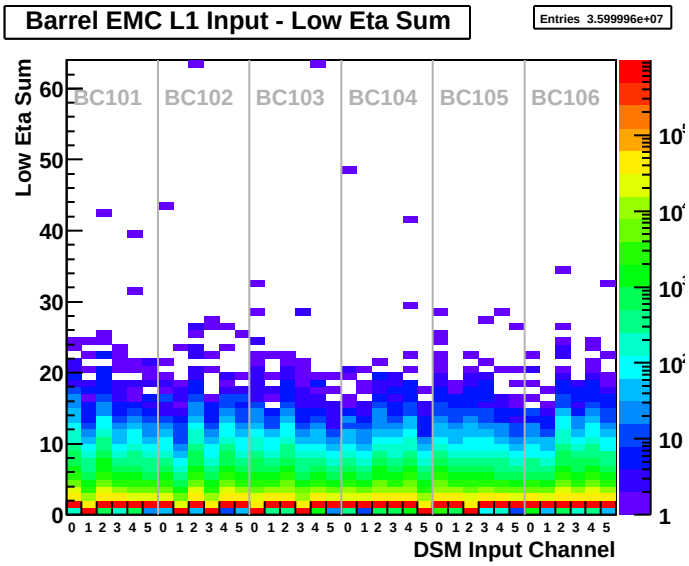
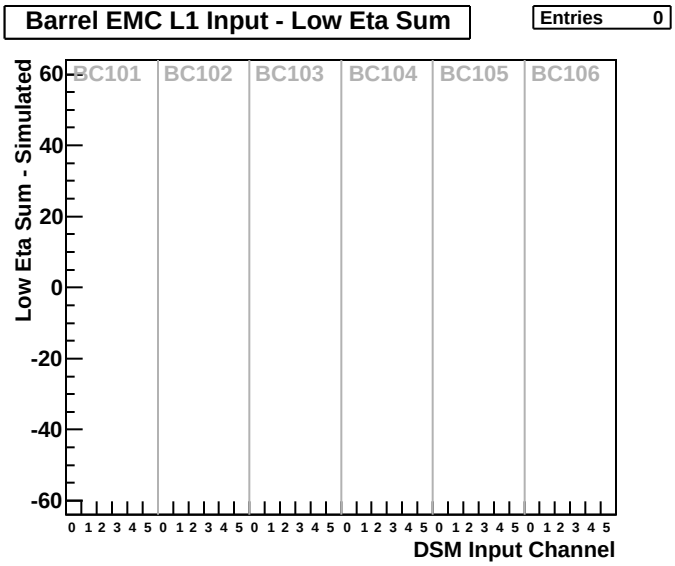
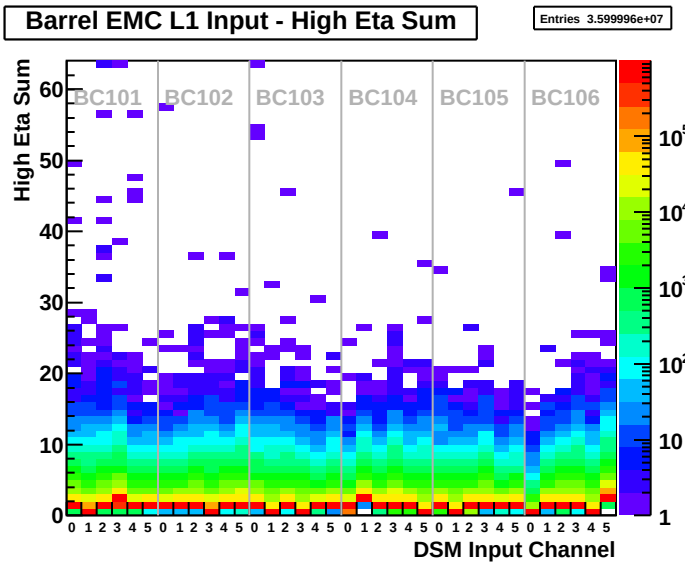
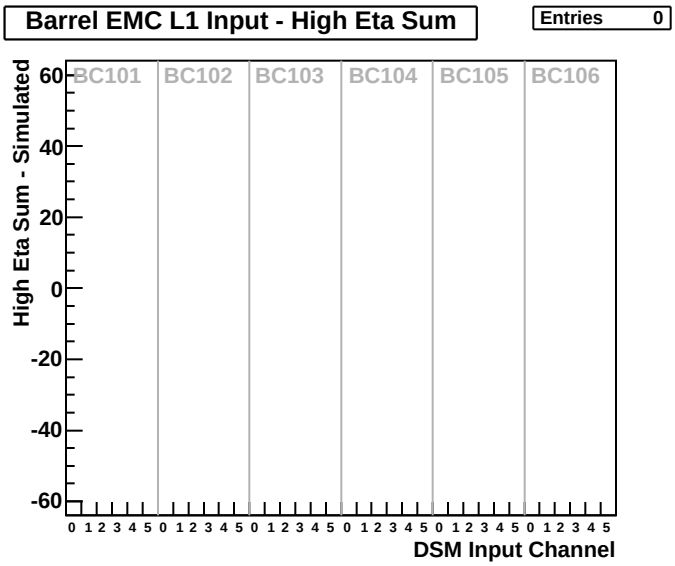
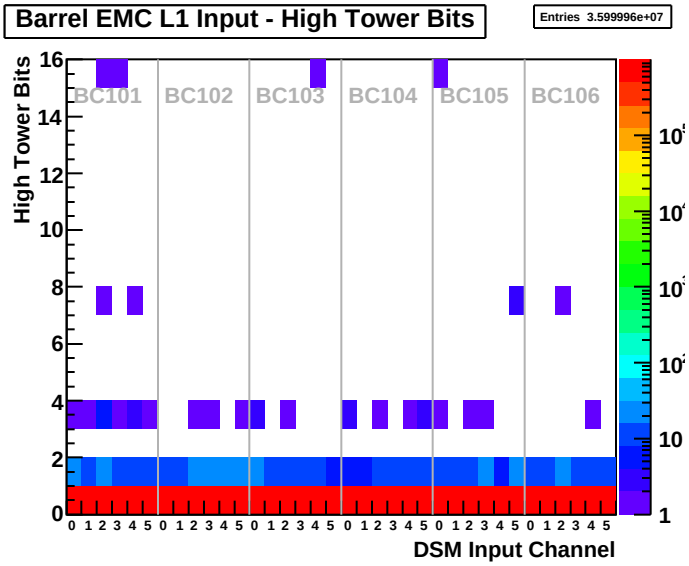
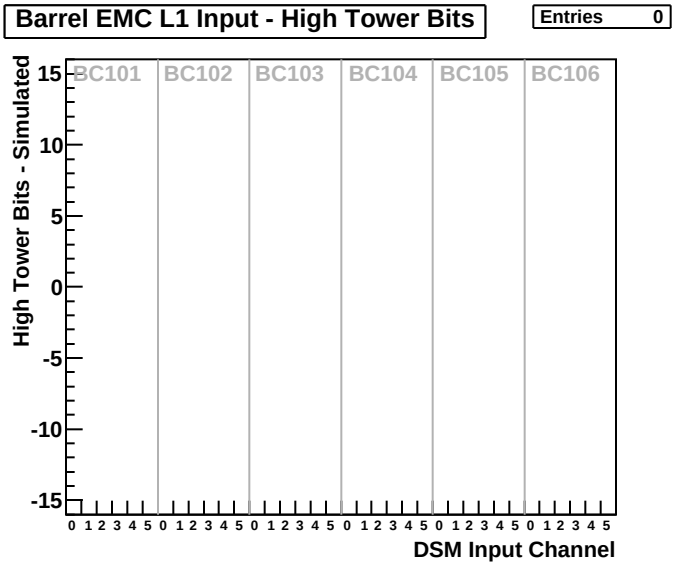

Barrel EMC L1 Input - Low Eta Sum
Entries 3.599996e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

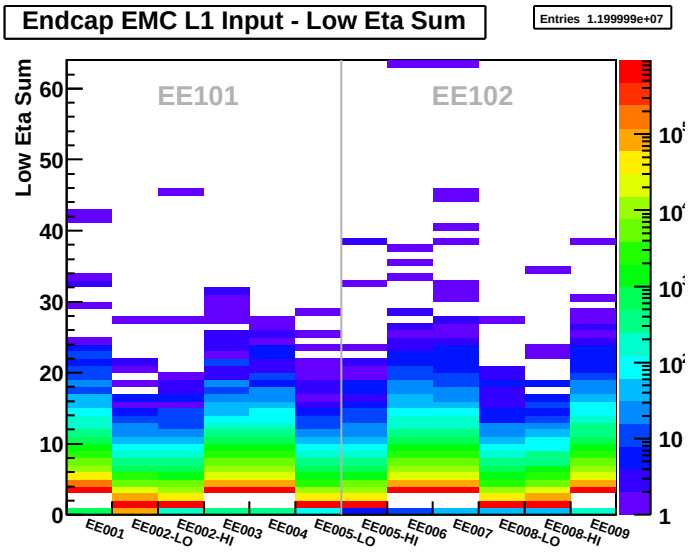

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

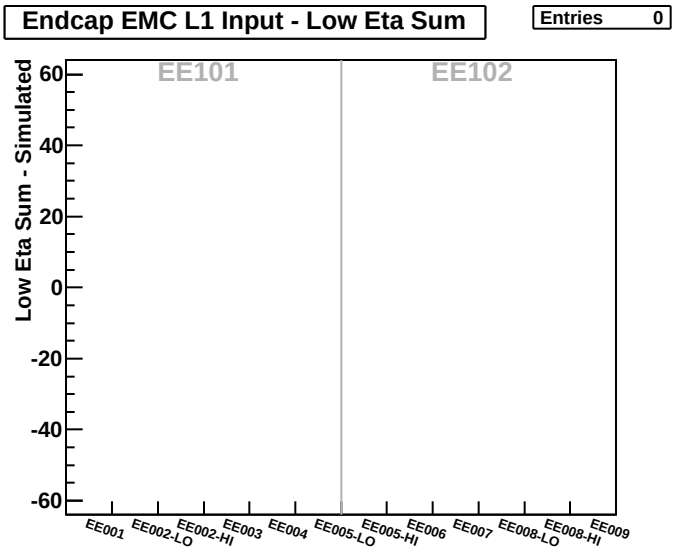

Barrel EMC L1 Input - High Eta Sum
Entries 3.599996e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

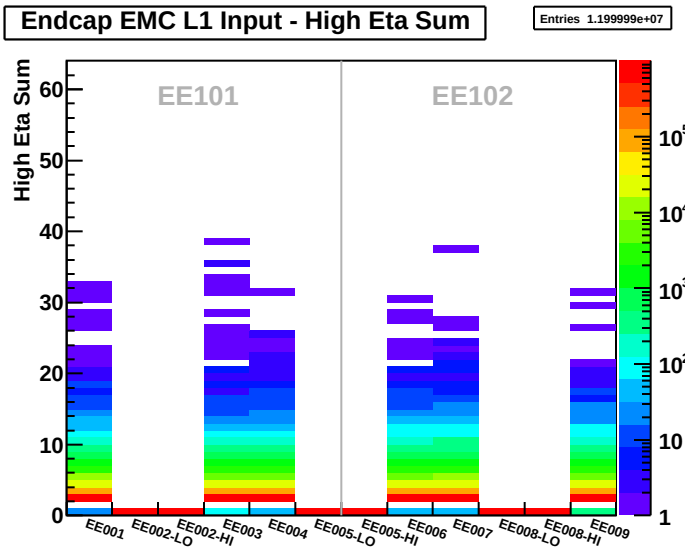

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

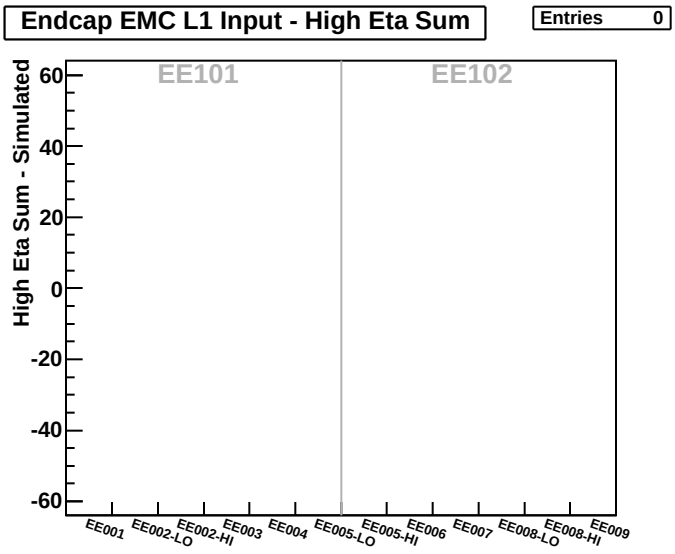

Barrel EMC L1 Input - High Tower Bits
Entries 3.599996e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

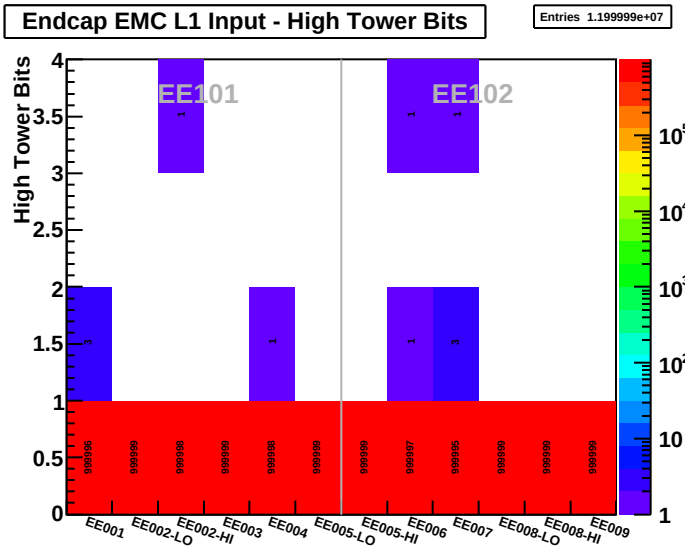

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

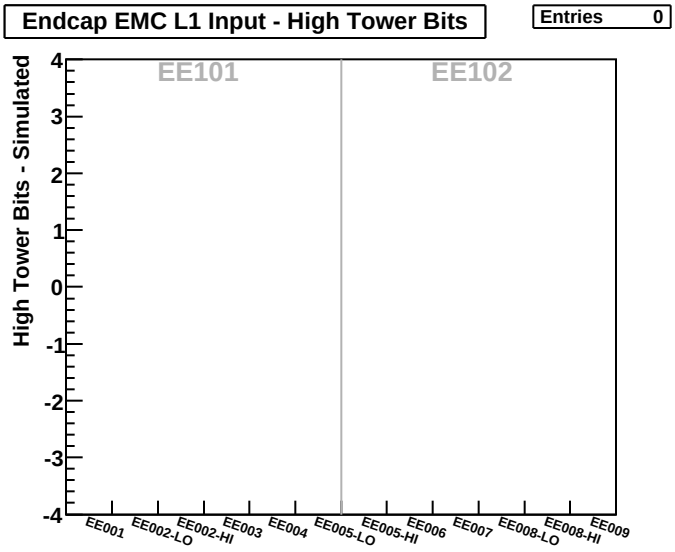

Endcap EMC L1 Input - Low Eta Sum
Entries 1.199999e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

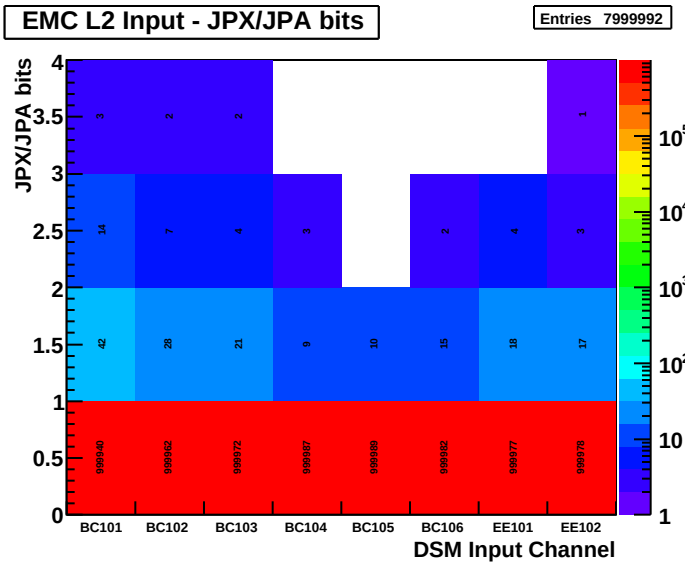

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

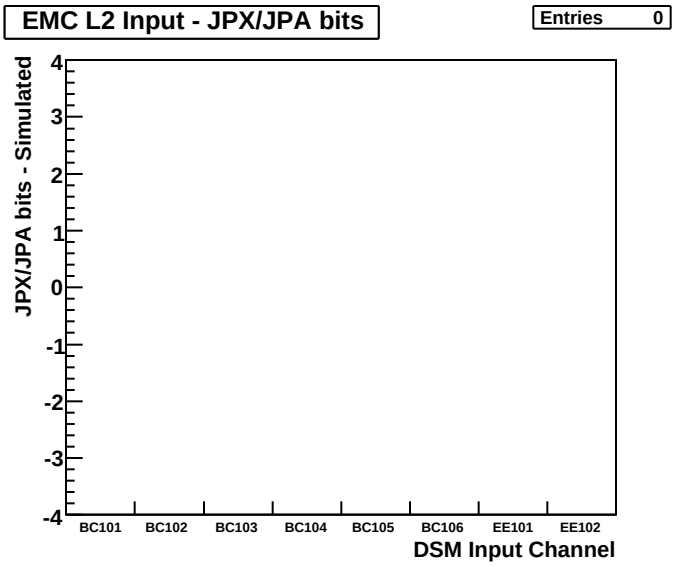

Endcap EMC L1 Input - High Eta Sum
Entries 1.199999e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

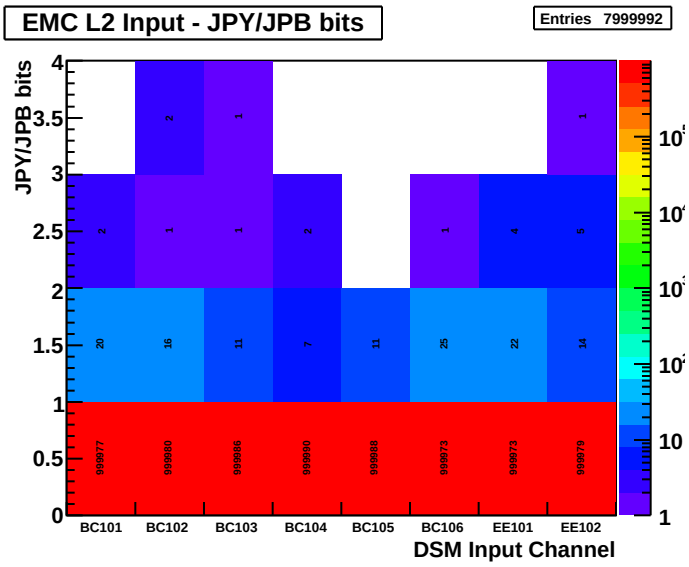

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

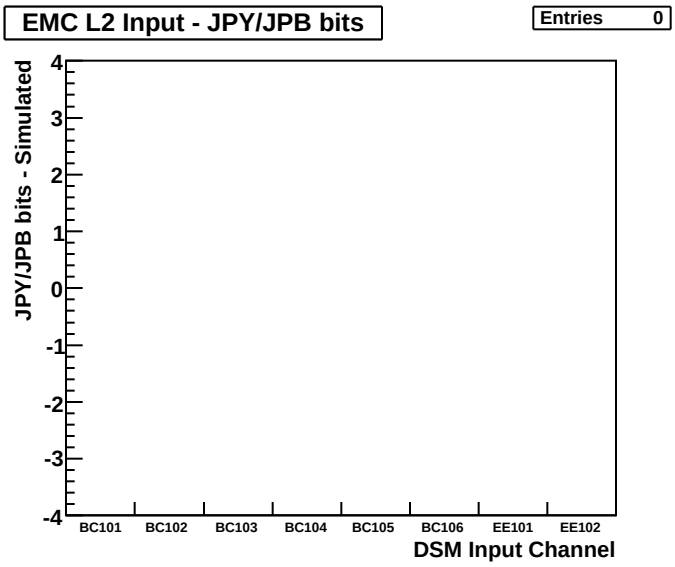

Endcap EMC L1 Input - High Tower Bits
Entries 1.199999e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

