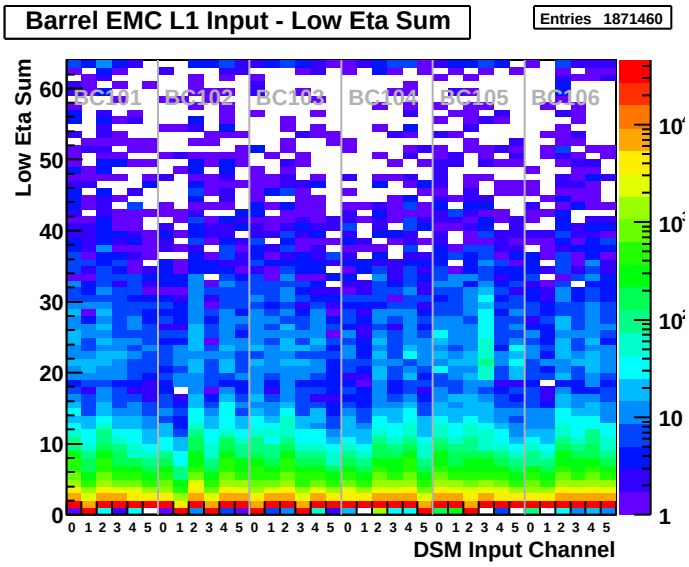
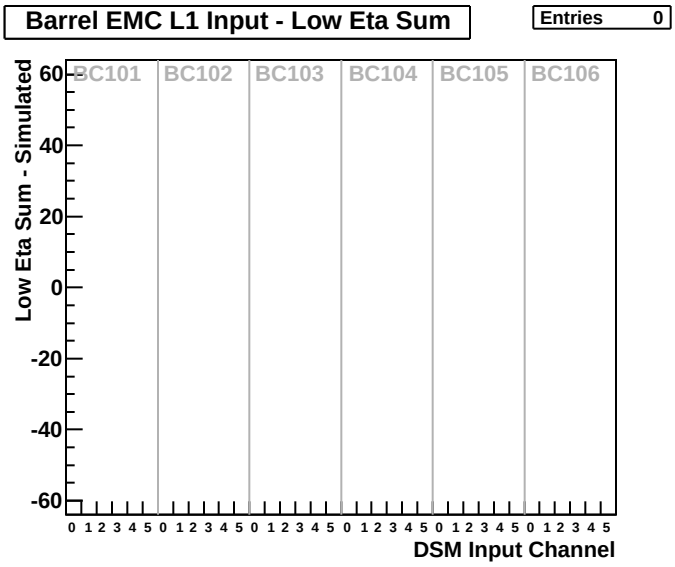
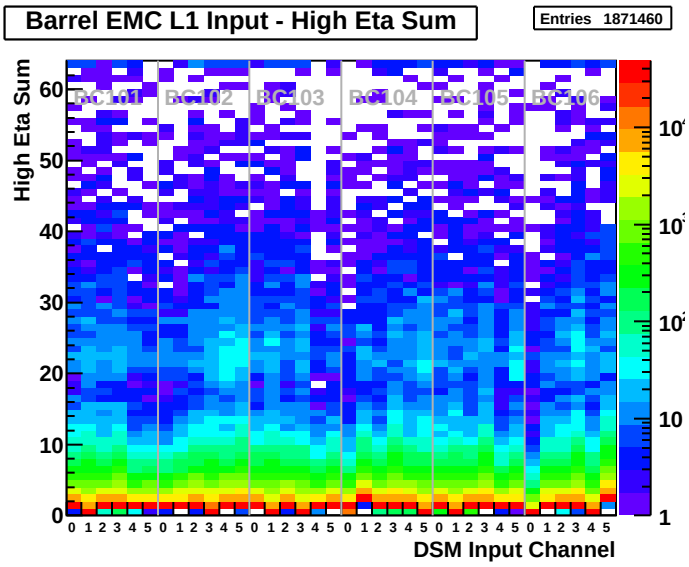
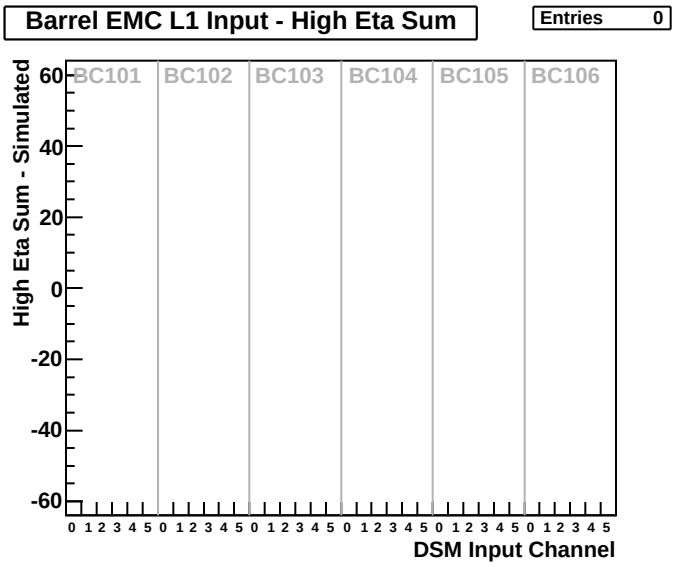
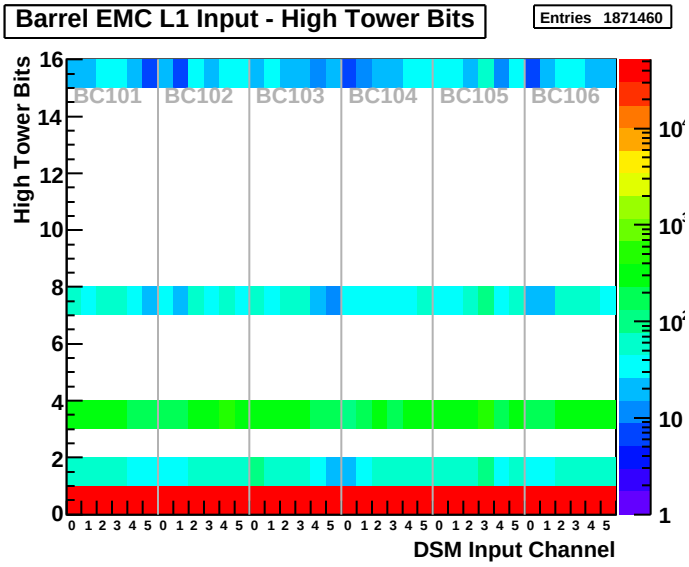
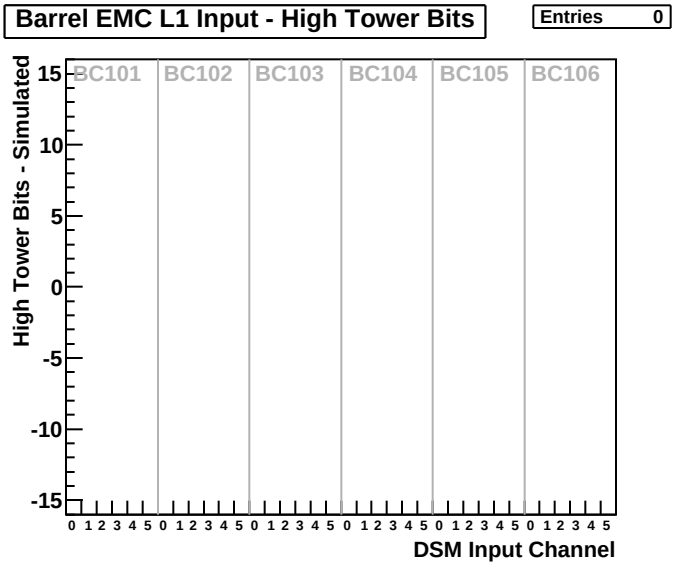

Barrel EMC L1 Input - Low Eta Sum
Entries 1871460
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

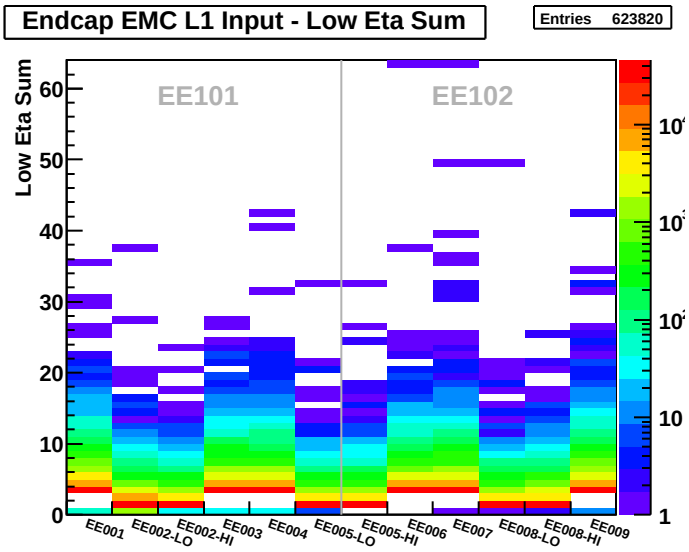

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

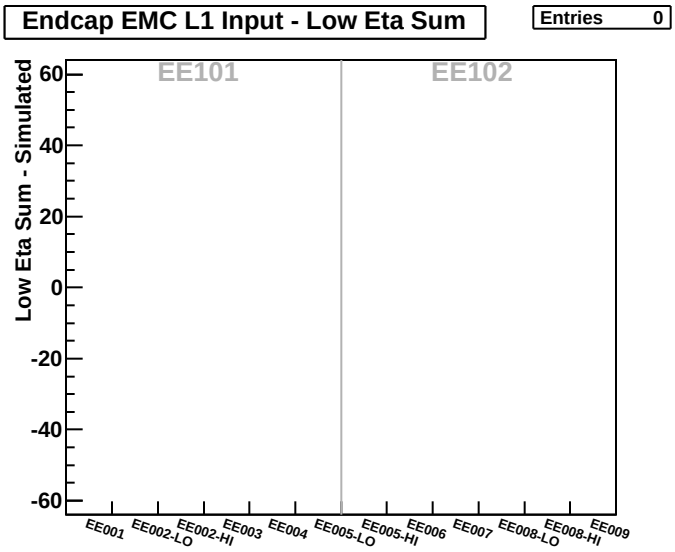

Barrel EMC L1 Input - High Eta Sum
Entries 1871460
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

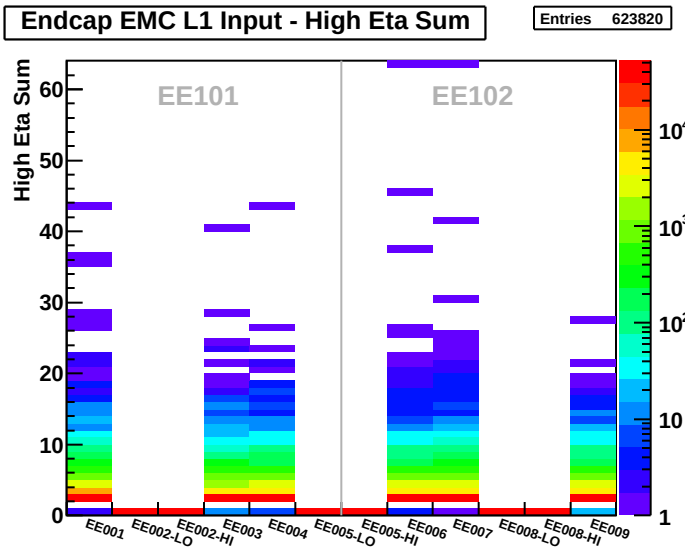

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

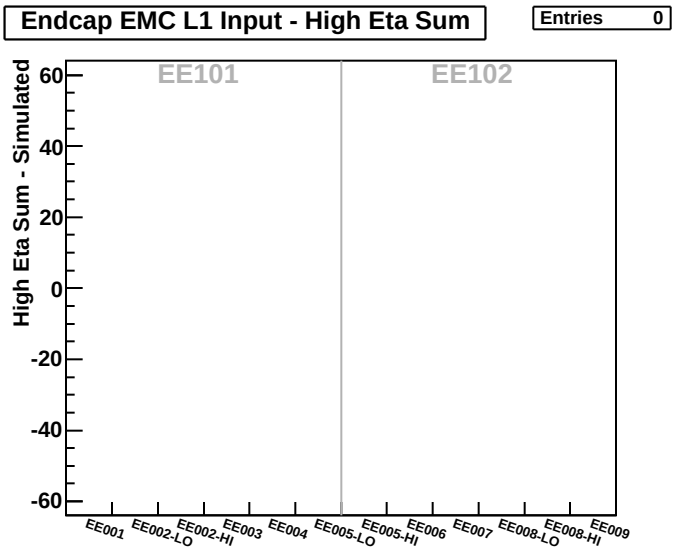

Barrel EMC L1 Input - High Tower Bits
Entries 1871460
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

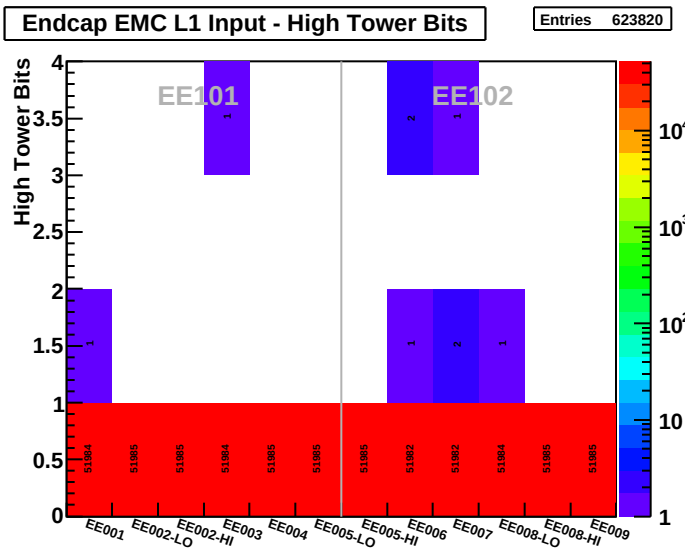

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

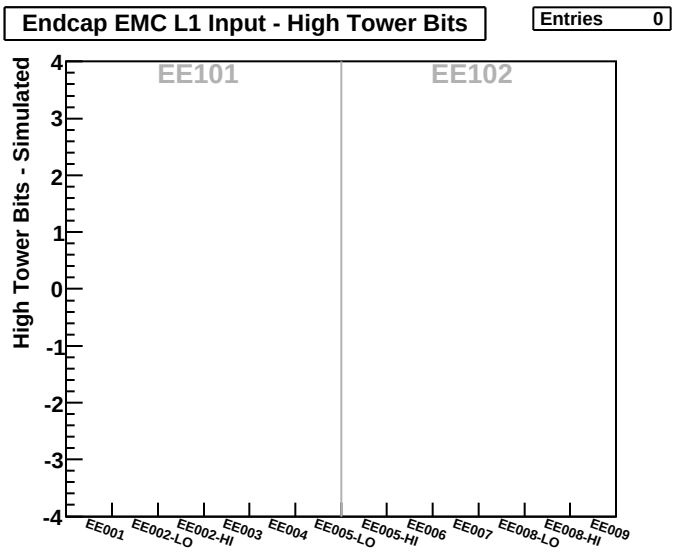

Endcap EMC L1 Input - Low Eta Sum
Entries 623820
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

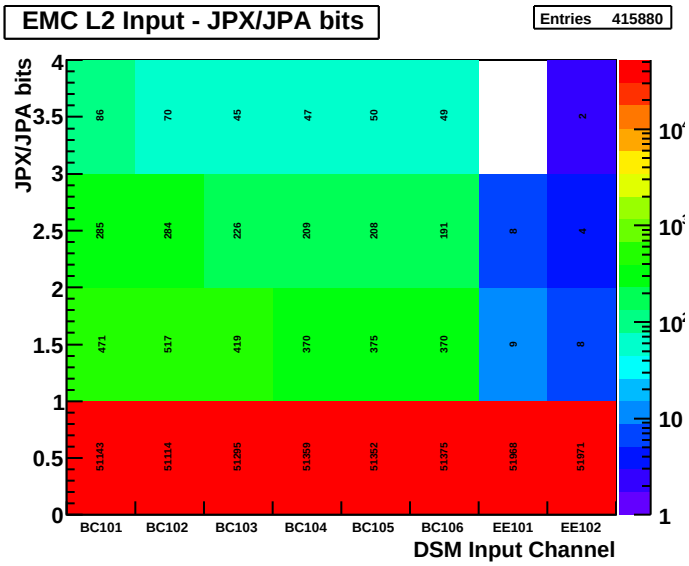

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

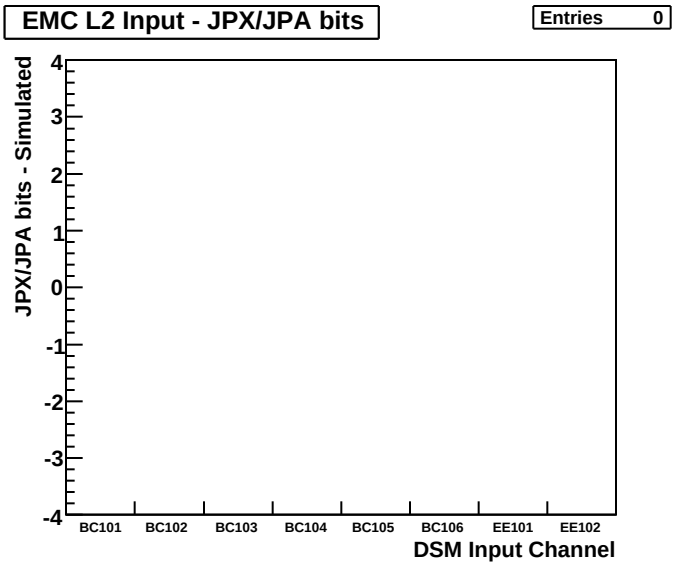

Endcap EMC L1 Input - High Eta Sum
Entries 623820
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

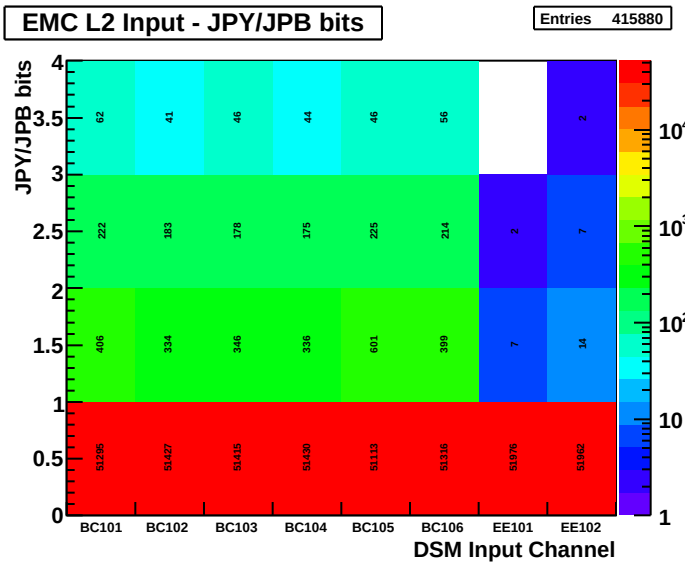

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

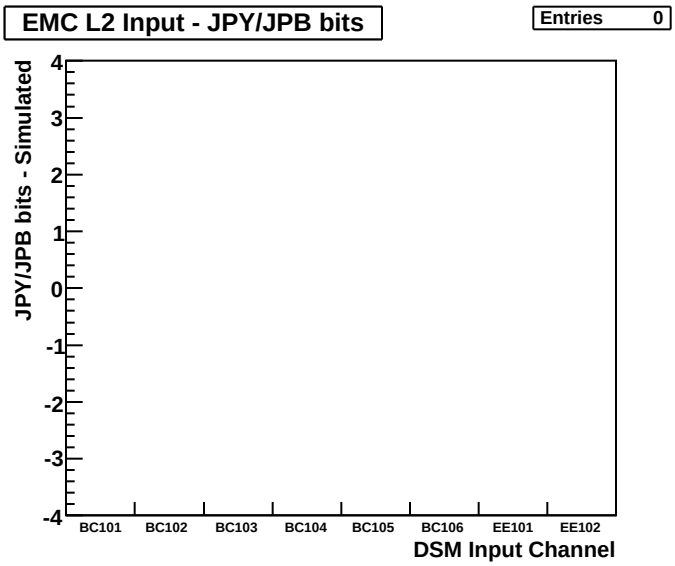

Endcap EMC L1 Input - High Tower Bits
Entries 623820
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

