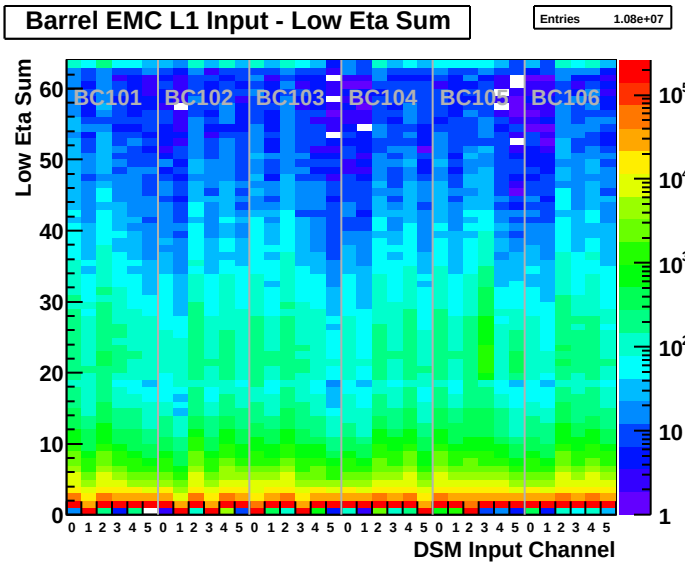
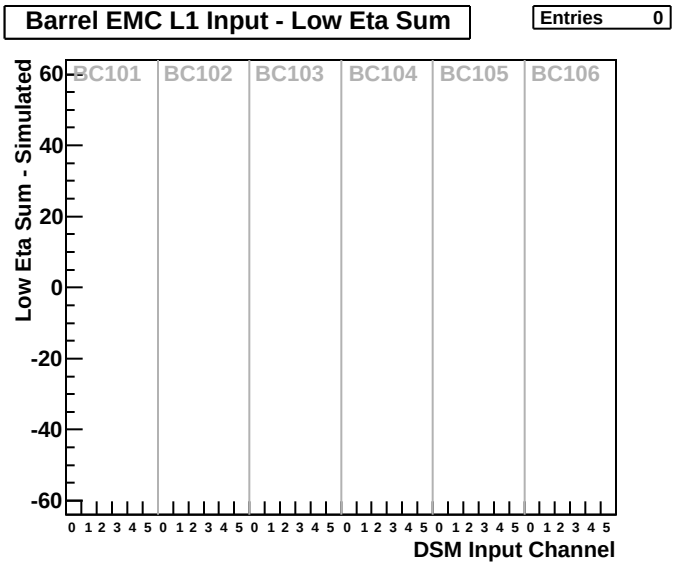
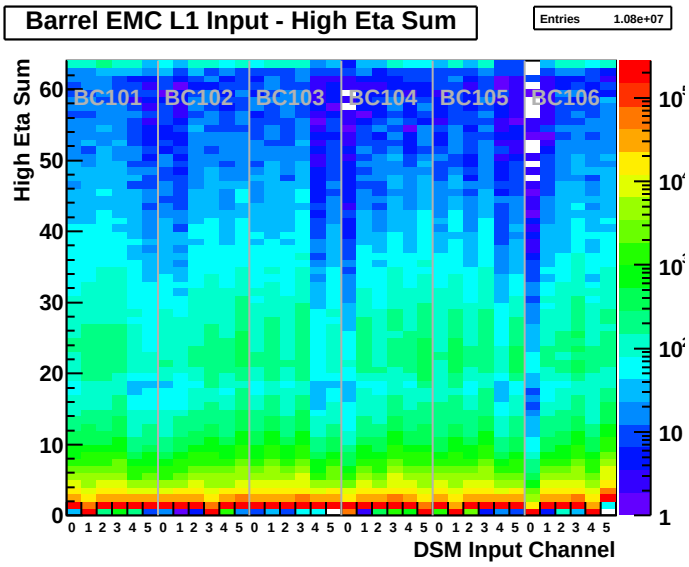
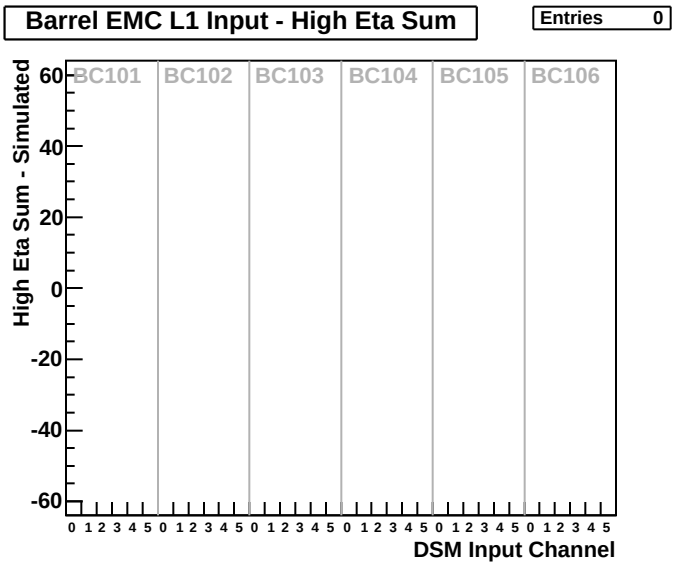
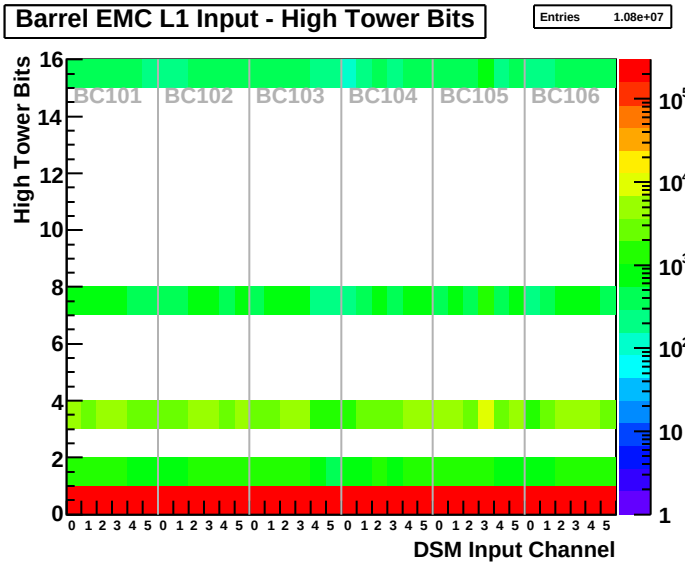
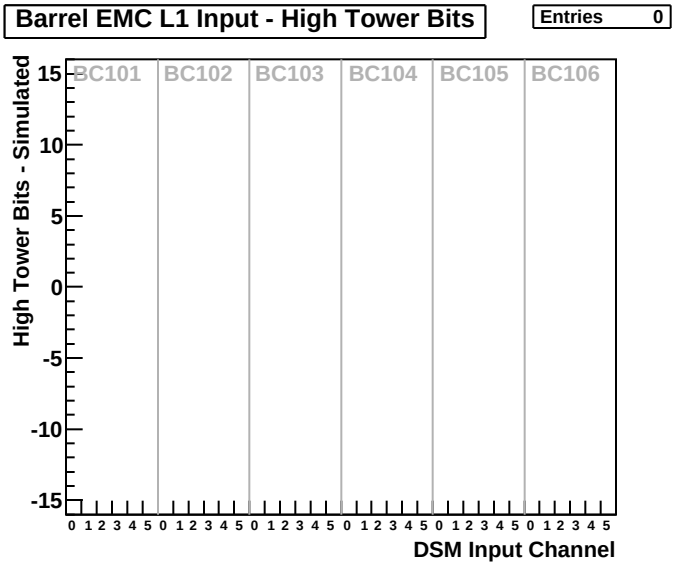

Barrel EMC L1 Input - Low Eta Sum
Entries 1.08e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

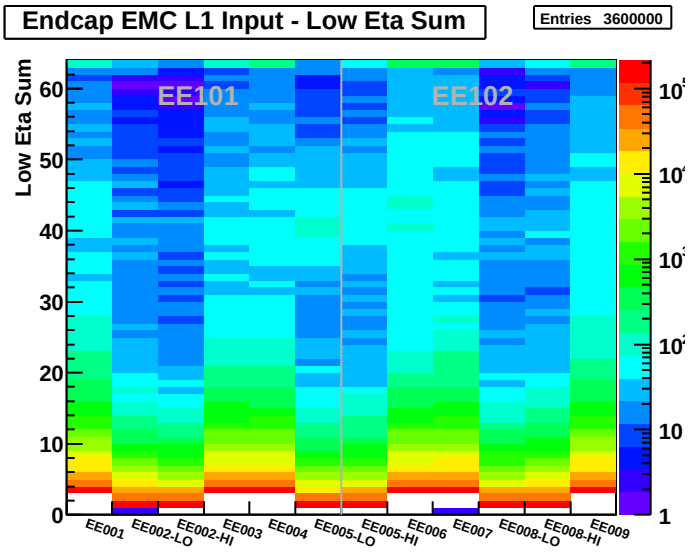

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

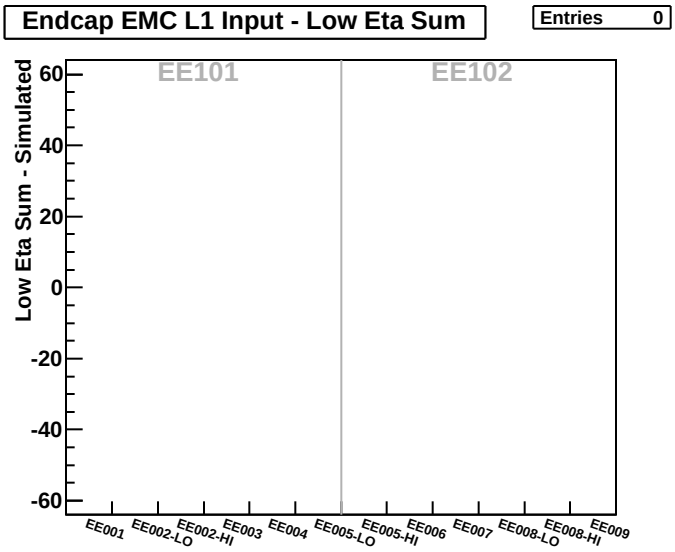

Barrel EMC L1 Input - High Eta Sum
Entries 1.08e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

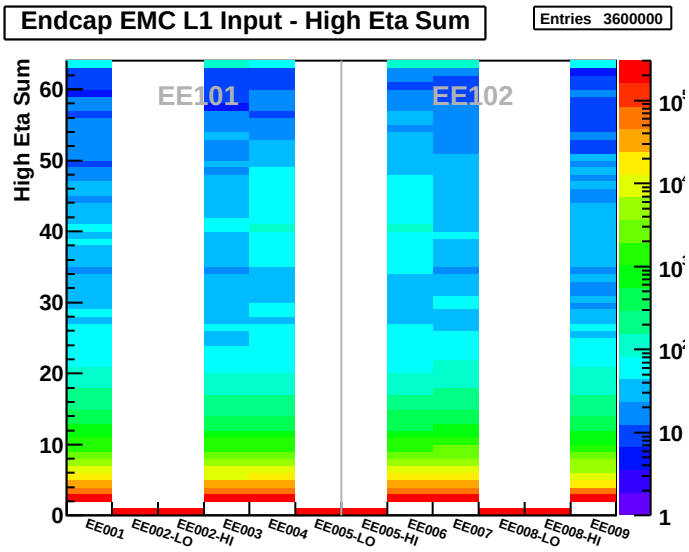

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

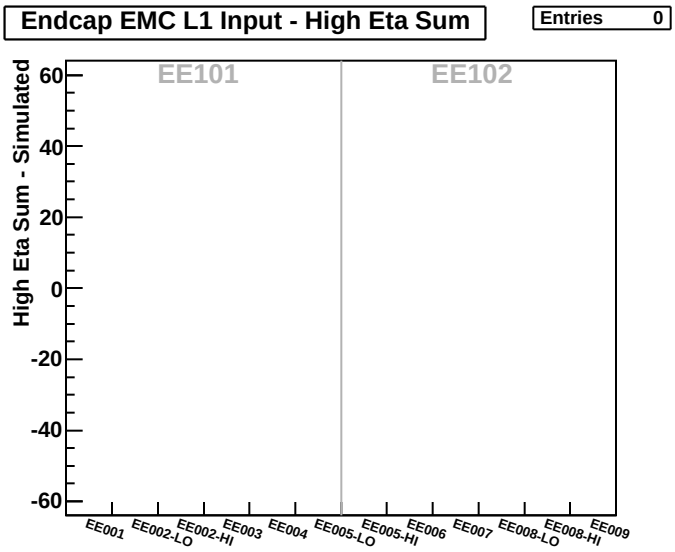

Barrel EMC L1 Input - High Tower Bits
Entries 1.08e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

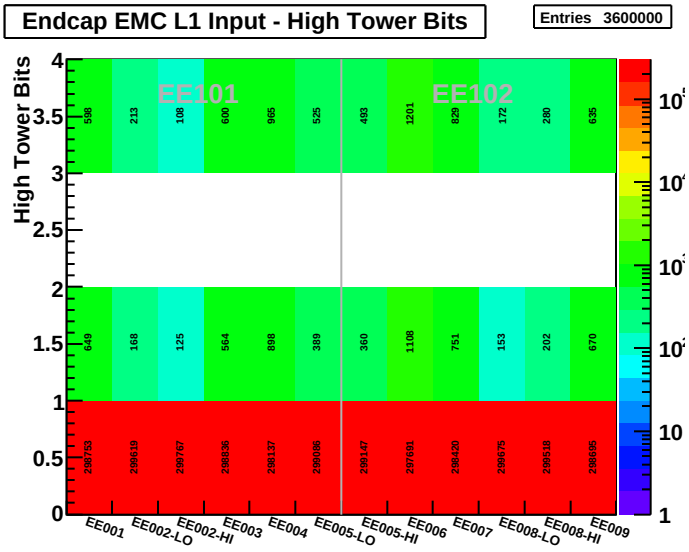

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

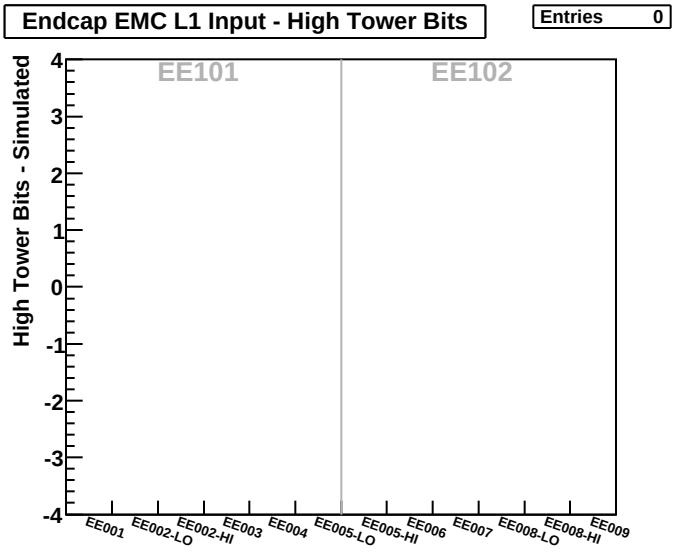

Endcap EMC L1 Input - Low Eta Sum
Entries 3600000
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

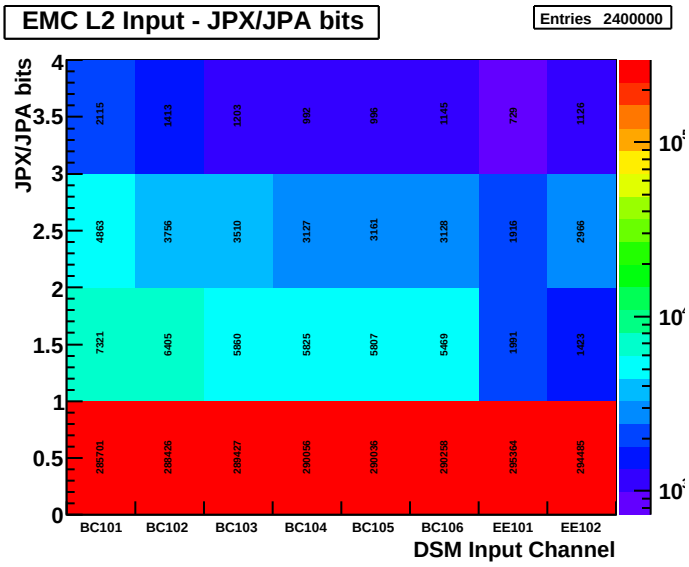

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

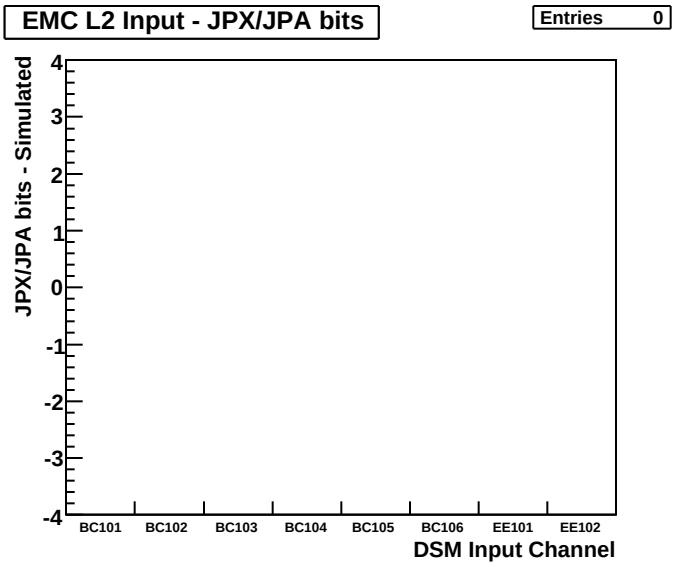

Endcap EMC L1 Input - High Eta Sum
Entries 3600000
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

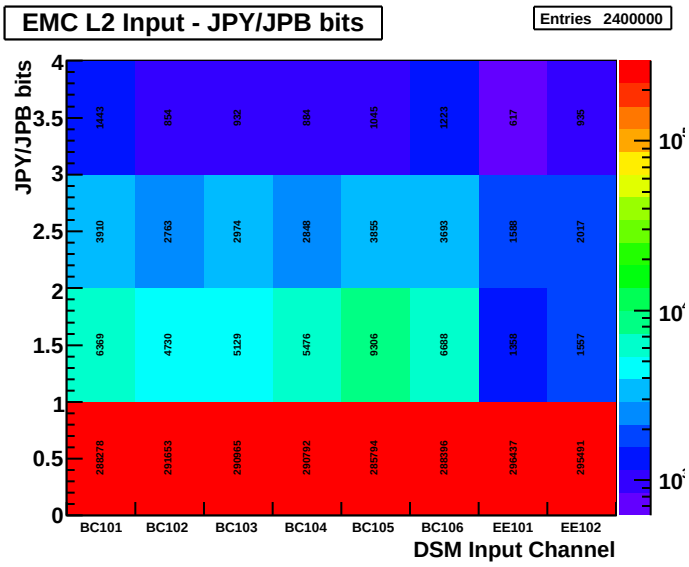

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

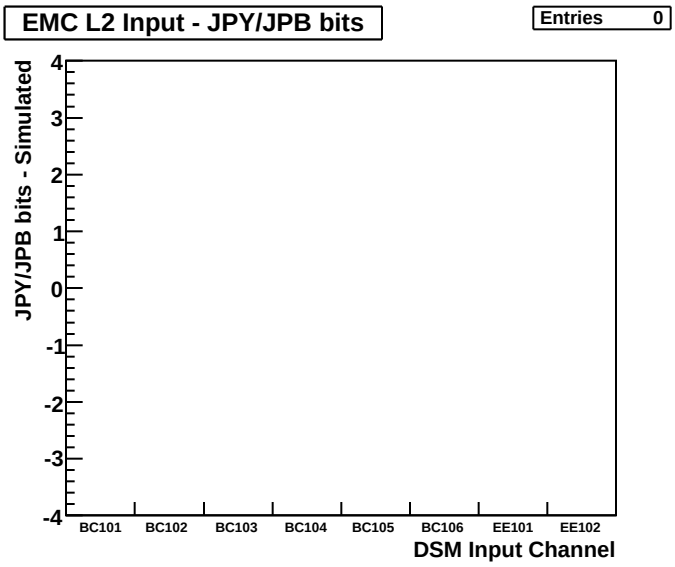

Endcap EMC L1 Input - High Tower Bits
Entries 3600000
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

