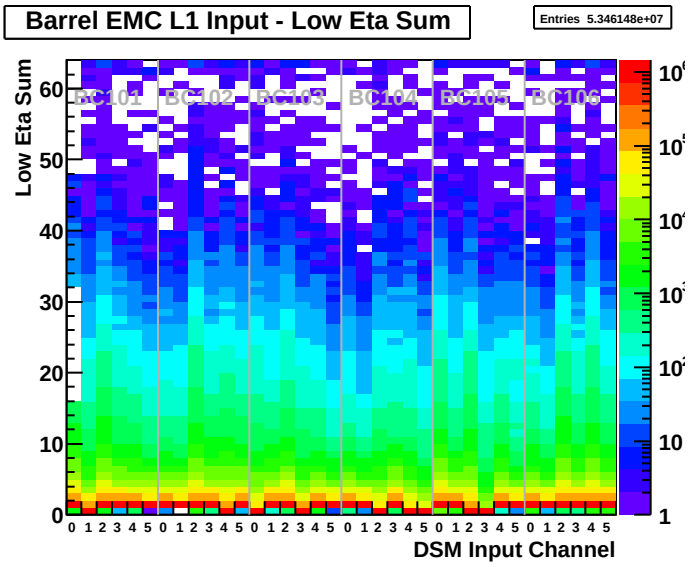
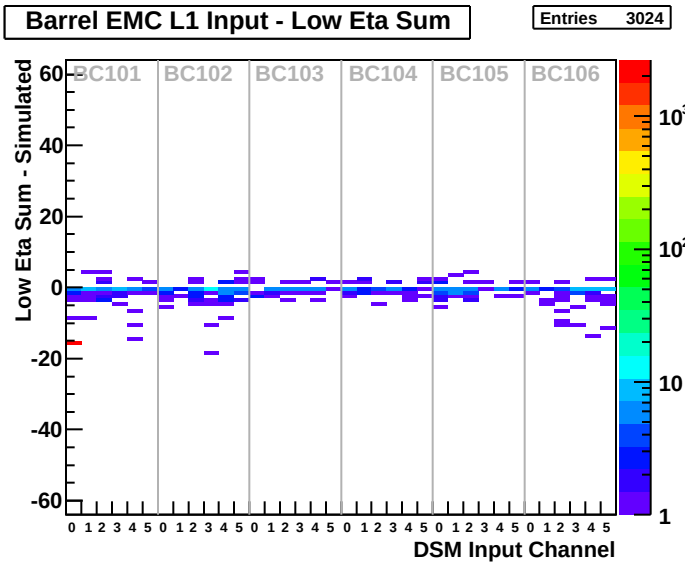
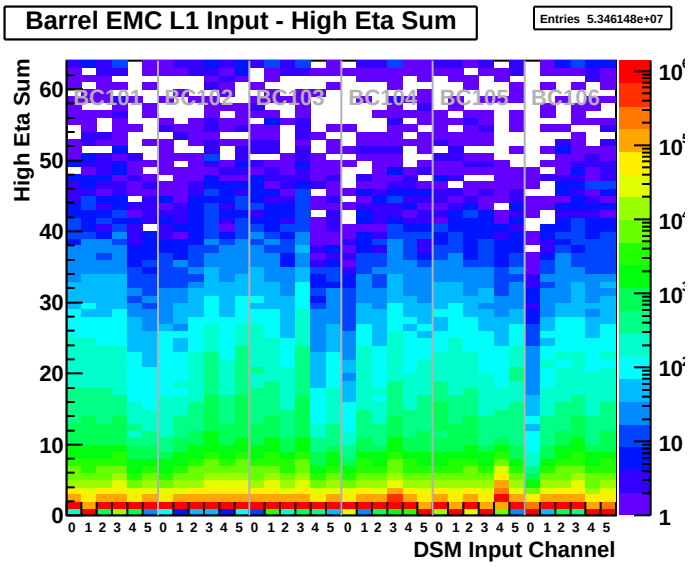
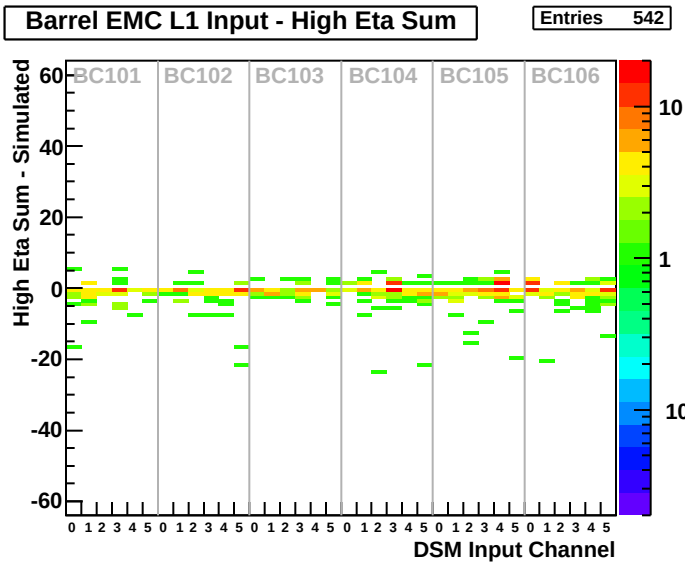
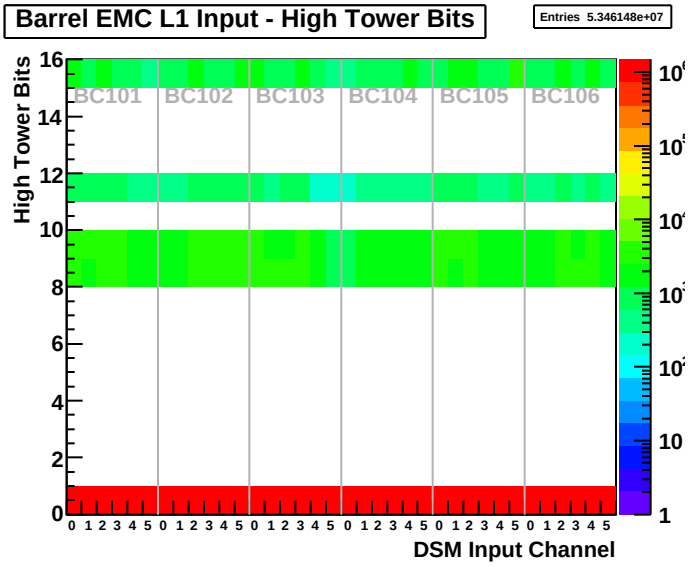
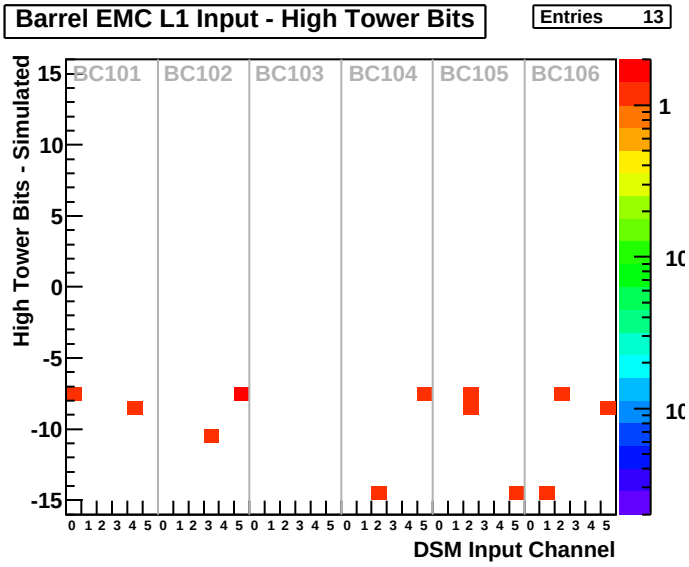

Barrel EMC L1 Input - Low Eta Sum
Entries 5.346148e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

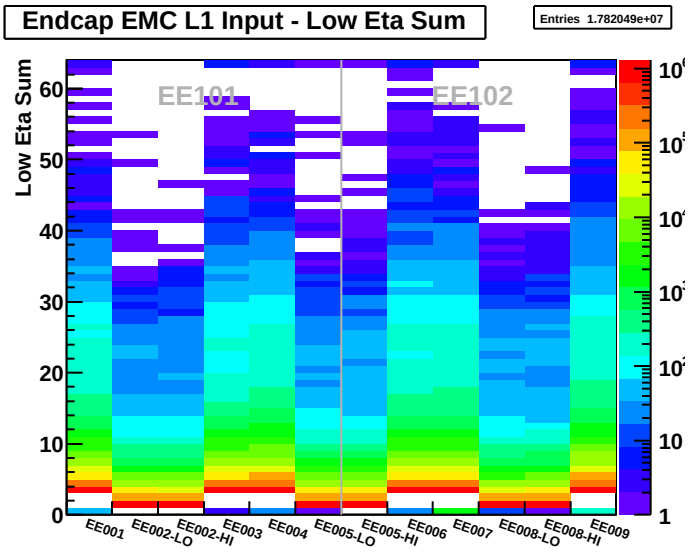

Barrel EMC L1 Input - Low Eta Sum
Entries 3024
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

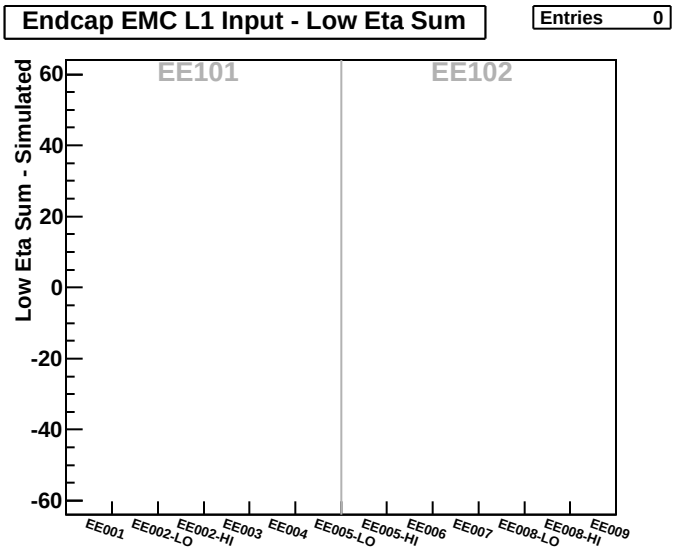

Barrel EMC L1 Input - High Eta Sum
Entries 5.346148e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

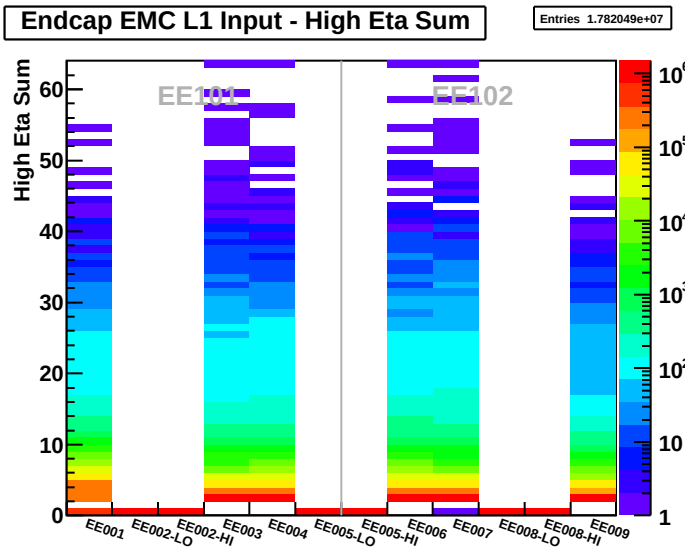

Barrel EMC L1 Input - High Eta Sum
Entries 542
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

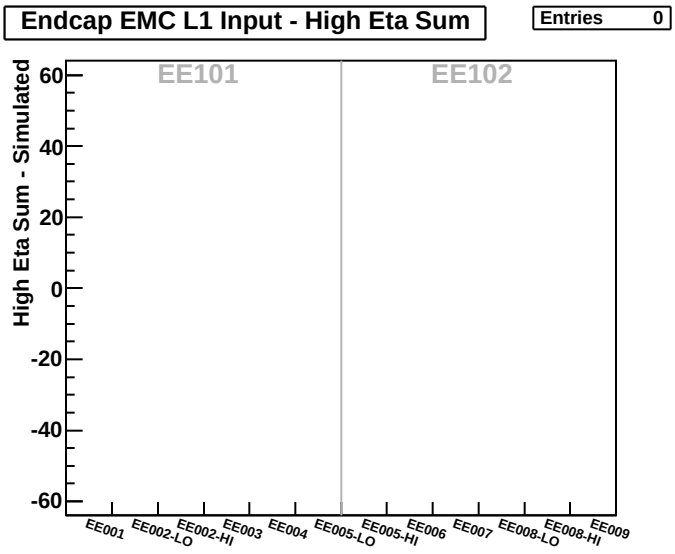

Barrel EMC L1 Input - High Tower Bits
Entries 5.346148e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

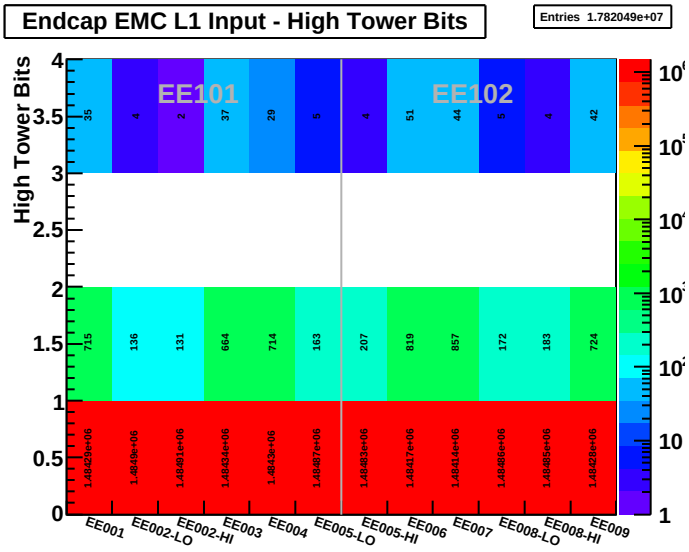

Barrel EMC L1 Input - High Tower Bits
Entries 13
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

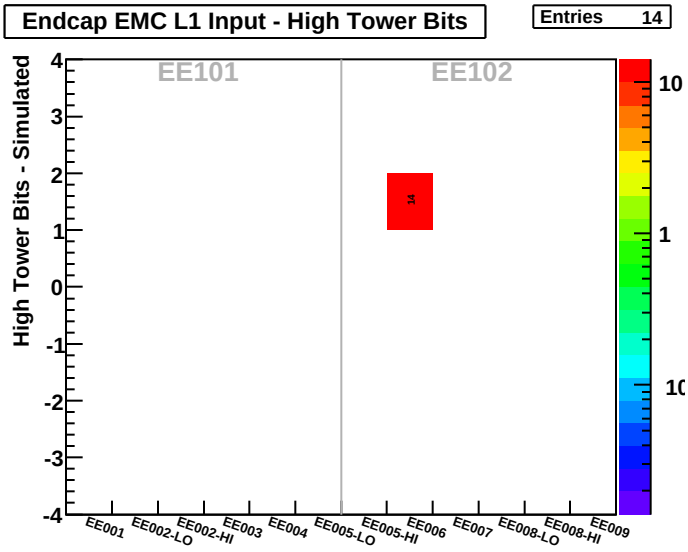

Endcap EMC L1 Input - Low Eta Sum
Entries 1.782049e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

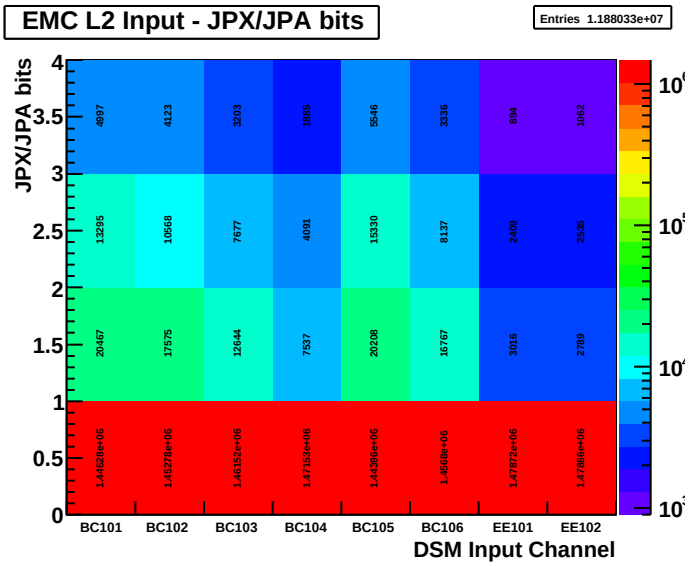

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

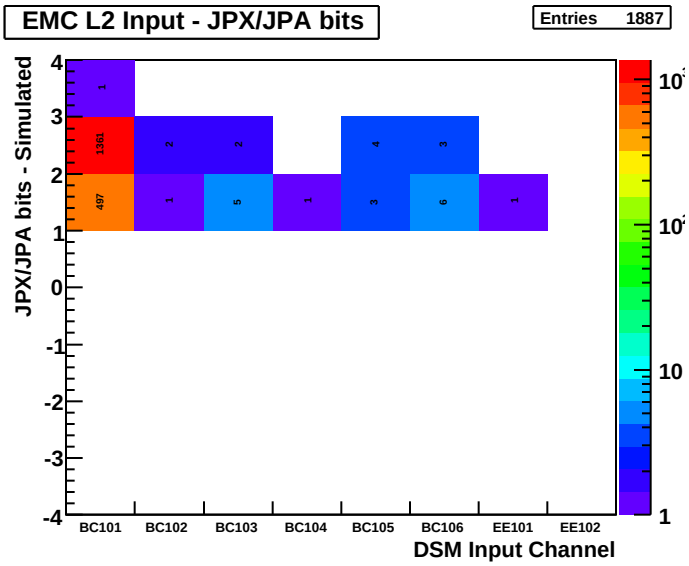

Endcap EMC L1 Input - High Eta Sum
Entries 1.782049e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

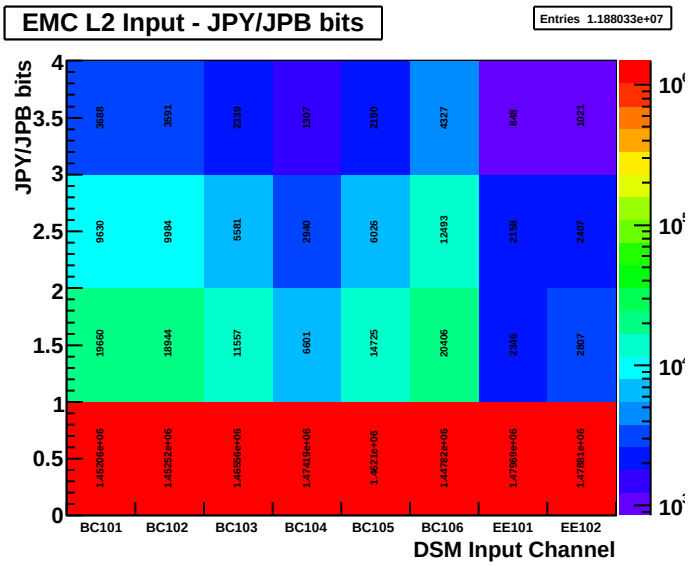

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

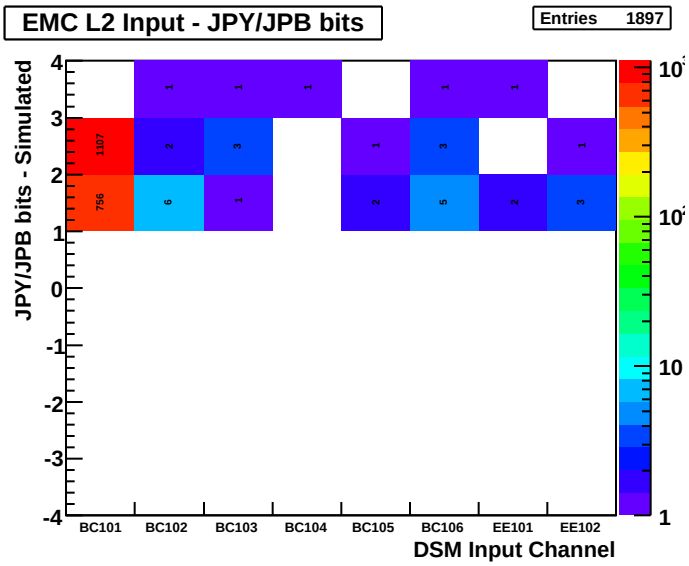

Endcap EMC L1 Input - High Tower Bits
Entries 1.782049e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

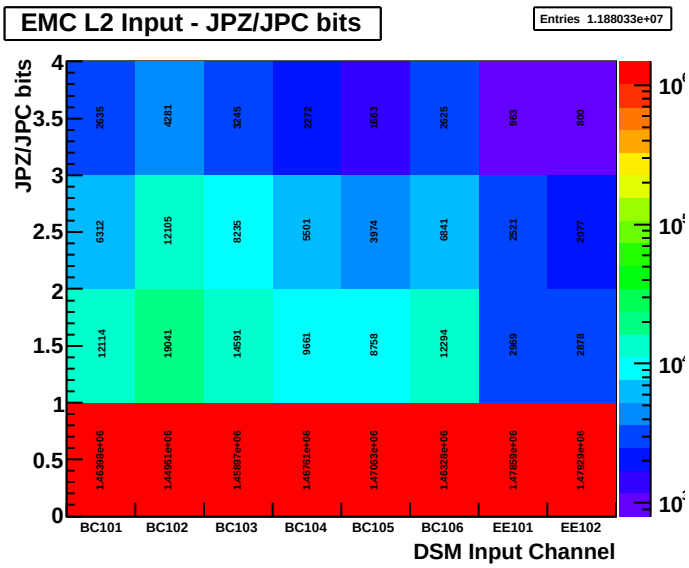

Endcap EMC L1 Input - High Tower Bits
Entries 14
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

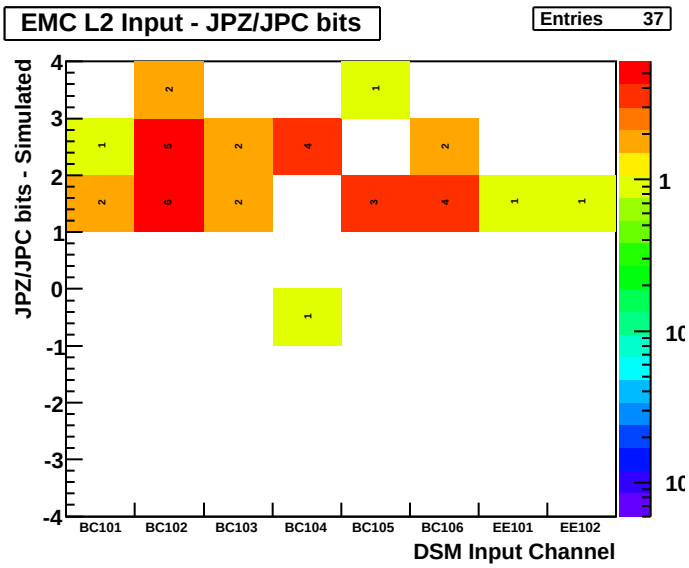

EMC L2 Input - JPX/JPA bits
Entries 1.188033e+07
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
4997 4123 3203 1885 5546 3336 894 1062
13295 10568 7677 4091 15330 8137 2409 2535
20467 17575 12644 7537 20208 16767 3016 2789
1.44628e+06 1.45278e+06 1.46152e+06 1.47153e+06 1.44396e+06 1.4568e+06 1.47872e+06 1.47866e+06

