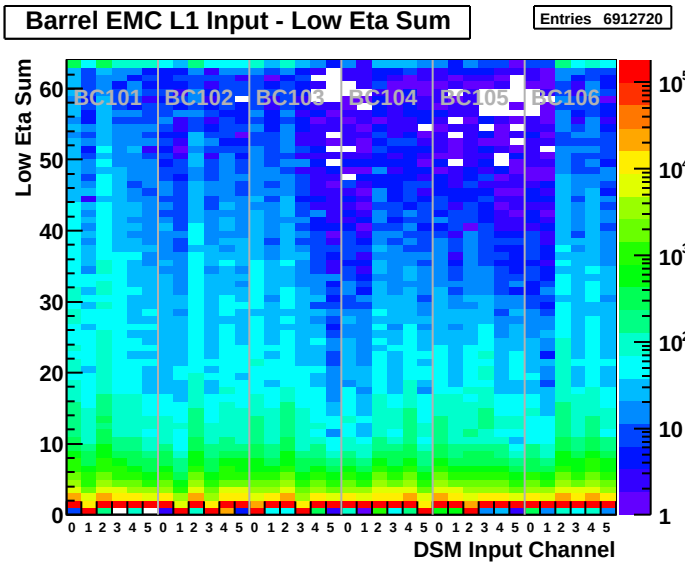
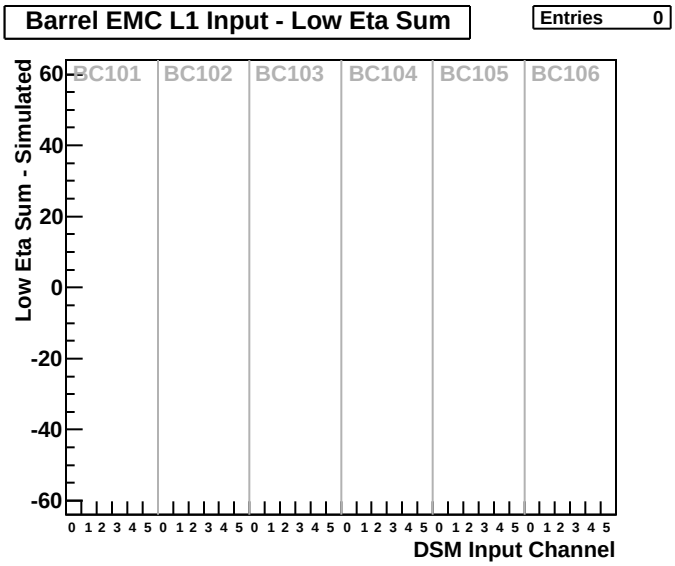
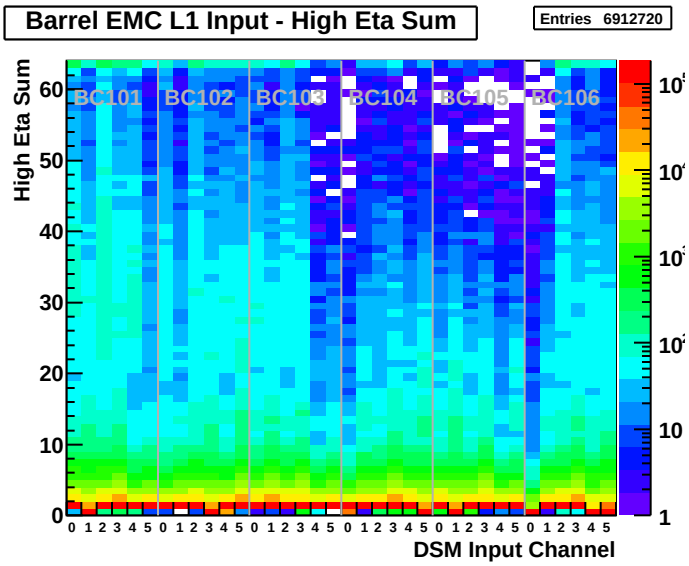
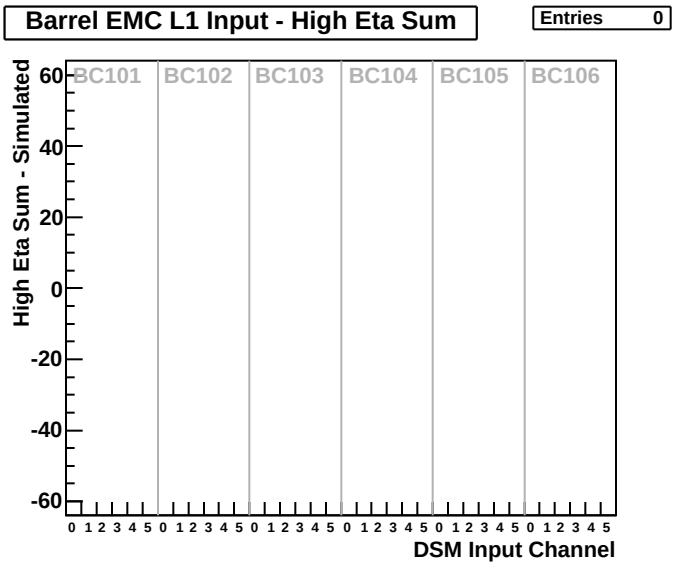
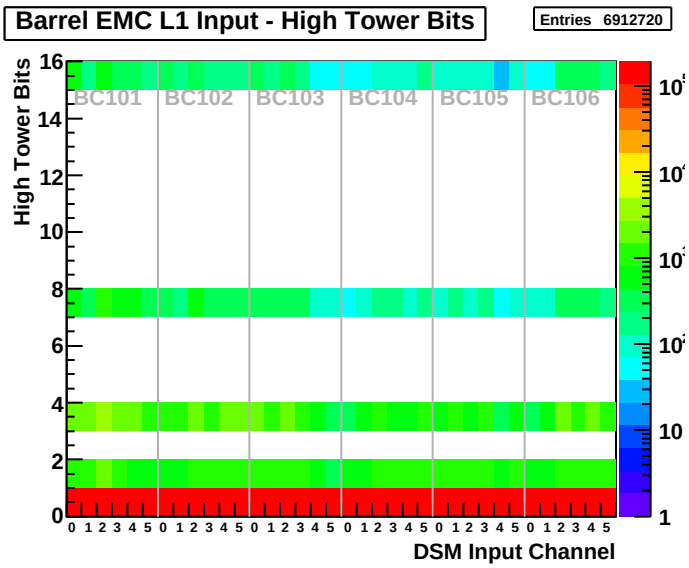
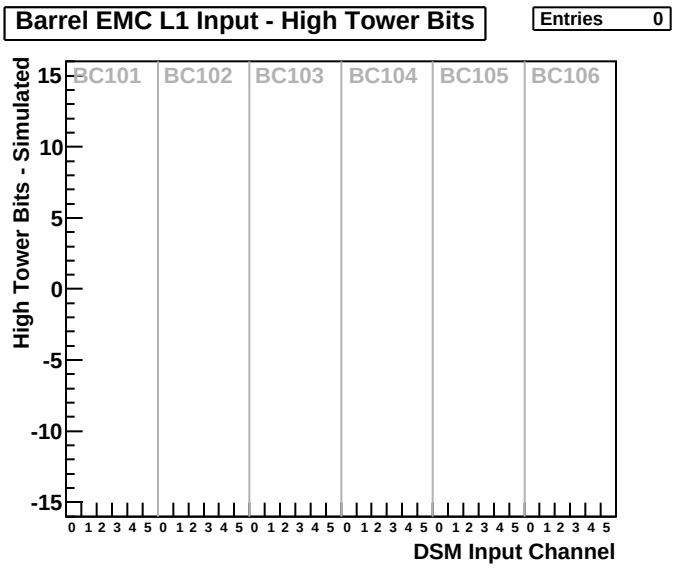

Barrel EMC L1 Input - Low Eta Sum
Entries 6912720
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

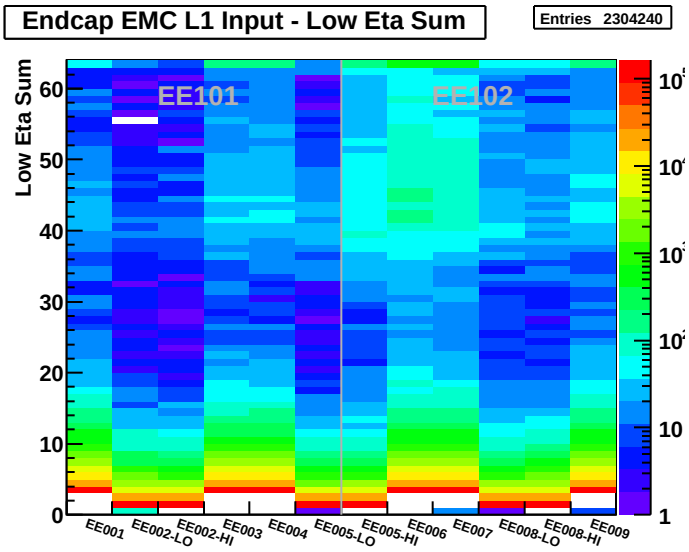

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

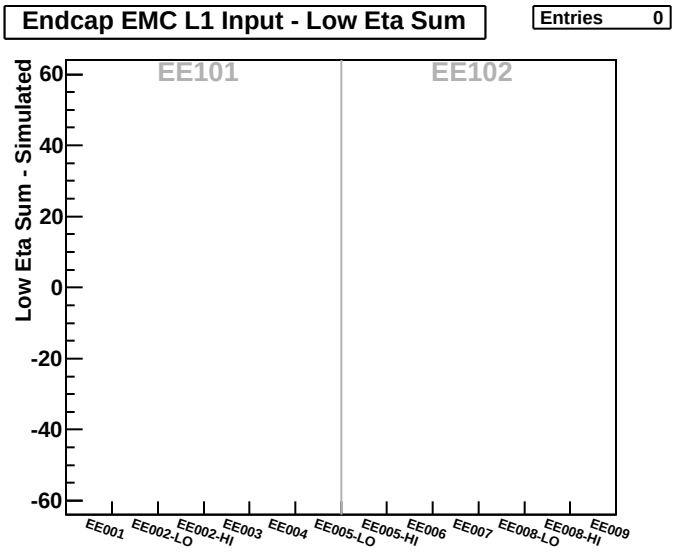

Barrel EMC L1 Input - High Eta Sum
Entries 6912720
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

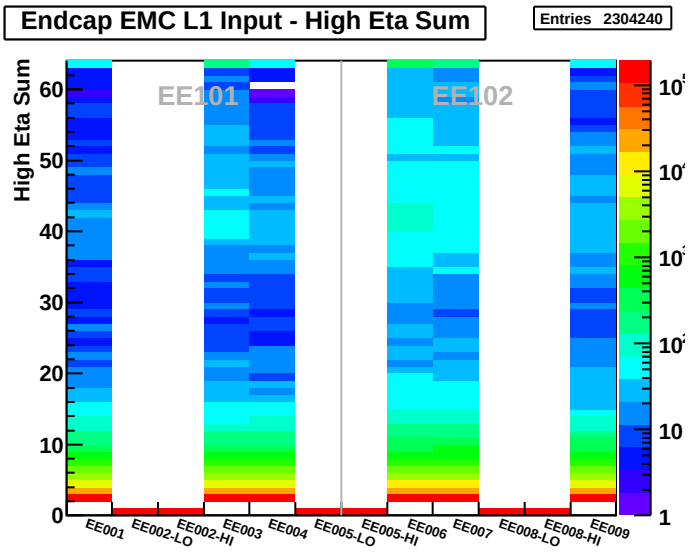

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

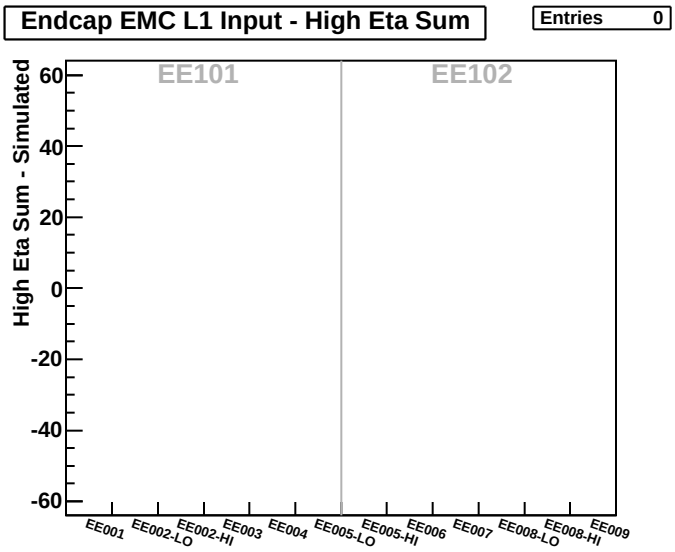

Barrel EMC L1 Input - High Tower Bits
Entries 6912720
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

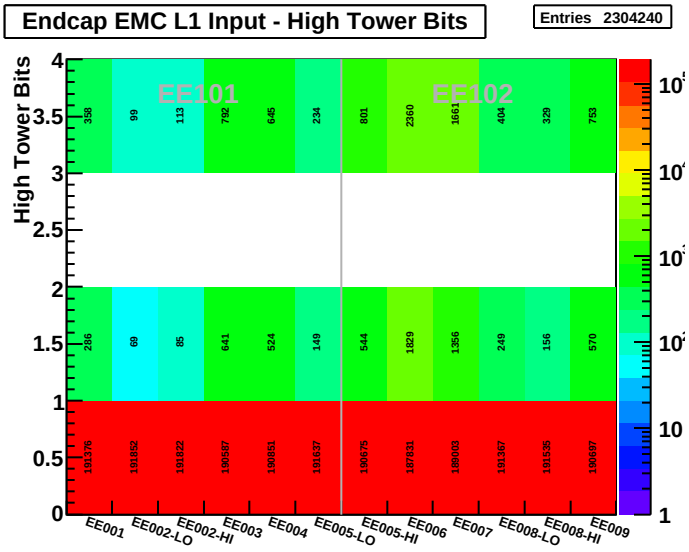

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

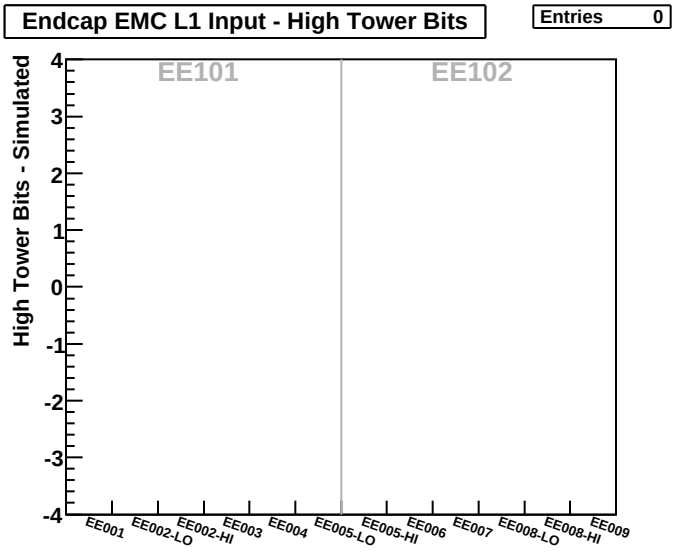

Endcap EMC L1 Input - Low Eta Sum
Entries 2304240
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

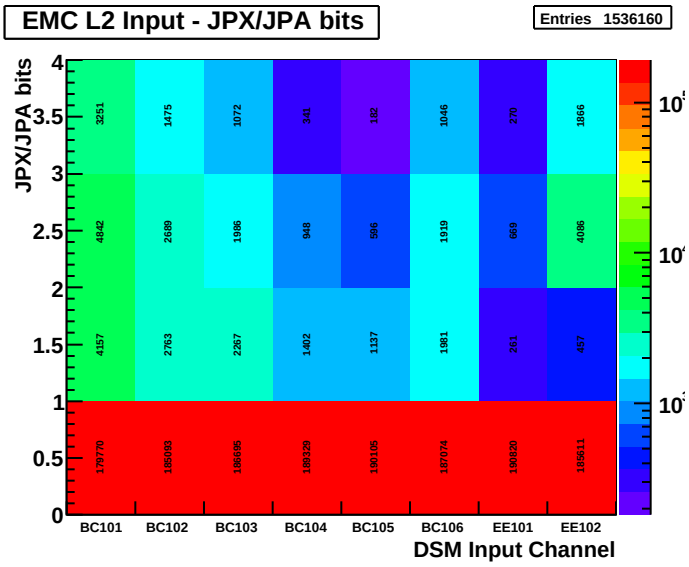

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

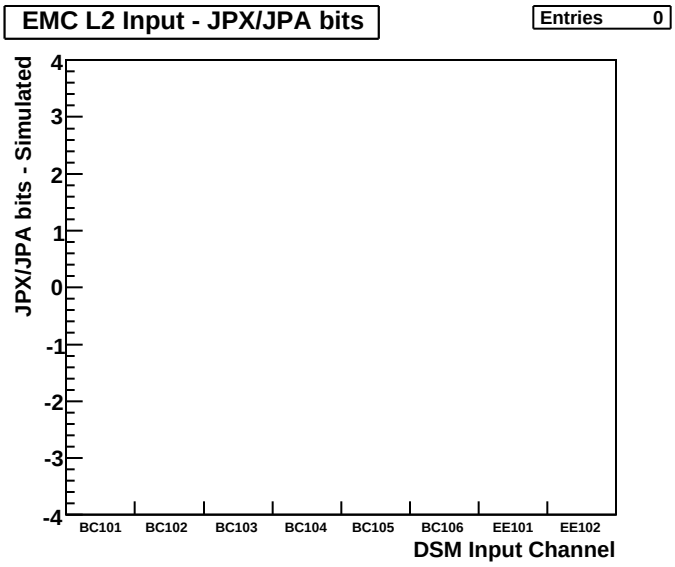

Endcap EMC L1 Input - High Eta Sum
Entries 2304240
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

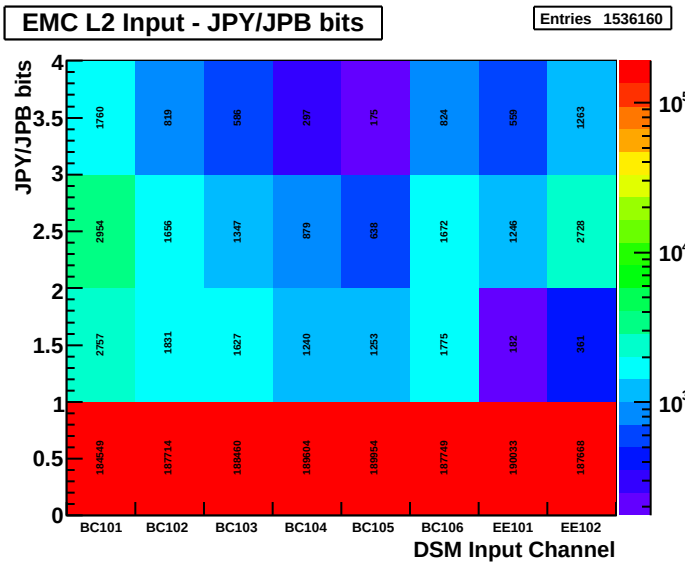

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

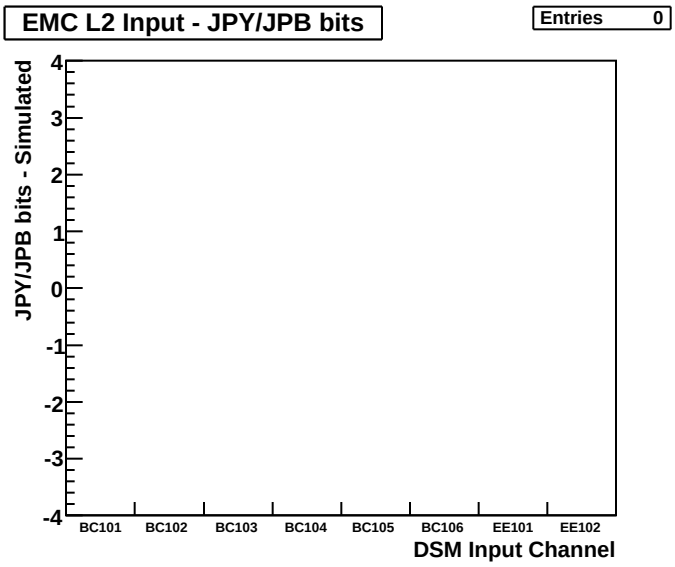

Endcap EMC L1 Input - High Tower Bits
Entries 2304240
High Tower Bits
EE101
EE102
358 99 113 792 645 234 801 2360 1661 404 329 753
286 69 85 641 524 149 544 1829 1356 249 156 570
191376 191852 191822 190567 190851 191537 190675 187831 189003 191367 191535 190597
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