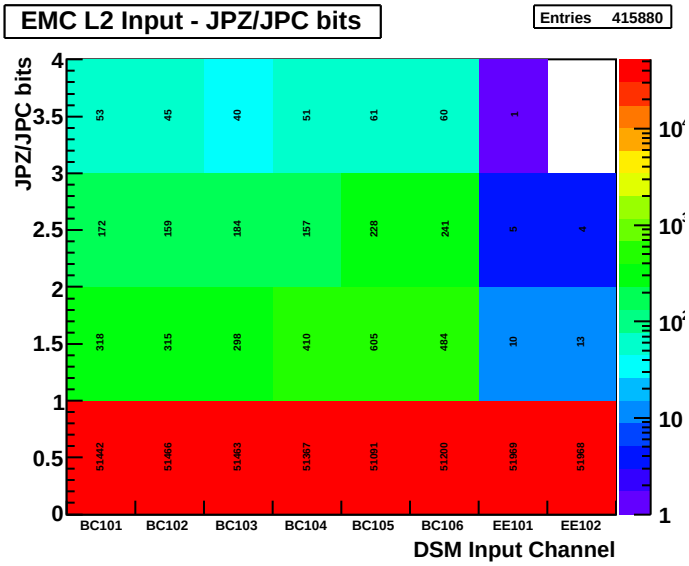

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

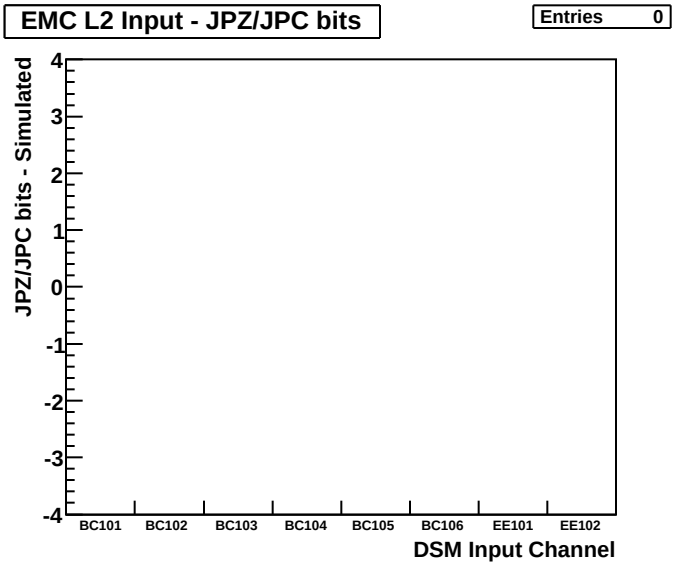

EMC L2 Input - JPX/JPA bits
Entries 415880
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
86 70 45 47 50 49 2
285 284 226 209 208 191 8 4
471 517 419 370 375 370 9 8
51143 51114 51295 51359 51352 51375 51968 51971

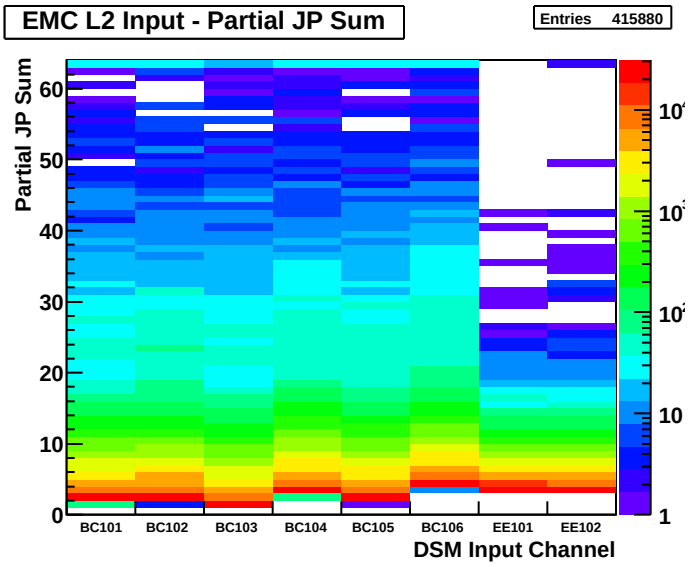

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

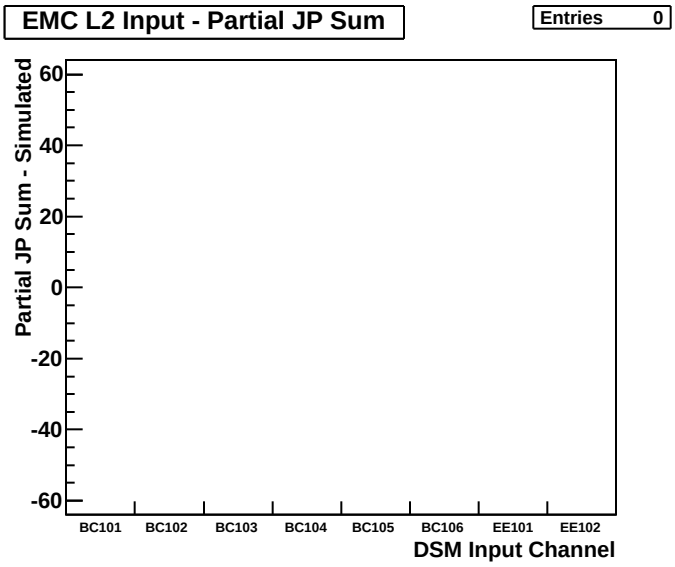

EMC L2 Input - JPY/JPB bits
Entries 415880
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
62 41 46 44 46 56 2
222 183 178 175 225 214 2 7
406 334 346 336 601 399 7 14
51295 51427 51415 51430 51113 51316 51976 51962

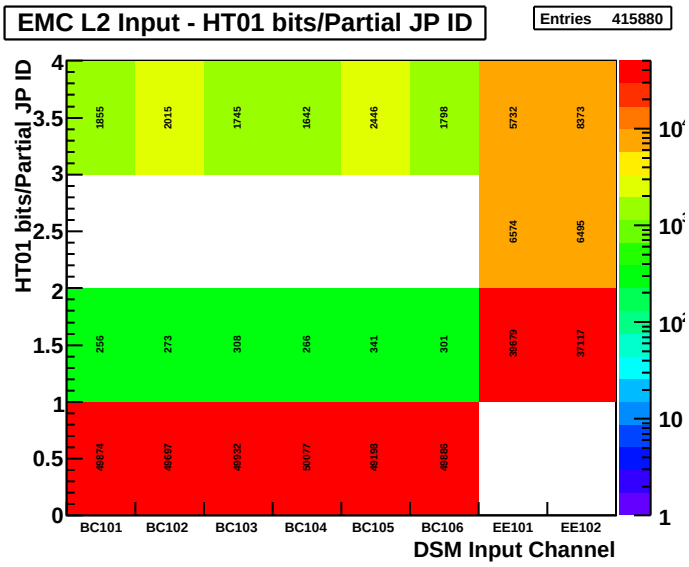

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

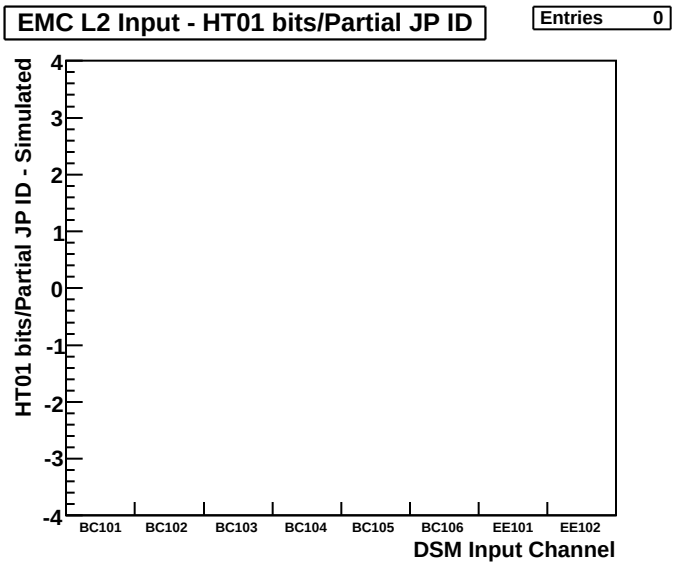

EMC L2 Input - JPZ/JPC bits
Entries 415880
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
53 45 40 51 61 60 1
172 159 184 157 228 241 5 4
318 315 298 410 605 484 10 13
51442 51466 51463 51367 51091 51200 51969 51958

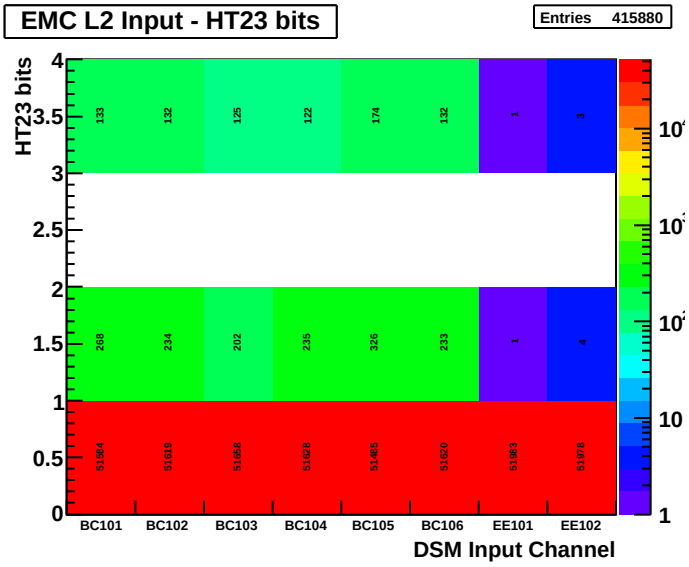

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

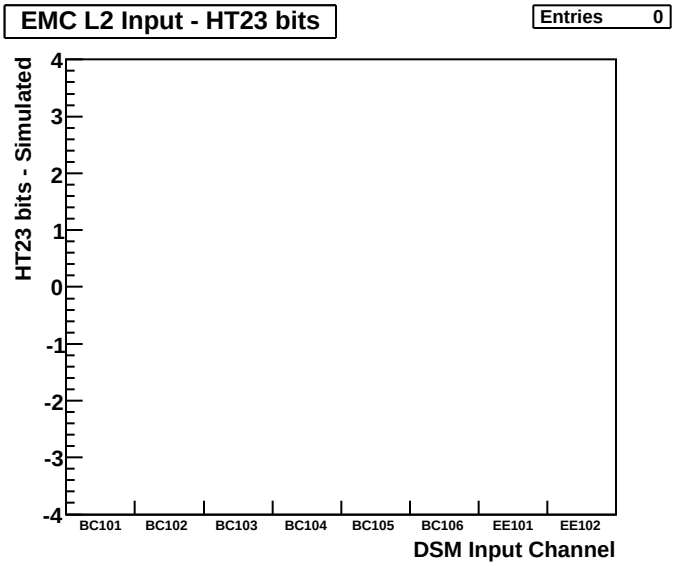

EMC L2 Input - Partial JP Sum
Entries 415880
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

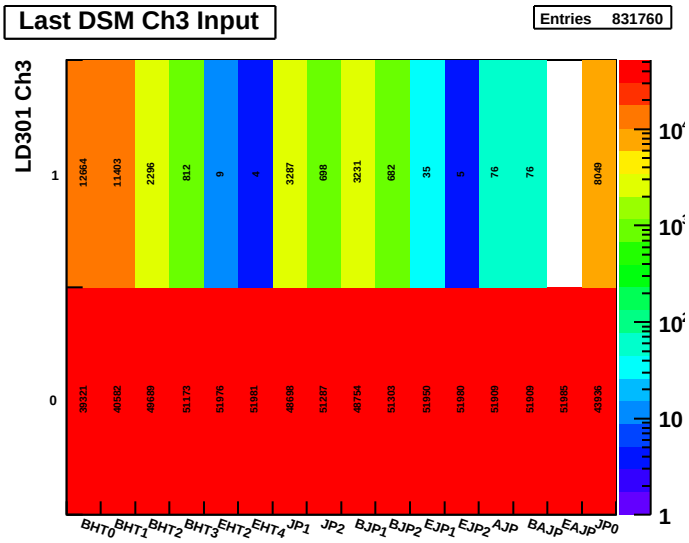

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

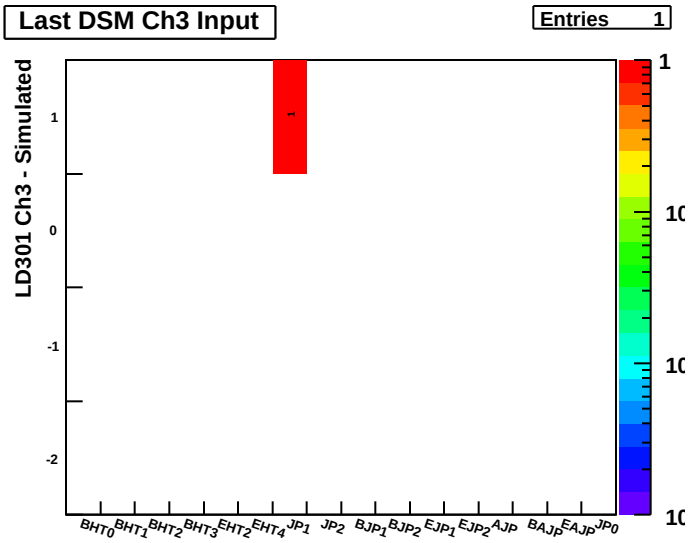

EMC L2 Input - HT01 bits/Partial JP ID
Entries 415880
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

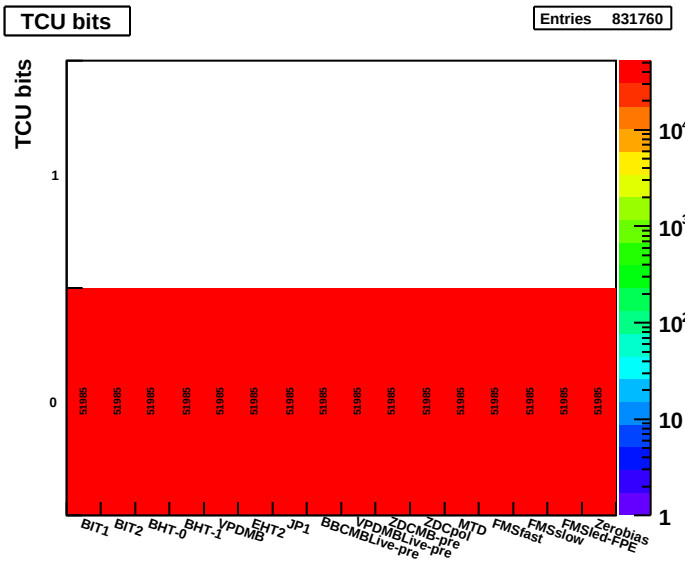

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

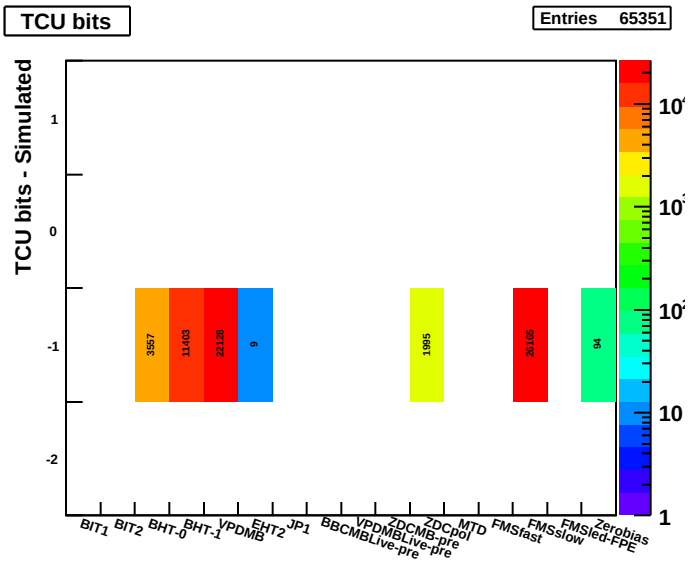

EMC L2 Input - HT23 bits
Entries 415880
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

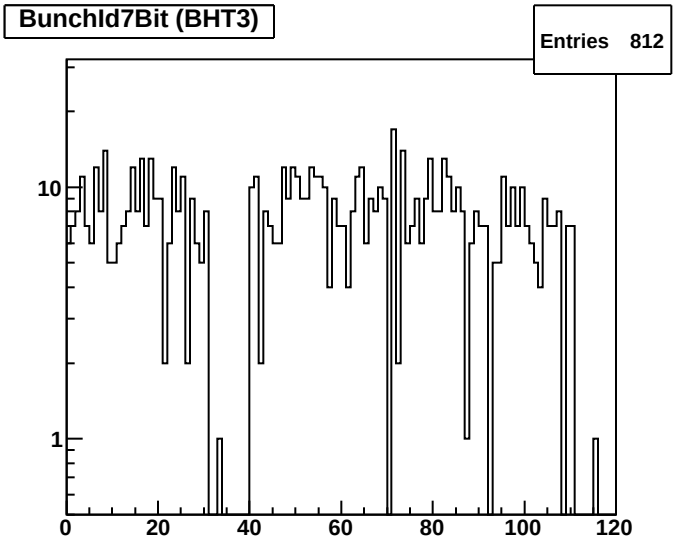

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

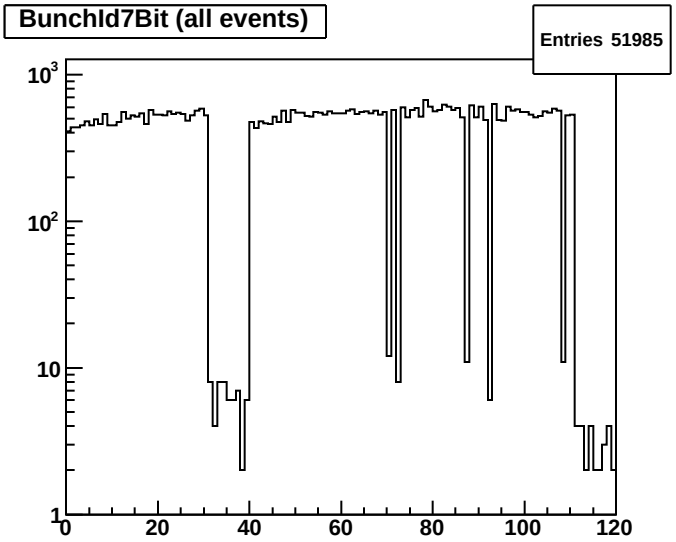

Last DSM Ch3 Input
Entries 831760
LD301 Ch3
12664 11403 2296 812 9 4 3287 698 3231 682 35 5 76 76 8049
39321 40582 49689 51173 51976 51961 49698 51267 49754 51303 51950 51980 51909 51909 51985 43936
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

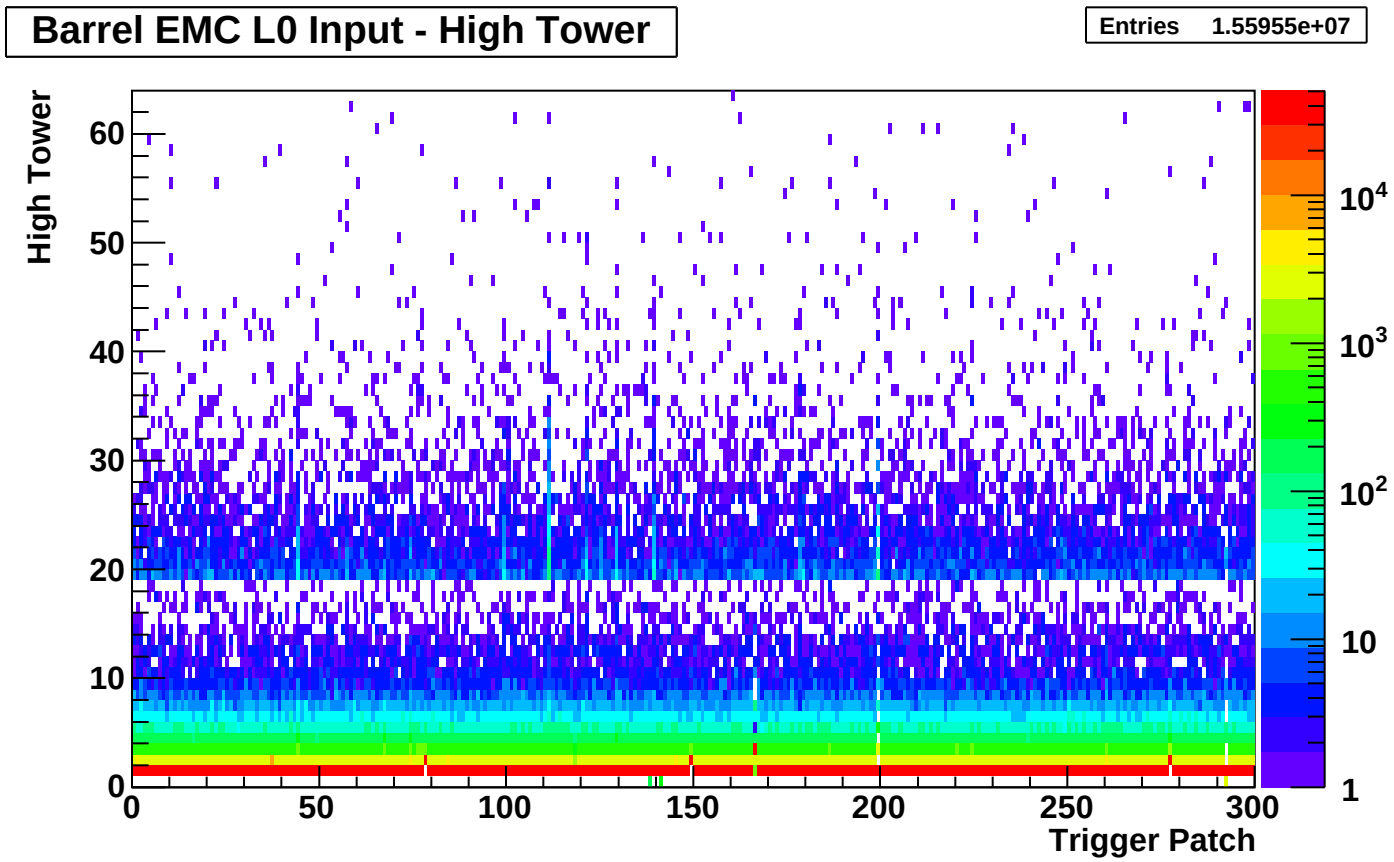

Last DSM Ch3 Input
Entries 1
LD301 Ch3 - Simulated
1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

