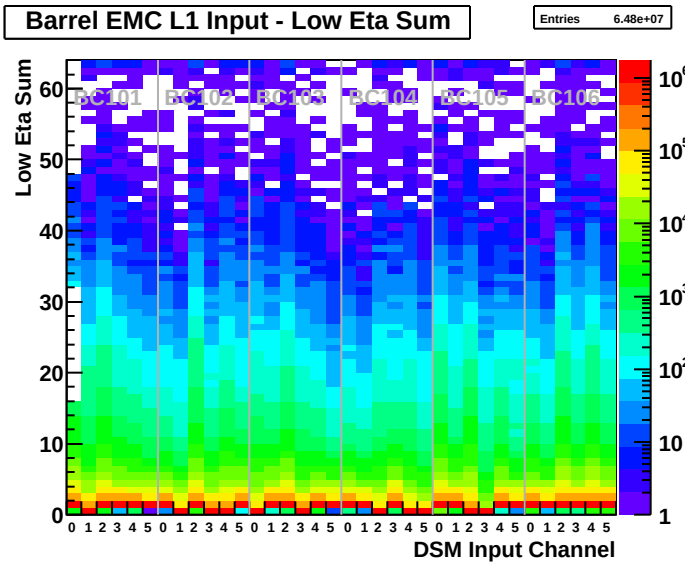
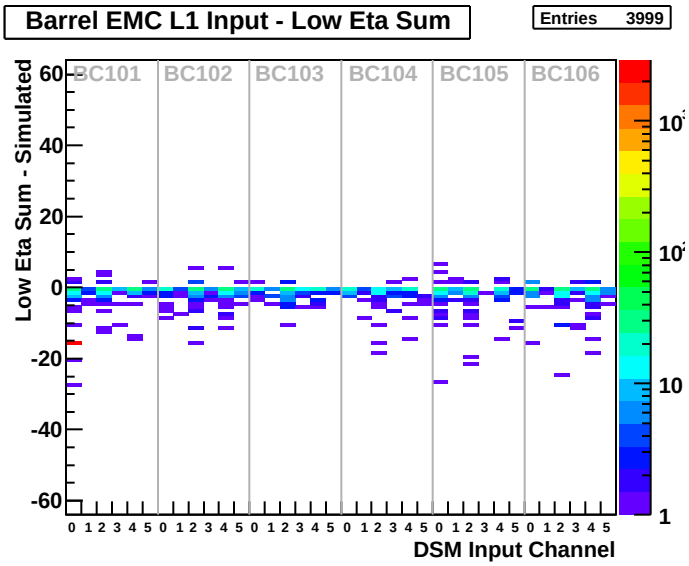
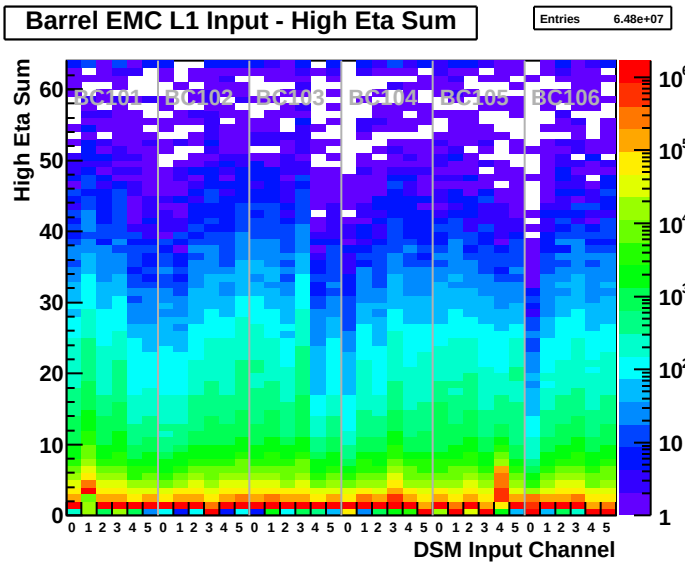
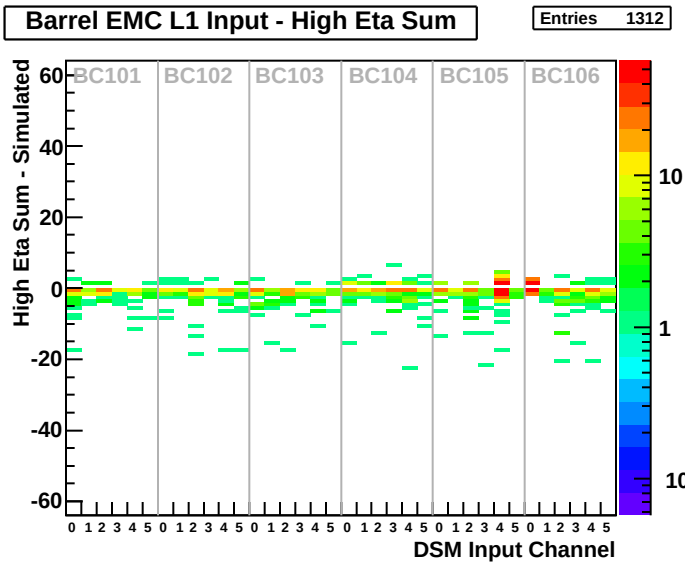
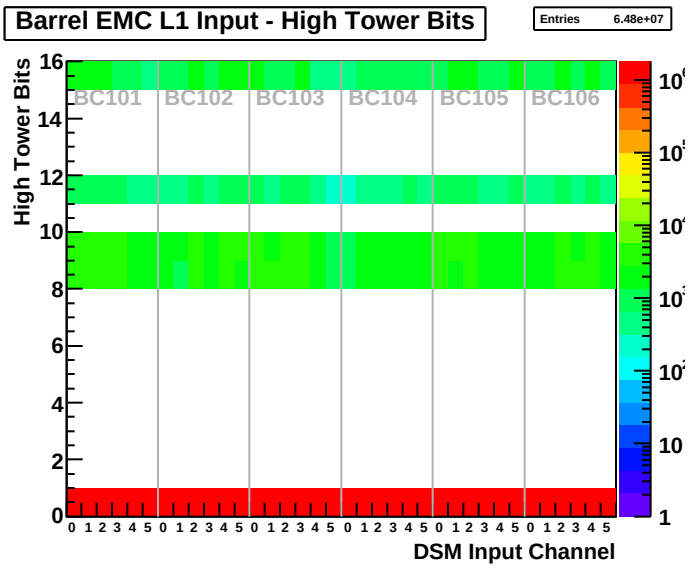
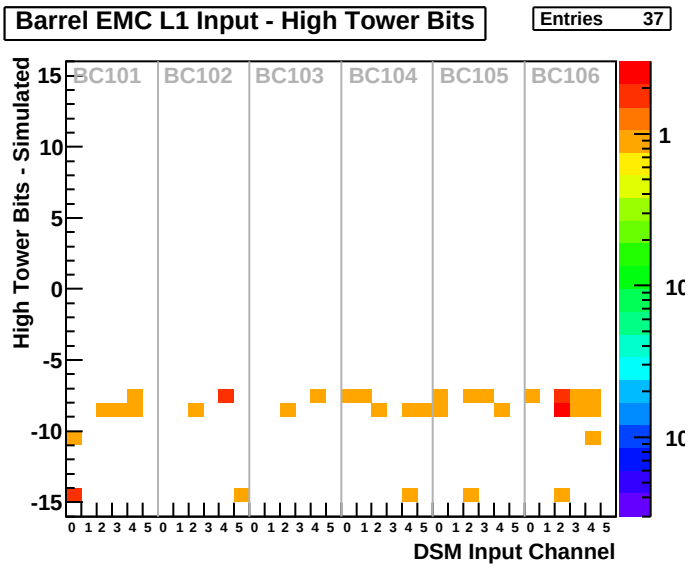

Barrel EMC L1 Input - Low Eta Sum
Entries 6.48e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

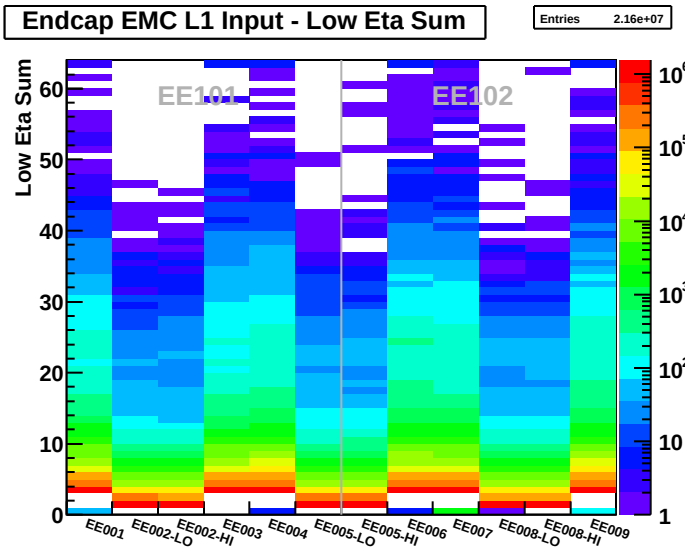

Barrel EMC L1 Input - Low Eta Sum
Entries 3999
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

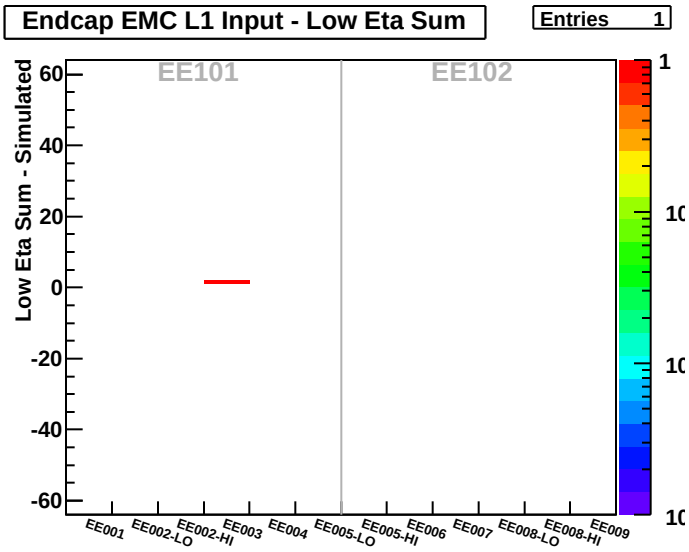

Barrel EMC L1 Input - High Eta Sum
Entries 6.48e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

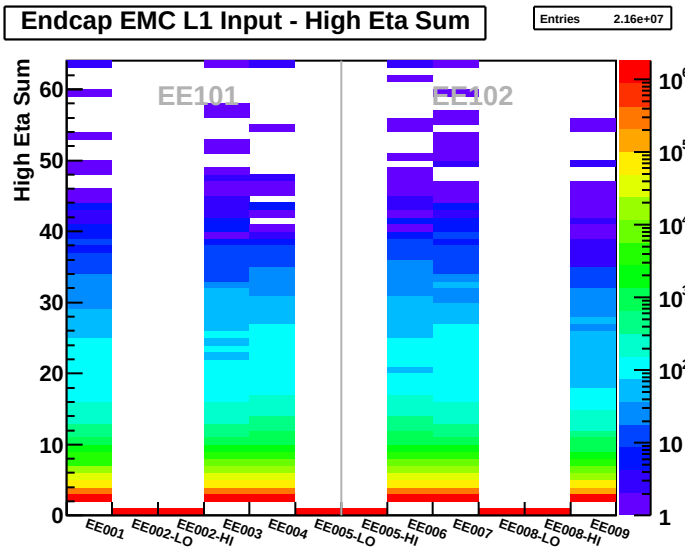

Barrel EMC L1 Input - High Eta Sum
Entries 1312
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

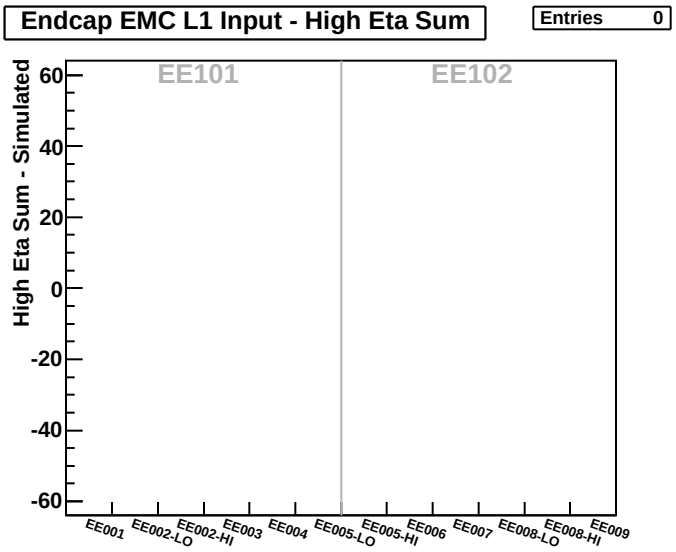

Barrel EMC L1 Input - High Tower Bits
Entries 6.48e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

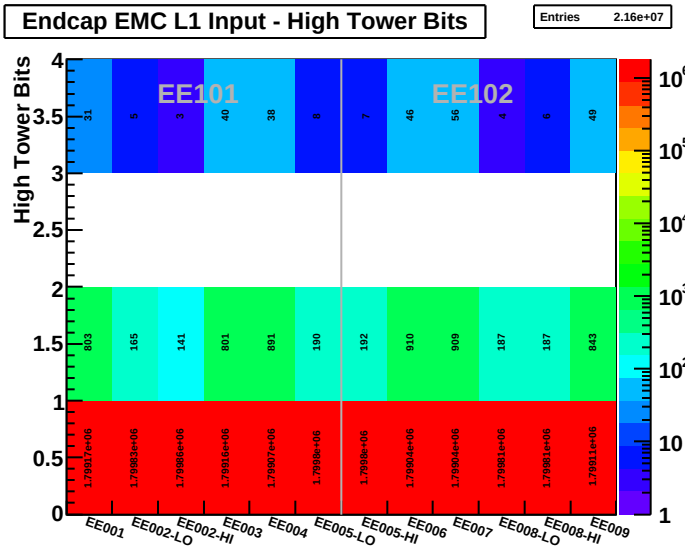

Barrel EMC L1 Input - High Tower Bits
Entries 37
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

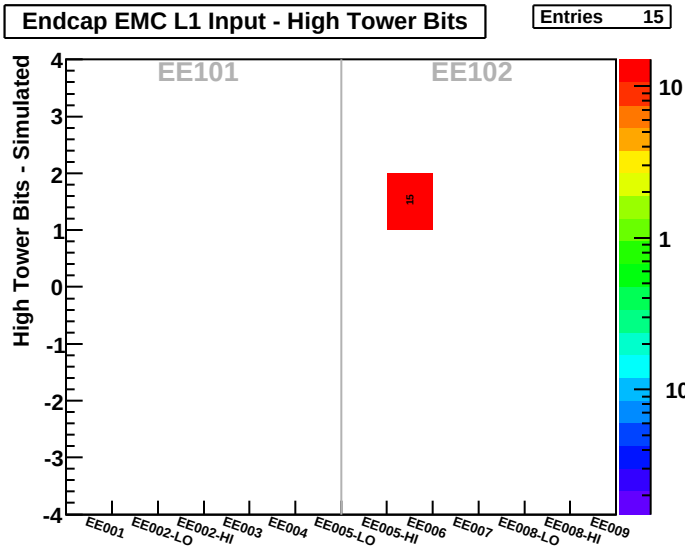

Endcap EMC L1 Input - Low Eta Sum
Entries 2.16e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

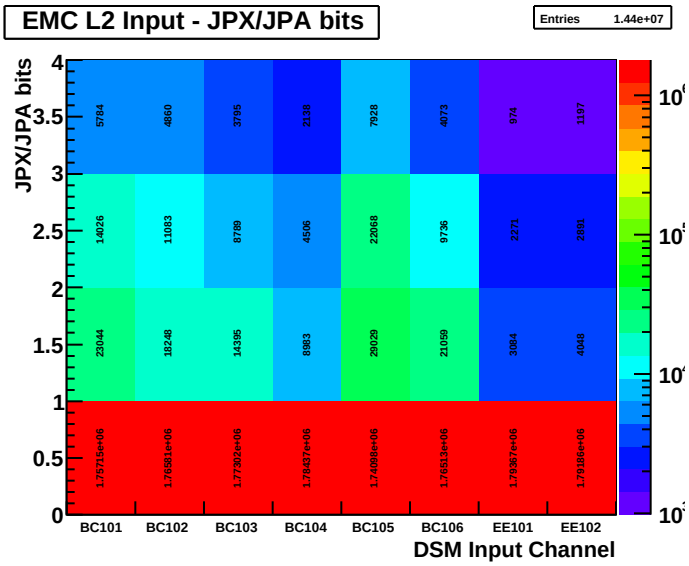

Endcap EMC L1 Input - Low Eta Sum
Entries 1
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

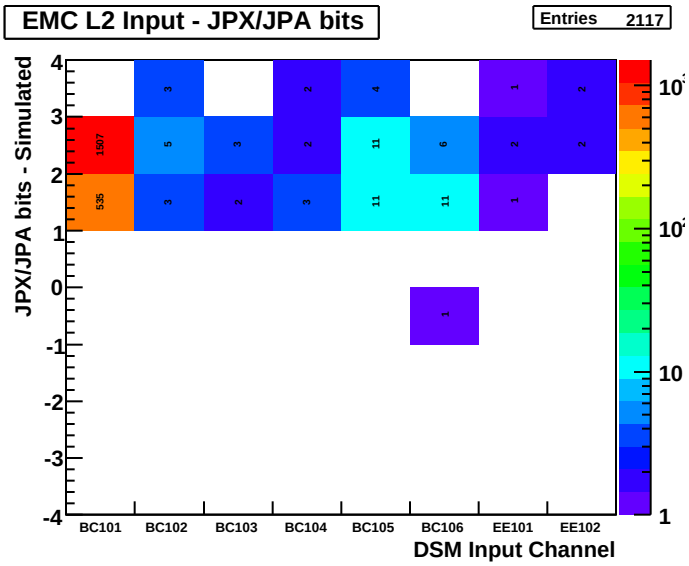

Endcap EMC L1 Input - High Eta Sum
Entries 2.16e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

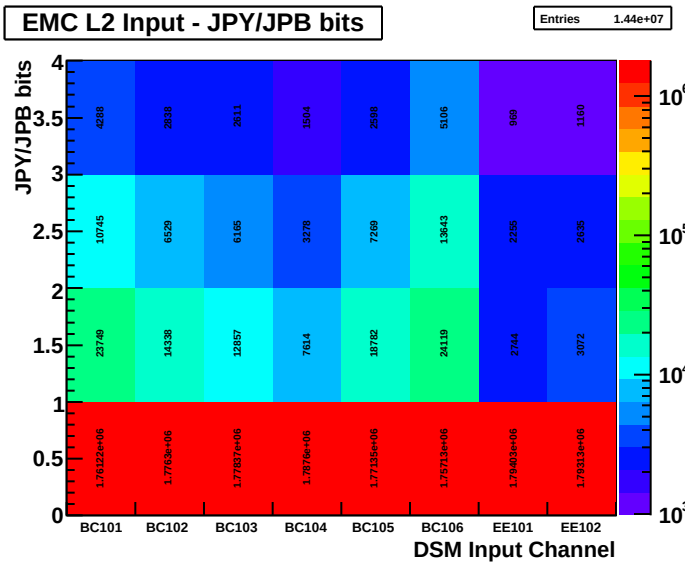

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

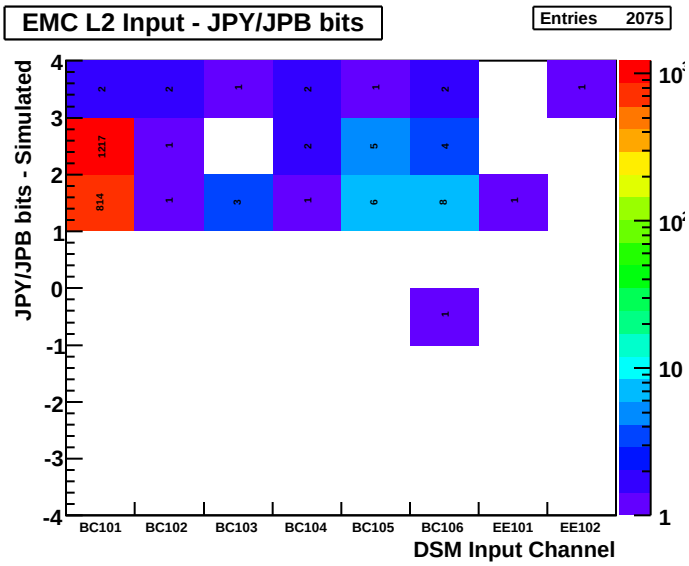

Endcap EMC L1 Input - High Tower Bits
Entries 2.16e+07
High Tower Bits
EE101
EE102
31 5 3 40 38 8 7 46 56 4 6 49
803 165 141 801 891 190 192 910 909 187 187 843
1.79917e+06 1.79983e+06 1.79986e+06 1.79916e+06 1.79907e+06 1.7998e+06 1.7998e+06 1.79904e+06 1.79904e+06 1.79981e+06 1.79981e+06 1.79911e+06
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

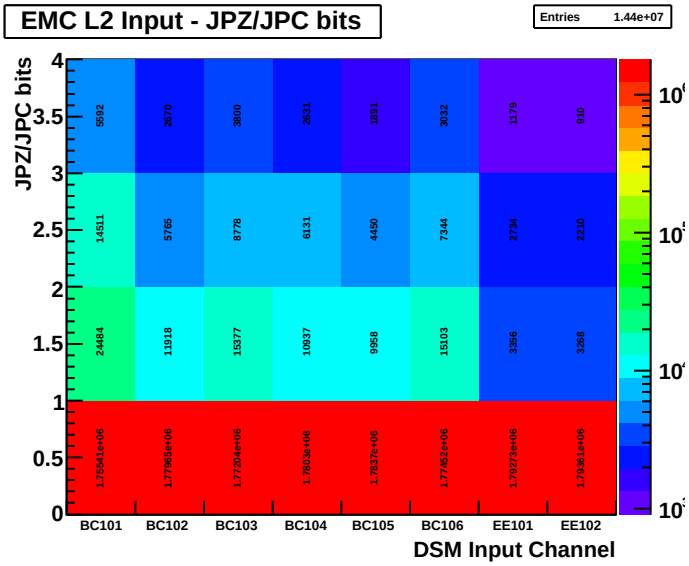

Endcap EMC L1 Input - High Tower Bits
Entries 15
High Tower Bits - Simulated
EE101
EE102
15
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

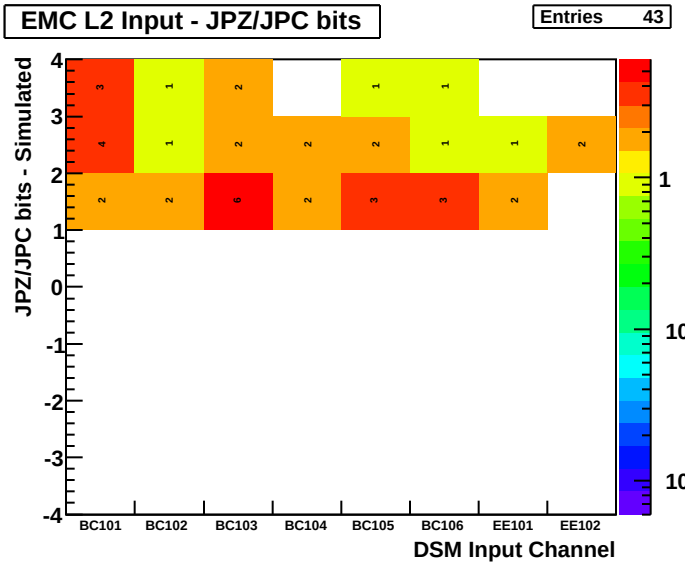

EMC L2 Input - JPX/JPA bits
Entries 1.44e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
5784 4860 3795 2138 7928 4073 974 1197
14026 11083 8789 4506 22068 9736 2271 2891
23044 18248 14395 8983 29029 21059 3084 4048
1.75715e+06 1.76581e+06 1.77302e+06 1.78437e+06 1.74098e+06 1.76513e+06 1.79367e+06 1.79186e+06

