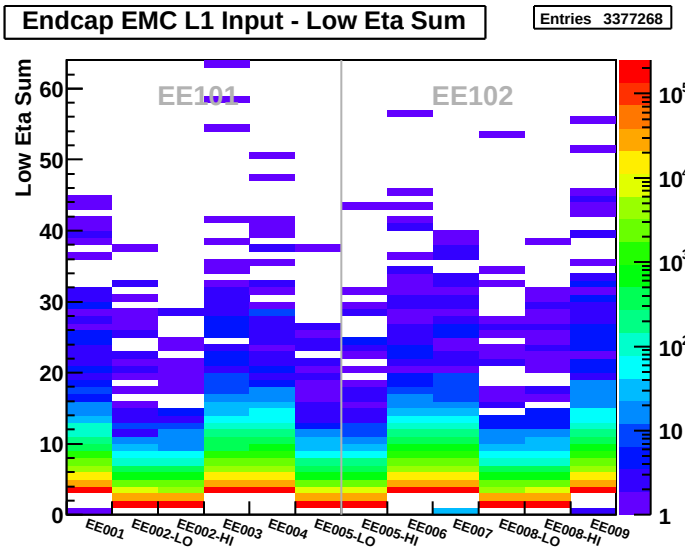

Barrel EMC L1 Input - Low Eta Sum
Entries 302
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

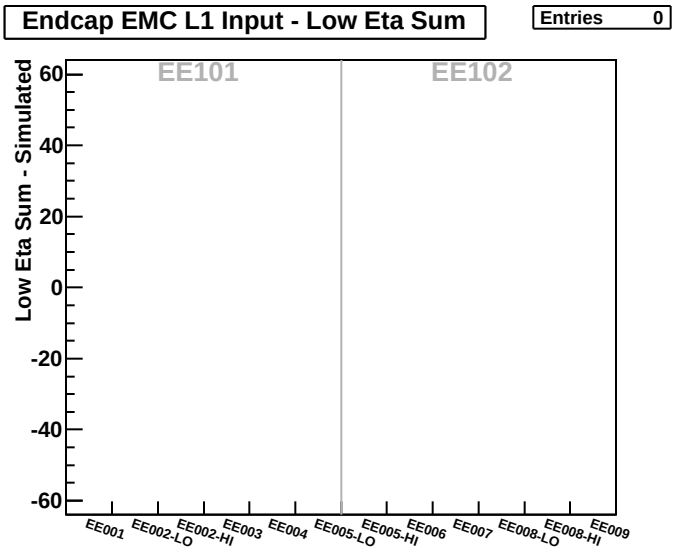

Barrel EMC L1 Input - High Eta Sum
Entries 1.01318e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

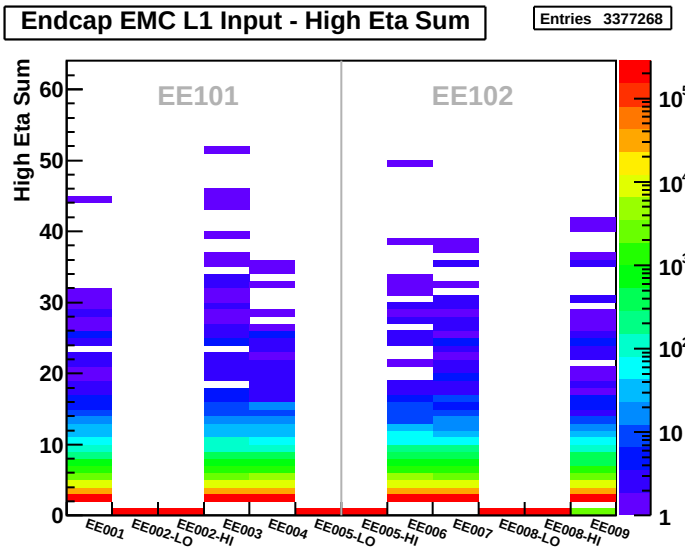

Barrel EMC L1 Input - High Eta Sum
Entries 208
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

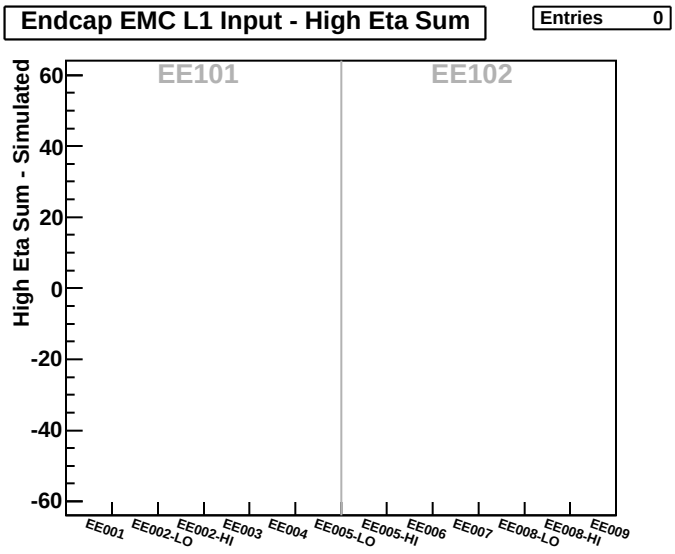

Barrel EMC L1 Input - High Tower Bits
Entries 1.01318e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

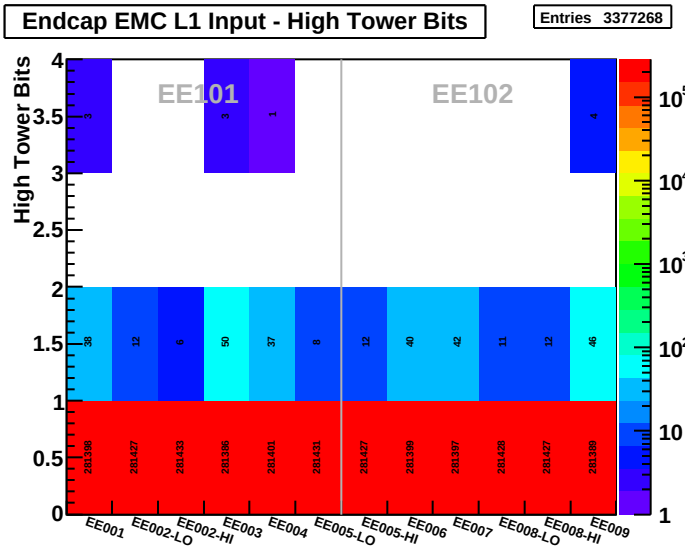

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

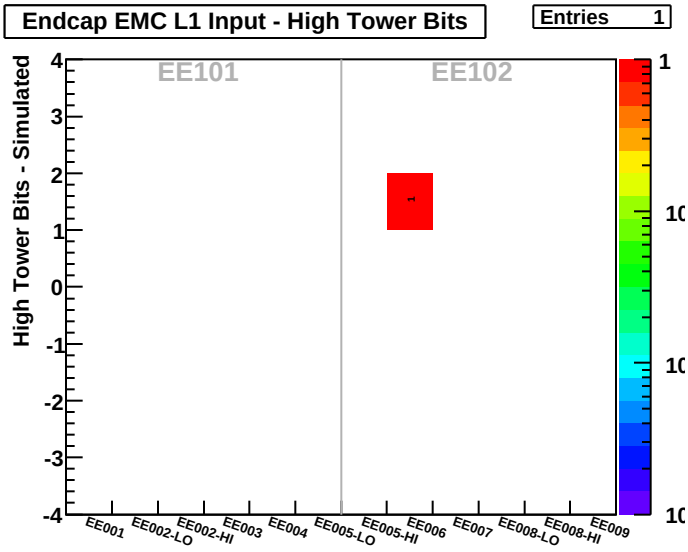

Endcap EMC L1 Input - Low Eta Sum
Entries 3377268
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

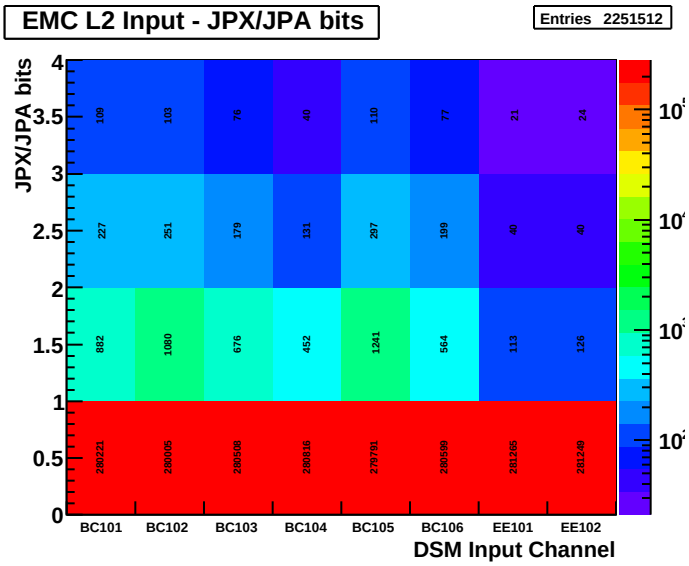

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

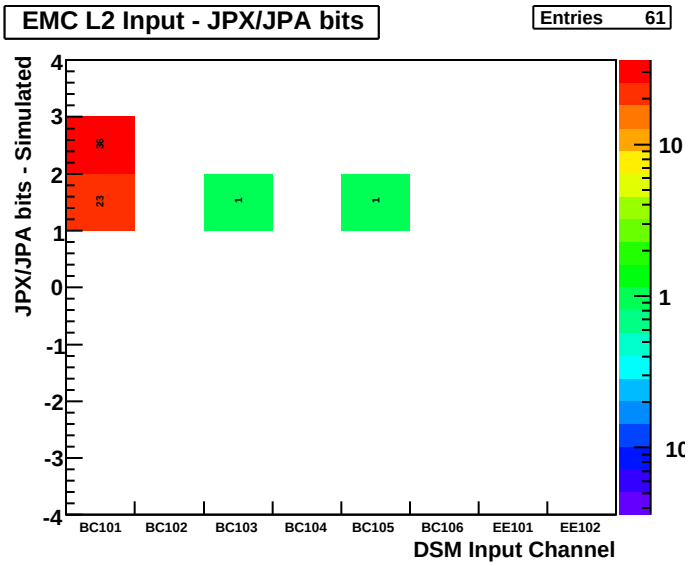

Endcap EMC L1 Input - High Eta Sum
Entries 3377268
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

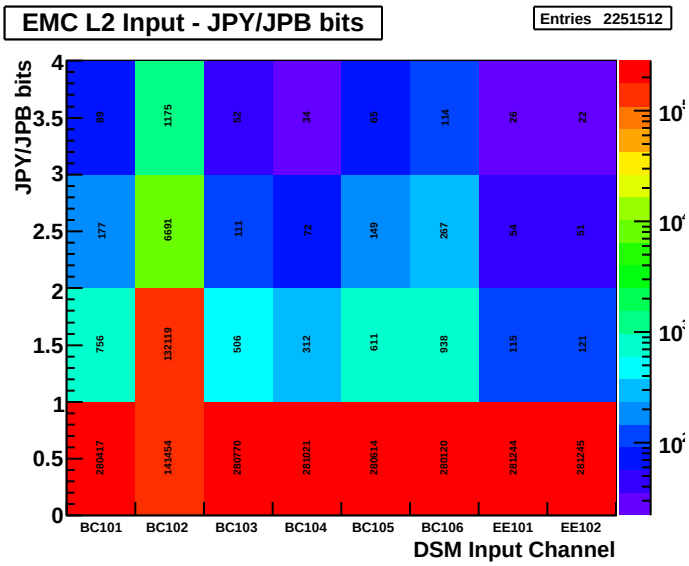

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

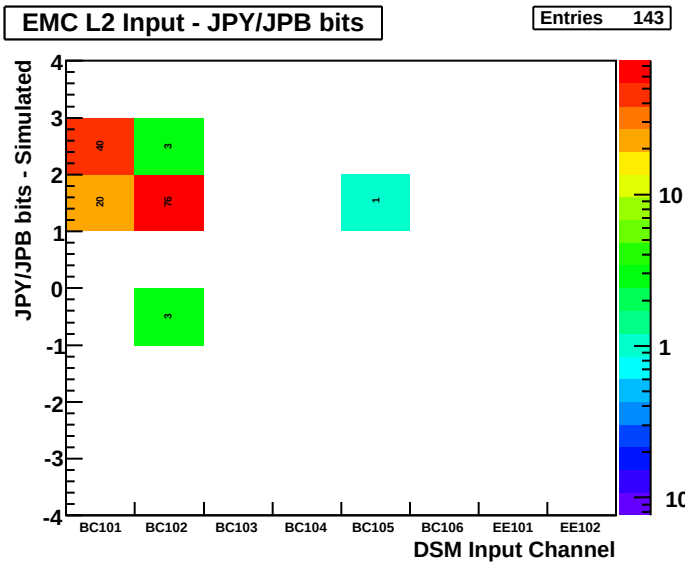

Endcap EMC L1 Input - High Tower Bits
Entries 3377268
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

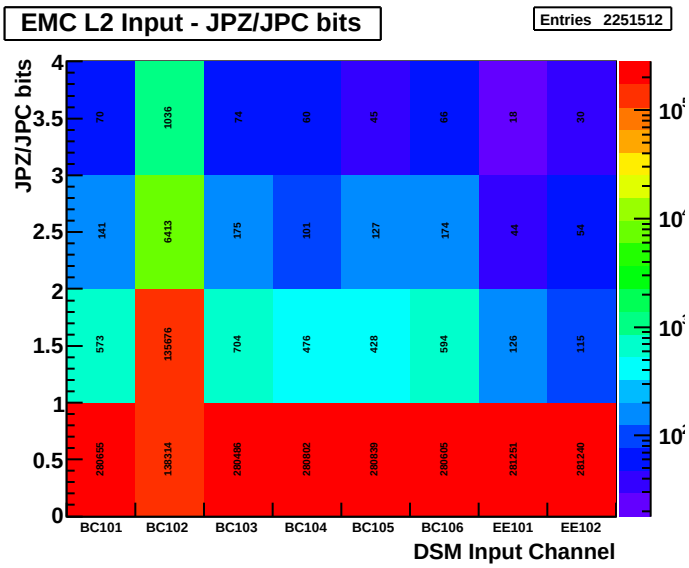

Endcap EMC L1 Input - High Tower Bits
Entries 1
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

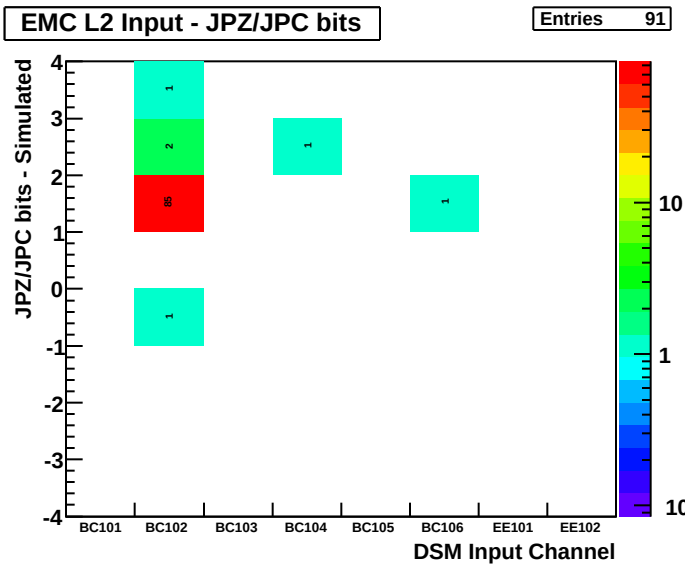

EMC L2 Input - JPX/JPA bits
Entries 2251512
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
109 103 76 40 110 77 21 24
227 251 179 131 297 199 40 40
882 1080 676 452 1241 564 113 126
280221 280005 280508 280816 279791 280599 281265 281240

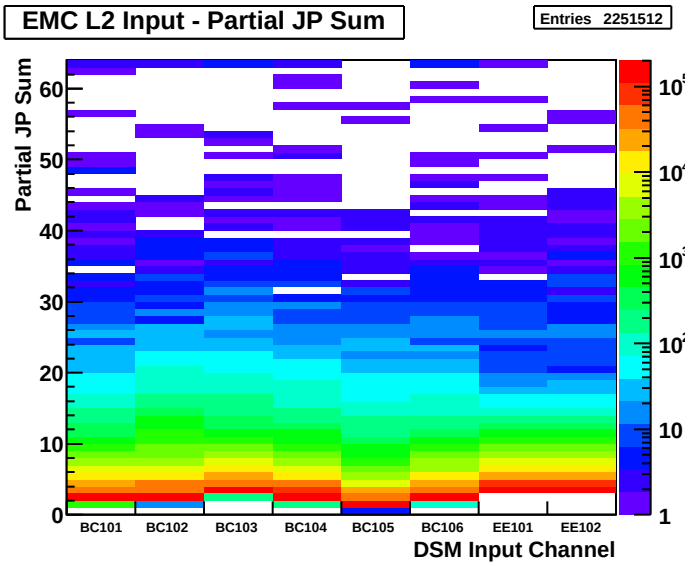

EMC L2 Input - JPX/JPA bits
Entries 61
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
36
23
1
1

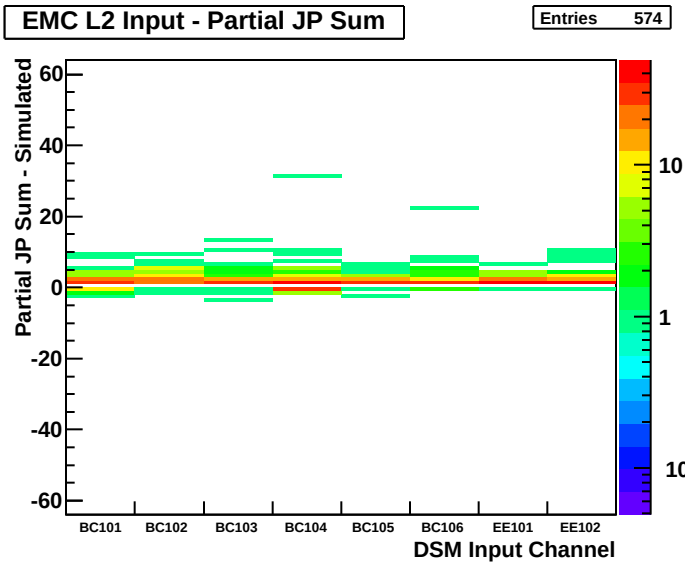

EMC L2 Input - JPY/JPB bits
Entries 2251512
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
89 1175 52 34 65 114 26 22
177 6691 111 72 149 267 54 51
756 132119 506 312 611 938 115 121
280417 141454 280770 281021 280614 280120 281244 281245

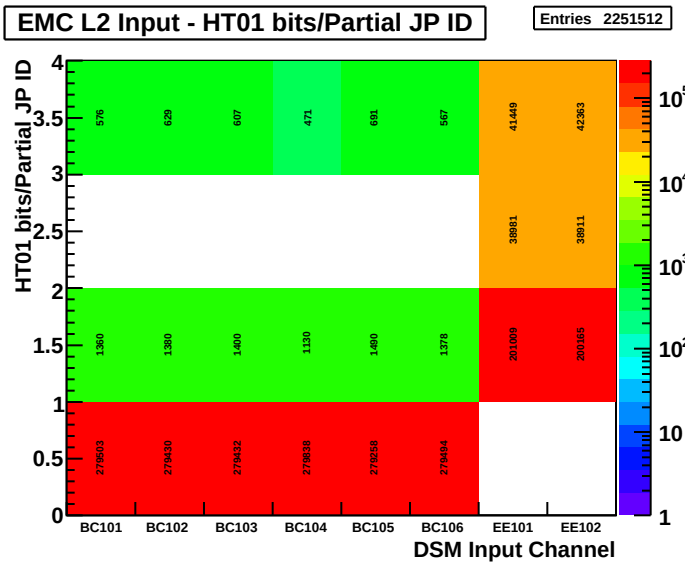

EMC L2 Input - JPY/JPB bits
Entries 143
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
40
3
20
76
1
3

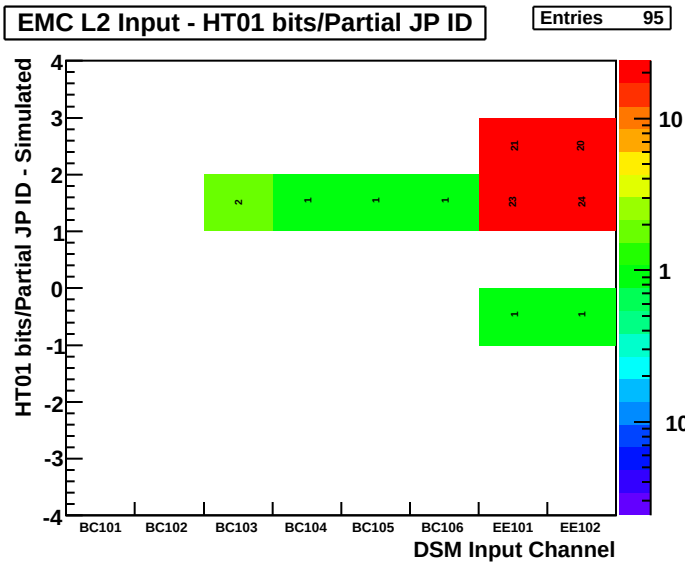

EMC L2 Input - JPZ/JPC bits
Entries 2251512
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
70 1036 74 60 45 66 18 30
141 6413 175 101 127 174 44 54
573 135676 704 476 428 594 126 115
280555 138314 280486 280802 280839 280605 281251 281240

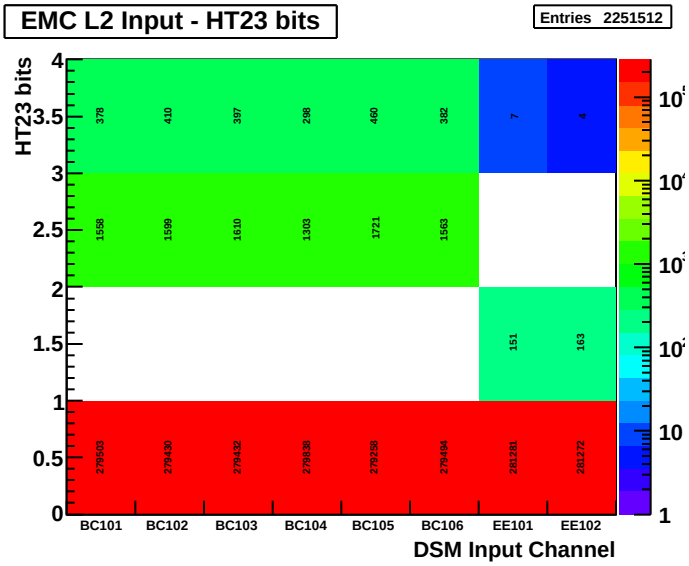

EMC L2 Input - JPZ/JPC bits
Entries 91
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
2
85
1
1
1