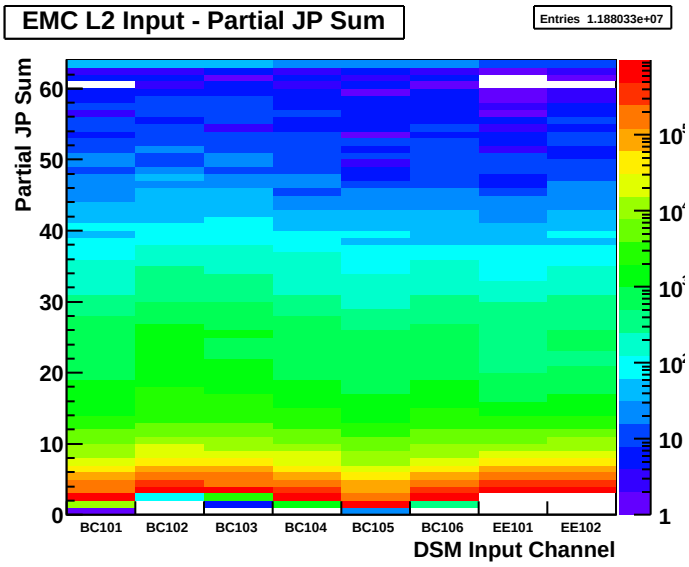

EMC L2 Input - JPX/JPA bits
Entries 1887
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1361 497
2 2 4 3
1 5 1 3 6 1

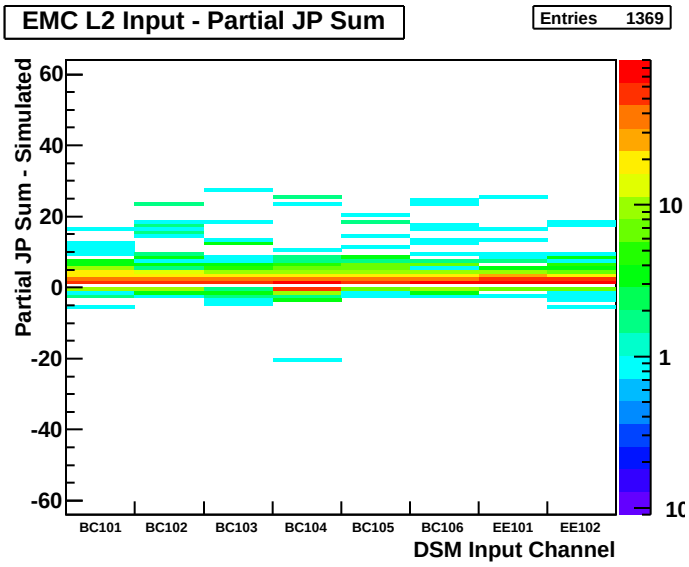

EMC L2 Input - JPY/JPB bits
Entries 1.188033e+07
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3688 3591 2339 1307 2190 4327 848 1021
9630 9984 5581 2940 6026 12493 2158 2407
19660 18944 11557 6601 14725 20406 2346 2907
1.45206e+06 1.45282e+06 1.46556e+06 1.47419e+06 1.4621e+06 1.44792e+06 1.47999e+06 1.47881e+06

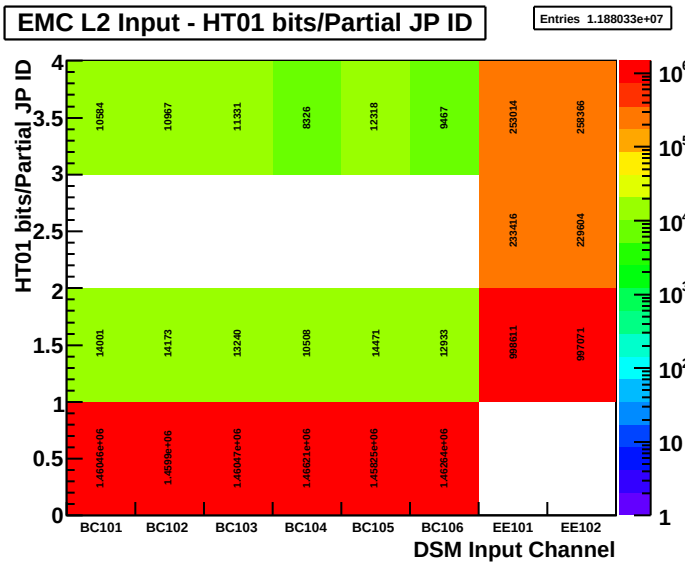

EMC L2 Input - JPY/JPB bits
Entries 1897
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1 1 1 1
1107 2 3 1 3 1
756 6 1 2 5 2 3

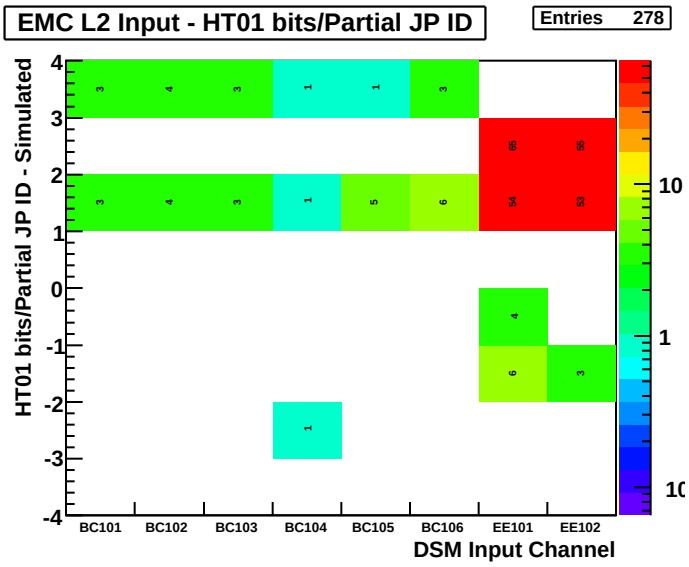

EMC L2 Input - JPZ/JPC bits
Entries 1.188033e+07
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2635 4281 3245 2272 1683 2625 963 800
6312 12105 8235 5501 3974 6841 2521 2077
12114 19041 14691 9661 8758 12294 2969 2878
1.46398e+06 1.44961e+06 1.45897e+06 1.46761e+06 1.47063e+06 1.46328e+06 1.47859e+06 1.47929e+06

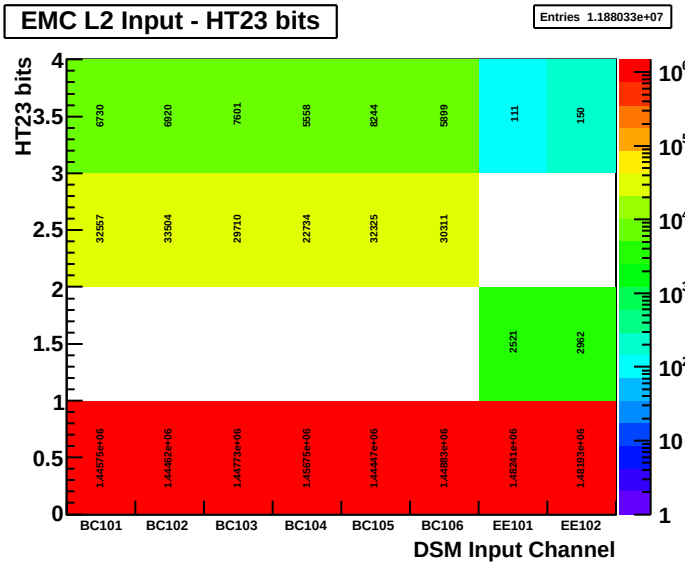

EMC L2 Input - JPZ/JPC bits
Entries 37
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2 1
1 5 2 4 2
2 6 2 3 4 1 1
1

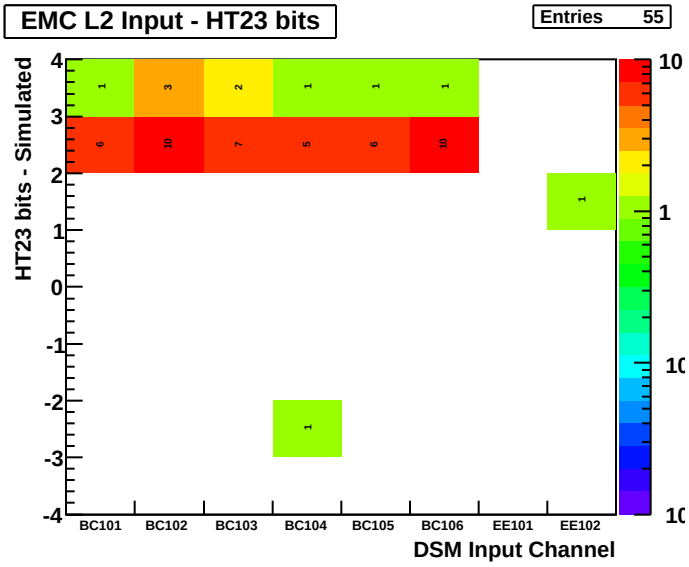

EMC L2 Input - Partial JP Sum
Entries 1.188033e+07
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

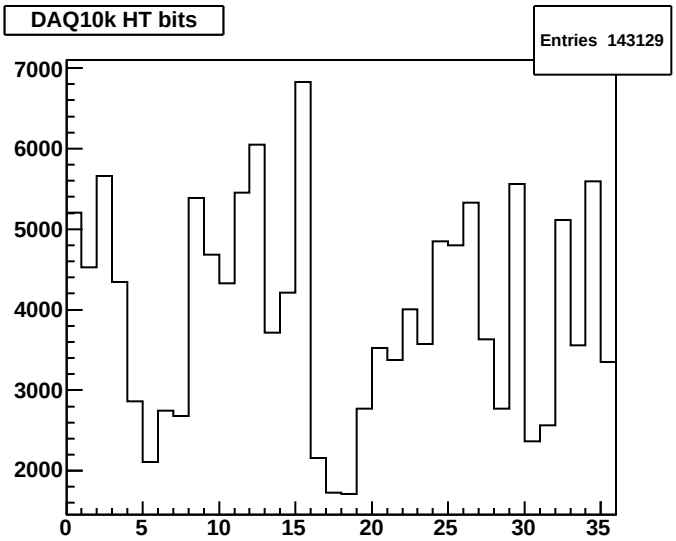

EMC L2 Input - Partial JP Sum
Entries 1369
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

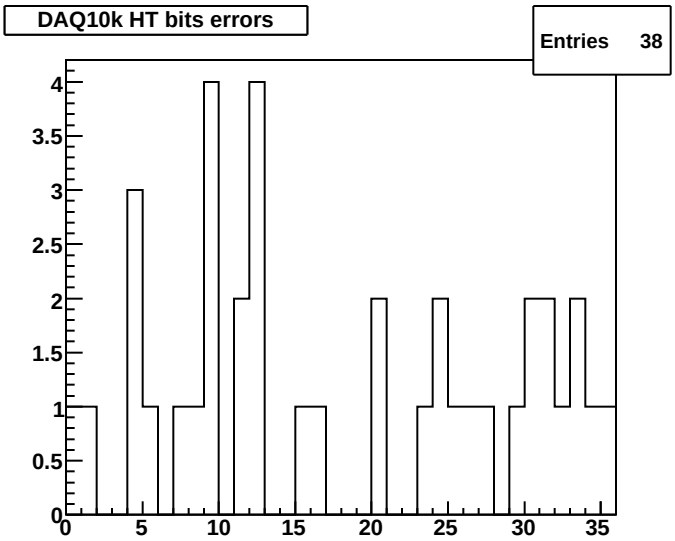

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1.188033e+07
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

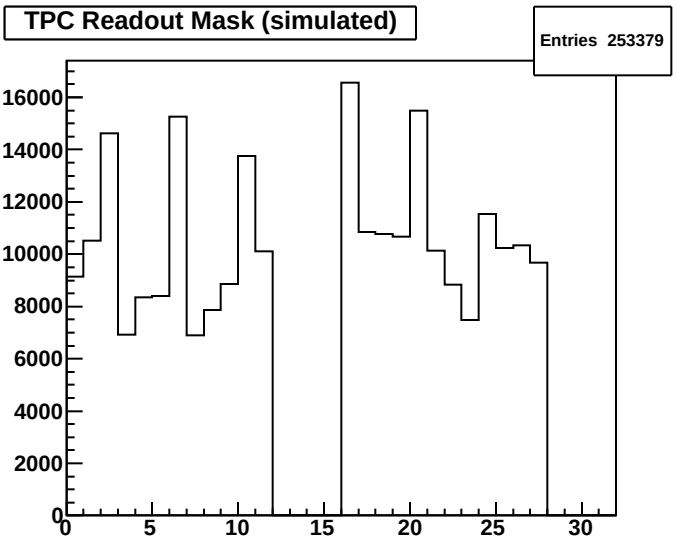

EMC L2 Input - HT01 bits/Partial JP ID
Entries 278
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

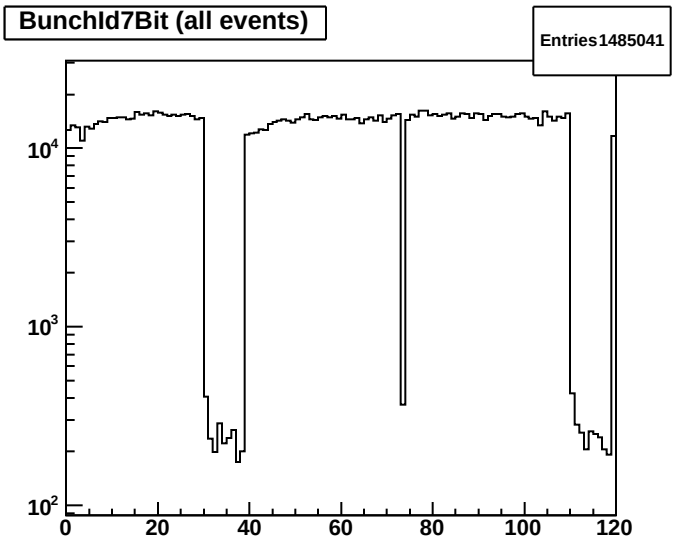

EMC L2 Input - HT23 bits
Entries 1.188033e+07
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

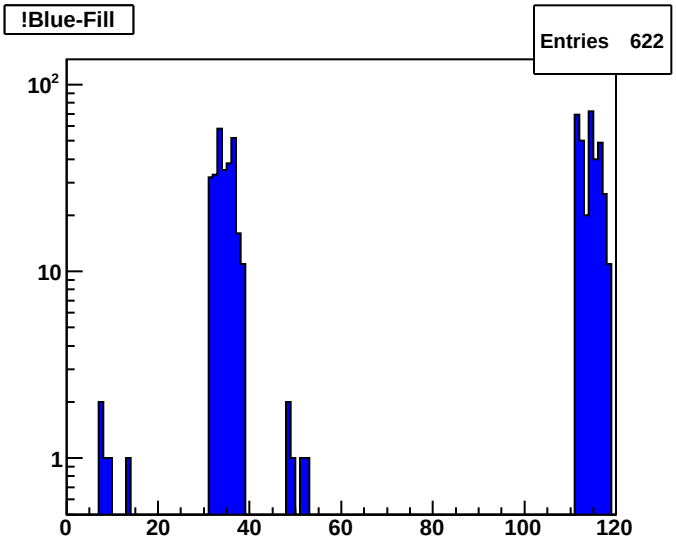

EMC L2 Input - HT23 bits
Entries 55
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

