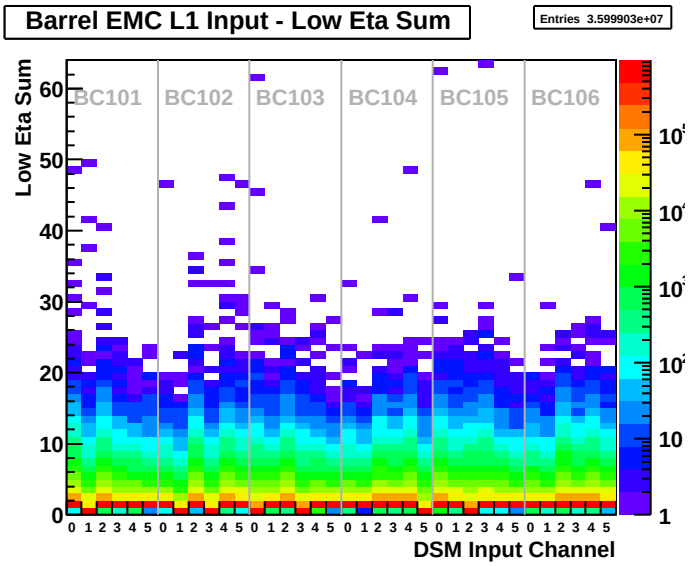
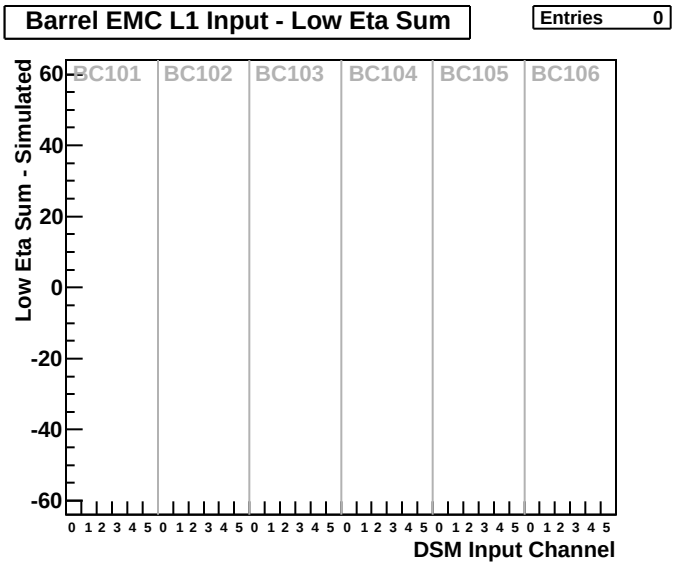
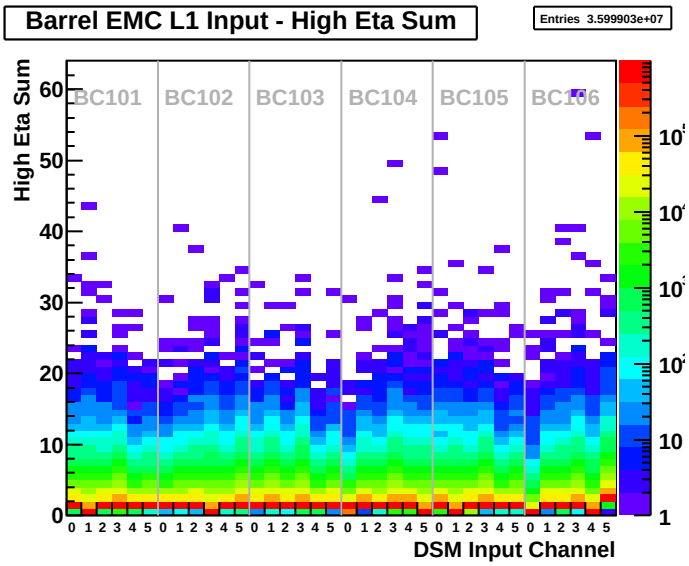
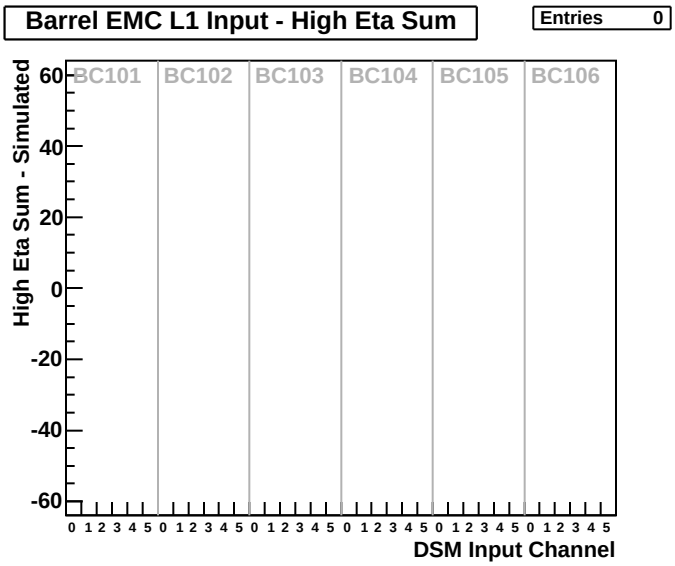
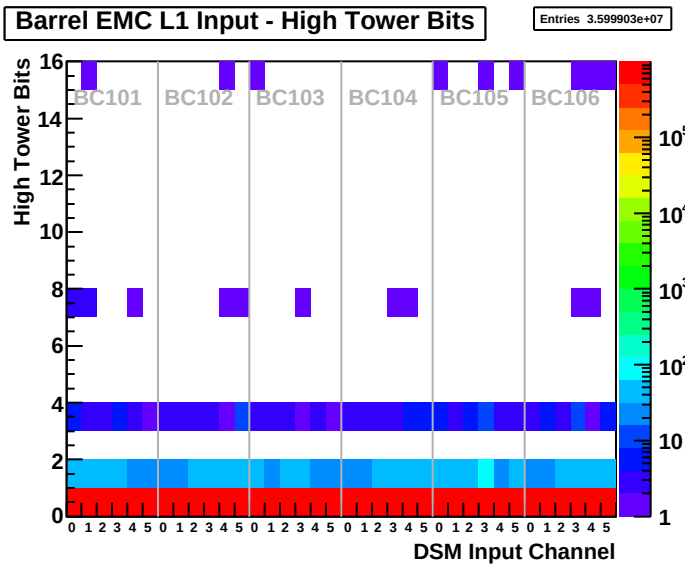
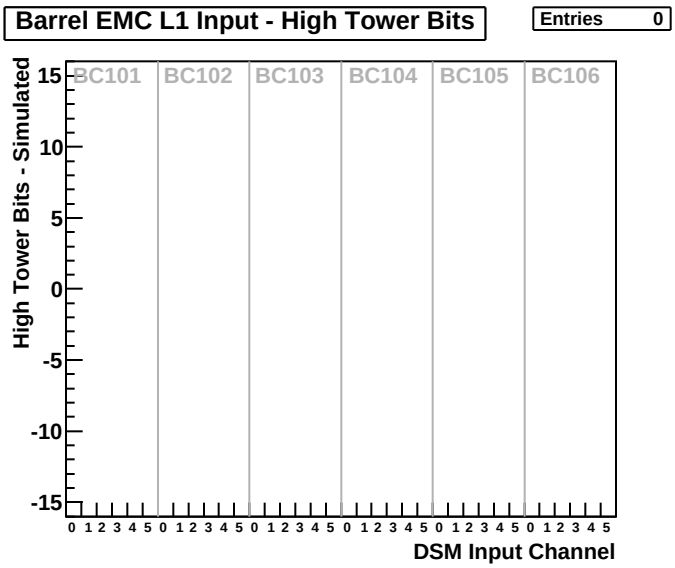

Barrel EMC L1 Input - Low Eta Sum
Entries 3.599903e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

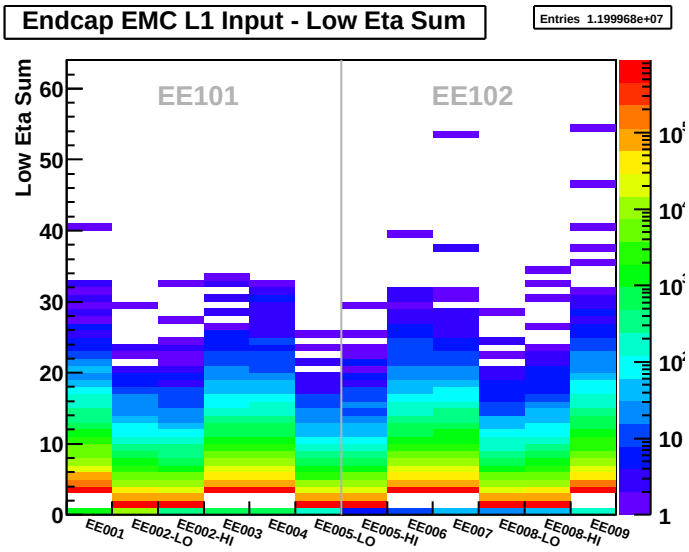

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

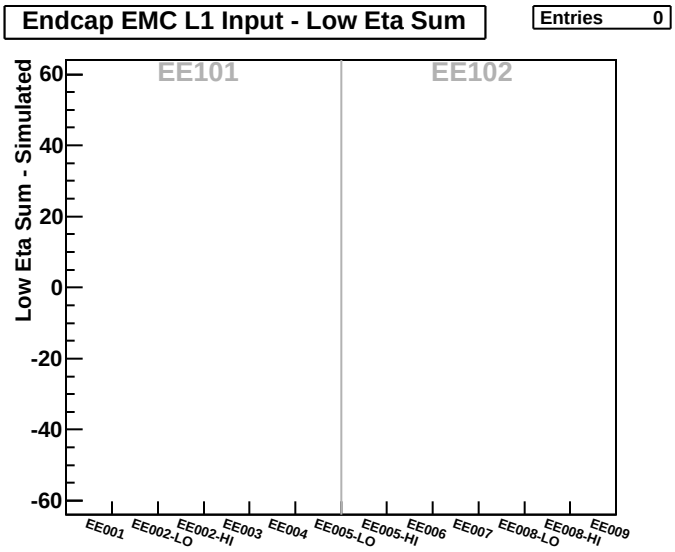

Barrel EMC L1 Input - High Eta Sum
Entries 3.599903e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

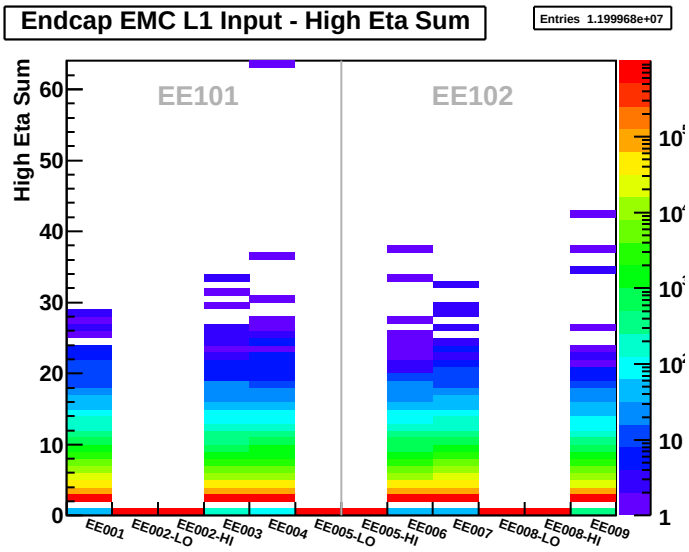

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

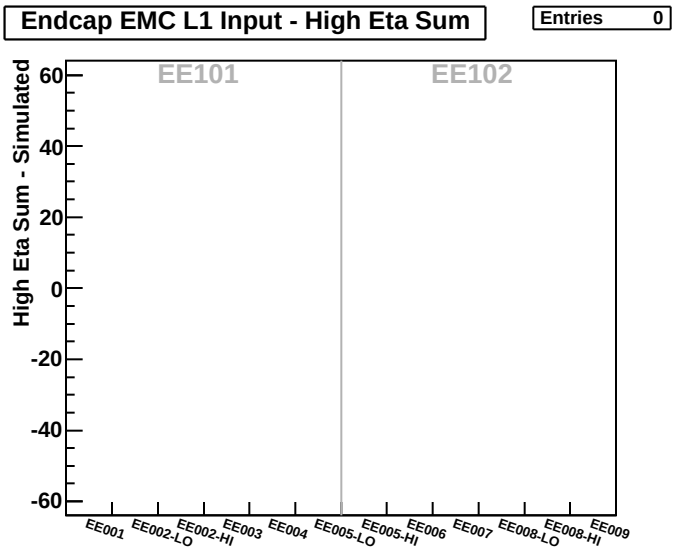

Barrel EMC L1 Input - High Tower Bits
Entries 3.599903e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

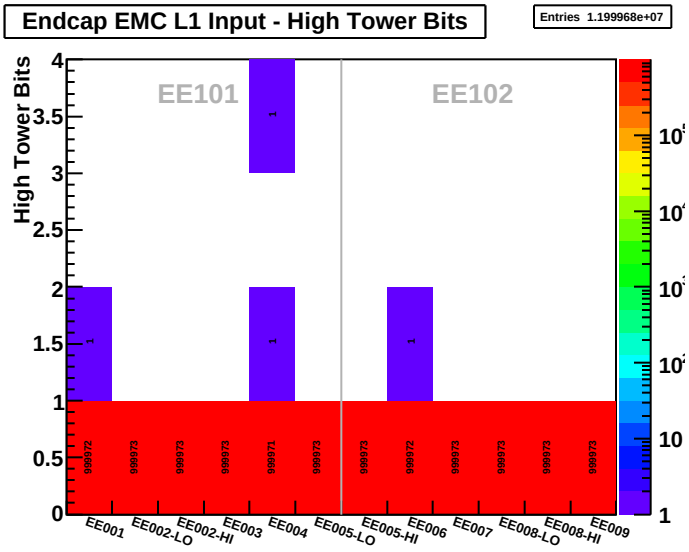

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

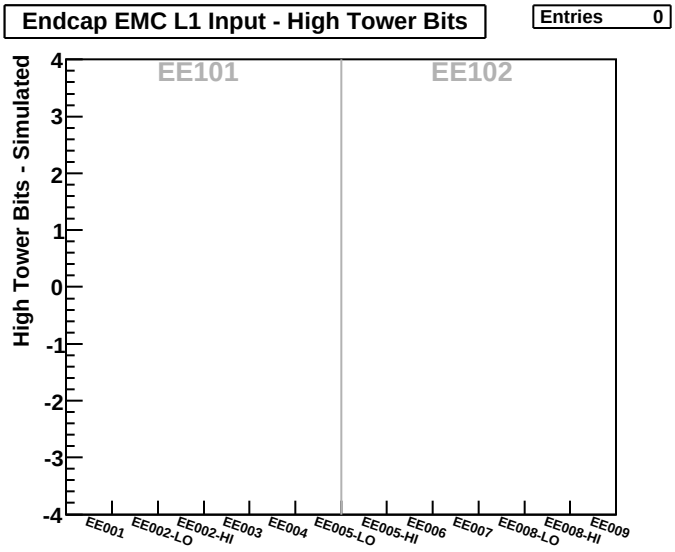

Endcap EMC L1 Input - Low Eta Sum
Entries 1.199968e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

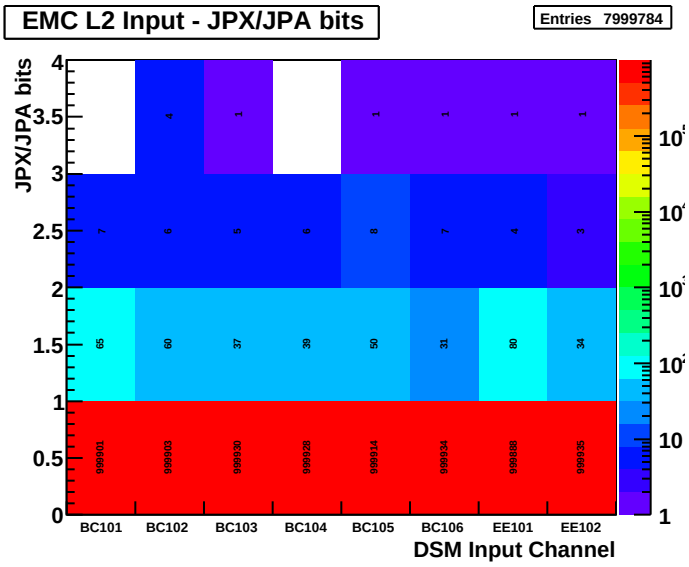

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

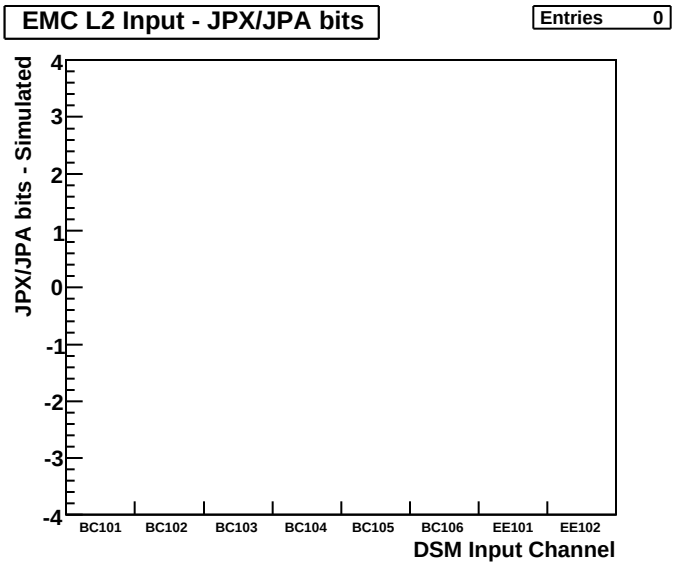

Endcap EMC L1 Input - High Eta Sum
Entries 1.199968e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

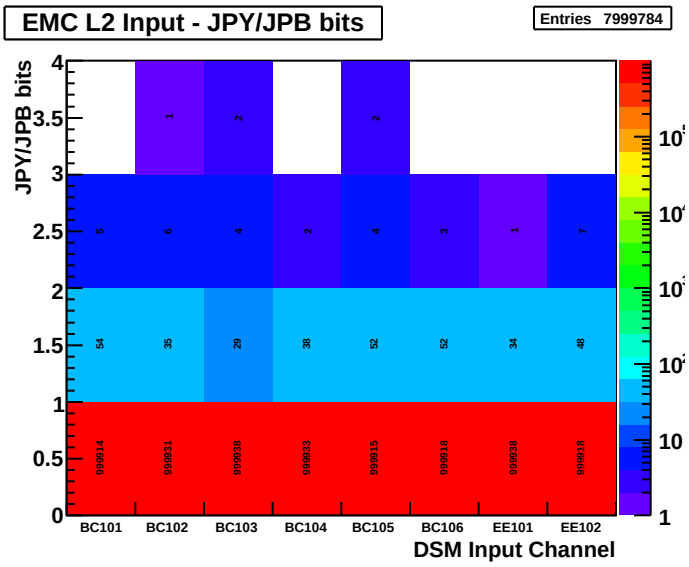

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

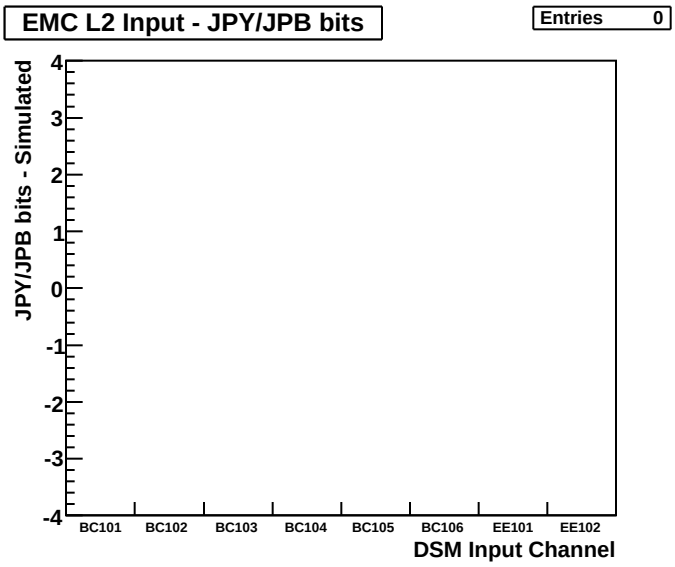

Endcap EMC L1 Input - High Tower Bits
Entries 1.199968e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