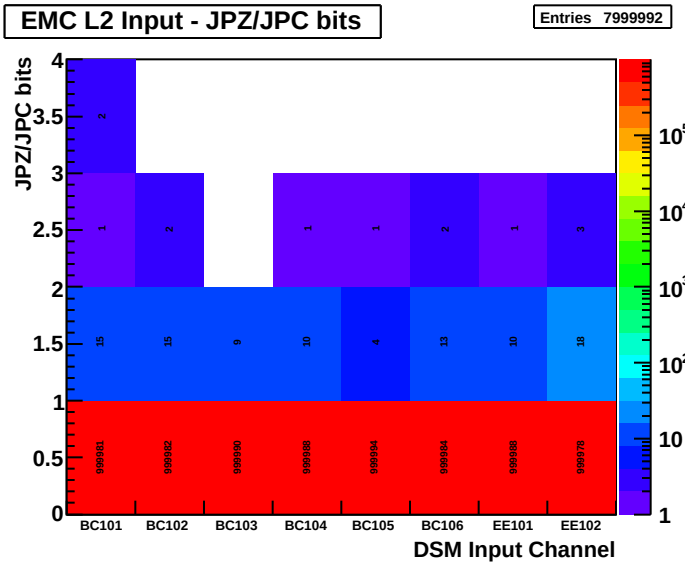

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

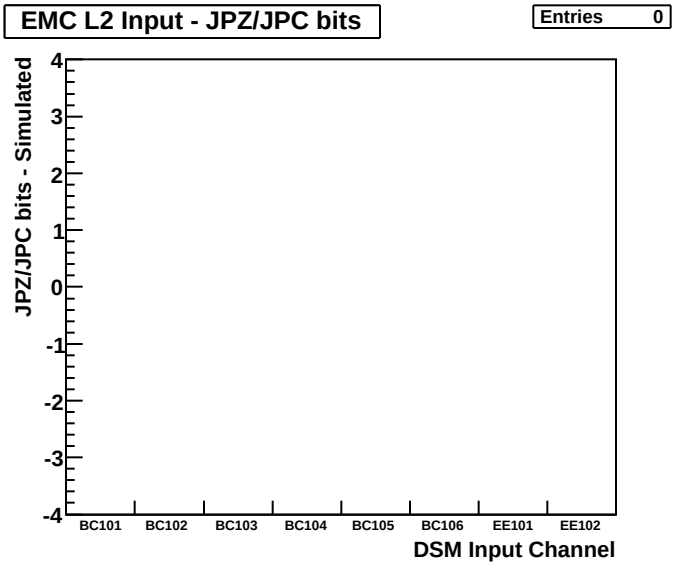

EMC L2 Input - JPX/JPA bits
Entries 7999992
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

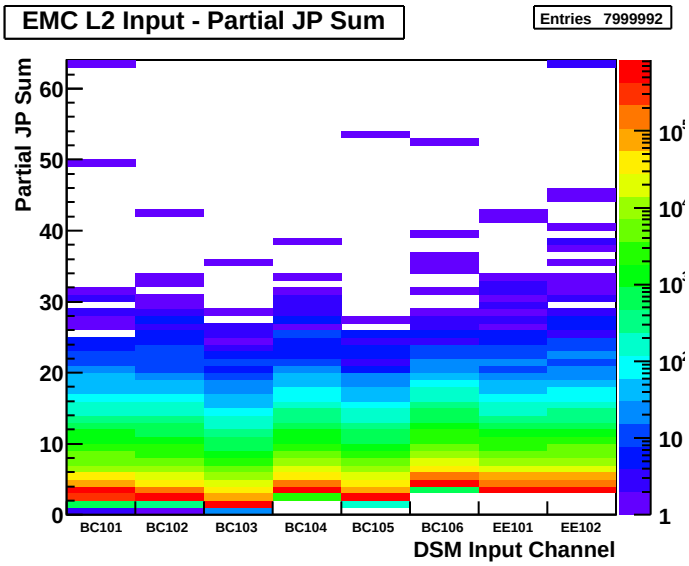

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

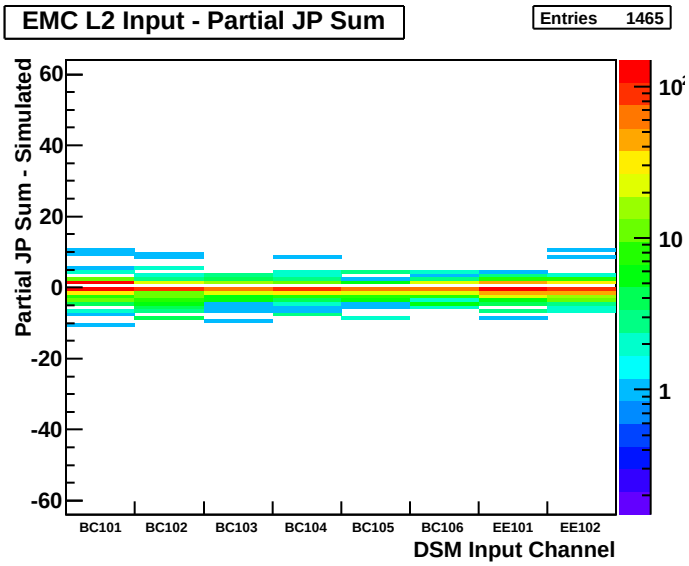

EMC L2 Input - JPY/JPB bits
Entries 7999992
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

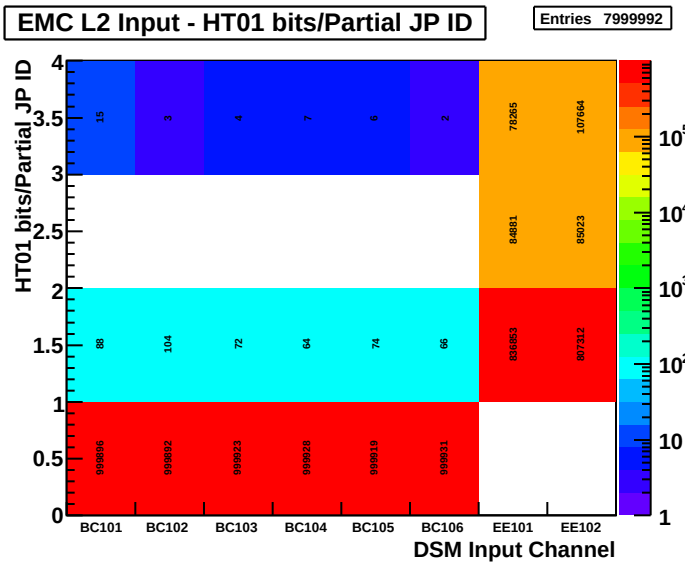

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

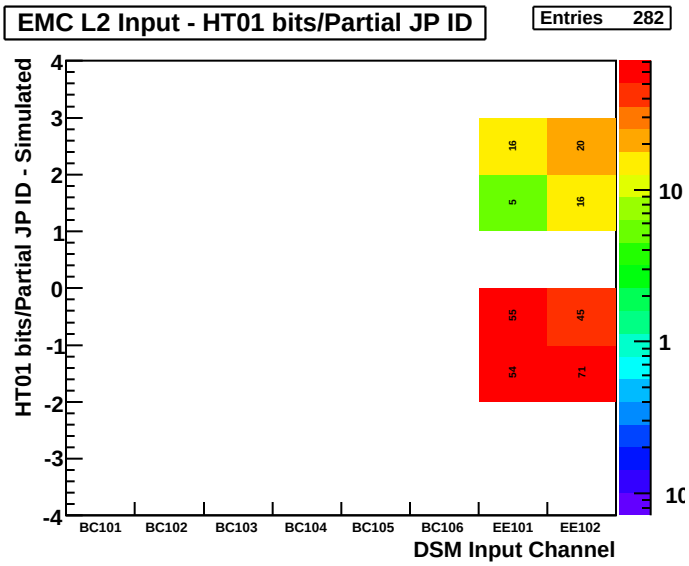

EMC L2 Input - JPZ/JPC bits
Entries 7999992
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

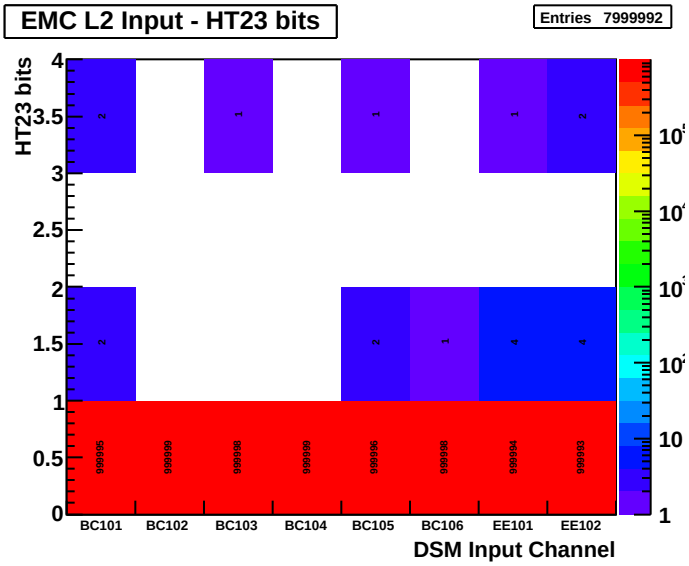

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

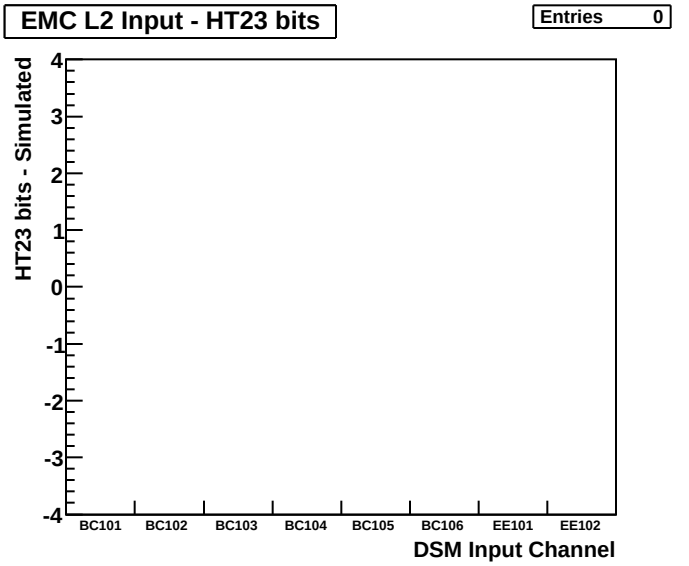

EMC L2 Input - Partial JP Sum
Entries 7999992
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

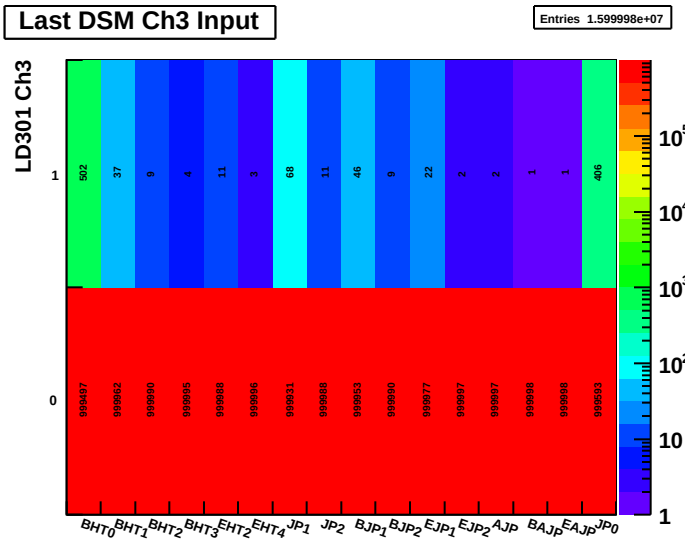

EMC L2 Input - Partial JP Sum
Entries 1465
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

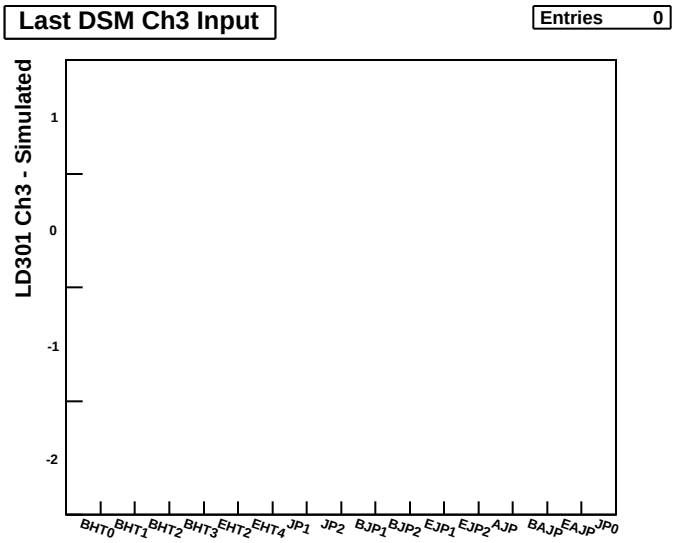

EMC L2 Input - HT01 bits/Partial JP ID
Entries 7999992
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

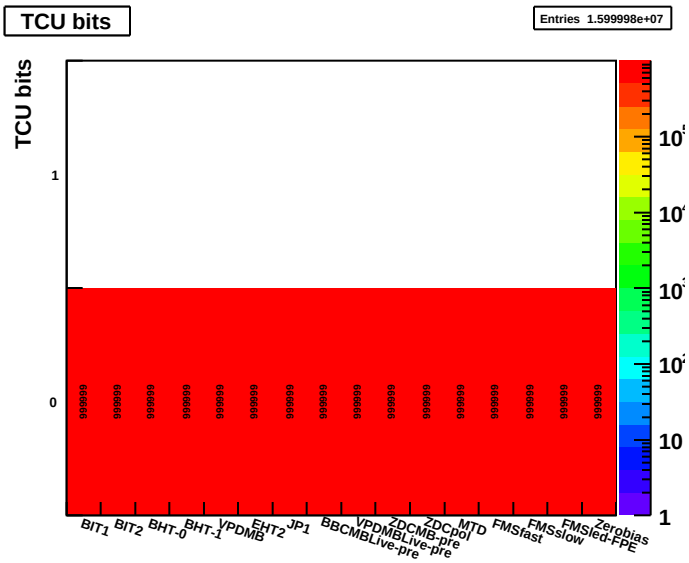

EMC L2 Input - HT01 bits/Partial JP ID
Entries 282
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

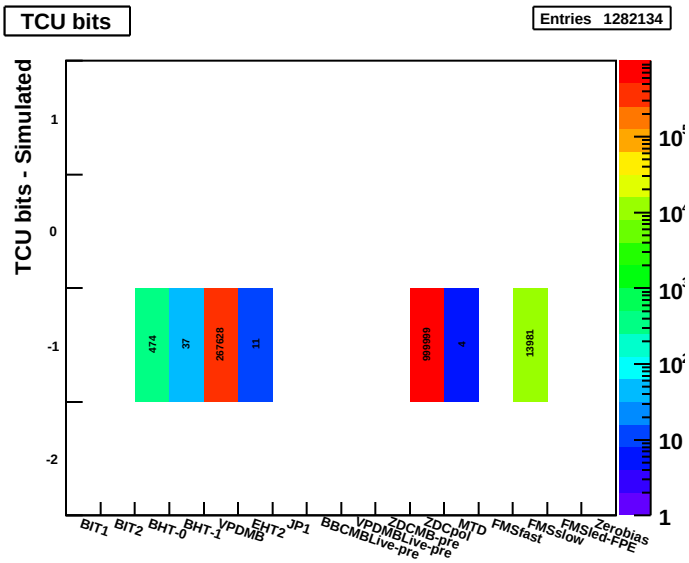

EMC L2 Input - HT23 bits
Entries 7999992
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

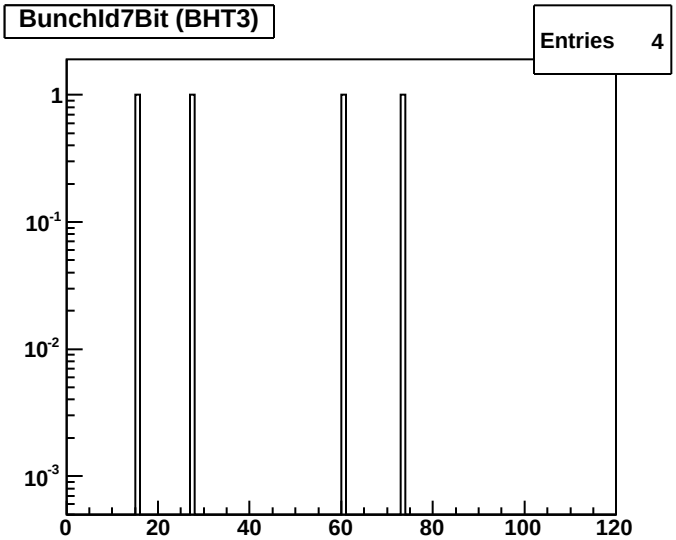

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

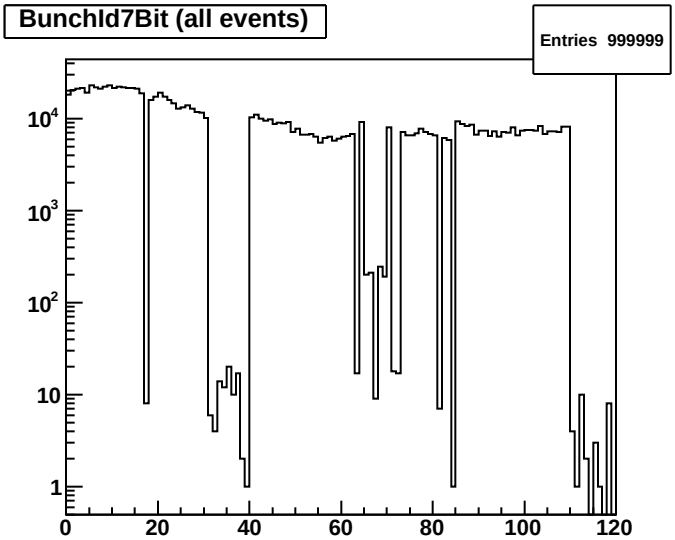

Last DSM Ch3 Input
Entries 1.599998e+07
LD301 Ch3
1
0
902 37 9 4 11 3 68 11 46 9 22 2 2 1 1 406
999497 999962 999990 999995 999988 999996 999931 999988 999953 999980 999977 999997 999997 999998 999998 999593
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0
1

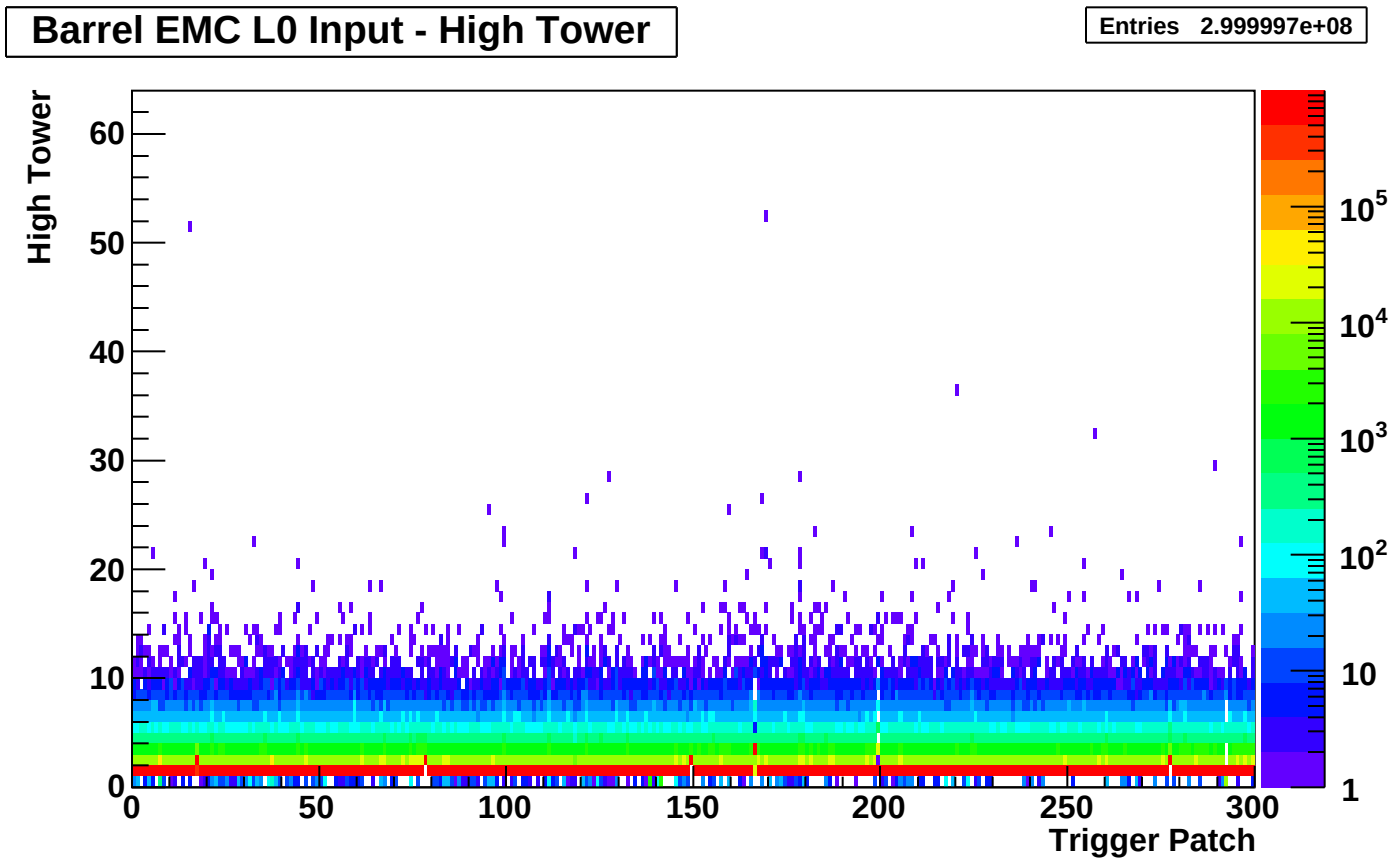

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
1
0
-1
-2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