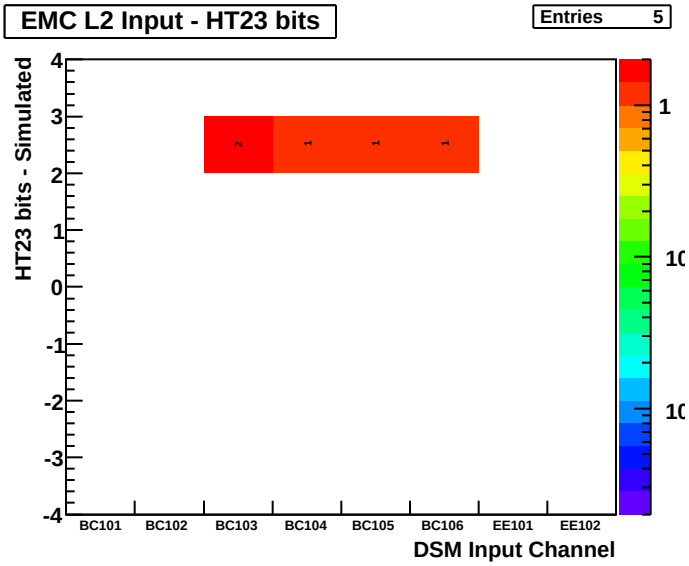

EMC L2 Input - Partial JP Sum
Entries 2251512
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

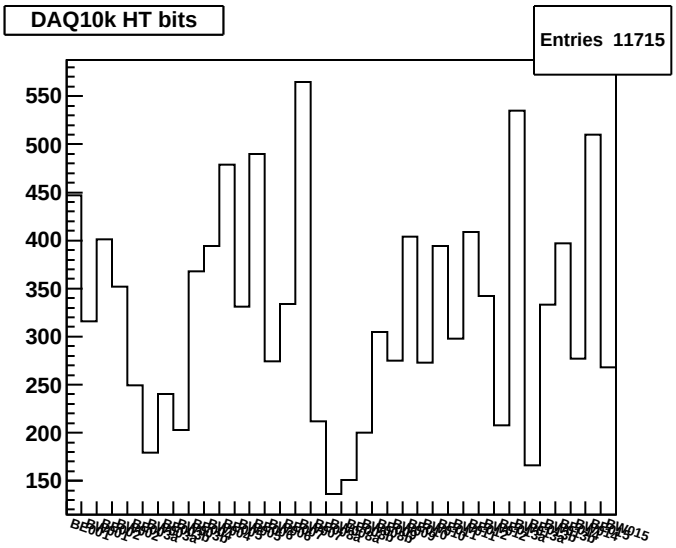

EMC L2 Input - Partial JP Sum
Entries 574
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

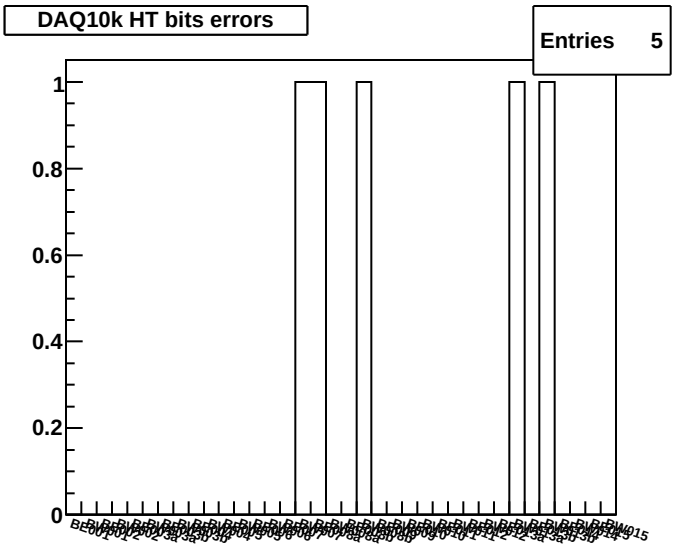

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2251512
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

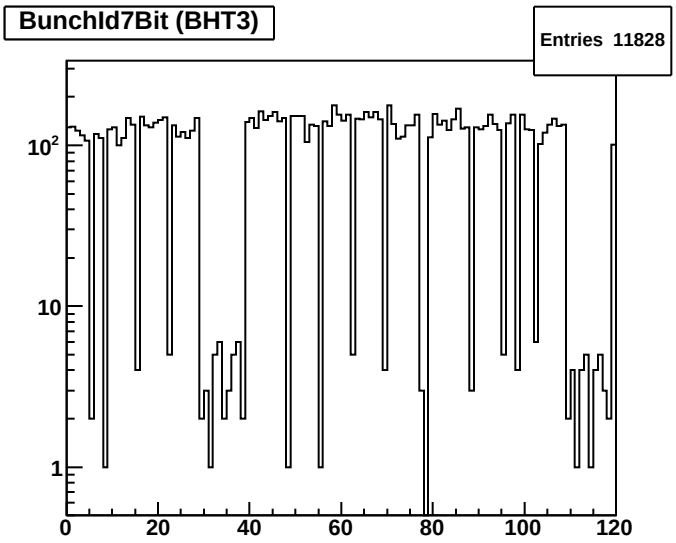

EMC L2 Input - HT01 bits/Partial JP ID
Entries 95
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

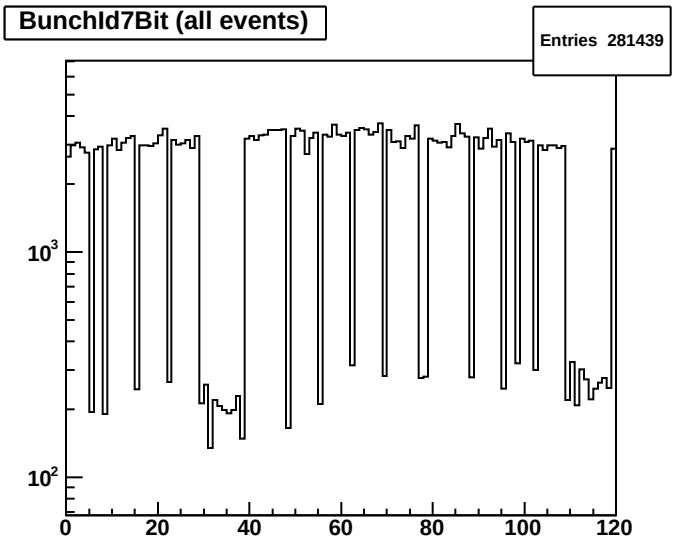

EMC L2 Input - HT23 bits
Entries 2251512
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

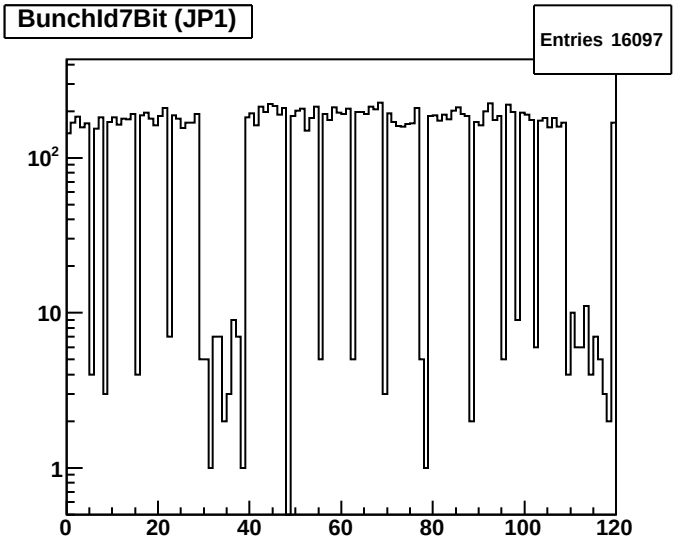

EMC L2 Input - HT23 bits
Entries 5
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

