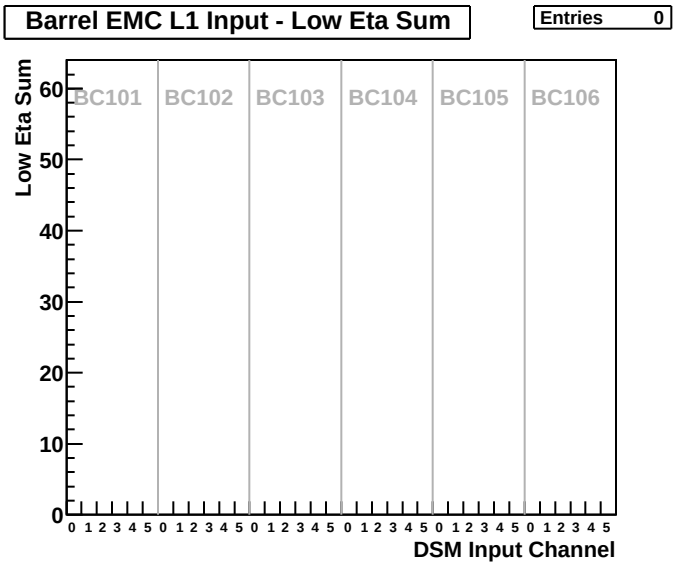
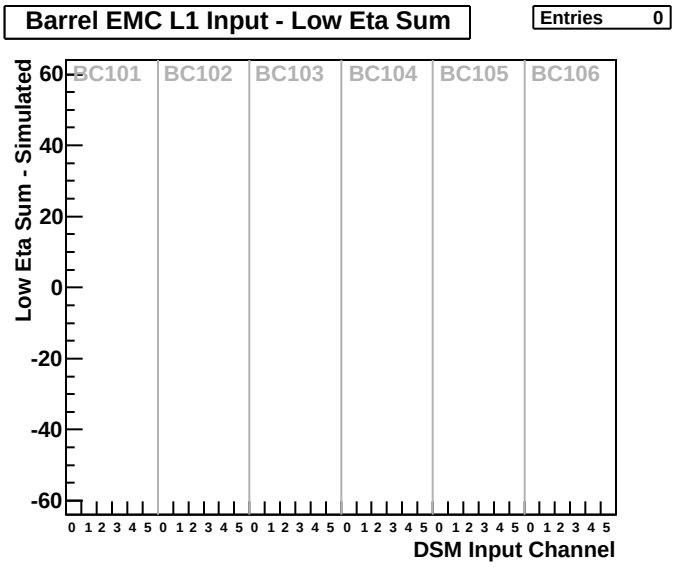
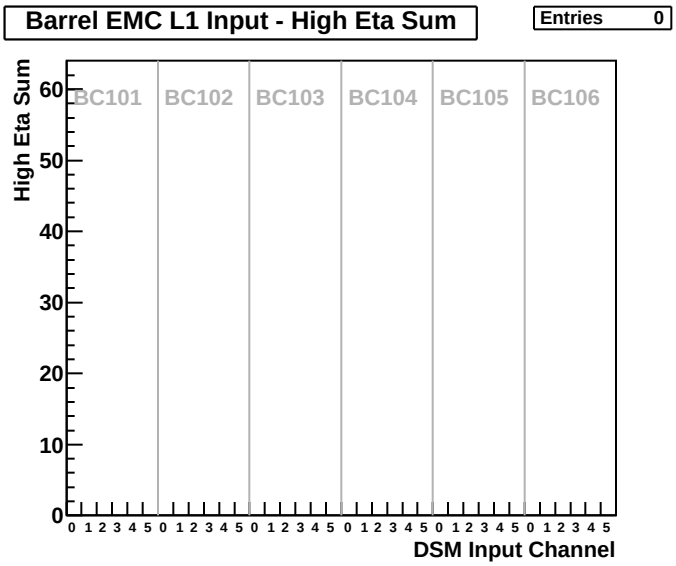
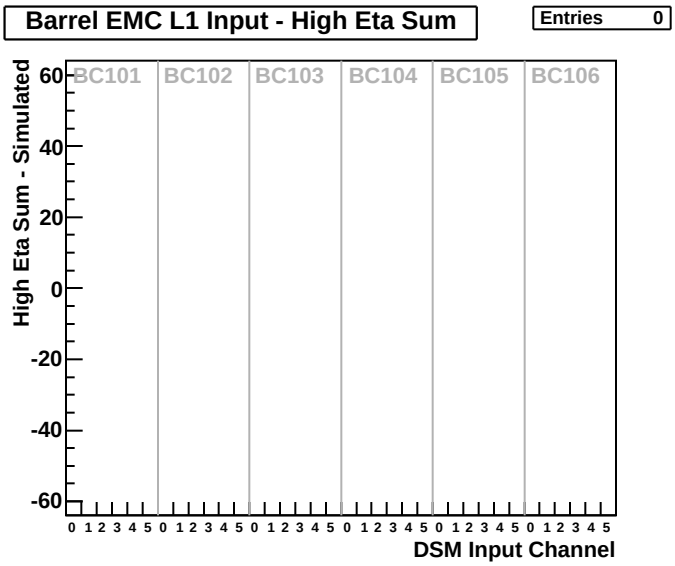
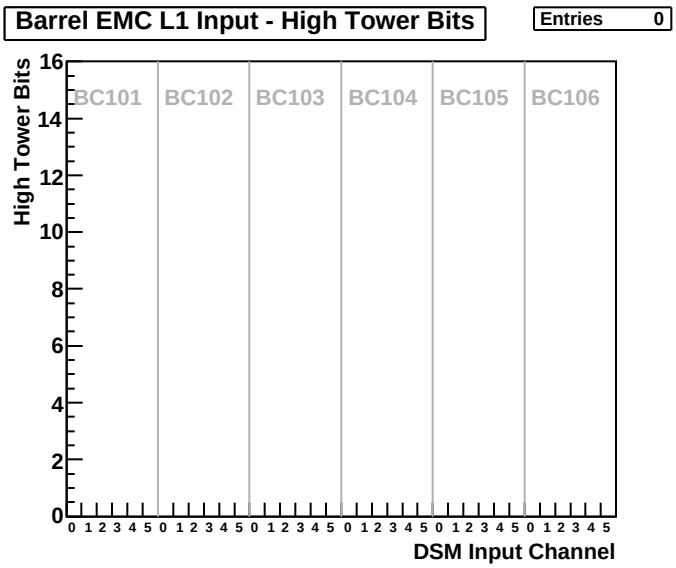
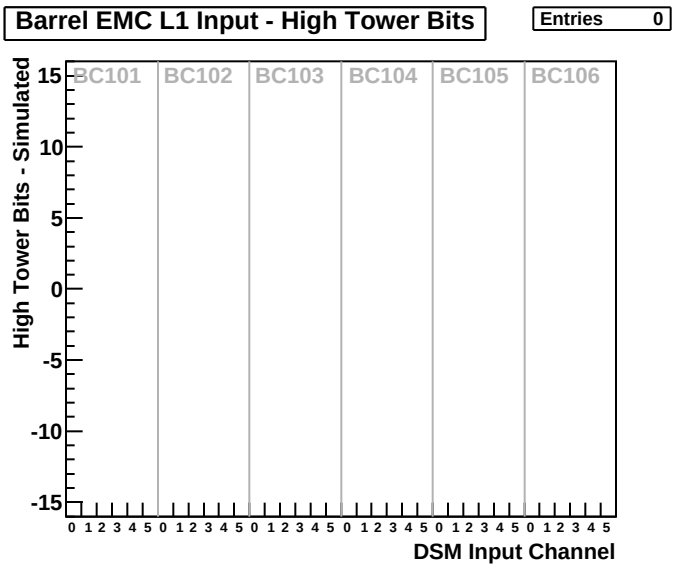

