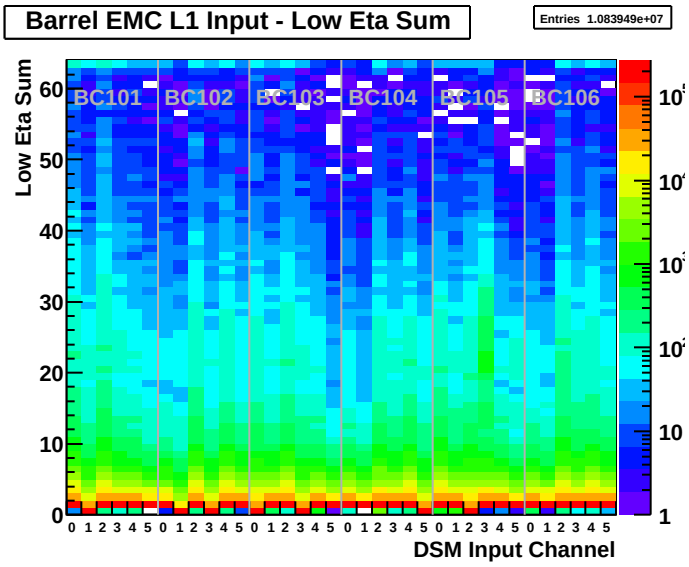
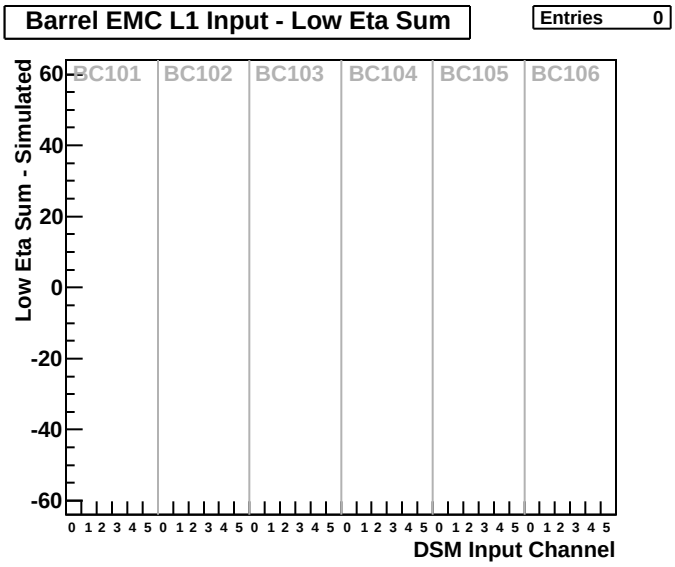
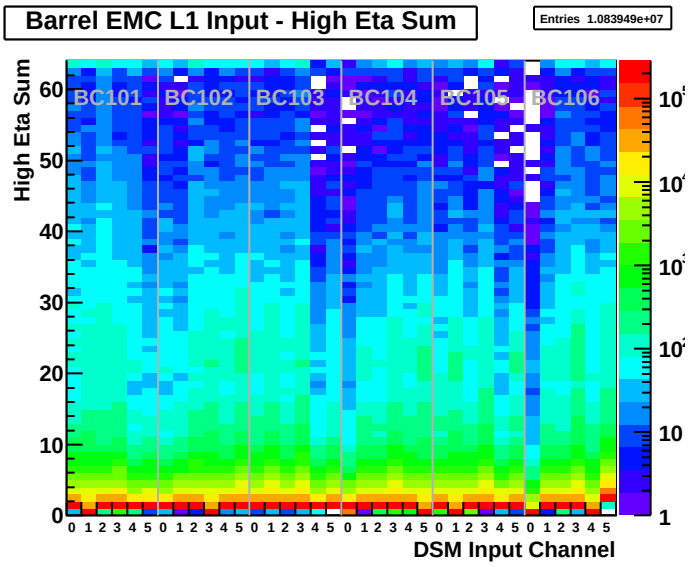
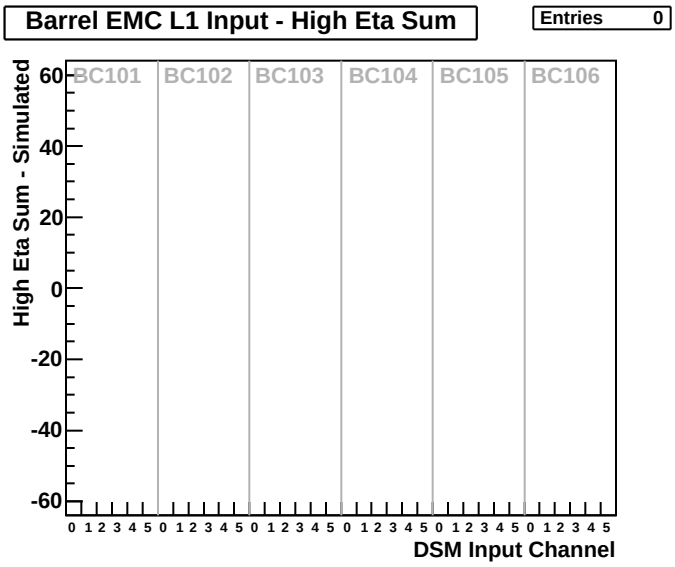
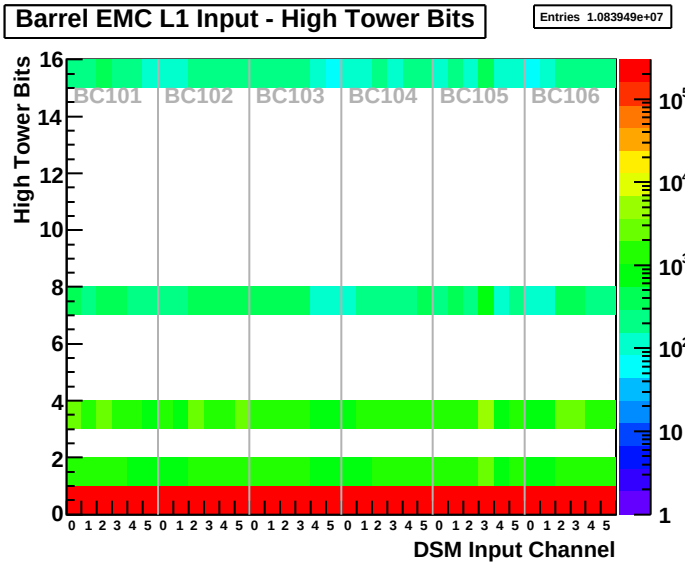
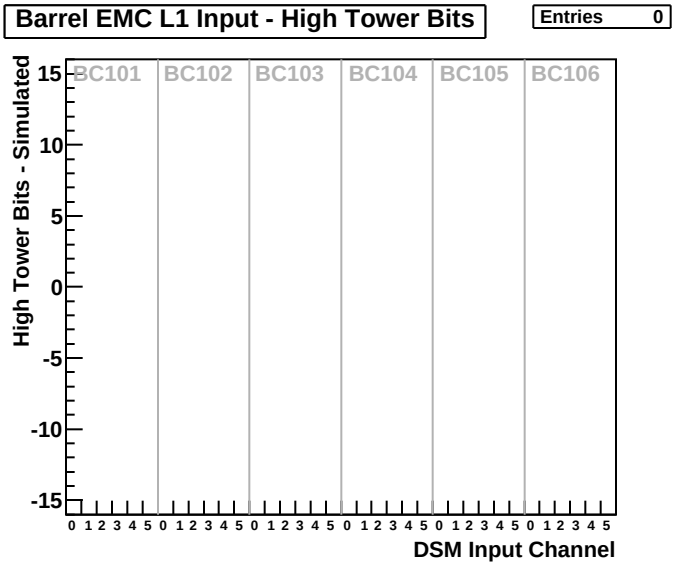

Barrel EMC L1 Input - Low Eta Sum
Entries 1.083949e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

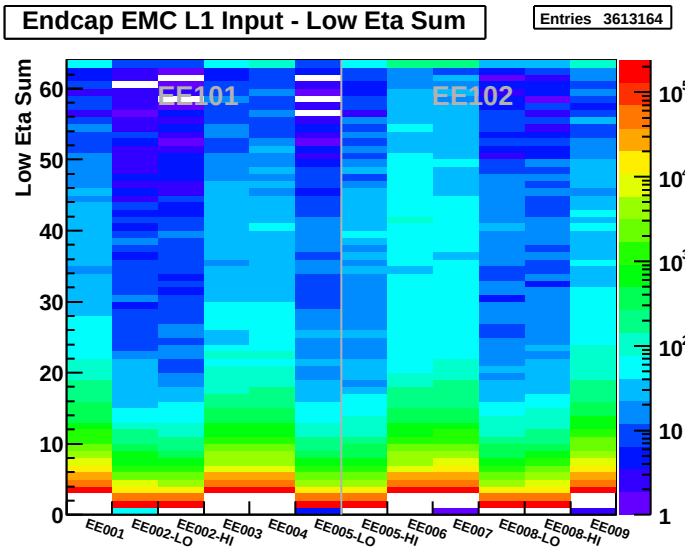

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

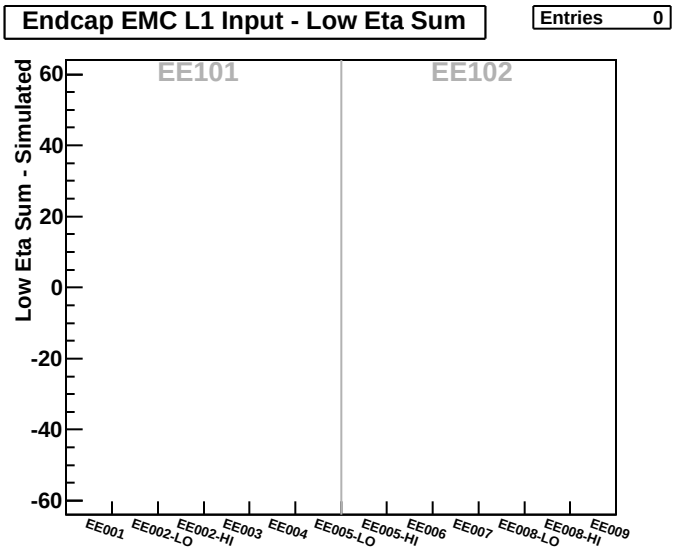

Barrel EMC L1 Input - High Eta Sum
Entries 1.083949e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

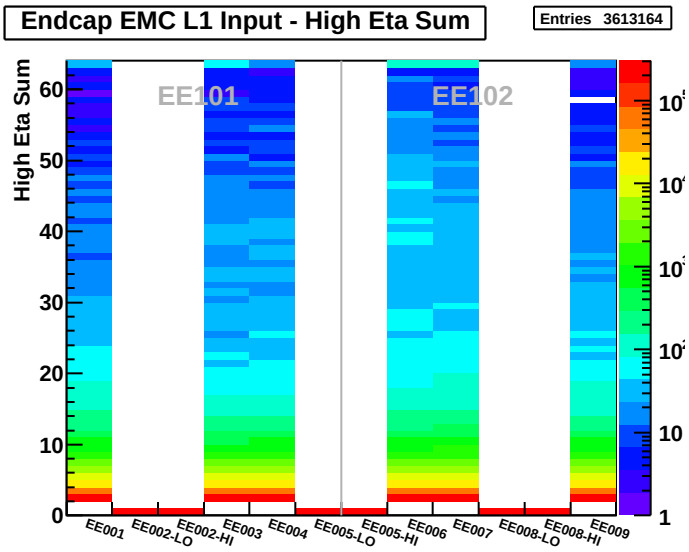

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

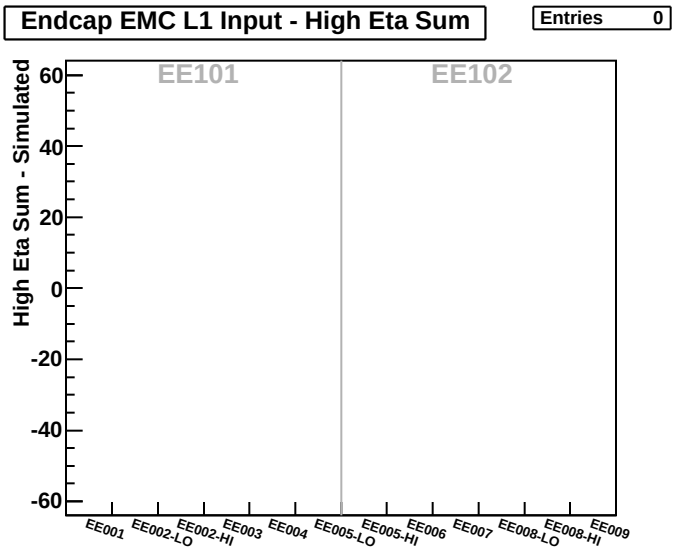

Barrel EMC L1 Input - High Tower Bits
Entries 1.083949e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

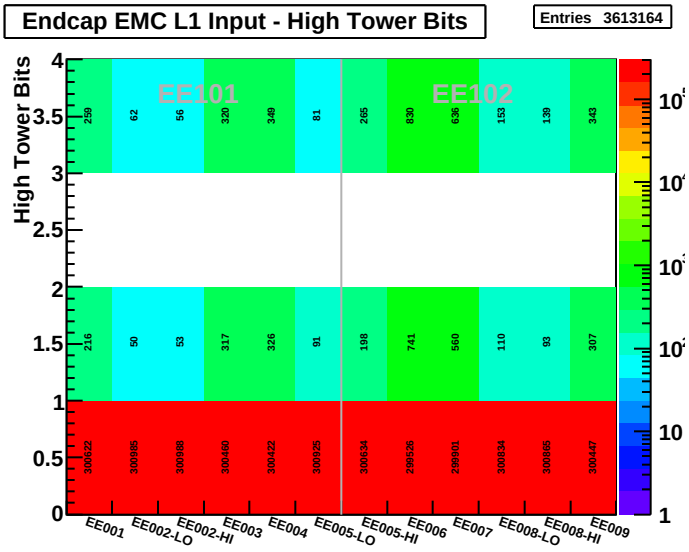

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

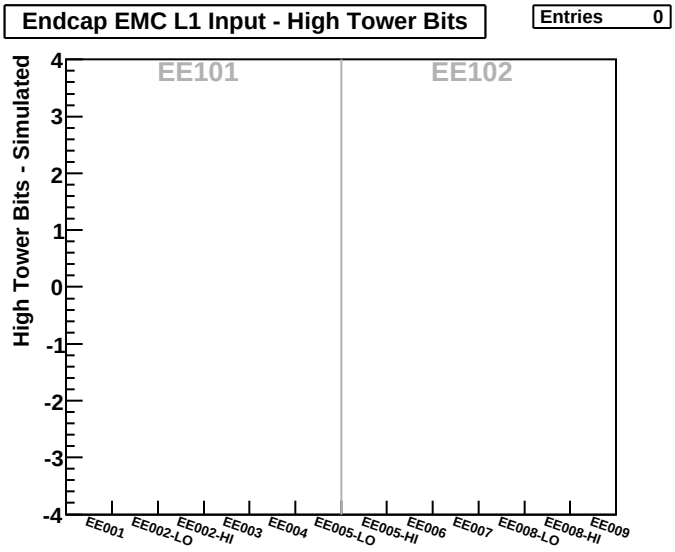

Endcap EMC L1 Input - Low Eta Sum
Entries 3613164
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

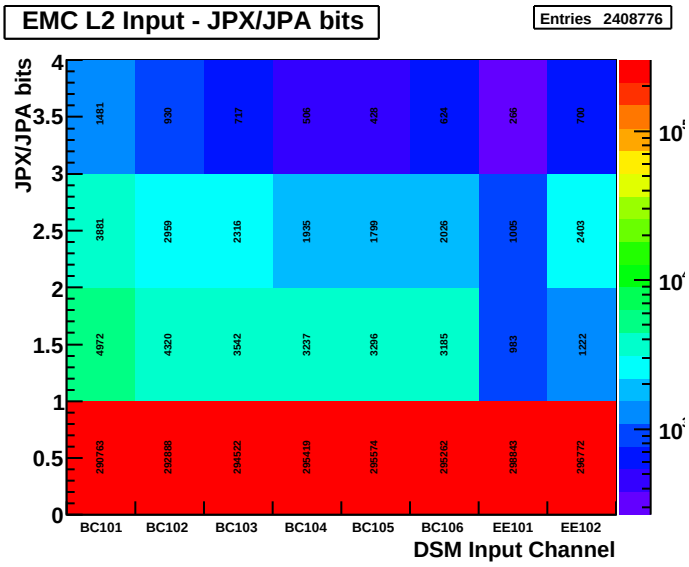

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

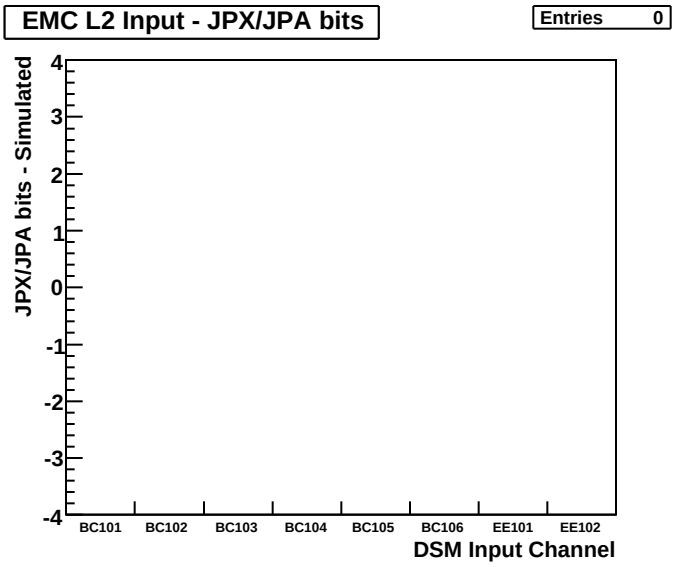

Endcap EMC L1 Input - High Eta Sum
Entries 3613164
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

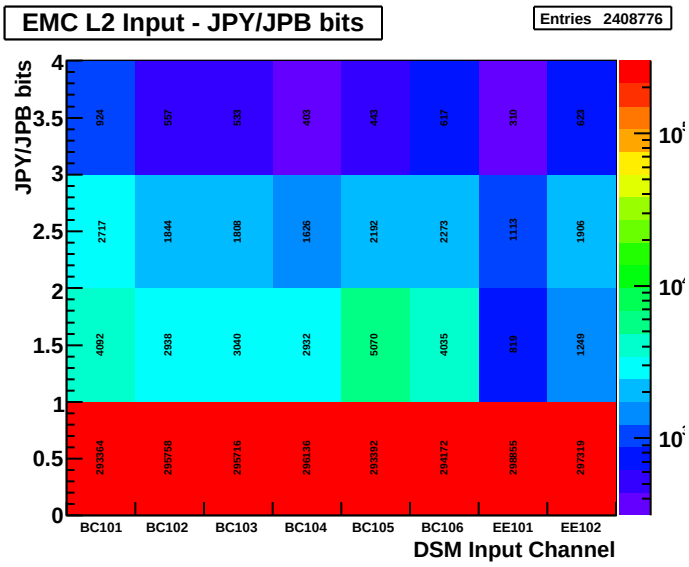

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

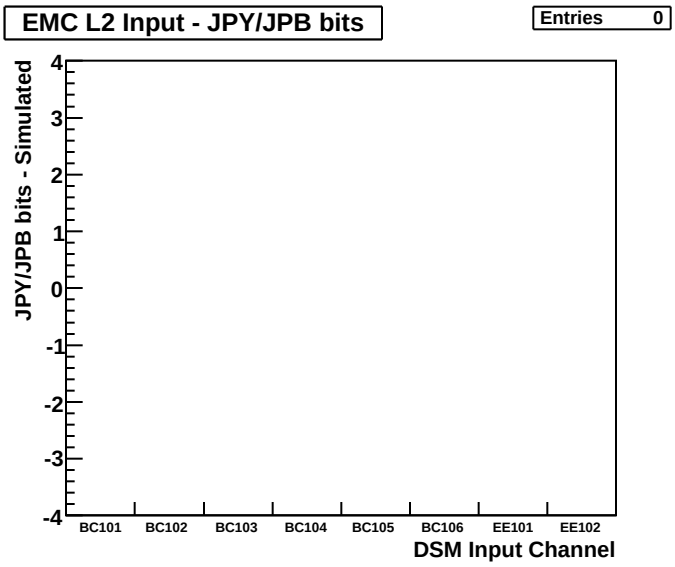

Endcap EMC L1 Input - High Tower Bits
Entries 3613164
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