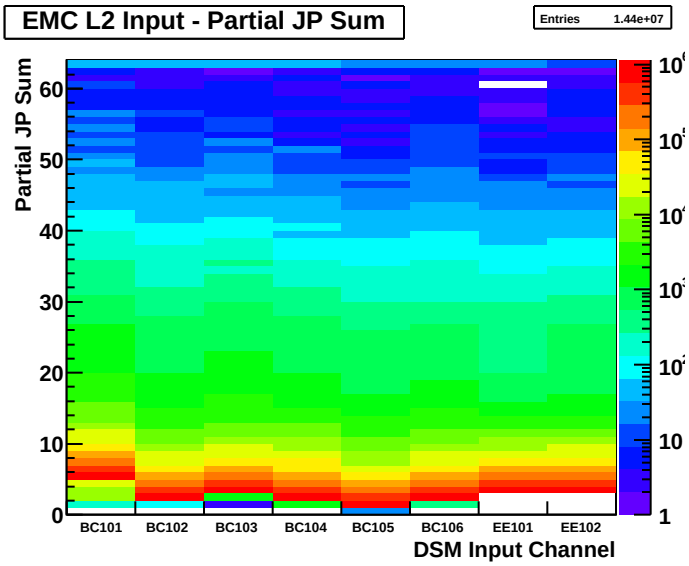

EMC L2 Input - JPX/JPA bits
Entries 2117
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1507 5 3 2 11 6 2 2
535 3 2 3 11 11 1
1

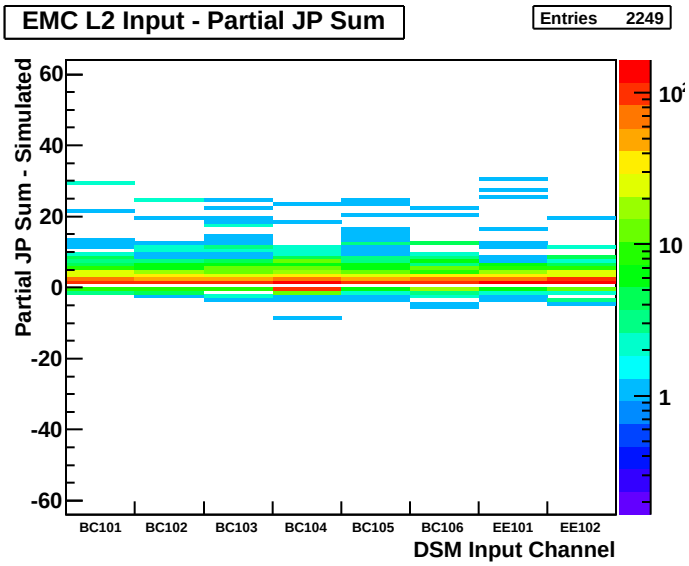

EMC L2 Input - JPY/JPB bits
Entries 1.44e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
4288 2838 2611 1504 2598 5106 969 1160
10745 6529 6165 3278 7269 13643 2255 2635
23749 14338 12857 7614 18782 24119 2744 3072
1.76122e+06 1.77632e+06 1.77837e+06 1.78756e+06 1.77135e+06 1.75713e+06 1.79403e+06 1.79313e+06

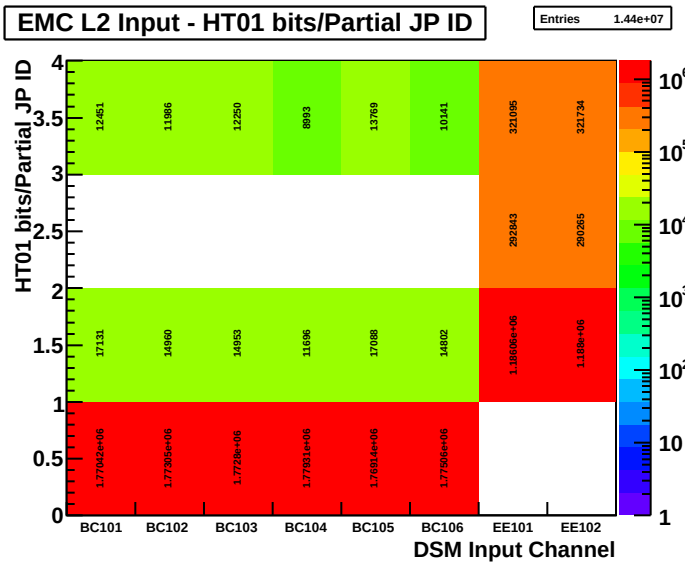

EMC L2 Input - JPY/JPB bits
Entries 2075
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2 2 1 2 1 2 1
1217 1 2 5 4
814 1 3 1 6 8 1
1

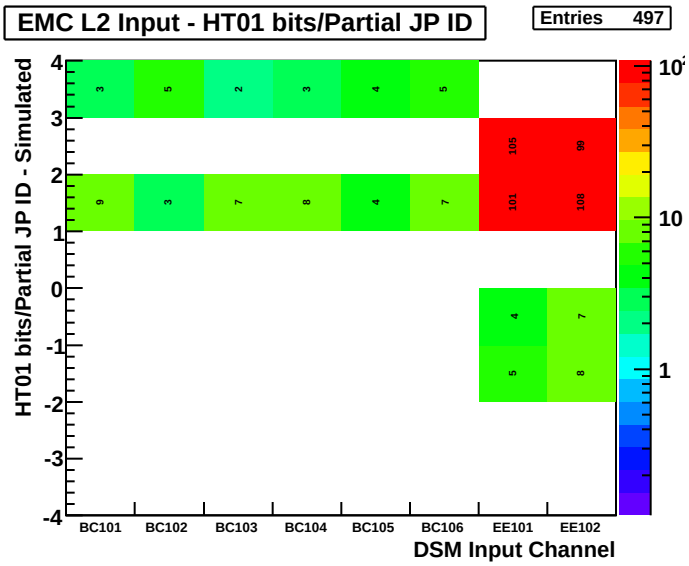

EMC L2 Input - JPZ/JPC bits
Entries 1.44e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
5592 2870 3000 2631 1991 3032 1179 910
14511 5765 8778 6131 4450 7344 2734 2210
24484 11918 15377 10937 9958 15103 3356 3268
1.75541e+06 1.77965e+06 1.77204e+06 1.78036e+06 1.78376e+06 1.77452e+06 1.79273e+06 1.79361e+06

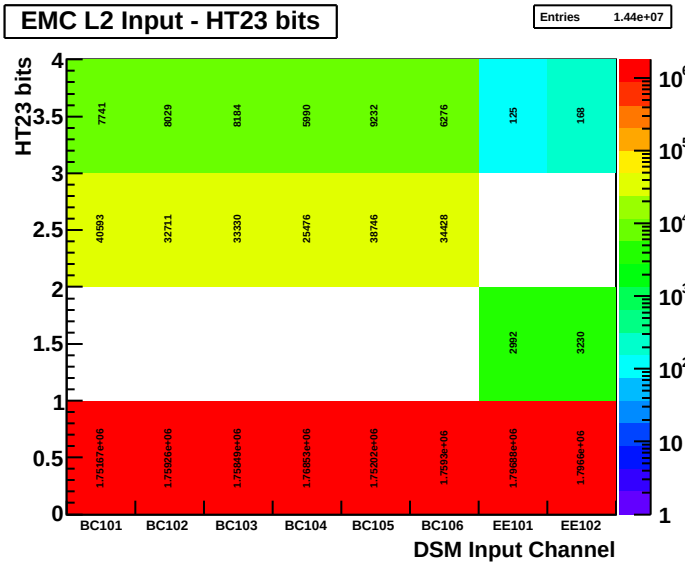

EMC L2 Input - JPZ/JPC bits
Entries 43
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3 1 2 1 1
4 1 2 2 2 1 1 2
2 2 6 2 3 3 2
1

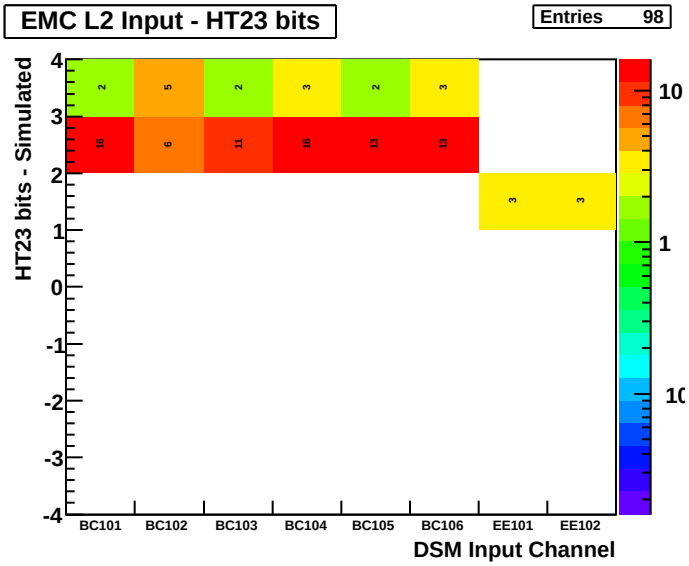

EMC L2 Input - Partial JP Sum
Entries 1.44e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

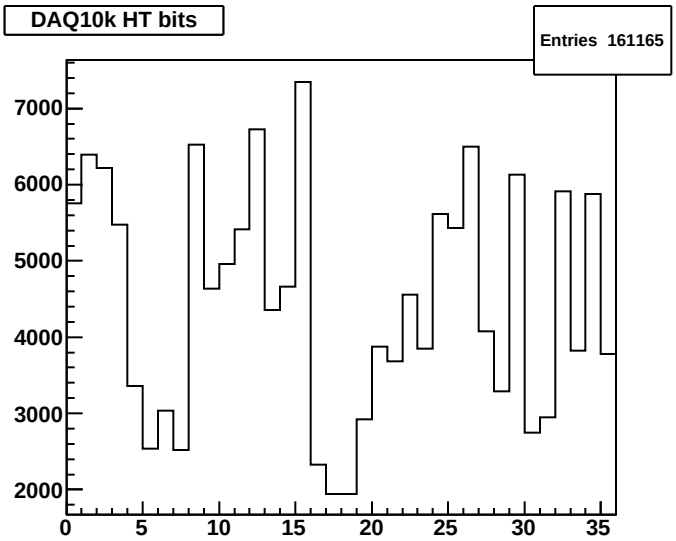

EMC L2 Input - Partial JP Sum
Entries 2249
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

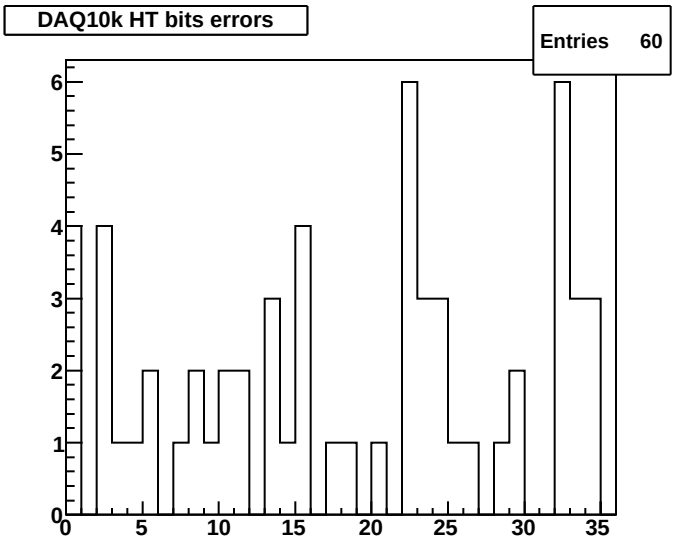

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1.44e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

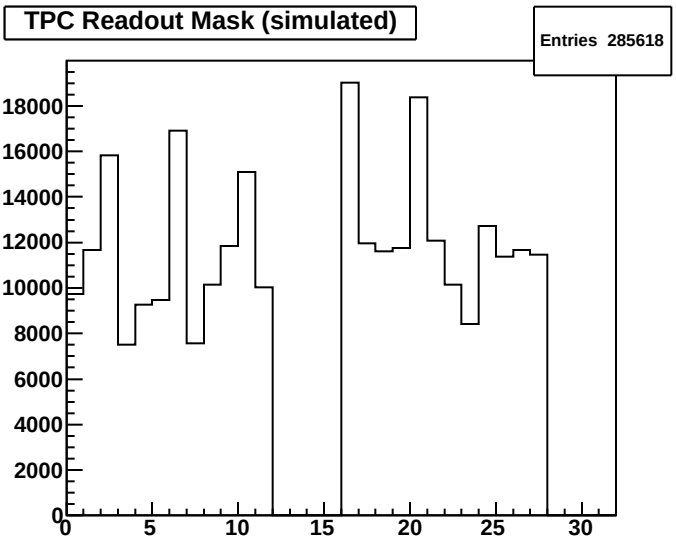

EMC L2 Input - HT01 bits/Partial JP ID
Entries 497
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

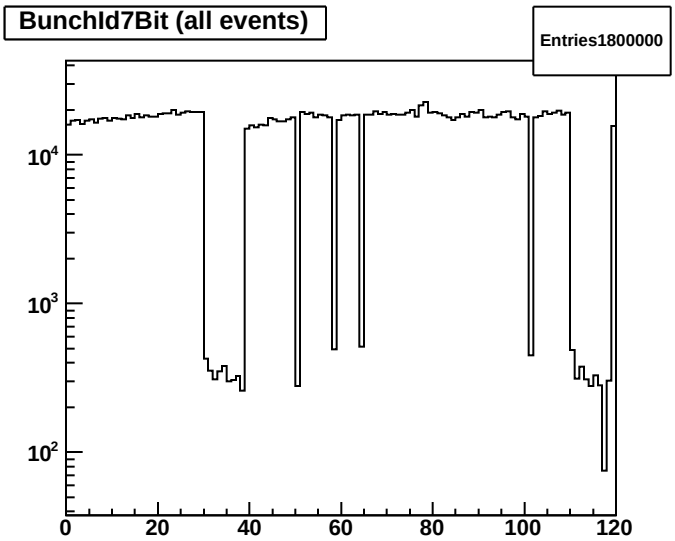

EMC L2 Input - HT23 bits
Entries 1.44e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

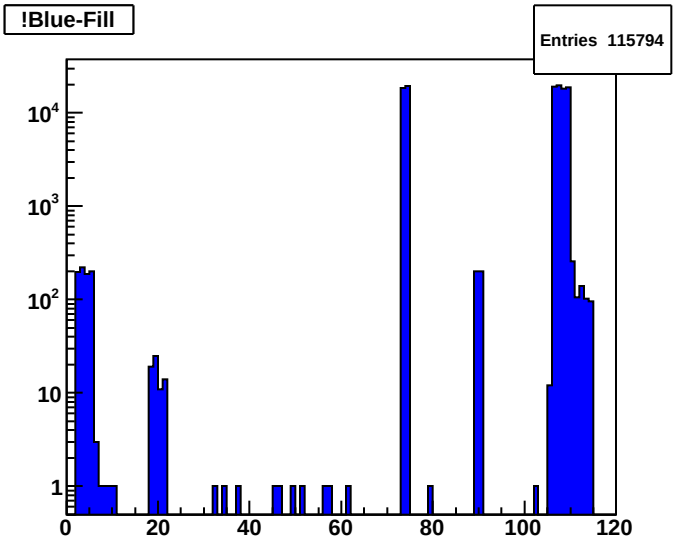

EMC L2 Input - HT23 bits
Entries 98
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

