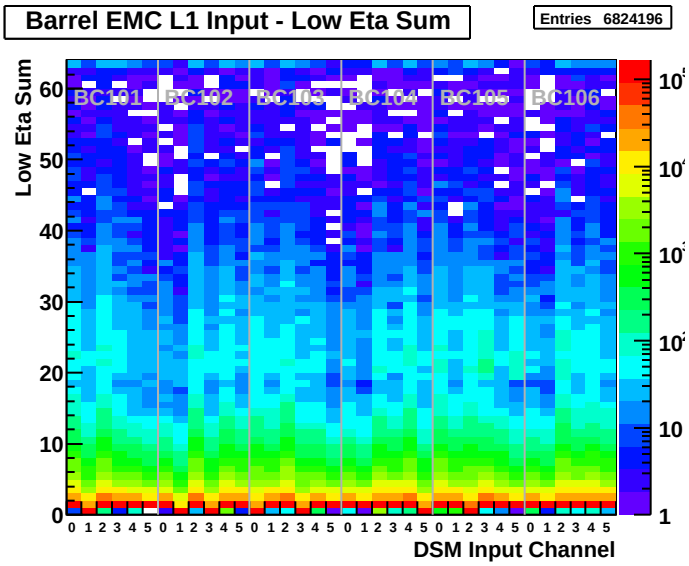
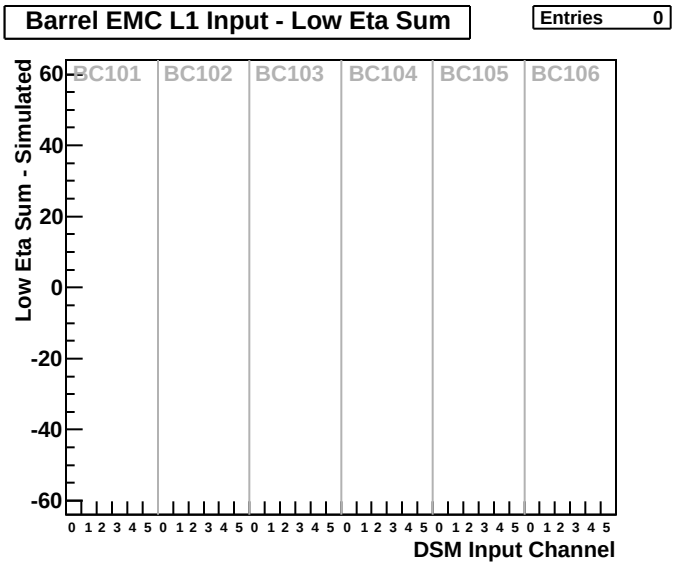
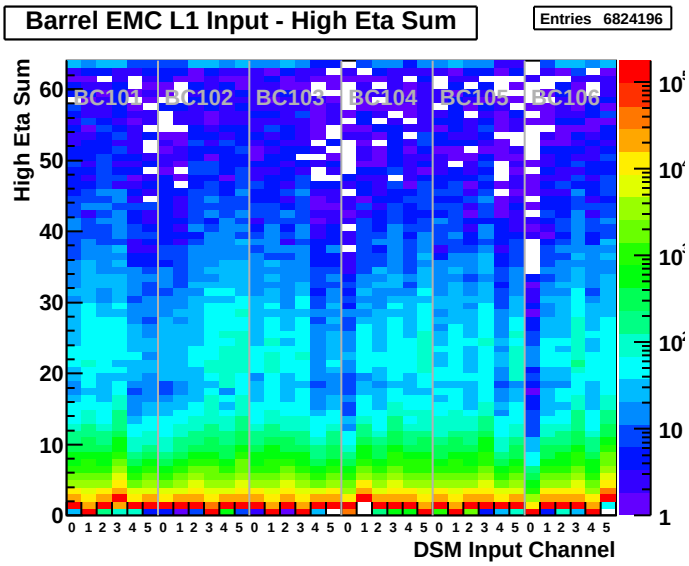
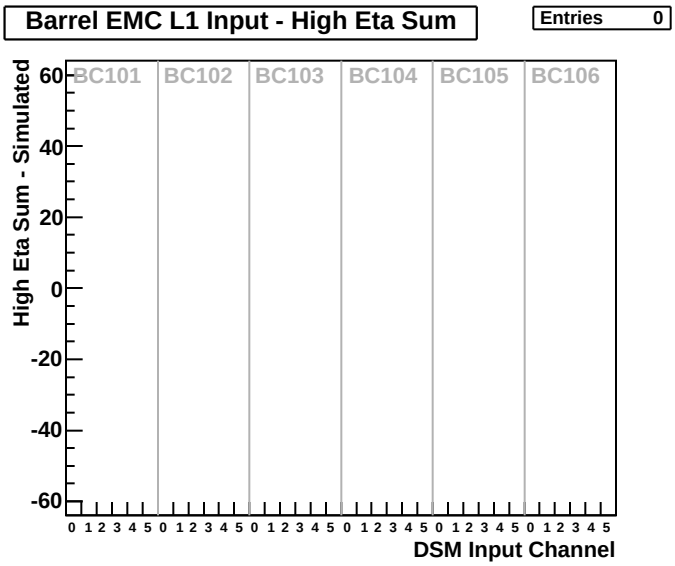
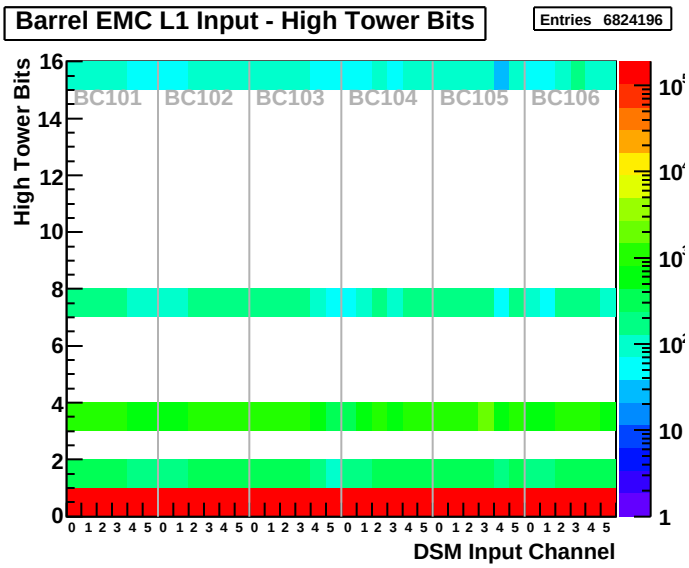
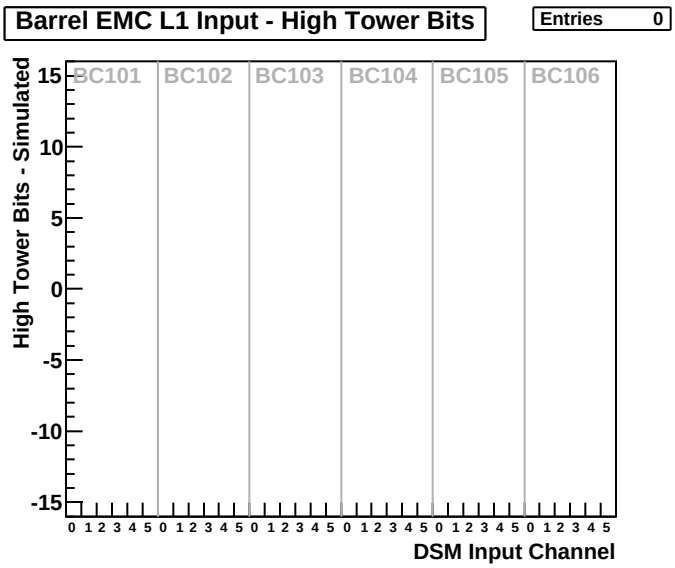

Barrel EMC L1 Input - Low Eta Sum
Entries 6824196
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

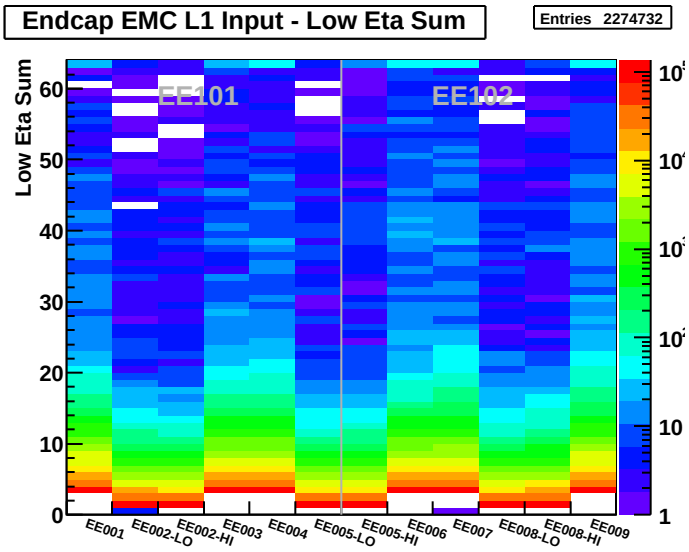

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

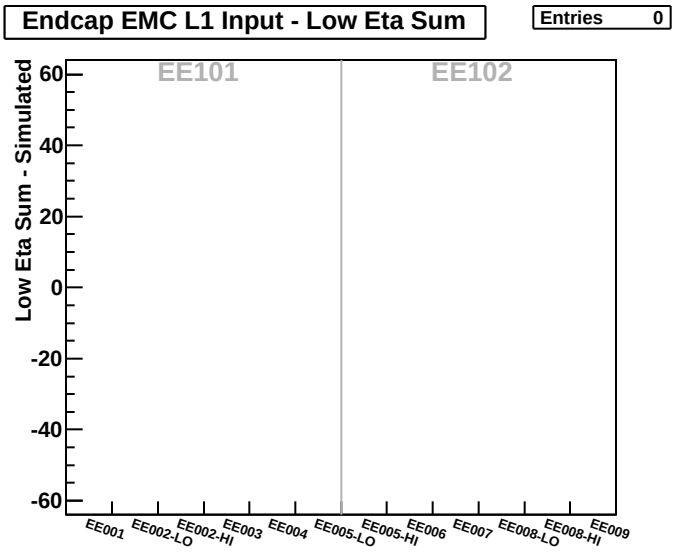

Barrel EMC L1 Input - High Eta Sum
Entries 6824196
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

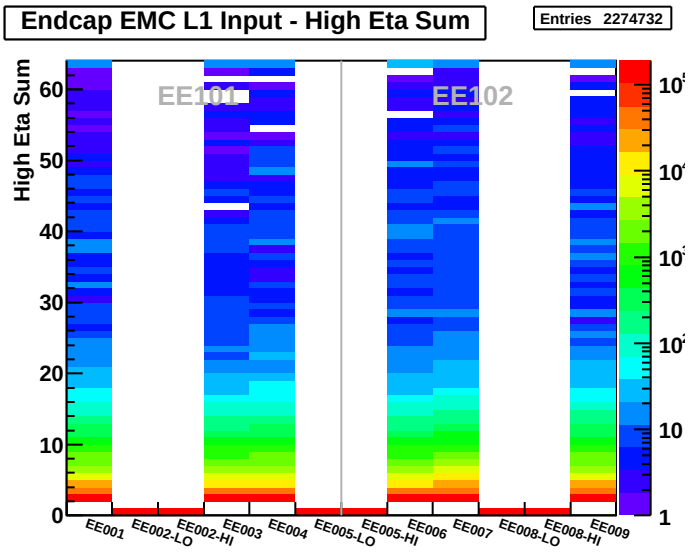

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

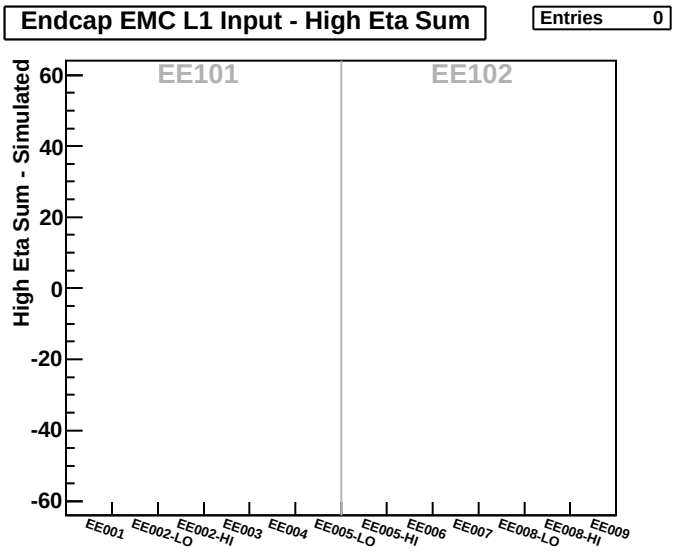

Barrel EMC L1 Input - High Tower Bits
Entries 6824196
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

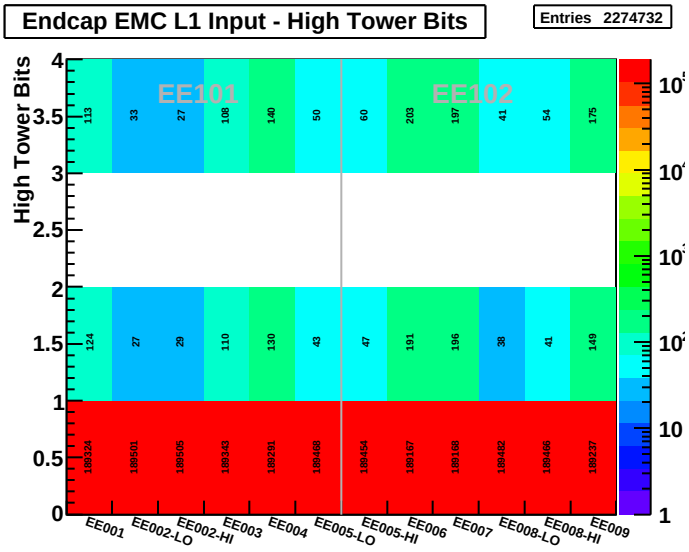

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

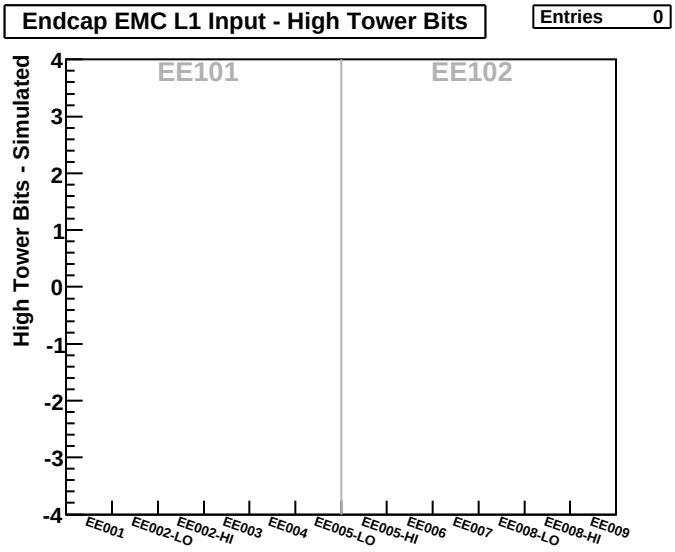

Endcap EMC L1 Input - Low Eta Sum
Entries 2274732
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

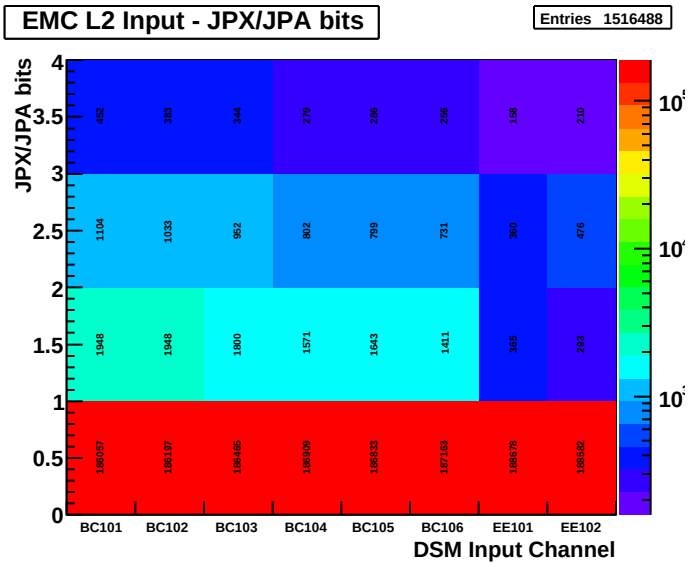

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

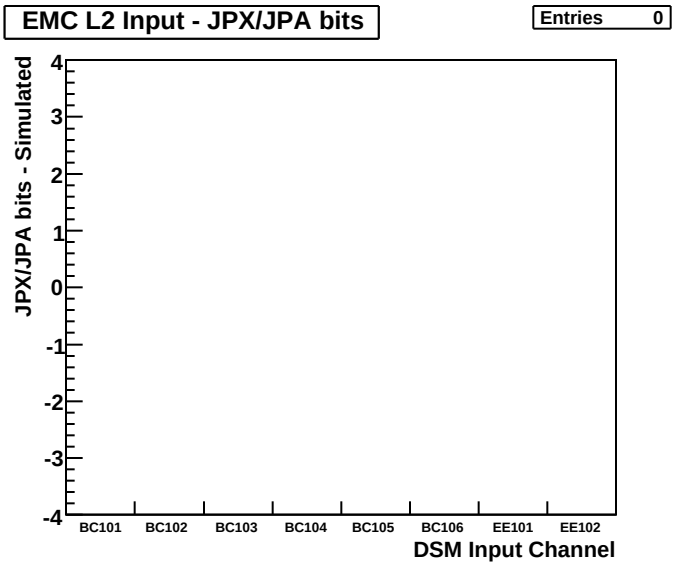

Endcap EMC L1 Input - High Eta Sum
Entries 2274732
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

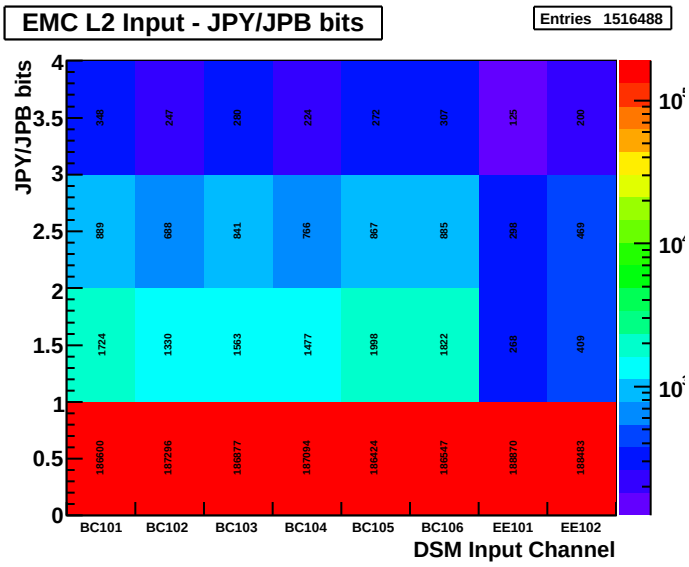

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

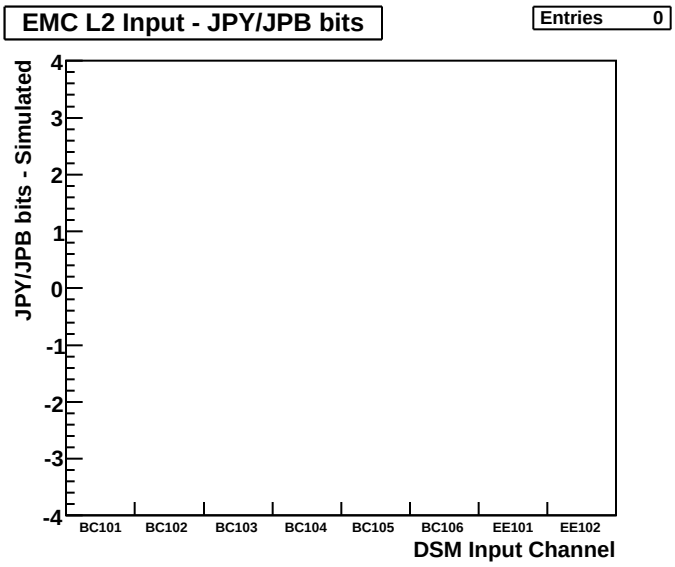

Endcap EMC L1 Input - High Tower Bits
Entries 2274732
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