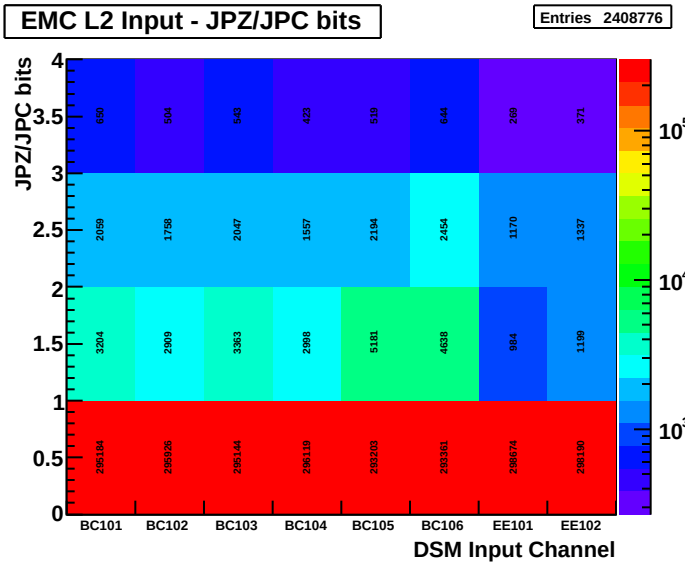

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

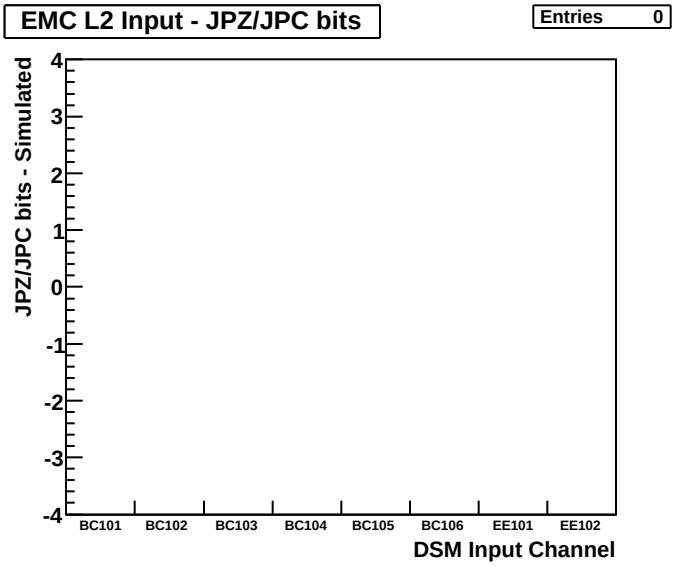

EMC L2 Input - JPX/JPA bits
Entries 2408776
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1481 930 717 506 428 624 266 700
3881 2959 2316 1935 1799 2026 1065 2403
4972 4320 3542 3237 3296 3185 983 1222
290763 292808 294522 295419 295574 295262 298843 298772

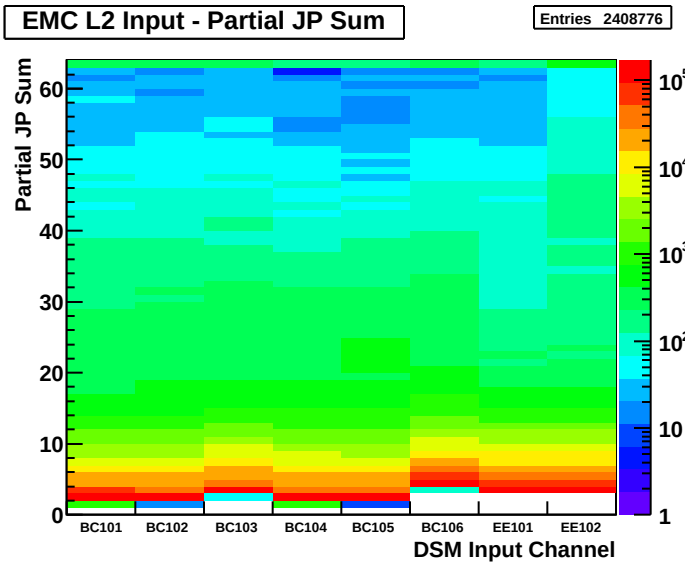

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

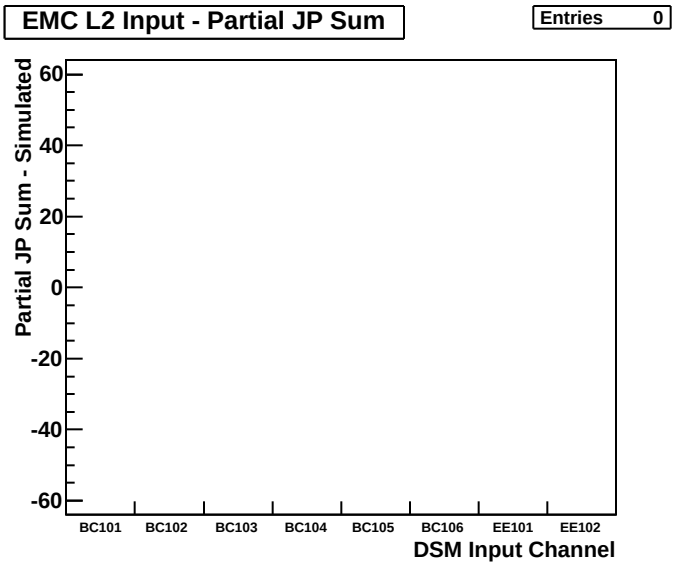

EMC L2 Input - JPY/JPB bits
Entries 2408776
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
924 557 538 403 443 617 310 625
2717 1844 1808 1626 2192 2273 1113 1906
4092 2938 3040 2932 5070 4035 819 1249
293364 293758 293716 293136 293392 294172 298855 297319

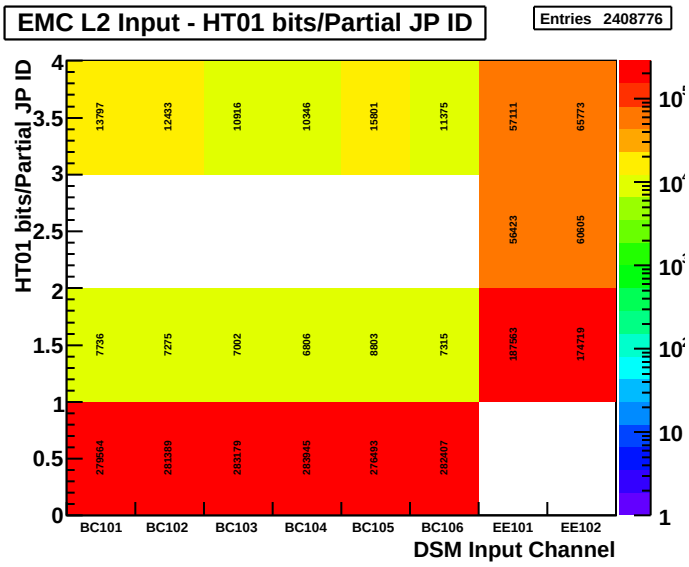

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

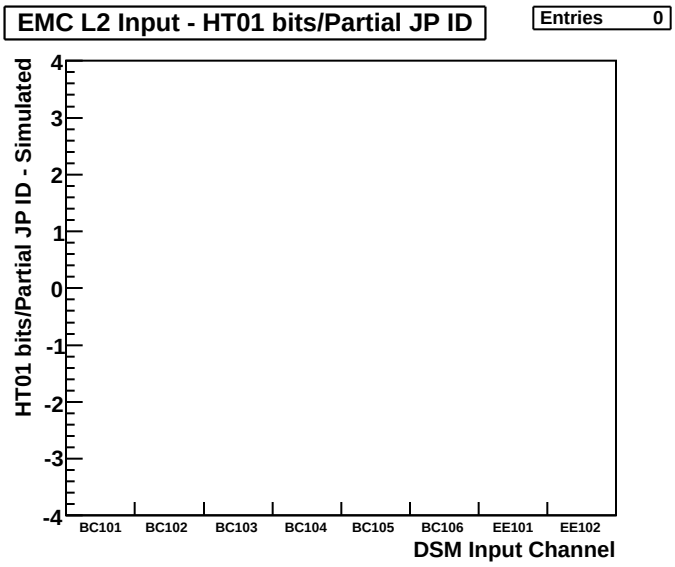

EMC L2 Input - JPZ/JPC bits
Entries 2408776
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
650 504 543 423 519 644 269 371
2059 1758 2047 1557 2194 2454 1170 1337
3204 2909 3363 2998 5181 4638 984 1199
295184 295326 295144 296119 293203 293361 298674 298190

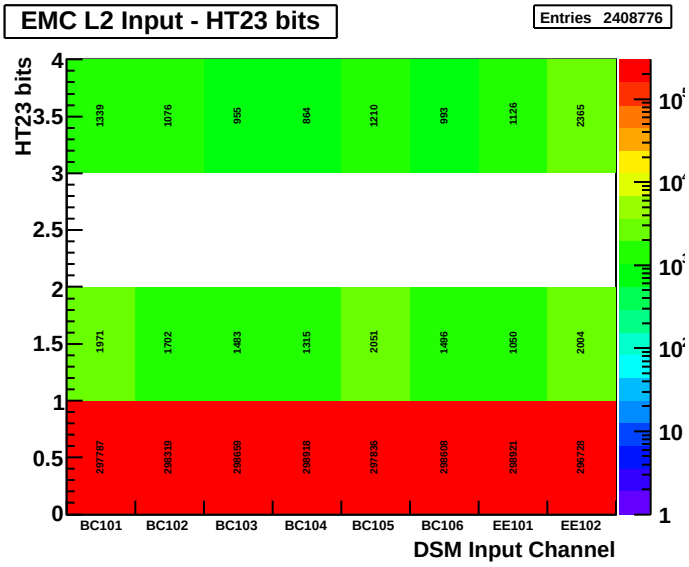

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

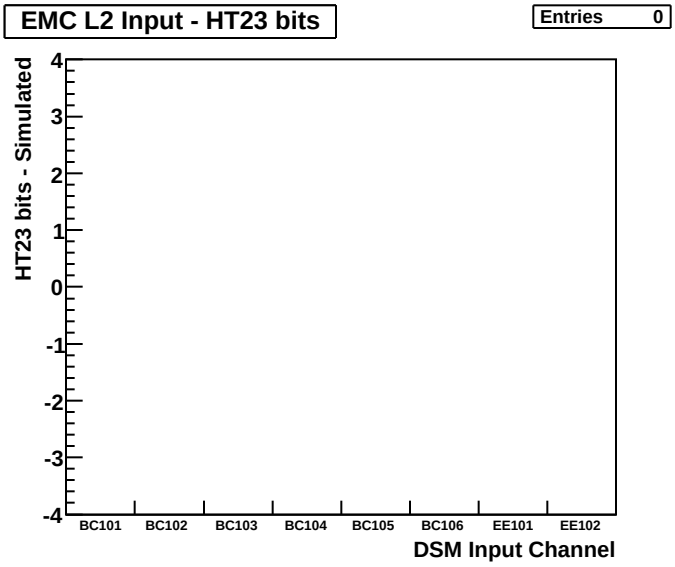

EMC L2 Input - Partial JP Sum
Entries 2408776
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

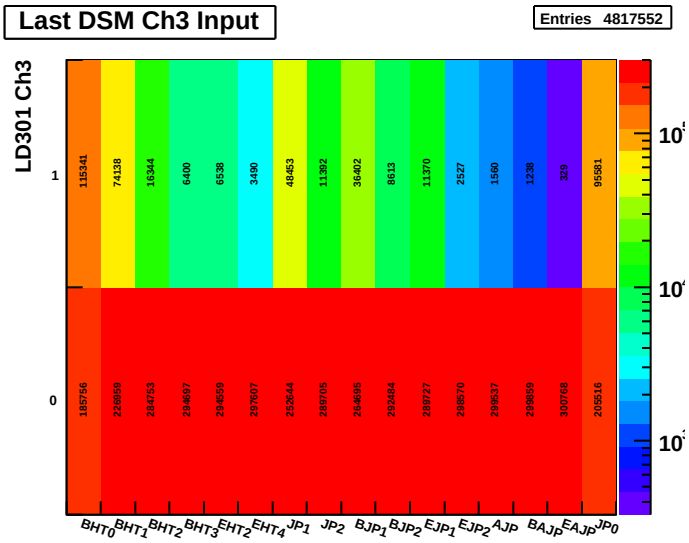

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

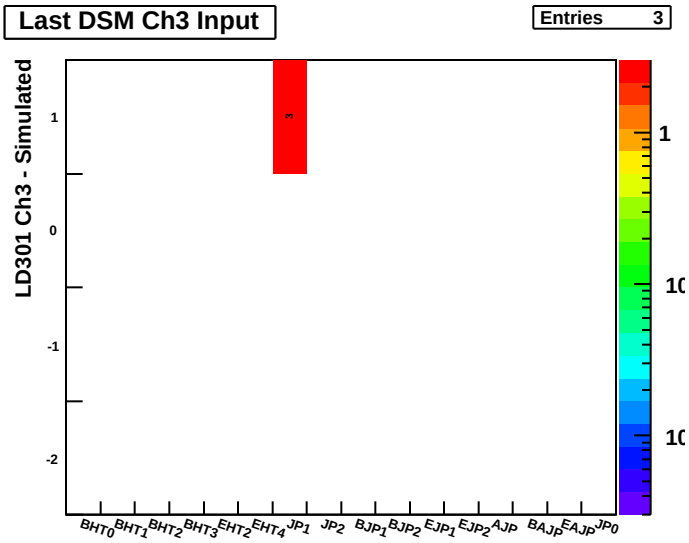

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2408776
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

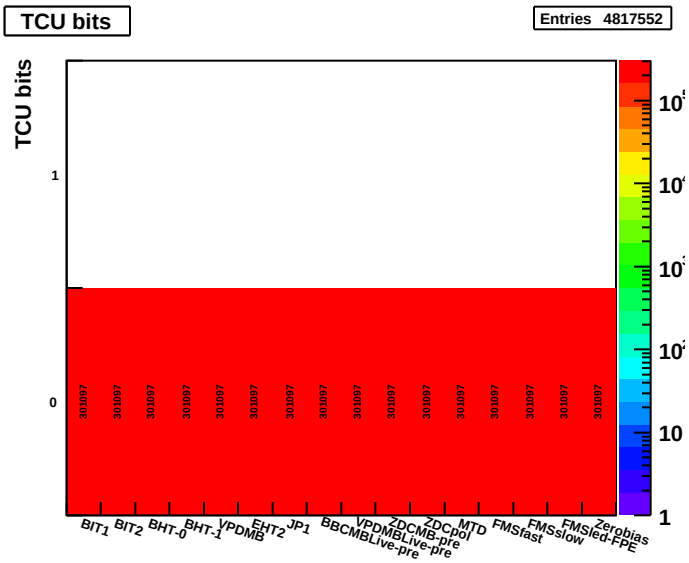

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

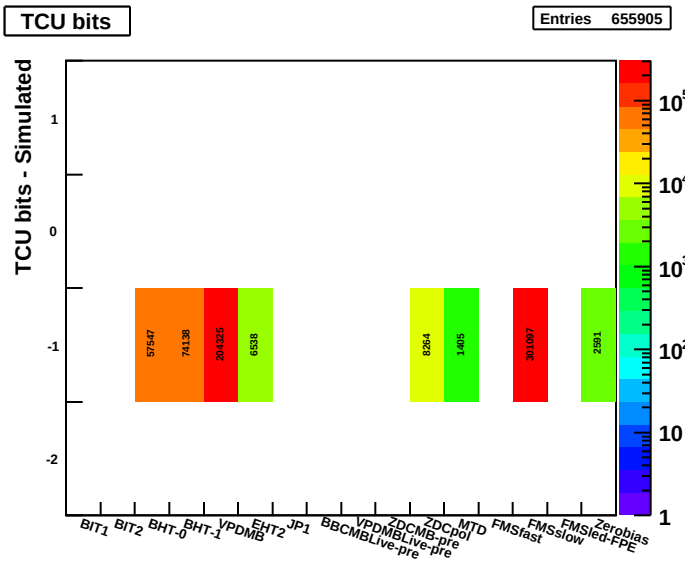

EMC L2 Input - HT23 bits
Entries 2408776
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

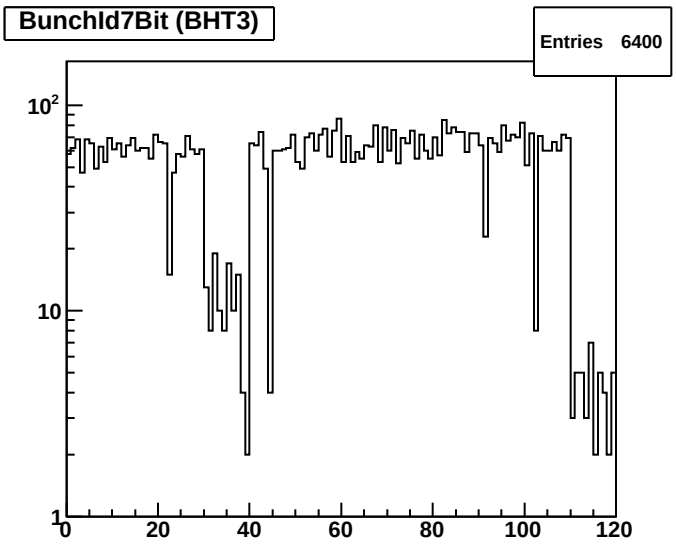

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

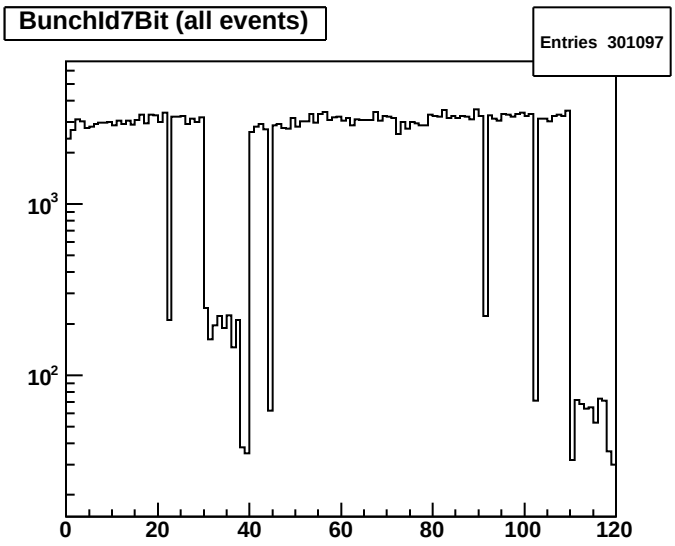

Last DSM Ch3 Input
Entries 4817552
LD301 Ch3
1
0
115341 74138 16344 6400 6538 3490 48453 11392 36402 8613 11370 2527 1560 1238 329 95581
185756 226959 284753 294697 294559 297607 252644 289705 264695 292484 289727 298570 299537 298859 300768 205516
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

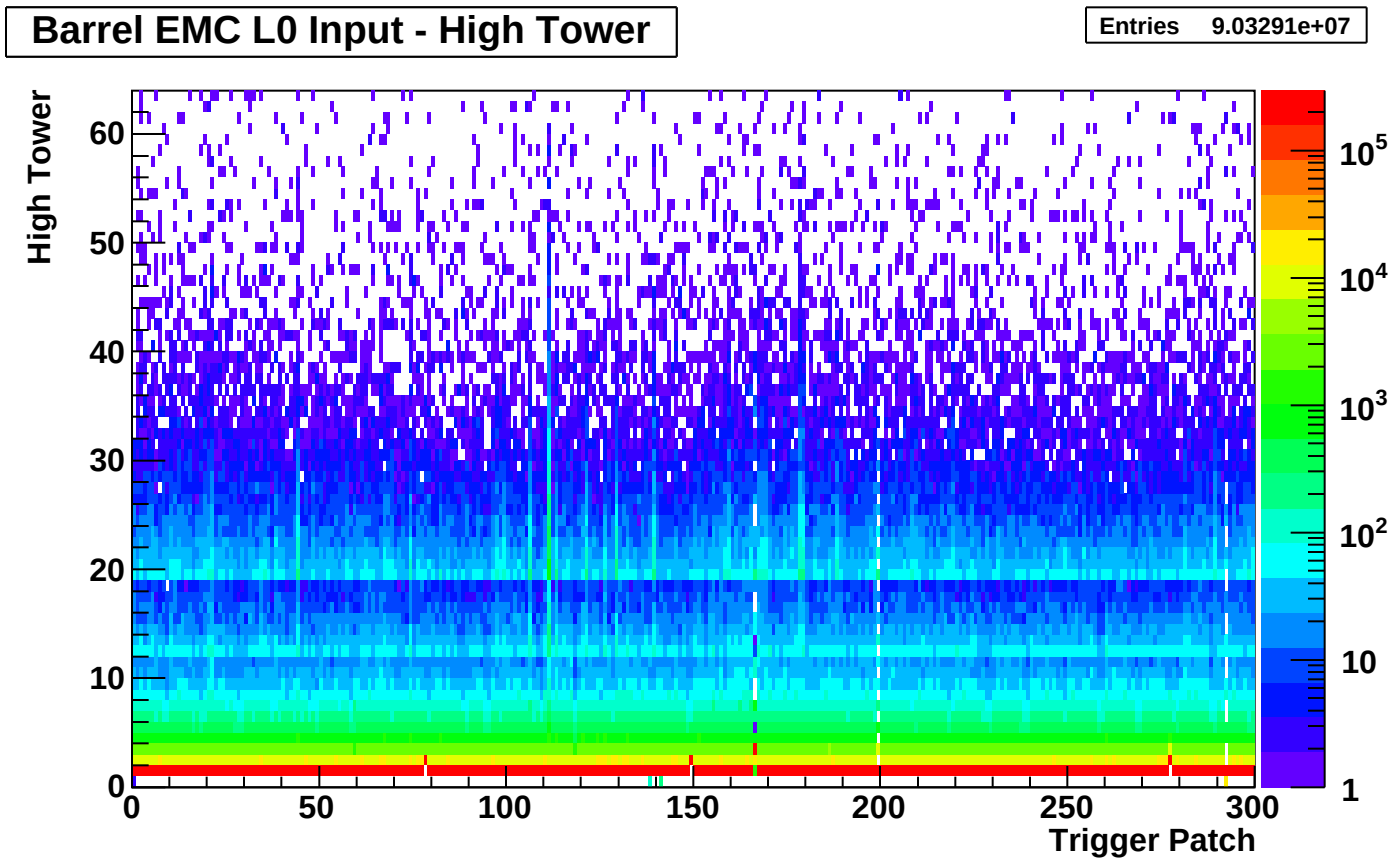

Last DSM Ch3 Input
Entries 3
LD301 Ch3 - Simulated
1
0
-1
-2
3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