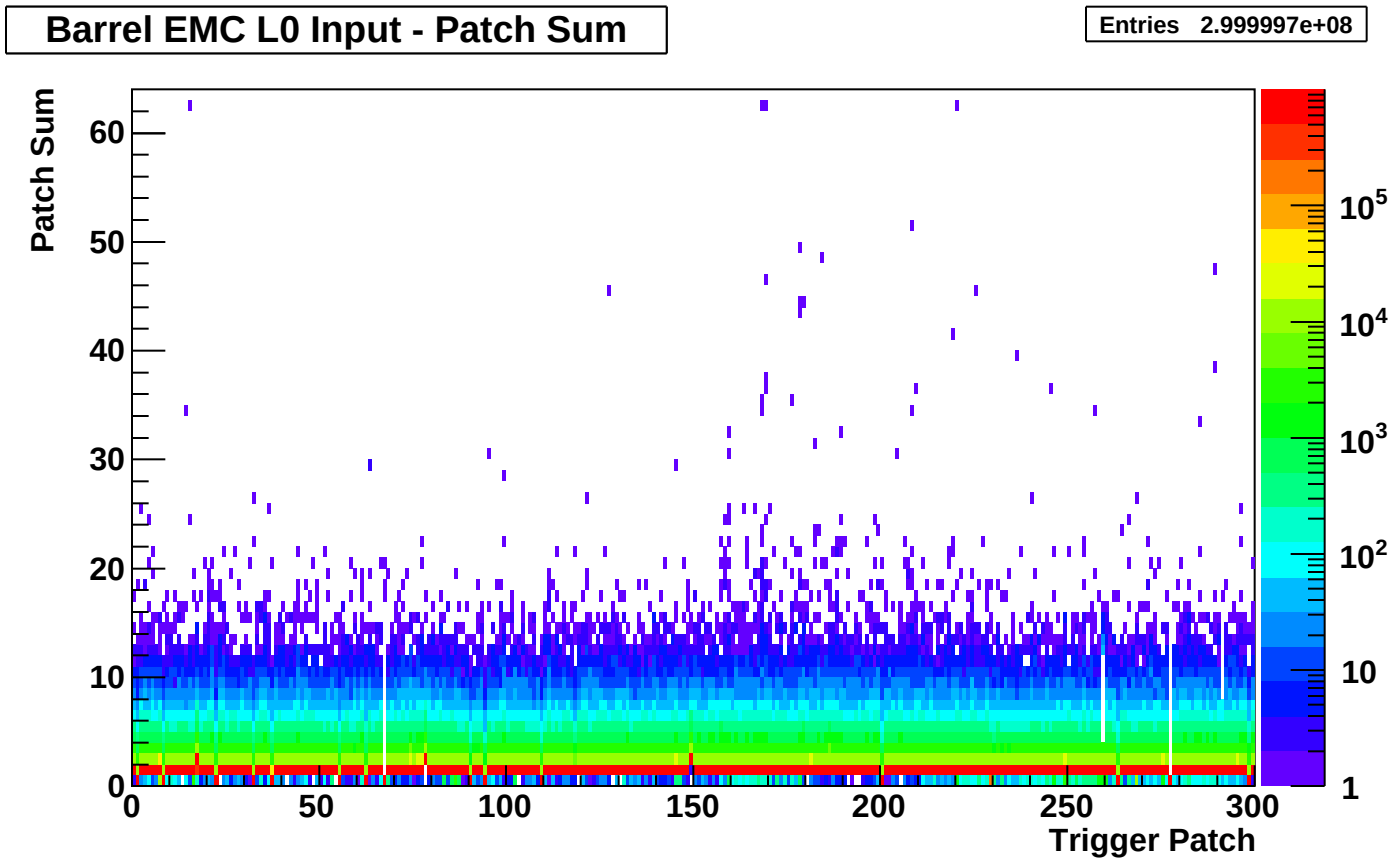

TCU bits
Entries 1.599998e+07
TCU bits
1
0
999999 999999 999999 999999 999999 999999 999999 999999 999999 999999 999999 999999 999999 999999 999999 999999
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias
1

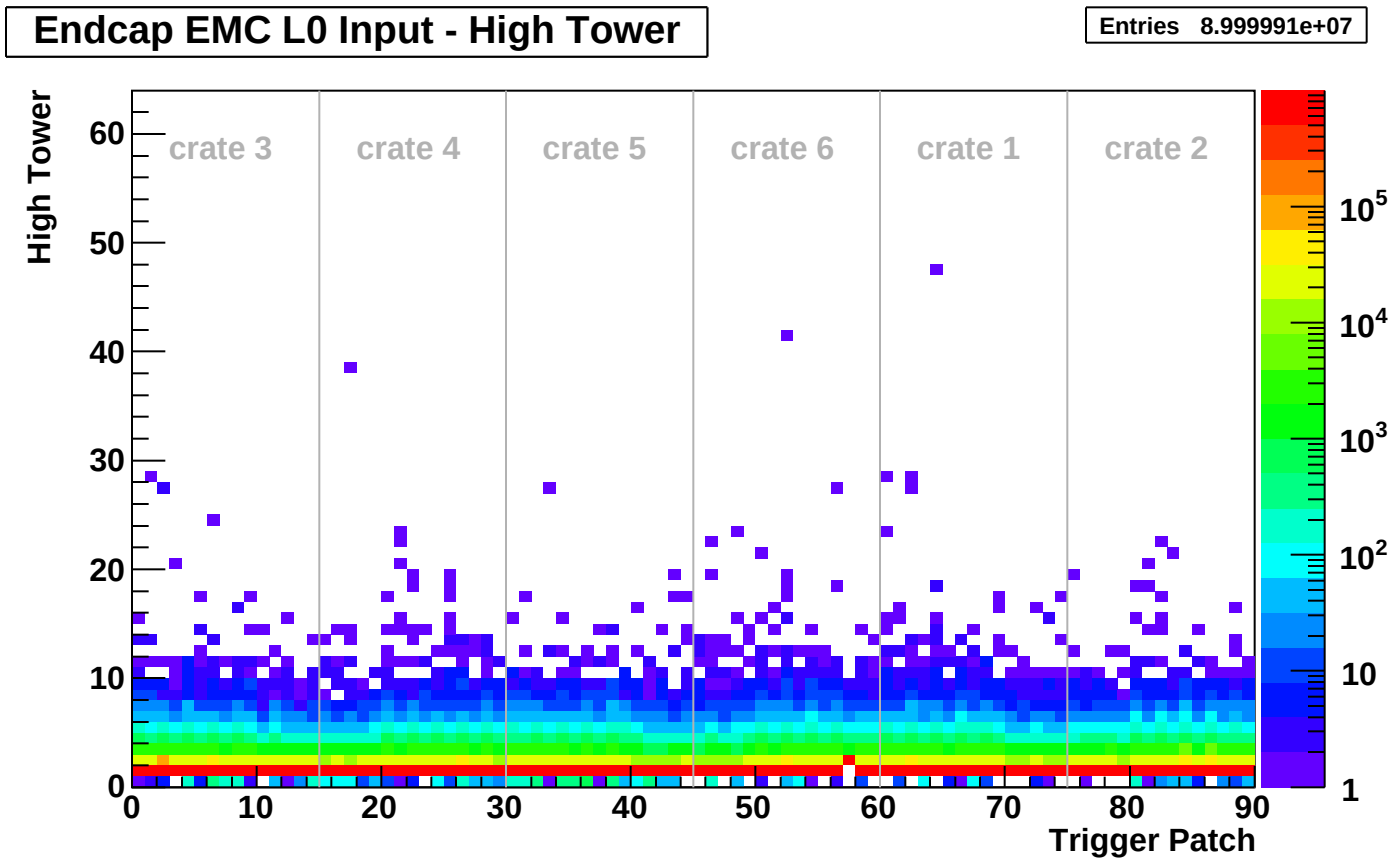

TCU bits
Entries 1282134
TCU bits - Simulated
1
0
-1
-2
474 37 267628 11 999999 4 13981
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias
1

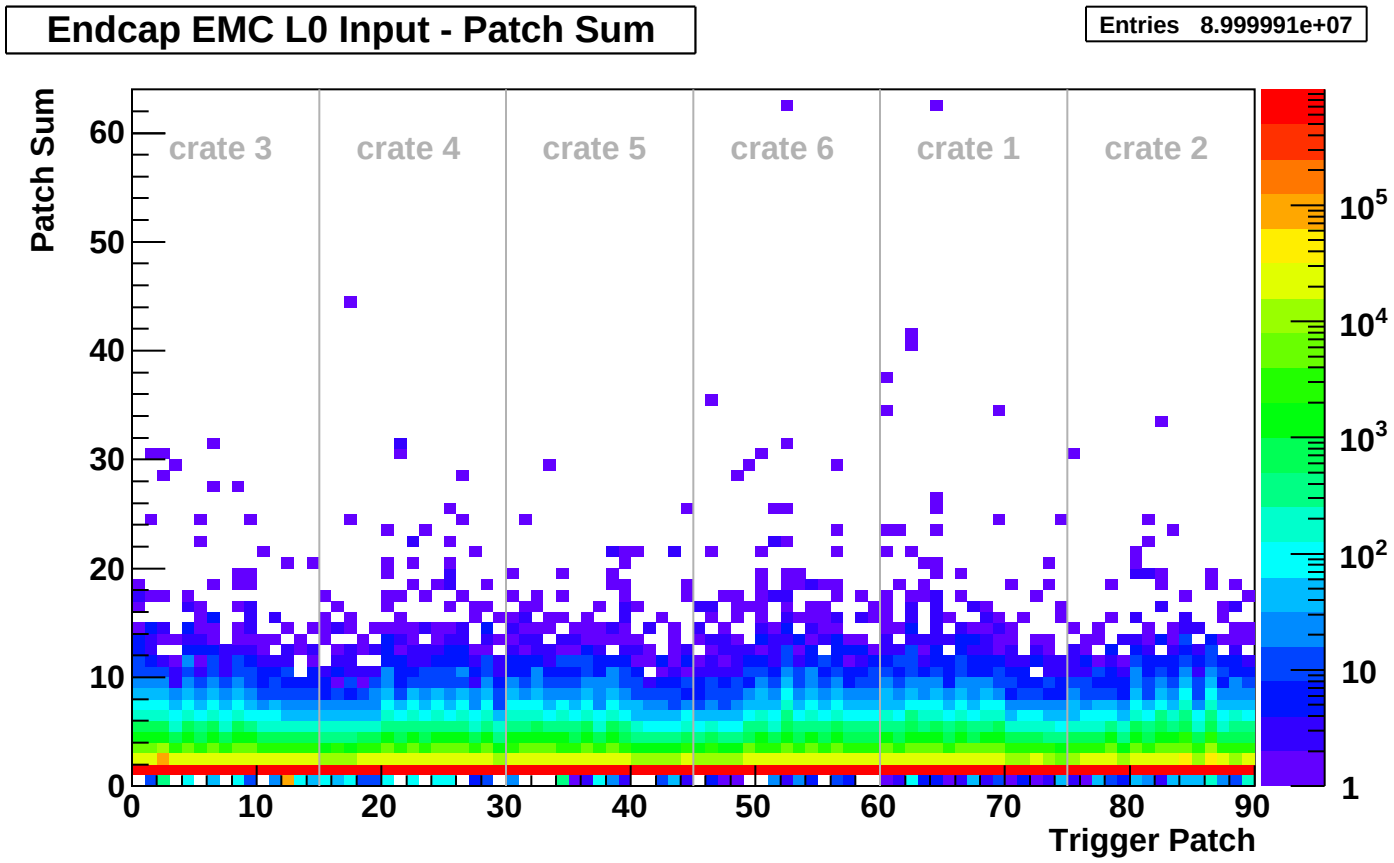

BunchId7Bit (BHT3)
Entries 4
1
10-1
10-2
10-3
0 20 40 60 80 100 120

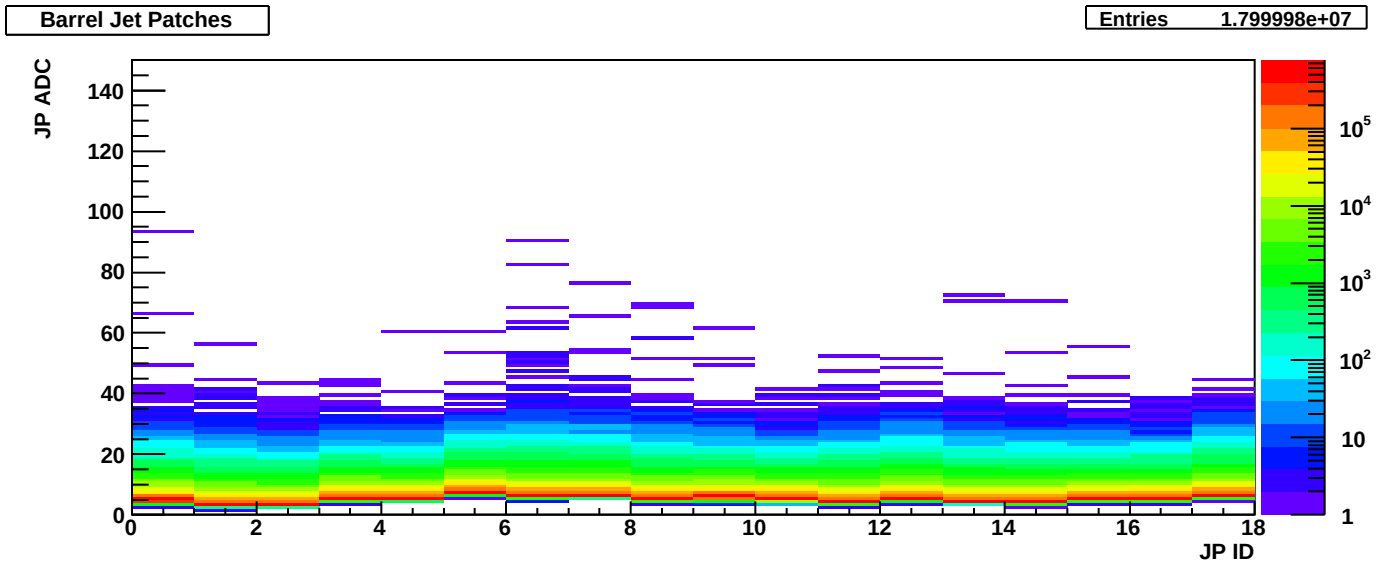

BunchId7Bit (all events)
Entries 999999
10^4
10^3
10^2
10
1
0 20 40 60 80 100 120

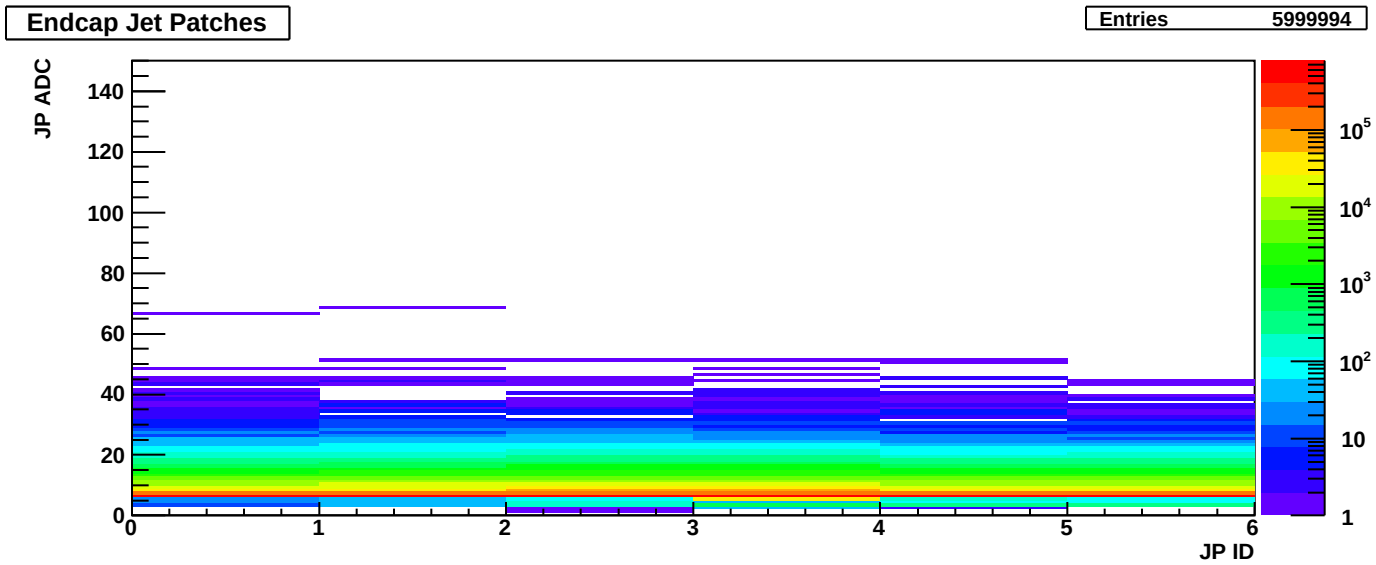

Barrel EMC L0 Input - High Tower
Entries 2.999997e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

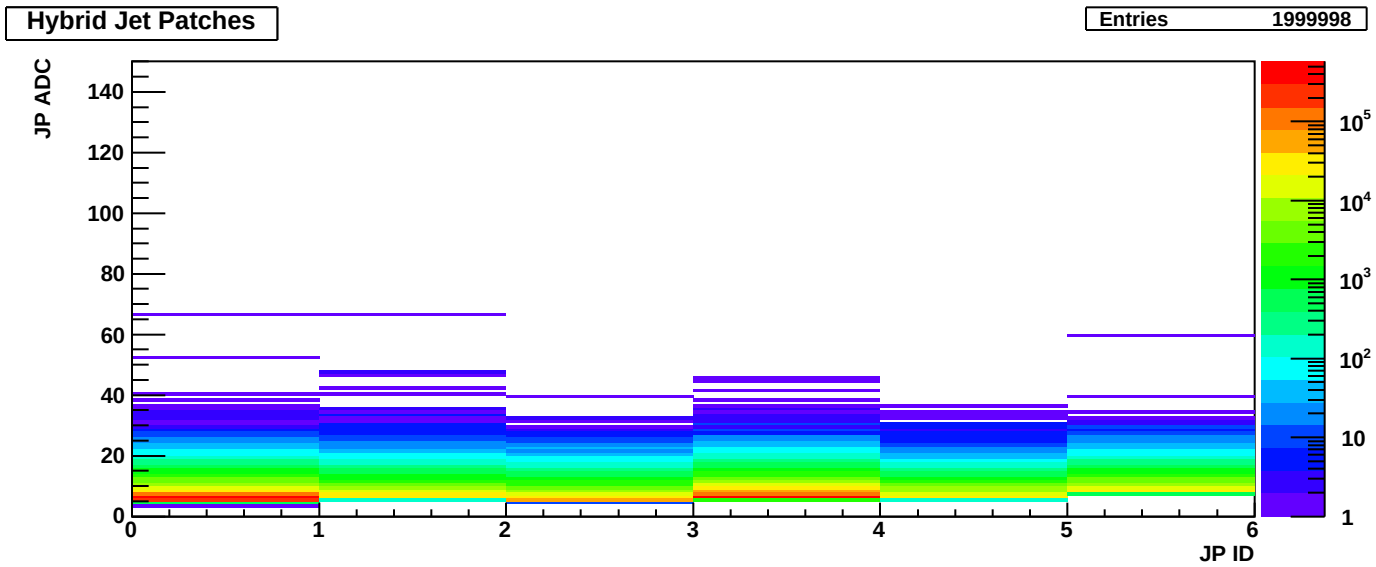

Barrel EMC L0 Input - Patch Sum
Entries 2.999997e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

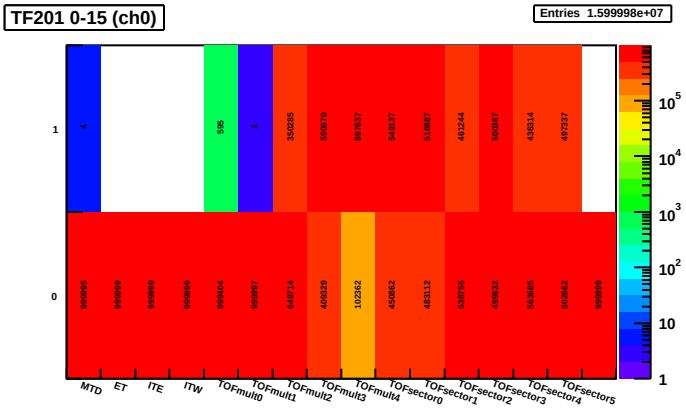

Endcap EMC L0 Input - High Tower
Entries 8.999991e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

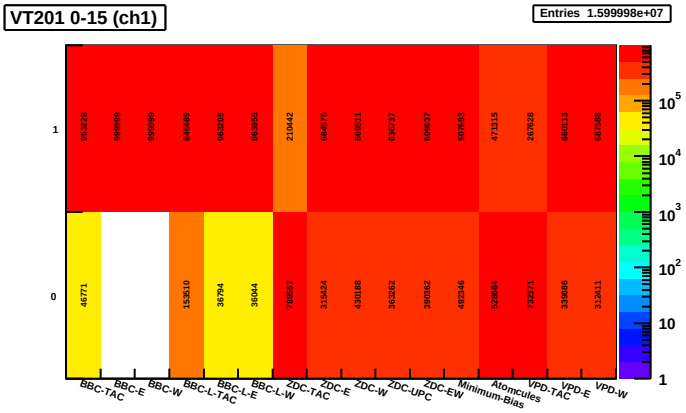

Endcap EMC L0 Input - Patch Sum
Entries 8.999991e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