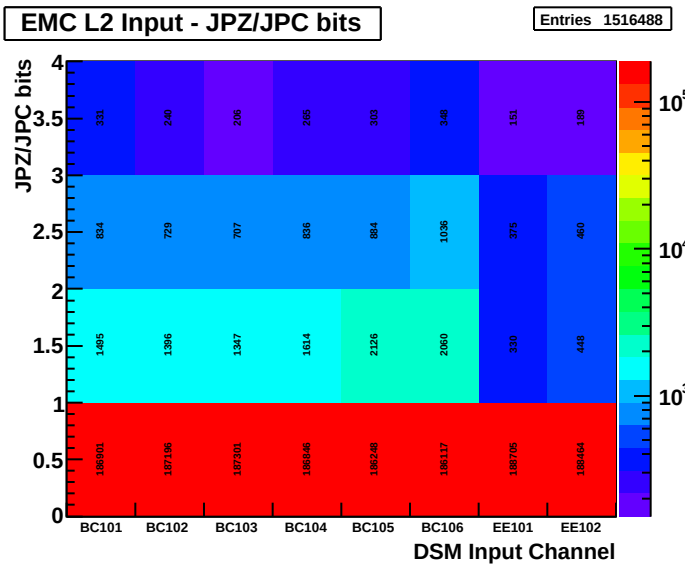

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

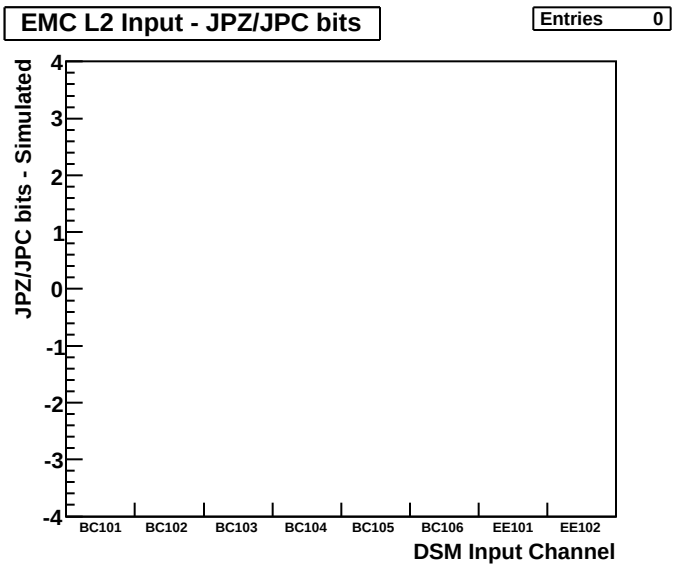

EMC L2 Input - JPX/JPA bits
Entries 1516488
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
452 383 344 279 286 256 158 210
1104 1033 952 802 799 731 360 476
1948 1948 1800 1571 1643 1411 365 233
186057 186197 186465 186909 186833 187163 188678 188582

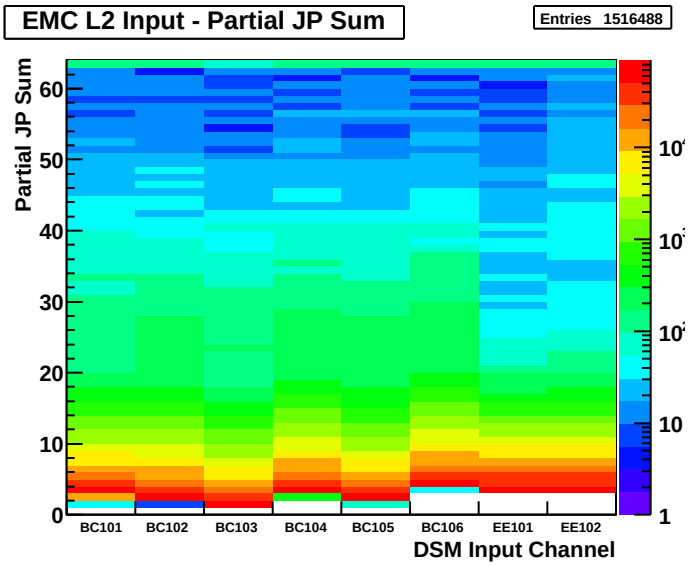

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

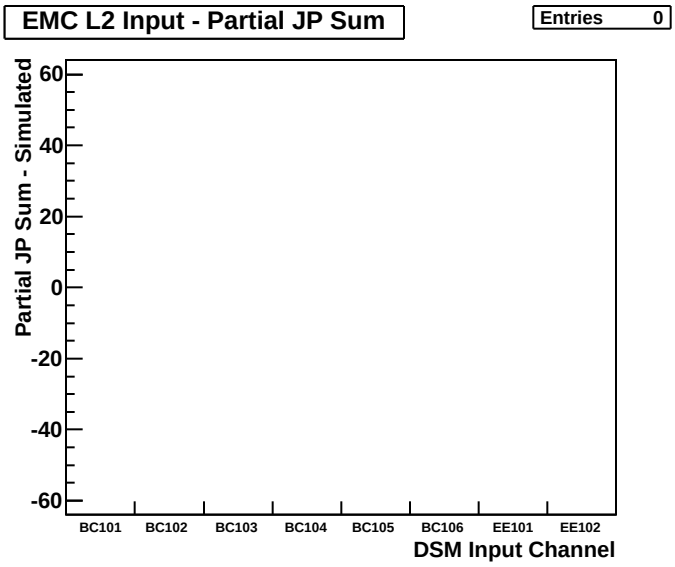

EMC L2 Input - JPY/JPB bits
Entries 1516488
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
346 247 200 224 272 307 125 200
889 688 841 766 867 885 298 469
1724 1330 1563 1477 1998 1822 268 409
186600 187296 186877 187094 186424 186547 188870 188483

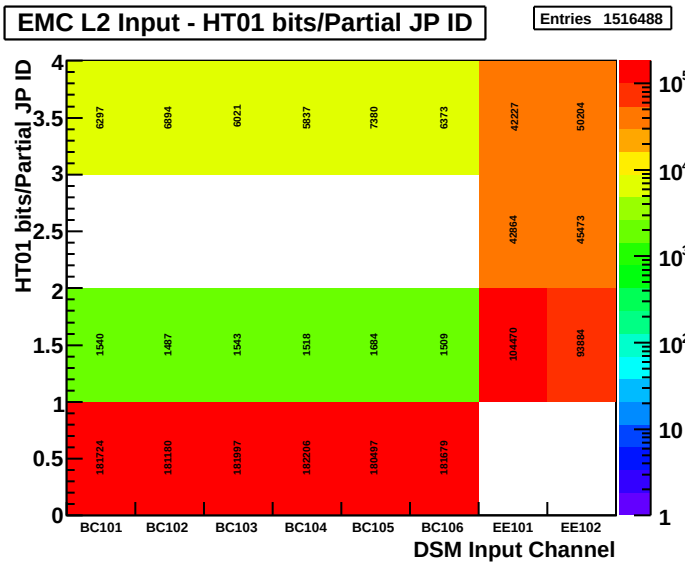

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

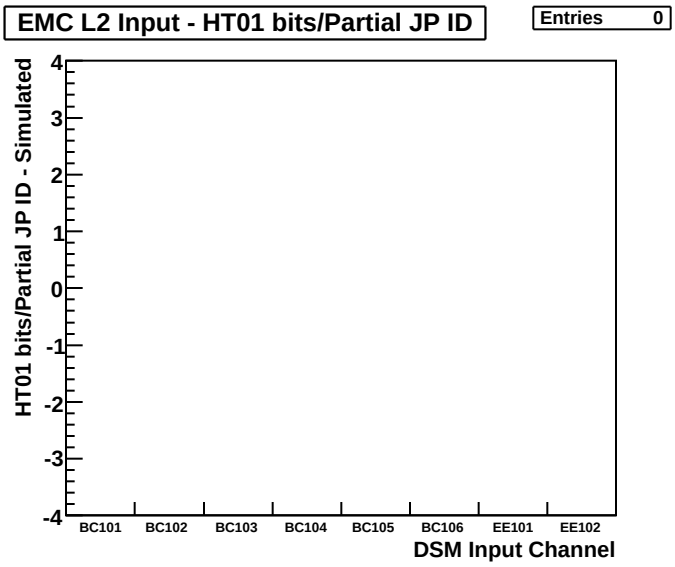

EMC L2 Input - JPZ/JPC bits
Entries 1516488
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
331 240 206 265 303 349 151 189
834 729 707 836 884 1036 375 460
1485 1396 1347 1614 2126 2060 330 448
186901 187196 187301 186846 186248 186117 188705 188464

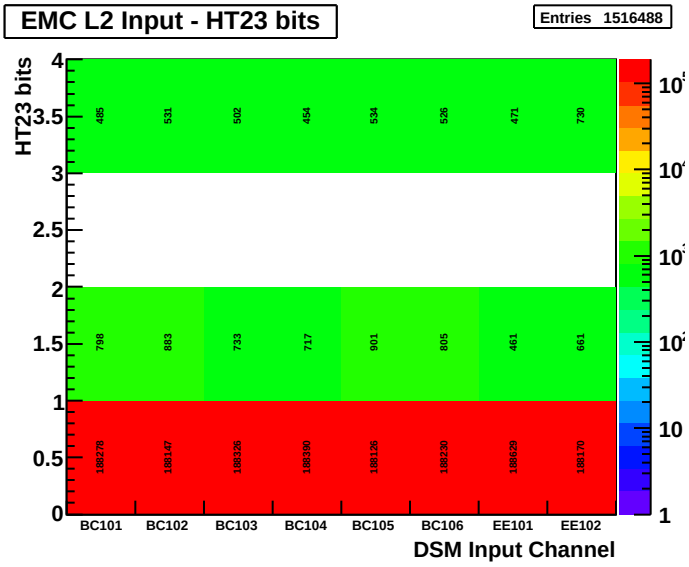

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

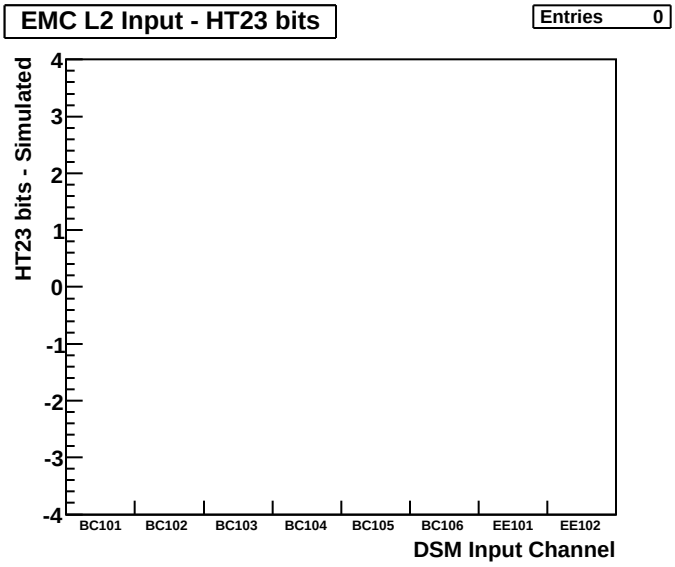

EMC L2 Input - Partial JP Sum
Entries 1516488
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

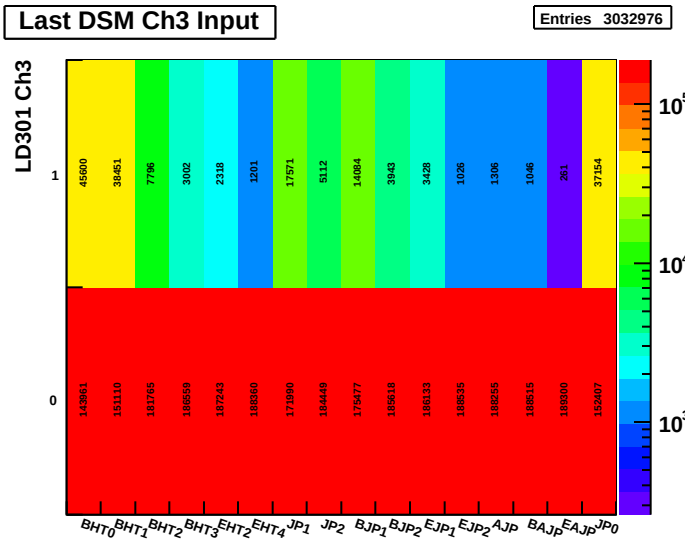

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

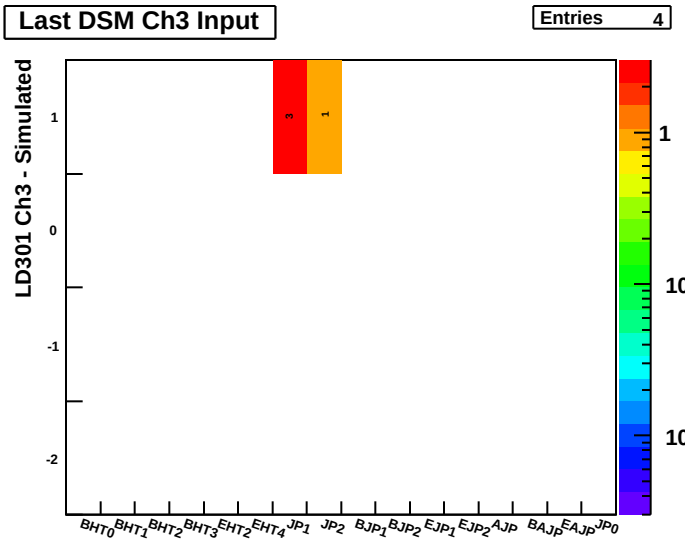

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1516488
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

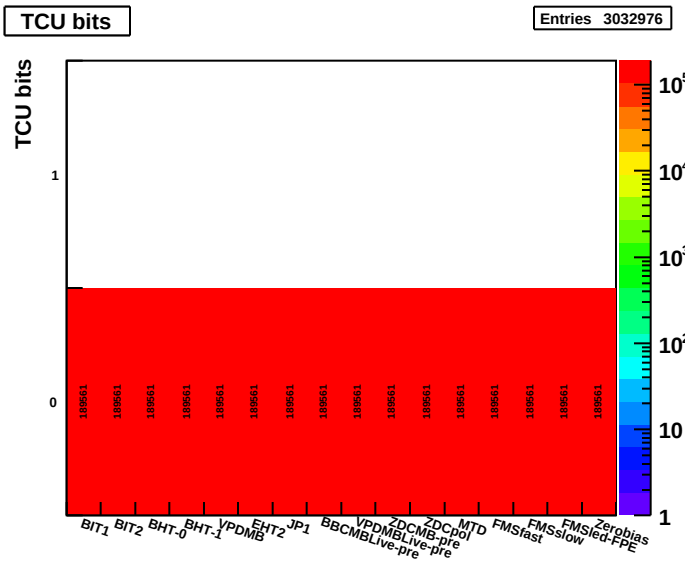

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

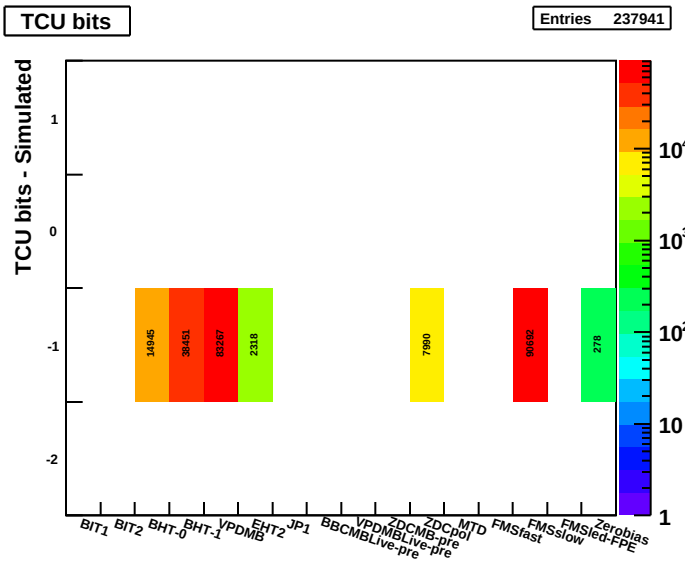

EMC L2 Input - HT23 bits
Entries 1516488
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

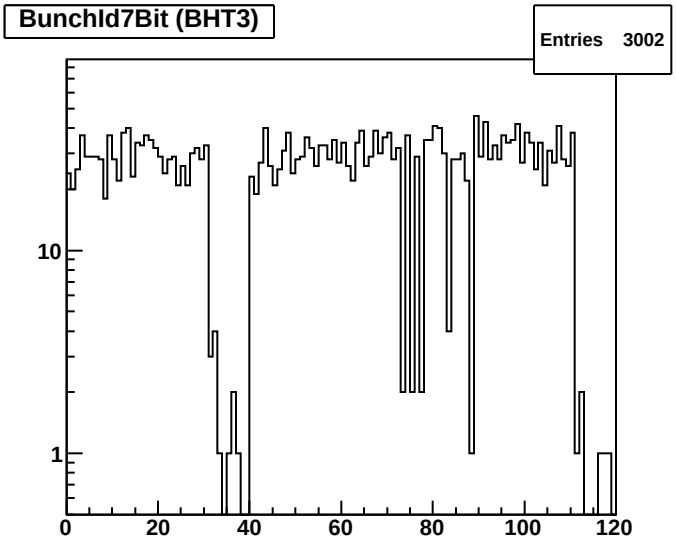

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

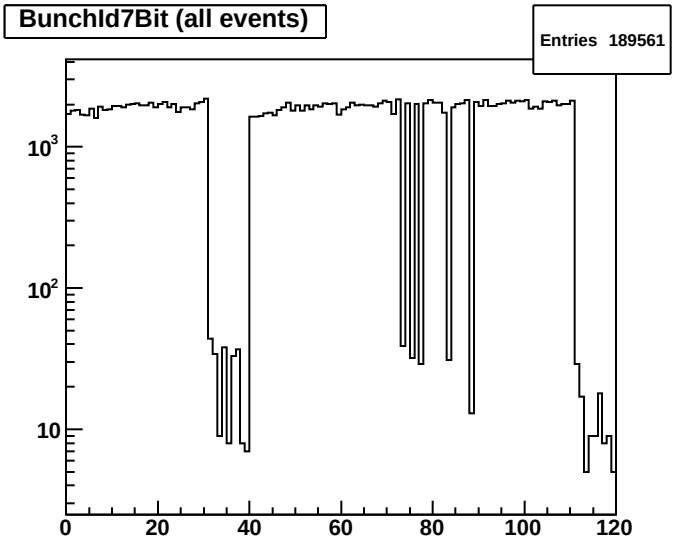

Last DSM Ch3 Input
Entries 3032976
LD301 Ch3
45600 38451 7796 3002 2318 1201 17571 5112 14084 3943 3428 1026 1306 1046 261 37154
143861 151110 181765 186559 187243 188360 171990 184449 175477 186518 186133 188535 188255 188515 188300 152407
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

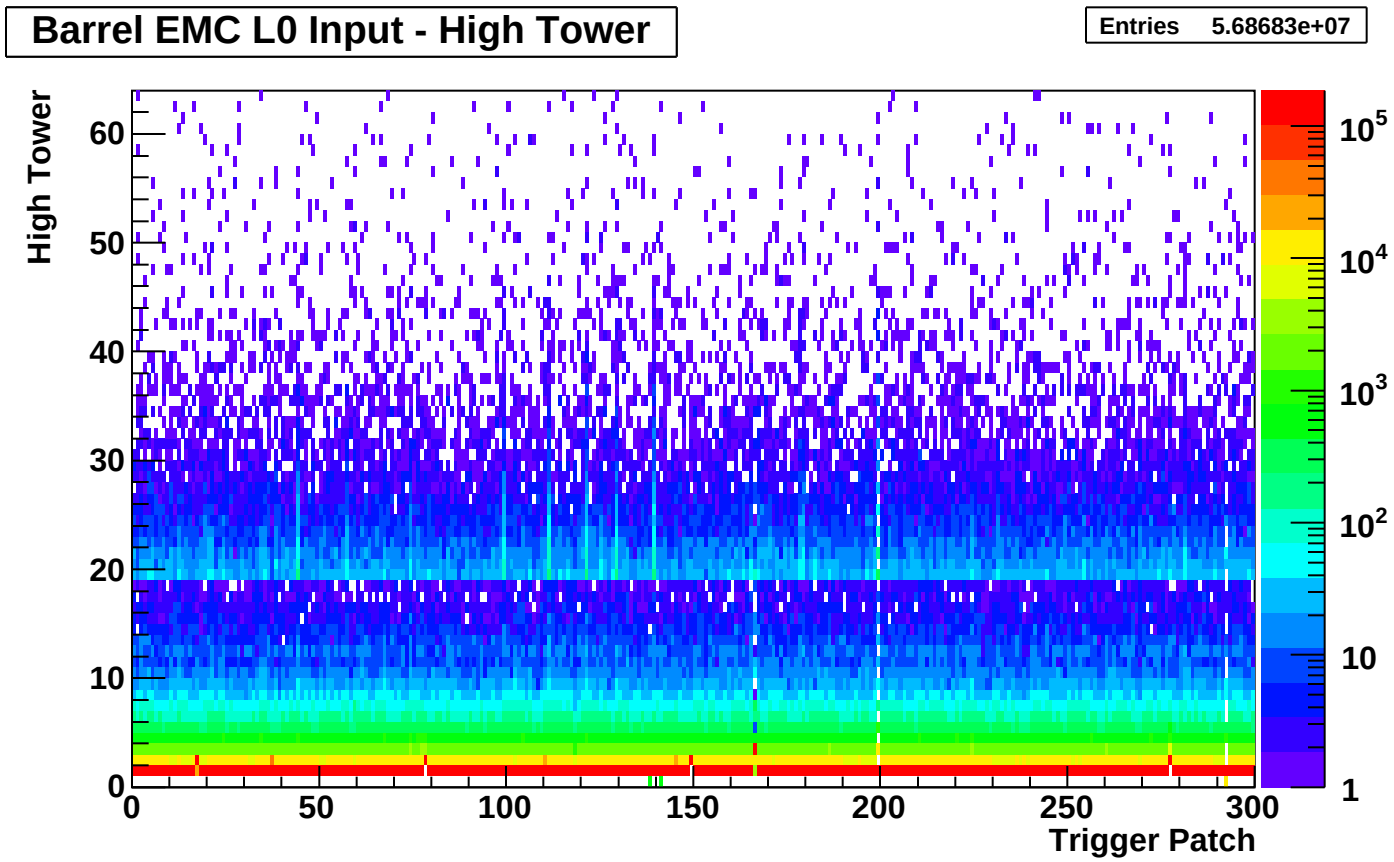

Last DSM Ch3 Input
Entries 4
LD301 Ch3 - Simulated
3 1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

