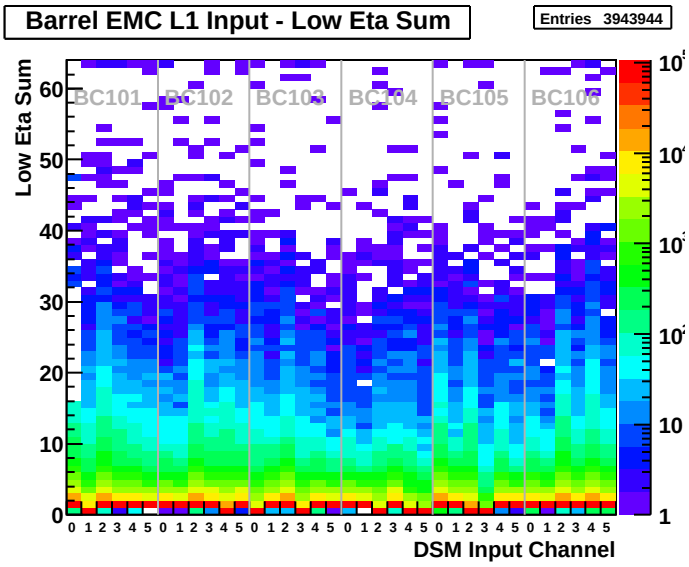
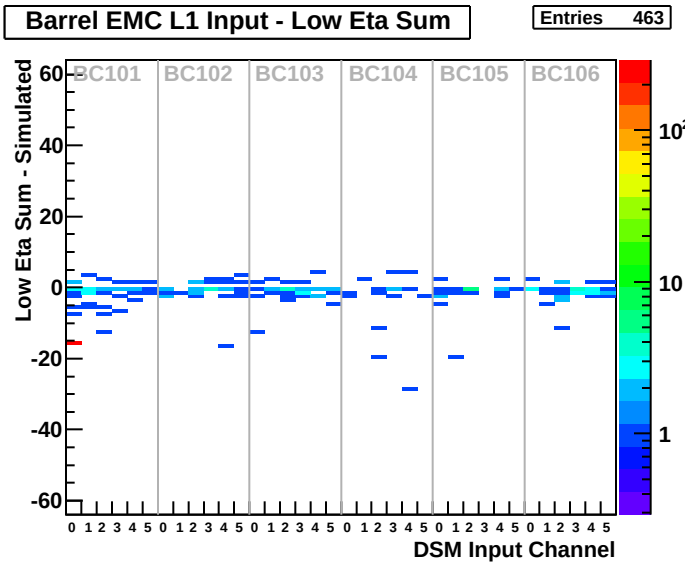
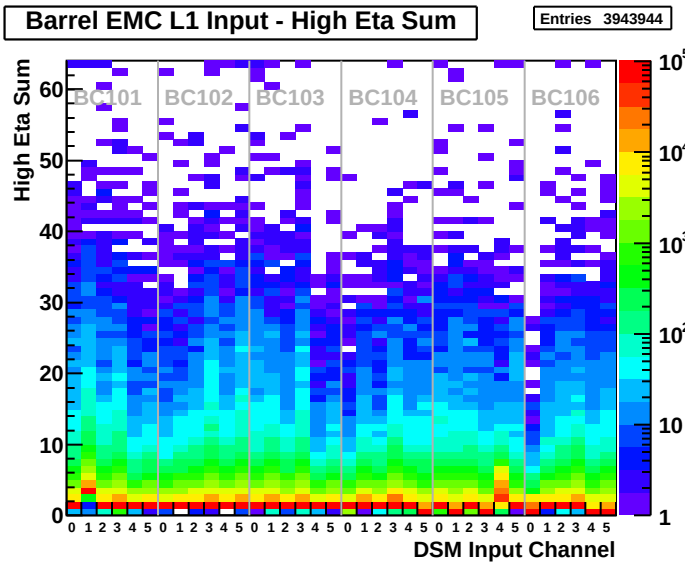
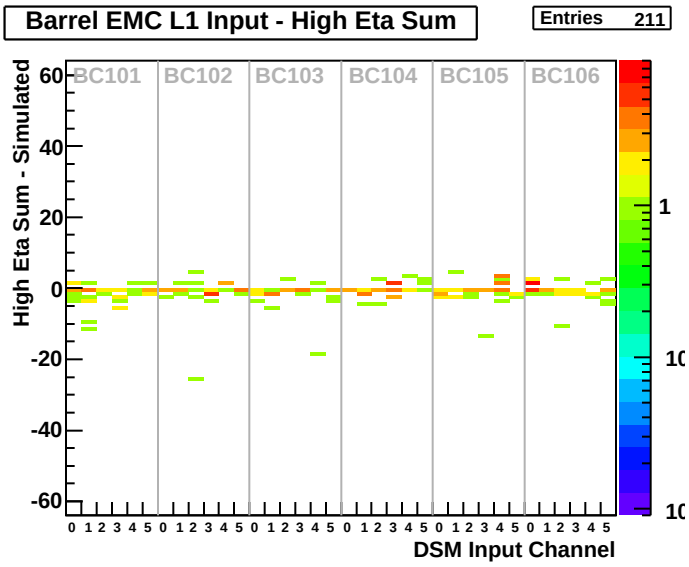
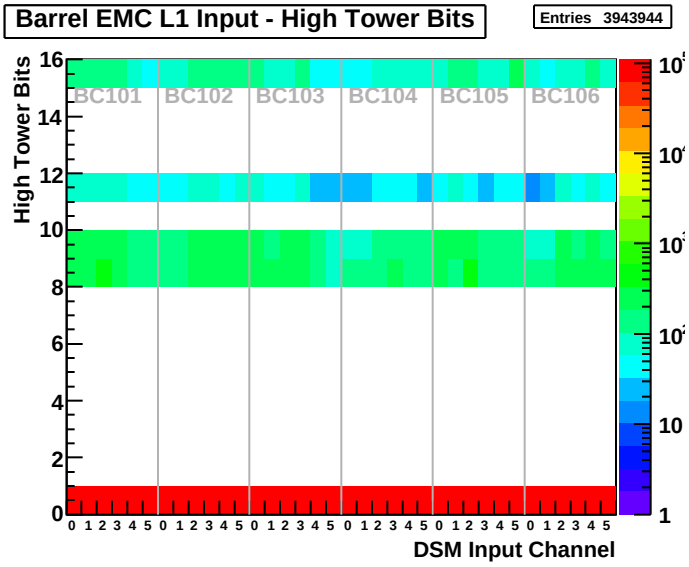
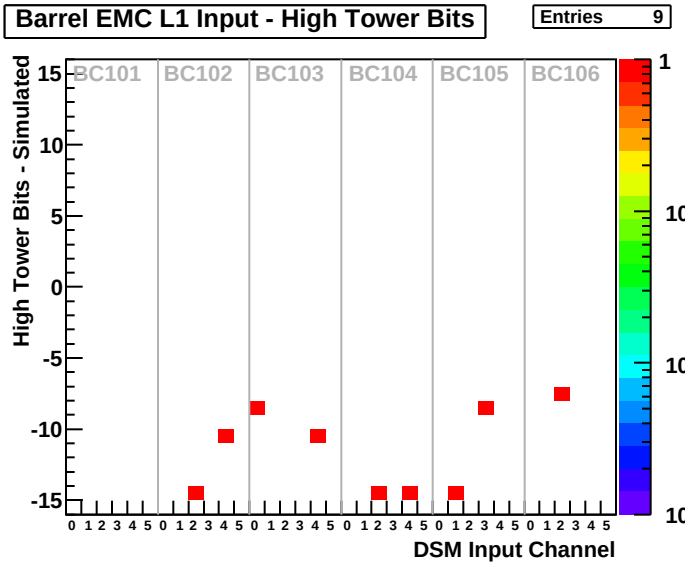

Barrel EMC L1 Input - Low Eta Sum
Entries 3943944
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

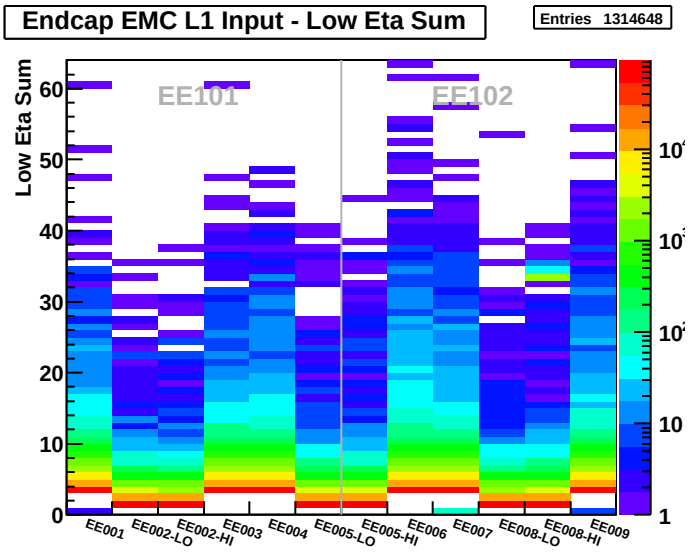

Barrel EMC L1 Input - Low Eta Sum
Entries 463
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

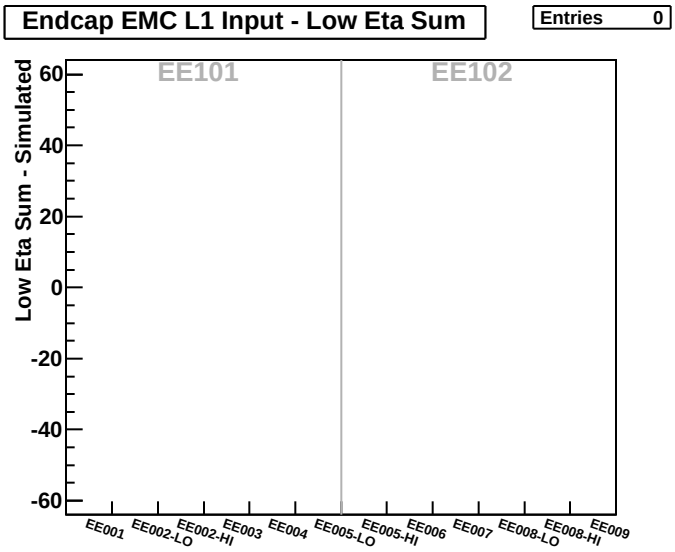

Barrel EMC L1 Input - High Eta Sum
Entries 3943944
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

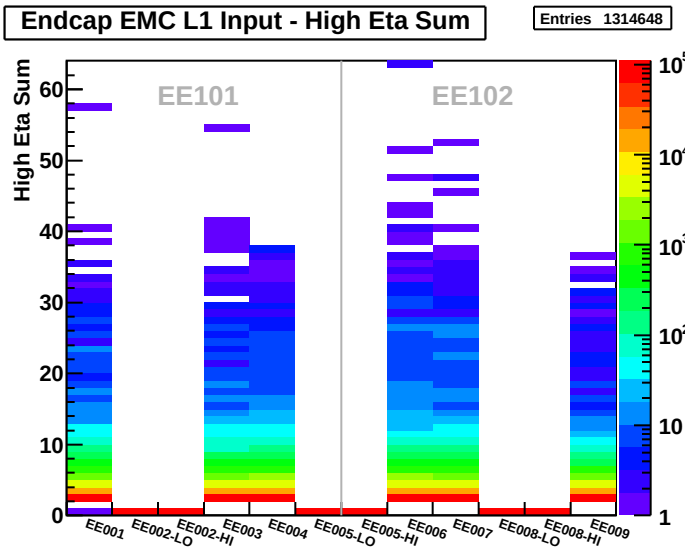

Barrel EMC L1 Input - High Eta Sum
Entries 211
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

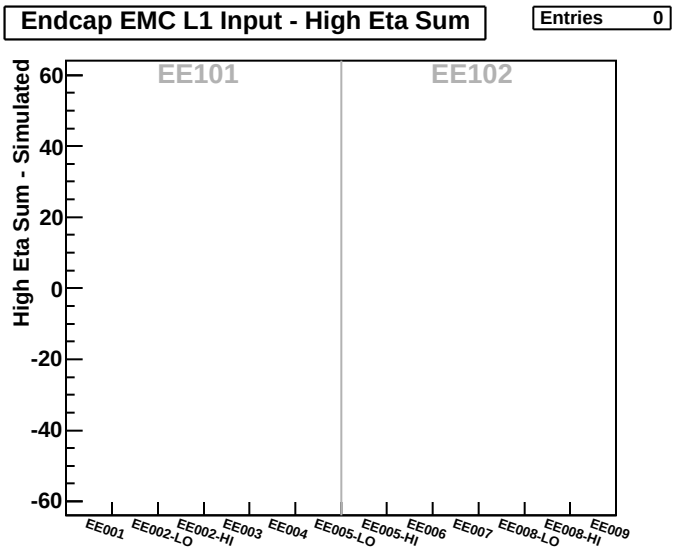

Barrel EMC L1 Input - High Tower Bits
Entries 3943944
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

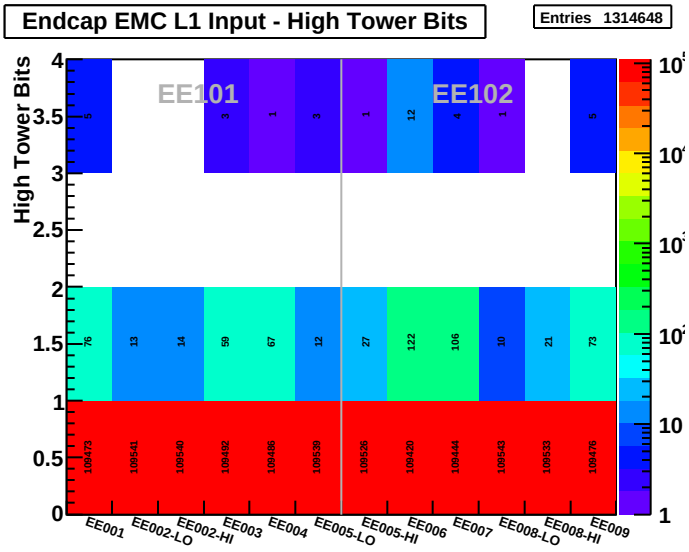

Barrel EMC L1 Input - High Tower Bits
Entries 9
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

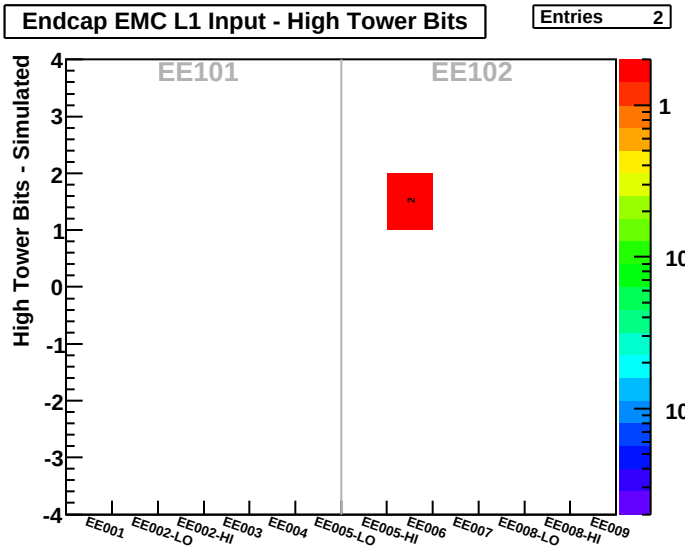

Endcap EMC L1 Input - Low Eta Sum
Entries 1314648
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

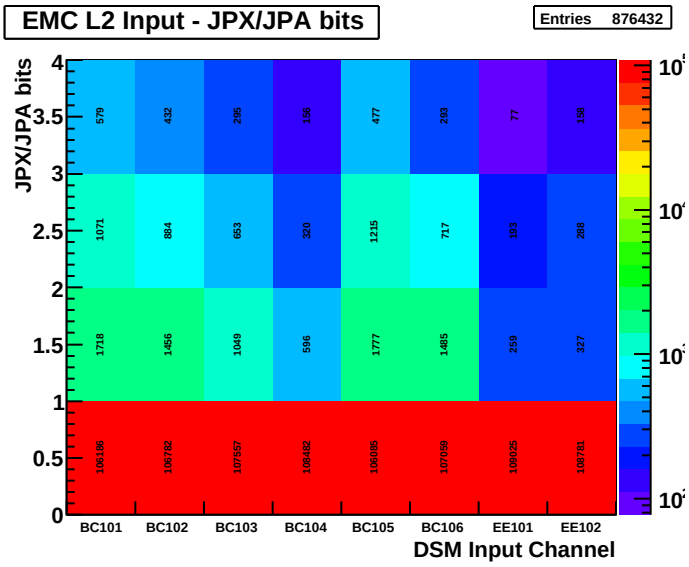

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

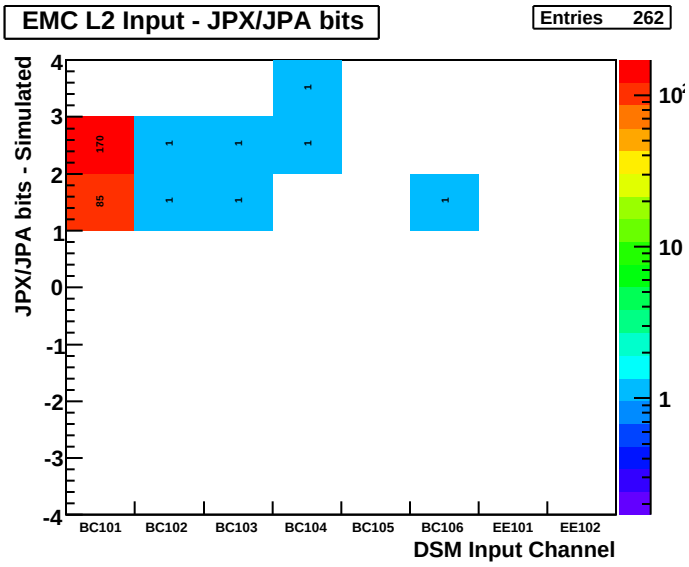

Endcap EMC L1 Input - High Eta Sum
Entries 1314648
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

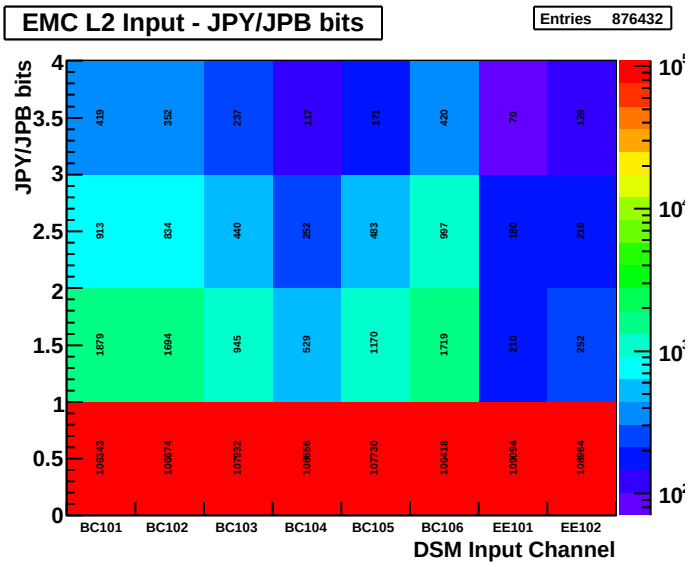

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

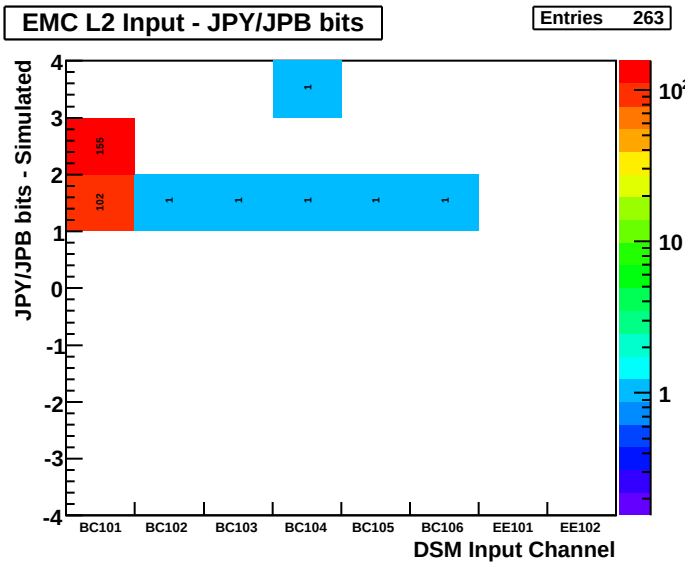

Endcap EMC L1 Input - High Tower Bits
Entries 1314648
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

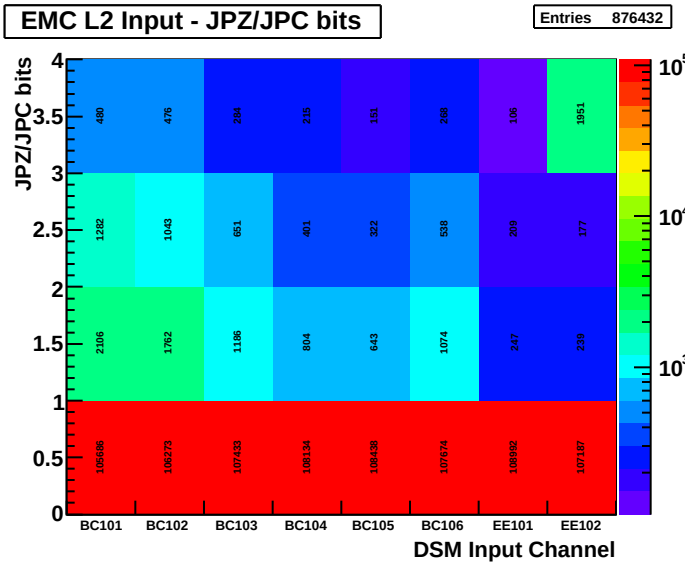

Endcap EMC L1 Input - High Tower Bits
Entries 2
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

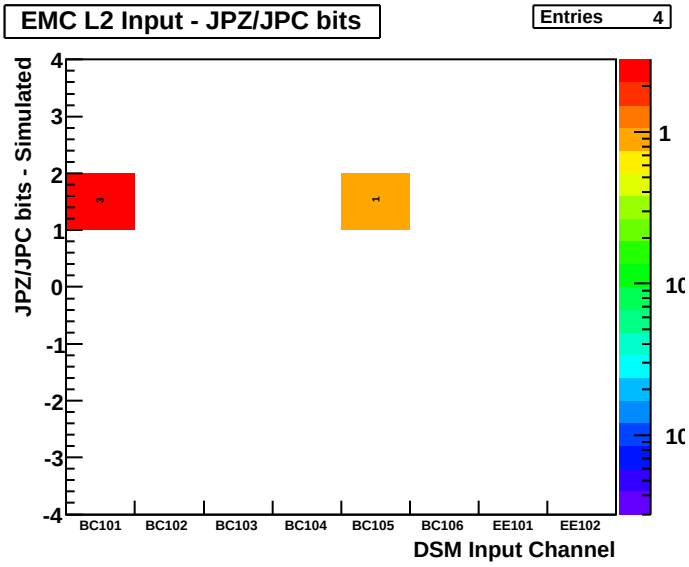

EMC L2 Input - JPX/JPA bits
Entries 876432
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
579 432 295 156 477 293 77 158
1071 884 653 320 1215 717 193 288
1718 1456 1049 596 1777 1485 259 327
106166 106782 107557 108482 106085 107059 109025 108781