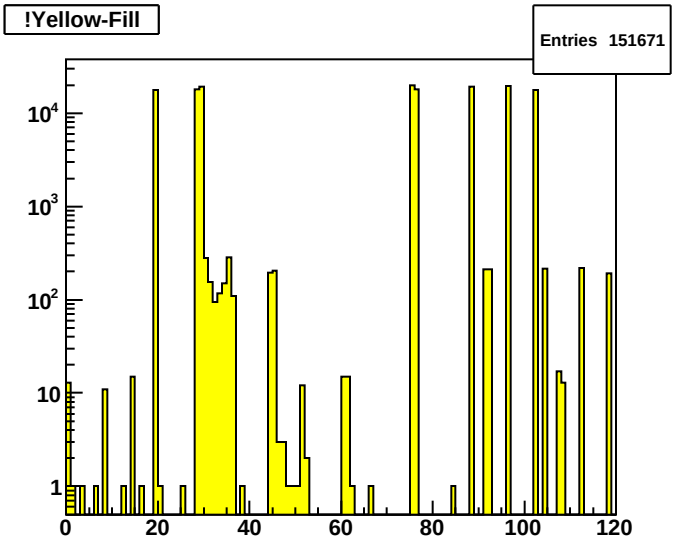

DAQ10k HT bits
Entries 161165

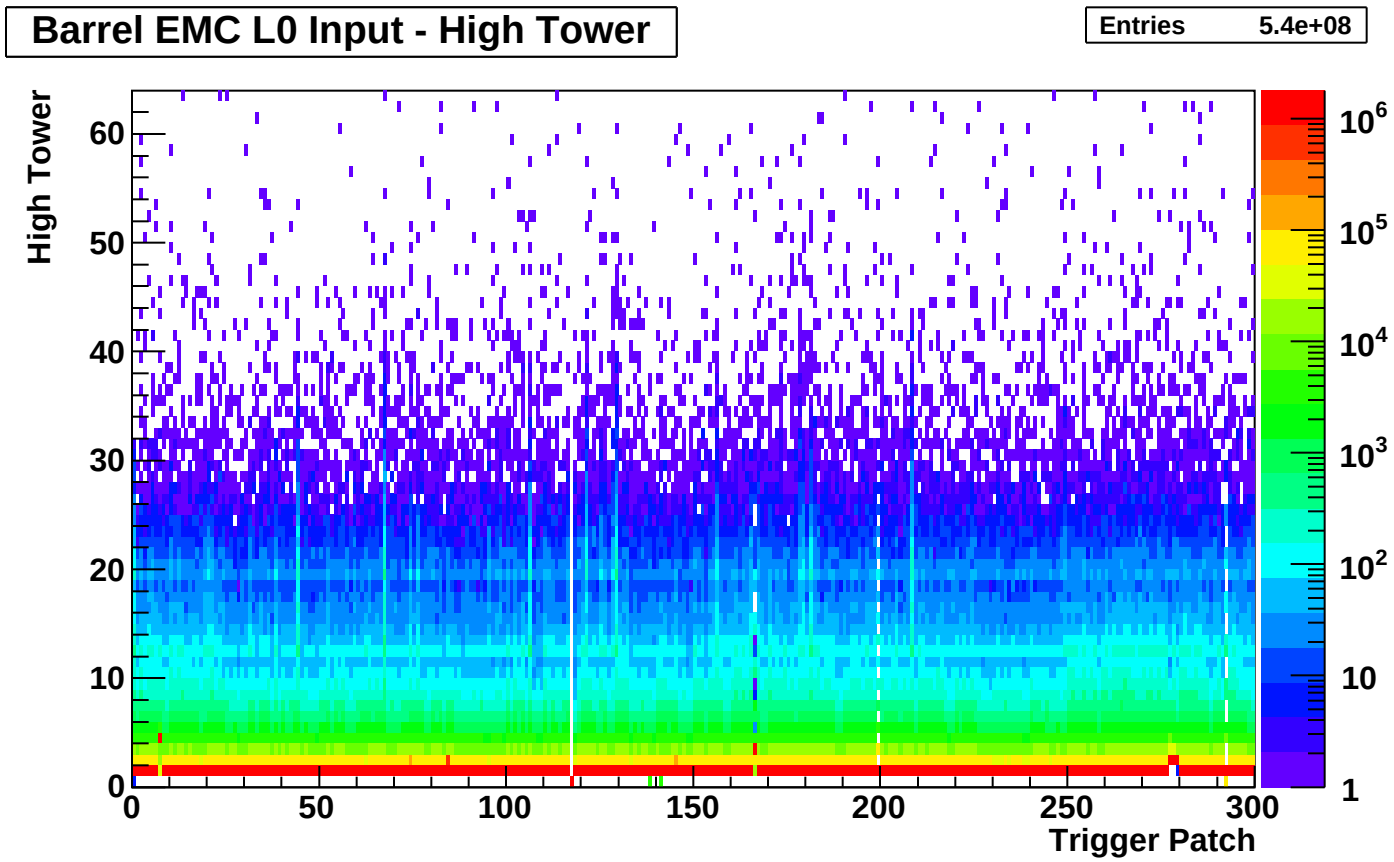

DAQ10k HT bits errors
Entries 60

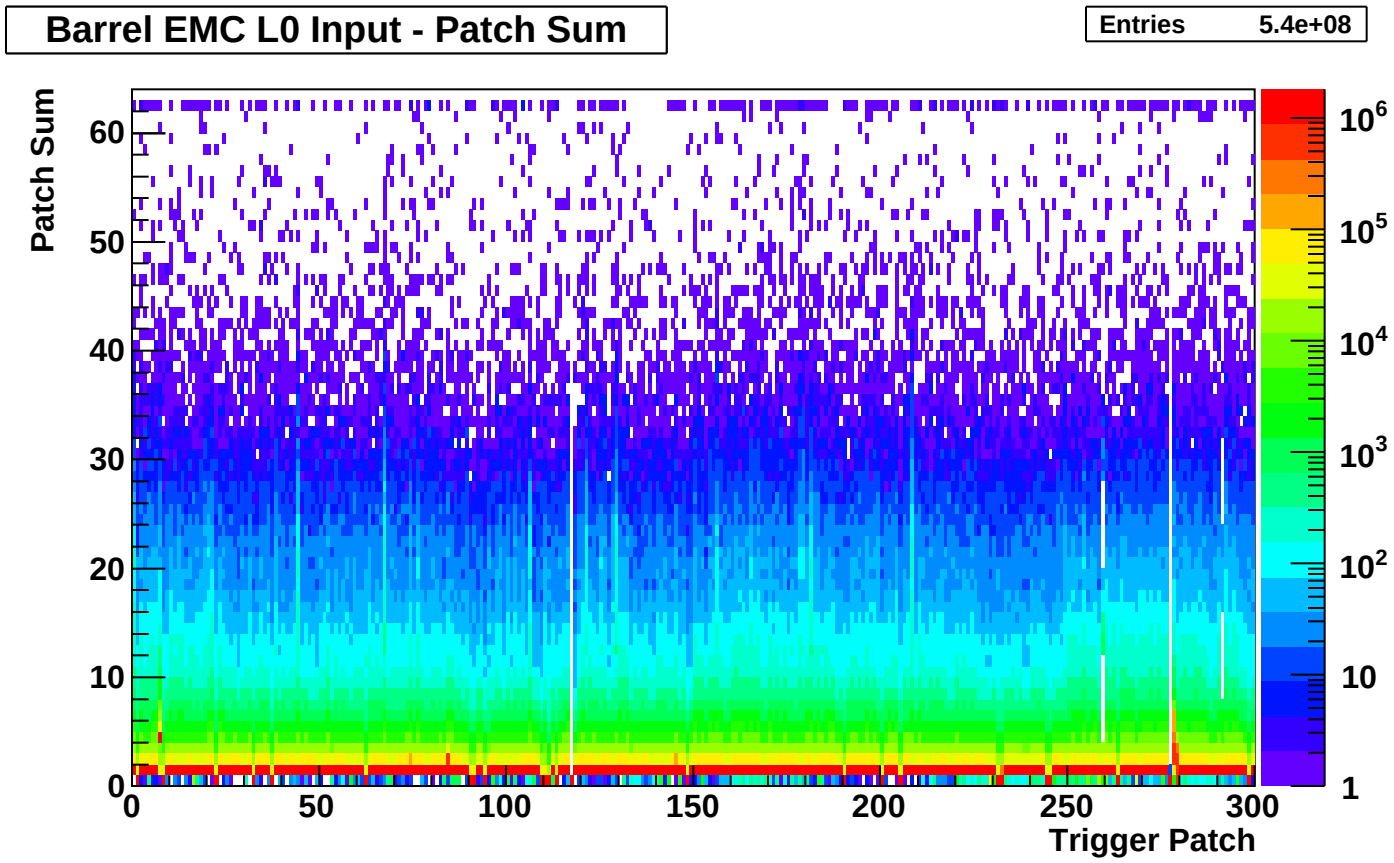

TPC Readout Mask (simulated)
Entries 285618

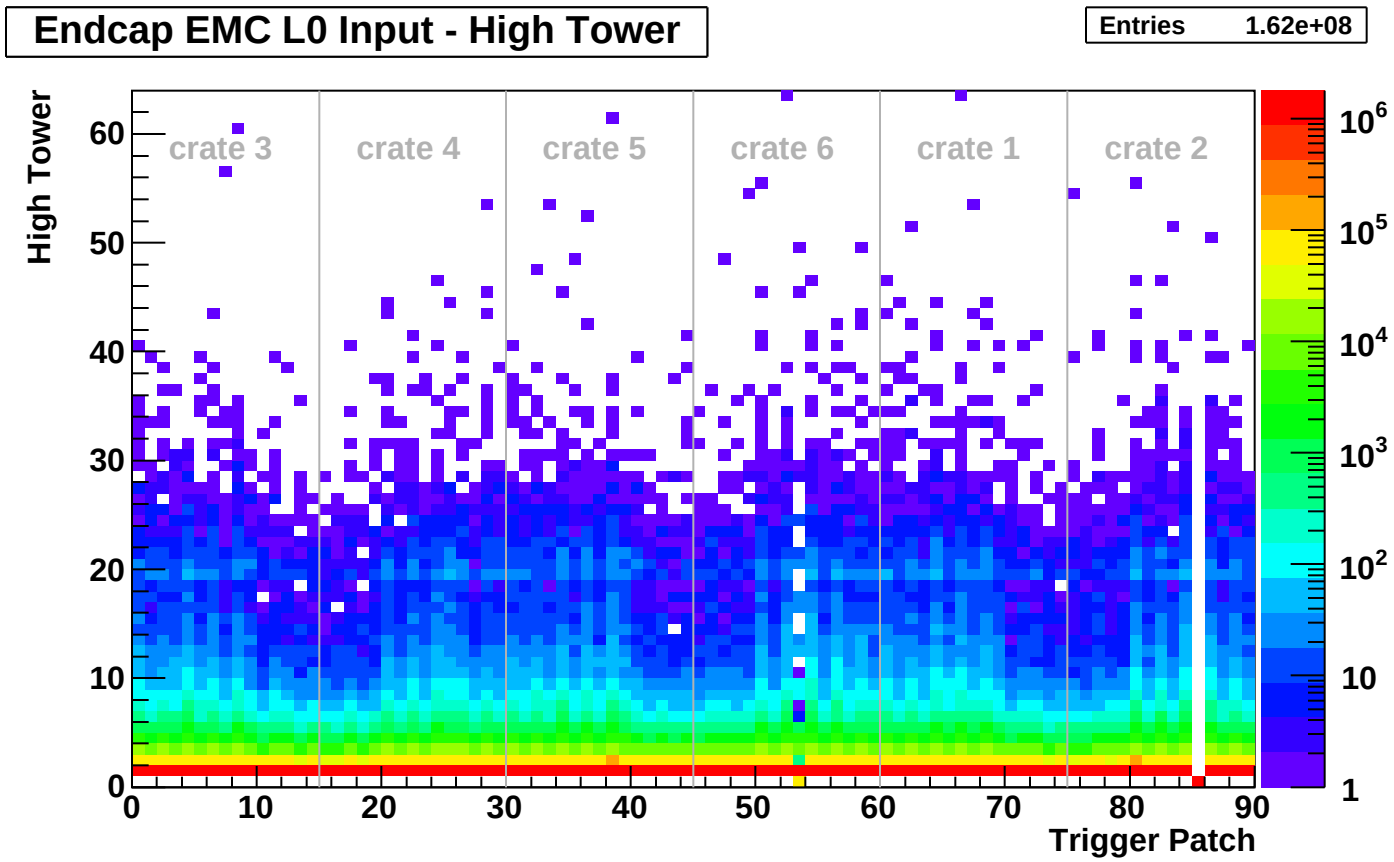

BunchId7Bit (all events)
Entries1800000

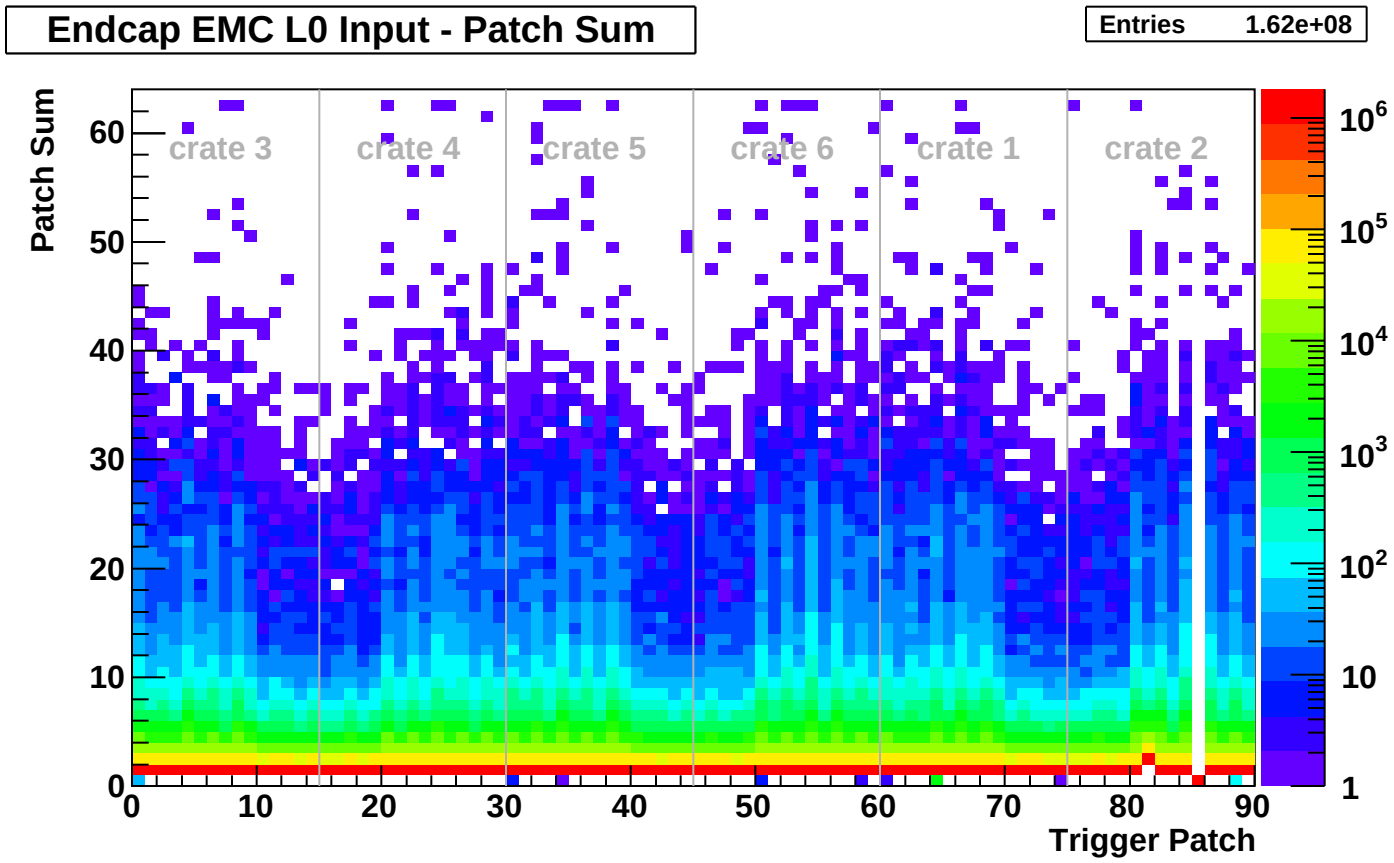

!Blue-Fill
Entries 115794

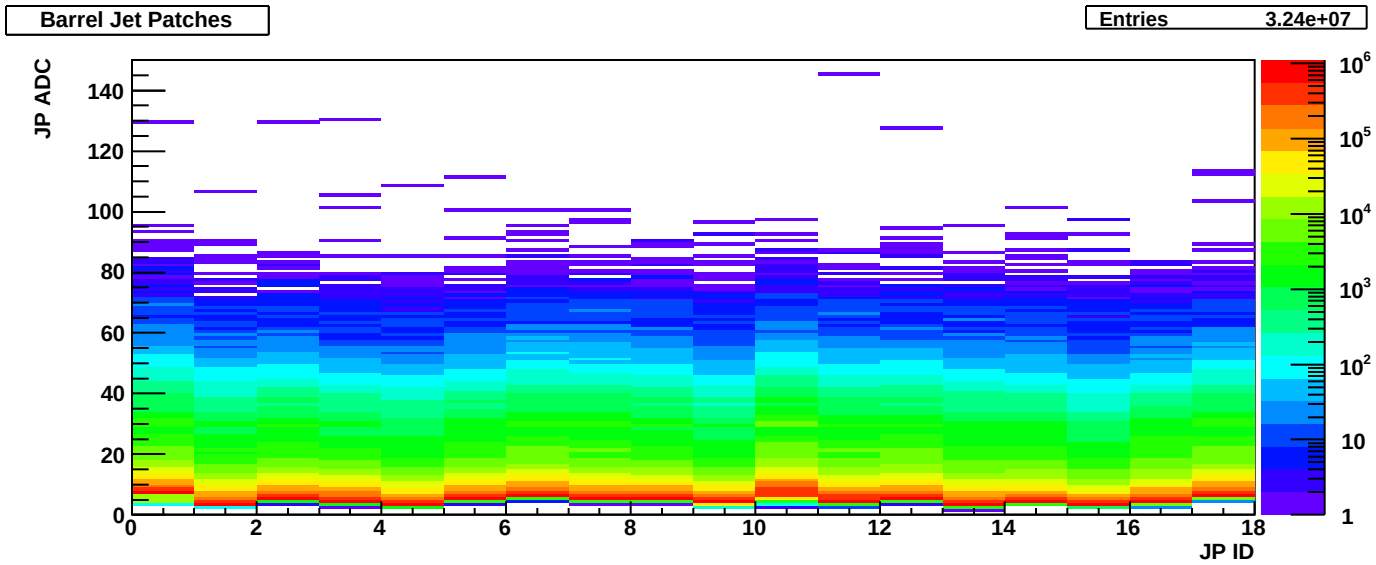

!Yellow-Fill
Entries 151671

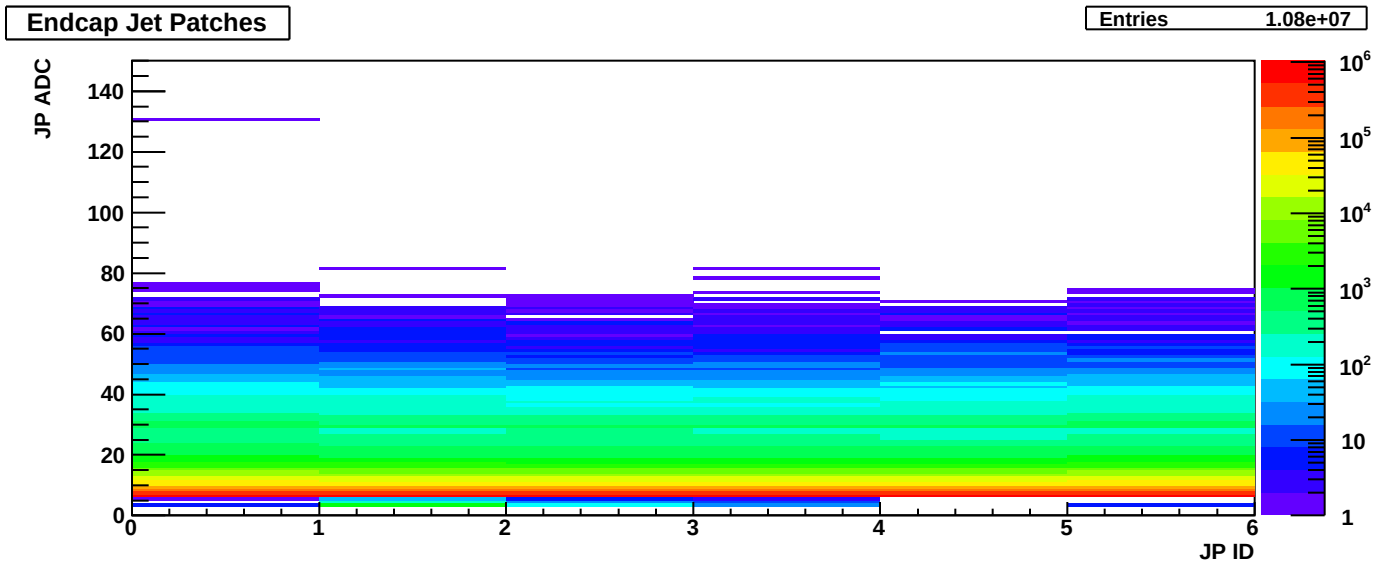

Barrel EMC L0 Input - High Tower
Entries 5.4e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

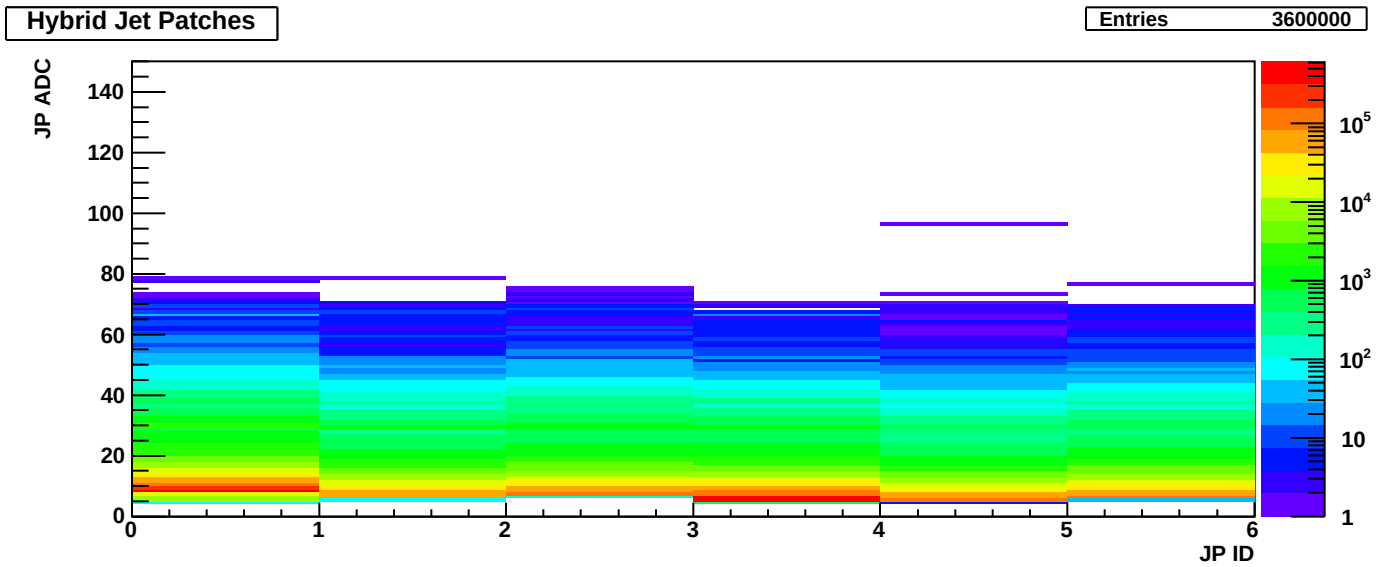

Barrel EMC L0 Input - Patch Sum
Entries 5.4e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

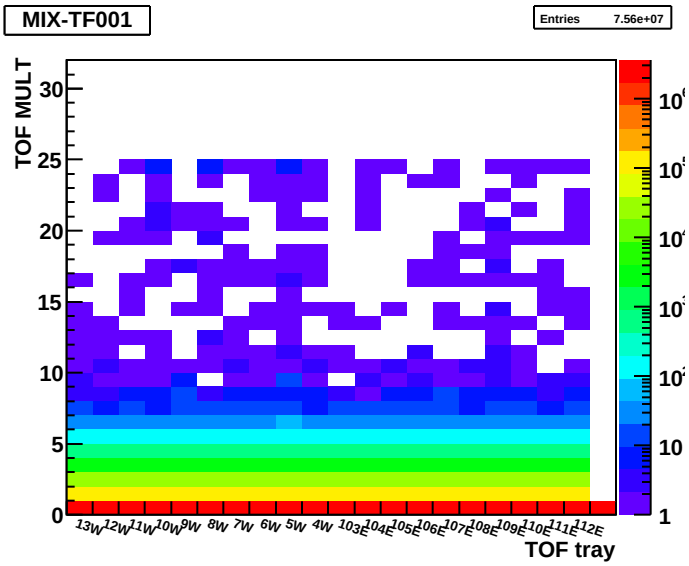

Endcap EMC L0 Input - High Tower
Entries 1.62e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

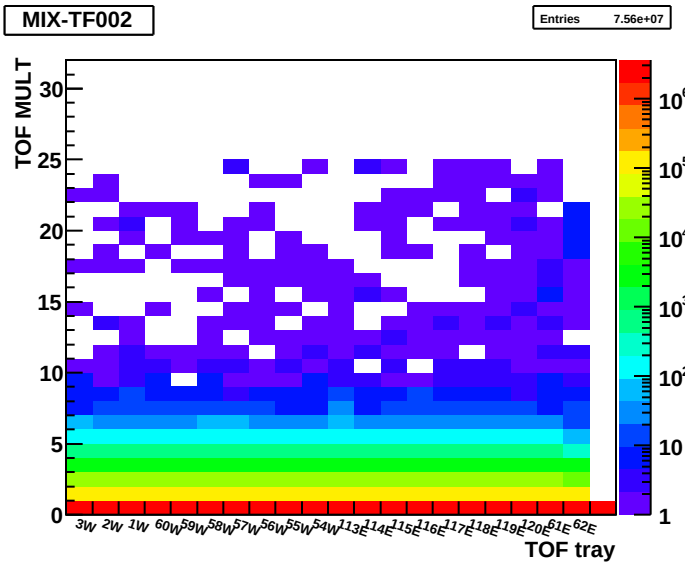

Endcap EMC L0 Input - Patch Sum
Entries 1.62e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

