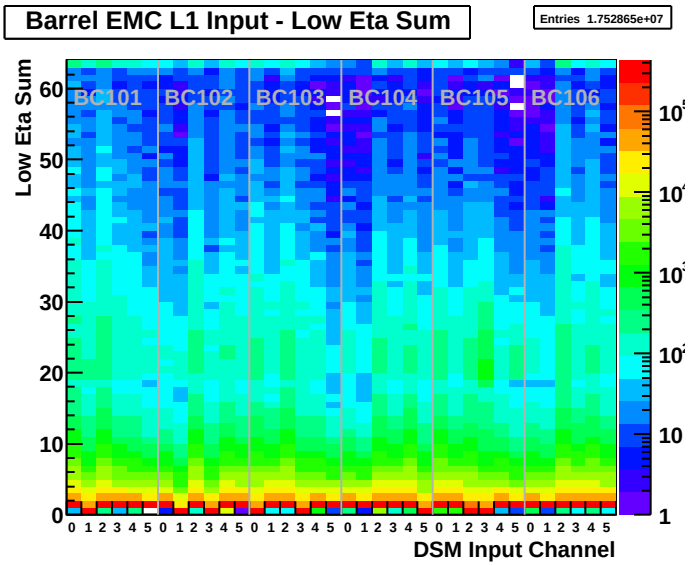
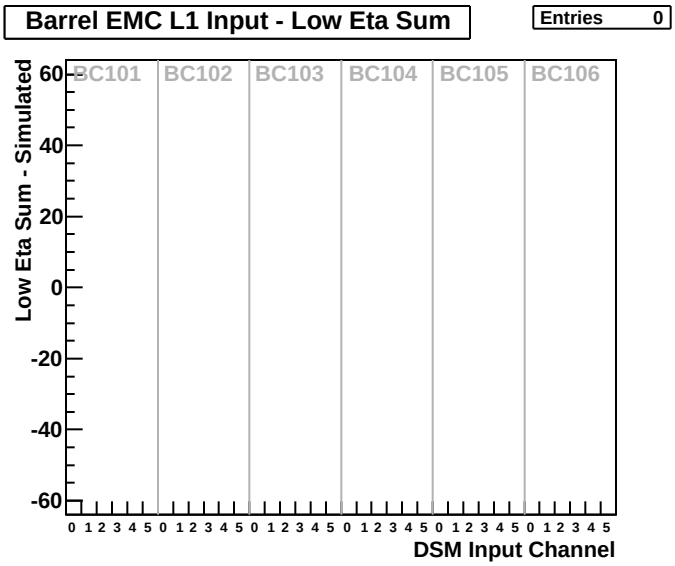
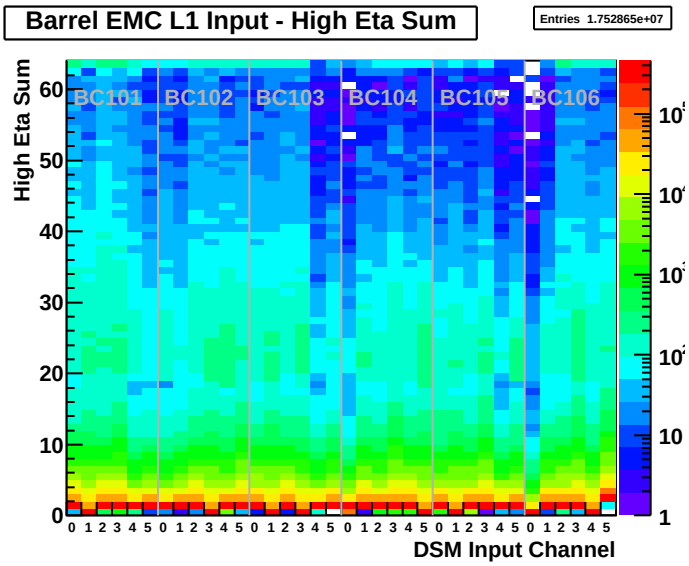
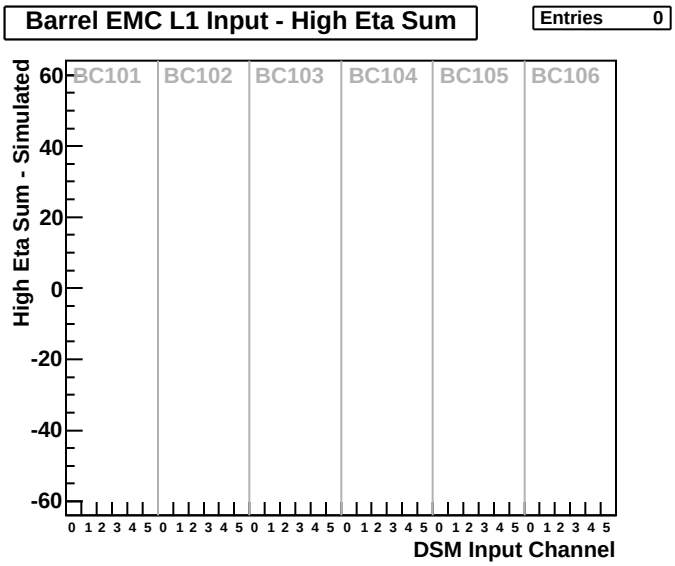
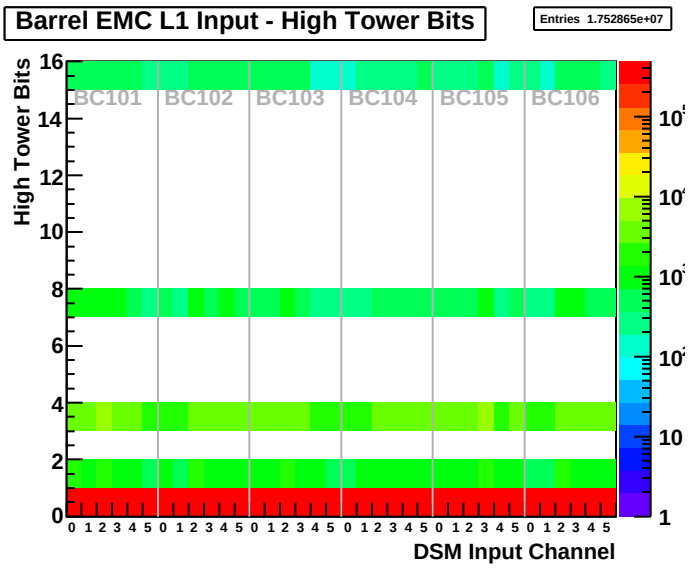
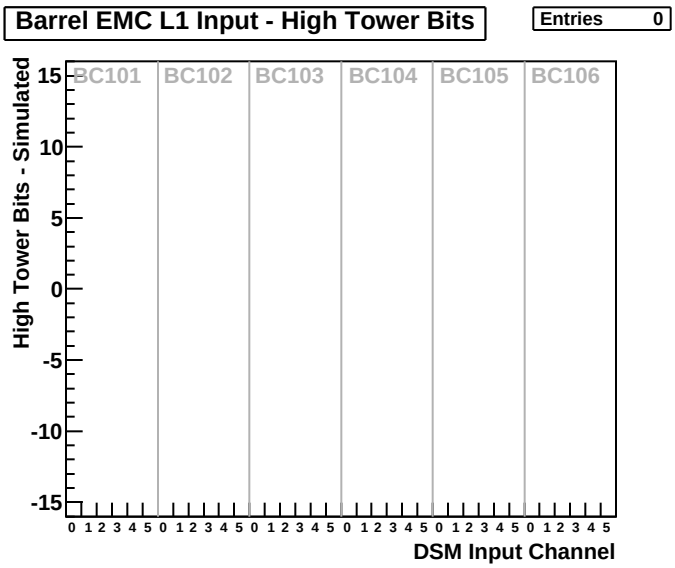

Barrel EMC L1 Input - Low Eta Sum
Entries 1.752865e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

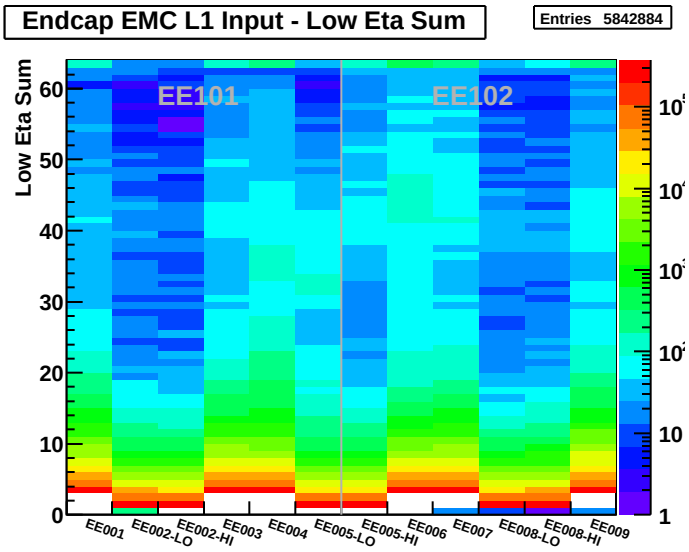

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

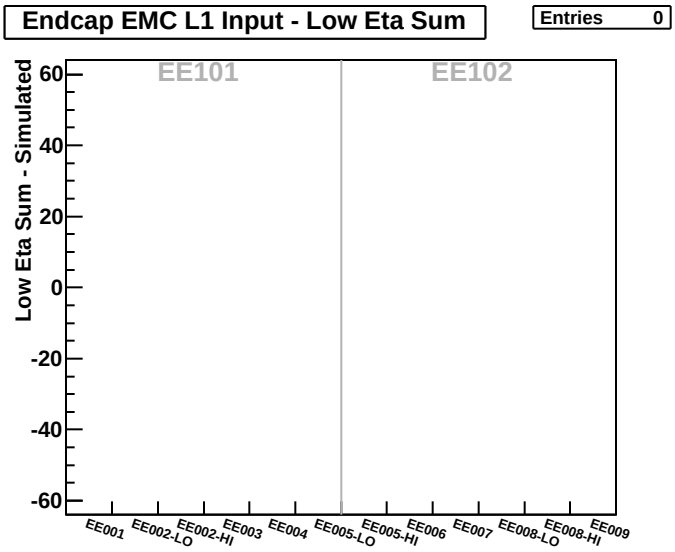

Barrel EMC L1 Input - High Eta Sum
Entries 1.752865e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

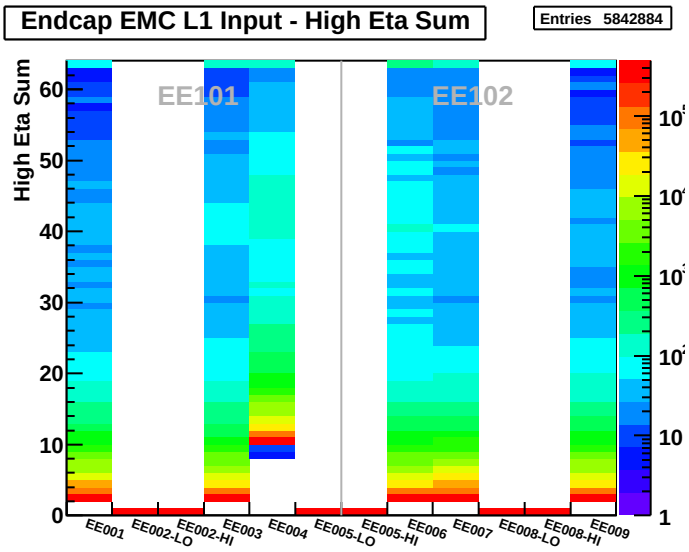

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

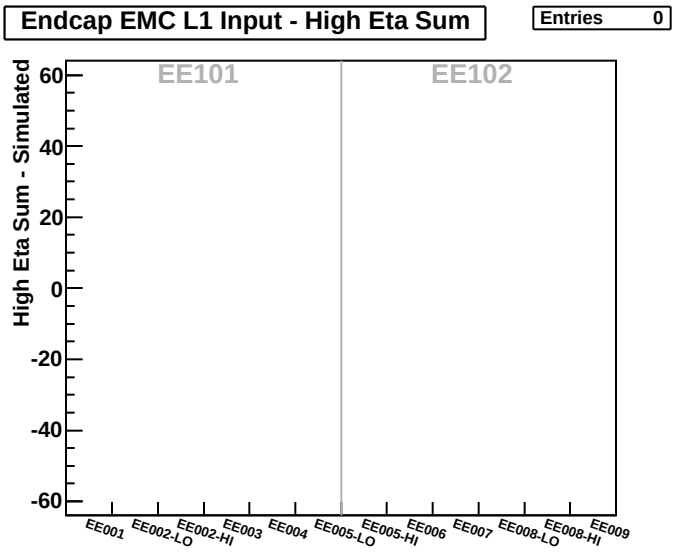

Barrel EMC L1 Input - High Tower Bits
Entries 1.752865e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

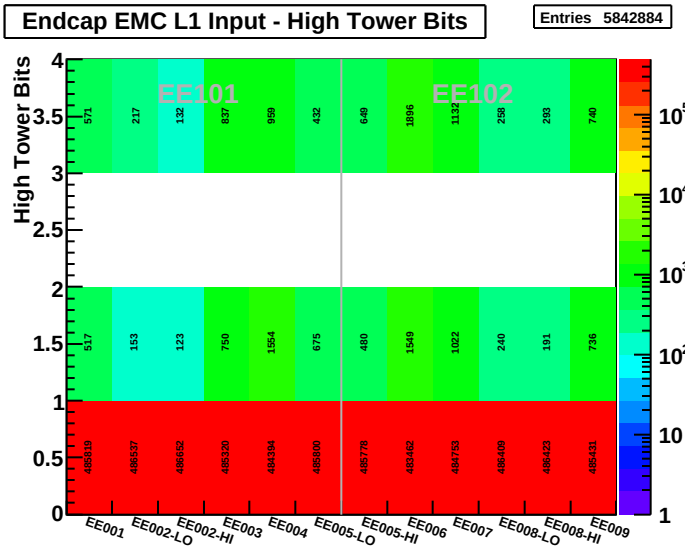

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

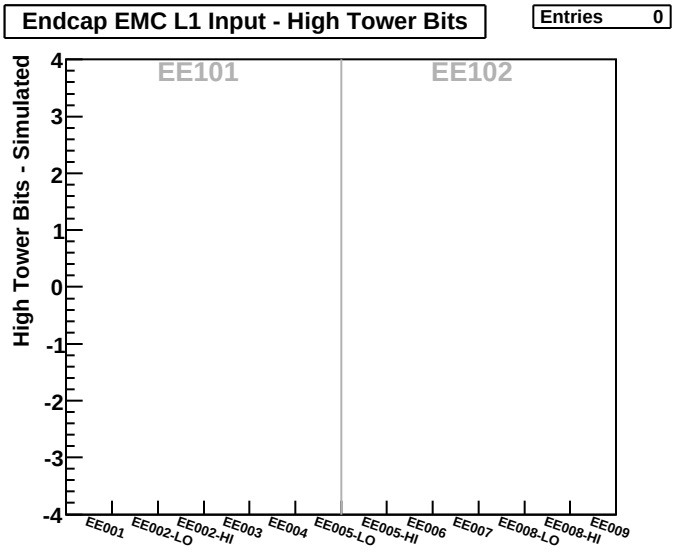

Endcap EMC L1 Input - Low Eta Sum
Entries 5842884
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

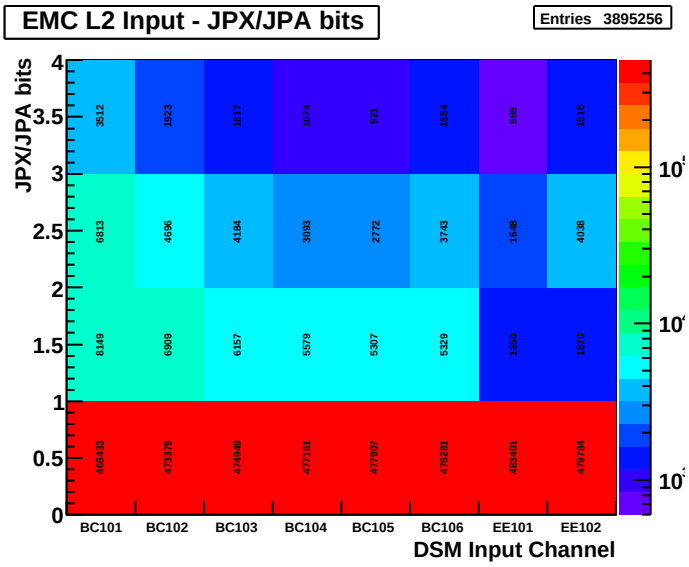

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

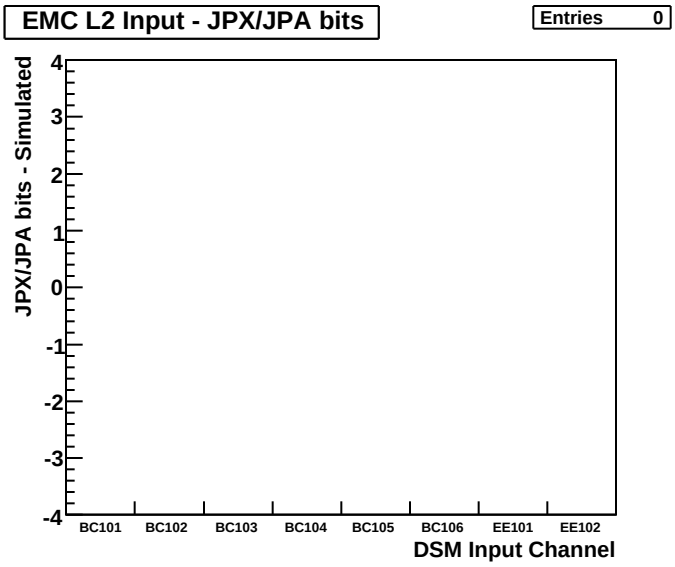

Endcap EMC L1 Input - High Eta Sum
Entries 5842884
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

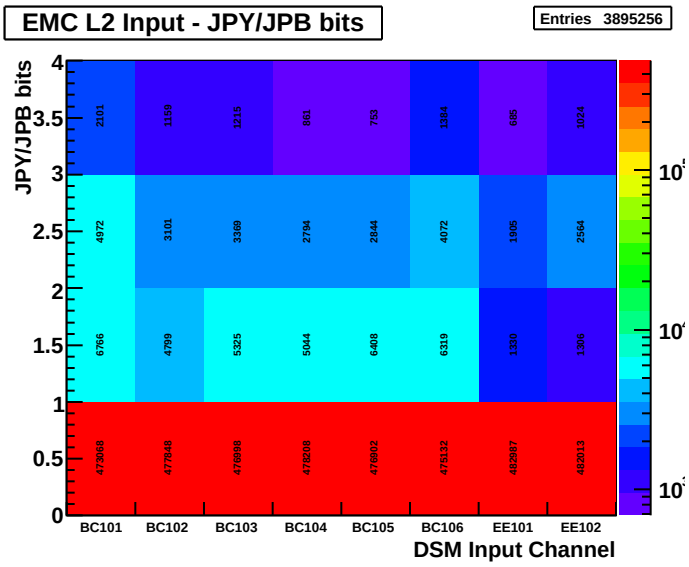

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

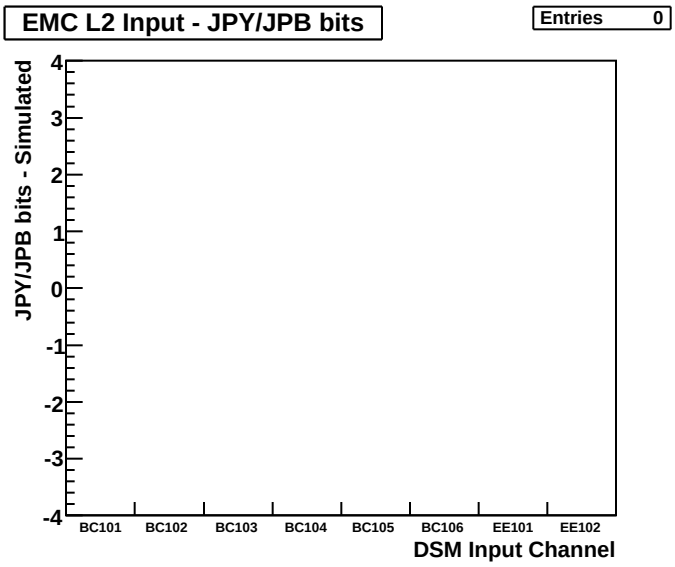

Endcap EMC L1 Input - High Tower Bits
Entries 5842884
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