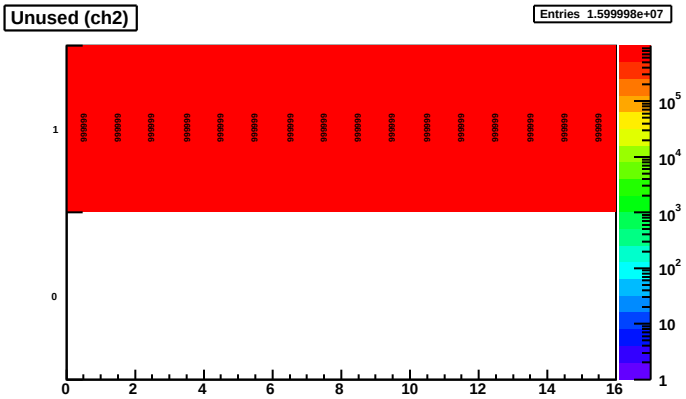

Barrel Jet Patches
Entries 1.799998e+07
JP ADC
JP ID

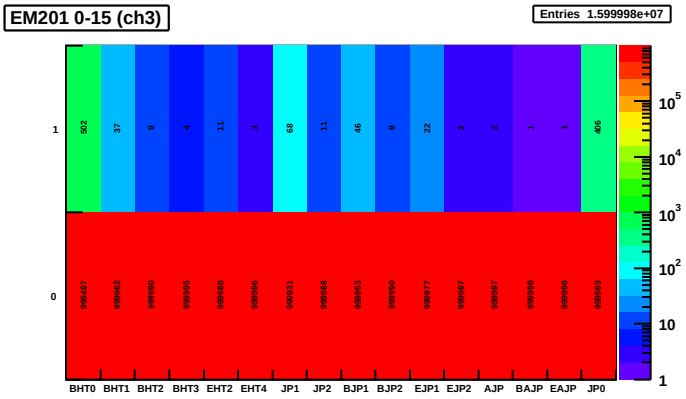

Endcap Jet Patches
Entries 5999994
JP ADC
JP ID

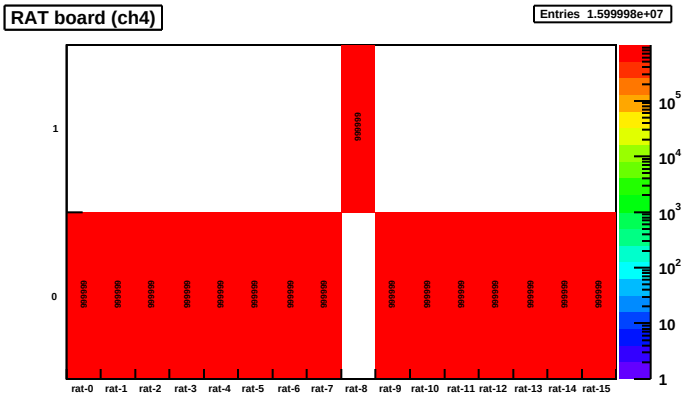

Hybrid Jet Patches
Entries 1999998
JP ADC
JP ID

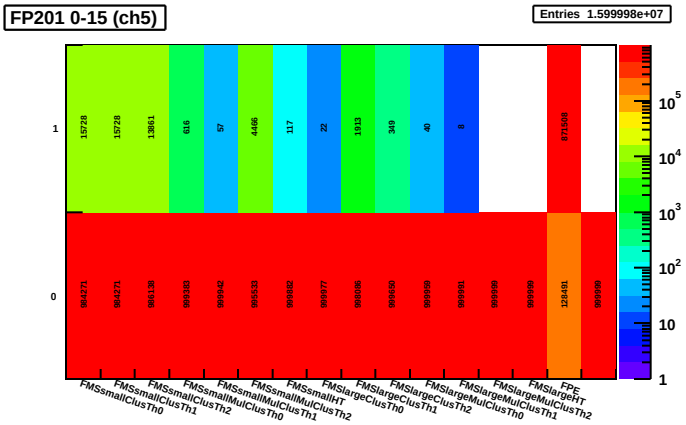

TF201 0-15 (ch0)
Entries 1.599998e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

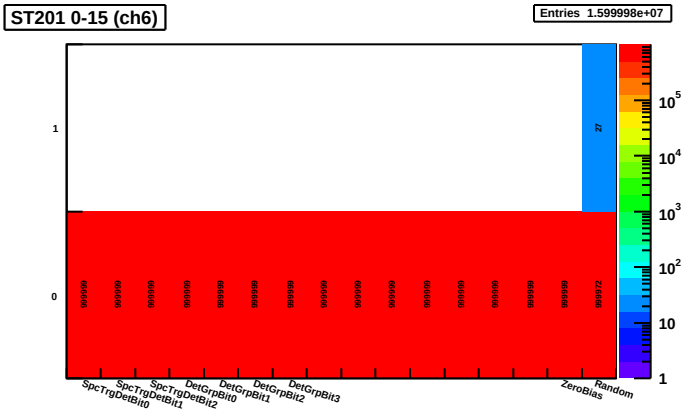

VT201 0-15 (ch1)
Entries 1.599998e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

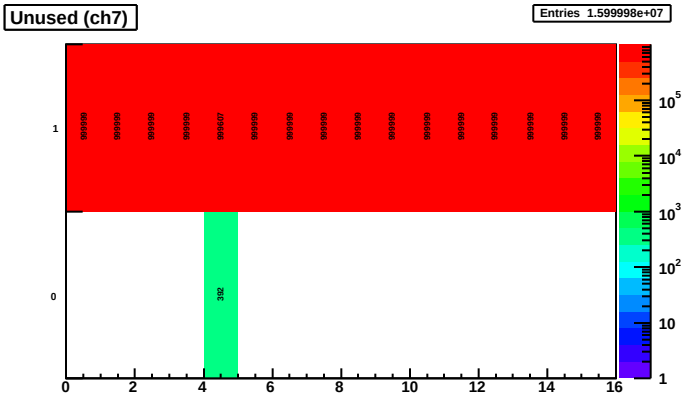

Unused (ch2)
Entries 1.599998e+07

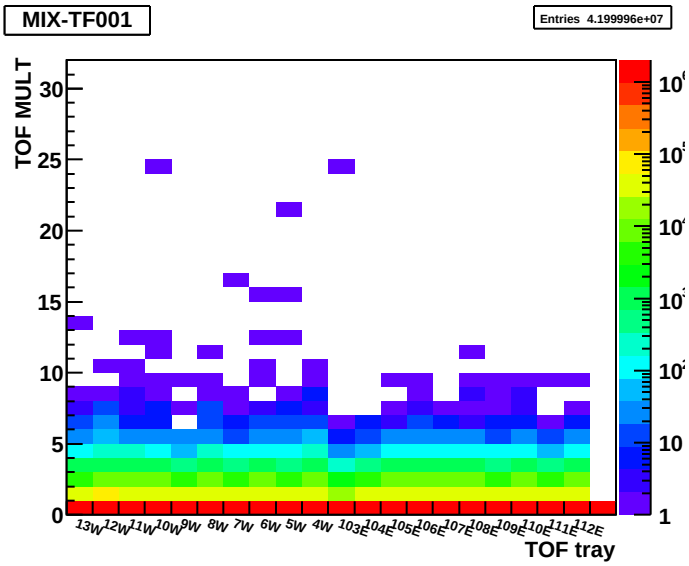

EM201 0-15 (ch3)
Entries 1.599998e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

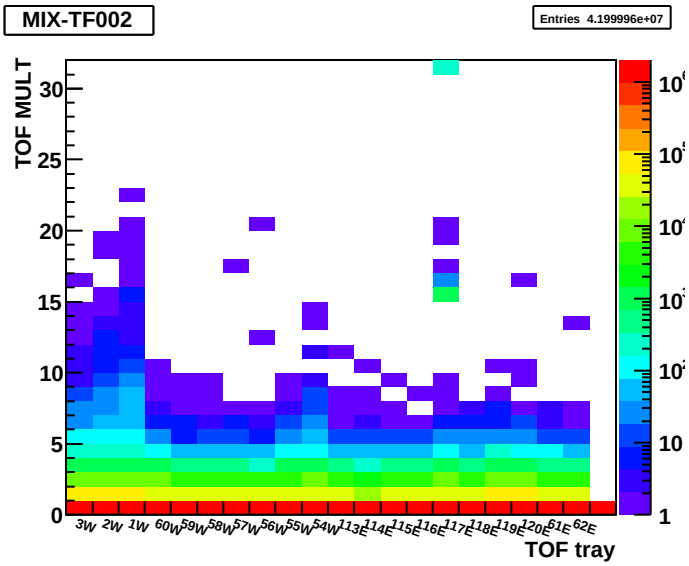

RAT board (ch4)
Entries 1.599998e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

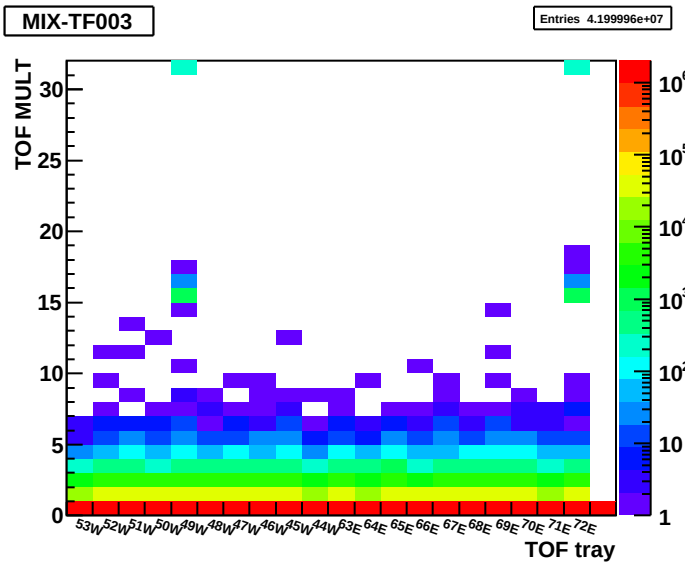

FP201 0-15 (ch5)
Entries 1.599998e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

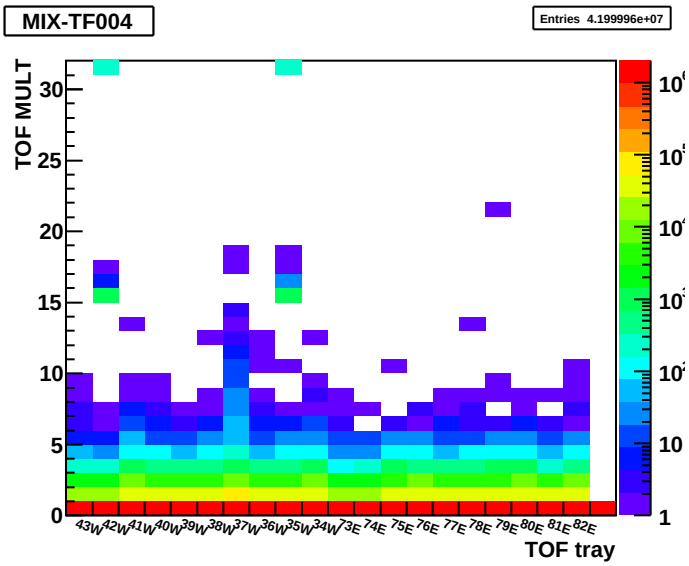

ST201 0-15 (ch6)
Entries 1.599998e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