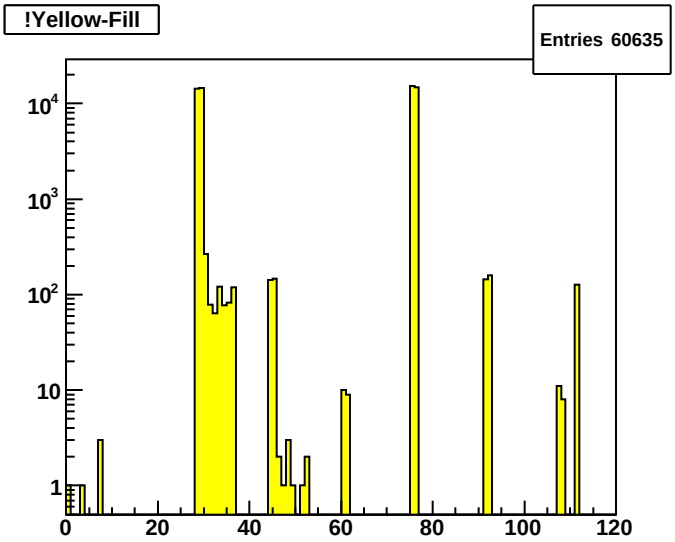

DAQ10k HT bits
Entries 143129

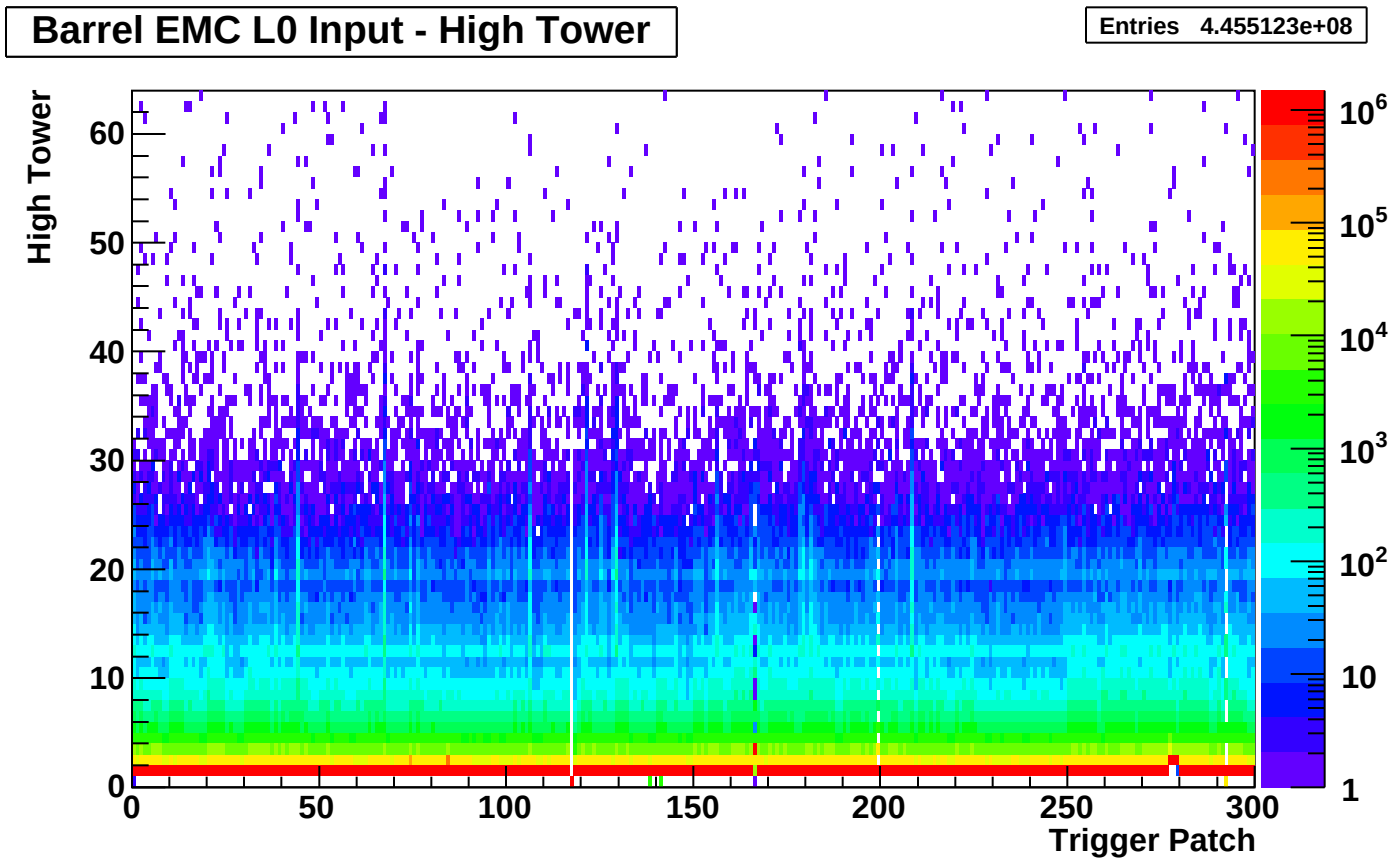

DAQ10k HT bits errors
Entries 38

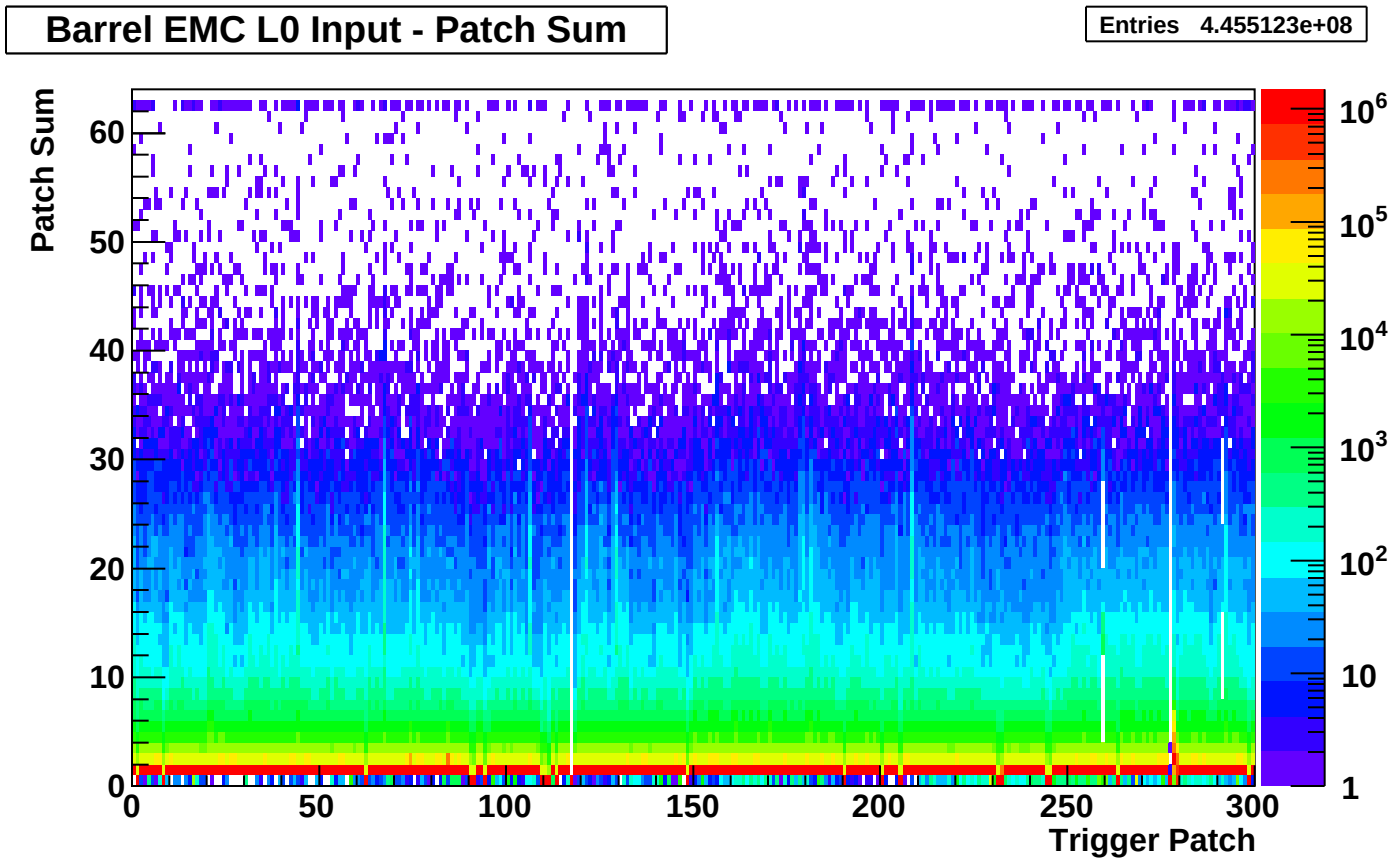

TPC Readout Mask (simulated)
Entries 253379

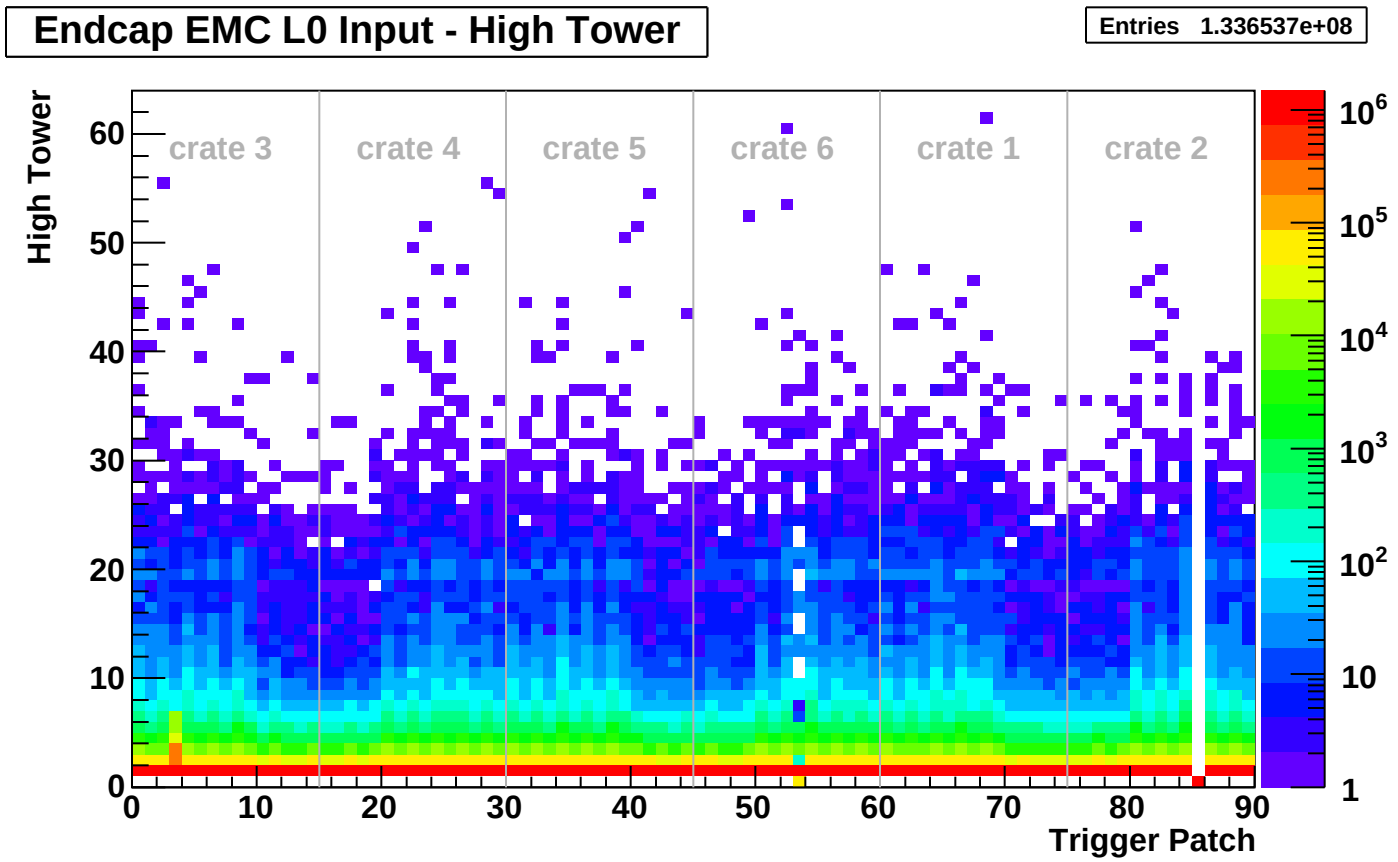

BunchId7Bit (all events)
Entries 1485041

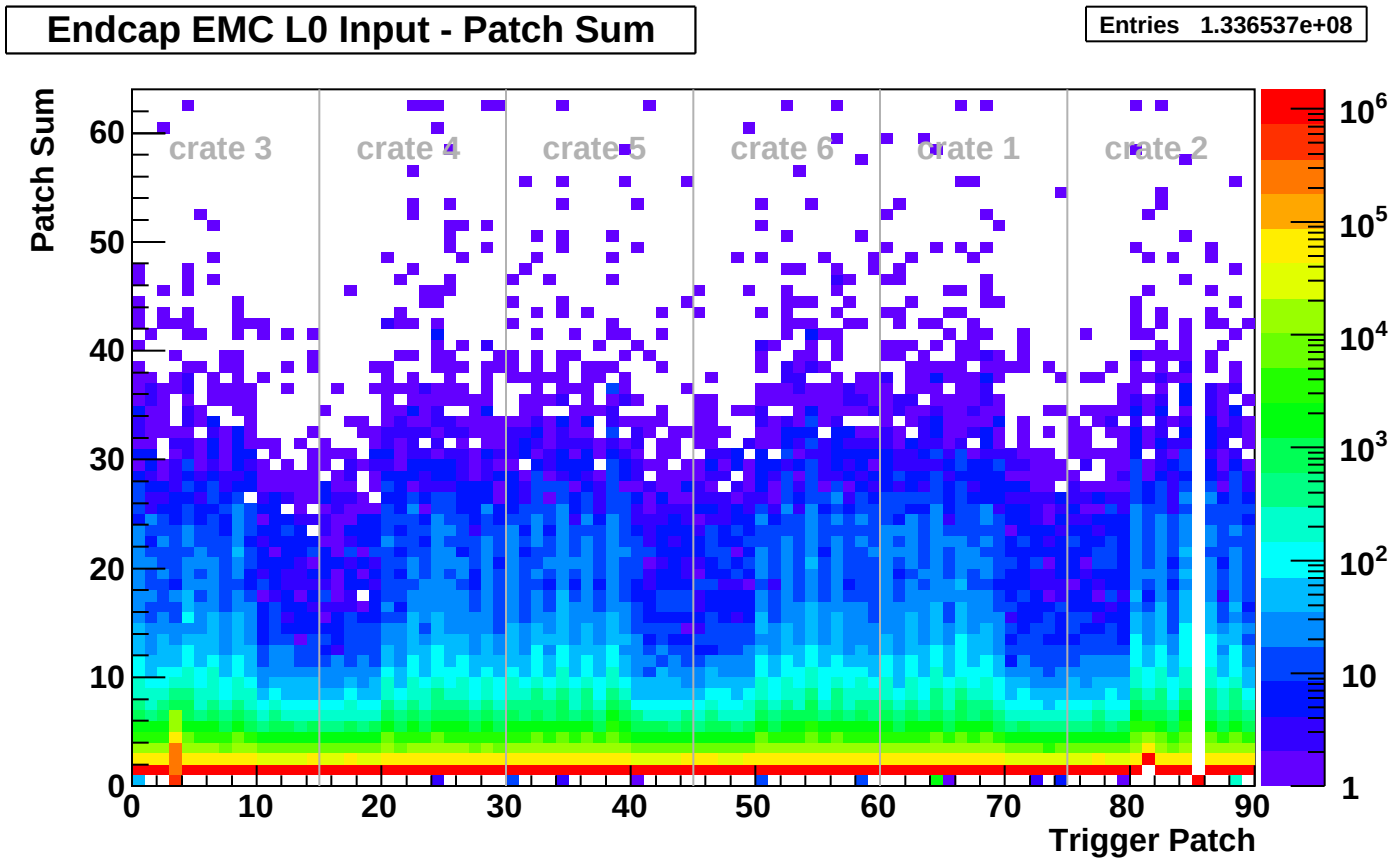

!Blue-Fill
Entries 622

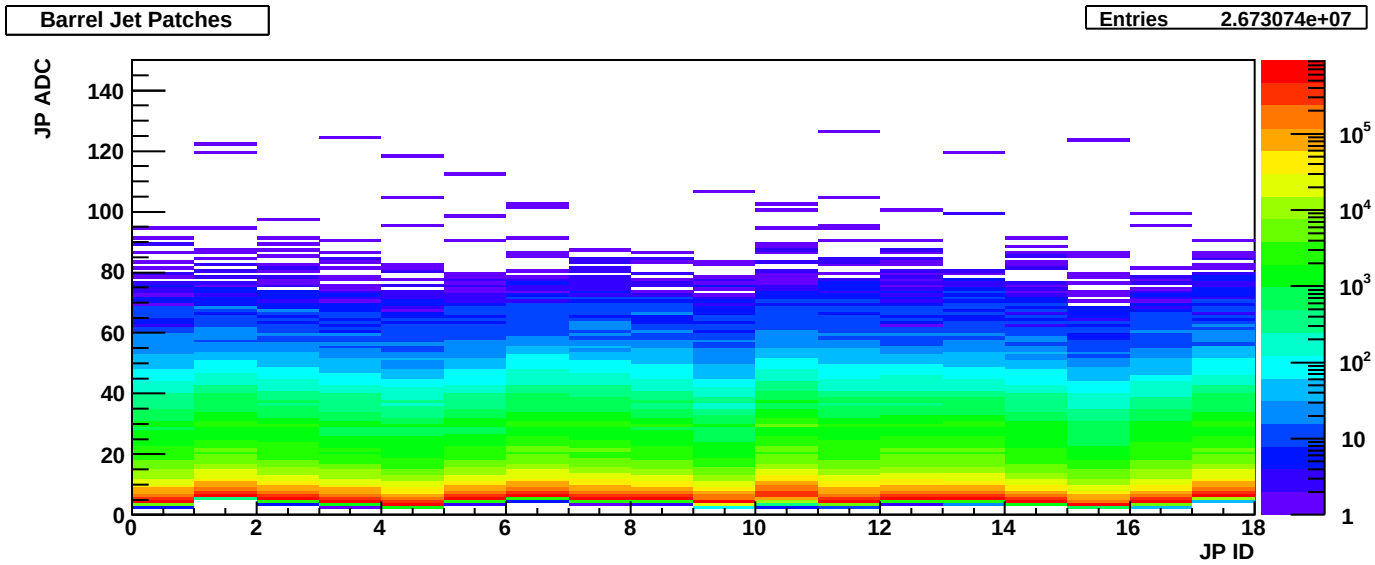

!Yellow-Fill
Entries 60635

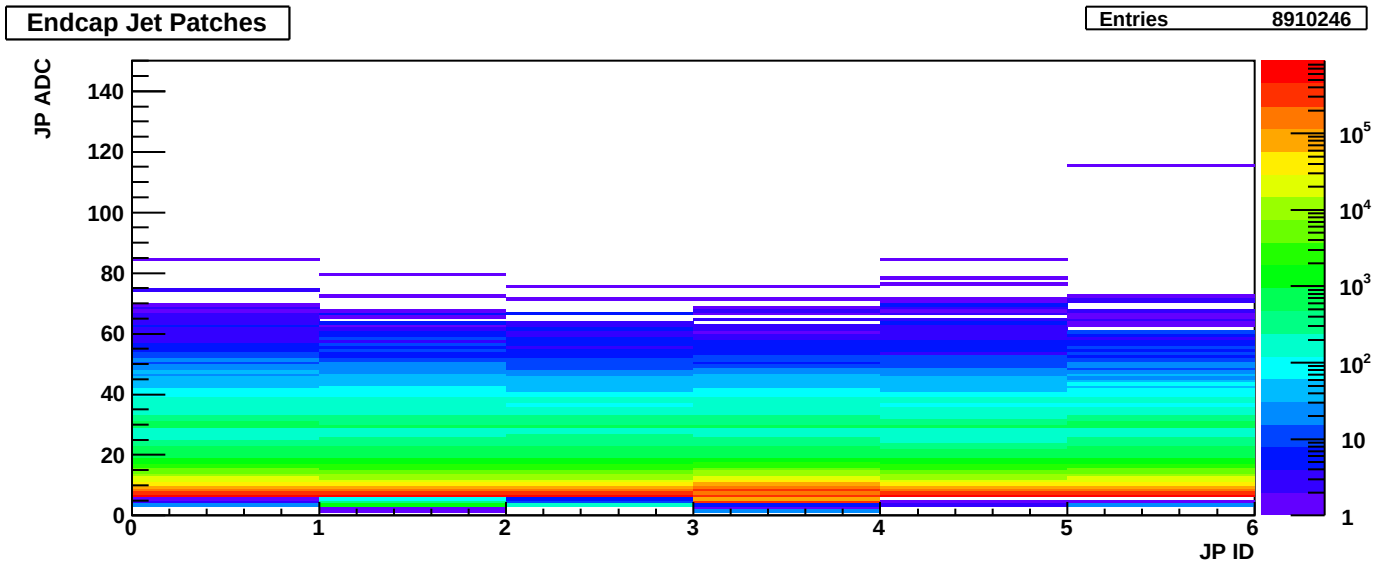

Barrel EMC L0 Input - High Tower
Entries 4.455123e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

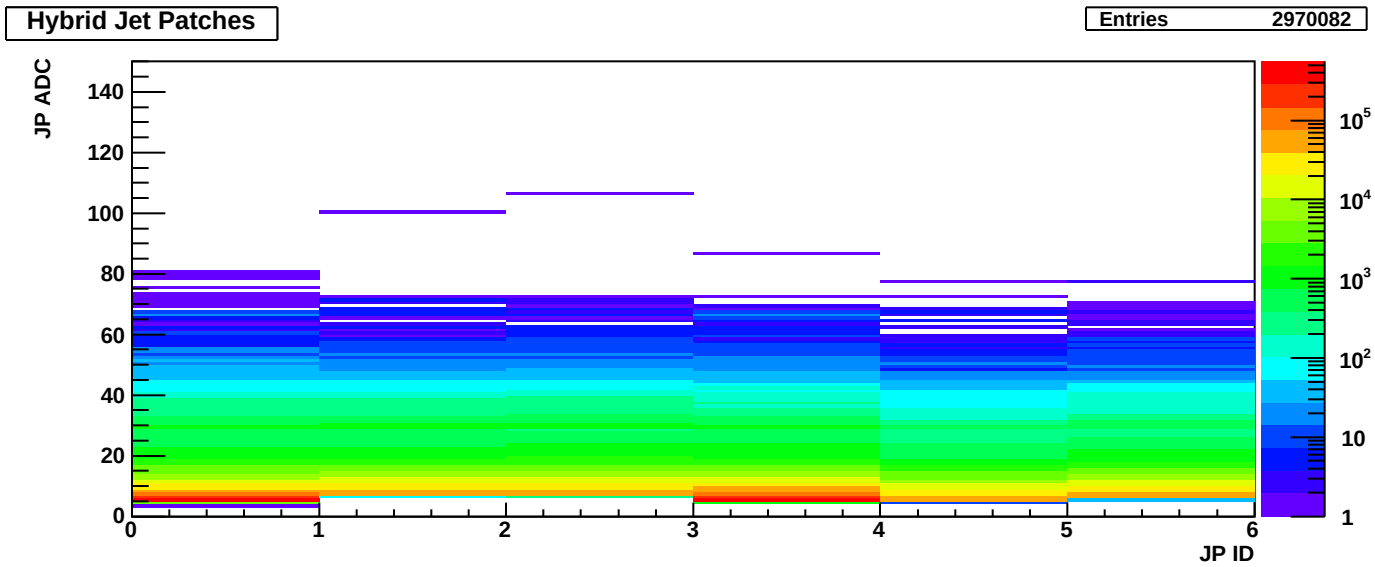

Barrel EMC L0 Input - Patch Sum
Entries 4.455123e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5
10^6

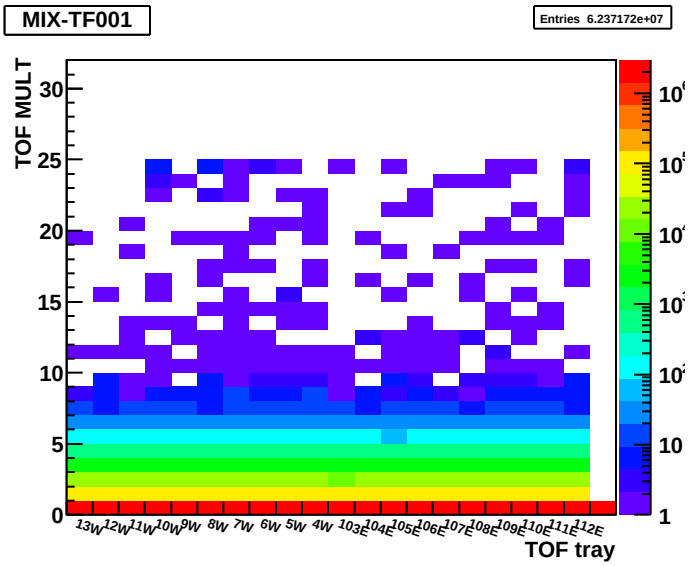

Endcap EMC L0 Input - High Tower
Entries 1.336537e+08
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

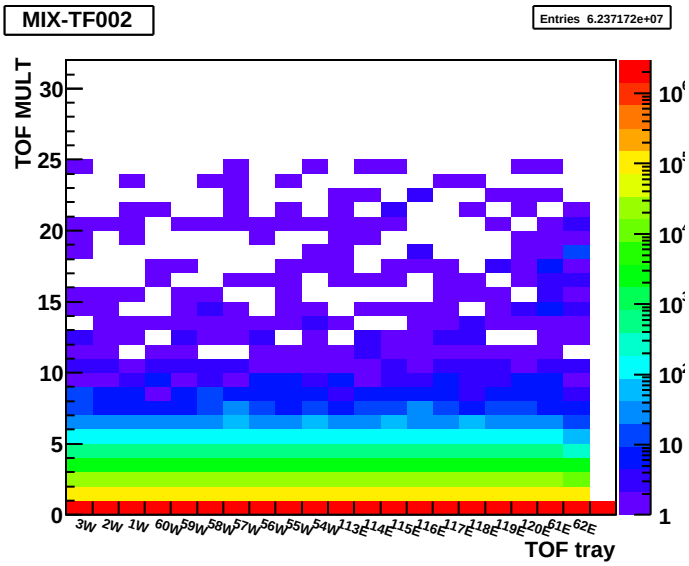

Endcap EMC L0 Input - Patch Sum
Entries 1.336537e+08
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

