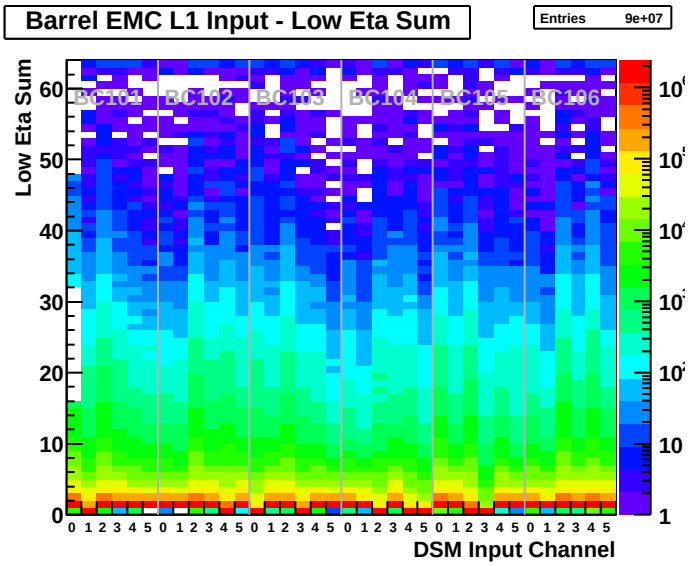
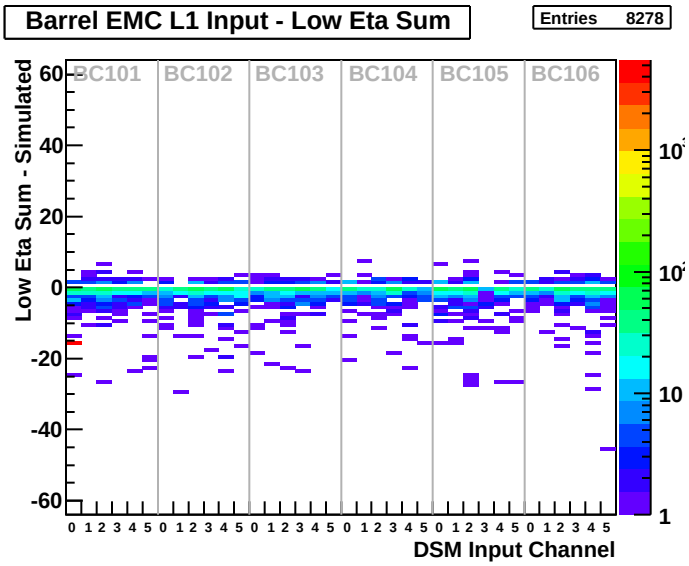
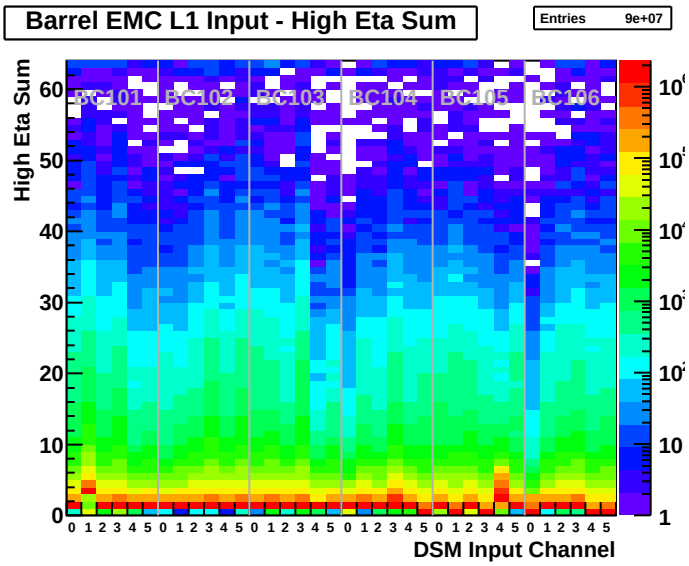
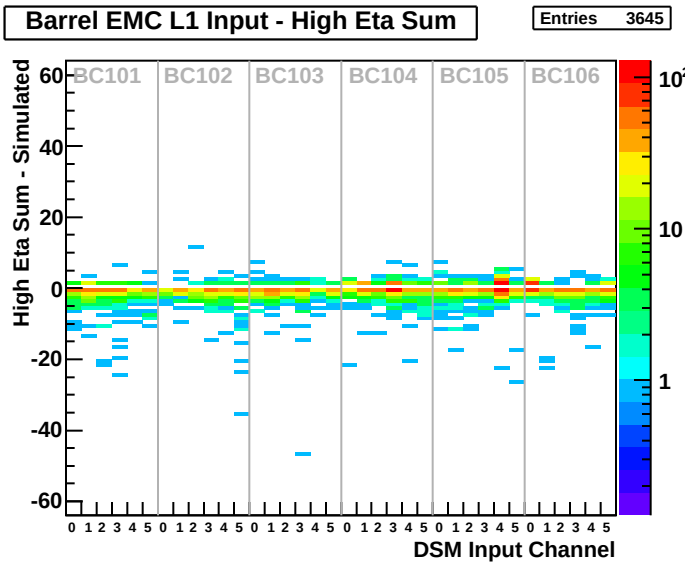
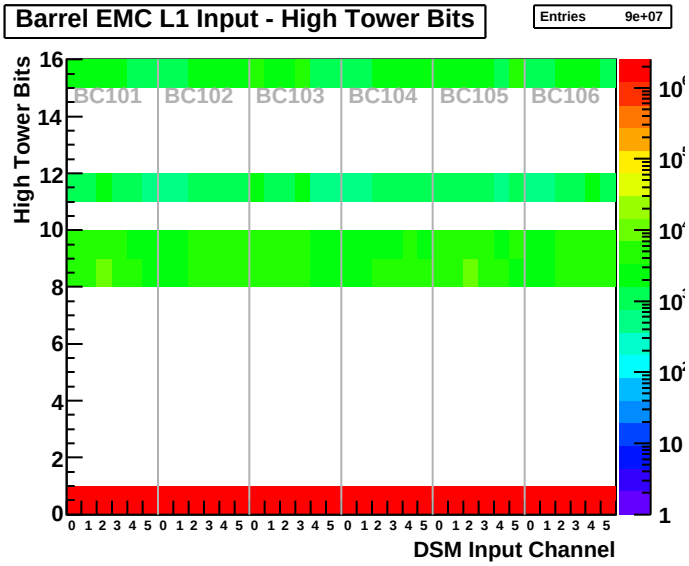
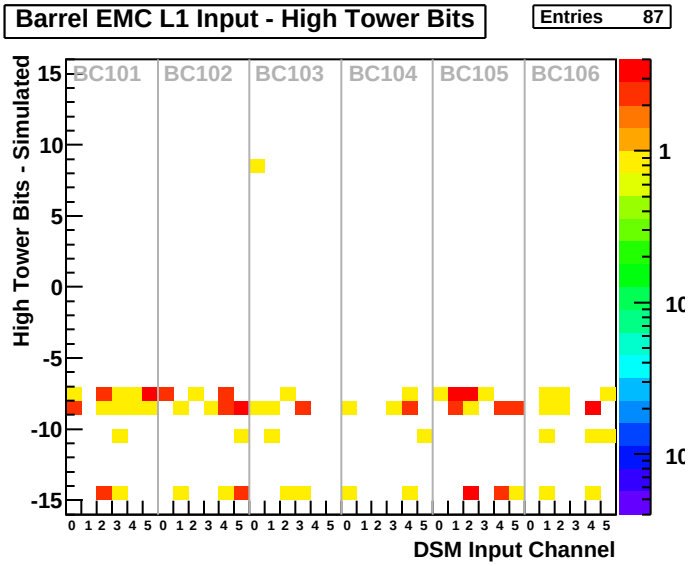

Barrel EMC L1 Input - Low Eta Sum
Entries 9e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

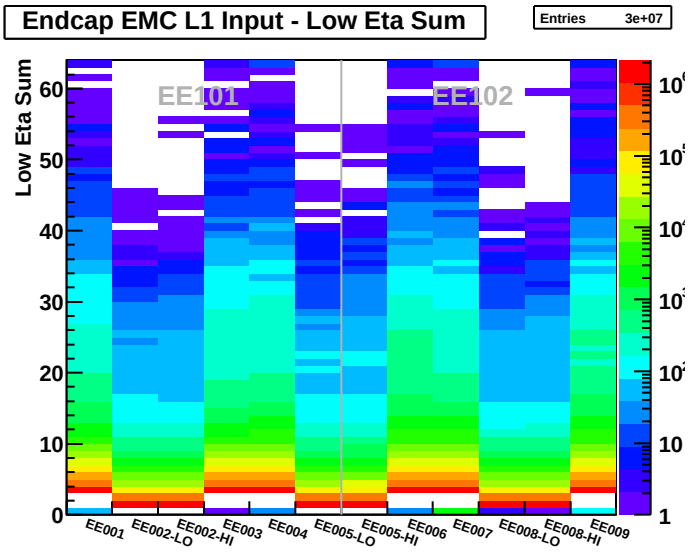

Barrel EMC L1 Input - Low Eta Sum
Entries 8278
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

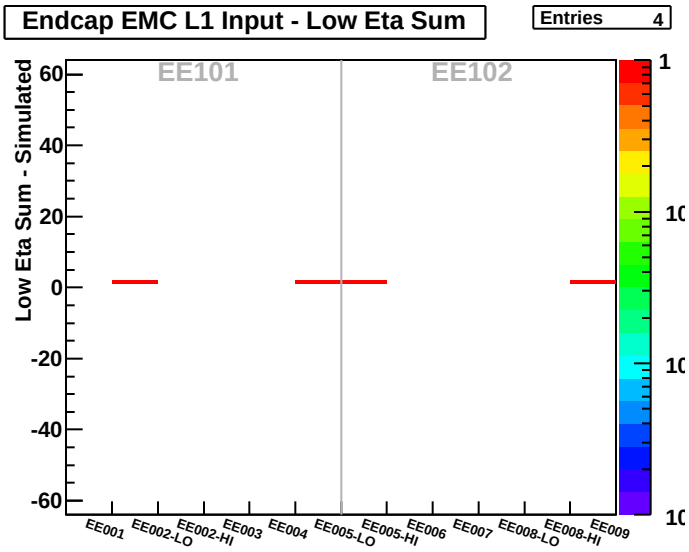

Barrel EMC L1 Input - High Eta Sum
Entries 9e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

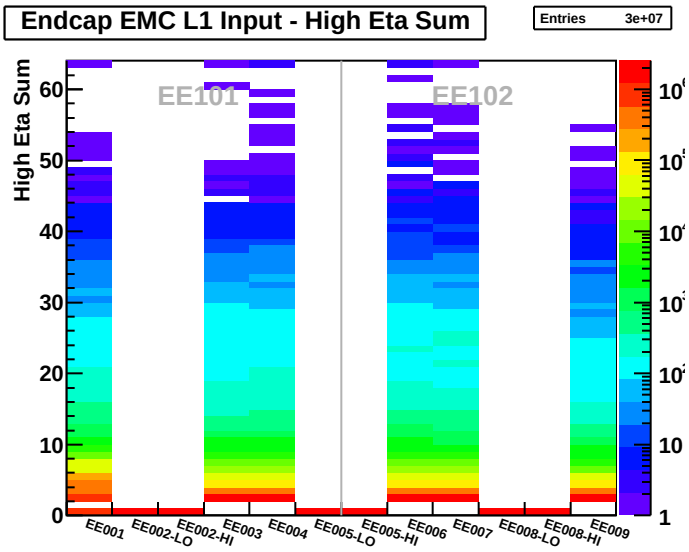

Barrel EMC L1 Input - High Eta Sum
Entries 3645
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

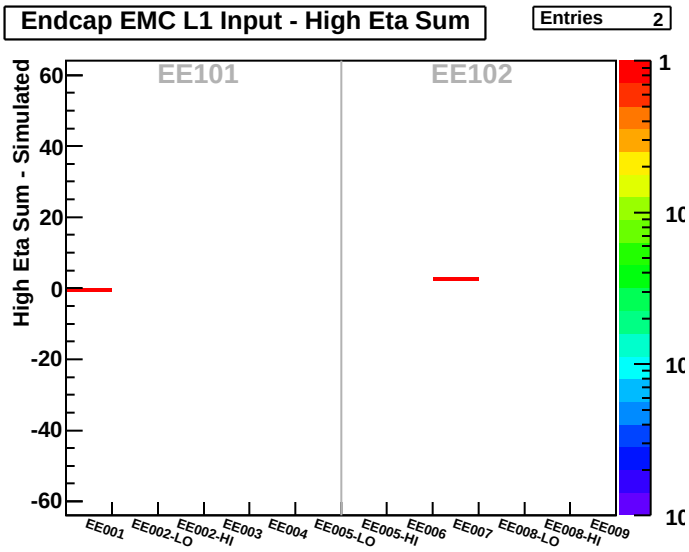

Barrel EMC L1 Input - High Tower Bits
Entries 9e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

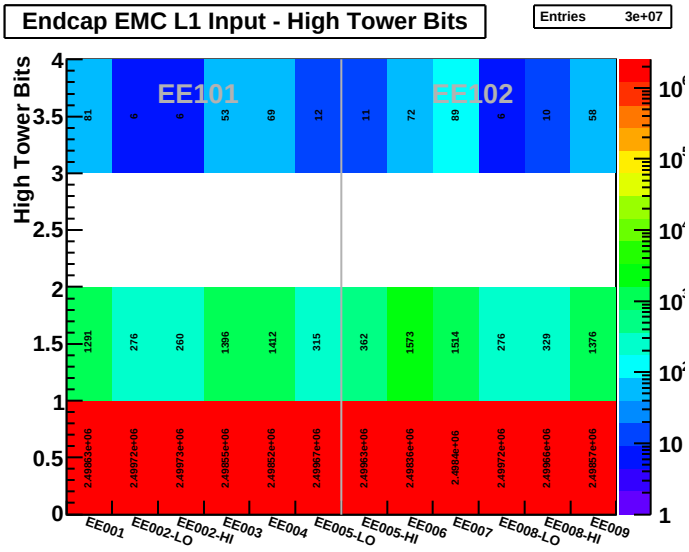

Barrel EMC L1 Input - High Tower Bits
Entries 87
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

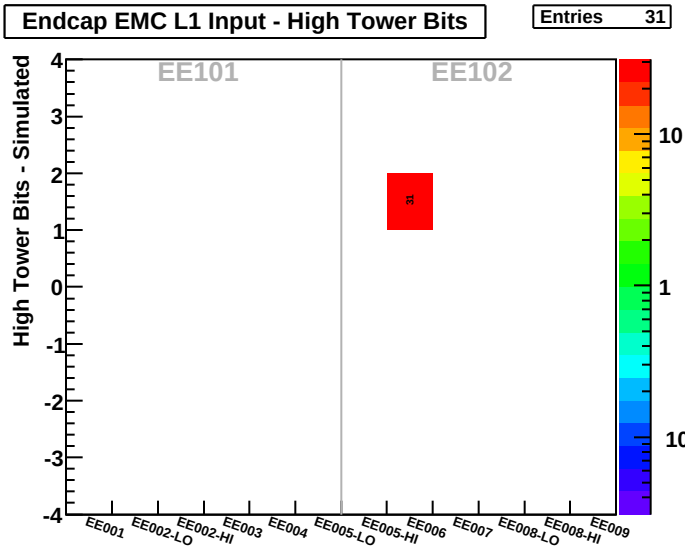

Endcap EMC L1 Input - Low Eta Sum
Entries 3e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

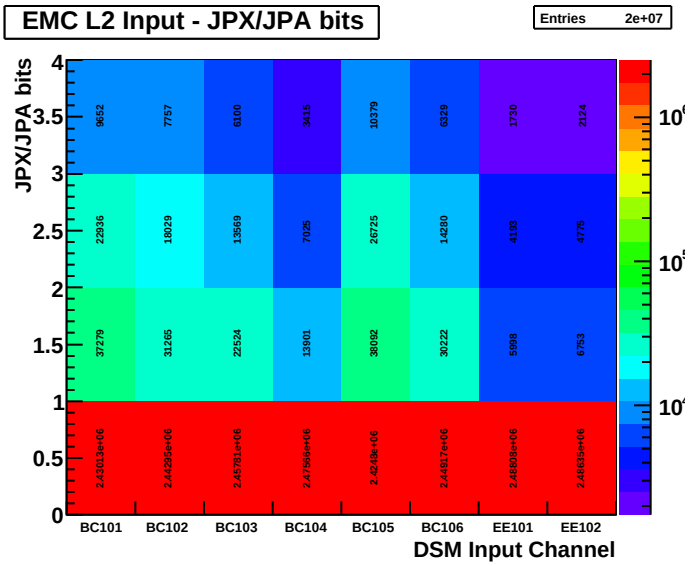

Endcap EMC L1 Input - Low Eta Sum
Entries 4
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

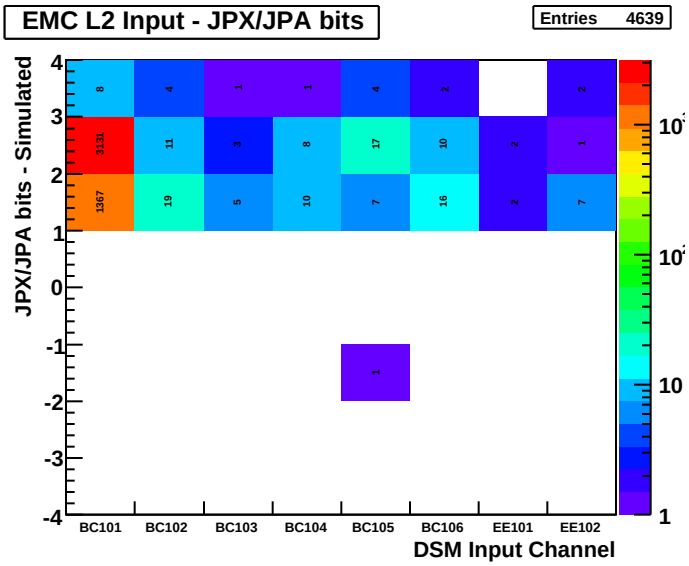

Endcap EMC L1 Input - High Eta Sum
Entries 3e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

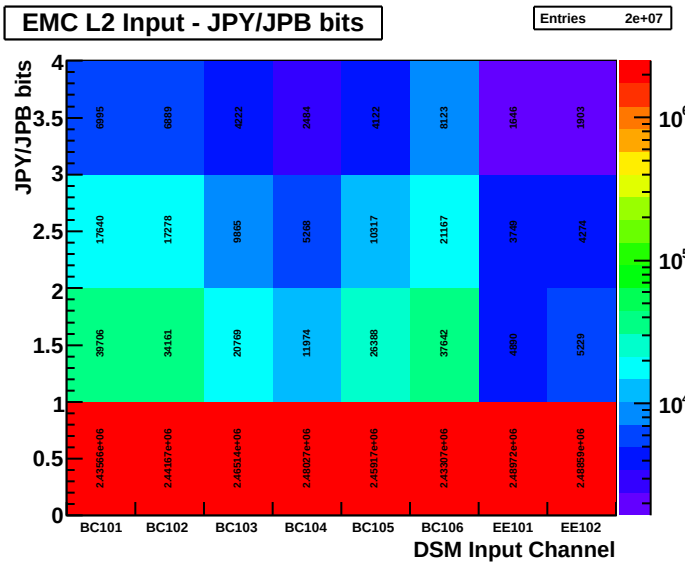

Endcap EMC L1 Input - High Eta Sum
Entries 2
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

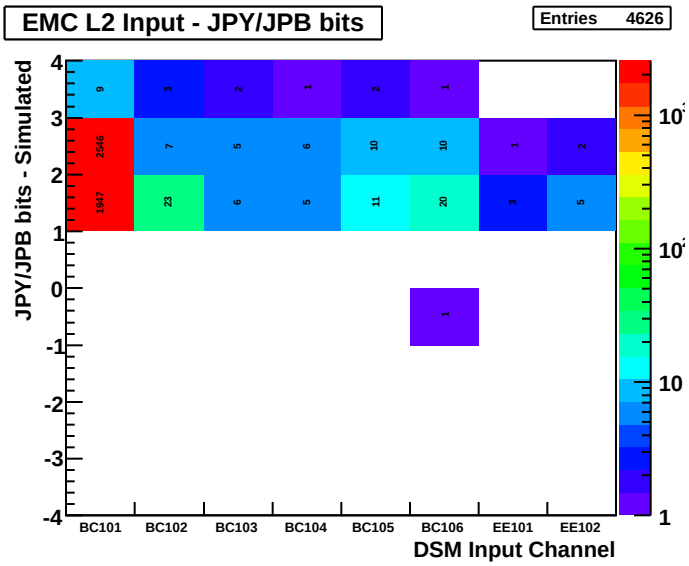

Endcap EMC L1 Input - High Tower Bits
Entries 3e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

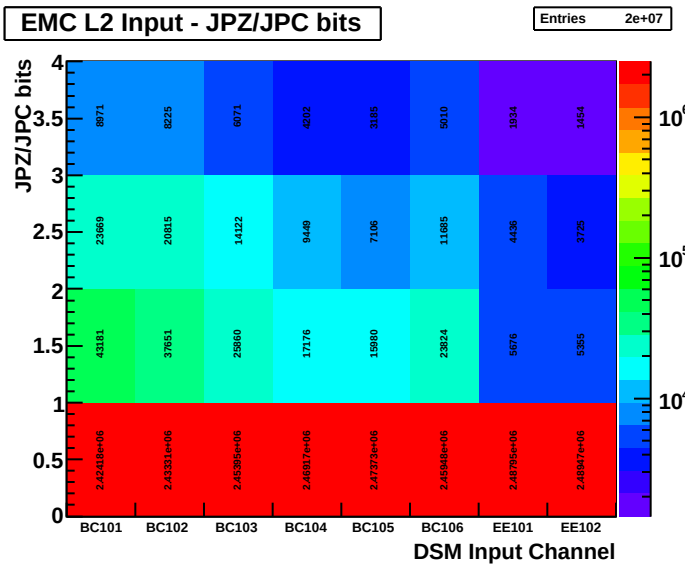

Endcap EMC L1 Input - High Tower Bits
Entries 31
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

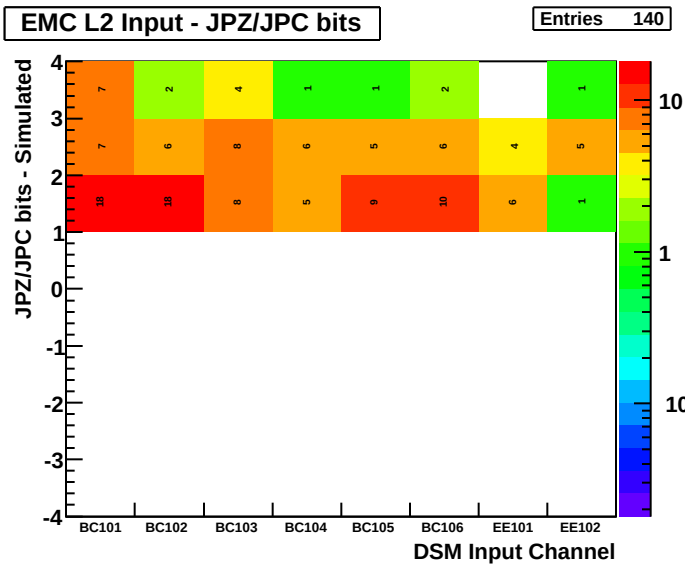

EMC L2 Input - JPX/JPA bits
Entries 2e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
9652 7757 6100 3415 10379 6329 1730 2124
22936 18029 13569 7025 26725 14280 4193 4775
37279 31265 22534 13901 30092 30222 5988 6753
2.43013e+06 2.44295e+06 2.45781e+06 2.47566e+06 2.4249e+06 2.44917e+06 2.48808e+06 2.48635e+06