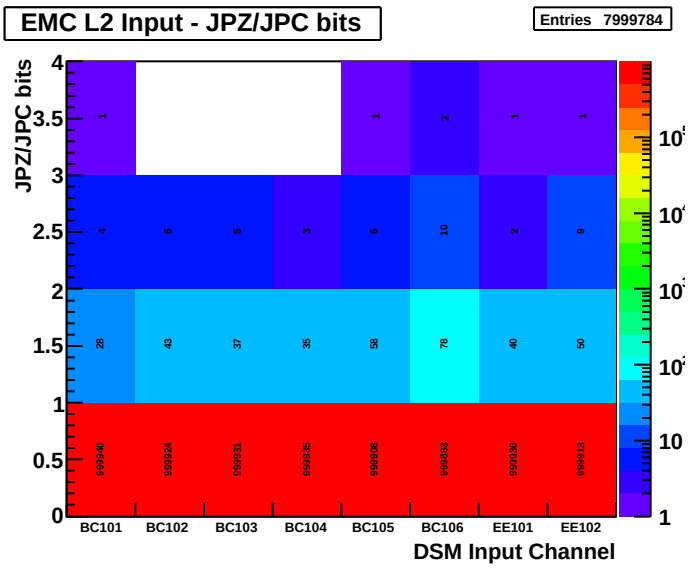

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

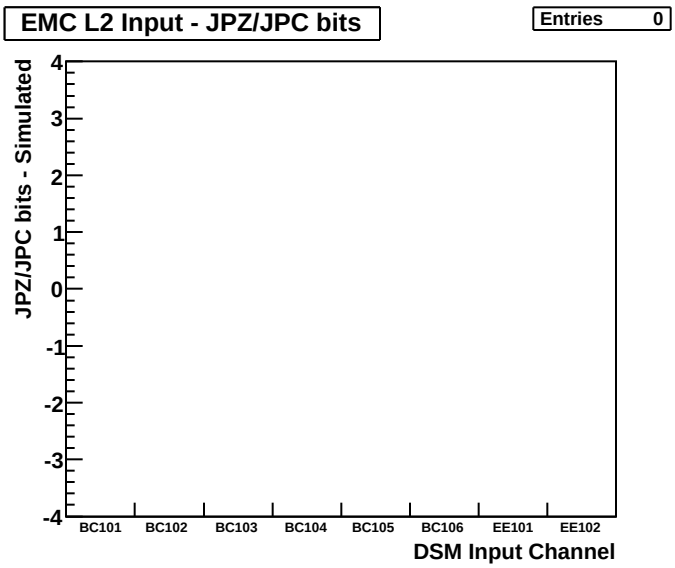

EMC L2 Input - JPX/JPA bits
Entries 7999784
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

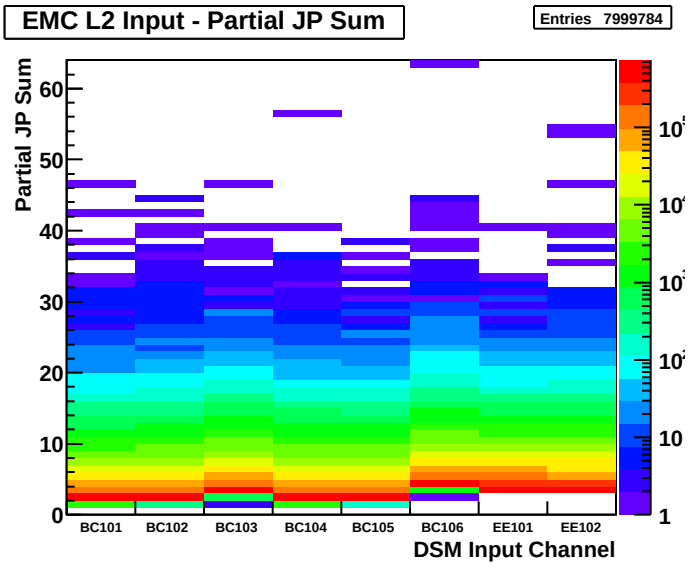

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

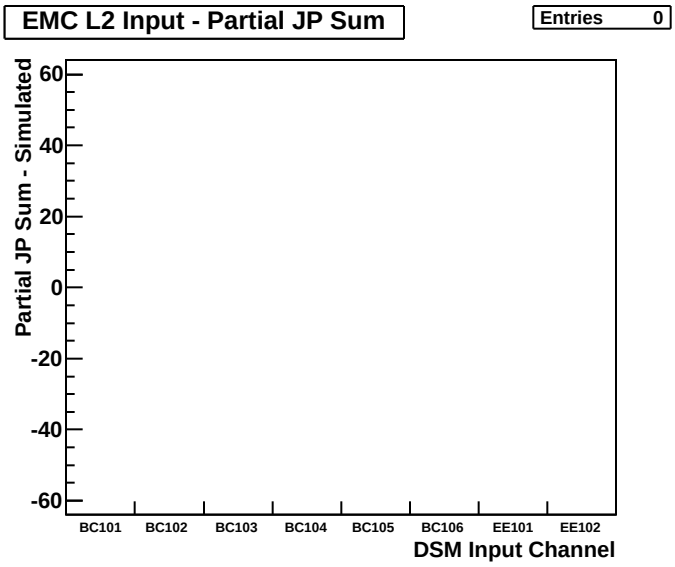

EMC L2 Input - JPY/JPB bits
Entries 7999784
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

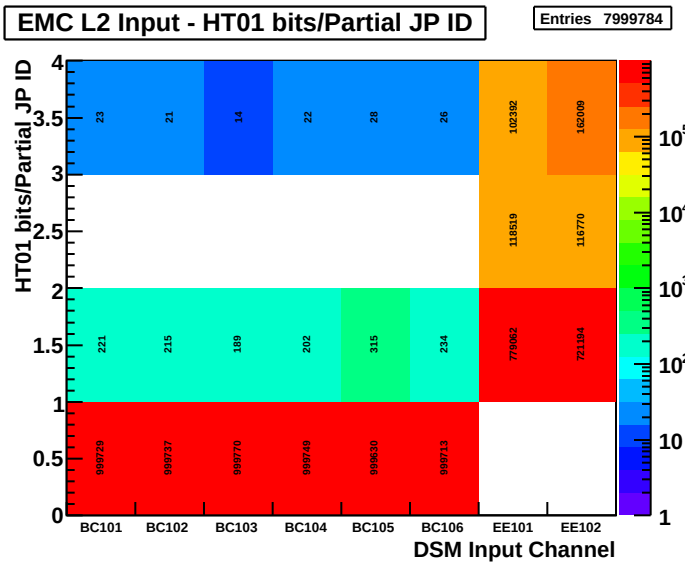

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

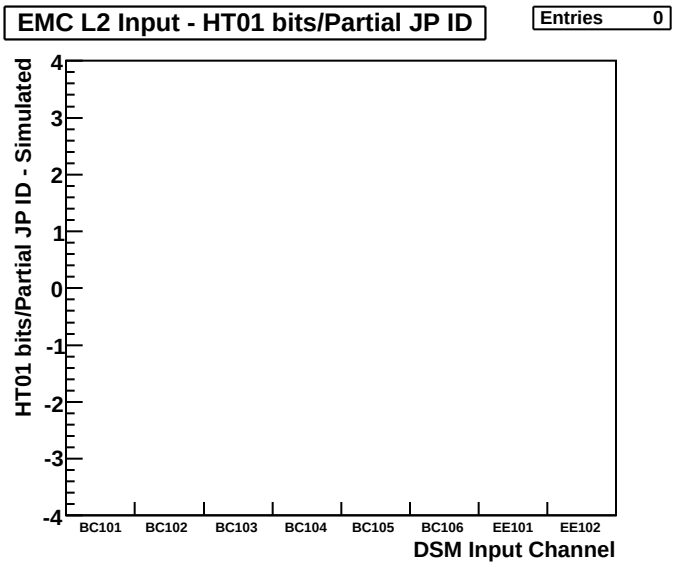

EMC L2 Input - JPZ/JPC bits
Entries 7999784
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

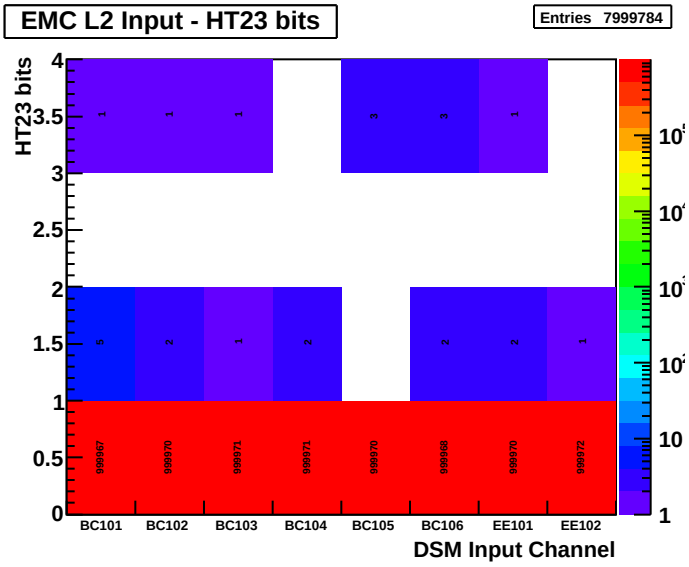

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

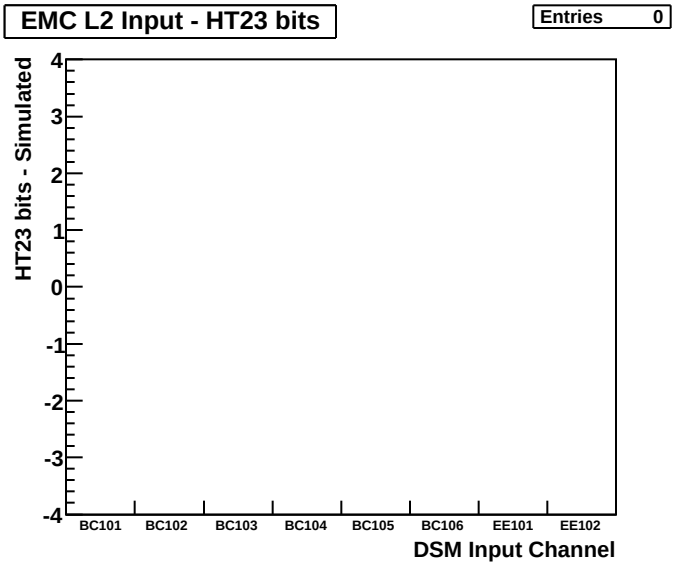

EMC L2 Input - Partial JP Sum
Entries 7999784
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

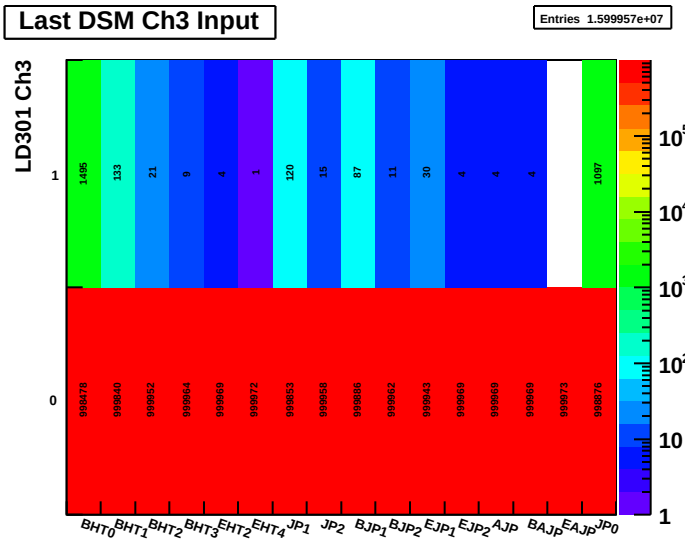

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

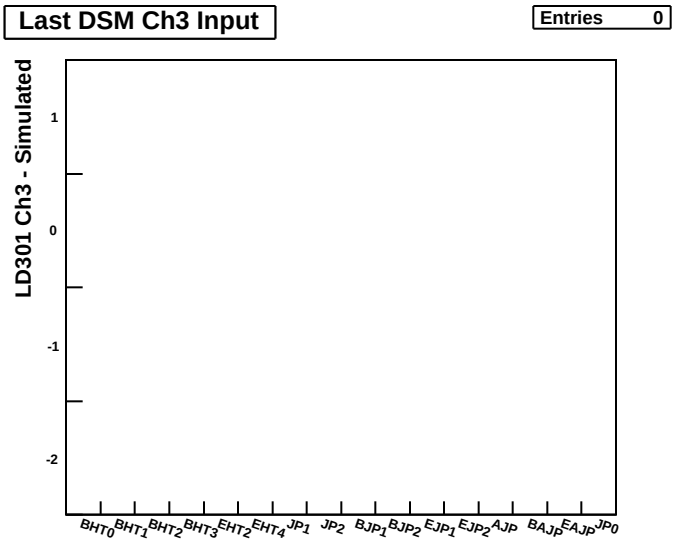

EMC L2 Input - HT01 bits/Partial JP ID
Entries 7999784
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

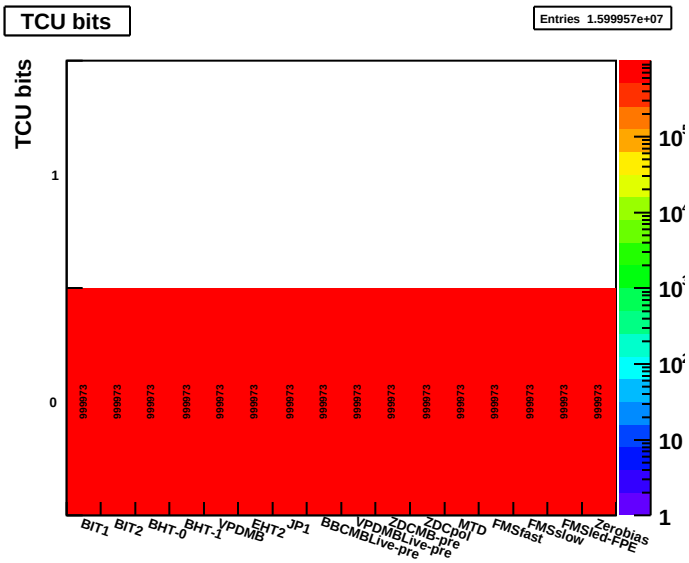

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

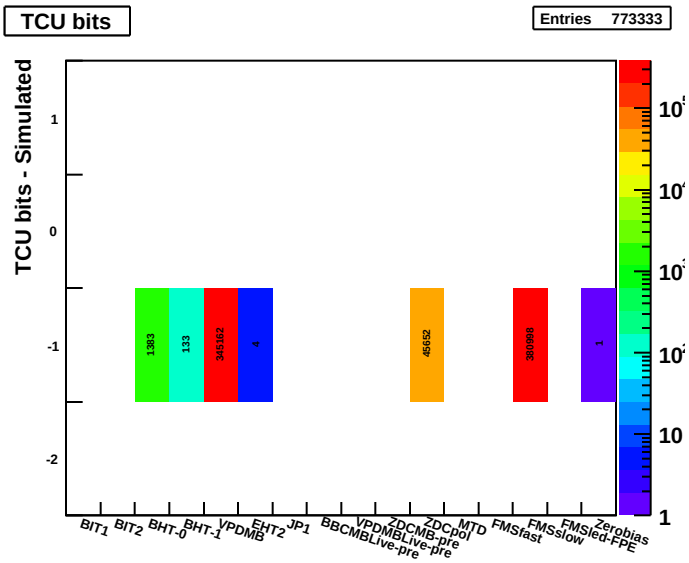

EMC L2 Input - HT23 bits
Entries 7999784
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

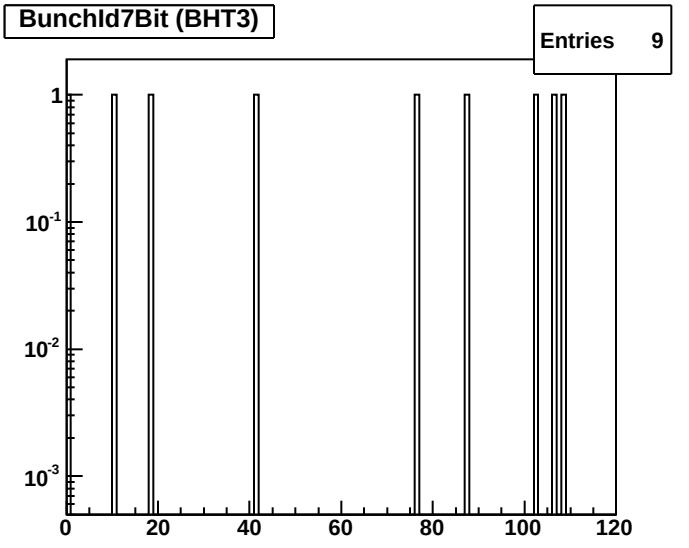

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

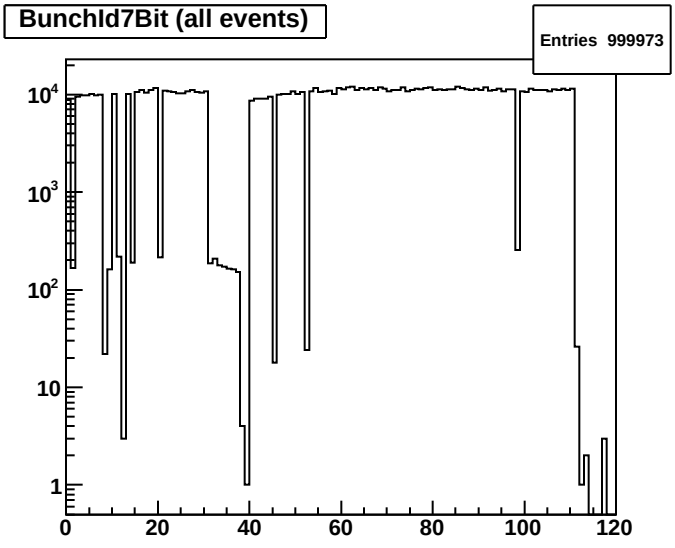

Last DSM Ch3 Input
Entries 1.599957e+07
LD301 Ch3
1
0
1495 133 21 9 4 1 120 15 87 11 30 4 4 4 1097
998478 999840 999952 999964 999969 999972 999853 999958 998886 999962 999943 999969 999969 999969 999973 998876
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0
10
1

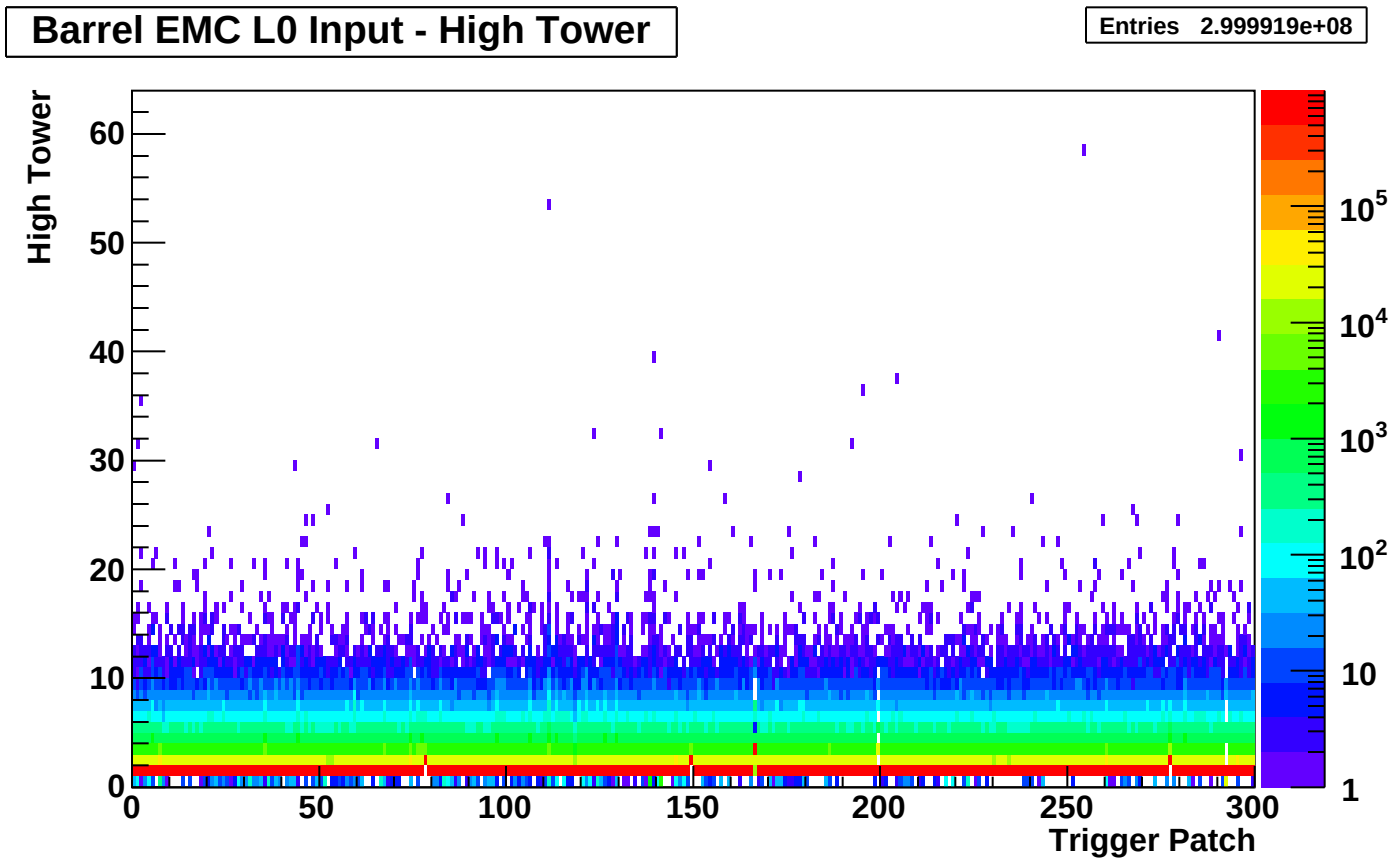

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
1
0
-1
-2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