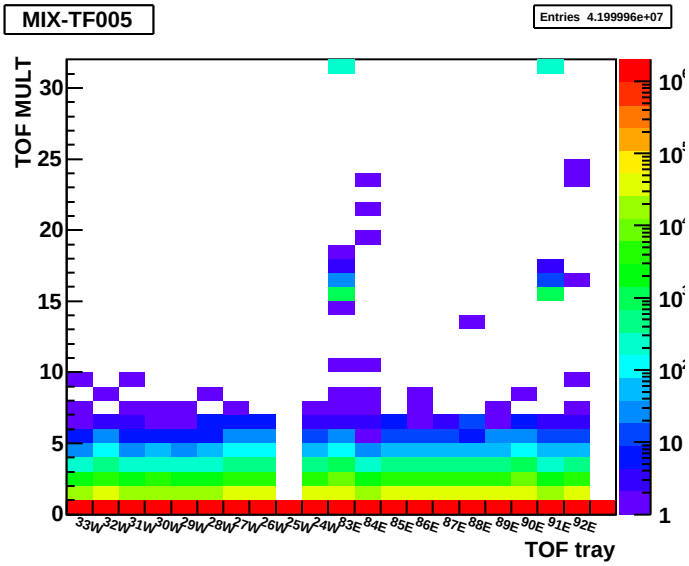

Unused (ch7)
Entries 1.599998e+07

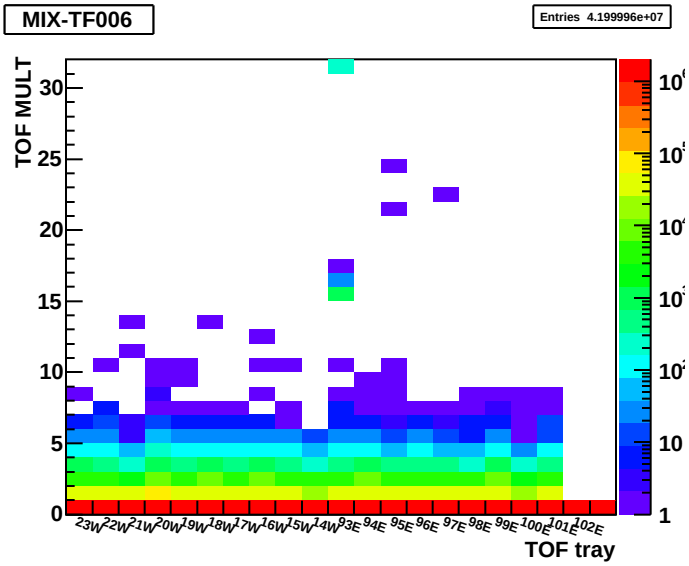

MIX-TF001
Entries 4.199996e+07
TOF MULT
TOF tray

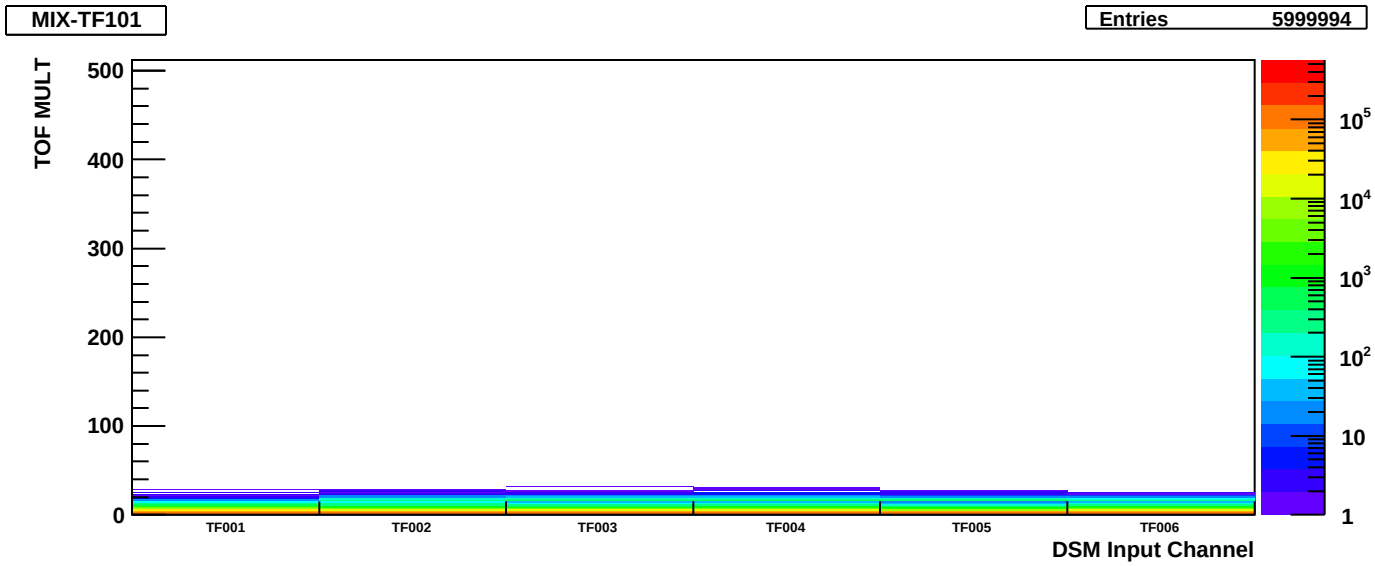

MIX-TF002
Entries 4.199996e+07
TOF MULT
TOF tray

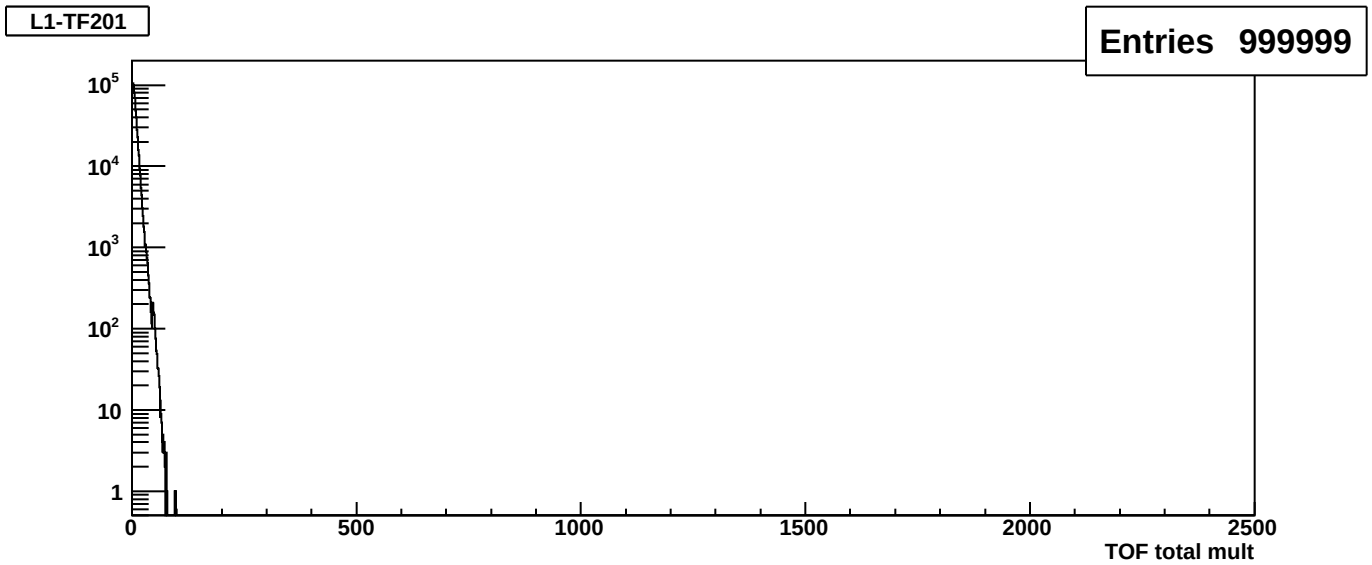

MIX-TF003
Entries 4.199996e+07
TOF MULT
TOF tray

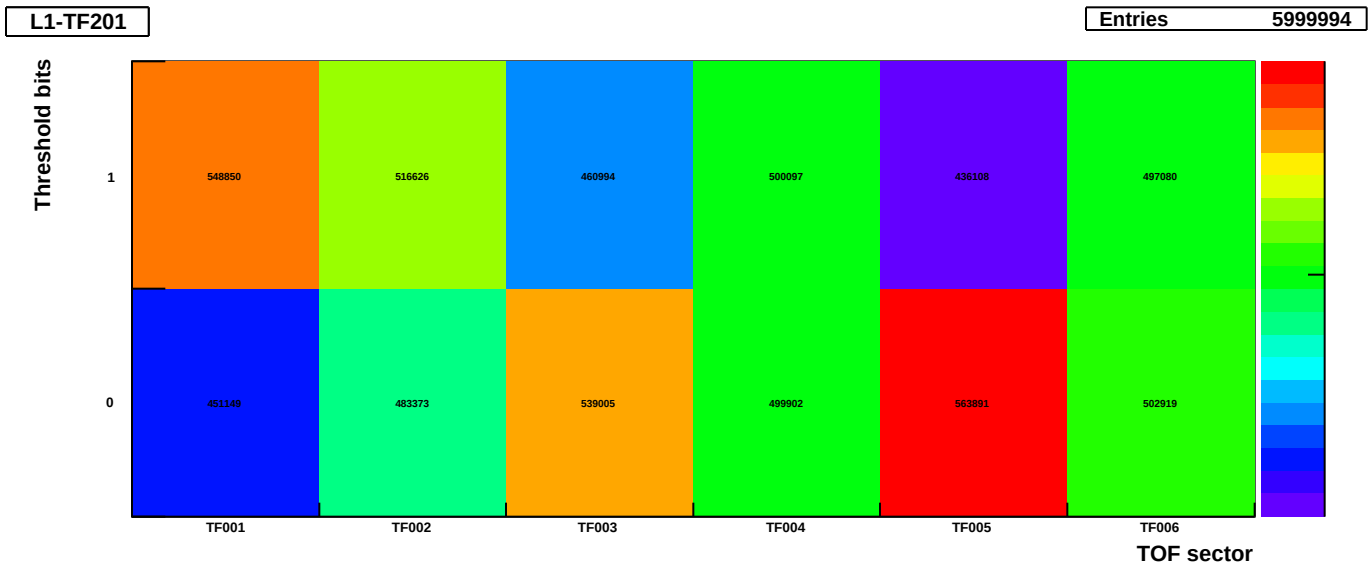

MIX-TF004
Entries 4.199996e+07
TOF MULT
TOF tray

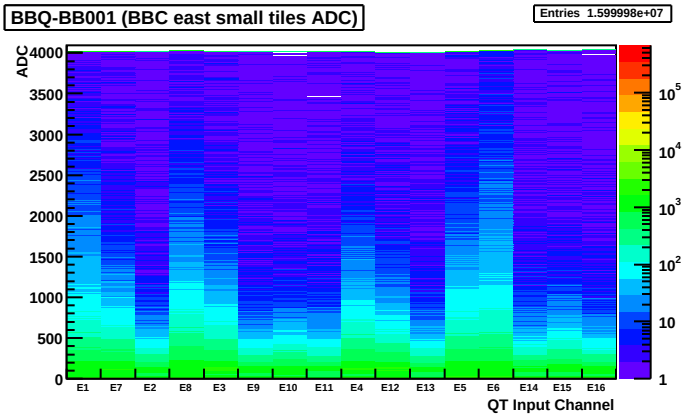

MIX-TF005
Entries 4.199996e+07
TOF MULT
TOF tray

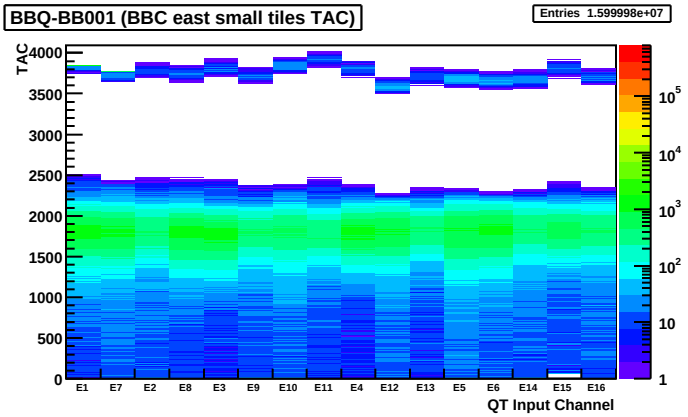

MIX-TF006
Entries 4.199996e+07
TOF MULT
TOF tray

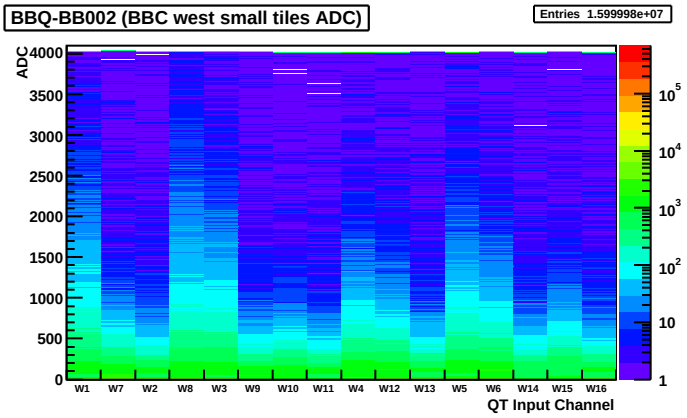

MIX-TF101
Entries 5999994
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

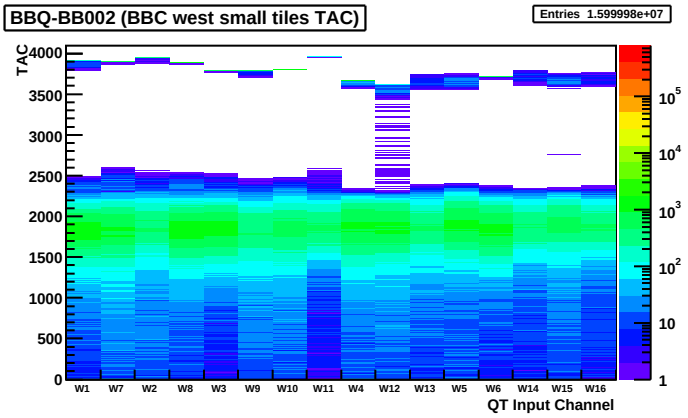

L1-TF201
Entries 999999
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

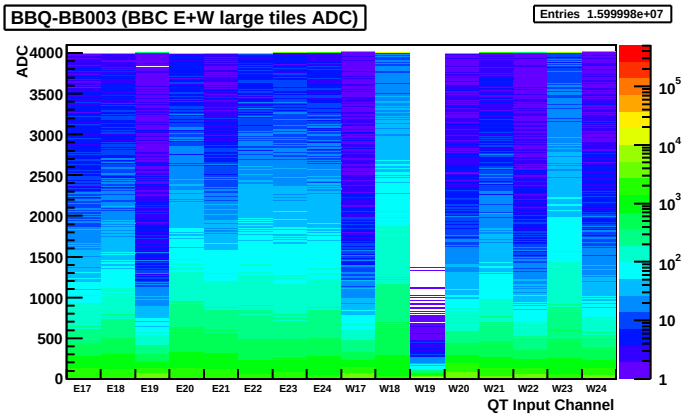

L1-TF201
Entries 5999994
Threshold bits
1
0
548850
516626
460994
500097
436108
497080
451149
483373
539005
499902
563891
502919
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

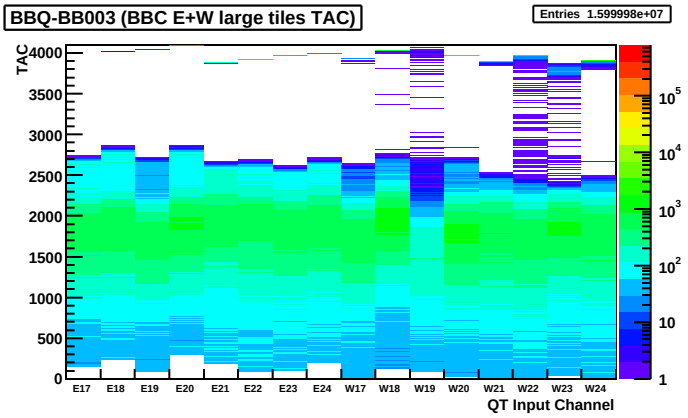

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.599998e+07
ADC
QT Input Channel

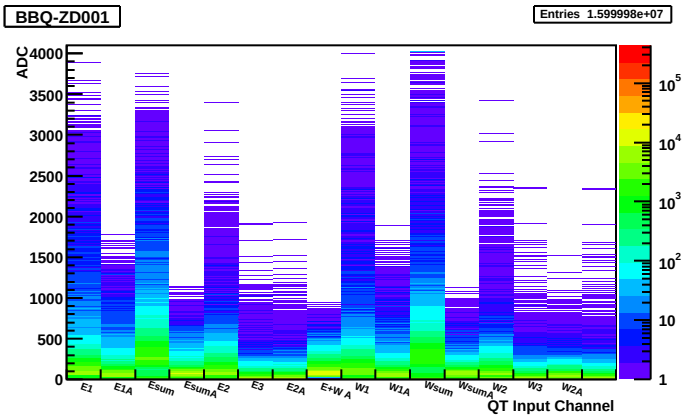

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.599998e+07
TAC
QT Input Channel

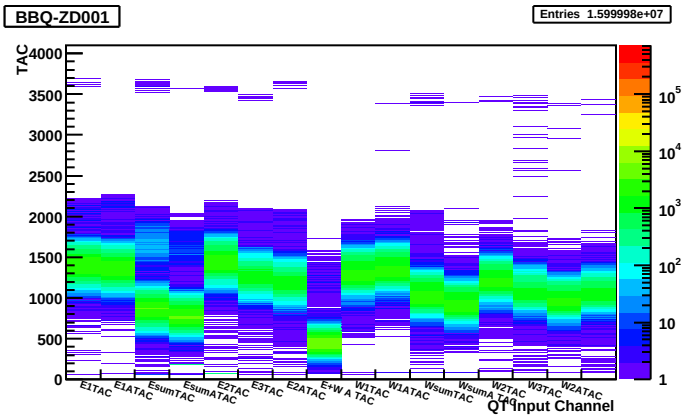

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.599998e+07
ADC
QT Input Channel

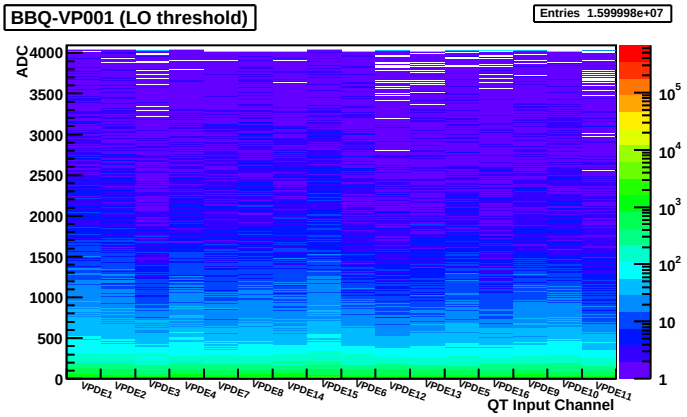

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.599998e+07
TAC
QT Input Channel

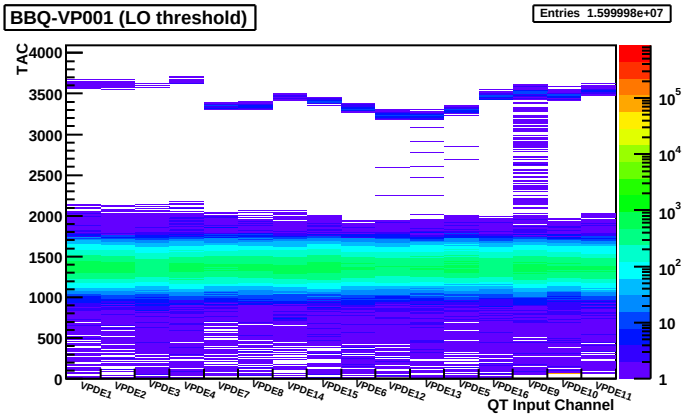

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.599998e+07
ADC
QT Input Channel

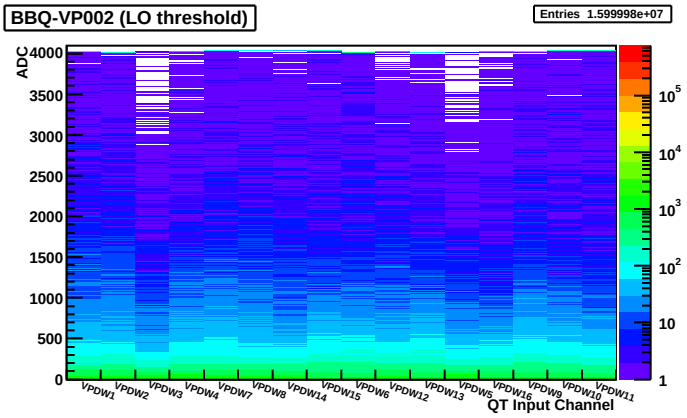

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.599998e+07
TAC
QT Input Channel