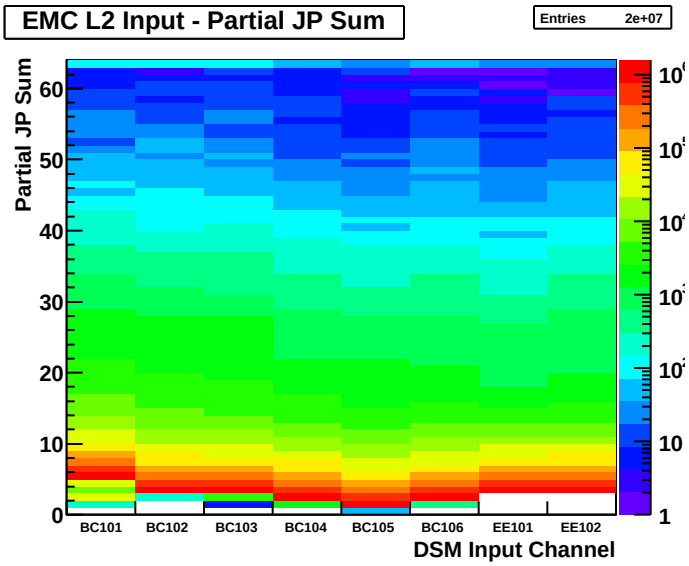

EMC L2 Input - JPX/JPA bits
Entries 4639
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
8 4 1 1 4 2 2
3131 11 3 8 17 10 2 1
1367 19 5 10 7 16 2 7
1

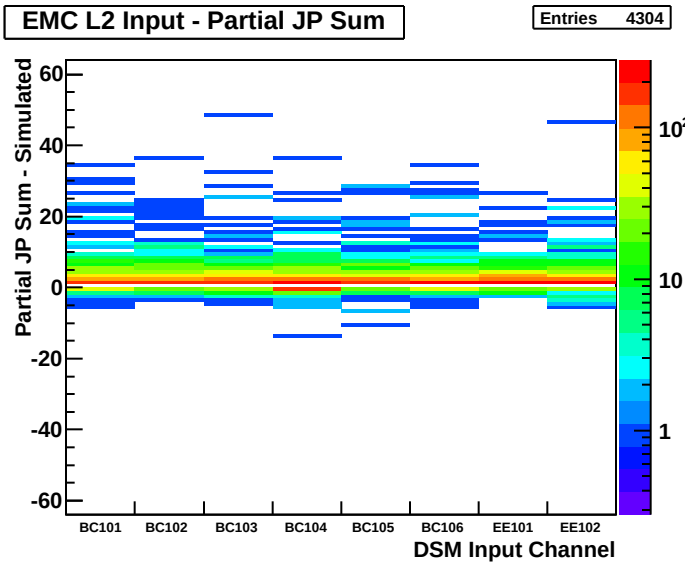

EMC L2 Input - JPY/JPB bits
Entries 2e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
6995 6889 4222 2484 4122 8123 1646 1903
17640 17278 9865 5268 10317 21167 3749 4274
39706 34161 20769 11974 26388 37642 4890 5229
2.43566e+06 2.44167e+06 2.46514e+06 2.48027e+06 2.45917e+06 2.43307e+06 2.48972e+06 2.48889e+06

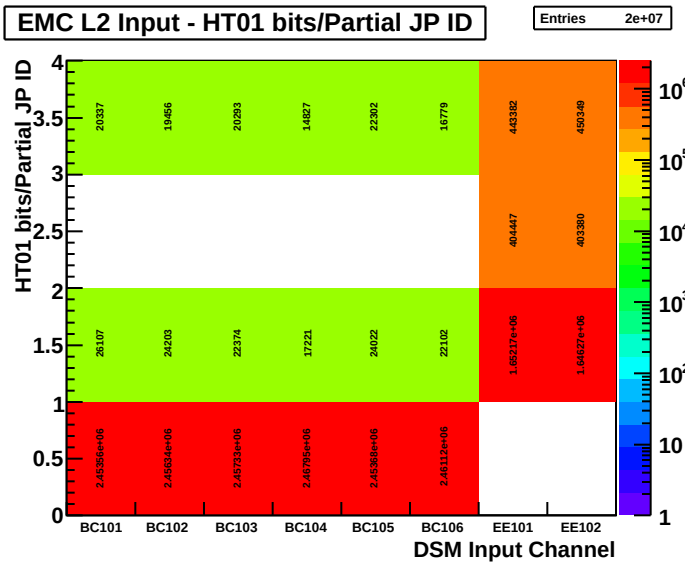

EMC L2 Input - JPY/JPB bits
Entries 4626
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
9 3 2 1 2 1
2546 7 5 6 10 10 1 2
1947 23 6 5 11 20 3 5
1

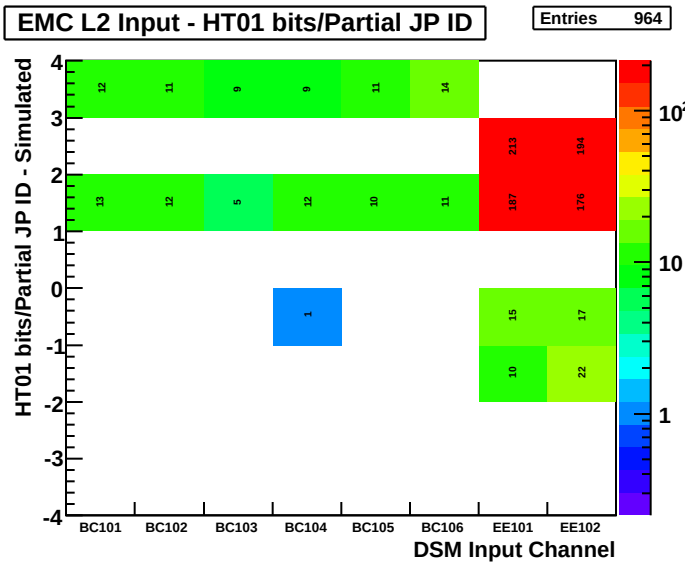

EMC L2 Input - JPZ/JPC bits
Entries 2e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
8871 8225 6071 4202 3185 5010 1934 1454
23669 20815 14122 9449 7106 11685 4438 3725
43181 37651 25860 17176 15980 23824 5676 5355
2.42418e+06 2.43331e+06 2.45395e+06 2.46917e+06 2.47373e+06 2.45948e+06 2.48795e+06 2.48947e+06

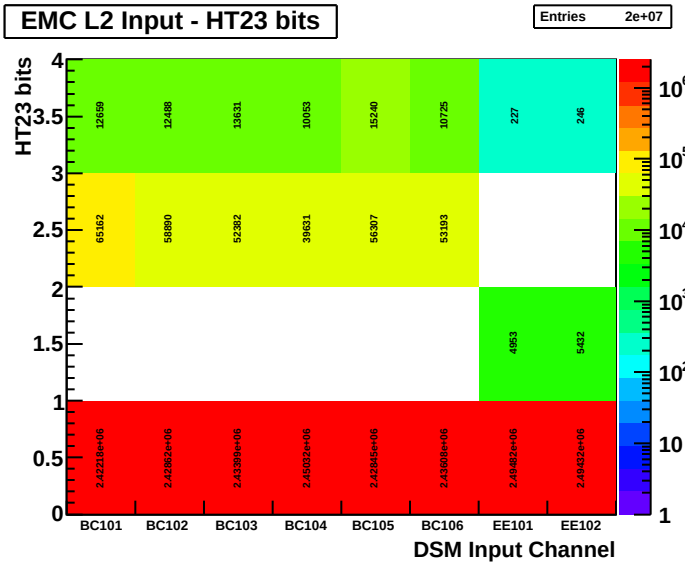

EMC L2 Input - JPZ/JPC bits
Entries 140
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
7 2 4 1 1 2 1
7 6 8 6 5 6 4 5
18 18 8 5 9 10 6 1
1

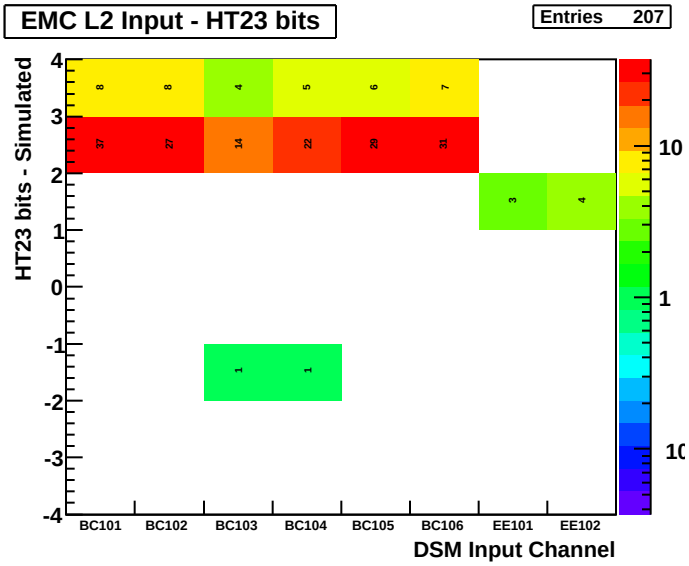

EMC L2 Input - Partial JP Sum
Entries 2e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

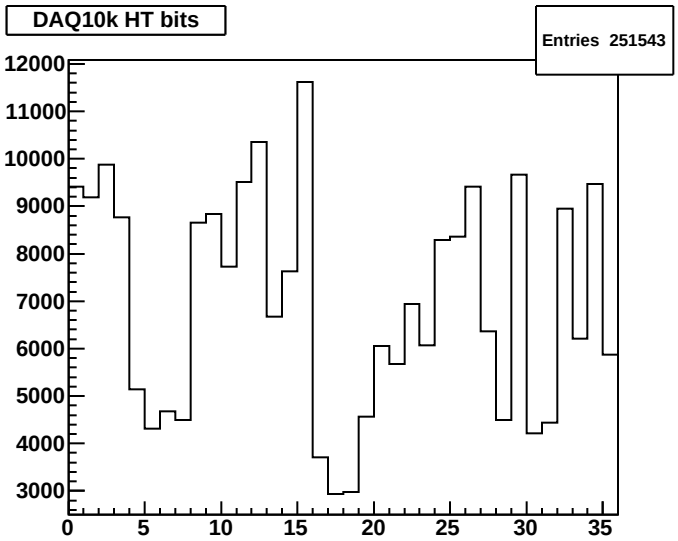

EMC L2 Input - Partial JP Sum
Entries 4304
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

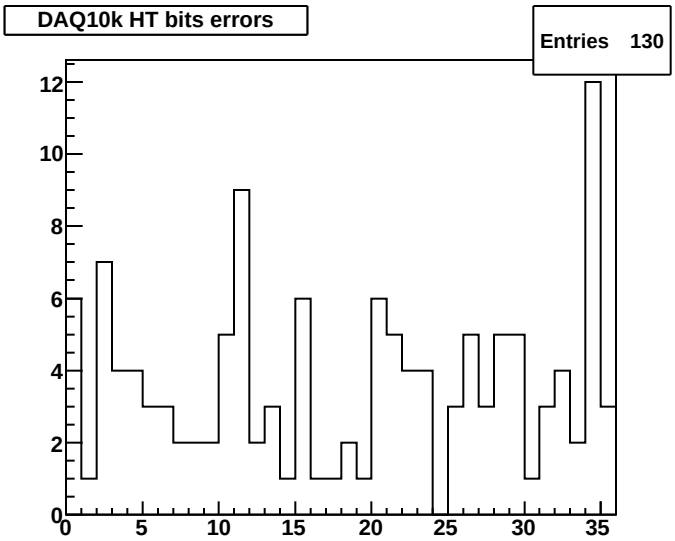

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

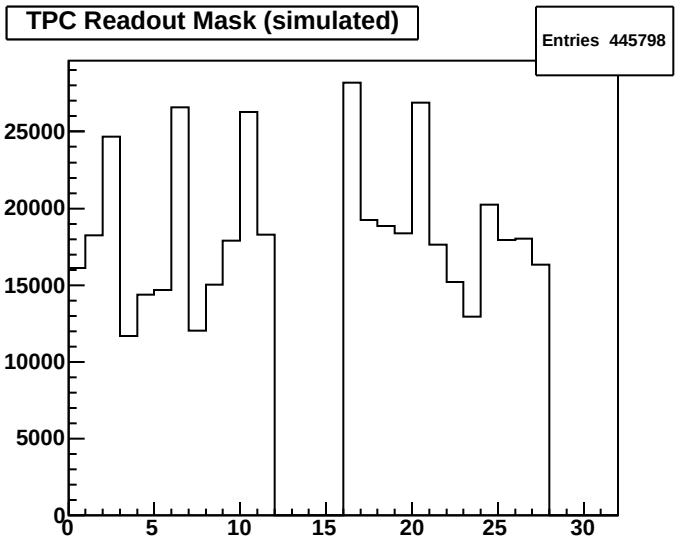

EMC L2 Input - HT01 bits/Partial JP ID
Entries 964
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

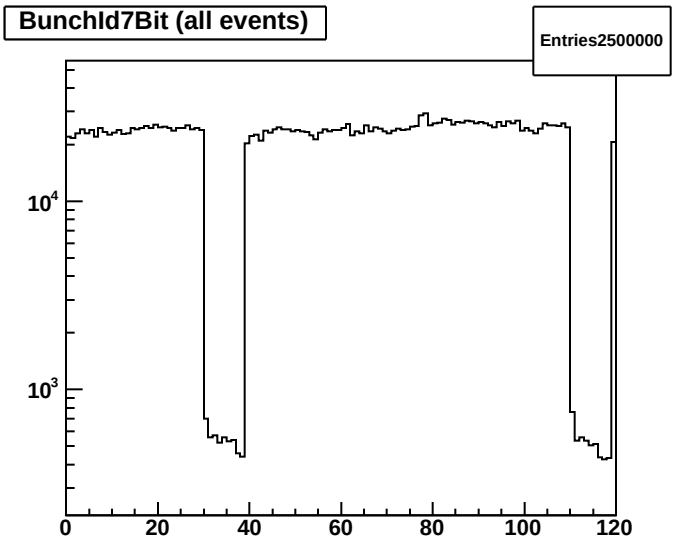

EMC L2 Input - HT23 bits
Entries 2e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

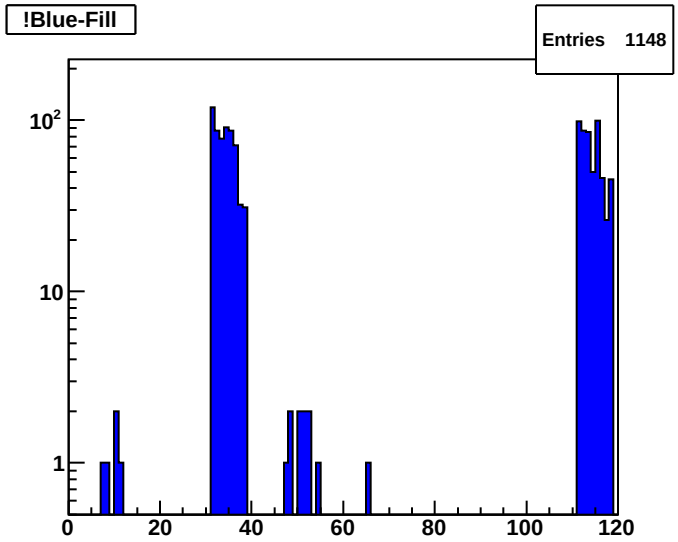

EMC L2 Input - HT23 bits
Entries 207
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