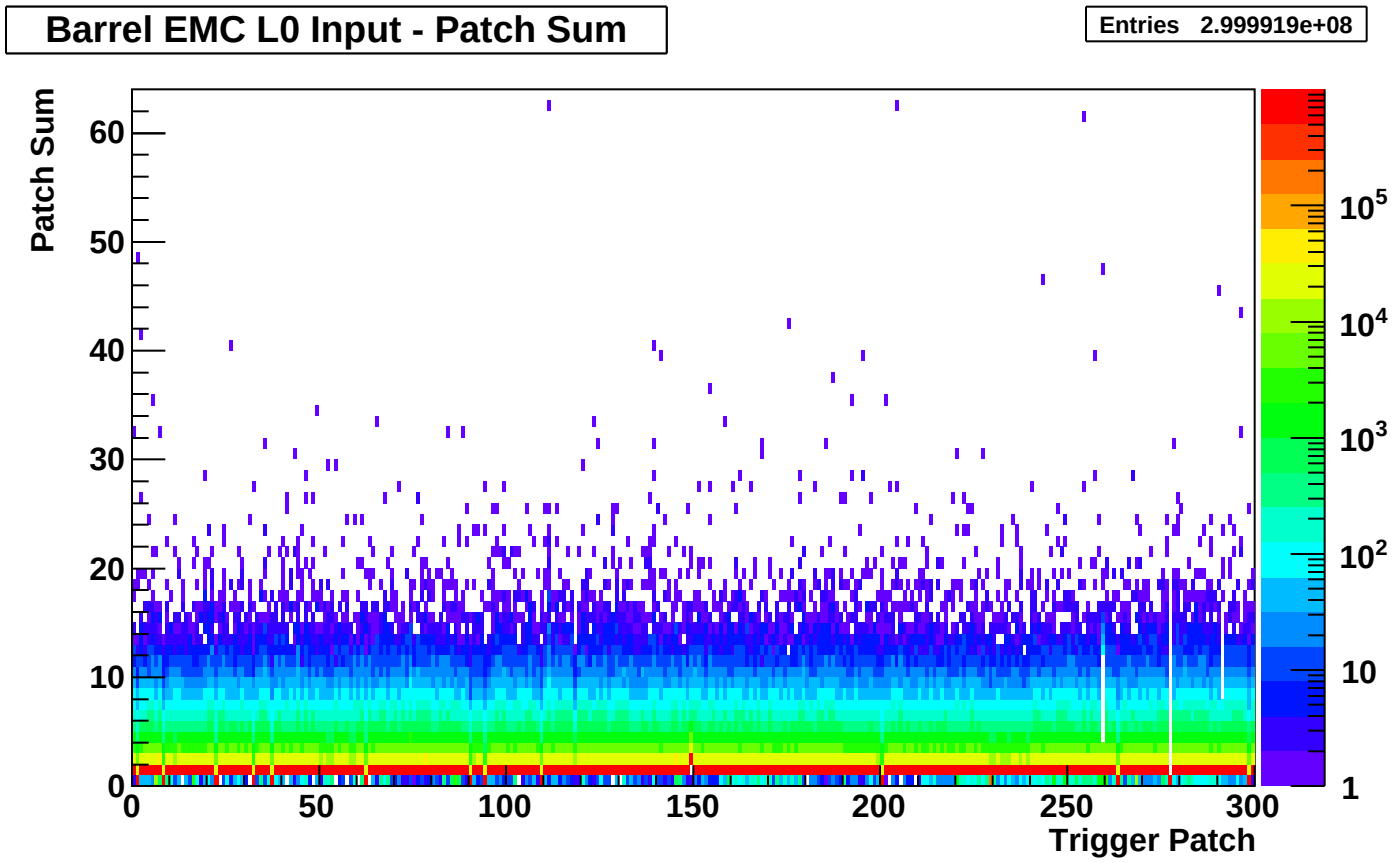

TCU bits
Entries 1.599957e+07
TCU bits
1
0
999973 999973 999973 999973 999973 999973 999973 999973 999973 999973 999973 999973 999973 999973 999973 999973
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias
10
1

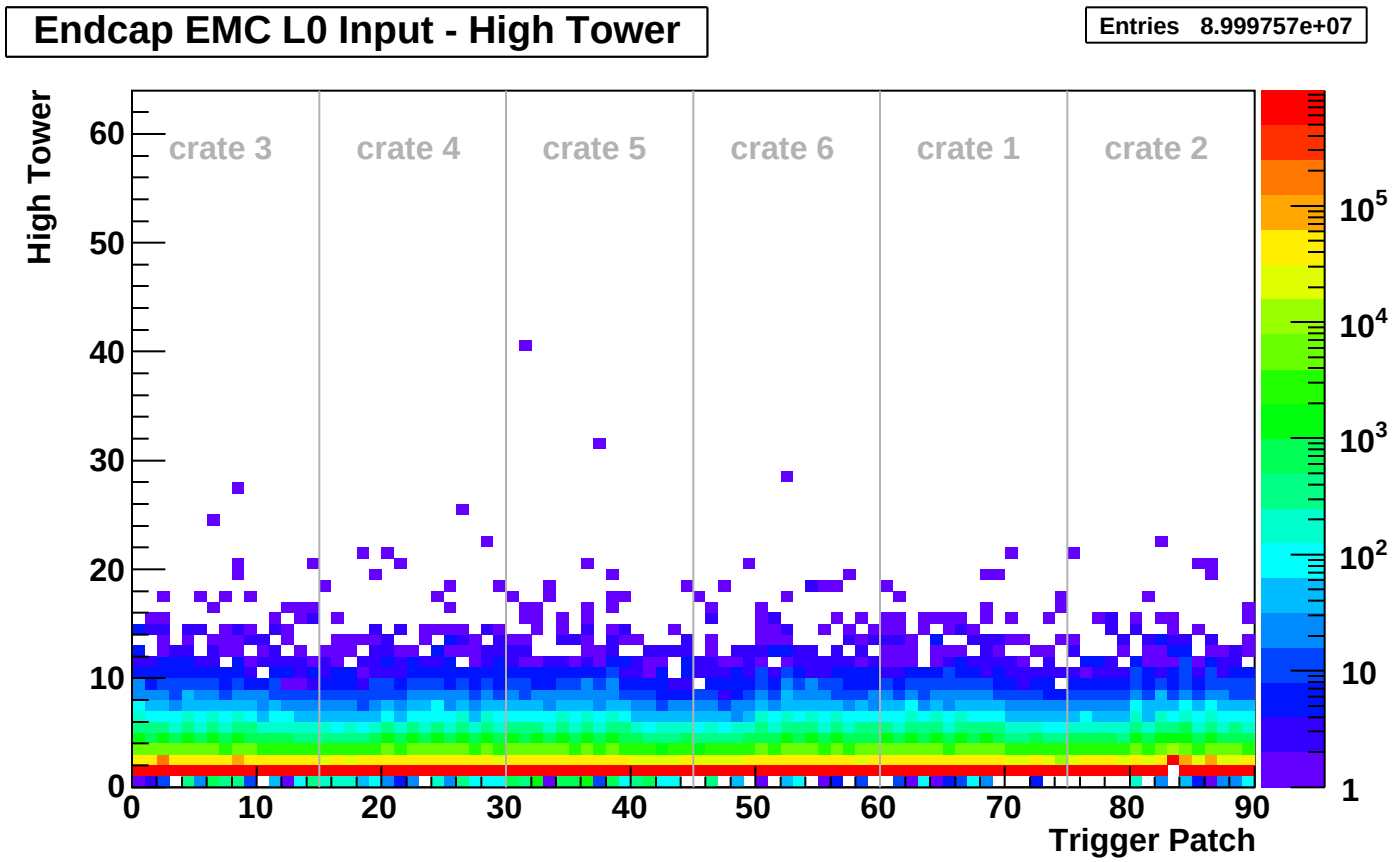

TCU bits
Entries 773333
TCU bits - Simulated
1
0
-1
-2
1383 133 345162 4 45652 380998 1
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias
10
1

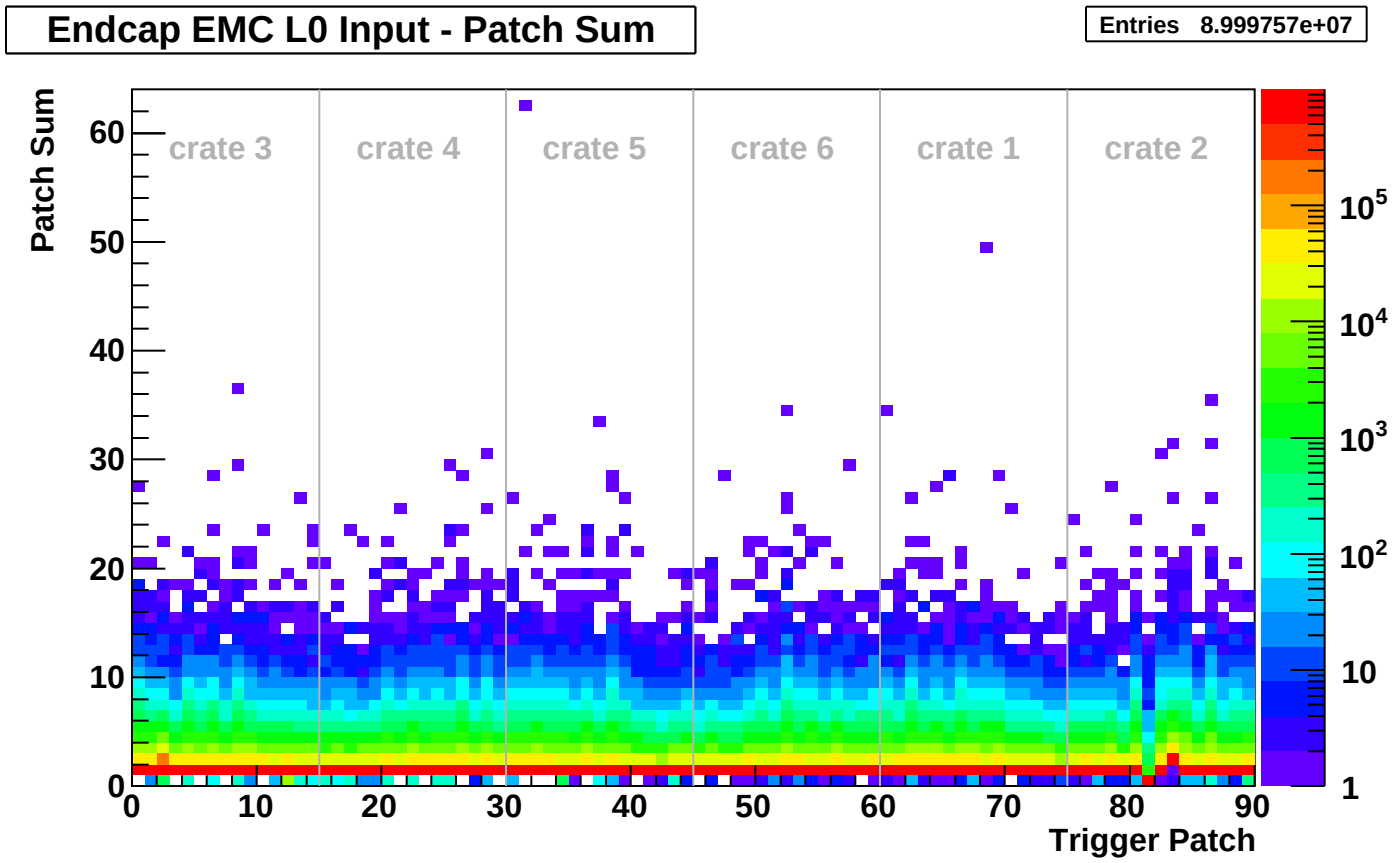

BunchId7Bit (BHT3)
Entries 9
1
10-1
10-2
10-3
0 20 40 60 80 100 120

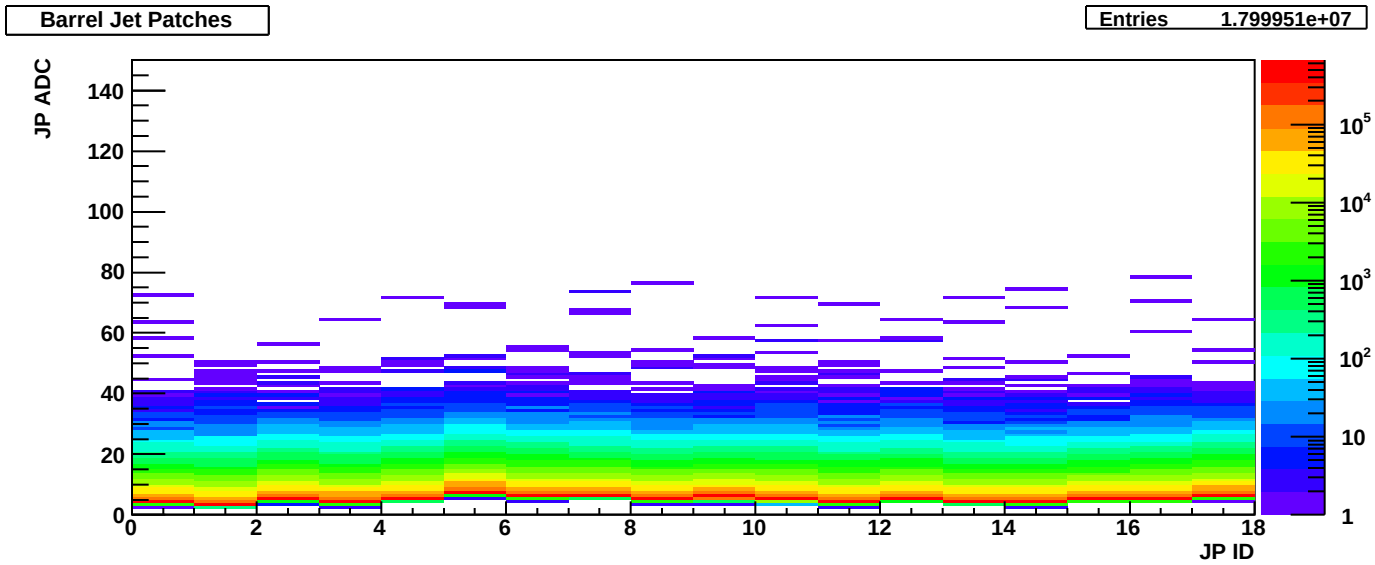

BunchId7Bit (all events)
Entries 999973
10^4
10^3
10^2
10
1
0 20 40 60 80 100 120

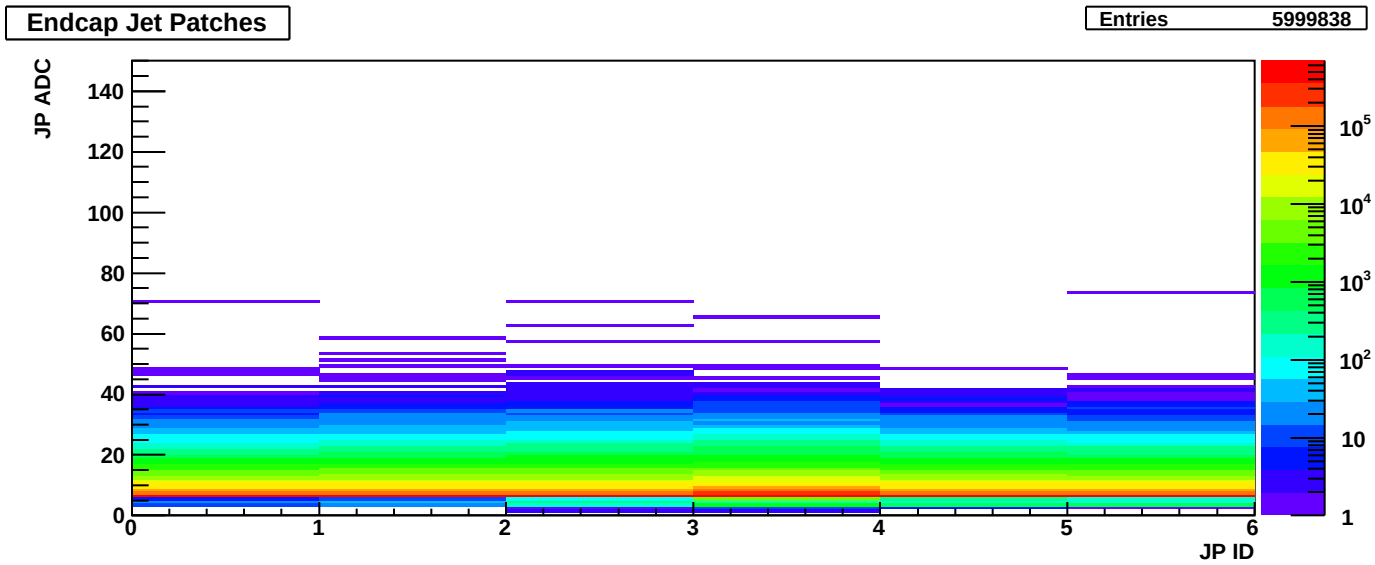

Barrel EMC L0 Input - High Tower
Entries 2.999919e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

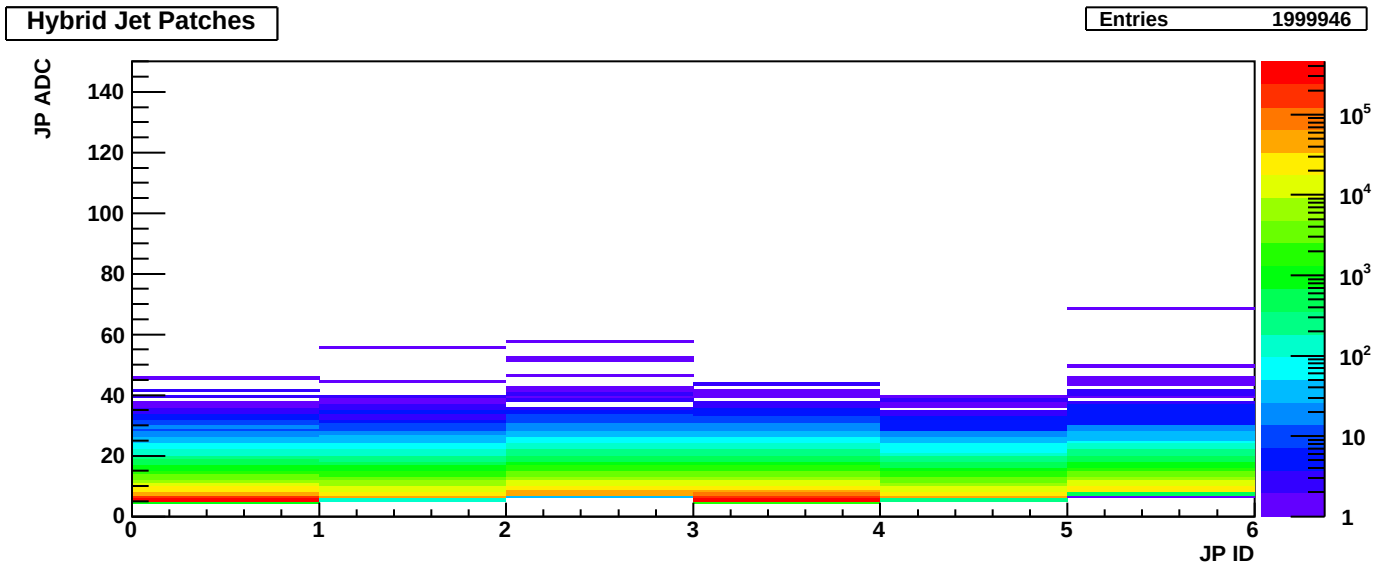

Barrel EMC L0 Input - Patch Sum
Entries 2.999919e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

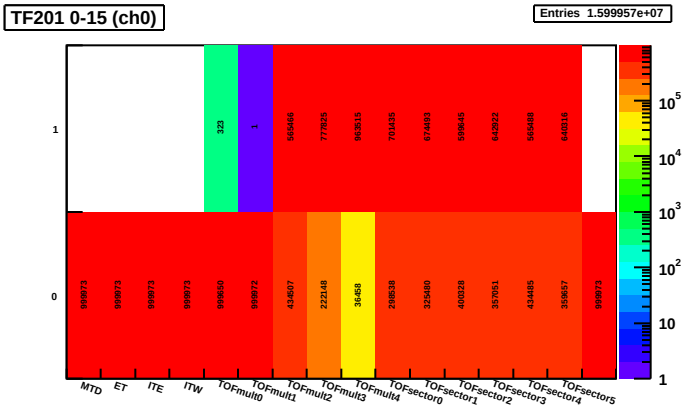

Endcap EMC L0 Input - High Tower
Entries 8.999757e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

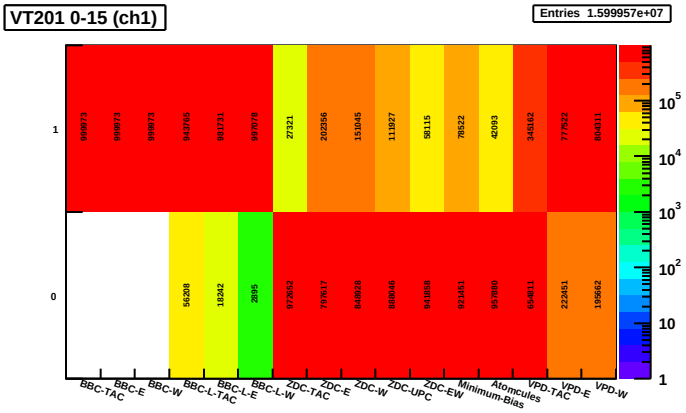

Endcap EMC L0 Input - Patch Sum
Entries 8.999757e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

