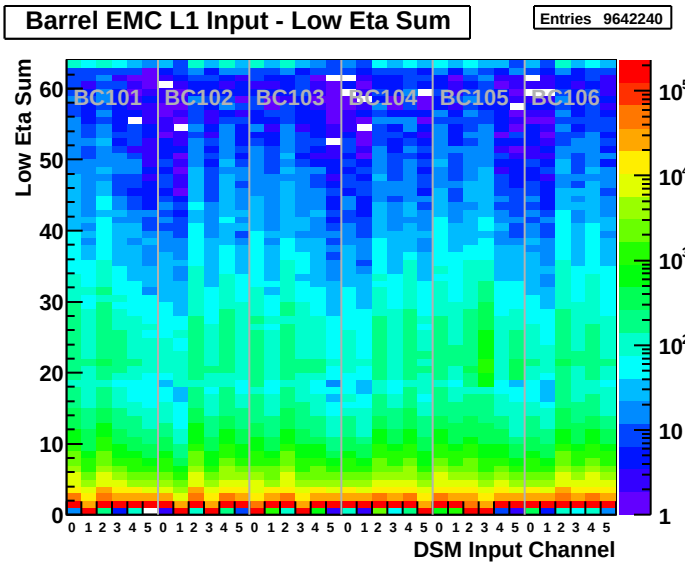
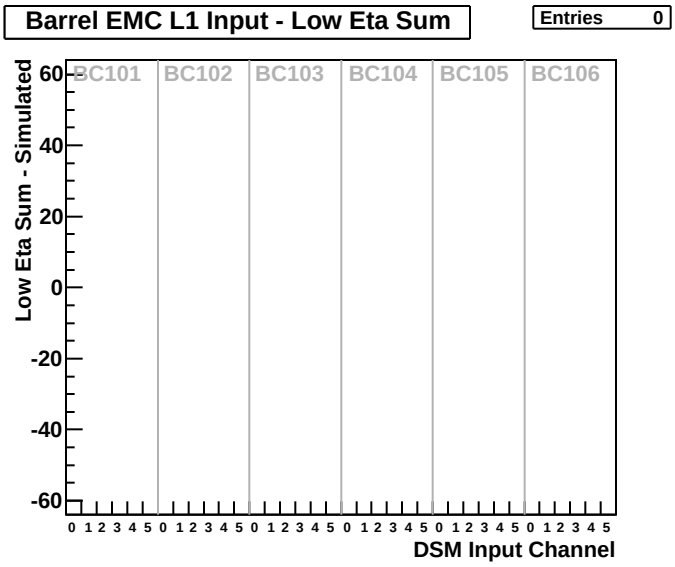
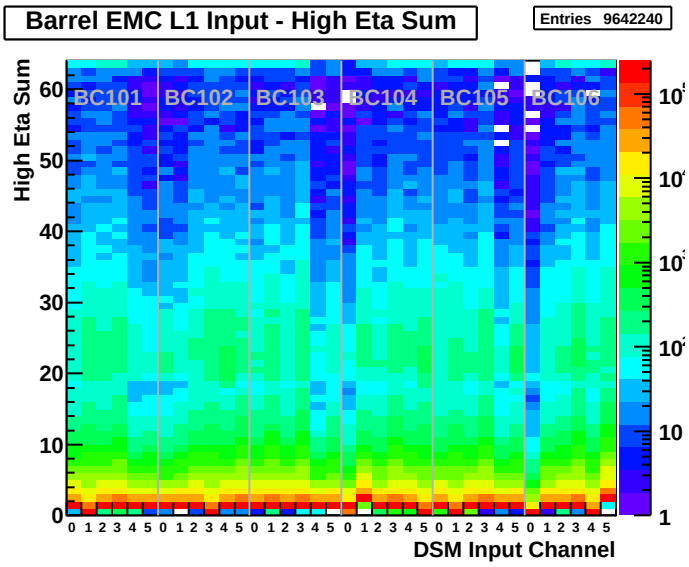
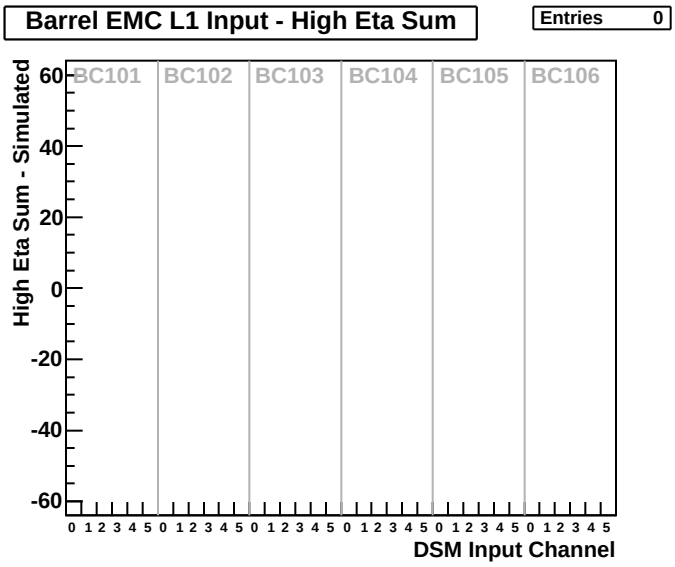
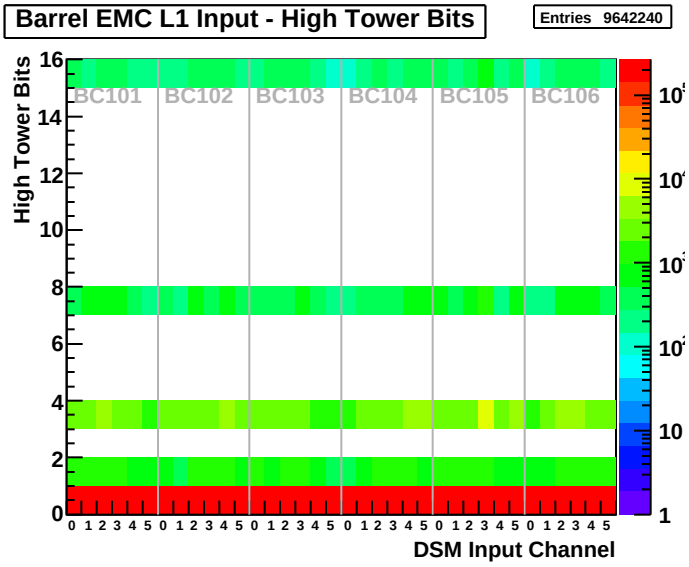
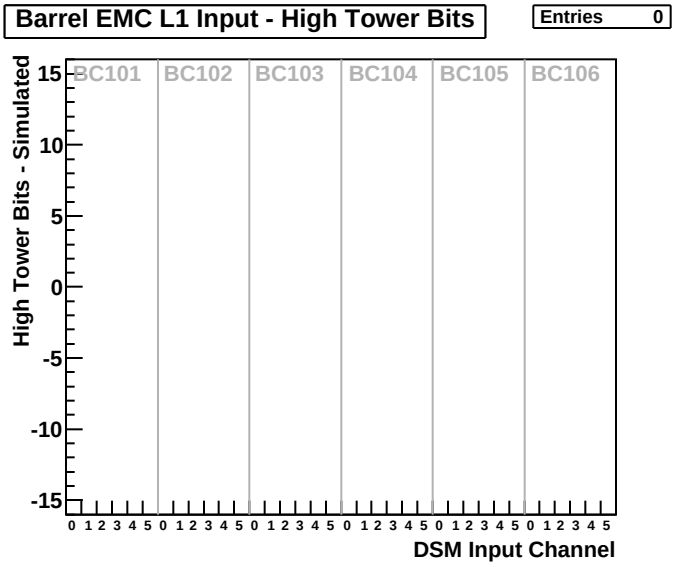

Barrel EMC L1 Input - Low Eta Sum
Entries 9642240
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

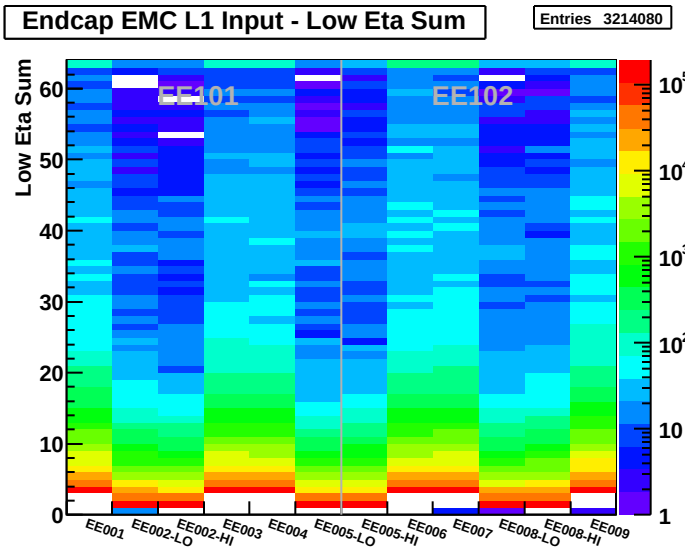

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

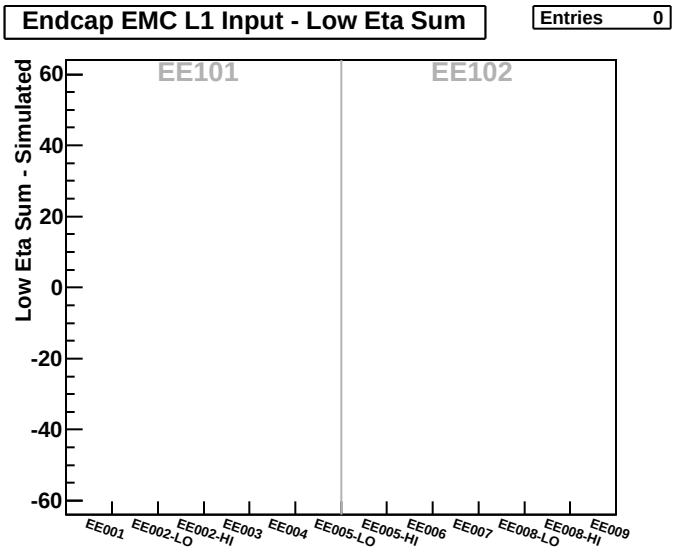

Barrel EMC L1 Input - High Eta Sum
Entries 9642240
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

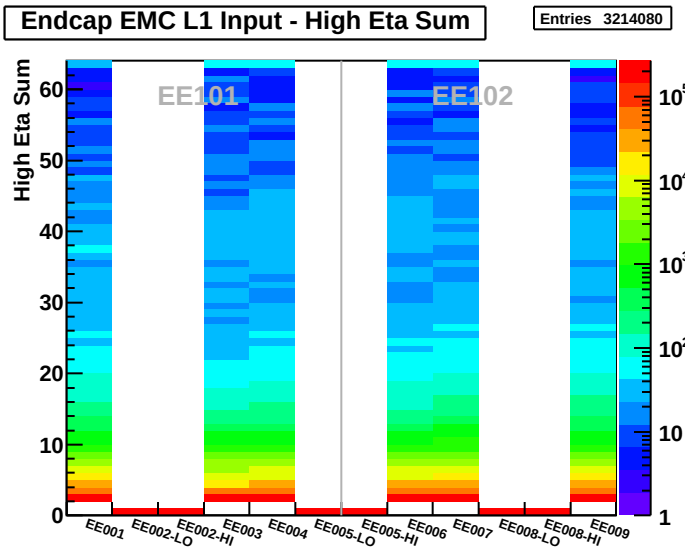

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

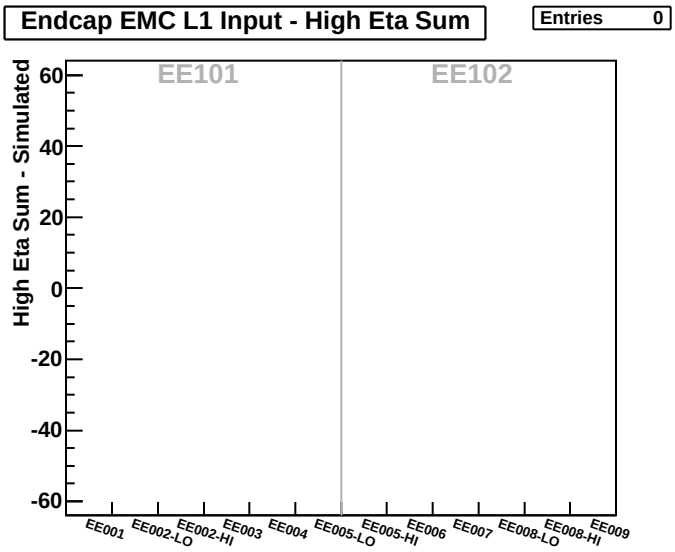

Barrel EMC L1 Input - High Tower Bits
Entries 9642240
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

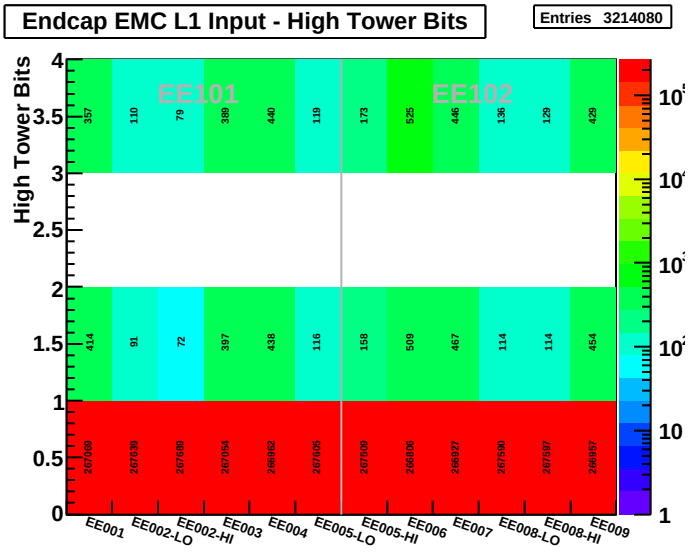

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

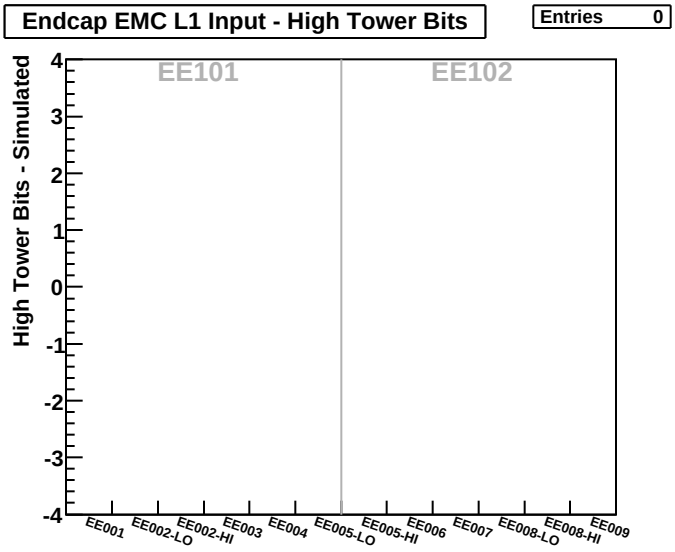

Endcap EMC L1 Input - Low Eta Sum
Entries 3214080
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

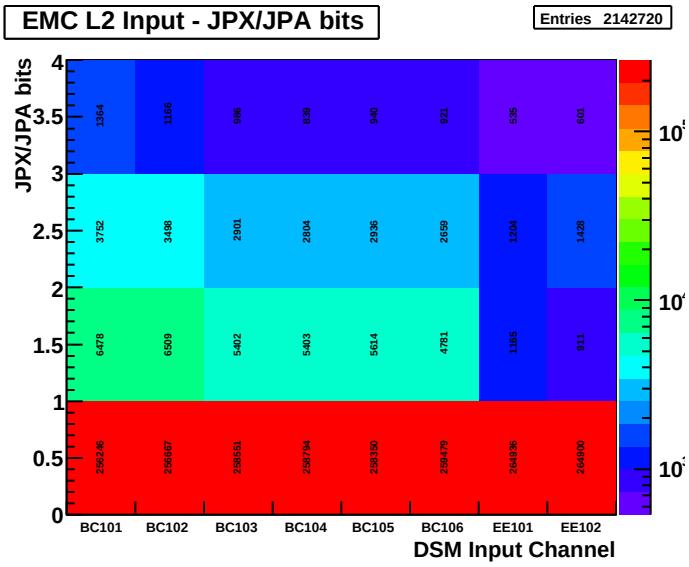

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

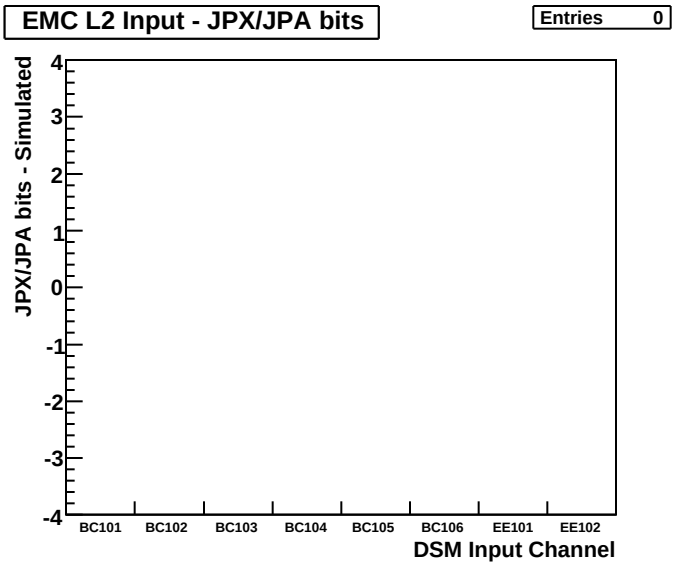

Endcap EMC L1 Input - High Eta Sum
Entries 3214080
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

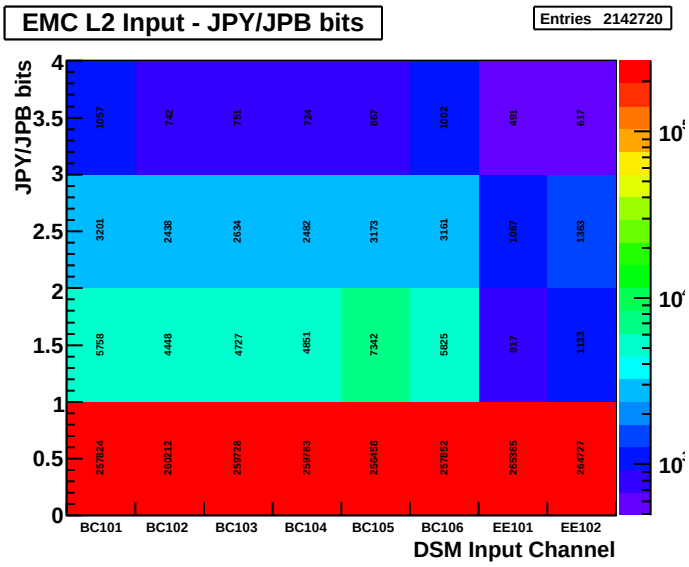

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

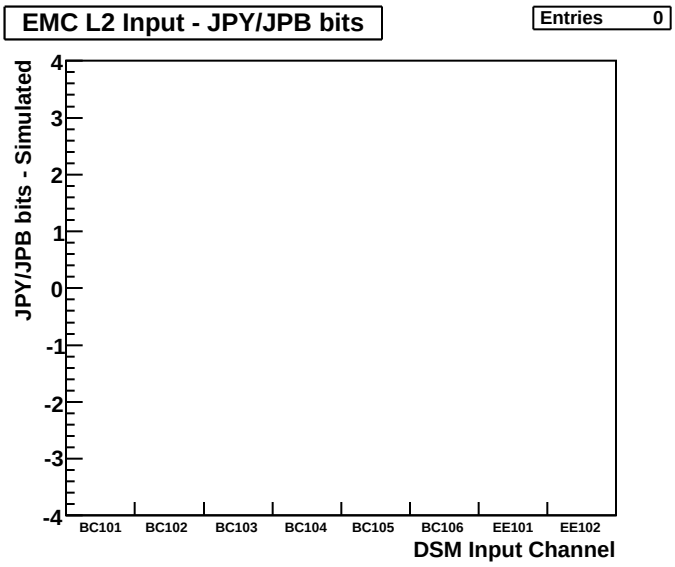

Endcap EMC L1 Input - High Tower Bits
Entries 3214080
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

