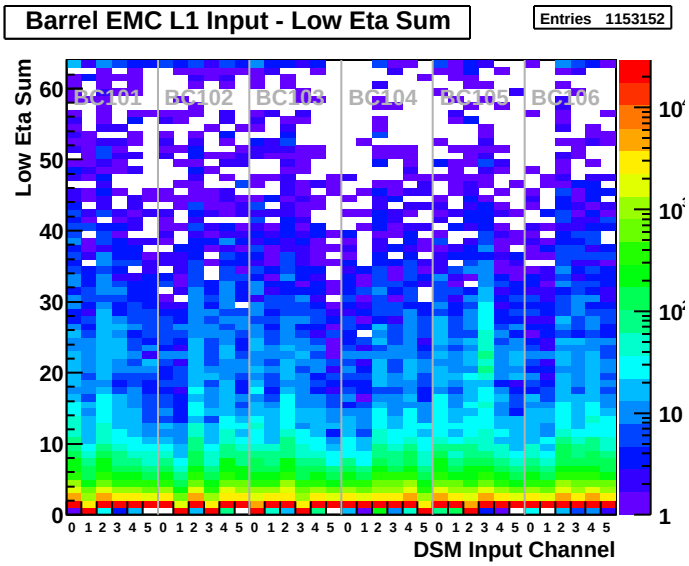
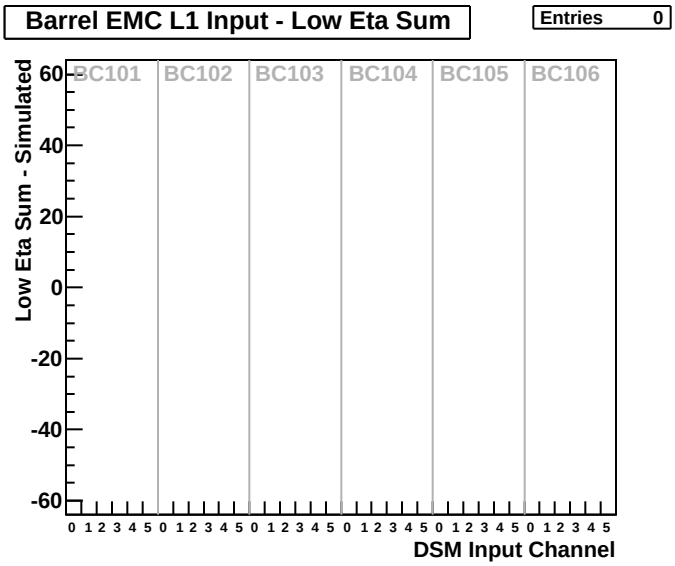
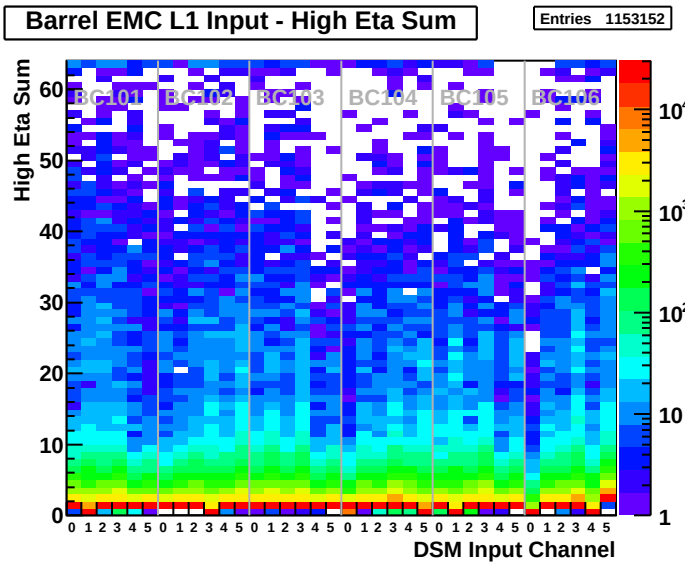
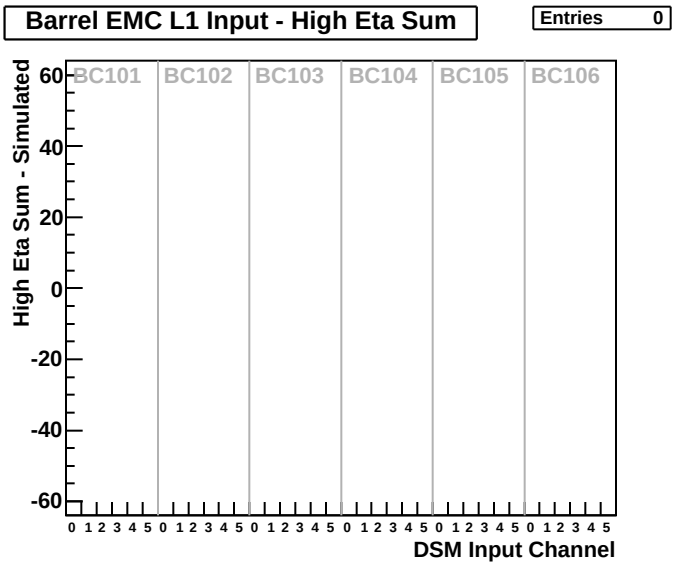
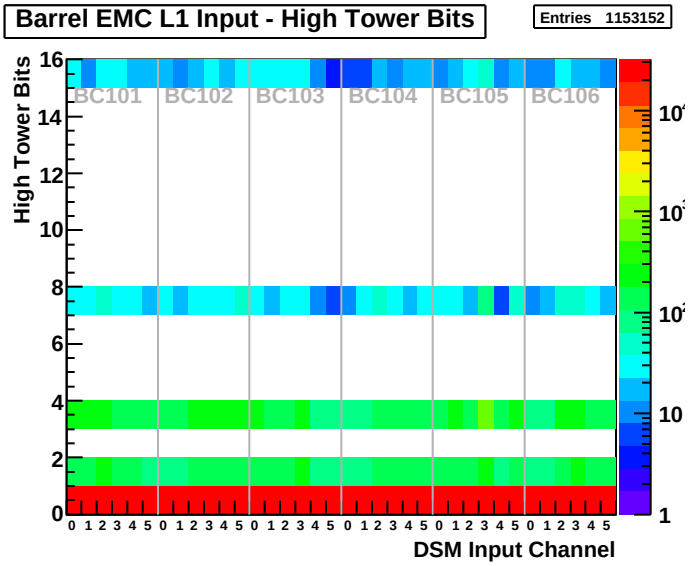
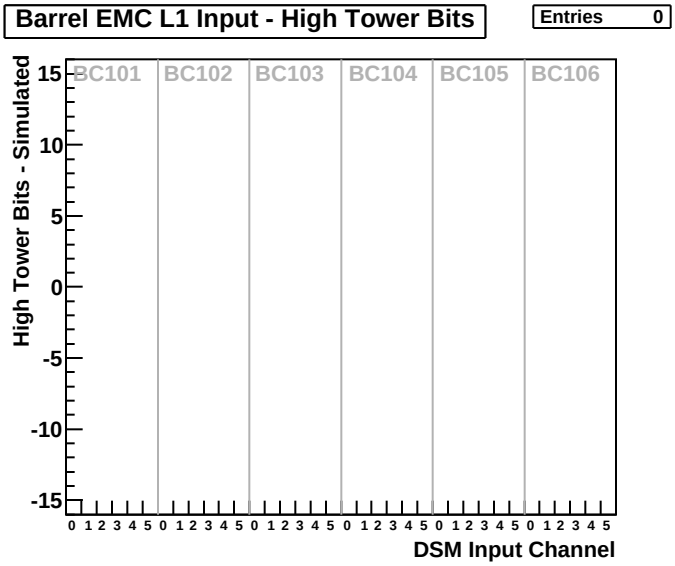

Barrel EMC L1 Input - Low Eta Sum
Entries 1153152
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

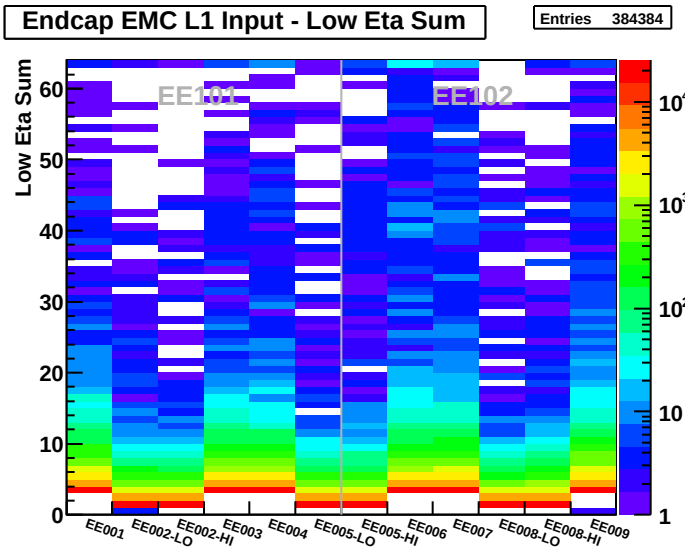

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

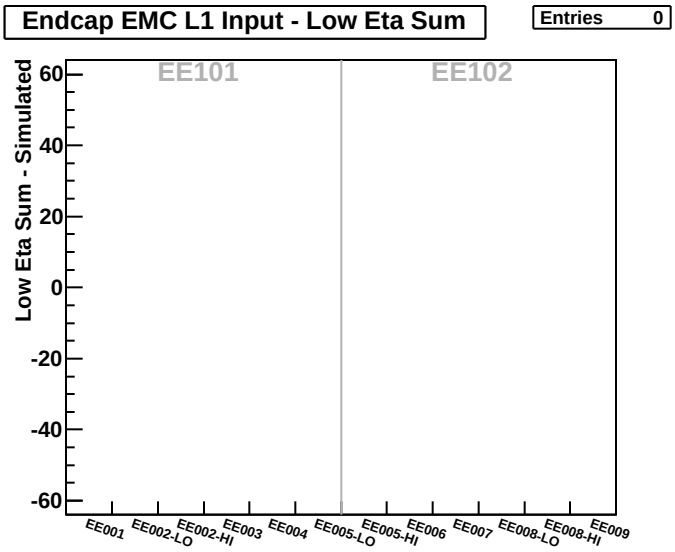

Barrel EMC L1 Input - High Eta Sum
Entries 1153152
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

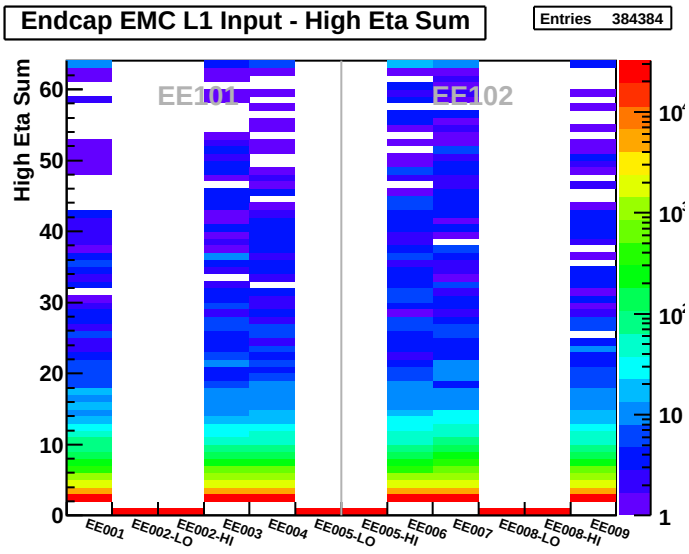

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

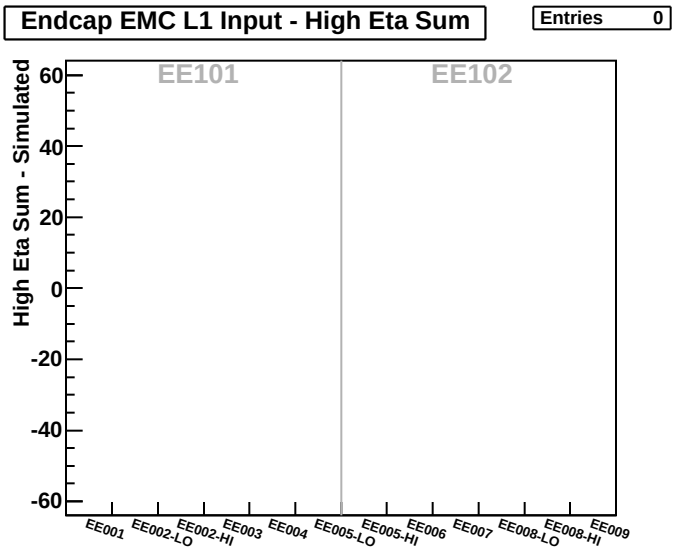

Barrel EMC L1 Input - High Tower Bits
Entries 1153152
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

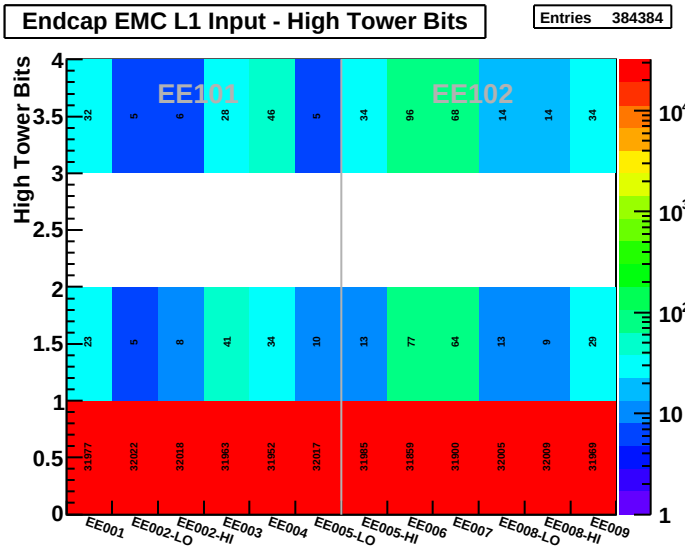

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

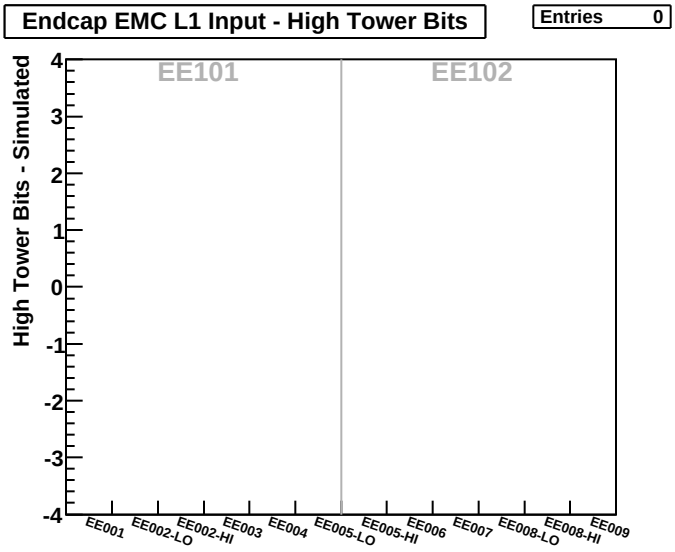

Endcap EMC L1 Input - Low Eta Sum
Entries 384384
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

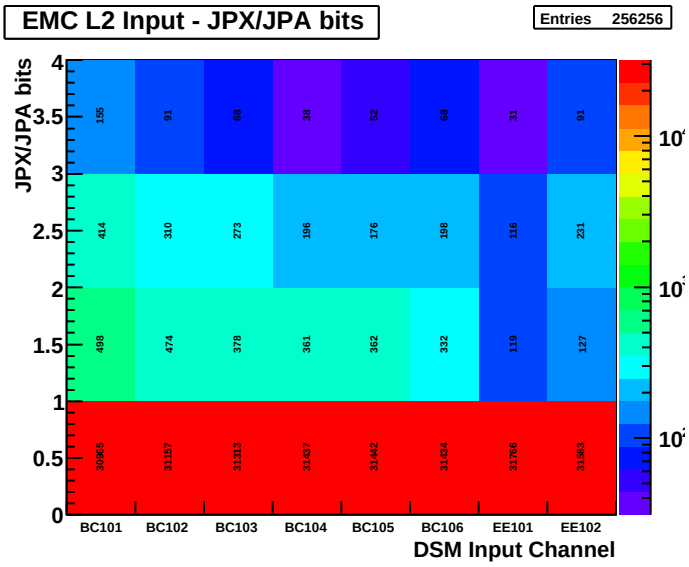

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

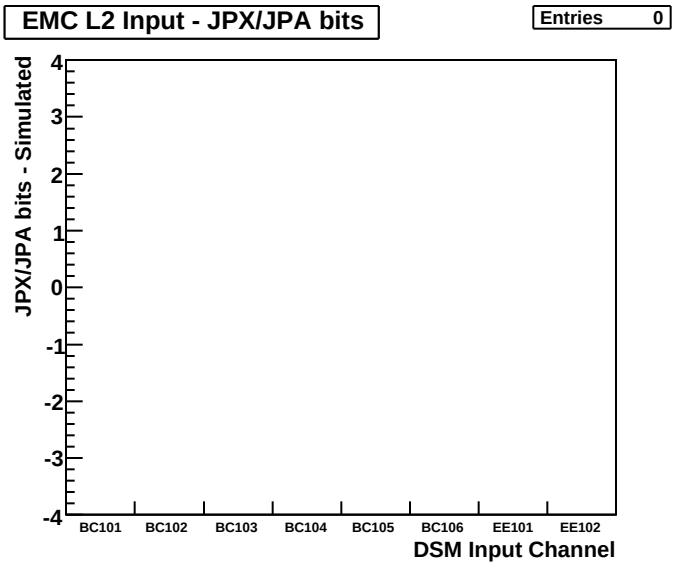

Endcap EMC L1 Input - High Eta Sum
Entries 384384
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

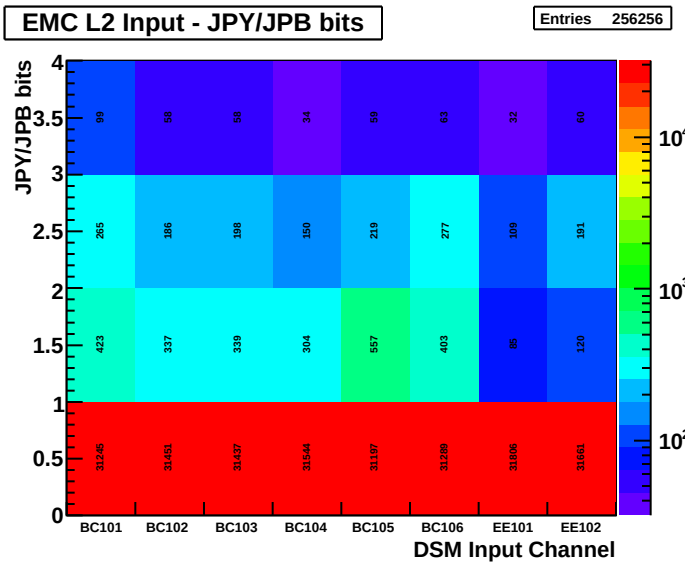

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

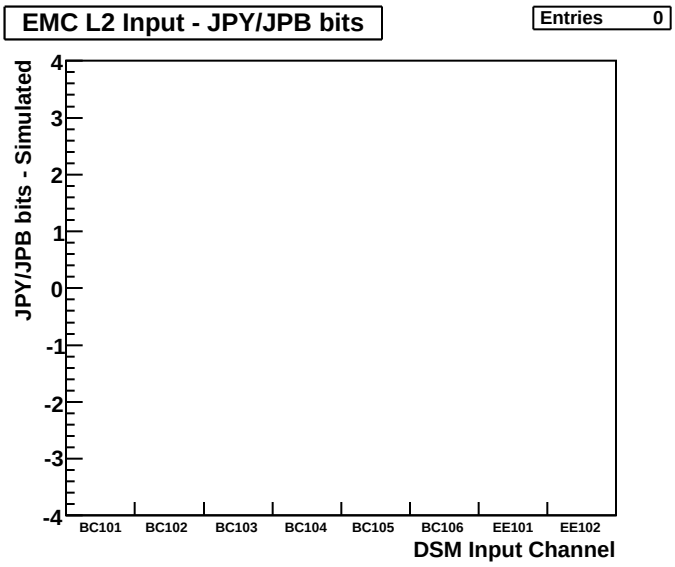

Endcap EMC L1 Input - High Tower Bits
Entries 384384
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