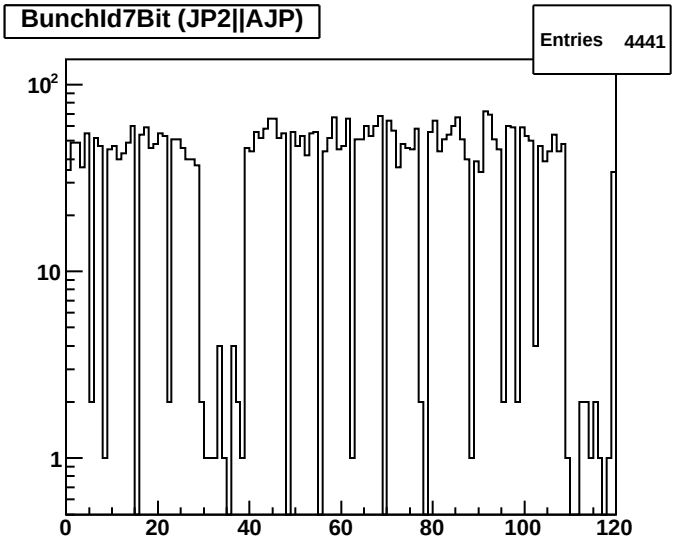

DAQ10k HT bits
Entries 11715

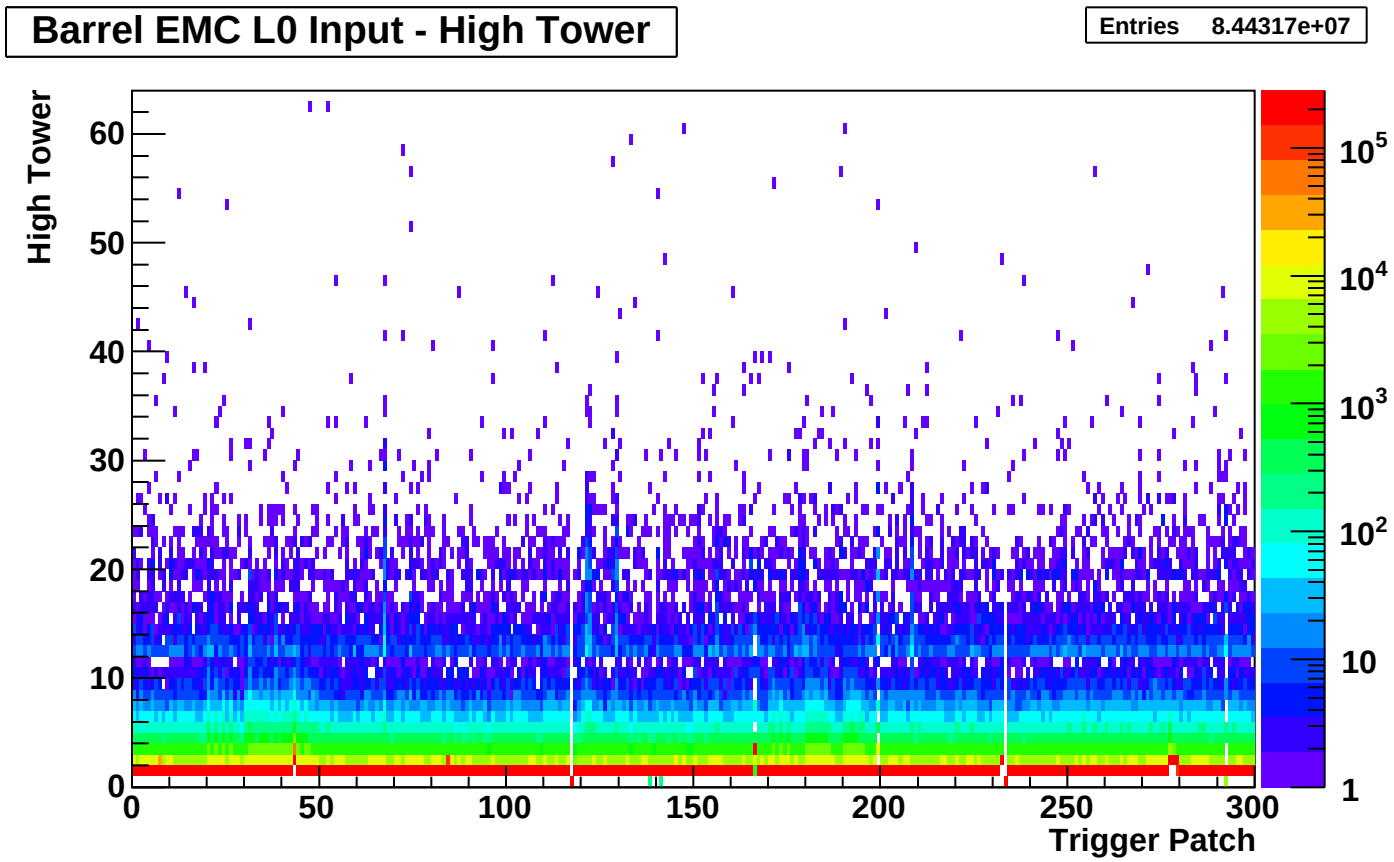

DAQ10k HT bits errors
Entries 5

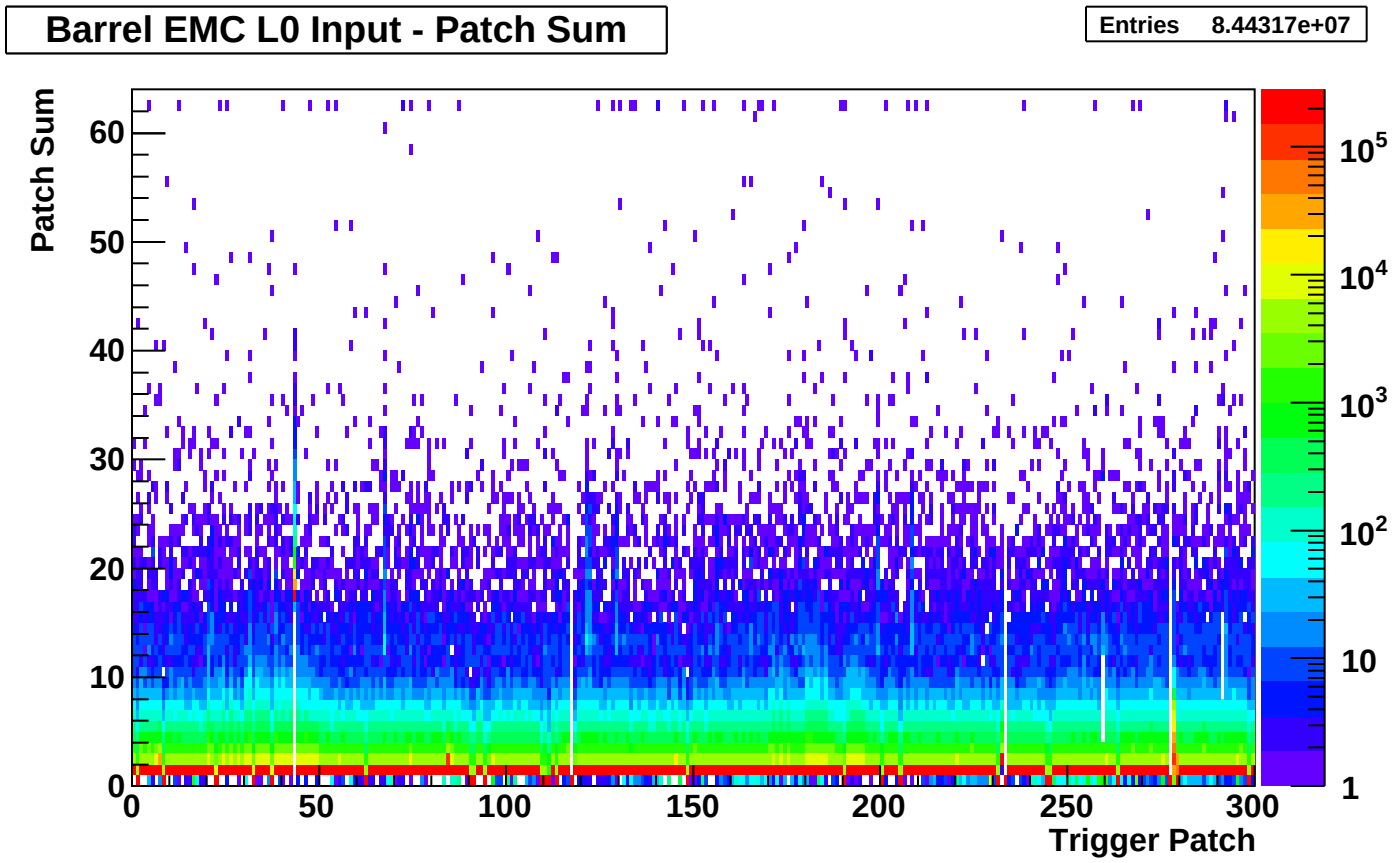

BunchId7Bit (BHT3)
Entries 11828

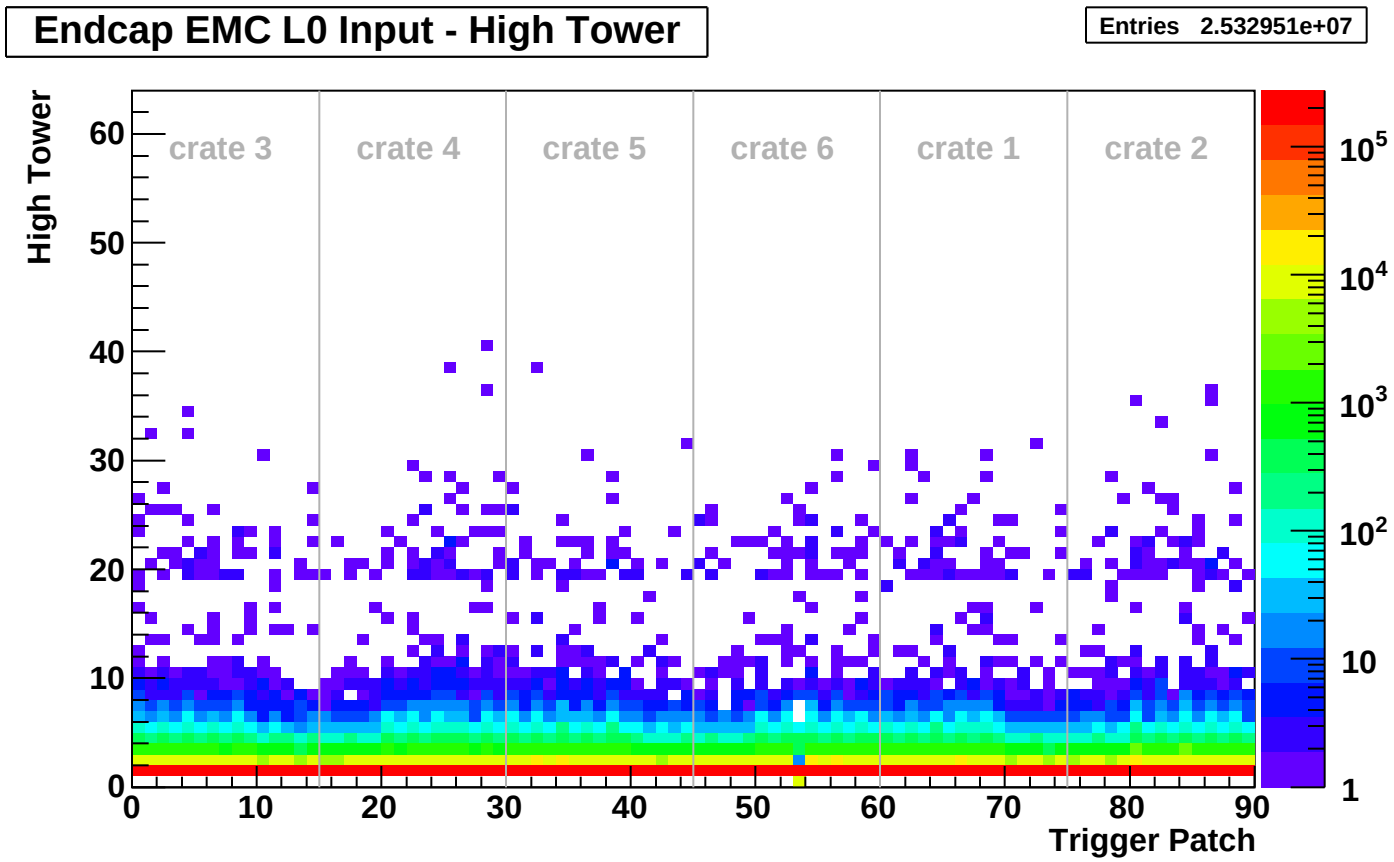

BunchId7Bit (all events)
Entries 281439

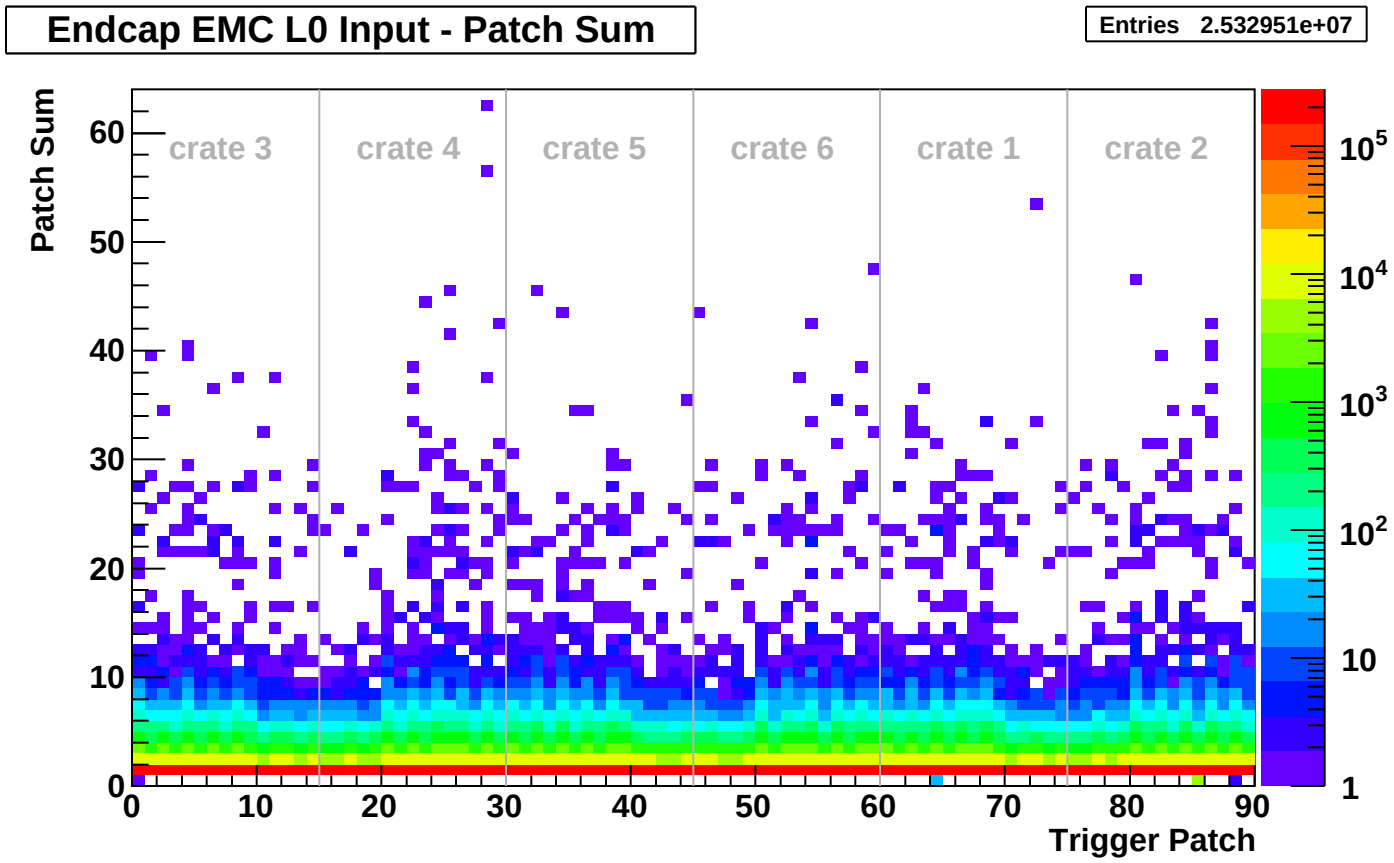

BunchId7Bit (JP1)
Entries 16097

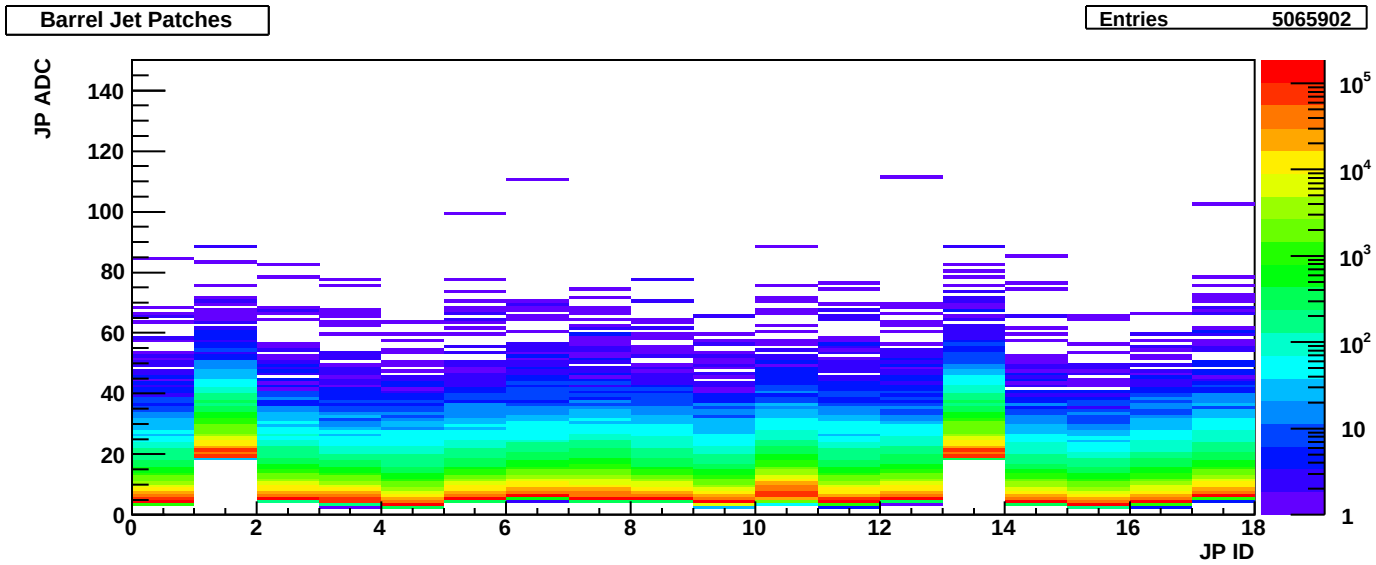

BunchId7Bit (JP2||AJP)
Entries 4441

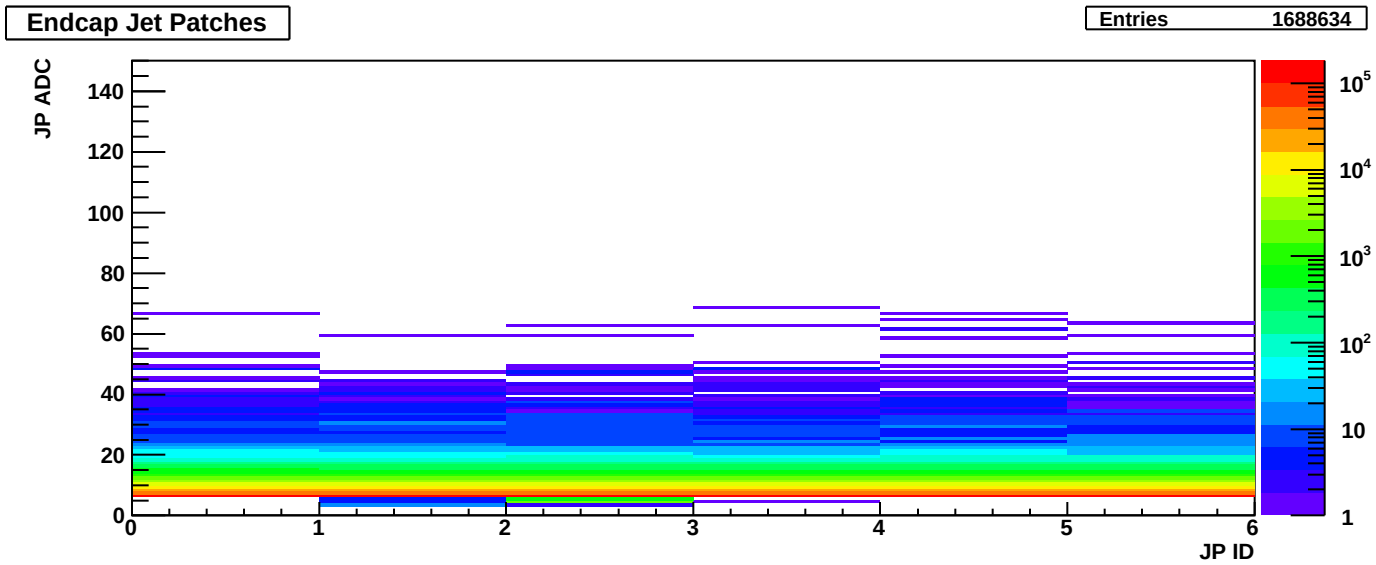

Barrel EMC L0 Input - High Tower
Entries 8.44317e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

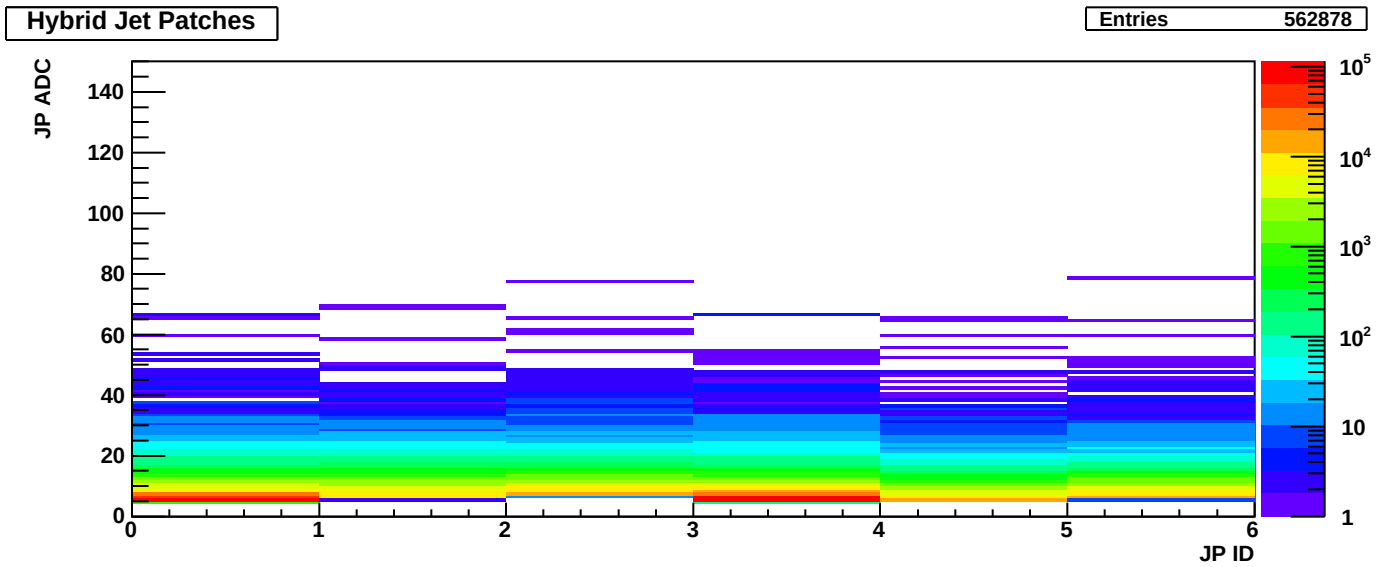

Barrel EMC L0 Input - Patch Sum
Entries 8.44317e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

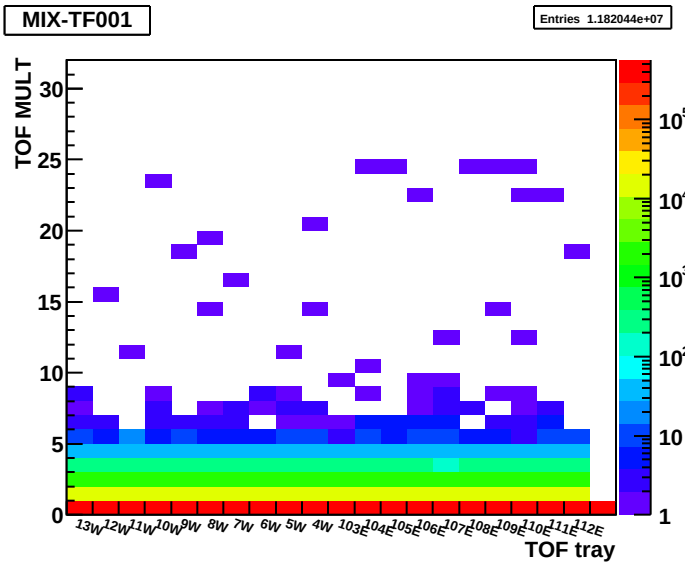

Endcap EMC L0 Input - High Tower
Entries 2.532951e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

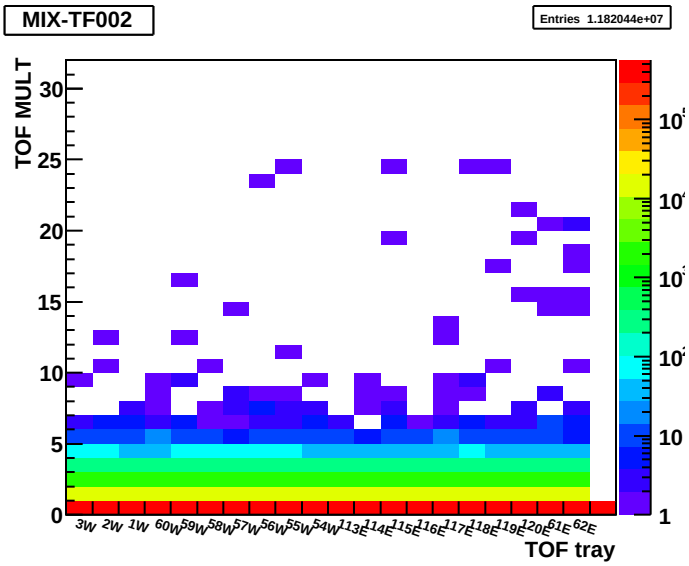

Endcap EMC L0 Input - Patch Sum
Entries 2.532951e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