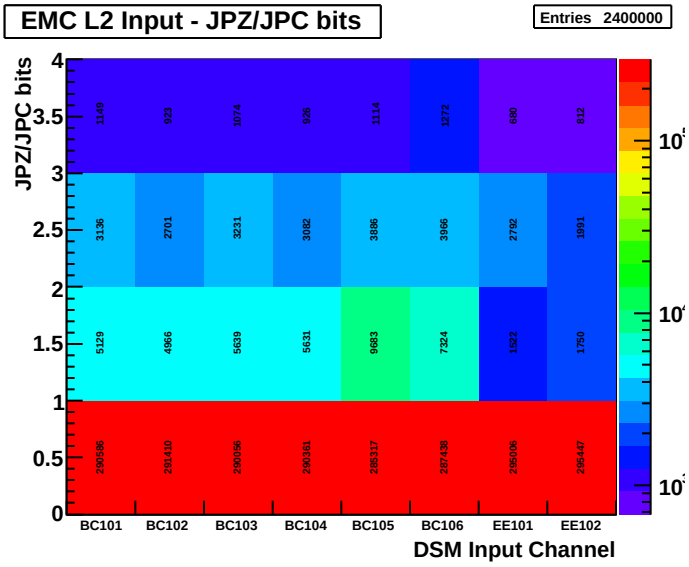

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

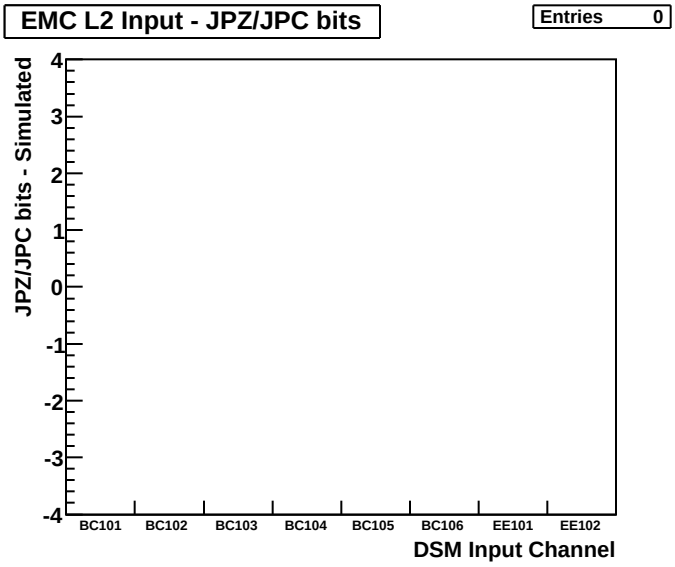

EMC L2 Input - JPX/JPA bits
Entries 2400000
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2115 1413 1203 992 996 1145 729 1126
4863 3756 3510 3127 3161 3128 1916 2966
7321 6405 5860 5825 5807 5469 1991 1423
285701 288426 289427 290056 290036 290258 295364 294485

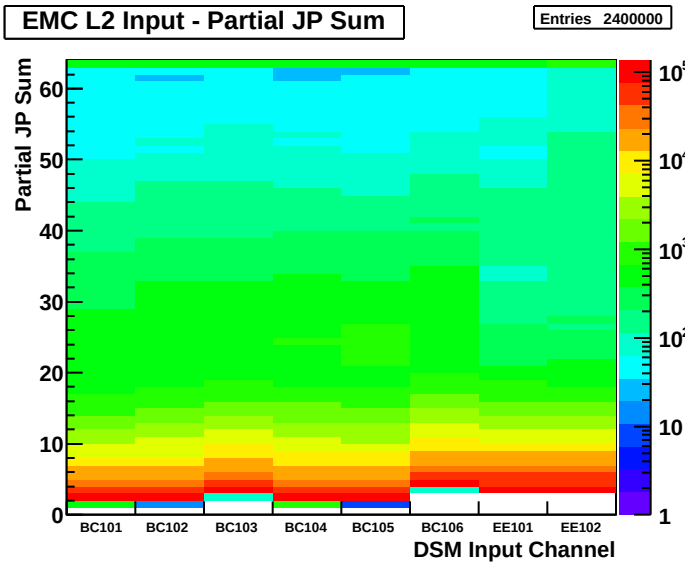

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

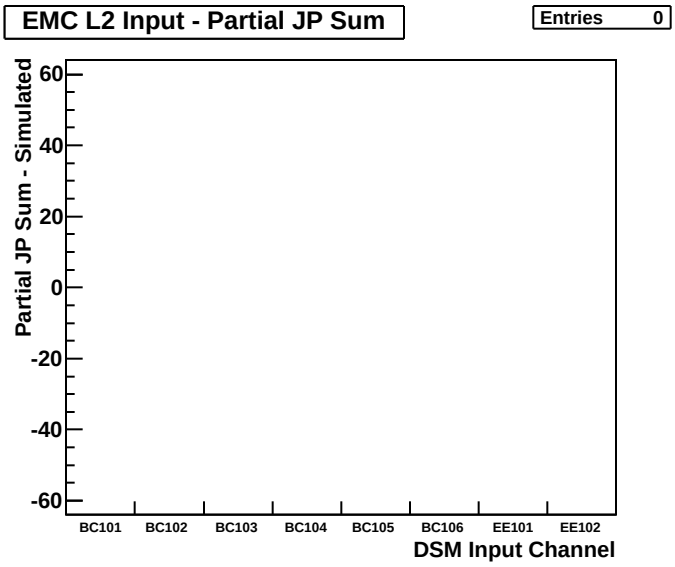

EMC L2 Input - JPY/JPB bits
Entries 2400000
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1443 854 932 884 1045 1223 617 935
3910 2763 2974 2848 3855 3693 1588 2017
6369 4730 5129 5476 9306 6688 1386 1557
288278 291653 290065 290792 285794 288396 295437 295491

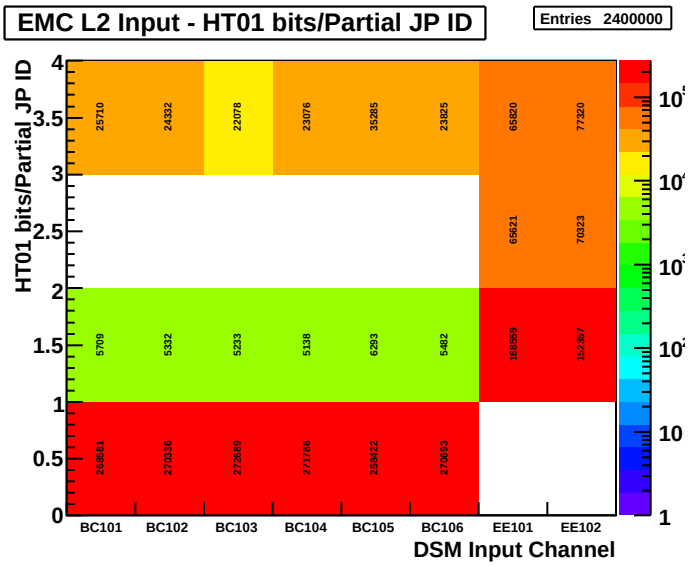

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

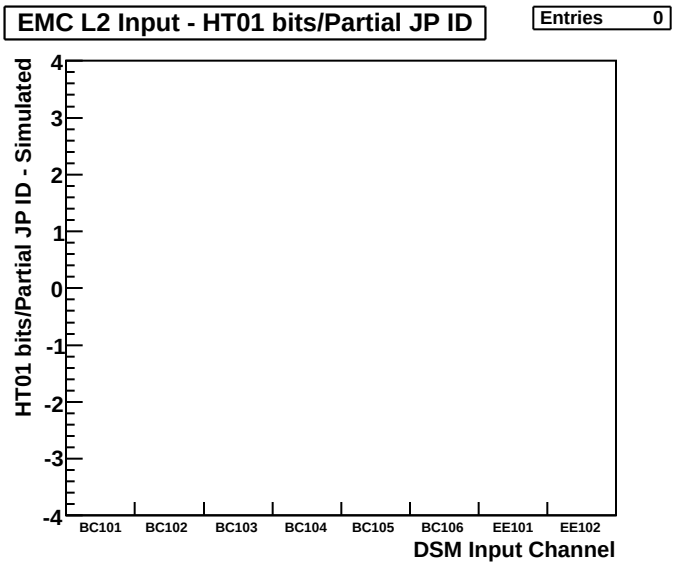

EMC L2 Input - JPZ/JPC bits
Entries 2400000
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1149 923 1074 926 1114 1272 680 812
3136 2701 3231 3082 3886 3966 2792 1991
5229 4966 5639 5631 9683 7324 1522 1750
290586 291410 290056 290361 285317 287438 295006 295447

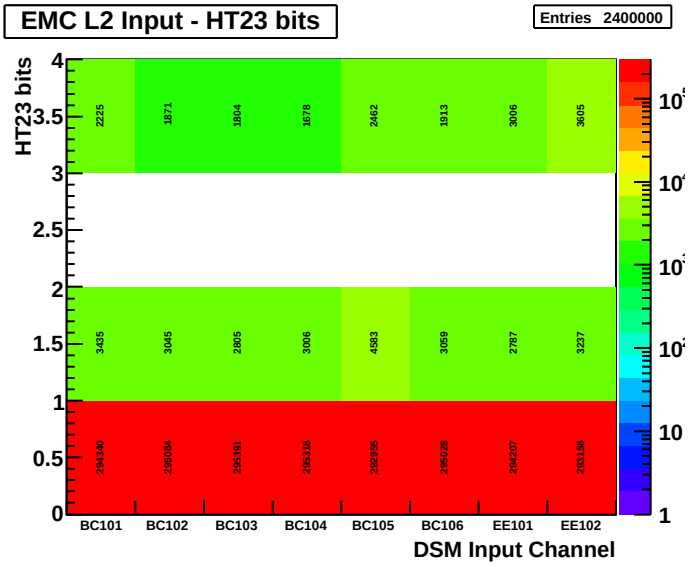

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

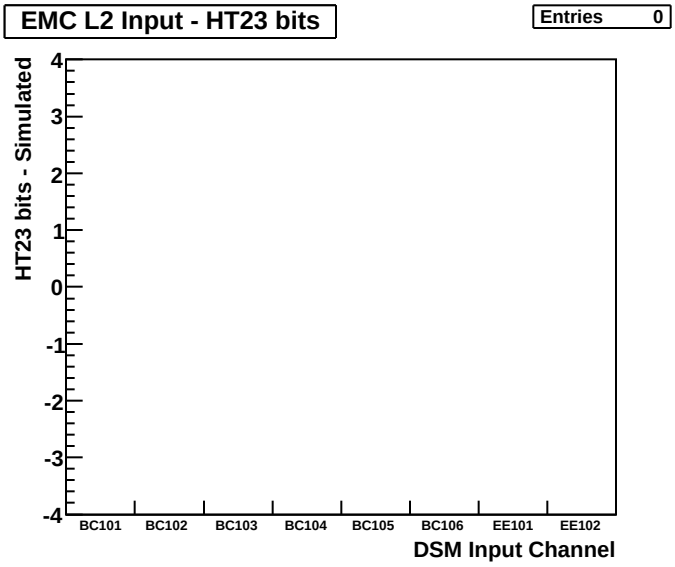

EMC L2 Input - Partial JP Sum
Entries 2400000
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

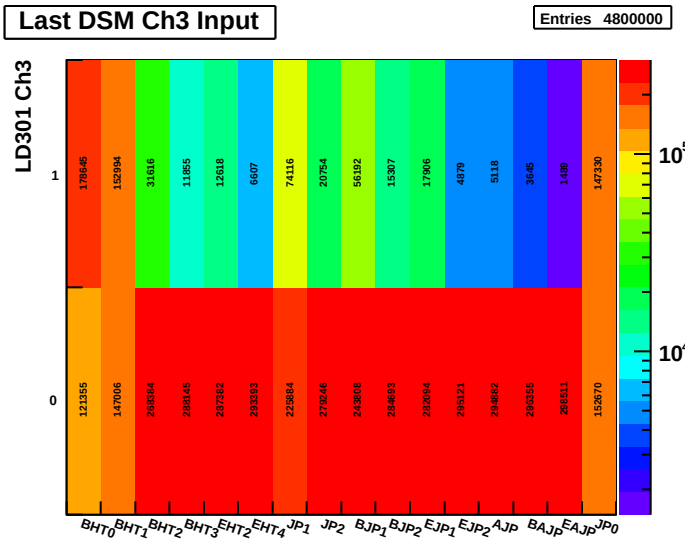

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

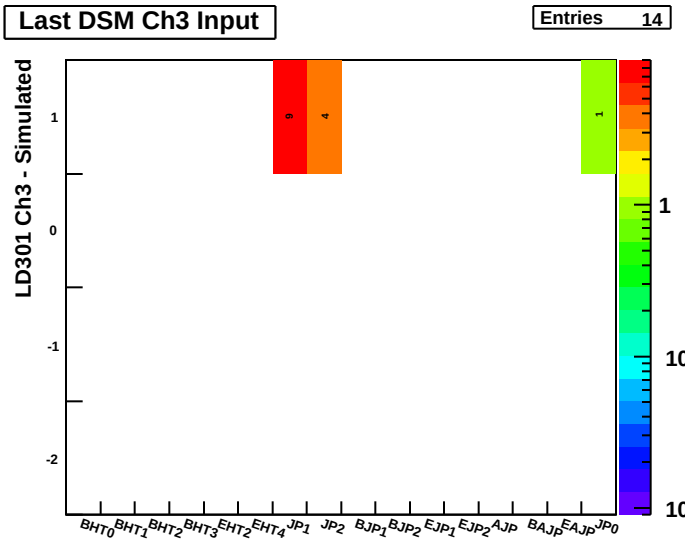

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2400000
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

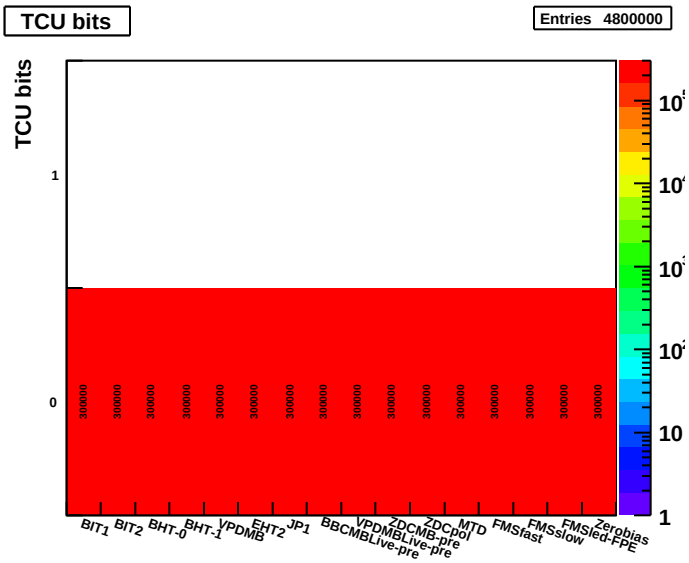

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

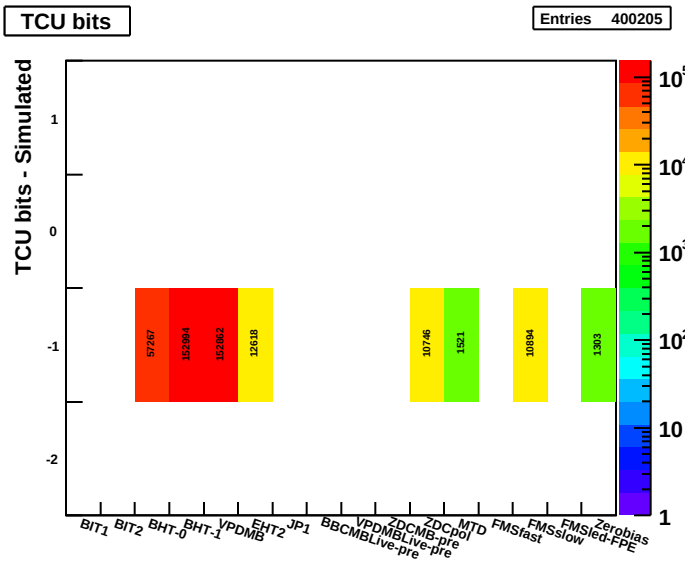

EMC L2 Input - HT23 bits
Entries 2400000
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

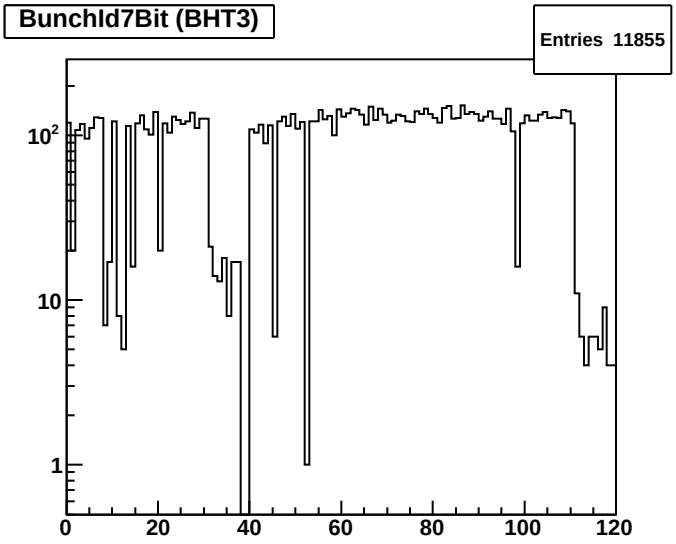

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

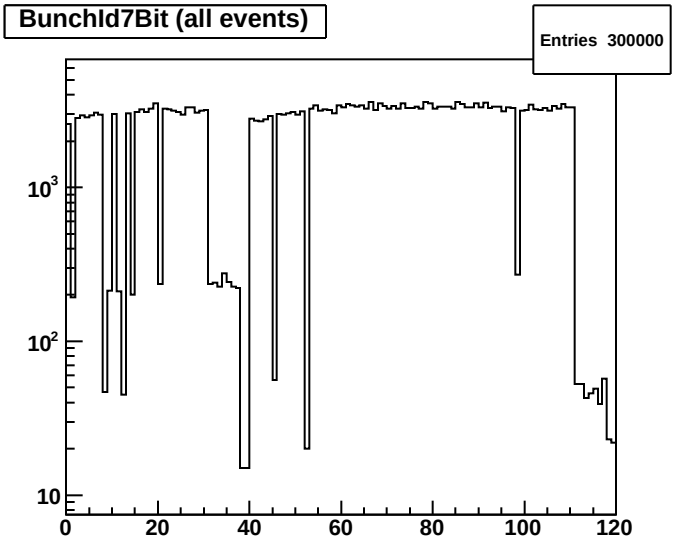

Last DSM Ch3 Input
Entries 4800000
LD301 Ch3
1
0
178645 152994 31616 11855 12618 6607 74116 20754 56192 15307 17906 4879 5118 3645 1489 147330
121355 147006 268384 288145 287382 293393 225884 279246 243808 284693 282094 295121 294882 296355 298511 152670
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

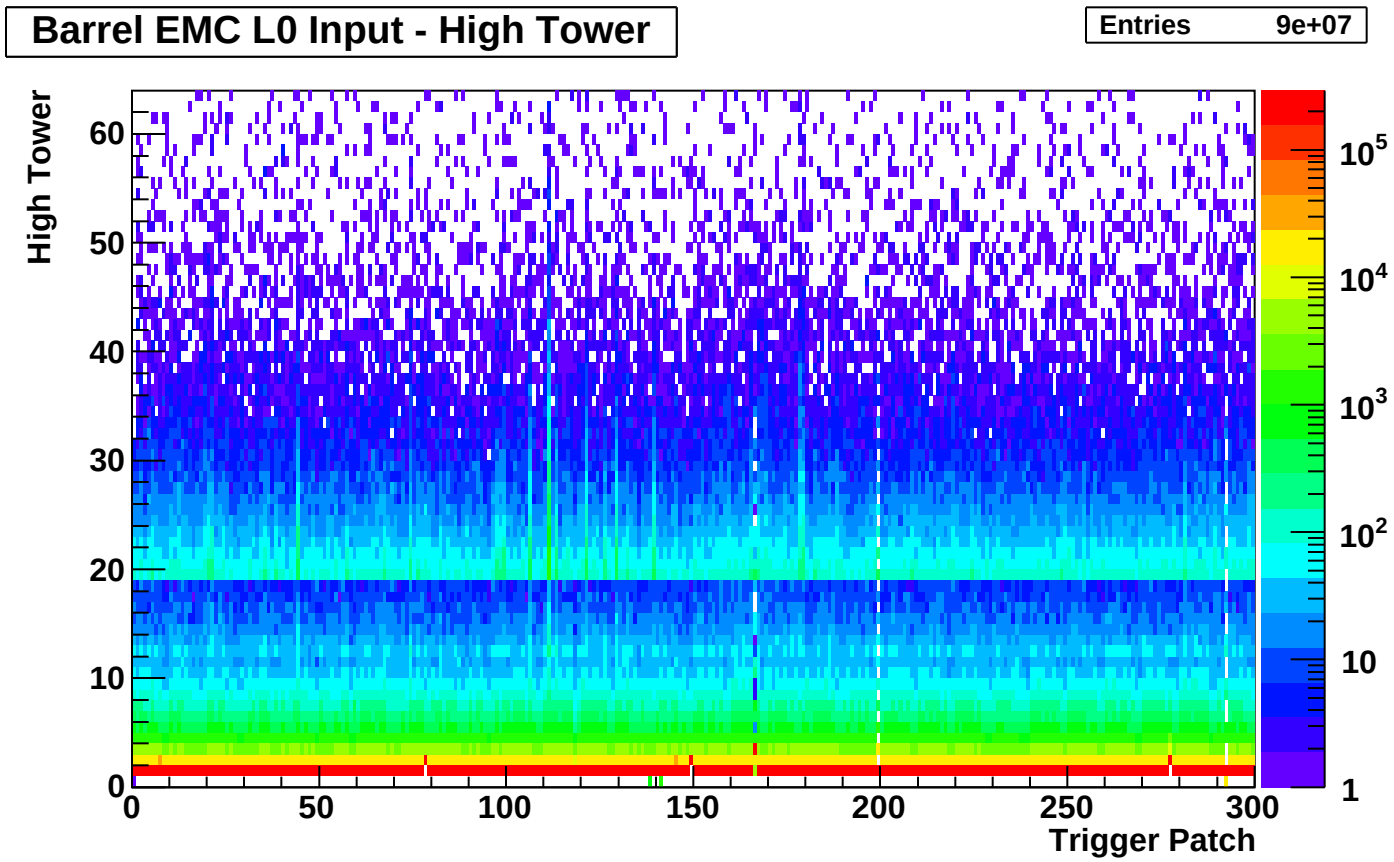

Last DSM Ch3 Input
Entries 14
LD301 Ch3 - Simulated
1
0
-1
-2
9 4 1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