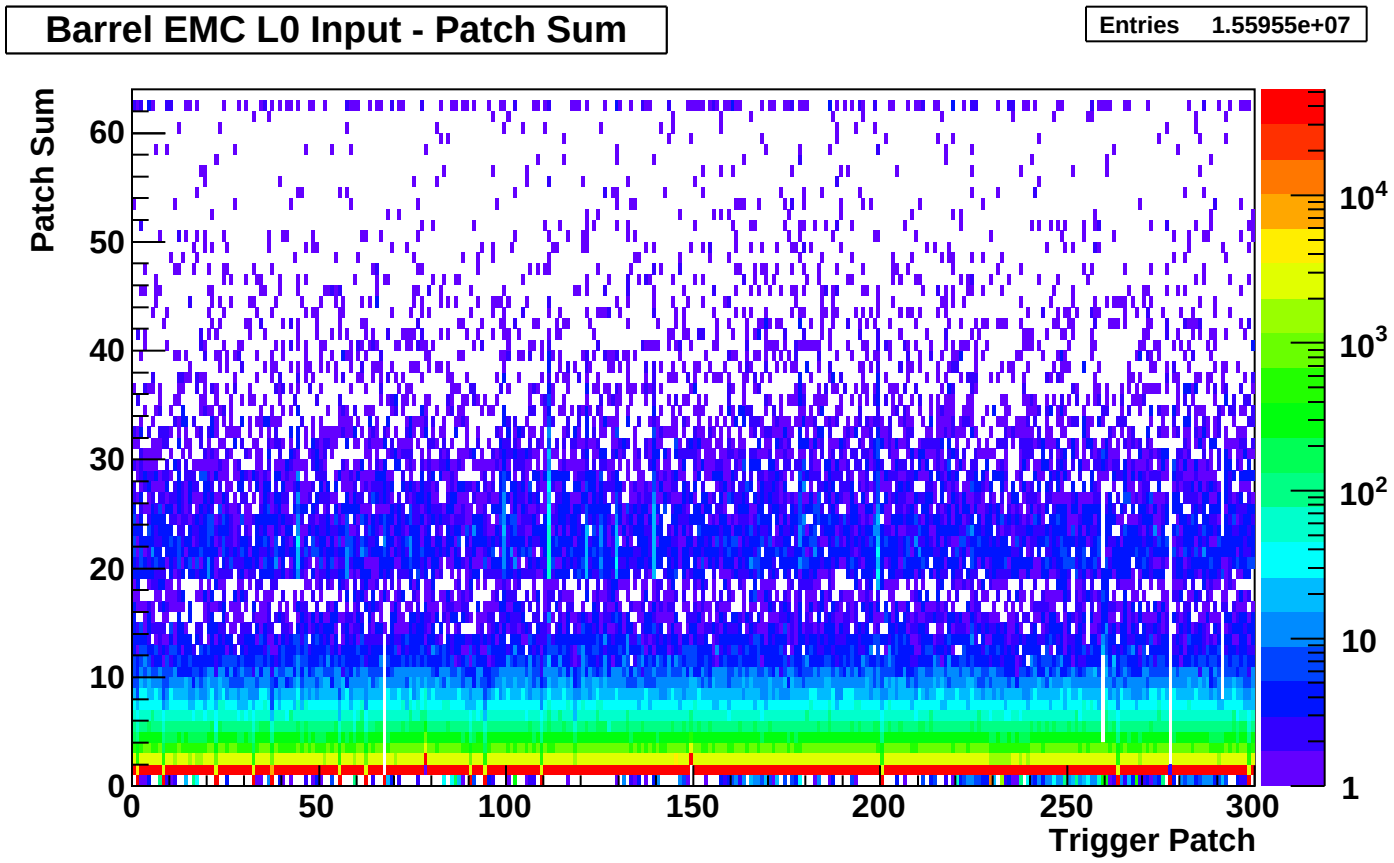

TCU bits
Entries 831760
TCU bits
51985 51985 51985 51985 51985 51985 51985 51985 51985 51985 51985 51985 51985 51985 51985 51985
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

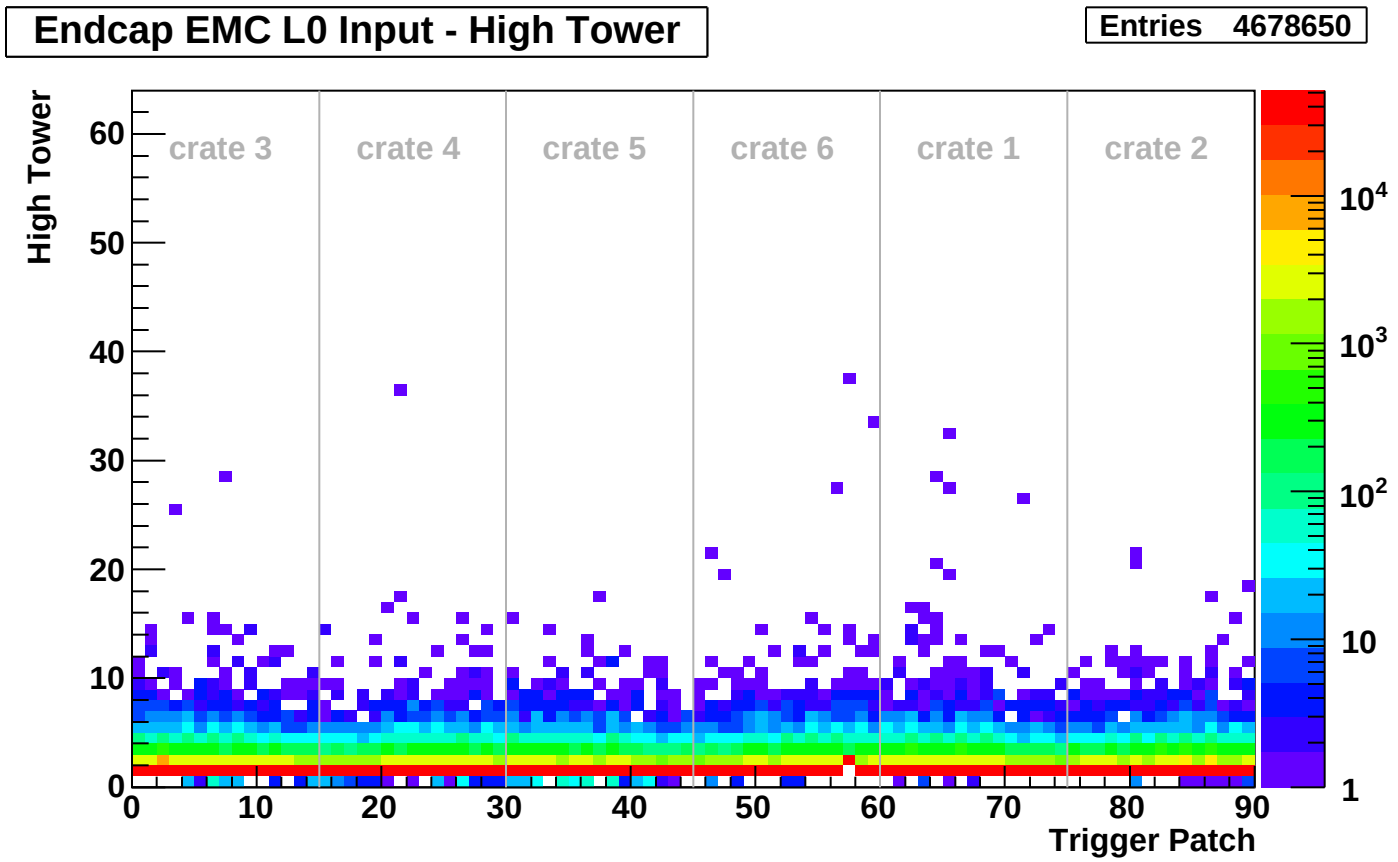

TCU bits
Entries 65351
TCU bits - Simulated
3557 11403 22128 9 1995 26165 94
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

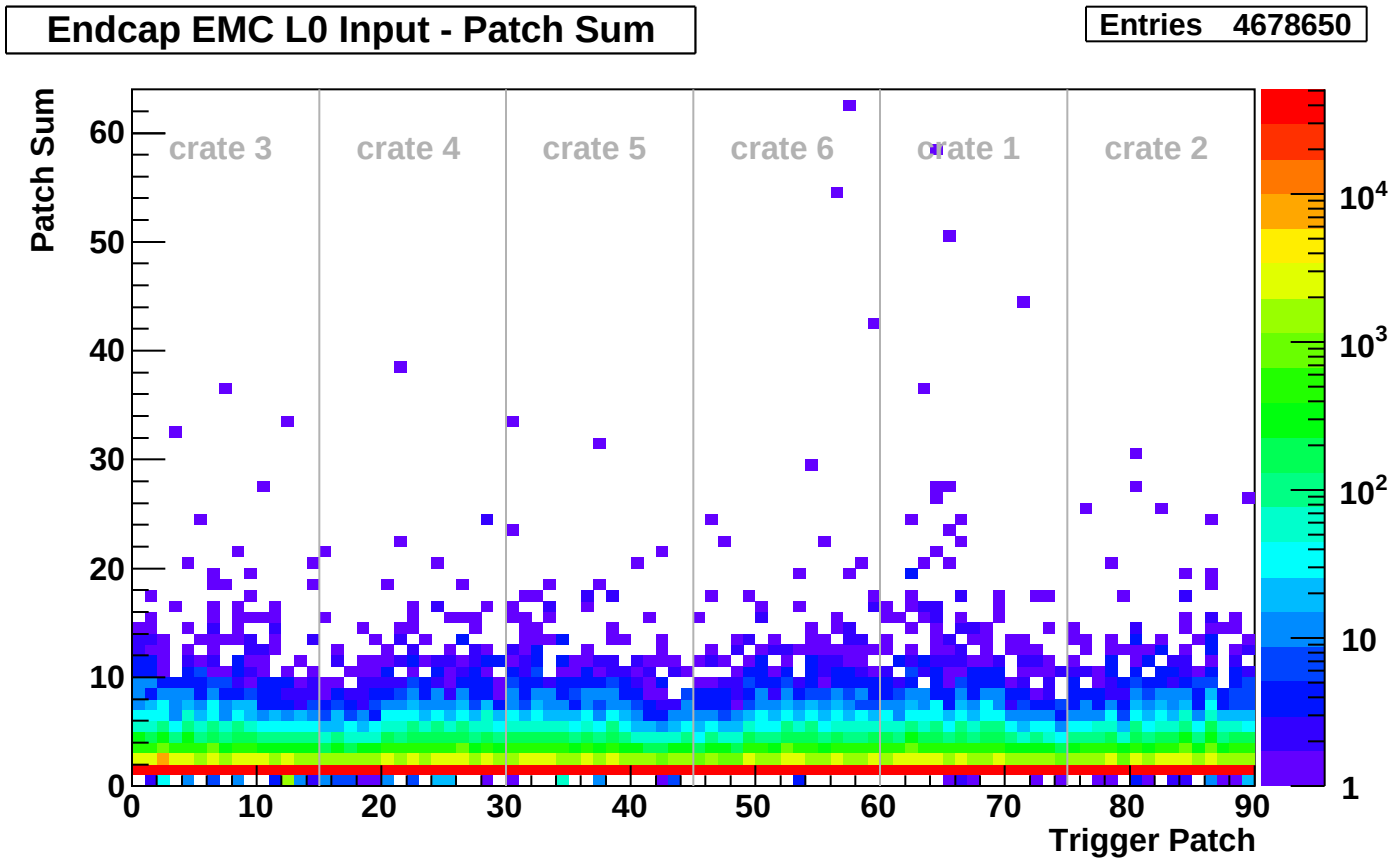

BunchId7Bit (BHT3)
Entries 812

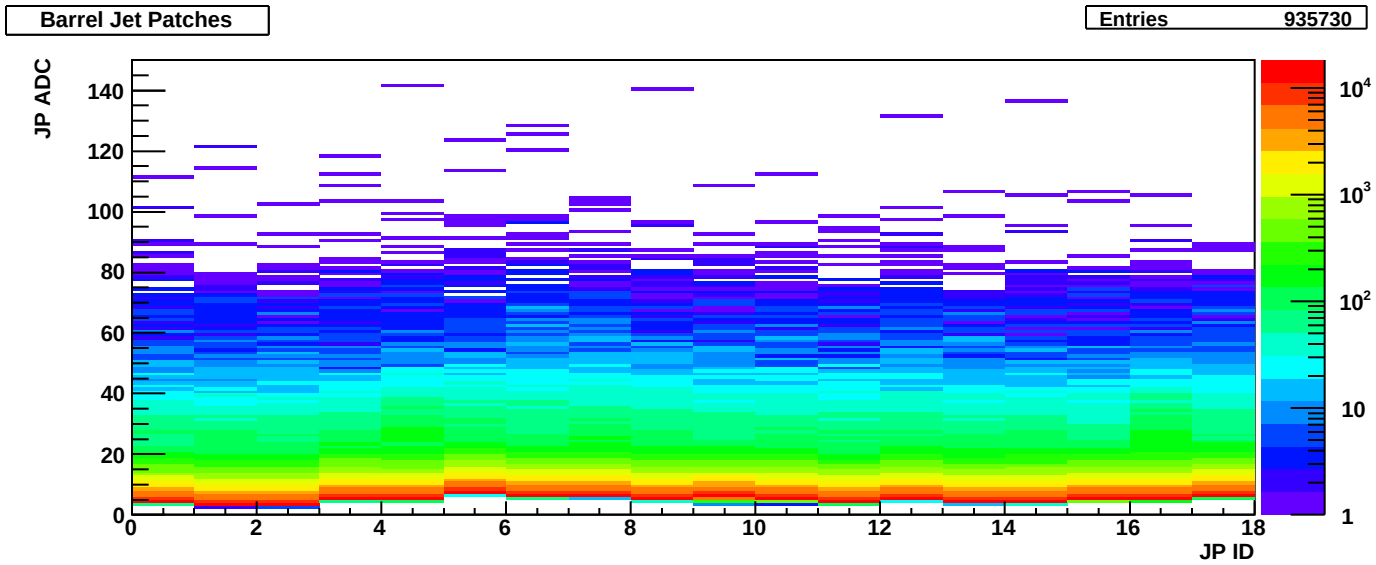

BunchId7Bit (all events)
Entries 51985

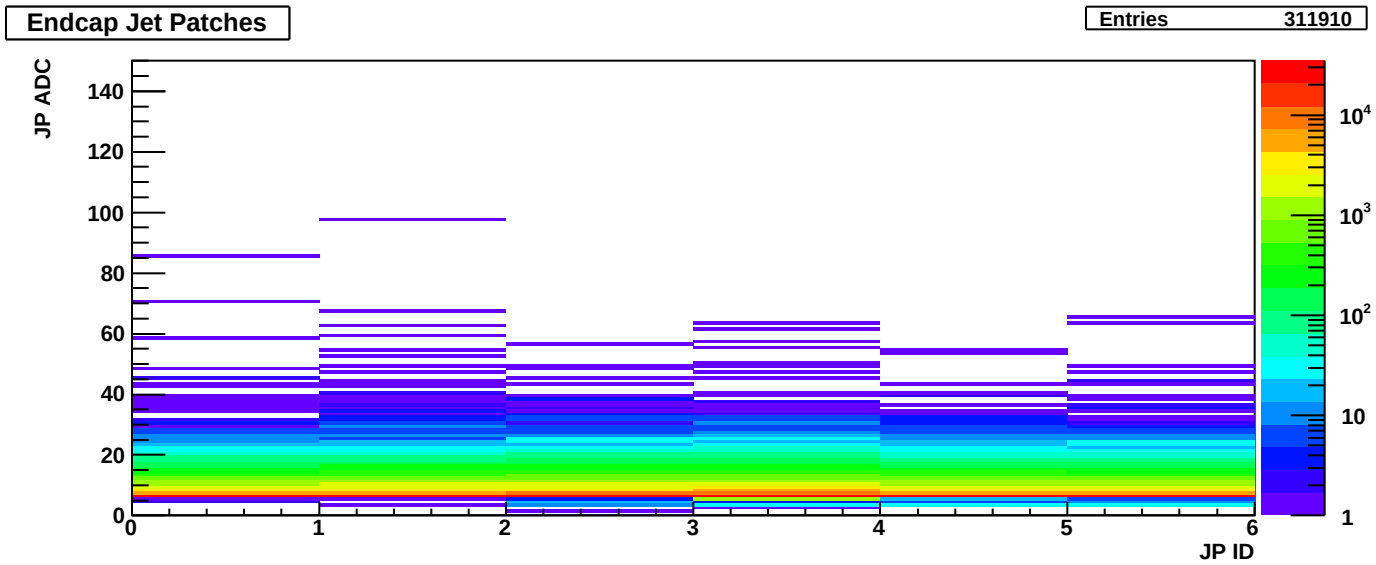

Barrel EMC L0 Input - High Tower
Entries 1.55955e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

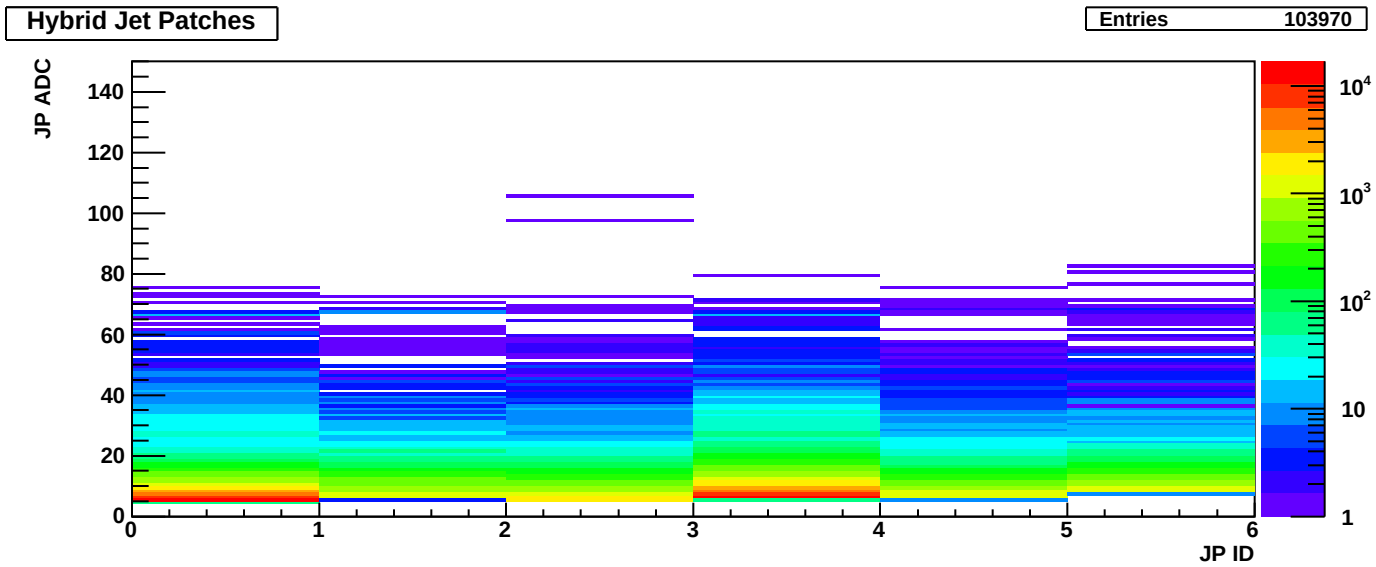

Barrel EMC L0 Input - Patch Sum
Entries 1.55955e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

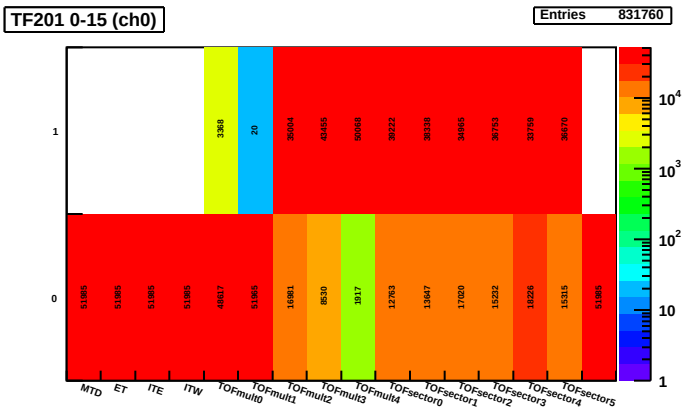

Endcap EMC L0 Input - High Tower
Entries 4678650
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

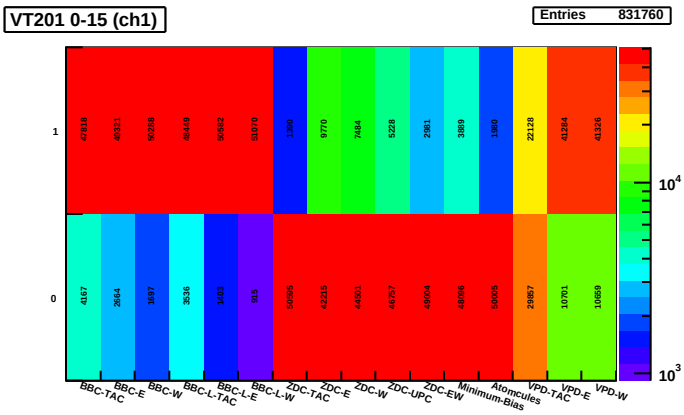

Endcap EMC L0 Input - Patch Sum
Entries 4678650
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