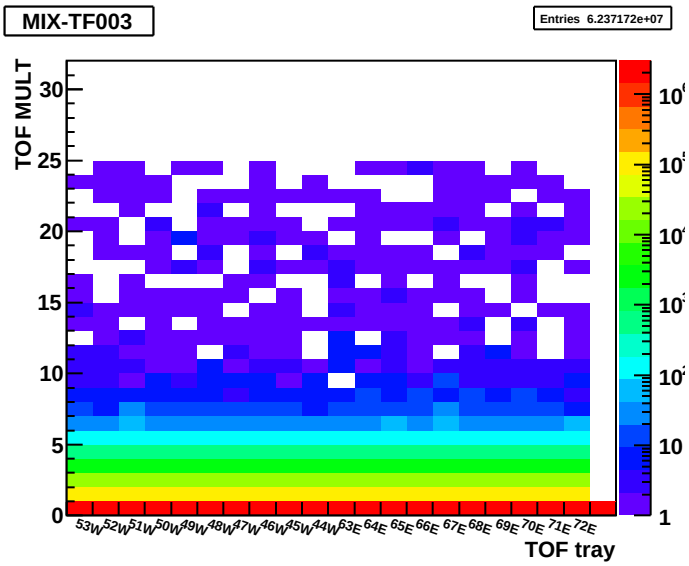

Barrel Jet Patches
Entries 2.673074e+07
JP ADC
JP ID

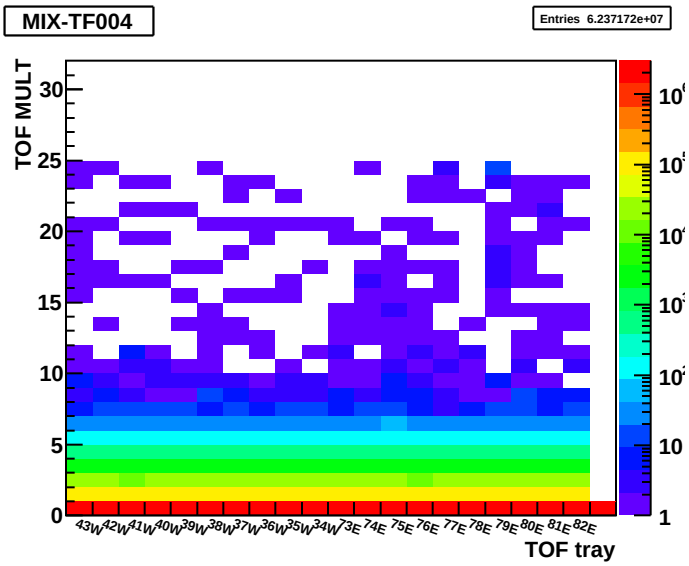

Endcap Jet Patches
Entries 8910246
JP ADC
JP ID

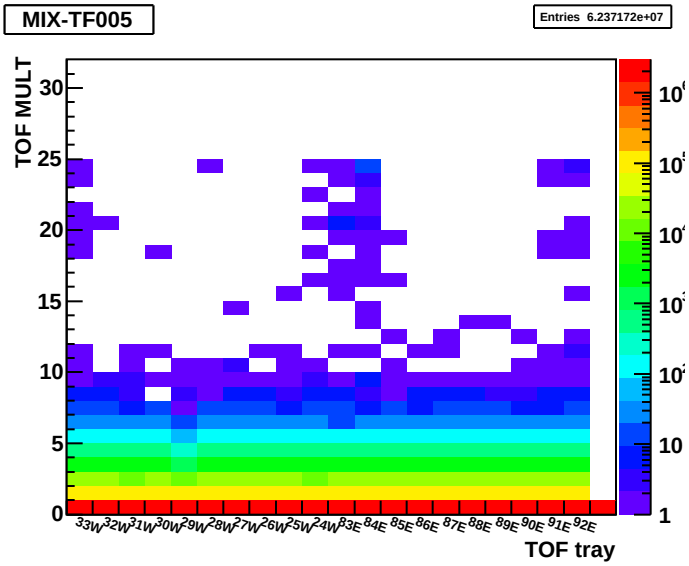

Hybrid Jet Patches
Entries 2970082
JP ADC
JP ID

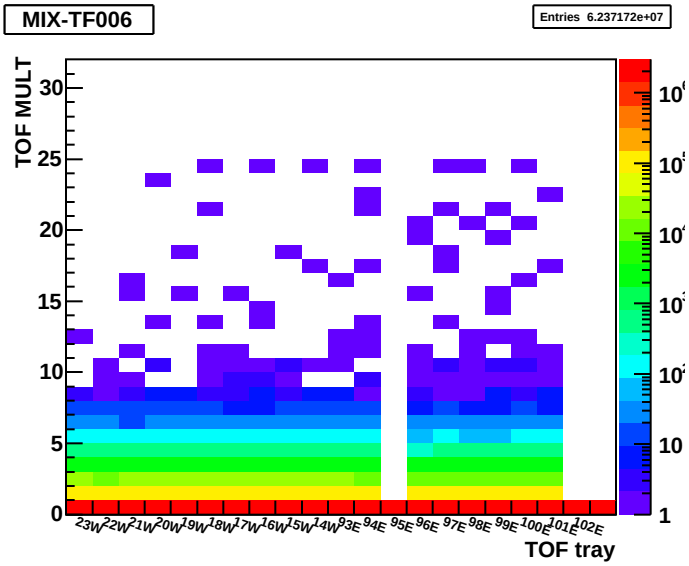

MIX-TF001
Entries 6.237172e+07
TOF MULT
TOF tray

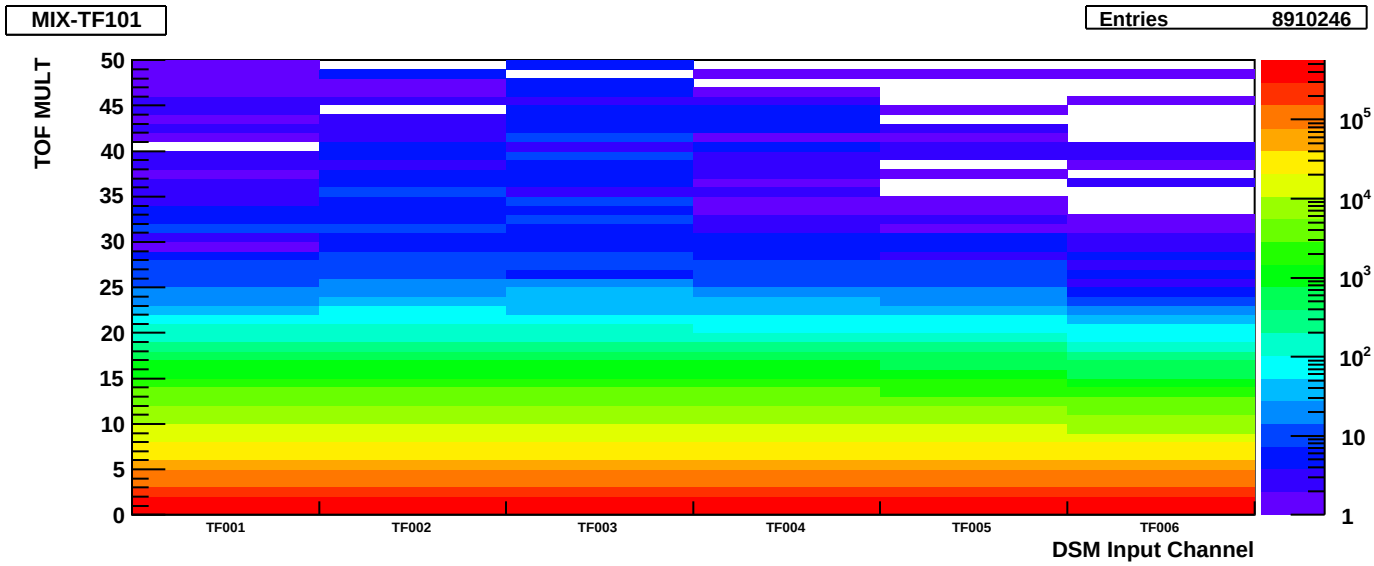

MIX-TF002
Entries 6.237172e+07
TOF MULT
TOF tray

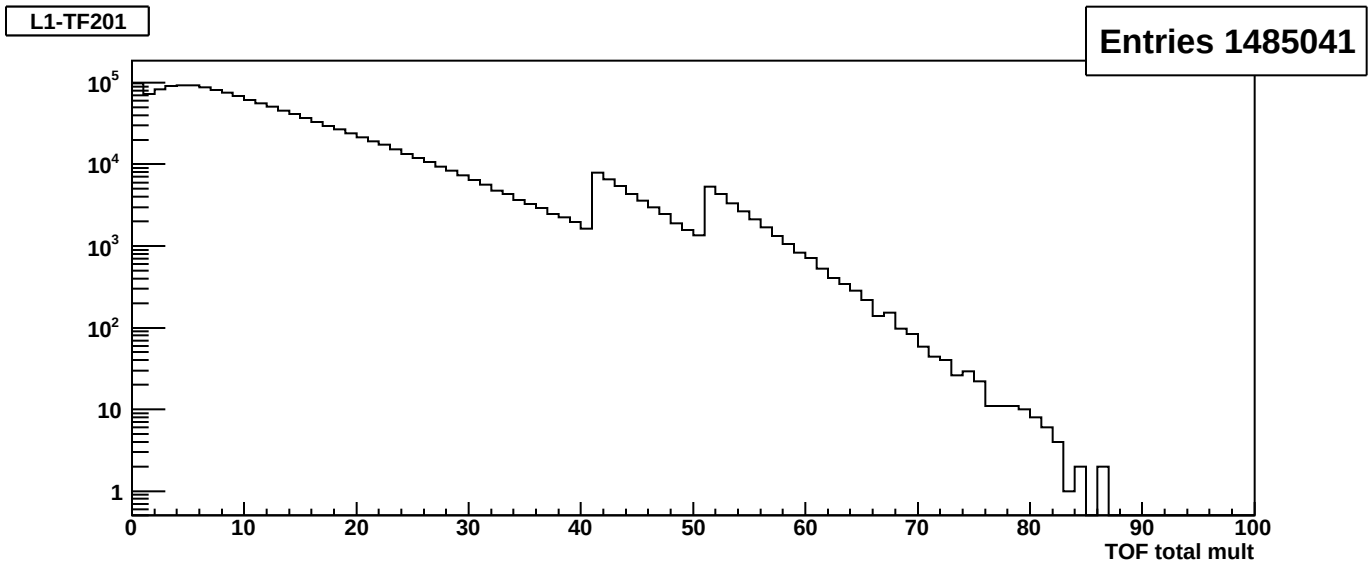

MIX-TF003
Entries 6.237172e+07
TOF MULT
TOF tray

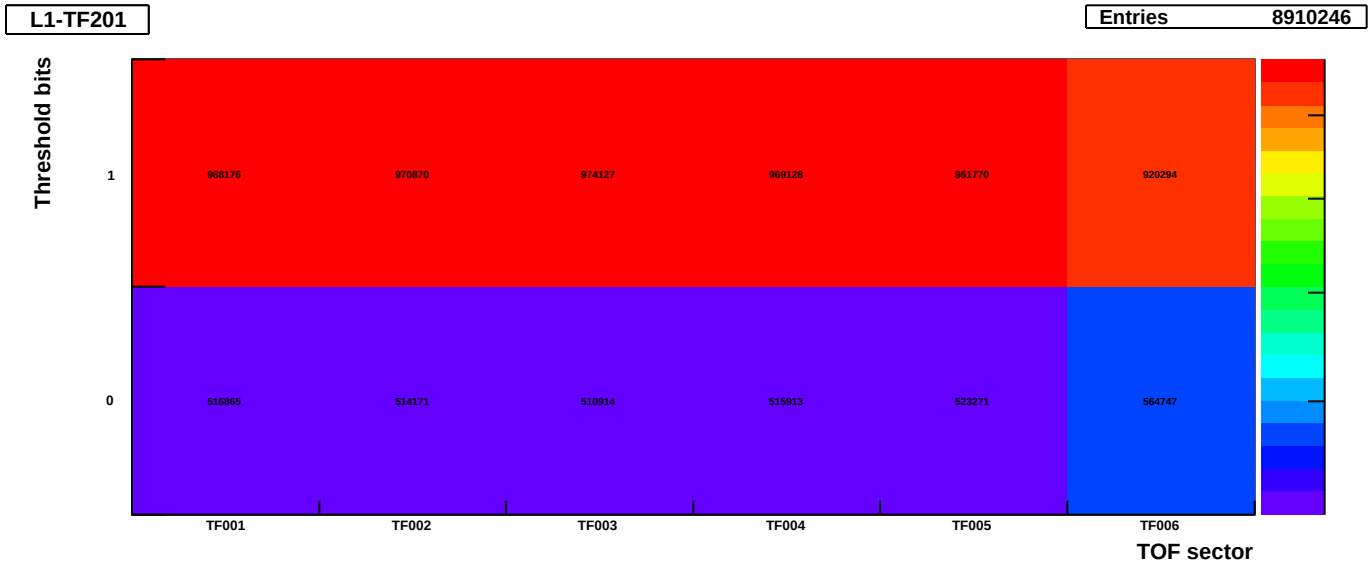

MIX-TF004
Entries 6.237172e+07
TOF MULT
TOF tray

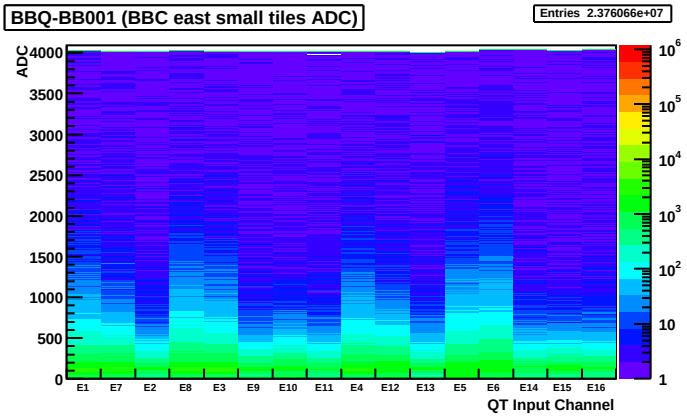

MIX-TF005
Entries 6.237172e+07
TOF MULT
TOF tray

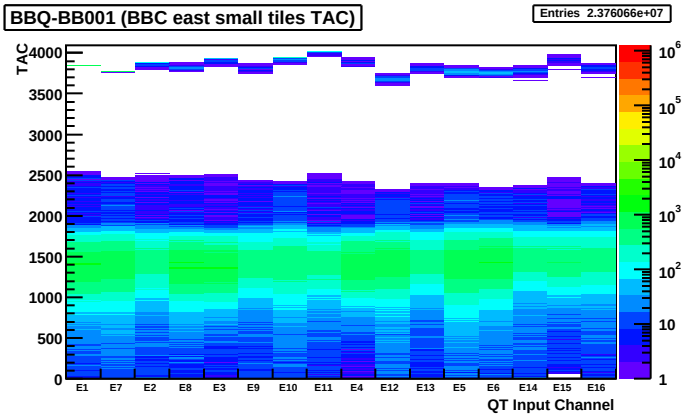

MIX-TF006
Entries 6.237172e+07
TOF MULT
TOF tray

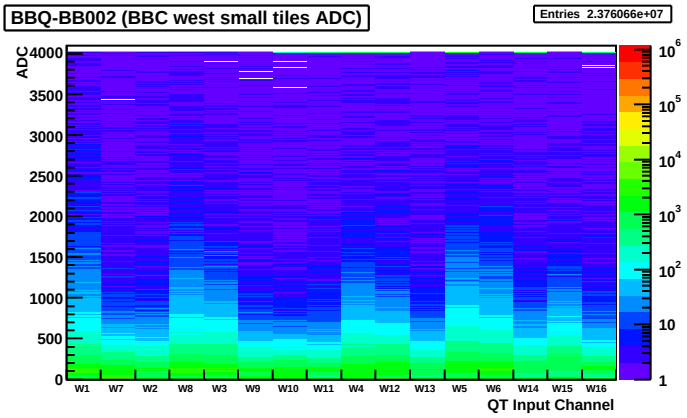

MIX-TF101
Entries 8910246
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

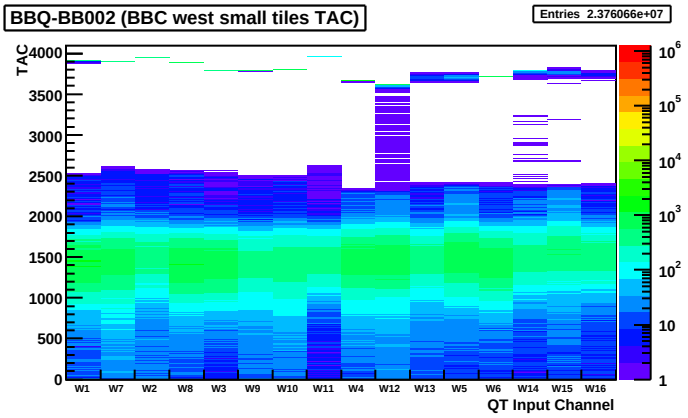

L1-TF201
Entries 1485041
TOF total mult

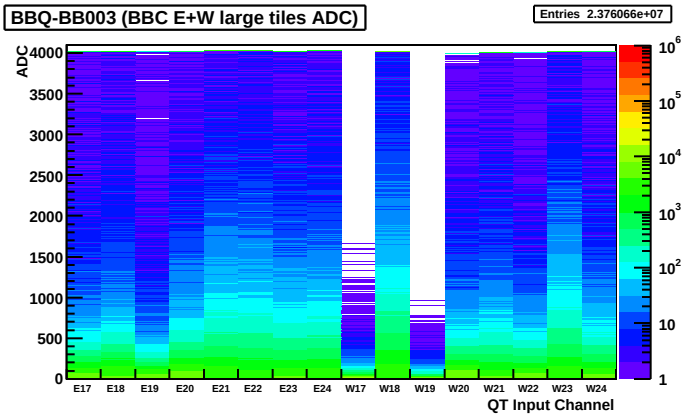

L1-TF201
Entries 8910246
Threshold bits
968176
970870
974127
969128
961770
920294
516865
514171
510914
515913
523271
564747
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

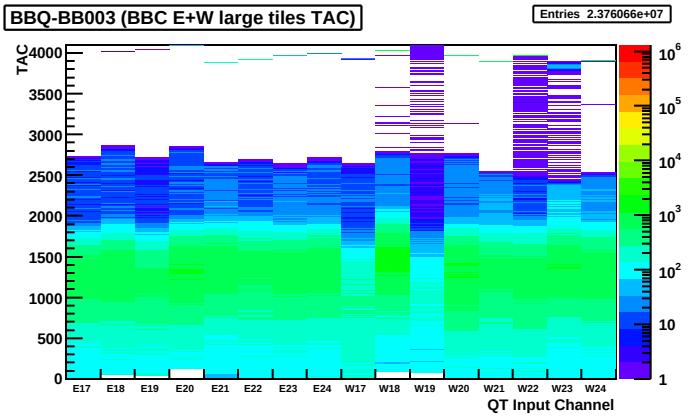

BBQ-BB001 (BBC east small tiles ADC)
Entries 2.376066e+07
ADC
QT Input Channel

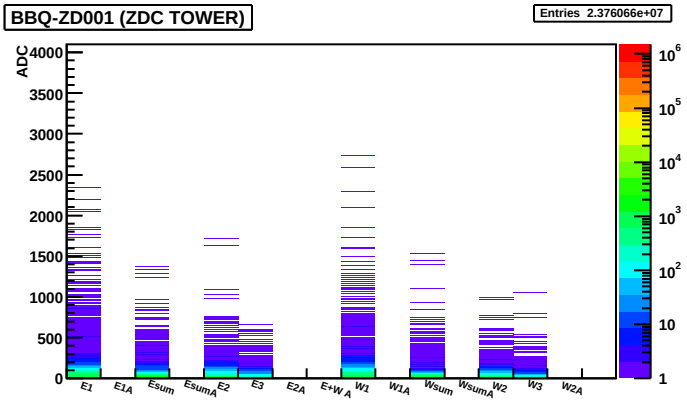

BBQ-BB001 (BBC east small tiles TAC)
Entries 2.376066e+07
TAC
QT Input Channel

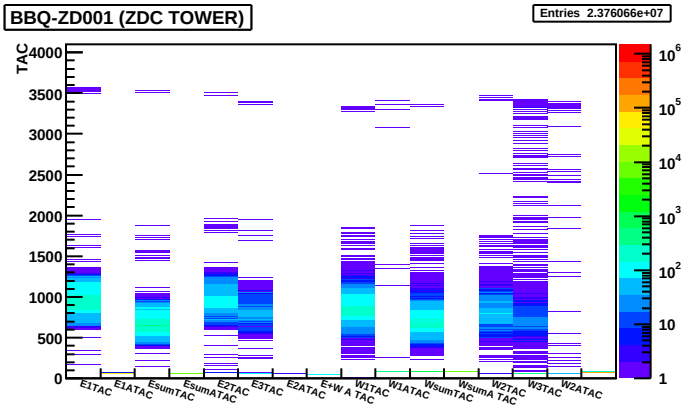

BBQ-BB002 (BBC west small tiles ADC)
Entries 2.376066e+07
ADC
QT Input Channel

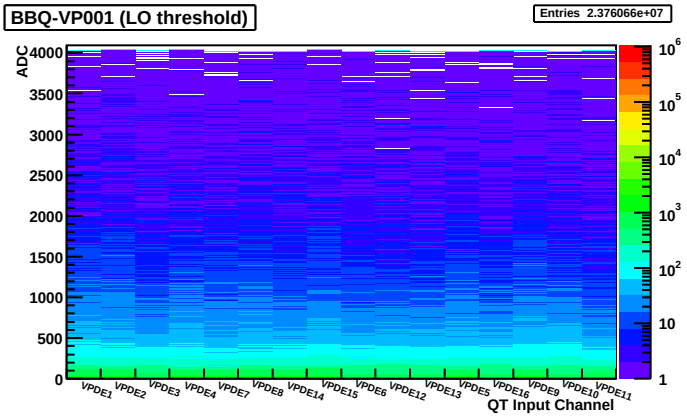

BBQ-BB002 (BBC west small tiles TAC)
Entries 2.376066e+07
TAC
QT Input Channel

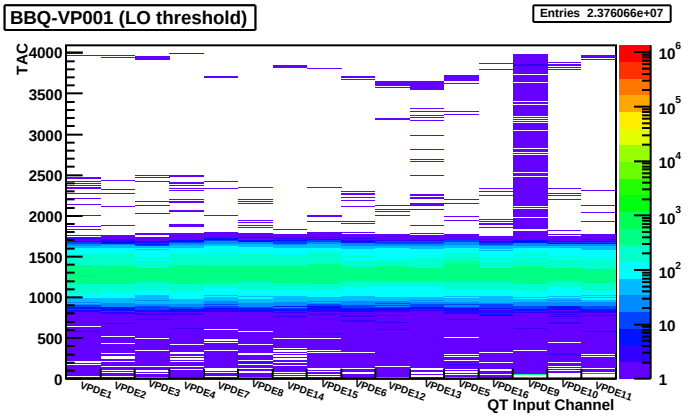

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2.376066e+07
ADC
QT Input Channel

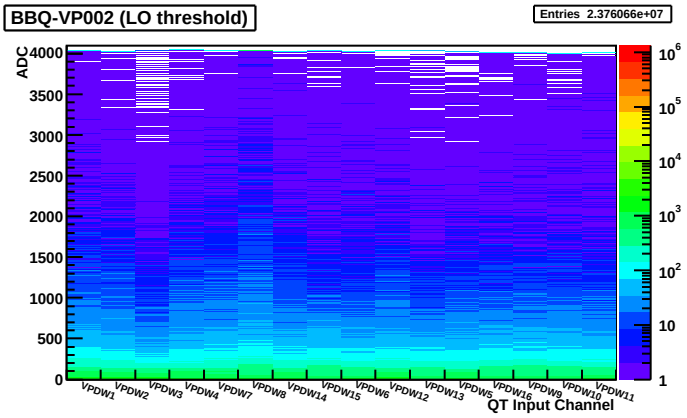

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2.376066e+07
TAC
QT Input Channel