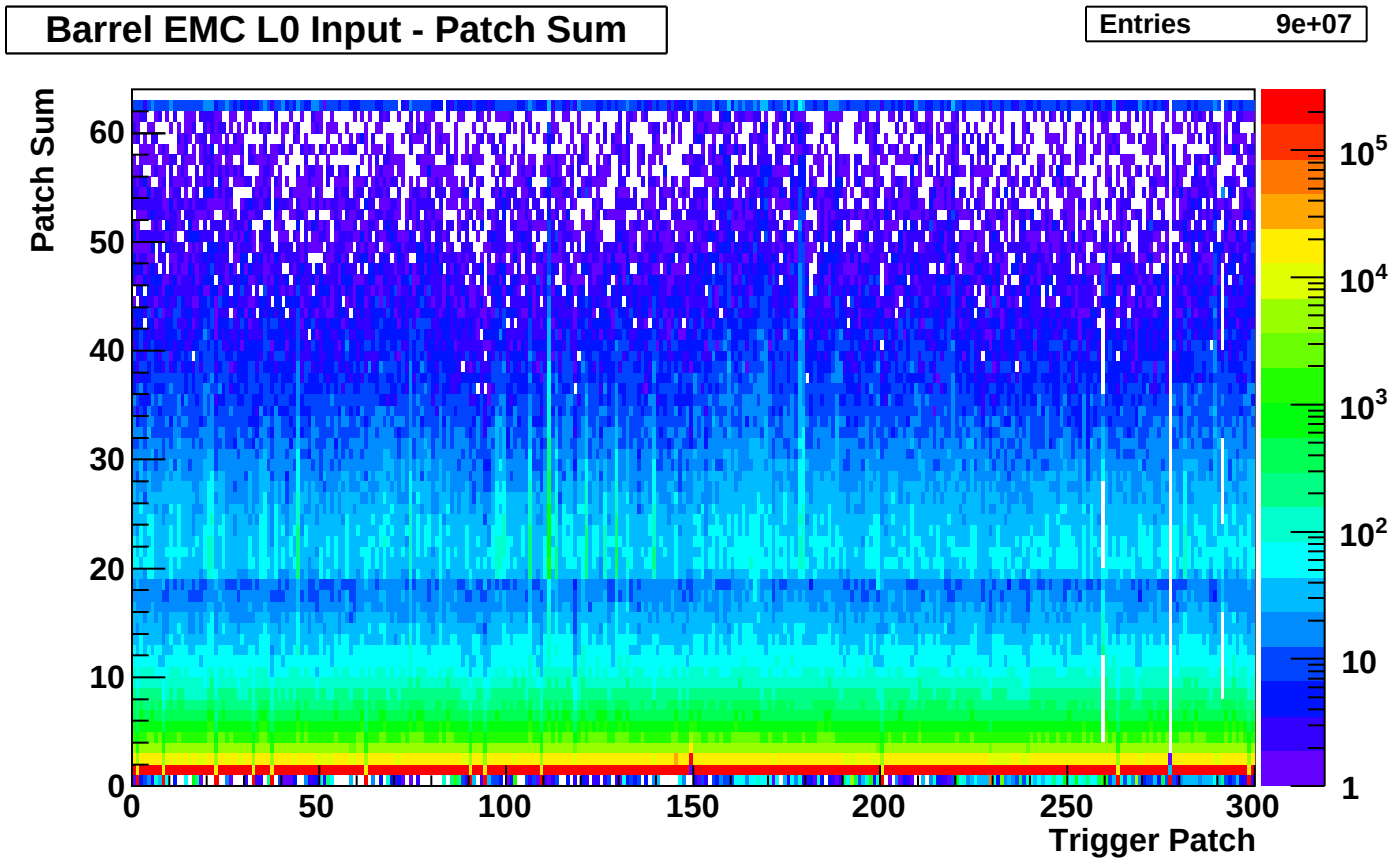

TCU bits
Entries 4800000
TCU bits
1
0
300000 300000 300000 300000 300000 300000 300000 300000 300000 300000 300000 300000 300000 300000 300000 300000
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

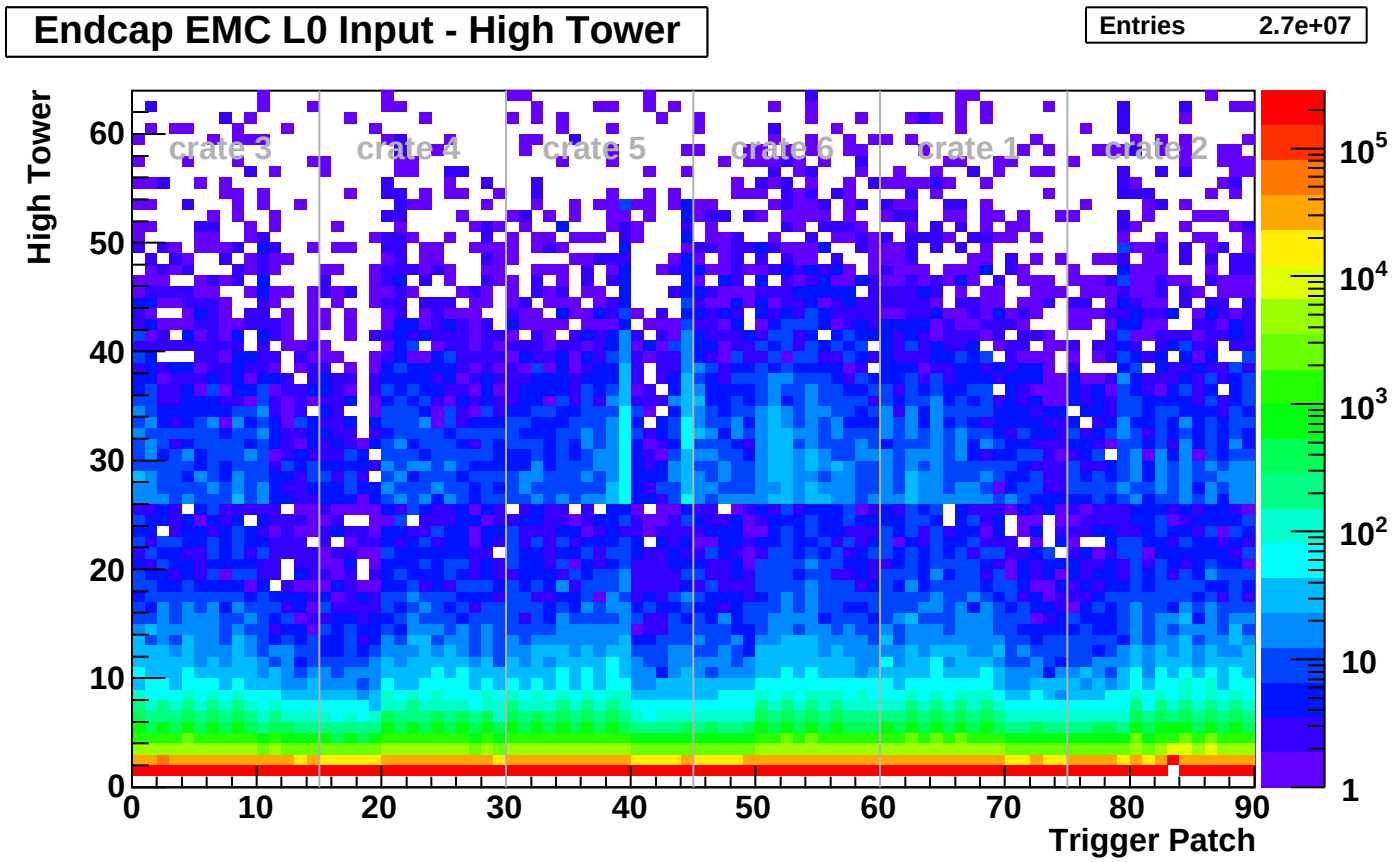

TCU bits
Entries 400205
TCU bits - Simulated
1
0
-1
-2
57267 152994 152862 12618 10746 1521 10894 1303
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

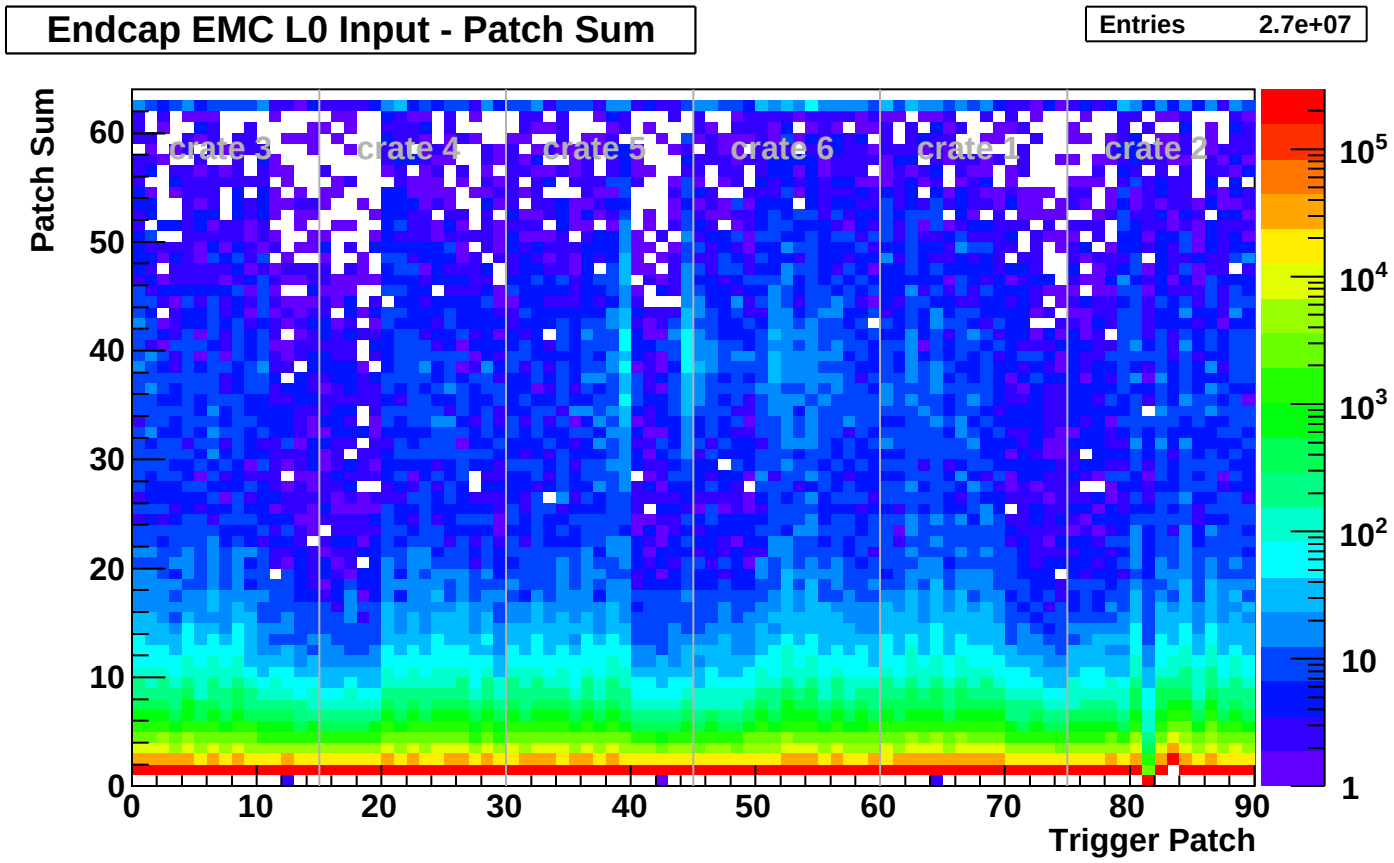

BunchId7Bit (BHT3)
Entries 11855
10²
10
1
0 20 40 60 80 100 120

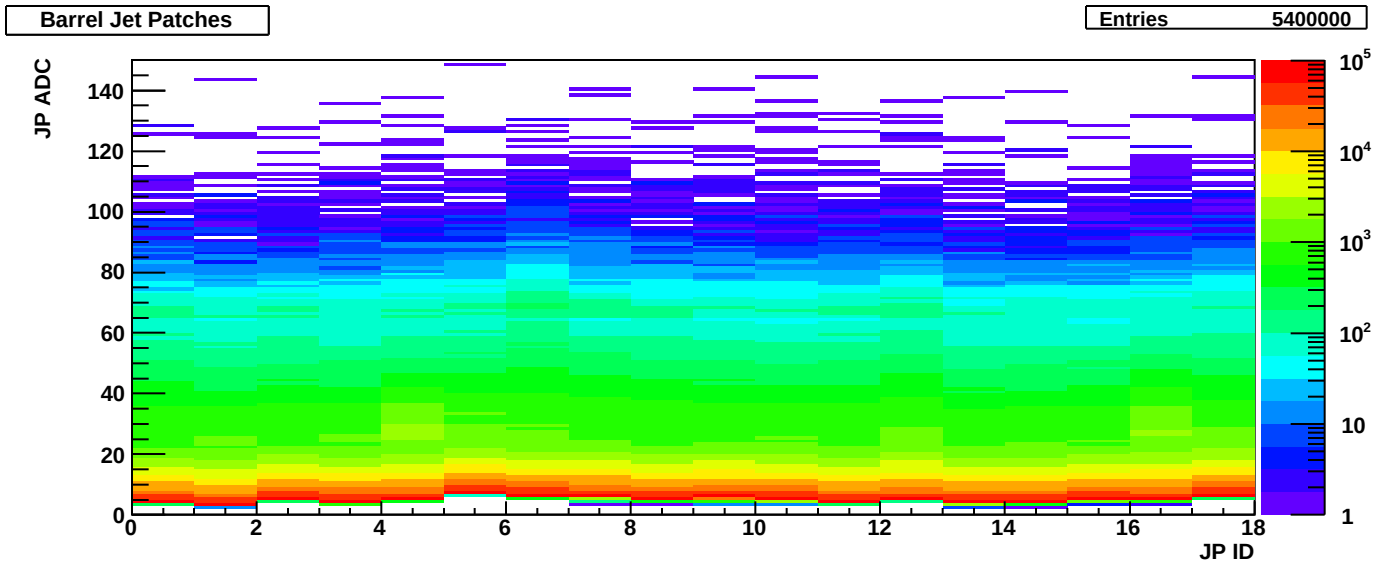

BunchId7Bit (all events)
Entries 300000
10³
10²
10
0 20 40 60 80 100 120

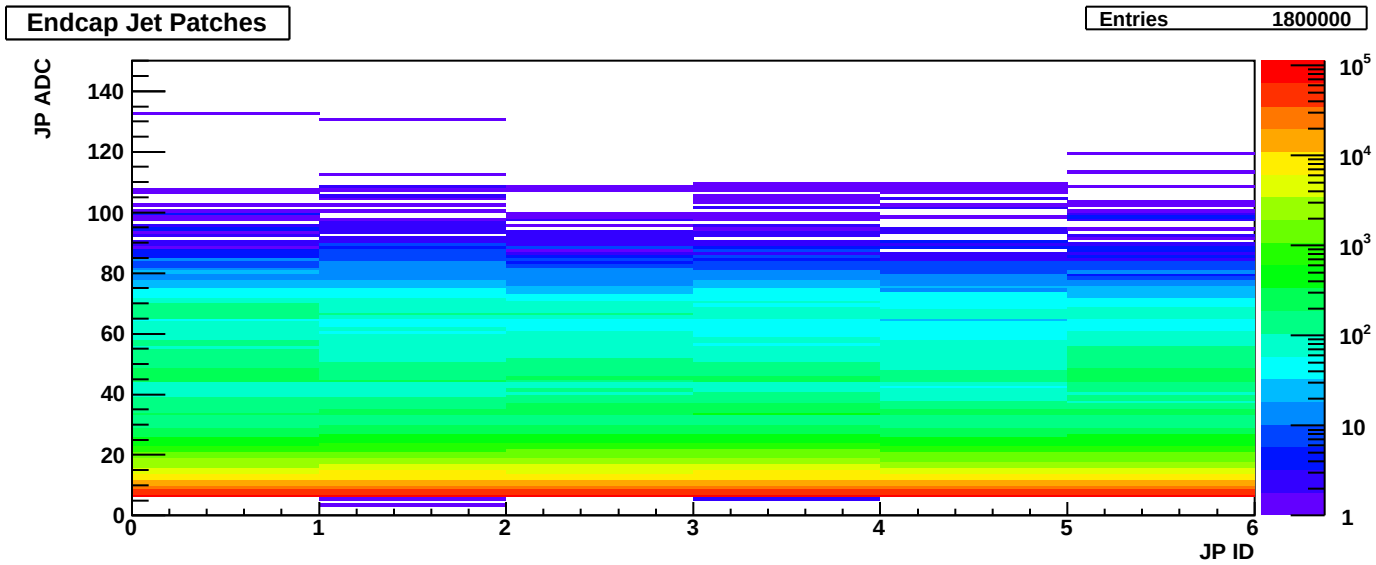

Barrel EMC L0 Input - High Tower
Entries 9e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

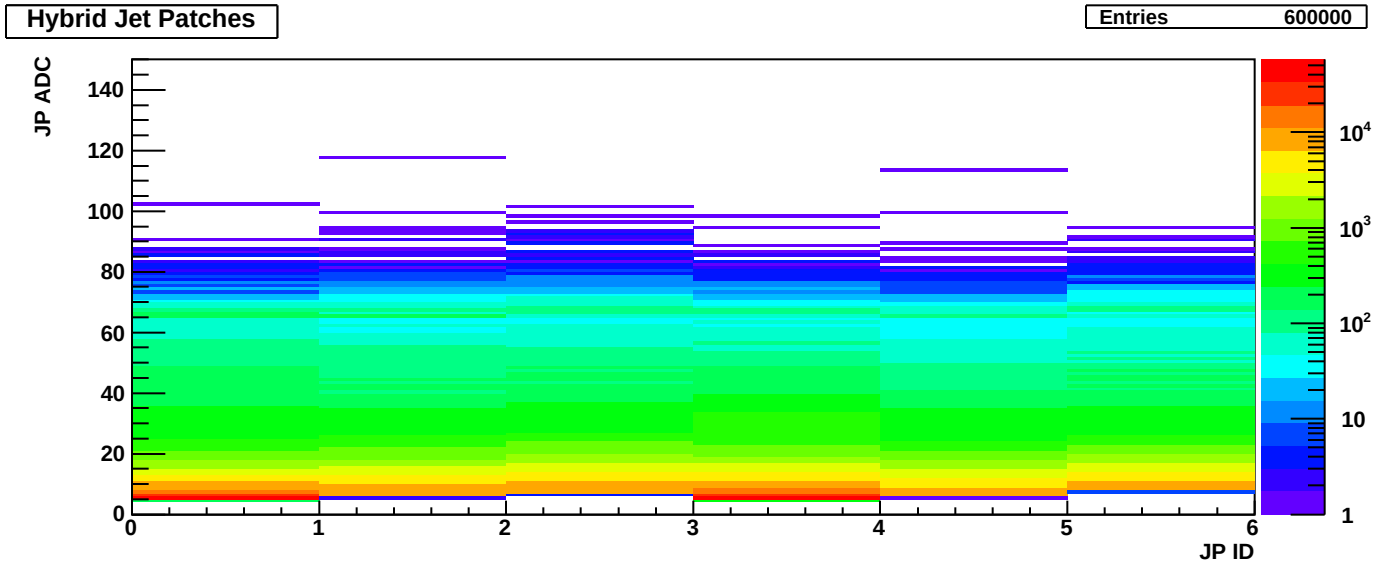

Barrel EMC L0 Input - Patch Sum
Entries 9e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

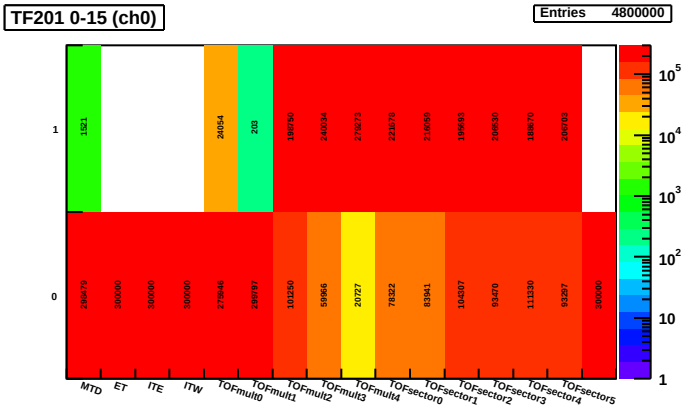

Endcap EMC L0 Input - High Tower
Entries 2.7e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

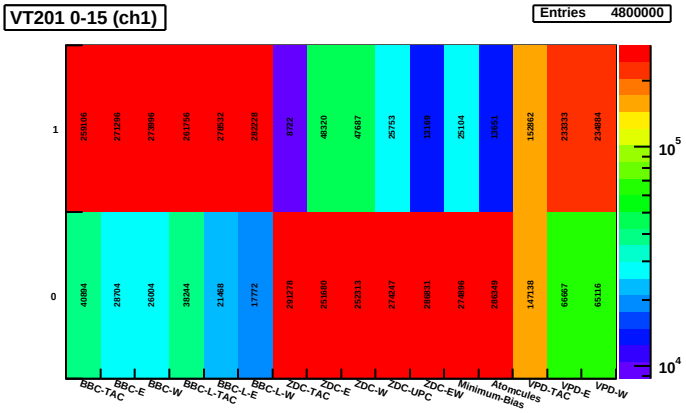

Endcap EMC L0 Input - Patch Sum
Entries 2.7e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