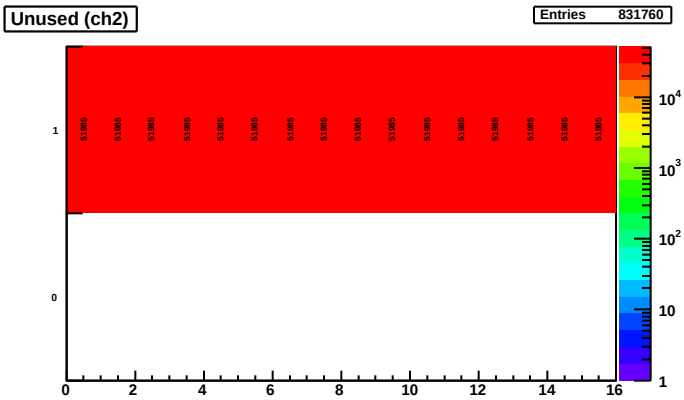

Barrel Jet Patches
Entries 935730
JP ADC
JP ID

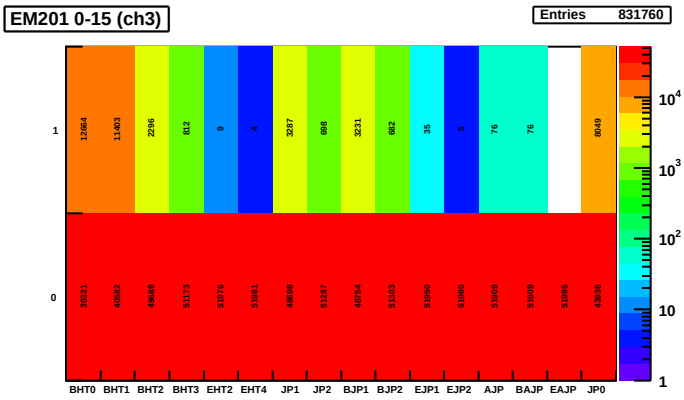

Endcap Jet Patches
Entries 311910
JP ADC
JP ID

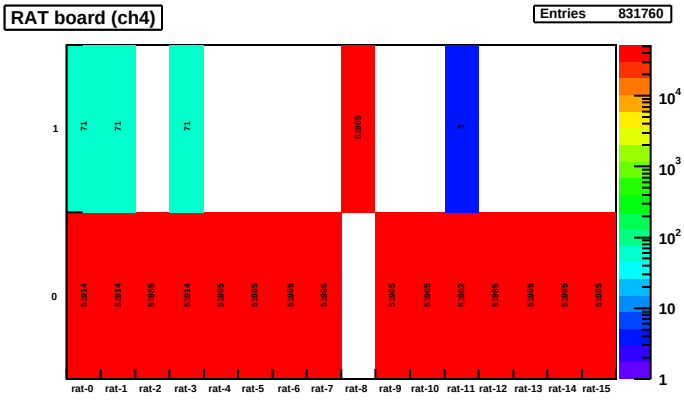

Hybrid Jet Patches
Entries 103970
JP ADC
JP ID

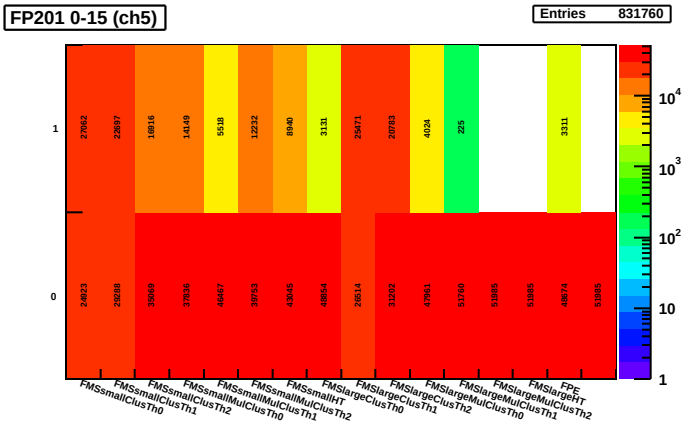

TF201 0-15 (ch0)
Entries 831760
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

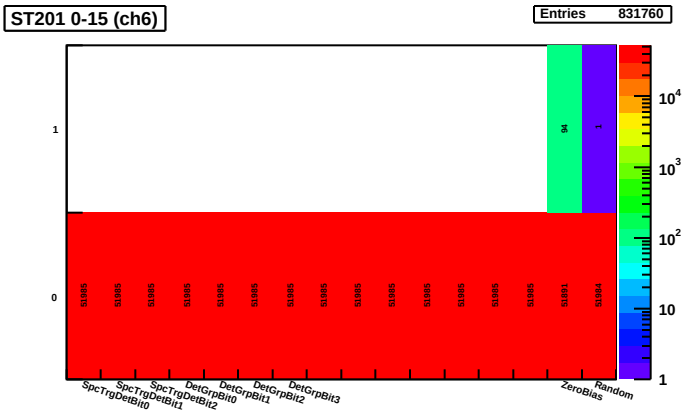

VT201 0-15 (ch1)
Entries 831760
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

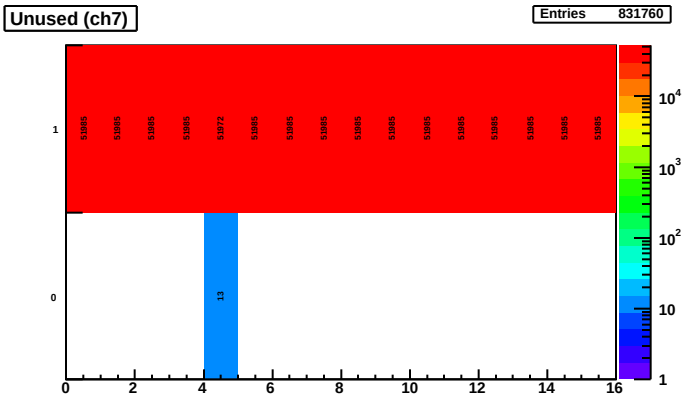

Unused (ch2)
Entries 831760

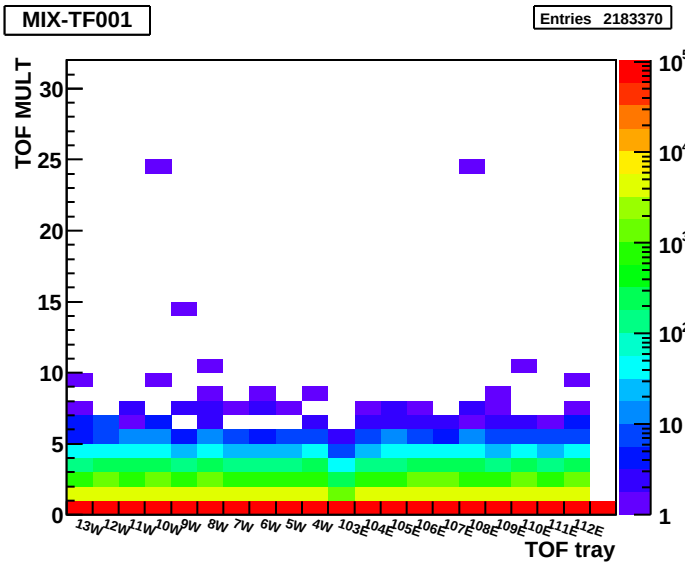

EM201 0-15 (ch3)
Entries 831760
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

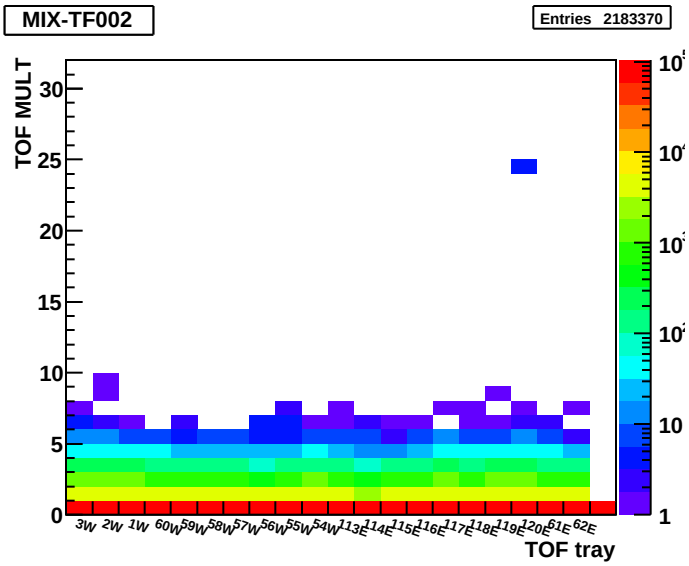

RAT board (ch4)
Entries 831760
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

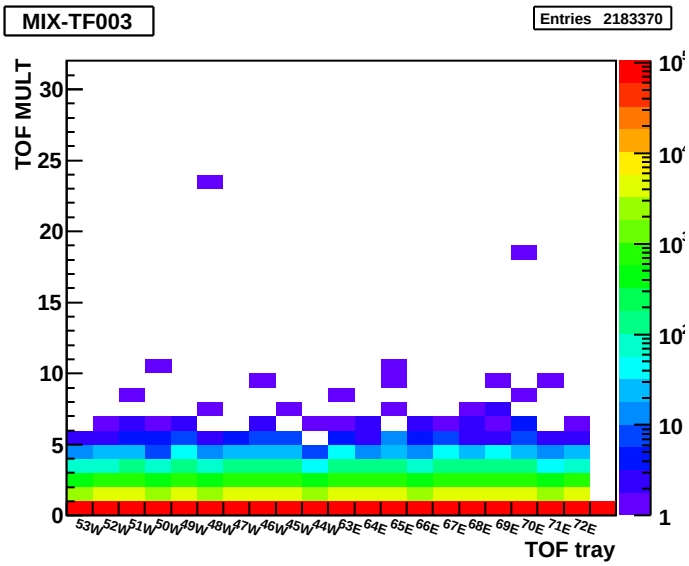

FP201 0-15 (ch5)
Entries 831760
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

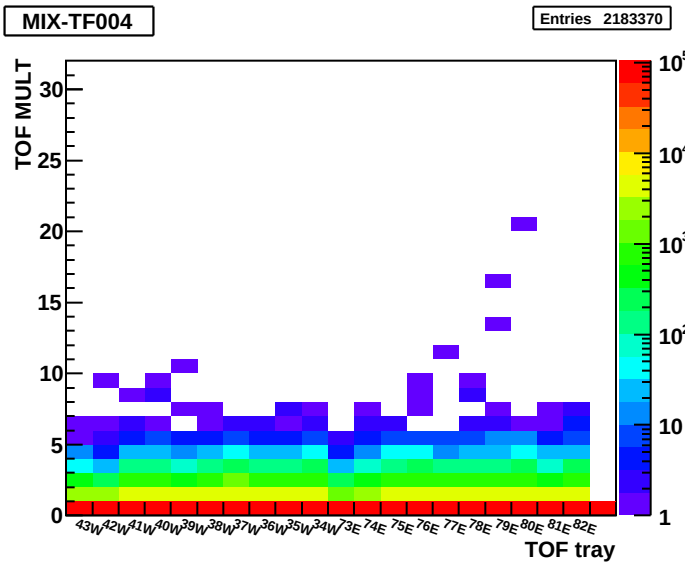

ST201 0-15 (ch6)
Entries 831760
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