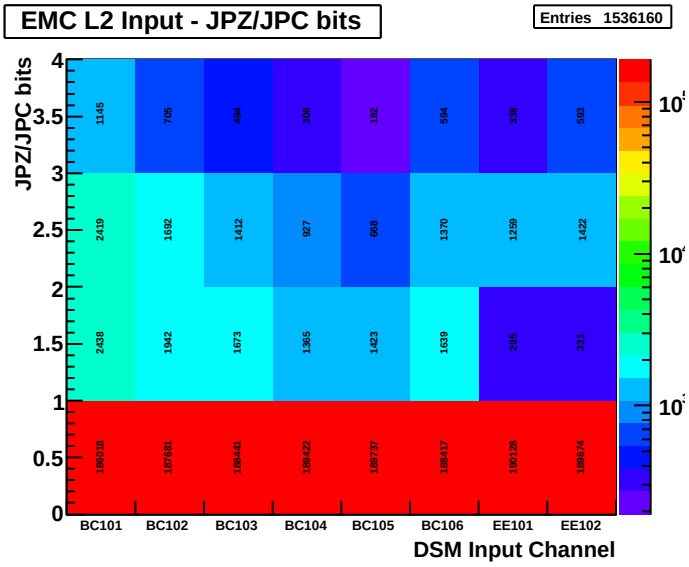

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

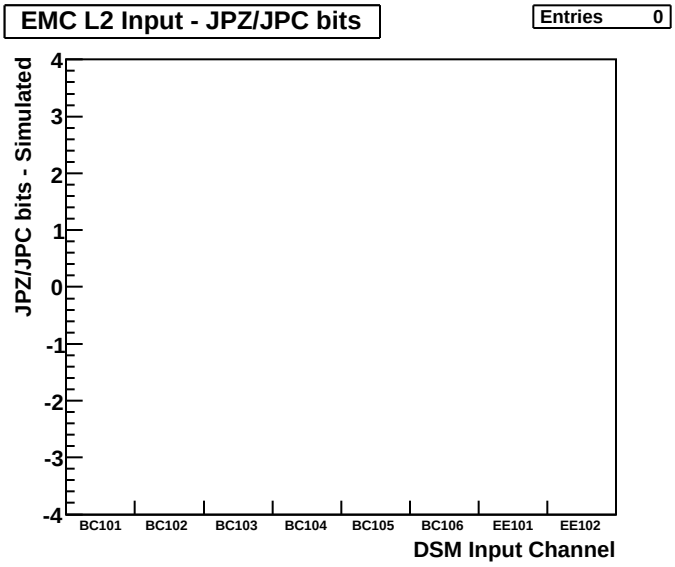

EMC L2 Input - JPX/JPA bits
Entries 1536160
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3251 1475 1072 341 182 1046 270 1866
4842 2689 1986 948 996 1919 669 4086
4157 2763 2267 1402 1137 1981 261 457
179770 185093 186695 188329 190105 187074 190820 185611

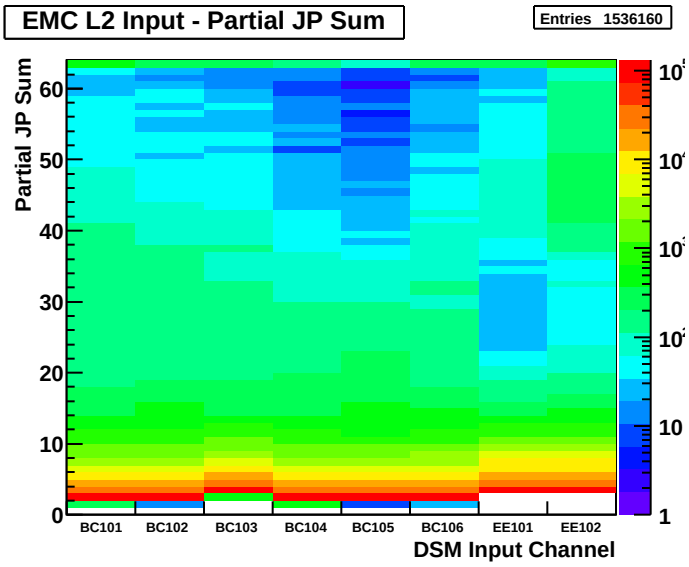

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

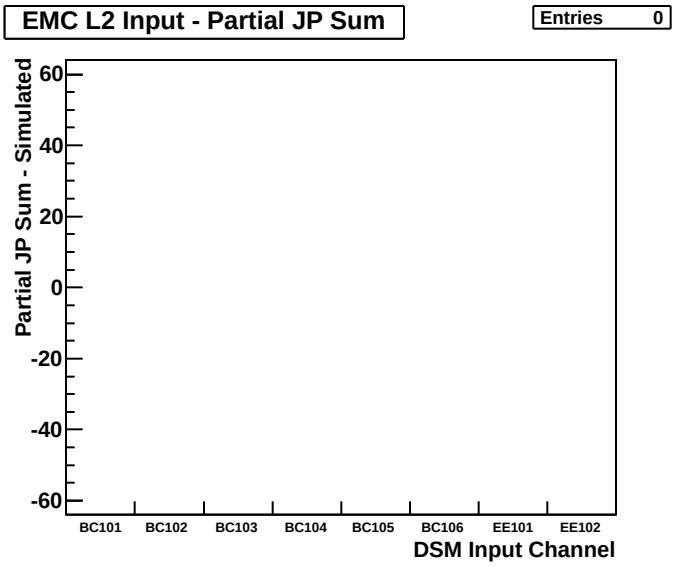

EMC L2 Input - JPY/JPB bits
Entries 1536160
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1760 819 586 297 175 824 599 1263
2954 1656 1347 879 638 1672 1246 2728
2757 1831 1627 1240 1253 1775 182 361
184549 187714 188460 189604 189954 187749 190033 187668

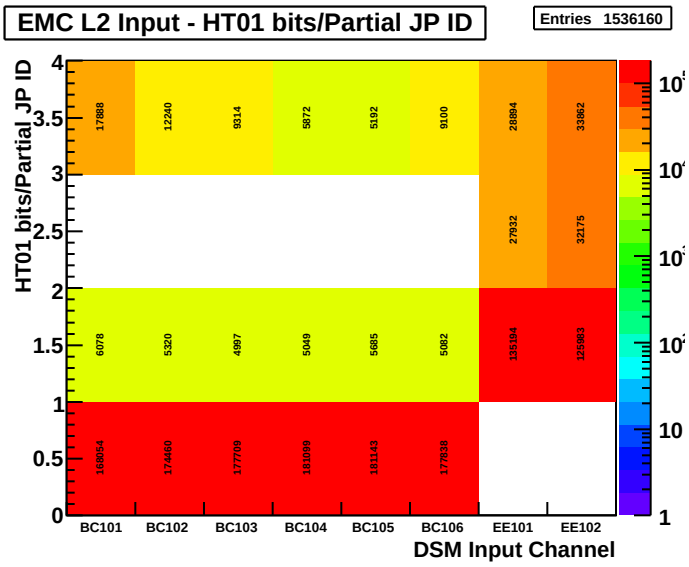

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

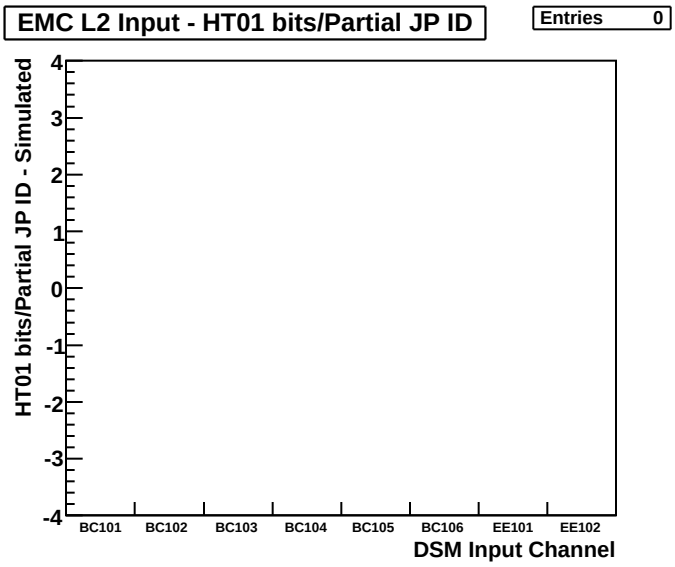

EMC L2 Input - JPZ/JPC bits
Entries 1536160
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1145 705 494 306 192 594 338 593
2419 1692 1412 927 668 1370 1259 1422
2438 1942 1673 1365 1423 1639 295 331
186018 187681 188441 189422 189737 188417 190128 189674

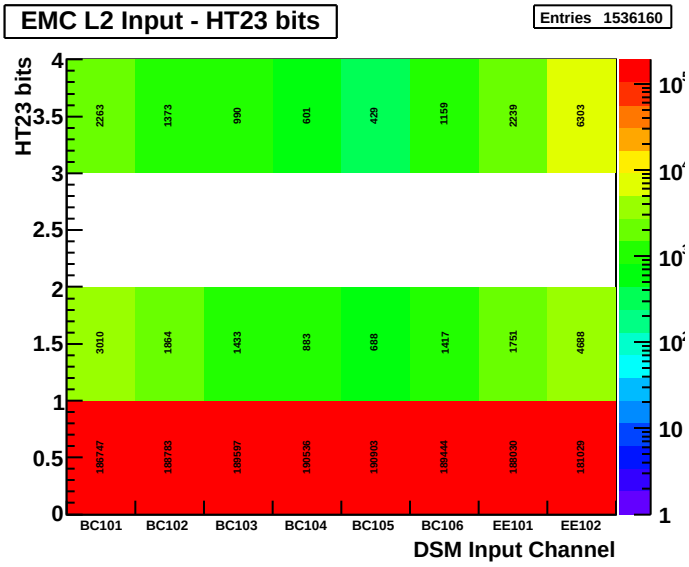

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

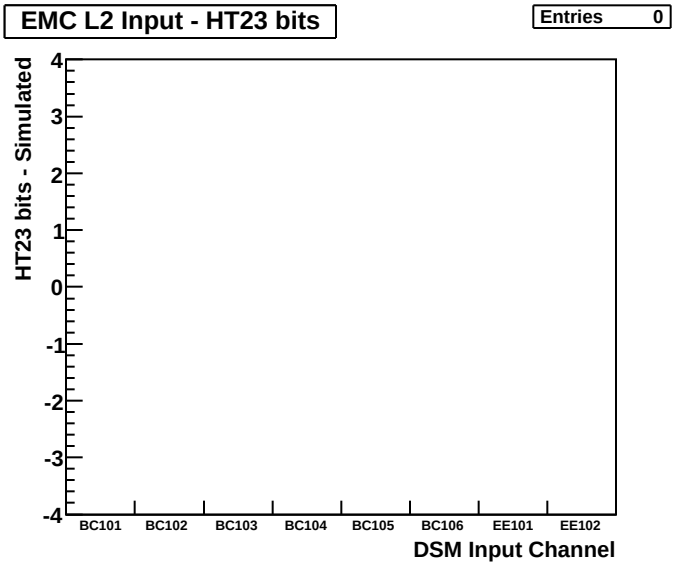

EMC L2 Input - Partial JP Sum
Entries 1536160
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

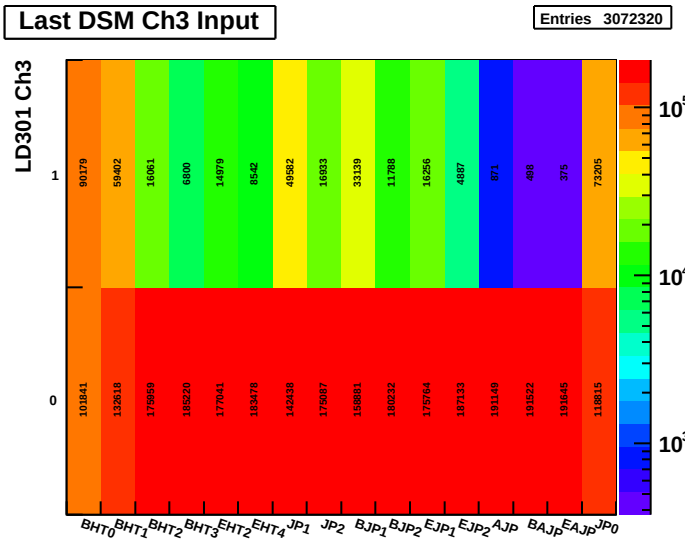

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

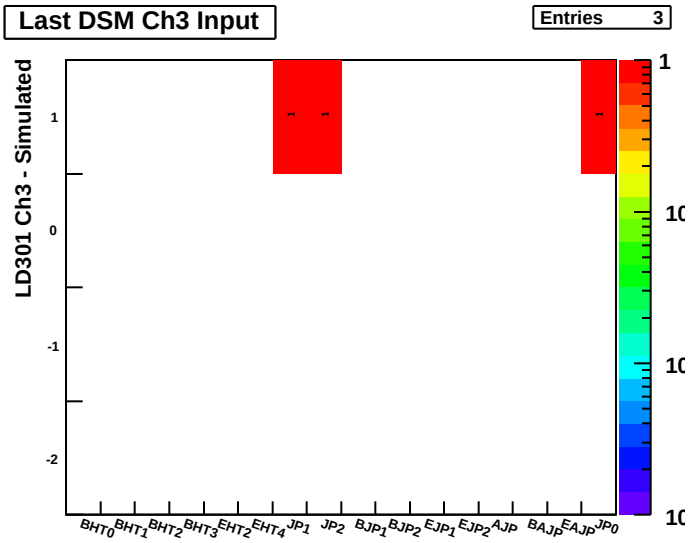

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1536160
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

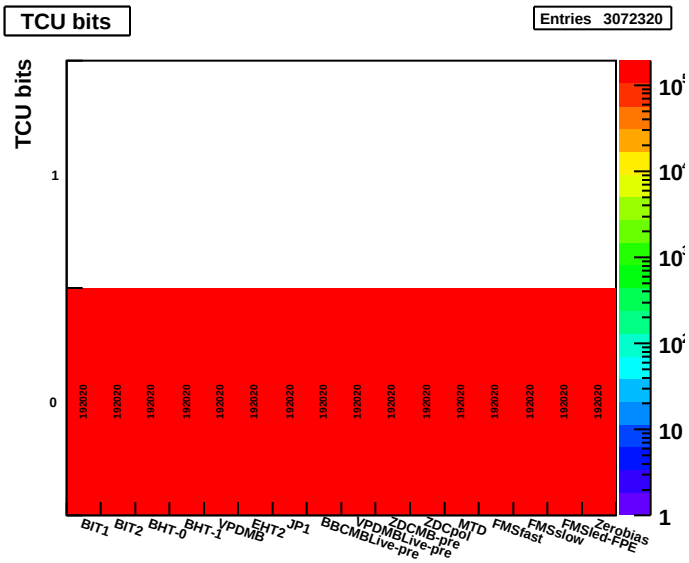

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

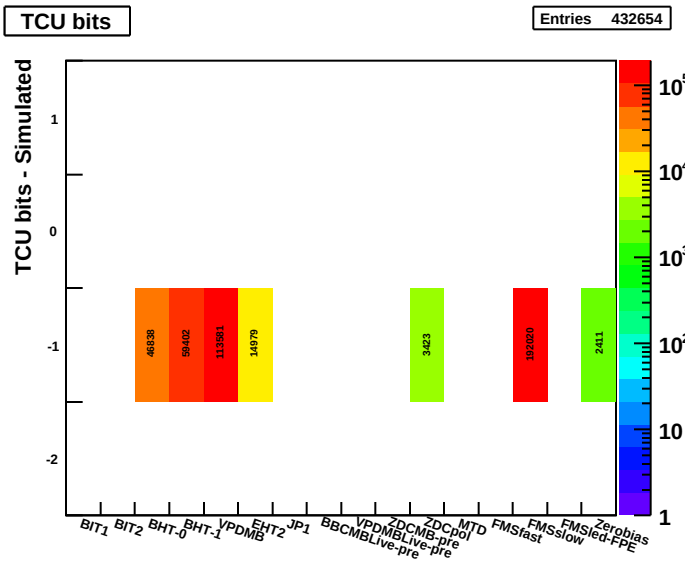

EMC L2 Input - HT23 bits
Entries 1536160
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

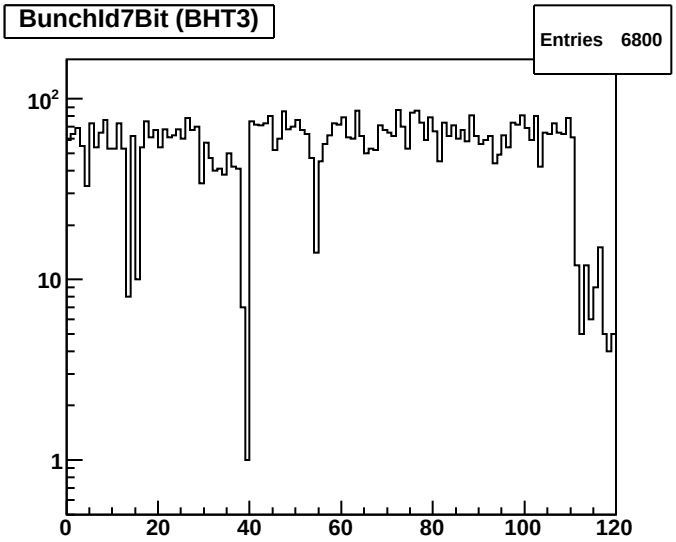

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

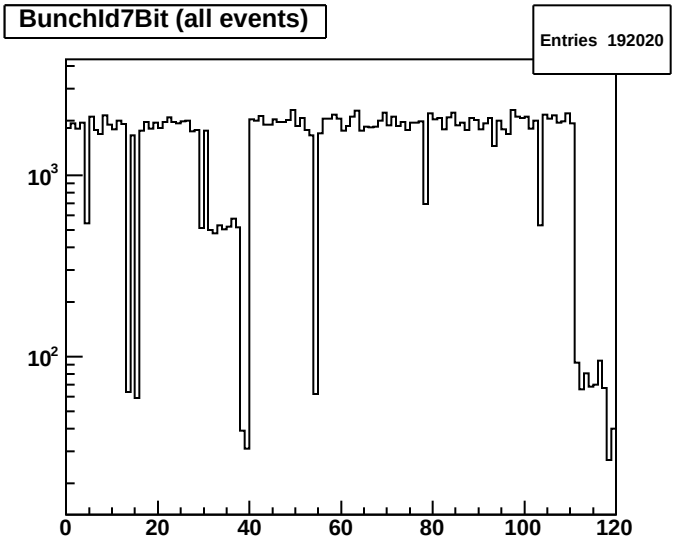

Last DSM Ch3 Input
Entries 3072320
LD301 Ch3
1
0
90179
59402
16061
6800
14979
8542
49582
16933
33139
11788
16256
4887
671
498
375
73205
101841
132618
175959
185220
177041
183478
142438
175087
158881
180232
175764
187133
191149
191522
191645
118315
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

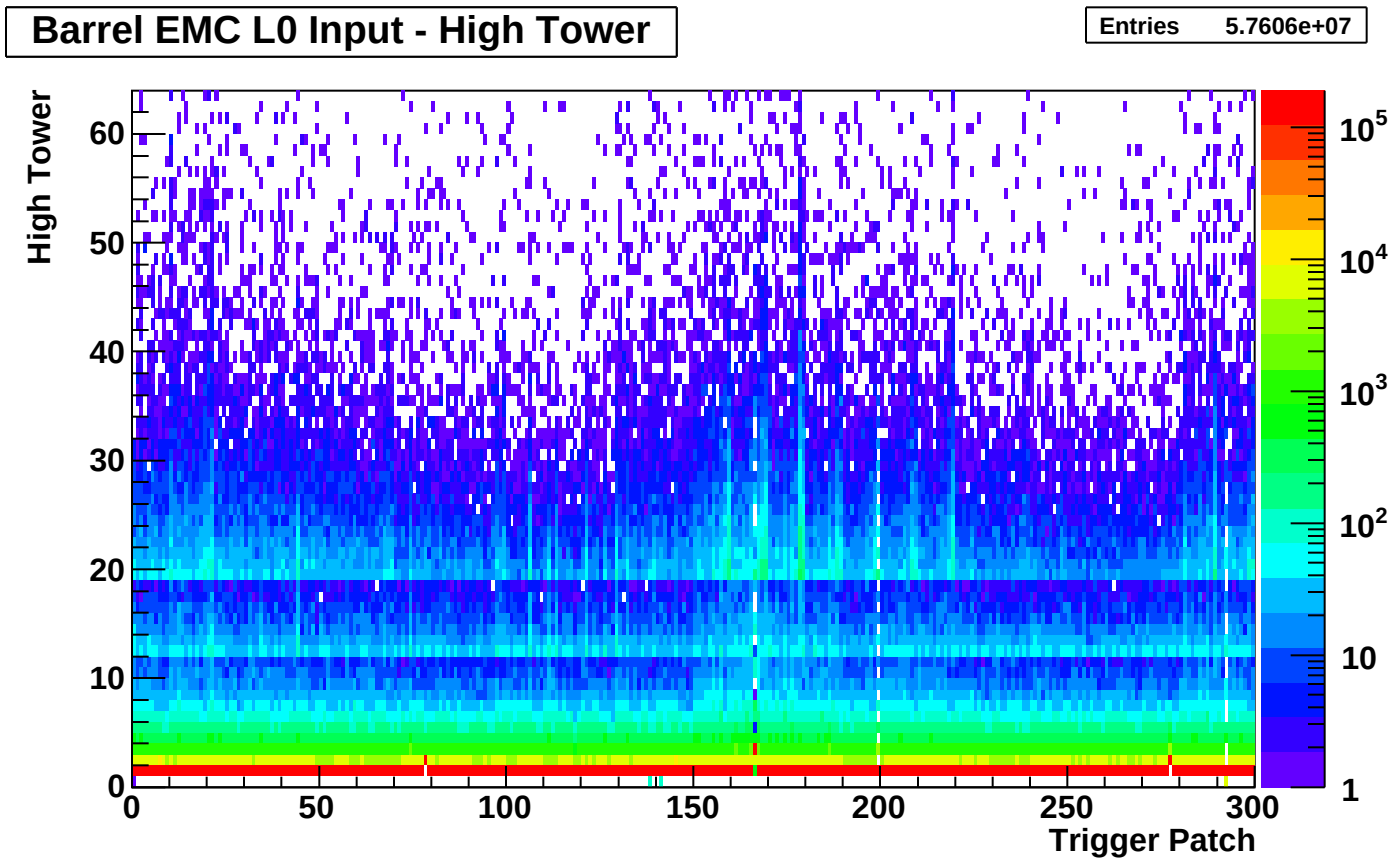

Last DSM Ch3 Input
Entries 3
LD301 Ch3 - Simulated
1
0
-1
-2
1
1
1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