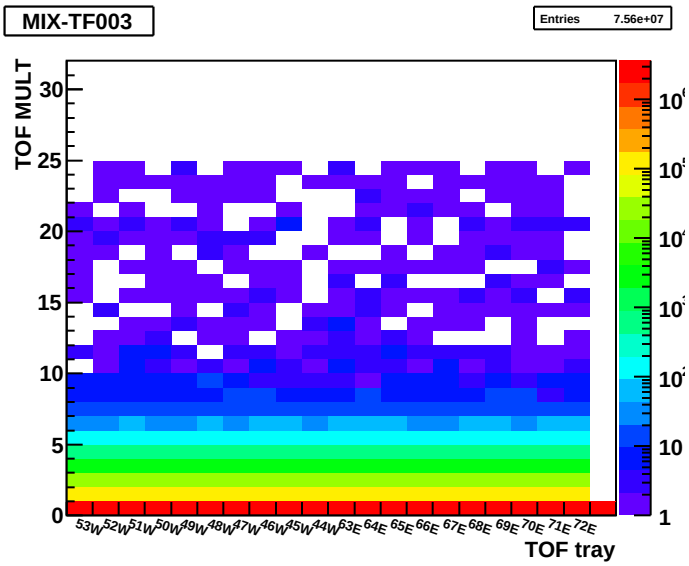

Barrel Jet Patches
Entries 3.24e+07
JP ADC
JP ID

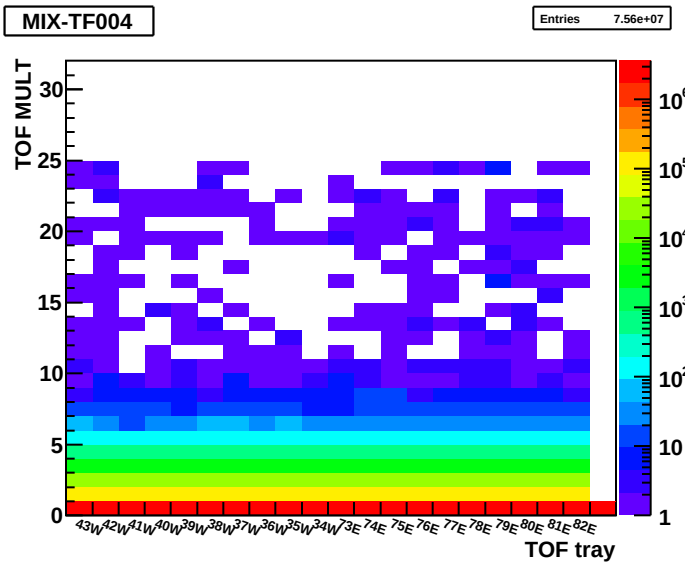

Endcap Jet Patches
Entries 1.08e+07
JP ADC
JP ID

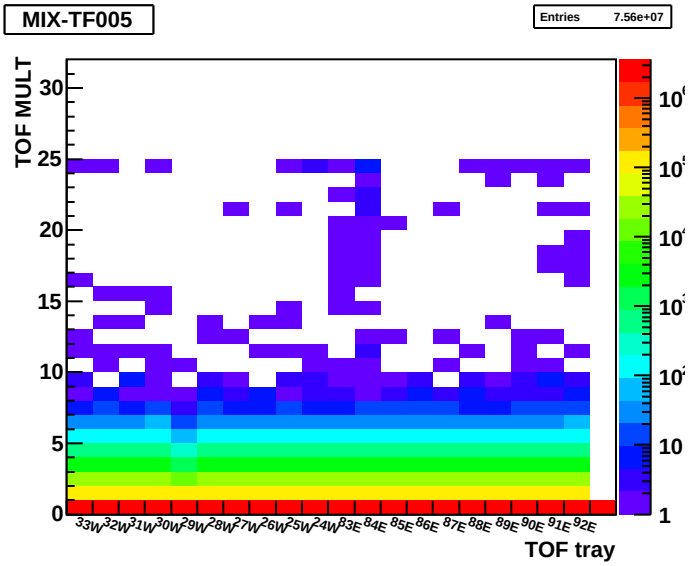

Hybrid Jet Patches
Entries 3600000
JP ADC
JP ID

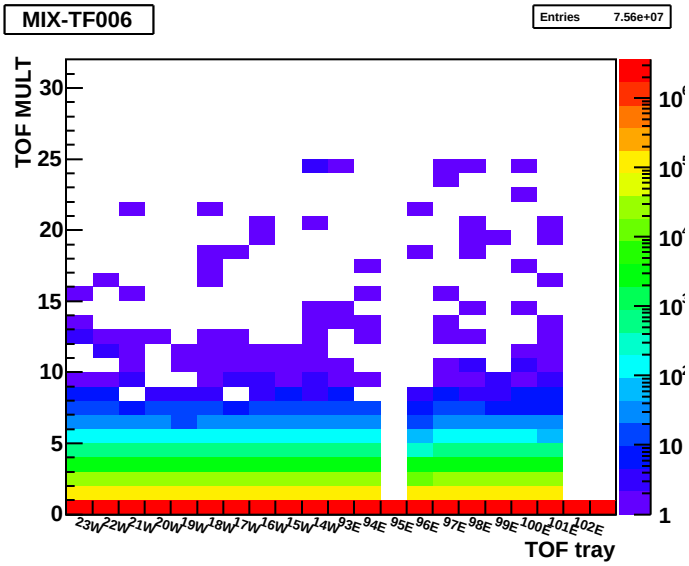

MIX-TF001
Entries 7.56e+07
TOF MULT
TOF tray

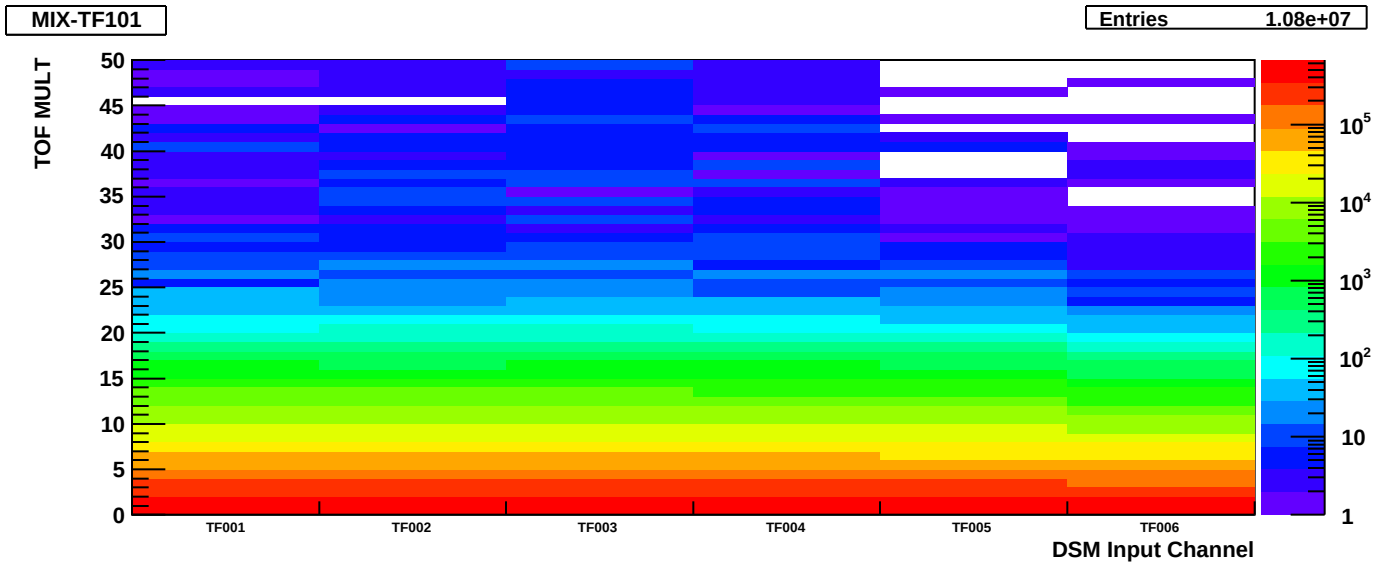

MIX-TF002
Entries 7.56e+07
TOF MULT
TOF tray

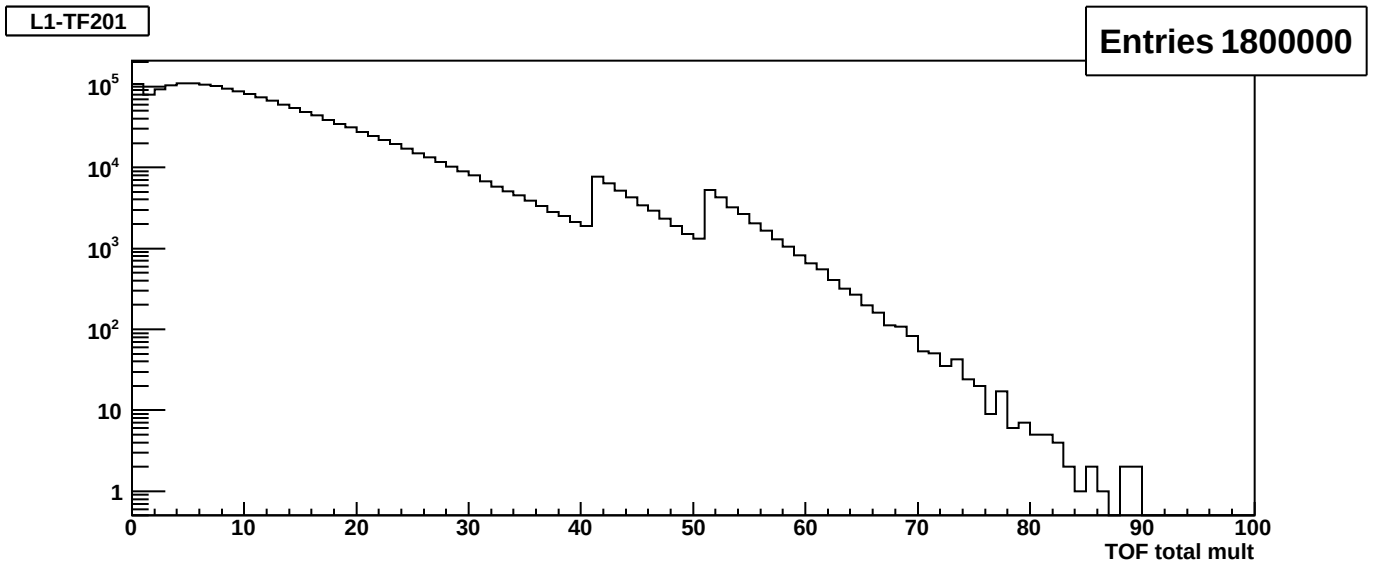

MIX-TF003
Entries 7.56e+07
TOF MULT
TOF tray

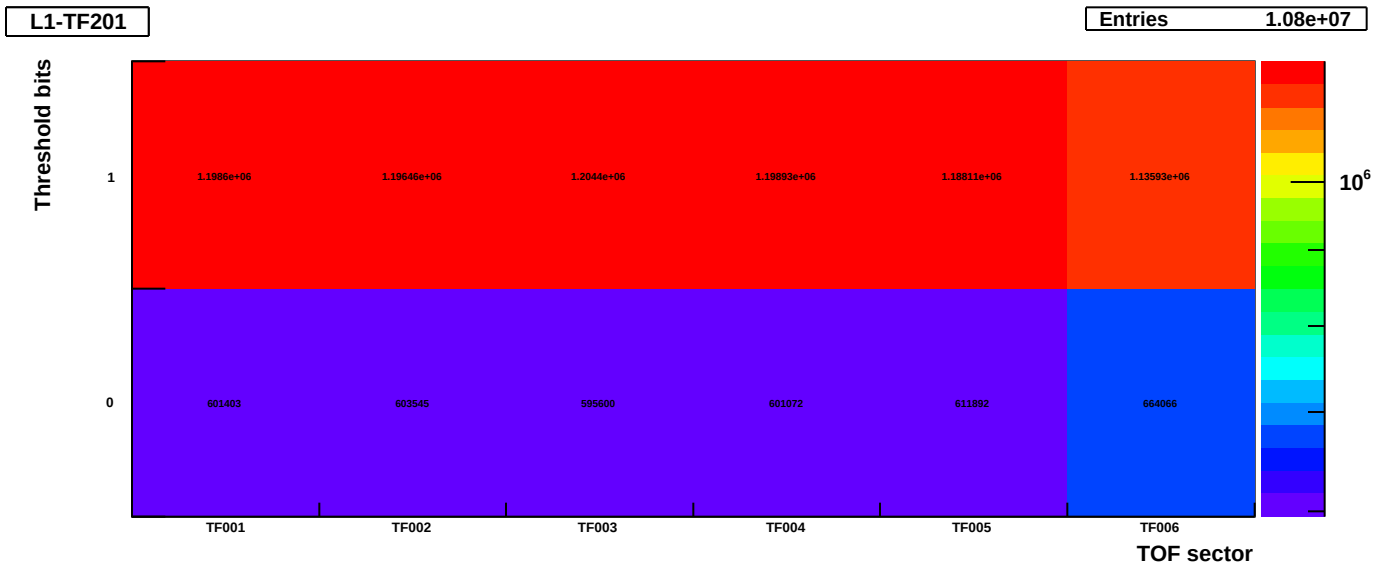

MIX-TF004
Entries 7.56e+07
TOF MULT
TOF tray

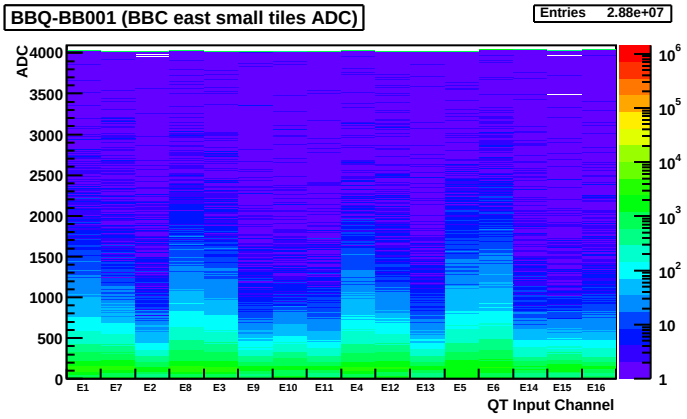

MIX-TF005
Entries 7.56e+07
TOF MULT
TOF tray

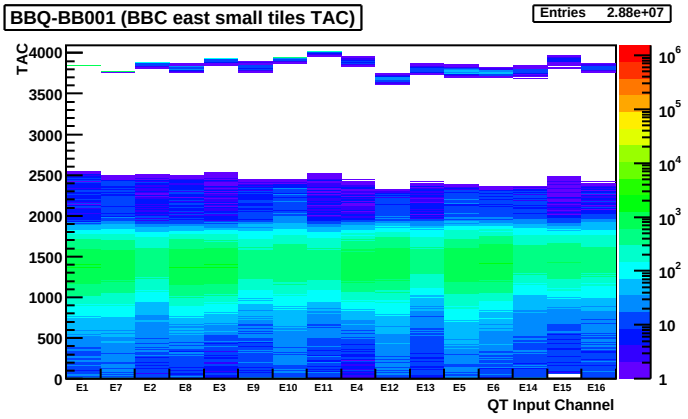

MIX-TF006
Entries 7.56e+07
TOF MULT
TOF tray

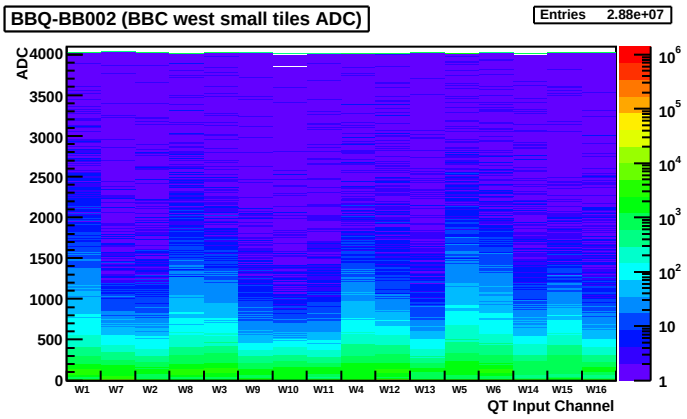

MIX-TF101
Entries 1.08e+07
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

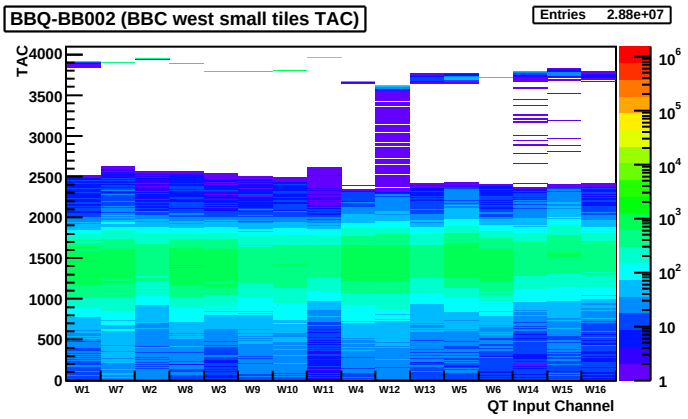

L1-TF201
Entries 1800000
10^5
10^4
10^3
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
TOF total mult

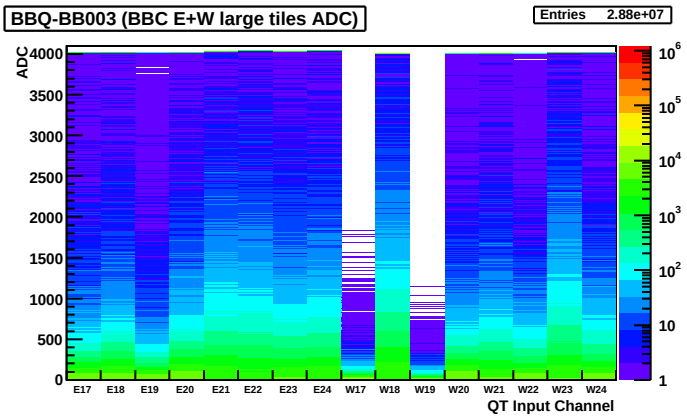

L1-TF201
Entries 1.08e+07
Threshold bits
1
0
1.1986e+06
1.19646e+06
1.2044e+06
1.19893e+06
1.18811e+06
1.13593e+06
601403
603545
595600
601072
611892
664066
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^6

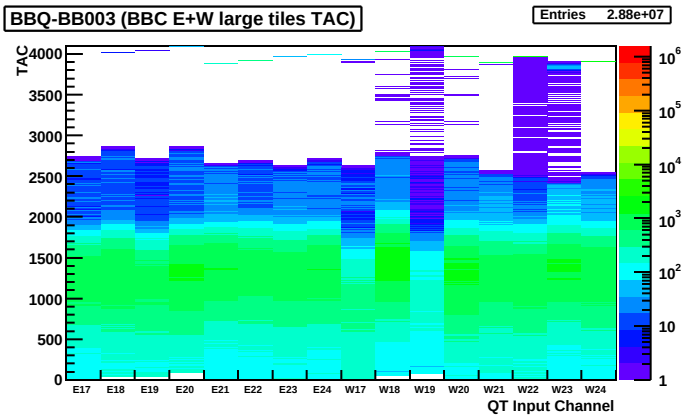

BBQ-BB001 (BBC east small tiles ADC)
Entries 2.88e+07
ADC
QT Input Channel

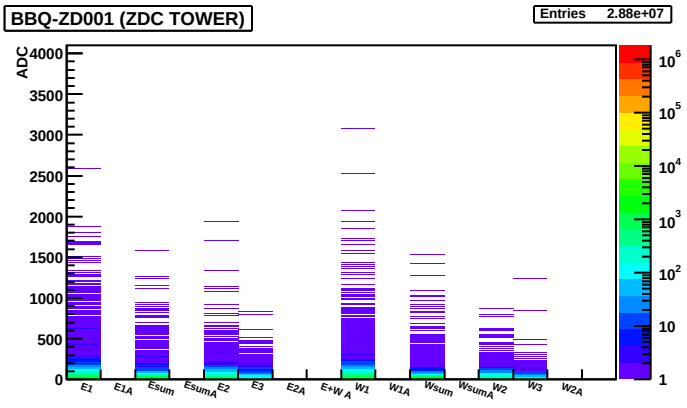

BBQ-BB001 (BBC east small tiles TAC)
Entries 2.88e+07
TAC
QT Input Channel

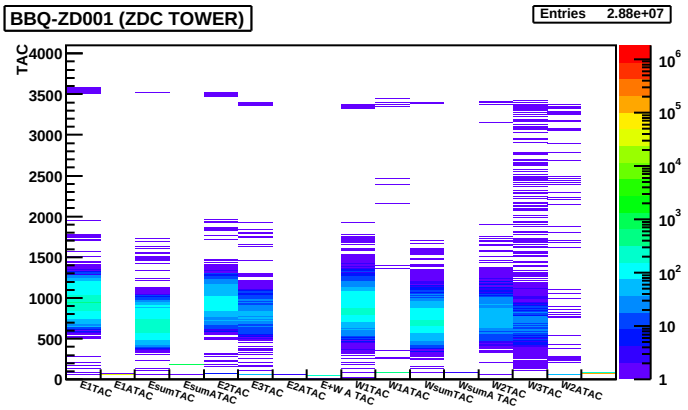

BBQ-BB002 (BBC west small tiles ADC)
Entries 2.88e+07
ADC
QT Input Channel

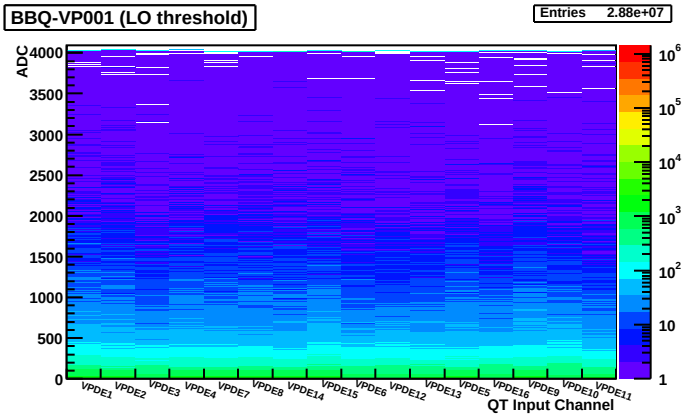

BBQ-BB002 (BBC west small tiles TAC)
Entries 2.88e+07
TAC
QT Input Channel

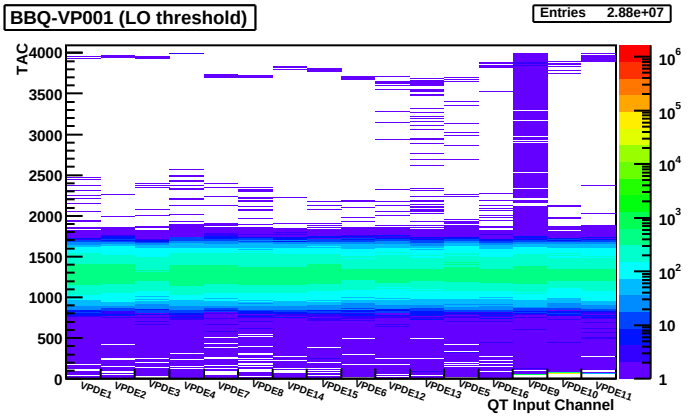

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2.88e+07
ADC
QT Input Channel

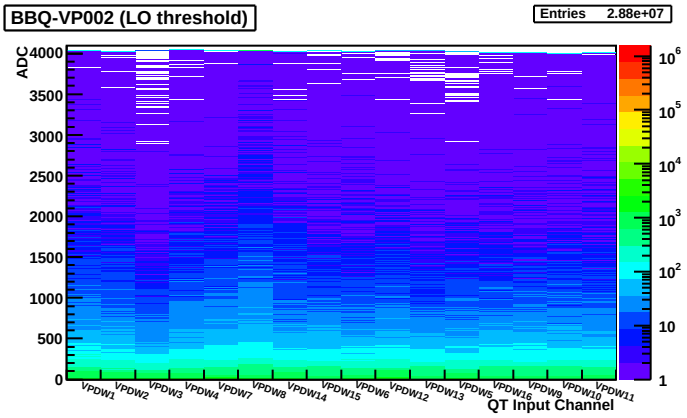

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2.88e+07
TAC
QT Input Channel