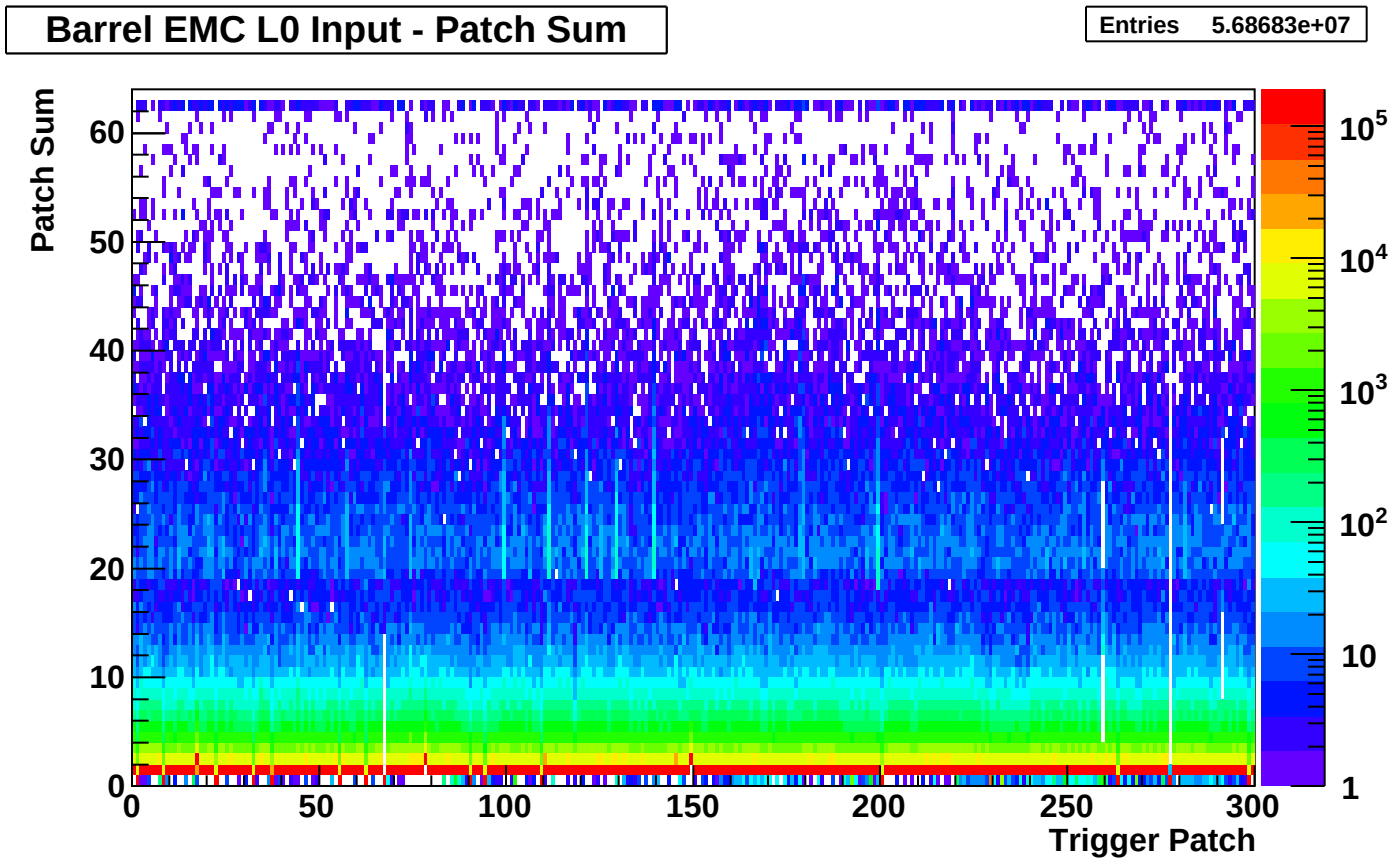

TCU bits
Entries 3032976
TCU bits
189561 189561 189561 189561 189561 189561 189561 189561 189561 189561 189561 189561 189561 189561 189561 189561
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

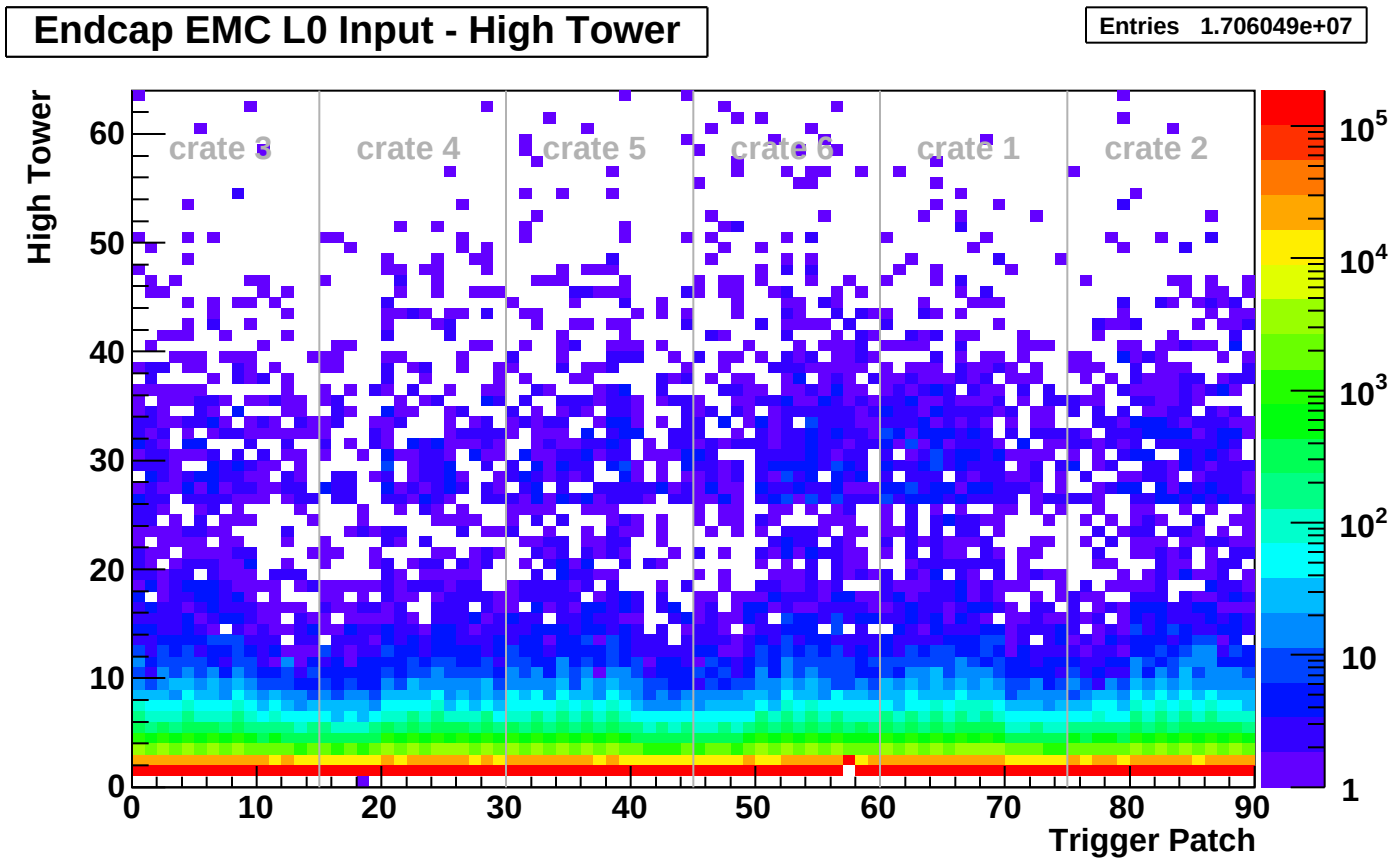

TCU bits
Entries 237941
TCU bits - Simulated
14945 38451 83267 2318 7990 90692 278
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

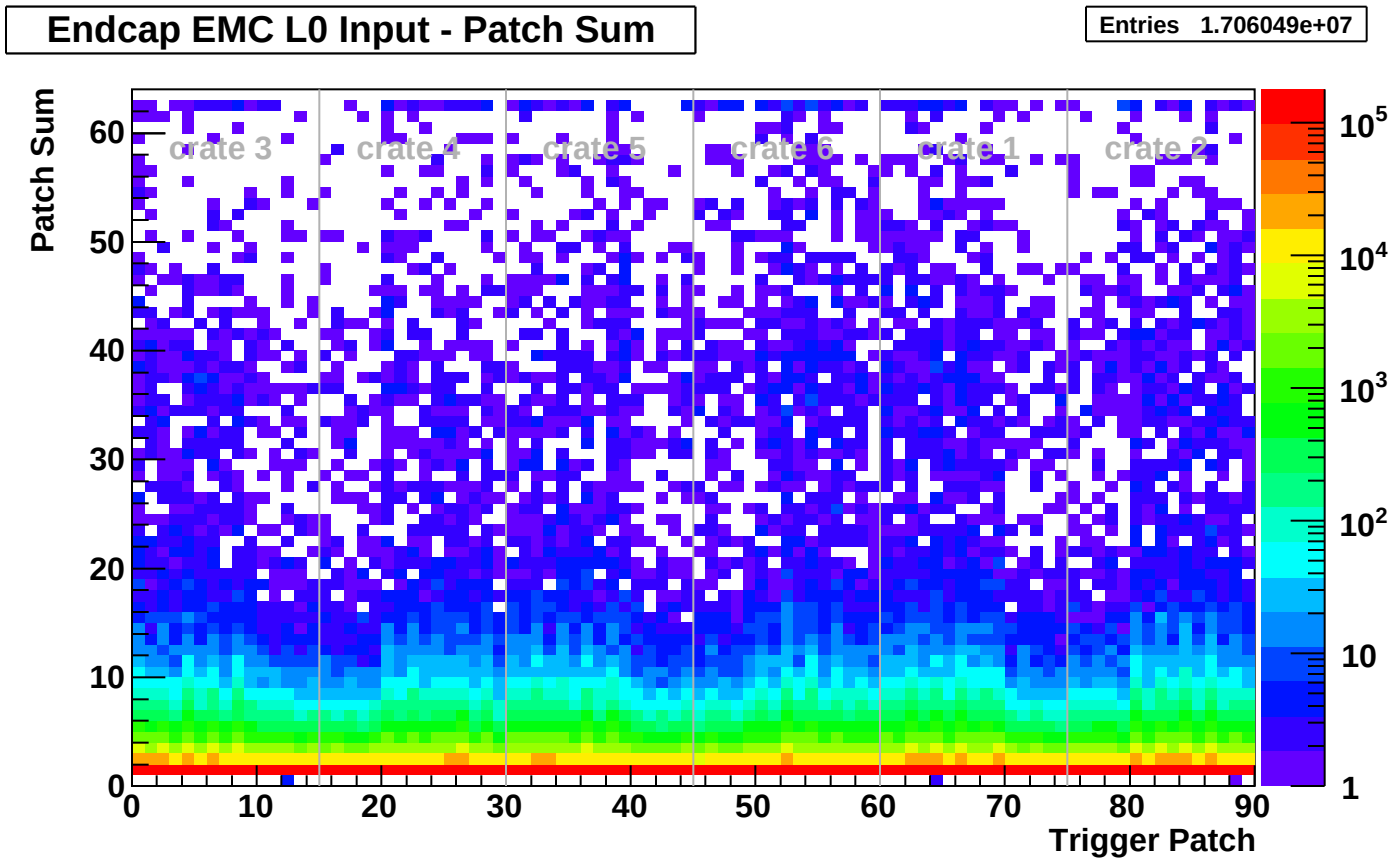

BunchId7Bit (BHT3)
Entries 3002

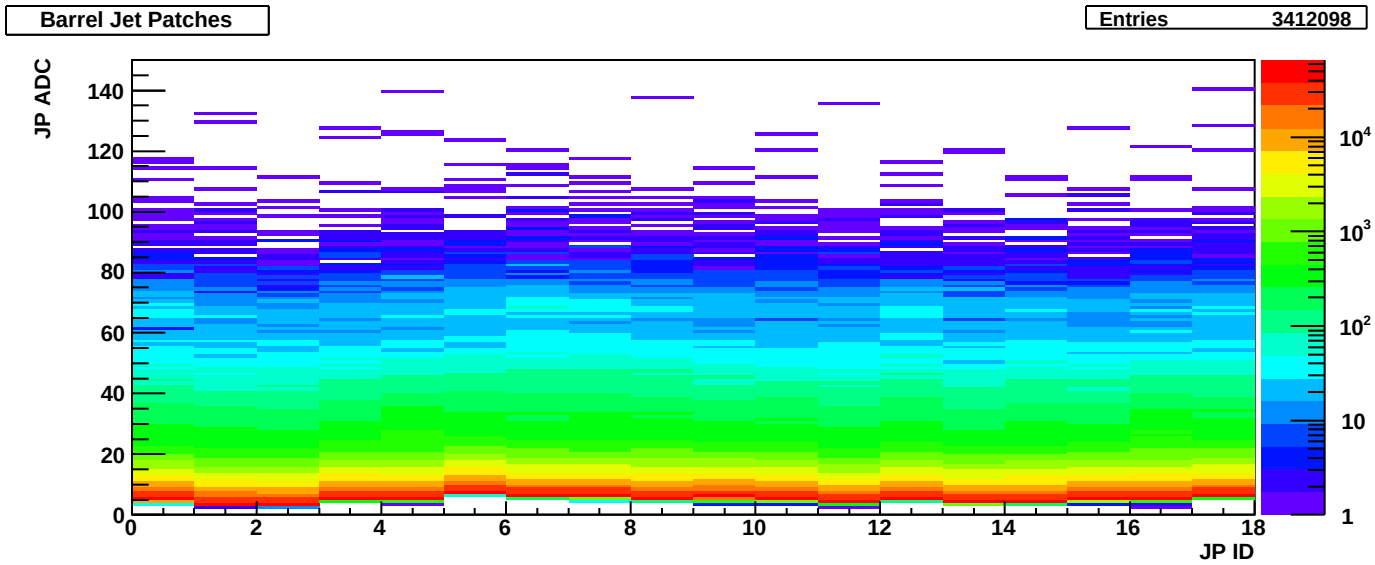

BunchId7Bit (all events)
Entries 189561

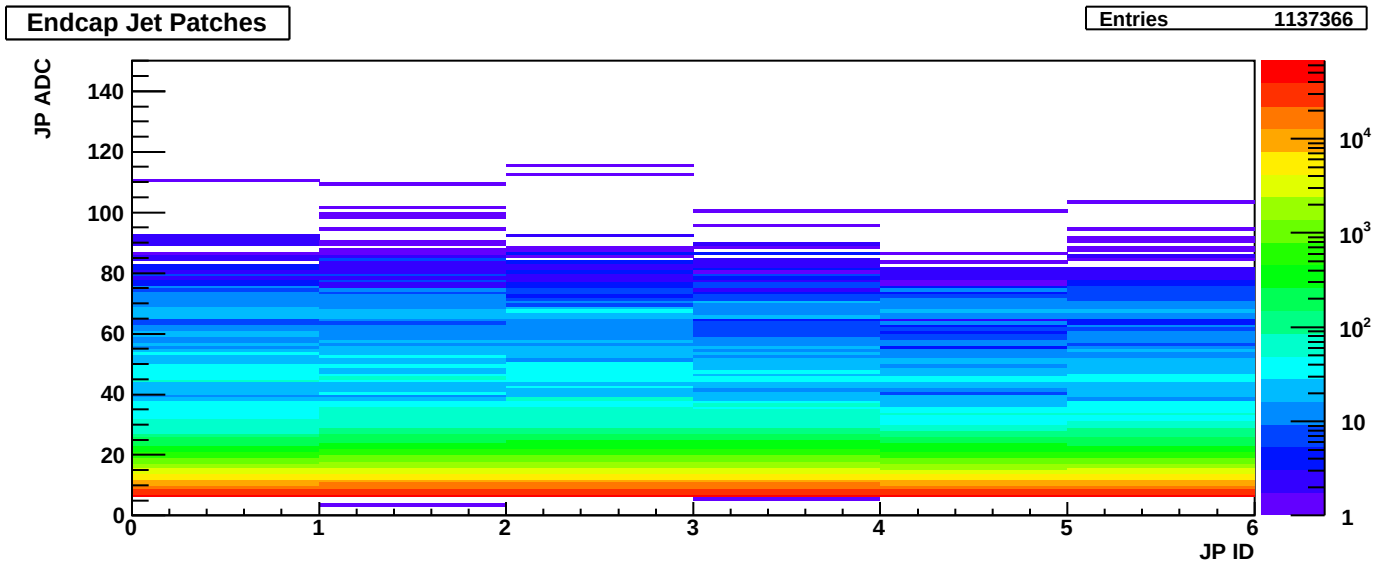

Barrel EMC L0 Input - High Tower
Entries 5.68683e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

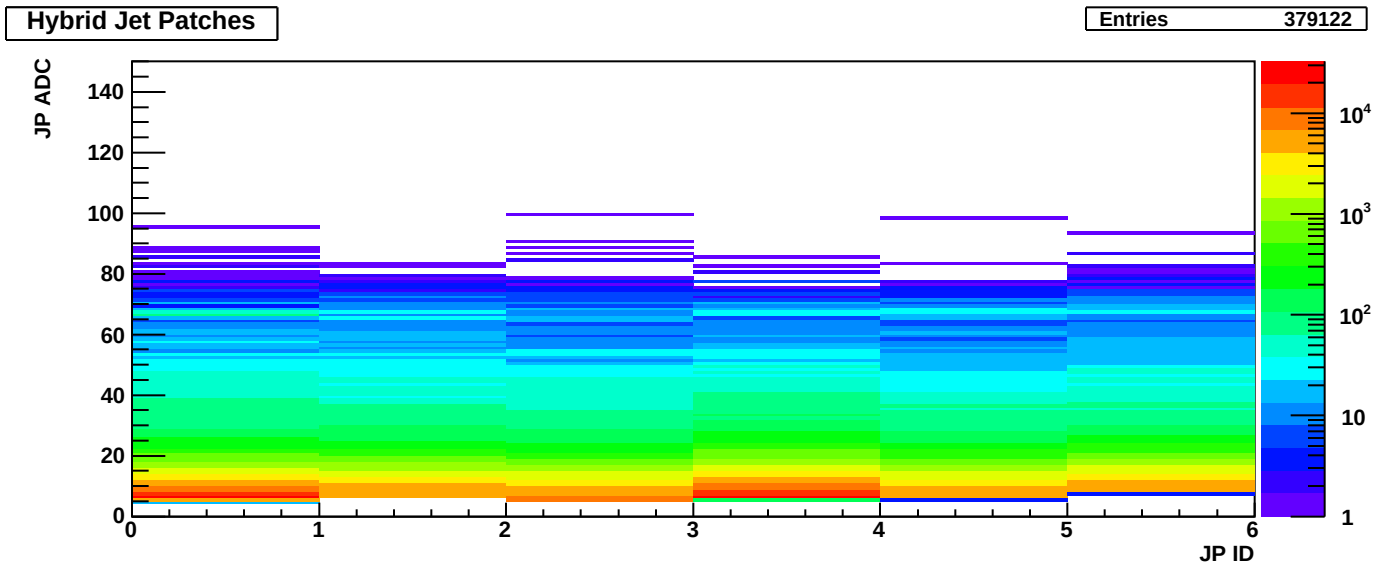

Barrel EMC L0 Input - Patch Sum
Entries 5.68683e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

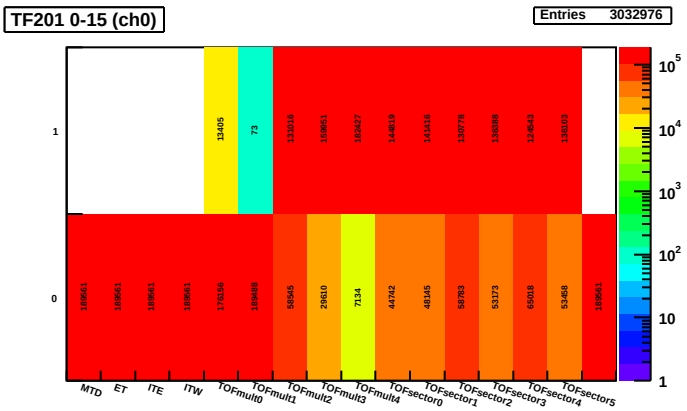

Endcap EMC L0 Input - High Tower
Entries 1.706049e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

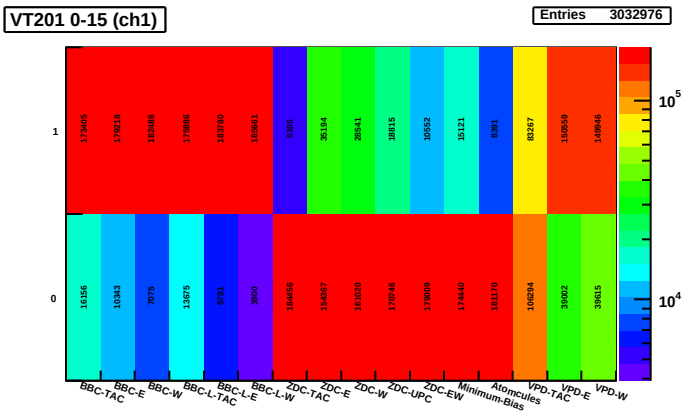

Endcap EMC L0 Input - Patch Sum
Entries 1.706049e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