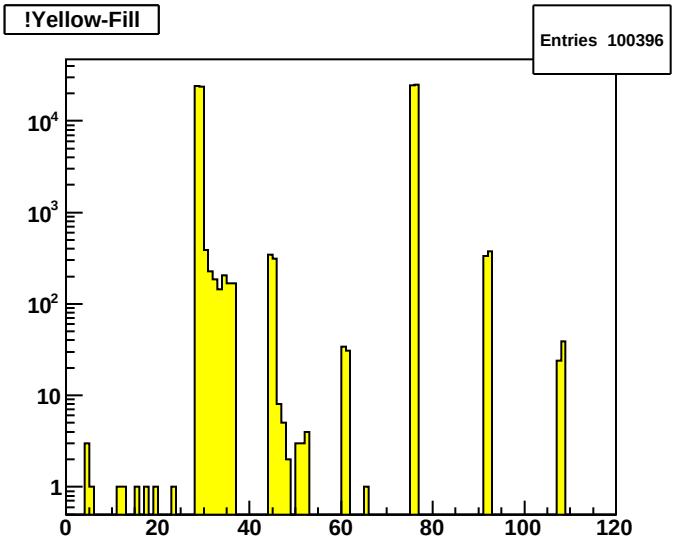

DAQ10k HT bits
Entries 251543

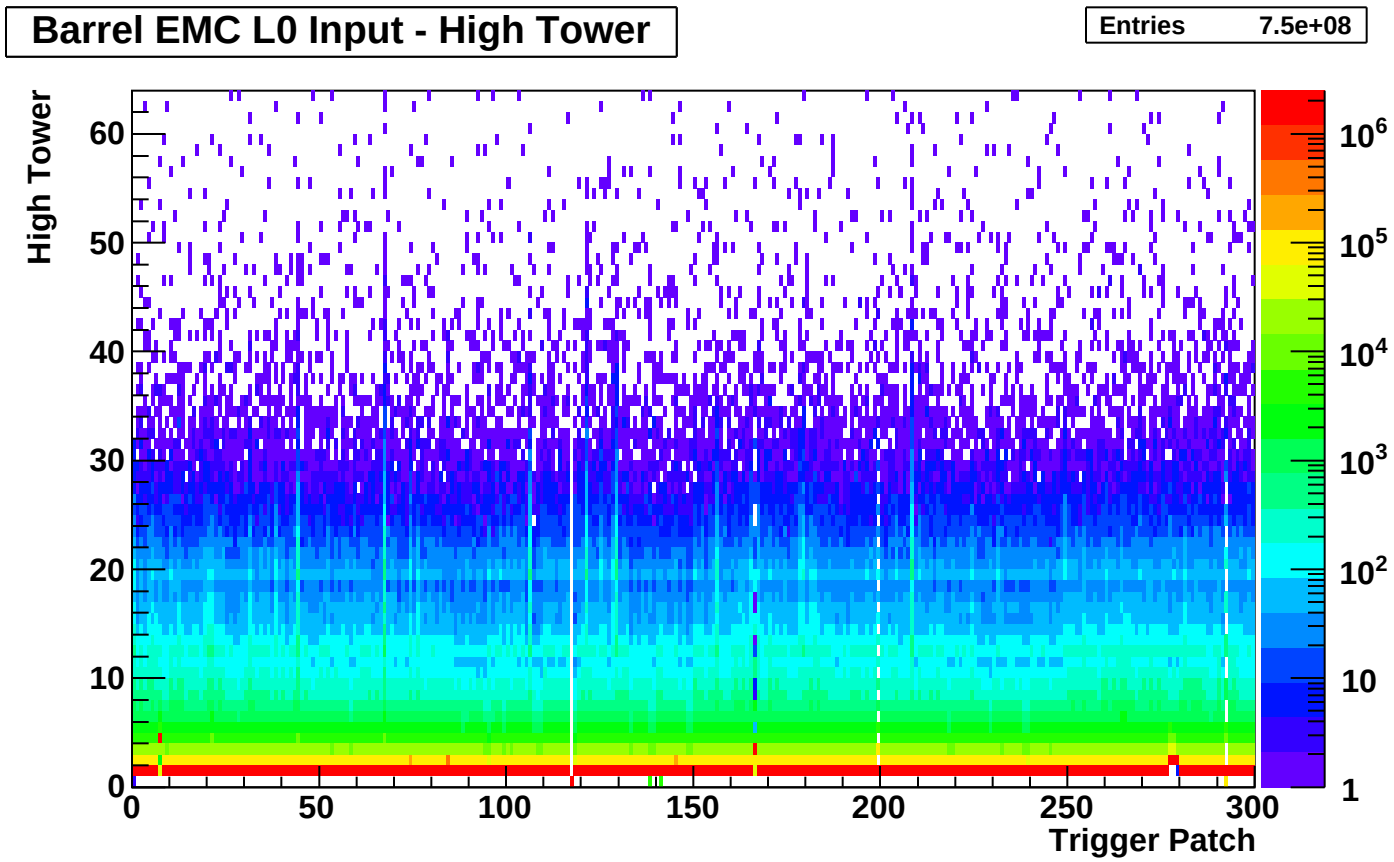

DAQ10k HT bits errors
Entries 130

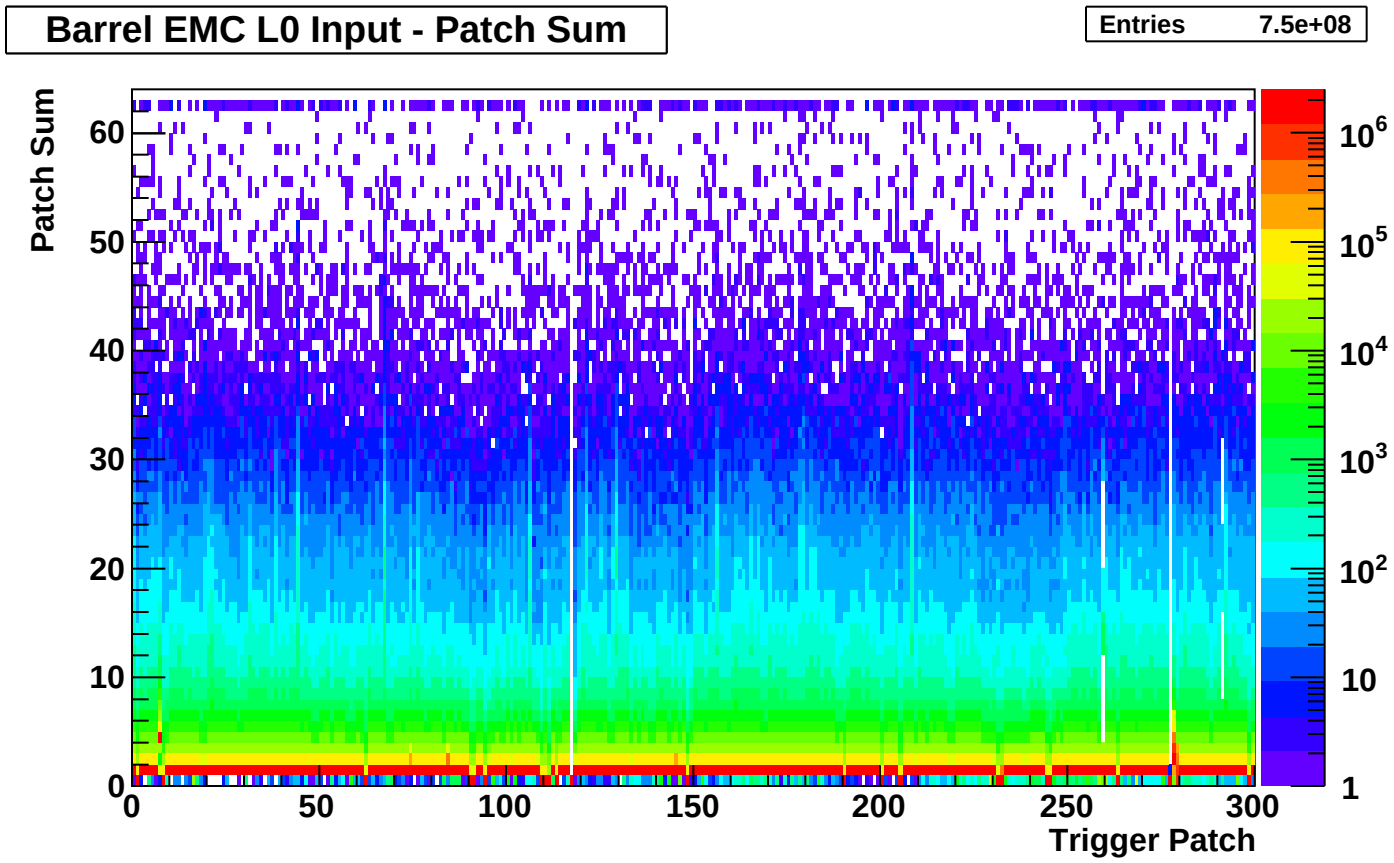

TPC Readout Mask (simulated)
Entries 445798

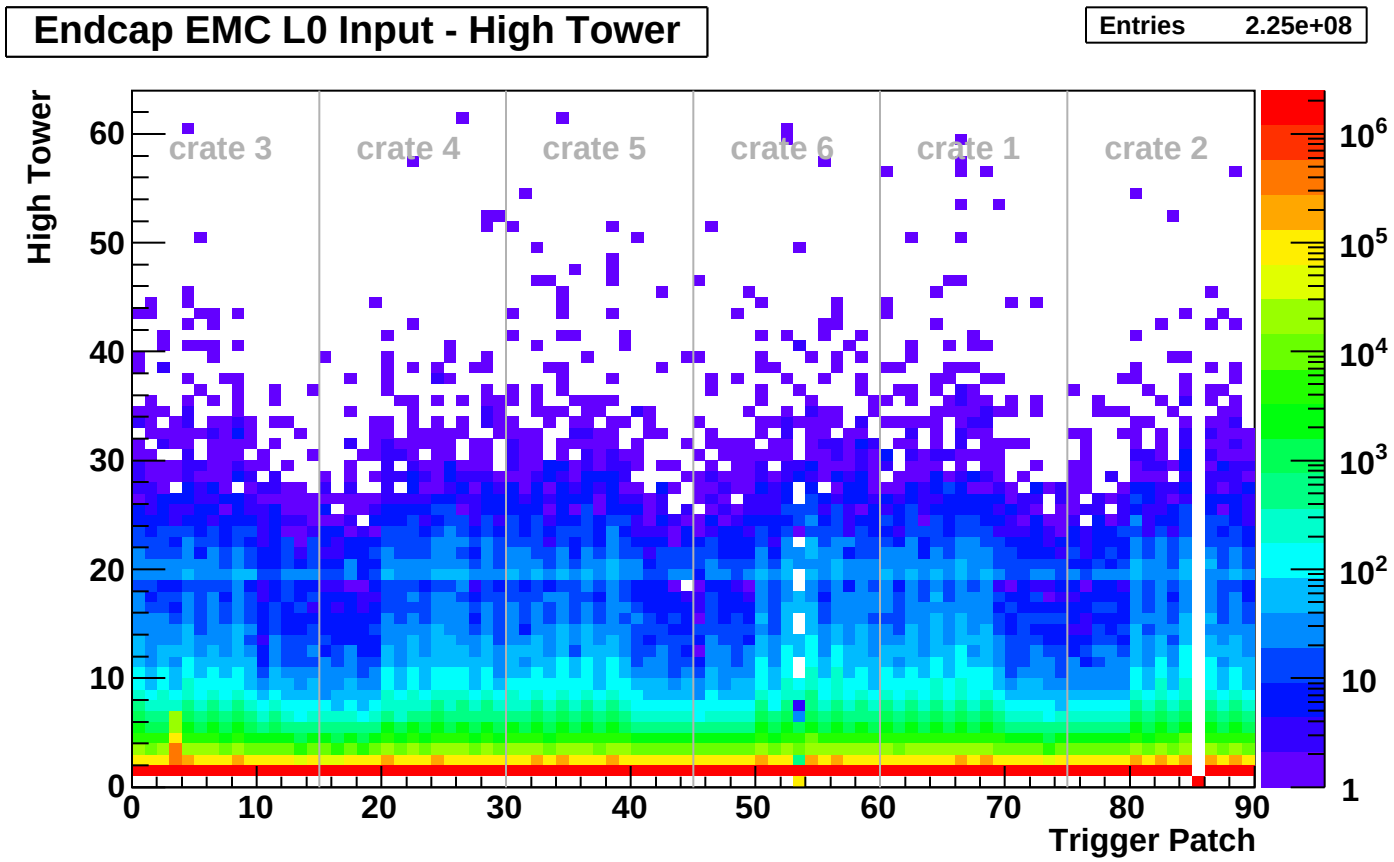

BunchId7Bit (all events)
Entries2500000

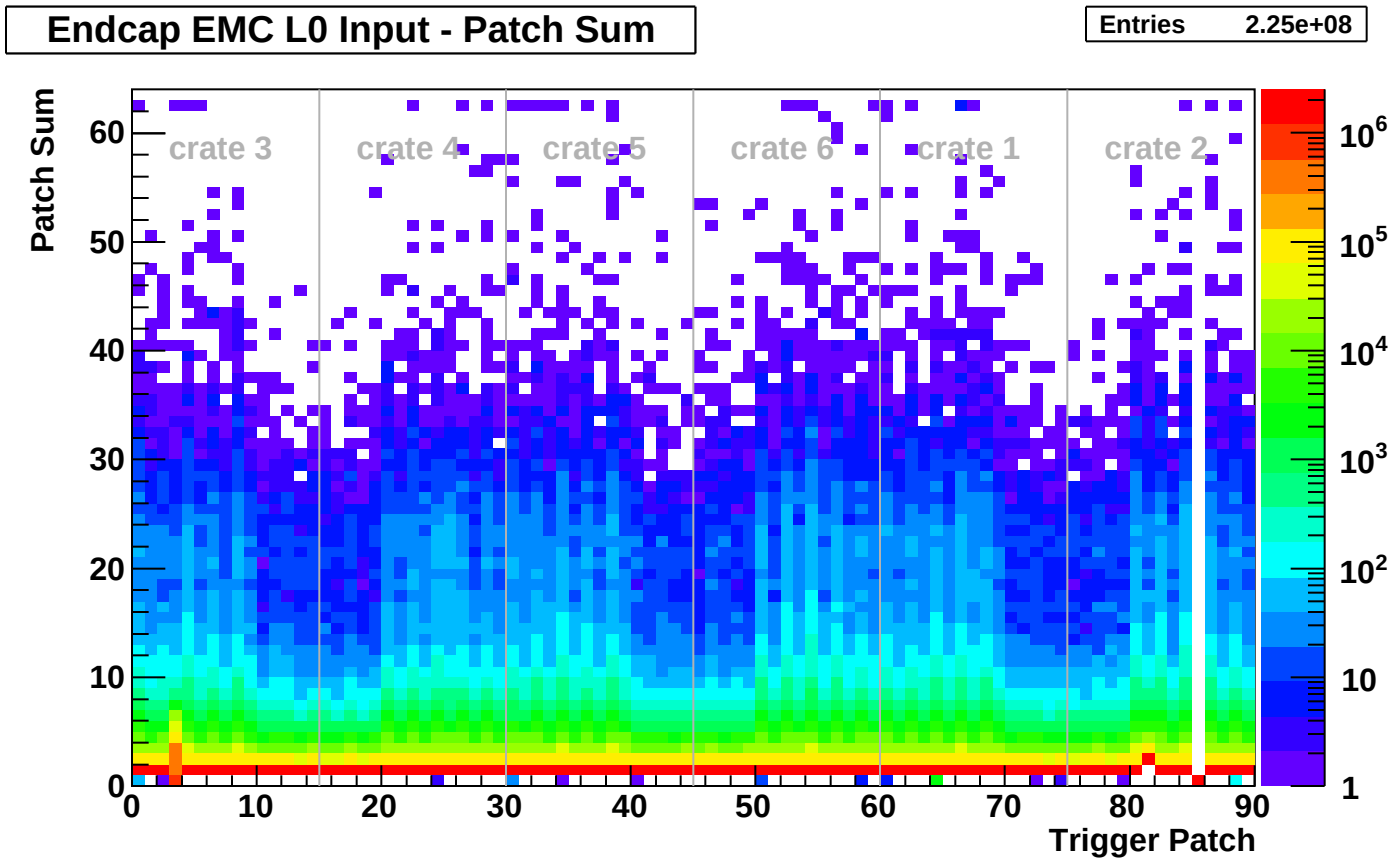

!Blue-Fill
Entries 1148

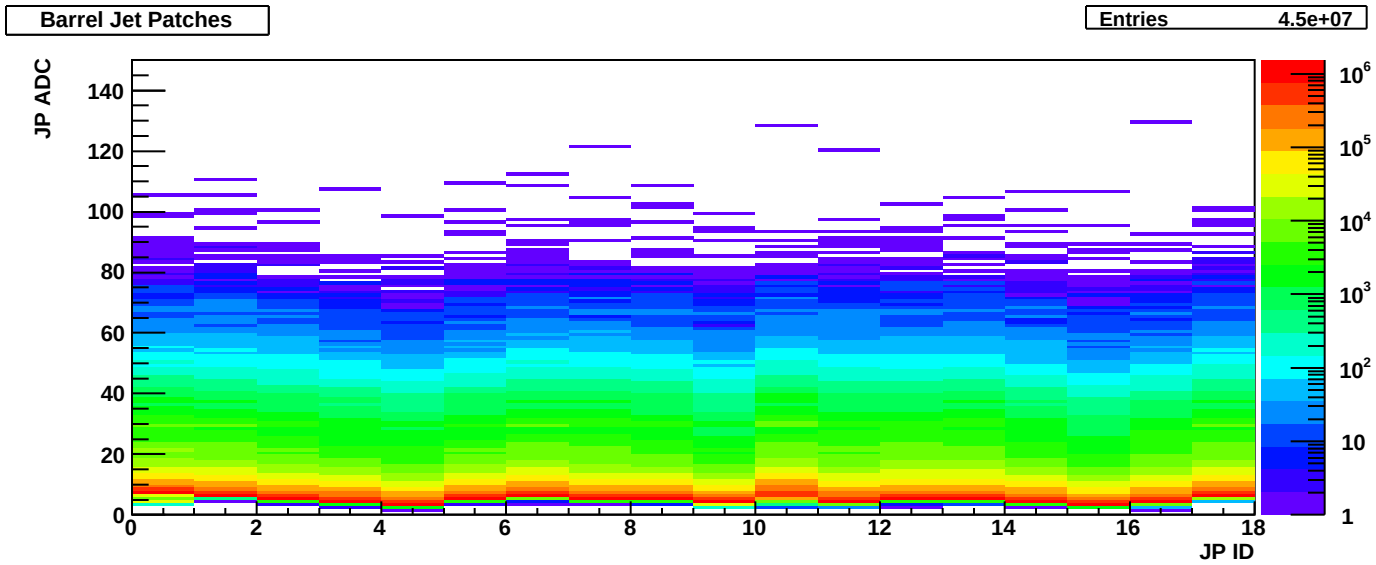

!Yellow-Fill
Entries 100396

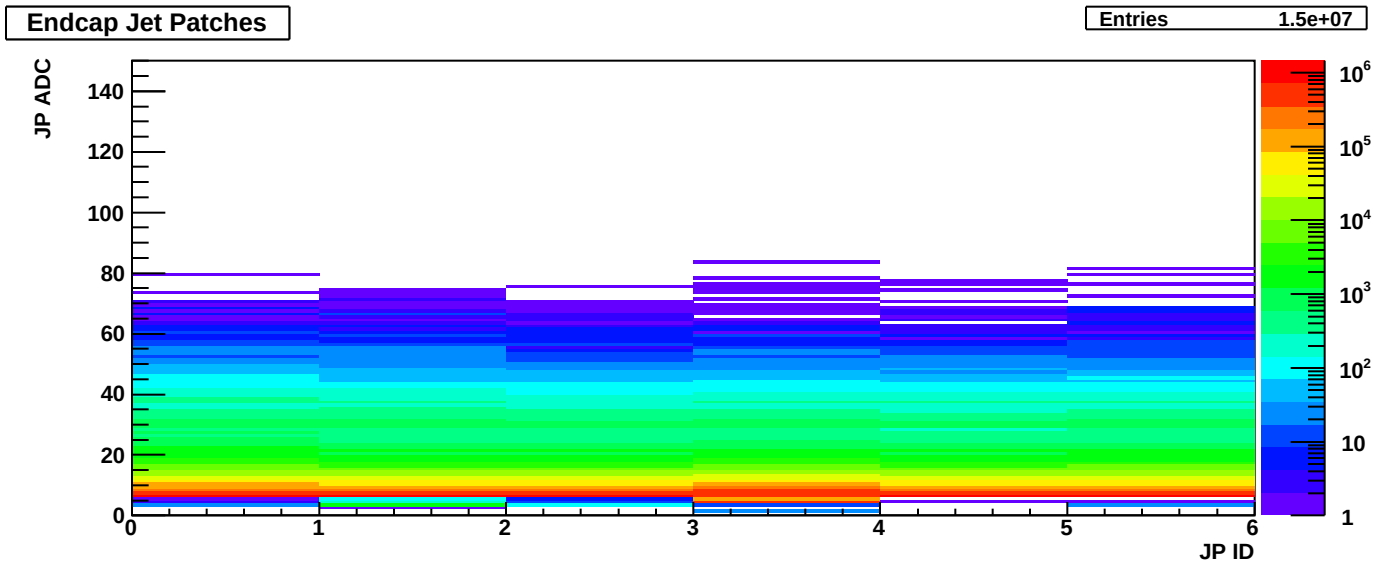

Barrel EMC L0 Input - High Tower
Entries 7.5e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

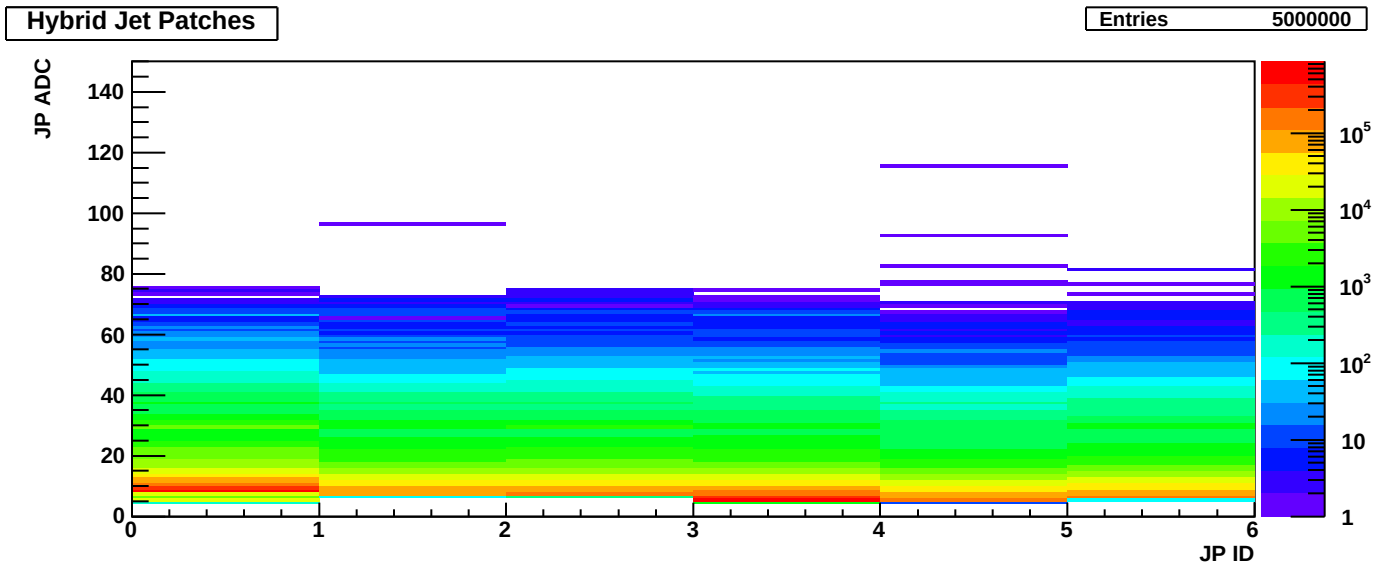

Barrel EMC L0 Input - Patch Sum
Entries 7.5e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

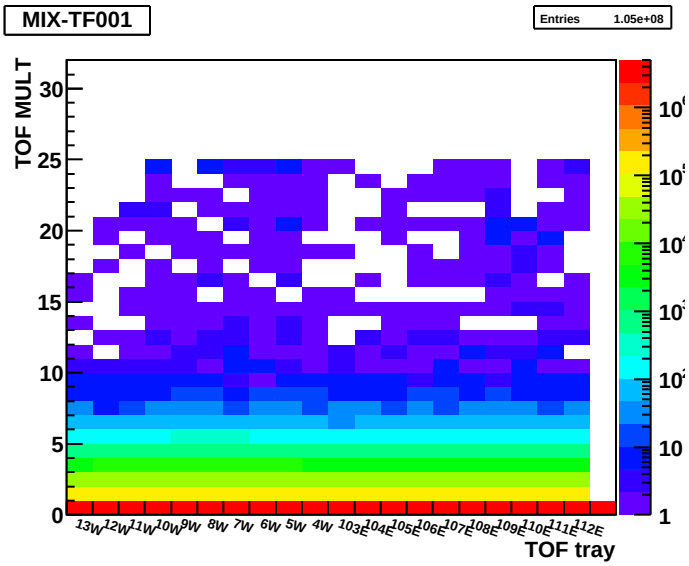

Endcap EMC L0 Input - High Tower
Entries 2.25e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

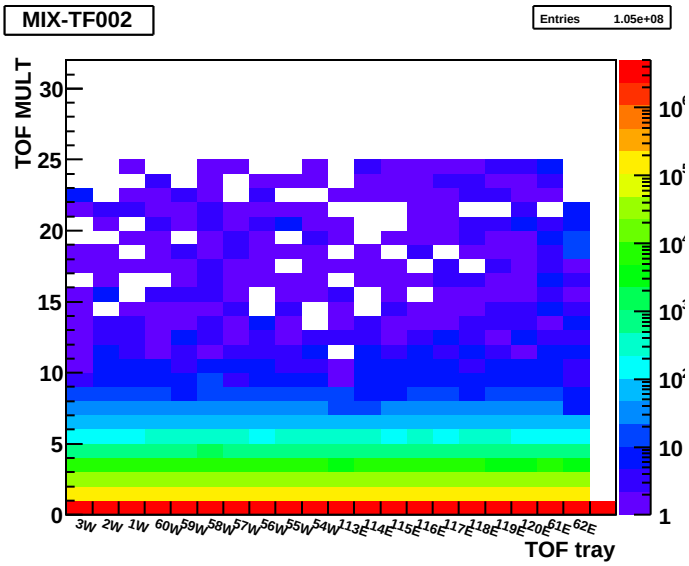

Endcap EMC L0 Input - Patch Sum
Entries 2.25e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