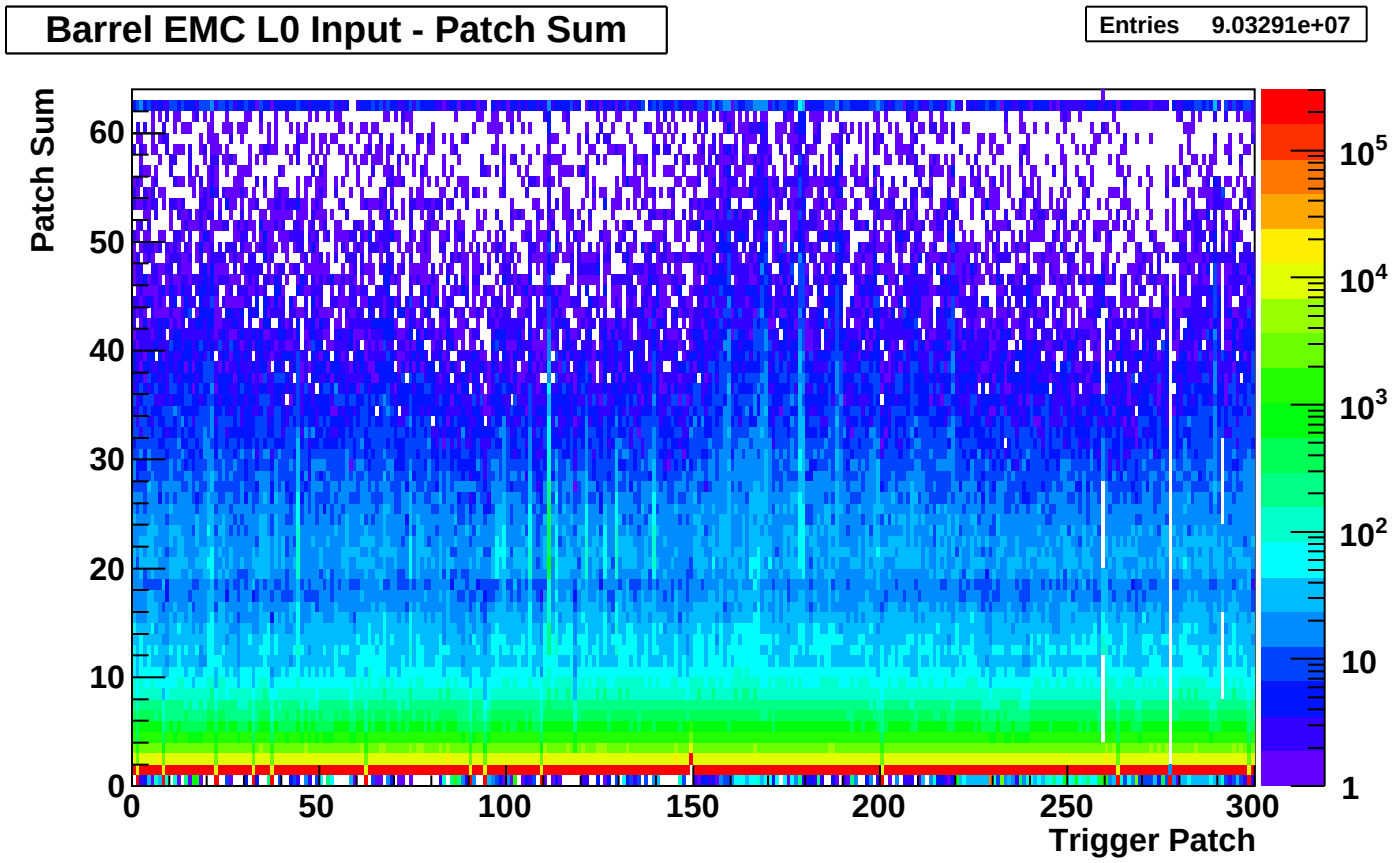

TCU bits
Entries 4817552
TCU bits
1
0
301097 301097 301097 301097 301097 301097 301097 301097 301097 301097 301097 301097 301097 301097 301097 301097
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

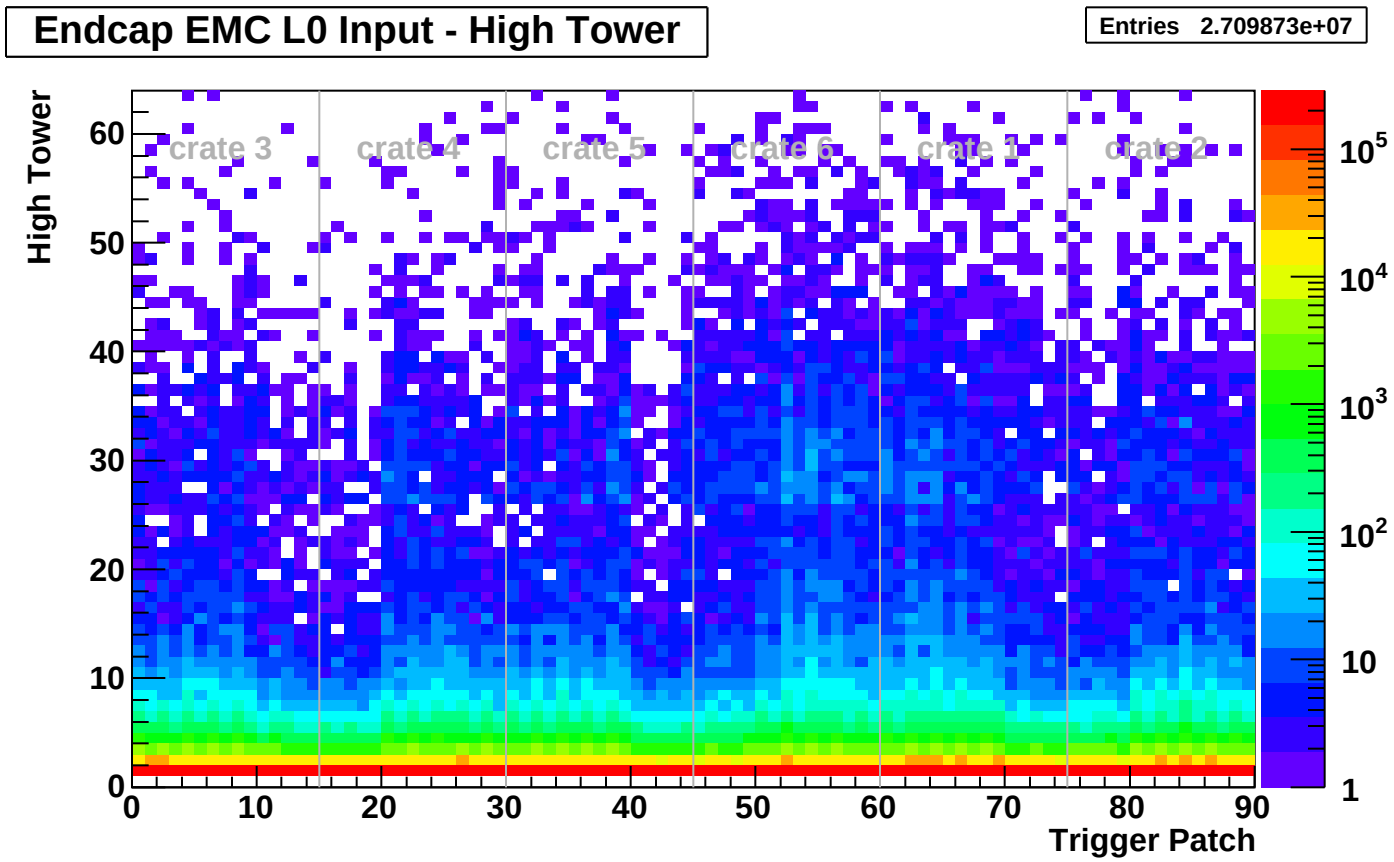

TCU bits
Entries 655905
TCU bits - Simulated
1
0
-1
-2
57547 74138 204325 6538 8264 1405 301097 2591
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

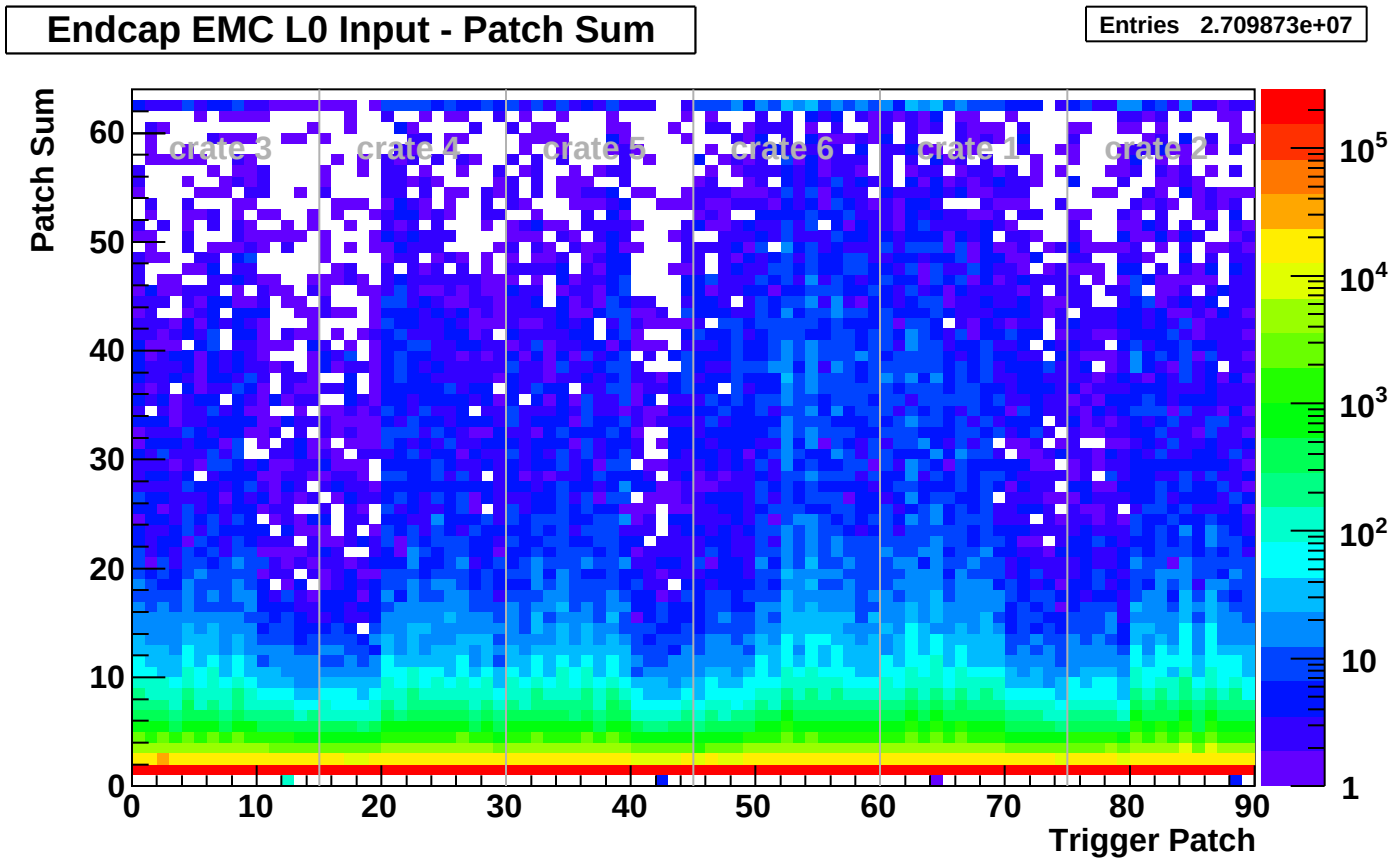

BunchId7Bit (BHT3)
Entries 6400
10^2
10
1
0 20 40 60 80 100 120

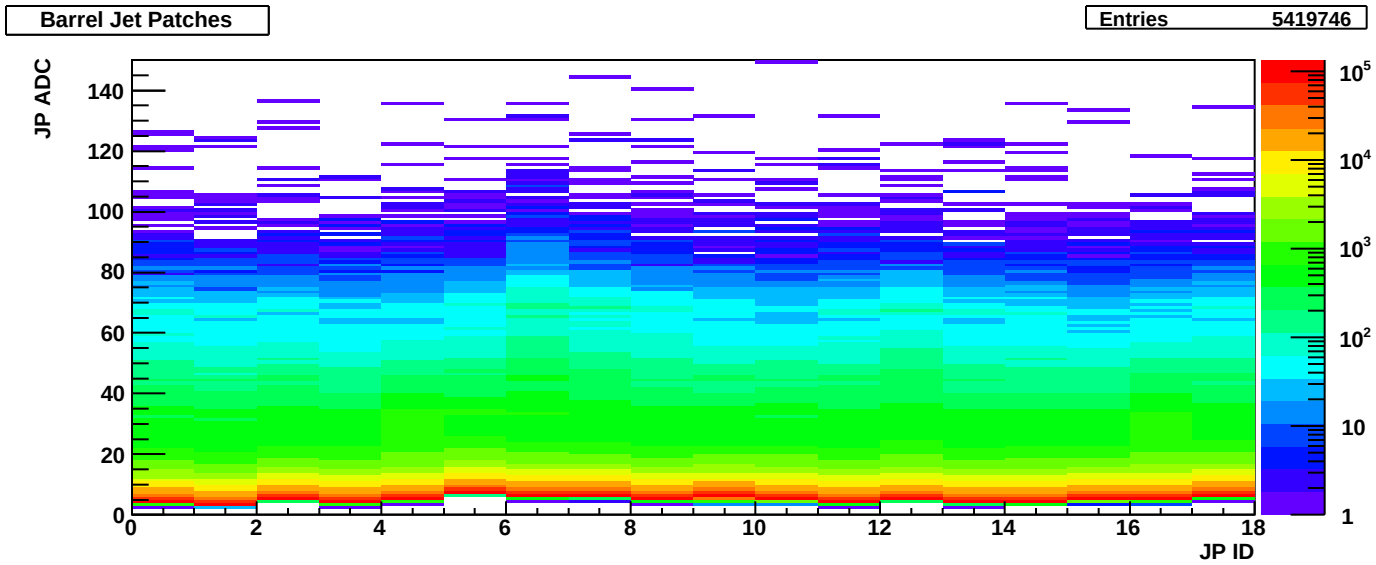

BunchId7Bit (all events)
Entries 301097
10^3
10^2
0 20 40 60 80 100 120

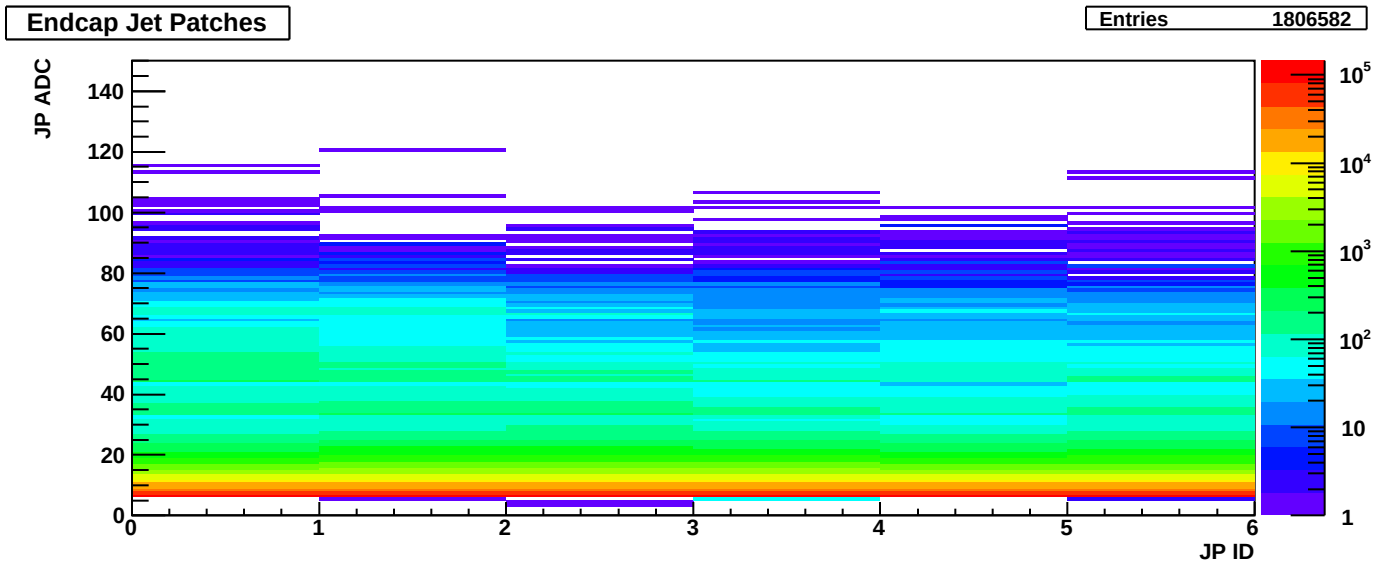

Barrel EMC L0 Input - High Tower
Entries 9.03291e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

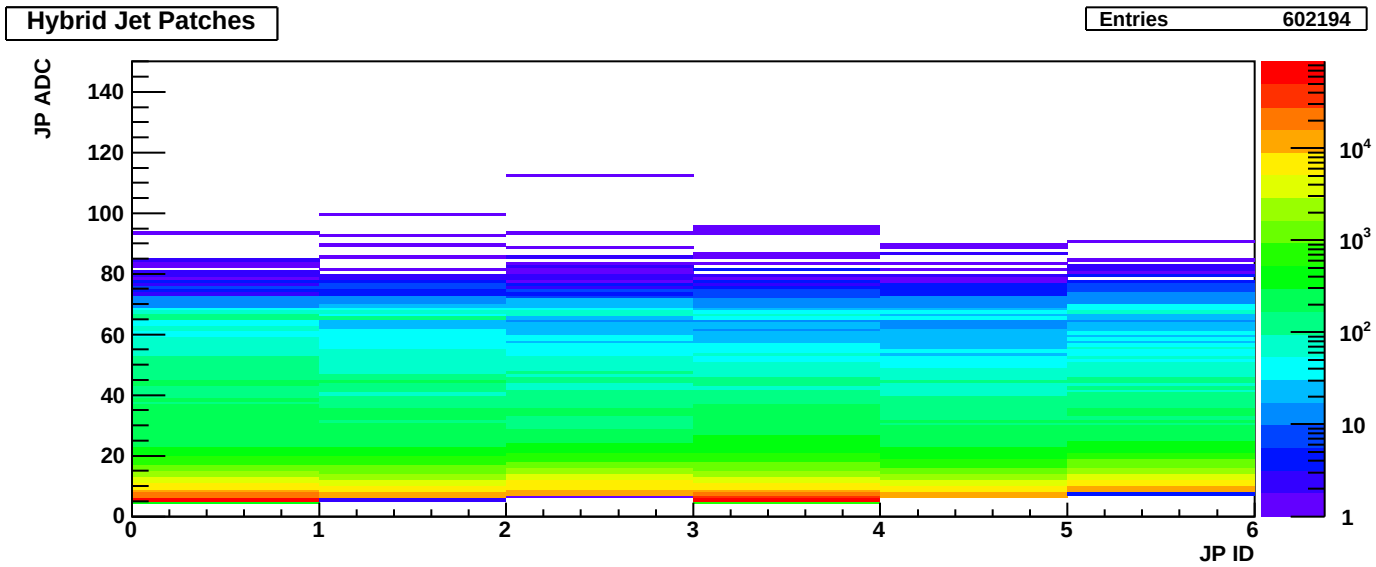

Barrel EMC L0 Input - Patch Sum
Entries 9.03291e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

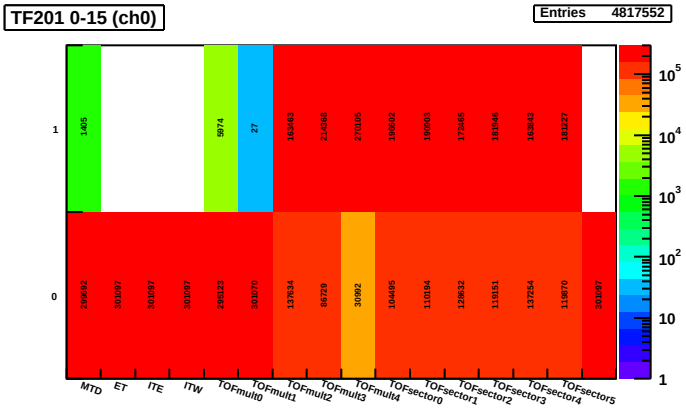

Endcap EMC L0 Input - High Tower
Entries 2.709873e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

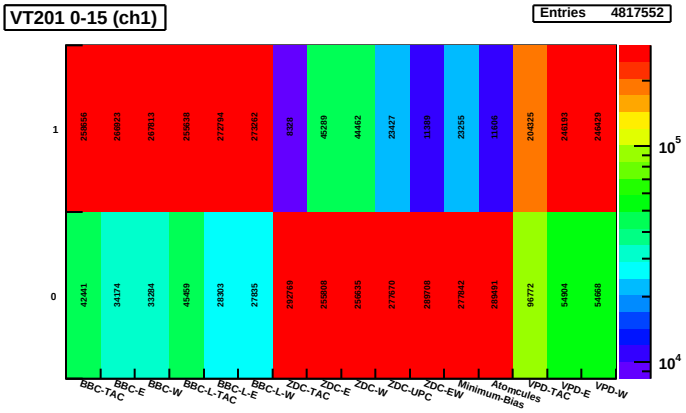

Endcap EMC L0 Input - Patch Sum
Entries 2.709873e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