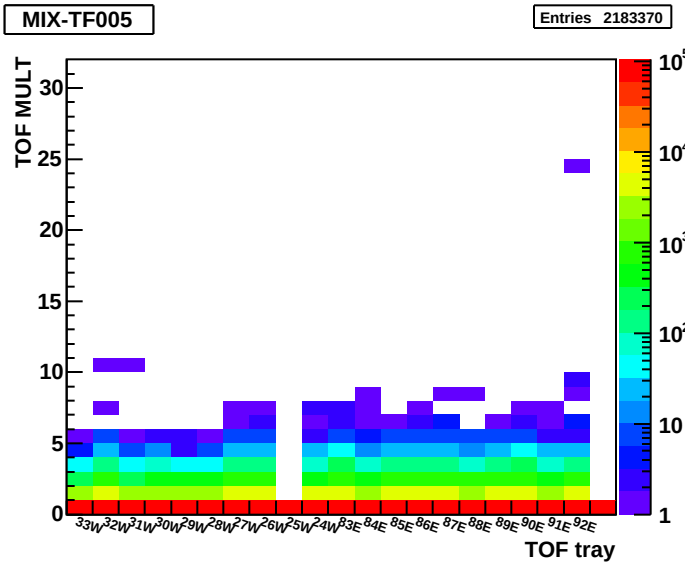

Unused (ch7)
Entries 831760

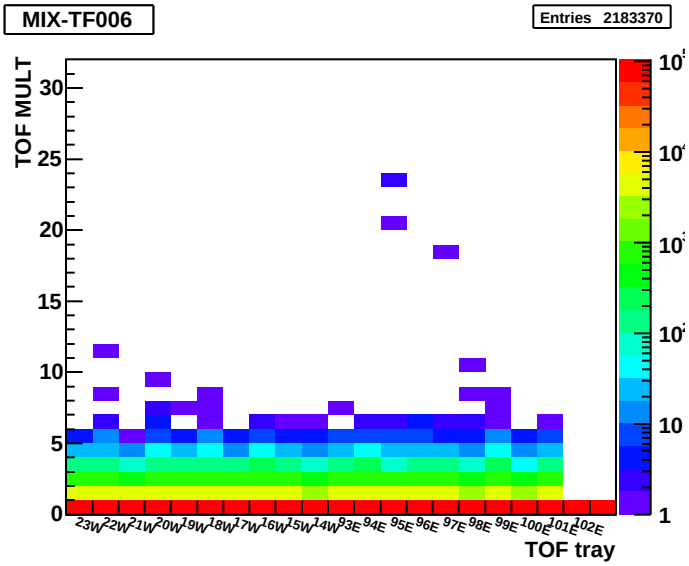

MIX-TF001
Entries 2183370
TOF MULT
TOF tray

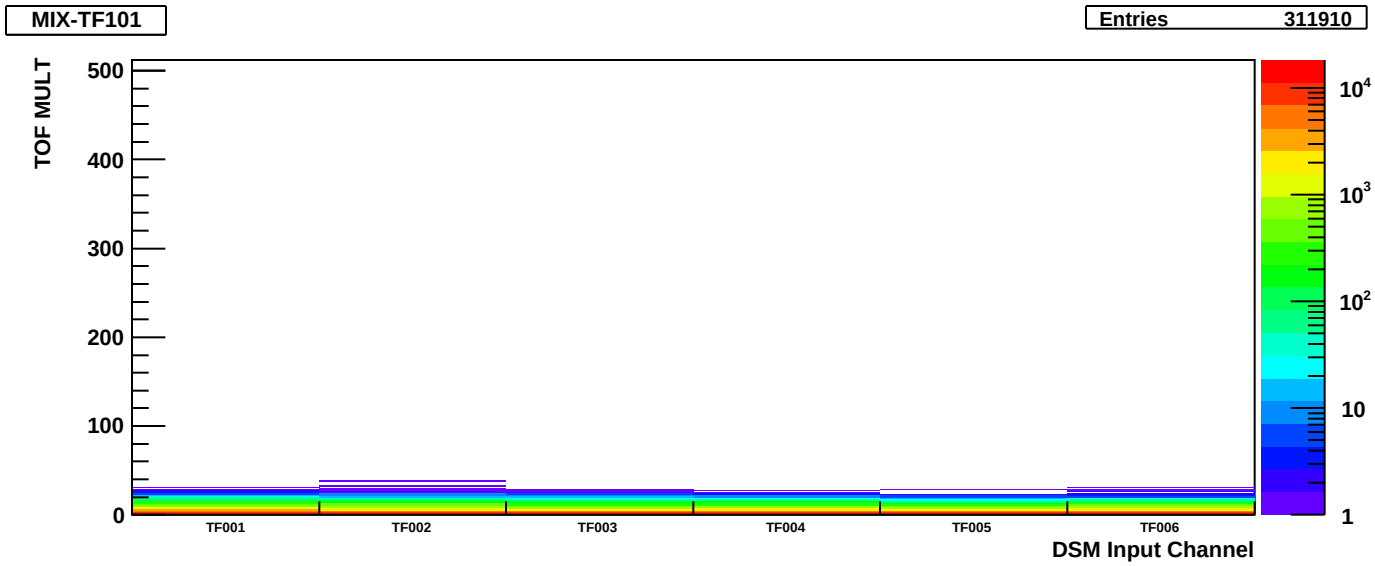

MIX-TF002
Entries 2183370
TOF MULT
TOF tray

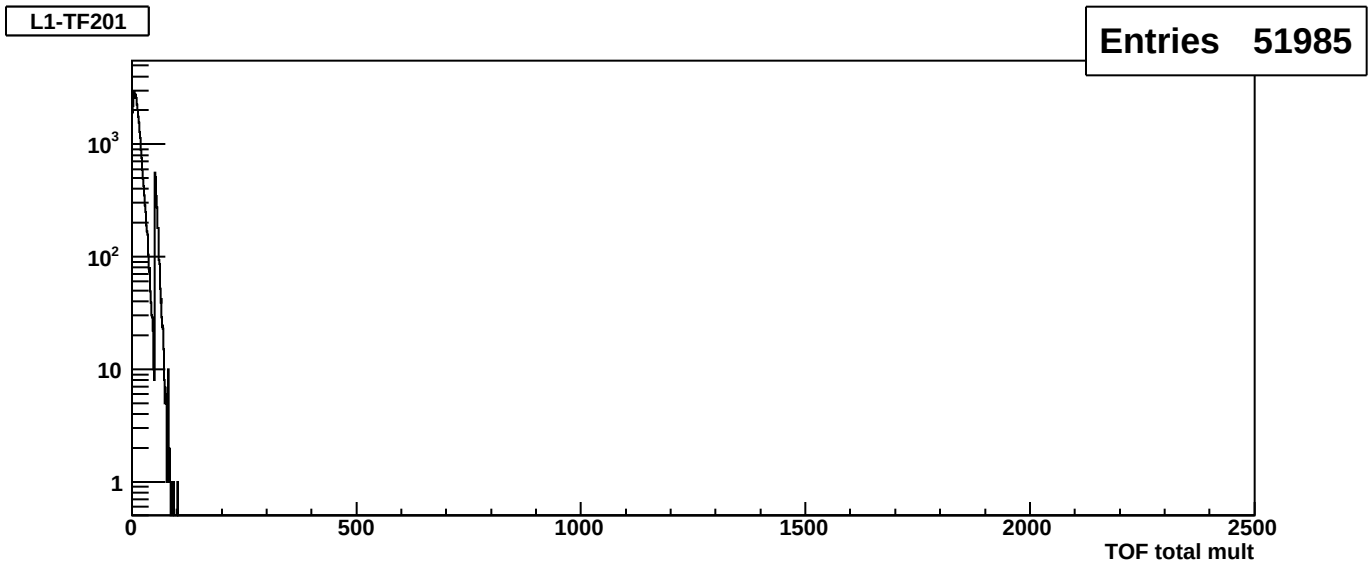

MIX-TF003
Entries 2183370
TOF MULT
TOF tray

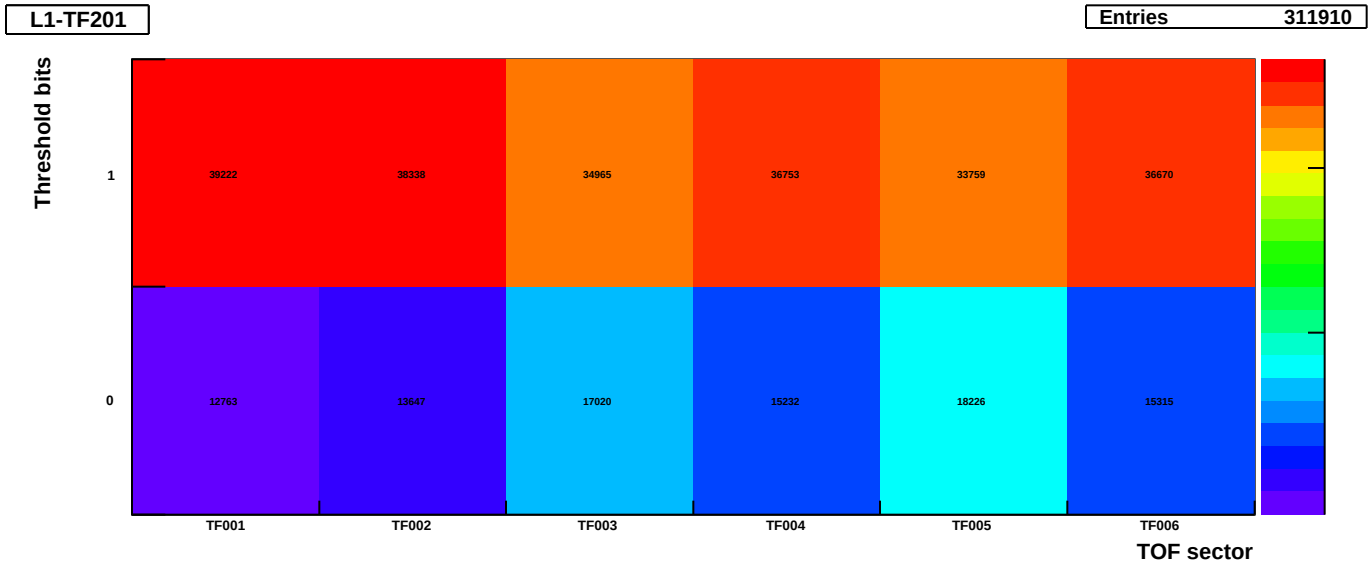

MIX-TF004
Entries 2183370
TOF MULT
TOF tray

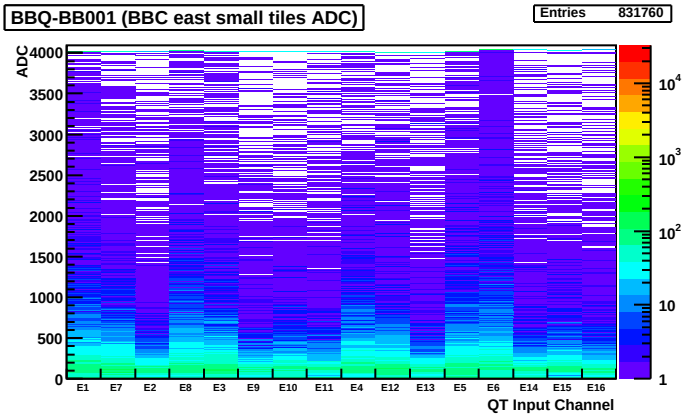

MIX-TF005
Entries 2183370
TOF MULT
TOF tray

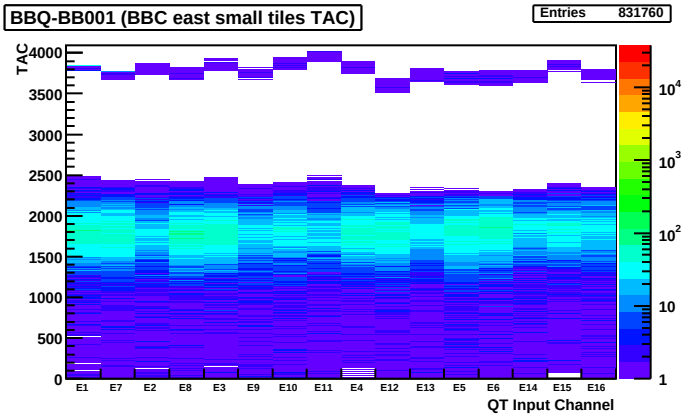

MIX-TF006
Entries 2183370
TOF MULT
TOF tray

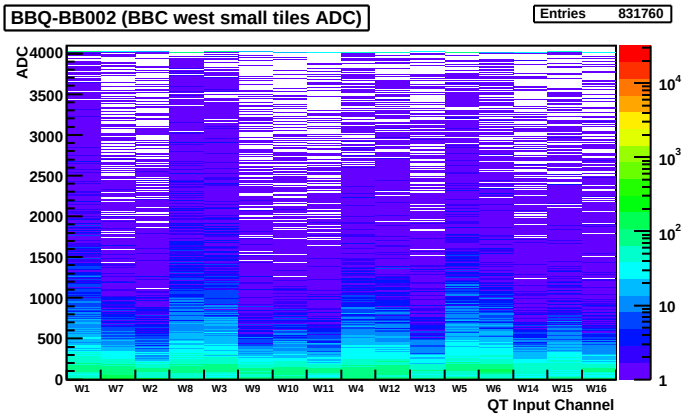

MIX-TF101
Entries 311910
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

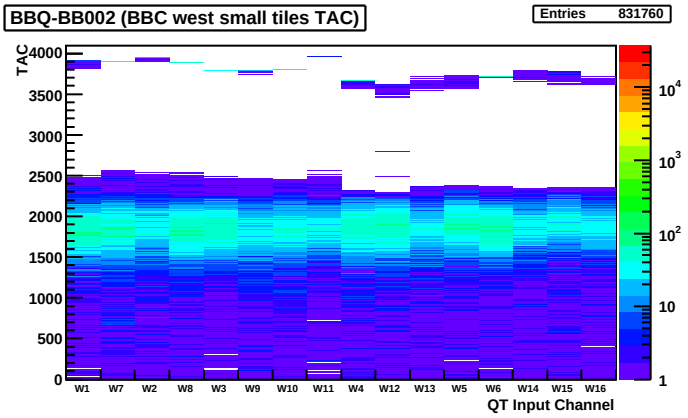

L1-TF201
Entries 51985
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

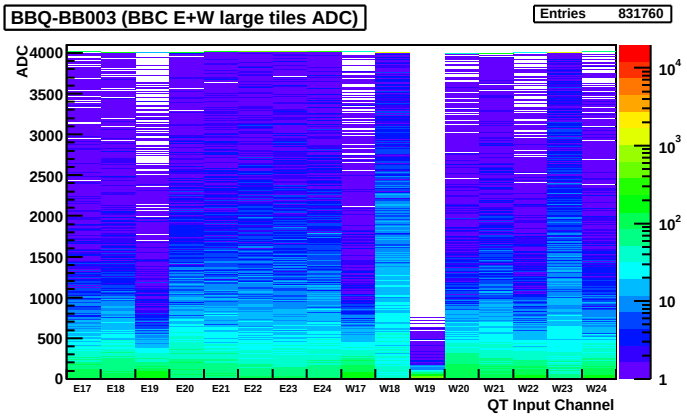

L1-TF201
Entries 311910
Threshold bits
1
0
39222
38338
34965
36753
33759
36670
12763
13647
17020
15232
18226
15315
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

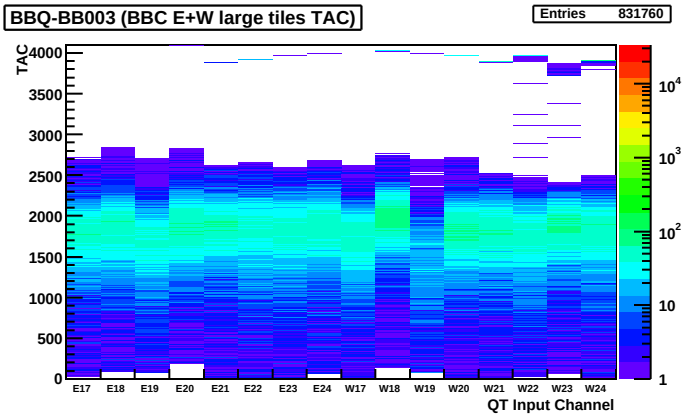

BBQ-BB001 (BBC east small tiles ADC)
Entries 831760
ADC
QT Input Channel

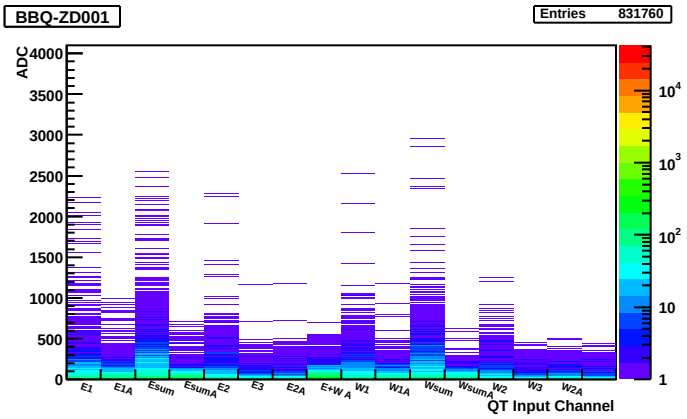

BBQ-BB001 (BBC east small tiles TAC)
Entries 831760
TAC
QT Input Channel

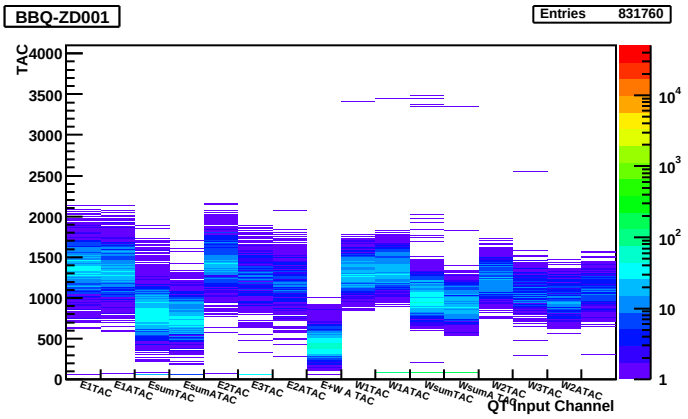

BBQ-BB002 (BBC west small tiles ADC)
Entries 831760
ADC
QT Input Channel

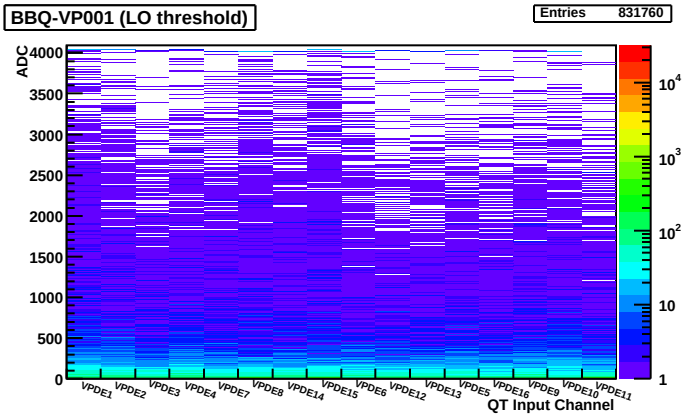

BBQ-BB002 (BBC west small tiles TAC)
Entries 831760
TAC
QT Input Channel

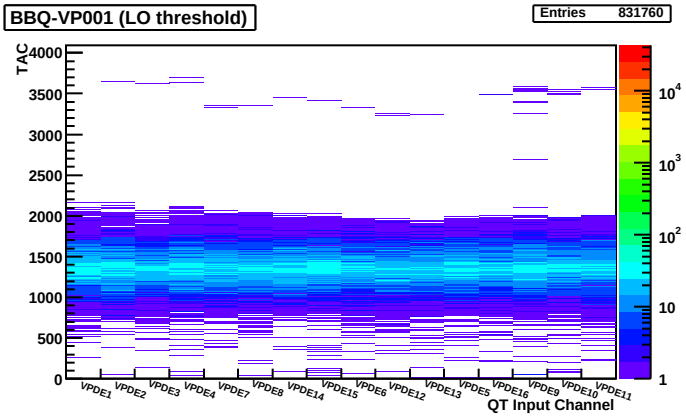

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 831760
ADC
QT Input Channel

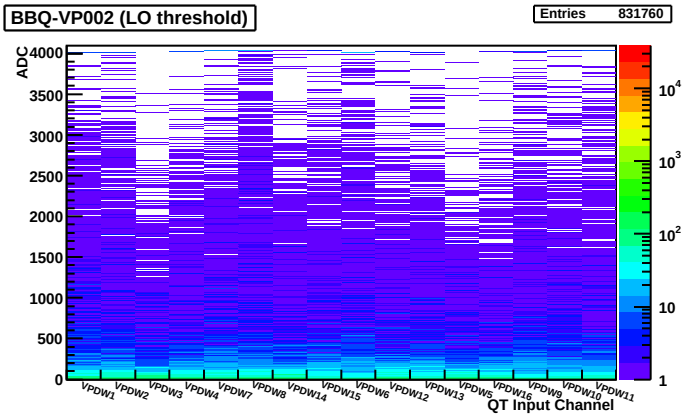

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 831760
TAC
QT Input Channel

