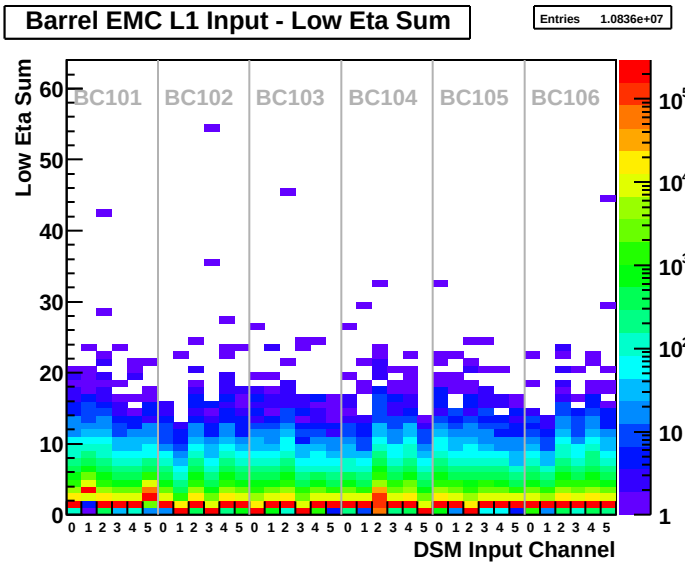
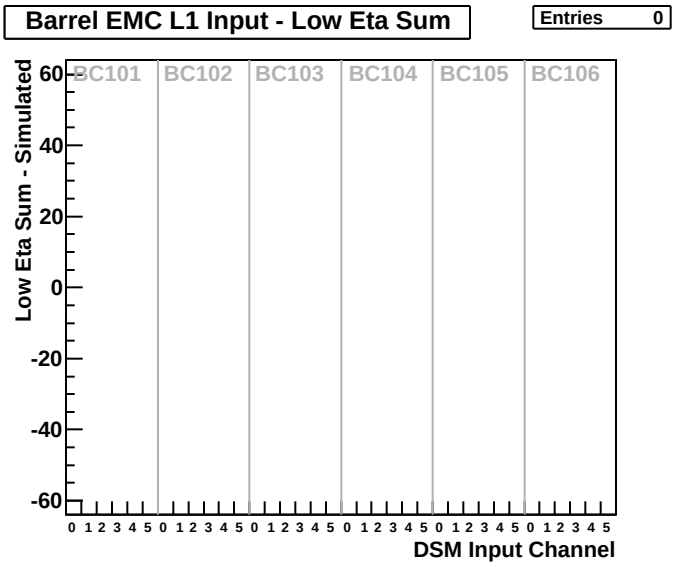
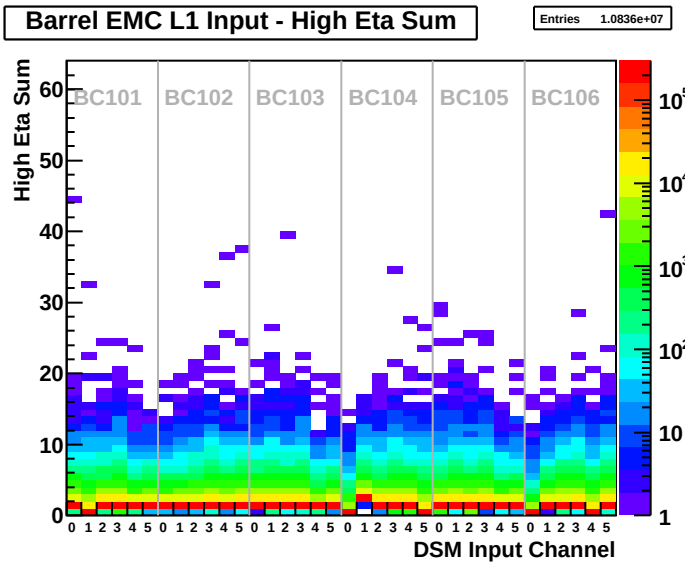
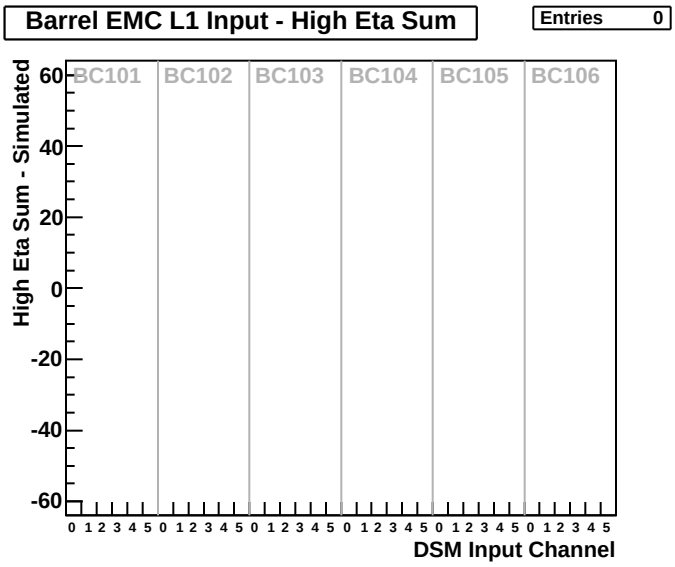
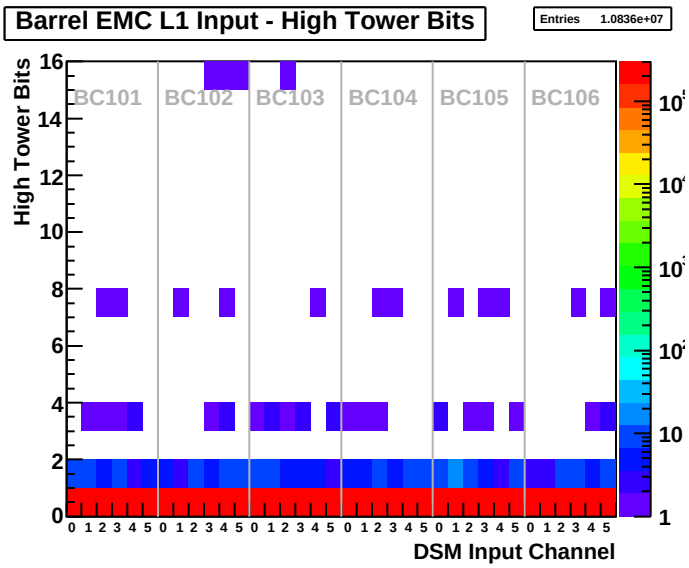
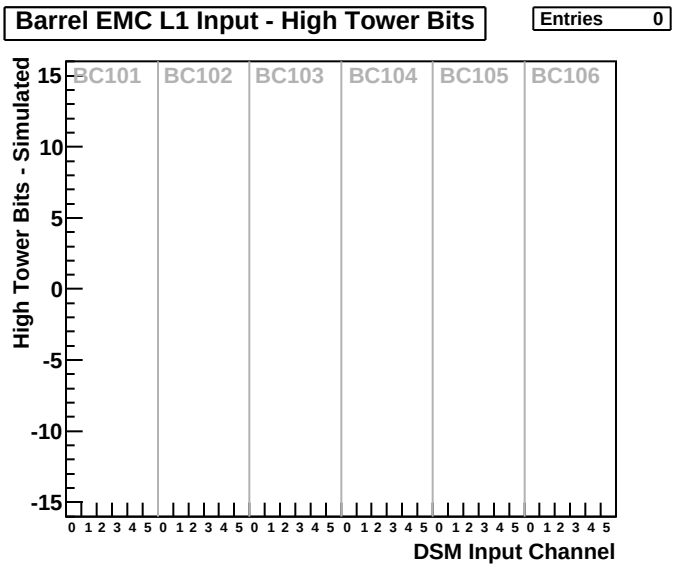

Barrel EMC L1 Input - Low Eta Sum
Entries 1.0836e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

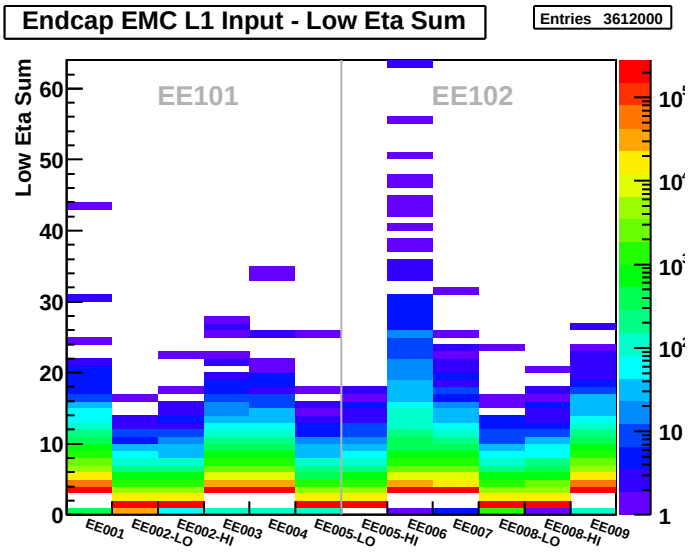

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

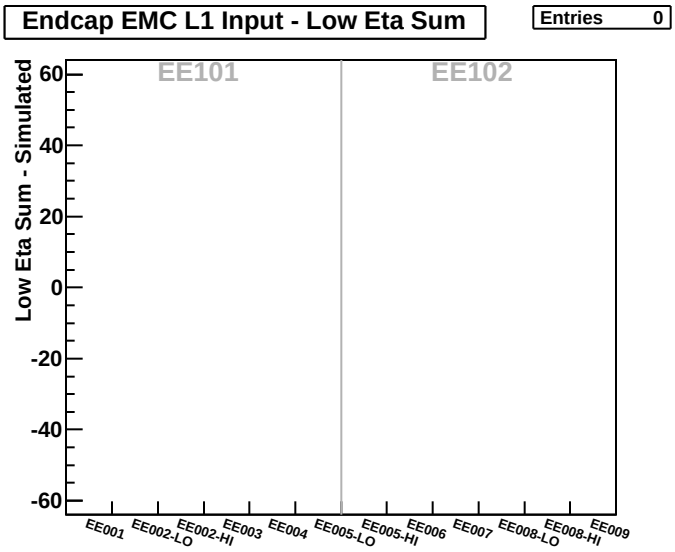

Barrel EMC L1 Input - High Eta Sum
Entries 1.0836e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

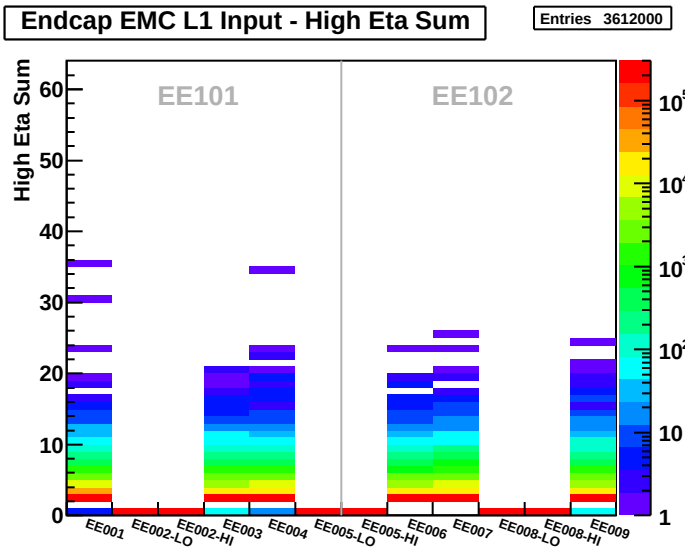

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

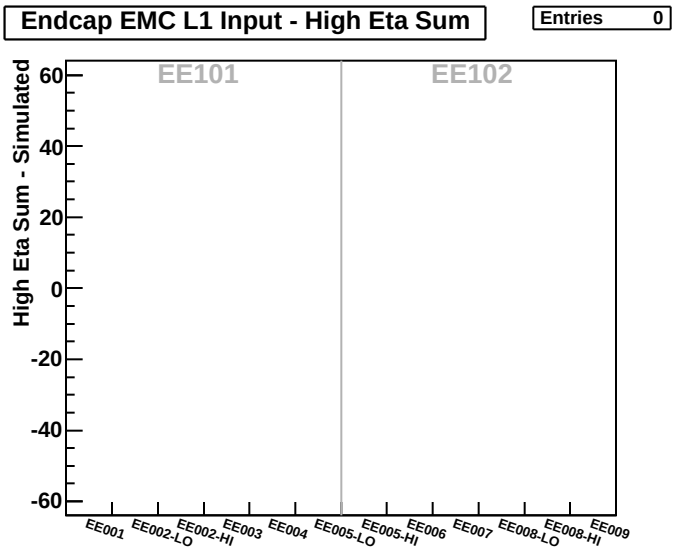

Barrel EMC L1 Input - High Tower Bits
Entries 1.0836e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

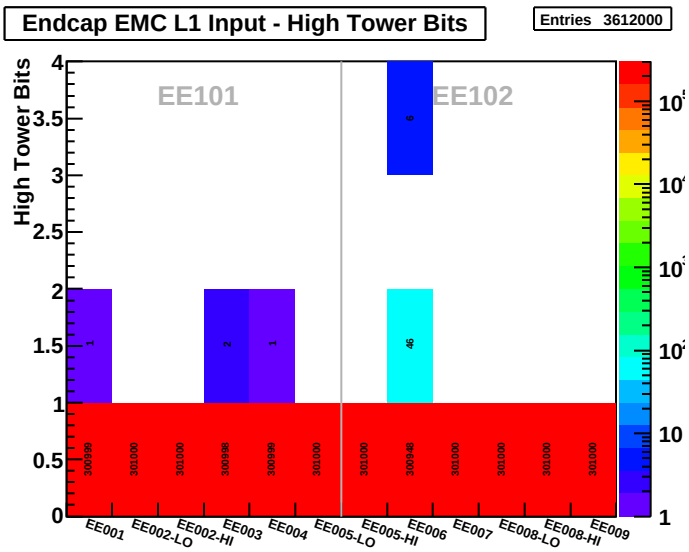

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

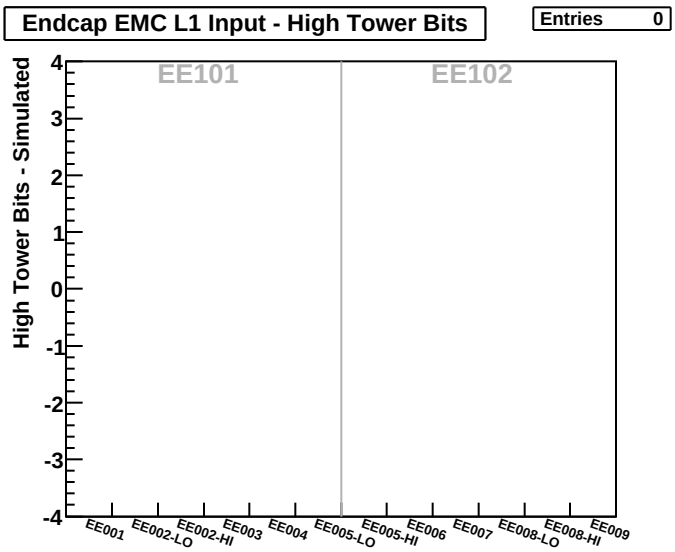

Endcap EMC L1 Input - Low Eta Sum
Entries 3612000
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

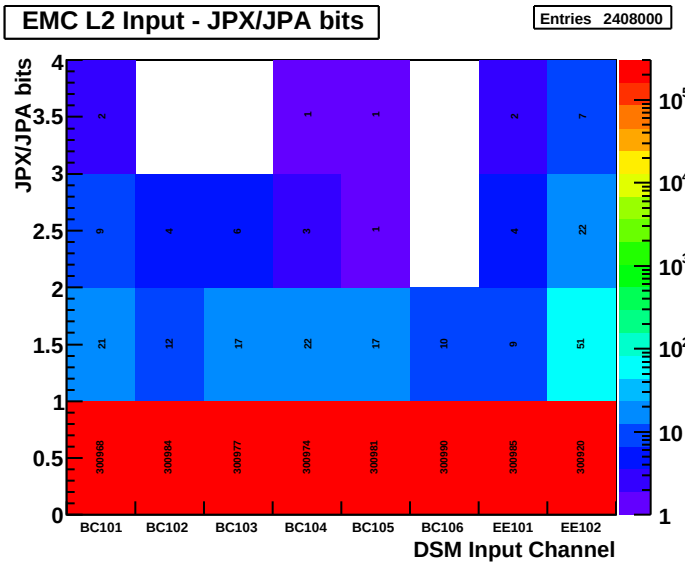

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

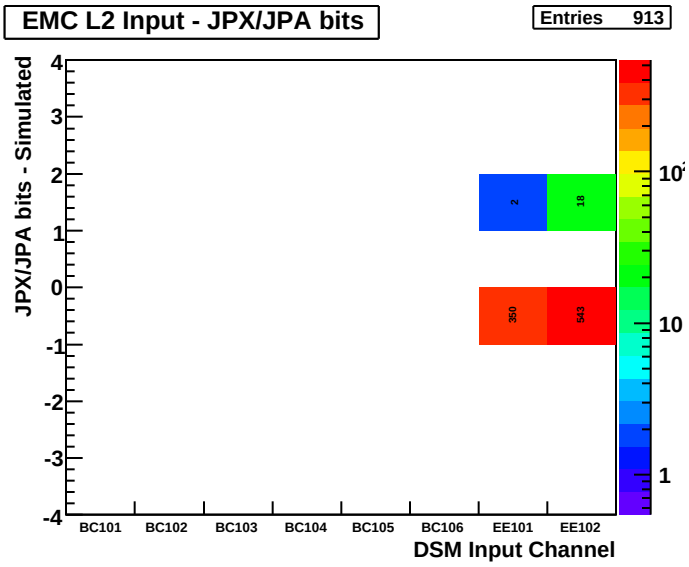

Endcap EMC L1 Input - High Eta Sum
Entries 3612000
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

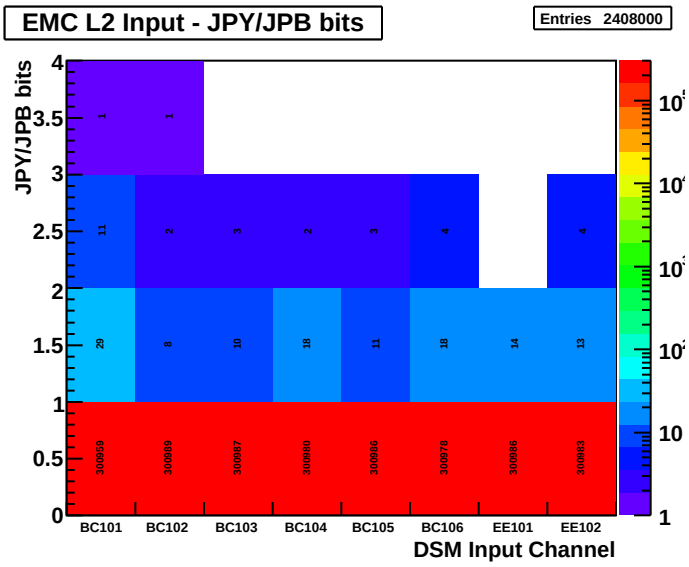

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

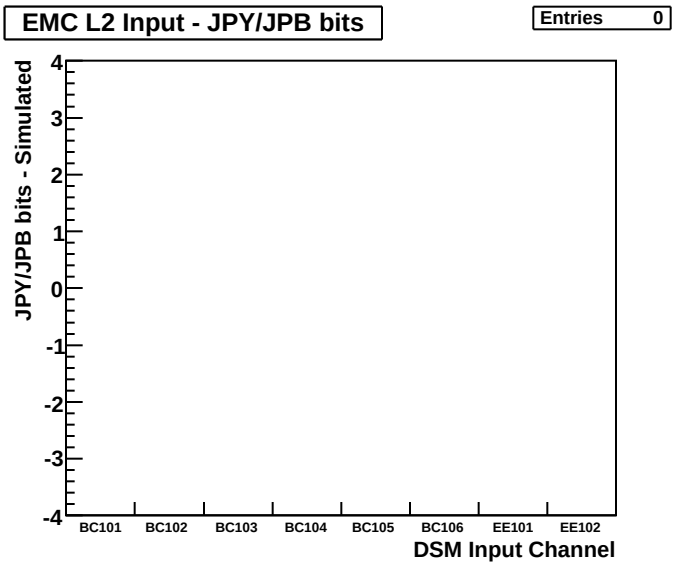

Endcap EMC L1 Input - High Tower Bits
Entries 3612000
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