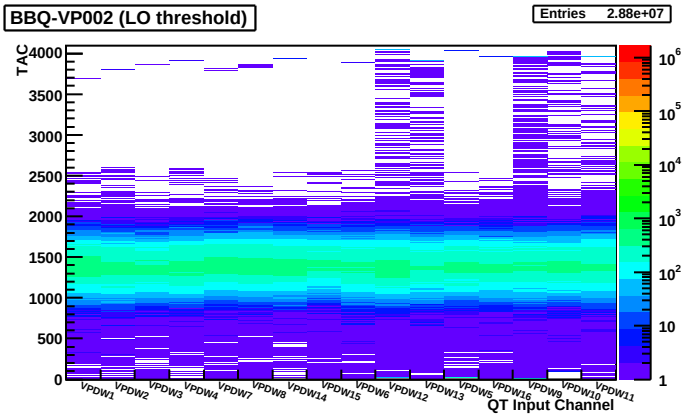

BBQ-ZD001 (ZDC TOWER)
Entries 2.88e+07
ADC

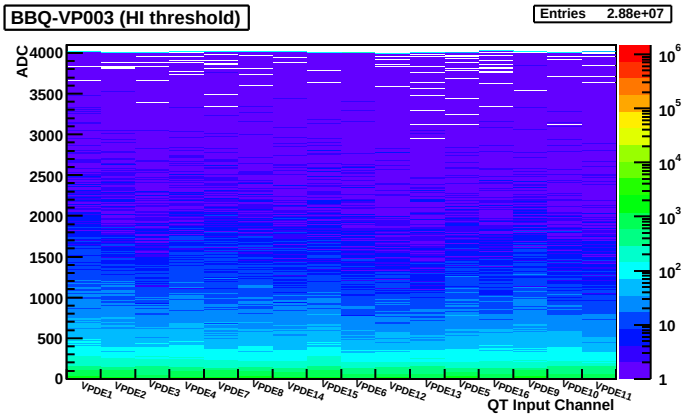

BBQ-ZD001 (ZDC TOWER)
Entries 2.88e+07
TAC

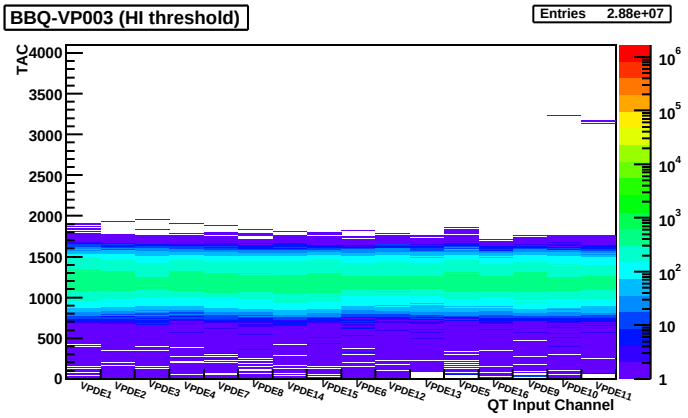

BBQ-VP001 (LO threshold)
Entries 2.88e+07
ADC
QT Input Channel

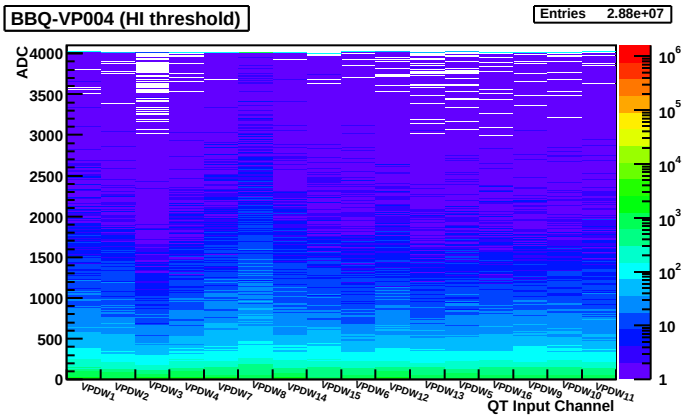

BBQ-VP001 (LO threshold)
Entries 2.88e+07
TAC
QT Input Channel

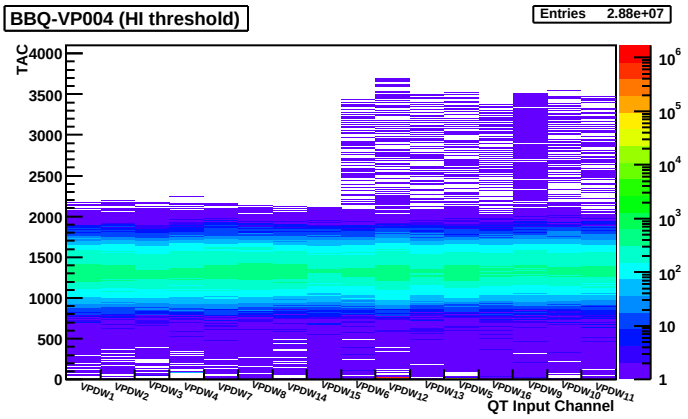

BBQ-VP002 (LO threshold)
Entries 2.88e+07
ADC
QT Input Channel

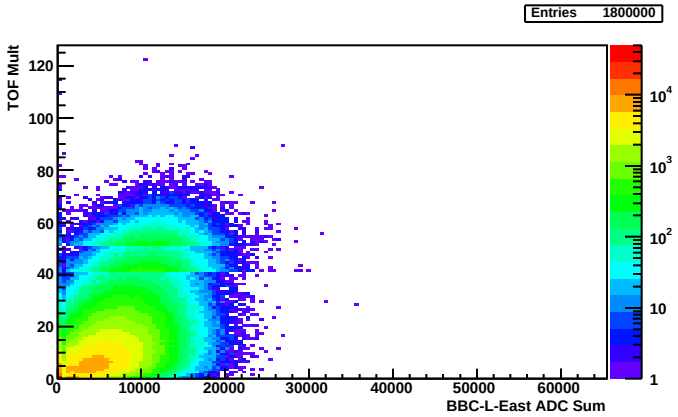

BBQ-VP002 (LO threshold)
Entries 2.88e+07
TAC
QT Input Channel

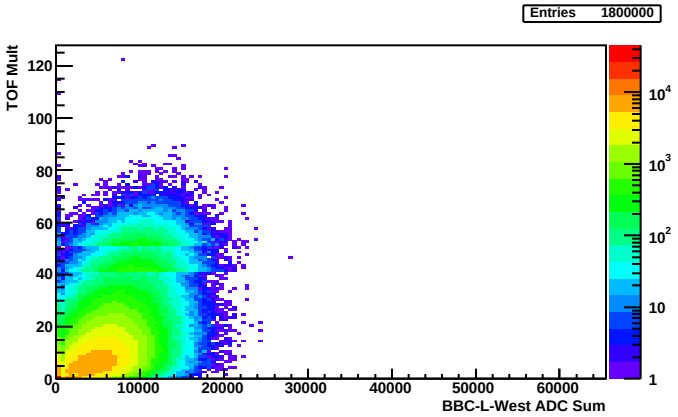

BBQ-VP003 (HI threshold)
Entries 2.88e+07
ADC
QT Input Channel

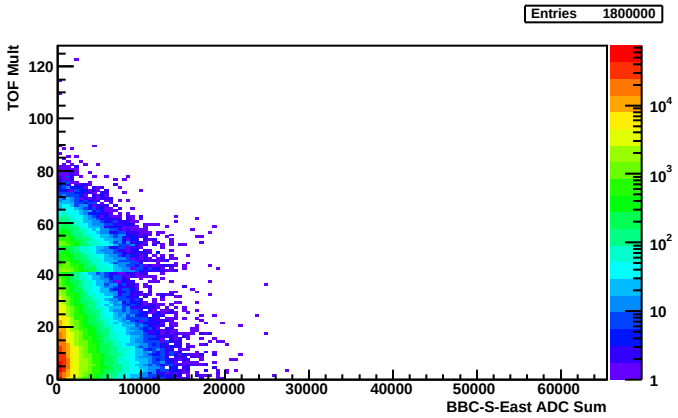

BBQ-VP003 (HI threshold)
Entries 2.88e+07
TAC
QT Input Channel

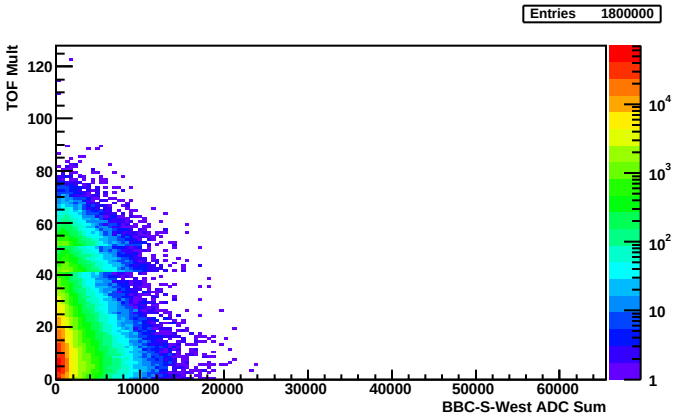

BBQ-VP004 (HI threshold)
Entries 2.88e+07
ADC
QT Input Channel

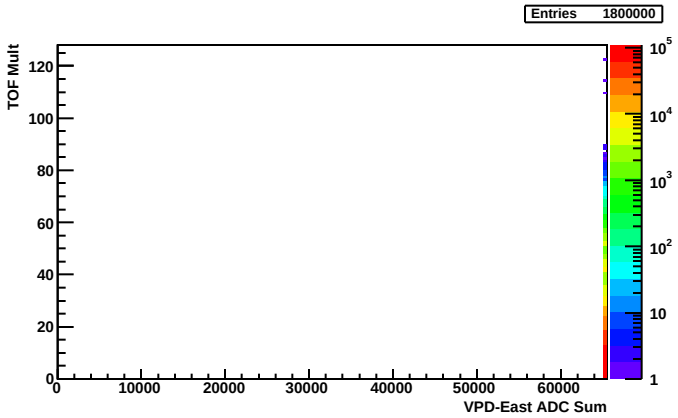

BBQ-VP004 (HI threshold)
Entries 2.88e+07
TAC
QT Input Channel

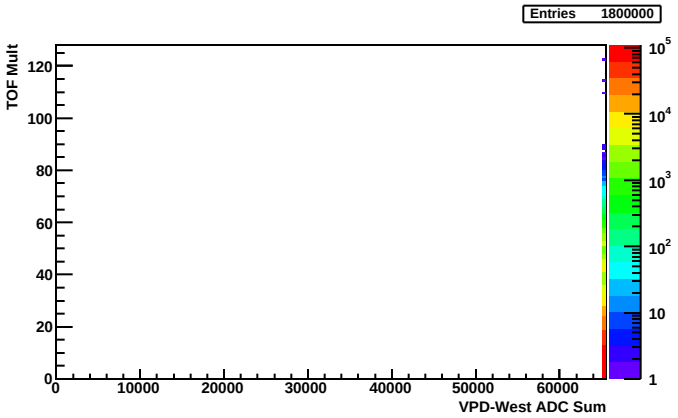

Entries 1800000
TOF Mult
BBC-L-East ADC Sum

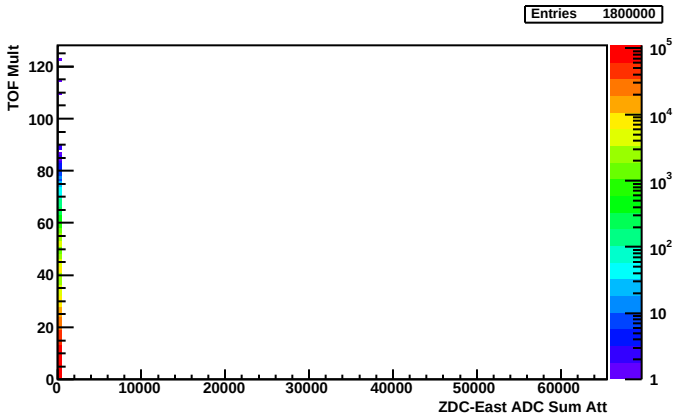

Entries 1800000
TOF Mult
BBC-L-West ADC Sum

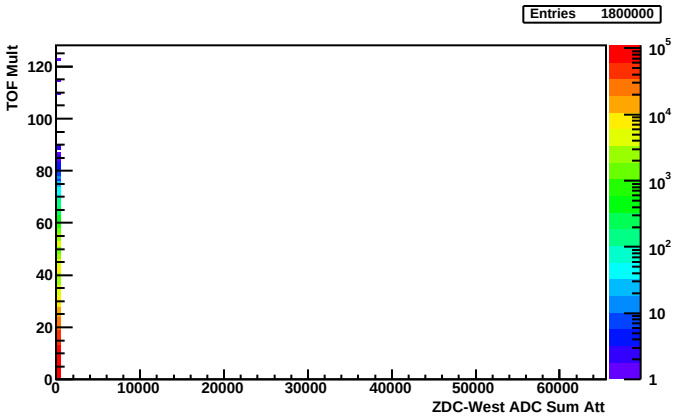

Entries 1800000
TOF Mult
BBC-S-East ADC Sum

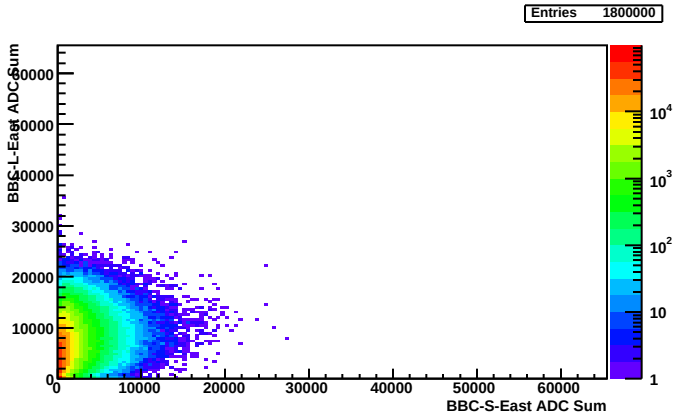

Entries 1800000
TOF Mult
BBC-S-West ADC Sum

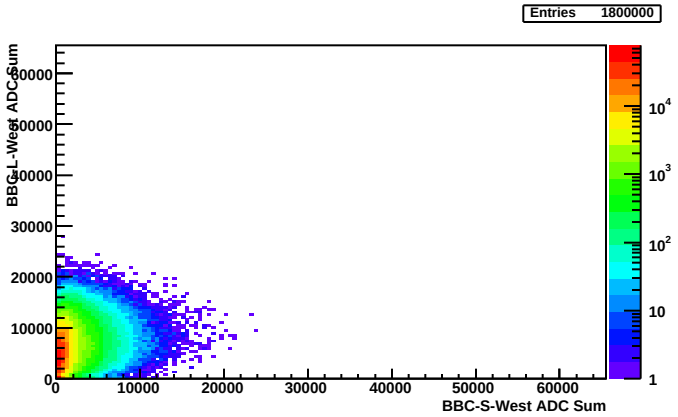

Entries 1800000
TOF Mult
VPD-East ADC Sum

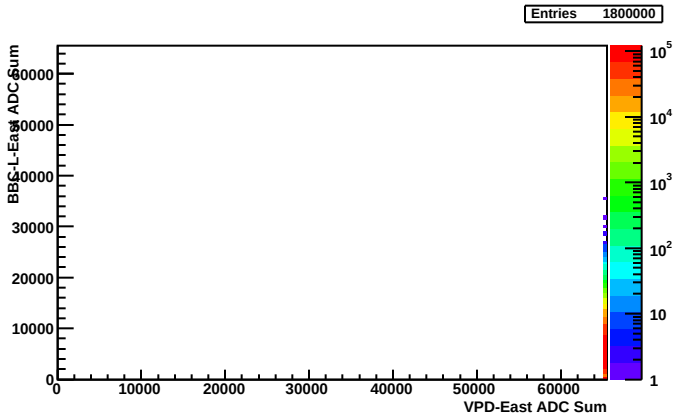

Entries 1800000
TOF Mult
VPD-West ADC Sum

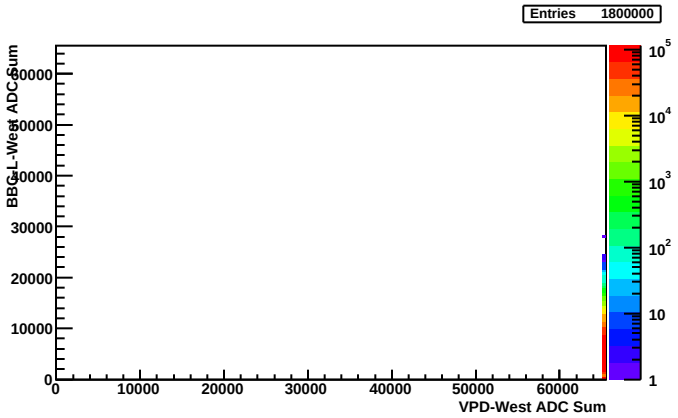

Entries 1800000
TOF Mult
ZDC-East ADC Sum Att

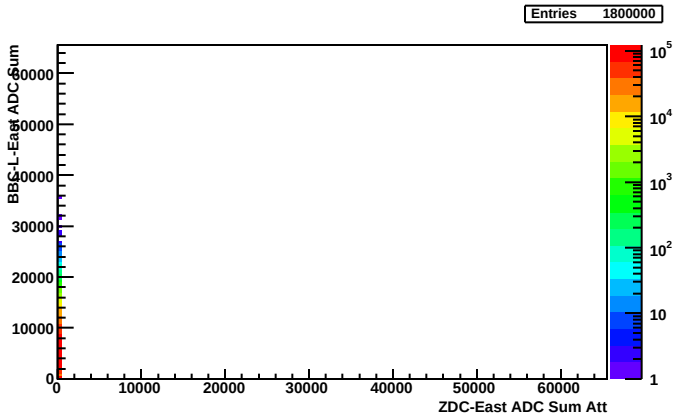

Entries 1800000
TOF Mult
ZDC-West ADC Sum Att

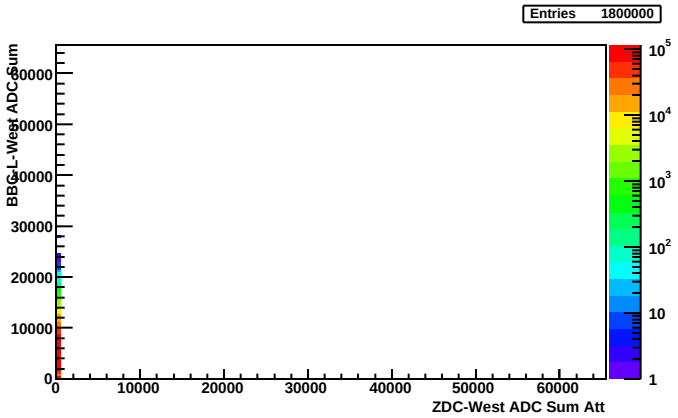

Entries 1800000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

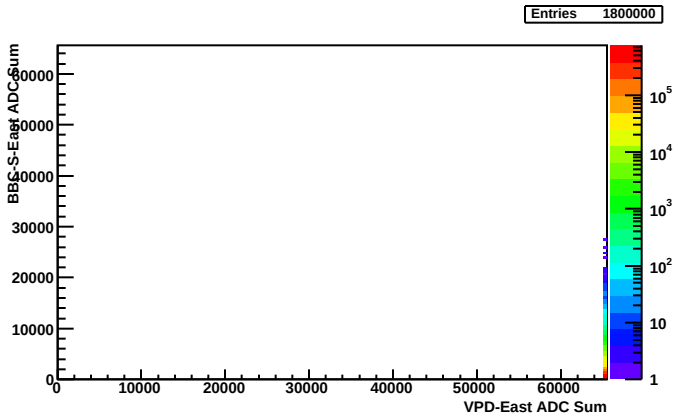

Entries 1800000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

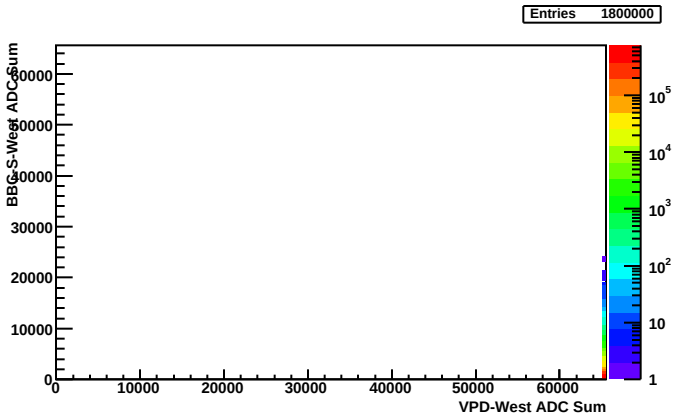

Entries 1800000
BBC-L-East ADC Sum
VPD-East ADC Sum

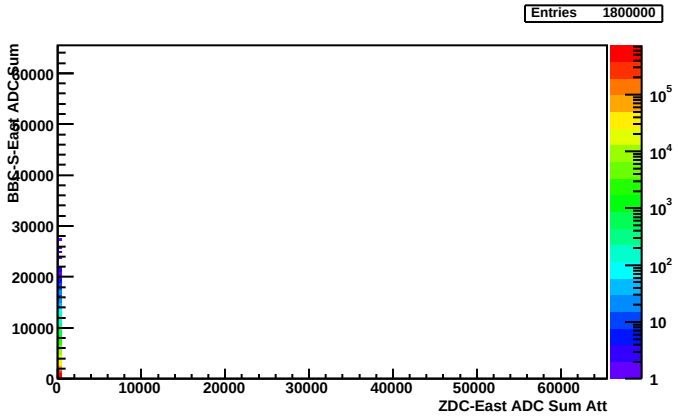

Entries 1800000
BBC-L-West ADC Sum
VPD-West ADC Sum

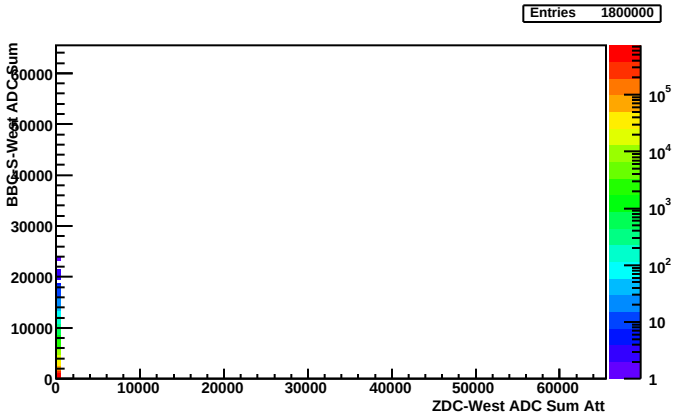