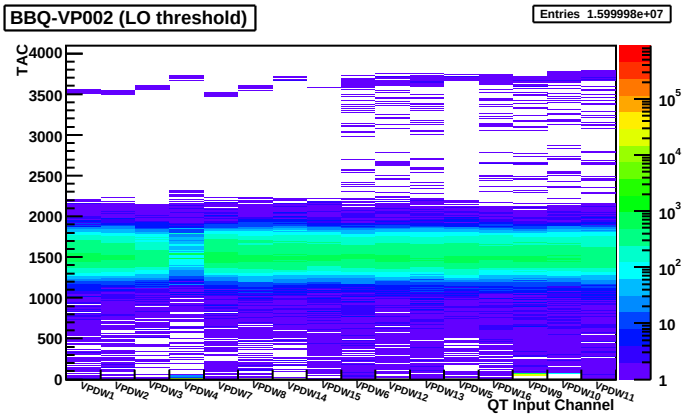

BBQ-ZD001
Entries 1.599998e+07
ADC
QT Input Channel

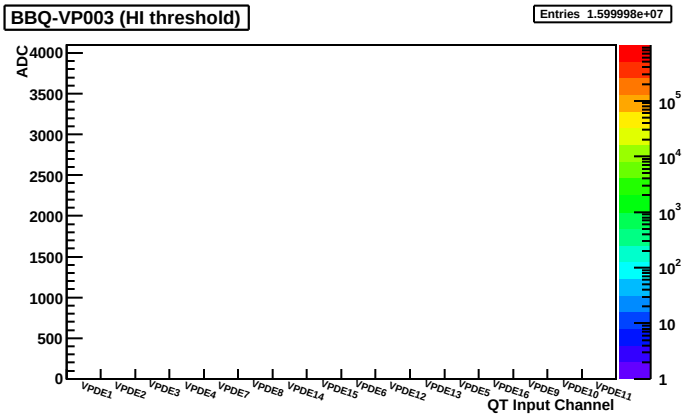

BBQ-ZD001
Entries 1.599998e+07
TAC
QT Input Channel

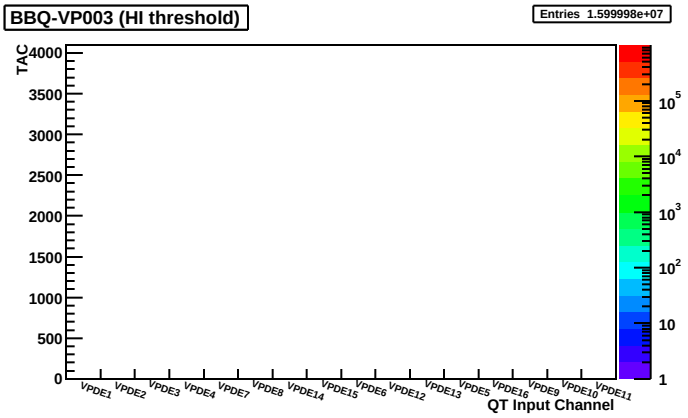

BBQ-VP001 (LO threshold)
Entries 1.599998e+07
ADC
QT Input Channel

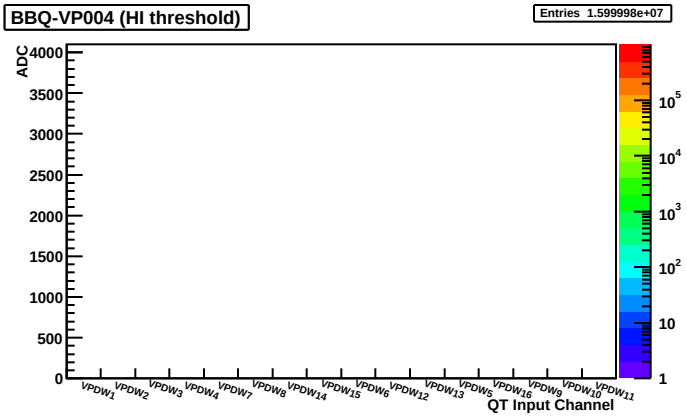

BBQ-VP001 (LO threshold)
Entries 1.599998e+07
TAC
QT Input Channel

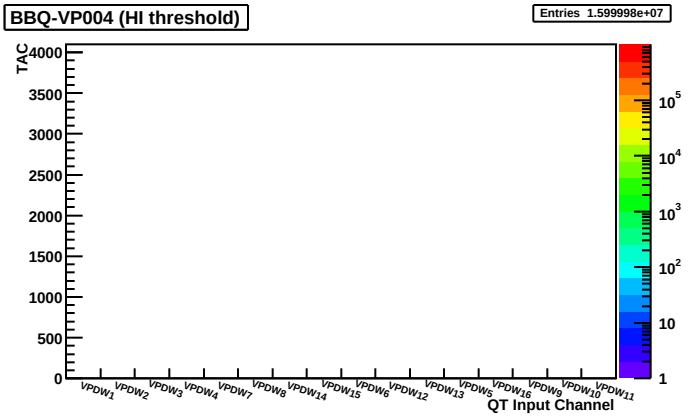

BBQ-VP002 (LO threshold)
Entries 1.599998e+07
ADC
QT Input Channel

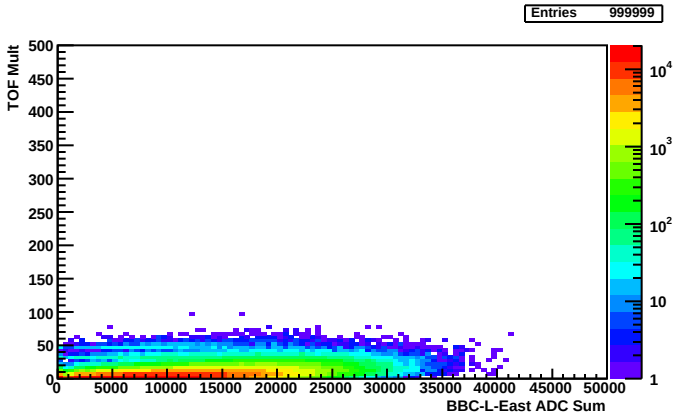

BBQ-VP002 (LO threshold)
Entries 1.599998e+07
TAC
QT Input Channel

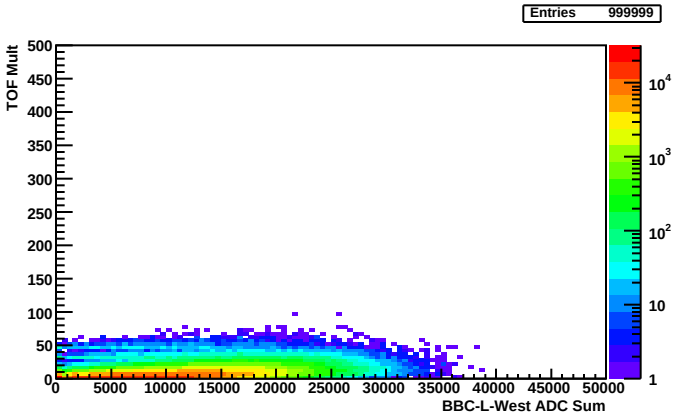

BBQ-VP003 (HI threshold)
Entries 1.599998e+07
ADC
QT Input Channel

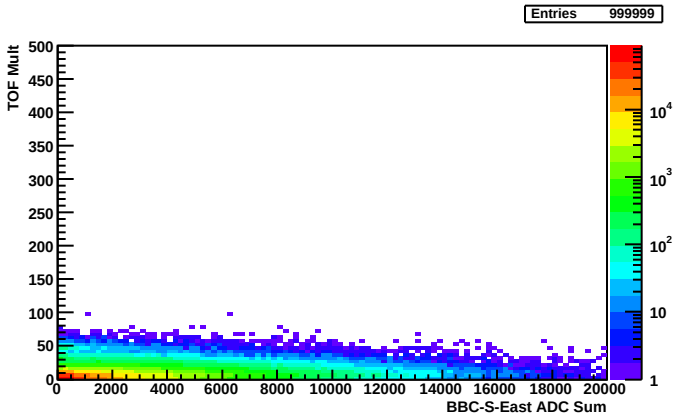

BBQ-VP003 (HI threshold)
Entries 1.599998e+07
TAC
QT Input Channel

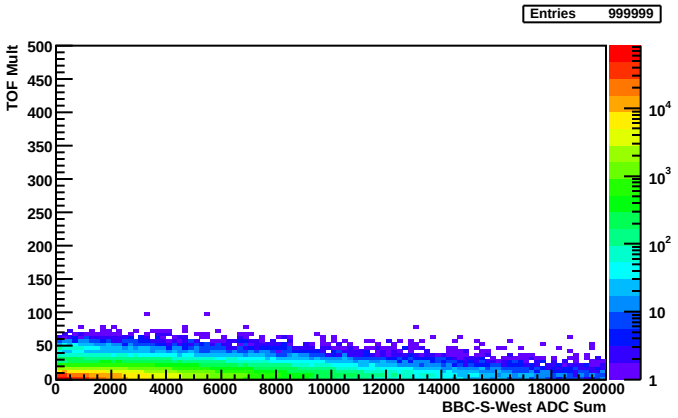

BBQ-VP004 (HI threshold)
Entries 1.599998e+07
ADC
QT Input Channel

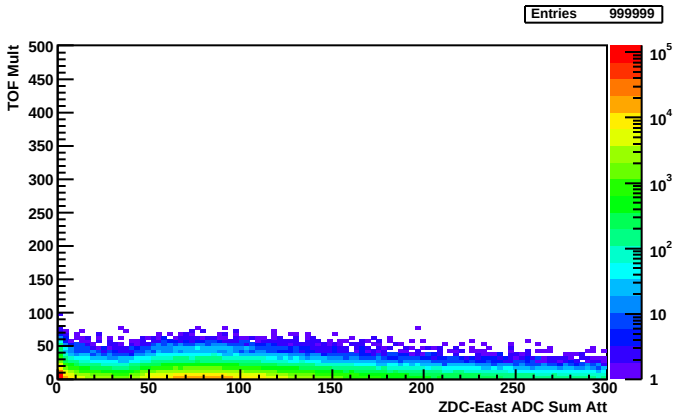

BBQ-VP004 (HI threshold)
Entries 1.599998e+07
TAC
QT Input Channel

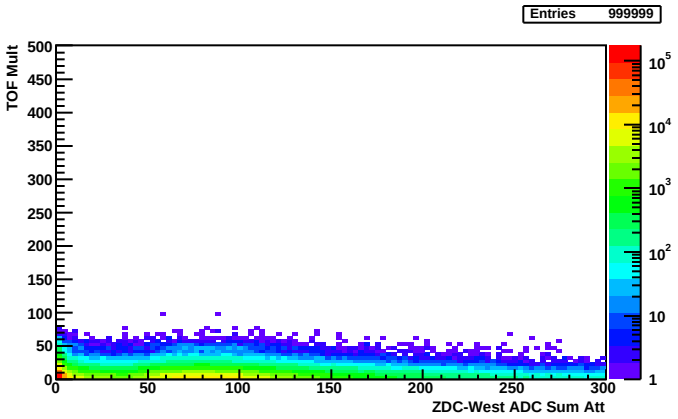

Entries 999999
TOF Mult
BBC-L-East ADC Sum

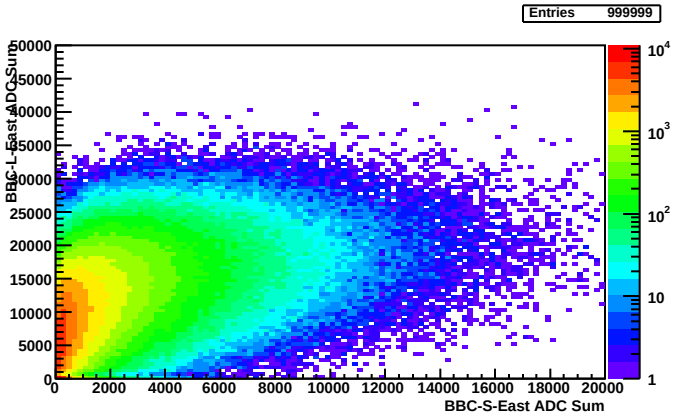

Entries 999999
TOF Mult
BBC-L-West ADC Sum

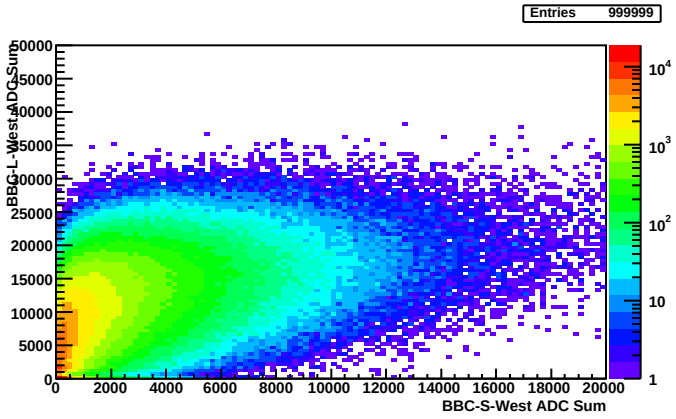

Entries 999999
TOF Mult
BBC-S-East ADC Sum

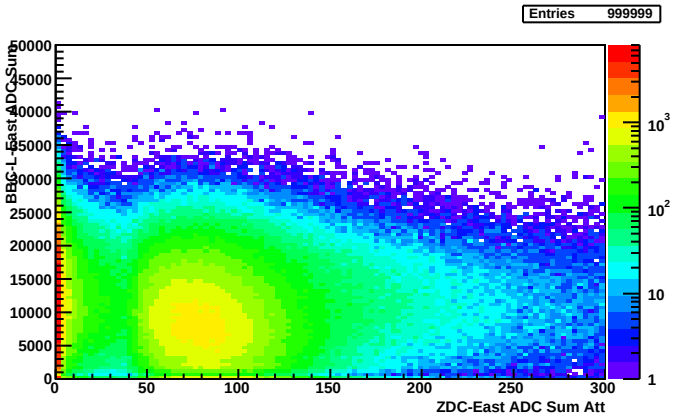

Entries 999999
TOF Mult
BBC-S-West ADC Sum

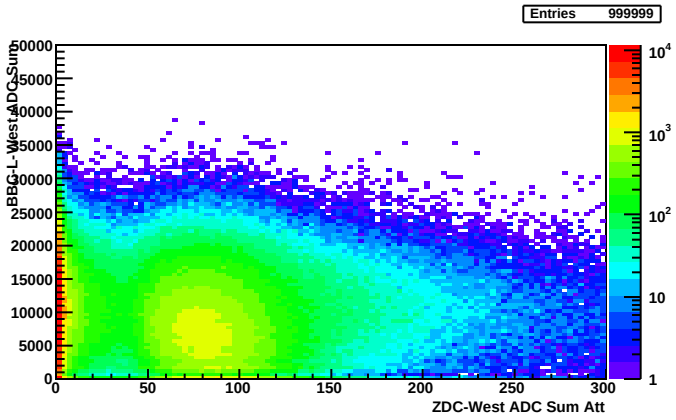

Entries 999999
TOF Mult
ZDC-East ADC Sum Att

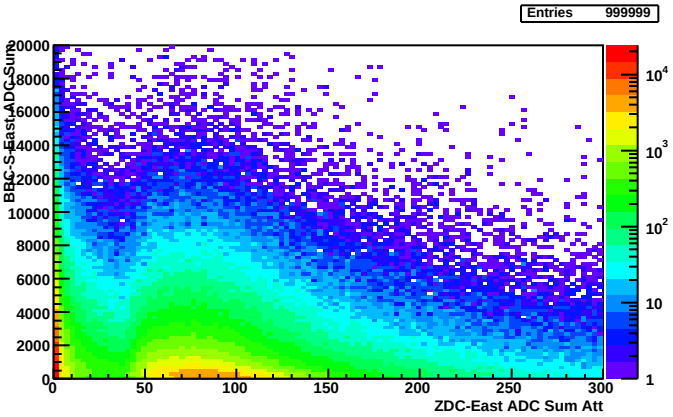

Entries 999999
TOF Mult
ZDC-West ADC Sum Att

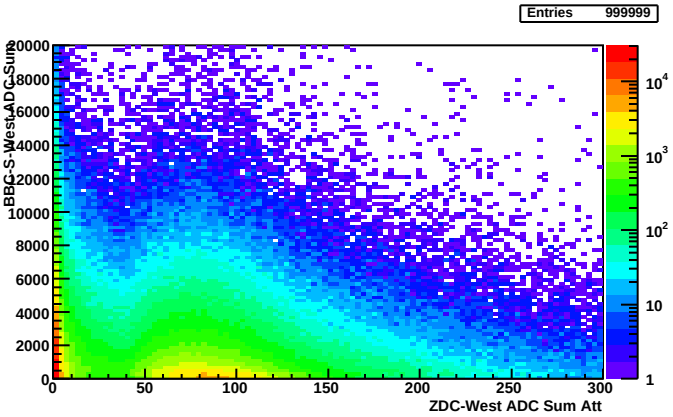

Entries 999999
BBC-L-East ADC Sum
BBC-S-East ADC Sum

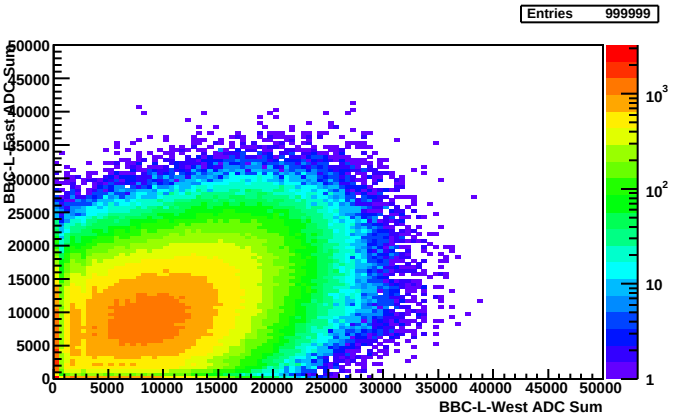

Entries 999999
BBC-L-West ADC Sum
BBC-S-West ADC Sum

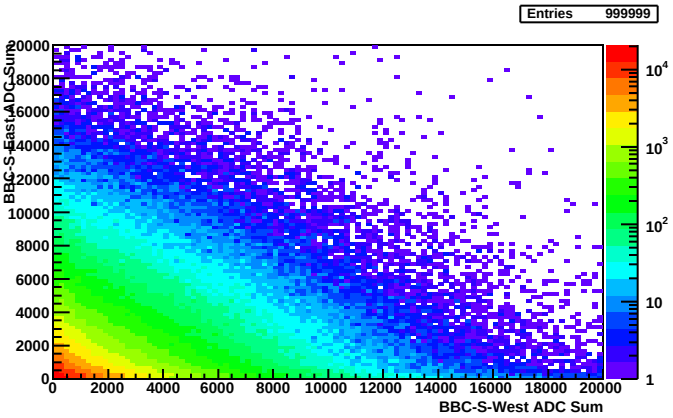

Entries 999999
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

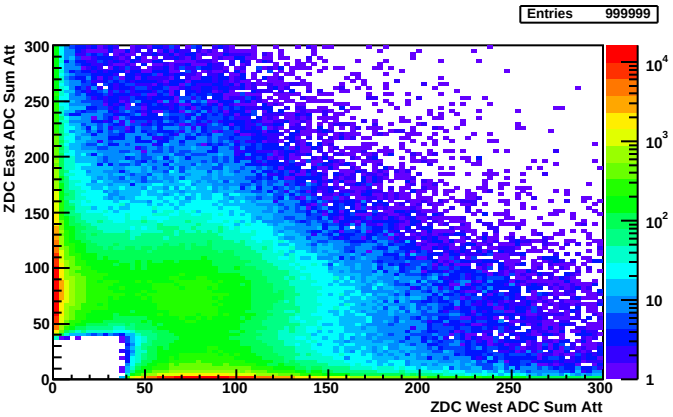

Entries 999999
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

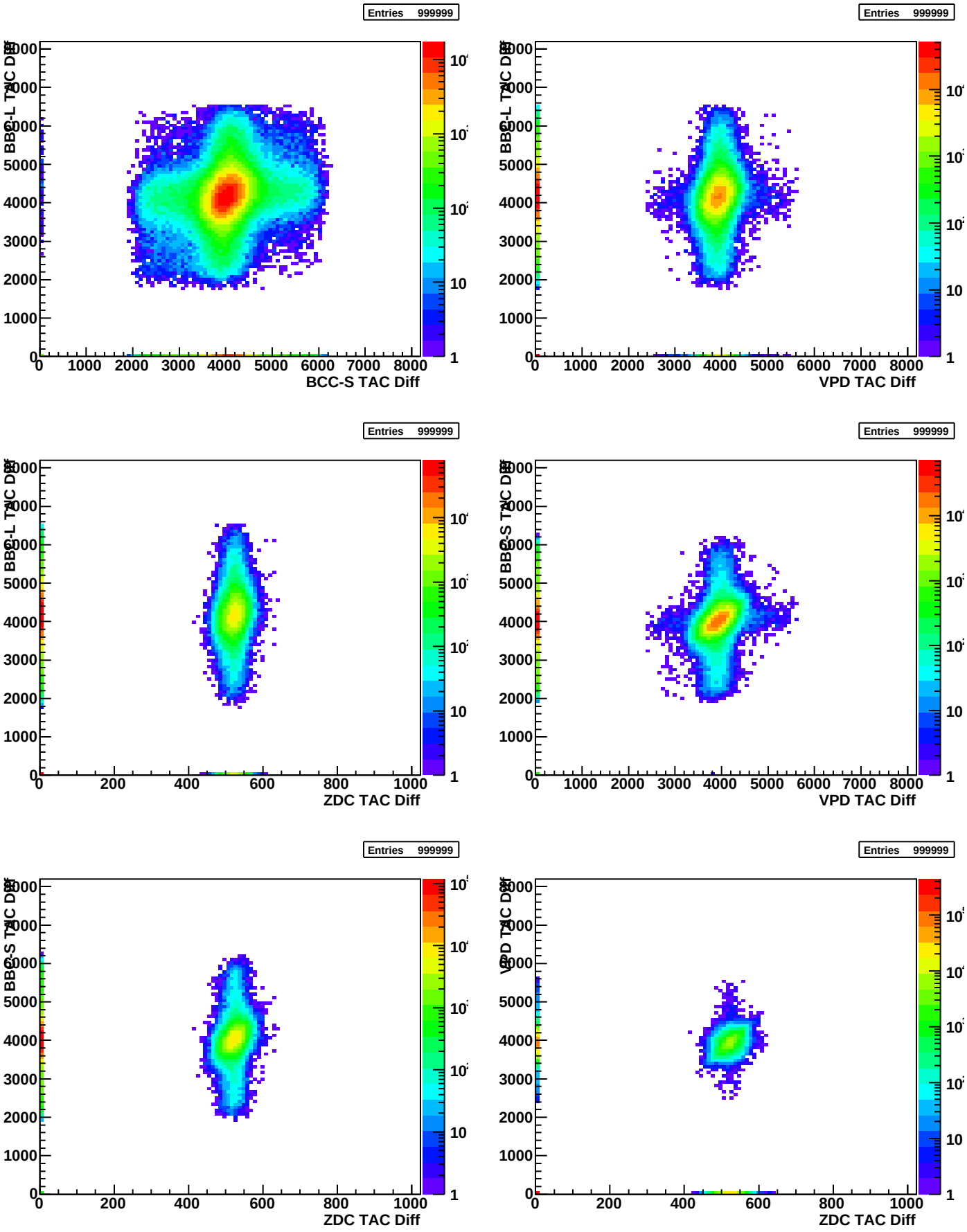

Entries 999999
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

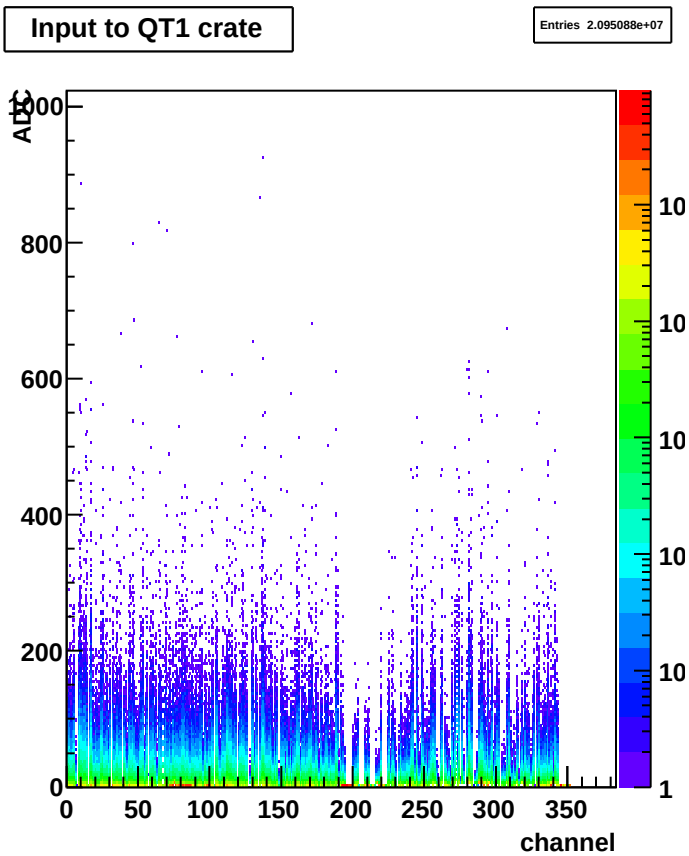

Entries 999999
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

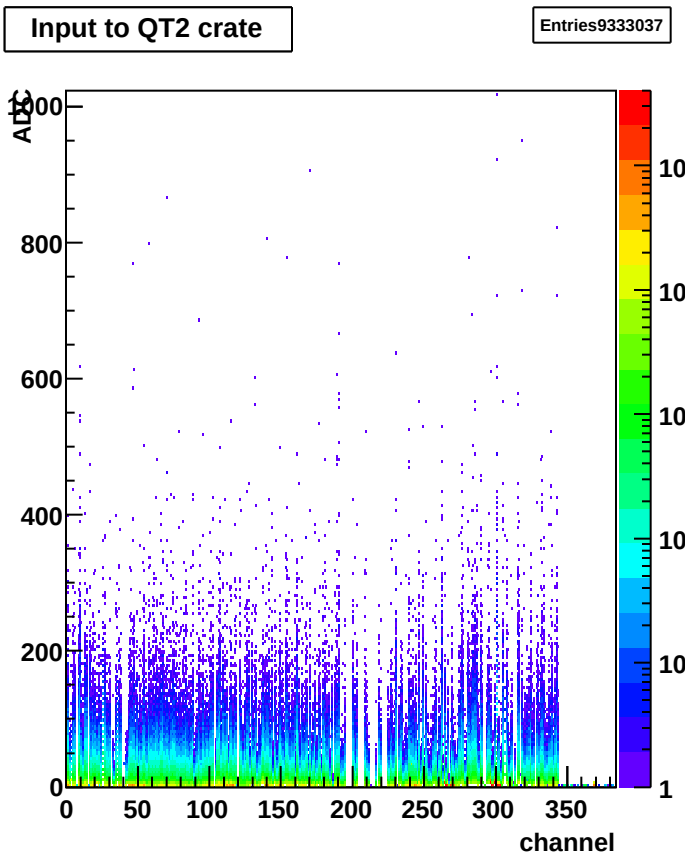

Entries 999999
BBC-L-East ADC Sum
BBC-L-West ADC Sum

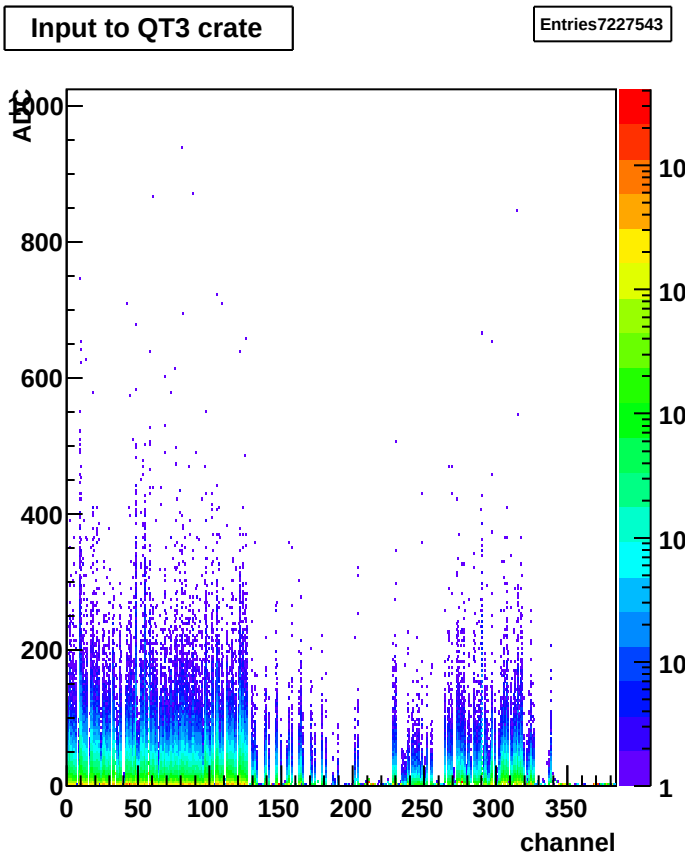

Entries 999999
BBC-S-East ADC Sum
BBC-S-West ADC Sum

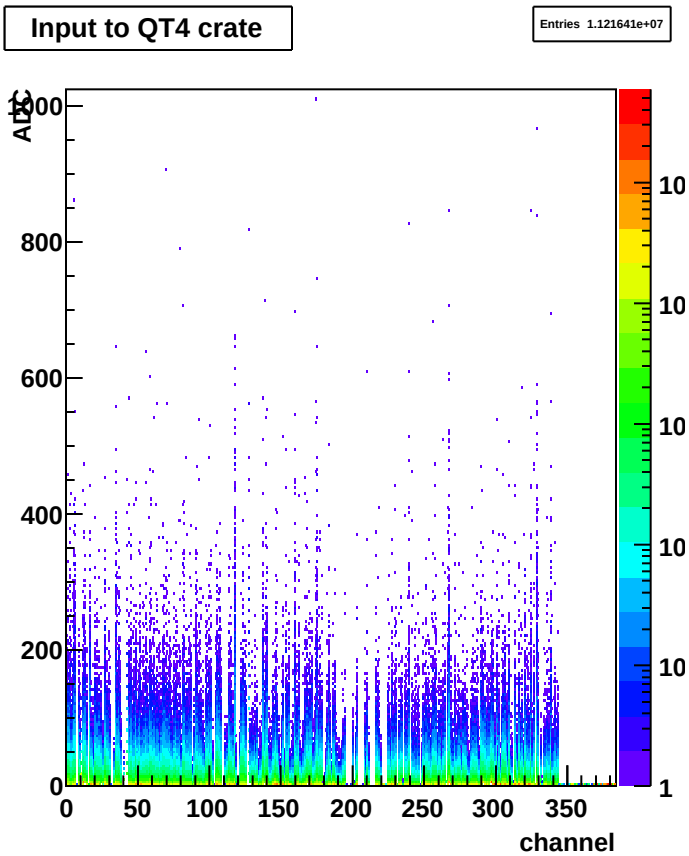

Entries 999999
ZDC East ADC Sum Att
ZDC West ADC Sum Att

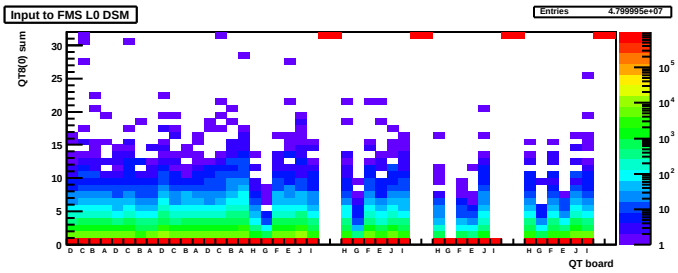

Entries 999999
BBC-L TAC Diff
BCC-S TAC Diff
Entries 999999
BBC-L TAC Diff
VPD TAC Diff
Entries 999999
BBC-L TAC Diff
ZDC TAC Diff
Entries 999999
BBC-S TAC Diff
VPD TAC Diff
Entries 999999
BBC-S TAC Diff
ZDC TAC Diff
Entries 999999
VPD TAC Diff
ZDC TAC Diff