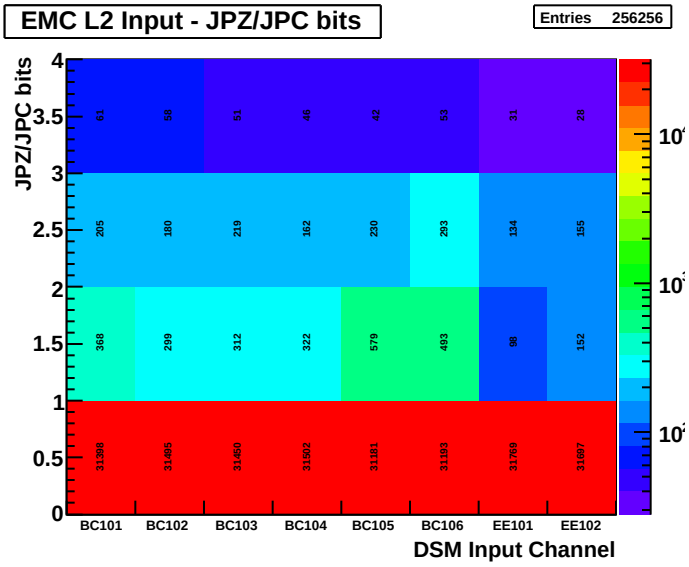

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

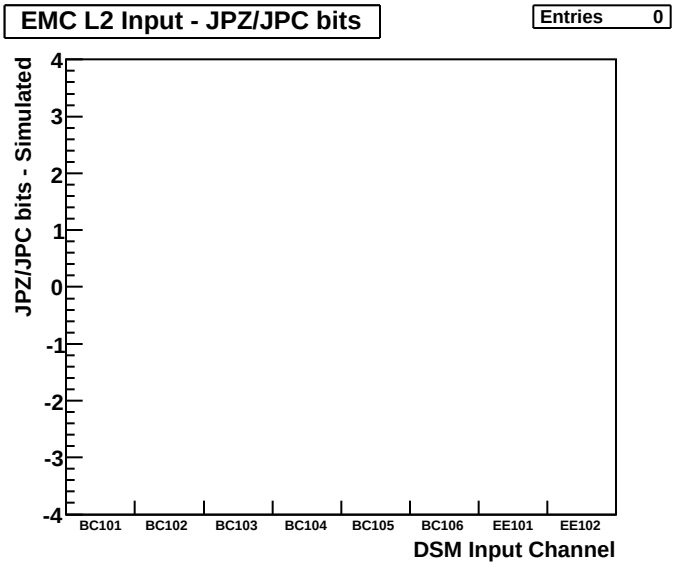

EMC L2 Input - JPX/JPA bits
Entries 256256
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
155 91 68 38 52 68 31 91
414 310 273 196 176 198 116 231
498 474 378 361 362 332 119 127
30965 31157 31313 31437 31442 31434 31766 31583

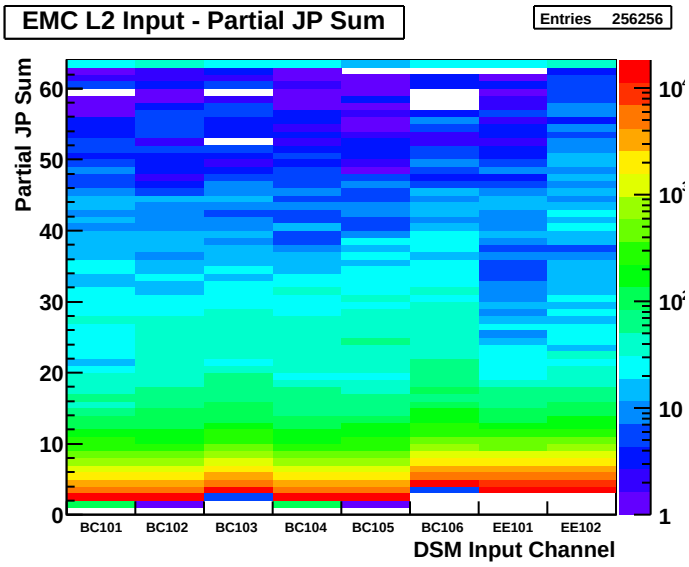

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

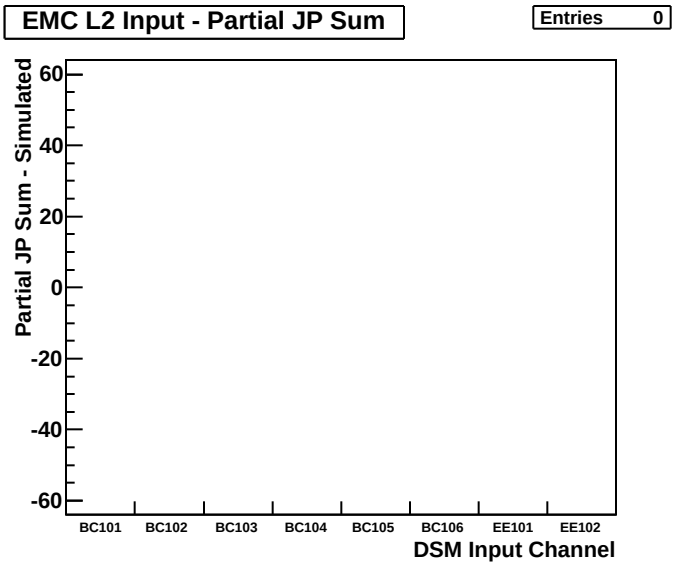

EMC L2 Input - JPY/JPB bits
Entries 256256
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
99 58 58 34 59 63 32 60
265 186 198 150 219 277 109 191
423 337 339 304 557 403 85 120
31245 31451 31437 31544 31197 31289 31806 31661

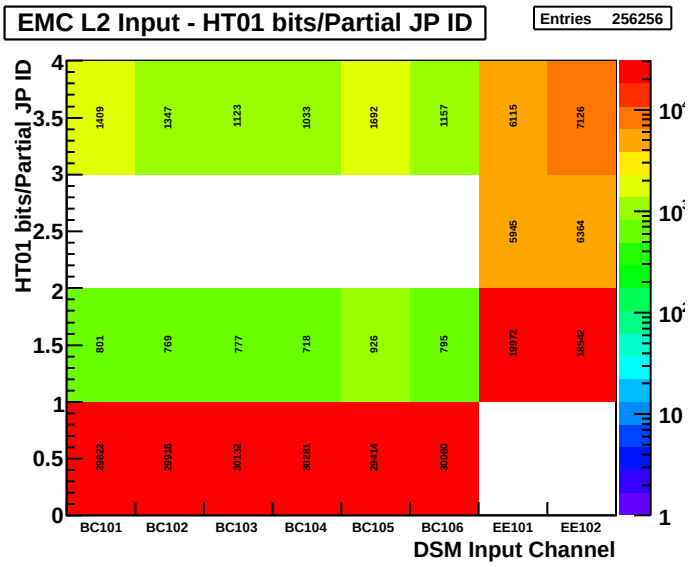

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

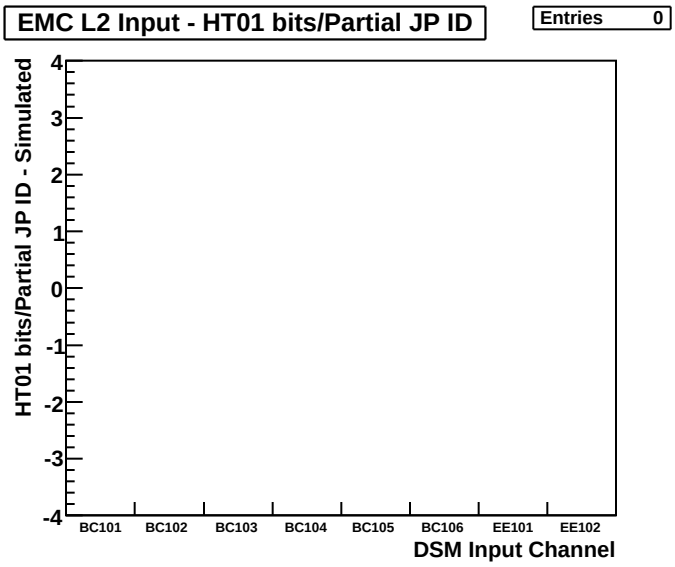

EMC L2 Input - JPZ/JPC bits
Entries 256256
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
61 58 51 46 42 53 31 28
205 180 219 162 230 293 134 155
368 299 312 322 579 493 98 152
31398 31405 31450 31502 31191 31193 31769 31697

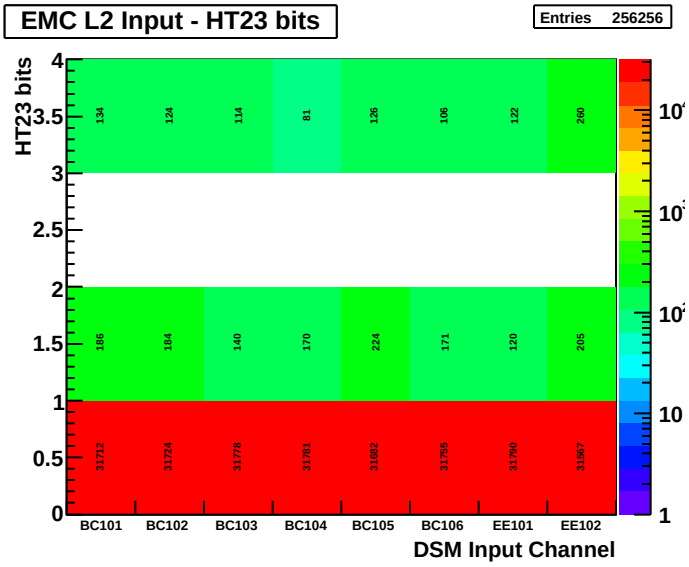

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

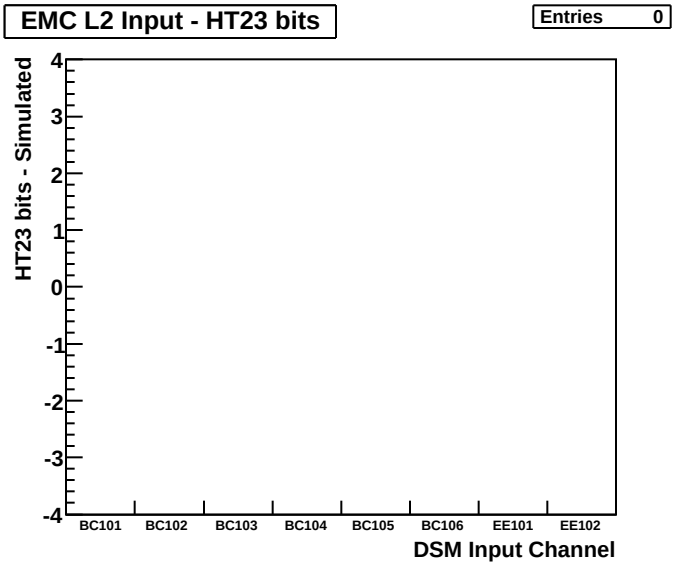

EMC L2 Input - Partial JP Sum
Entries 256256
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

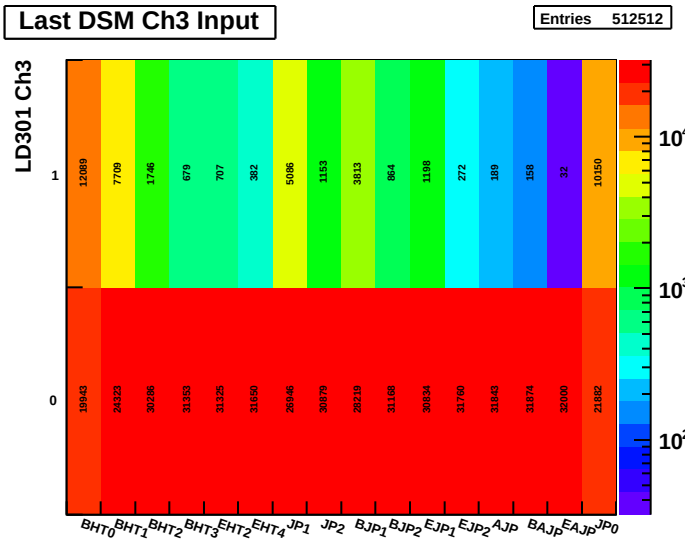

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

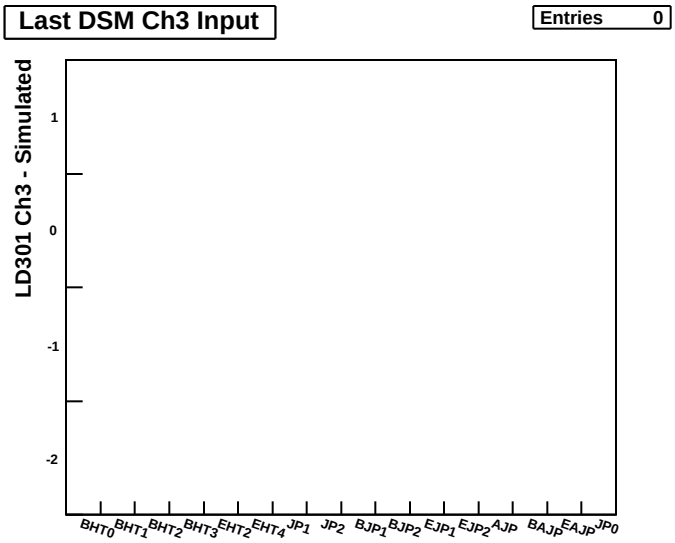

EMC L2 Input - HT01 bits/Partial JP ID
Entries 256256
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

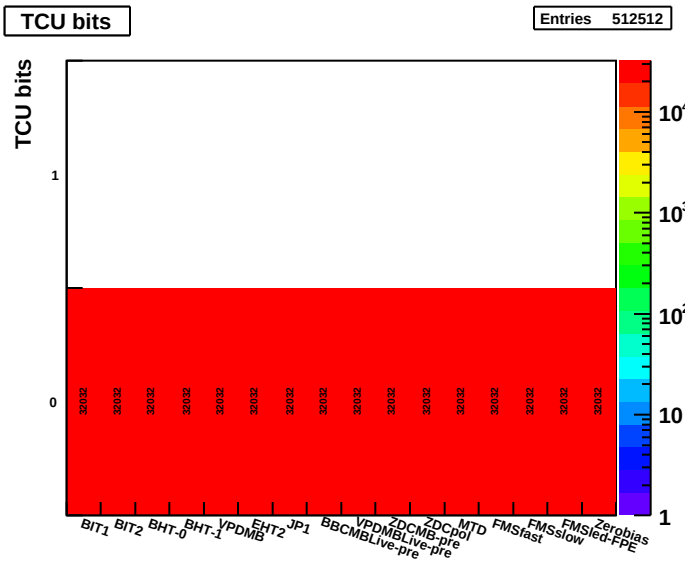

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

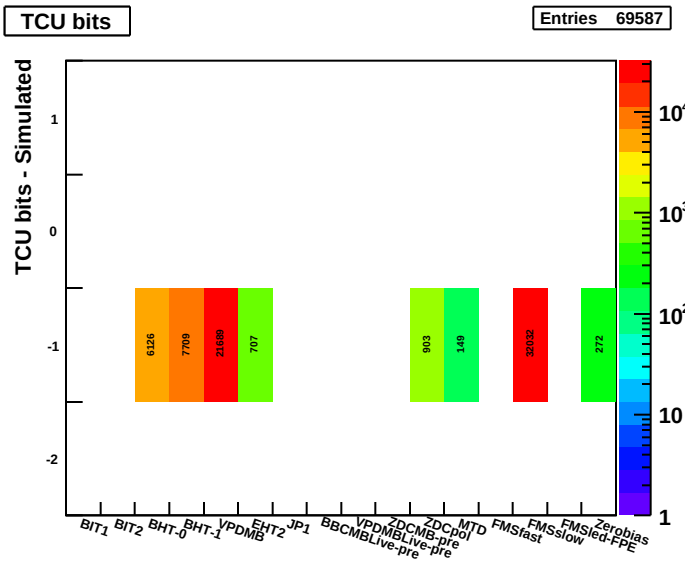

EMC L2 Input - HT23 bits
Entries 256256
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

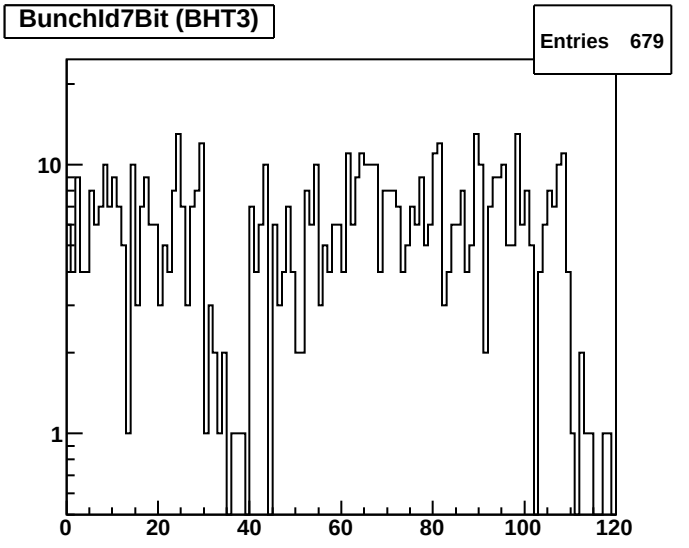

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

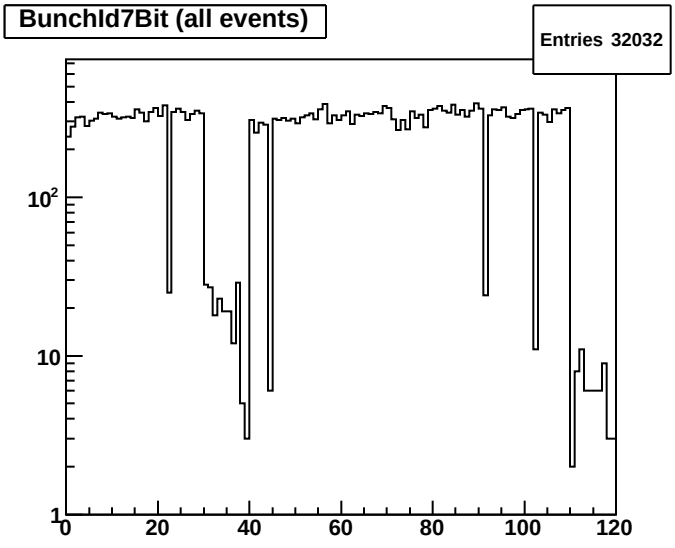

Last DSM Ch3 Input
Entries 512512
LD301 Ch3
12089 7709 1746 679 707 362 5086 1153 3813 864 1198 272 189 158 32 10150
19943 24323 30296 31353 31325 31650 26946 30879 28219 31168 30834 31760 31843 31874 32000 21882
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