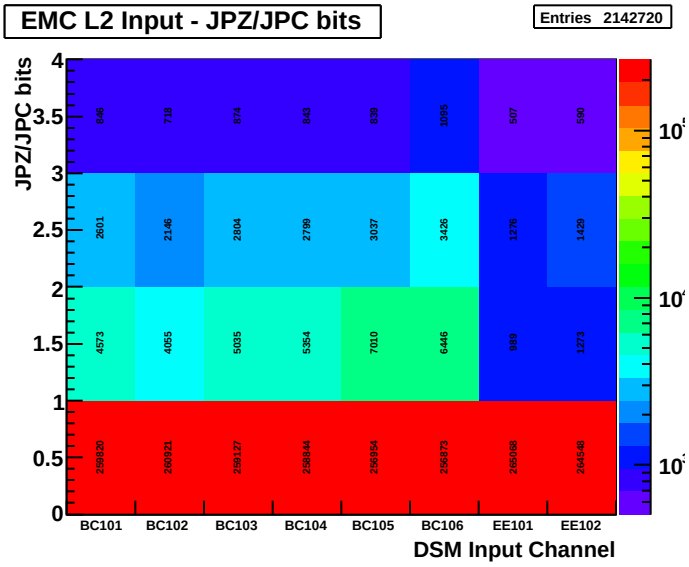

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

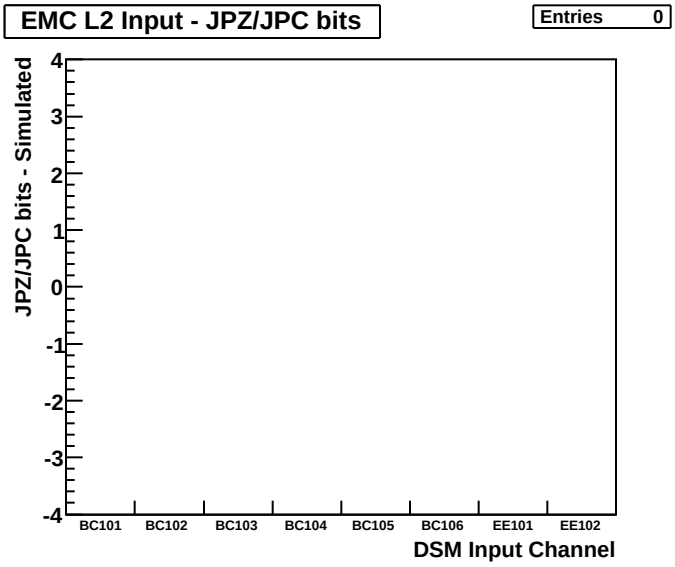

EMC L2 Input - JPX/JPA bits
Entries 2142720
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1364 1166 986 839 940 921 535 601
3752 3498 2901 2804 2936 2659 1204 1428
6478 6509 5402 5403 5614 4781 1165 911
256246 256667 258551 258704 258350 259479 264936 264900

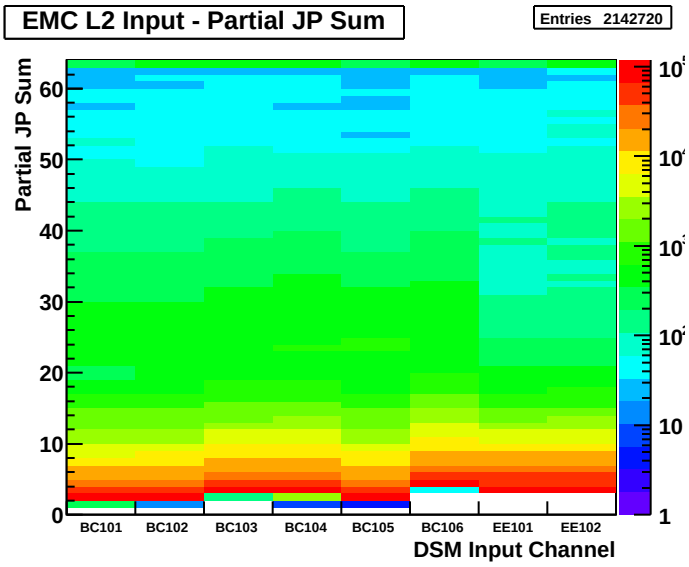

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

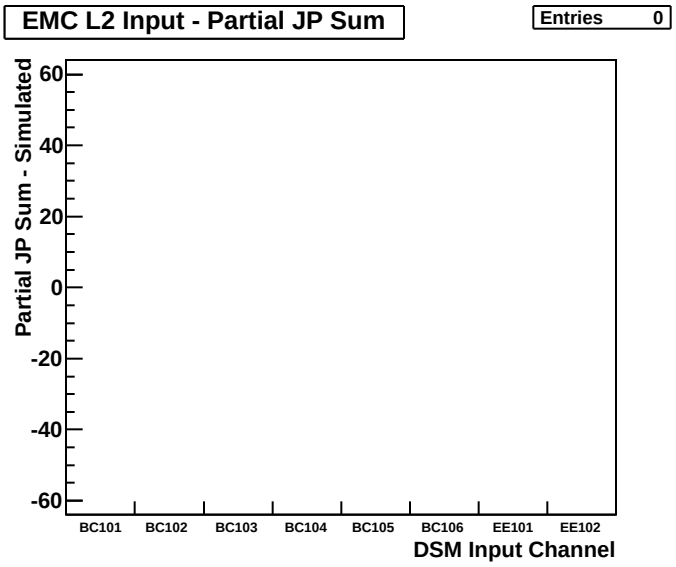

EMC L2 Input - JPY/JPB bits
Entries 2142720
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1057 742 751 724 867 1002 491 617
3201 2438 2634 2482 3173 3161 1067 1363
5758 4448 4727 4851 7342 5925 917 1133
257824 260212 259728 259783 256458 257852 265365 264727

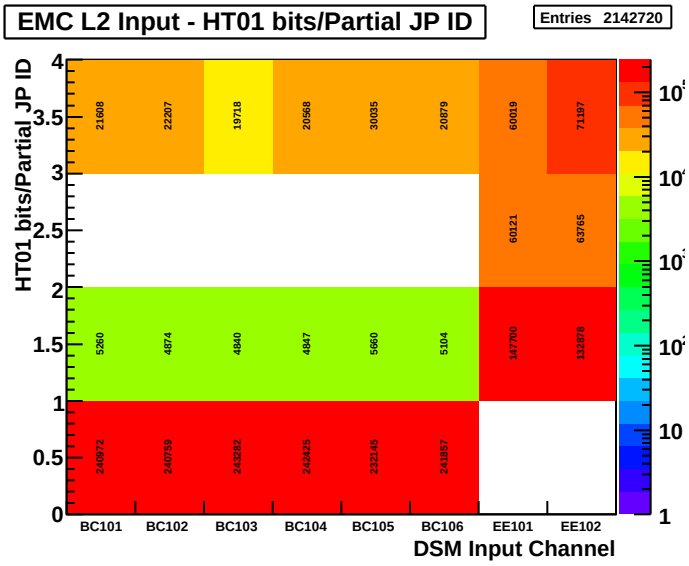

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

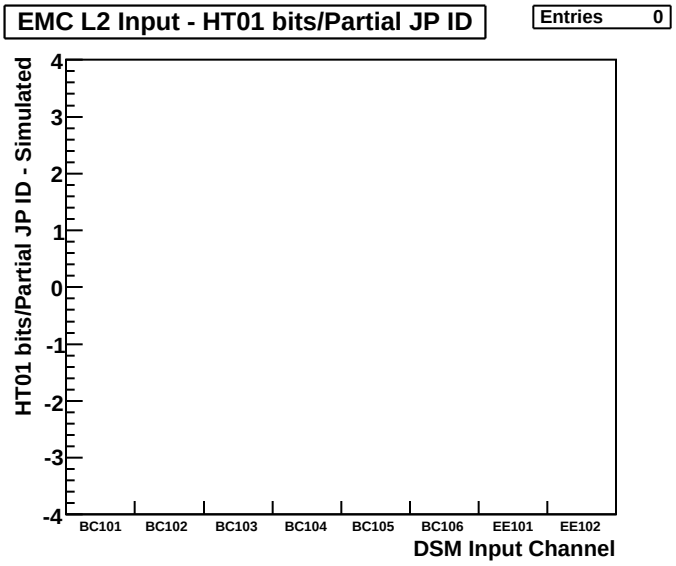

EMC L2 Input - JPZ/JPC bits
Entries 2142720
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
846 718 874 843 839 1095 507 590
2601 2146 2804 2799 3037 3426 1276 1429
4573 4055 5035 5354 7010 6446 989 1273
259820 260321 259127 258344 256954 256873 265088 264548

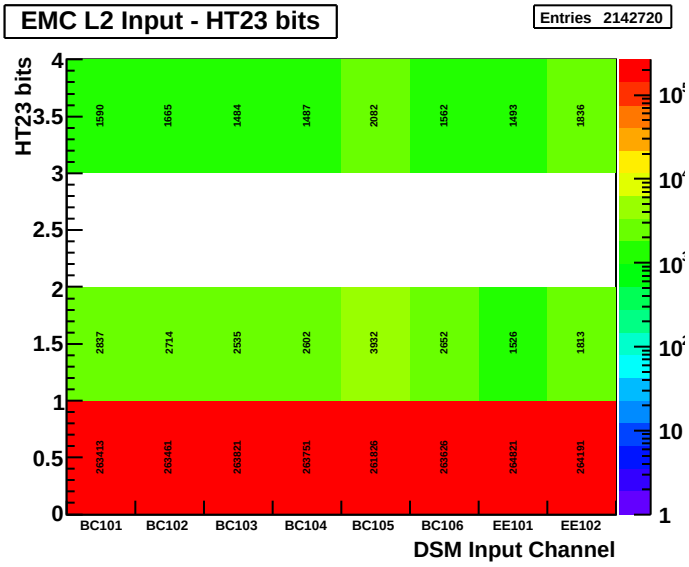

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

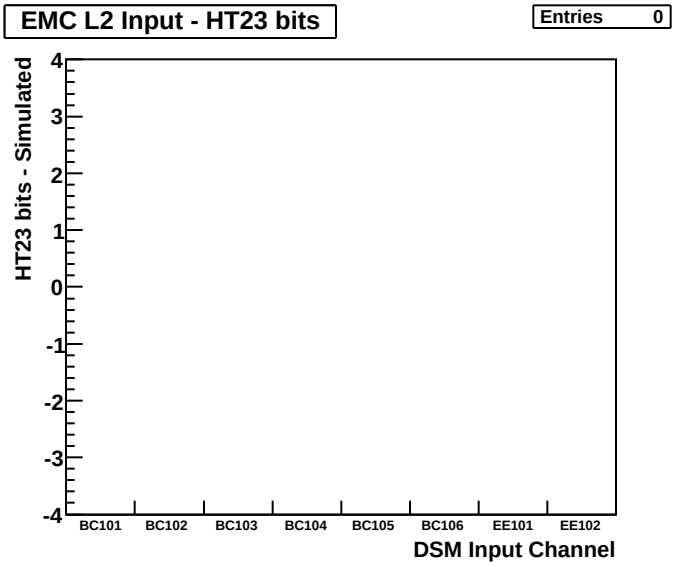

EMC L2 Input - Partial JP Sum
Entries 2142720
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

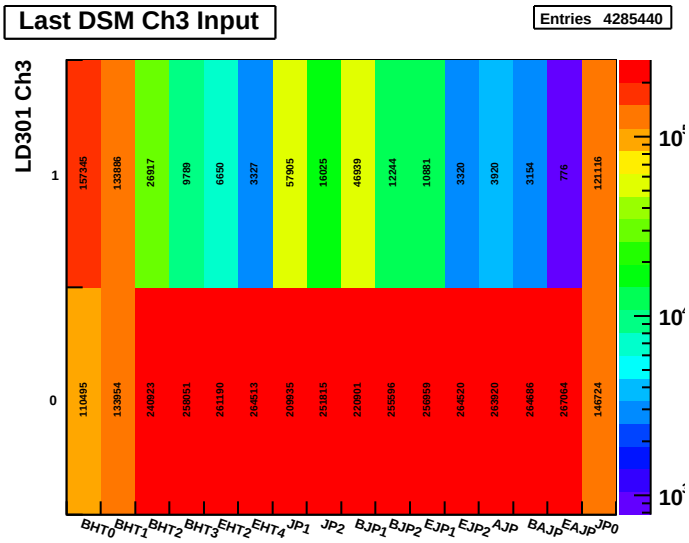

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

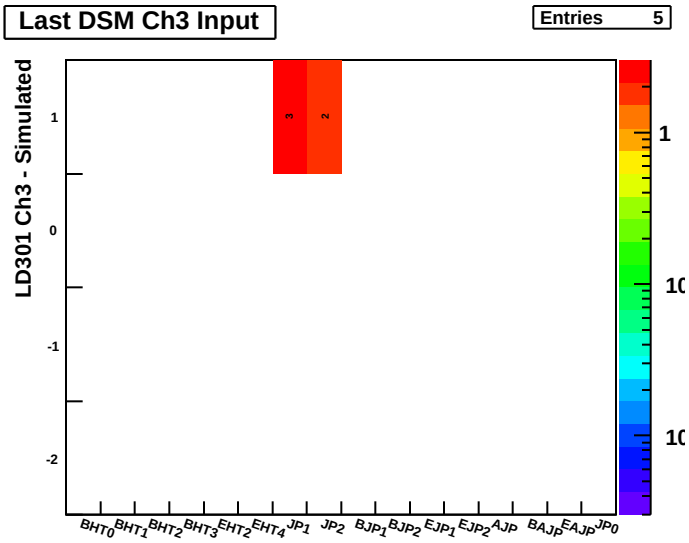

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2142720
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

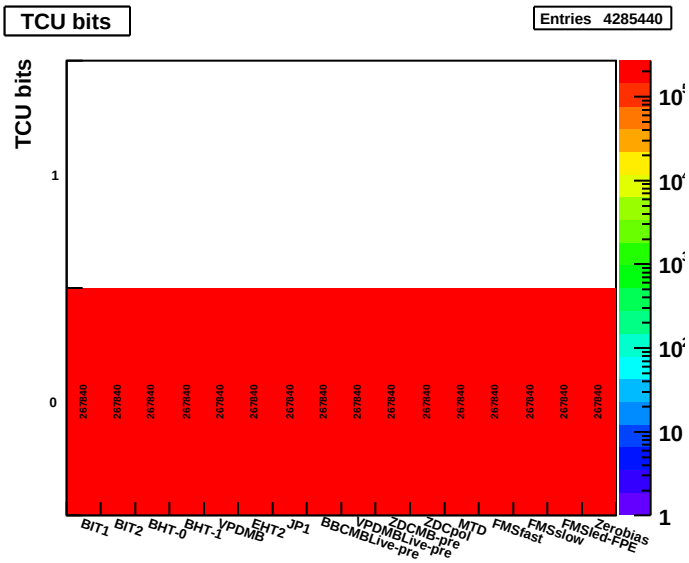

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

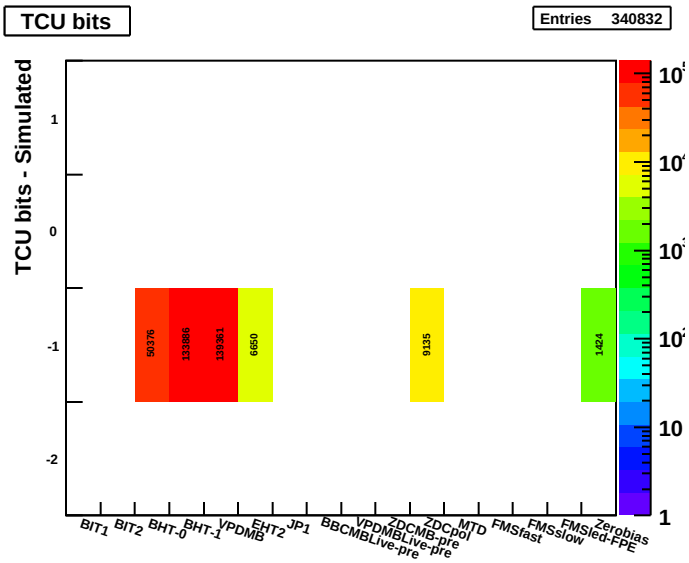

EMC L2 Input - HT23 bits
Entries 2142720
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

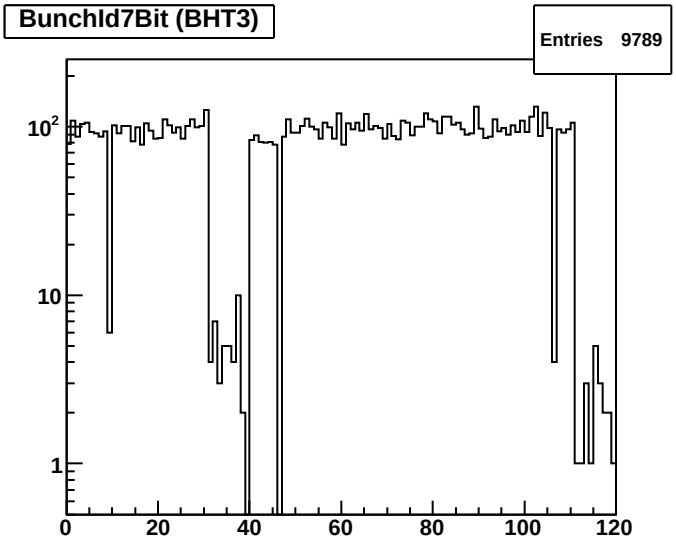

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

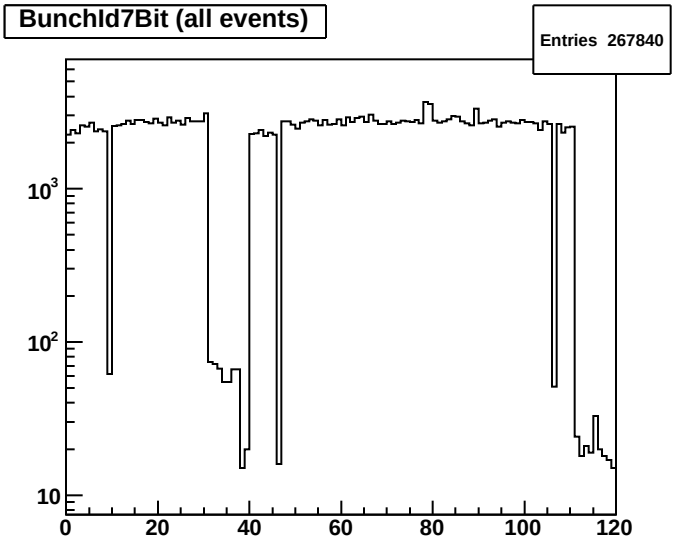

Last DSM Ch3 Input
Entries 4285440
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

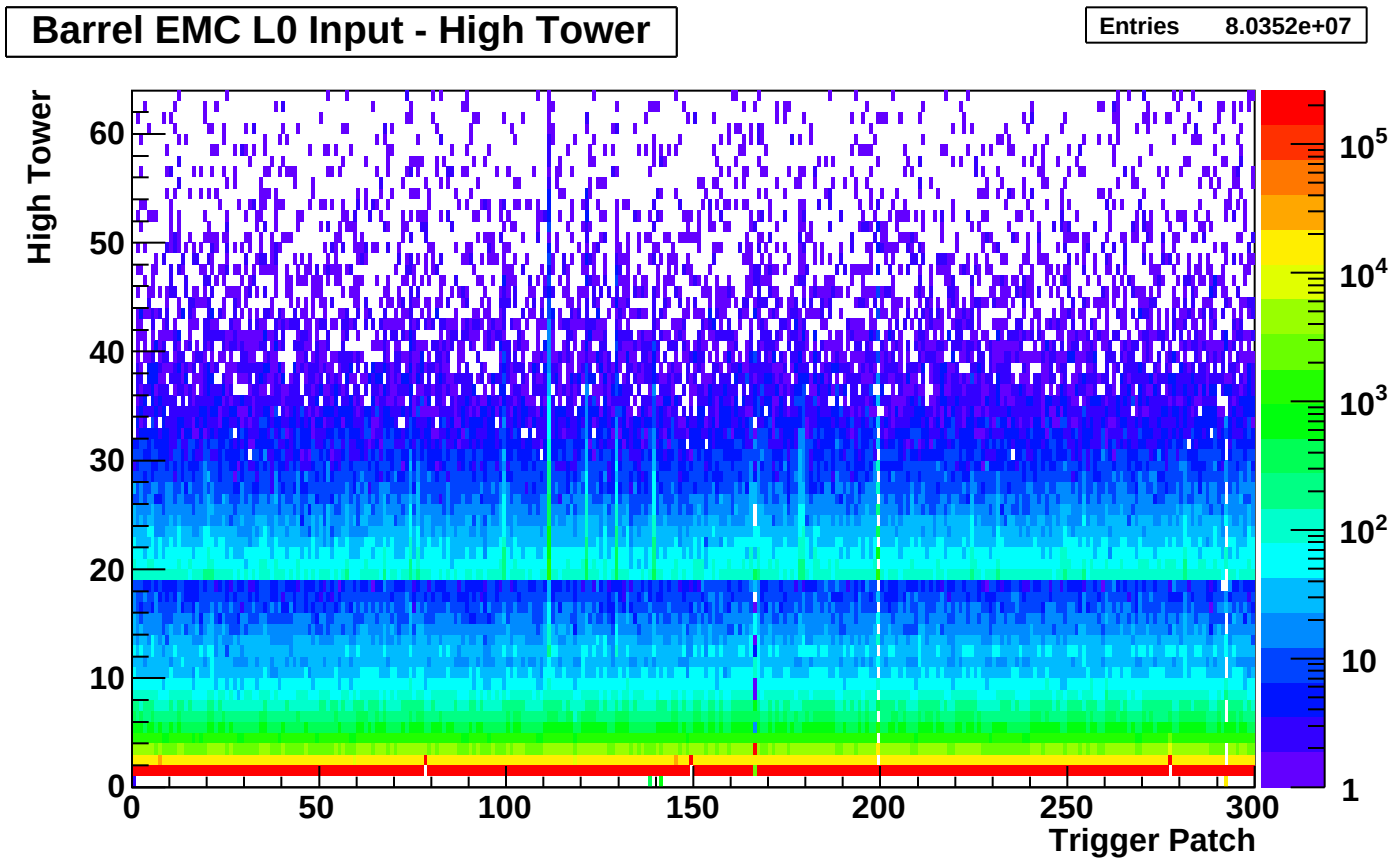

Last DSM Ch3 Input
Entries 5
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

