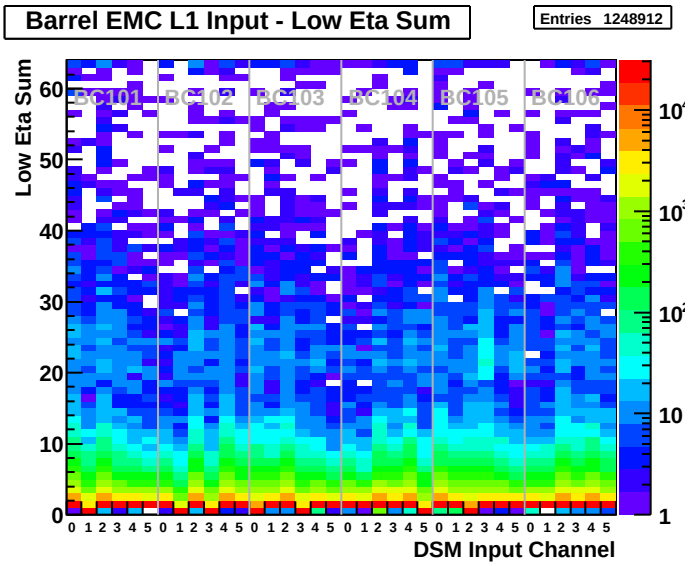
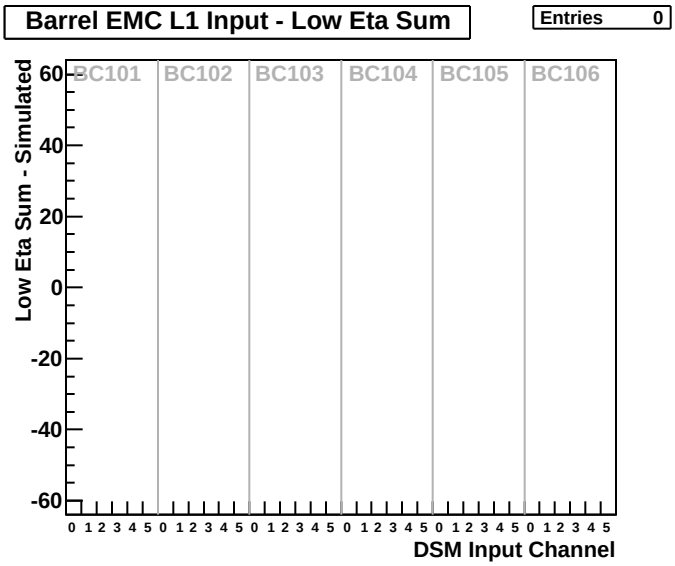
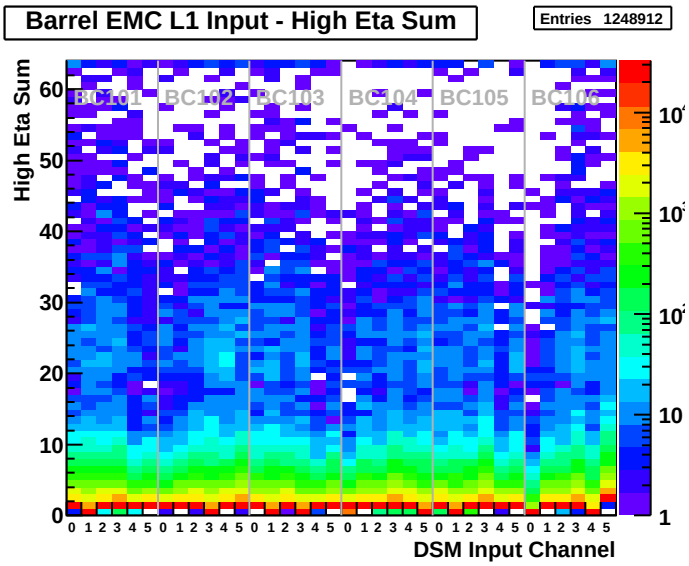
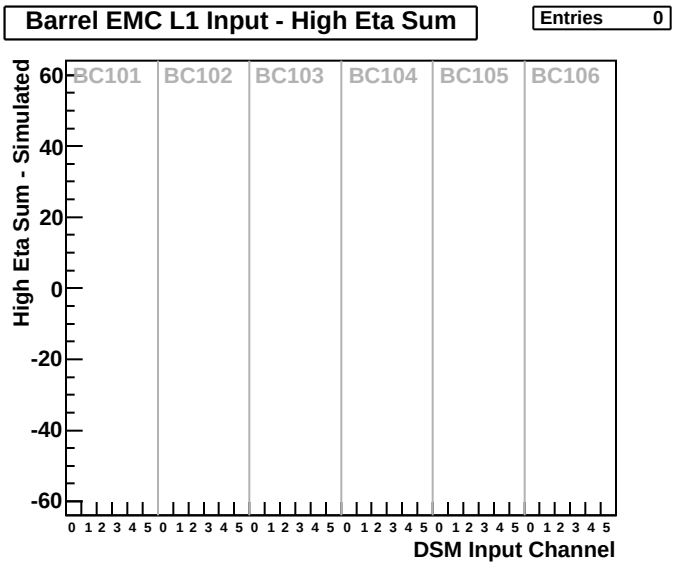
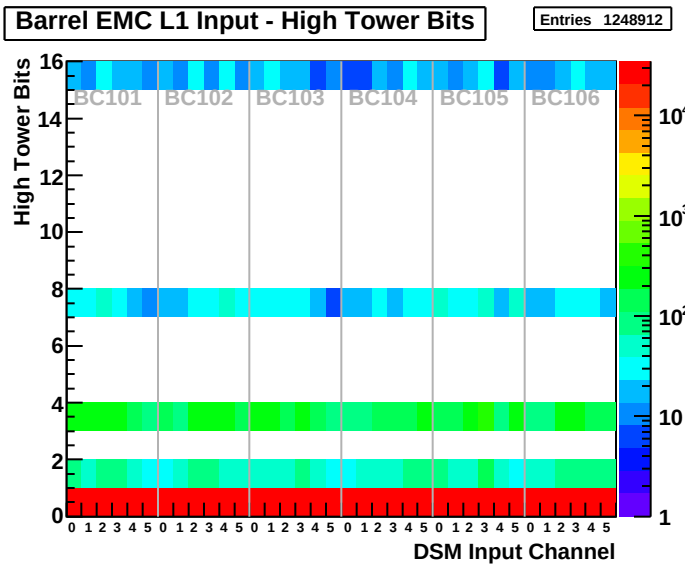
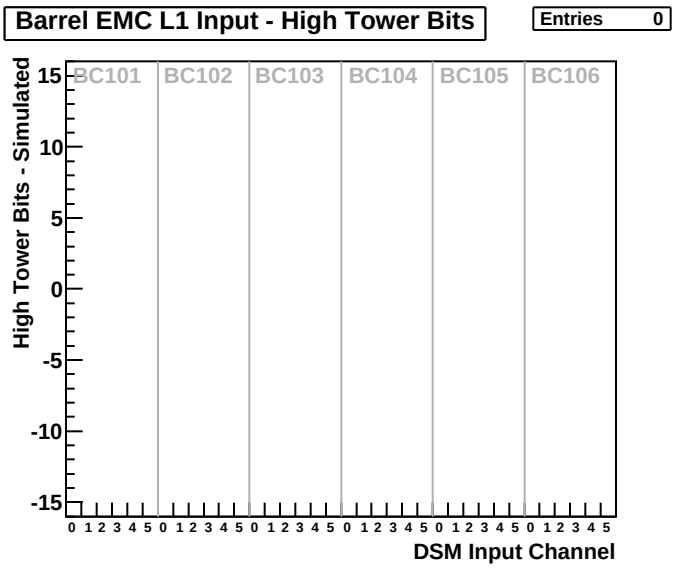

