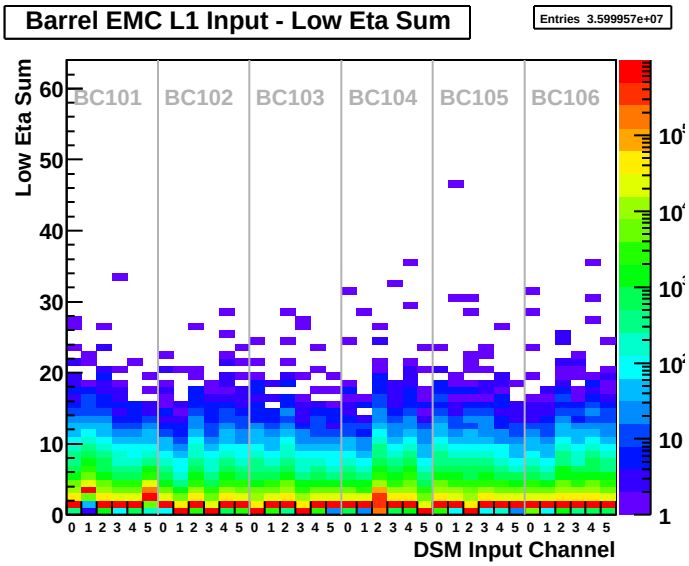
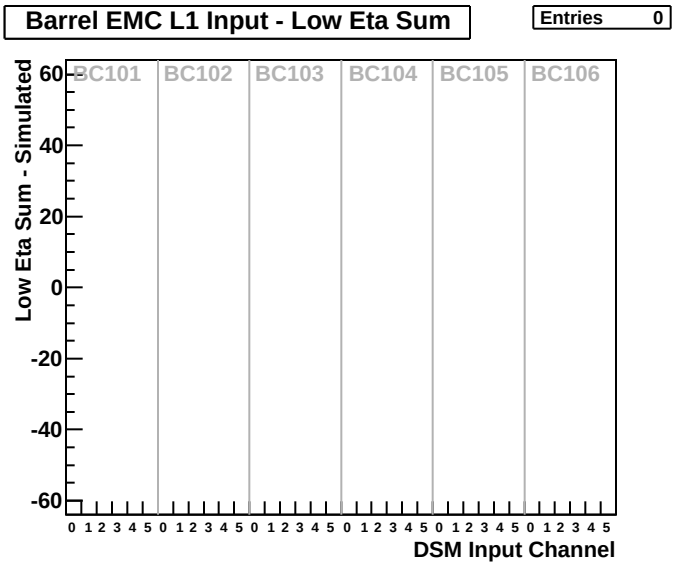
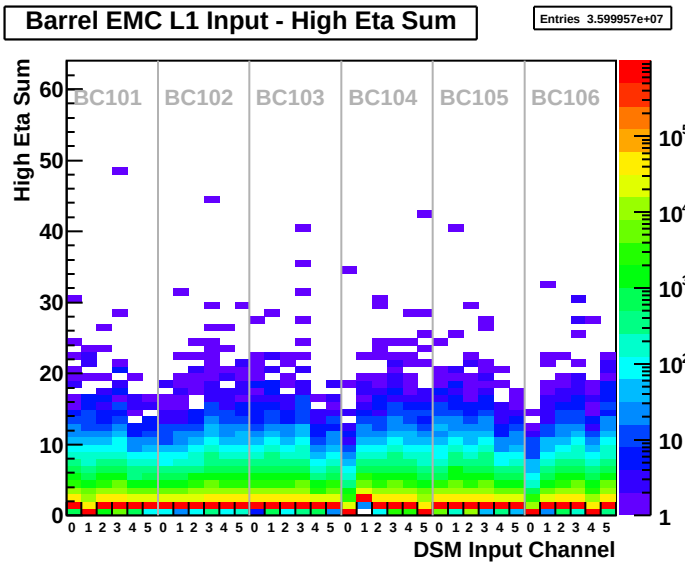
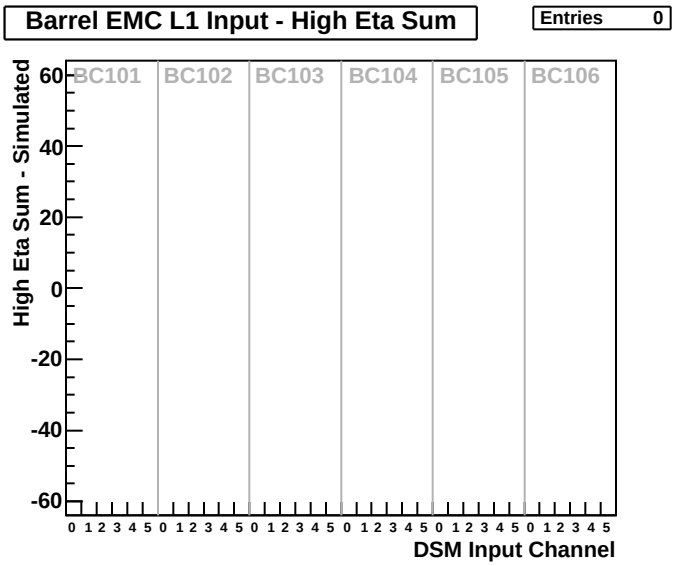
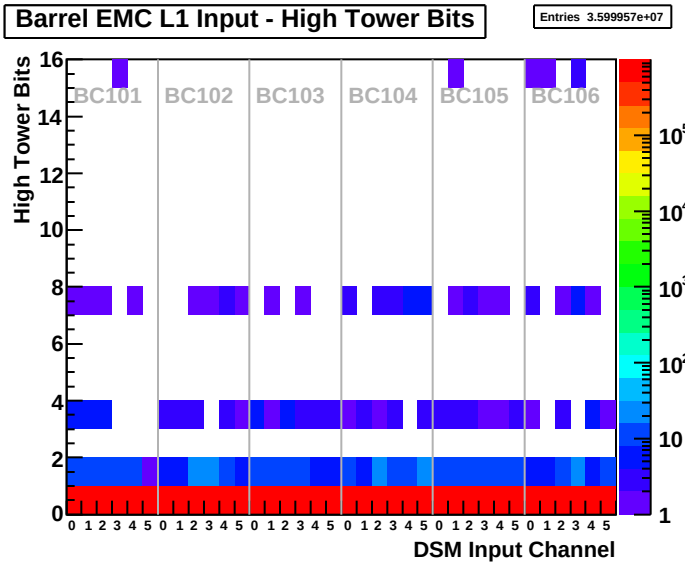
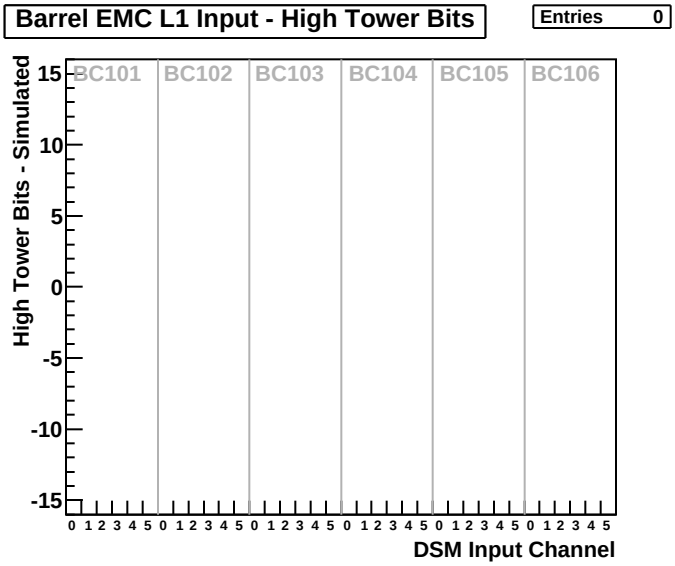

Barrel EMC L1 Input - Low Eta Sum
Entries 3.599957e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

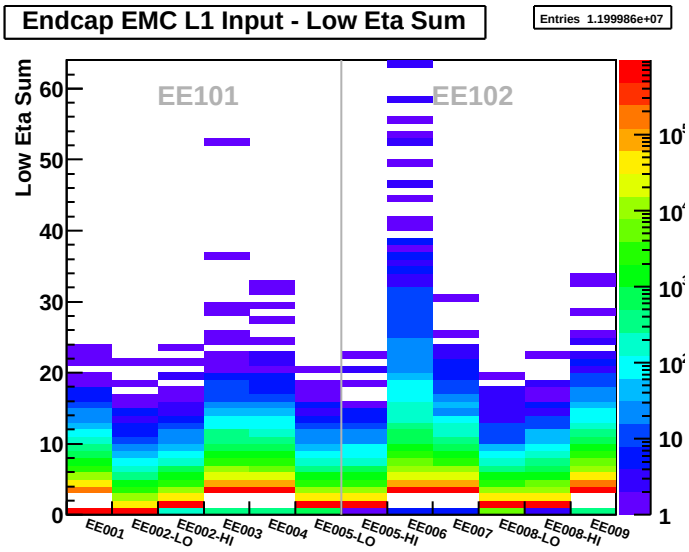

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

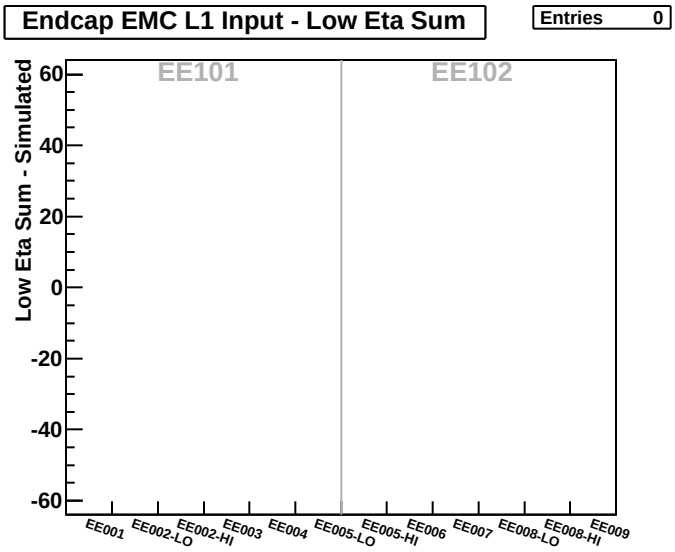

Barrel EMC L1 Input - High Eta Sum
Entries 3.599957e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

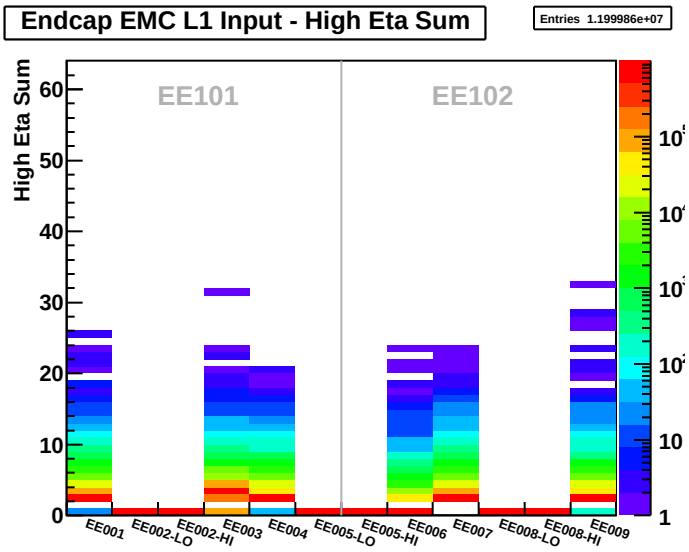

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

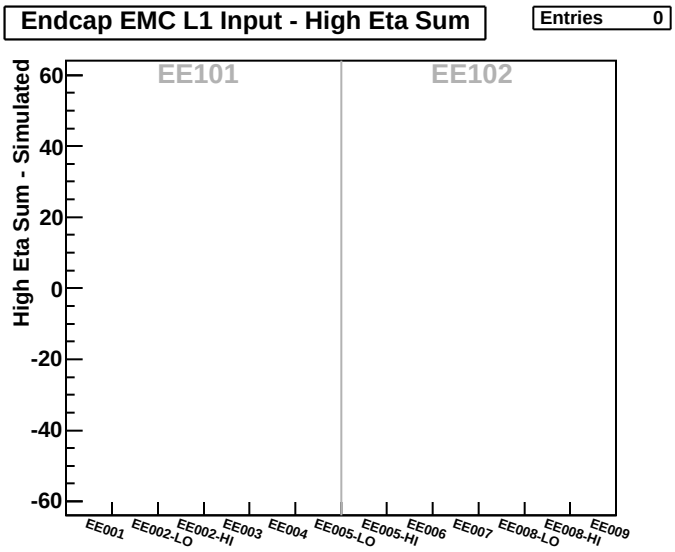

Barrel EMC L1 Input - High Tower Bits
Entries 3.599957e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

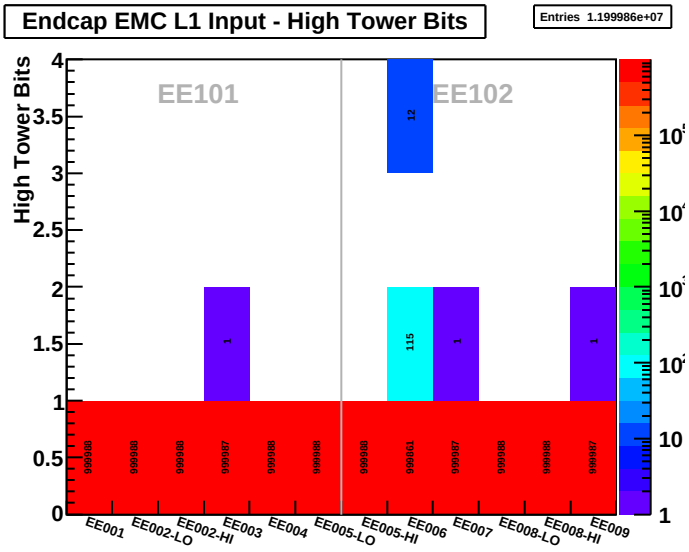

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

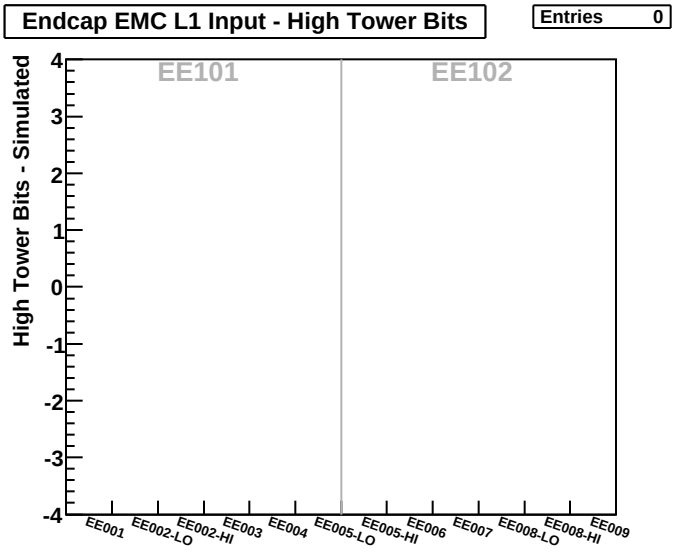

Endcap EMC L1 Input - Low Eta Sum
Entries 1.199986e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

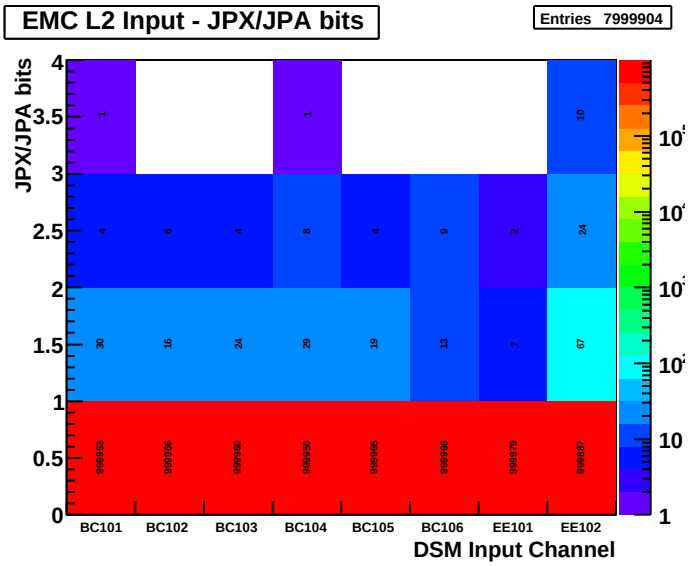

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

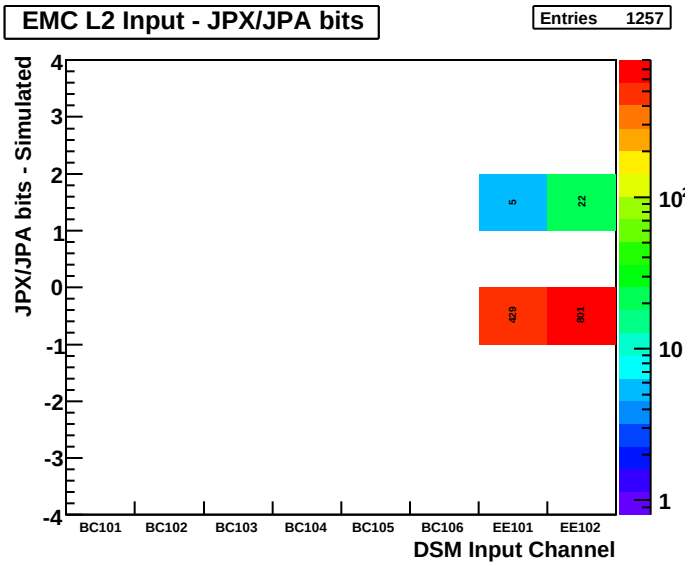

Endcap EMC L1 Input - High Eta Sum
Entries 1.199986e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

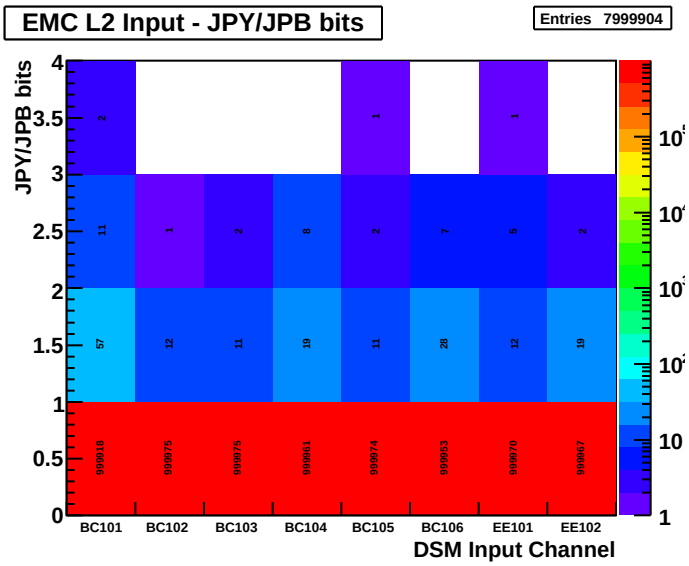

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

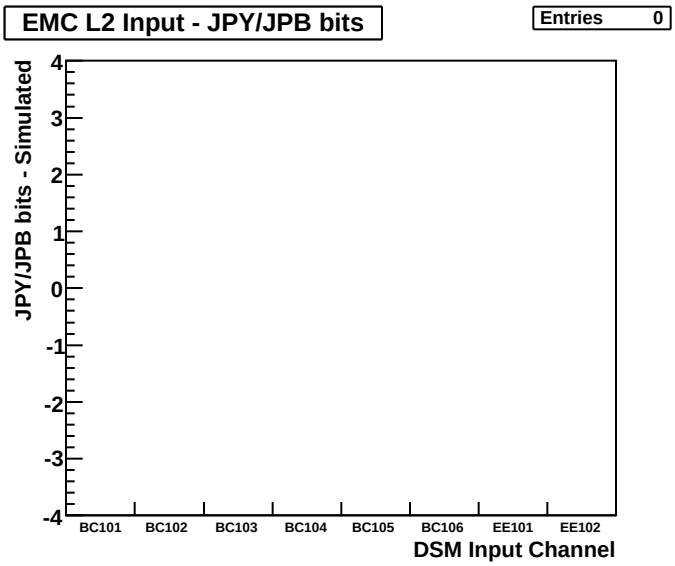

Endcap EMC L1 Input - High Tower Bits
Entries 1.199986e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

