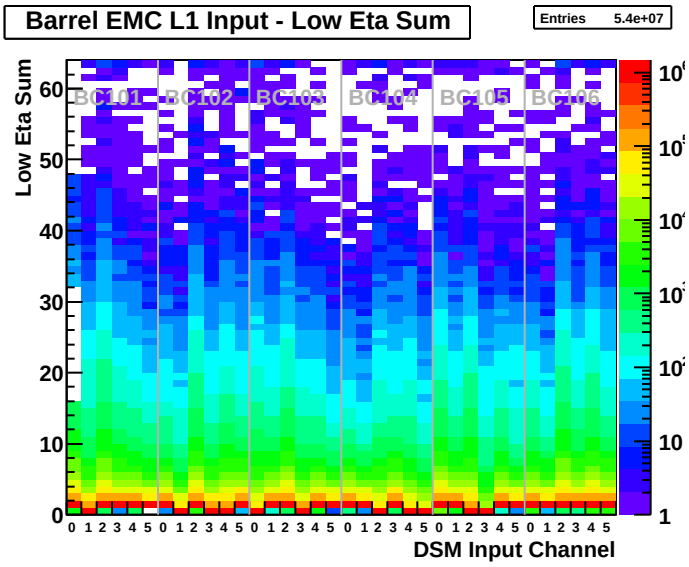
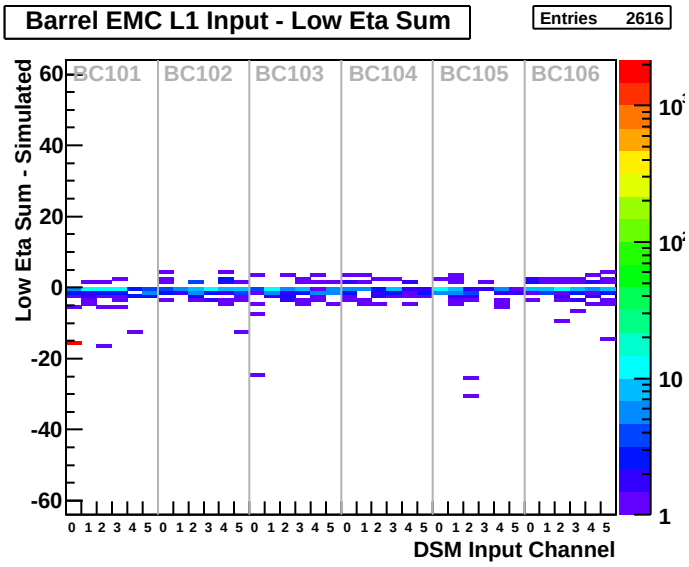
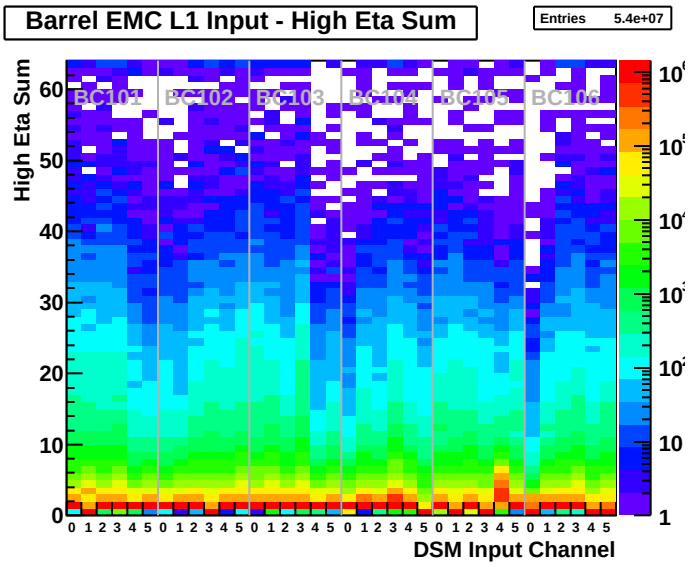
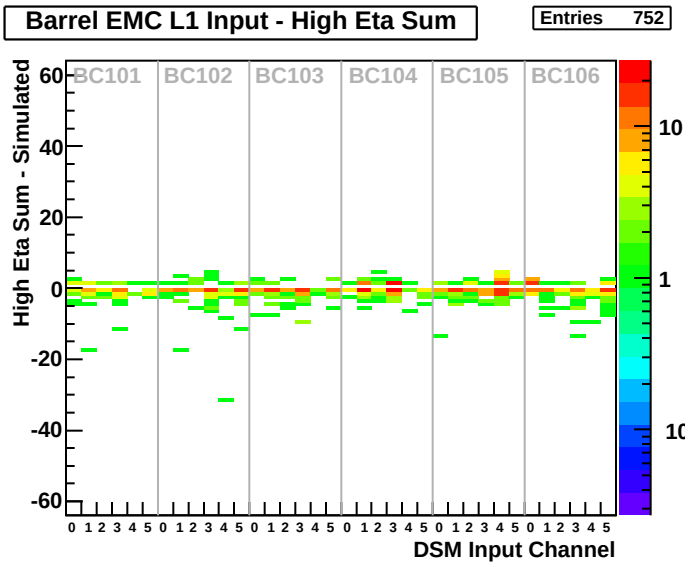
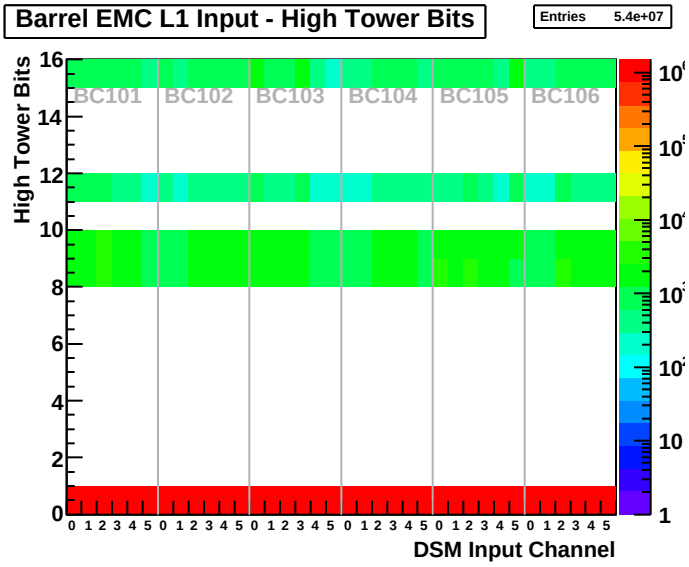
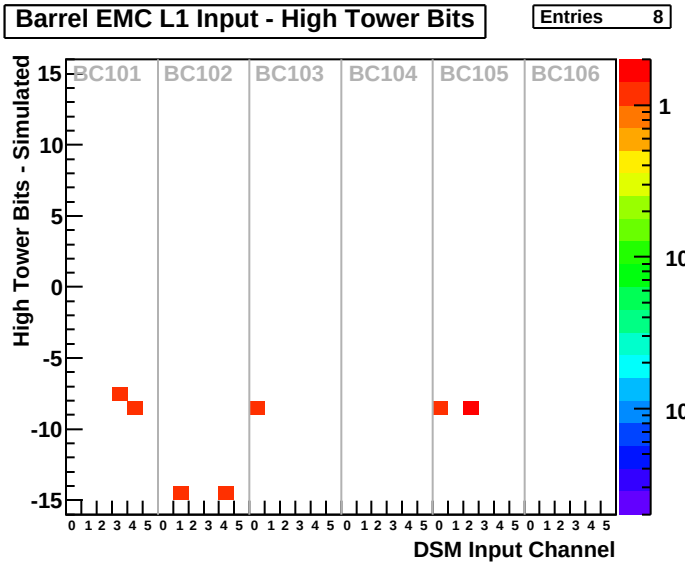

Barrel EMC L1 Input - Low Eta Sum
Entries 5.4e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

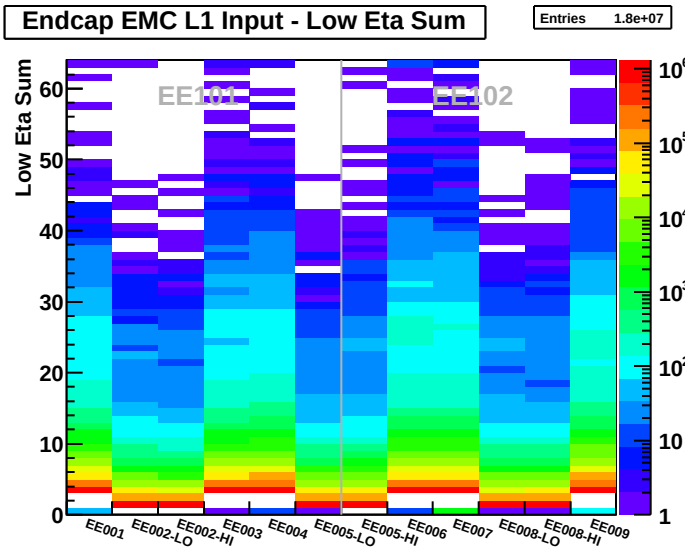

Barrel EMC L1 Input - Low Eta Sum
Entries 2616
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

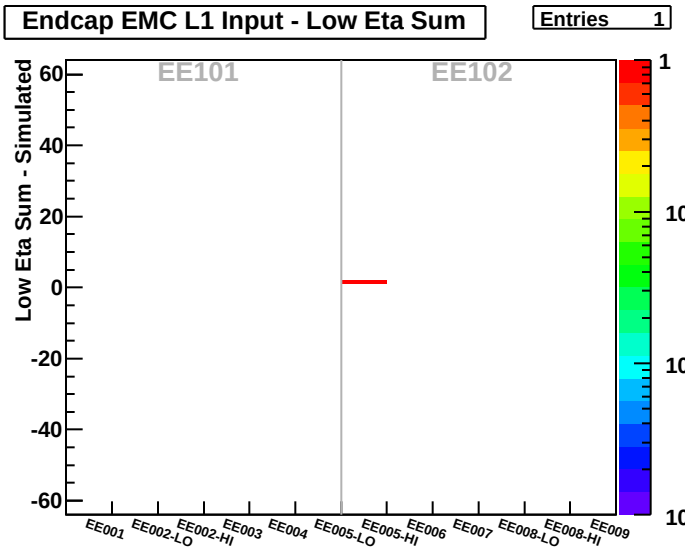

Barrel EMC L1 Input - High Eta Sum
Entries 5.4e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

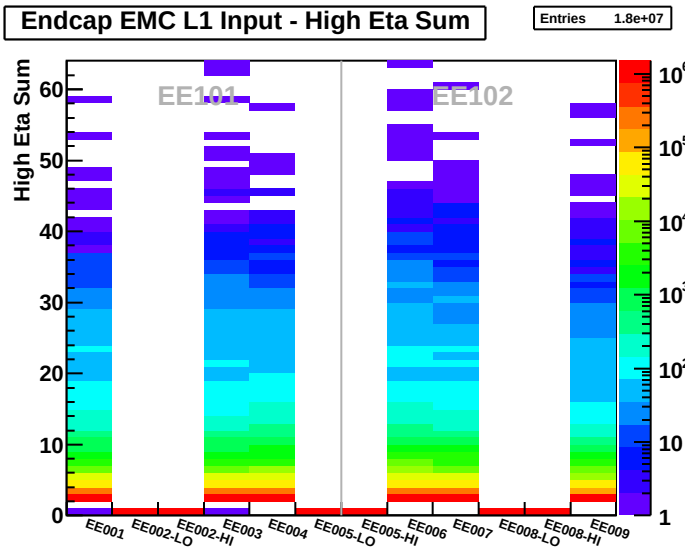

Barrel EMC L1 Input - High Eta Sum
Entries 752
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

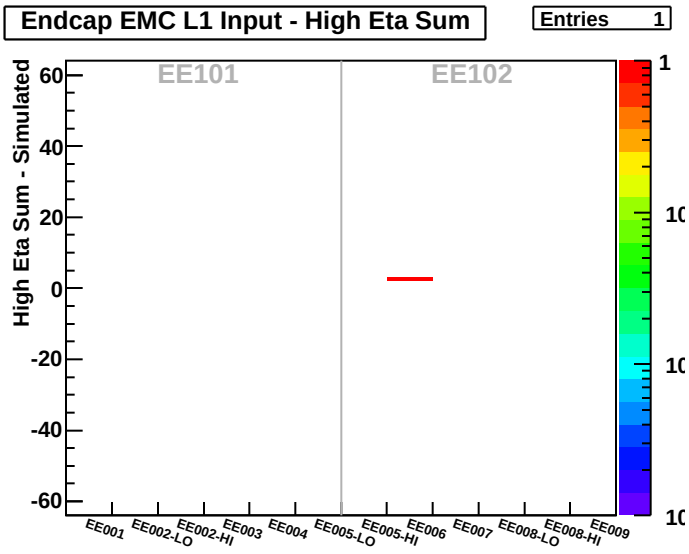

Barrel EMC L1 Input - High Tower Bits
Entries 5.4e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

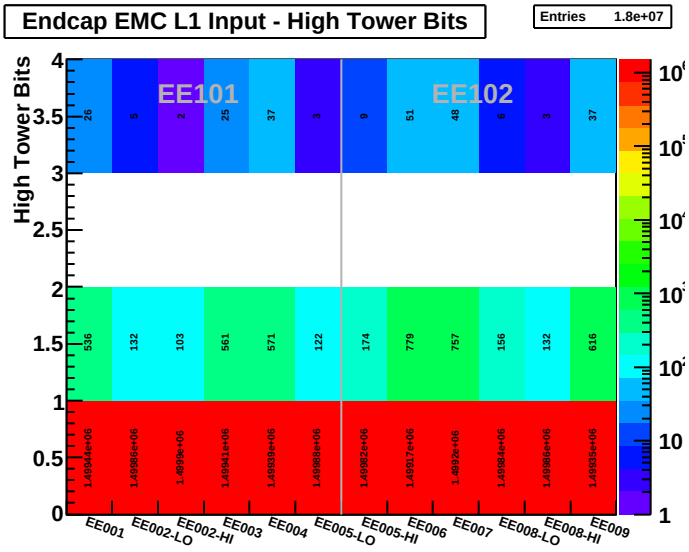

Barrel EMC L1 Input - High Tower Bits
Entries 8
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

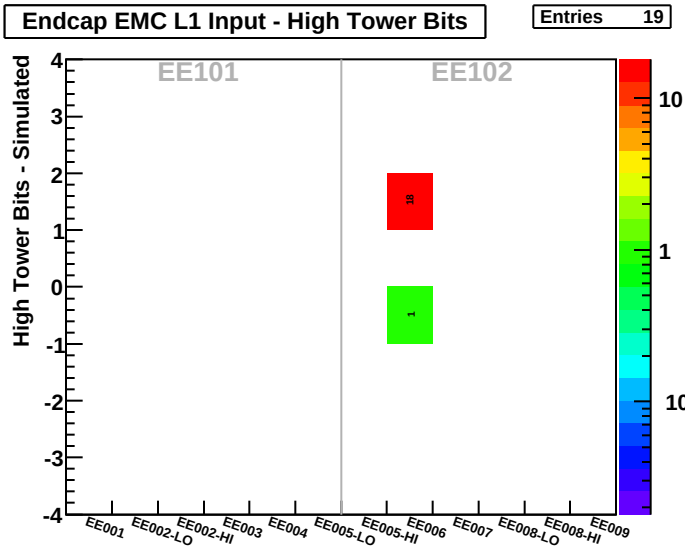

Endcap EMC L1 Input - Low Eta Sum
Entries 1.8e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

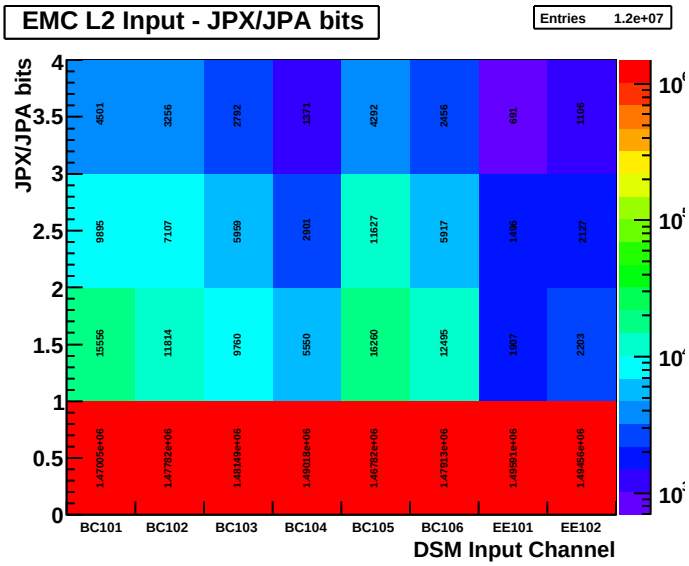

Endcap EMC L1 Input - Low Eta Sum
Entries 1
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

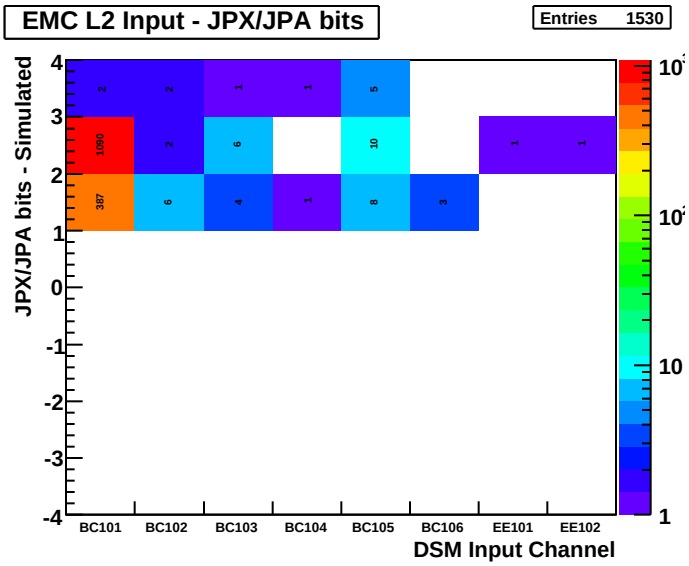

Endcap EMC L1 Input - High Eta Sum
Entries 1.8e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

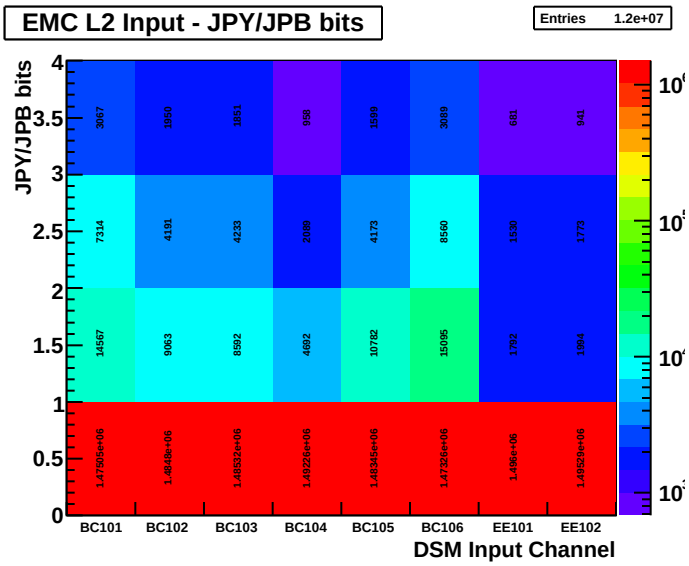

Endcap EMC L1 Input - High Eta Sum
Entries 1
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

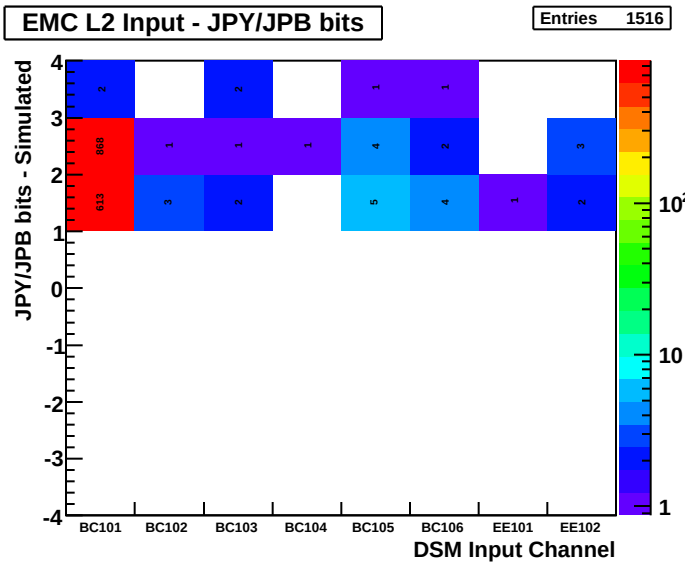

Endcap EMC L1 Input - High Tower Bits
Entries 1.8e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

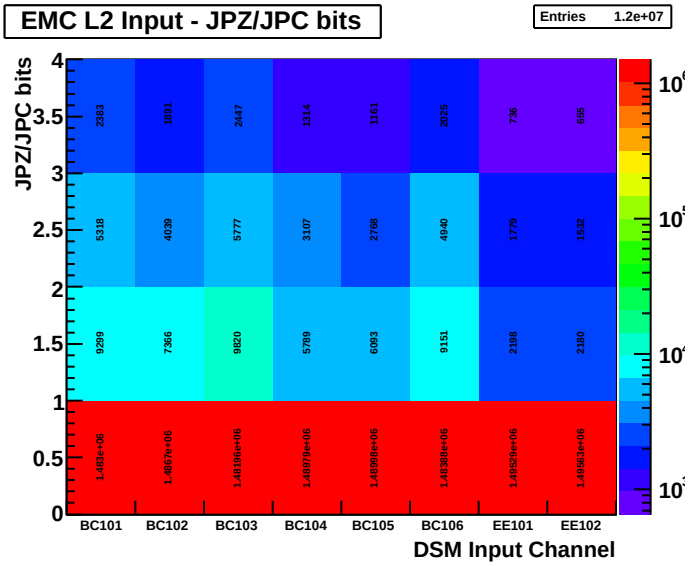

Endcap EMC L1 Input - High Tower Bits
Entries 19
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

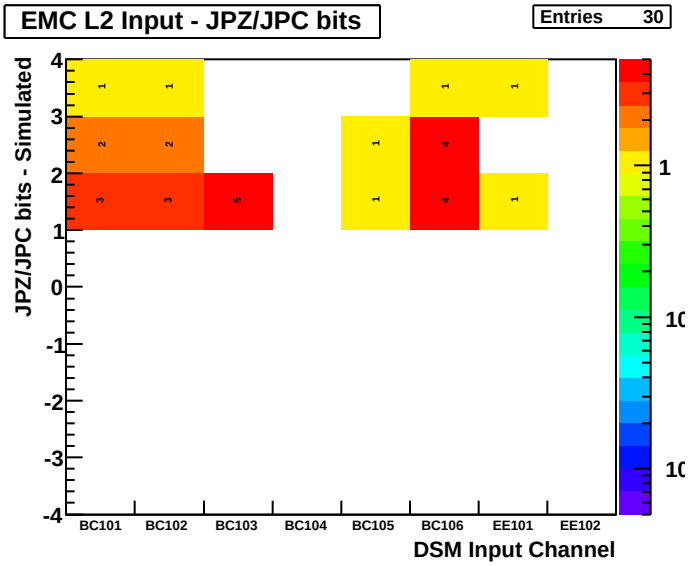

EMC L2 Input - JPX/JPA bits
Entries 1.2e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
4501 3256 2792 1371 4292 2456 691 1106
9895 7107 5959 2901 11627 5917 1496 2127
15556 11814 9760 5550 16260 12495 1907 2203
1.47005e+06 1.47782e+06 1.48149e+06 1.49018e+06 1.46782e+06 1.47913e+06 1.49591e+06 1.49456e+06