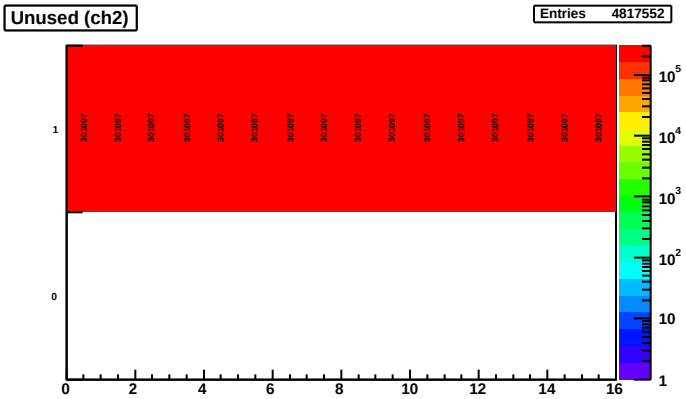

Barrel Jet Patches
Entries 5419746
JP ADC
JP ID

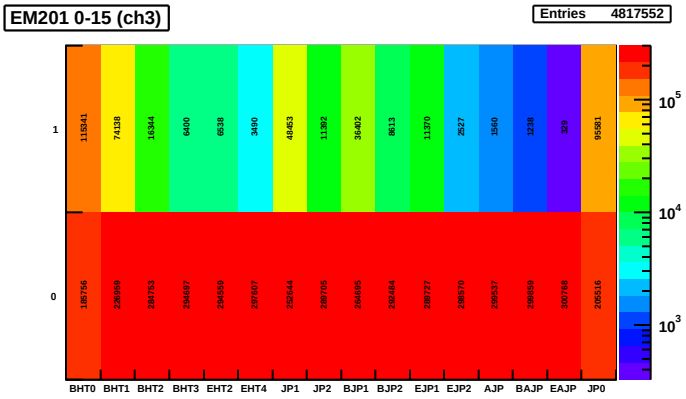

Endcap Jet Patches
Entries 1806582
JP ADC
JP ID

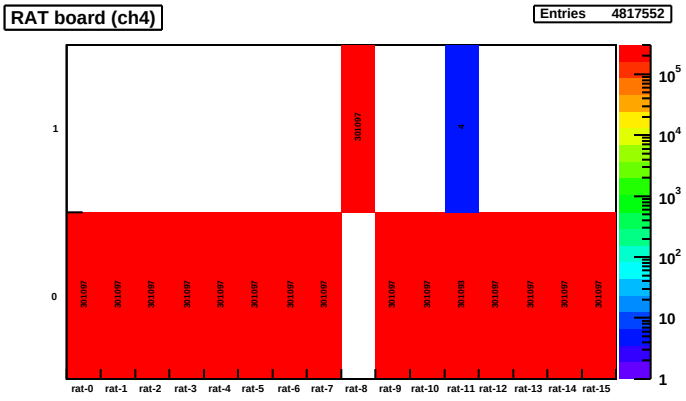

Hybrid Jet Patches
Entries 602194
JP ADC
JP ID

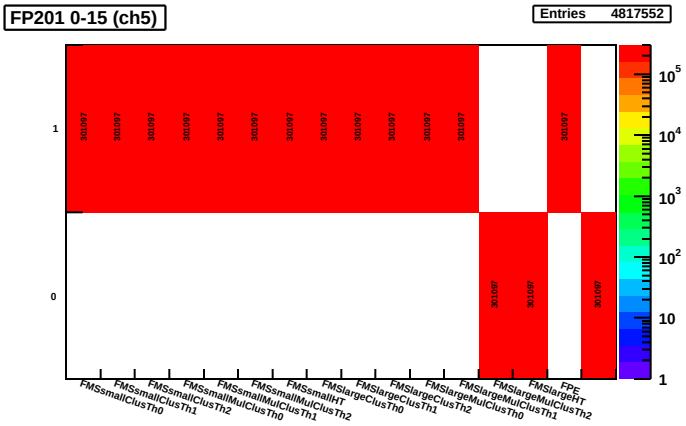

TF201 0-15 (ch0)
Entries 4817552
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

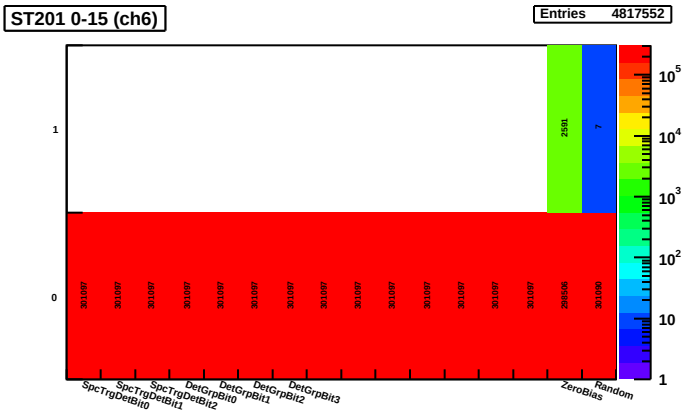

VT201 0-15 (ch1)
Entries 4817552
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

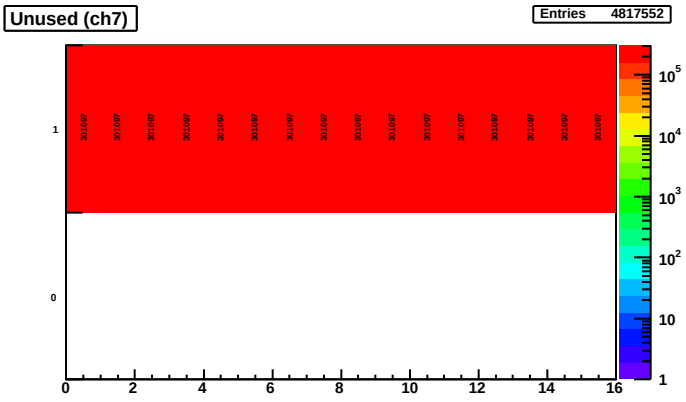

Unused (ch2)
Entries 4817552

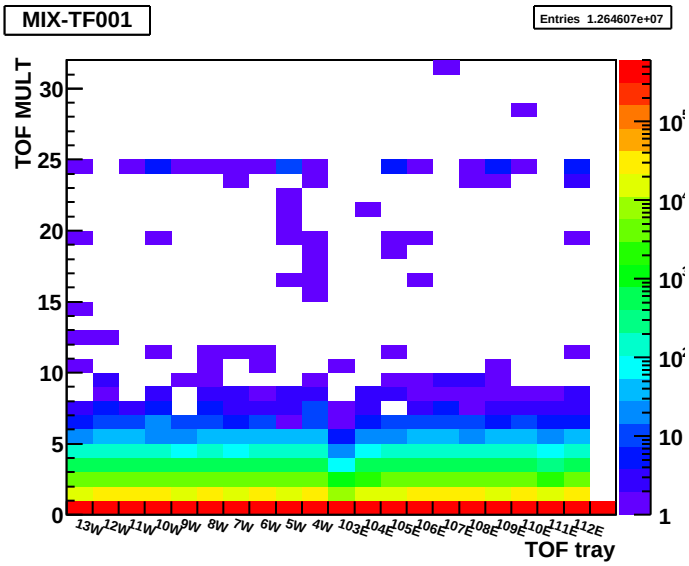

EM201 0-15 (ch3)
Entries 4817552
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

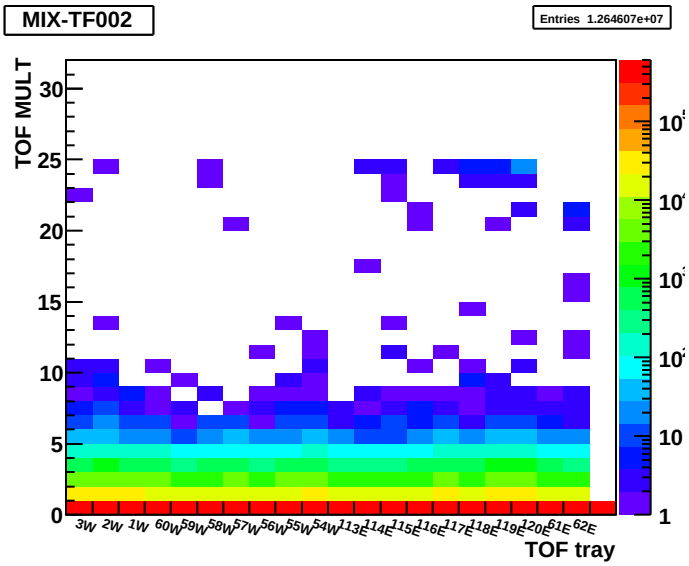

RAT board (ch4)
Entries 4817552
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

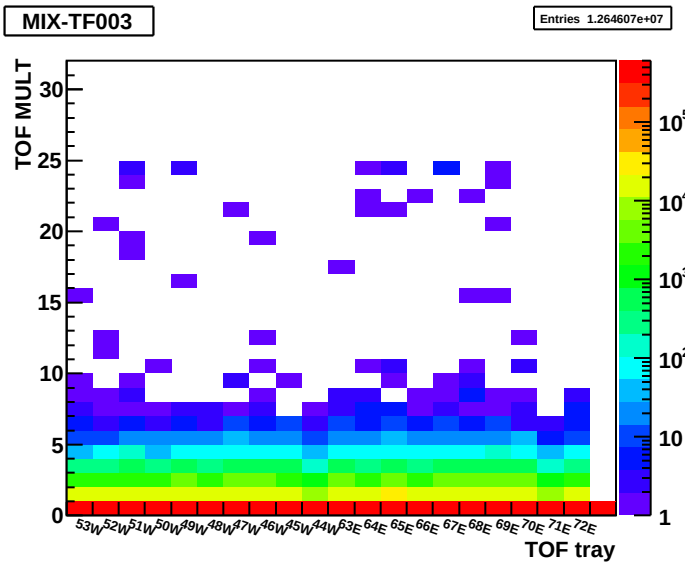

FP201 0-15 (ch5)
Entries 4817552
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

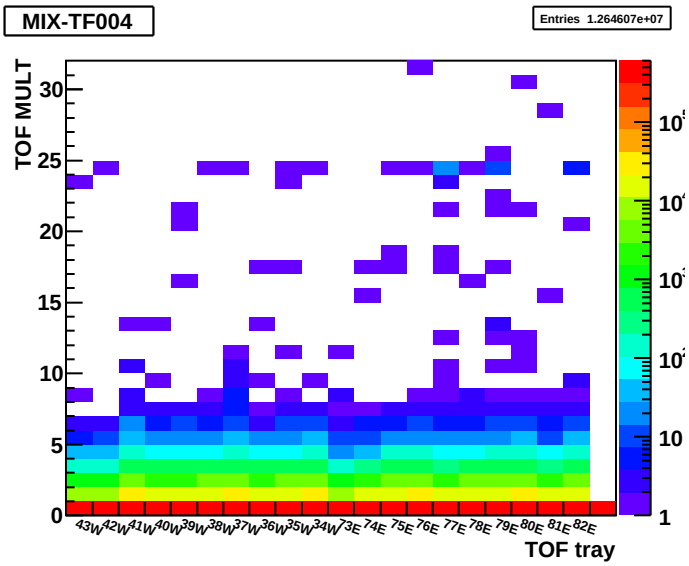

ST201 0-15 (ch6)
Entries 4817552
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