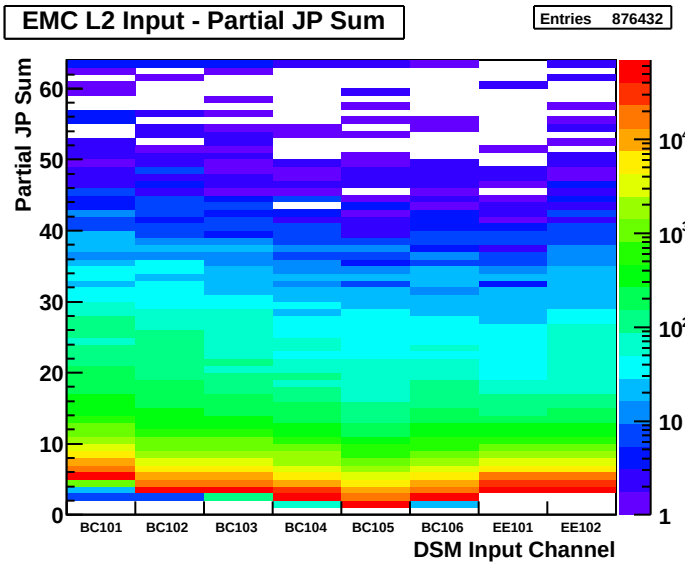

EMC L2 Input - JPX/JPA bits
Entries 262
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
170 1 1 1
85 1 1 1

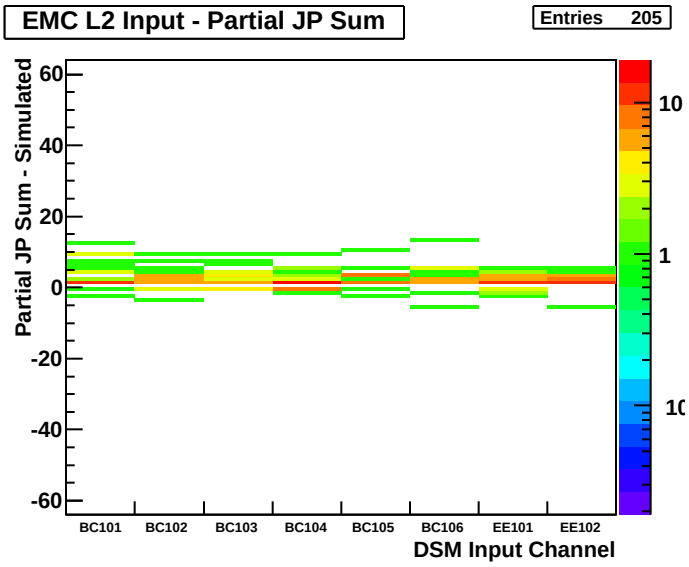

EMC L2 Input - JPY/JPB bits
Entries 876432
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
419 352 237 117 171 420 70 128
913 834 440 252 483 997 180 210
1879 1694 945 529 1170 1719 210 252
106343 106674 107932 108656 107730 106418 109094 108964

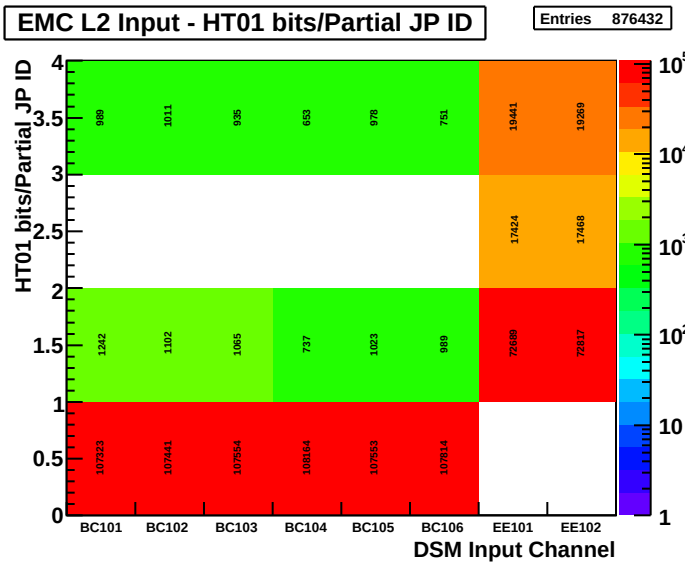

EMC L2 Input - JPY/JPB bits
Entries 263
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
155
102 1 1 1 1 1

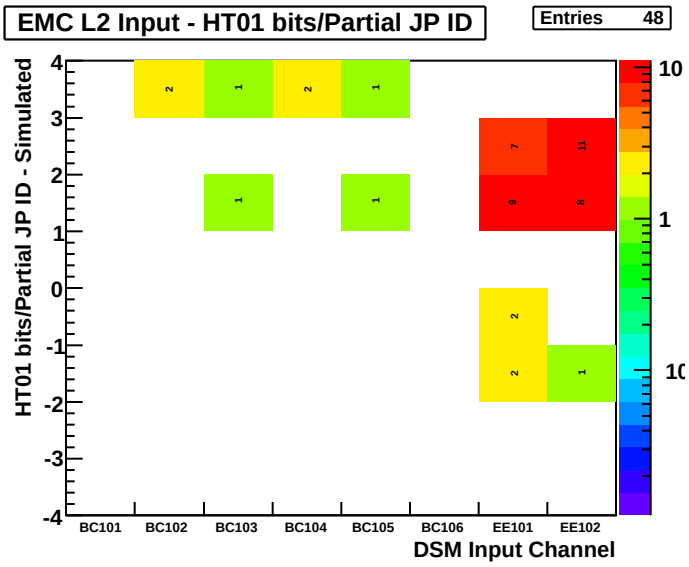

EMC L2 Input - JPZ/JPC bits
Entries 876432
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
480 476 284 215 151 268 106 1951
1282 1043 651 401 322 538 209 177
2106 1762 1186 804 643 1074 247 239
105586 106273 107433 108134 108438 107674 108992 107187

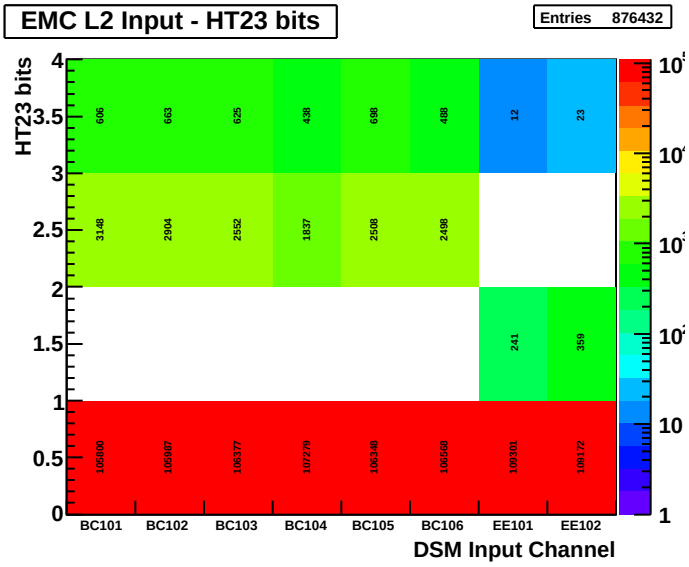

EMC L2 Input - JPZ/JPC bits
Entries 4
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3
1

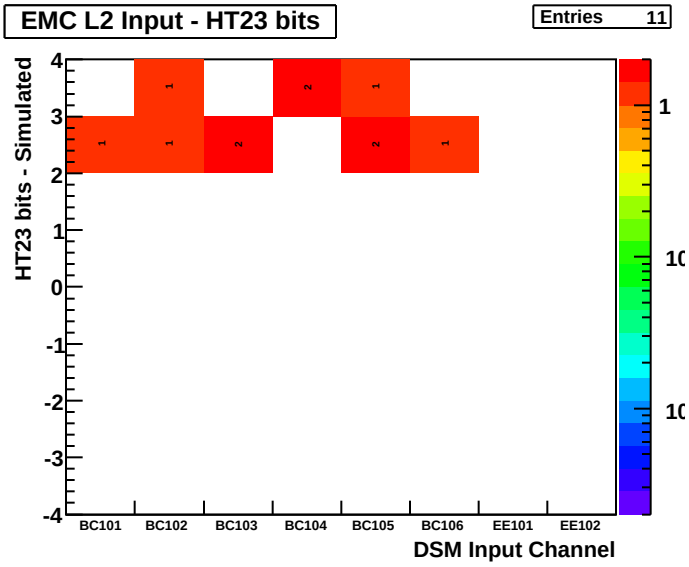

EMC L2 Input - Partial JP Sum
Entries 876432
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

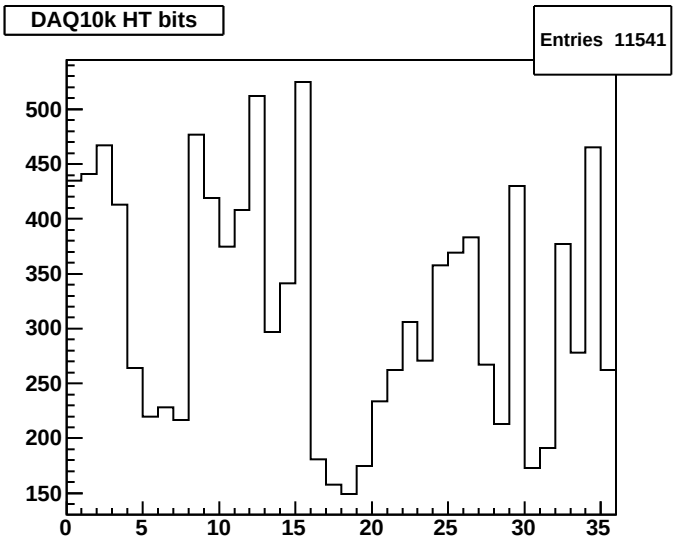

EMC L2 Input - Partial JP Sum
Entries 205
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

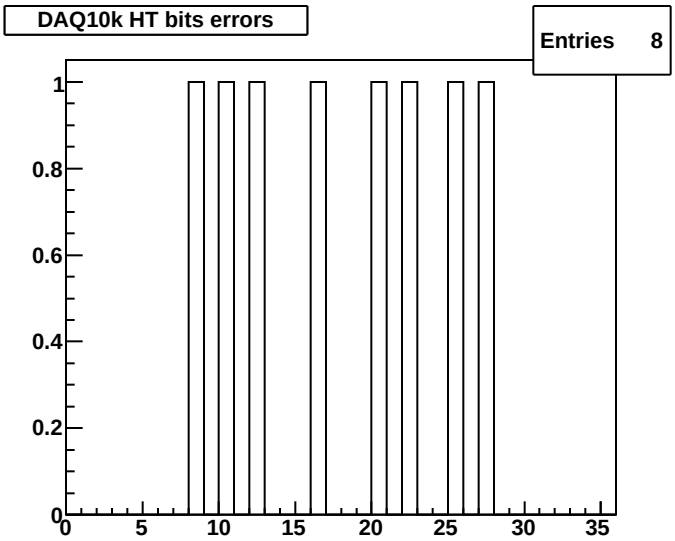

EMC L2 Input - HT01 bits/Partial JP ID
Entries 876432
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

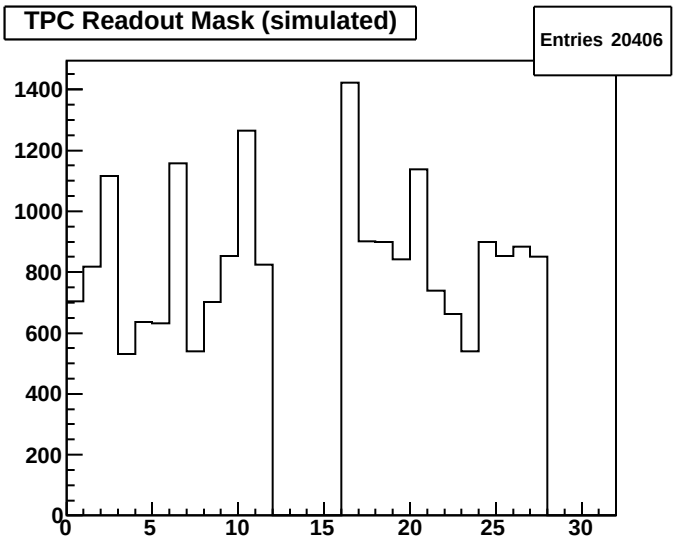

EMC L2 Input - HT01 bits/Partial JP ID
Entries 48
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

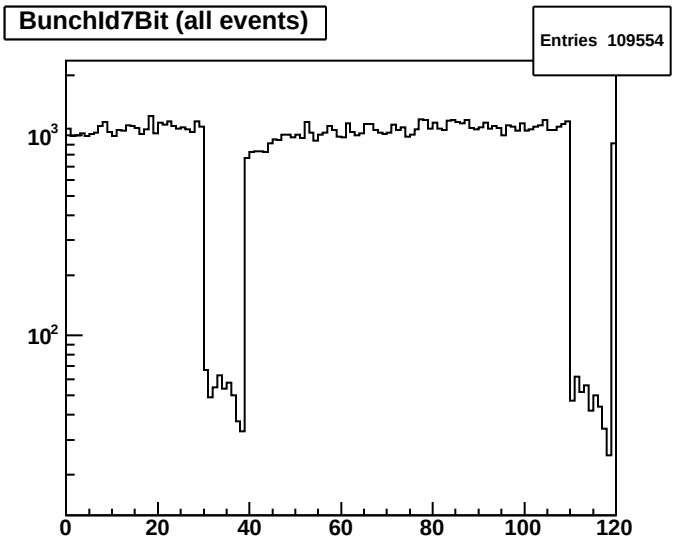

EMC L2 Input - HT23 bits
Entries 876432
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

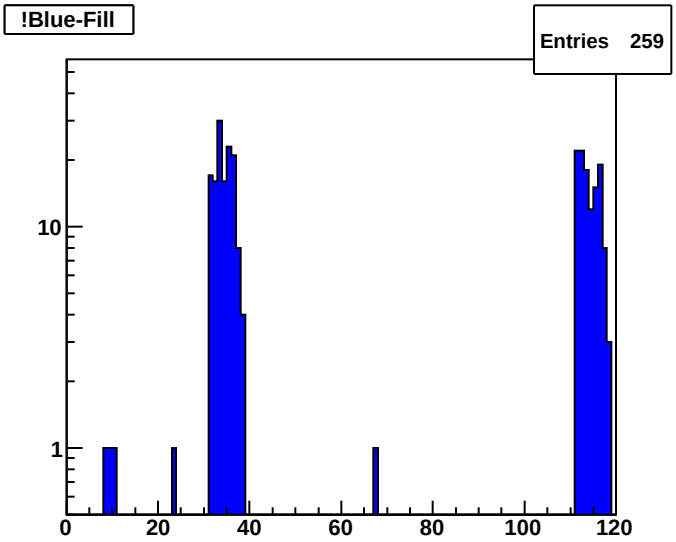

EMC L2 Input - HT23 bits
Entries 11
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