Entries 1800000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

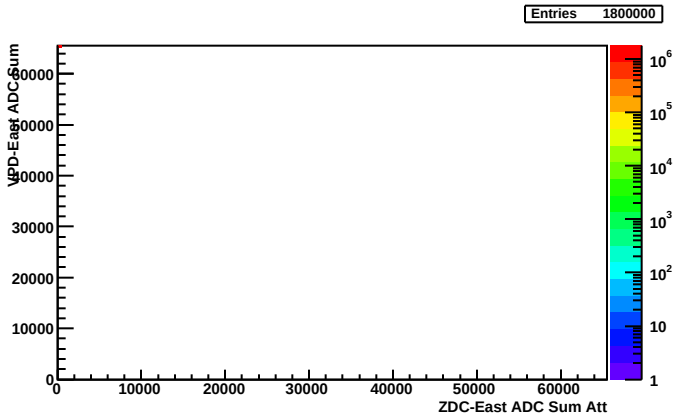

Entries 1800000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

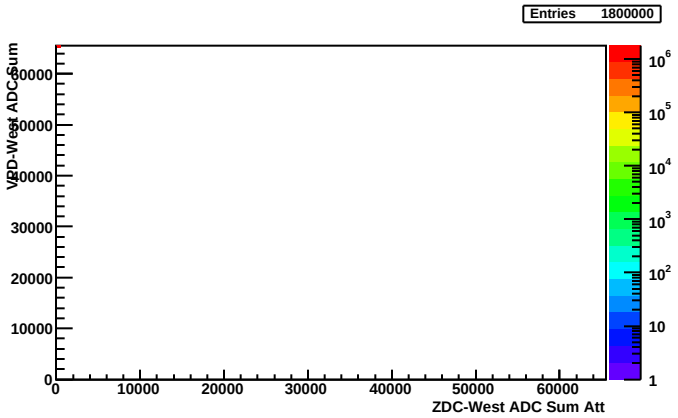

Entries 1800000
BBC-S-East ADC Sum
VPD-East ADC Sum

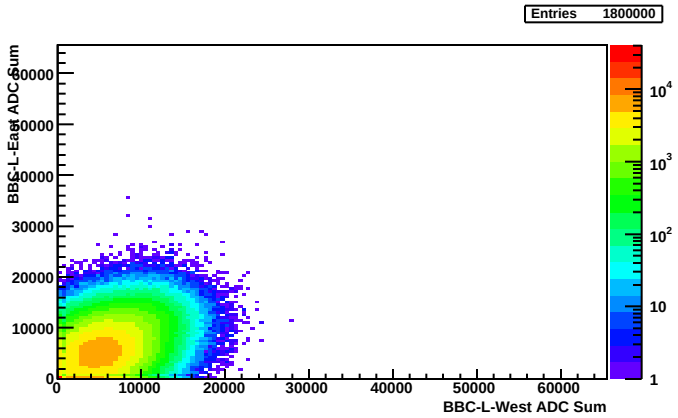

Entries 1800000
BBC-S-West ADC Sum
VPD-West ADC Sum

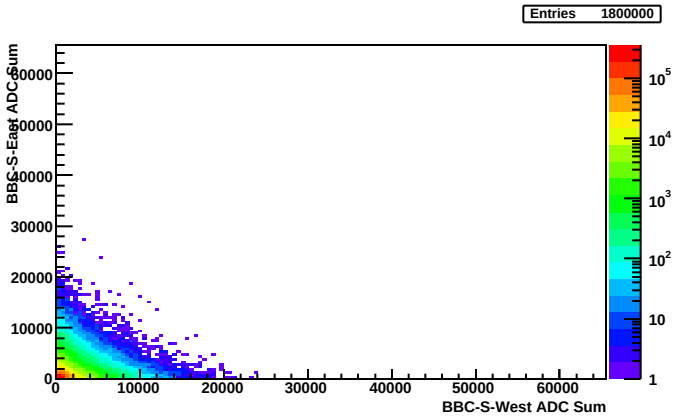

Entries 1800000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

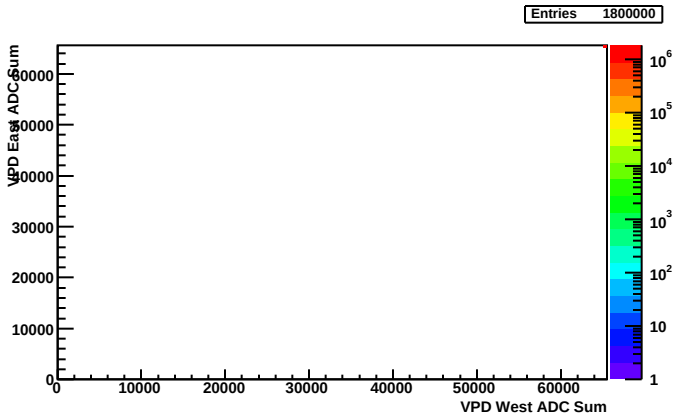

Entries 1800000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

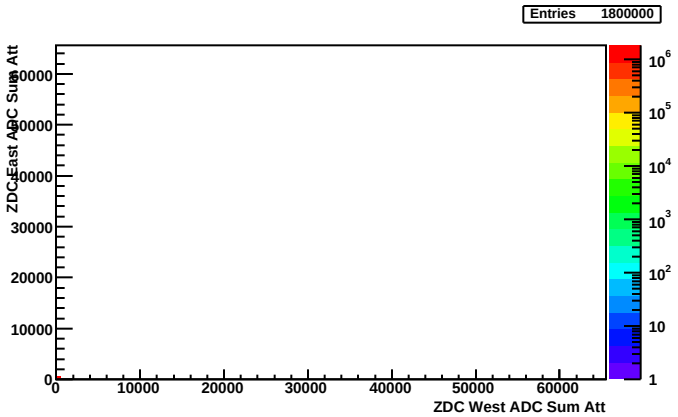

Entries 1800000
VPD-East ADC Sum
ZDC-East ADC Sum Att

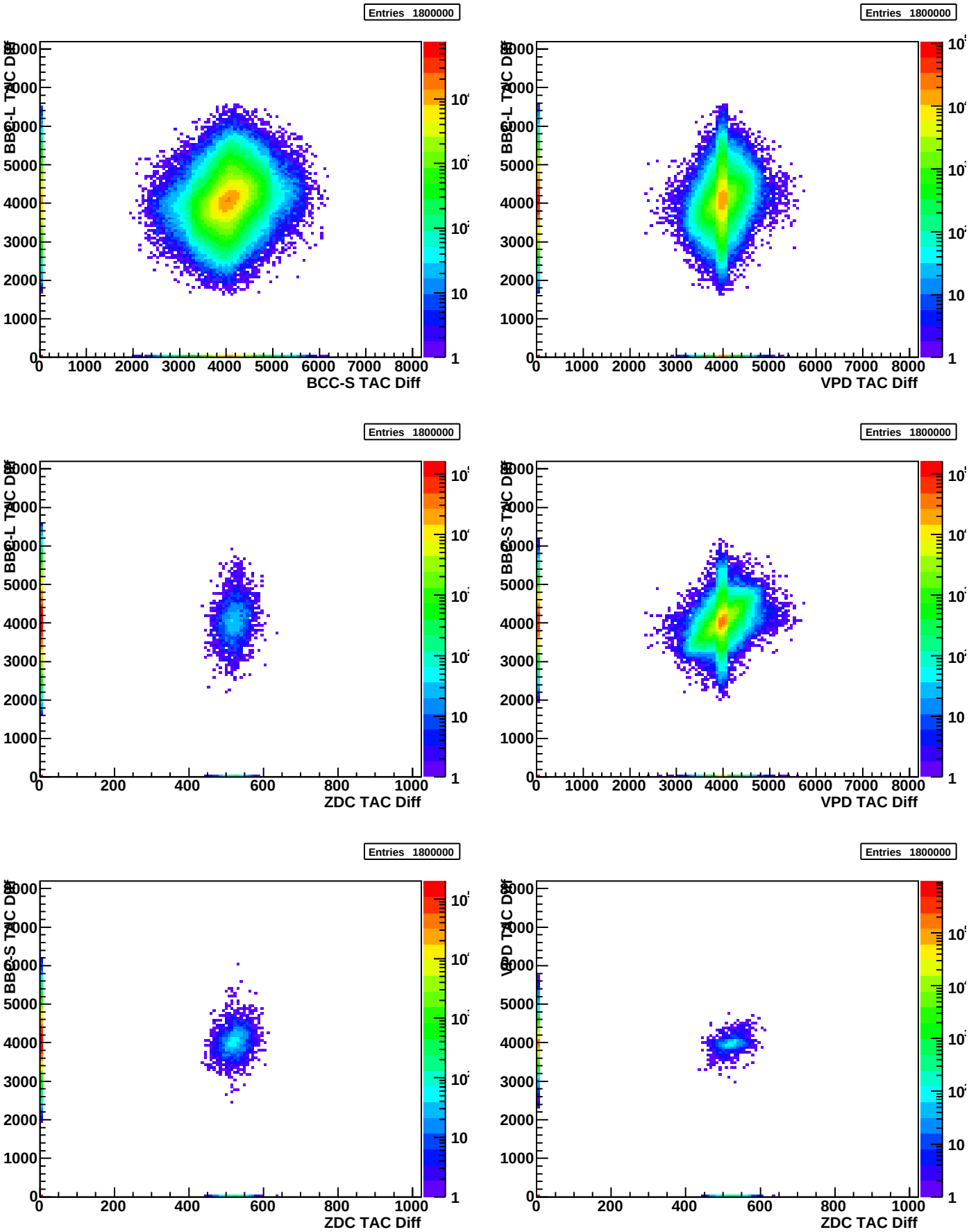

Entries 1800000
VPD-West ADC Sum
ZDC-West ADC Sum Att


Entries 1800000
BBC-L-East ADC Sum
BBC-L-West ADC Sum


Entries 1800000
BBC-S-East ADC Sum
BBC-S-West ADC Sum


Entries 1800000
VPD East ADC Sum
VPD West ADC Sum


Entries 1800000
ZDC East ADC Sum Att
ZDC West ADC Sum Att


Entries 1800000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1800000
BBC-L TAC Diff
VPD TAC Diff
Entries 1800000
BBC-L TAC Diff
ZDC TAC Diff
Entries 1800000
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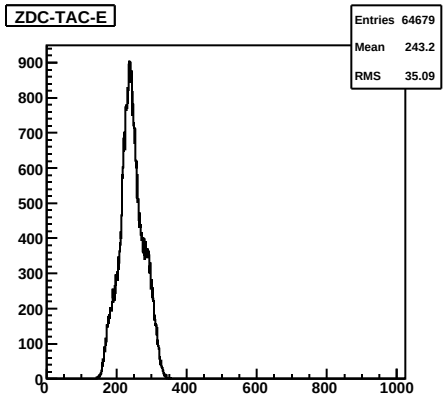
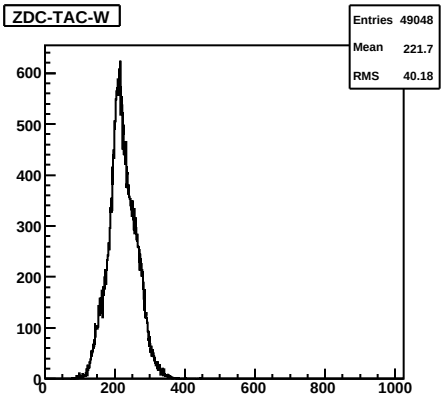
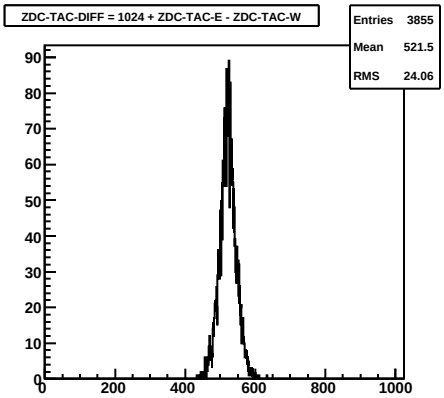
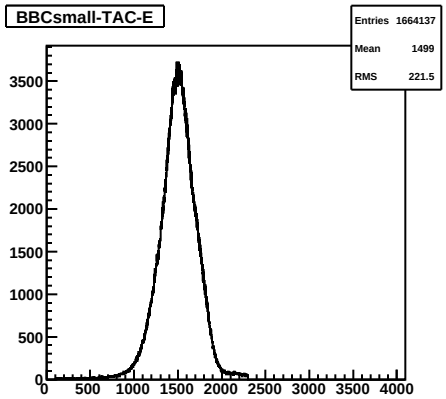
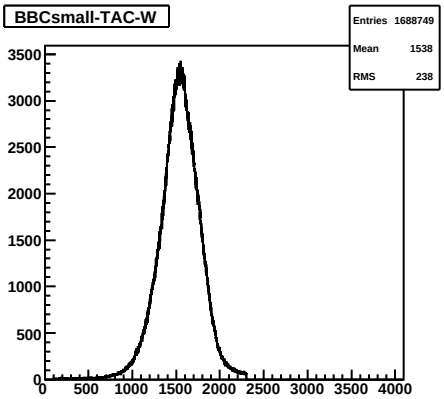
VPD TAC Diff
Entries 1800000
BBC-S TAC Diff
ZDC TAC Diff
Entries 1800000
VPD TAC Diff
ZDC TAC Diff

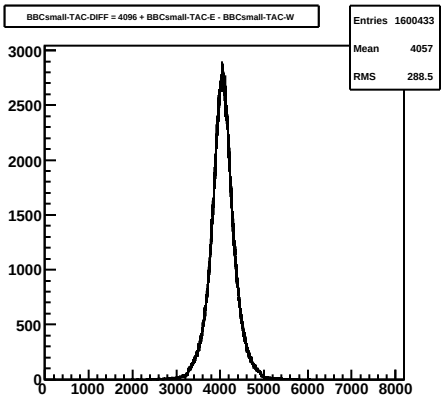

ZDC-TAC-E
Entries 64679
Mean 243.2
RMS 35.09

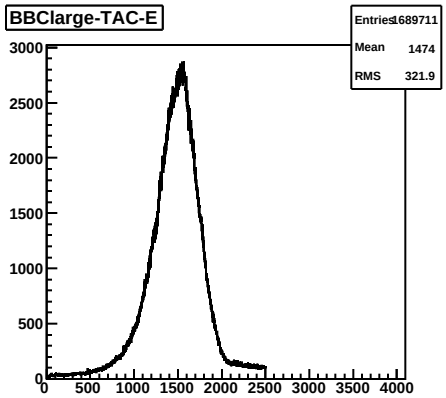

ZDC-TAC-W
Entries 49048
Mean 221.7
RMS 40.18

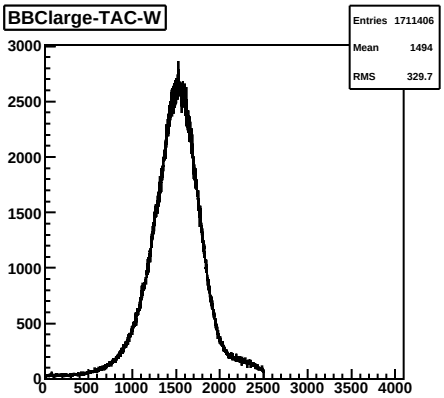

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 3855
Mean 521.5
RMS 24.06

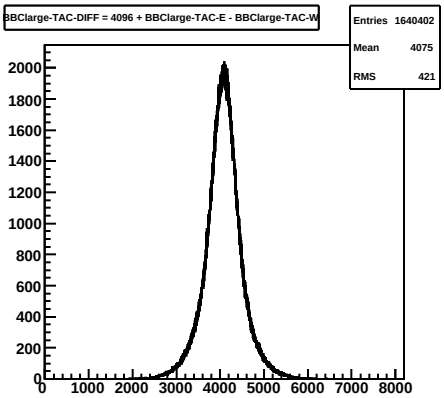

BBCsmall-TAC-E
Entries 1664137
Mean 1499
RMS 221.5

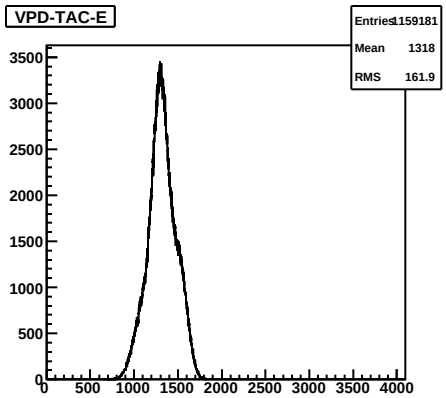

BBCsmall-TAC-W
Entries 1688749
Mean 1538
RMS 238

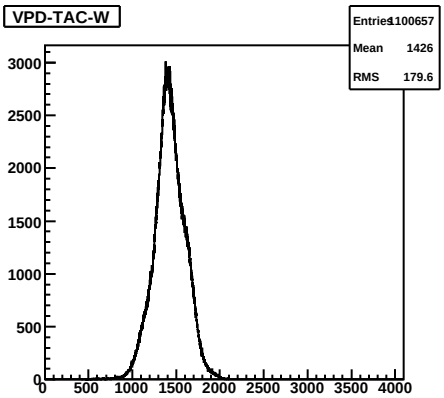

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 1600433
Mean 4057
RMS 288.5