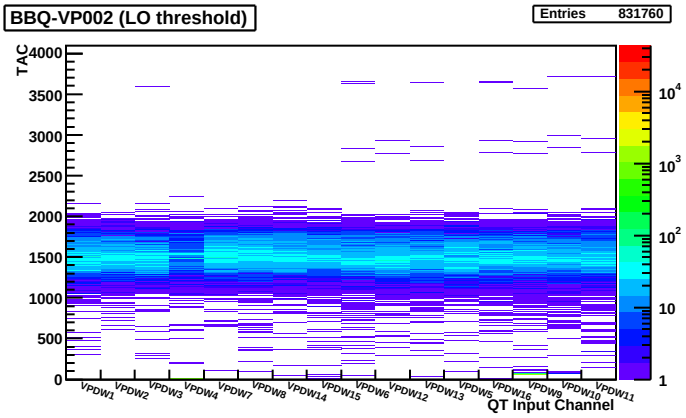

BBQ-ZD001
Entries 831760
ADC
QT Input Channel

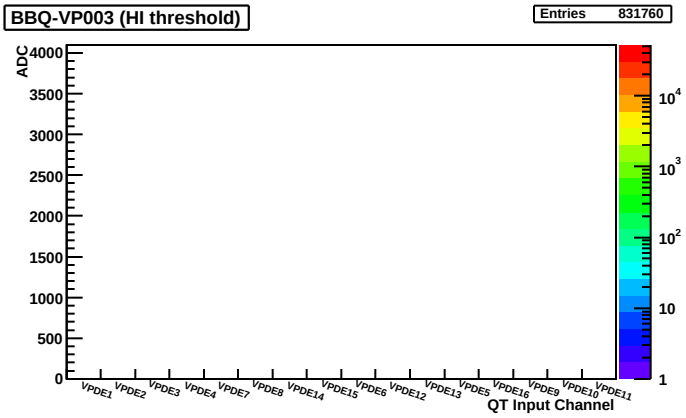

BBQ-ZD001
Entries 831760
TAC
QT Input Channel

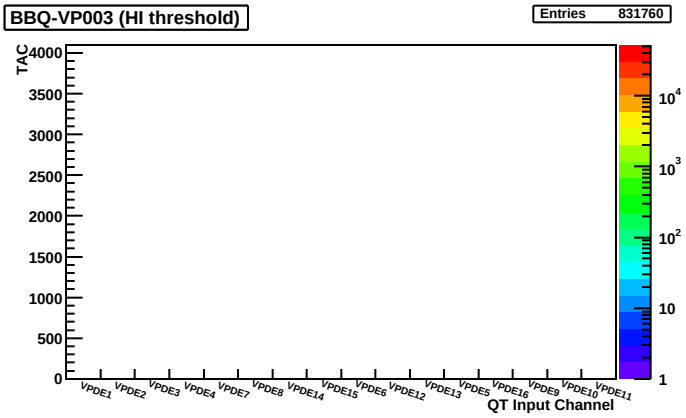

BBQ-VP001 (LO threshold)
Entries 831760
ADC
QT Input Channel

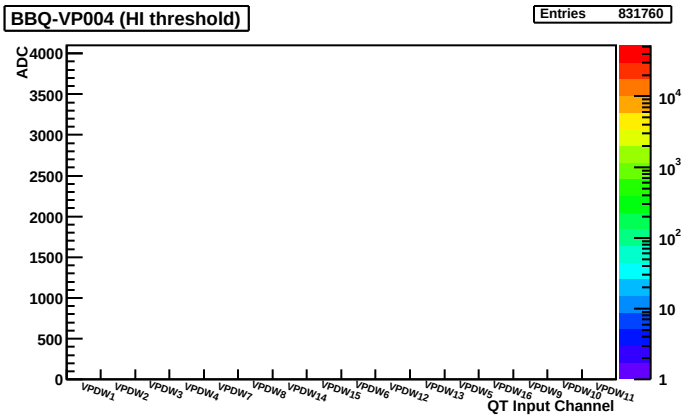

BBQ-VP001 (LO threshold)
Entries 831760
TAC
QT Input Channel

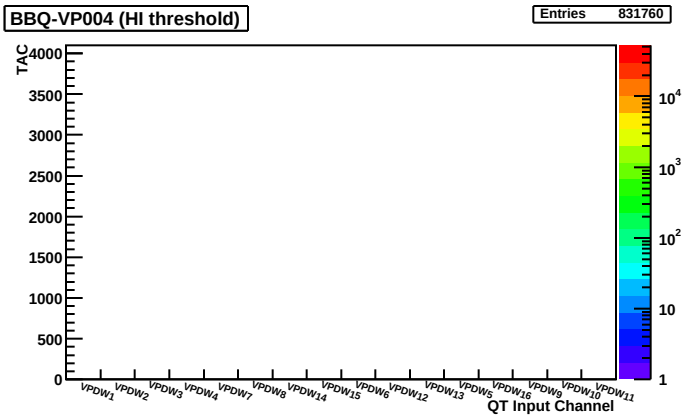

BBQ-VP002 (LO threshold)
Entries 831760
ADC
QT Input Channel

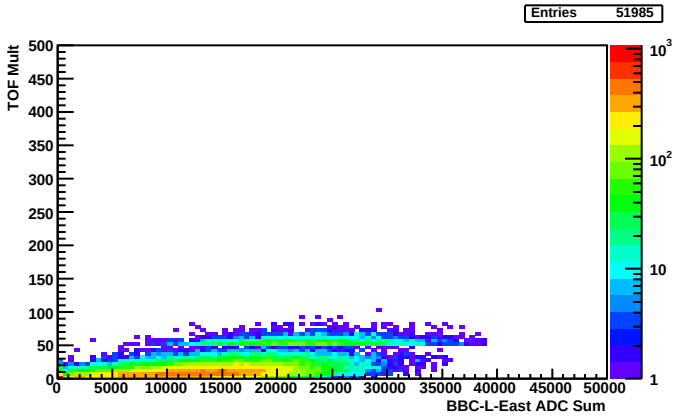

BBQ-VP002 (LO threshold)
Entries 831760
TAC
QT Input Channel

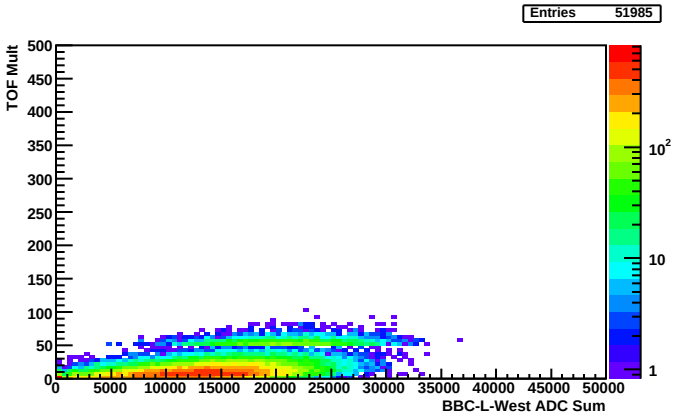

BBQ-VP003 (HI threshold)
Entries 831760
ADC
QT Input Channel

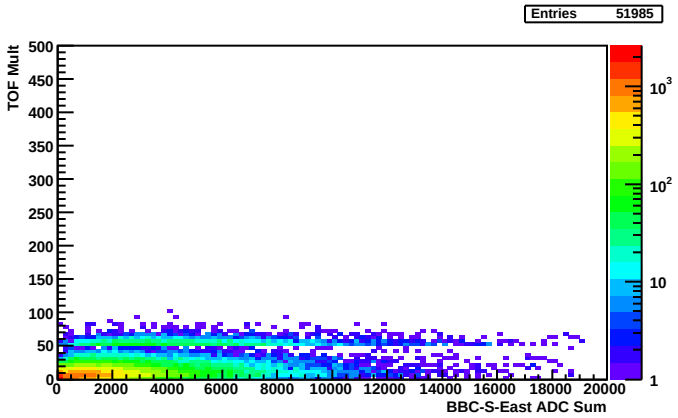

BBQ-VP003 (HI threshold)
Entries 831760
TAC
QT Input Channel

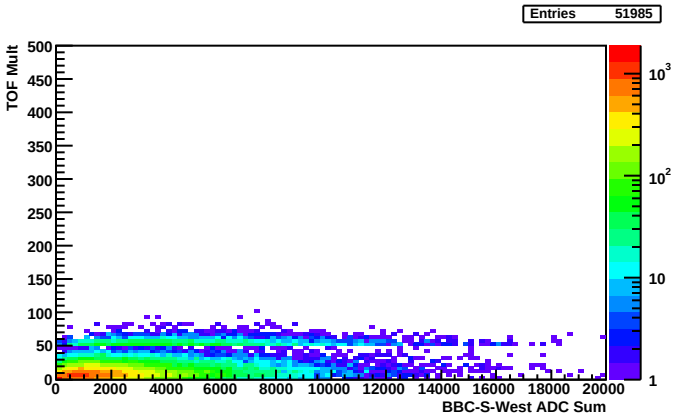

BBQ-VP004 (HI threshold)
Entries 831760
ADC
QT Input Channel

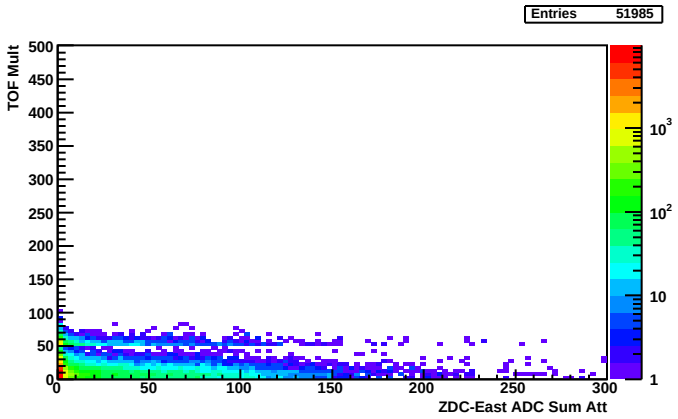

BBQ-VP004 (HI threshold)
Entries 831760
TAC
QT Input Channel

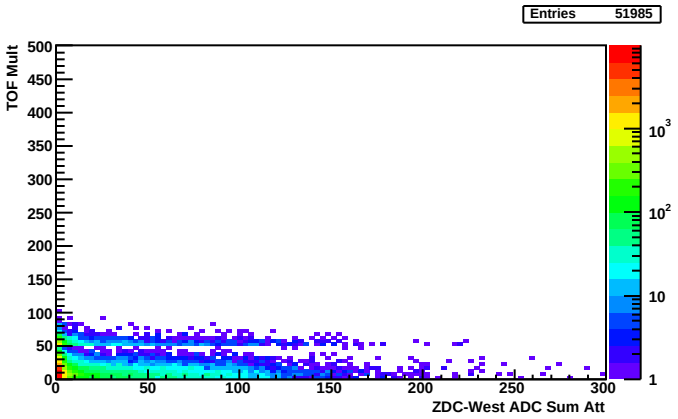

Entries 51985
TOF Mult
BBC-L-East ADC Sum

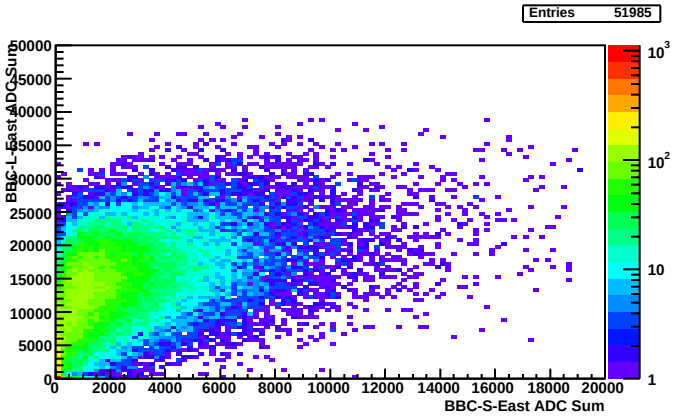

Entries 51985
TOF Mult
BBC-L-West ADC Sum

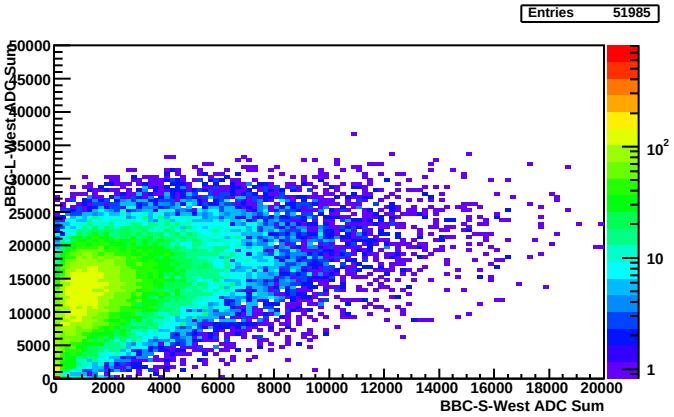

Entries 51985
TOF Mult
BBC-S-East ADC Sum

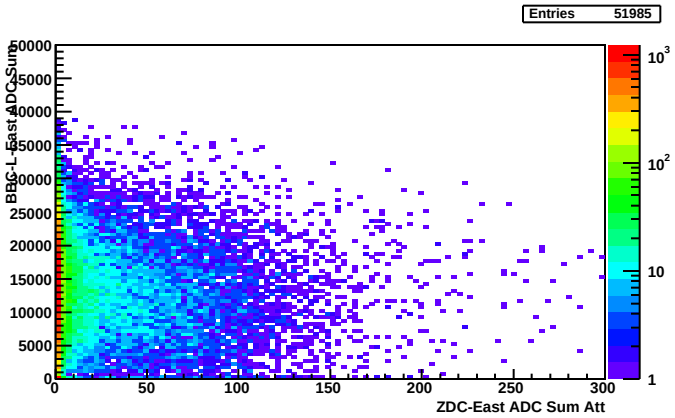

Entries 51985
TOF Mult
BBC-S-West ADC Sum

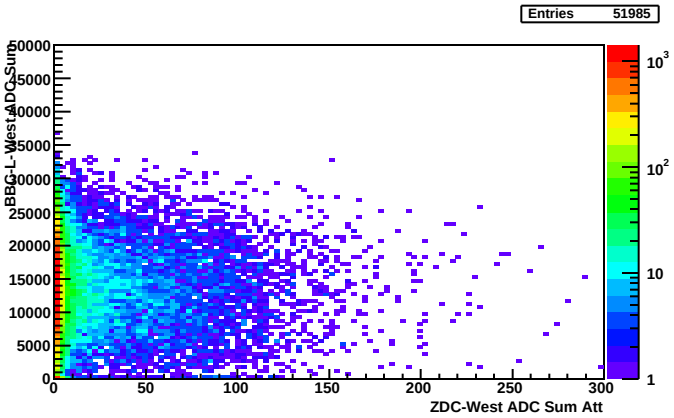

Entries 51985
TOF Mult
ZDC-East ADC Sum Att

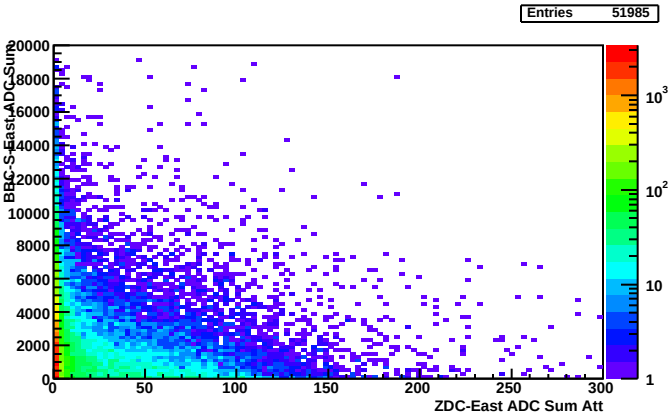

Entries 51985
TOF Mult
ZDC-West ADC Sum Att

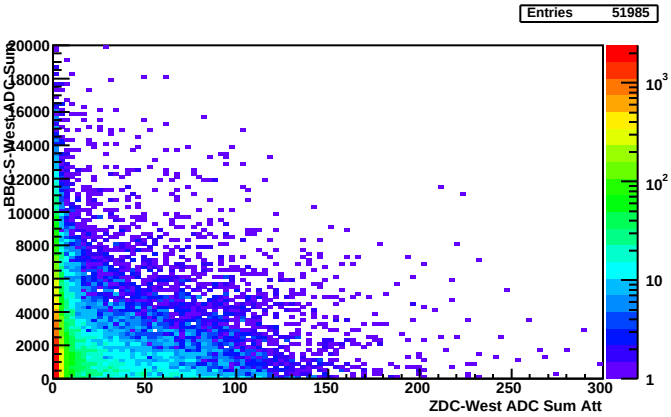

Entries 51985
BBC-L-East ADC Sum
BBC-S-East ADC Sum

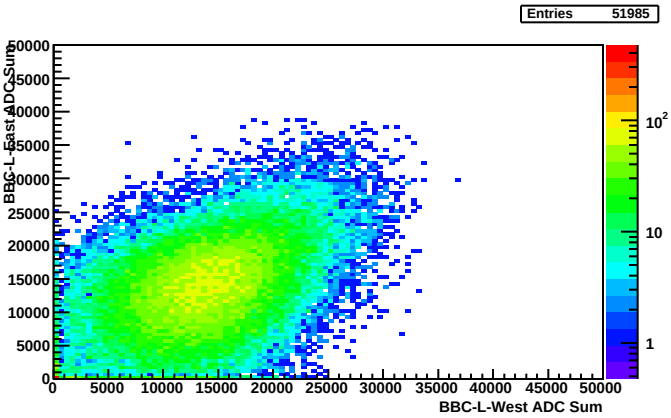

Entries 51985
BBC-L-West ADC Sum
BBC-S-West ADC Sum

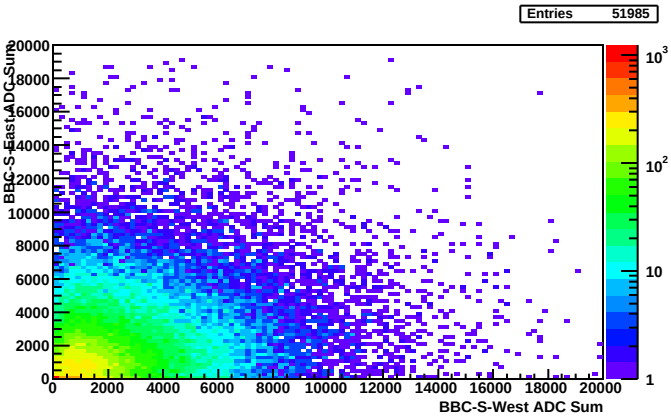

Entries 51985
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

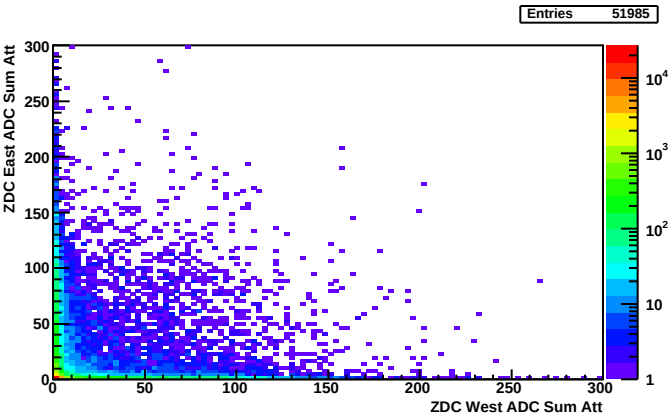

Entries 51985
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

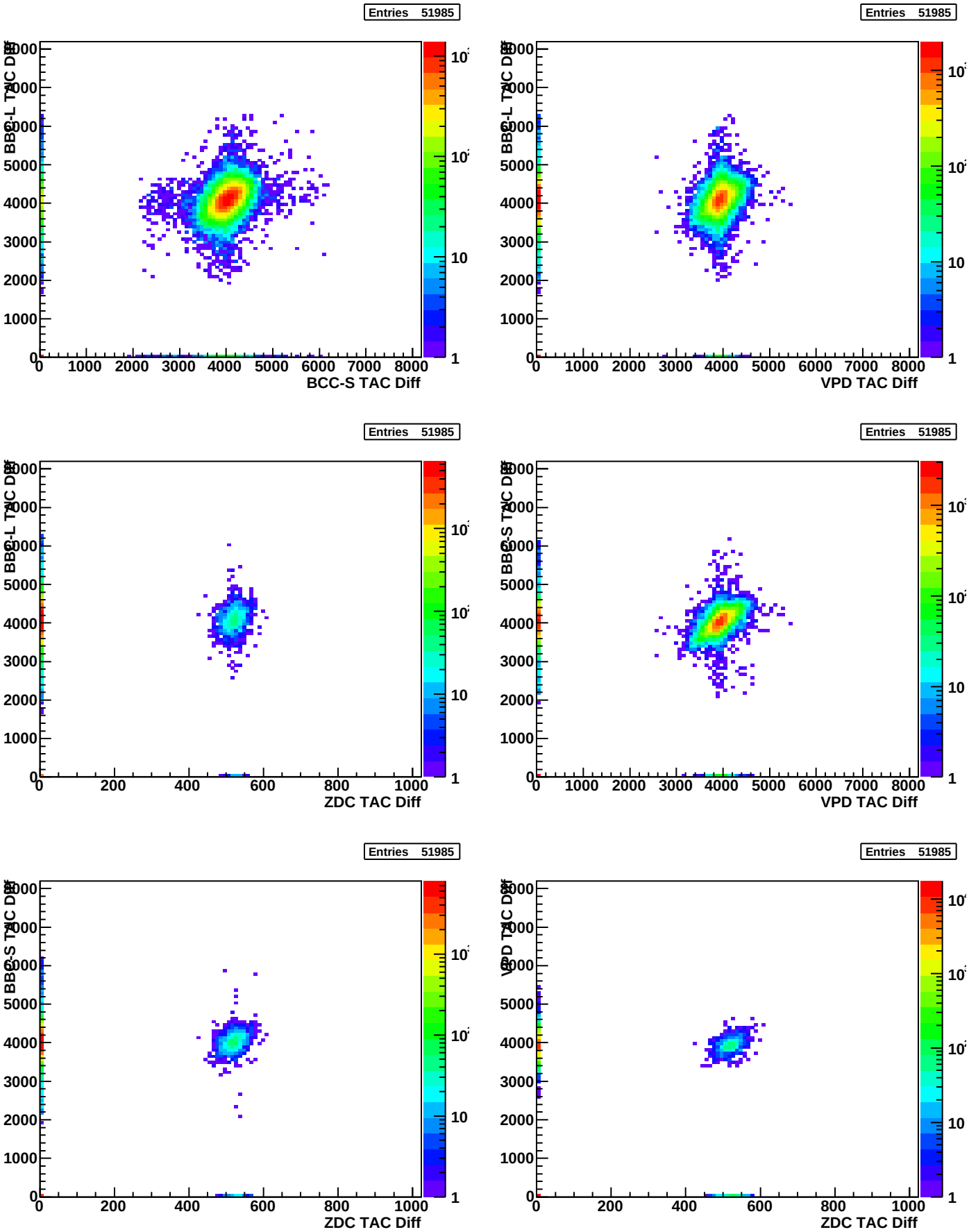

Entries 51985
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

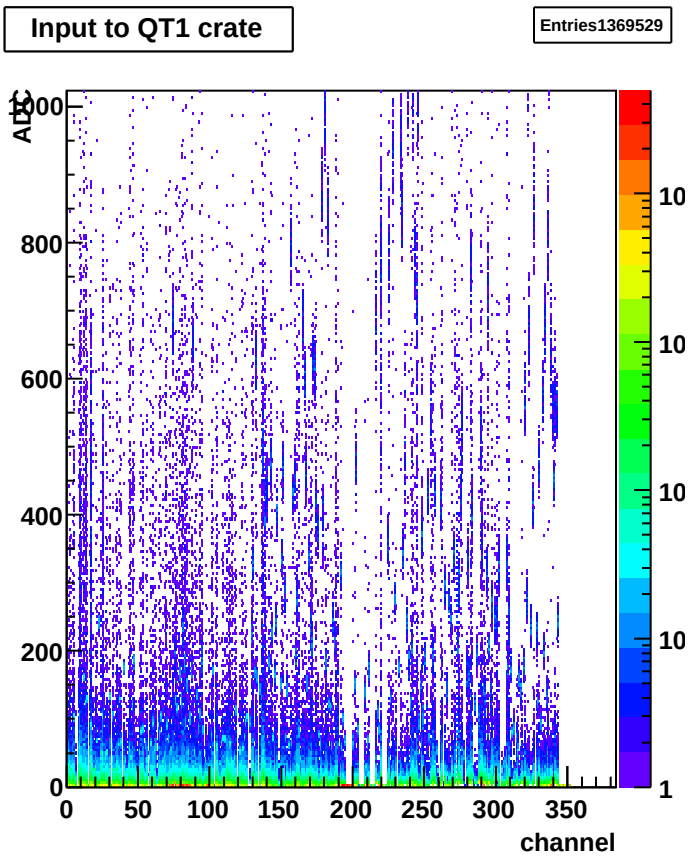

Entries 51985
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

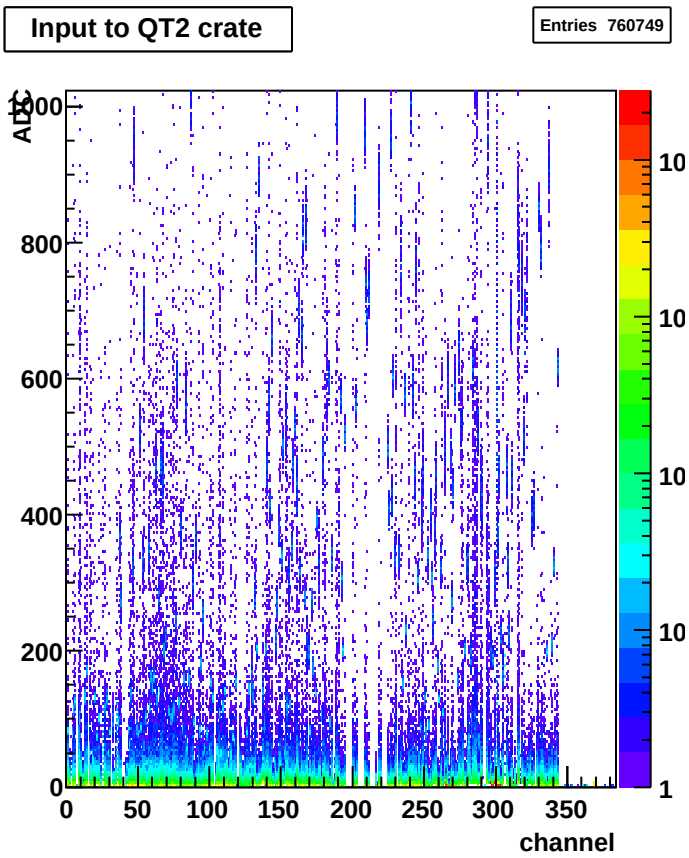

Entries 51985
BBC-L-East ADC Sum
BBC-L-West ADC Sum

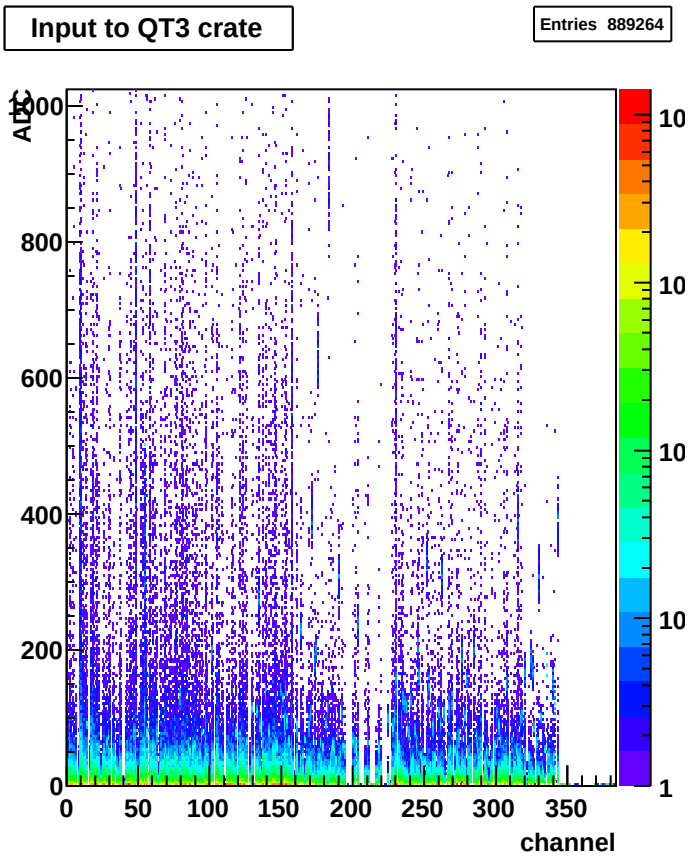

Entries 51985
BBC-S-East ADC Sum
BBC-S-West ADC Sum

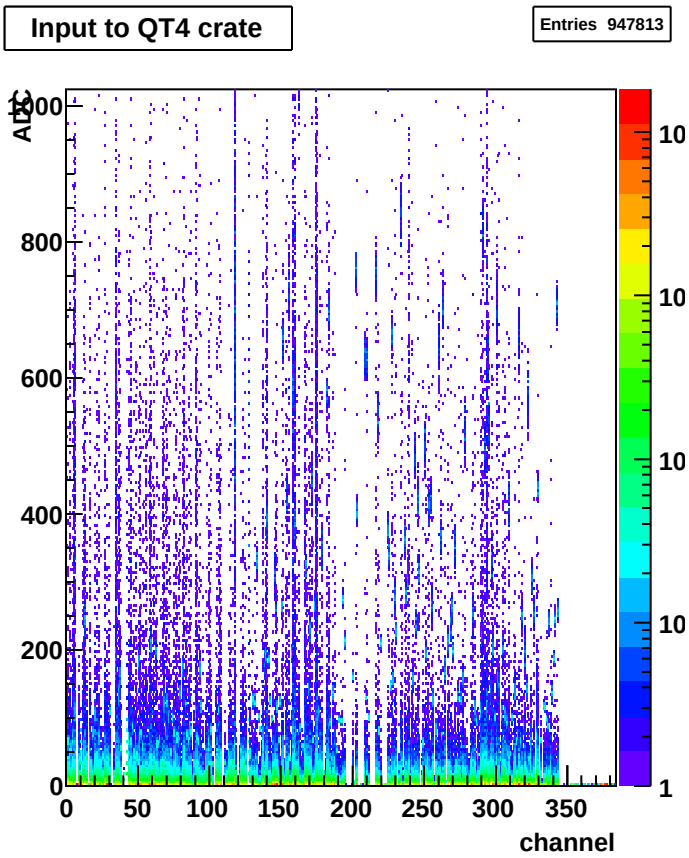

Entries 51985
ZDC East ADC Sum Att
ZDC West ADC Sum Att

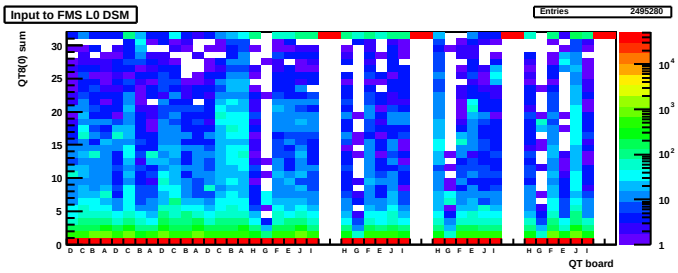

Entries 51985
BBC-L TAC Diff
BCC-S TAC Diff
Entries 51985
BBC-L TAC Diff
VPD TAC Diff
Entries 51985
BBC-L TAC Diff
ZDC TAC Diff
Entries 51985
BBC-S TAC Diff
VPD TAC Diff
Entries 51985
BBC-S TAC Diff
ZDC TAC Diff
Entries 51985
VPD TAC Diff
ZDC TAC Diff