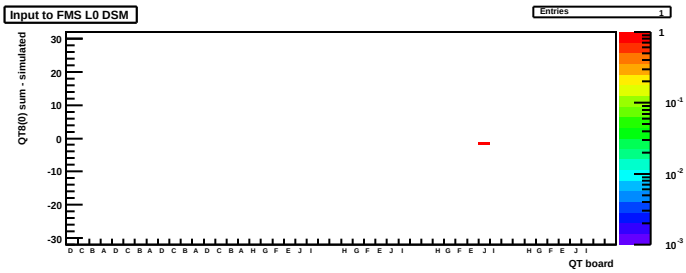

Input to QT1 crate
Entries 2.095088e+07
ADC
channel

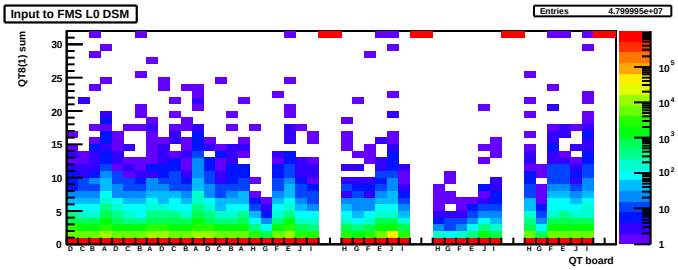

Input to QT2 crate
Entries9333037
ADC
channel

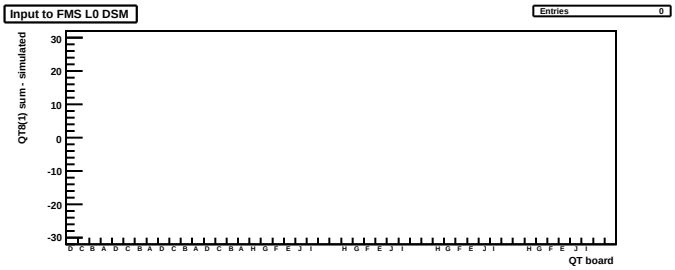

Input to QT3 crate
Entries7227543
ADC
channel

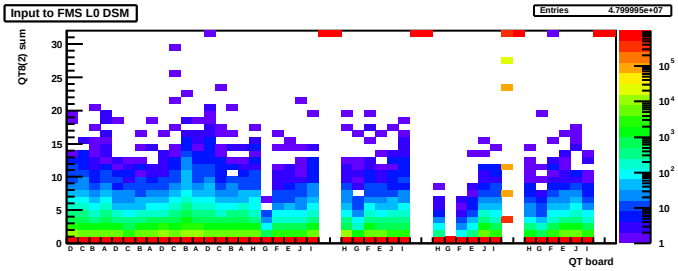

Input to QT4 crate
Entries 1.121641e+07
ADC
channel

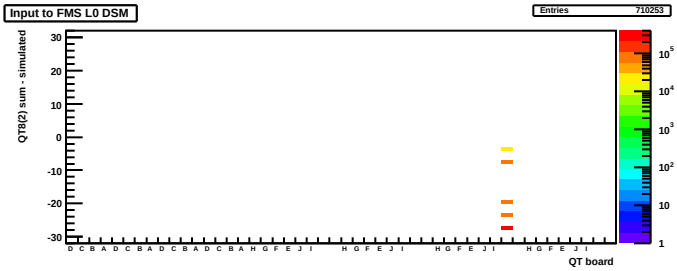

Input to FMS L0 DSM
Entries 4.799995e+07
QT8(0) sum
QT board

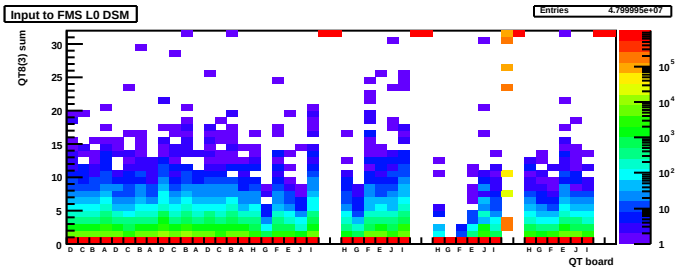

Input to FMS L0 DSM
Entries 1
QT8(0) sum - simulated
QT board

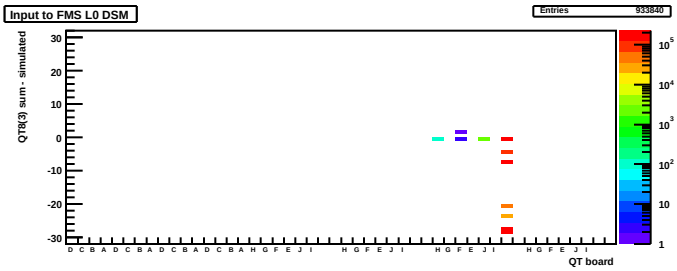

Input to FMS L0 DSM
Entries 4.799995e+07
QT8(1) sum
QT board

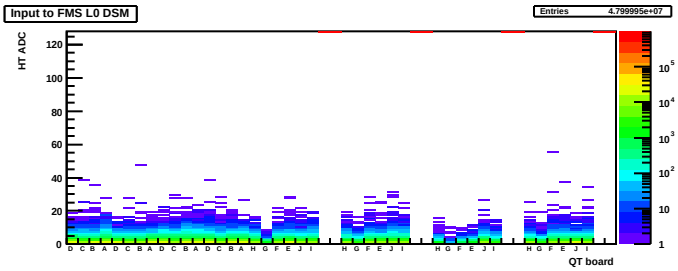

Input to FMS L0 DSM
Entries 0
QT8(1) sum - simulated
QT board

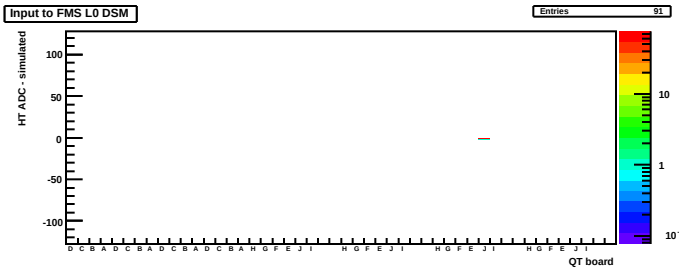

Input to FMS L0 DSM
Entries 4.799995e+07
QT8(2) sum
QT board

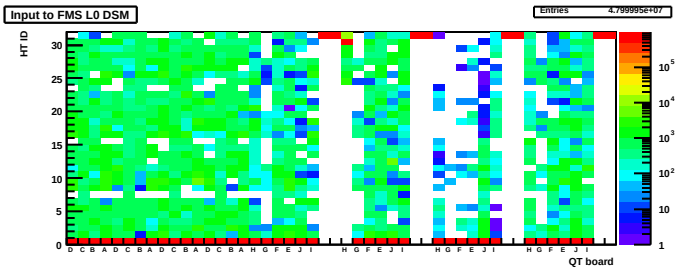

Input to FMS L0 DSM
Entries 710253
QT8(2) sum - simulated
QT board

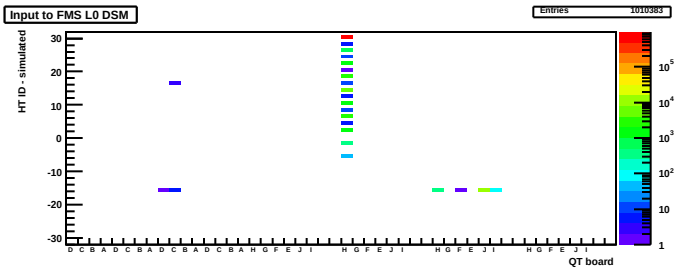

Input to FMS L0 DSM
Entries 4.799995e+07
QT8(3) sum
QT board

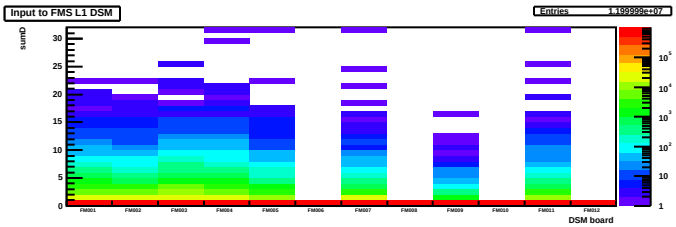

Input to FMS L0 DSM
Entries 933840
QT8(3) sum - simulated
QT board

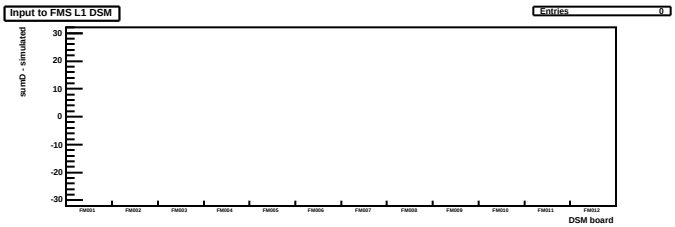

Input to FMS L0 DSM
Entries 4.799995e+07
HT ADC
QT board

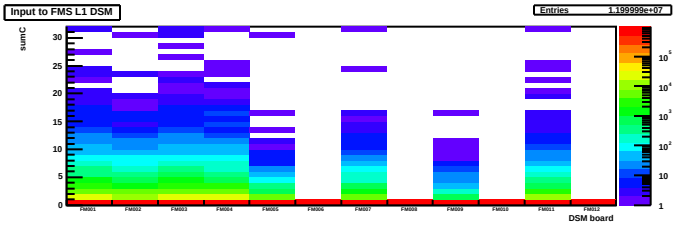

Input to FMS L0 DSM
Entries 91
HT ADC - simulated
QT board

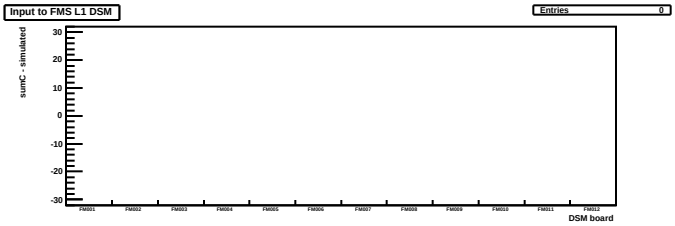

Input to FMS L0 DSM
Entries 4.799995e+07
HT ID
QT board

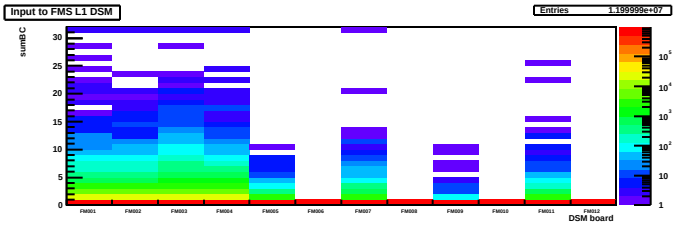

Input to FMS L0 DSM
Entries 1010383
HT ID - simulated
QT board

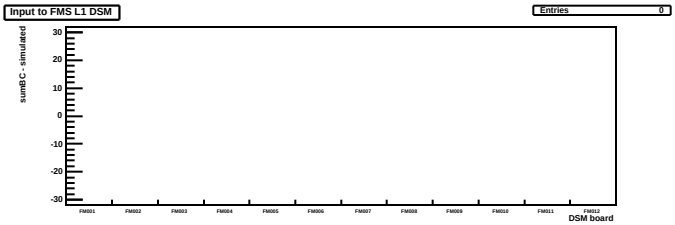

Input to FMS L1 DSM
Entries 1.199999e+07
sumD
DSM board

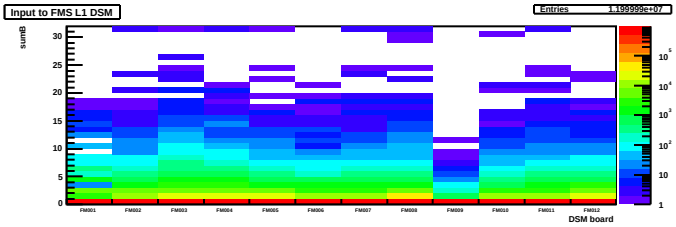

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

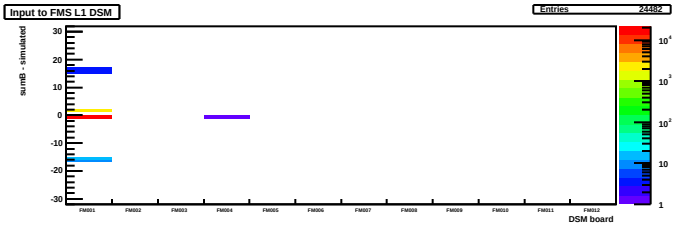

Input to FMS L1 DSM
Entries 1.199999e+07
sumC
DSM board

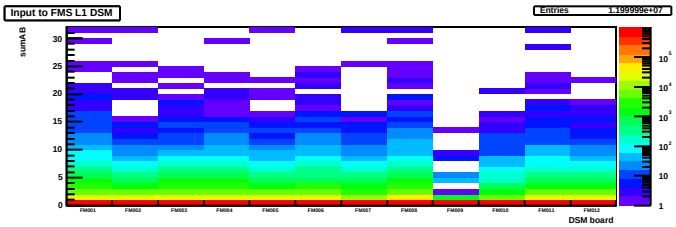

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

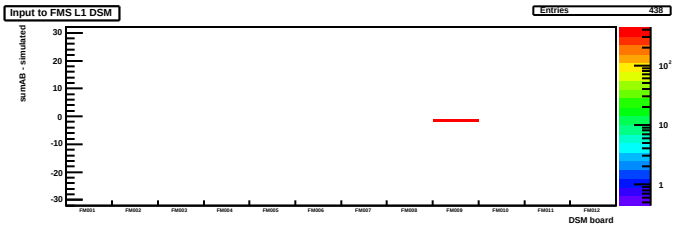

Input to FMS L1 DSM
Entries 1.199999e+07
sumBC
DSM board

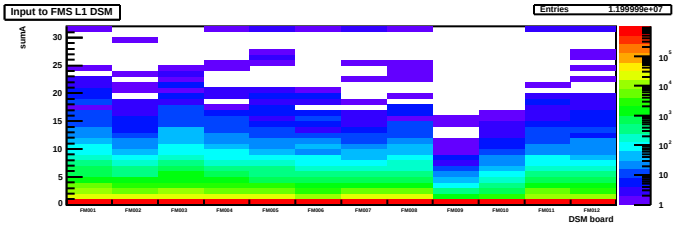

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

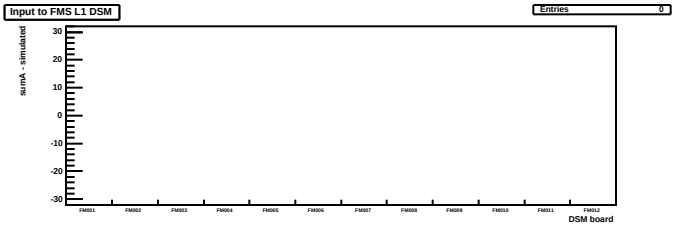

Input to FMS L1 DSM
Entries 1.199999e+07
sumB
DSM board

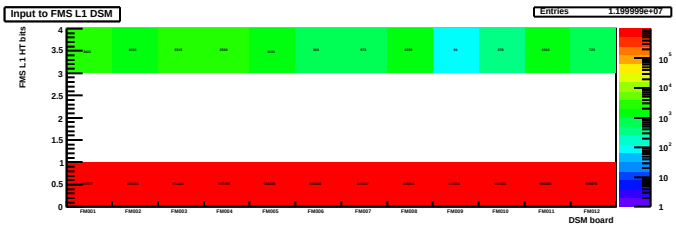

Input to FMS L1 DSM
Entries 24482
sumB - simulated
DSM board

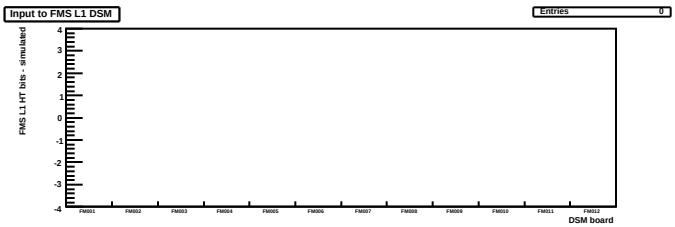

Input to FMS L1 DSM
Entries 1.199999e+07
sumAB
DSM board

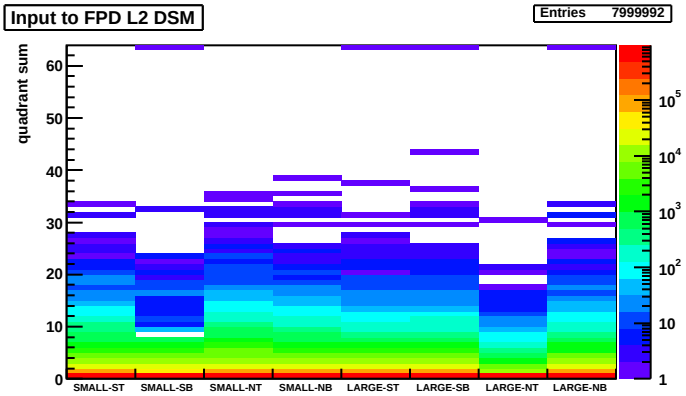

Input to FMS L1 DSM
Entries 438
sumAB - simulated
DSM board

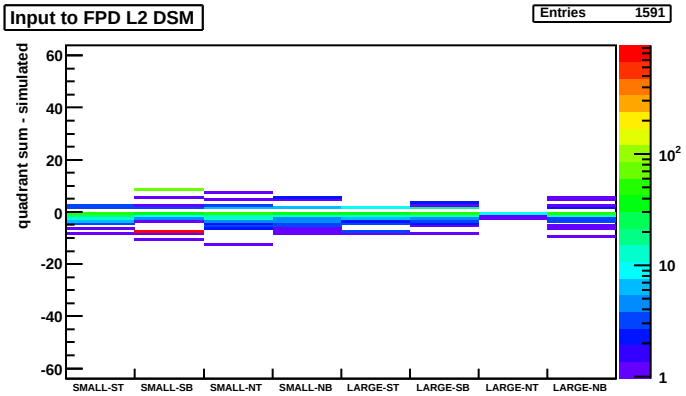

Input to FMS L1 DSM
Entries 1.199999e+07
sumA
DSM board

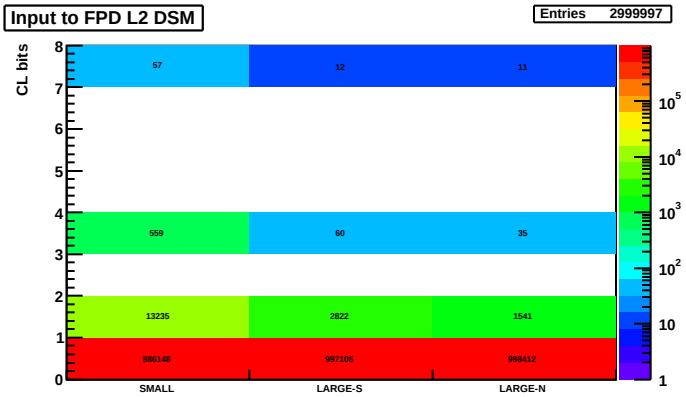

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

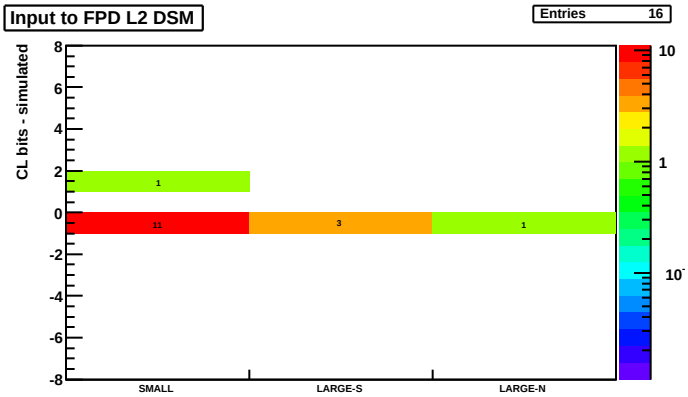

Input to FMS L1 DSM
Entries 1.199999e+07
FMS L1 HT bits
DSM board

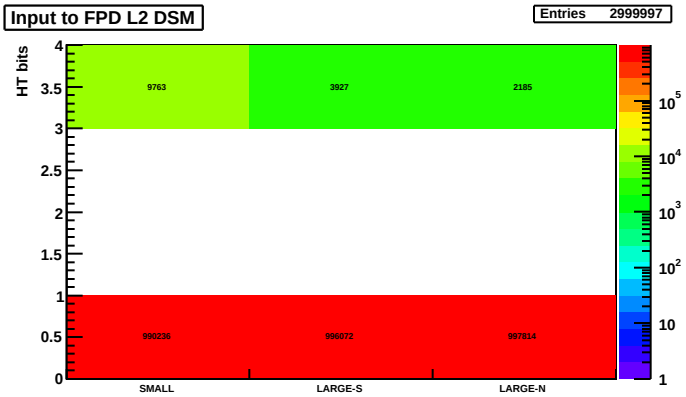

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

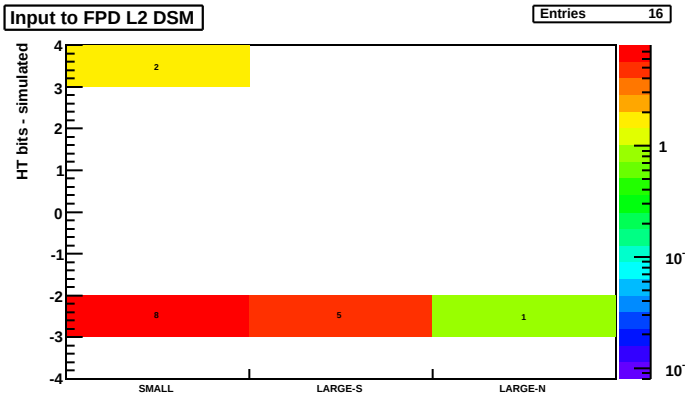

Input to FPD L2 DSM
Entries 7999992
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