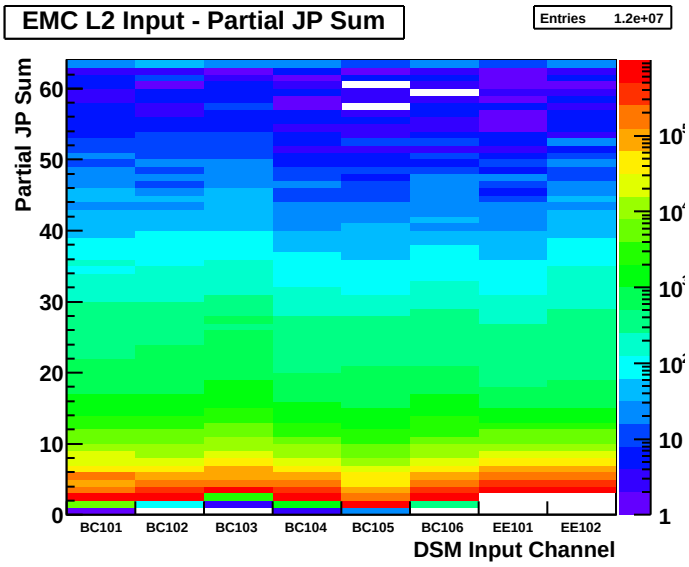

EMC L2 Input - JPX/JPA bits
Entries 1530
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2 2 1 1 5
1090 2 6 10 1 1
387 6 4 1 8 3

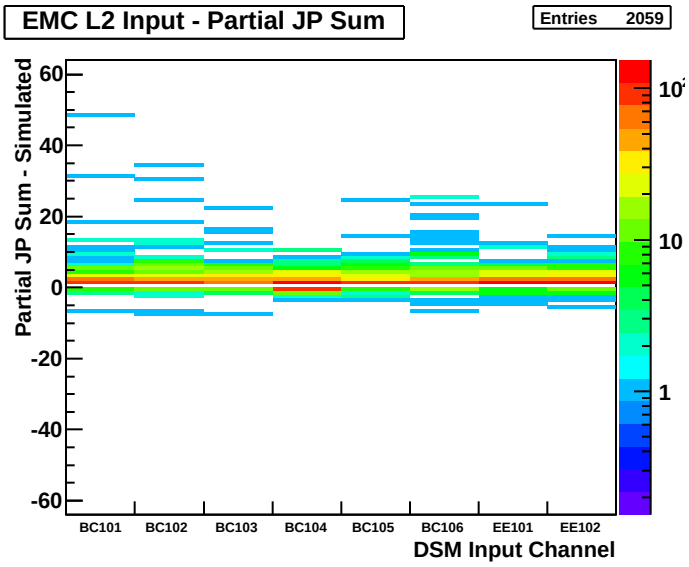

EMC L2 Input - JPY/JPB bits
Entries 1.2e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3067 1950 1851 958 1599 3089 681 941
7314 4191 4233 2088 4173 8560 1530 1773
14567 9053 8892 4692 10782 15095 1792 1994
1.47505e+06 1.4848e+06 1.48532e+06 1.49226e+06 1.48345e+06 1.47326e+06 1.498e+06 1.49529e+06

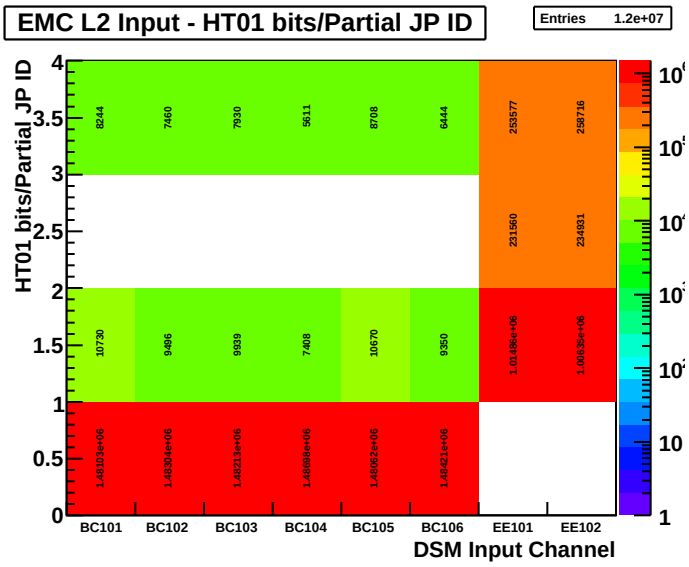

EMC L2 Input - JPY/JPB bits
Entries 1516
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2 2 1 1
868 1 1 1 4 2 3
613 3 2 5 4 1 2

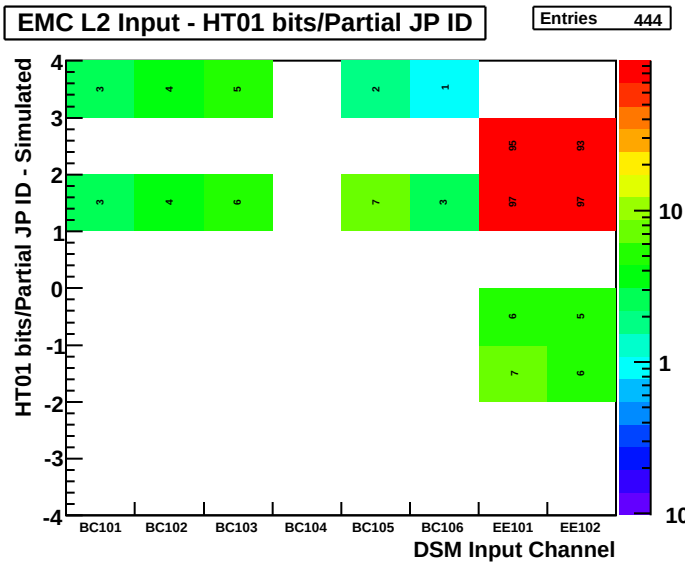

EMC L2 Input - JPZ/JPC bits
Entries 1.2e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2383 1891 2447 1314 1161 2025 736 655
5318 4039 5777 3107 2768 4940 1779 1532
9299 7366 9820 5789 6093 9151 2198 2180
1.483e+06 1.4867e+06 1.48196e+06 1.48979e+06 1.48998e+06 1.48388e+06 1.49529e+06 1.49563e+06

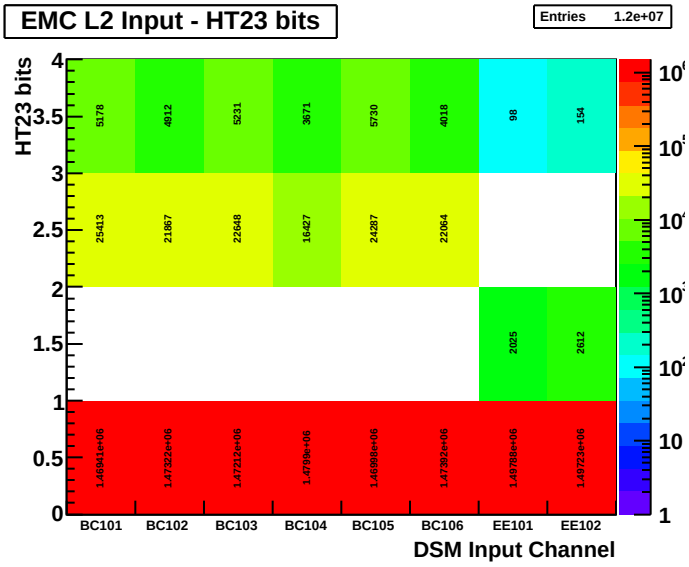

EMC L2 Input - JPZ/JPC bits
Entries 30
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1 1 1
2 2 1 4
3 3 5 1 4 1

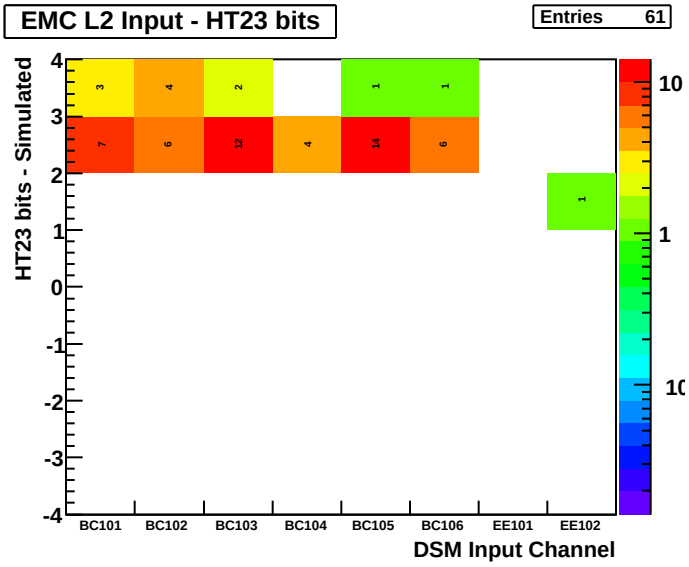

EMC L2 Input - Partial JP Sum
Entries 1.2e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

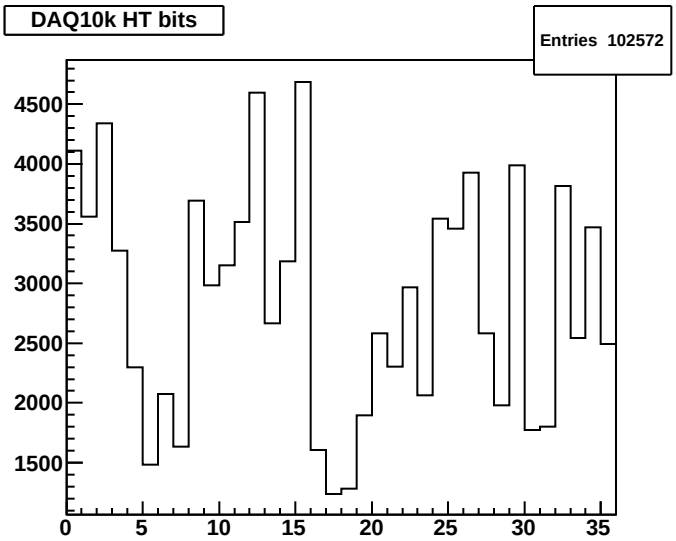

EMC L2 Input - Partial JP Sum
Entries 2059
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

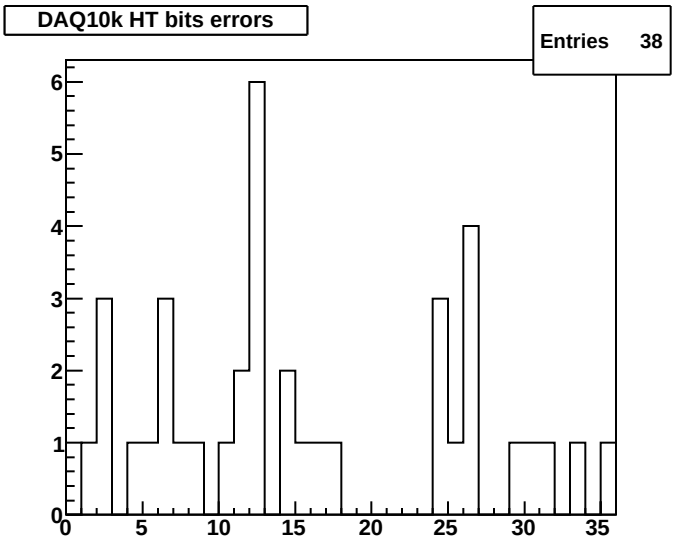

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1.2e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

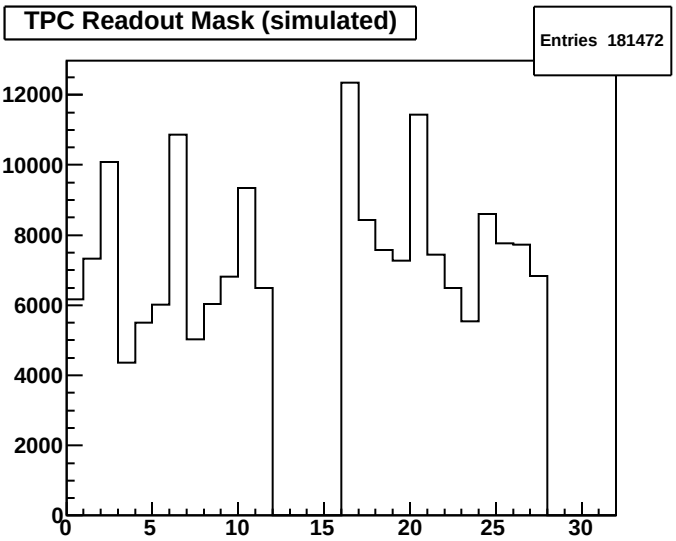

EMC L2 Input - HT01 bits/Partial JP ID
Entries 444
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

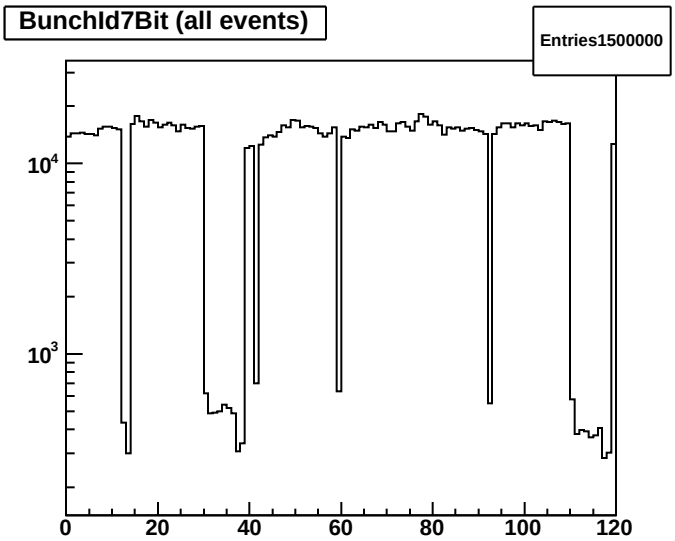

EMC L2 Input - HT23 bits
Entries 1.2e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

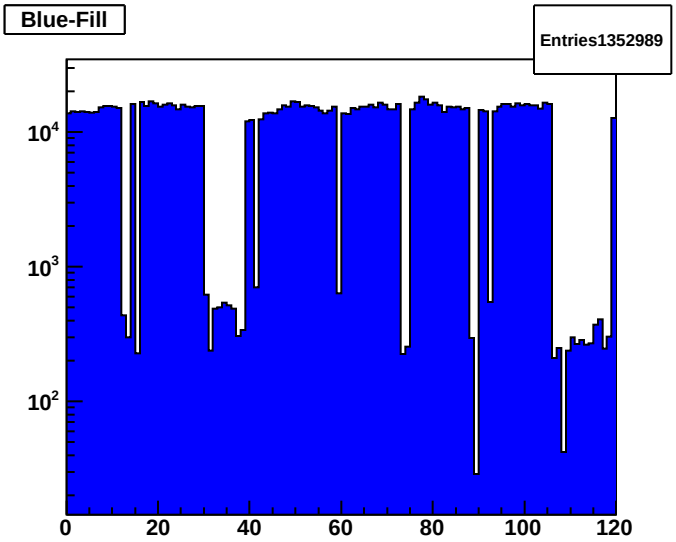

EMC L2 Input - HT23 bits
Entries 61
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