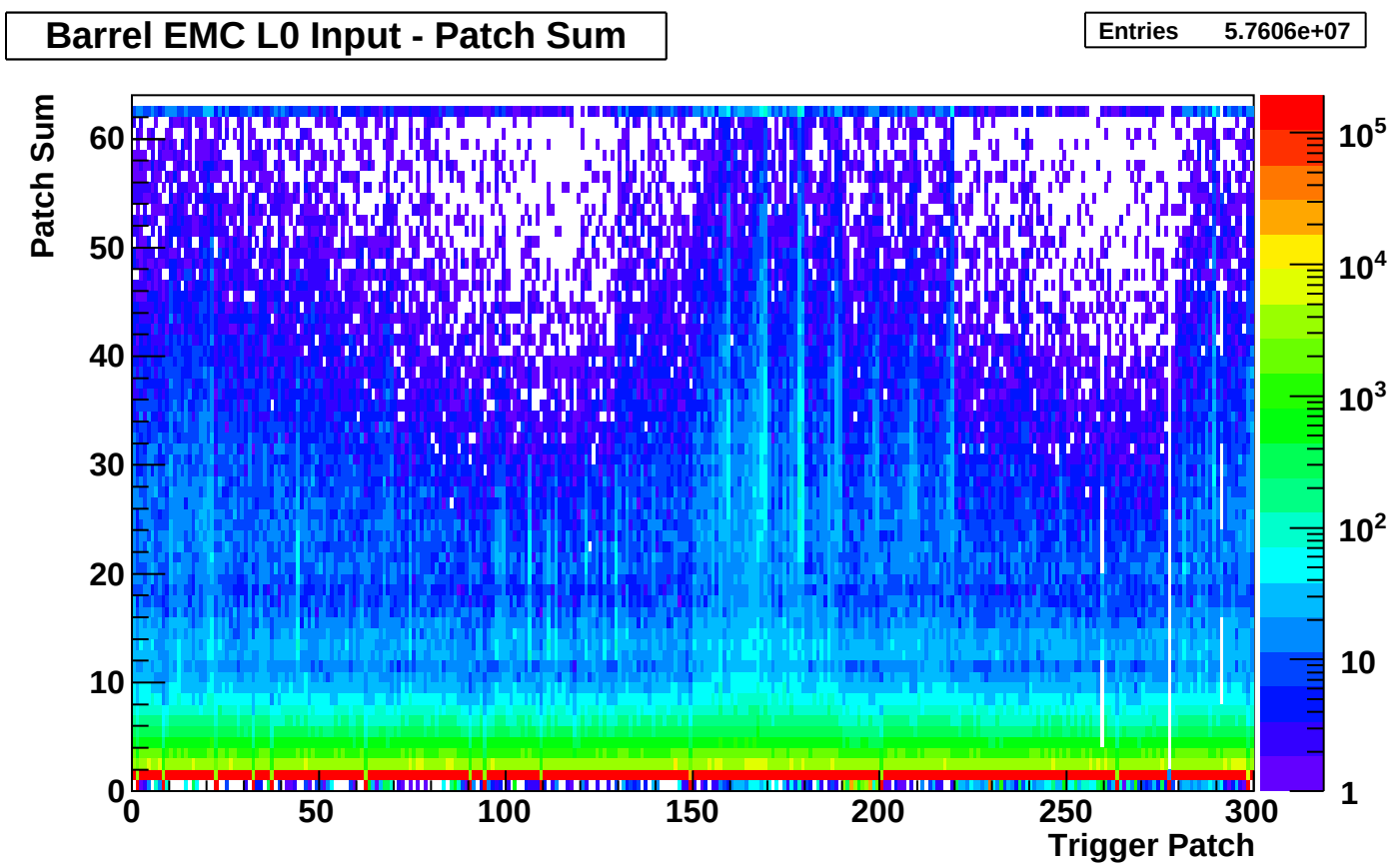

TCU bits
Entries 3072320
TCU bits
1
0
192020
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

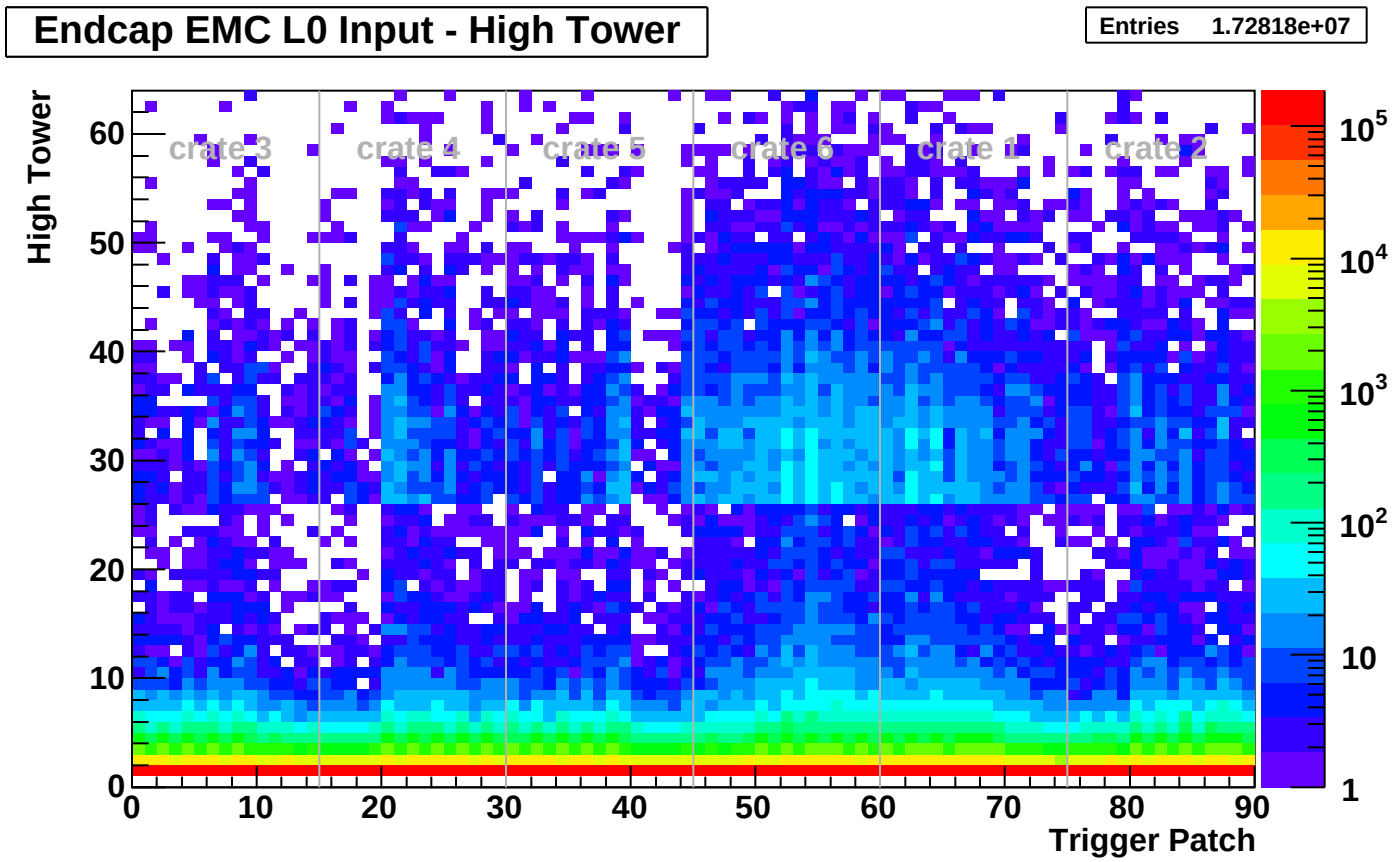

TCU bits
Entries 432654
TCU bits - Simulated
1
0
-1
-2
46838
59402
113581
14979
3423
192020
2411
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

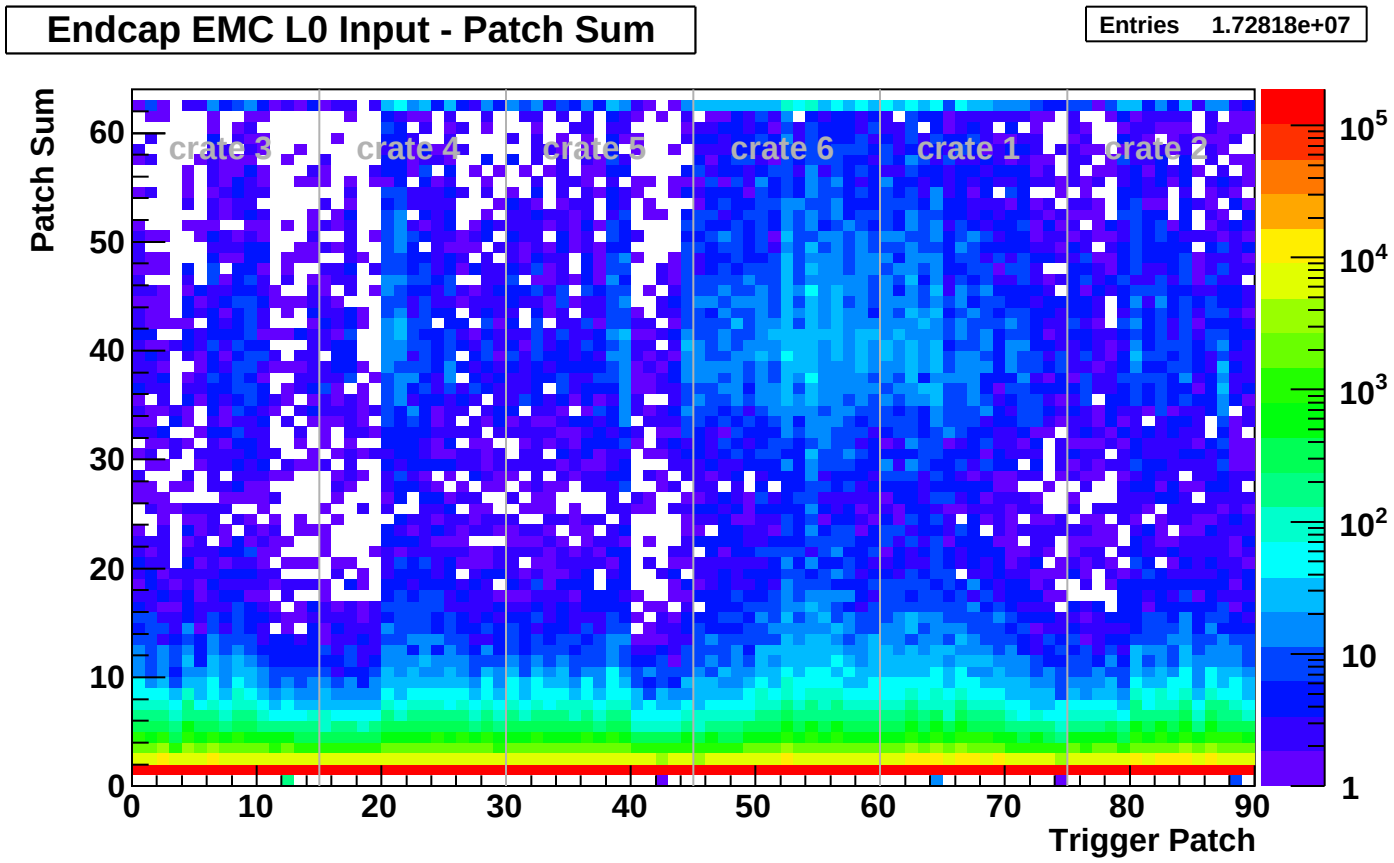

BunchId7Bit (BHT3)
Entries 6800
10^2
10
1
0
20
40
60
80
100
120

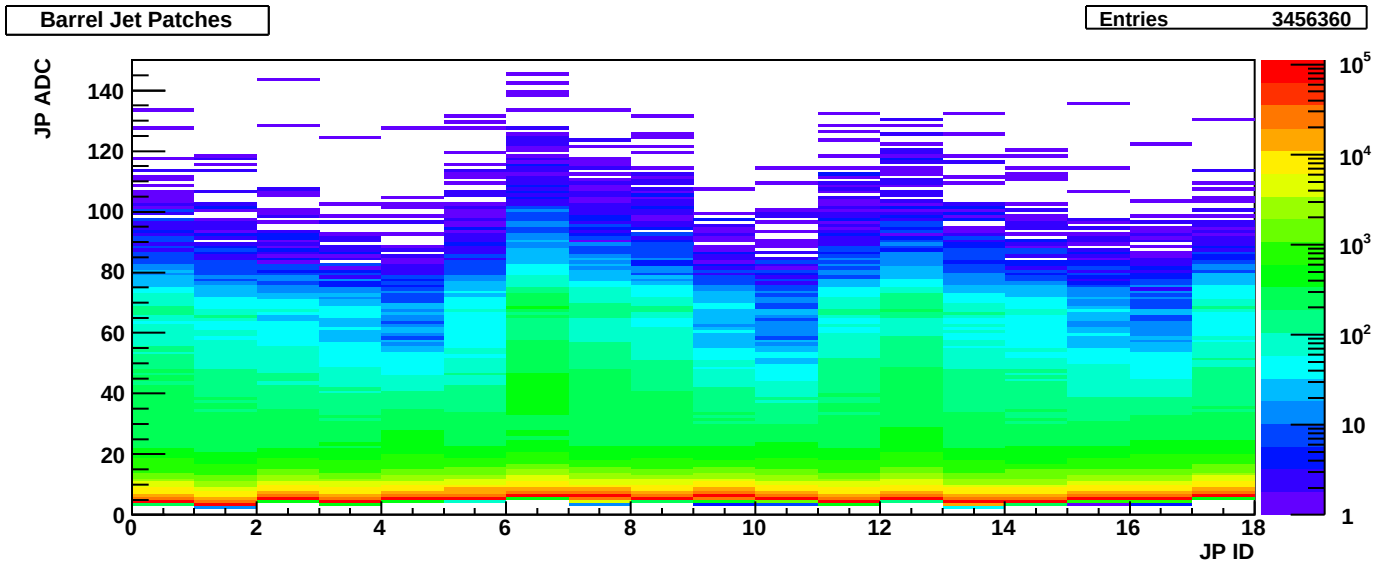

BunchId7Bit (all events)
Entries 192020
10^3
10^2
0
20
40
60
80
100
120

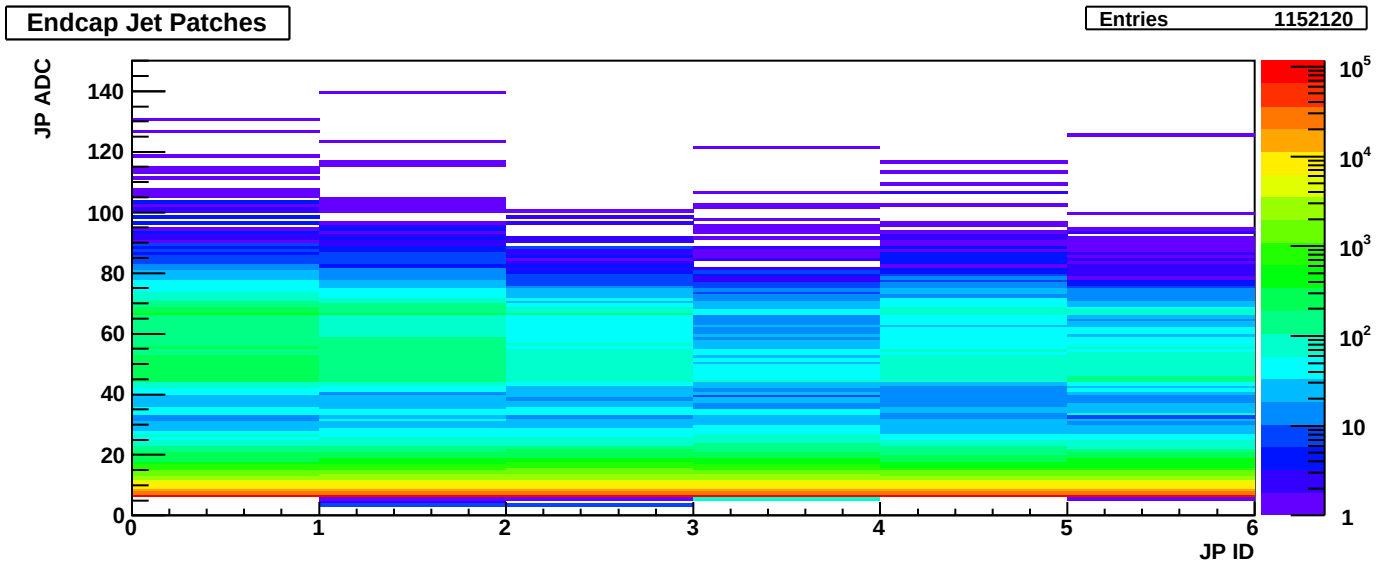

Barrel EMC L0 Input - High Tower
Entries 5.7606e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

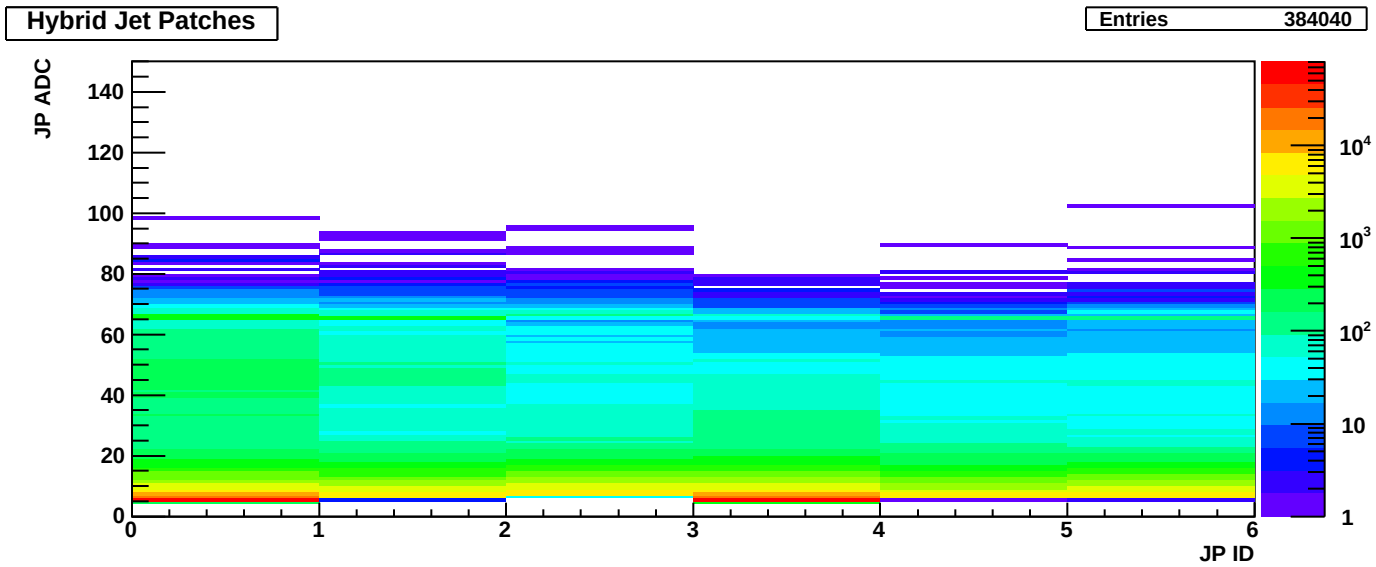

Barrel EMC L0 Input - Patch Sum
Entries 5.7606e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

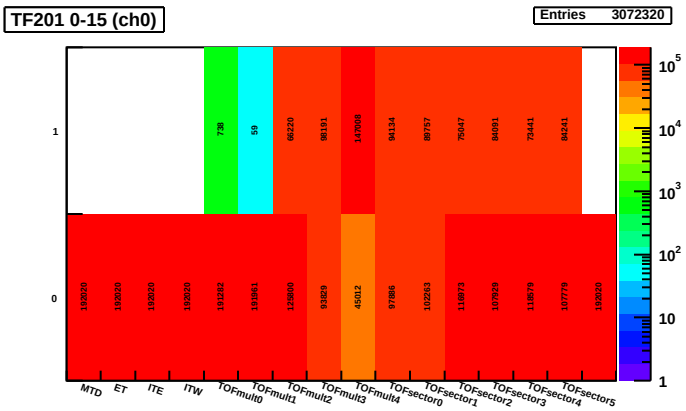

Endcap EMC L0 Input - High Tower
Entries 1.72818e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

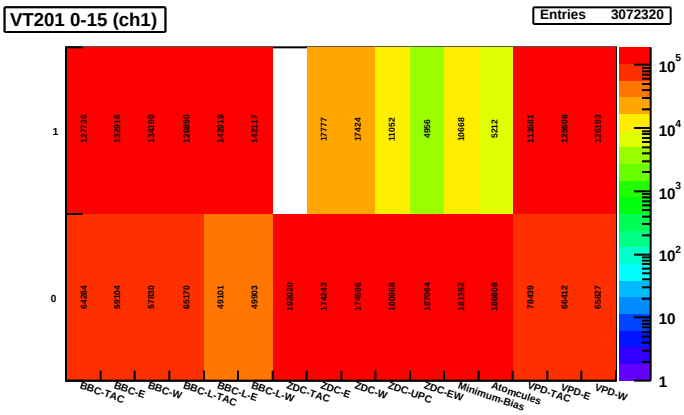

Endcap EMC L0 Input - Patch Sum
Entries 1.72818e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