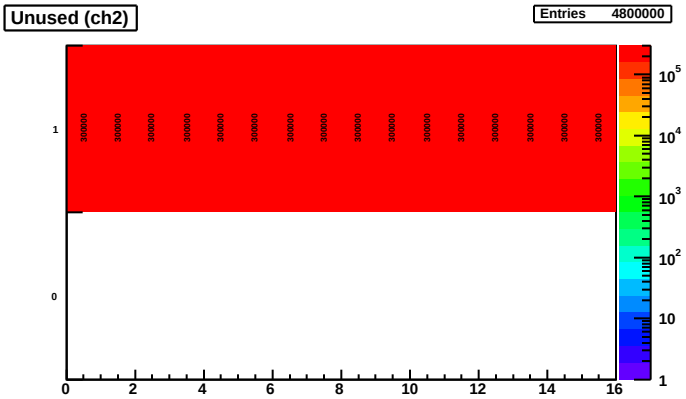

Barrel Jet Patches
Entries 5400000
JP ADC
JP ID

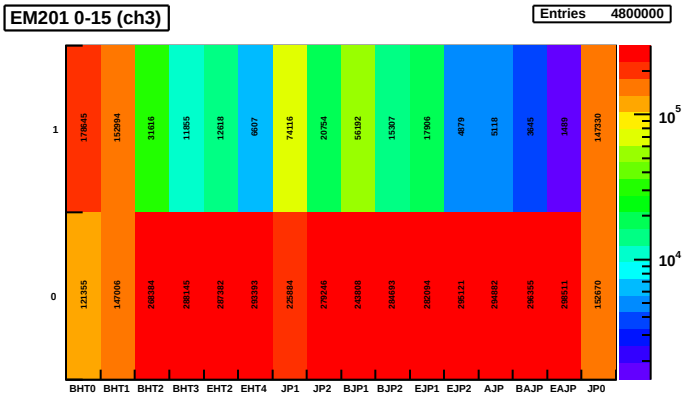

Endcap Jet Patches
Entries 1800000
JP ADC
JP ID

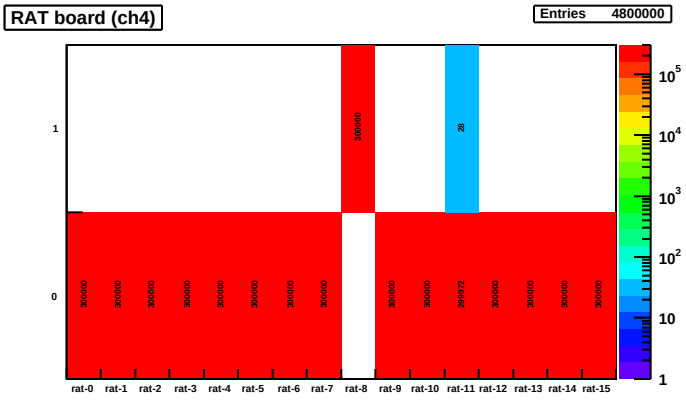

Hybrid Jet Patches
Entries 600000
JP ADC
JP ID

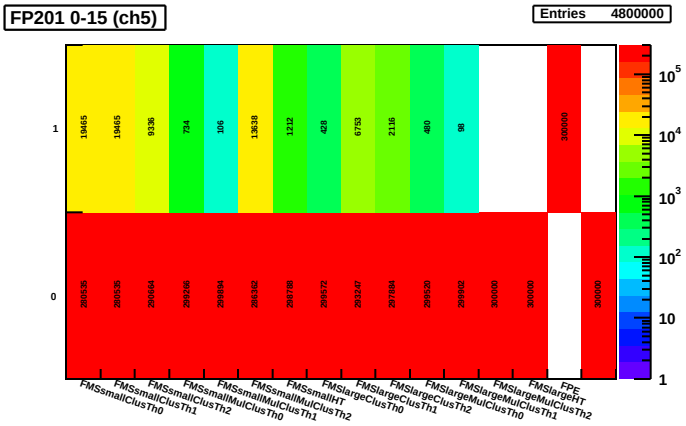

TF201 0-15 (ch0)
Entries 4800000
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

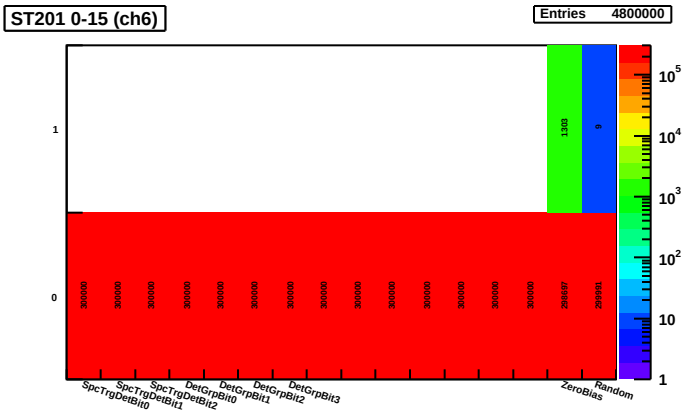

VT201 0-15 (ch1)
Entries 4800000
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Atomcules Minimum-Bias VPD-TAC VPD-E VPD-W

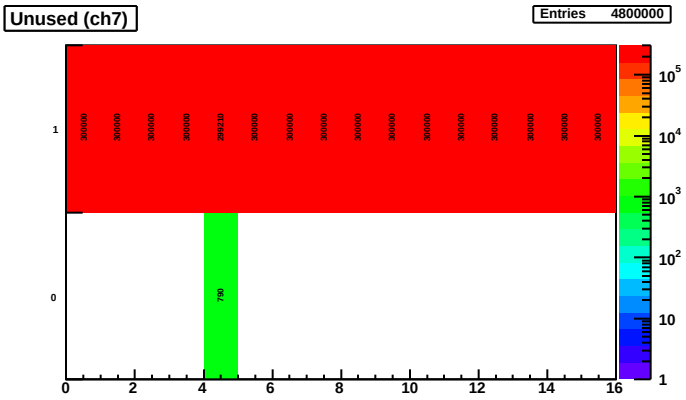

Unused (ch2)
Entries 4800000

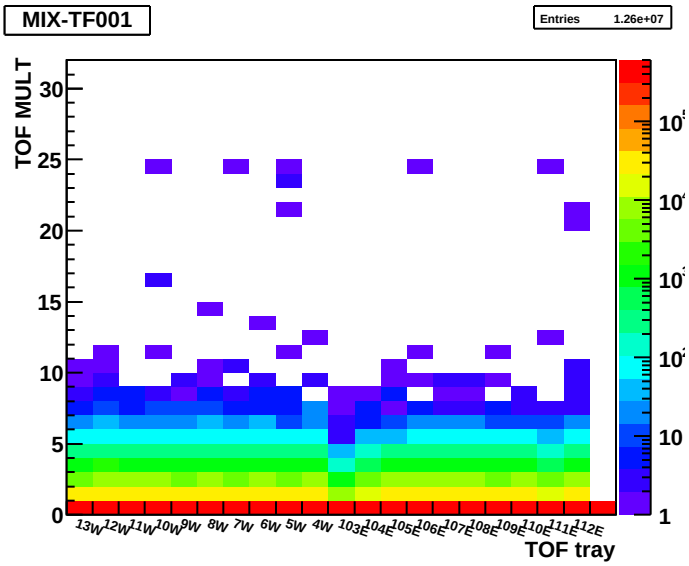

EM201 0-15 (ch3)
Entries 4800000
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

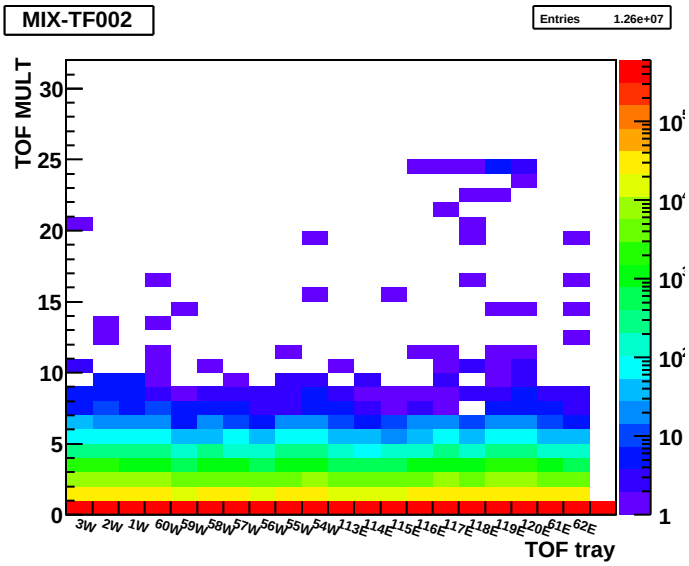

RAT board (ch4)
Entries 4800000
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

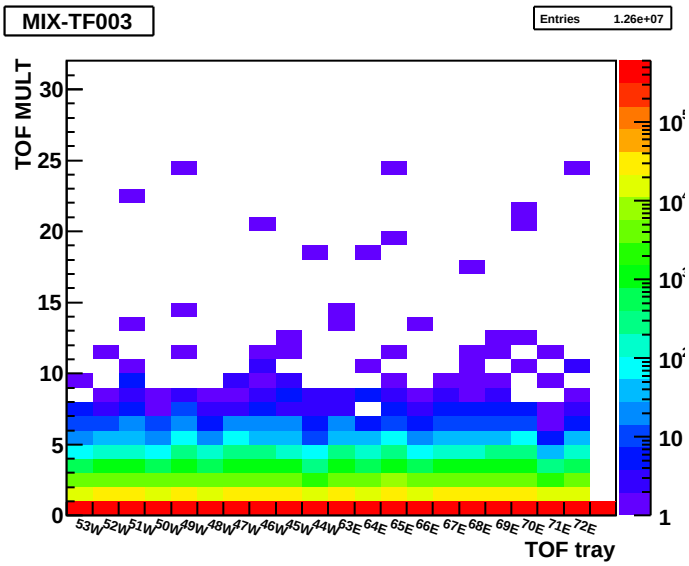

FP201 0-15 (ch5)
Entries 4800000
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

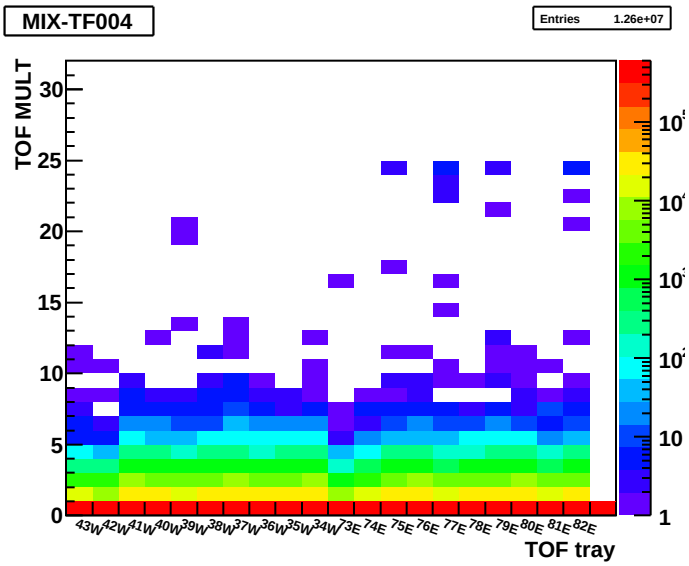

ST201 0-15 (ch6)
Entries 4800000
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random