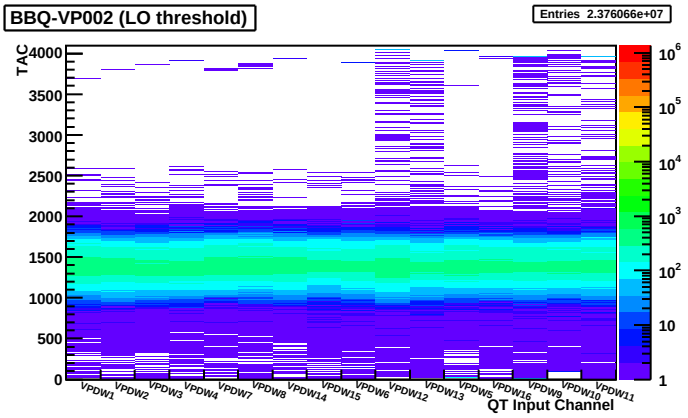

BBQ-ZD001 (ZDC TOWER)
Entries 2.376066e+07
ADC

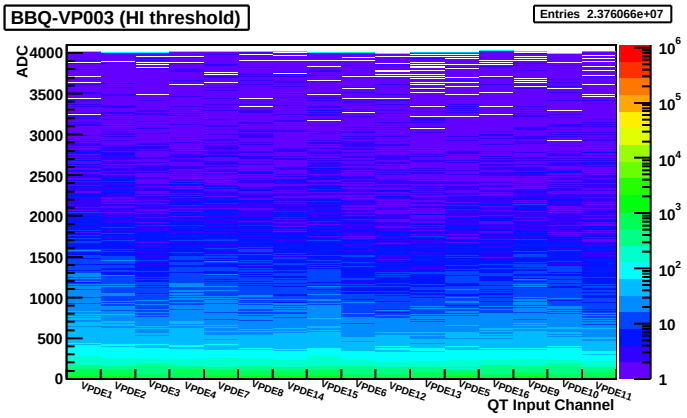

BBQ-ZD001 (ZDC TOWER)
Entries 2.376066e+07
TAC

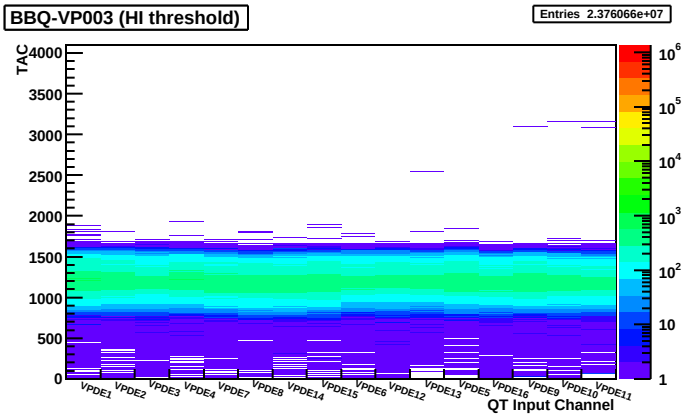

BBQ-VP001 (LO threshold)
Entries 2.376066e+07
ADC
QT Input Channel

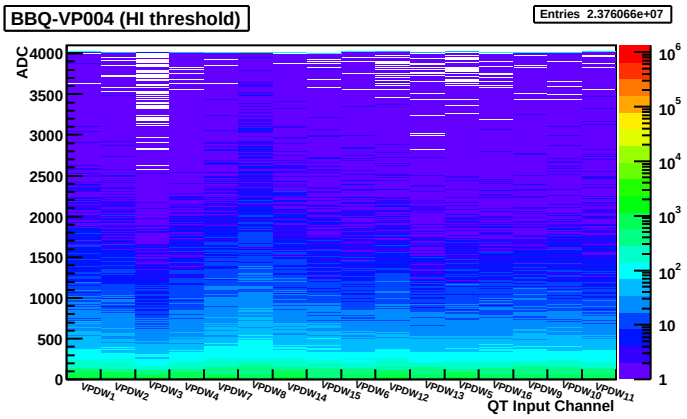

BBQ-VP001 (LO threshold)
Entries 2.376066e+07
TAC
QT Input Channel

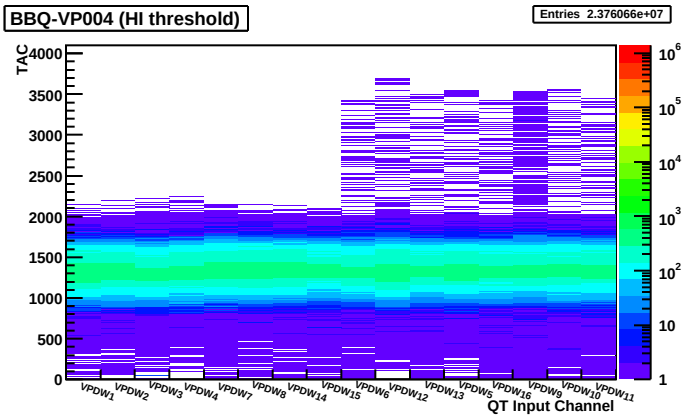

BBQ-VP002 (LO threshold)
Entries 2.376066e+07
ADC
QT Input Channel

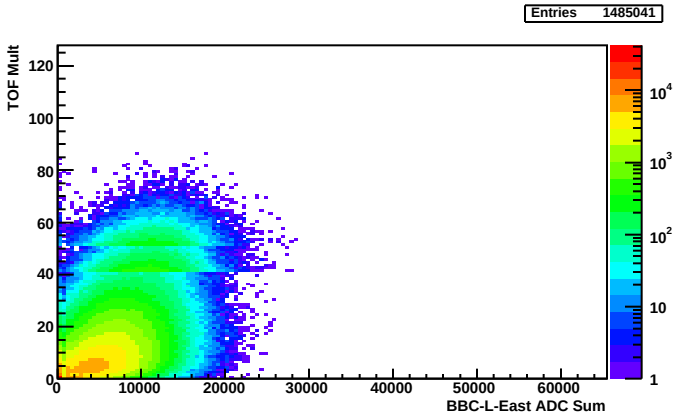

BBQ-VP002 (LO threshold)
Entries 2.376066e+07
TAC
QT Input Channel

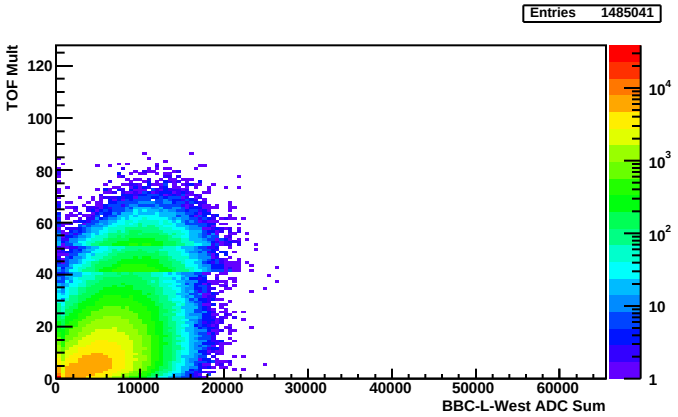

BBQ-VP003 (HI threshold)
Entries 2.376066e+07
ADC
QT Input Channel

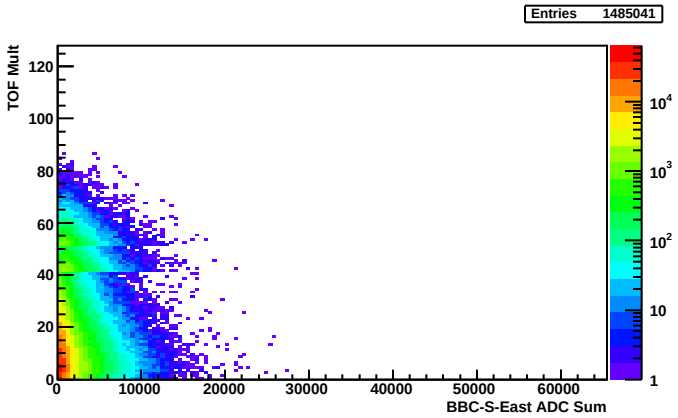

BBQ-VP003 (HI threshold)
Entries 2.376066e+07
TAC
QT Input Channel

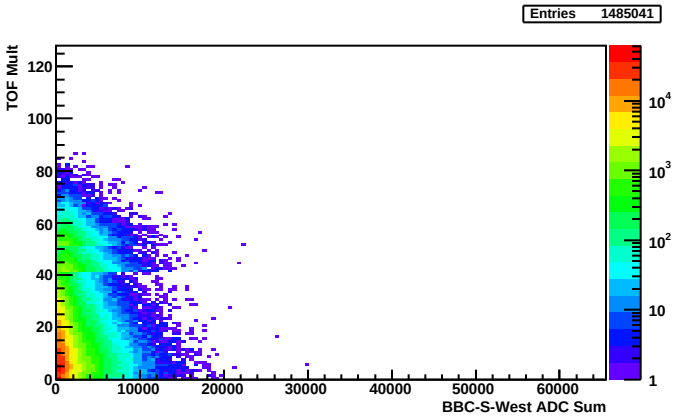

BBQ-VP004 (HI threshold)
Entries 2.376066e+07
ADC
QT Input Channel

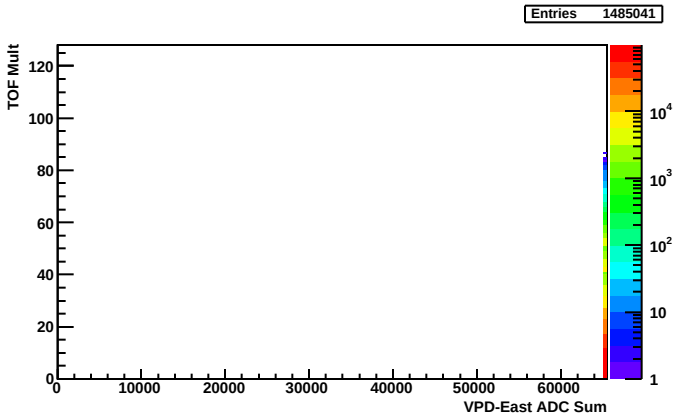

BBQ-VP004 (HI threshold)
Entries 2.376066e+07
TAC
QT Input Channel

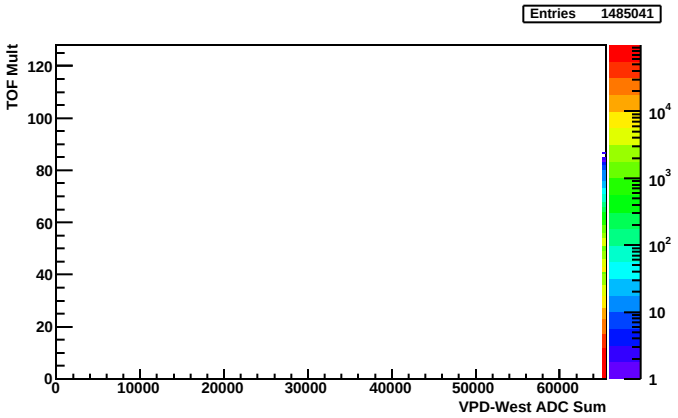

Entries 1485041
TOF Mult
BBC-L-East ADC Sum

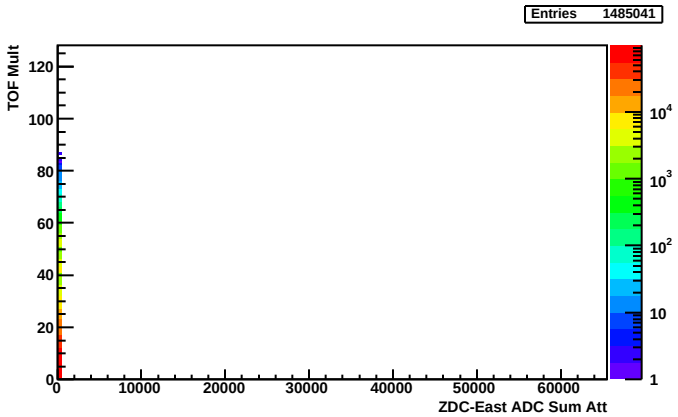

Entries 1485041
TOF Mult
BBC-L-West ADC Sum

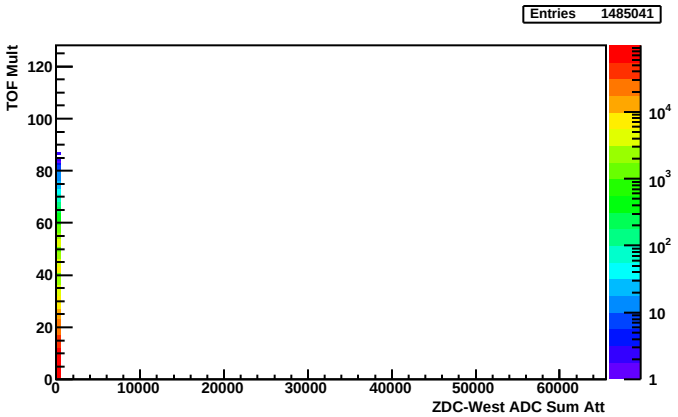

Entries 1485041
TOF Mult
BBC-S-East ADC Sum

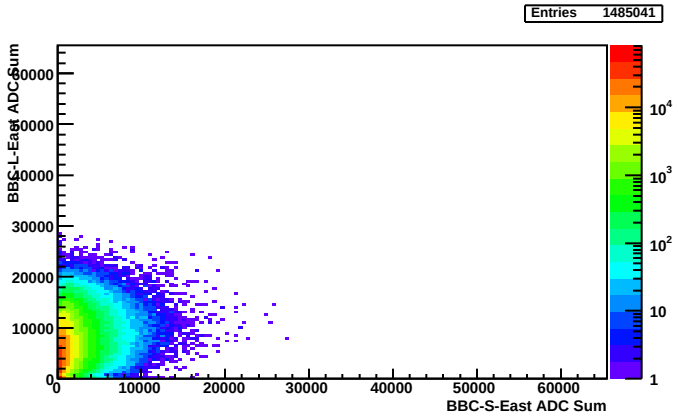

Entries 1485041
TOF Mult
BBC-S-West ADC Sum

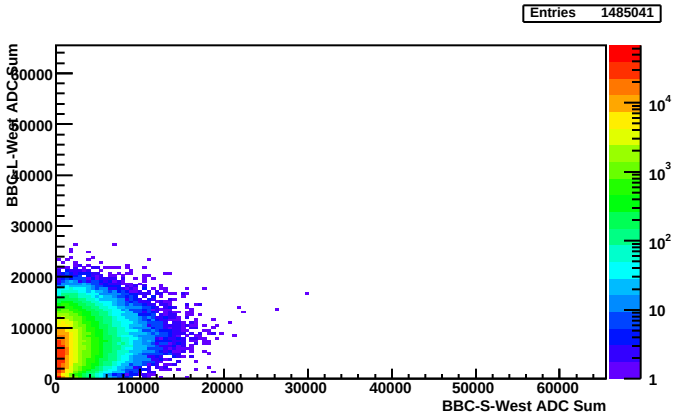

Entries 1485041
TOF Mult
VPD-East ADC Sum

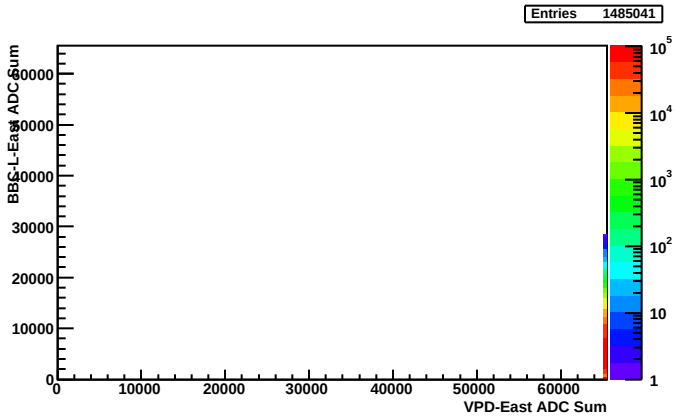

Entries 1485041
TOF Mult
VPD-West ADC Sum

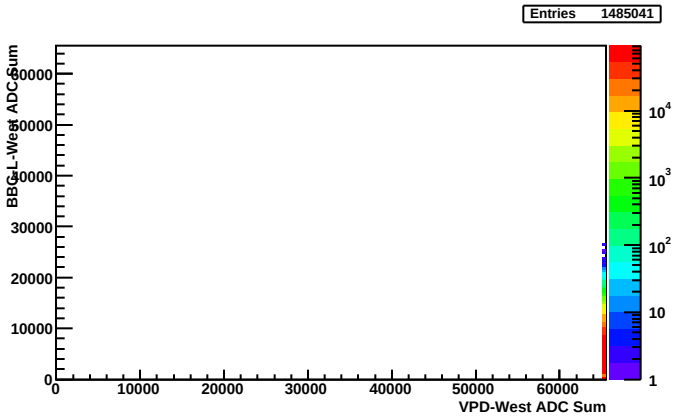

Entries 1485041
TOF Mult
ZDC-East ADC Sum Att

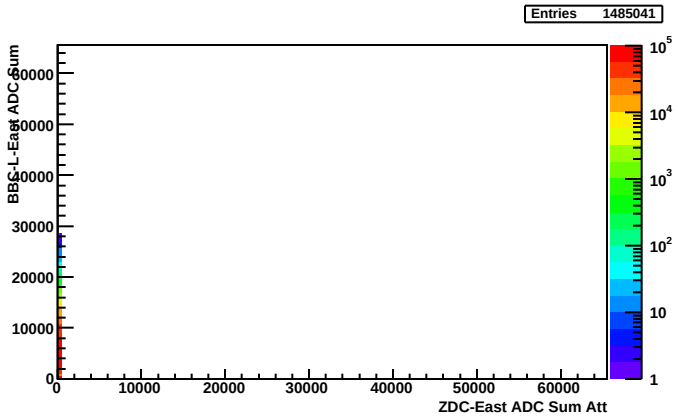

Entries 1485041
TOF Mult
ZDC-West ADC Sum Att

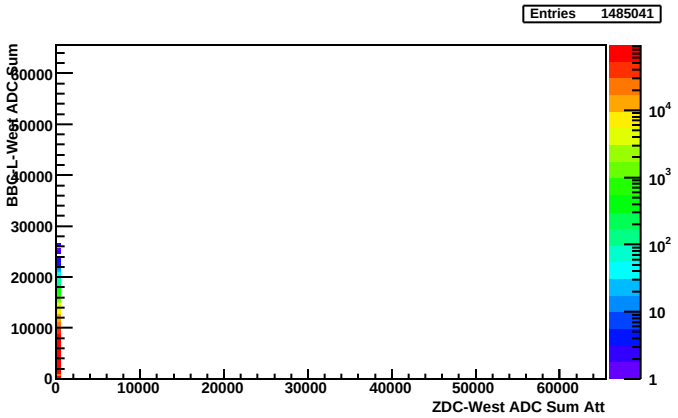

Entries 1485041
BBC-L-East ADC Sum
BBC-S-East ADC Sum

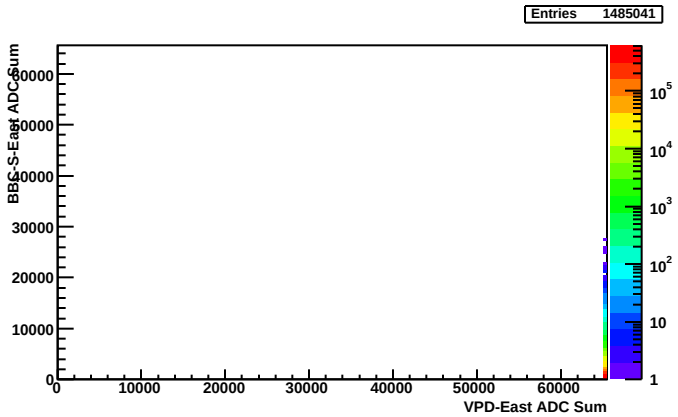

Entries 1485041
BBC-L-West ADC Sum
BBC-S-West ADC Sum

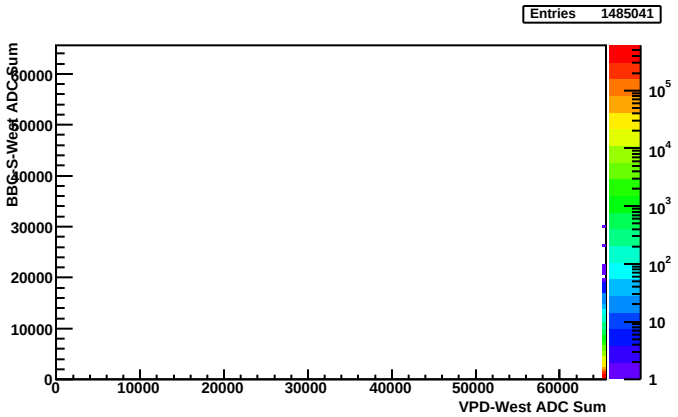

Entries 1485041
BBC-L-East ADC Sum
VPD-East ADC Sum

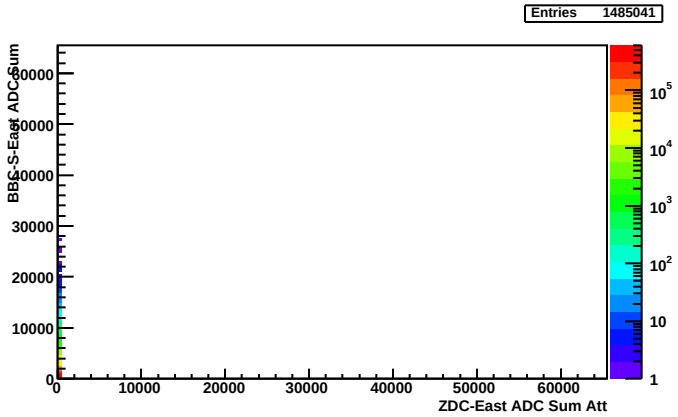

Entries 1485041
BBC-L-West ADC Sum
VPD-West ADC Sum

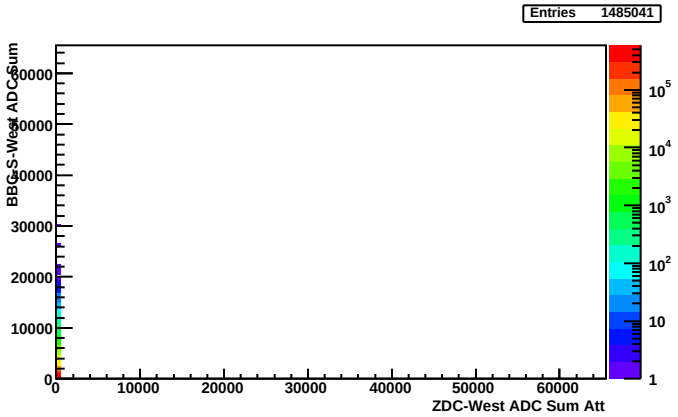

Entries 1485041
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

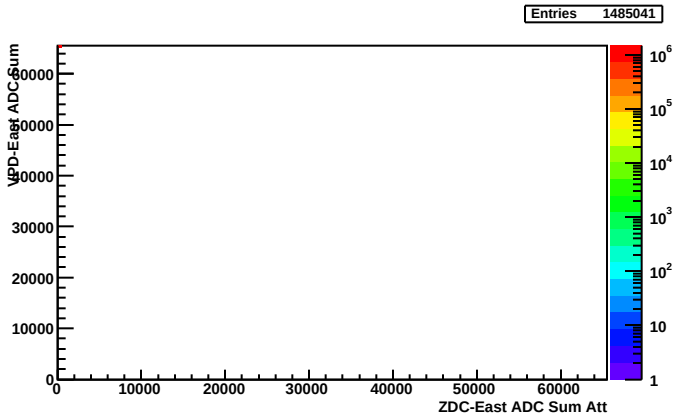

Entries 1485041