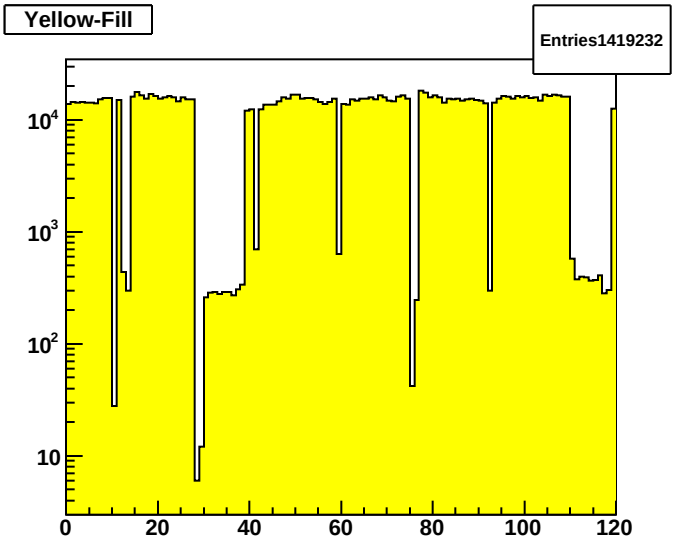

DAQ10k HT bits
Entries 102572

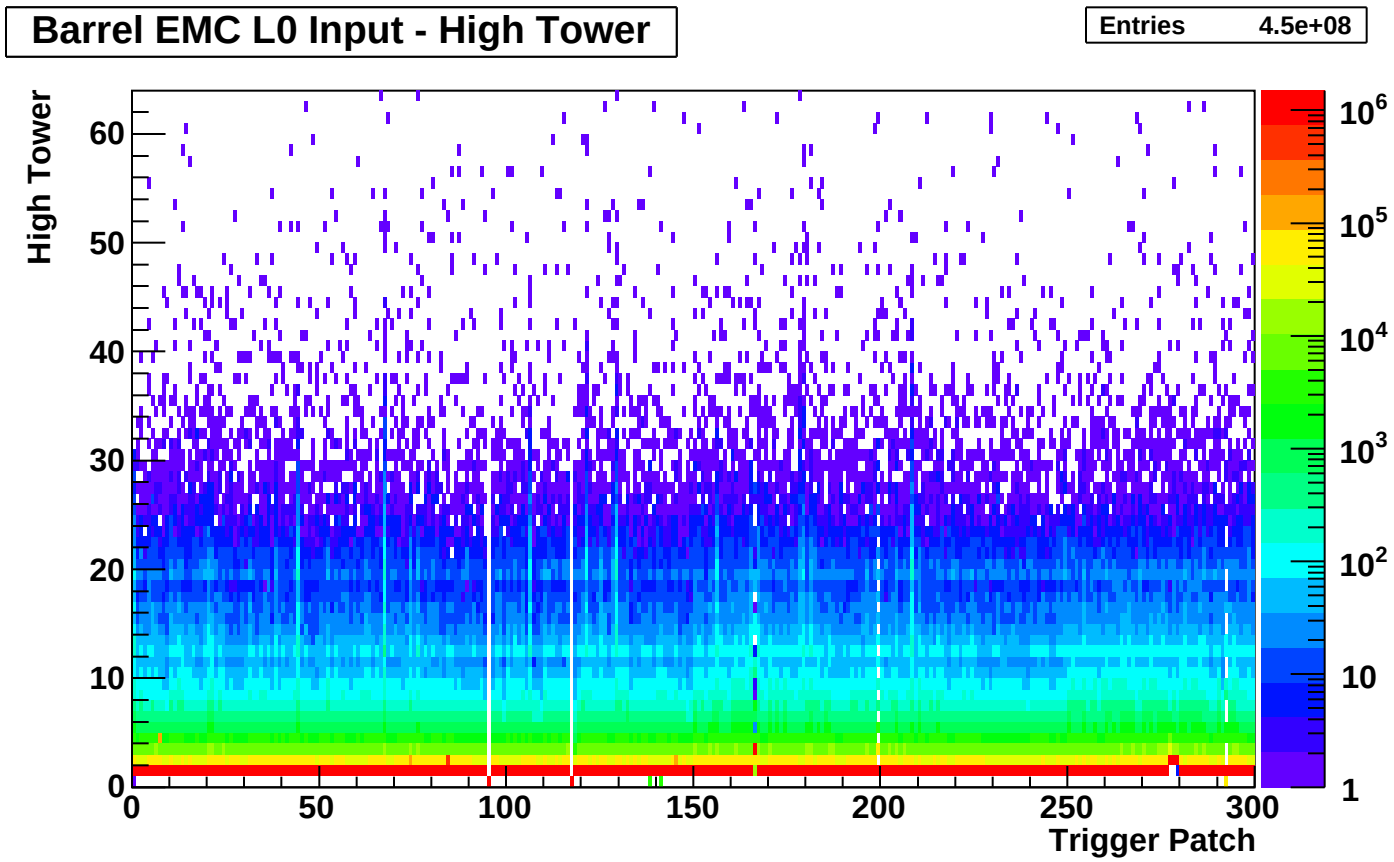

DAQ10k HT bits errors
Entries 38

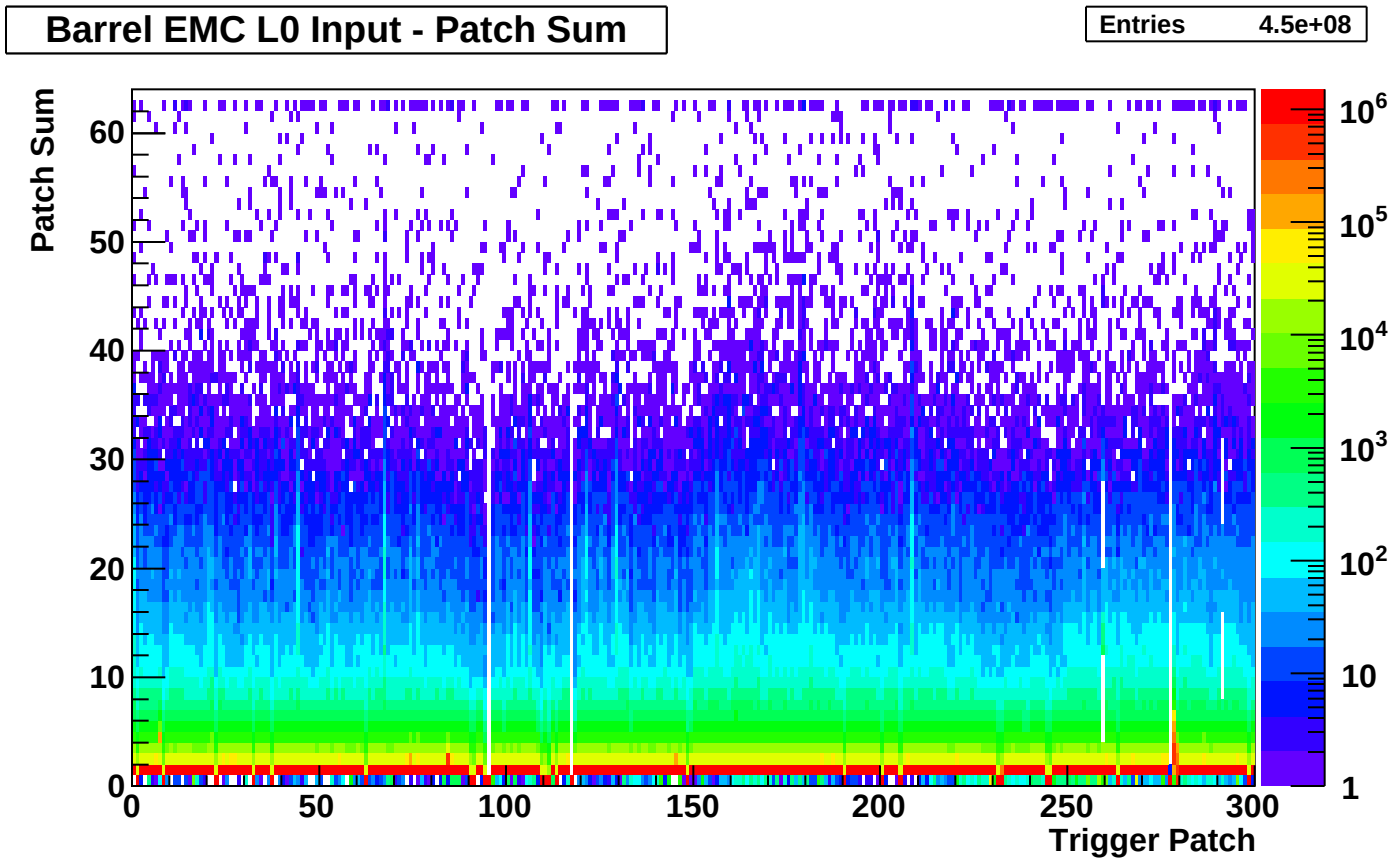

TPC Readout Mask (simulated)
Entries 181472

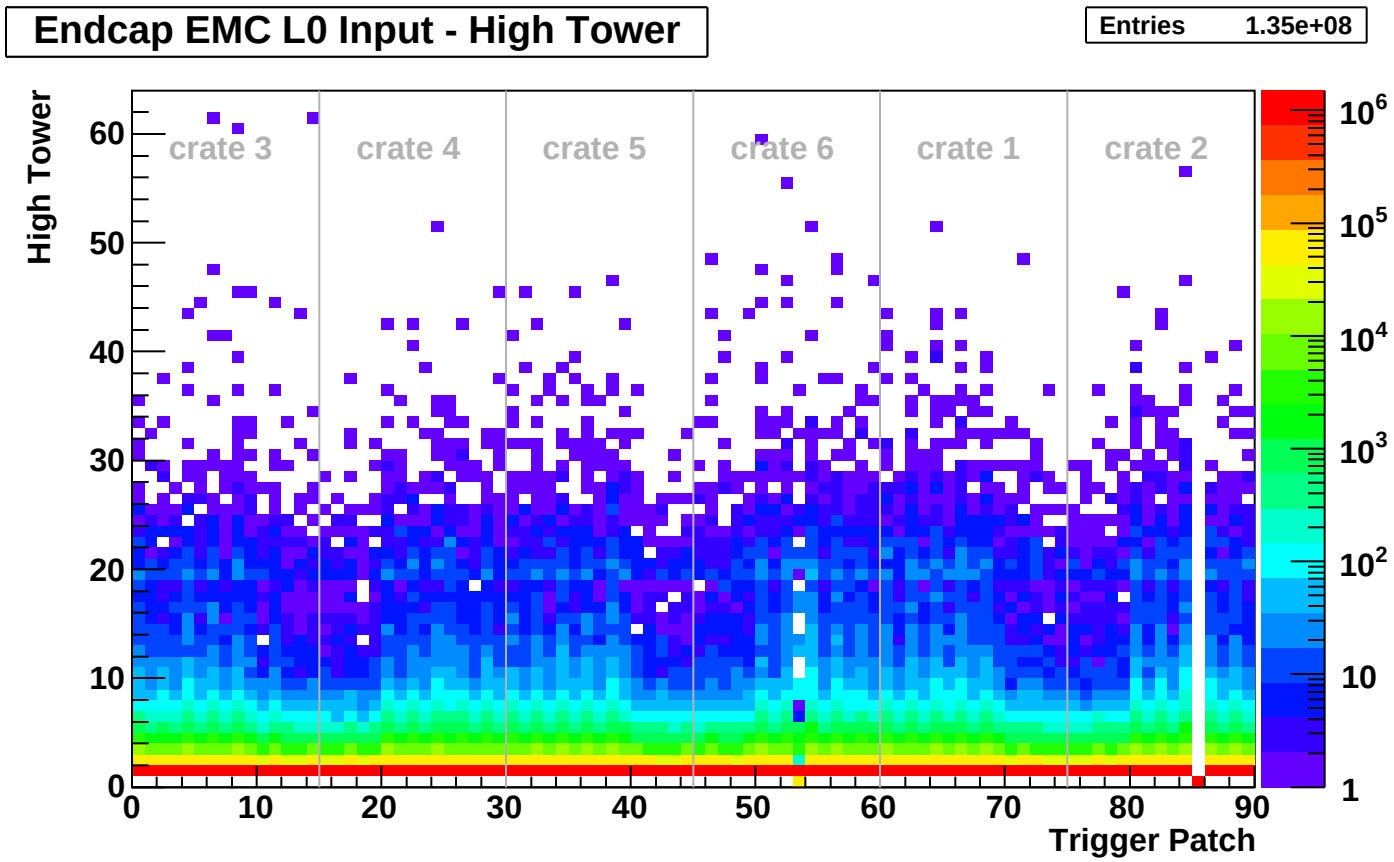

BunchId7Bit (all events)
Entries1500000

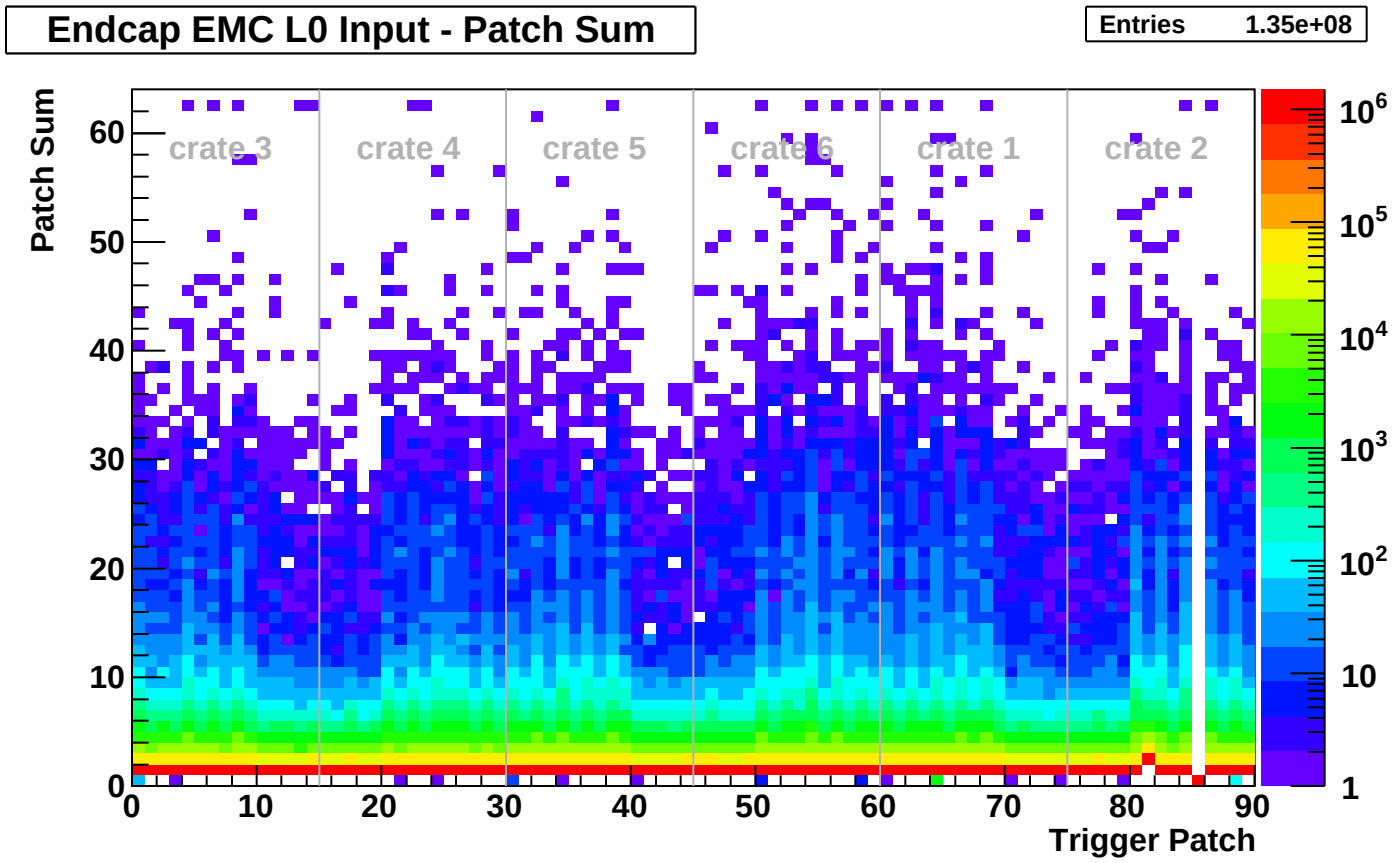

Blue-Fill
Entries1352989

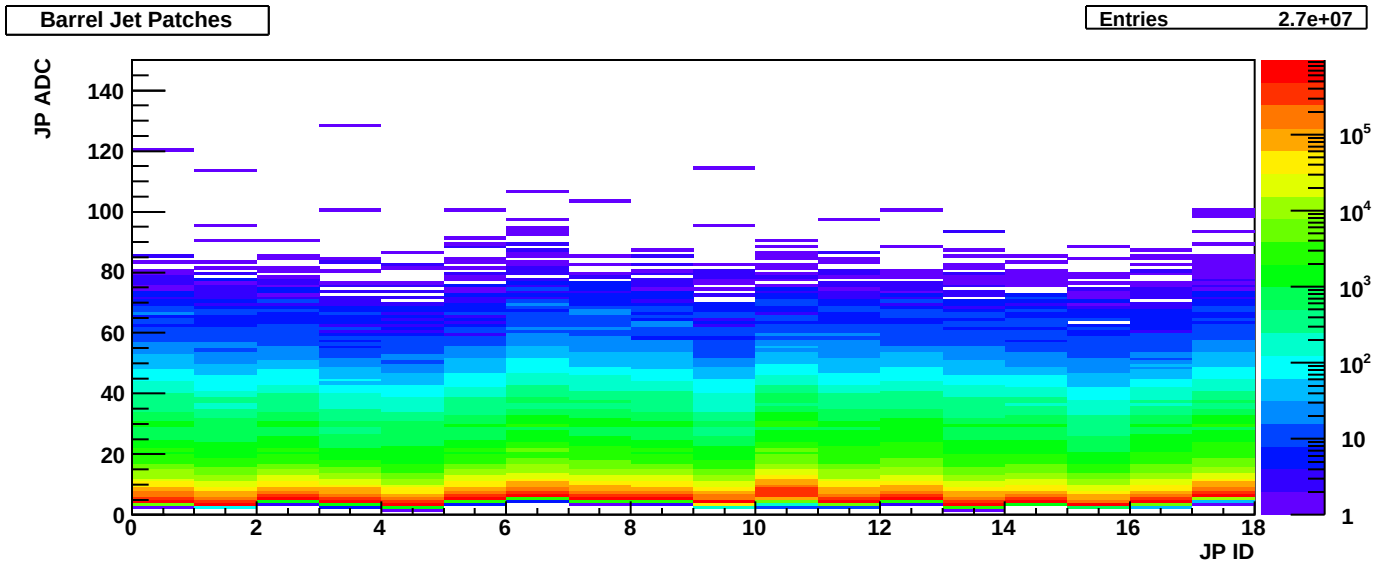

Yellow-Fill
Entries1419232

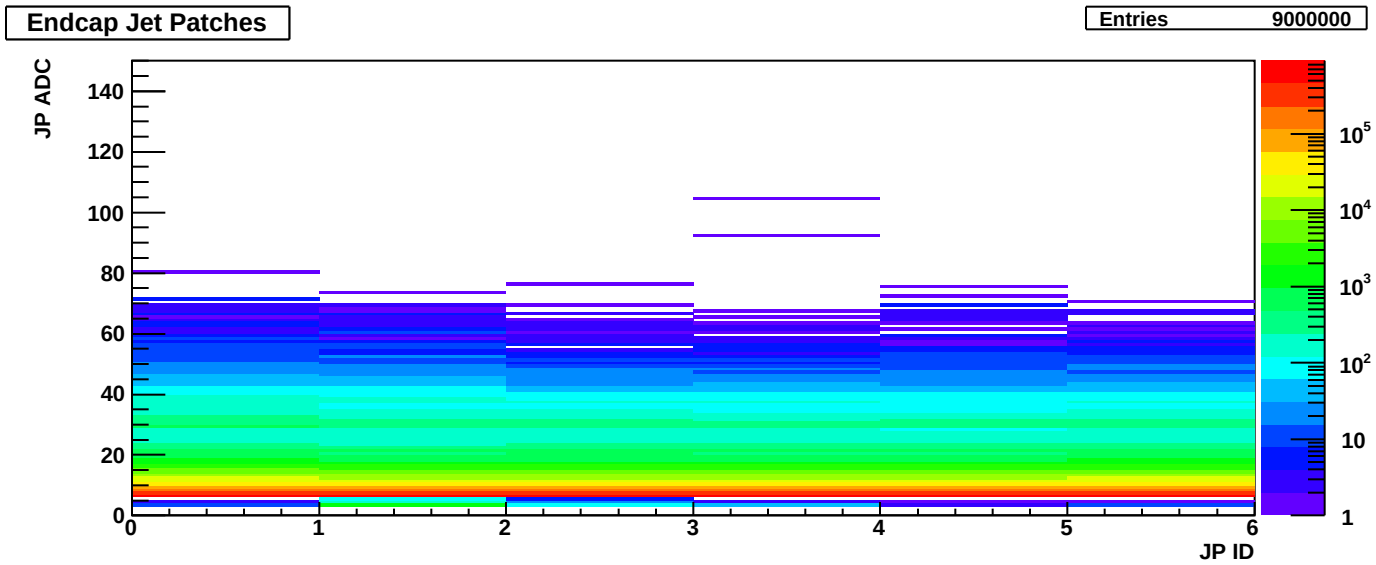

Barrel EMC L0 Input - High Tower
Entries 4.5e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

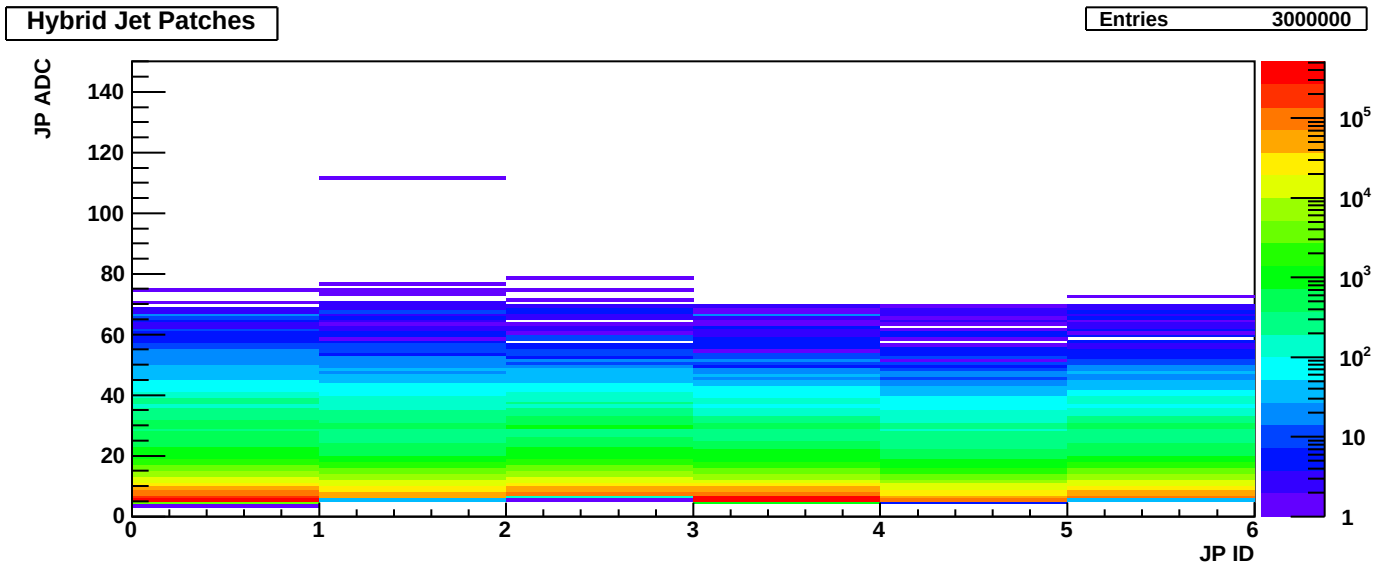

Barrel EMC L0 Input - Patch Sum
Entries 4.5e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

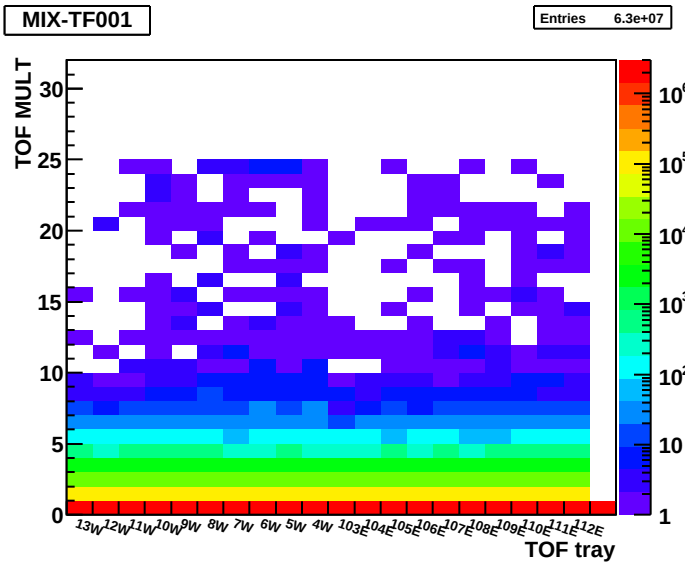

Endcap EMC L0 Input - High Tower
Entries 1.35e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

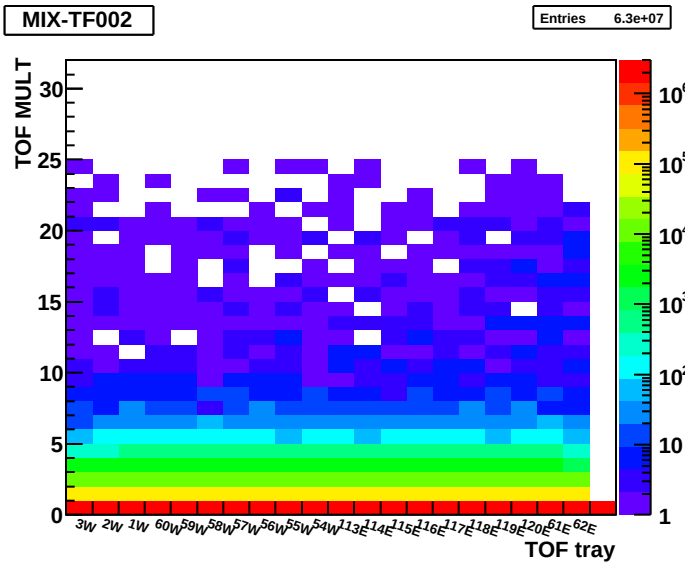

Endcap EMC L0 Input - Patch Sum
Entries 1.35e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