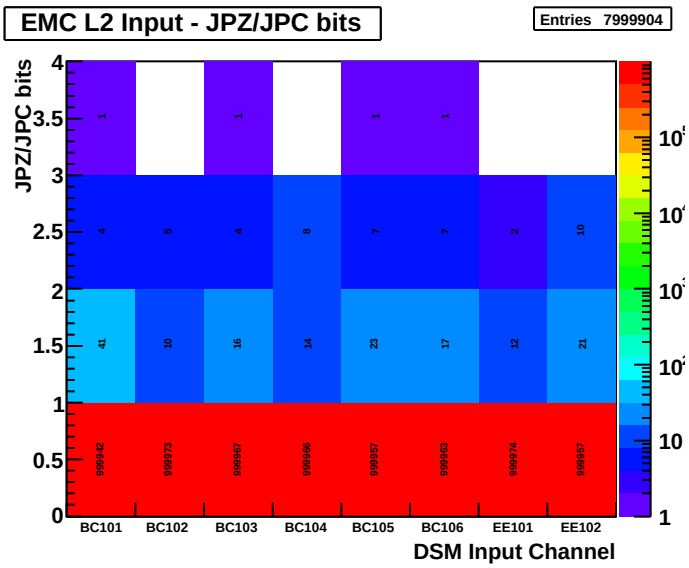

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

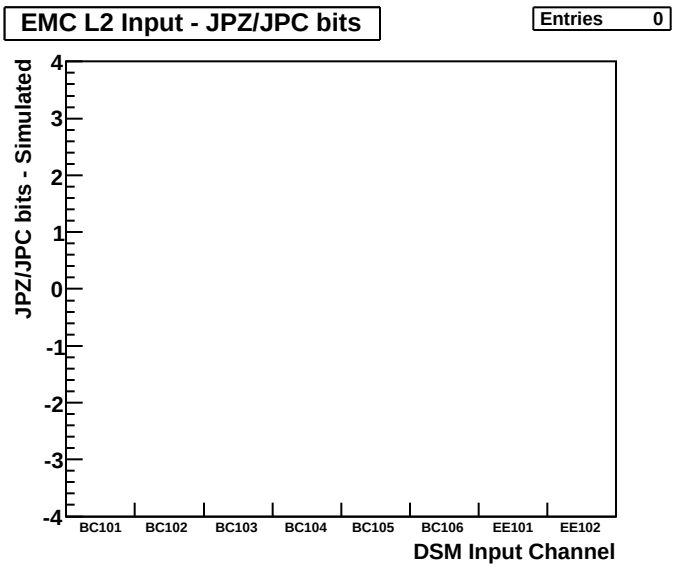

EMC L2 Input - JPX/JPA bits
Entries 7999904
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

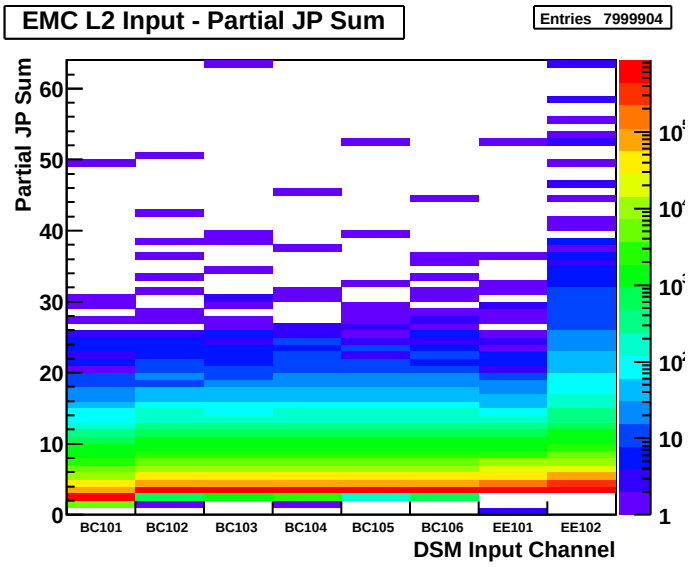

EMC L2 Input - JPX/JPA bits
Entries 1257
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

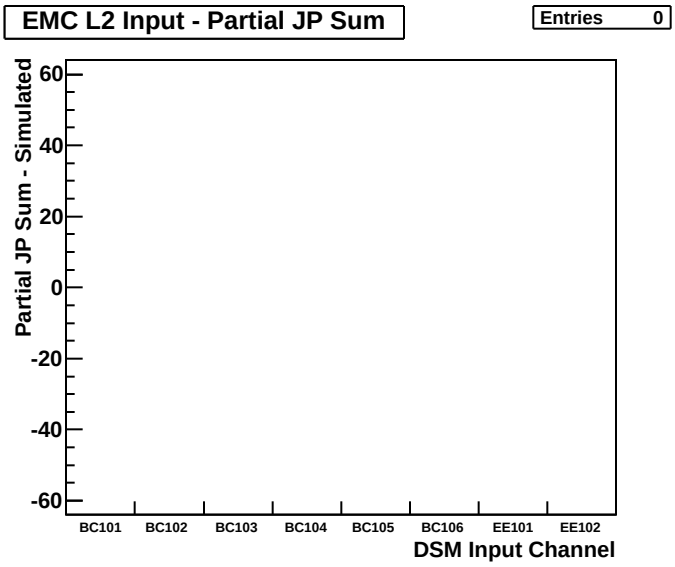

EMC L2 Input - JPY/JPB bits
Entries 7999904
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

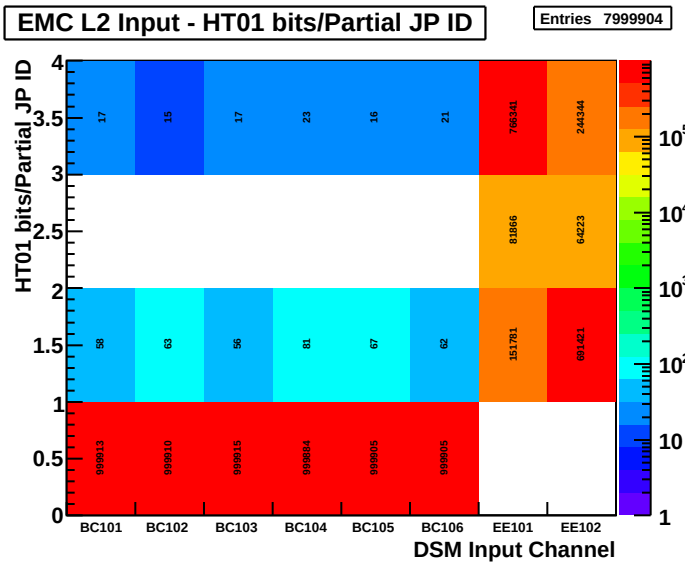

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

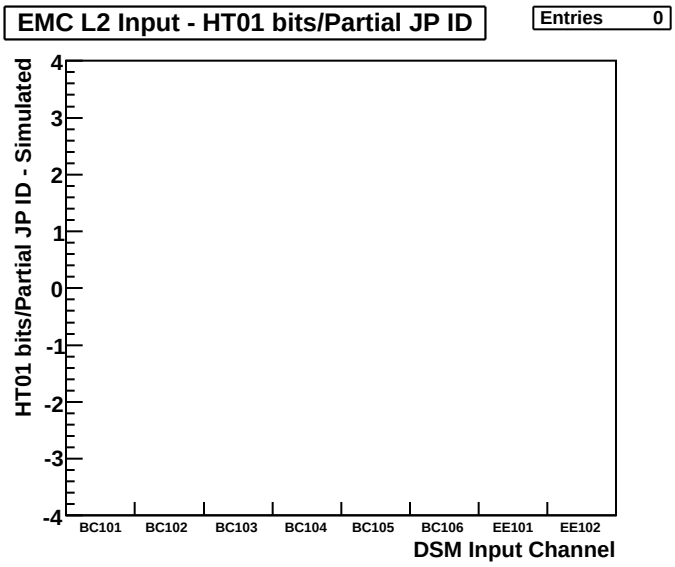

EMC L2 Input - JPZ/JPC bits
Entries 7999904
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

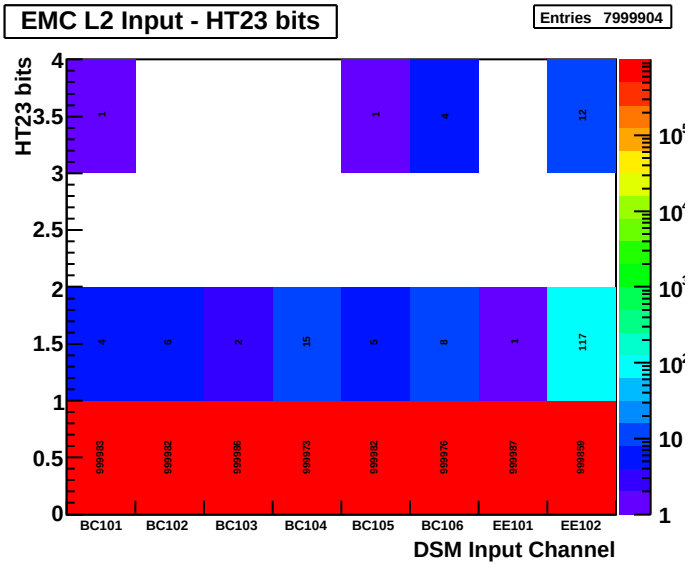

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

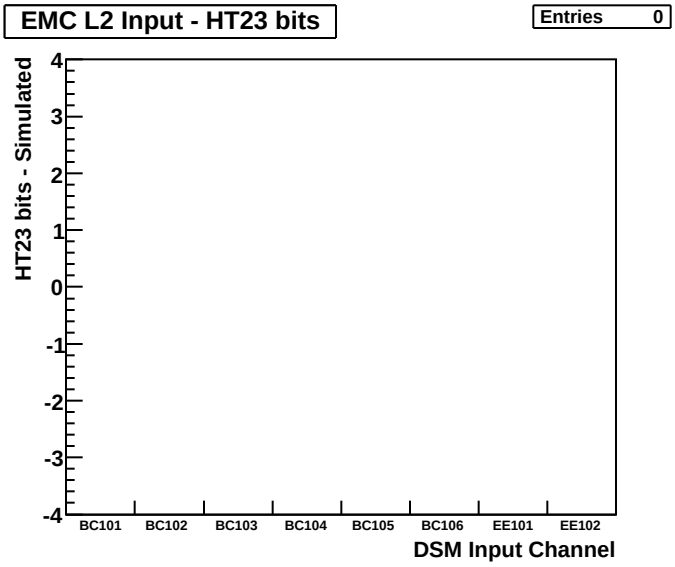

EMC L2 Input - Partial JP Sum
Entries 7999904
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

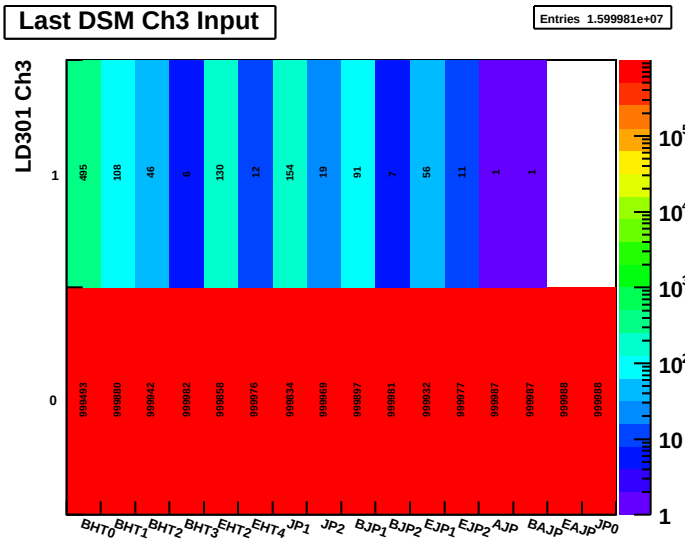

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

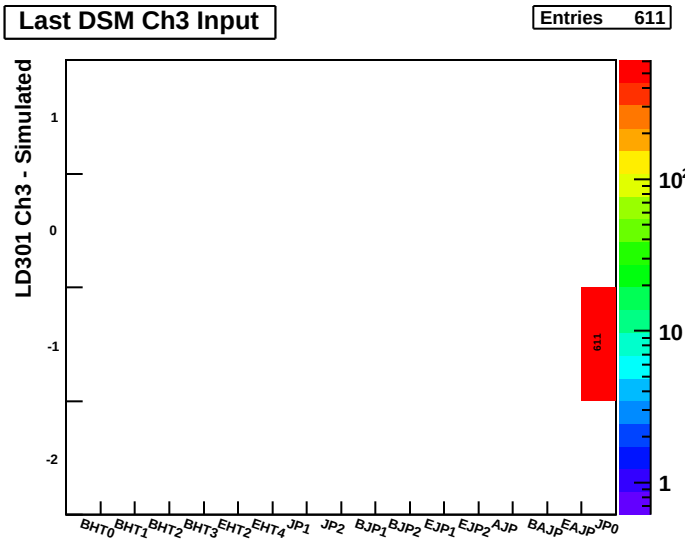

EMC L2 Input - HT01 bits/Partial JP ID
Entries 7999904
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

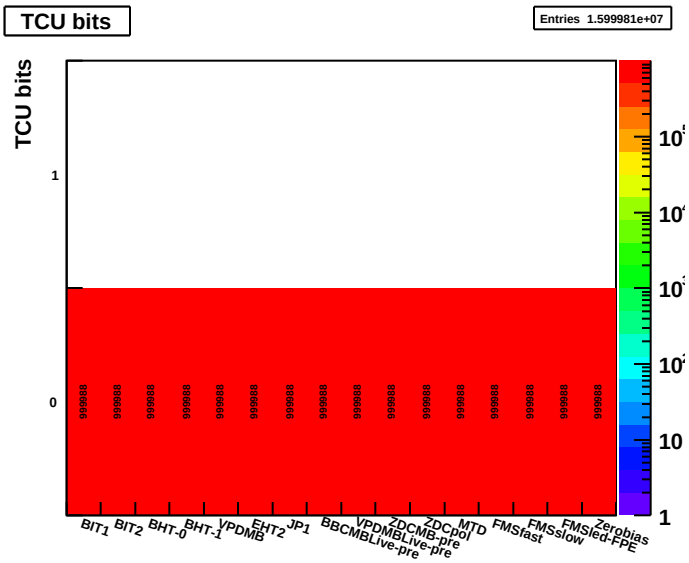

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

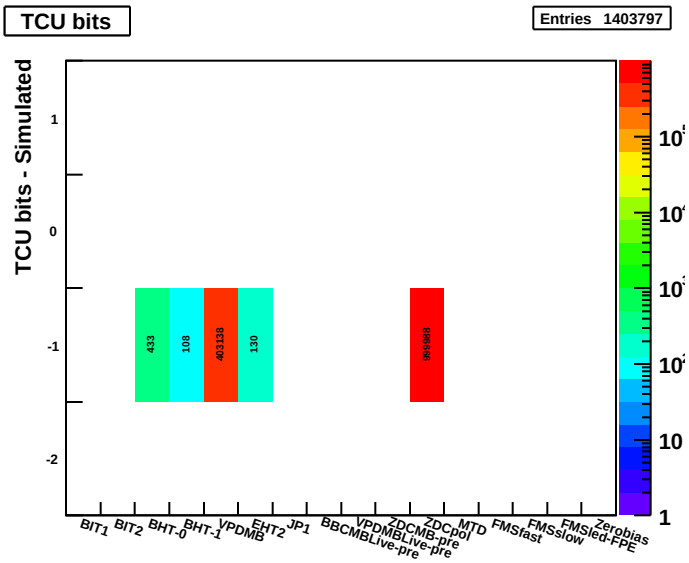

EMC L2 Input - HT23 bits
Entries 7999904
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

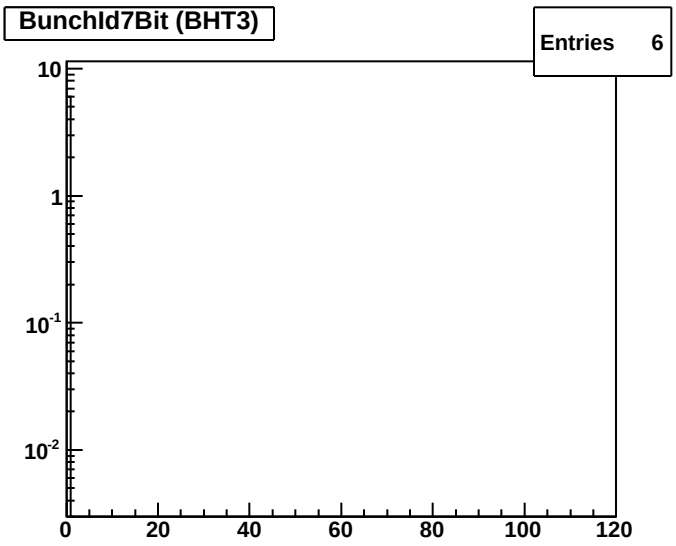

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

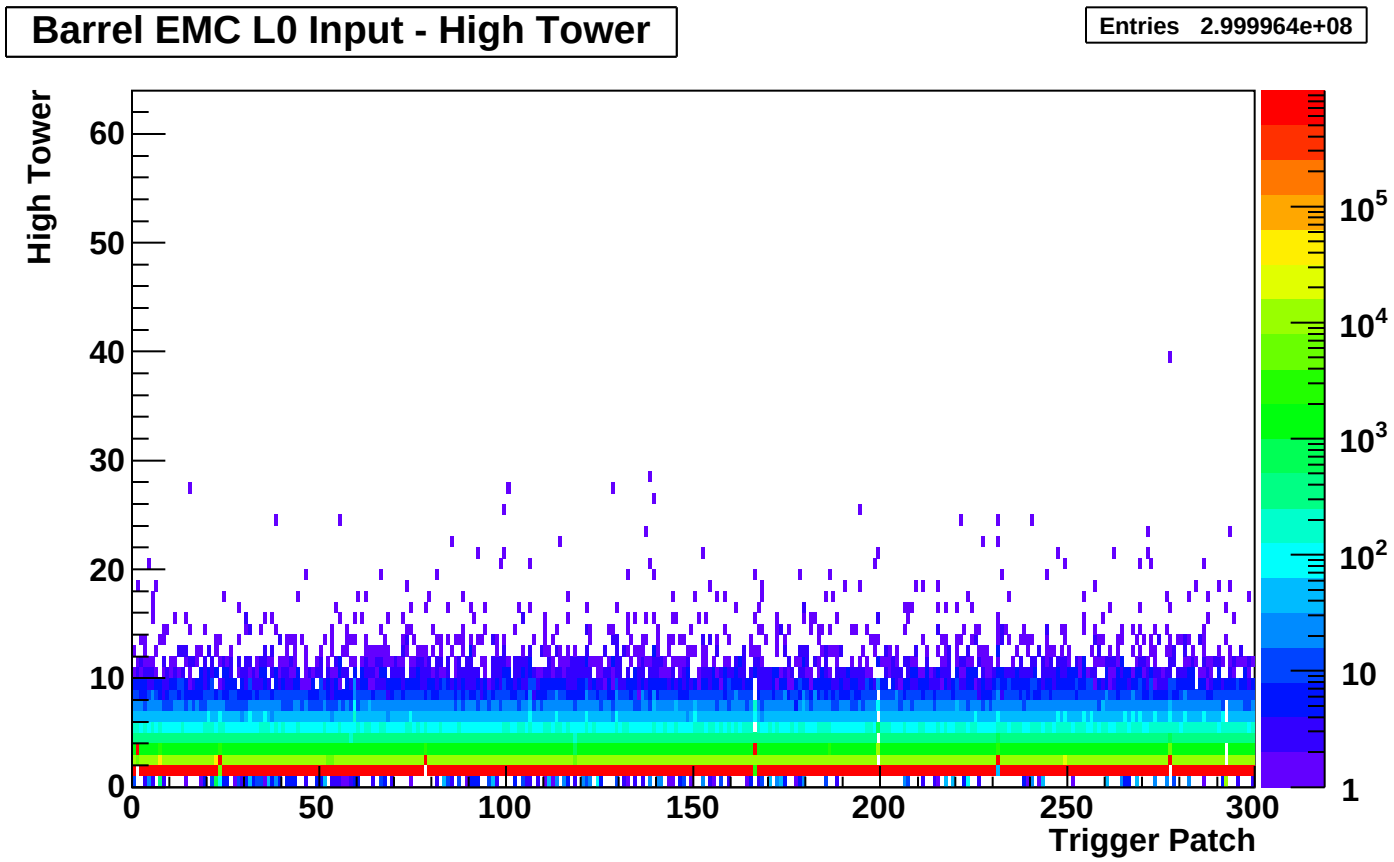

Last DSM Ch3 Input
Entries 1.599981e+07
LD301 Ch3
1
0
495
108
46
6
130
12
154
19
91
7
56
11
1
1
999493
999980
999942
999982
999859
999976
999834
999969
999897
999981
999932
999977
999987
999987
999958
999988
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0
1