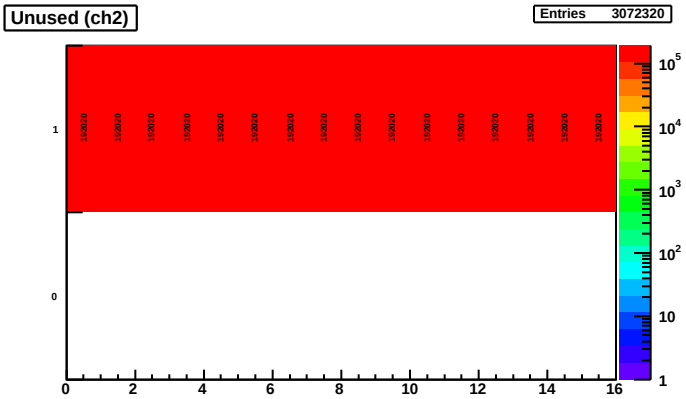

Barrel Jet Patches
Entries 3456360
JP ADC
JP ID

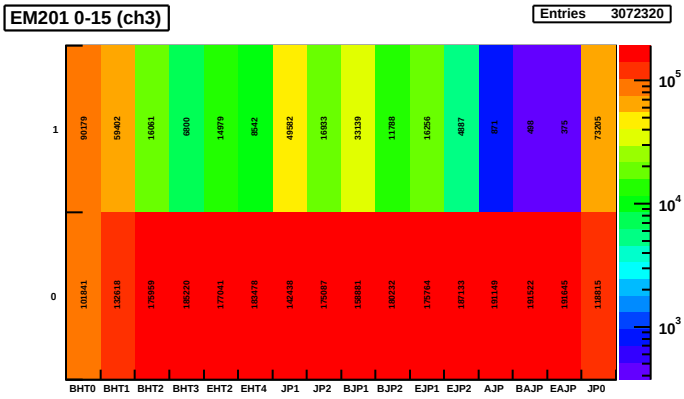

Endcap Jet Patches
Entries 1152120
JP ADC
JP ID

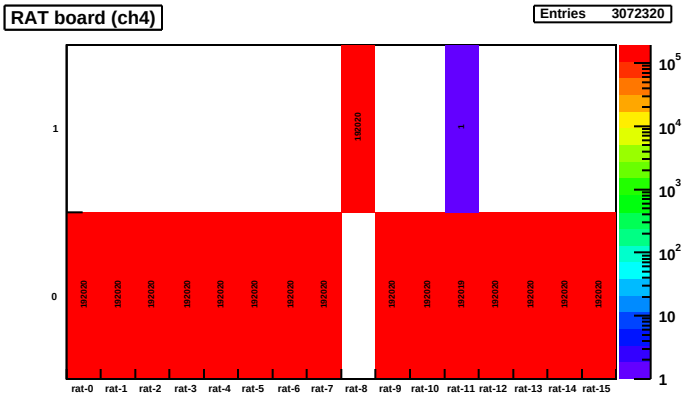

Hybrid Jet Patches
Entries 384040
JP ADC
JP ID

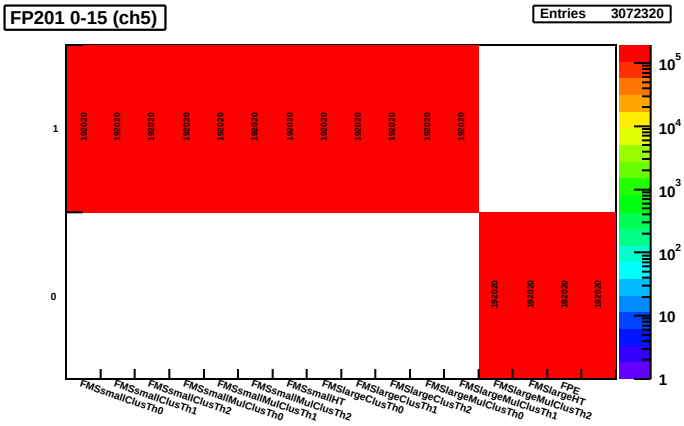

TF201 0-15 (ch0)
Entries 3072320
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

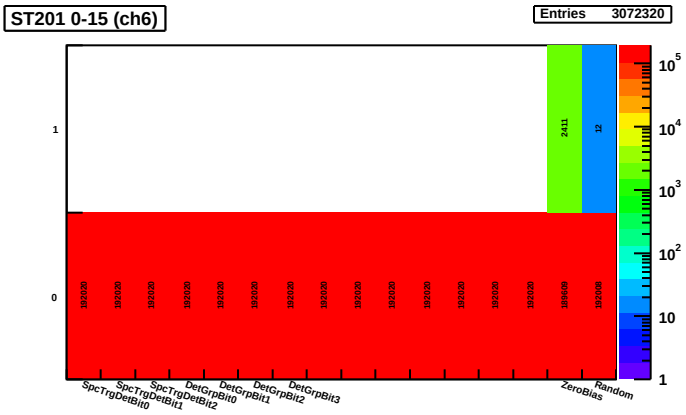

VT201 0-15 (ch1)
Entries 3072320
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

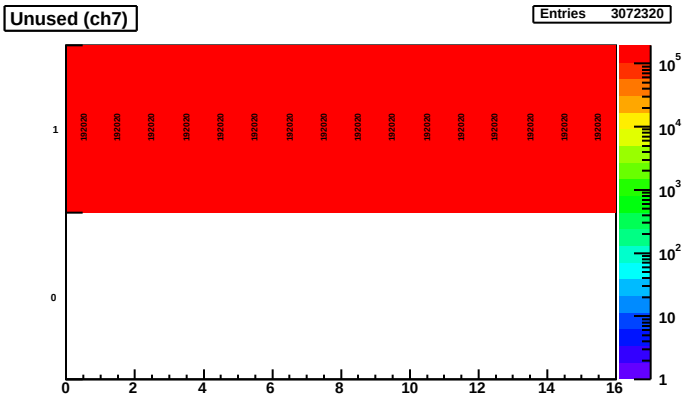

Unused (ch2)
Entries 3072320

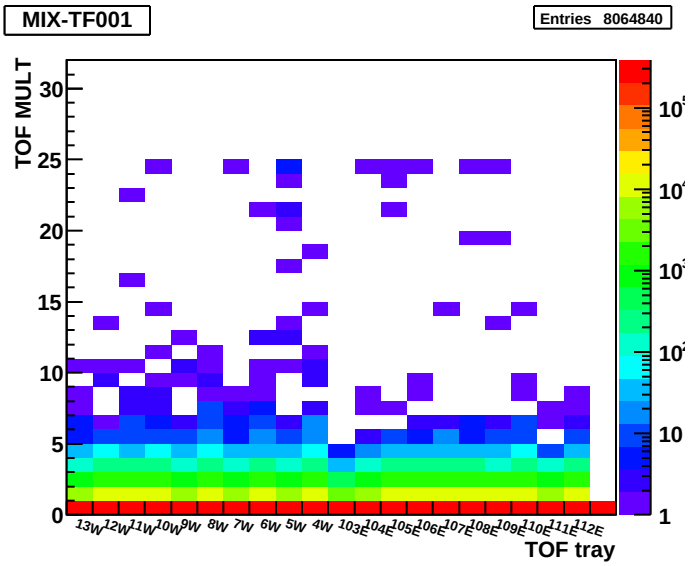

EM201 0-15 (ch3)
Entries 3072320
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

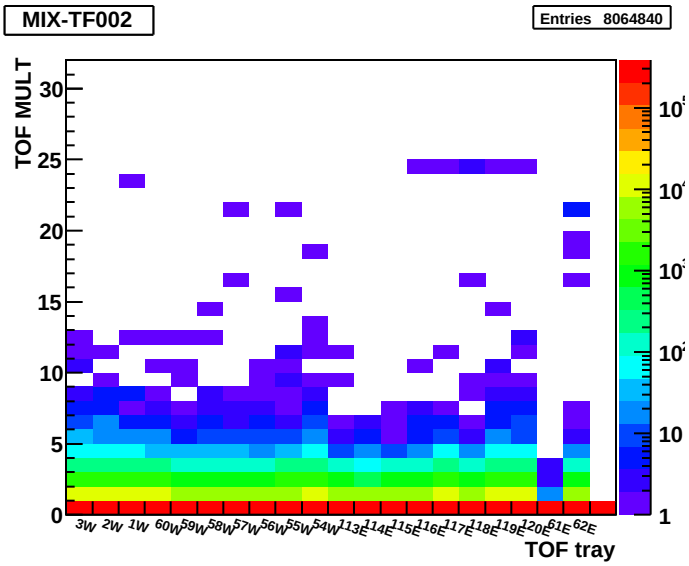

RAT board (ch4)
Entries 3072320
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

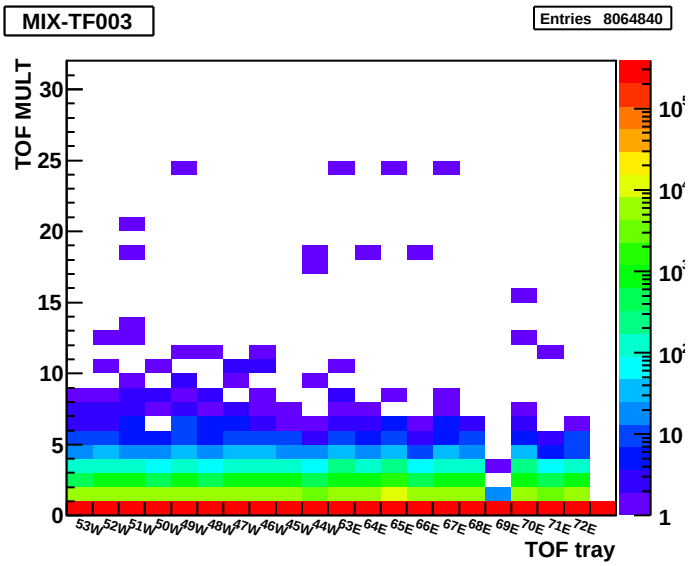

FP201 0-15 (ch5)
Entries 3072320
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

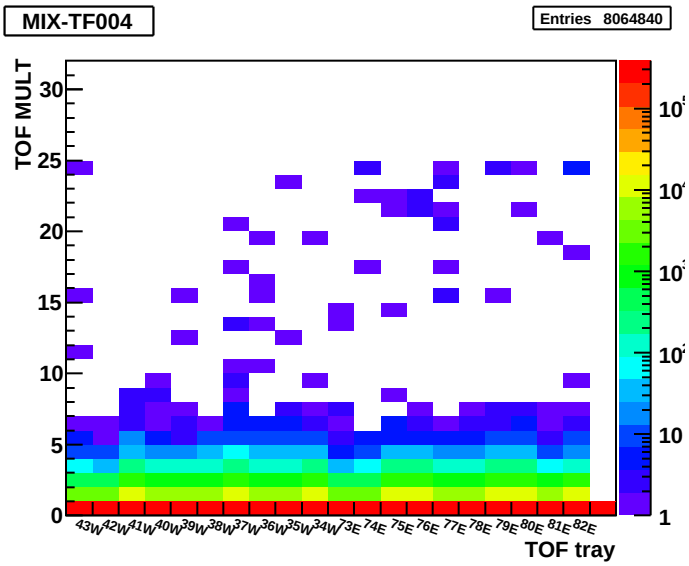

ST201 0-15 (ch6)
Entries 3072320
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random

