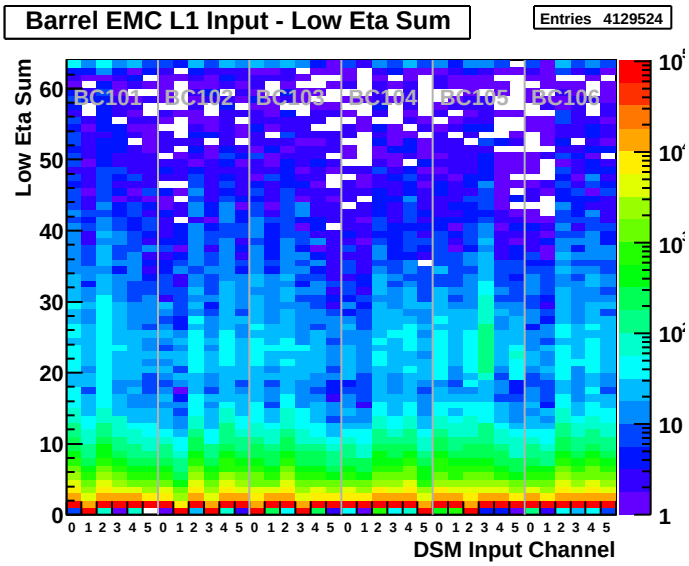
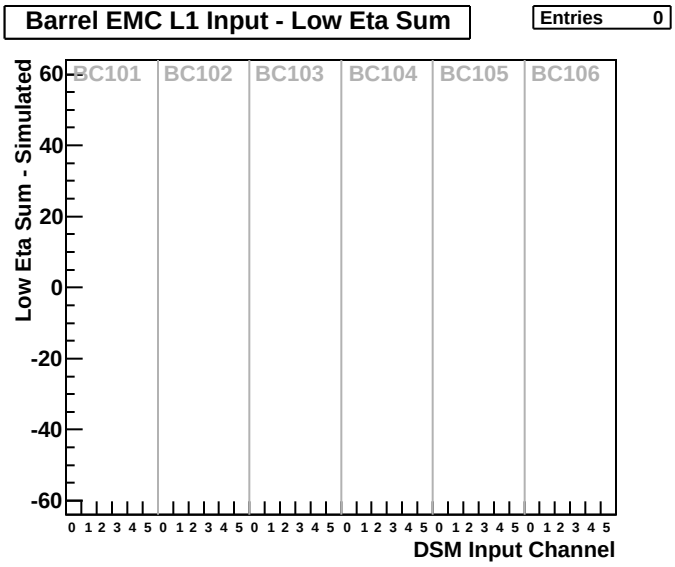
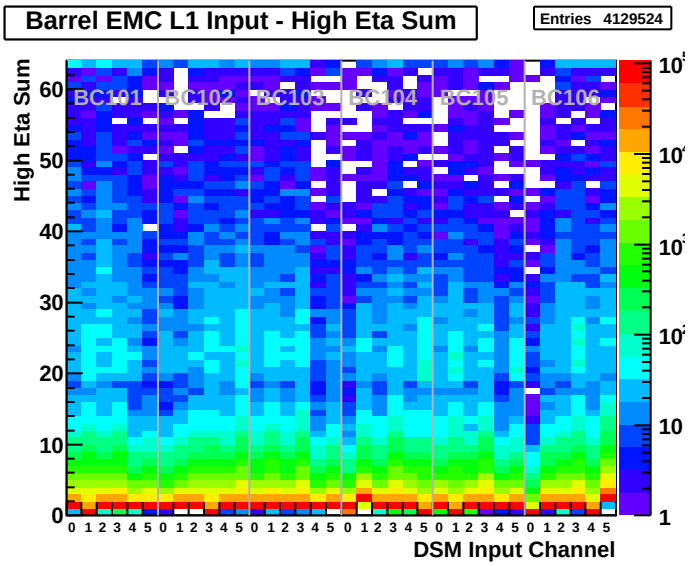
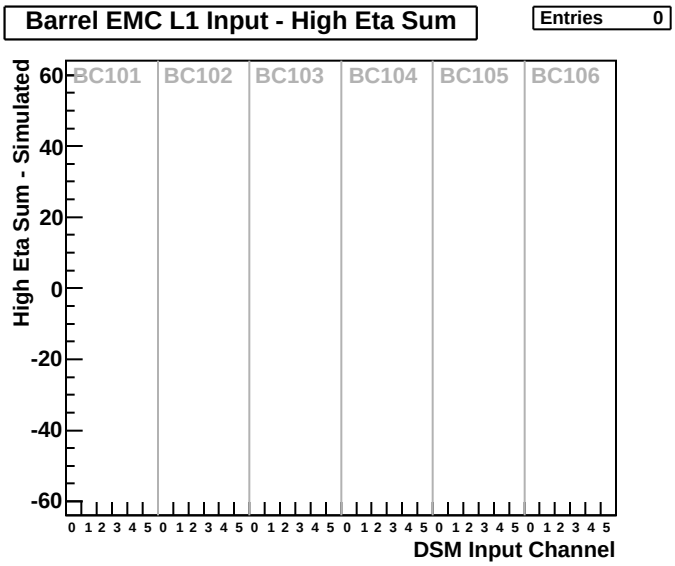
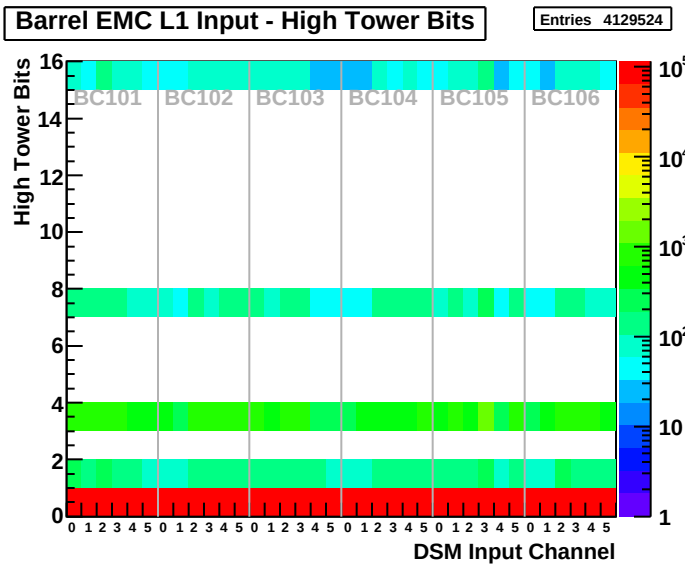
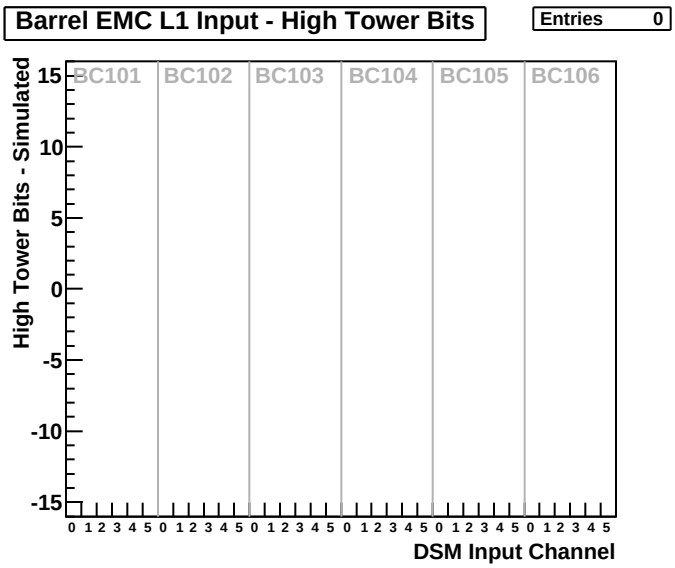

Barrel EMC L1 Input - Low Eta Sum
Entries 4129524
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

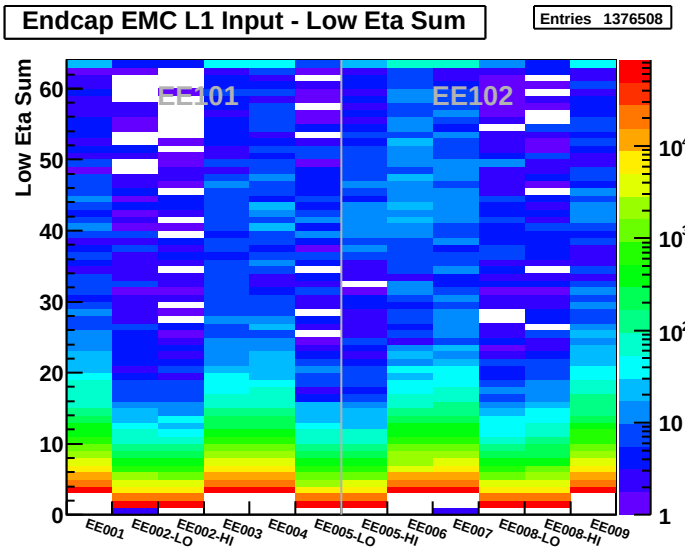

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

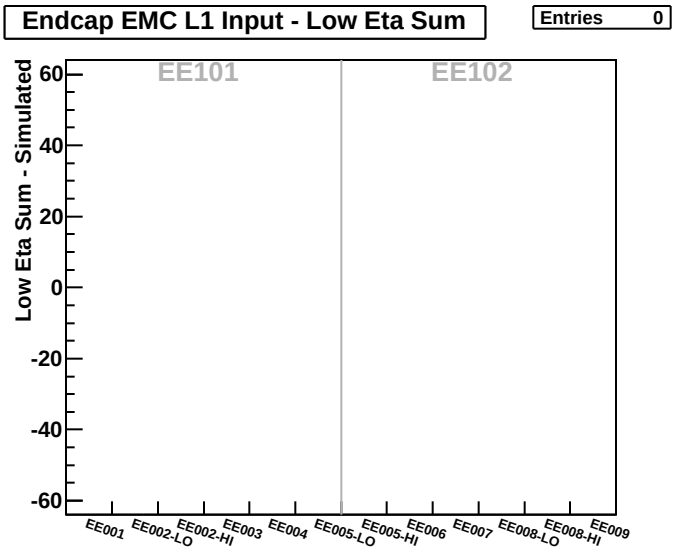

Barrel EMC L1 Input - High Eta Sum
Entries 4129524
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

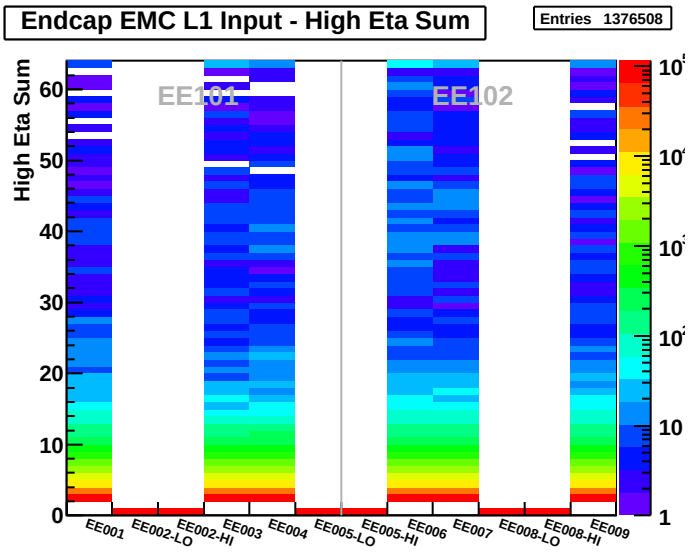

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

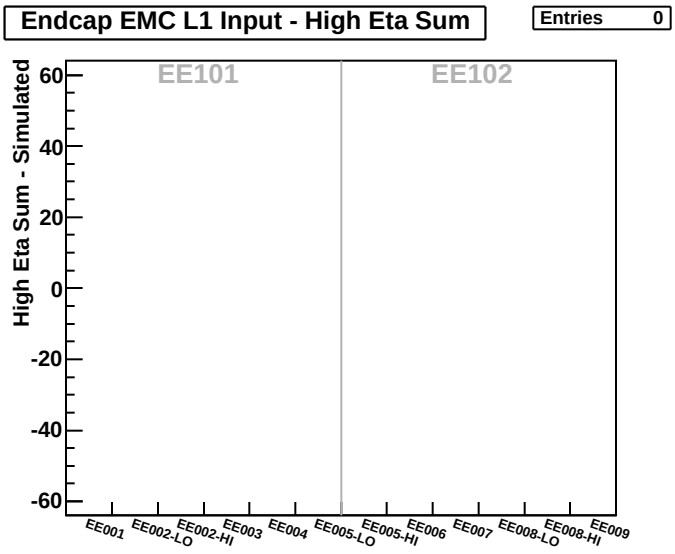

Barrel EMC L1 Input - High Tower Bits
Entries 4129524
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

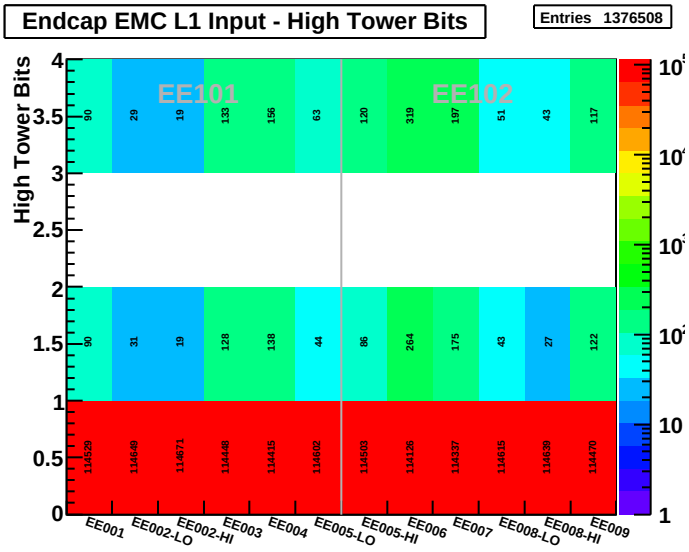

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

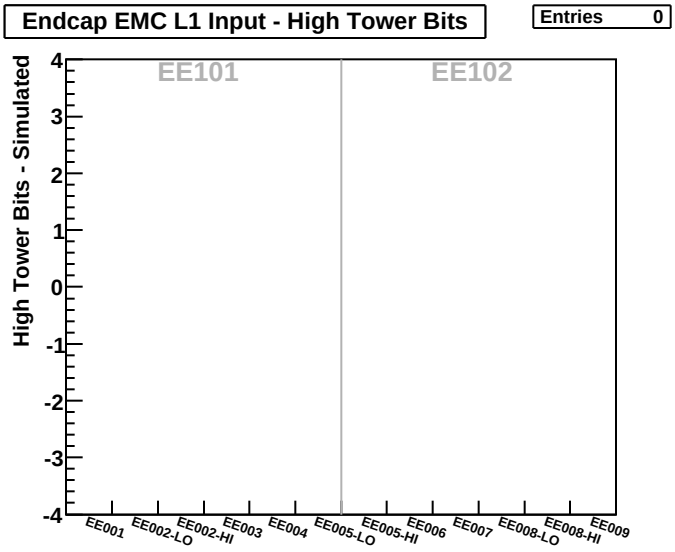

Endcap EMC L1 Input - Low Eta Sum
Entries 1376508
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

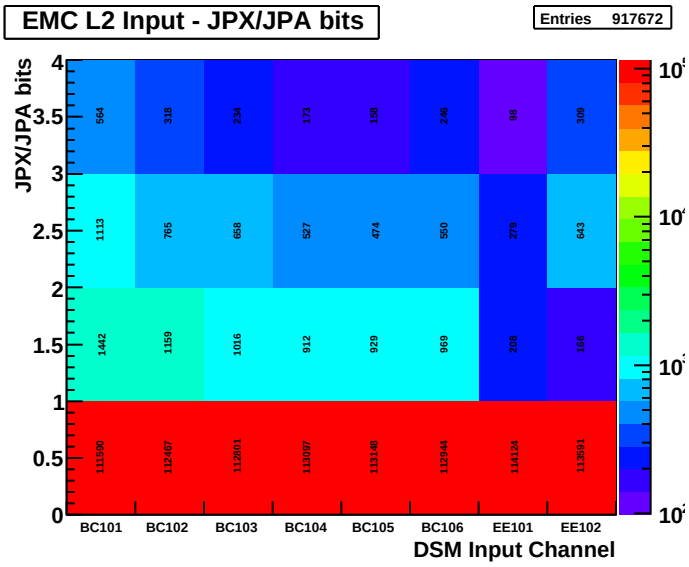

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

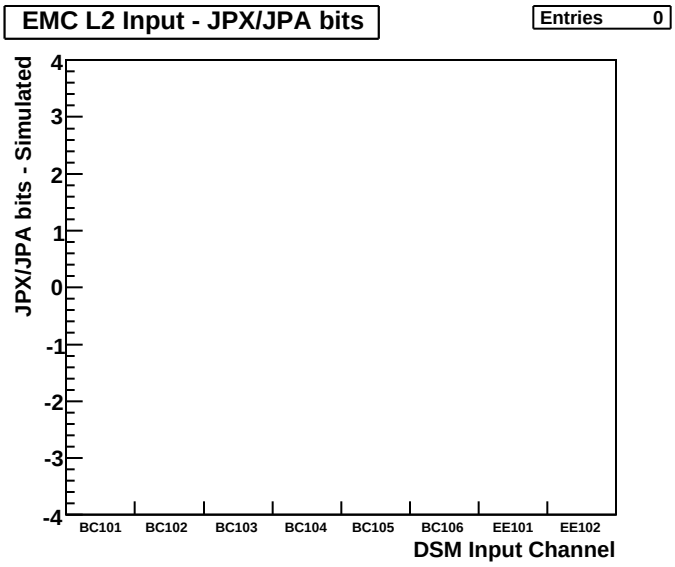

Endcap EMC L1 Input - High Eta Sum
Entries 1376508
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

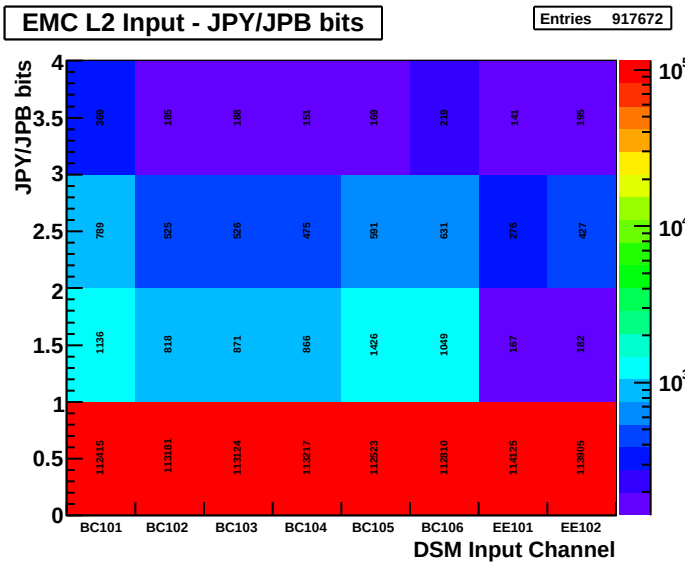

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

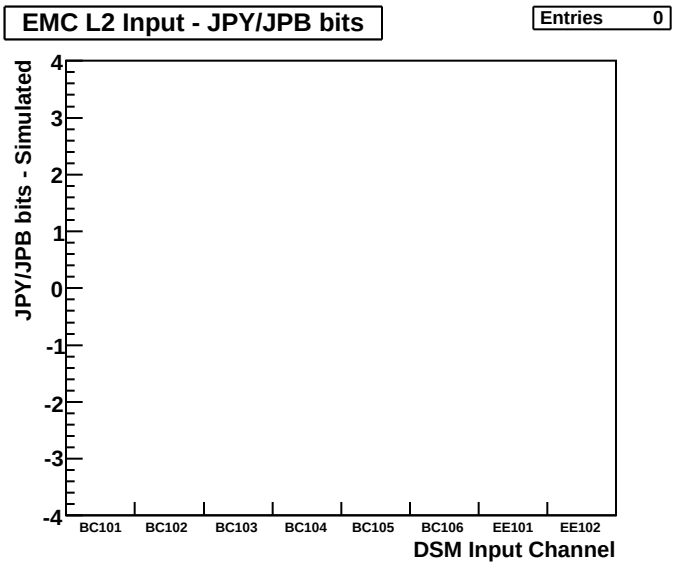

Endcap EMC L1 Input - High Tower Bits
Entries 1376508
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