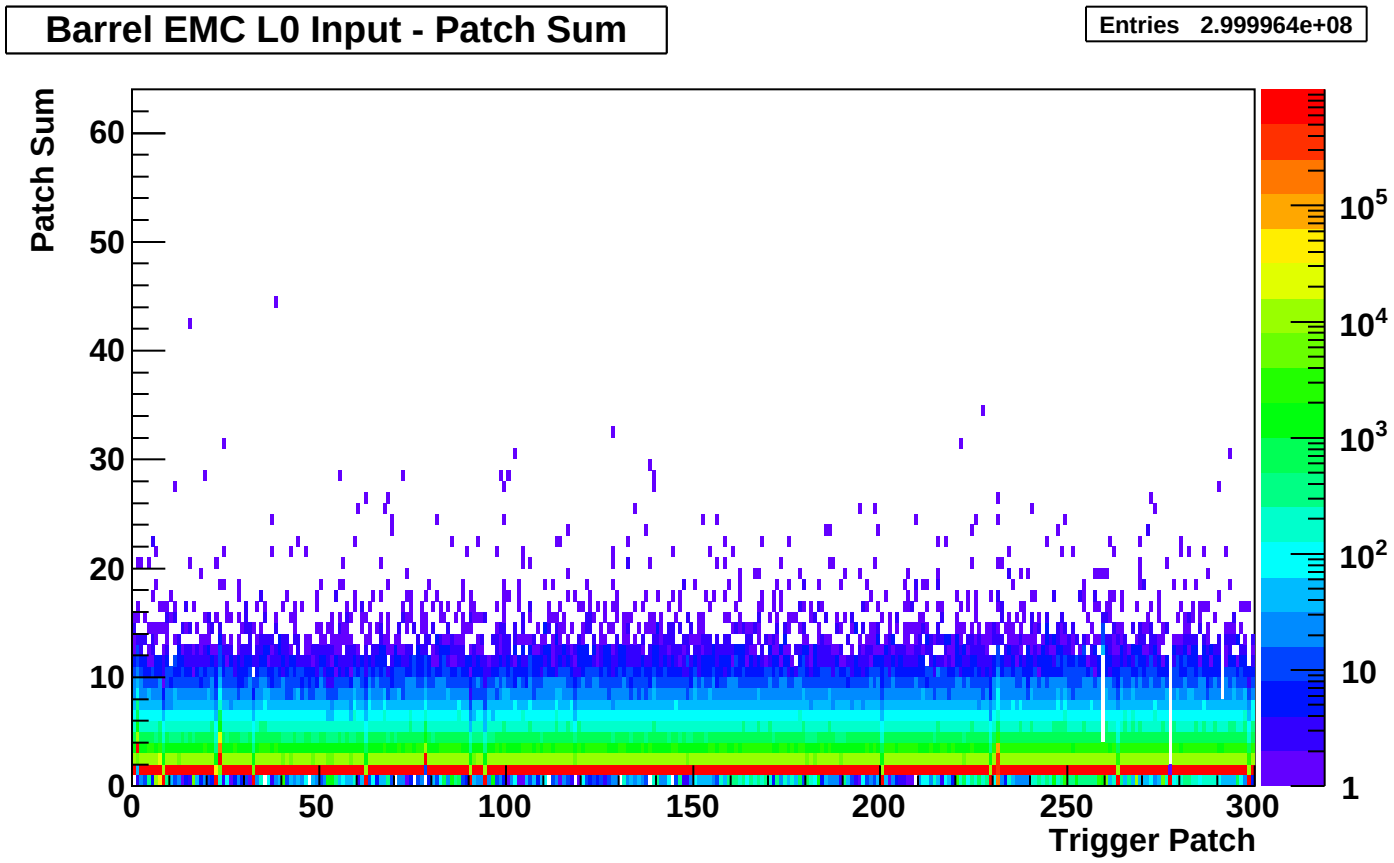

Last DSM Ch3 Input
Entries 611
LD301 Ch3 - Simulated
1
0
-1
-2
611
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0
10
1

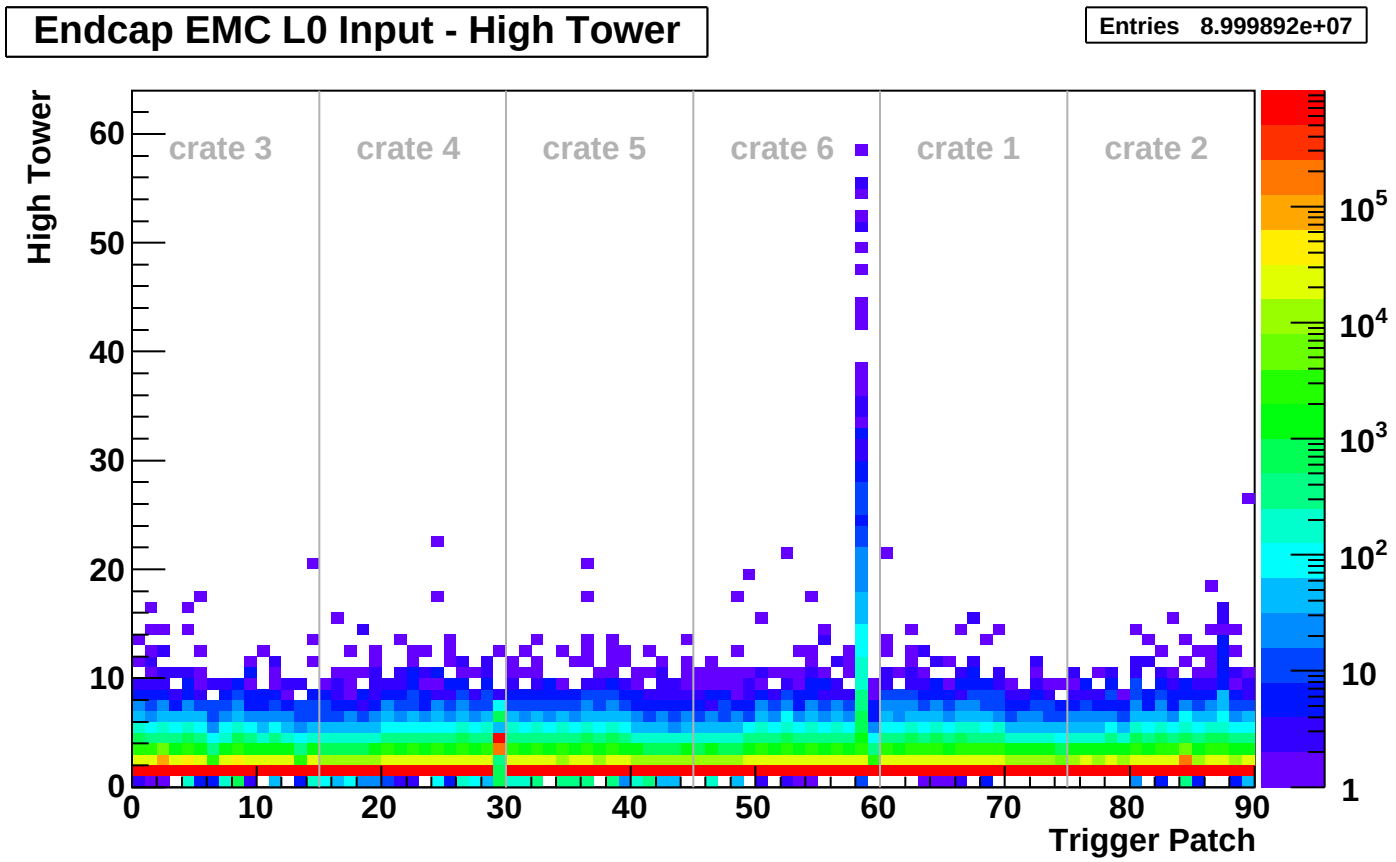

TCU bits
Entries 1.599981e+07
TCU bits
1
0
999988
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias
10
1

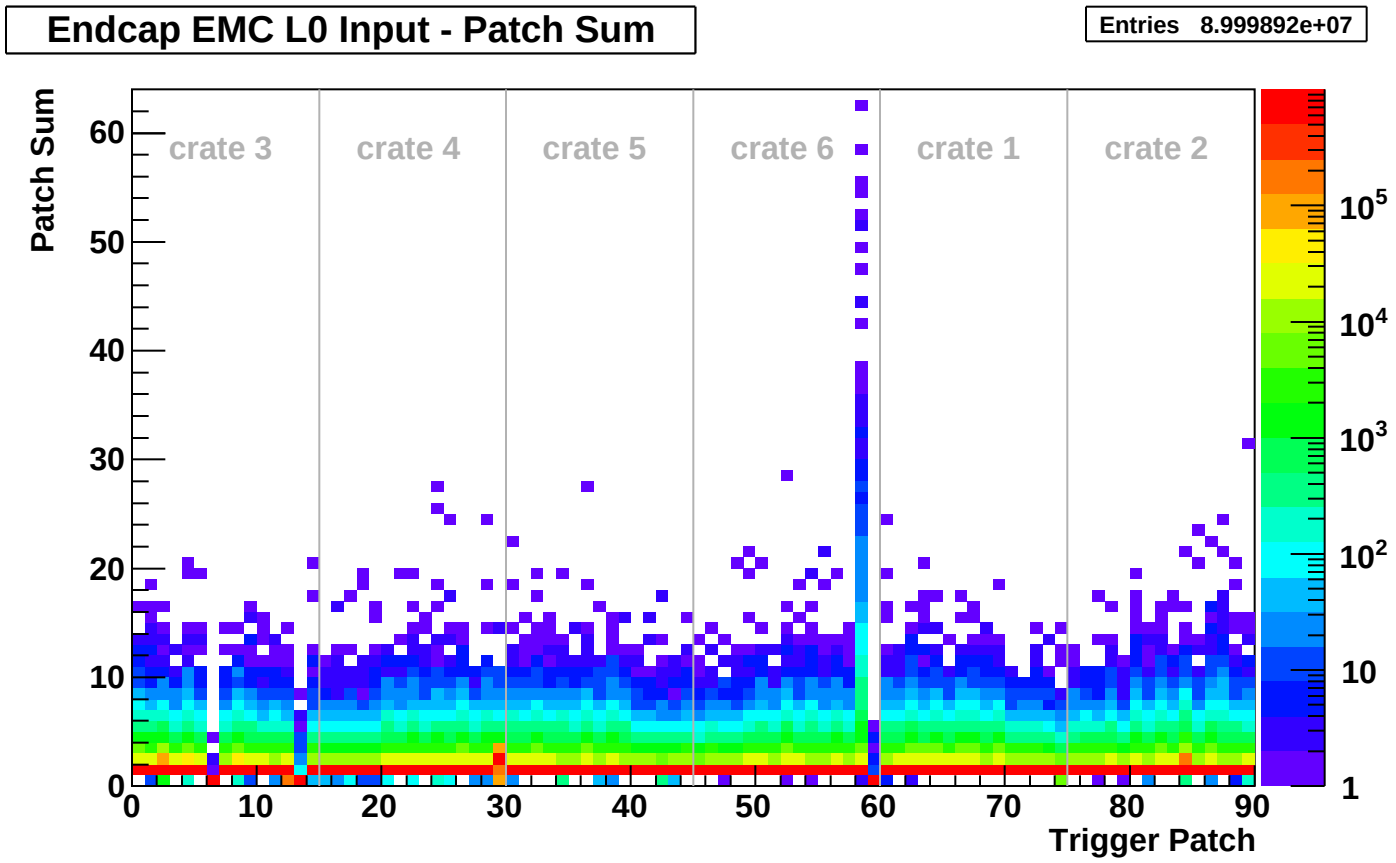

TCU bits
Entries 1403797
TCU bits - Simulated
1
0
-1
-2
433
108
403138
130
999988
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias
10
1

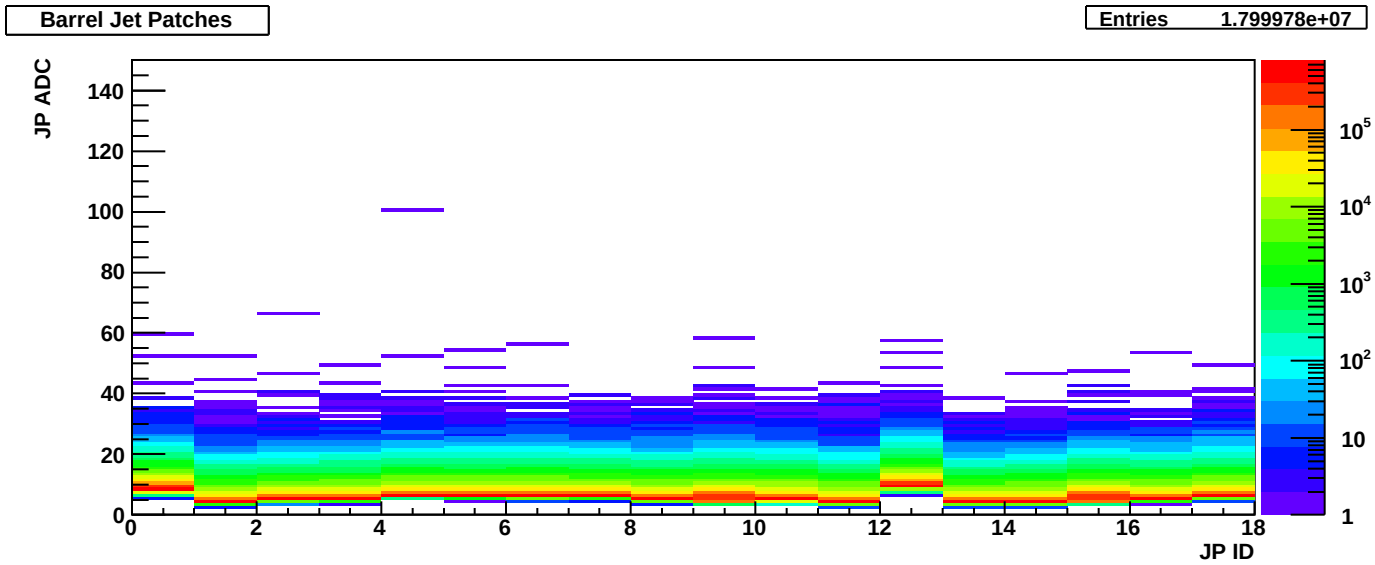

BunchId7Bit (BHT3)
Entries 6
10
1
10^-1
10^-2
0
20
40
60
80
100
120

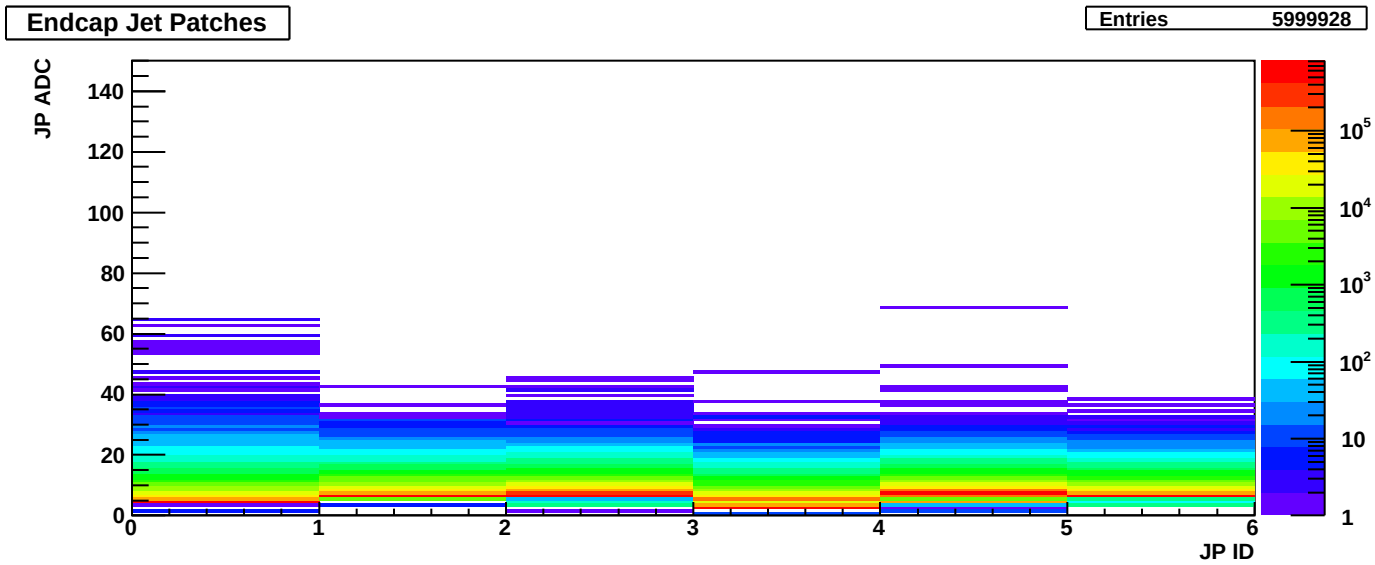

Barrel EMC L0 Input - High Tower
Entries 2.999964e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

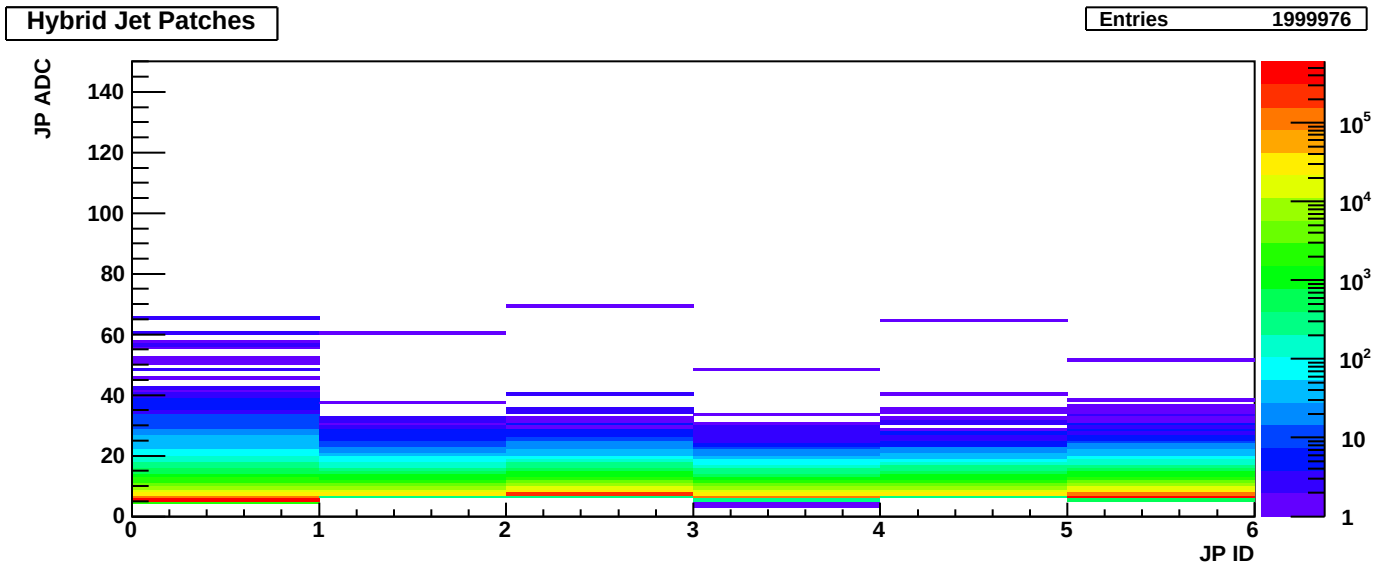

Barrel EMC L0 Input - Patch Sum
Entries 2.999964e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

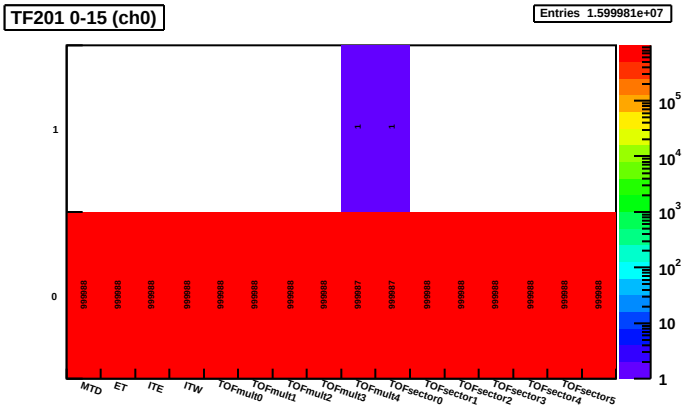

Endcap EMC L0 Input - High Tower
Entries 8.999892e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

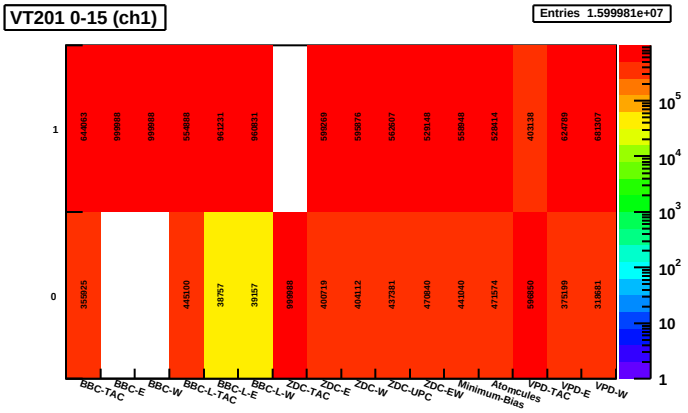

Endcap EMC L0 Input - Patch Sum
Entries 8.999892e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