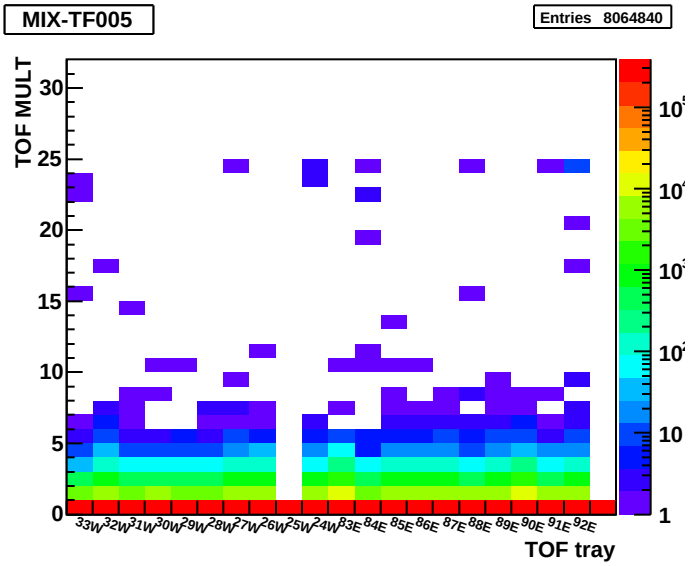

Unused (ch7)
Entries 3072320

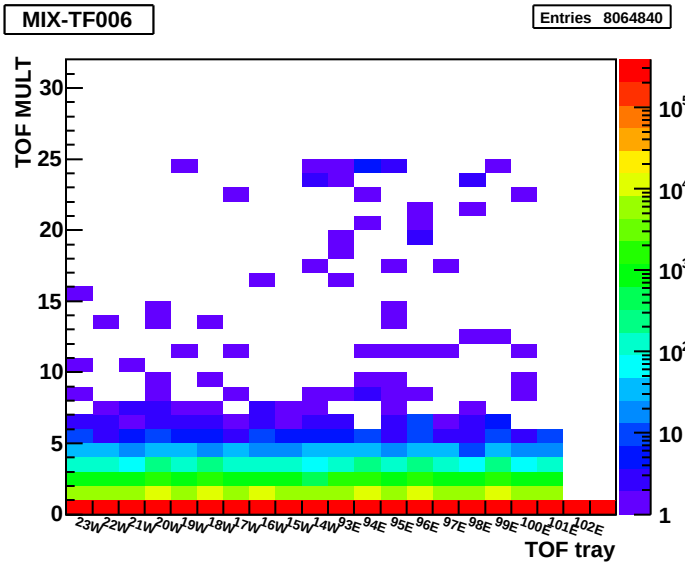

MIX-TF001
Entries 8064840
TOF MULT
TOF tray

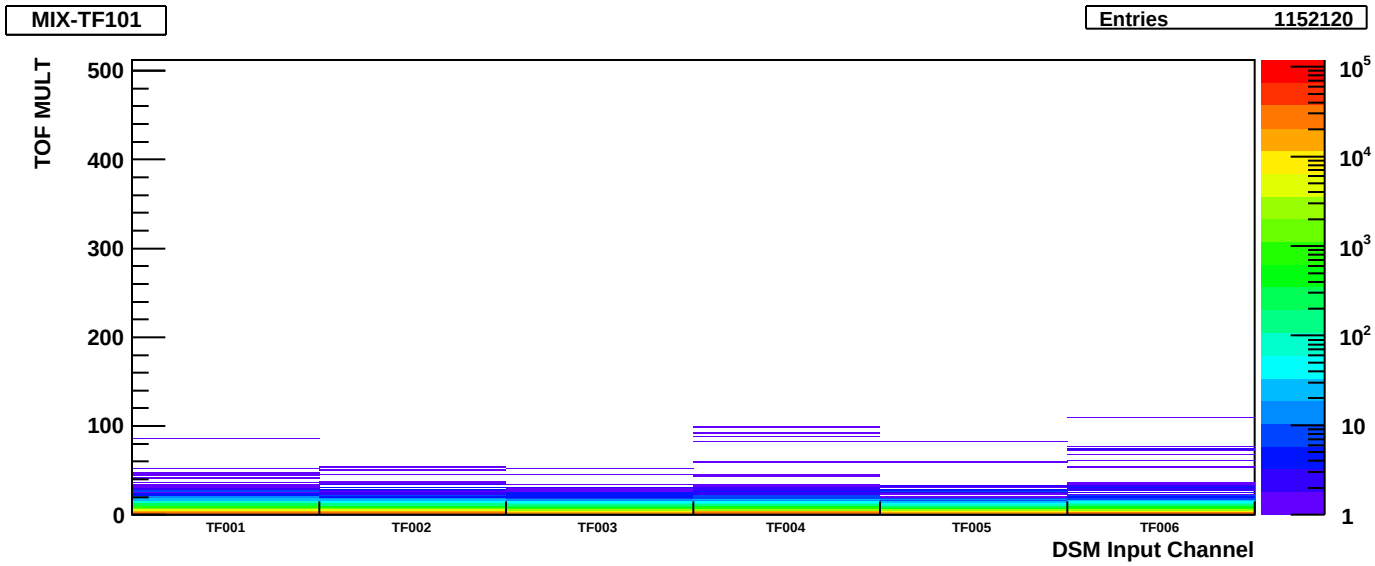

MIX-TF002
Entries 8064840
TOF MULT
TOF tray

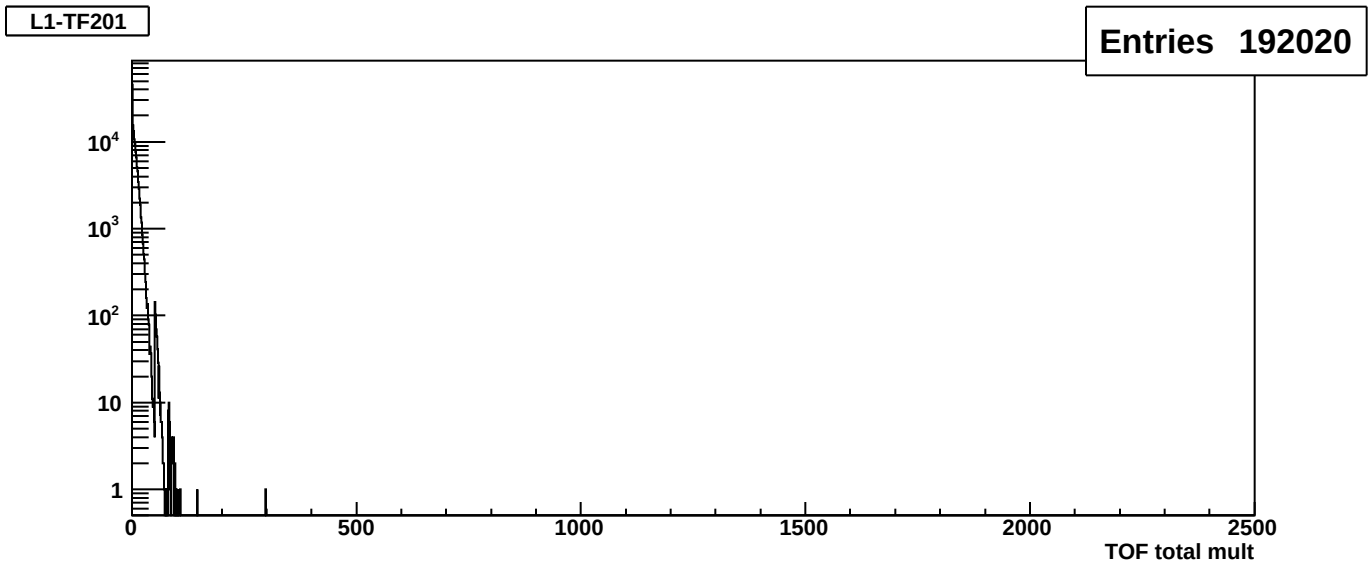

MIX-TF003
Entries 8064840
TOF MULT
TOF tray

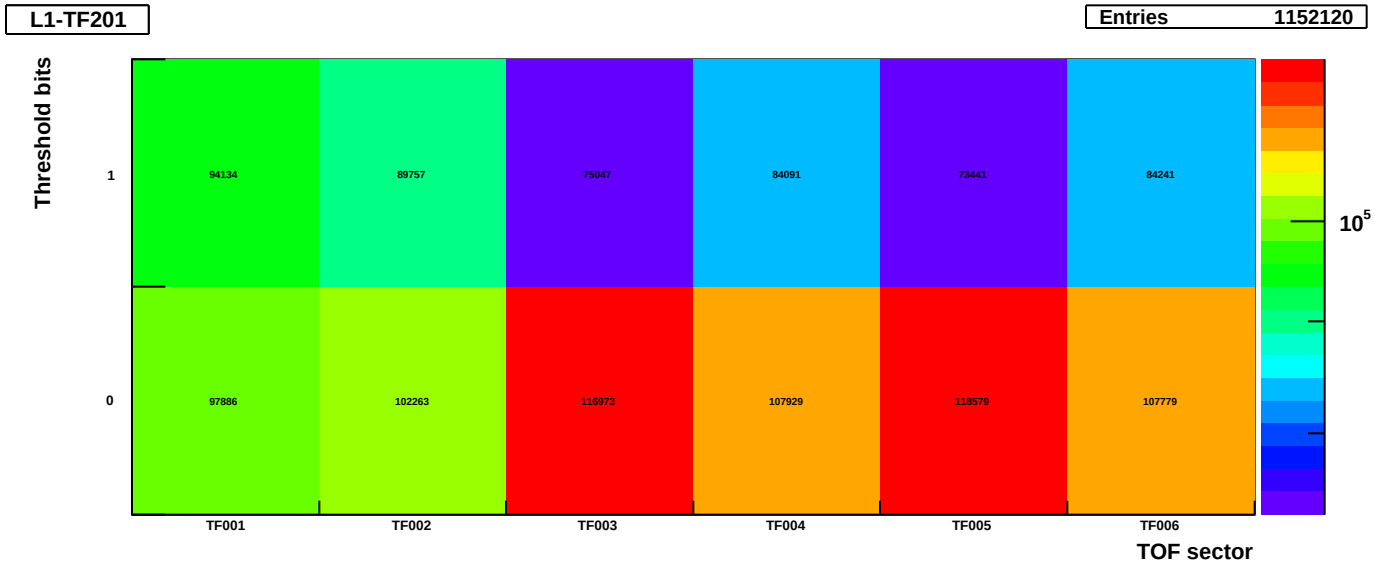

MIX-TF004
Entries 8064840
TOF MULT
TOF tray

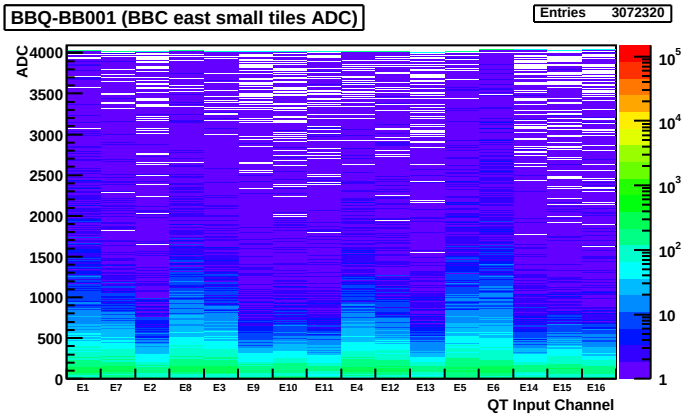

MIX-TF005
Entries 8064840
TOF MULT
TOF tray

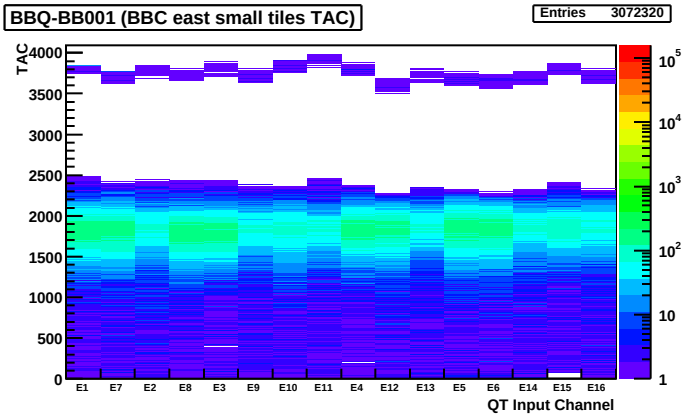

MIX-TF006
Entries 8064840
TOF MULT
TOF tray

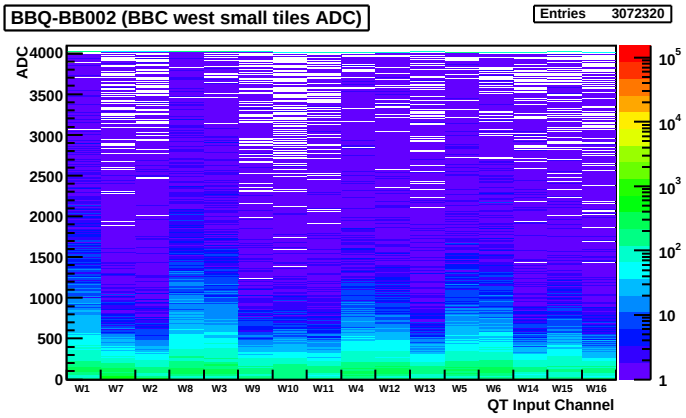

MIX-TF101
Entries 1152120
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

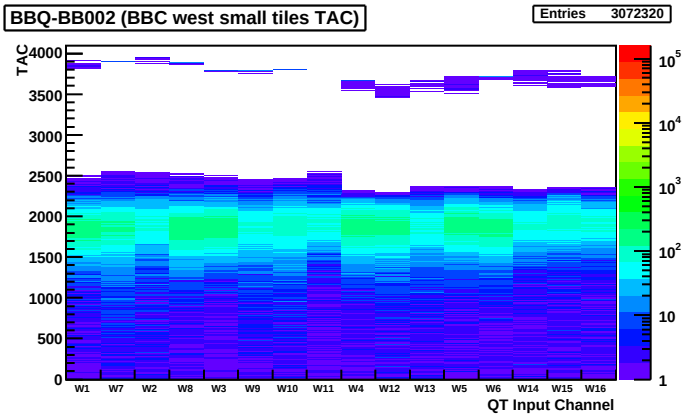

L1-TF201
Entries 192020
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

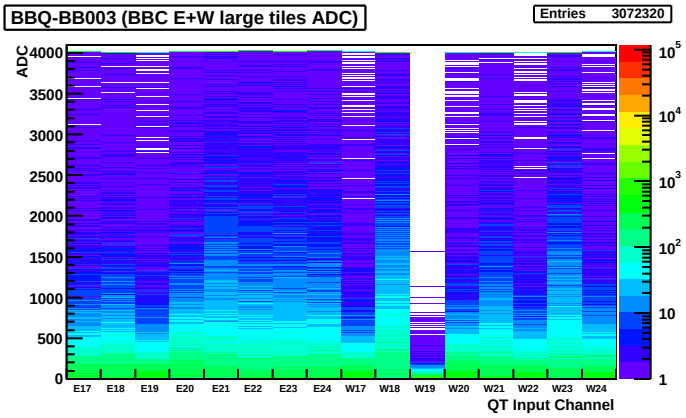

L1-TF201
Entries 1152120
Threshold bits
1
0
94134
89757
75047
84091
73441
84241
97886
102263
116973
107929
118579
107779
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

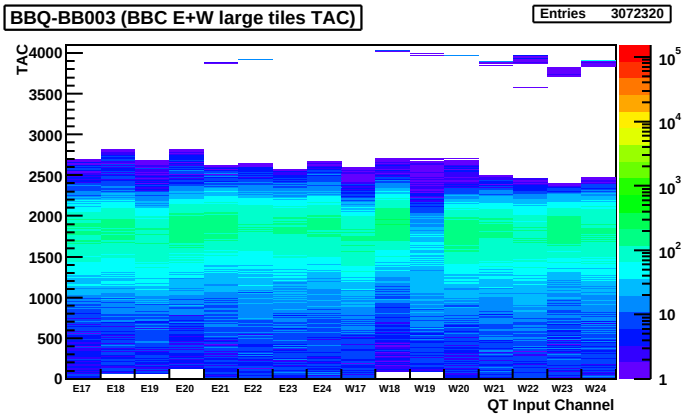

BBQ-BB001 (BBC east small tiles ADC)
Entries 3072320
ADC
QT Input Channel

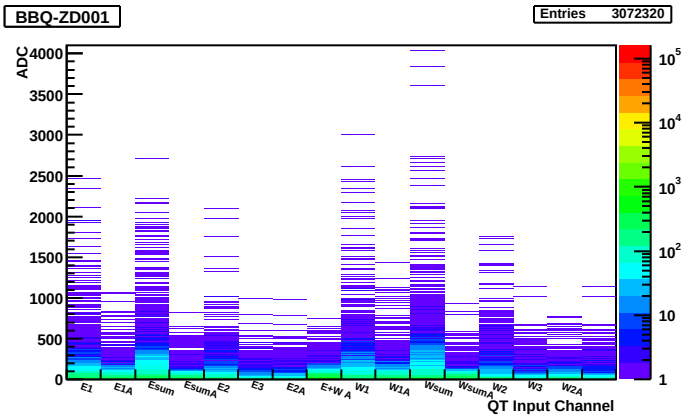

BBQ-BB001 (BBC east small tiles TAC)
Entries 3072320
TAC
QT Input Channel

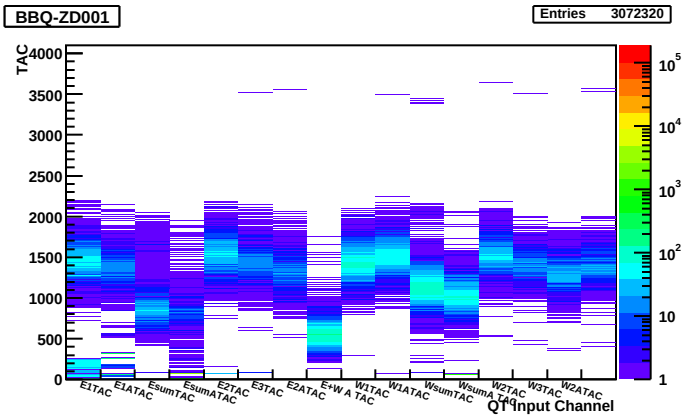

BBQ-BB002 (BBC west small tiles ADC)
Entries 3072320
ADC
QT Input Channel

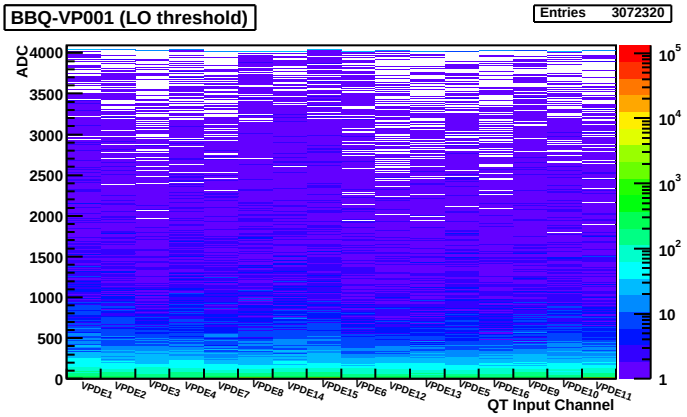

BBQ-BB002 (BBC west small tiles TAC)
Entries 3072320
TAC
QT Input Channel

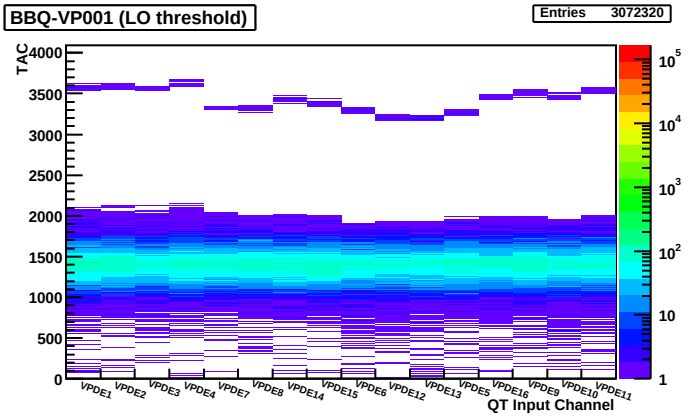

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3072320
ADC
QT Input Channel

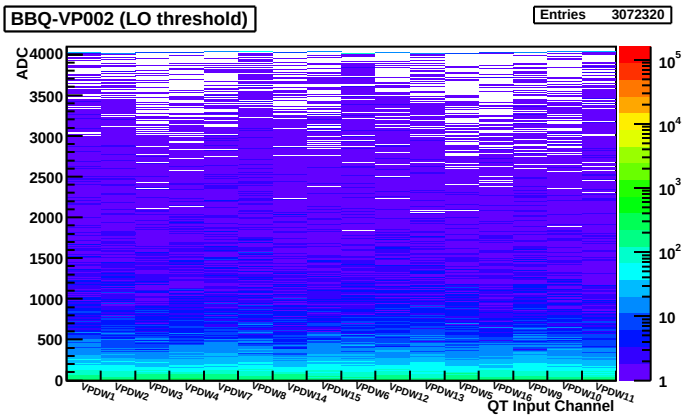

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3072320
TAC
QT Input Channel