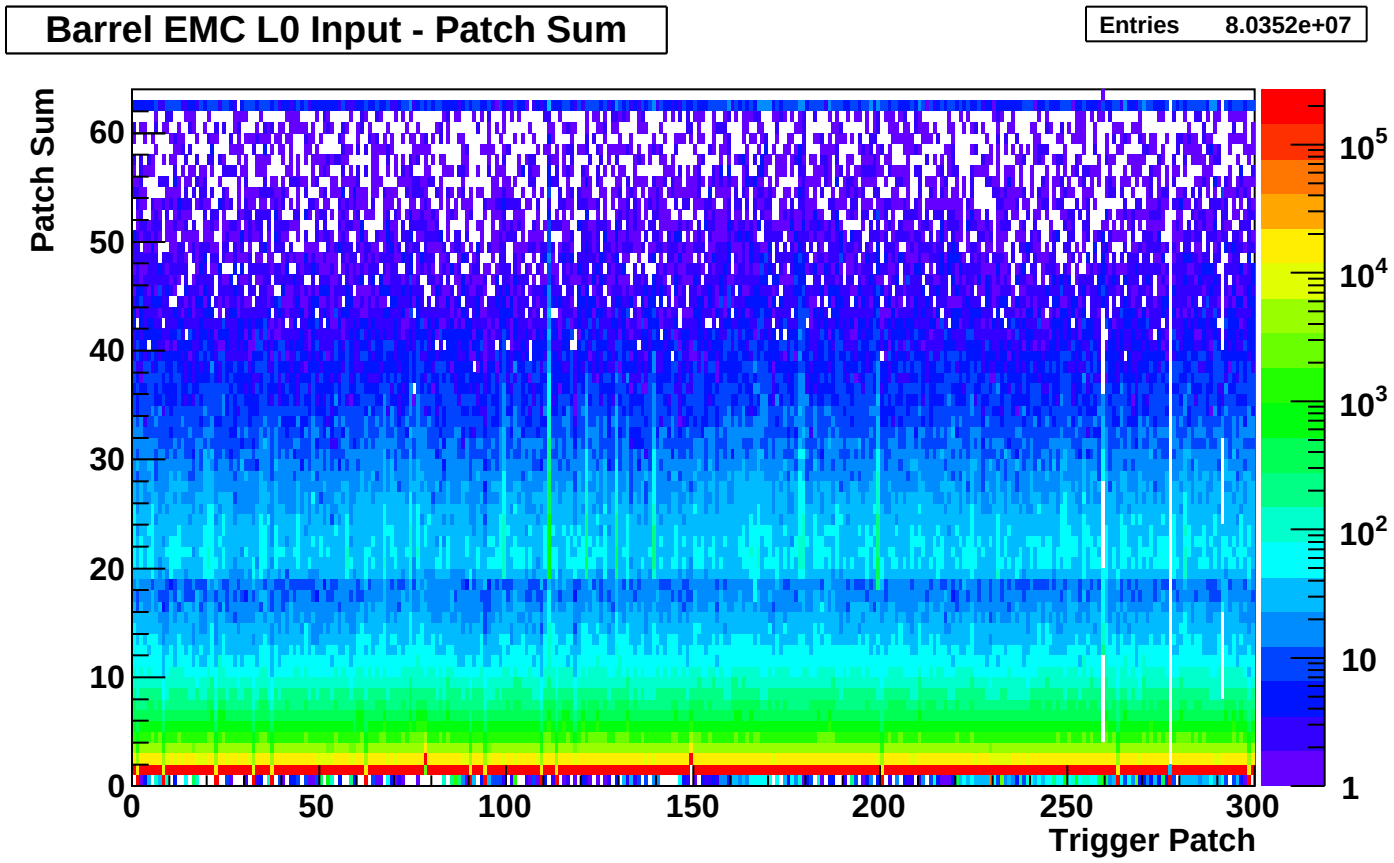

TCU bits
Entries 4285440
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

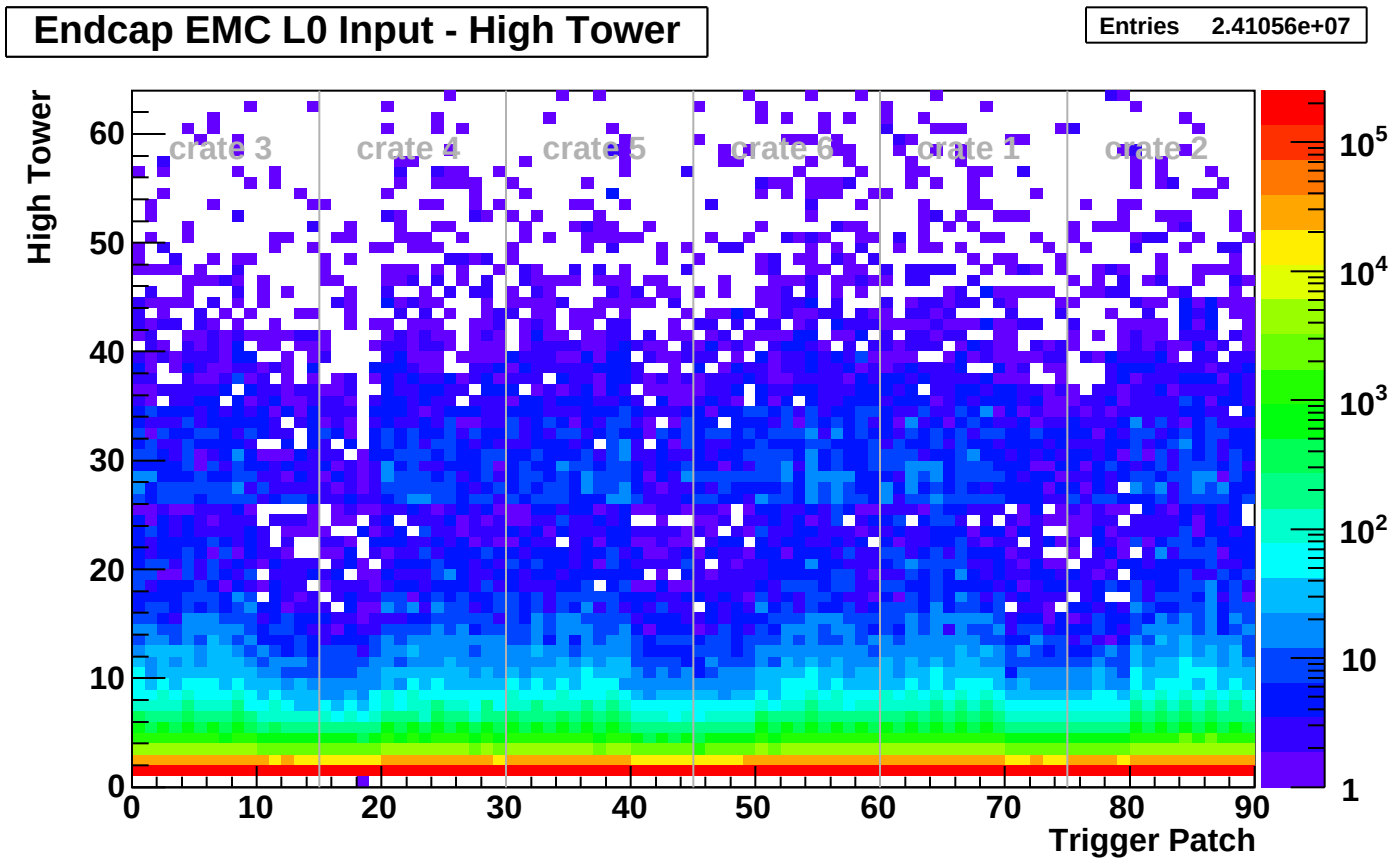

TCU bits
Entries 340832
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

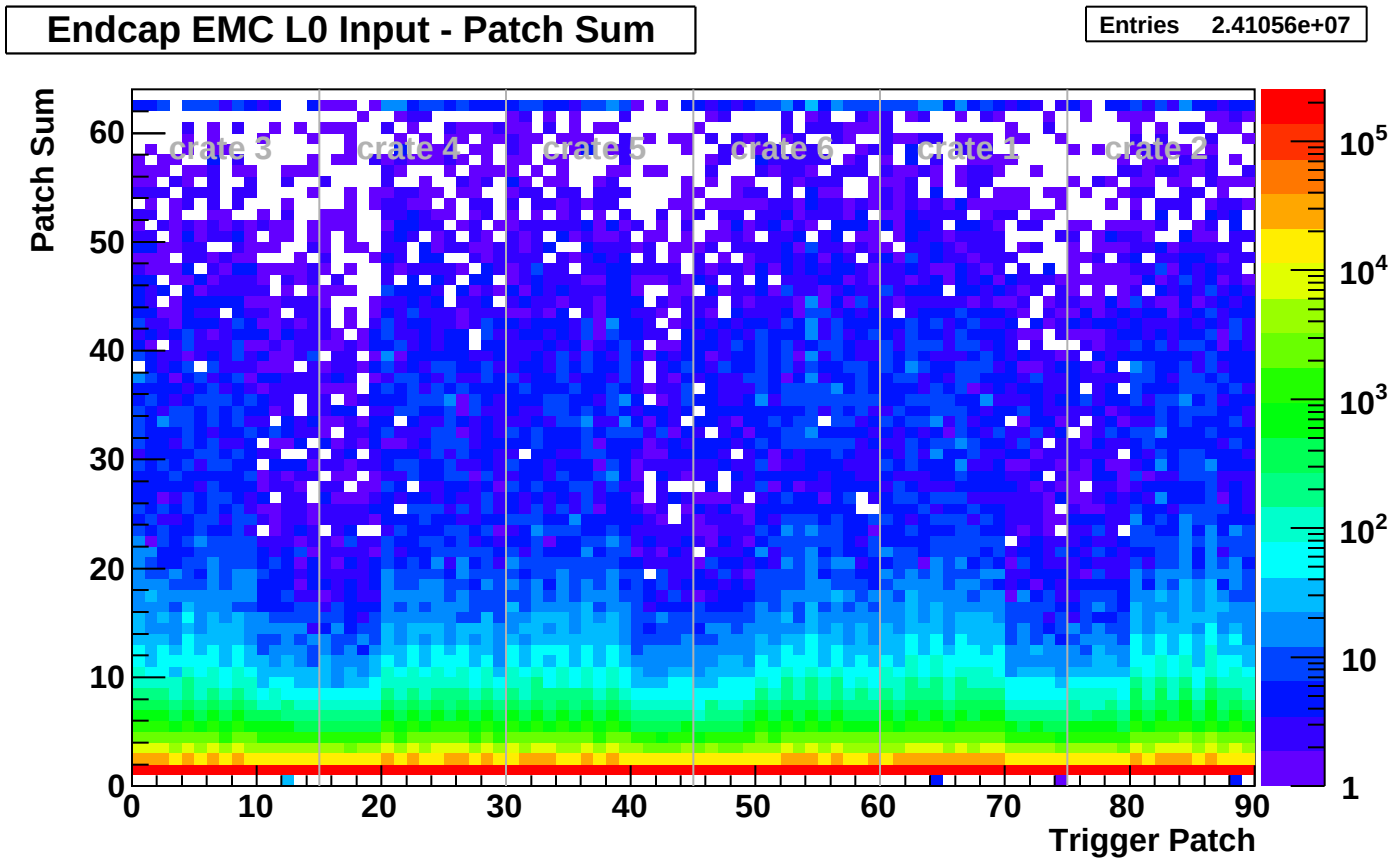

BunchId7Bit (BHT3)
Entries 9789

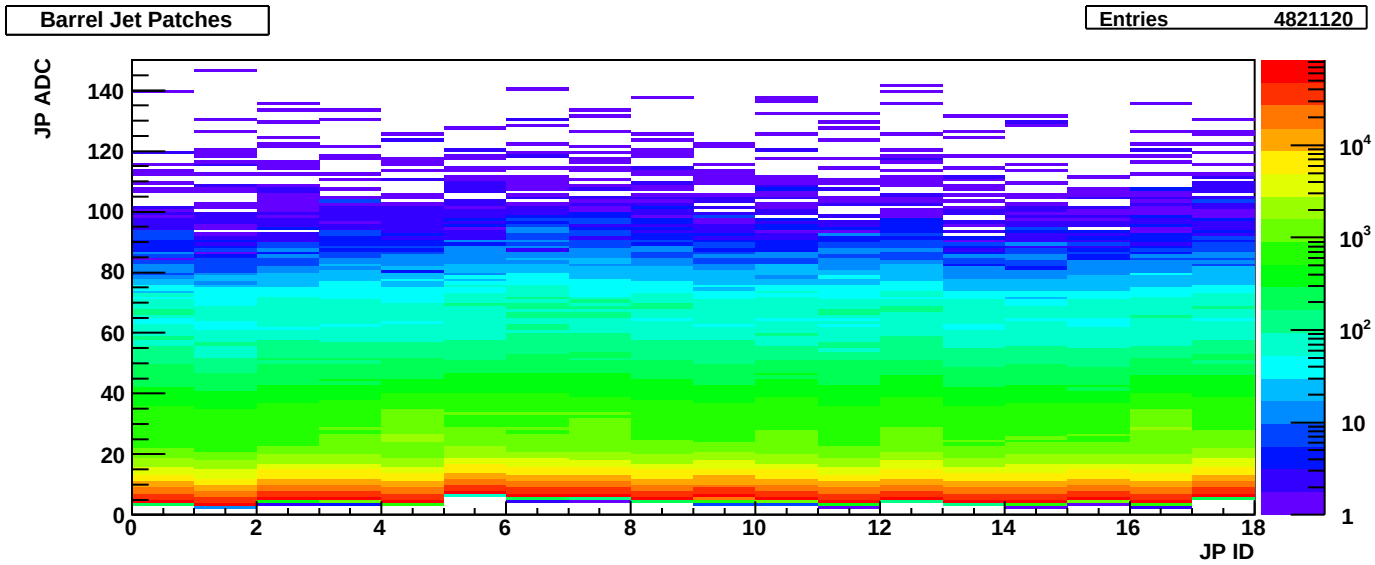

BunchId7Bit (all events)
Entries 267840

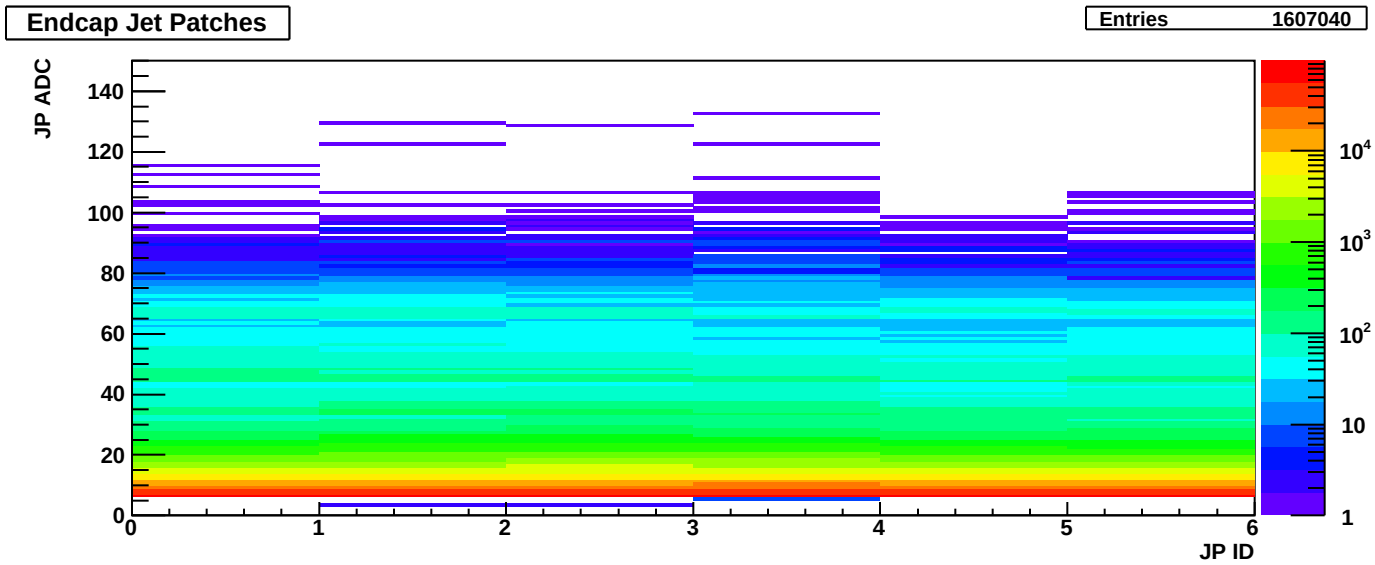

Barrel EMC L0 Input - High Tower
Entries 8.0352e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

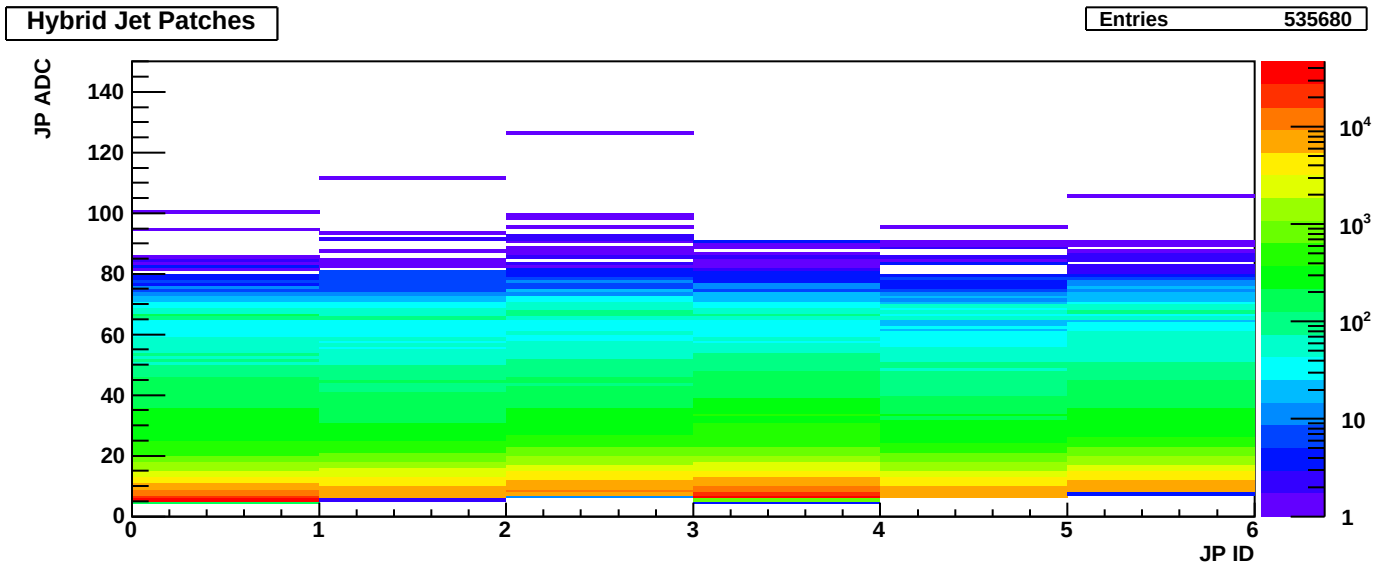

Barrel EMC L0 Input - Patch Sum
Entries 8.0352e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

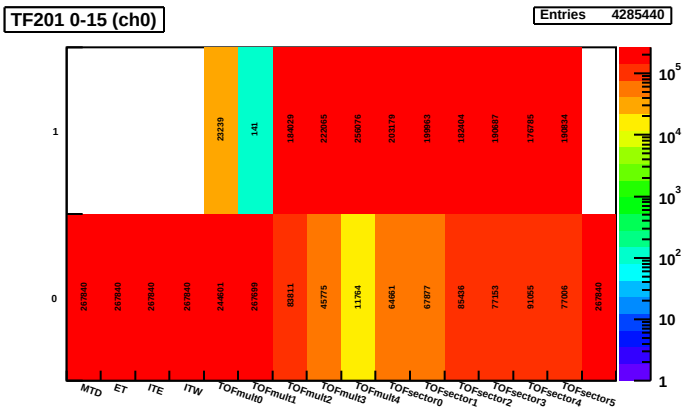

Endcap EMC L0 Input - High Tower
Entries 2.41056e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

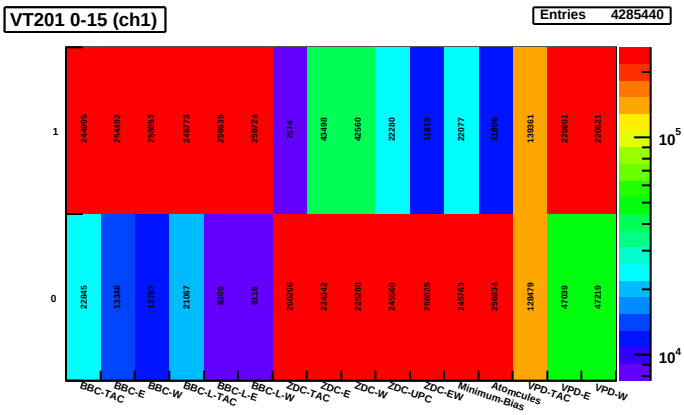

Endcap EMC L0 Input - Patch Sum
Entries 2.41056e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