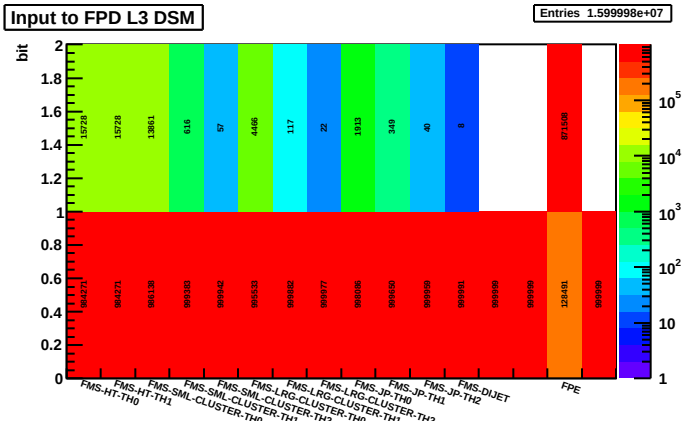

Input to FPD L2 DSM
Entries 1591
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

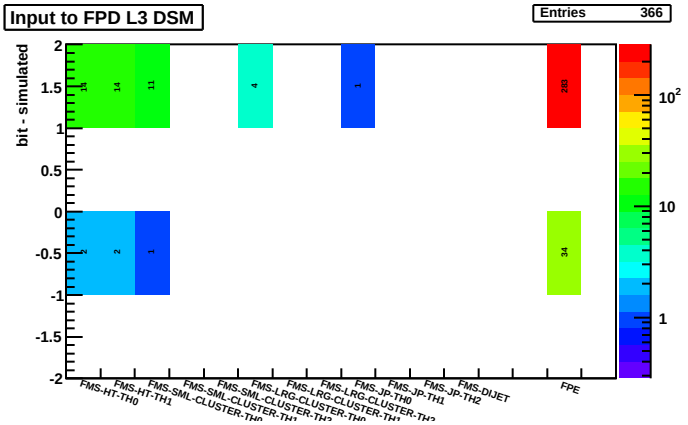

Input to FPD L2 DSM
Entries 2999997
CL bits
57
12
11
559
60
35
13235
2822
1541
986148
997105
998412
SMALL
LARGE-S
LARGE-N

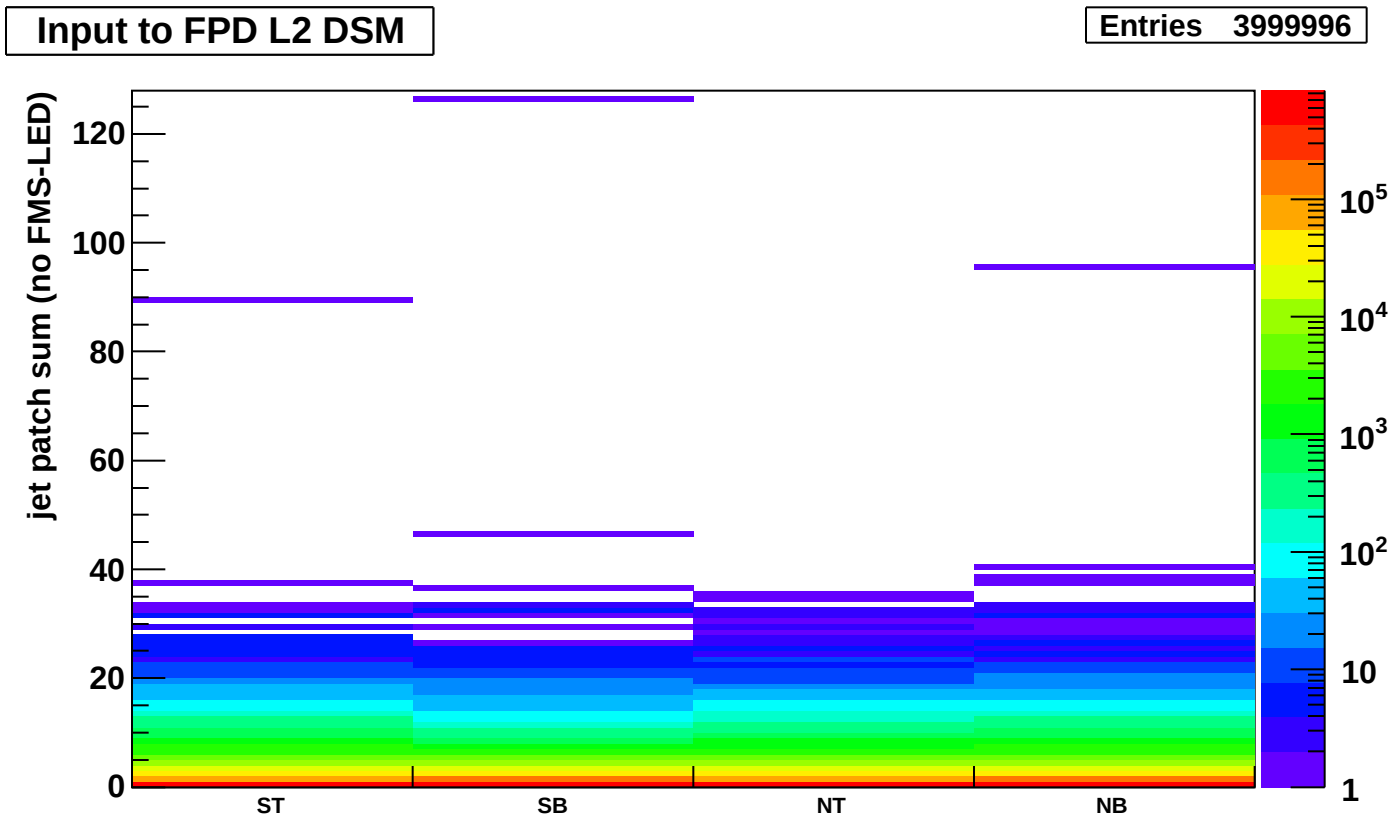

Input to FPD L2 DSM
Entries 16
CL bits - simulated
1
11
3
1
SMALL
LARGE-S
LARGE-N

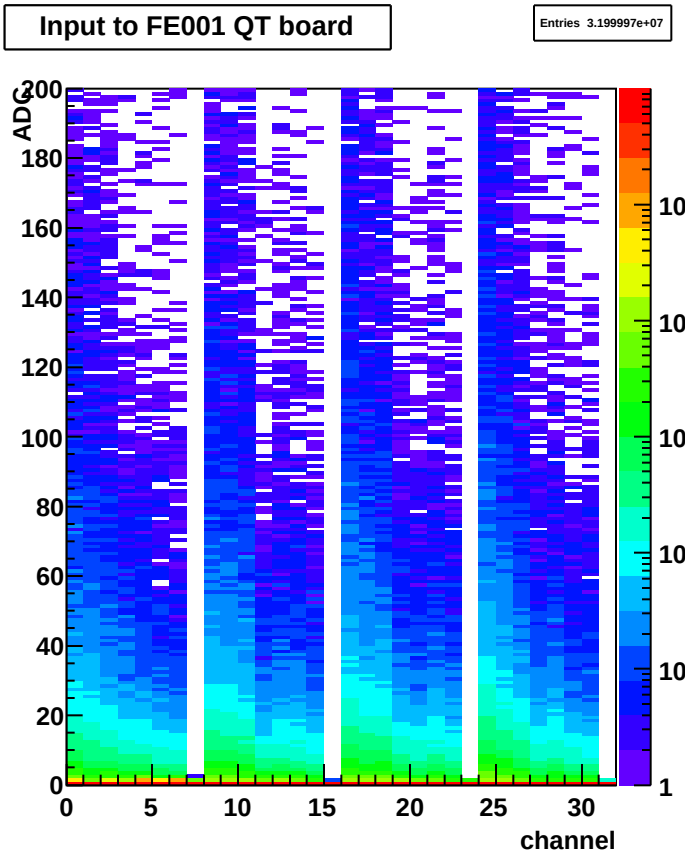

Input to FPD L2 DSM
Entries 2999997
HT bits
9763
3927
2185
990236
996072
997814
SMALL
LARGE-S
LARGE-N

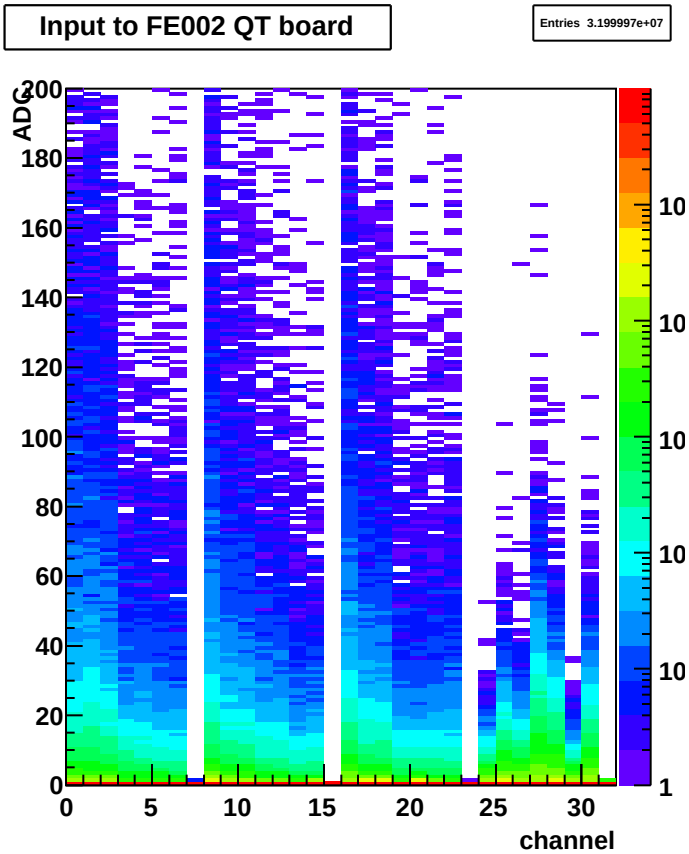

Input to FPD L2 DSM
Entries 16
HT bits - simulated
2
8
5
1
SMALL
LARGE-S
LARGE-N

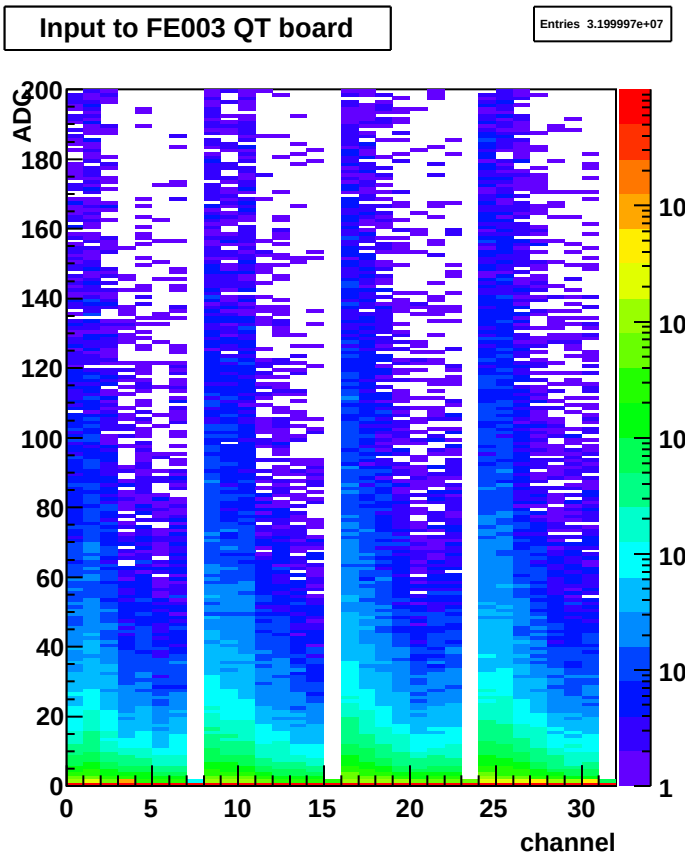

Input to FPD L3 DSM
Entries 1.599998e+07
bit
15728
15728
13861
616
57
4466
117
22
1913
349
40
8
871508
984271
984271
986138
999383
999942
999533
999932
999977
999086
999650
999959
999931
999999
999999
128491
999999
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

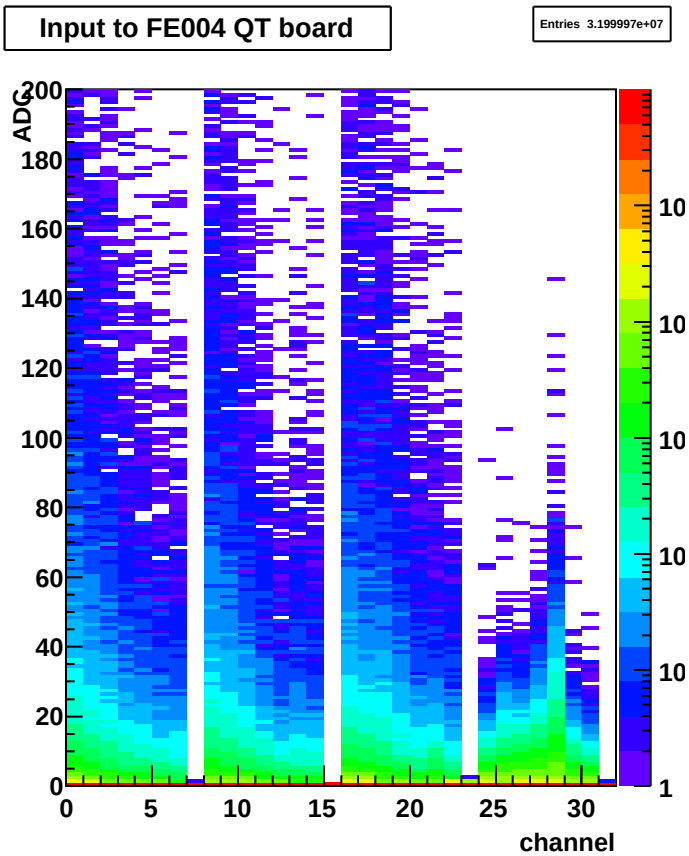

Input to FPD L3 DSM
Entries 366
bit - simulated
14
14
11
4
1
285
2
2
1
34
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

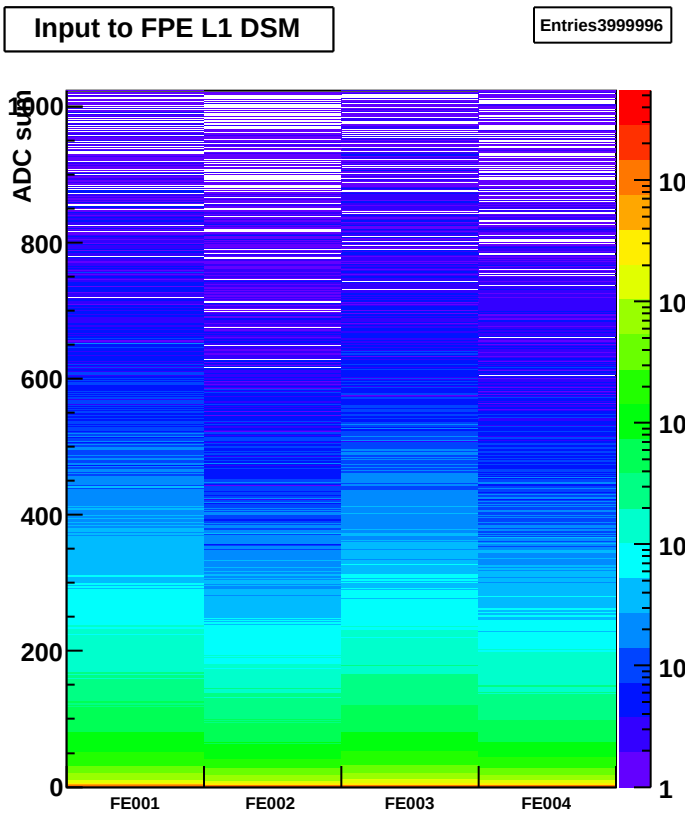

Input to FPD L2 DSM
Entries 3999996
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

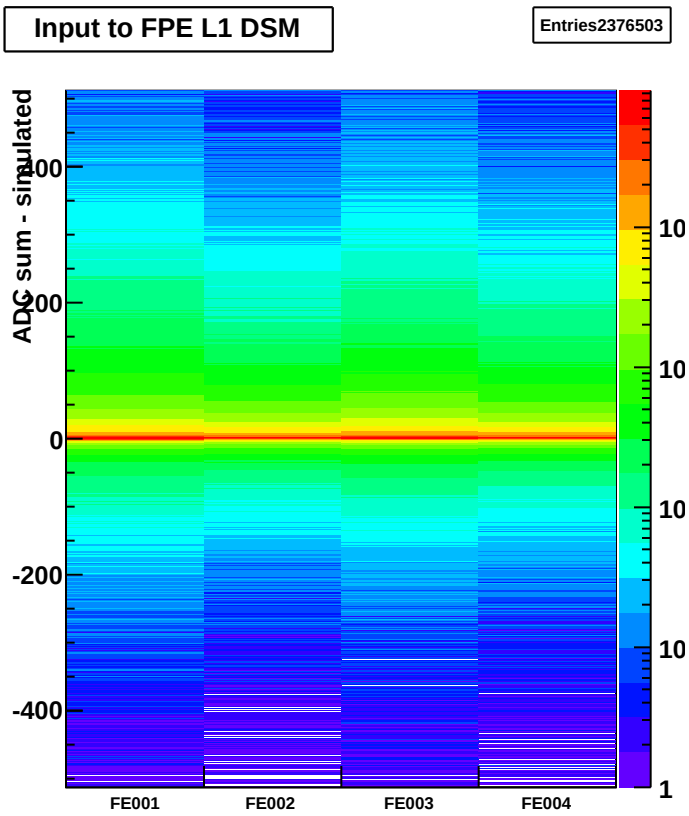

Input to FE001 QT board
Entries 3.199997e+07
ADC
channel

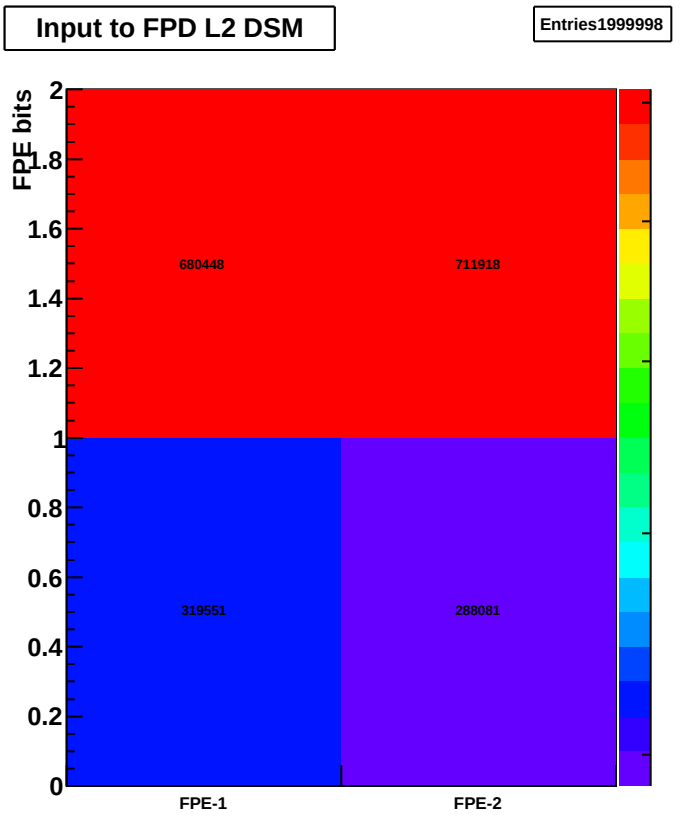

Input to FE002 QT board
Entries 3.199997e+07
ADC
channel

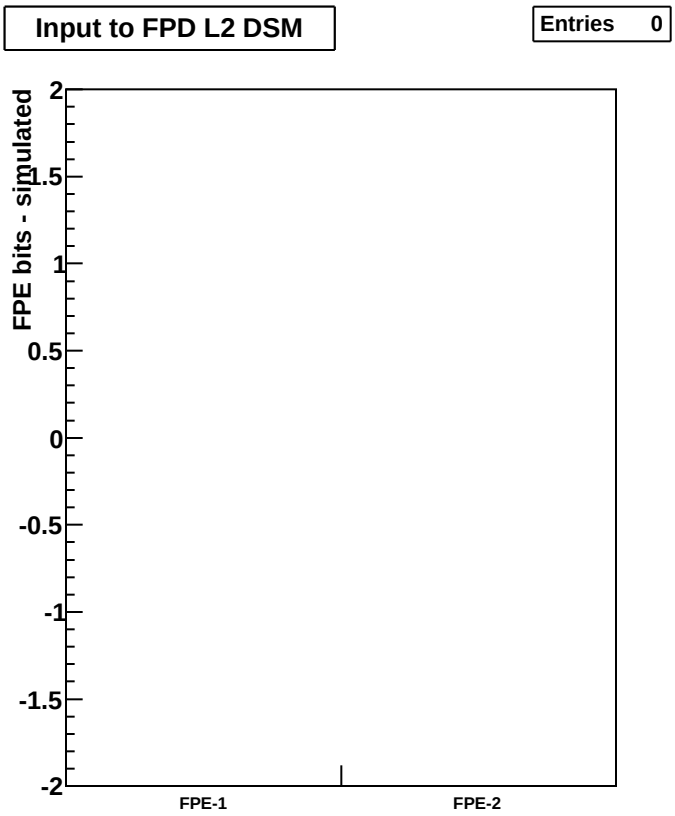

Input to FE003 QT board
Entries 3.199997e+07
ADC
channel


Input to FE004 QT board
Entries 3.199997e+07
ADC
channel


Input to FPE L1 DSM
Entries3999996
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries2376503
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPD L2 DSM
Entries1999998
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
680448
711918
319551
288081
FPE-1
FPE-2


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