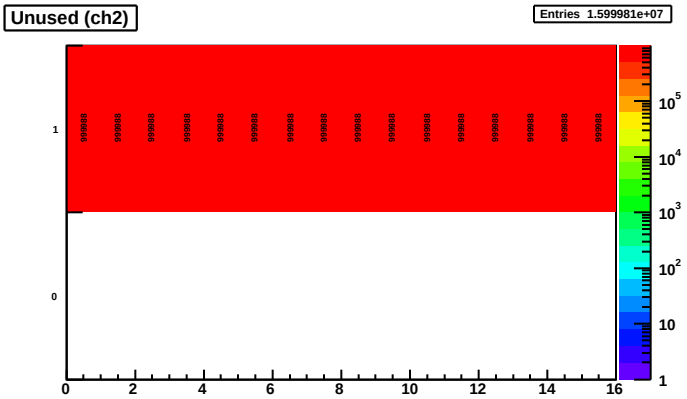

Barrel Jet Patches
Entries 1.799978e+07
JP ADC
JP ID

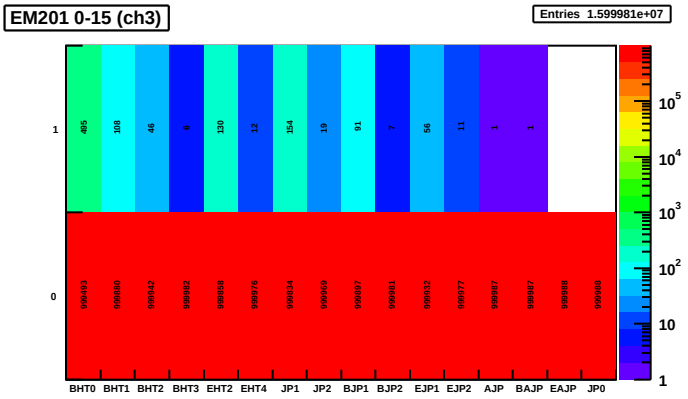

Endcap Jet Patches
Entries 5999928
JP ADC
JP ID

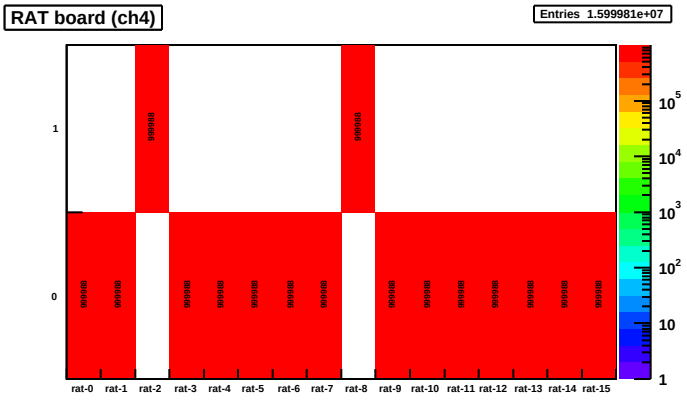

Hybrid Jet Patches
Entries 1999976
JP ADC
JP ID

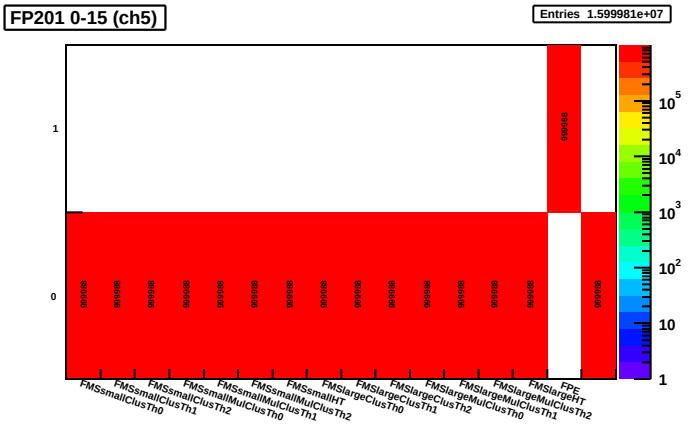

TF201 0-15 (ch0)
Entries 1.599981e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

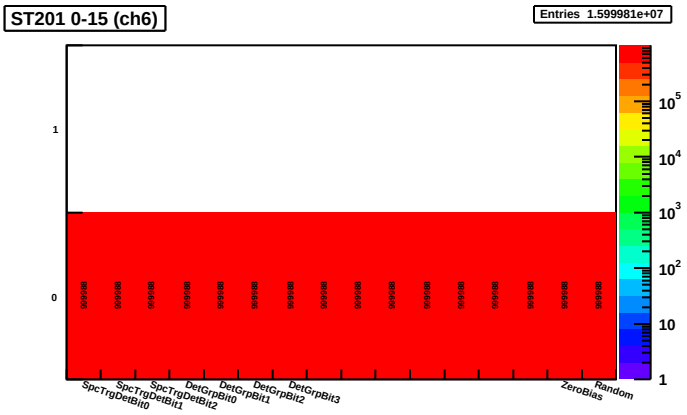

VT201 0-15 (ch1)
Entries 1.599981e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

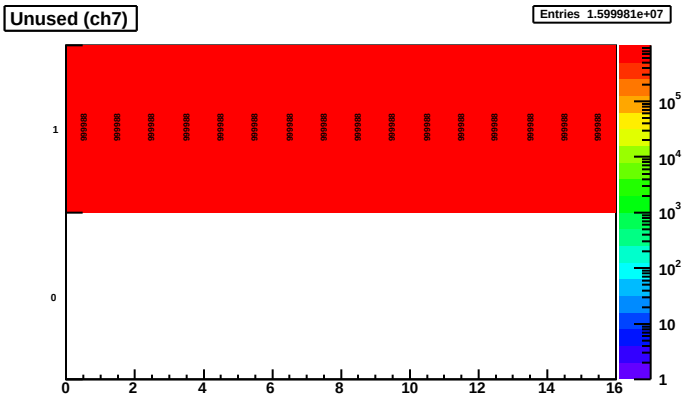

Unused (ch2)
Entries 1.599981e+07

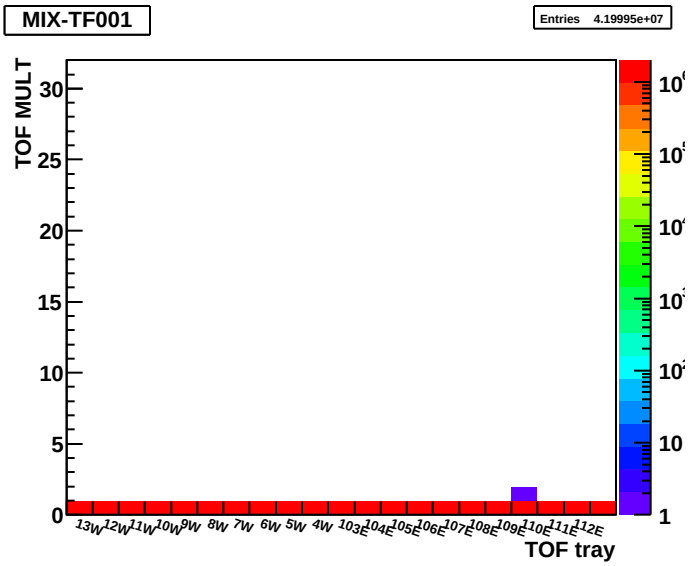

EM201 0-15 (ch3)
Entries 1.599981e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

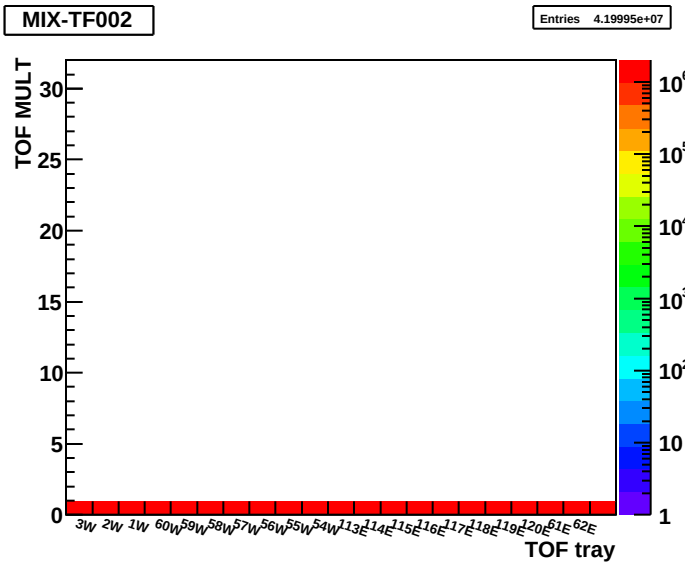

RAT board (ch4)
Entries 1.599981e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

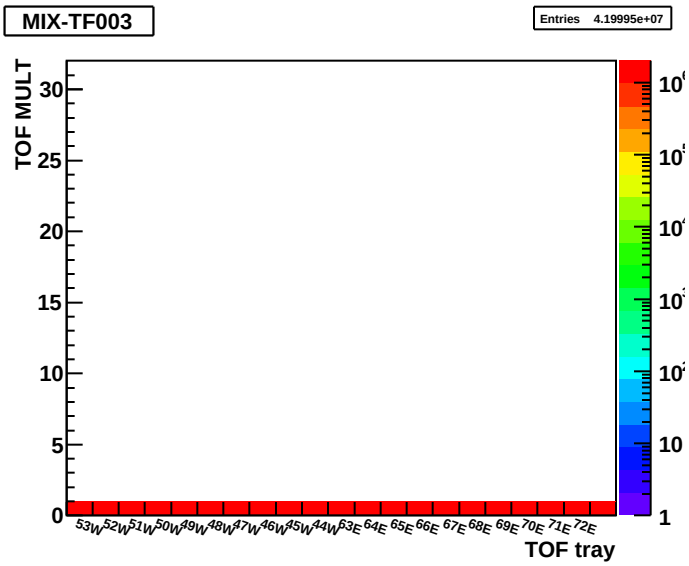

FP201 0-15 (ch5)
Entries 1.599981e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

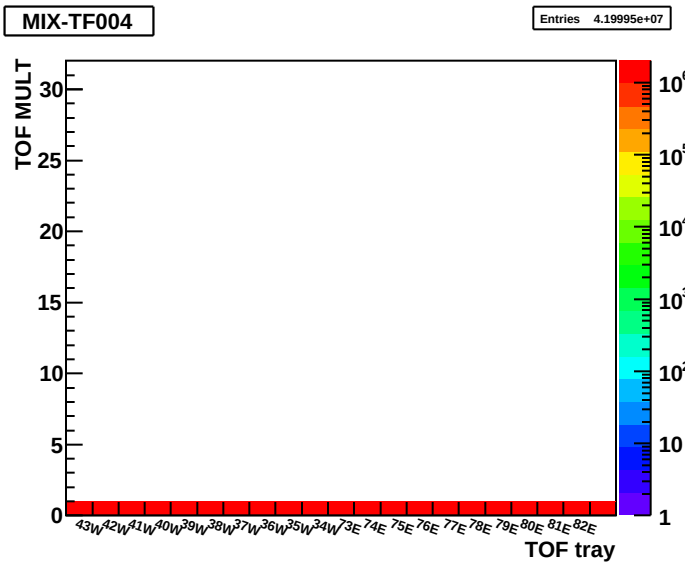

ST201 0-15 (ch6)
Entries 1.599981e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

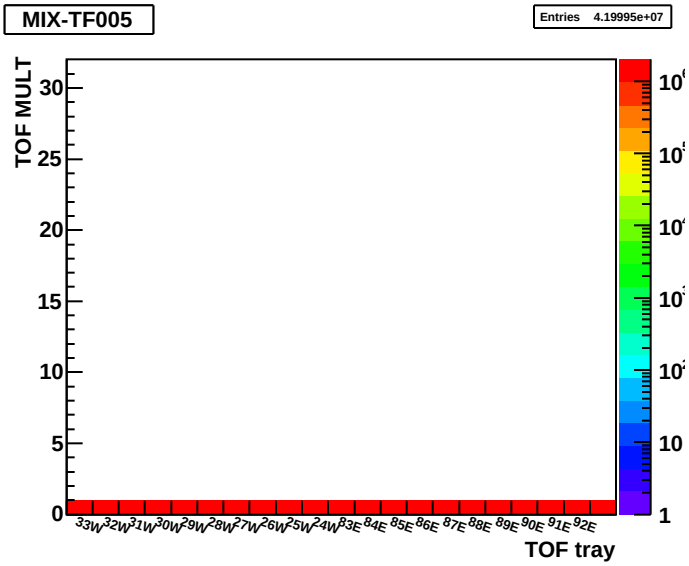

Unused (ch7)
Entries 1.599981e+07

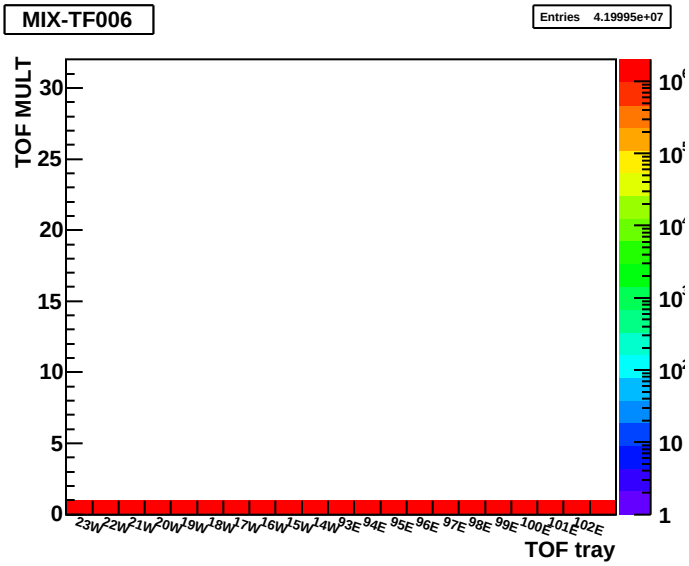

MIX-TF001
Entries 4.19995e+07
TOF MULT
TOF tray

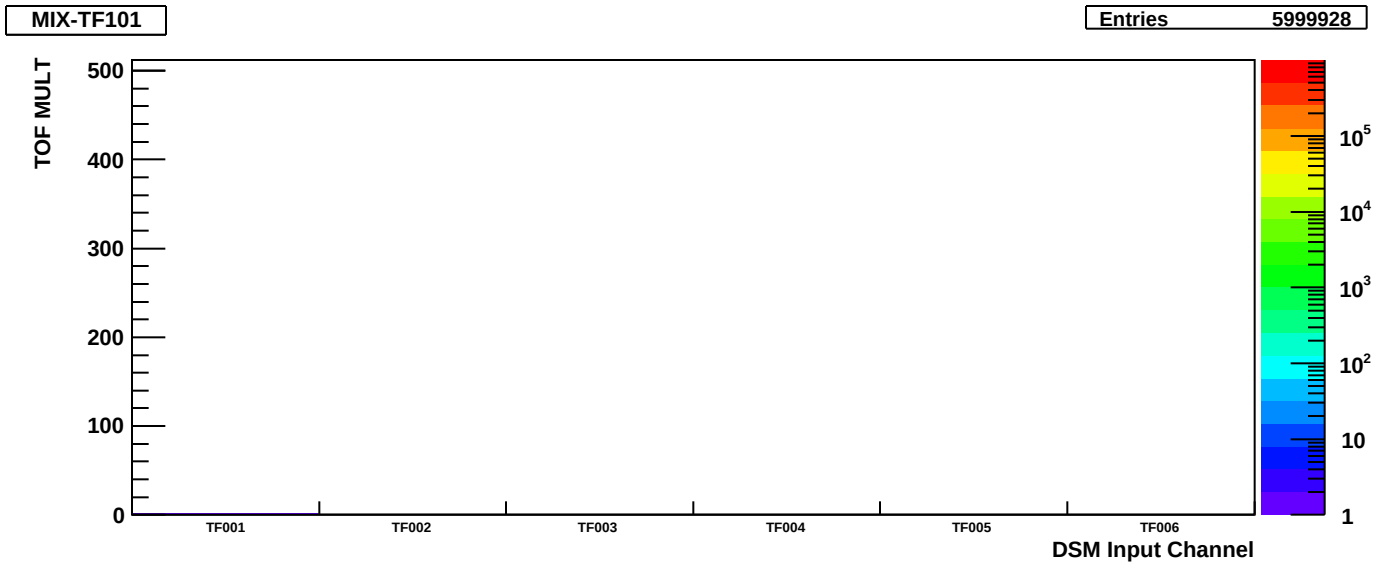

MIX-TF002
Entries 4.19995e+07
TOF MULT
TOF tray

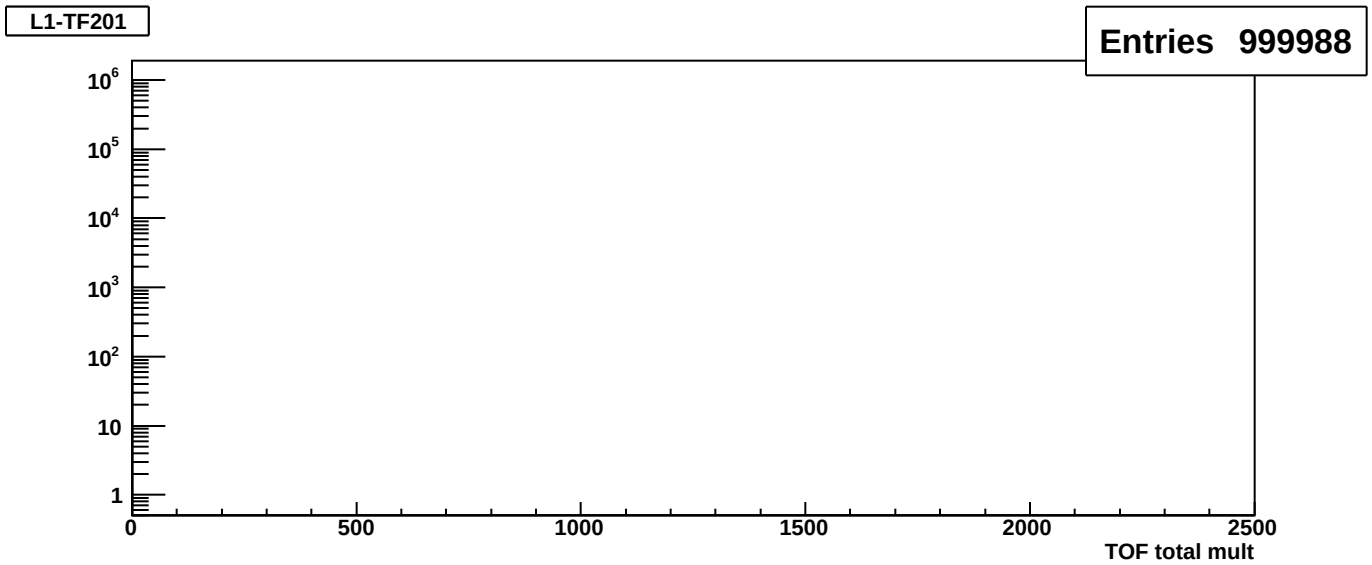

MIX-TF003
Entries 4.19995e+07
TOF MULT
TOF tray

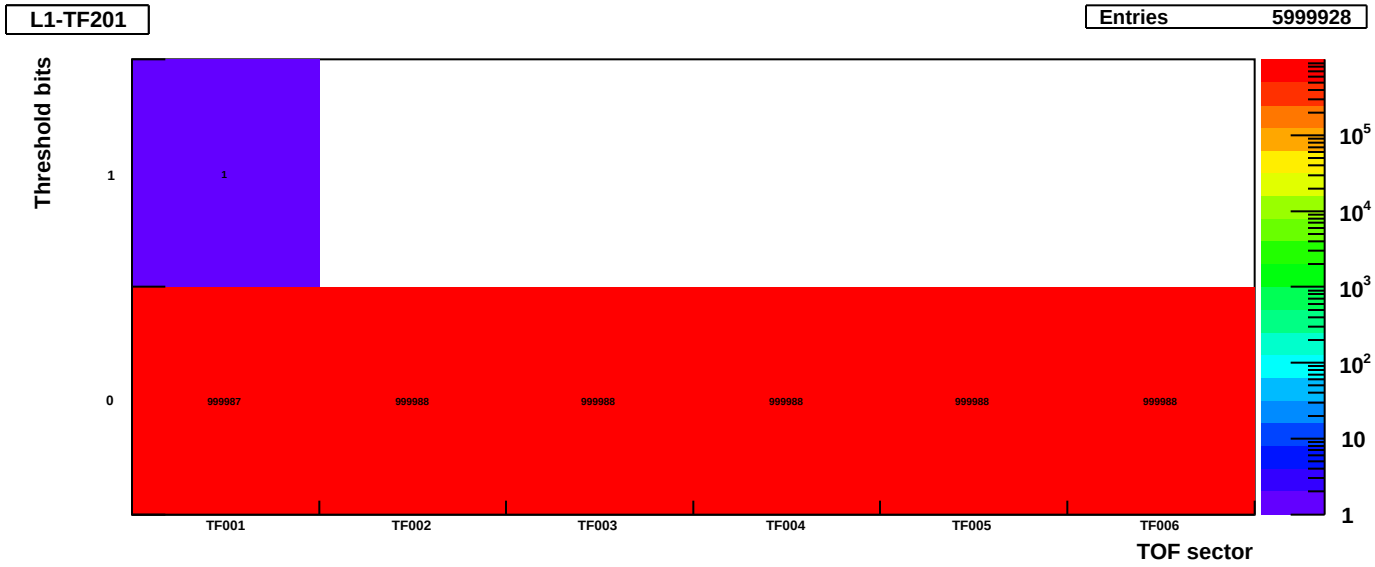

MIX-TF004
Entries 4.19995e+07
TOF MULT
TOF tray

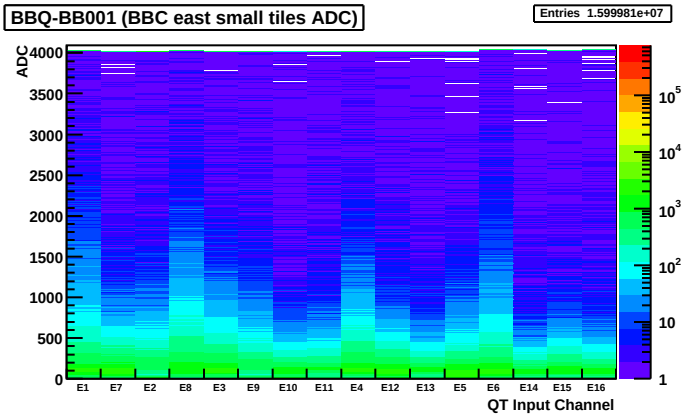

MIX-TF005
Entries 4.19995e+07
TOF MULT
TOF tray

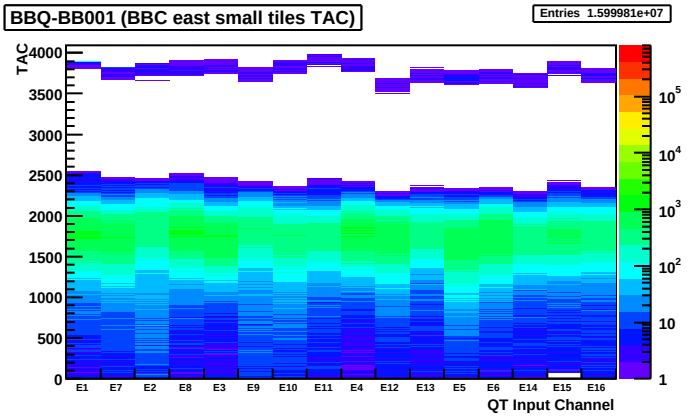

MIX-TF006
Entries 4.19995e+07
TOF MULT
TOF tray

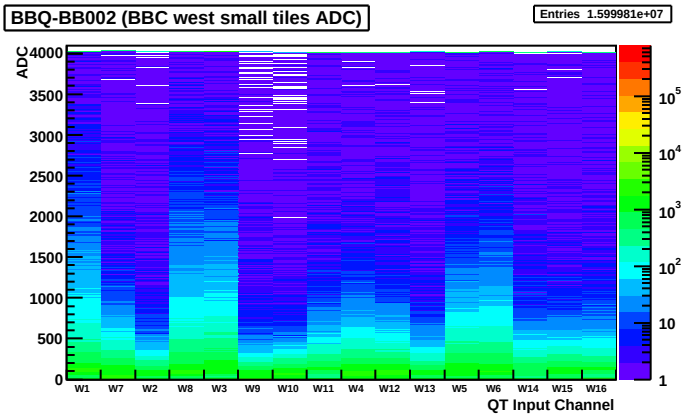

MIX-TF101
Entries 5999928
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

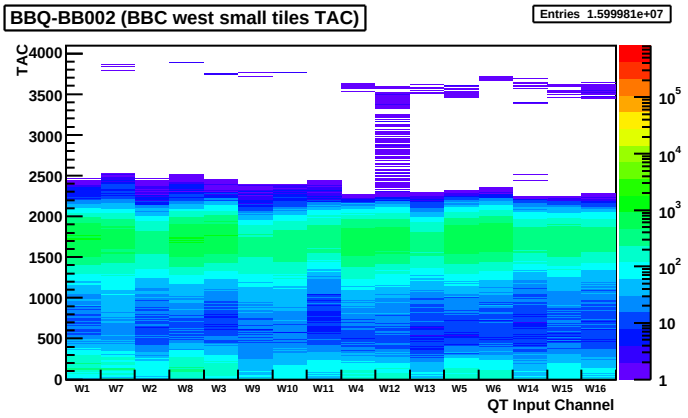

L1-TF201
Entries 999988
10^6
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