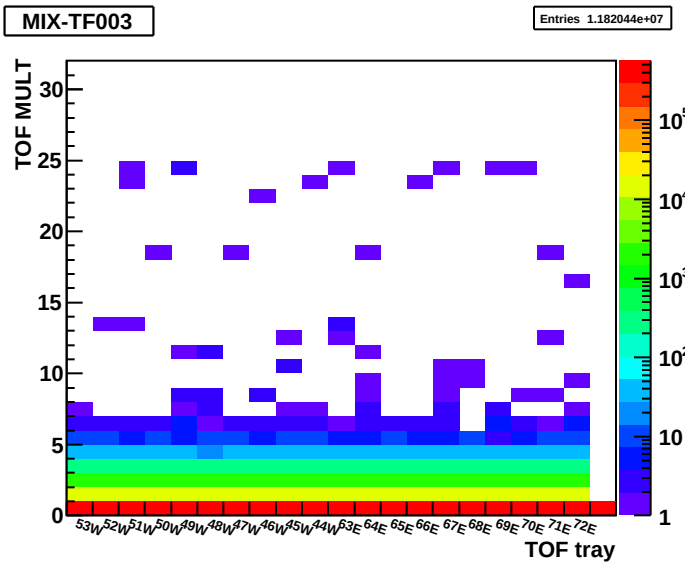

Barrel Jet Patches
Entries 5065902
JP ADC
JP ID

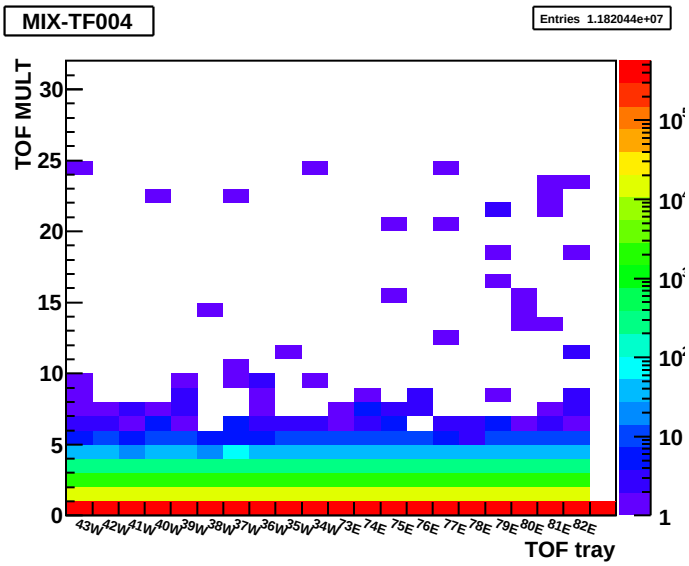

Endcap Jet Patches
Entries 1688634
JP ADC
JP ID

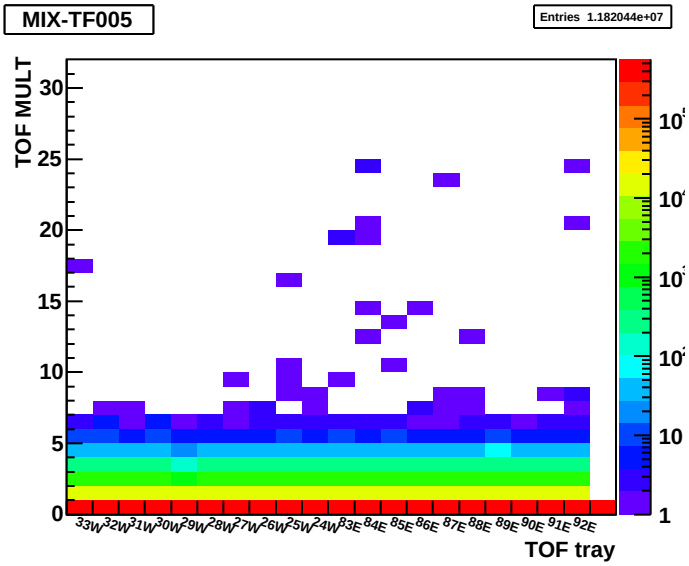

Hybrid Jet Patches
Entries 562878
JP ADC
JP ID

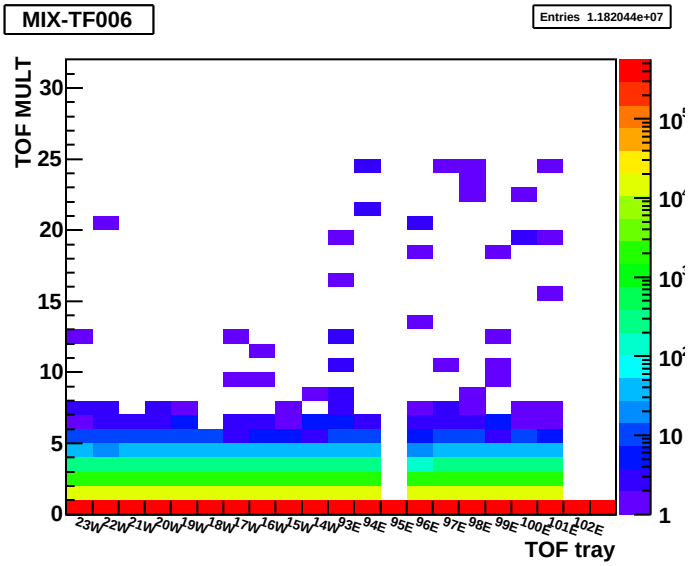

MIX-TF001
Entries 1.182044e+07
TOF MULT
TOF tray

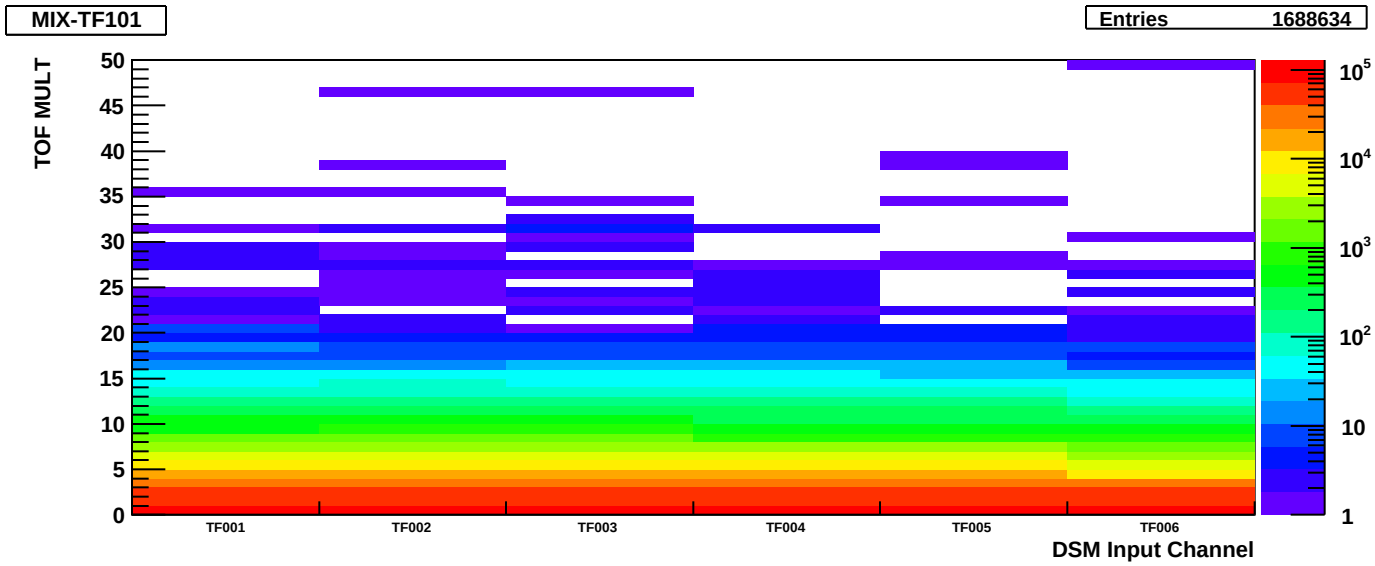

MIX-TF002
Entries 1.182044e+07
TOF MULT
TOF tray

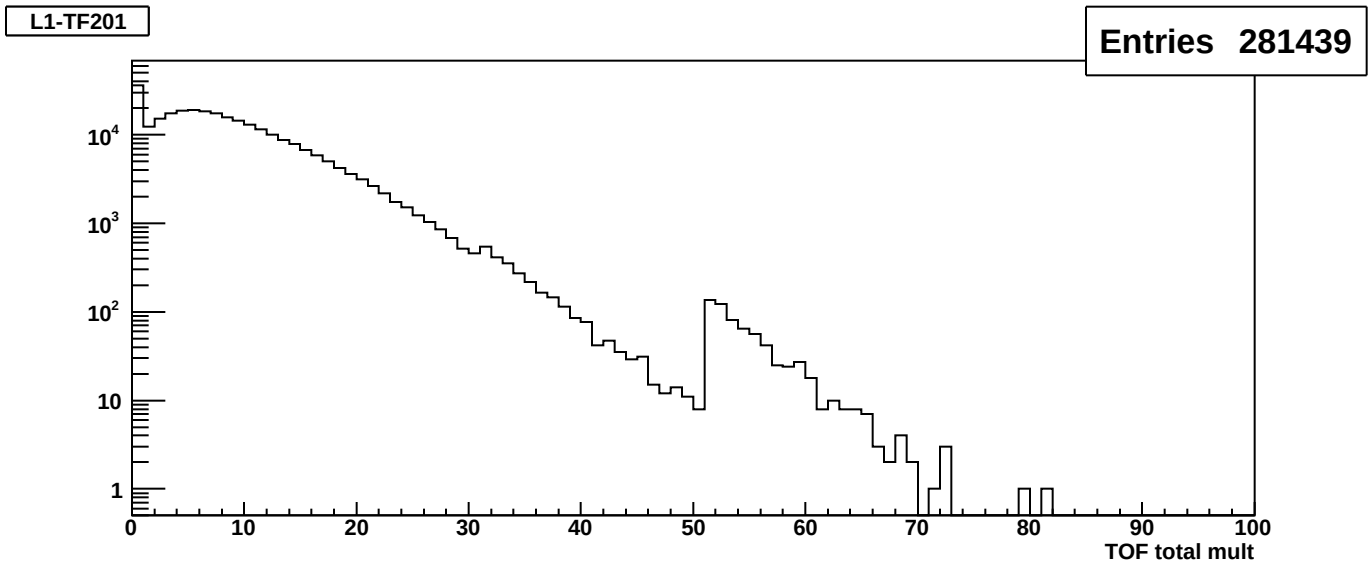

MIX-TF003
Entries 1.182044e+07
TOF MULT
TOF tray

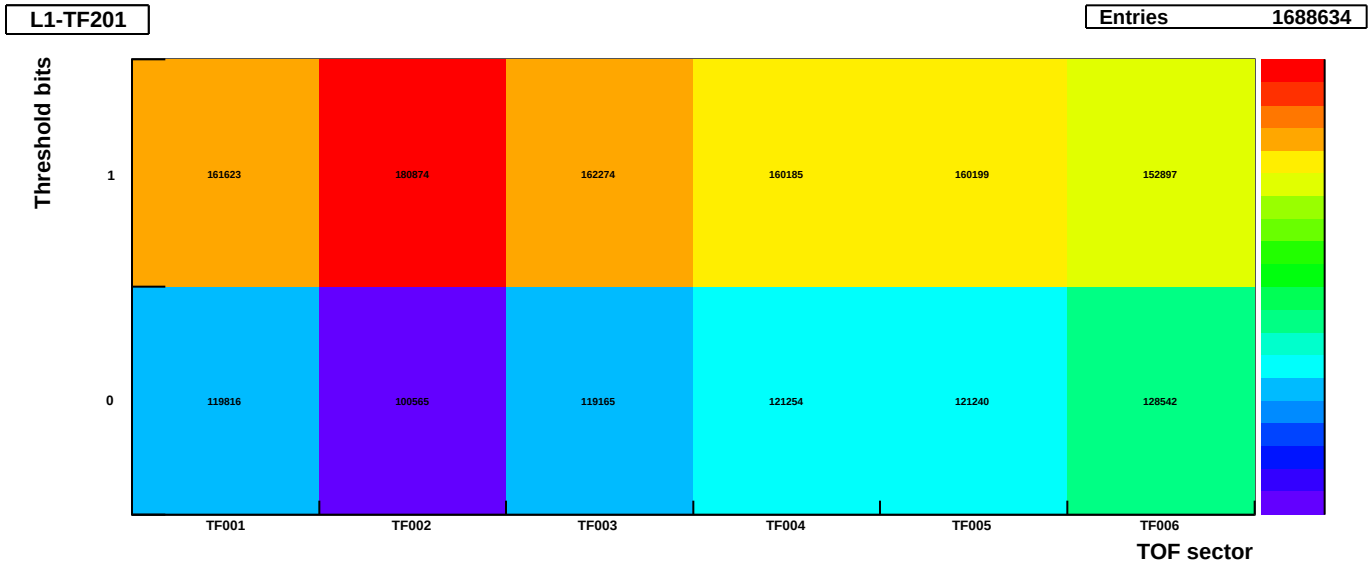

MIX-TF004
Entries 1.182044e+07
TOF MULT
TOF tray

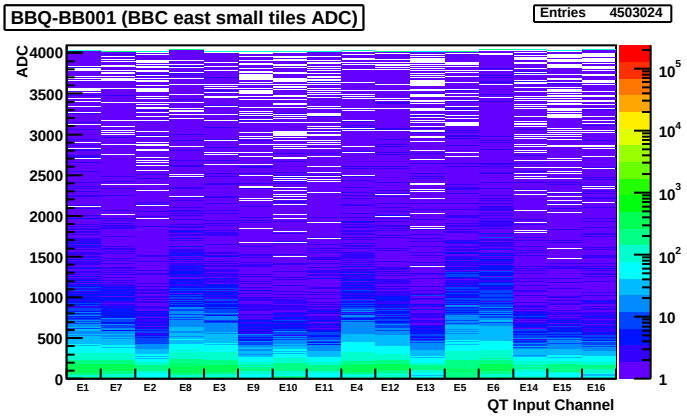

MIX-TF005
Entries 1.182044e+07
TOF MULT
TOF tray

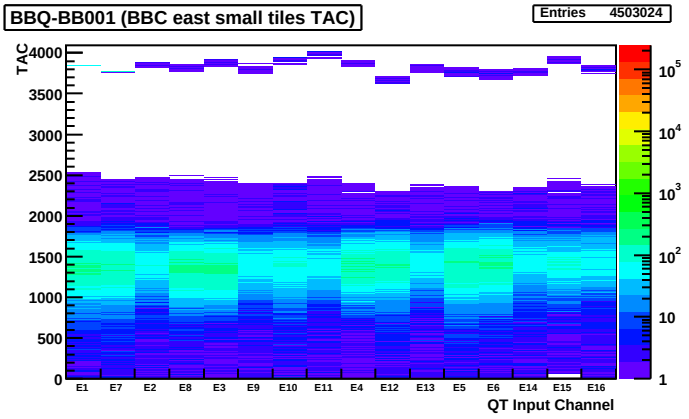

MIX-TF006
Entries 1.182044e+07
TOF MULT
TOF tray

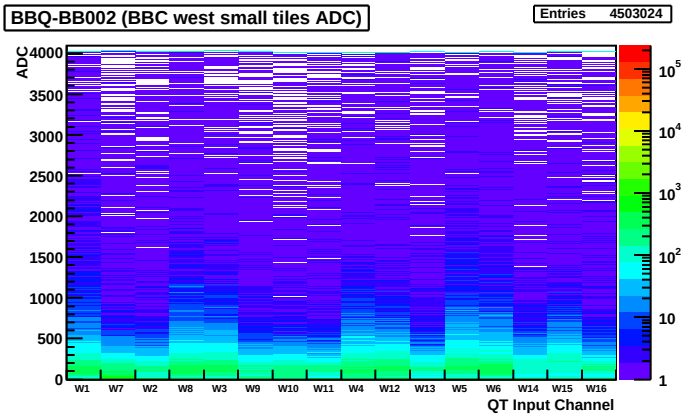

MIX-TF101
Entries 1688634
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

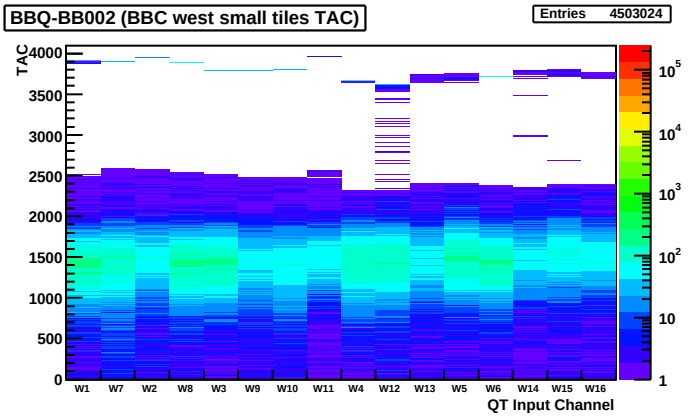

L1-TF201
Entries 281439
TOF total mult

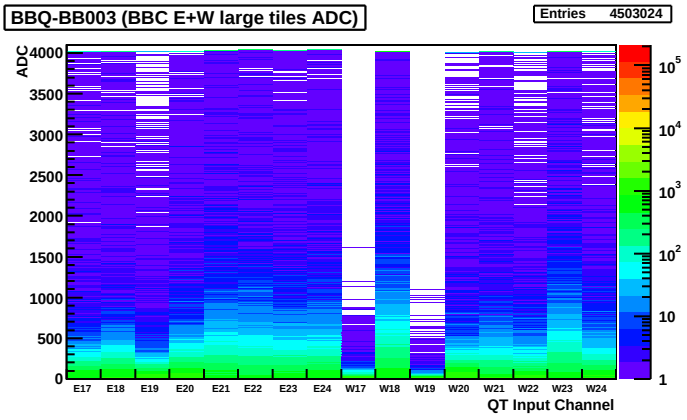

L1-TF201
Entries 1688634
Threshold bits
161623
180874
162274
160185
160199
152897
119816
100565
119165
121254
121240
128542
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

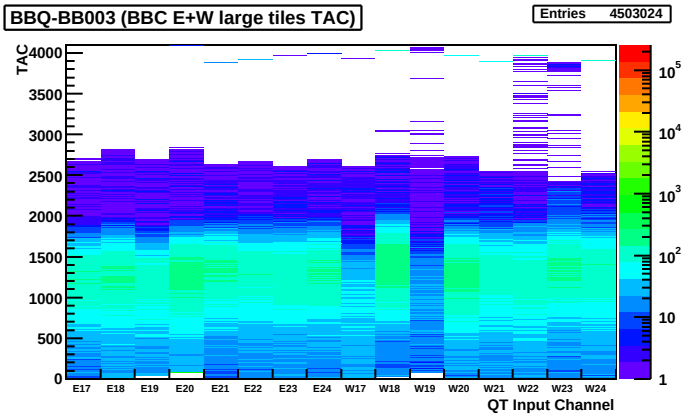

BBQ-BB001 (BBC east small tiles ADC)
Entries 4503024
ADC
QT Input Channel

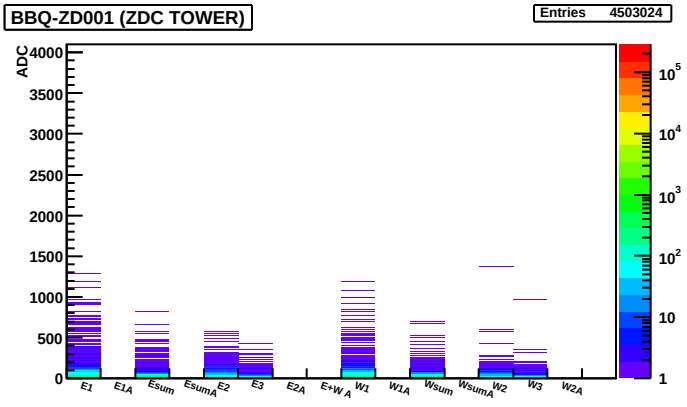

BBQ-BB001 (BBC east small tiles TAC)
Entries 4503024
TAC
QT Input Channel

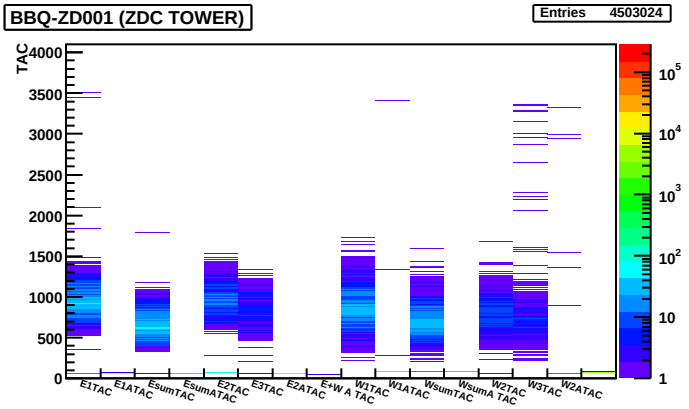

BBQ-BB002 (BBC west small tiles ADC)
Entries 4503024
ADC
QT Input Channel

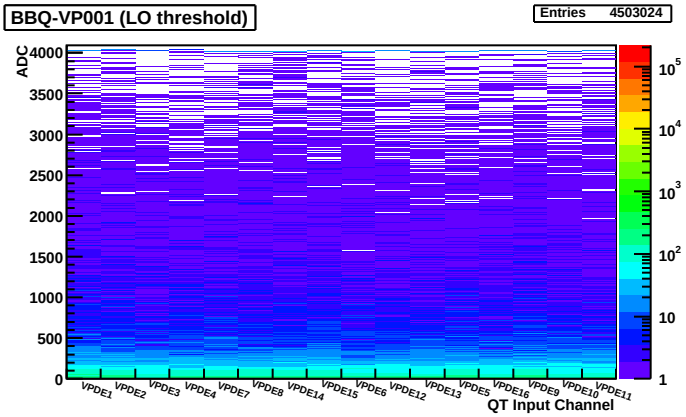

BBQ-BB002 (BBC west small tiles TAC)
Entries 4503024
TAC
QT Input Channel

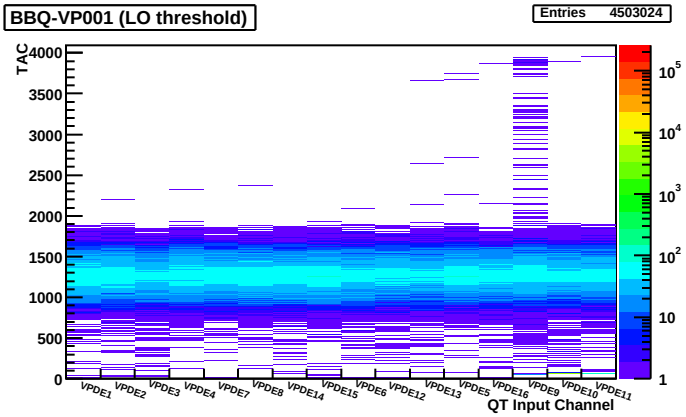

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4503024
ADC
QT Input Channel

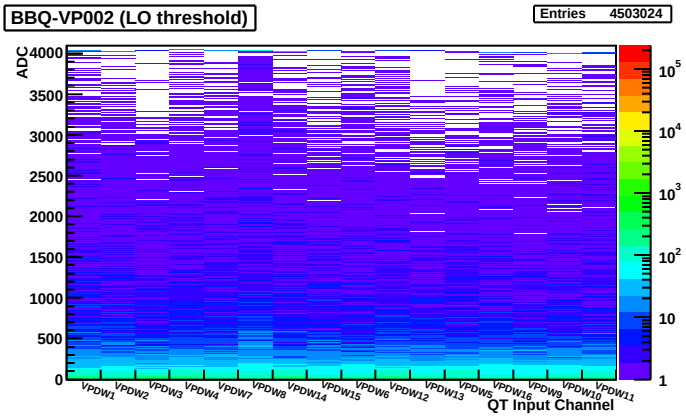

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4503024
TAC
QT Input Channel