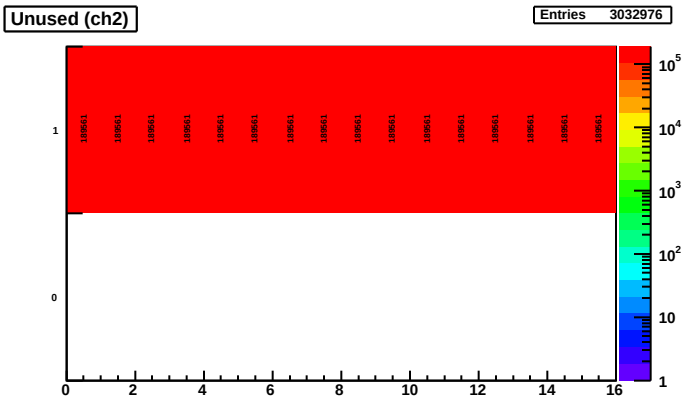

Barrel Jet Patches
Entries 3412098
JP ADC
JP ID

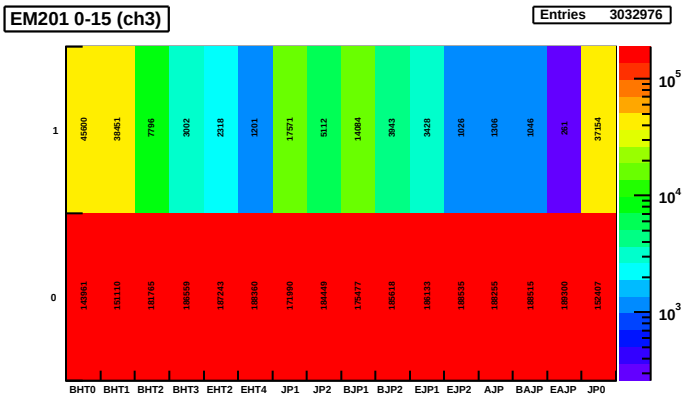

Endcap Jet Patches
Entries 1137366
JP ADC
JP ID

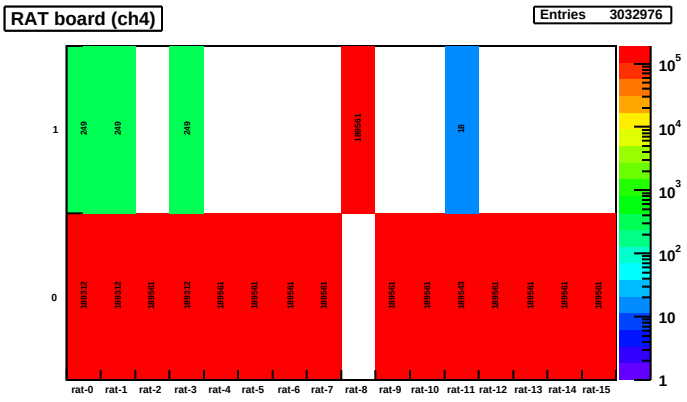

Hybrid Jet Patches
Entries 379122
JP ADC
JP ID

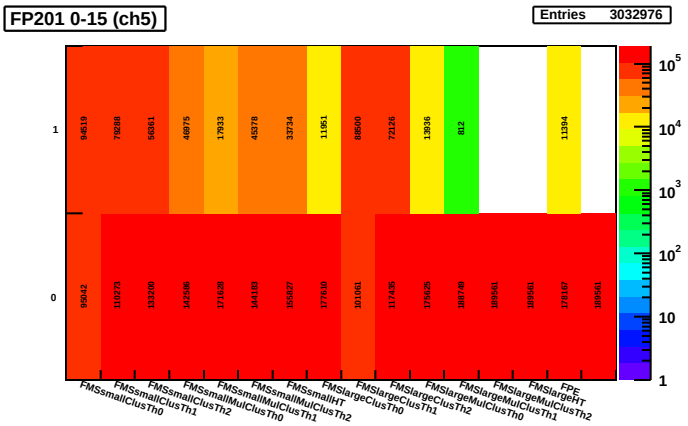

TF201 0-15 (ch0)
Entries 3032976
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

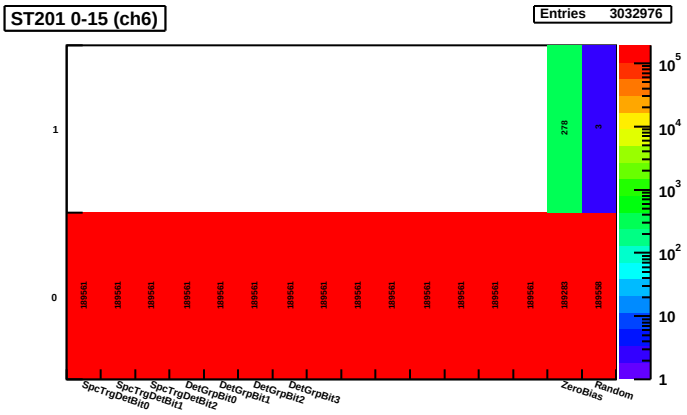

VT201 0-15 (ch1)
Entries 3032976
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

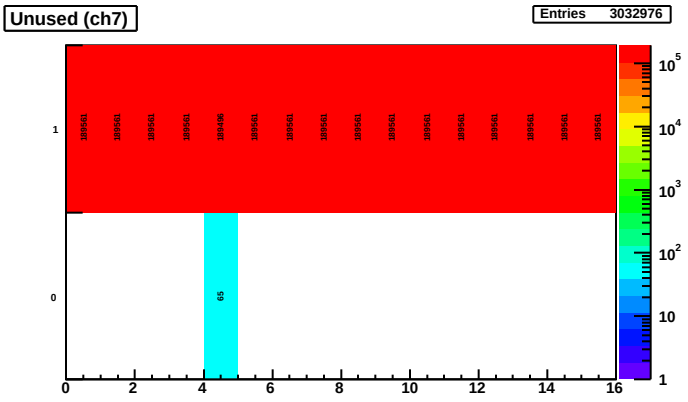

Unused (ch2)
Entries 3032976

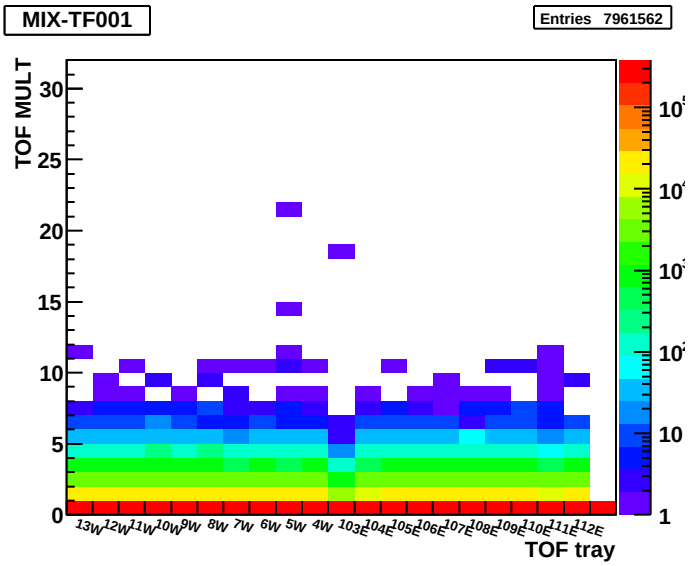

EM201 0-15 (ch3)
Entries 3032976
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

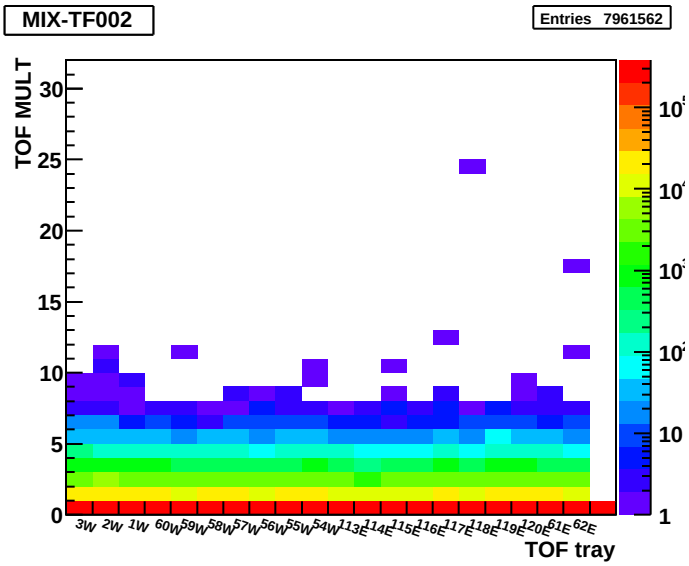

RAT board (ch4)
Entries 3032976
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

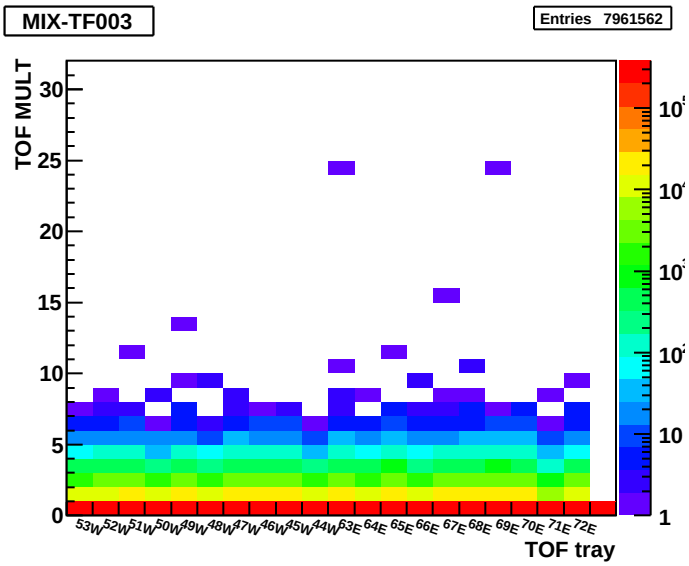

FP201 0-15 (ch5)
Entries 3032976
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

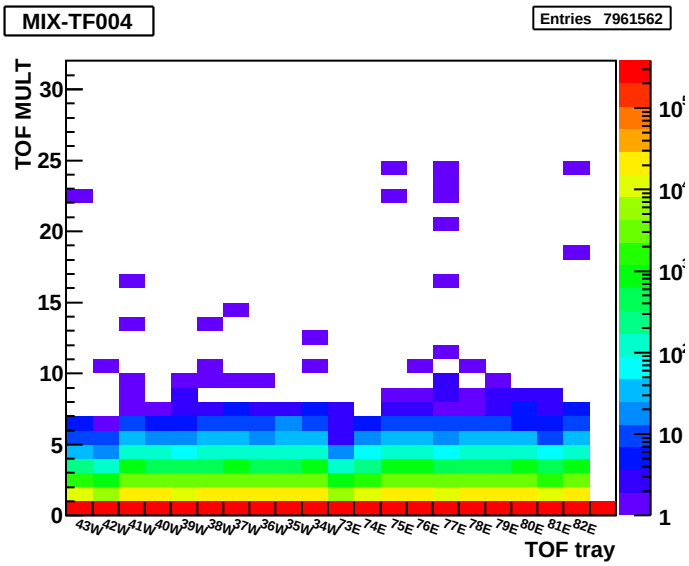

ST201 0-15 (ch6)
Entries 3032976
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