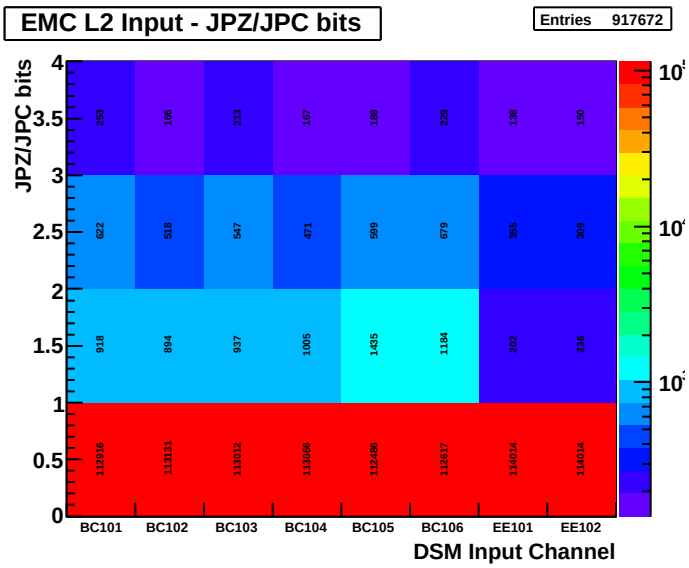

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

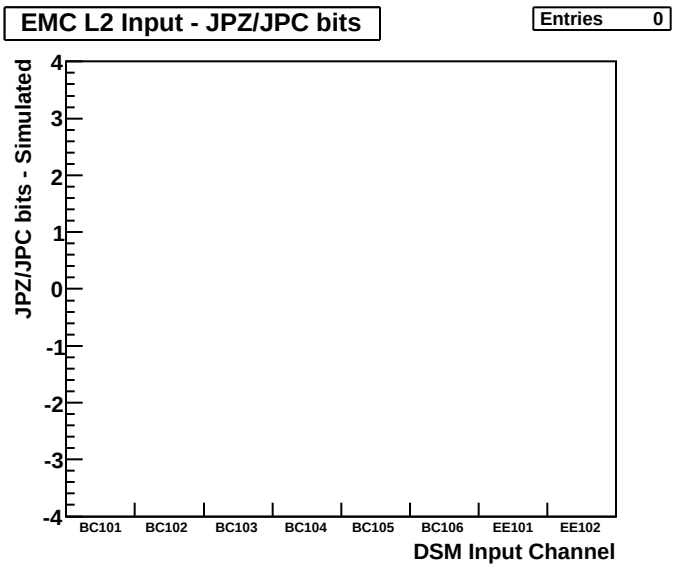

EMC L2 Input - JPX/JPA bits
Entries 917672
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
564 318 234 173 158 246 98 309
1113 765 658 527 474 550 279 643
1442 1159 1016 912 929 969 208 166
111590 112467 112801 113097 113148 112944 114124 113591

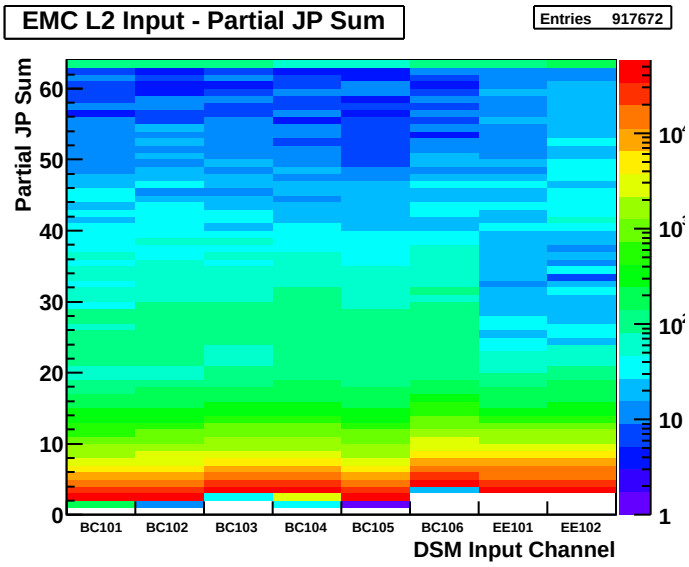

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

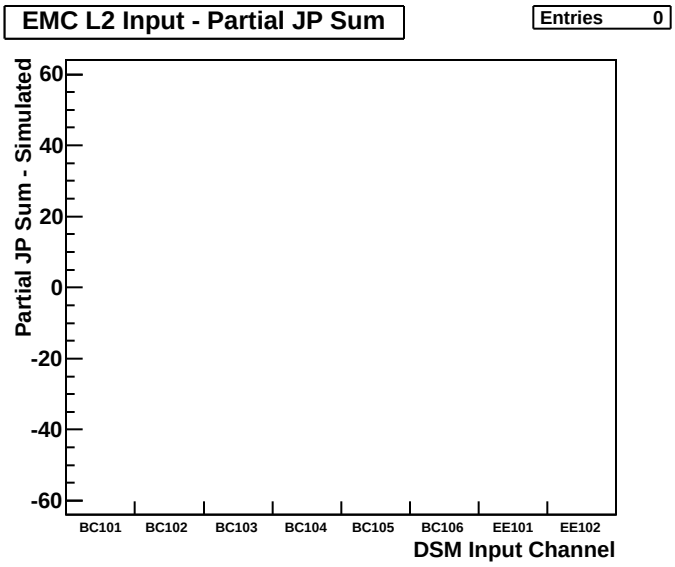

EMC L2 Input - JPY/JPB bits
Entries 917672
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
369 185 188 151 169 219 141 195
789 525 526 475 591 631 276 427
1136 818 871 866 1426 1049 167 182
112415 113181 113124 113217 112523 112810 114125 113905

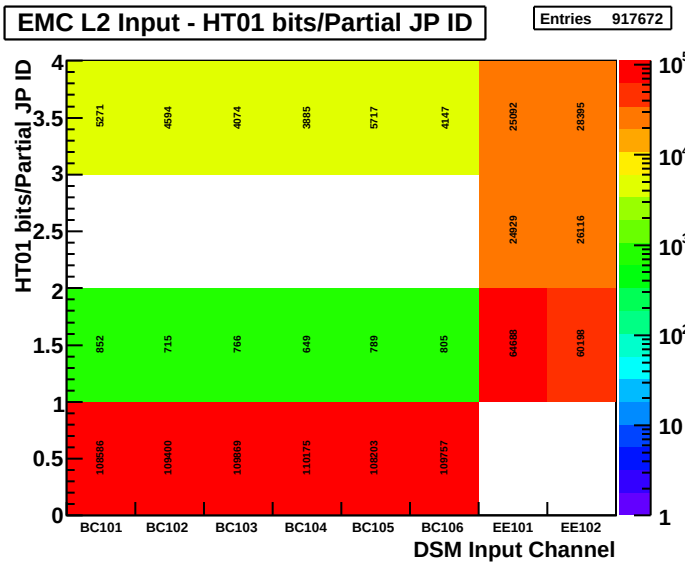

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

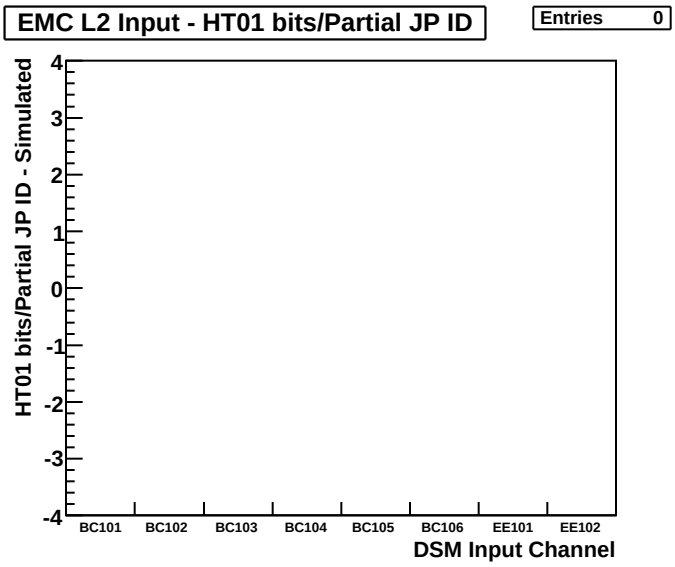

EMC L2 Input - JPZ/JPC bits
Entries 917672
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
259 166 213 167 189 229 138 150
622 518 547 471 599 679 355 309
918 894 937 1005 1435 1184 202 236
112916 113131 113012 113066 112486 112617 114014 114014

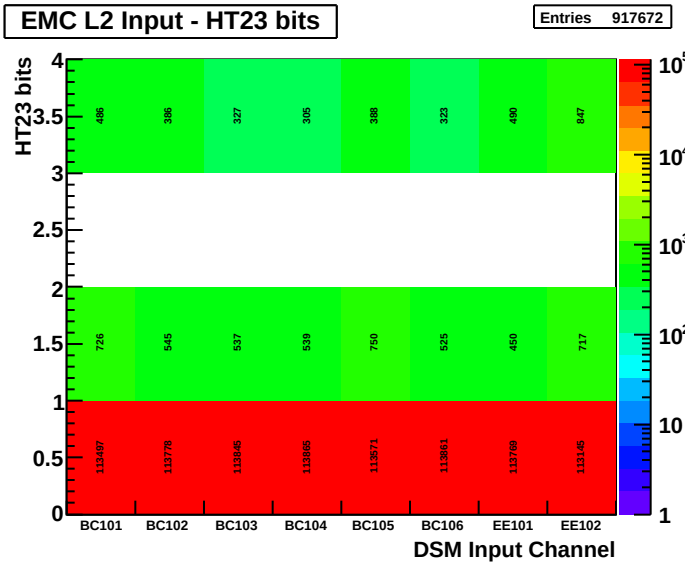

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

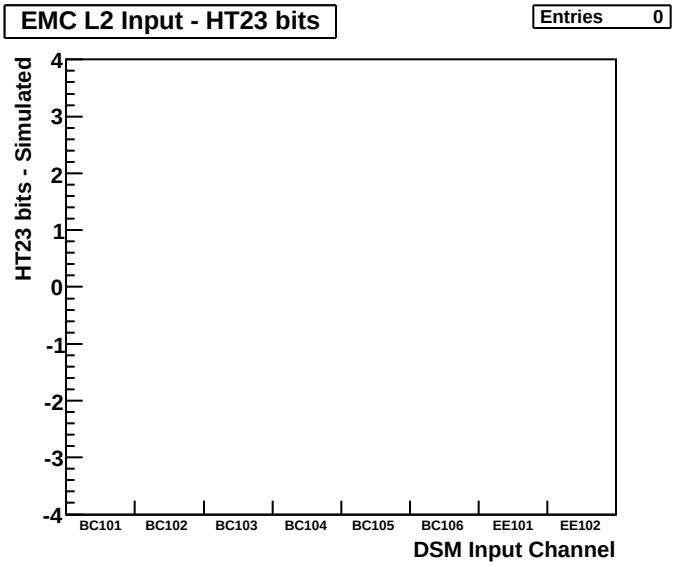

EMC L2 Input - Partial JP Sum
Entries 917672
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

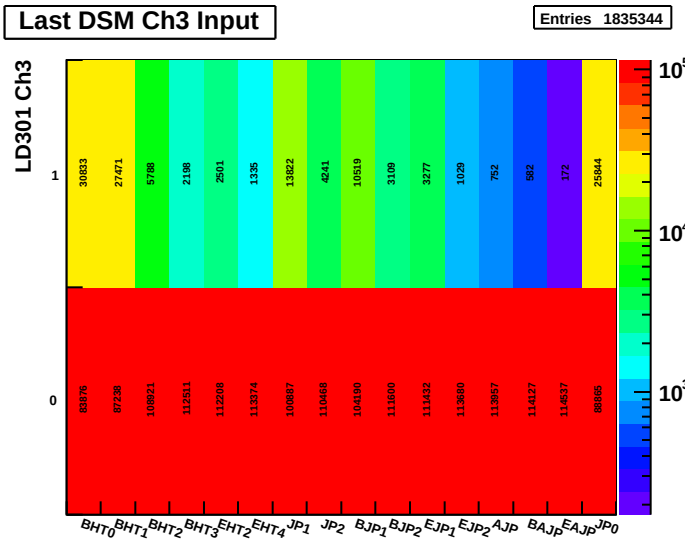

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

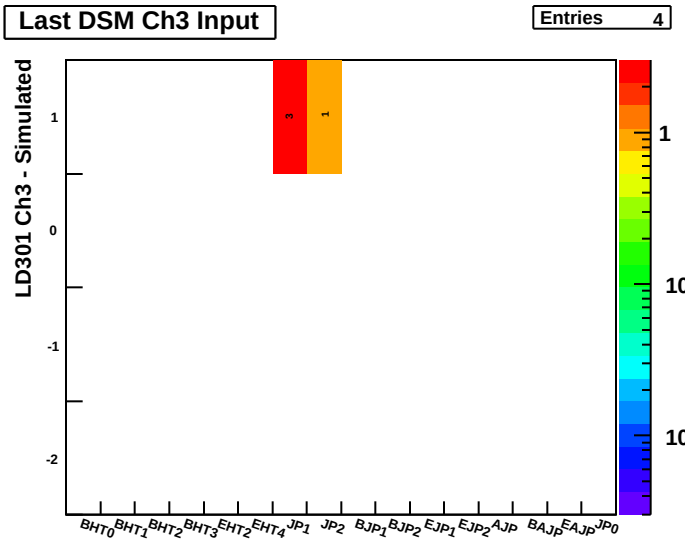

EMC L2 Input - HT01 bits/Partial JP ID
Entries 917672
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

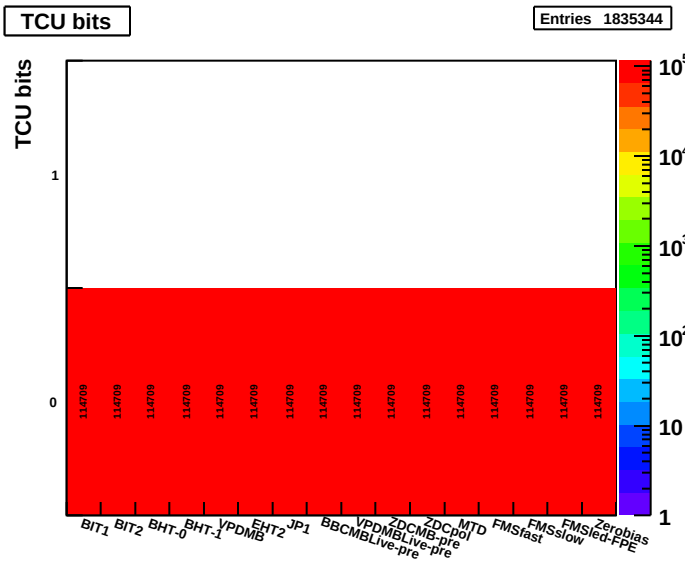

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

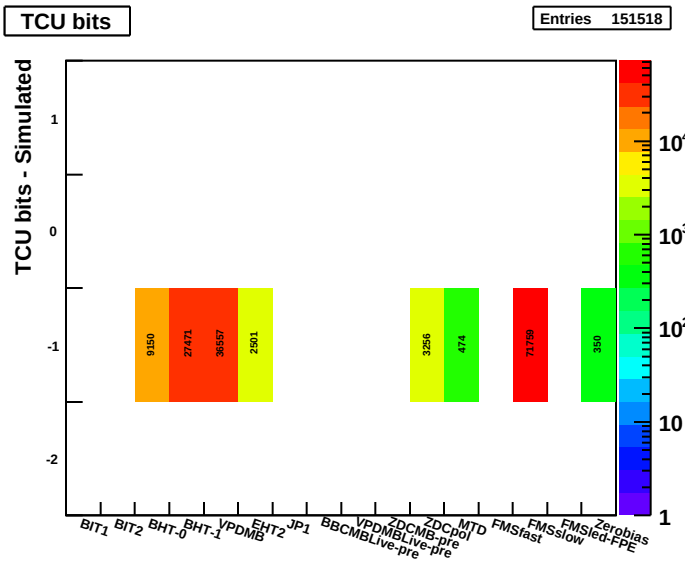

EMC L2 Input - HT23 bits
Entries 917672
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

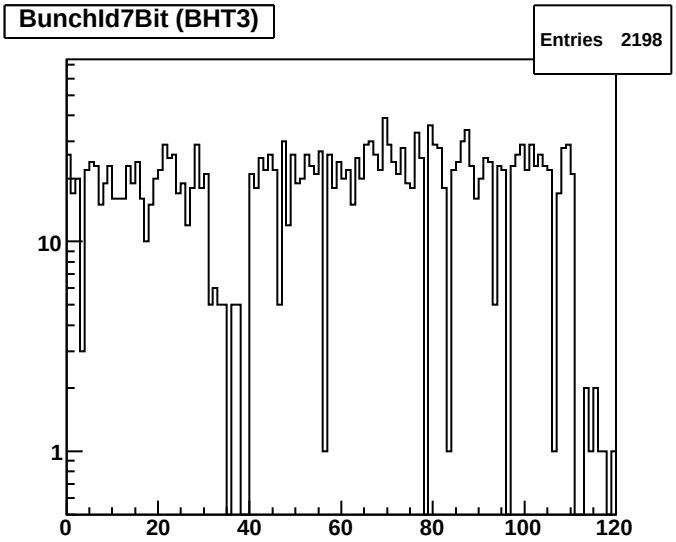

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

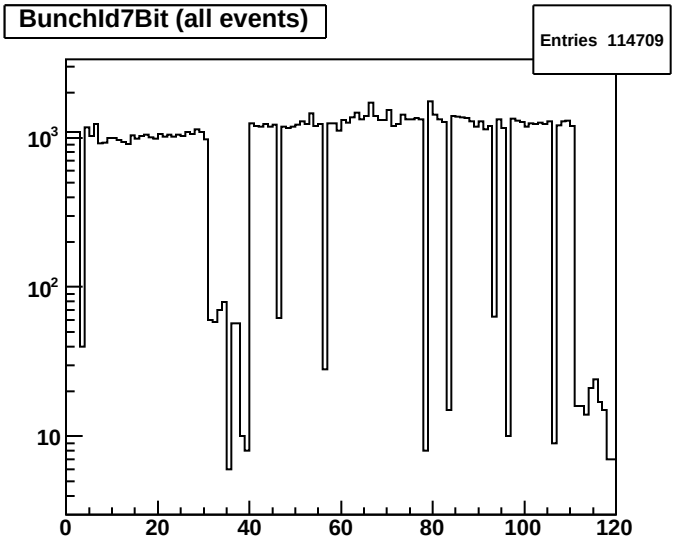

Last DSM Ch3 Input
Entries 1835344
LD301 Ch3
30833 27471 5788 2198 2501 1335 13822 4241 10519 3109 3277 1029 752 582 172 25844
83876 87238 108921 112511 112708 113374 100887 110468 104190 111600 111432 113680 113957 114127 114537 88865
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

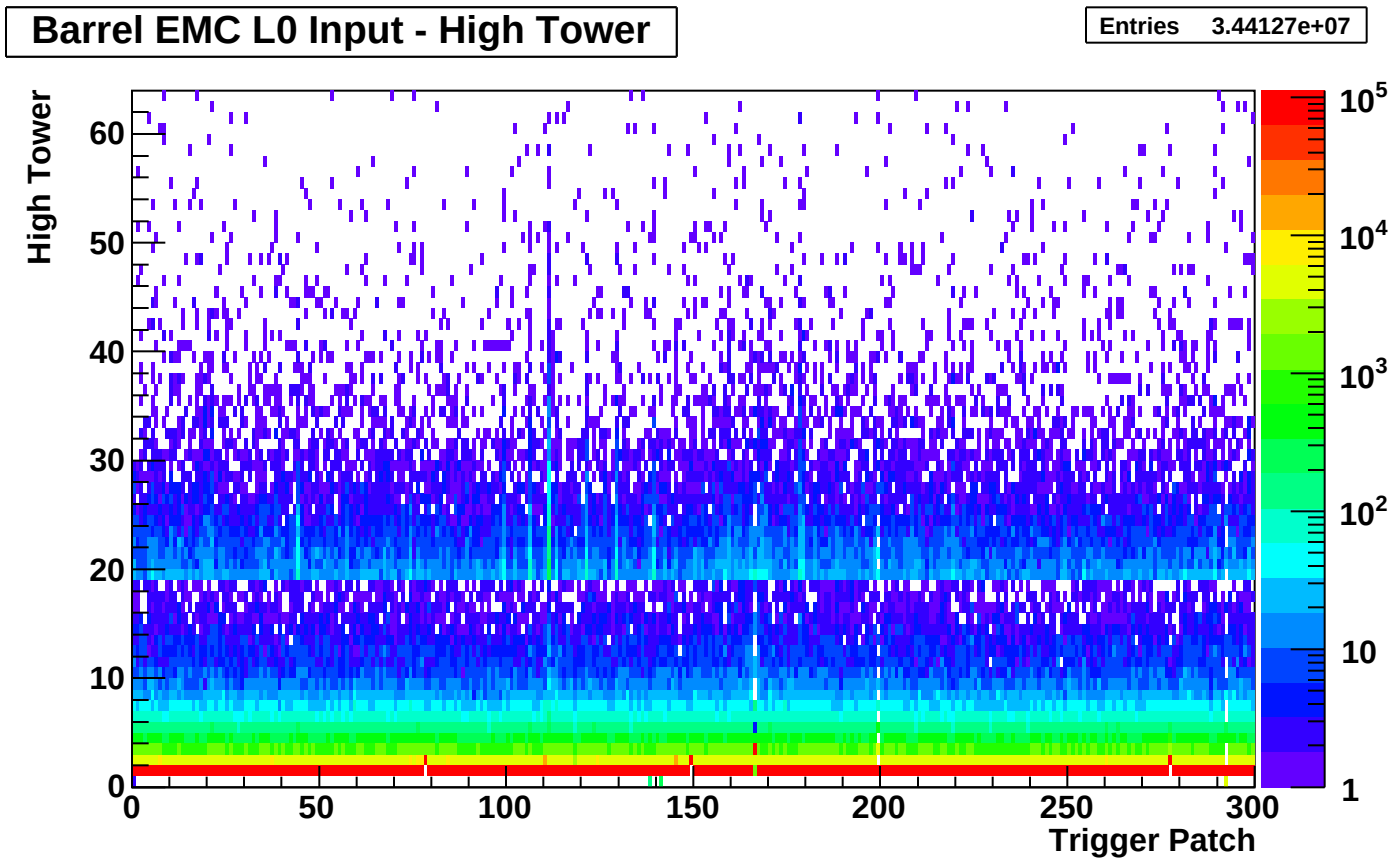

Last DSM Ch3 Input
Entries 4
LD301 Ch3 - Simulated
3 1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