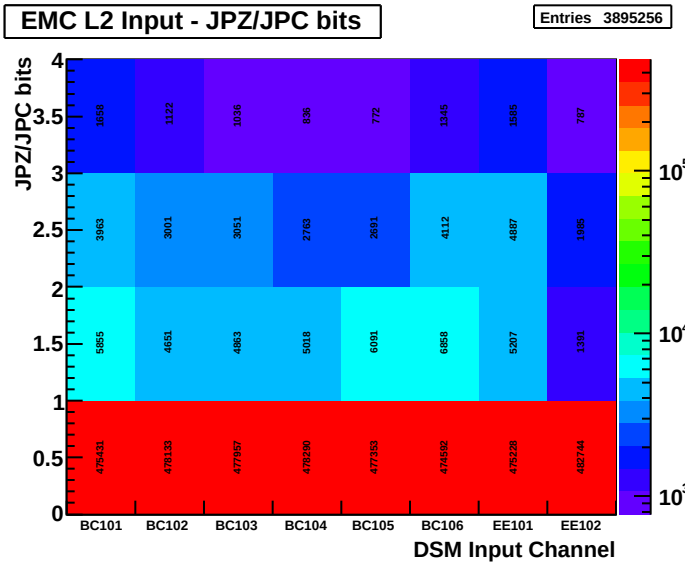

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

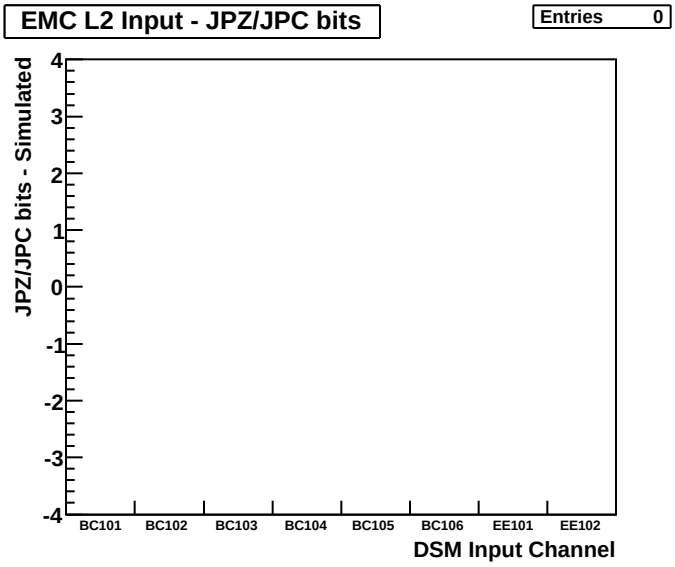

EMC L2 Input - JPX/JPA bits
Entries 3895256
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3512 1923 1617 1074 921 1554 598 1515
6813 4696 4184 3093 2772 3743 1648 4038
8149 6909 6157 5579 5307 5329 1260 1570
468433 473379 474949 477161 477907 476281 483401 479784

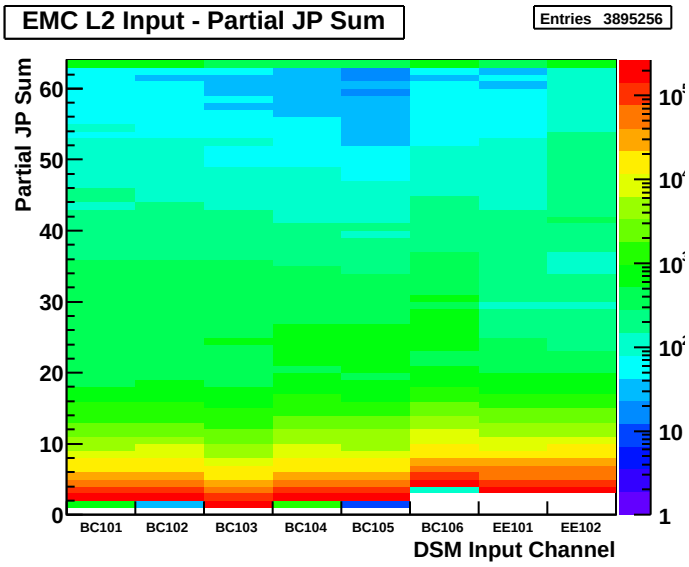

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

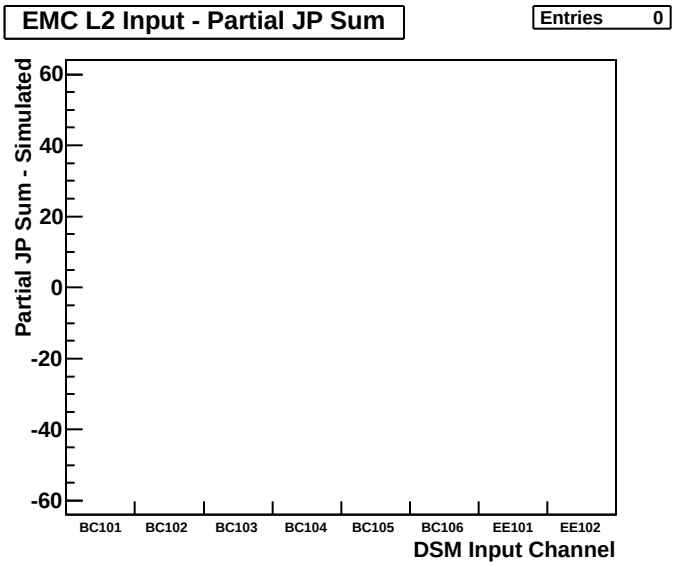

EMC L2 Input - JPY/JPB bits
Entries 3895256
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2101 1159 1215 861 753 1394 685 1024
4972 3101 3369 2794 2844 4072 1905 2564
6766 4799 5325 5044 6408 6319 1330 1306
473068 477048 478998 478208 478902 475132 482987 482013

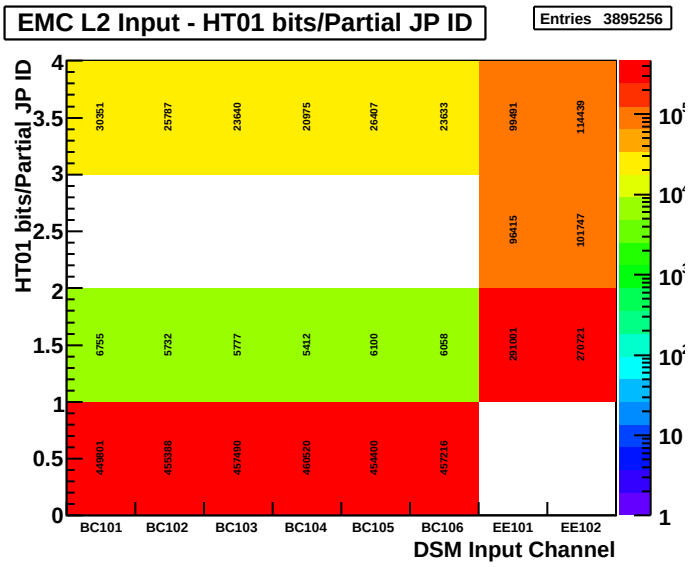

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

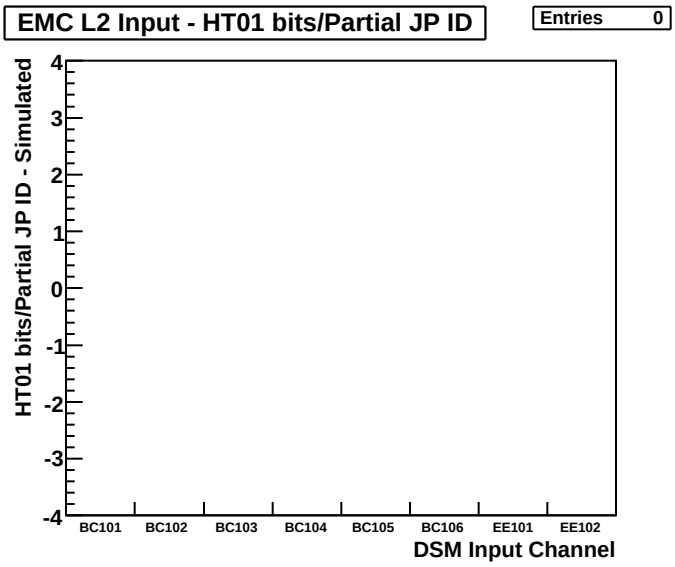

EMC L2 Input - JPZ/JPC bits
Entries 3895256
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1658 1122 1026 836 772 1345 1585 787
3963 3001 3051 2763 2691 4112 4987 1985
5855 4651 4863 5018 6091 6858 5207 1391
475431 478133 477957 478290 477353 474592 475228 482744

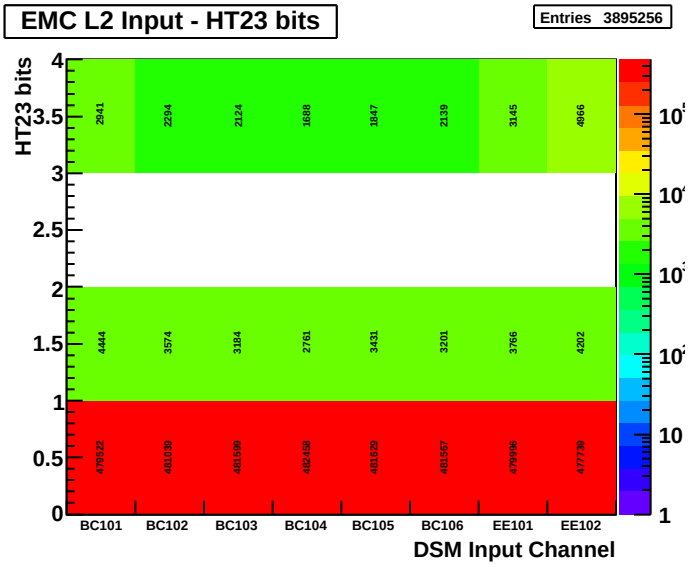

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

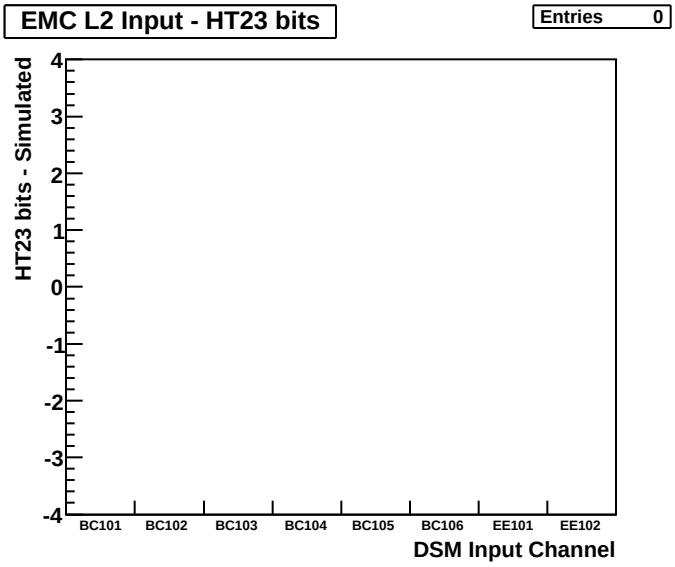

EMC L2 Input - Partial JP Sum
Entries 3895256
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

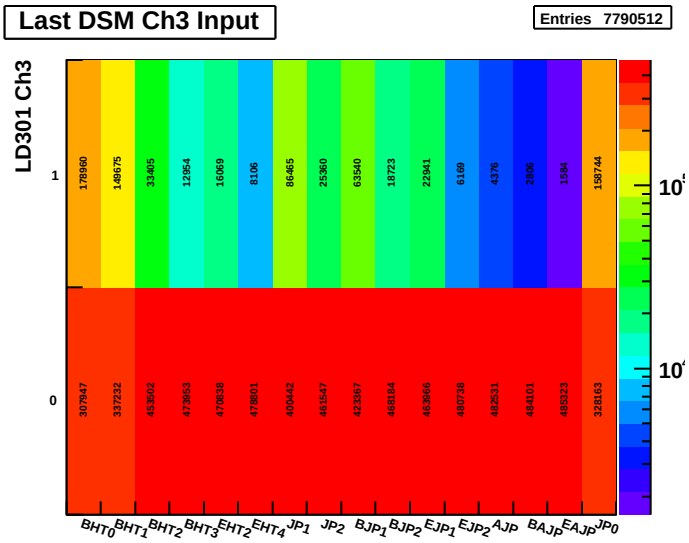

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

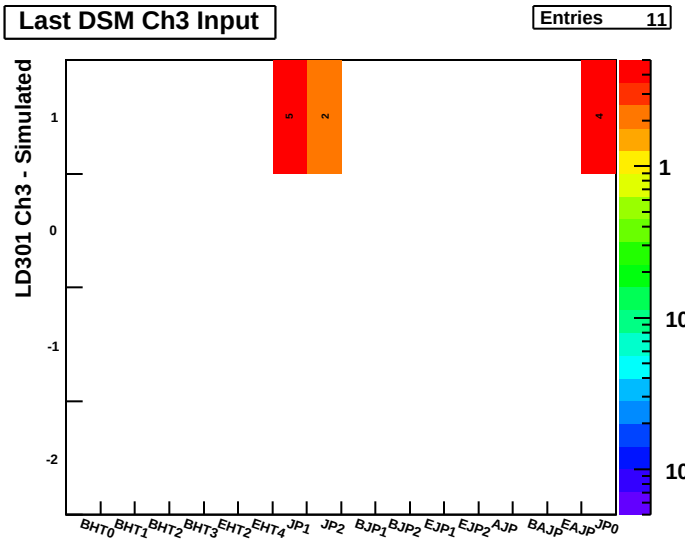

EMC L2 Input - HT01 bits/Partial JP ID
Entries 3895256
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

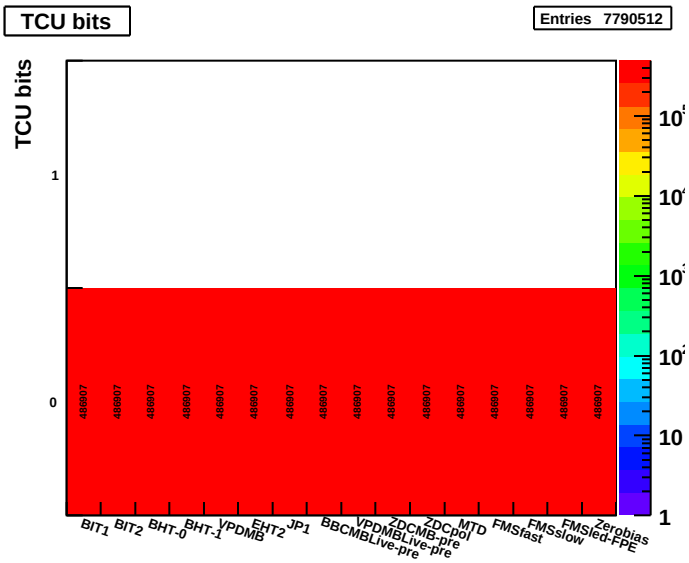

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

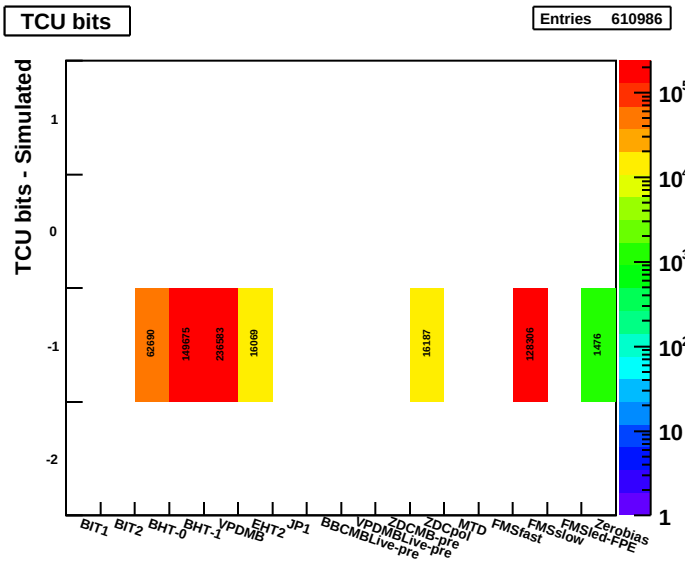

EMC L2 Input - HT23 bits
Entries 3895256
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

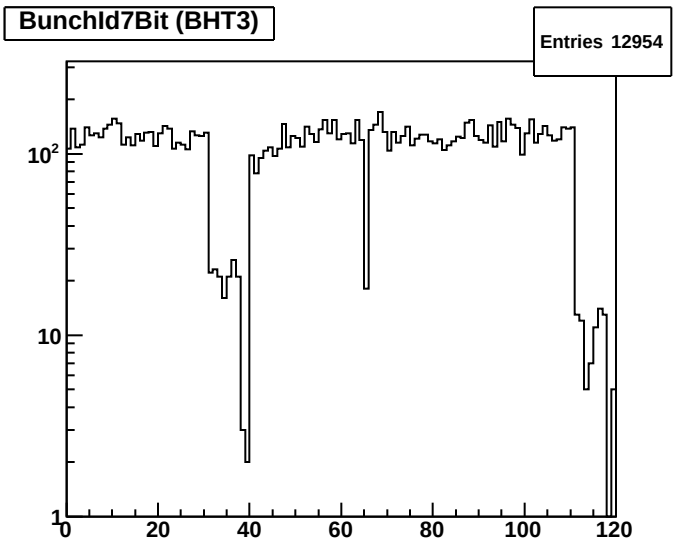

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

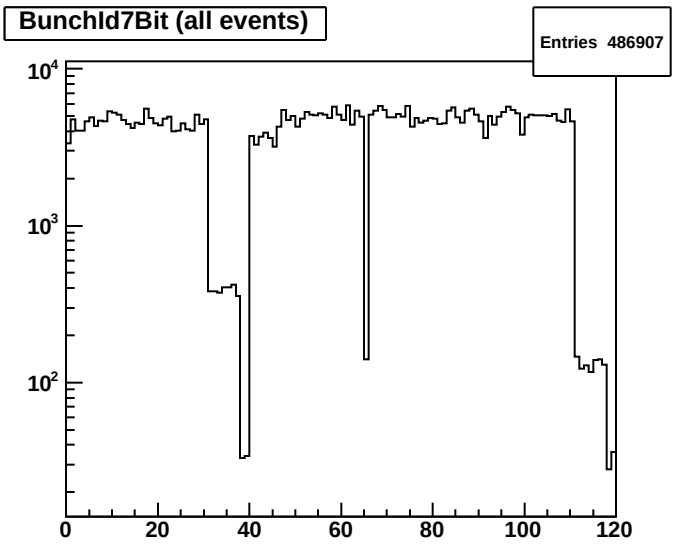

Last DSM Ch3 Input
Entries 7790512
LD301 Ch3
1
0
178960 149675 33405 12954 16069 8106 86465 25360 63540 18723 22941 6169 4376 2806 1584 158744
307947 337232 453502 473953 470838 478801 400442 461547 423367 468184 463966 480738 482531 484101 485323 328163
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

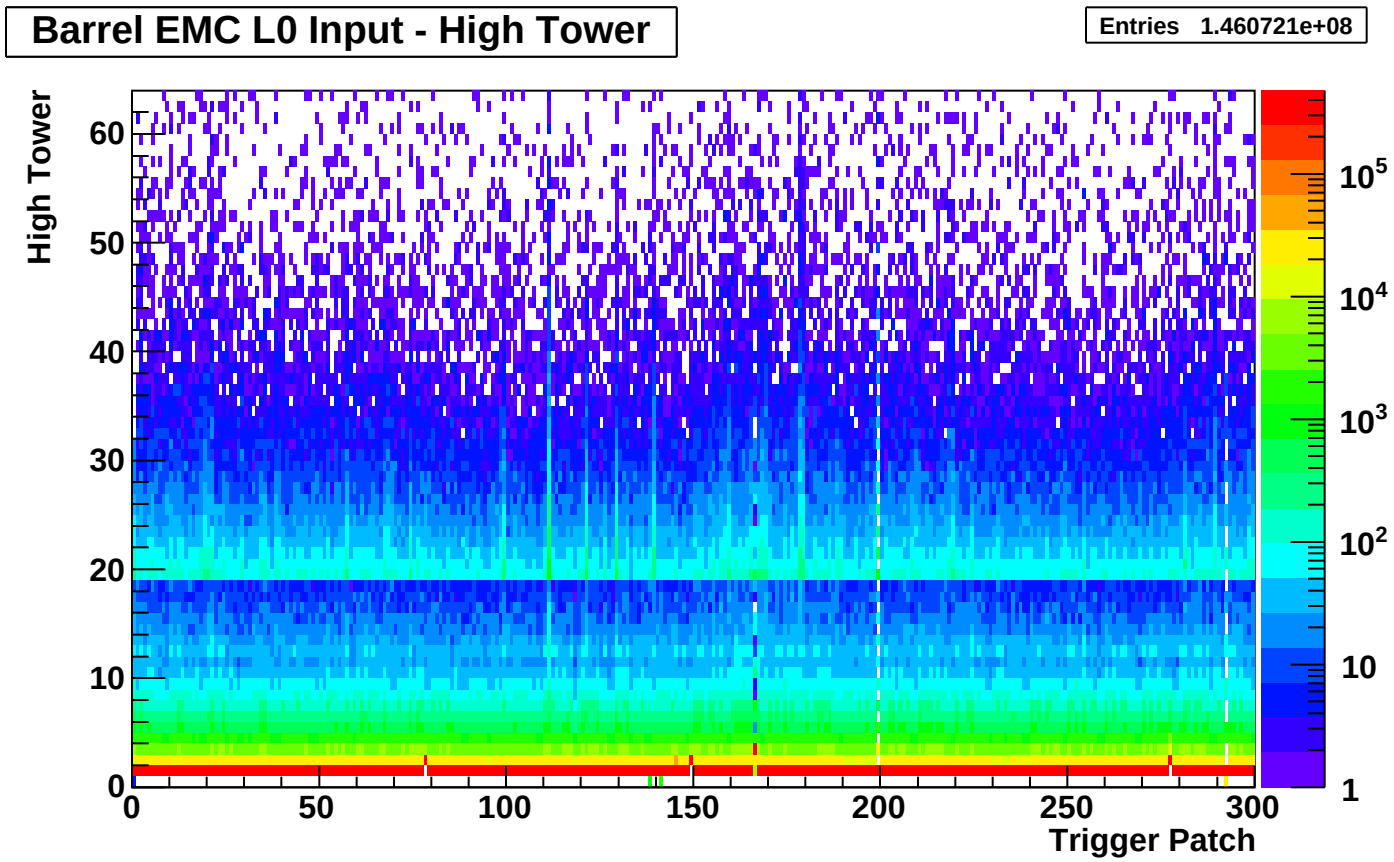

Last DSM Ch3 Input
Entries 11
LD301 Ch3 - Simulated
1
0
-1
-2
5 2 4
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