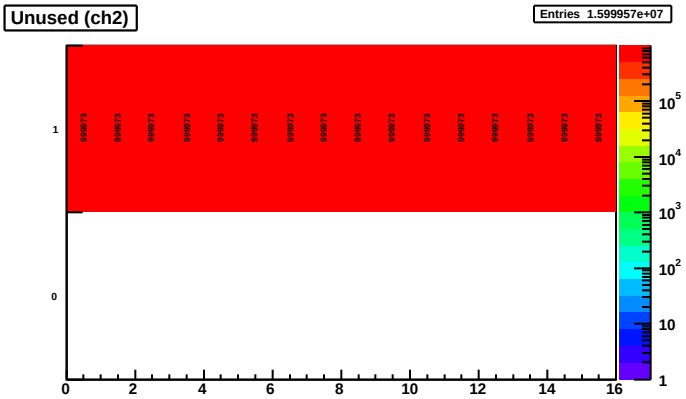

Barrel Jet Patches
Entries 1.799951e+07
JP ADC
JP ID

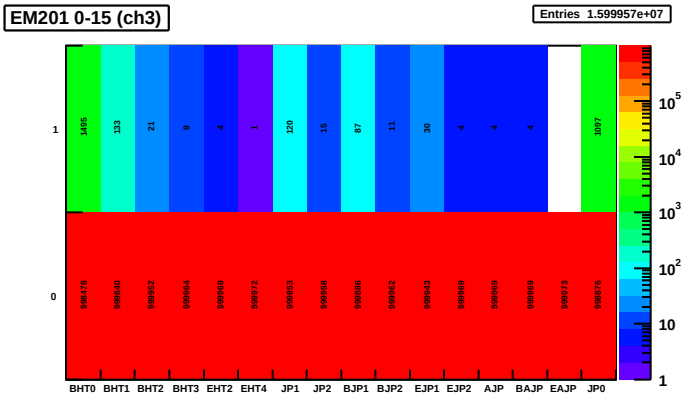

Endcap Jet Patches
Entries 5999838
JP ADC
JP ID

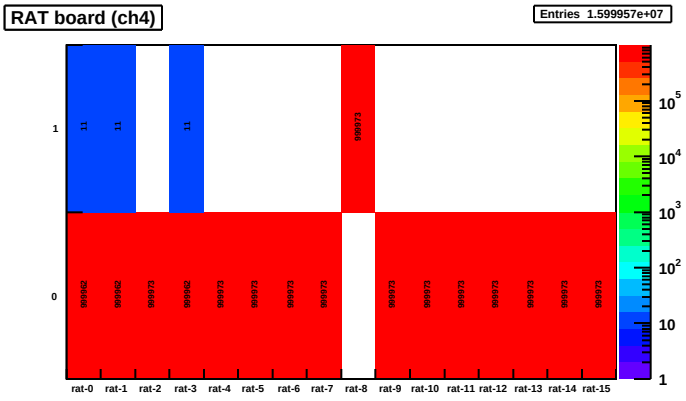

Hybrid Jet Patches
Entries 1999946
JP ADC
JP ID

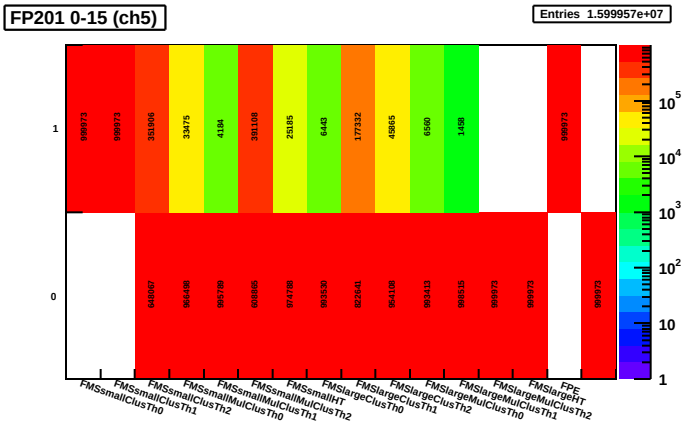

TF201 0-15 (ch0)
Entries 1.599957e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

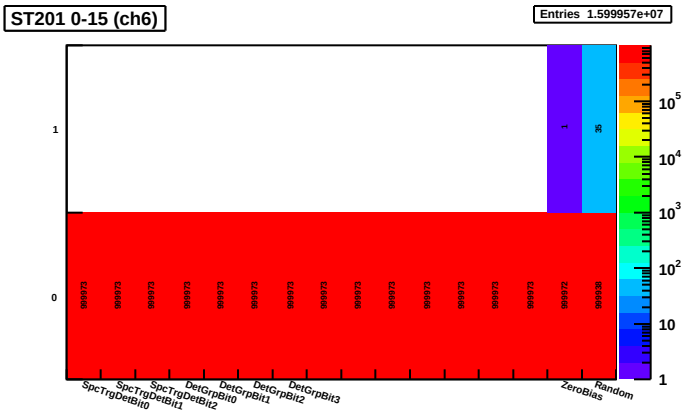

VT201 0-15 (ch1)
Entries 1.599957e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

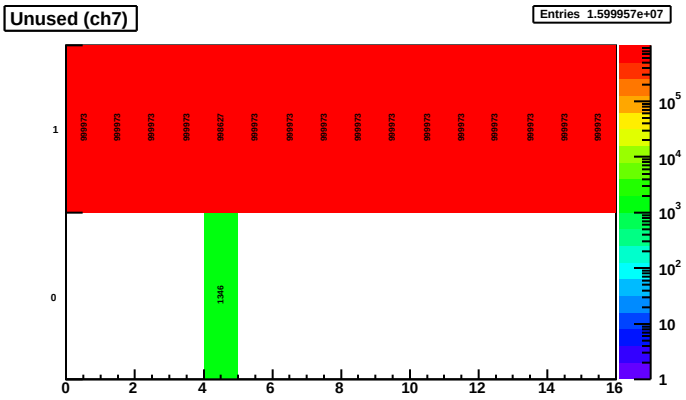

Unused (ch2)
Entries 1.599957e+07

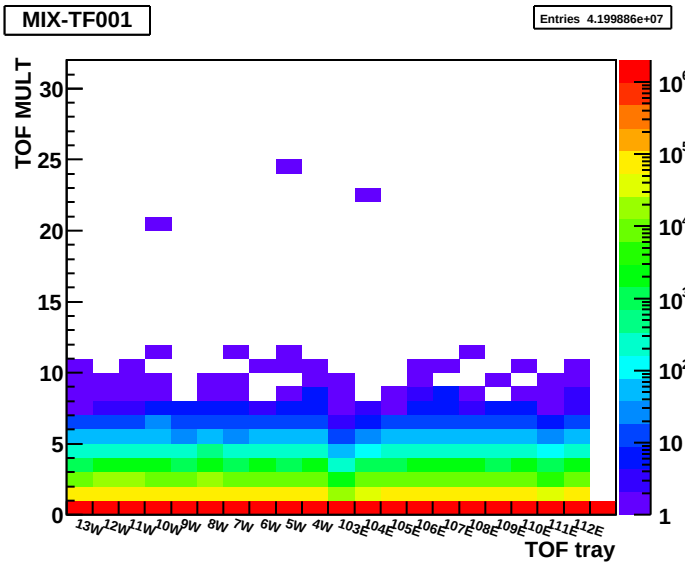

EM201 0-15 (ch3)
Entries 1.599957e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

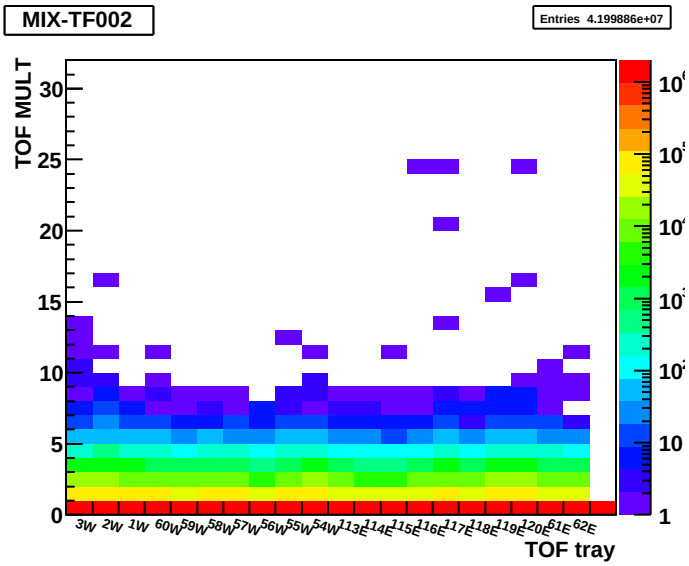

RAT board (ch4)
Entries 1.599957e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

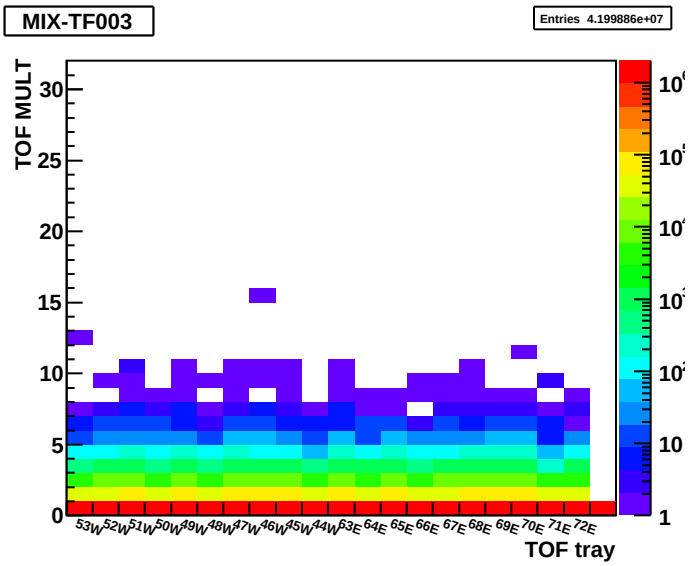

FP201 0-15 (ch5)
Entries 1.599957e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

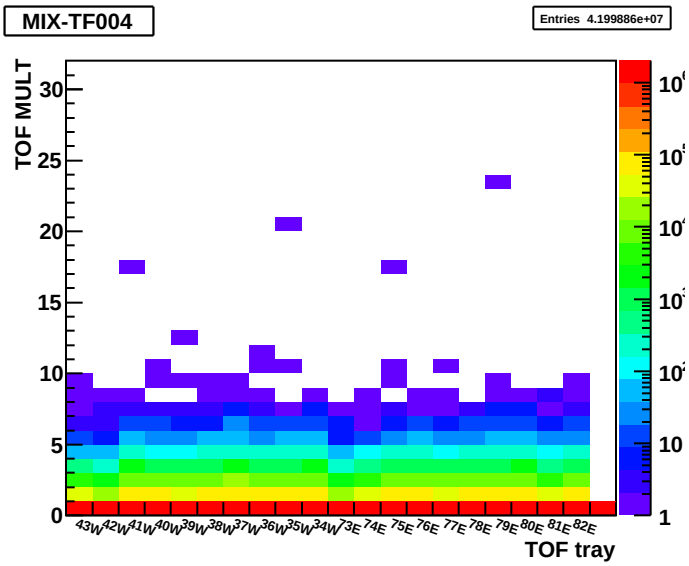

ST201 0-15 (ch6)
Entries 1.599957e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