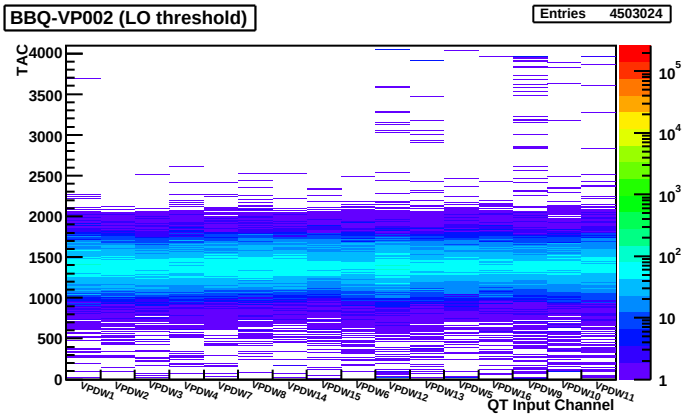

BBQ-ZD001 (ZDC TOWER)
Entries 4503024
ADC

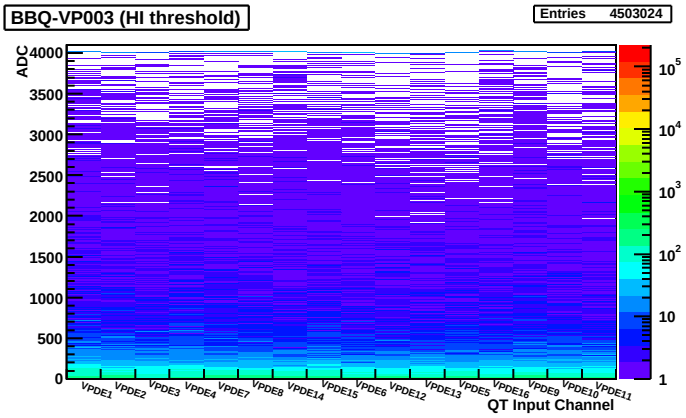

BBQ-ZD001 (ZDC TOWER)
Entries 4503024
TAC

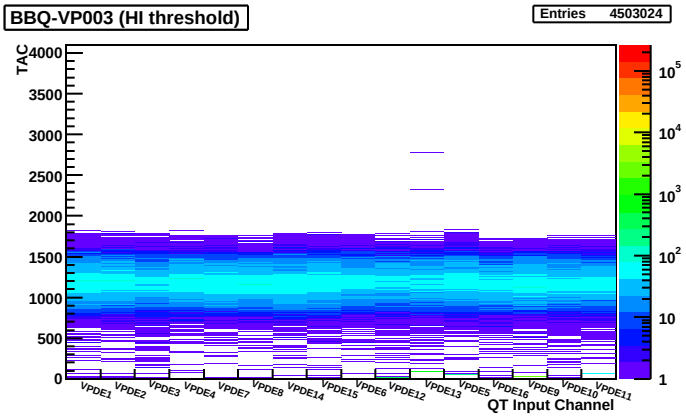

BBQ-VP001 (LO threshold)
Entries 4503024
ADC
QT Input Channel

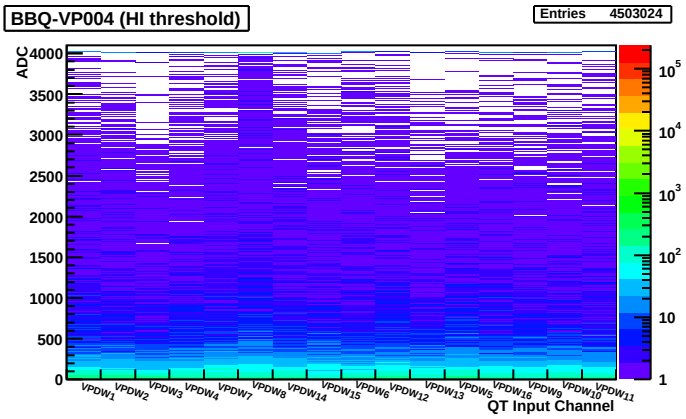

BBQ-VP001 (LO threshold)
Entries 4503024
TAC
QT Input Channel

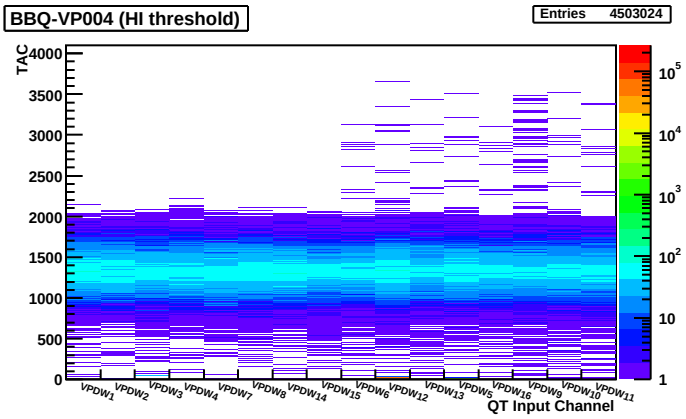

BBQ-VP002 (LO threshold)
Entries 4503024
ADC
QT Input Channel

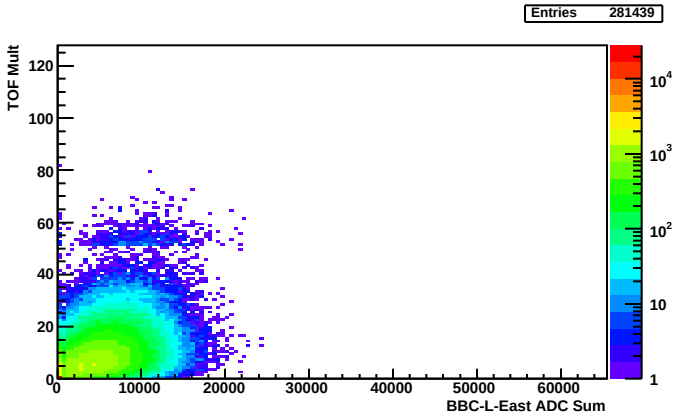

BBQ-VP002 (LO threshold)
Entries 4503024
TAC
QT Input Channel

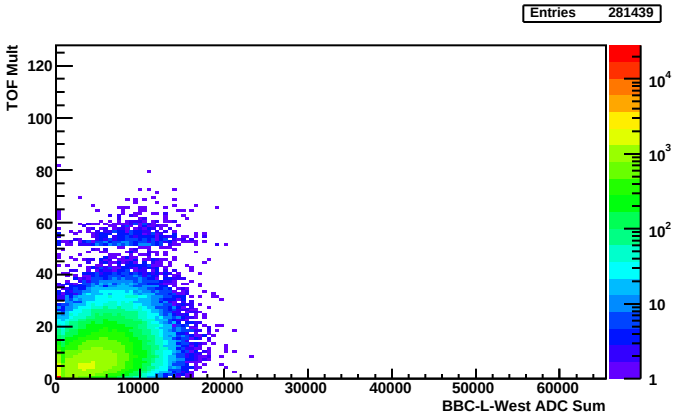

BBQ-VP003 (HI threshold)
Entries 4503024
ADC
QT Input Channel

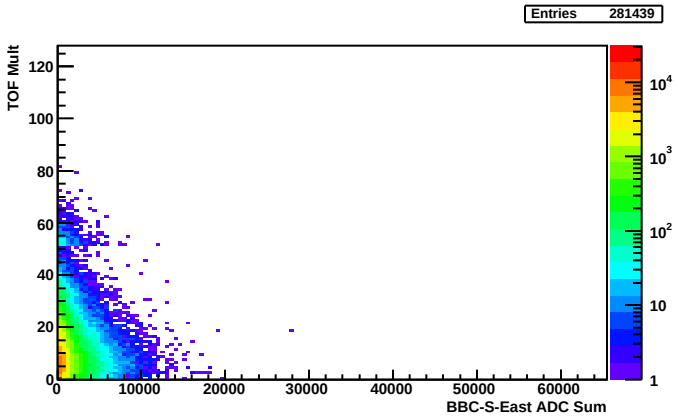

BBQ-VP003 (HI threshold)
Entries 4503024
TAC
QT Input Channel

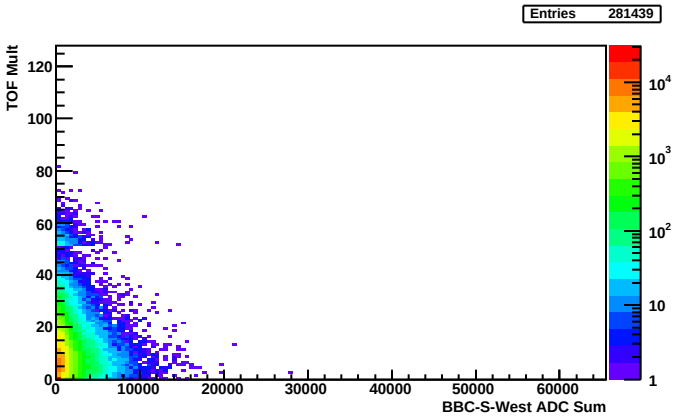

BBQ-VP004 (HI threshold)
Entries 4503024
ADC
QT Input Channel

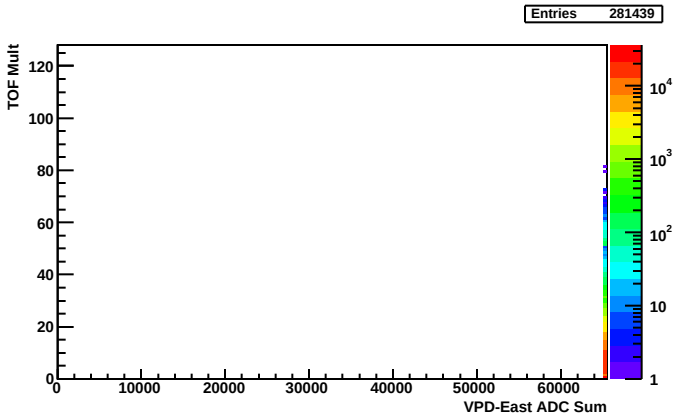

BBQ-VP004 (HI threshold)
Entries 4503024
TAC
QT Input Channel

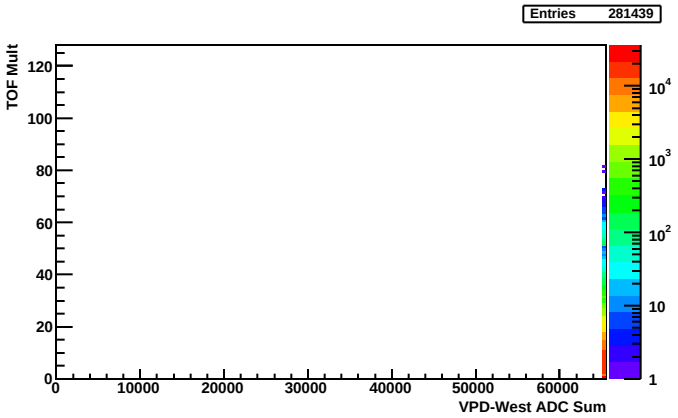

Entries 281439
TOF Mult
BBC-L-East ADC Sum

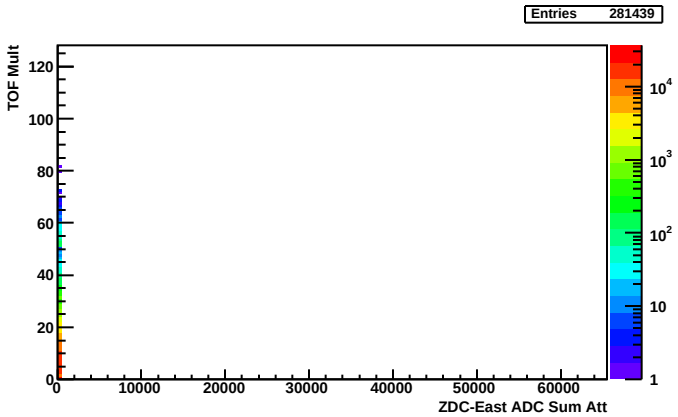

Entries 281439
TOF Mult
BBC-L-West ADC Sum

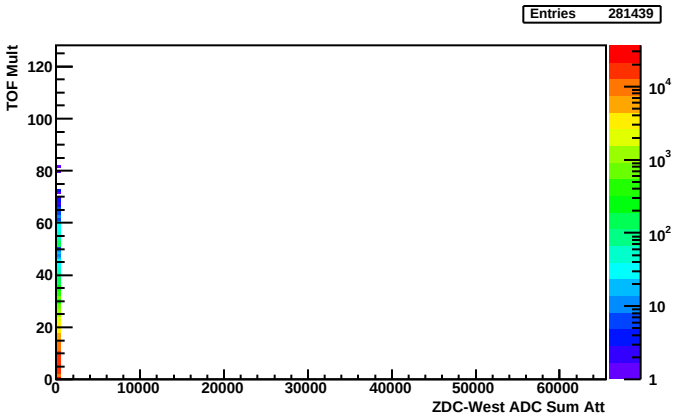

Entries 281439
TOF Mult
BBC-S-East ADC Sum

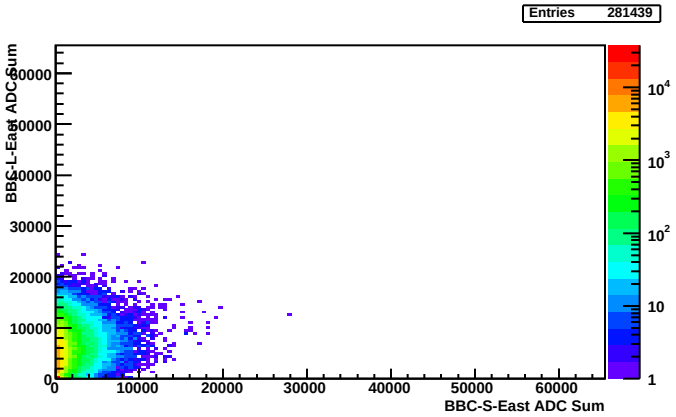

Entries 281439
TOF Mult
BBC-S-West ADC Sum

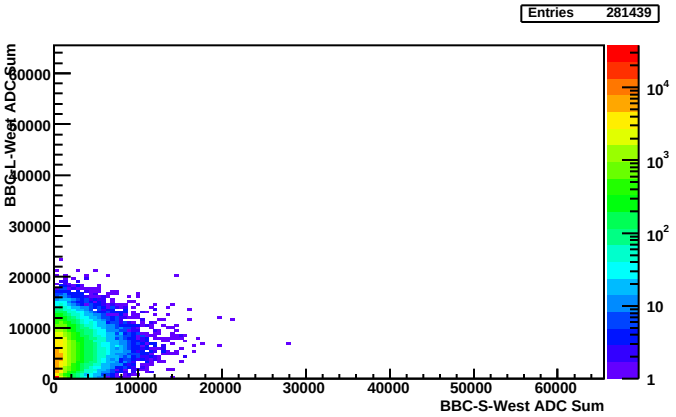

Entries 281439
TOF Mult
VPD-East ADC Sum

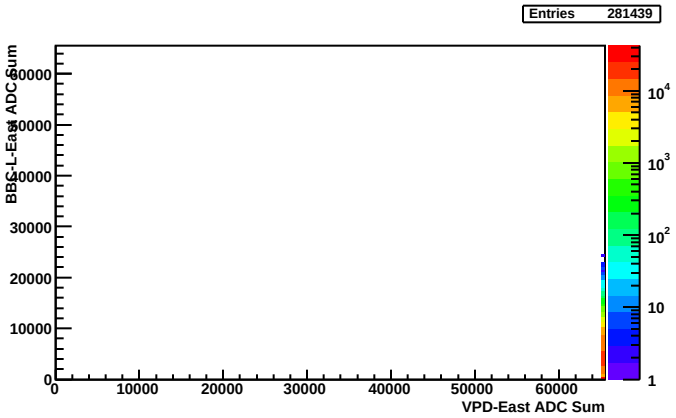

Entries 281439
TOF Mult
VPD-West ADC Sum

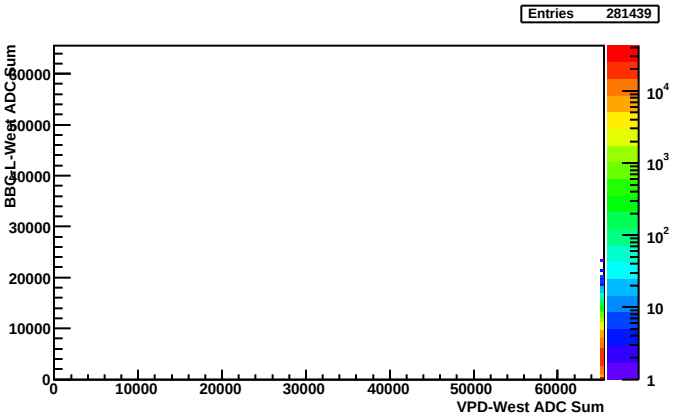

Entries 281439
TOF Mult
ZDC-East ADC Sum Att

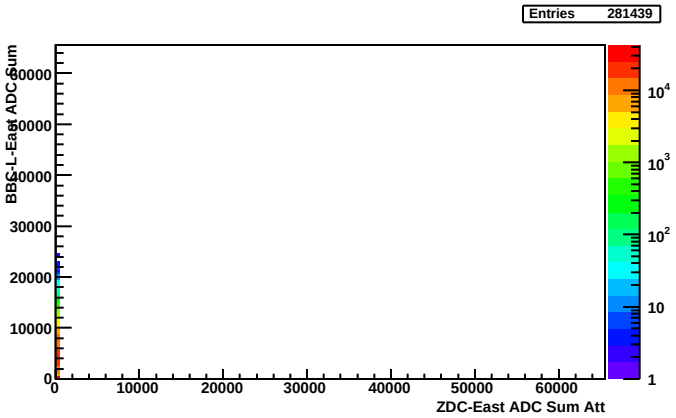

Entries 281439
TOF Mult
ZDC-West ADC Sum Att

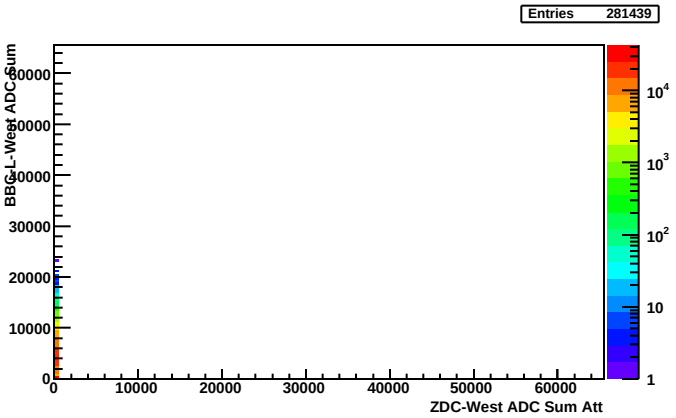

Entries 281439
BBC-L-East ADC Sum
BBC-S-East ADC Sum

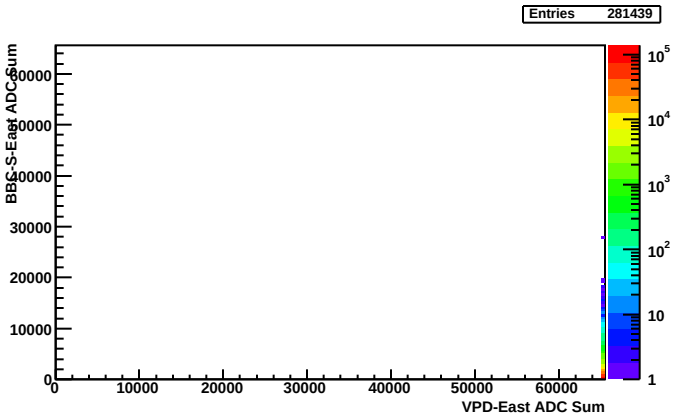

Entries 281439
BBC-L-West ADC Sum
BBC-S-West ADC Sum

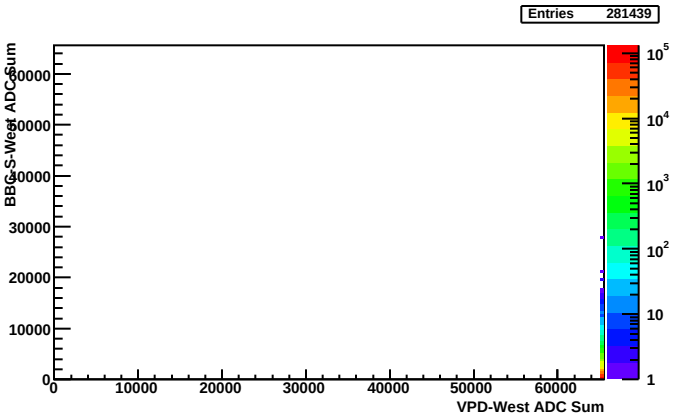

Entries 281439
BBC-L-East ADC Sum
VPD-East ADC Sum

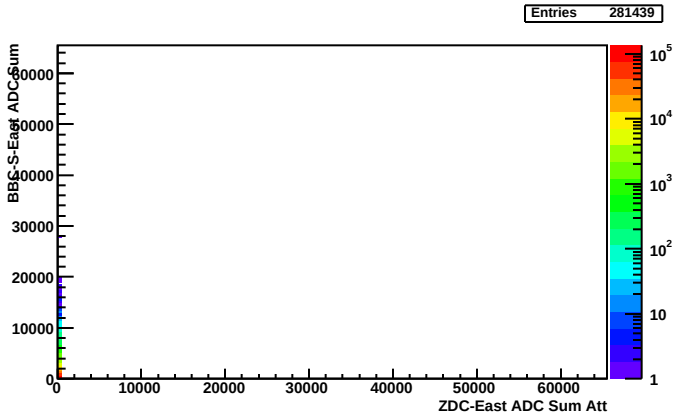

Entries 281439
BBC-L-West ADC Sum
VPD-West ADC Sum

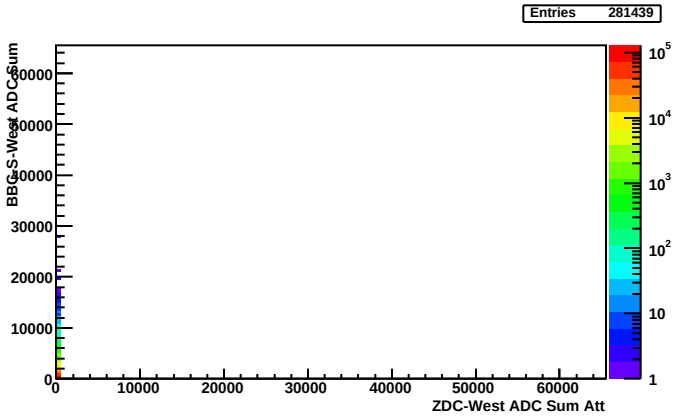

Entries 281439
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

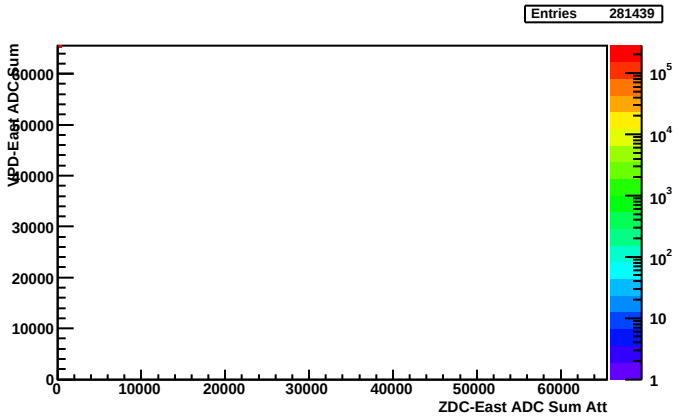

Entries 281439
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

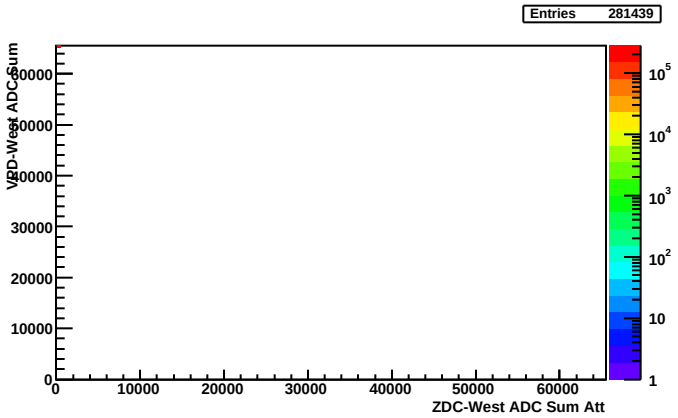

Entries 281439
BBC-S-East ADC Sum
VPD-East ADC Sum

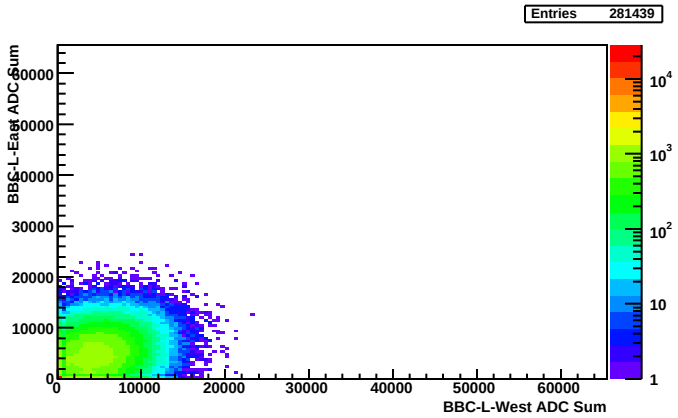

Entries 281439
BBC-S-West ADC Sum
VPD-West ADC Sum

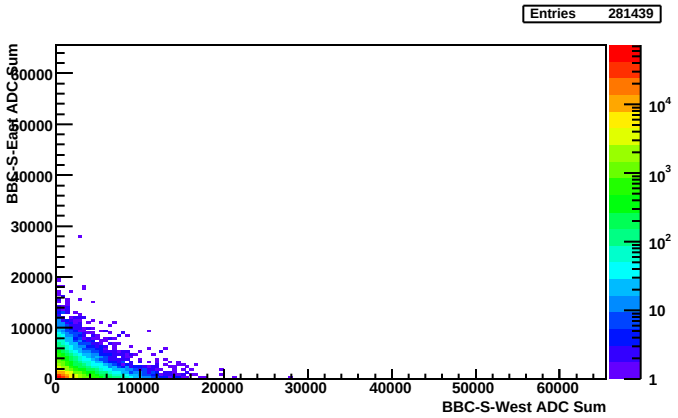

Entries 281439
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

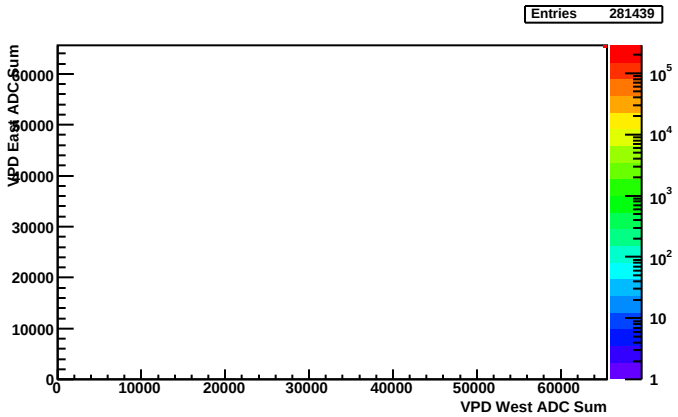

Entries 281439
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

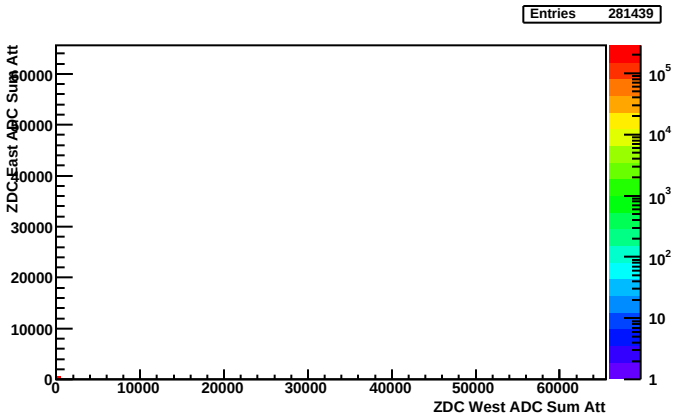

Entries 281439
VPD-East ADC Sum
ZDC-East ADC Sum Att

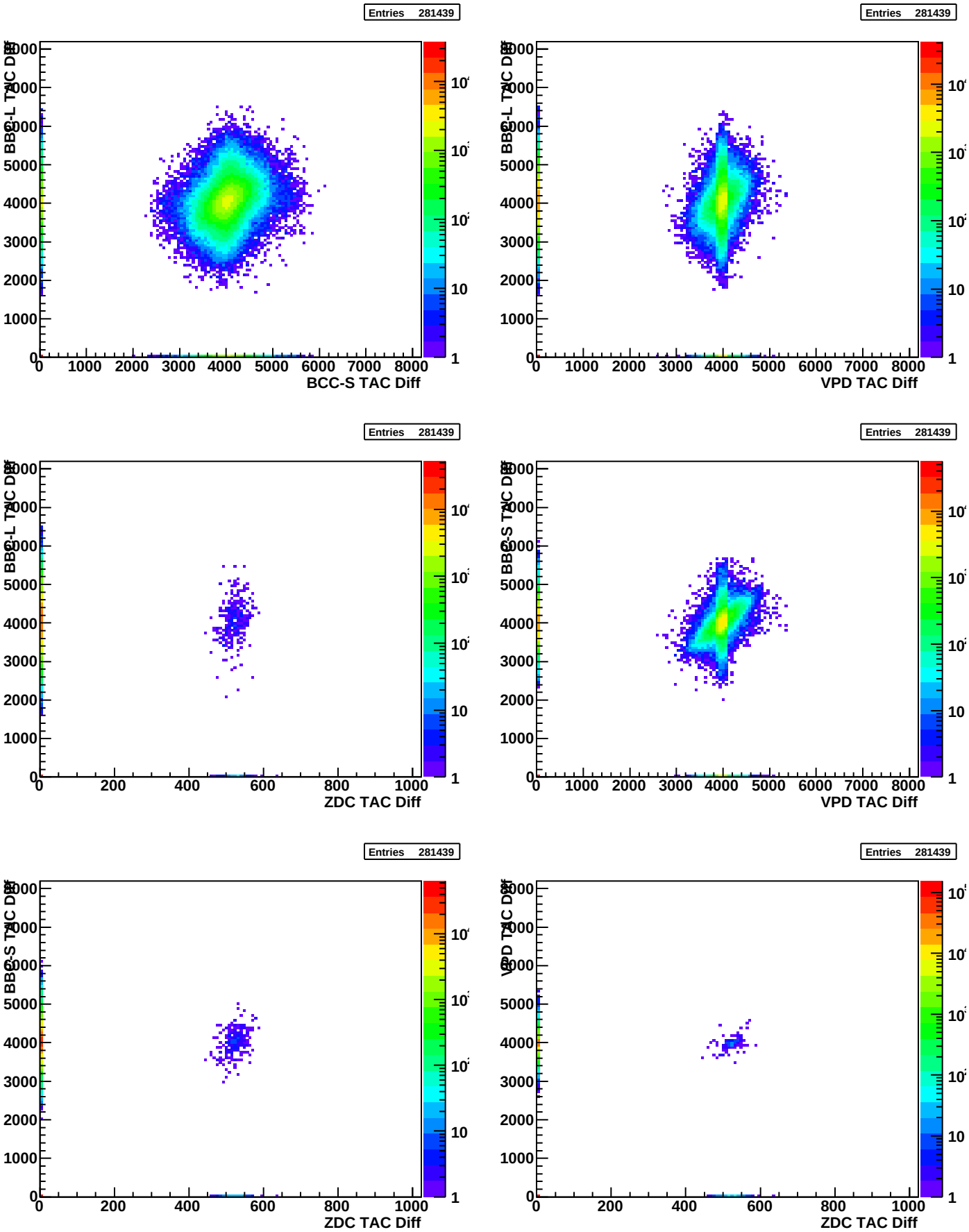

Entries 281439
VPD-West ADC Sum
ZDC-West ADC Sum Att

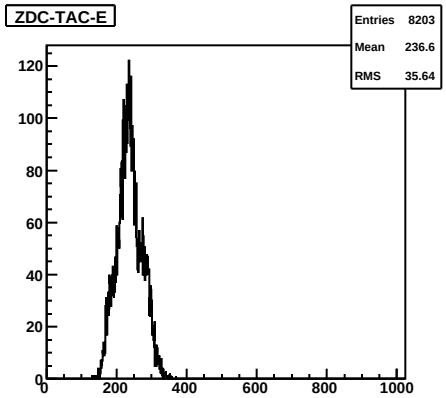

Entries 281439
BBC-L-East ADC Sum
BBC-L-West ADC Sum

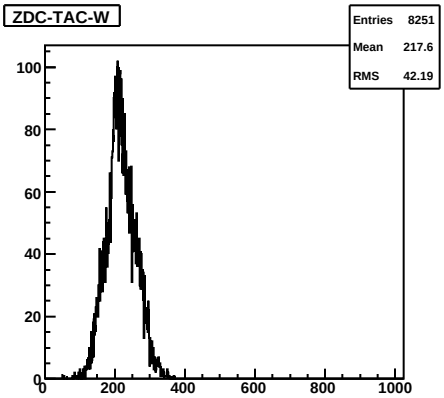

Entries 281439
BBC-S-East ADC Sum
BBC-S-West ADC Sum

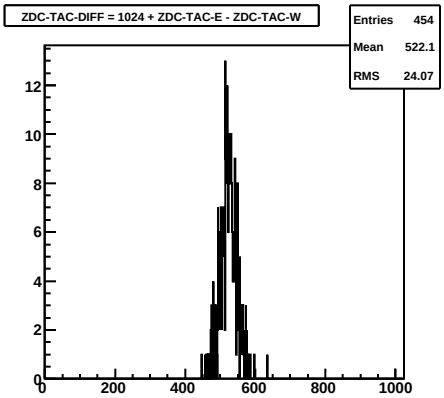

Entries 281439
VPD East ADC Sum
VPD West ADC Sum

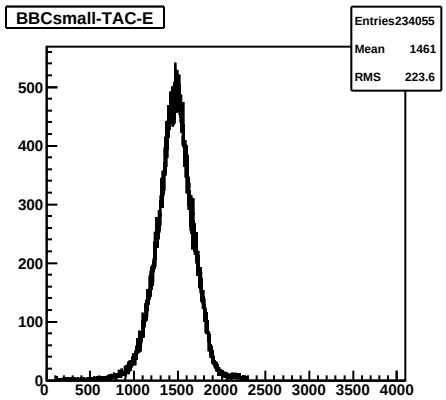

Entries 281439
ZDC East ADC Sum Att
ZDC West ADC Sum Att

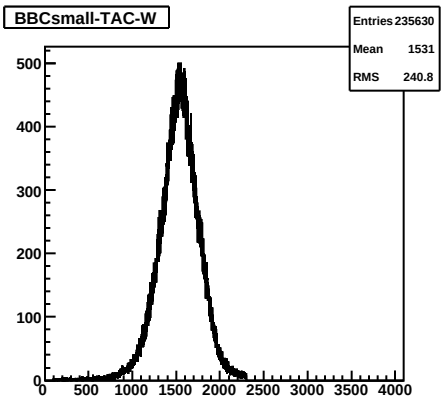

Entries 281439
BBC-L TAC Diff
BCC-S TAC Diff
Entries 281439
BBC-L TAC Diff
VPD TAC Diff
Entries 281439
BBC-L TAC Diff
ZDC TAC Diff
Entries 281439
BBC-S TAC Diff
VPD TAC Diff
Entries 281439
BBC-S TAC Diff
ZDC TAC Diff
Entries 281439
VPD TAC Diff
ZDC TAC Diff