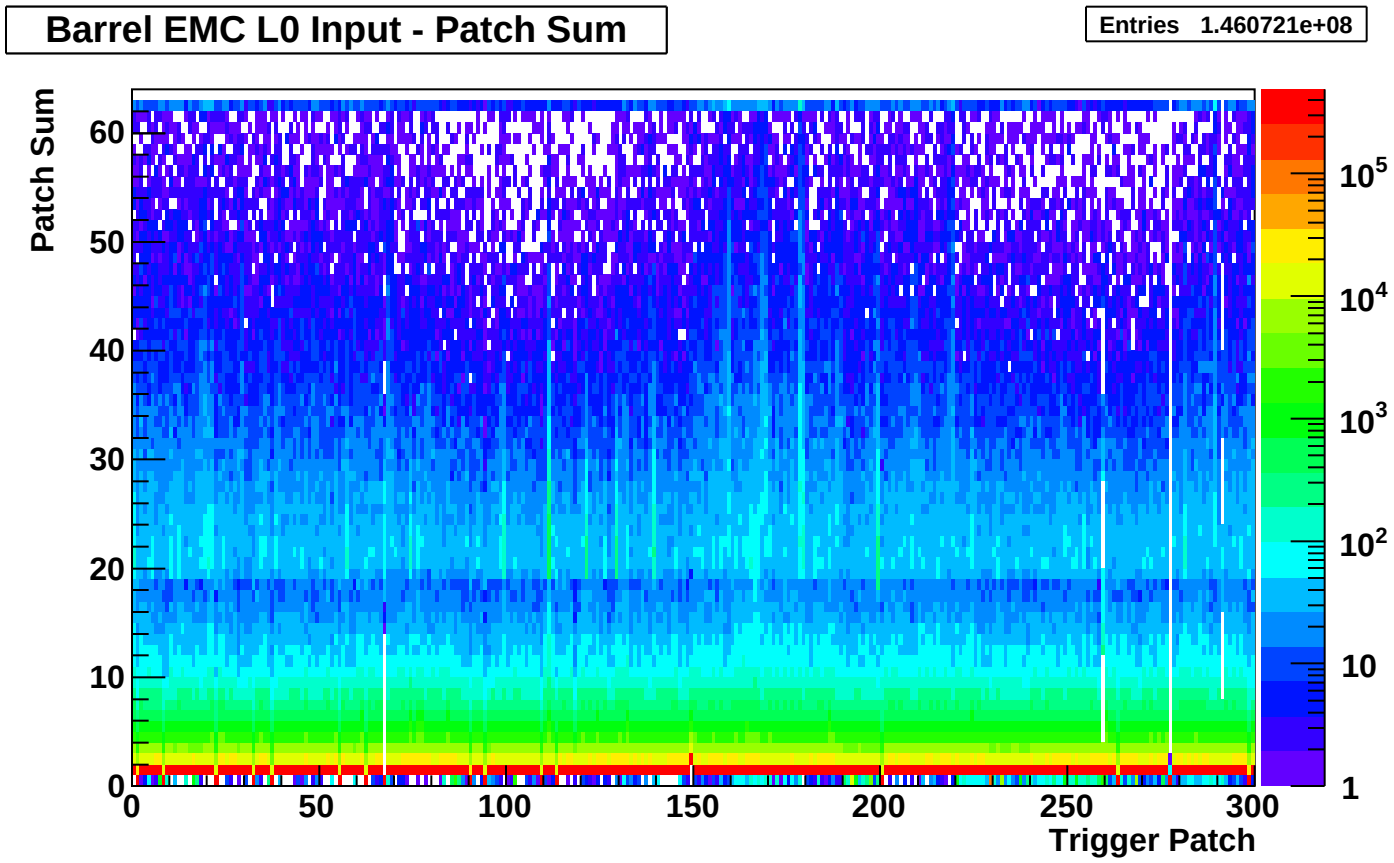

TCU bits
Entries 7790512
TCU bits
1
0
486907 486907 486907 486907 486907 486907 486907 486907 486907 486907 486907 486907 486907 486907 486907 486907
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

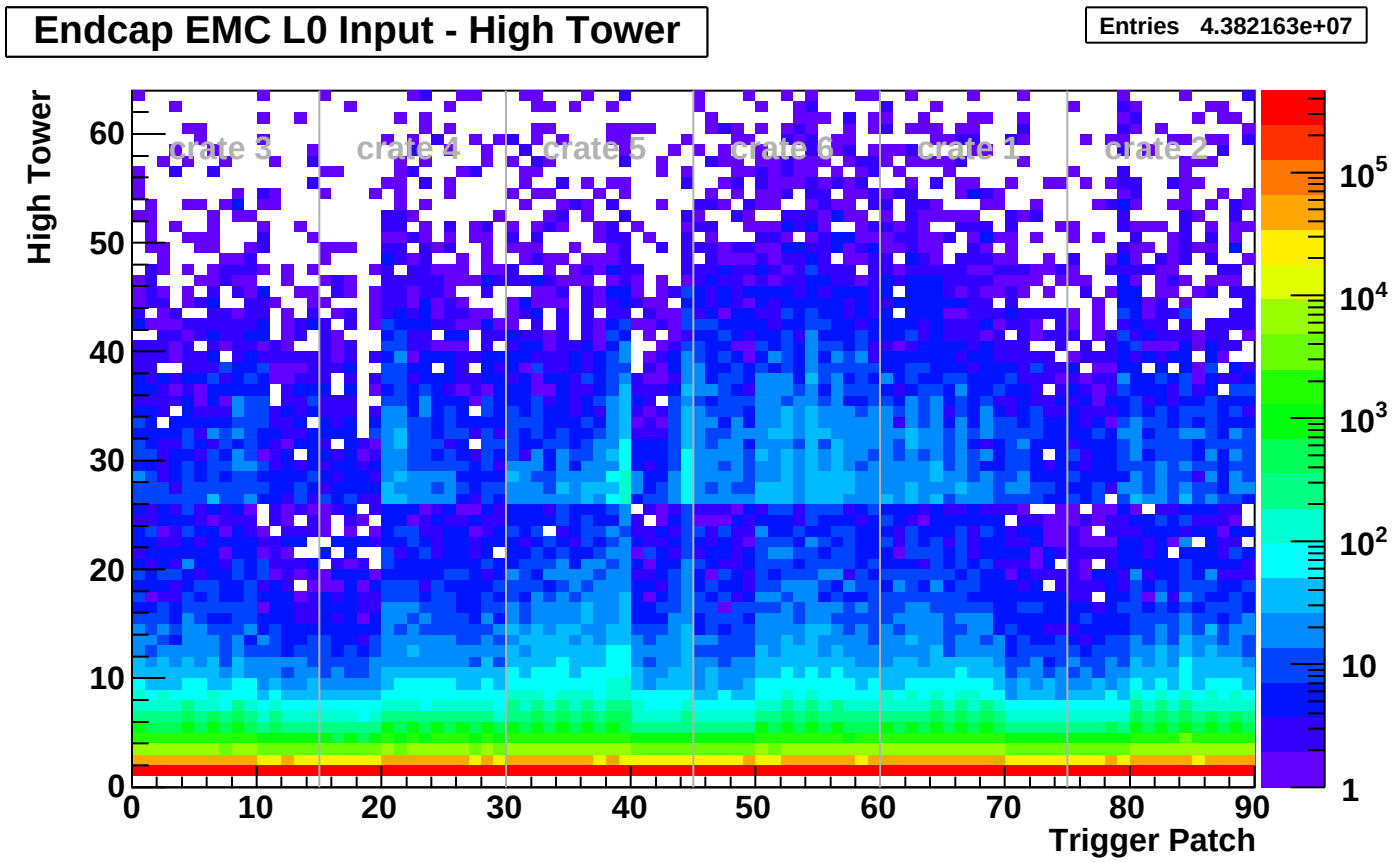

TCU bits
Entries 610986
TCU bits - Simulated
1
0
-1
-2
62690 149675 236583 16069 16187 123306 1476
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

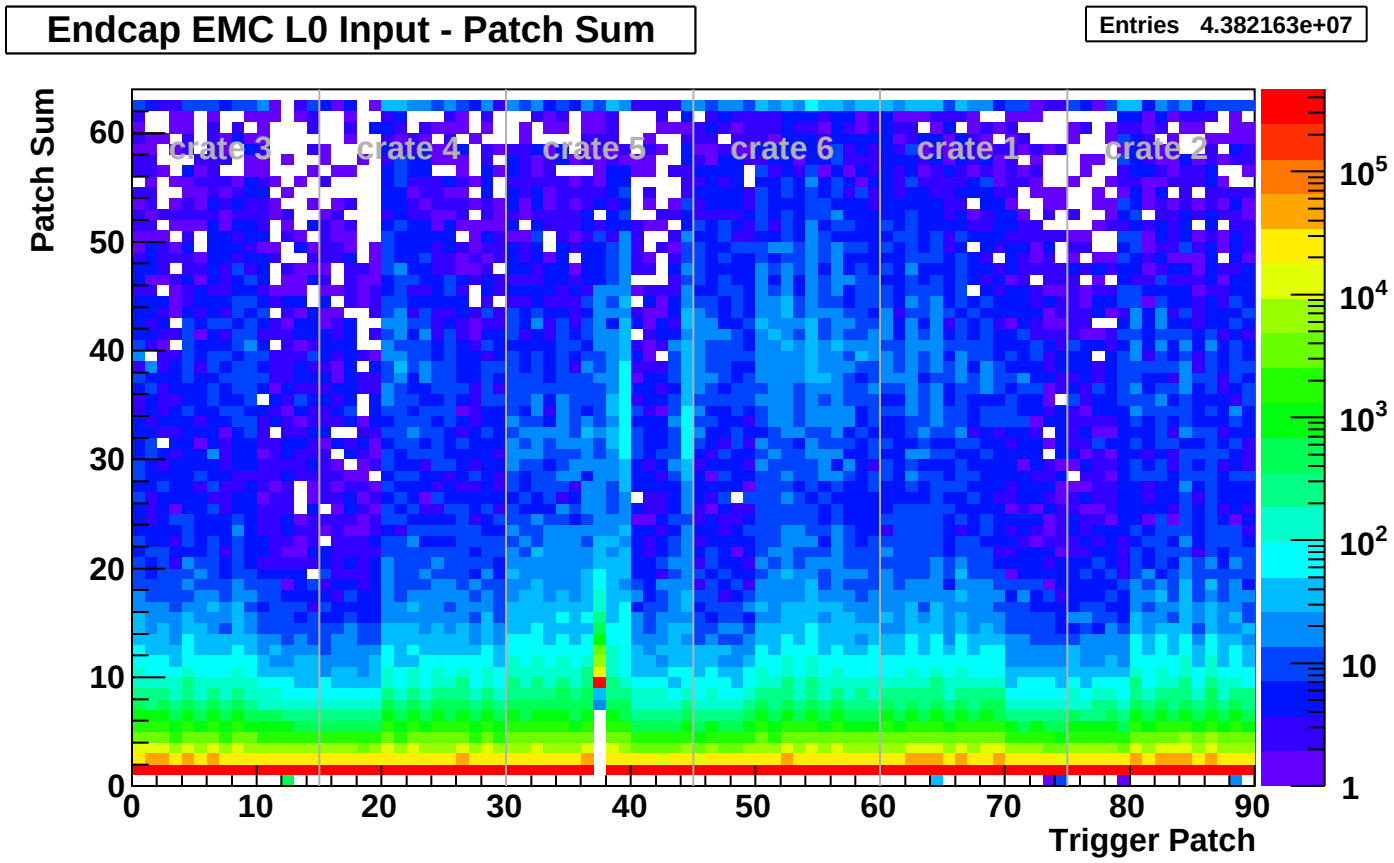

BunchId7Bit (BHT3)
Entries 12954
10²
10
1
0 20 40 60 80 100 120

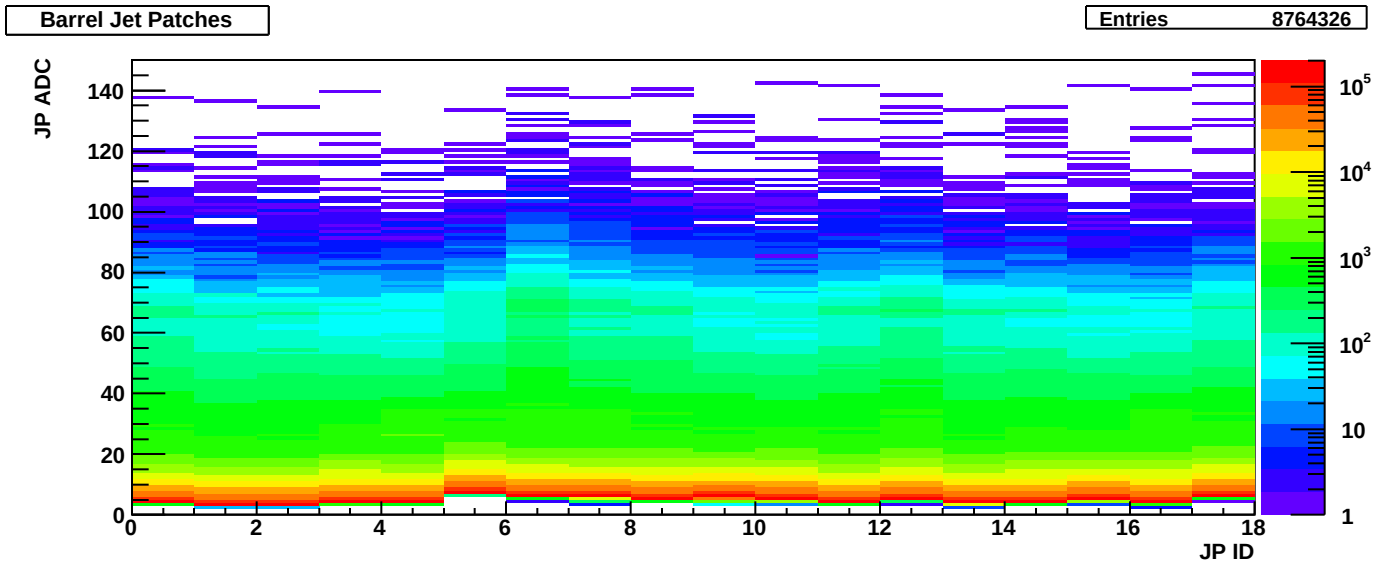

BunchId7Bit (all events)
Entries 486907
10⁴
10³
10²
0 20 40 60 80 100 120

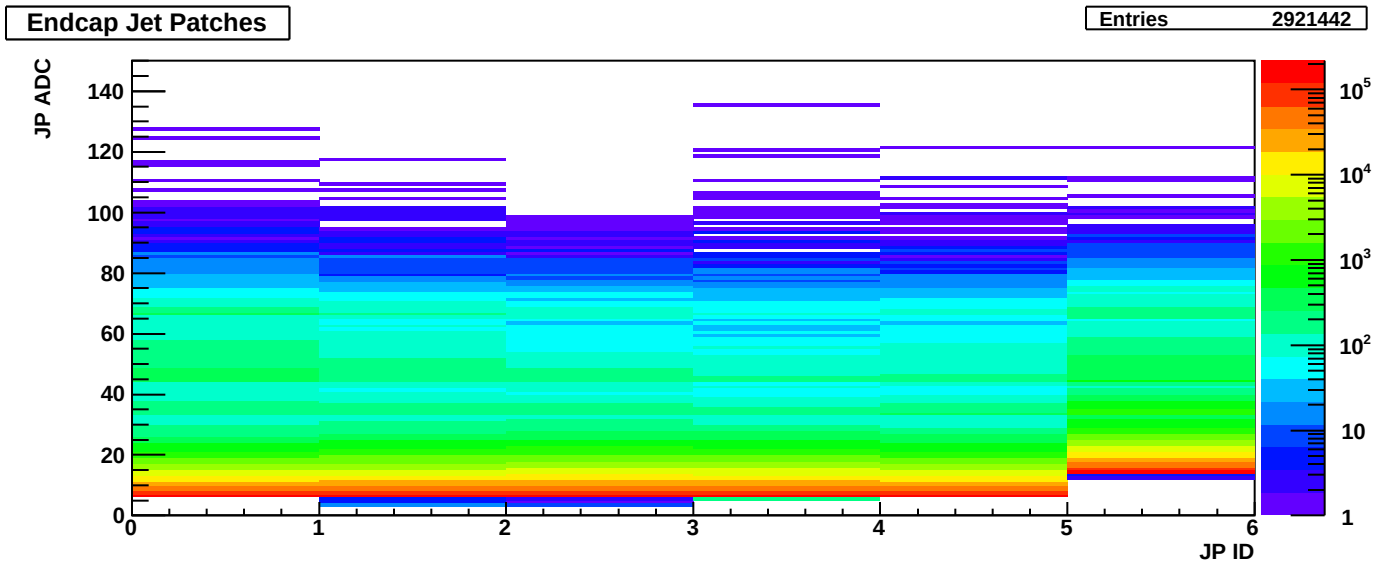

Barrel EMC L0 Input - High Tower
Entries 1.460721e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

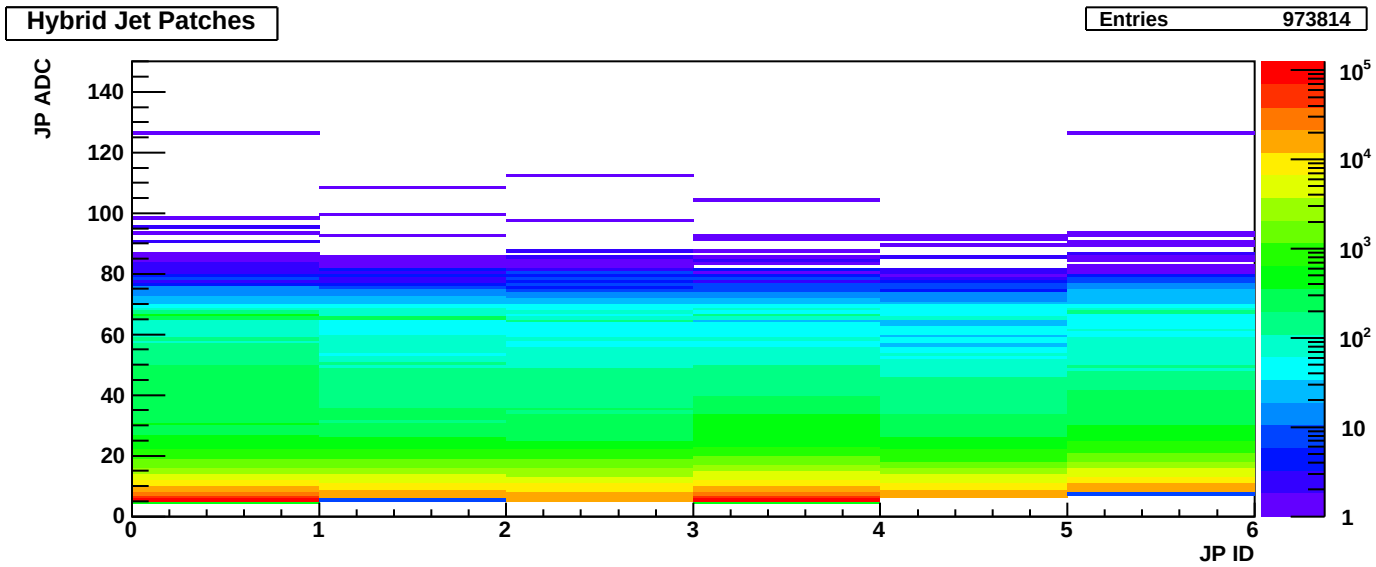

Barrel EMC L0 Input - Patch Sum
Entries 1.460721e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

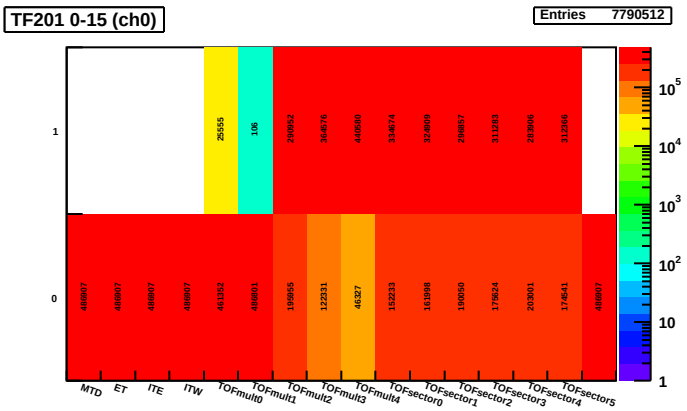

Endcap EMC L0 Input - High Tower
Entries 4.382163e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

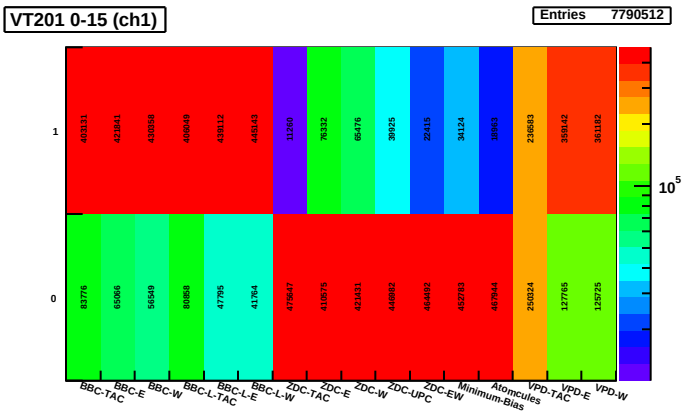

Endcap EMC L0 Input - Patch Sum
Entries 4.382163e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