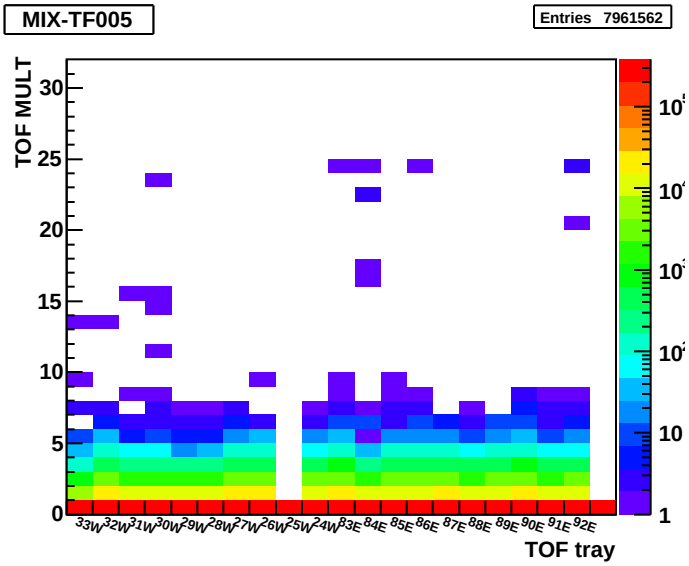

Unused (ch7)
Entries 3032976

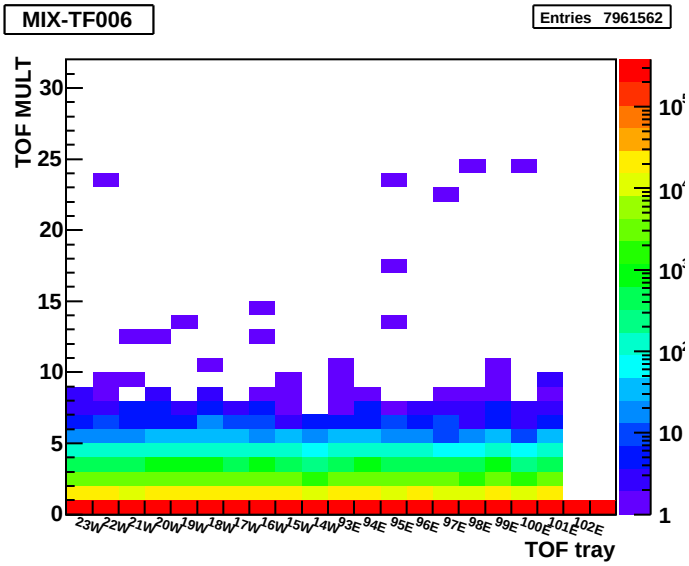

MIX-TF001
Entries 7961562
TOF MULT
TOF tray

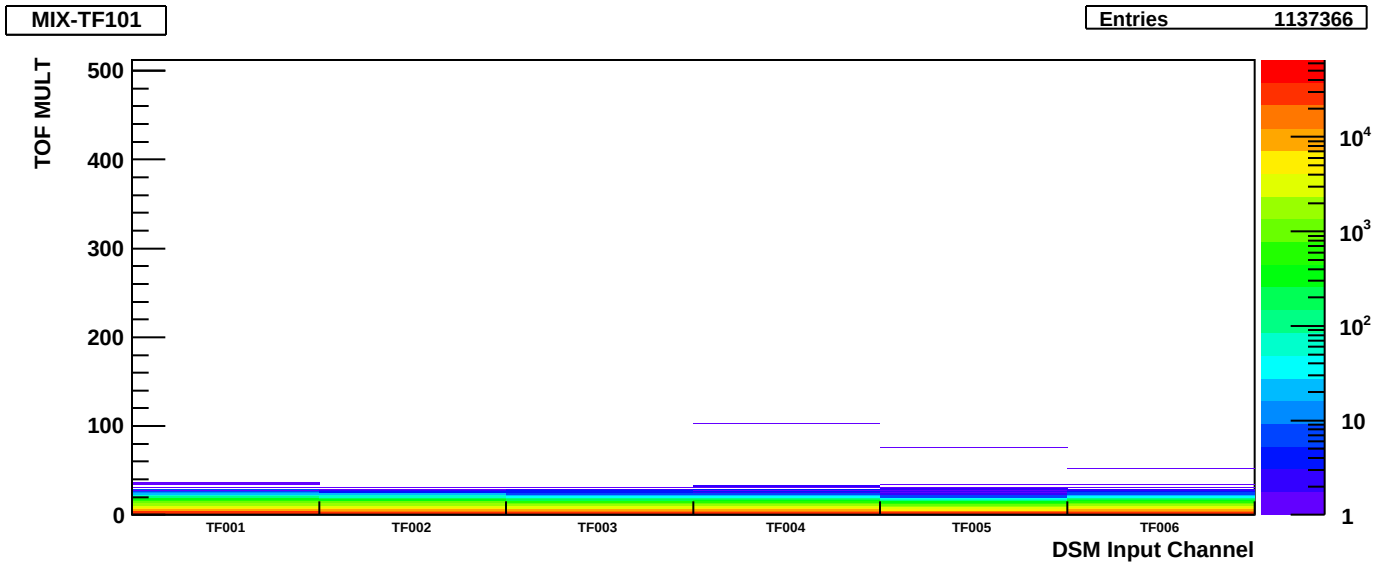

MIX-TF002
Entries 7961562
TOF MULT
TOF tray

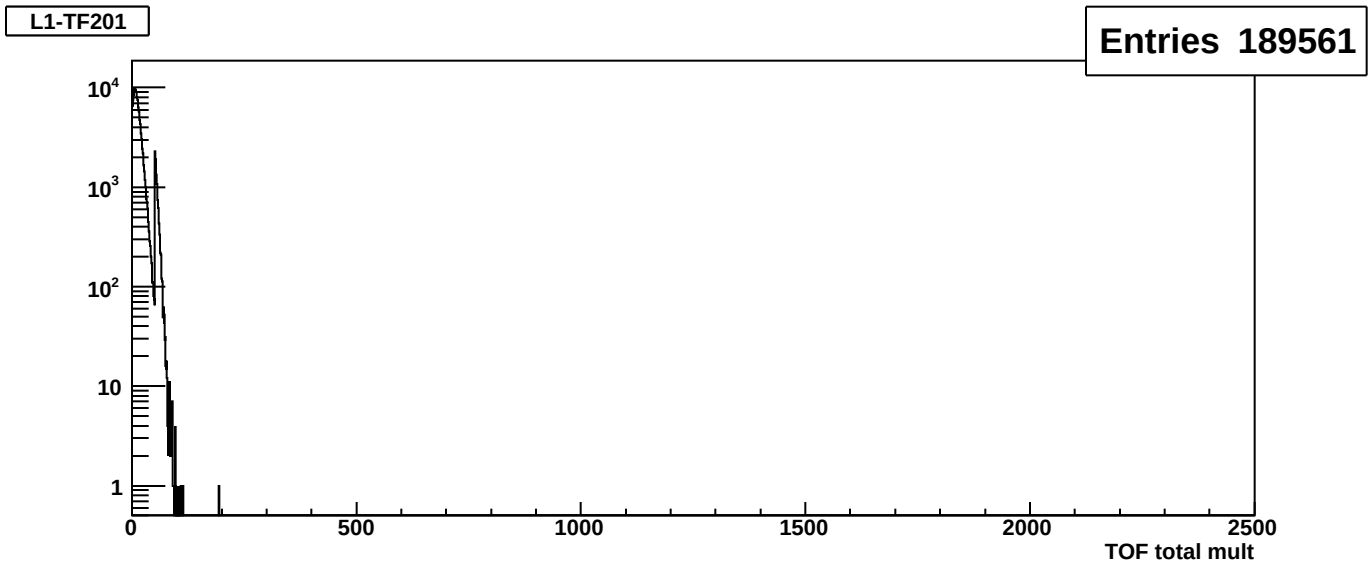

MIX-TF003
Entries 7961562
TOF MULT
TOF tray

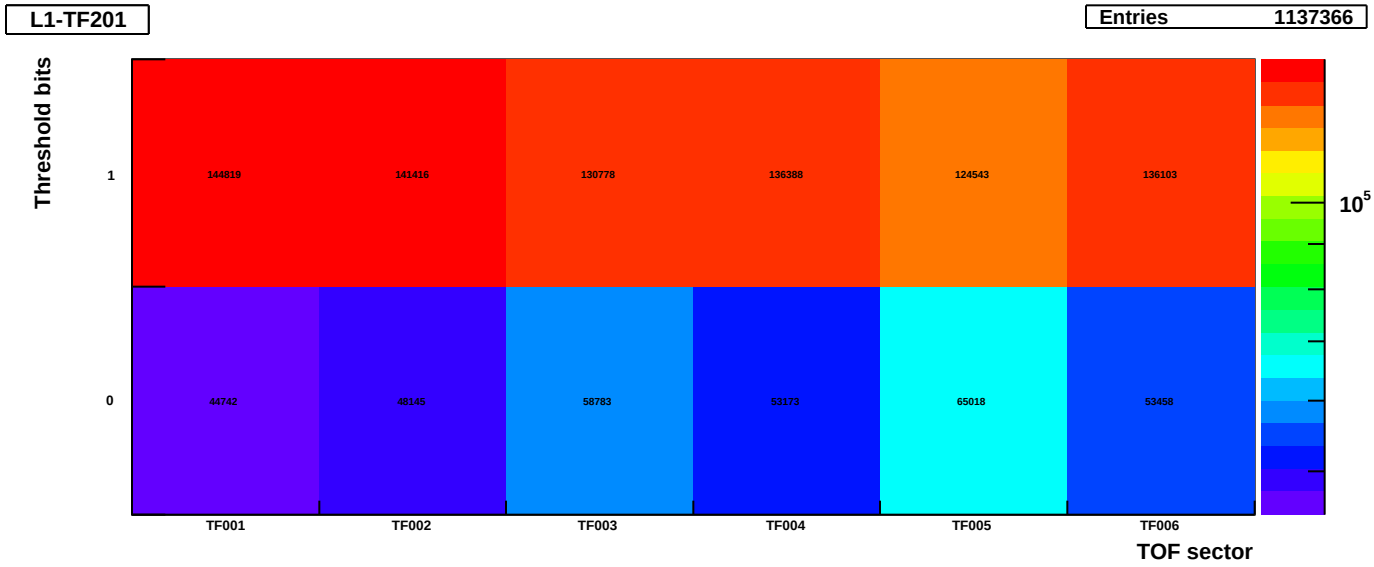

MIX-TF004
Entries 7961562
TOF MULT
TOF tray

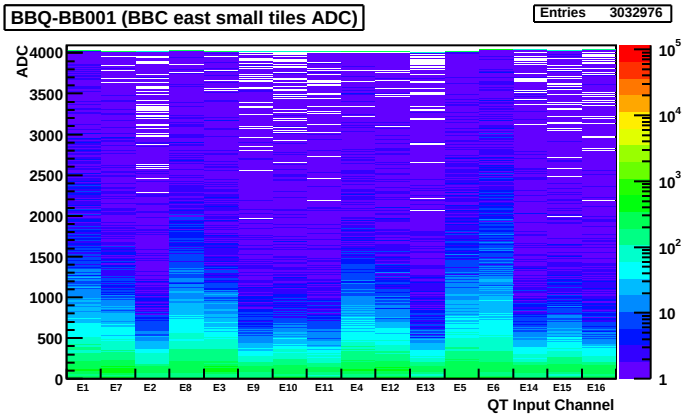

MIX-TF005
Entries 7961562
TOF MULT
TOF tray

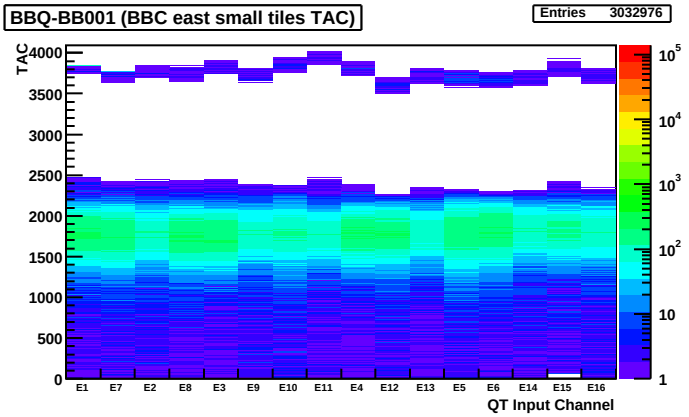

MIX-TF006
Entries 7961562
TOF MULT
TOF tray

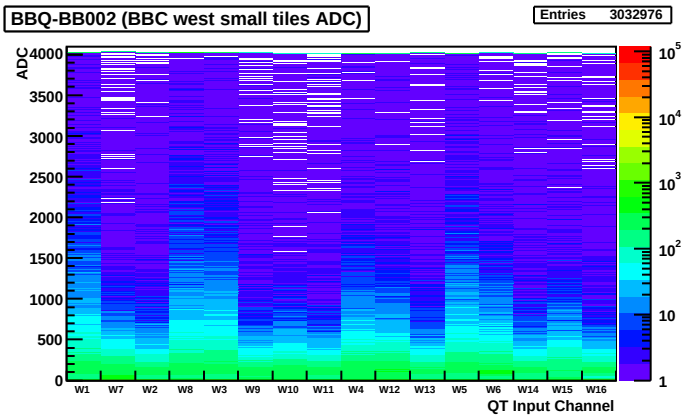

MIX-TF101
Entries 1137366
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

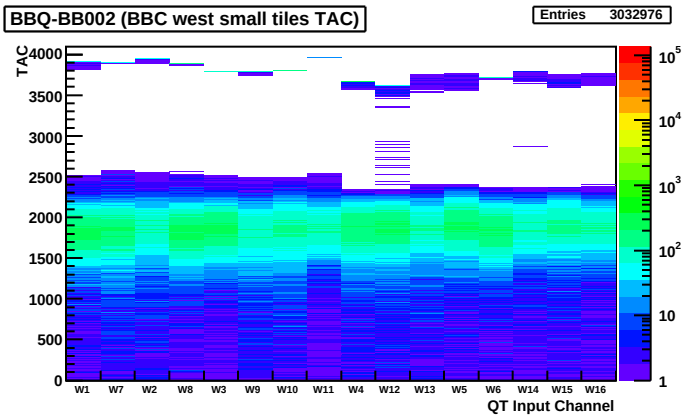

L1-TF201
Entries 189561
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

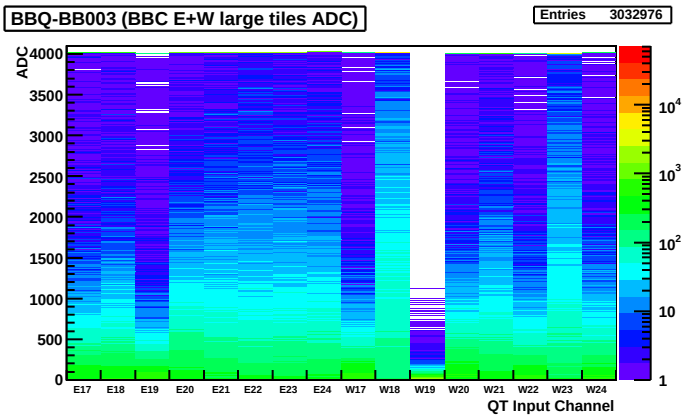

L1-TF201
Entries 1137366
Threshold bits
1
0
144819
141416
130778
136388
124543
136103
44742
48145
58783
53173
65018
53458
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

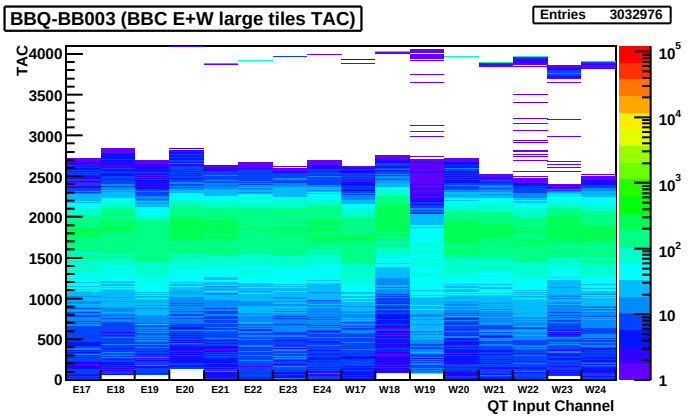

BBQ-BB001 (BBC east small tiles ADC)
Entries 3032976
ADC
QT Input Channel

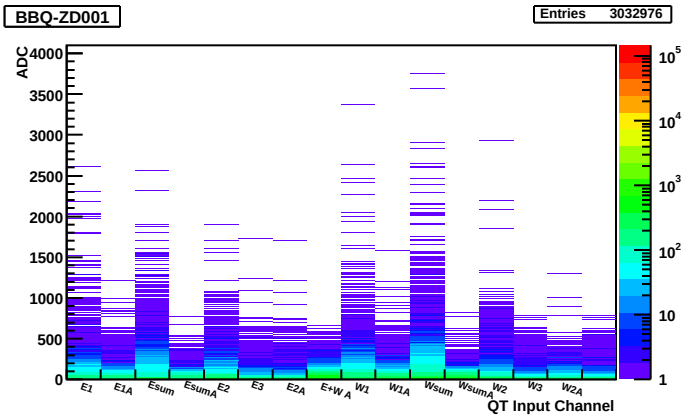

BBQ-BB001 (BBC east small tiles TAC)
Entries 3032976
TAC
QT Input Channel

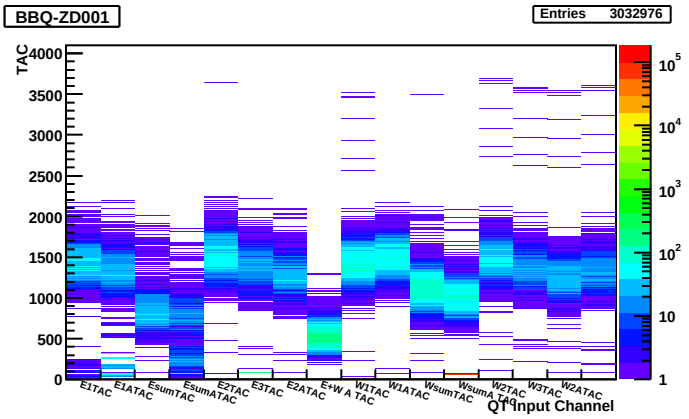

BBQ-BB002 (BBC west small tiles ADC)
Entries 3032976
ADC
QT Input Channel

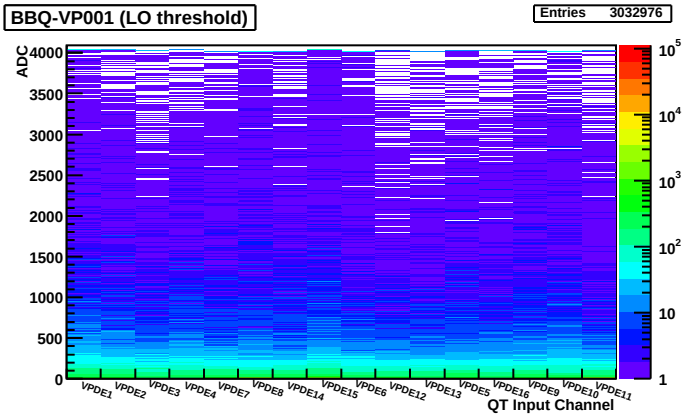

BBQ-BB002 (BBC west small tiles TAC)
Entries 3032976
TAC
QT Input Channel

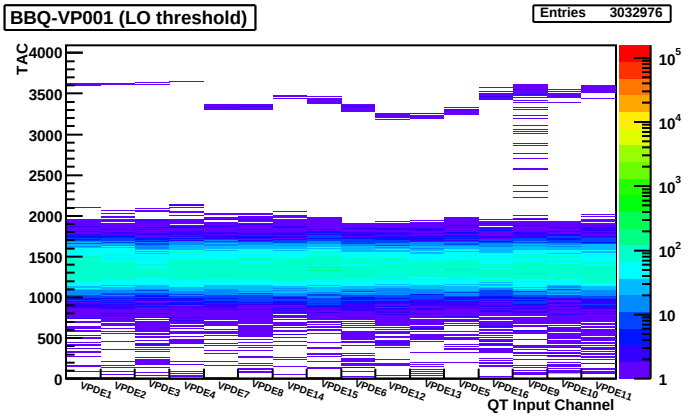

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3032976
ADC
QT Input Channel

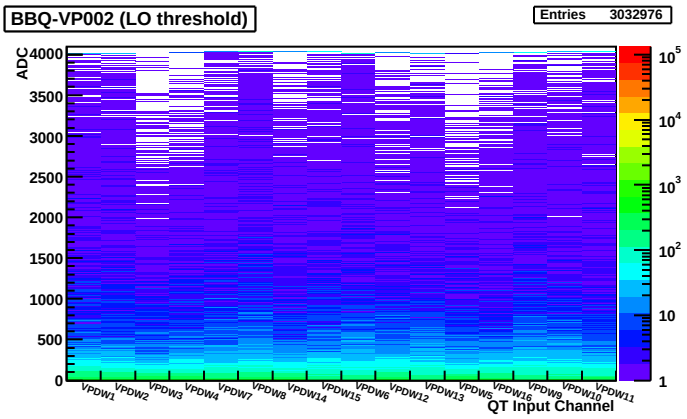

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3032976
TAC
QT Input Channel