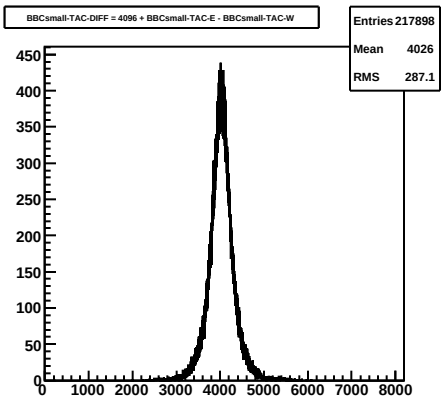

ZDC-TAC-E
Entries 8203
Mean 236.6
RMS 35.64

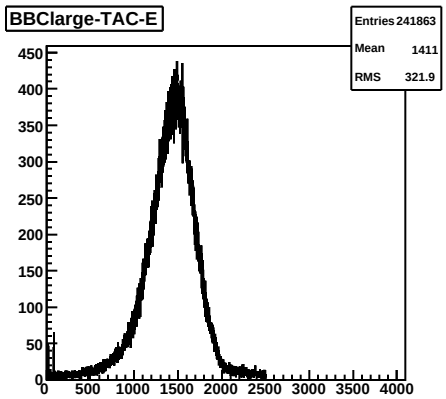

ZDC-TAC-W
Entries 8251
Mean 217.6
RMS 42.19

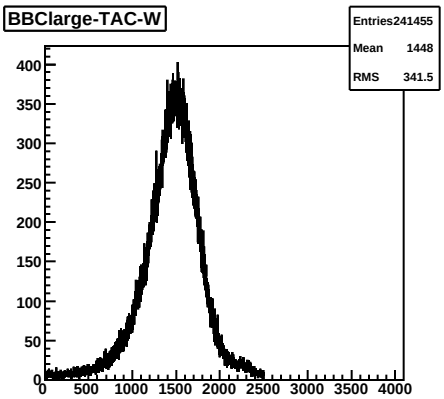

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 454
Mean 522.1
RMS 24.07

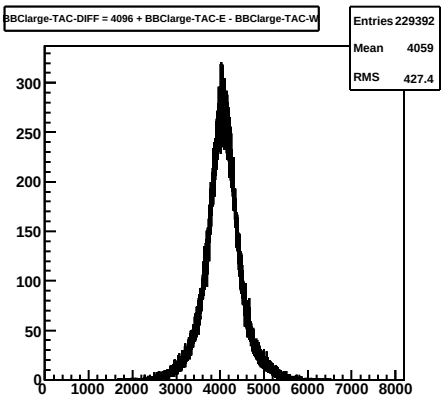

BBCsmall-TAC-E
Entries 234055
Mean 1461
RMS 223.6

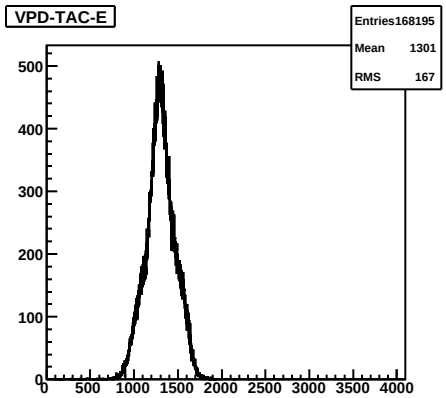

BBCsmall-TAC-W
Entries 235630
Mean 1531
RMS 240.8

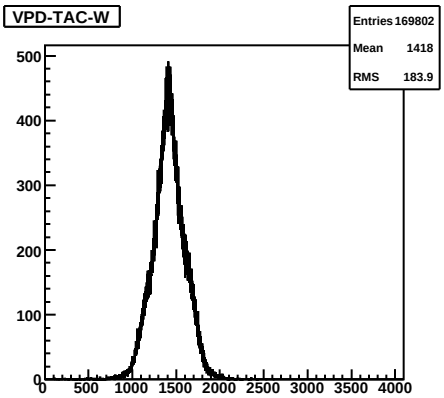

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 217898
Mean 4026
RMS 287.1

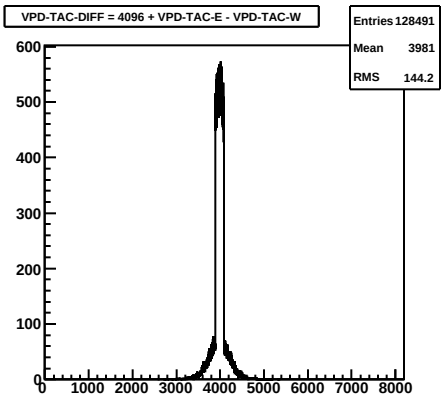

BBClarge-TAC-E
Entries 241863
Mean 1411
RMS 321.9

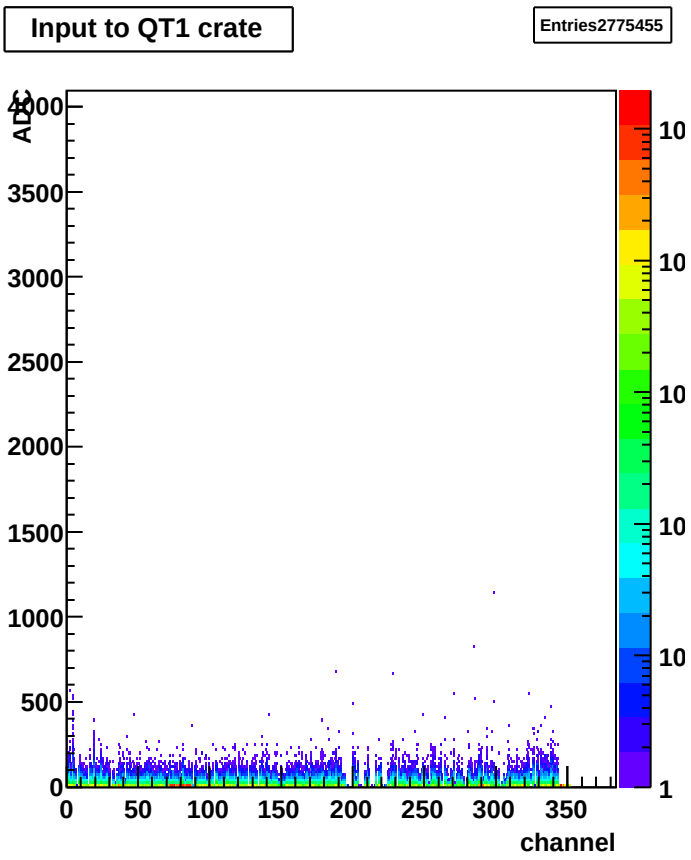

BBClarge-TAC-W
Entries 241455
Mean 1448
RMS 341.5

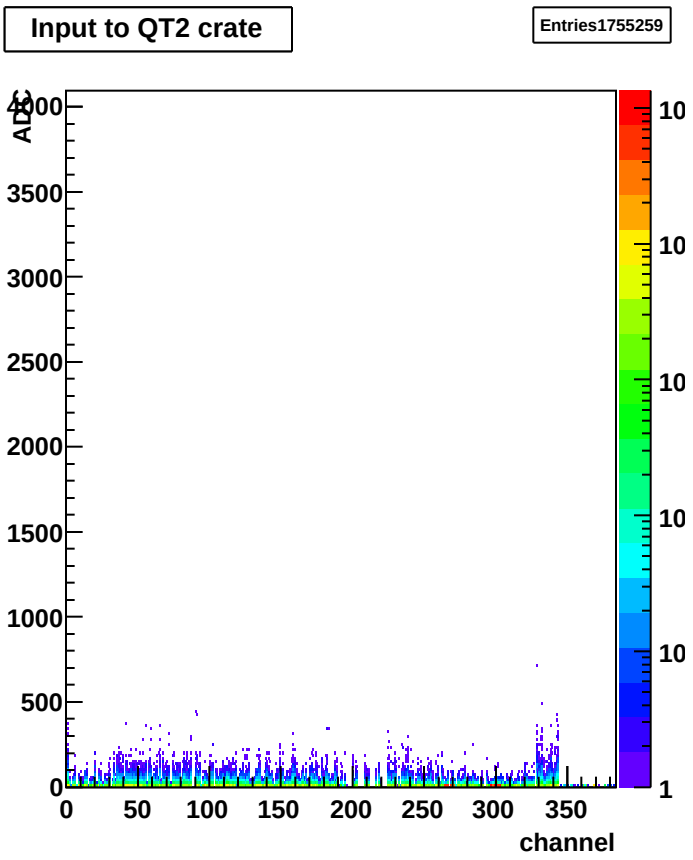

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 229392
Mean 4059
RMS 427.4

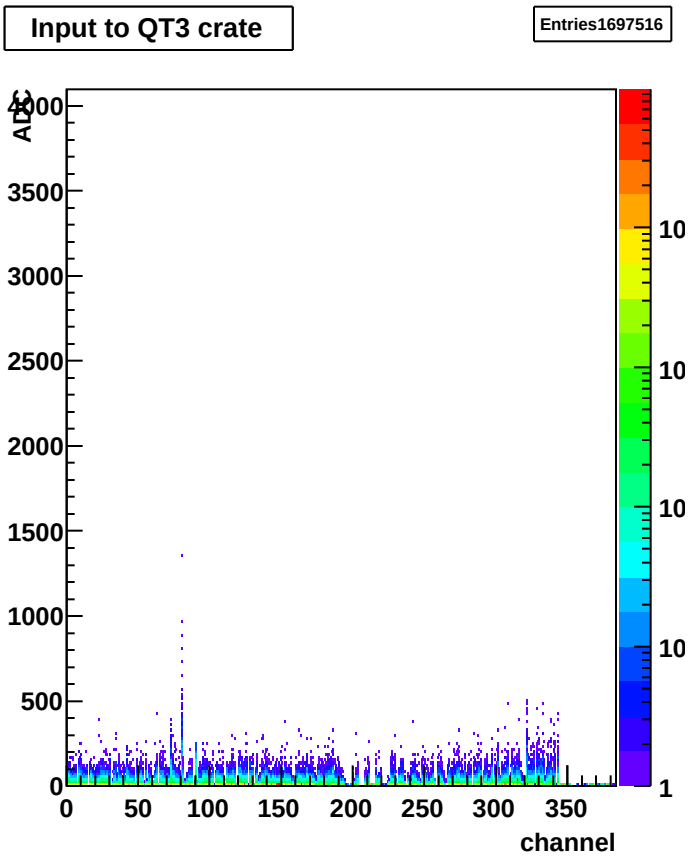

VPD-TAC-E
Entries 168195
Mean 1301
RMS 167

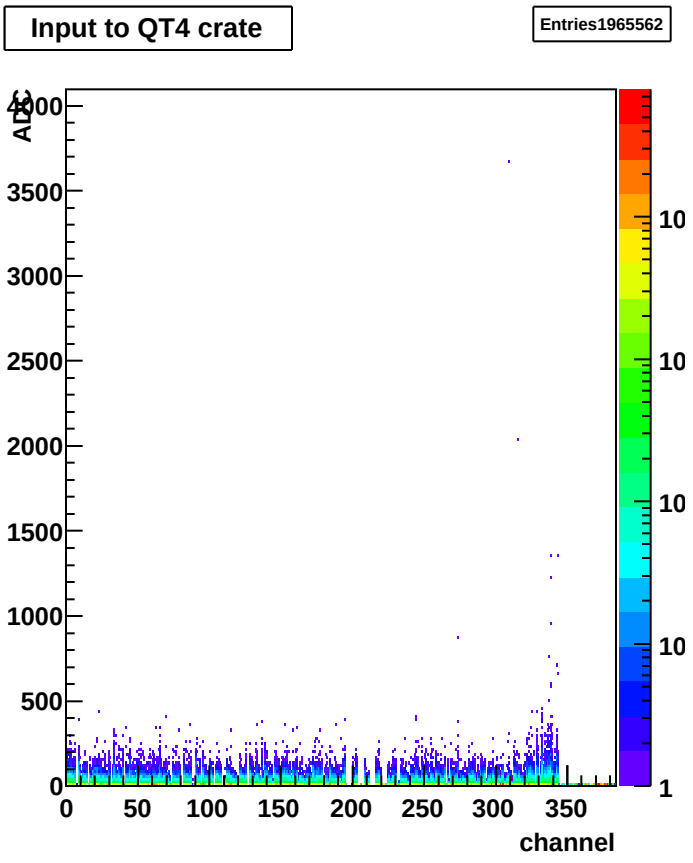

VPD-TAC-W
Entries 169802
Mean 1418
RMS 183.9

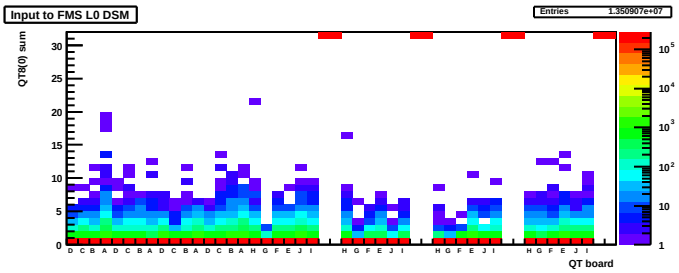

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 128491
Mean 3981
RMS 144.2

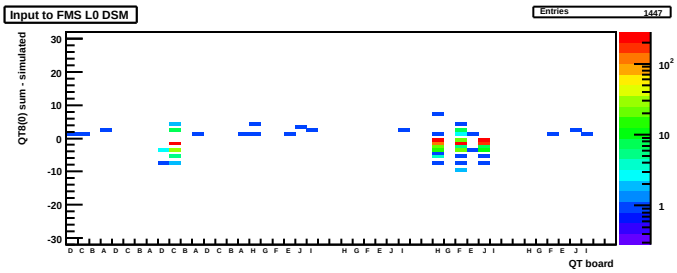

Input to QT1 crate
Entries2775455
ADC
channel

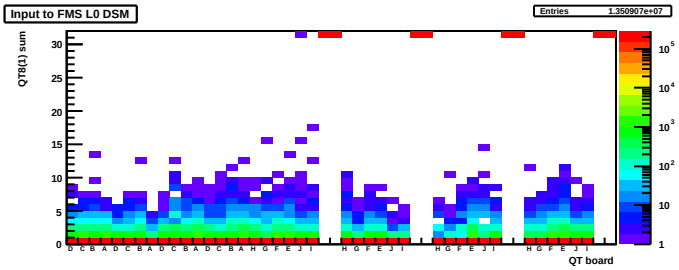

Input to QT2 crate
Entries1755259
ADC
channel

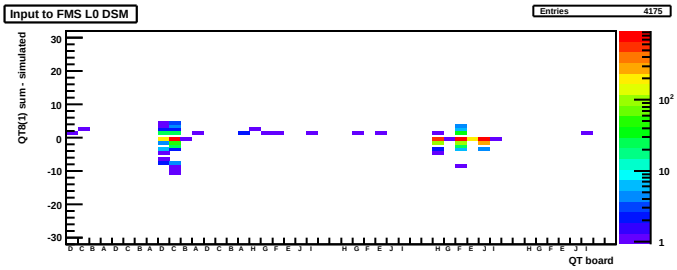

Input to QT3 crate
Entries1697516
ADC
channel

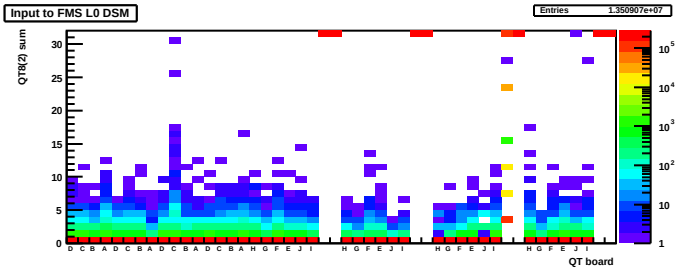

Input to QT4 crate
Entries1965562
ADC
channel

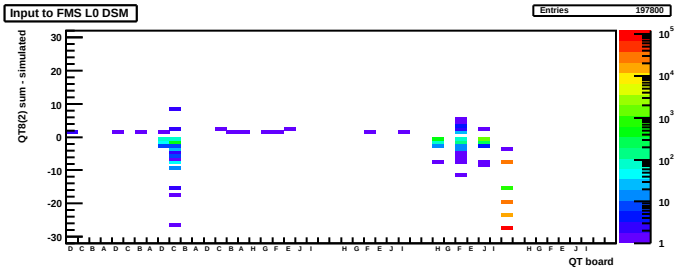

Input to FMS L0 DSM
Entries 1.350907e+07
QT8(0) sum
QT board

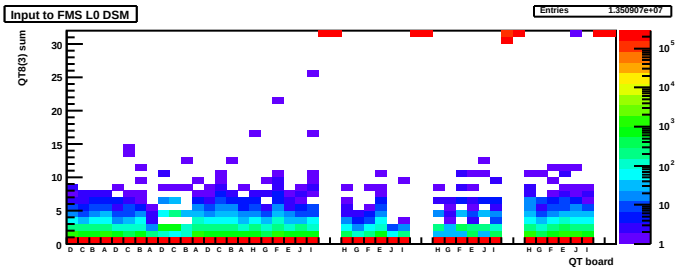

Input to FMS L0 DSM
Entries 1447
QT8(0) sum - simulated
QT board

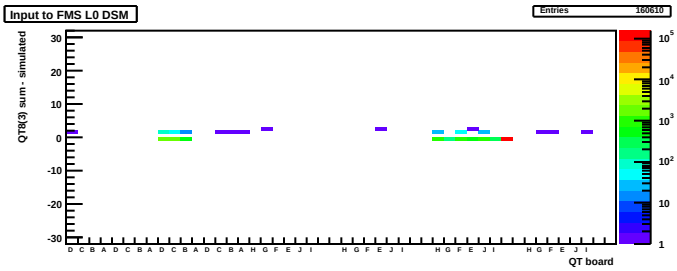

Input to FMS L0 DSM
Entries 1.350907e+07
QT8(1) sum
QT board

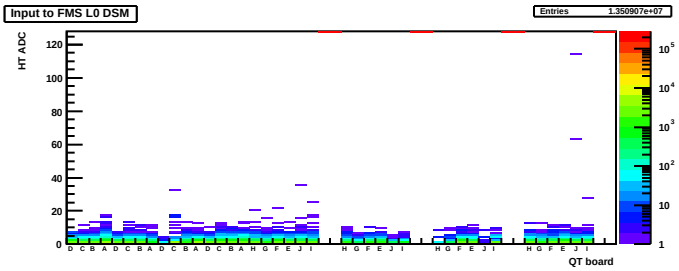

Input to FMS L0 DSM
Entries 4175
QT8(1) sum - simulated
QT board

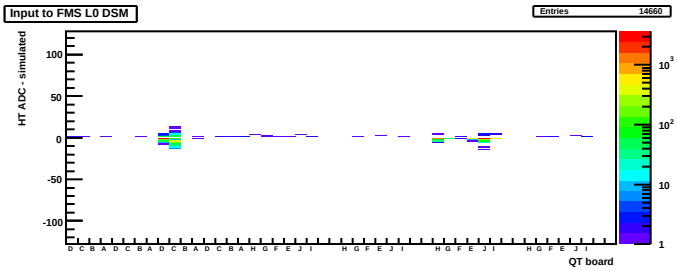

Input to FMS L0 DSM
Entries 1.350907e+07
QT8(2) sum
QT board

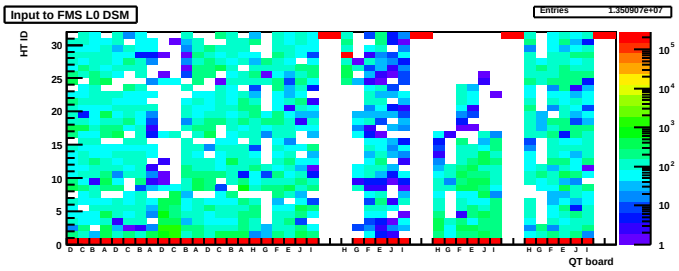

Input to FMS L0 DSM
Entries 197800
QT8(2) sum - simulated
QT board

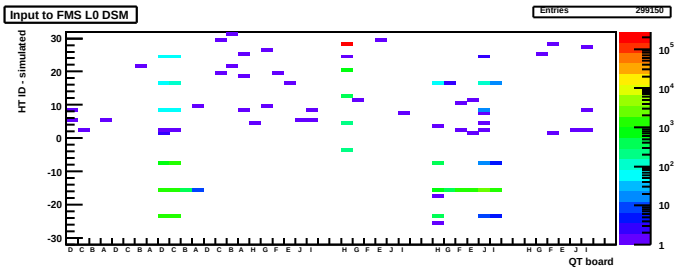

Input to FMS L0 DSM
Entries 1.350907e+07
QT8(3) sum