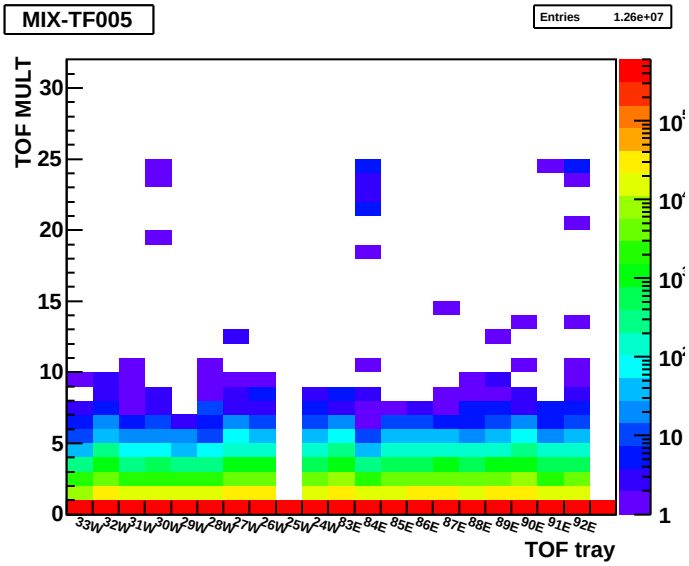

Unused (ch7)
Entries 4800000

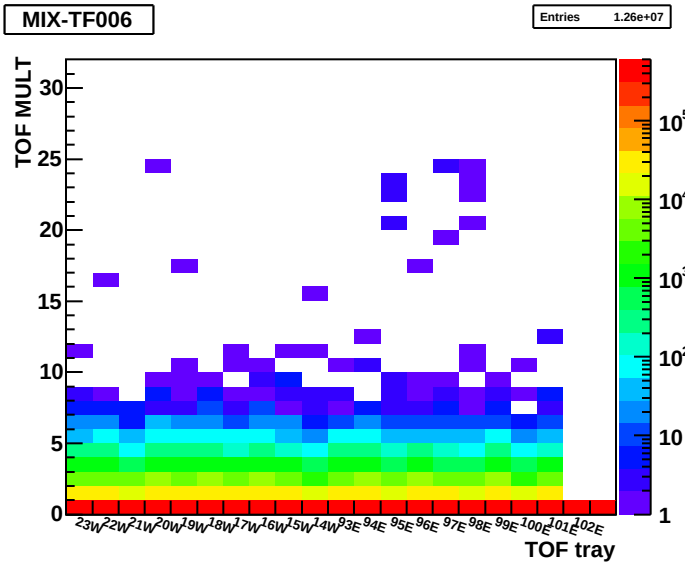

MIX-TF001
Entries 1.26e+07
TOF MULT
TOF tray

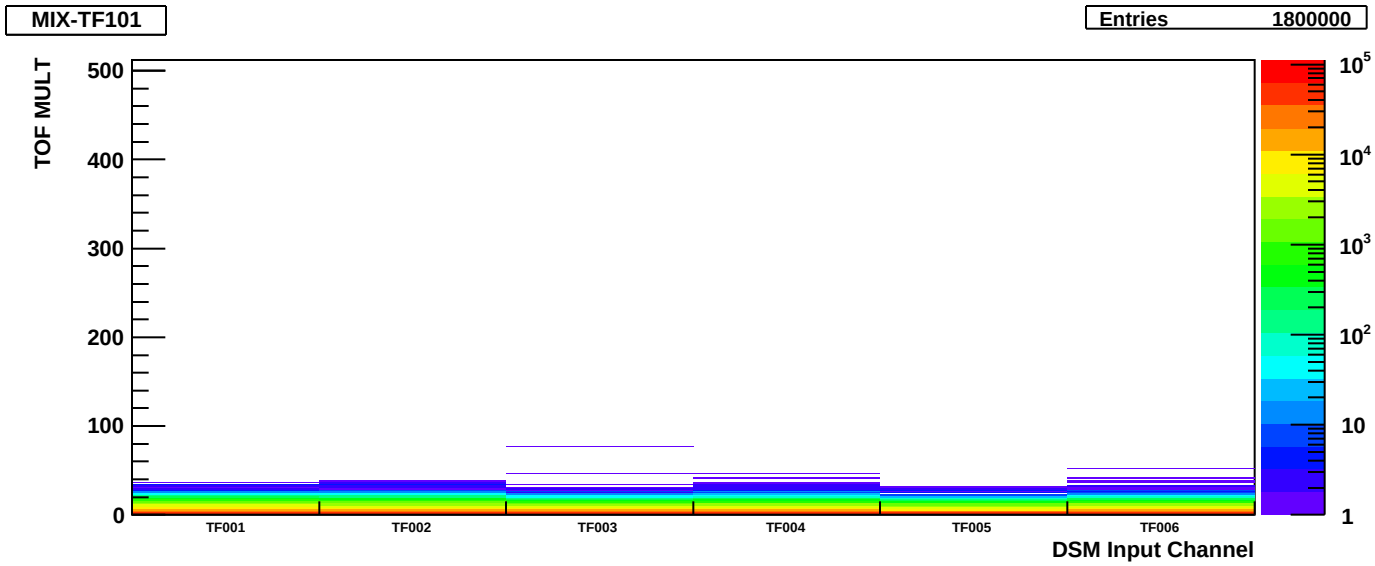

MIX-TF002
Entries 1.26e+07
TOF MULT
TOF tray

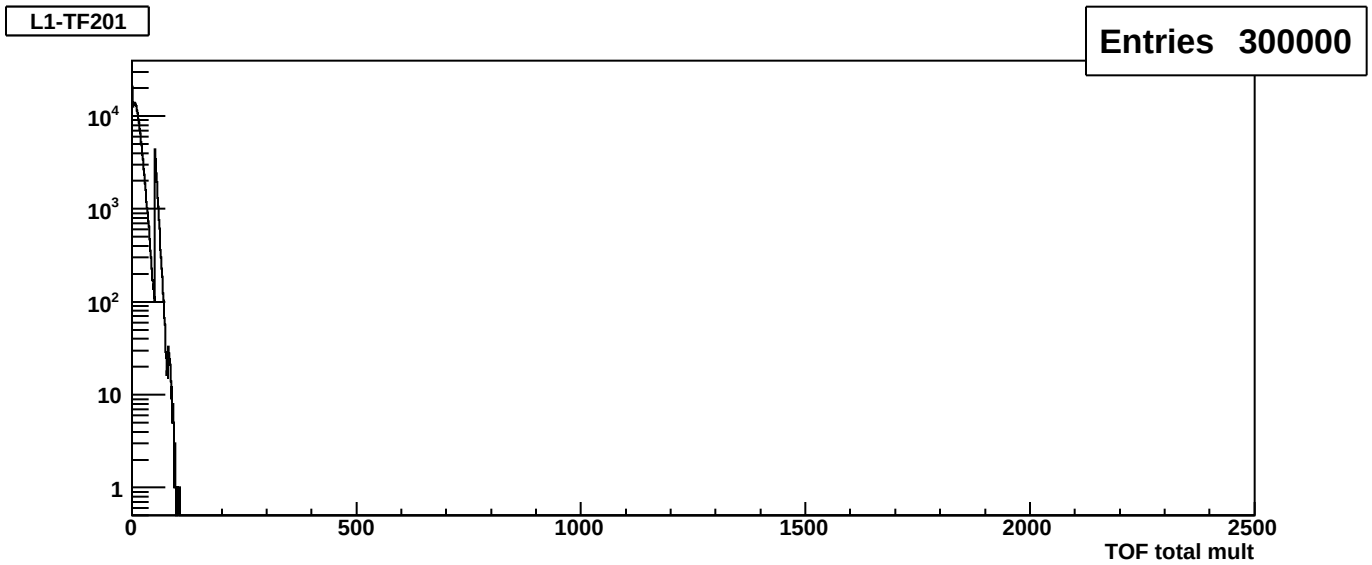

MIX-TF003
Entries 1.26e+07
TOF MULT
TOF tray

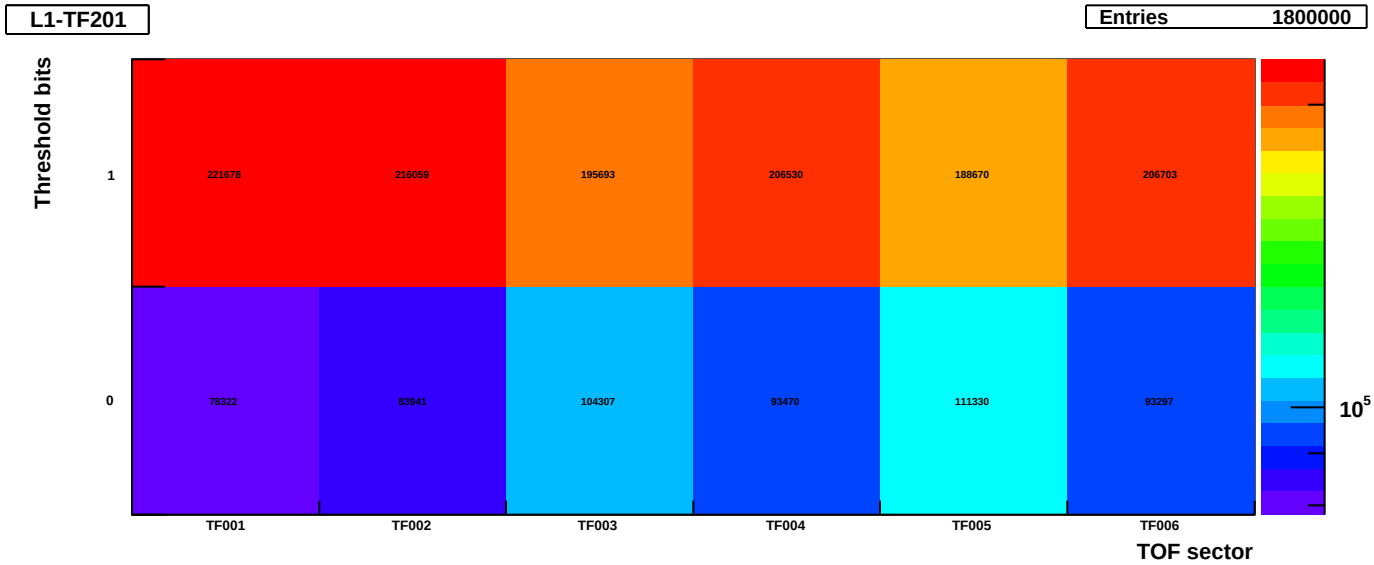

MIX-TF004
Entries 1.26e+07
TOF MULT
TOF tray

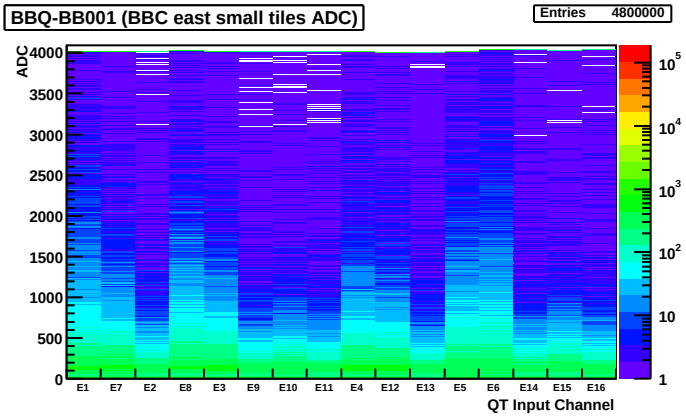

MIX-TF005
Entries 1.26e+07
TOF MULT
TOF tray

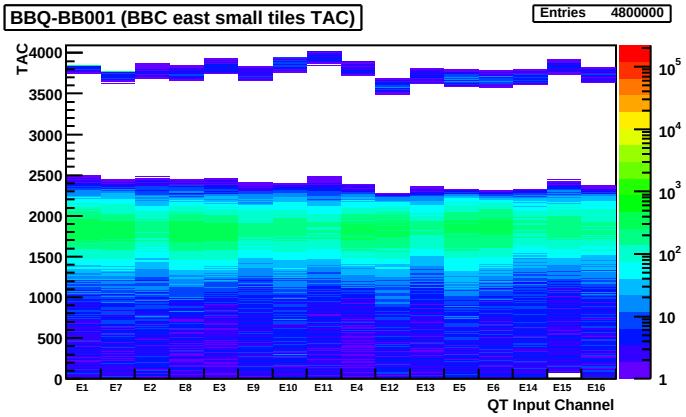

MIX-TF006
Entries 1.26e+07
TOF MULT
TOF tray

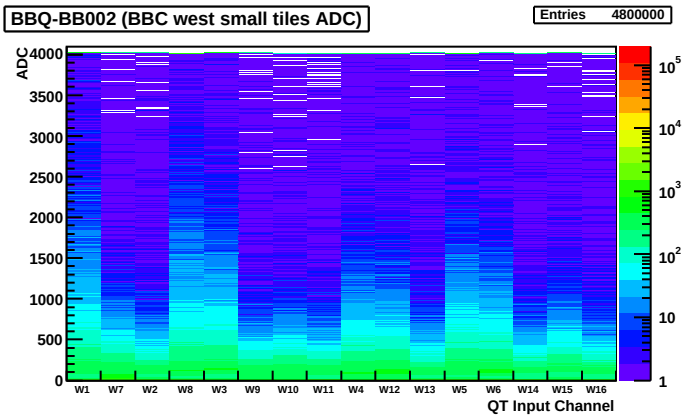

MIX-TF101
Entries 1800000
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

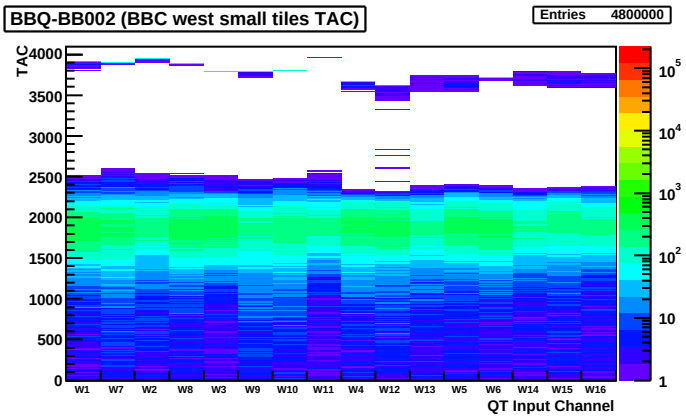

L1-TF201
Entries 300000
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

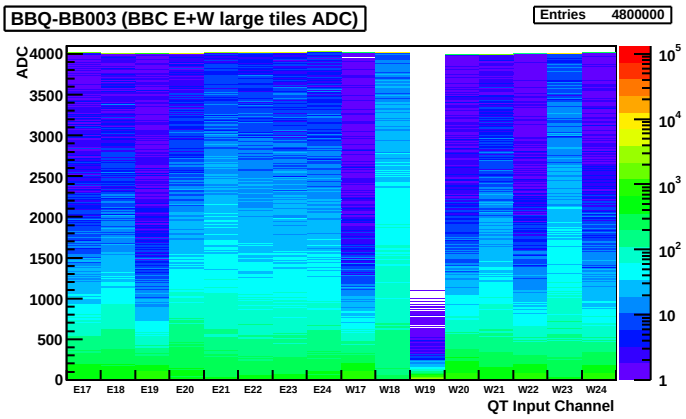

L1-TF201
Entries 1800000
Threshold bits
1
0
221678
216059
195693
206530
188670
206703
78322
83941
104307
93470
111330
93297
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

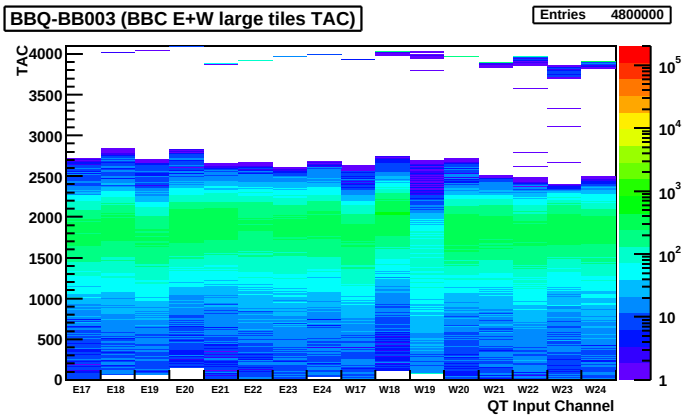

BBQ-BB001 (BBC east small tiles ADC)
Entries 4800000
ADC
QT Input Channel

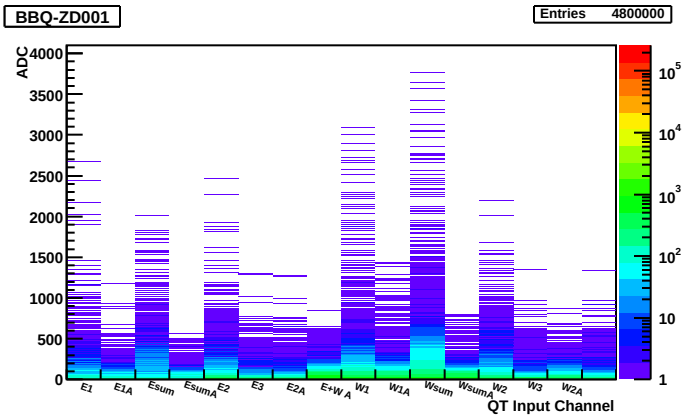

BBQ-BB001 (BBC east small tiles TAC)
Entries 4800000
TAC
QT Input Channel

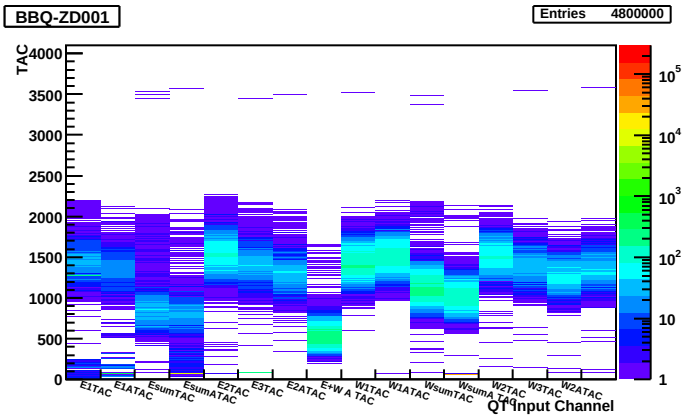

BBQ-BB002 (BBC west small tiles ADC)
Entries 4800000
ADC
QT Input Channel

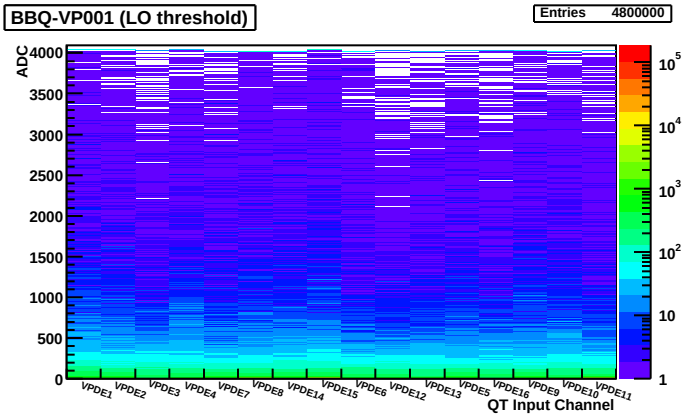

BBQ-BB002 (BBC west small tiles TAC)
Entries 4800000
TAC
QT Input Channel

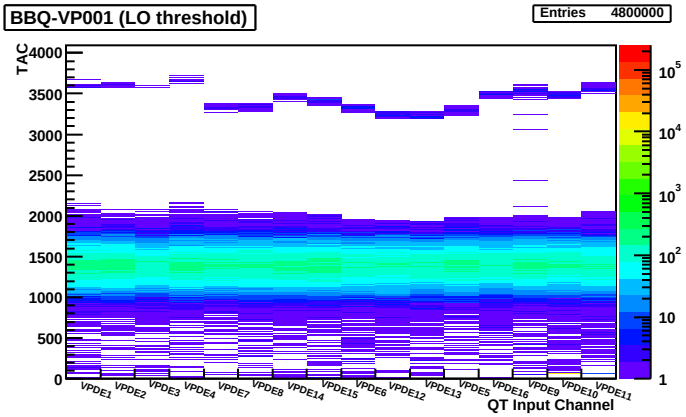

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4800000
ADC
QT Input Channel

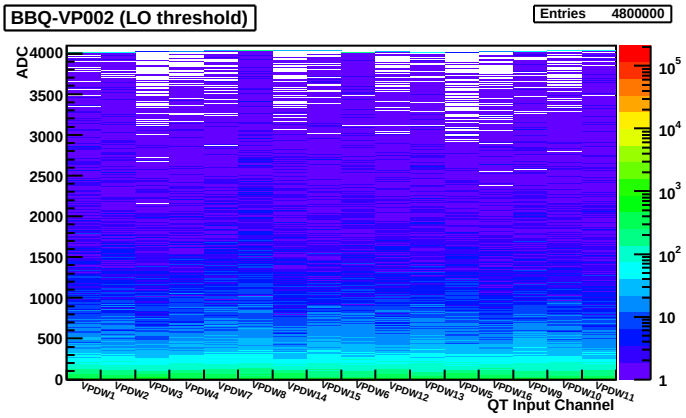

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4800000
TAC
QT Input Channel