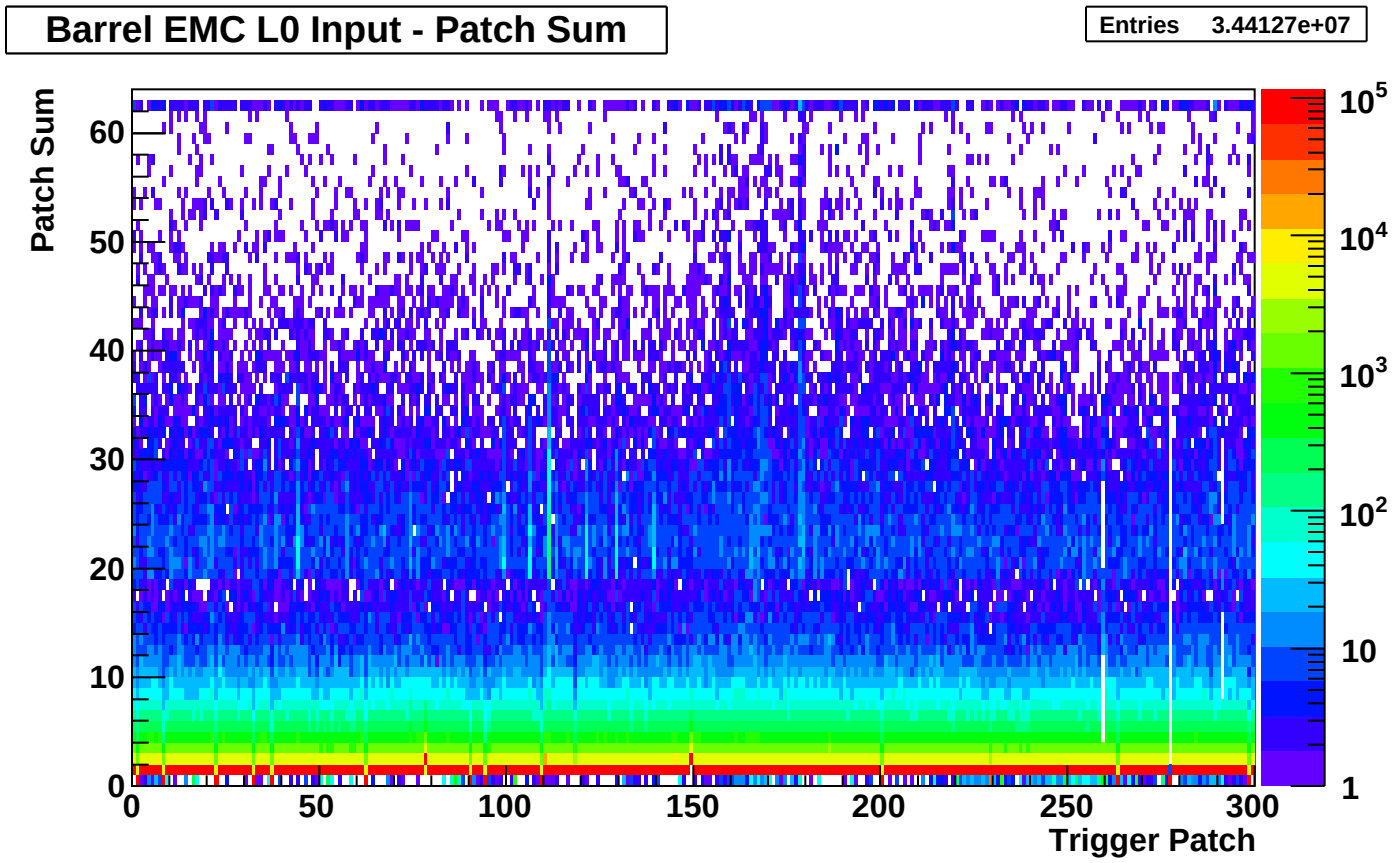

TCU bits
Entries 1835344
TCU bits
114709
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

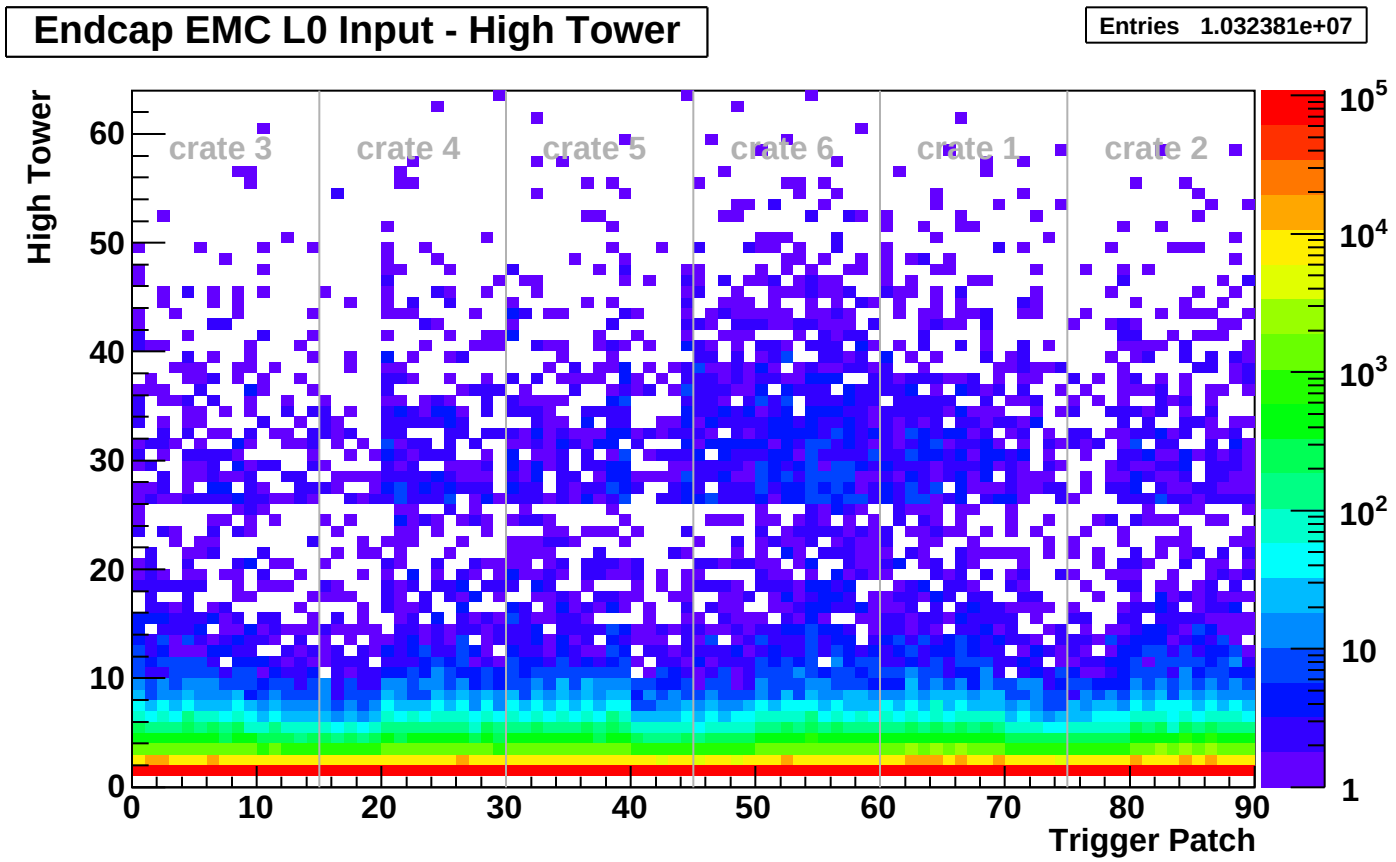

TCU bits
Entries 151518
TCU bits - Simulated
9150 27471 36557 2501 3256 474 71759 350
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

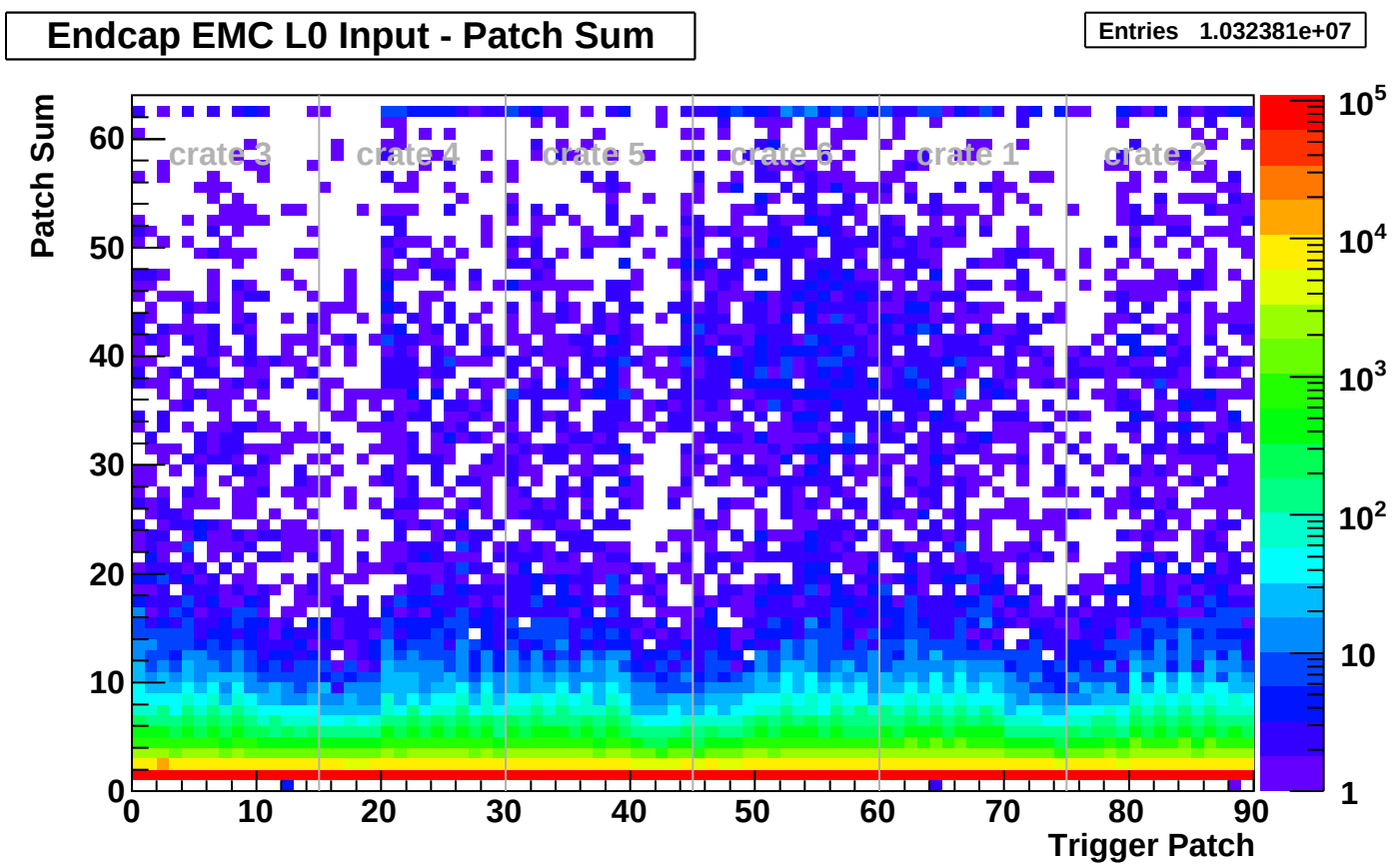

BunchId7Bit (BHT3)
Entries 2198

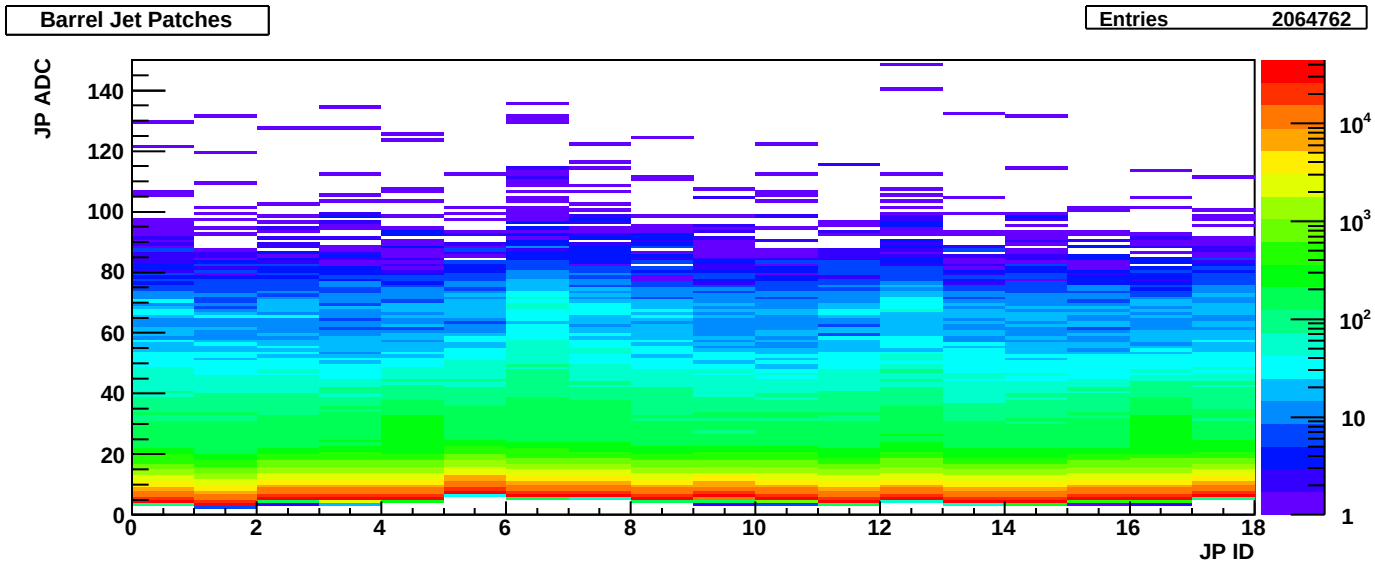

BunchId7Bit (all events)
Entries 114709

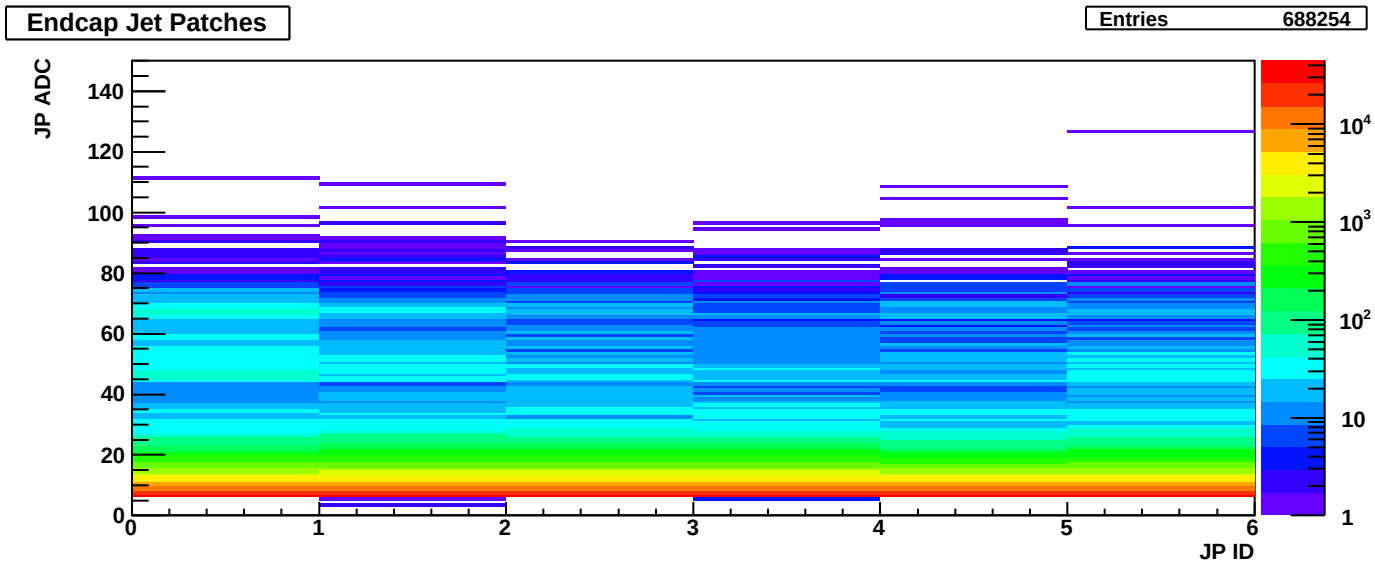

Barrel EMC L0 Input - High Tower
Entries 3.44127e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

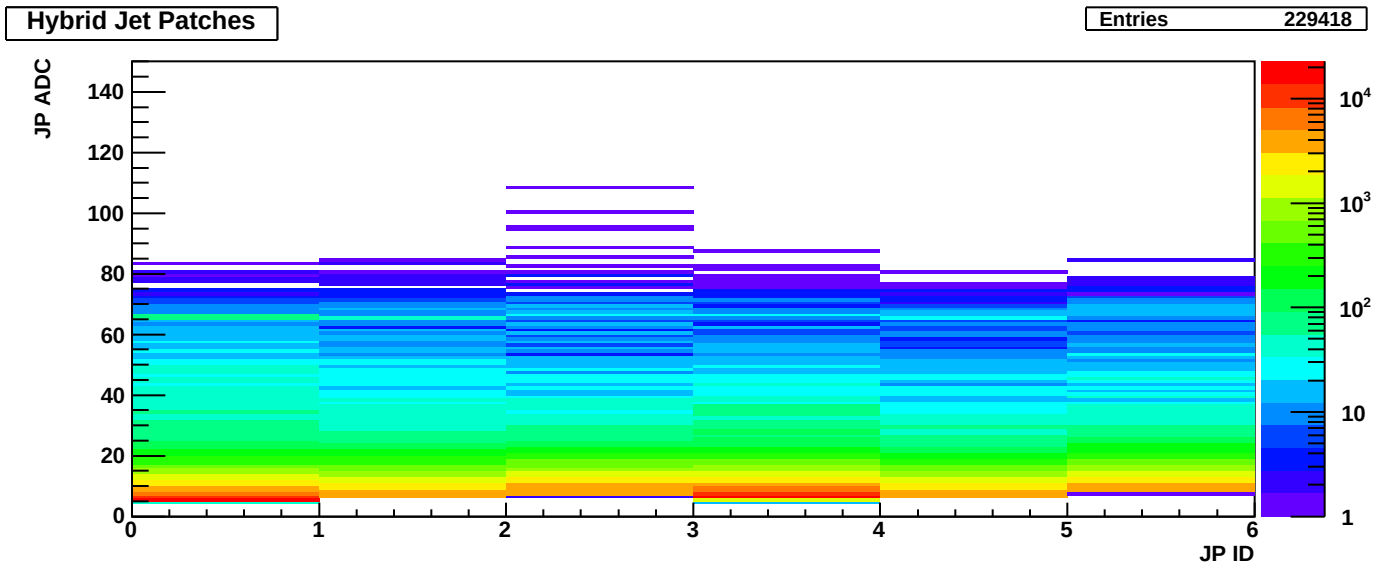

Barrel EMC L0 Input - Patch Sum
Entries 3.44127e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

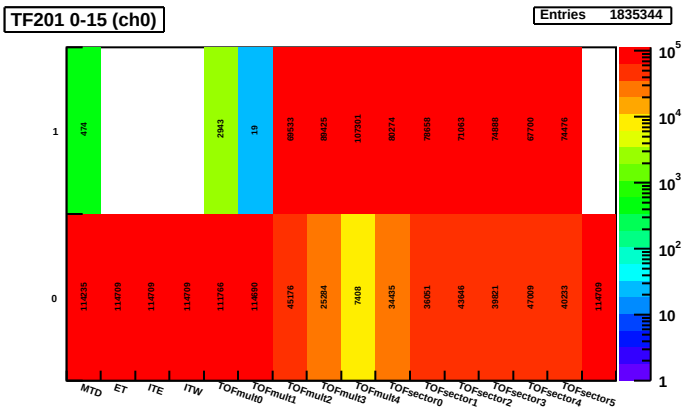

Endcap EMC L0 Input - High Tower
Entries 1.032381e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

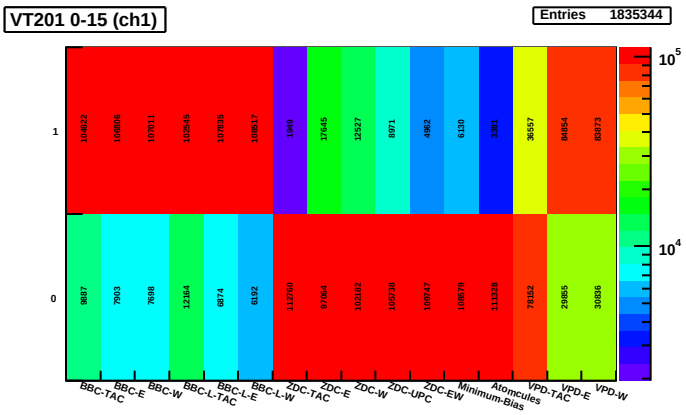

Endcap EMC L0 Input - Patch Sum
Entries 1.032381e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