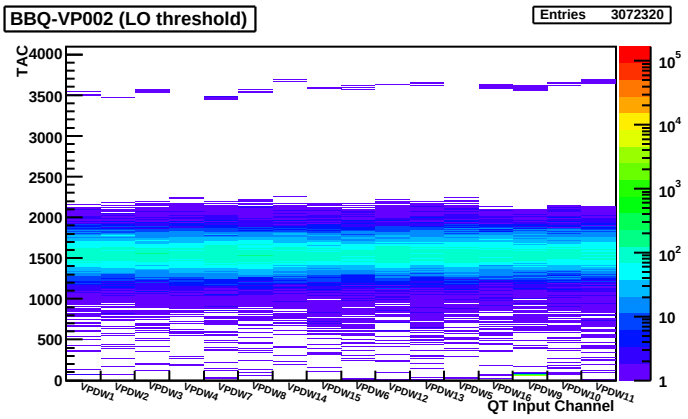

BBQ-ZD001
Entries 3072320
ADC
QT Input Channel

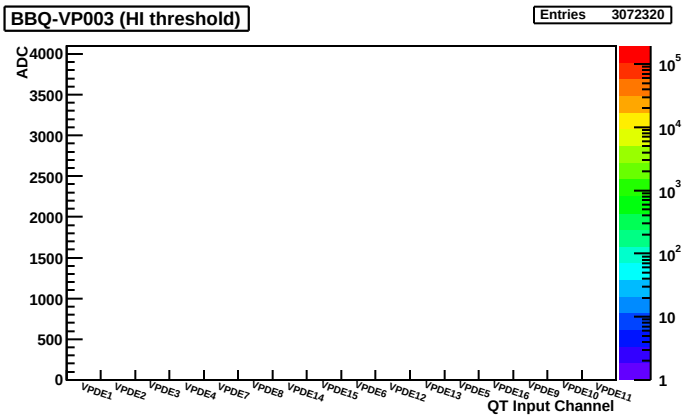

BBQ-ZD001
Entries 3072320
TAC
QT Input Channel

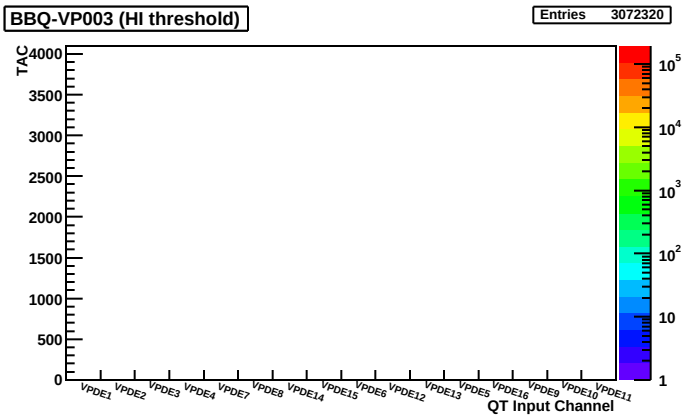

BBQ-VP001 (LO threshold)
Entries 3072320
ADC
QT Input Channel

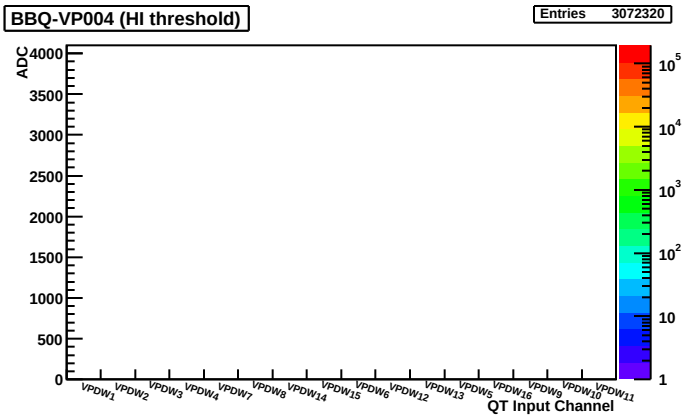

BBQ-VP001 (LO threshold)
Entries 3072320
TAC
QT Input Channel

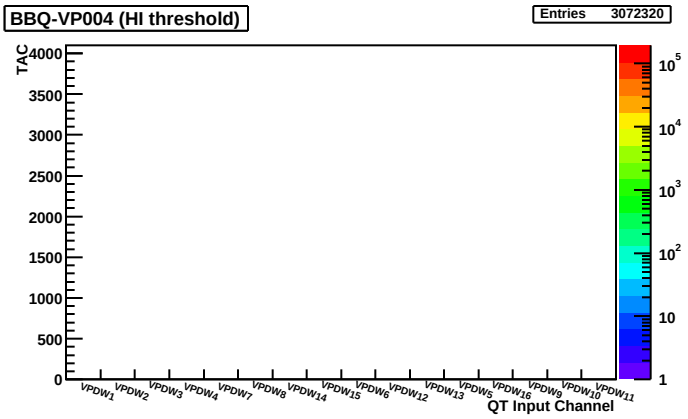

BBQ-VP002 (LO threshold)
Entries 3072320
ADC
QT Input Channel

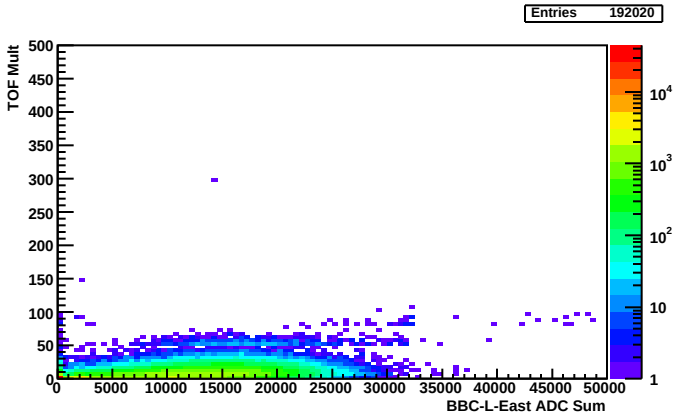

BBQ-VP002 (LO threshold)
Entries 3072320
TAC
QT Input Channel

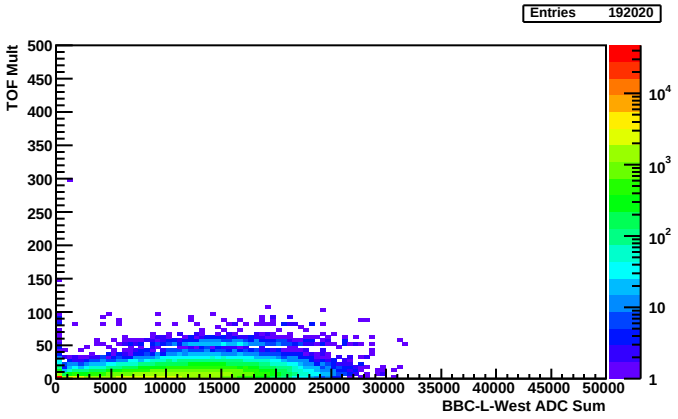

BBQ-VP003 (HI threshold)
Entries 3072320
ADC
QT Input Channel

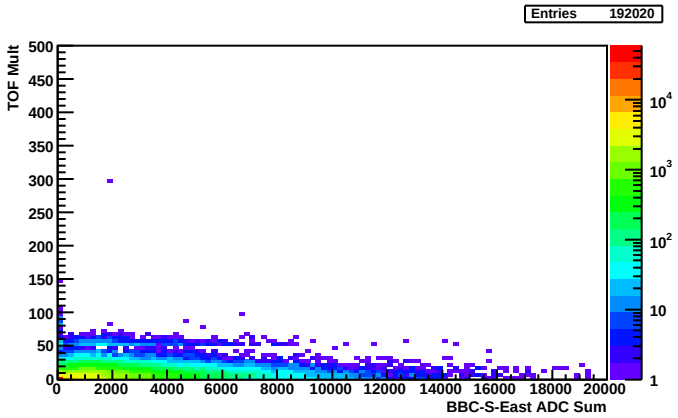

BBQ-VP003 (HI threshold)
Entries 3072320
TAC
QT Input Channel

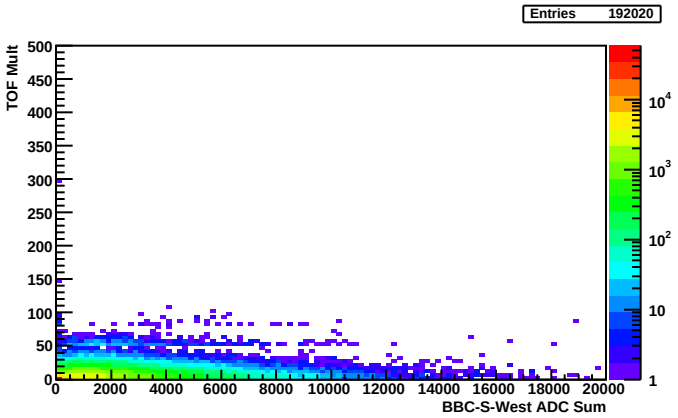

BBQ-VP004 (HI threshold)
Entries 3072320
ADC
QT Input Channel

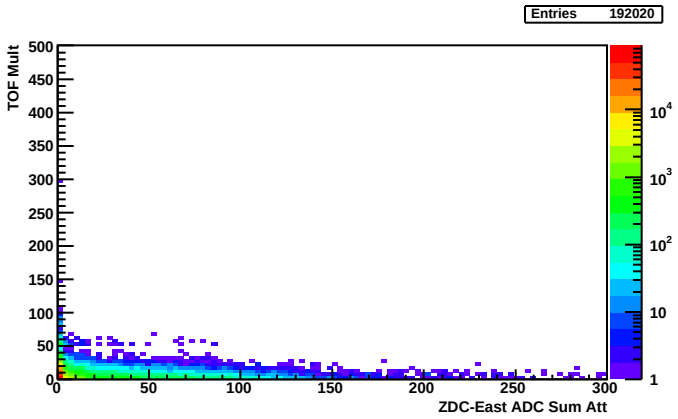

BBQ-VP004 (HI threshold)
Entries 3072320
TAC
QT Input Channel

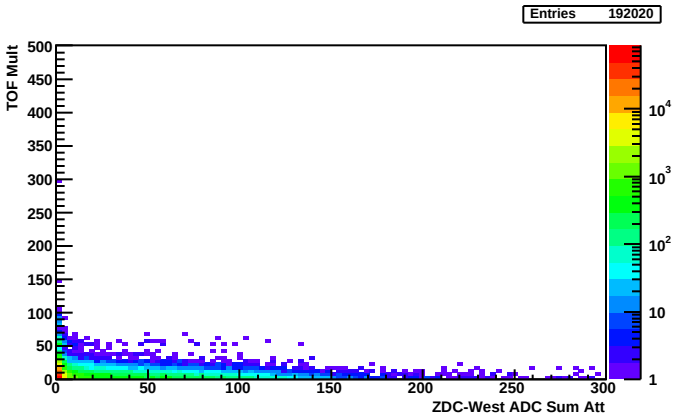

Entries 192020
TOF Mult
BBC-L-East ADC Sum

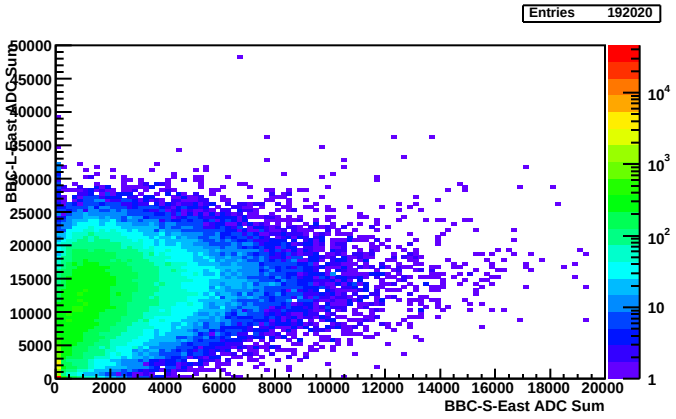

Entries 192020
TOF Mult
BBC-L-West ADC Sum

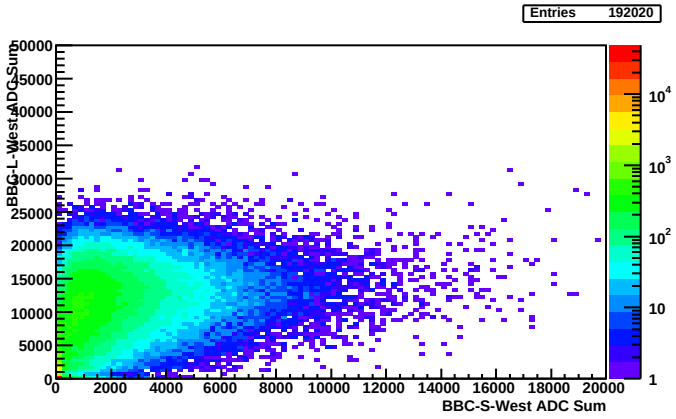

Entries 192020
TOF Mult
BBC-S-East ADC Sum

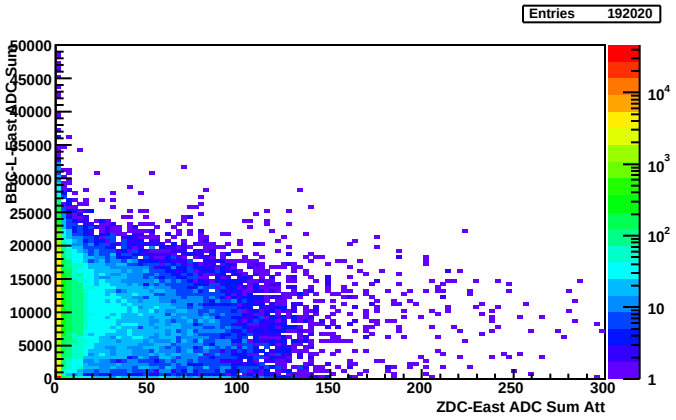

Entries 192020
TOF Mult
BBC-S-West ADC Sum

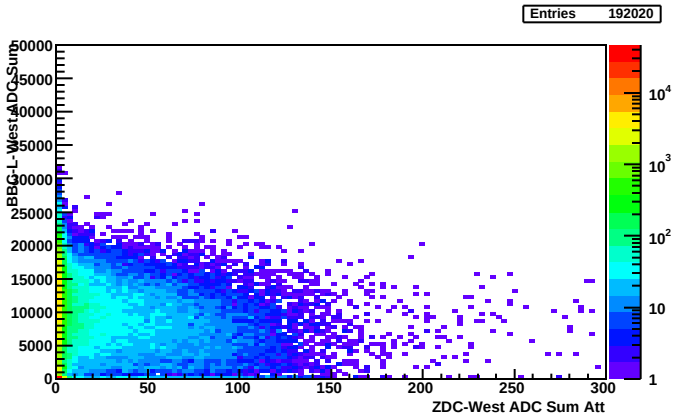

Entries 192020
TOF Mult
ZDC-East ADC Sum Att

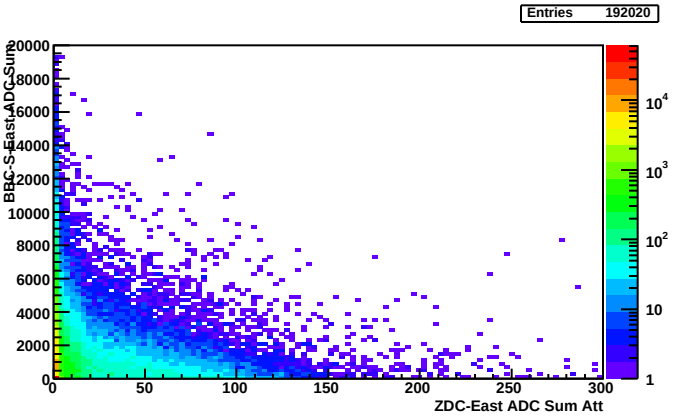

Entries 192020
TOF Mult
ZDC-West ADC Sum Att

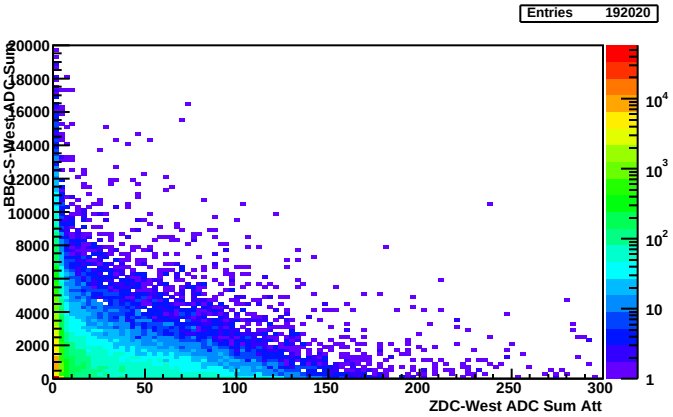

Entries 192020
BBC-L-East ADC Sum
BBC-S-East ADC Sum

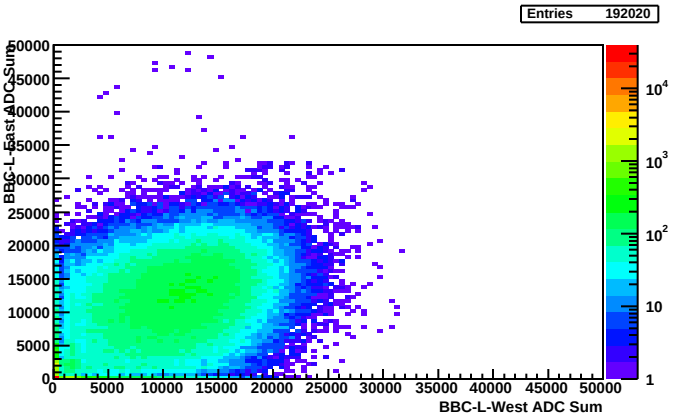

Entries 192020
BBC-L-West ADC Sum
BBC-S-West ADC Sum

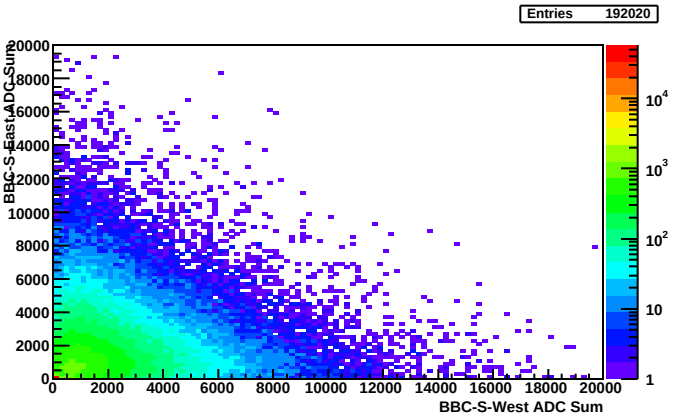

Entries 192020
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

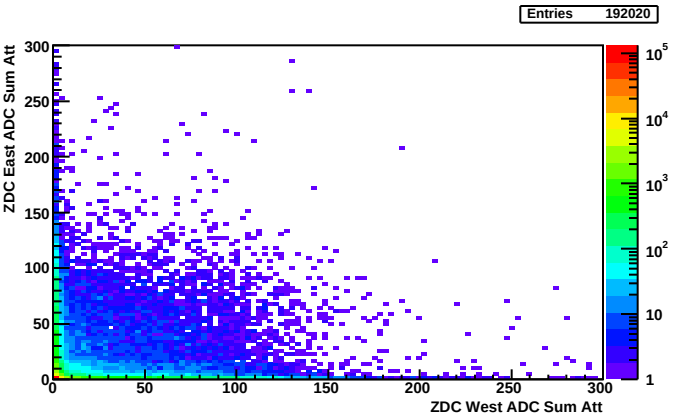

Entries 192020
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

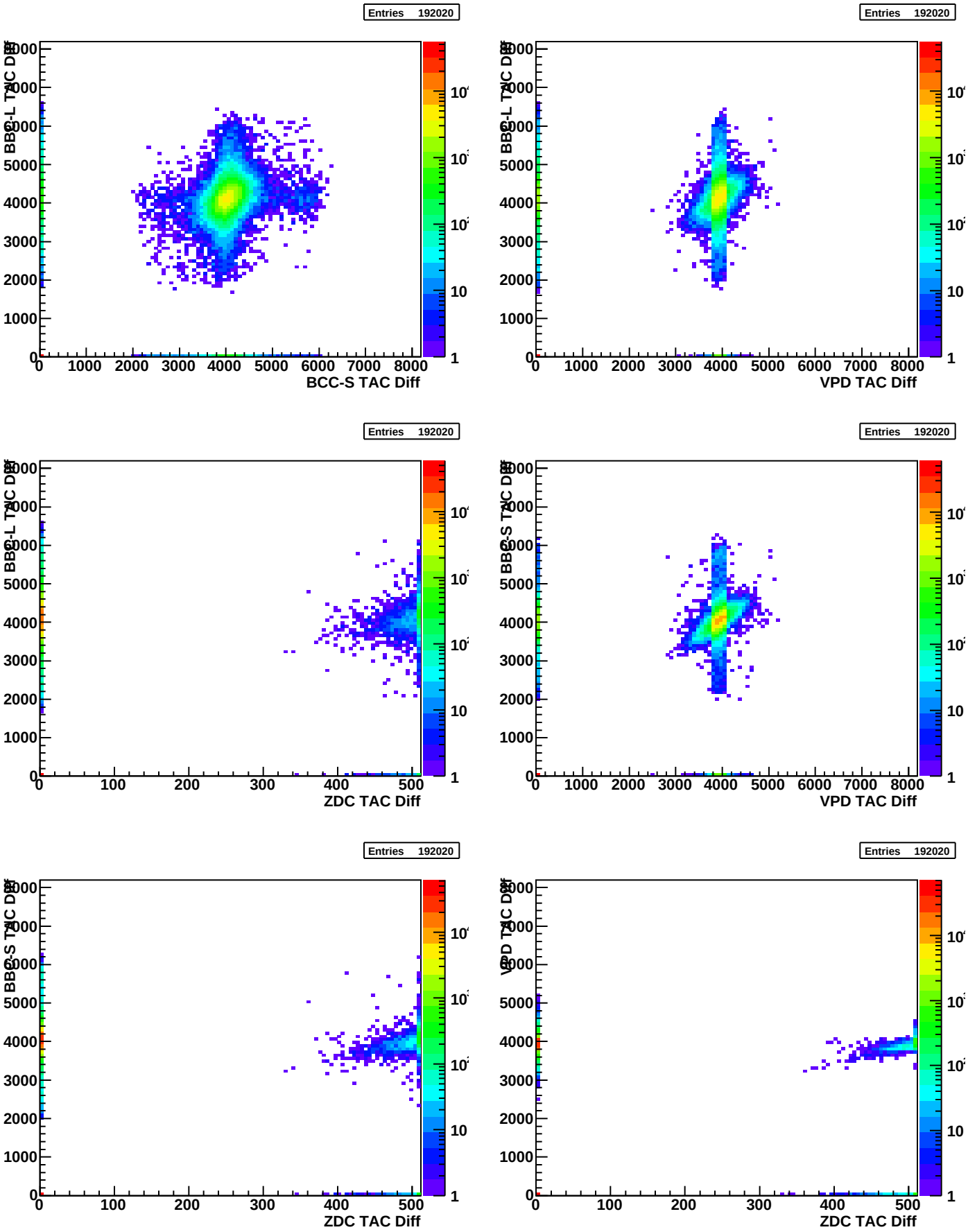

Entries 192020
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

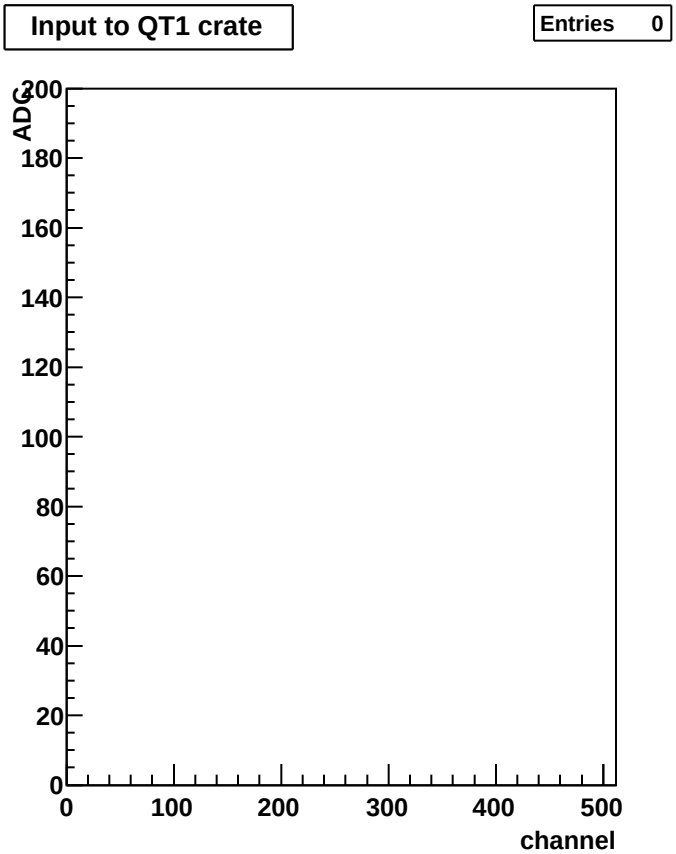

Entries 192020
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

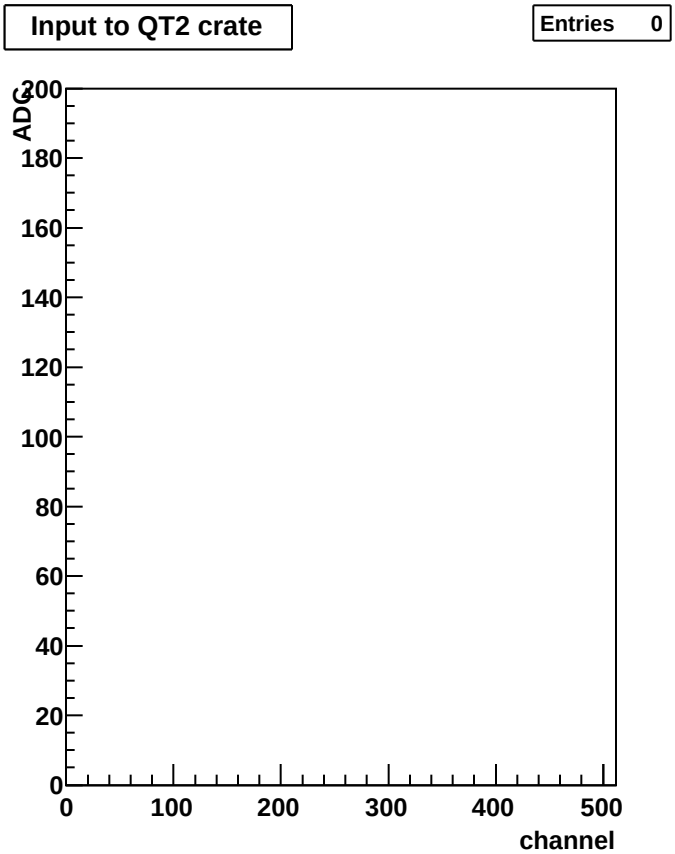

Entries 192020
BBC-L-East ADC Sum
BBC-L-West ADC Sum

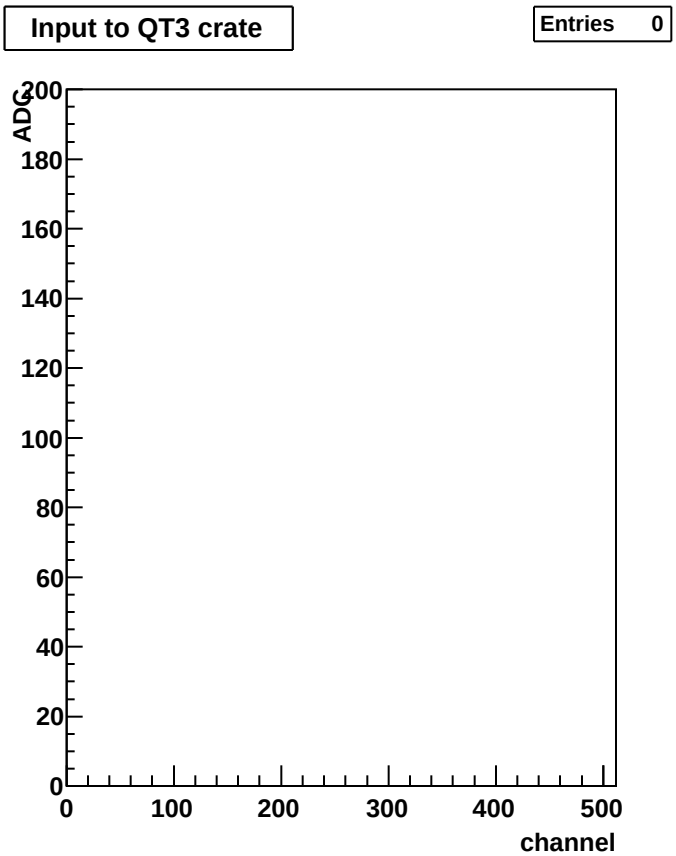

Entries 192020
BBC-S-East ADC Sum
BBC-S-West ADC Sum

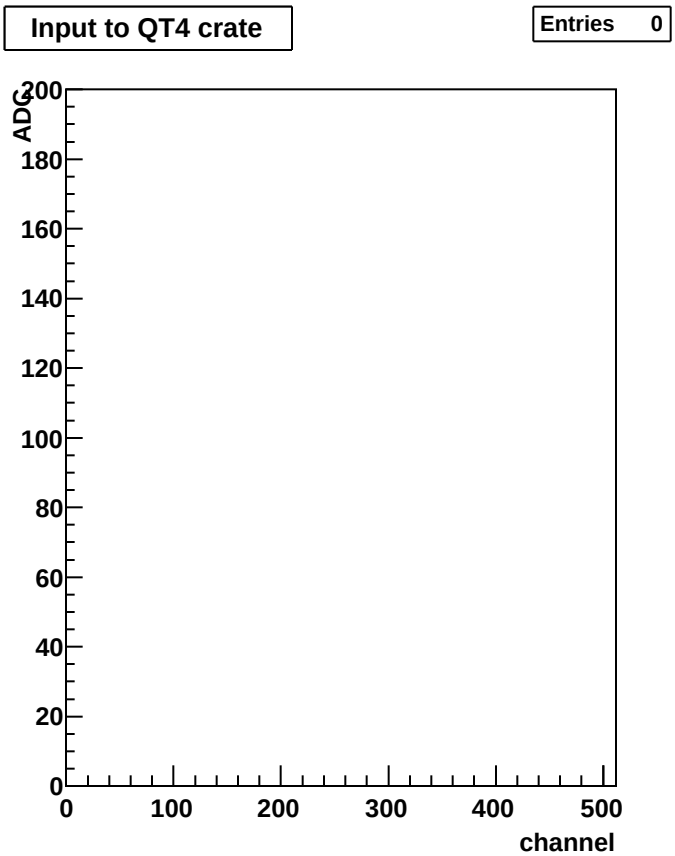

Entries 192020
ZDC East ADC Sum Att
ZDC West ADC Sum Att

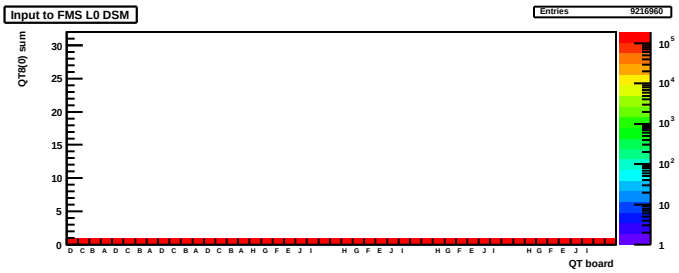

Entries 192020
BBC-L TAC Diff
BCC-S TAC Diff
Entries 192020
BBC-L TAC Diff
VPD TAC Diff
Entries 192020
BBC-L TAC Diff
ZDC TAC Diff
Entries 192020
BBC-S TAC Diff
VPD TAC Diff
Entries 192020
BBC-S TAC Diff
ZDC TAC Diff
Entries 192020
VPD TAC Diff
ZDC TAC Diff