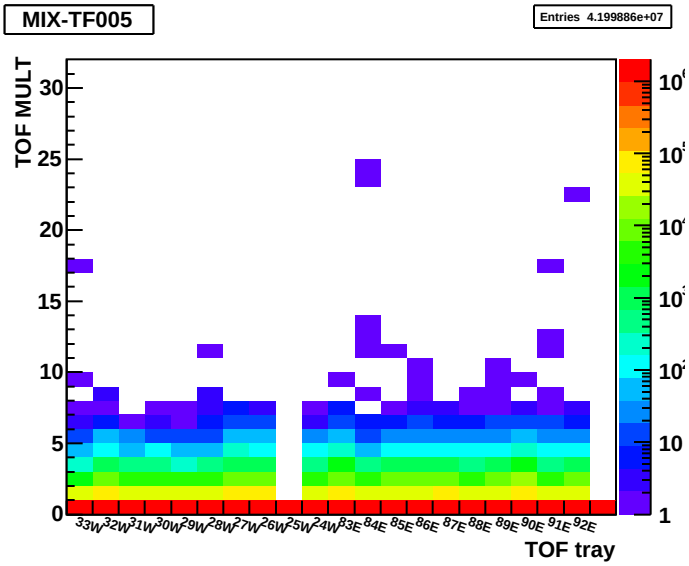

Unused (ch7)
Entries 1.599957e+07

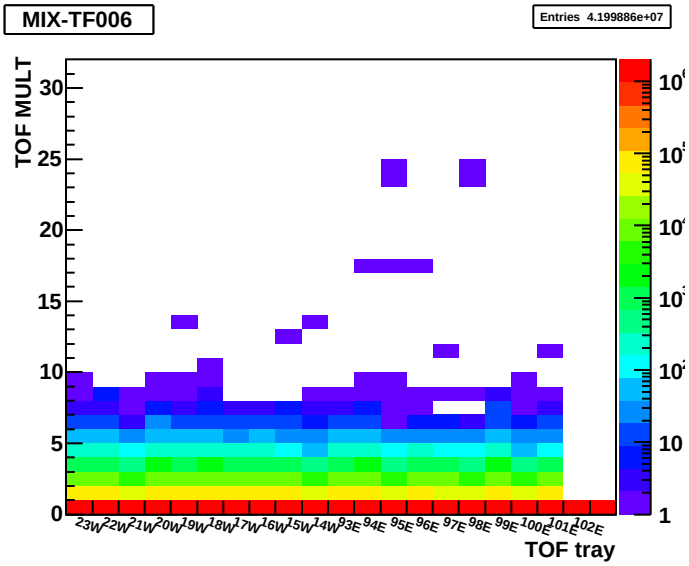

MIX-TF001
Entries 4.199886e+07
TOF MULT
TOF tray

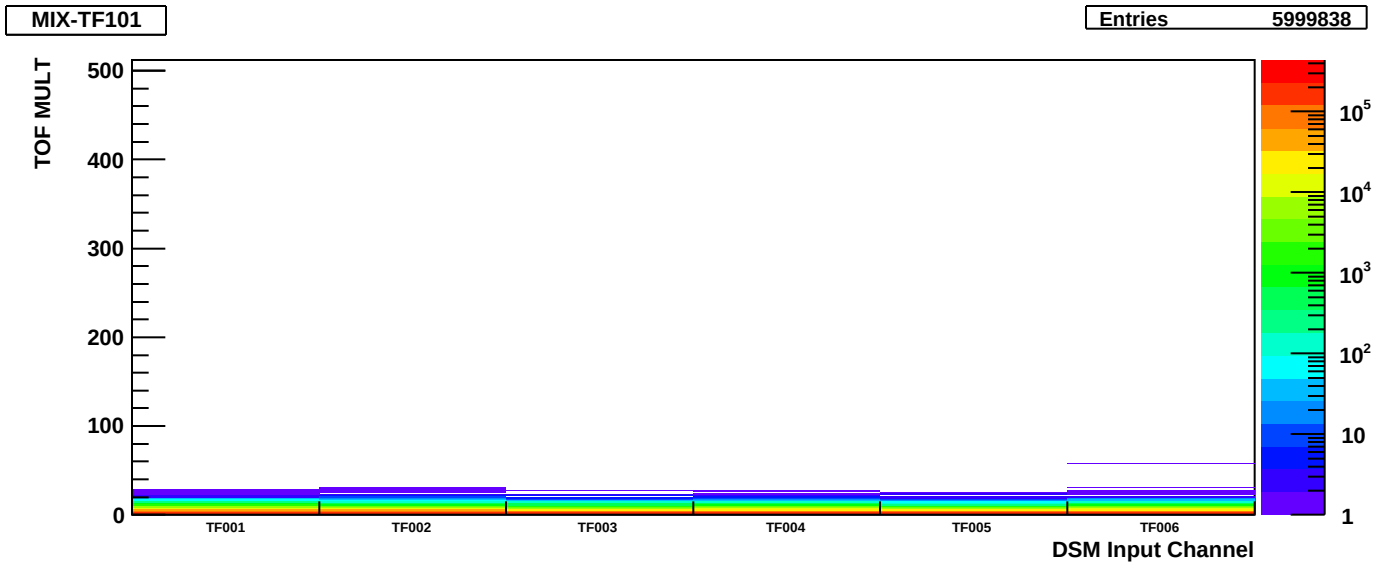

MIX-TF002
Entries 4.199886e+07
TOF MULT
TOF tray

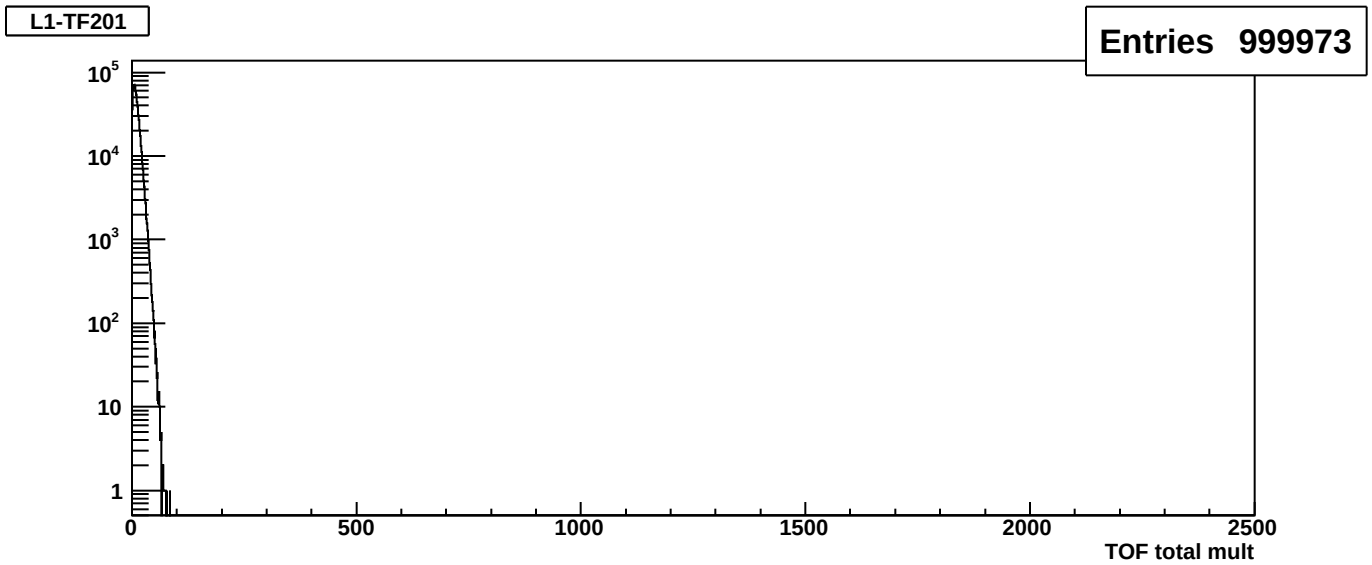

MIX-TF003
Entries 4.199886e+07
TOF MULT
TOF tray

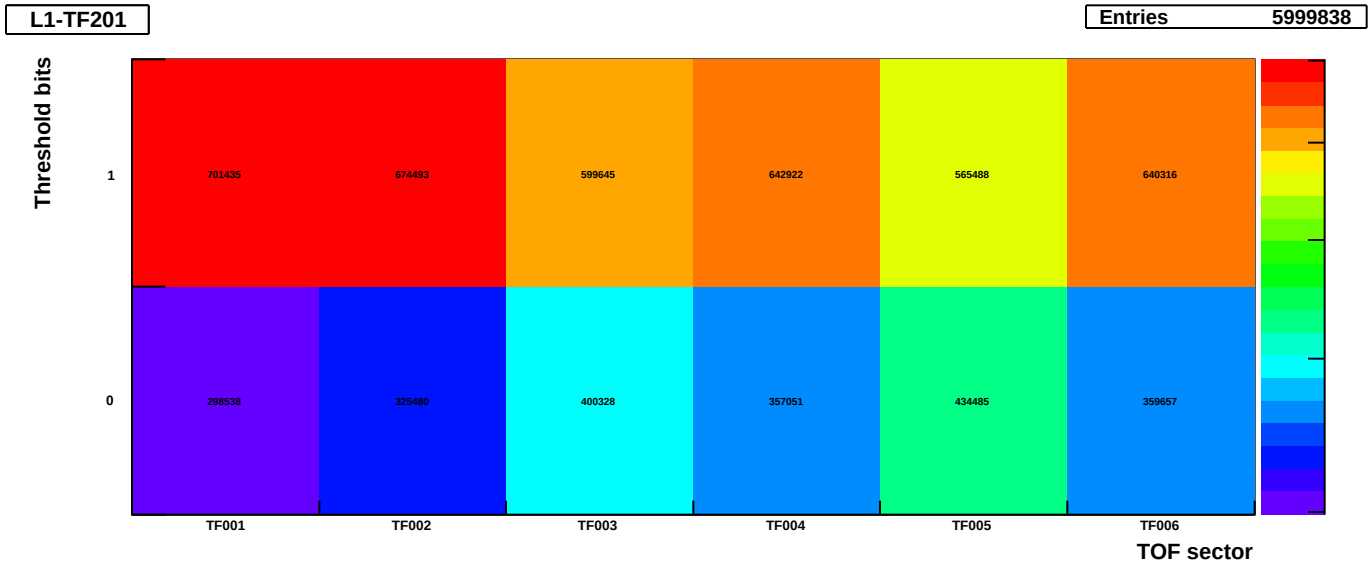

MIX-TF004
Entries 4.199886e+07
TOF MULT
TOF tray

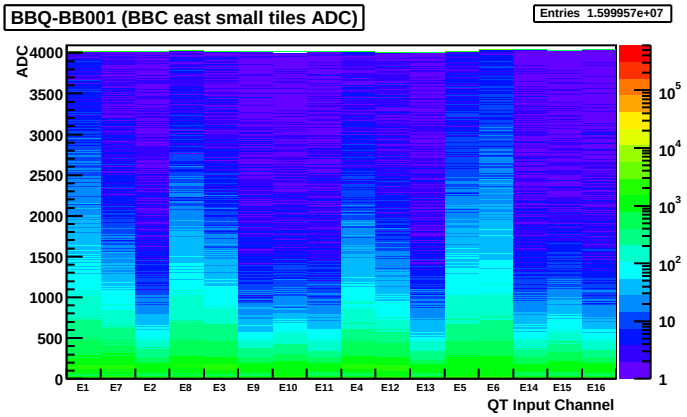

MIX-TF005
Entries 4.199886e+07
TOF MULT
TOF tray

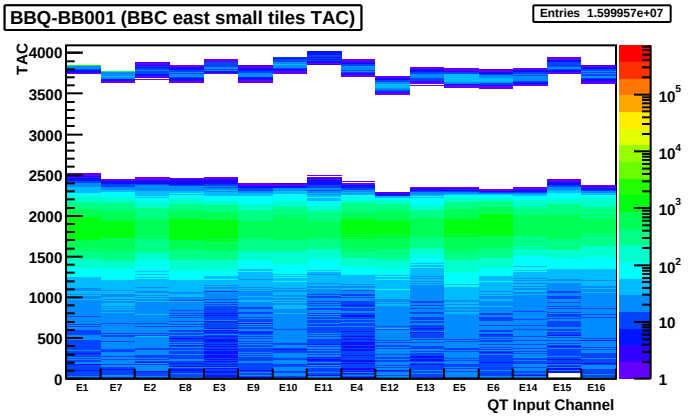

MIX-TF006
Entries 4.199886e+07
TOF MULT
TOF tray

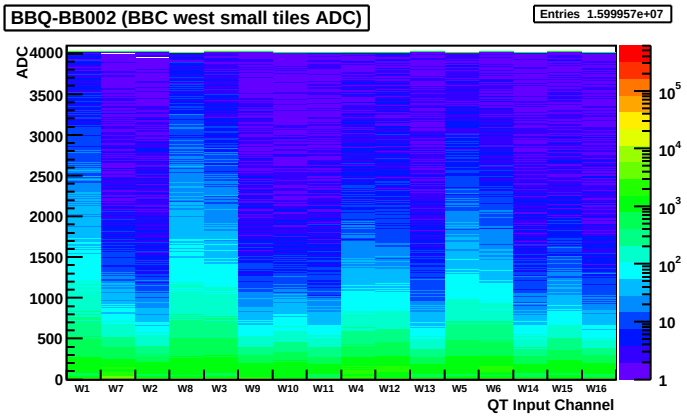

MIX-TF101
Entries 5999838
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

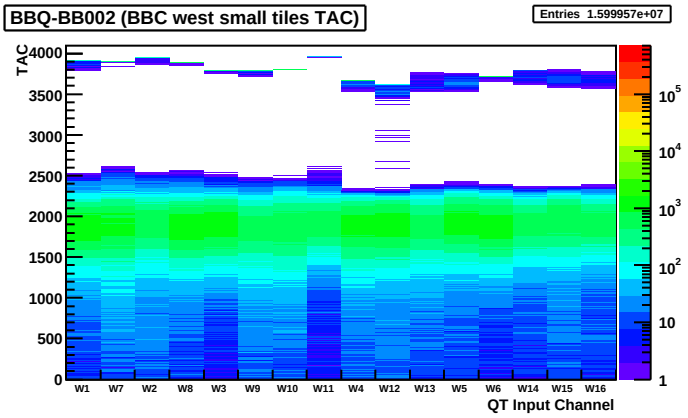

L1-TF201
Entries 999973
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

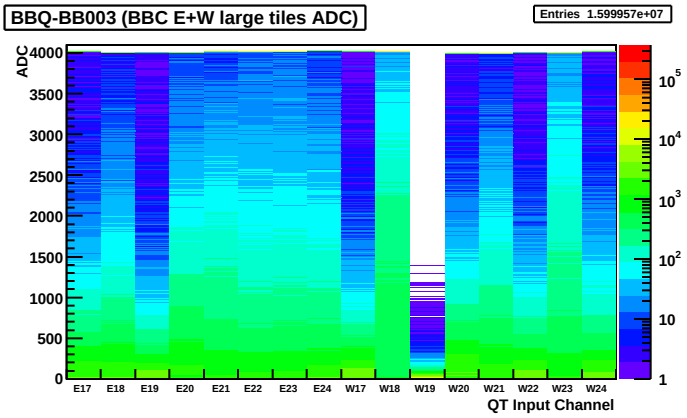

L1-TF201
Entries 5999838
Threshold bits
1
0
701435
674493
599645
642922
565488
640316
298538
325480
400328
357051
434485
359657
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

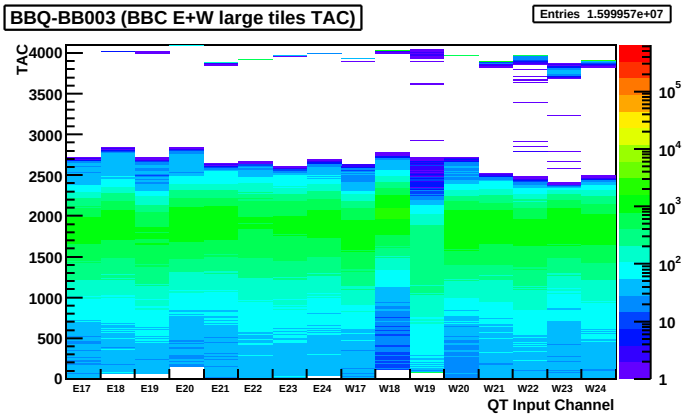

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.599957e+07
ADC
QT Input Channel

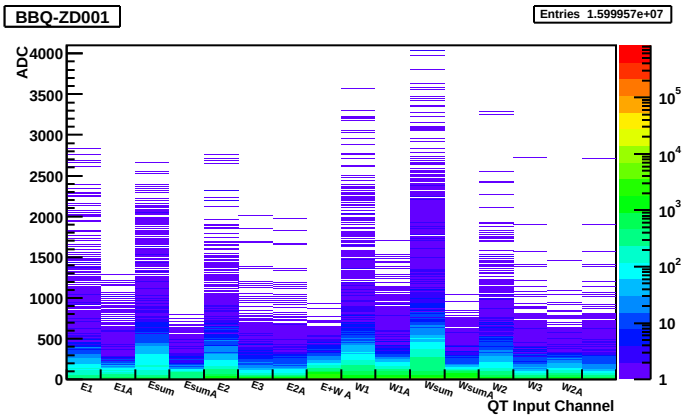

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.599957e+07
TAC
QT Input Channel

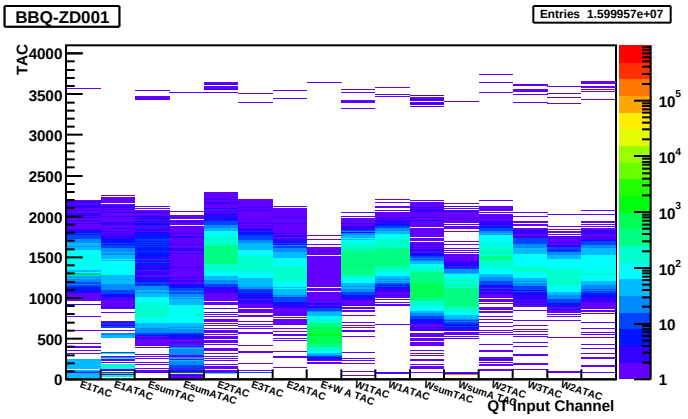

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.599957e+07
ADC
QT Input Channel

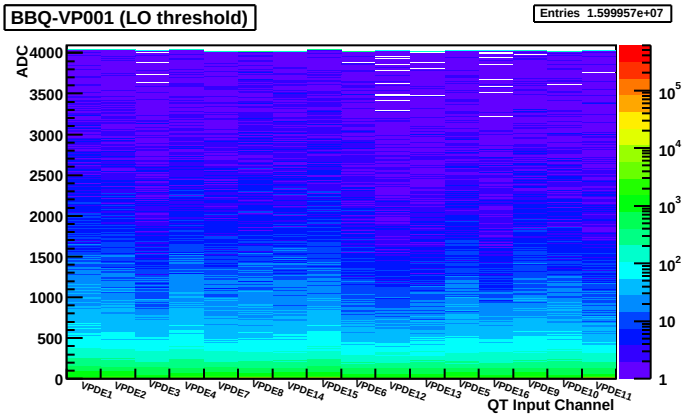

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.599957e+07
TAC
QT Input Channel

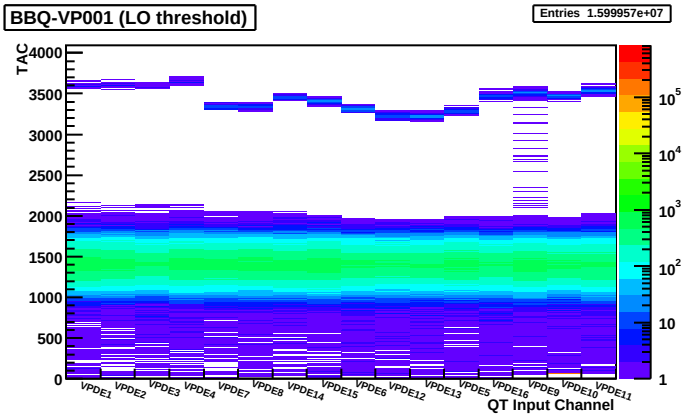

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.599957e+07
ADC
QT Input Channel

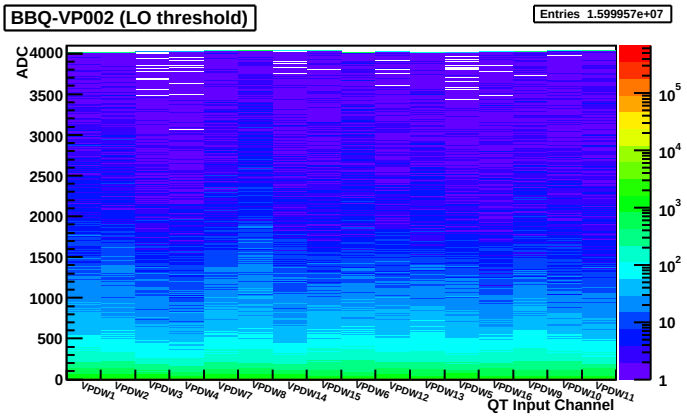

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.599957e+07
TAC
QT Input Channel