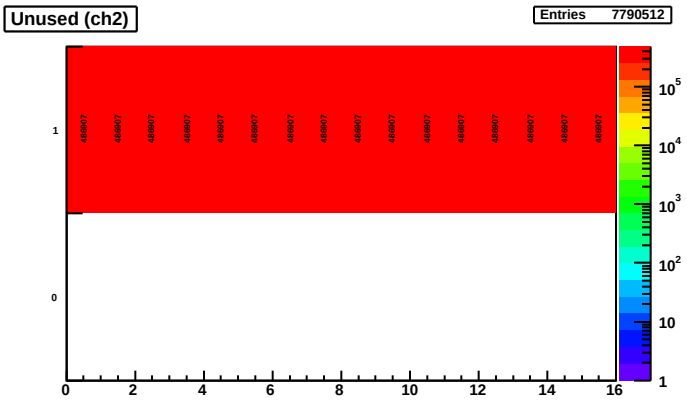

Barrel Jet Patches
Entries 8764326
JP ADC
JP ID

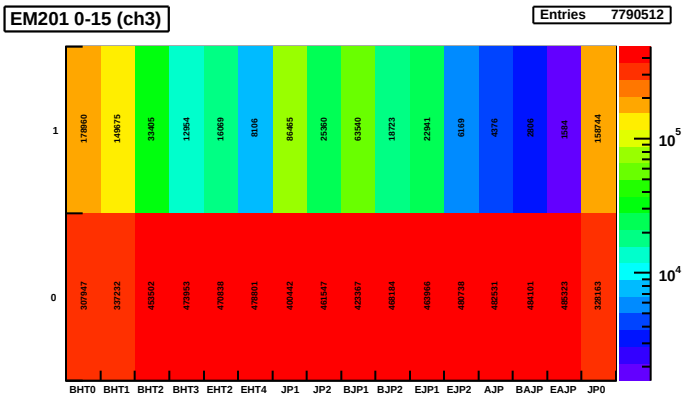

Endcap Jet Patches
Entries 2921442
JP ADC
JP ID

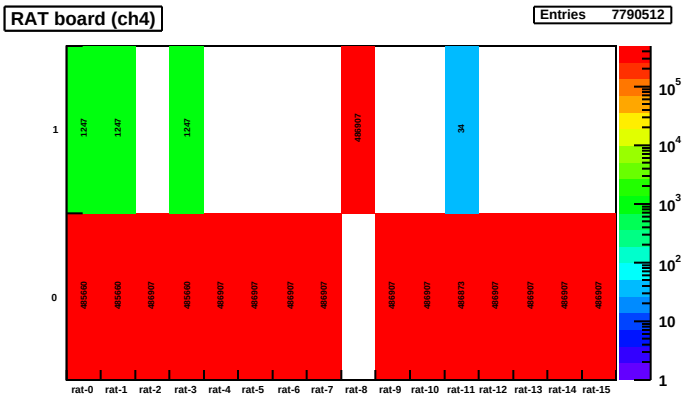

Hybrid Jet Patches
Entries 973814
JP ADC
JP ID

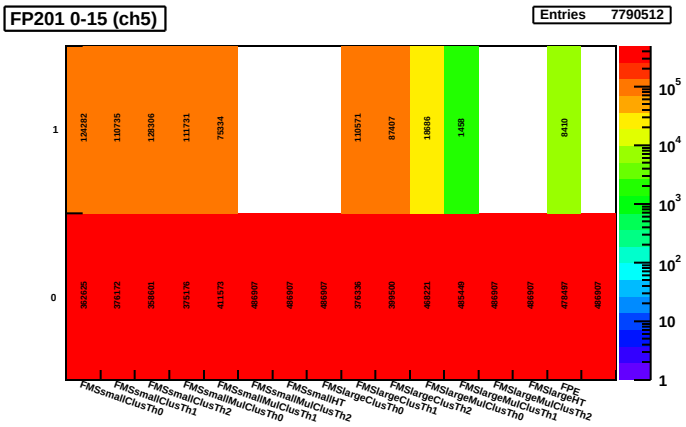

TF201 0-15 (ch0)
Entries 7790512
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

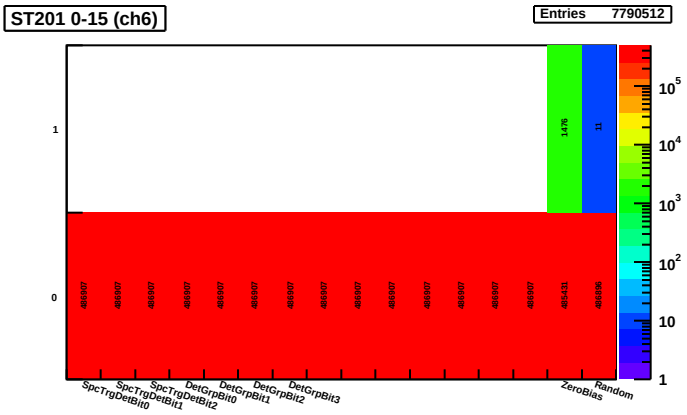

VT201 0-15 (ch1)
Entries 7790512
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Atomcules
Minimum-Bias
VPD-TAC
VPD-E
VPD-W

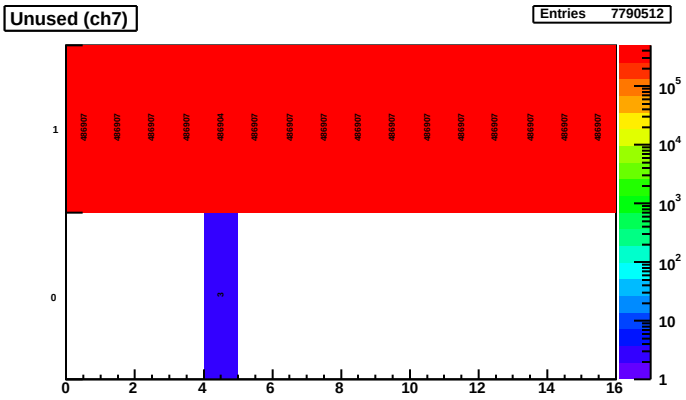

Unused (ch2)
Entries 7790512

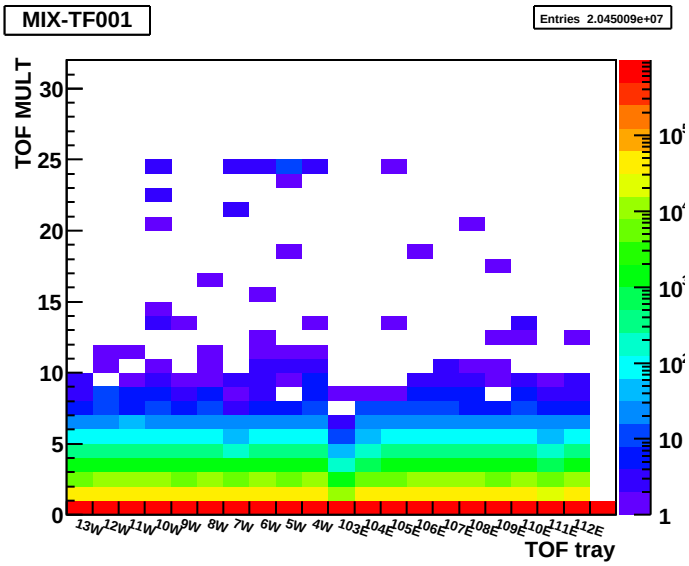

EM201 0-15 (ch3)
Entries 7790512
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

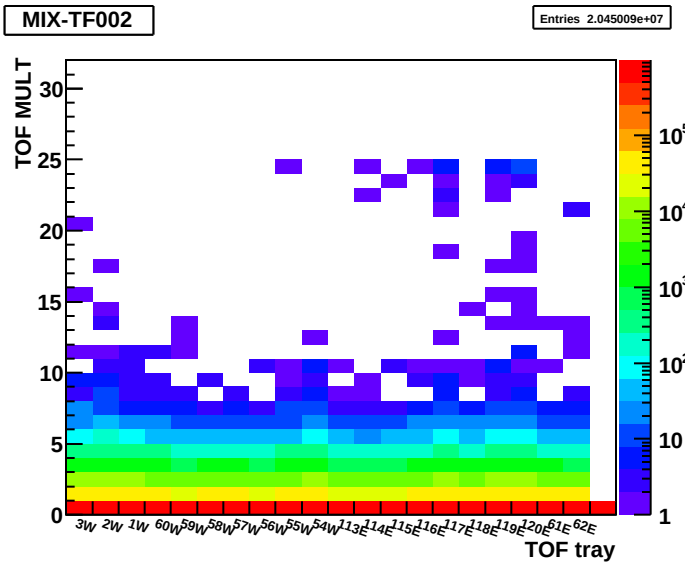

RAT board (ch4)
Entries 7790512
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

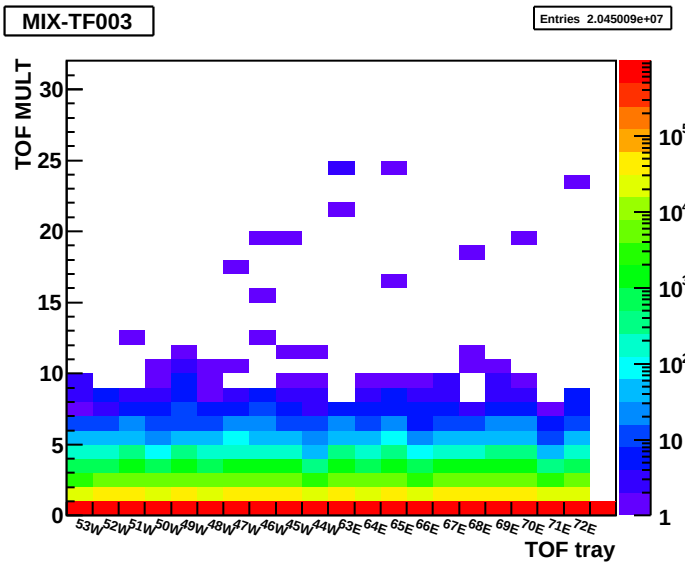

FP201 0-15 (ch5)
Entries 7790512
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

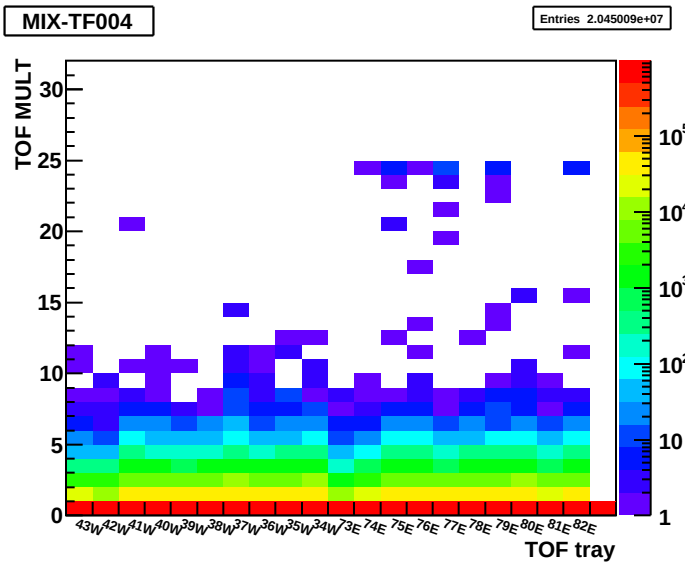

ST201 0-15 (ch6)
Entries 7790512
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