QT board

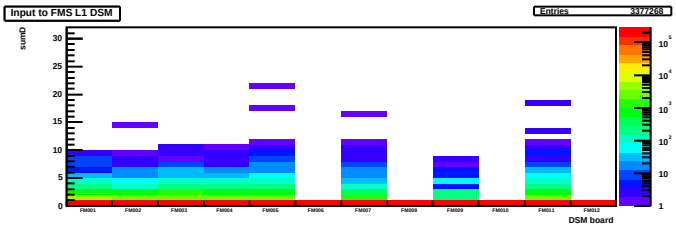

Input to FMS L0 DSM
Entries 160610
QT8(3) sum - simulated
QT board

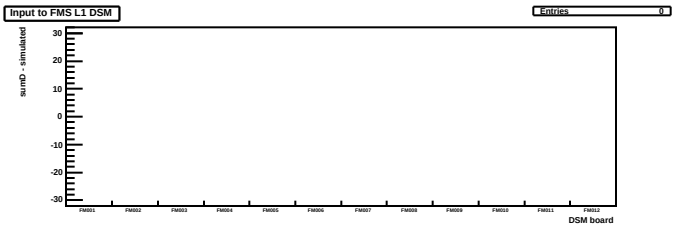

Input to FMS L0 DSM
Entries 1.350907e+07
HT ADC
QT board

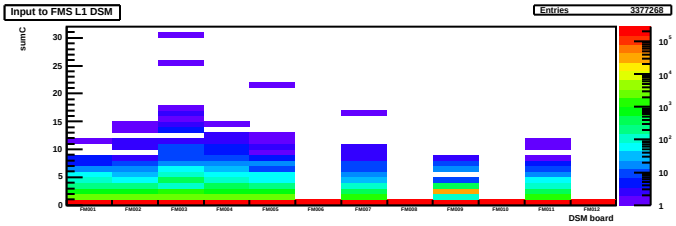

Input to FMS L0 DSM
Entries 14660
HT ADC - simulated
QT board

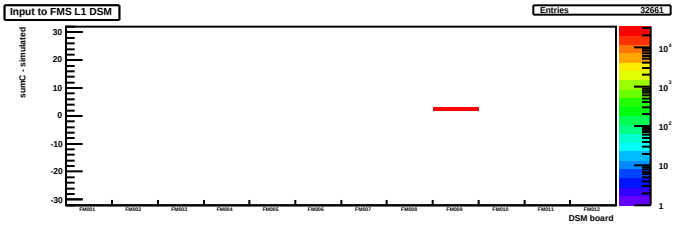

Input to FMS L0 DSM
Entries 1.350907e+07
HT ID
QT board

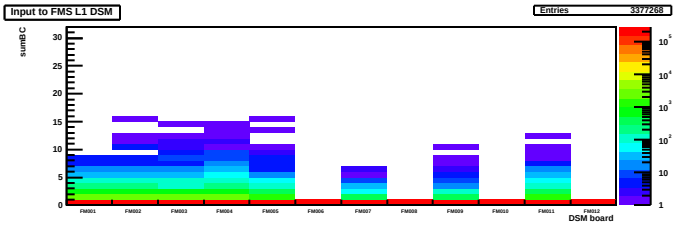

Input to FMS L0 DSM
Entries 299150
HT ID - simulated
QT board

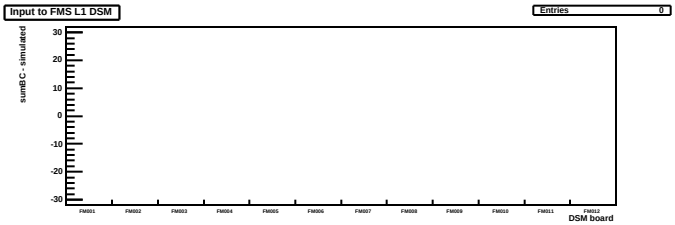

Input to FMS L1 DSM
Entries 3377268
sumD
DSM board

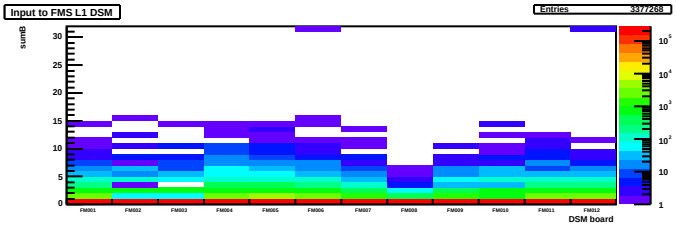

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

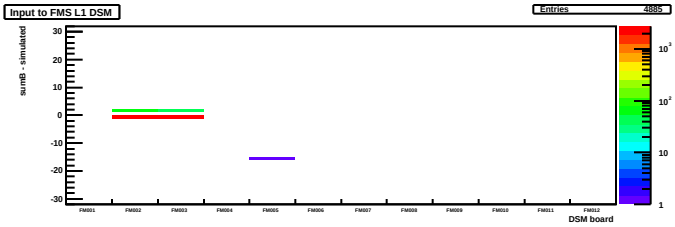

Input to FMS L1 DSM
Entries 3377268
sumC
DSM board

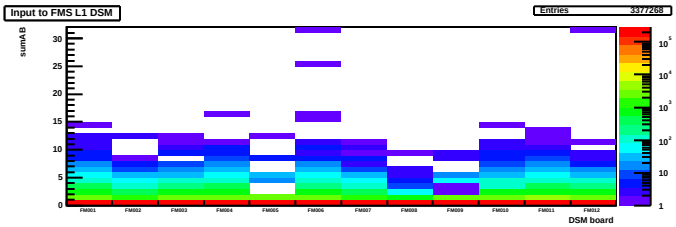

Input to FMS L1 DSM
Entries 32661
sumC - simulated
DSM board

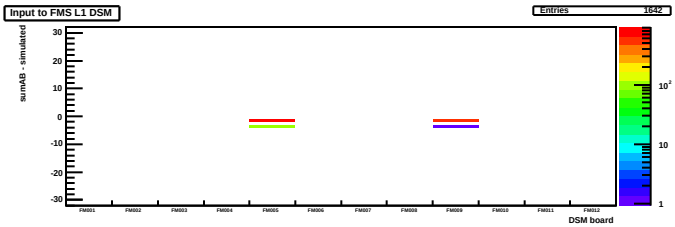

Input to FMS L1 DSM
Entries 3377268
sumBC
DSM board

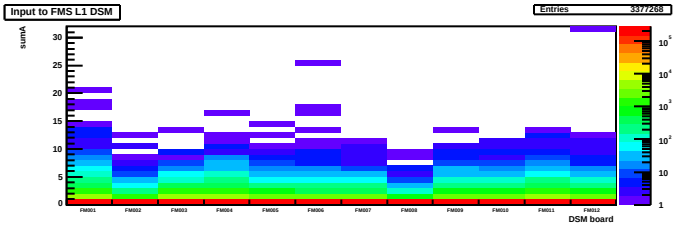

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

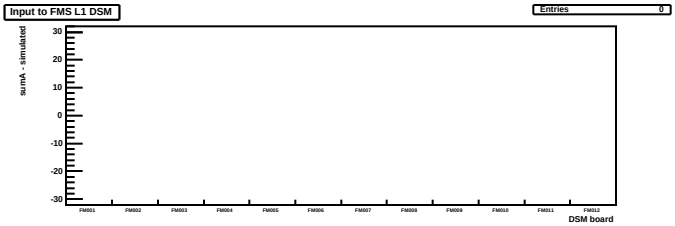

Input to FMS L1 DSM
Entries 3377268
sumB
DSM board

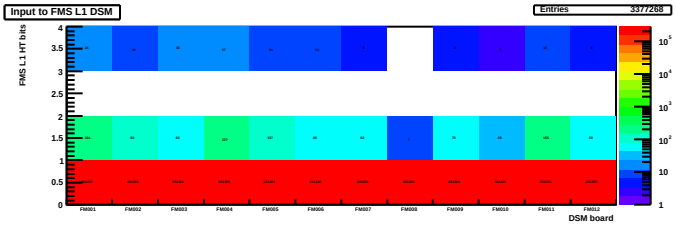

Input to FMS L1 DSM
Entries 4885
sumB - simulated
DSM board

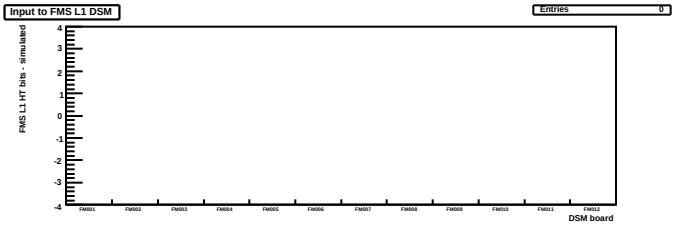

Input to FMS L1 DSM
Entries 3377268
sumAB
DSM board

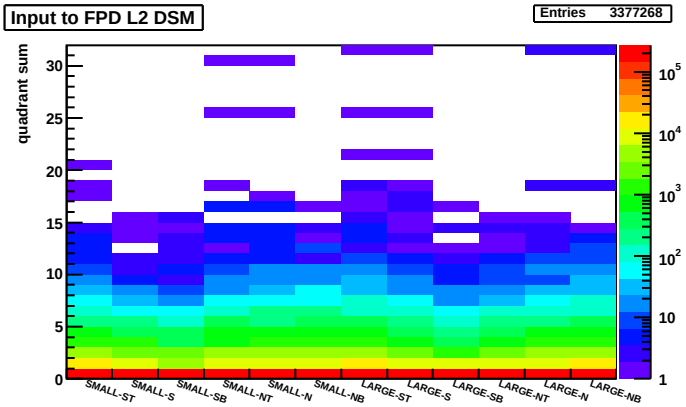

Input to FMS L1 DSM
Entries 1642
sumAB - simulated
DSM board

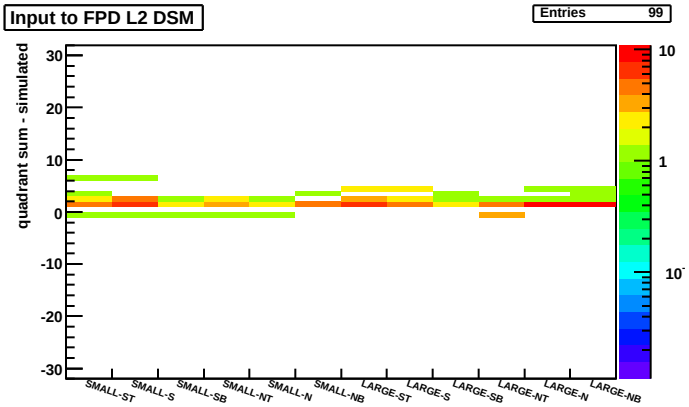

Input to FMS L1 DSM
Entries 3377268
sumA
DSM board

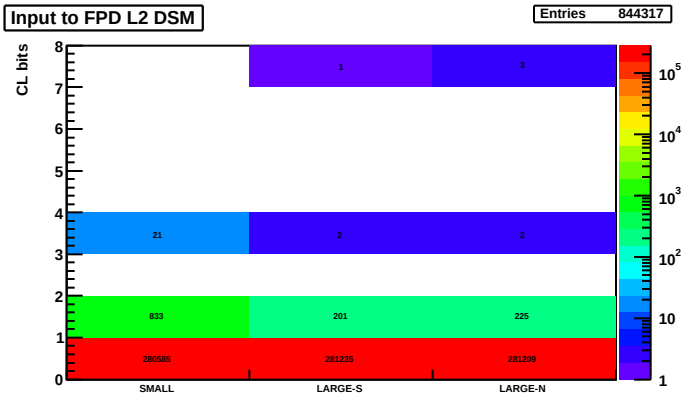

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

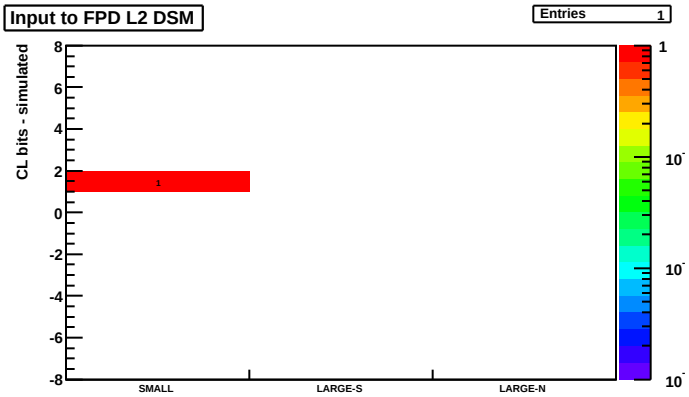

Input to FMS L1 DSM
Entries 3377268
FMS L1 HT bits
DSM board

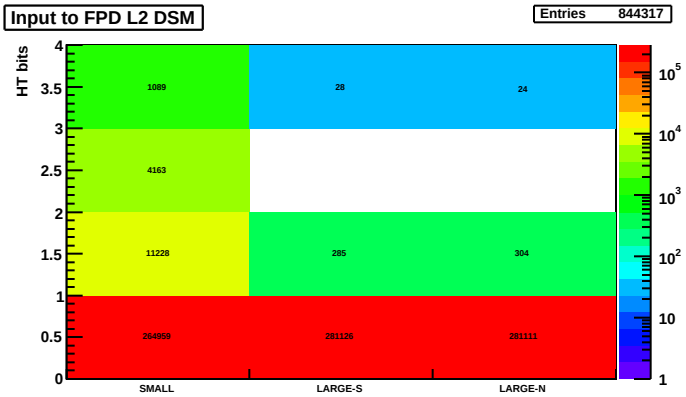

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

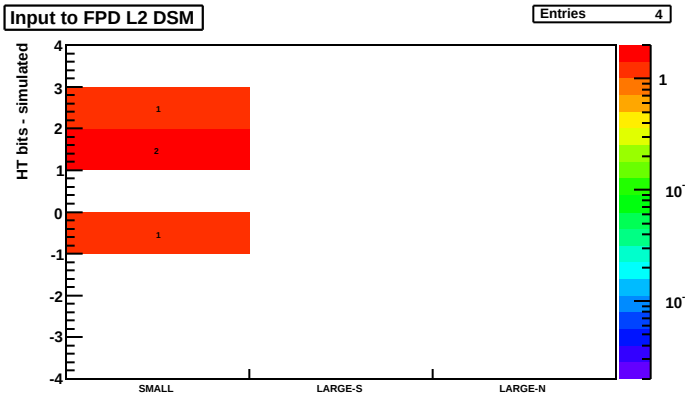

Input to FPD L2 DSM
Entries 3377268
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

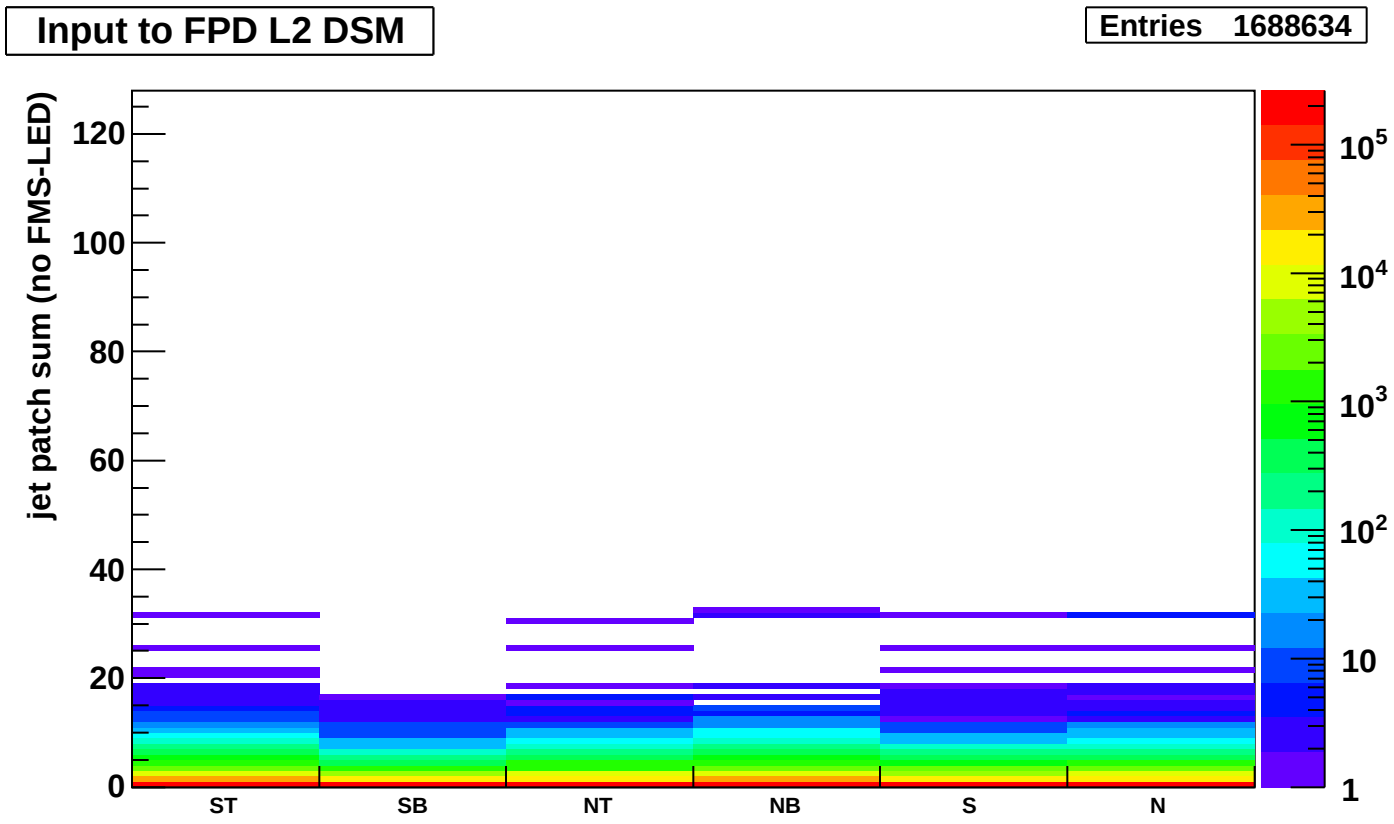

Input to FPD L2 DSM
Entries 99
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

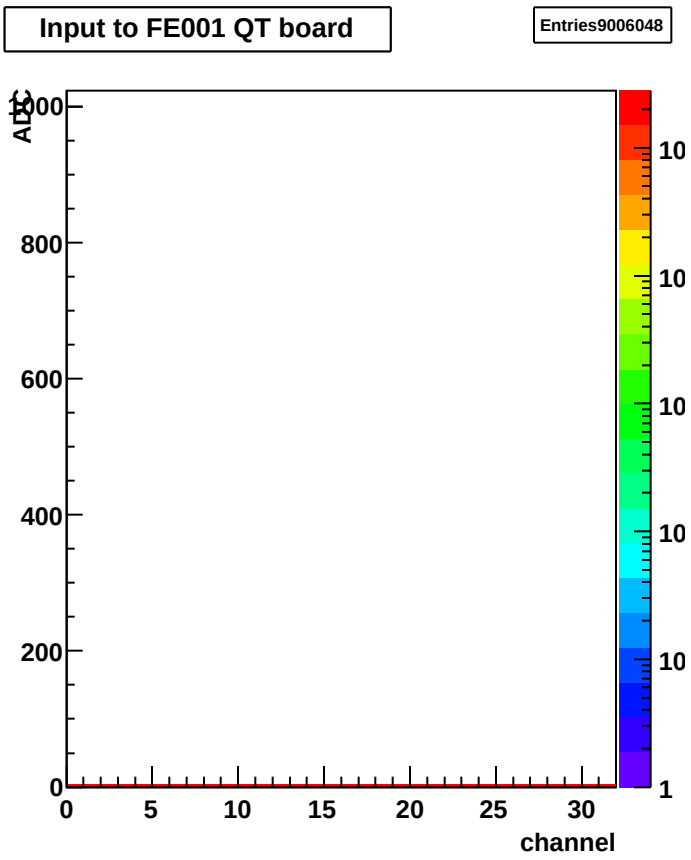

Input to FPD L2 DSM
Entries 844317
CL bits
1
3
21
2
2
833
201
225
280585
281235
281209
SMALL
LARGE-S
LARGE-N