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

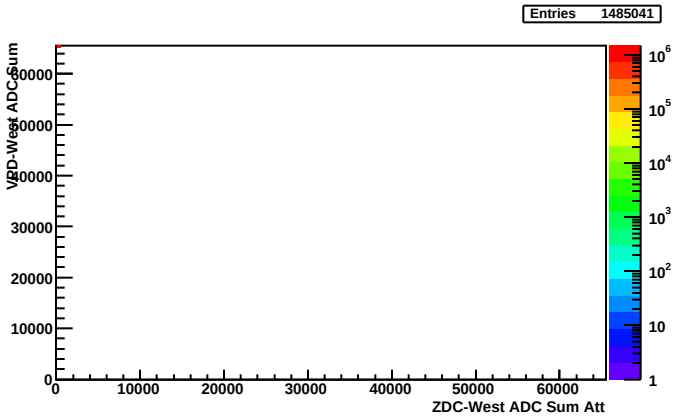

Entries 1485041
BBC-S-East ADC Sum
VPD-East ADC Sum

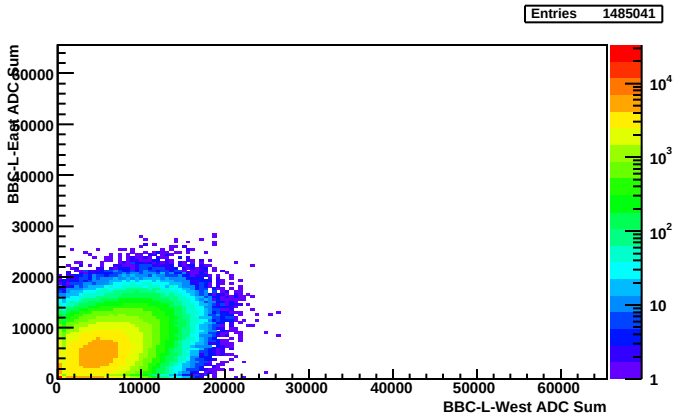

Entries 1485041
BBC-S-West ADC Sum
VPD-West ADC Sum

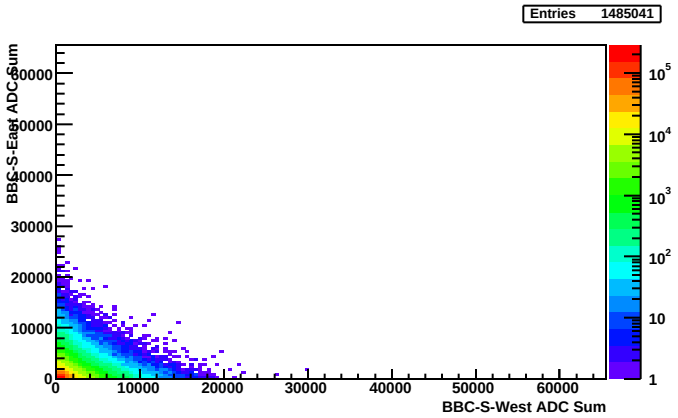

Entries 1485041
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

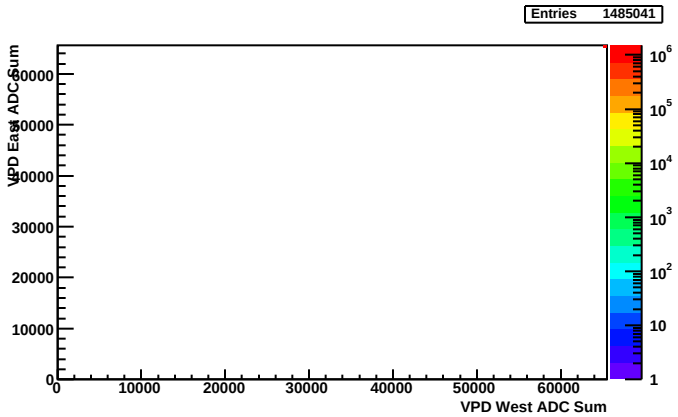

Entries 1485041
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

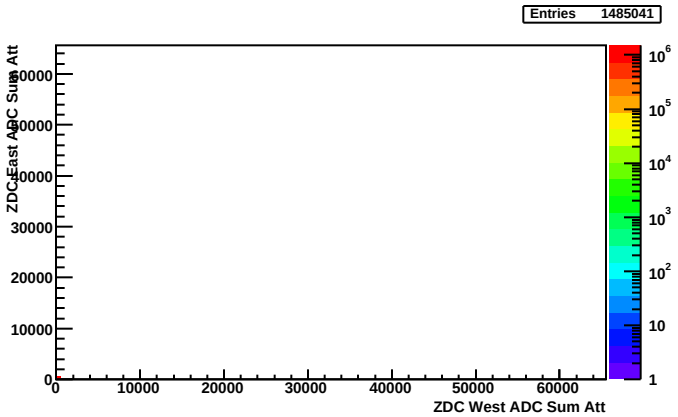

Entries 1485041
VPD-East ADC Sum
ZDC-East ADC Sum Att

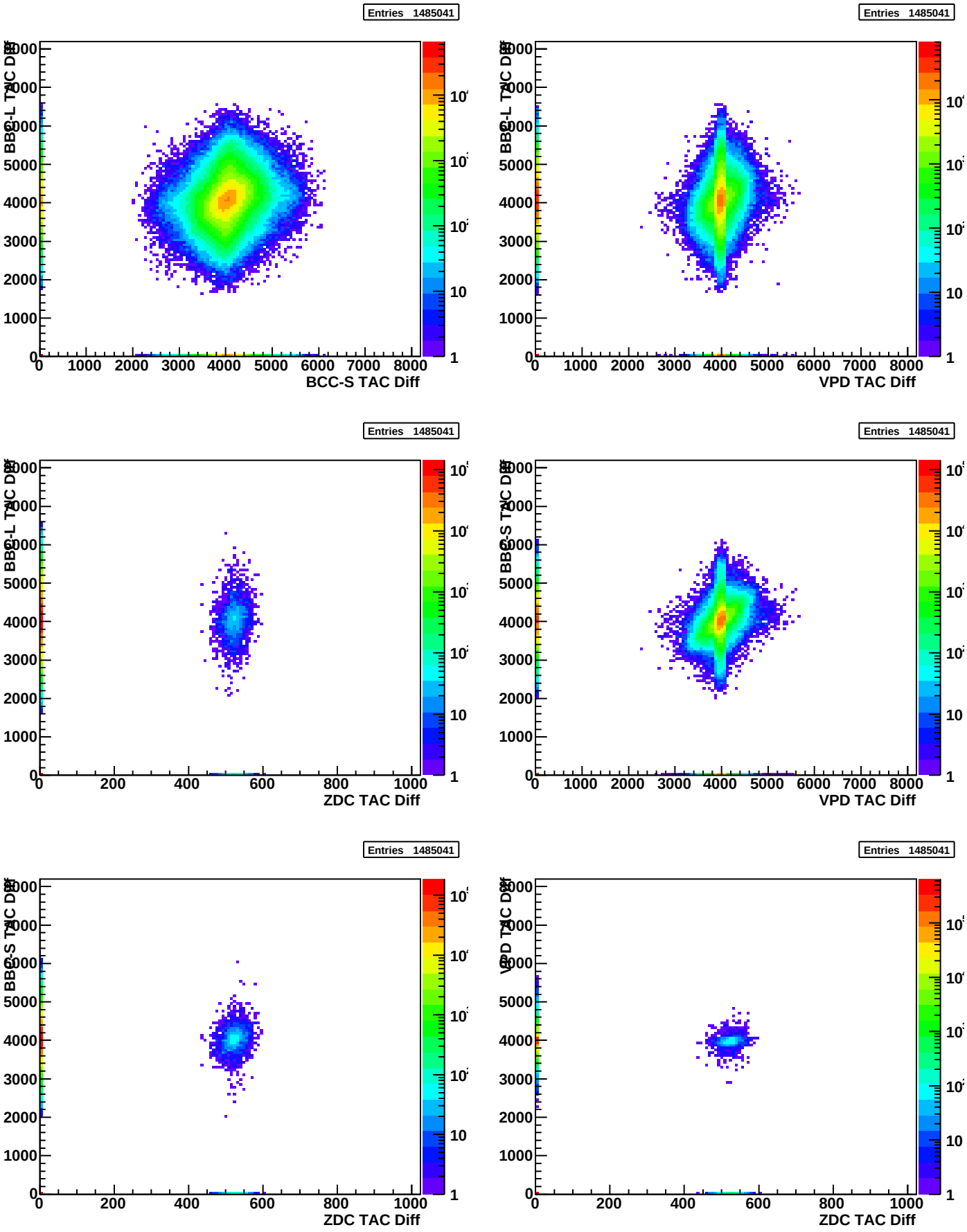

Entries 1485041
VPD-West ADC Sum
ZDC-West ADC Sum Att

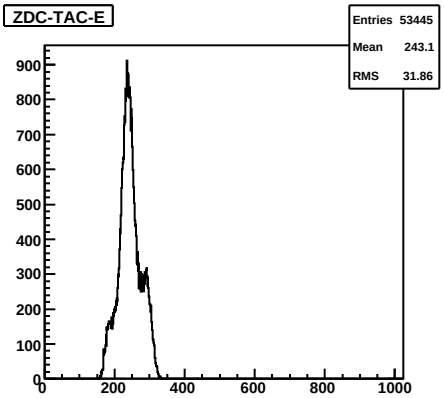

Entries 1485041
BBC-L-East ADC Sum
BBC-L-West ADC Sum

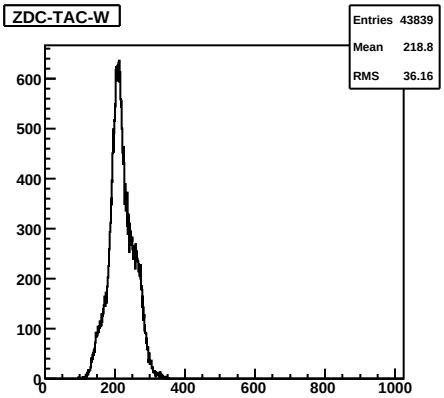

Entries 1485041
BBC-S-East ADC Sum
BBC-S-West ADC Sum

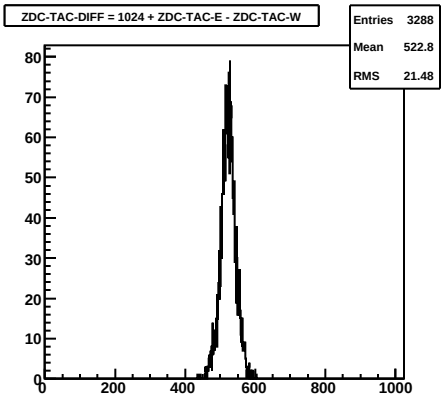

Entries 1485041
VPD East ADC Sum
VPD West ADC Sum

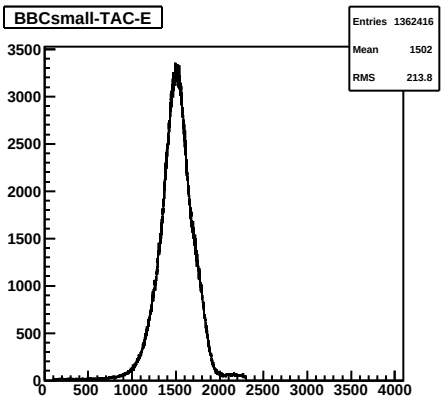

Entries 1485041
ZDC East ADC Sum Att
ZDC West ADC Sum Att

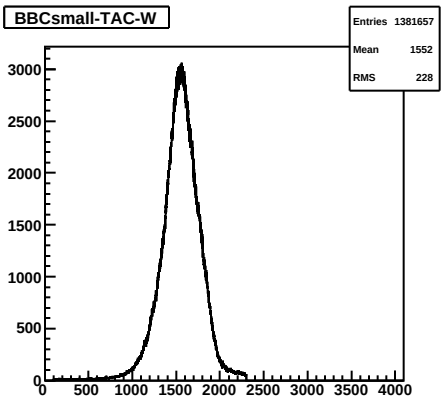

Entries 1485041
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1485041
BBC-L TAC Diff
VPD TAC Diff
Entries 1485041
BBC-L TAC Diff
ZDC TAC Diff
Entries 1485041
BBC-S TAC Diff
VPD TAC Diff
Entries 1485041
BBC-S TAC Diff
ZDC TAC Diff
Entries 1485041
VPD TAC Diff
ZDC TAC Diff

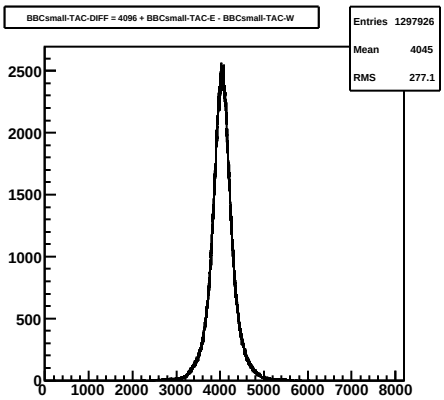

ZDC-TAC-E
Entries 53445
Mean 243.1
RMS 31.86

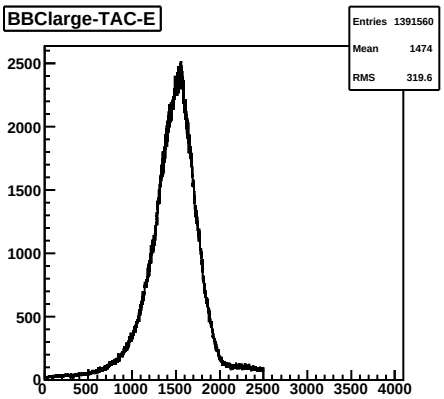

ZDC-TAC-W
Entries 43839
Mean 218.8
RMS 36.16

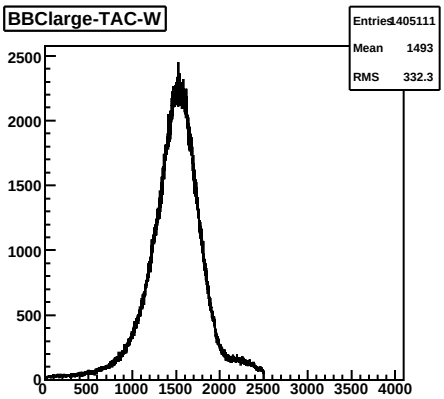

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 3288
Mean 522.8
RMS 21.48

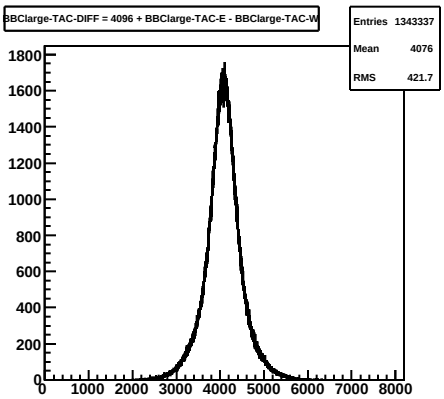

BBCsmall-TAC-E
Entries 1362416
Mean 1502
RMS 213.8

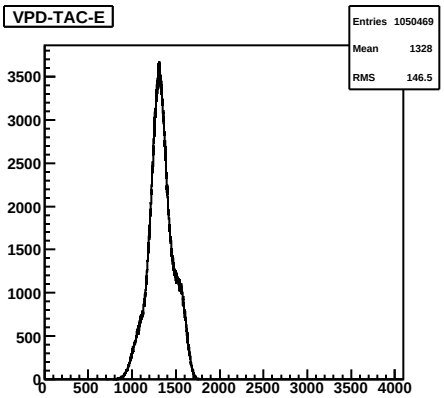

BBCsmall-TAC-W
Entries 1381657
Mean 1552
RMS 228

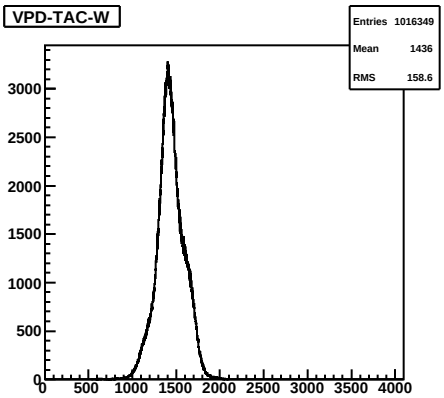

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 1297926
Mean 4045
RMS 277.1

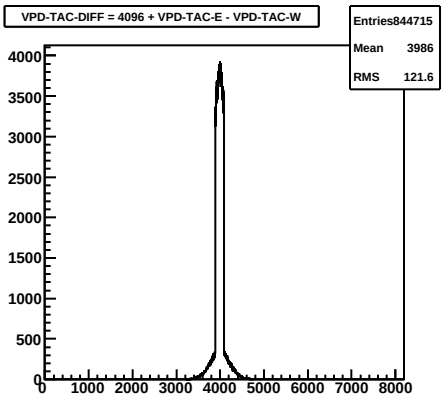

BBClarge-TAC-E
Entries 1391560
Mean 1474
RMS 319.6

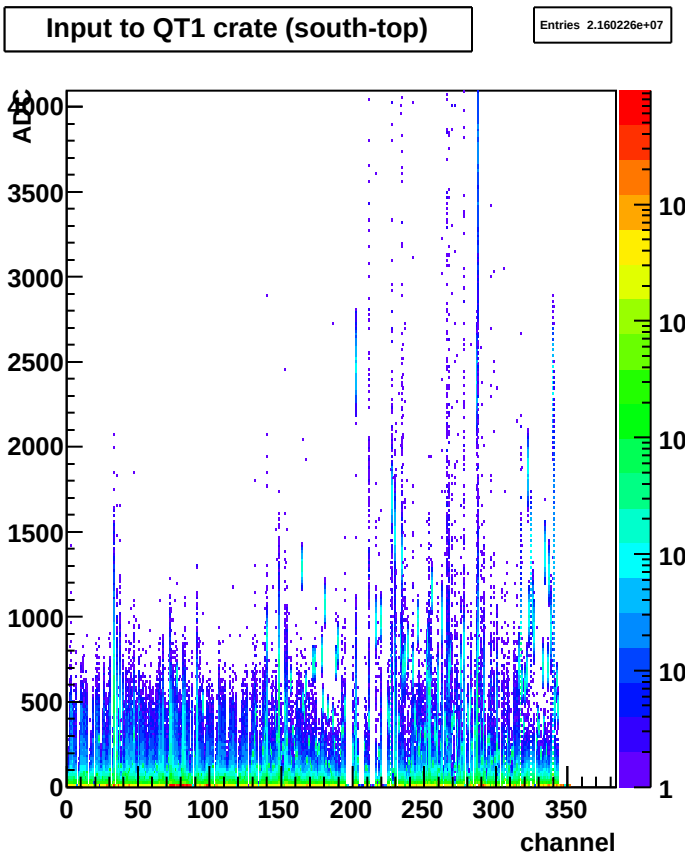

BBClarge-TAC-W
Entries 1405111
Mean 1493
RMS 332.3

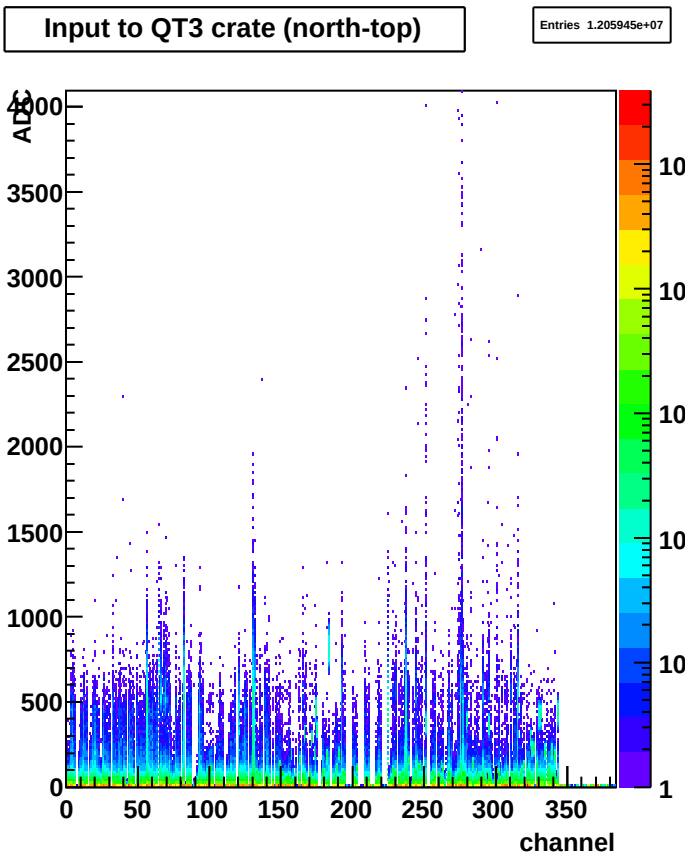

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 1343337
Mean 4076
RMS 421.7