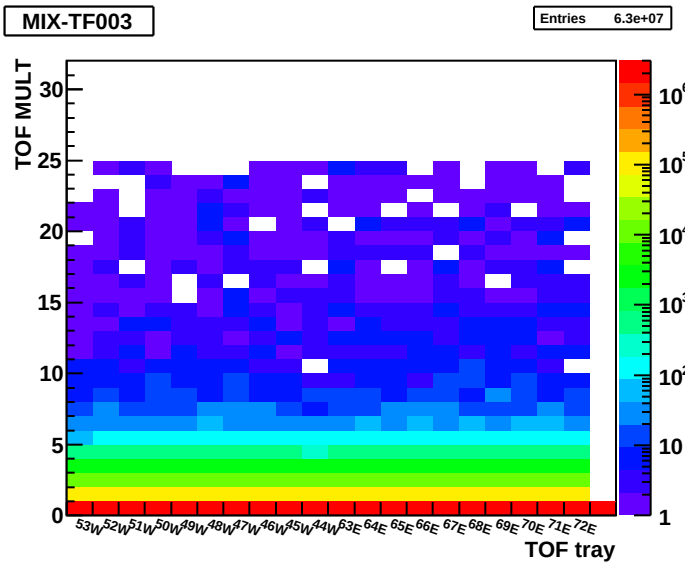

Barrel Jet Patches
Entries 2.7e+07
JP ADC
JP ID

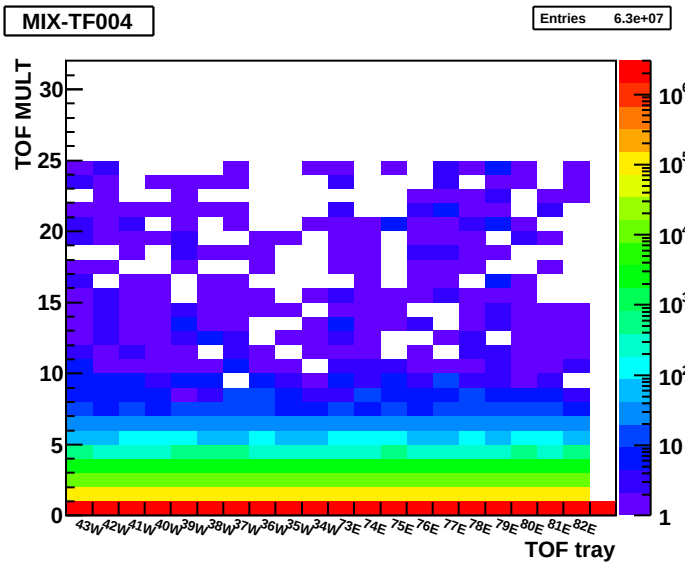

Endcap Jet Patches
Entries 9000000
JP ADC
JP ID

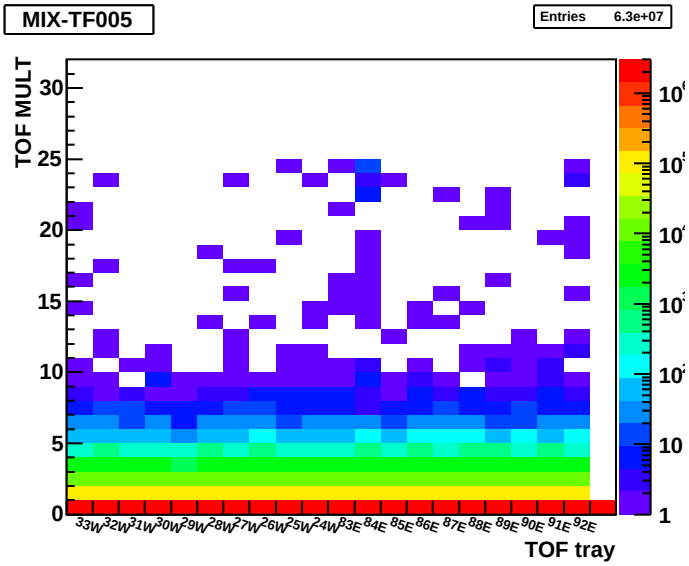

Hybrid Jet Patches
Entries 3000000
JP ADC
JP ID

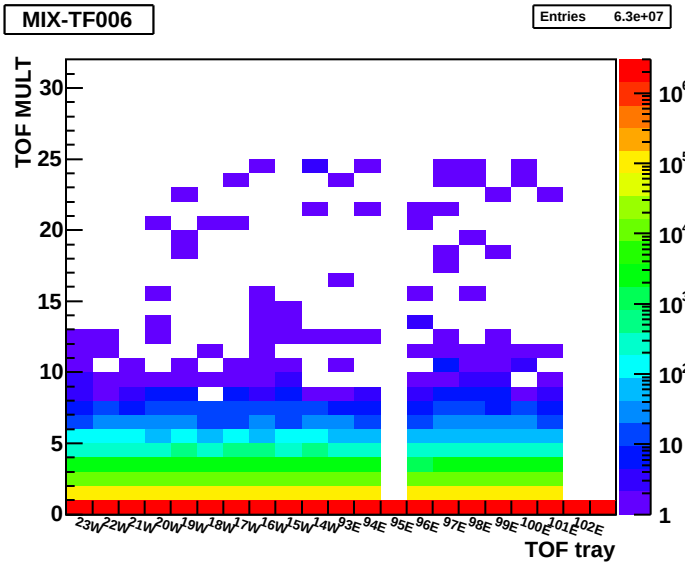

MIX-TF001
Entries 6.3e+07
TOF MULT
TOF tray

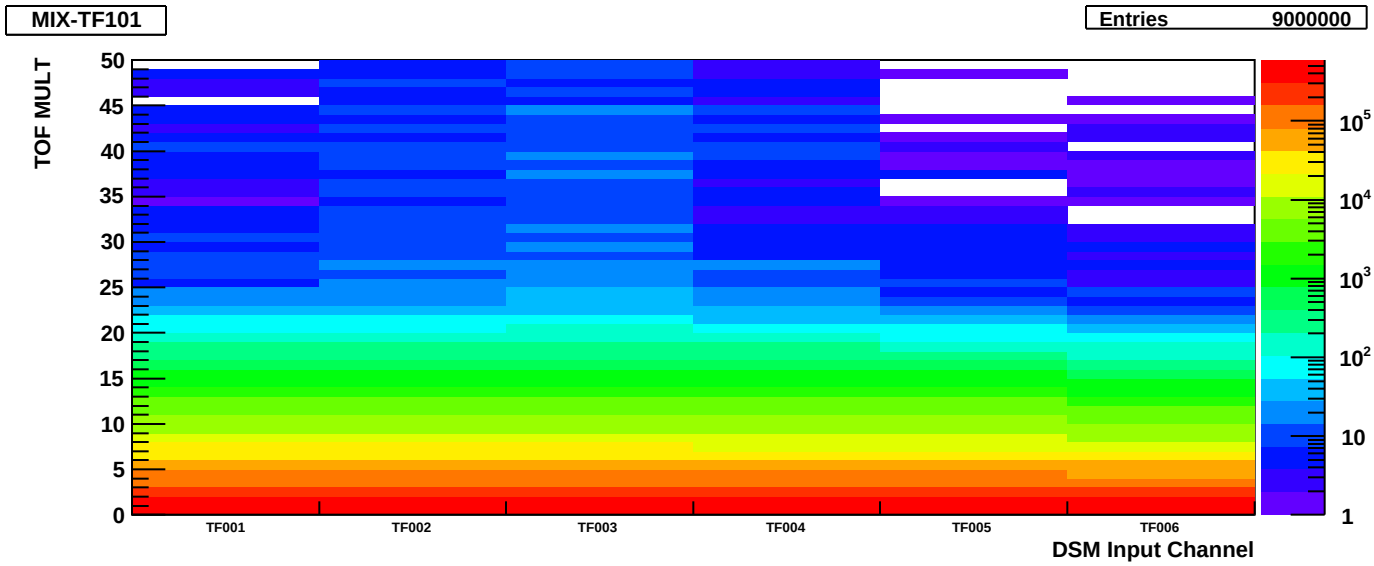

MIX-TF002
Entries 6.3e+07
TOF MULT
TOF tray

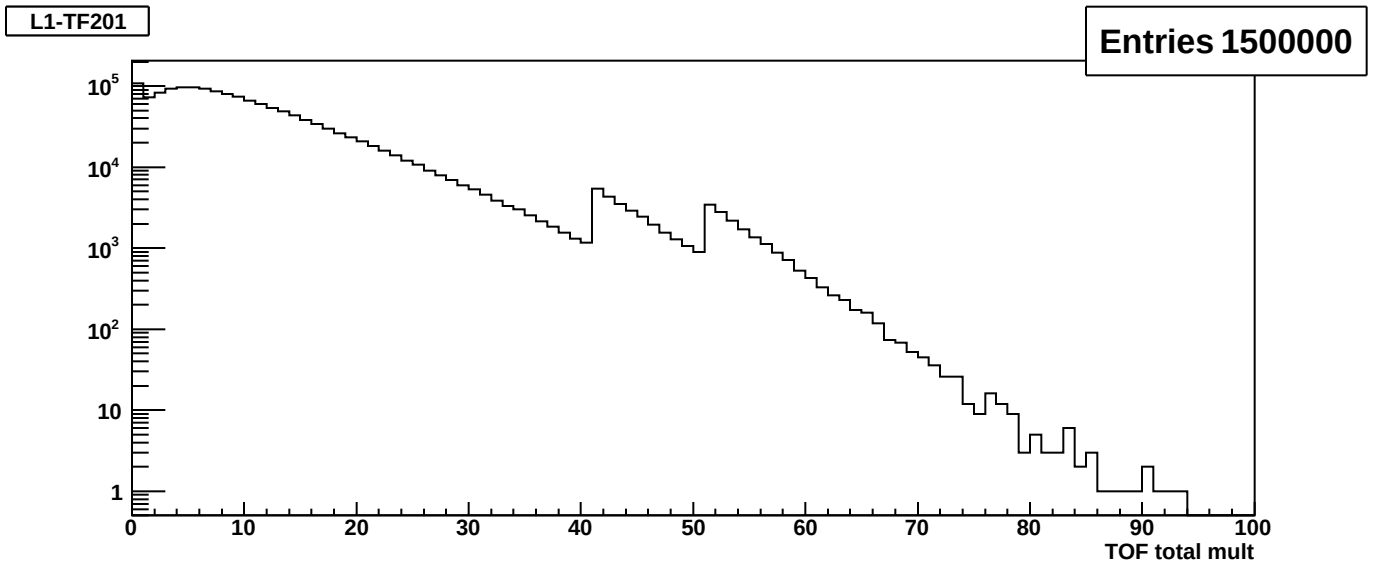

MIX-TF003
Entries 6.3e+07
TOF MULT
TOF tray

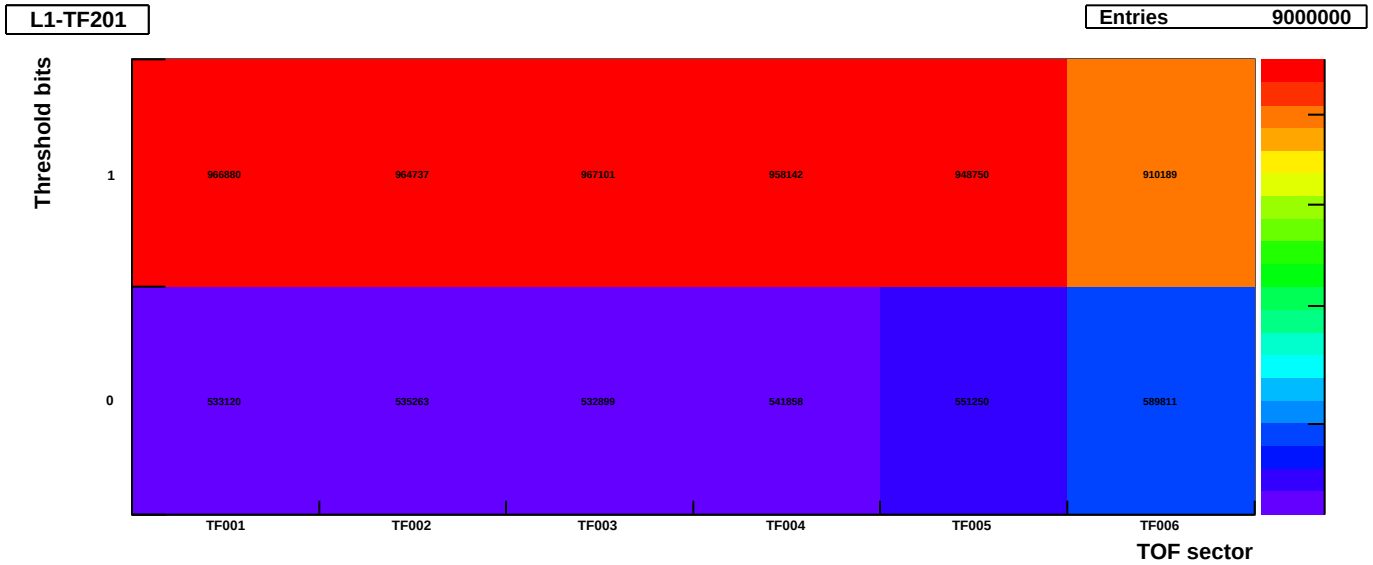

MIX-TF004
Entries 6.3e+07
TOF MULT
TOF tray

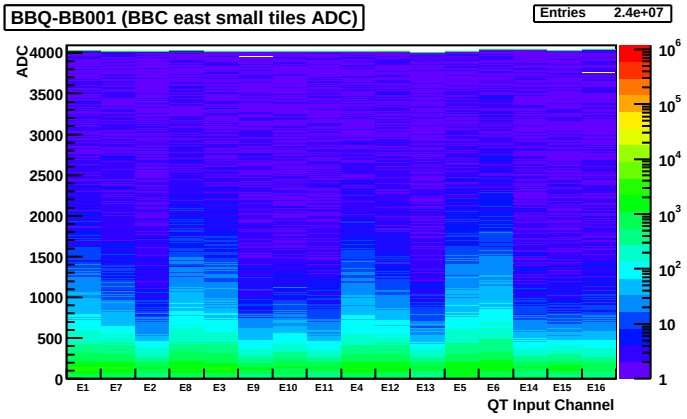

MIX-TF005
Entries 6.3e+07
TOF MULT
TOF tray

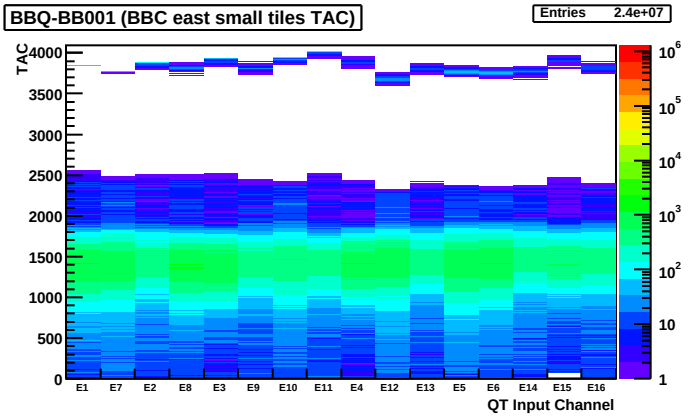

MIX-TF006
Entries 6.3e+07
TOF MULT
TOF tray

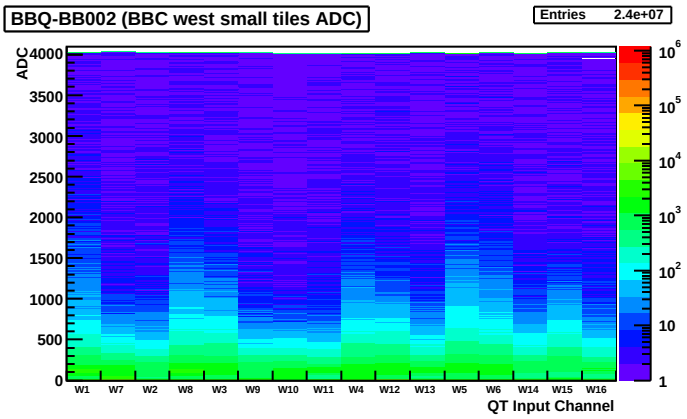

MIX-TF101
Entries 9000000
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

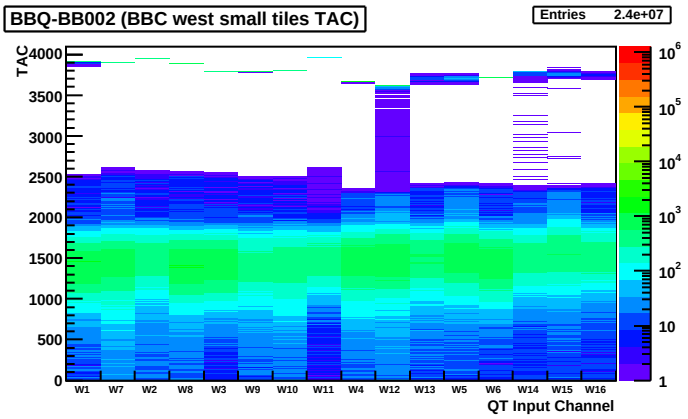

L1-TF201
Entries 1500000
TOF total mult

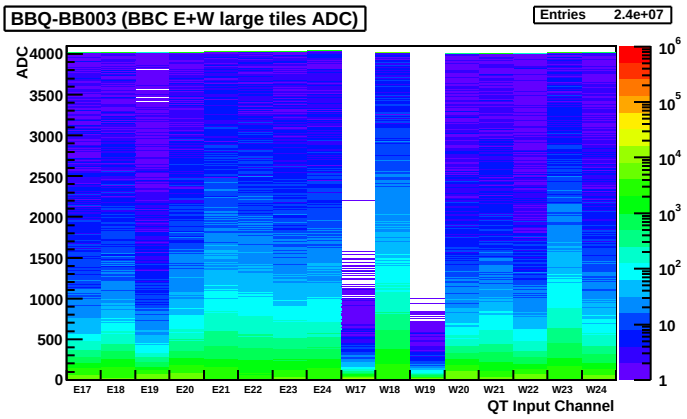

L1-TF201
Entries 9000000
Threshold bits
966880
964737
967101
958142
948750
910189
533120
535263
532899
541858
551250
589811
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

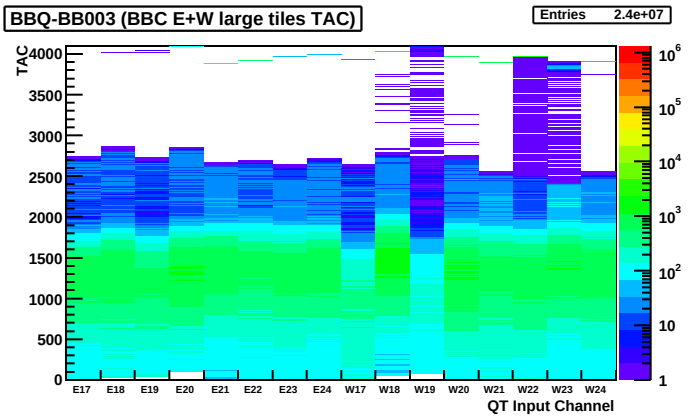

BBQ-BB001 (BBC east small tiles ADC)
Entries 2.4e+07
ADC
QT Input Channel

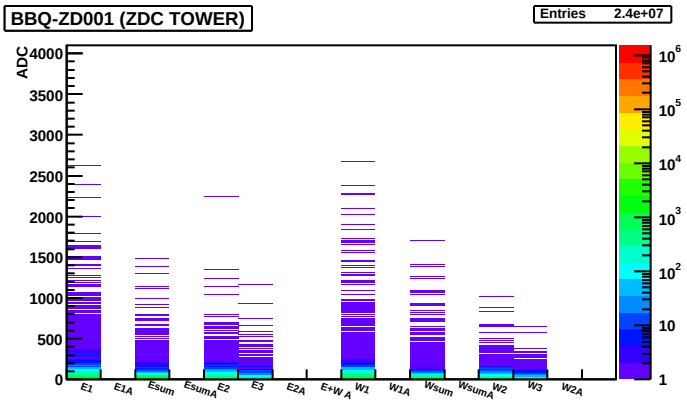

BBQ-BB001 (BBC east small tiles TAC)
Entries 2.4e+07
TAC
QT Input Channel

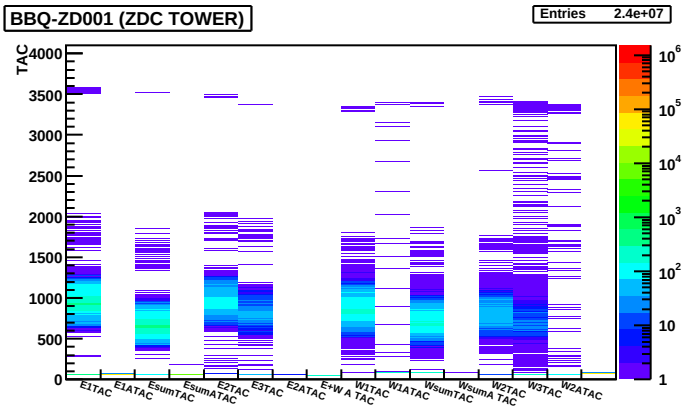

BBQ-BB002 (BBC west small tiles ADC)
Entries 2.4e+07
ADC
QT Input Channel

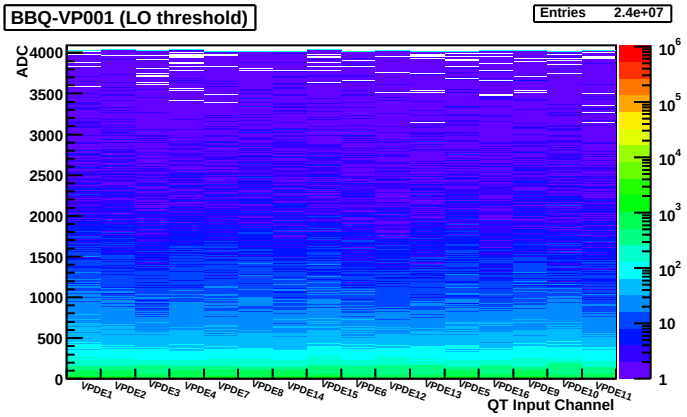

BBQ-BB002 (BBC west small tiles TAC)
Entries 2.4e+07
TAC
QT Input Channel

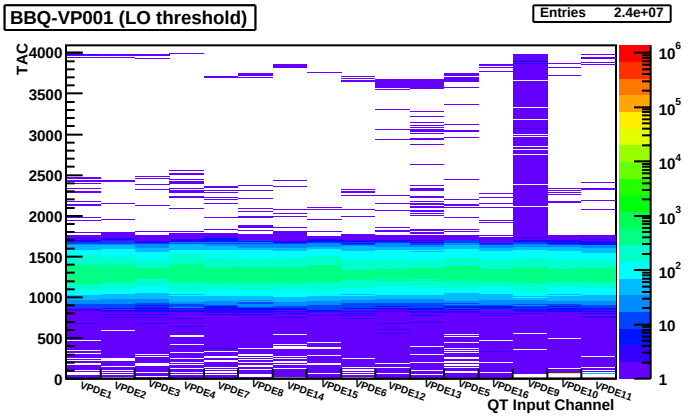

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2.4e+07
ADC
QT Input Channel

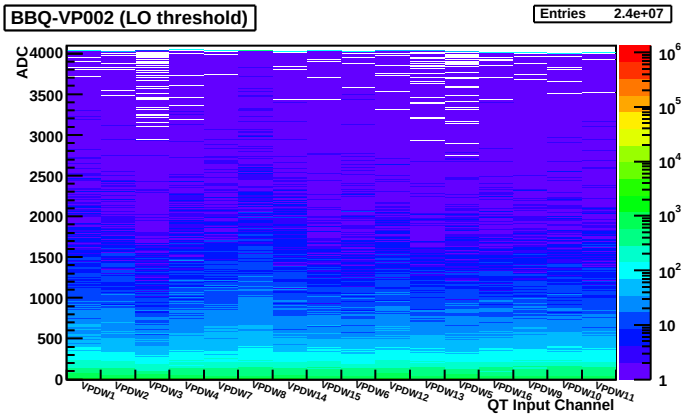

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2.4e+07
TAC
QT Input Channel