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

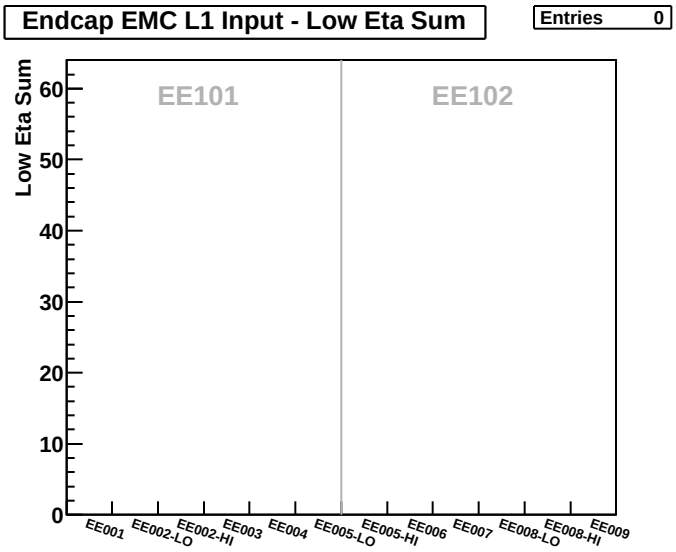

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

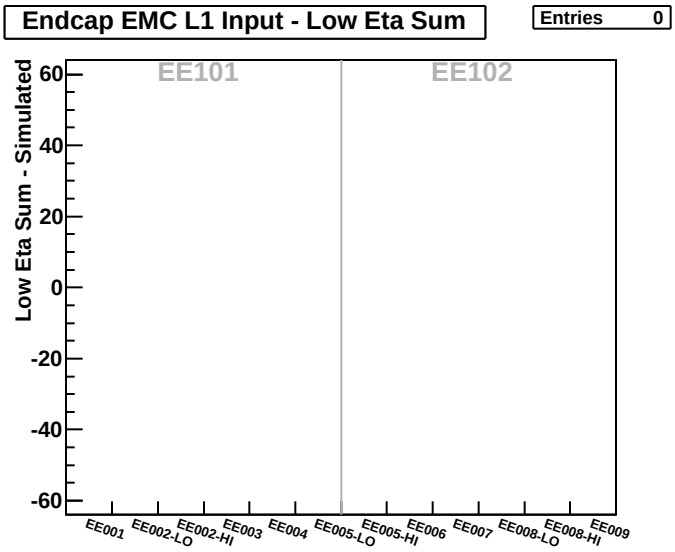

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

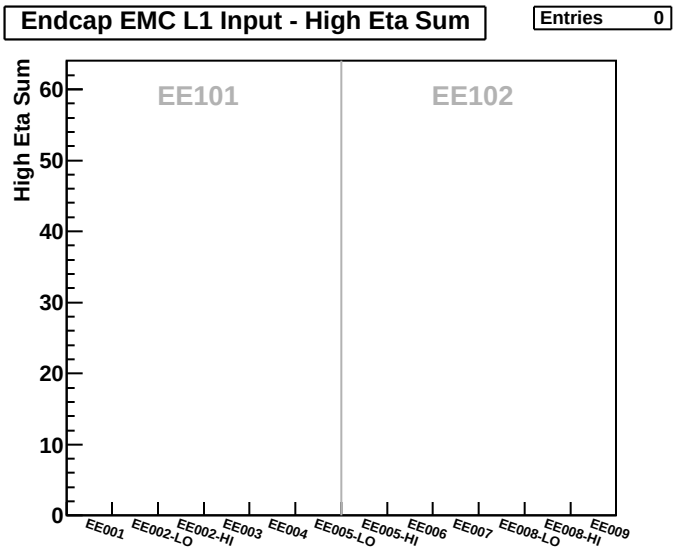

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

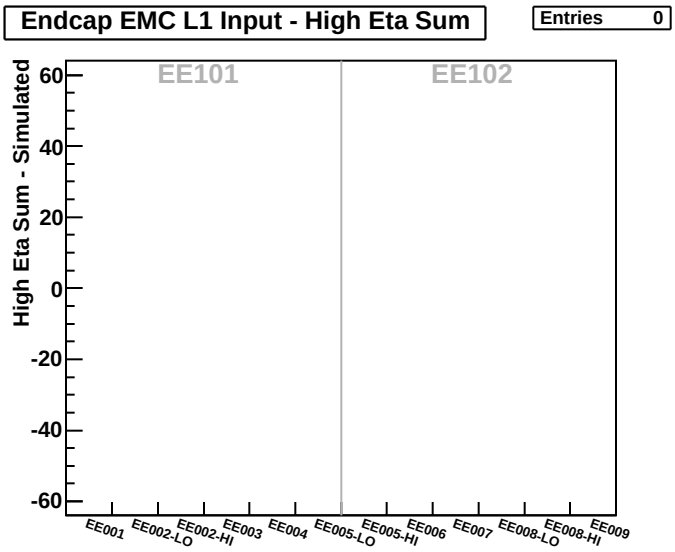

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

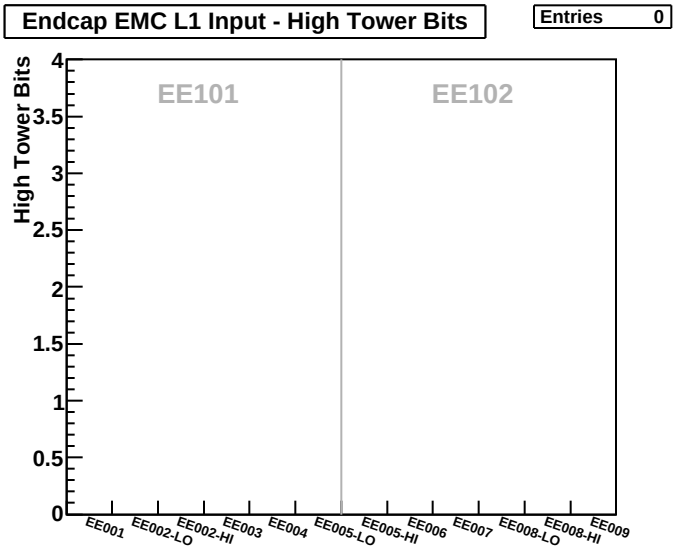

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

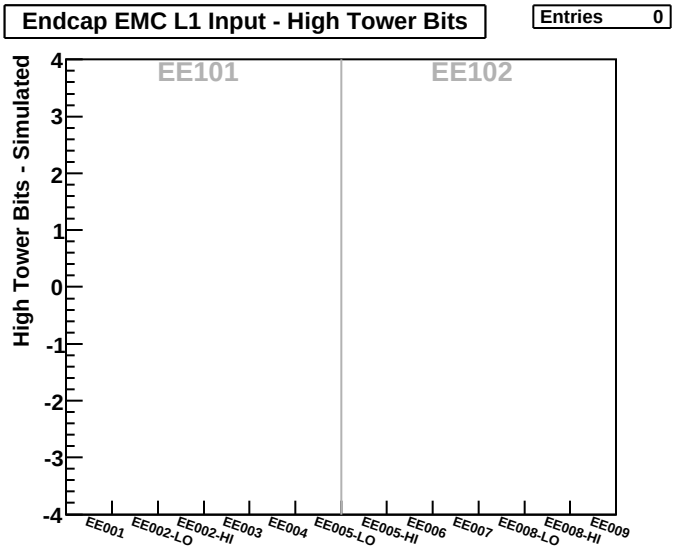

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

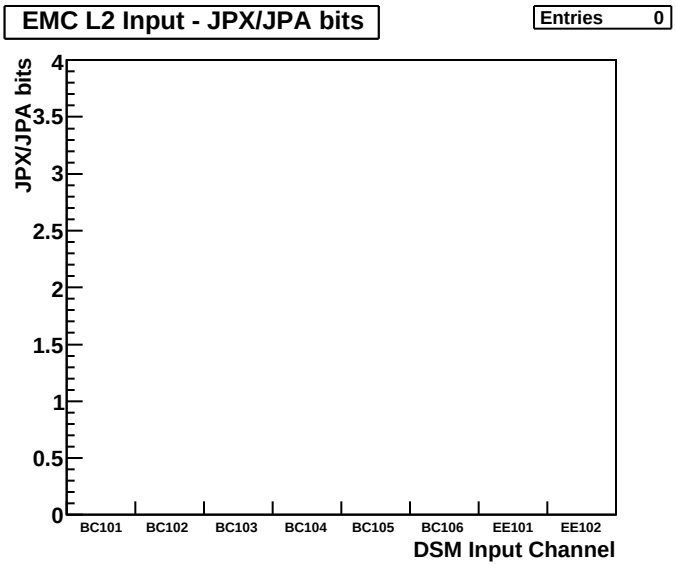

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

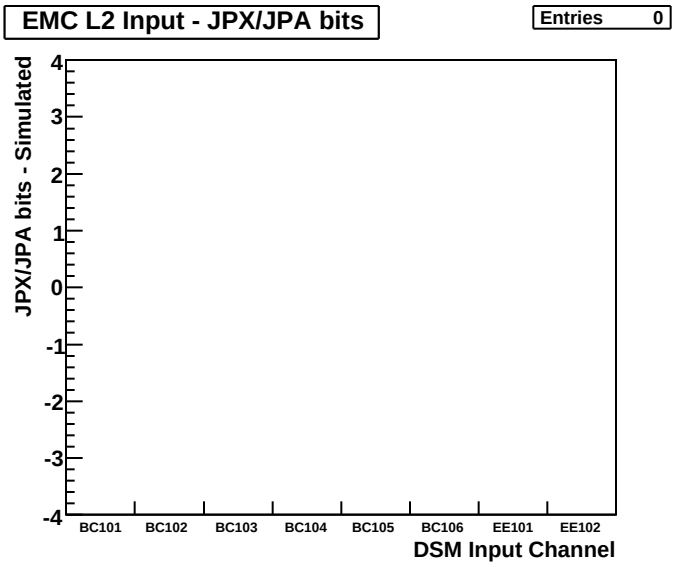

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

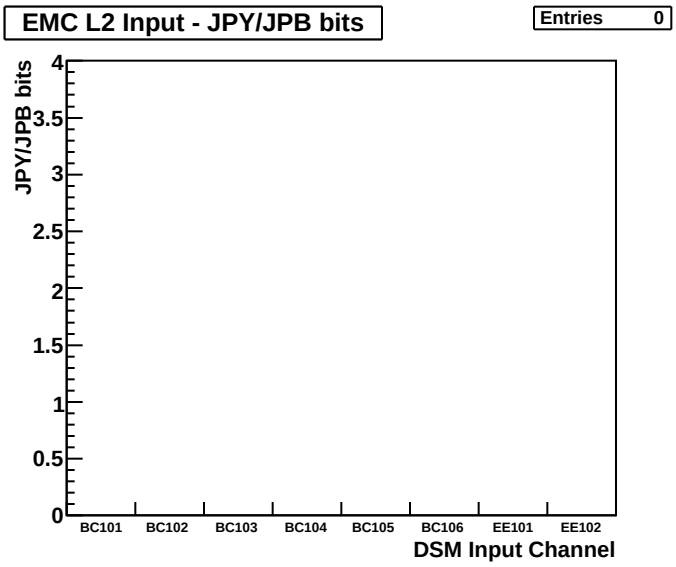

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

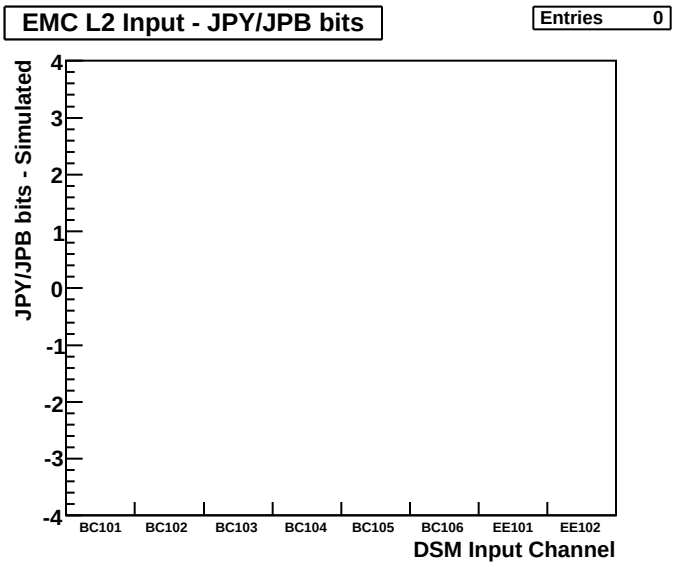

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

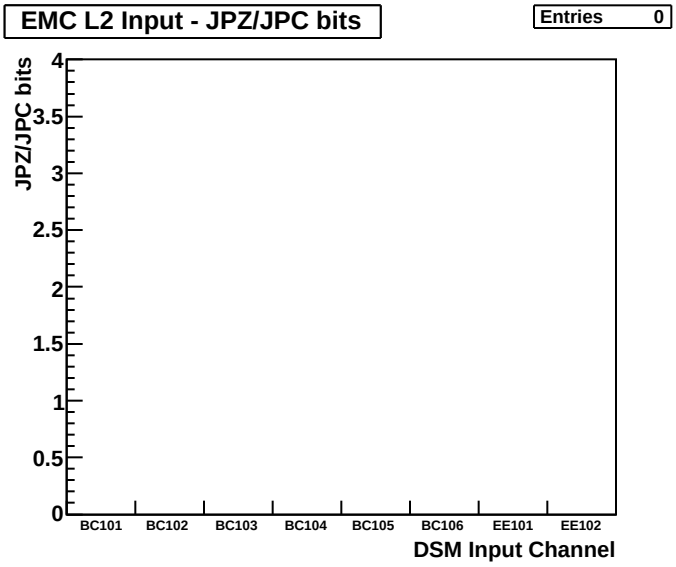

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

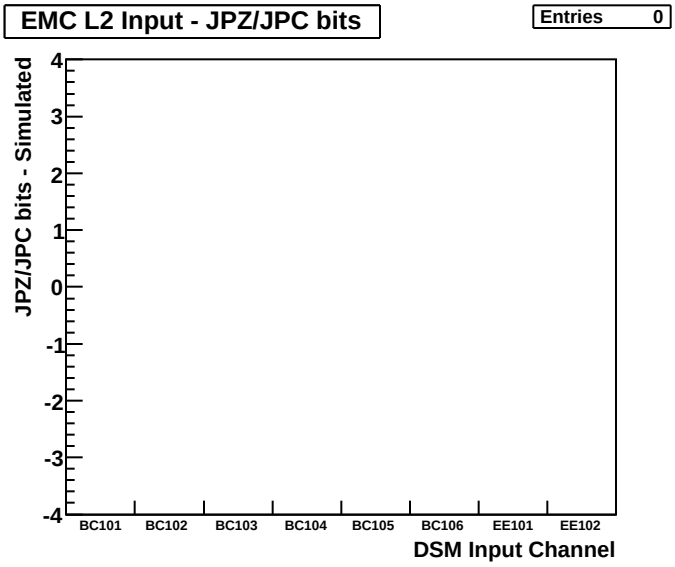

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

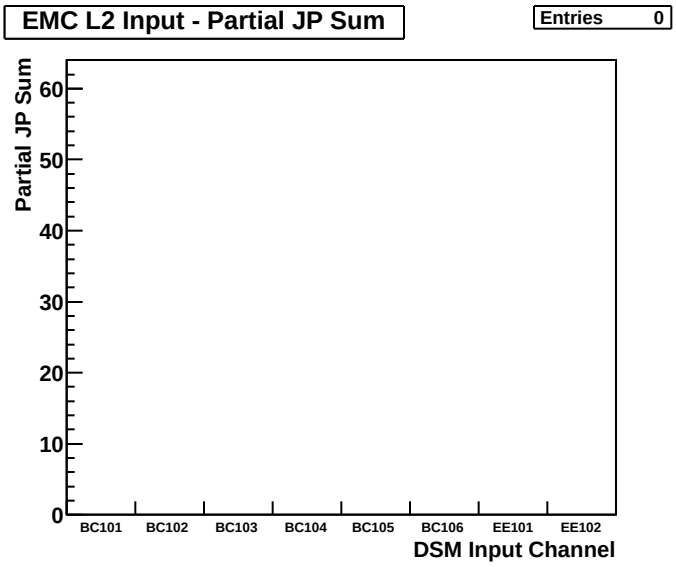

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

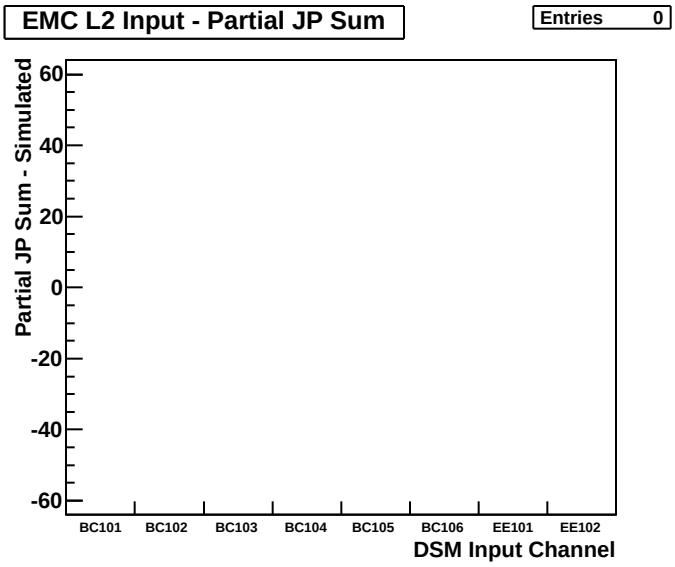

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

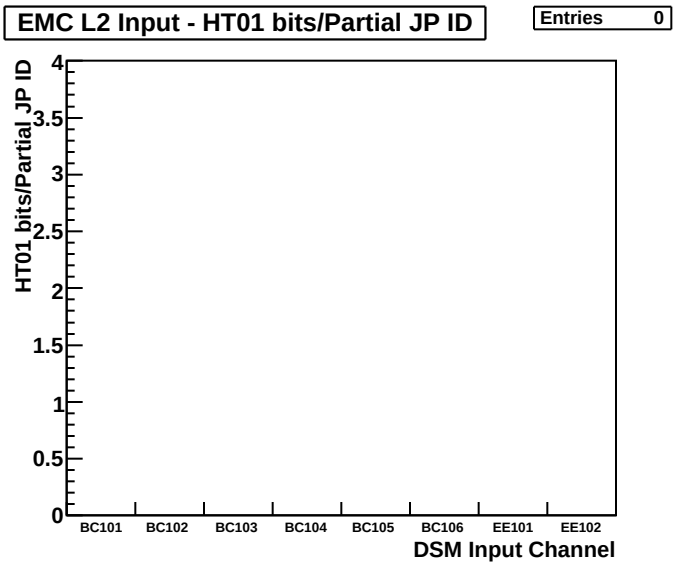

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

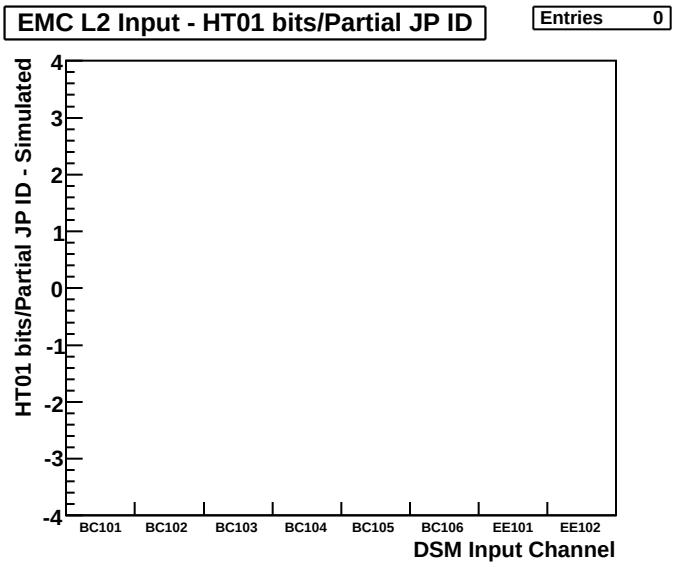

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

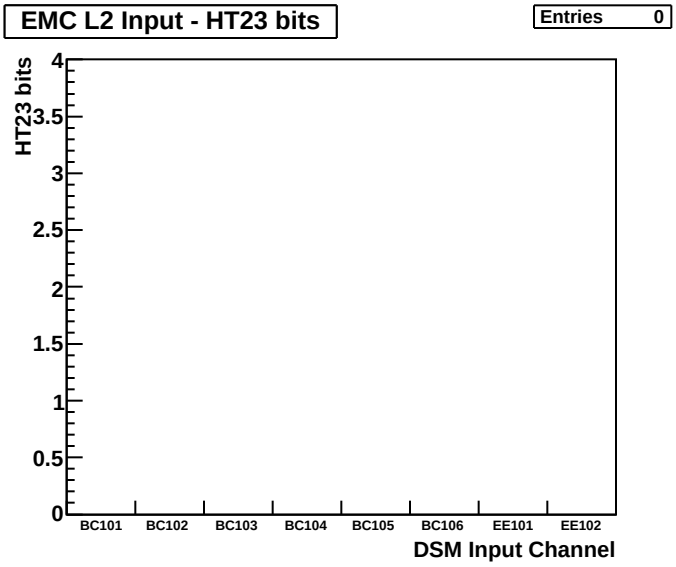

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

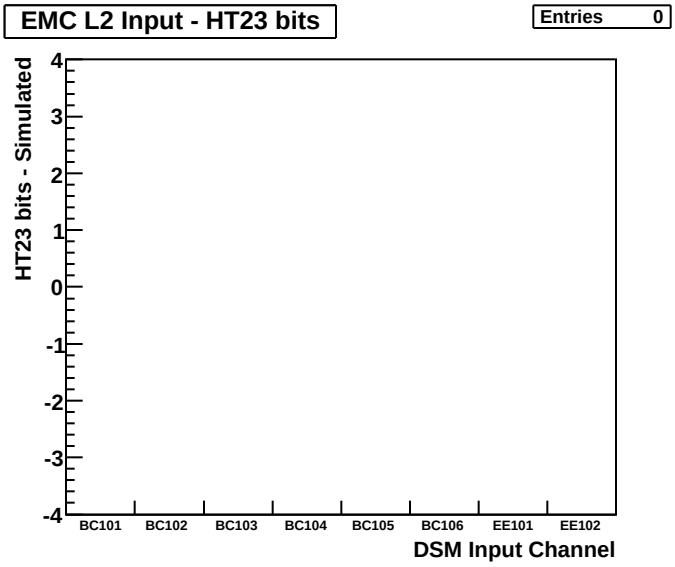

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum
60
50
40
30
20
10
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

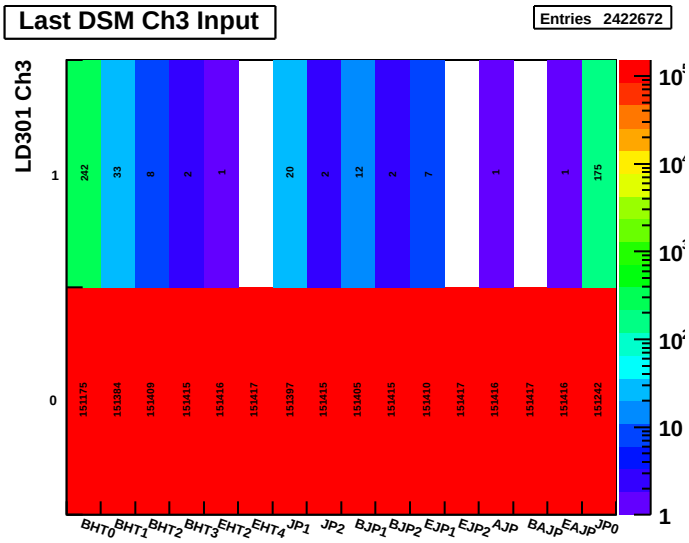

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
60
40
20
0
-20
-40
-60
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

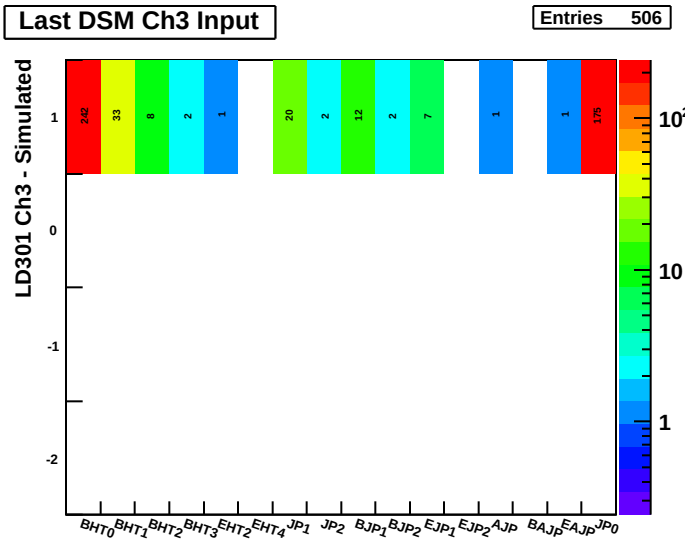

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

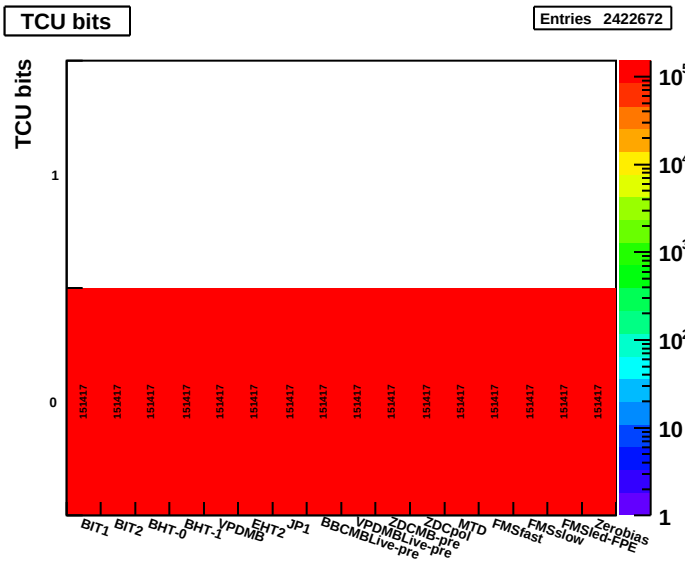

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

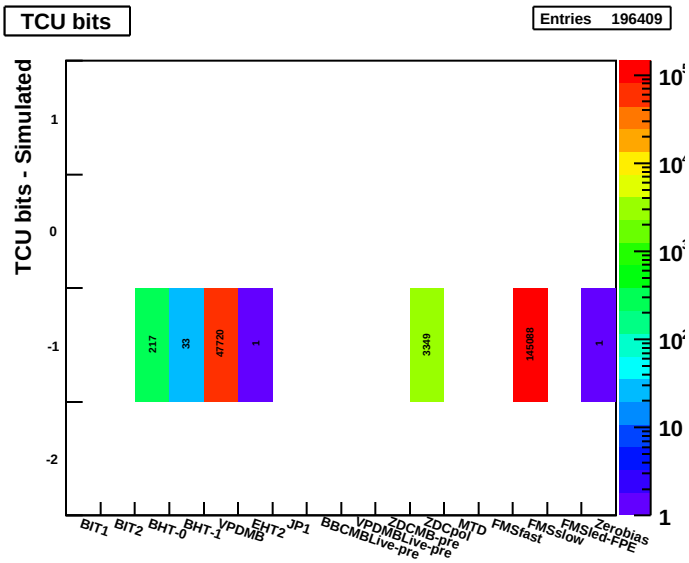

EMC L2 Input - HT23 bits
Entries 0
HT23 bits
4
3.5
3
2.5
2
1.5
1
0.5
0
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

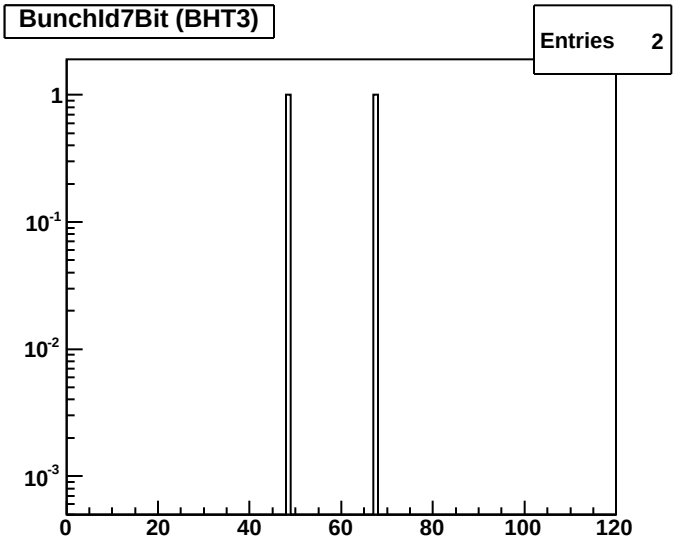

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
4
3
2
1
0
-1
-2
-3
-4
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
DSM Input Channel

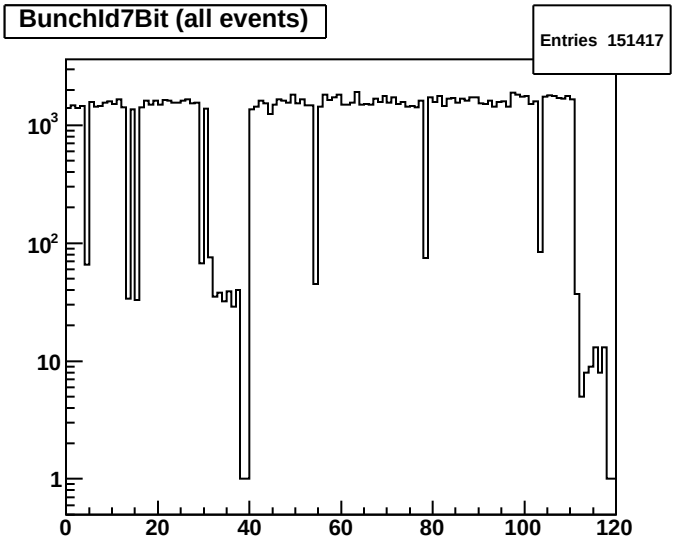

Last DSM Ch3 Input
Entries 2422672
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

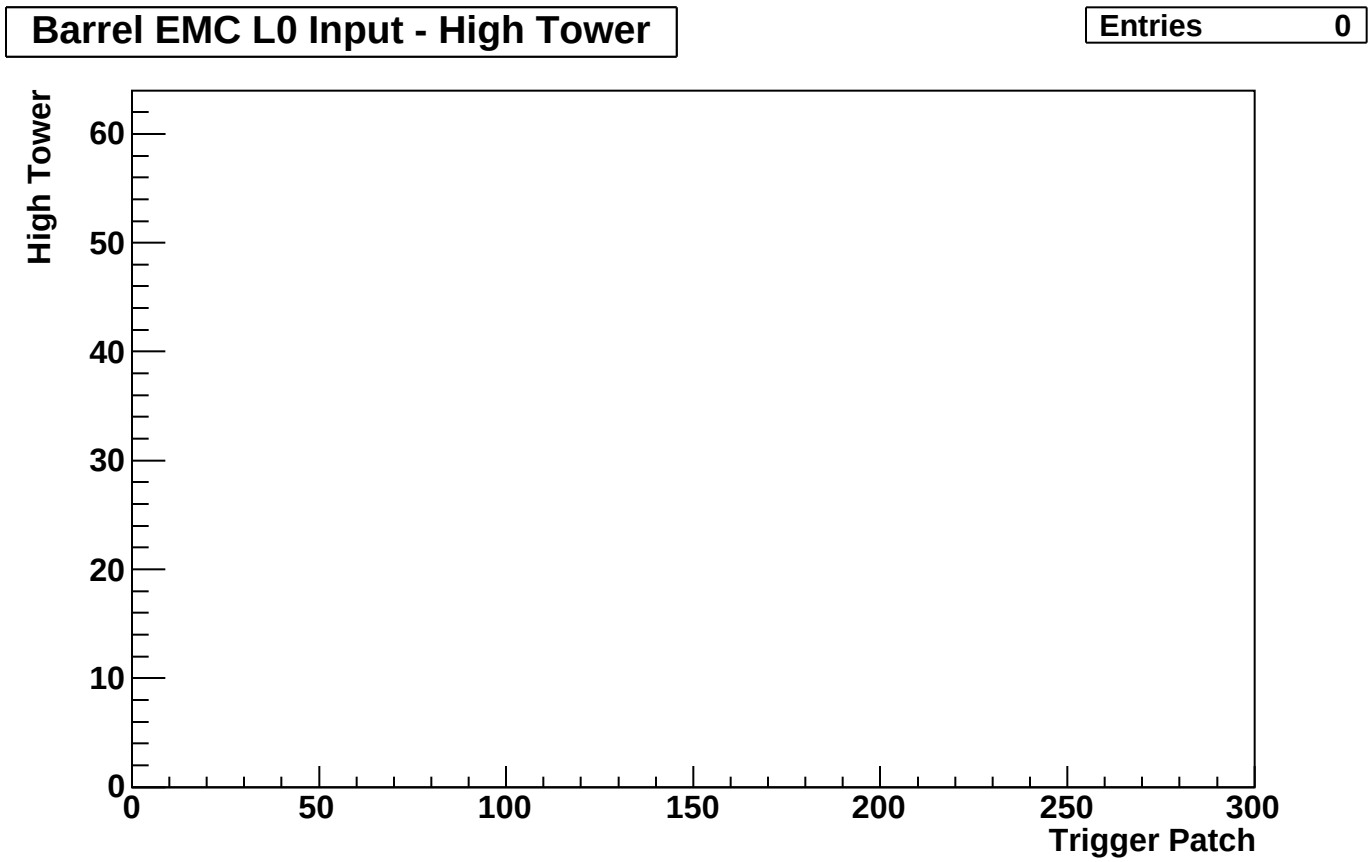

Last DSM Ch3 Input
Entries 506
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