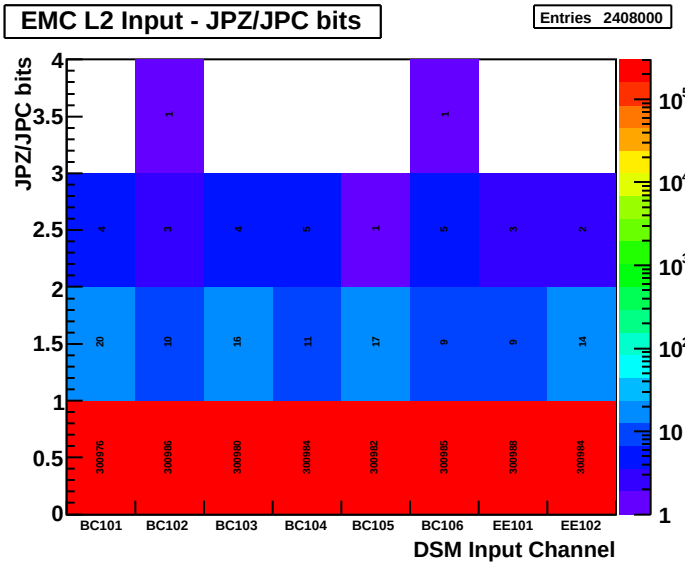

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

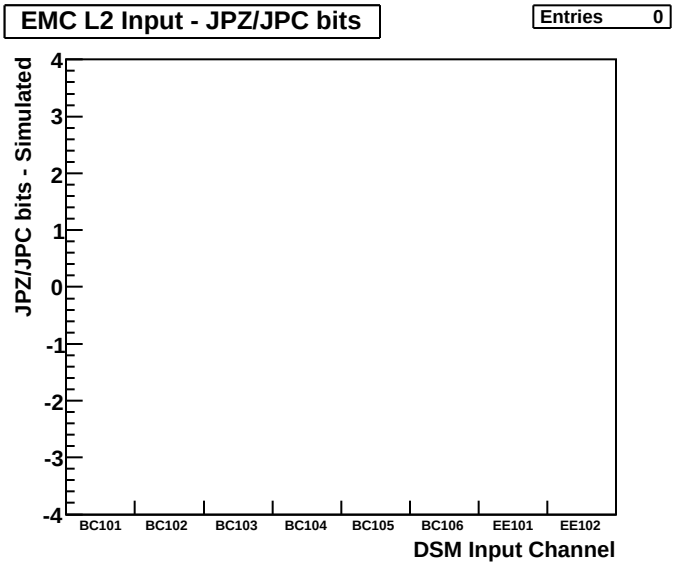

EMC L2 Input - JPX/JPA bits
Entries 2408000
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

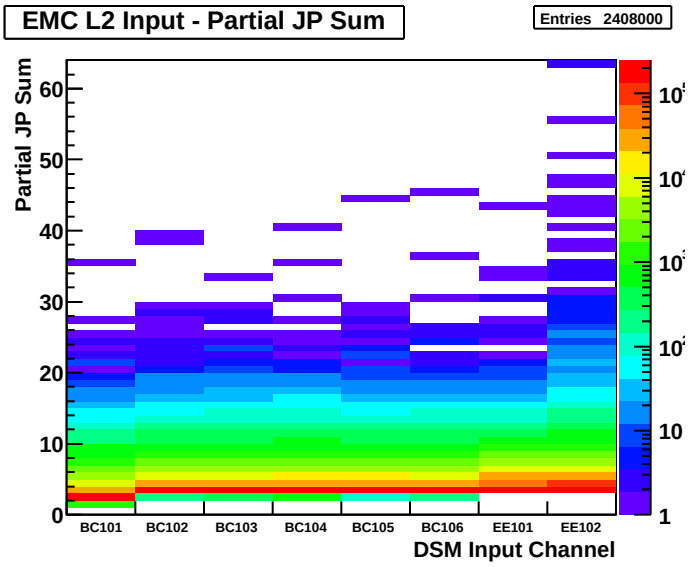

EMC L2 Input - JPX/JPA bits
Entries 913
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

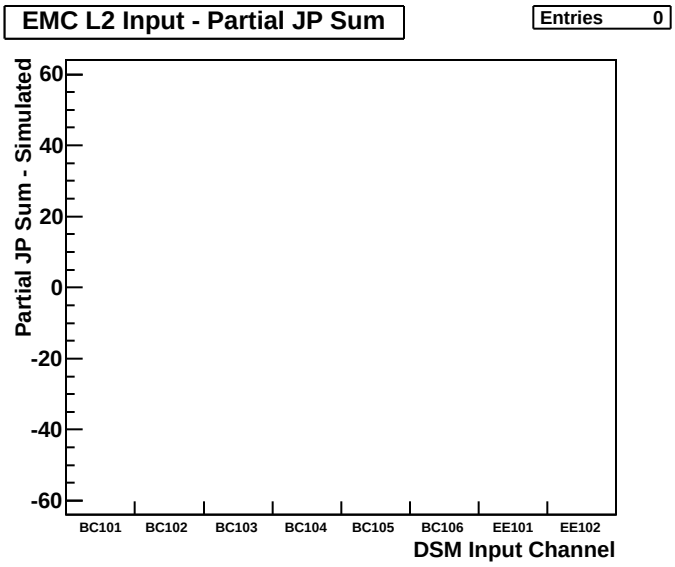

EMC L2 Input - JPY/JPB bits
Entries 2408000
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

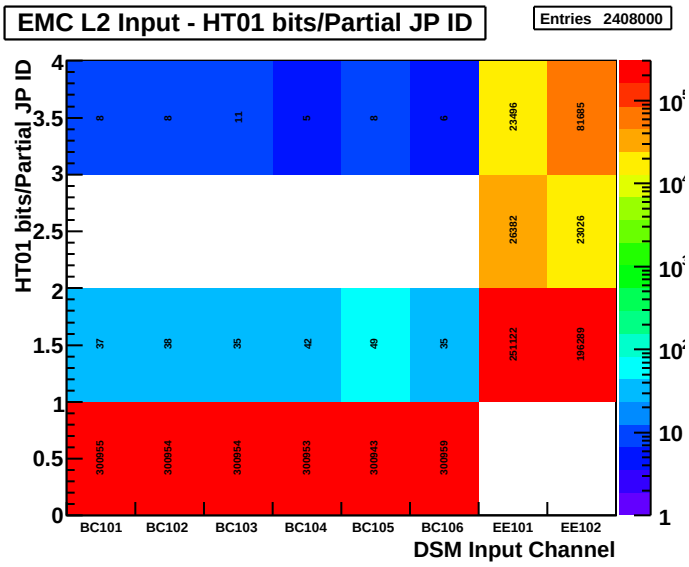

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

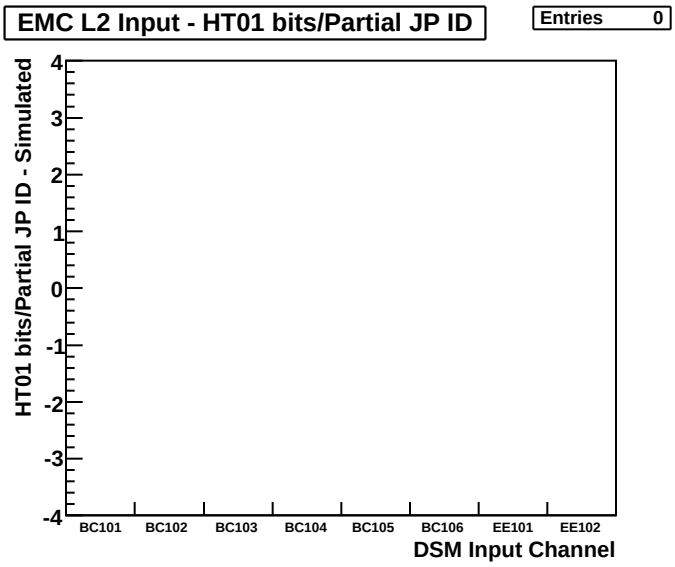

EMC L2 Input - JPZ/JPC bits
Entries 2408000
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

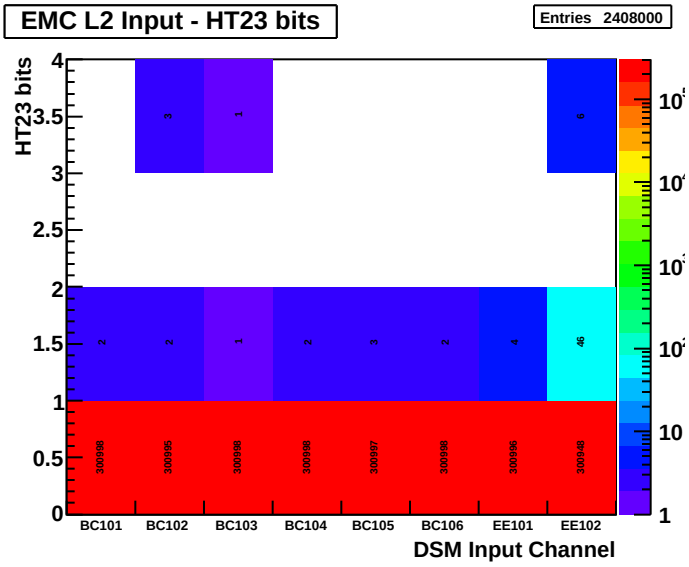

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

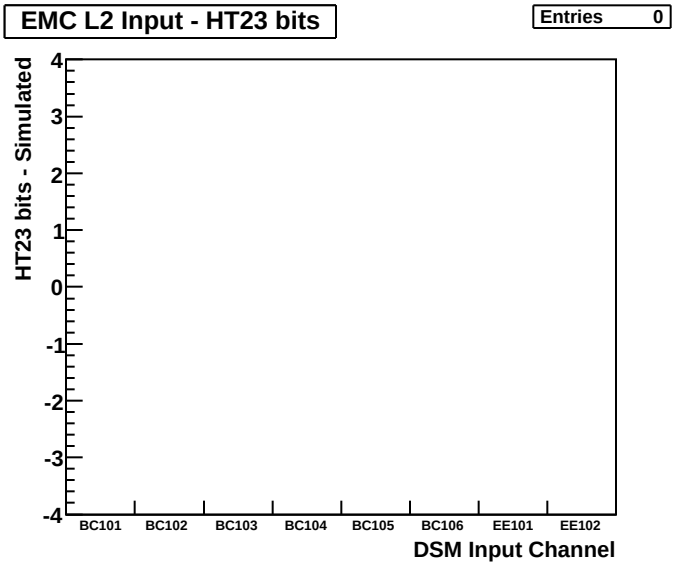

EMC L2 Input - Partial JP Sum
Entries 2408000
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

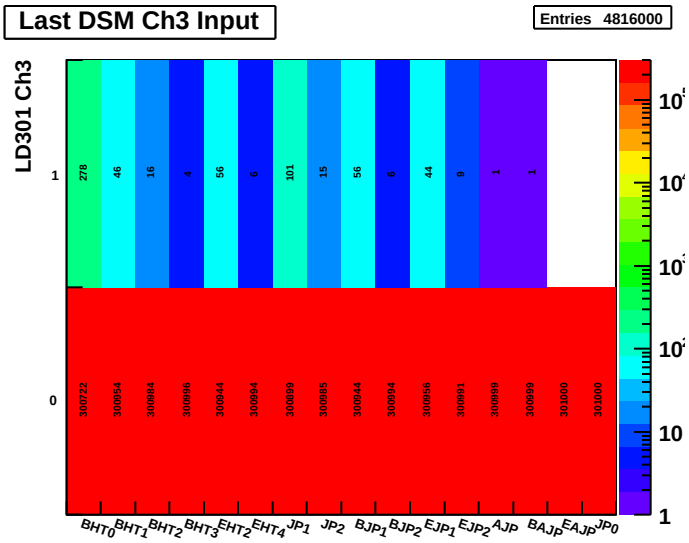

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

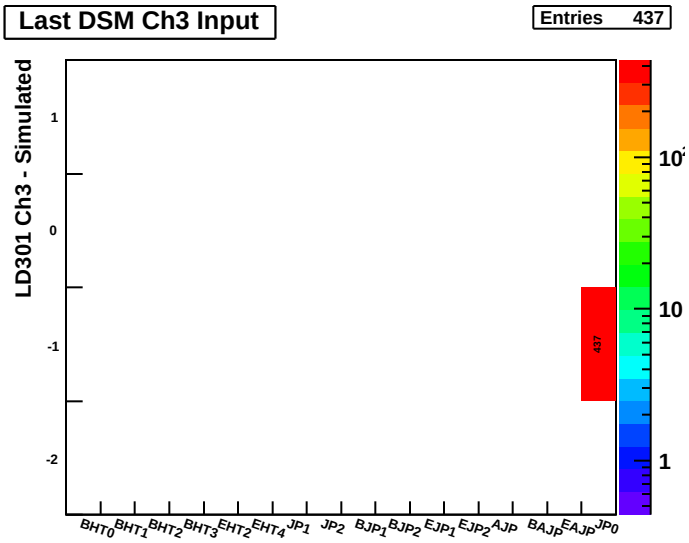

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2408000
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

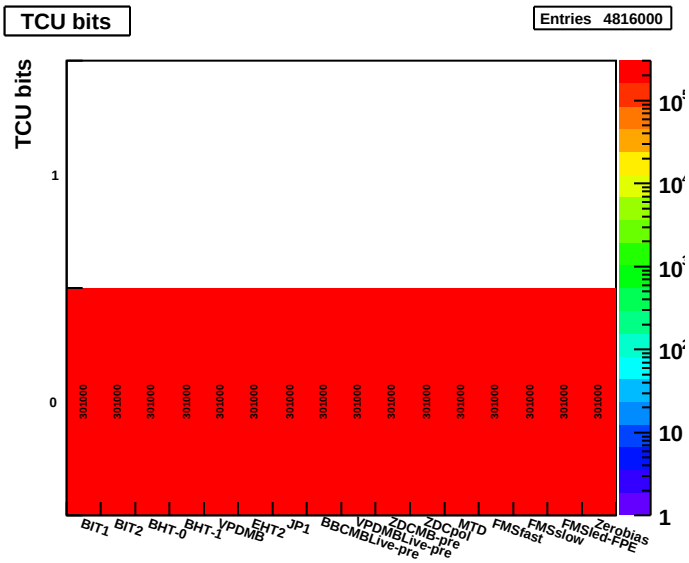

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

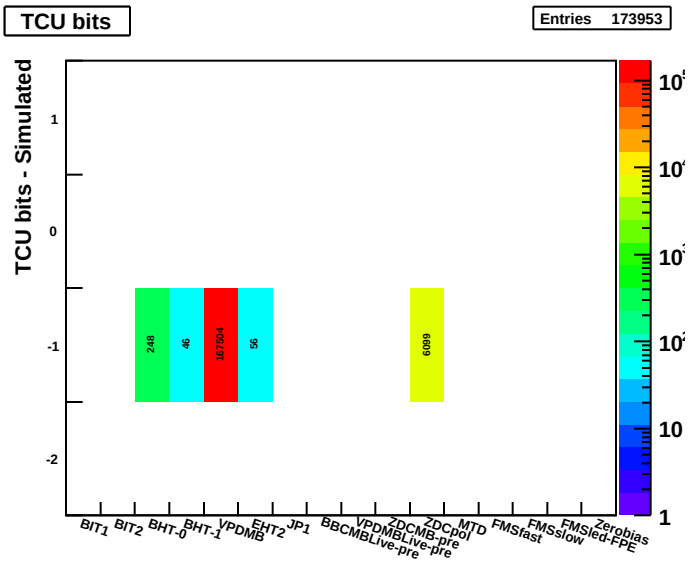

EMC L2 Input - HT23 bits
Entries 2408000
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

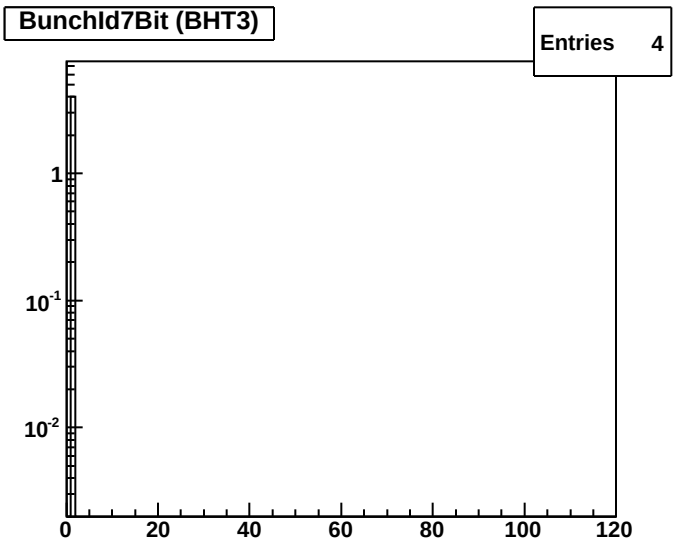

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

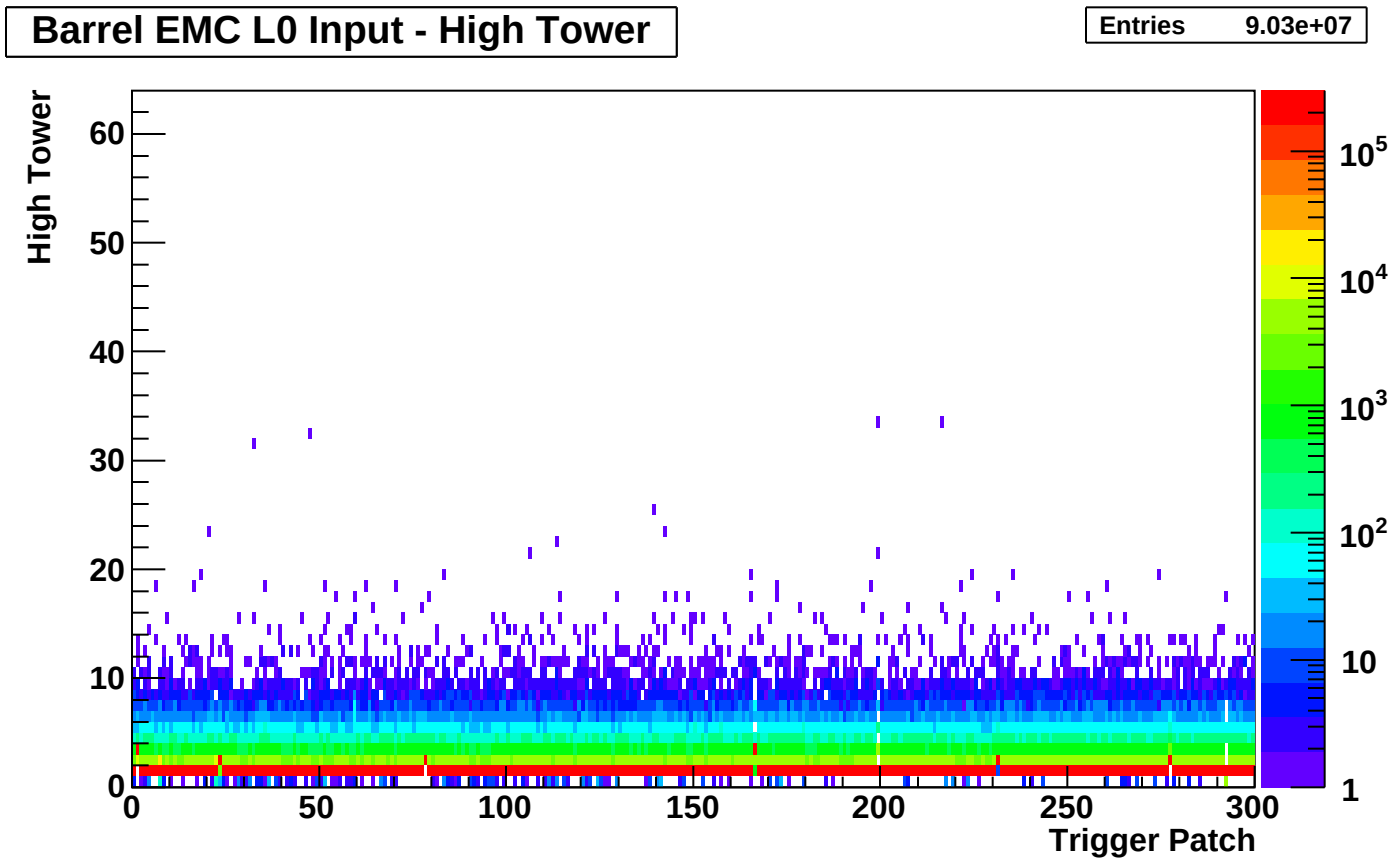

Last DSM Ch3 Input
Entries 4816000
LD301 Ch3
1
0
278 46 16 4 56 6 101 15 56 6 44 9 1 1
300722 300954 300984 300996 300944 300994 300899 300985 300944 300934 300956 300991 300999 300999 301000 301000
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0
1