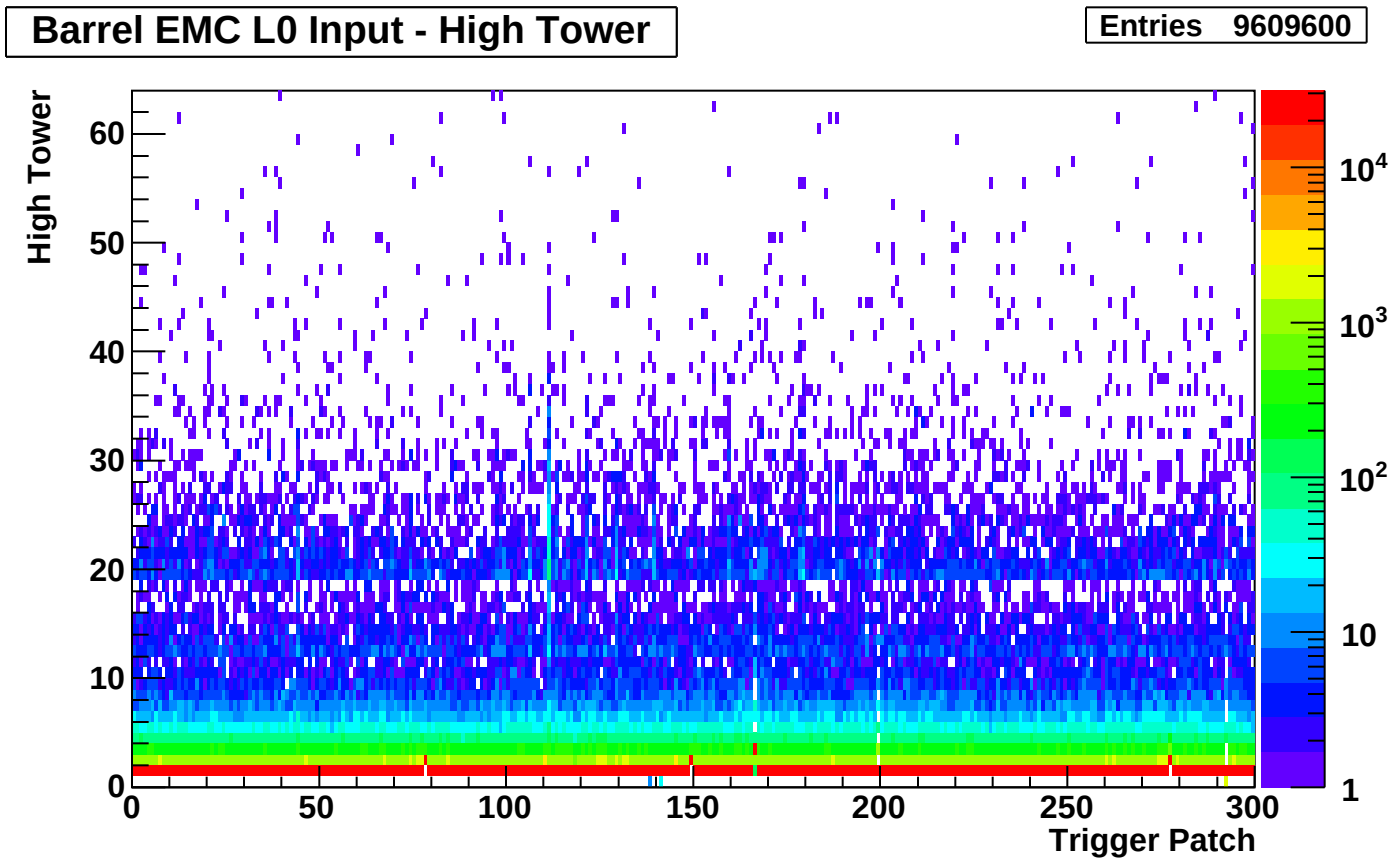

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

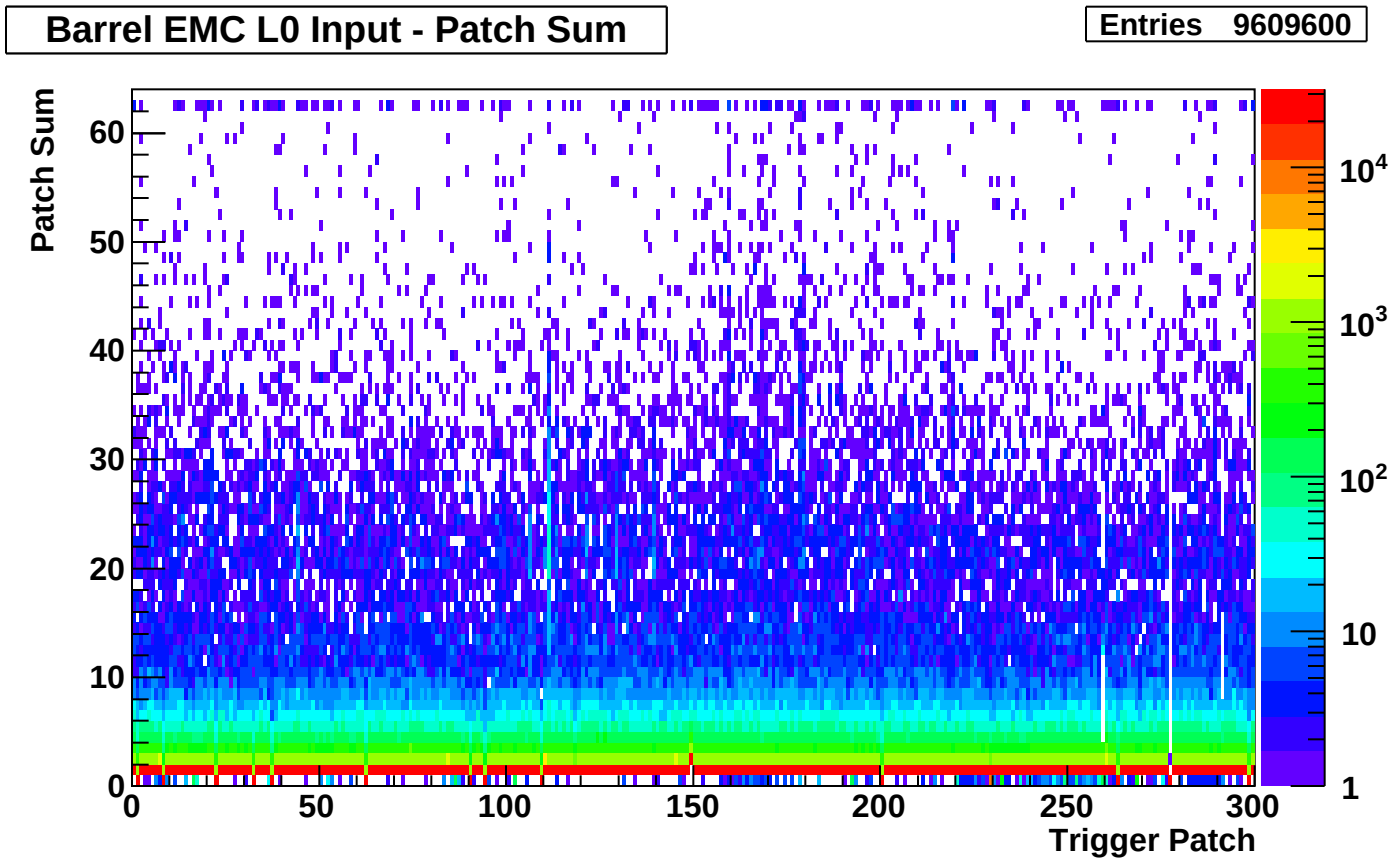

TCU bits
Entries 512512
TCU bits
32032 32032 32032 32032 32032 32032 32032 32032 32032 32032 32032 32032 32032 32032 32032 32032
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

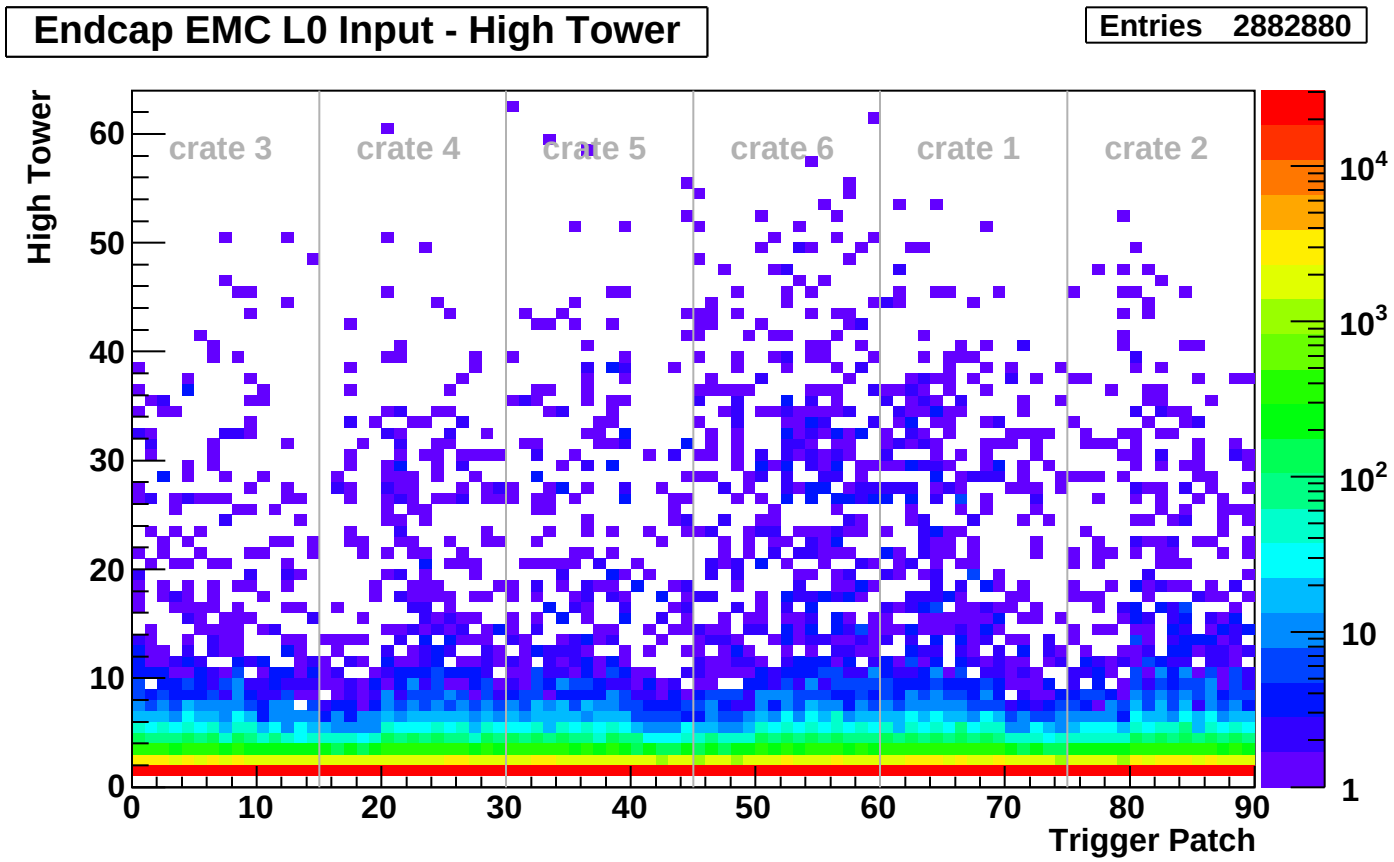

TCU bits
Entries 69587
TCU bits - Simulated
6126 7709 21689 707 903 149 32032 272
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

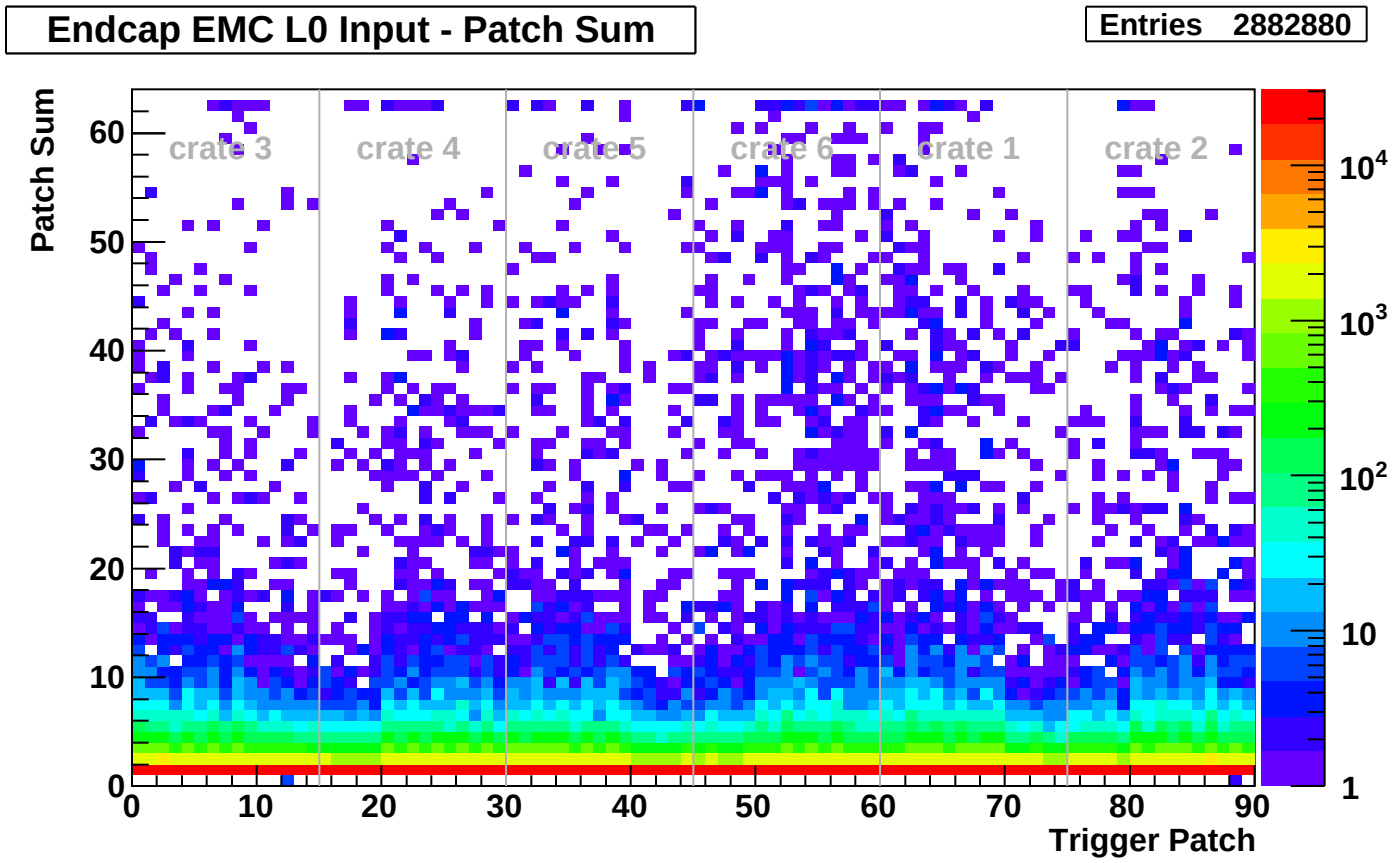

BunchId7Bit (BHT3)
Entries 679

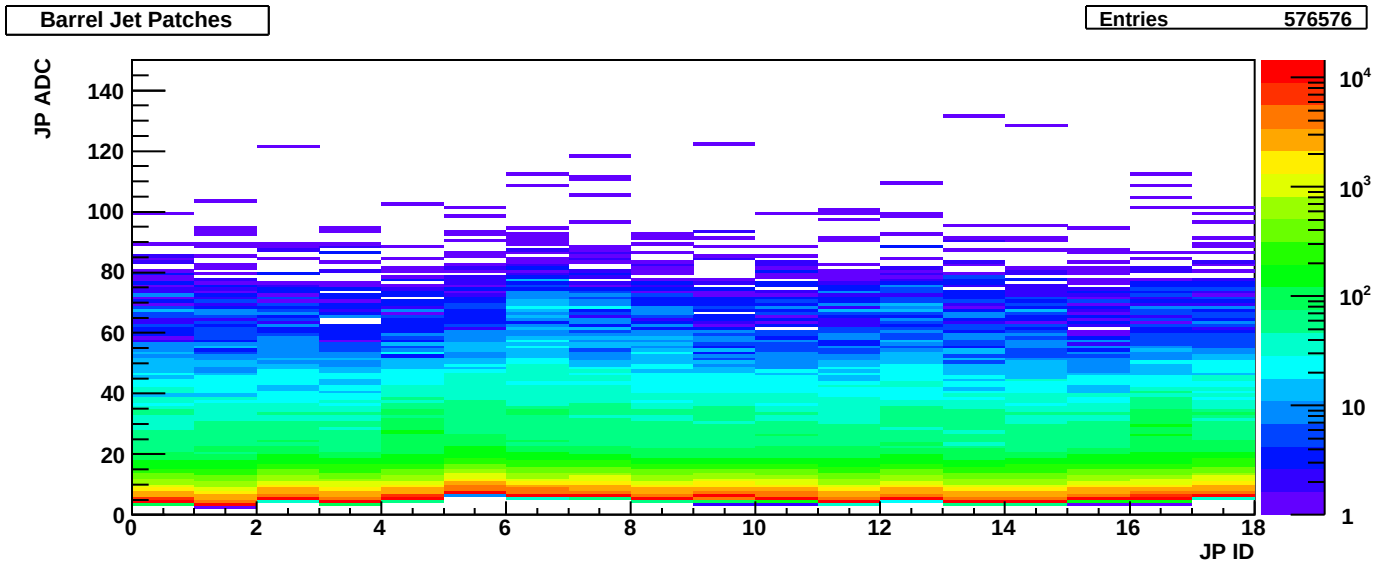

BunchId7Bit (all events)
Entries 32032

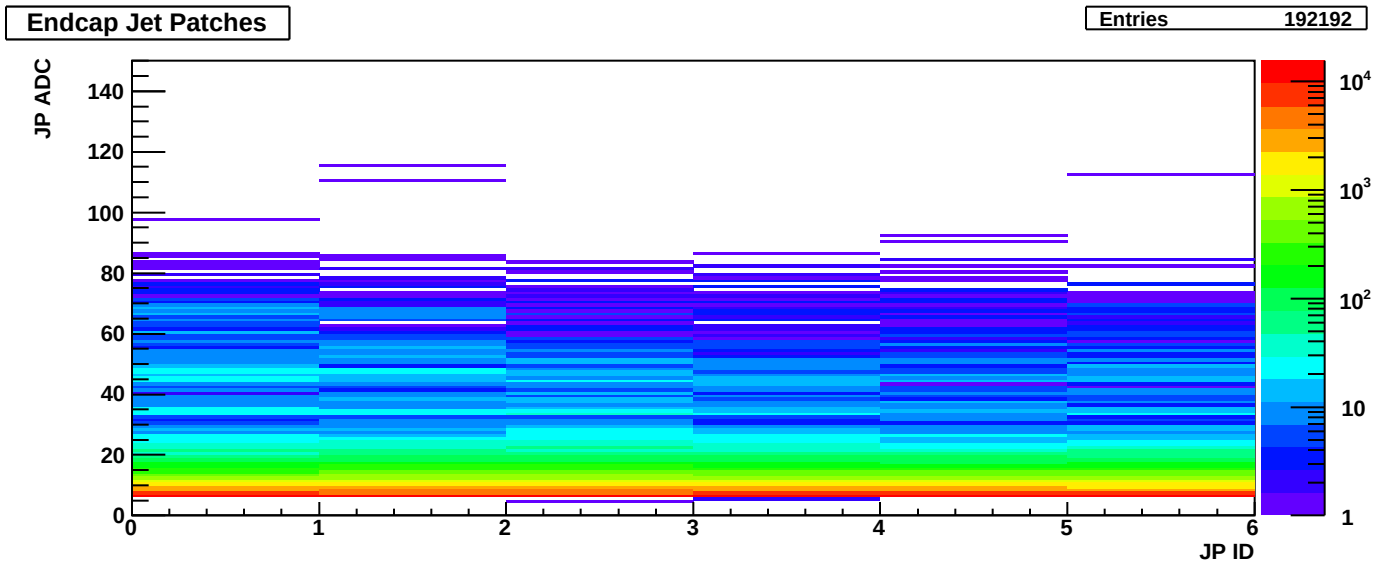

Barrel EMC L0 Input - High Tower
Entries 9609600
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

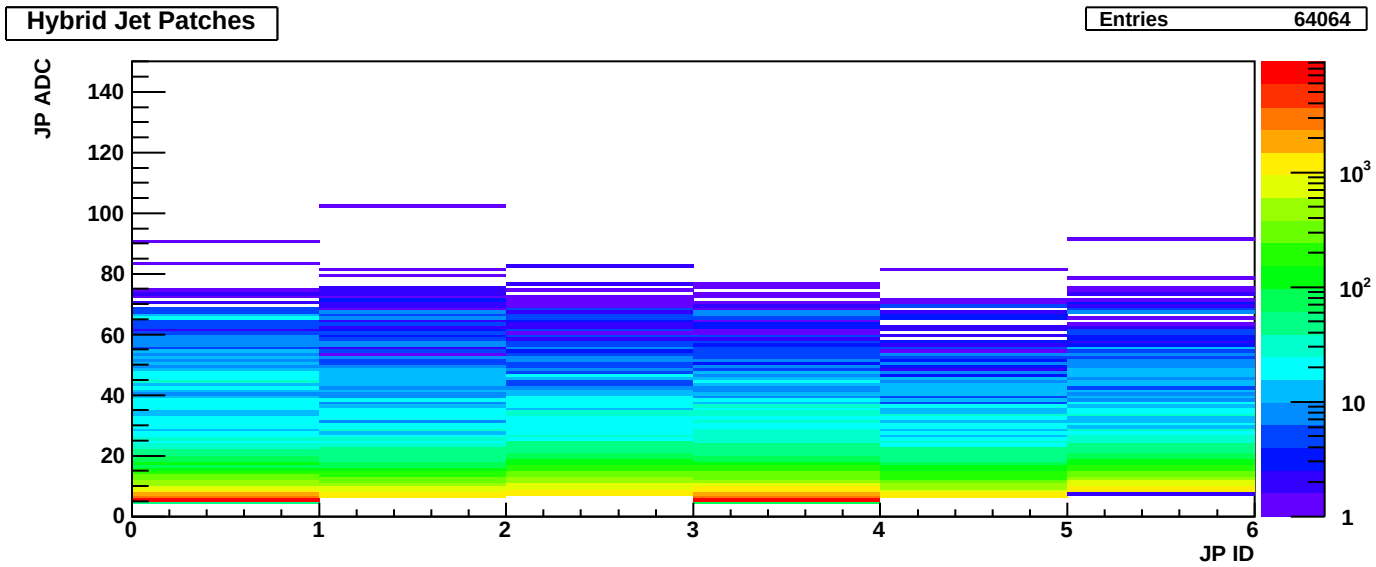

Barrel EMC L0 Input - Patch Sum
Entries 9609600
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

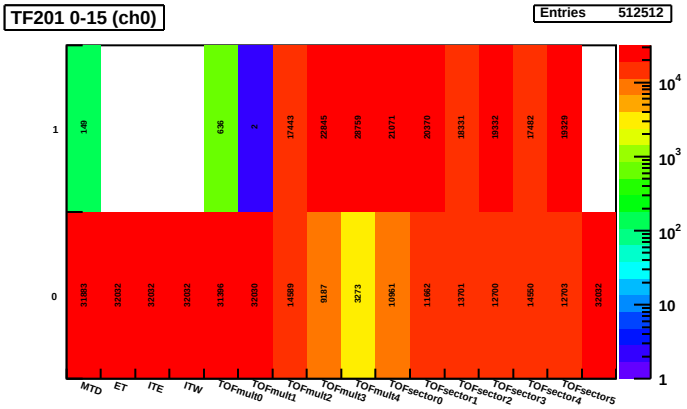

Endcap EMC L0 Input - High Tower
Entries 2882880
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

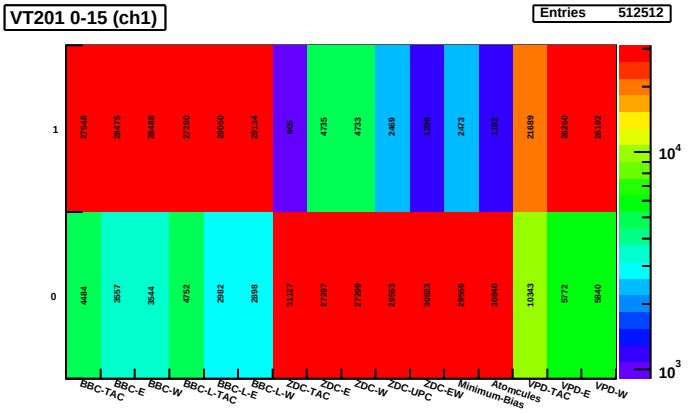

Endcap EMC L0 Input - Patch Sum
Entries 2882880
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