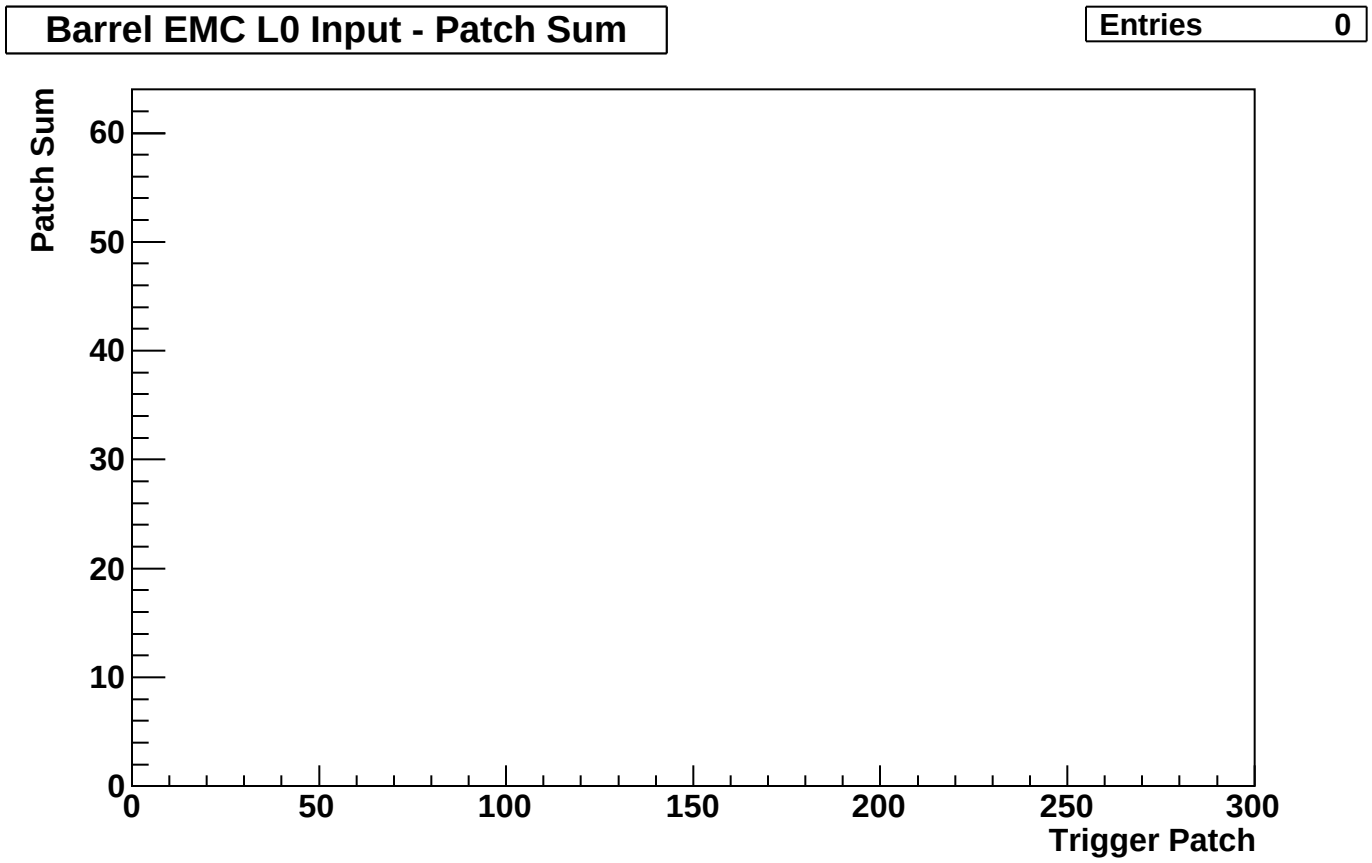

TCU bits
Entries 2422672
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

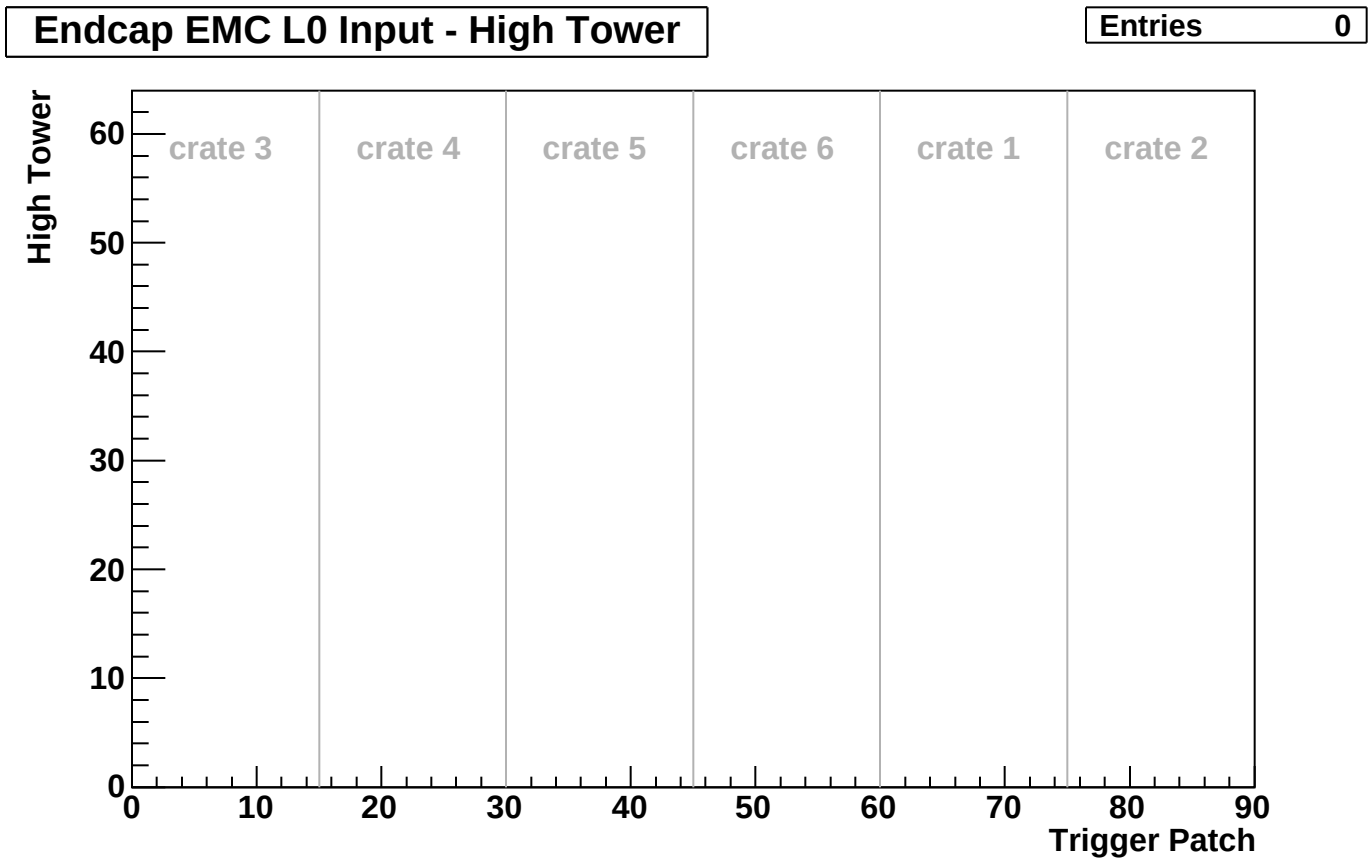

TCU bits
Entries 196409
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

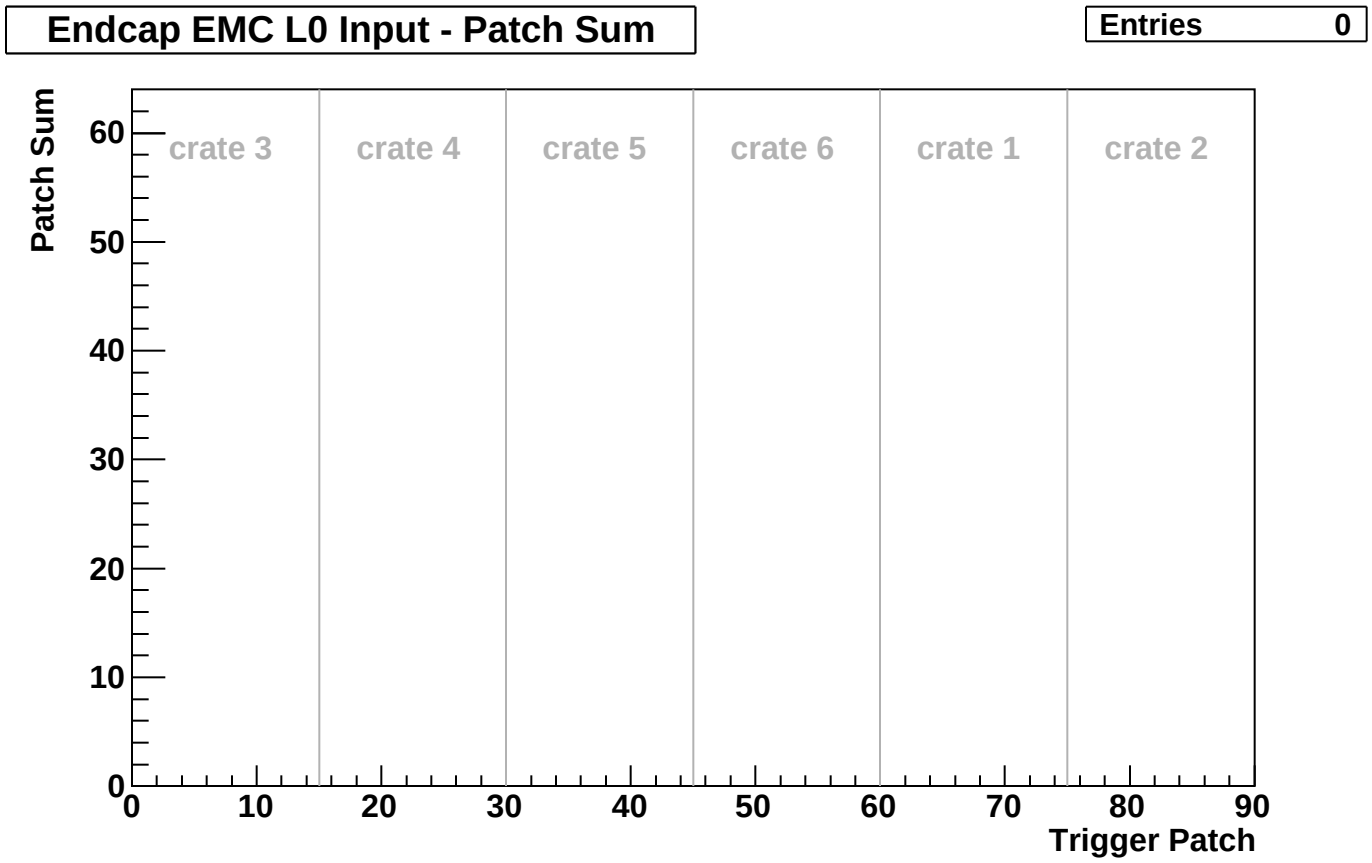

BunchId7Bit (BHT3)
Entries 2

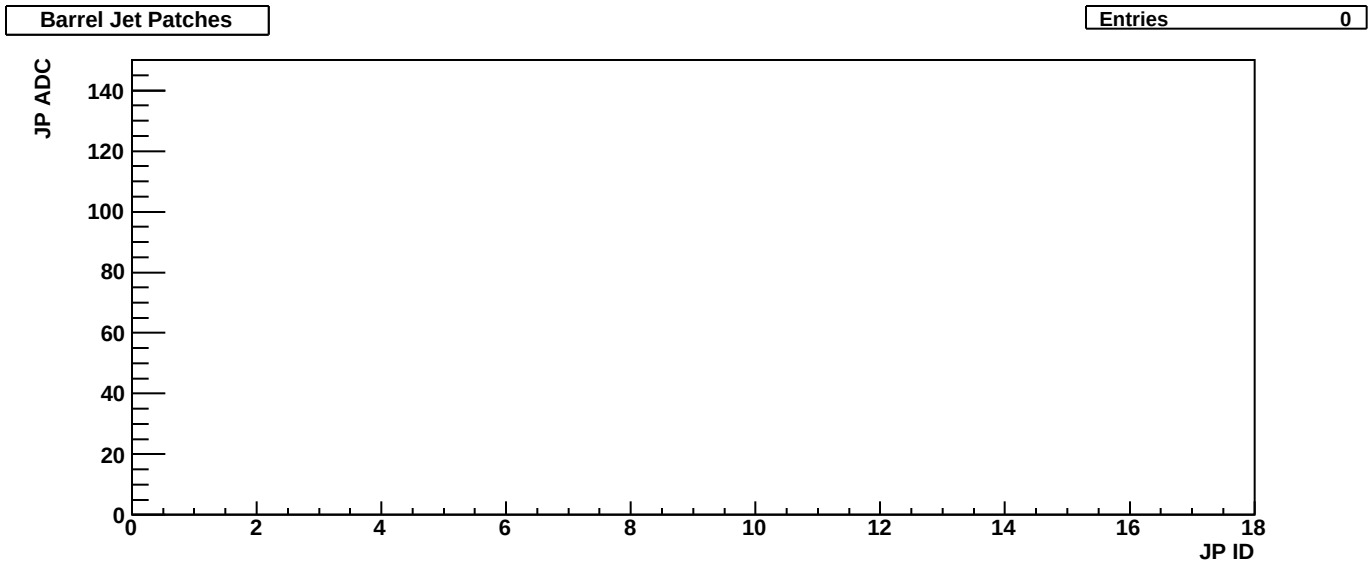

BunchId7Bit (all events)
Entries 151417

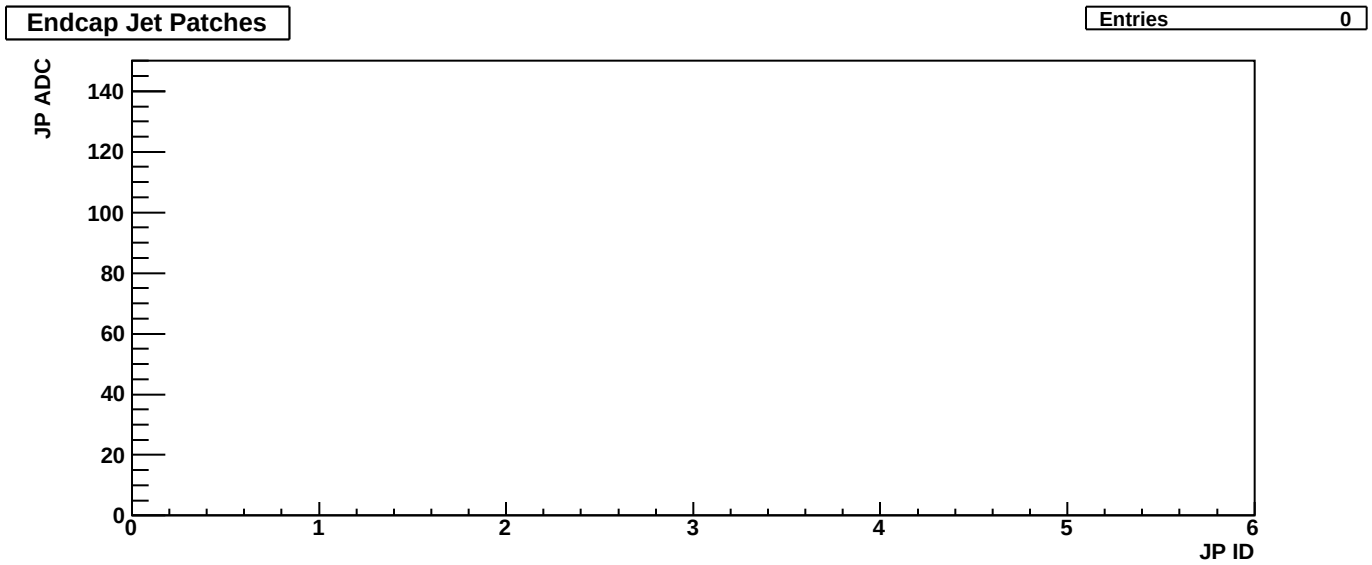

Barrel EMC L0 Input - High Tower
Entries 0
High Tower
0
10
20
30
40
50
60
0
50
100
150
200
250
300
Trigger Patch

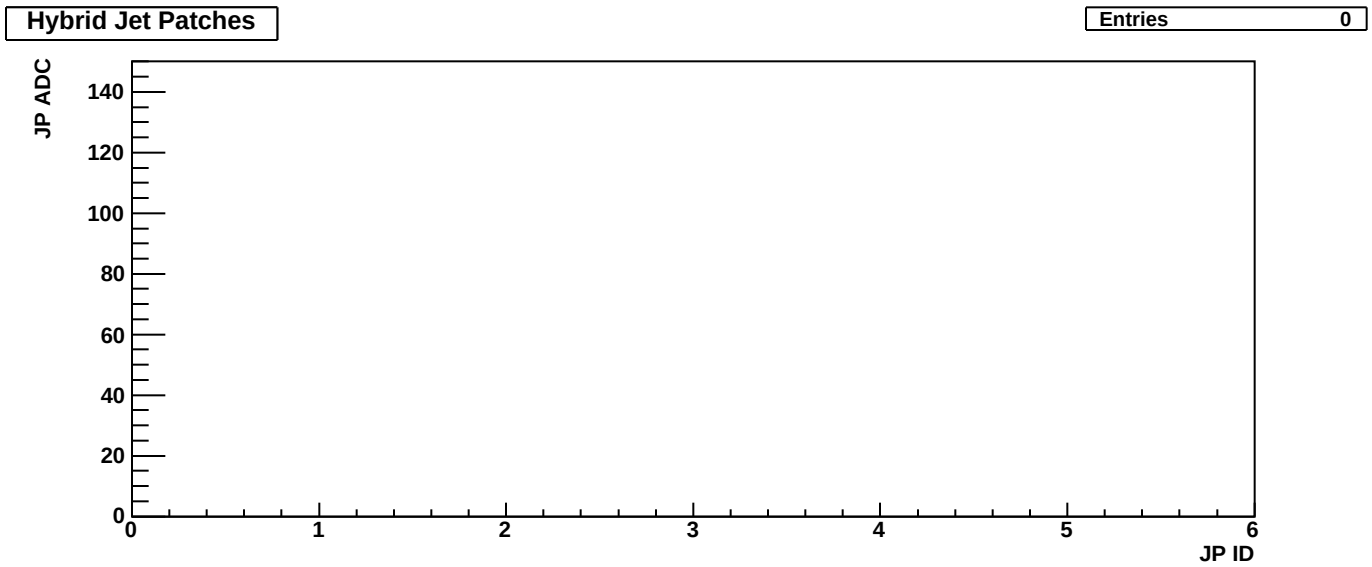

Barrel EMC L0 Input - Patch Sum
Entries 0
Patch Sum
0
10
20
30
40
50
60
0
50
100
150
200
250
300
Trigger Patch

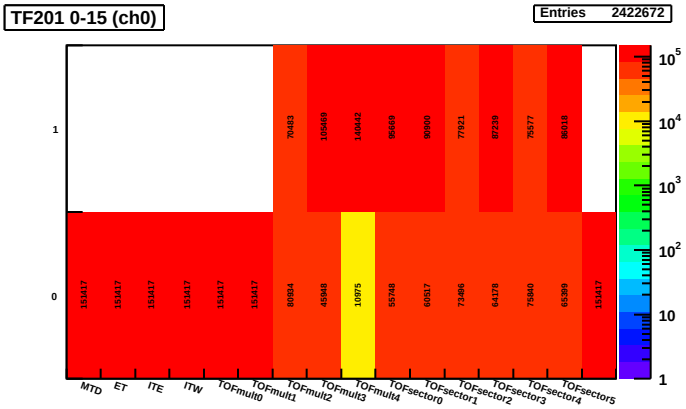

Endcap EMC L0 Input - High Tower
Entries 0
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
0
10
20
30
40
50
60
70
80
90
Trigger Patch

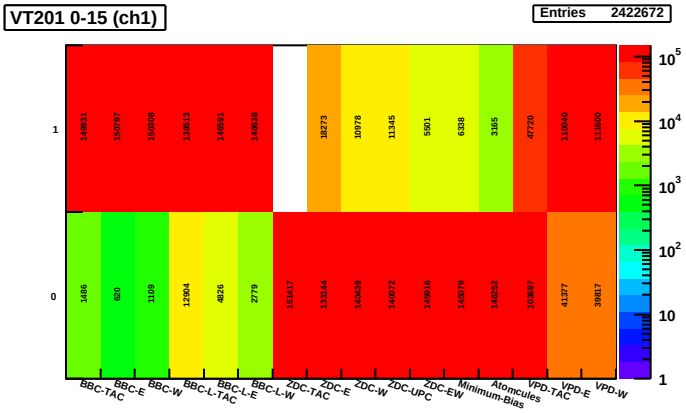

Endcap EMC L0 Input - Patch Sum
Entries 0
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
0
10
20
30
40
50
60
70
80
90
Trigger Patch

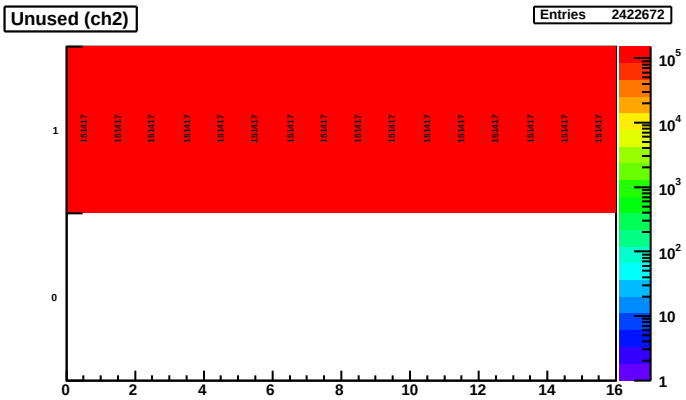

Barrel Jet Patches
Entries 0
JP ADC
0
20
40
60
80
100
120
140
0
2
4
6
8
10
12
14
16
18
JP ID