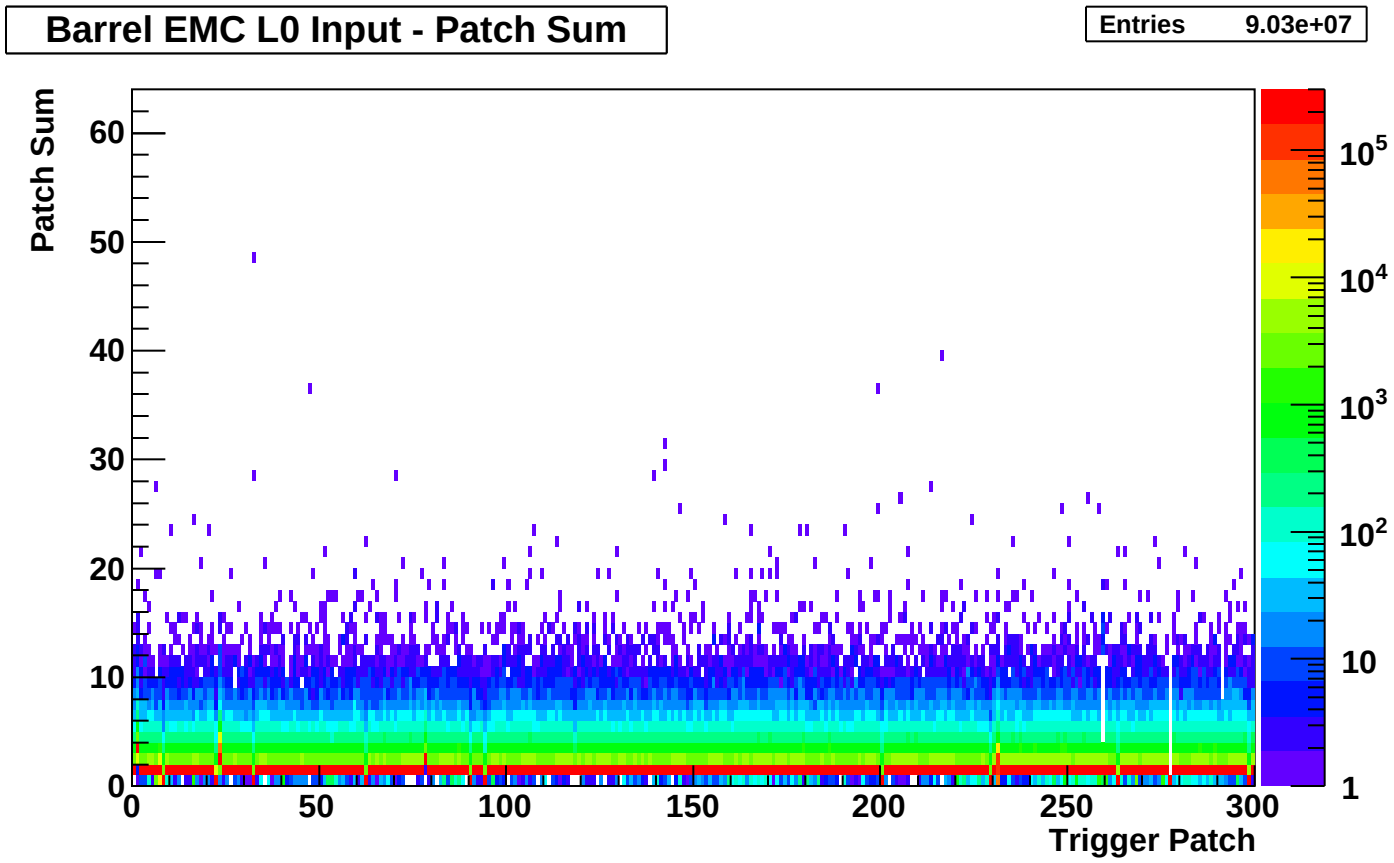

Last DSM Ch3 Input
Entries 437
LD301 Ch3 - Simulated
1
0
-1
-2
437
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0
10
1

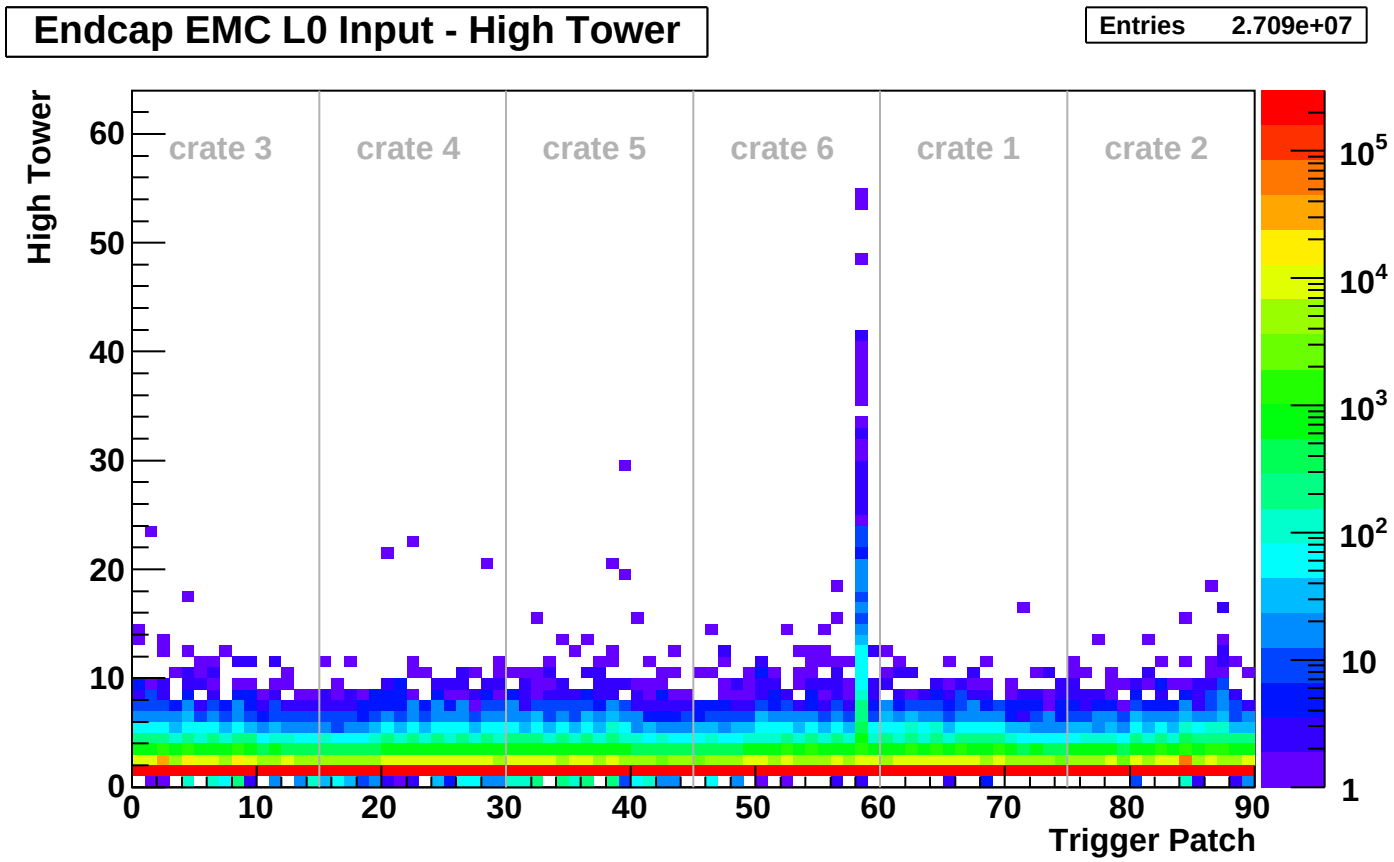

TCU bits
Entries 4816000
TCU bits
1
0
301000 301000 301000 301000 301000 301000 301000 301000 301000 301000 301000 301000 301000 301000 301000 301000
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias
10
1

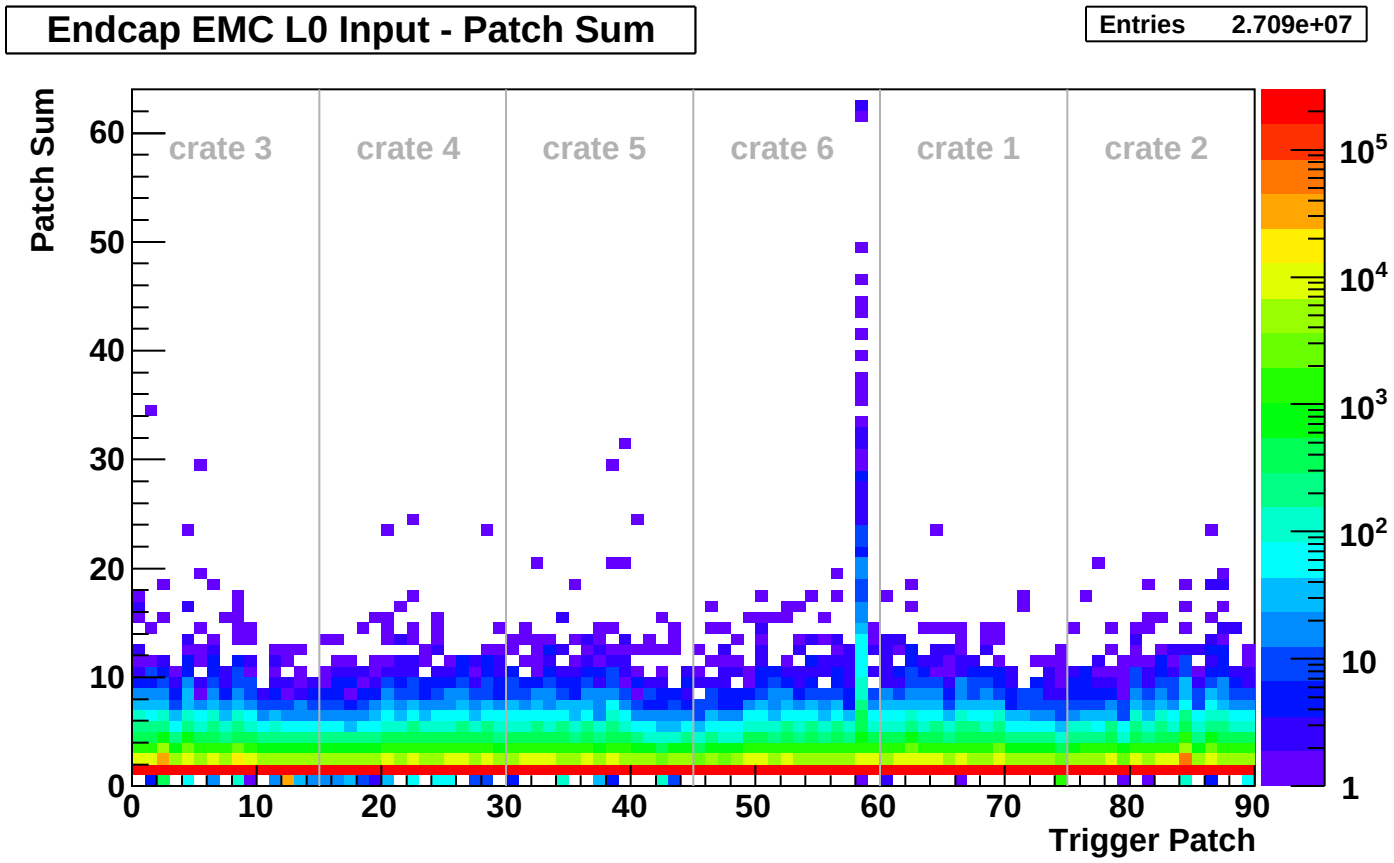

TCU bits
Entries 173953
TCU bits - Simulated
1
0
-1
-2
248 46 167504 56 6099
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias
10
1

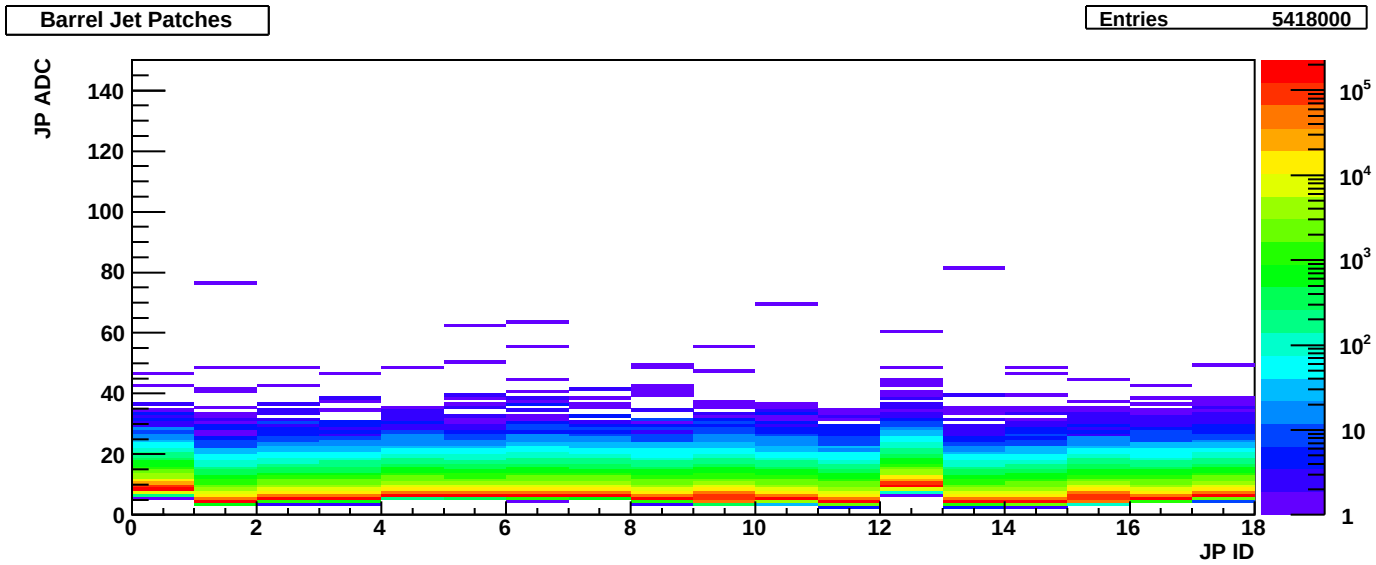

BunchId7Bit (BHT3)
Entries 4
1
10-1
10-2
0 20 40 60 80 100 120

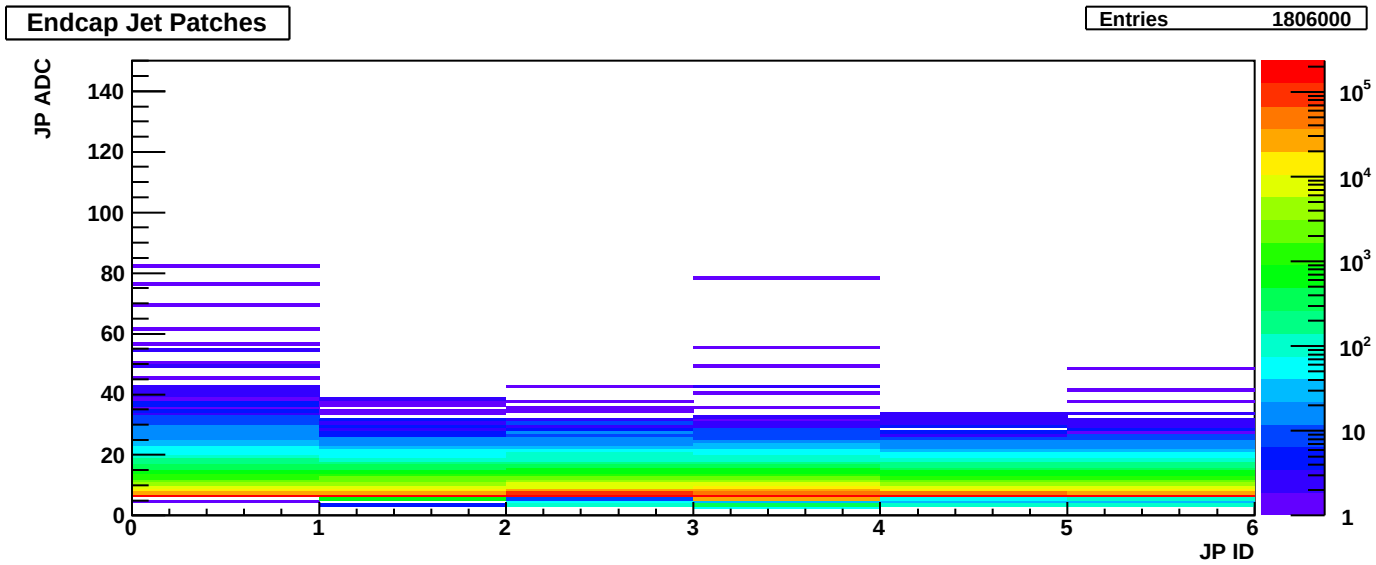

Barrel EMC L0 Input - High Tower
Entries 9.03e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

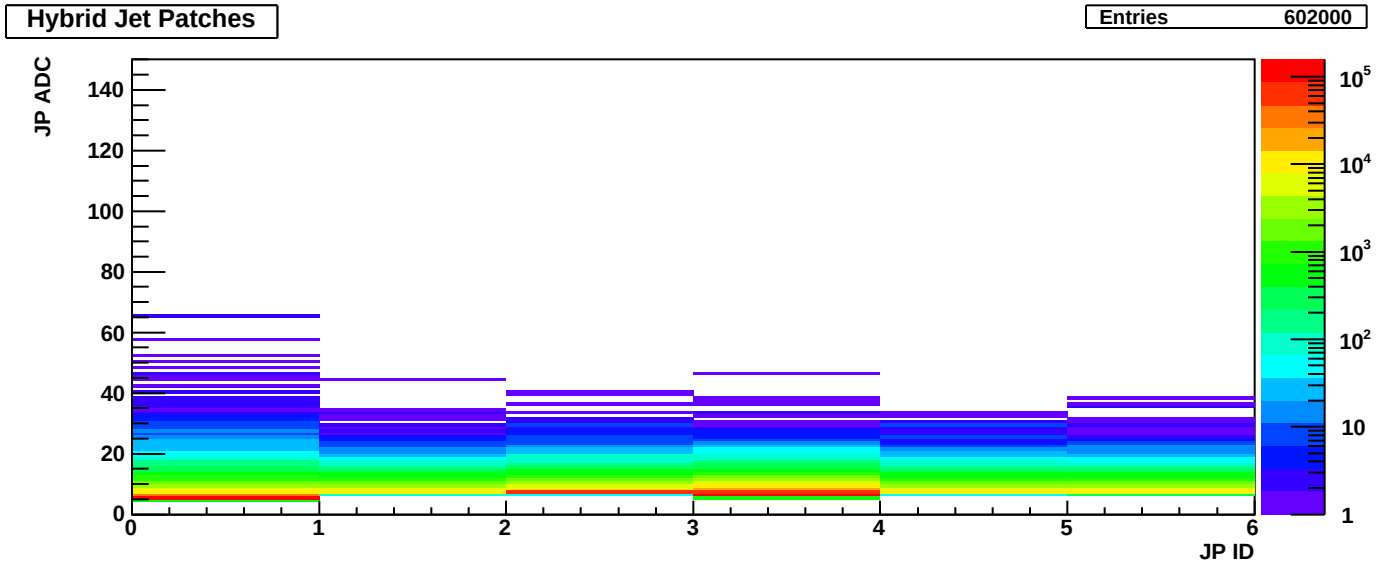

Barrel EMC L0 Input - Patch Sum
Entries 9.03e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

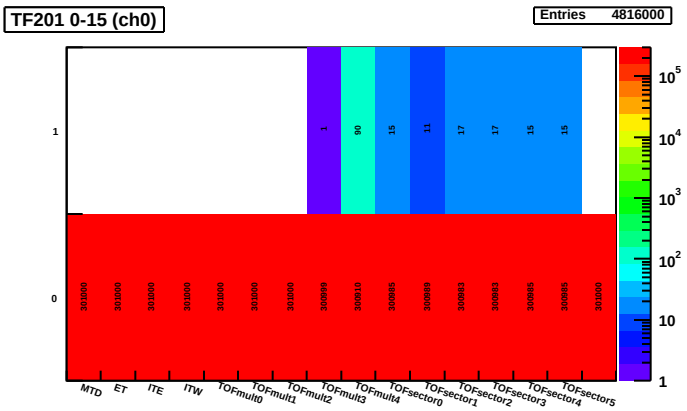

Endcap EMC L0 Input - High Tower
Entries 2.709e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

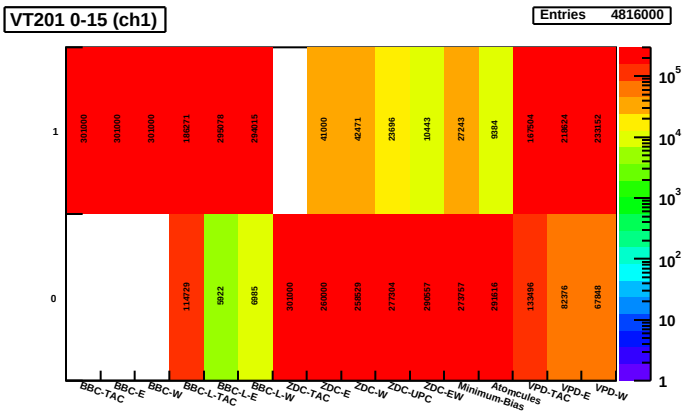

Endcap EMC L0 Input - Patch Sum
Entries 2.709e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