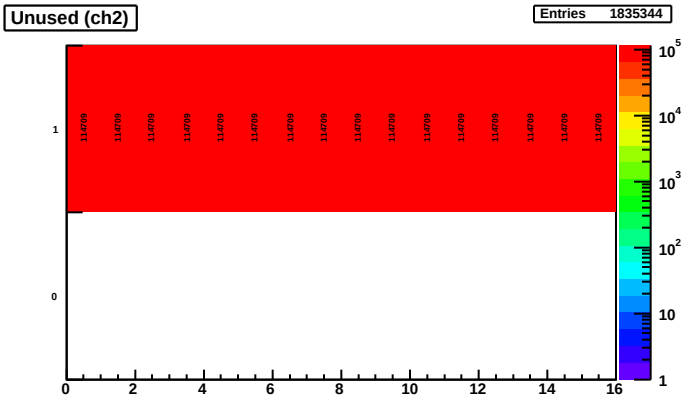

Barrel Jet Patches
Entries 2064762
JP ADC
JP ID

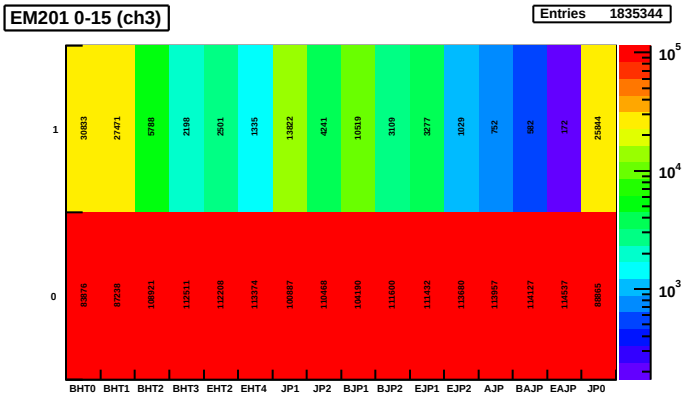

Endcap Jet Patches
Entries 688254
JP ADC
JP ID

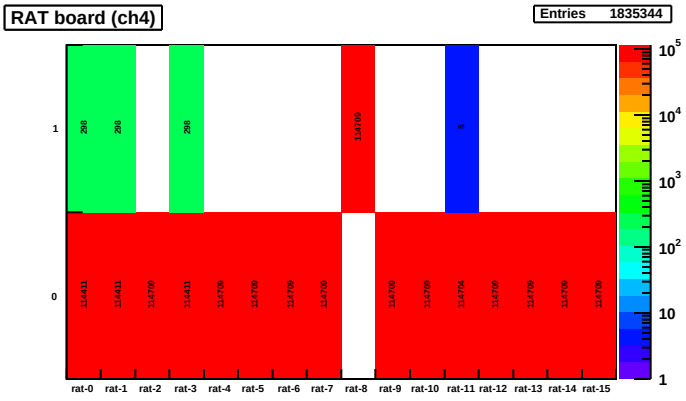

Hybrid Jet Patches
Entries 229418
JP ADC
JP ID

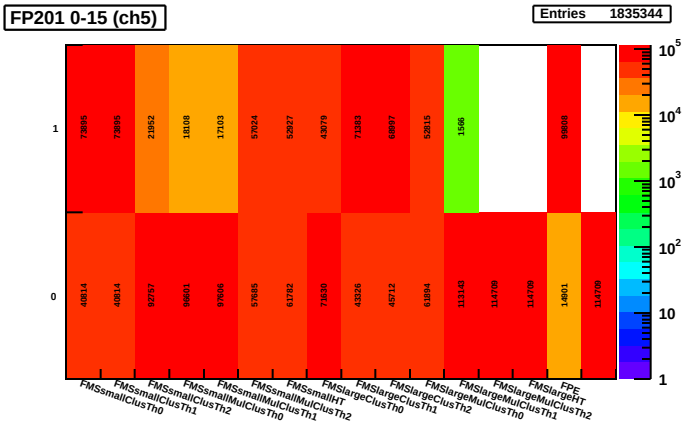

TF201 0-15 (ch0)
Entries 1835344
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

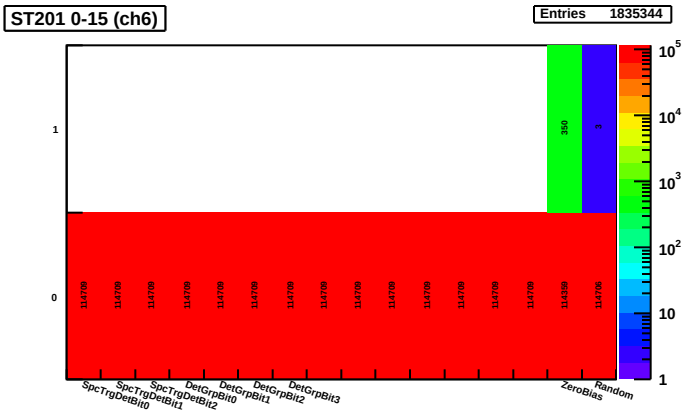

VT201 0-15 (ch1)
Entries 1835344
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

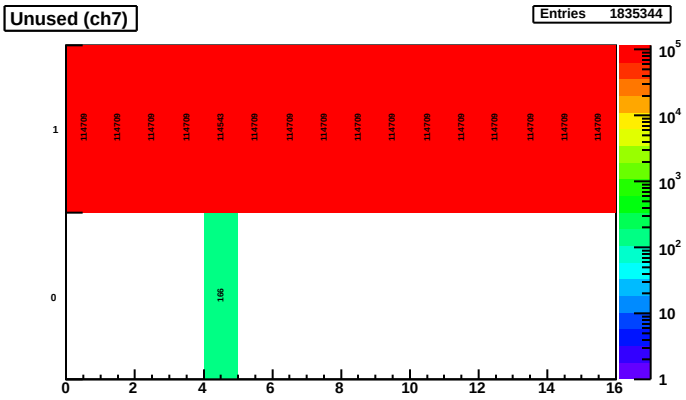

Unused (ch2)
Entries 1835344

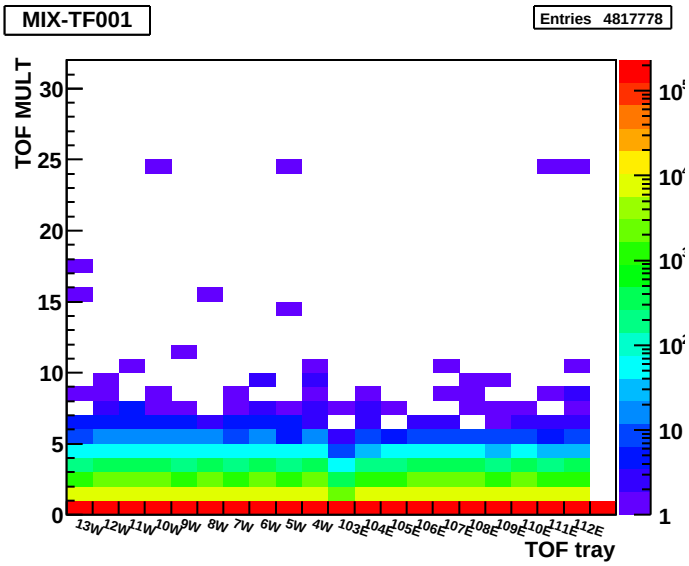

EM201 0-15 (ch3)
Entries 1835344
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

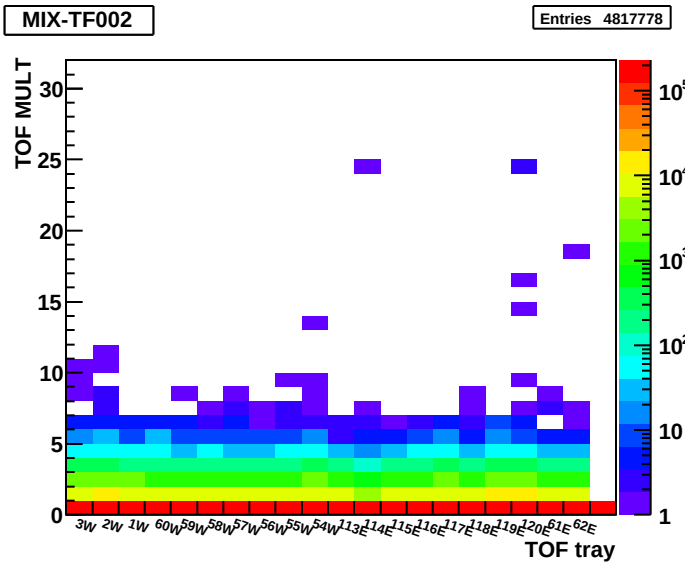

RAT board (ch4)
Entries 1835344
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

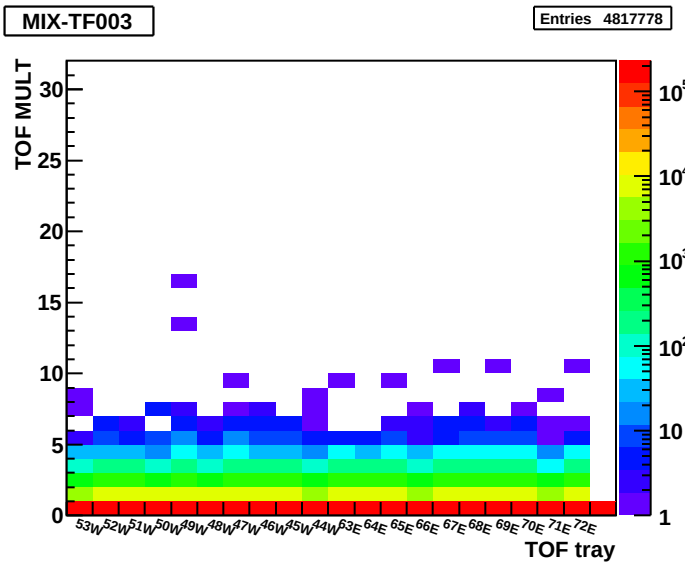

FP201 0-15 (ch5)
Entries 1835344
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

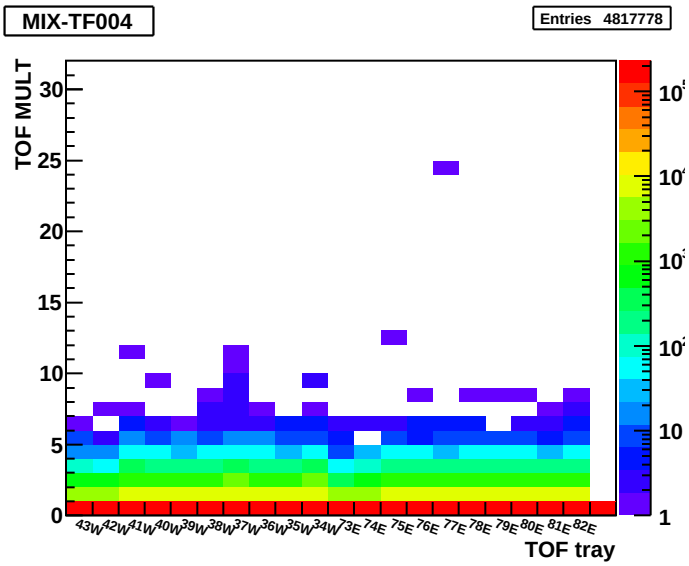

ST201 0-15 (ch6)
Entries 1835344
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