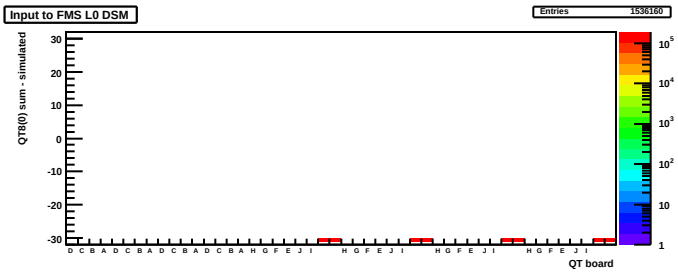

Input to QT1 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

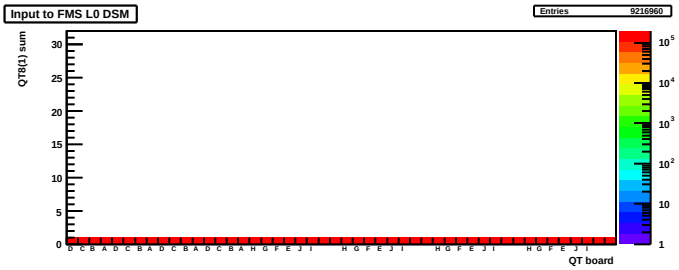

Input to QT2 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

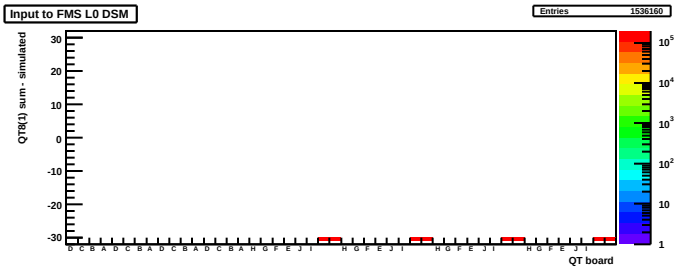

Input to QT3 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

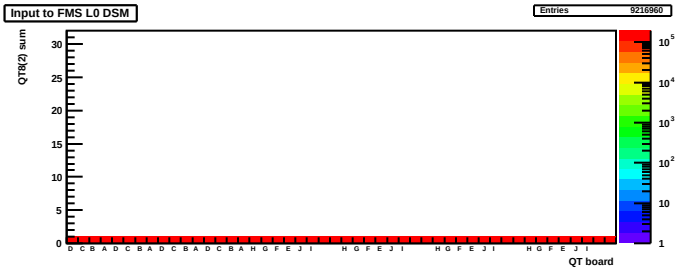

Input to QT4 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

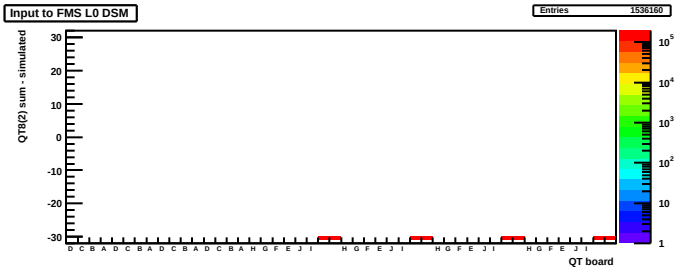

Input to FMS L0 DSM
Entries 9216960
QT8(0) sum
QT board

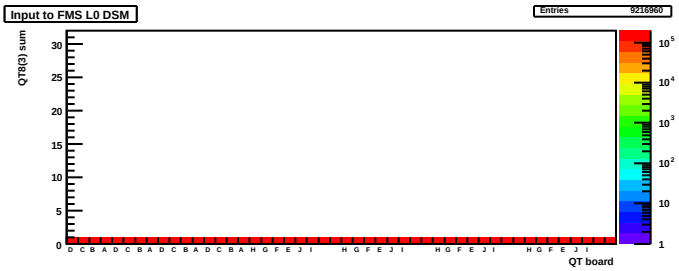

Input to FMS L0 DSM
Entries 1536160
QT8(0) sum - simulated
QT board

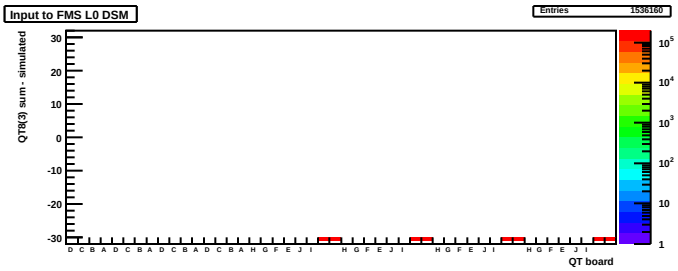

Input to FMS L0 DSM
Entries 9216960
QT8(1) sum
QT board

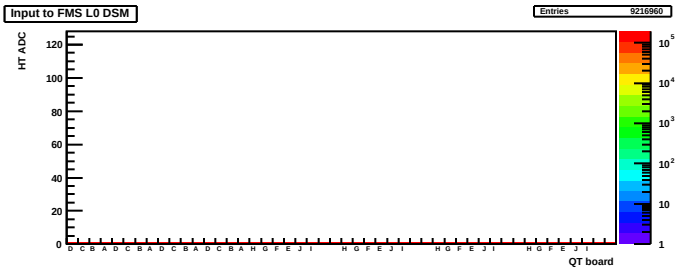

Input to FMS L0 DSM
Entries 1536160
QT8(1) sum - simulated
QT board

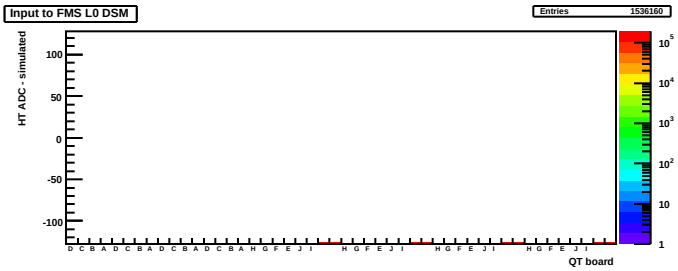

Input to FMS L0 DSM
Entries 9216960
QT8(2) sum
QT board

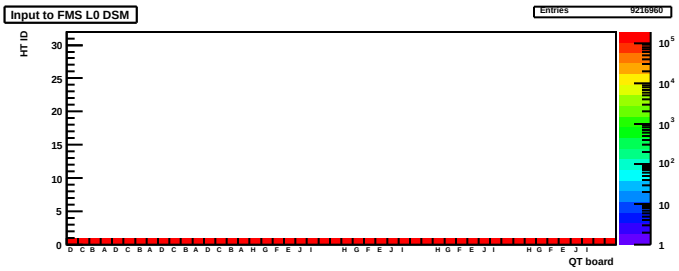

Input to FMS L0 DSM
Entries 1536160
QT8(2) sum - simulated
QT board

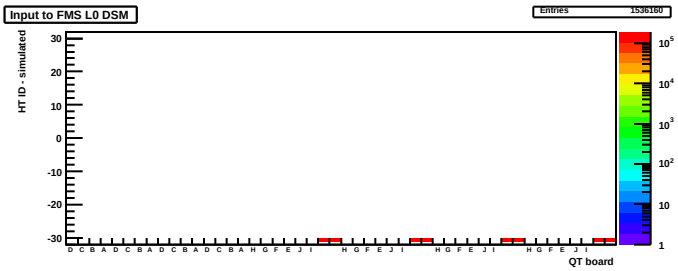

Input to FMS L0 DSM
Entries 9216960
QT8(3) sum
QT board

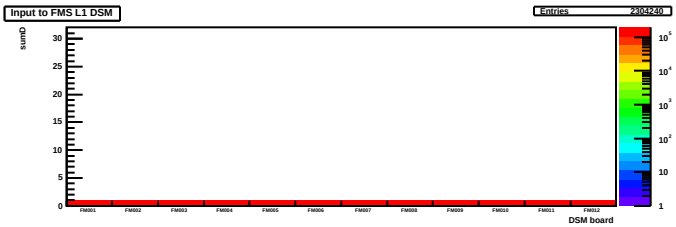

Input to FMS L0 DSM
Entries 1536160
QT8(3) sum - simulated
QT board

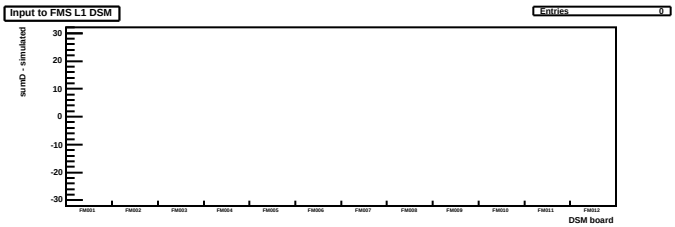

Input to FMS L0 DSM
Entries 9216960
HT ADC
QT board

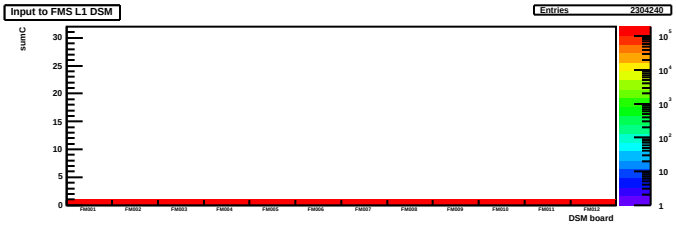

Input to FMS L0 DSM
Entries 1536160
HT ADC - simulated
QT board

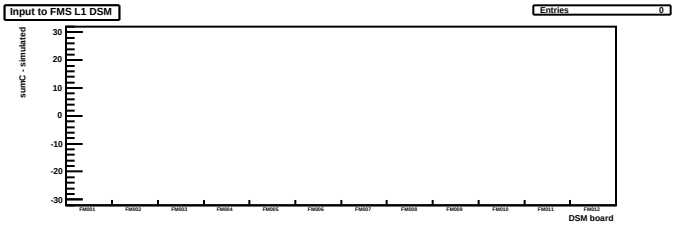

Input to FMS L0 DSM
Entries 9216960
HT ID
QT board

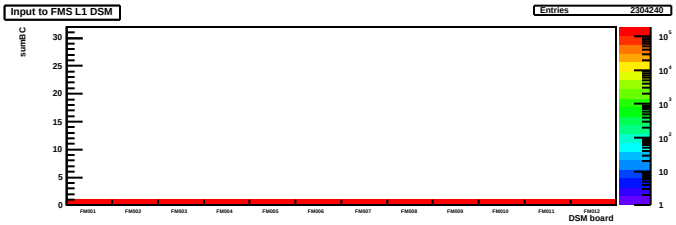

Input to FMS L0 DSM
Entries 1536160
HT ID - simulated
QT board

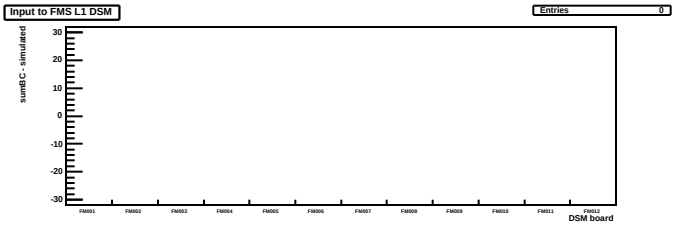

Input to FMS L1 DSM
Entries 2304240
sumD
DSM board

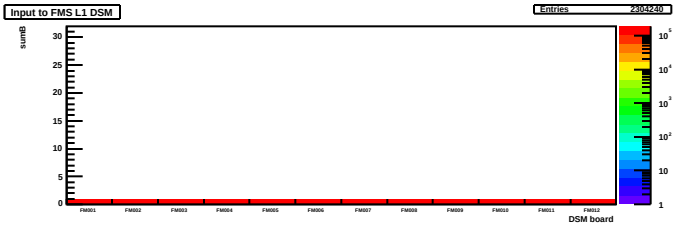

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

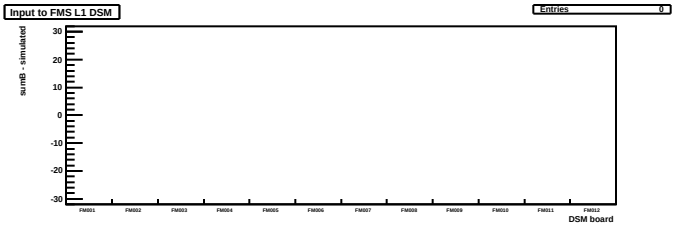

Input to FMS L1 DSM
Entries 2304240
sumC
DSM board

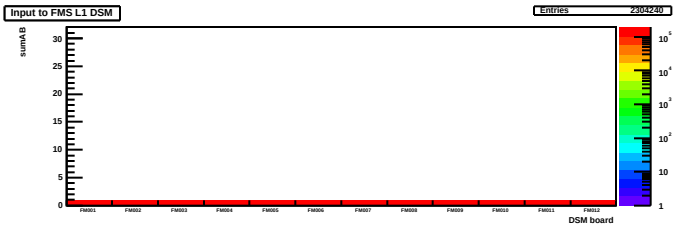

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

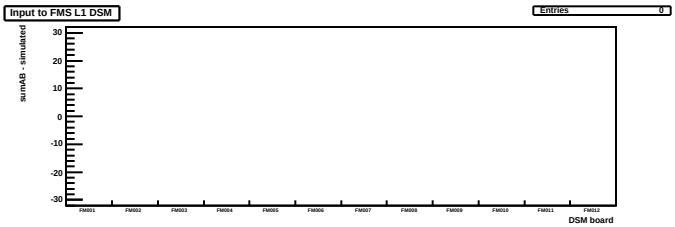

Input to FMS L1 DSM
Entries 2304240
sumBC
DSM board

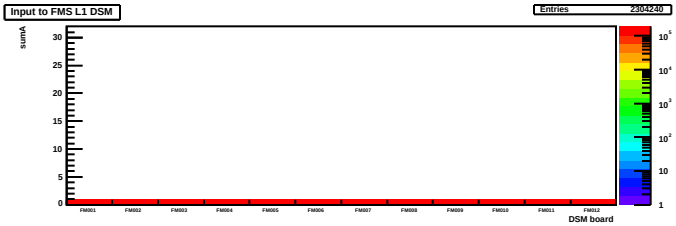

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

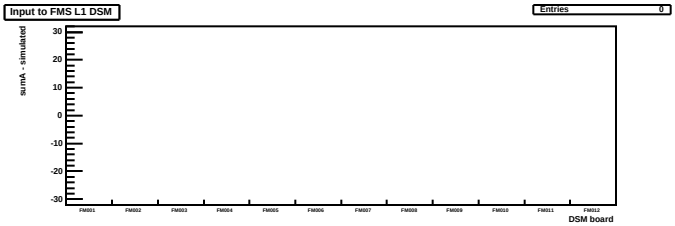

Input to FMS L1 DSM
Entries 2304240
sumB
DSM board

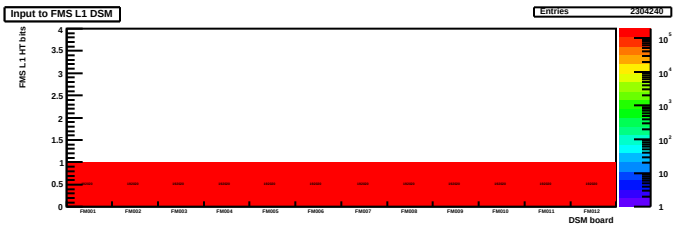

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

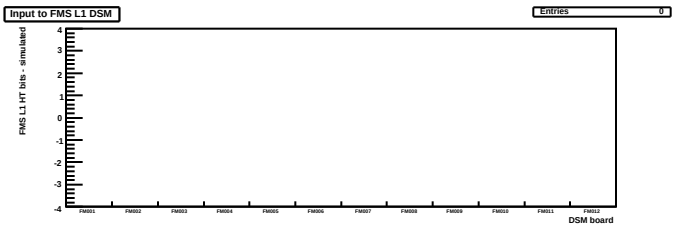

Input to FMS L1 DSM
Entries 2304240
sumAB
DSM board

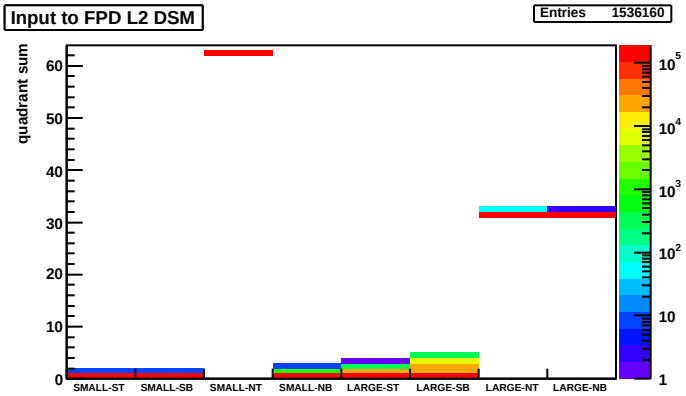

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

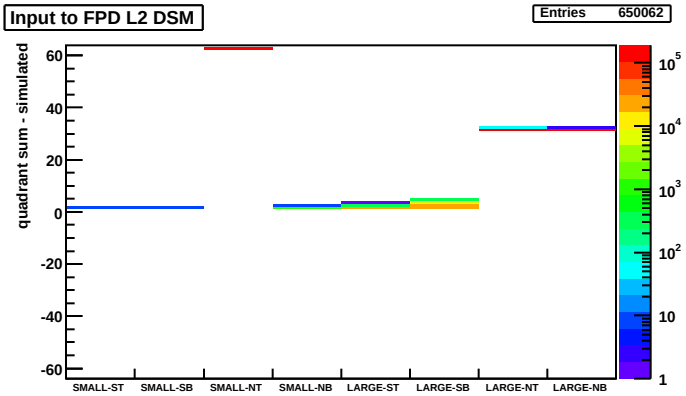

Input to FMS L1 DSM
Entries 2304240
sumA
DSM board

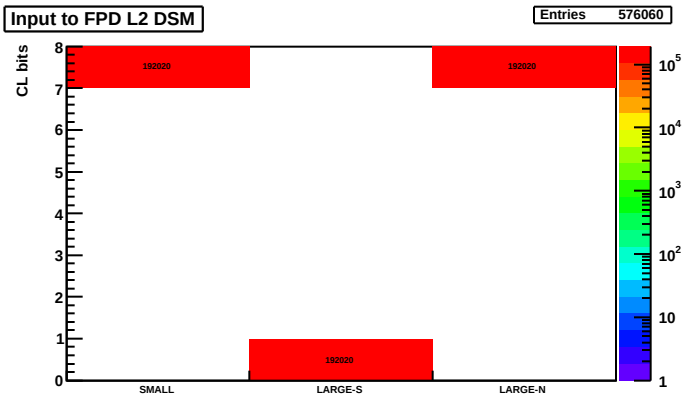

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

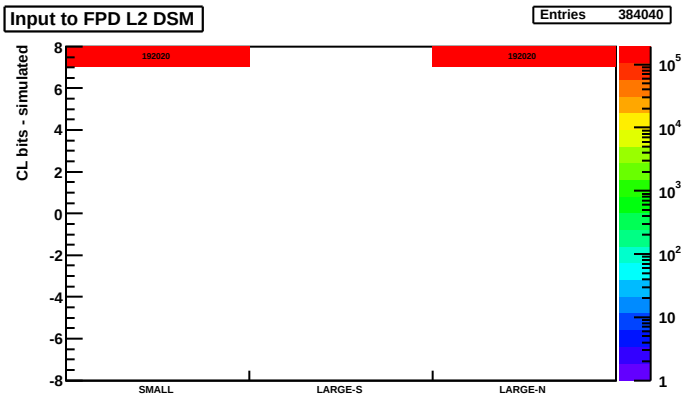

Input to FMS L1 DSM
Entries 2304240
FMS L1 HT bits
DSM board

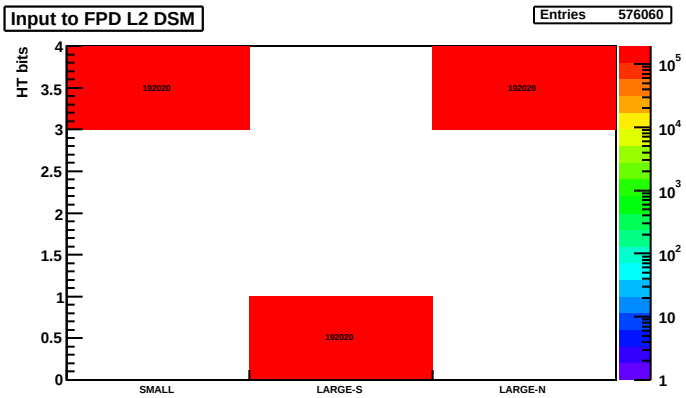

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

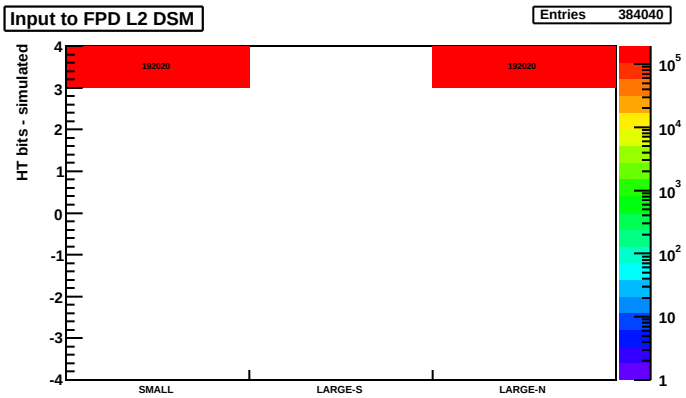

Input to FPD L2 DSM
Entries 1536160
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