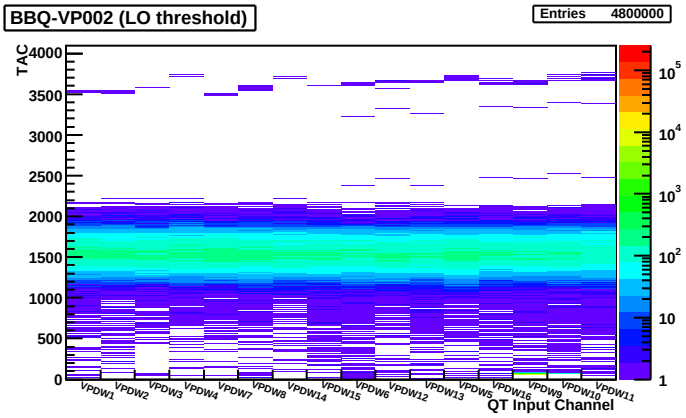

BBQ-ZD001
Entries 4800000
ADC
QT Input Channel

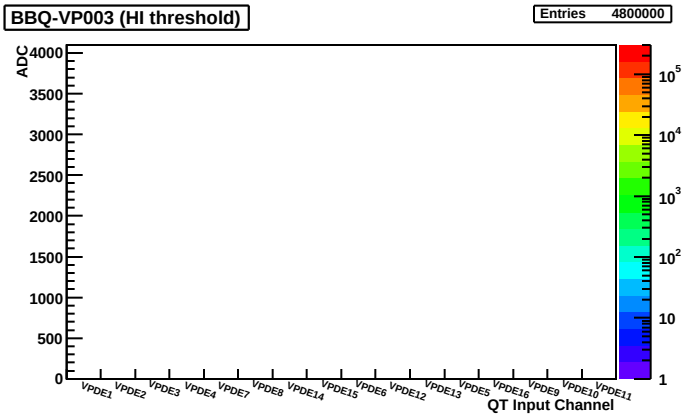

BBQ-ZD001
Entries 4800000
TAC
QT Input Channel

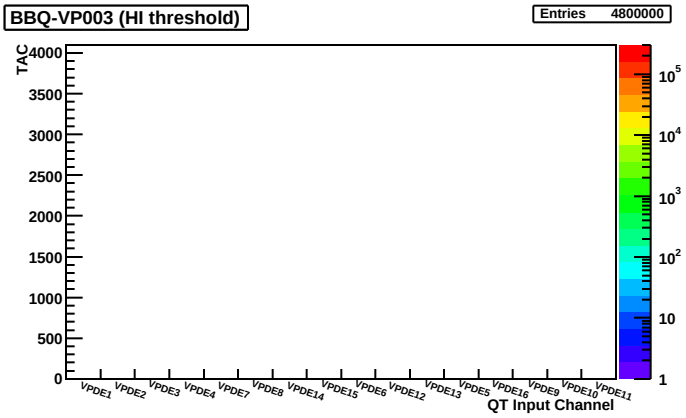

BBQ-VP001 (LO threshold)
Entries 4800000
ADC
QT Input Channel

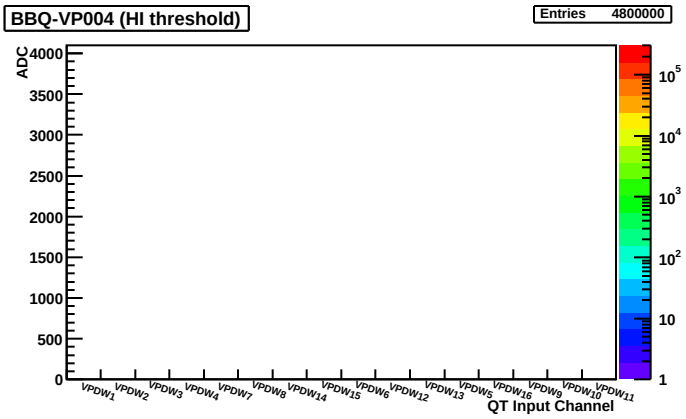

BBQ-VP001 (LO threshold)
Entries 4800000
TAC
QT Input Channel

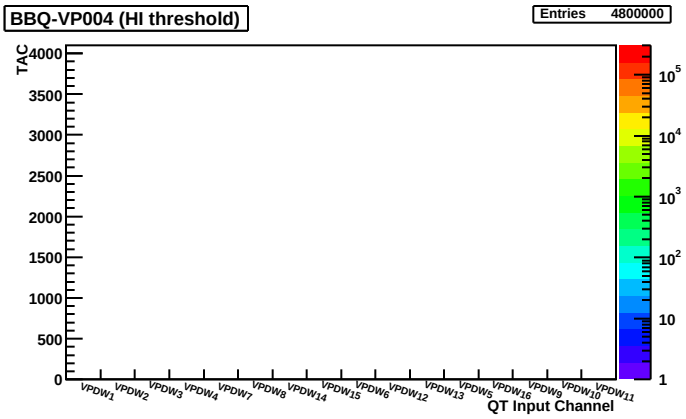

BBQ-VP002 (LO threshold)
Entries 4800000
ADC
QT Input Channel

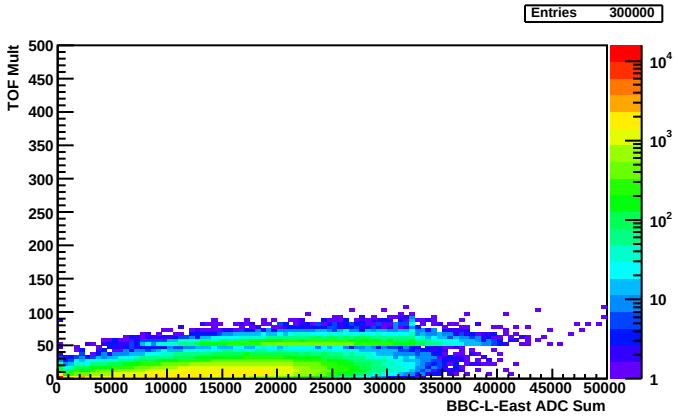

BBQ-VP002 (LO threshold)
Entries 4800000
TAC
QT Input Channel

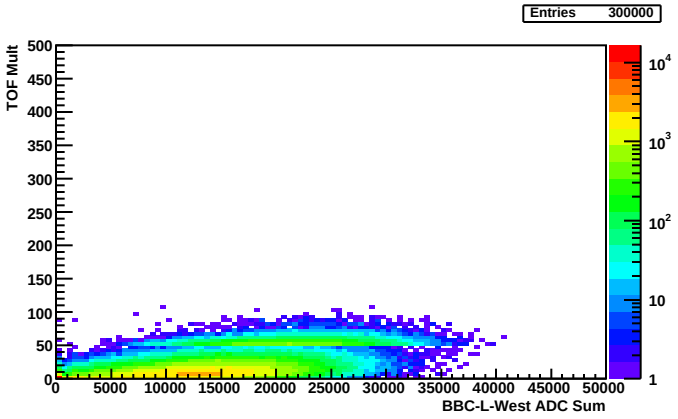

BBQ-VP003 (HI threshold)
Entries 4800000
ADC
QT Input Channel

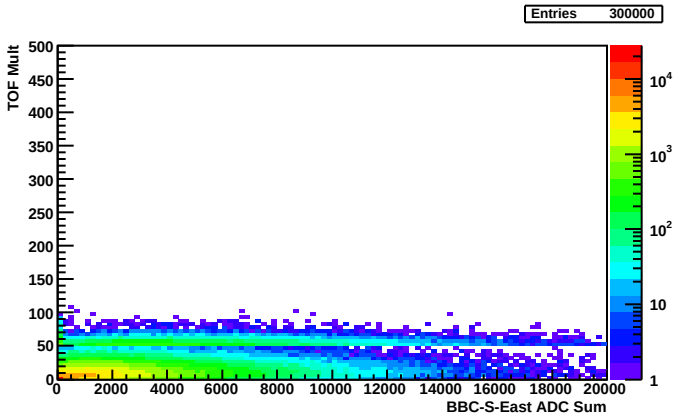

BBQ-VP003 (HI threshold)
Entries 4800000
TAC
QT Input Channel

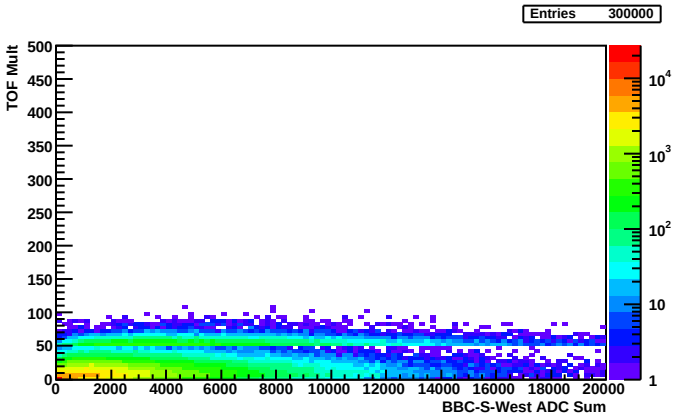

BBQ-VP004 (HI threshold)
Entries 4800000
ADC
QT Input Channel

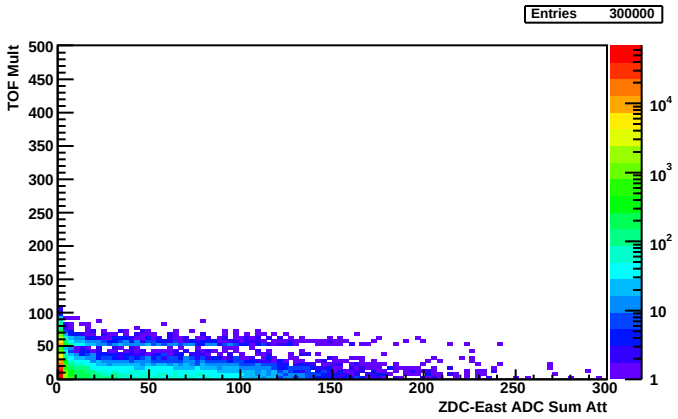

BBQ-VP004 (HI threshold)
Entries 4800000
TAC
QT Input Channel

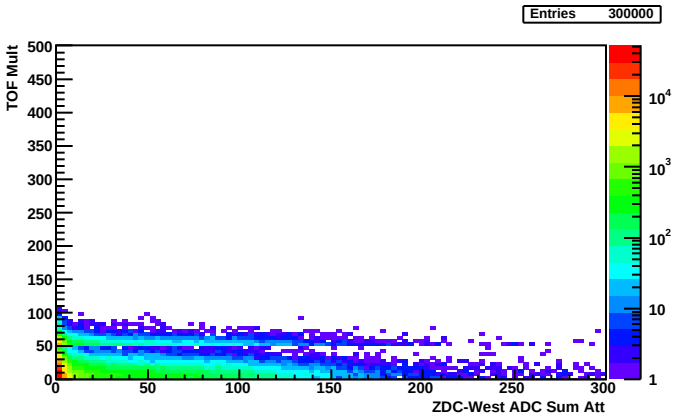

Entries 300000
TOF Mult
BBC-L-East ADC Sum

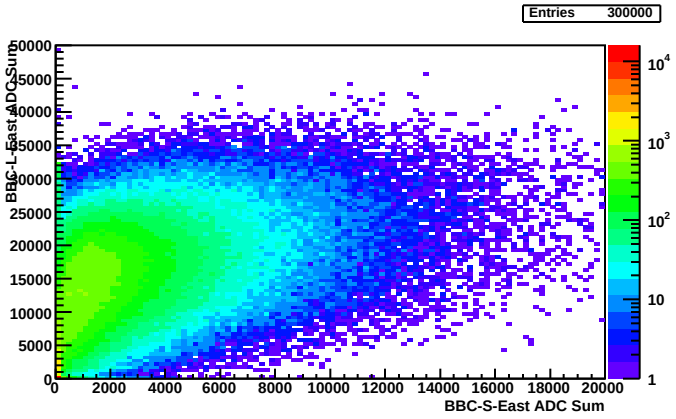

Entries 300000
TOF Mult
BBC-L-West ADC Sum

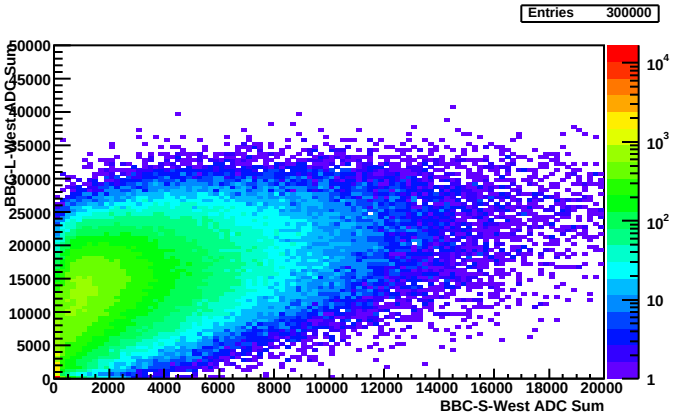

Entries 300000
TOF Mult
BBC-S-East ADC Sum

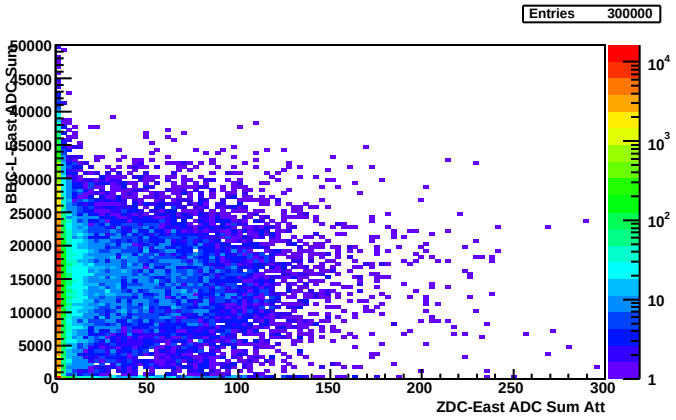

Entries 300000
TOF Mult
BBC-S-West ADC Sum

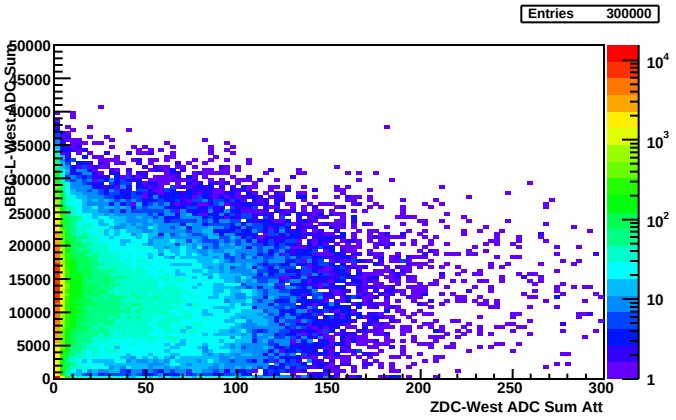

Entries 300000
TOF Mult
ZDC-East ADC Sum Att

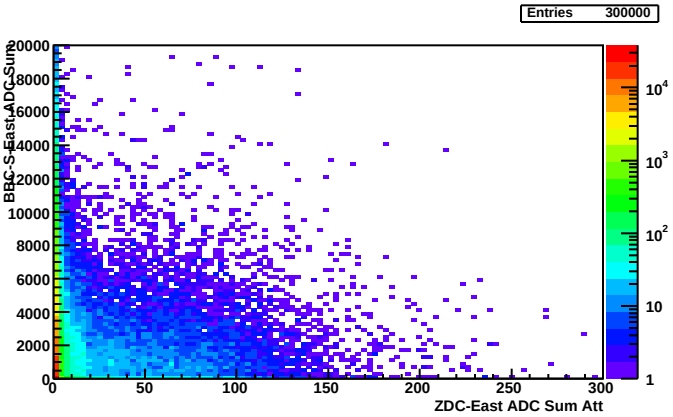

Entries 300000
TOF Mult
ZDC-West ADC Sum Att

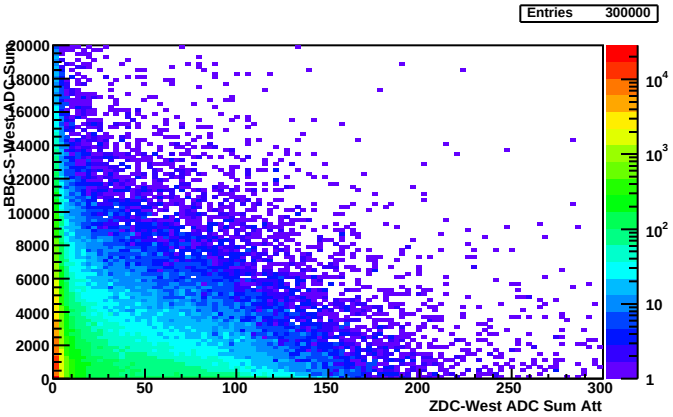

Entries 300000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

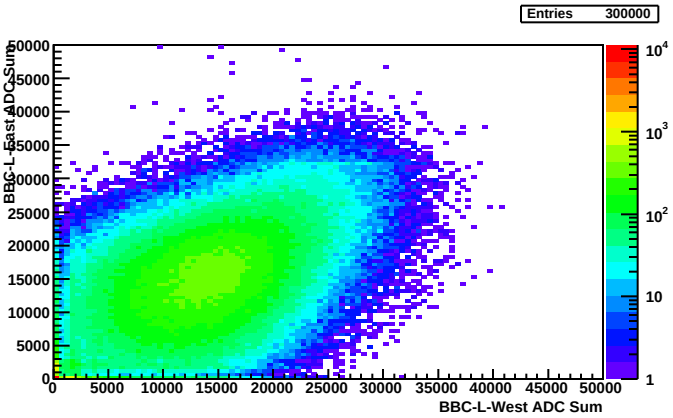

Entries 300000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

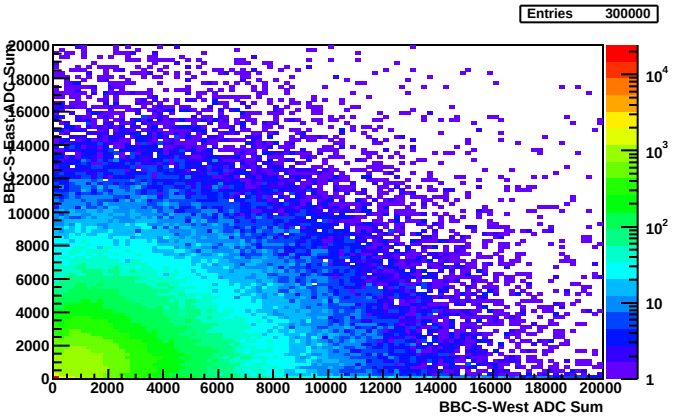

Entries 300000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

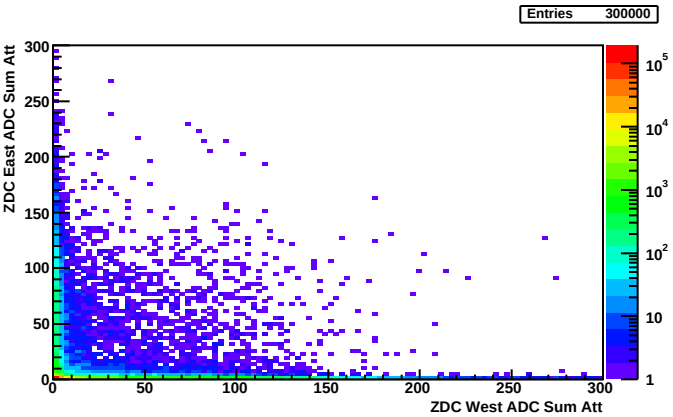

Entries 300000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

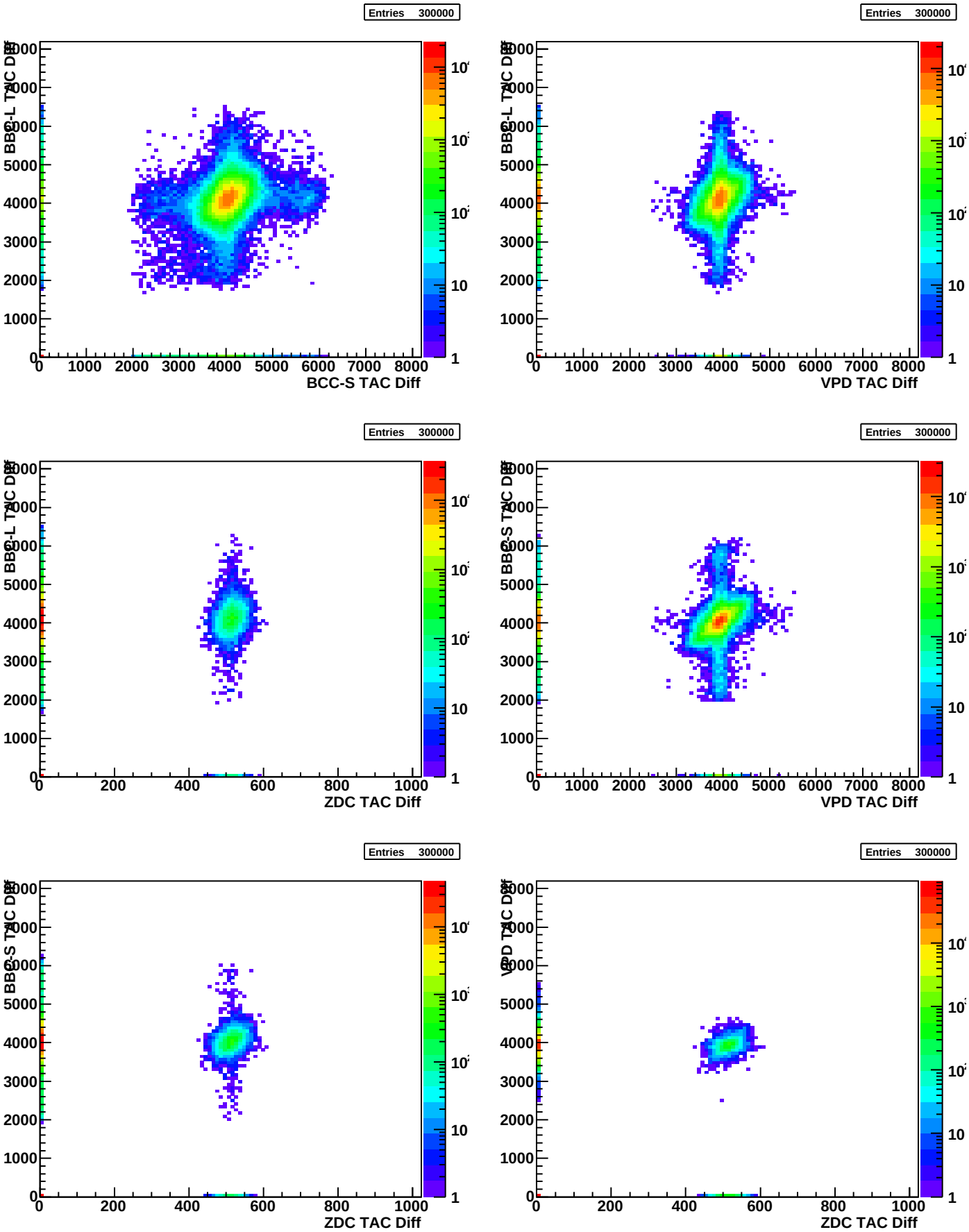

Entries 300000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

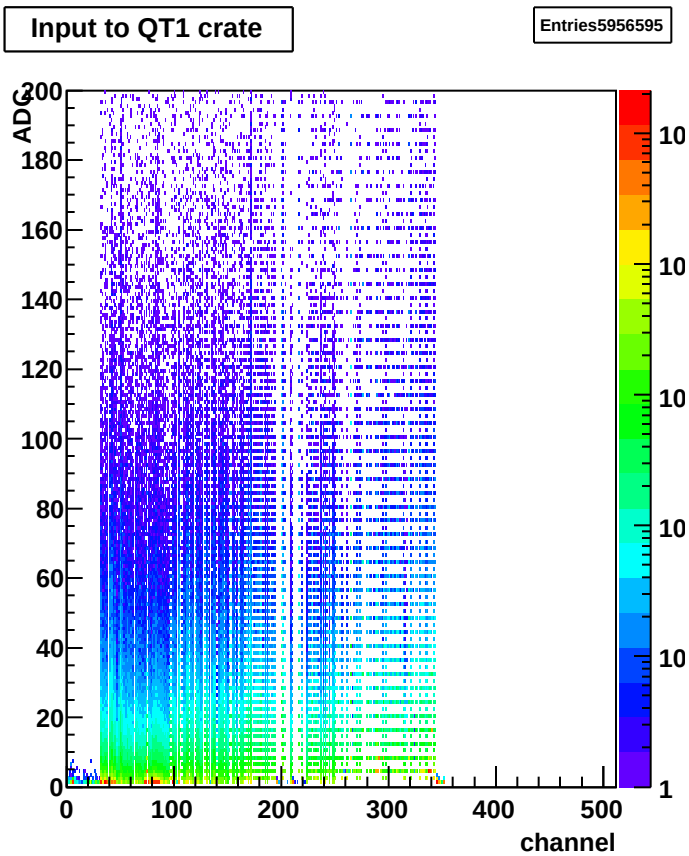

Entries 300000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

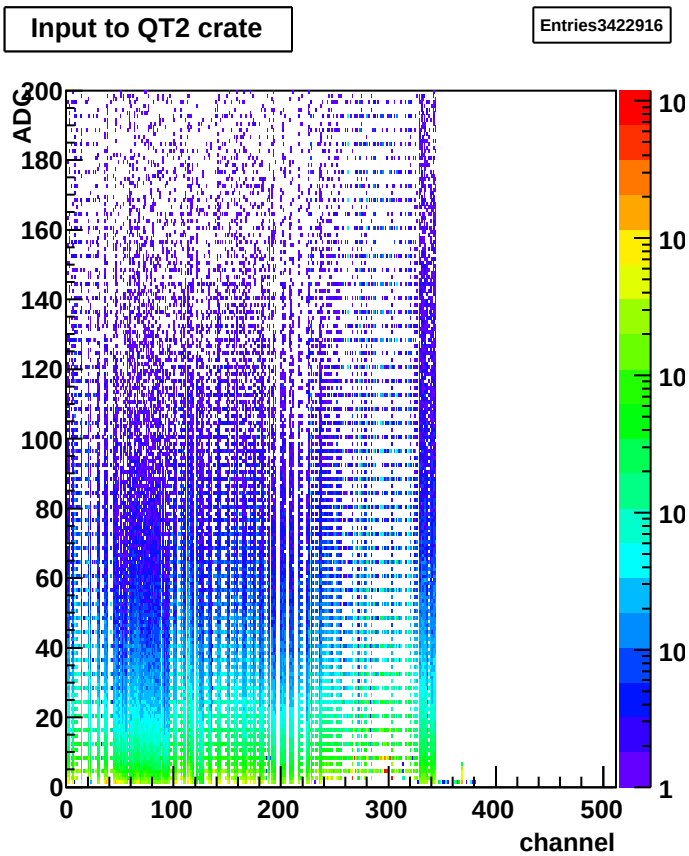

Entries 300000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

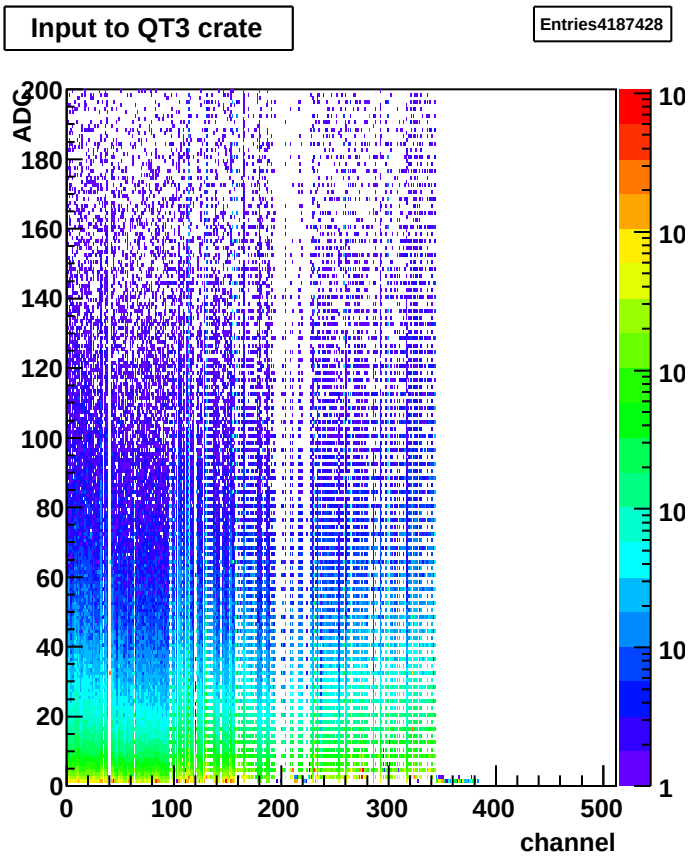

Entries 300000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

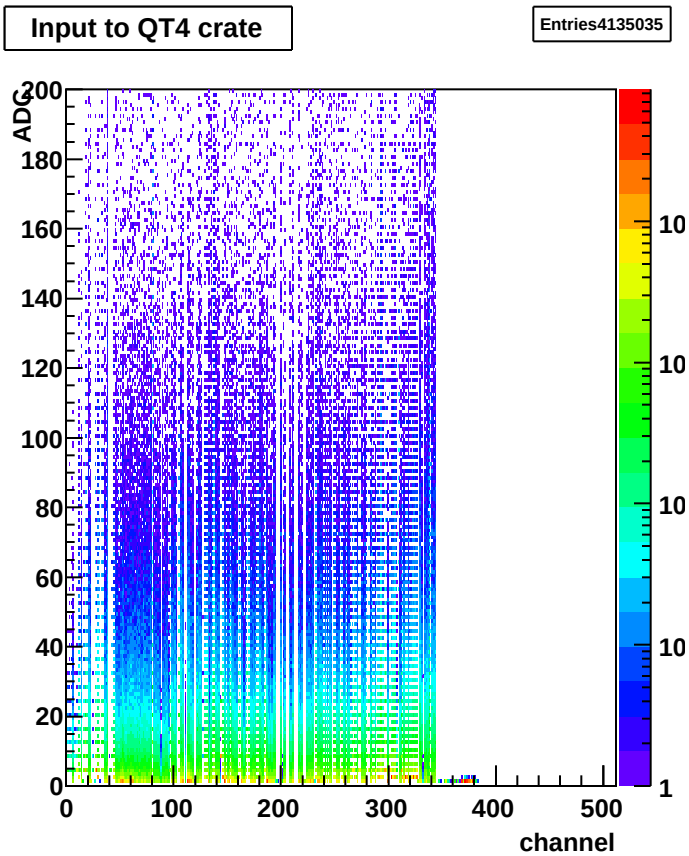

Entries 300000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

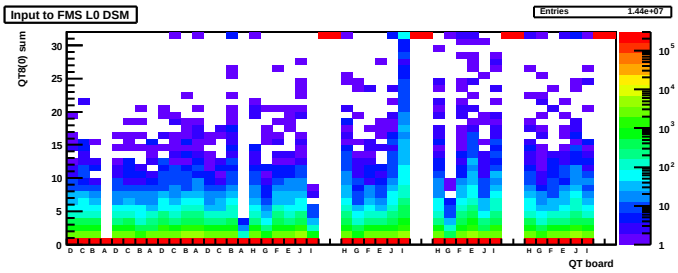

Entries 300000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 300000
BBC-L TAC Diff
VPD TAC Diff
Entries 300000
BBC-L TAC Diff
ZDC TAC Diff
Entries 300000
BBC-S TAC Diff
VPD TAC Diff
Entries 300000
BBC-S TAC Diff
ZDC TAC Diff
Entries 300000
VPD TAC Diff
ZDC TAC Diff