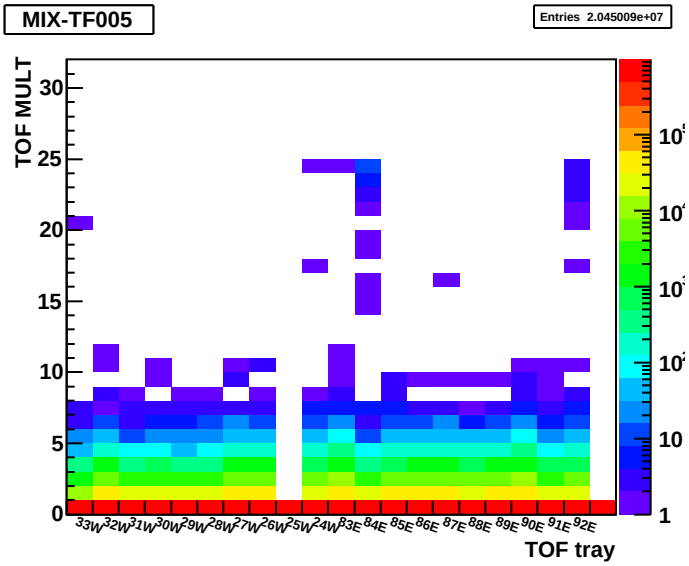

Unused (ch7)
Entries 7790512

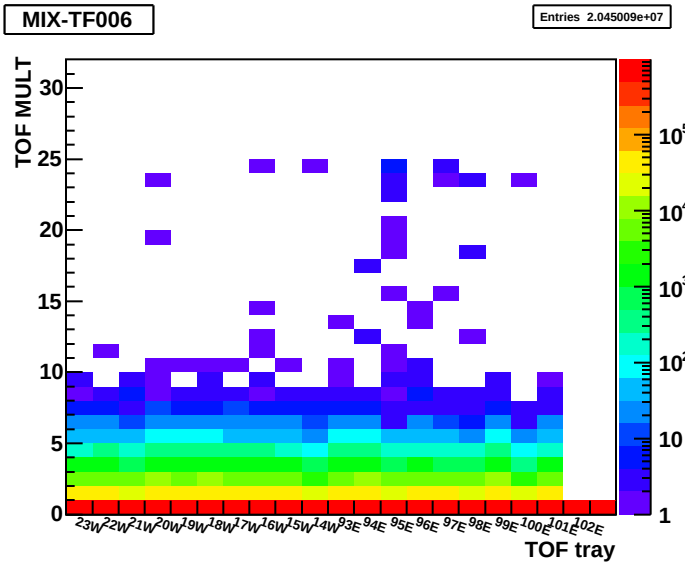

MIX-TF001
Entries 2.045009e+07
TOF MULT
TOF tray

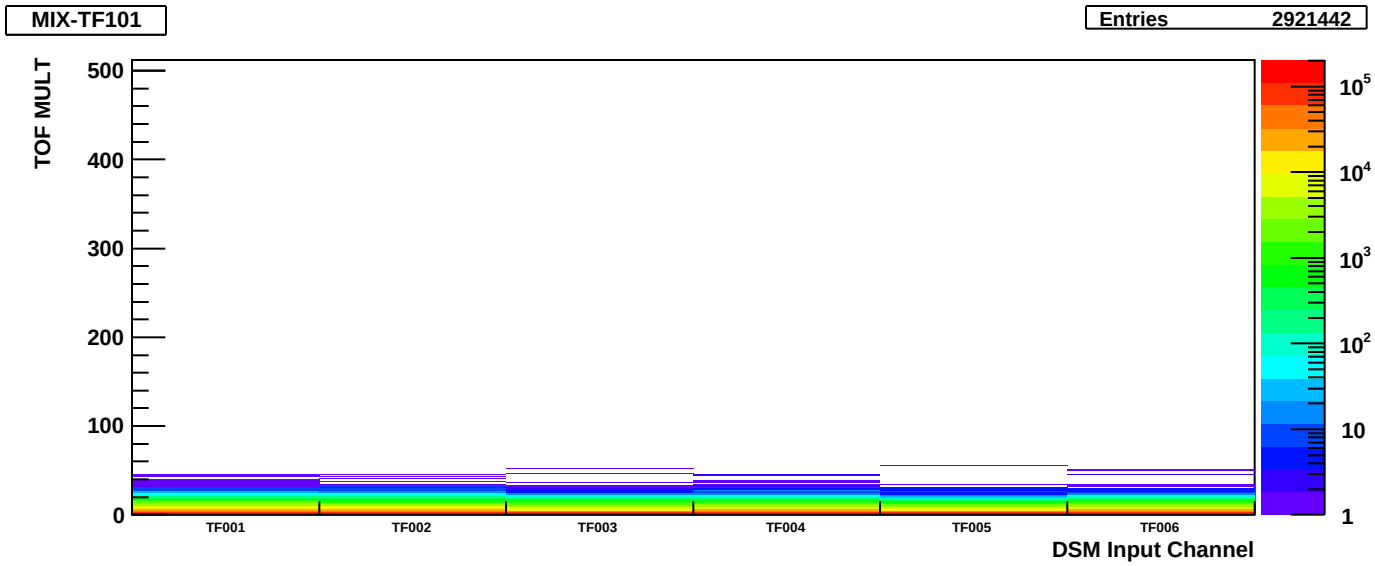

MIX-TF002
Entries 2.045009e+07
TOF MULT
TOF tray

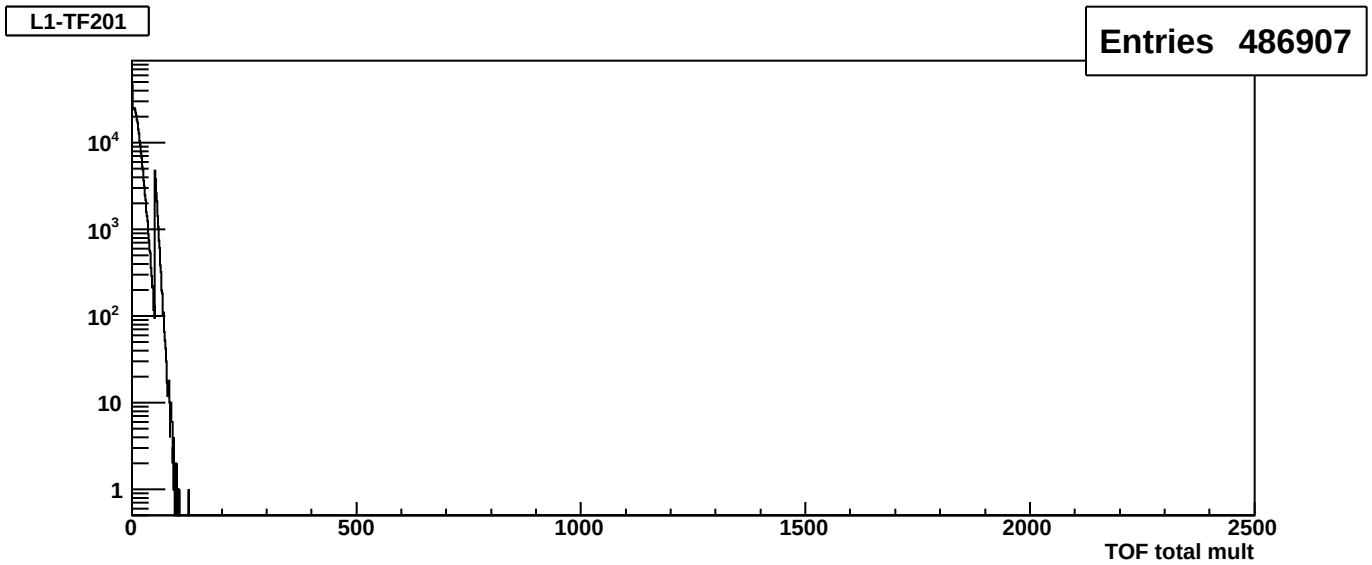

MIX-TF003
Entries 2.045009e+07
TOF MULT
TOF tray

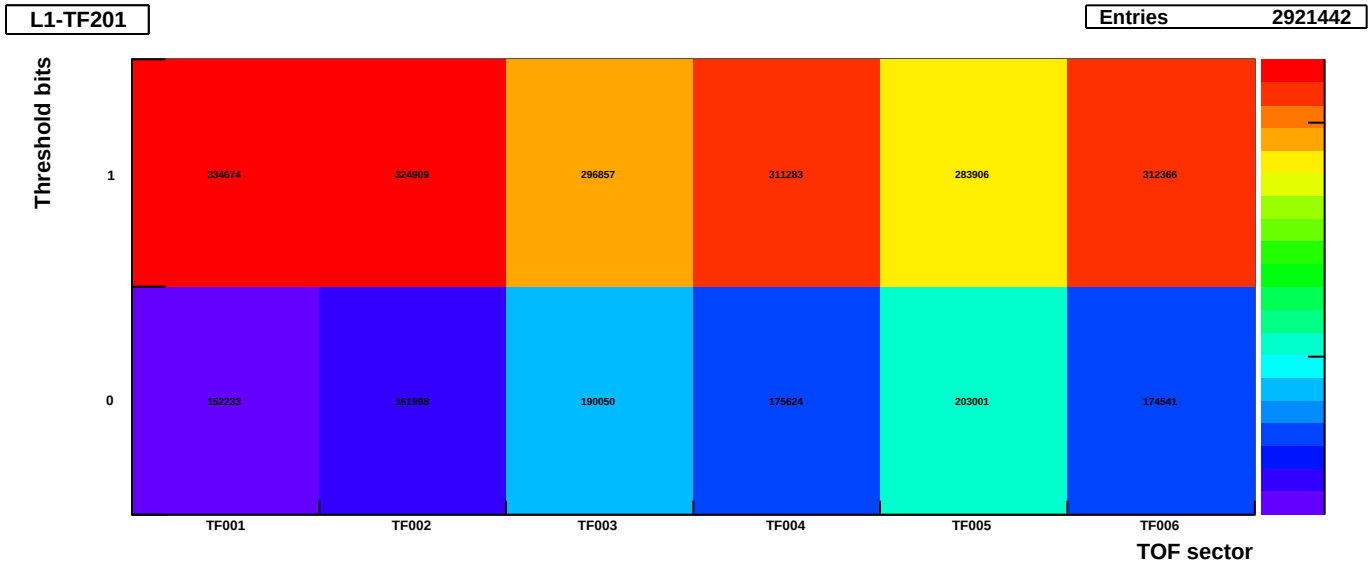

MIX-TF004
Entries 2.045009e+07
TOF MULT
TOF tray

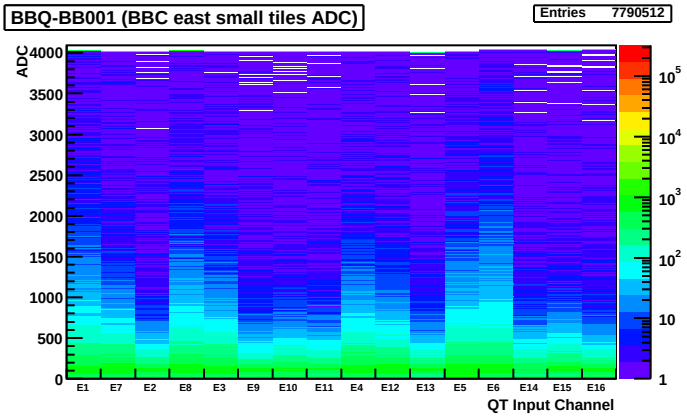

MIX-TF005
Entries 2.045009e+07
TOF MULT
TOF tray

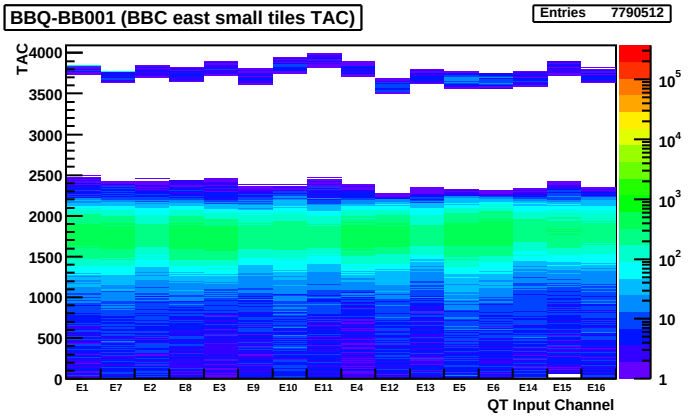

MIX-TF006
Entries 2.045009e+07
TOF MULT
TOF tray

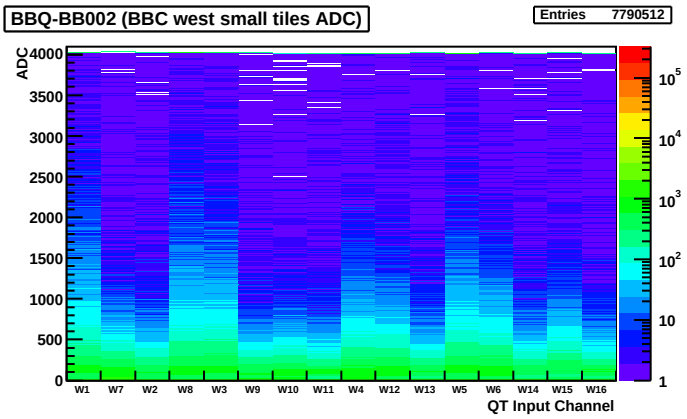

MIX-TF101
Entries 2921442
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

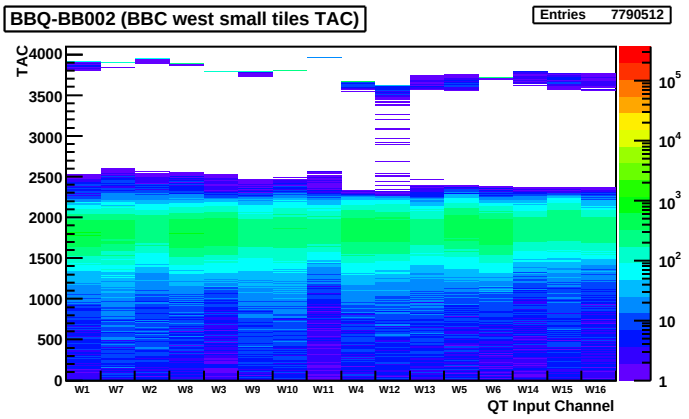

L1-TF201
Entries 486907
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

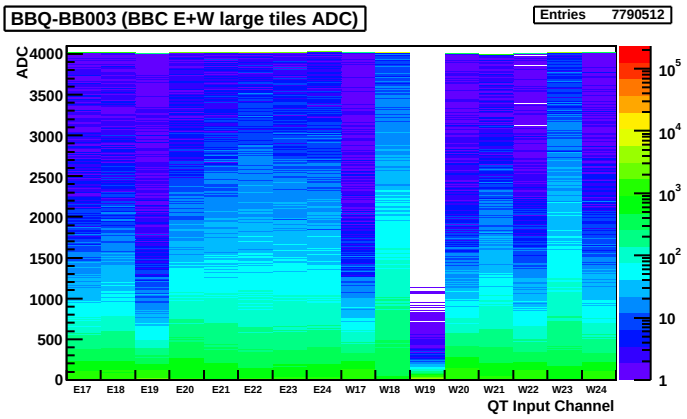

L1-TF201
Entries 2921442
Threshold bits
1
0
334674
324909
296857
311283
283906
312366
152233
161998
190050
175624
203001
174541
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

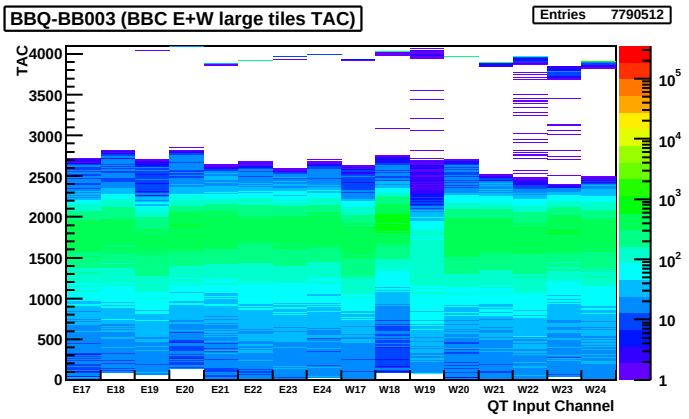

BBQ-BB001 (BBC east small tiles ADC)
Entries 7790512
ADC
QT Input Channel

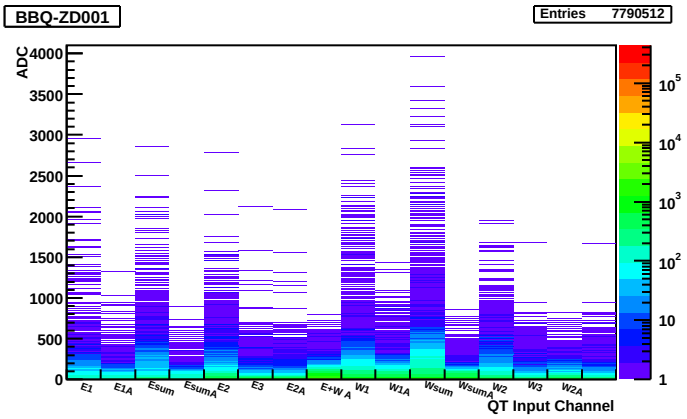

BBQ-BB001 (BBC east small tiles TAC)
Entries 7790512
TAC
QT Input Channel

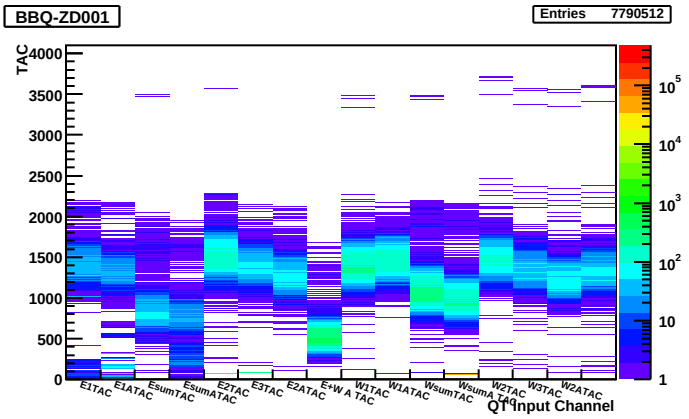

BBQ-BB002 (BBC west small tiles ADC)
Entries 7790512
ADC
QT Input Channel

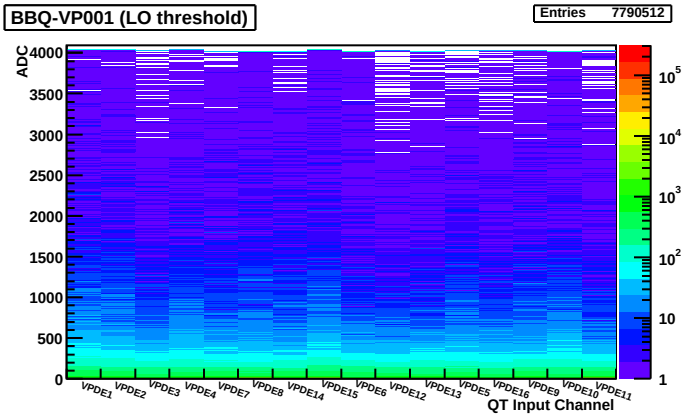

BBQ-BB002 (BBC west small tiles TAC)
Entries 7790512
TAC
QT Input Channel

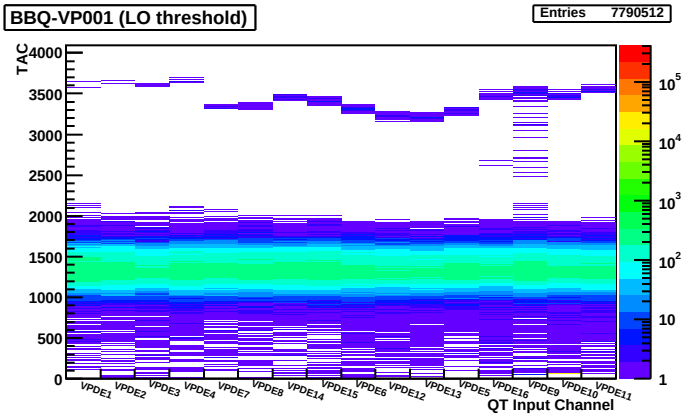

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 7790512
ADC
QT Input Channel

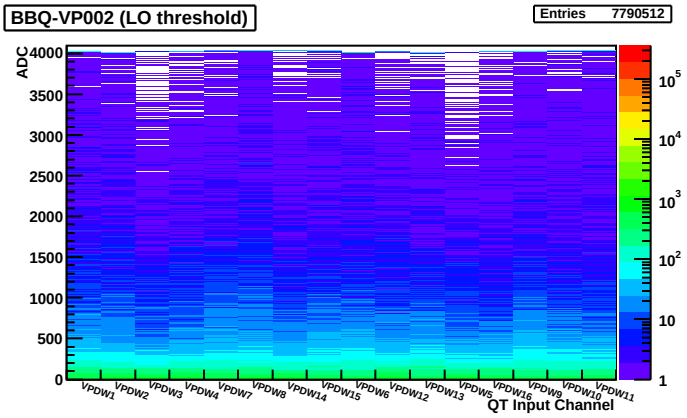

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 7790512
TAC
QT Input Channel