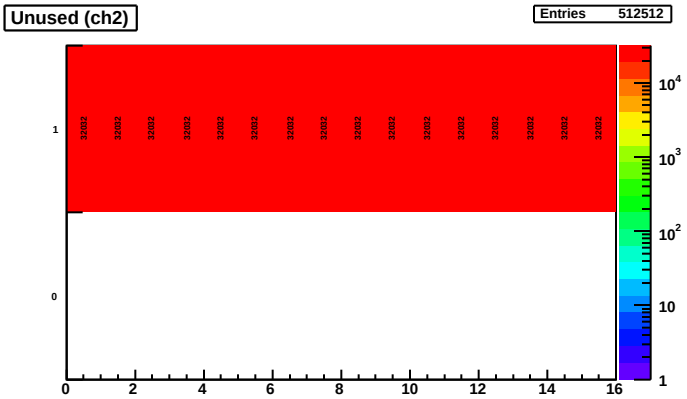

Barrel Jet Patches
Entries 576576
JP ADC
JP ID

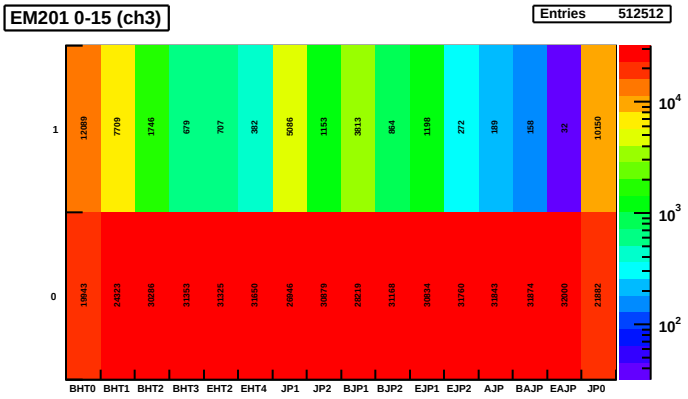

Endcap Jet Patches
Entries 192192
JP ADC
JP ID

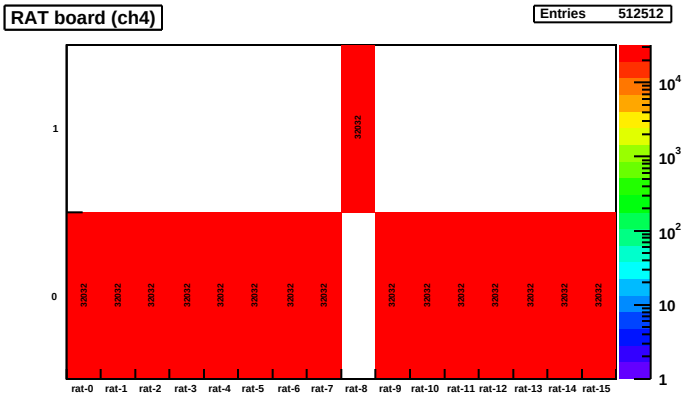

Hybrid Jet Patches
Entries 64064
JP ADC
JP ID

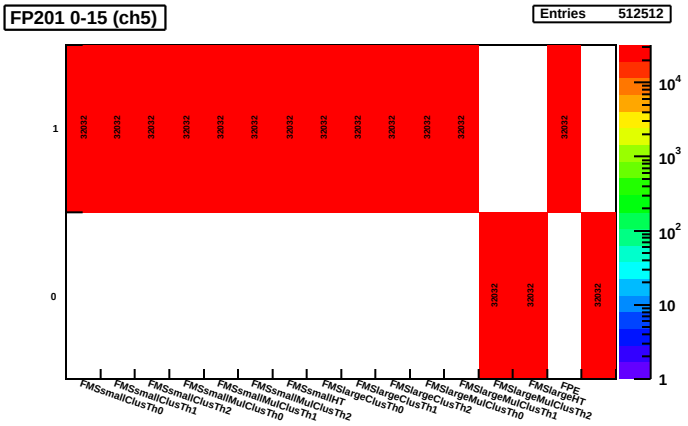

TF201 0-15 (ch0)
Entries 512512
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

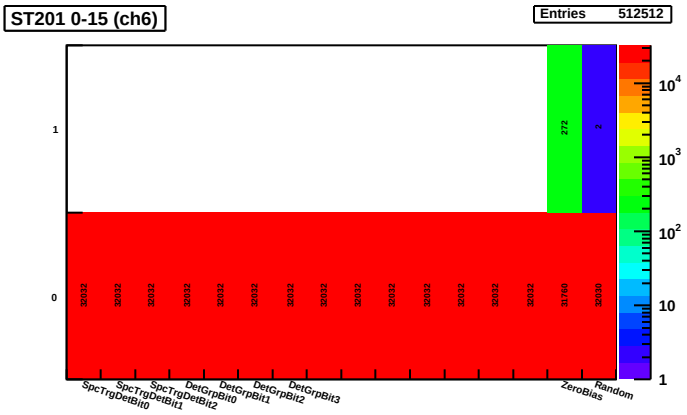

VT201 0-15 (ch1)
Entries 512512
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

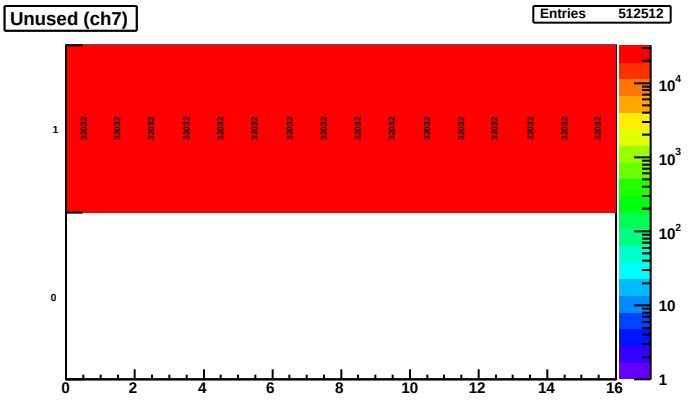

Unused (ch2)
Entries 512512

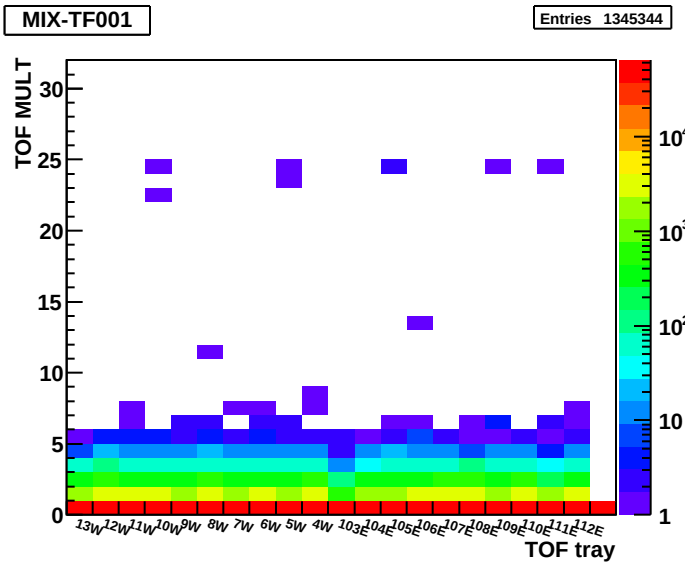

EM201 0-15 (ch3)
Entries 512512
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

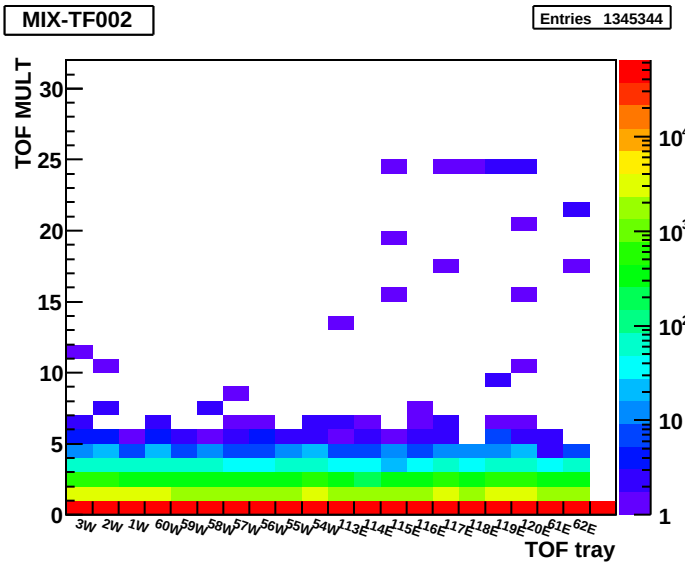

RAT board (ch4)
Entries 512512
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

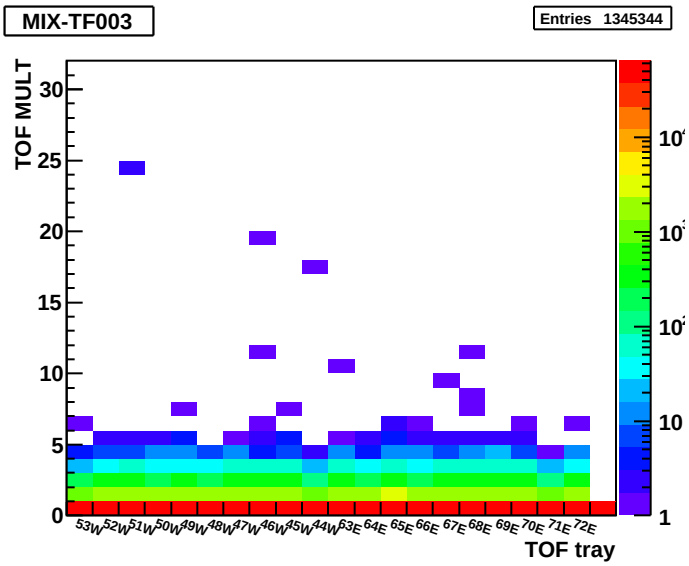

FP201 0-15 (ch5)
Entries 512512
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

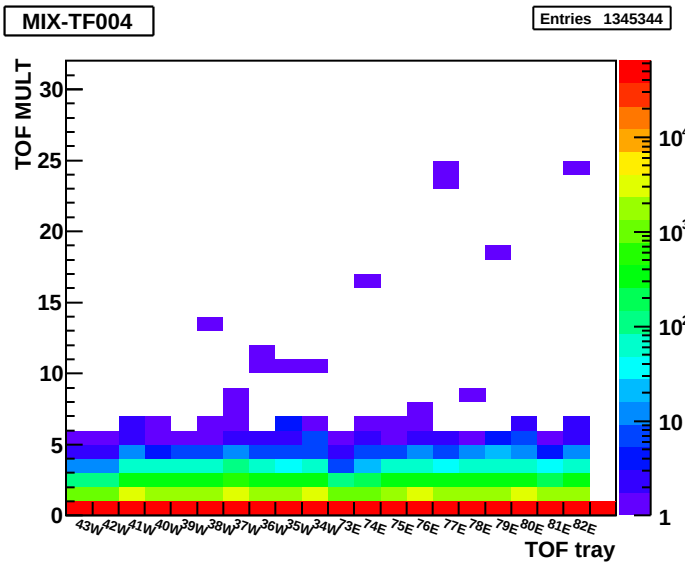

ST201 0-15 (ch6)
Entries 512512
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