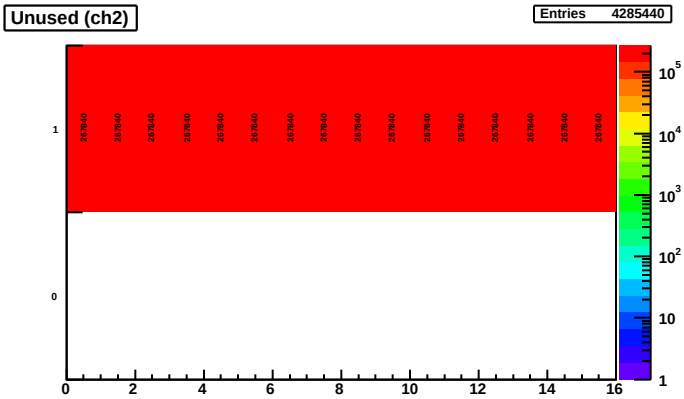

Barrel Jet Patches
Entries 4821120
JP ADC
JP ID

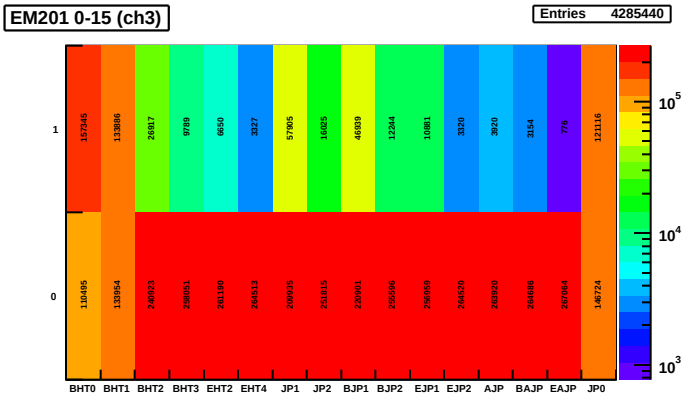

Endcap Jet Patches
Entries 1607040
JP ADC
JP ID

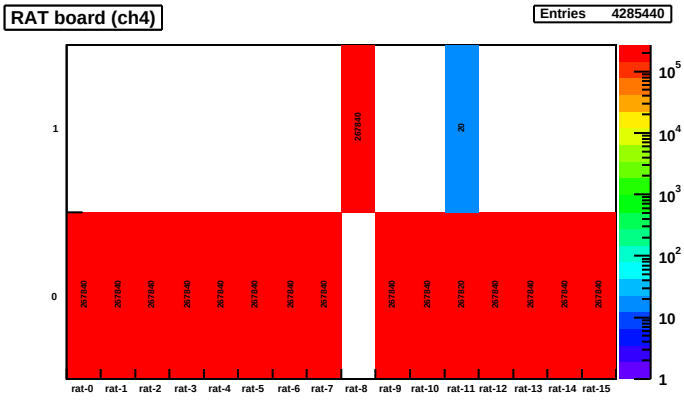

Hybrid Jet Patches
Entries 535680
JP ADC
JP ID

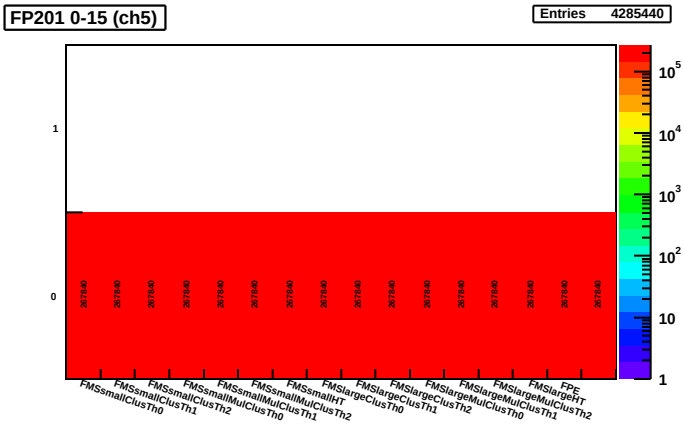

TF201 0-15 (ch0)
Entries 4285440
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

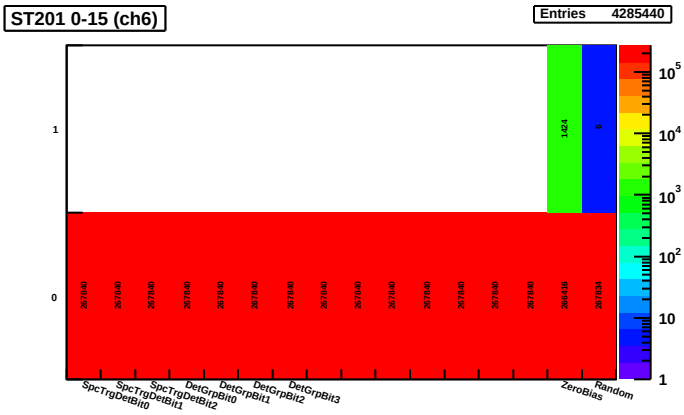

VT201 0-15 (ch1)
Entries 4285440
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

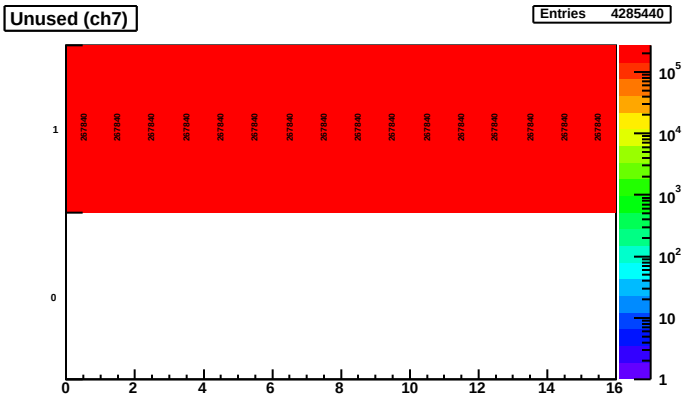

Unused (ch2)
Entries 4285440

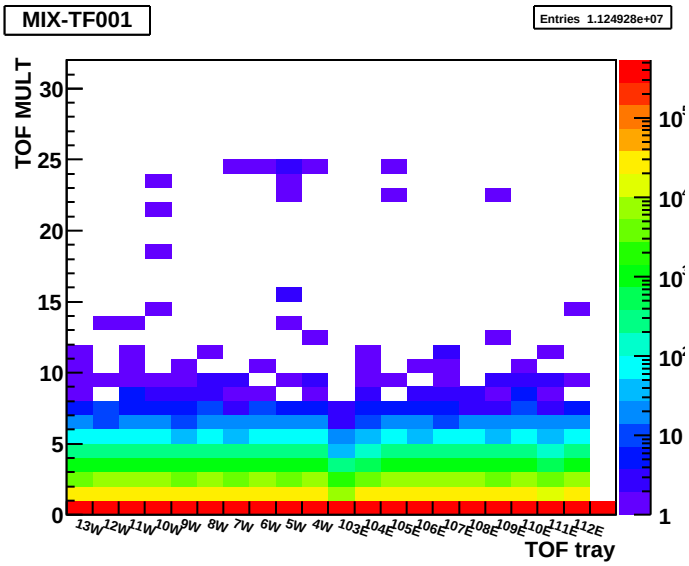

EM201 0-15 (ch3)
Entries 4285440
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

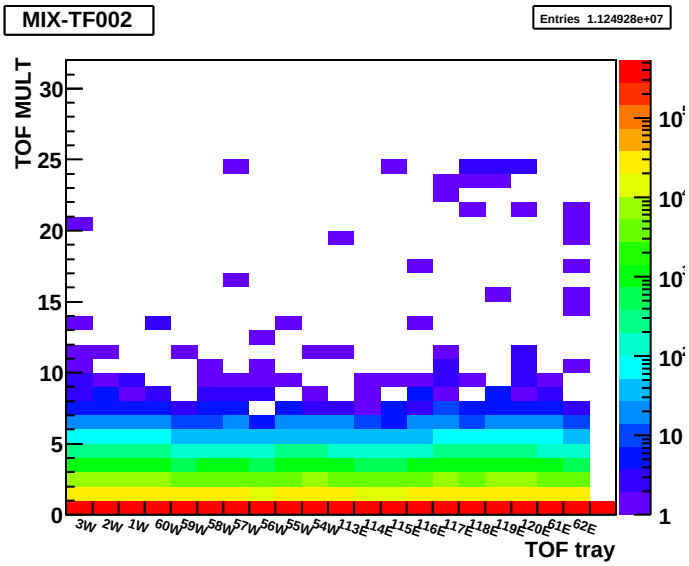

RAT board (ch4)
Entries 4285440
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

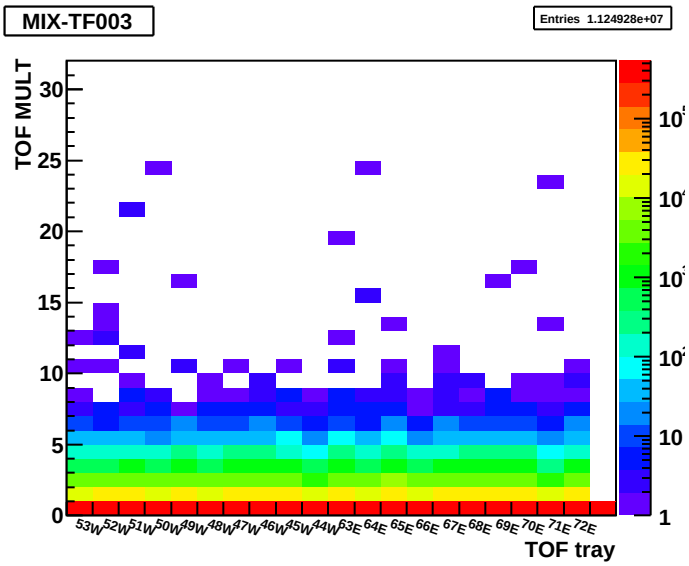

FP201 0-15 (ch5)
Entries 4285440
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

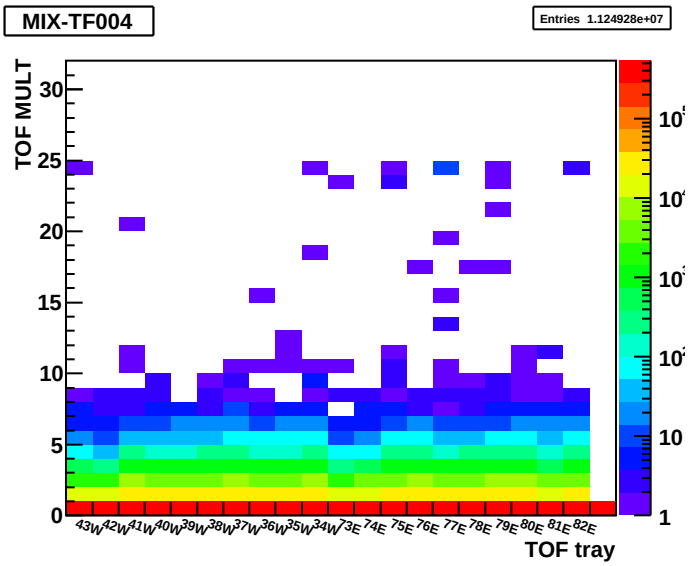

ST201 0-15 (ch6)
Entries 4285440
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