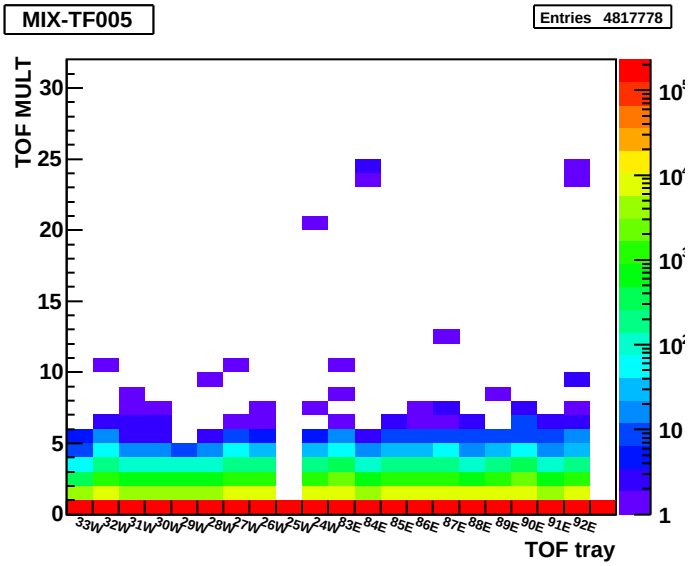

Unused (ch7)
Entries 1835344

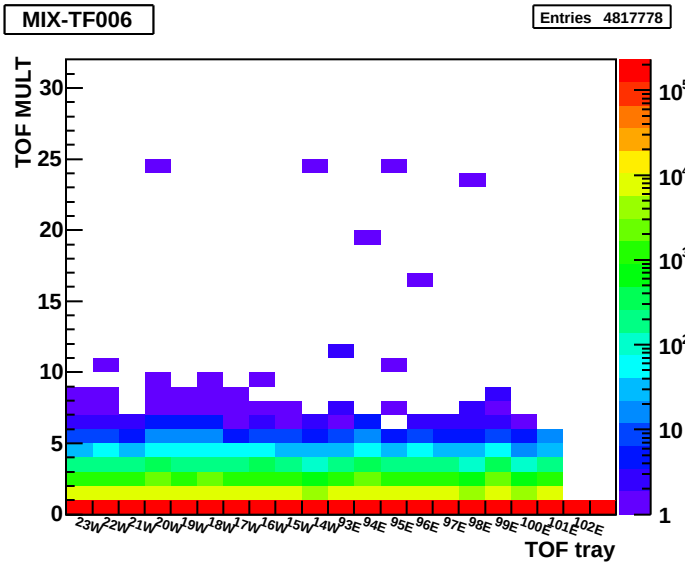

MIX-TF001
Entries 4817778
TOF MULT
TOF tray

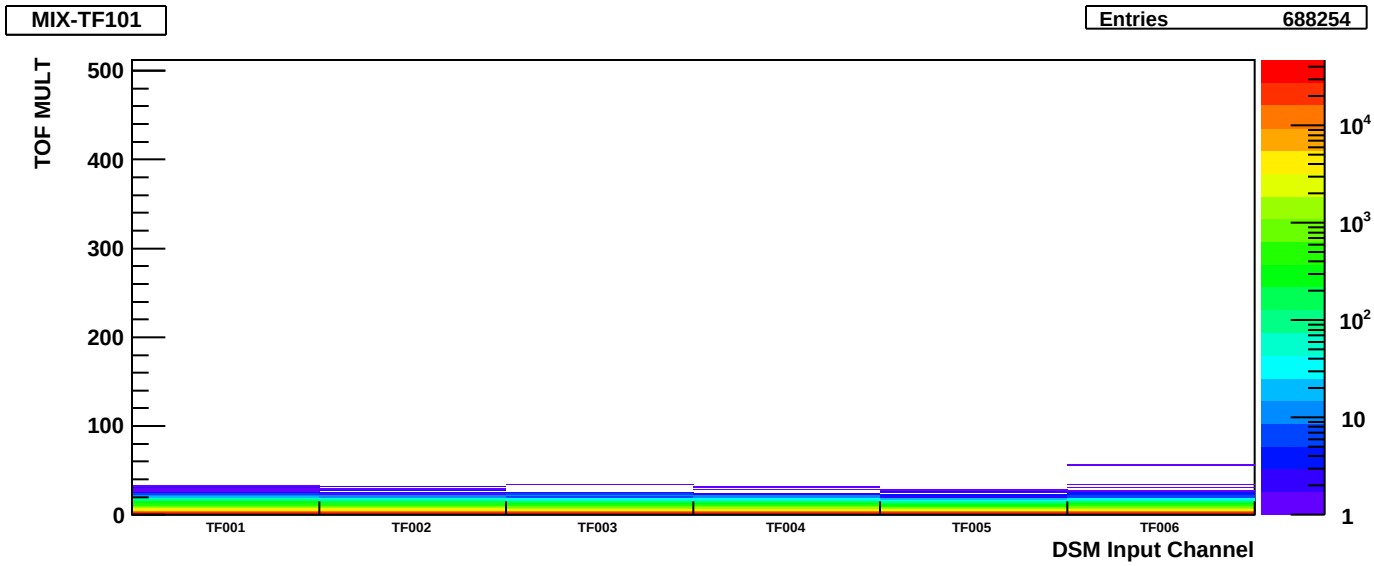

MIX-TF002
Entries 4817778
TOF MULT
TOF tray

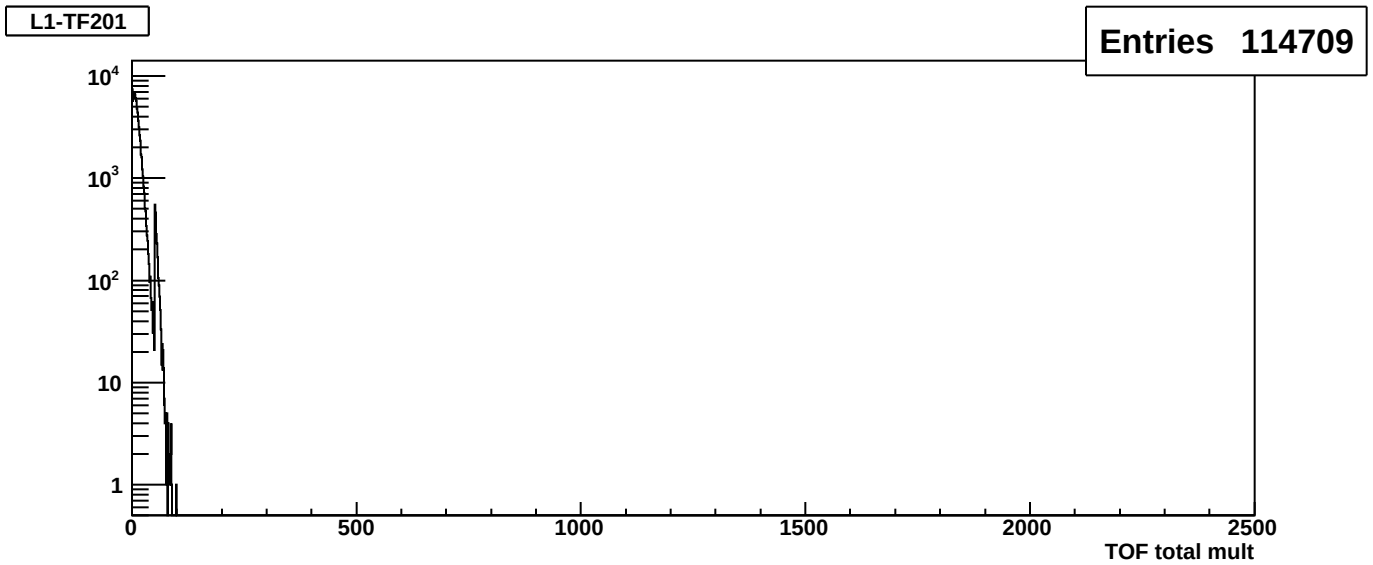

MIX-TF003
Entries 4817778
TOF MULT
TOF tray

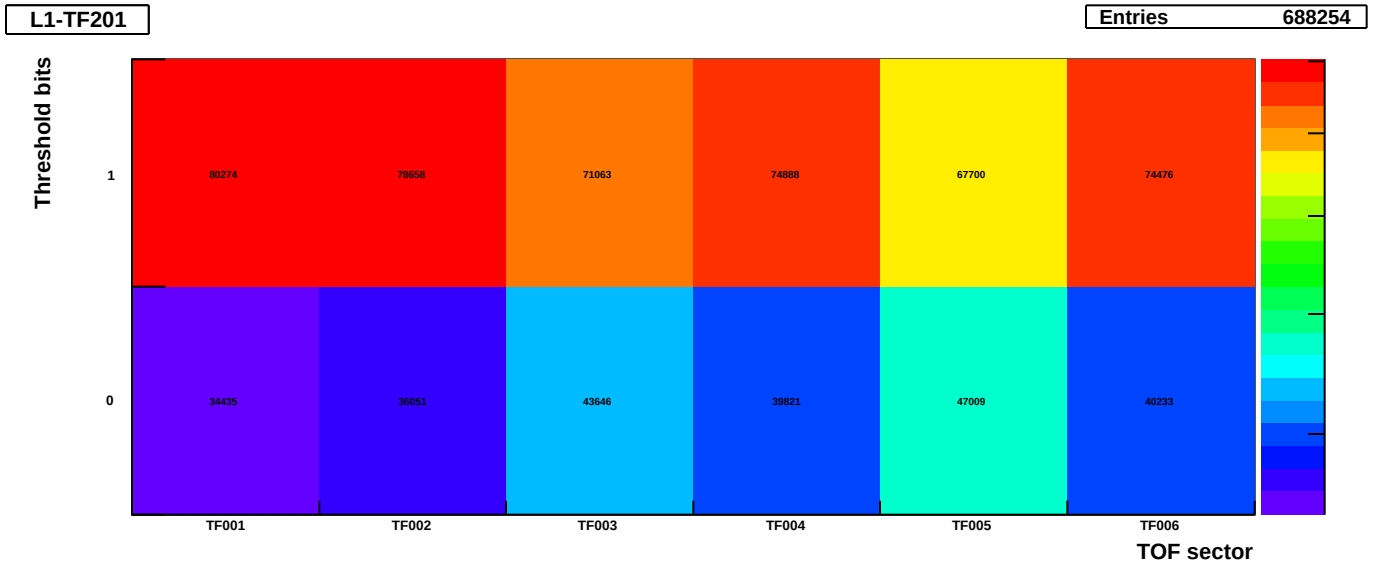

MIX-TF004
Entries 4817778
TOF MULT
TOF tray

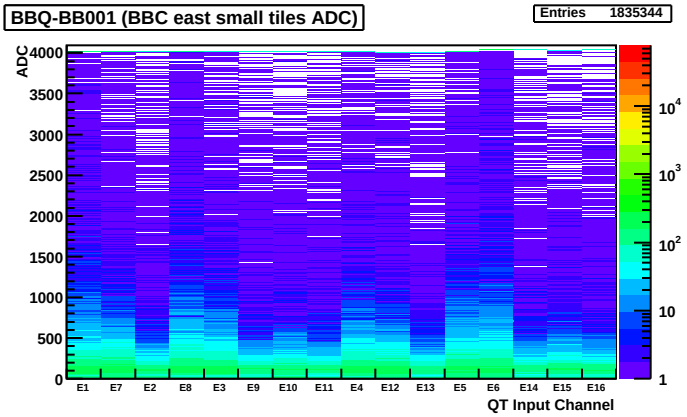

MIX-TF005
Entries 4817778
TOF MULT
TOF tray

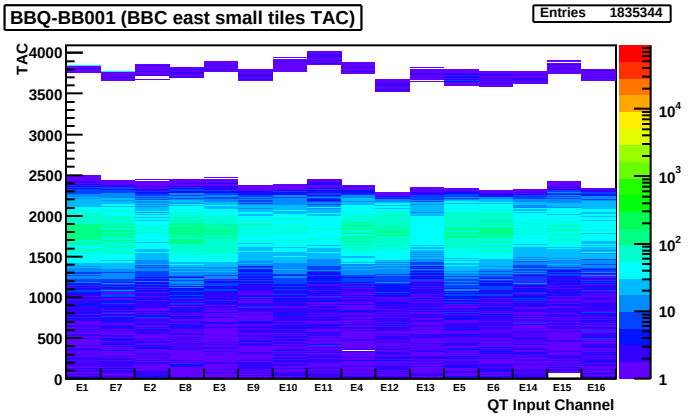

MIX-TF006
Entries 4817778
TOF MULT
TOF tray

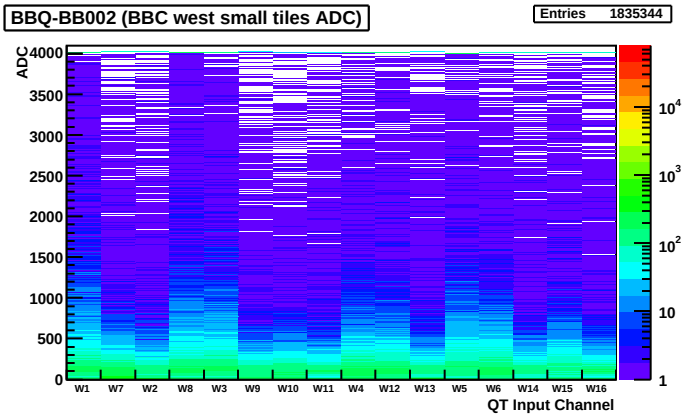

MIX-TF101
Entries 688254
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

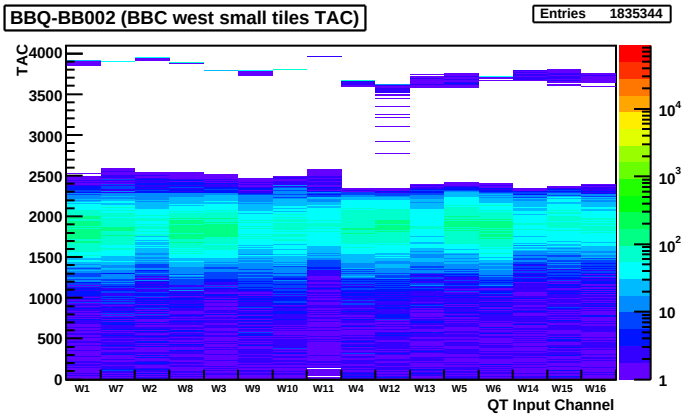

L1-TF201
Entries 114709
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

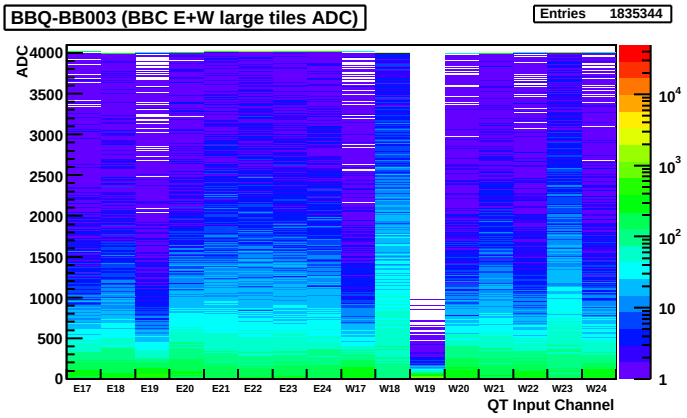

L1-TF201
Entries 688254
Threshold bits
1
0
80274
78658
71063
74888
67700
74476
34435
36051
43646
39821
47009
40233
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

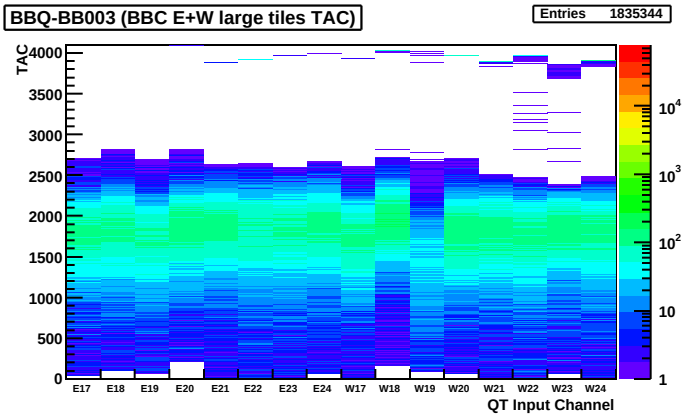

BBQ-BB001 (BBC east small tiles ADC)
Entries 1835344
ADC
QT Input Channel

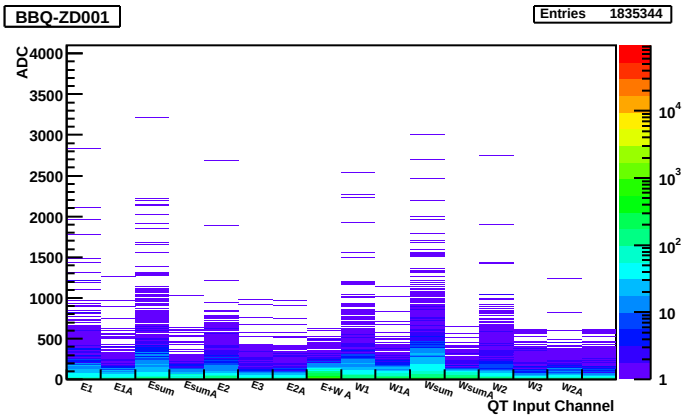

BBQ-BB001 (BBC east small tiles TAC)
Entries 1835344
TAC
QT Input Channel

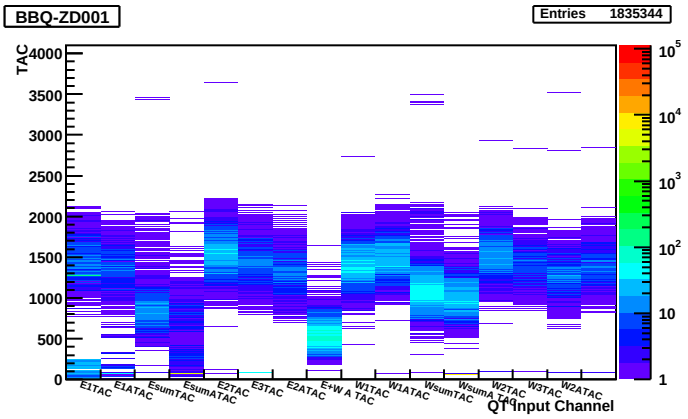

BBQ-BB002 (BBC west small tiles ADC)
Entries 1835344
ADC
QT Input Channel

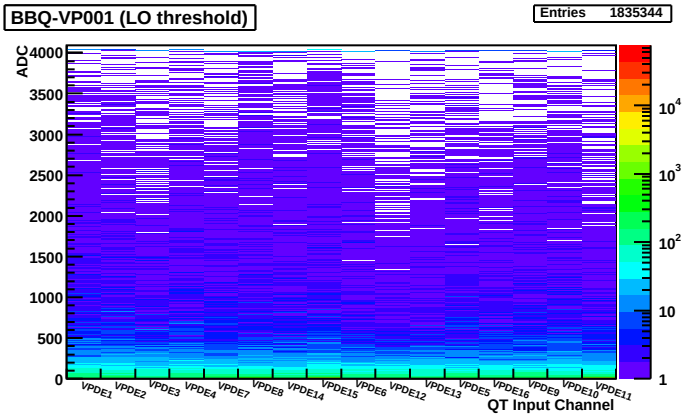

BBQ-BB002 (BBC west small tiles TAC)
Entries 1835344
TAC
QT Input Channel

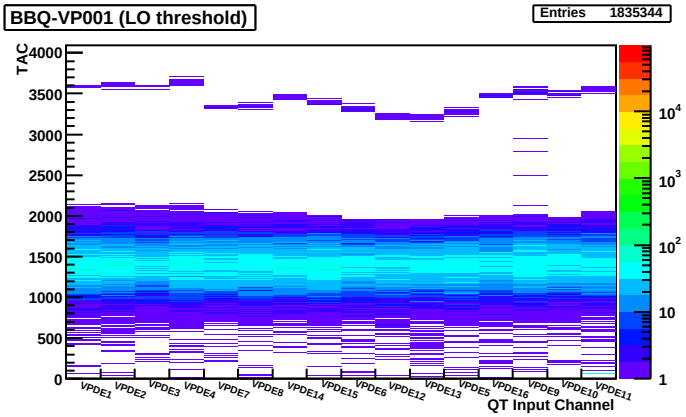

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1835344
ADC
QT Input Channel

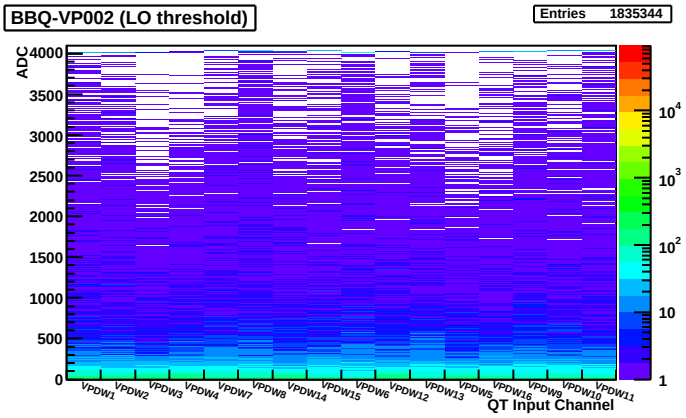

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1835344
TAC
QT Input Channel