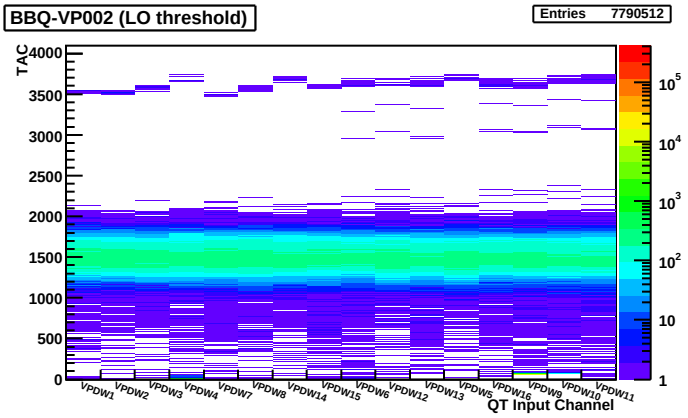

BBQ-ZD001
Entries 7790512
ADC
QT Input Channel

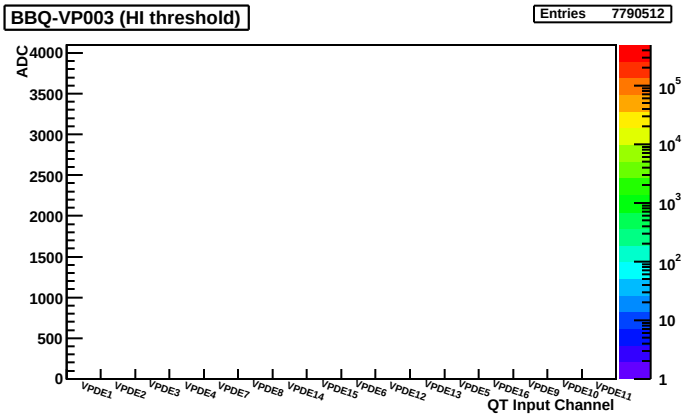

BBQ-ZD001
Entries 7790512
TAC
QT Input Channel

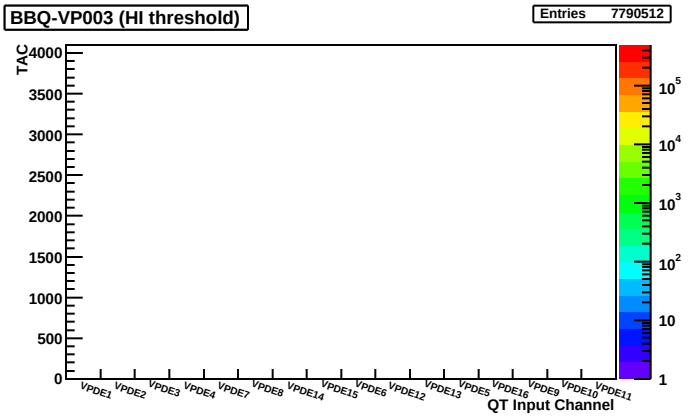

BBQ-VP001 (LO threshold)
Entries 7790512
ADC
QT Input Channel

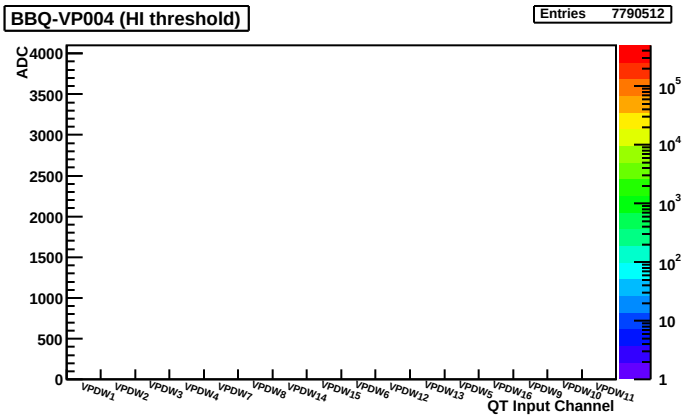

BBQ-VP001 (LO threshold)
Entries 7790512
TAC
QT Input Channel

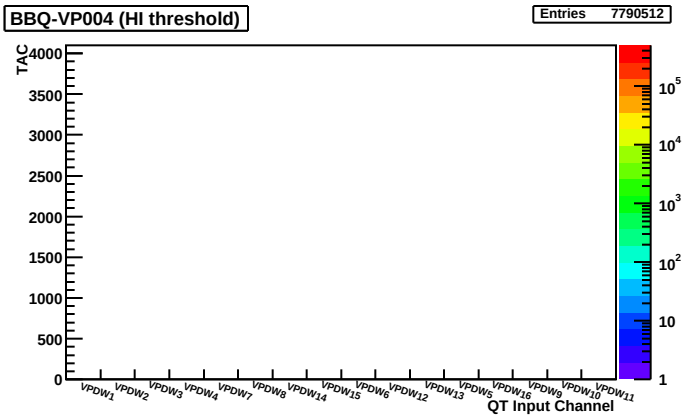

BBQ-VP002 (LO threshold)
Entries 7790512
ADC
QT Input Channel

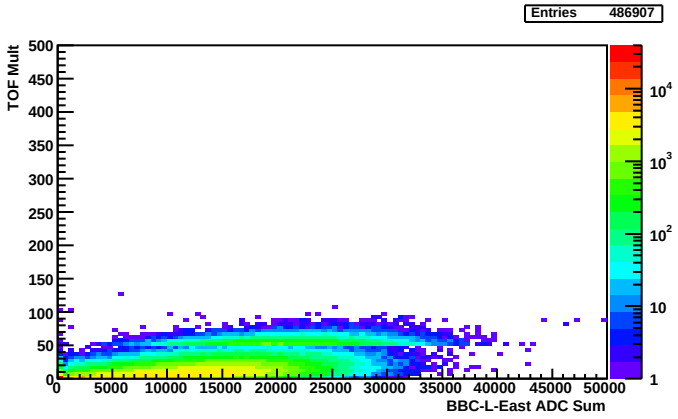

BBQ-VP002 (LO threshold)
Entries 7790512
TAC
QT Input Channel

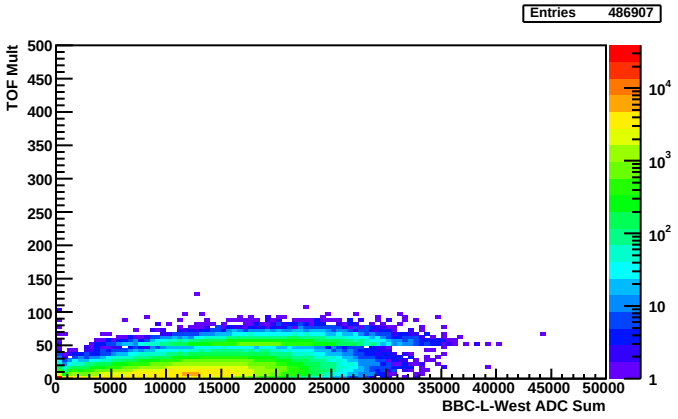

BBQ-VP003 (HI threshold)
Entries 7790512
ADC
QT Input Channel

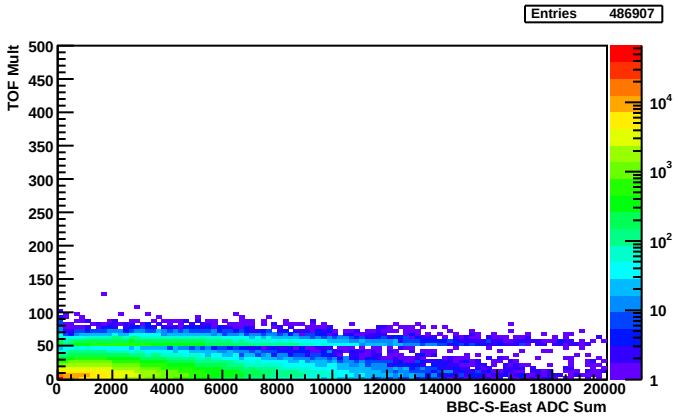

BBQ-VP003 (HI threshold)
Entries 7790512
TAC
QT Input Channel

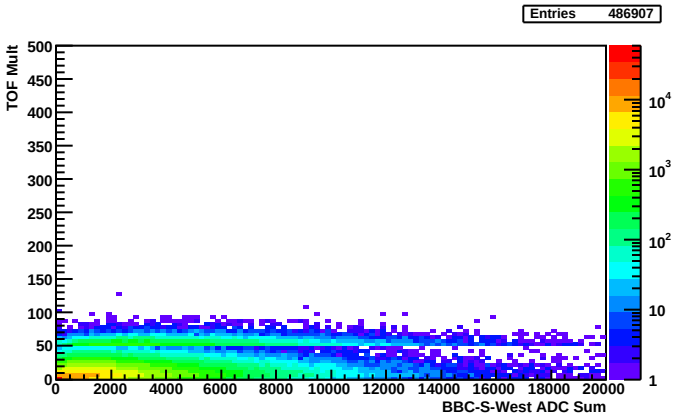

BBQ-VP004 (HI threshold)
Entries 7790512
ADC
QT Input Channel

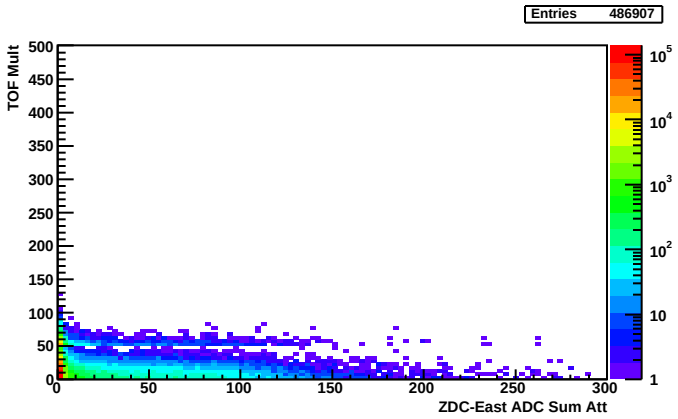

BBQ-VP004 (HI threshold)
Entries 7790512
TAC
QT Input Channel

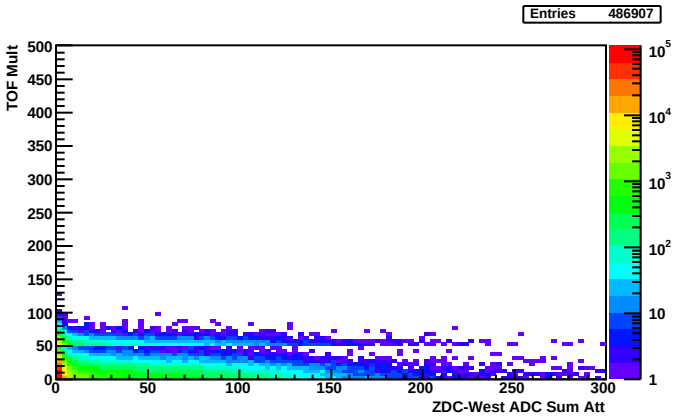

Entries 486907
TOF Mult
BBC-L-East ADC Sum

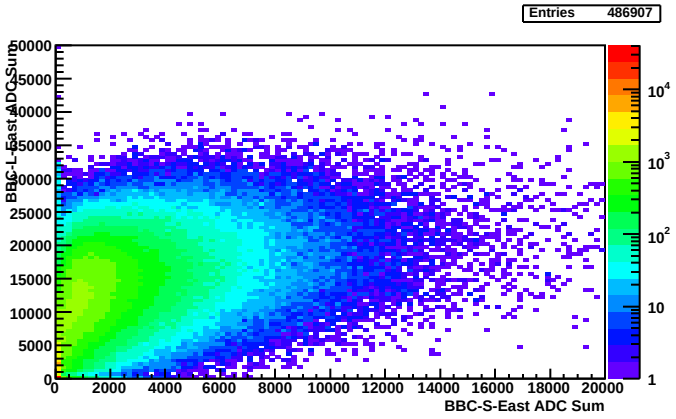

Entries 486907
TOF Mult
BBC-L-West ADC Sum

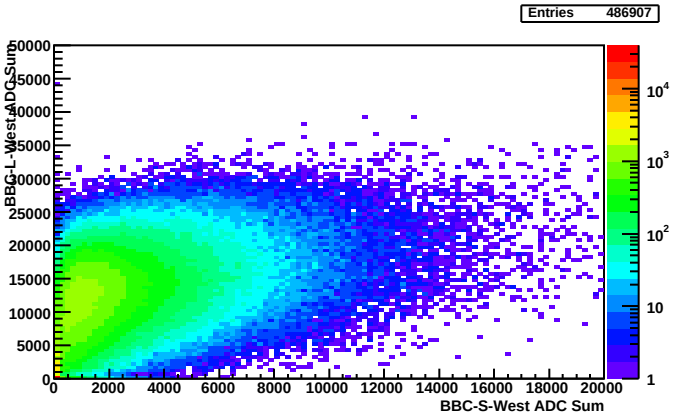

Entries 486907
TOF Mult
BBC-S-East ADC Sum

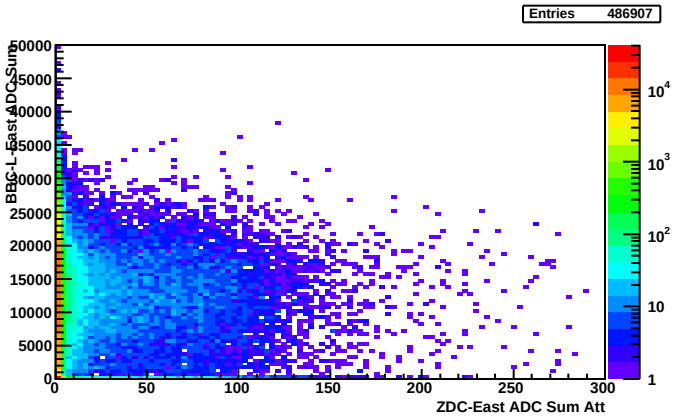

Entries 486907
TOF Mult
BBC-S-West ADC Sum

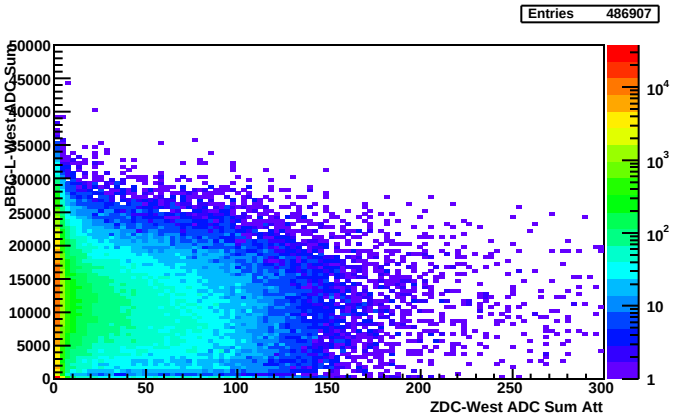

Entries 486907
TOF Mult
ZDC-East ADC Sum Att

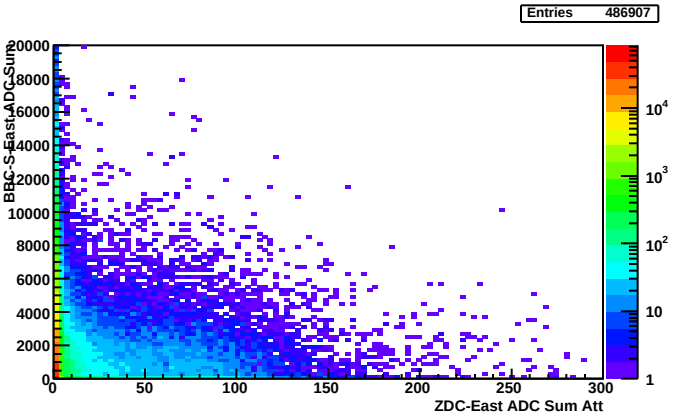

Entries 486907
TOF Mult
ZDC-West ADC Sum Att

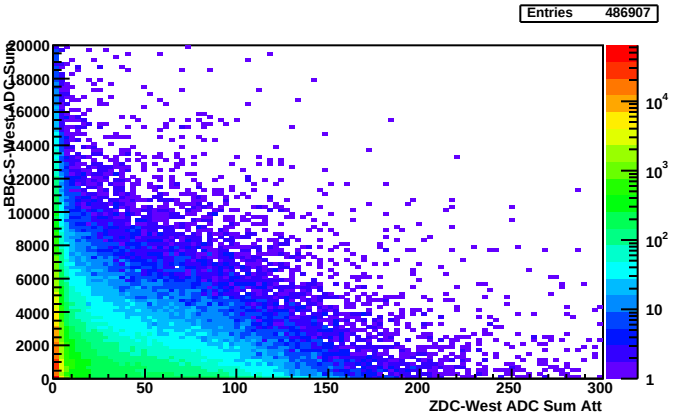

Entries 486907
BBC-L-East ADC Sum
BBC-S-East ADC Sum

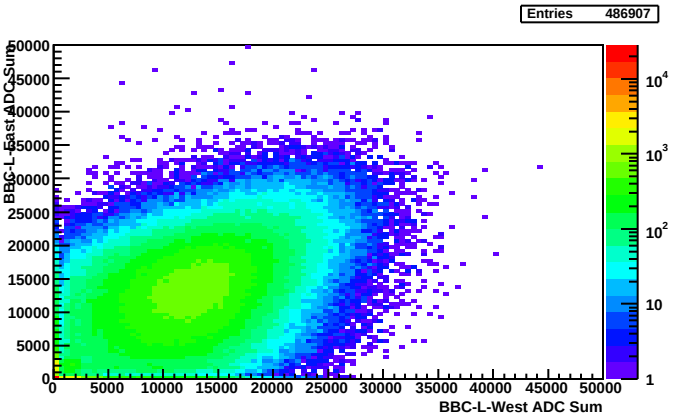

Entries 486907
BBC-L-West ADC Sum
BBC-S-West ADC Sum

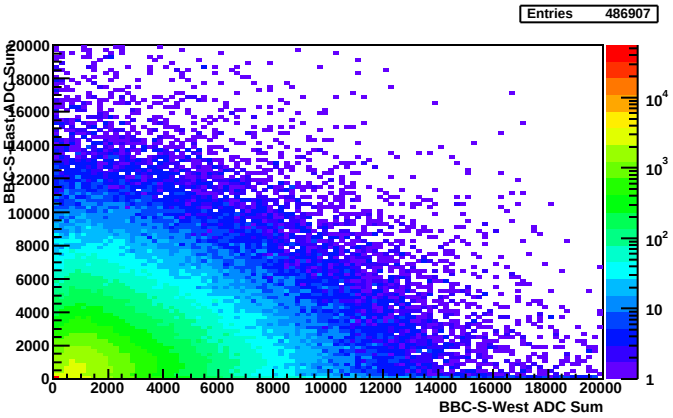

Entries 486907
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

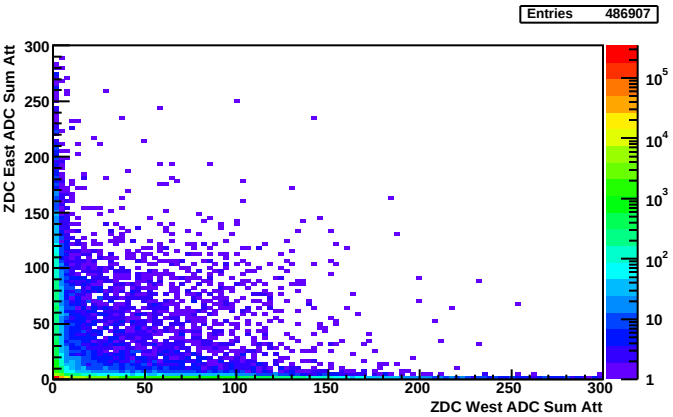

Entries 486907
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

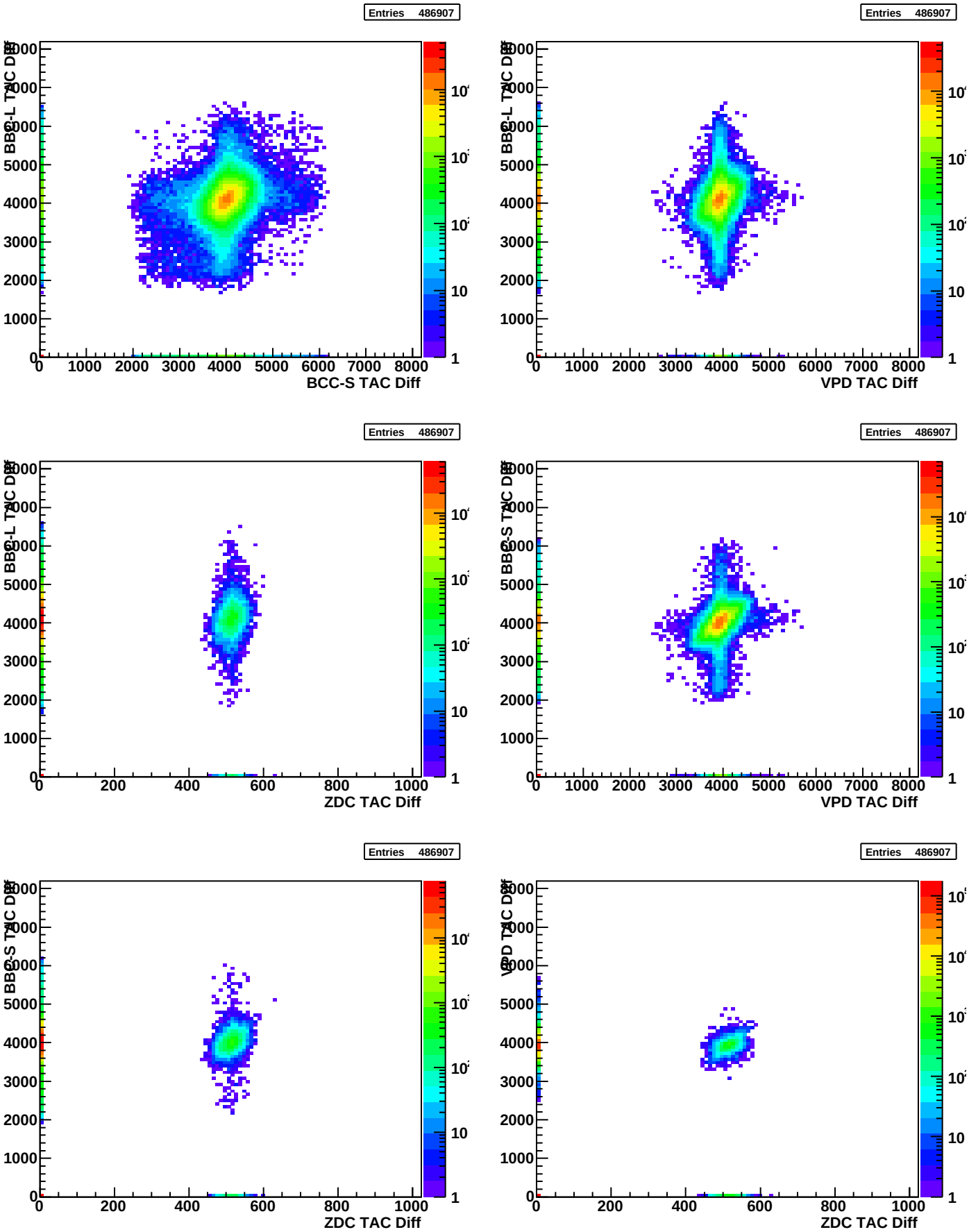

Entries 486907
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

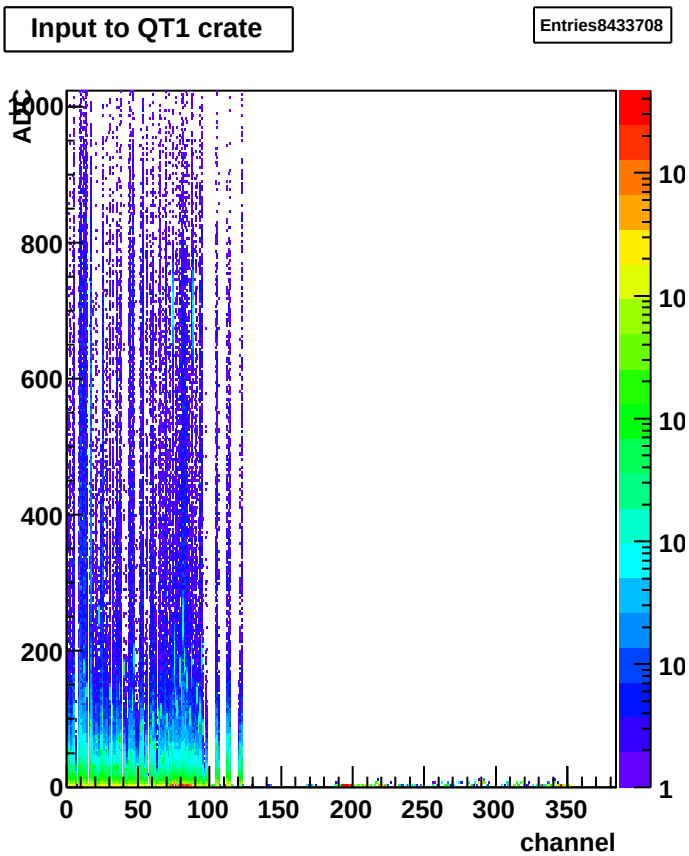

Entries 486907
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

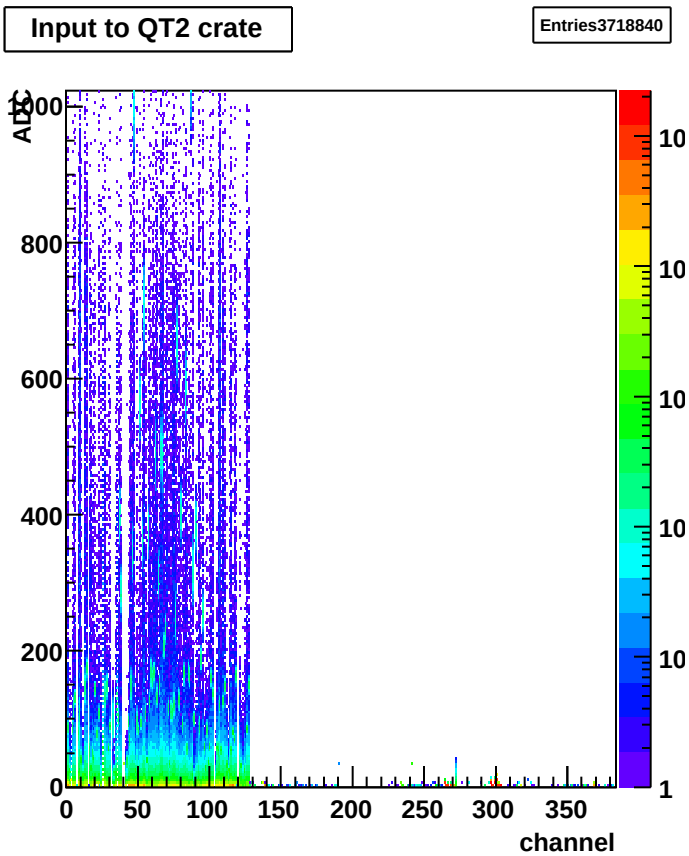

Entries 486907
BBC-L-East ADC Sum
BBC-L-West ADC Sum

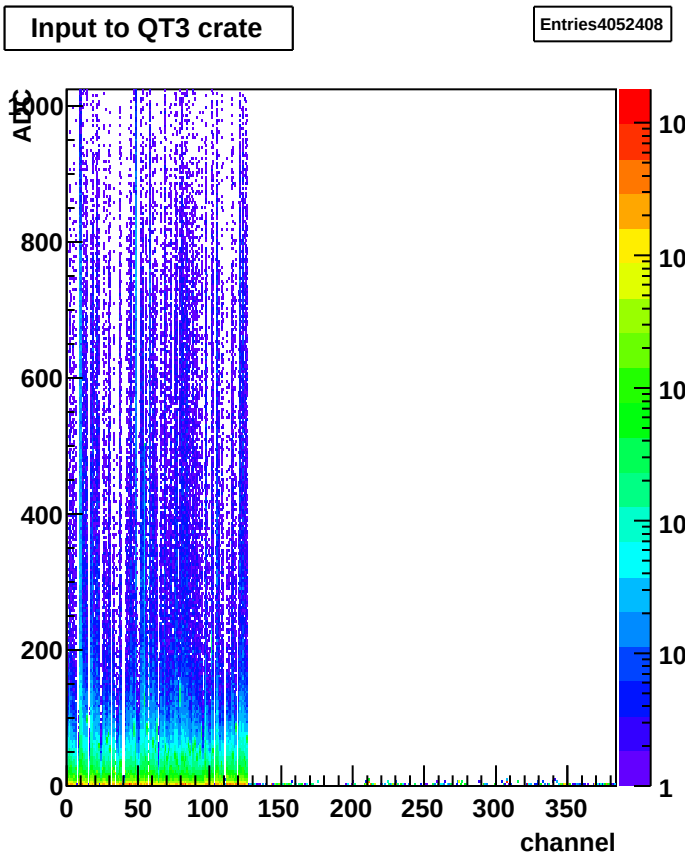

Entries 486907
BBC-S-East ADC Sum
BBC-S-West ADC Sum

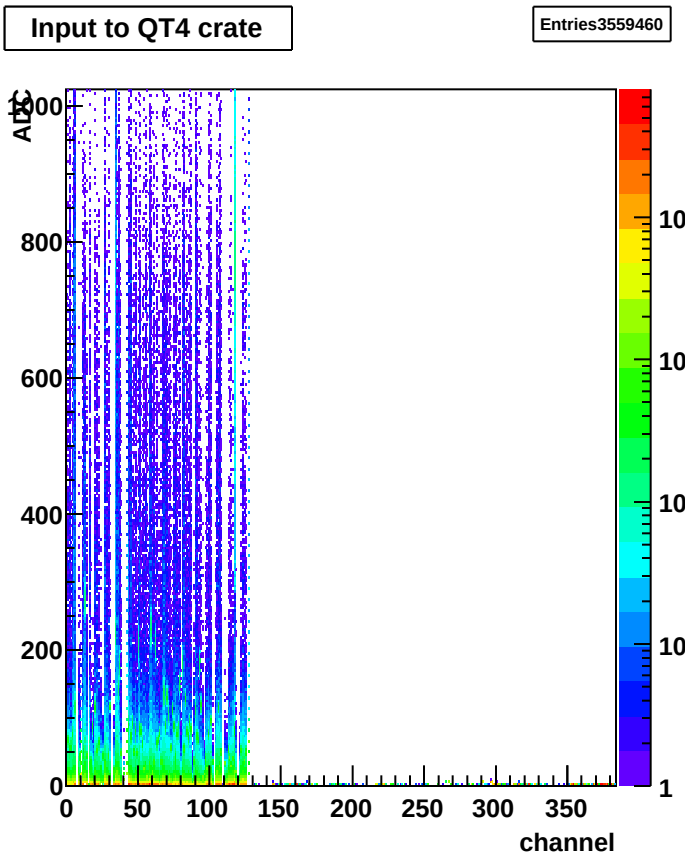

Entries 486907
ZDC East ADC Sum Att
ZDC West ADC Sum Att

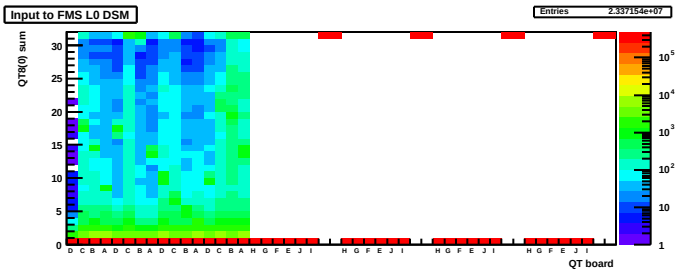

Entries 486907
BBC-L TAC Diff
BCC-S TAC Diff
Entries 486907
BBC-L TAC Diff
VPD TAC Diff
Entries 486907
BBC-L TAC Diff
ZDC TAC Diff
Entries 486907
BBC-S TAC Diff
VPD TAC Diff
Entries 486907
BBC-S TAC Diff
ZDC TAC Diff
Entries 486907
VPD TAC Diff
ZDC TAC Diff