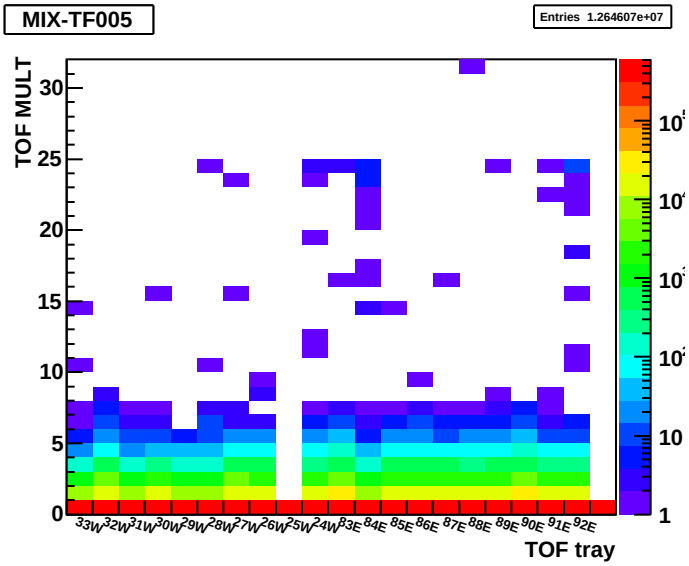

Unused (ch7)
Entries 4817552

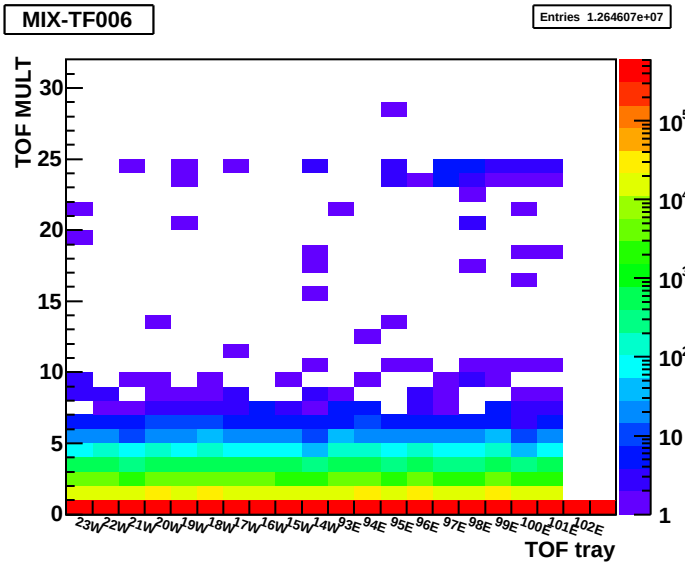

MIX-TF001
Entries 1.264607e+07
TOF MULT
TOF tray

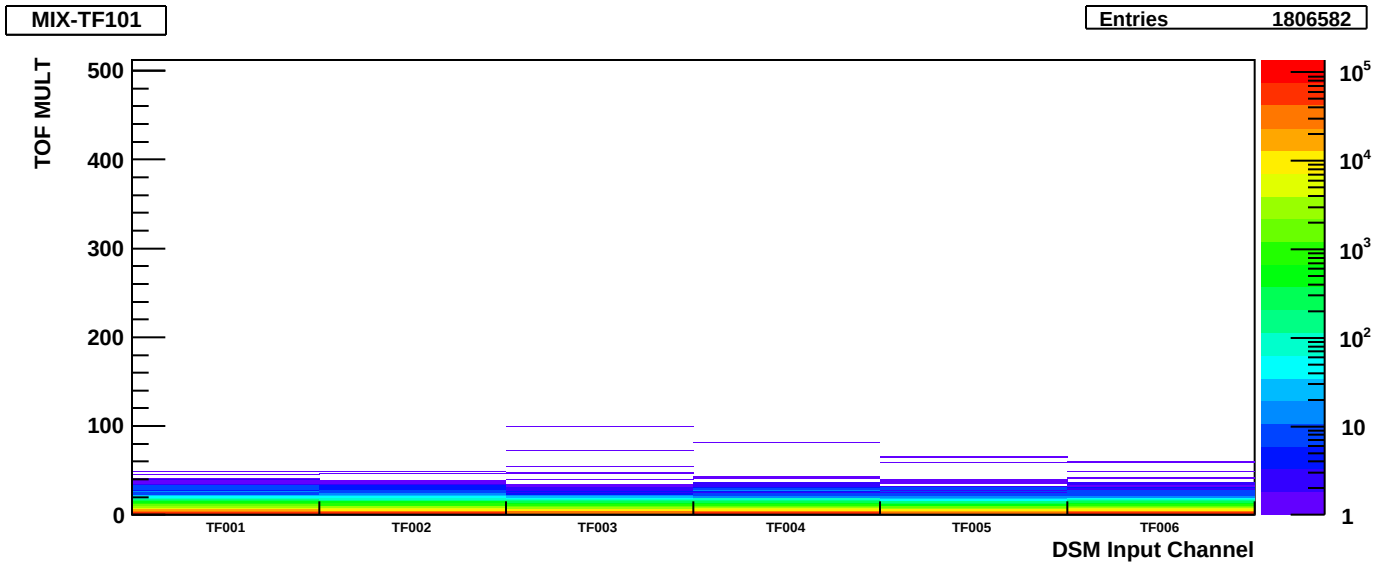

MIX-TF002
Entries 1.264607e+07
TOF MULT
TOF tray

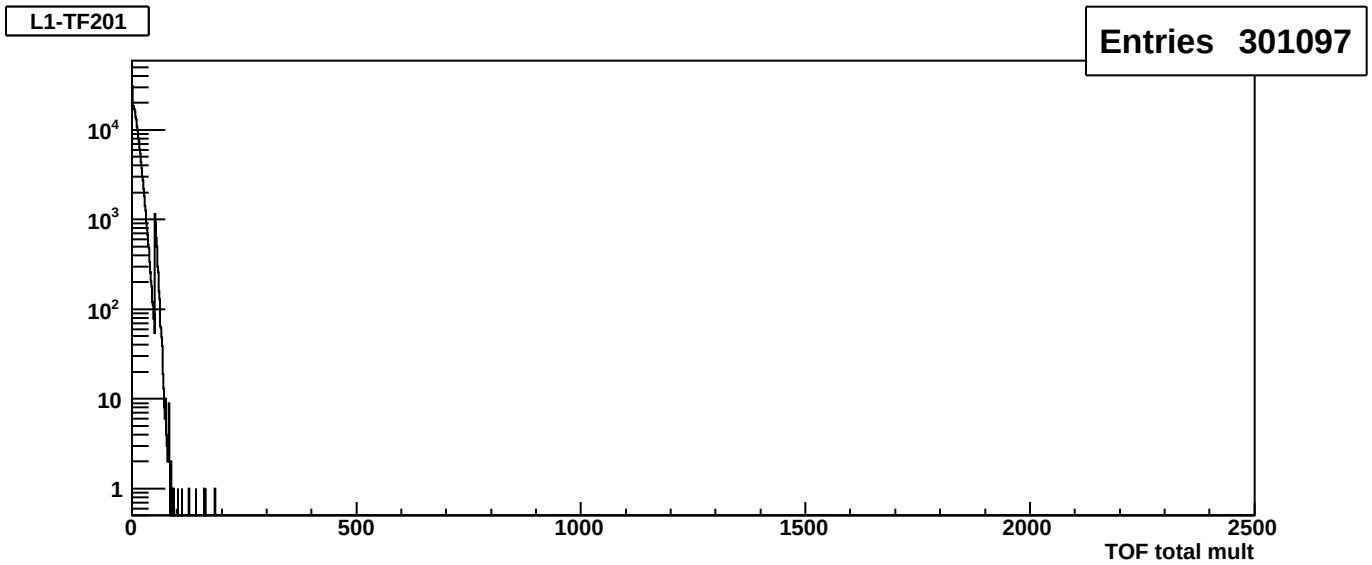

MIX-TF003
Entries 1.264607e+07
TOF MULT
TOF tray

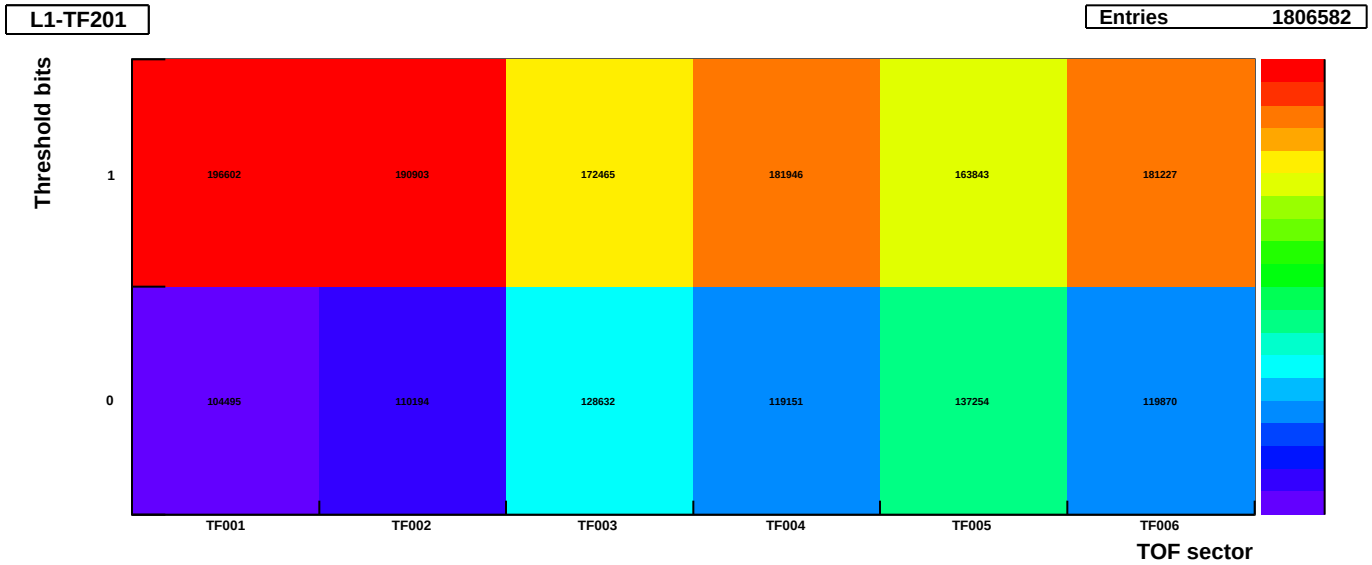

MIX-TF004
Entries 1.264607e+07
TOF MULT
TOF tray

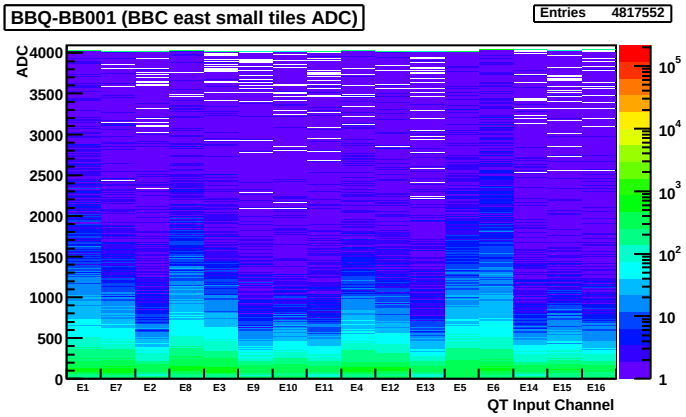

MIX-TF005
Entries 1.264607e+07
TOF MULT
TOF tray

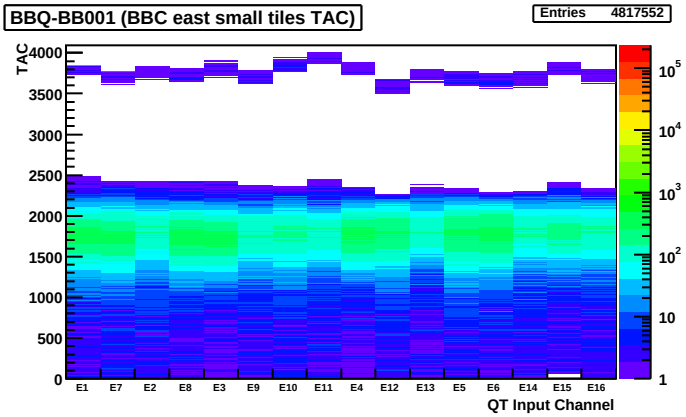

MIX-TF006
Entries 1.264607e+07
TOF MULT
TOF tray

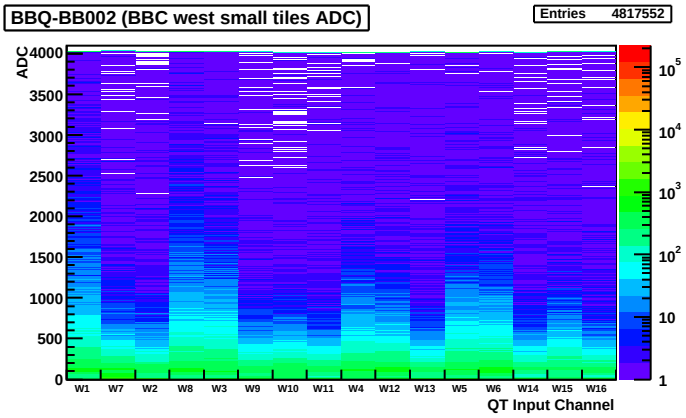

MIX-TF101
Entries 1806582
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

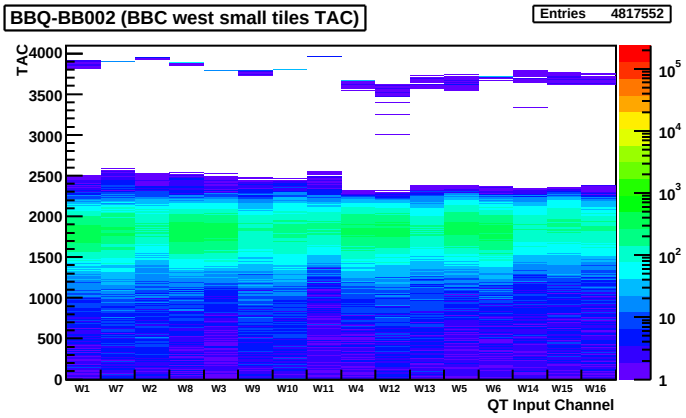

L1-TF201
Entries 301097
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

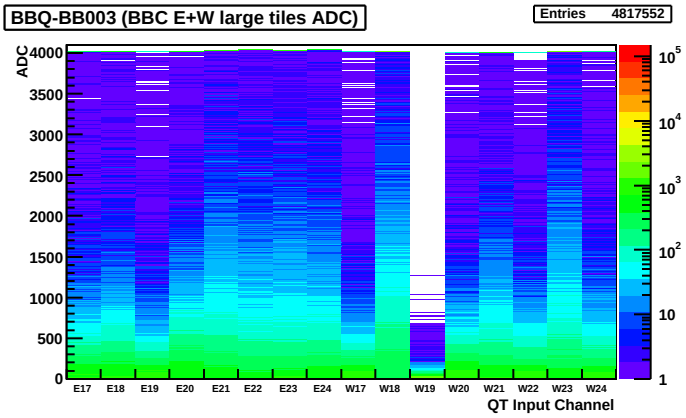

L1-TF201
Entries 1806582
Threshold bits
1
0
196602
190903
172465
181946
163843
181227
104495
110194
128632
119151
137254
119870
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

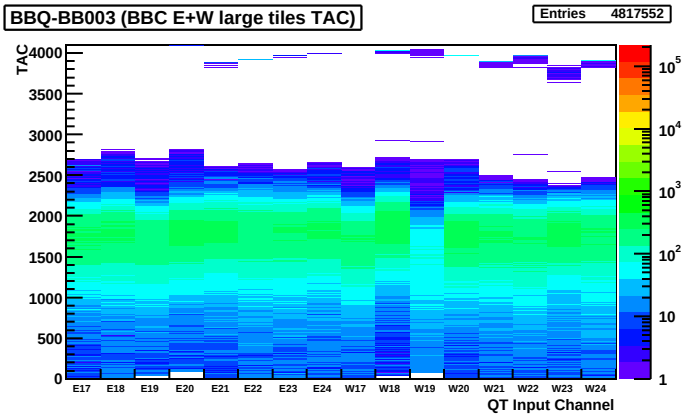

BBQ-BB001 (BBC east small tiles ADC)
Entries 4817552
ADC
QT Input Channel

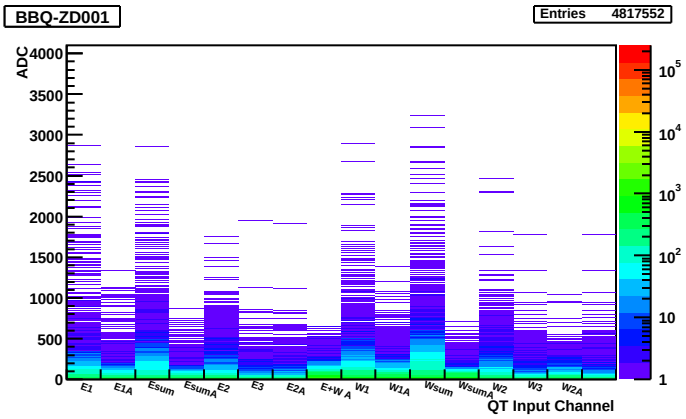

BBQ-BB001 (BBC east small tiles TAC)
Entries 4817552
TAC
QT Input Channel

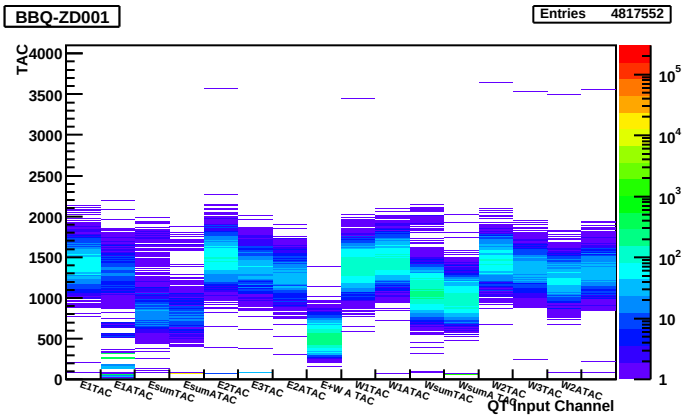

BBQ-BB002 (BBC west small tiles ADC)
Entries 4817552
ADC
QT Input Channel

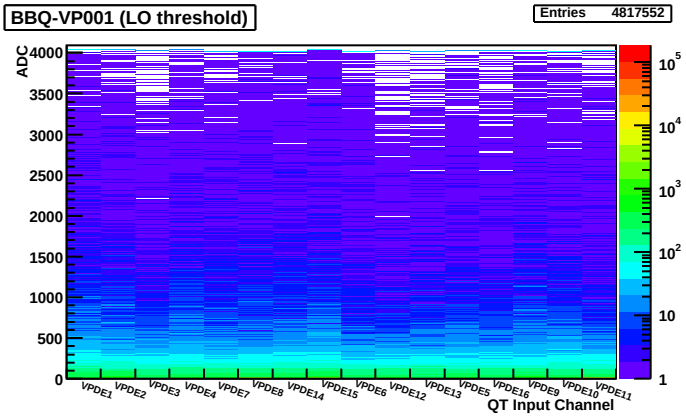

BBQ-BB002 (BBC west small tiles TAC)
Entries 4817552
TAC
QT Input Channel

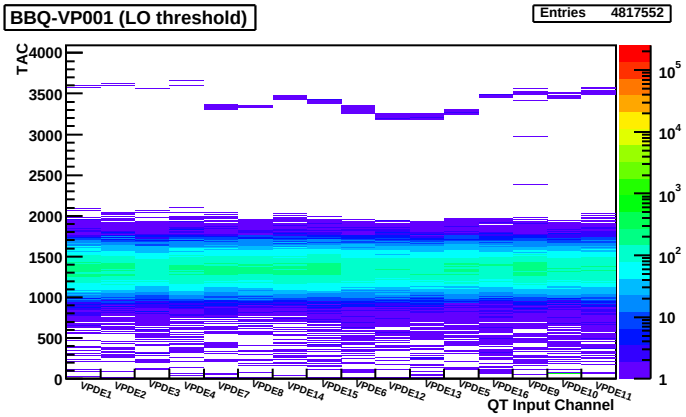

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4817552
ADC
QT Input Channel

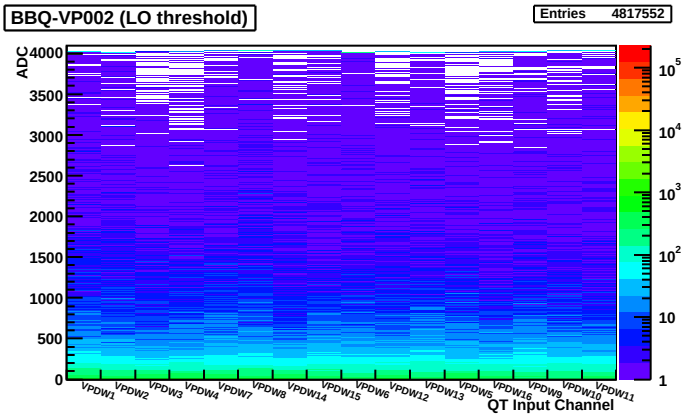

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4817552
TAC
QT Input Channel