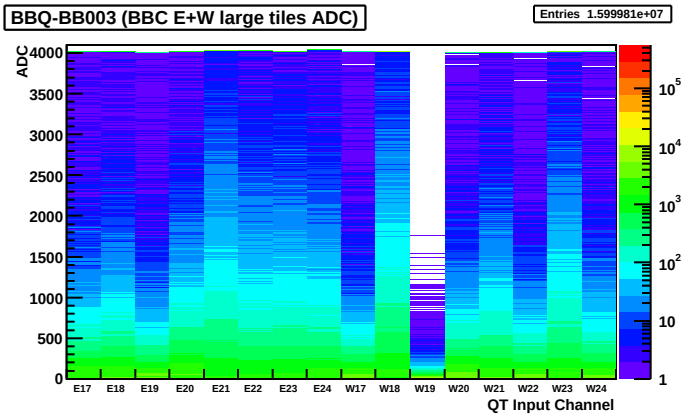

L1-TF201
Entries 5999928
Threshold bits
1
0
1
999987
999988
999988
999988
999988
999988
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5
10^4
10^3
10^2
10
1

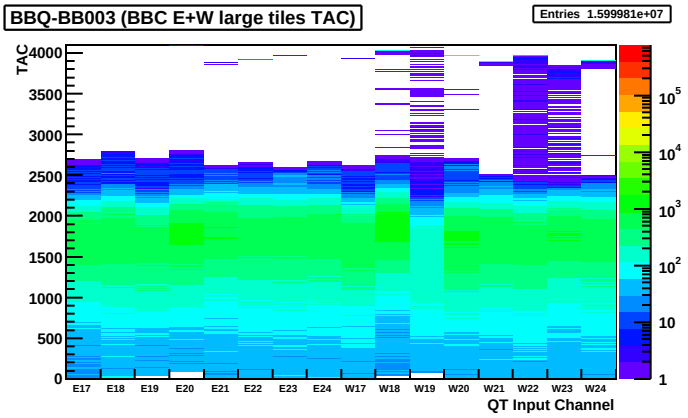

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.599981e+07
ADC
QT Input Channel

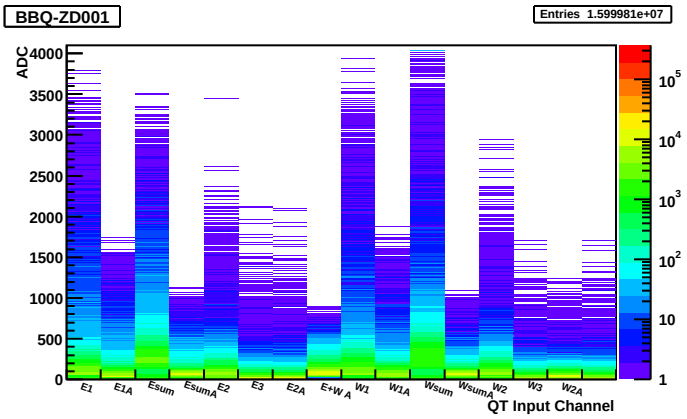

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.599981e+07
TAC
QT Input Channel

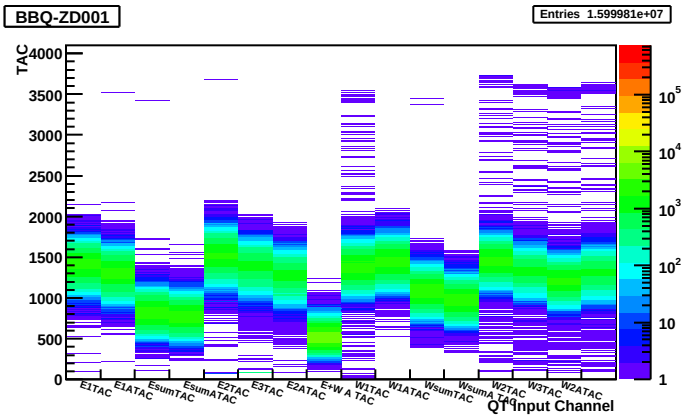

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.599981e+07
ADC
QT Input Channel

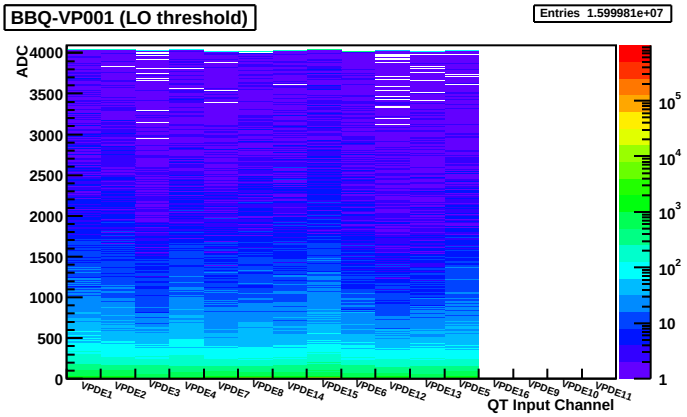

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.599981e+07
TAC
QT Input Channel

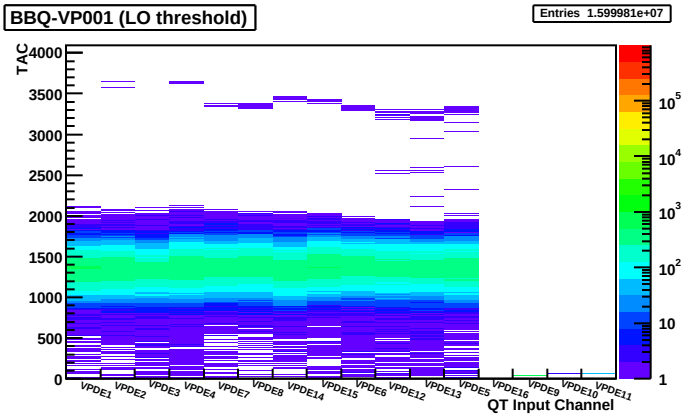

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.599981e+07
ADC
QT Input Channel

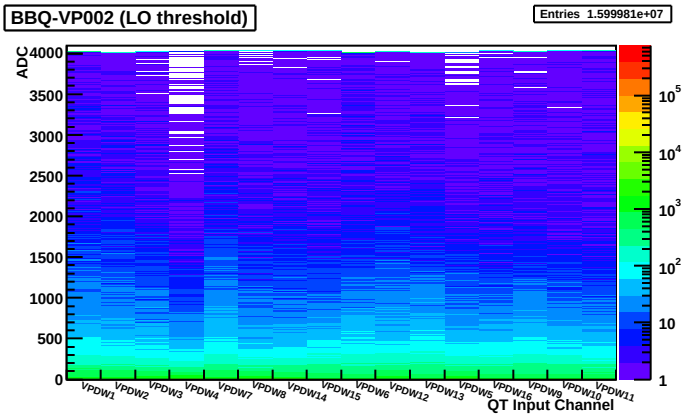

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.599981e+07
TAC
QT Input Channel