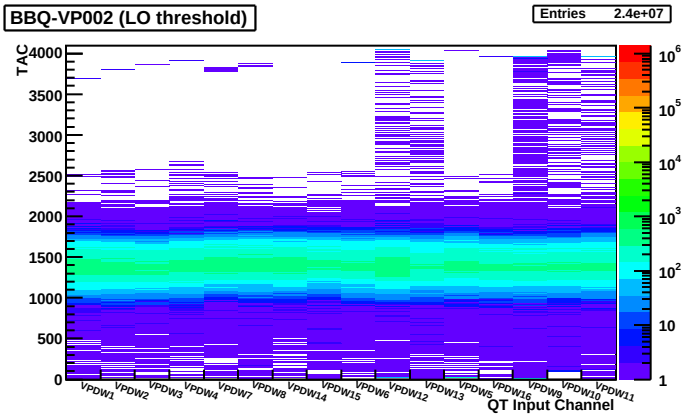

BBQ-ZD001 (ZDC TOWER)
Entries 2.4e+07
ADC

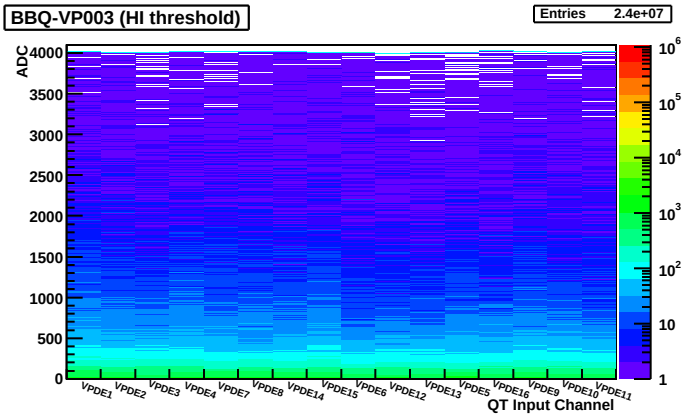

BBQ-ZD001 (ZDC TOWER)
Entries 2.4e+07
TAC

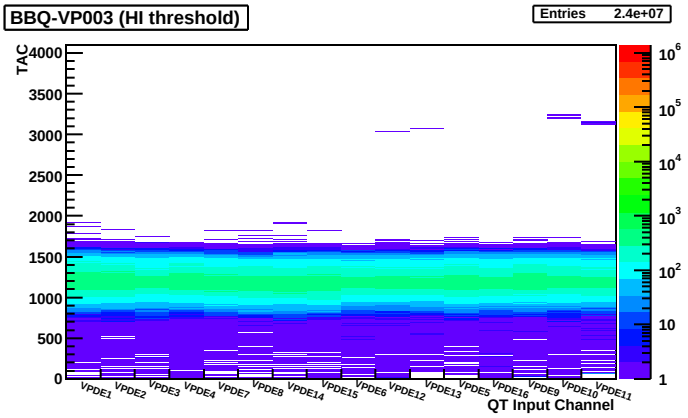

BBQ-VP001 (LO threshold)
Entries 2.4e+07
ADC
QT Input Channel

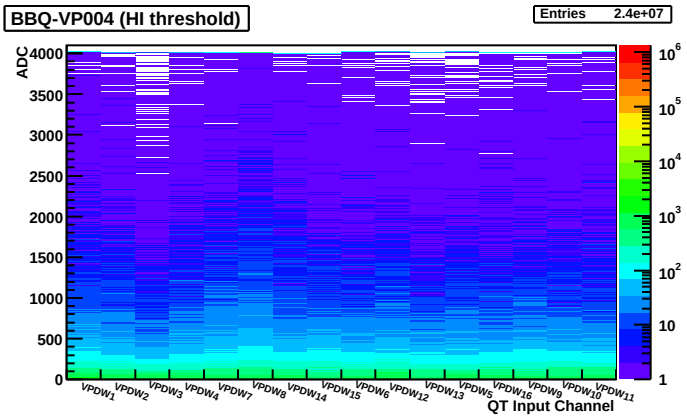

BBQ-VP001 (LO threshold)
Entries 2.4e+07
TAC
QT Input Channel

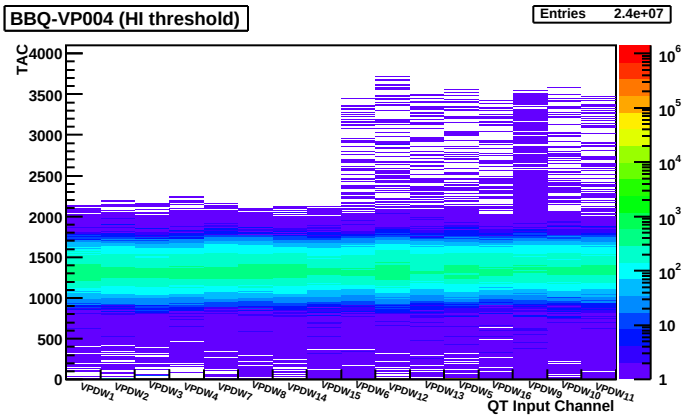

BBQ-VP002 (LO threshold)
Entries 2.4e+07
ADC
QT Input Channel

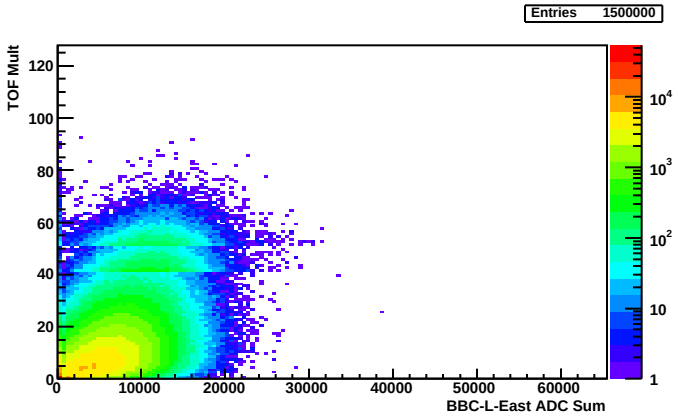

BBQ-VP002 (LO threshold)
Entries 2.4e+07
TAC
QT Input Channel

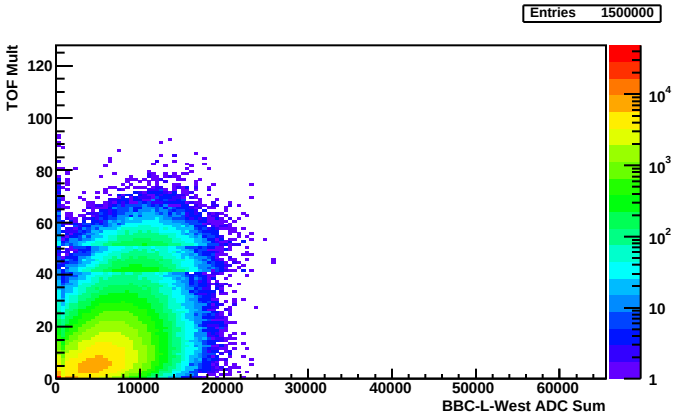

BBQ-VP003 (HI threshold)
Entries 2.4e+07
ADC
QT Input Channel

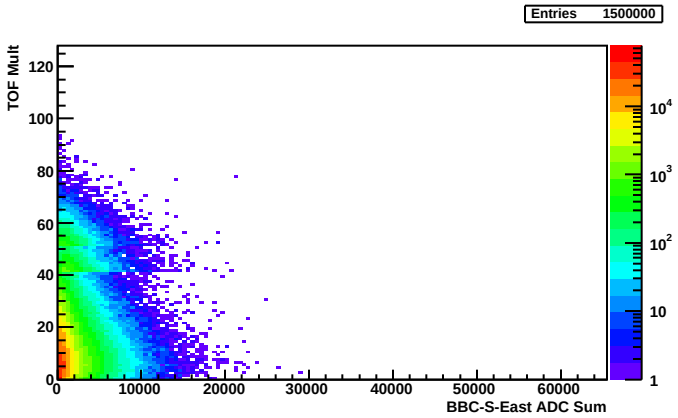

BBQ-VP003 (HI threshold)
Entries 2.4e+07
TAC
QT Input Channel

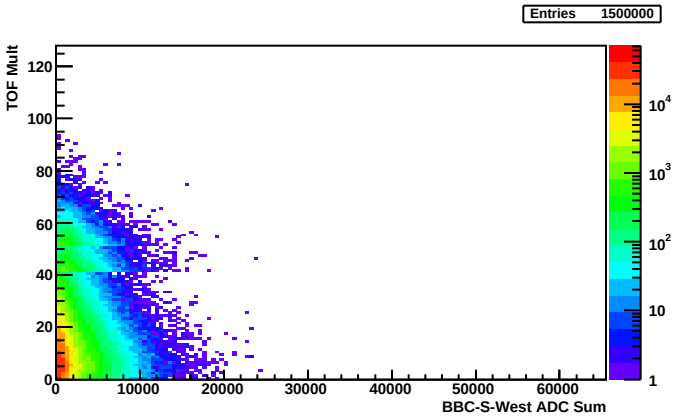

BBQ-VP004 (HI threshold)
Entries 2.4e+07
ADC
QT Input Channel

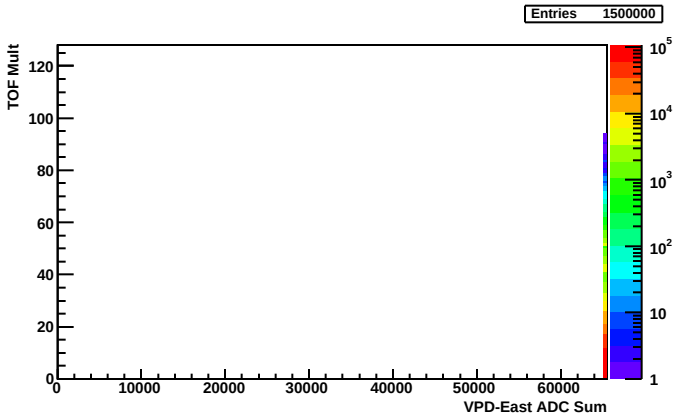

BBQ-VP004 (HI threshold)
Entries 2.4e+07
TAC
QT Input Channel

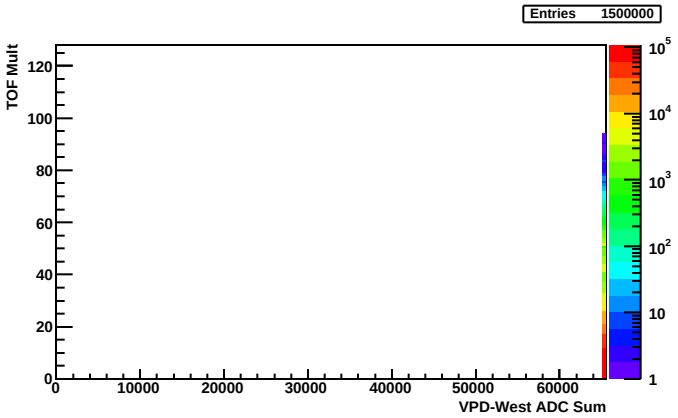

Entries 1500000
TOF Mult
BBC-L-East ADC Sum

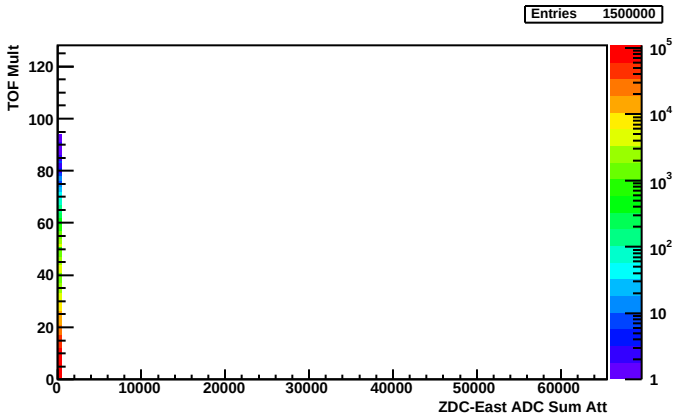

Entries 1500000
TOF Mult
BBC-L-West ADC Sum

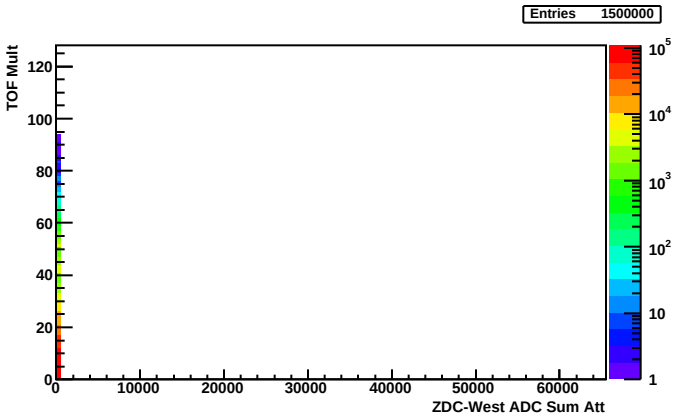

Entries 1500000
TOF Mult
BBC-S-East ADC Sum

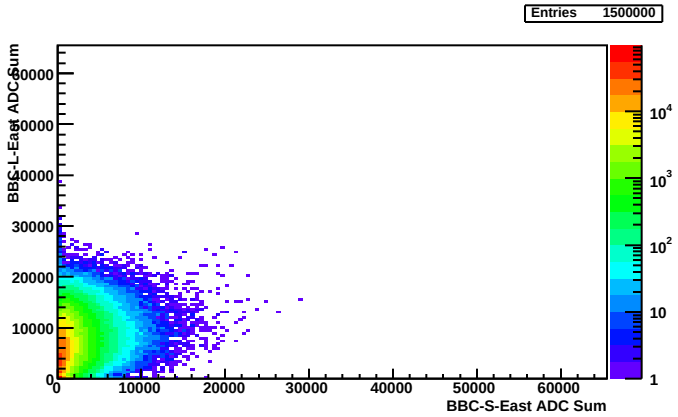

Entries 1500000
TOF Mult
BBC-S-West ADC Sum

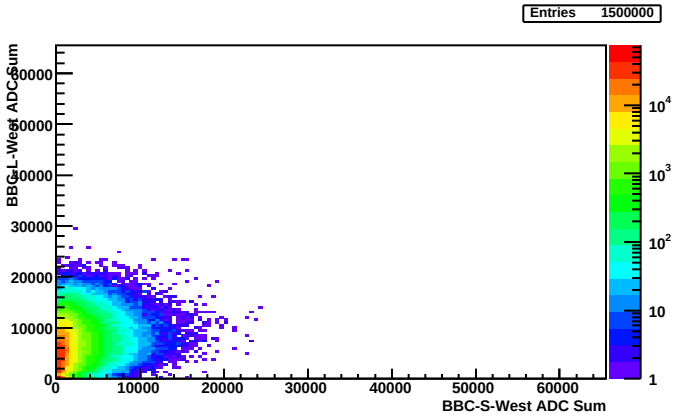

Entries 1500000
TOF Mult
VPD-East ADC Sum

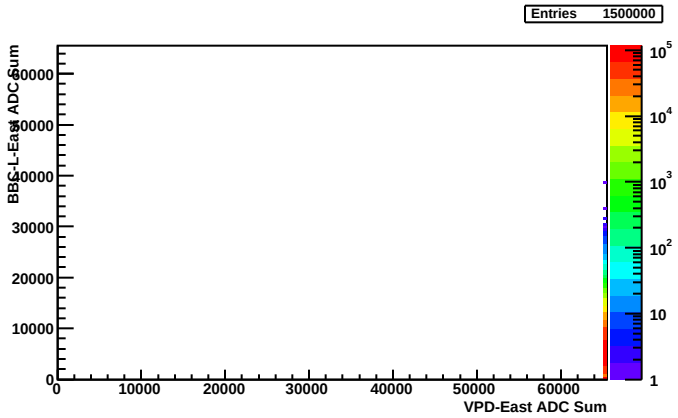

Entries 1500000
TOF Mult
VPD-West ADC Sum

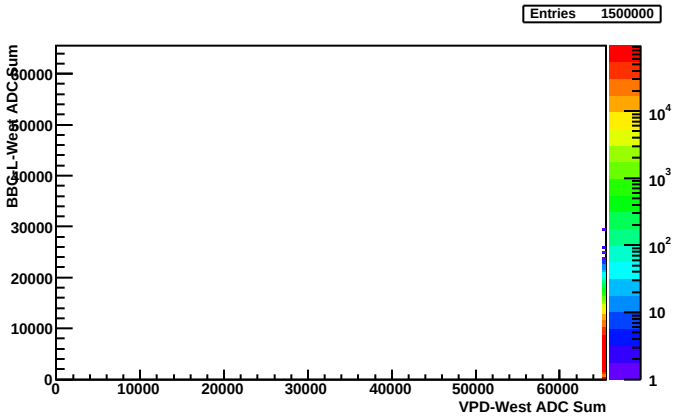

Entries 1500000
TOF Mult
ZDC-East ADC Sum Att

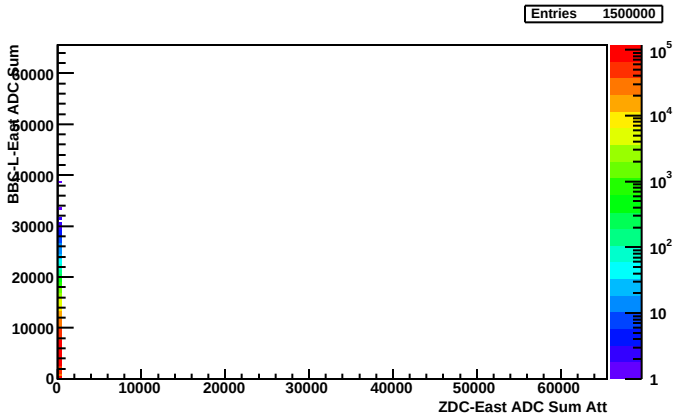

Entries 1500000
TOF Mult
ZDC-West ADC Sum Att

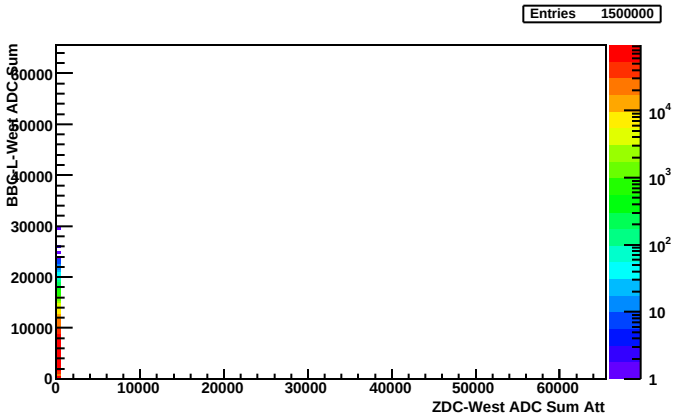

Entries 1500000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

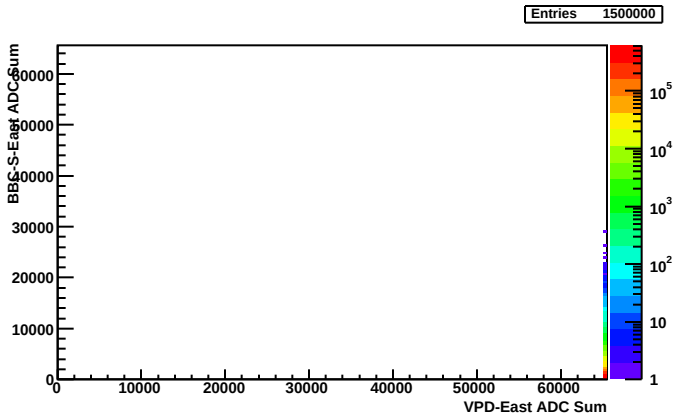

Entries 1500000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

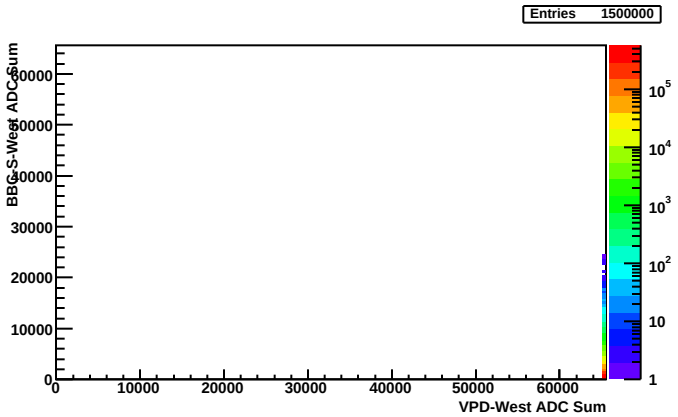

Entries 1500000
BBC-L-East ADC Sum
VPD-East ADC Sum

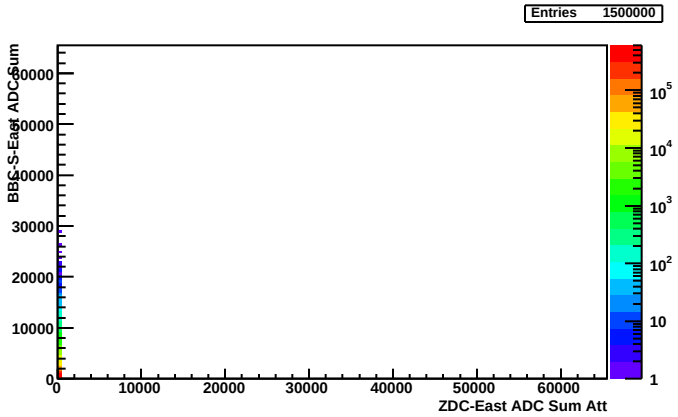

Entries 1500000
BBC-L-West ADC Sum
VPD-West ADC Sum

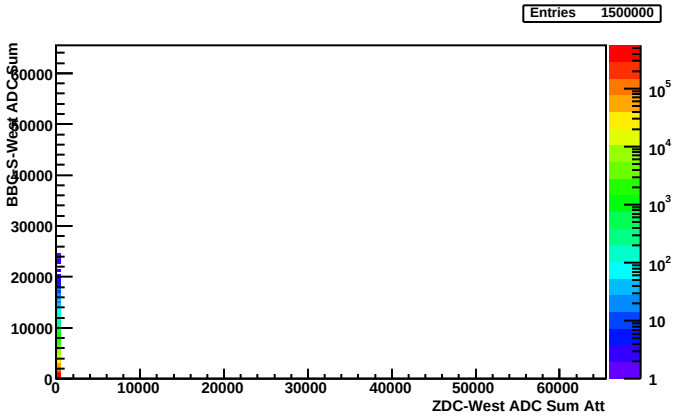

Entries 1500000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

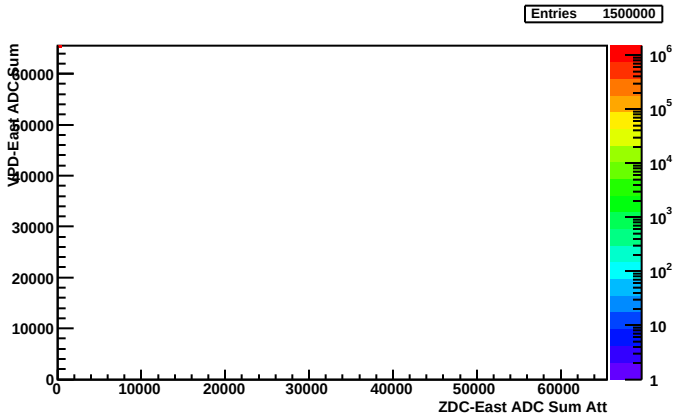

Entries 1500000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