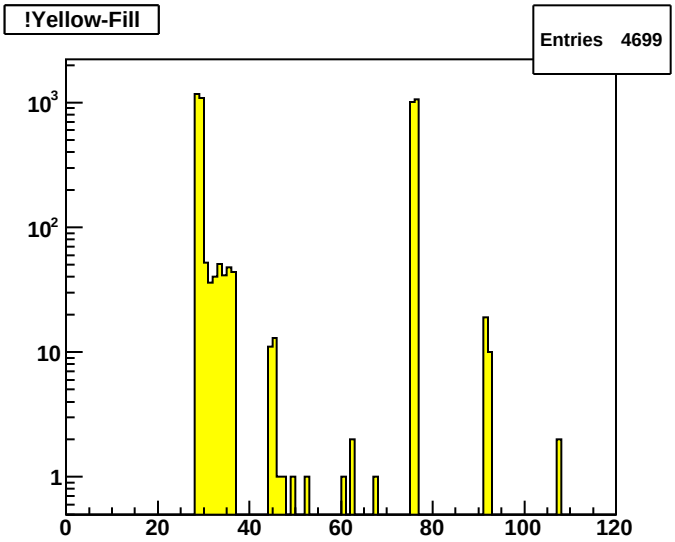

DAQ10k HT bits
Entries 11541

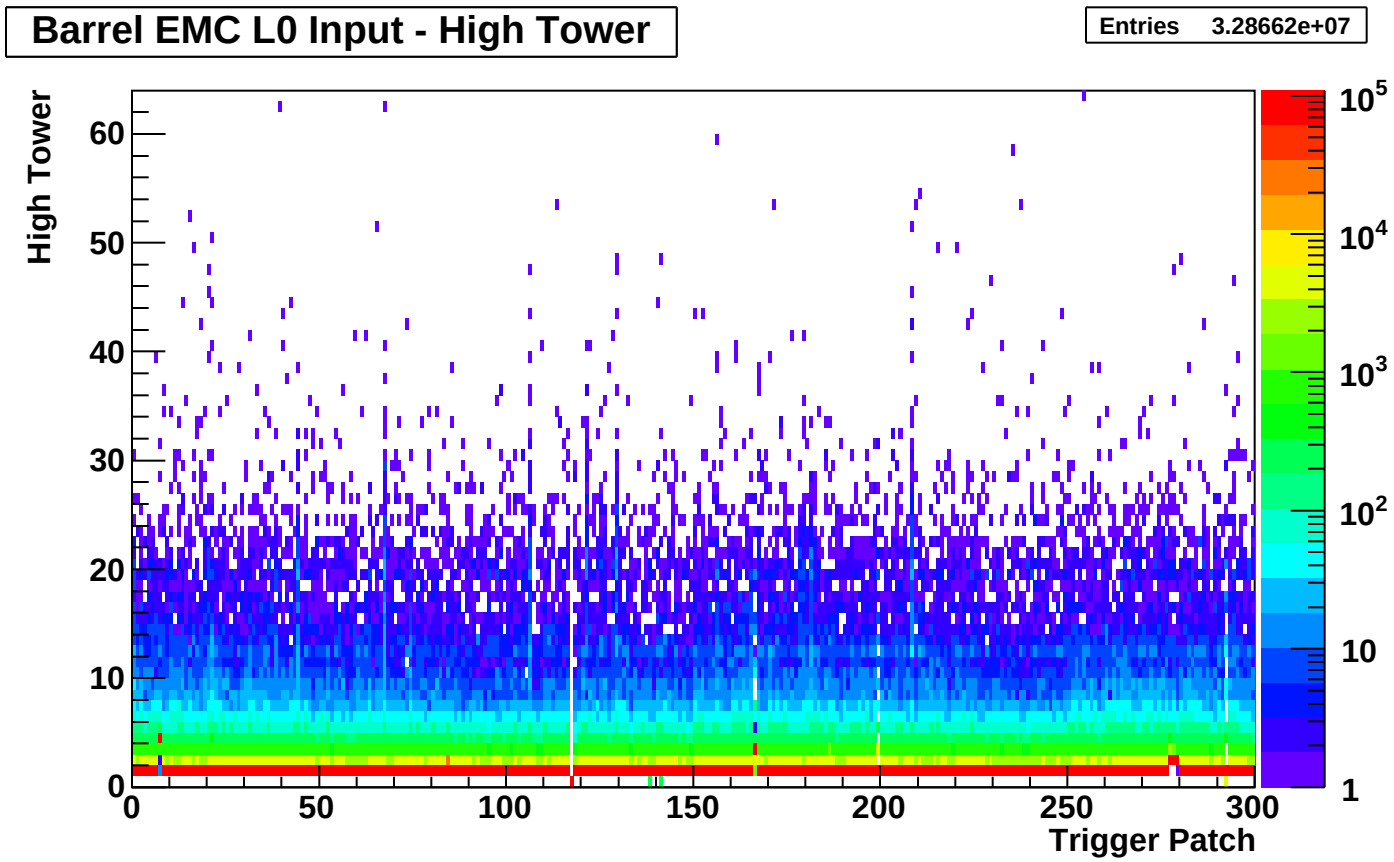

DAQ10k HT bits errors
Entries 8

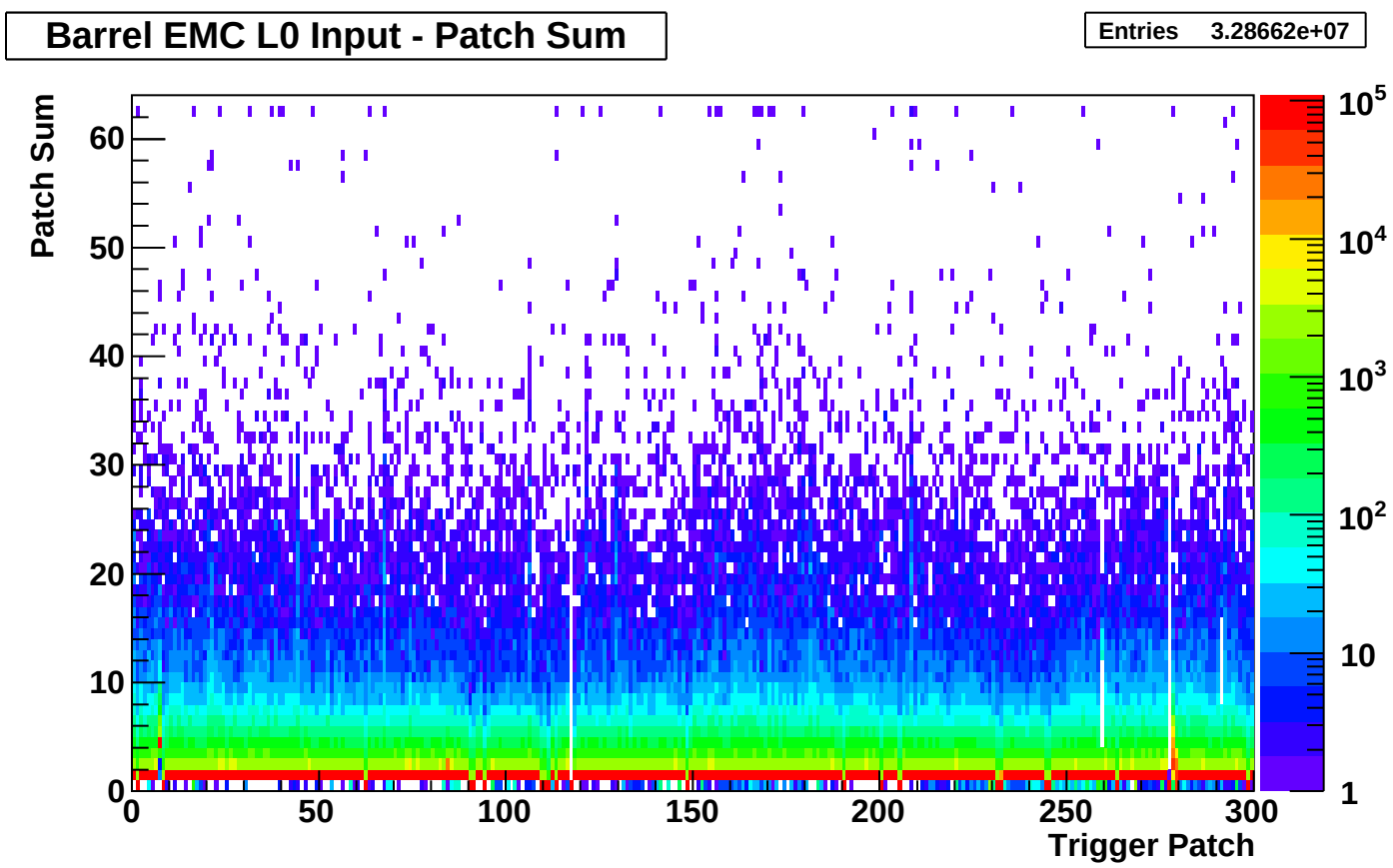

TPC Readout Mask (simulated)
Entries 20406

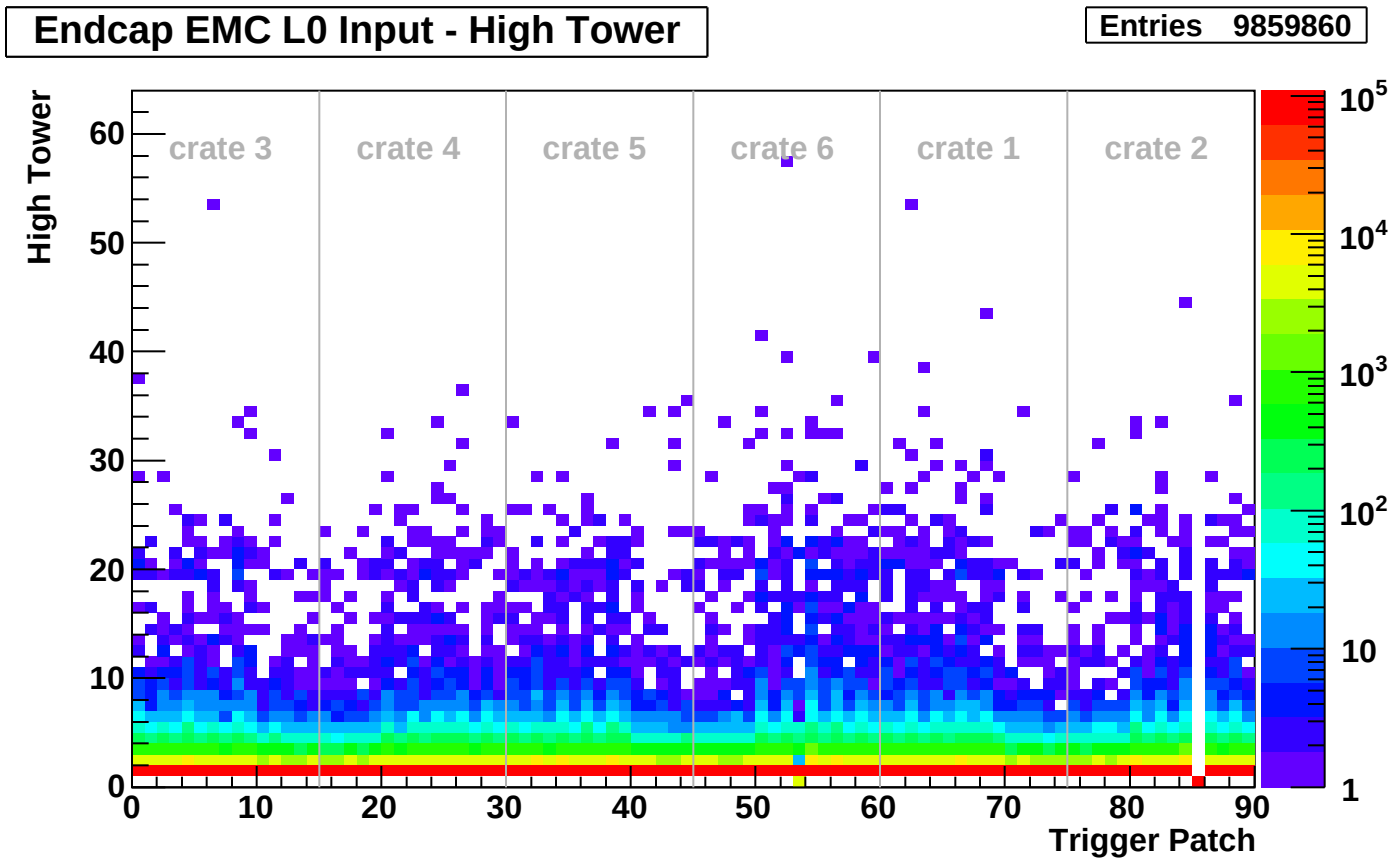

BunchId7Bit (all events)
Entries 109554

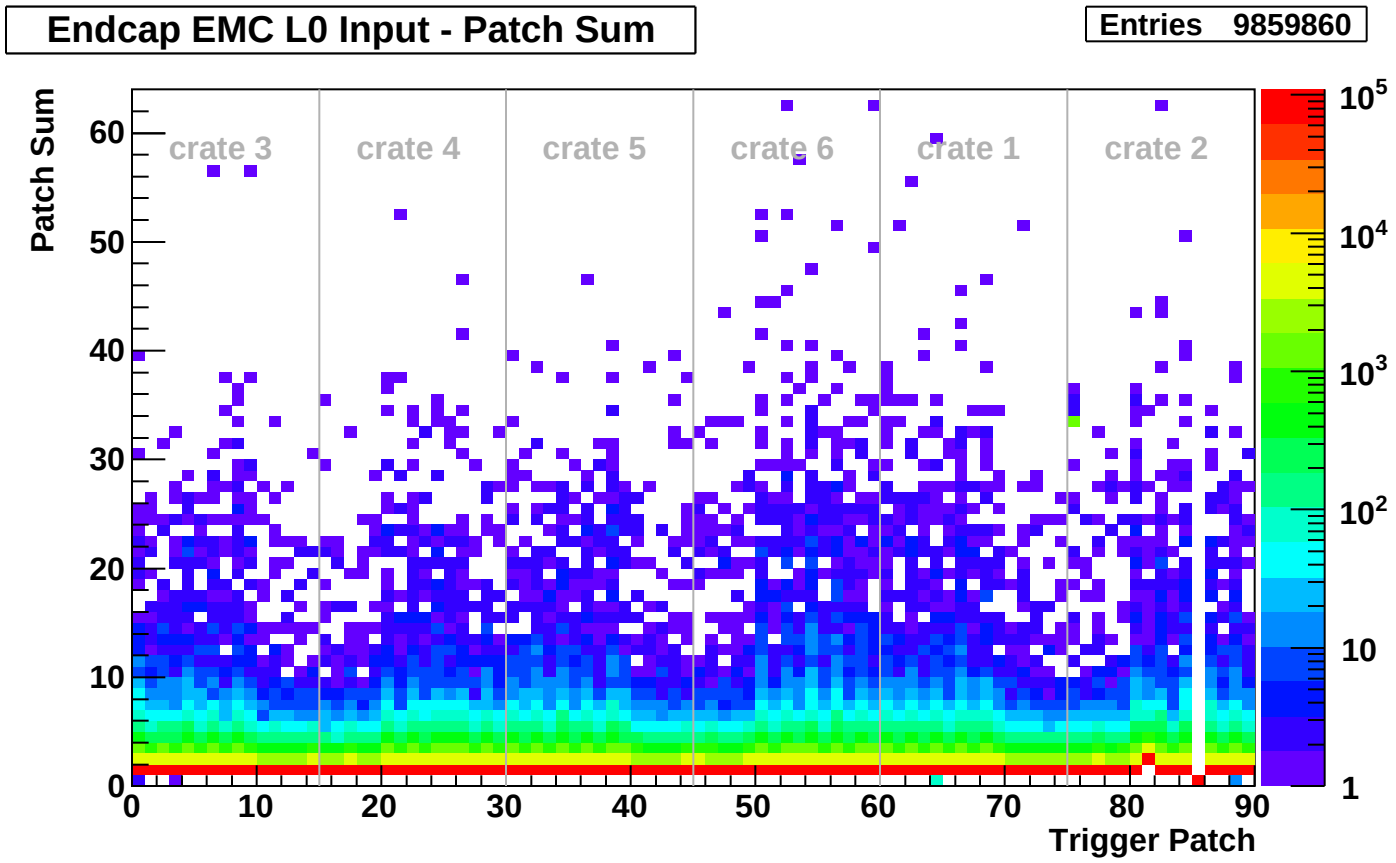

!Blue-Fill
Entries 259

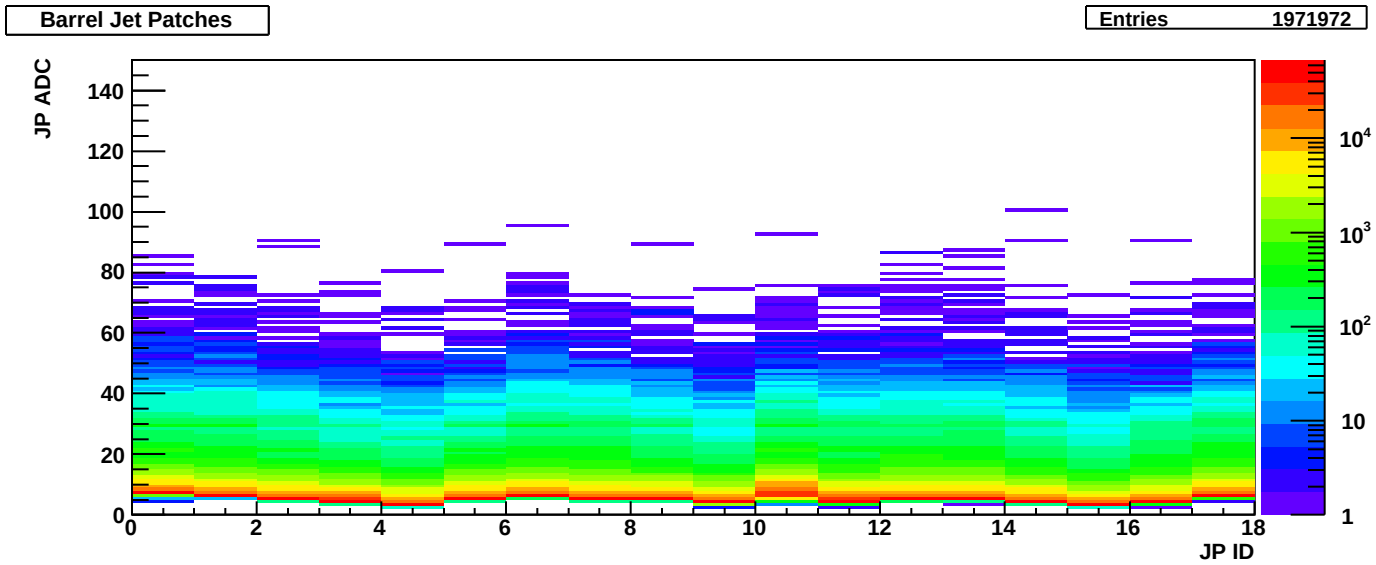

!Yellow-Fill
Entries 4699

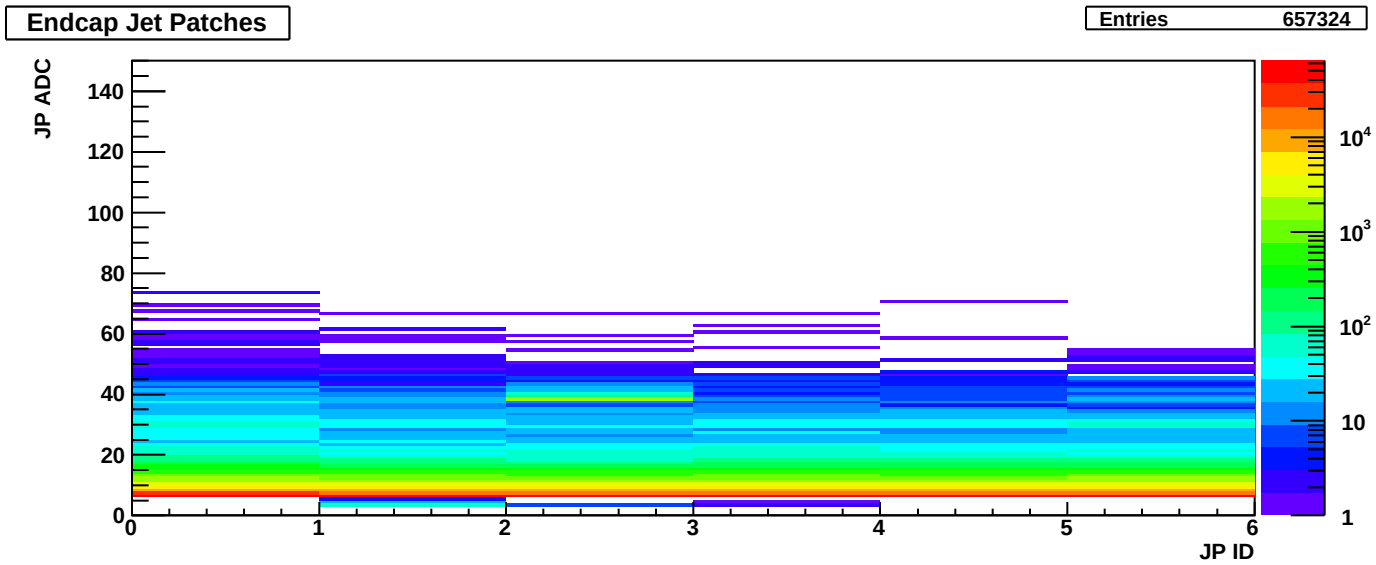

Barrel EMC L0 Input - High Tower
Entries 3.28662e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

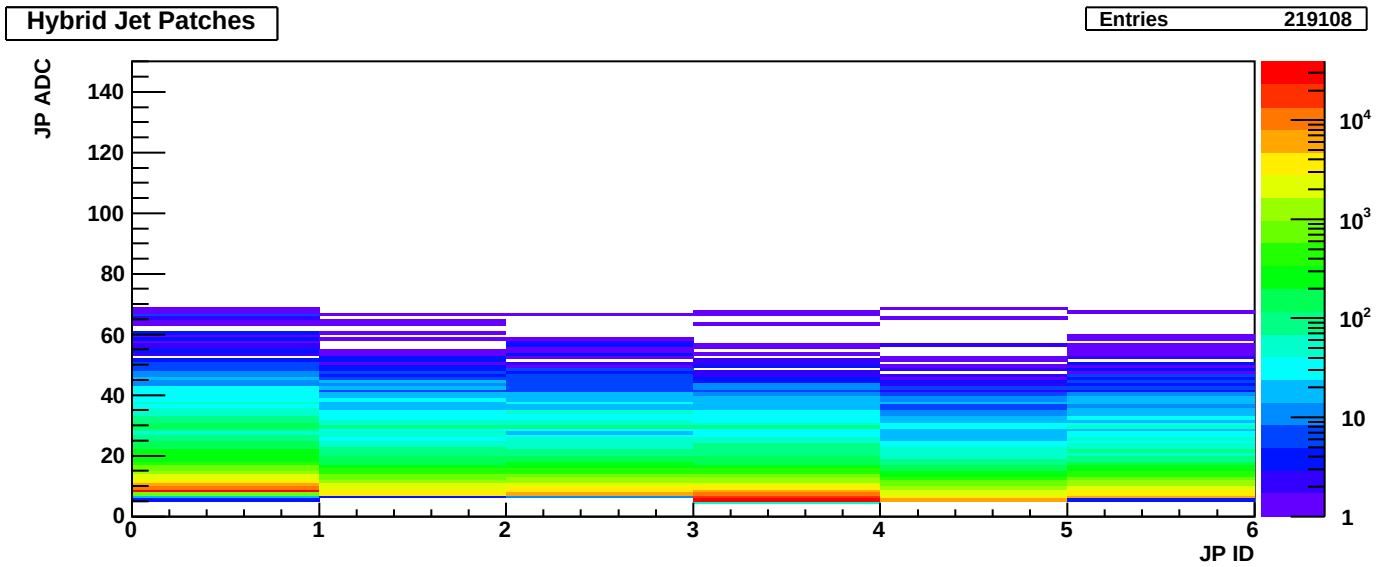

Barrel EMC L0 Input - Patch Sum
Entries 3.28662e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

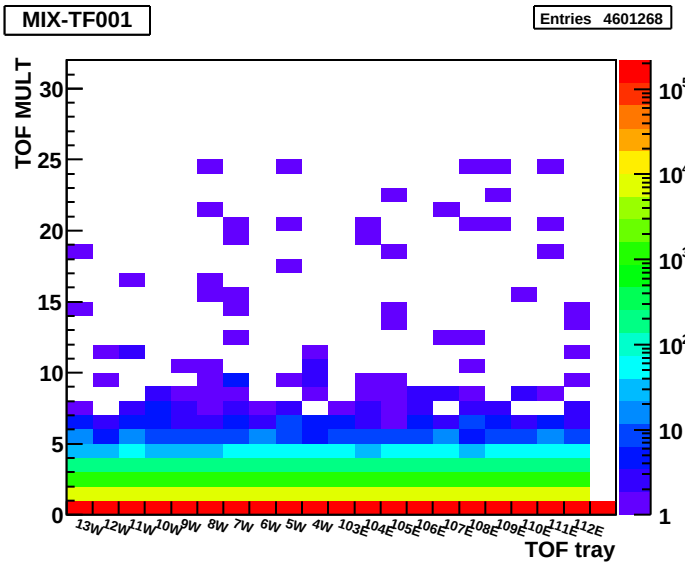

Endcap EMC L0 Input - High Tower
Entries 9859860
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

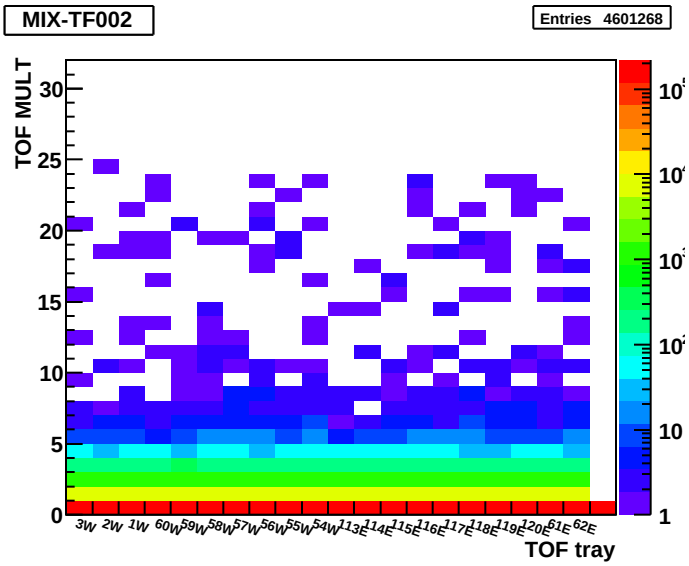

Endcap EMC L0 Input - Patch Sum
Entries 9859860
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