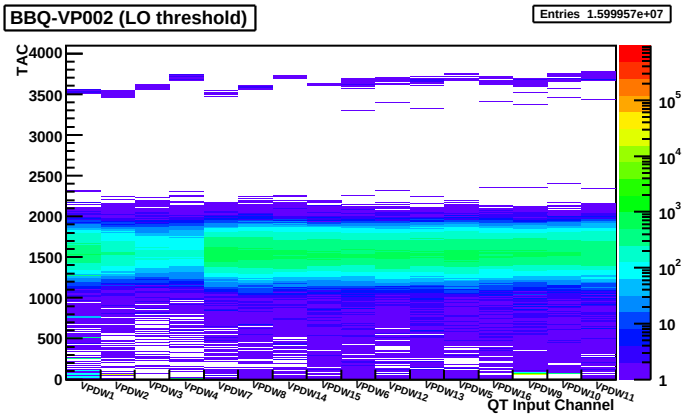

BBQ-ZD001
Entries 1.599957e+07
ADC
QT Input Channel

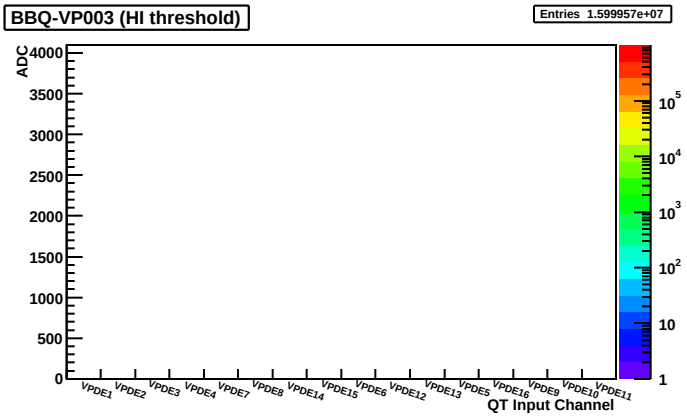

BBQ-ZD001
Entries 1.599957e+07
TAC
QT Input Channel

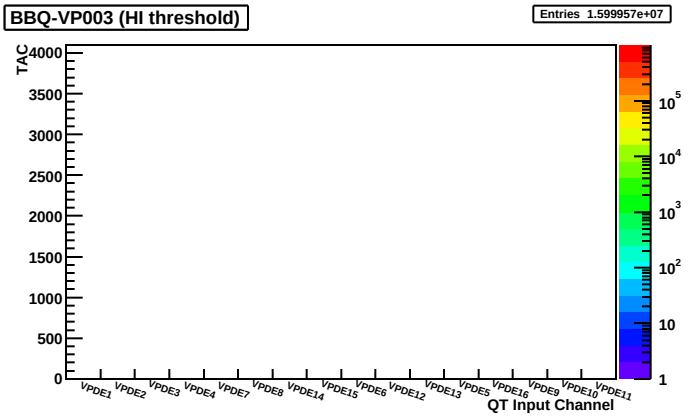

BBQ-VP001 (LO threshold)
Entries 1.599957e+07
ADC
QT Input Channel

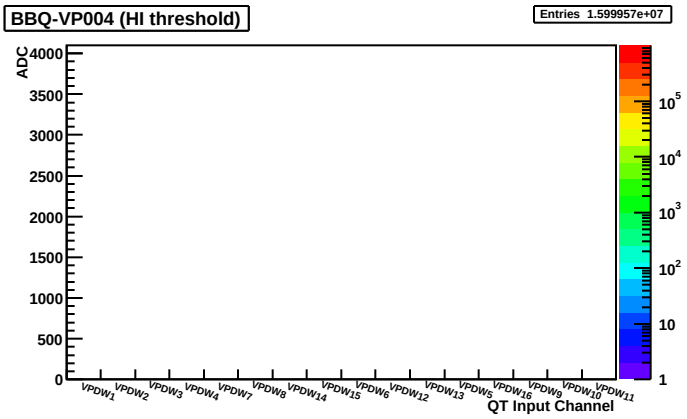

BBQ-VP001 (LO threshold)
Entries 1.599957e+07
TAC
QT Input Channel

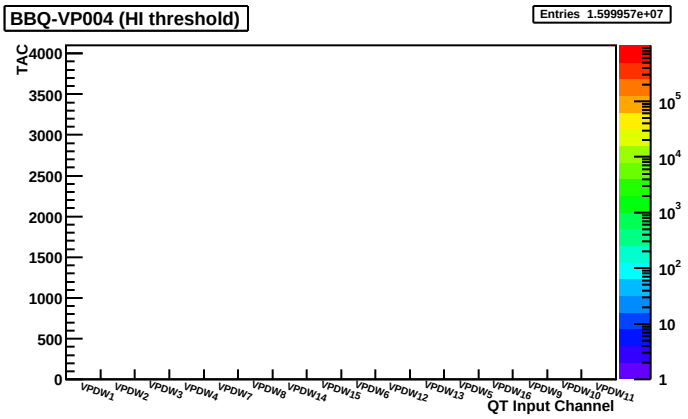

BBQ-VP002 (LO threshold)
Entries 1.599957e+07
ADC
QT Input Channel

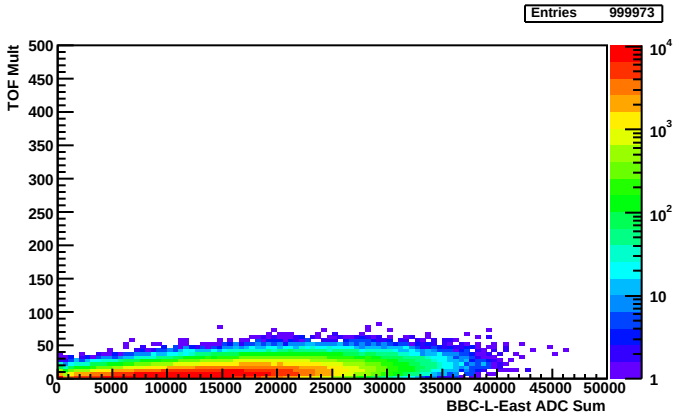

BBQ-VP002 (LO threshold)
Entries 1.599957e+07
TAC
QT Input Channel

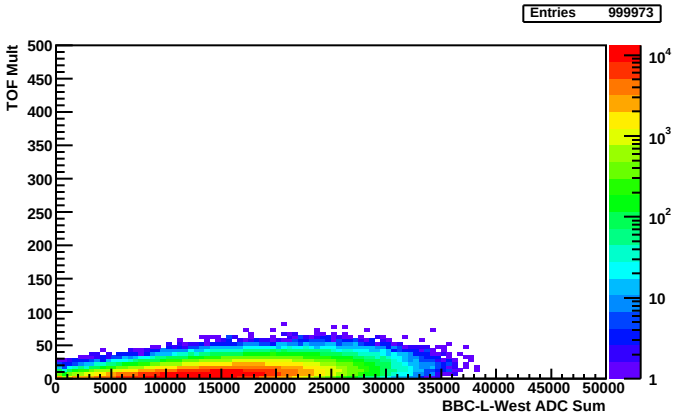

BBQ-VP003 (HI threshold)
Entries 1.599957e+07
ADC
QT Input Channel

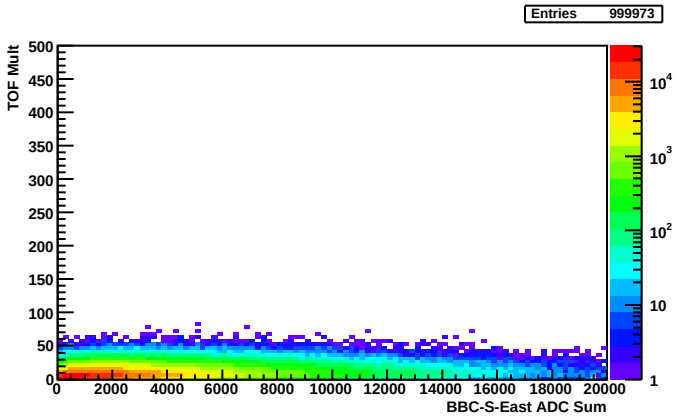

BBQ-VP003 (HI threshold)
Entries 1.599957e+07
TAC
QT Input Channel

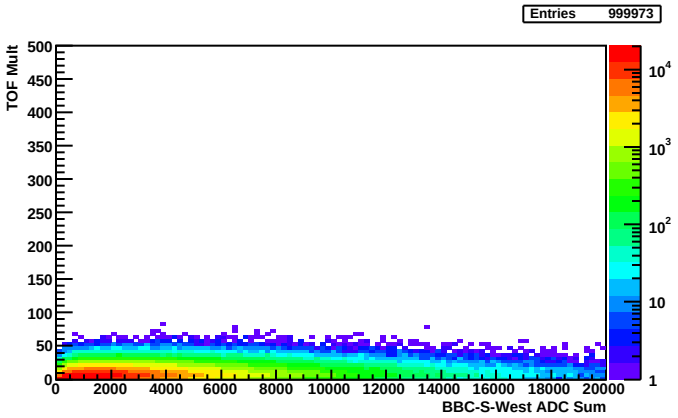

BBQ-VP004 (HI threshold)
Entries 1.599957e+07
ADC
QT Input Channel

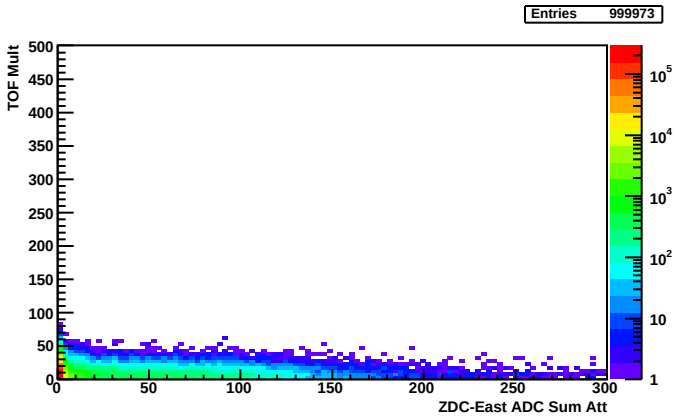

BBQ-VP004 (HI threshold)
Entries 1.599957e+07
TAC
QT Input Channel

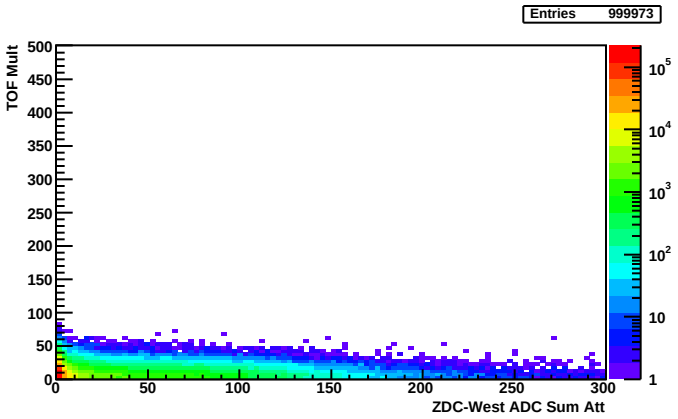

Entries 999973
TOF Mult
BBC-L-East ADC Sum

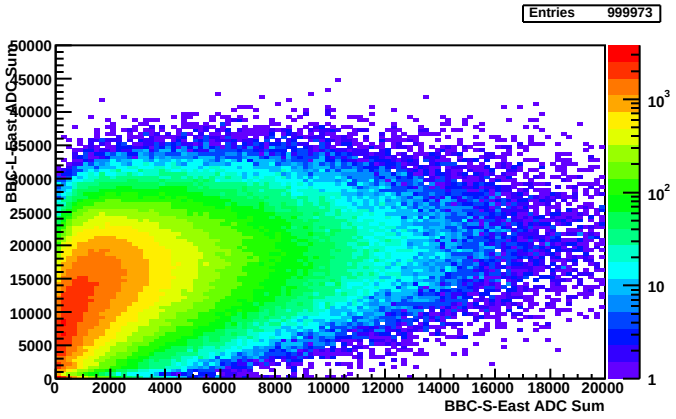

Entries 999973
TOF Mult
BBC-L-West ADC Sum

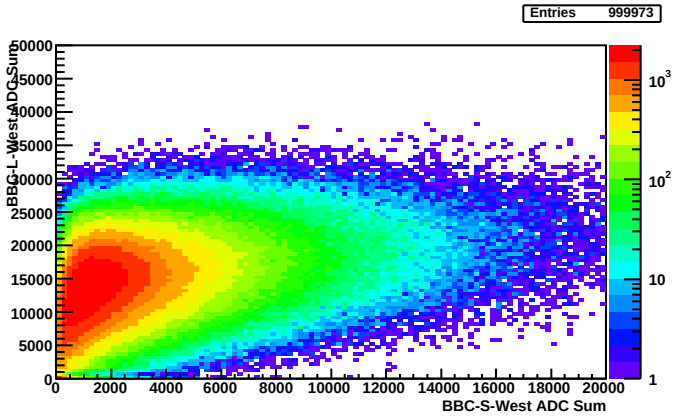

Entries 999973
TOF Mult
BBC-S-East ADC Sum

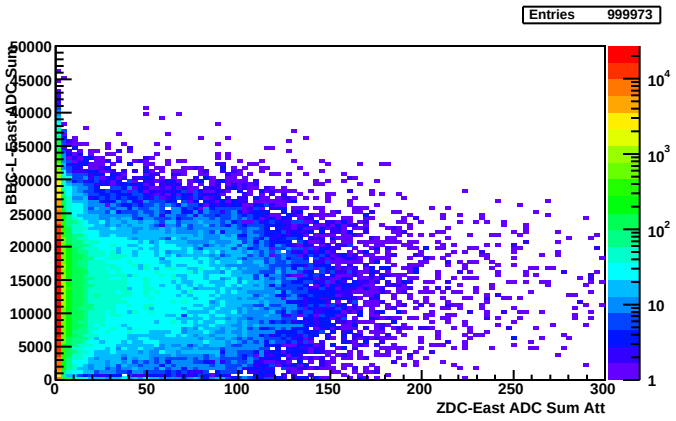

Entries 999973
TOF Mult
BBC-S-West ADC Sum

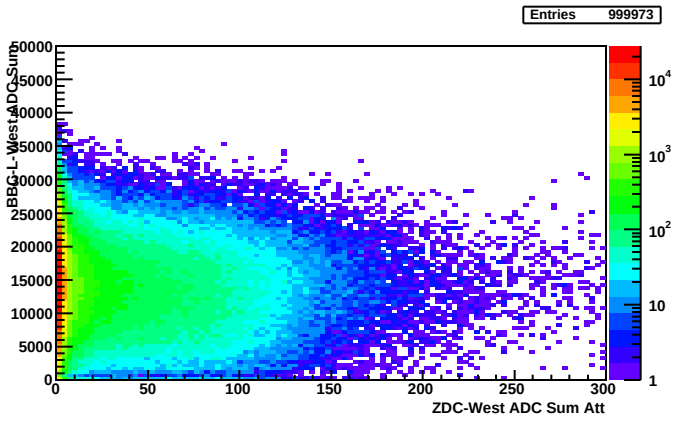

Entries 999973
TOF Mult
ZDC-East ADC Sum Att

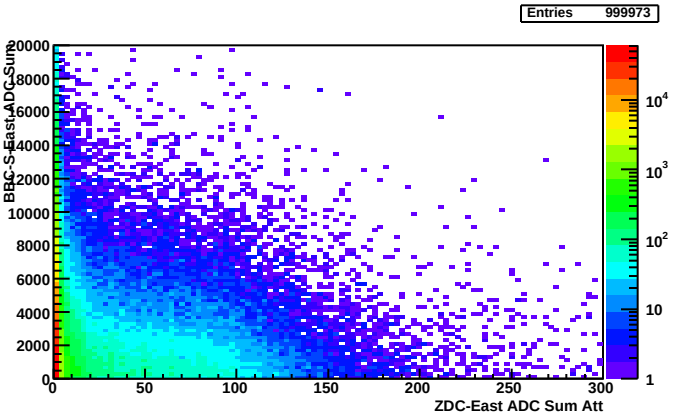

Entries 999973
TOF Mult
ZDC-West ADC Sum Att

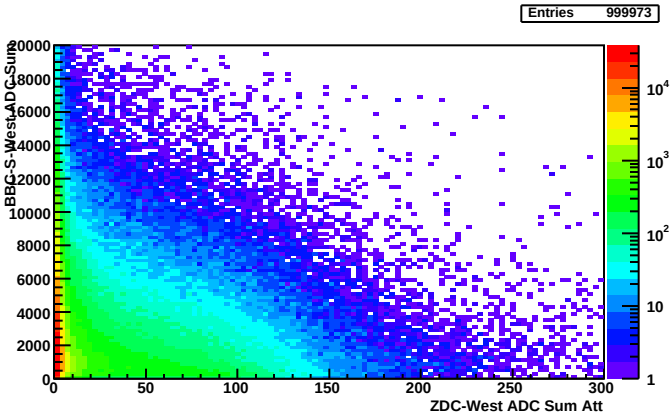

Entries 999973
BBC-L-East ADC Sum
BBC-S-East ADC Sum

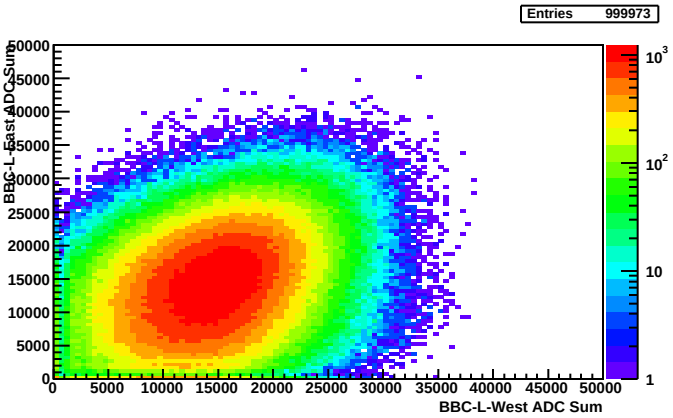

Entries 999973
BBC-L-West ADC Sum
BBC-S-West ADC Sum

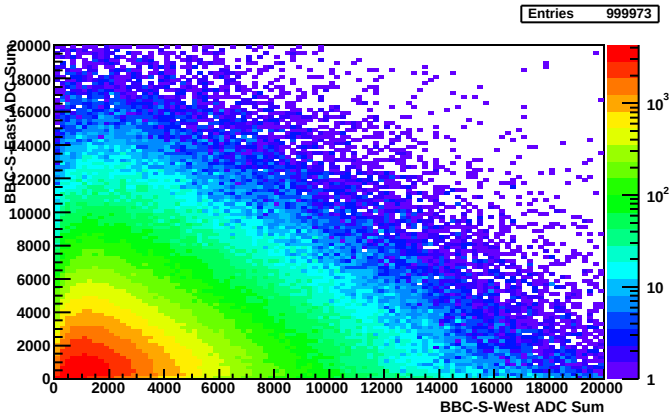

Entries 999973
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

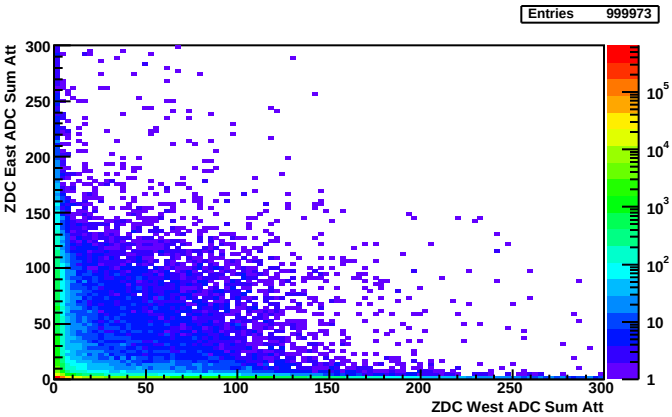

Entries 999973
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

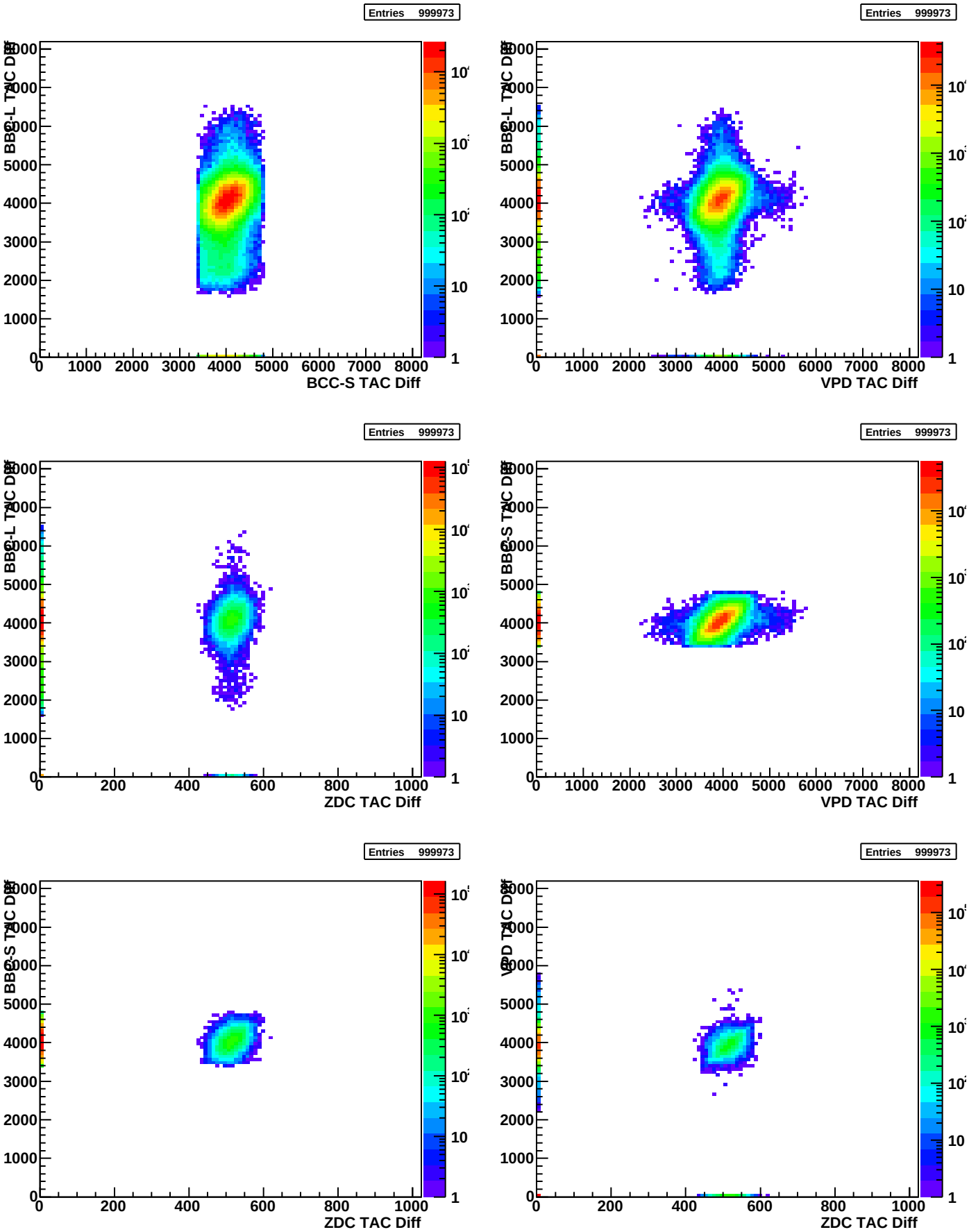

Entries 999973
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

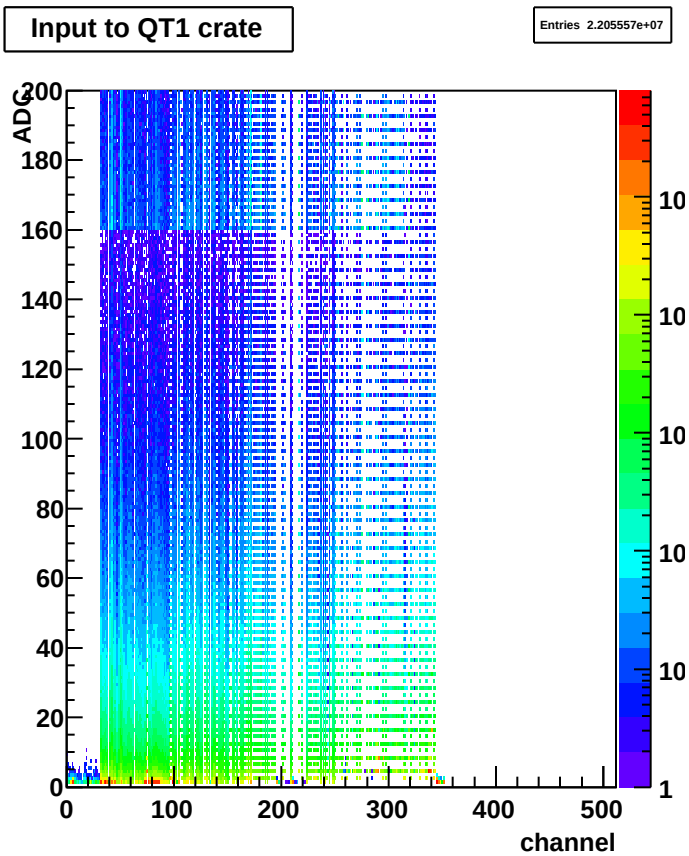

Entries 999973
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

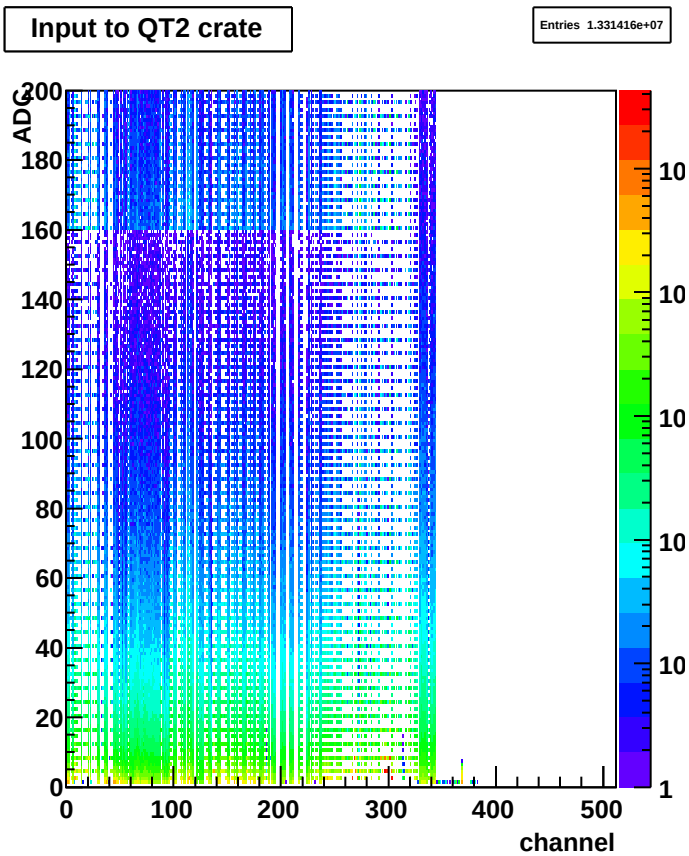

Entries 999973
BBC-L-East ADC Sum
BBC-L-West ADC Sum

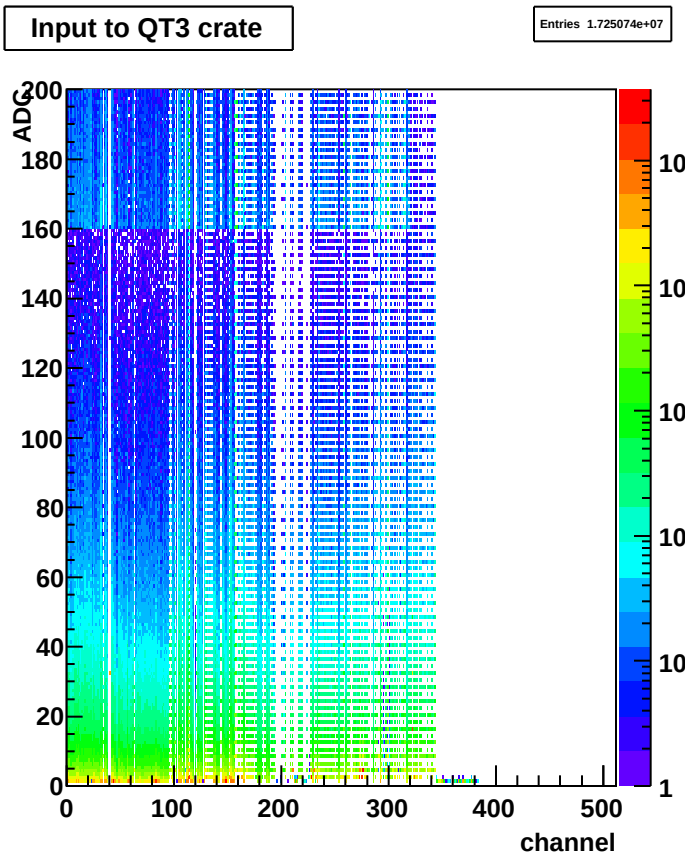

Entries 999973
BBC-S-East ADC Sum
BBC-S-West ADC Sum

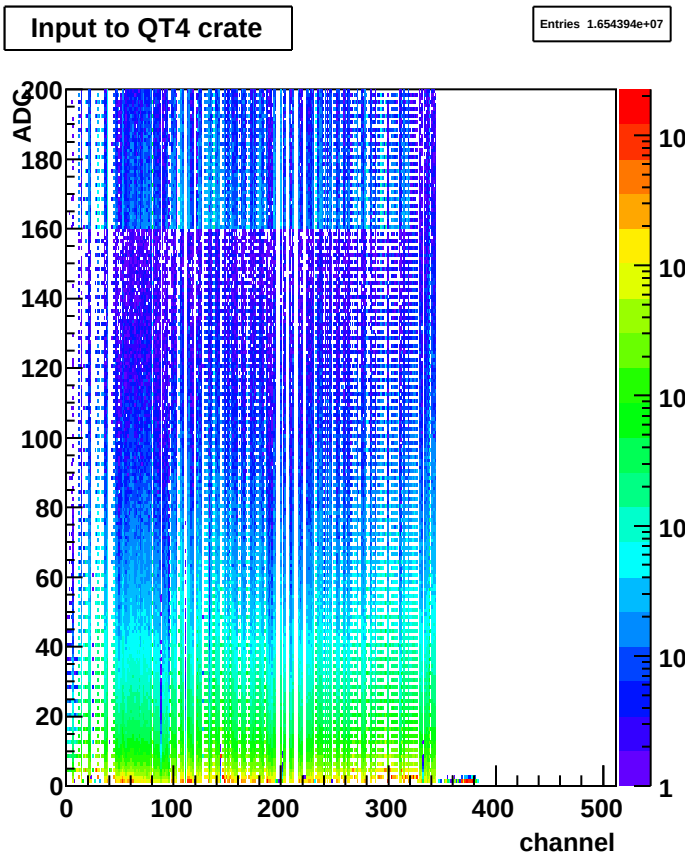

Entries 999973
ZDC East ADC Sum Att
ZDC West ADC Sum Att

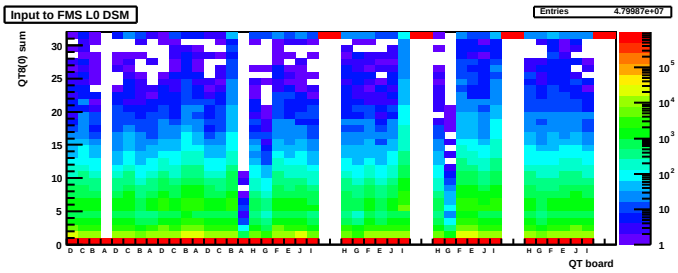

Entries 999973
BBC-L TAC Diff
BCC-S TAC Diff
Entries 999973
BBC-L TAC Diff
VPD TAC Diff
Entries 999973
BBC-L TAC Diff
ZDC TAC Diff
Entries 999973
BBC-S TAC Diff
VPD TAC Diff
Entries 999973
BBC-S TAC Diff
ZDC TAC Diff
Entries 999973
VPD TAC Diff
ZDC TAC Diff