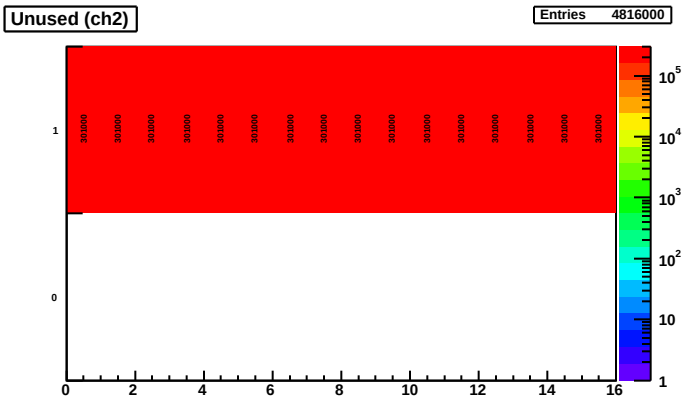

Barrel Jet Patches
Entries 5418000
JP ADC
JP ID

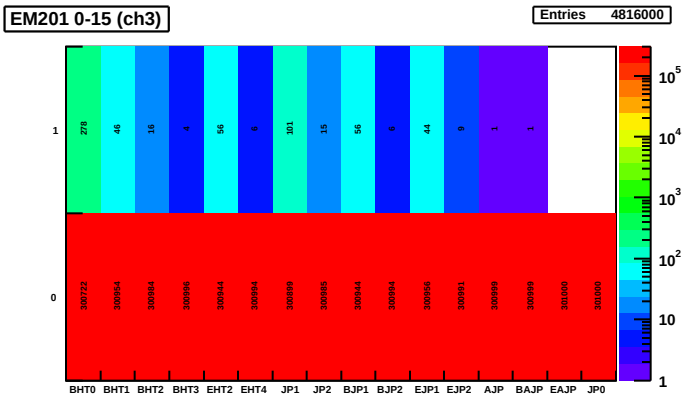

Endcap Jet Patches
Entries 1806000
JP ADC
JP ID

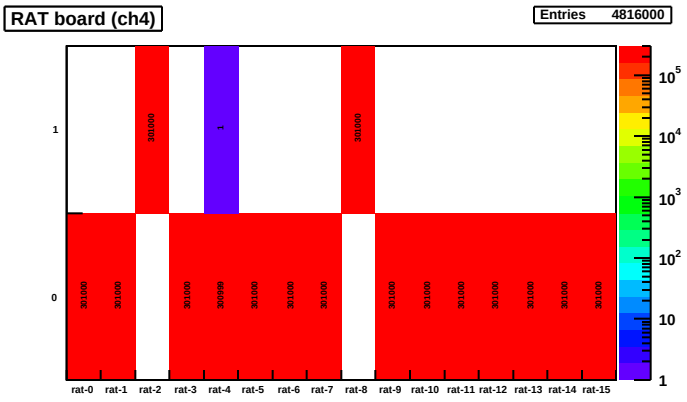

Hybrid Jet Patches
Entries 602000
JP ADC
JP ID

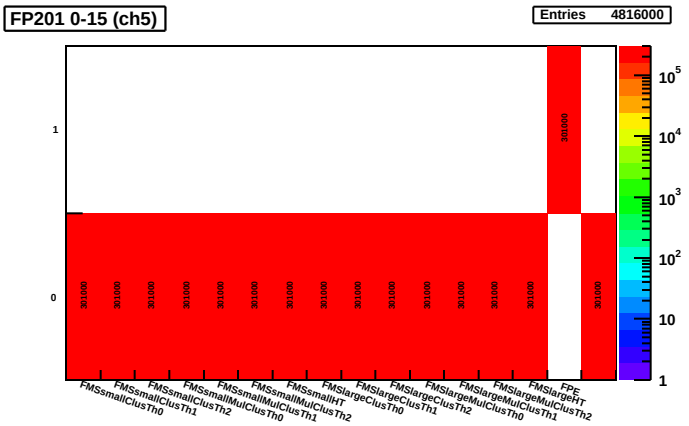

TF201 0-15 (ch0)
Entries 4816000
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

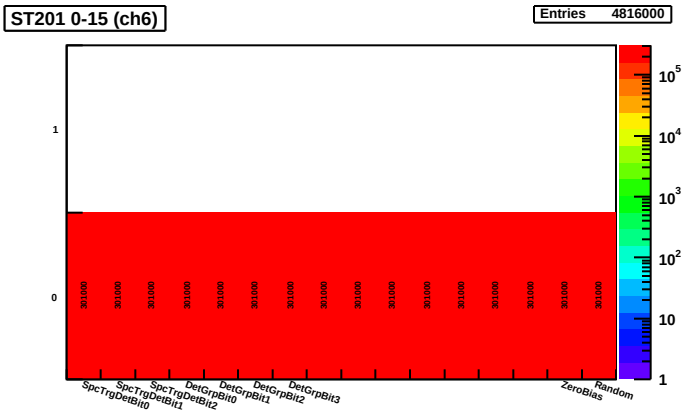

VT201 0-15 (ch1)
Entries 4816000
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

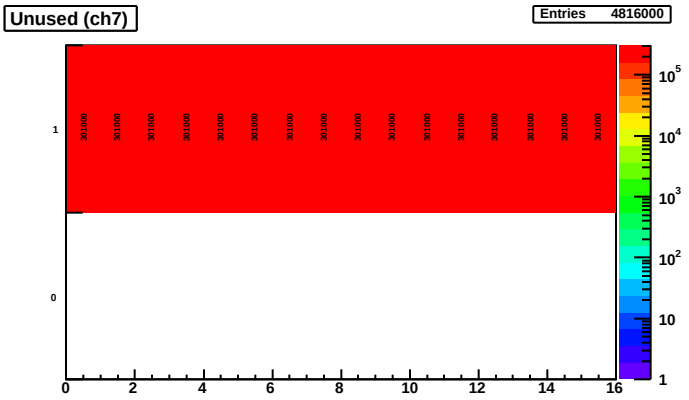

Unused (ch2)
Entries 4816000

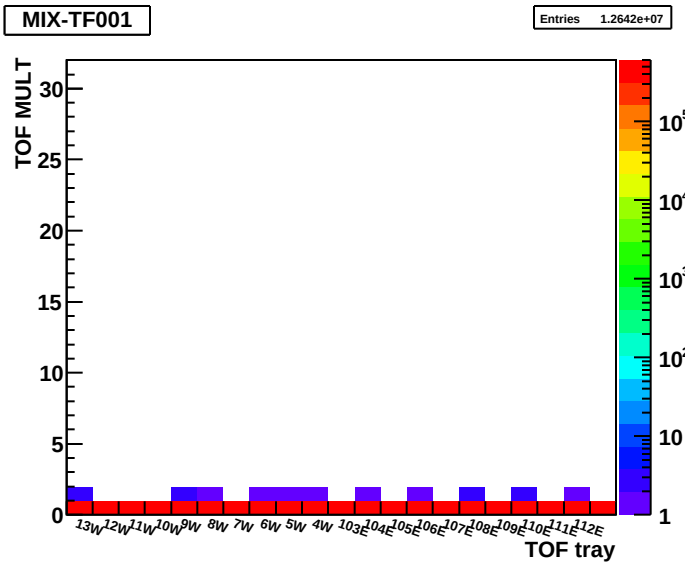

EM201 0-15 (ch3)
Entries 4816000
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

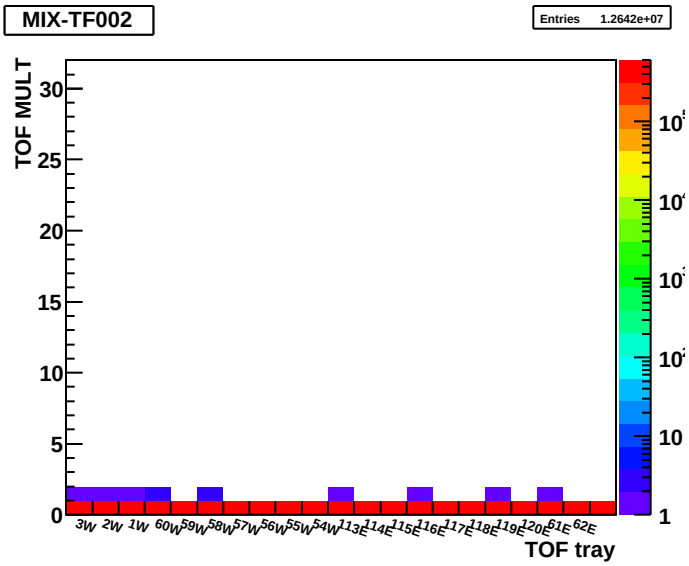

RAT board (ch4)
Entries 4816000
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

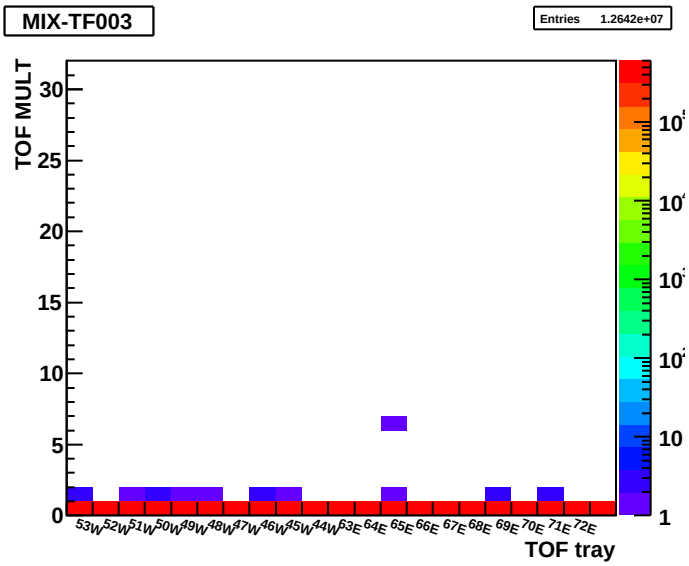

FP201 0-15 (ch5)
Entries 4816000
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

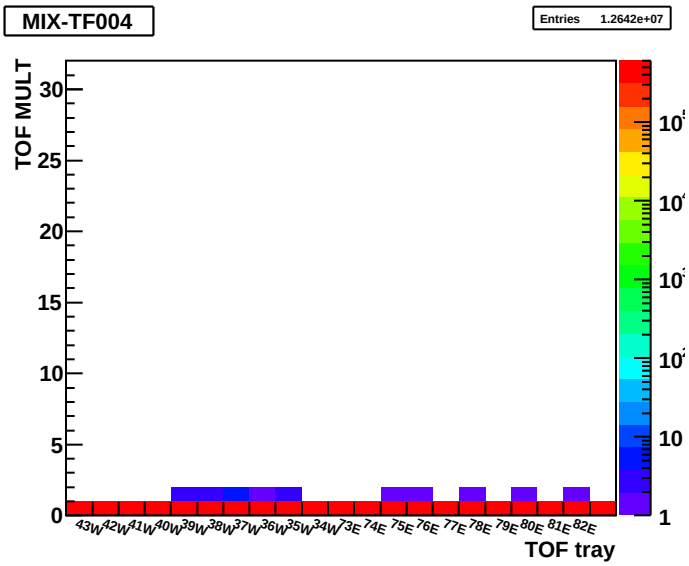

ST201 0-15 (ch6)
Entries 4816000
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random