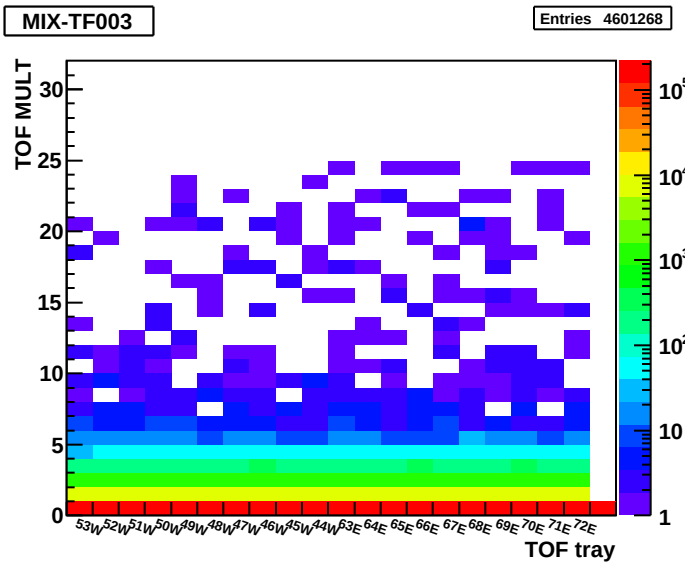

Barrel Jet Patches
Entries 1971972
JP ADC
JP ID

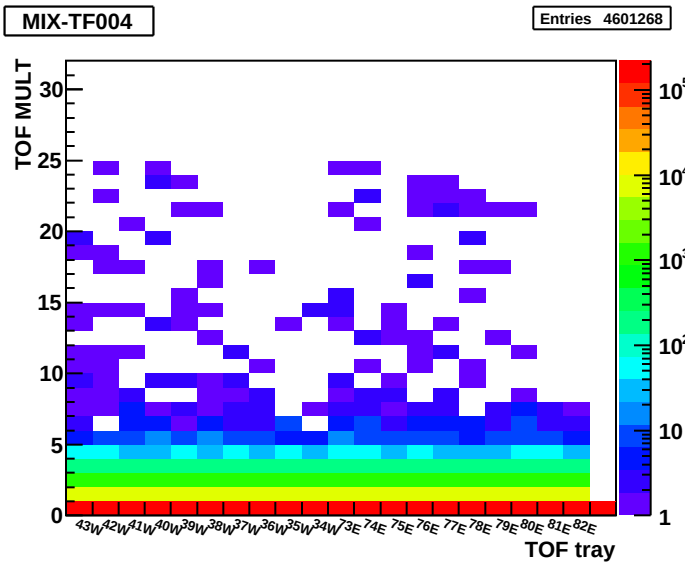

Endcap Jet Patches
Entries 657324
JP ADC
JP ID

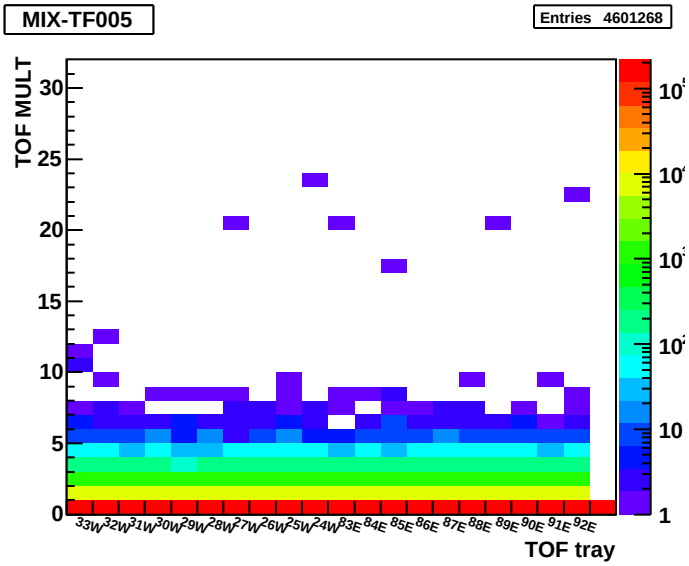

Hybrid Jet Patches
Entries 219108
JP ADC
JP ID

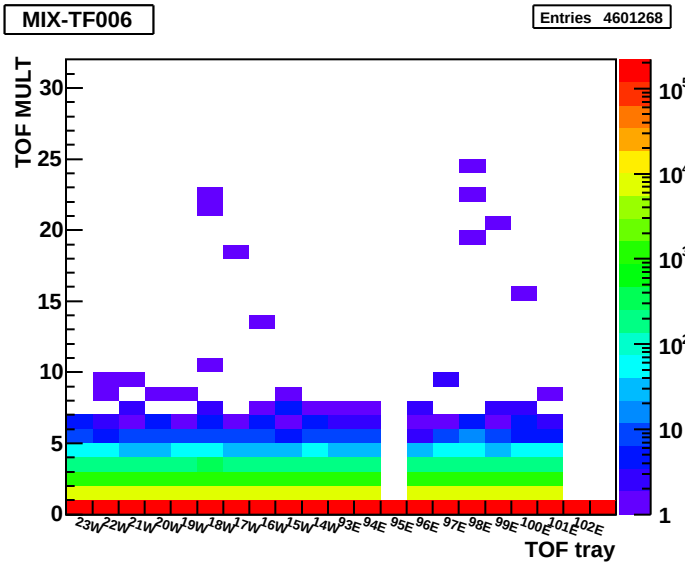

MIX-TF001
Entries 4601268
TOF MULT
TOF tray

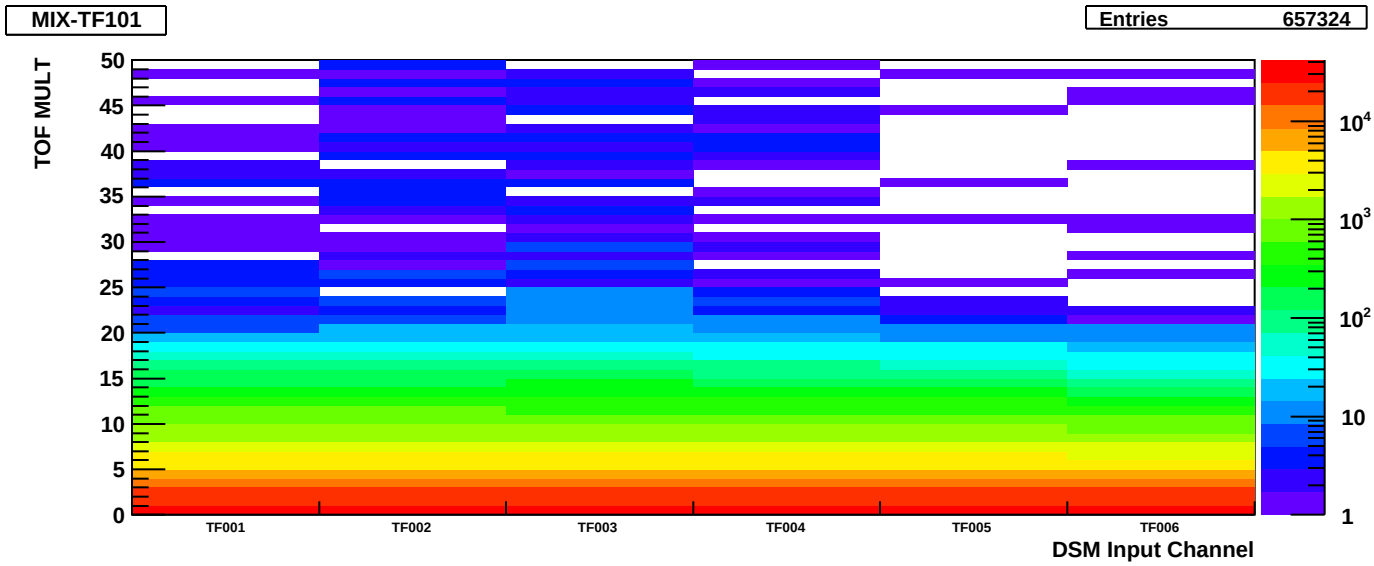

MIX-TF002
Entries 4601268
TOF MULT
TOF tray

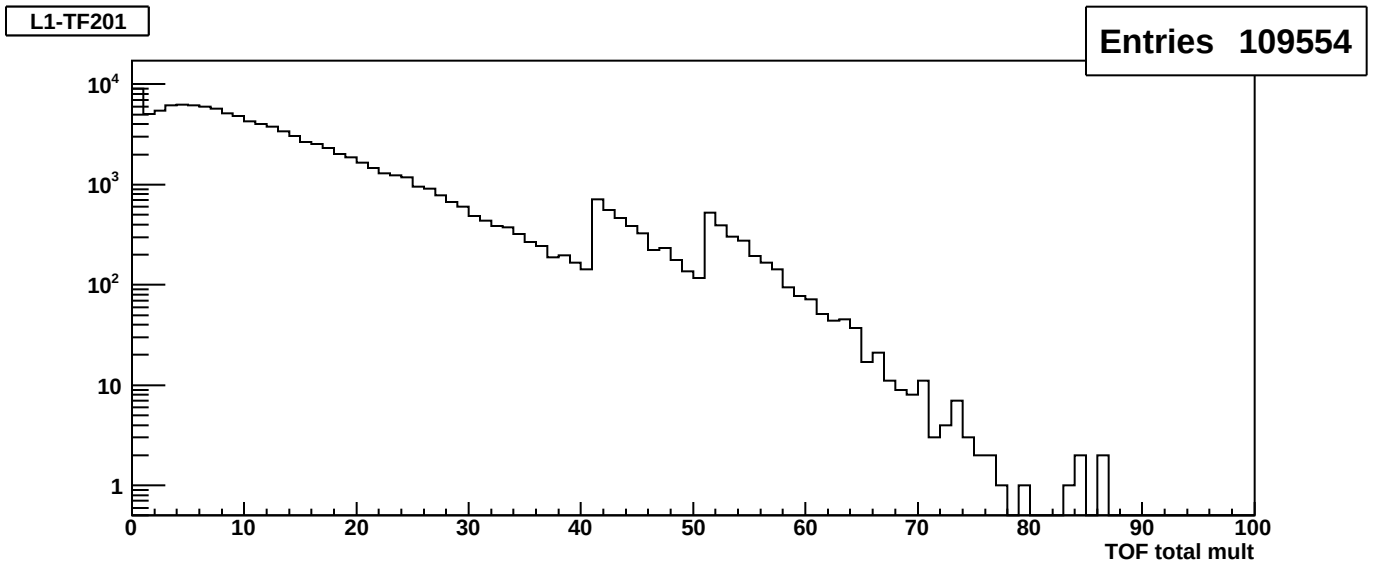

MIX-TF003
Entries 4601268
TOF MULT
TOF tray

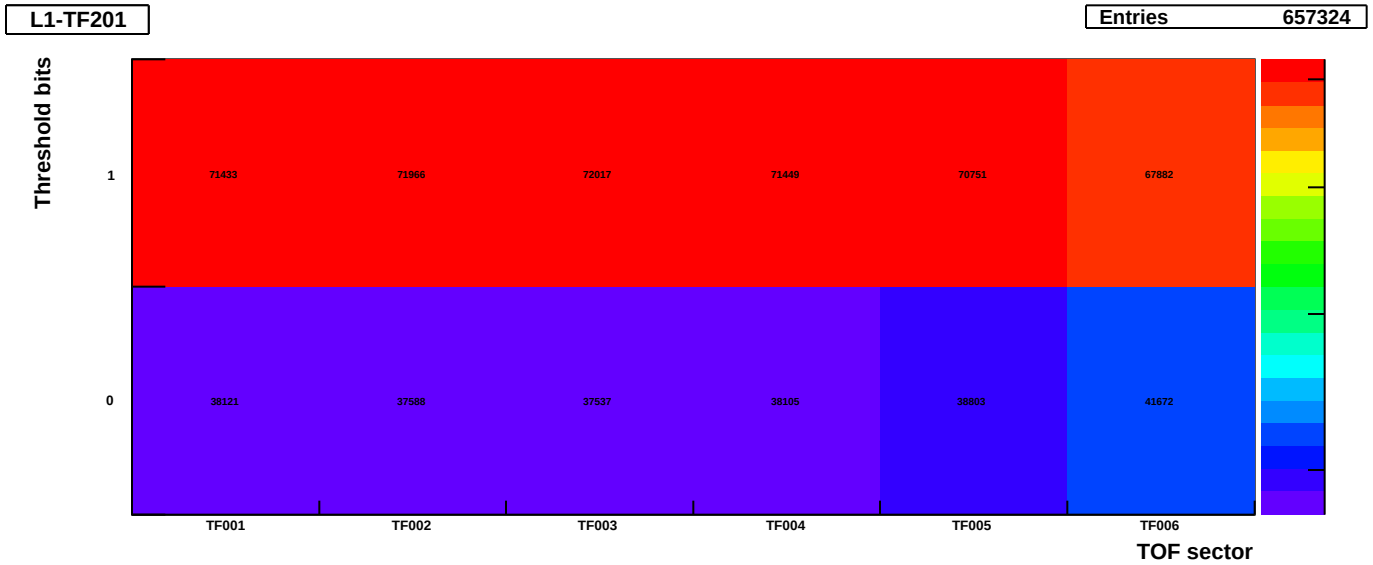

MIX-TF004
Entries 4601268
TOF MULT
TOF tray

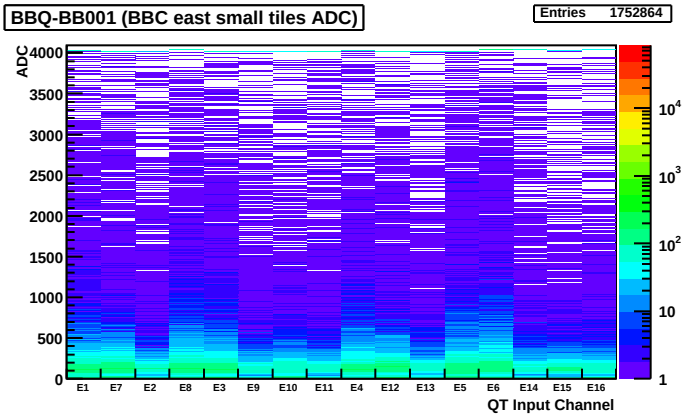

MIX-TF005
Entries 4601268
TOF MULT
TOF tray

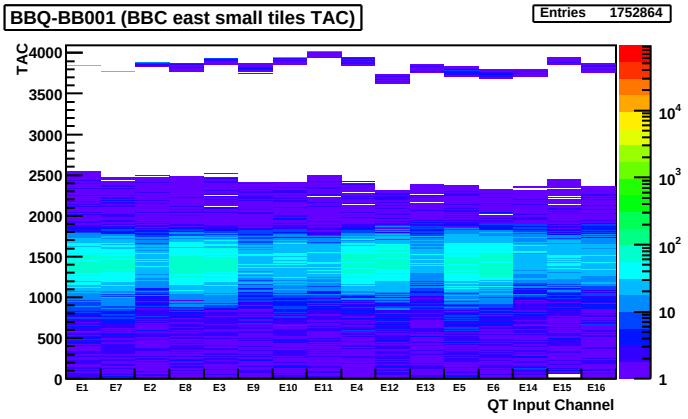

MIX-TF006
Entries 4601268
TOF MULT
TOF tray

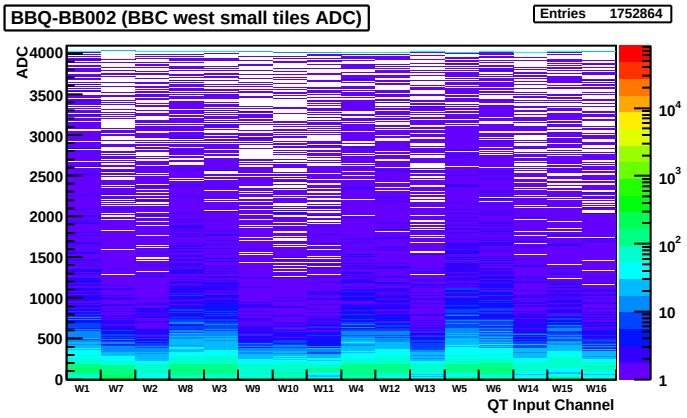

MIX-TF101
Entries 657324
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

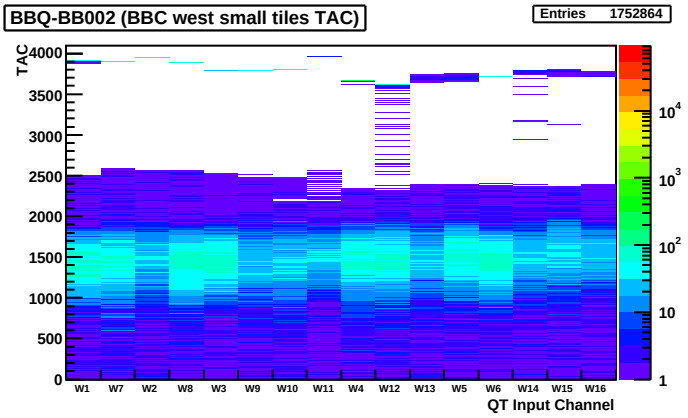

L1-TF201
Entries 109554
TOF total mult

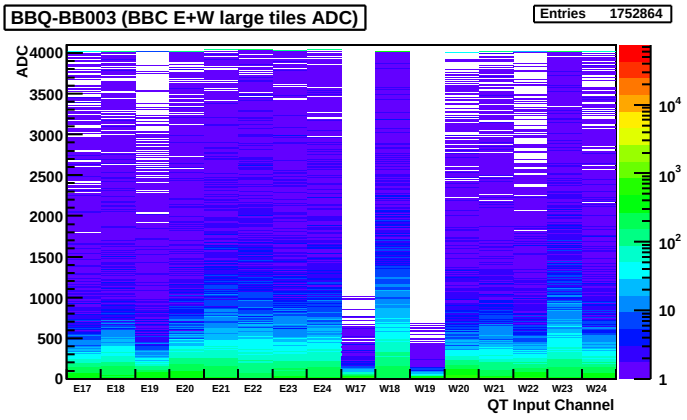

L1-TF201
Entries 657324
Threshold bits
71433
71966
72017
71449
70751
67882
38121
37588
37537
38105
38803
41672
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

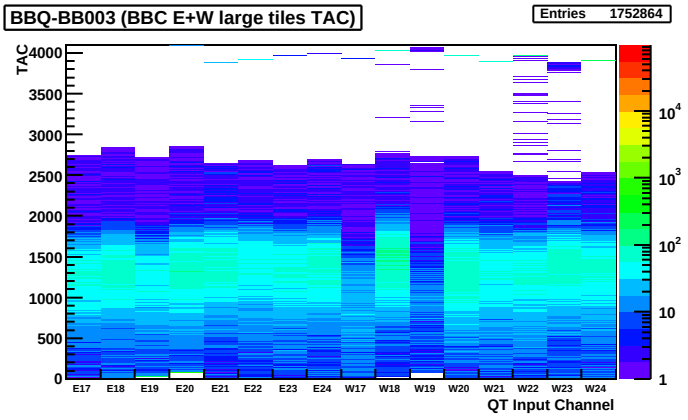

BBQ-BB001 (BBC east small tiles ADC)
Entries 1752864
ADC
QT Input Channel

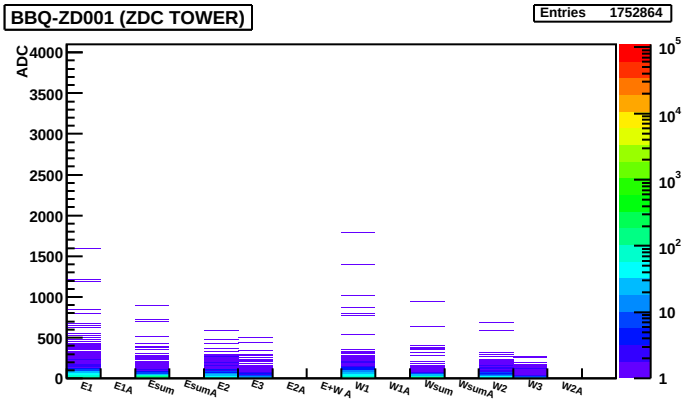

BBQ-BB001 (BBC east small tiles TAC)
Entries 1752864
TAC
QT Input Channel

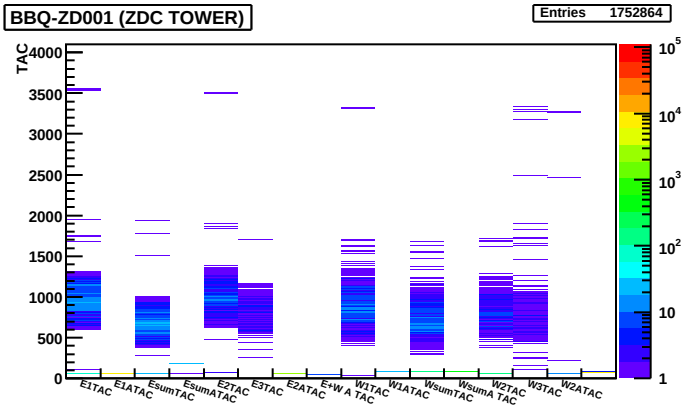

BBQ-BB002 (BBC west small tiles ADC)
Entries 1752864
ADC
QT Input Channel

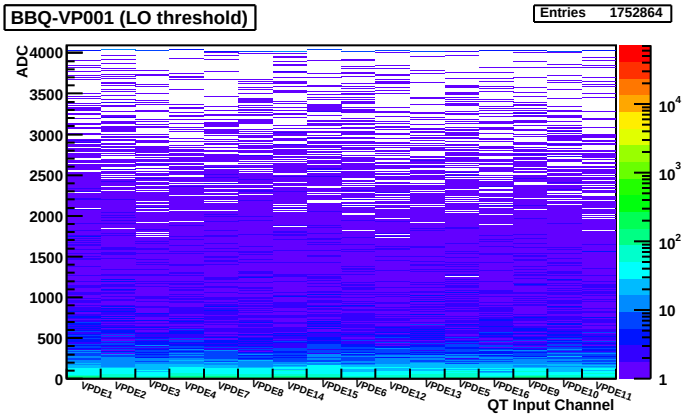

BBQ-BB002 (BBC west small tiles TAC)
Entries 1752864
TAC
QT Input Channel

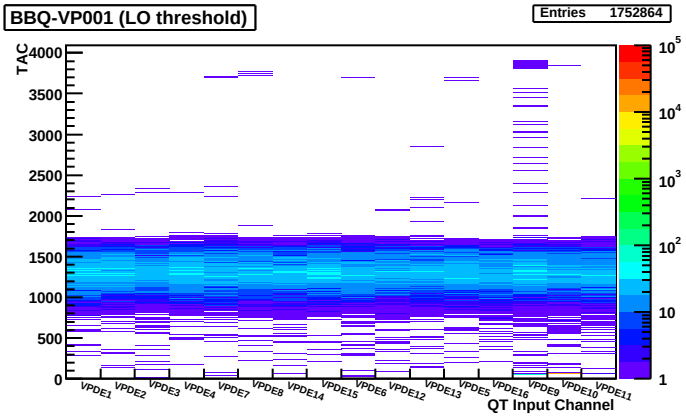

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1752864
ADC
QT Input Channel

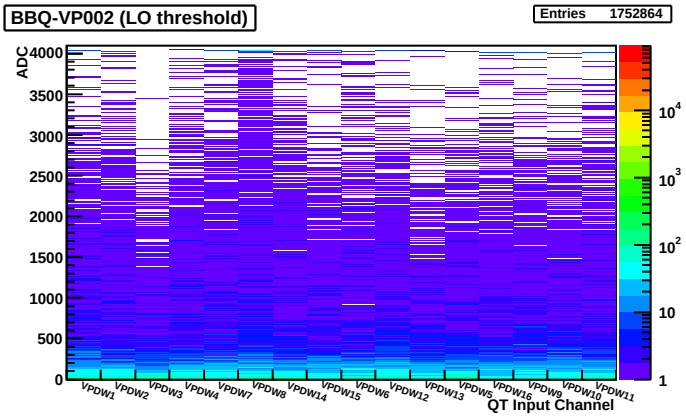

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1752864
TAC
QT Input Channel