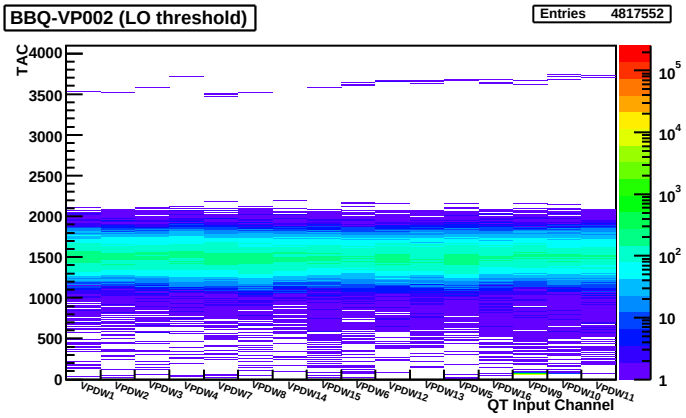

BBQ-ZD001
Entries 4817552
ADC
QT Input Channel

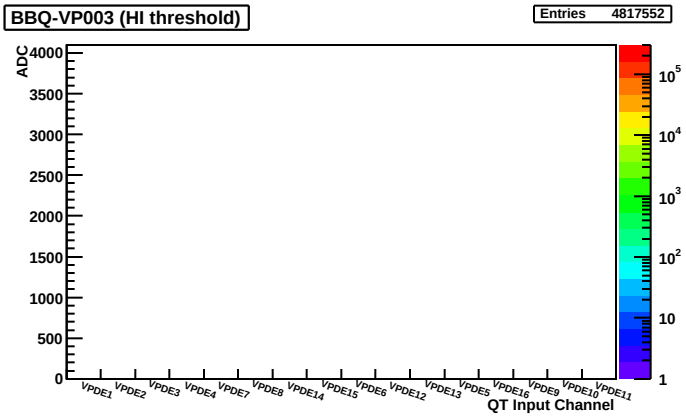

BBQ-ZD001
Entries 4817552
TAC
QT Input Channel

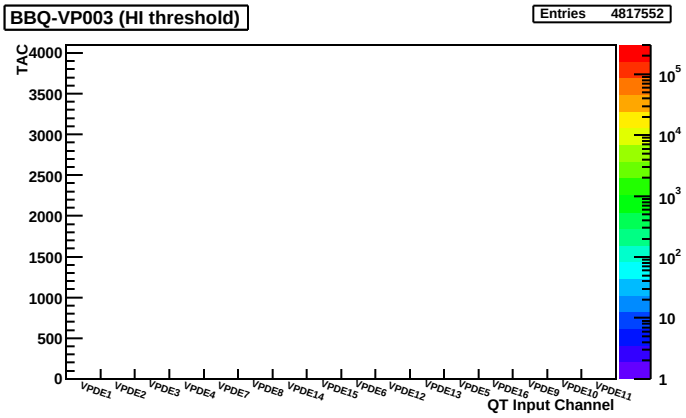

BBQ-VP001 (LO threshold)
Entries 4817552
ADC
QT Input Channel

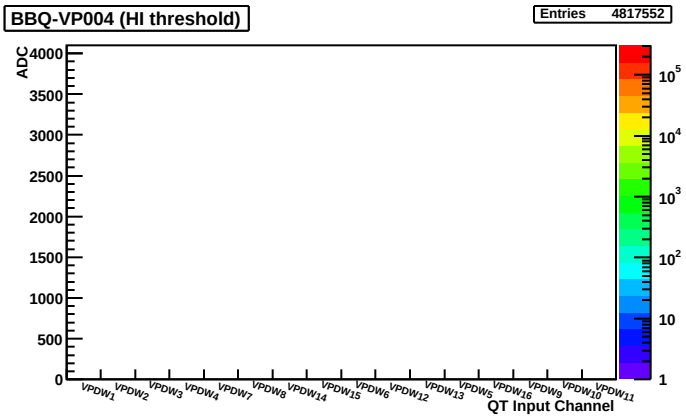

BBQ-VP001 (LO threshold)
Entries 4817552
TAC
QT Input Channel

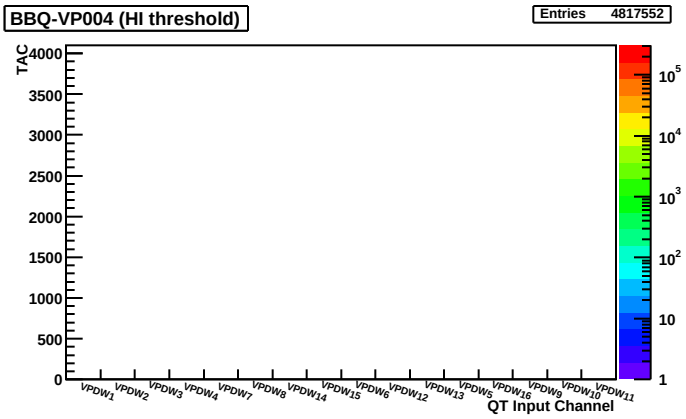

BBQ-VP002 (LO threshold)
Entries 4817552
ADC
QT Input Channel

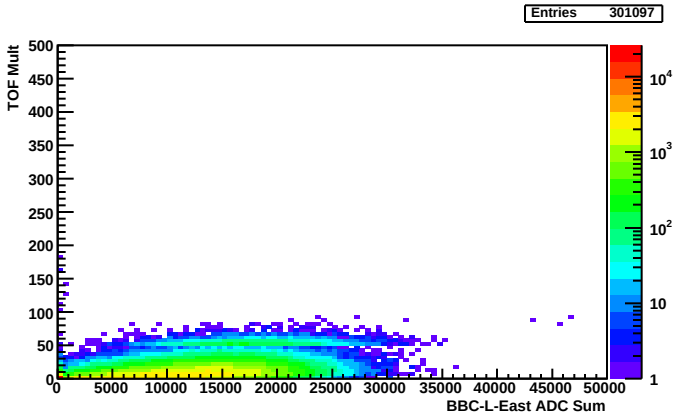

BBQ-VP002 (LO threshold)
Entries 4817552
TAC
QT Input Channel

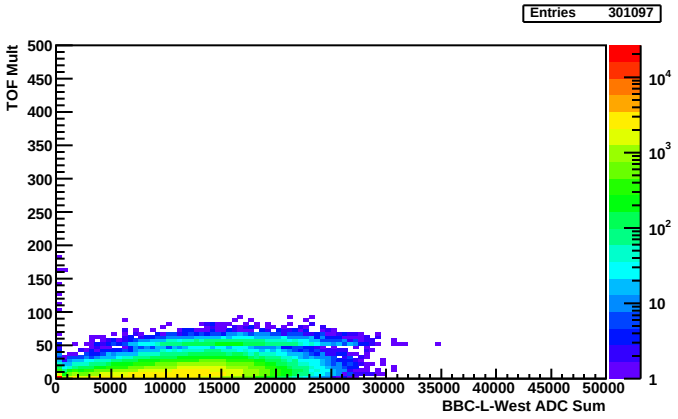

BBQ-VP003 (HI threshold)
Entries 4817552
ADC
QT Input Channel

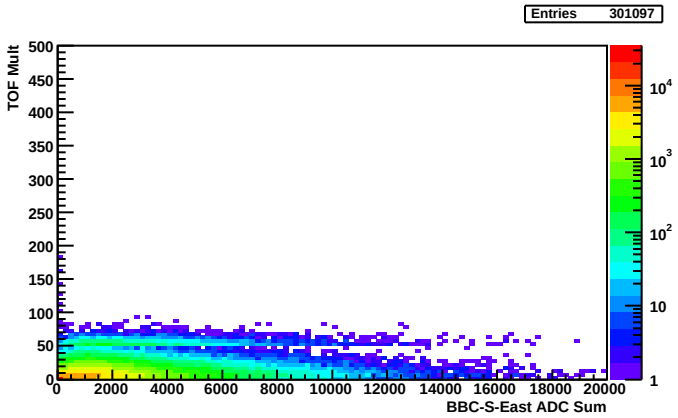

BBQ-VP003 (HI threshold)
Entries 4817552
TAC
QT Input Channel

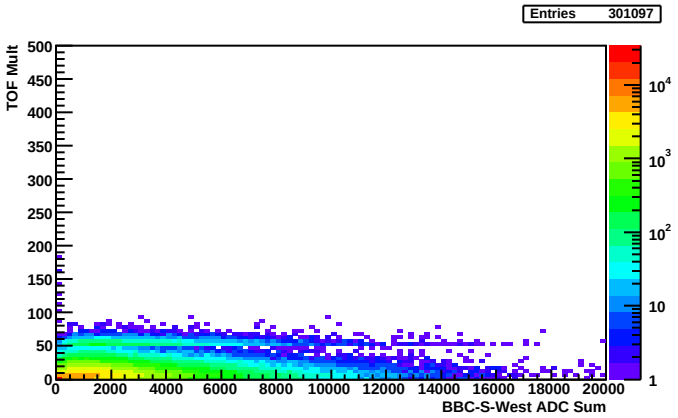

BBQ-VP004 (HI threshold)
Entries 4817552
ADC
QT Input Channel

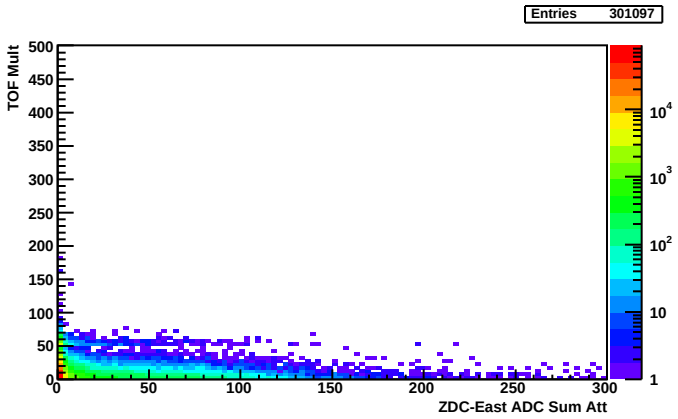

BBQ-VP004 (HI threshold)
Entries 4817552
TAC
QT Input Channel

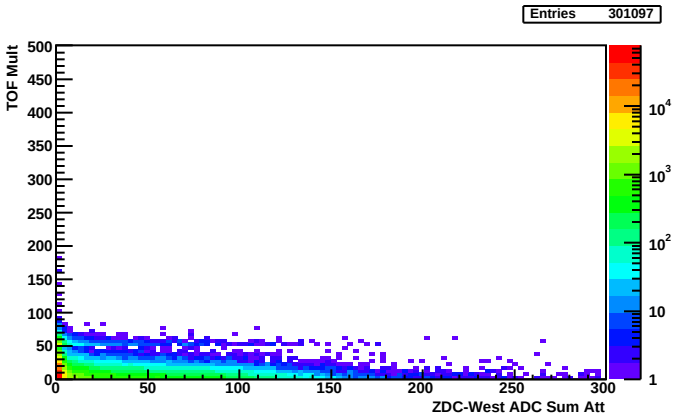

Entries 301097
TOF Mult
BBC-L-East ADC Sum

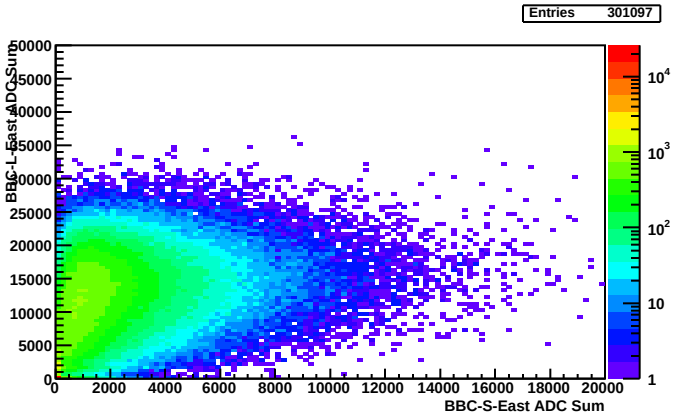

Entries 301097
TOF Mult
BBC-L-West ADC Sum

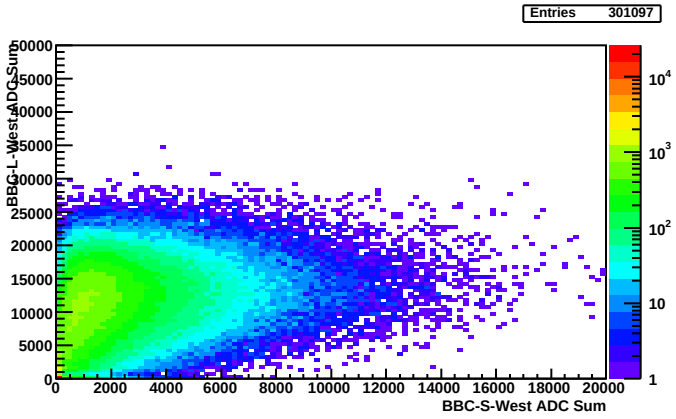

Entries 301097
TOF Mult
BBC-S-East ADC Sum

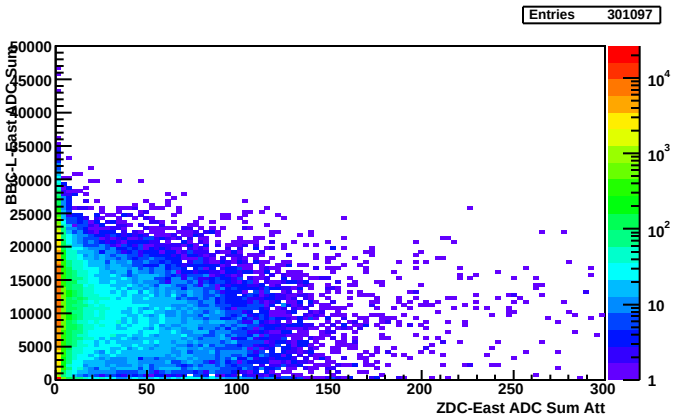

Entries 301097
TOF Mult
BBC-S-West ADC Sum

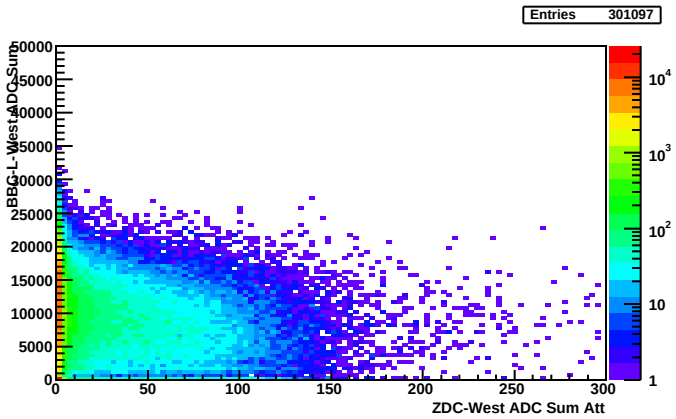

Entries 301097
TOF Mult
ZDC-East ADC Sum Att

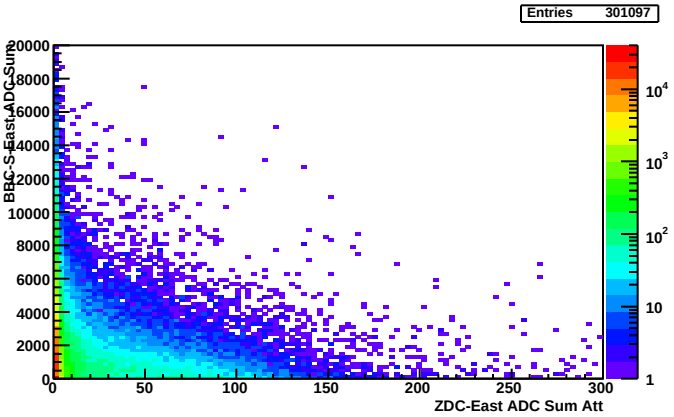

Entries 301097
TOF Mult
ZDC-West ADC Sum Att

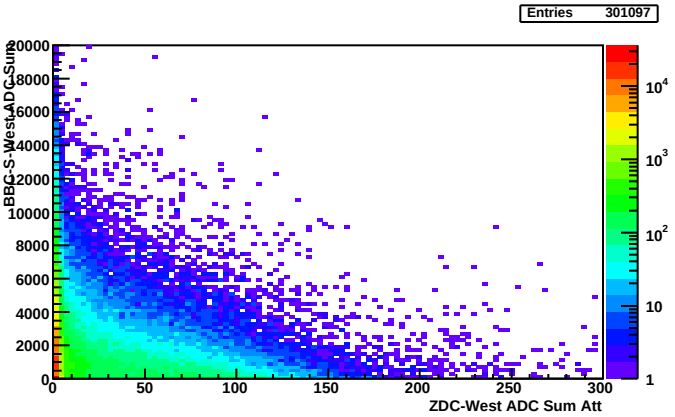

Entries 301097
BBC-L-East ADC Sum
BBC-S-East ADC Sum

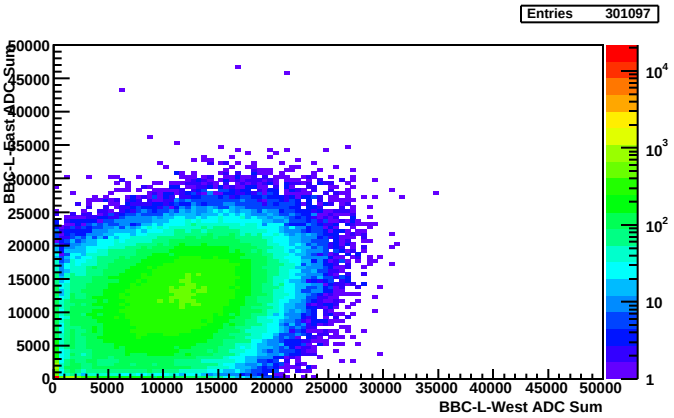

Entries 301097
BBC-L-West ADC Sum
BBC-S-West ADC Sum

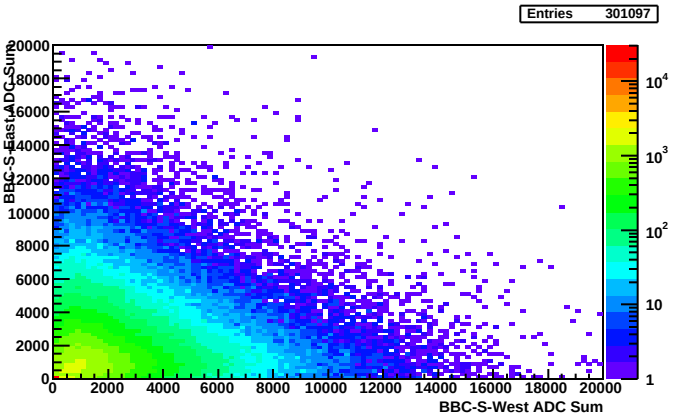

Entries 301097
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

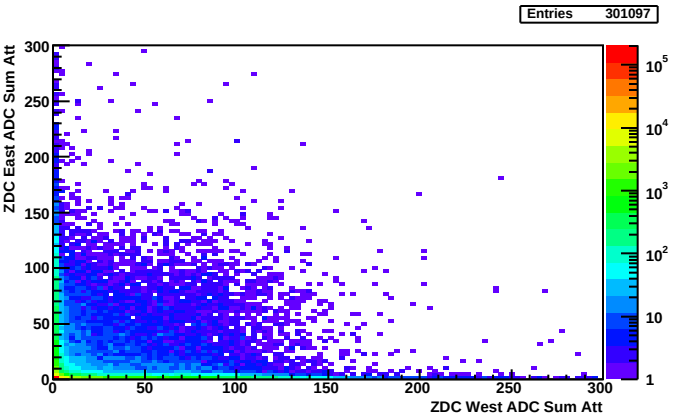

Entries 301097
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

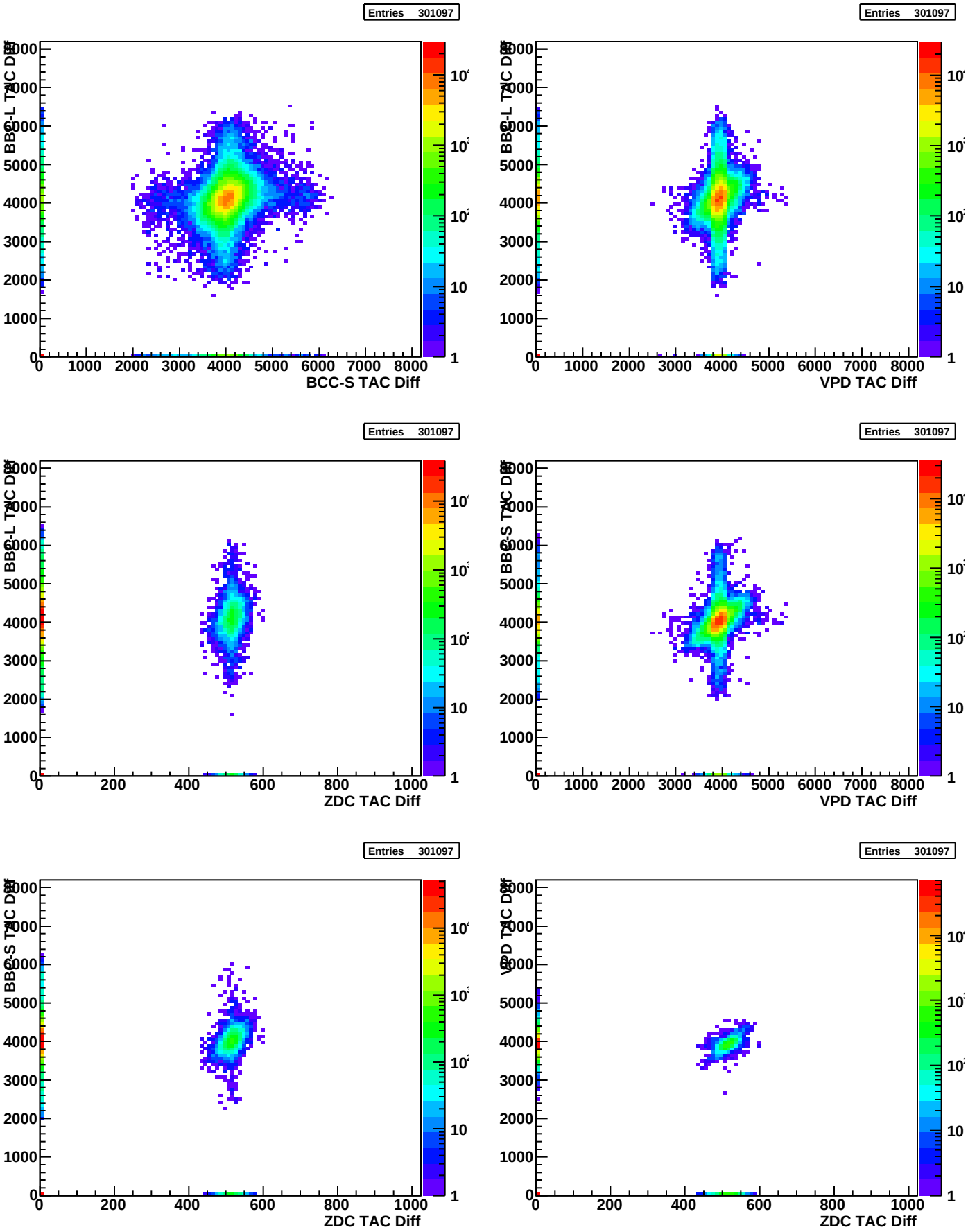

Entries 301097
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

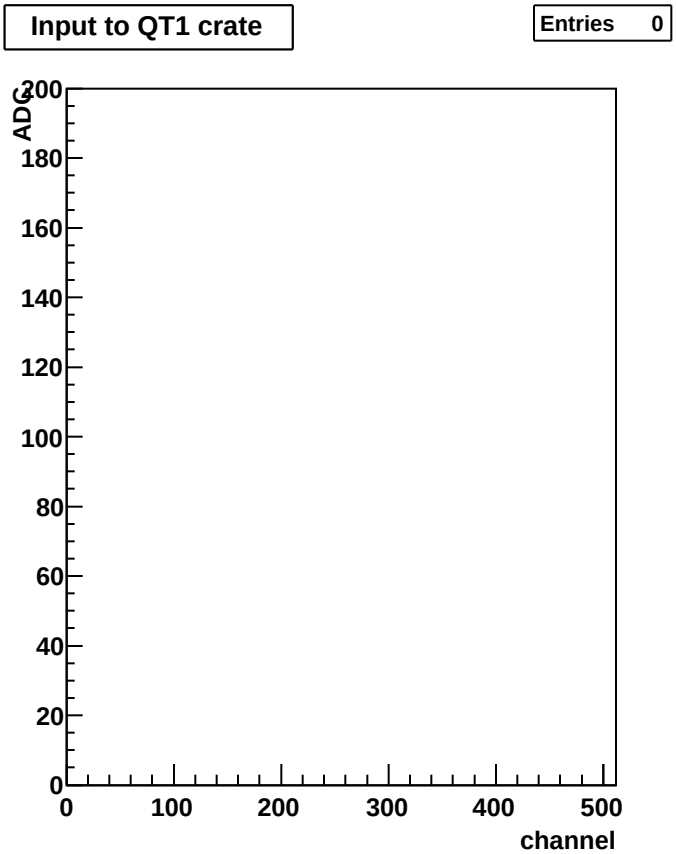

Entries 301097
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

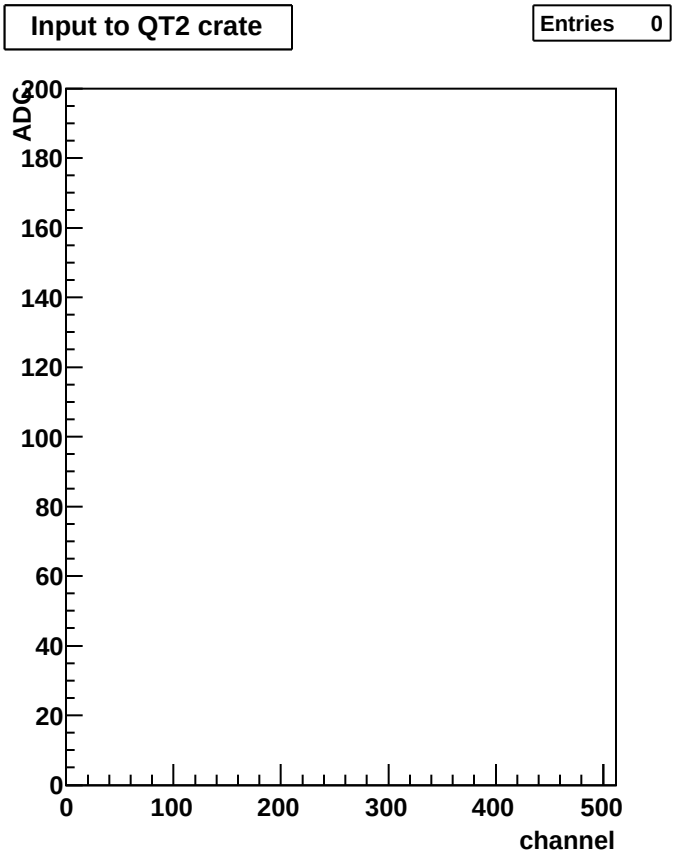

Entries 301097
BBC-L-East ADC Sum
BBC-L-West ADC Sum

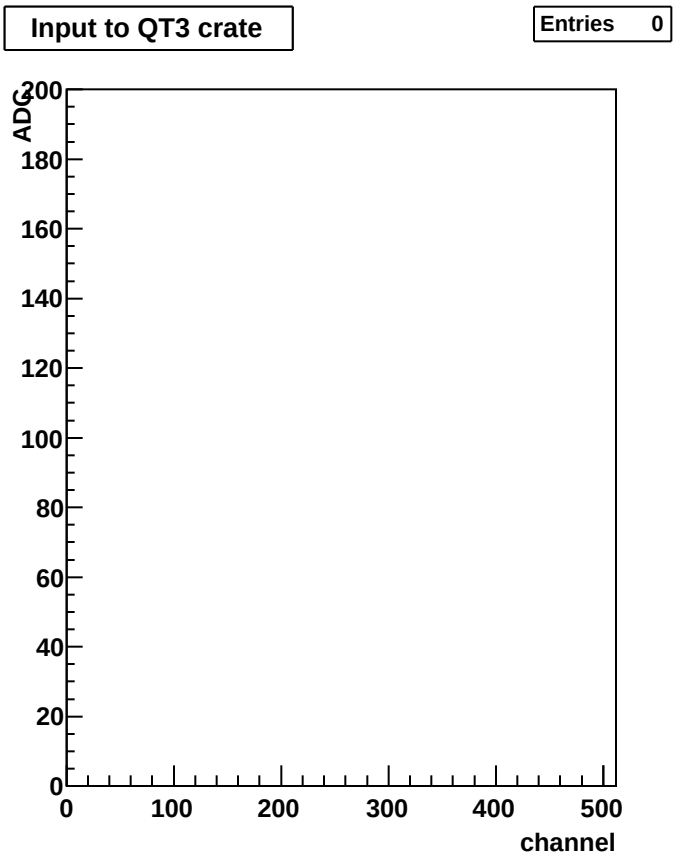

Entries 301097
BBC-S-East ADC Sum
BBC-S-West ADC Sum

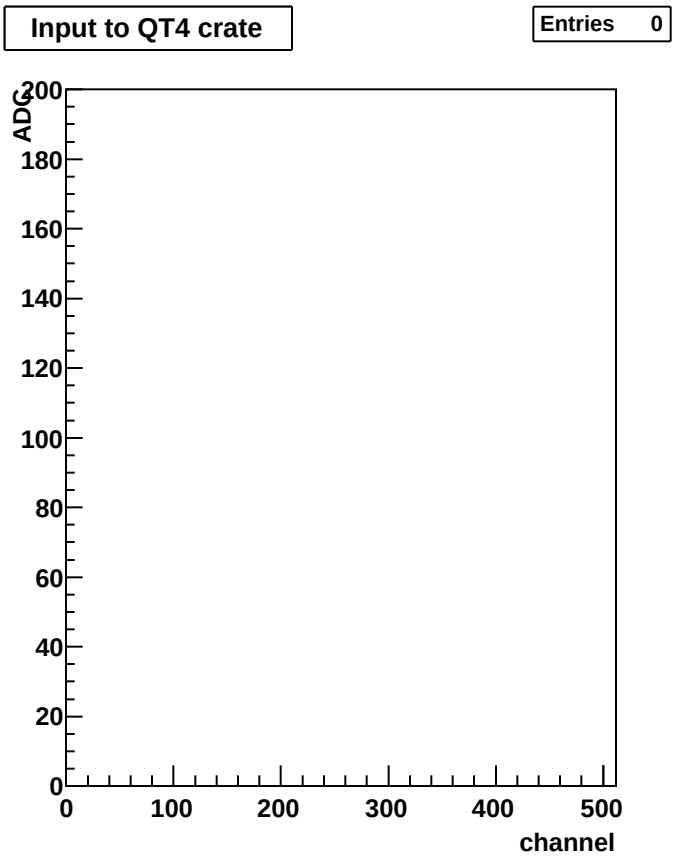

Entries 301097
ZDC East ADC Sum Att
ZDC West ADC Sum Att

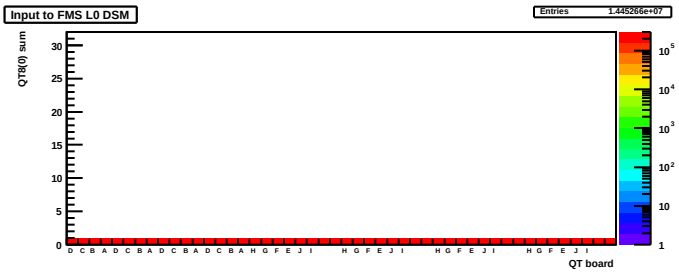

Entries 301097
BBC-L TAC Diff
BCC-S TAC Diff
Entries 301097
BBC-L TAC Diff
VPD TAC Diff
Entries 301097
BBC-L TAC Diff
ZDC TAC Diff
Entries 301097
BBC-S TAC Diff
VPD TAC Diff
Entries 301097
BBC-S TAC Diff
ZDC TAC Diff
Entries 301097
VPD TAC Diff
ZDC TAC Diff