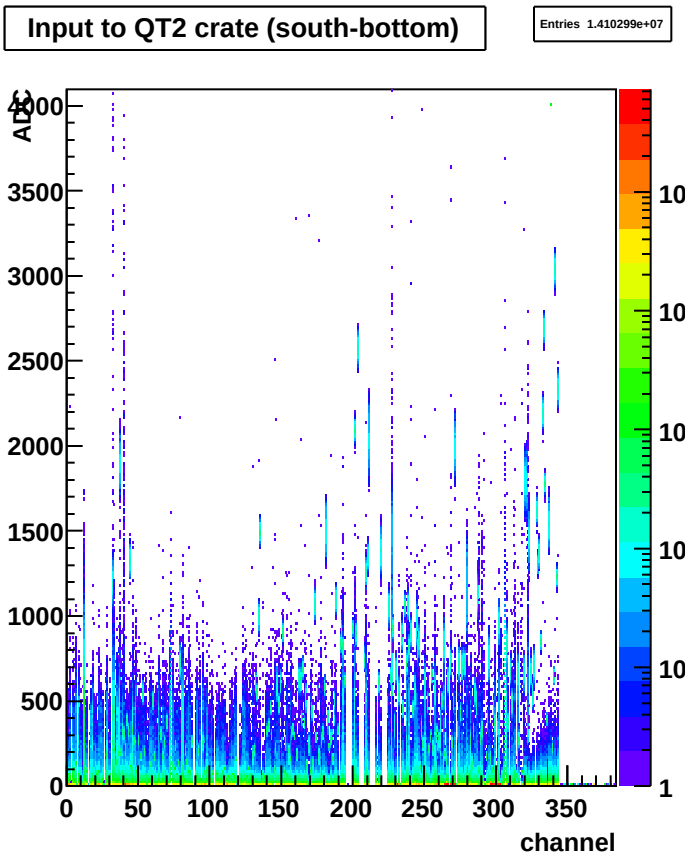

VPD-TAC-E
Entries 1050469
Mean 1328
RMS 146.5

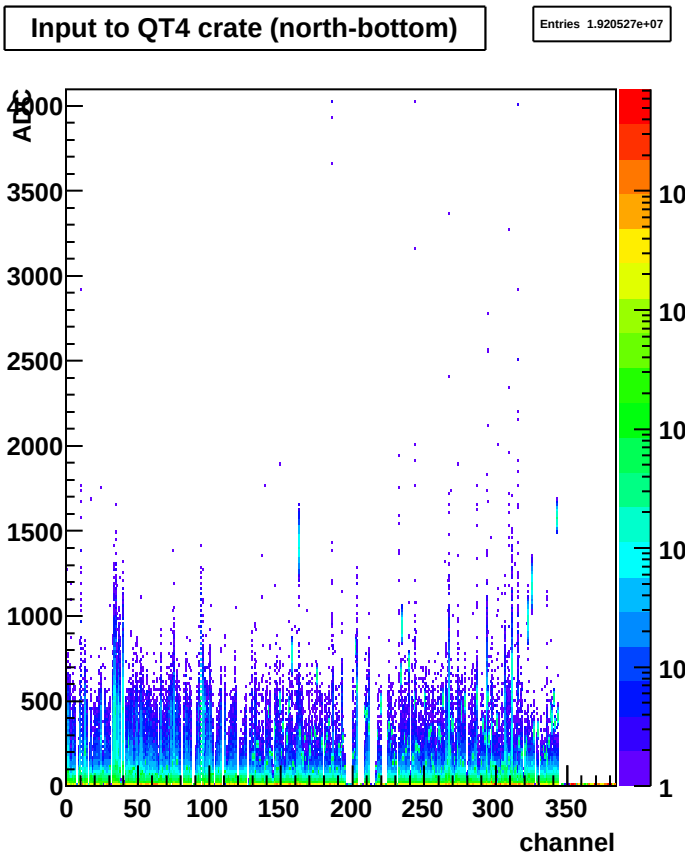

VPD-TAC-W
Entries 1016349
Mean 1436
RMS 158.6

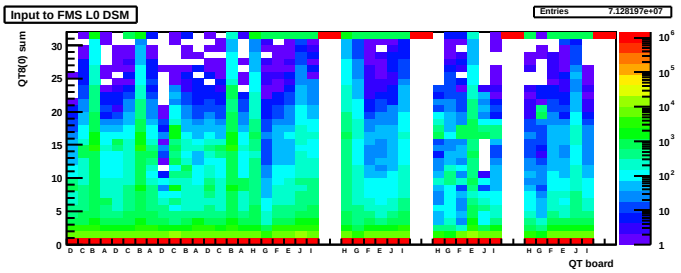

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 844715
Mean 3986
RMS 121.6

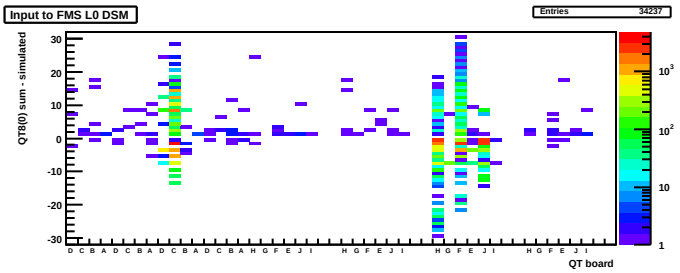

Input to QT1 crate (south-top)
Entries 2.160226e+07
ADC
channel

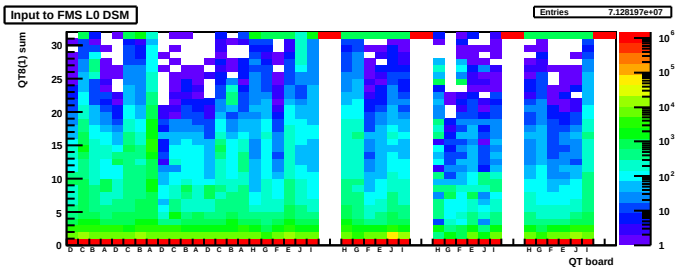

Input to QT3 crate (north-top)
Entries 1.205945e+07
ADC
channel

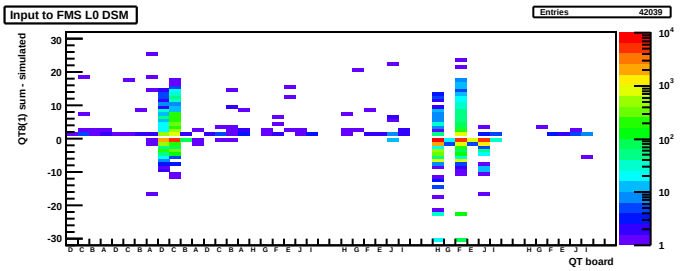

Input to QT2 crate (south-bottom)
Entries 1.410299e+07
ADC
channel

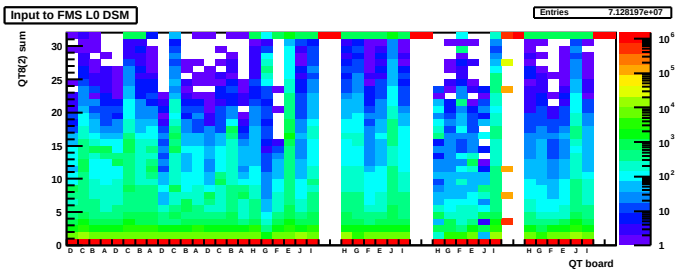

Input to QT4 crate (north-bottom)
Entries 1.920527e+07
ADC
channel

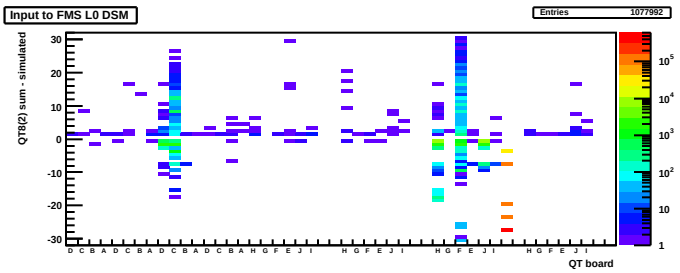

Input to FMS L0 DSM
Entries 7.128197e+07
QT8(0) sum
QT board

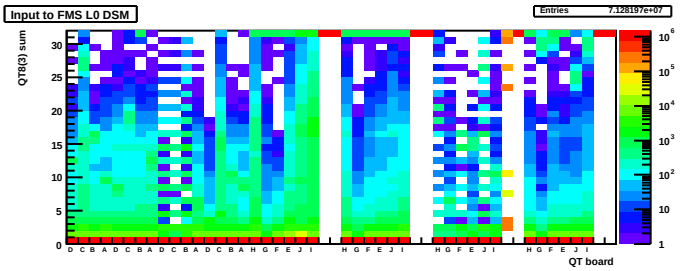

Input to FMS L0 DSM
Entries 34237
QT8(0) sum - simulated
QT board

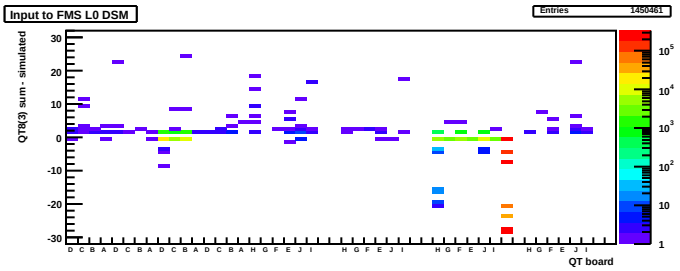

Input to FMS L0 DSM
Entries 7.128197e+07
QT8(1) sum
QT board

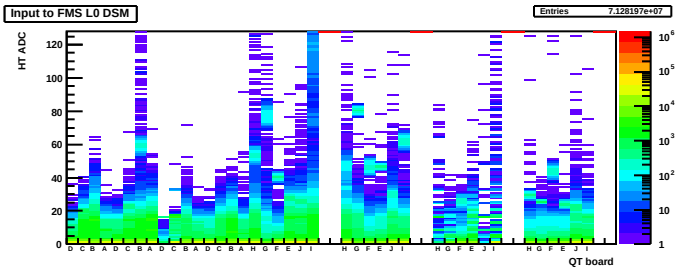

Input to FMS L0 DSM
Entries 42039
QT8(1) sum - simulated
QT board

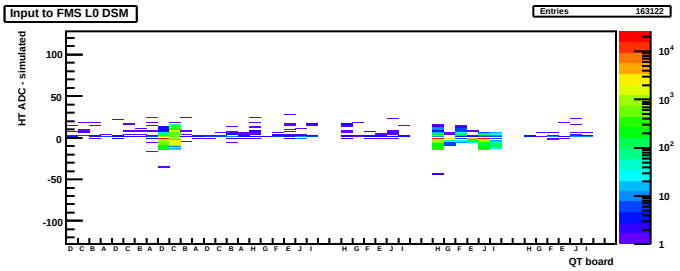

Input to FMS L0 DSM
Entries 7.128197e+07
QT8(2) sum
QT board

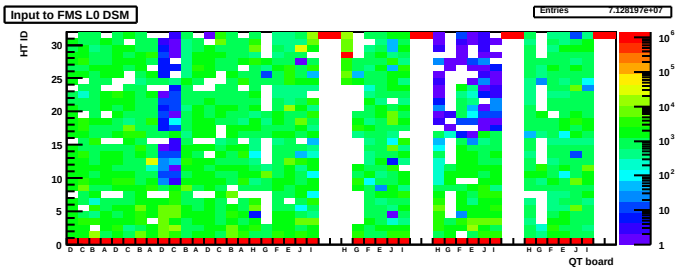

Input to FMS L0 DSM
Entries 1077992
QT8(2) sum - simulated
QT board

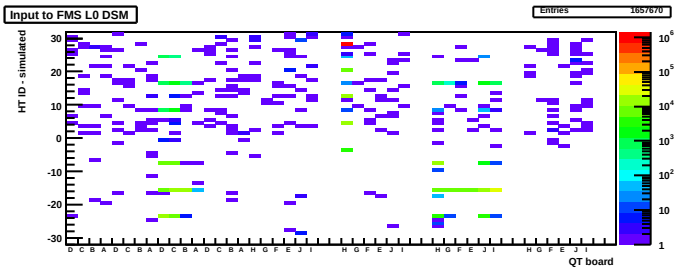

Input to FMS L0 DSM
Entries 7.128197e+07
QT8(3) sum
QT board

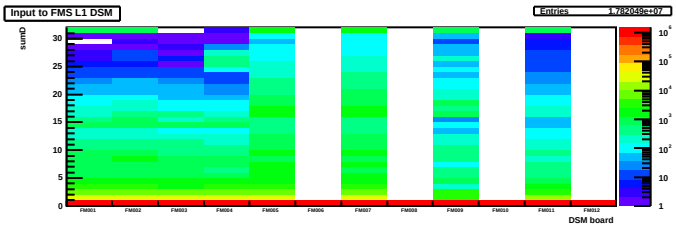

Input to FMS L0 DSM
Entries 1450461
QT8(3) sum - simulated
QT board

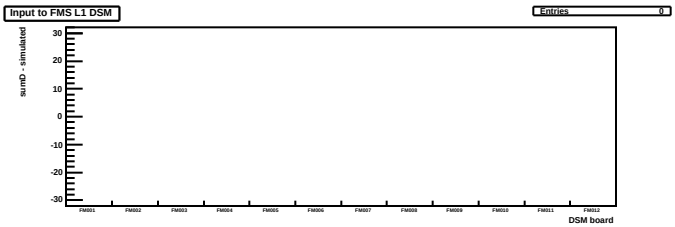

Input to FMS L0 DSM
Entries 7.128197e+07
HT ADC
QT board

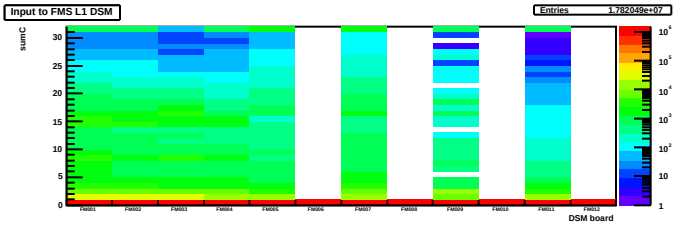

Input to FMS L0 DSM
Entries 163122
HT ADC - simulated
QT board

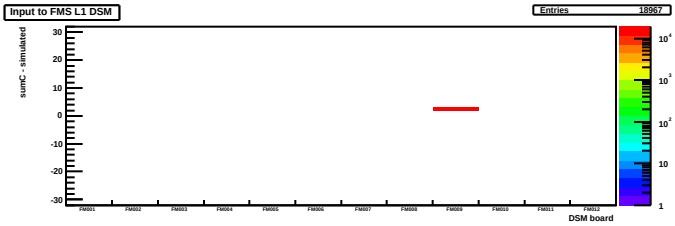

Input to FMS L0 DSM
Entries 7.128197e+07
HT ID
QT board

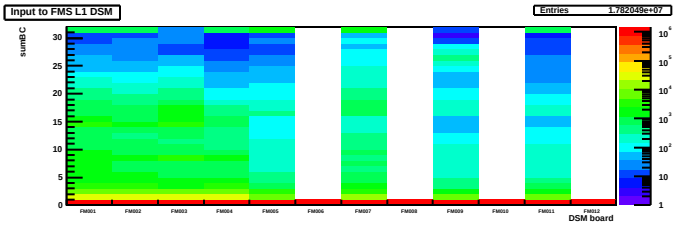

Input to FMS L0 DSM
Entries 1657670
HT ID - simulated
QT board

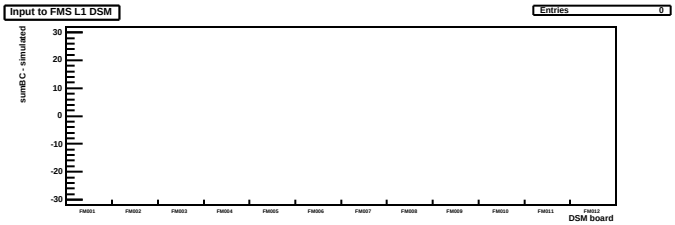

Input to FMS L1 DSM
Entries 1.782049e+07
sumD
DSM board

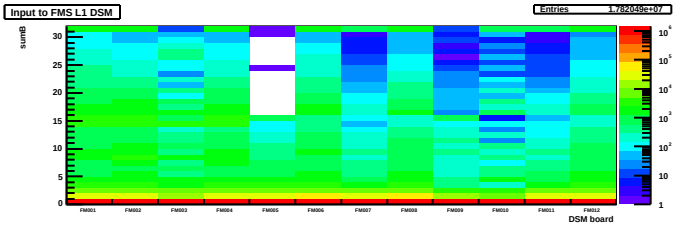

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

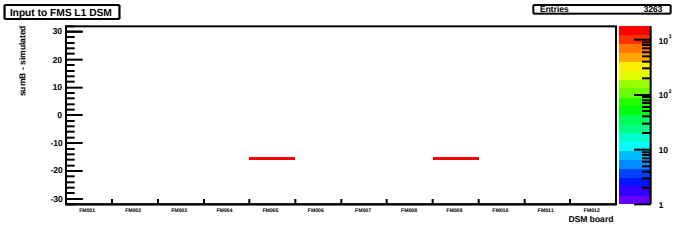

Input to FMS L1 DSM
Entries 1.782049e+07
sumC
DSM board

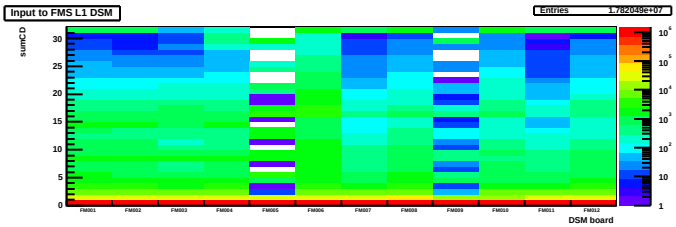

Input to FMS L1 DSM
Entries 18967
sumC - simulated
DSM board

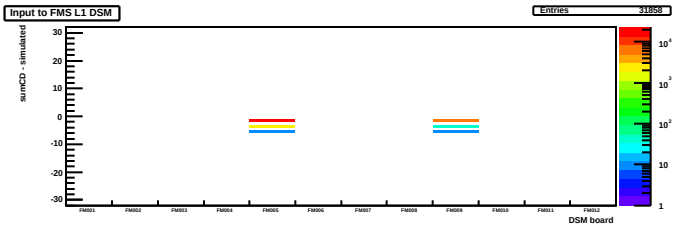

Input to FMS L1 DSM
Entries 1.782049e+07
sumBC
DSM board

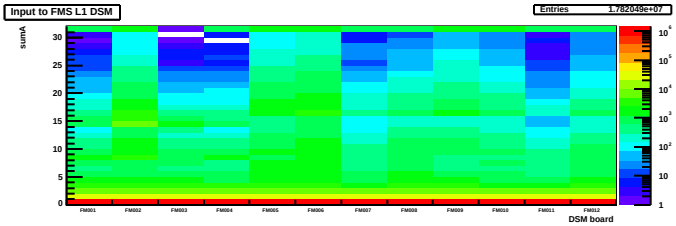

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

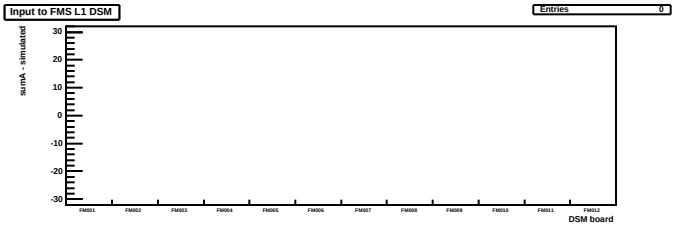

Input to FMS L1 DSM
Entries 1.782049e+07
sumB
DSM board

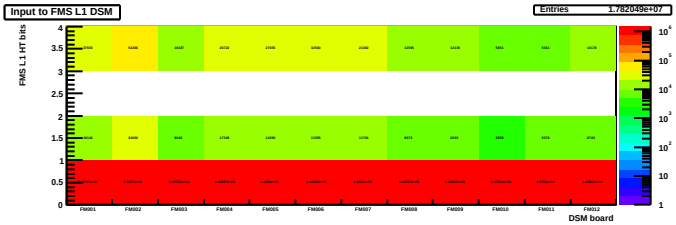

Input to FMS L1 DSM
Entries 3263
sumB - simulated
DSM board

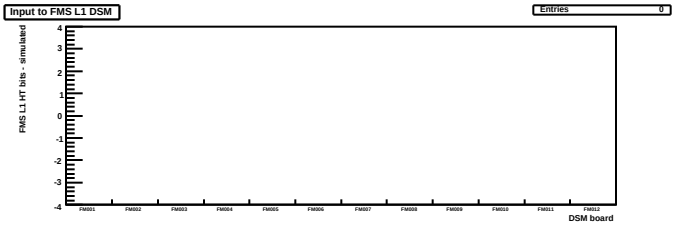

Input to FMS L1 DSM
Entries 1.782049e+07
sumCD
DSM board

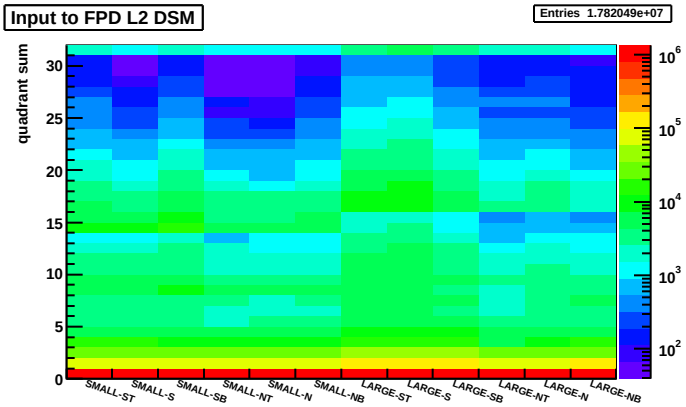

Input to FMS L1 DSM
Entries 31858
sumCD - simulated
DSM board

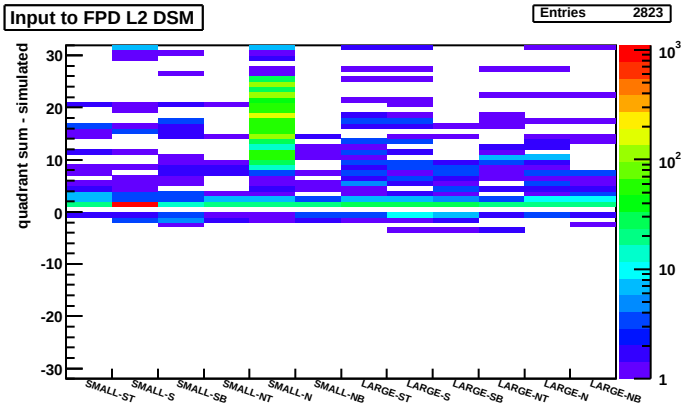

Input to FMS L1 DSM
Entries 1.782049e+07
sumA
DSM board

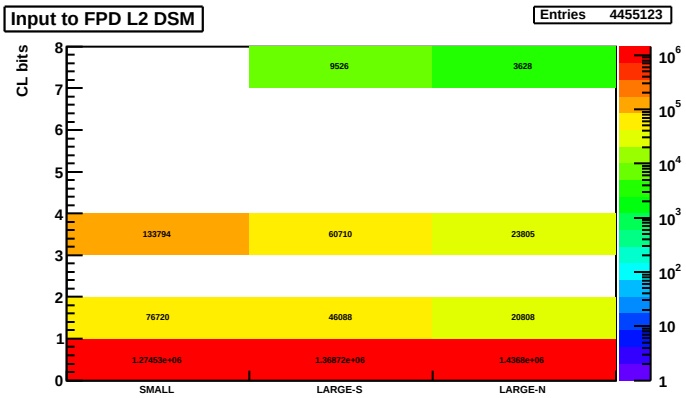

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

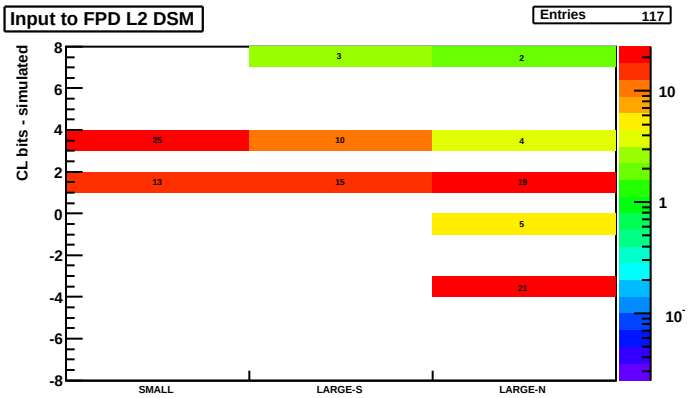

Input to FMS L1 DSM
Entries 1.782049e+07
FMS L1 HT bits
DSM board

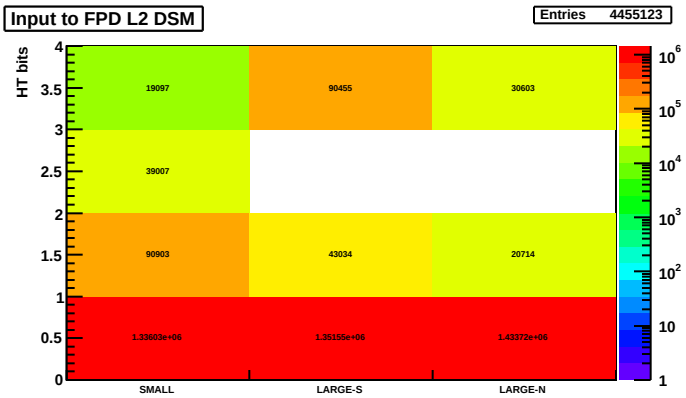

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

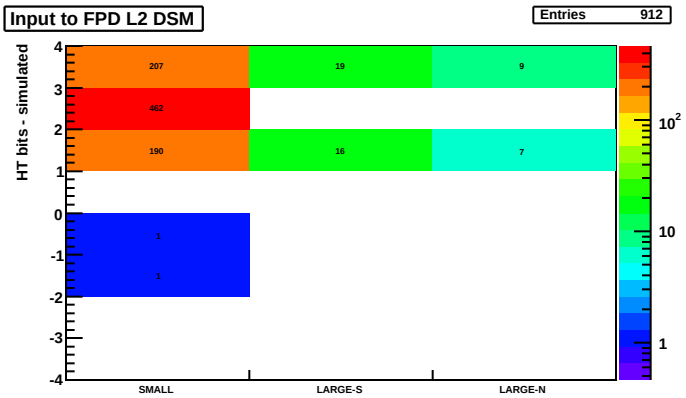

Input to FPD L2 DSM
Entries 1.782049e+07
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

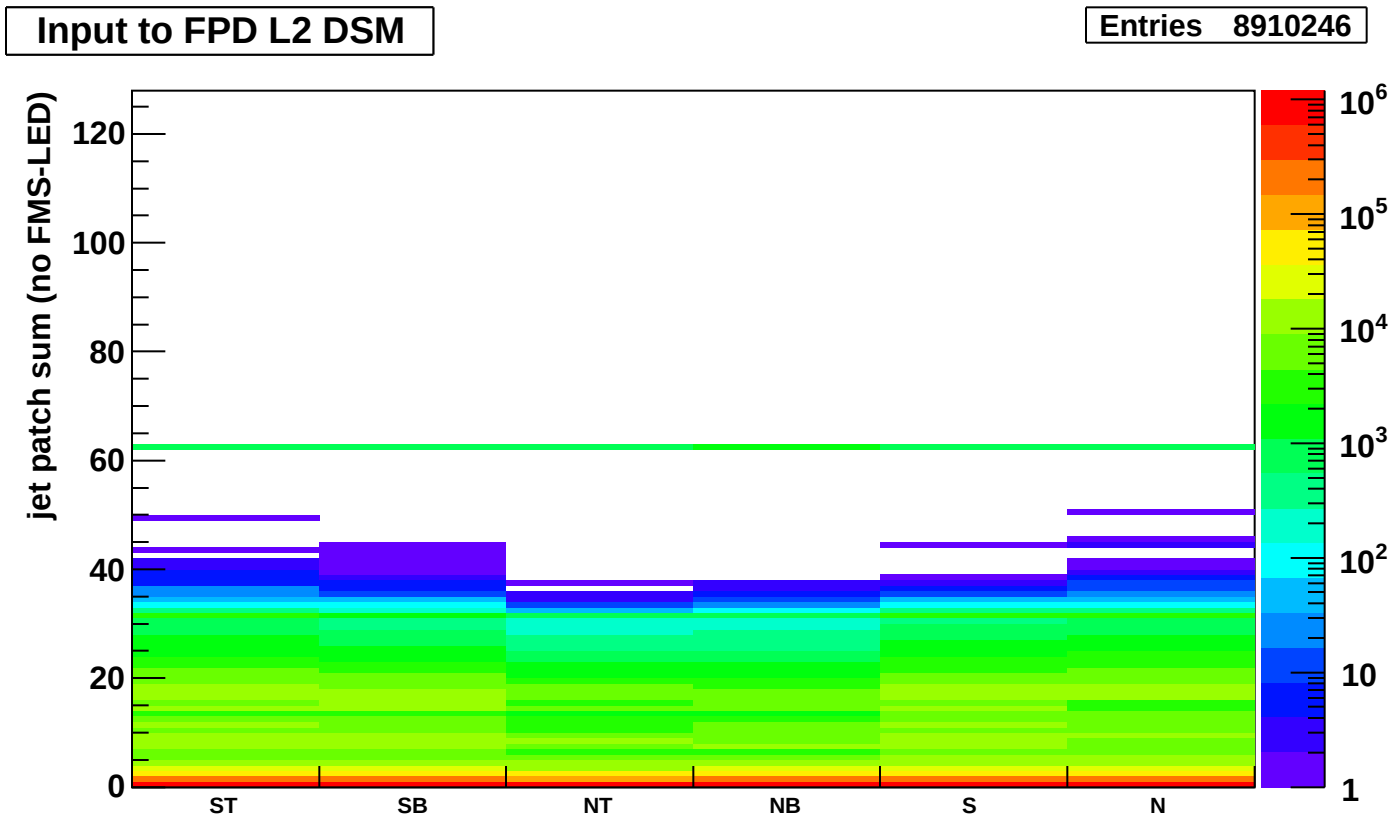

Input to FPD L2 DSM
Entries 2823
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