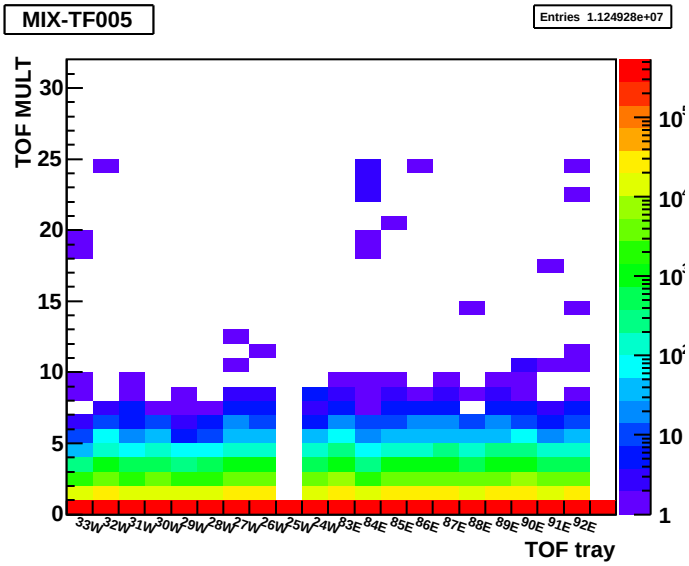

Unused (ch7)
Entries 4285440

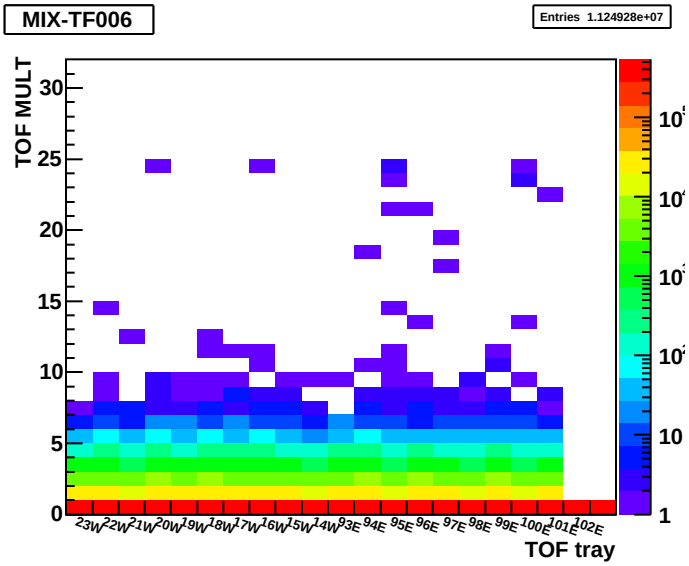

MIX-TF001
Entries 1.124928e+07
TOF MULT
TOF tray

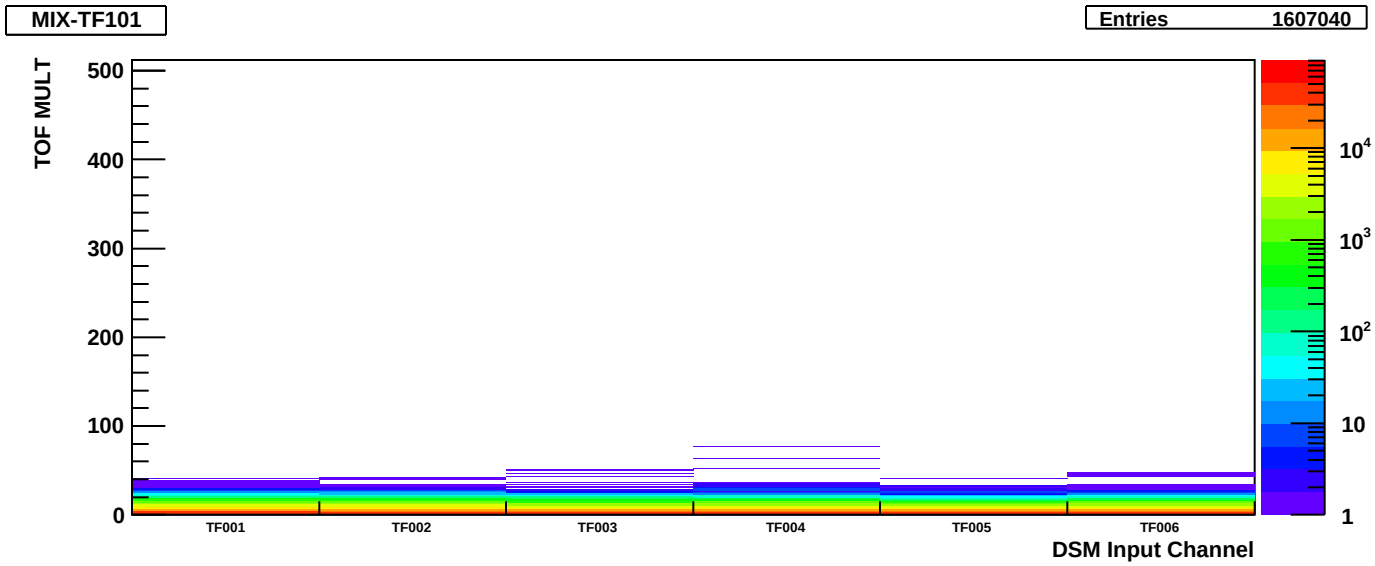

MIX-TF002
Entries 1.124928e+07
TOF MULT
TOF tray

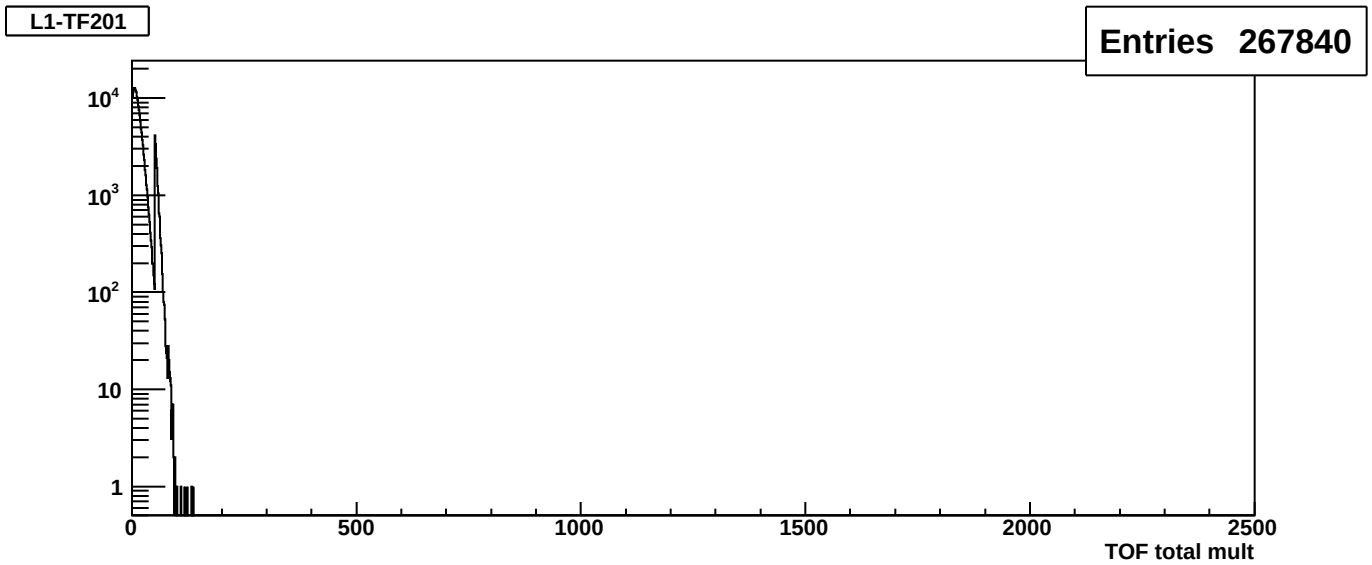

MIX-TF003
Entries 1.124928e+07
TOF MULT
TOF tray

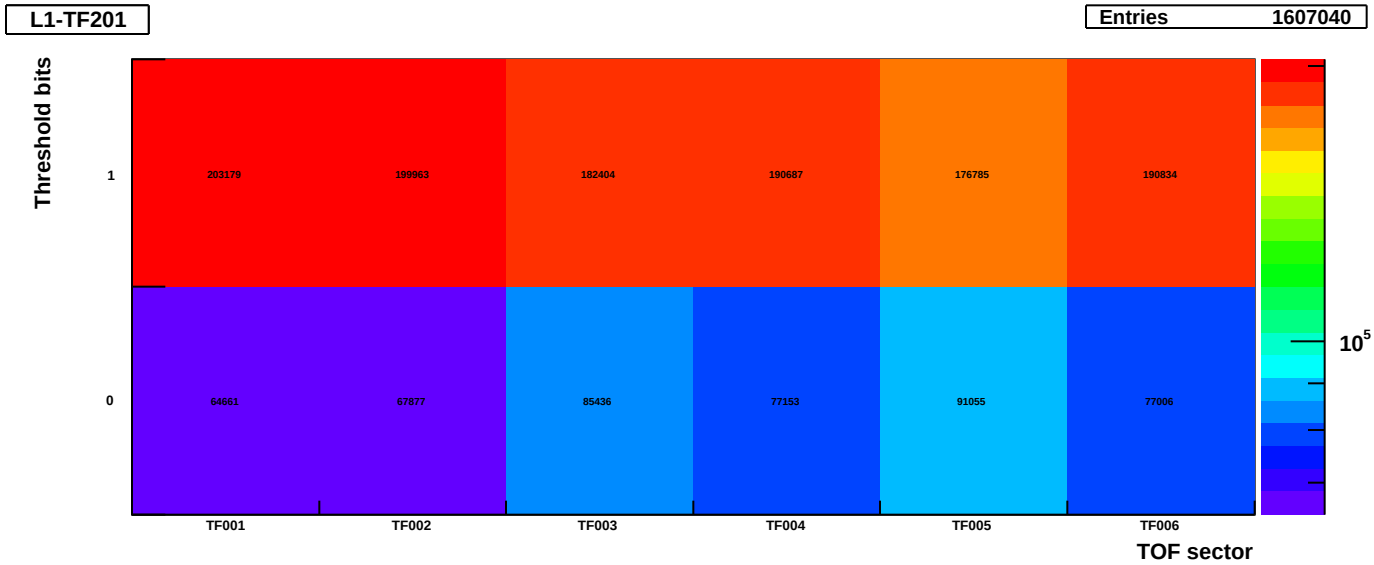

MIX-TF004
Entries 1.124928e+07
TOF MULT
TOF tray

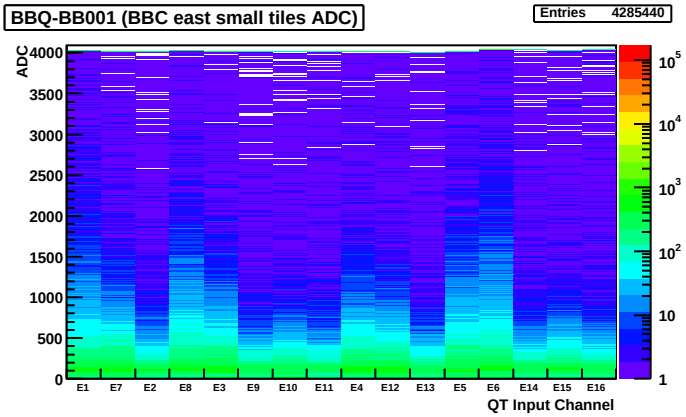

MIX-TF005
Entries 1.124928e+07
TOF MULT
TOF tray

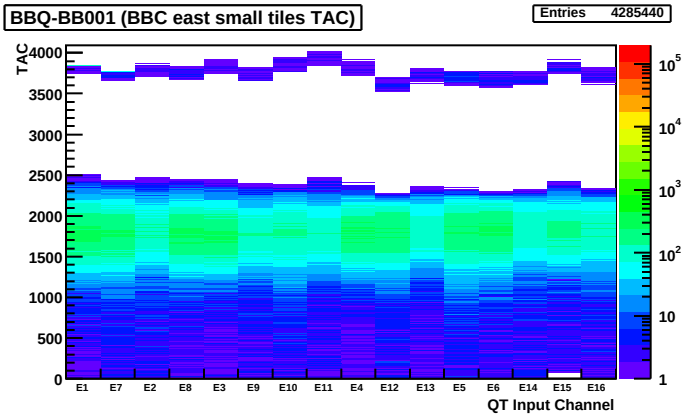

MIX-TF006
Entries 1.124928e+07
TOF MULT
TOF tray

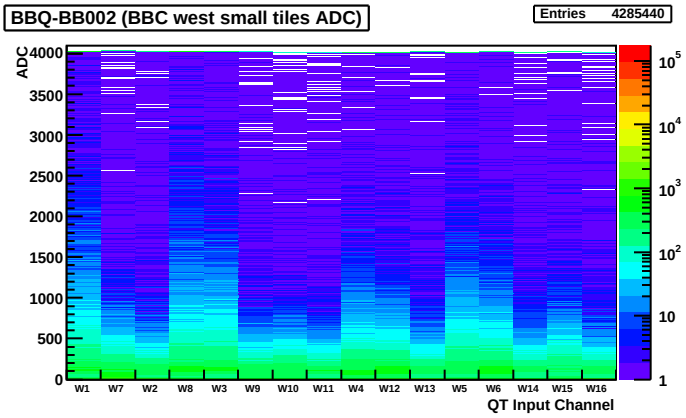

MIX-TF101
Entries 1607040
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

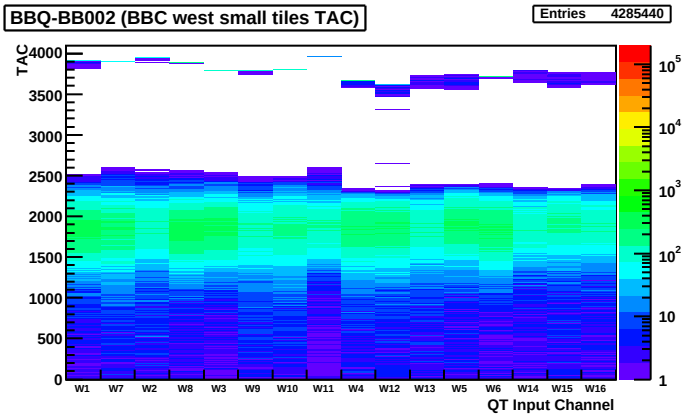

L1-TF201
Entries 267840
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

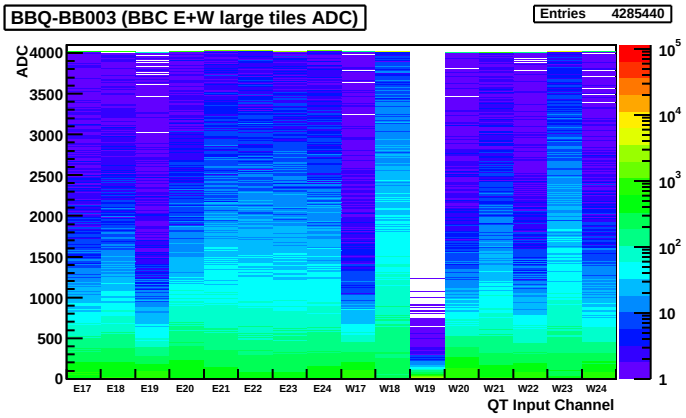

L1-TF201
Entries 1607040
Threshold bits
1
0
203179
199963
182404
190687
176785
190834
64661
67877
85436
77153
91055
77006
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

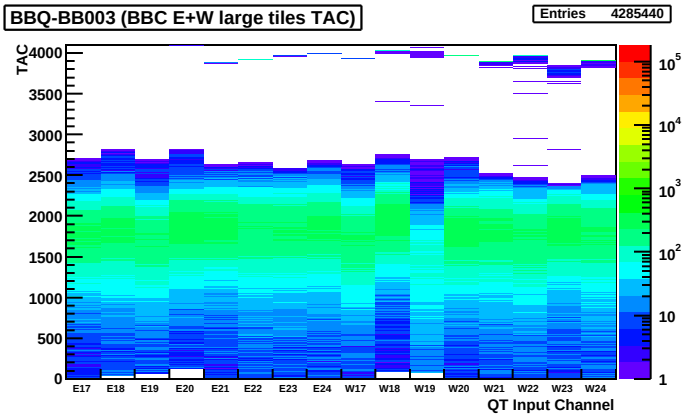

BBQ-BB001 (BBC east small tiles ADC)
Entries 4285440
ADC
QT Input Channel

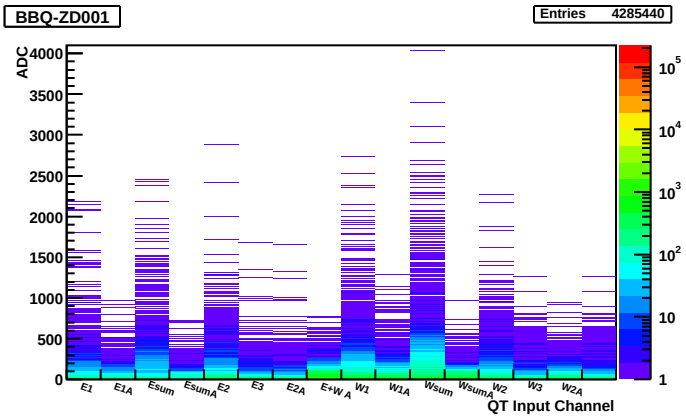

BBQ-BB001 (BBC east small tiles TAC)
Entries 4285440
TAC
QT Input Channel

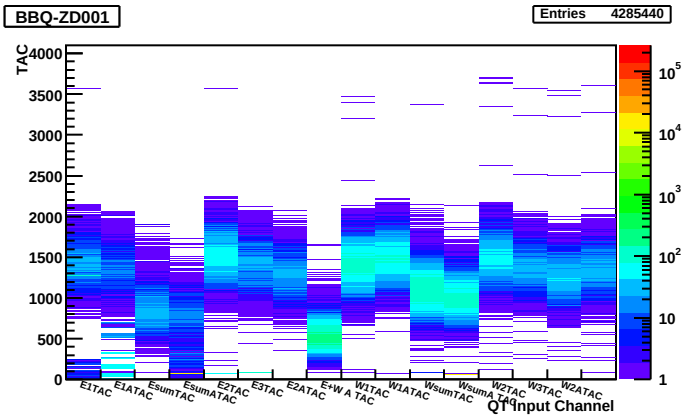

BBQ-BB002 (BBC west small tiles ADC)
Entries 4285440
ADC
QT Input Channel

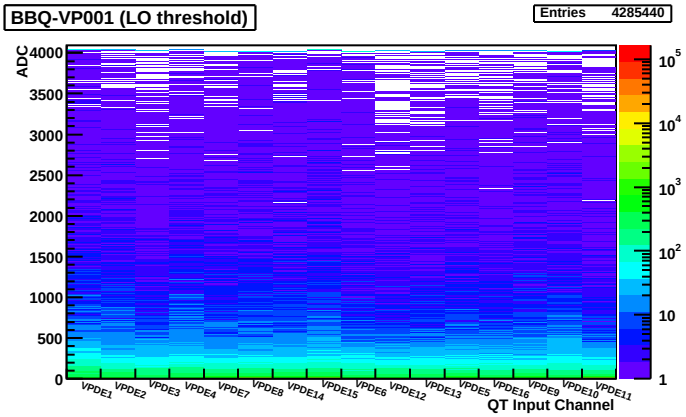

BBQ-BB002 (BBC west small tiles TAC)
Entries 4285440
TAC
QT Input Channel

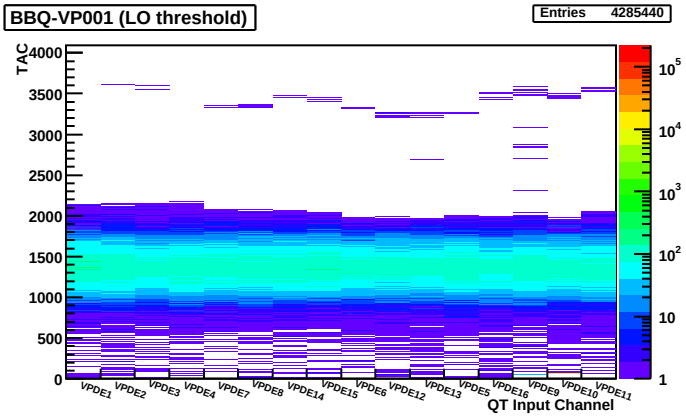

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4285440
ADC
QT Input Channel

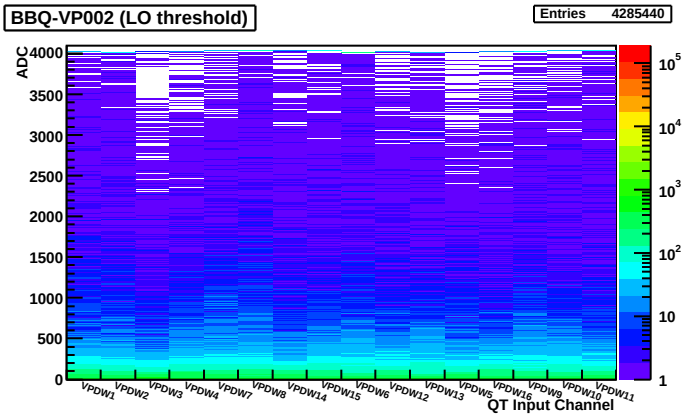

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4285440
TAC
QT Input Channel