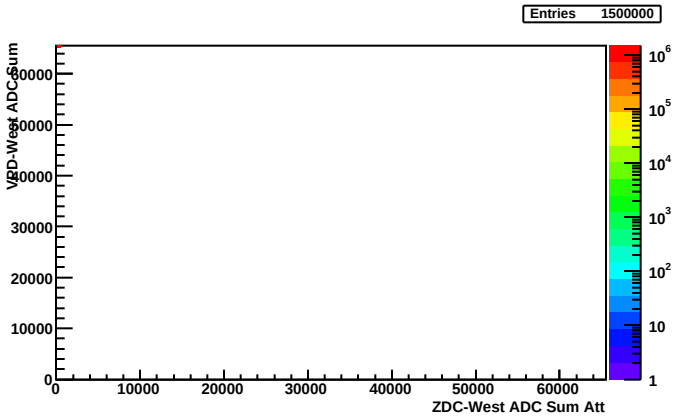

Entries 1500000
BBC-S-East ADC Sum
VPD-East ADC Sum

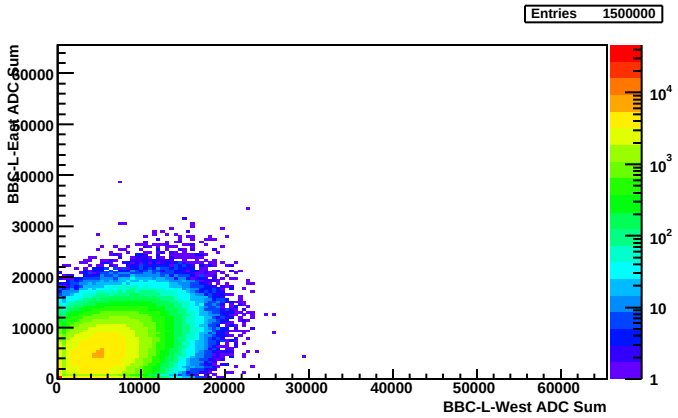

Entries 1500000
BBC-S-West ADC Sum
VPD-West ADC Sum

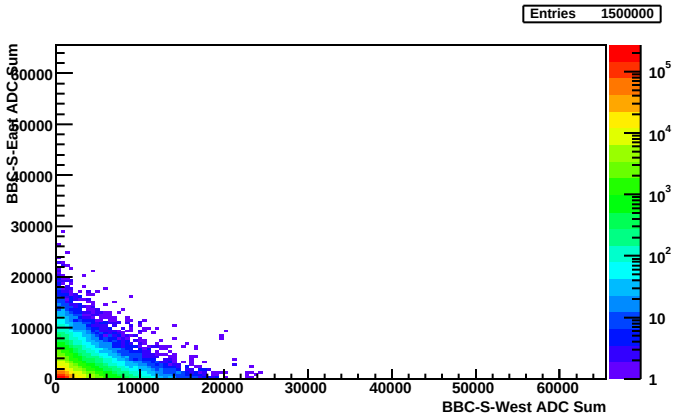

Entries 1500000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

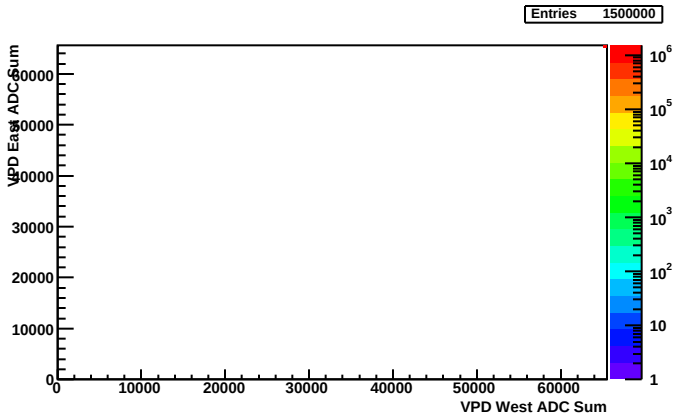

Entries 1500000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

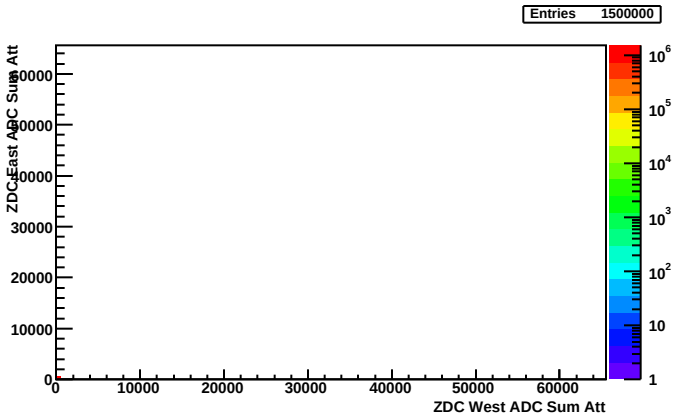

Entries 1500000
VPD-East ADC Sum
ZDC-East ADC Sum Att

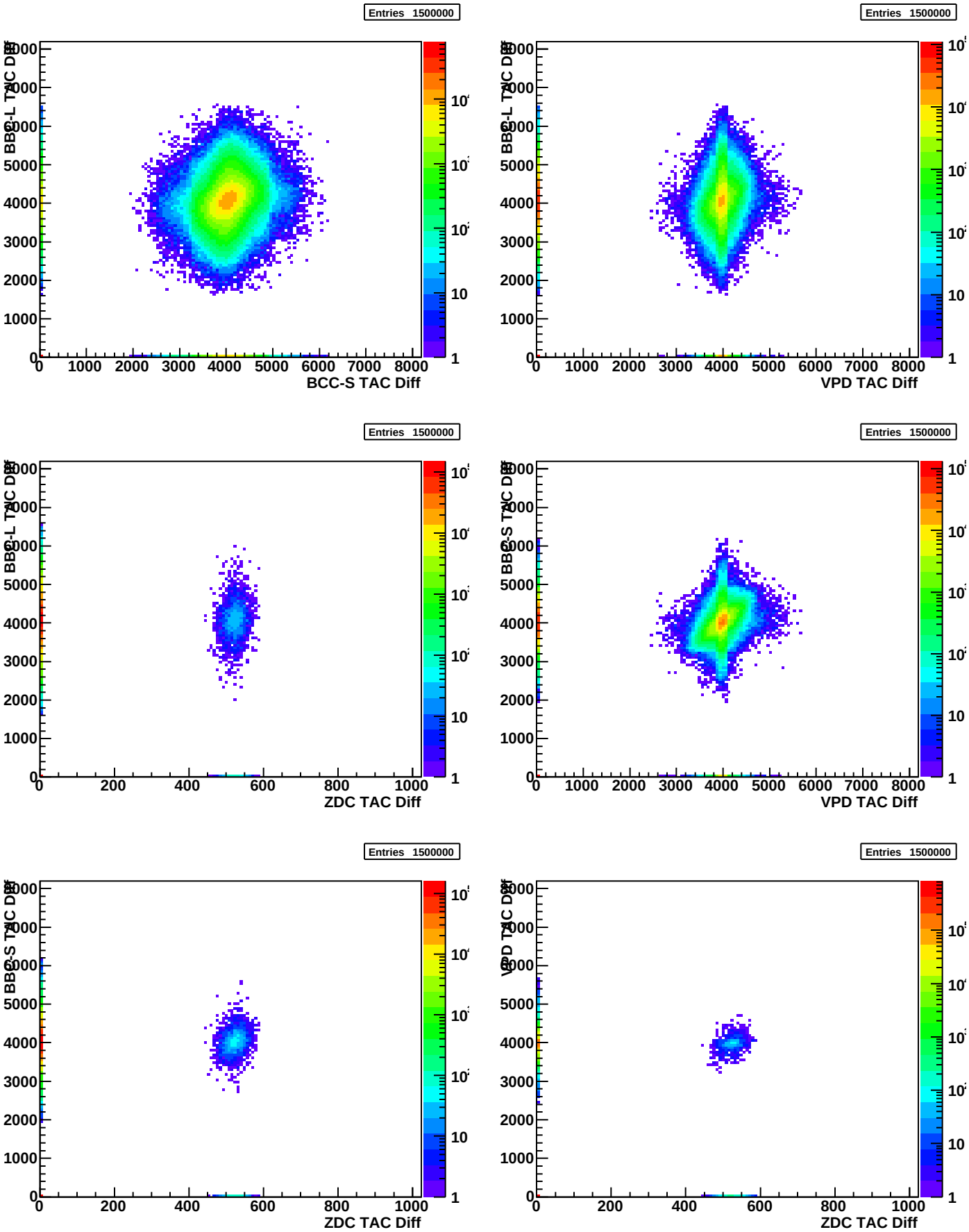

Entries 1500000
VPD-West ADC Sum
ZDC-West ADC Sum Att

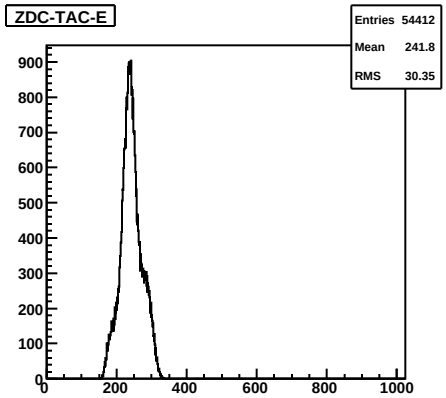

Entries 1500000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

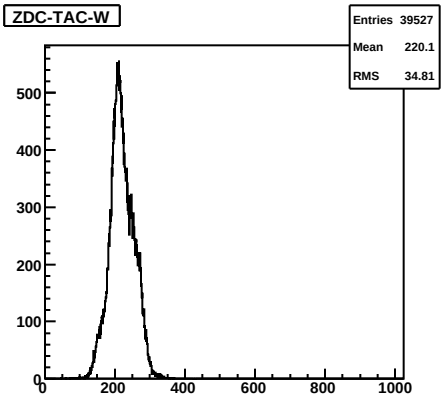

Entries 1500000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

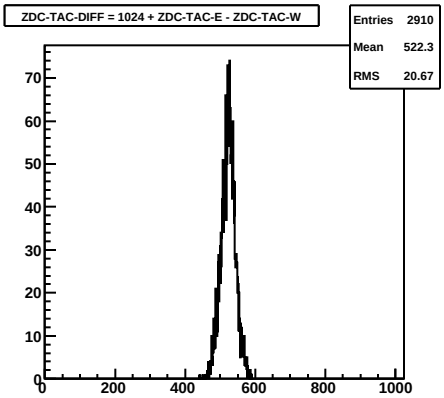

Entries 1500000
VPD East ADC Sum
VPD West ADC Sum

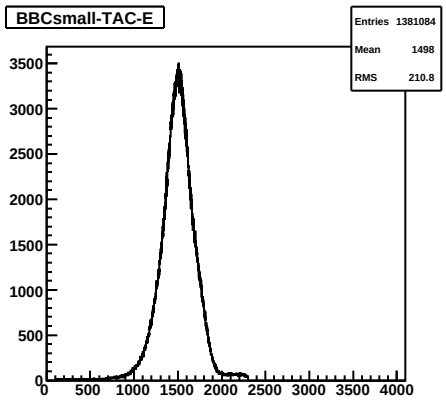

Entries 1500000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

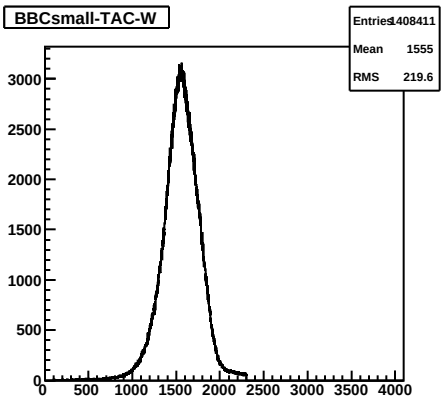

Entries 1500000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1500000
BBC-L TAC Diff
VPD TAC Diff
Entries 1500000
BBC-L TAC Diff
ZDC TAC Diff
Entries 1500000
BBC-S TAC Diff
VPD TAC Diff
Entries 1500000
BBC-S TAC Diff
ZDC TAC Diff
Entries 1500000
VPD TAC Diff
ZDC TAC Diff

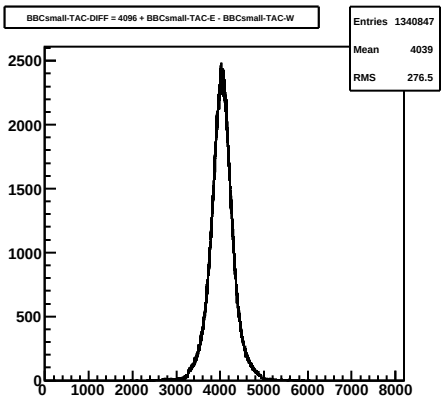

ZDC-TAC-E
Entries 54412
Mean 241.8
RMS 30.35

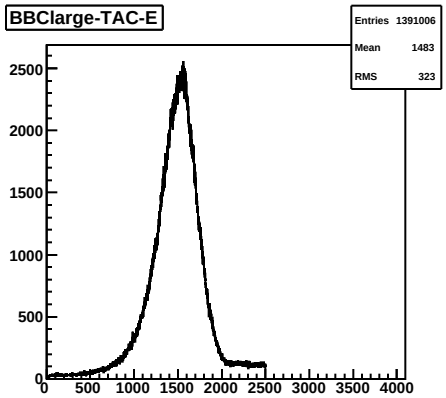

ZDC-TAC-W
Entries 39527
Mean 220.1
RMS 34.81

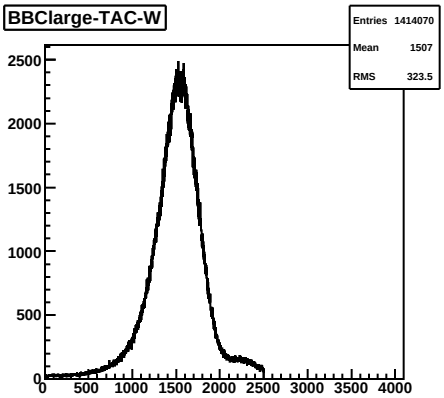

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 2910
Mean 522.3
RMS 20.67

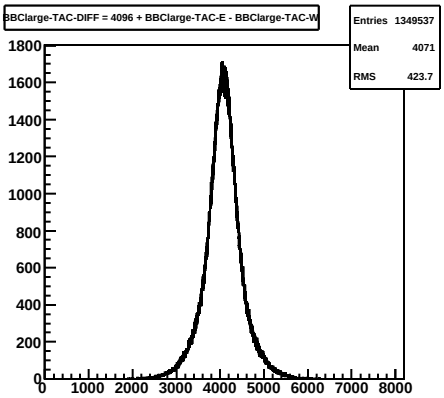

BBCsmall-TAC-E
Entries 1381084
Mean 1498
RMS 210.8

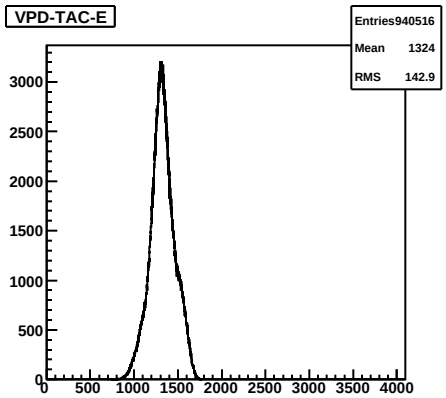

BBCsmall-TAC-W
Entries 1408411
Mean 1555
RMS 219.6

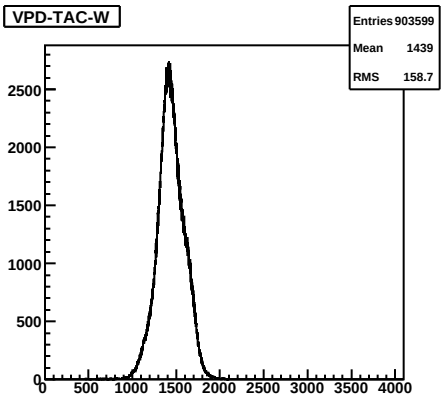

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 1340847
Mean 4039
RMS 276.5

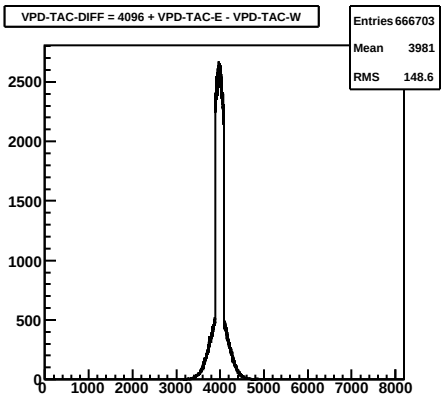

BBClarge-TAC-E
Entries 1391006
Mean 1483
RMS 323

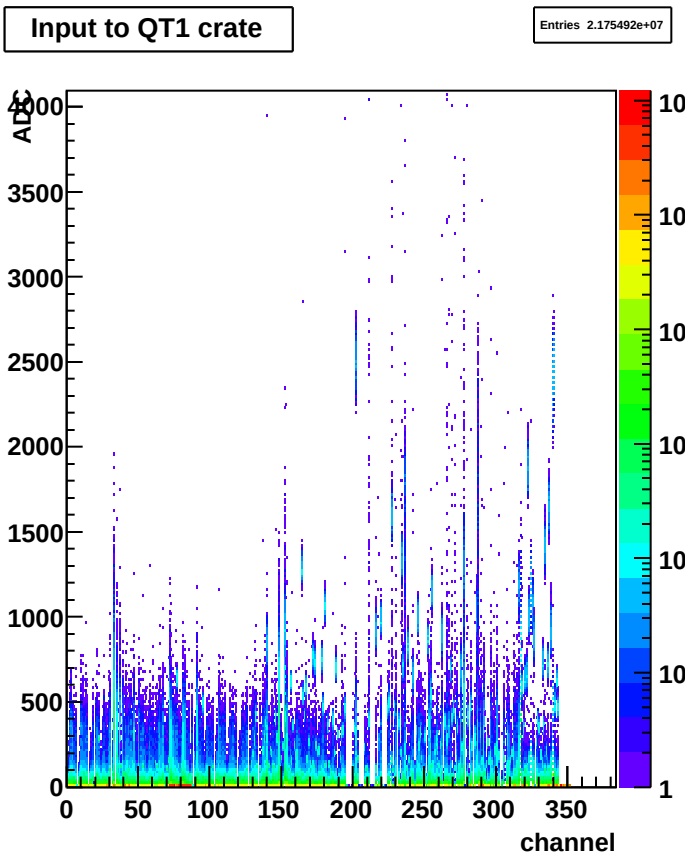

BBClarge-TAC-W
Entries 1414070
Mean 1507
RMS 323.5

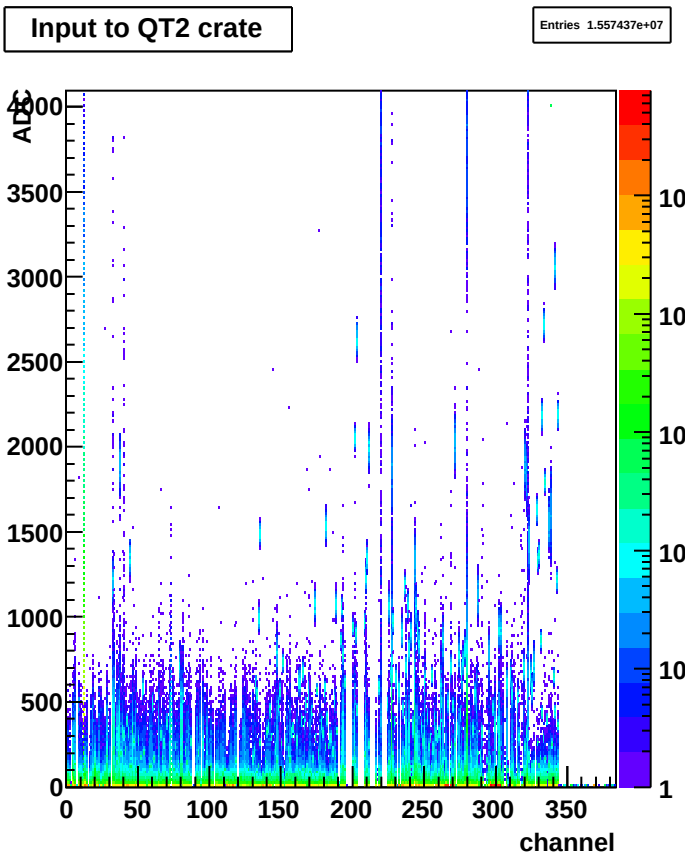

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 1349537
Mean 4071
RMS 423.7