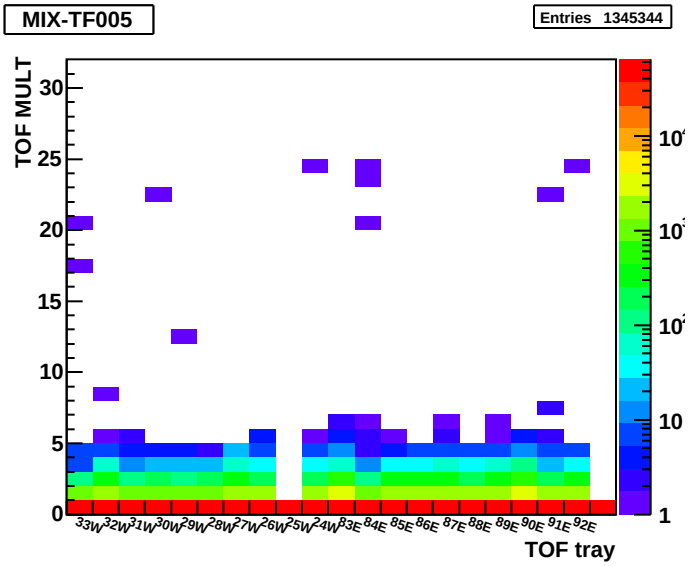

Unused (ch7)
Entries 512512

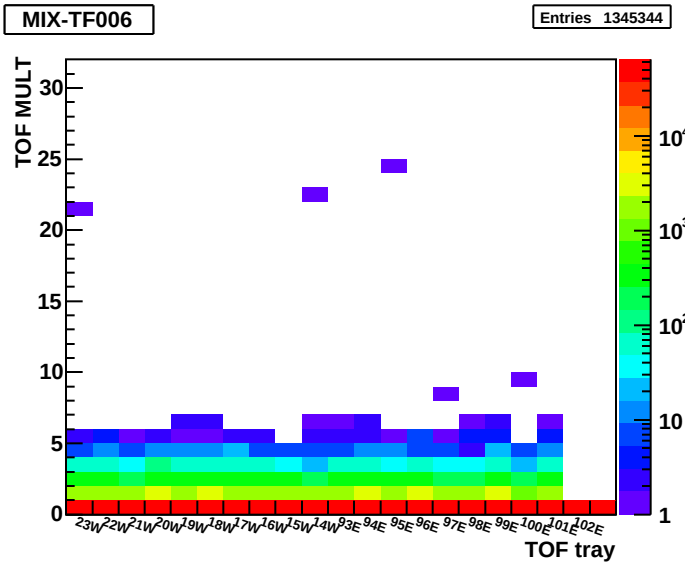

MIX-TF001
Entries 1345344
TOF MULT
TOF tray

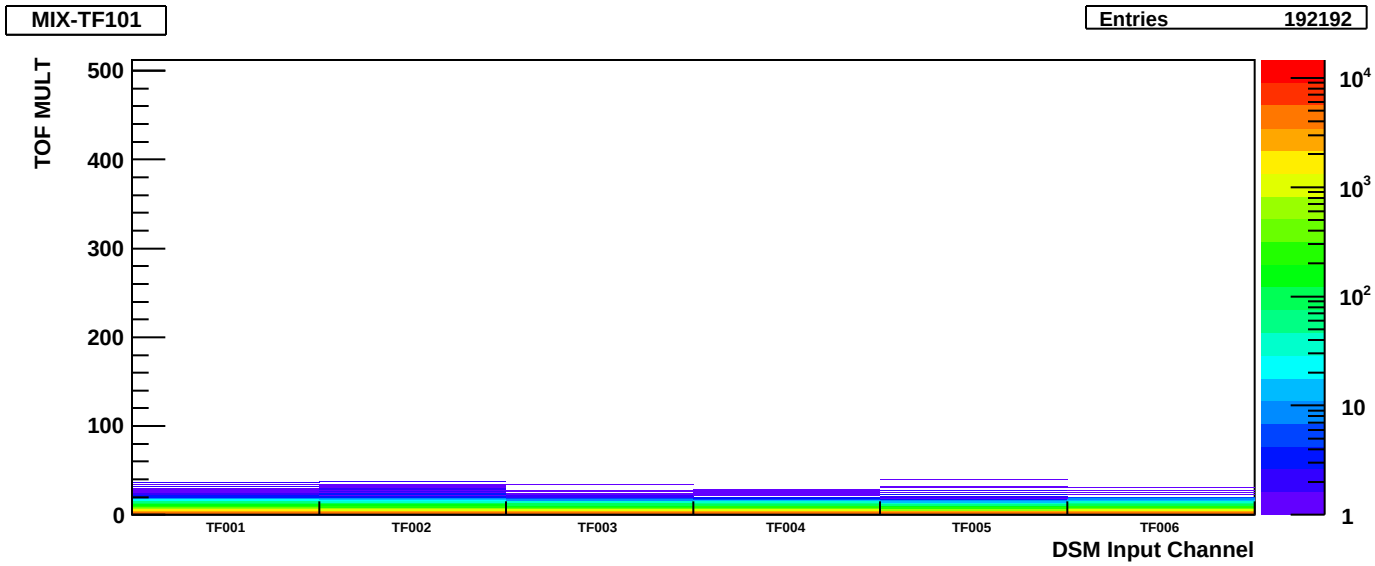

MIX-TF002
Entries 1345344
TOF MULT
TOF tray

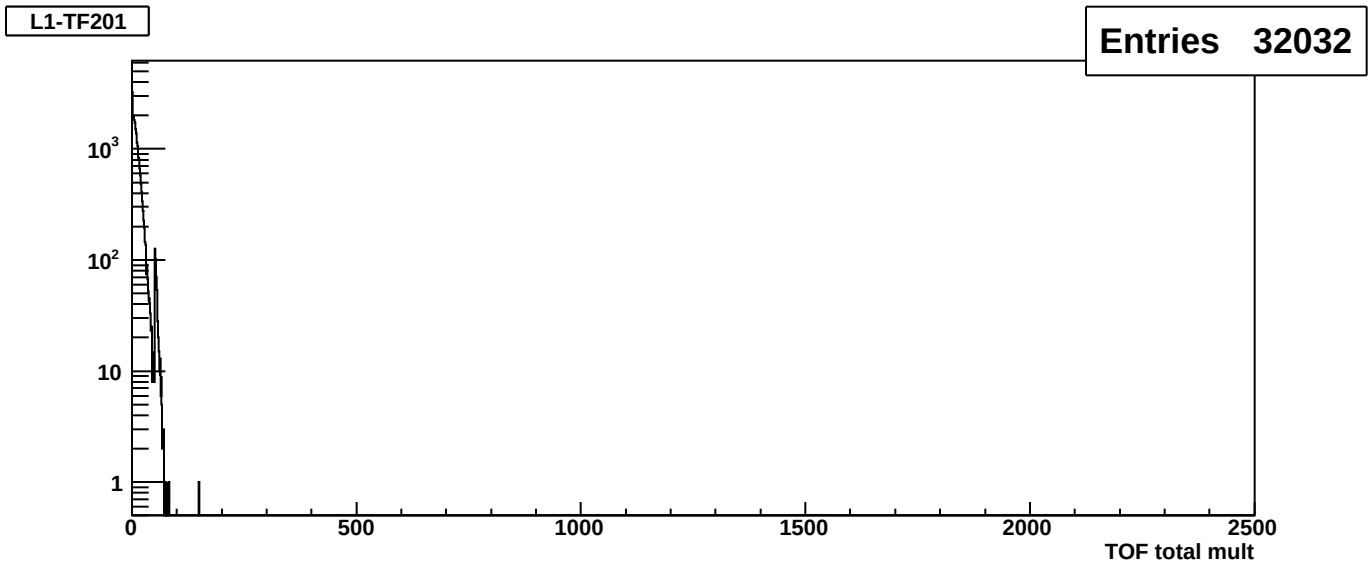

MIX-TF003
Entries 1345344
TOF MULT
TOF tray

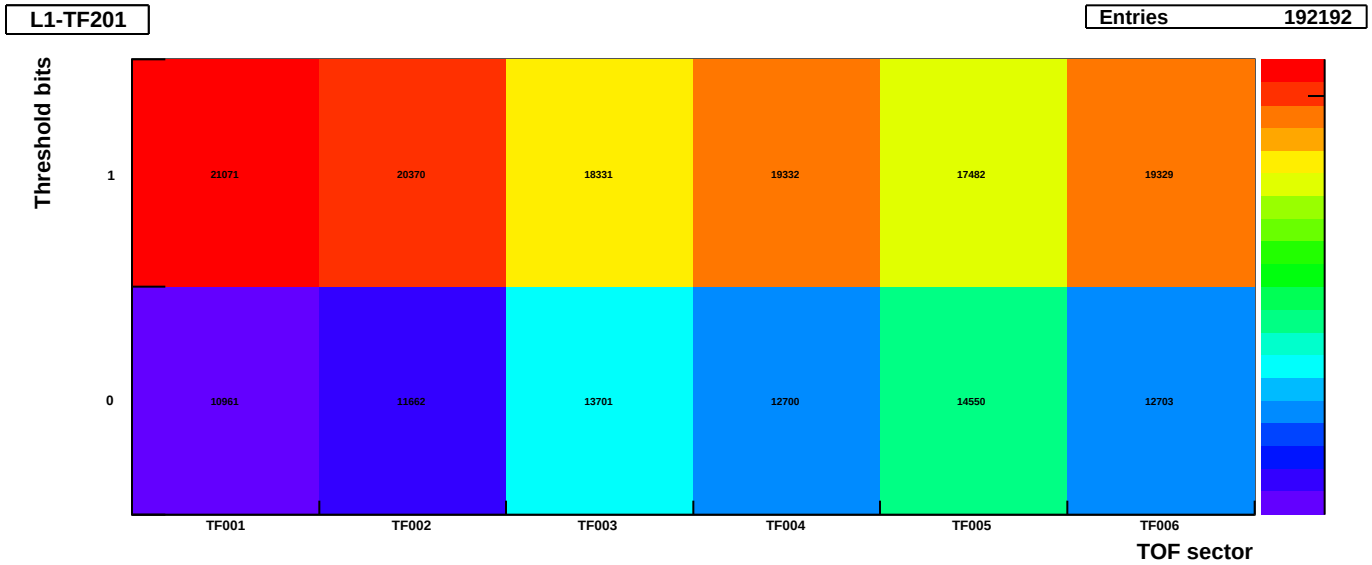

MIX-TF004
Entries 1345344
TOF MULT
TOF tray

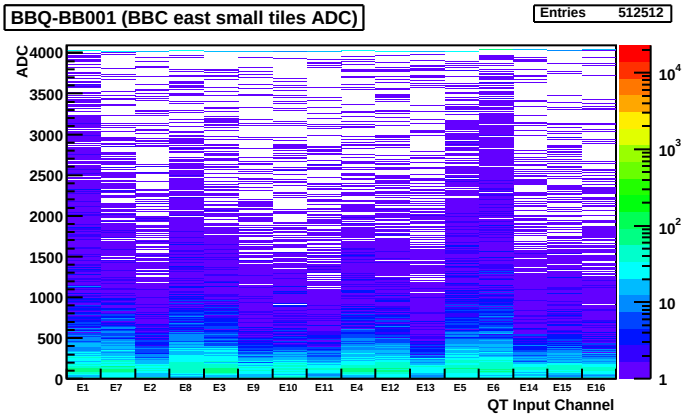

MIX-TF005
Entries 1345344
TOF MULT
TOF tray

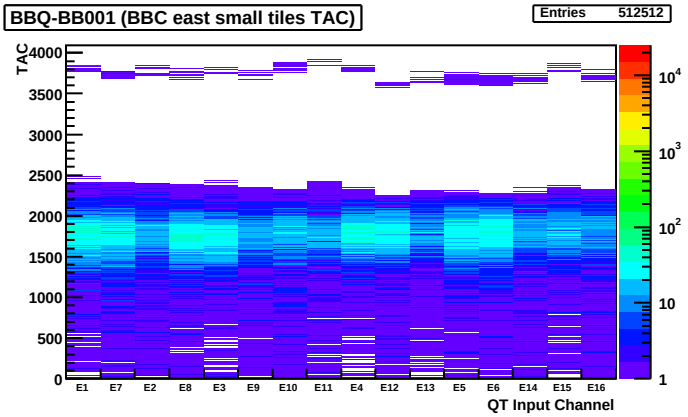

MIX-TF006
Entries 1345344
TOF MULT
TOF tray

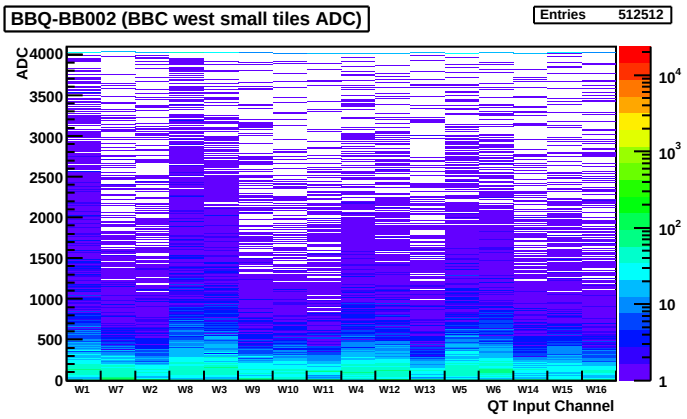

MIX-TF101
Entries 192192
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

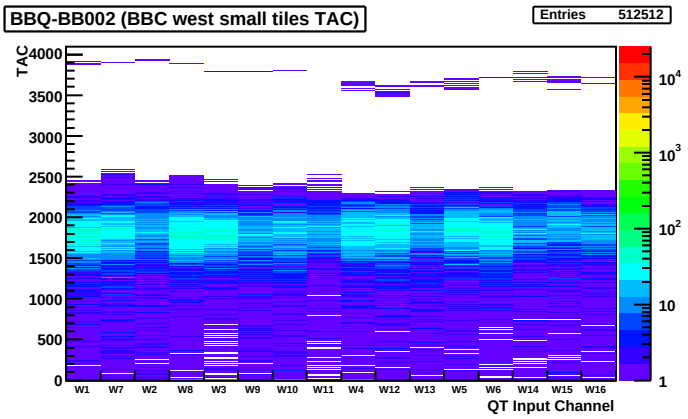

L1-TF201
Entries 32032
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

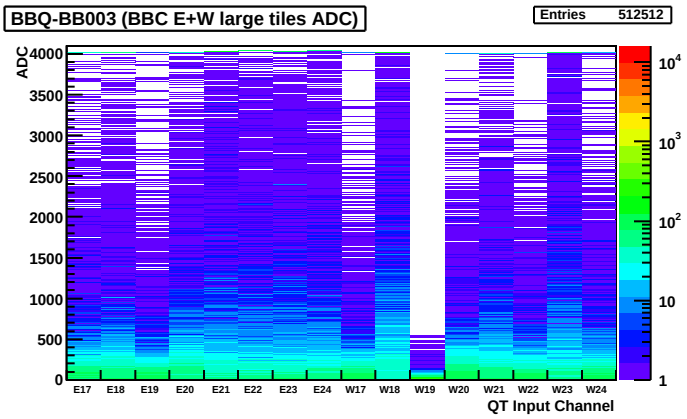

L1-TF201
Entries 192192
Threshold bits
1
0
21071
20370
18331
19332
17482
19329
10961
11662
13701
12700
14550
12703
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

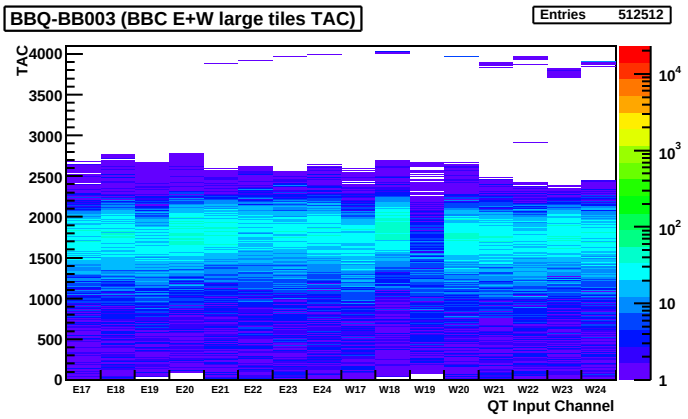

BBQ-BB001 (BBC east small tiles ADC)
Entries 512512
ADC
QT Input Channel

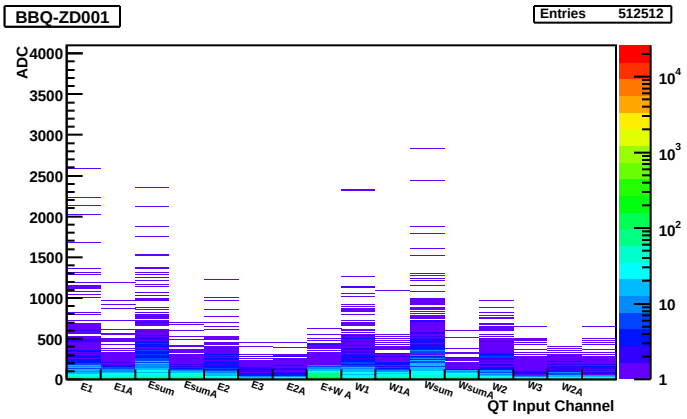

BBQ-BB001 (BBC east small tiles TAC)
Entries 512512
TAC
QT Input Channel

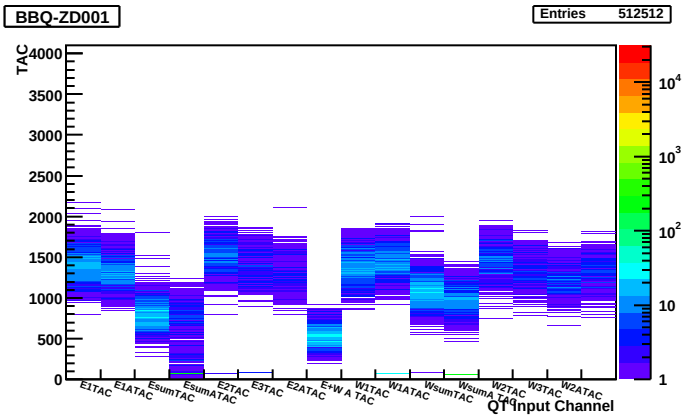

BBQ-BB002 (BBC west small tiles ADC)
Entries 512512
ADC
QT Input Channel

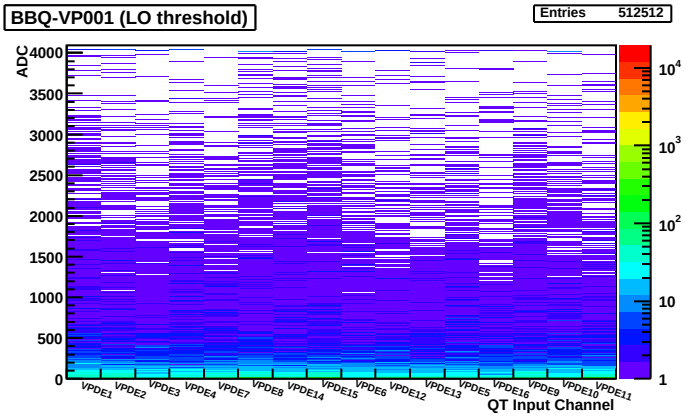

BBQ-BB002 (BBC west small tiles TAC)
Entries 512512
TAC
QT Input Channel

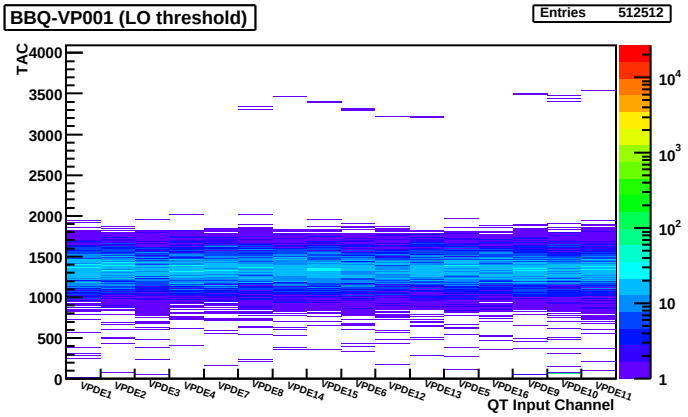

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 512512
ADC
QT Input Channel

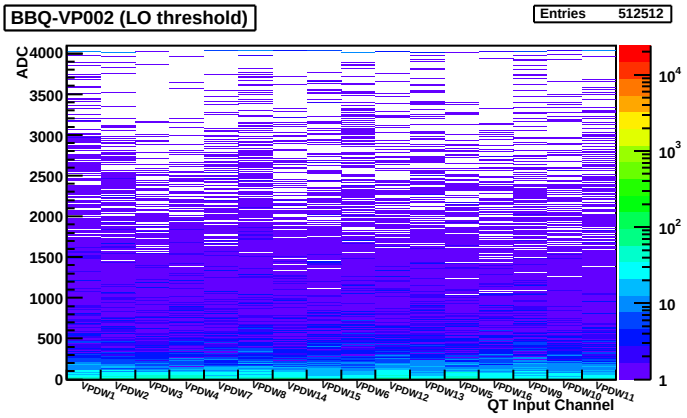

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 512512
TAC
QT Input Channel