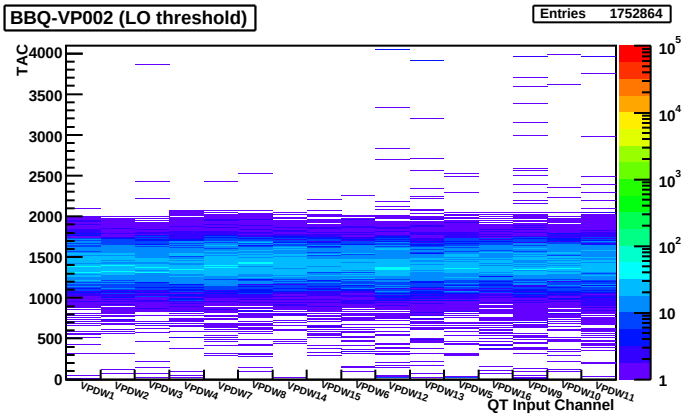

BBQ-ZD001 (ZDC TOWER)
Entries 1752864
ADC

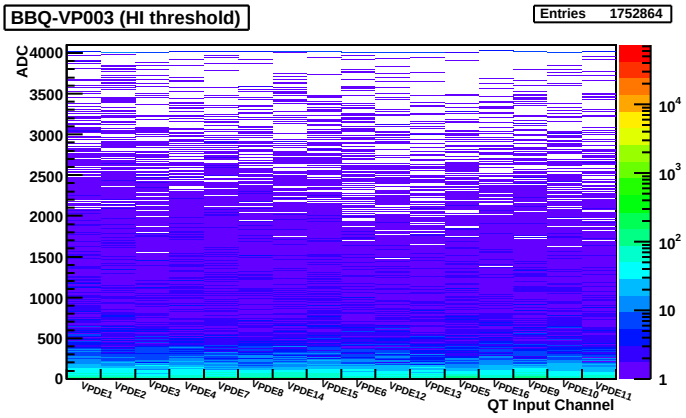

BBQ-ZD001 (ZDC TOWER)
Entries 1752864
TAC

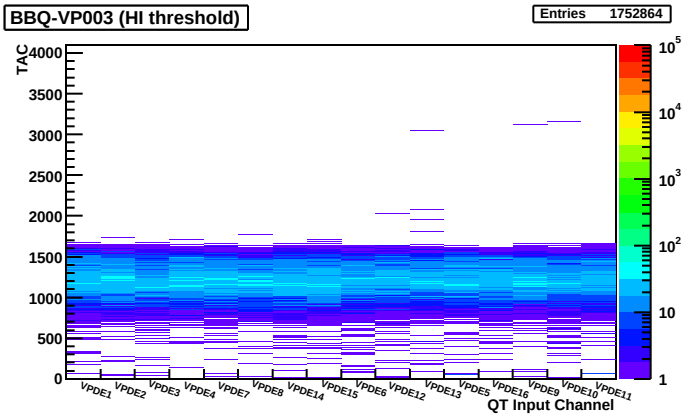

BBQ-VP001 (LO threshold)
Entries 1752864
ADC
QT Input Channel

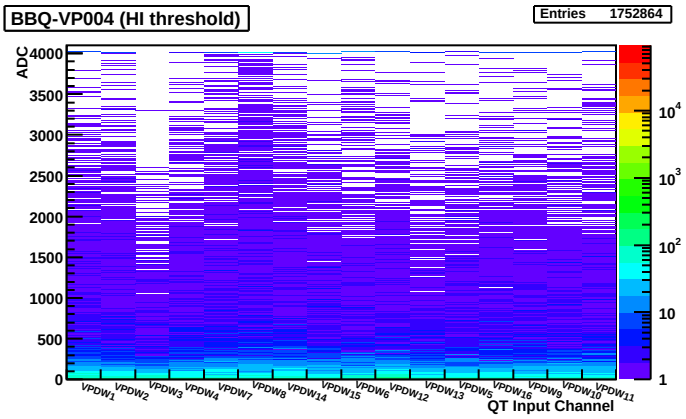

BBQ-VP001 (LO threshold)
Entries 1752864
TAC
QT Input Channel

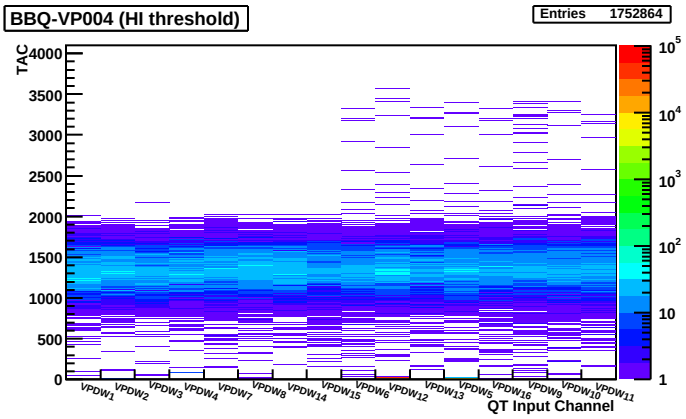

BBQ-VP002 (LO threshold)
Entries 1752864
ADC
QT Input Channel

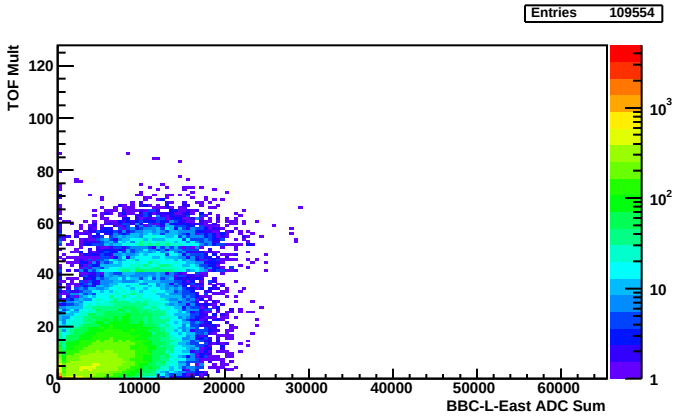

BBQ-VP002 (LO threshold)
Entries 1752864
TAC
QT Input Channel

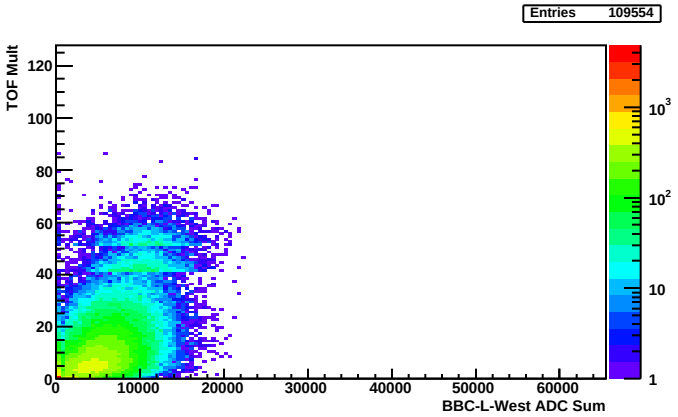

BBQ-VP003 (HI threshold)
Entries 1752864
ADC
QT Input Channel

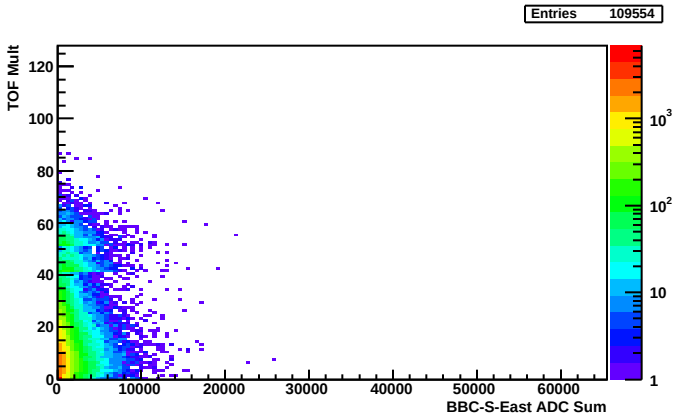

BBQ-VP003 (HI threshold)
Entries 1752864
TAC
QT Input Channel

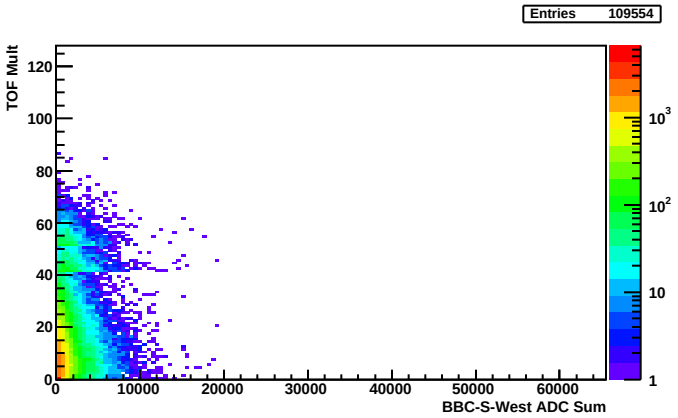

BBQ-VP004 (HI threshold)
Entries 1752864
ADC
QT Input Channel

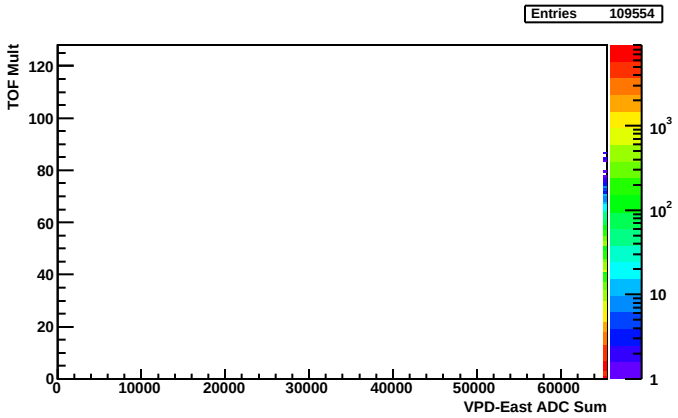

BBQ-VP004 (HI threshold)
Entries 1752864
TAC
QT Input Channel

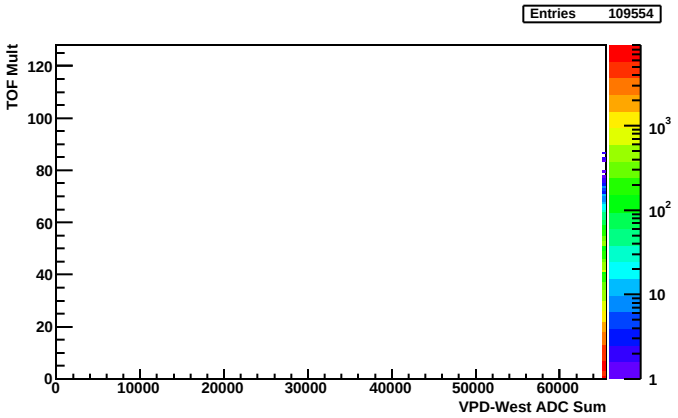

Entries 109554
TOF Mult
BBC-L-East ADC Sum

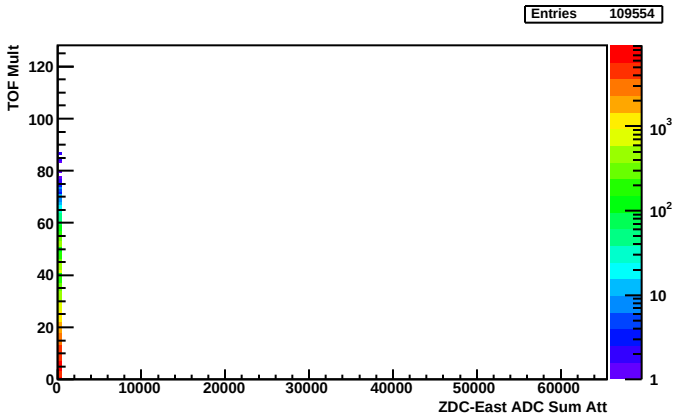

Entries 109554
TOF Mult
BBC-L-West ADC Sum

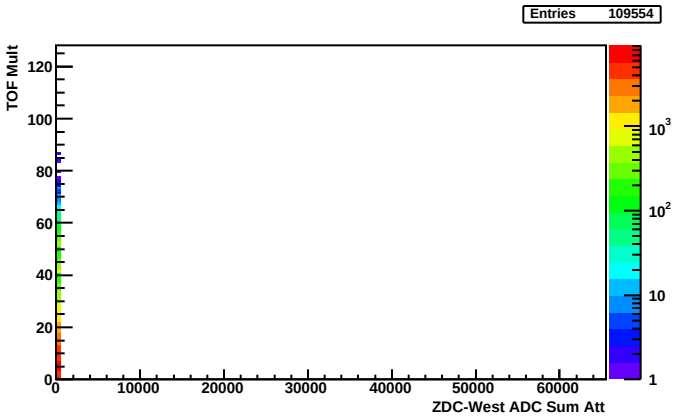

Entries 109554
TOF Mult
BBC-S-East ADC Sum

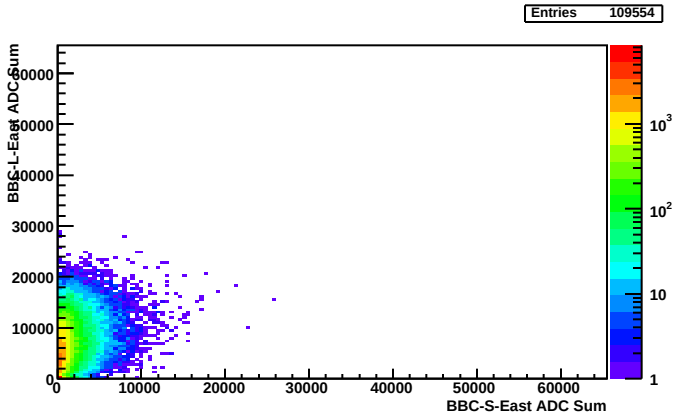

Entries 109554
TOF Mult
BBC-S-West ADC Sum

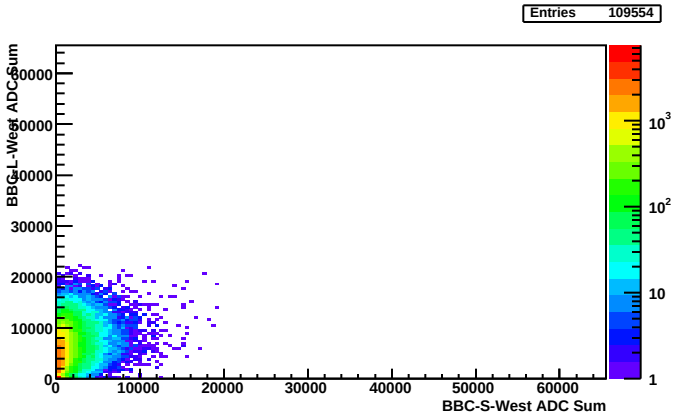

Entries 109554
TOF Mult
VPD-East ADC Sum


Entries 109554
TOF Mult
VPD-West ADC Sum


Entries 109554
TOF Mult
ZDC-East ADC Sum Att


Entries 109554
TOF Mult
ZDC-West ADC Sum Att


Entries 109554
BBC-L-East ADC Sum
BBC-S-East ADC Sum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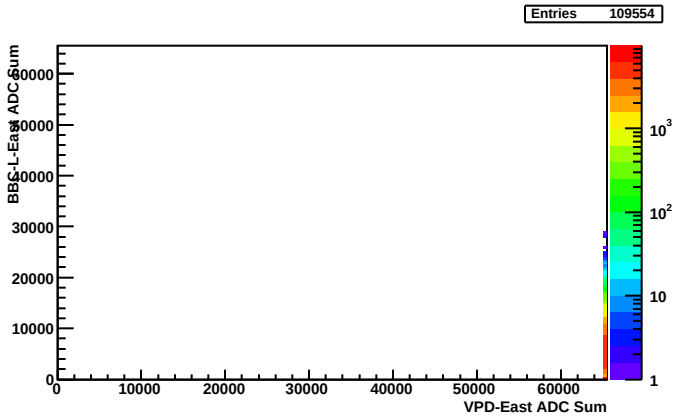
BBC-L-West ADC Sum
BBC-S-West ADC Sum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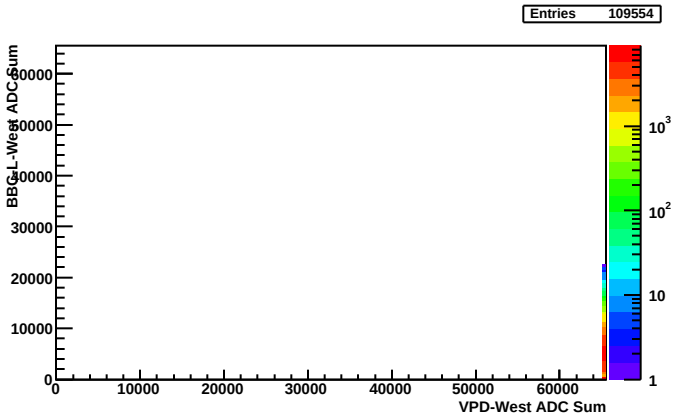
BBC-L-East ADC Sum
VPD-East ADC Sum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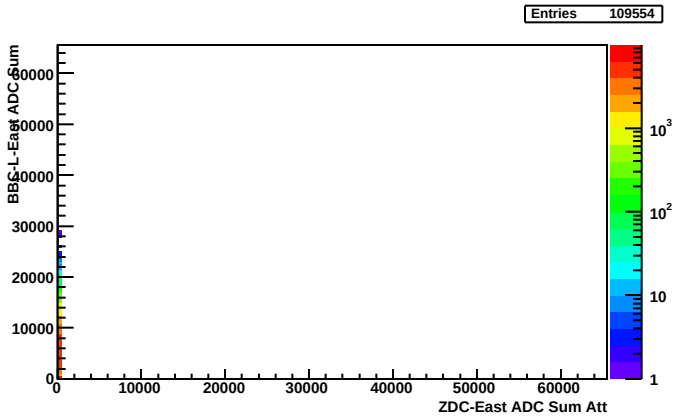
BBC-L-West ADC Sum
VPD-West ADC Sum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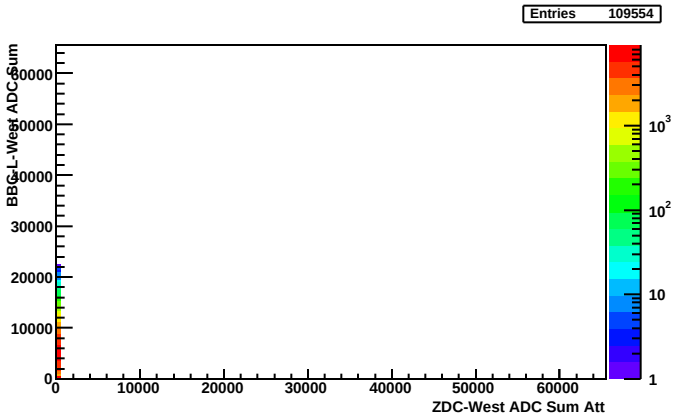
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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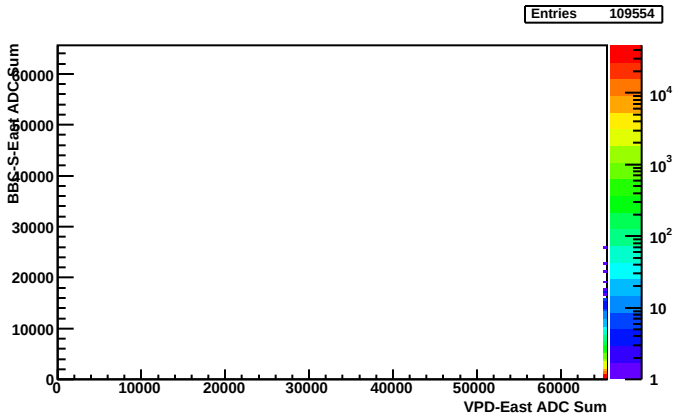
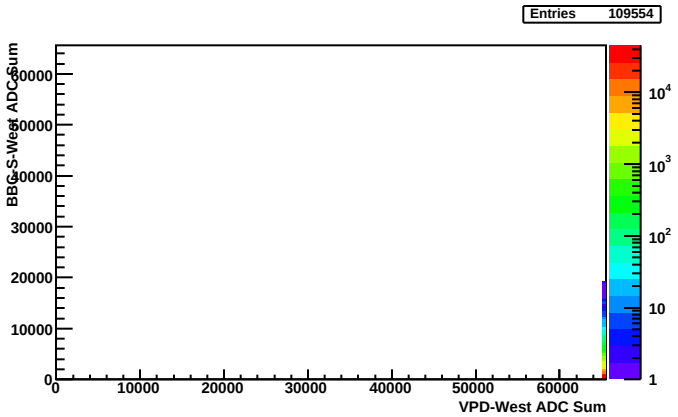
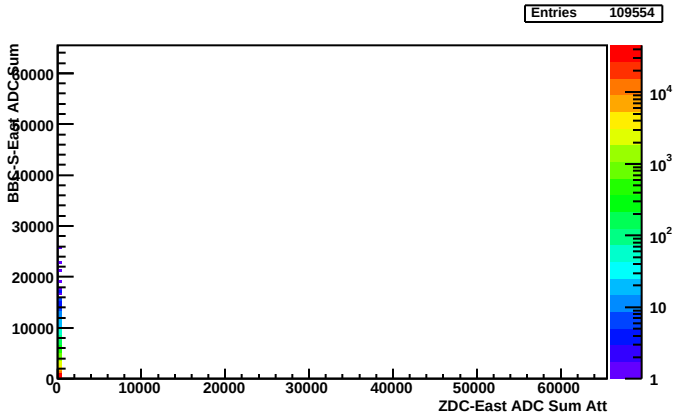
BBC-L-West ADC Sum
ZDC-West ADC Sum Att


Entries 109554
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 109554
BBC-S-West ADC Sum
VPD-West ADC Sum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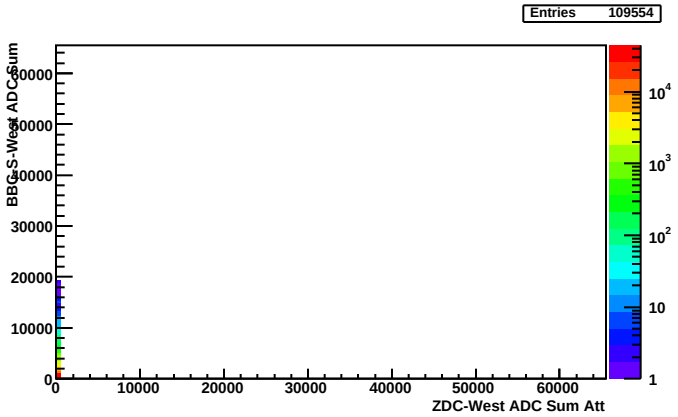
BBC-S-East ADC Sum
ZDC-East ADC Sum Att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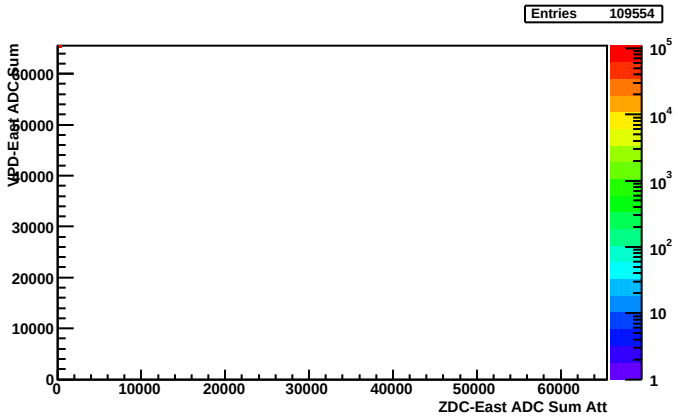
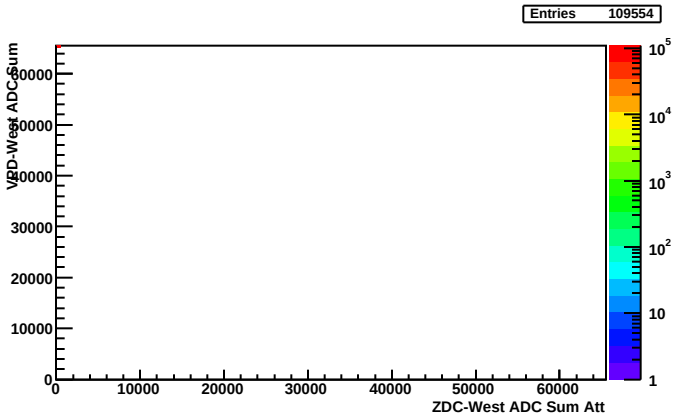
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 109554
VPD-East ADC Sum
ZDC-East ADC Sum Att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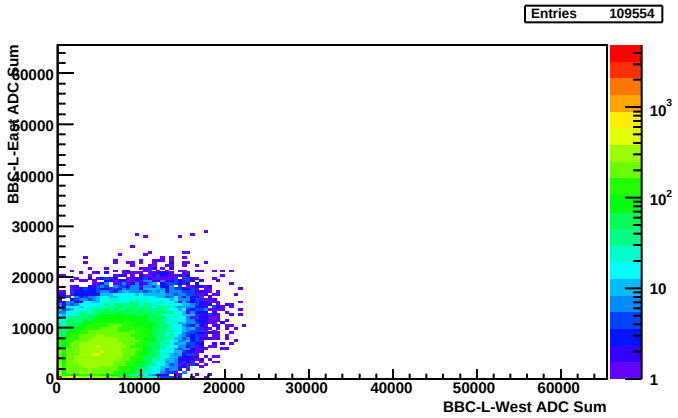
VPD-West ADC Sum
ZDC-West ADC Sum Att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BBC-L-East ADC Sum
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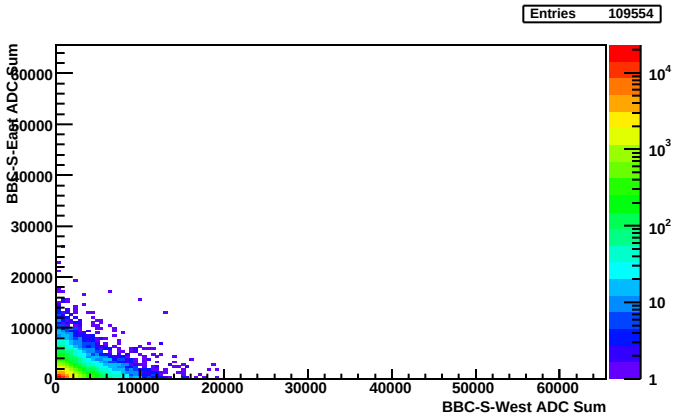
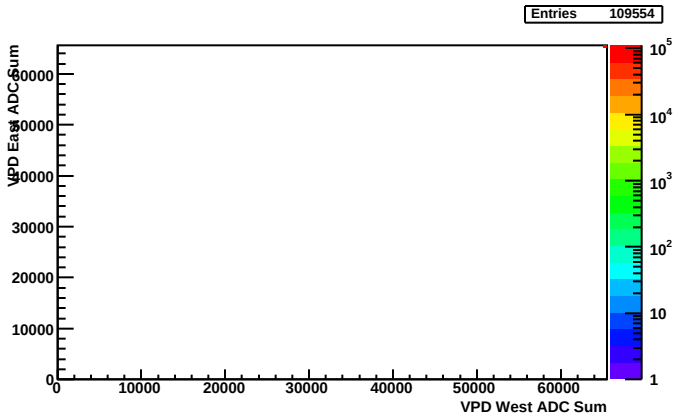
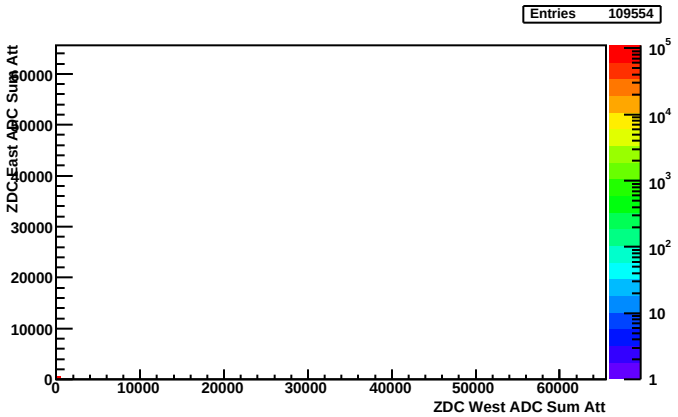
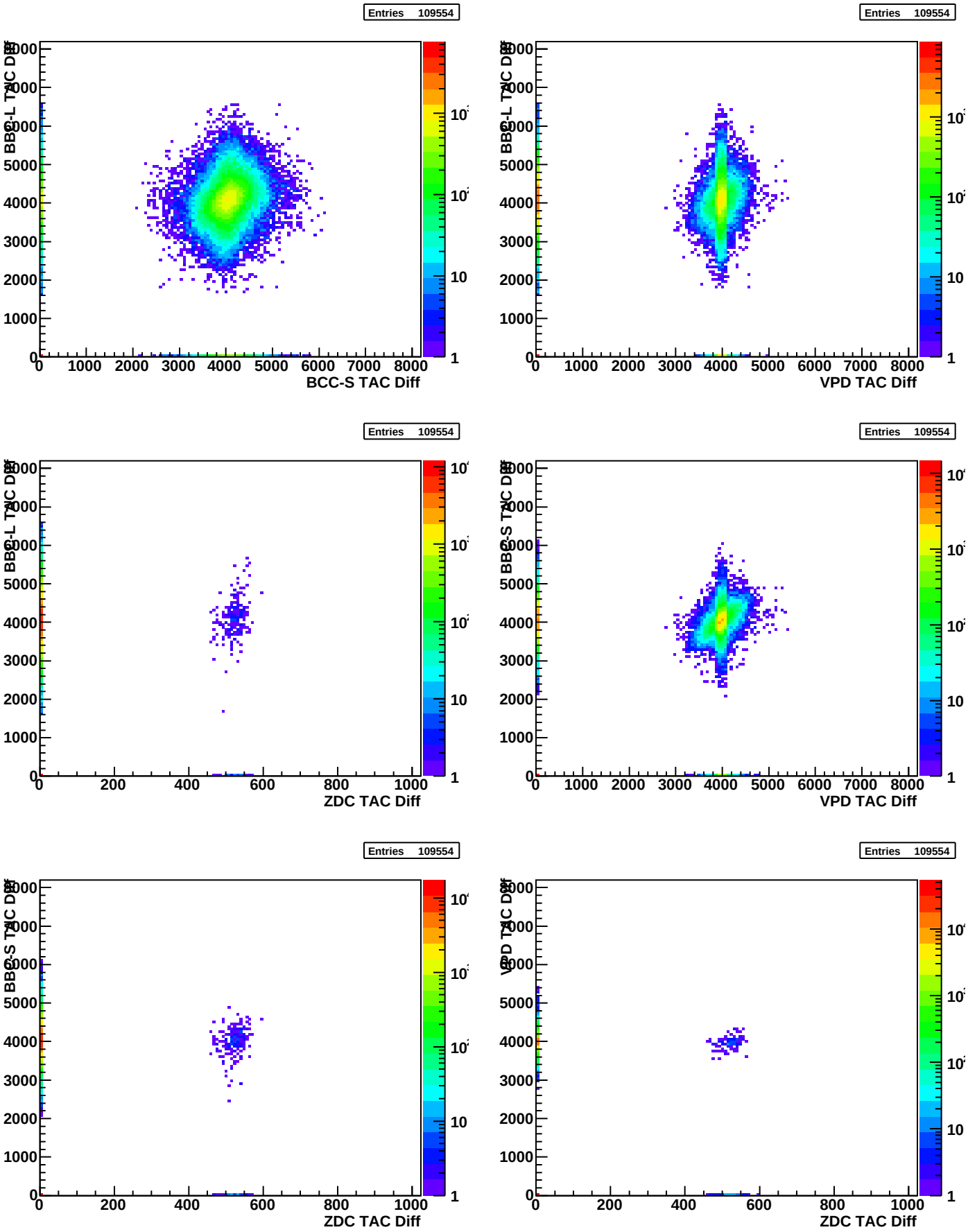
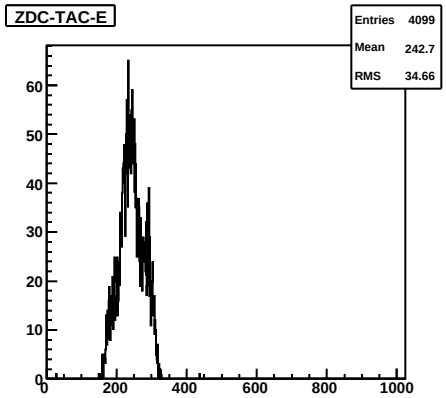
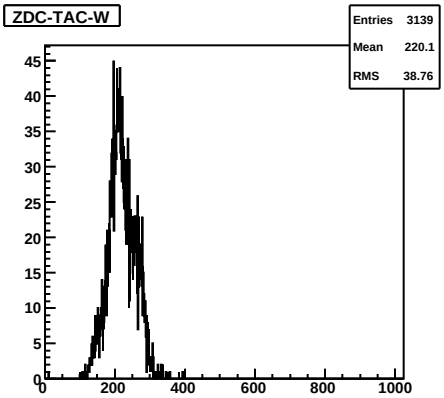