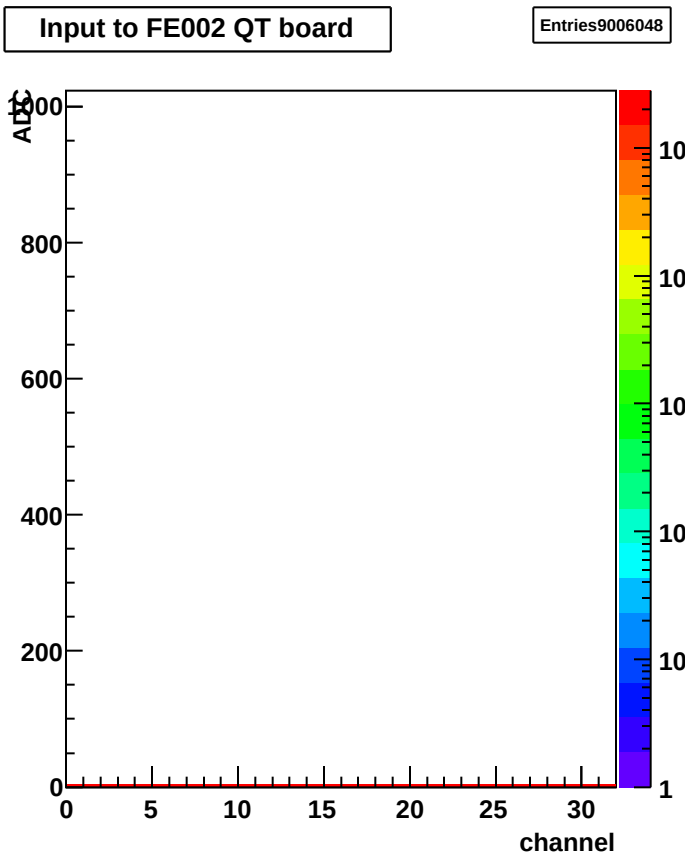

Input to FPD L2 DSM
Entries 1
CL bits - simulated
1
SMALL
LARGE-S
LARGE-N

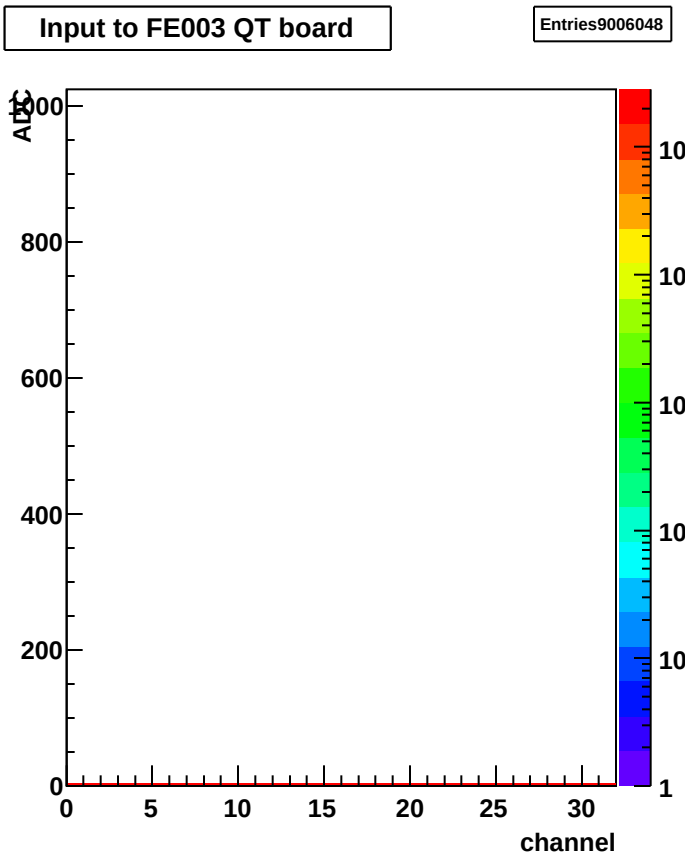

Input to FPD L2 DSM
Entries 844317
HT bits
1089
28
24
4163
11228
285
304
264959
281126
281111
SMALL
LARGE-S
LARGE-N

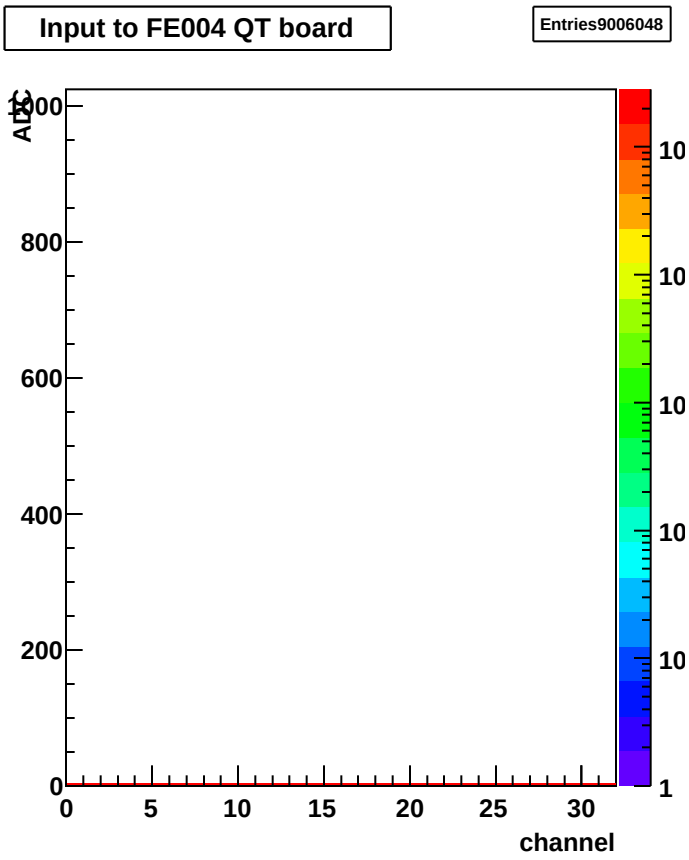

Input to FPD L2 DSM
Entries 4
HT bits - simulated
1
2
1
SMALL
LARGE-S
LARGE-N

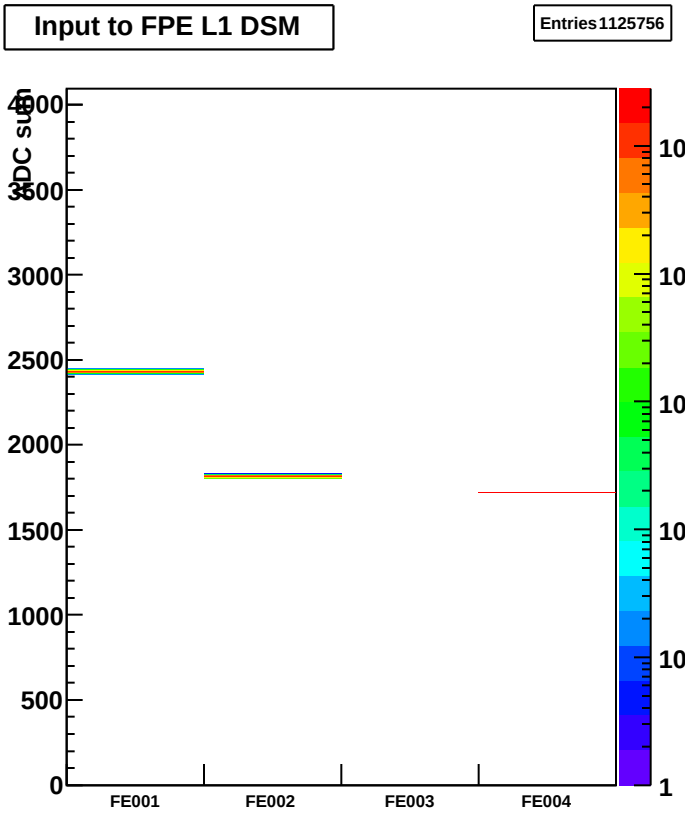

Input to FPD L2 DSM
Entries 1688634
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5


Input to FE001 QT board
Entries9006048
ADC
channel

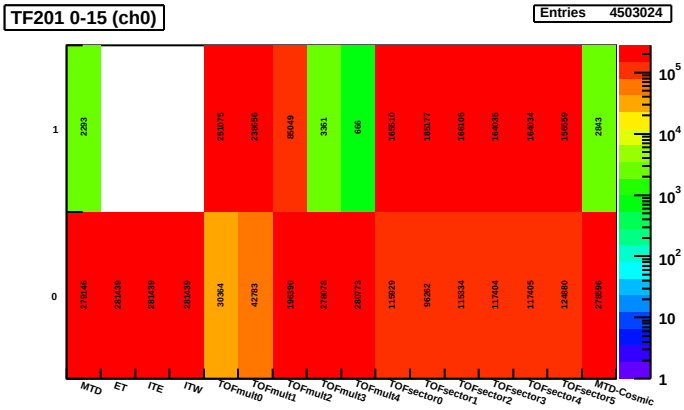

Input to FE002 QT board
Entries9006048
ADC
channel


Input to FE003 QT board
Entries9006048
ADC
channel

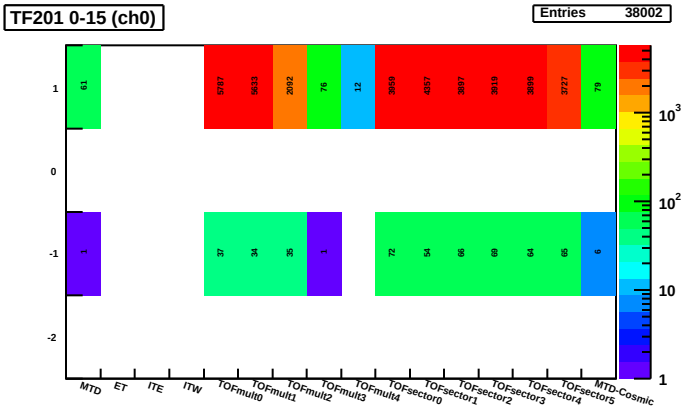

Input to FE004 QT board
Entries9006048
ADC
channel


Input to FPE L1 DSM
Entries 1125756
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1

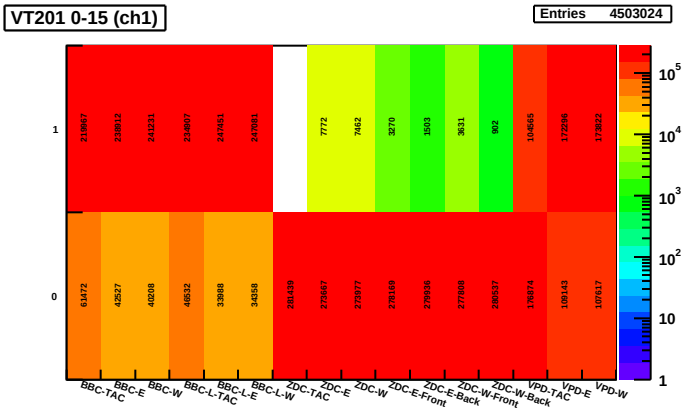
TF201 0-15 (ch0)



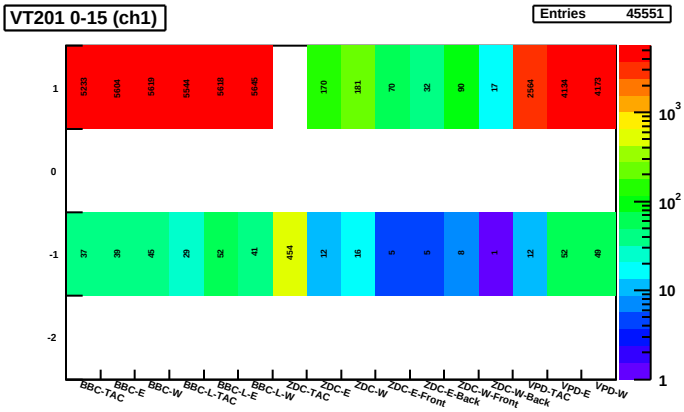
TF201 0-15 (ch0)



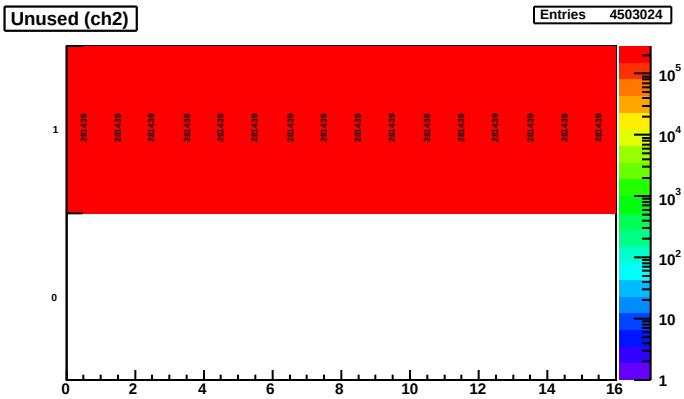
VT201 0-15 (ch1)

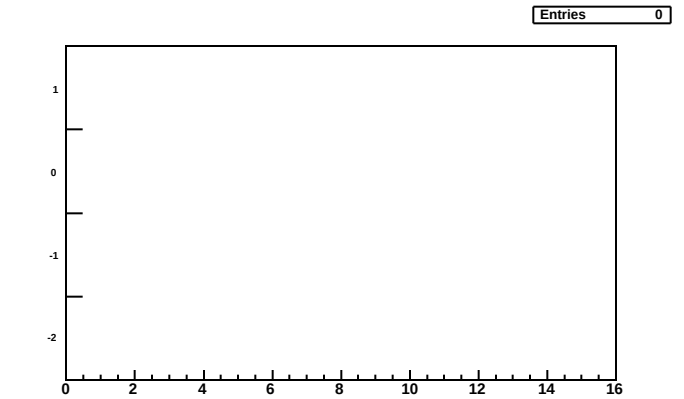


VT201 0-15 (ch1)

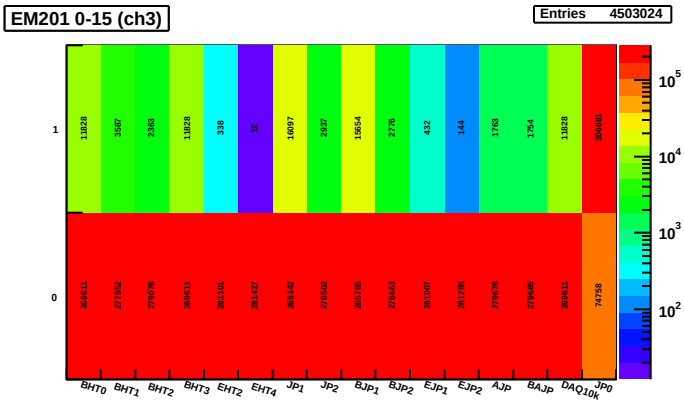


Unused (ch2)

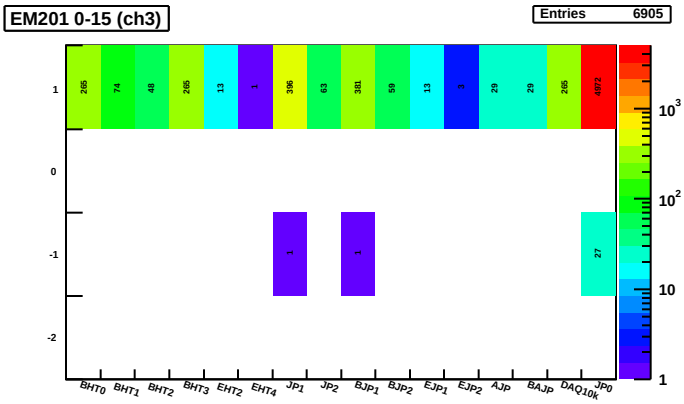




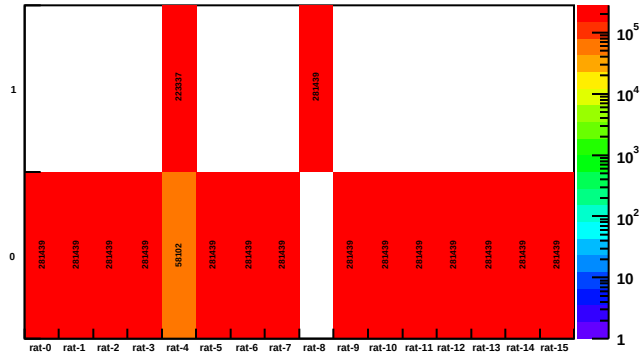
EM201 0-15 (ch3)

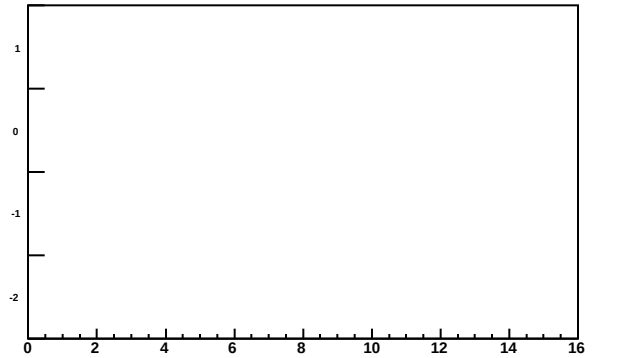


EM201 0-15 (ch3)

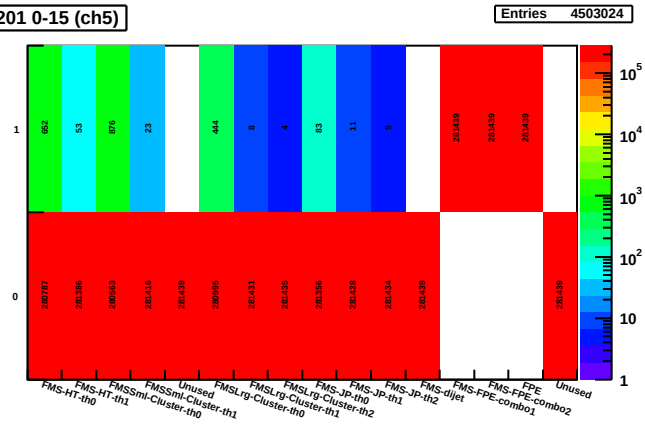


RAT board (ch4)

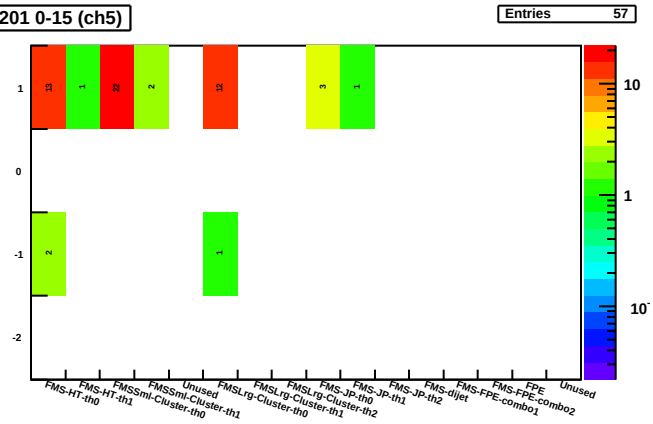




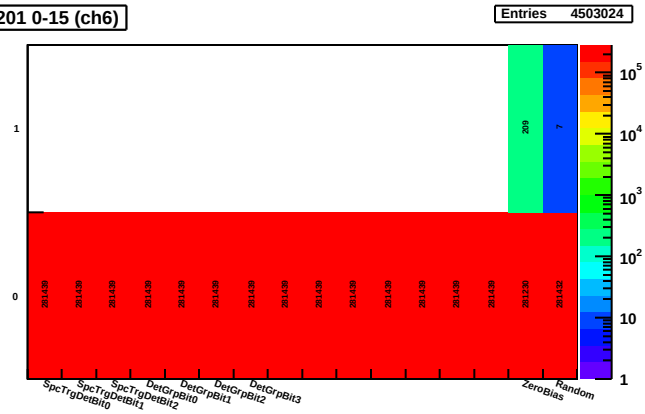
FP201 0-15 (ch5)

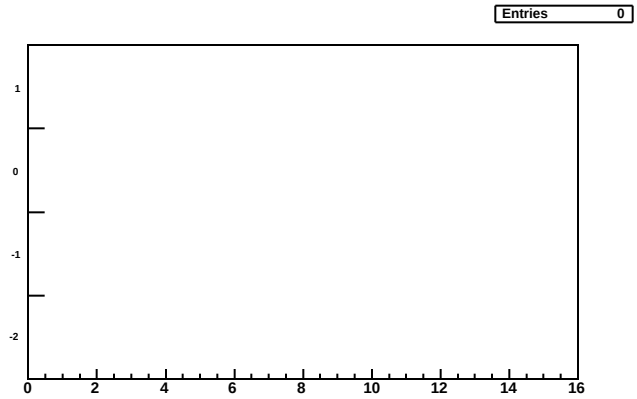
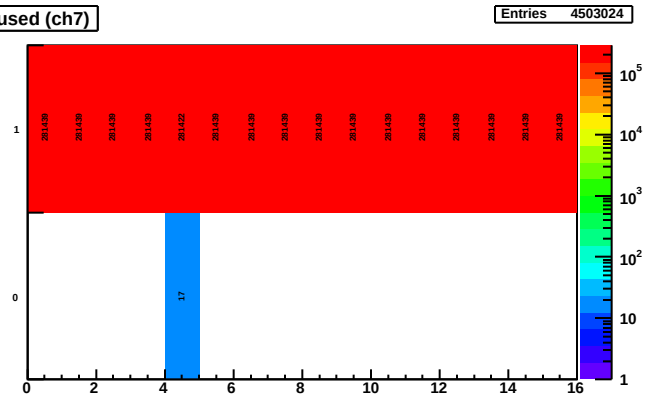
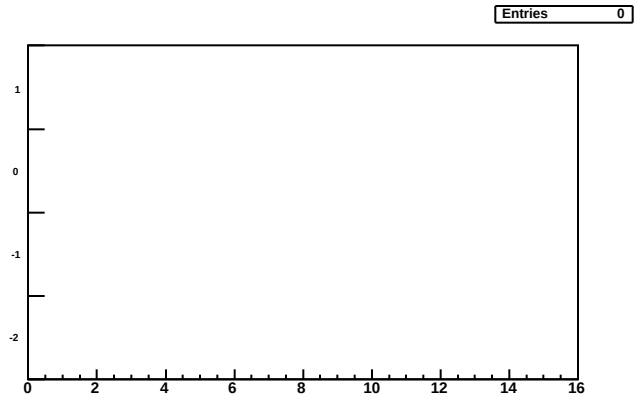


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)