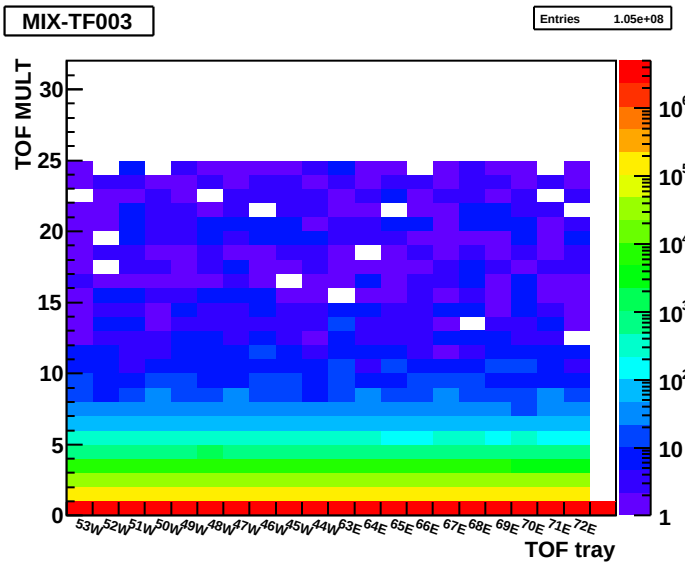

Barrel Jet Patches
Entries 4.5e+07
JP ADC
JP ID

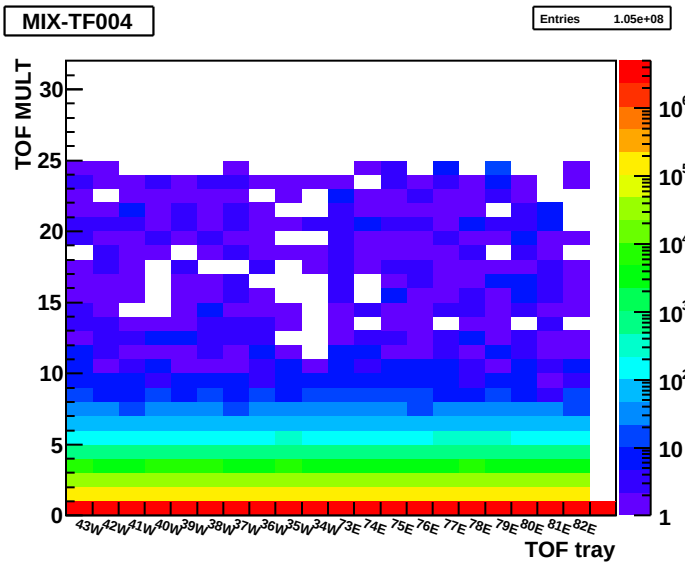

Endcap Jet Patches
Entries 1.5e+07
JP ADC
JP ID

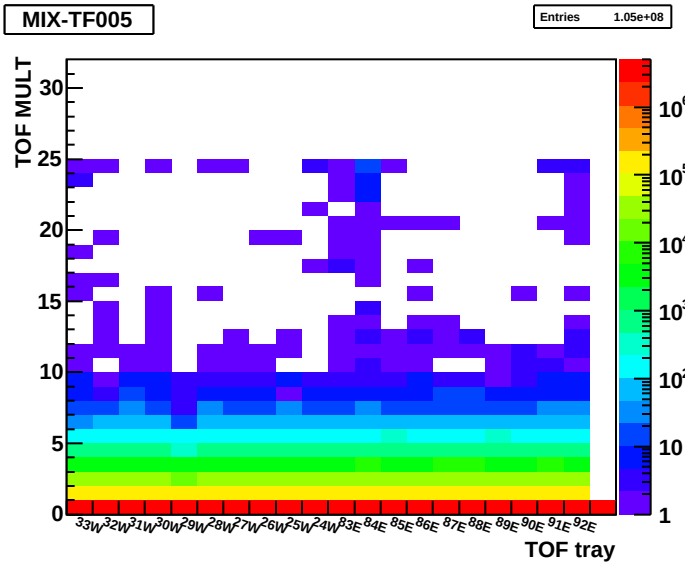

Hybrid Jet Patches
Entries 5000000
JP ADC
JP ID

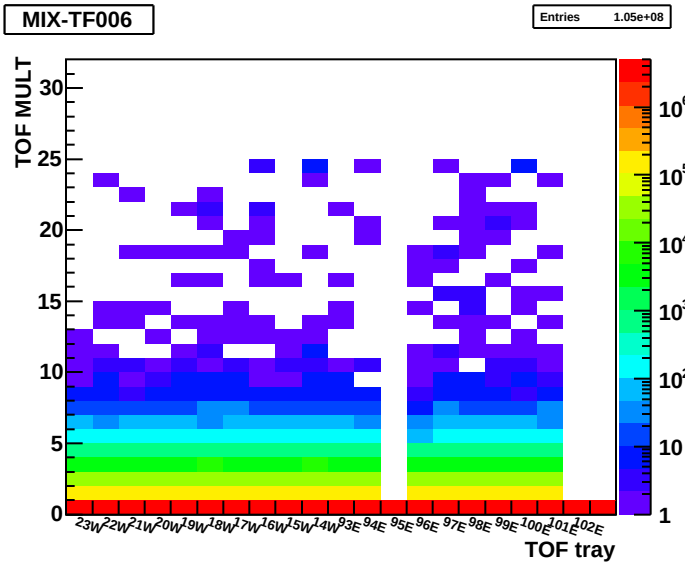

MIX-TF001
Entries 1.05e+08
TOF MULT
TOF tray

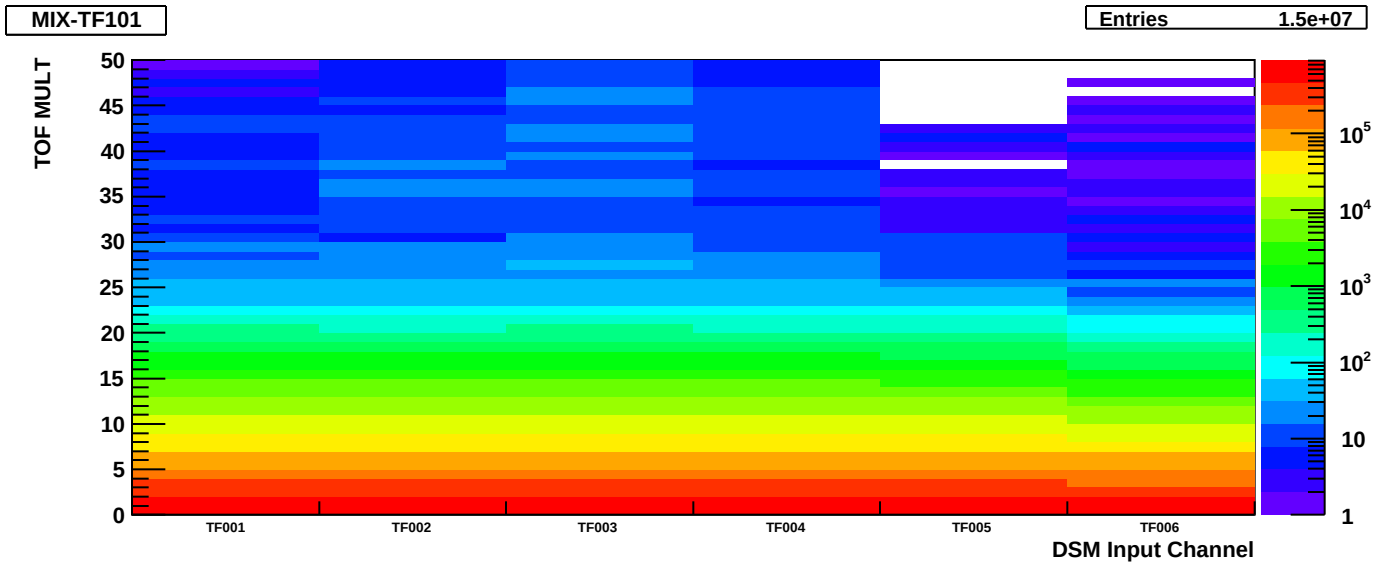

MIX-TF002
Entries 1.05e+08
TOF MULT
TOF tray

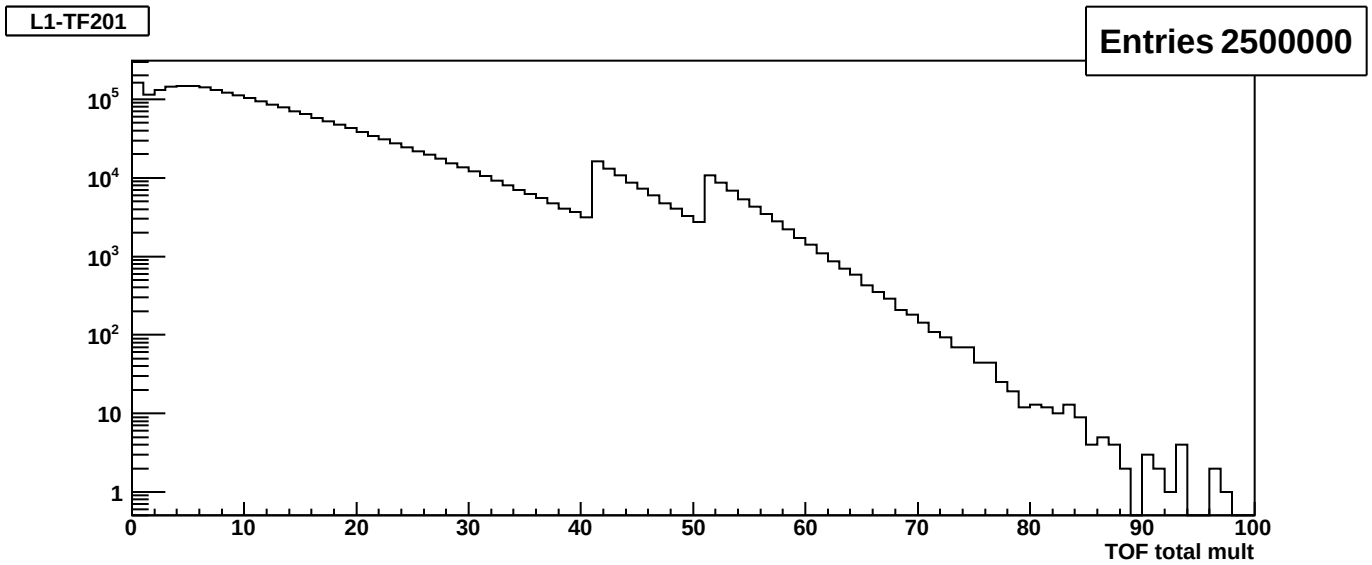

MIX-TF003
Entries 1.05e+08
TOF MULT
TOF tray

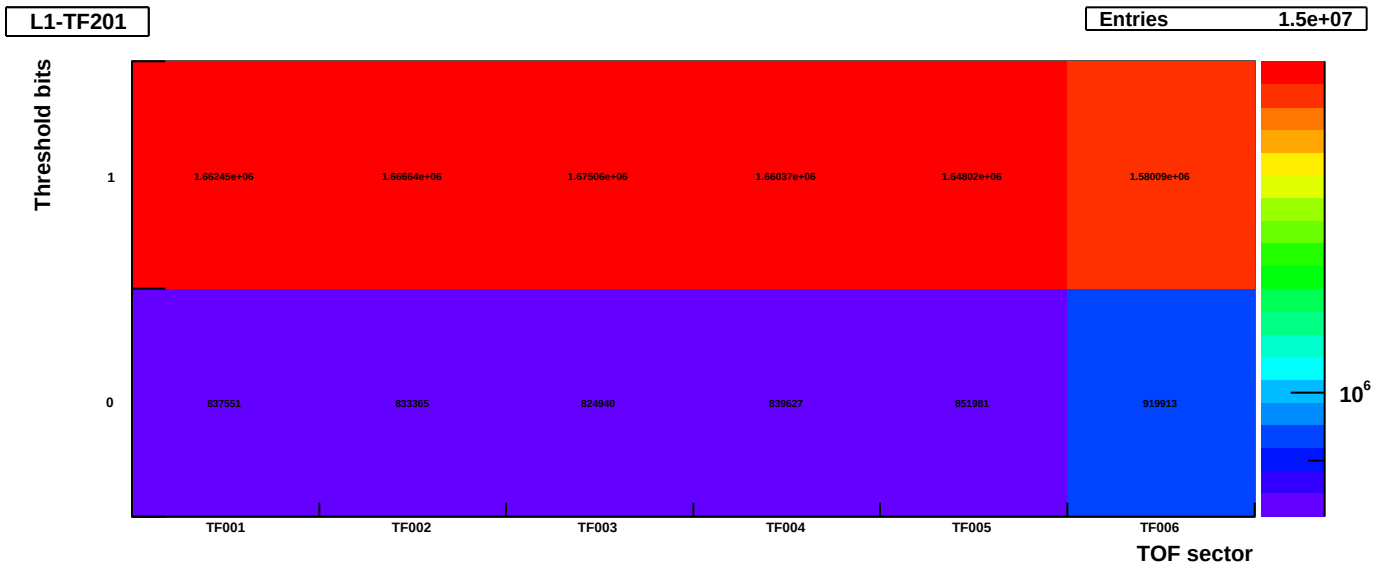

MIX-TF004
Entries 1.05e+08
TOF MULT
TOF tray

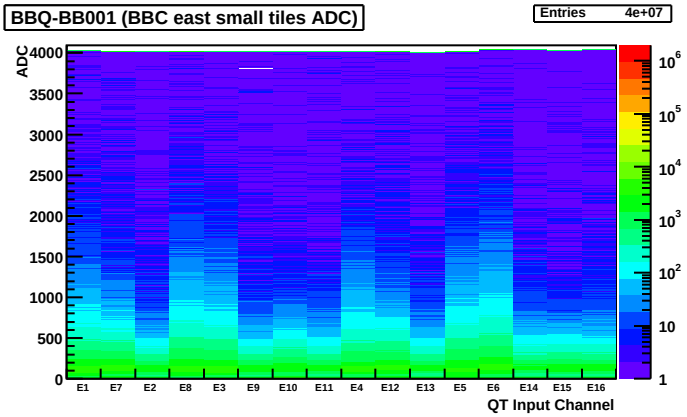

MIX-TF005
Entries 1.05e+08
TOF MULT
TOF tray

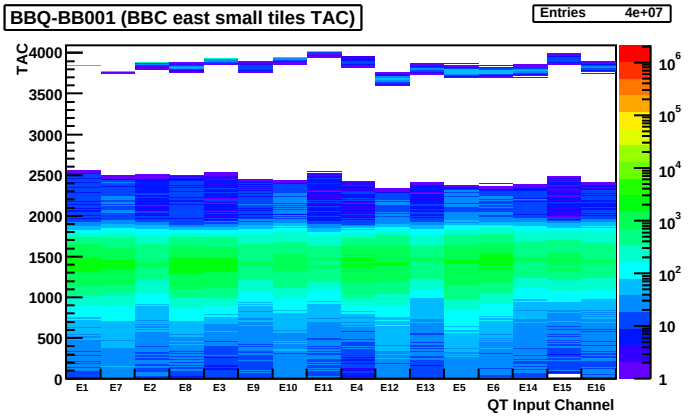

MIX-TF006
Entries 1.05e+08
TOF MULT
TOF tray

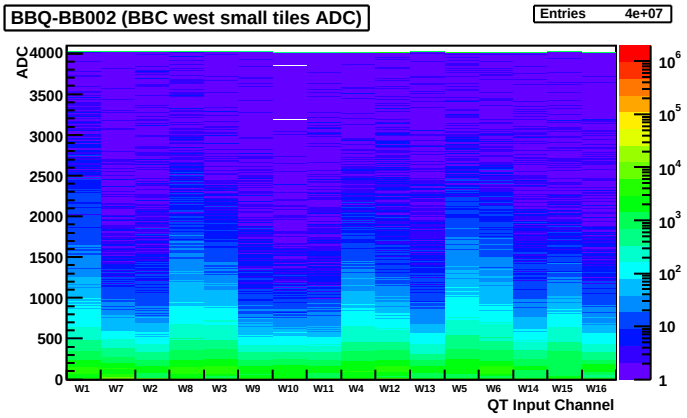

MIX-TF101
Entries 1.5e+07
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

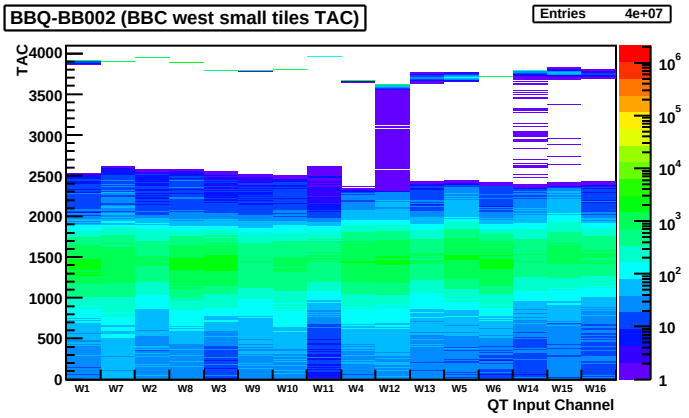

L1-TF201
Entries 2500000
10^5
10^4
10^3
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
TOF total mult

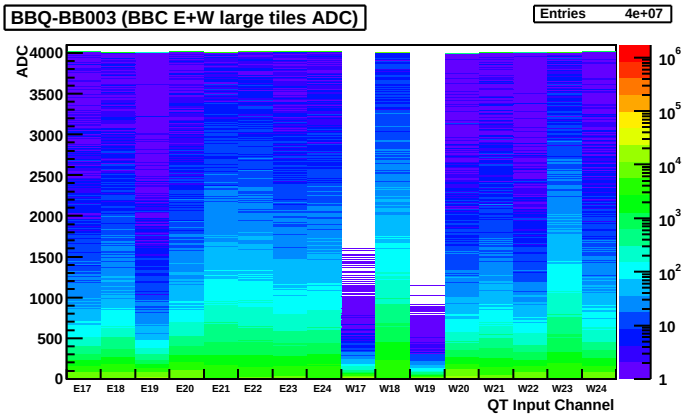

L1-TF201
Entries 1.5e+07
Threshold bits
1
0
1.66245e+06
1.66664e+06
1.67506e+06
1.66037e+06
1.64802e+06
1.58009e+06
837551
833365
824940
839627
851981
919913
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^6