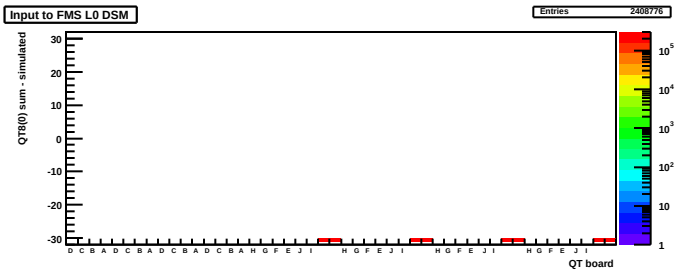

Input to QT1 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

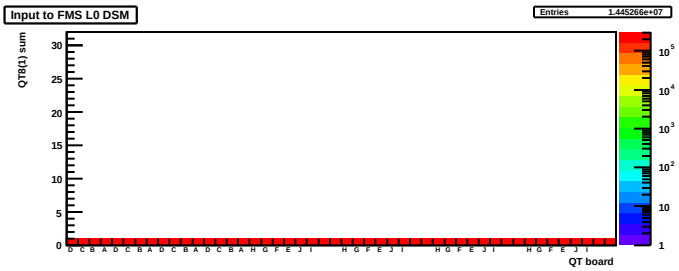

Input to QT2 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

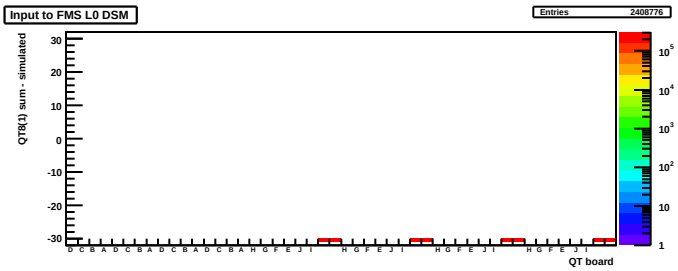

Input to QT3 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

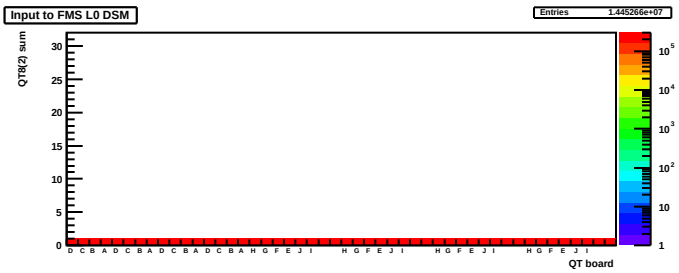

Input to QT4 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

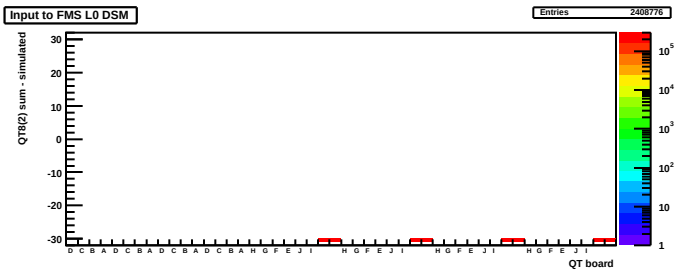

Input to FMS L0 DSM
Entries 1.445266e+07
QT8(0) sum
QT board

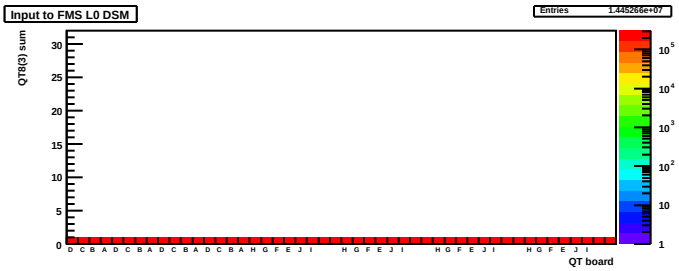

Input to FMS L0 DSM
Entries 2408776
QT8(0) sum - simulated
QT board

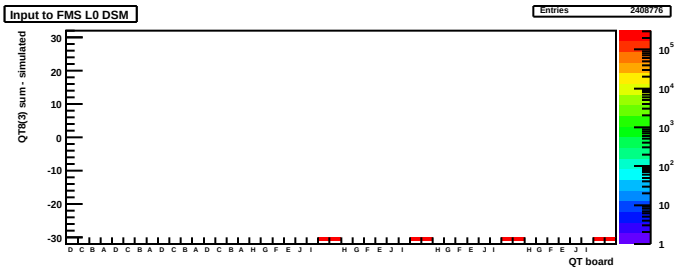

Input to FMS L0 DSM
Entries 1.445266e+07
QT8(1) sum
QT board

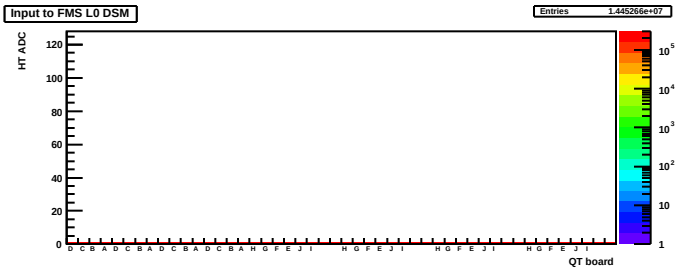

Input to FMS L0 DSM
Entries 2408776
QT8(1) sum - simulated
QT board

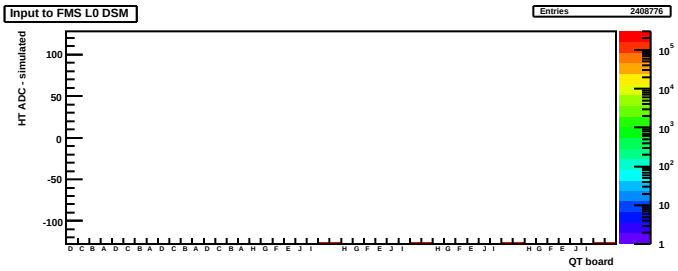

Input to FMS L0 DSM
Entries 1.445266e+07
QT8(2) sum
QT board

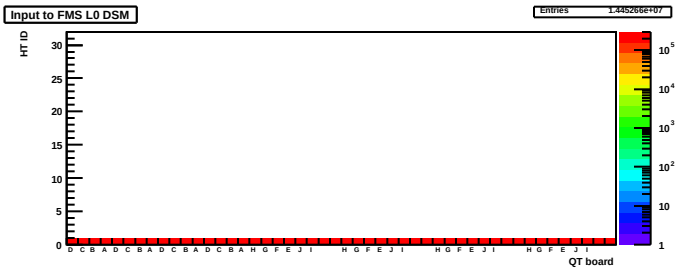

Input to FMS L0 DSM
Entries 2408776
QT8(2) sum - simulated
QT board

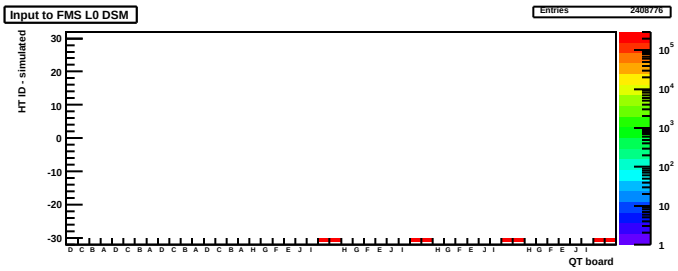

Input to FMS L0 DSM
Entries 1.445266e+07
QT8(3) sum
QT board

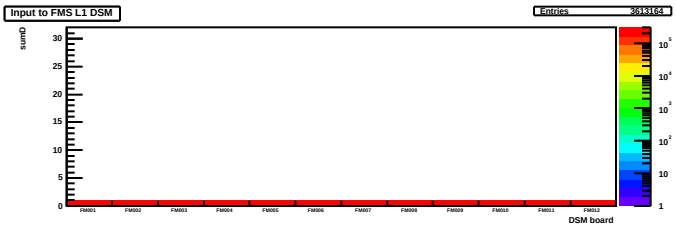

Input to FMS L0 DSM
Entries 2408776
QT8(3) sum - simulated
QT board

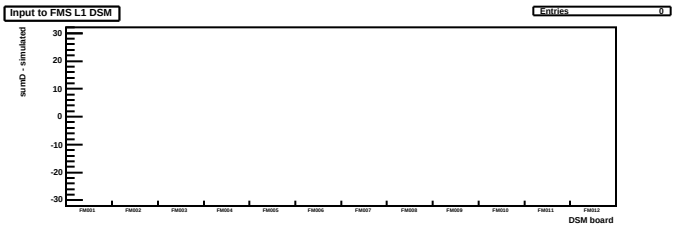

Input to FMS L0 DSM
Entries 1.445266e+07
HT ADC
QT board

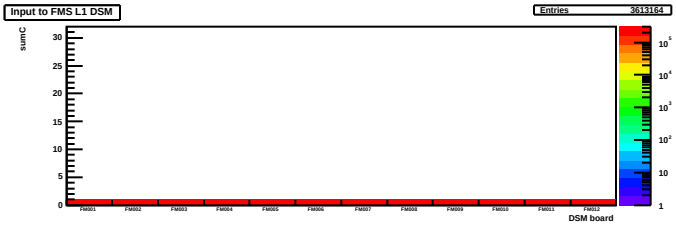

Input to FMS L0 DSM
Entries 2408776
HT ADC - simulated
QT board

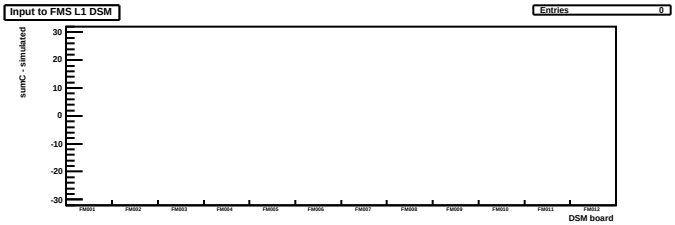

Input to FMS L0 DSM
Entries 1.445266e+07
HT ID
QT board

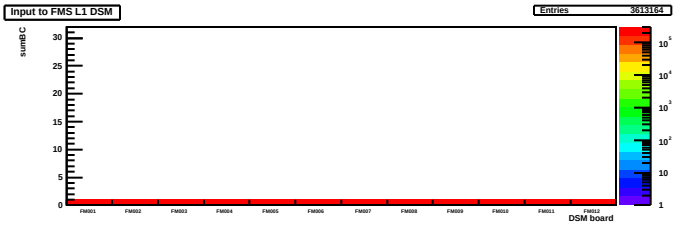

Input to FMS L0 DSM
Entries 2408776
HT ID - simulated
QT board

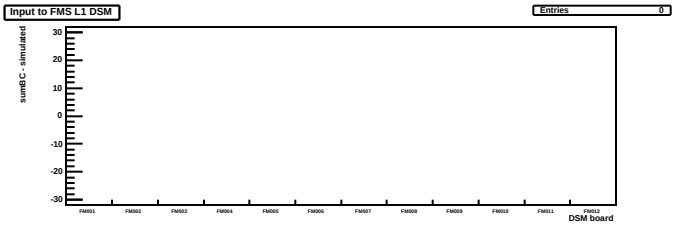

Input to FMS L1 DSM
Entries 3613164
sumD
DSM board

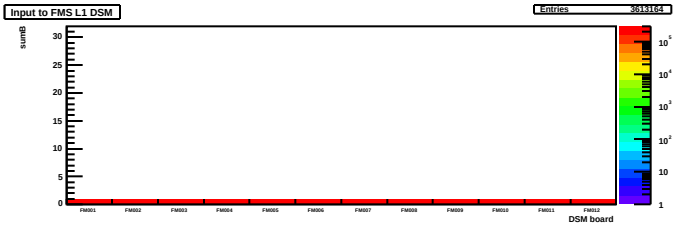

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

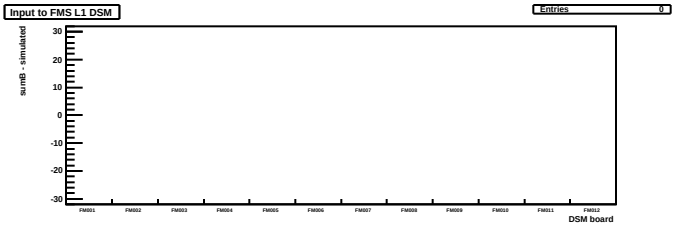

Input to FMS L1 DSM
Entries 3613164
sumC
DSM board

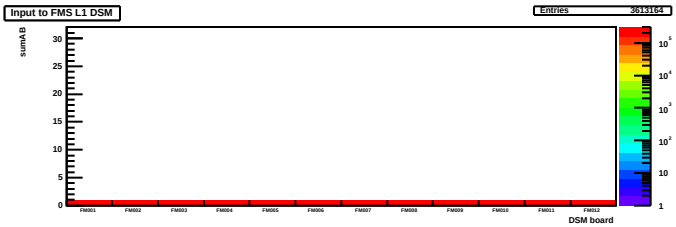

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

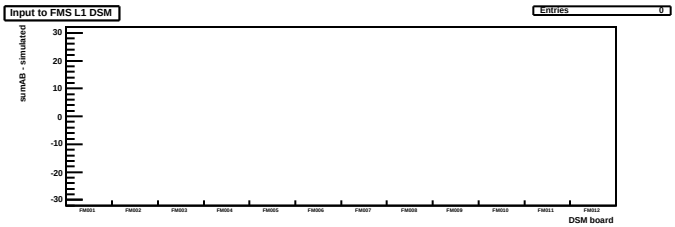

Input to FMS L1 DSM
Entries 3613164
sumBC
DSM board

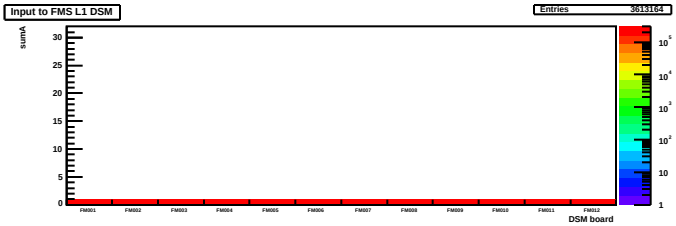

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

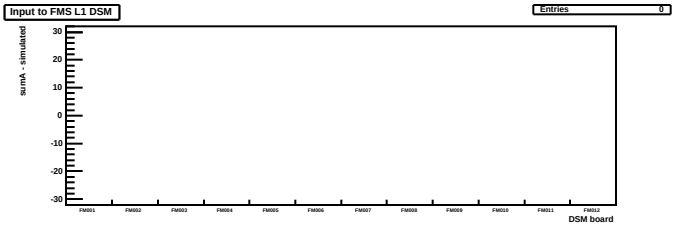

Input to FMS L1 DSM
Entries 3613164
sumB
DSM board

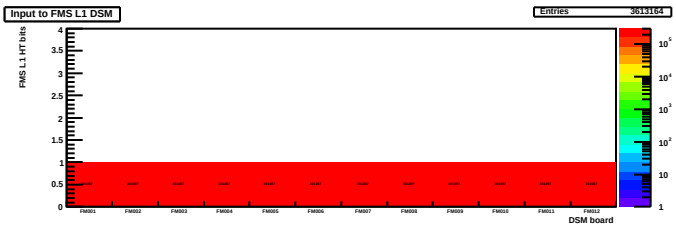

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

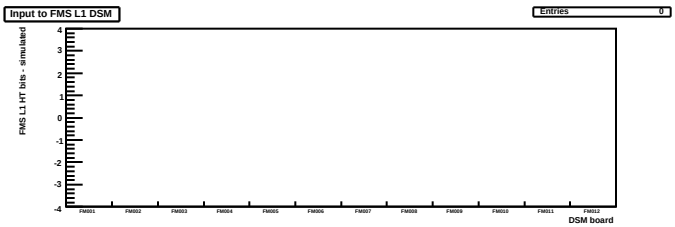

Input to FMS L1 DSM
Entries 3613164
sumAB
DSM board

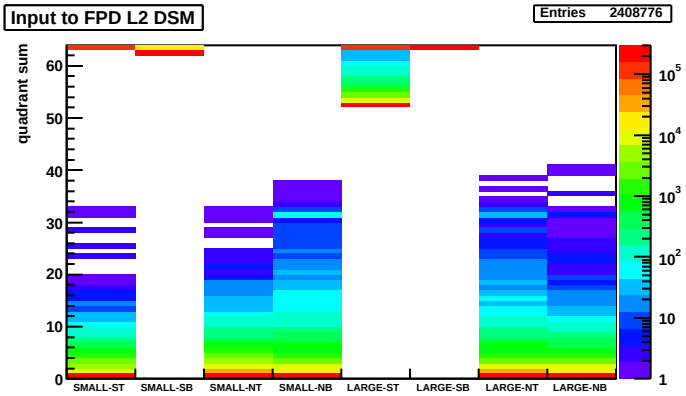

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

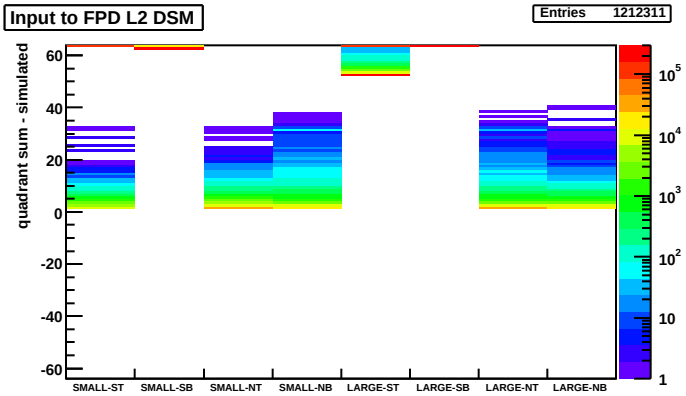

Input to FMS L1 DSM
Entries 3613164
sumA
DSM board

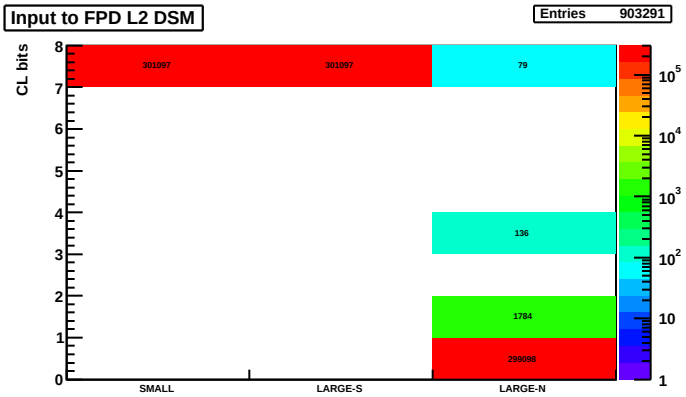

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

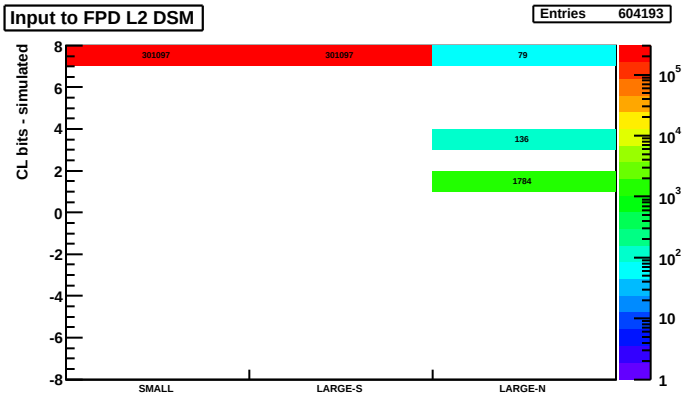

Input to FMS L1 DSM
Entries 3613164
FMS L1 HT bits
DSM board

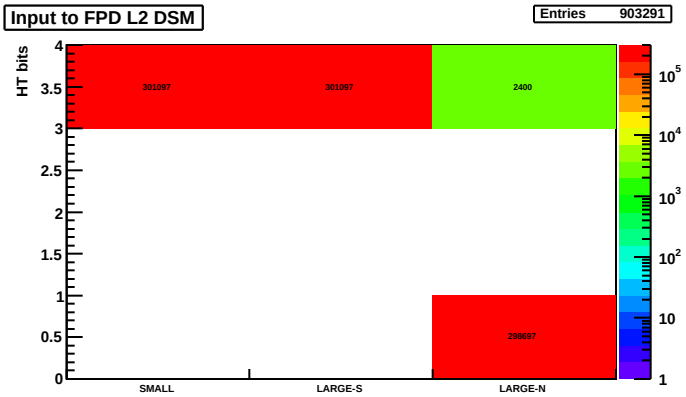

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

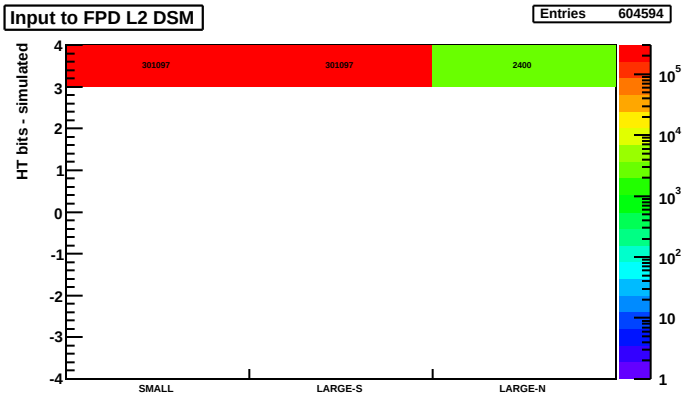

Input to FPD L2 DSM
Entries 2408776
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