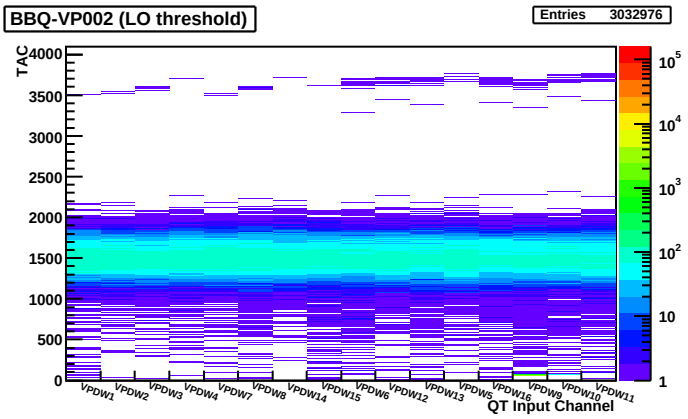

BBQ-ZD001
Entries 3032976
ADC
QT Input Channel

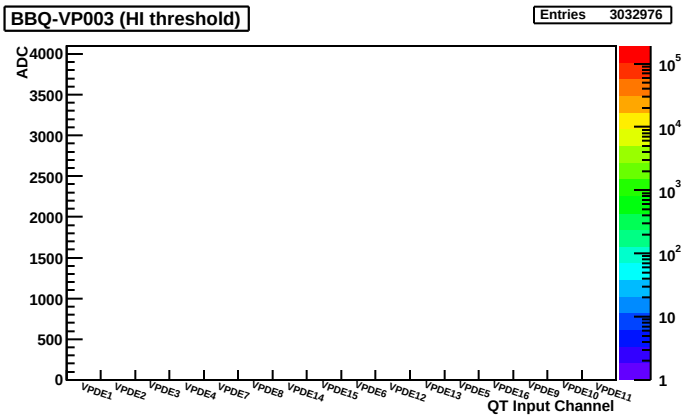

BBQ-ZD001
Entries 3032976
TAC
QT Input Channel

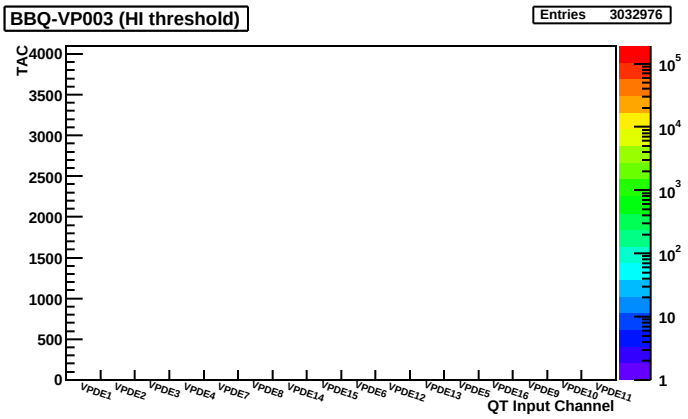

BBQ-VP001 (LO threshold)
Entries 3032976
ADC
QT Input Channel

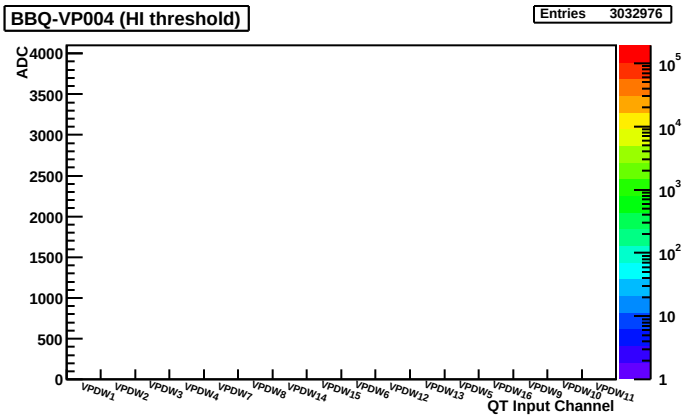

BBQ-VP001 (LO threshold)
Entries 3032976
TAC
QT Input Channel

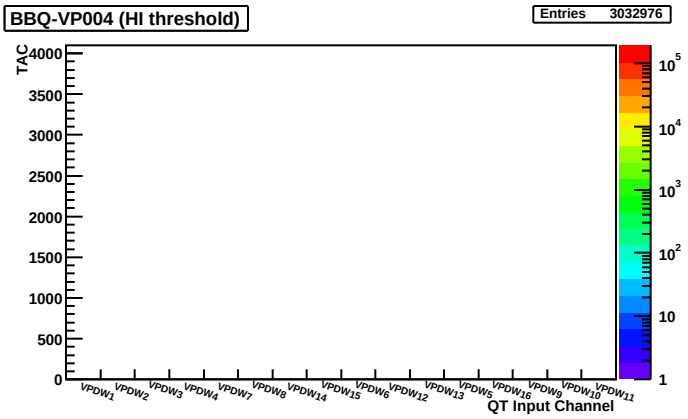

BBQ-VP002 (LO threshold)
Entries 3032976
ADC
QT Input Channel

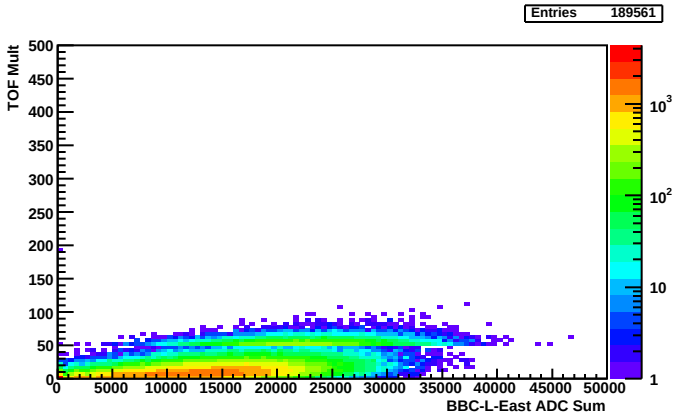

BBQ-VP002 (LO threshold)
Entries 3032976
TAC
QT Input Channel

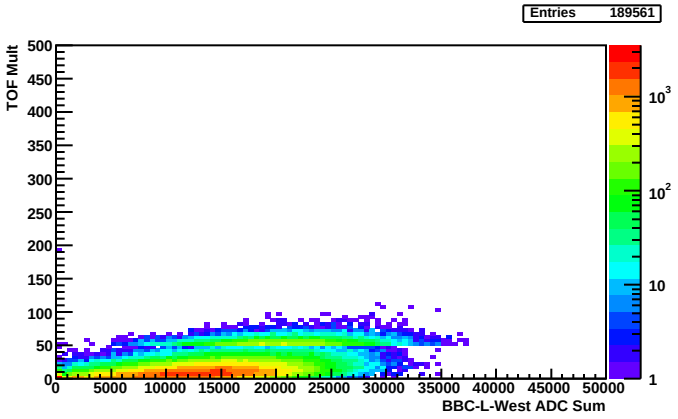

BBQ-VP003 (HI threshold)
Entries 3032976
ADC
QT Input Channel

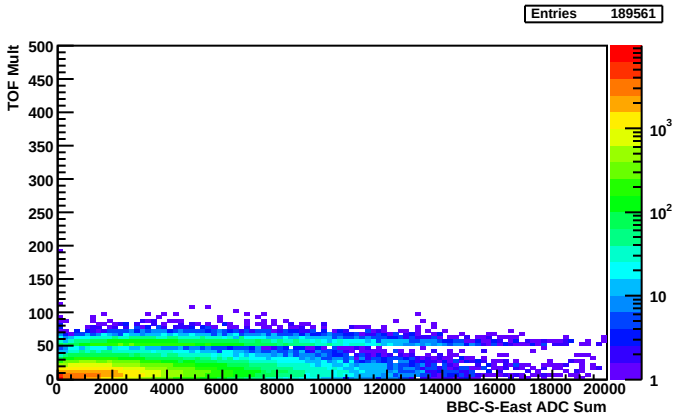

BBQ-VP003 (HI threshold)
Entries 3032976
TAC
QT Input Channel

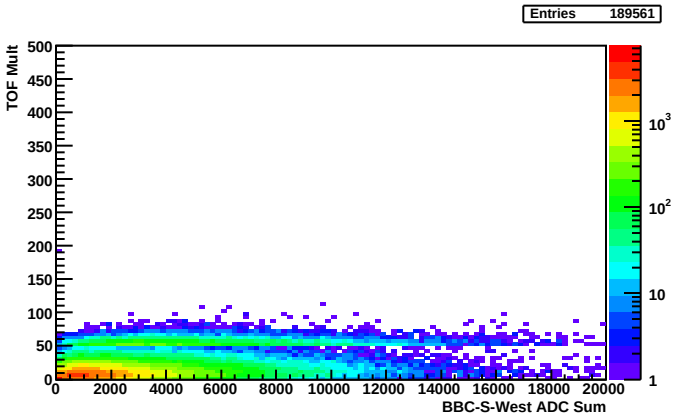

BBQ-VP004 (HI threshold)
Entries 3032976
ADC
QT Input Channel

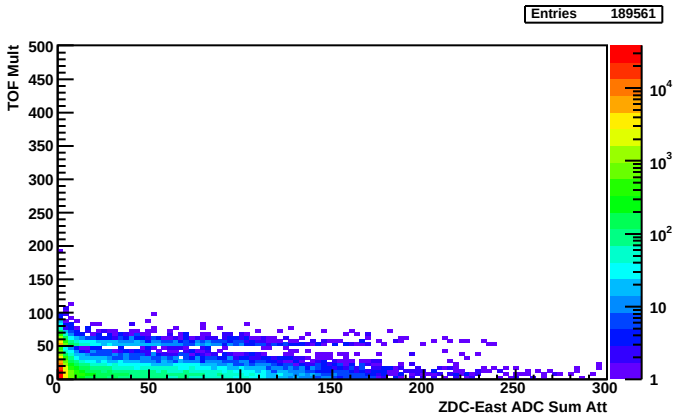

BBQ-VP004 (HI threshold)
Entries 3032976
TAC
QT Input Channel

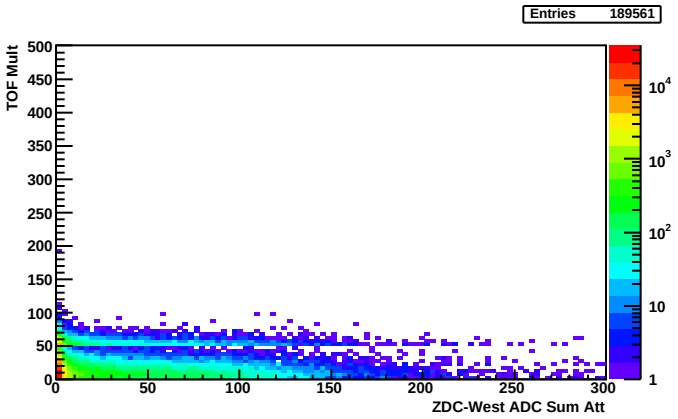

Entries 189561
TOF Mult
BBC-L-East ADC Sum

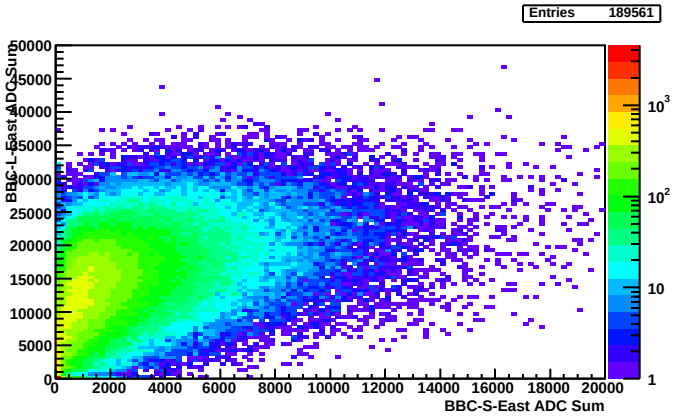

Entries 189561
TOF Mult
BBC-L-West ADC Sum

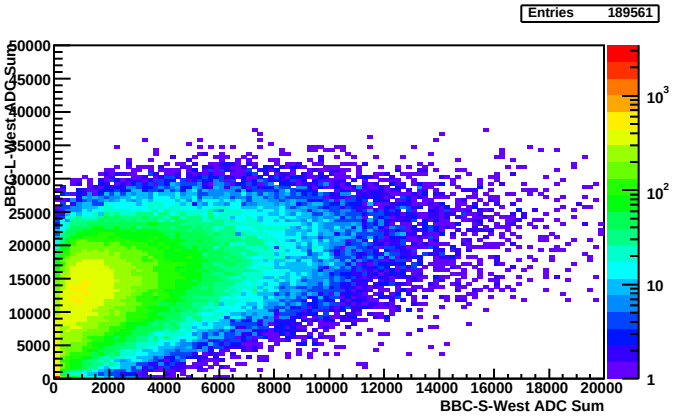

Entries 189561
TOF Mult
BBC-S-East ADC Sum

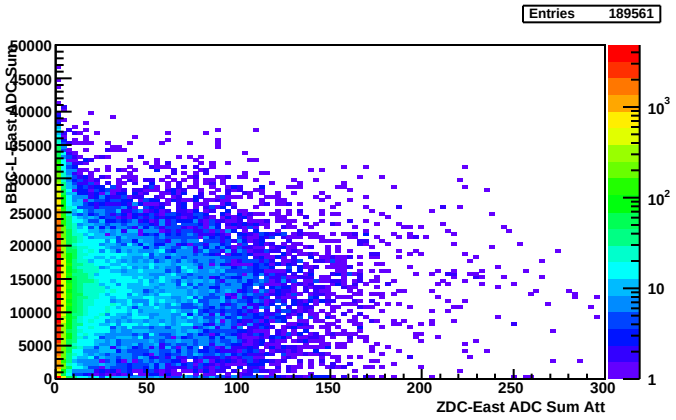

Entries 189561
TOF Mult
BBC-S-West ADC Sum

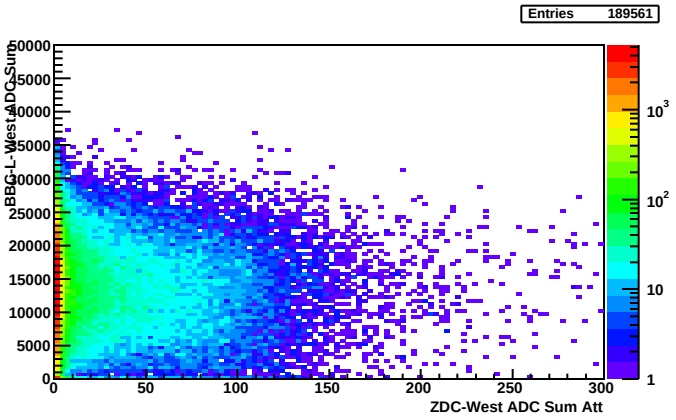

Entries 189561
TOF Mult
ZDC-East ADC Sum Att

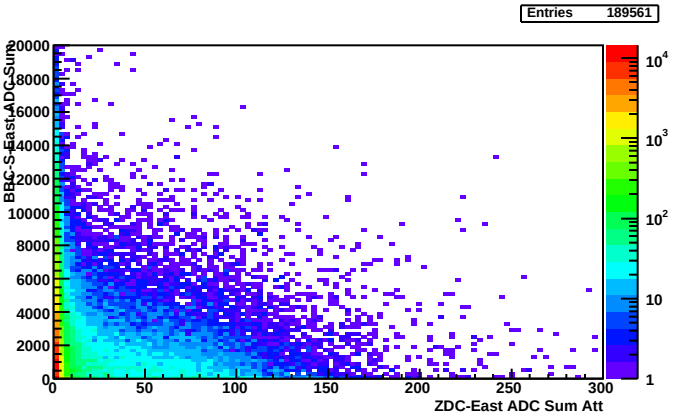

Entries 189561
TOF Mult
ZDC-West ADC Sum Att

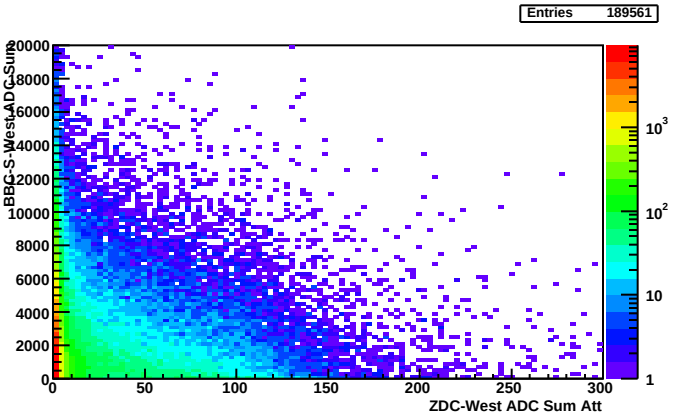

Entries 189561
BBC-L-East ADC Sum
BBC-S-East ADC Sum

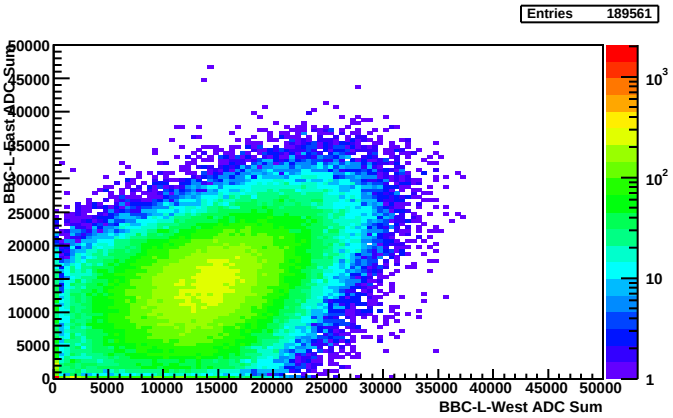

Entries 189561
BBC-L-West ADC Sum
BBC-S-West ADC Sum

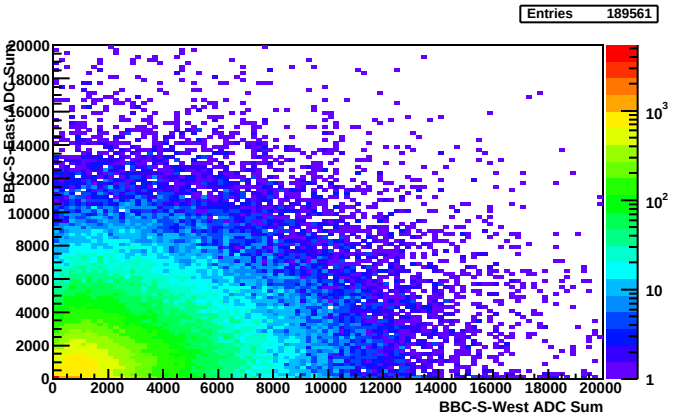

Entries 189561
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

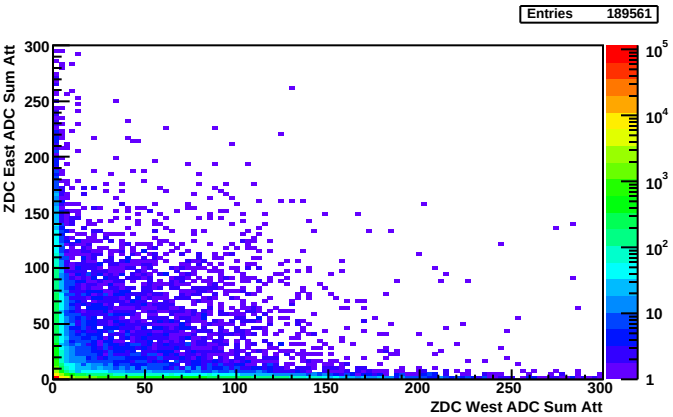

Entries 189561
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

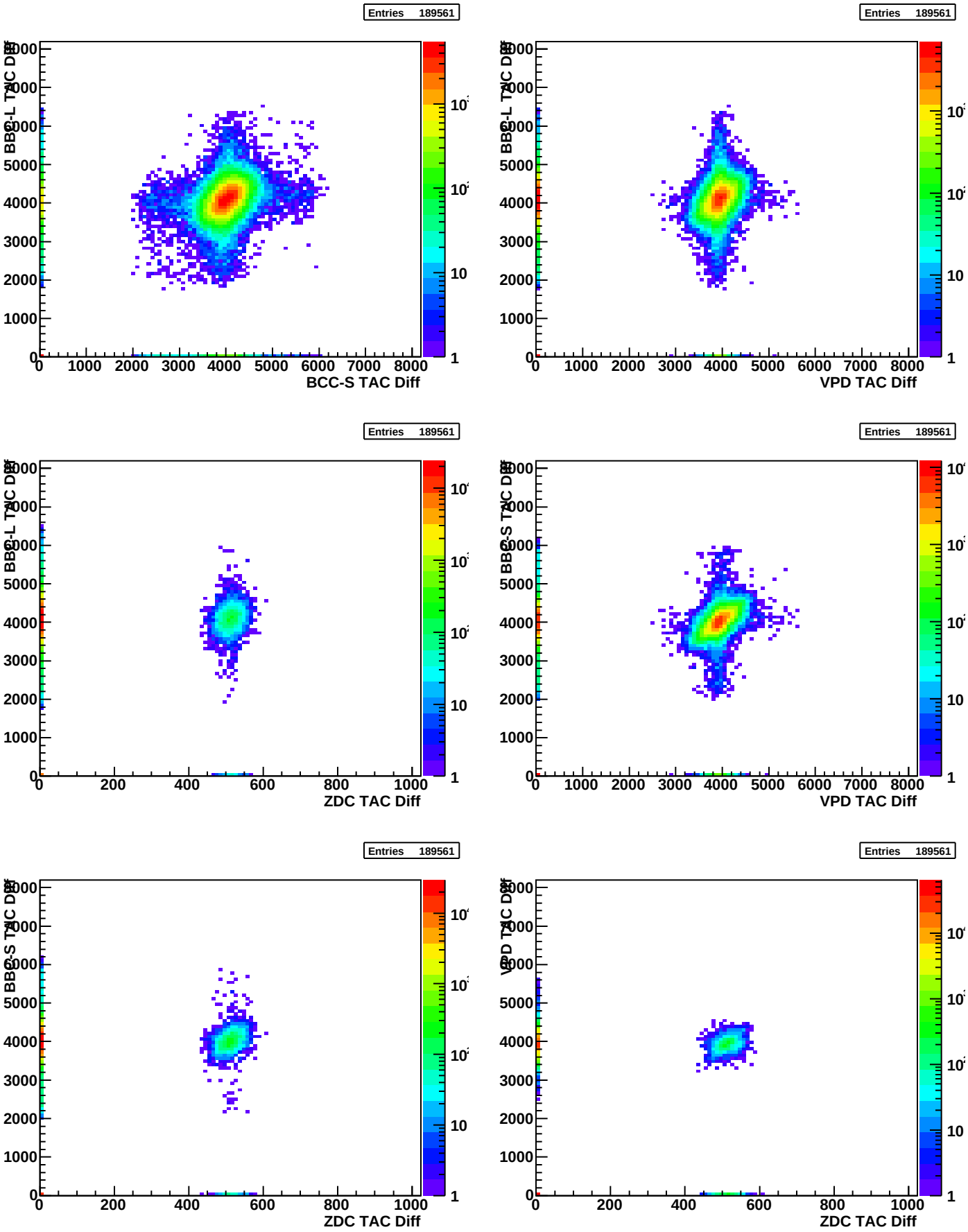

Entries 189561
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

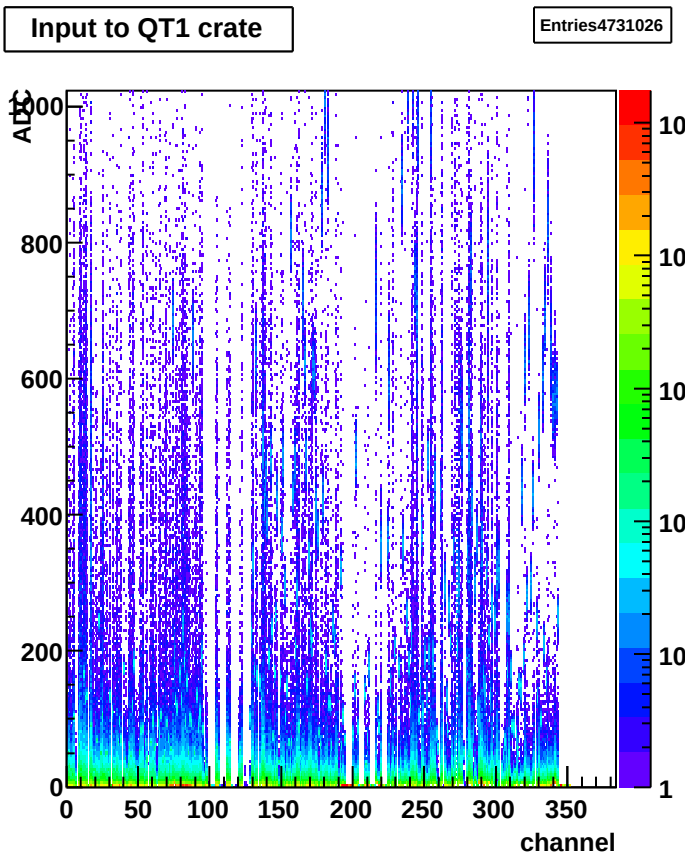

Entries 189561
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

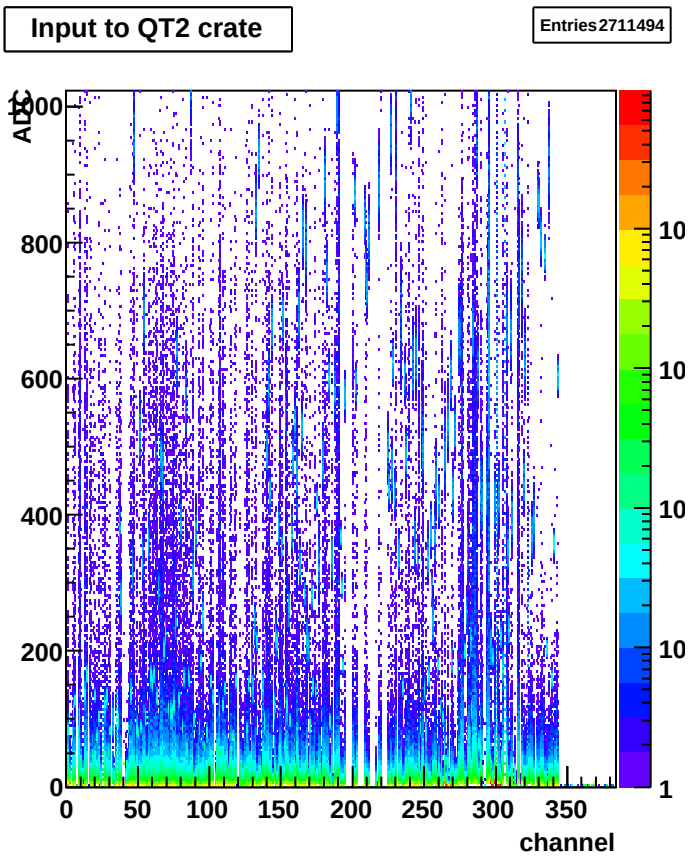

Entries 189561
BBC-L-East ADC Sum
BBC-L-West ADC Sum

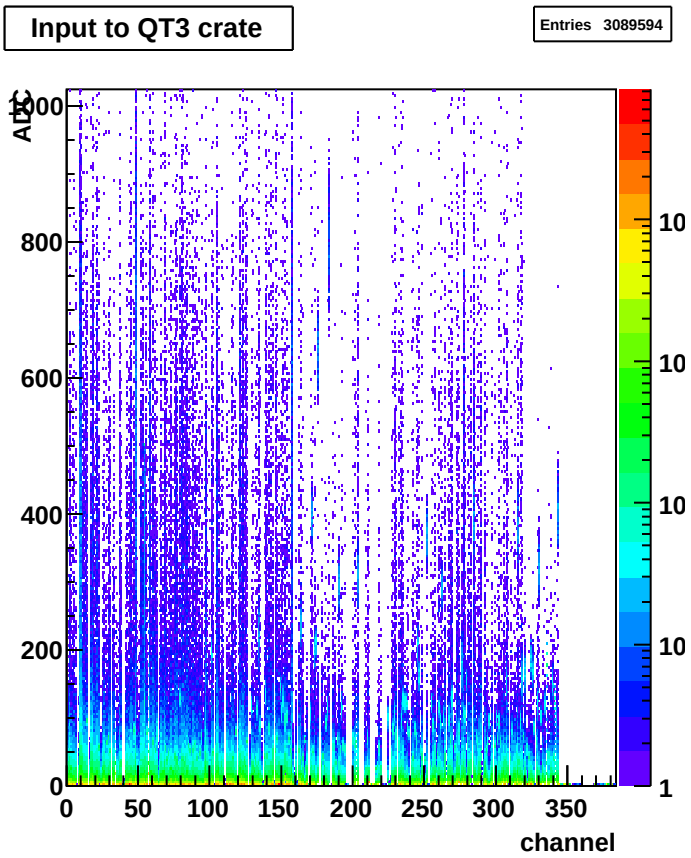

Entries 189561
BBC-S-East ADC Sum
BBC-S-West ADC Sum

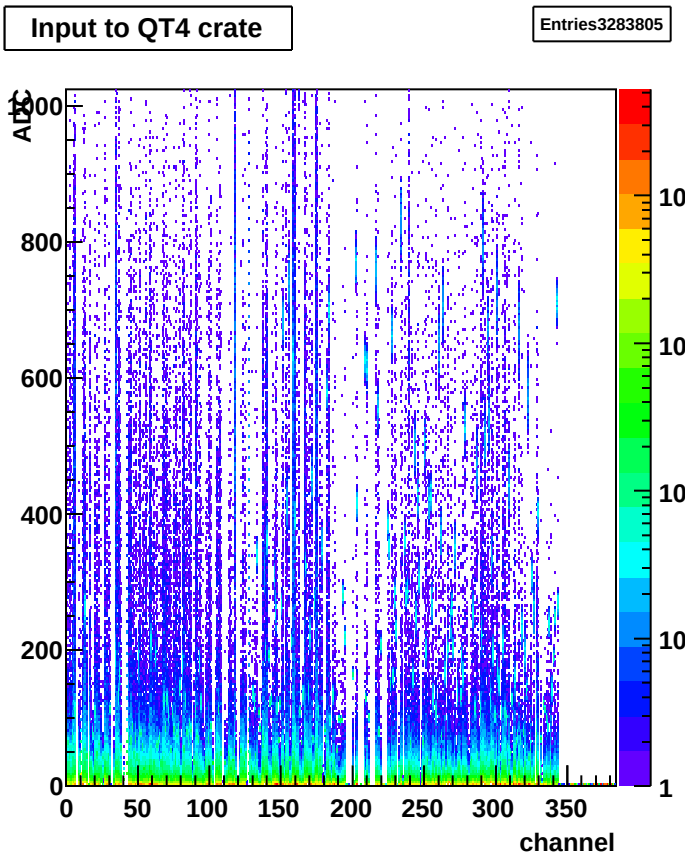

Entries 189561
ZDC East ADC Sum Att
ZDC West ADC Sum Att

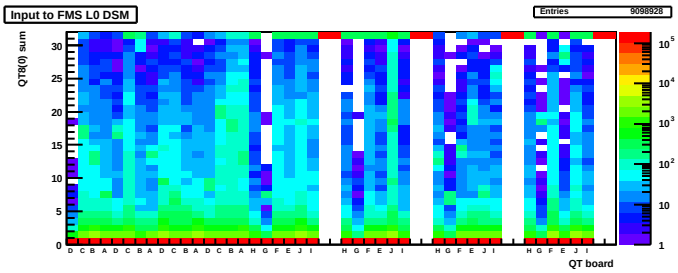

Entries 189561
BBC-L TAC Diff
BCC-S TAC Diff
Entries 189561
BBC-L TAC Diff
VPD TAC Diff
Entries 189561
BBC-L TAC Diff
ZDC TAC Diff
Entries 189561
BBC-S TAC Diff
VPD TAC Diff
Entries 189561
BBC-S TAC Diff
ZDC TAC Diff
Entries 189561
VPD TAC Diff
ZDC TAC Diff