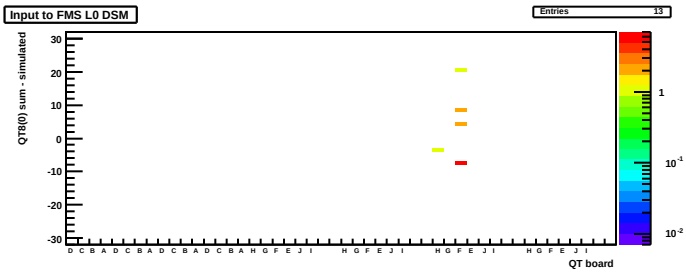

Input to QT1 crate
Entries 2.205557e+07
ADC
channel

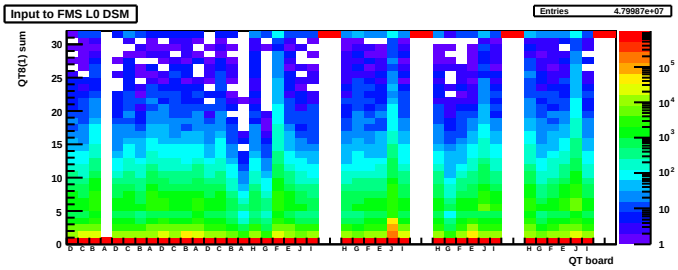

Input to QT2 crate
Entries 1.331416e+07
ADC
channel

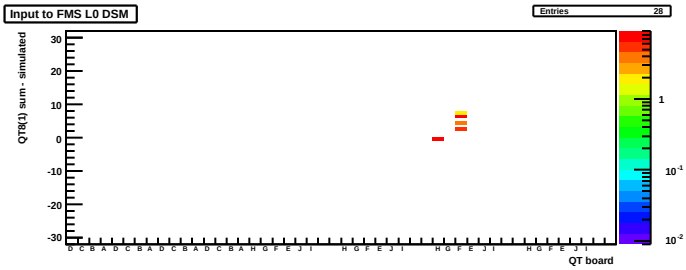

Input to QT3 crate
Entries 1.725074e+07
ADC
channel

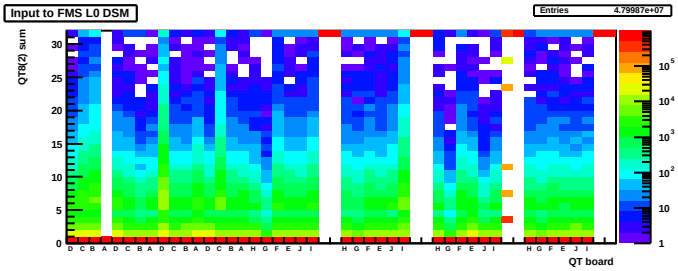

Input to QT4 crate
Entries 1.654394e+07
ADC
channel

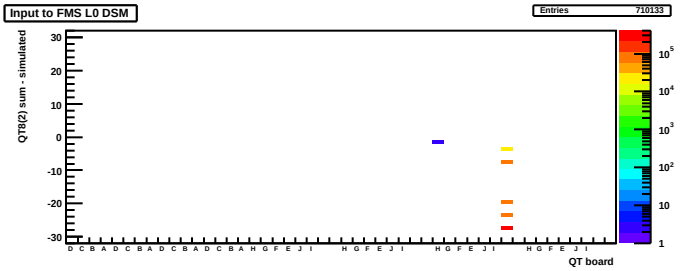

Input to FMS L0 DSM
Entries 4.79987e+07
QT8(0) sum
QT board

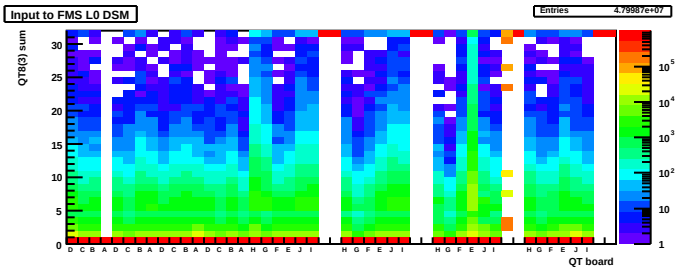

Input to FMS L0 DSM
Entries 13
QT8(0) sum - simulated
QT board

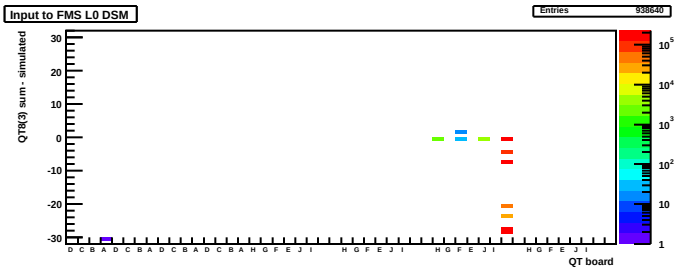

Input to FMS L0 DSM
Entries 4.79987e+07
QT8(1) sum
QT board

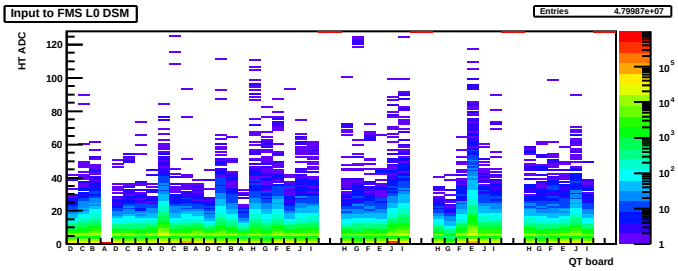

Input to FMS L0 DSM
Entries 28
QT8(1) sum - simulated
QT board

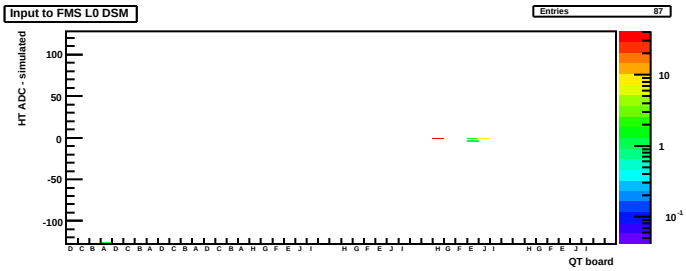

Input to FMS L0 DSM
Entries 4.79987e+07
QT8(2) sum
QT board

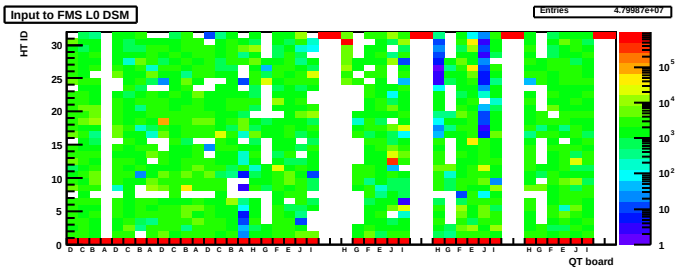

Input to FMS L0 DSM
Entries 710133
QT8(2) sum - simulated
QT board

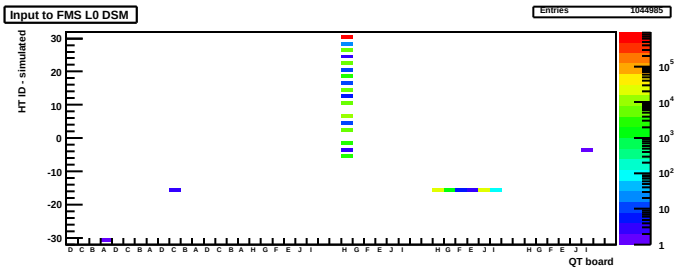

Input to FMS L0 DSM
Entries 4.79987e+07
QT8(3) sum
QT board

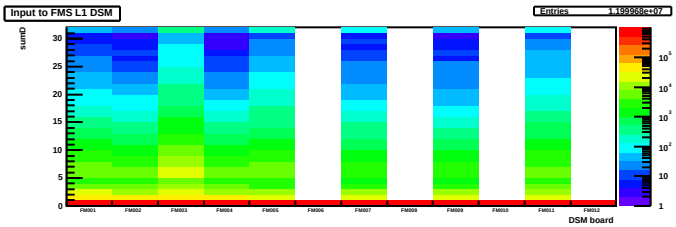

Input to FMS L0 DSM
Entries 938640
QT8(3) sum - simulated
QT board

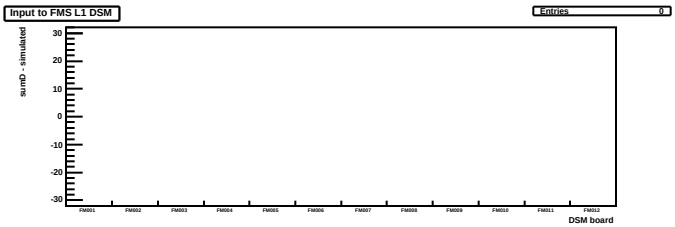

Input to FMS L0 DSM
Entries 4.79987e+07
HT ADC
QT board

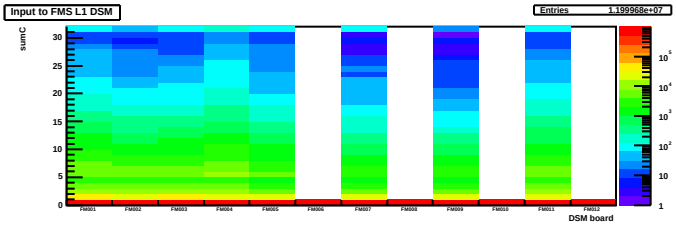

Input to FMS L0 DSM
Entries 87
HT ADC - simulated
QT board

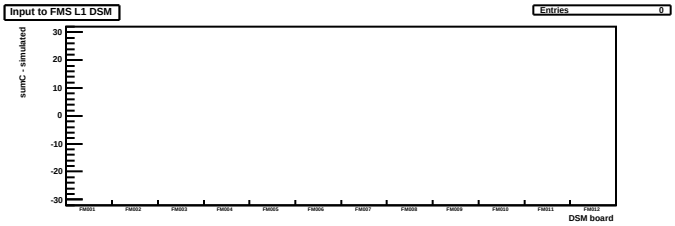

Input to FMS L0 DSM
Entries 4.79987e+07
HT ID
QT board

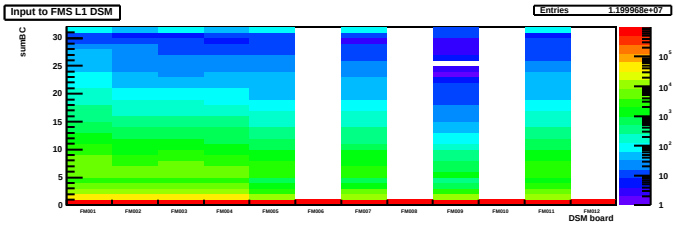

Input to FMS L0 DSM
Entries 1044985
HT ID - simulated
QT board

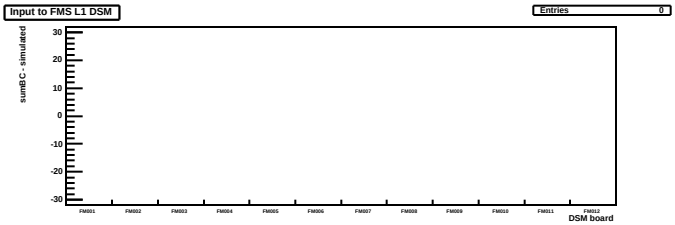

Input to FMS L1 DSM
Entries 1.199968e+07
sumD
DSM board

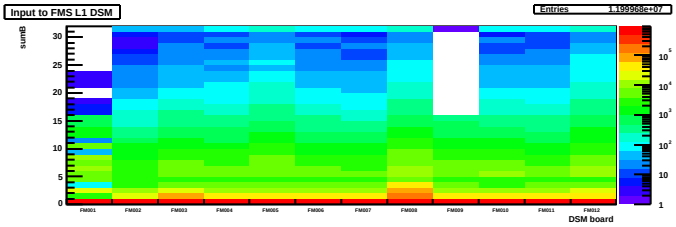

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

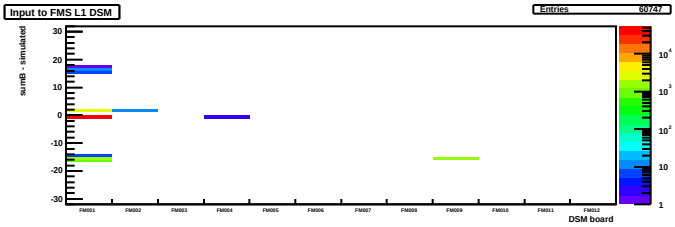

Input to FMS L1 DSM
Entries 1.199968e+07
sumC
DSM board

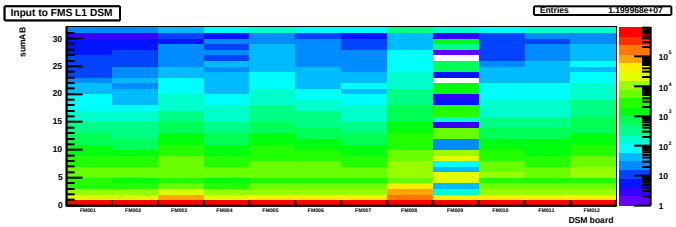

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

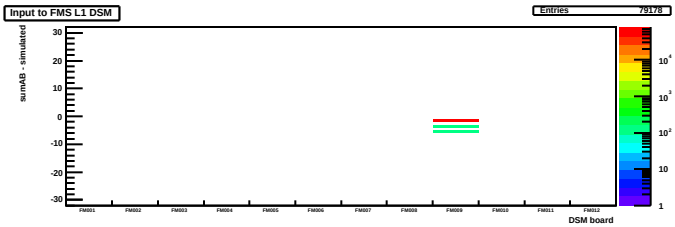

Input to FMS L1 DSM
Entries 1.199968e+07
sumBC
DSM board

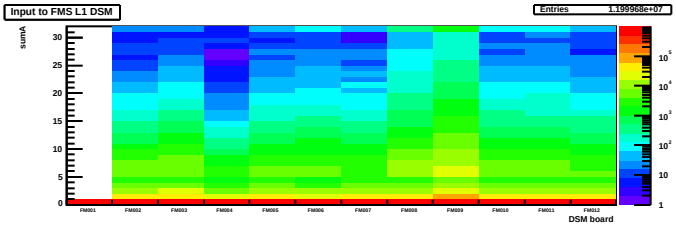

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

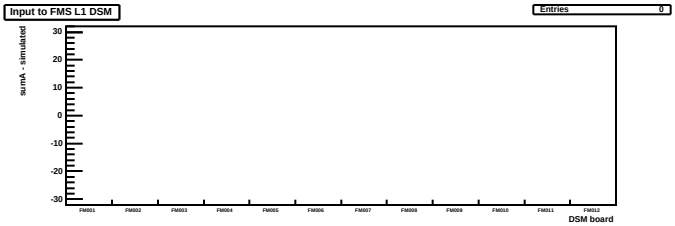

Input to FMS L1 DSM
Entries 1.199968e+07
sumB
DSM board

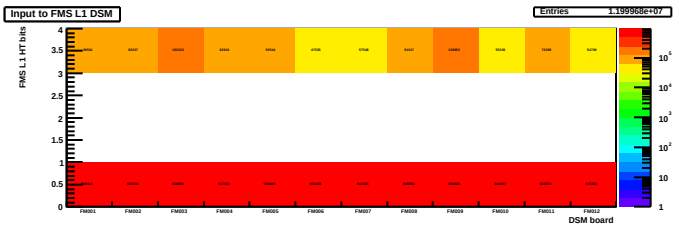

Input to FMS L1 DSM
Entries 60747
sumB - simulated
DSM board

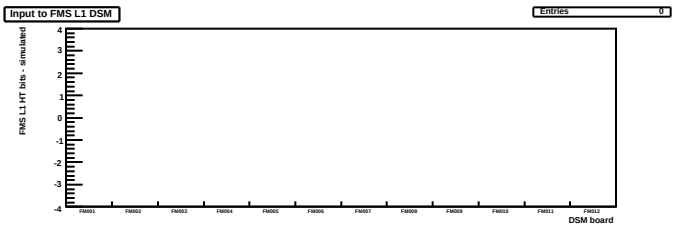

Input to FMS L1 DSM
Entries 1.199968e+07
sumAB
DSM board

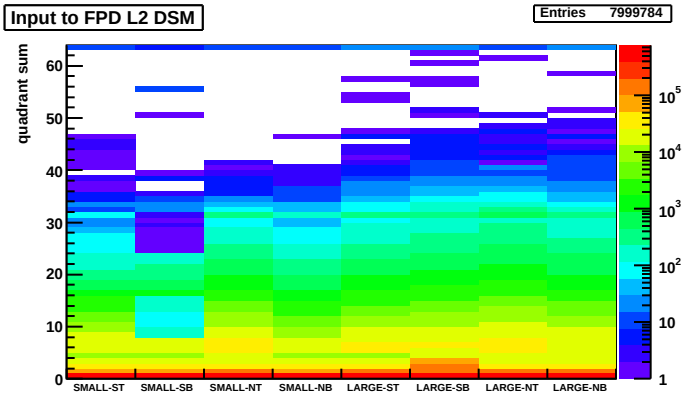

Input to FMS L1 DSM
Entries 79178
sumAB - simulated
DSM board

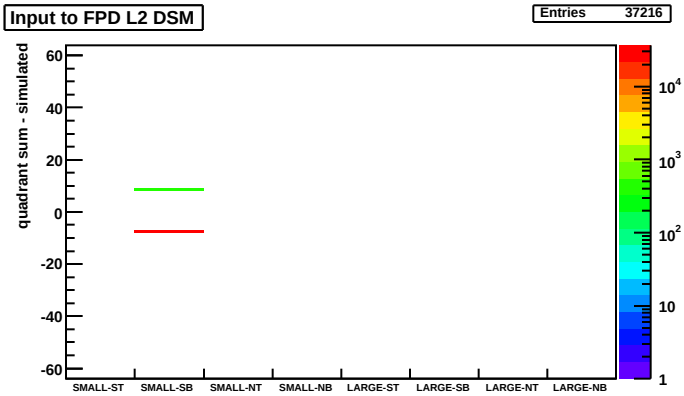

Input to FMS L1 DSM
Entries 1.199968e+07
sumA
DSM board

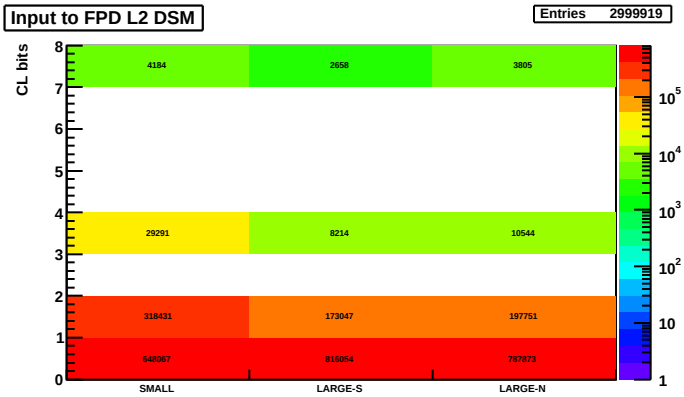

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

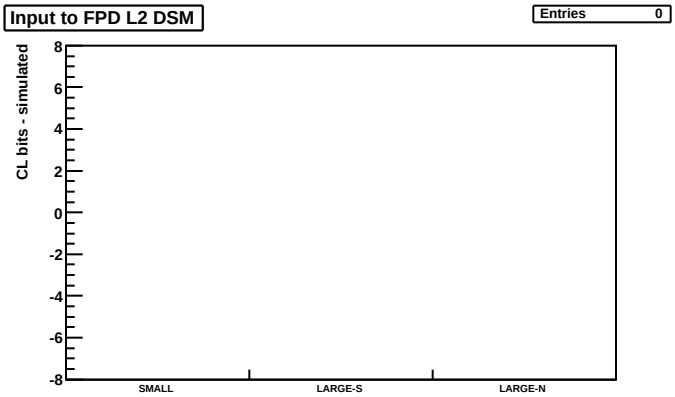

Input to FMS L1 DSM
Entries 1.199968e+07
FMS L1 HT bits
DSM board

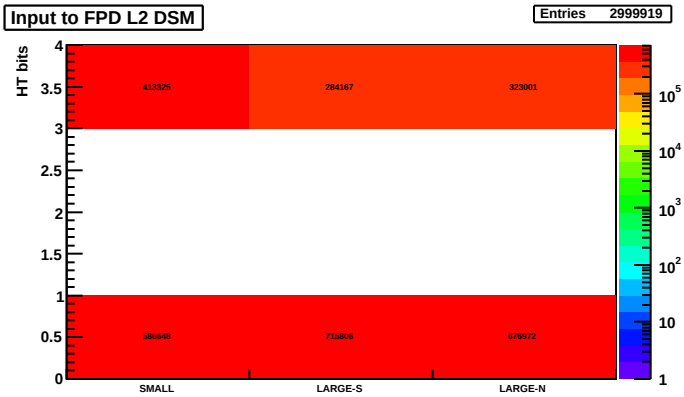

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

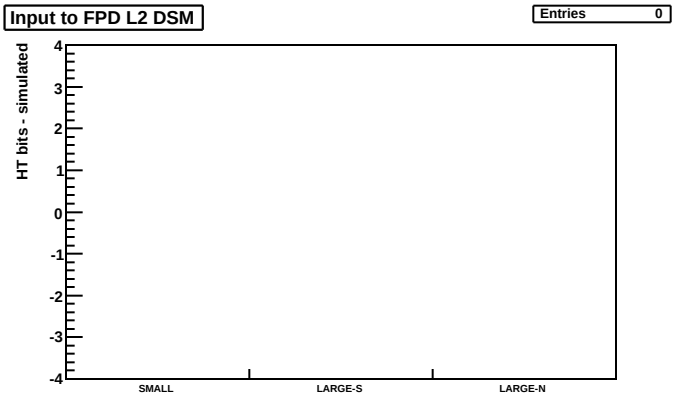

Input to FPD L2 DSM
Entries 7999784
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