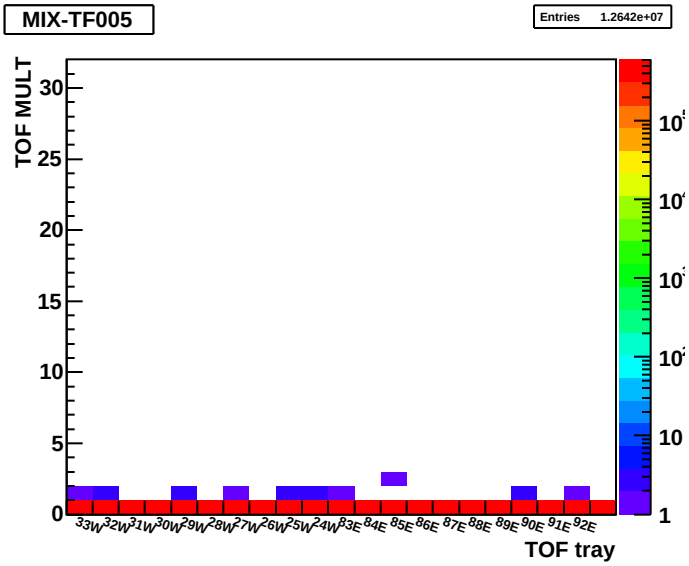

Unused (ch7)
Entries 4816000

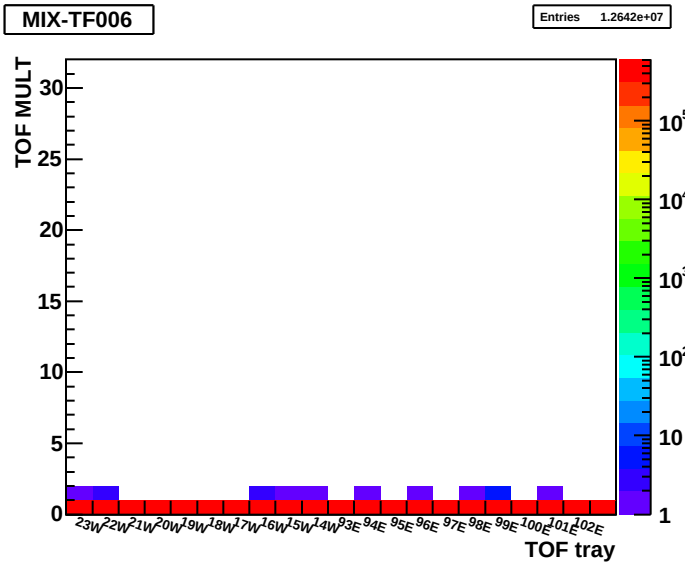

MIX-TF001
Entries 1.2642e+07
TOF MULT
TOF tray

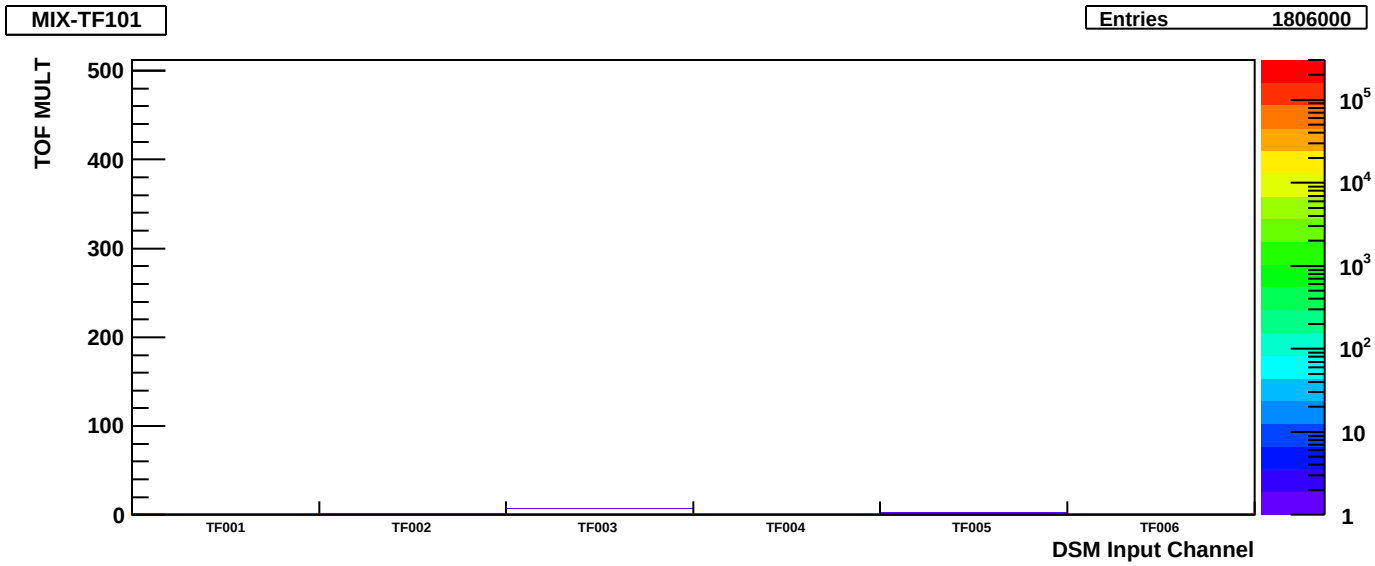

MIX-TF002
Entries 1.2642e+07
TOF MULT
TOF tray

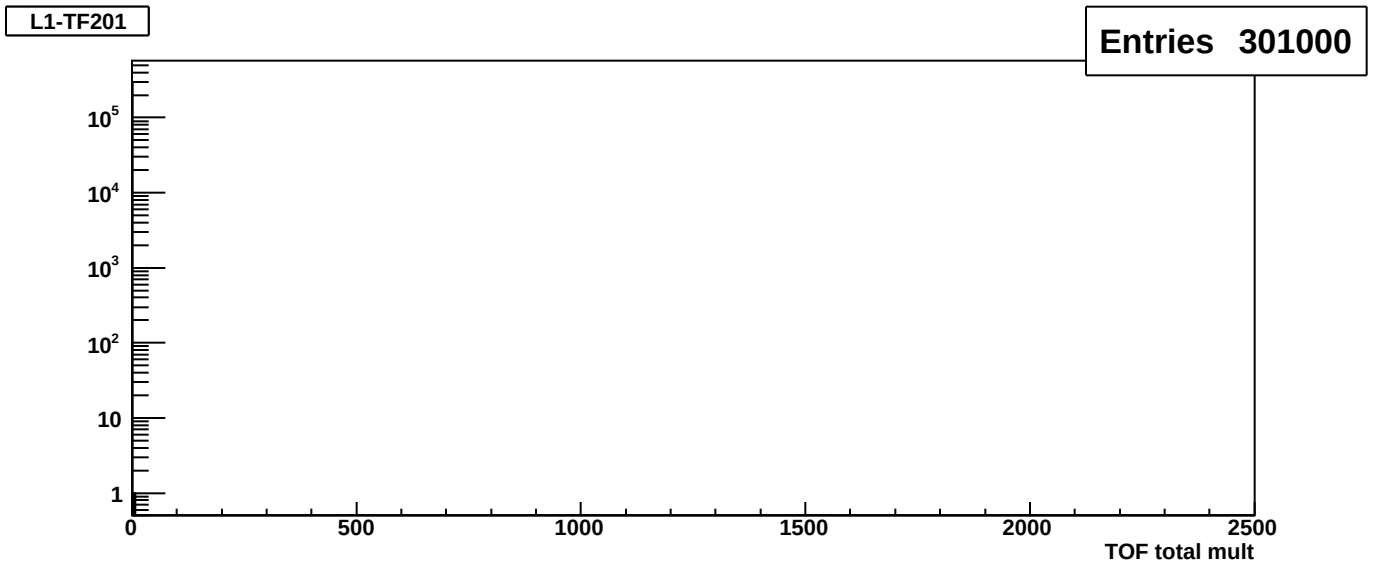

MIX-TF003
Entries 1.2642e+07
TOF MULT
TOF tray

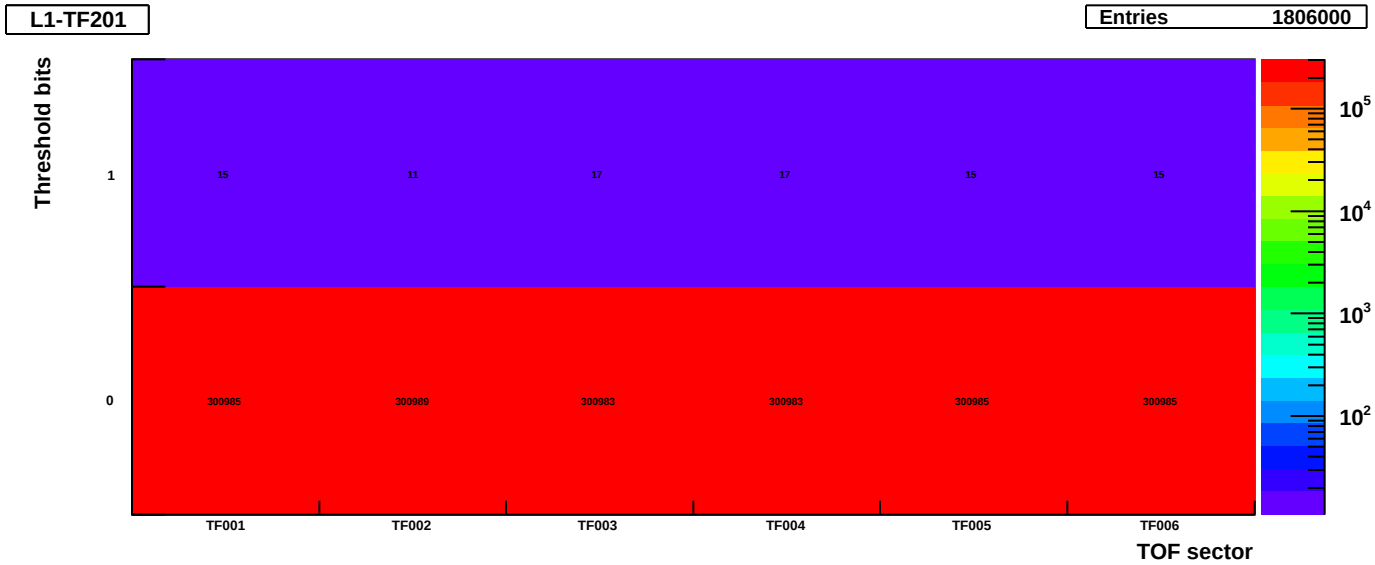

MIX-TF004
Entries 1.2642e+07
TOF MULT
TOF tray

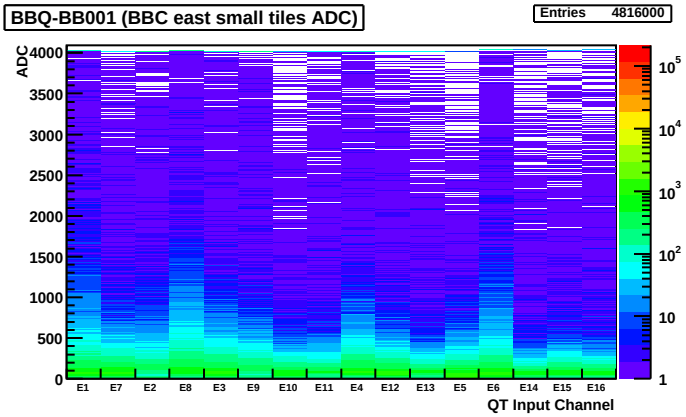

MIX-TF005
Entries 1.2642e+07
TOF MULT
TOF tray

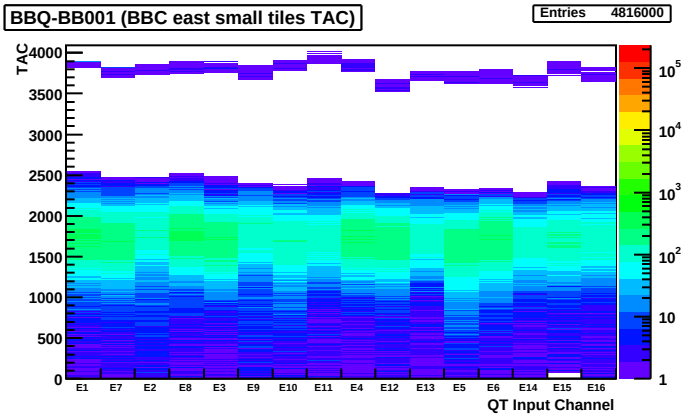

MIX-TF006
Entries 1.2642e+07
TOF MULT
TOF tray

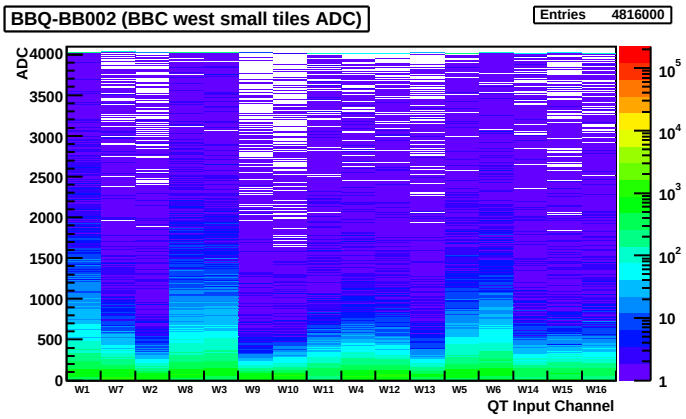

MIX-TF101
Entries 1806000
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

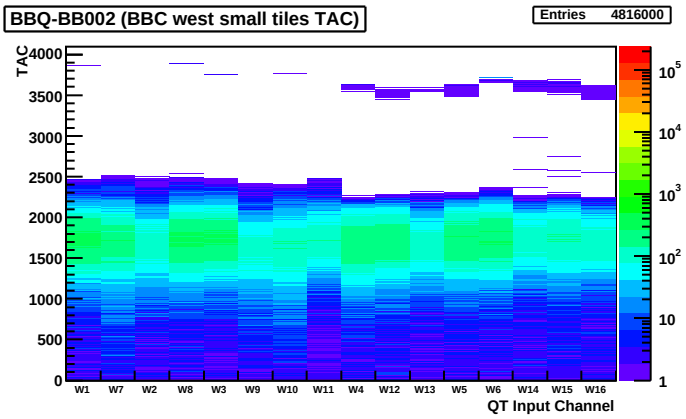

L1-TF201
Entries 301000
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

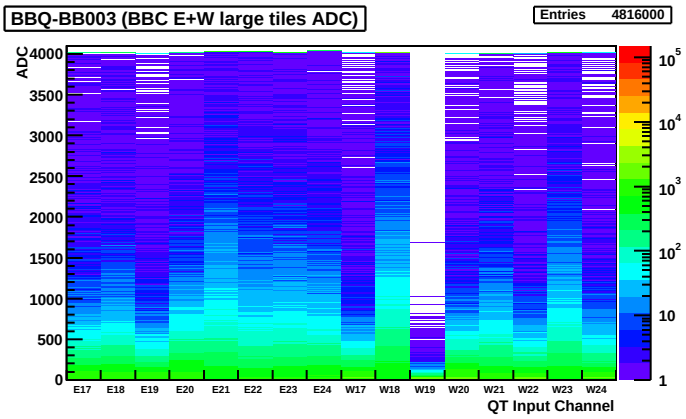

L1-TF201
Entries 1806000
Threshold bits
1
0
15
11
17
17
15
15
300985
300989
300983
300983
300985
300985
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5
10^4
10^3
10^2

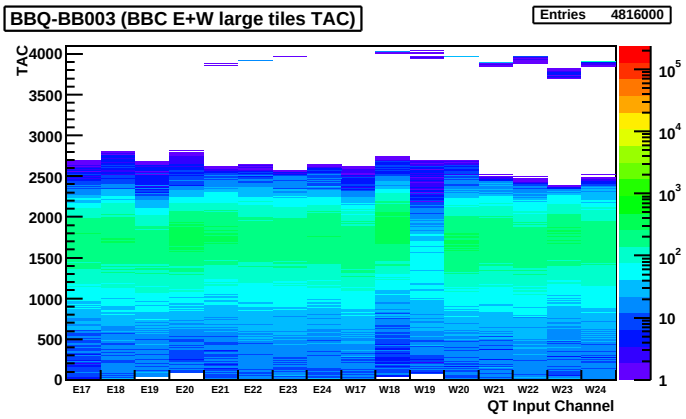

BBQ-BB001 (BBC east small tiles ADC)
Entries 4816000
ADC
QT Input Channel

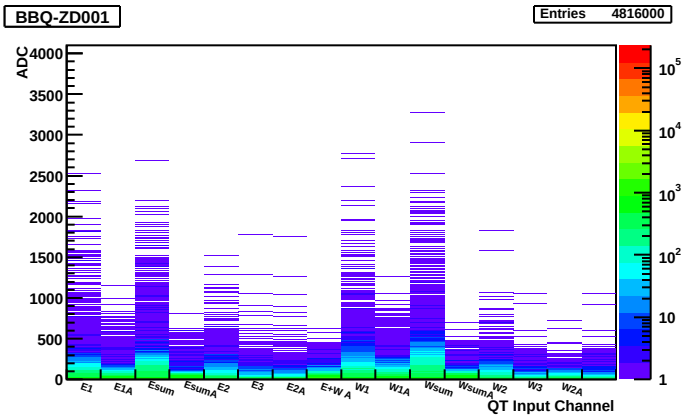

BBQ-BB001 (BBC east small tiles TAC)
Entries 4816000
TAC
QT Input Channel

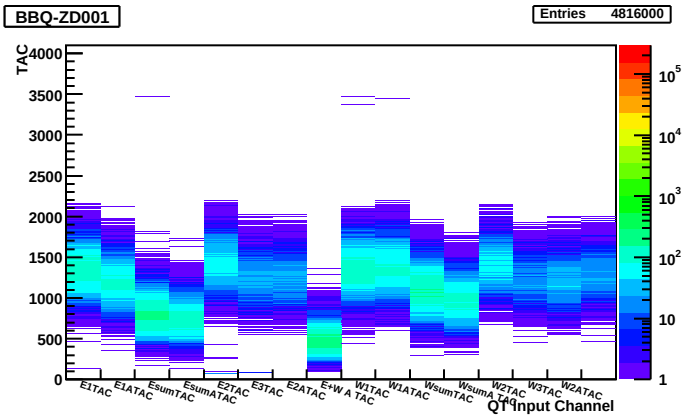

BBQ-BB002 (BBC west small tiles ADC)
Entries 4816000
ADC
QT Input Channel

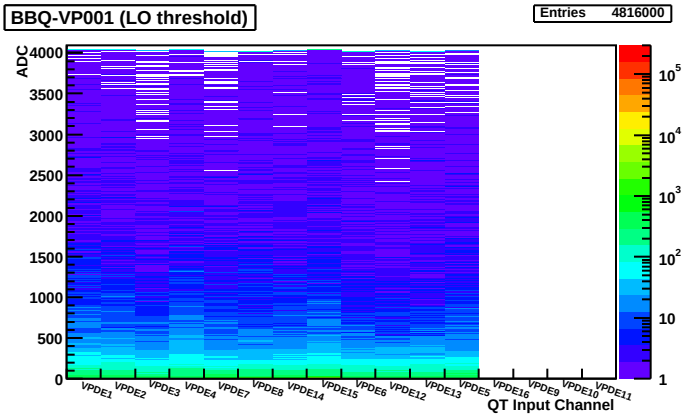

BBQ-BB002 (BBC west small tiles TAC)
Entries 4816000
TAC
QT Input Channel

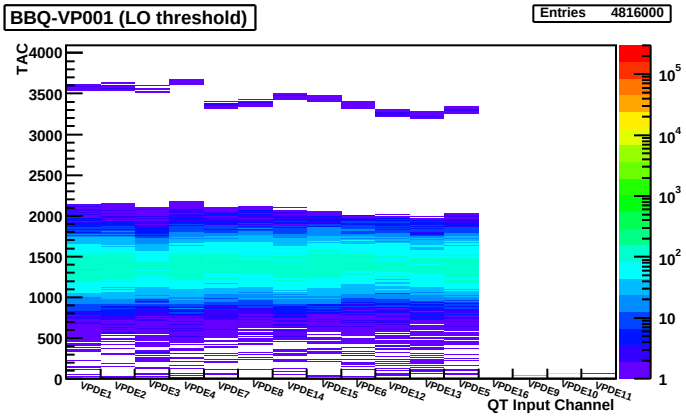

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4816000
ADC
QT Input Channel

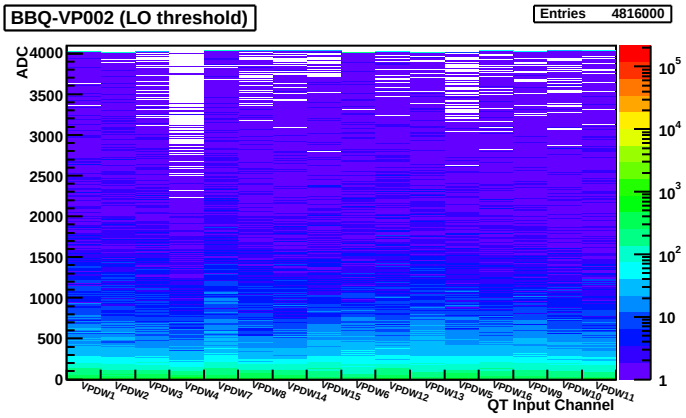

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4816000
TAC
QT Input Channel