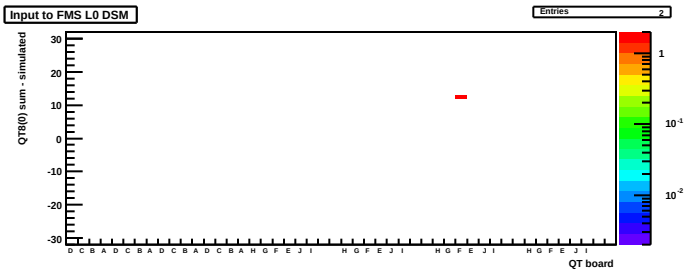

Input to QT1 crate
Entries4731026
ADC
channel

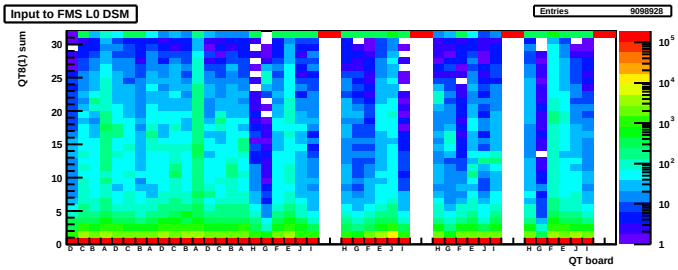

Input to QT2 crate
Entries2711494
ADC
channel

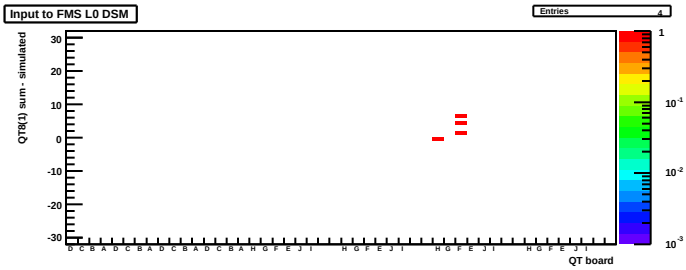

Input to QT3 crate
Entries 3089594
ADC
channel

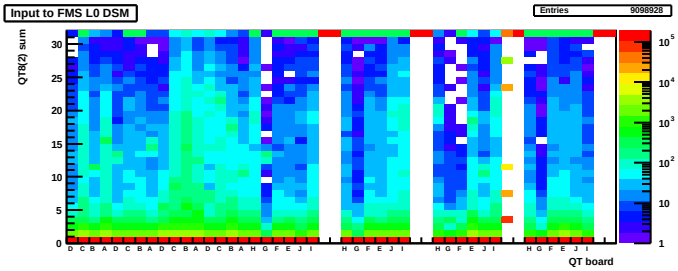

Input to QT4 crate
Entries3283805
ADC
channel

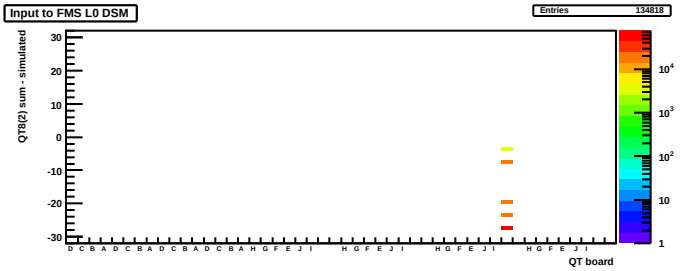

Input to FMS L0 DSM
Entries 9098928
QT8(0) sum
QT board

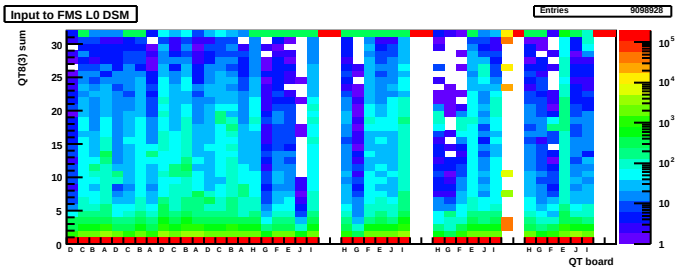

Input to FMS L0 DSM
Entries 2
QT8(0) sum - simulated
QT board

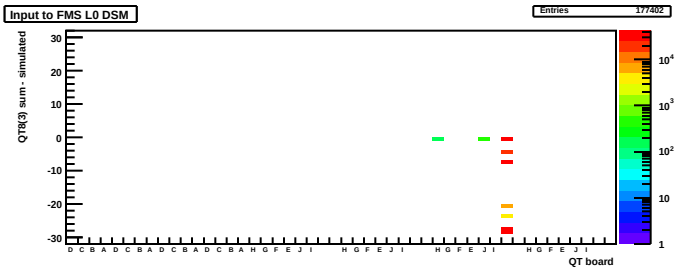

Input to FMS L0 DSM
Entries 9098928
QT8(1) sum
QT board

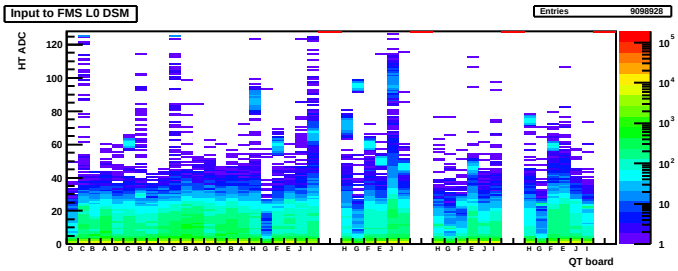

Input to FMS L0 DSM
Entries 4
QT8(1) sum - simulated
QT board

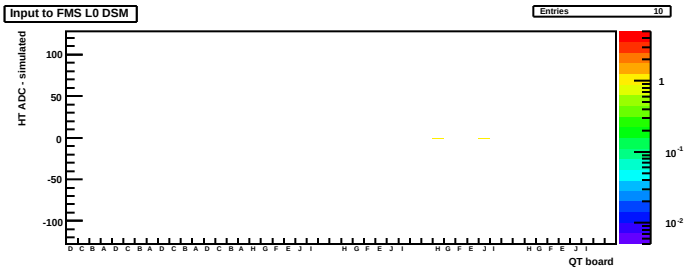

Input to FMS L0 DSM
Entries 9098928
QT8(2) sum
QT board

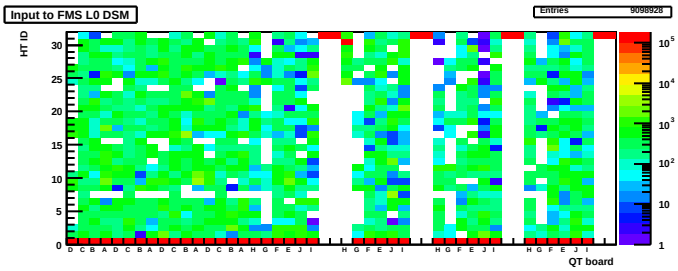

Input to FMS L0 DSM
Entries 134818
QT8(2) sum - simulated
QT board

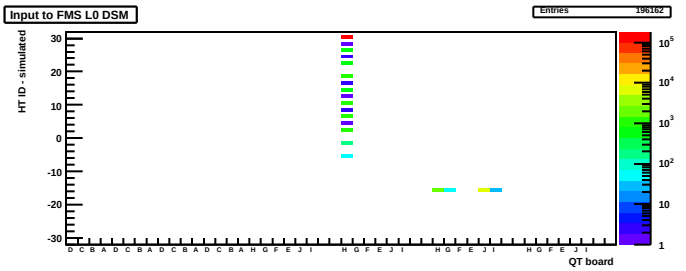

Input to FMS L0 DSM
Entries 9098928
QT8(3) sum
QT board

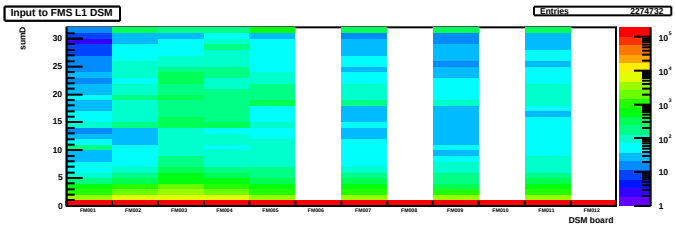

Input to FMS L0 DSM
Entries 177402
QT8(3) sum - simulated
QT board

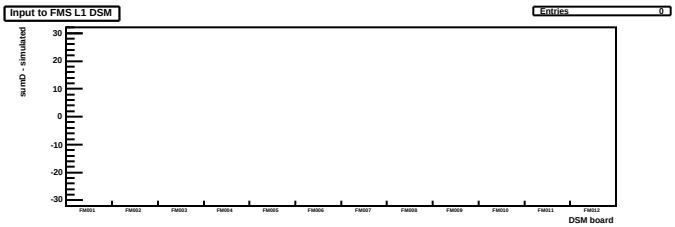

Input to FMS L0 DSM
Entries 9098928
HT ADC
QT board

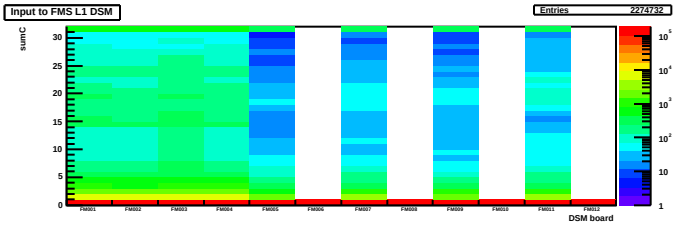

Input to FMS L0 DSM
Entries 10
HT ADC - simulated
QT board

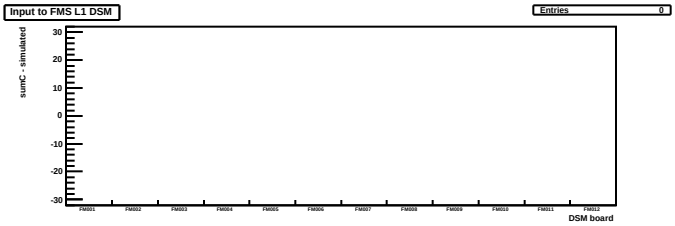

Input to FMS L0 DSM
Entries 9098928
HT ID
QT board

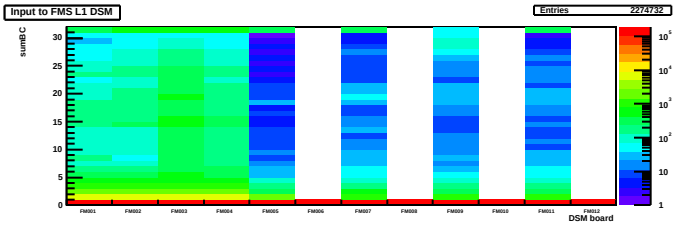

Input to FMS L0 DSM
Entries 196162
HT ID - simulated
QT board

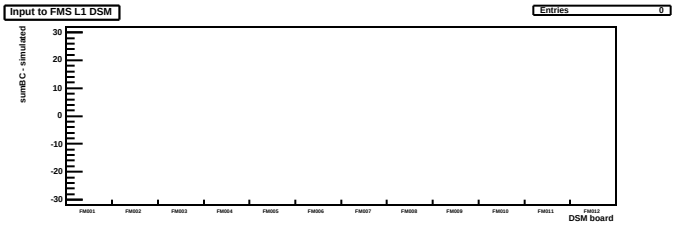

Input to FMS L1 DSM
Entries 2274732
sumD
DSM board

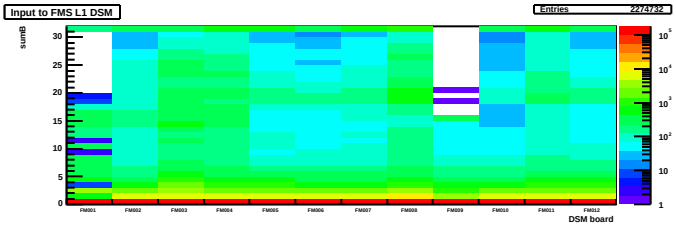

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

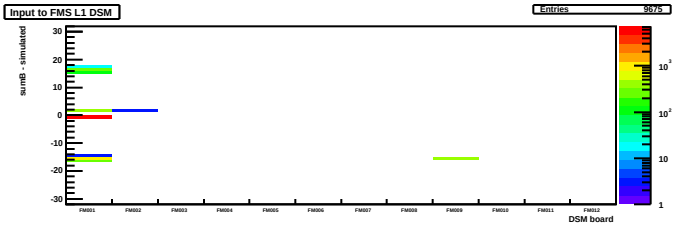

Input to FMS L1 DSM
Entries 2274732
sumC
DSM board

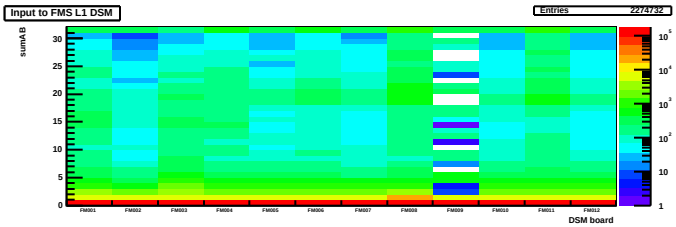

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

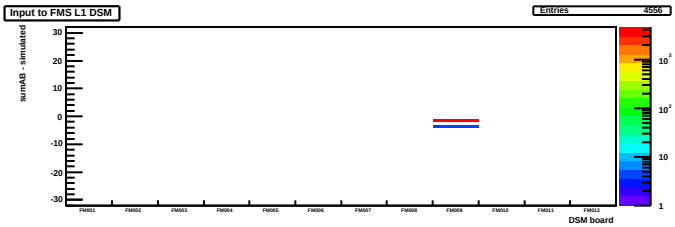

Input to FMS L1 DSM
Entries 2274732
sumBC
DSM board

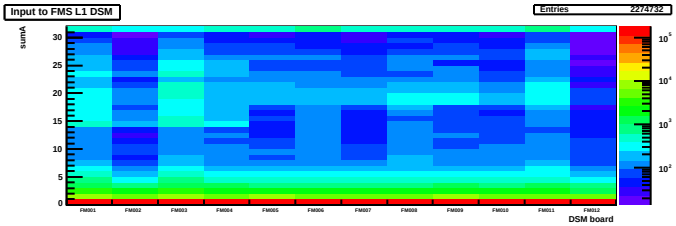

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

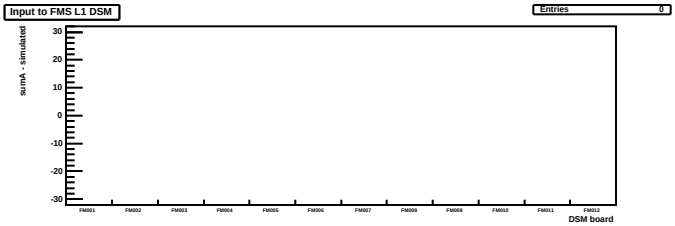

Input to FMS L1 DSM
Entries 2274732
sumB
DSM board

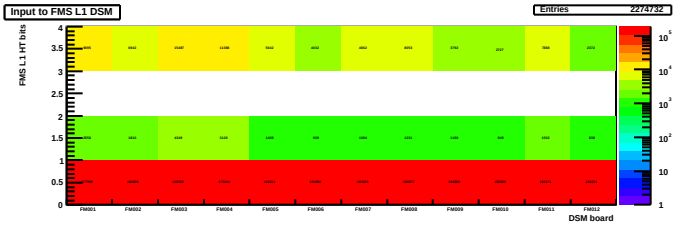

Input to FMS L1 DSM
Entries 9675
sumB - simulated
DSM board

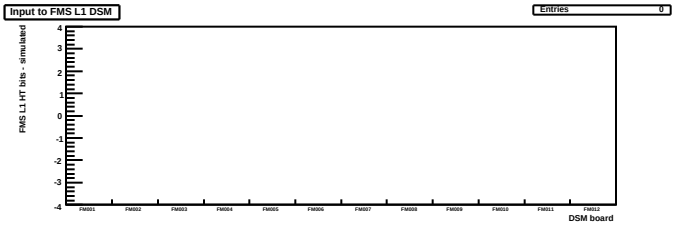

Input to FMS L1 DSM
Entries 2274732
sumAB
DSM board

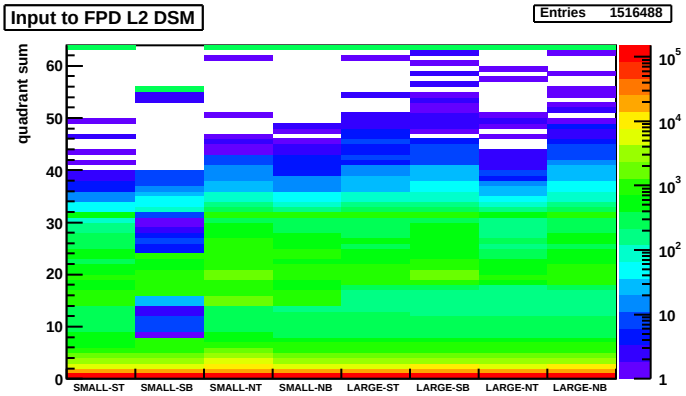

Input to FMS L1 DSM
Entries 4556
sumAB - simulated
DSM board

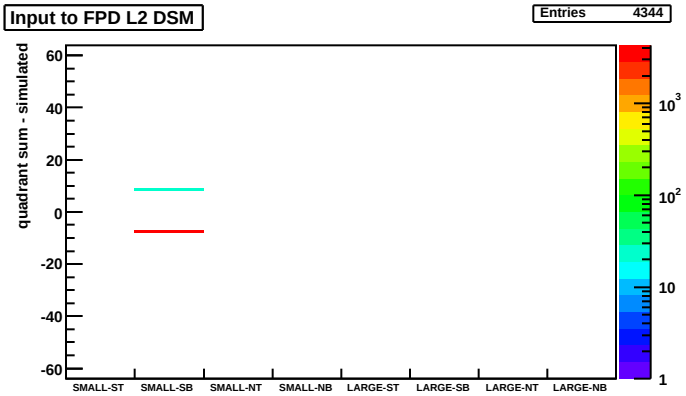

Input to FMS L1 DSM
Entries 2274732
sumA
DSM board

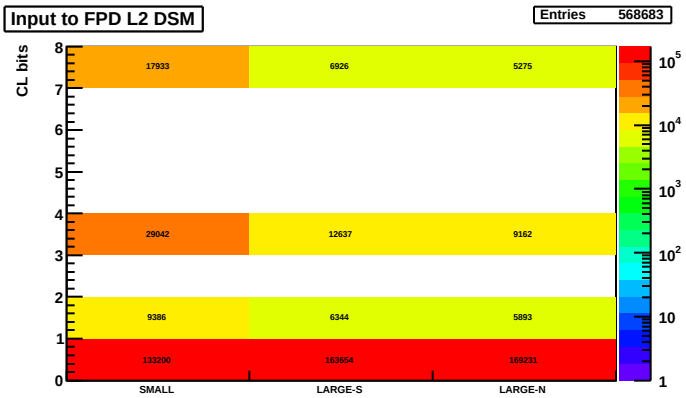

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

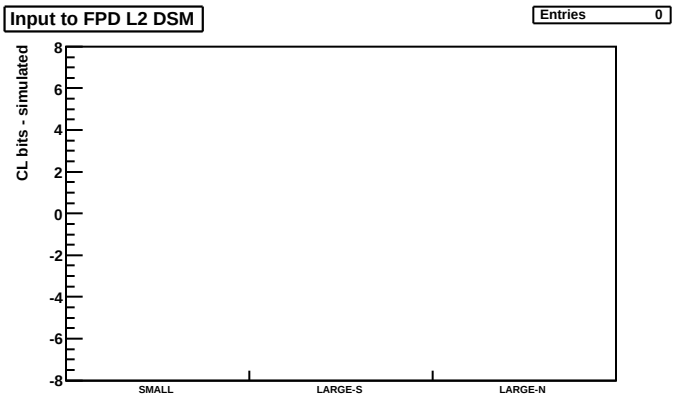

Input to FMS L1 DSM
Entries 2274732
FMS L1 HT bits
DSM board

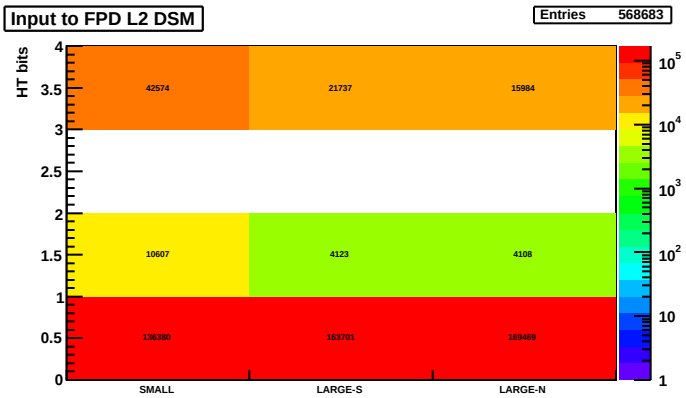

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

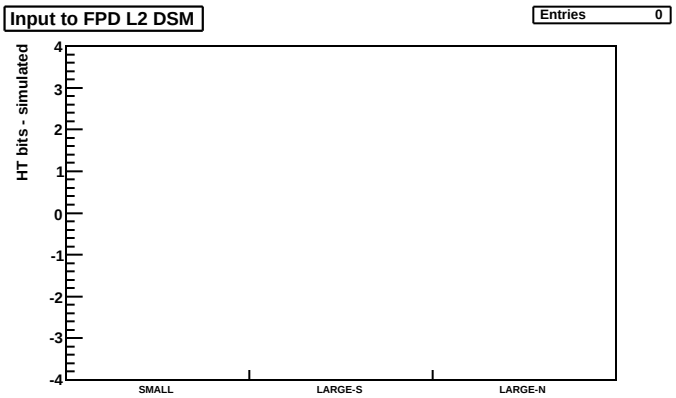

Input to FPD L2 DSM
Entries 1516488
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