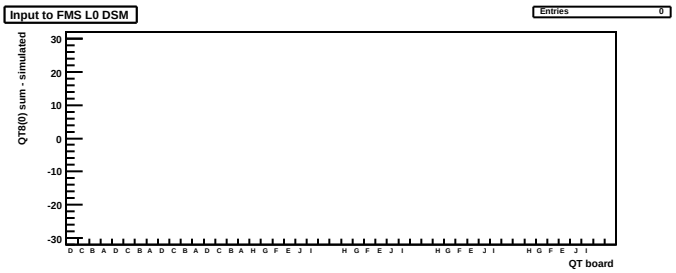

Input to QT1 crate
Entries8433708
ADC
channel

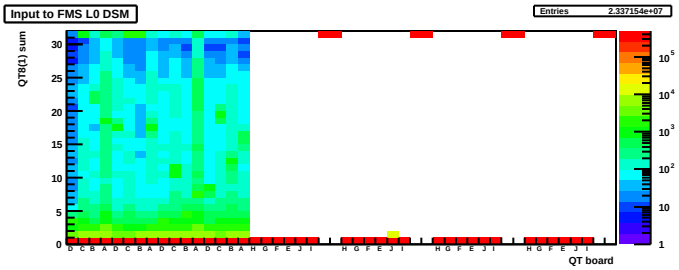

Input to QT2 crate
Entries3718840
ADC
channel

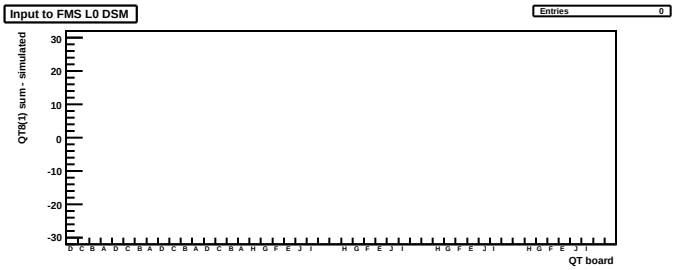

Input to QT3 crate
Entries4052408
ADC
channel

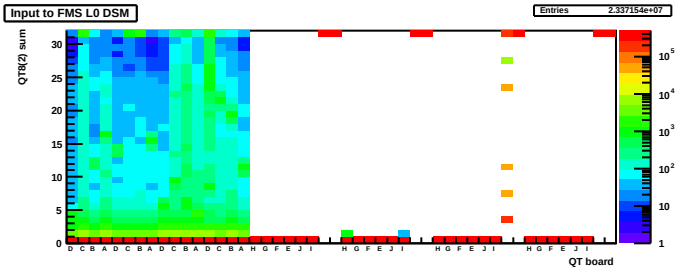

Input to QT4 crate
Entries3559460
ADC
channel

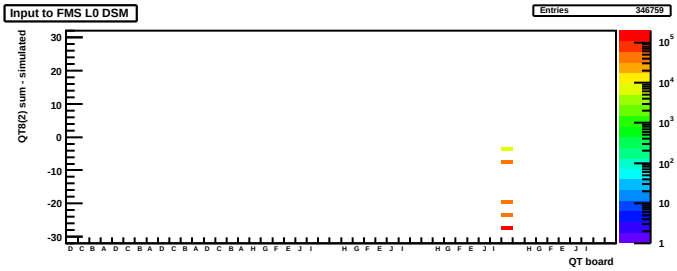

Input to FMS L0 DSM
Entries 2.337154e+07
QT8(0) sum
QT board

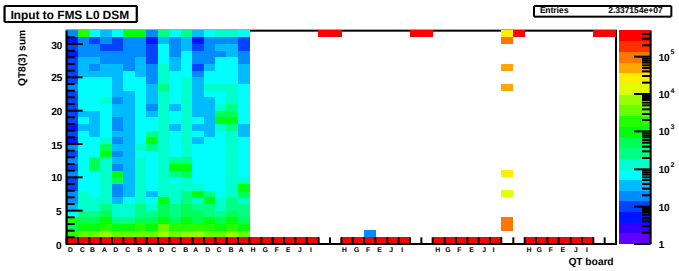

Input to FMS L0 DSM
Entries 0
QT8(0) sum - simulated
QT board

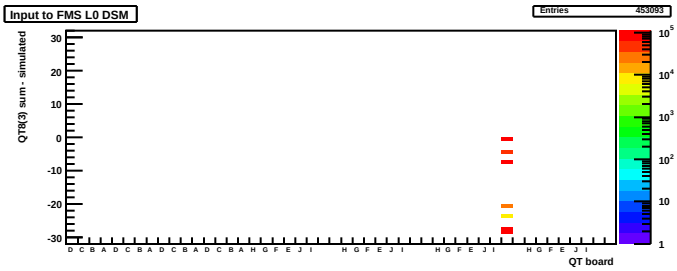

Input to FMS L0 DSM
Entries 2.337154e+07
QT8(1) sum
QT board

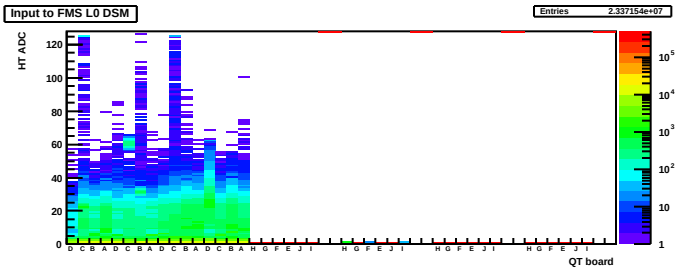

Input to FMS L0 DSM
Entries 0
QT8(1) sum - simulated
QT board

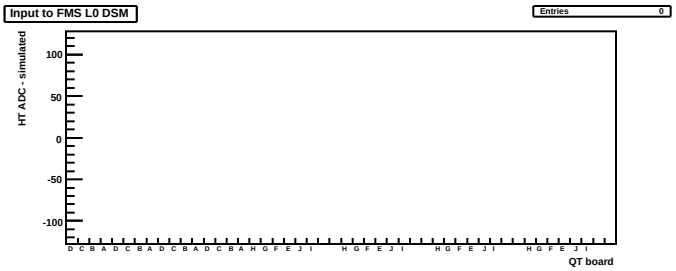

Input to FMS L0 DSM
Entries 2.337154e+07
QT8(2) sum
QT board

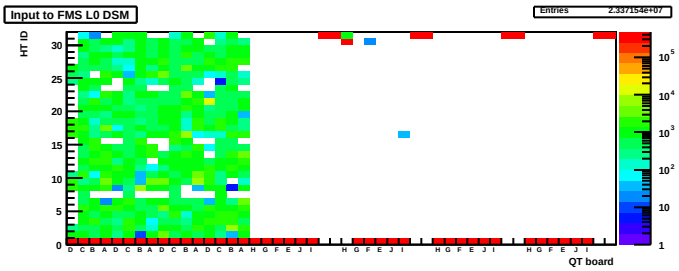

Input to FMS L0 DSM
Entries 346759
QT8(2) sum - simulated
QT board

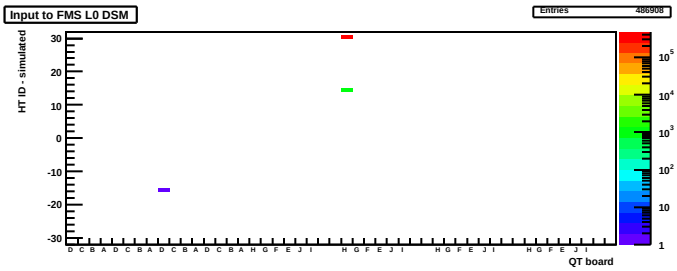

Input to FMS L0 DSM
Entries 2.337154e+07
QT8(3) sum
QT board

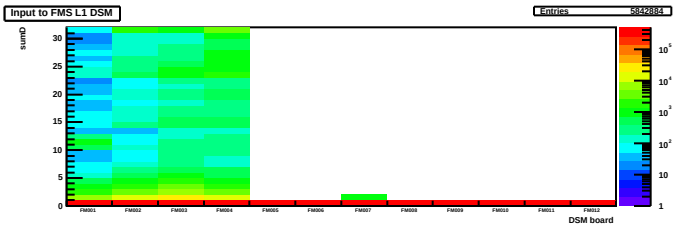

Input to FMS L0 DSM
Entries 453093
QT8(3) sum - simulated
QT board

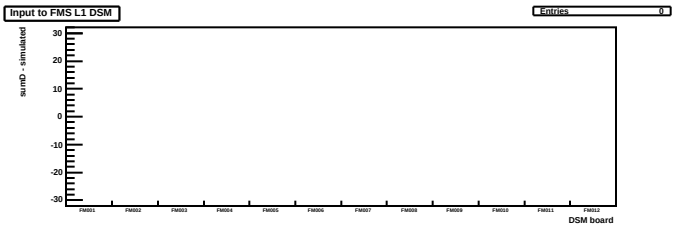

Input to FMS L0 DSM
Entries 2.337154e+07
HT ADC
QT board

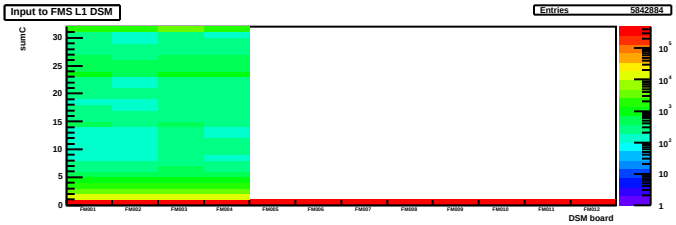

Input to FMS L0 DSM
Entries 0
HT ADC - simulated
QT board

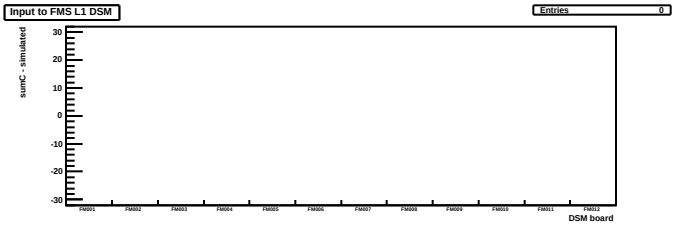

Input to FMS L0 DSM
Entries 2.337154e+07
HT ID
QT board

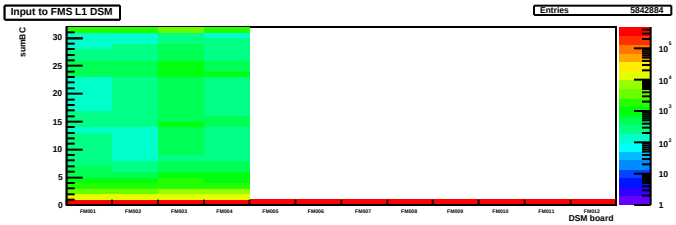

Input to FMS L0 DSM
Entries 486908
HT ID - simulated
QT board

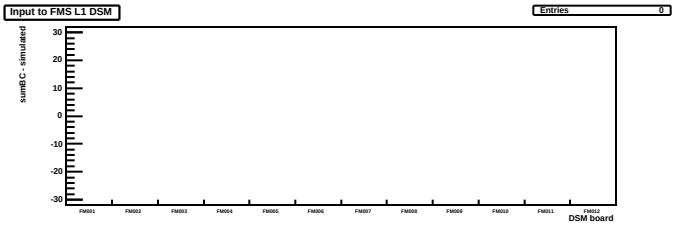

Input to FMS L1 DSM
Entries 5842884
sumD
DSM board

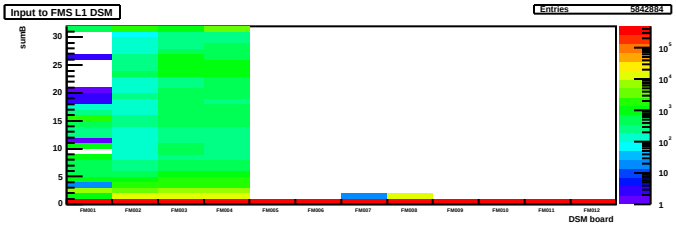

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

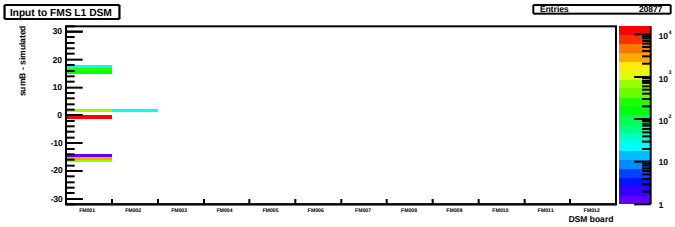

Input to FMS L1 DSM
Entries 5842884
sumC
DSM board

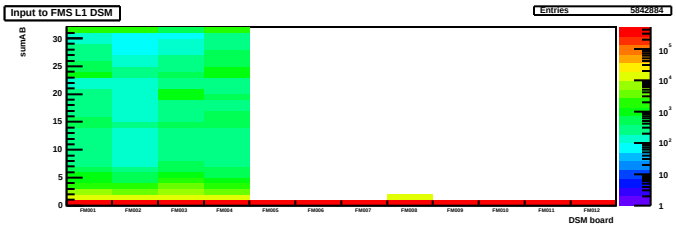

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

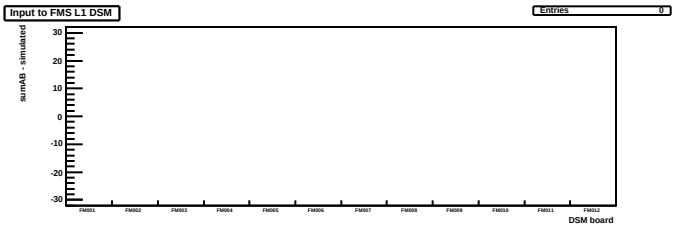

Input to FMS L1 DSM
Entries 5842884
sumBC
DSM board

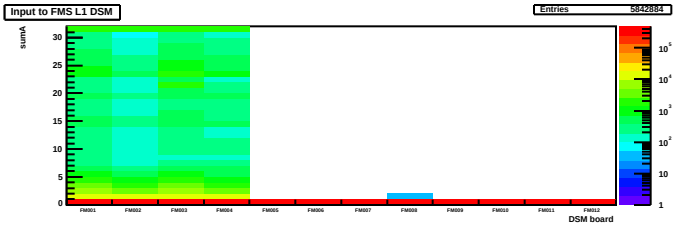

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

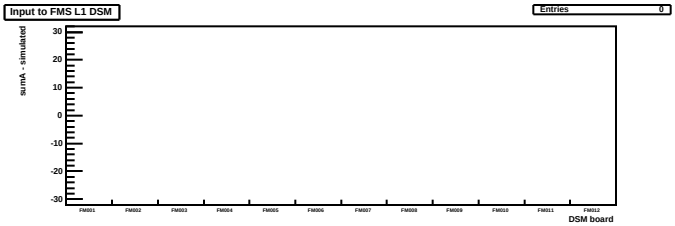

Input to FMS L1 DSM
Entries 5842884
sumB
DSM board

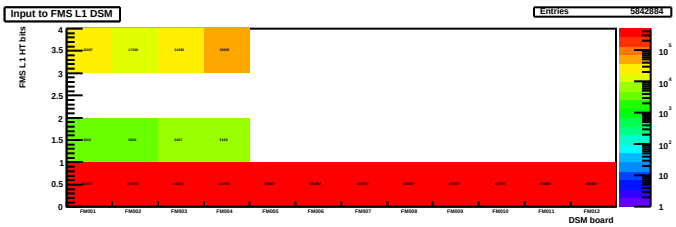

Input to FMS L1 DSM
Entries 20877
sumB - simulated
DSM board

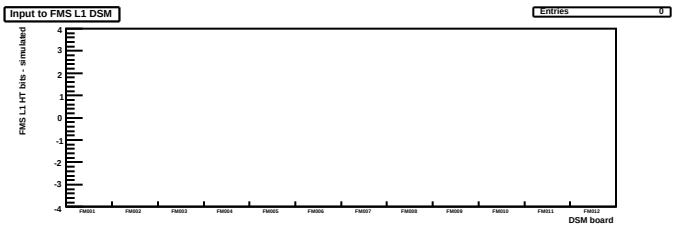

Input to FMS L1 DSM
Entries 5842884
sumAB
DSM board

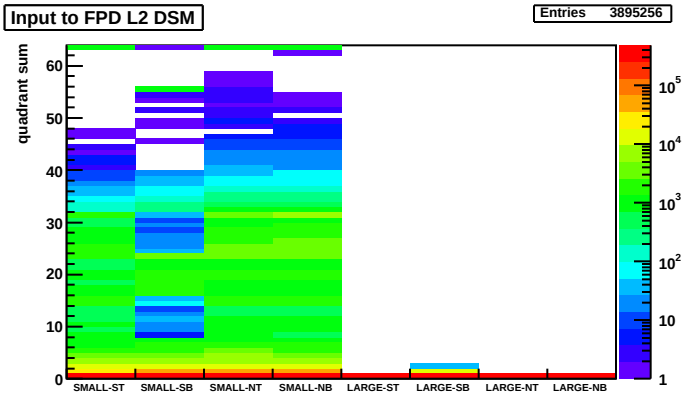

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

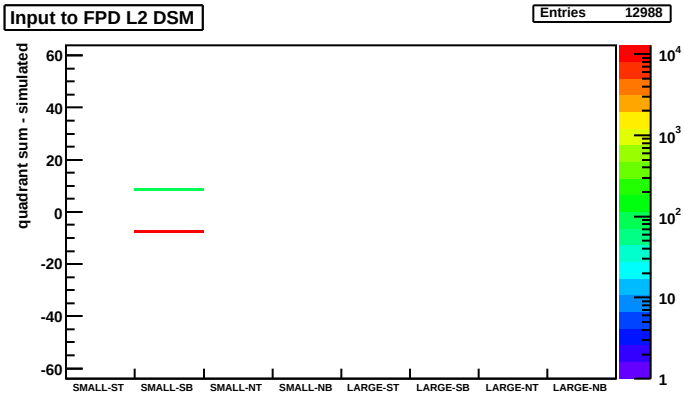

Input to FMS L1 DSM
Entries 5842884
sumA
DSM board

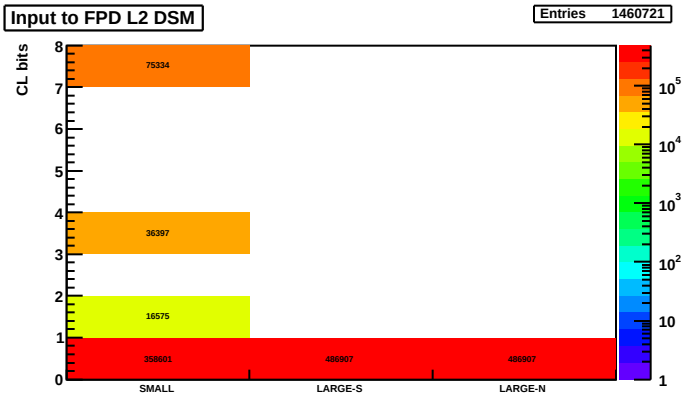

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

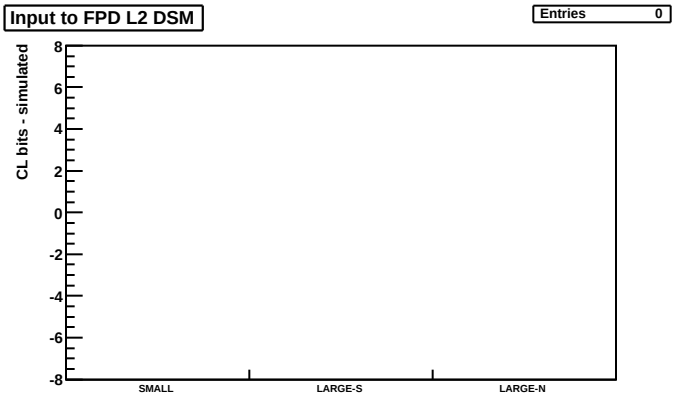

Input to FMS L1 DSM
Entries 5842884
FMS L1 HT bits
DSM board

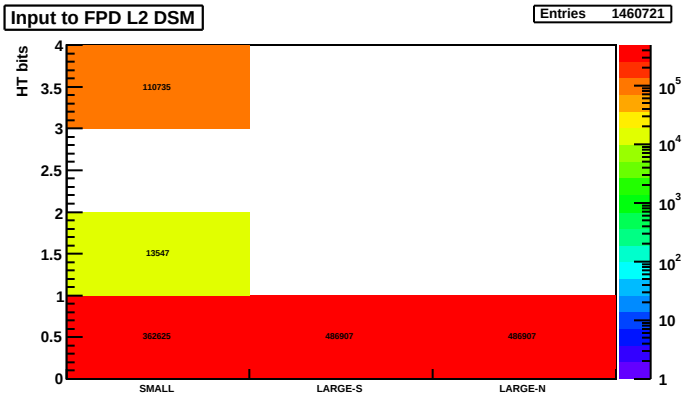

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

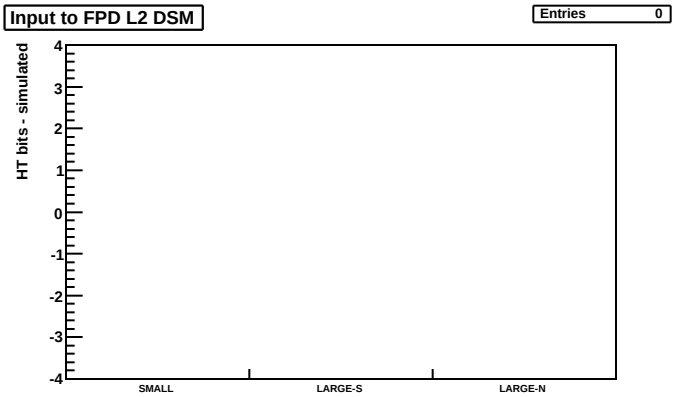

Input to FPD L2 DSM
Entries 3895256
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