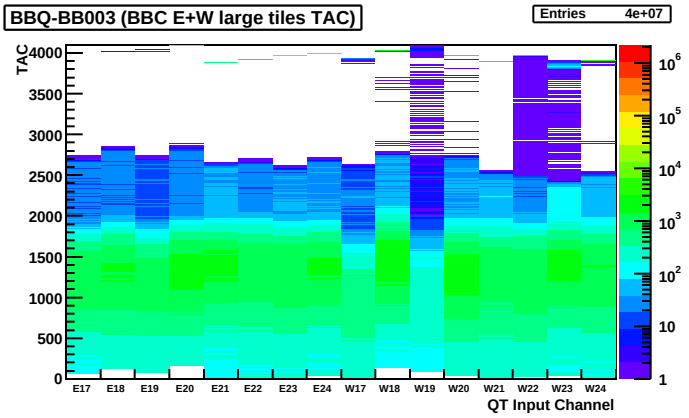

BBQ-BB001 (BBC east small tiles ADC)
Entries 4e+07
ADC
QT Input Channel

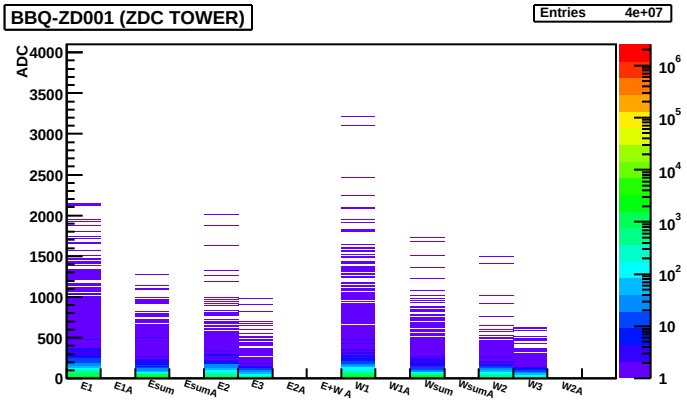

BBQ-BB001 (BBC east small tiles TAC)
Entries 4e+07
TAC
QT Input Channel

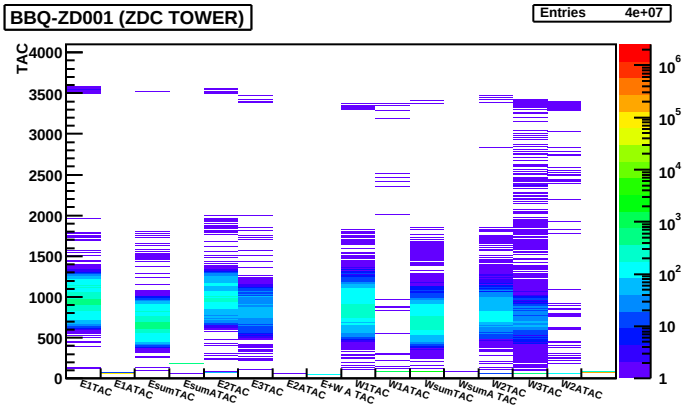

BBQ-BB002 (BBC west small tiles ADC)
Entries 4e+07
ADC
QT Input Channel

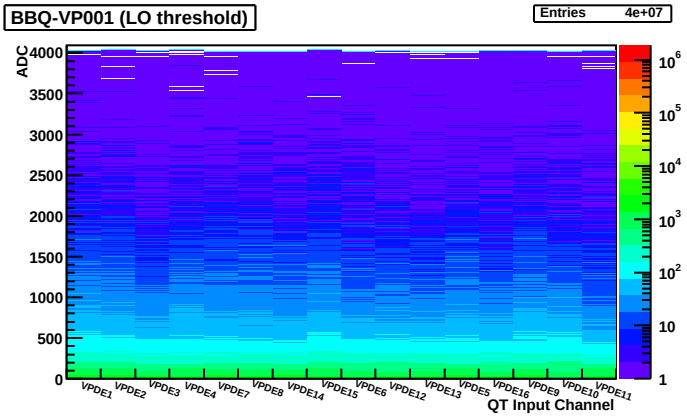

BBQ-BB002 (BBC west small tiles TAC)
Entries 4e+07
TAC
QT Input Channel

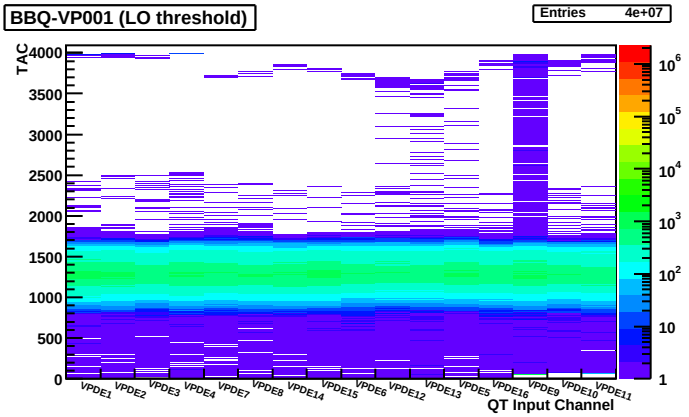

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4e+07
ADC
QT Input Channel

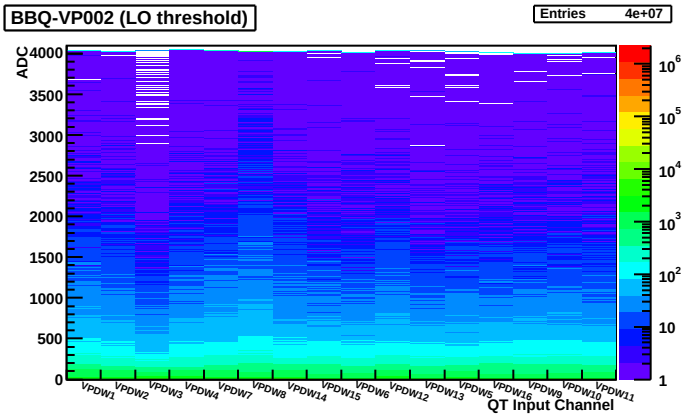

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4e+07
TAC
QT Input Channel

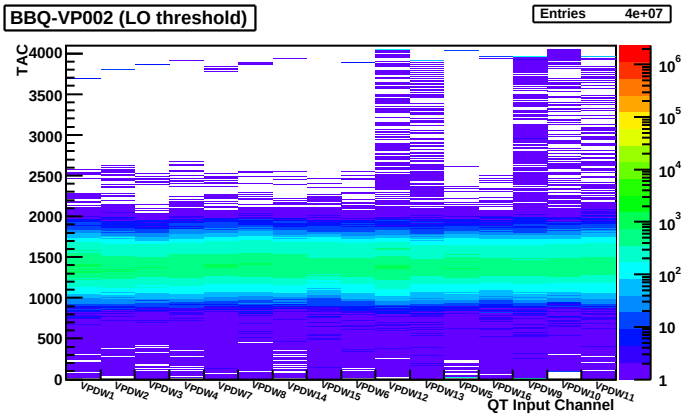

BBQ-ZD001 (ZDC TOWER)
Entries 4e+07
ADC

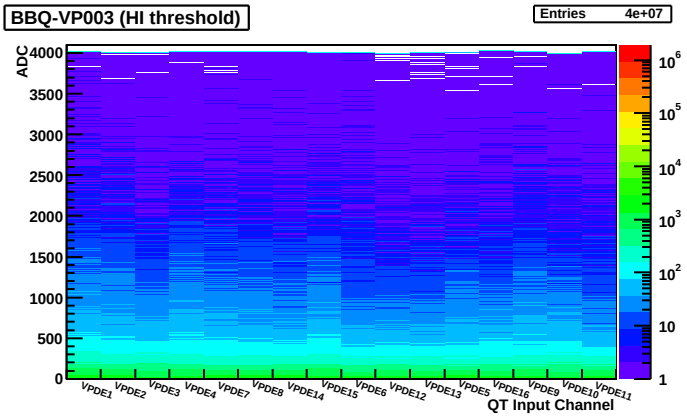

BBQ-ZD001 (ZDC TOWER)
Entries 4e+07
TAC

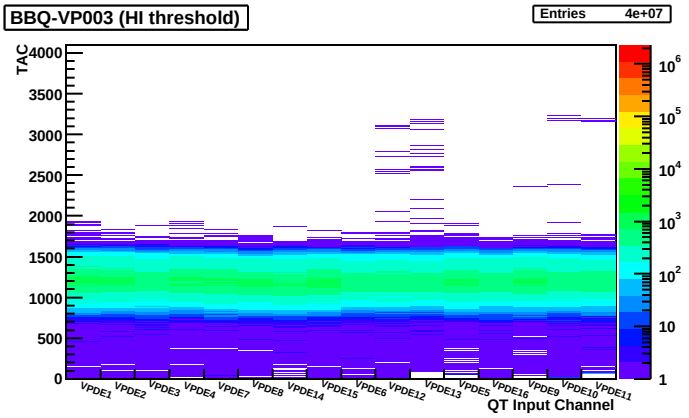

BBQ-VP001 (LO threshold)
Entries 4e+07
ADC
QT Input Channel

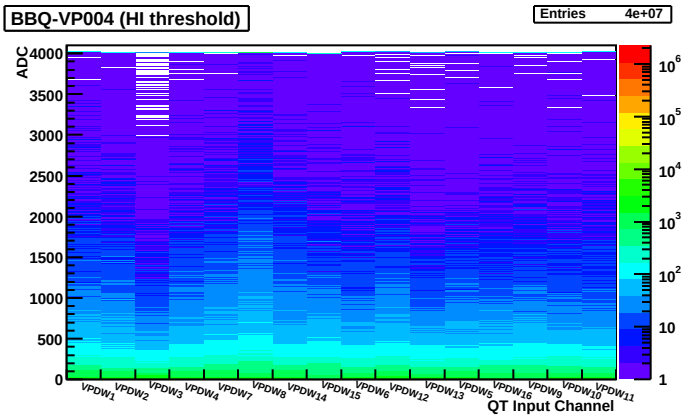

BBQ-VP001 (LO threshold)
Entries 4e+07
TAC
QT Input Channel

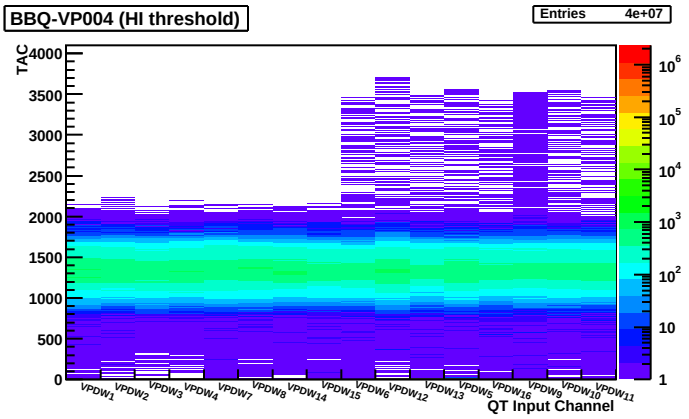

BBQ-VP002 (LO threshold)
Entries 4e+07
ADC
QT Input Channel

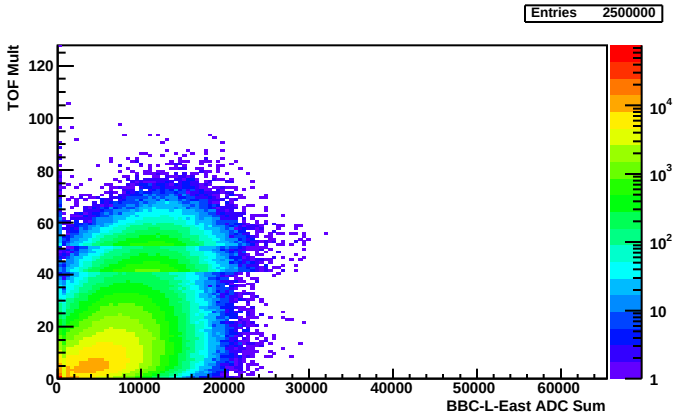

BBQ-VP002 (LO threshold)
Entries 4e+07
TAC
QT Input Channel

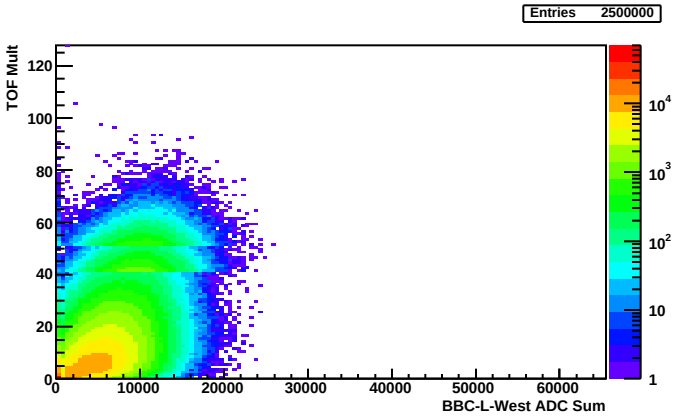

BBQ-VP003 (HI threshold)
Entries 4e+07
ADC
QT Input Channel

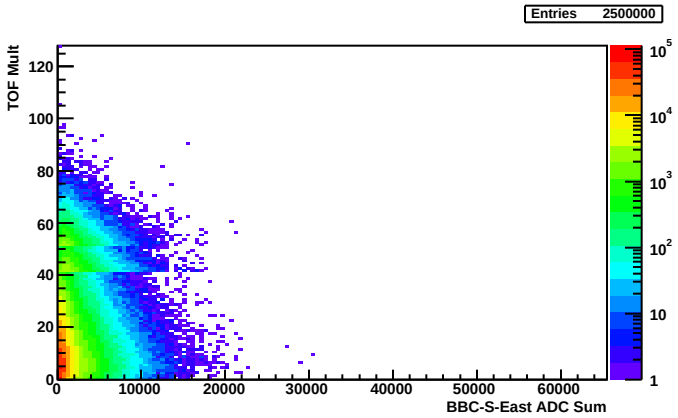

BBQ-VP003 (HI threshold)
Entries 4e+07
TAC
QT Input Channel

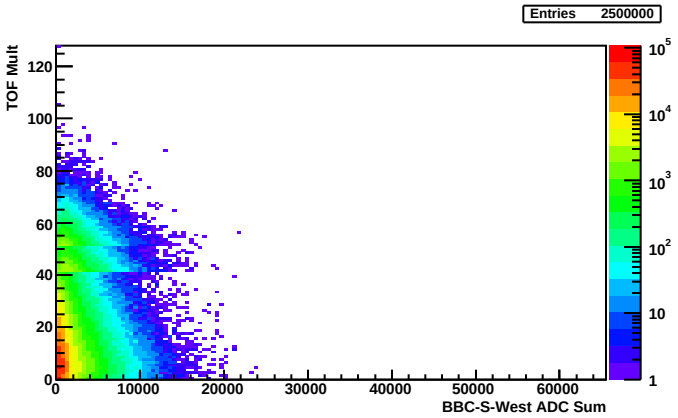

BBQ-VP004 (HI threshold)
Entries 4e+07
ADC
QT Input Channel

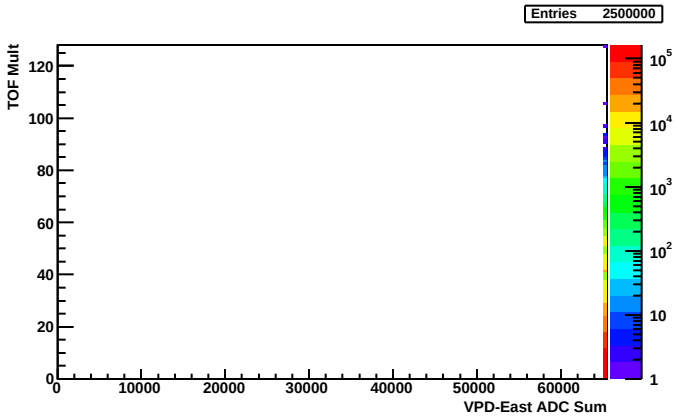

BBQ-VP004 (HI threshold)
Entries 4e+07
TAC
QT Input Channel

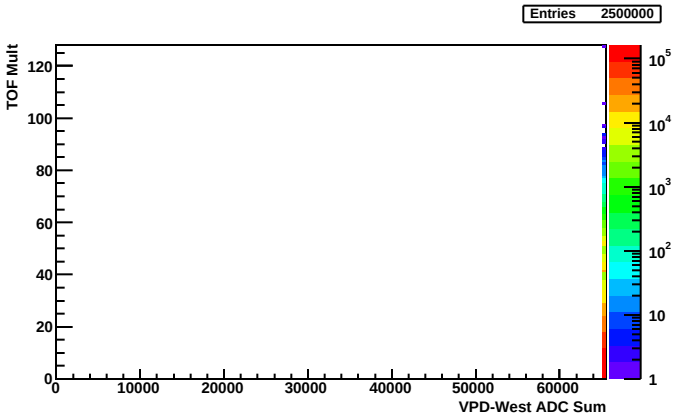

Entries 2500000
TOF Mult
BBC-L-East ADC Sum

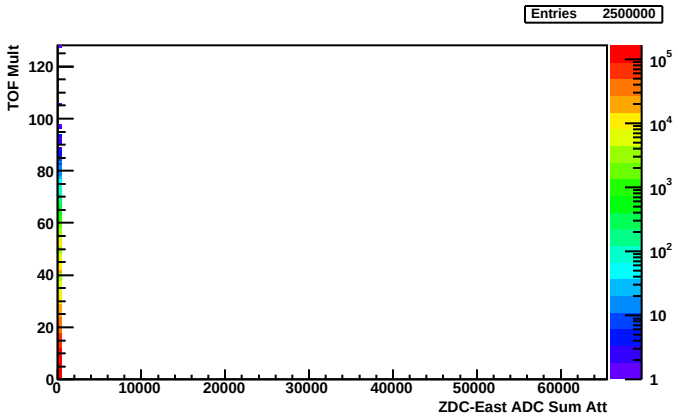

Entries 2500000
TOF Mult
BBC-L-West ADC Sum

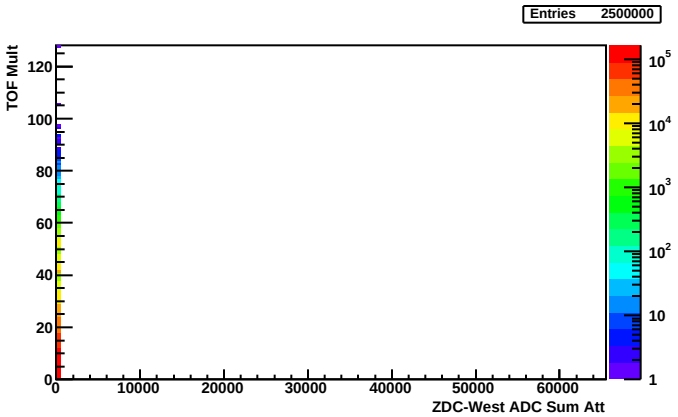

Entries 2500000
TOF Mult
BBC-S-East ADC Sum

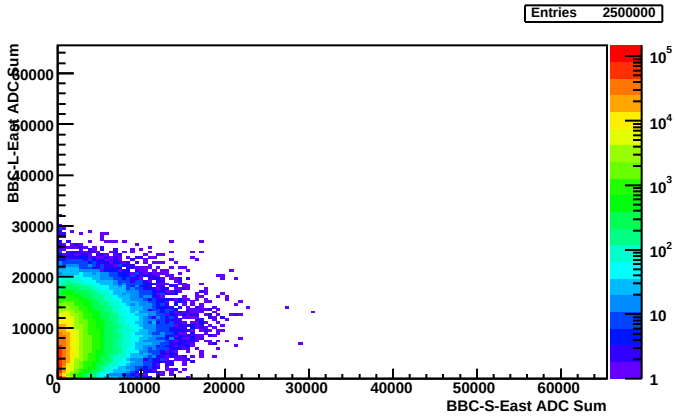

Entries 2500000
TOF Mult
BBC-S-West ADC Sum

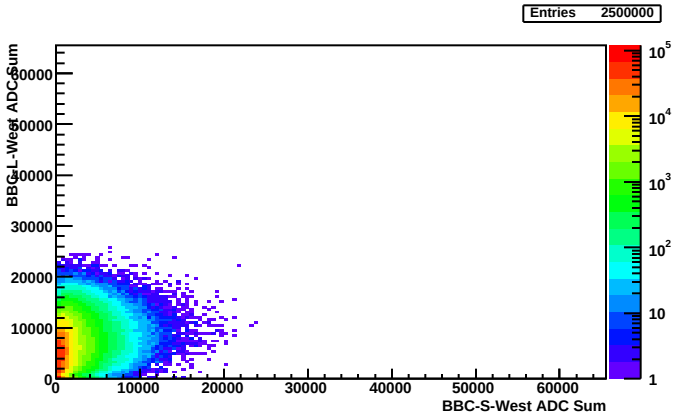

Entries 2500000
TOF Mult
VPD-East ADC Sum

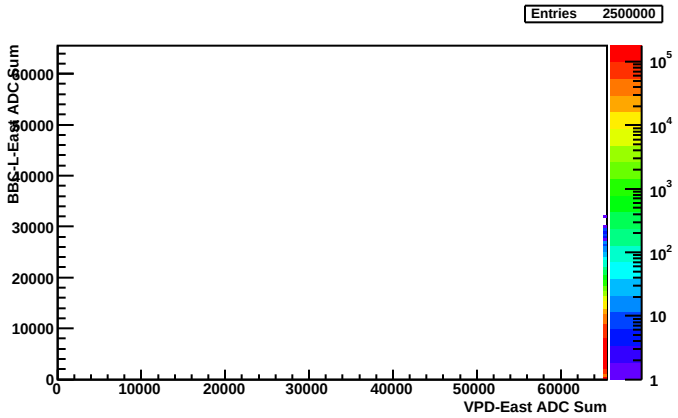

Entries 2500000
TOF Mult
VPD-West ADC Sum

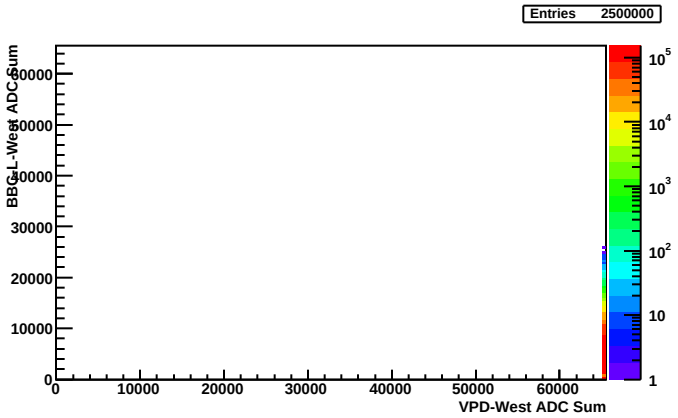

Entries 2500000
TOF Mult
ZDC-East ADC Sum Att

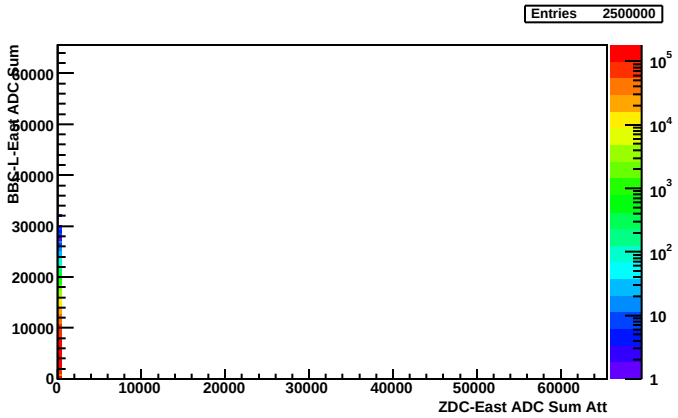

Entries 2500000
TOF Mult
ZDC-West ADC Sum Att

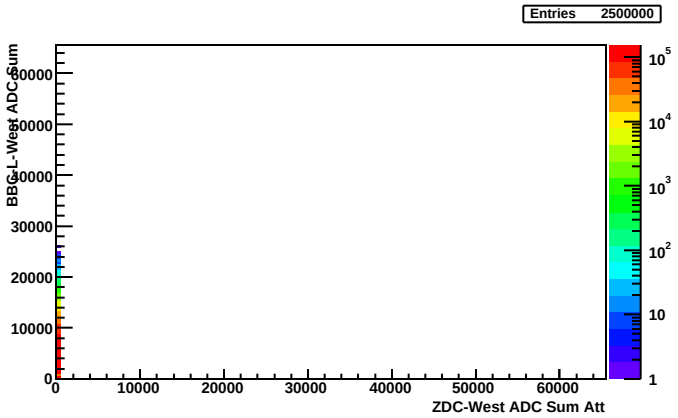

Entries 2500000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

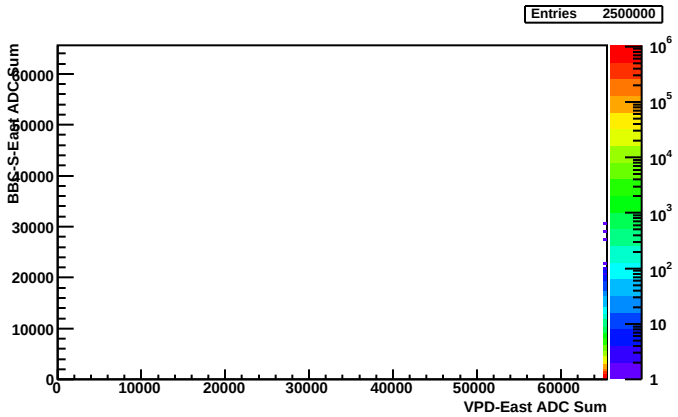

Entries 2500000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

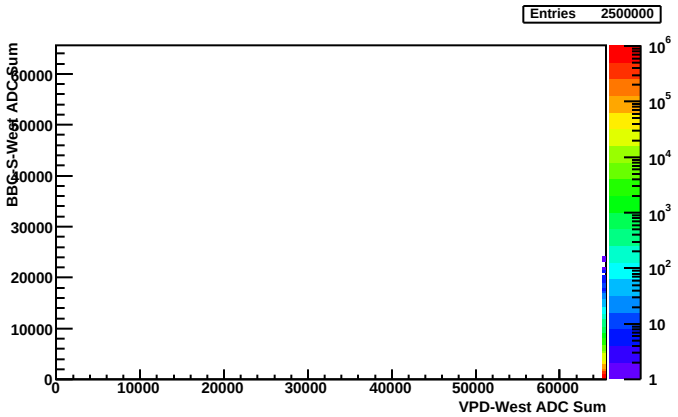

Entries 2500000
BBC-L-East ADC Sum
VPD-East ADC Sum

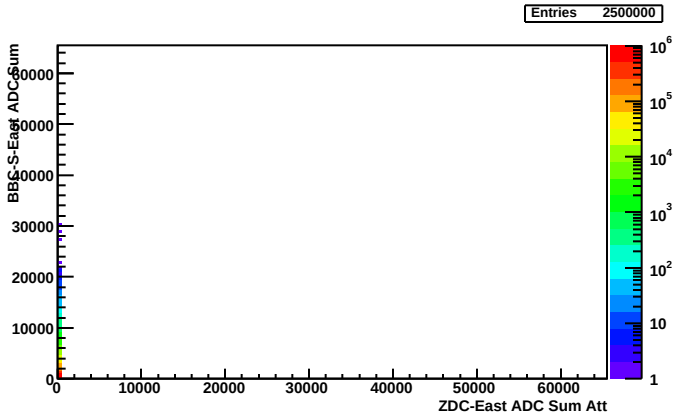

Entries 2500000
BBC-L-West ADC Sum
VPD-West ADC Sum