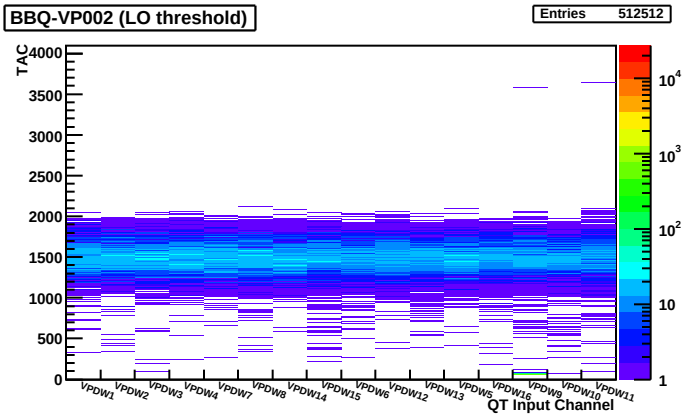

BBQ-ZD001
Entries 512512
ADC
QT Input Channel

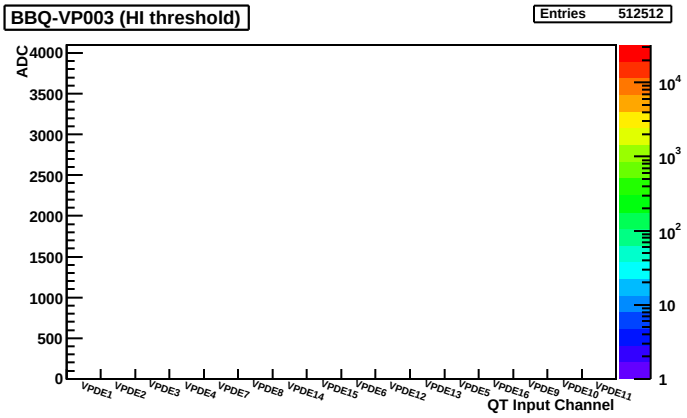

BBQ-ZD001
Entries 512512
TAC
QT Input Channel

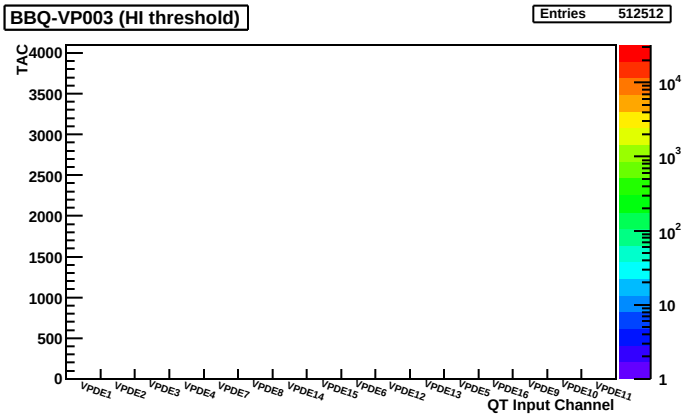

BBQ-VP001 (LO threshold)
Entries 512512
ADC
QT Input Channel

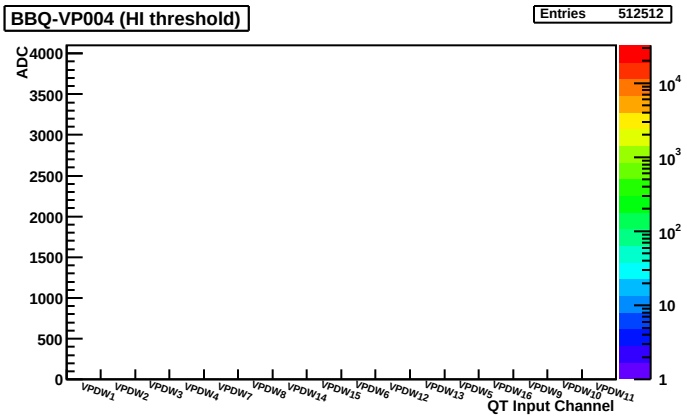

BBQ-VP001 (LO threshold)
Entries 512512
TAC
QT Input Channel

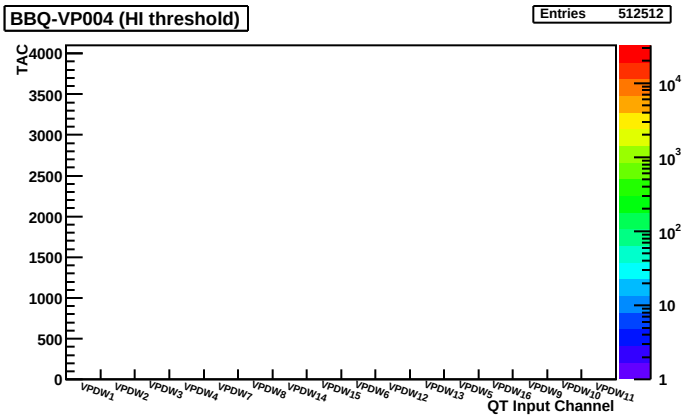

BBQ-VP002 (LO threshold)
Entries 512512
ADC
QT Input Channel

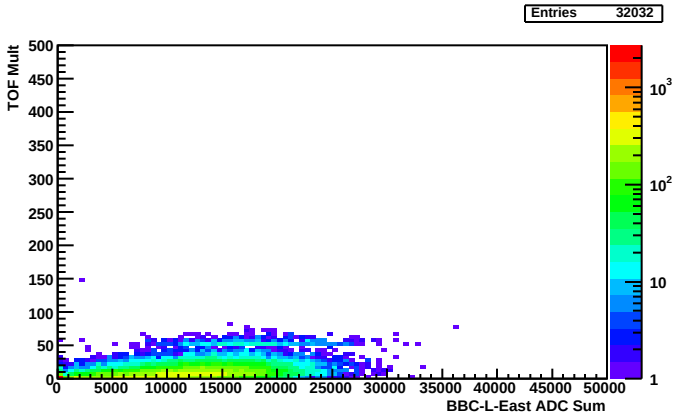

BBQ-VP002 (LO threshold)
Entries 512512
TAC
QT Input Channel

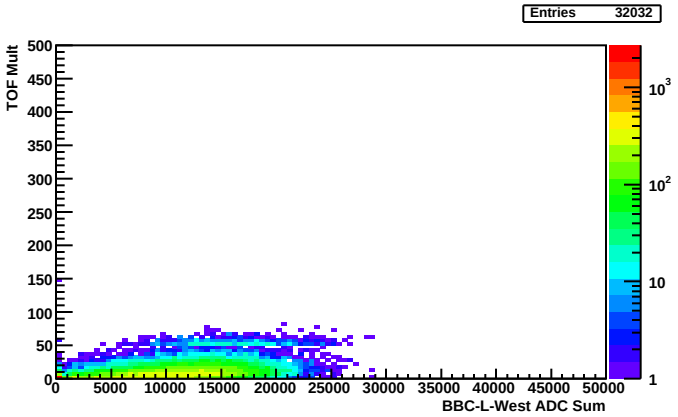

BBQ-VP003 (HI threshold)
Entries 512512
ADC
QT Input Channel

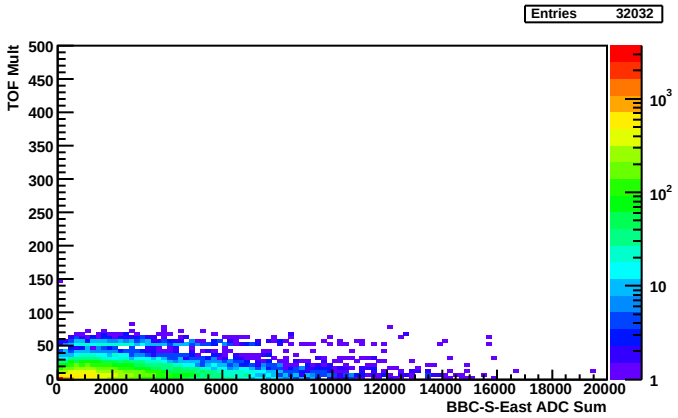

BBQ-VP003 (HI threshold)
Entries 512512
TAC
QT Input Channel

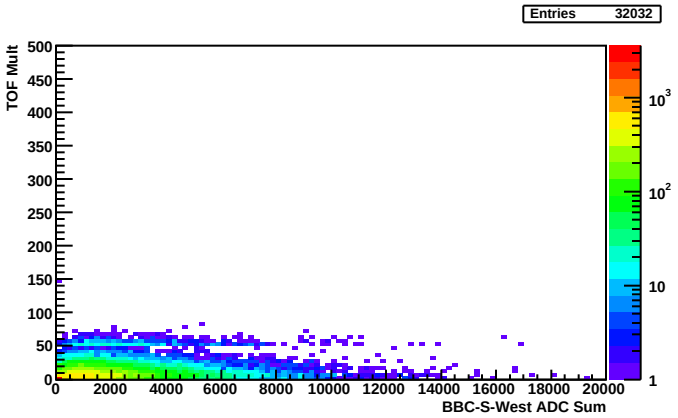

BBQ-VP004 (HI threshold)
Entries 512512
ADC
QT Input Channel

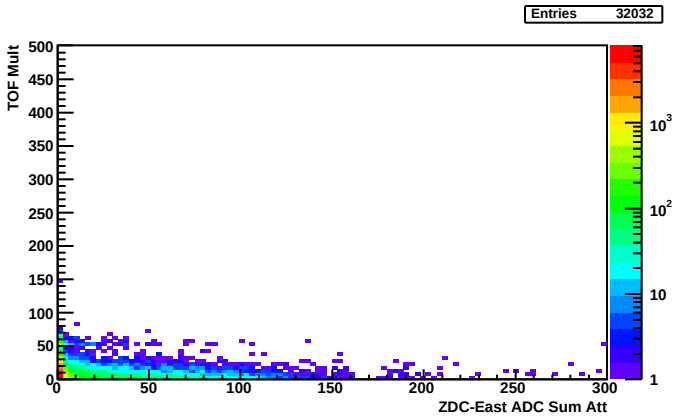

BBQ-VP004 (HI threshold)
Entries 512512
TAC
QT Input Channel

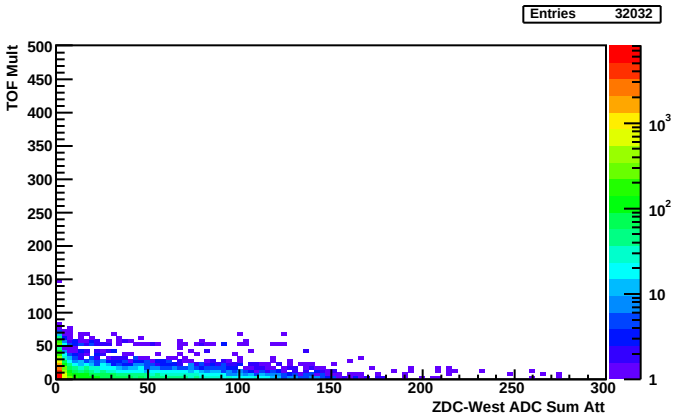

Entries 32032
TOF Mult
BBC-L-East ADC Sum

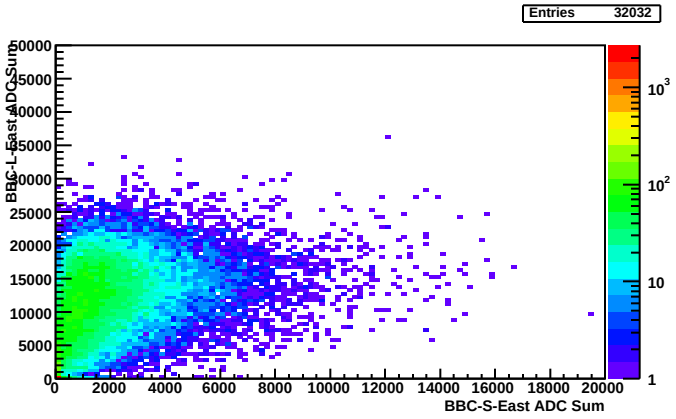

Entries 32032
TOF Mult
BBC-L-West ADC Sum

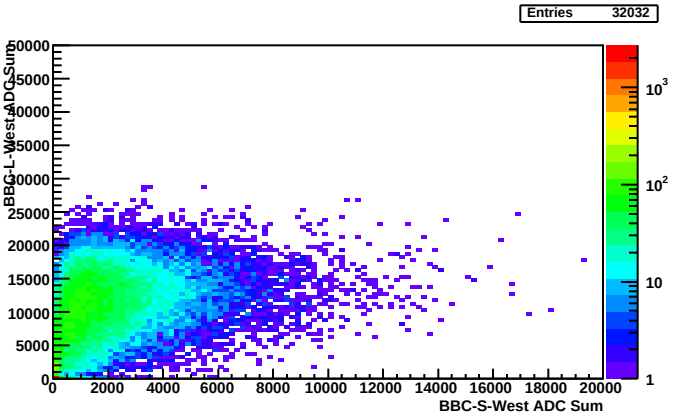

Entries 32032
TOF Mult
BBC-S-East ADC Sum

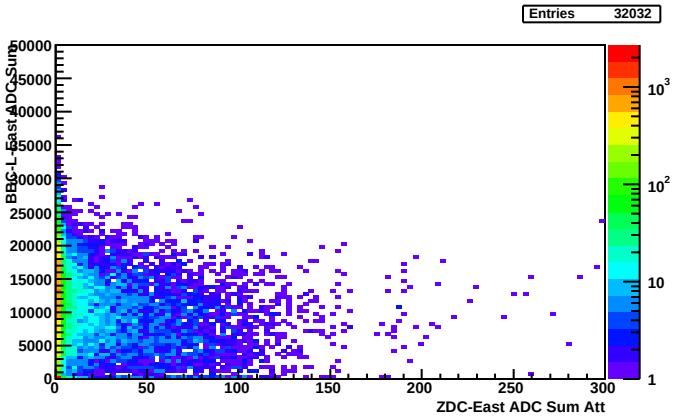

Entries 32032
TOF Mult
BBC-S-West ADC Sum

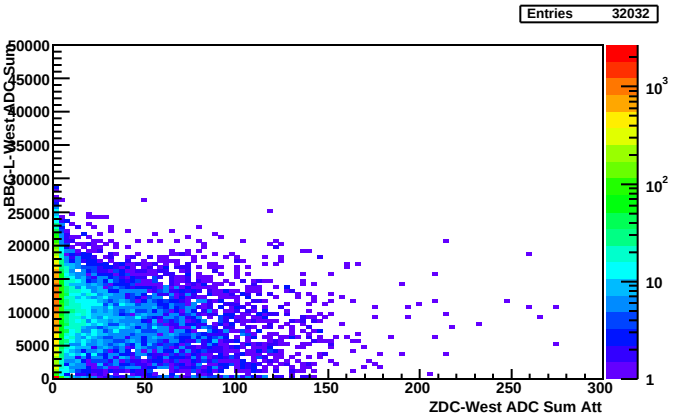

Entries 32032
TOF Mult
ZDC-East ADC Sum Att

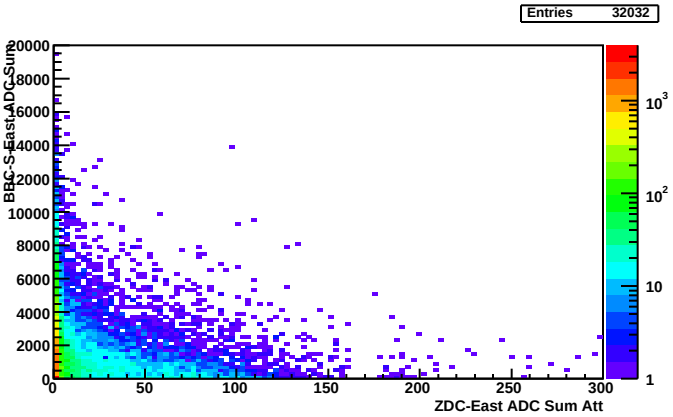

Entries 32032
TOF Mult
ZDC-West ADC Sum Att

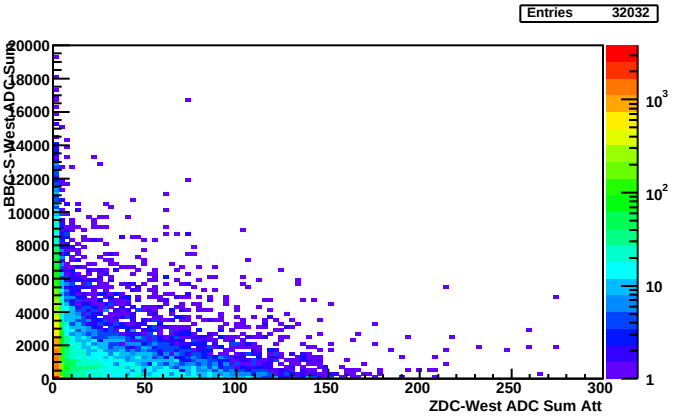

Entries 32032
BBC-L-East ADC Sum
BBC-S-East ADC Sum

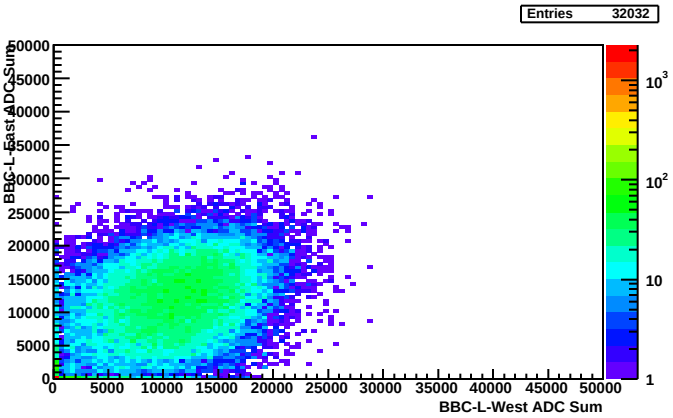

Entries 32032
BBC-L-West ADC Sum
BBC-S-West ADC Sum

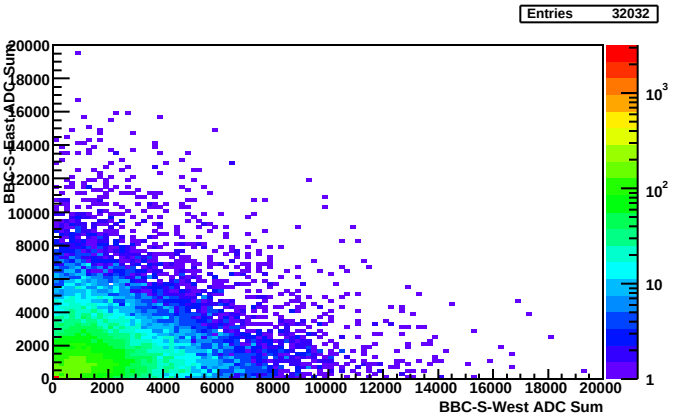

Entries 32032
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

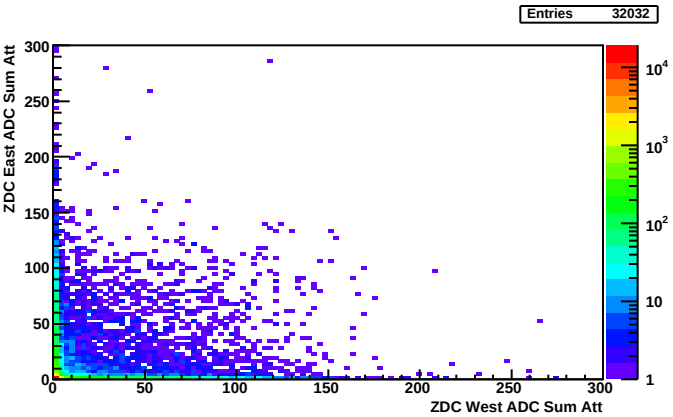

Entries 32032
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

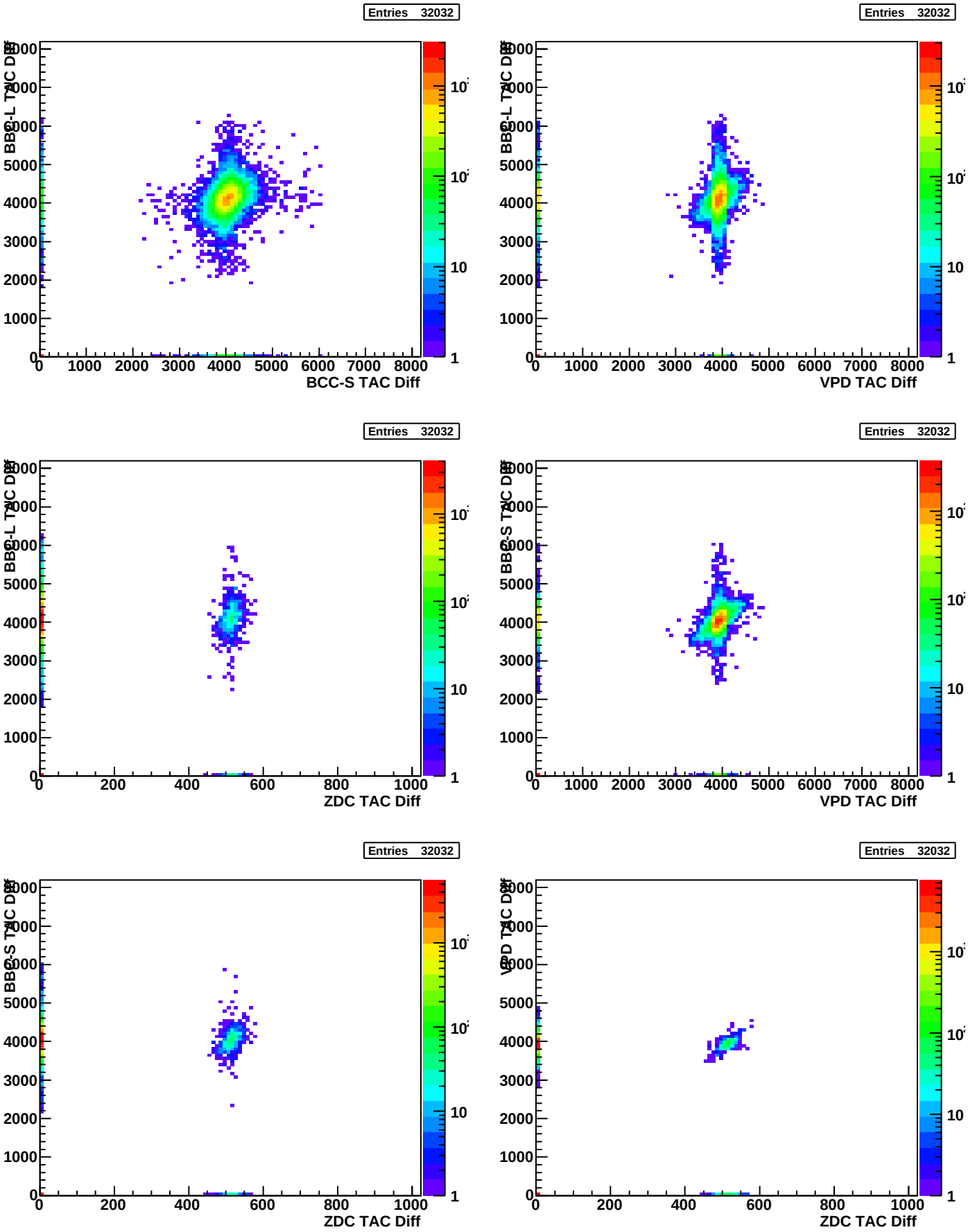

Entries 32032
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

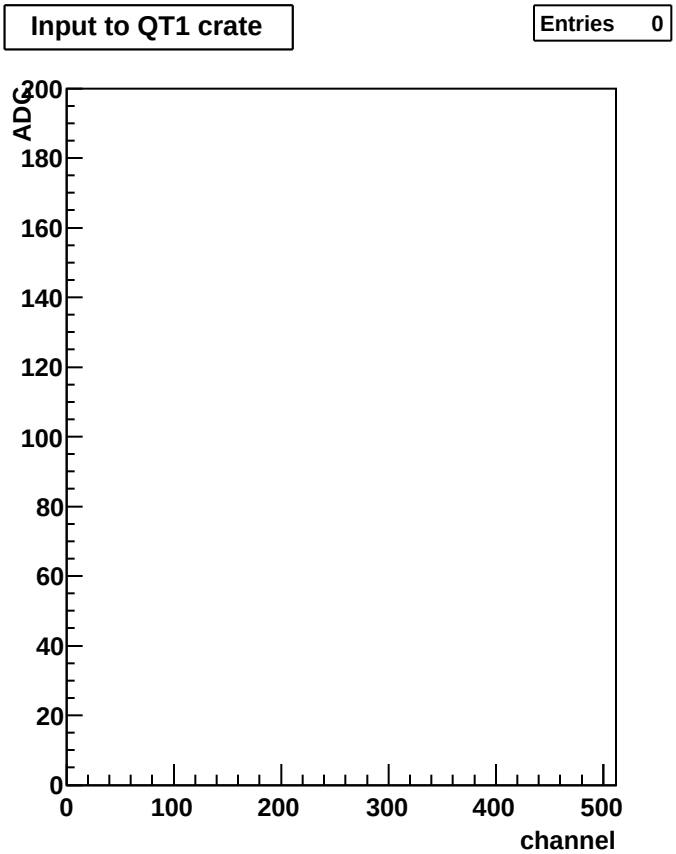

Entries 32032
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

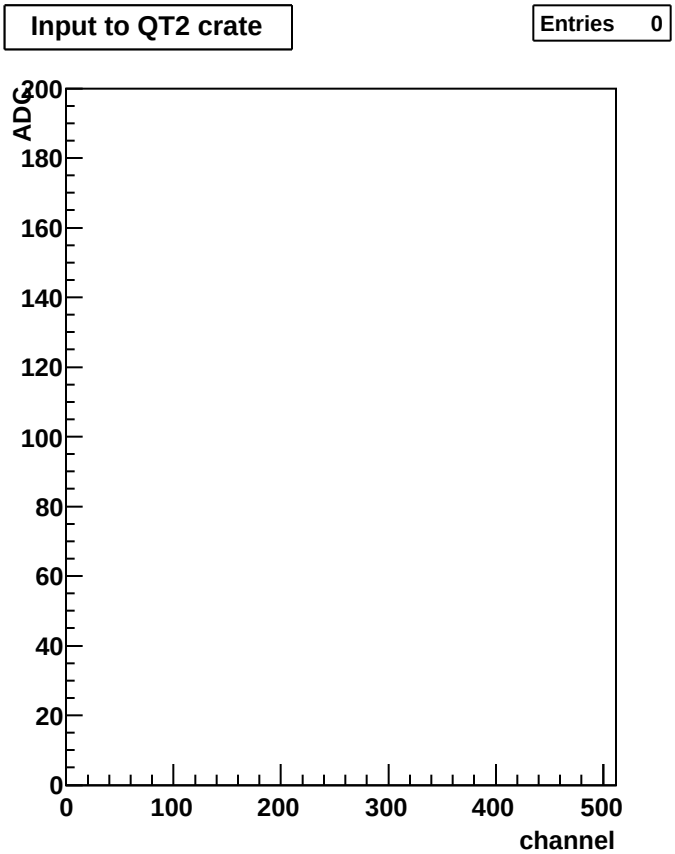

Entries 32032
BBC-L-East ADC Sum
BBC-L-West ADC Sum

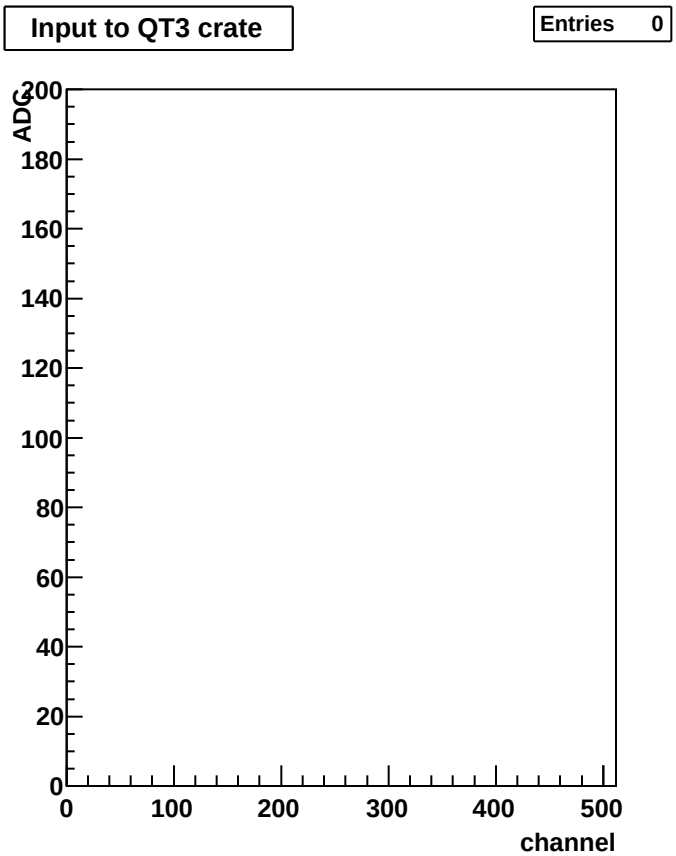

Entries 32032
BBC-S-East ADC Sum
BBC-S-West ADC Sum

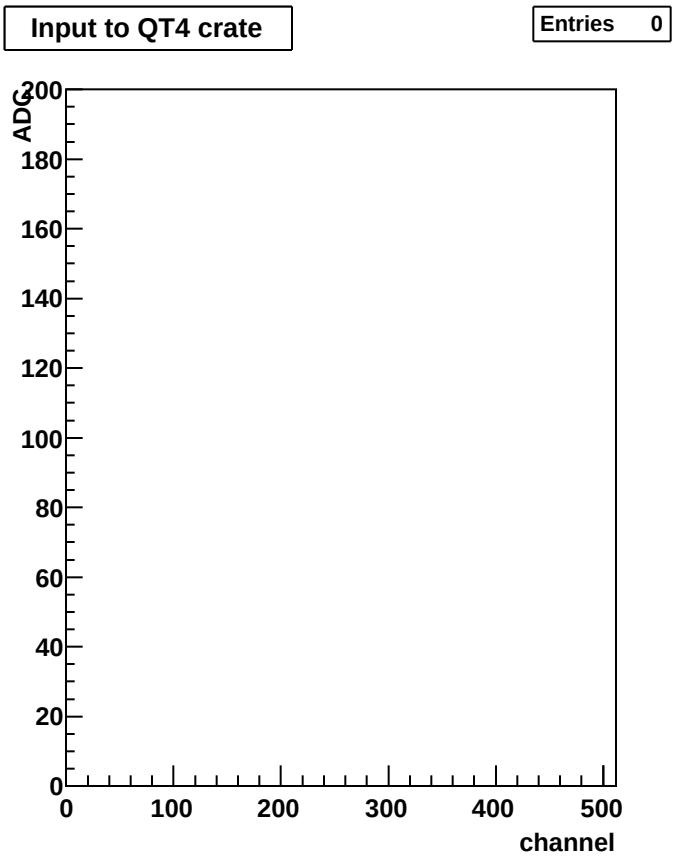

Entries 32032
ZDC East ADC Sum Att
ZDC West ADC Sum Att

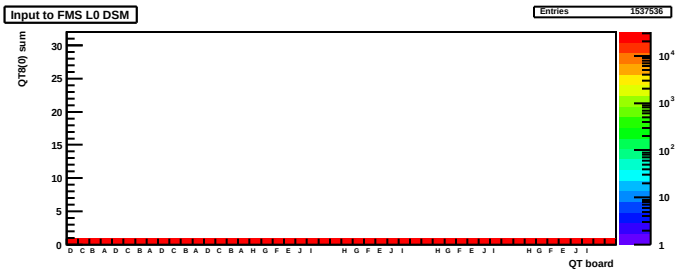

Entries 32032
BBC-L TAC Diff
BCC-S TAC Diff
Entries 32032
BBC-L TAC Diff
VPD TAC Diff
Entries 32032
BBC-L TAC Diff
ZDC TAC Diff
Entries 32032
BBC-S TAC Diff
VPD TAC Diff
Entries 32032
BBC-S TAC Diff
ZDC TAC Diff
Entries 32032
VPD TAC Diff
ZDC TAC Diff