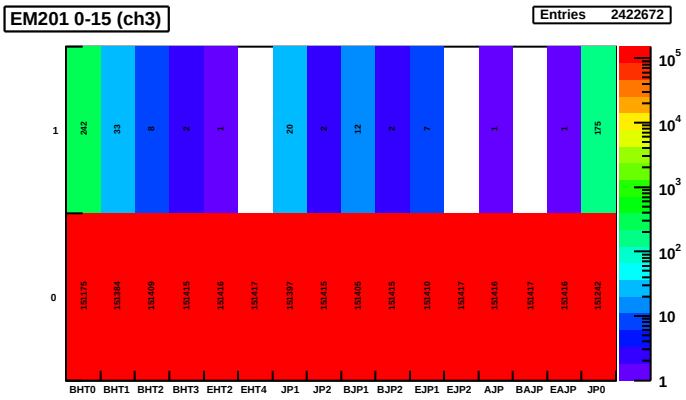

Endcap Jet Patches
Entries 0
JP ADC
0
20
40
60
80
100
120
140
0
1
2
3
4
5
6
JP ID

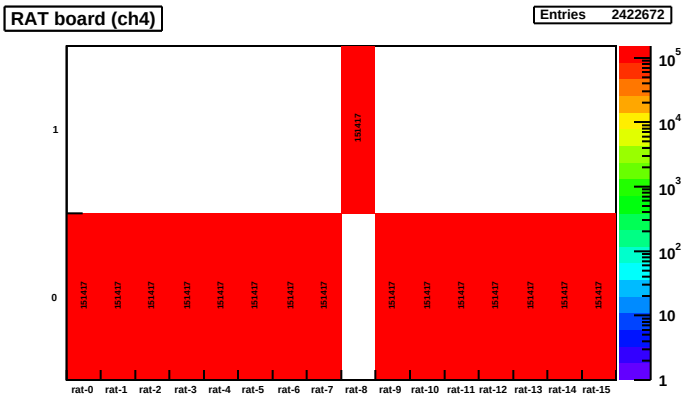

Hybrid Jet Patches
Entries 0
JP ADC
0
20
40
60
80
100
120
140
0
1
2
3
4
5
6
JP ID

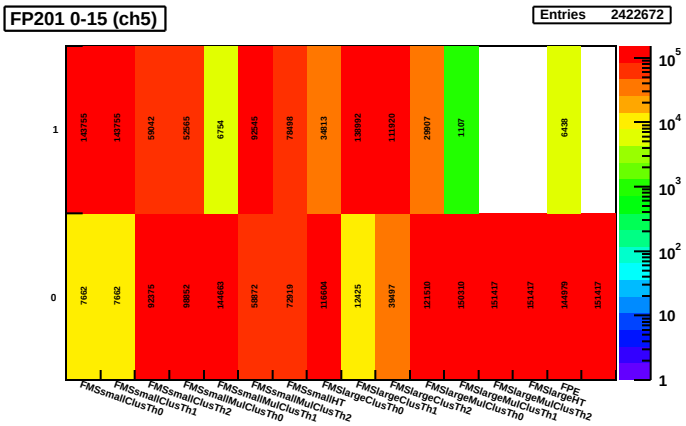

TF201 0-15 (ch0)
Entries 2422672
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

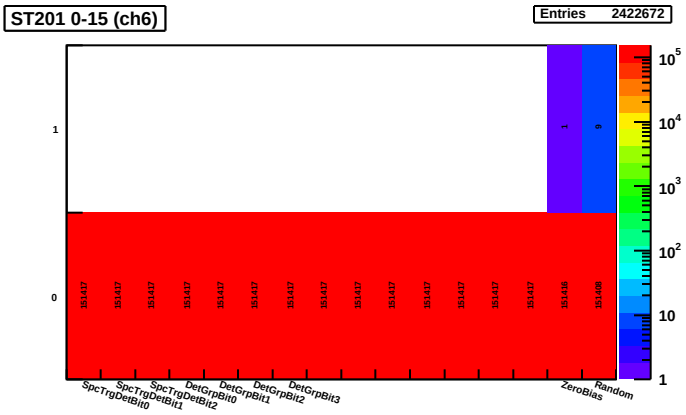

VT201 0-15 (ch1)
Entries 2422672
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

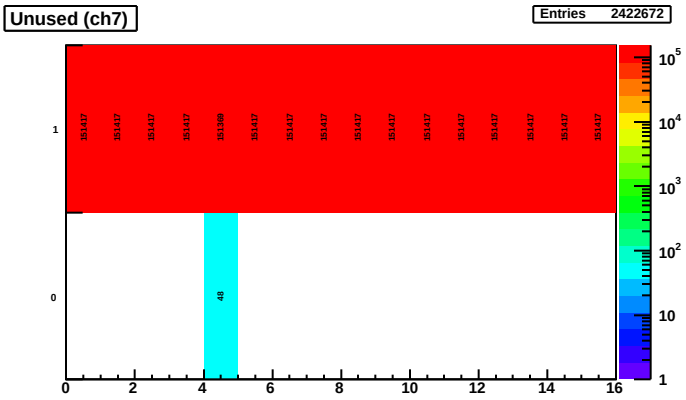

Unused (ch2)
Entries 2422672

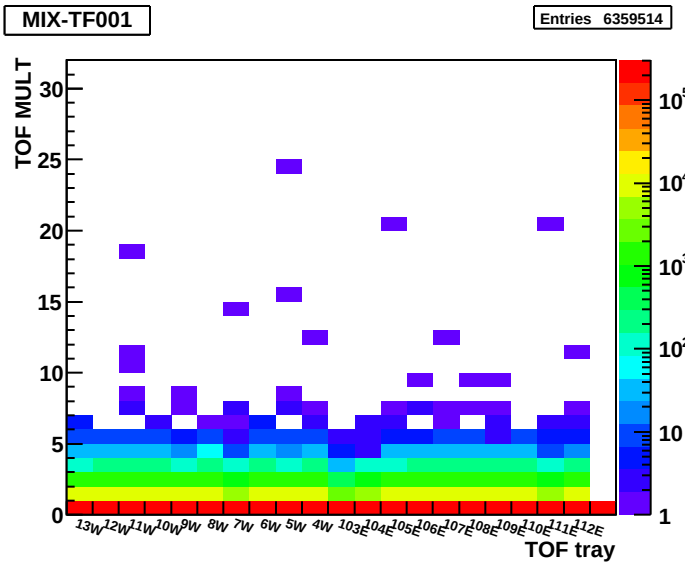

EM201 0-15 (ch3)
Entries 2422672
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

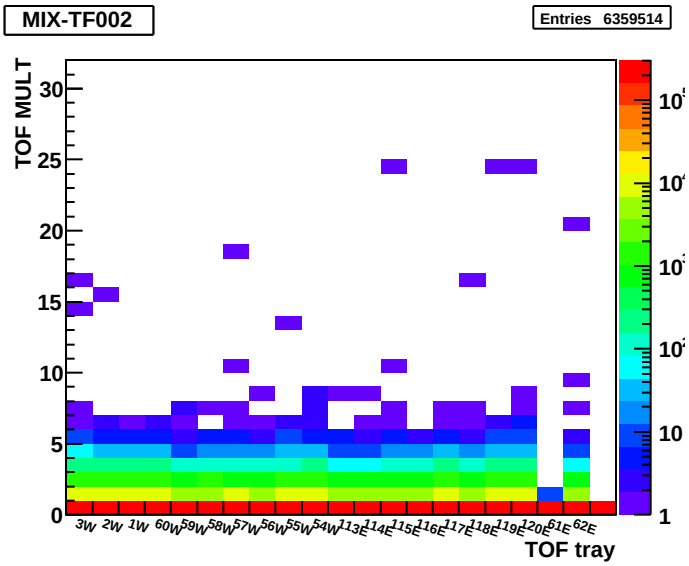

RAT board (ch4)
Entries 2422672
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

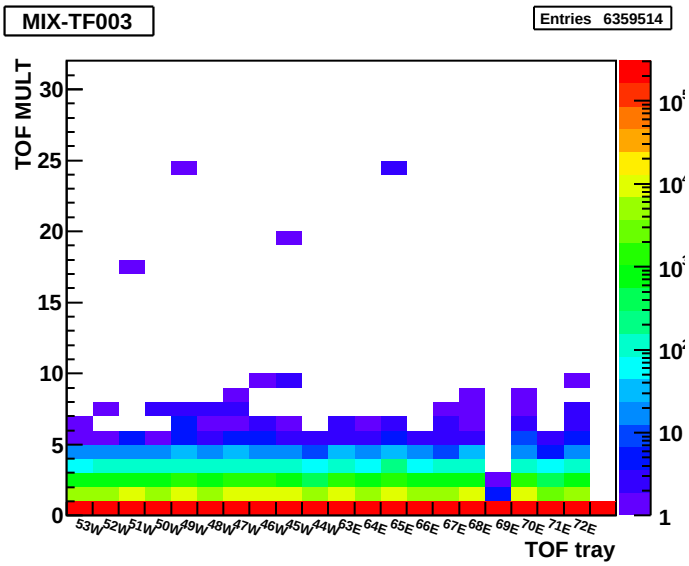

FP201 0-15 (ch5)
Entries 2422672
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

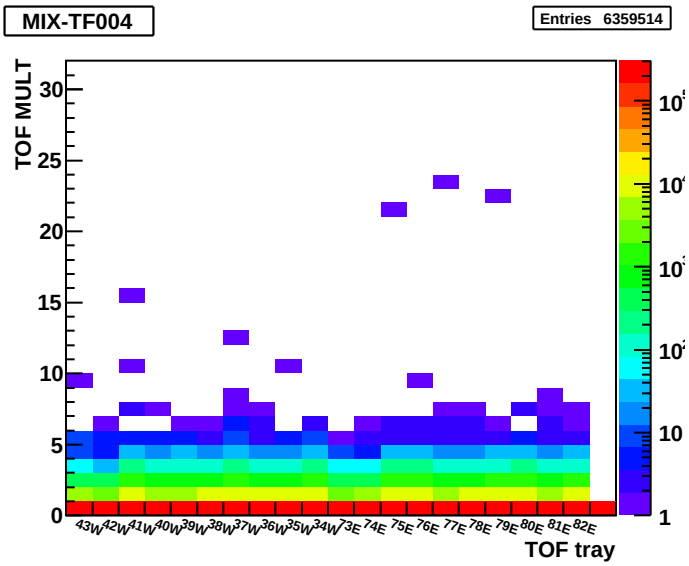

ST201 0-15 (ch6)
Entries 2422672
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