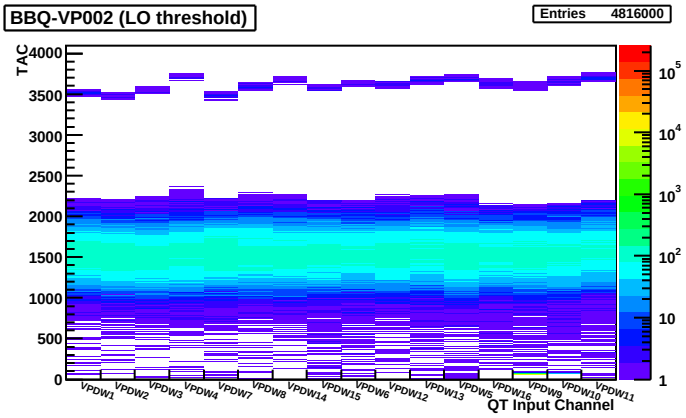

BBQ-ZD001
Entries 4816000
ADC
QT Input Channel

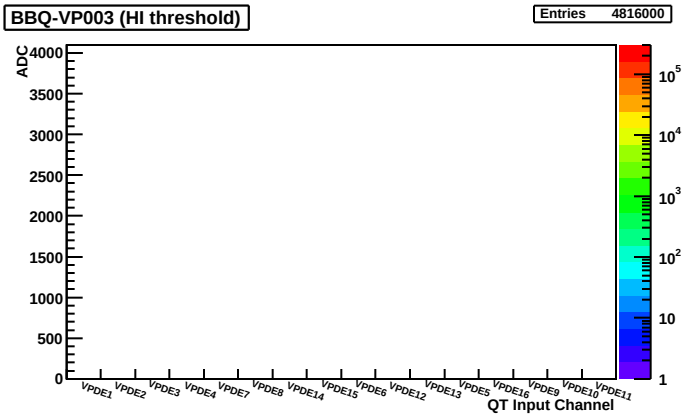

BBQ-ZD001
Entries 4816000
TAC
QT Input Channel

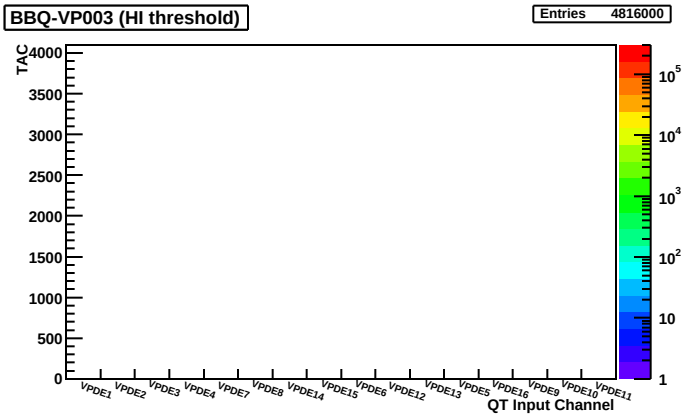

BBQ-VP001 (LO threshold)
Entries 4816000
ADC
QT Input Channel

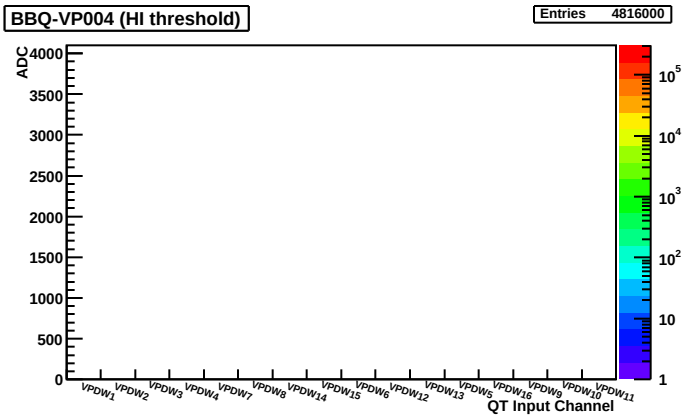

BBQ-VP001 (LO threshold)
Entries 4816000
TAC
QT Input Channel

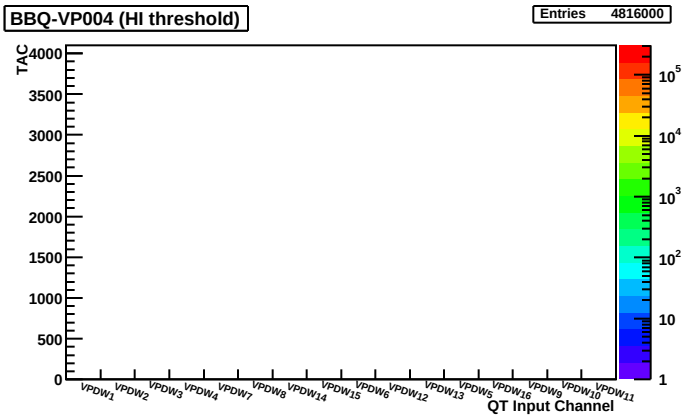

BBQ-VP002 (LO threshold)
Entries 4816000
ADC
QT Input Channel

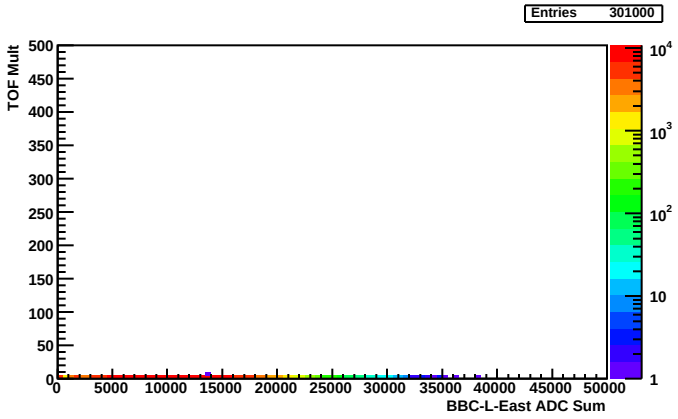

BBQ-VP002 (LO threshold)
Entries 4816000
TAC
QT Input Channel

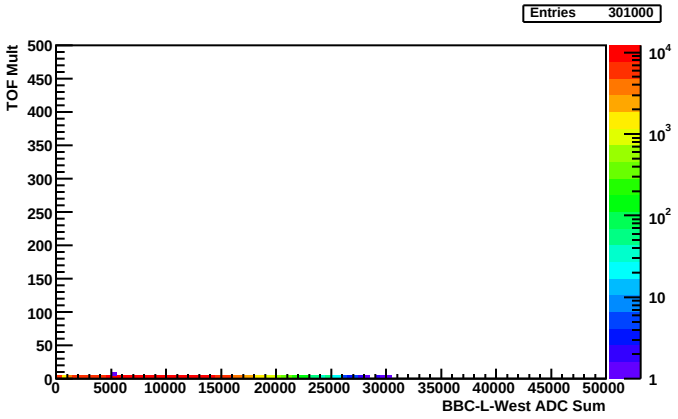

BBQ-VP003 (HI threshold)
Entries 4816000
ADC
QT Input Channel

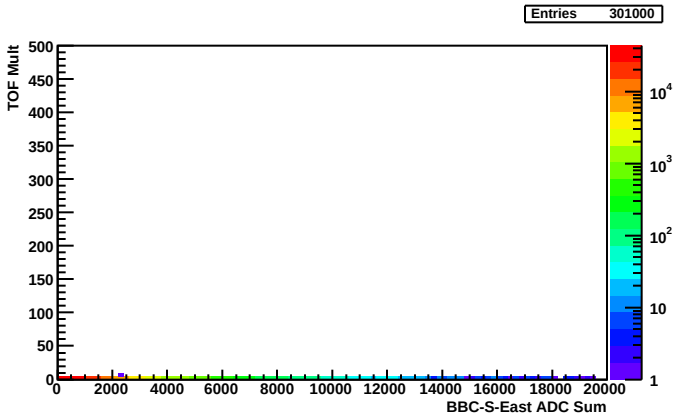

BBQ-VP003 (HI threshold)
Entries 4816000
TAC
QT Input Channel

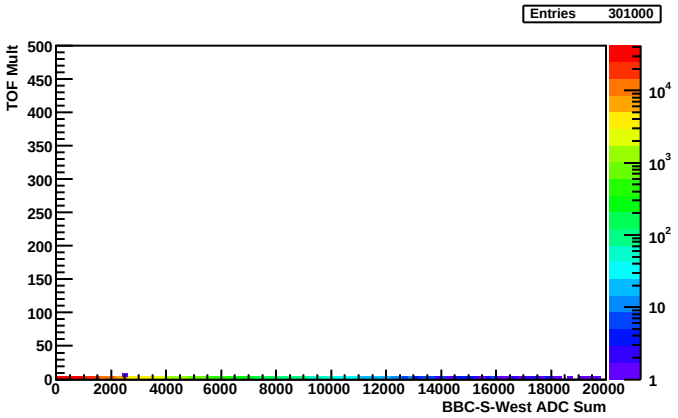

BBQ-VP004 (HI threshold)
Entries 4816000
ADC
QT Input Channel

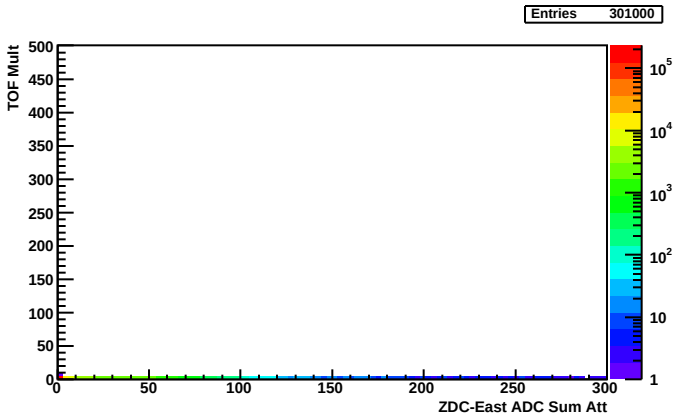

BBQ-VP004 (HI threshold)
Entries 4816000
TAC
QT Input Channel

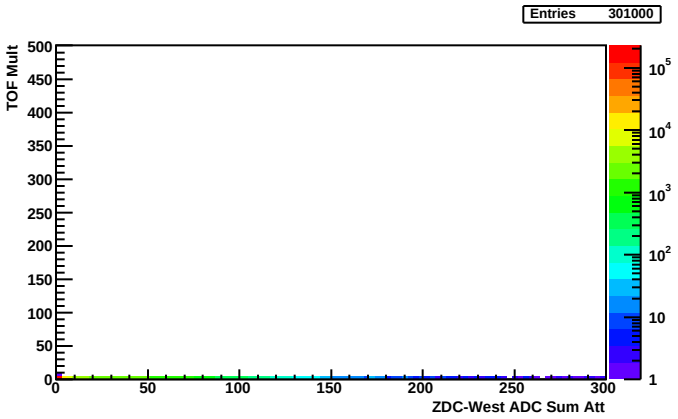

Entries 301000
TOF Mult
BBC-L-East ADC Sum

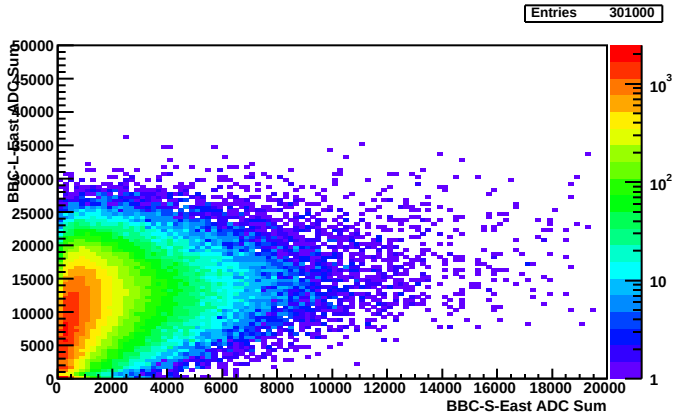

Entries 301000
TOF Mult
BBC-L-West ADC Sum

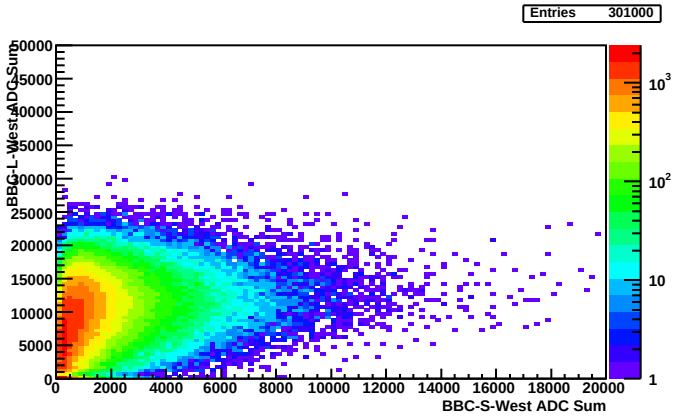

Entries 301000
TOF Mult
BBC-S-East ADC Sum

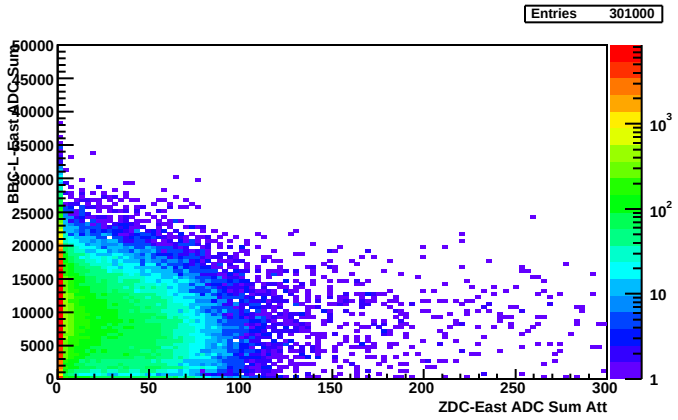

Entries 301000
TOF Mult
BBC-S-West ADC Sum

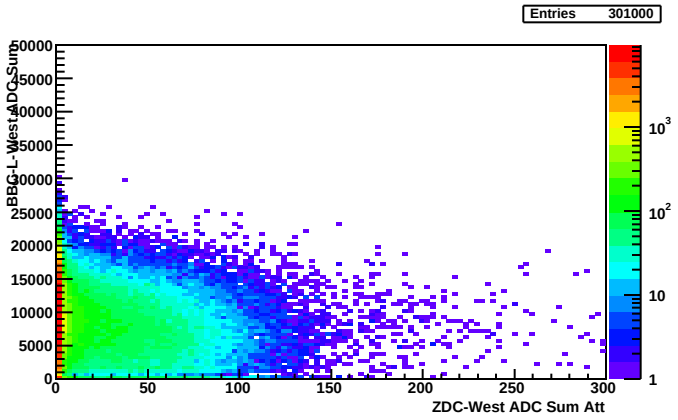

Entries 301000
TOF Mult
ZDC-East ADC Sum Att

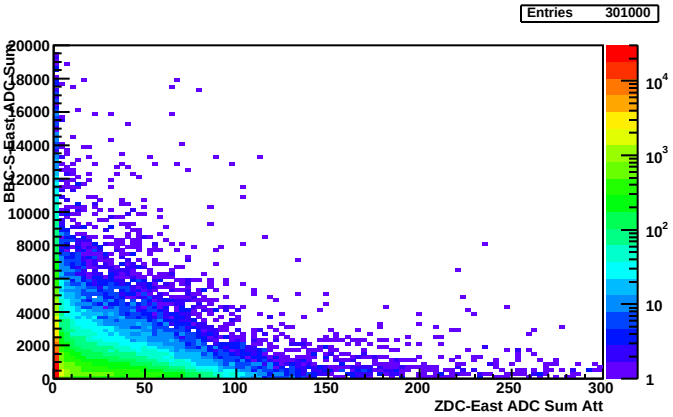

Entries 301000
TOF Mult
ZDC-West ADC Sum Att

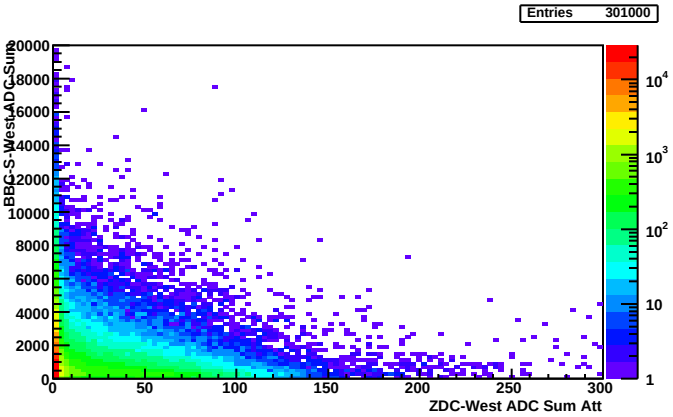

Entries 301000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

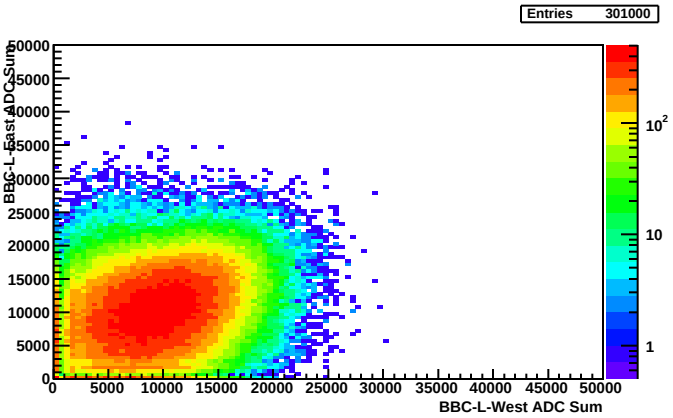

Entries 301000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

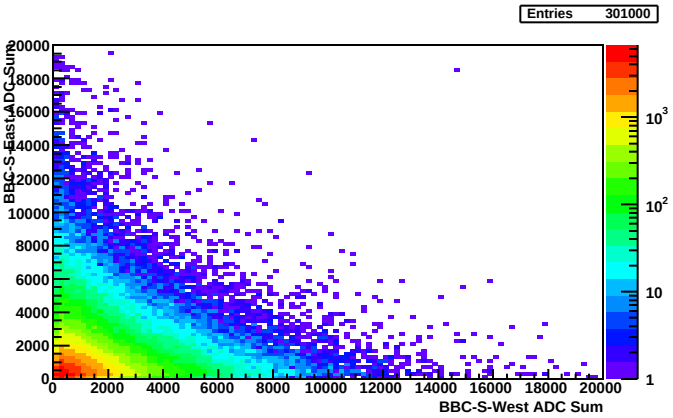

Entries 301000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

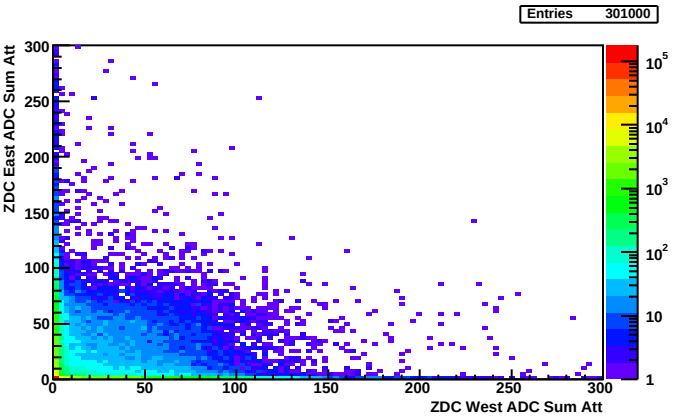

Entries 301000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

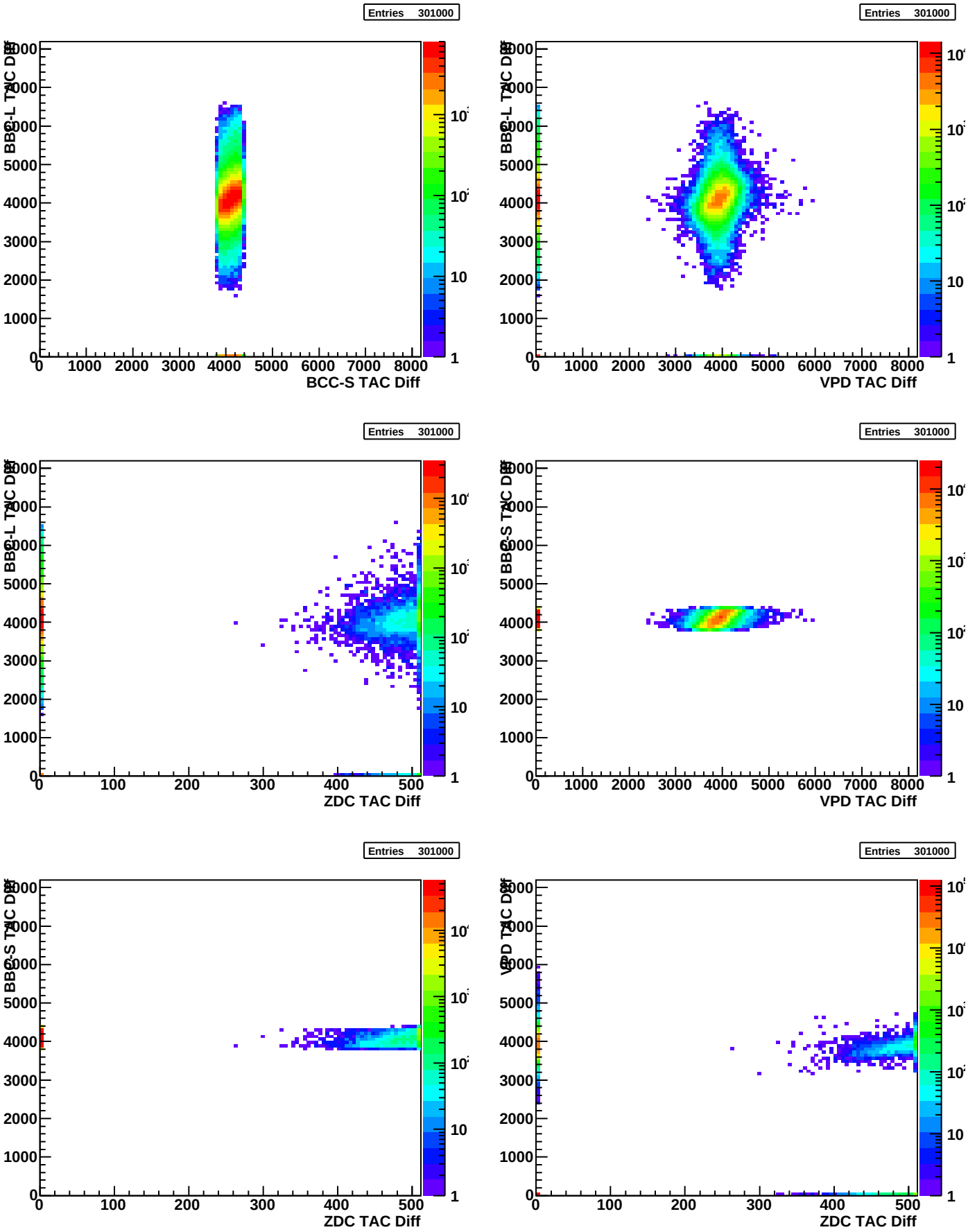

Entries 301000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

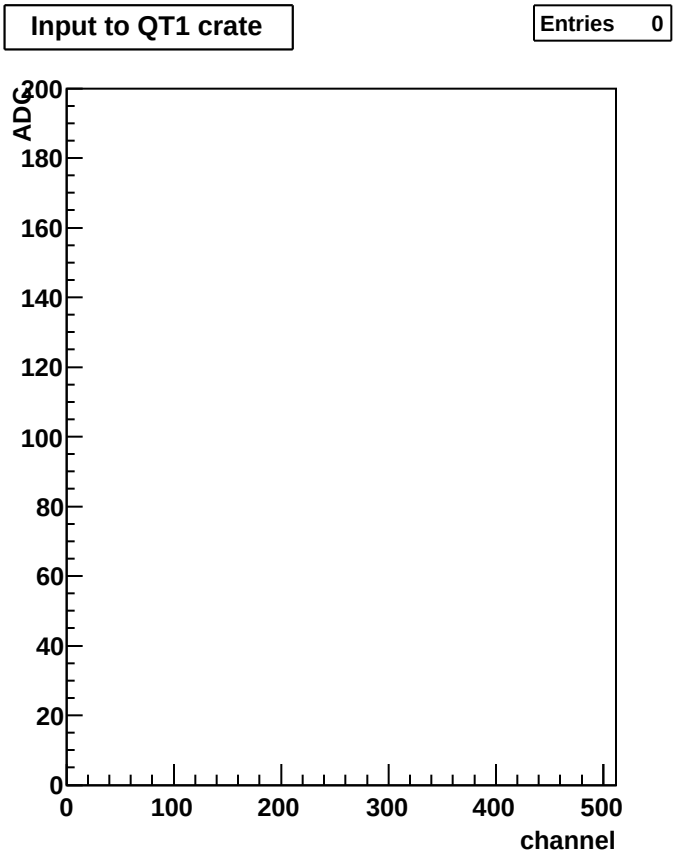

Entries 301000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

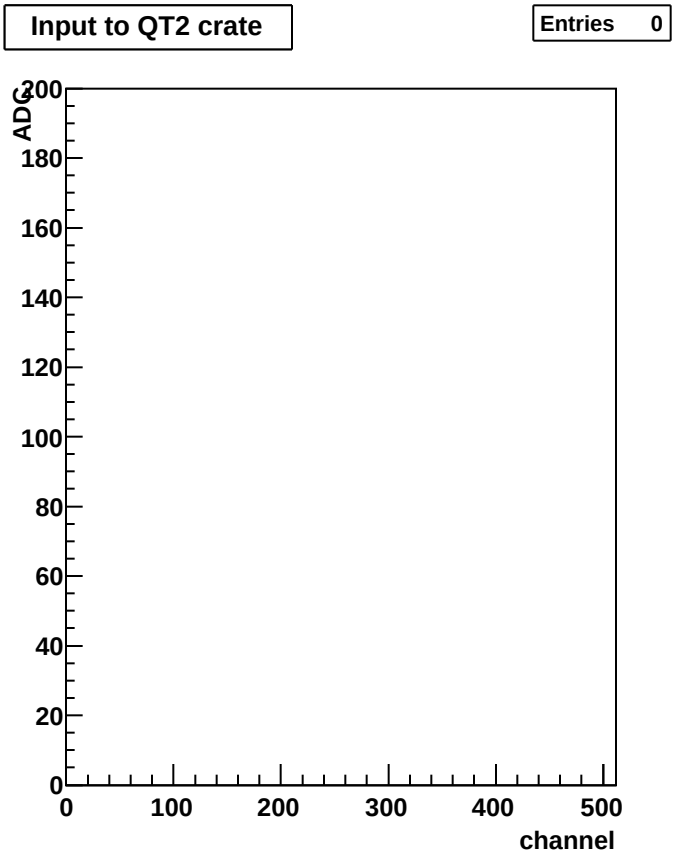

Entries 301000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

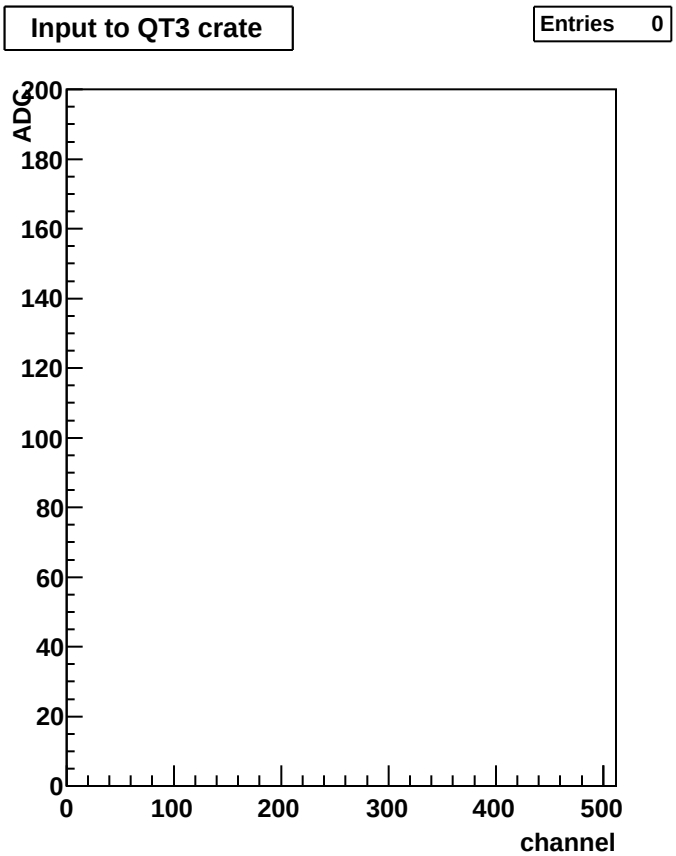

Entries 301000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

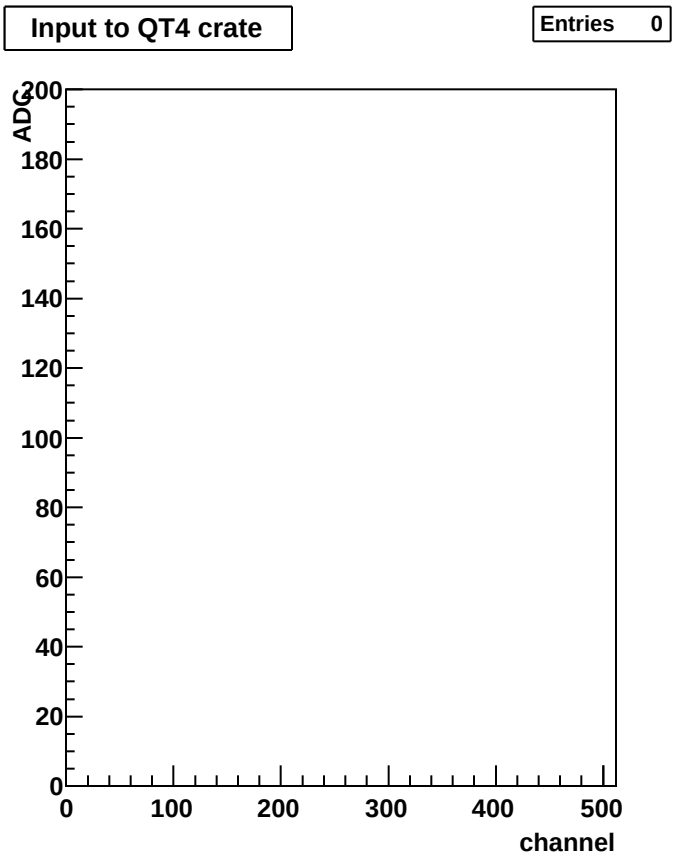

Entries 301000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

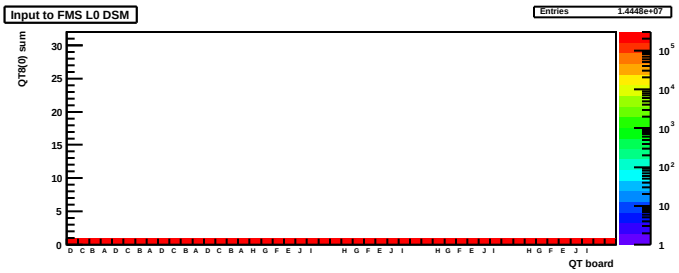

Entries 301000
BBC-L TAC Diff
BCC-S TAC Diff
Entries 301000
BBC-L TAC Diff
VPD TAC Diff
Entries 301000
BBC-L TAC Diff
ZDC TAC Diff
Entries 301000
BBC-S TAC Diff
VPD TAC Diff
Entries 301000
BBC-S TAC Diff
ZDC TAC Diff
Entries 301000
VPD TAC Diff
ZDC TAC Diff