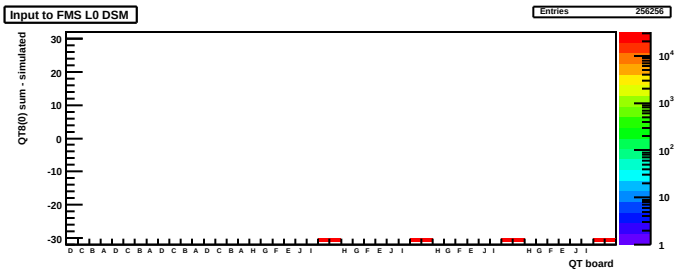

Input to QT1 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

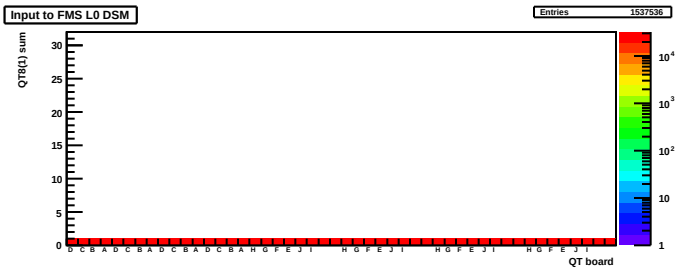

Input to QT2 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

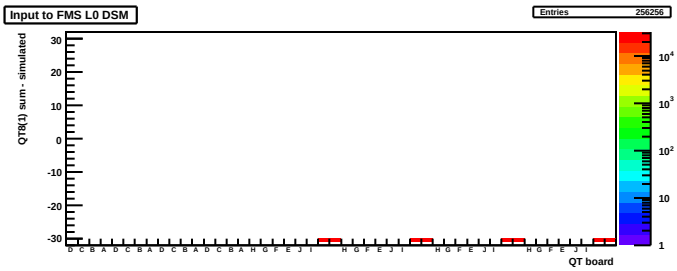

Input to QT3 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

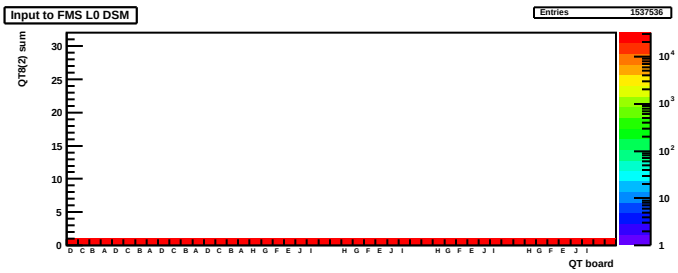

Input to QT4 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

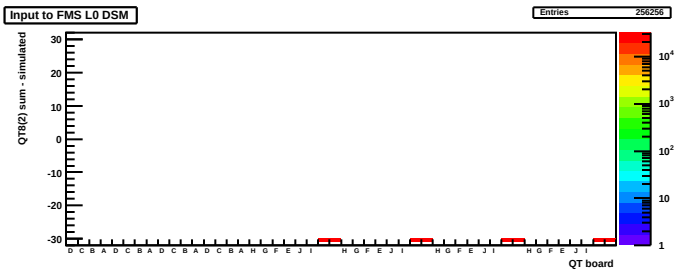

Input to FMS L0 DSM
Entries 1537536
QT8(0) sum
QT board

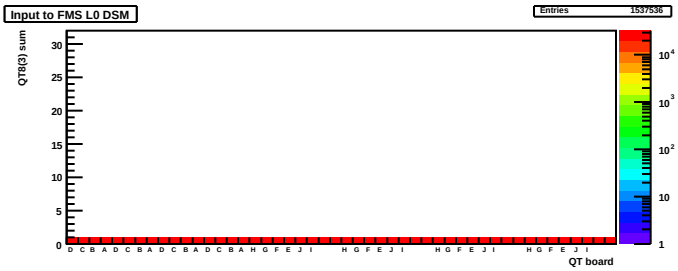

Input to FMS L0 DSM
Entries 256256
QT8(0) sum - simulated
QT board

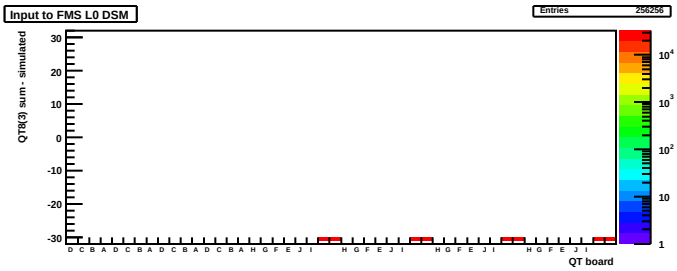

Input to FMS L0 DSM
Entries 1537536
QT8(1) sum
QT board

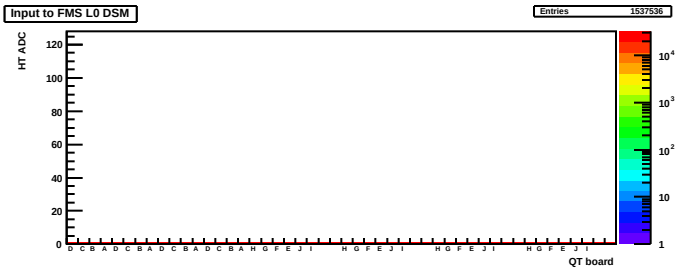

Input to FMS L0 DSM
Entries 256256
QT8(1) sum - simulated
QT board

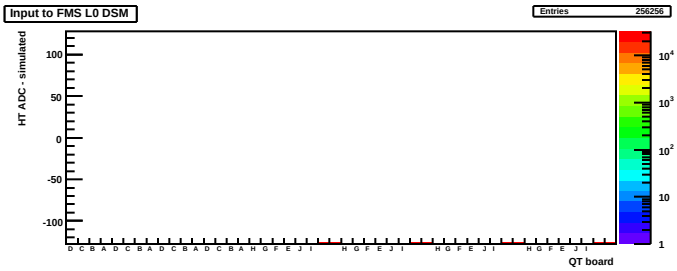

Input to FMS L0 DSM
Entries 1537536
QT8(2) sum
QT board

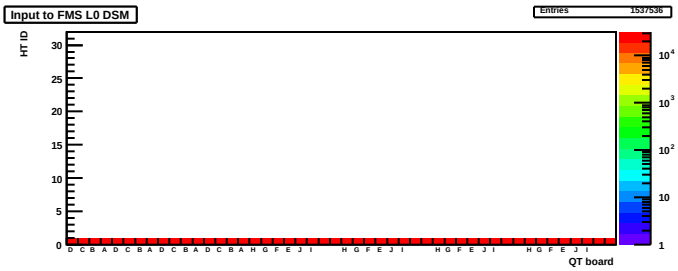

Input to FMS L0 DSM
Entries 256256
QT8(2) sum - simulated
QT board

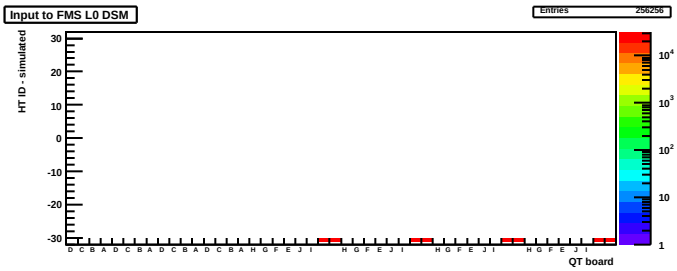

Input to FMS L0 DSM
Entries 1537536
QT8(3) sum
QT board

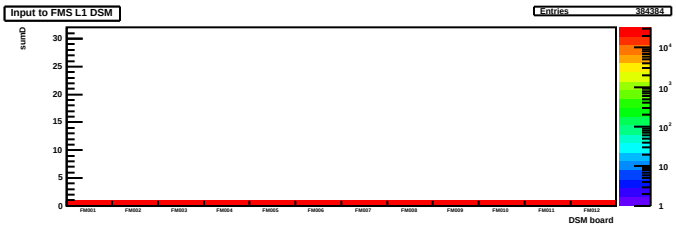

Input to FMS L0 DSM
Entries 256256
QT8(3) sum - simulated
QT board

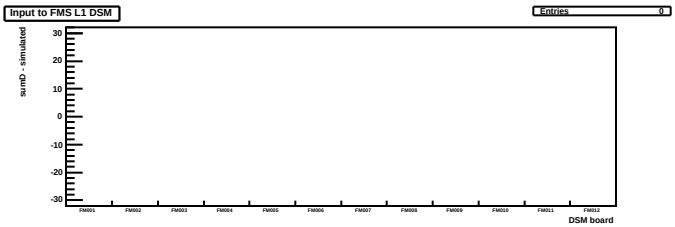

Input to FMS L0 DSM
Entries 1537536
HT ADC
QT board

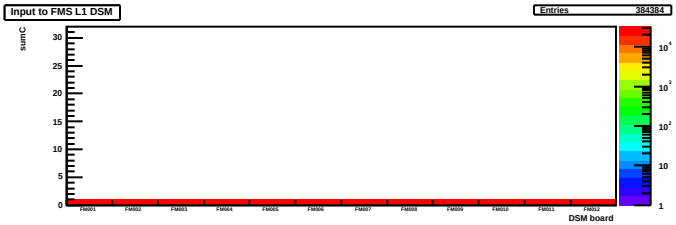

Input to FMS L0 DSM
Entries 256256
HT ADC - simulated
QT board

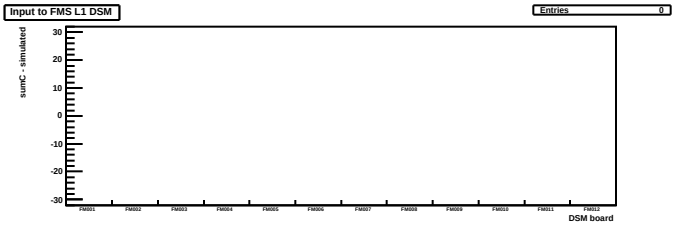

Input to FMS L0 DSM
Entries 1537536
HT ID
QT board

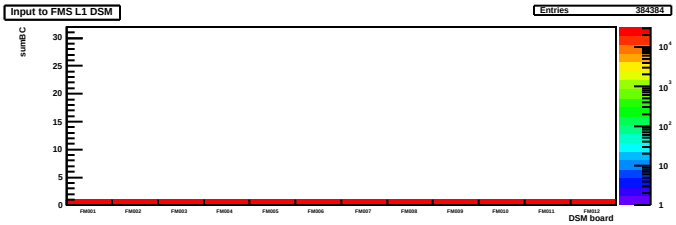

Input to FMS L0 DSM
Entries 256256
HT ID - simulated
QT board

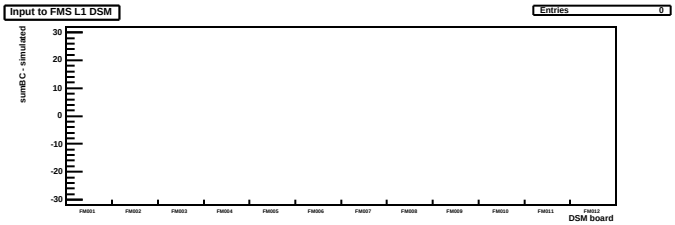

Input to FMS L1 DSM
Entries 384384
sumD
DSM board

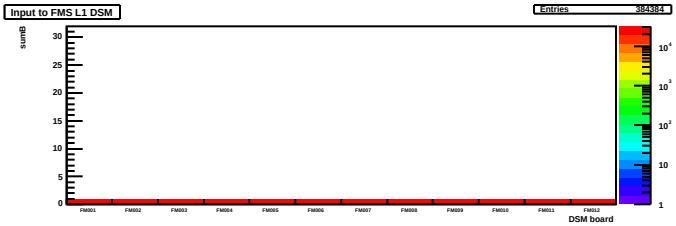

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

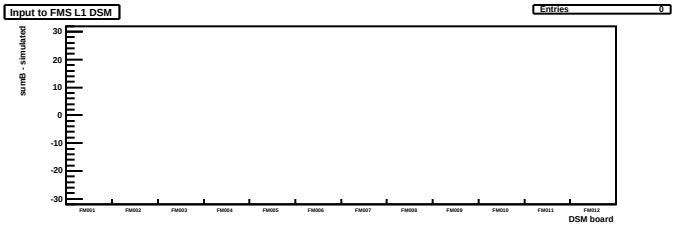

Input to FMS L1 DSM
Entries 384384
sumC
DSM board

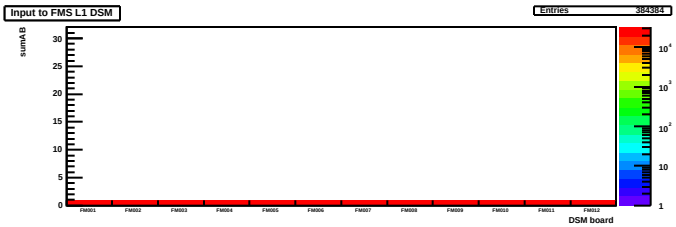

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

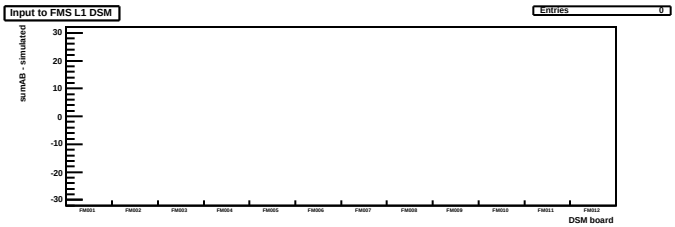

Input to FMS L1 DSM
Entries 384384
sumBC
DSM board

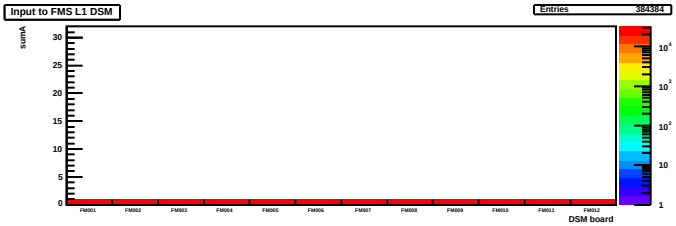

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

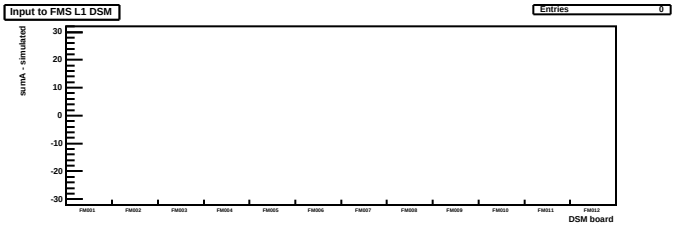

Input to FMS L1 DSM
Entries 384384
sumB
DSM board

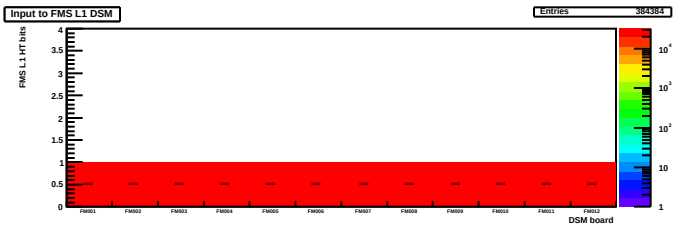

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

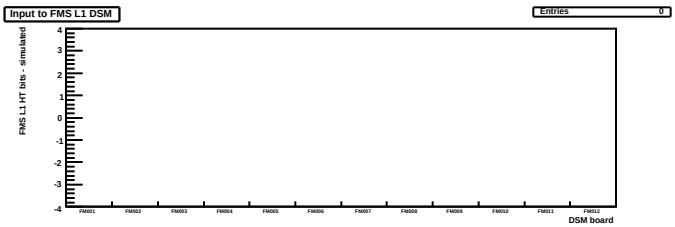

Input to FMS L1 DSM
Entries 384384
sumAB
DSM board

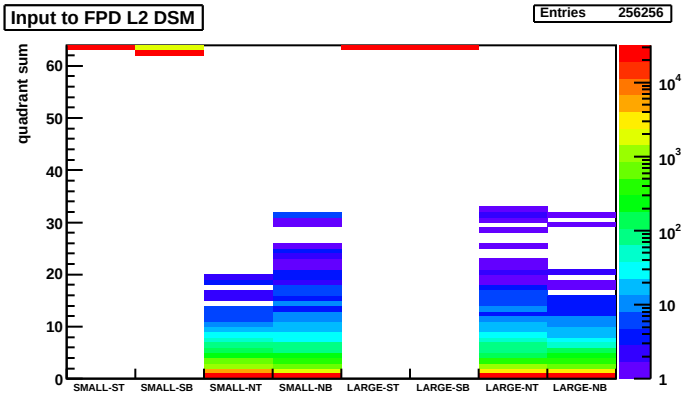

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

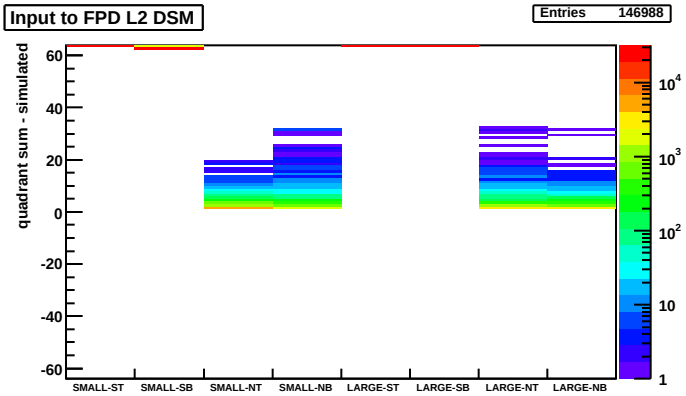

Input to FMS L1 DSM
Entries 384384
sumA
DSM board

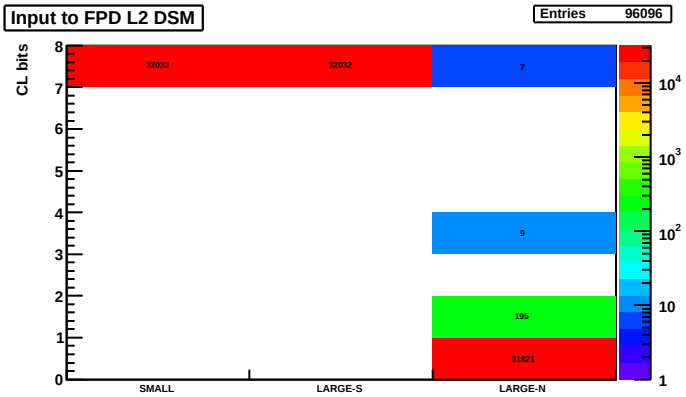

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

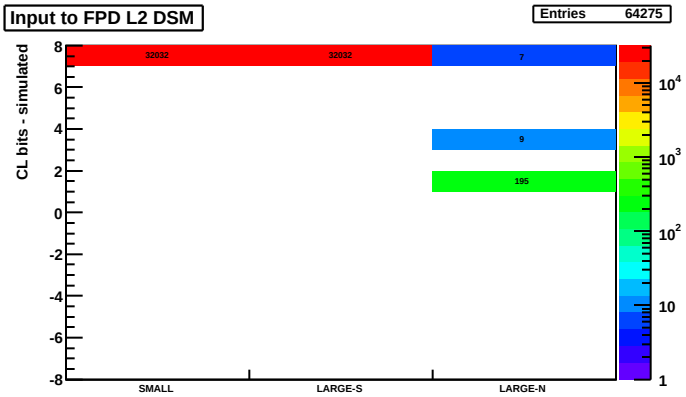

Input to FMS L1 DSM
Entries 384384
FMS L1 HT bits
DSM board

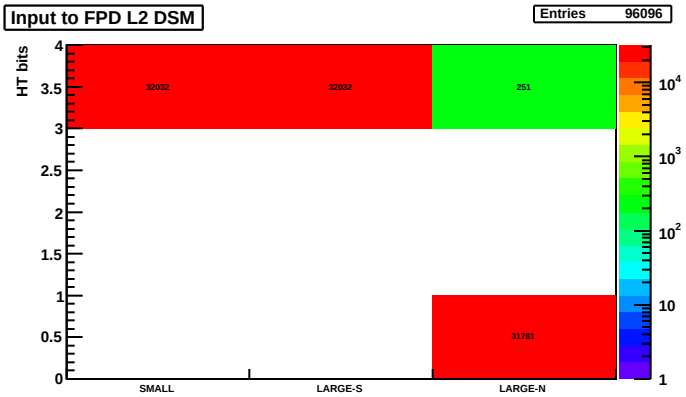

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

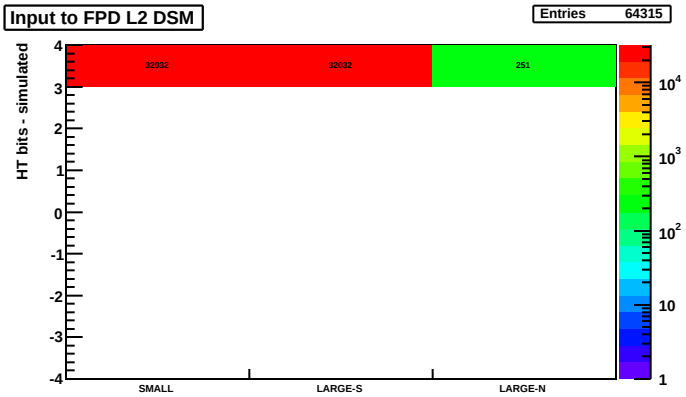

Input to FPD L2 DSM
Entries 256256
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