Entries 109554
BBC-S-East ADC Sum
BBC-S-West ADC Sum

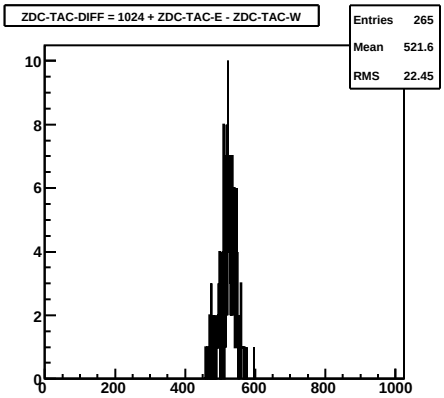

Entries 109554
VPD East ADC Sum
VPD West ADC Sum

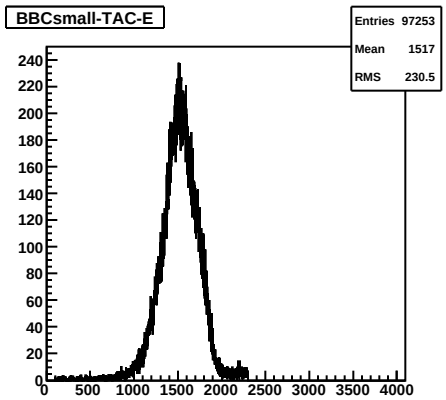

Entries 109554
ZDC East ADC Sum Att
ZDC West ADC Sum Att

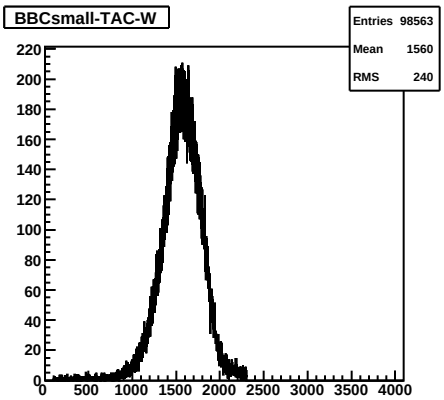

Entries 109554
BBC-L TAC Diff
BCC-S TAC Diff
Entries 109554
BBC-L TAC Diff
VPD TAC Diff
Entries 109554
BBC-L TAC Diff
ZDC TAC Diff
Entries 109554
BBC-S TAC Diff
VPD TAC Diff
Entries 109554
BBC-S TAC Diff
ZDC TAC Diff
Entries 109554
VPD TAC Diff
ZDC TAC Diff