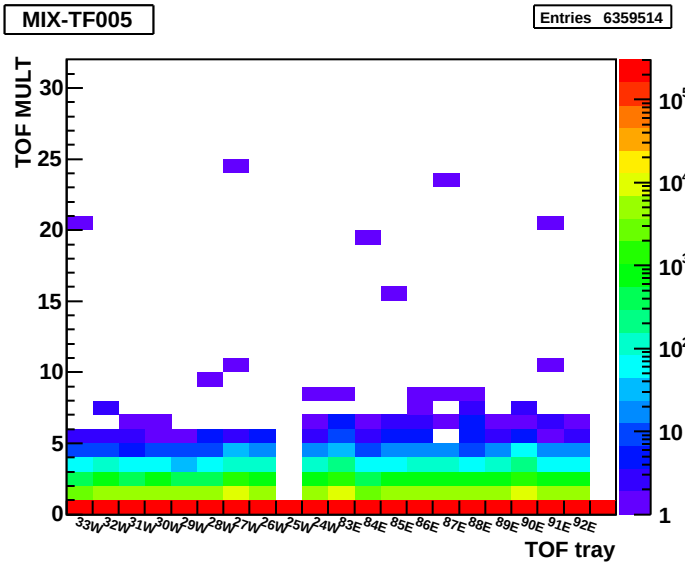

Unused (ch7)
Entries 2422672

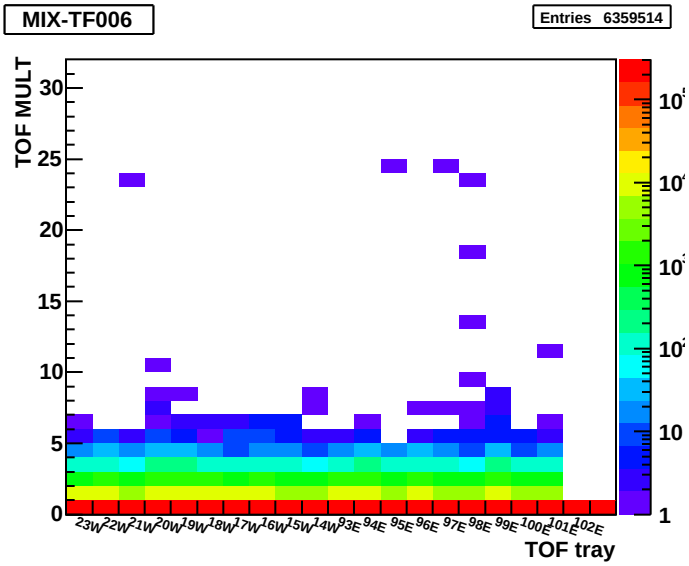

MIX-TF001
Entries 6359514
TOF MULT
TOF tray

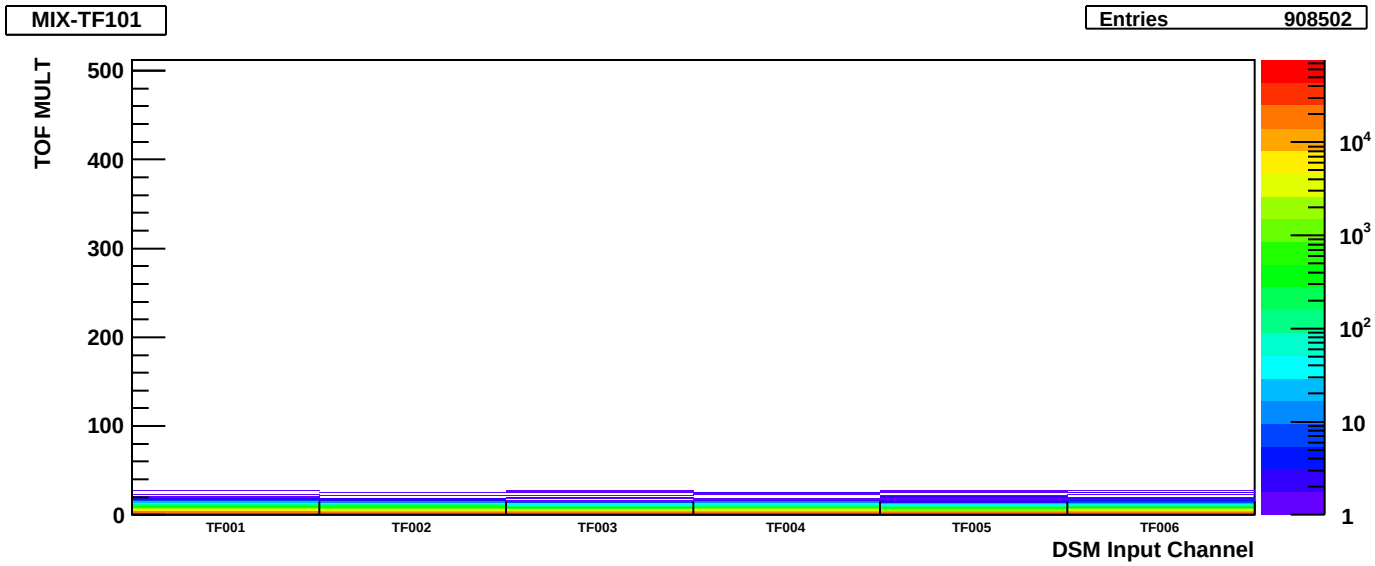

MIX-TF002
Entries 6359514
TOF MULT
TOF tray

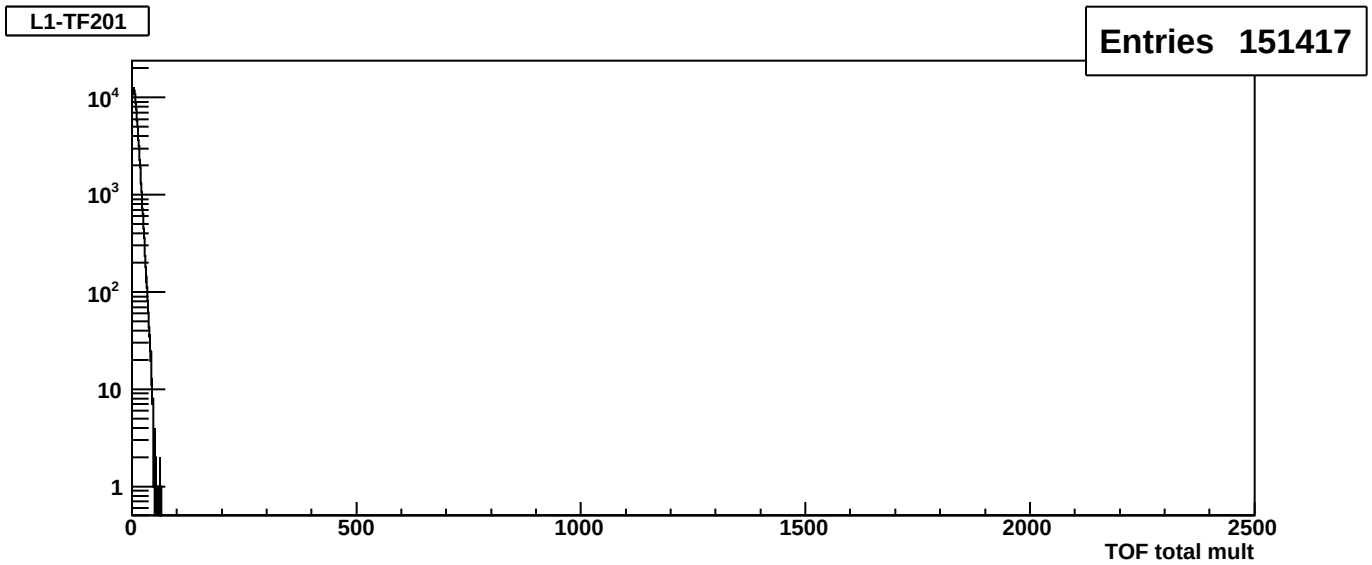

MIX-TF003
Entries 6359514
TOF MULT
TOF tray

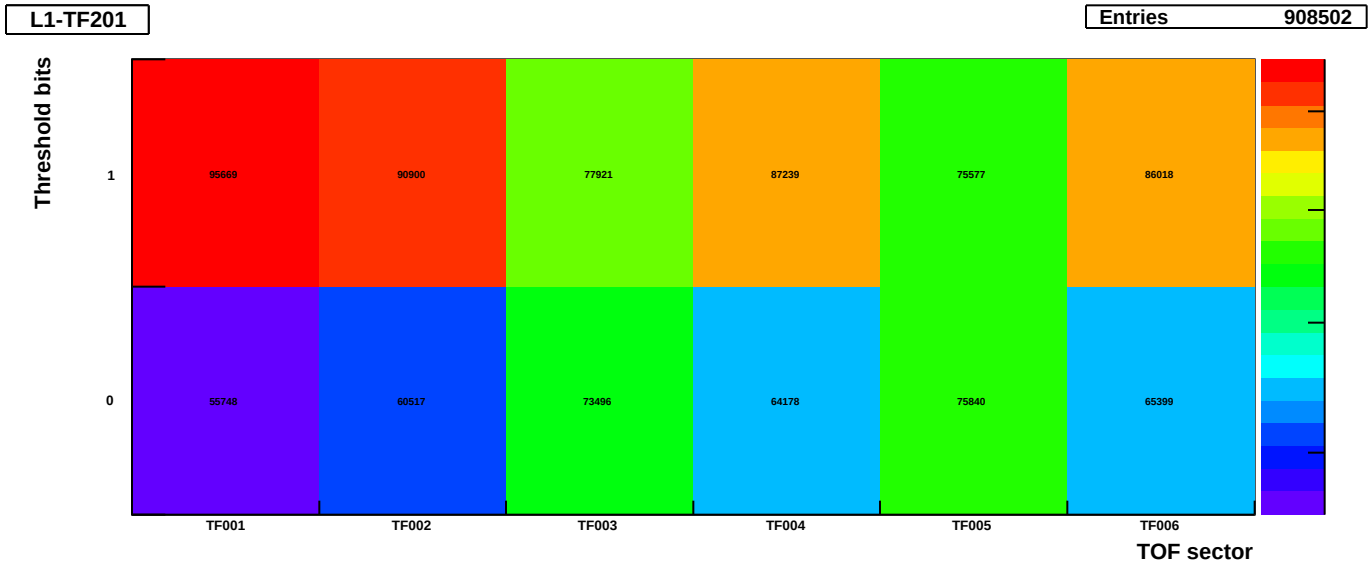

MIX-TF004
Entries 6359514
TOF MULT
TOF tray

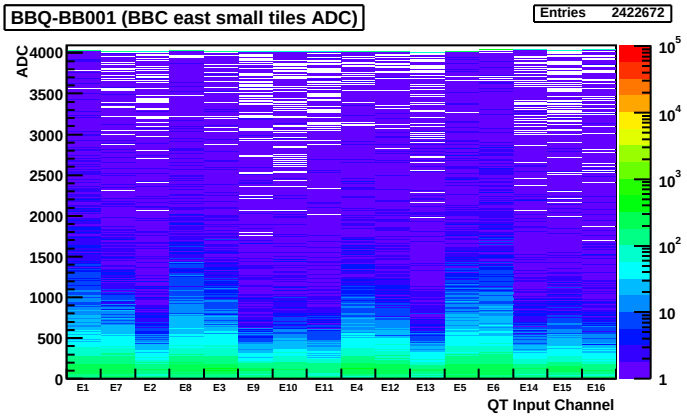

MIX-TF005
Entries 6359514
TOF MULT
TOF tray

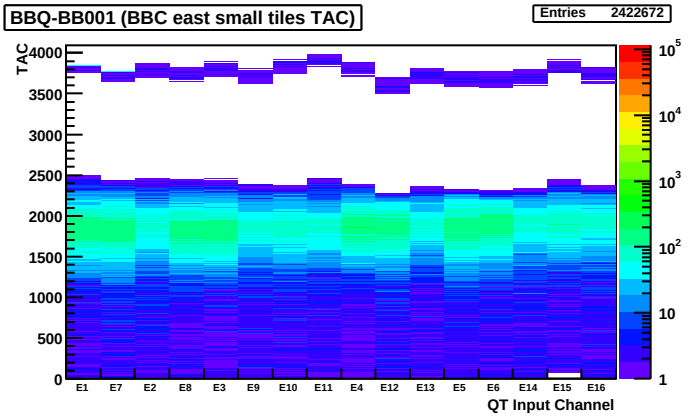

MIX-TF006
Entries 6359514
TOF MULT
TOF tray

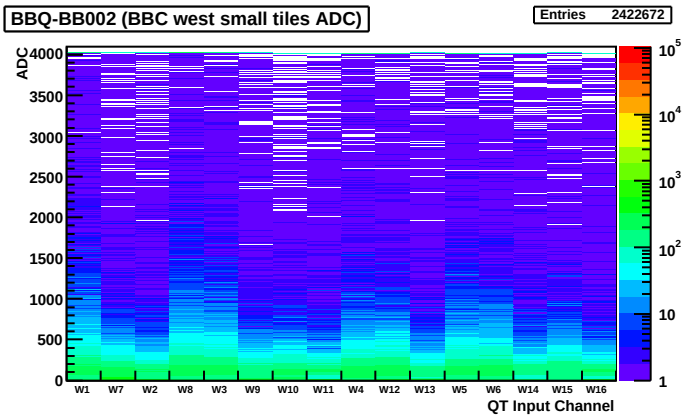

MIX-TF101
Entries 908502
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

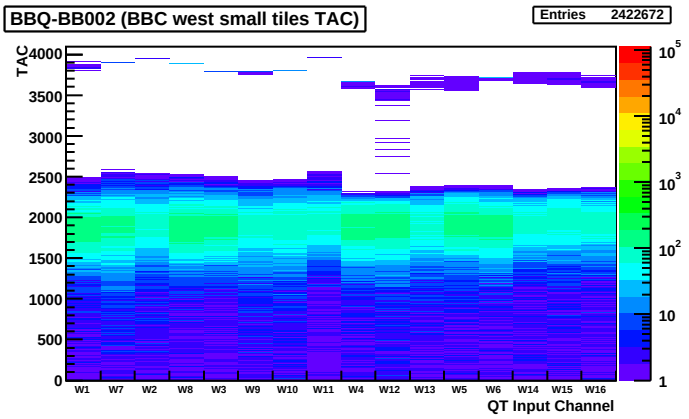

L1-TF201
Entries 151417
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

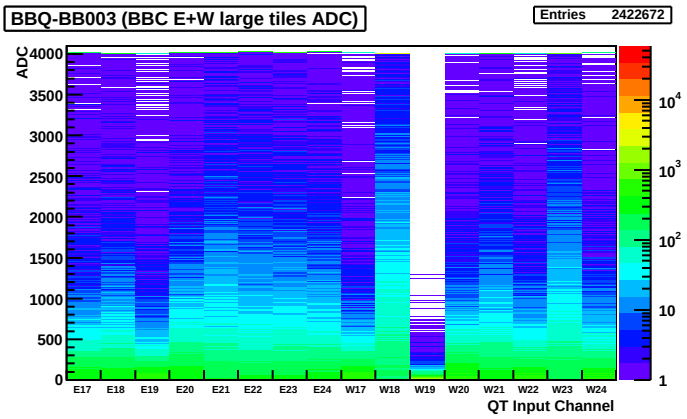

L1-TF201
Entries 908502
Threshold bits
1
0
95669
90900
77921
87239
75577
86018
55748
60517
73496
64178
75840
65399
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

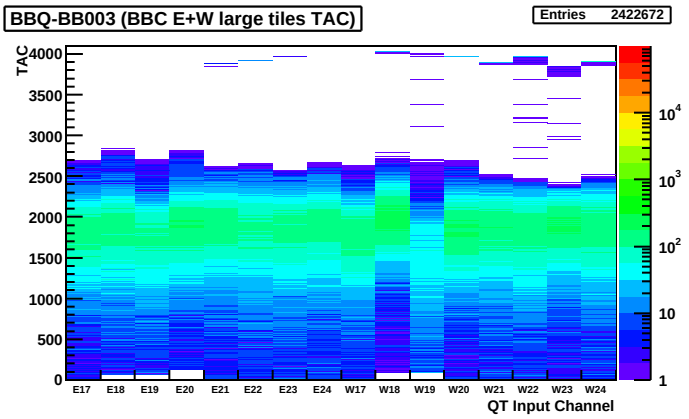

BBQ-BB001 (BBC east small tiles ADC)
Entries 2422672
ADC
QT Input Channel

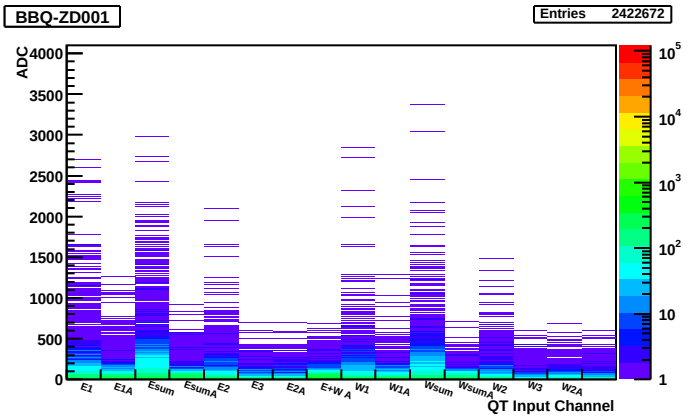

BBQ-BB001 (BBC east small tiles TAC)
Entries 2422672
TAC
QT Input Channel

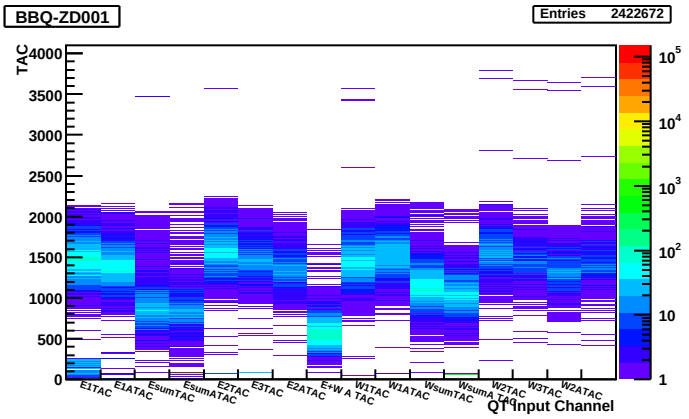

BBQ-BB002 (BBC west small tiles ADC)
Entries 2422672
ADC
QT Input Channel

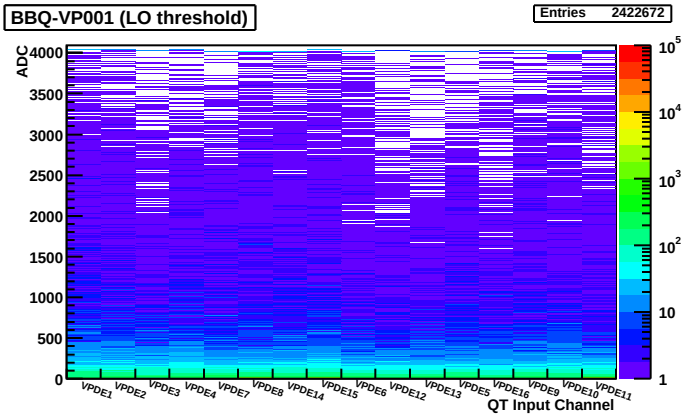

BBQ-BB002 (BBC west small tiles TAC)
Entries 2422672
TAC
QT Input Channel

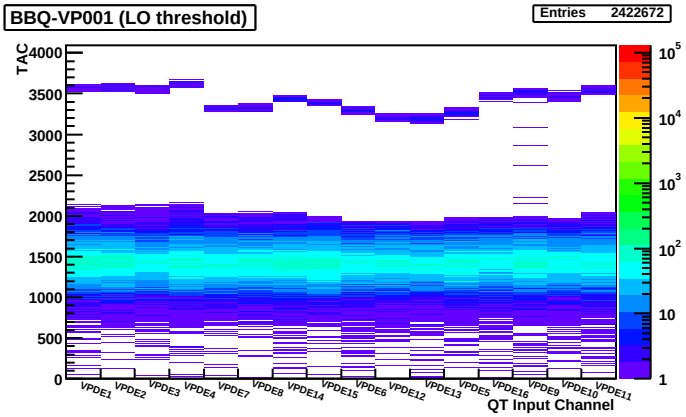

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2422672
ADC
QT Input Channel

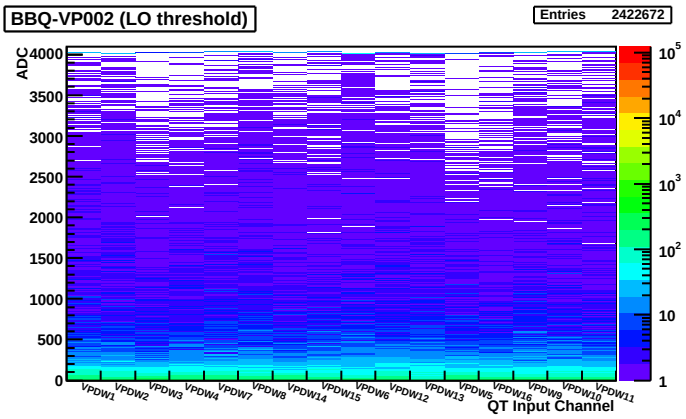

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2422672
TAC
QT Input Channel