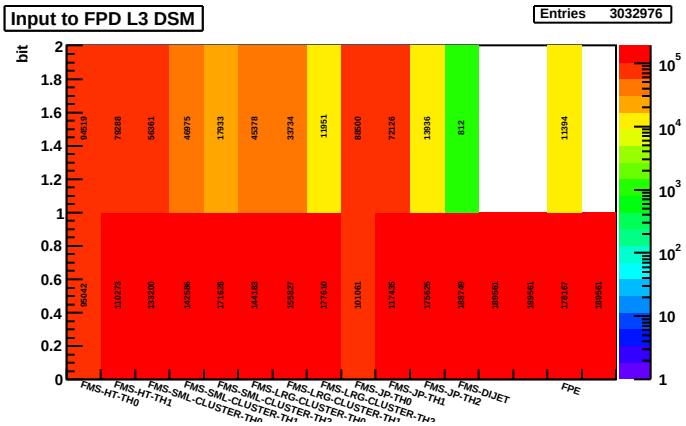

Input to FPD L2 DSM
Entries 4344
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

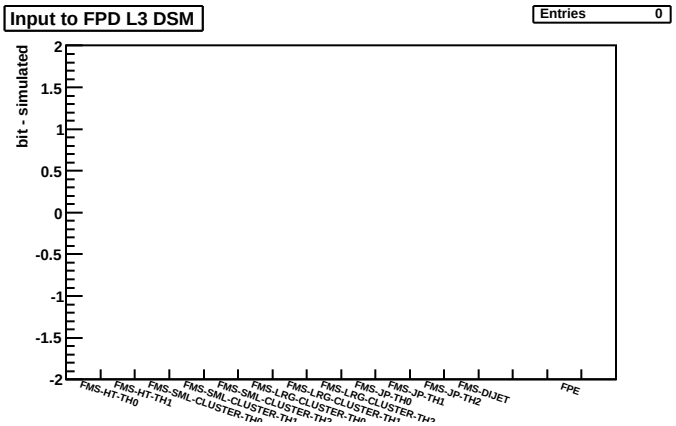

Input to FPD L2 DSM
Entries 568683
CL bits
17933
6926
5275
29042
12637
9162
9386
6344
5893
133200
163654
169231
SMALL
LARGE-S
LARGE-N

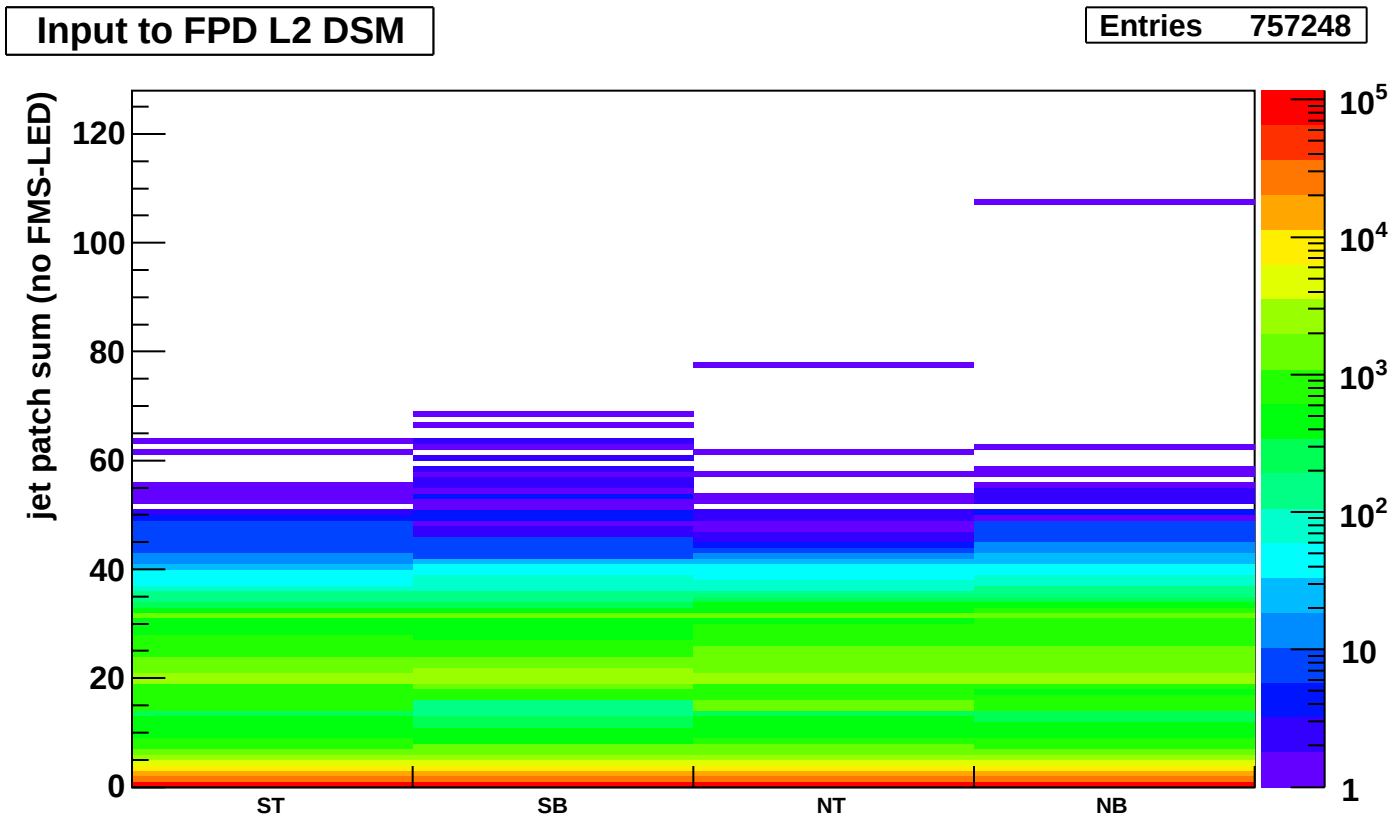

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

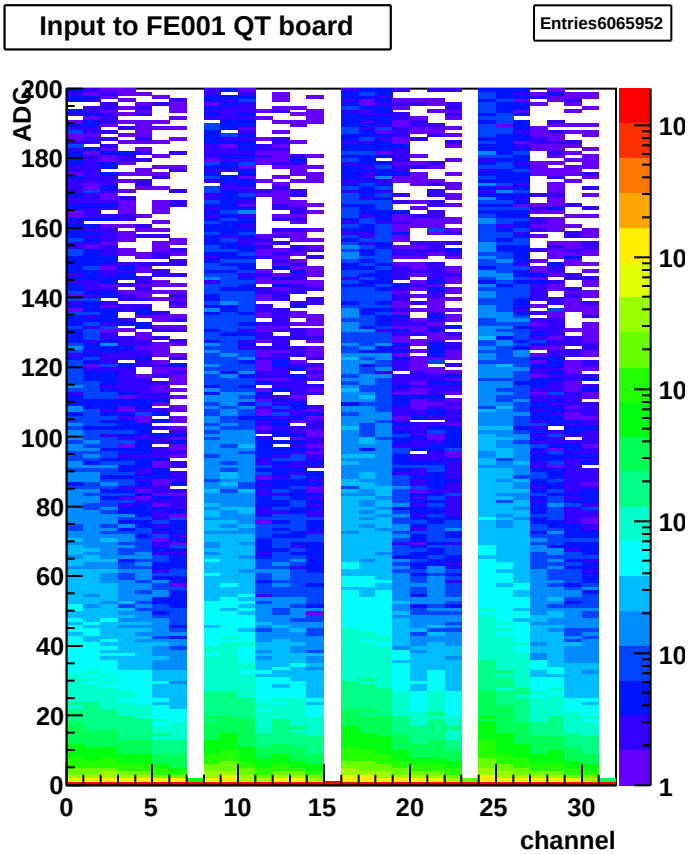

Input to FPD L2 DSM
Entries 568683
HT bits
42574
21737
15984
10607
4123
4108
136380
163701
169469
SMALL
LARGE-S
LARGE-N

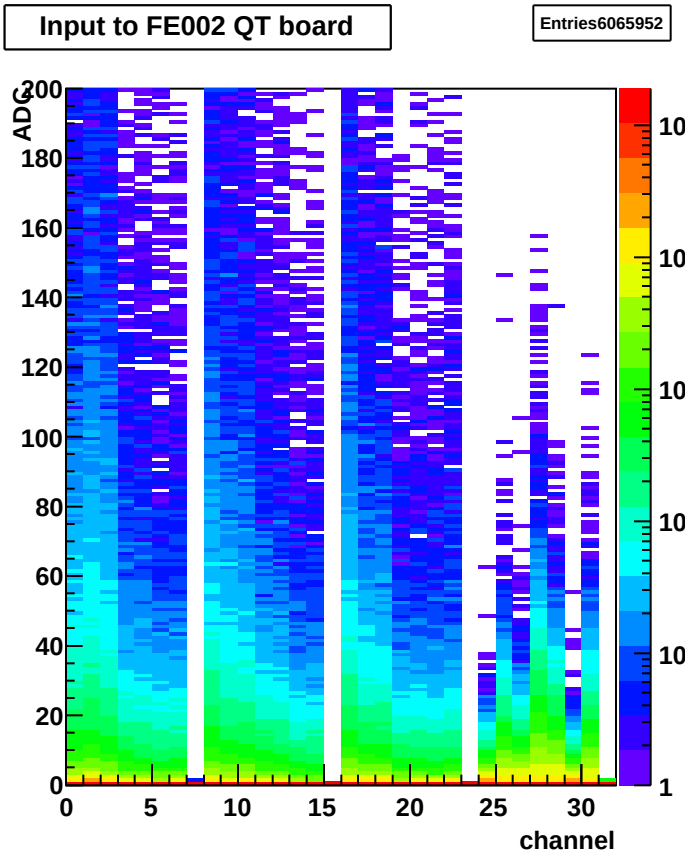

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

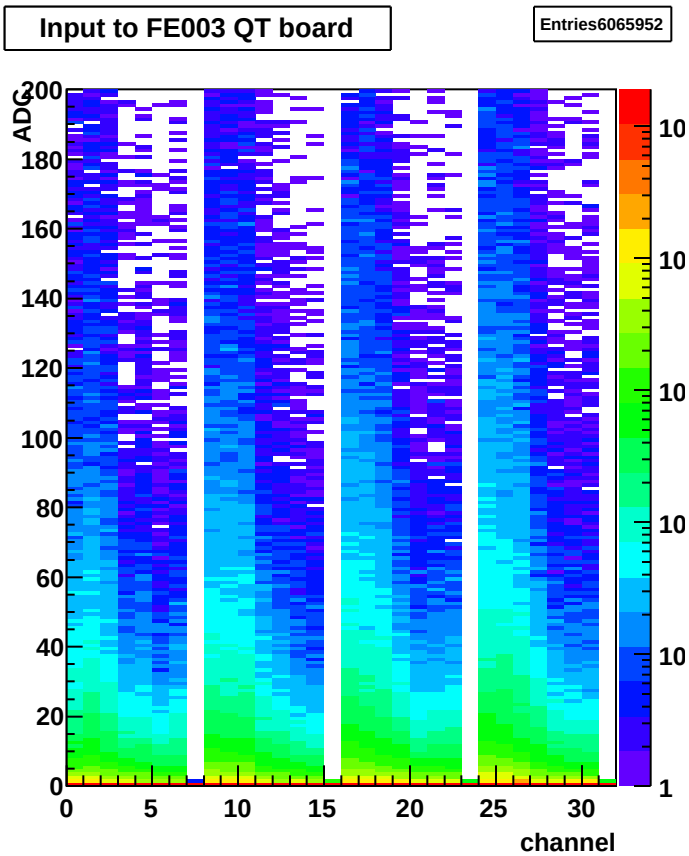

Input to FPD L3 DSM
Entries 3032976
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

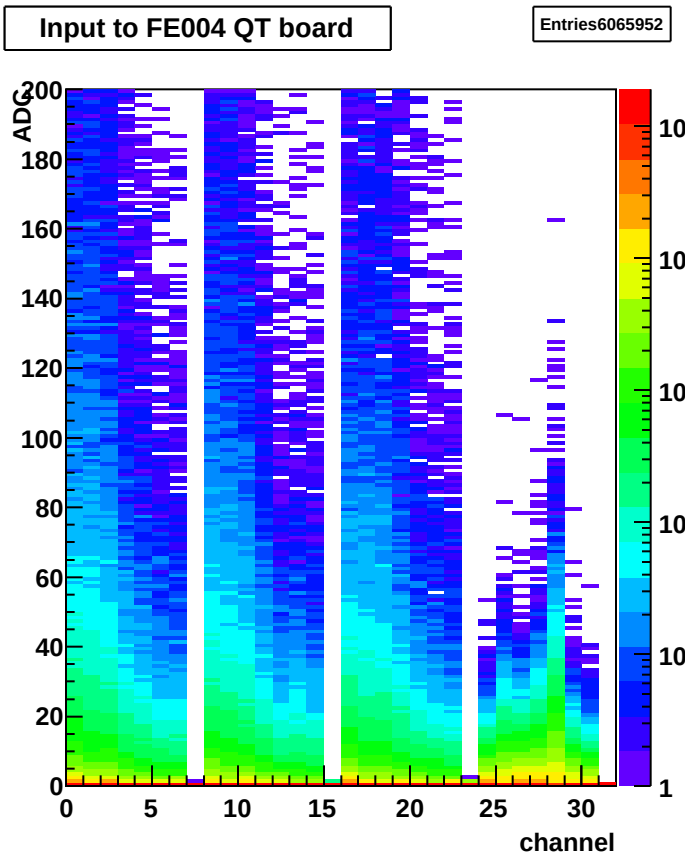

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

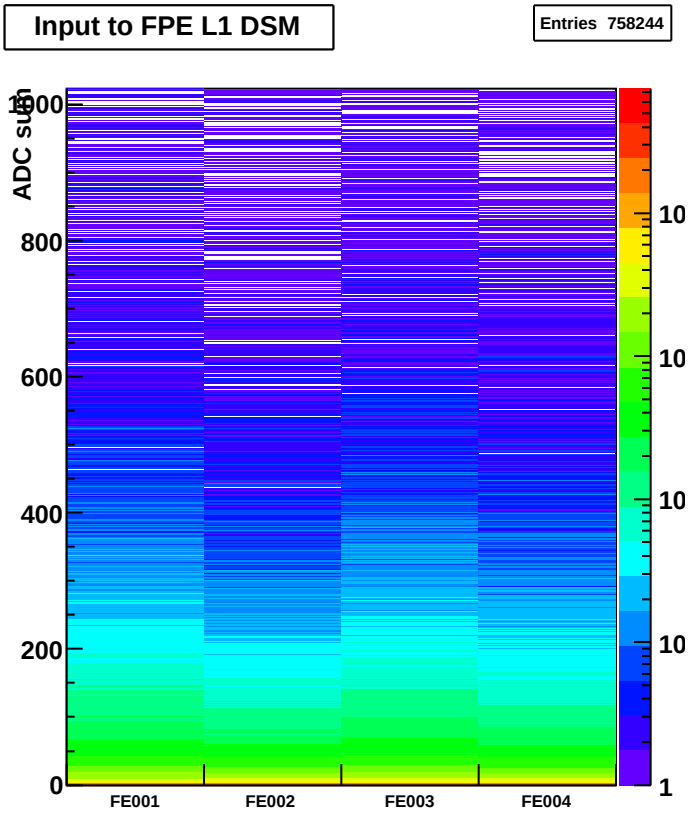

Input to FPD L2 DSM
Entries 757248
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

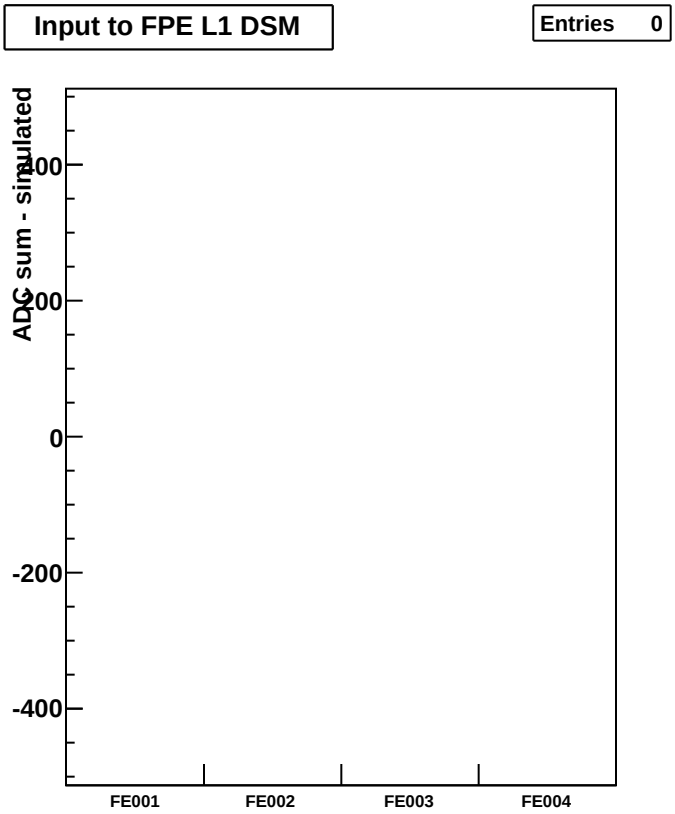

Input to FE001 QT board
Entries6065952
ADC
channel

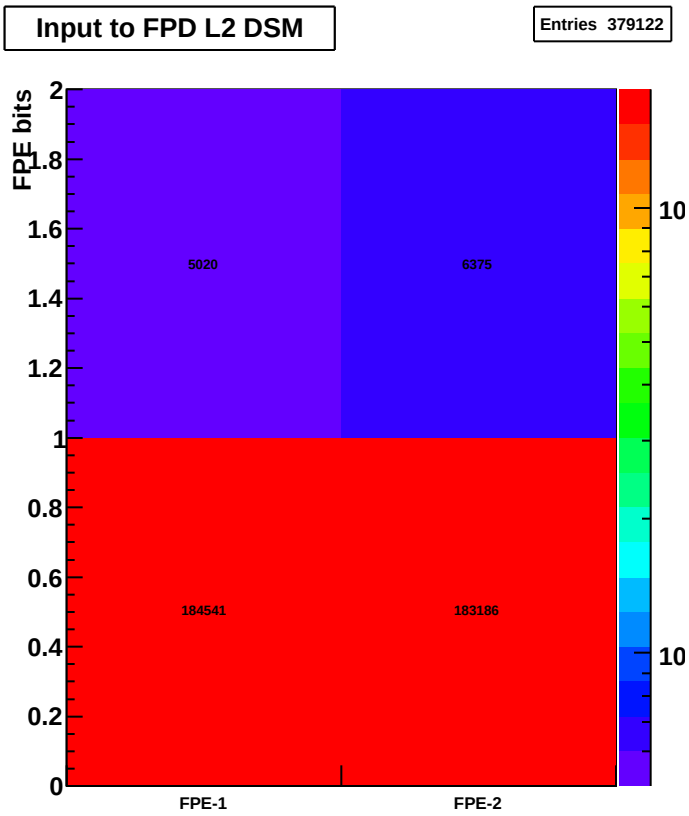

Input to FE002 QT board
Entries6065952
ADC
channel

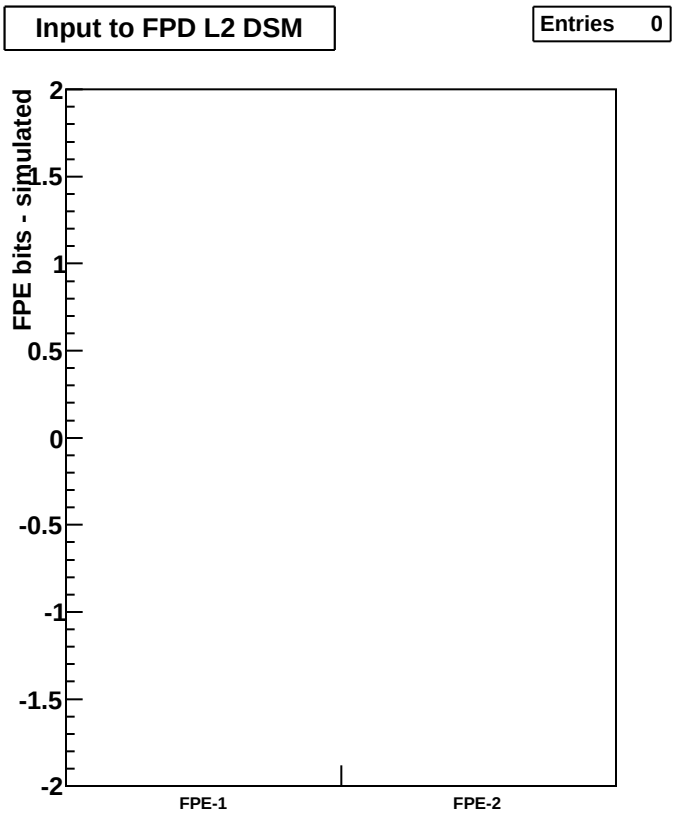

Input to FE003 QT board
Entries6065952
ADC
channel


Input to FE004 QT board
Entries6065952
ADC
channel


Input to FPE L1 DSM
Entries 758244
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
1


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


Input to FPD L2 DSM
Entries 379122
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
5020
6375
184541
183186
FPE-1
FPE-2
10
10


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