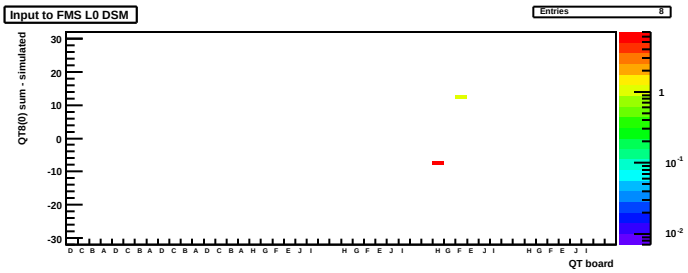

Input to QT1 crate
Entries1369529
ADC
channel

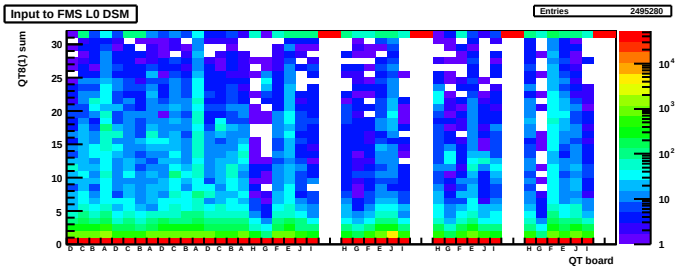

Input to QT2 crate
Entries 760749
ADC
channel

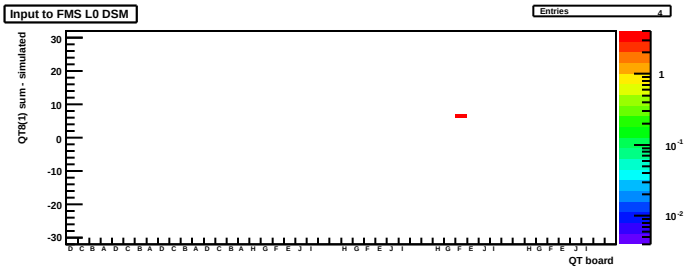

Input to QT3 crate
Entries 889264
ADC
channel

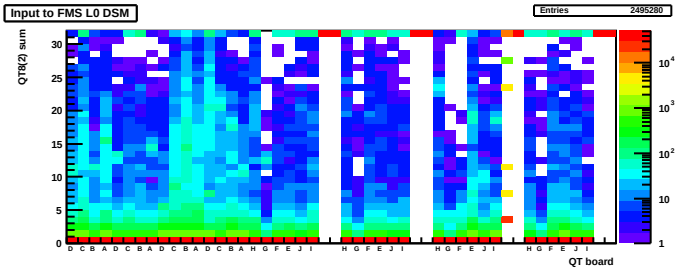

Input to QT4 crate
Entries 947813
ADC
channel

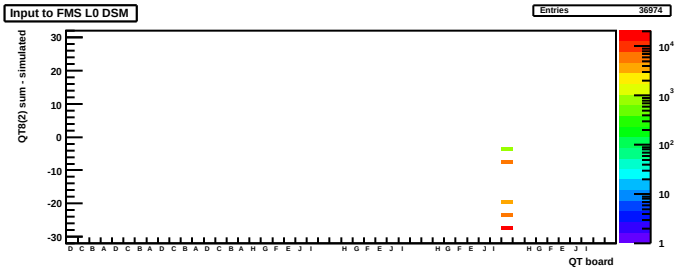

Input to FMS L0 DSM
Entries 2495280
QT8(0) sum
QT board

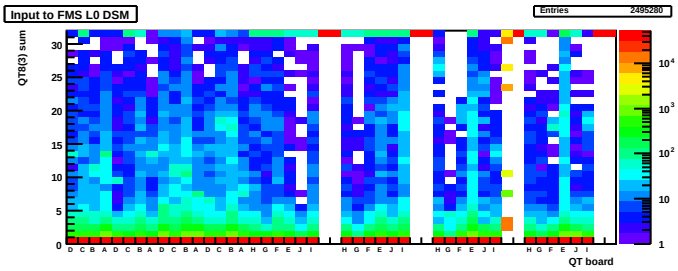

Input to FMS L0 DSM
Entries 8
QT8(0) sum - simulated
QT board

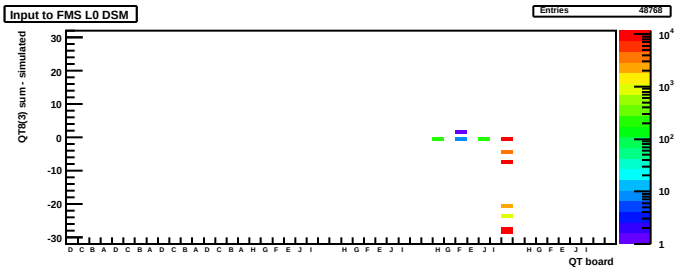

Input to FMS L0 DSM
Entries 2495280
QT8(1) sum
QT board

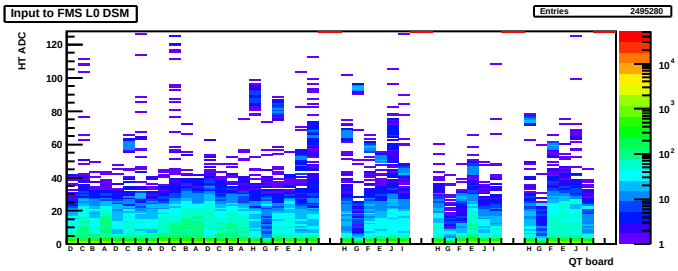

Input to FMS L0 DSM
Entries 4
QT8(1) sum - simulated
QT board

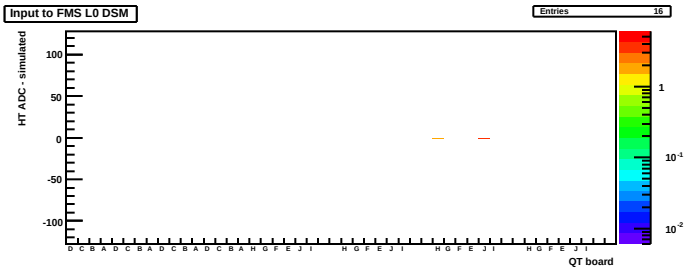

Input to FMS L0 DSM
Entries 2495280
QT8(2) sum
QT board

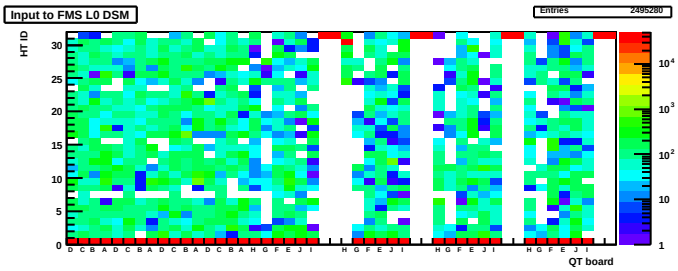

Input to FMS L0 DSM
Entries 36974
QT8(2) sum - simulated
QT board

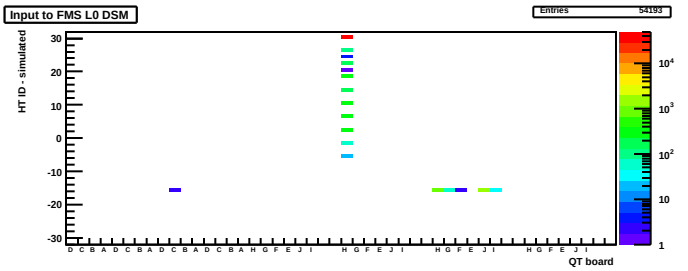

Input to FMS L0 DSM
Entries 2495280
QT8(3) sum
QT board

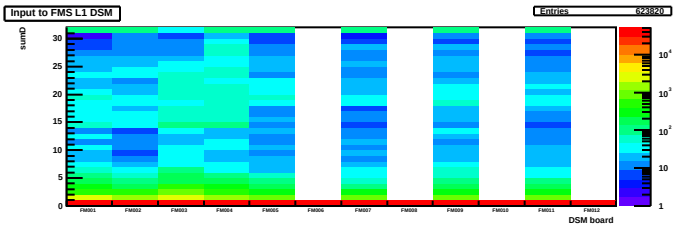

Input to FMS L0 DSM
Entries 48768
QT8(3) sum - simulated
QT board

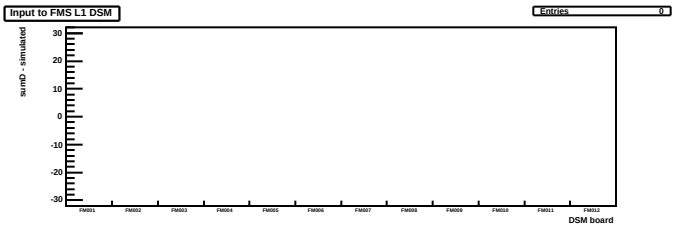

Input to FMS L0 DSM
Entries 2495280
HT ADC
QT board

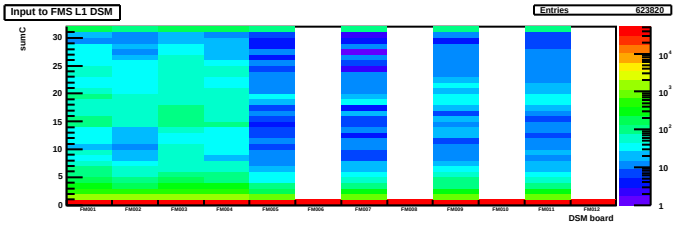

Input to FMS L0 DSM
Entries 16
HT ADC - simulated
QT board

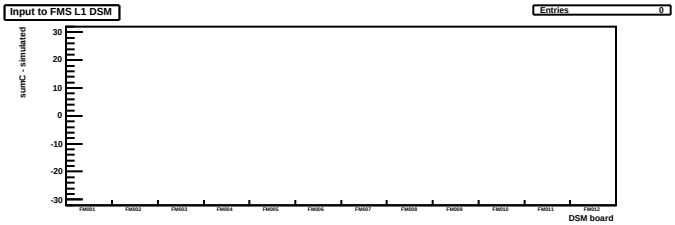

Input to FMS L0 DSM
Entries 2495280
HT ID
QT board

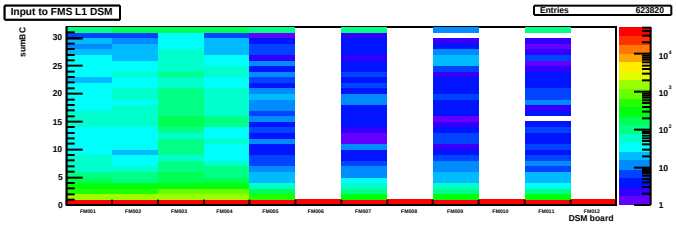

Input to FMS L0 DSM
Entries 54193
HT ID - simulated
QT board

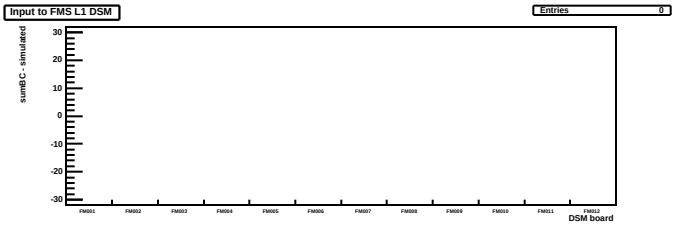

Input to FMS L1 DSM
Entries 623820
sumD
DSM board

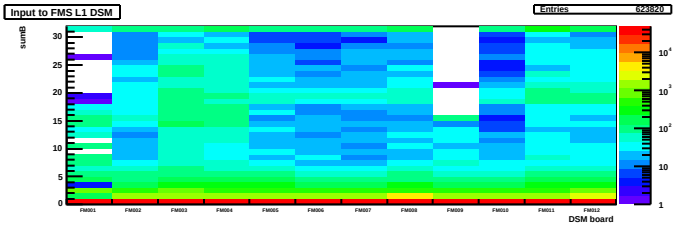

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

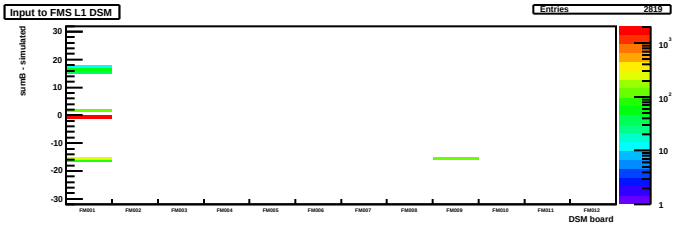

Input to FMS L1 DSM
Entries 623820
sumC
DSM board

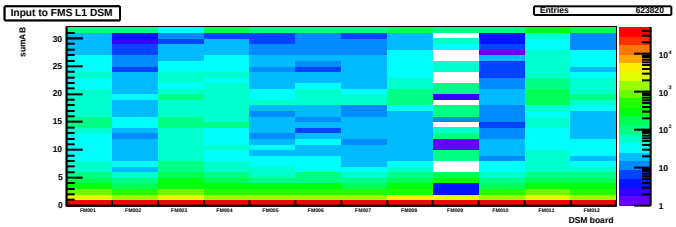

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

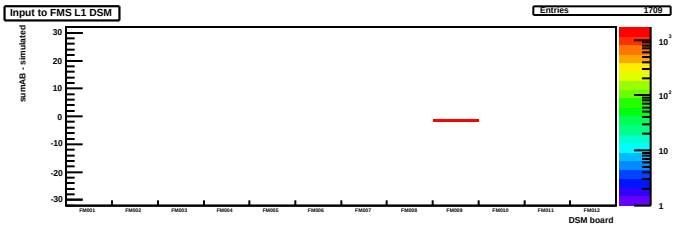

Input to FMS L1 DSM
Entries 623820
sumBC
DSM board

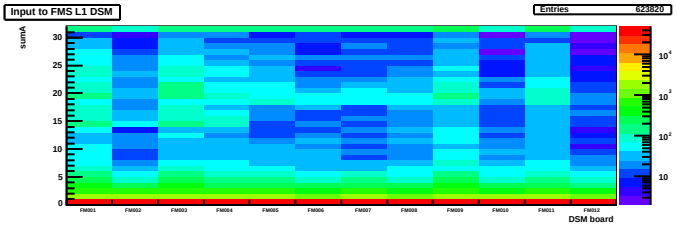

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

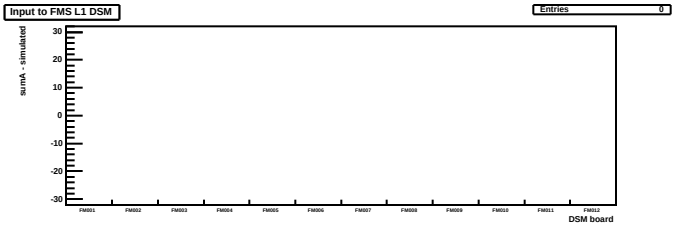

Input to FMS L1 DSM
Entries 623820
sumB
DSM board

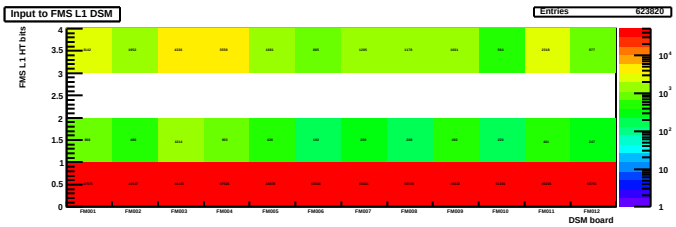

Input to FMS L1 DSM
Entries 2819
sumB - simulated
DSM board

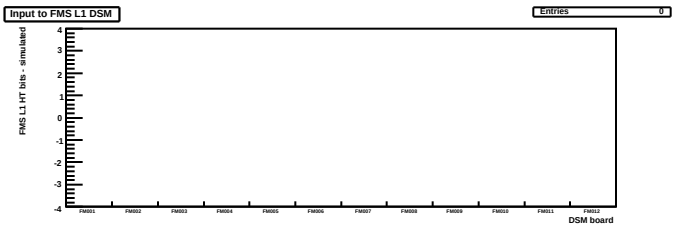

Input to FMS L1 DSM
Entries 623820
sumAB
DSM board

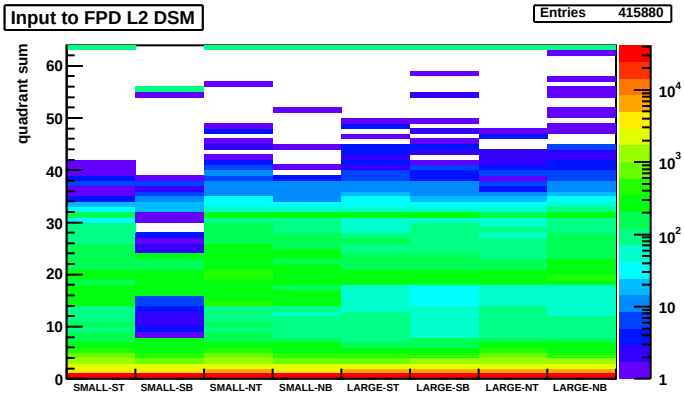

Input to FMS L1 DSM
Entries 1709
sumAB - simulated
DSM board

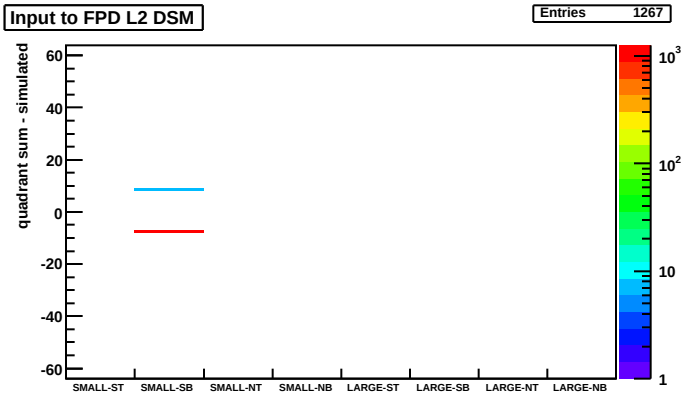

Input to FMS L1 DSM
Entries 623820
sumA
DSM board

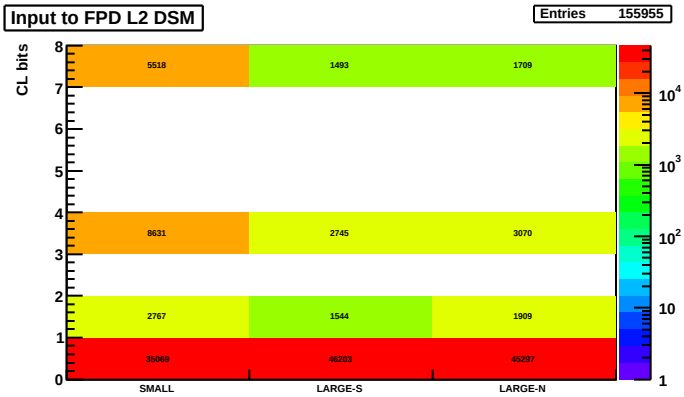

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

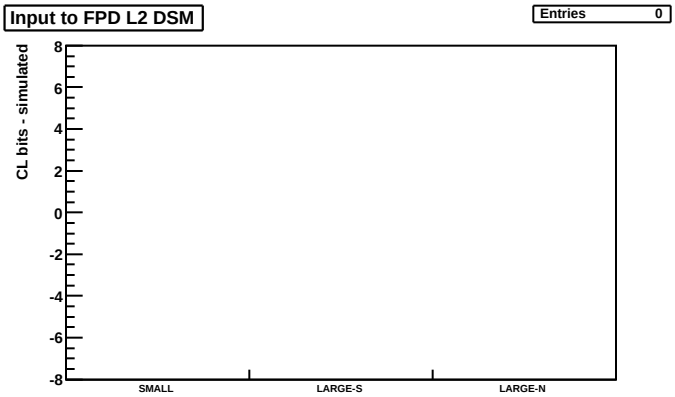

Input to FMS L1 DSM
Entries 623820
FMS L1 HT bits
DSM board

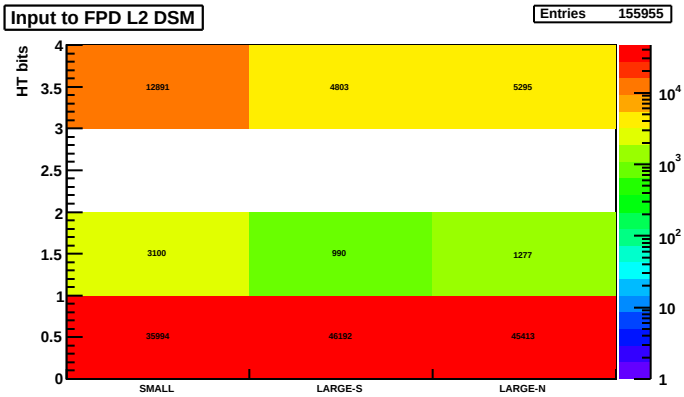

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

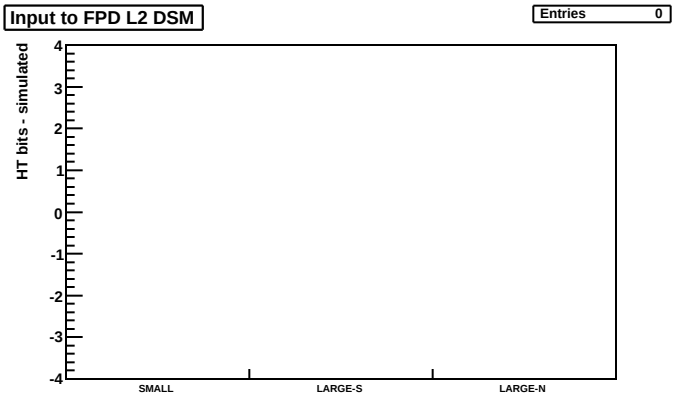

Input to FPD L2 DSM
Entries 415880
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