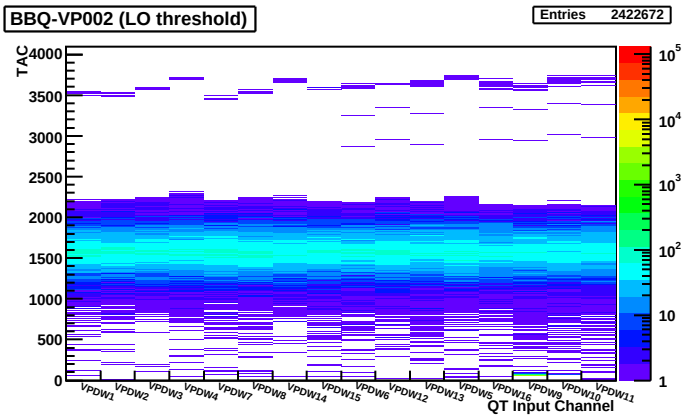

BBQ-ZD001
Entries 2422672
ADC
QT Input Channel

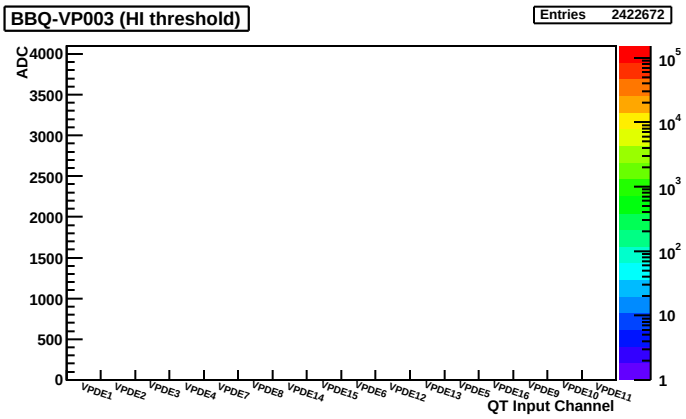

BBQ-ZD001
Entries 2422672
TAC
QT Input Channel

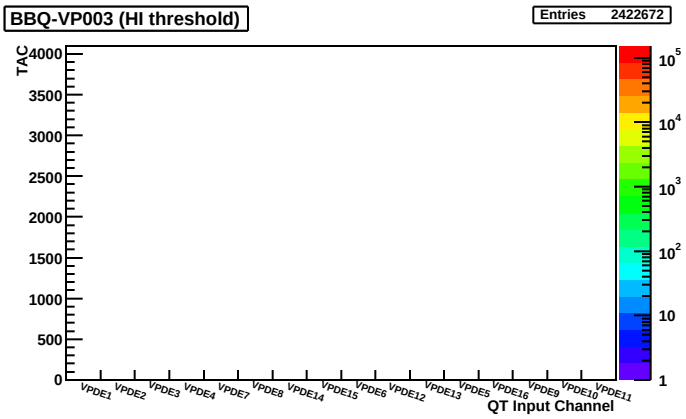

BBQ-VP001 (LO threshold)
Entries 2422672
ADC
QT Input Channel

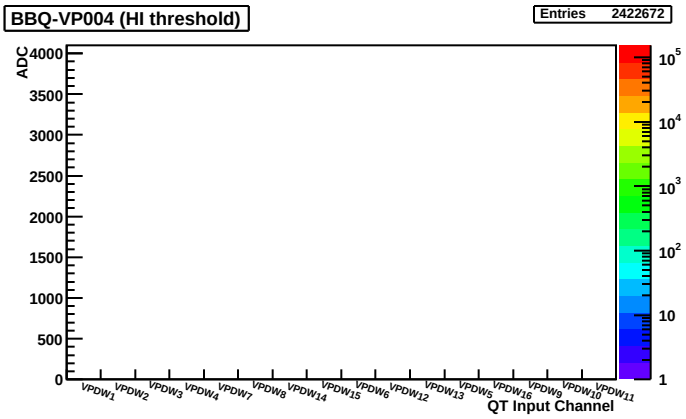

BBQ-VP001 (LO threshold)
Entries 2422672
TAC
QT Input Channel

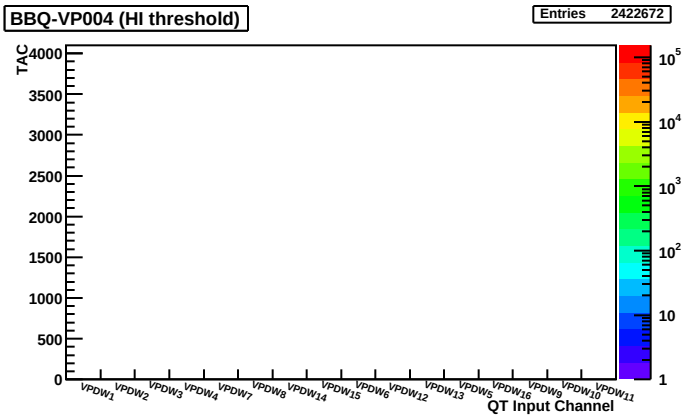

BBQ-VP002 (LO threshold)
Entries 2422672
ADC
QT Input Channel

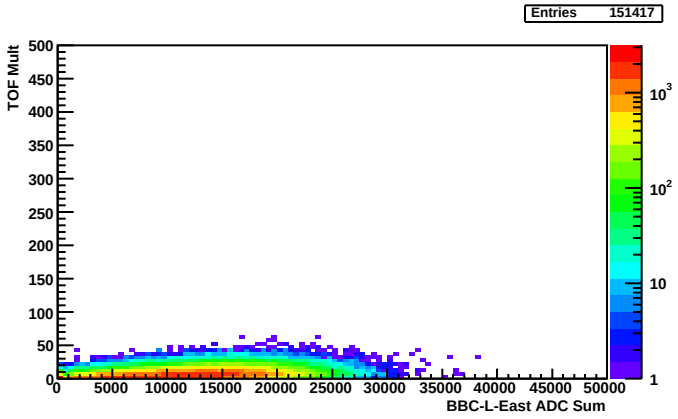

BBQ-VP002 (LO threshold)
Entries 2422672
TAC
QT Input Channel

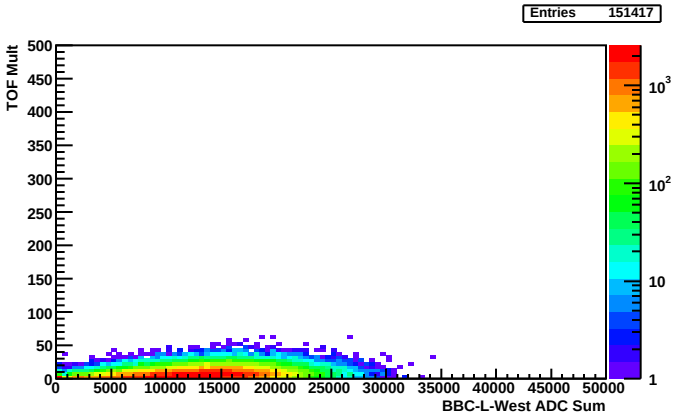

BBQ-VP003 (HI threshold)
Entries 2422672
ADC
QT Input Channel

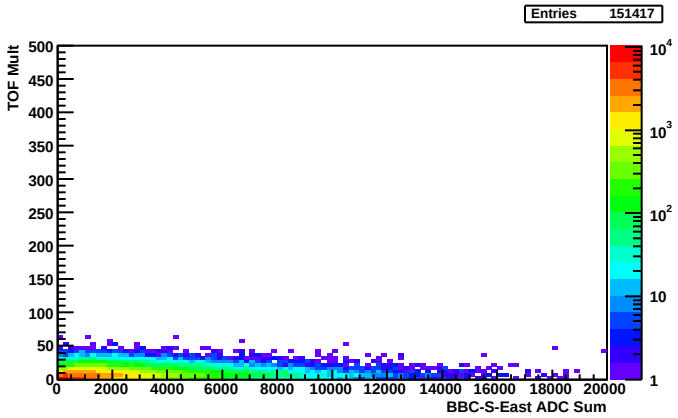

BBQ-VP003 (HI threshold)
Entries 2422672
TAC
QT Input Channel

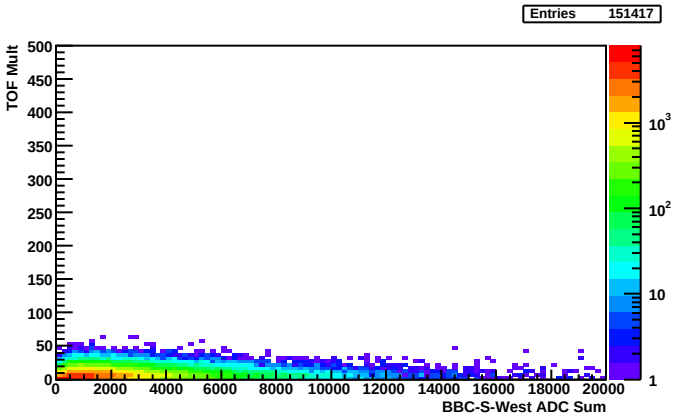

BBQ-VP004 (HI threshold)
Entries 2422672
ADC
QT Input Channel

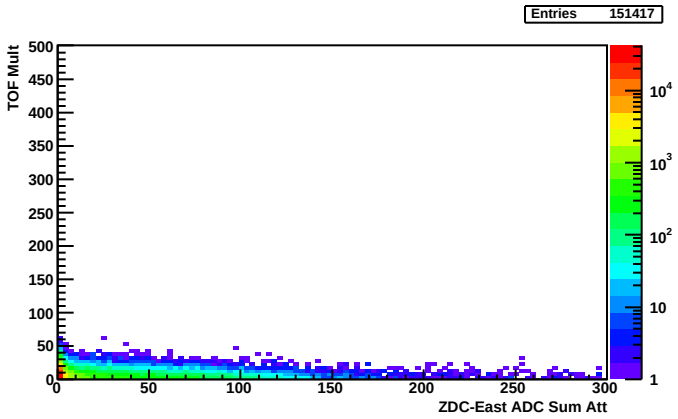

BBQ-VP004 (HI threshold)
Entries 2422672
TAC
QT Input Channel

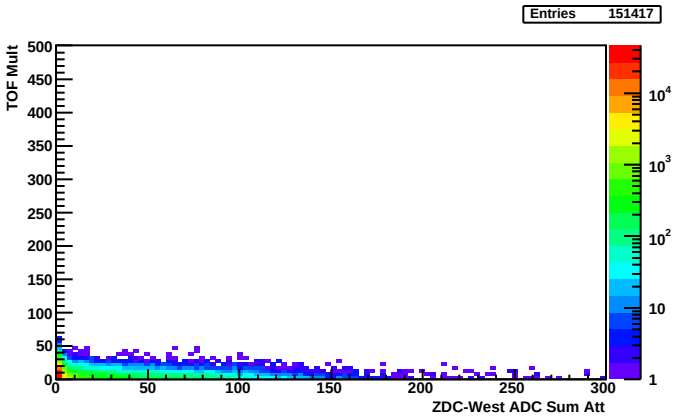

Entries 151417
TOF Mult
BBC-L-East ADC Sum

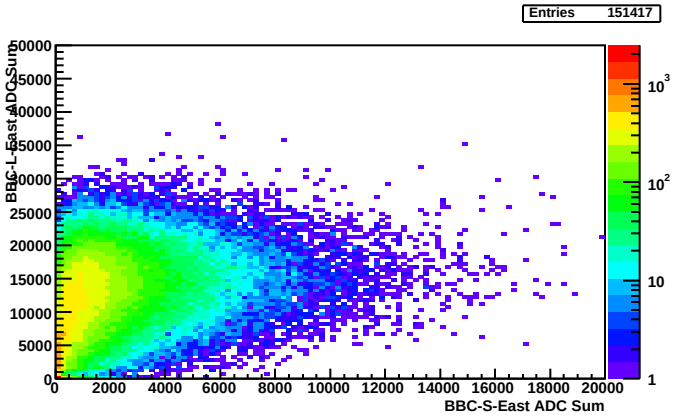

Entries 151417
TOF Mult
BBC-L-West ADC Sum

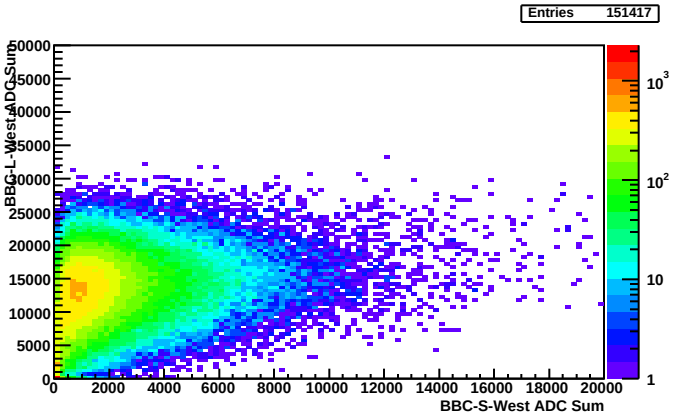

Entries 151417
TOF Mult
BBC-S-East ADC Sum

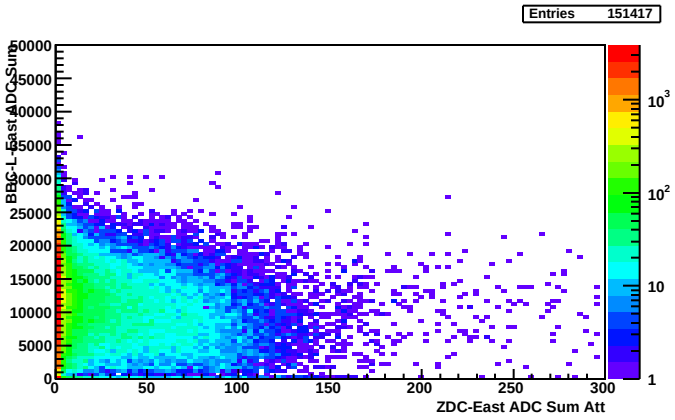

Entries 151417
TOF Mult
BBC-S-West ADC Sum

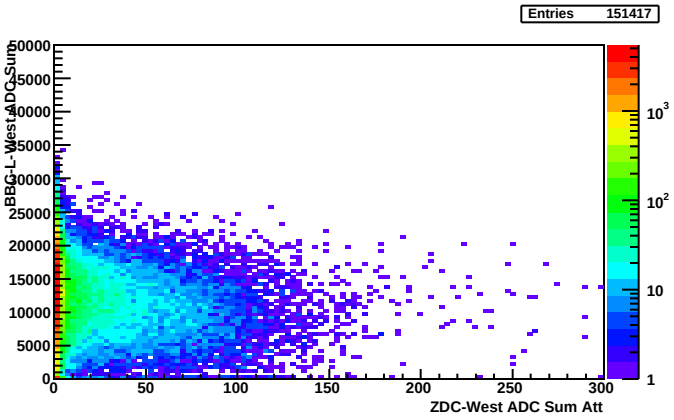

Entries 151417
TOF Mult
ZDC-East ADC Sum Att

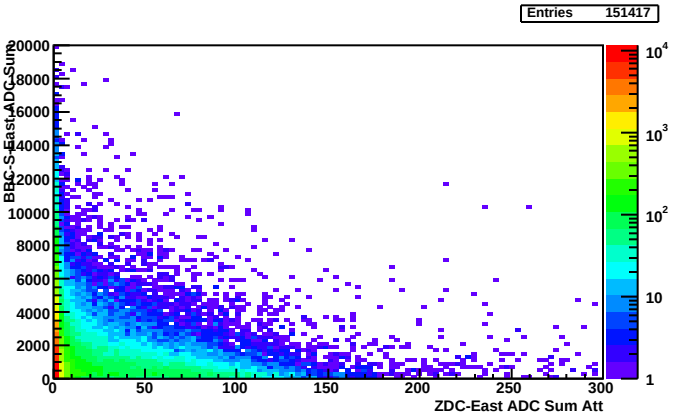

Entries 151417
TOF Mult
ZDC-West ADC Sum Att

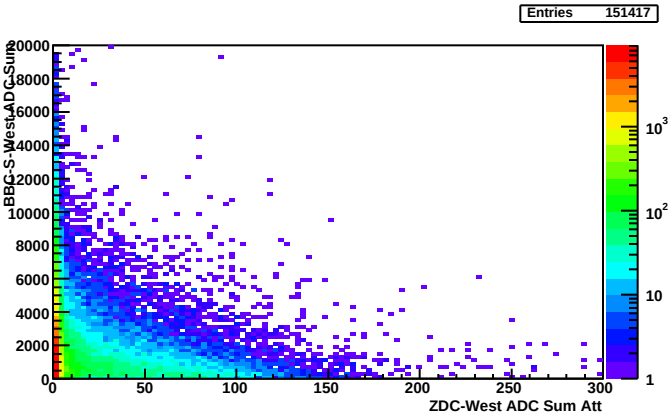

Entries 151417
BBC-L-East ADC Sum
BBC-S-East ADC Sum

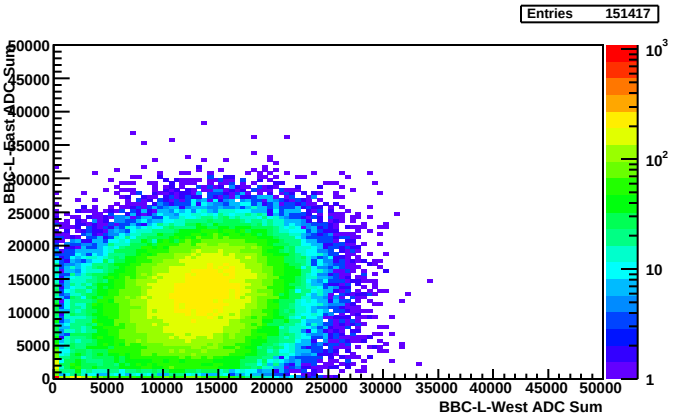

Entries 151417
BBC-L-West ADC Sum
BBC-S-West ADC Sum

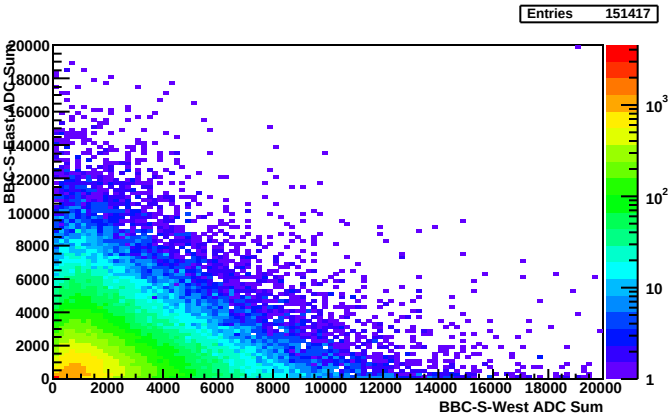

Entries 151417
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

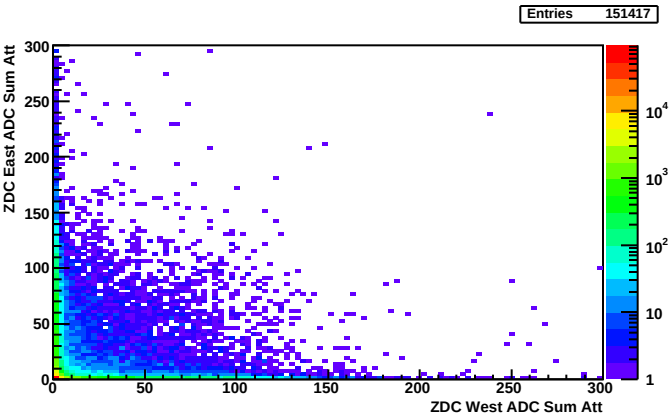

Entries 151417
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

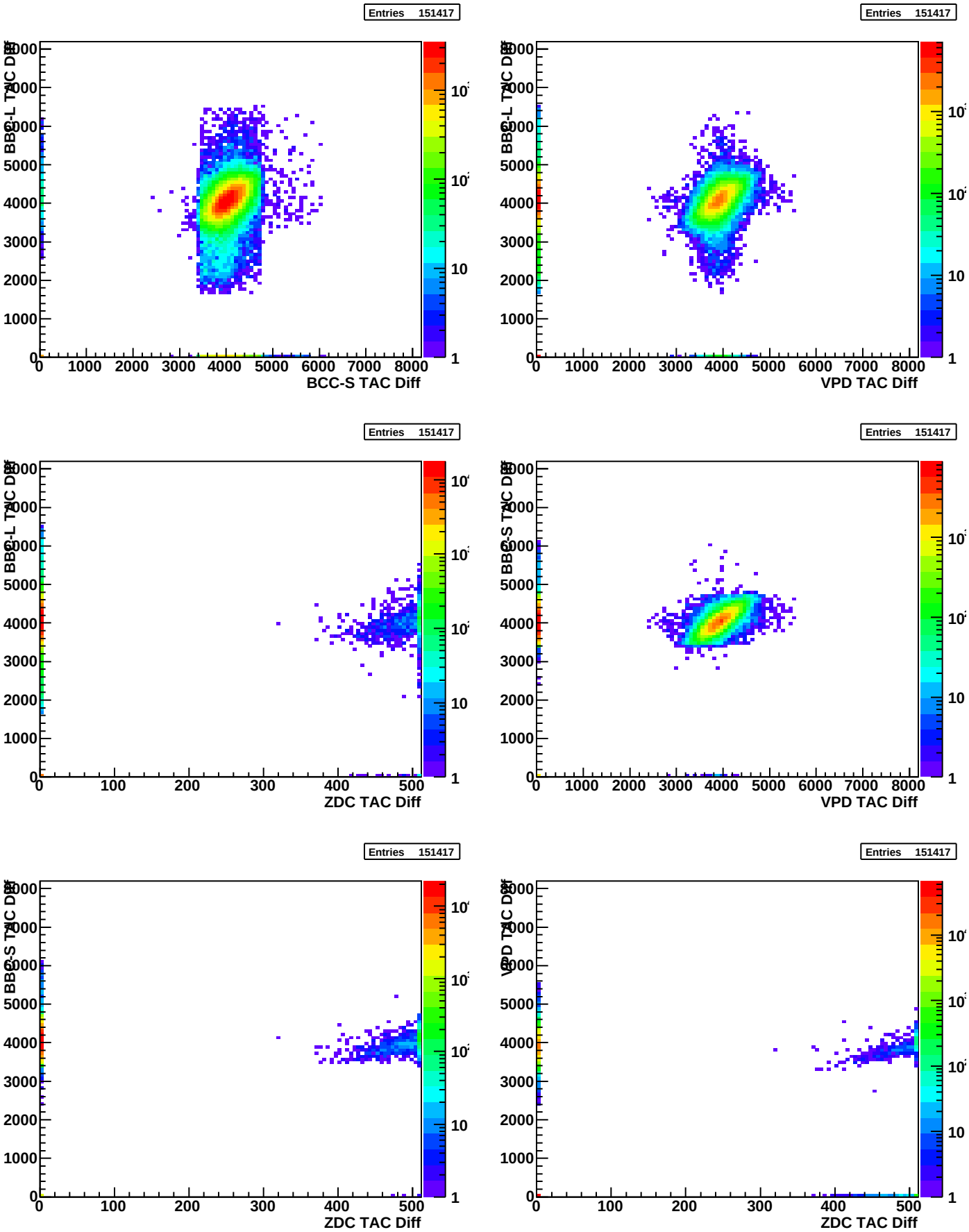

Entries 151417
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

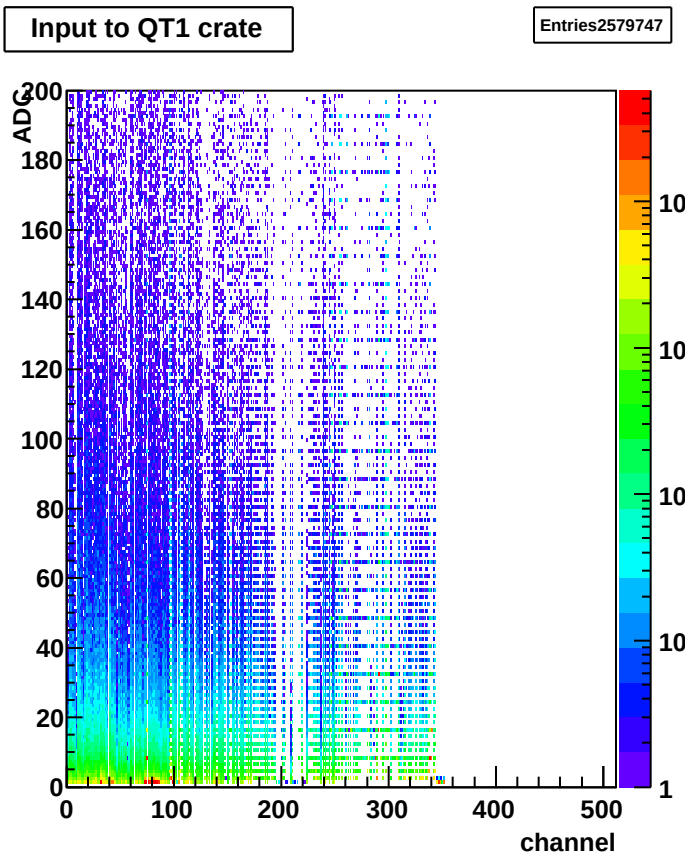

Entries 151417
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

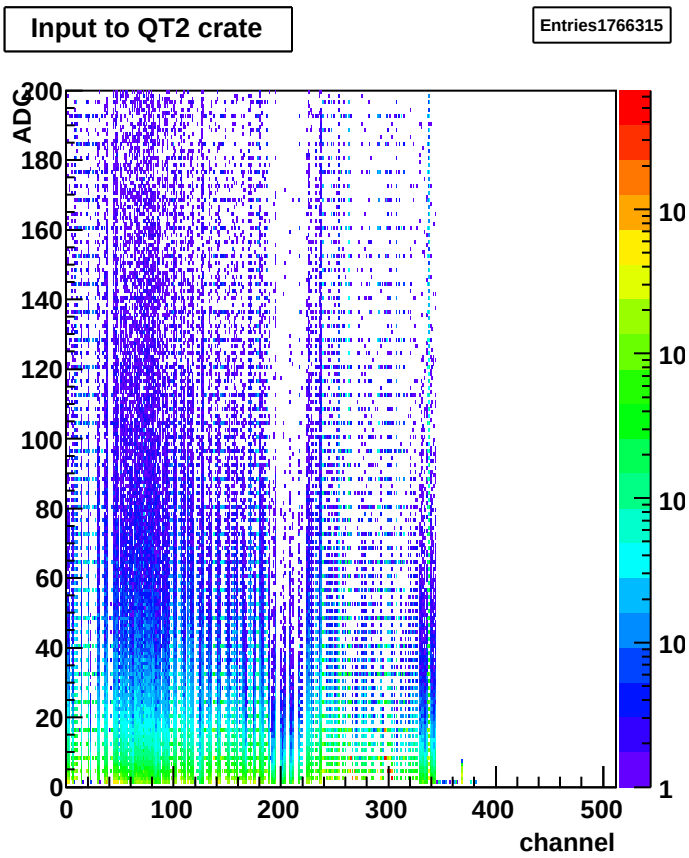

Entries 151417
BBC-L-East ADC Sum
BBC-L-West ADC Sum

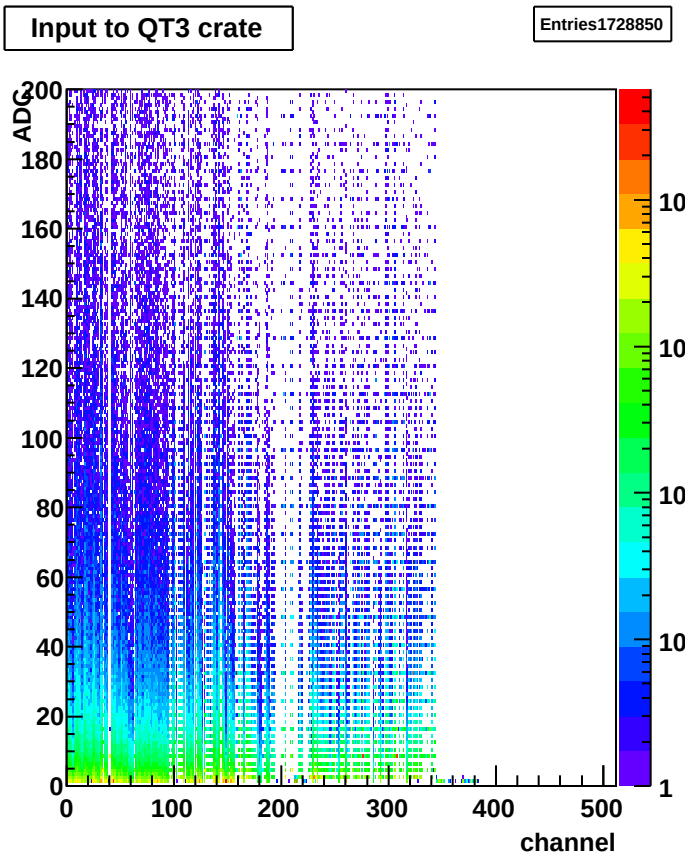

Entries 151417
BBC-S-East ADC Sum
BBC-S-West ADC Sum

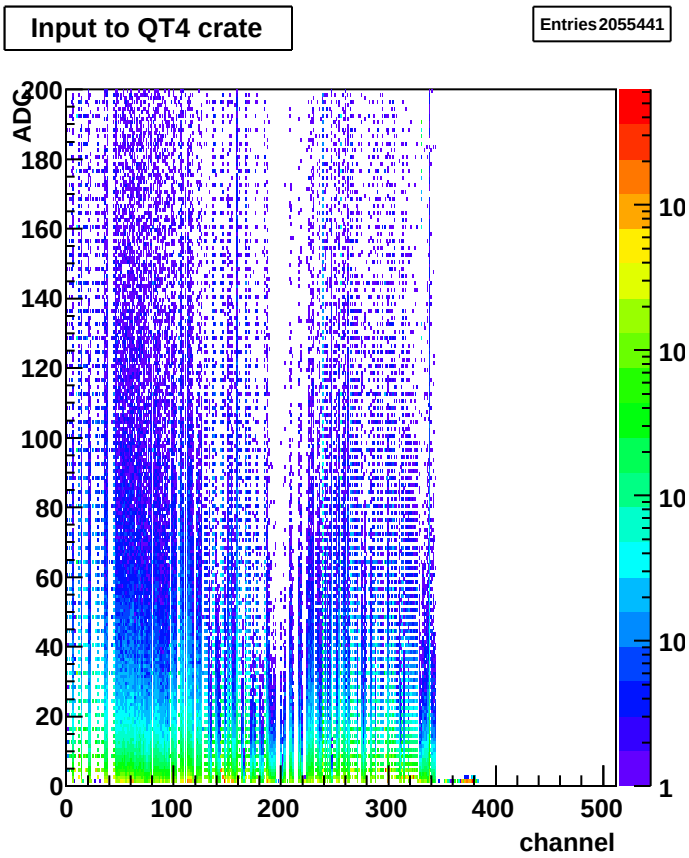

Entries 151417
ZDC East ADC Sum Att
ZDC West ADC Sum Att

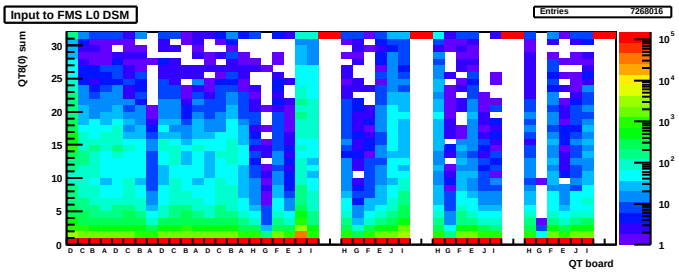

Entries 151417
BBC-L TAC Diff
BCC-S TAC Diff
Entries 151417
BBC-L TAC Diff
VPD TAC Diff
Entries 151417
BBC-L TAC Diff
ZDC TAC Diff
Entries 151417
BBC-S TAC Diff
VPD TAC Diff
Entries 151417
BBC-S TAC Diff
ZDC TAC Diff
Entries 151417
VPD TAC Diff
ZDC TAC Diff