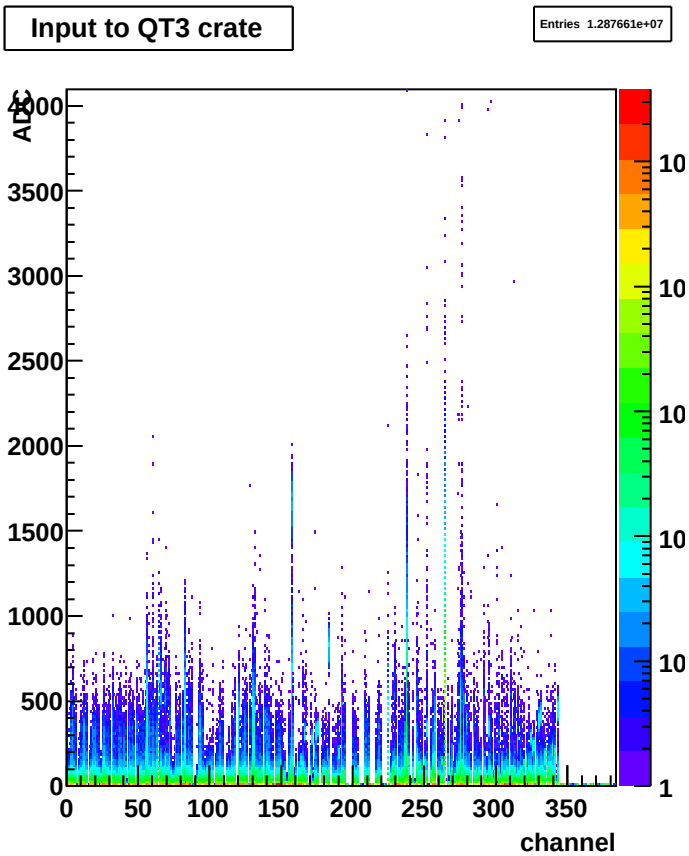

VPD-TAC-E
Entries 940516
Mean 1324
RMS 142.9

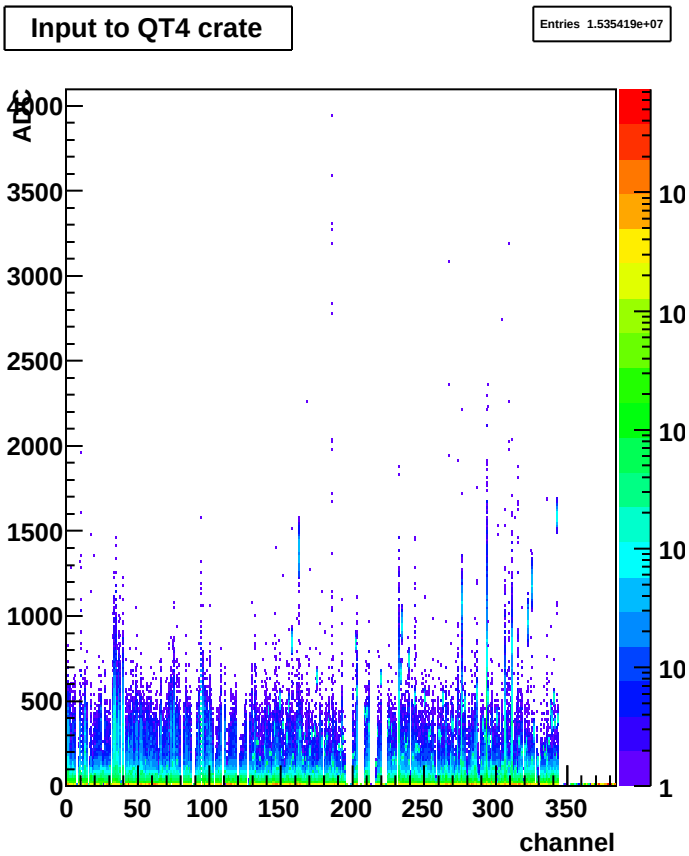

VPD-TAC-W
Entries 903599
Mean 1439
RMS 158.7

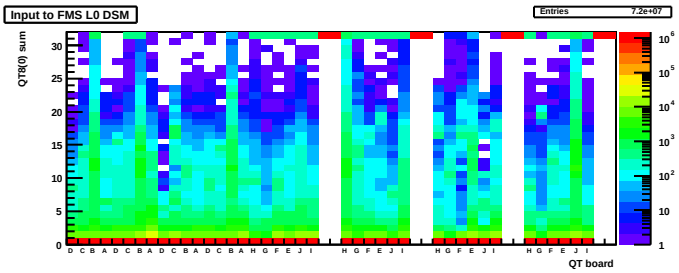

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 666703
Mean 3981
RMS 148.6

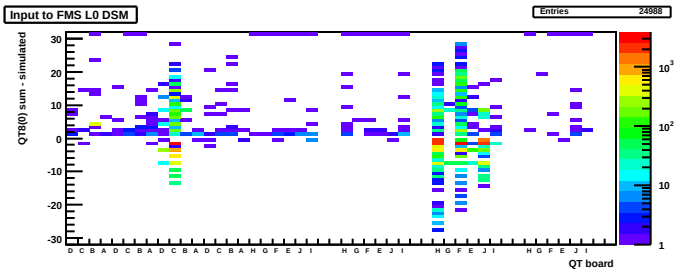

Input to QT1 crate
Entries 2.175492e+07
ADC
channel

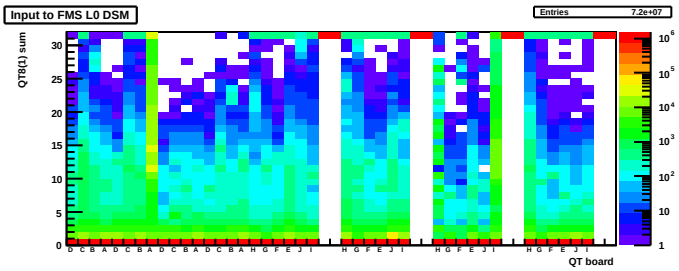

Input to QT2 crate
Entries 1.557437e+07
ADC
channel

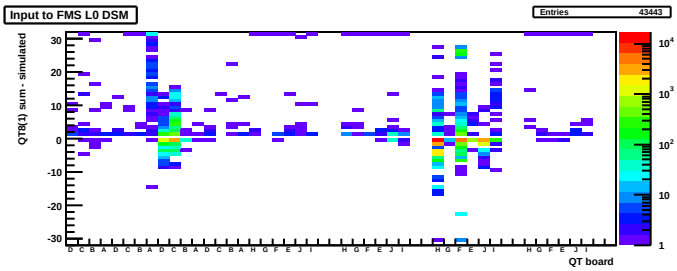

Input to QT3 crate
Entries 1.287661e+07
ADC
channel

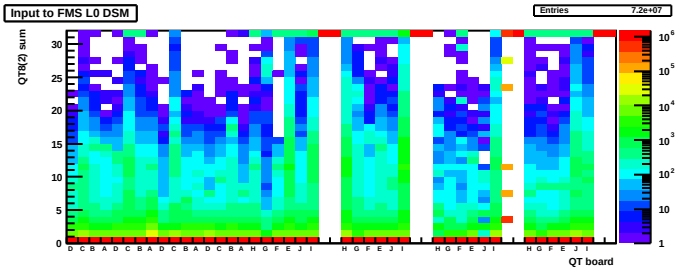

Input to QT4 crate
Entries 1.535419e+07
ADC
channel

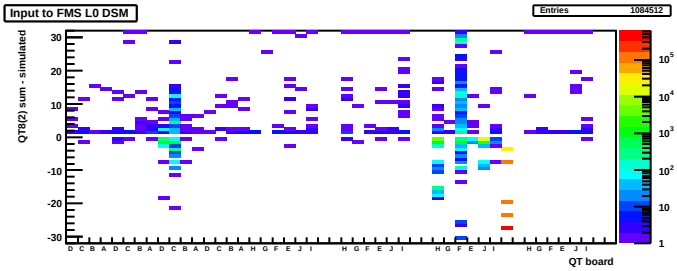

Input to FMS L0 DSM
Entries 7.2e+07
QT8(0) sum
QT board

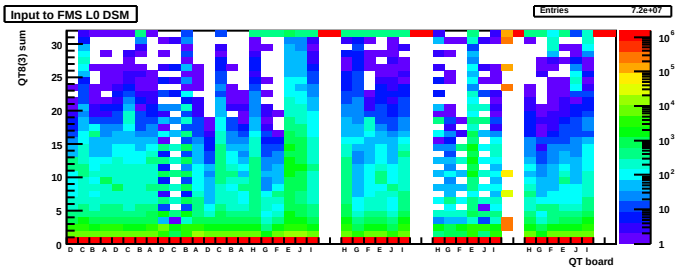

Input to FMS L0 DSM
Entries 24988
QT8(0) sum - simulated
QT board

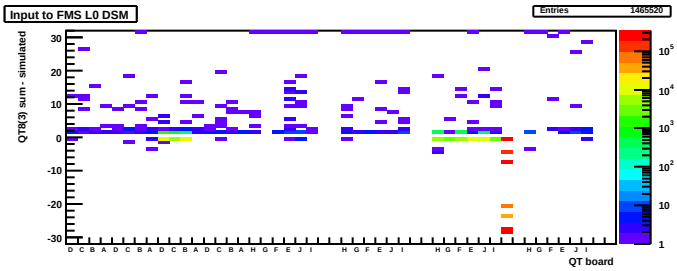

Input to FMS L0 DSM
Entries 7.2e+07
QT8(1) sum
QT board

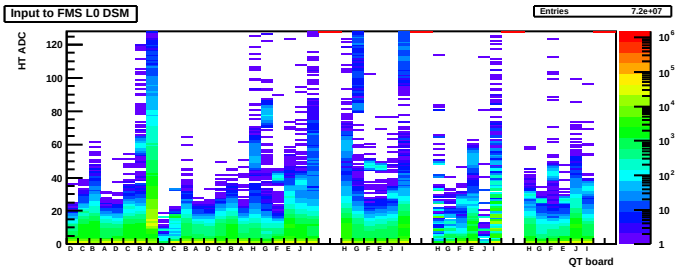

Input to FMS L0 DSM
Entries 43443
QT8(1) sum - simulated
QT board

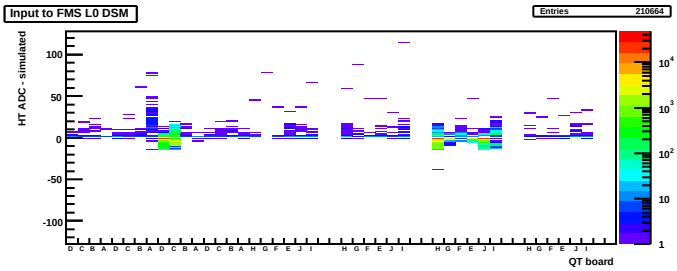

Input to FMS L0 DSM
Entries 7.2e+07
QT8(2) sum
QT board

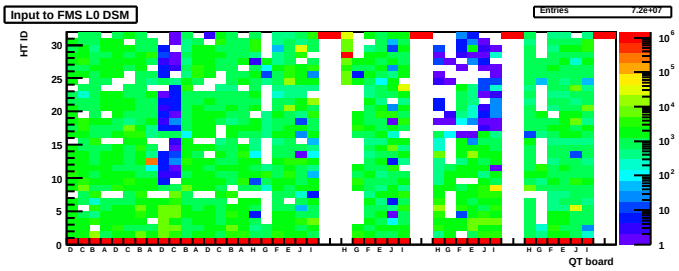

Input to FMS L0 DSM
Entries 1084512
QT8(2) sum - simulated
QT board

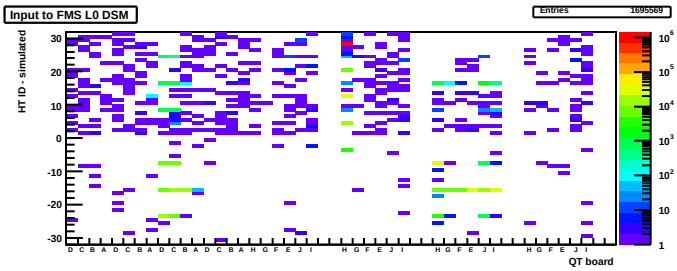

Input to FMS L0 DSM
Entries 7.2e+07
QT8(3) sum
QT board

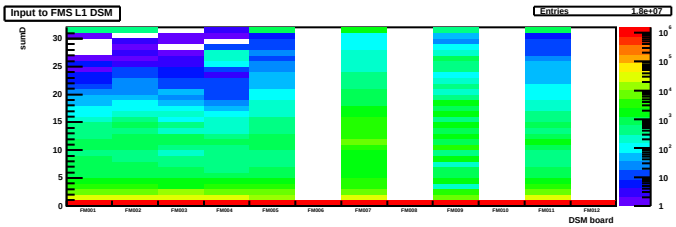

Input to FMS L0 DSM
Entries 1465520
QT8(3) sum - simulated
QT board

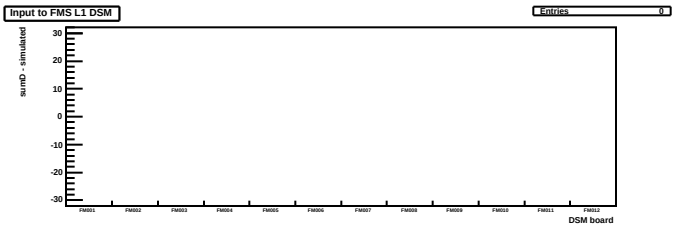

Input to FMS L0 DSM
Entries 7.2e+07
HT ADC
QT board

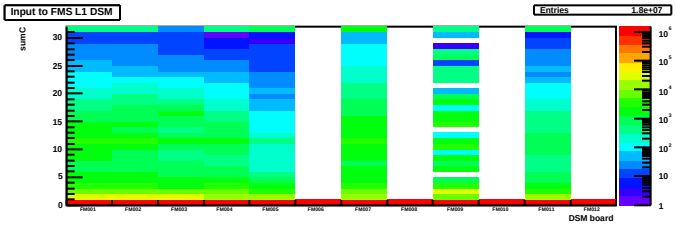

Input to FMS L0 DSM
Entries 210664
HT ADC - simulated
QT board

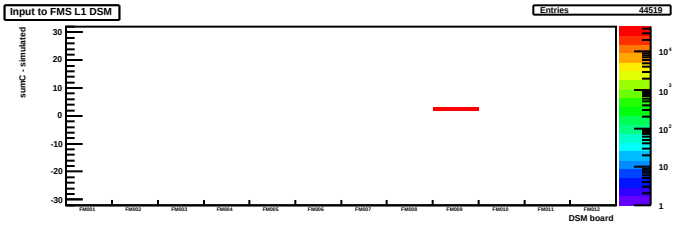

Input to FMS L0 DSM
Entries 7.2e+07
HT ID
QT board

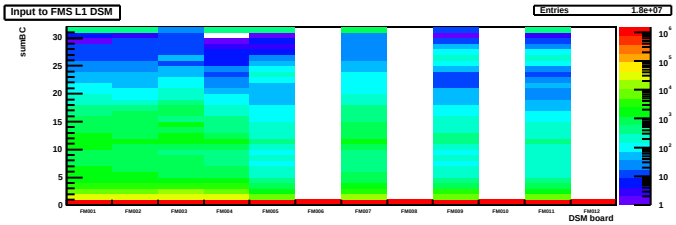

Input to FMS L0 DSM
Entries 1695569
HT ID - simulated
QT board

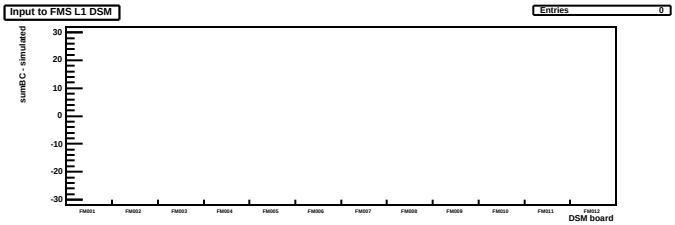

Input to FMS L1 DSM
Entries 1.8e+07
sumD
DSM board

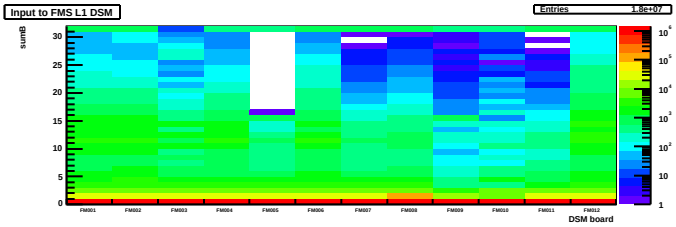

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

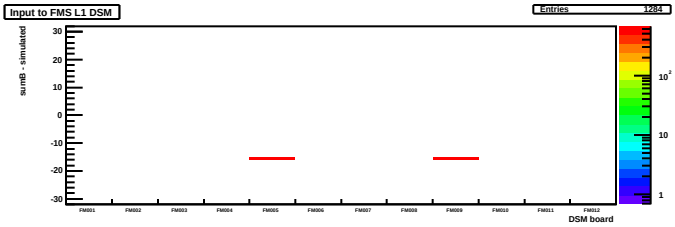

Input to FMS L1 DSM
Entries 1.8e+07
sumC
DSM board

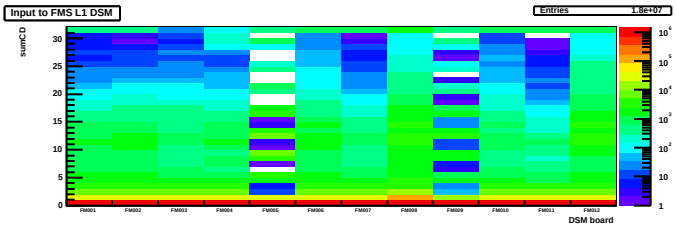

Input to FMS L1 DSM
Entries 44519
sumC - simulated
DSM board

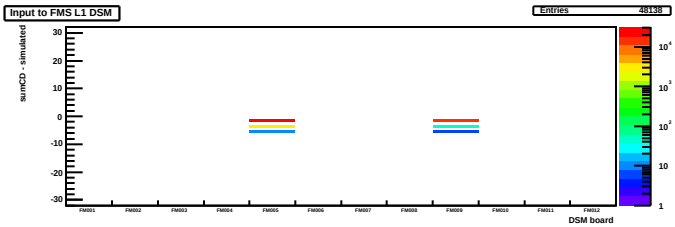

Input to FMS L1 DSM
Entries 1.8e+07
sumBC
DSM board

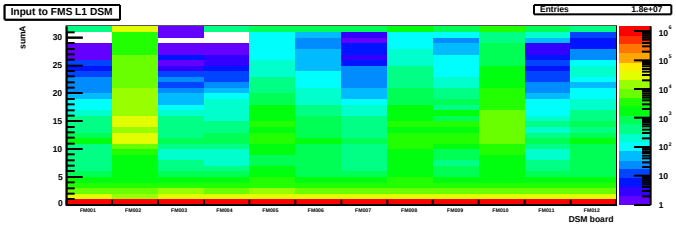

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

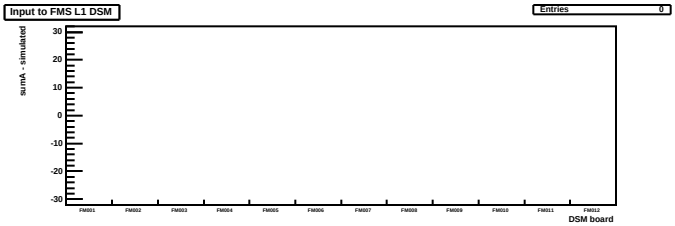

Input to FMS L1 DSM
Entries 1.8e+07
sumB
DSM board

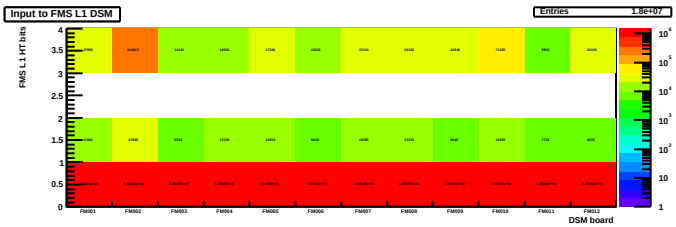

Input to FMS L1 DSM
Entries 1284
sumB - simulated
DSM board

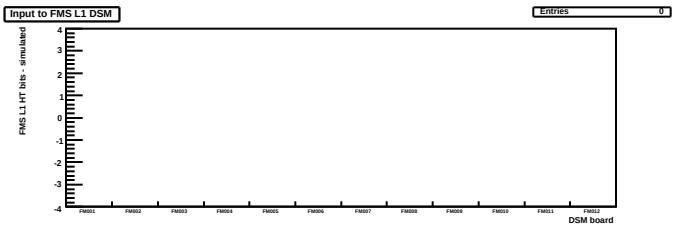

Input to FMS L1 DSM
Entries 1.8e+07
sumCD
DSM board

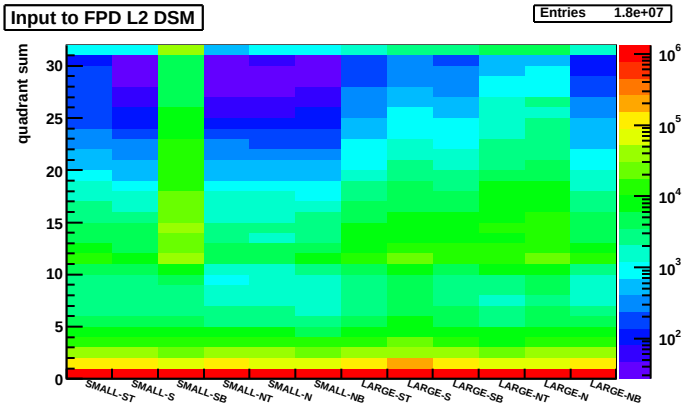

Input to FMS L1 DSM
Entries 48138
sumCD - simulated
DSM board

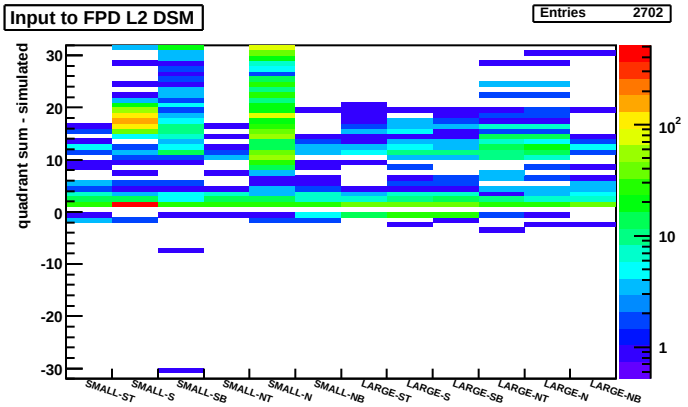

Input to FMS L1 DSM
Entries 1.8e+07
sumA
DSM board

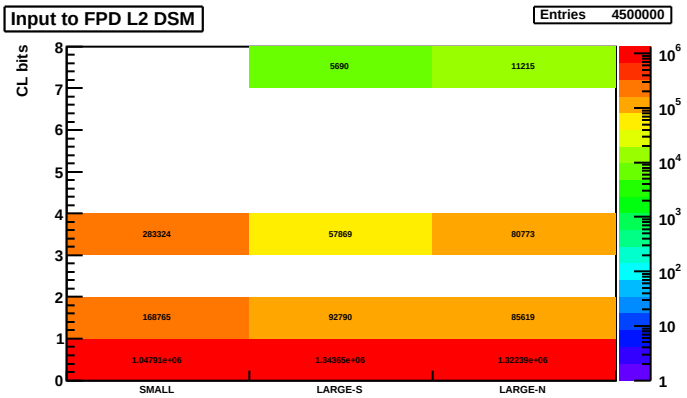

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

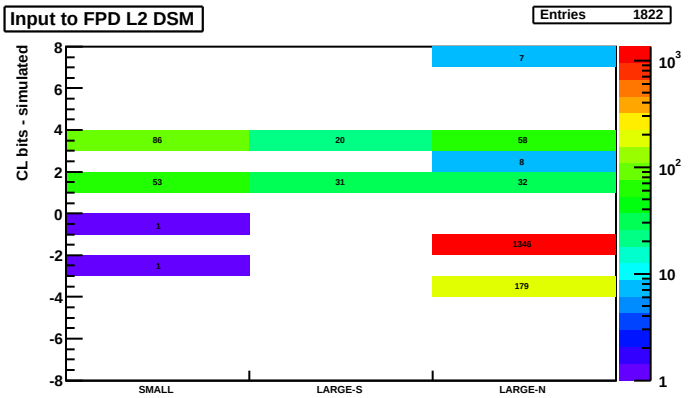

Input to FMS L1 DSM
Entries 1.8e+07
FMS L1 HT bits
DSM board

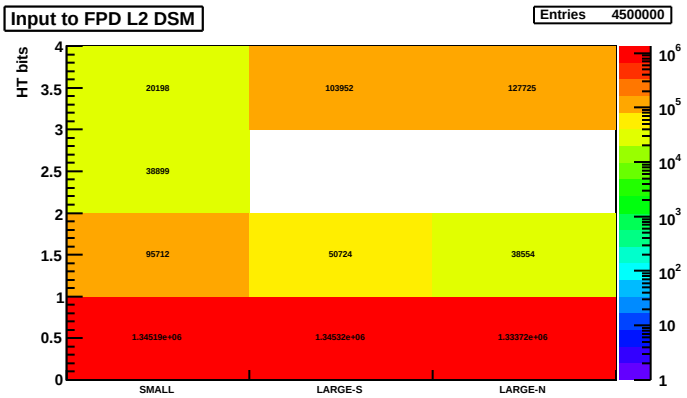

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

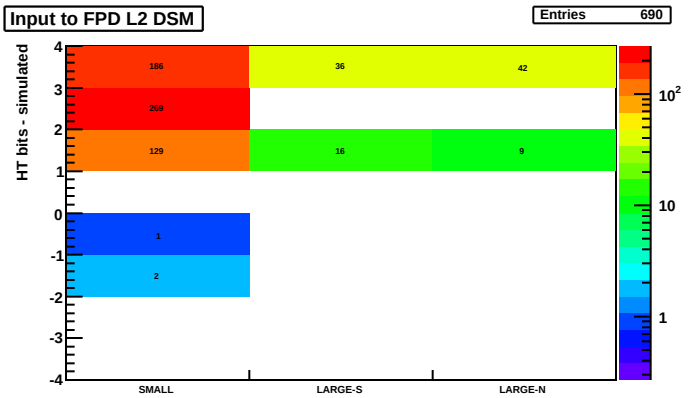

Input to FPD L2 DSM
Entries 1.8e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

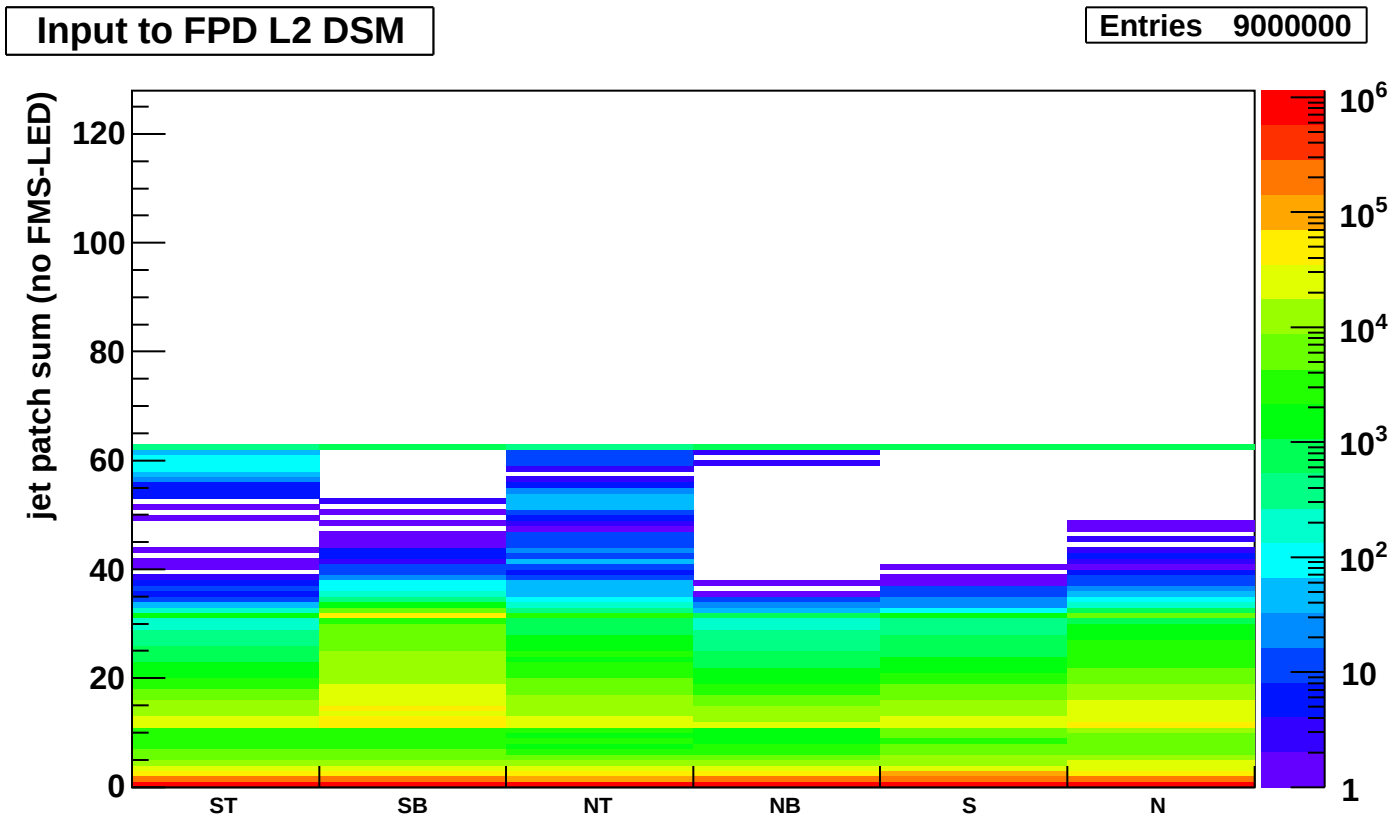

Input to FPD L2 DSM
Entries 2702
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

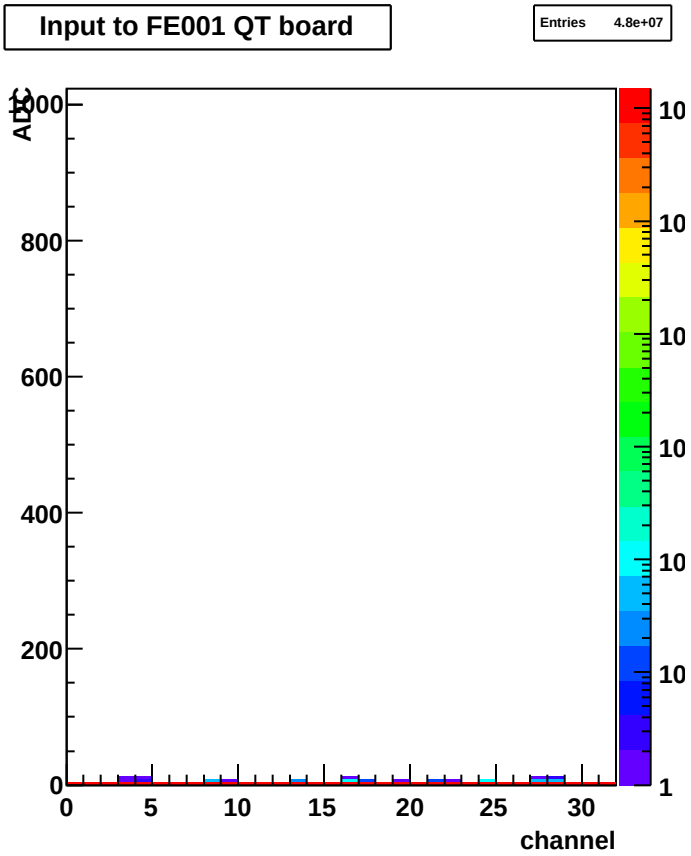

Input to FPD L2 DSM
Entries 4500000
CL bits
5690
11215
283324
57869
80773
168765
92790
85619
1.04791e+06
1.34365e+06
1.32239e+06
SMALL
LARGE-S
LARGE-N

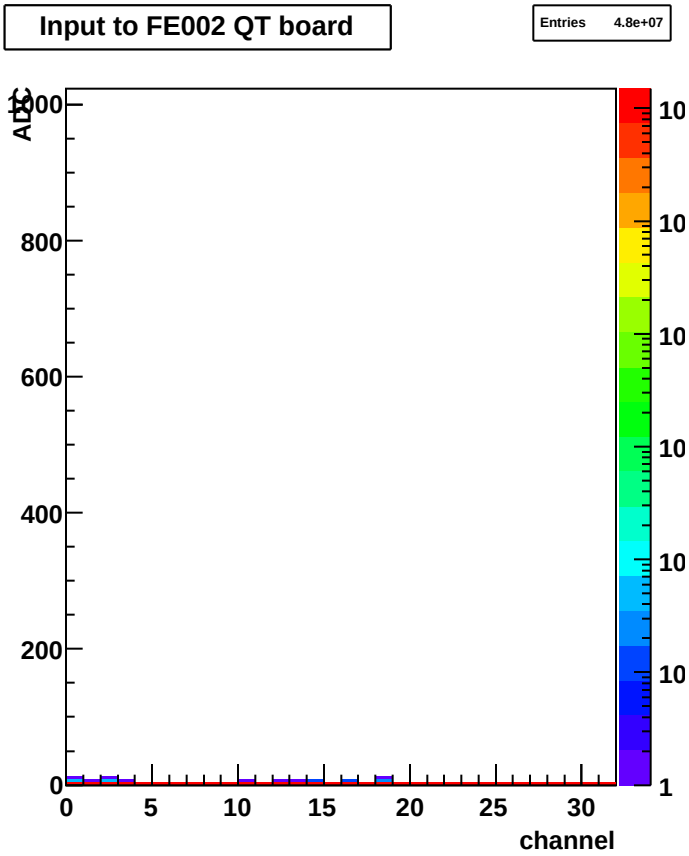

Input to FPD L2 DSM
Entries 1822
CL bits - simulated
7
86
20
58
8
53
31
32
1
1346
1
179
SMALL
LARGE-S
LARGE-N