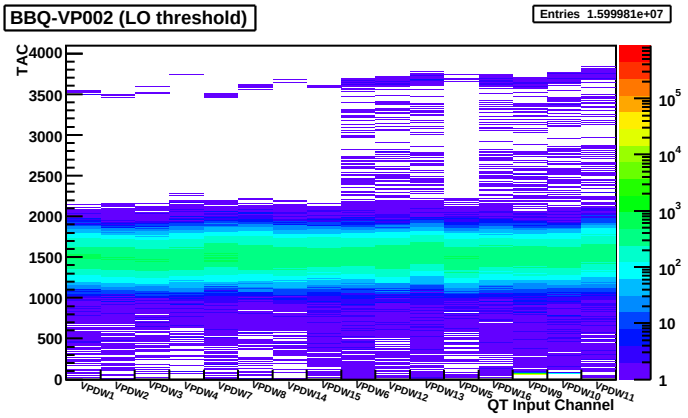

BBQ-ZD001
Entries 1.599981e+07
ADC
QT Input Channel

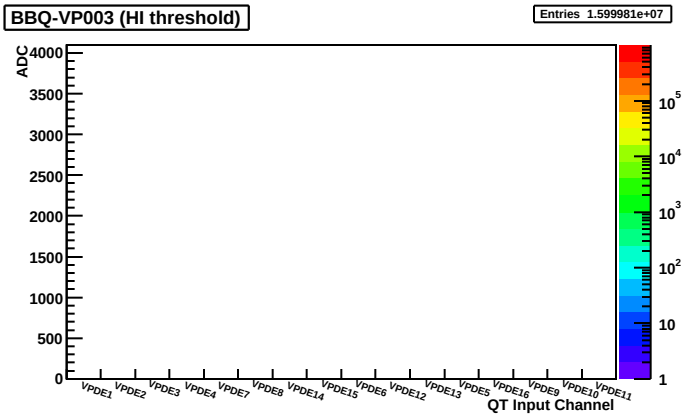

BBQ-ZD001
Entries 1.599981e+07
TAC
QT Input Channel

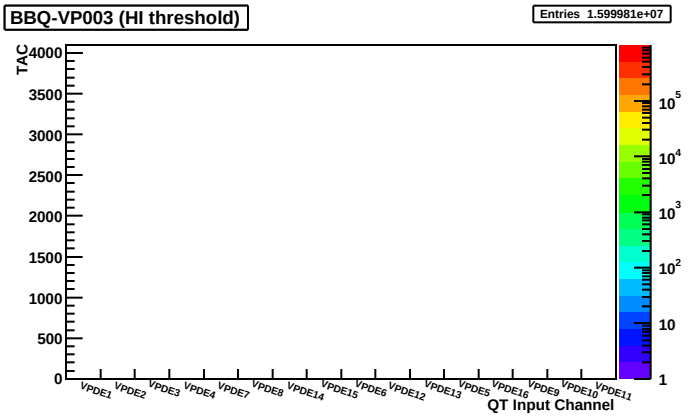

BBQ-VP001 (LO threshold)
Entries 1.599981e+07
ADC
QT Input Channel

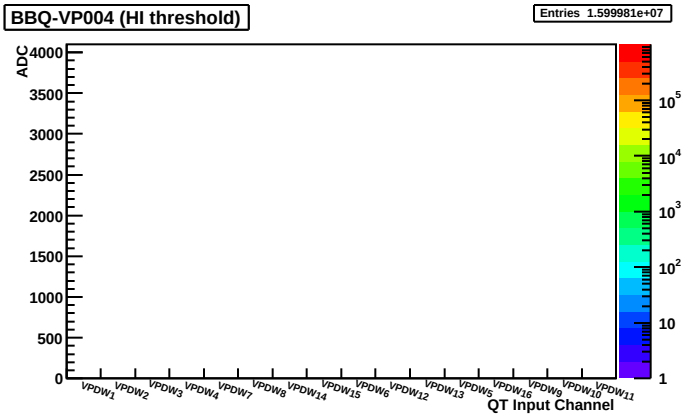

BBQ-VP001 (LO threshold)
Entries 1.599981e+07
TAC
QT Input Channel

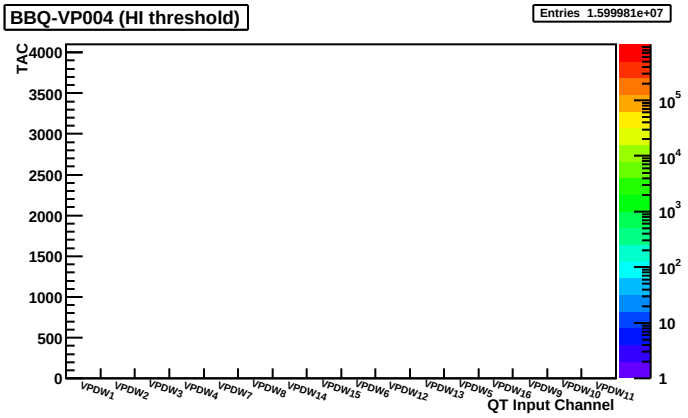

BBQ-VP002 (LO threshold)
Entries 1.599981e+07
ADC
QT Input Channel

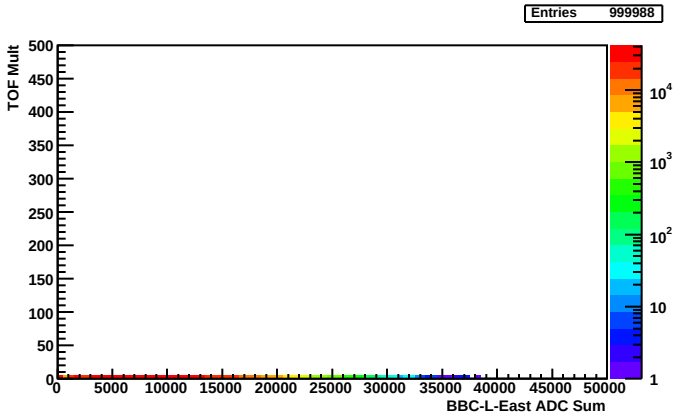

BBQ-VP002 (LO threshold)
Entries 1.599981e+07
TAC
QT Input Channel

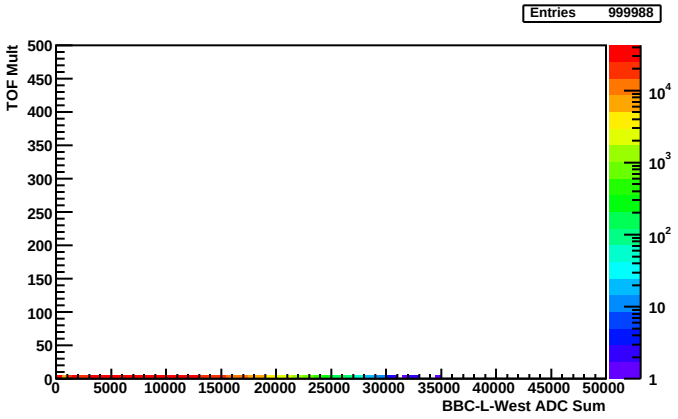

BBQ-VP003 (HI threshold)
Entries 1.599981e+07
ADC
QT Input Channel

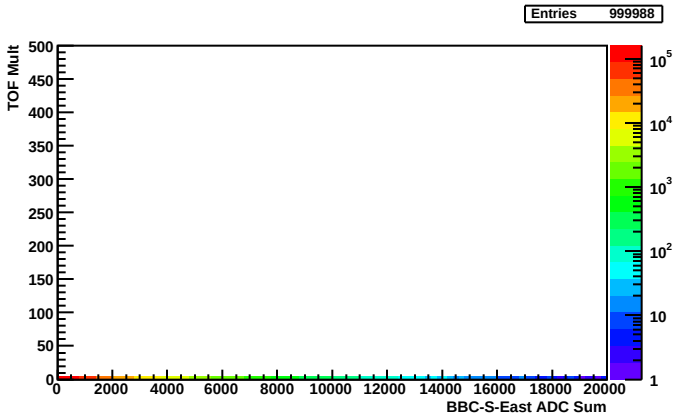

BBQ-VP003 (HI threshold)
Entries 1.599981e+07
TAC
QT Input Channel

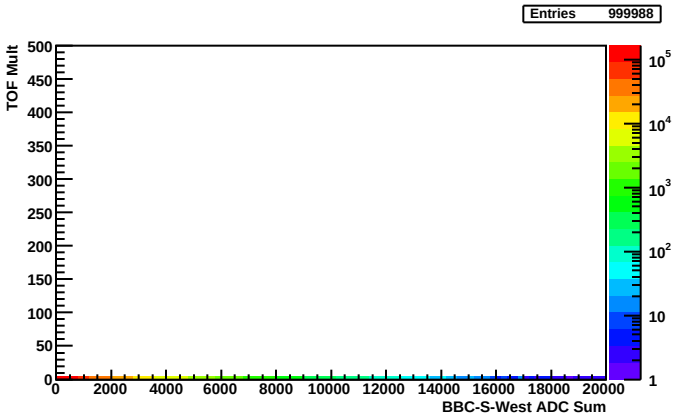

BBQ-VP004 (HI threshold)
Entries 1.599981e+07
ADC
QT Input Channel

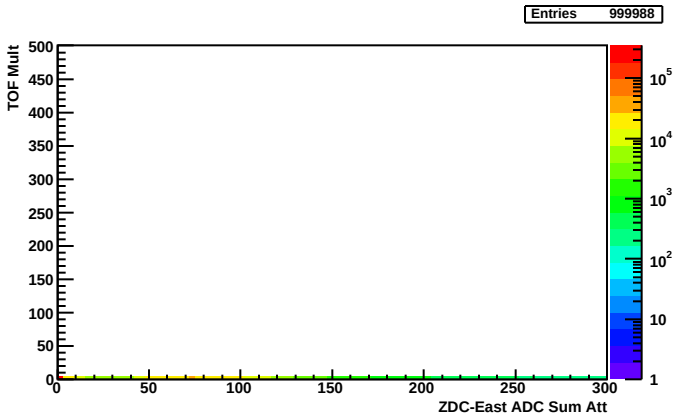

BBQ-VP004 (HI threshold)
Entries 1.599981e+07
TAC
QT Input Channel

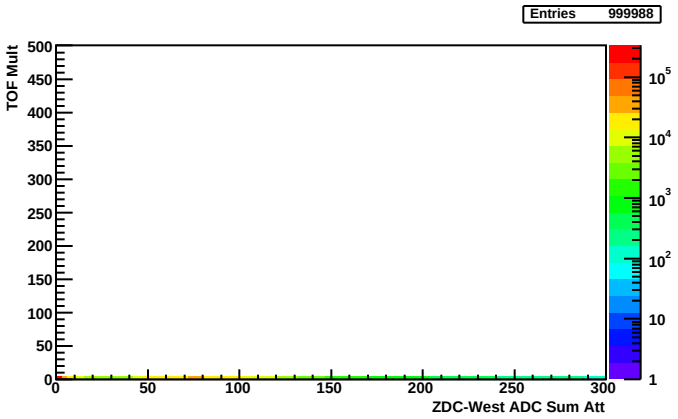

Entries 999988
TOF Mult
BBC-L-East ADC Sum

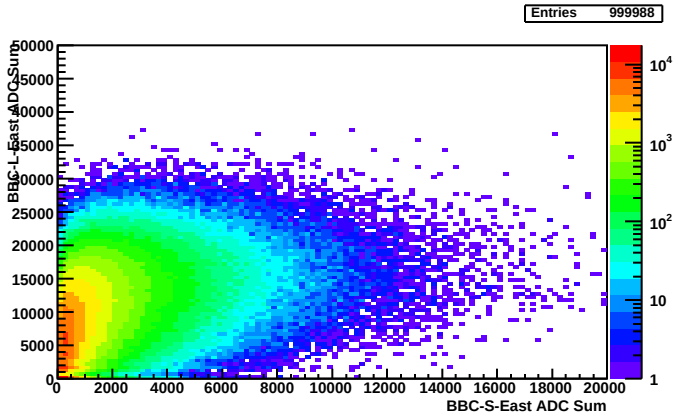

Entries 999988
TOF Mult
BBC-L-West ADC Sum

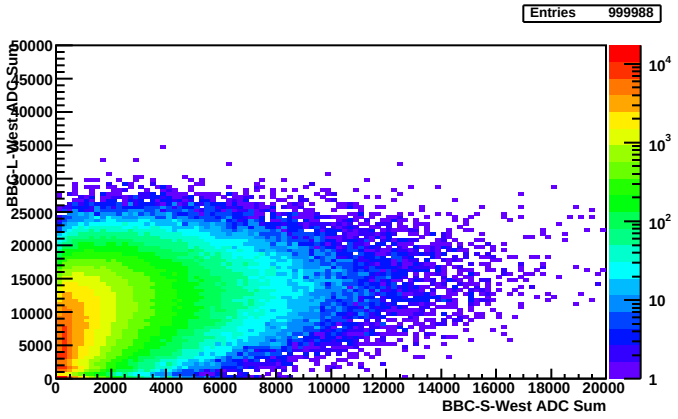

Entries 999988
TOF Mult
BBC-S-East ADC Sum

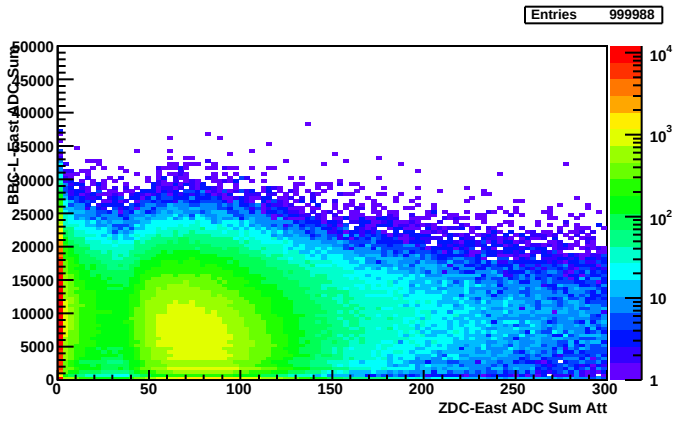

Entries 999988
TOF Mult
BBC-S-West ADC Sum

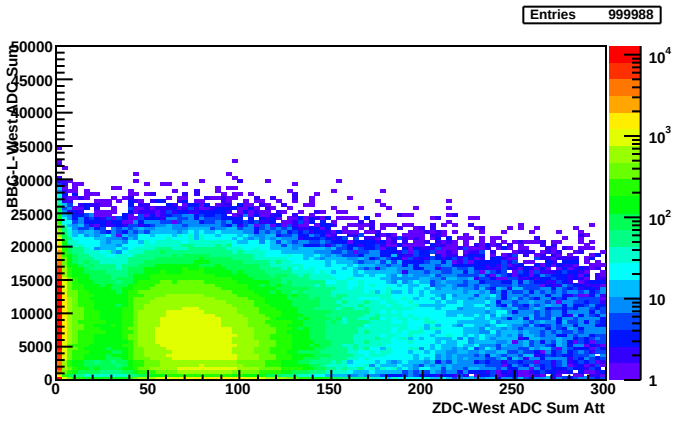

Entries 999988
TOF Mult
ZDC-East ADC Sum Att

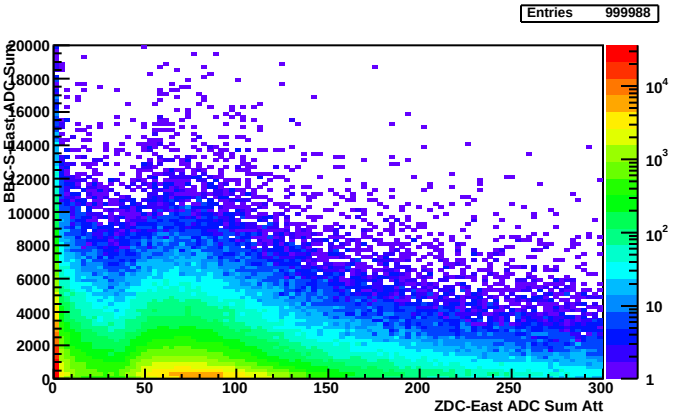

Entries 999988
TOF Mult
ZDC-West ADC Sum Att

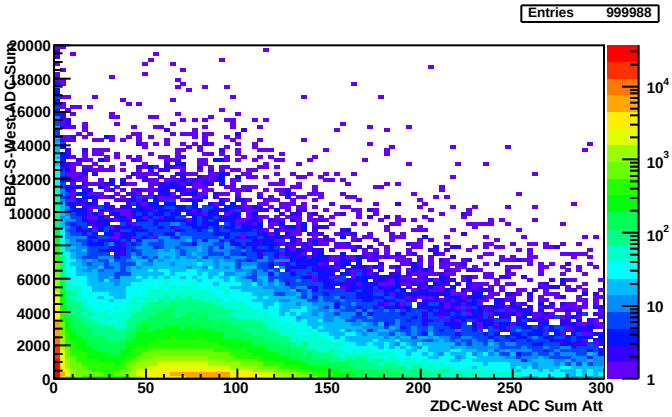

Entries 999988
BBC-L-East ADC Sum
BBC-S-East ADC Sum

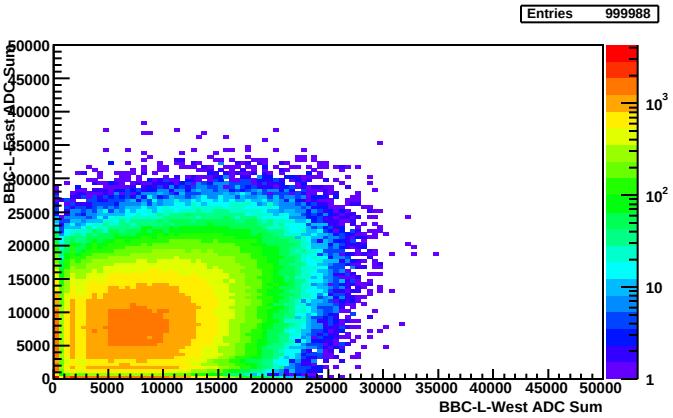

Entries 999988
BBC-L-West ADC Sum
BBC-S-West ADC Sum

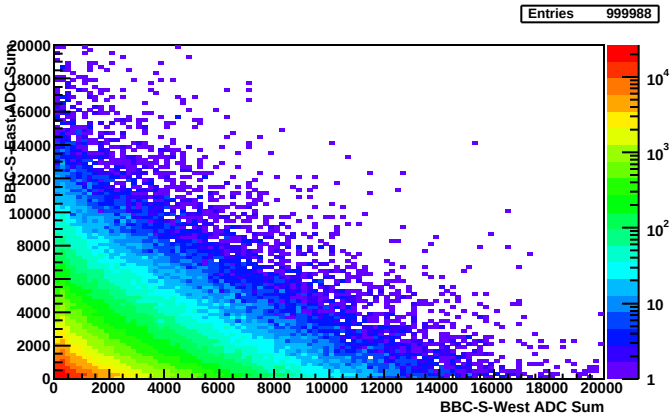

Entries 999988
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

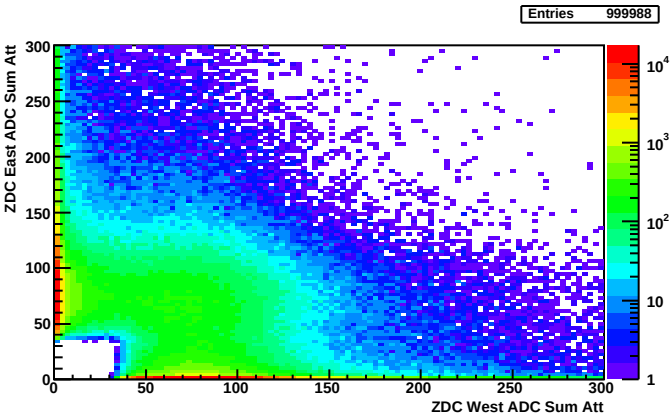

Entries 999988
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

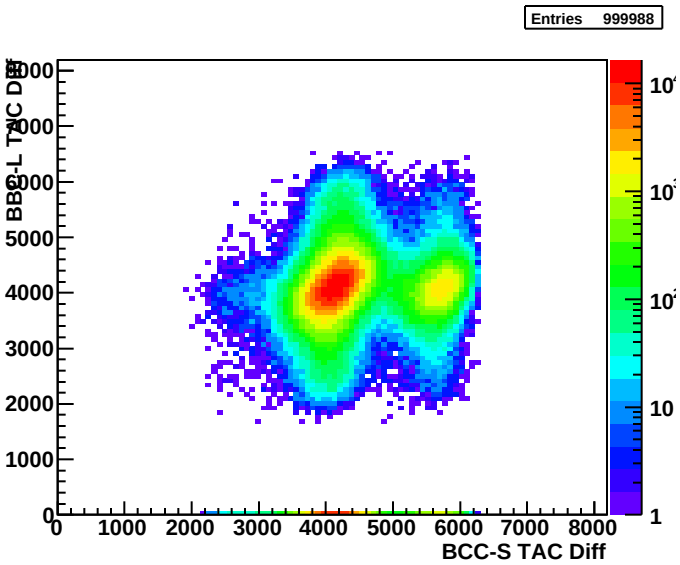

Entries 999988
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

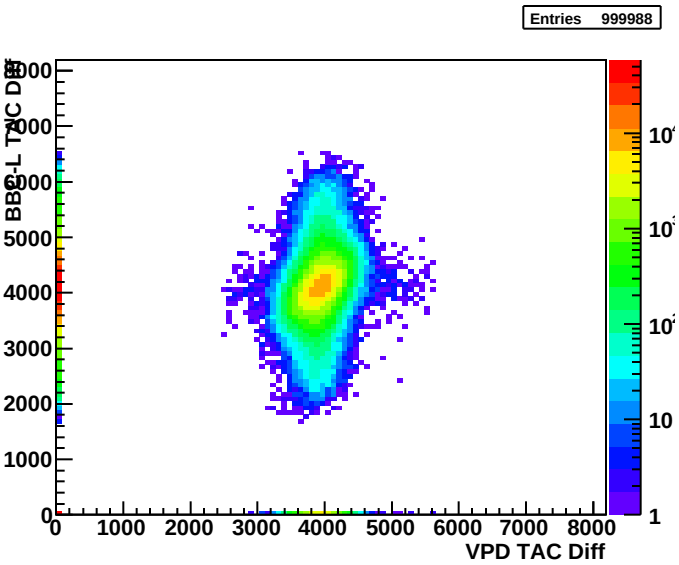

Entries 999988
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

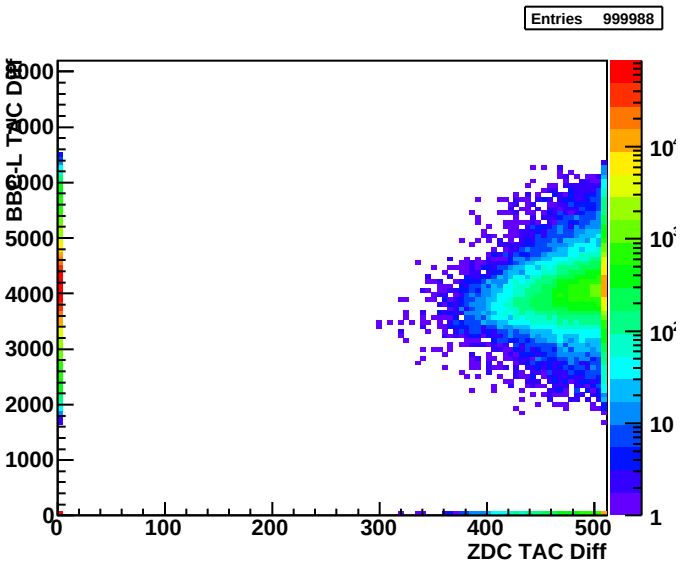

Entries 999988
BBC-L-East ADC Sum
BBC-L-West ADC Sum

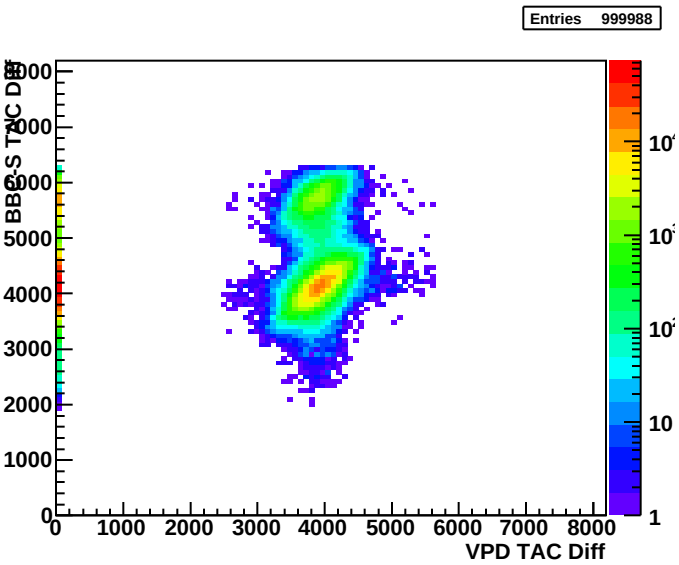

Entries 999988
BBC-S-East ADC Sum
BBC-S-West ADC Sum

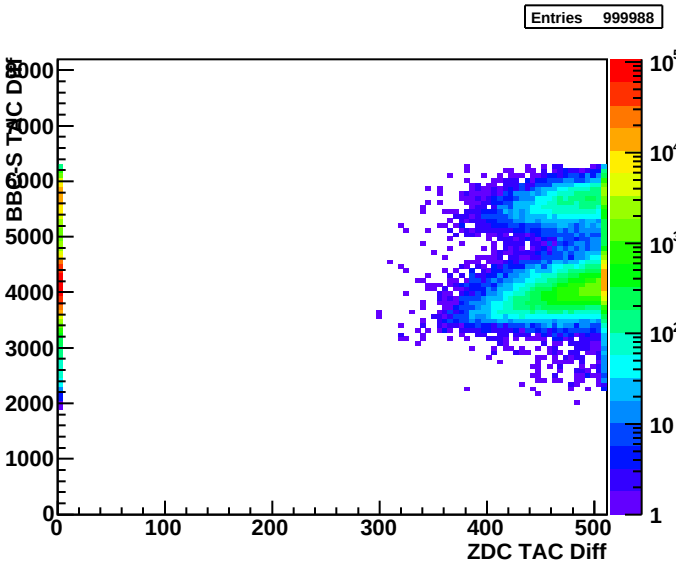

Entries 999988
ZDC East ADC Sum Att
ZDC West ADC Sum Att

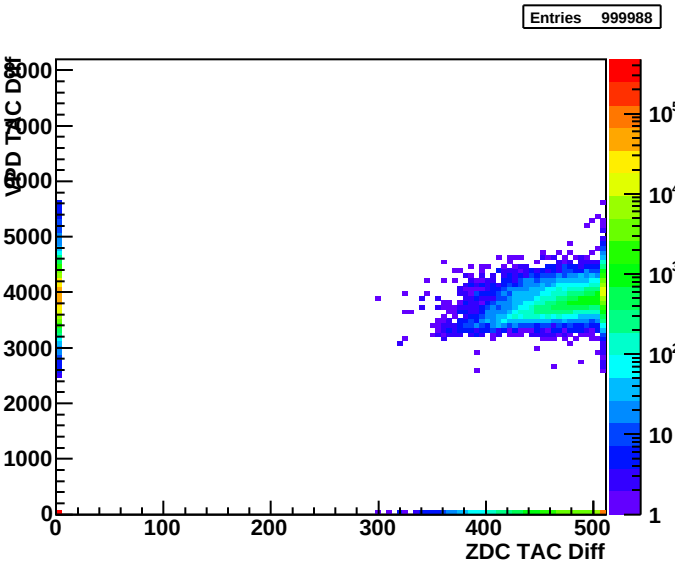

Entries 999988
BBC-L TAC Diff
BCC-S TAC Diff

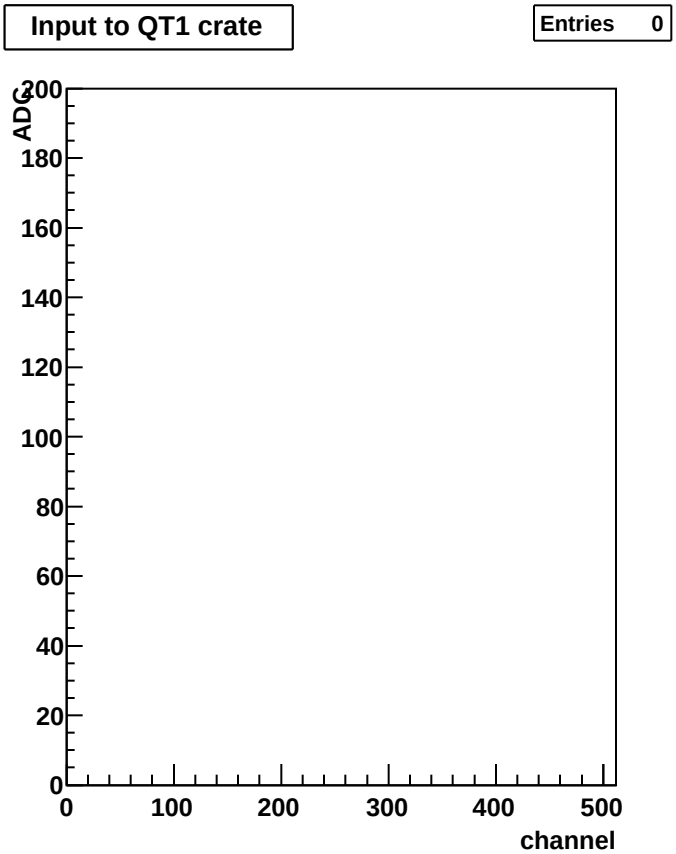

Entries 999988
BBC-L TAC Diff
VPD TAC Diff

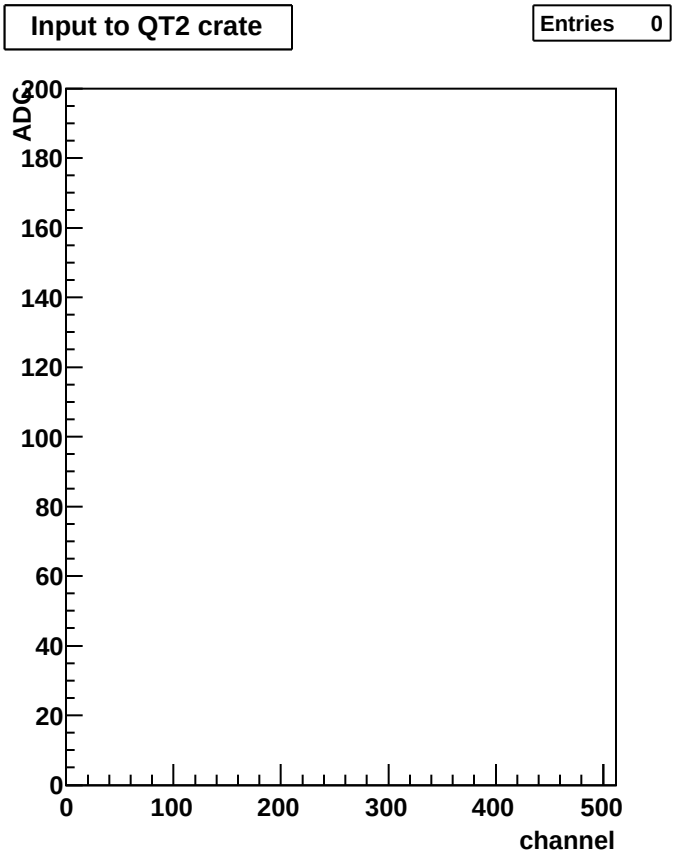

Entries 999988
BBC-L TAC Diff
ZDC TAC Diff

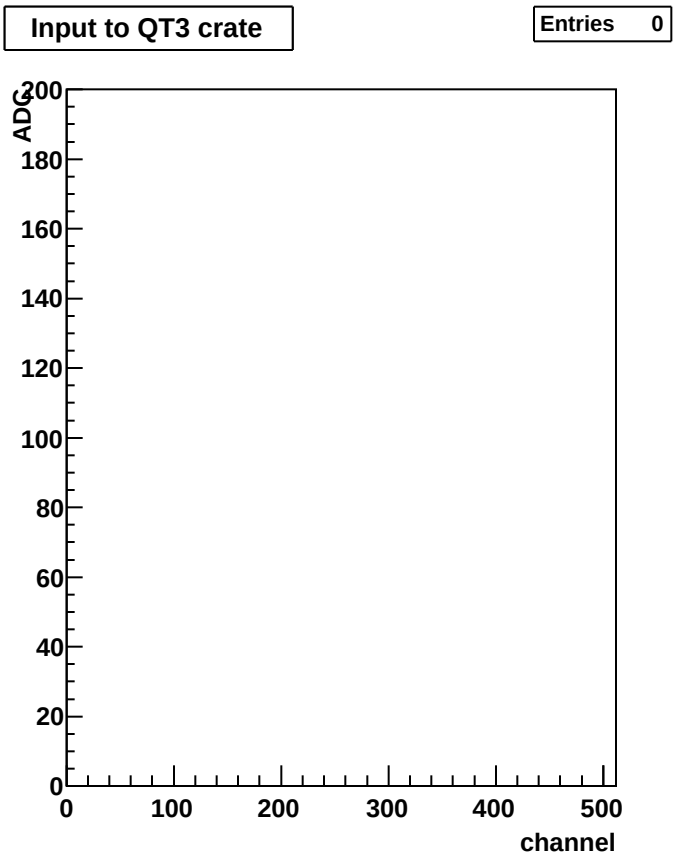

Entries 999988
BBC-S TAC Diff
VPD TAC Diff

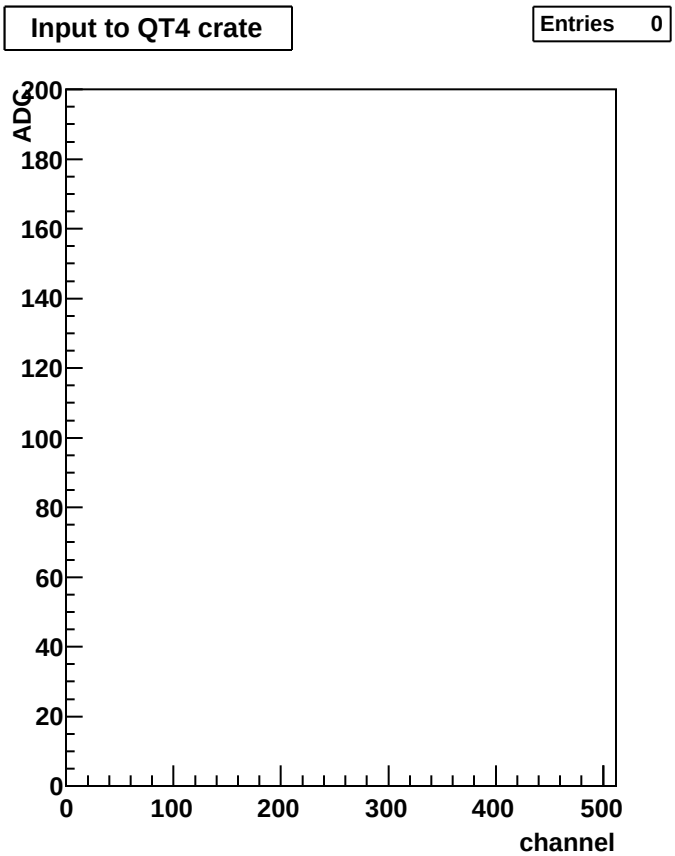

Entries 999988
BBC-S TAC Diff
ZDC TAC Diff

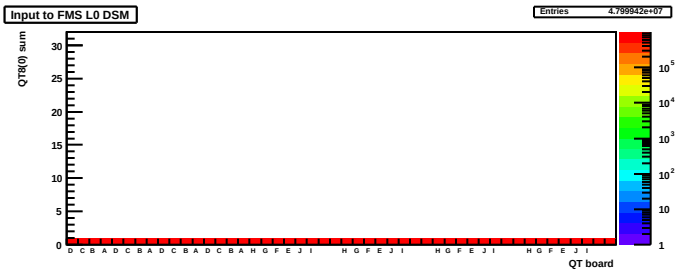

Entries 999988
VPD TAC Diff
ZDC TAC Diff

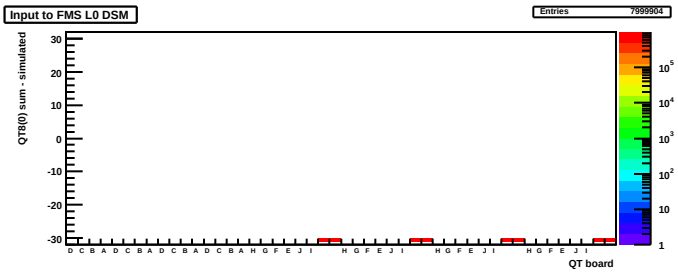

Input to QT1 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