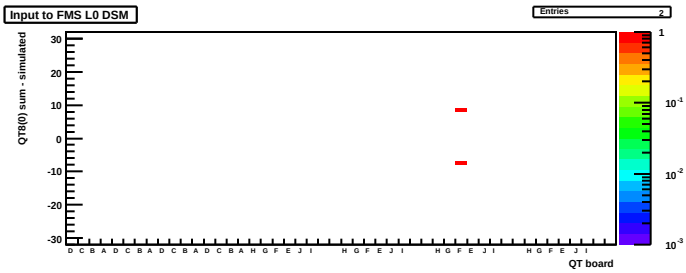

Input to QT1 crate
Entries5956595
ADC
channel

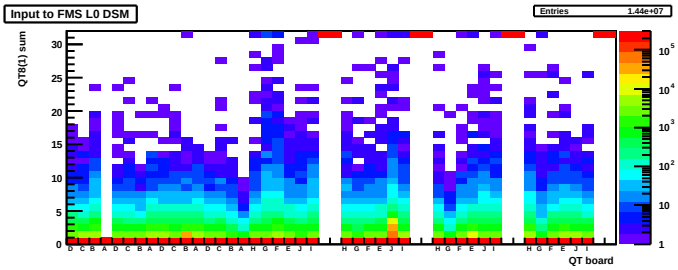

Input to QT2 crate
Entries3422916
ADC
channel

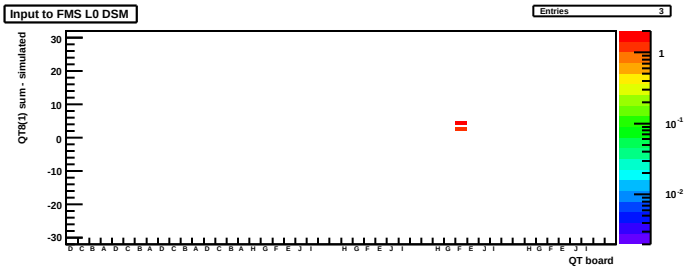

Input to QT3 crate
Entries4187428
ADC
channel

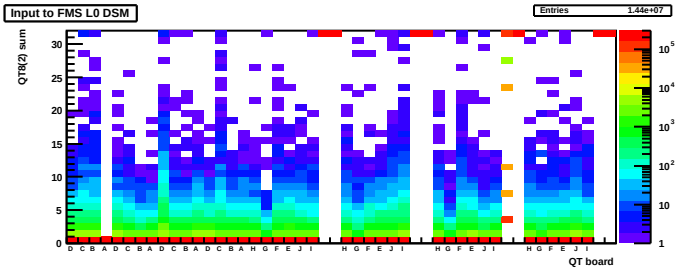

Input to QT4 crate
Entries4135035
ADC
channel

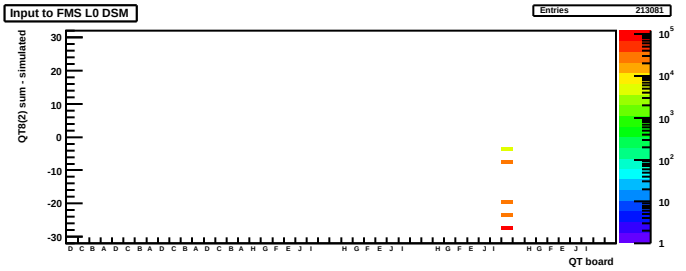

Input to FMS L0 DSM
Entries 1.44e+07
QT8(0) sum
QT board

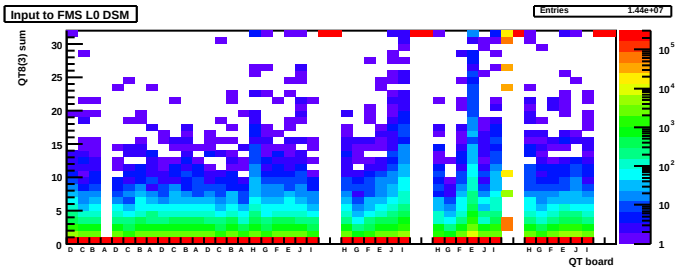

Input to FMS L0 DSM
Entries 2
QT8(0) sum - simulated
QT board

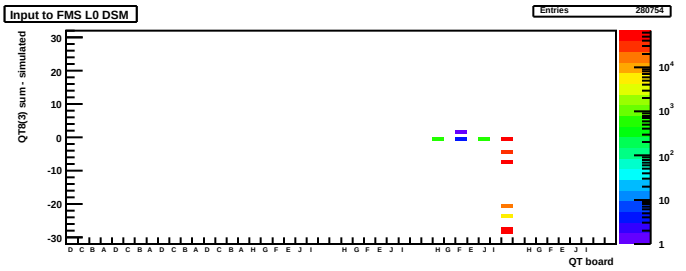

Input to FMS L0 DSM
Entries 1.44e+07
QT8(1) sum
QT board

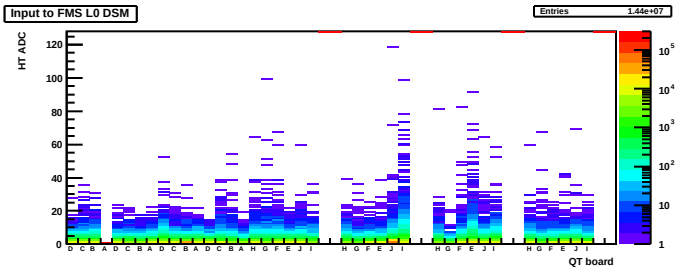

Input to FMS L0 DSM
Entries 3
QT8(1) sum - simulated
QT board

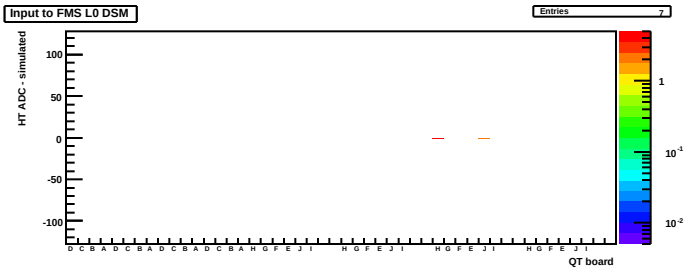

Input to FMS L0 DSM
Entries 1.44e+07
QT8(2) sum
QT board

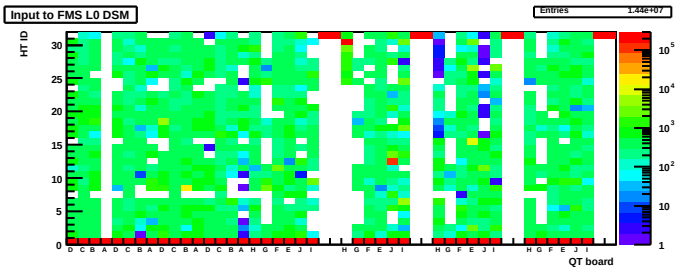

Input to FMS L0 DSM
Entries 213081
QT8(2) sum - simulated
QT board

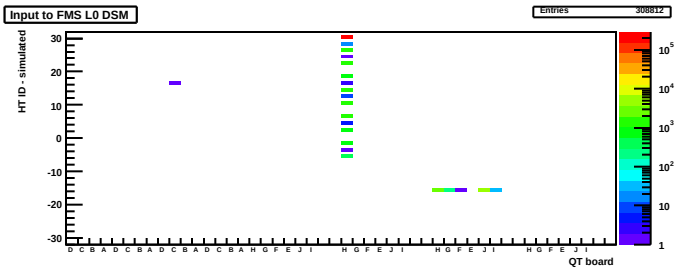

Input to FMS L0 DSM
Entries 1.44e+07
QT8(3) sum
QT board

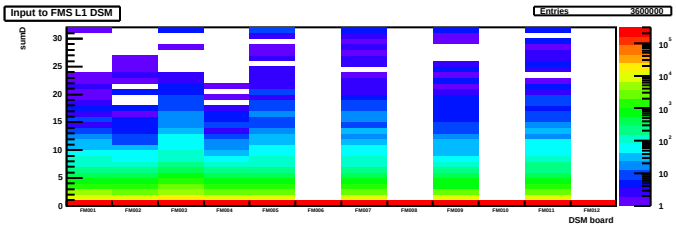

Input to FMS L0 DSM
Entries 280754
QT8(3) sum - simulated
QT board

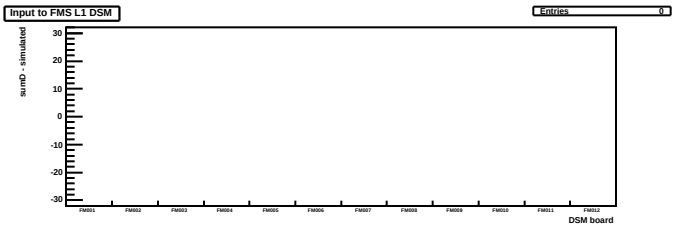

Input to FMS L0 DSM
Entries 1.44e+07
HT ADC
QT board

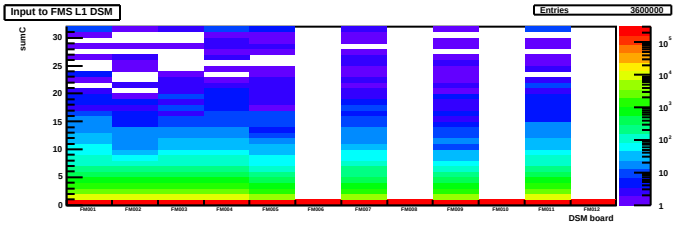

Input to FMS L0 DSM
Entries 7
HT ADC - simulated
QT board

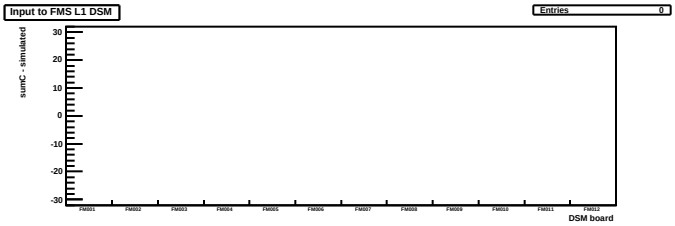

Input to FMS L0 DSM
Entries 1.44e+07
HT ID
QT board

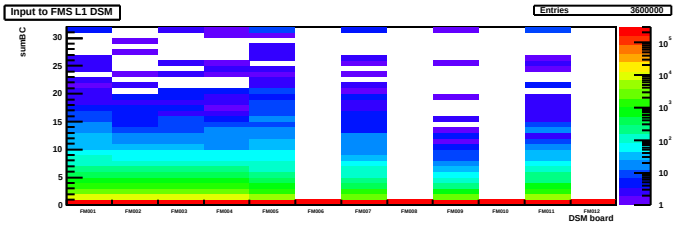

Input to FMS L0 DSM
Entries 308812
HT ID - simulated
QT board

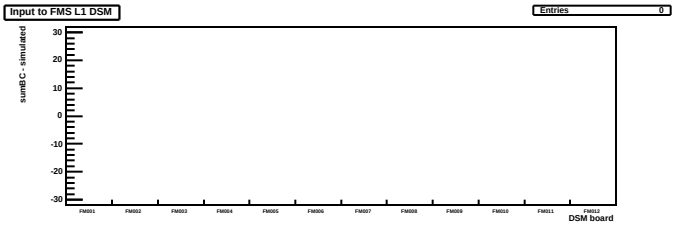

Input to FMS L1 DSM
Entries 3600000
sumD
DSM board

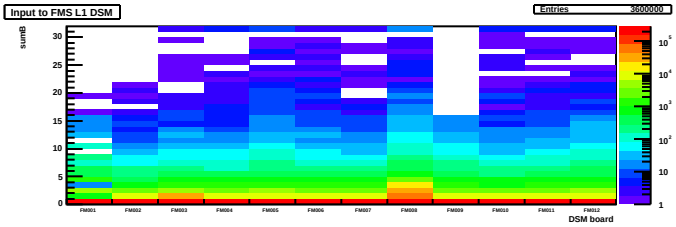

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

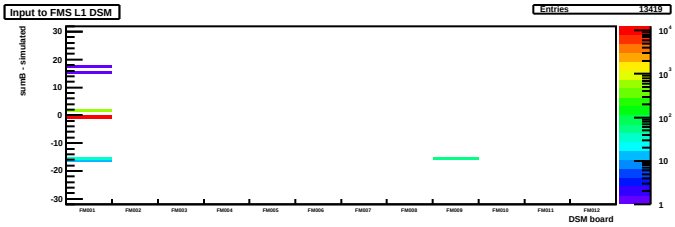

Input to FMS L1 DSM
Entries 3600000
sumC
DSM board

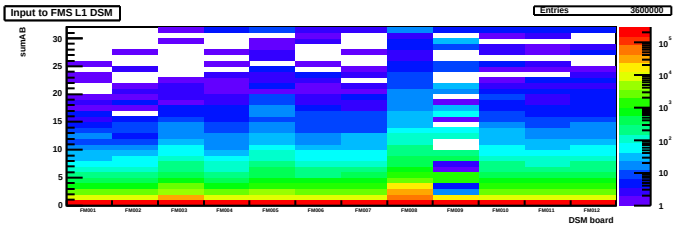

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

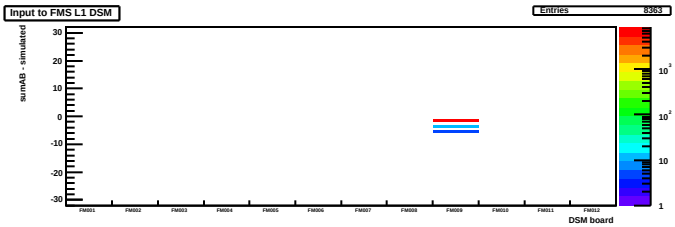

Input to FMS L1 DSM
Entries 3600000
sumBC
DSM board

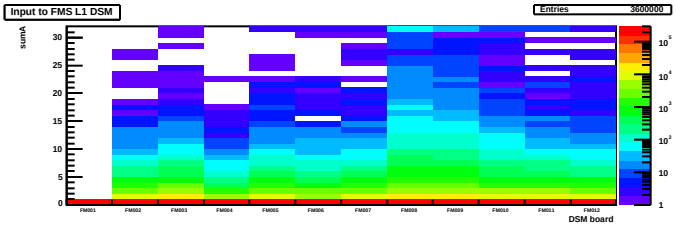

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

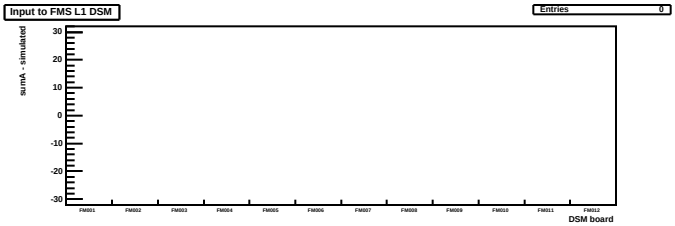

Input to FMS L1 DSM
Entries 3600000
sumB
DSM board

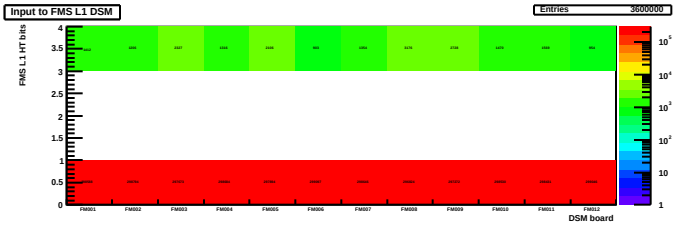

Input to FMS L1 DSM
Entries 13419
sumB - simulated
DSM board

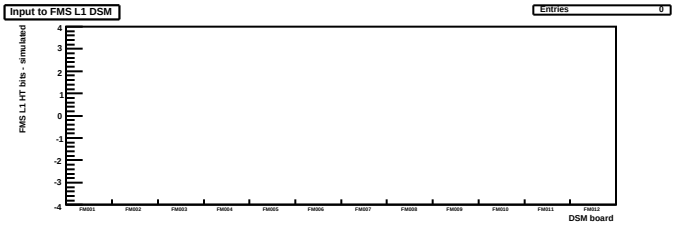

Input to FMS L1 DSM
Entries 3600000
sumAB
DSM board

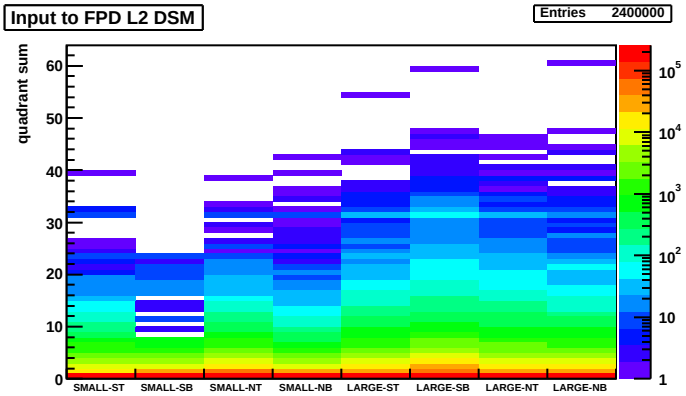

Input to FMS L1 DSM
Entries 8363
sumAB - simulated
DSM board

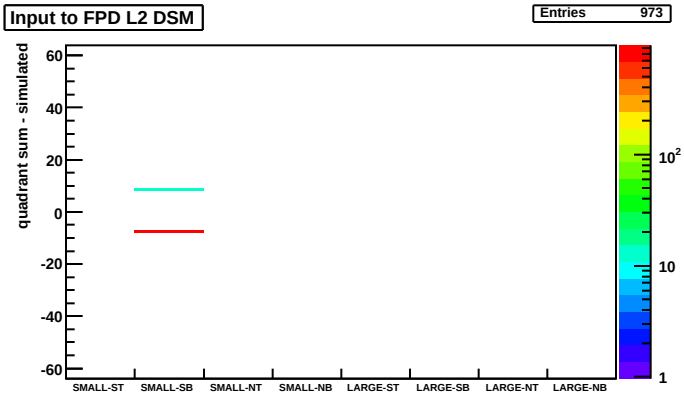

Input to FMS L1 DSM
Entries 3600000
sumA
DSM board

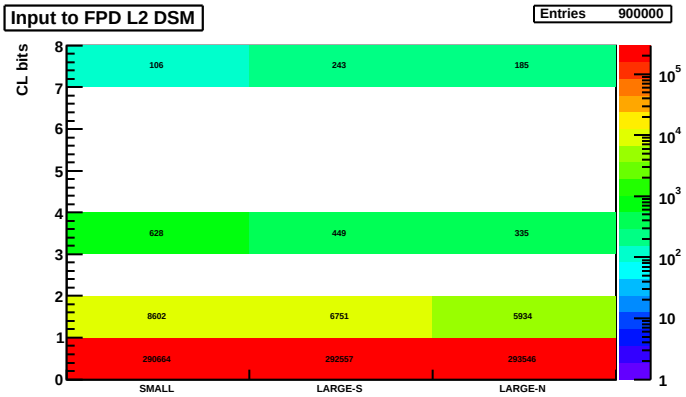

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

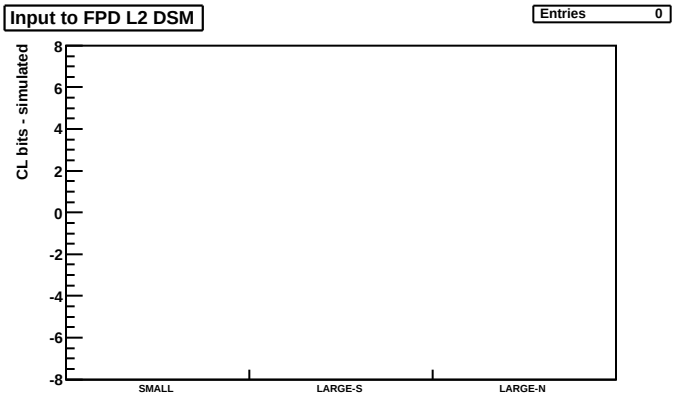

Input to FMS L1 DSM
Entries 3600000
FMS L1 HT bits
DSM board

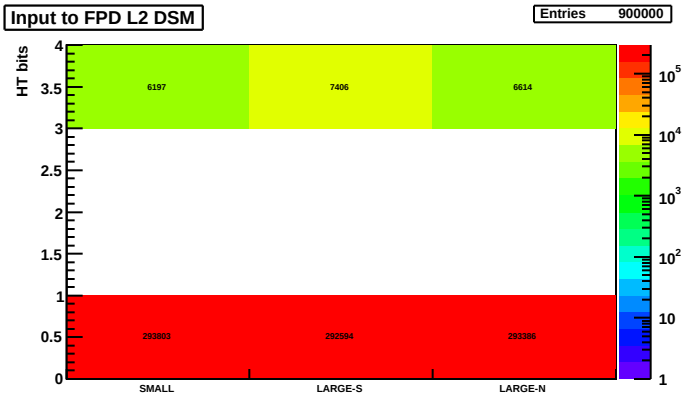

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

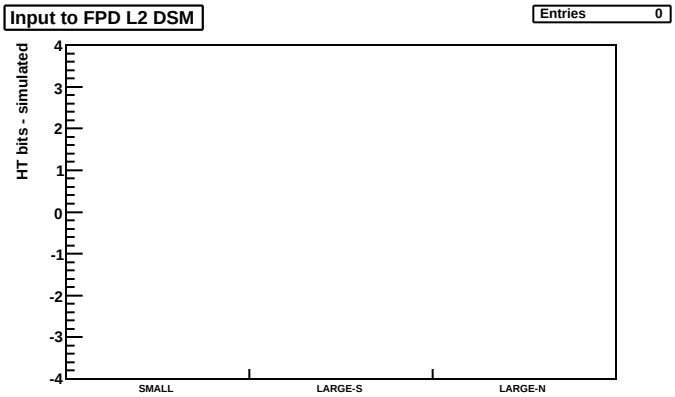

Input to FPD L2 DSM
Entries 2400000
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