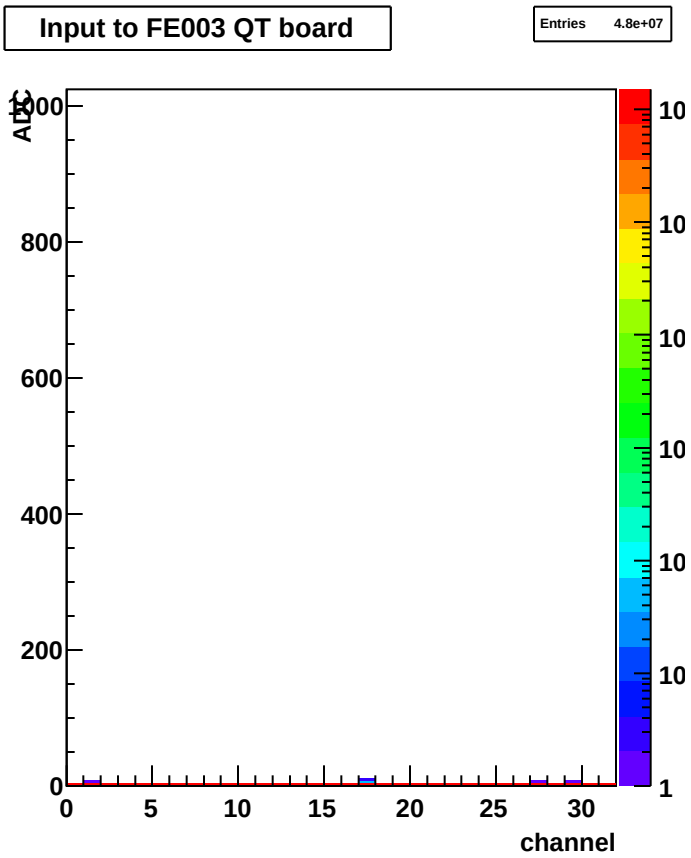

Input to FPD L2 DSM
Entries 4500000
HT bits
20198
103952
127725
38899
95712
50724
38554
1.34519e+06
1.34532e+06
1.33372e+06
SMALL
LARGE-S
LARGE-N

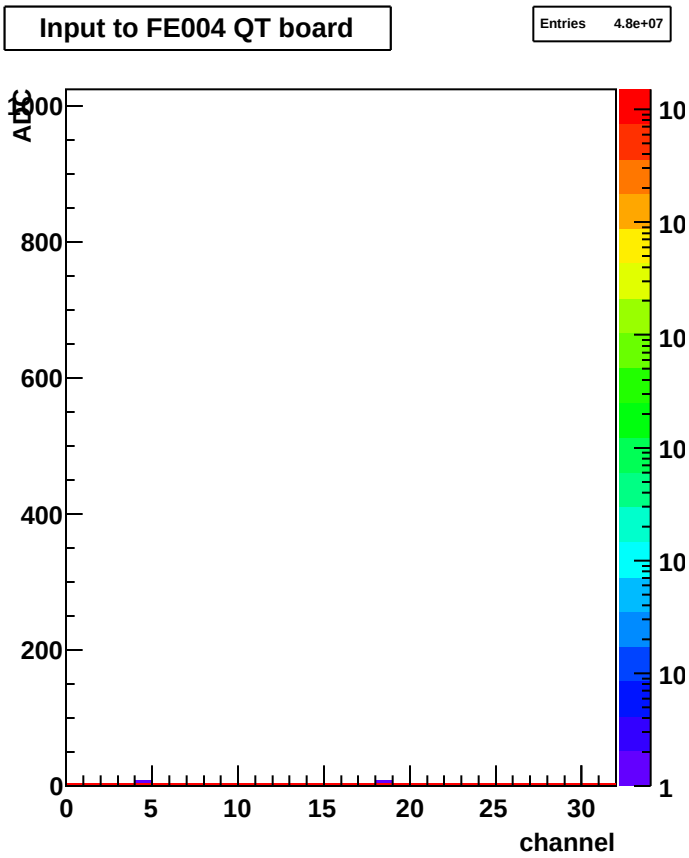

Input to FPD L2 DSM
Entries 690
HT bits - simulated
186
36
42
269
129
16
9
1
2
SMALL
LARGE-S
LARGE-N

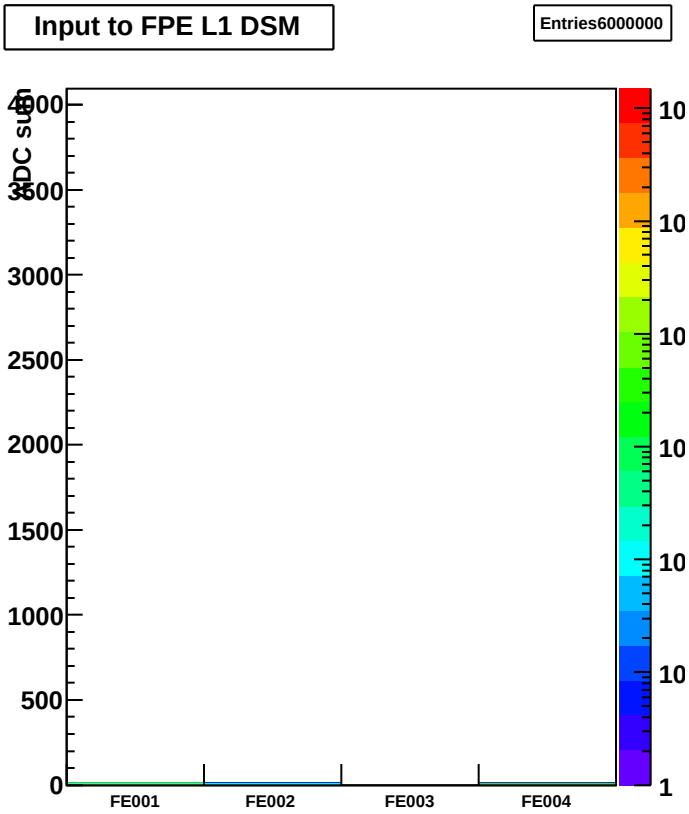

Input to FPD L2 DSM
Entries 9000000
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

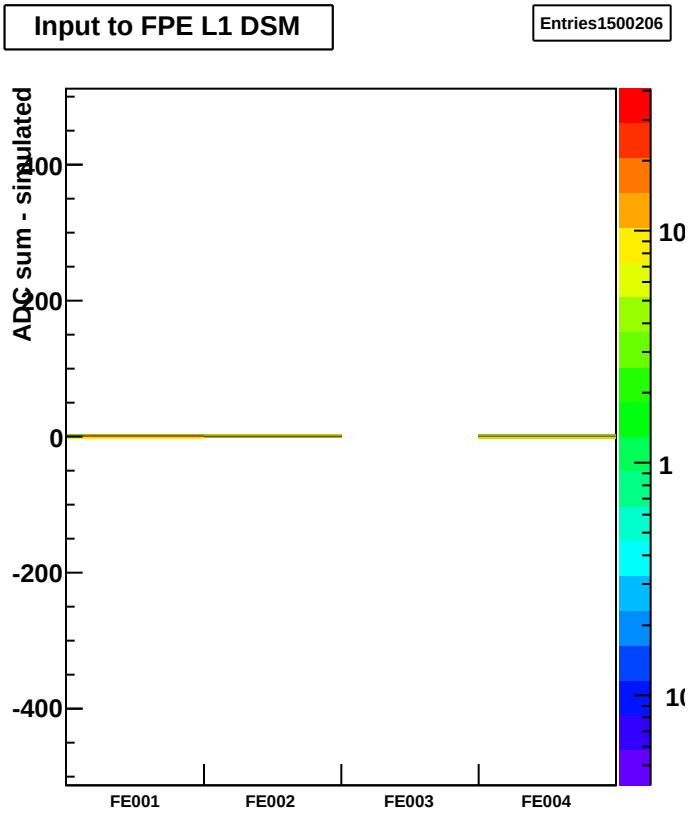

Input to FE001 QT board
Entries 4.8e+07
ADC
channel

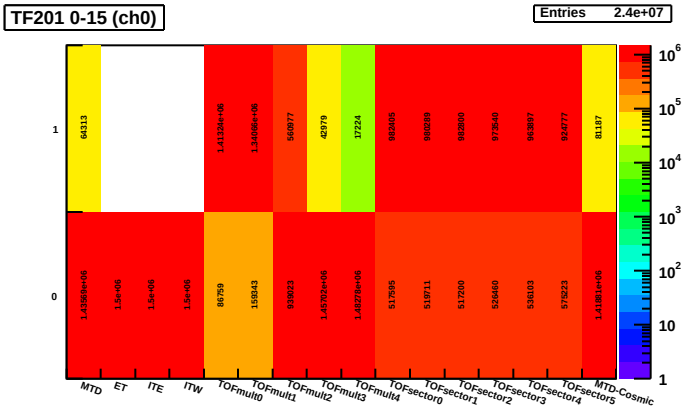

Input to FE002 QT board
Entries 4.8e+07
ADC
channel

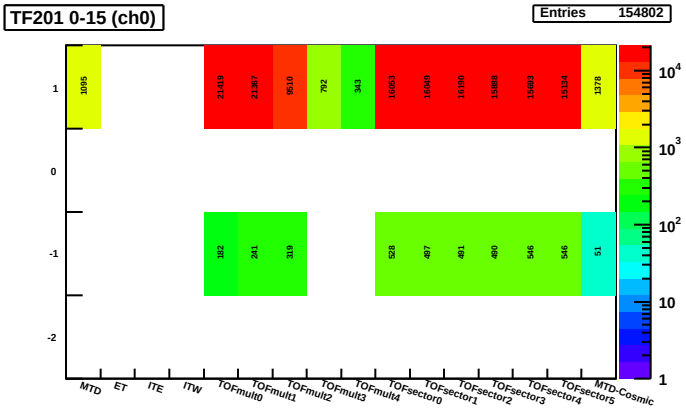

Input to FE003 QT board
Entries 4.8e+07
ADC
channel

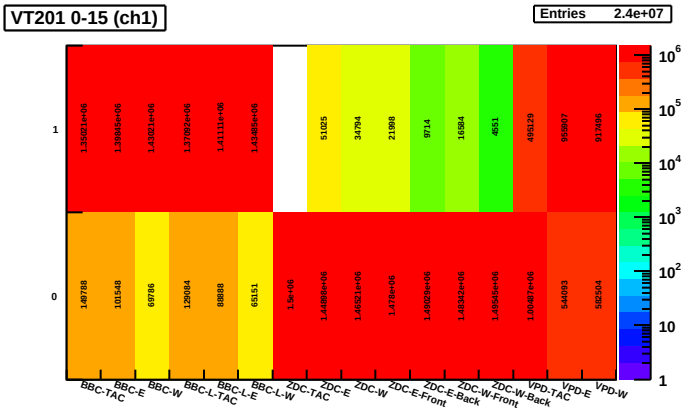

Input to FE004 QT board
Entries 4.8e+07
ADC
channel

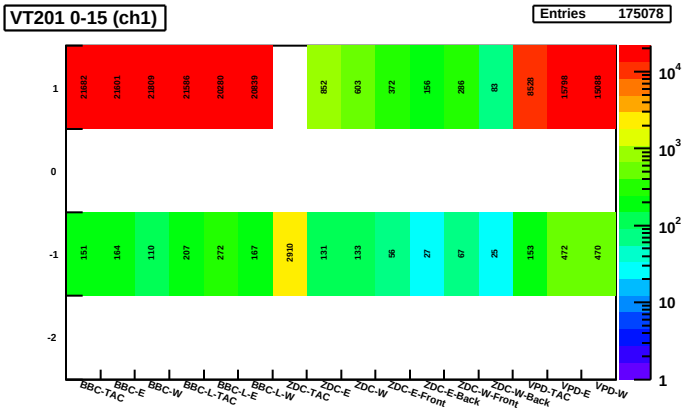

Input to FPE L1 DSM
Entries6000000
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
10
1


Input to FPE L1 DSM
Entries1500206
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
1


TF201 0-15 (ch0)
Entries 2.4e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 154802
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 2.4e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 175078
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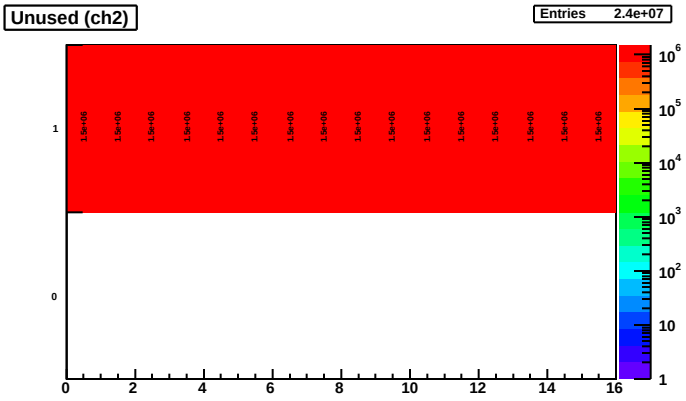
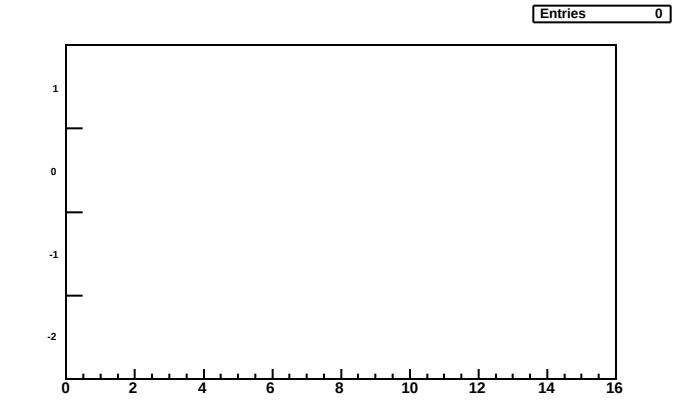
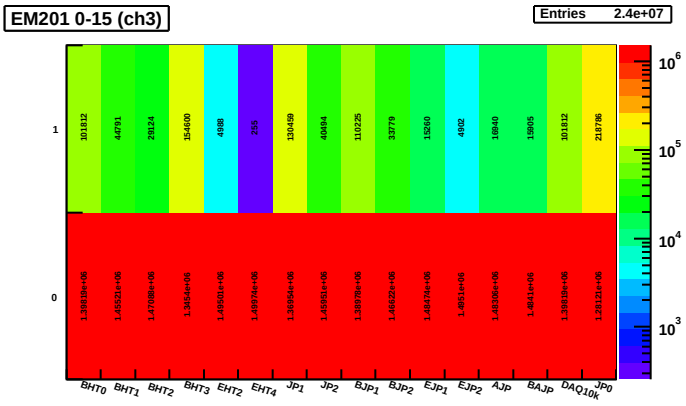
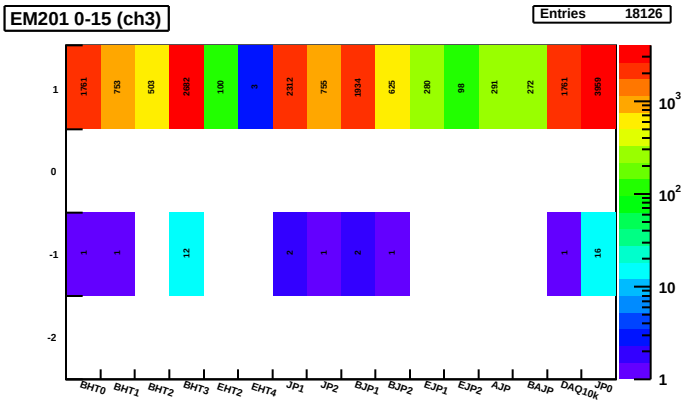
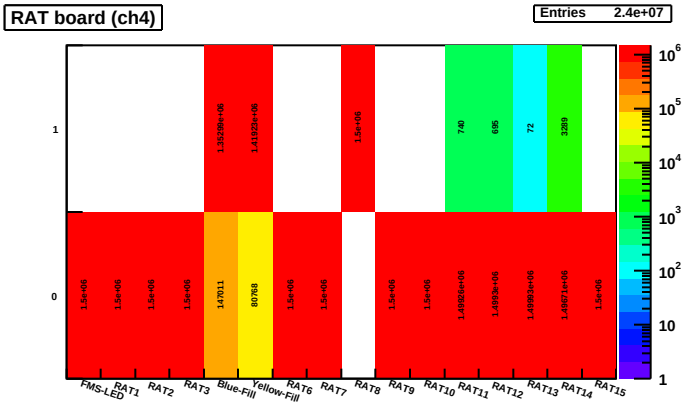

Unused (ch2)
Entries 2.4e+07

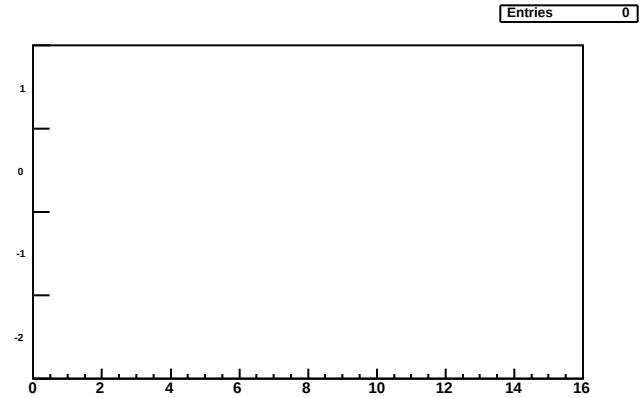

Entries 0


EM201 0-15 (ch3)
Entries 2.4e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

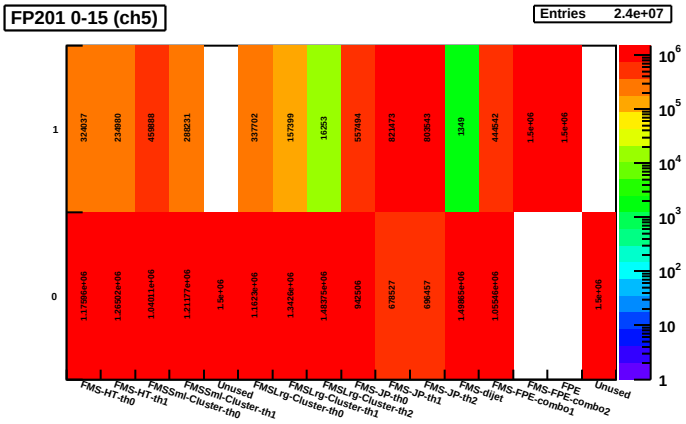

EM201 0-15 (ch3)
Entries 18126
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

RAT board (ch4)





FP201 0-15 (ch5)



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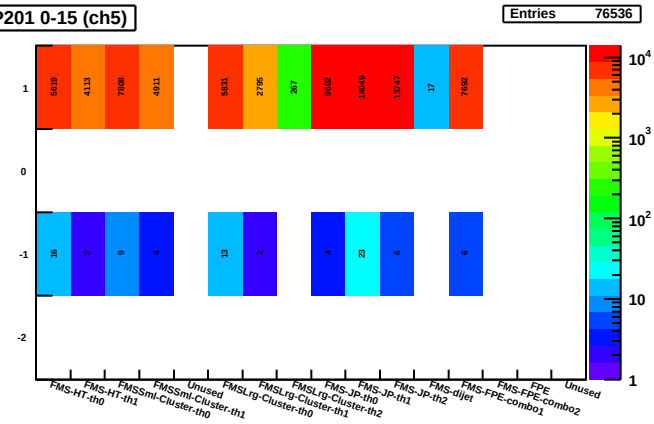
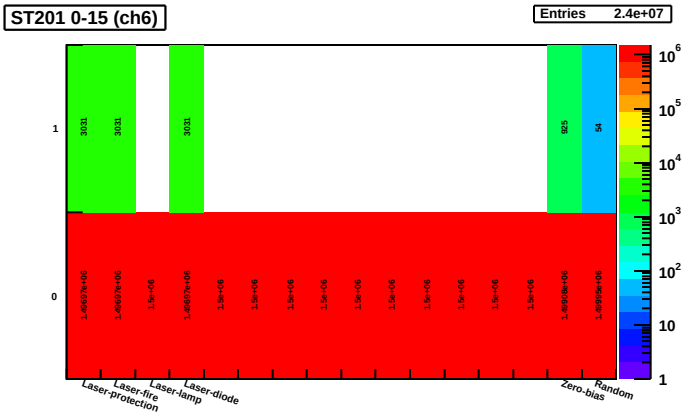
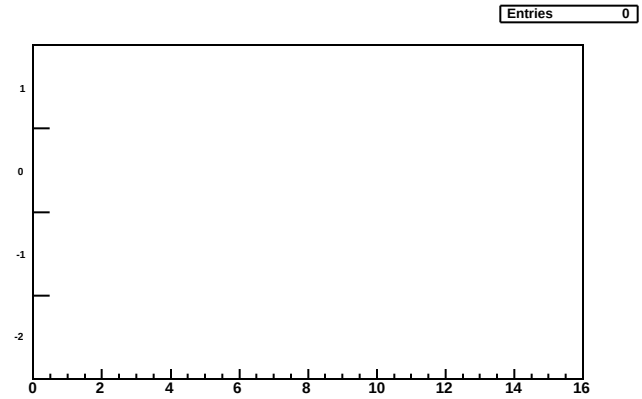
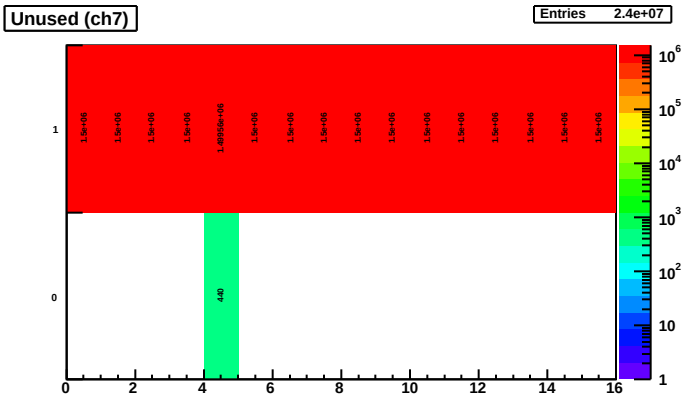
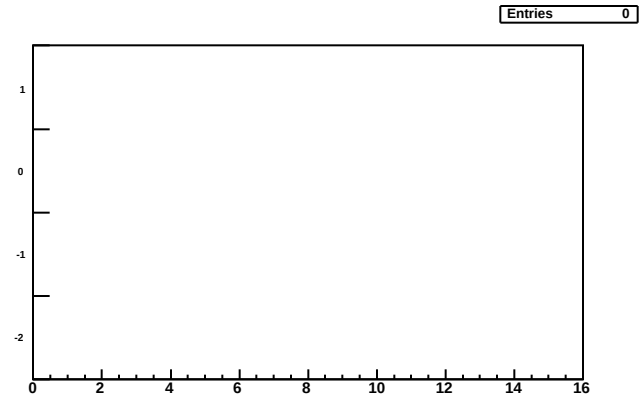


ST201 0-15 (ch6)





Unused (ch7)