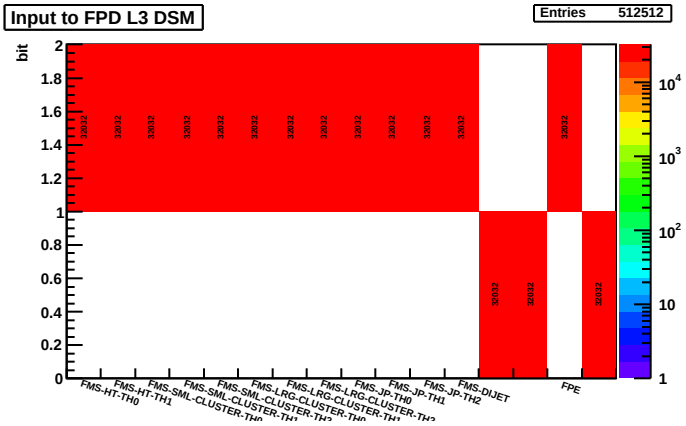

Input to FPD L2 DSM
Entries 146988
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

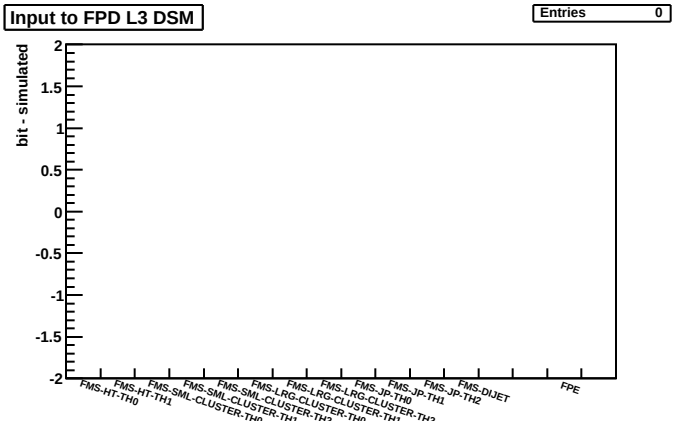

Input to FPD L2 DSM
Entries 96096
CL bits
32032
32032
7
9
195
31821
SMALL
LARGE-S
LARGE-N

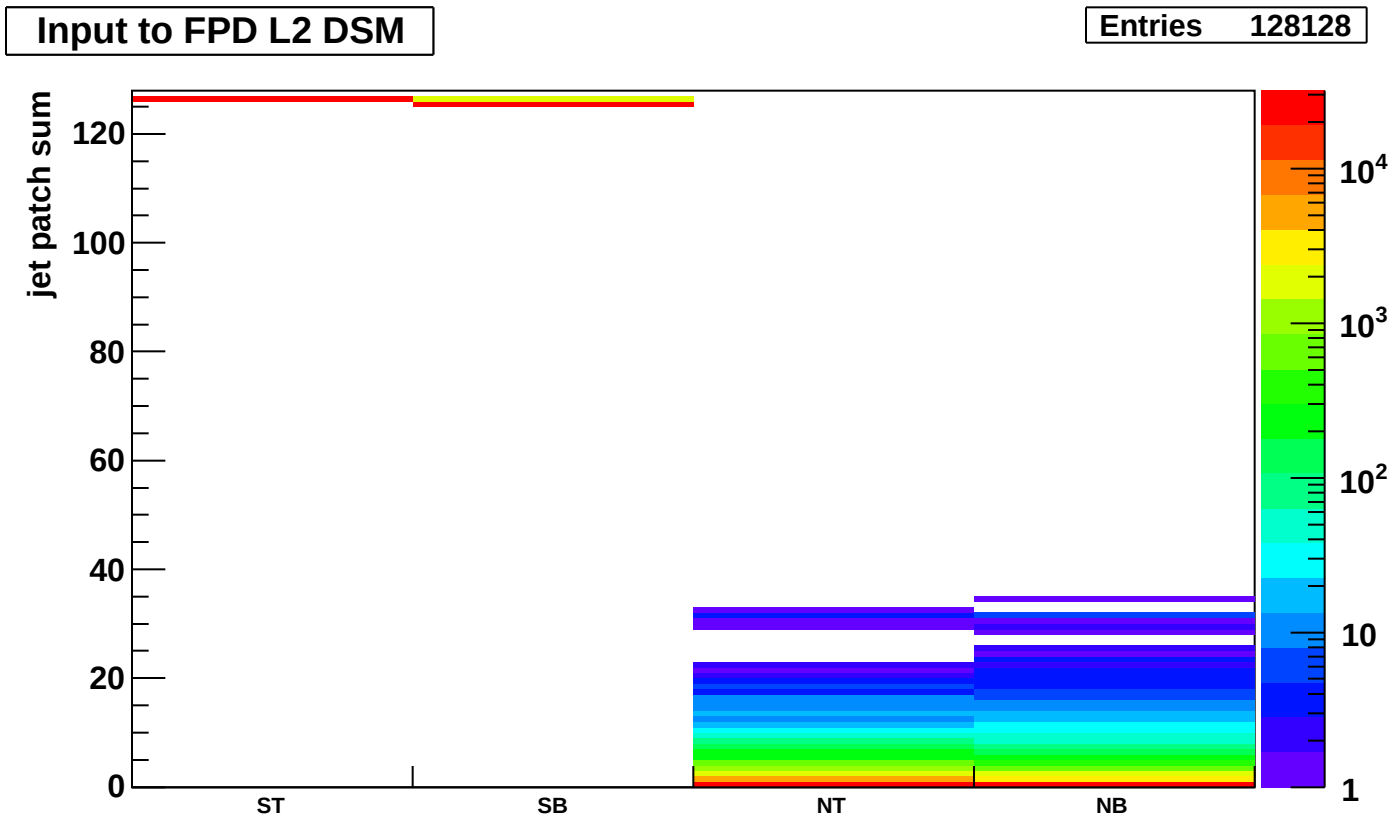

Input to FPD L2 DSM
Entries 64275
CL bits - simulated
32032
32032
7
9
195
SMALL
LARGE-S
LARGE-N

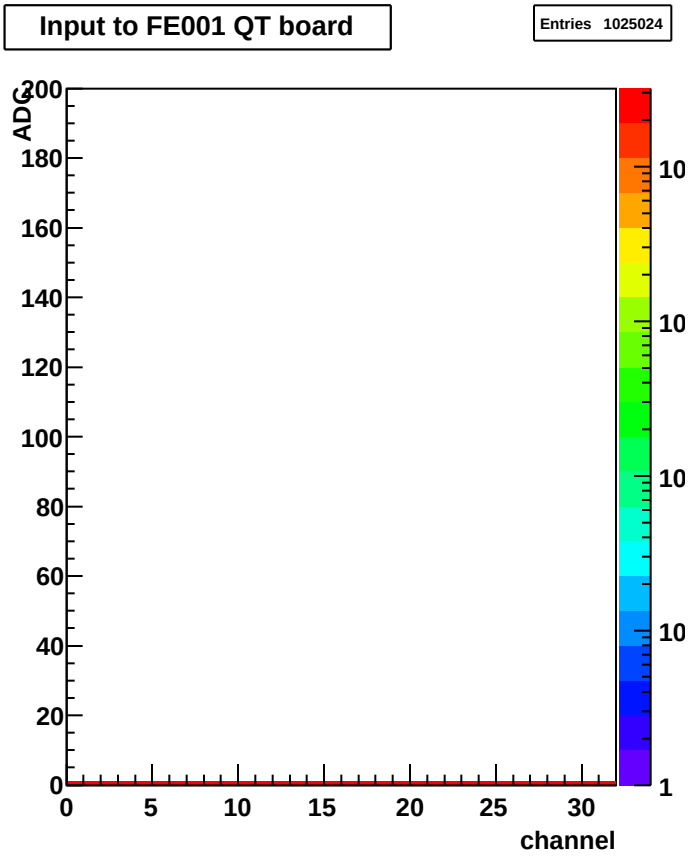

Input to FPD L2 DSM
Entries 96096
HT bits
32032
32032
251
31781
SMALL
LARGE-S
LARGE-N

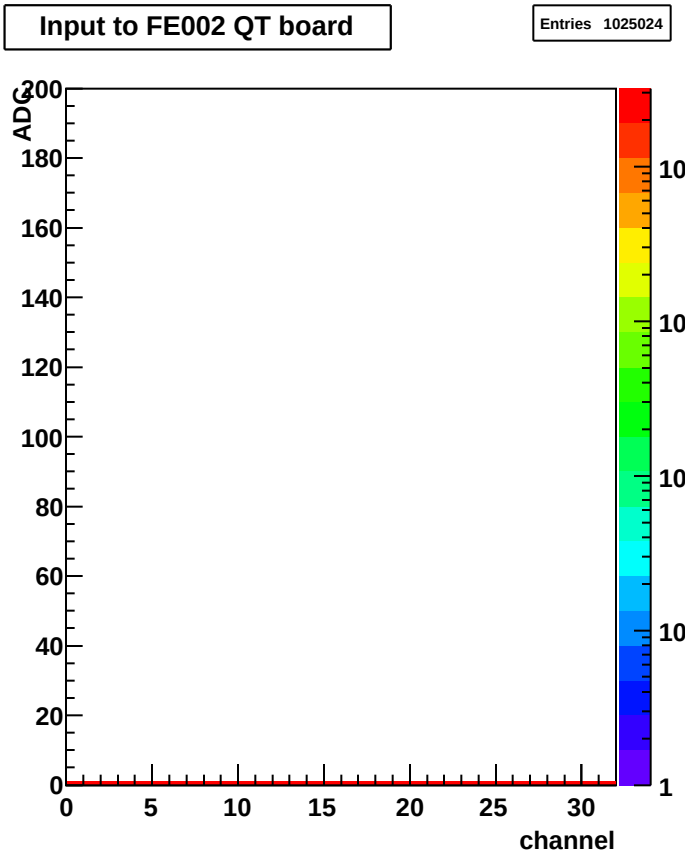

Input to FPD L2 DSM
Entries 64315
HT bits - simulated
32032
32032
251
SMALL
LARGE-S
LARGE-N

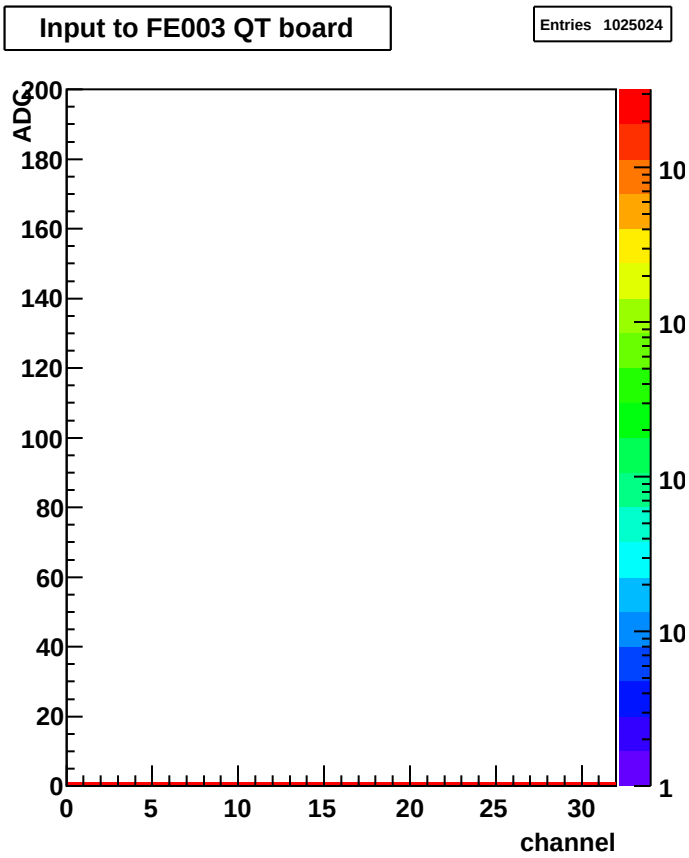

Input to FPD L3 DSM
Entries 512512
bit
32032
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

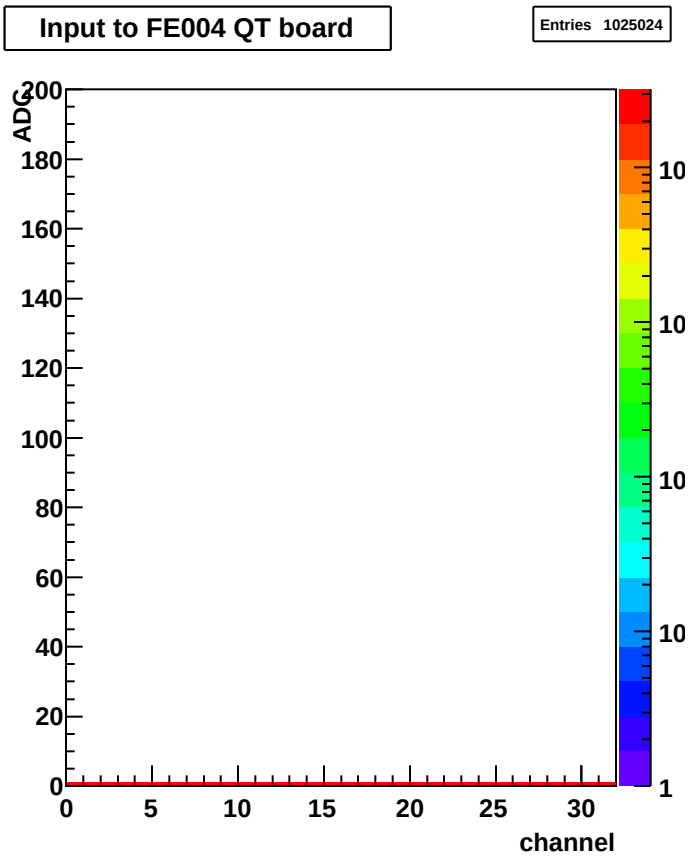

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

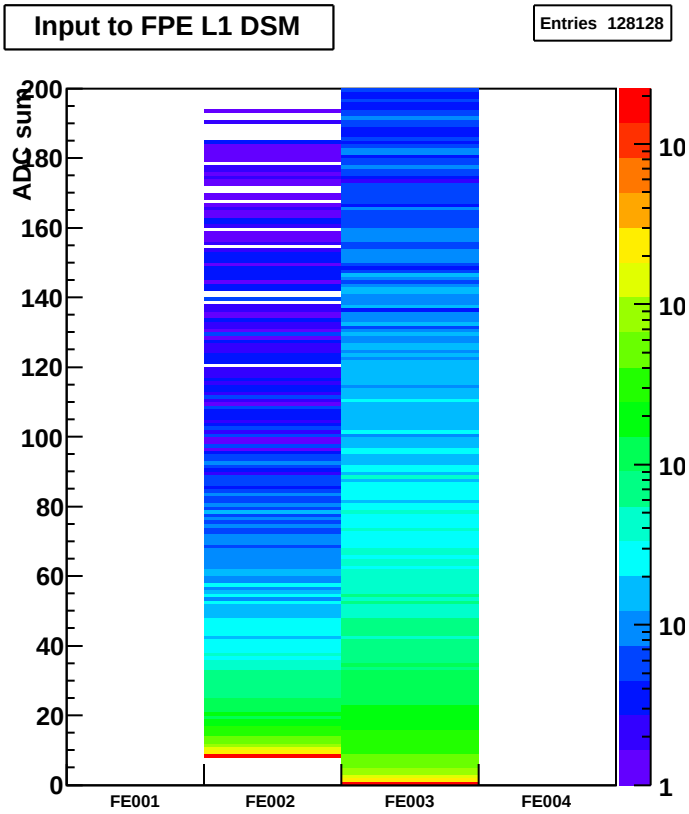

Input to FPD L2 DSM
Entries 128128
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^4
10^3
10^2
10
1

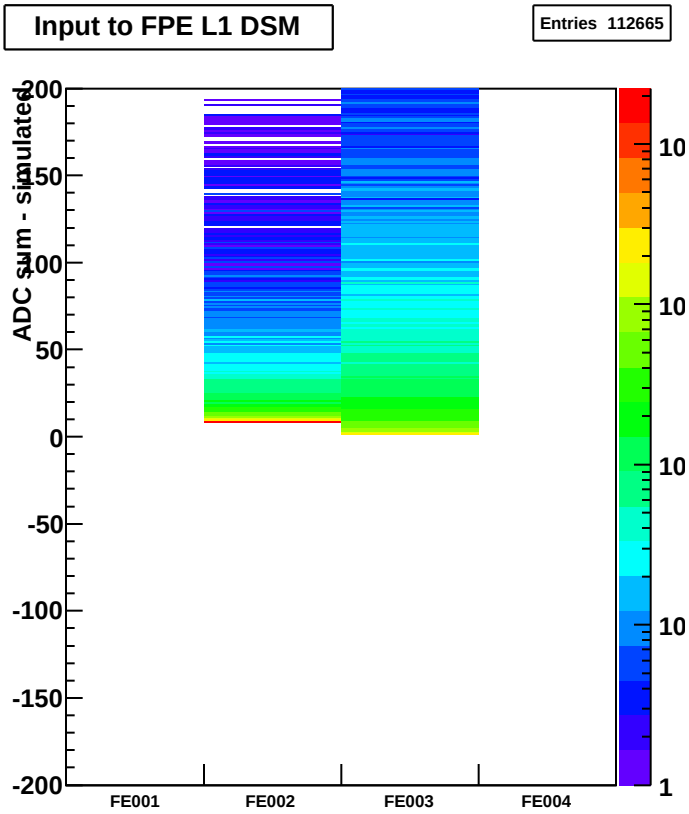

Input to FE001 QT board
Entries 1025024
ADC
channel

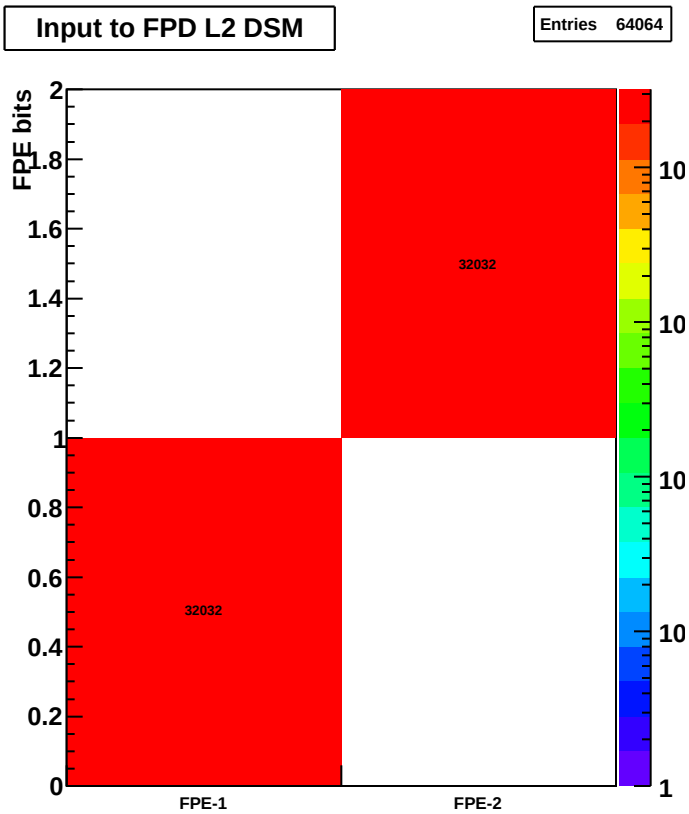

Input to FE002 QT board
Entries 1025024
ADC
channel

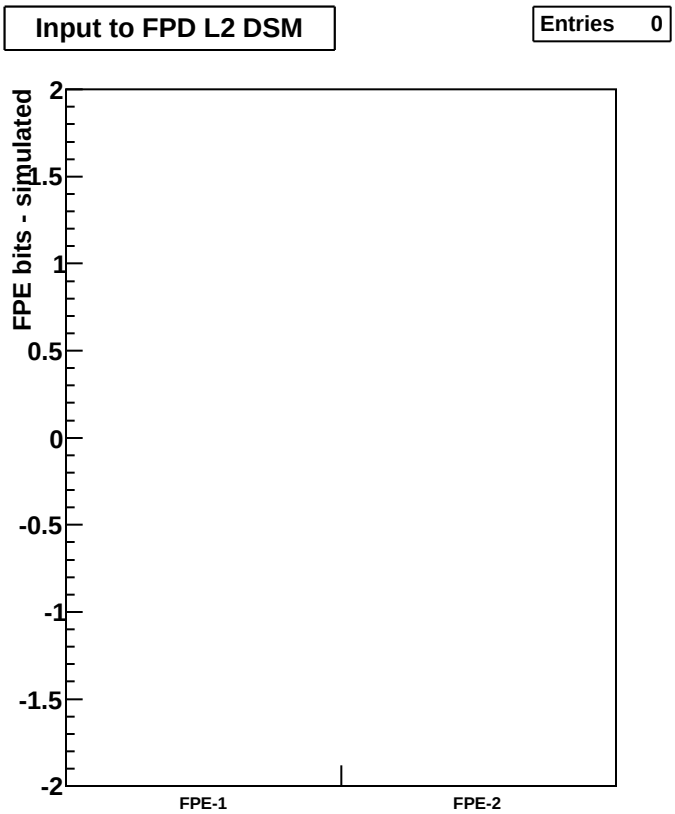

Input to FE003 QT board
Entries 1025024
ADC
channel


Input to FE004 QT board
Entries 1025024
ADC
channel


Input to FPE L1 DSM
Entries 128128
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 112665
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 64064
FPE bits
32032
32032
FPE-1
FPE-2


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