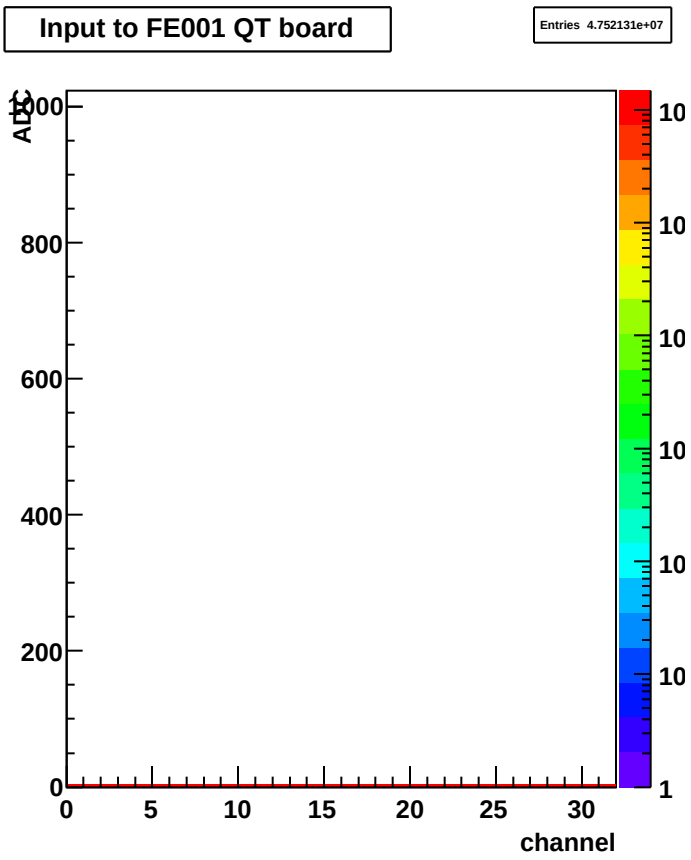

Input to FPD L2 DSM
Entries 4455123
CL bits
9526
3628
133794
60710
23805
76720
46088
20808
1.27453e+06
1.36872e+06
1.4368e+06
SMALL
LARGE-S
LARGE-N

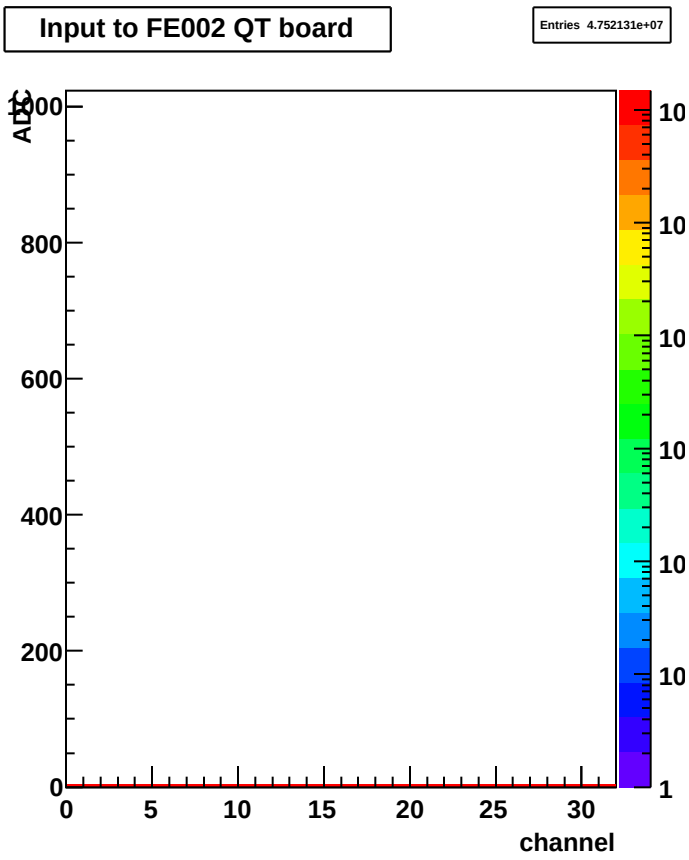

Input to FPD L2 DSM
Entries 117
CL bits - simulated
3
2
25
10
4
13
15
19
5
21
SMALL
LARGE-S
LARGE-N

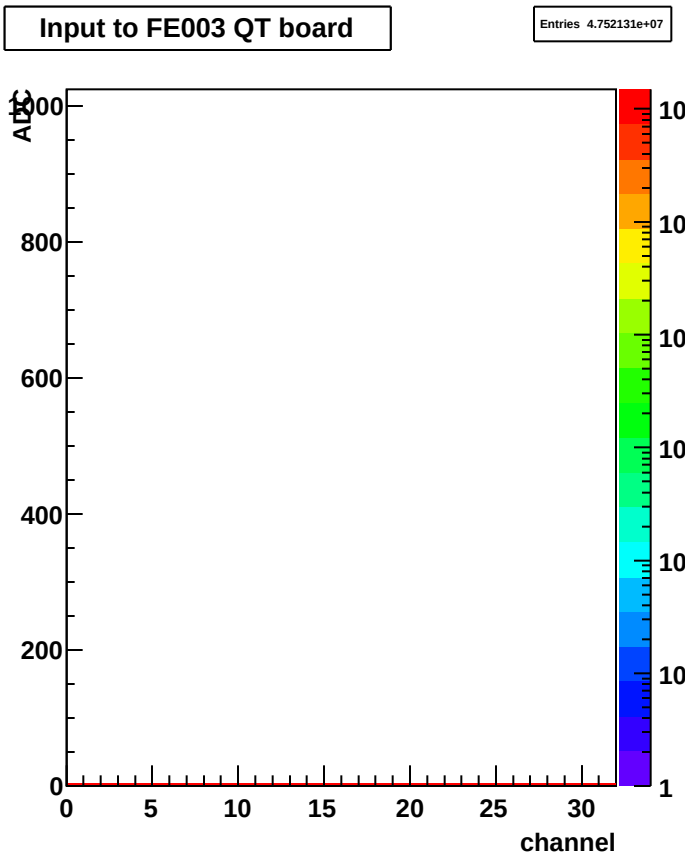

Input to FPD L2 DSM
Entries 4455123
HT bits
19097
90455
30603
39007
90903
43034
20714
1.33603e+06
1.35155e+06
1.43372e+06
SMALL
LARGE-S
LARGE-N

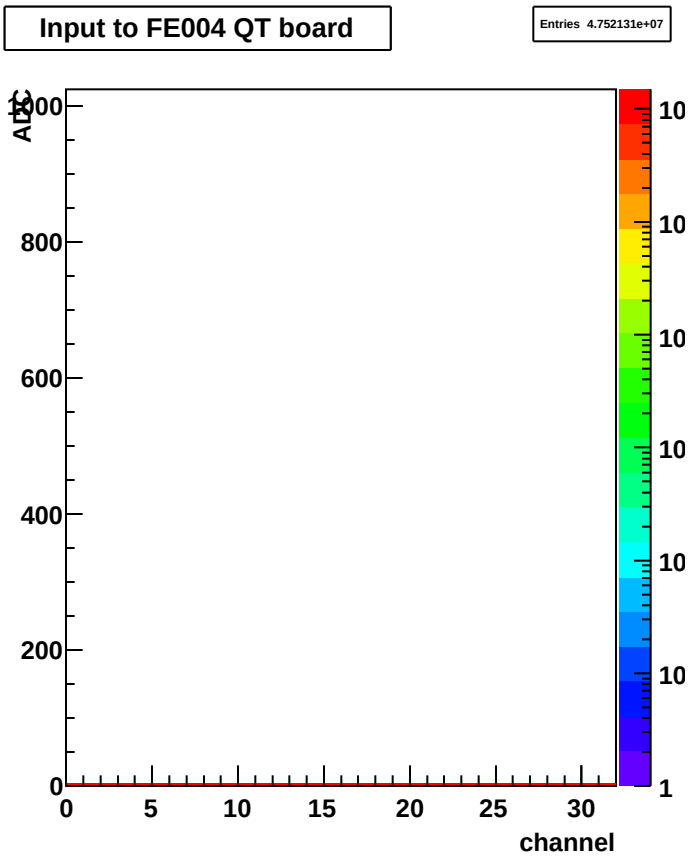

Input to FPD L2 DSM
Entries 912
HT bits - simulated
207
19
9
462
190
16
7
1
1
SMALL
LARGE-S
LARGE-N

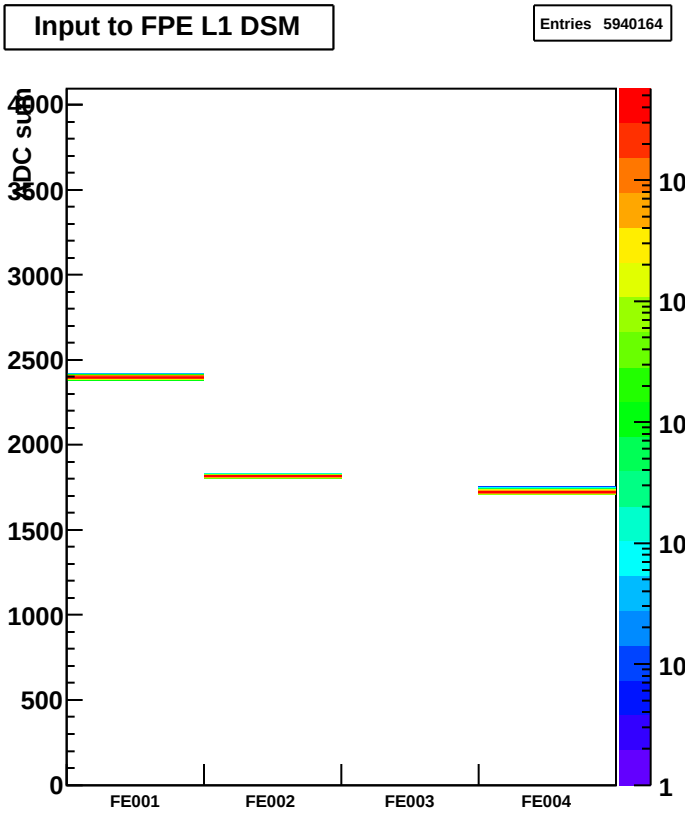

Input to FPD L2 DSM
Entries 8910246
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5
10^6

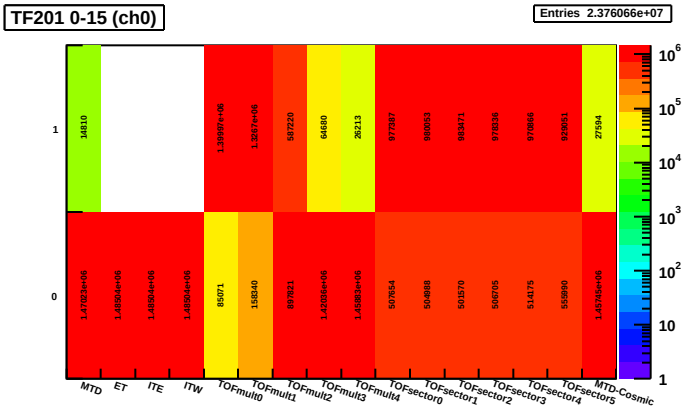

Input to FE001 QT board
Entries 4.752131e+07
ADC
channel

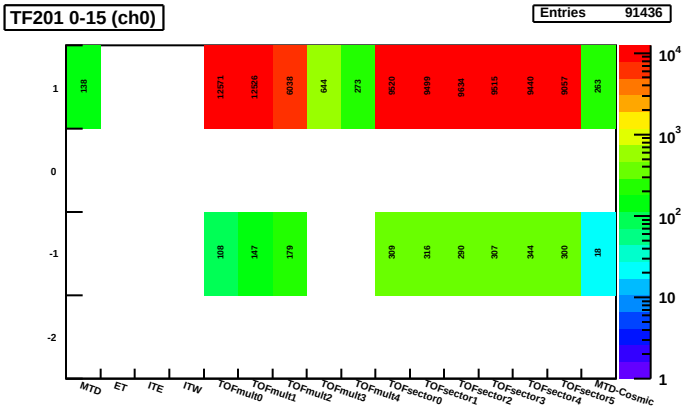

Input to FE002 QT board
Entries 4.752131e+07
ADC
channel

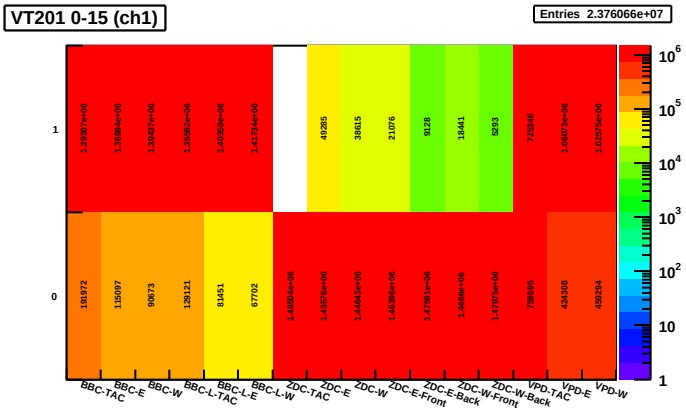

Input to FE003 QT board
Entries 4.752131e+07
ADC
channel


Input to FE004 QT board
Entries 4.752131e+07
ADC
channel


Input to FPE L1 DSM
Entries 5940164
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


TF201 0-15 (ch0)
Entries 2.376066e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 91436
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic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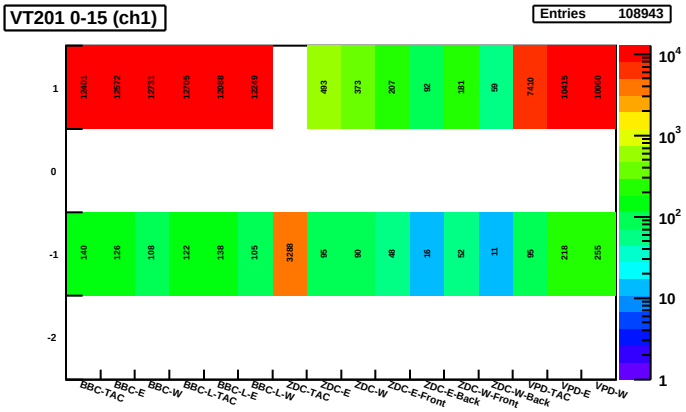
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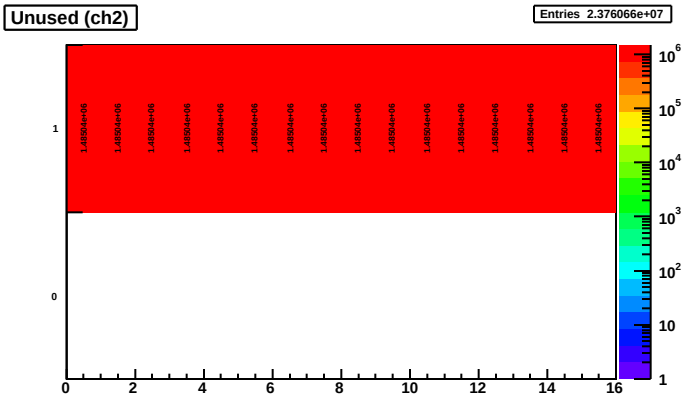
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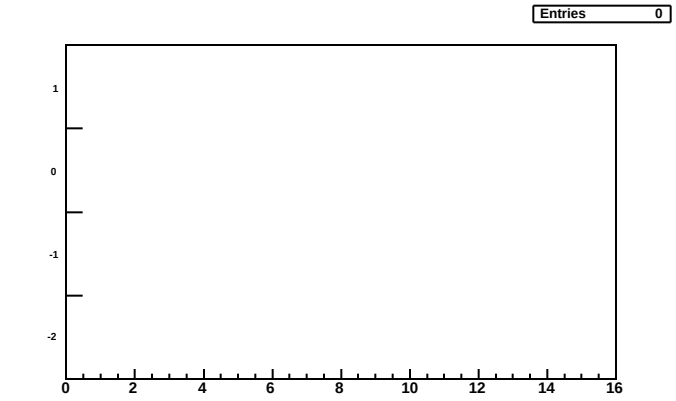
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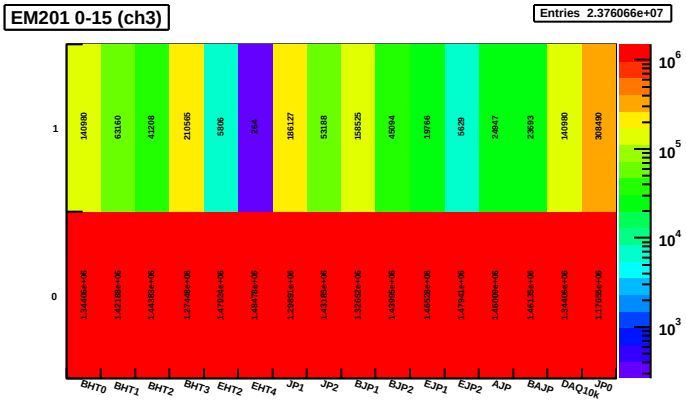
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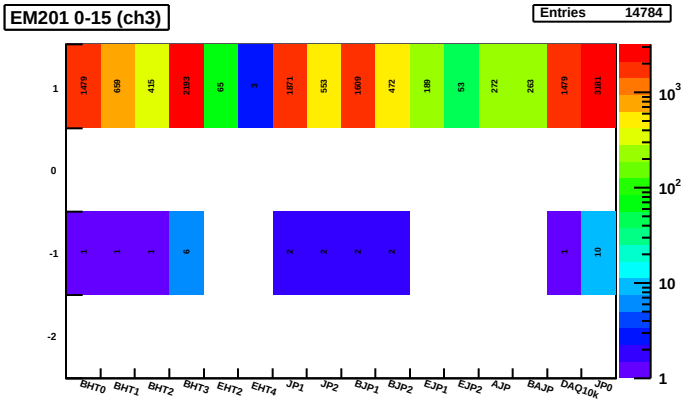
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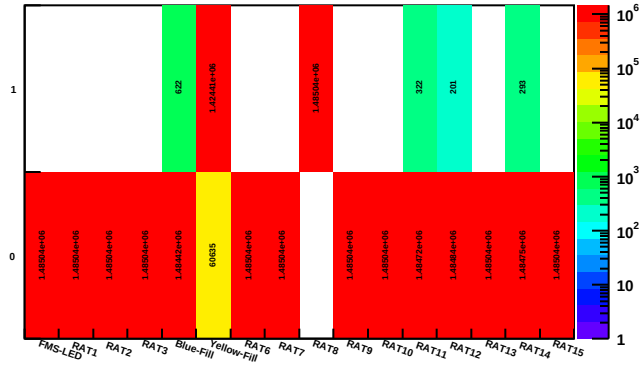
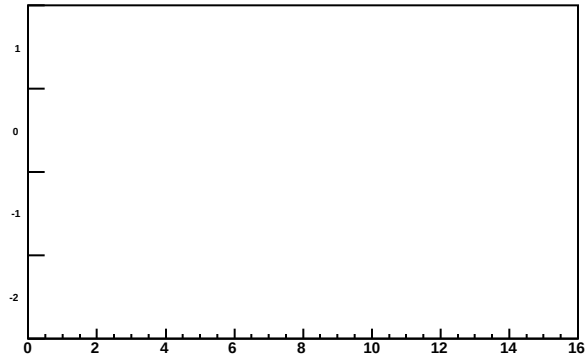
RAT board (ch4)





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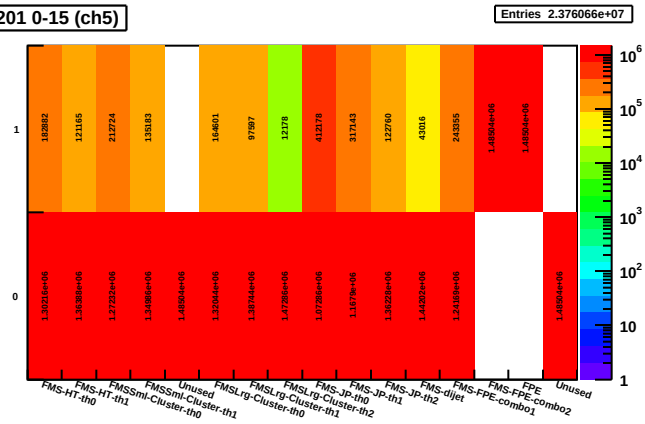

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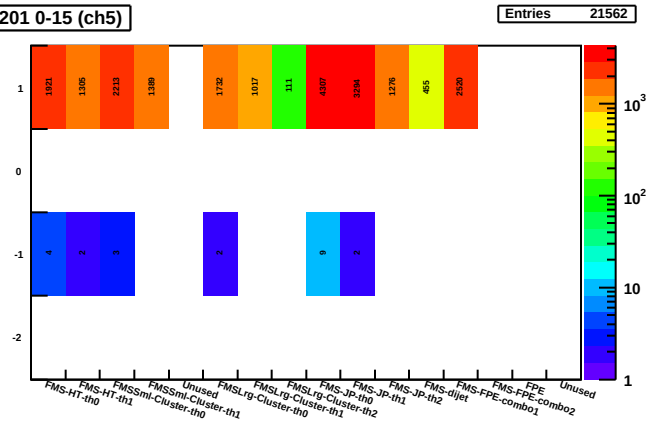
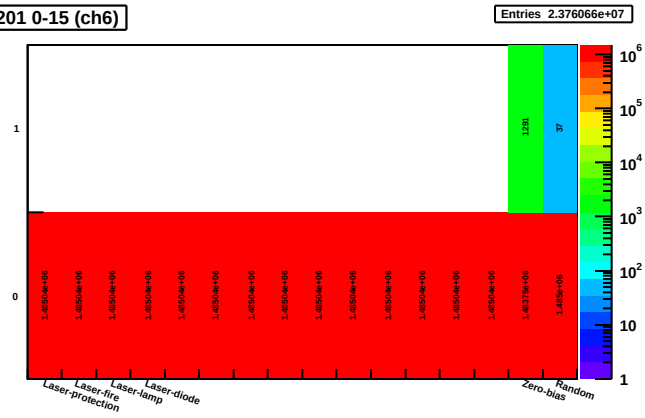
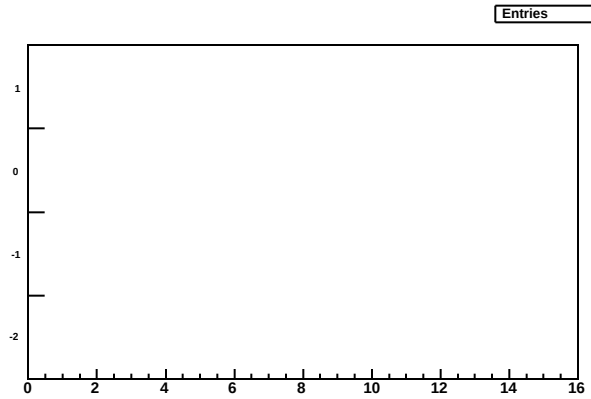
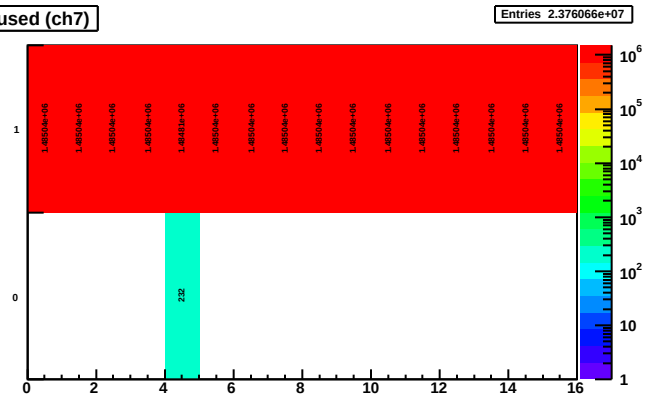
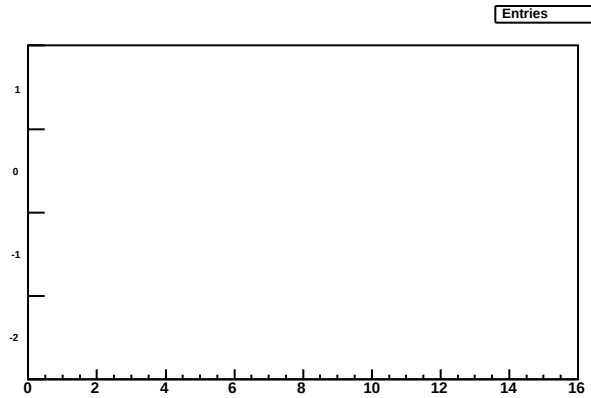


ST201 0-15 (ch6)





Unused (ch7)