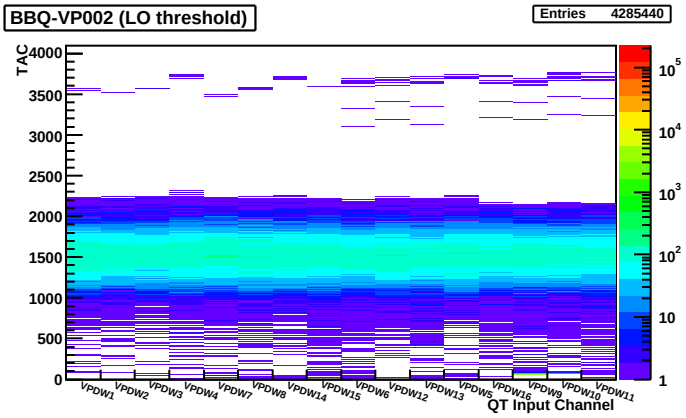

BBQ-ZD001
Entries 4285440
ADC
QT Input Channel

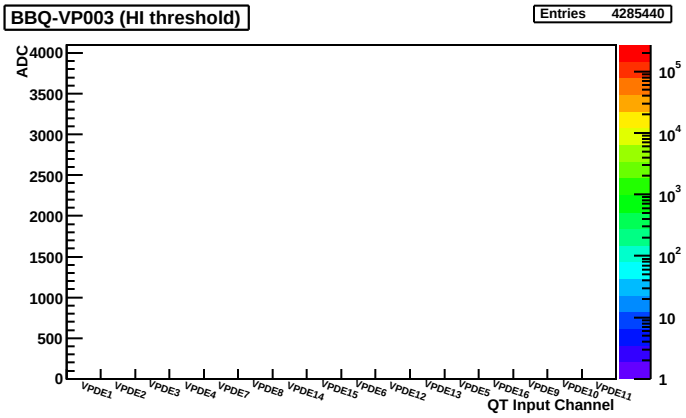

BBQ-ZD001
Entries 4285440
TAC
QT Input Channel

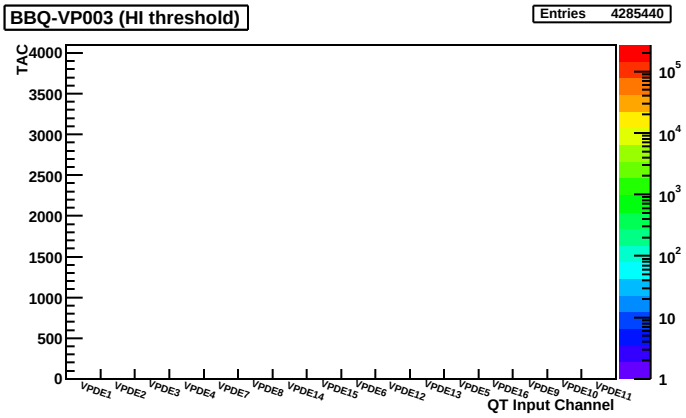

BBQ-VP001 (LO threshold)
Entries 4285440
ADC
QT Input Channel

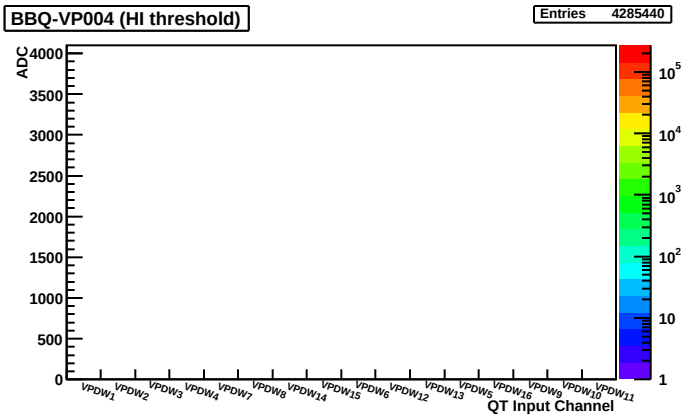

BBQ-VP001 (LO threshold)
Entries 4285440
TAC
QT Input Channel

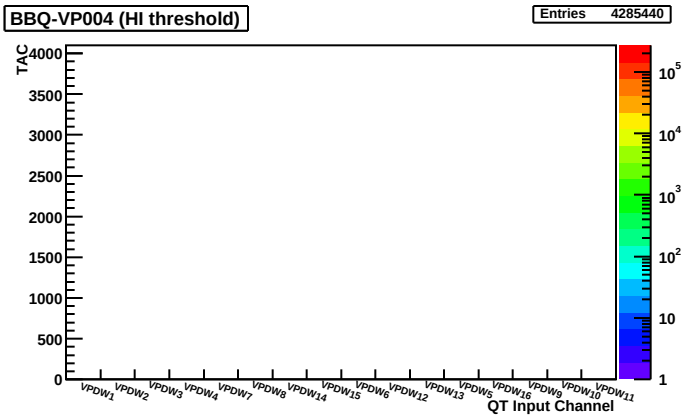

BBQ-VP002 (LO threshold)
Entries 4285440
ADC
QT Input Channel

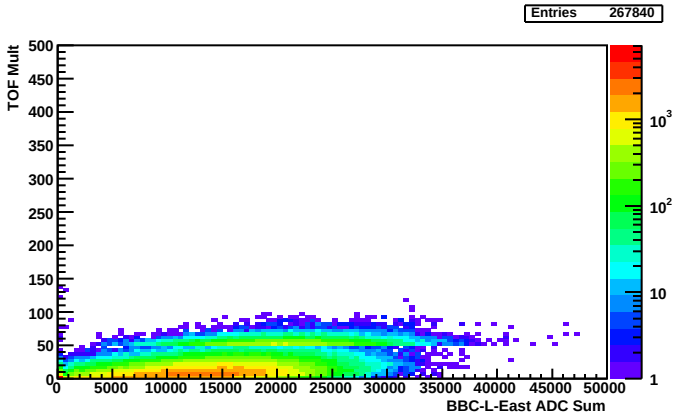

BBQ-VP002 (LO threshold)
Entries 4285440
TAC
QT Input Channel

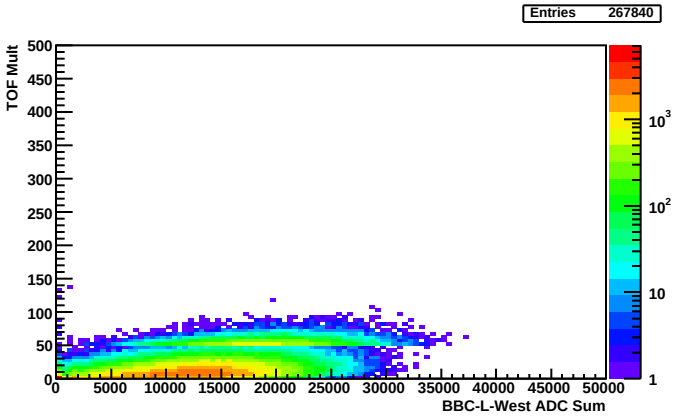

BBQ-VP003 (HI threshold)
Entries 4285440
ADC
QT Input Channel

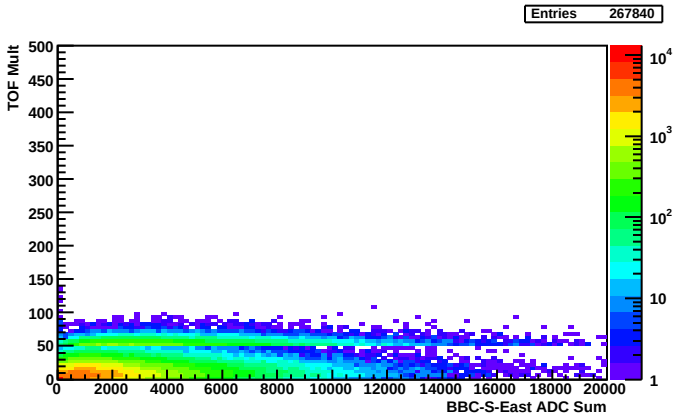

BBQ-VP003 (HI threshold)
Entries 4285440
TAC
QT Input Channel

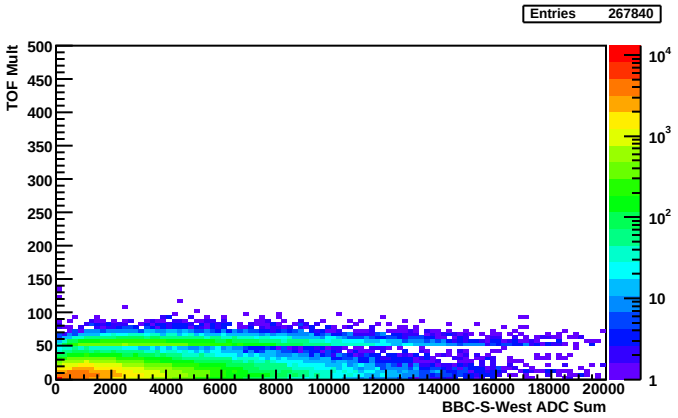

BBQ-VP004 (HI threshold)
Entries 4285440
ADC
QT Input Channel

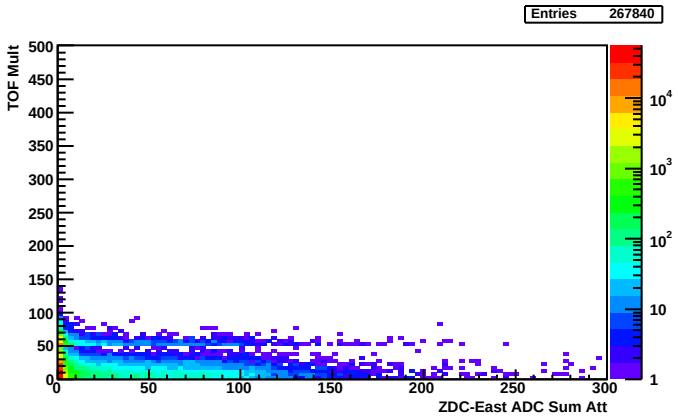

BBQ-VP004 (HI threshold)
Entries 4285440
TAC
QT Input Channel

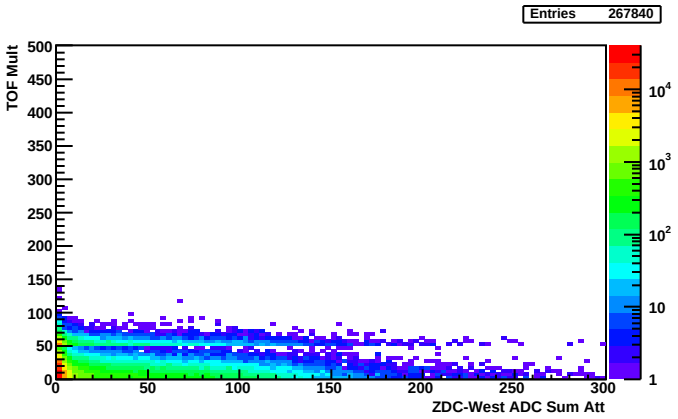

Entries 267840
TOF Mult
BBC-L-East ADC Sum

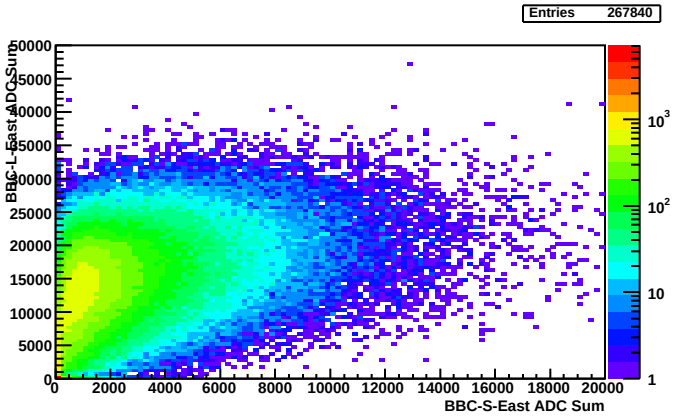

Entries 267840
TOF Mult
BBC-L-West ADC Sum

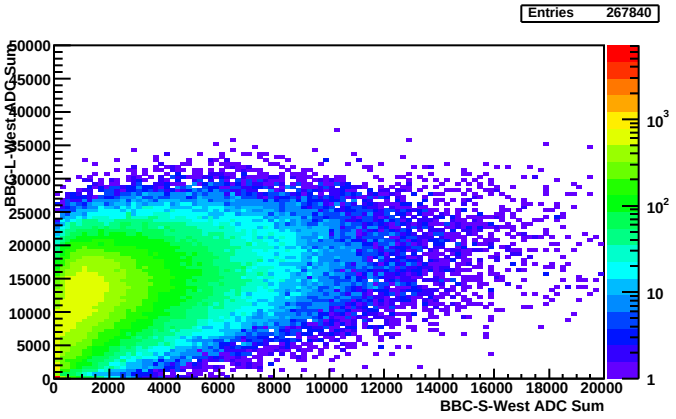

Entries 267840
TOF Mult
BBC-S-East ADC Sum

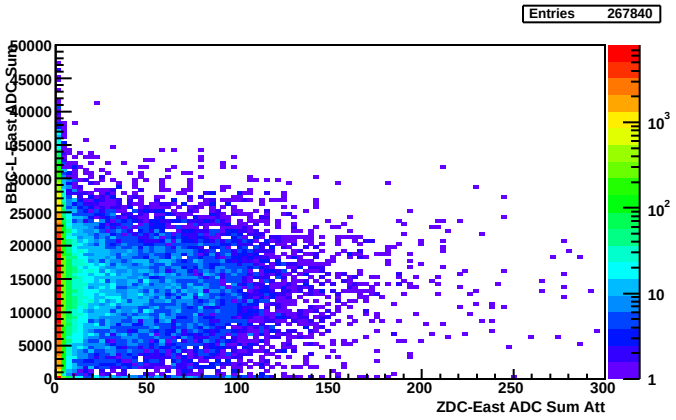

Entries 267840
TOF Mult
BBC-S-West ADC Sum

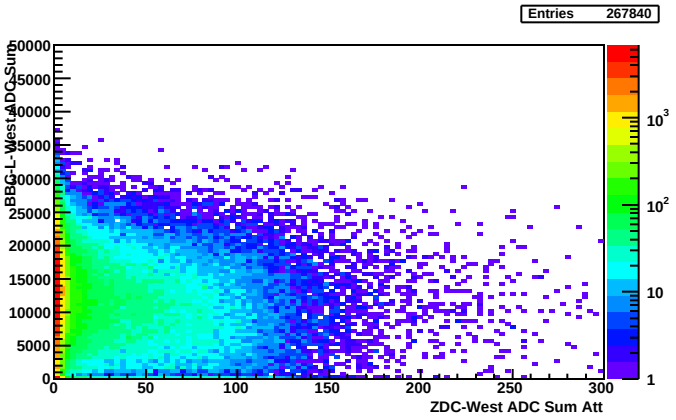

Entries 267840
TOF Mult
ZDC-East ADC Sum Att

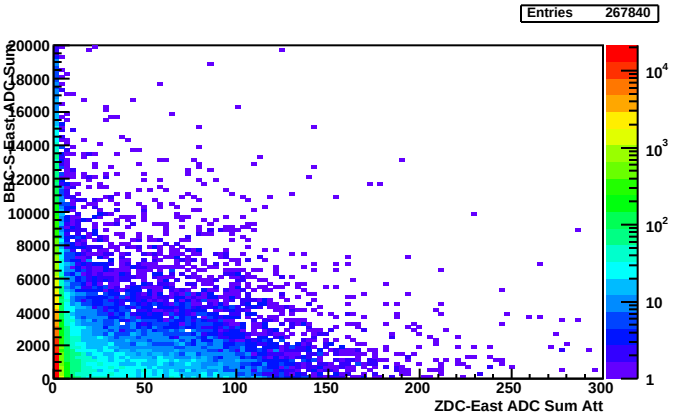

Entries 267840
TOF Mult
ZDC-West ADC Sum Att

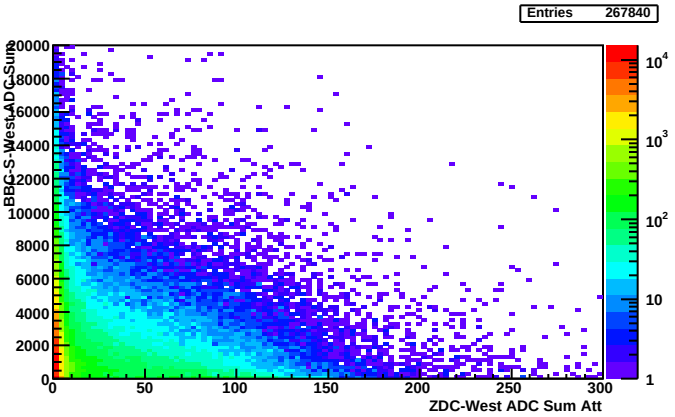

Entries 267840
BBC-L-East ADC Sum
BBC-S-East ADC Sum

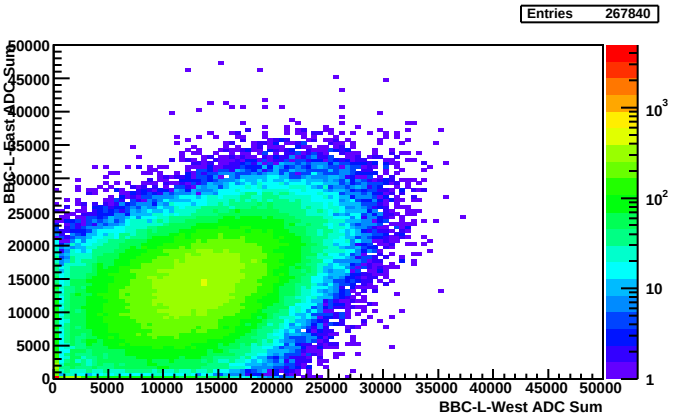

Entries 267840
BBC-L-West ADC Sum
BBC-S-West ADC Sum

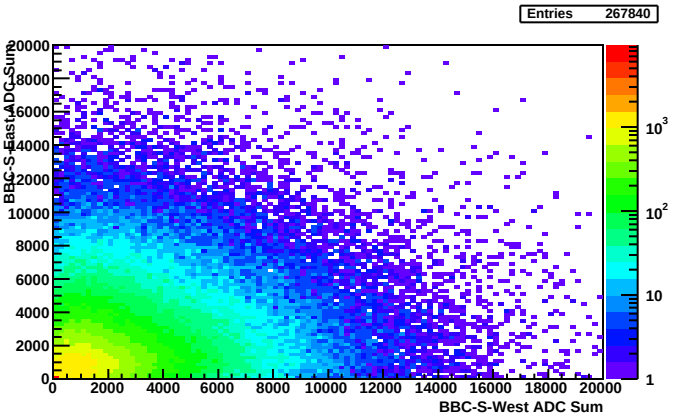

Entries 267840
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

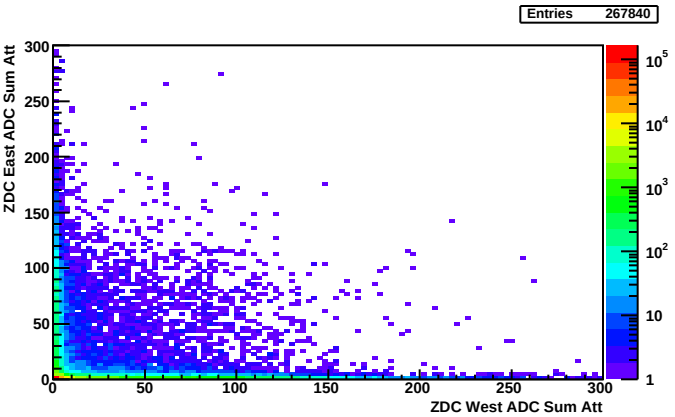

Entries 267840
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

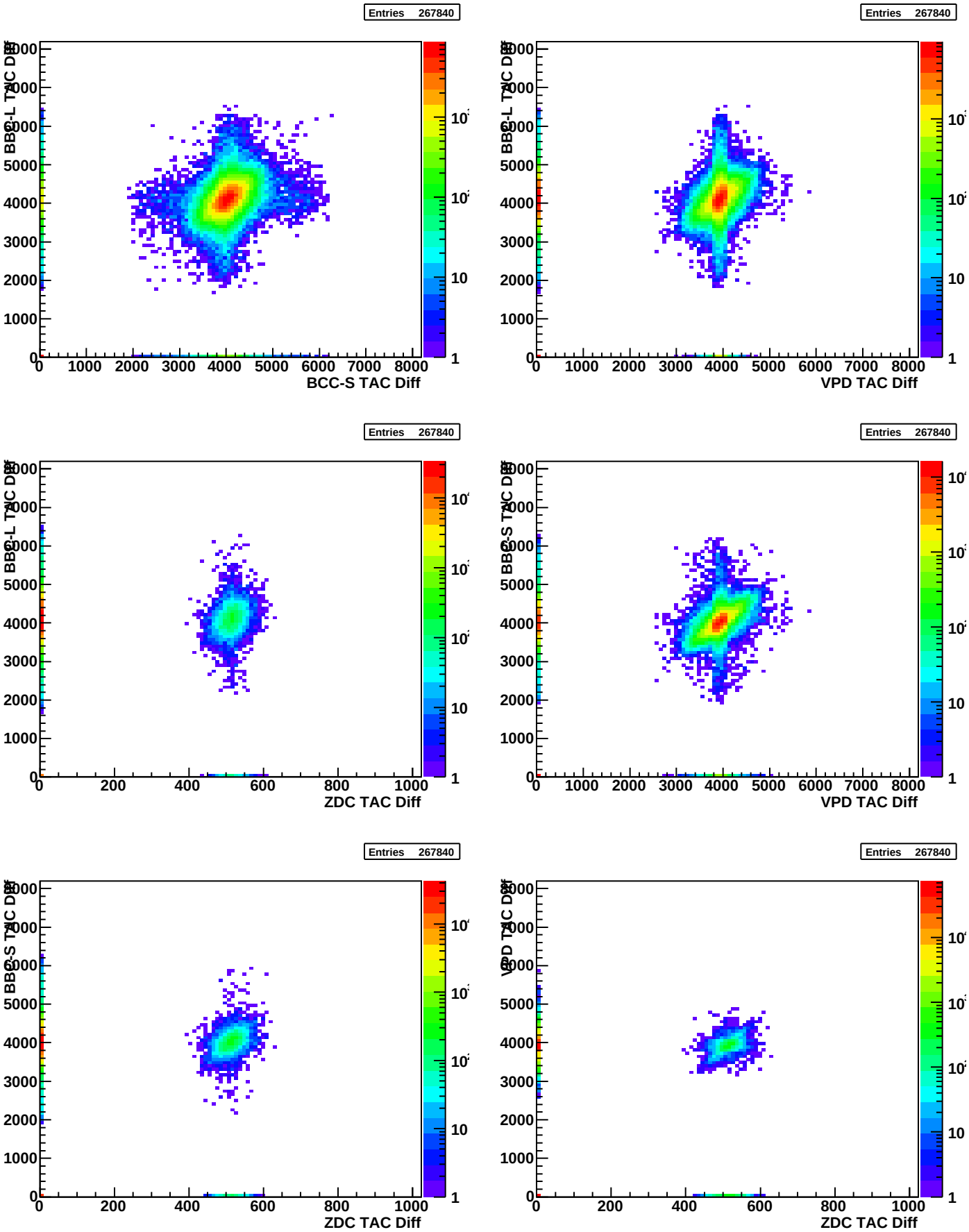

Entries 267840
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

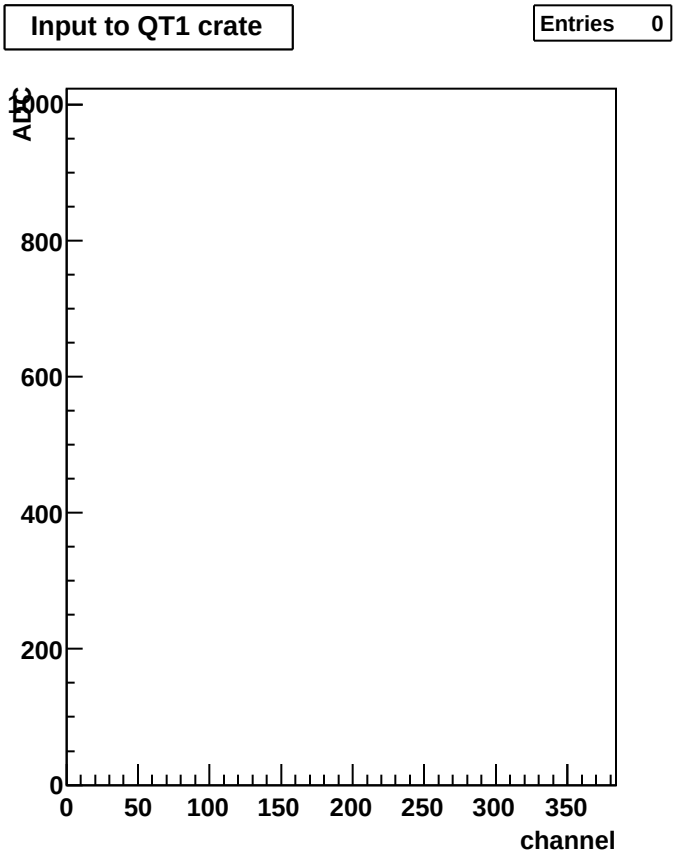

Entries 267840
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

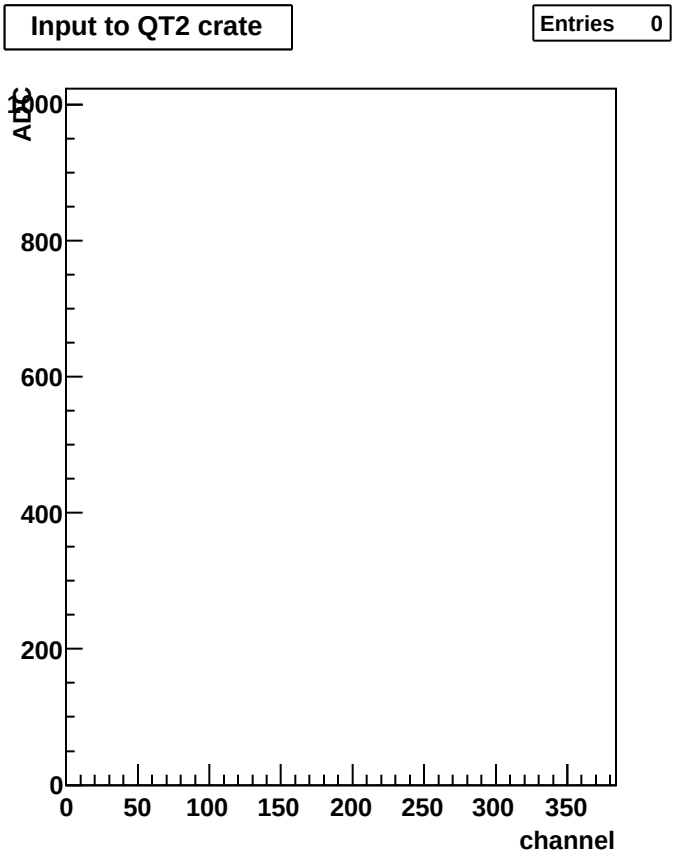

Entries 267840
BBC-L-East ADC Sum
BBC-L-West ADC Sum

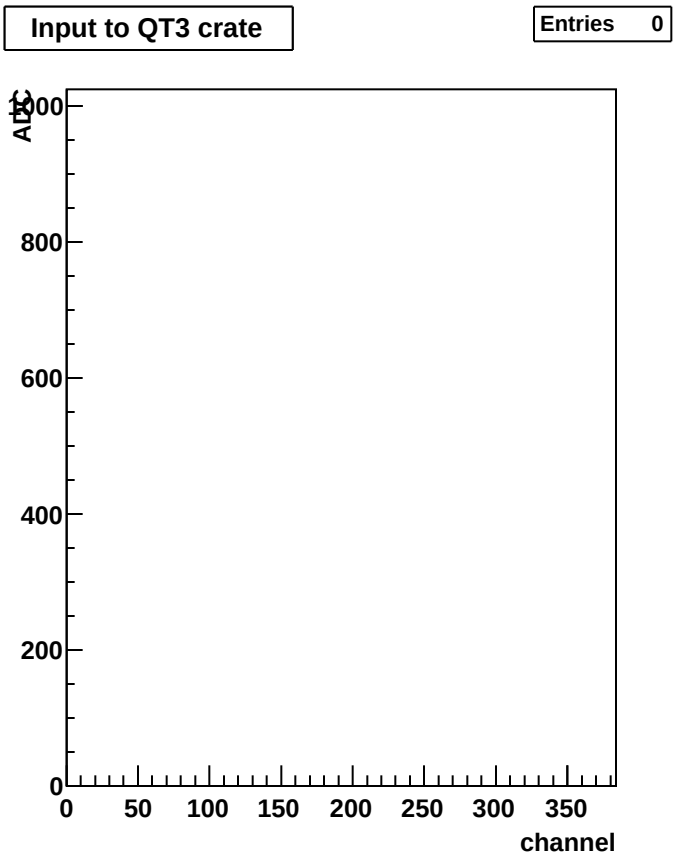

Entries 267840
BBC-S-East ADC Sum
BBC-S-West ADC Sum

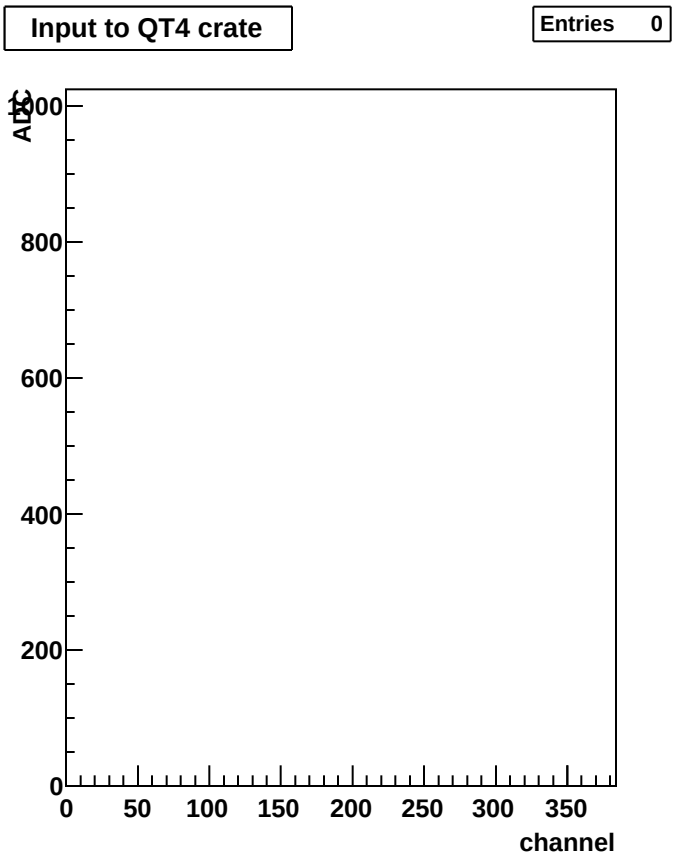

Entries 267840
ZDC East ADC Sum Att
ZDC West ADC Sum Att

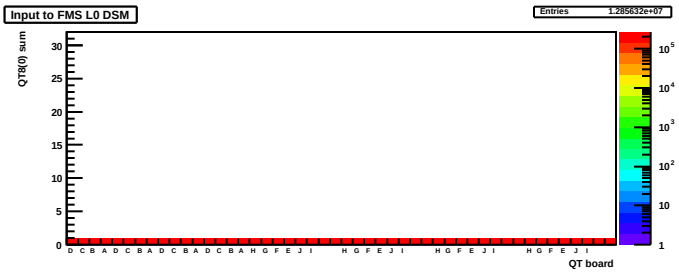

Entries 267840
BBC-L TAC Diff
BCC-S TAC Diff
Entries 267840
BBC-L TAC Diff
VPD TAC Diff
Entries 267840
BBC-L TAC Diff
ZDC TAC Diff
Entries 267840
BBC-S TAC Diff
VPD TAC Diff
Entries 267840
BBC-S TAC Diff
ZDC TAC Diff
Entries 267840
VPD TAC Diff
ZDC TAC Diff