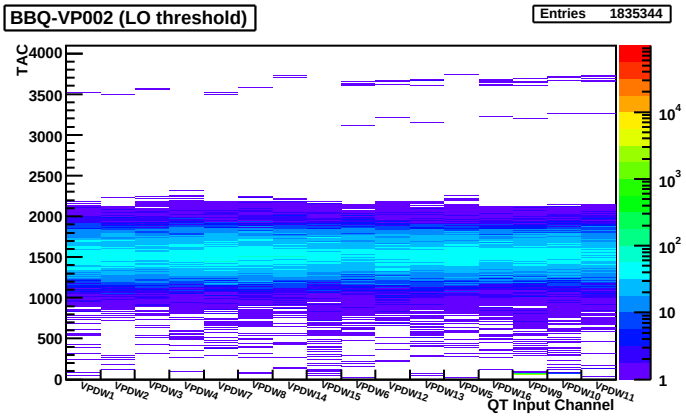

BBQ-ZD001
Entries 1835344
ADC
QT Input Channel

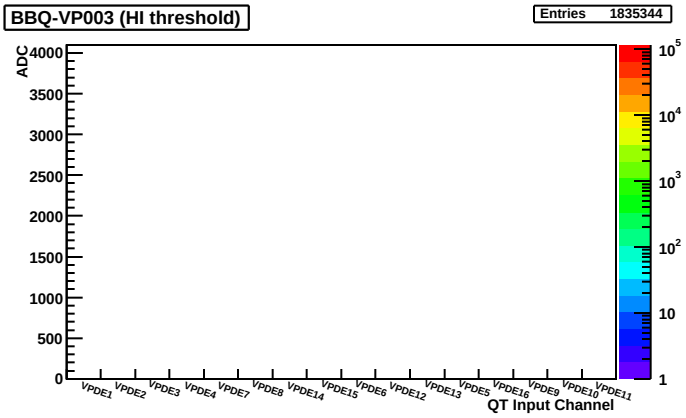

BBQ-ZD001
Entries 1835344
TAC
QT Input Channel

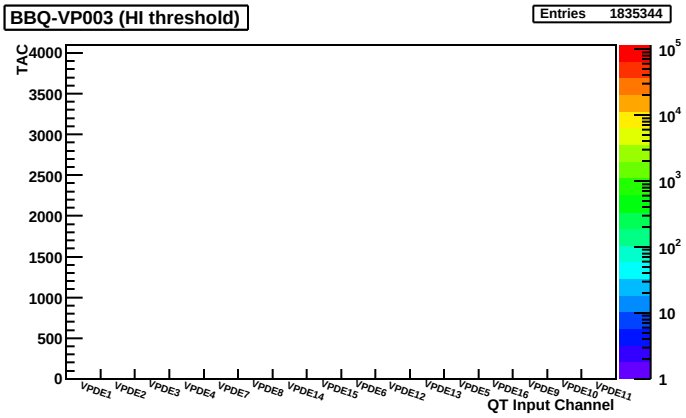

BBQ-VP001 (LO threshold)
Entries 1835344
ADC
QT Input Channel

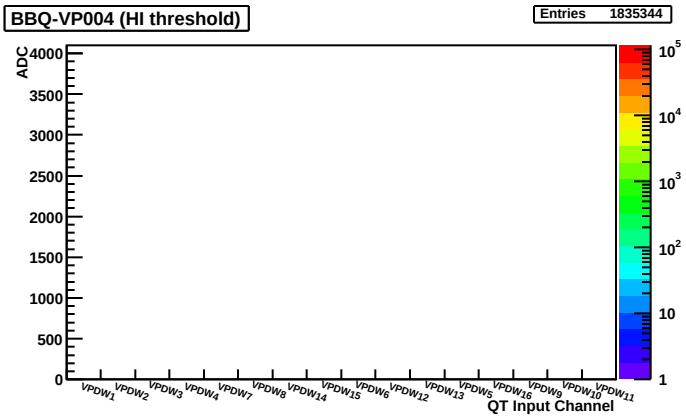

BBQ-VP001 (LO threshold)
Entries 1835344
TAC
QT Input Channel

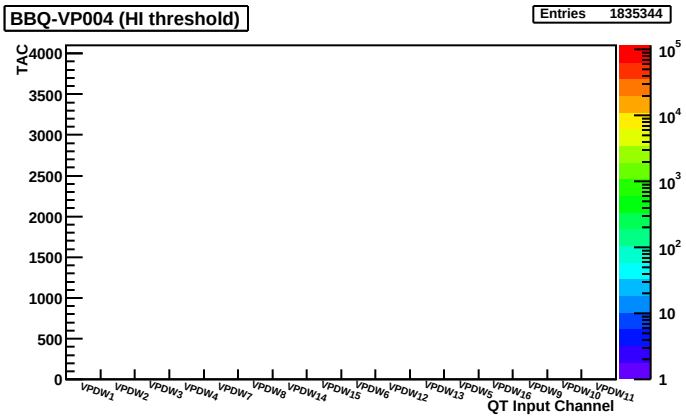

BBQ-VP002 (LO threshold)
Entries 1835344
ADC
QT Input Channel

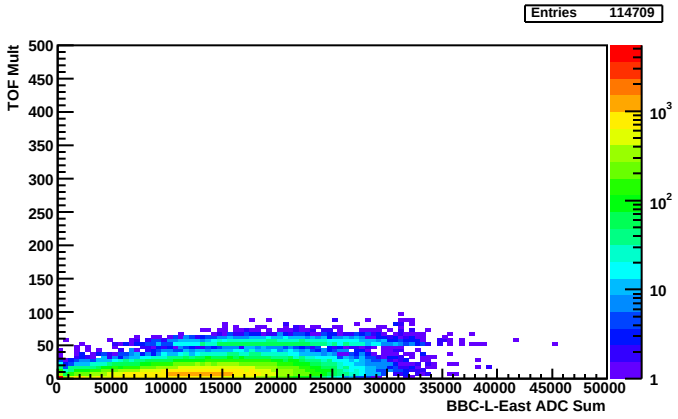

BBQ-VP002 (LO threshold)
Entries 1835344
TAC
QT Input Channel

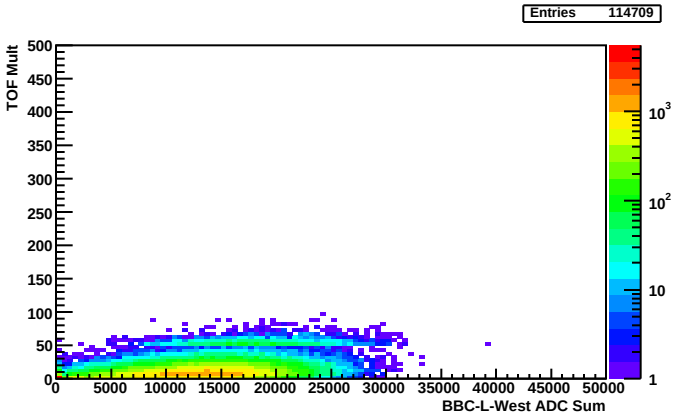

BBQ-VP003 (HI threshold)
Entries 1835344
ADC
QT Input Channel

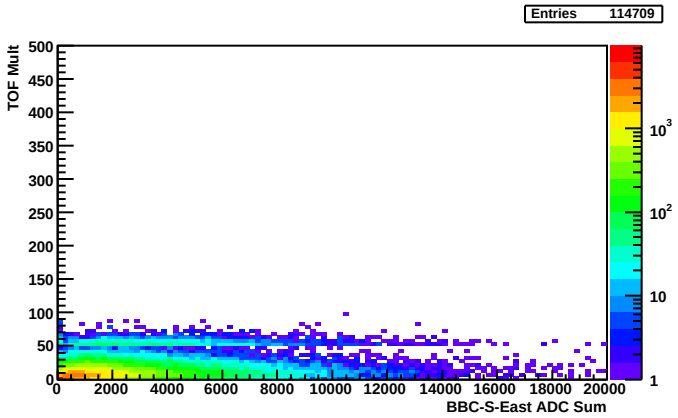

BBQ-VP003 (HI threshold)
Entries 1835344
TAC
QT Input Channel

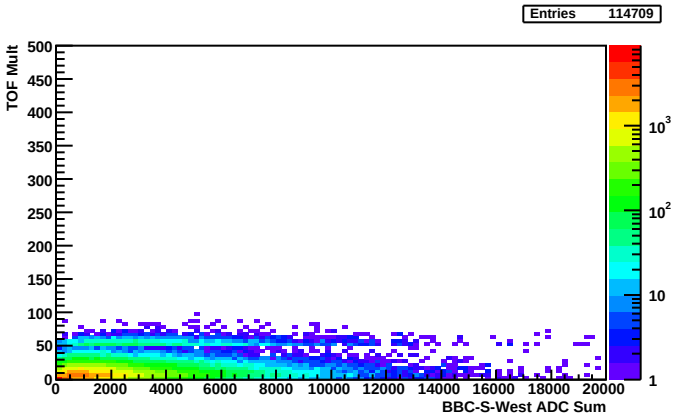

BBQ-VP004 (HI threshold)
Entries 1835344
ADC
QT Input Channel

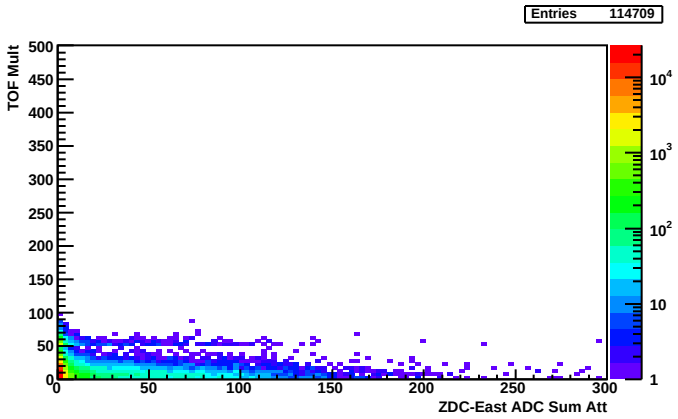

BBQ-VP004 (HI threshold)
Entries 1835344
TAC
QT Input Channel

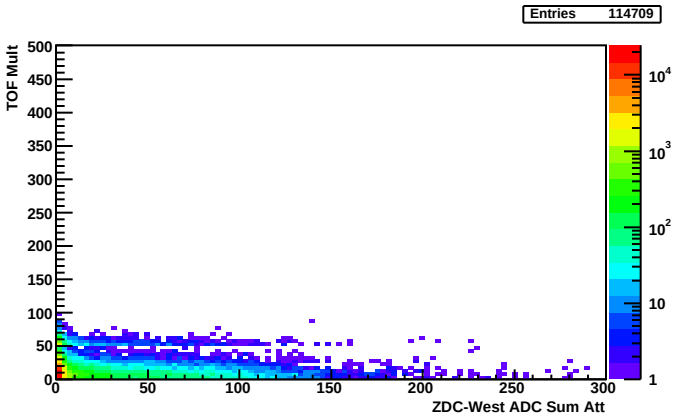

Entries 114709
TOF Mult
BBC-L-East ADC Sum

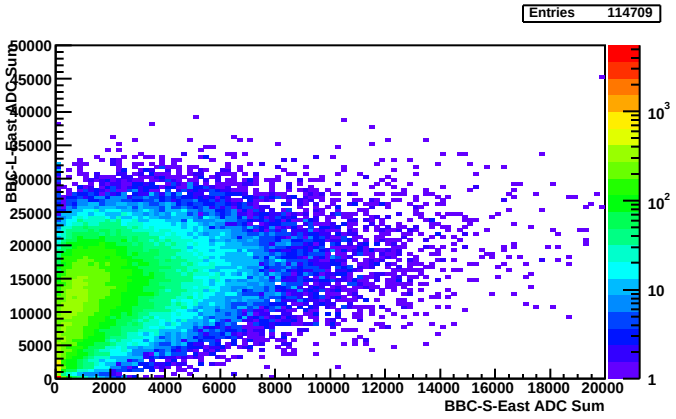

Entries 114709
TOF Mult
BBC-L-West ADC Sum

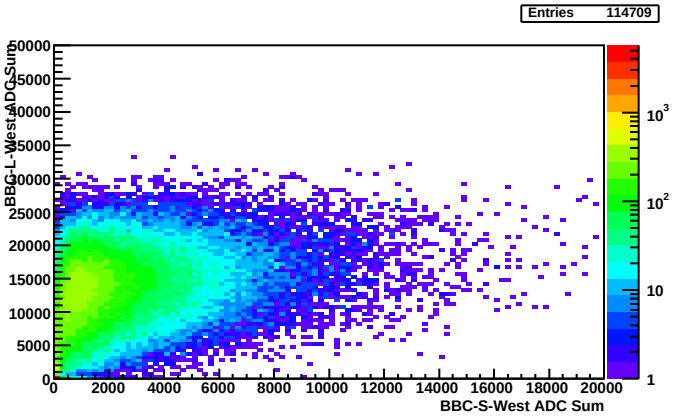

Entries 114709
TOF Mult
BBC-S-East ADC Sum

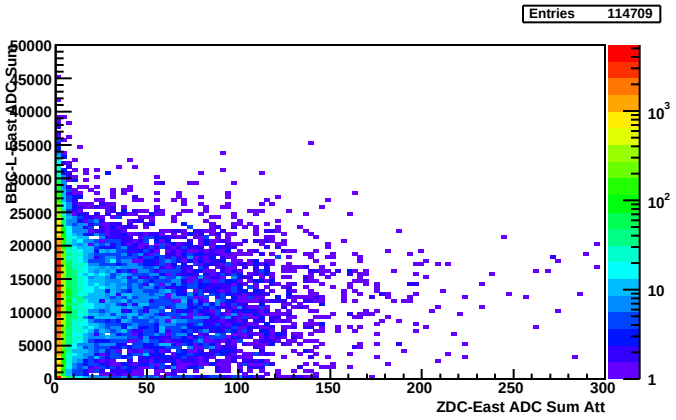

Entries 114709
TOF Mult
BBC-S-West ADC Sum

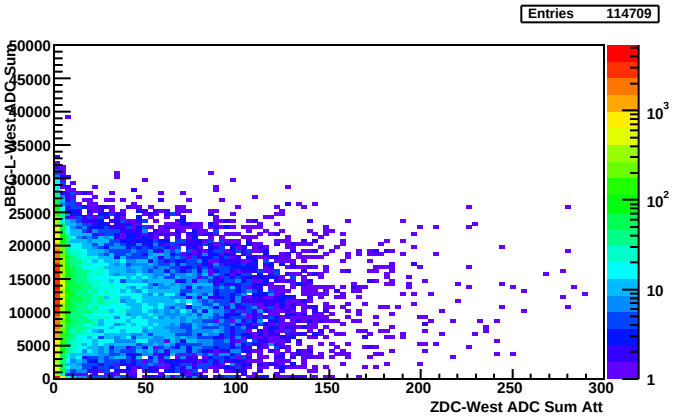

Entries 114709
TOF Mult
ZDC-East ADC Sum Att

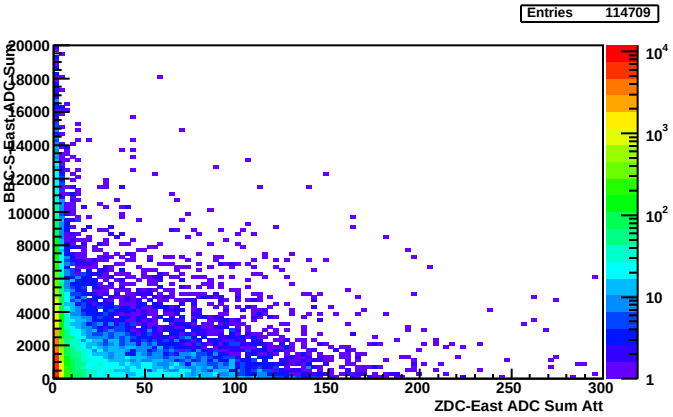

Entries 114709
TOF Mult
ZDC-West ADC Sum Att

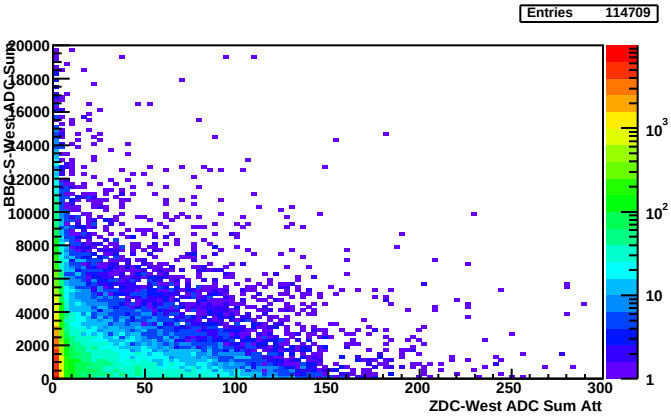

Entries 114709
BBC-L-East ADC Sum
BBC-S-East ADC Sum

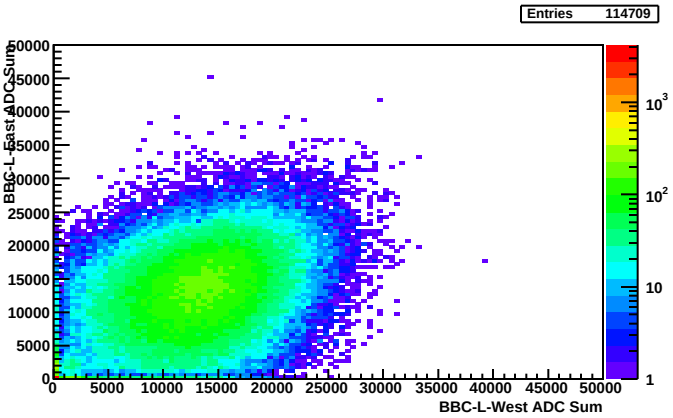

Entries 114709
BBC-L-West ADC Sum
BBC-S-West ADC Sum

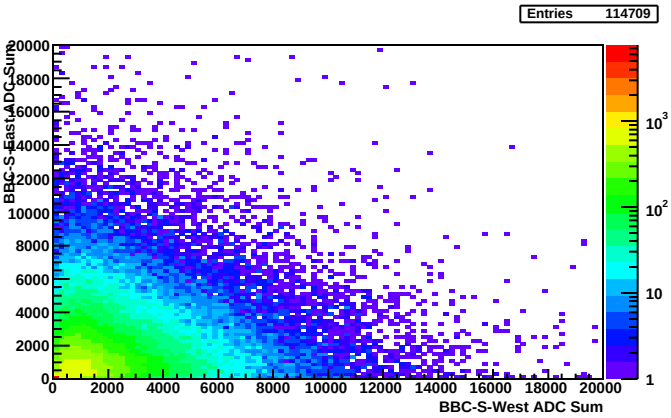

Entries 114709
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

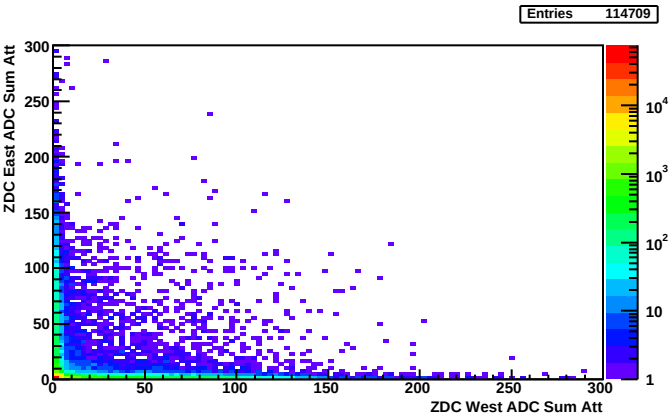

Entries 114709
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

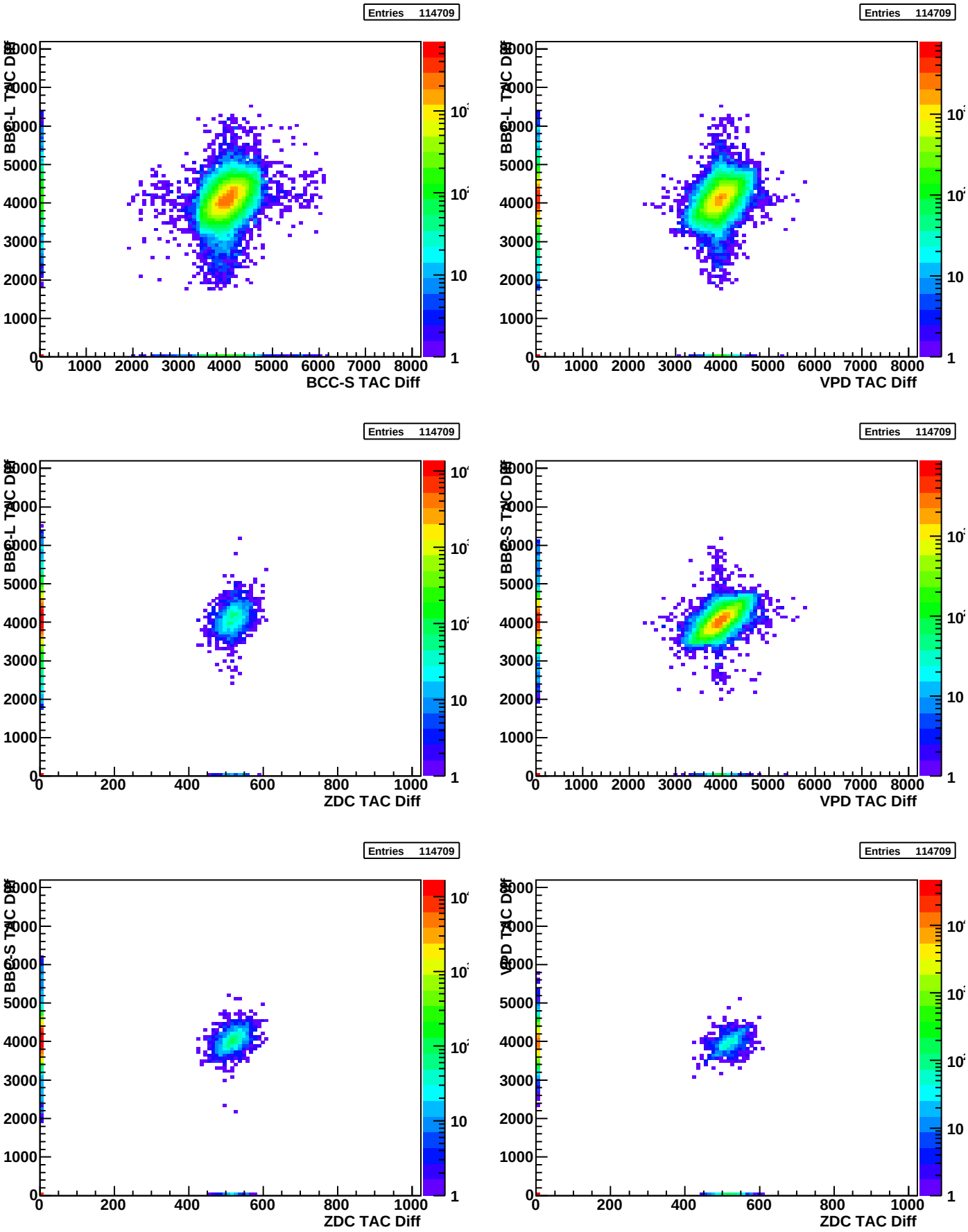

Entries 114709
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

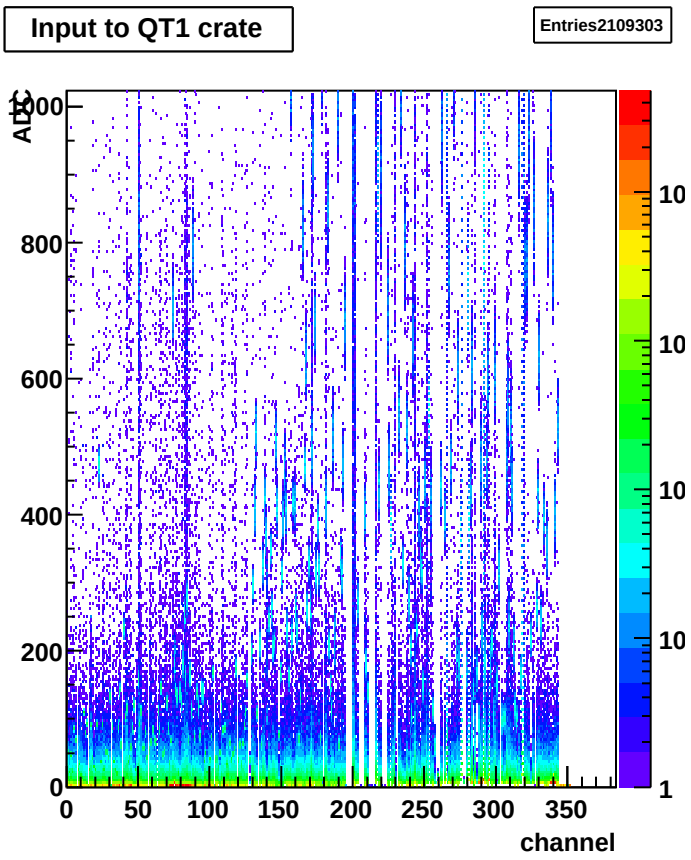

Entries 114709
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

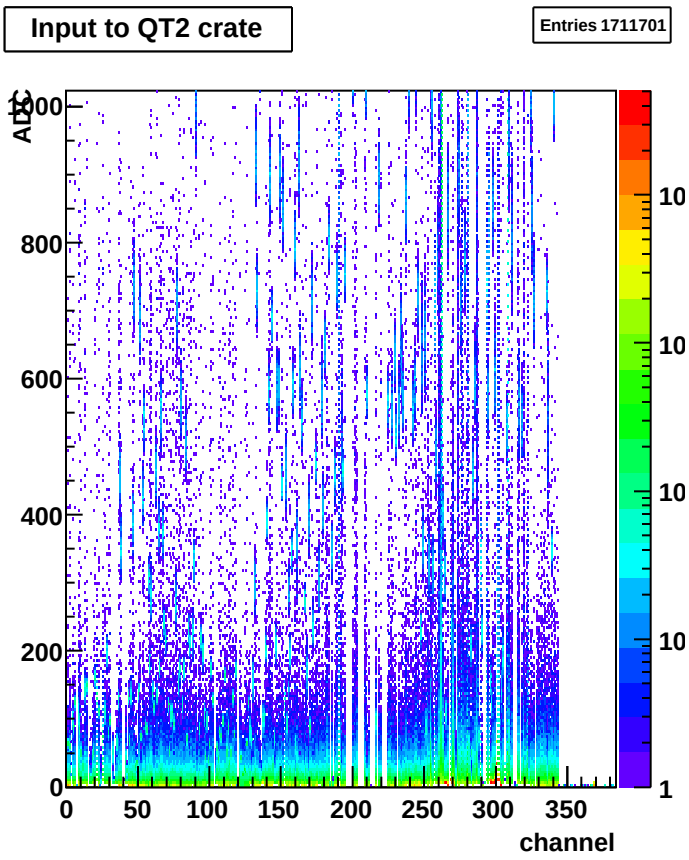

Entries 114709
BBC-L-East ADC Sum
BBC-L-West ADC Sum

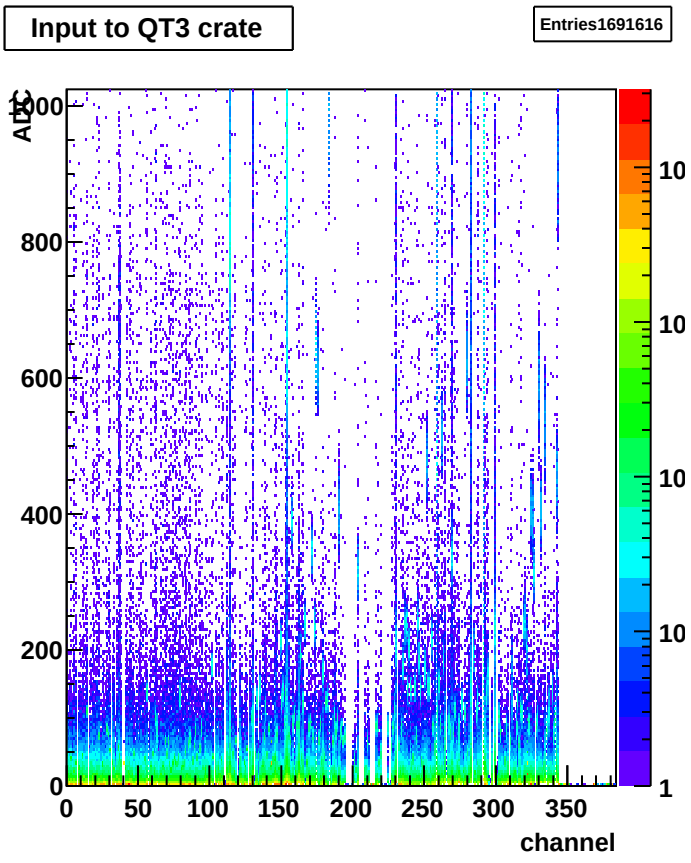

Entries 114709
BBC-S-East ADC Sum
BBC-S-West ADC Sum

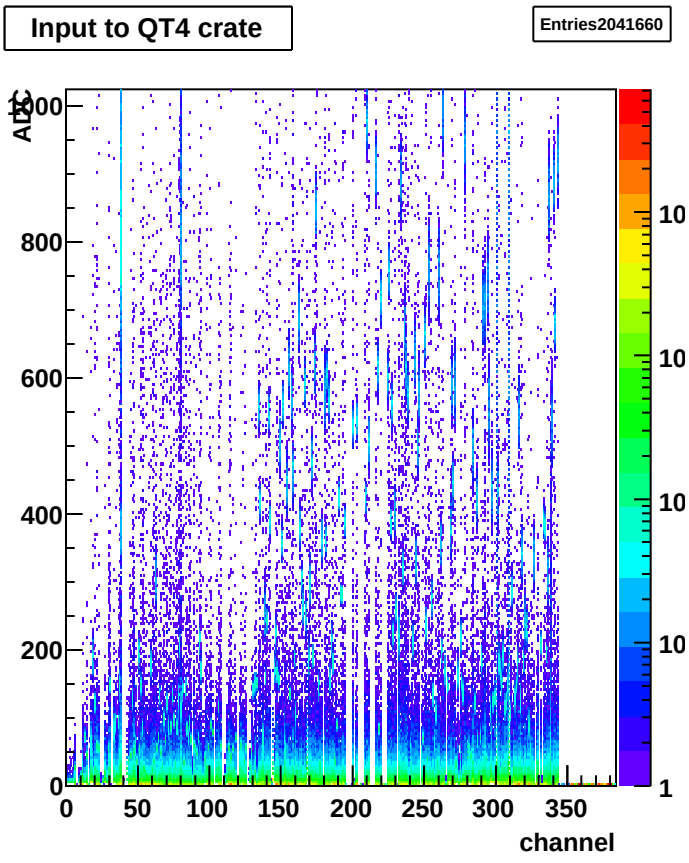

Entries 114709
ZDC East ADC Sum Att
ZDC West ADC Sum Att

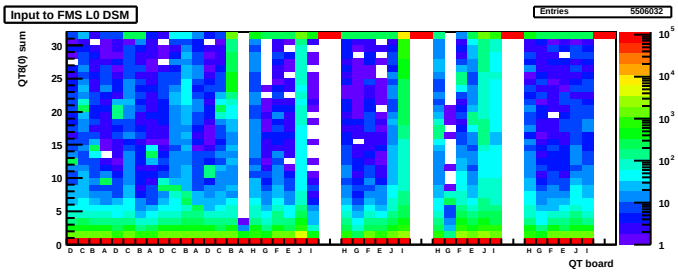

Entries 114709
BBC-L TAC Diff
BCC-S TAC Diff
Entries 114709
BBC-L TAC Diff
VPD TAC Diff
Entries 114709
BBC-L TAC Diff
ZDC TAC Diff
Entries 114709
BBC-S TAC Diff
VPD TAC Diff
Entries 114709
BBC-S TAC Diff
ZDC TAC Diff
Entries 114709
VPD TAC Diff
ZDC TAC Diff