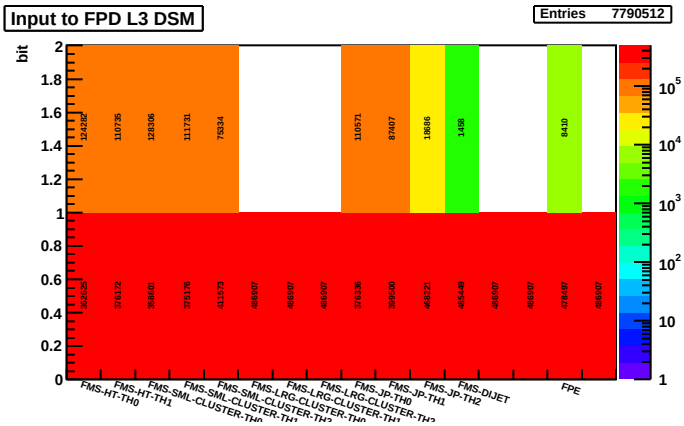

Input to FPD L2 DSM
Entries 12988
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

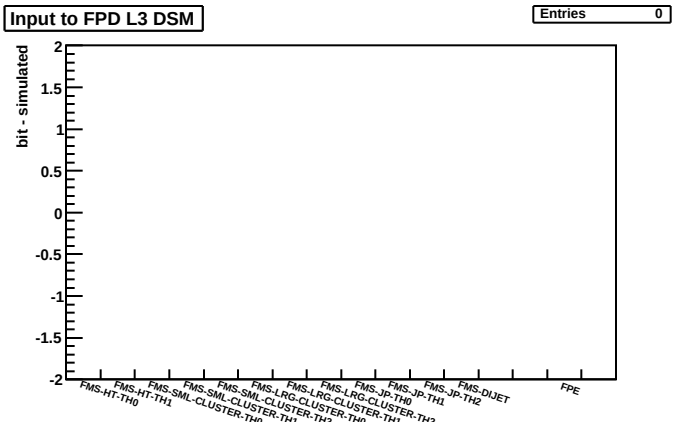

Input to FPD L2 DSM
Entries 1460721
CL bits
75334
36397
16575
358601
486907
486907
SMALL
LARGE-S
LARGE-N

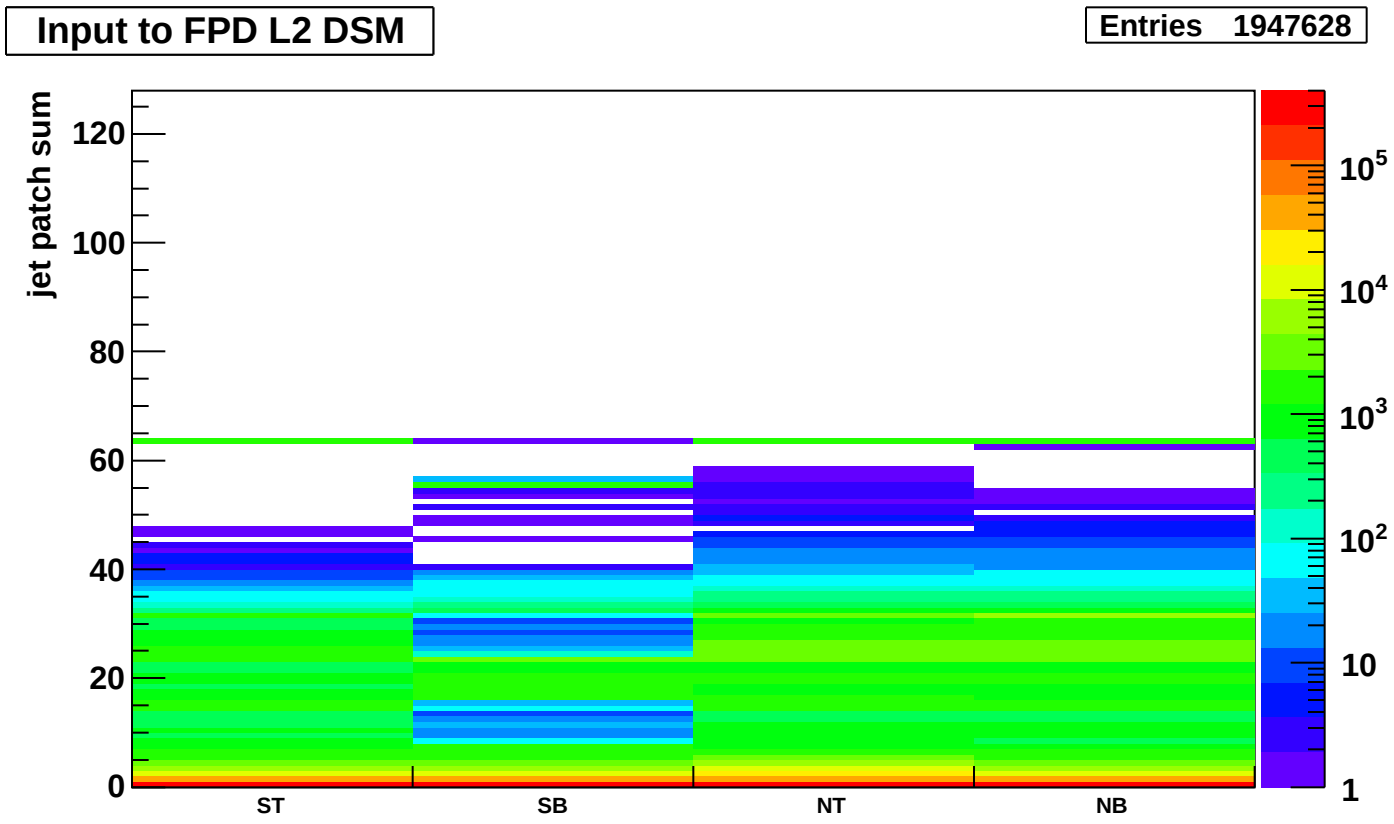

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

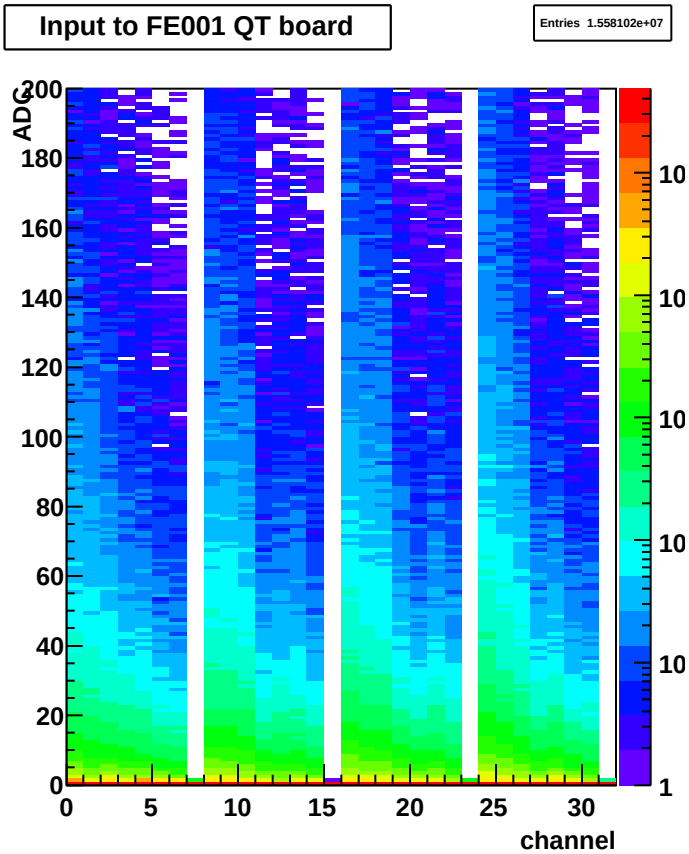

Input to FPD L2 DSM
Entries 1460721
HT bits
110735
13547
362625
486907
486907
SMALL
LARGE-S
LARGE-N

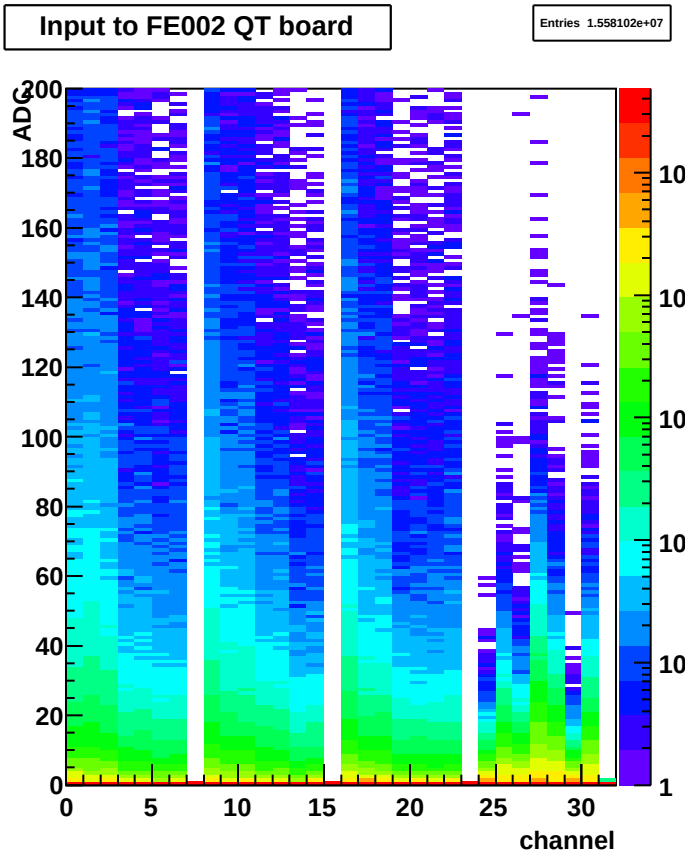

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

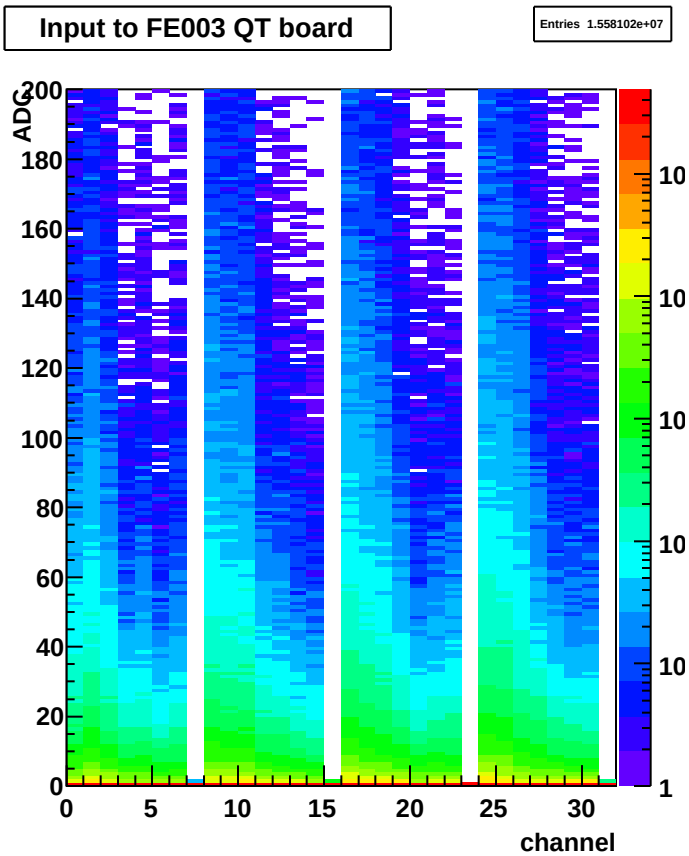

Input to FPD L3 DSM
Entries 7790512
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

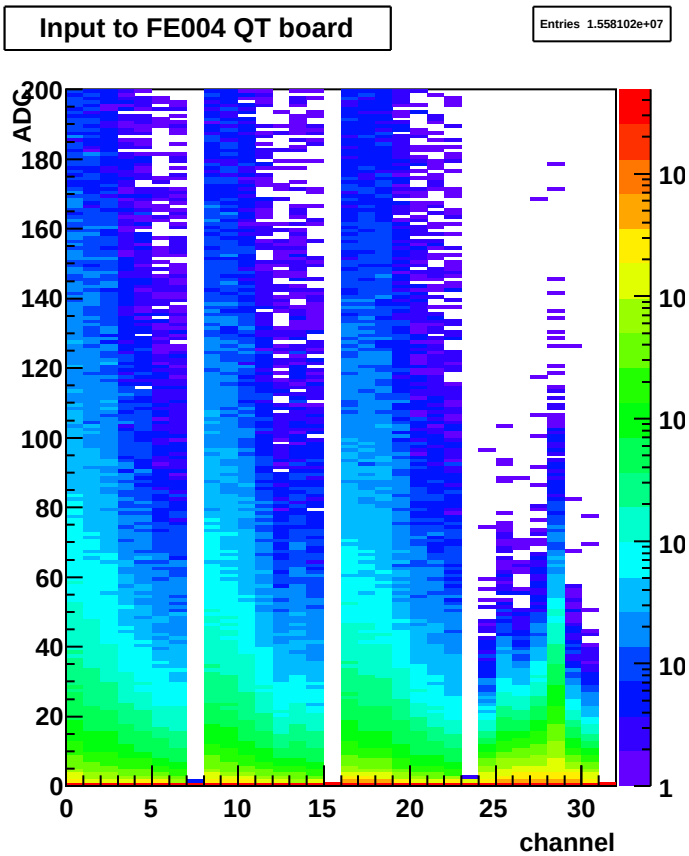

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

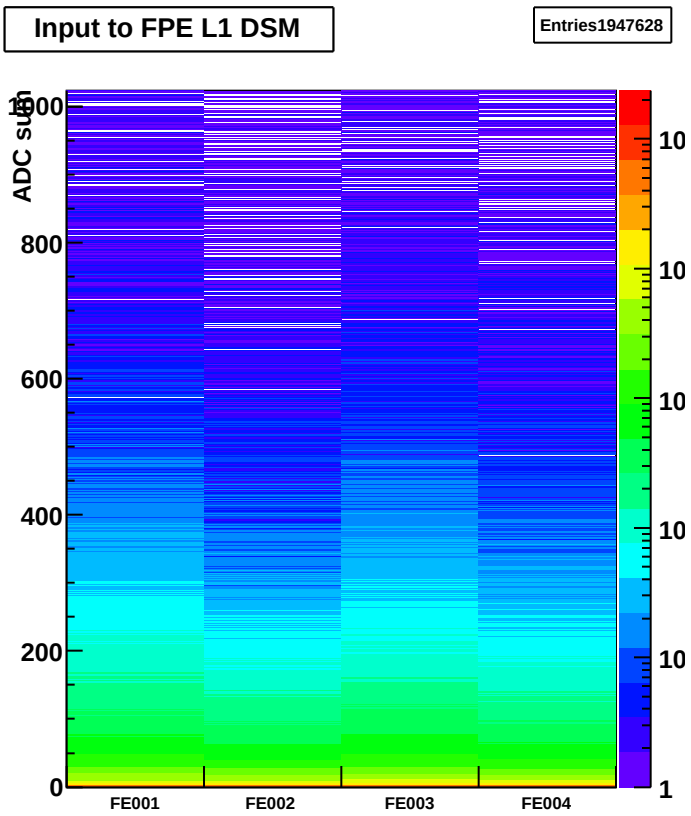

Input to FPD L2 DSM
Entries 1947628
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^5
10^4
10^3
10^2
10
1

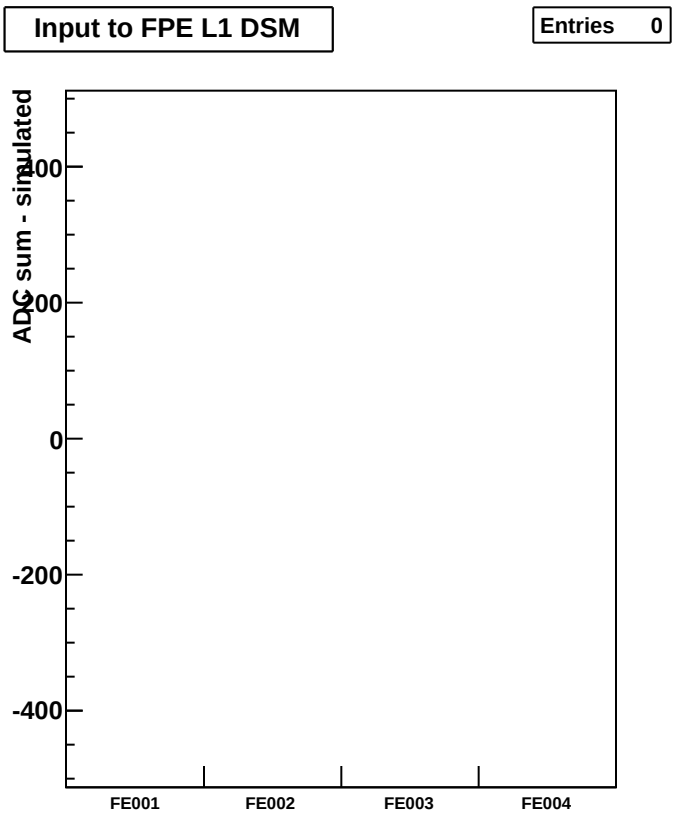

Input to FE001 QT board
Entries 1.558102e+07
ADC
channel

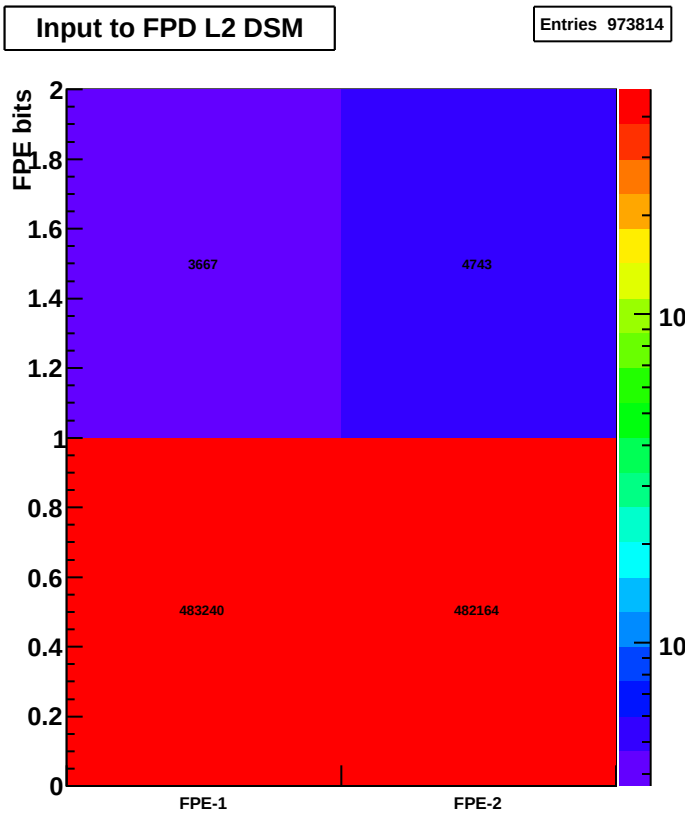

Input to FE002 QT board
Entries 1.558102e+07
ADC
channel

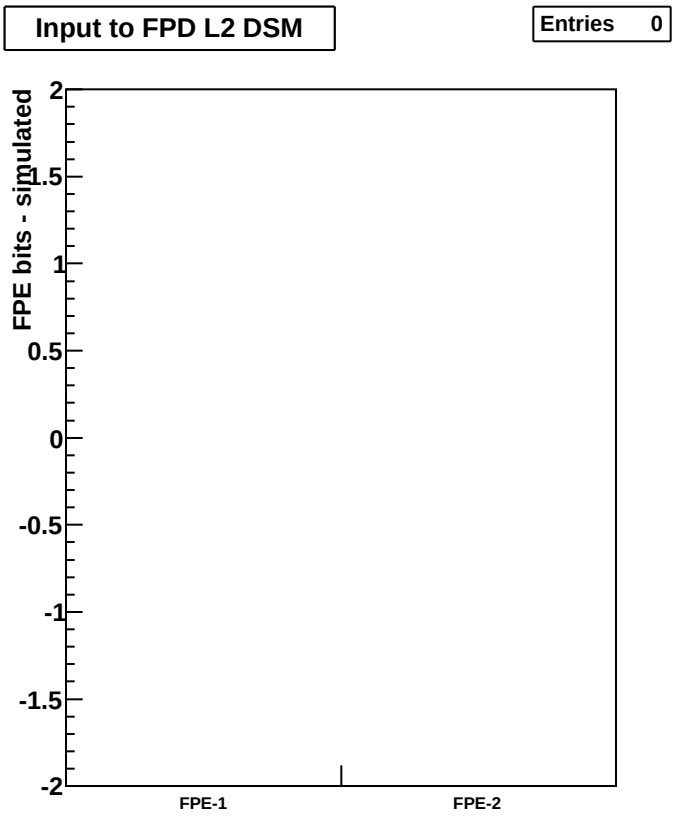

Input to FE003 QT board
Entries 1.558102e+07
ADC
channel


Input to FE004 QT board
Entries 1.558102e+07
ADC
channel


Input to FPE L1 DSM
Entries1947628
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
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 973814
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
3667
4743
483240
482164
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