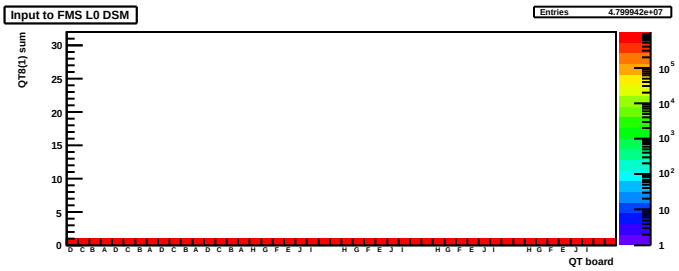

Input to QT2 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

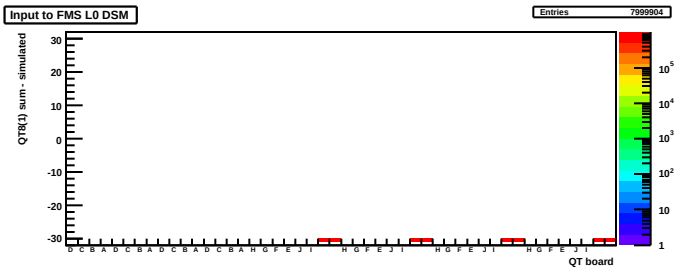

Input to QT3 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

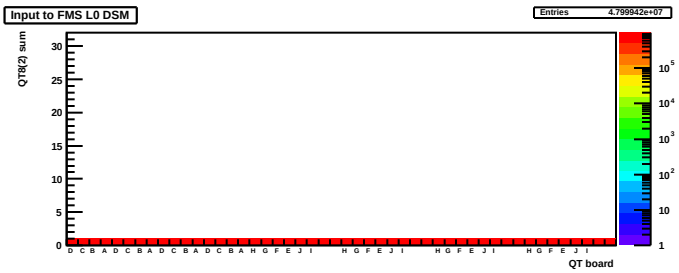

Input to QT4 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

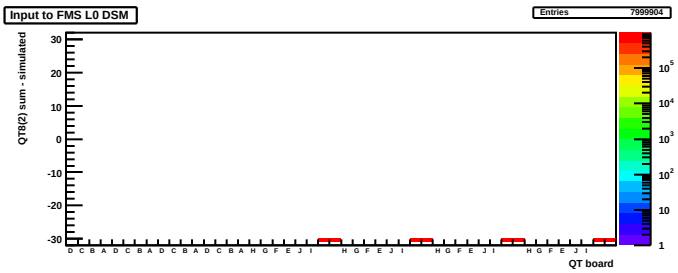

Input to FMS L0 DSM
Entries 4.799942e+07
QT8(0) sum
QT board

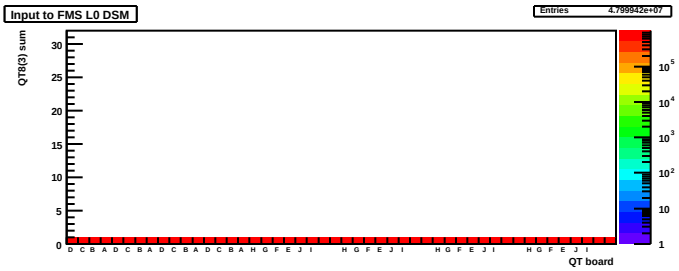

Input to FMS L0 DSM
Entries 7999904
QT8(0) sum - simulated
QT board

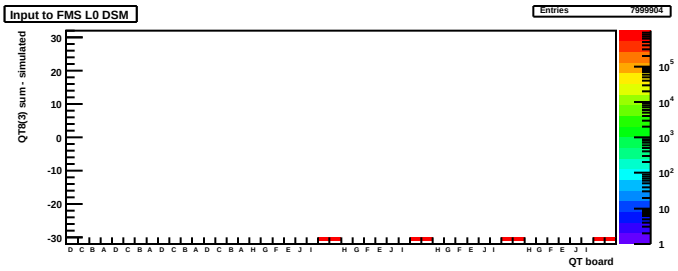

Input to FMS L0 DSM
Entries 4.799942e+07
QT8(1) sum
QT board

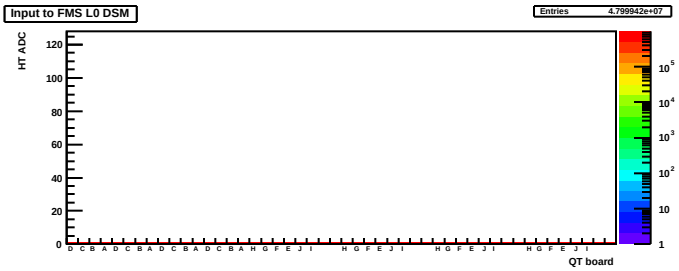

Input to FMS L0 DSM
Entries 7999904
QT8(1) sum - simulated
QT board

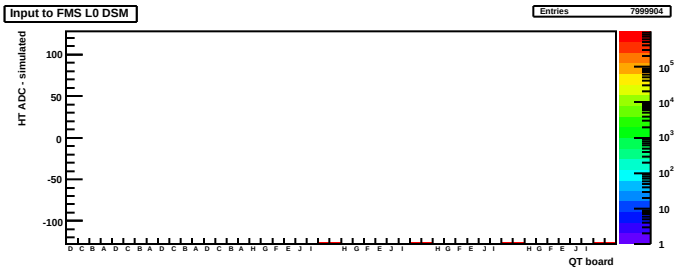

Input to FMS L0 DSM
Entries 4.799942e+07
QT8(2) sum
QT board

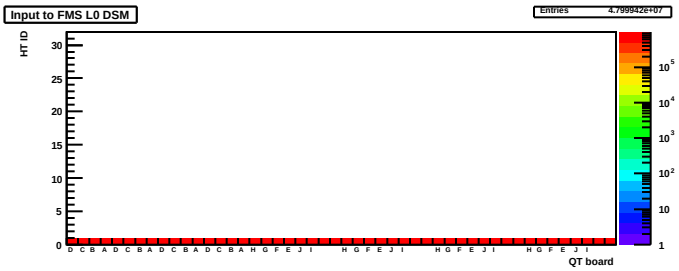

Input to FMS L0 DSM
Entries 7999904
QT8(2) sum - simulated
QT board

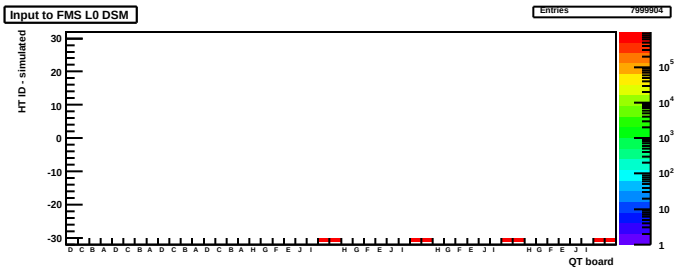

Input to FMS L0 DSM
Entries 4.799942e+07
QT8(3) sum
QT board

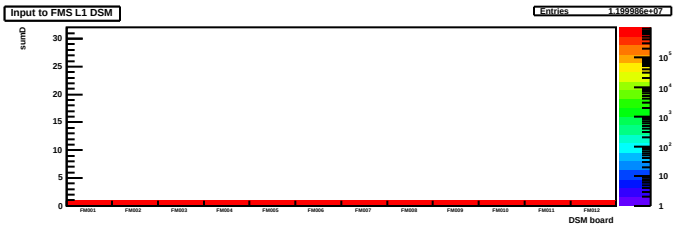

Input to FMS L0 DSM
Entries 7999904
QT8(3) sum - simulated
QT board

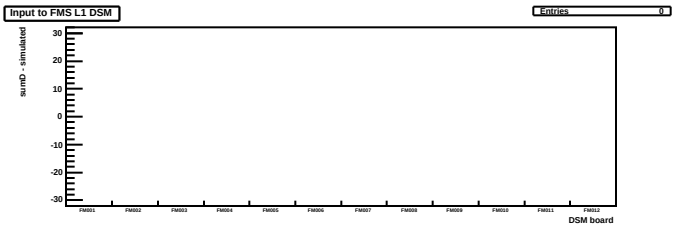

Input to FMS L0 DSM
Entries 4.799942e+07
HT ADC
QT board

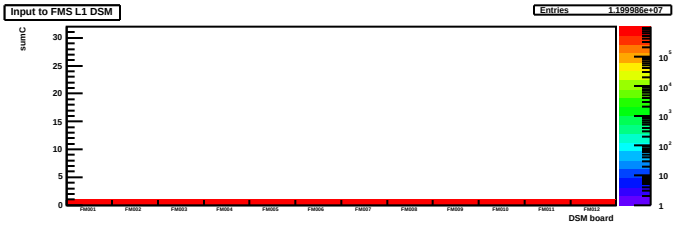

Input to FMS L0 DSM
Entries 7999904
HT ADC - simulated
QT board

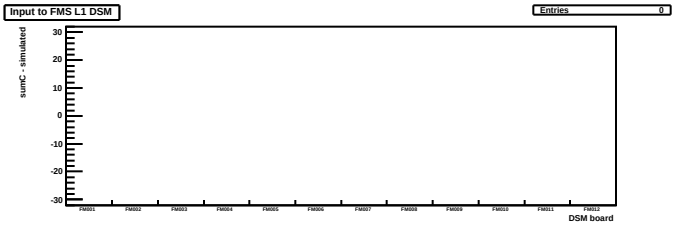

Input to FMS L0 DSM
Entries 4.799942e+07
HT ID
QT board

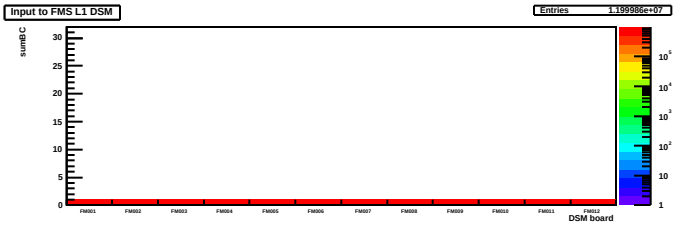

Input to FMS L0 DSM
Entries 7999904
HT ID - simulated
QT board

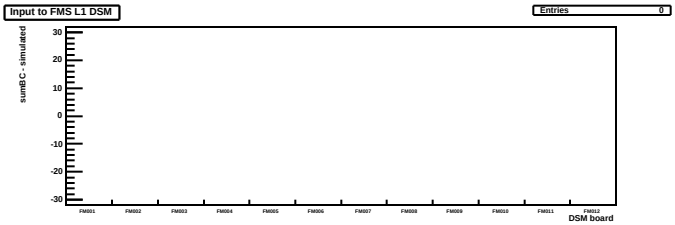

Input to FMS L1 DSM
Entries 1.199986e+07
sumD
DSM board

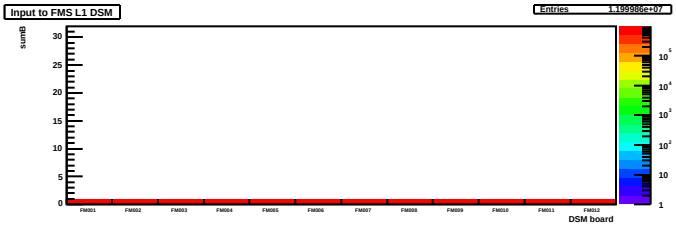

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

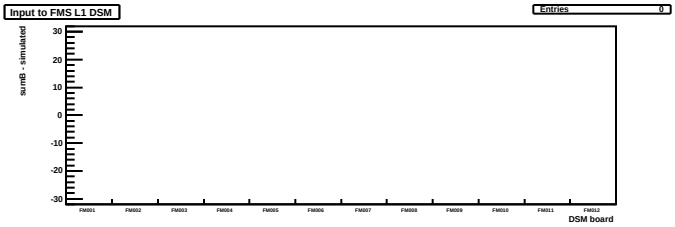

Input to FMS L1 DSM
Entries 1.199986e+07
sumC
DSM board

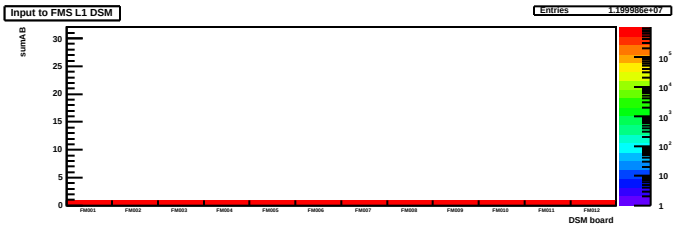

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

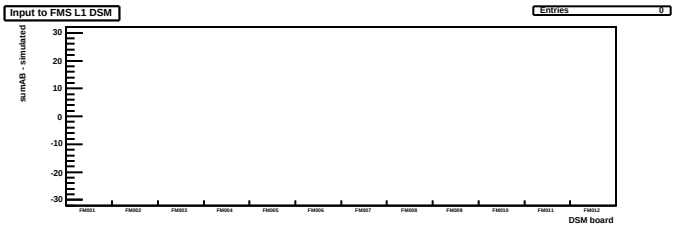

Input to FMS L1 DSM
Entries 1.199986e+07
sumBC
DSM board

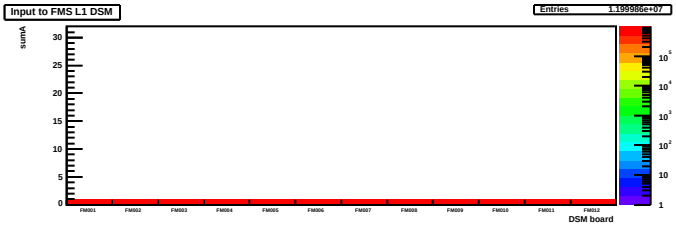

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

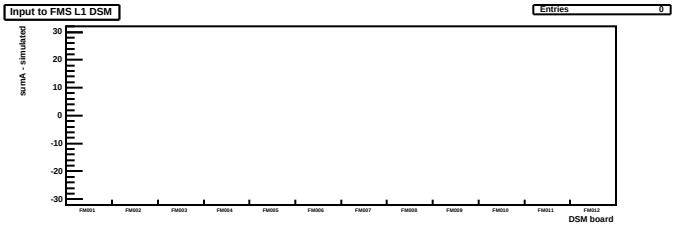

Input to FMS L1 DSM
Entries 1.199986e+07
sumB
DSM board

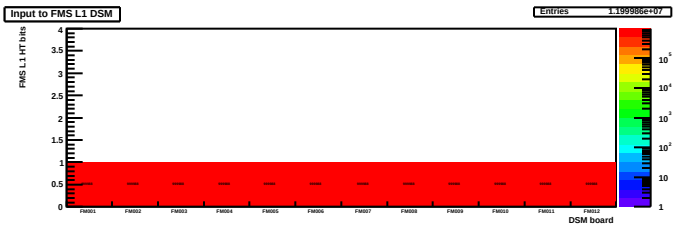

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

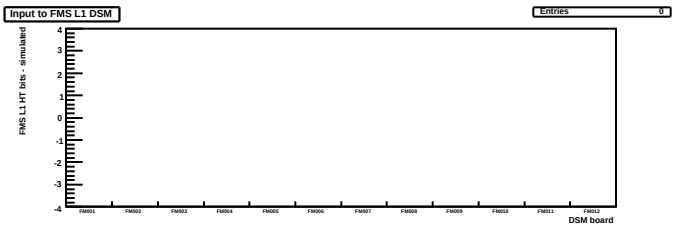

Input to FMS L1 DSM
Entries 1.199986e+07
sumAB
DSM board

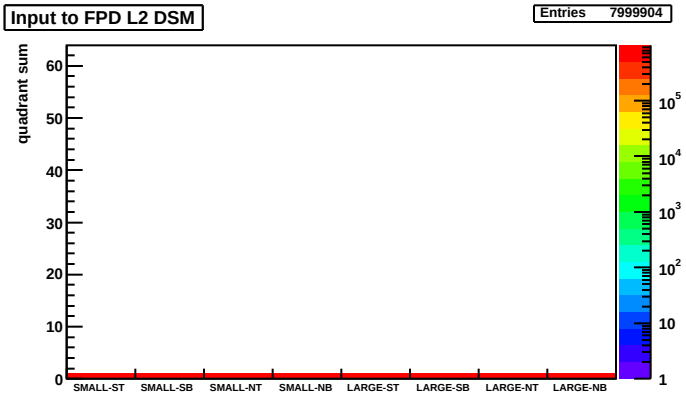

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

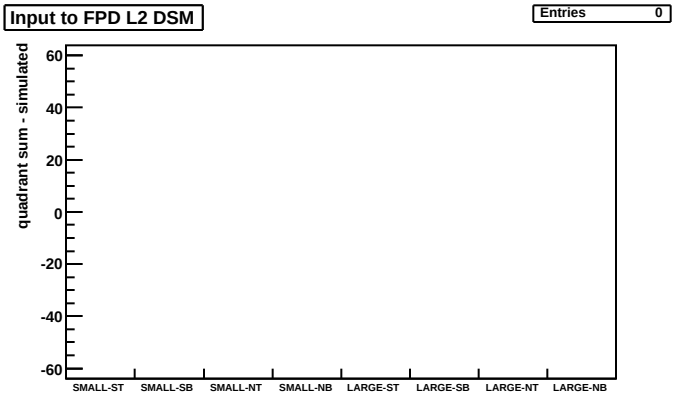

Input to FMS L1 DSM
Entries 1.199986e+07
sumA
DSM board

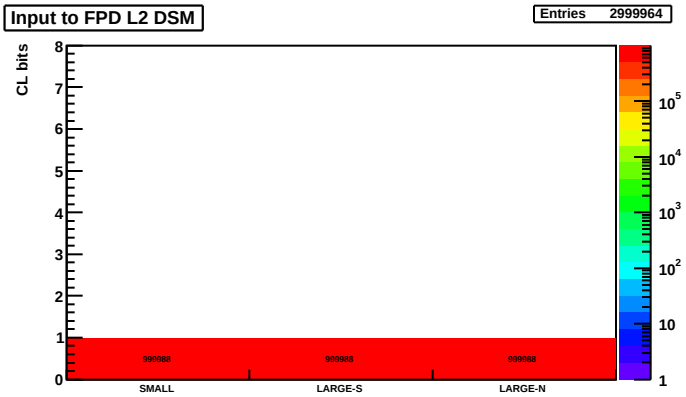

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

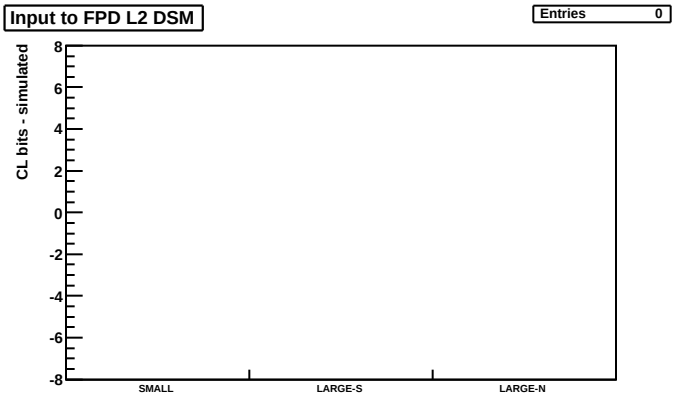

Input to FMS L1 DSM
Entries 1.199986e+07
FMS L1 HT bits
DSM board

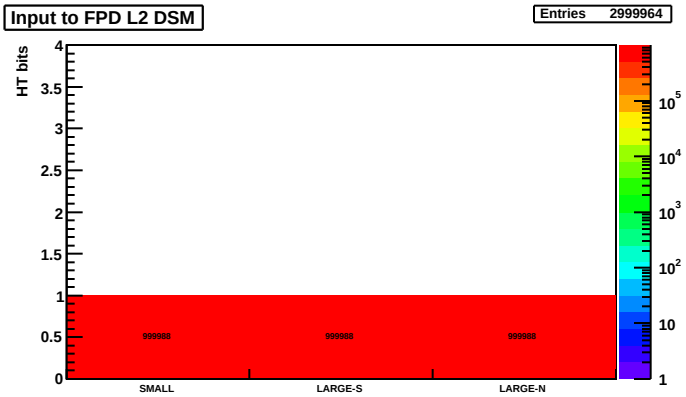

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

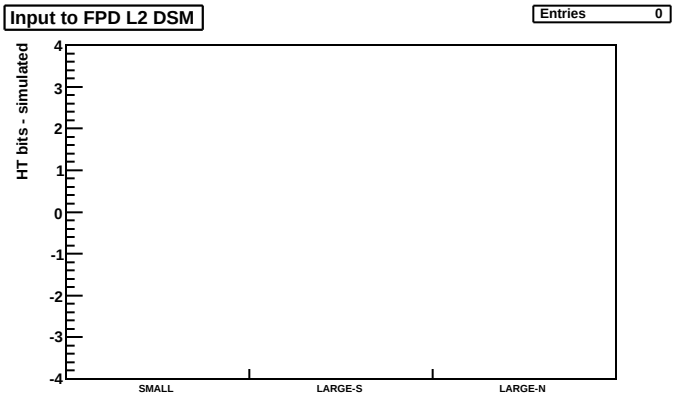

Input to FPD L2 DSM
Entries 7999904
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