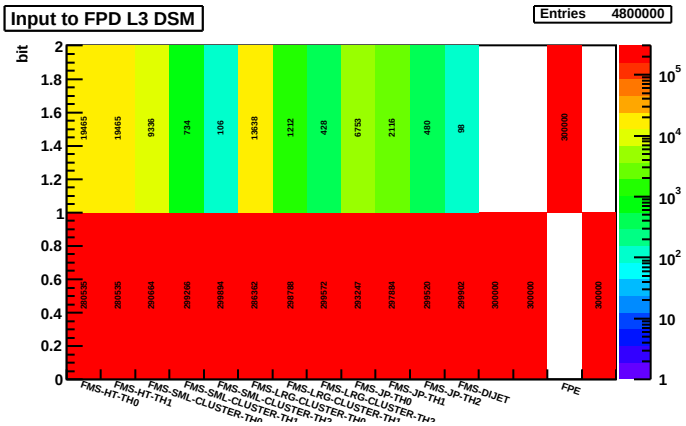

Input to FPD L2 DSM
Entries 973
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

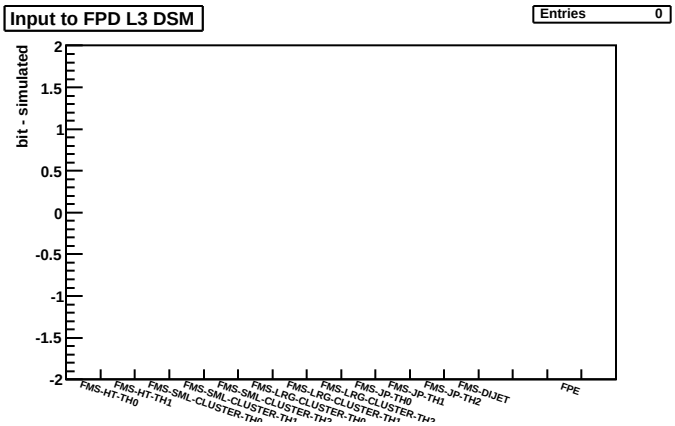

Input to FPD L2 DSM
Entries 900000
CL bits
106
243
185
628
449
335
8602
6751
5934
290664
292557
293546
SMALL
LARGE-S
LARGE-N

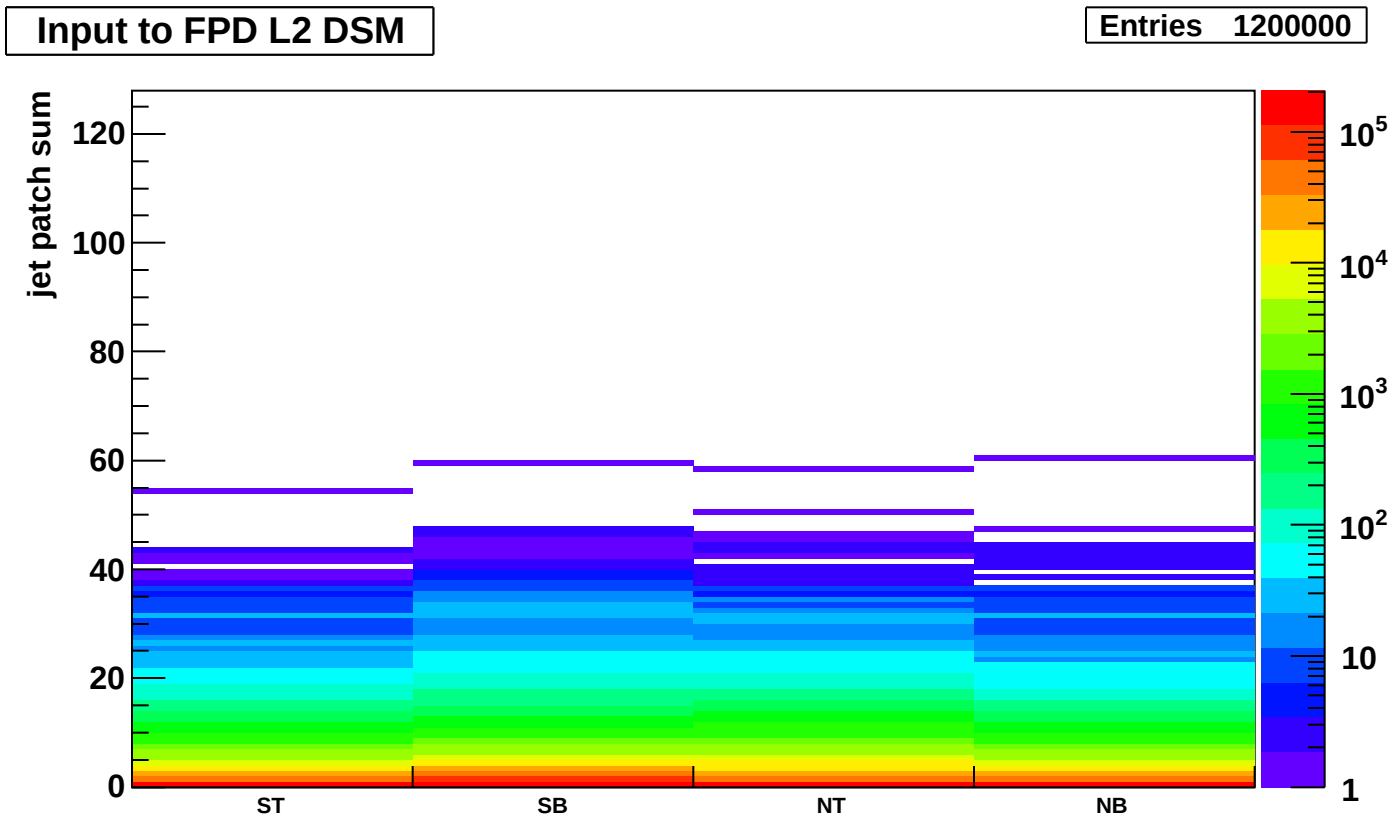

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

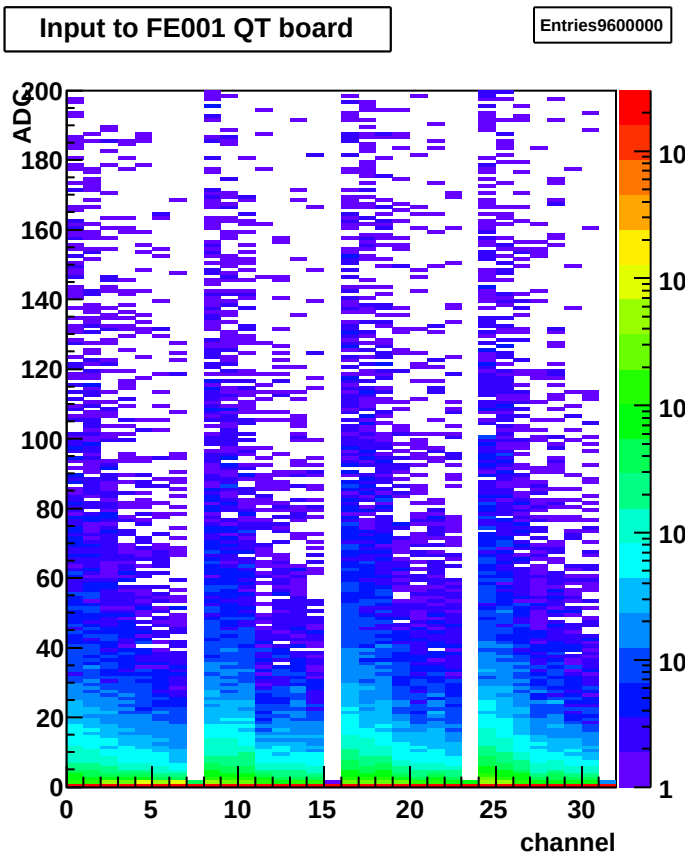

Input to FPD L2 DSM
Entries 900000
HT bits
6197
7406
6614
293803
292594
293386
SMALL
LARGE-S
LARGE-N

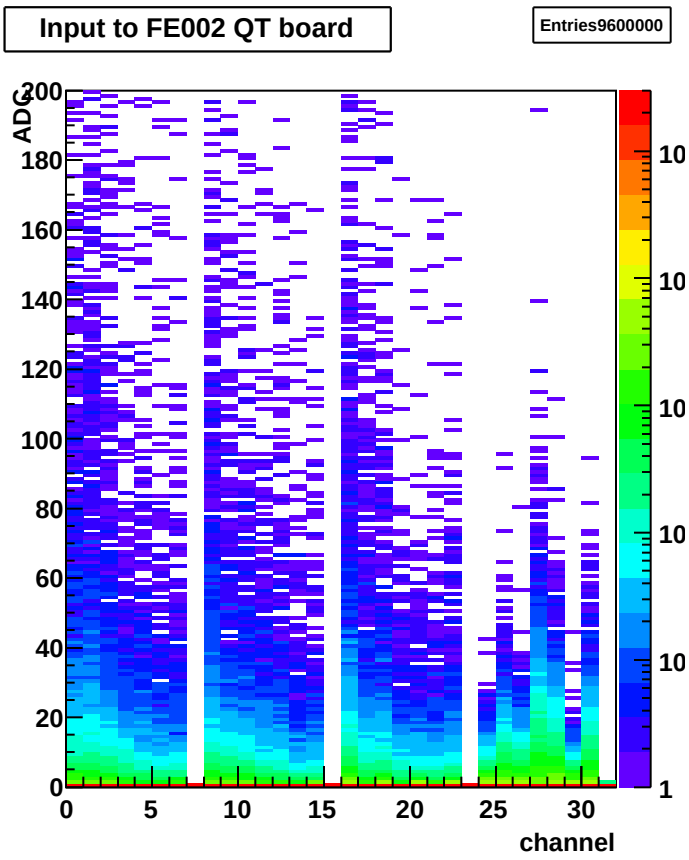

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

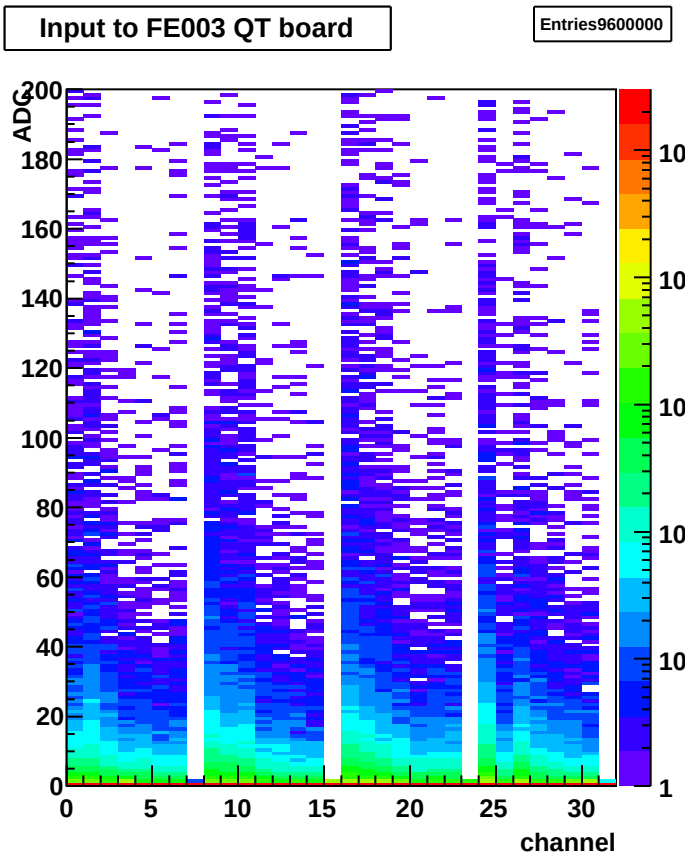

Input to FPD L3 DSM
Entries 4800000
bit
19465
19465
9336
734
106
13638
1212
428
6753
2116
480
98
30000
280535
280535
290664
299266
299694
299788
299972
293247
297684
299520
299902
30000
30000
30000
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

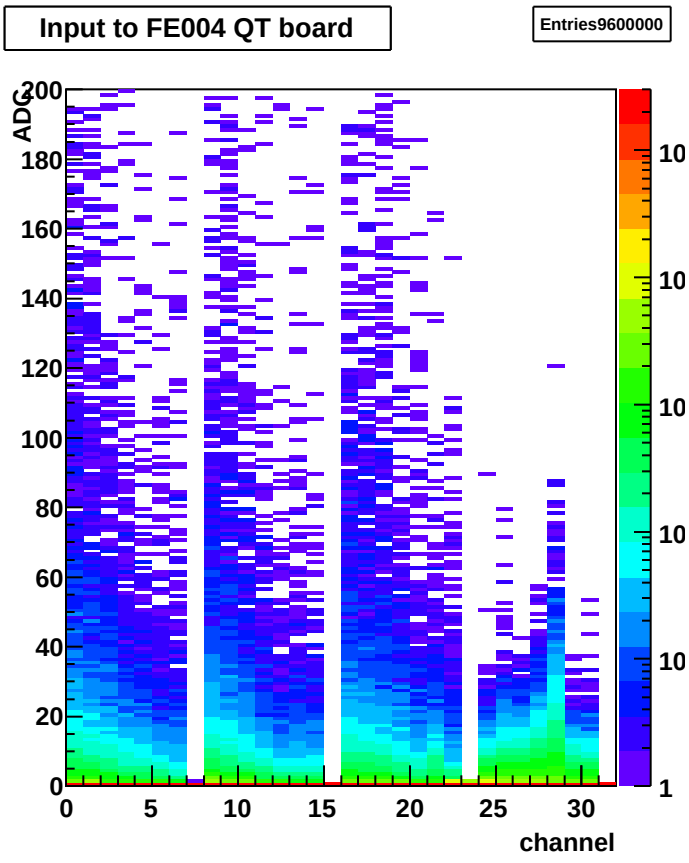

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

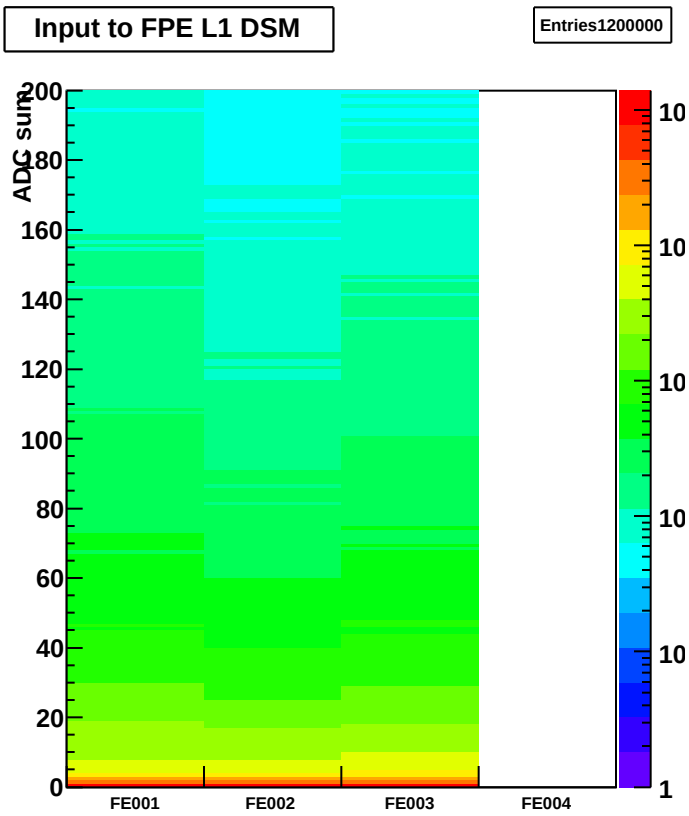

Input to FPD L2 DSM
Entries 1200000
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

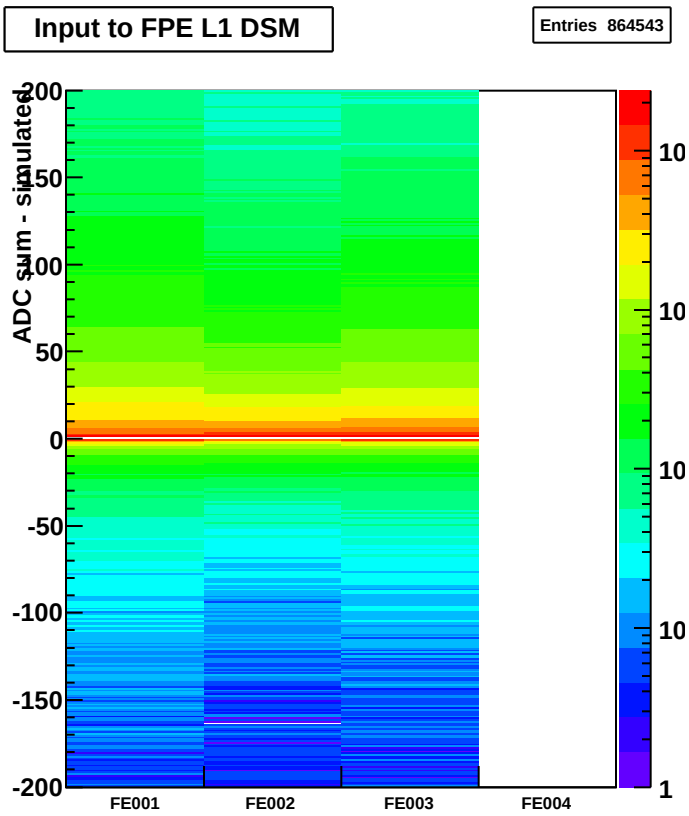

Input to FE001 QT board
Entries9600000
ADC
channel

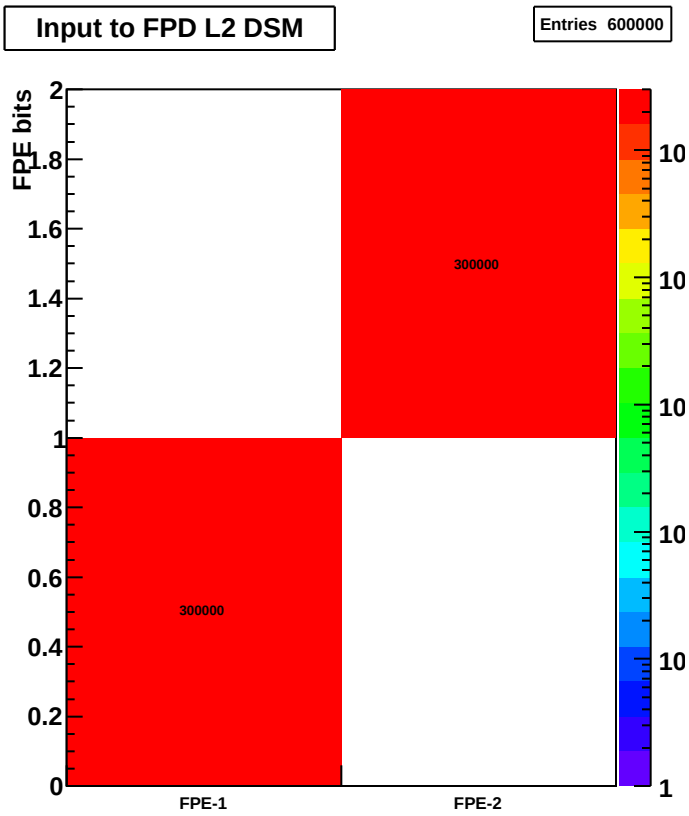

Input to FE002 QT board
Entries9600000
ADC
channel

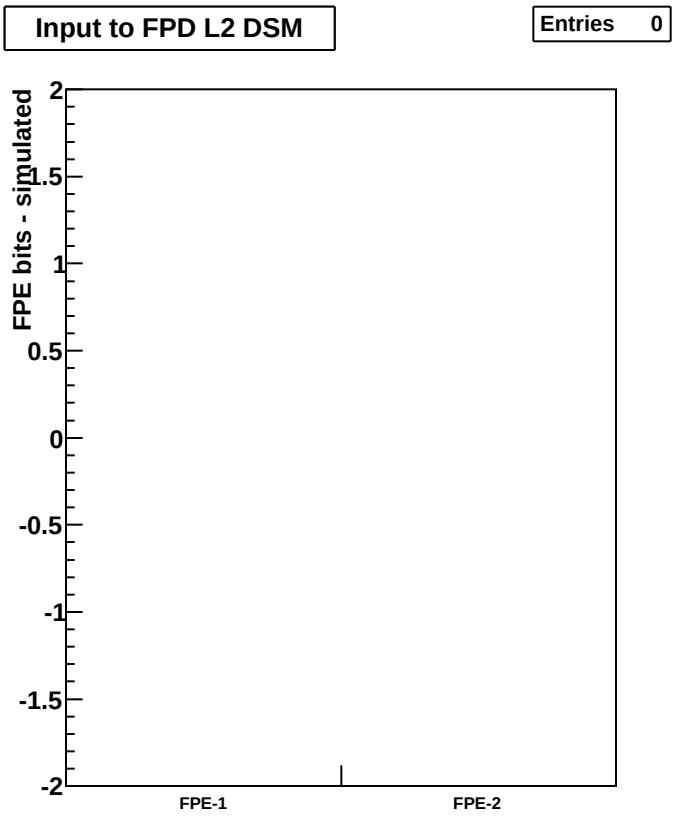

Input to FE003 QT board
Entries9600000
ADC
channel


Input to FE004 QT board
Entries9600000
ADC
channel


Input to FPE L1 DSM
Entries1200000
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 864543
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 600000
FPE bits
300000
300000
FPE-1
FPE-2


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