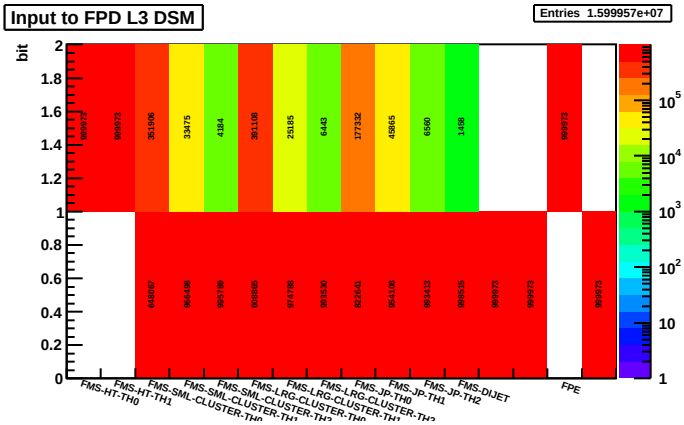

Input to FPD L2 DSM
Entries 37216
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

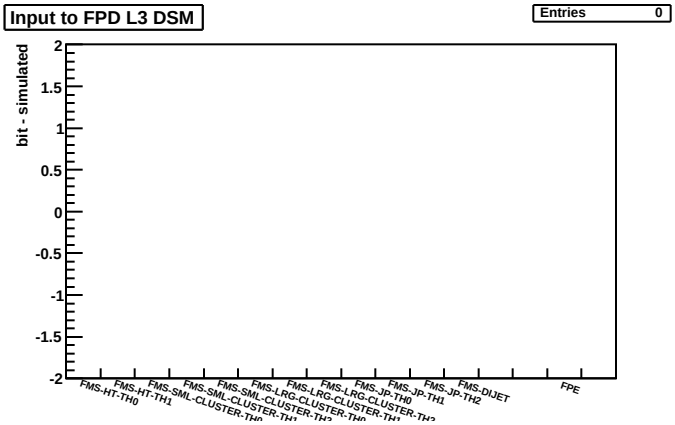

Input to FPD L2 DSM
Entries 2999919
CL bits
4184
2658
3805
29291
8214
10544
318431
173047
197751
648067
816054
787873
SMALL
LARGE-S
LARGE-N

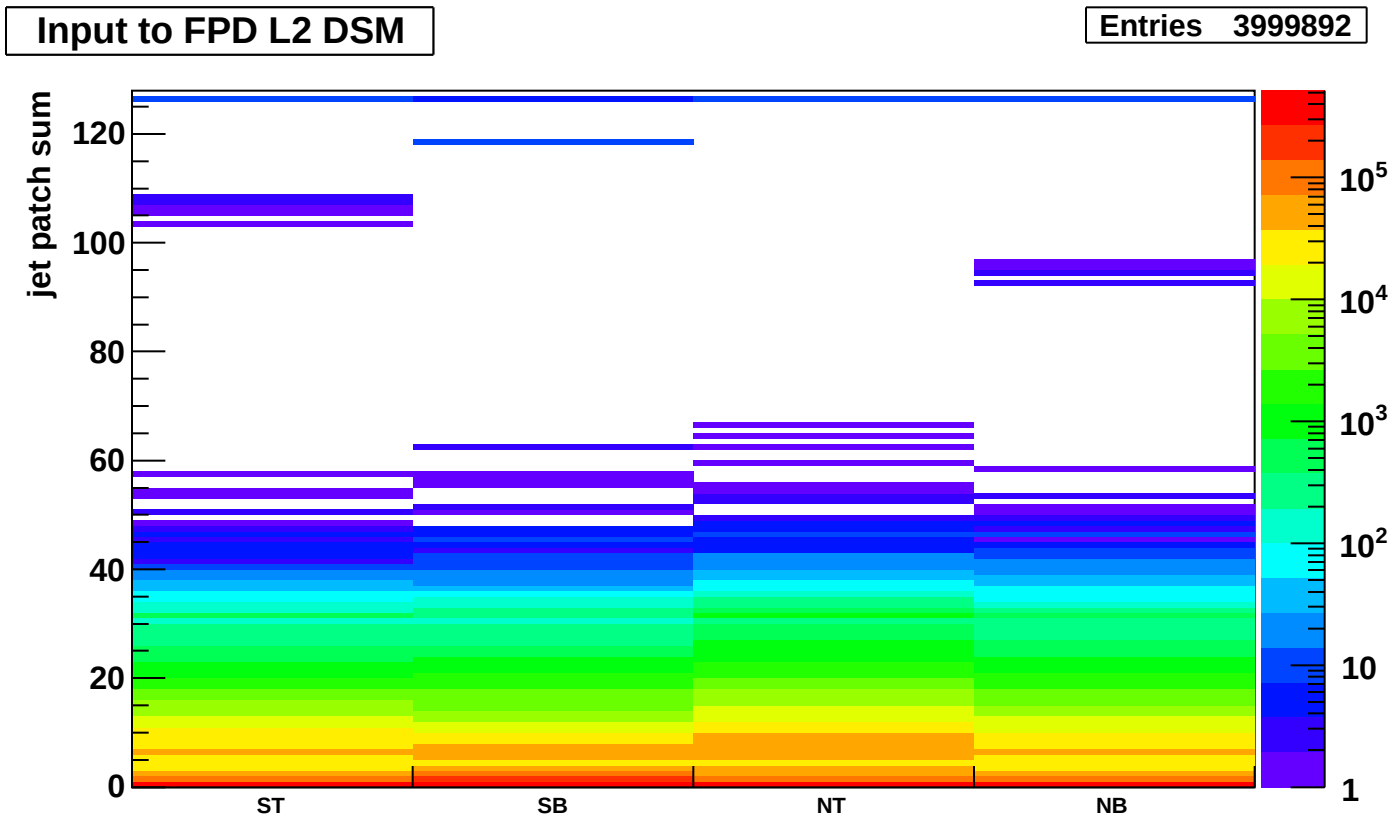

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

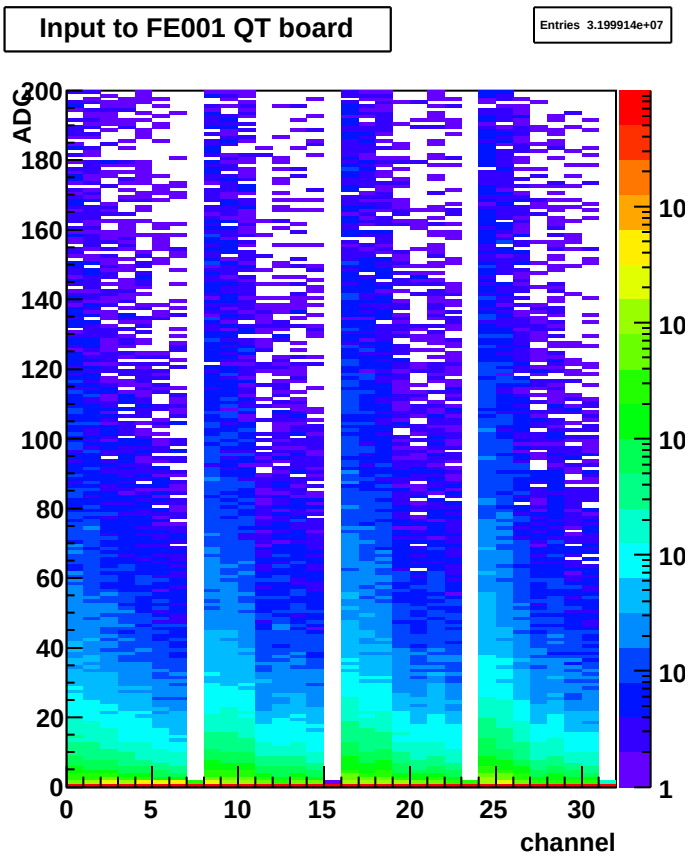

Input to FPD L2 DSM
Entries 2999919
HT bits
413325
284167
323001
586648
715806
676972
SMALL
LARGE-S
LARGE-N

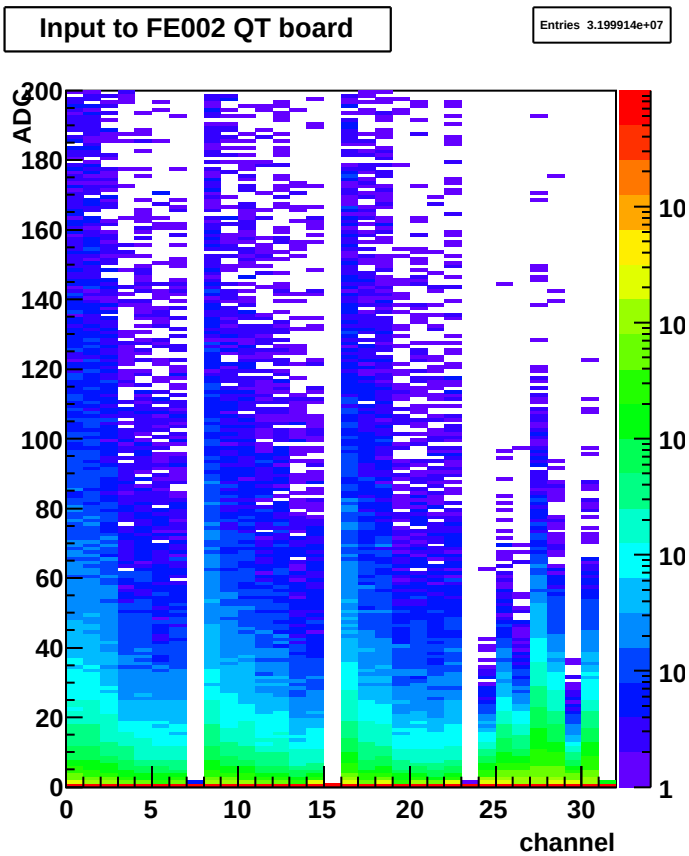

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

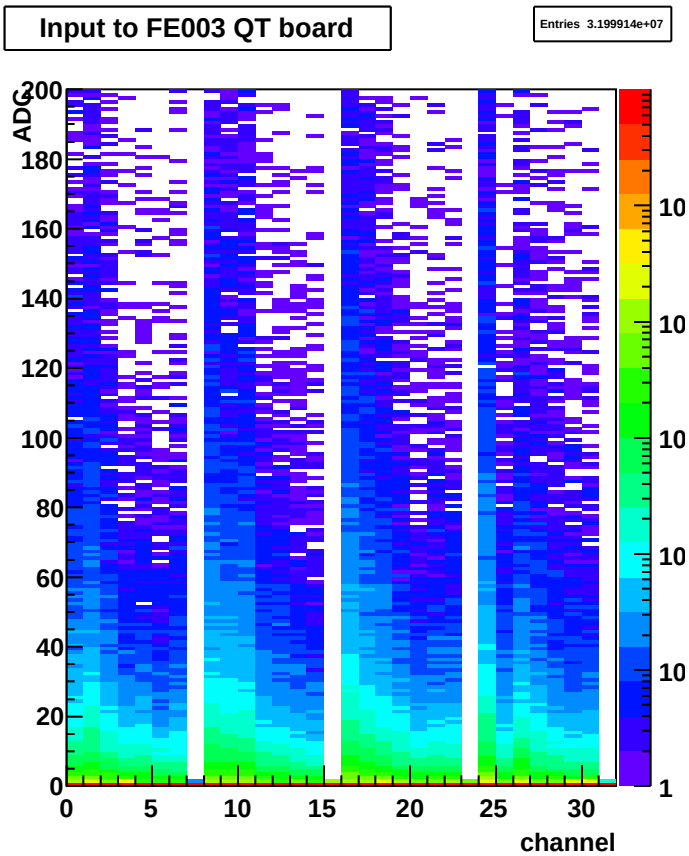

Input to FPD L3 DSM
Entries 1.599957e+07
bit
999973
999973
351506
33475
4184
391108
25195
6443
177332
45865
6560
1498
999973
648067
966498
995789
608865
974788
993530
822641
954108
993413
988315
999973
999973
999973
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

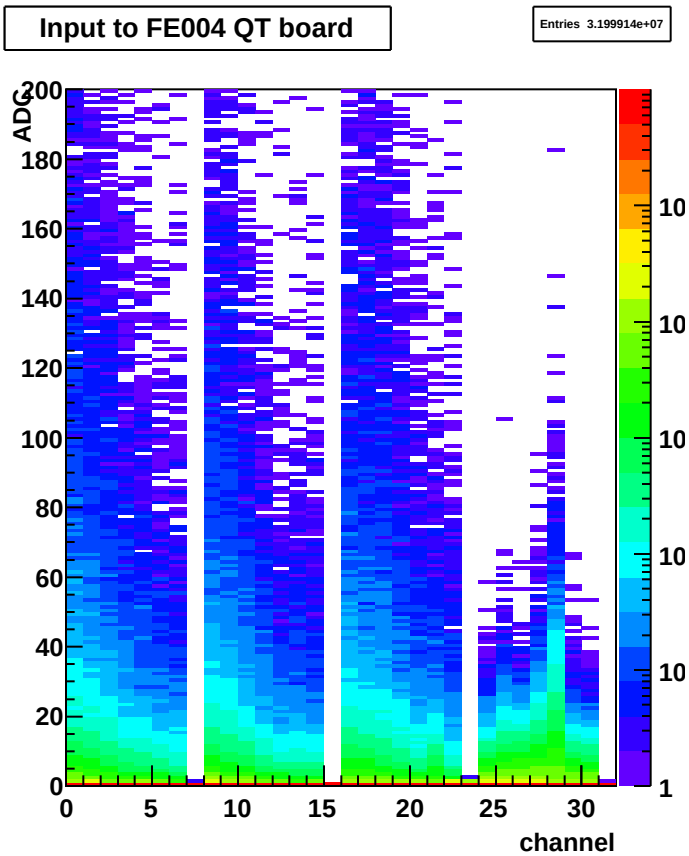

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

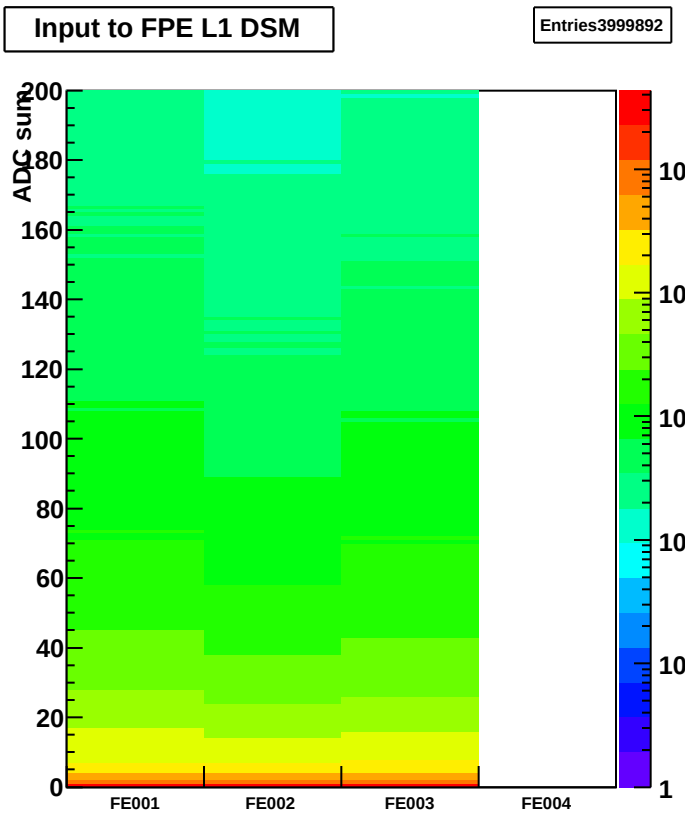

Input to FPD L2 DSM
Entries 3999892
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

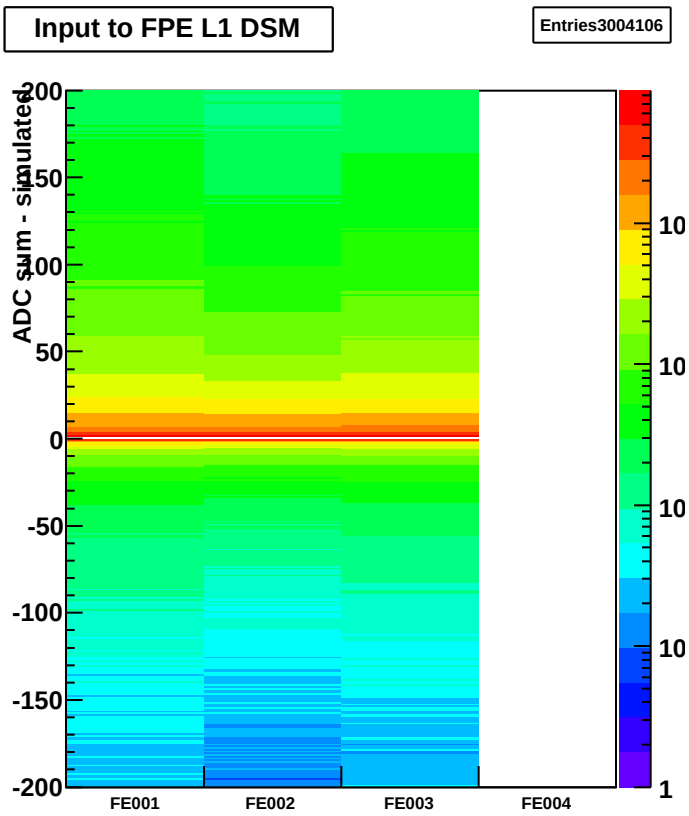

Input to FE001 QT board
Entries 3.199914e+07
ADC
channel

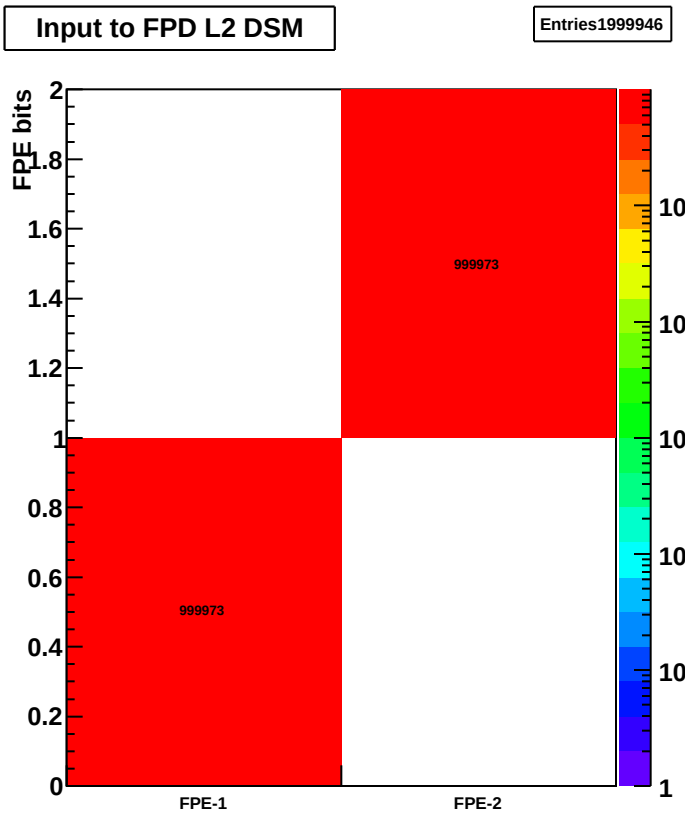

Input to FE002 QT board
Entries 3.199914e+07
ADC
channel

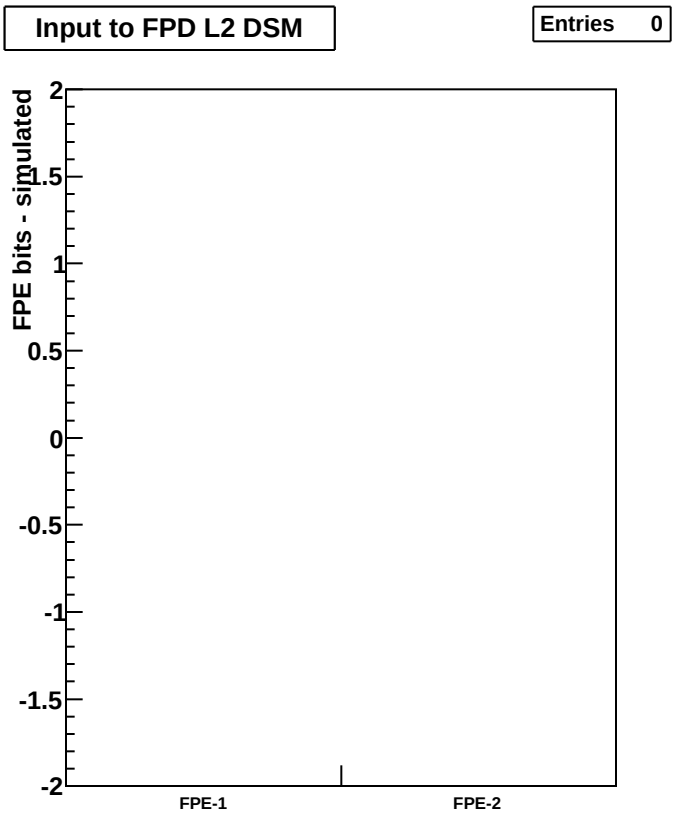

Input to FE003 QT board
Entries 3.199914e+07
ADC
channel


Input to FE004 QT board
Entries 3.199914e+07
ADC
channel


Input to FPE L1 DSM
Entries3999892
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries3004106
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries1999946
FPE bits
999973
999973
FPE-1
FPE-2


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