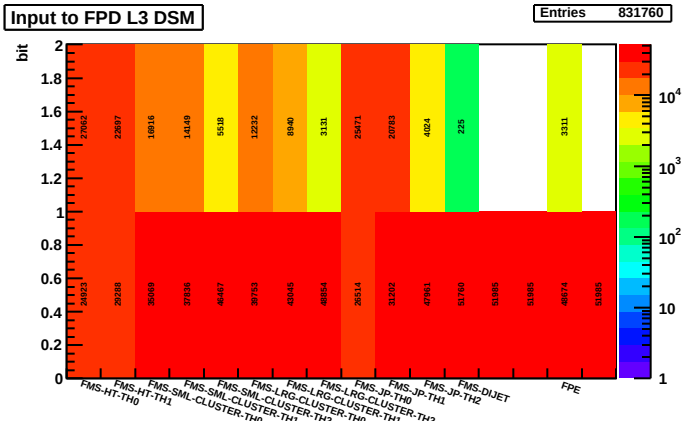

Input to FPD L2 DSM
Entries 1267
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

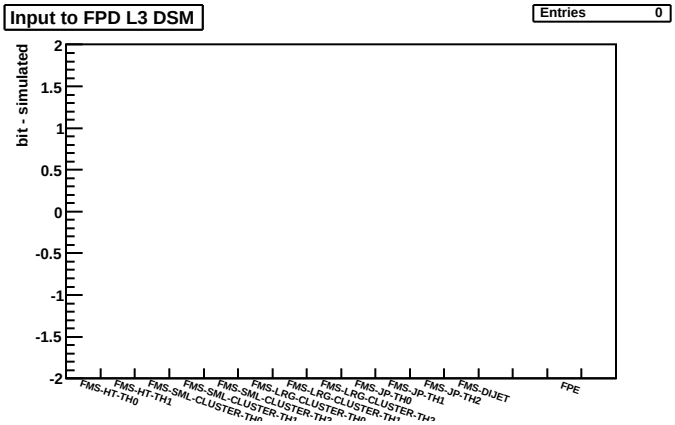

Input to FPD L2 DSM
Entries 155955
CL bits
5518
1493
1709
8631
2745
3070
2767
1544
1909
35069
46203
45297
SMALL
LARGE-S
LARGE-N

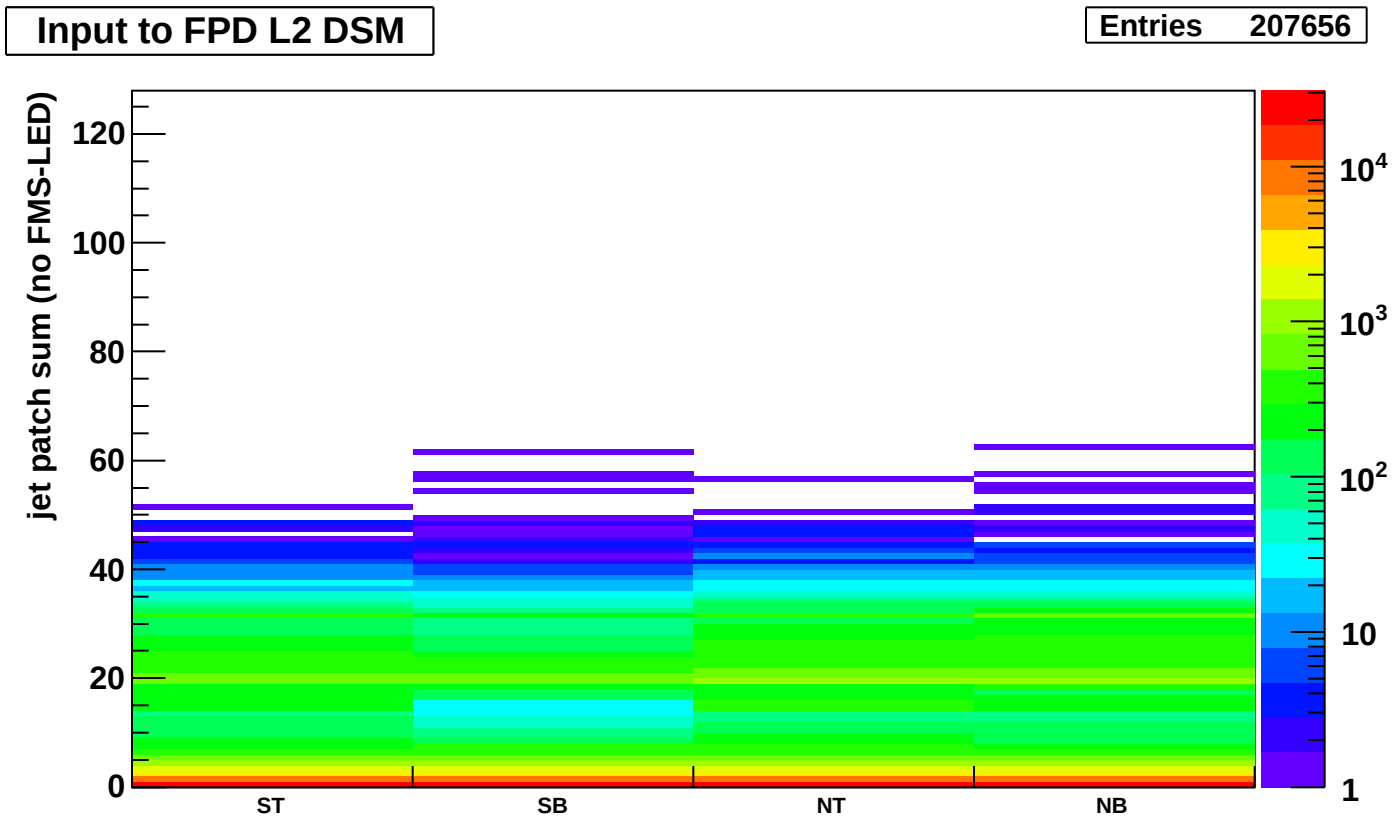

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

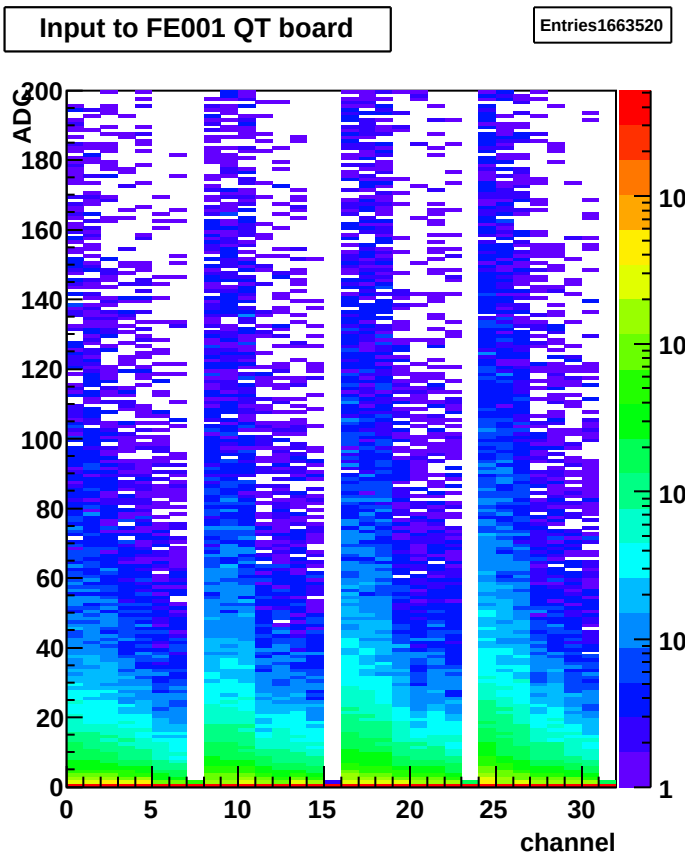

Input to FPD L2 DSM
Entries 155955
HT bits
12891
4803
5295
3100
990
1277
35994
46192
45413
SMALL
LARGE-S
LARGE-N

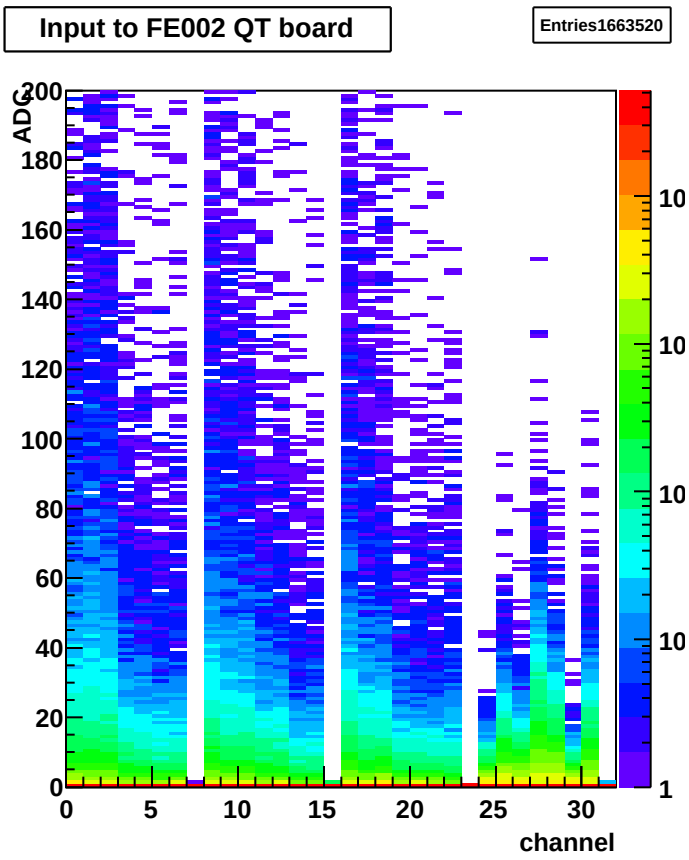

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

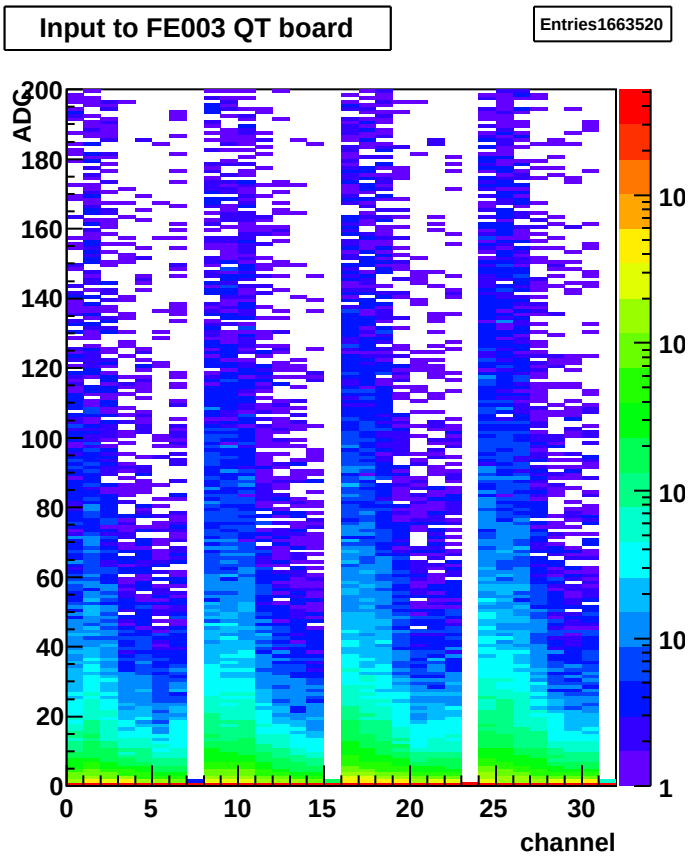

Input to FPD L3 DSM
Entries 831760
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

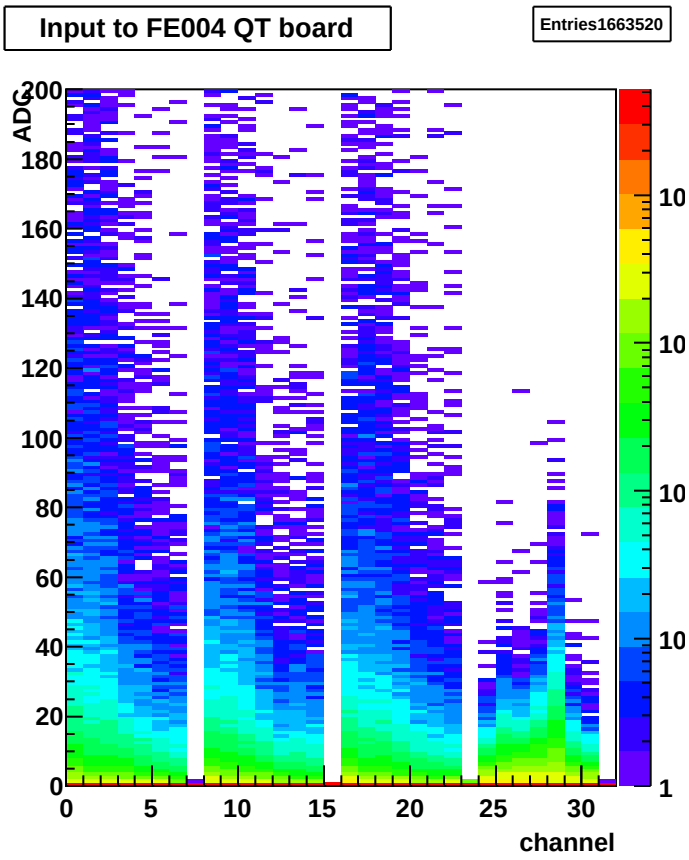

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

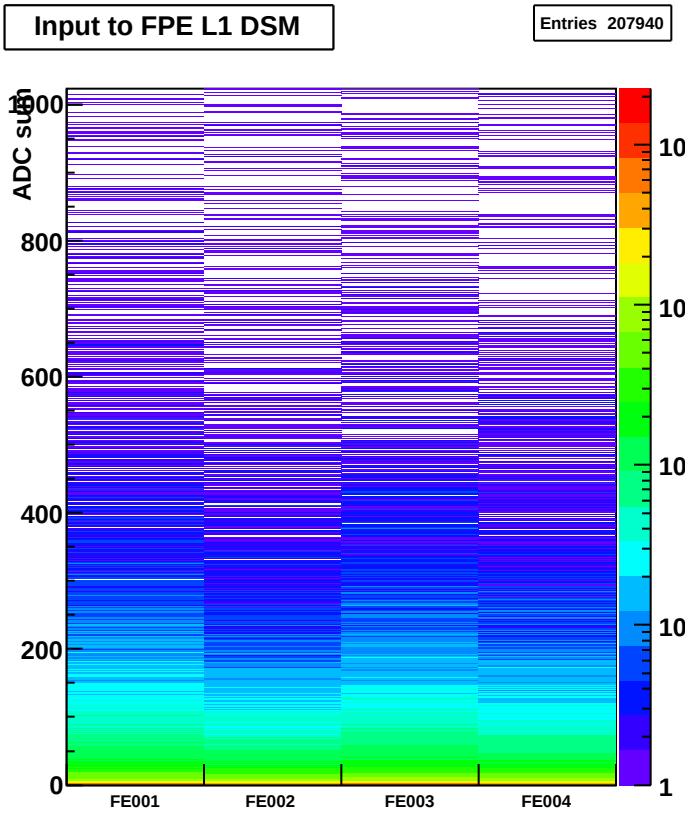

Input to FPD L2 DSM
Entries 207656
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

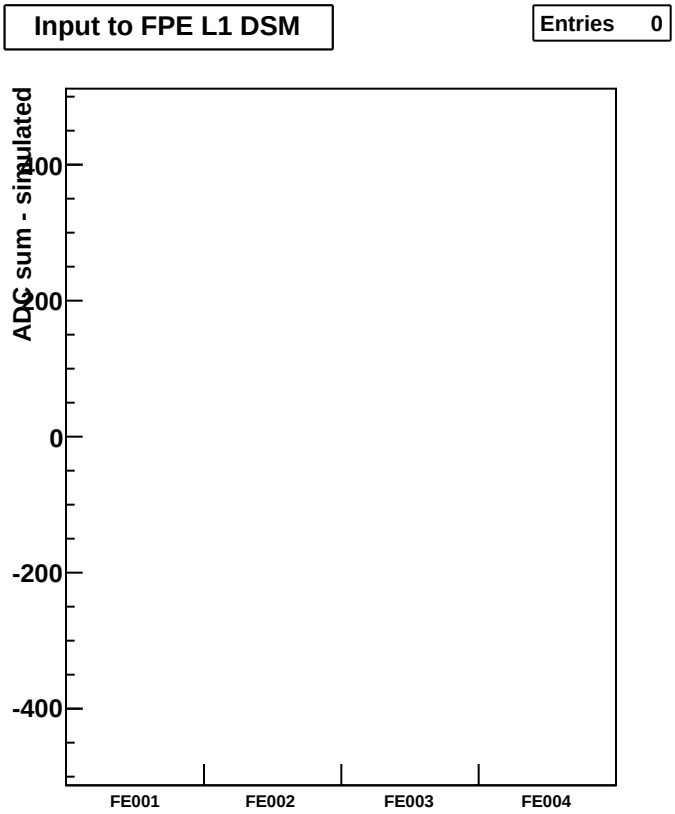

Input to FE001 QT board
Entries1663520
ADC
channel

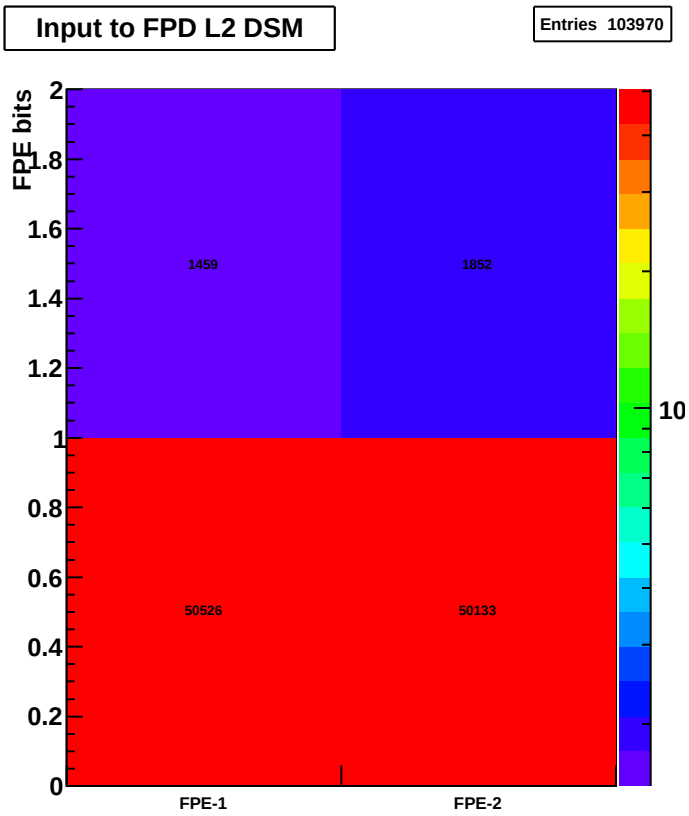

Input to FE002 QT board
Entries1663520
ADC
channel

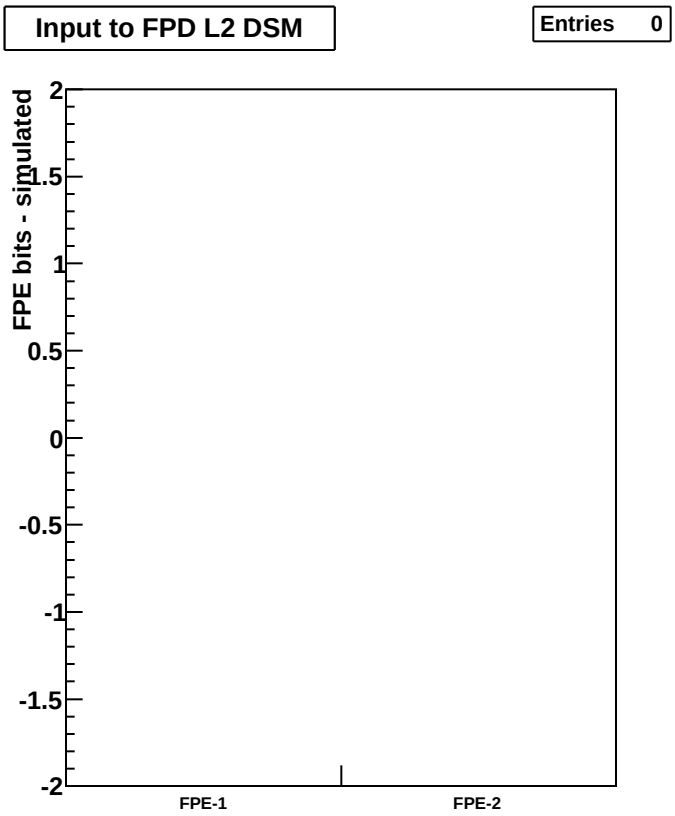

Input to FE003 QT board
Entries1663520
ADC
channel


Input to FE004 QT board
Entries1663520
ADC
channel


Input to FPE L1 DSM
Entries 207940
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
1


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


Input to FPD L2 DSM
Entries 103970
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1459
1852
50526
50133
FPE-1
FPE-2
10


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