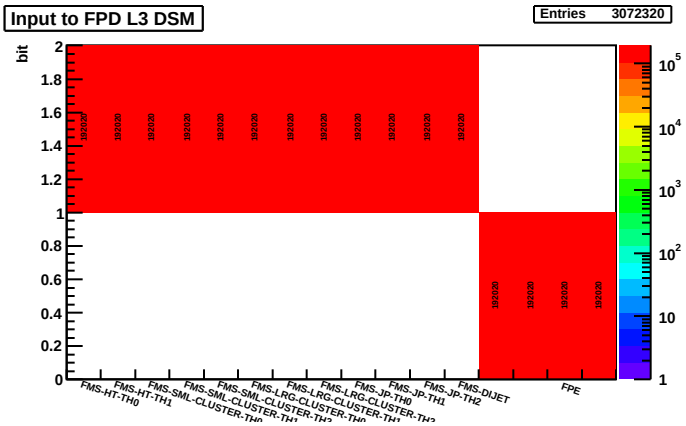

Input to FPD L2 DSM
Entries 650062
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

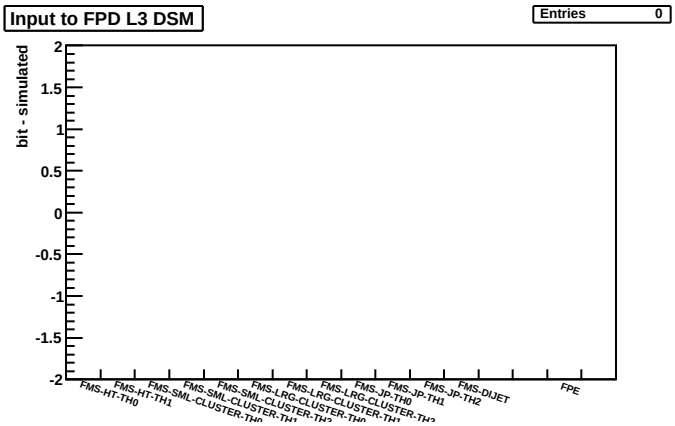

Input to FPD L2 DSM
Entries 576060
CL bits
192020
SMALL
LARGE-S
LARGE-N

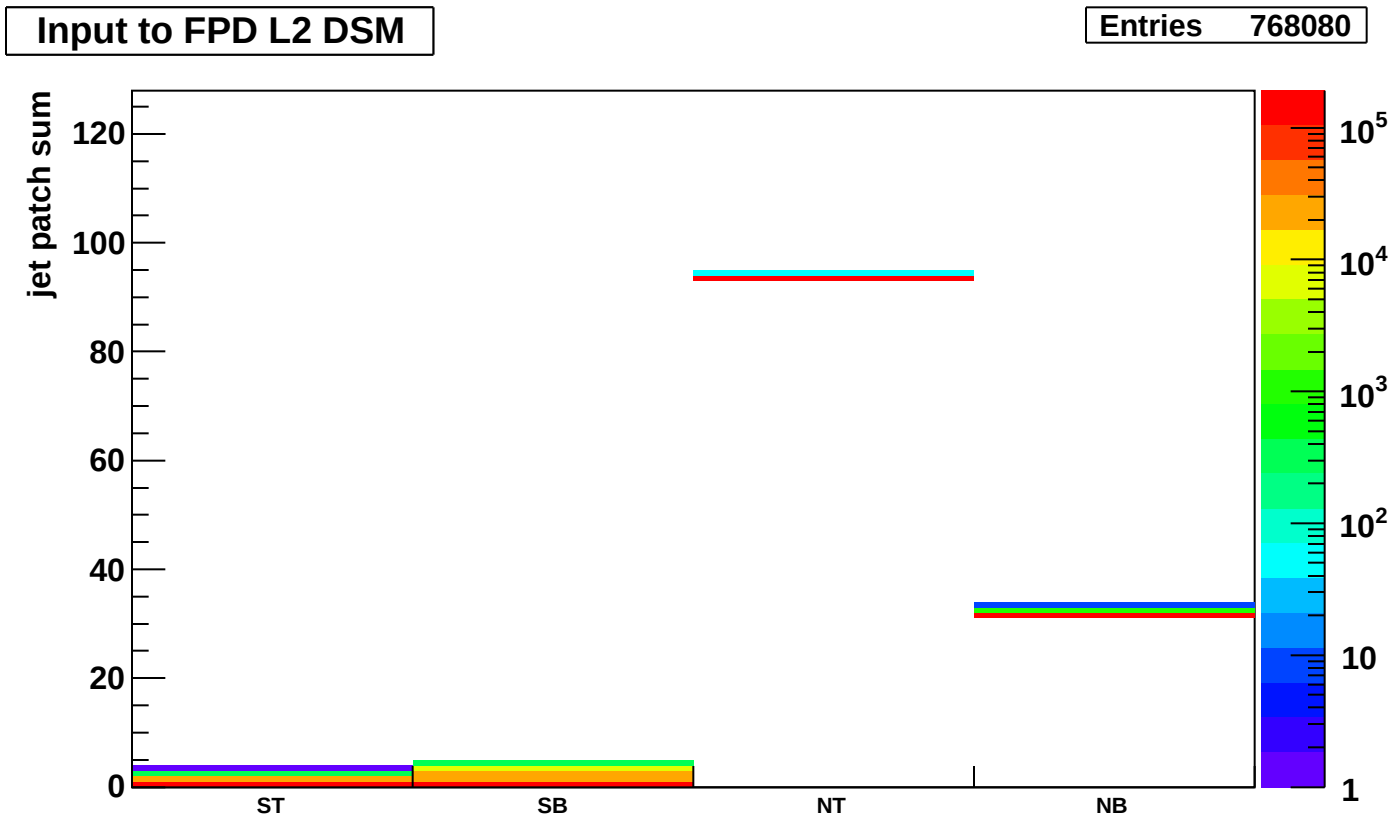

Input to FPD L2 DSM
Entries 384040
CL bits - simulated
192020
SMALL
LARGE-S
LARGE-N

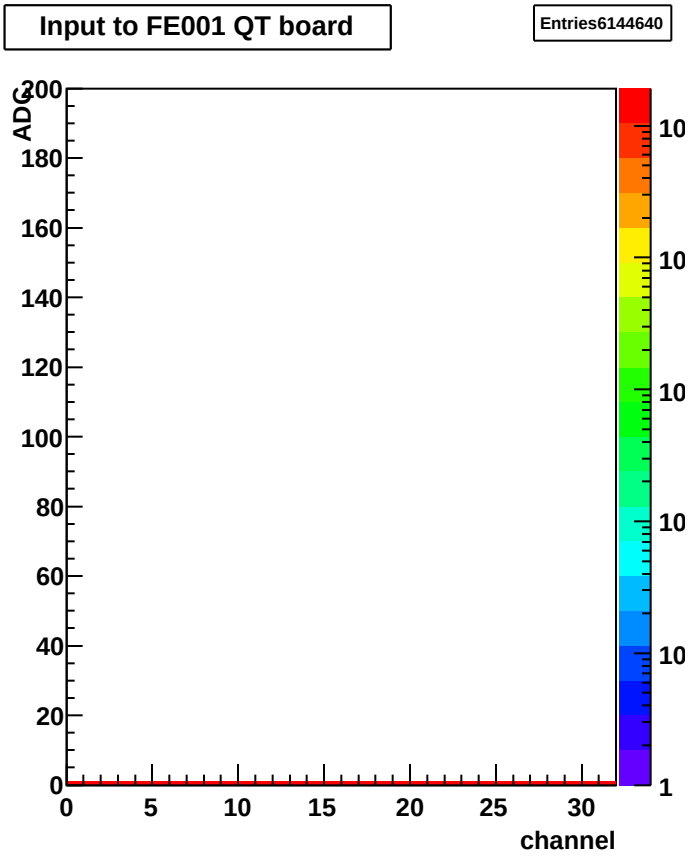

Input to FPD L2 DSM
Entries 576060
HT bits
192020
SMALL
LARGE-S
LARGE-N

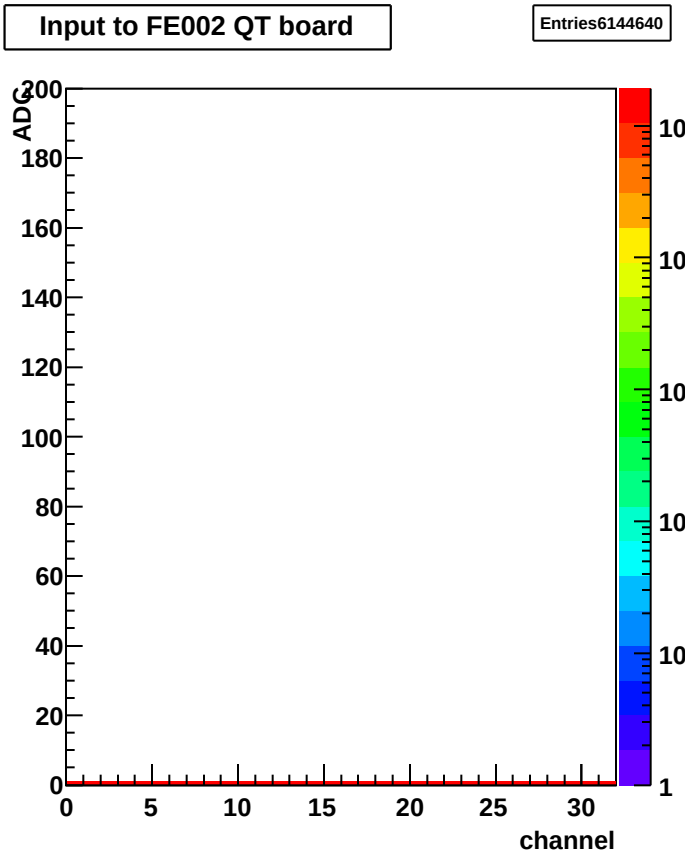

Input to FPD L2 DSM
Entries 384040
HT bits - simulated
192020
SMALL
LARGE-S
LARGE-N

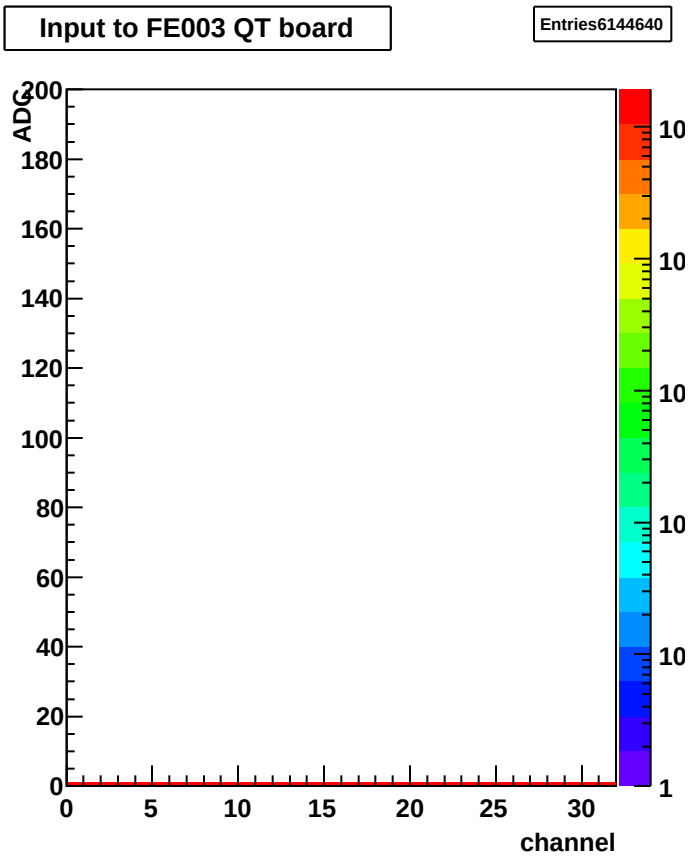

Input to FPD L3 DSM
Entries 3072320
bit
192020
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

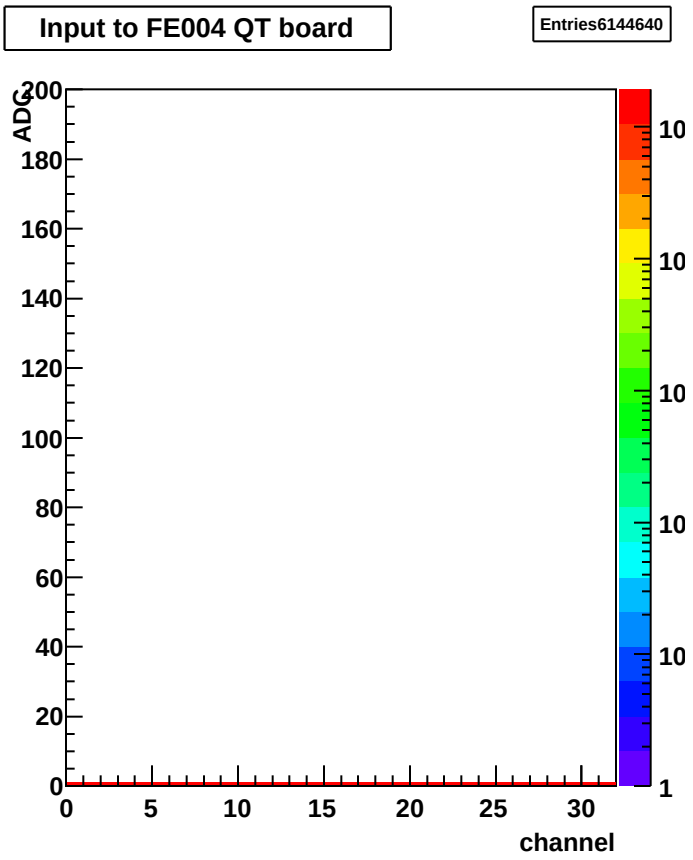

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

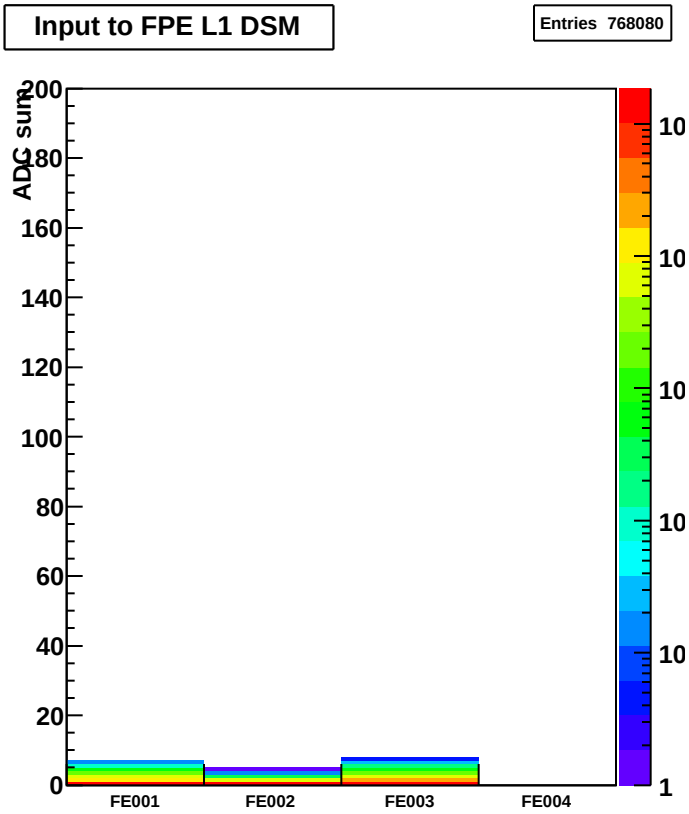

Input to FPD L2 DSM
Entries 768080
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

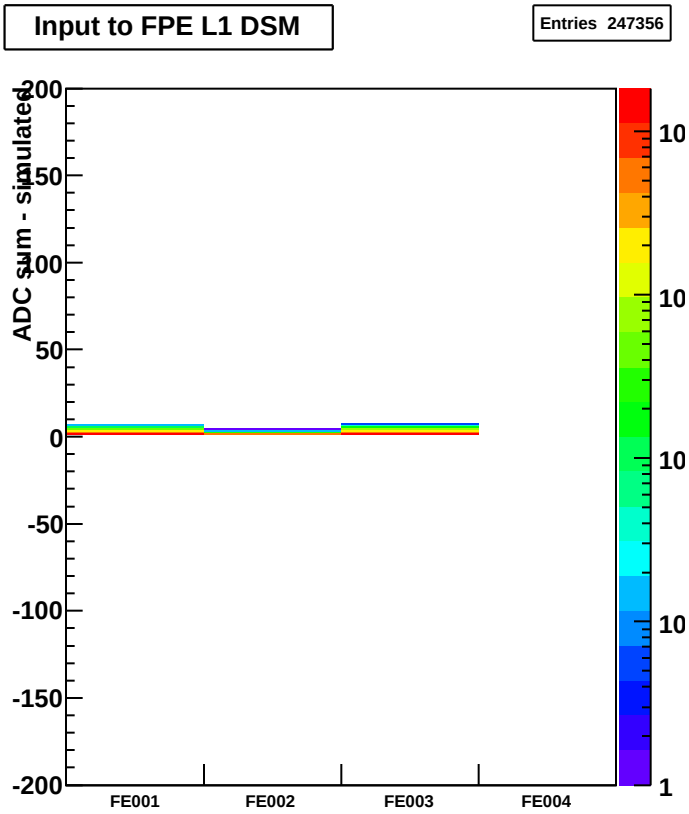

Input to FE001 QT board
Entries6144640
ADC
channel

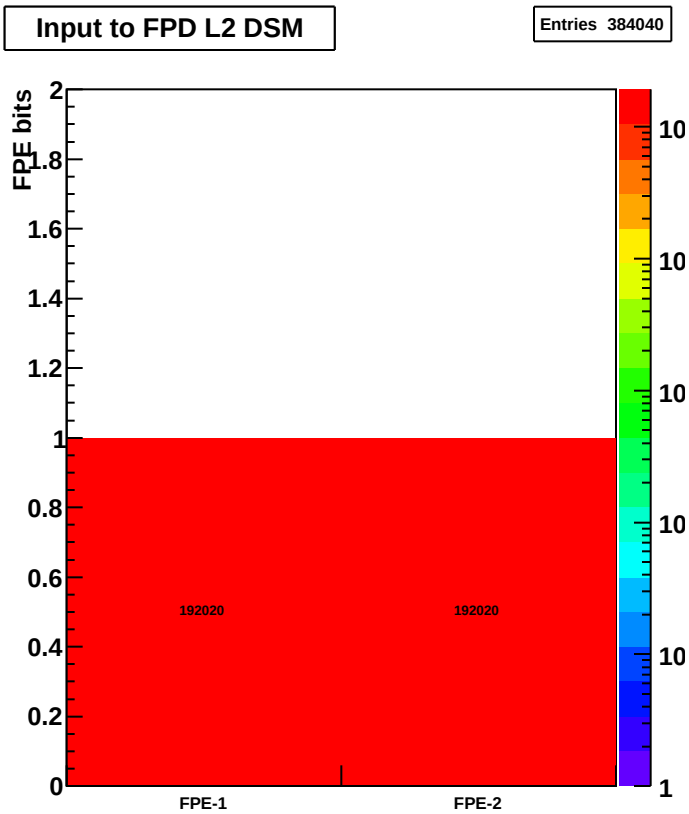

Input to FE002 QT board
Entries6144640
ADC
channel

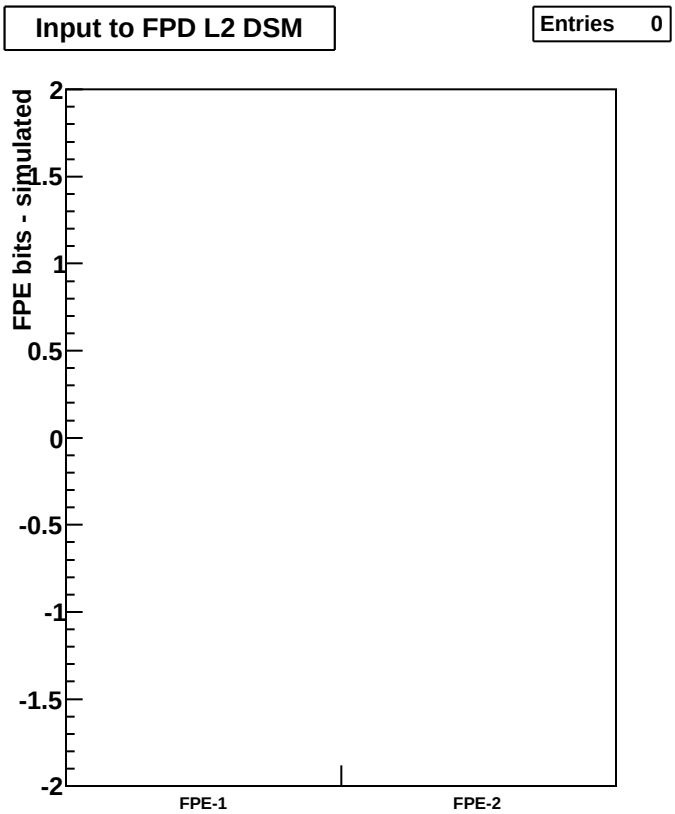

Input to FE003 QT board
Entries6144640
ADC
channel


Input to FE004 QT board
Entries6144640
ADC
channel


Input to FPE L1 DSM
Entries 768080
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 247356
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 384040
FPE bits
192020
192020
FPE-1
FPE-2


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