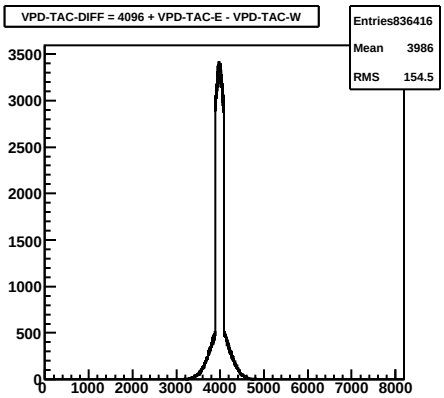

BBClarge-TAC-E
Entries 1689711
Mean 1474
RMS 321.9

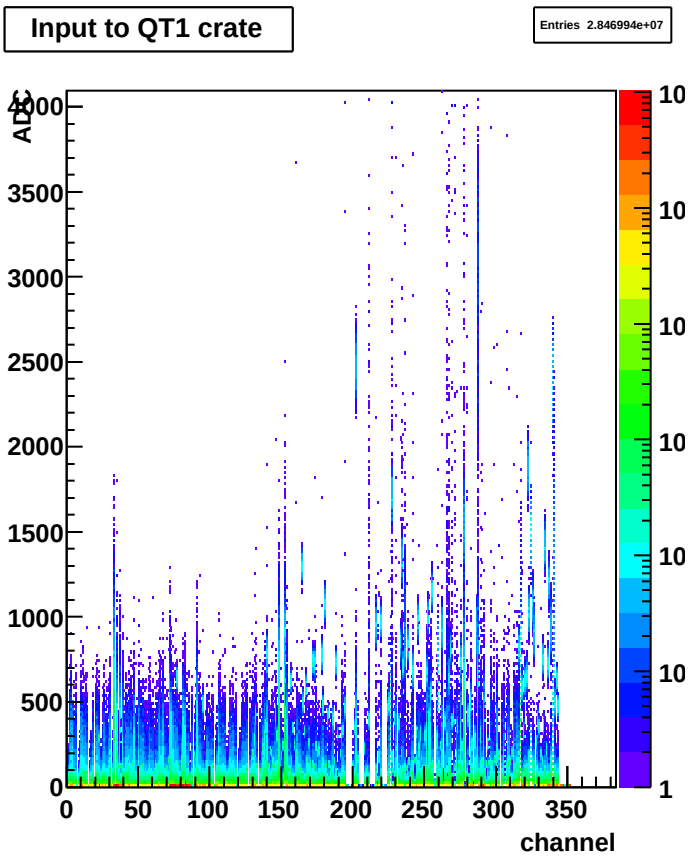

BBClarge-TAC-W
Entries 1711406
Mean 1494
RMS 329.7

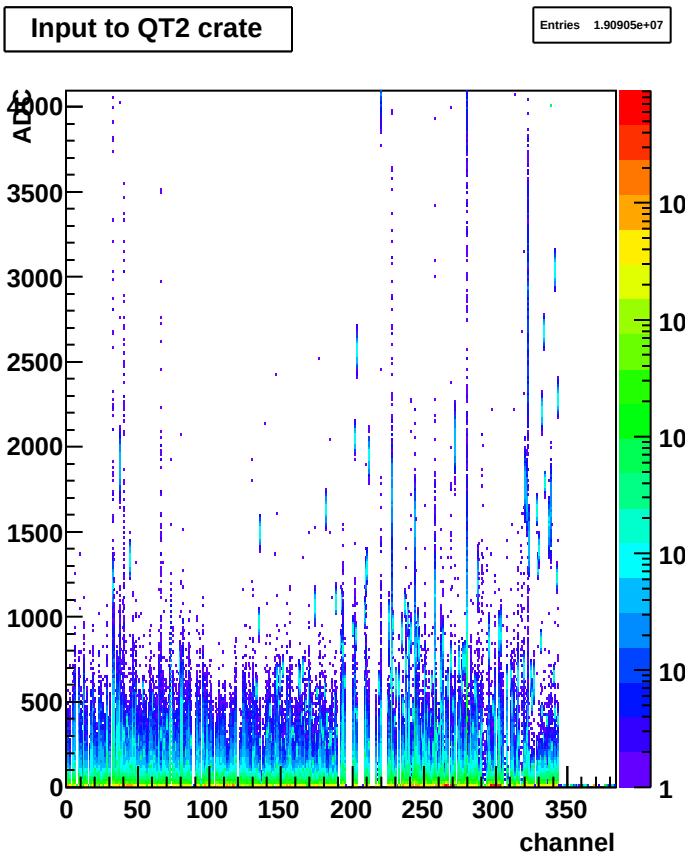

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 1640402
Mean 4075
RMS 421

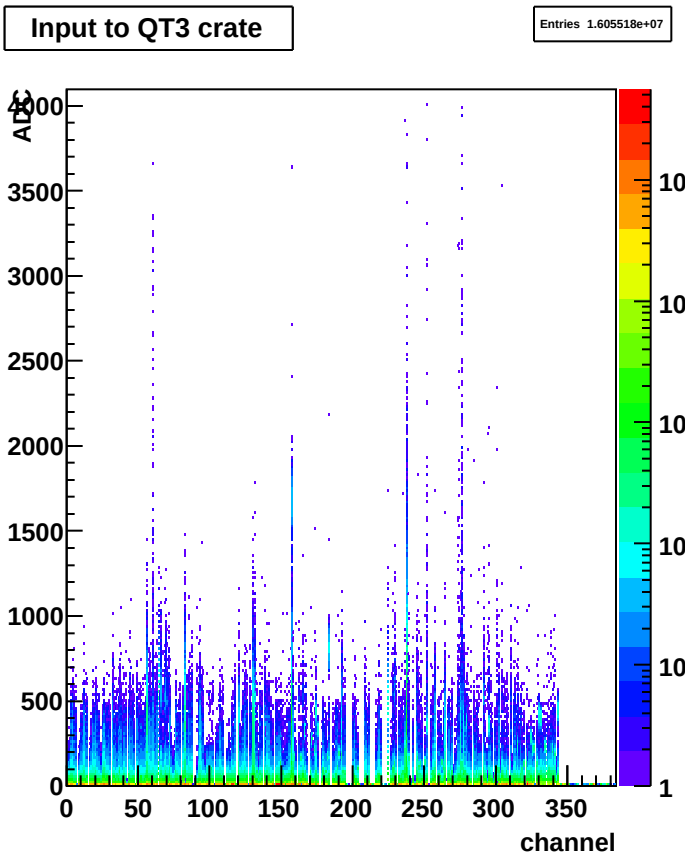

VPD-TAC-E
Entries 1159181
Mean 1318
RMS 161.9

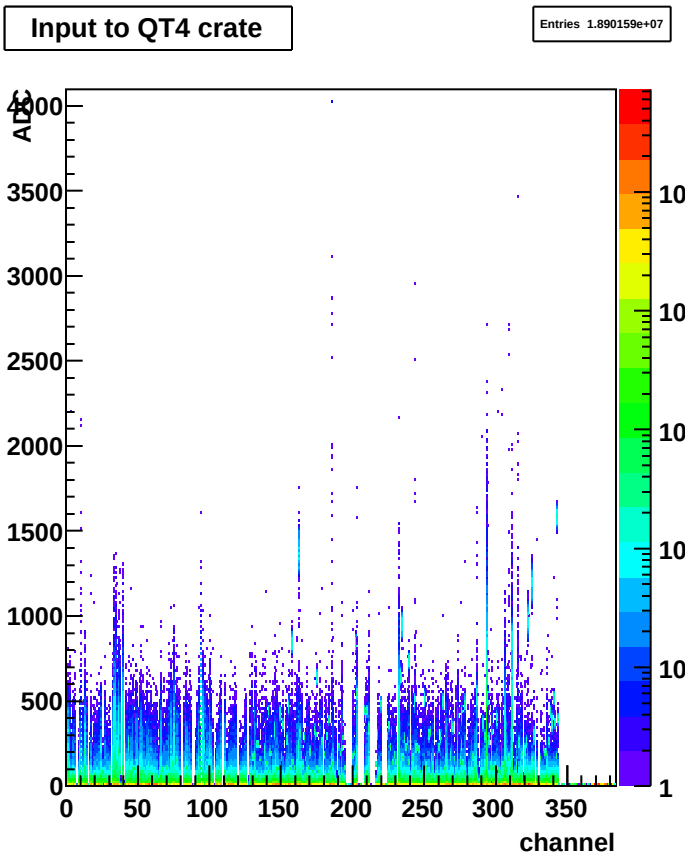

VPD-TAC-W
Entries 1100657
Mean 1426
RMS 179.6

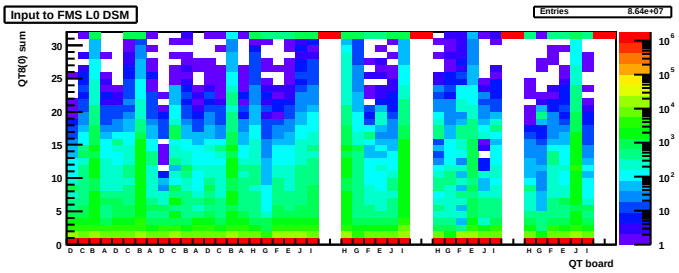

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 836416
Mean 3986
RMS 154.5

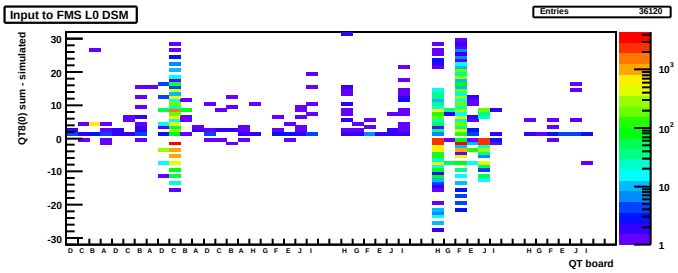

Input to QT1 crate
Entries 2.846994e+07
ADC
channel

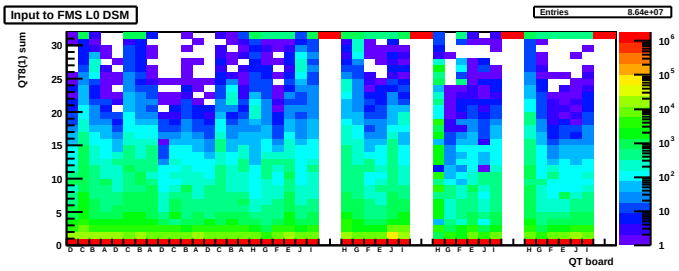

Input to QT2 crate
Entries 1.90905e+07
ADC
channel

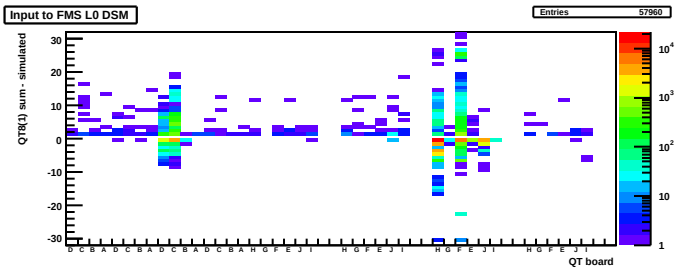

Input to QT3 crate
Entries 1.605518e+07
ADC
channel

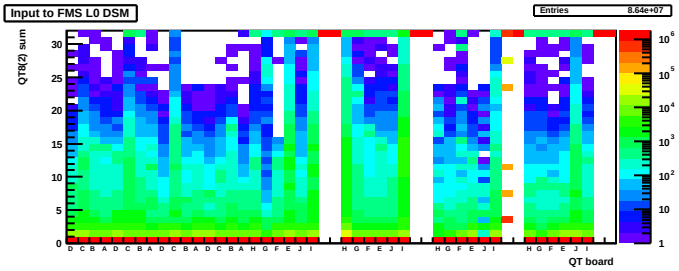

Input to QT4 crate
Entries 1.890159e+07
ADC
channel

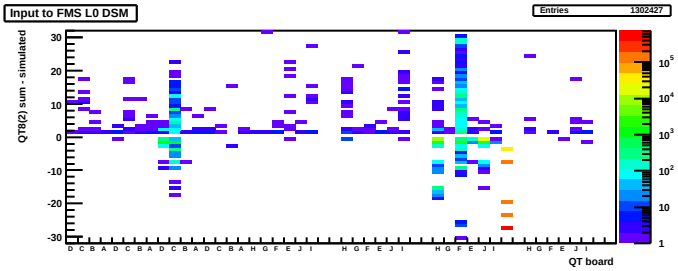

Input to FMS L0 DSM
Entries 8.64e+07
QT8(0) sum
QT board

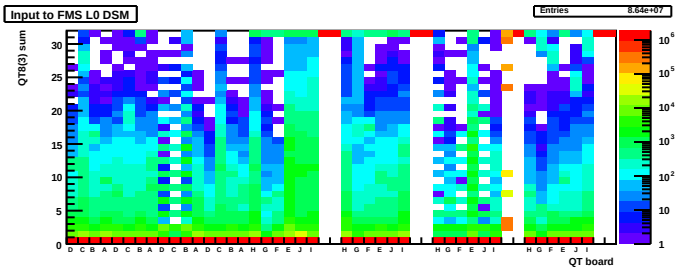

Input to FMS L0 DSM
Entries 36120
QT8(0) sum - simulated
QT board

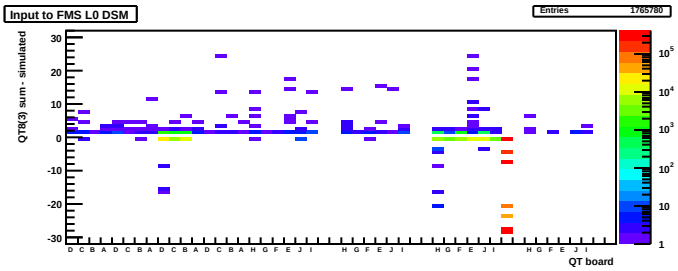

Input to FMS L0 DSM
Entries 8.64e+07
QT8(1) sum
QT board

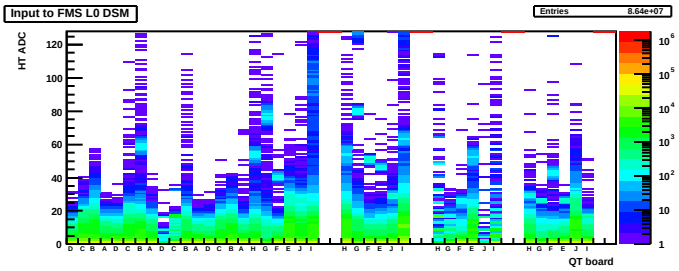

Input to FMS L0 DSM
Entries 57960
QT8(1) sum - simulated
QT board

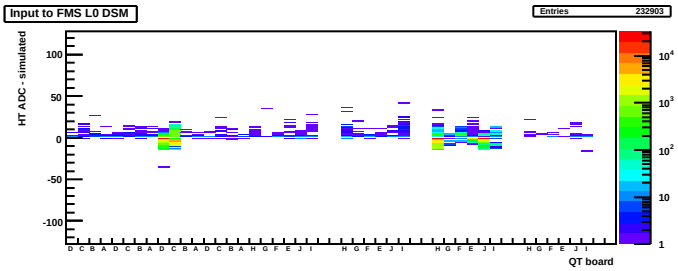

Input to FMS L0 DSM
Entries 8.64e+07
QT8(2) sum
QT board

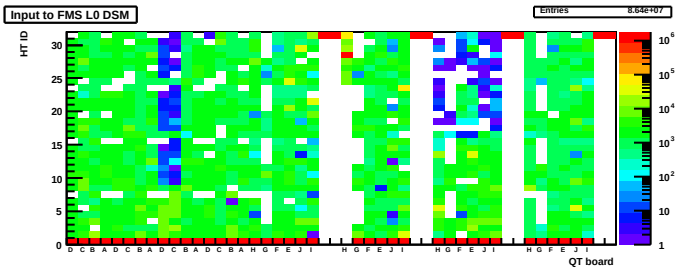

Input to FMS L0 DSM
Entries 1302427
QT8(2) sum - simulated
QT board

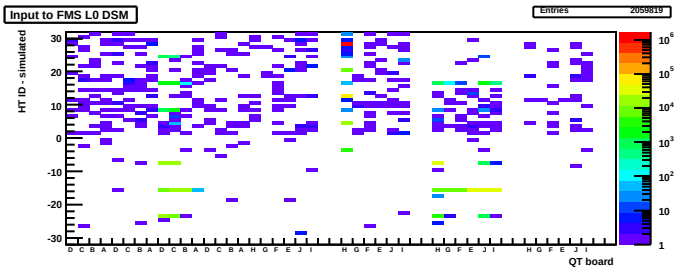

Input to FMS L0 DSM
Entries 8.64e+07
QT8(3) sum
QT board

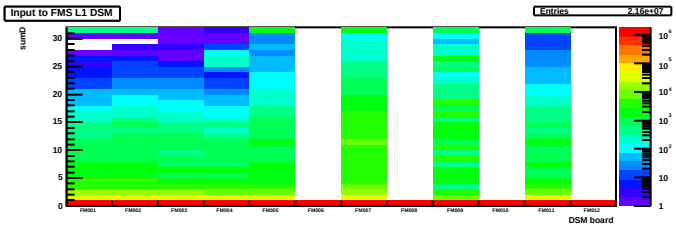

Input to FMS L0 DSM
Entries 1765780
QT8(3) sum - simulated
QT board

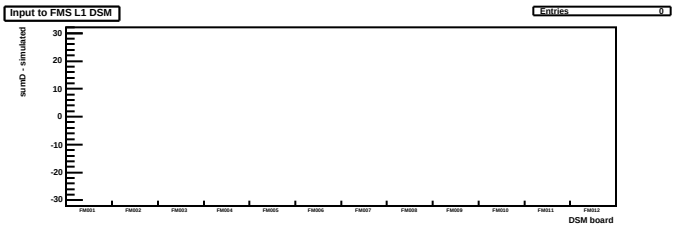

Input to FMS L0 DSM
Entries 8.64e+07
HT ADC
QT board

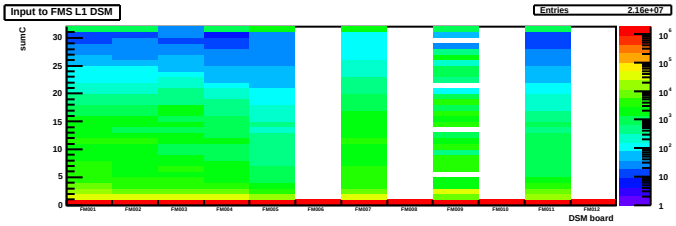

Input to FMS L0 DSM
Entries 232903
HT ADC - simulated
QT board

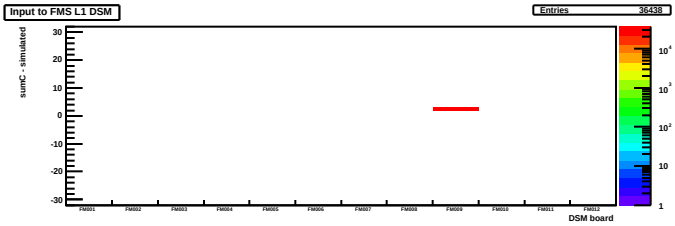

Input to FMS L0 DSM
Entries 8.64e+07
HT ID
QT board

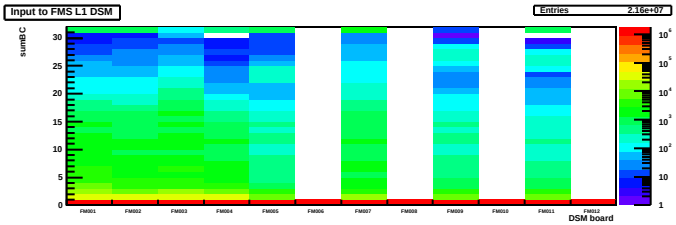

Input to FMS L0 DSM
Entries 2059819
HT ID - simulated
QT board

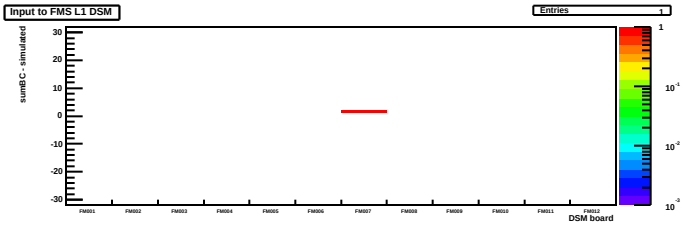

Input to FMS L1 DSM
Entries 2.16e+07
sumD
DSM board

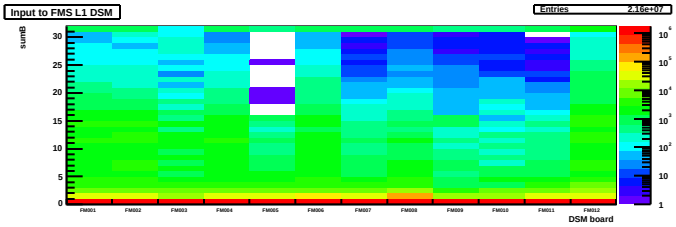

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

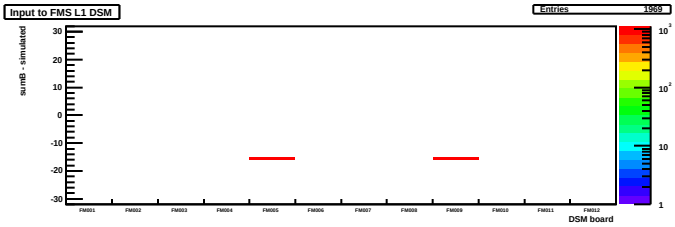

Input to FMS L1 DSM
Entries 2.16e+07
sumC
DSM board

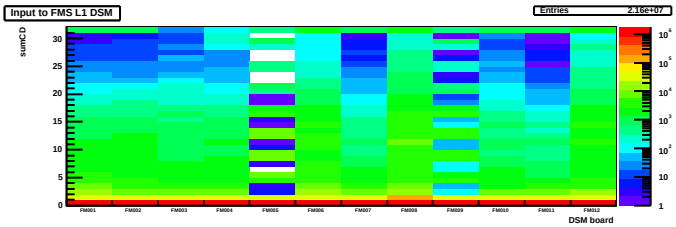

Input to FMS L1 DSM
Entries 36438
sumC - simulated
DSM board

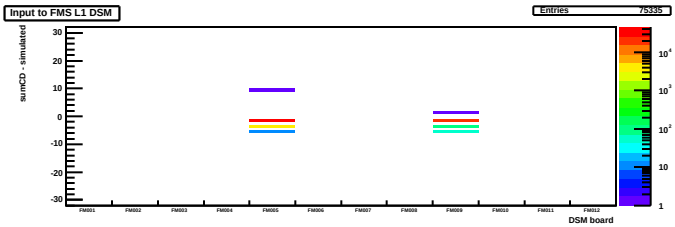

Input to FMS L1 DSM
Entries 2.16e+07
sumBC
DSM board

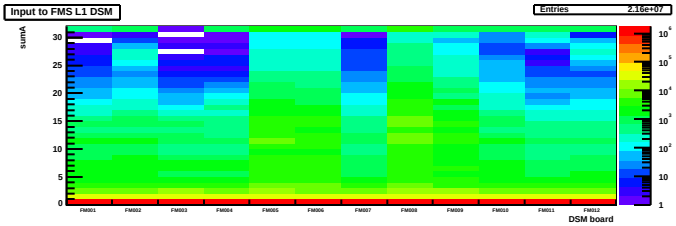

Input to FMS L1 DSM
Entries 1
sumBC - simulated
DSM board

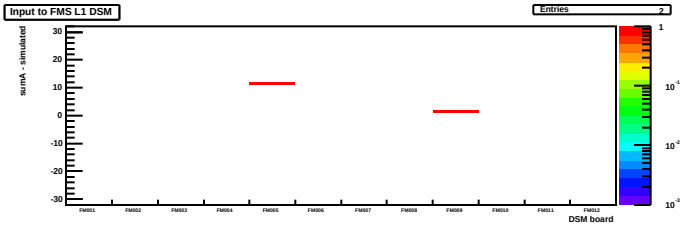

Input to FMS L1 DSM
Entries 2.16e+07
sumB
DSM board

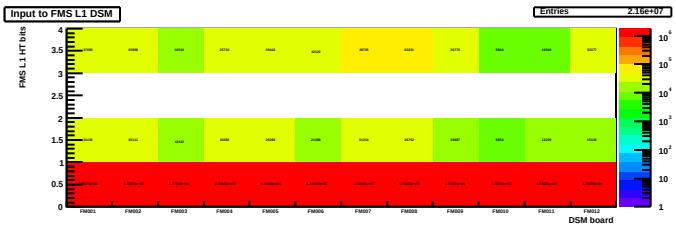

Input to FMS L1 DSM
Entries 1969
sumB - simulated
DSM board

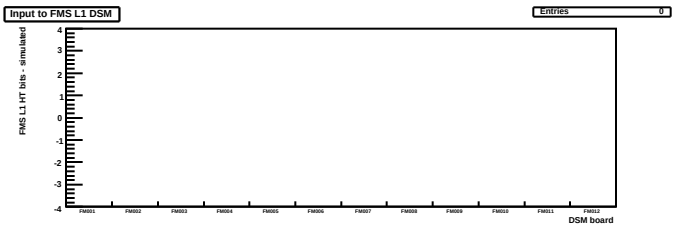

Input to FMS L1 DSM
Entries 2.16e+07
sumCD
DSM board

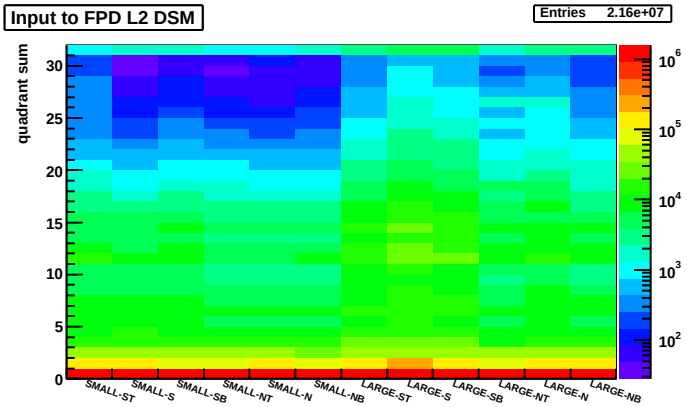

Input to FMS L1 DSM
Entries 75335
sumCD - simulated
DSM board

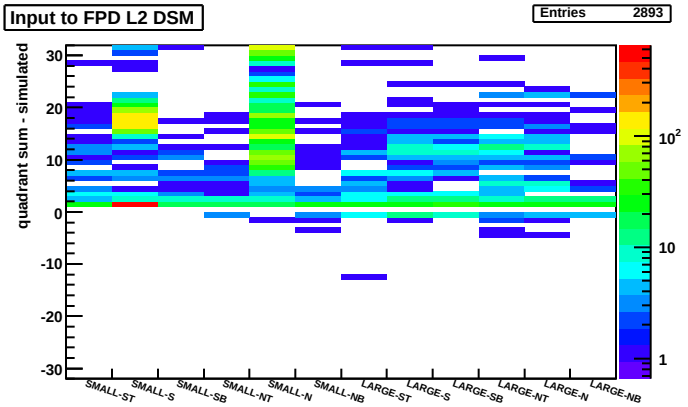

Input to FMS L1 DSM
Entries 2.16e+07
sumA
DSM board

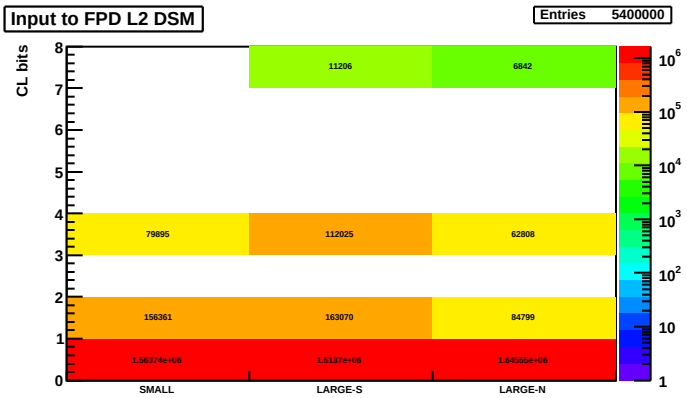

Input to FMS L1 DSM
Entries 2
sumA - simulated
DSM board

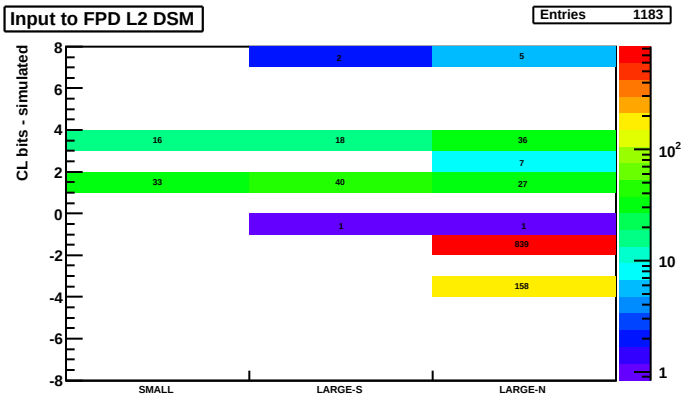

Input to FMS L1 DSM
Entries 2.16e+07
FMS L1 HT bits
DSM board

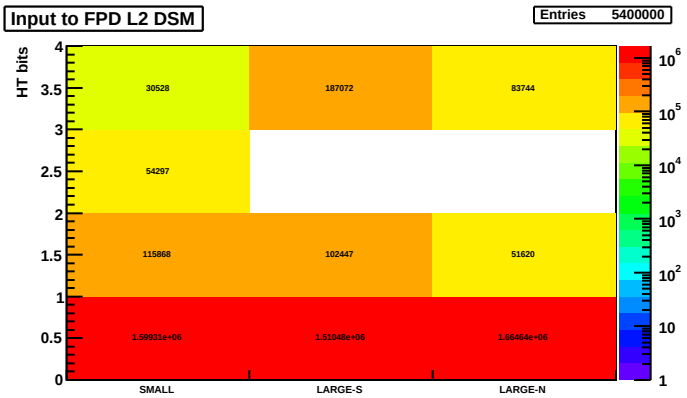

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

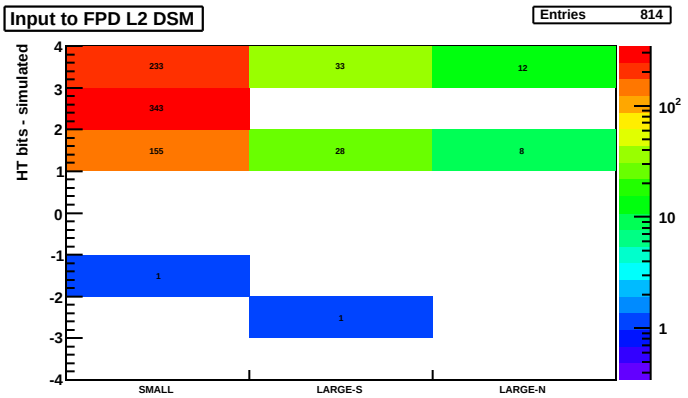

Input to FPD L2 DSM
Entries 2.16e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

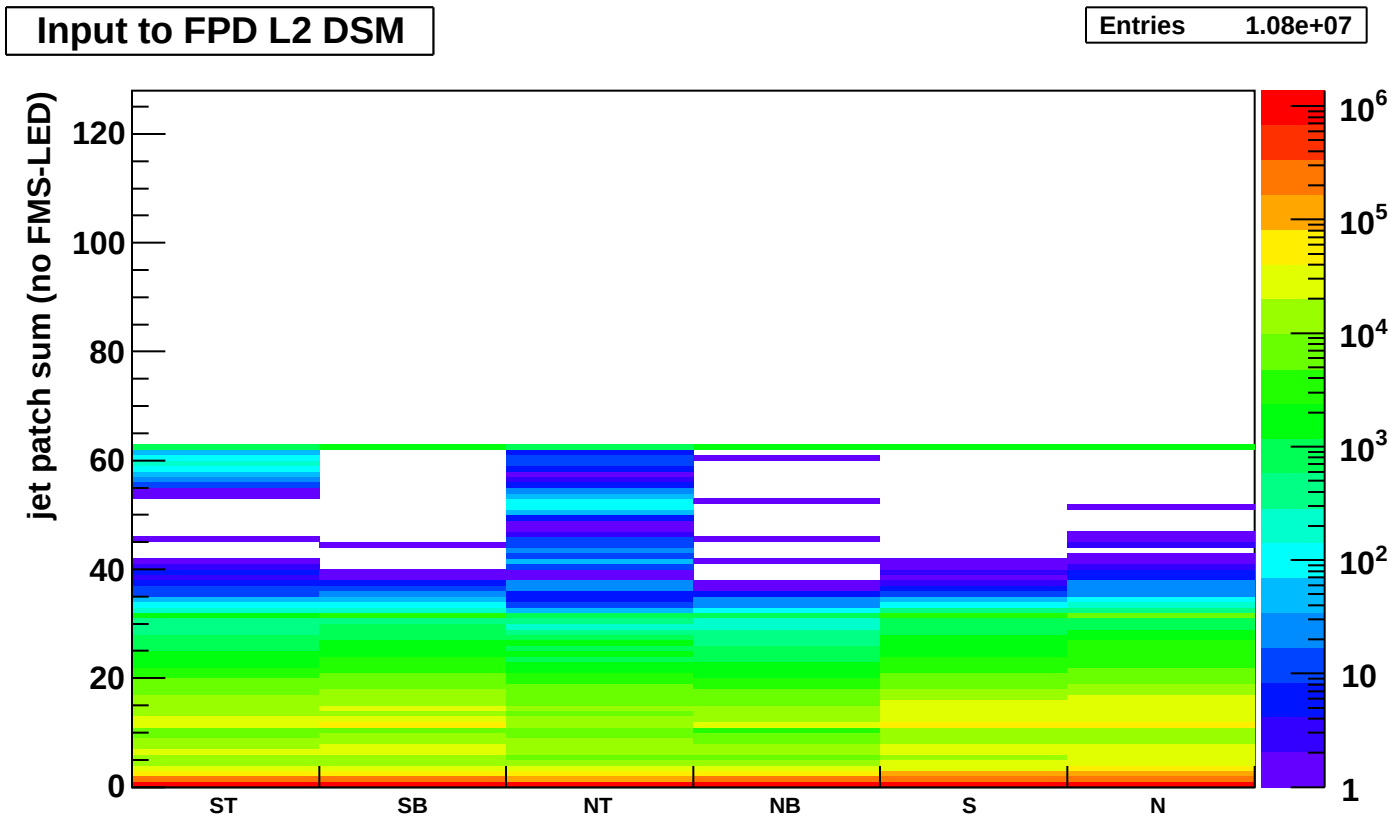

Input to FPD L2 DSM
Entries 2893
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

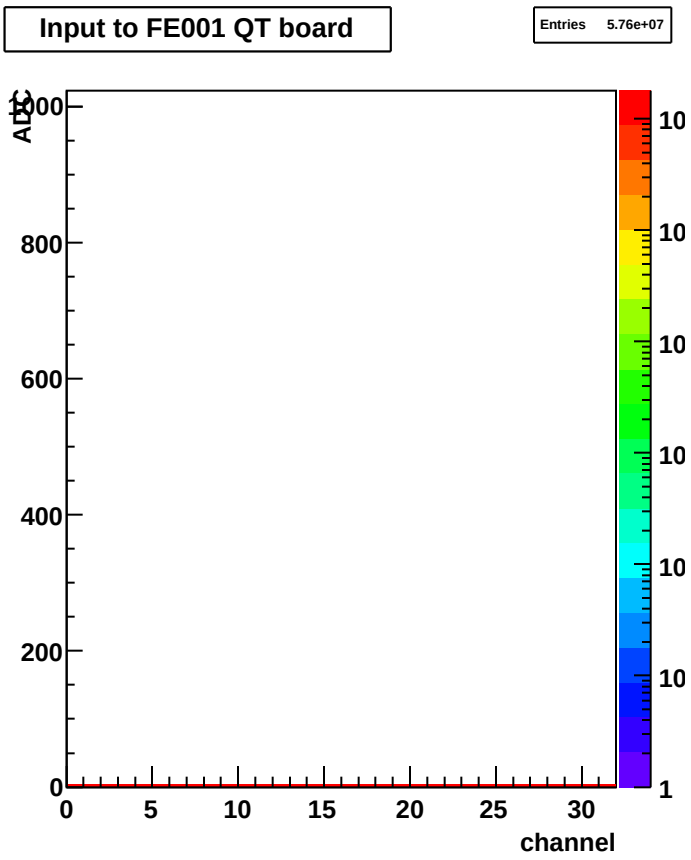

Input to FPD L2 DSM
Entries 5400000
CL bits
11206
6842
79895
112025
62808
156361
163070
84799
1.56374e+06
1.5137e+06
1.64555e+06
SMALL
LARGE-S
LARGE-N