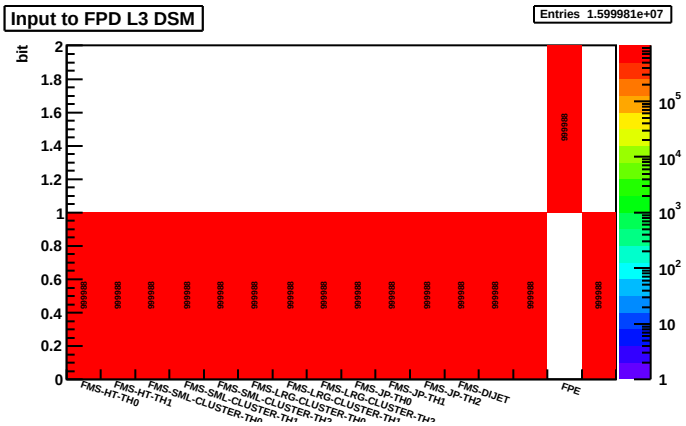

Input to FPD L2 DSM
Entries 0
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

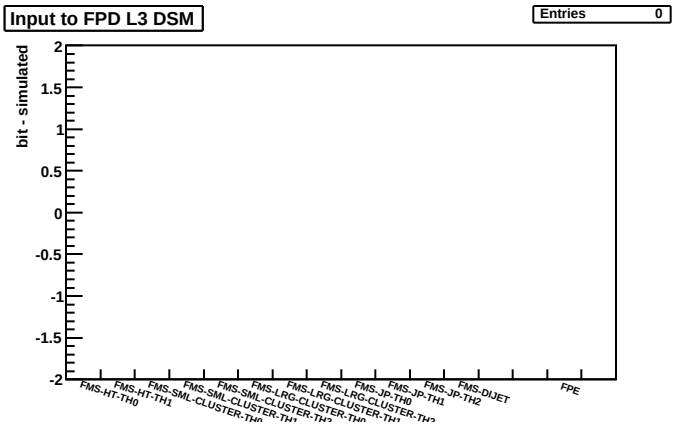

Input to FPD L2 DSM
Entries 2999964
CL bits
999988
999988
999988
SMALL
LARGE-S
LARGE-N

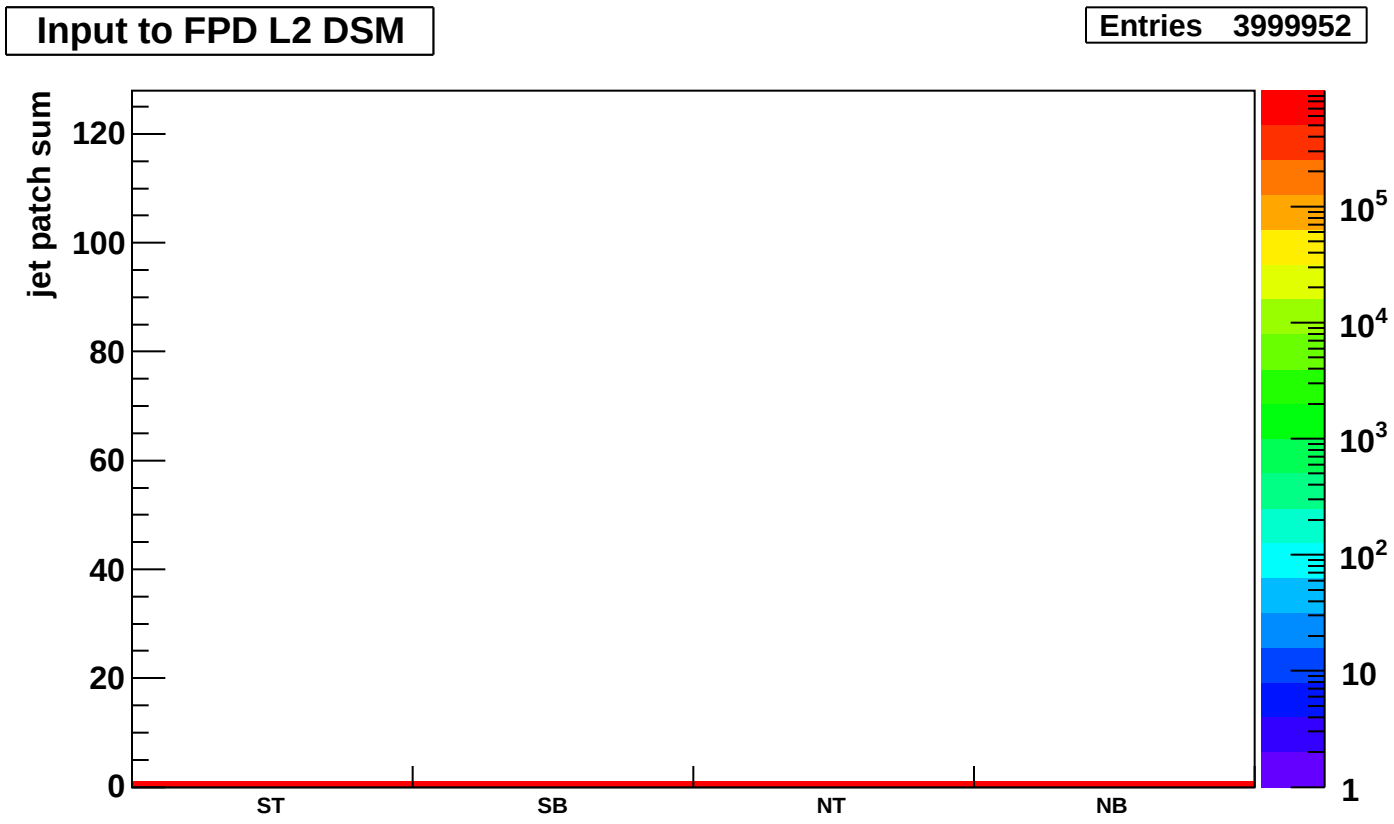

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

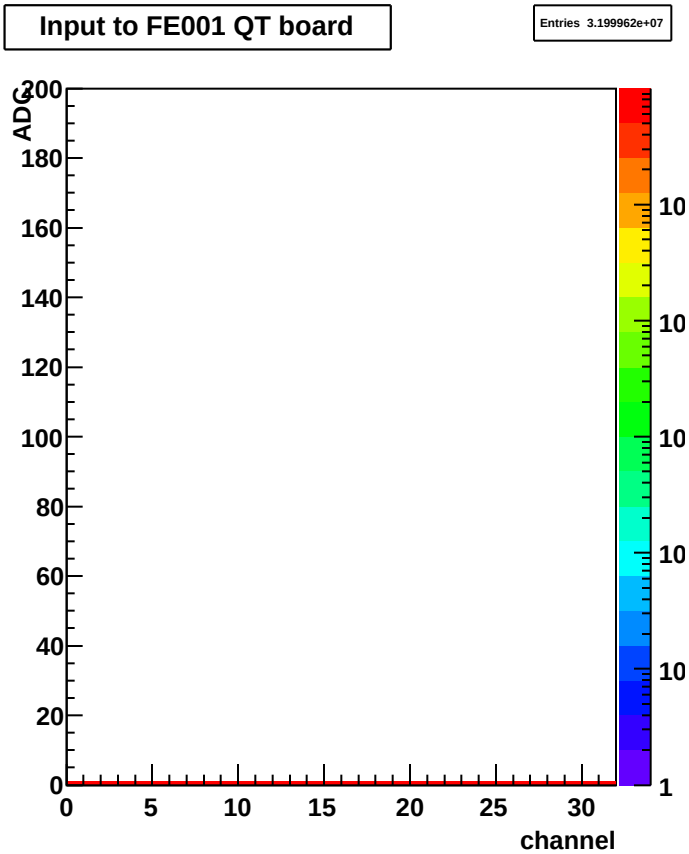

Input to FPD L2 DSM
Entries 2999964
HT bits
999988
999988
999988
SMALL
LARGE-S
LARGE-N

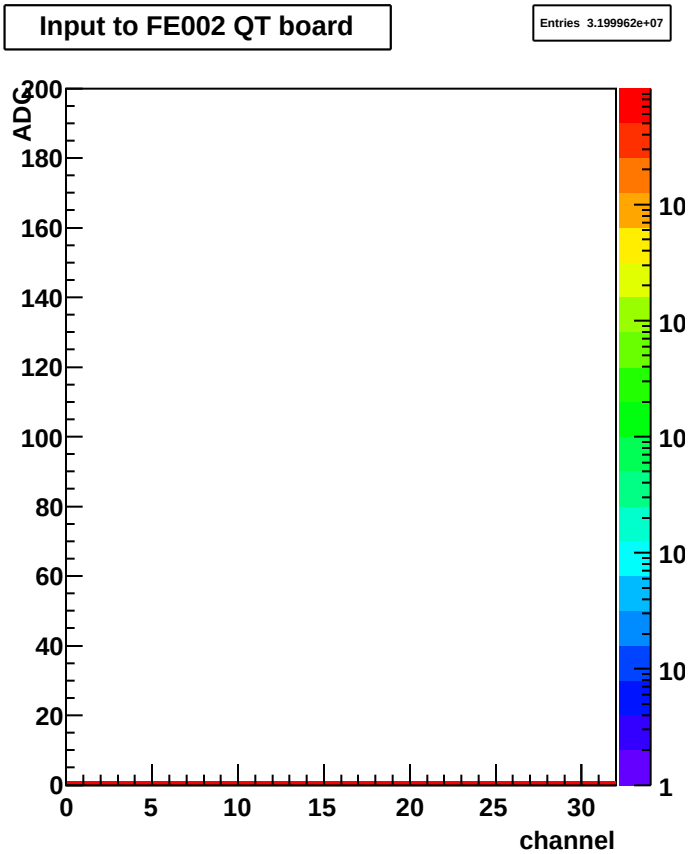

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

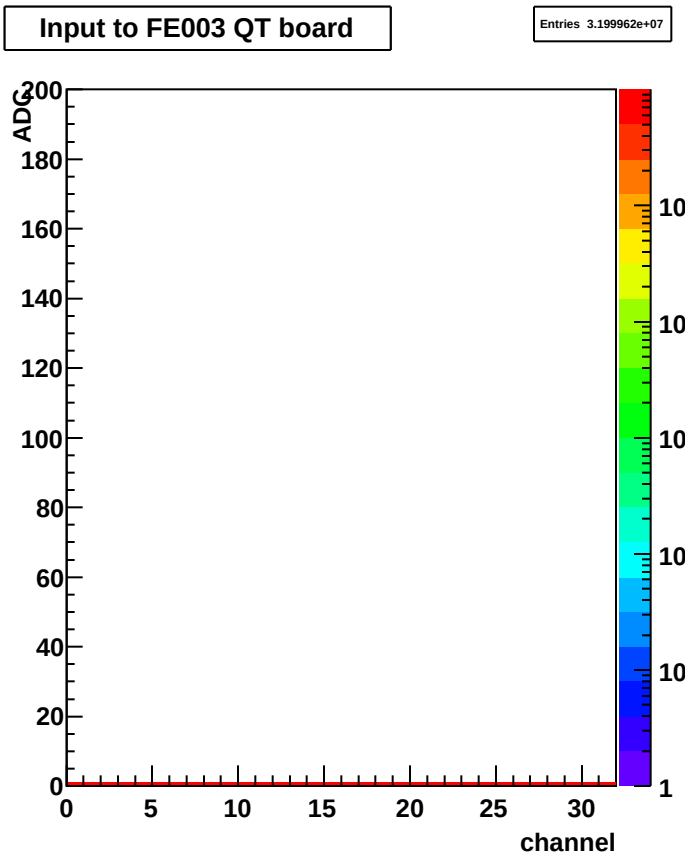

Input to FPD L3 DSM
Entries 1.599981e+07
bit
999988
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

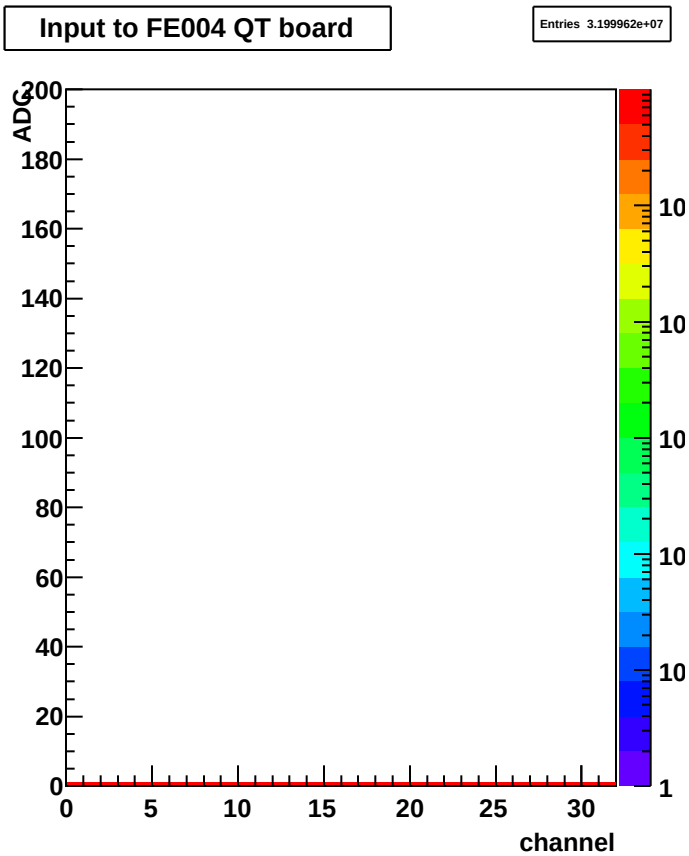

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

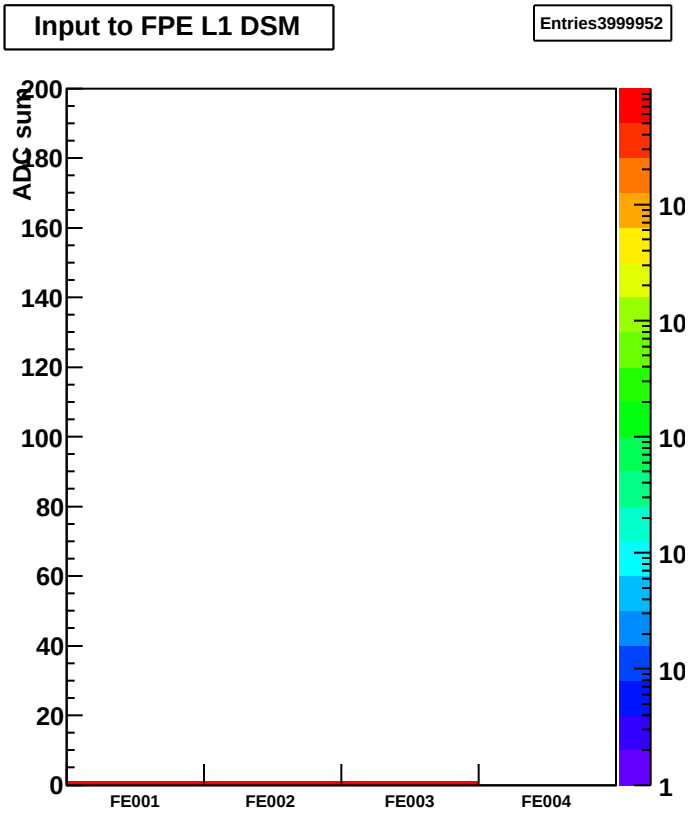

Input to FPD L2 DSM
Entries 3999952
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^5
10^4
10^3
10^2
10
1

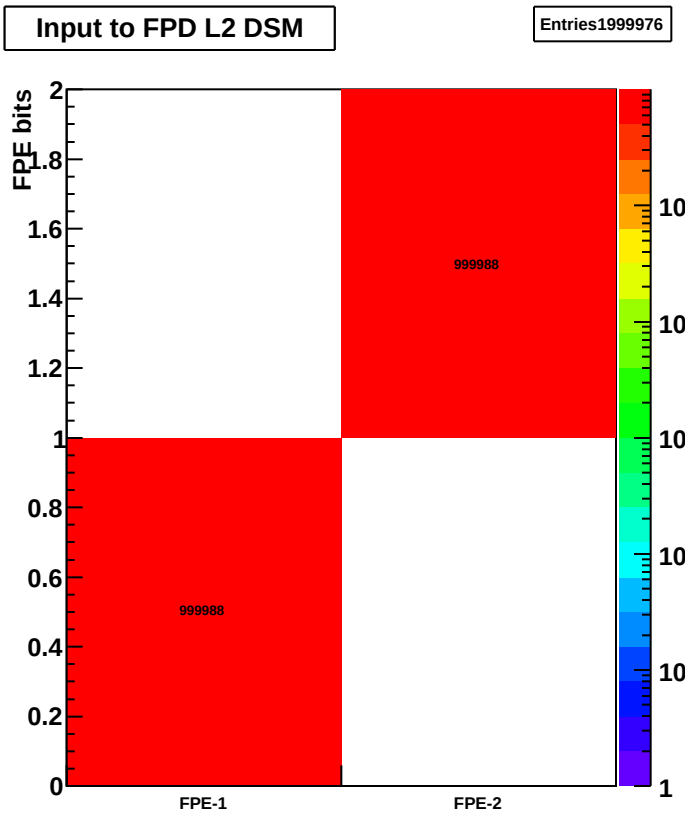

Input to FE001 QT board
Entries 3.199962e+07
ADC
channel

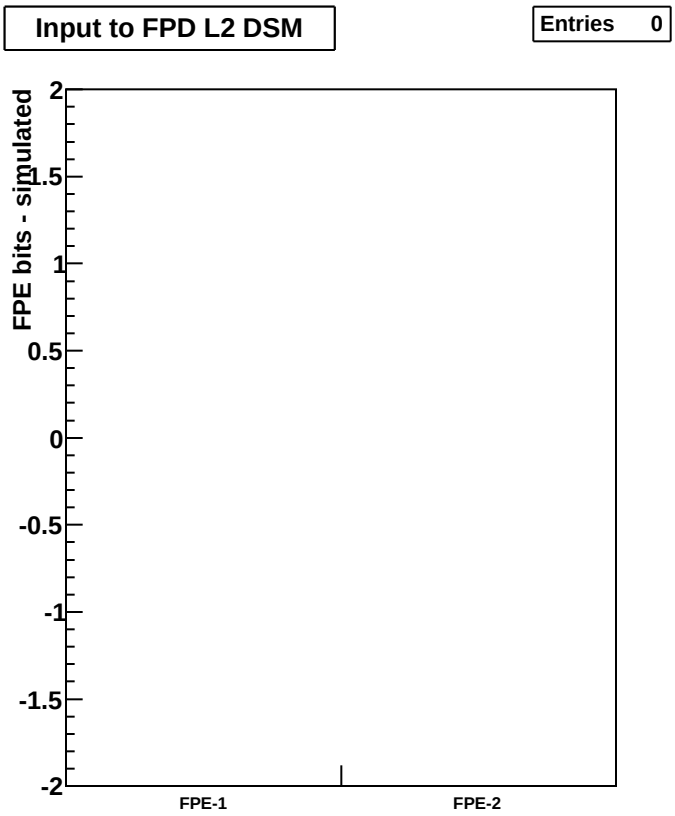

Input to FE002 QT board
Entries 3.199962e+07
ADC
channel


Input to FE003 QT board
Entries 3.199962e+07
ADC
channel


Input to FE004 QT board
Entries 3.199962e+07
ADC
channel


Input to FPE L1 DSM
Entries3999952
ADC sum
200
180
160
140
120
100
80
60
40
20
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPD L2 DSM
Entries1999976
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
999988
999988
FPE-1
FPE-2
10
10
10
10
10
1


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