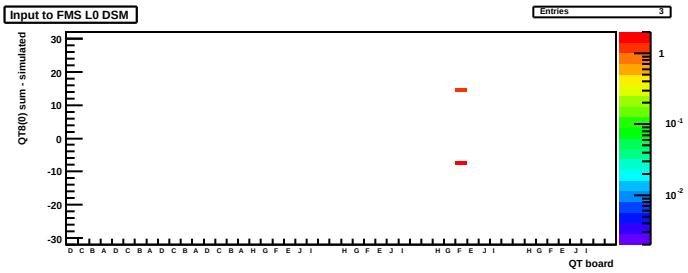

Input to QT1 crate
Entries2579747
ADC
channel

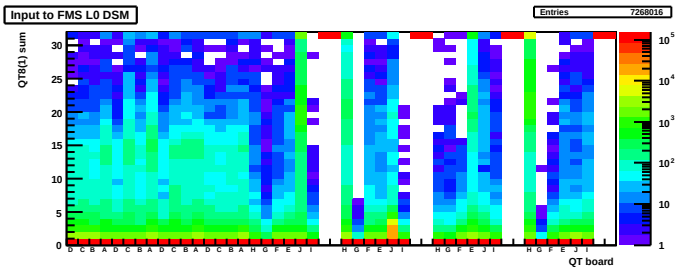

Input to QT2 crate
Entries1766315
ADC
channel

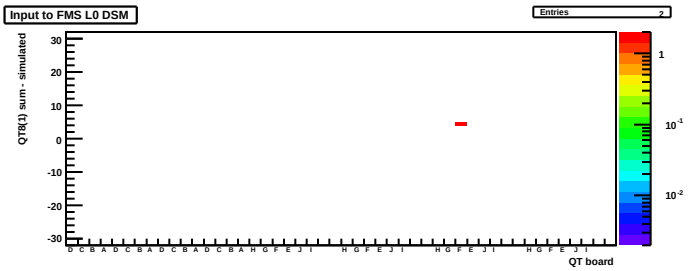

Input to QT3 crate
Entries1728850
ADC
channel

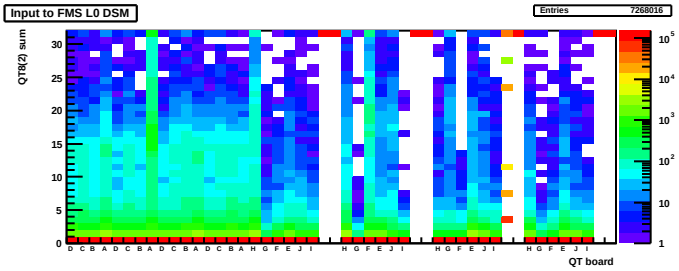

Input to QT4 crate
Entries2055441
ADC
channel

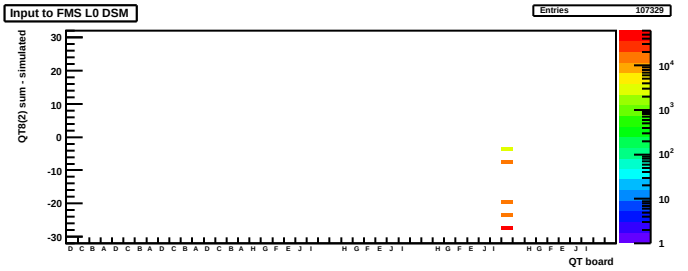

Input to FMS L0 DSM
Entries 7268016
QT8(0) sum
QT board

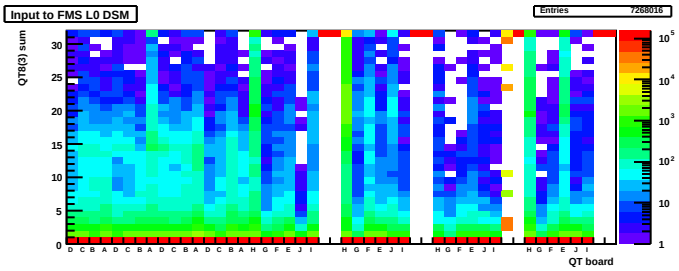

Input to FMS L0 DSM
Entries 3
QT8(0) sum - simulated
QT board

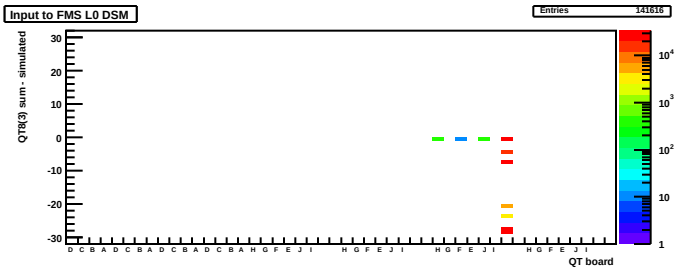

Input to FMS L0 DSM
Entries 7268016
QT8(1) sum
QT board

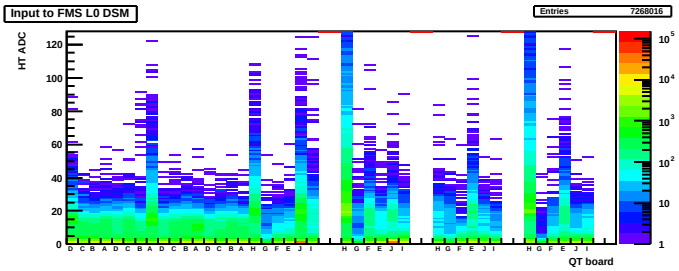

Input to FMS L0 DSM
Entries 2
QT8(1) sum - simulated
QT board

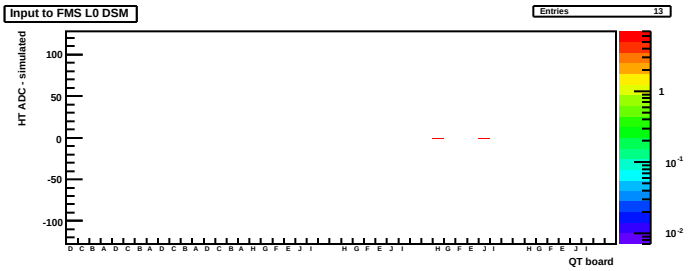

Input to FMS L0 DSM
Entries 7268016
QT8(2) sum
QT board

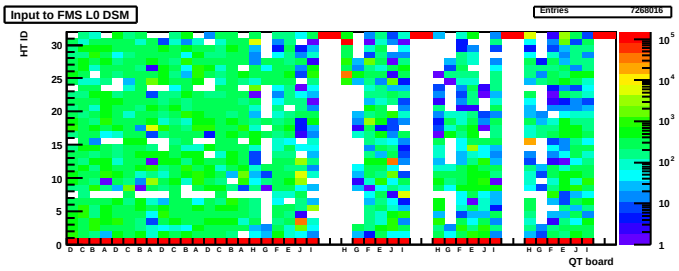

Input to FMS L0 DSM
Entries 107329
QT8(2) sum - simulated
QT board

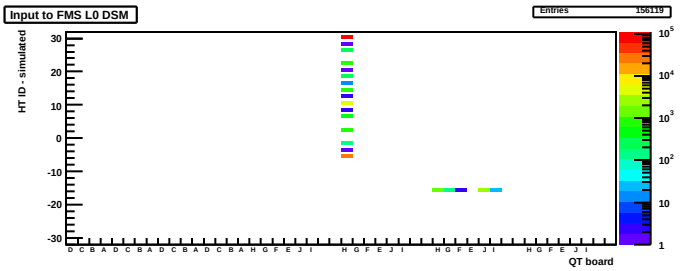

Input to FMS L0 DSM
Entries 7268016
QT8(3) sum
QT board

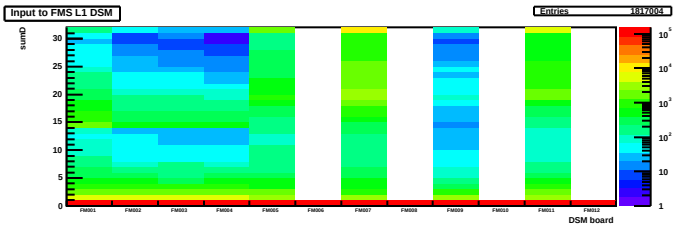

Input to FMS L0 DSM
Entries 141616
QT8(3) sum - simulated
QT board

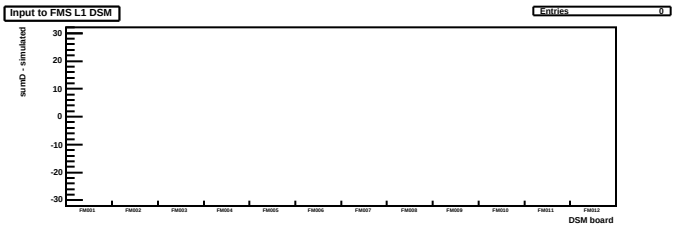

Input to FMS L0 DSM
Entries 7268016
HT ADC
QT board

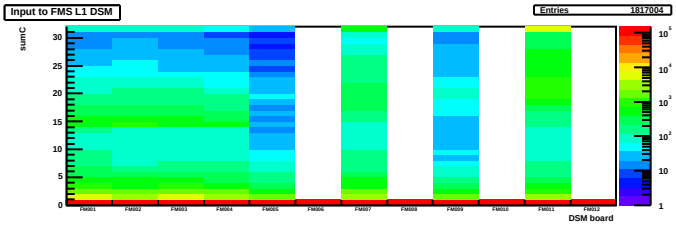

Input to FMS L0 DSM
Entries 13
HT ADC - simulated
QT board

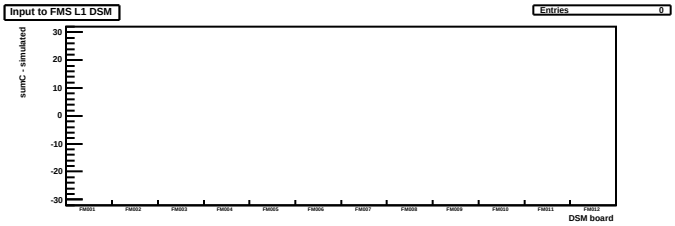

Input to FMS L0 DSM
Entries 7268016
HT ID
QT board

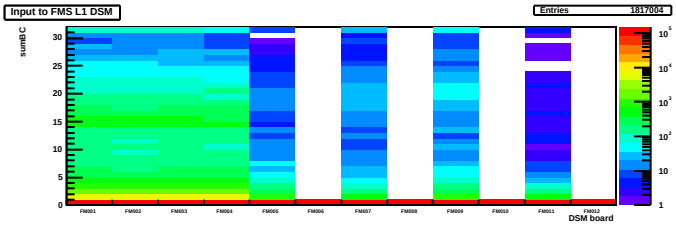

Input to FMS L0 DSM
Entries 156119
HT ID - simulated
QT board

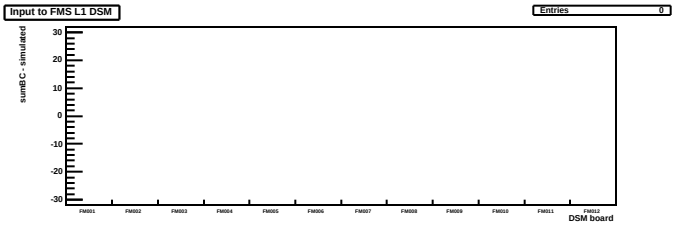

Input to FMS L1 DSM
Entries 1817004
sumD
DSM board

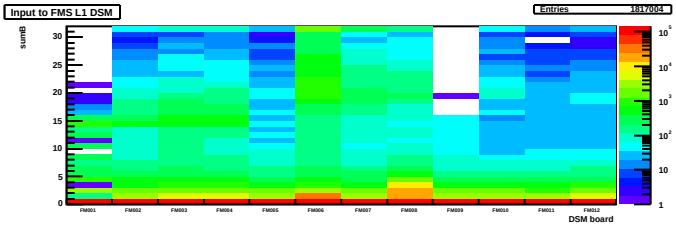

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

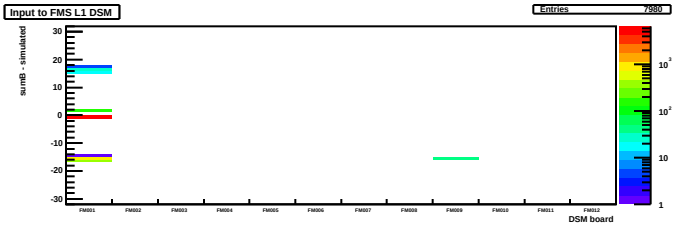

Input to FMS L1 DSM
Entries 1817004
sumC
DSM board

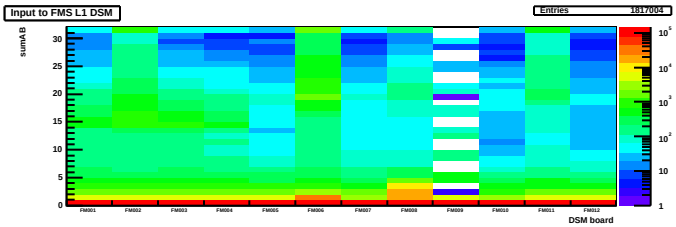

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

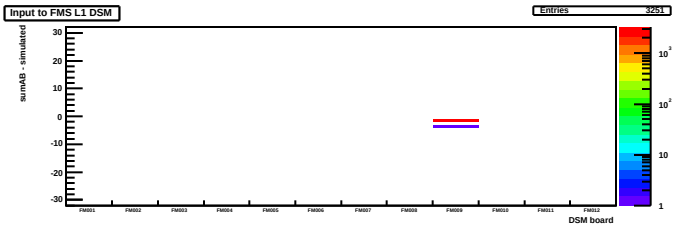

Input to FMS L1 DSM
Entries 1817004
sumBC
DSM board

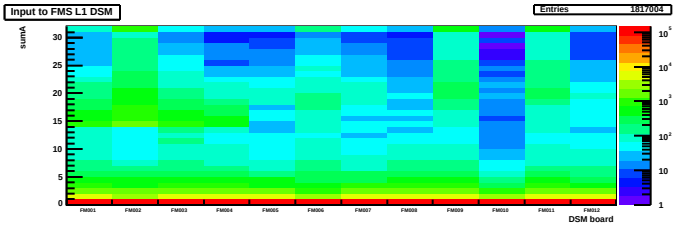

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

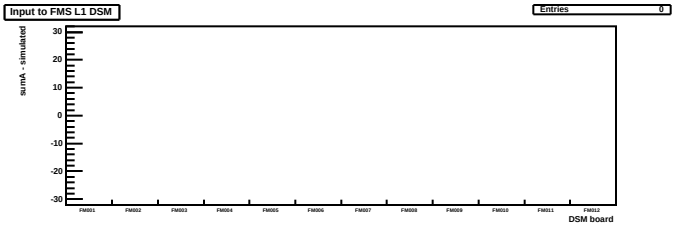

Input to FMS L1 DSM
Entries 1817004
sumB
DSM board

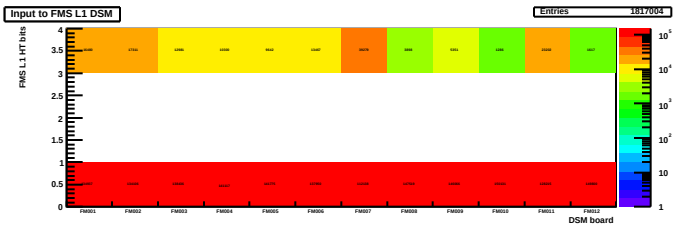

Input to FMS L1 DSM
Entries 7980
sumB - simulated
DSM board

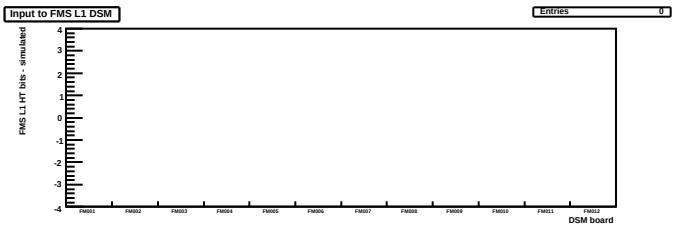

Input to FMS L1 DSM
Entries 1817004
sumAB
DSM board

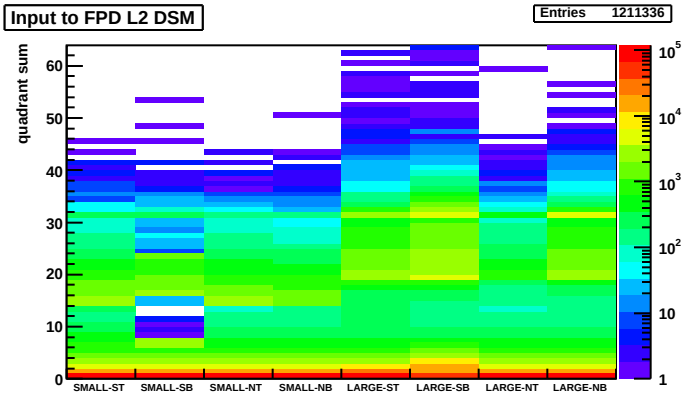

Input to FMS L1 DSM
Entries 3251
sumAB - simulated
DSM board

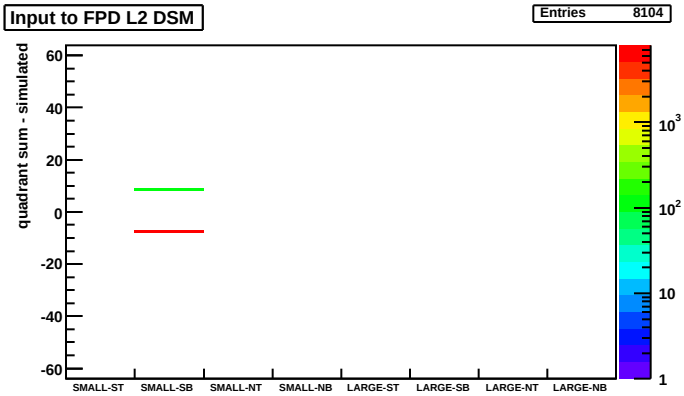

Input to FMS L1 DSM
Entries 1817004
sumA
DSM board

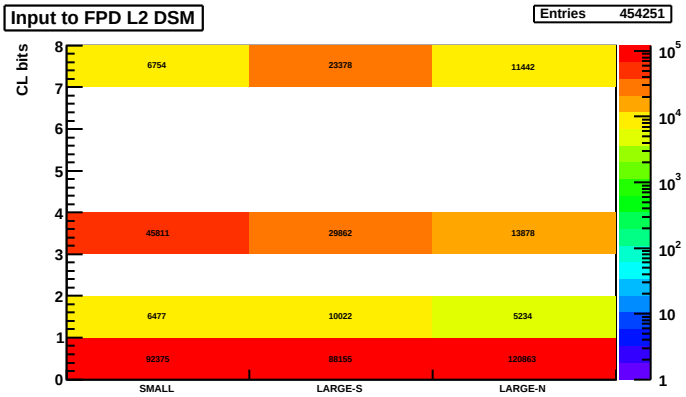

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

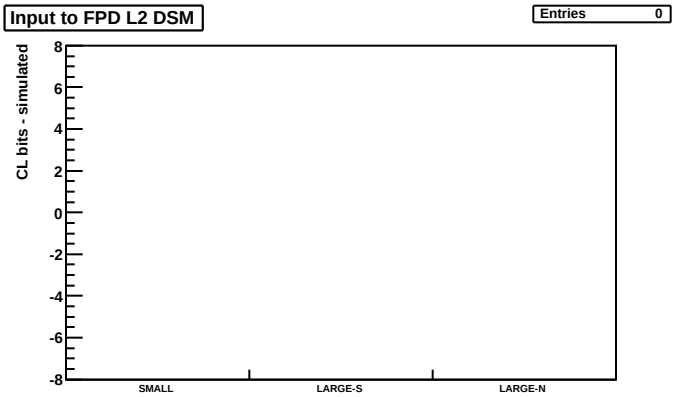

Input to FMS L1 DSM
Entries 1817004
FMS L1 HT bits
DSM board

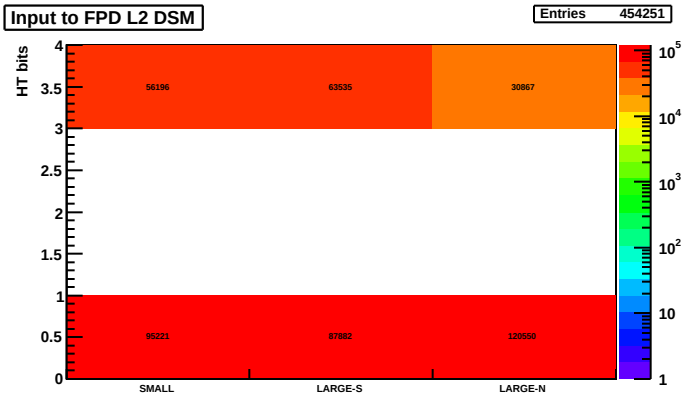

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

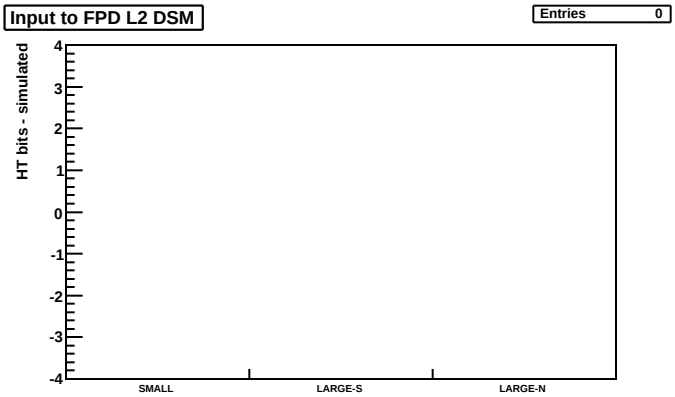

Input to FPD L2 DSM
Entries 1211336
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