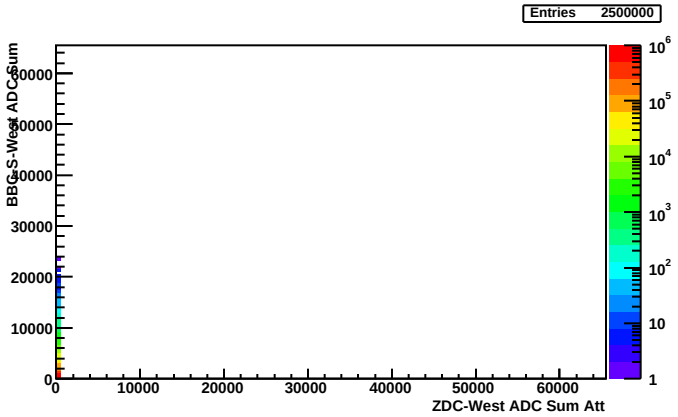

Entries 2500000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

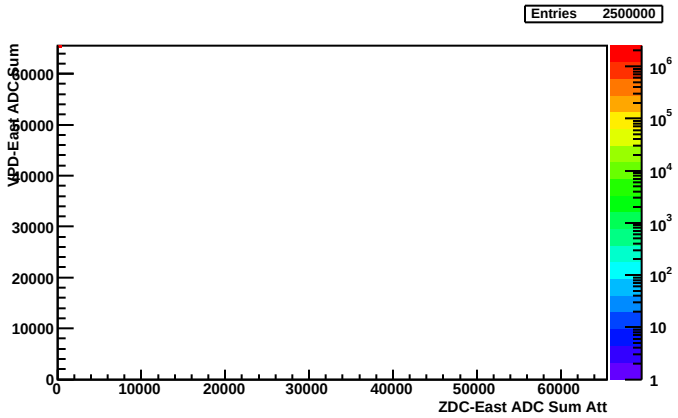

Entries 2500000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

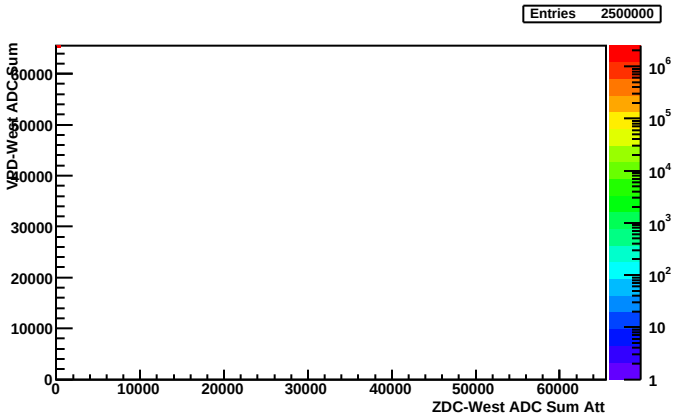

Entries 2500000
BBC-S-East ADC Sum
VPD-East ADC Sum

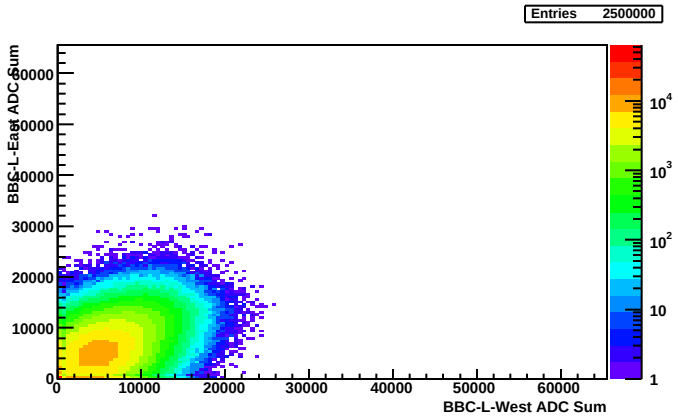

Entries 2500000
BBC-S-West ADC Sum
VPD-West ADC Sum

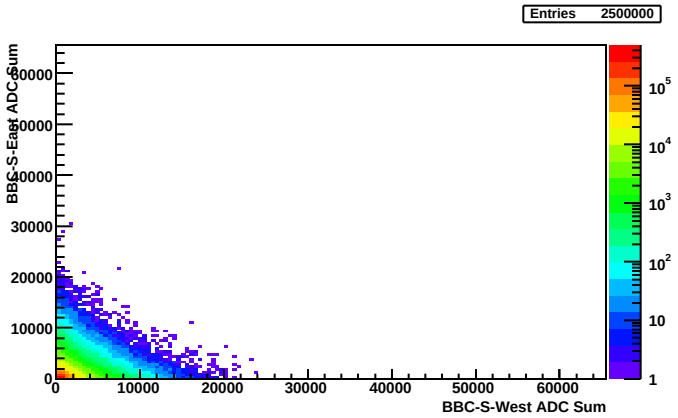

Entries 2500000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

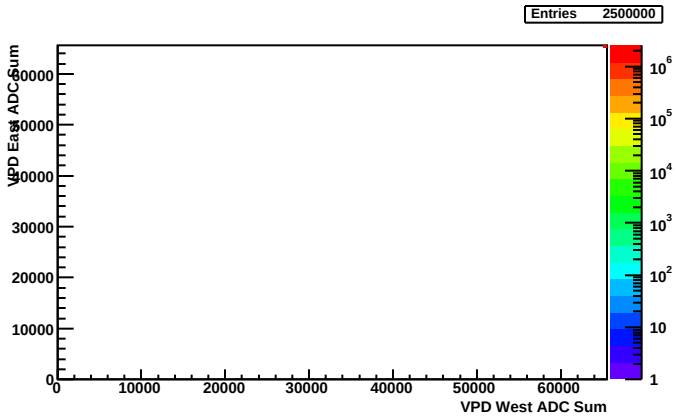

Entries 2500000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

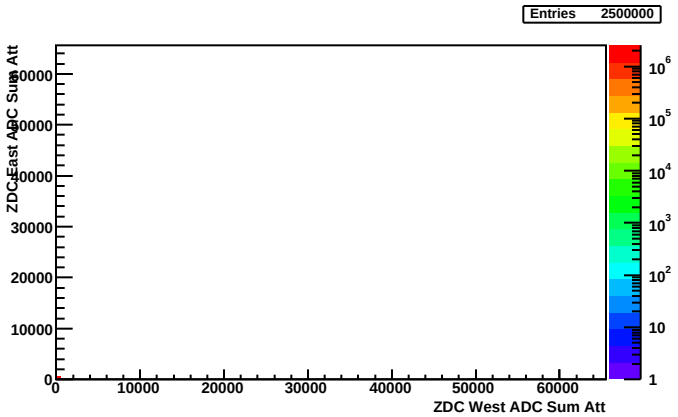

Entries 2500000
VPD-East ADC Sum
ZDC-East ADC Sum Att

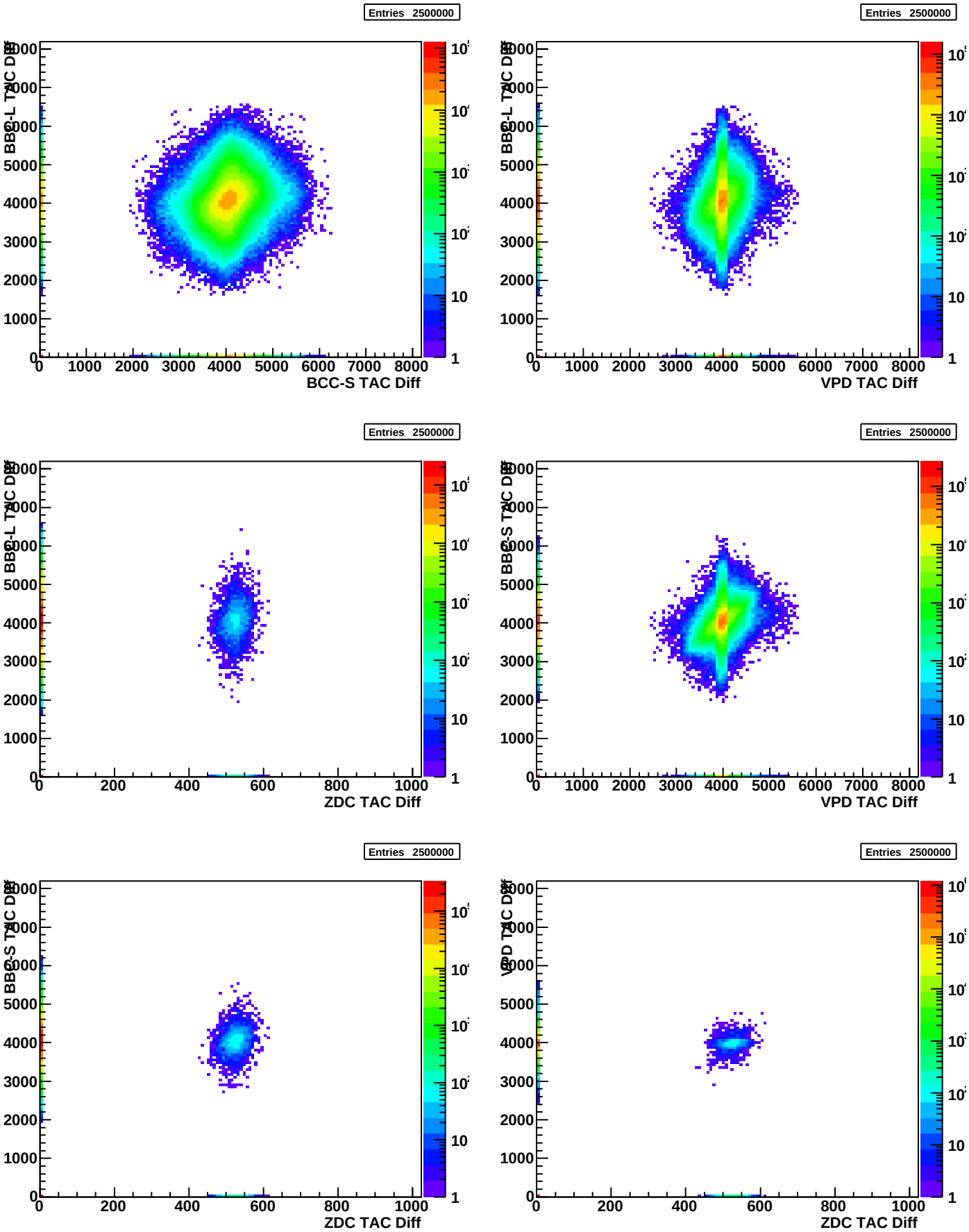

Entries 2500000
VPD-West ADC Sum
ZDC-West ADC Sum Att

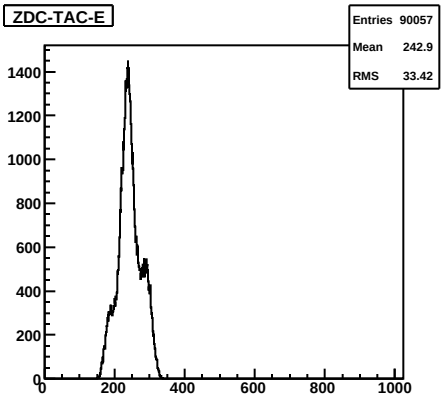

Entries 2500000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

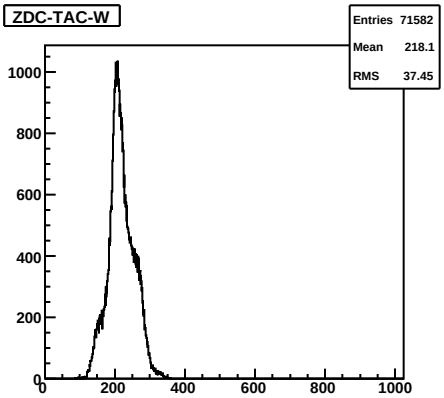

Entries 2500000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

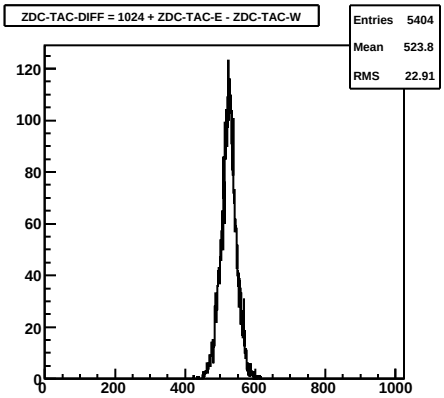

Entries 2500000
VPD East ADC Sum
VPD West ADC Sum

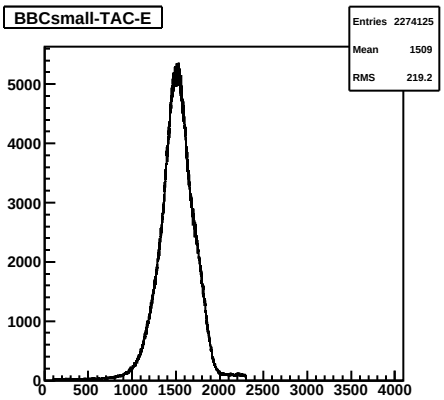

Entries 2500000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

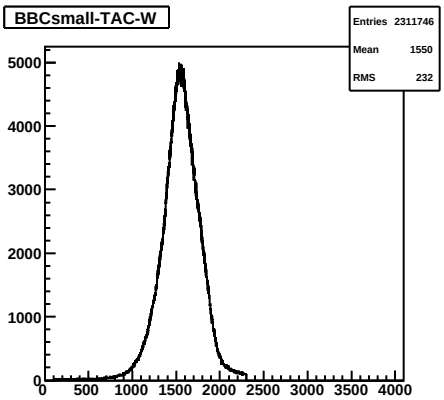

Entries 2500000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 2500000
BBC-L TAC Diff
VPD TAC Diff
Entries 2500000
BBC-L TAC Diff
ZDC TAC Diff
Entries 2500000
BBC-S TAC Diff
VPD TAC Diff
Entries 2500000
BBC-S TAC Diff
ZDC TAC Diff
Entries 2500000
VPD TAC Diff
ZDC TAC Diff

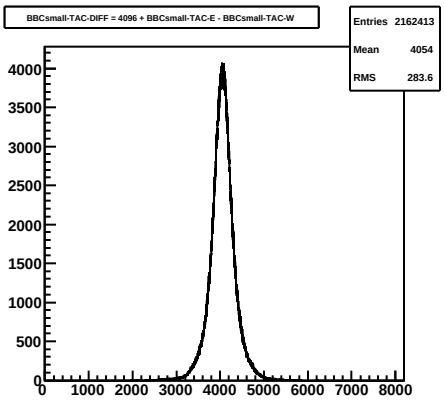

ZDC-TAC-E
Entries 90057
Mean 242.9
RMS 33.42

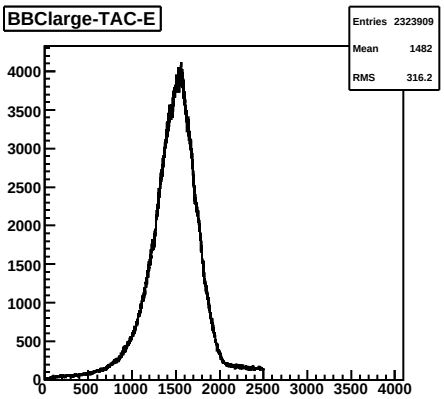

ZDC-TAC-W
Entries 71582
Mean 218.1
RMS 37.45

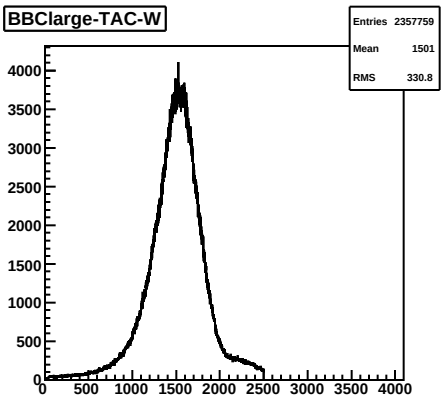

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 5404
Mean 523.8
RMS 22.91

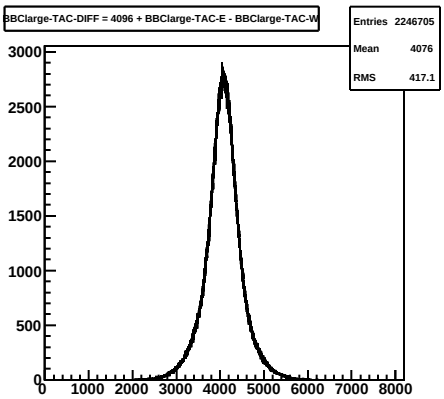

BBCsmall-TAC-E
Entries 2274125
Mean 1509
RMS 219.2

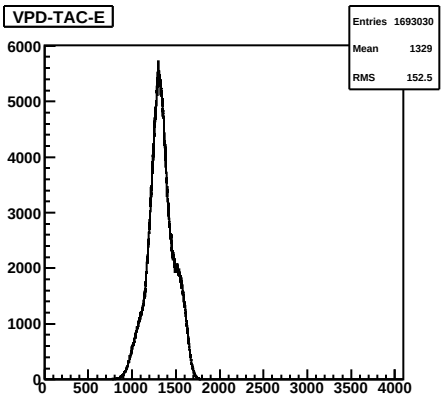

BBCsmall-TAC-W
Entries 2311746
Mean 1550
RMS 232

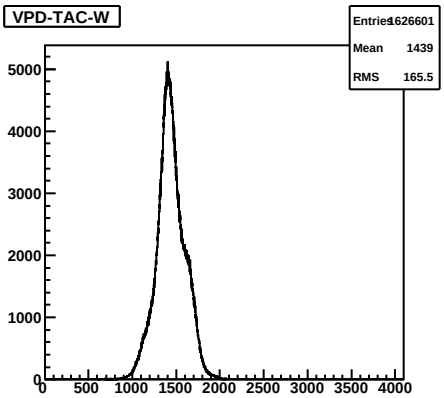

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 2162413
Mean 4054
RMS 283.6

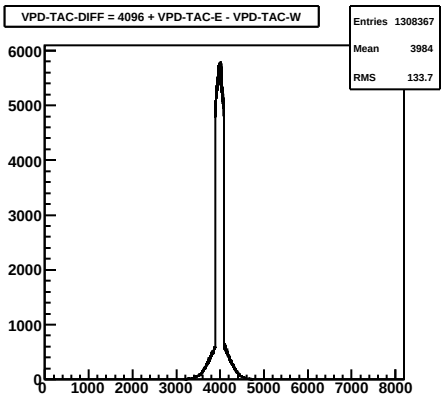

BBClarge-TAC-E
Entries 2323909
Mean 1482
RMS 316.2

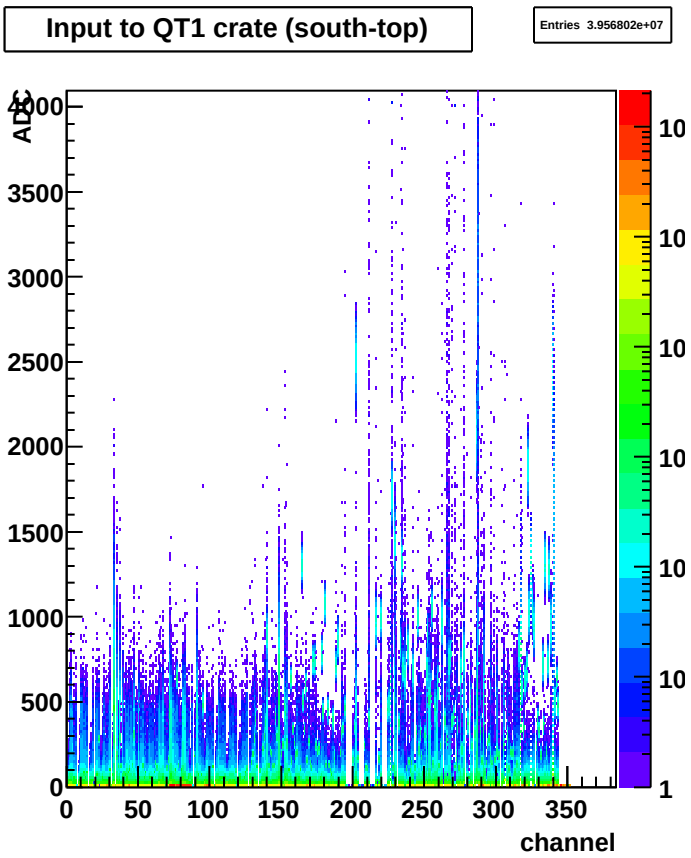

BBClarge-TAC-W
Entries 2357759
Mean 1501
RMS 330.8

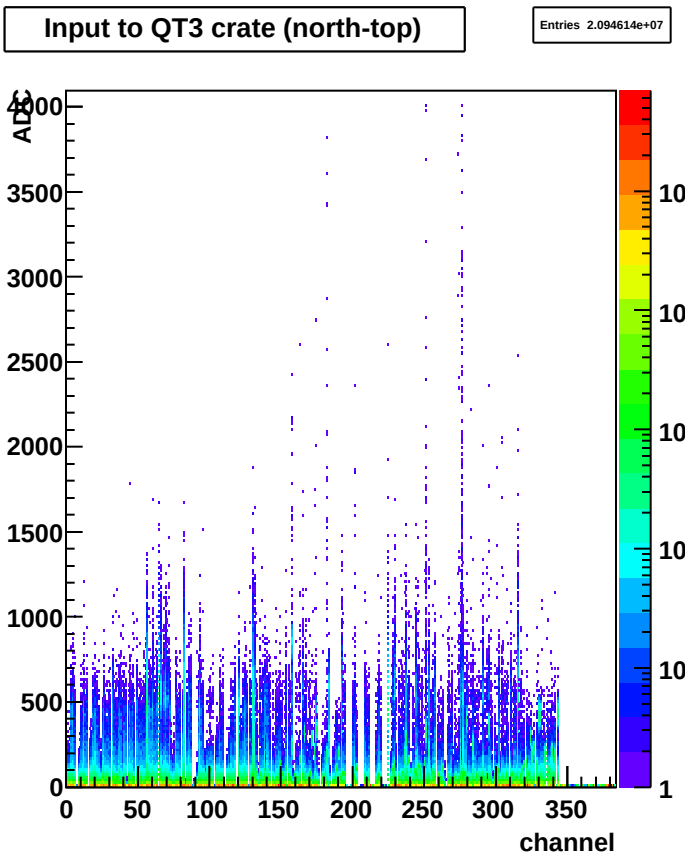

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 2246705
Mean 4076
RMS 417.1

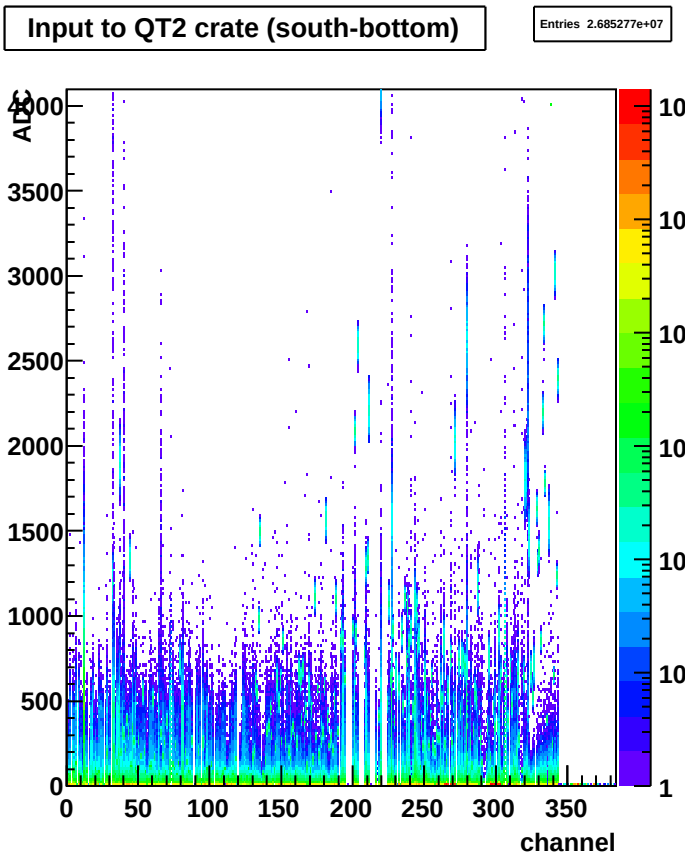

VPD-TAC-E
Entries 1693030
Mean 1329
RMS 152.5

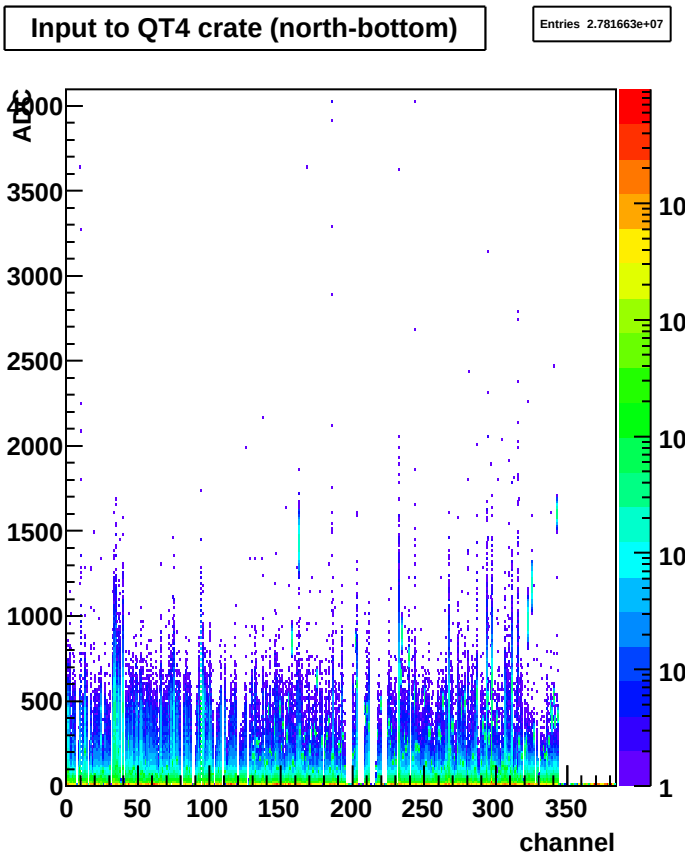

VPD-TAC-W
Entries 1626601
Mean 1439
RMS 165.5

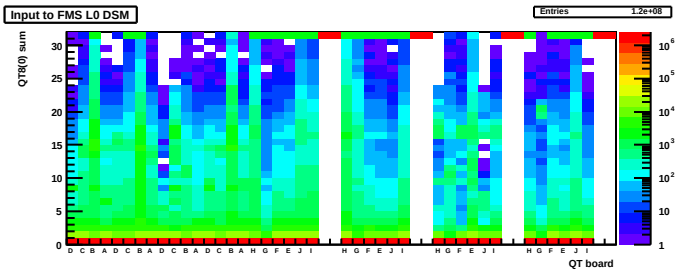

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 1308367
Mean 3984
RMS 133.7