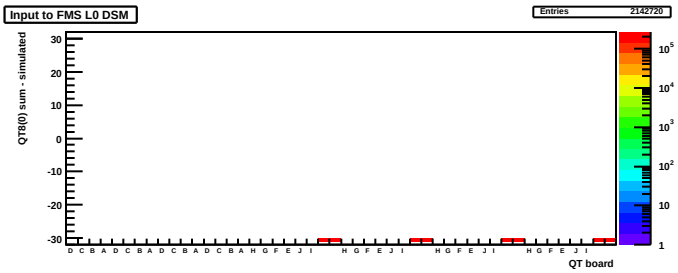

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

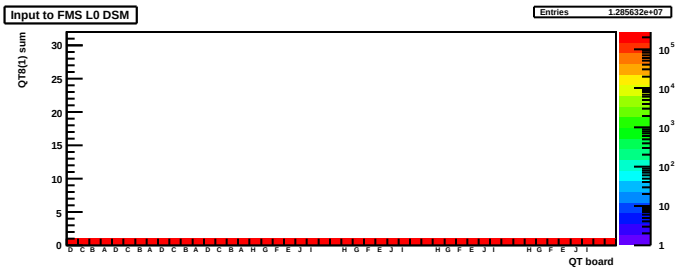

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

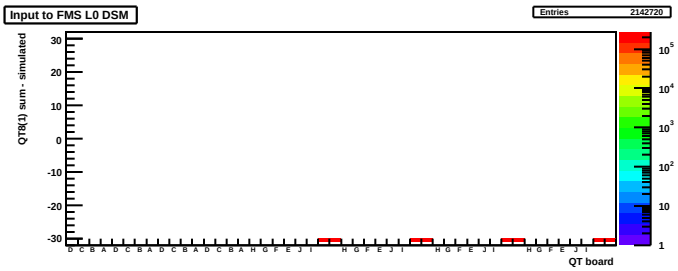

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

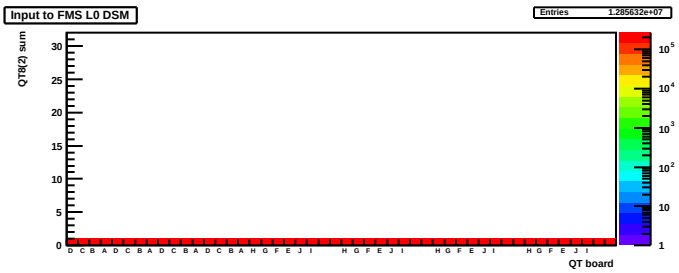

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

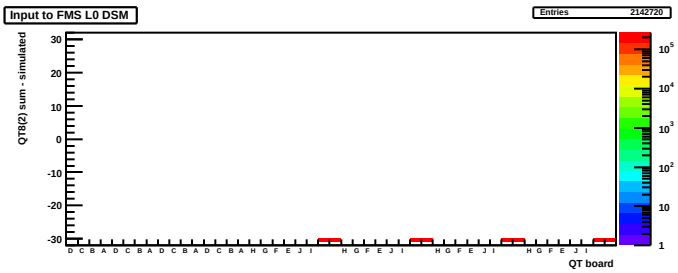

Input to FMS L0 DSM
Entries 1.285632e+07
QT8(0) sum
QT board

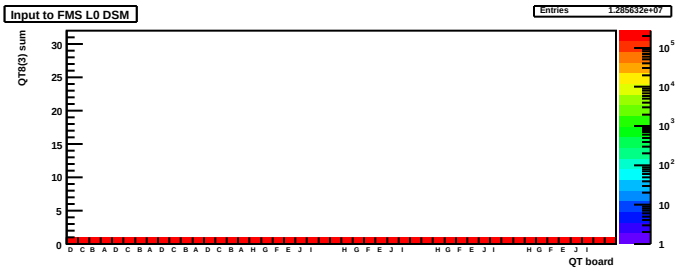

Input to FMS L0 DSM
Entries 2142720
QT8(0) sum - simulated
QT board

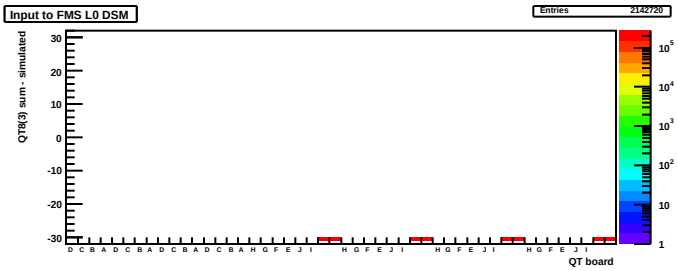

Input to FMS L0 DSM
Entries 1.285632e+07
QT8(1) sum
QT board

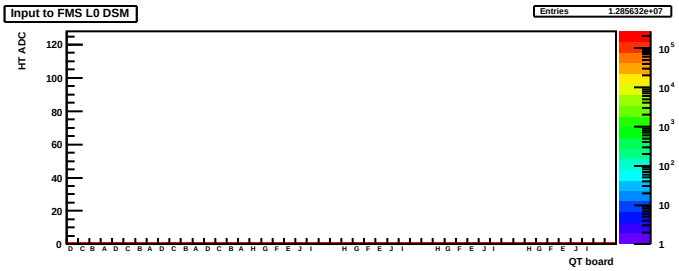

Input to FMS L0 DSM
Entries 2142720
QT8(1) sum - simulated
QT board

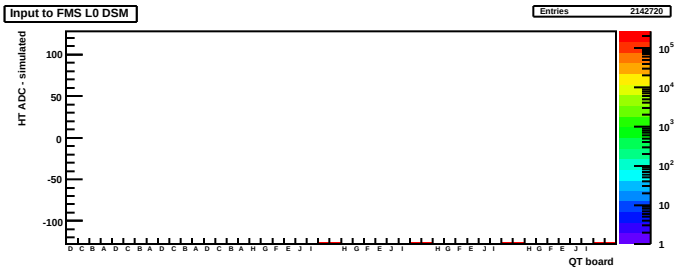

Input to FMS L0 DSM
Entries 1.285632e+07
QT8(2) sum
QT board

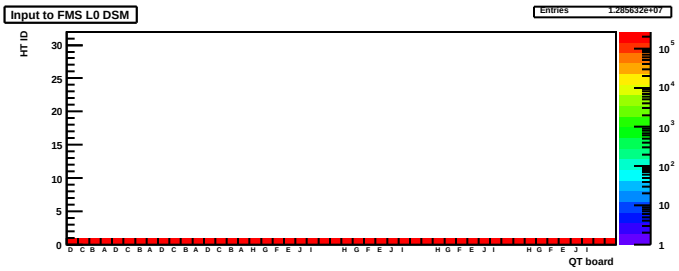

Input to FMS L0 DSM
Entries 2142720
QT8(2) sum - simulated
QT board

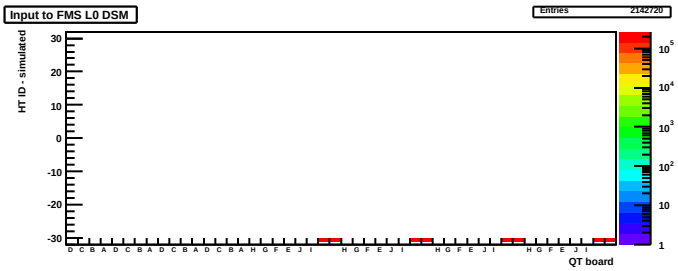

Input to FMS L0 DSM
Entries 1.285632e+07
QT8(3) sum
QT board

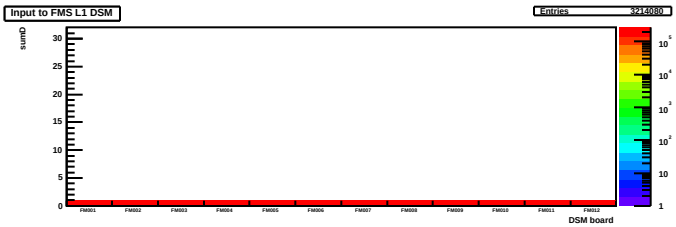

Input to FMS L0 DSM
Entries 2142720
QT8(3) sum - simulated
QT board

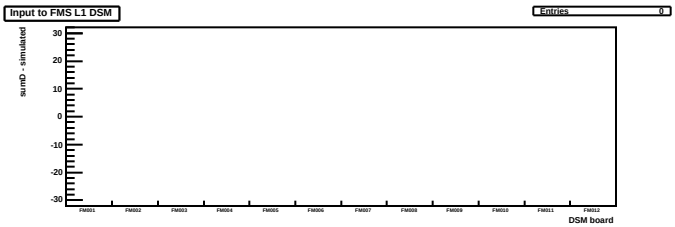

Input to FMS L0 DSM
Entries 1.285632e+07
HT ADC
QT board

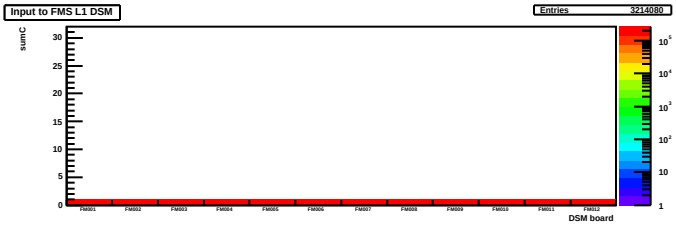

Input to FMS L0 DSM
Entries 2142720
HT ADC - simulated
QT board

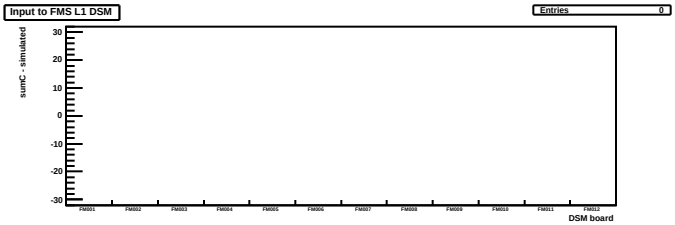

Input to FMS L0 DSM
Entries 1.285632e+07
HT ID
QT board

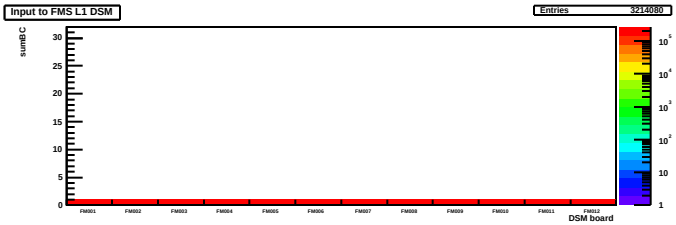

Input to FMS L0 DSM
Entries 2142720
HT ID - simulated
QT board

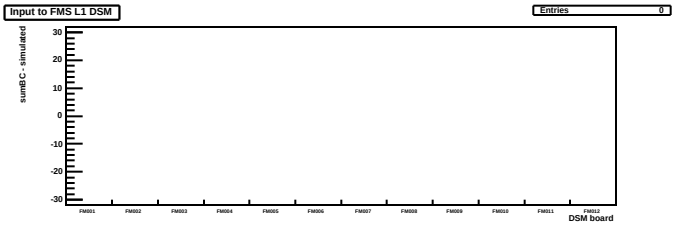

Input to FMS L1 DSM
Entries 3214080
sumD
DSM board

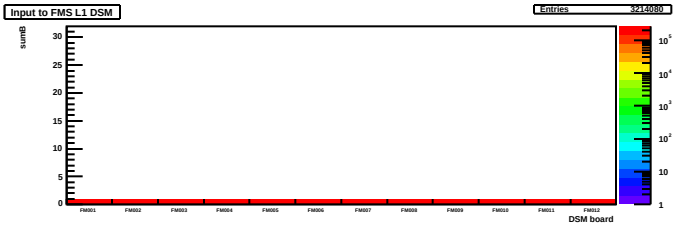

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

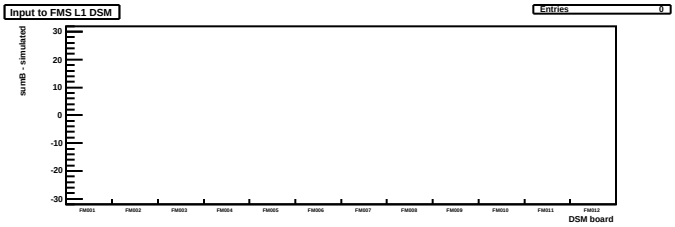

Input to FMS L1 DSM
Entries 3214080
sumC
DSM board

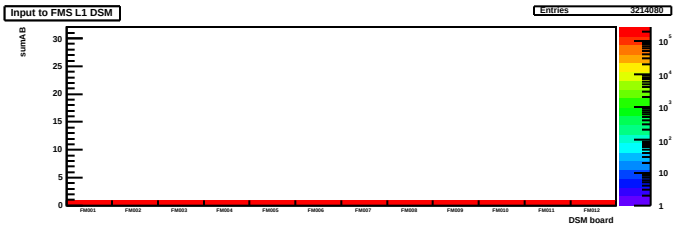

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

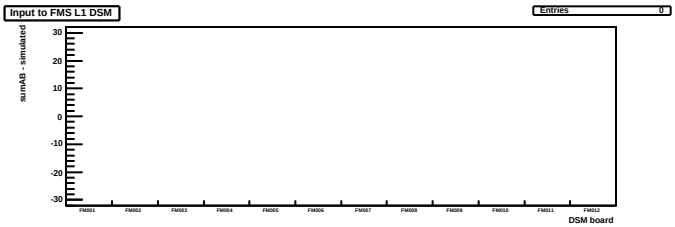

Input to FMS L1 DSM
Entries 3214080
sumBC
DSM board

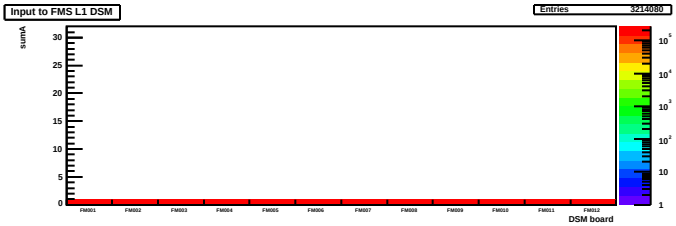

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

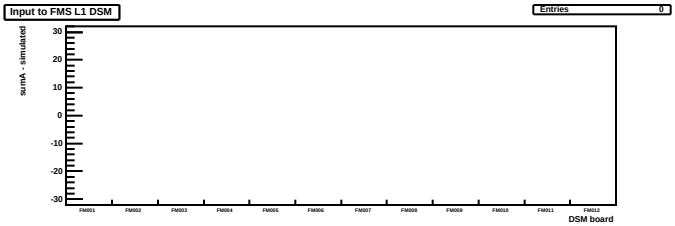

Input to FMS L1 DSM
Entries 3214080
sumB
DSM board

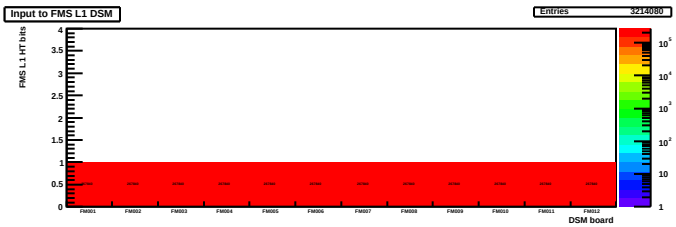

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

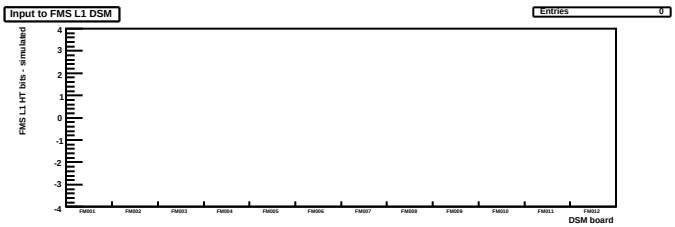

Input to FMS L1 DSM
Entries 3214080
sumAB
DSM board

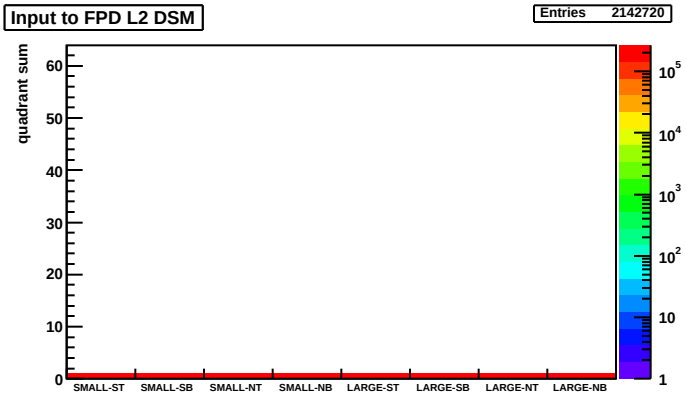

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

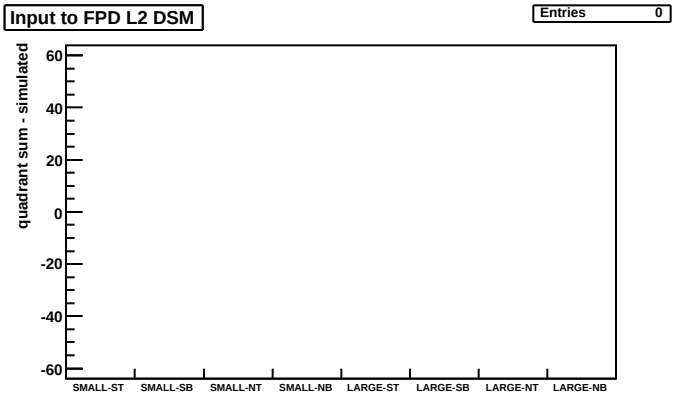

Input to FMS L1 DSM
Entries 3214080
sumA
DSM board

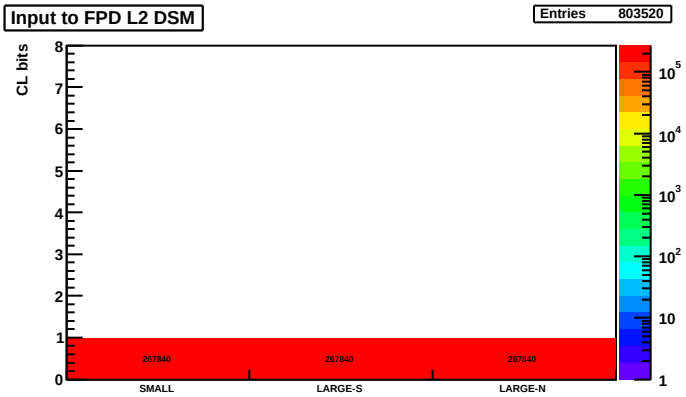

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

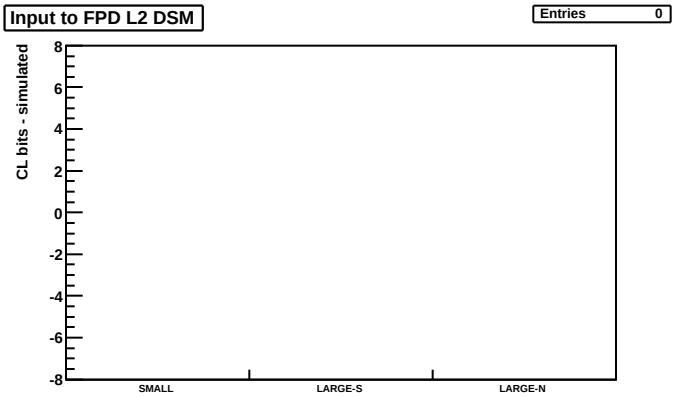

Input to FMS L1 DSM
Entries 3214080
FMS L1 HT bits
DSM board

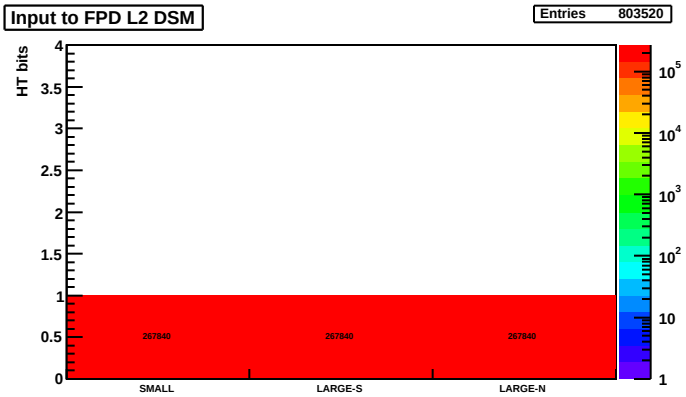

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

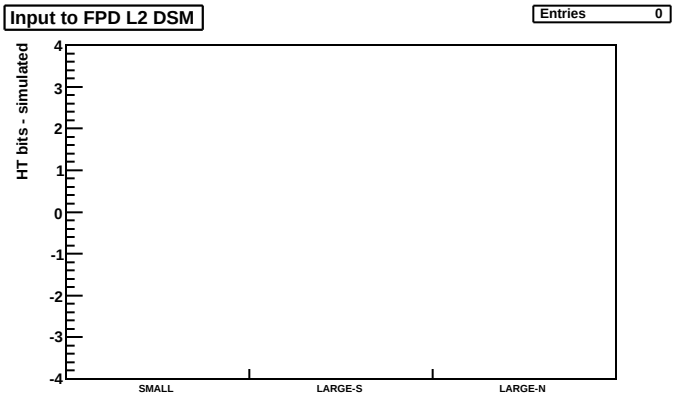

Input to FPD L2 DSM
Entries 2142720
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