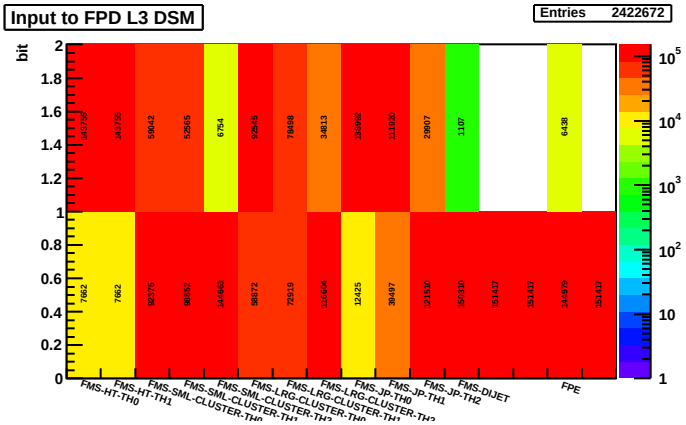

Input to FPD L2 DSM
Entries 8104
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

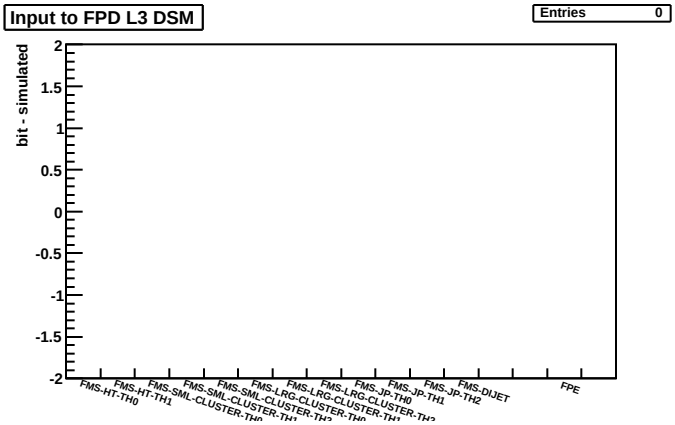

Input to FPD L2 DSM
Entries 454251
CL bits
6754
23378
11442
45811
29862
13878
6477
10022
5234
92375
88155
120863
SMALL
LARGE-S
LARGE-N

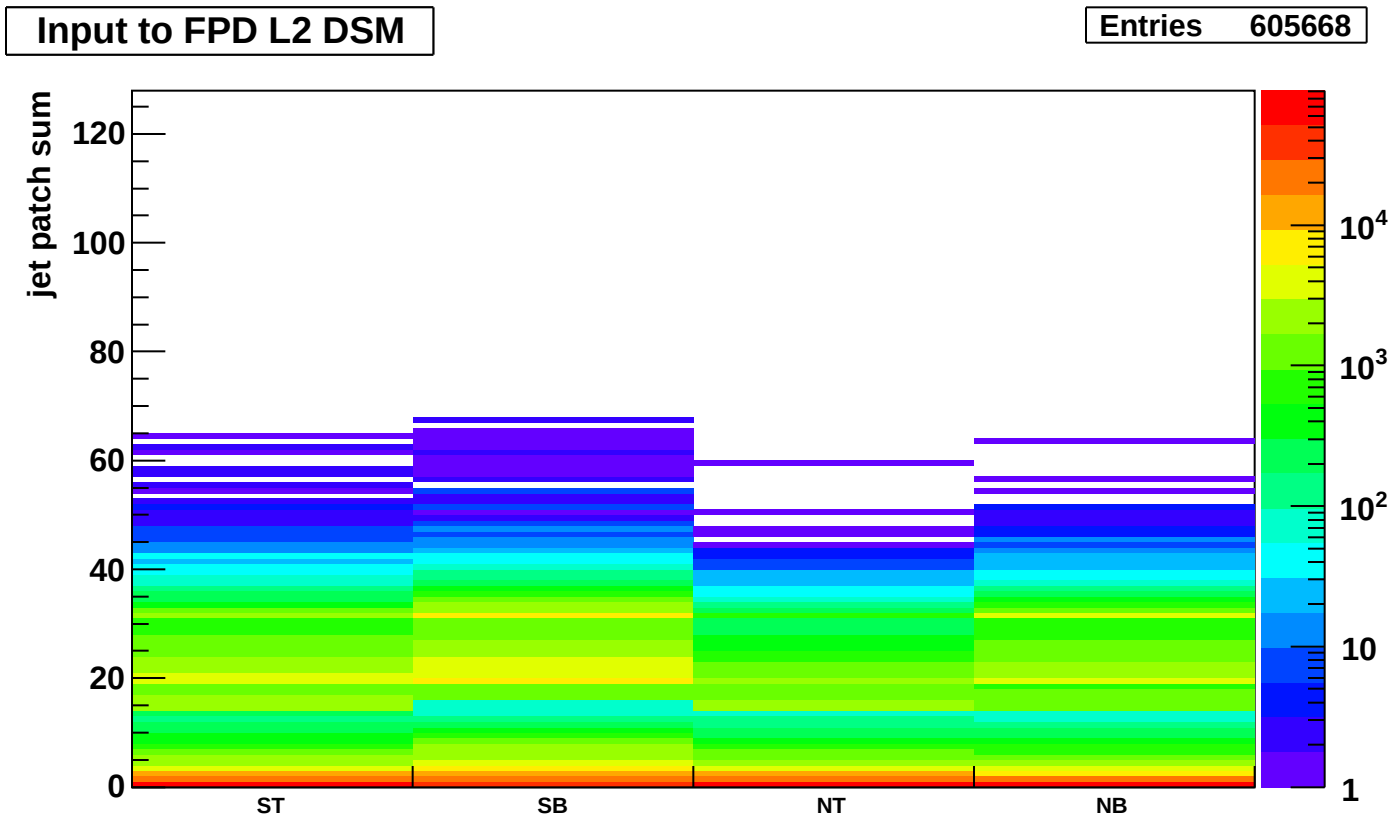

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

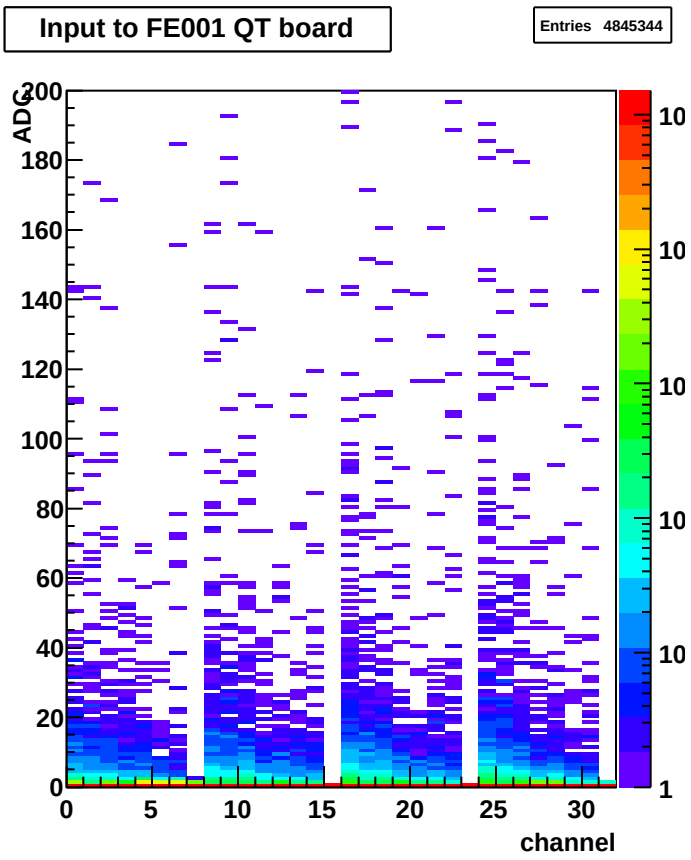

Input to FPD L2 DSM
Entries 454251
HT bits
56196
63535
30867
95221
87882
120550
SMALL
LARGE-S
LARGE-N

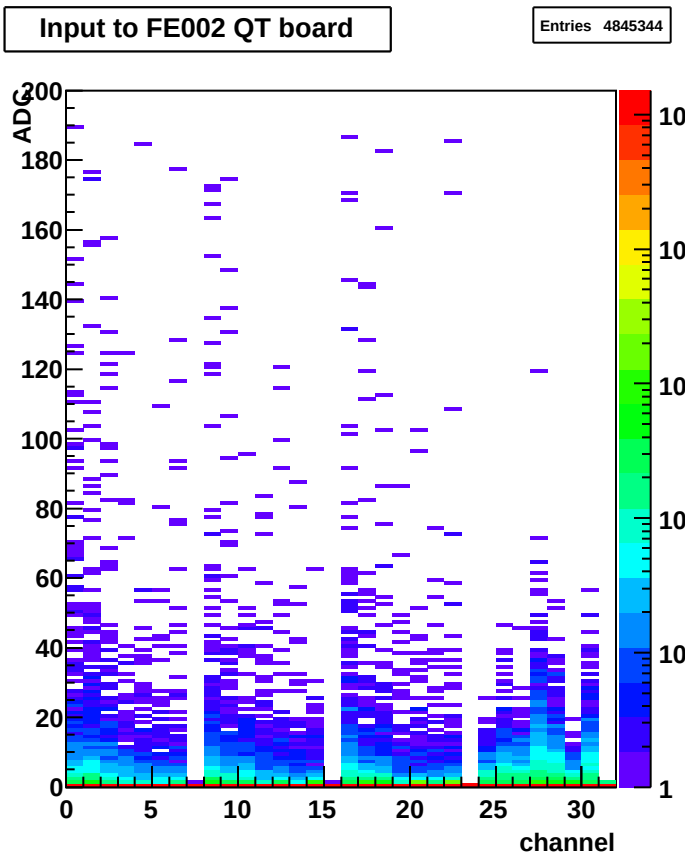

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

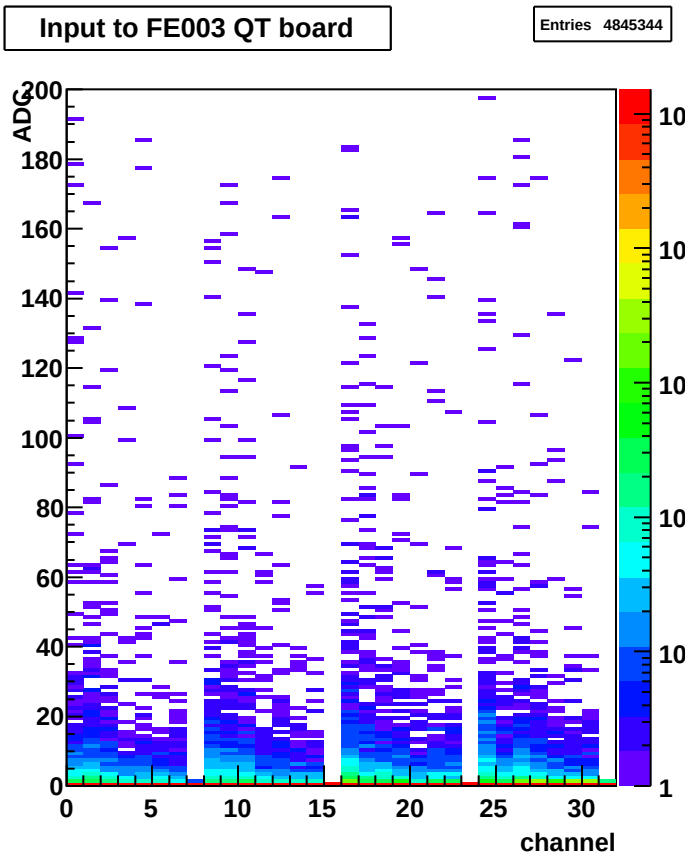

Input to FPD L3 DSM
Entries 2422672
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

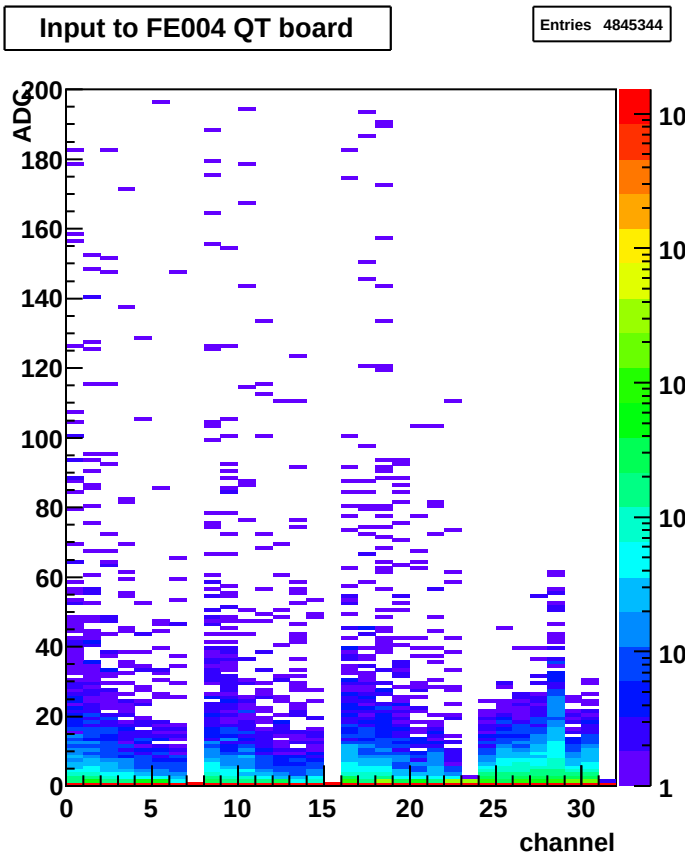

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

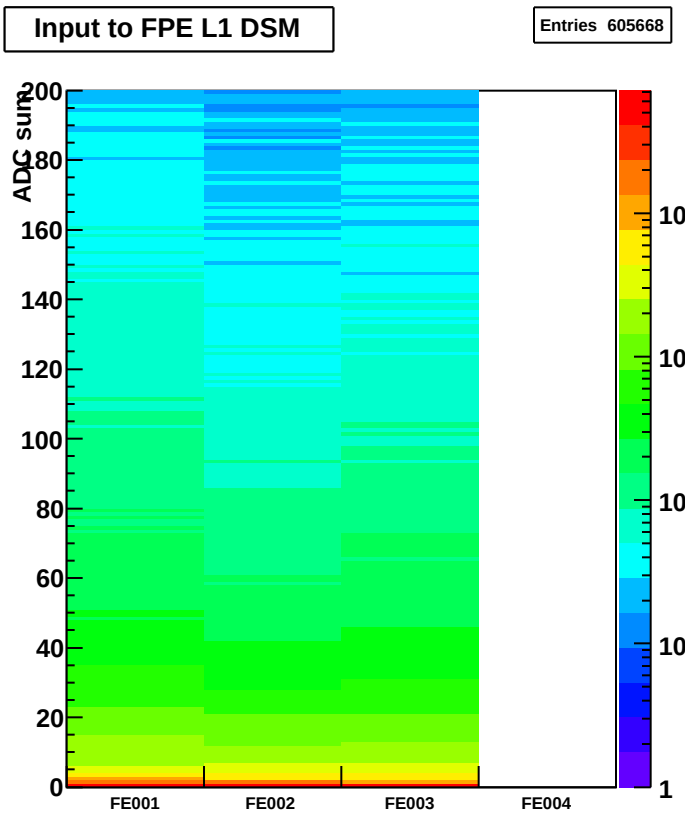

Input to FPD L2 DSM
Entries 605668
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^4
10^3
10^2
10
1

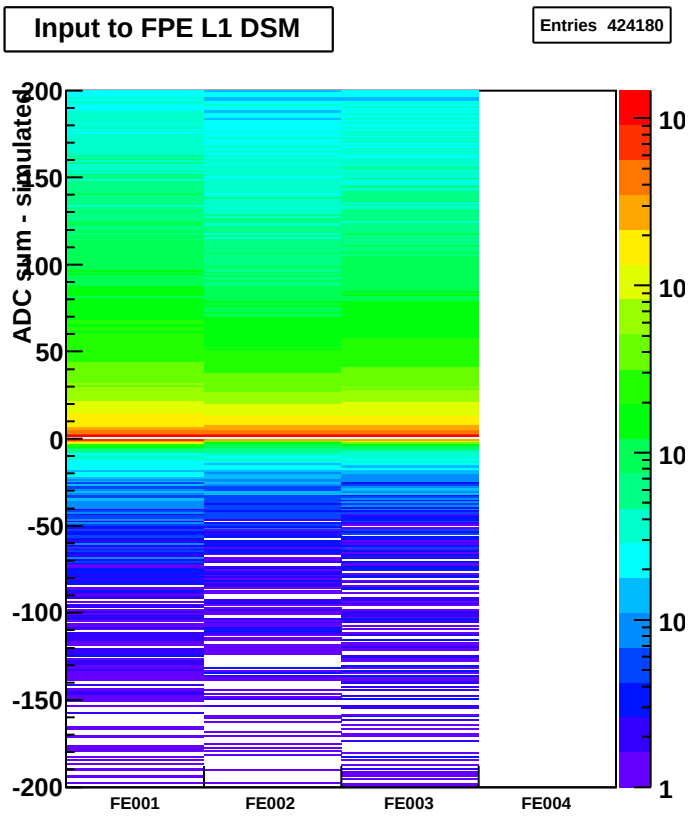

Input to FE001 QT board
Entries 4845344
ADC
channel

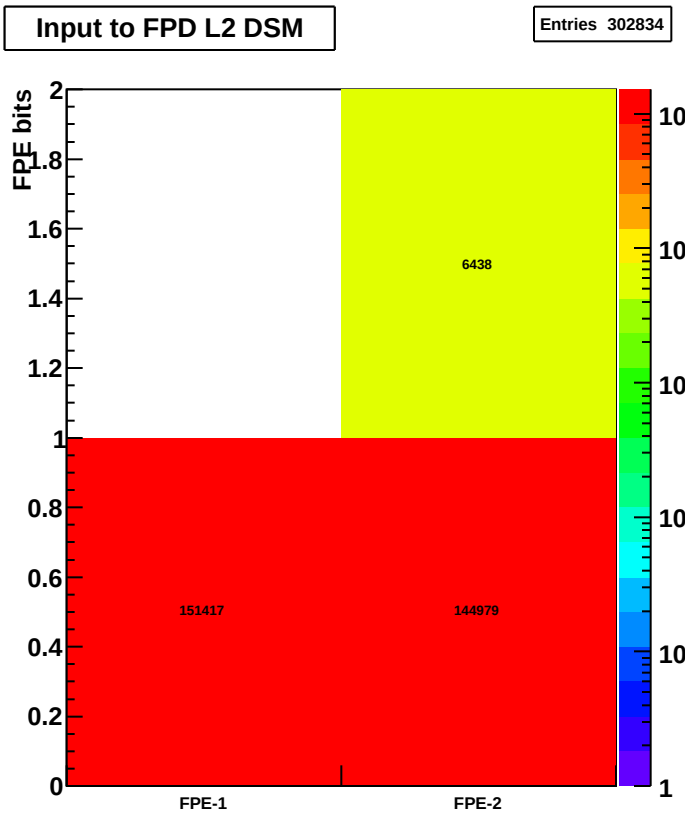

Input to FE002 QT board
Entries 4845344
ADC
channel

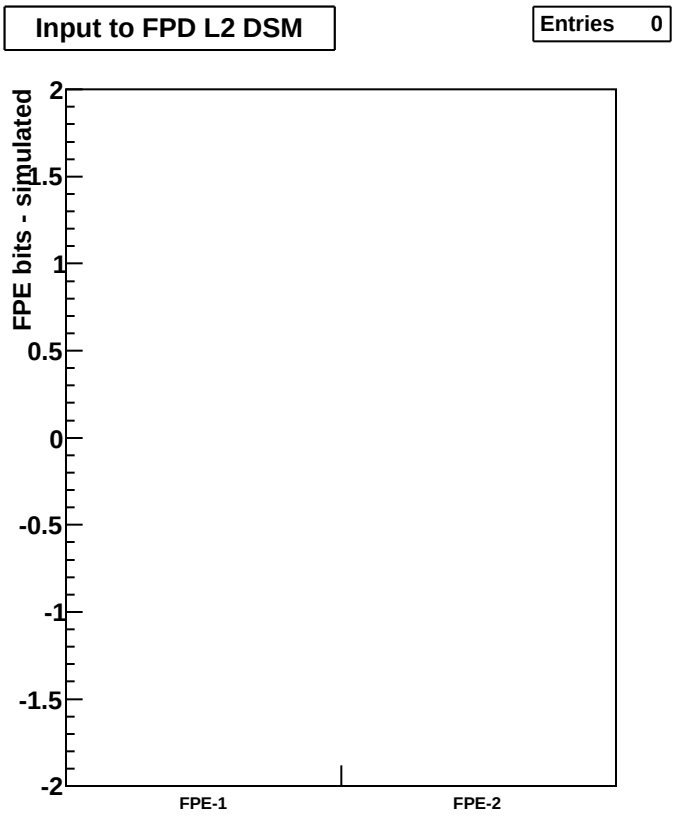

Input to FE003 QT board
Entries 4845344
ADC
channel


Input to FE004 QT board
Entries 4845344
ADC
channel


Input to FPE L1 DSM
Entries 605668
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 424180
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 302834
FPE bits
6438
151417
144979
FPE-1
FPE-2


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