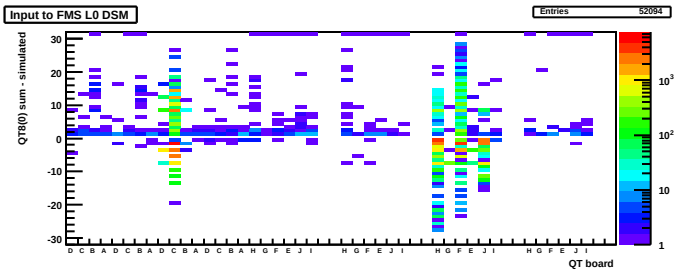

Input to QT1 crate (south-top)
Entries 3.956802e+07
ADC
channel

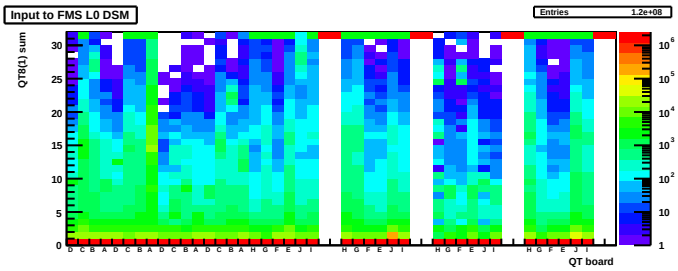

Input to QT3 crate (north-top)
Entries 2.094614e+07
ADC
channel

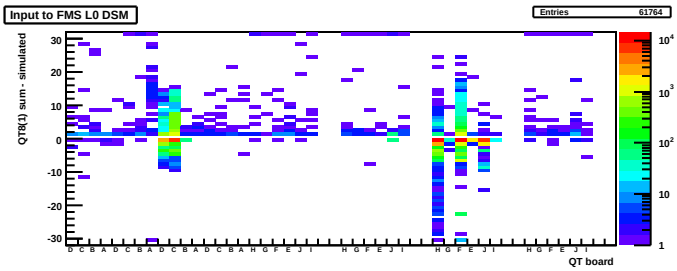

Input to QT2 crate (south-bottom)
Entries 2.685277e+07
ADC
channel

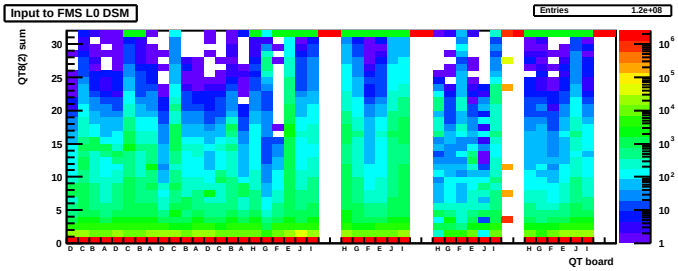

Input to QT4 crate (north-bottom)
Entries 2.781663e+07
ADC
channel

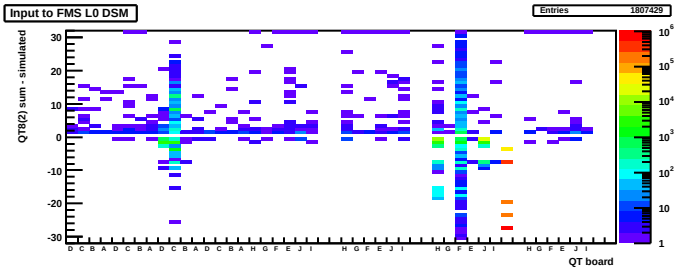

Input to FMS L0 DSM
Entries 1.2e+08
QT8(0) sum
QT board

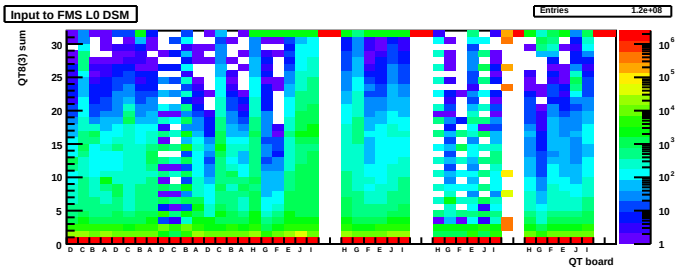

Input to FMS L0 DSM
Entries 52094
QT8(0) sum - simulated
QT board

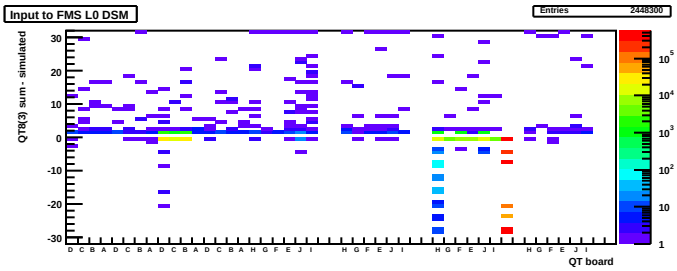

Input to FMS L0 DSM
Entries 1.2e+08
QT8(1) sum
QT board

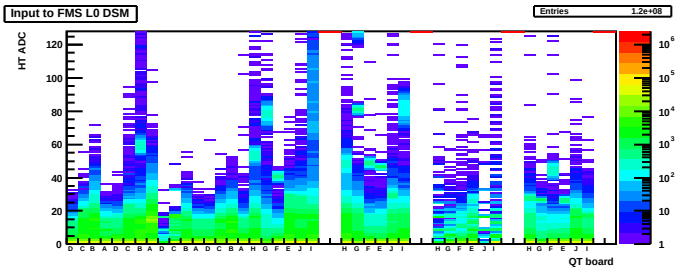

Input to FMS L0 DSM
Entries 61764
QT8(1) sum - simulated
QT board

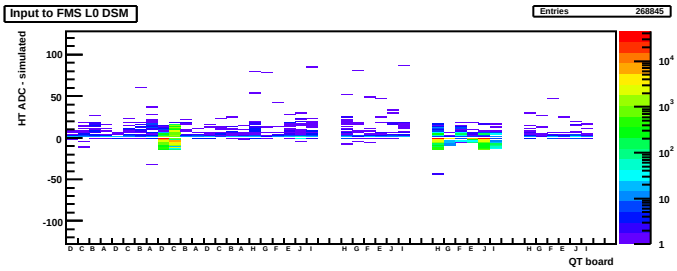

Input to FMS L0 DSM
Entries 1.2e+08
QT8(2) sum
QT board

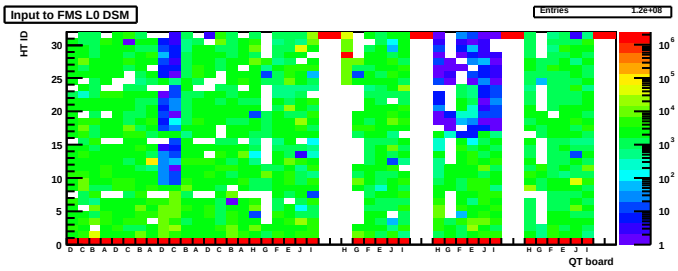

Input to FMS L0 DSM
Entries 1807429
QT8(2) sum - simulated
QT board

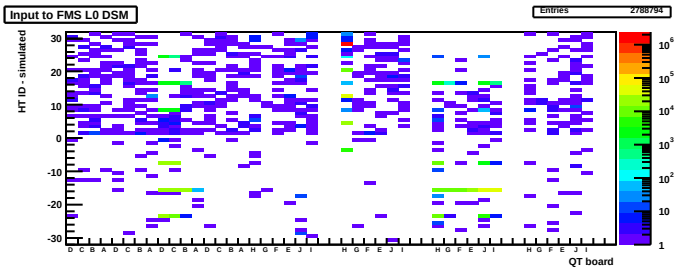

Input to FMS L0 DSM
Entries 1.2e+08
QT8(3) sum
QT board

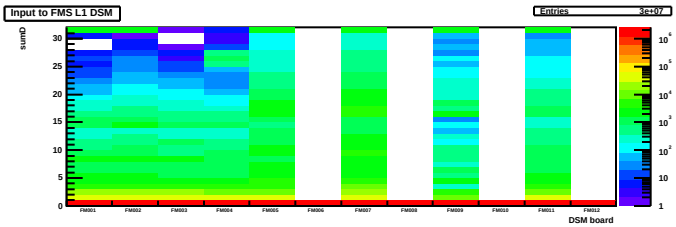

Input to FMS L0 DSM
Entries 2448300
QT8(3) sum - simulated
QT board

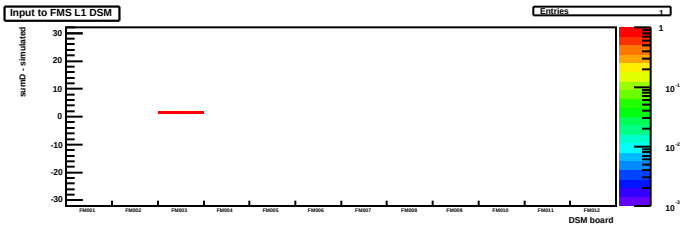

Input to FMS L0 DSM
Entries 1.2e+08
HT ADC
QT board

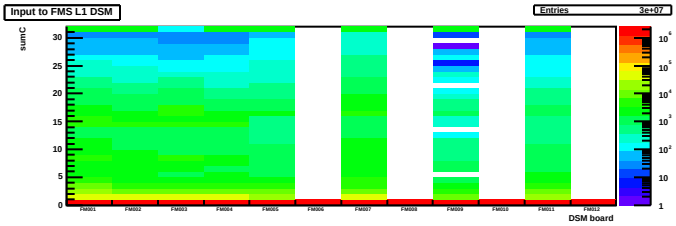

Input to FMS L0 DSM
Entries 268845
HT ADC - simulated
QT board

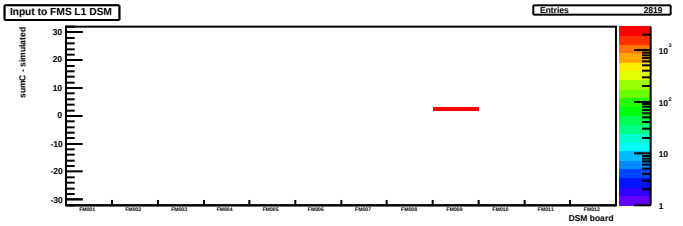

Input to FMS L0 DSM
Entries 1.2e+08
HT ID
QT board

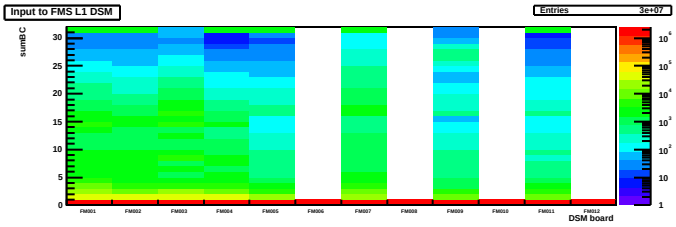

Input to FMS L0 DSM
Entries 2788794
HT ID - simulated
QT board

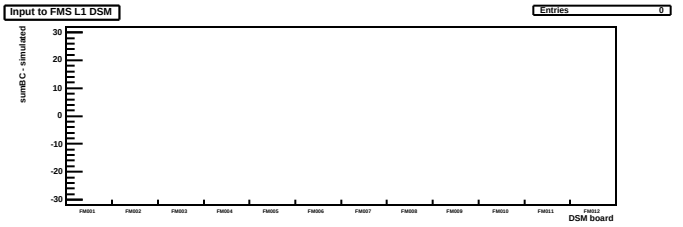

Input to FMS L1 DSM
Entries 3e+07
sumD
DSM board

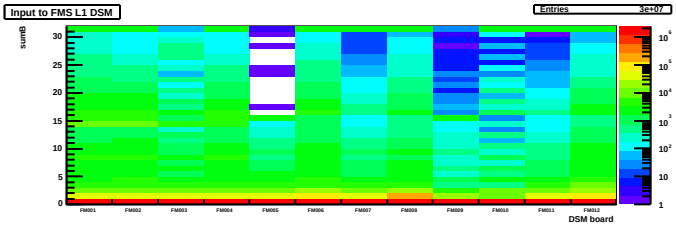

Input to FMS L1 DSM
Entries 1
sumD - simulated
DSM board

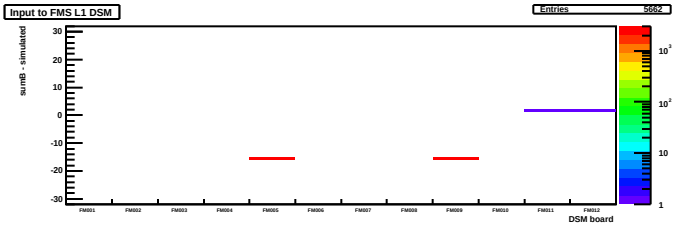

Input to FMS L1 DSM
Entries 3e+07
sumC
DSM board

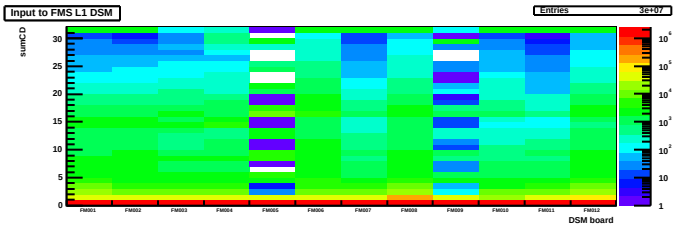

Input to FMS L1 DSM
Entries 2819
sumC - simulated
DSM board

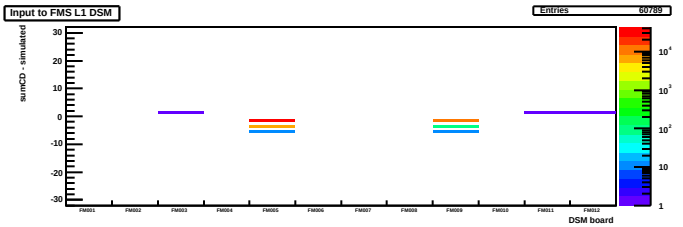

Input to FMS L1 DSM
Entries 3e+07
sumBC
DSM board

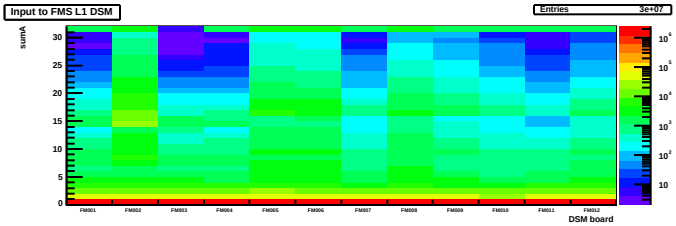

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

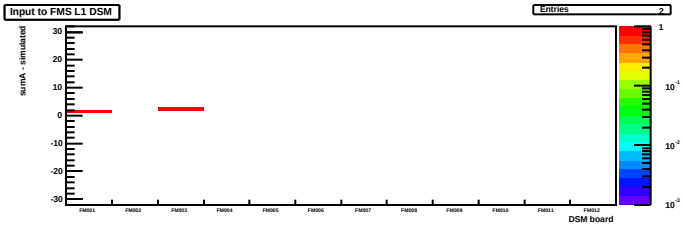

Input to FMS L1 DSM
Entries 3e+07
sumB
DSM board

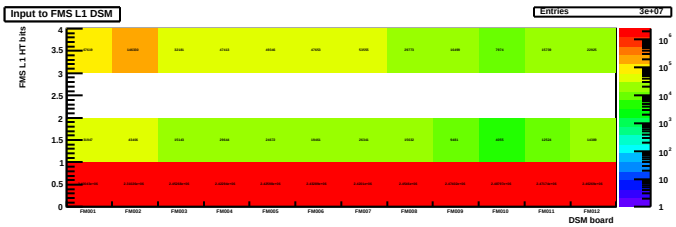

Input to FMS L1 DSM
Entries 5662
sumB - simulated
DSM board

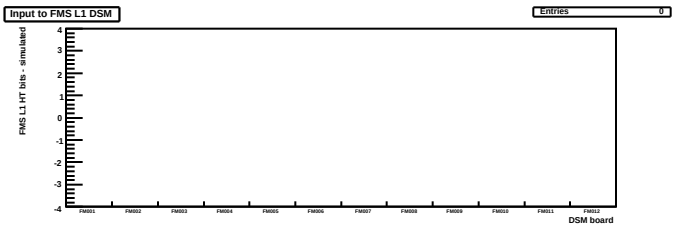

Input to FMS L1 DSM
Entries 3e+07
sumCD
DSM board

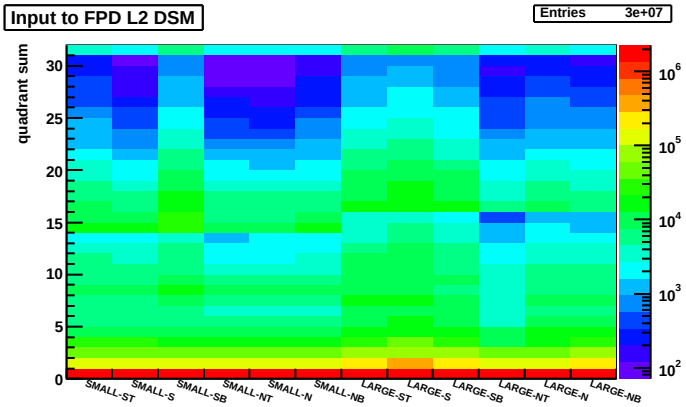

Input to FMS L1 DSM
Entries 60789
sumCD - simulated
DSM board

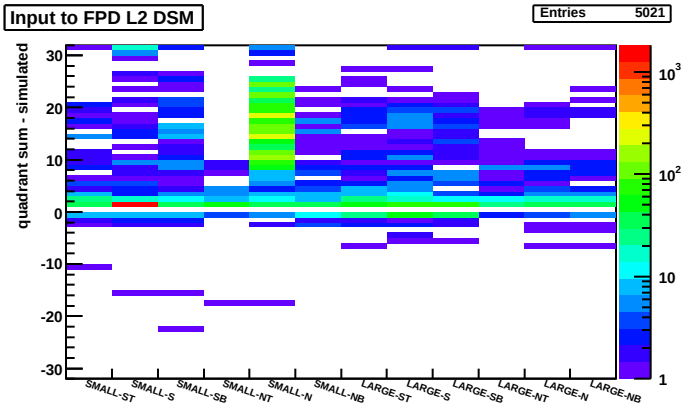

Input to FMS L1 DSM
Entries 3e+07
sumA
DSM board

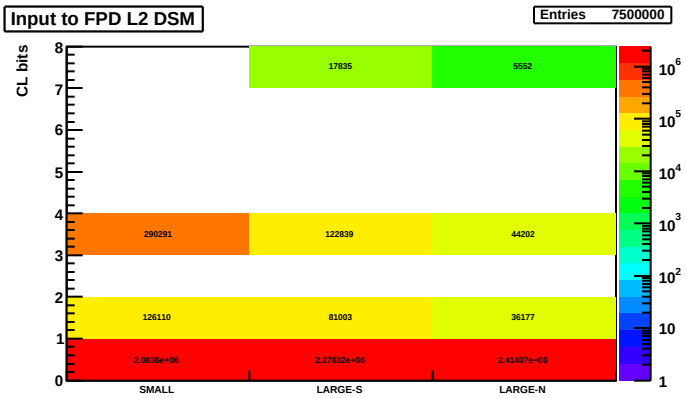

Input to FMS L1 DSM
Entries 2
sumA - simulated
DSM board

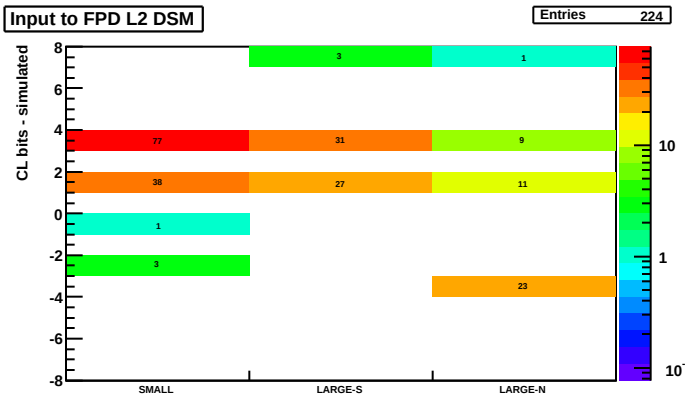

Input to FMS L1 DSM
Entries 3e+07
FMS L1 HT bits
DSM board

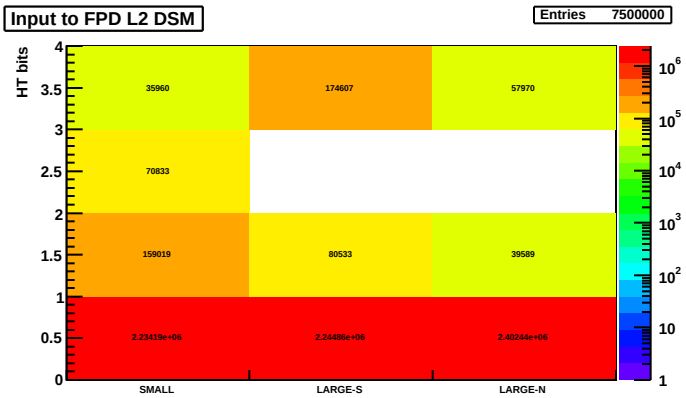

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

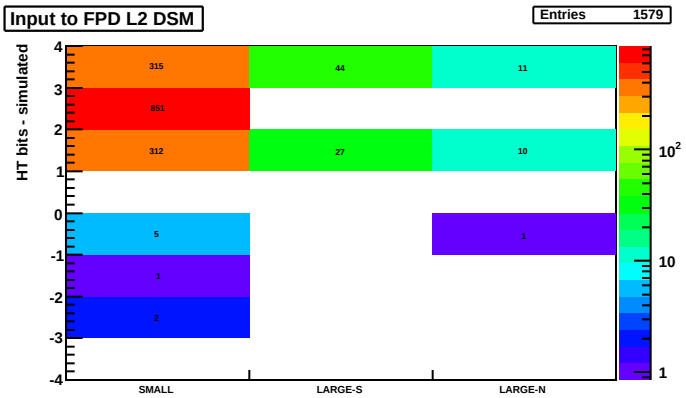

Input to FPD L2 DSM
Entries 3e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

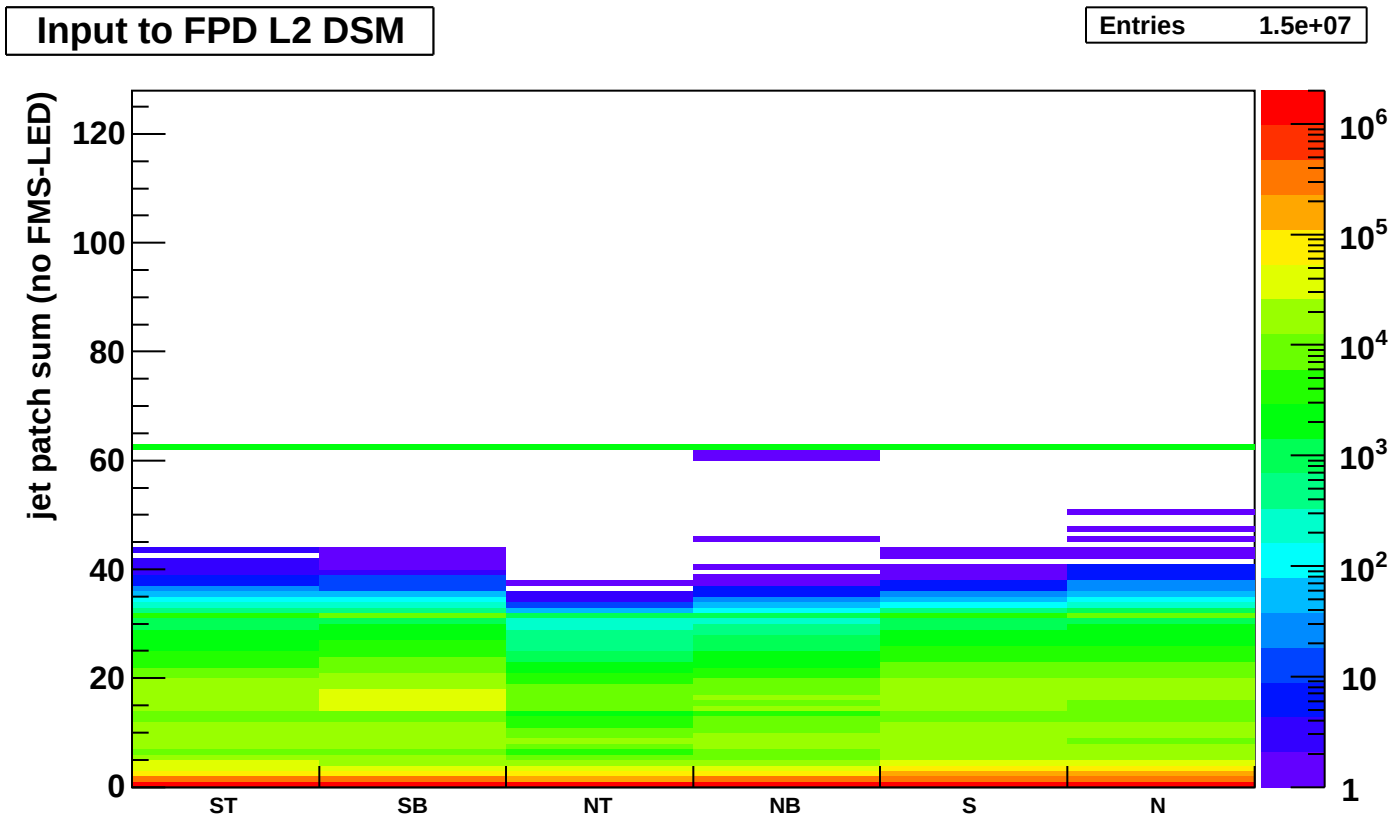

Input to FPD L2 DSM
Entries 5021
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

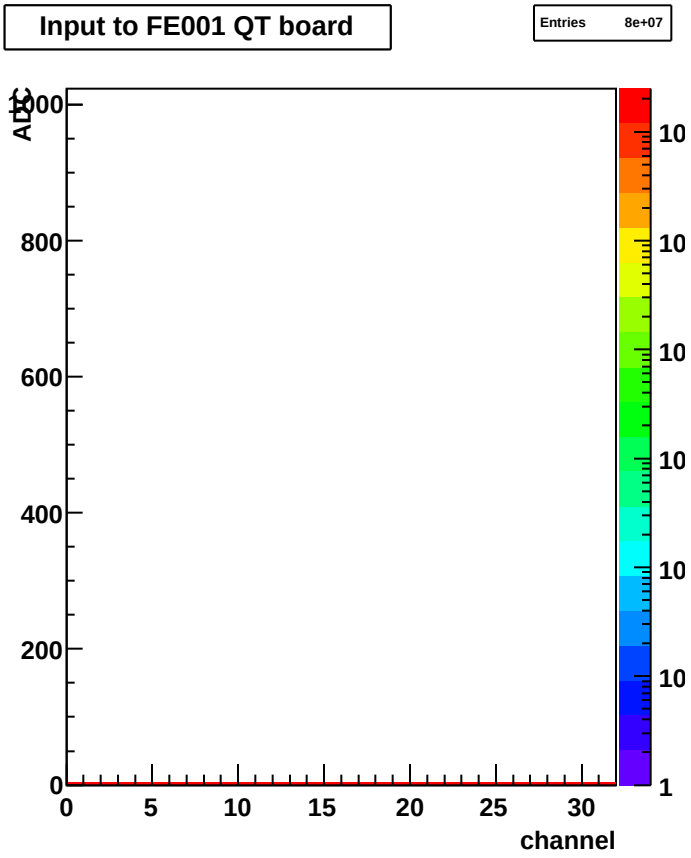

Input to FPD L2 DSM
Entries 7500000
CL bits
17835
5552
290291
122839
44202
126110
81003
36177
2.0836e+06
2.27832e+06
2.41407e+06
SMALL
LARGE-S
LARGE-N