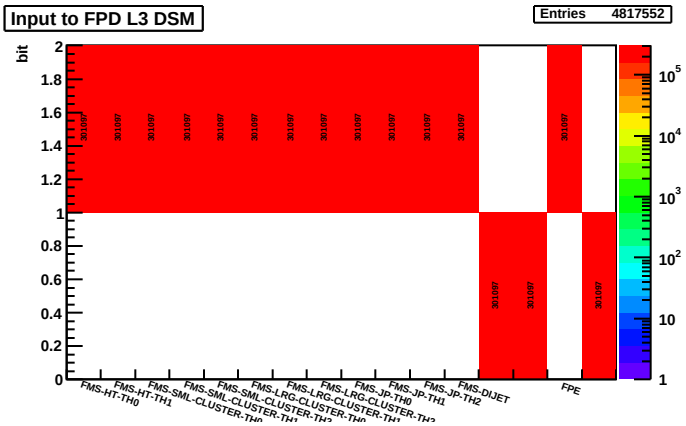

Input to FPD L2 DSM
Entries 1212311
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

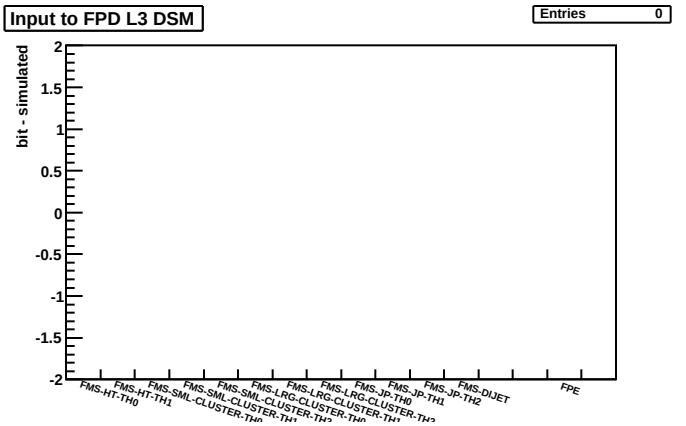

Input to FPD L2 DSM
Entries 903291
CL bits
301097
301097
79
136
1784
299098
SMALL
LARGE-S
LARGE-N

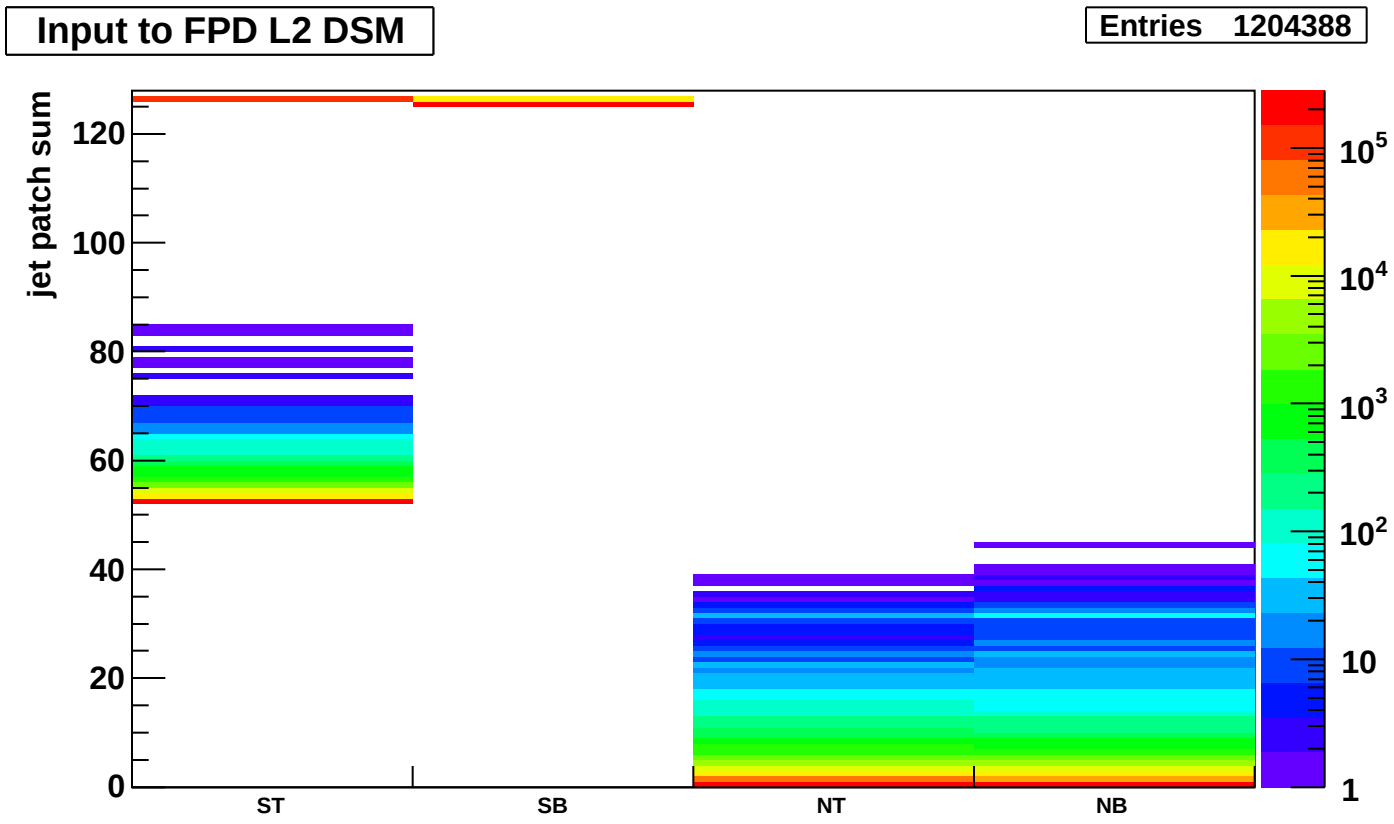

Input to FPD L2 DSM
Entries 604193
CL bits - simulated
301097
301097
79
136
1784
SMALL
LARGE-S
LARGE-N

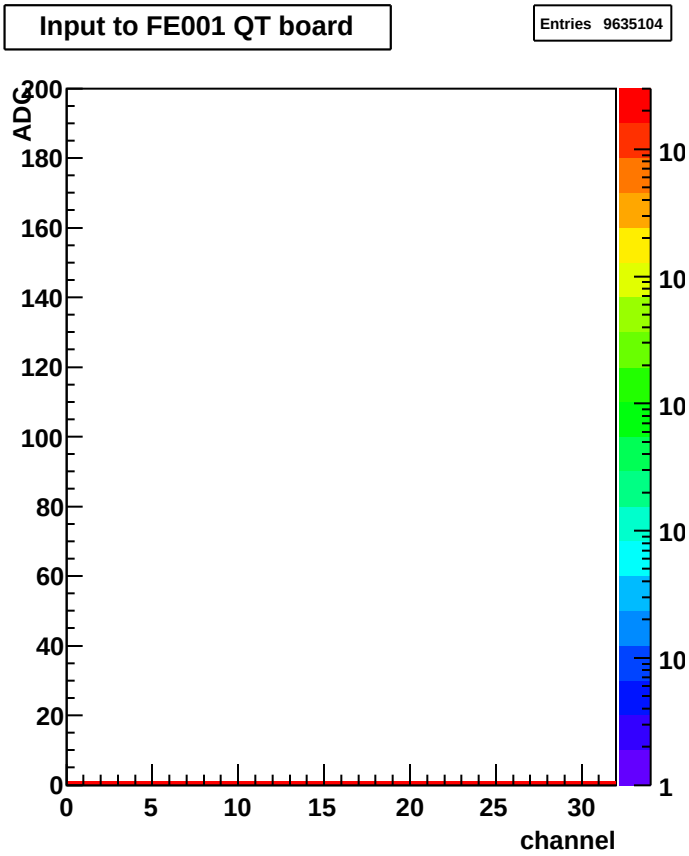

Input to FPD L2 DSM
Entries 903291
HT bits
301097
301097
2400
298697
SMALL
LARGE-S
LARGE-N

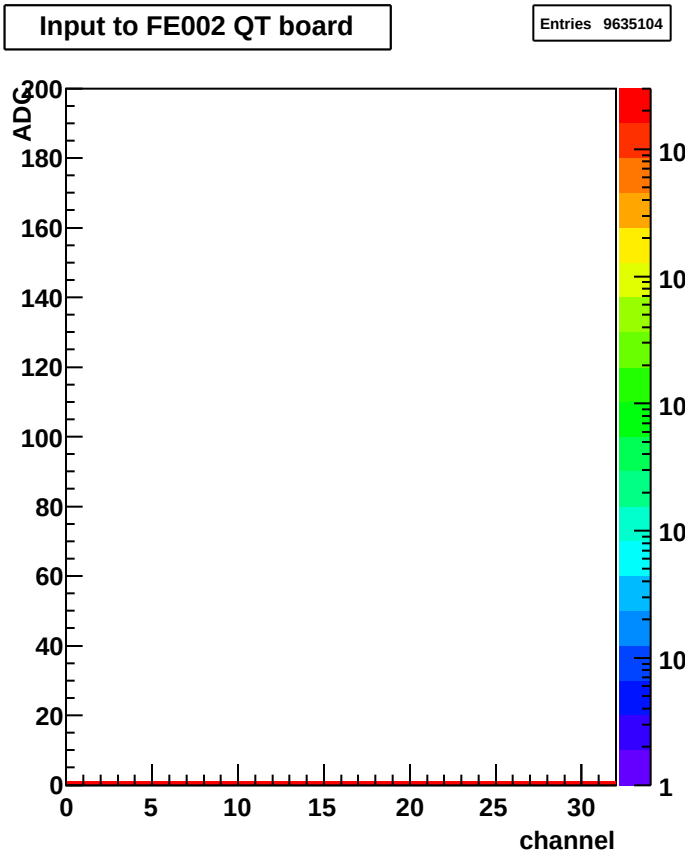

Input to FPD L2 DSM
Entries 604594
HT bits - simulated
301097
301097
2400
SMALL
LARGE-S
LARGE-N

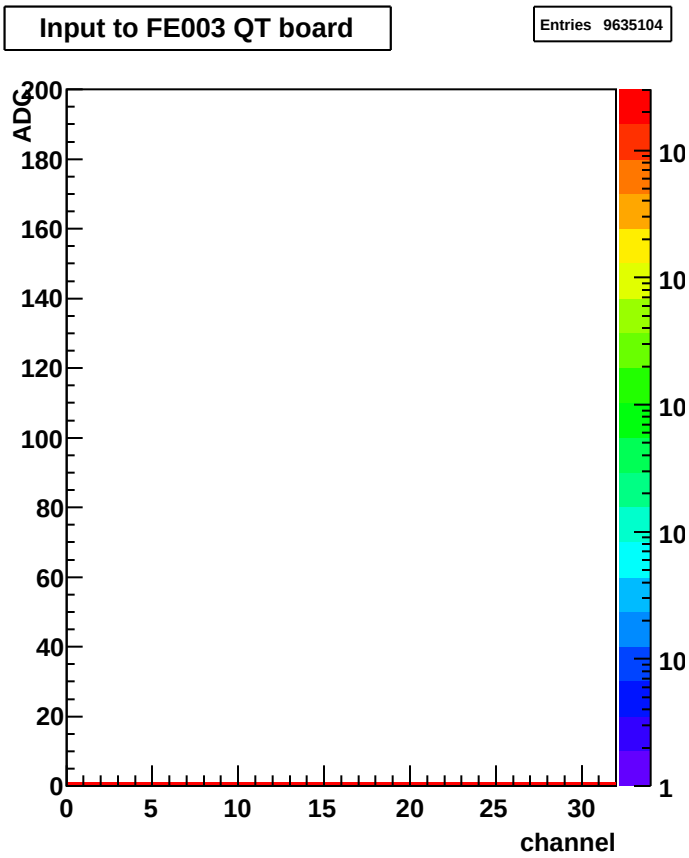

Input to FPD L3 DSM
Entries 4817552
bit
301097
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

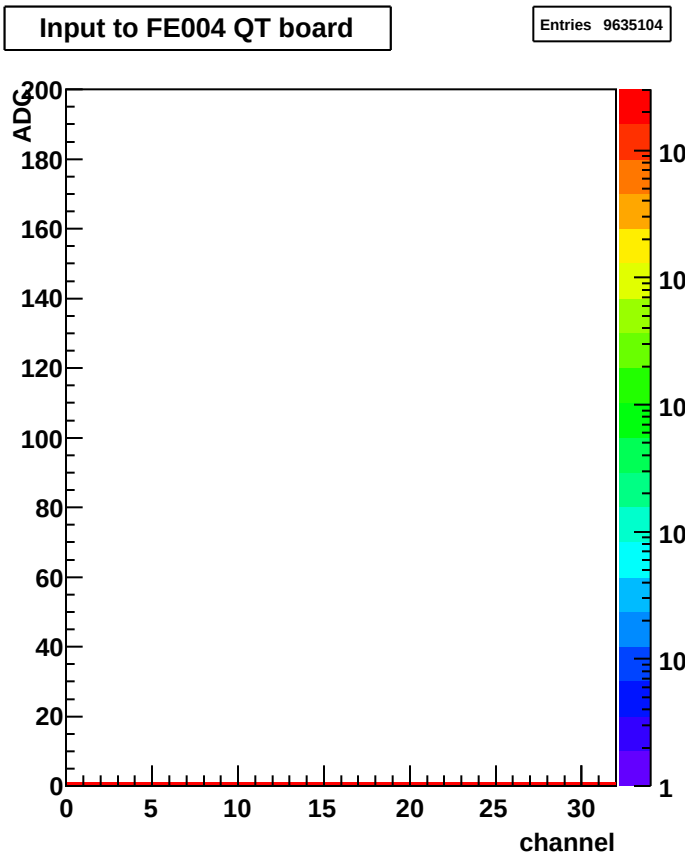

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

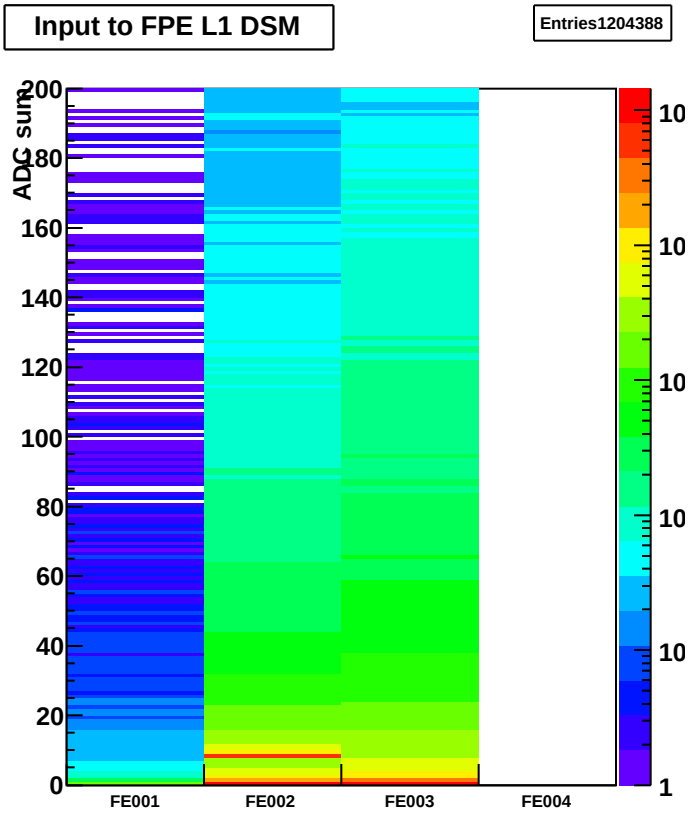

Input to FPD L2 DSM
Entries 1204388
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

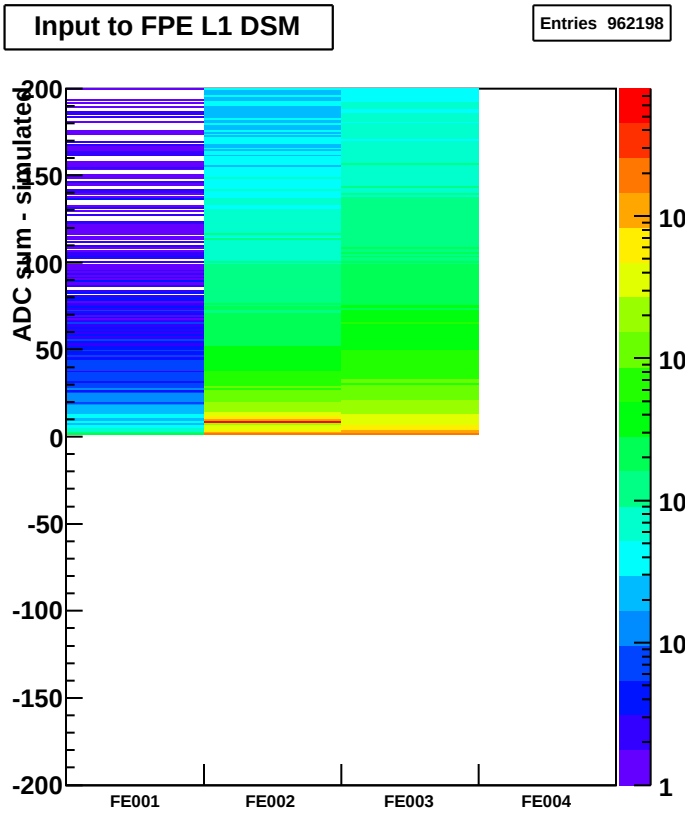

Input to FE001 QT board
Entries 9635104
ADC
channel

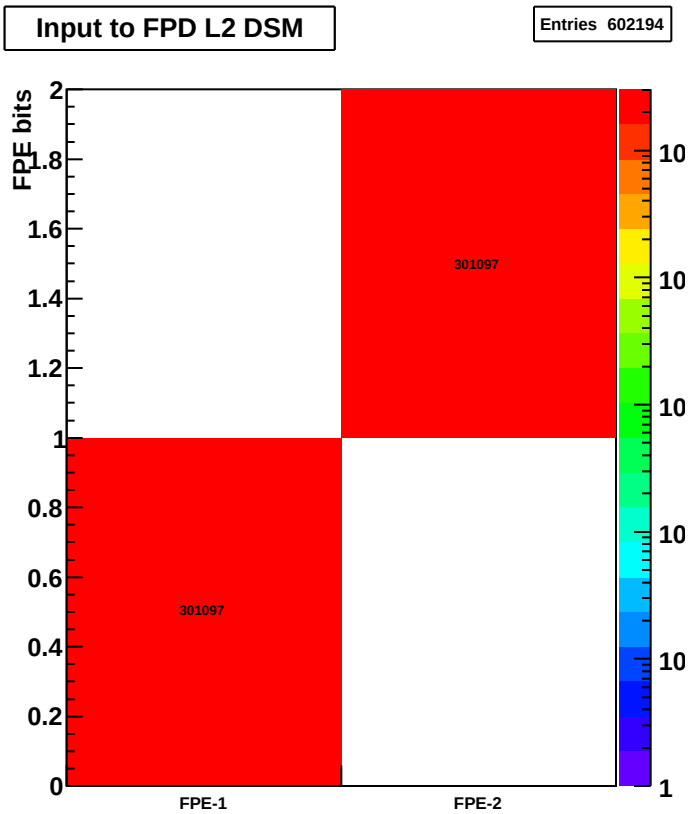

Input to FE002 QT board
Entries 9635104
ADC
channel

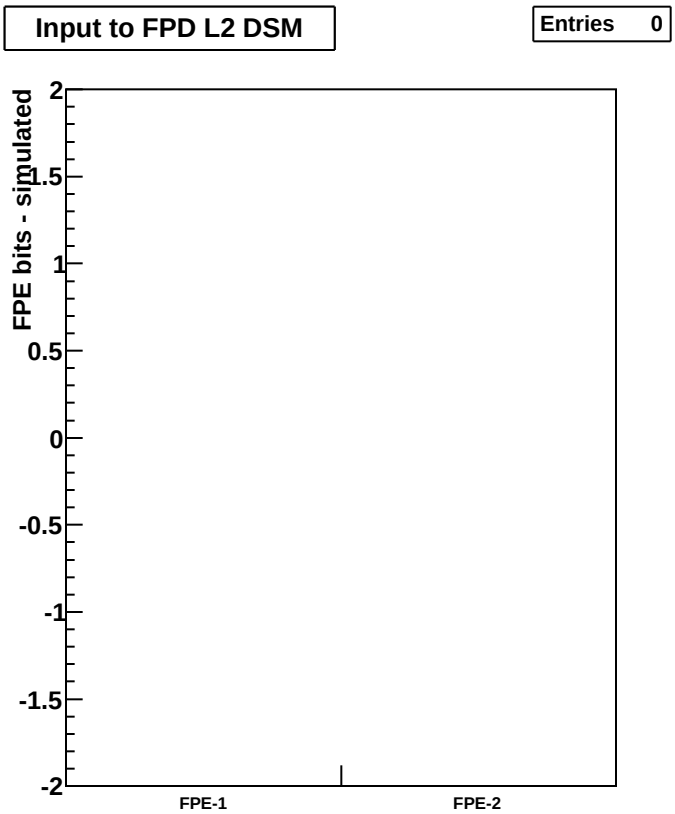

Input to FE003 QT board
Entries 9635104
ADC
channel


Input to FE004 QT board
Entries 9635104
ADC
channel


Input to FPE L1 DSM
Entries1204388
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 962198
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 602194
FPE bits
301097
301097
FPE-1
FPE-2


Input to FPD L2 DSM
Entries 0
FPE bits - simulated
FPE-1
FPE-2