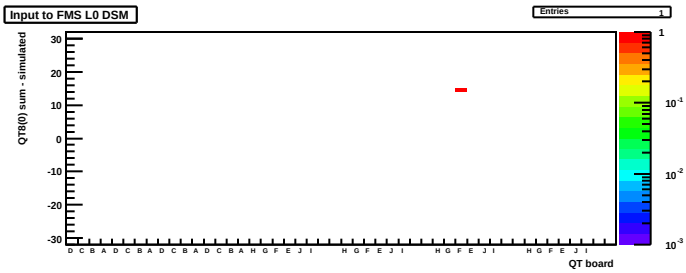

Input to QT1 crate
Entries2109303
ADC
channel

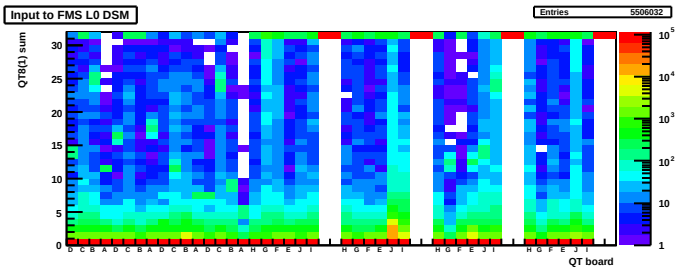

Input to QT2 crate
Entries 1711701
ADC
channel

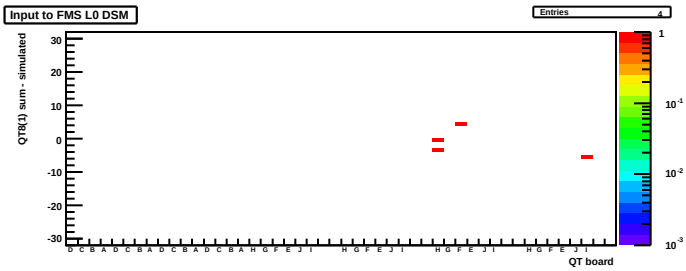

Input to QT3 crate
Entries1691616
ADC
channel

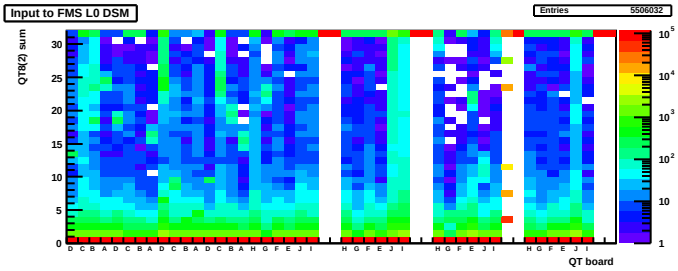

Input to QT4 crate
Entries2041660
ADC
channel

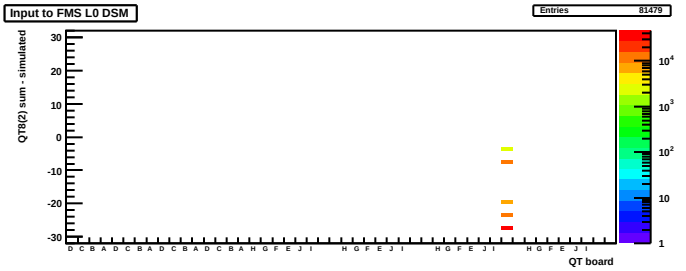

Input to FMS L0 DSM
Entries 5506032
QT8(0) sum
QT board

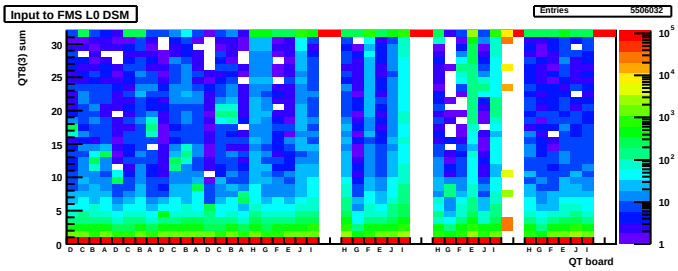

Input to FMS L0 DSM
Entries 1
QT8(0) sum - simulated
QT board

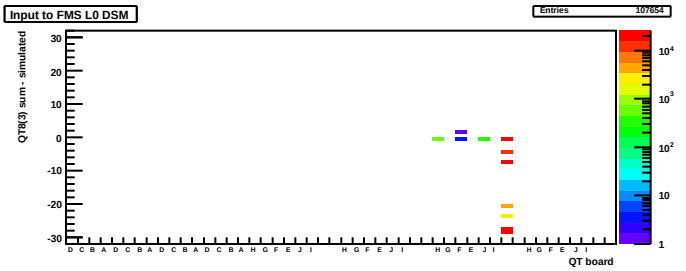

Input to FMS L0 DSM
Entries 5506032
QT8(1) sum
QT board

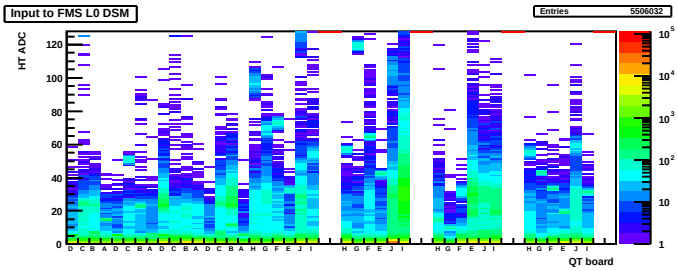

Input to FMS L0 DSM
Entries 4
QT8(1) sum - simulated
QT board

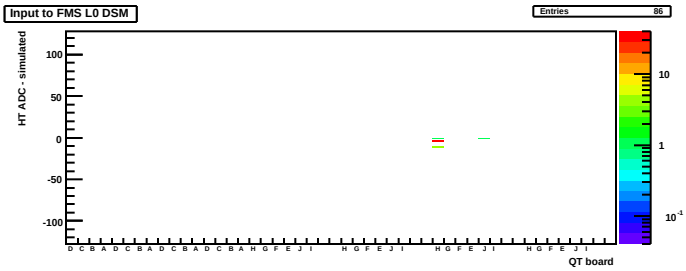

Input to FMS L0 DSM
Entries 5506032
QT8(2) sum
QT board

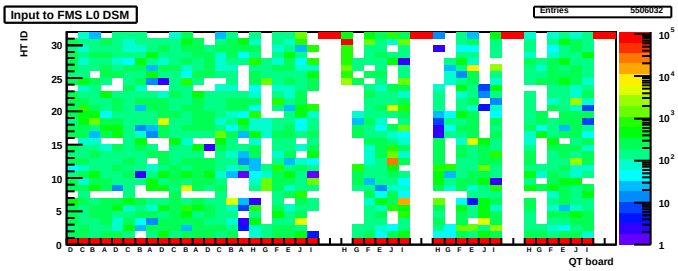

Input to FMS L0 DSM
Entries 81479
QT8(2) sum - simulated
QT board

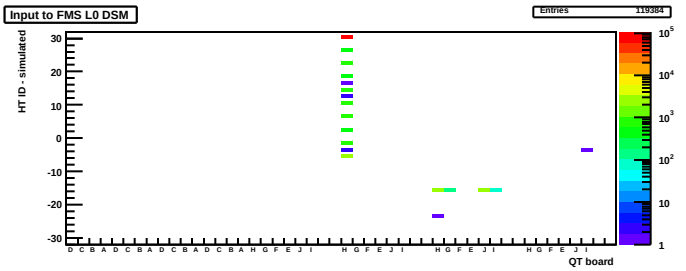

Input to FMS L0 DSM
Entries 5506032
QT8(3) sum
QT board

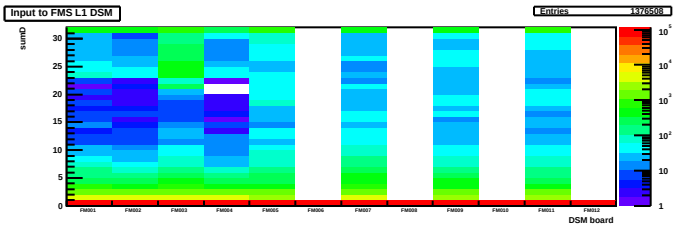

Input to FMS L0 DSM
Entries 107654
QT8(3) sum - simulated
QT board

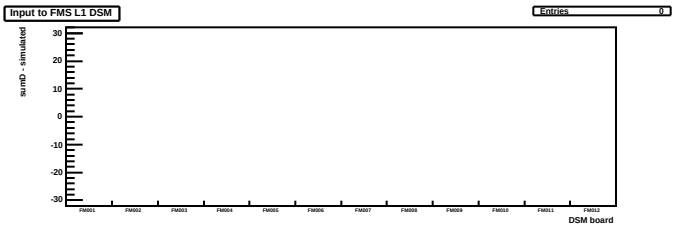

Input to FMS L0 DSM
Entries 5506032
HT ADC
QT board

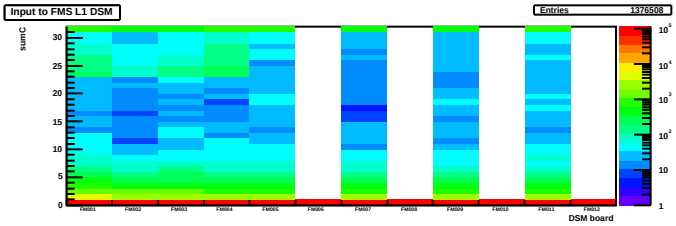

Input to FMS L0 DSM
Entries 86
HT ADC - simulated
QT board

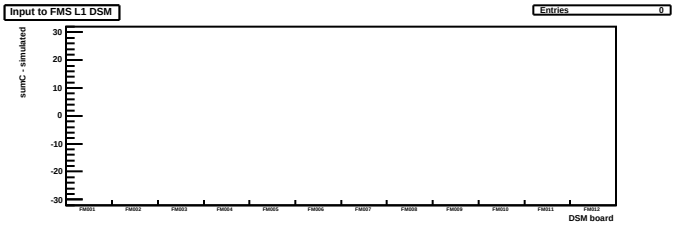

Input to FMS L0 DSM
Entries 5506032
HT ID
QT board

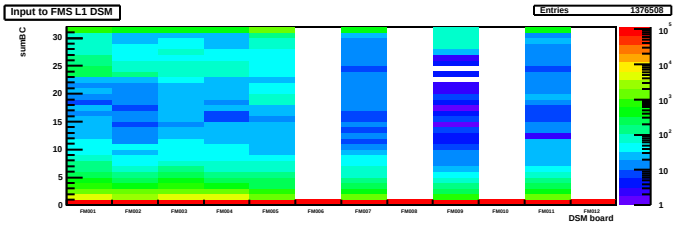

Input to FMS L0 DSM
Entries 119384
HT ID - simulated
QT board

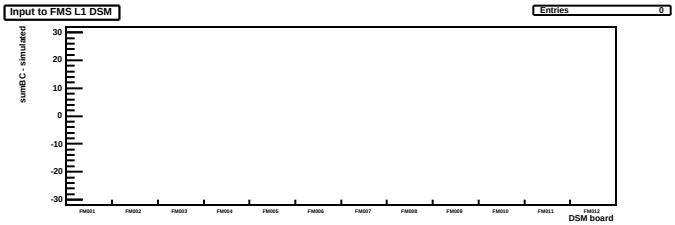

Input to FMS L1 DSM
Entries 1376508
sumD
DSM board

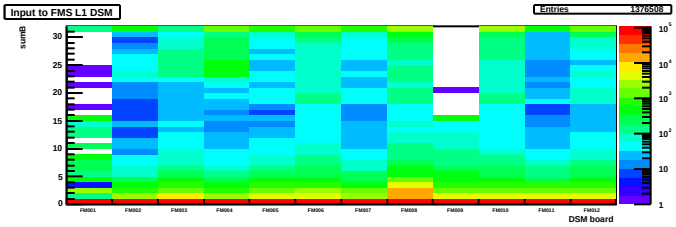

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

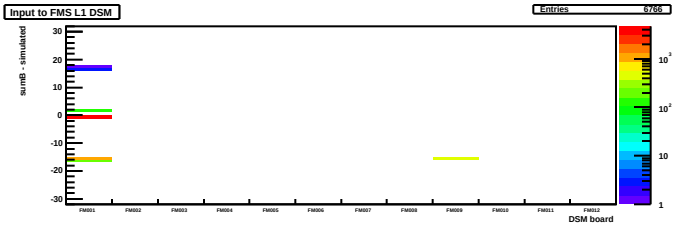

Input to FMS L1 DSM
Entries 1376508
sumC
DSM board

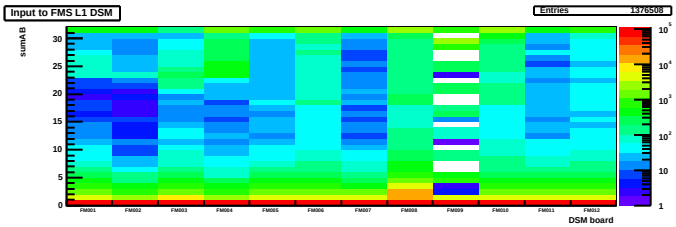

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

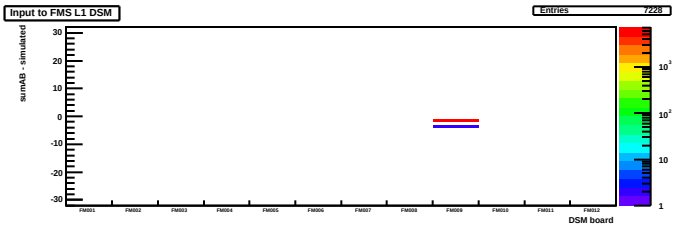

Input to FMS L1 DSM
Entries 1376508
sumBC
DSM board

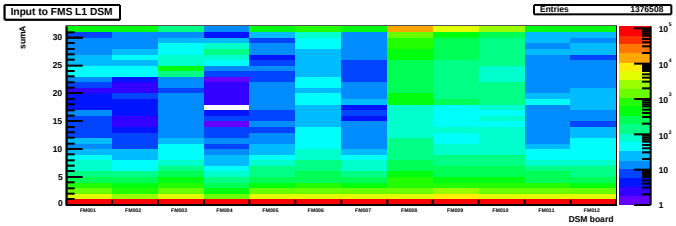

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

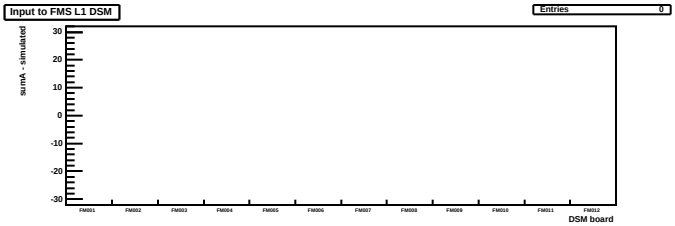

Input to FMS L1 DSM
Entries 1376508
sumB
DSM board

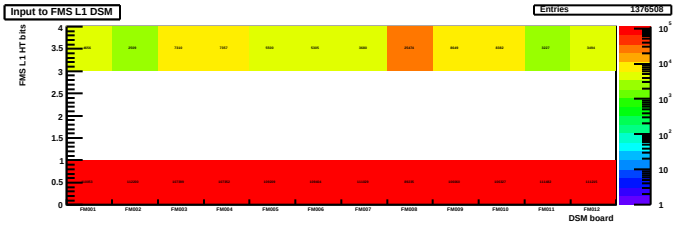

Input to FMS L1 DSM
Entries 6766
sumB - simulated
DSM board

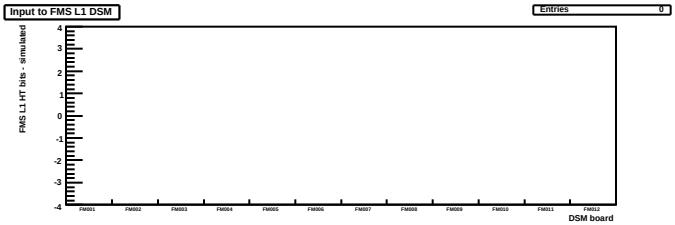

Input to FMS L1 DSM
Entries 1376508
sumAB
DSM board

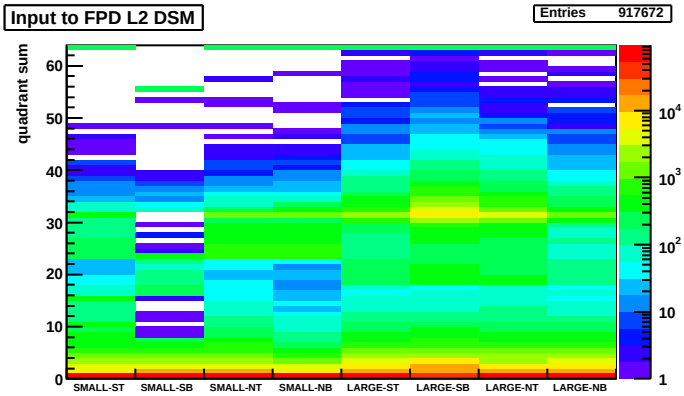

Input to FMS L1 DSM
Entries 7228
sumAB - simulated
DSM board

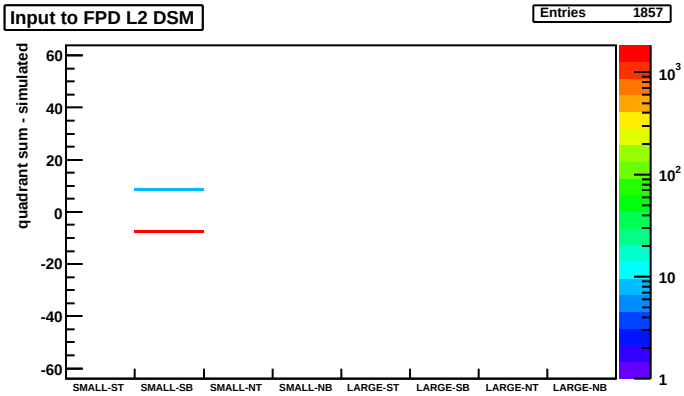

Input to FMS L1 DSM
Entries 1376508
sumA
DSM board

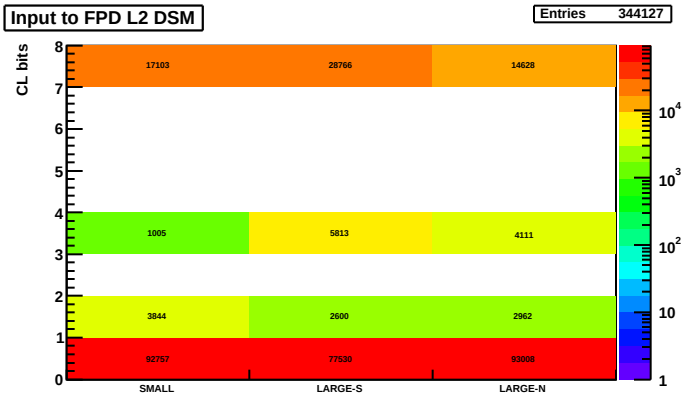

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

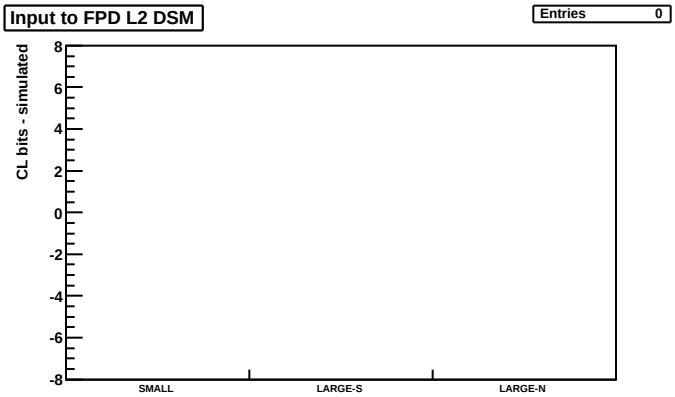

Input to FMS L1 DSM
Entries 1376508
FMS L1 HT bits
DSM board

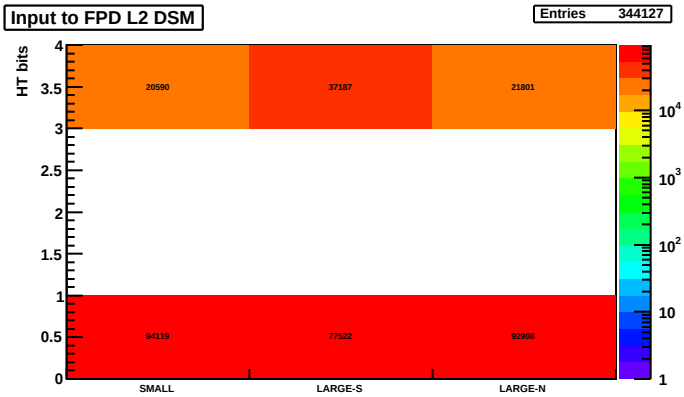

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

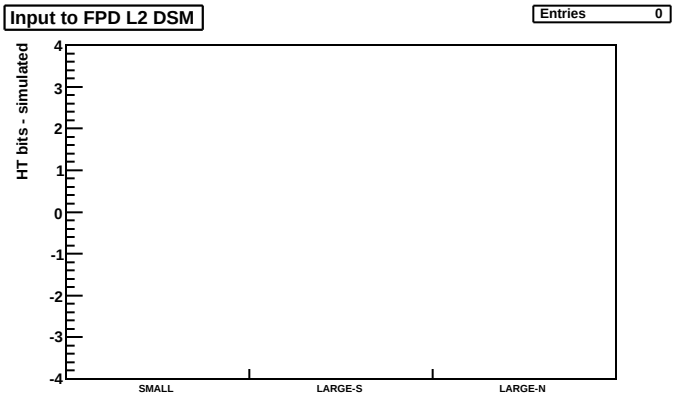

Input to FPD L2 DSM
Entries 917672
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