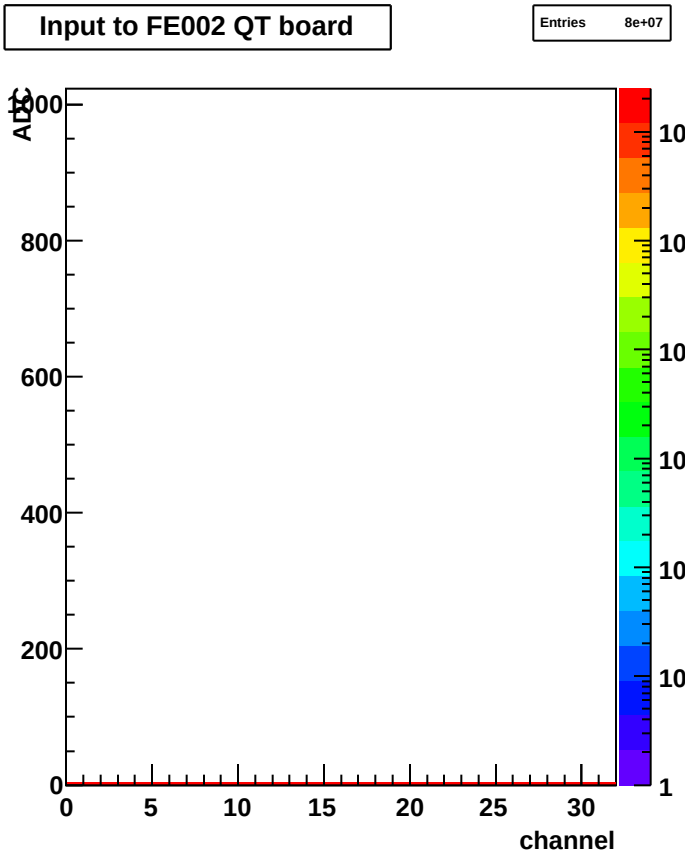

Input to FPD L2 DSM
Entries 224
CL bits - simulated
3
1
77
31
9
38
27
11
1
3
23
SMALL
LARGE-S
LARGE-N

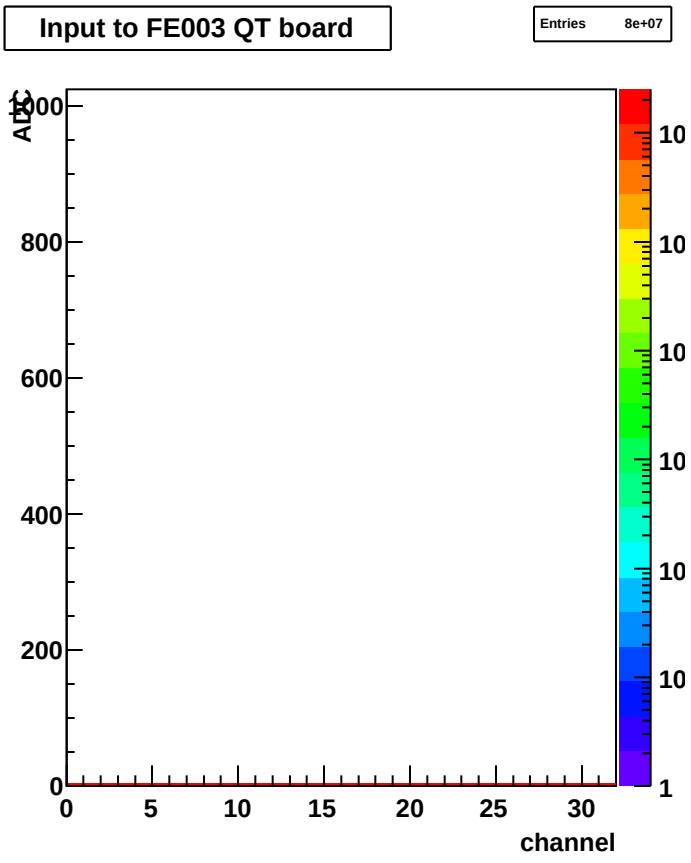

Input to FPD L2 DSM
Entries 7500000
HT bits
35960
174607
57970
70833
159019
80533
39589
2.23419e+06
2.24486e+06
2.40244e+06
SMALL
LARGE-S
LARGE-N

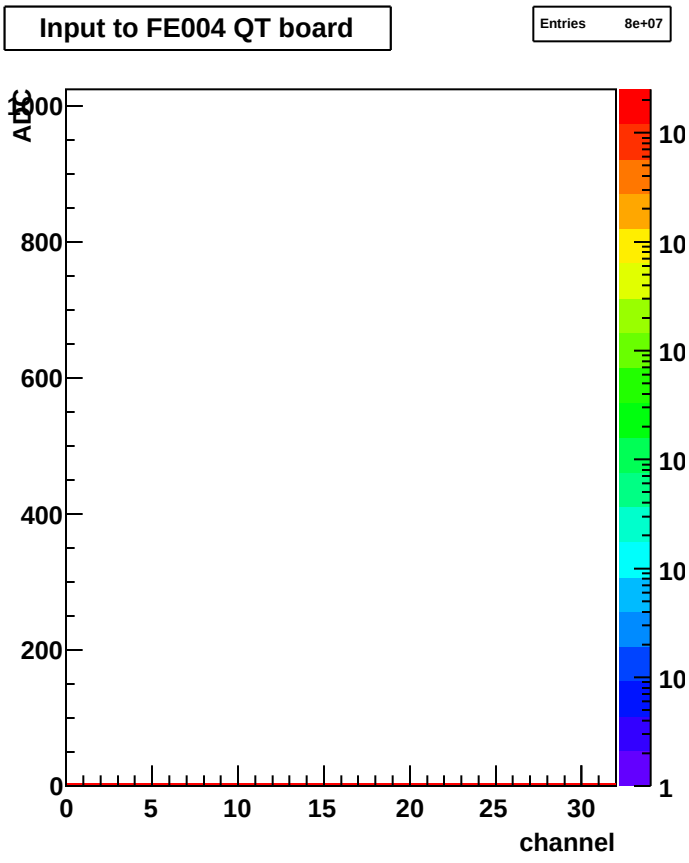

Input to FPD L2 DSM
Entries 1579
HT bits - simulated
315
44
11
851
312
27
10
5
1
1
2
SMALL
LARGE-S
LARGE-N

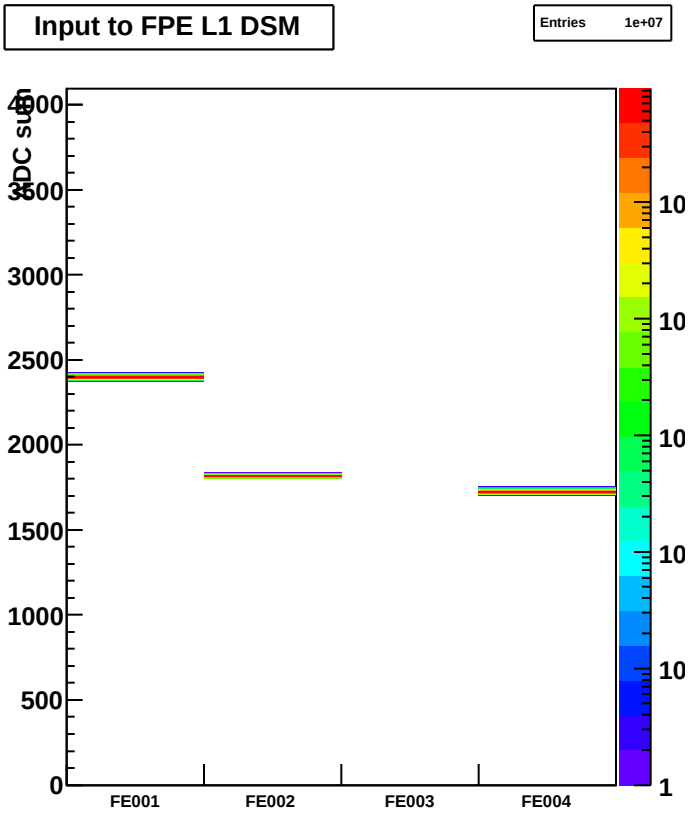

Input to FPD L2 DSM
Entries 1.5e+07
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6


Input to FE001 QT board
Entries 8e+07
ADC
channel

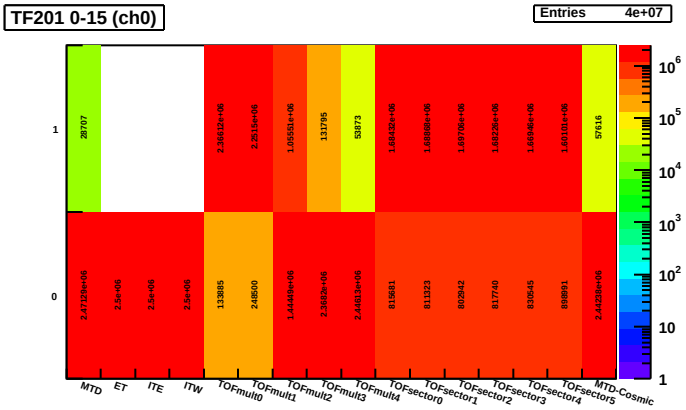

Input to FE002 QT board
Entries 8e+07
ADC
channel


Input to FE003 QT board
Entries 8e+07
ADC
channel

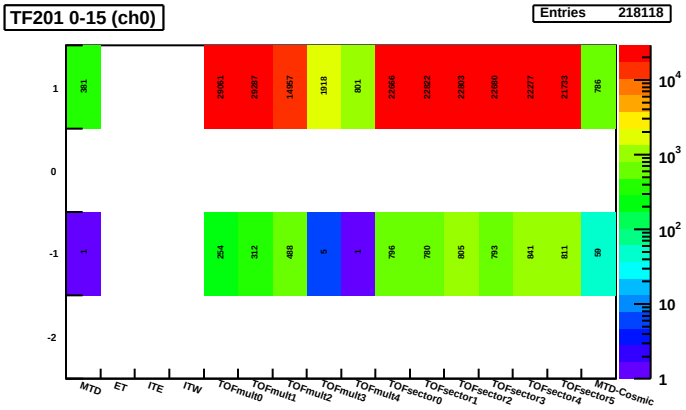

Input to FE004 QT board
Entries 8e+07
ADC
channel


Input to FPE L1 DSM
Entries 1e+07
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1

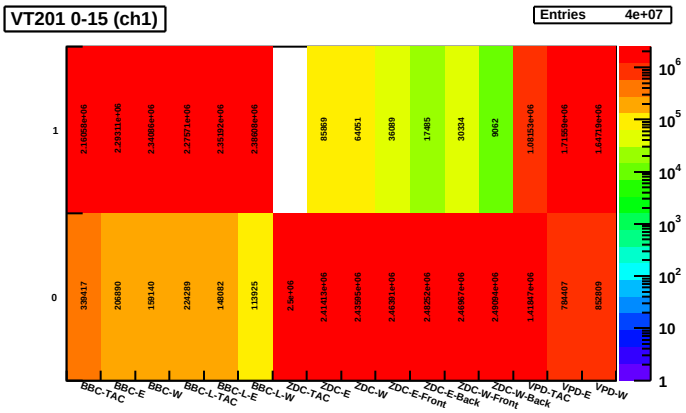
TF201 0-15 (ch0)



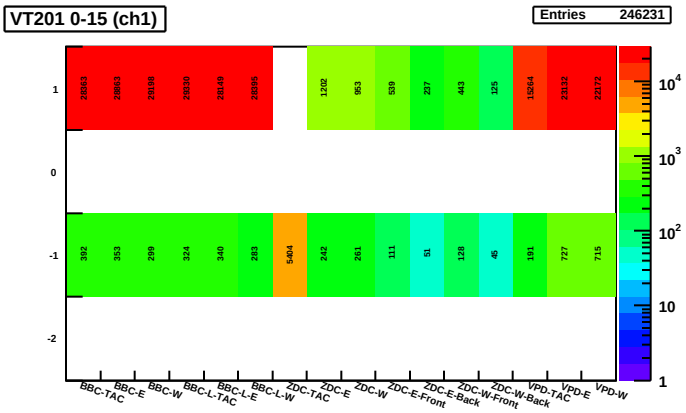
TF201 0-15 (ch0)



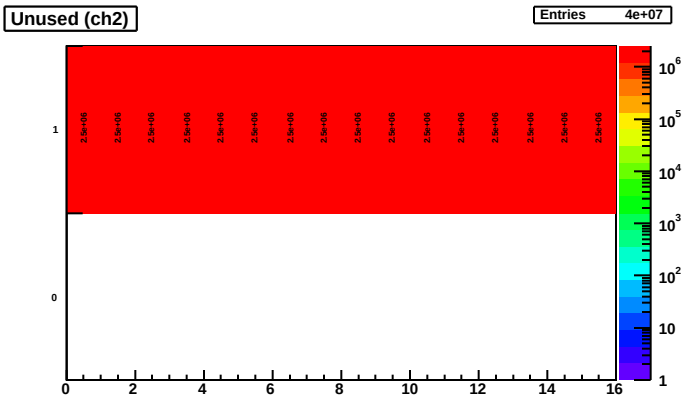
VT201 0-15 (ch1)

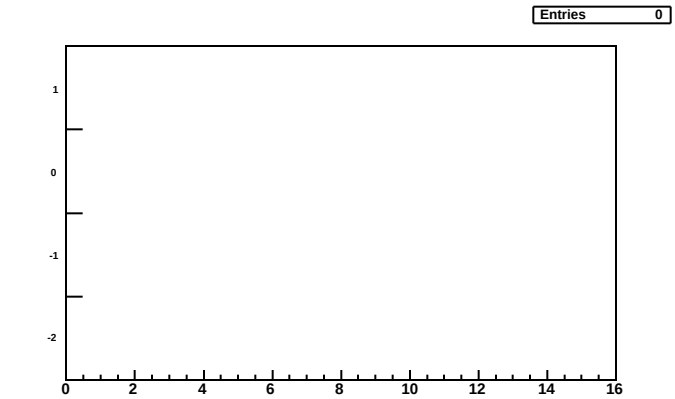


VT201 0-15 (ch1)

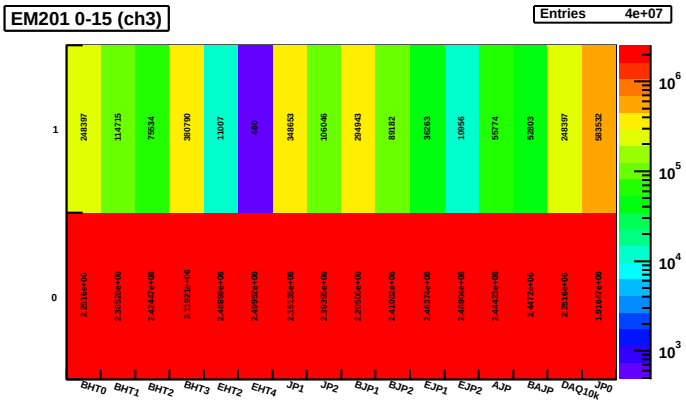


Unused (ch2)





EM201 0-15 (ch3)



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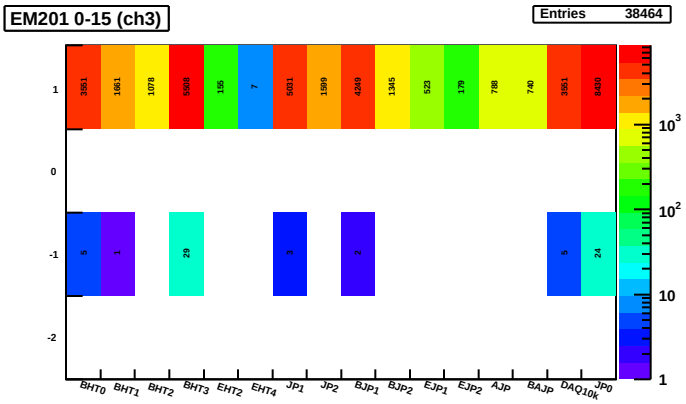
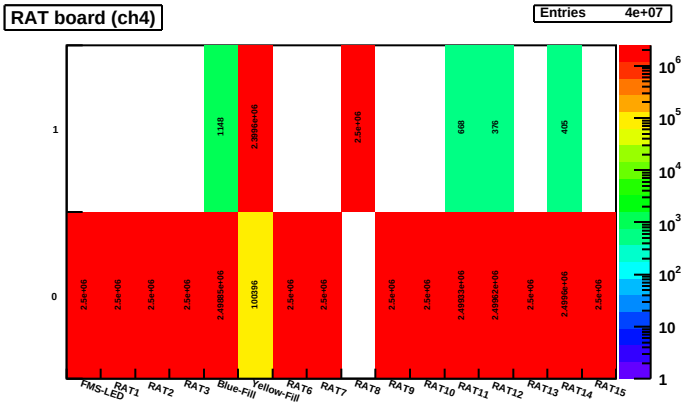
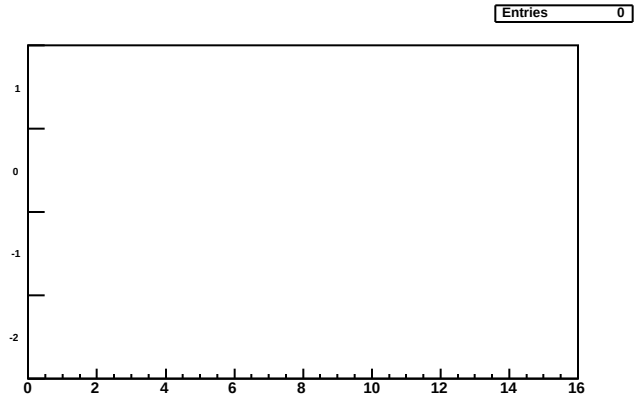
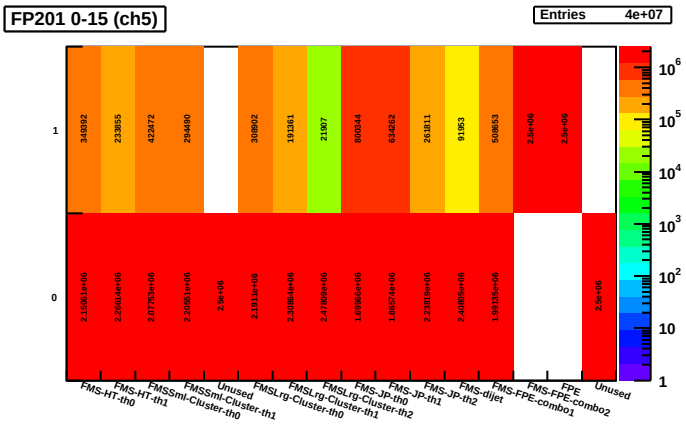


RAT board (ch4)

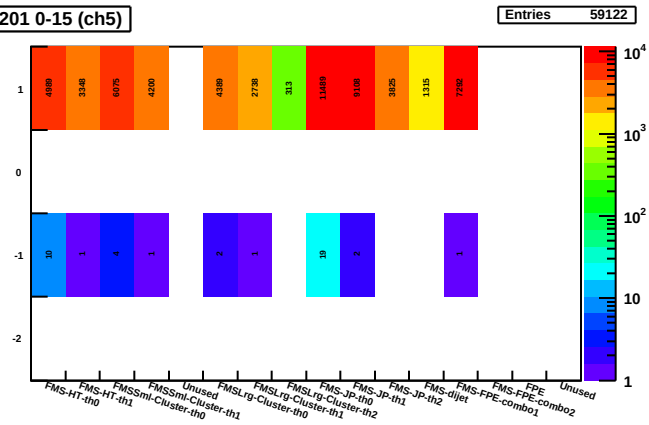




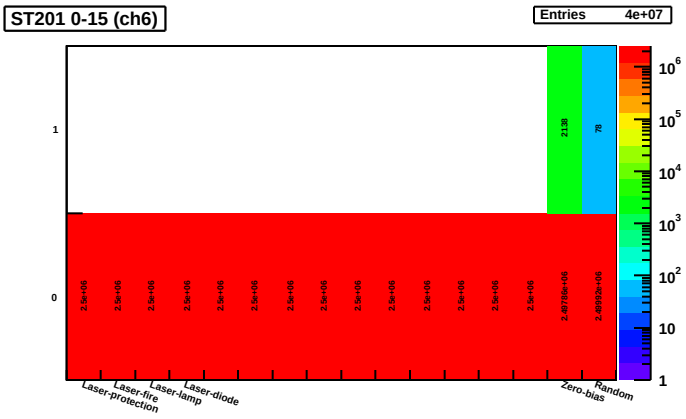
FP201 0-15 (ch5)

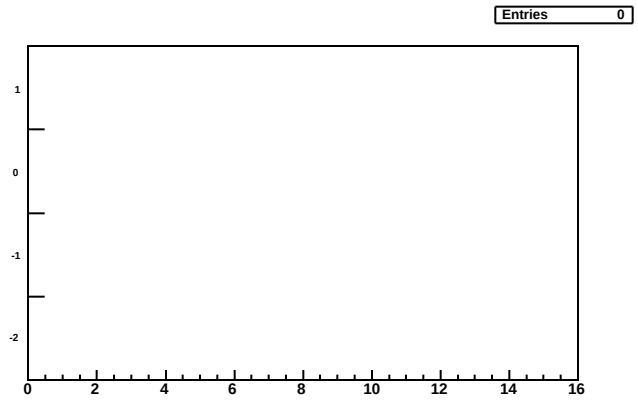
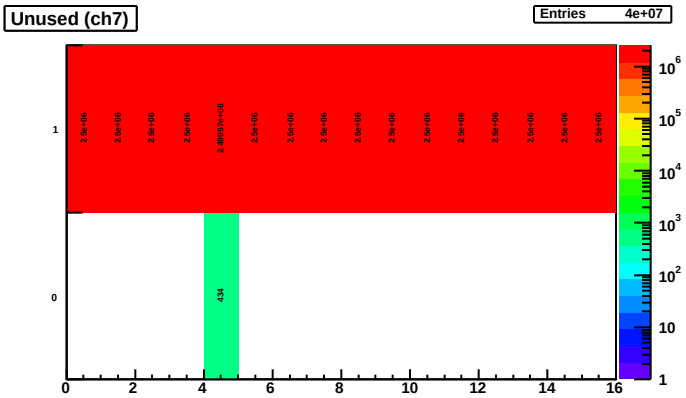
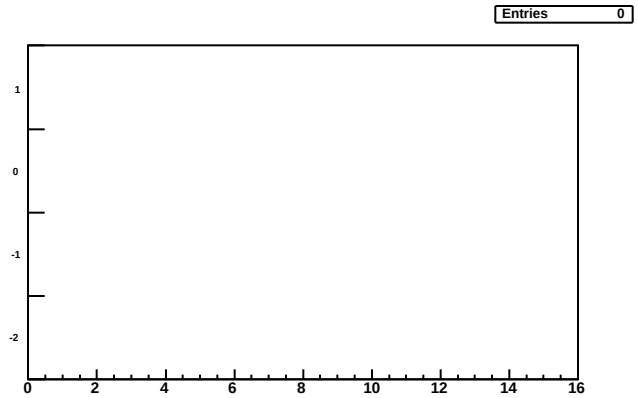


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)