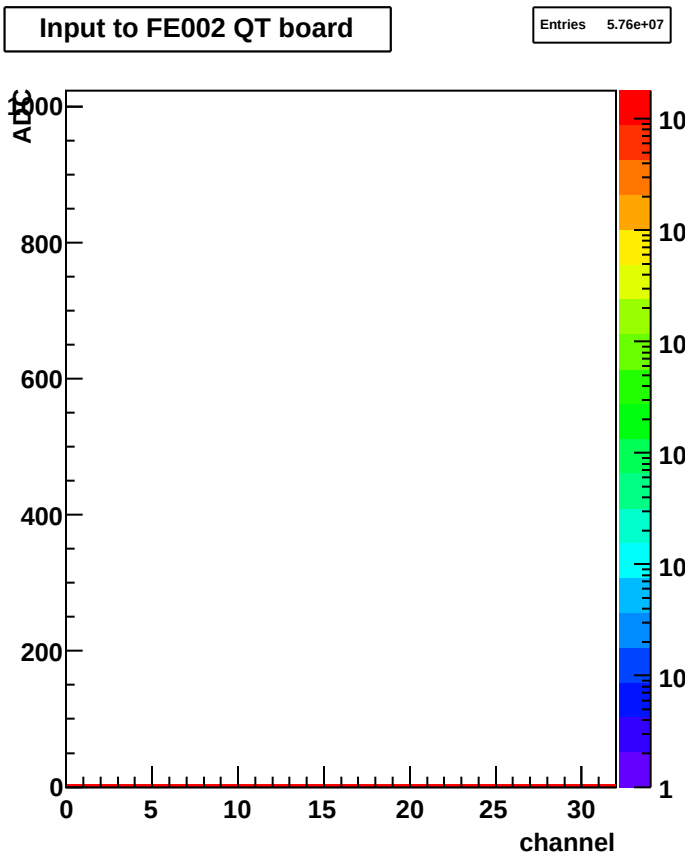

Input to FPD L2 DSM
Entries 1183
CL bits - simulated
2
5
16
18
36
7
33
40
27
1
1
839
158
SMALL
LARGE-S
LARGE-N

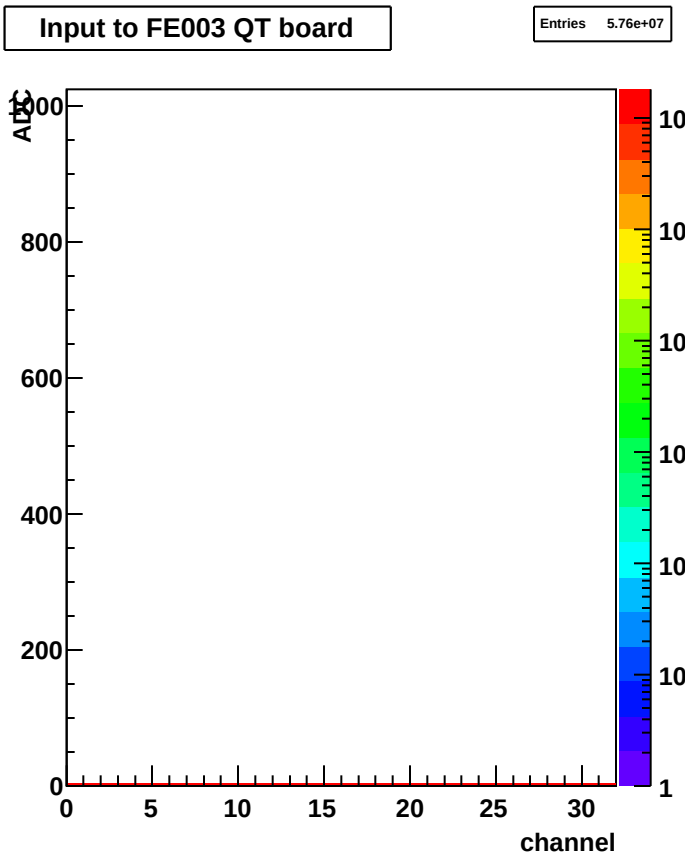

Input to FPD L2 DSM
Entries 5400000
HT bits
30528
187072
83744
54297
115868
102447
51620
1.59931e+06
1.51048e+06
1.66464e+06
SMALL
LARGE-S
LARGE-N

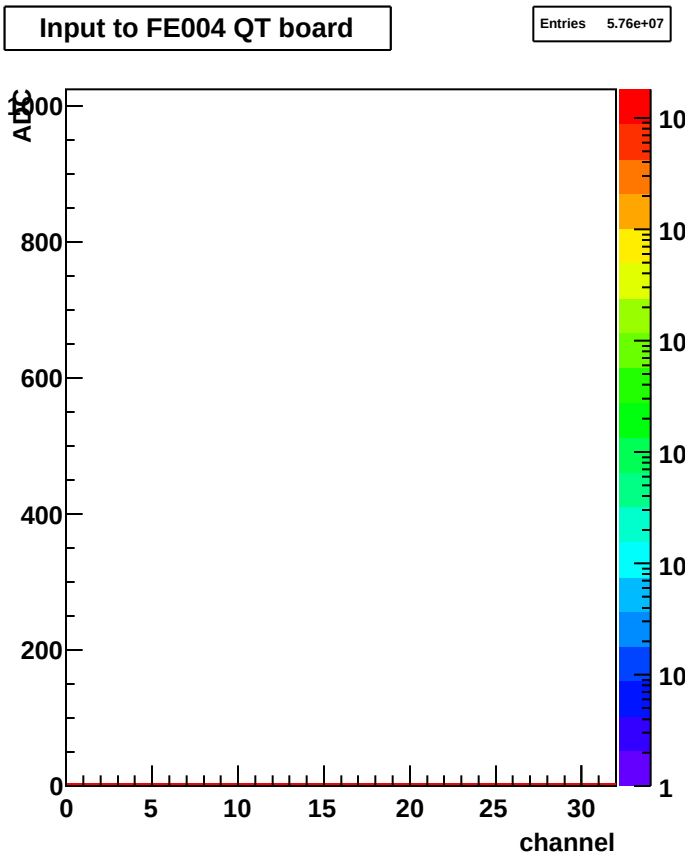

Input to FPD L2 DSM
Entries 814
HT bits - simulated
233
33
12
343
155
28
8
1
1
SMALL
LARGE-S
LARGE-N

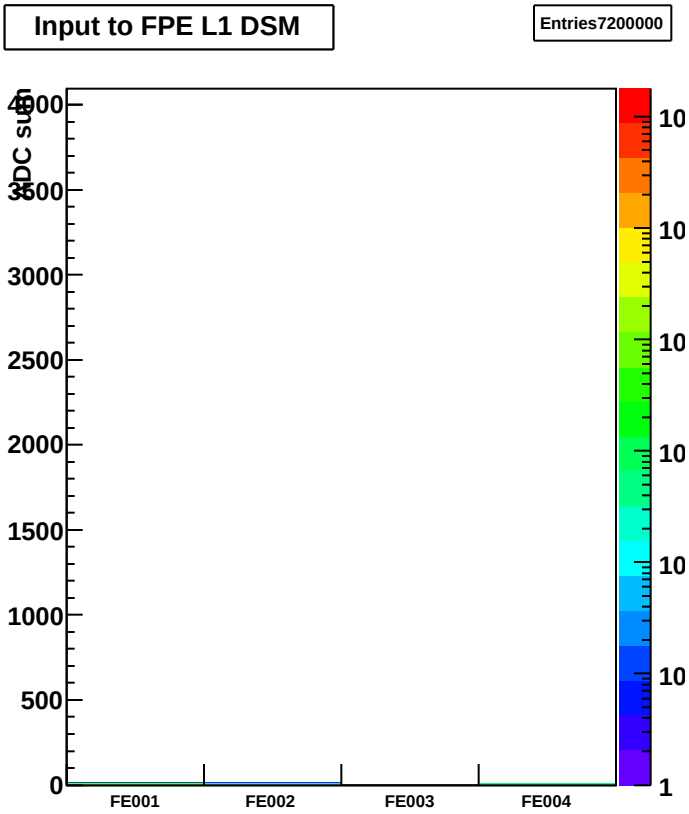

Input to FPD L2 DSM
Entries 1.08e+07
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

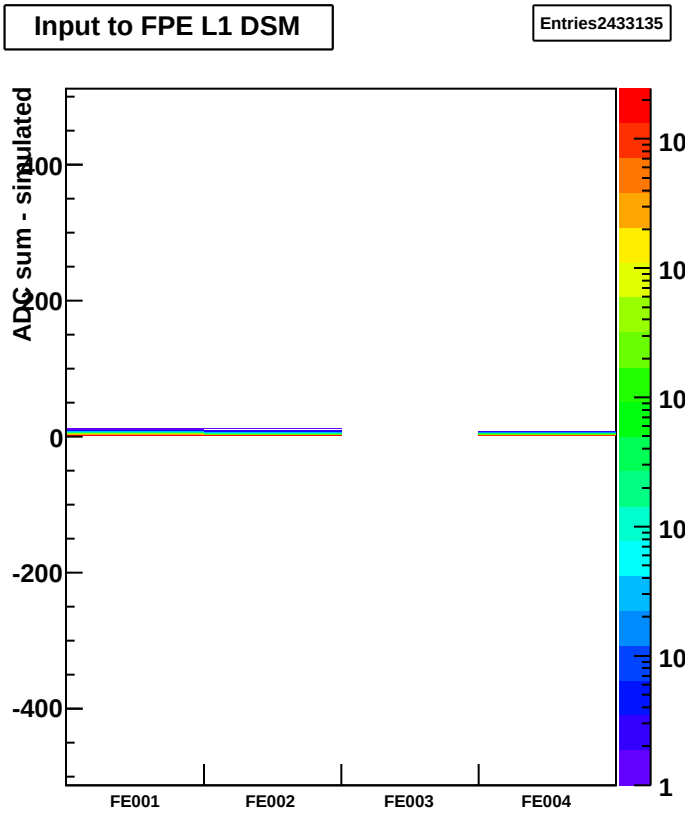

Input to FE001 QT board
Entries 5.76e+07
ADC
channel


Input to FE002 QT board
Entries 5.76e+07
ADC
channel


Input to FE003 QT board
Entries 5.76e+07
ADC
channel


Input to FE004 QT board
Entries 5.76e+07
ADC
channel


Input to FPE L1 DSM
Entries7200000
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
Entries2433135
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
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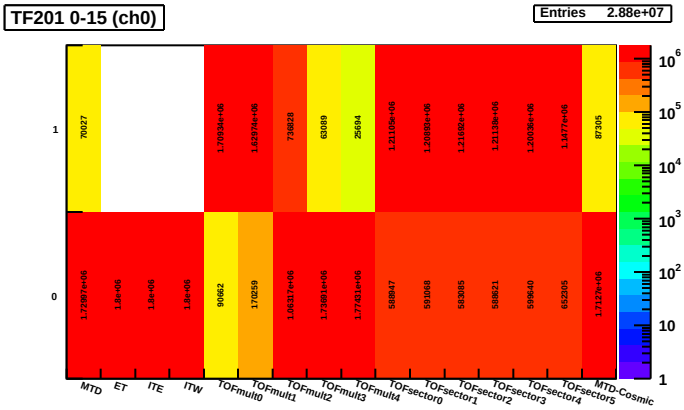
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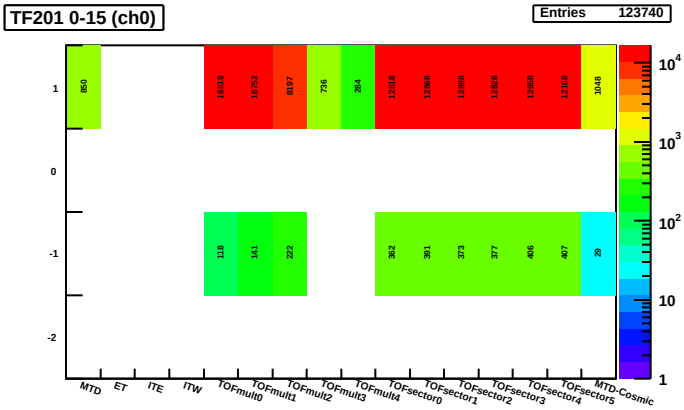
Entries 2.88e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic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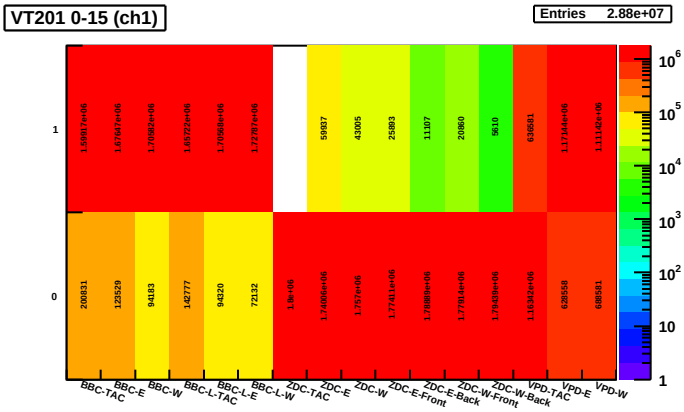
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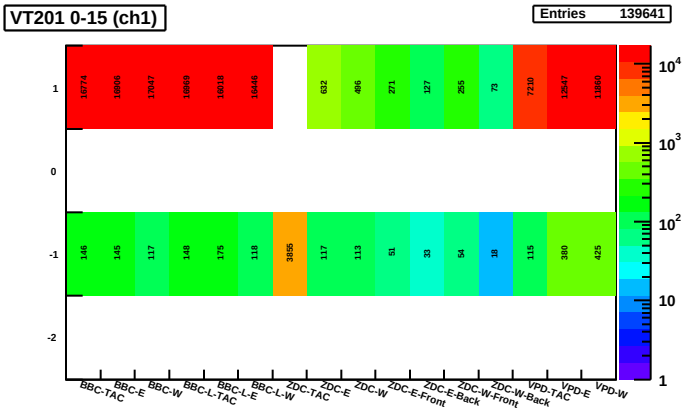
Entries 2.88e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W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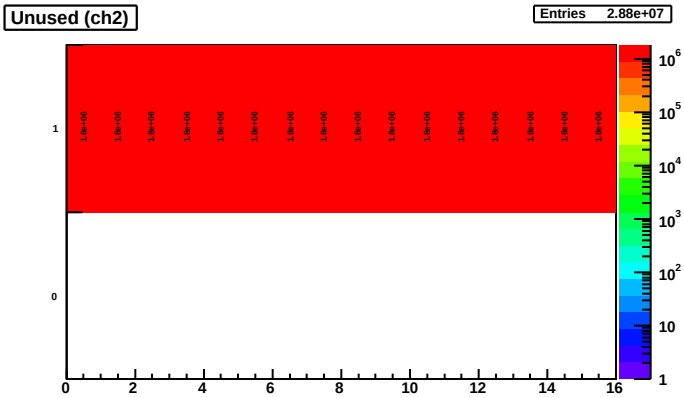
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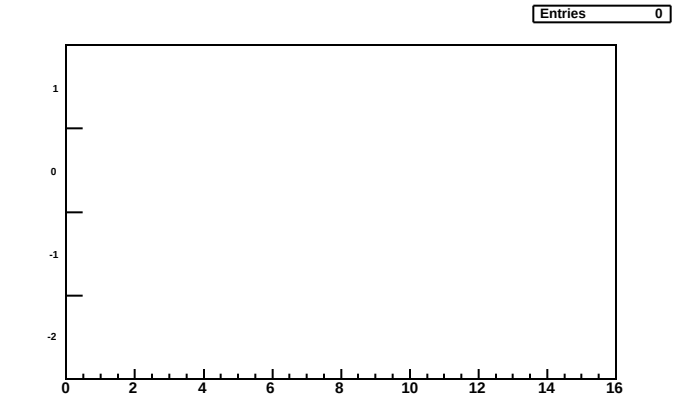
Entries 2.88e+07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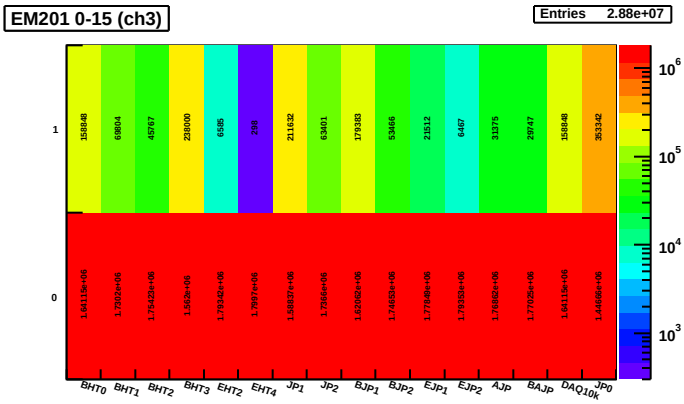
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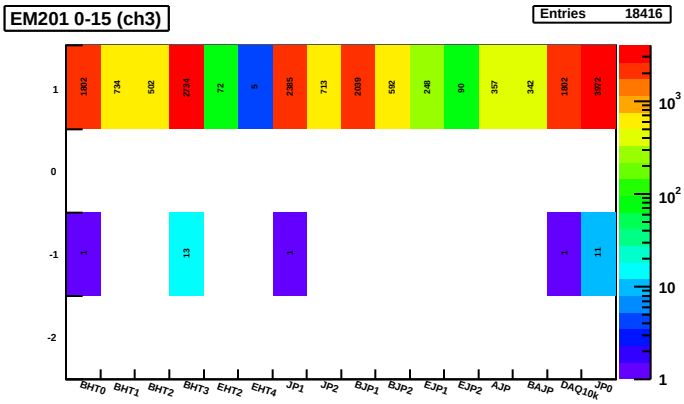
EM201 0-15 (ch3)
Entries 18416
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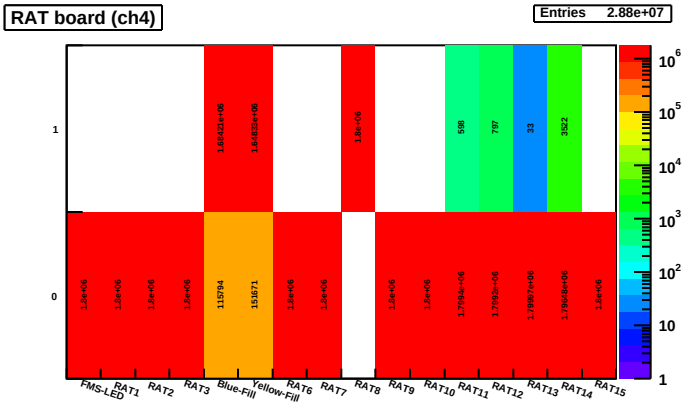
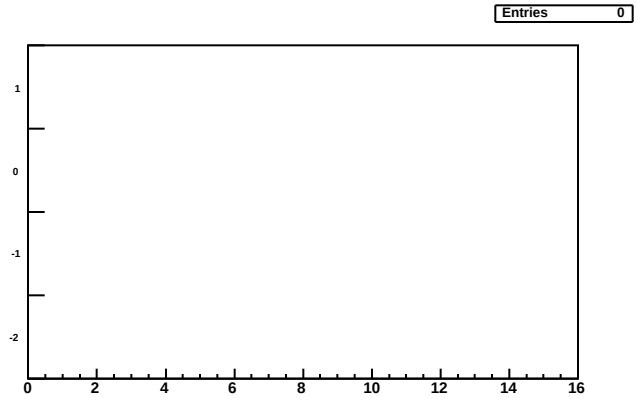
RAT board (ch4)





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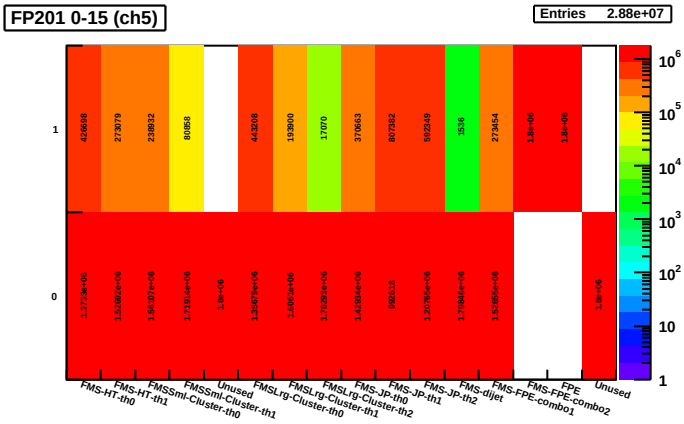

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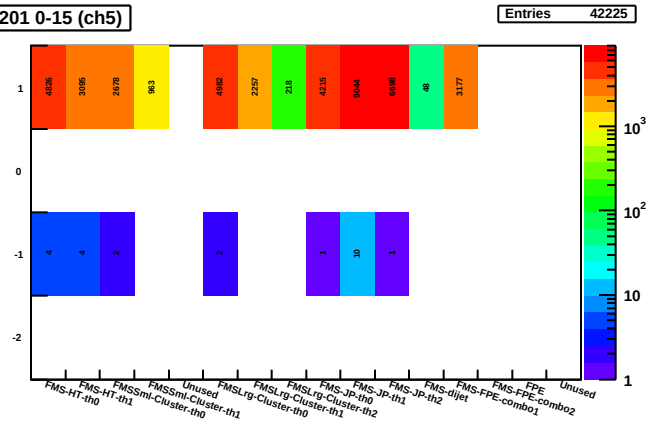
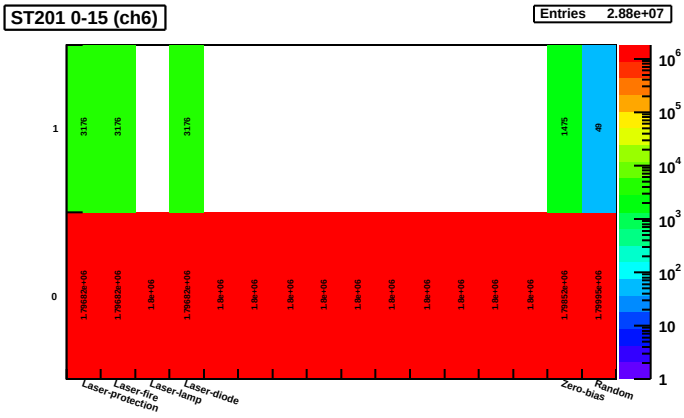
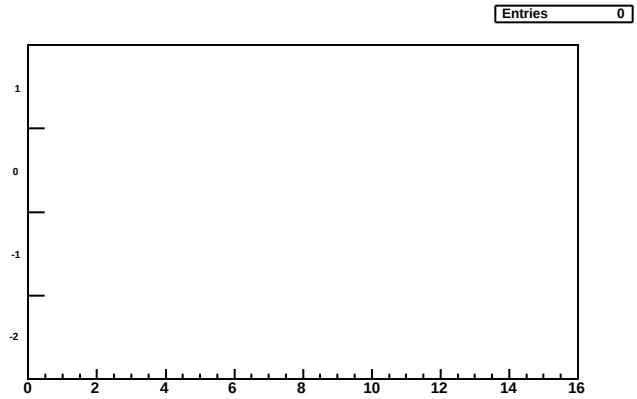
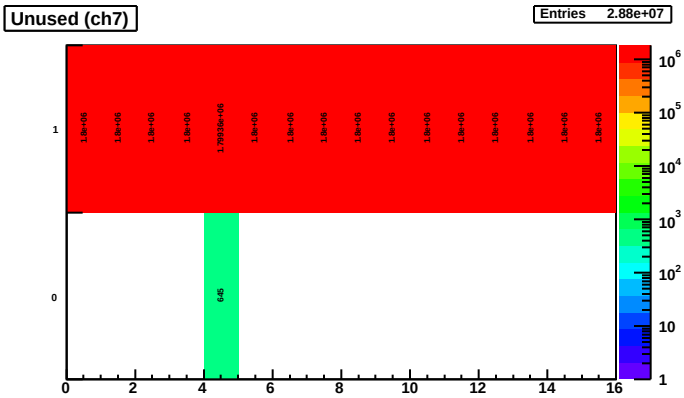
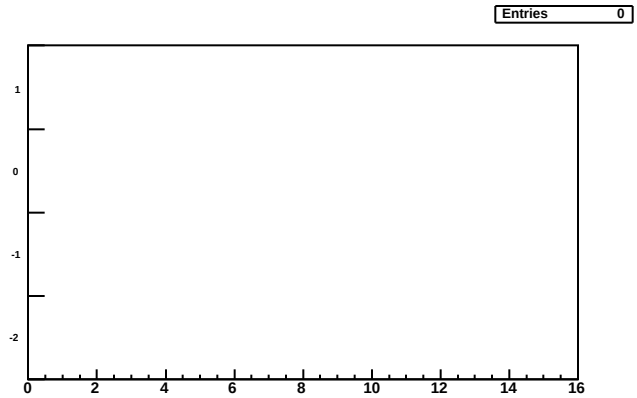


ST201 0-15 (ch6)





Unused (ch7)