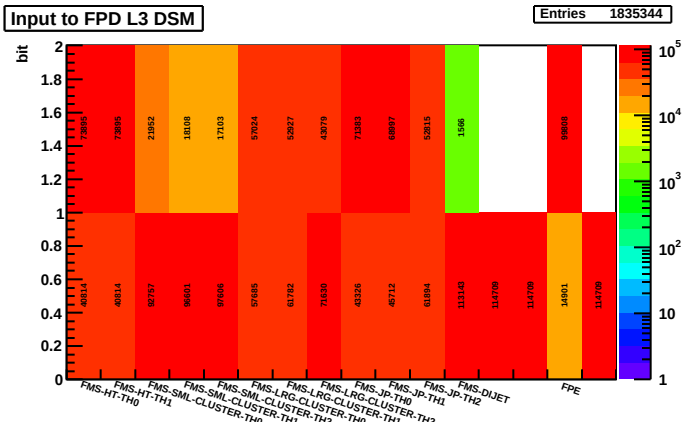

Input to FPD L2 DSM
Entries 1857
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

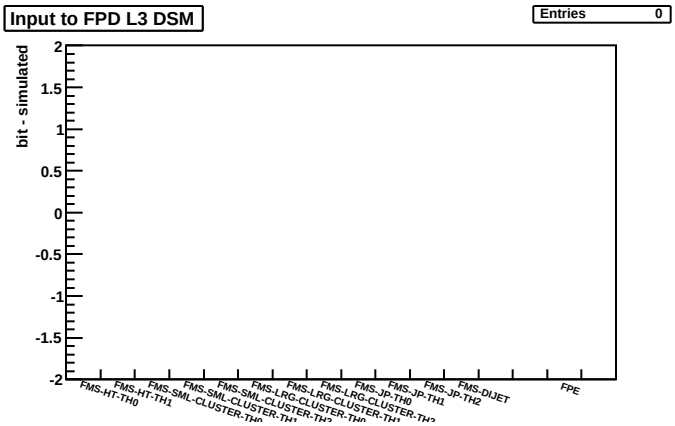

Input to FPD L2 DSM
Entries 344127
CL bits
17103
28766
14628
1005
5813
4111
3844
2600
2962
92757
77530
93008
SMALL
LARGE-S
LARGE-N

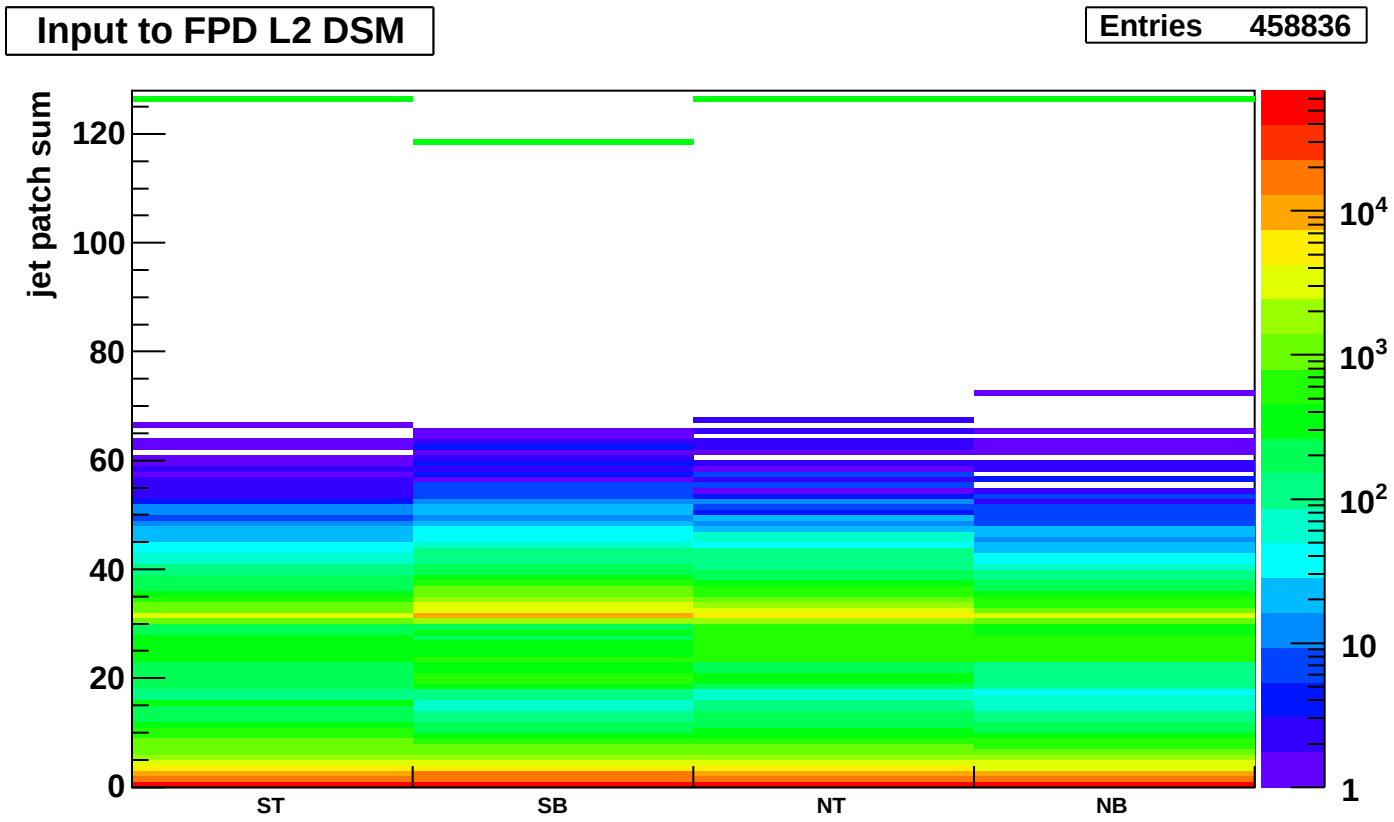

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

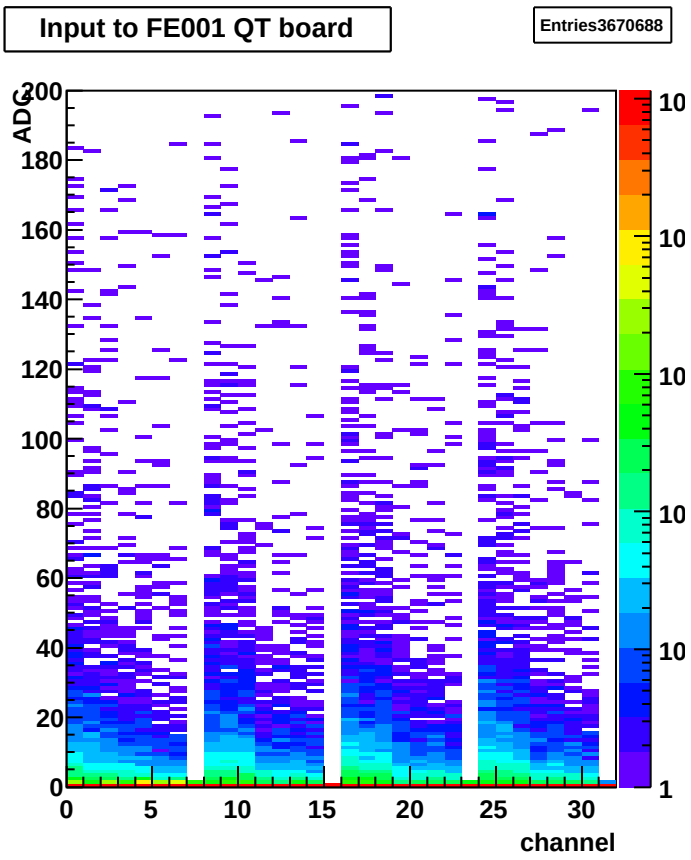

Input to FPD L2 DSM
Entries 344127
HT bits
20590
37187
21801
94119
77522
92908
SMALL
LARGE-S
LARGE-N

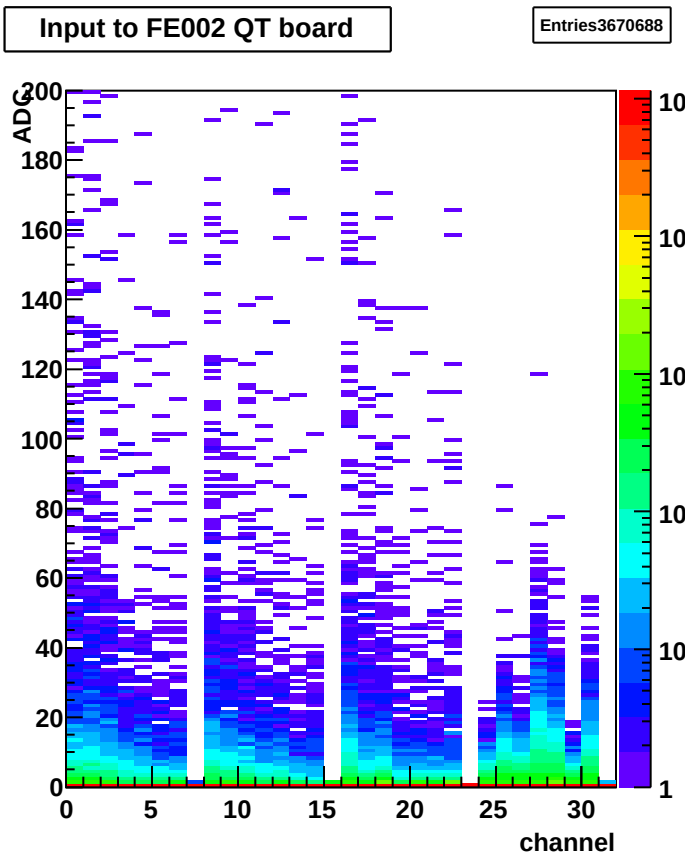

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

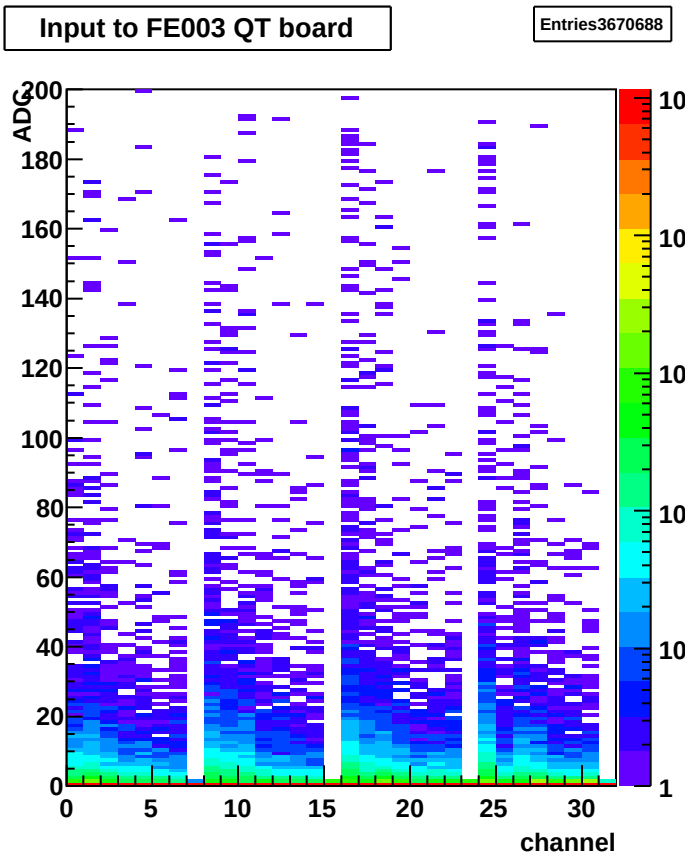

Input to FPD L3 DSM
Entries 1835344
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

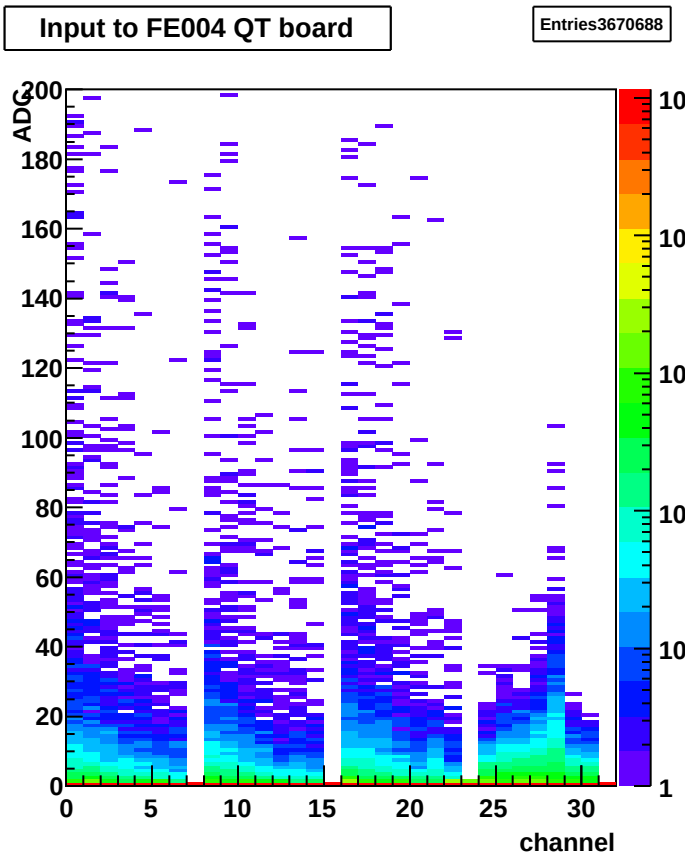

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

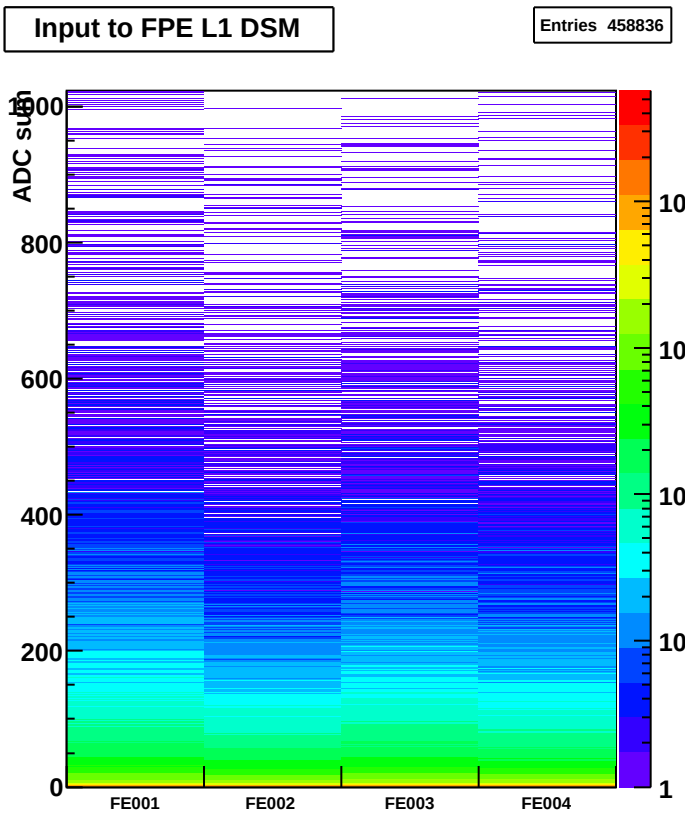

Input to FPD L2 DSM
Entries 458836
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

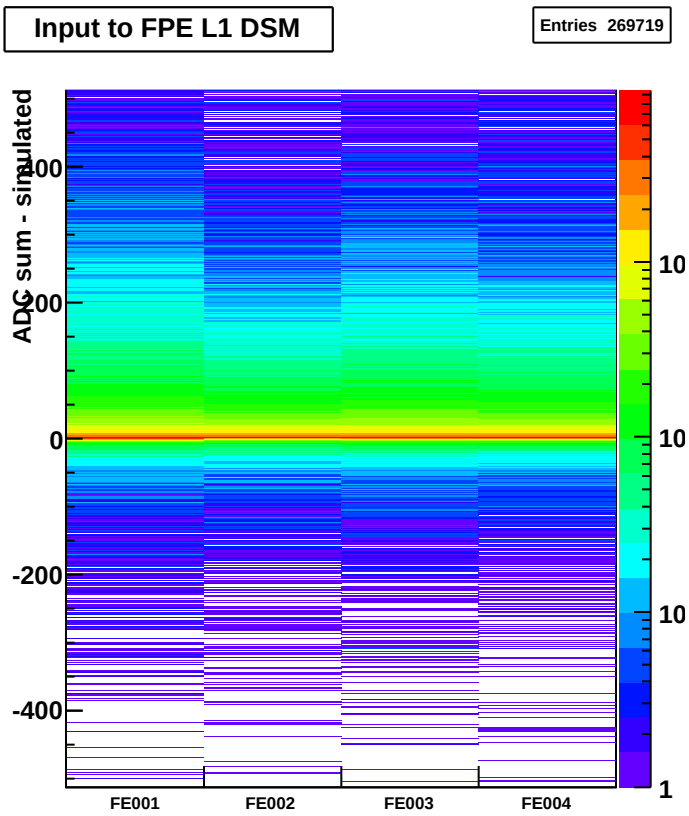

Input to FE001 QT board
Entries3670688
ADC
channel

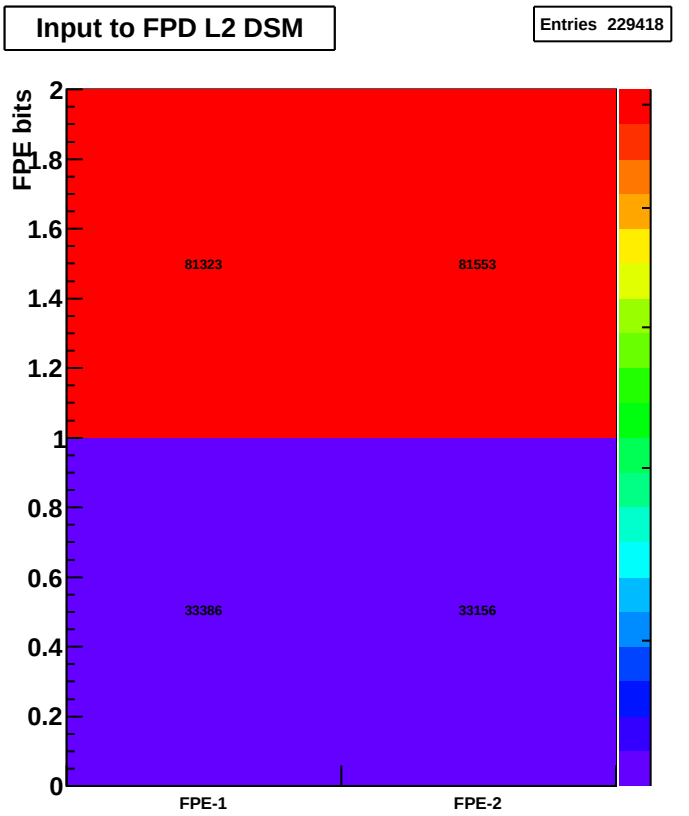

Input to FE002 QT board
Entries3670688
ADC
channel

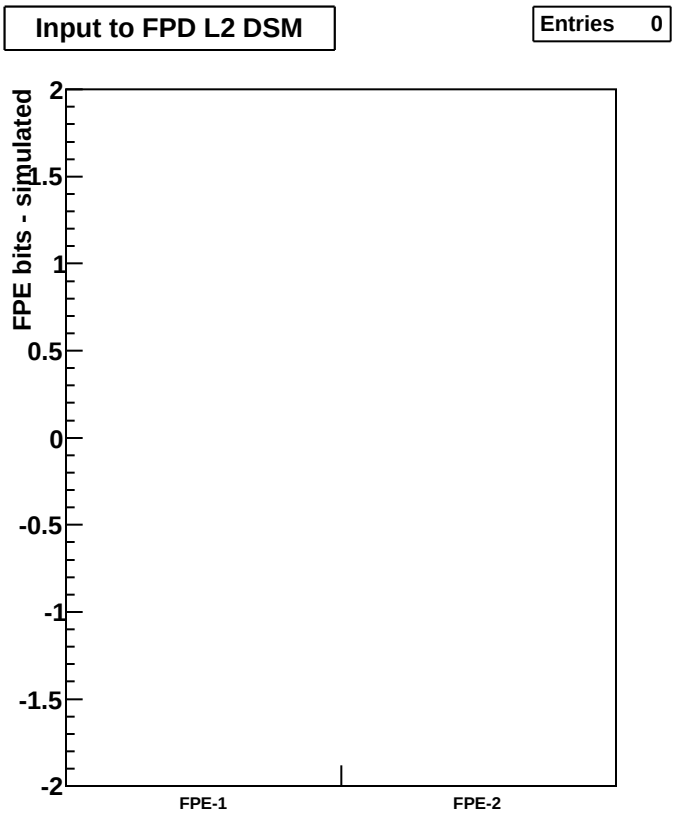

Input to FE003 QT board
Entries3670688
ADC
channel


Input to FE004 QT board
Entries3670688
ADC
channel


Input to FPE L1 DSM
Entries 458836
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPE L1 DSM
Entries 269719
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPD L2 DSM
Entries 229418
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
81323
81553
33386
33156
FPE-1
FPE-2


Input to FPD L2 DSM
Entries 0
FPE bits - simulated
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
FPE-1
FPE-2