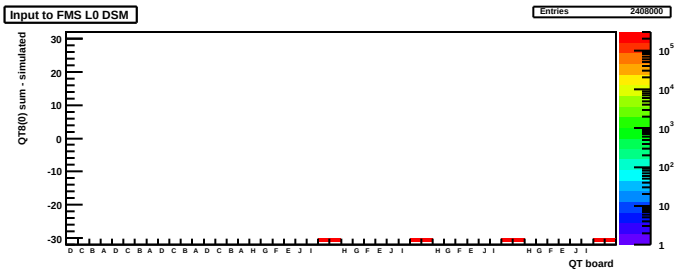

Input to QT1 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

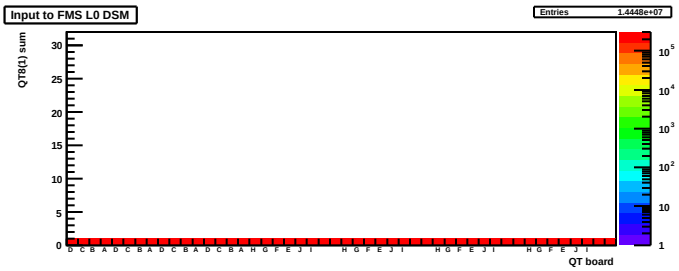

Input to QT2 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

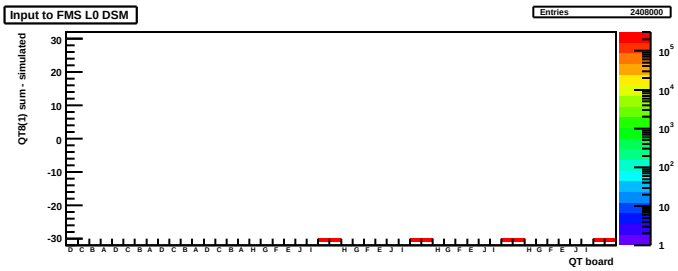

Input to QT3 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

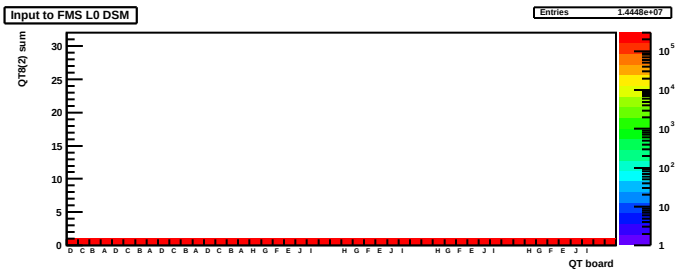

Input to QT4 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

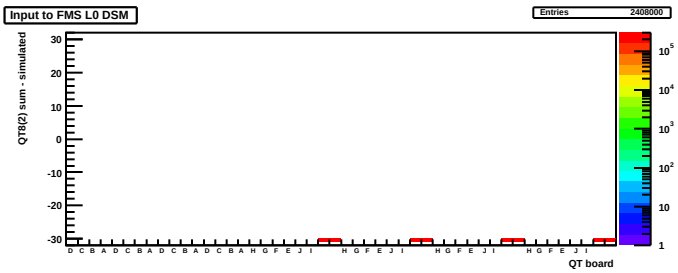

Input to FMS L0 DSM
Entries 1.4448e+07
QT8(0) sum
QT board

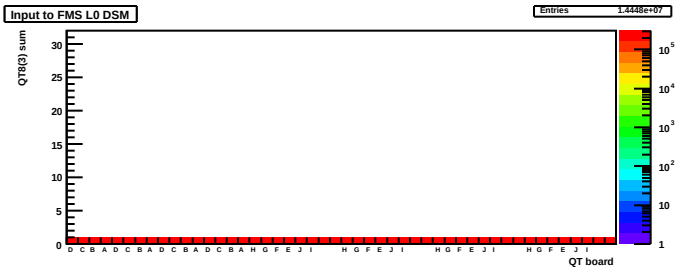

Input to FMS L0 DSM
Entries 2408000
QT8(0) sum - simulated
QT board

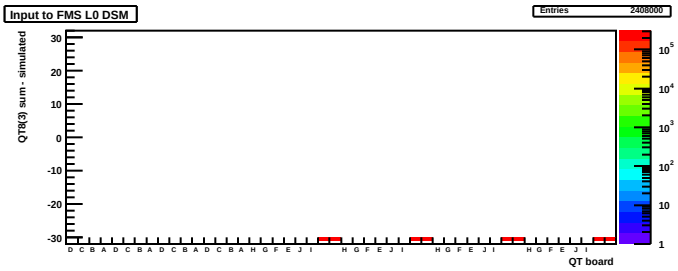

Input to FMS L0 DSM
Entries 1.4448e+07
QT8(1) sum
QT board

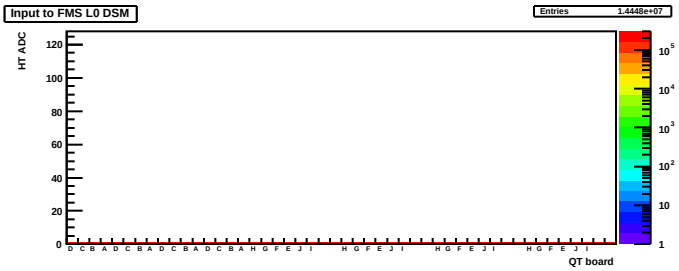

Input to FMS L0 DSM
Entries 2408000
QT8(1) sum - simulated
QT board

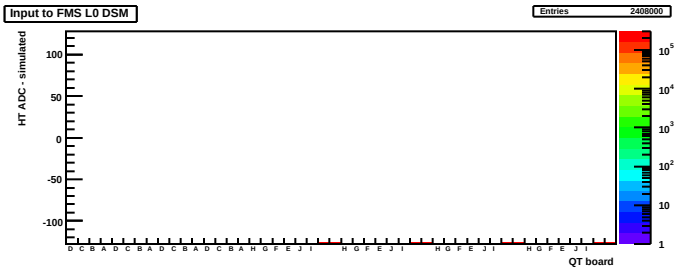

Input to FMS L0 DSM
Entries 1.4448e+07
QT8(2) sum
QT board

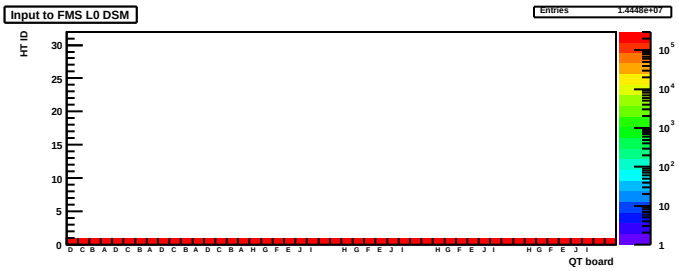

Input to FMS L0 DSM
Entries 2408000
QT8(2) sum - simulated
QT board

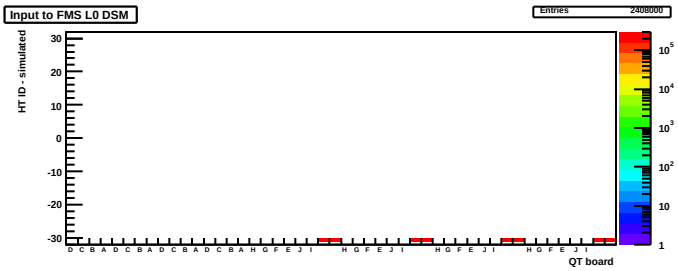

Input to FMS L0 DSM
Entries 1.4448e+07
QT8(3) sum
QT board

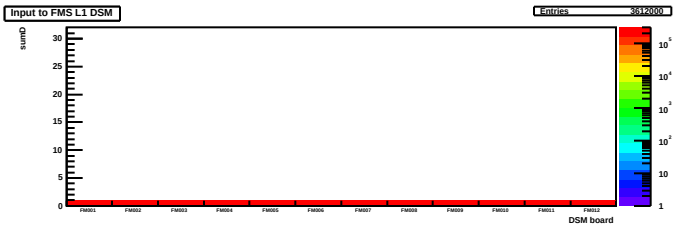

Input to FMS L0 DSM
Entries 2408000
QT8(3) sum - simulated
QT board

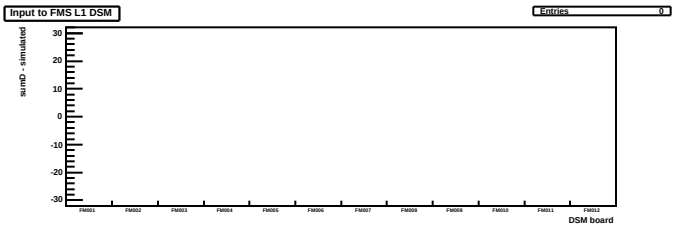

Input to FMS L0 DSM
Entries 1.4448e+07
HT ADC
QT board

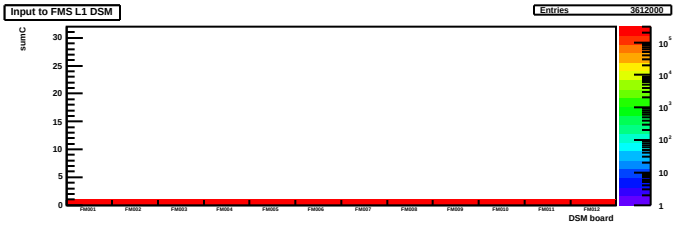

Input to FMS L0 DSM
Entries 2408000
HT ADC - simulated
QT board

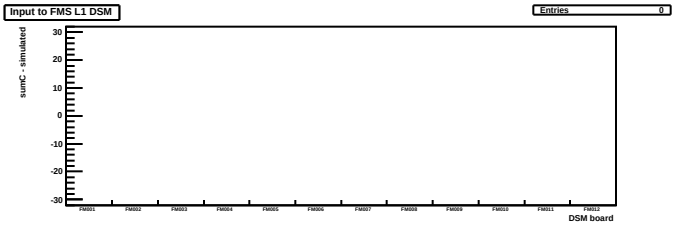

Input to FMS L0 DSM
Entries 1.4448e+07
HT ID
QT board

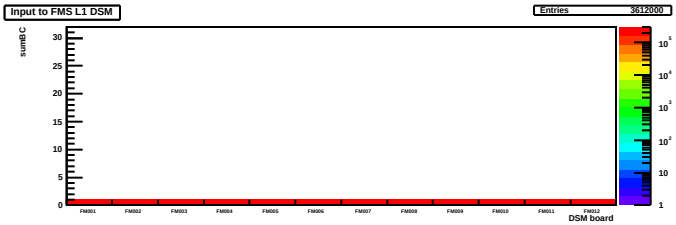

Input to FMS L0 DSM
Entries 2408000
HT ID - simulated
QT board

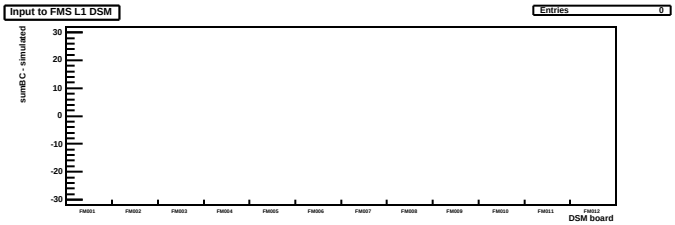

Input to FMS L1 DSM
Entries 3612000
sumD
DSM board

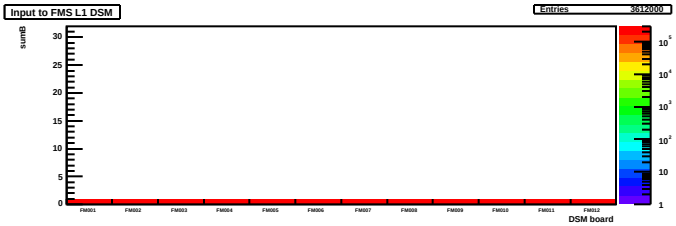

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

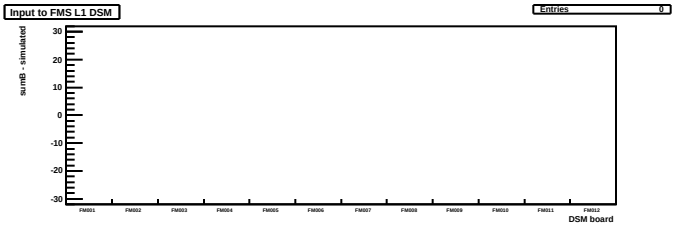

Input to FMS L1 DSM
Entries 3612000
sumC
DSM board

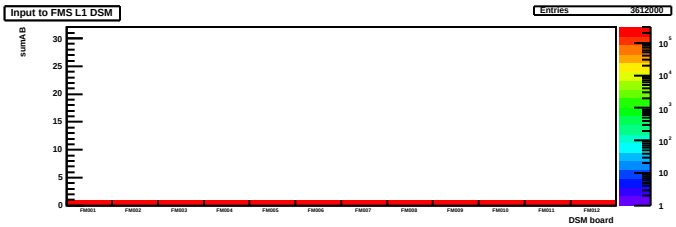

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

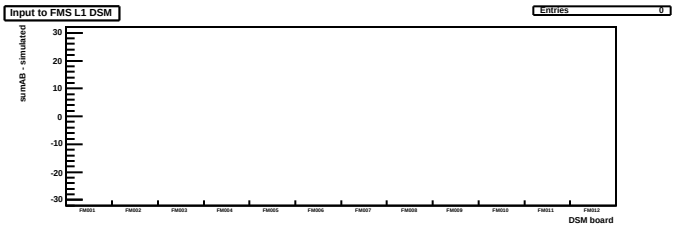

Input to FMS L1 DSM
Entries 3612000
sumBC
DSM board

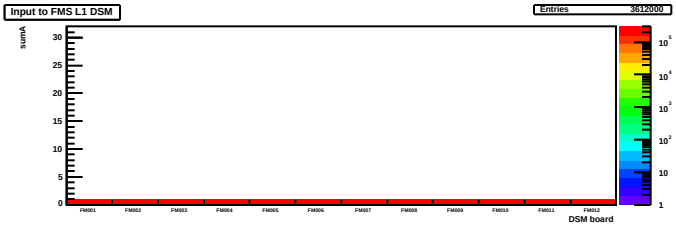

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

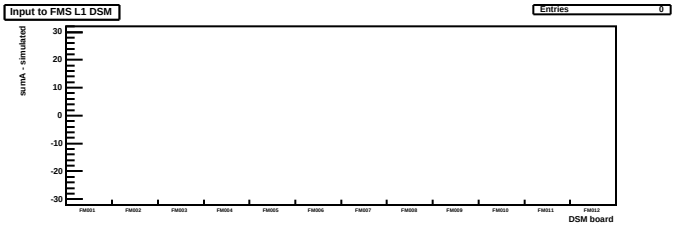

Input to FMS L1 DSM
Entries 3612000
sumB
DSM board

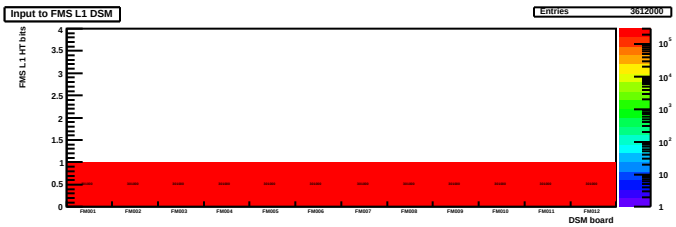

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

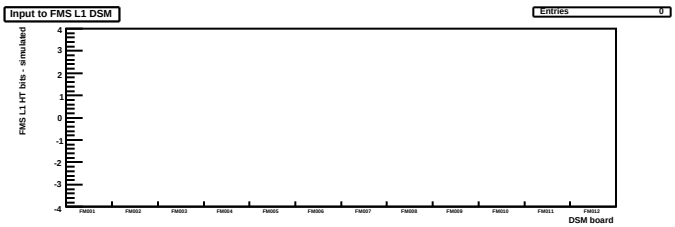

Input to FMS L1 DSM
Entries 3612000
sumAB
DSM board

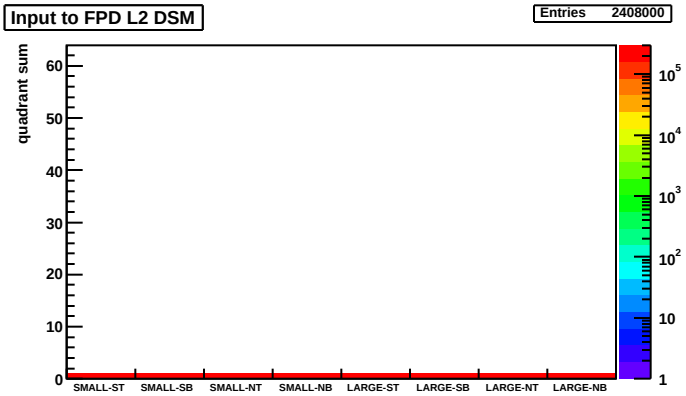

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

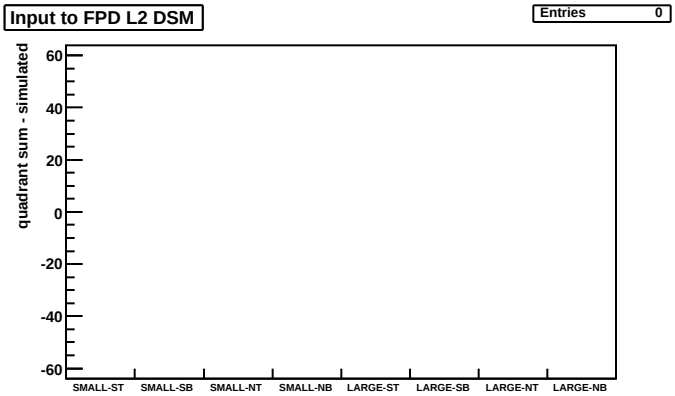

Input to FMS L1 DSM
Entries 3612000
sumA
DSM board

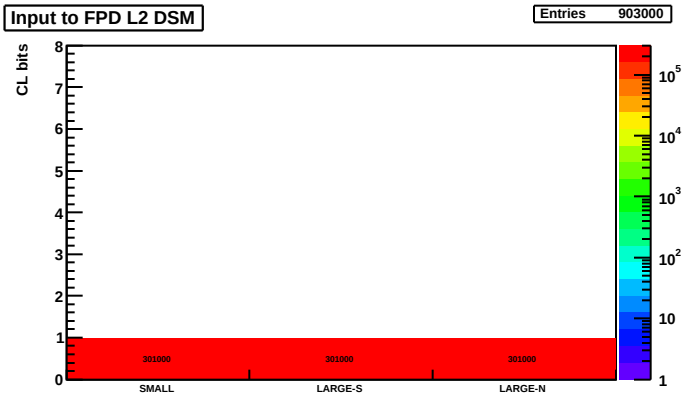

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

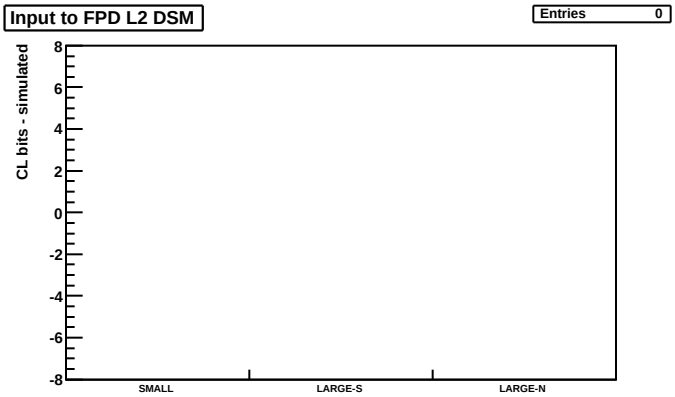

Input to FMS L1 DSM
Entries 3612000
FMS L1 HT bits
DSM board

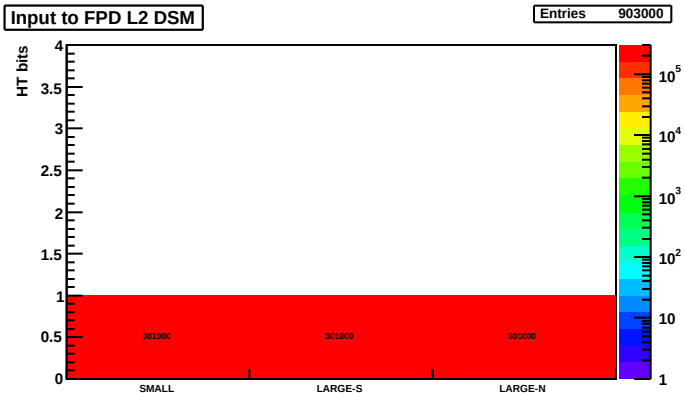

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

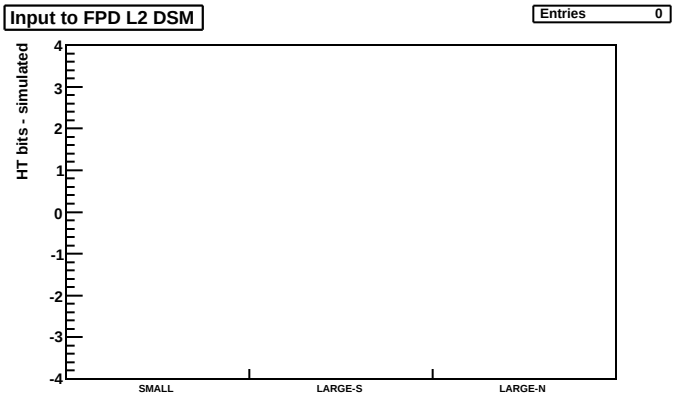

Input to FPD L2 DSM
Entries 2408000
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