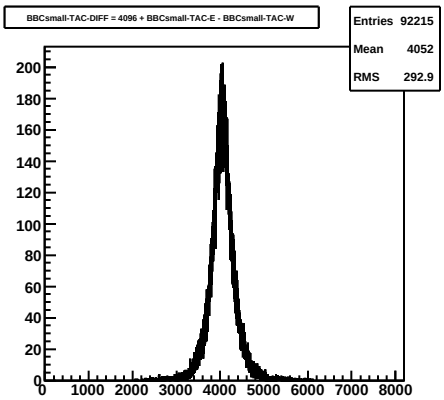

ZDC-TAC-E
Entries 4099
Mean 242.7
RMS 34.66

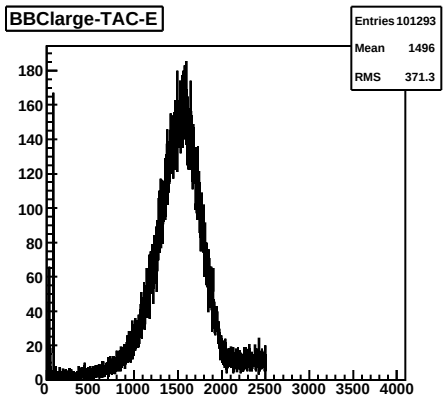

ZDC-TAC-W
Entries 3139
Mean 220.1
RMS 38.76

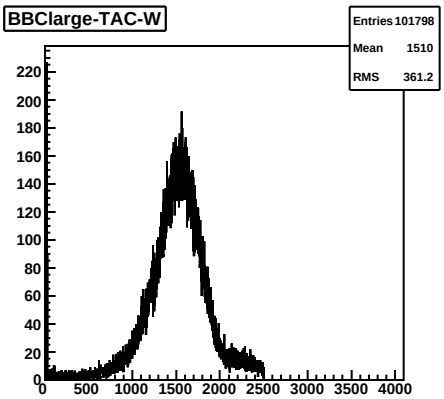

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 265
Mean 521.6
RMS 22.45

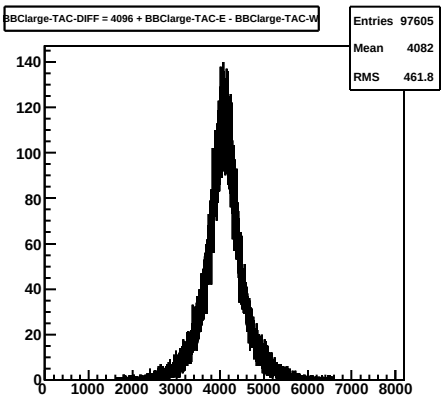

BBCsmall-TAC-E
Entries 97253
Mean 1517
RMS 230.5

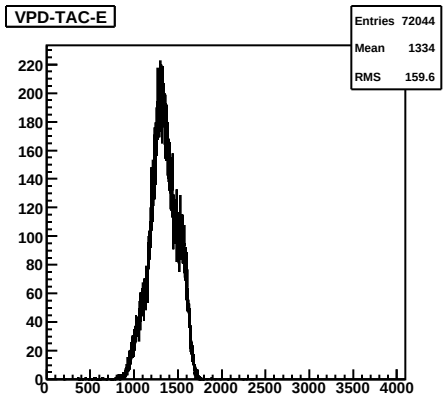

BBCsmall-TAC-W
Entries 98563
Mean 1560
RMS 240

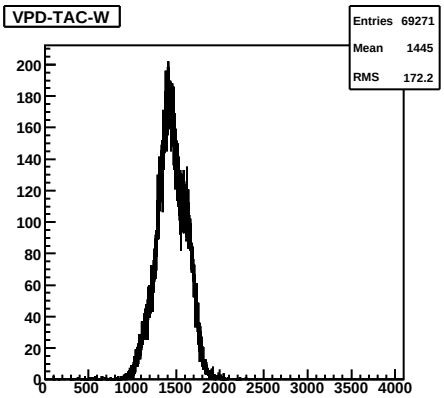

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 92215
Mean 4052
RMS 292.9

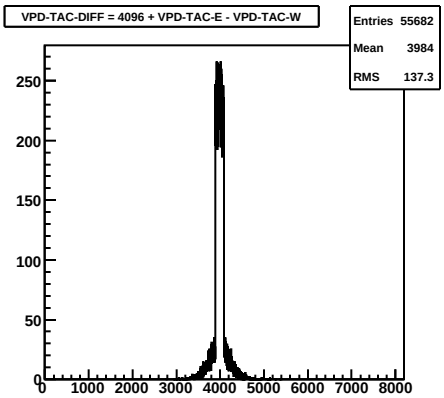

BBClarge-TAC-E
Entries 101293
Mean 1496
RMS 371.3

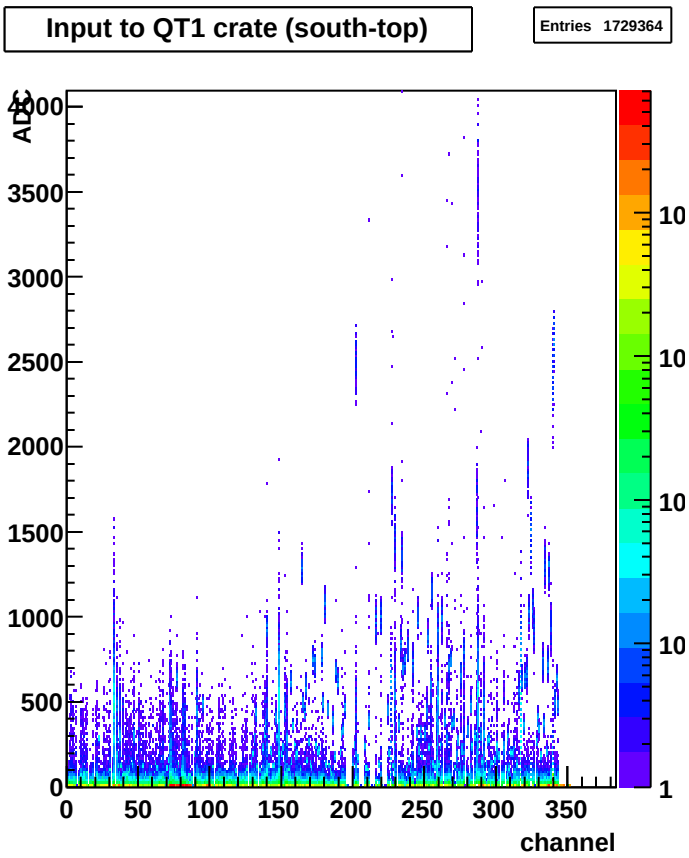

BBClarge-TAC-W
Entries 101798
Mean 1510
RMS 361.2

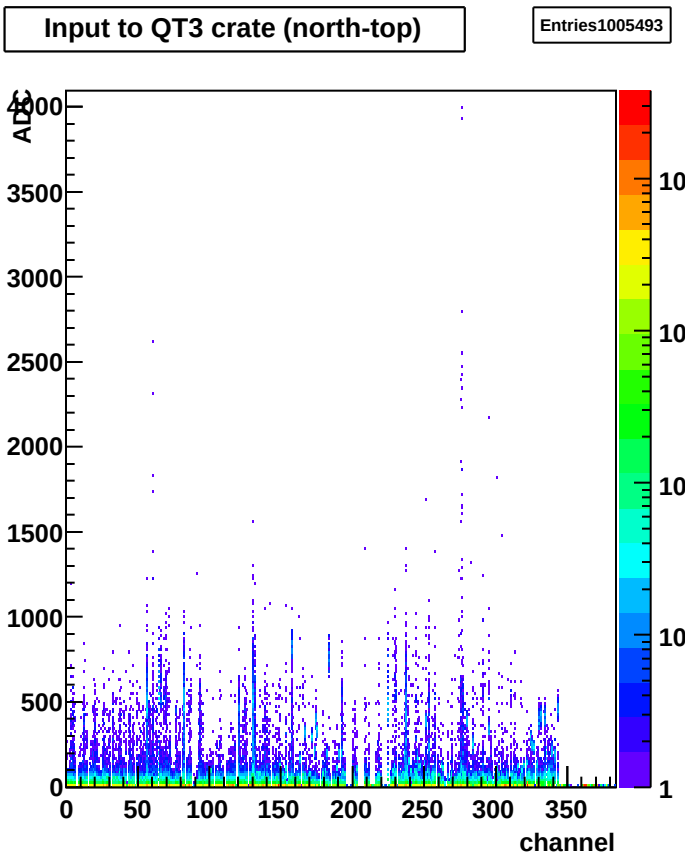

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 97605
Mean 4082
RMS 461.8

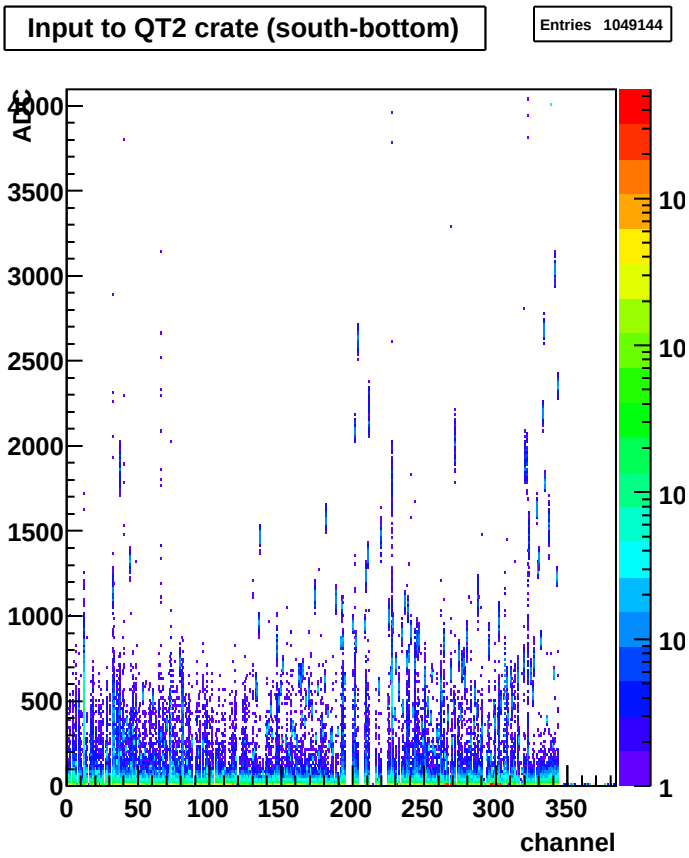

VPD-TAC-E
Entries 72044
Mean 1334
RMS 159.6

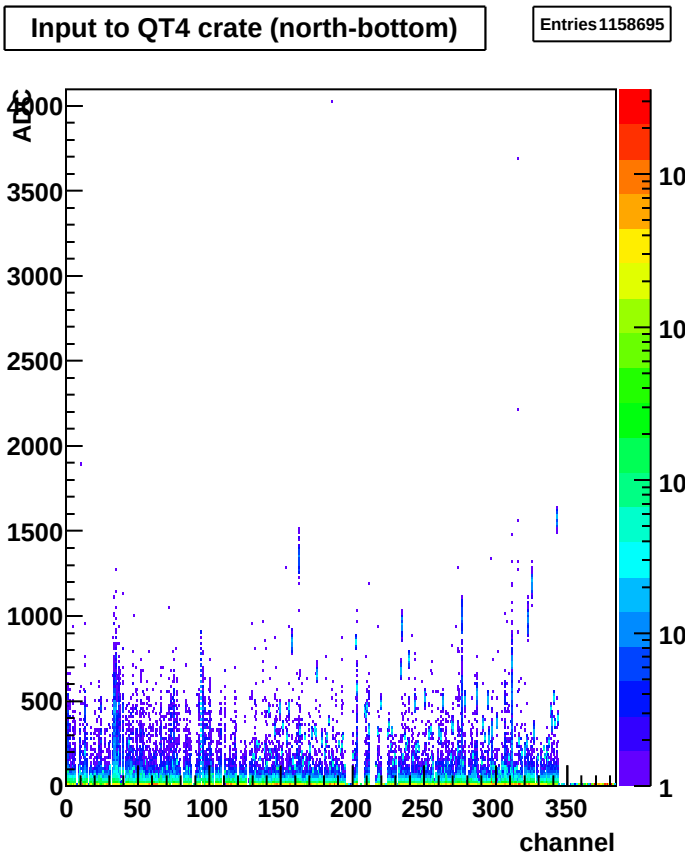

VPD-TAC-W
Entries 69271
Mean 1445
RMS 172.2

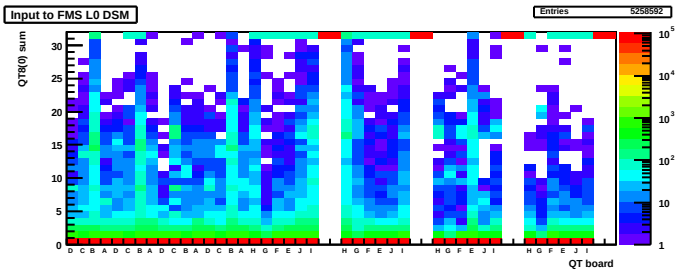

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 55682
Mean 3984
RMS 137.3

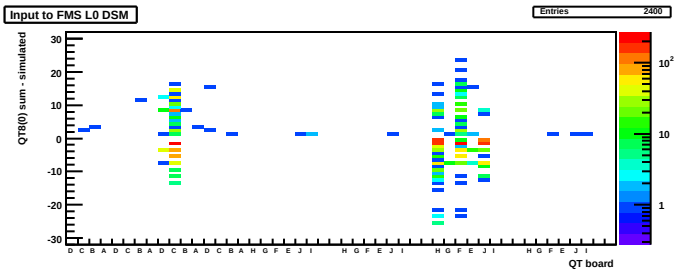

Input to QT1 crate (south-top)
Entries 1729364
ADC
channel

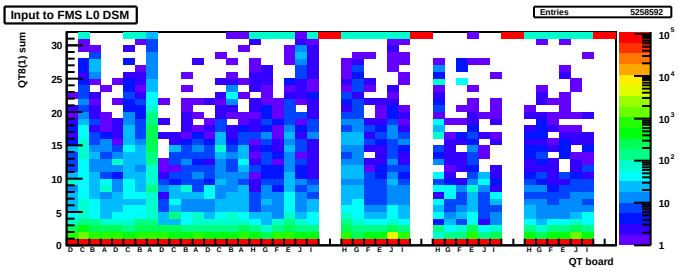

Input to QT3 crate (north-top)
Entries1005493
ADC
channel

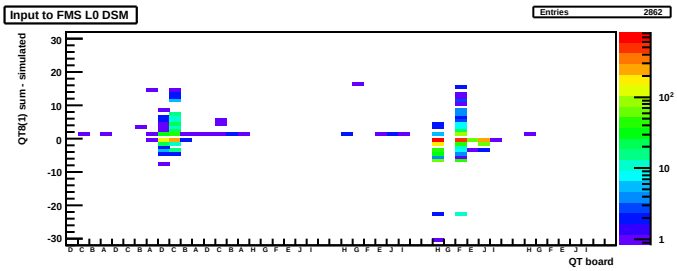

Input to QT2 crate (south-bottom)
Entries 1049144
ADC
channel

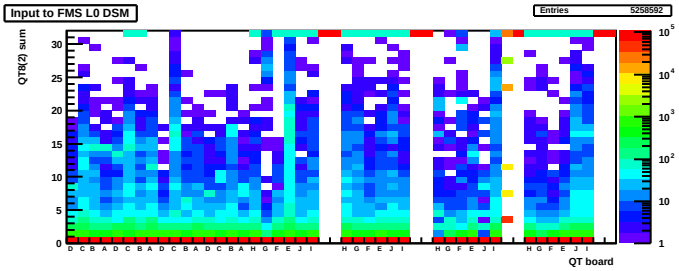

Input to QT4 crate (north-bottom)
Entries1158695
ADC
channel

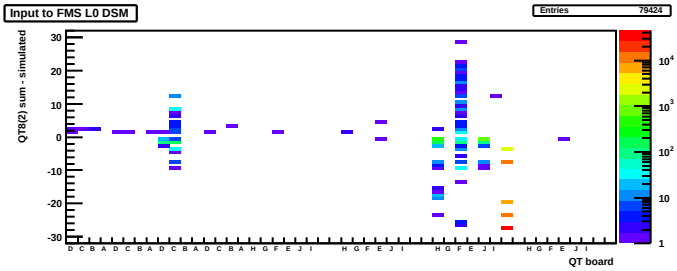

Input to FMS L0 DSM
Entries 5258592
QT8(0) sum
QT board

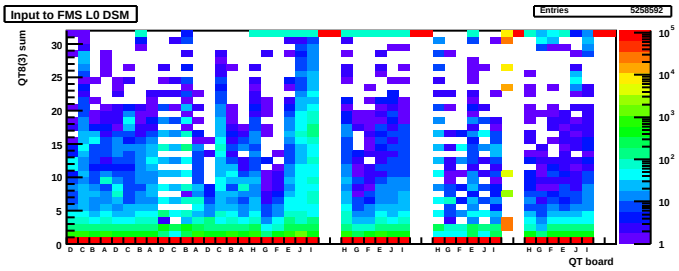

Input to FMS L0 DSM
Entries 2400
QT8(0) sum - simulated
QT board

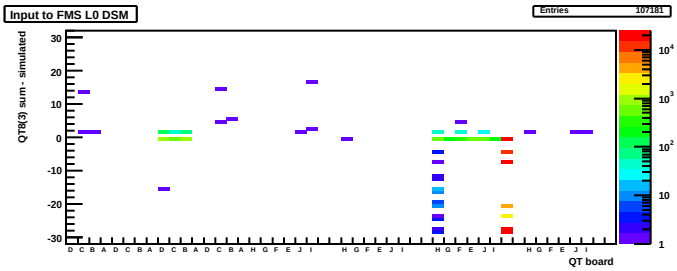

Input to FMS L0 DSM
Entries 5258592
QT8(1) sum
QT board

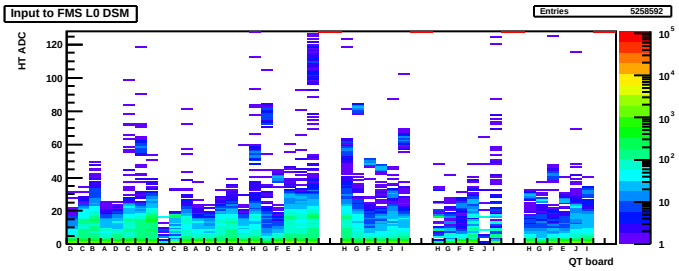

Input to FMS L0 DSM
Entries 2862
QT8(1) sum - simulated
QT board

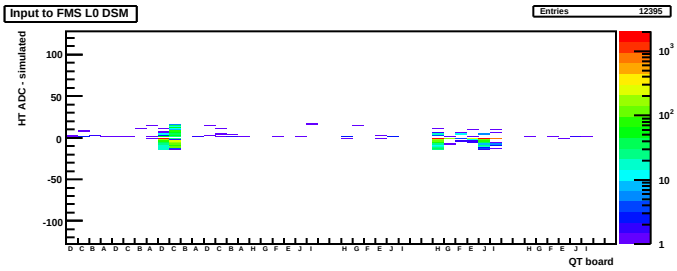

Input to FMS L0 DSM
Entries 5258592
QT8(2) sum
QT board

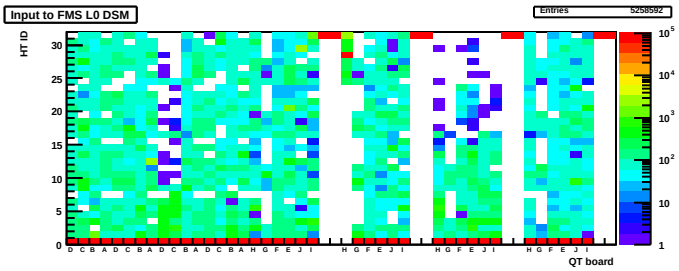

Input to FMS L0 DSM
Entries 79424
QT8(2) sum - simulated
QT board

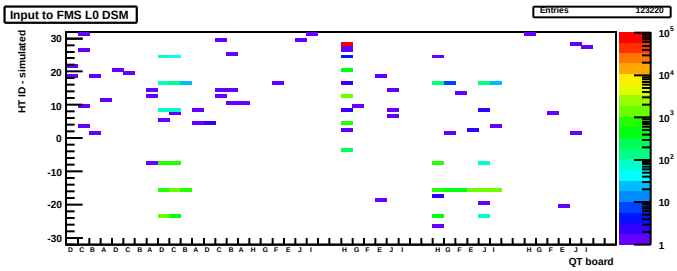

Input to FMS L0 DSM
Entries 5258592
QT8(3) sum
QT board

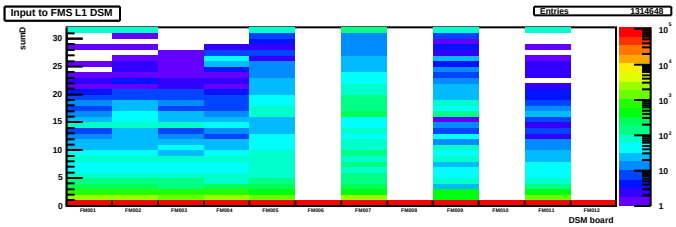

Input to FMS L0 DSM
Entries 107181
QT8(3) sum - simulated
QT board

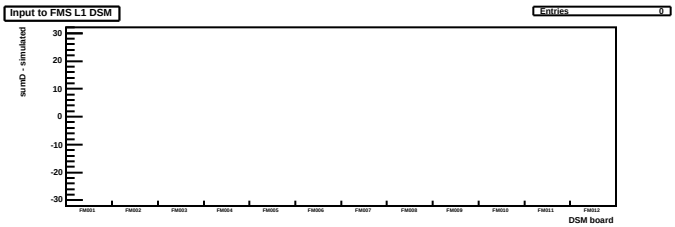

Input to FMS L0 DSM
Entries 5258592
HT ADC
QT board

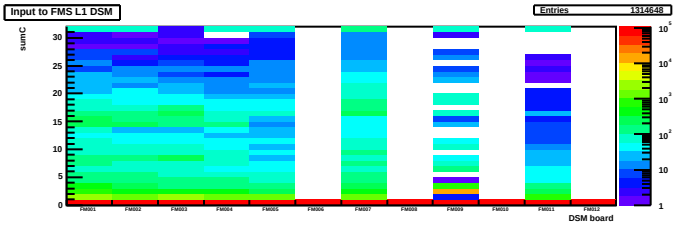

Input to FMS L0 DSM
Entries 12395
HT ADC - simulated
QT board

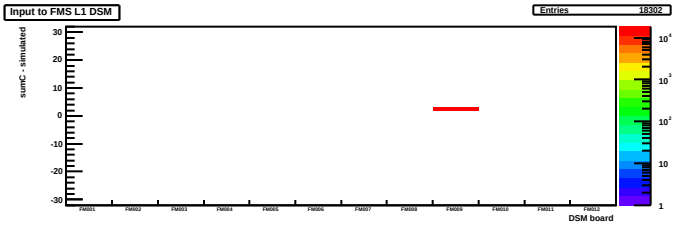

Input to FMS L0 DSM
Entries 5258592
HT ID
QT board

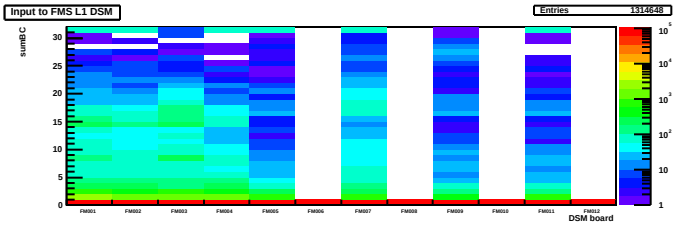

Input to FMS L0 DSM
Entries 123220
HT ID - simulated
QT board

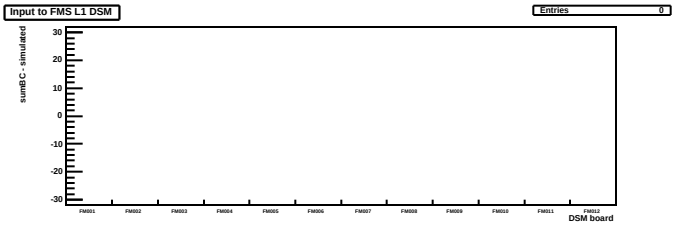

Input to FMS L1 DSM
Entries 1314648
sumD
DSM board

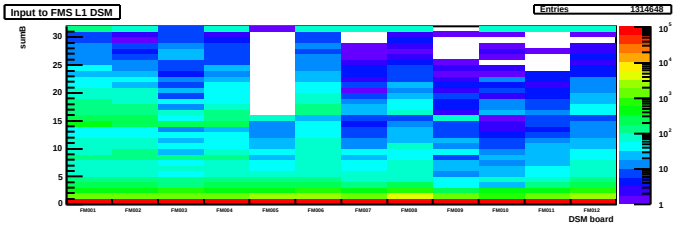

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

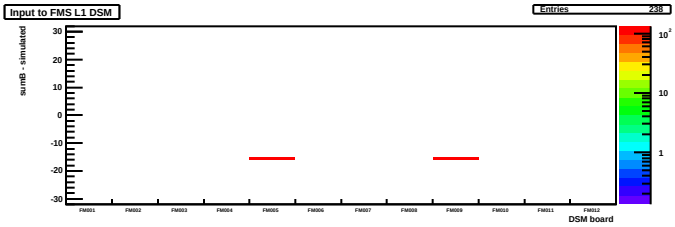

Input to FMS L1 DSM
Entries 1314648
sumC
DSM board

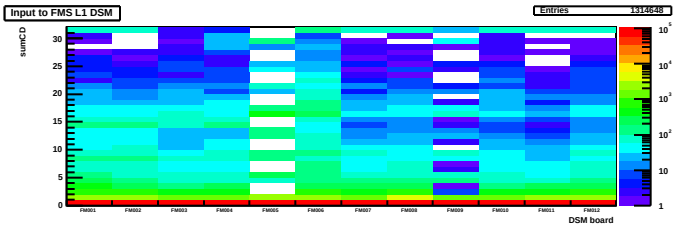

Input to FMS L1 DSM
Entries 18302
sumC - simulated
DSM board

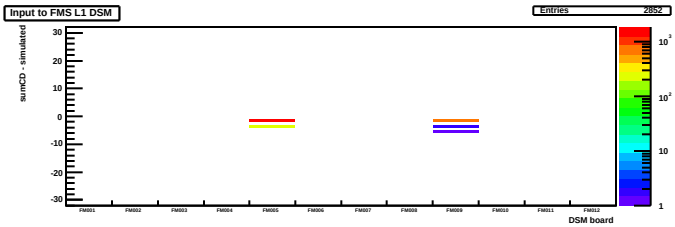

Input to FMS L1 DSM
Entries 1314648
sumBC
DSM board

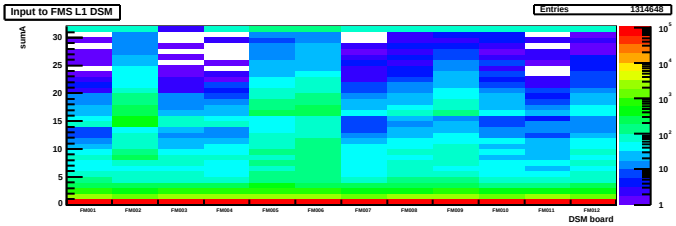

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

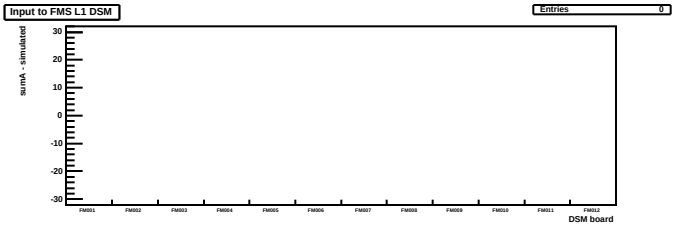

Input to FMS L1 DSM
Entries 1314648
sumB
DSM board

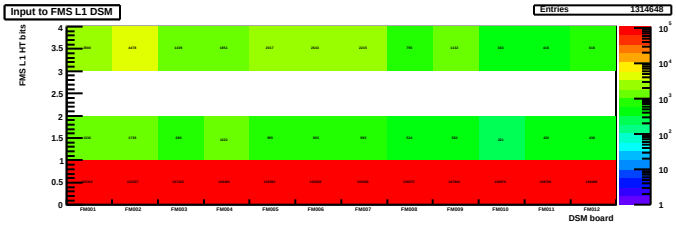

Input to FMS L1 DSM
Entries 238
sumB - simulated
DSM board

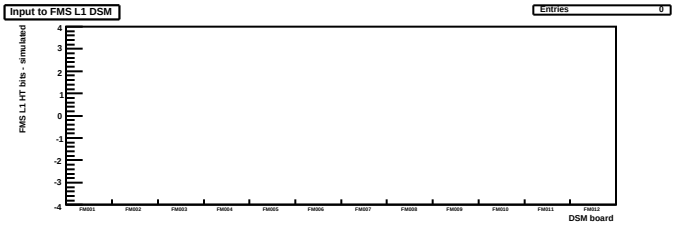

Input to FMS L1 DSM
Entries 1314648
sumCD
DSM board

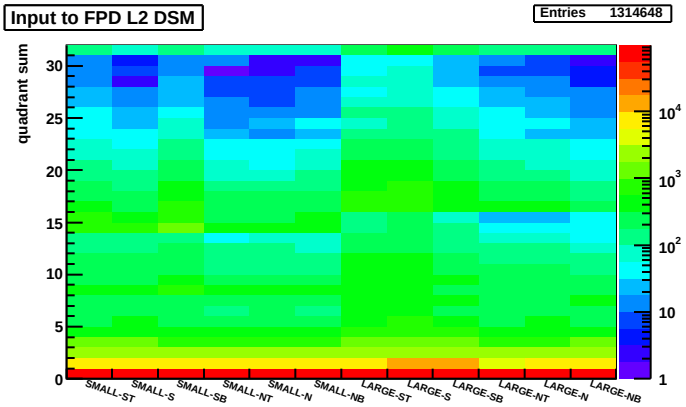

Input to FMS L1 DSM
Entries 2852
sumCD - simulated
DSM board

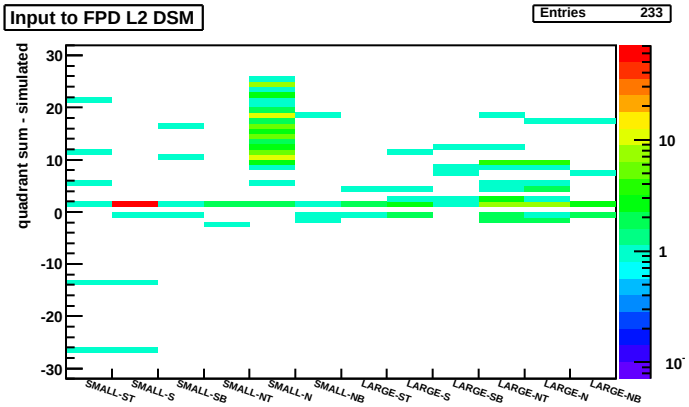

Input to FMS L1 DSM
Entries 1314648
sumA
DSM board

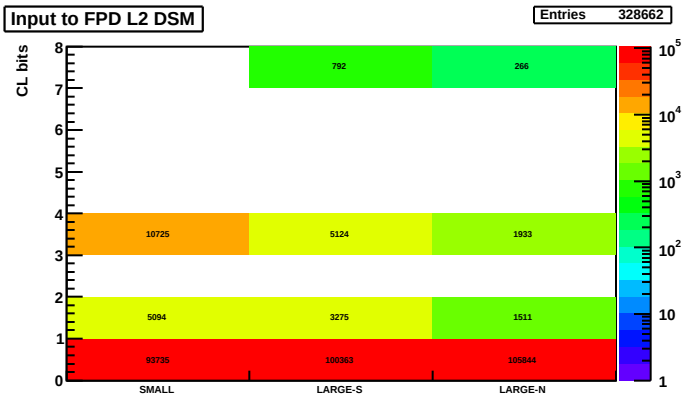

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

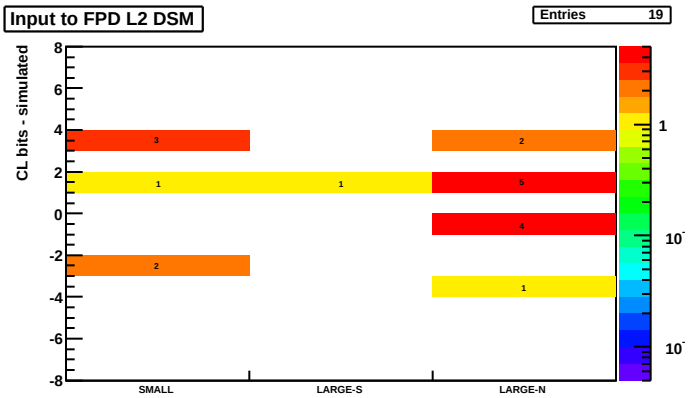

Input to FMS L1 DSM
Entries 1314648
FMS L1 HT bits
DSM board

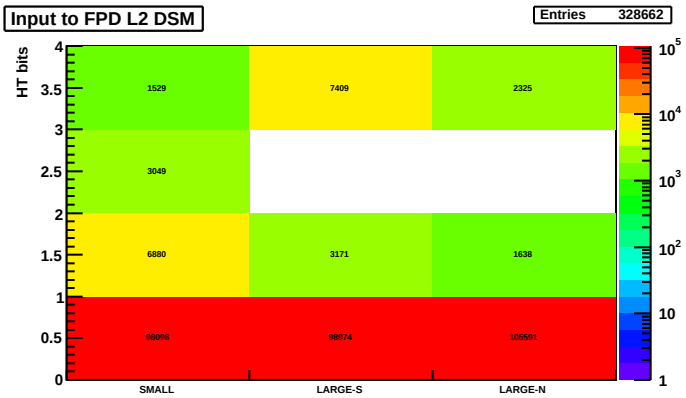

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

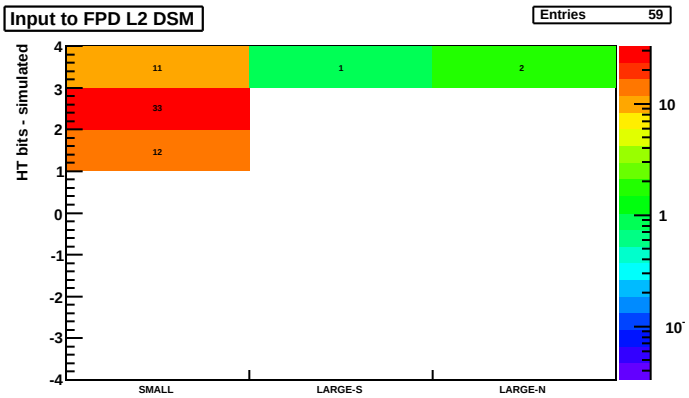

Input to FPD L2 DSM
Entries 1314648
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

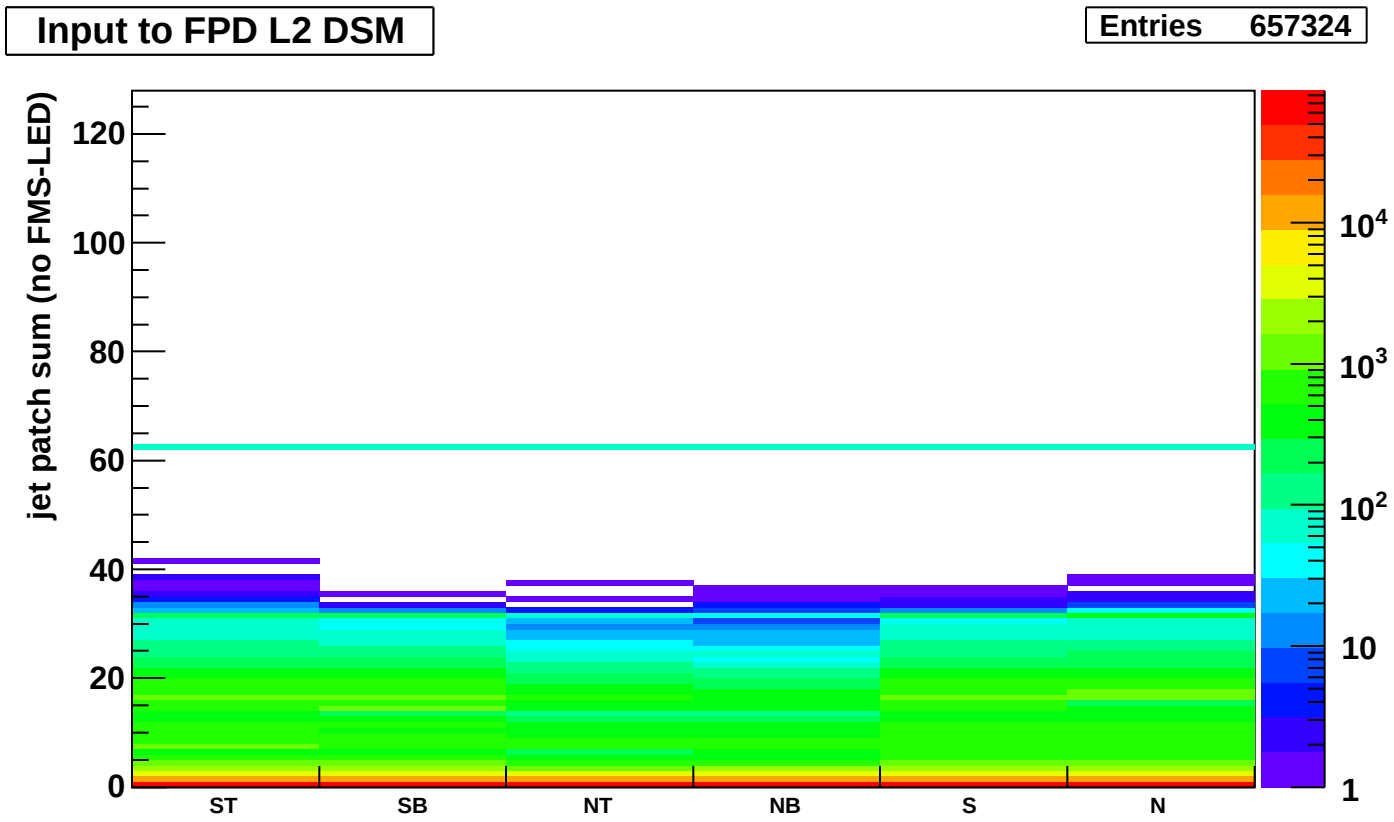

Input to FPD L2 DSM
Entries 233
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

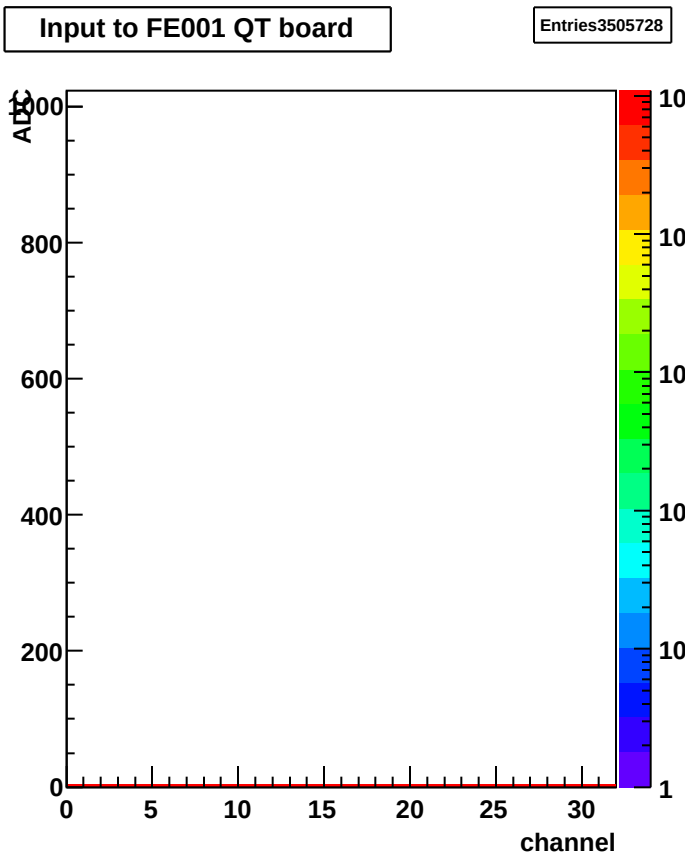

Input to FPD L2 DSM
Entries 328662
CL bits
792
266
10725
5124
1933
5094
3275
1511
93735
100363
105844
SMALL
LARGE-S
LARGE-N