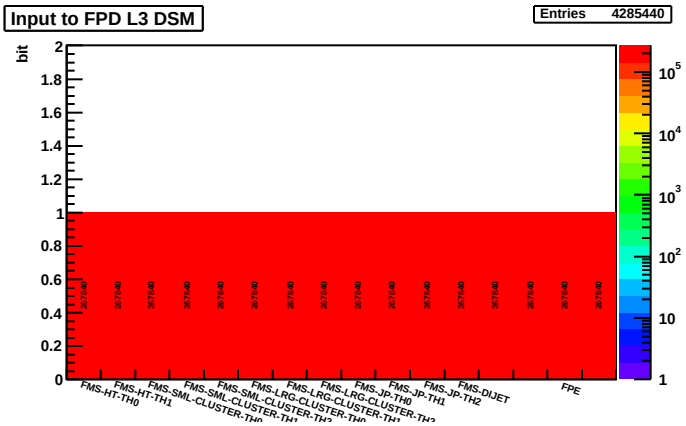

Input to FPD L2 DSM
Entries 0
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

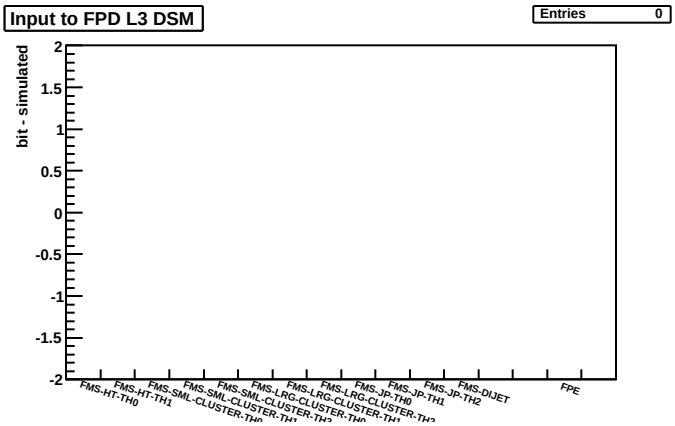

Input to FPD L2 DSM
Entries 803520
CL bits
267840
267840
267840
SMALL
LARGE-S
LARGE-N

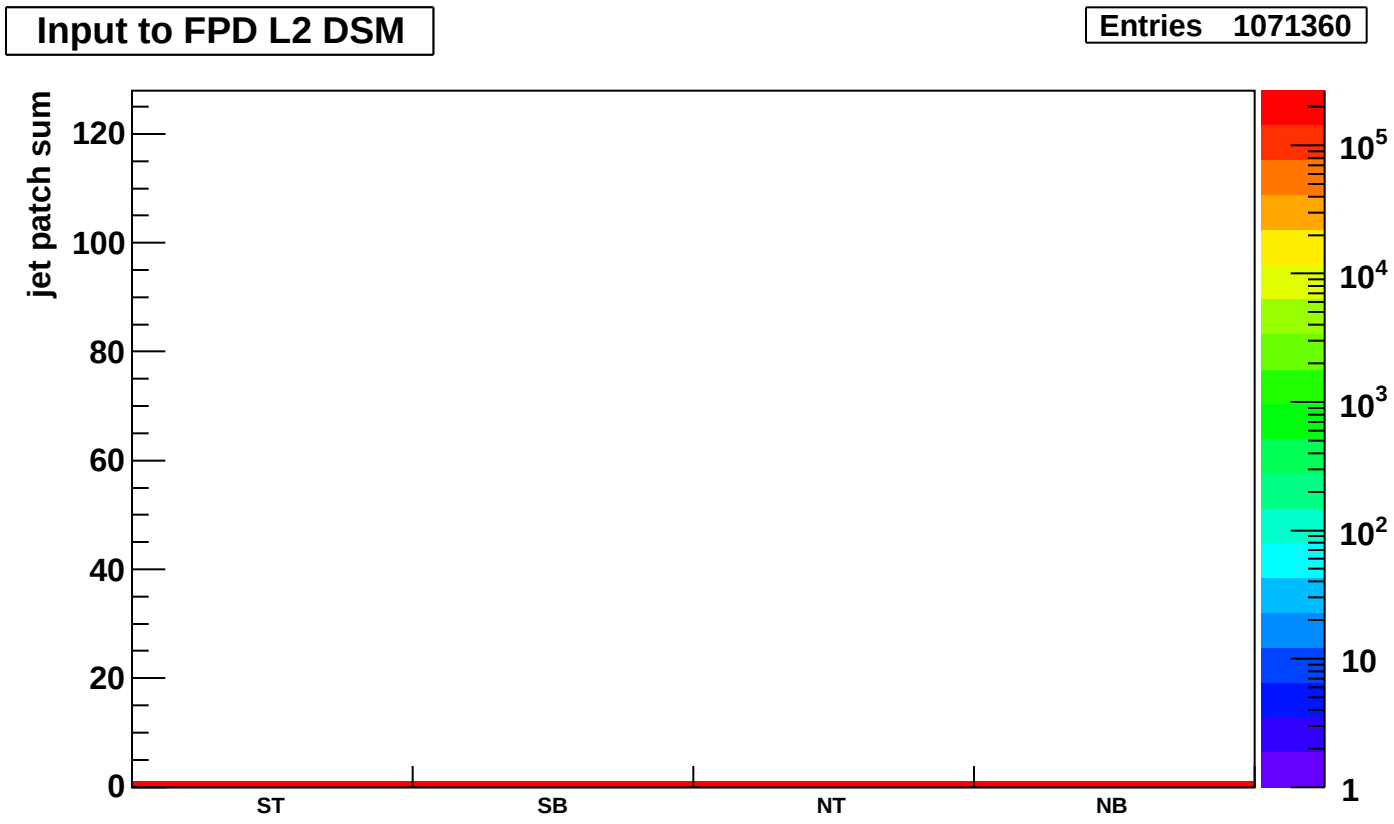

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

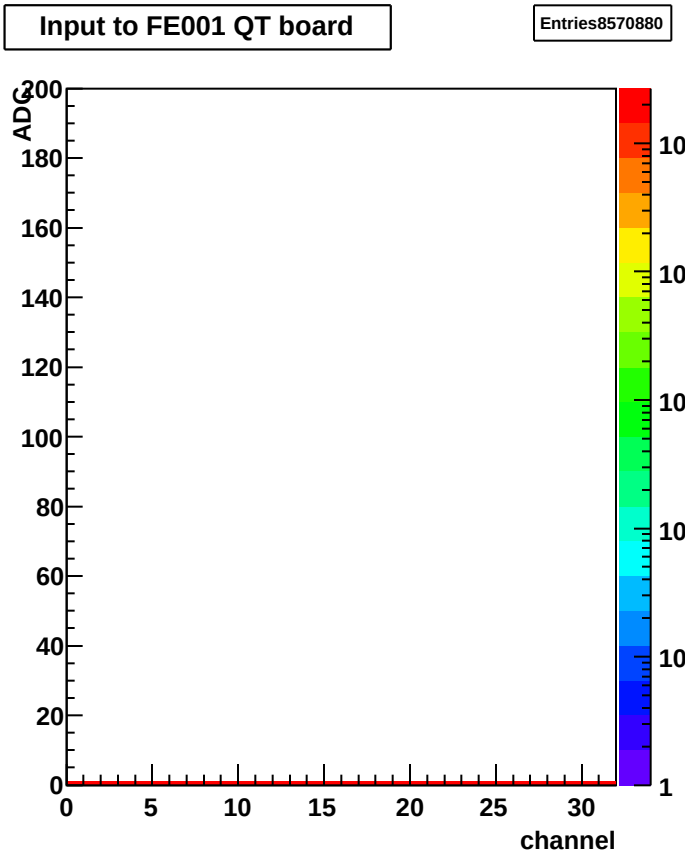

Input to FPD L2 DSM
Entries 803520
HT bits
267840
267840
267840
SMALL
LARGE-S
LARGE-N

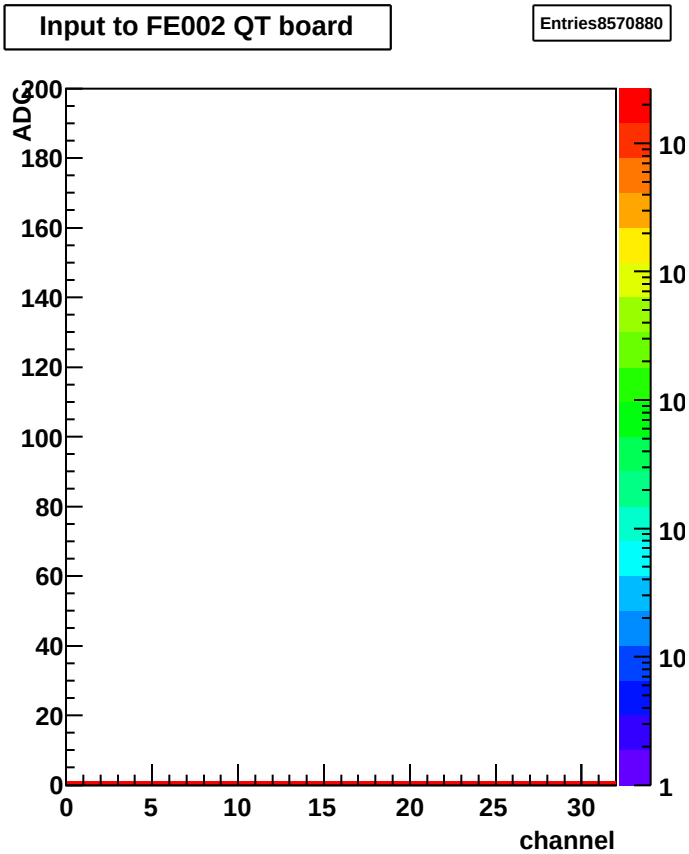

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

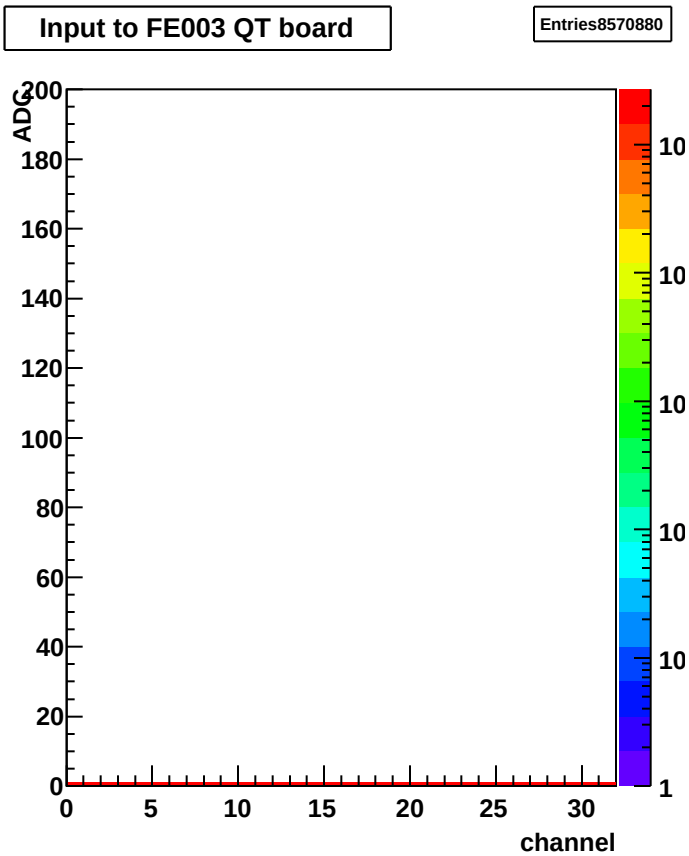

Input to FPD L3 DSM
Entries 4285440
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

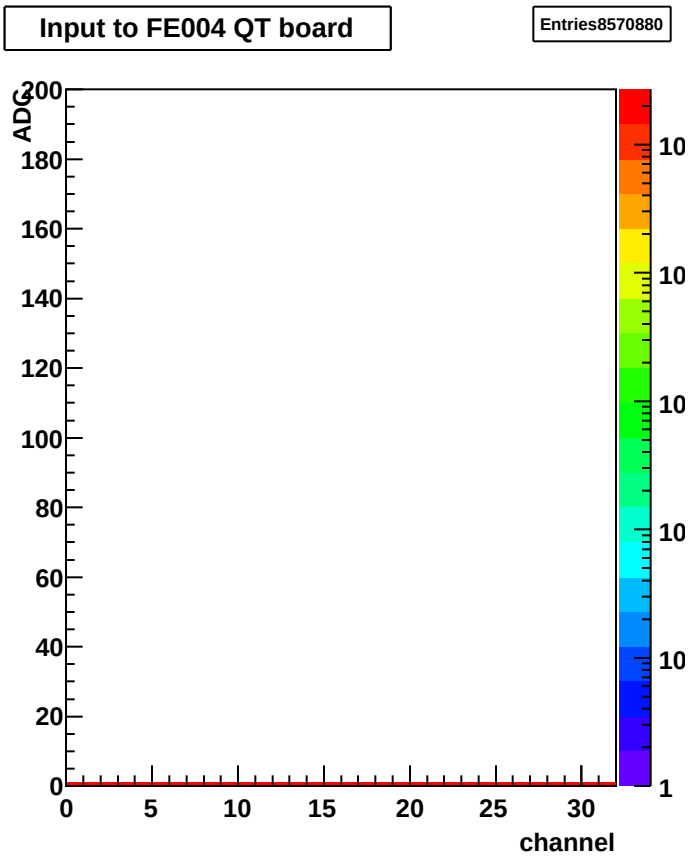

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

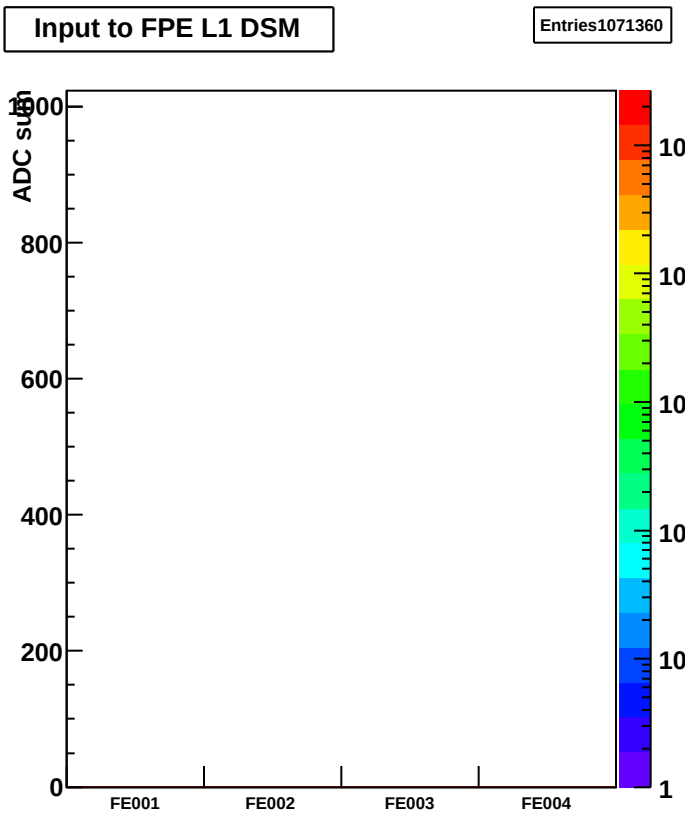

Input to FPD L2 DSM
Entries 1071360
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^5
10^4
10^3
10^2
10
1

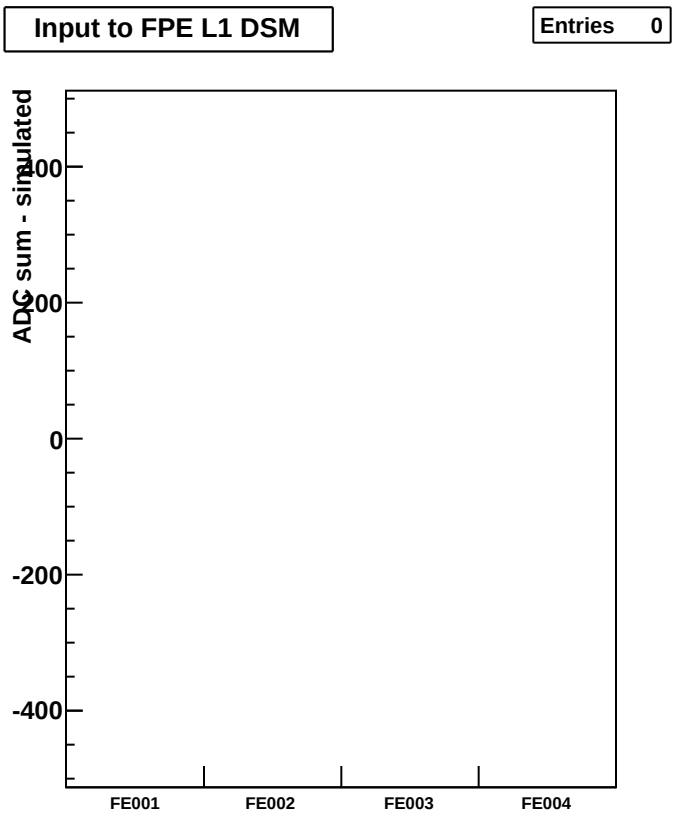

Input to FE001 QT board
Entries8570880
ADC
channel

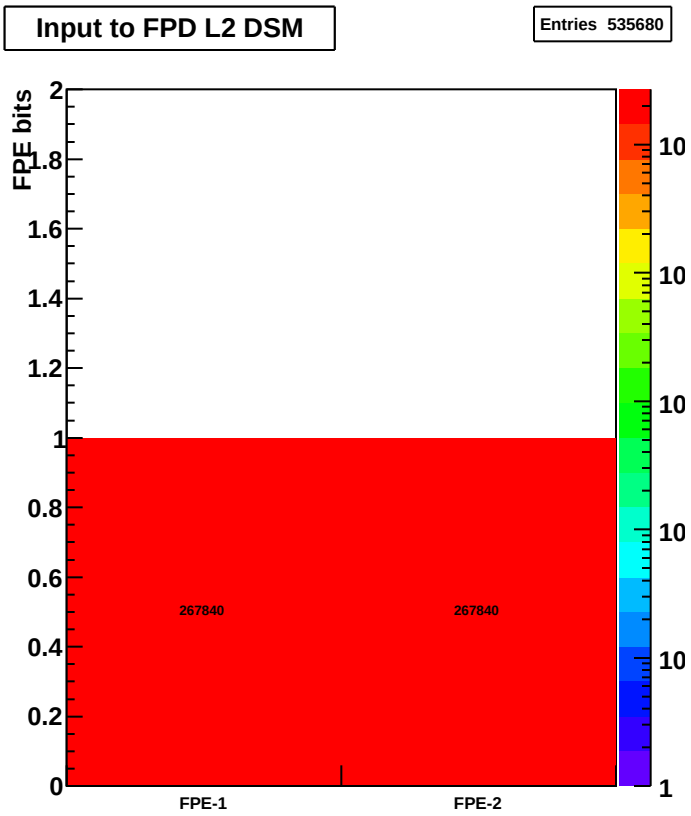

Input to FE002 QT board
Entries8570880
ADC
channel

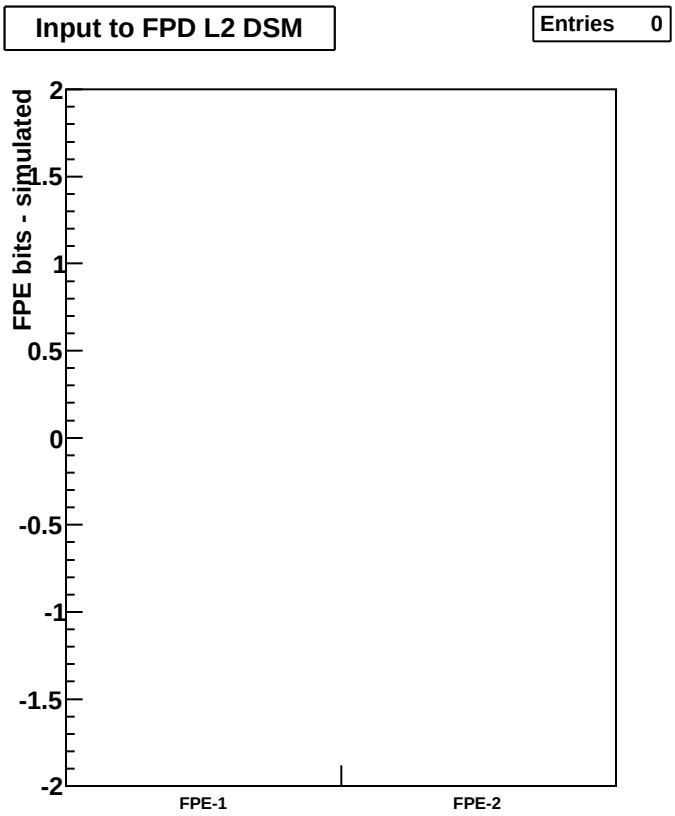

Input to FE003 QT board
Entries8570880
ADC
channel


Input to FE004 QT board
Entries8570880
ADC
channel


Input to FPE L1 DSM
Entries1071360
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


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


Input to FPD L2 DSM
Entries 535680
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
267840
267840
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