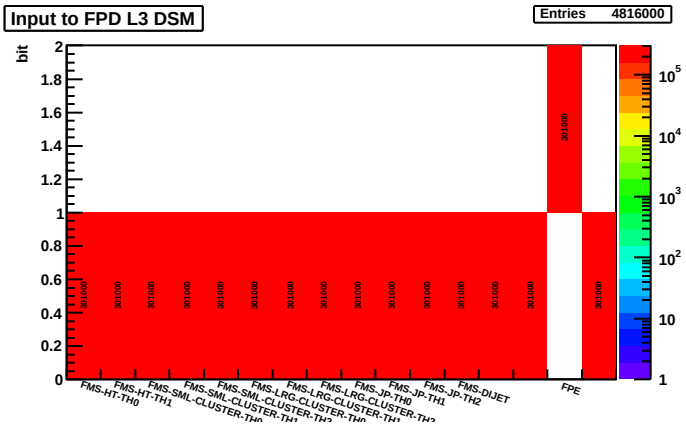

Input to FPD L2 DSM
Entries 0
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

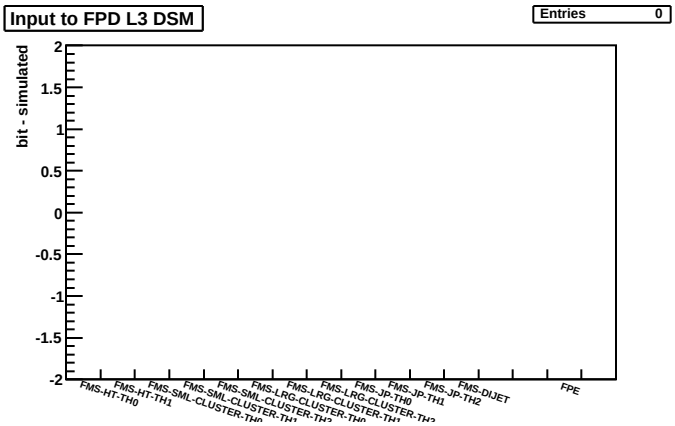

Input to FPD L2 DSM
Entries 903000
CL bits
301000
301000
301000
SMALL
LARGE-S
LARGE-N

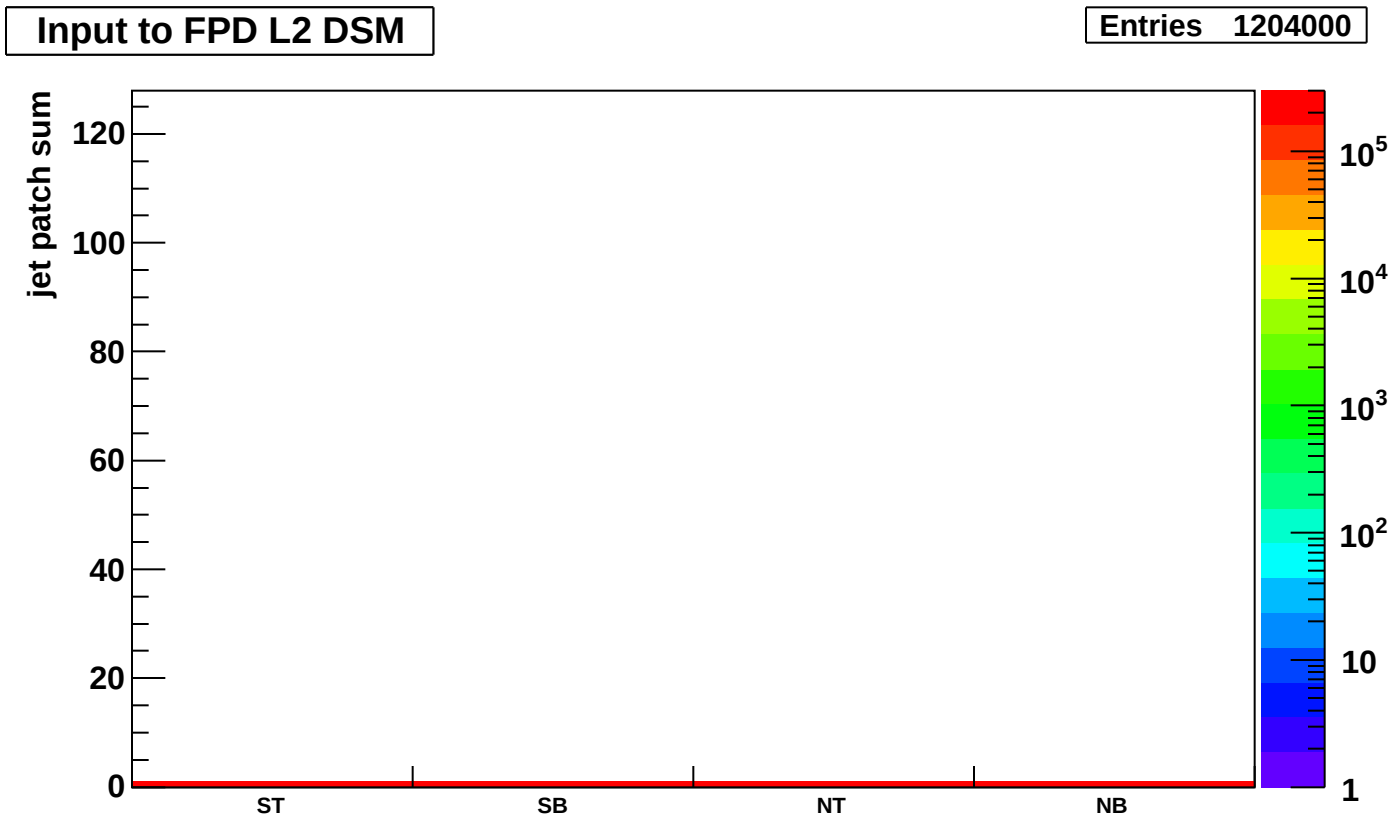

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

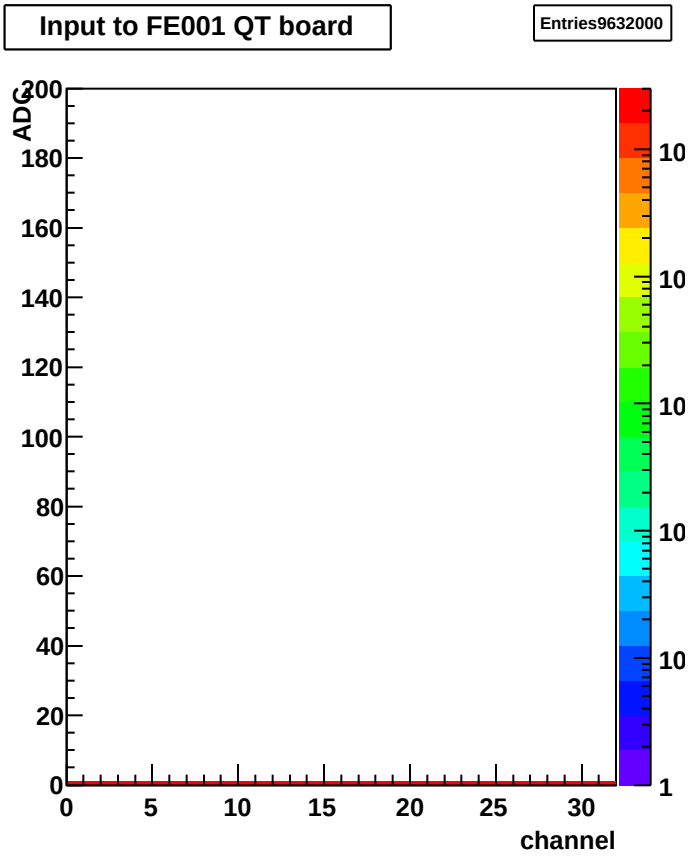

Input to FPD L2 DSM
Entries 903000
HT bits
301000
301000
301000
SMALL
LARGE-S
LARGE-N

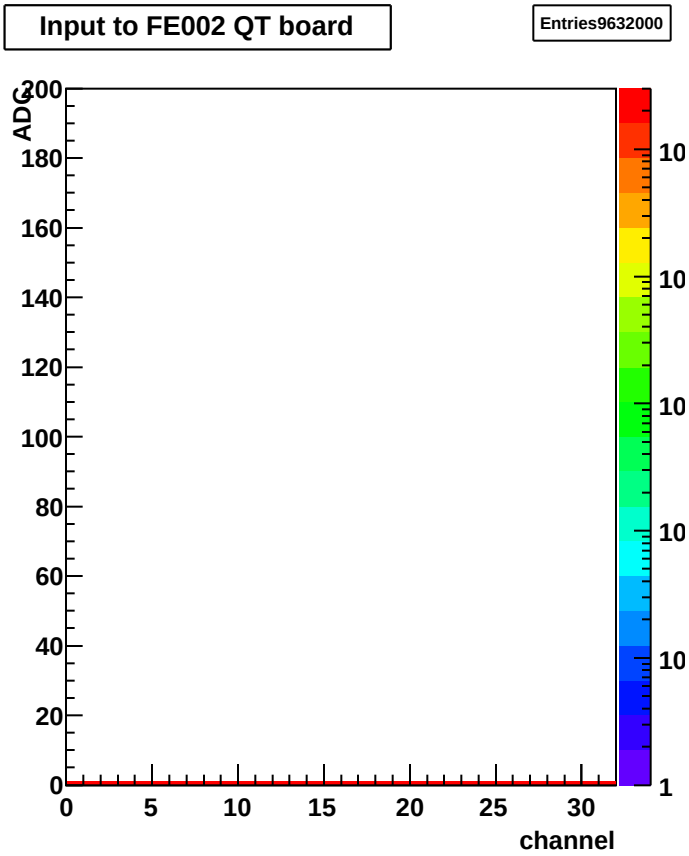

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

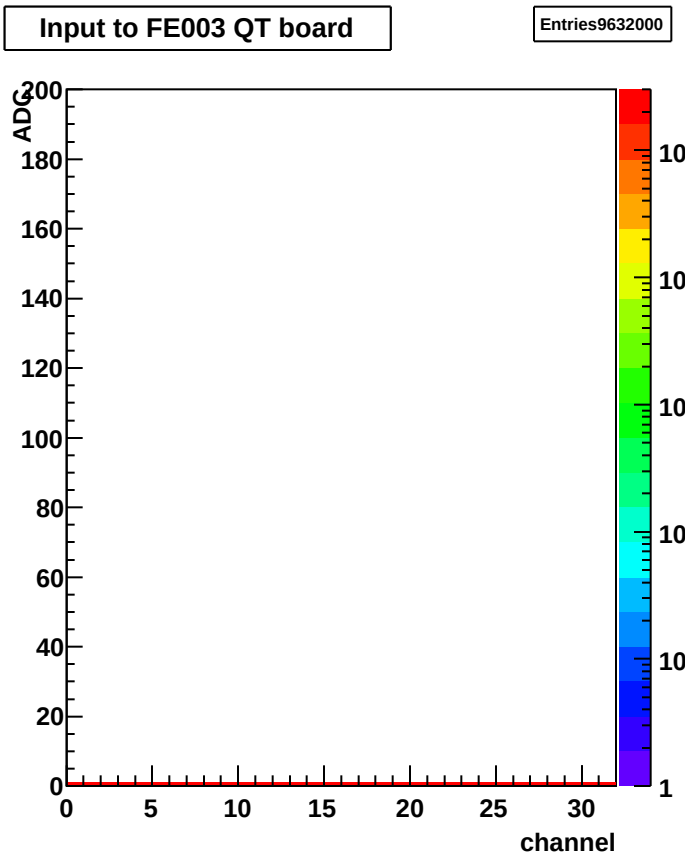

Input to FPD L3 DSM
Entries 4816000
bit
301000
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

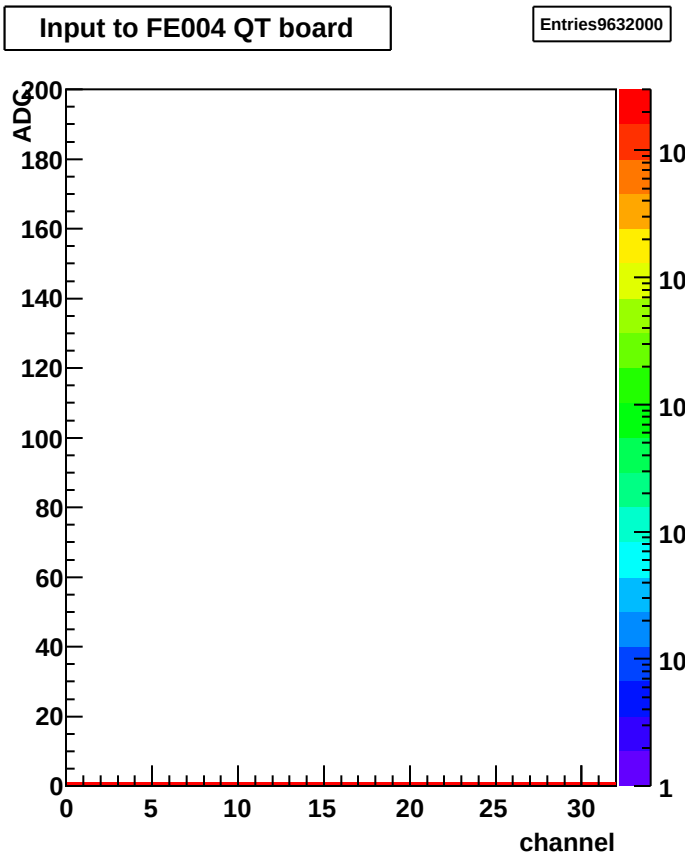

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

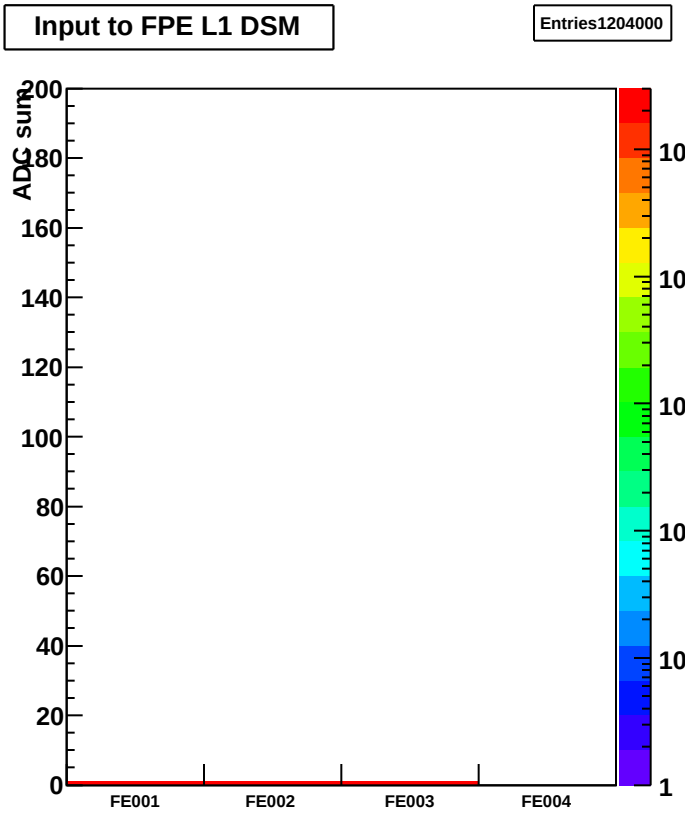

Input to FPD L2 DSM
Entries 1204000
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^5
10^4
10^3
10^2
10
1

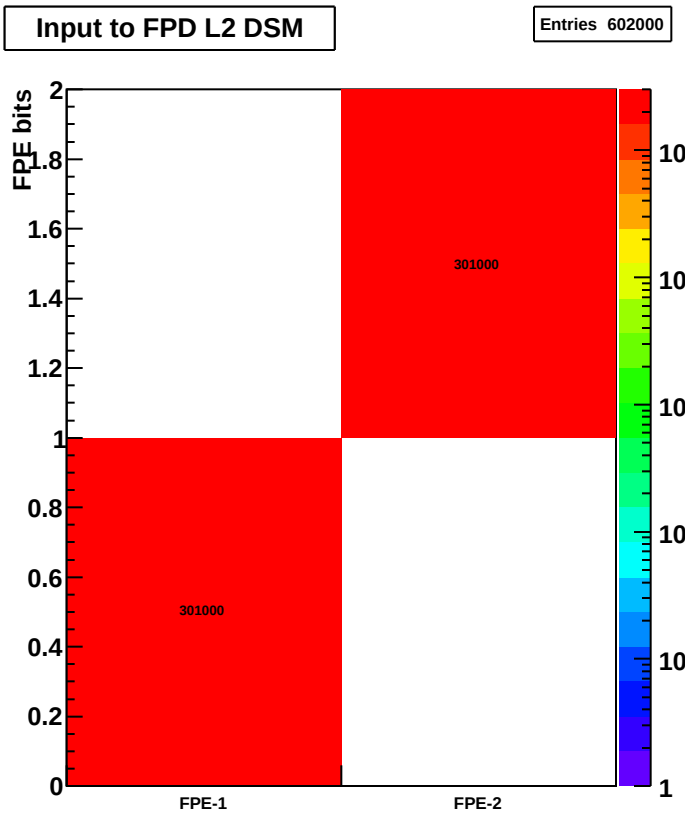

Input to FE001 QT board
Entries9632000
ADC
channel

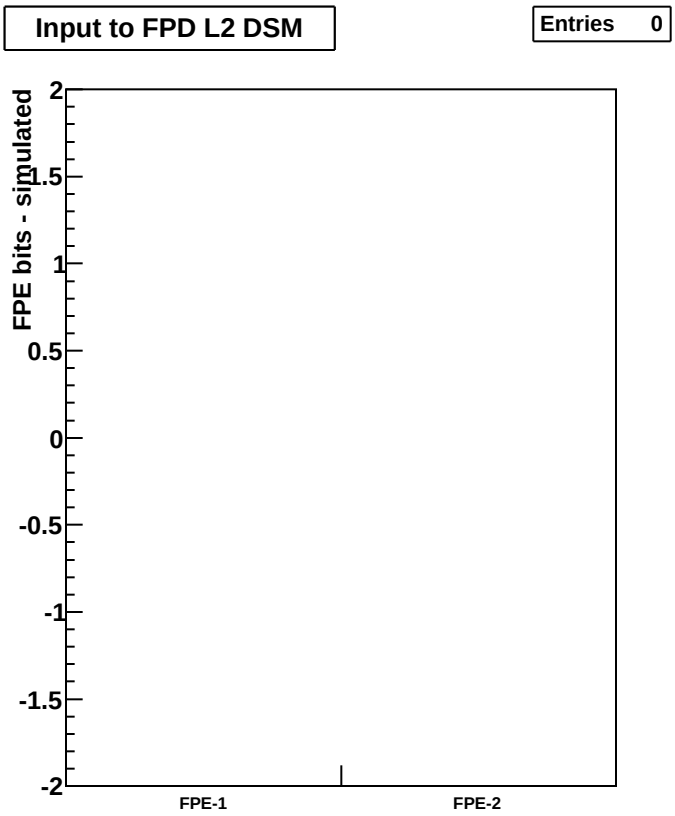

Input to FE002 QT board
Entries9632000
ADC
channel


Input to FE003 QT board
Entries9632000
ADC
channel


Input to FE004 QT board
Entries9632000
ADC
channel


Input to FPE L1 DSM
Entries1204000
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
Entries 602000
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
301000
301000
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