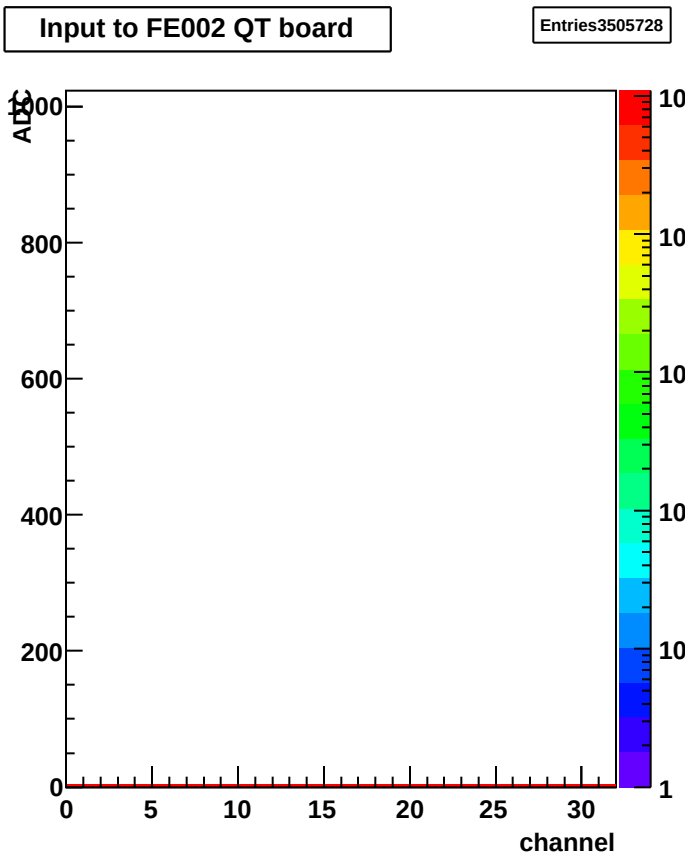

Input to FPD L2 DSM
Entries 19
CL bits - simulated
3
2
1
1
5
4
2
1
SMALL
LARGE-S
LARGE-N

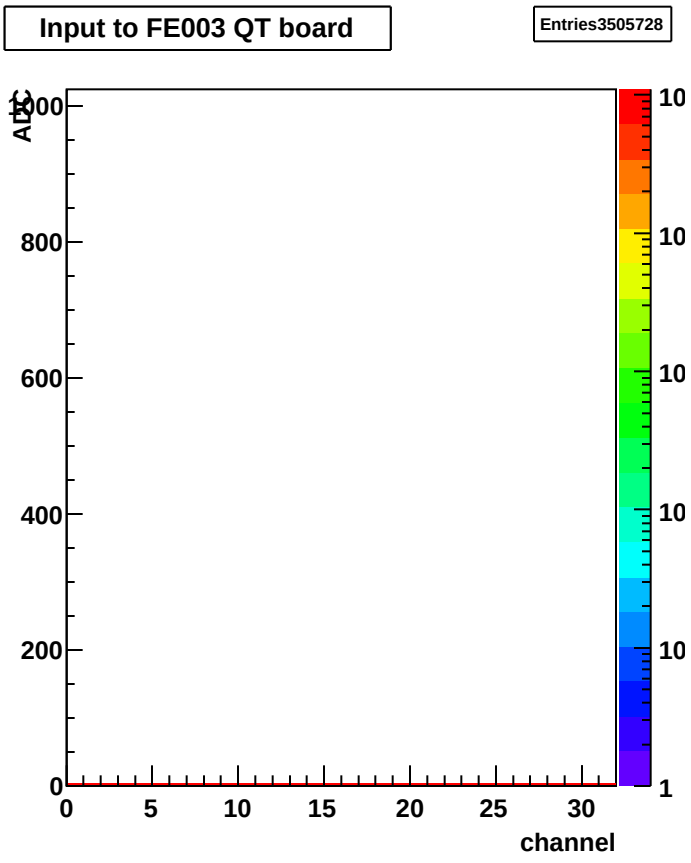

Input to FPD L2 DSM
Entries 328662
HT bits
1529
7409
2325
3049
6880
3171
1638
98096
98974
105591
SMALL
LARGE-S
LARGE-N

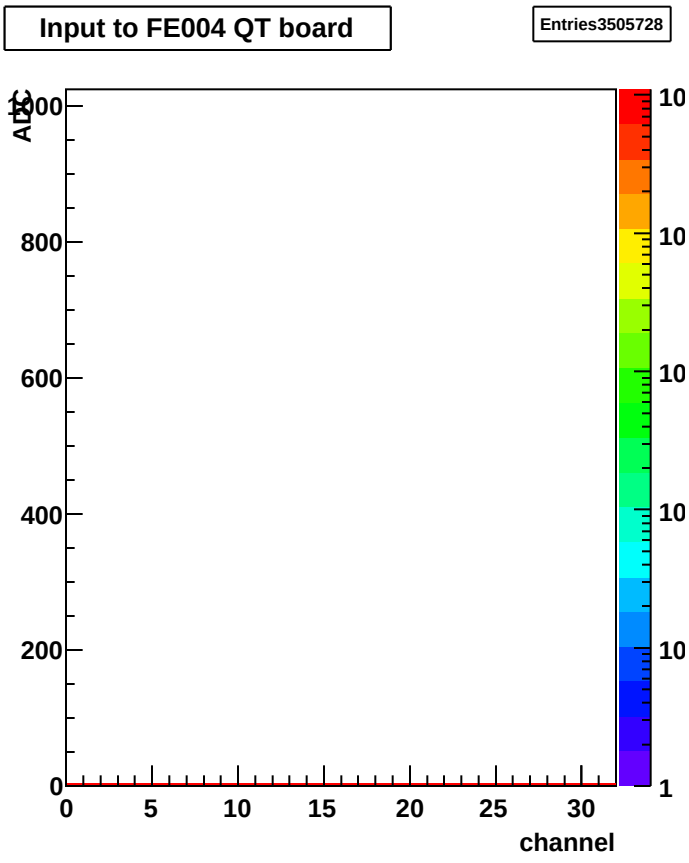

Input to FPD L2 DSM
Entries 59
HT bits - simulated
11
1
2
33
12
SMALL
LARGE-S
LARGE-N

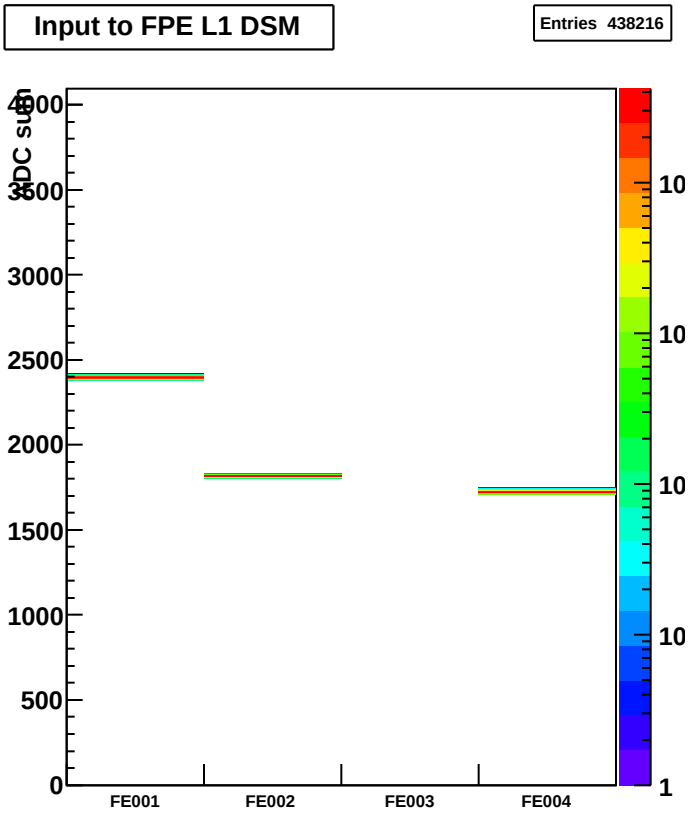

Input to FPD L2 DSM
Entries 657324
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

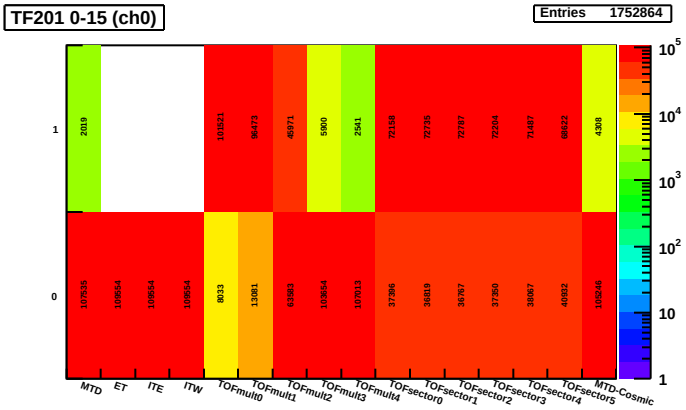

Input to FE001 QT board
Entries3505728
ADC
channel

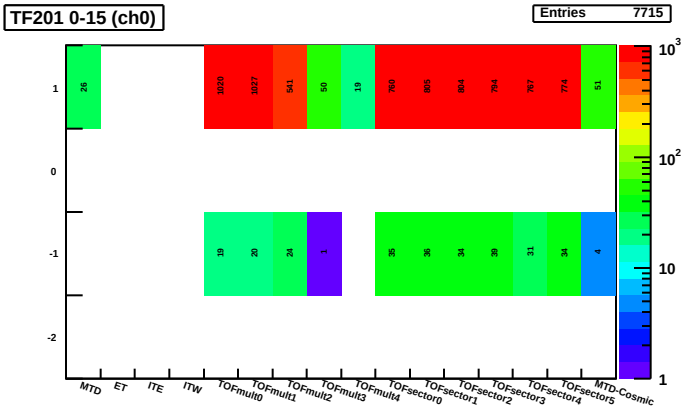

Input to FE002 QT board
Entries3505728
ADC
channel

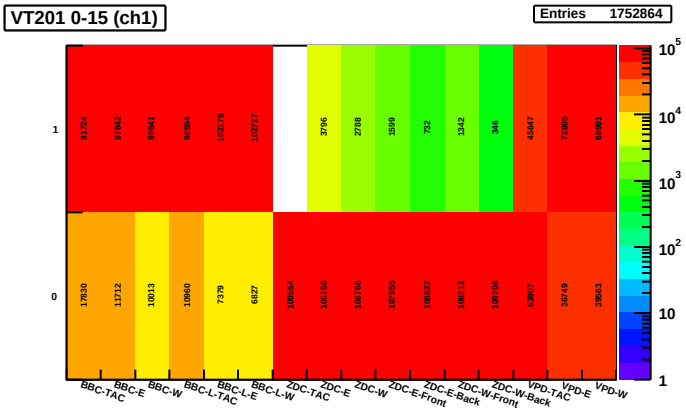

Input to FE003 QT board
Entries3505728
ADC
channel

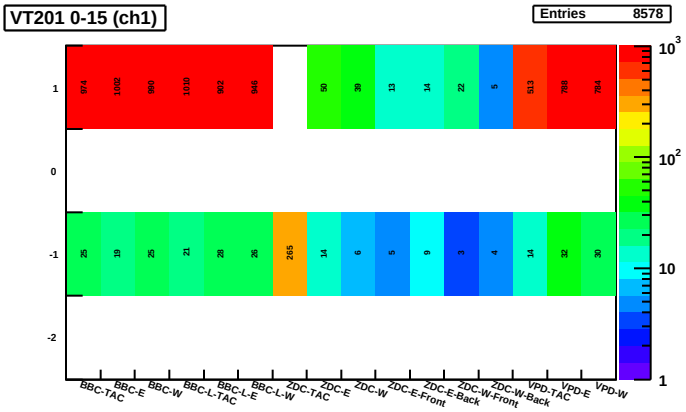

Input to FE004 QT board
Entries3505728
ADC
channel

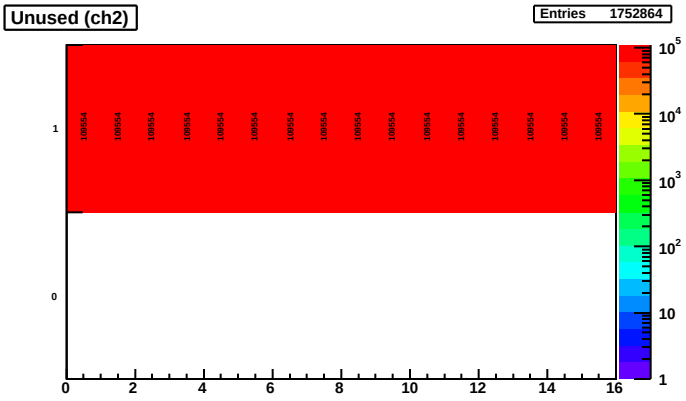

Input to FPE L1 DSM
Entries 438216
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

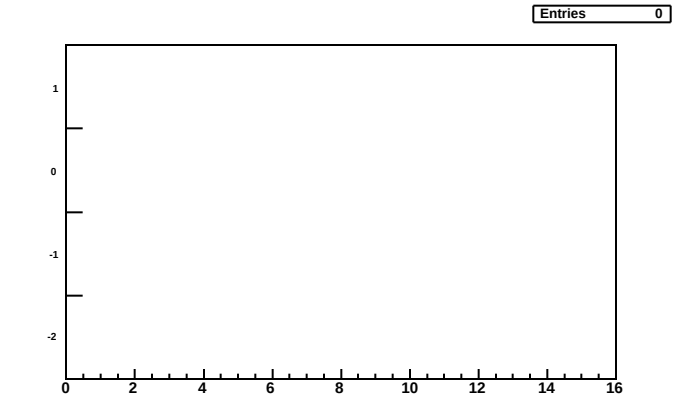

TF201 0-15 (ch0)
Entries 1752864
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

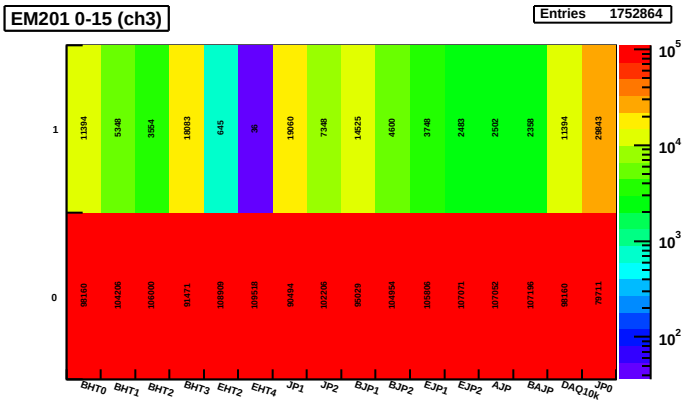

TF201 0-15 (ch0)
Entries 7715
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 1752864
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 8578
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


Unused (ch2)
Entries 1752864


Entries 0


EM201 0-15 (ch3)
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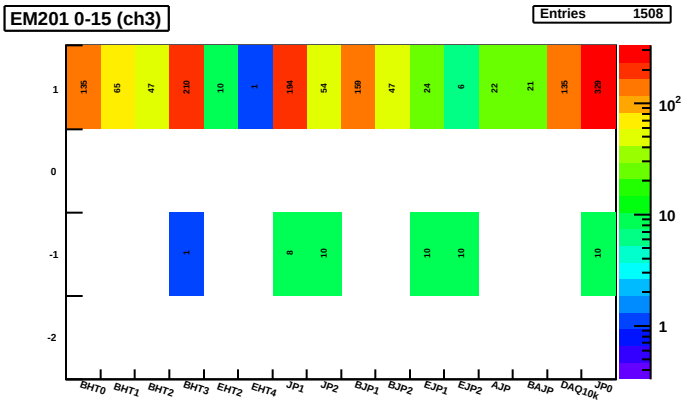
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Entries 1508
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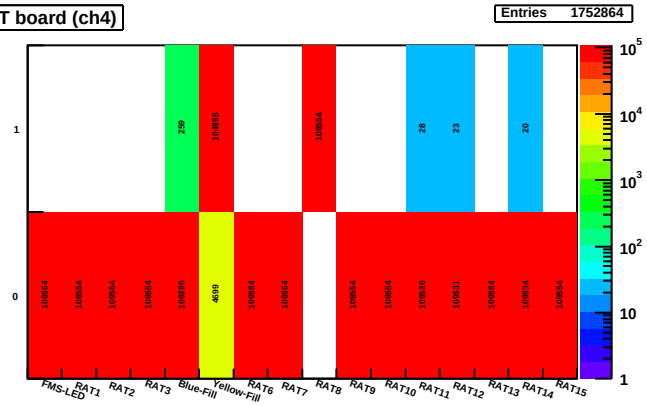
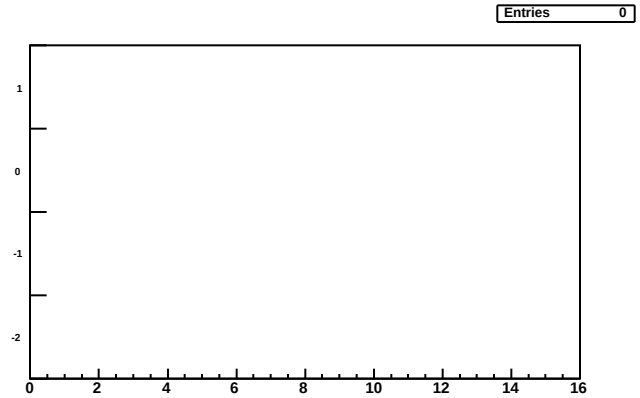
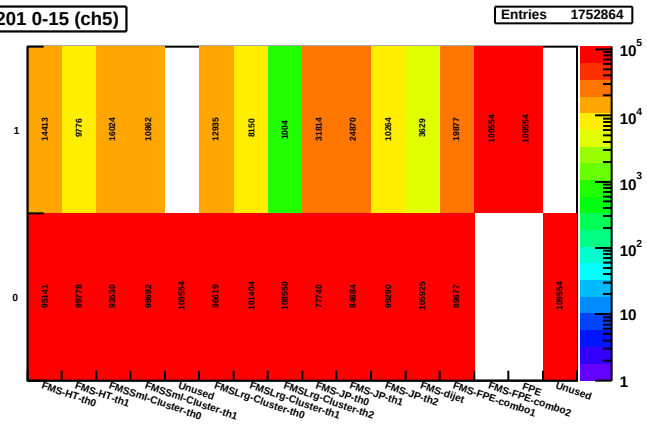
RAT board (ch4)





FP201 0-15 (ch5)



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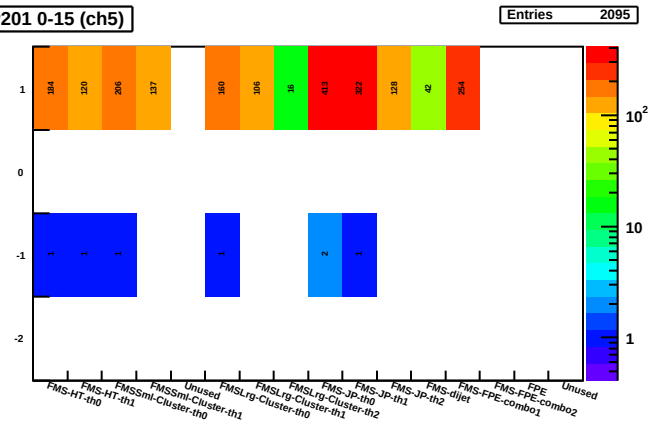
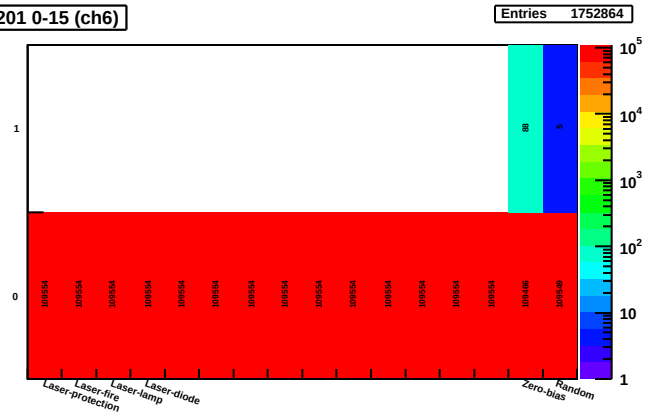
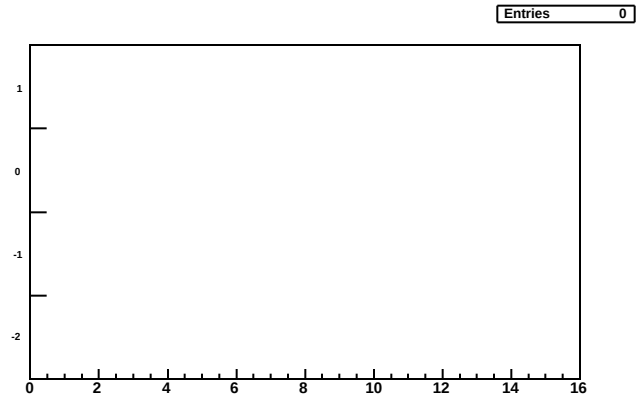
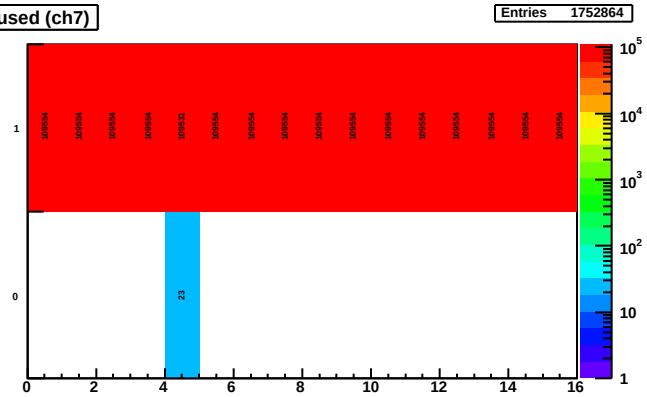
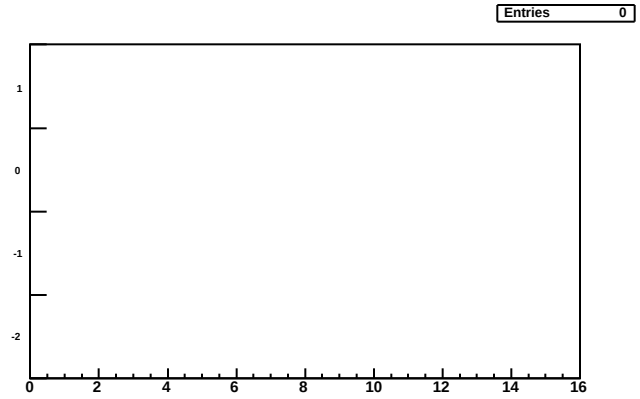


ST201 0-15 (ch6)





Unused (ch7)