Barrel EMC L1 Input - Low Eta Sum
Entries 1248912
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

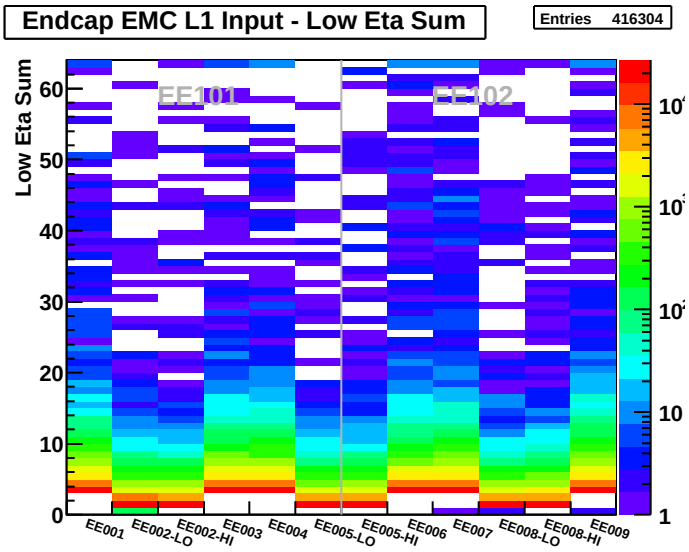

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

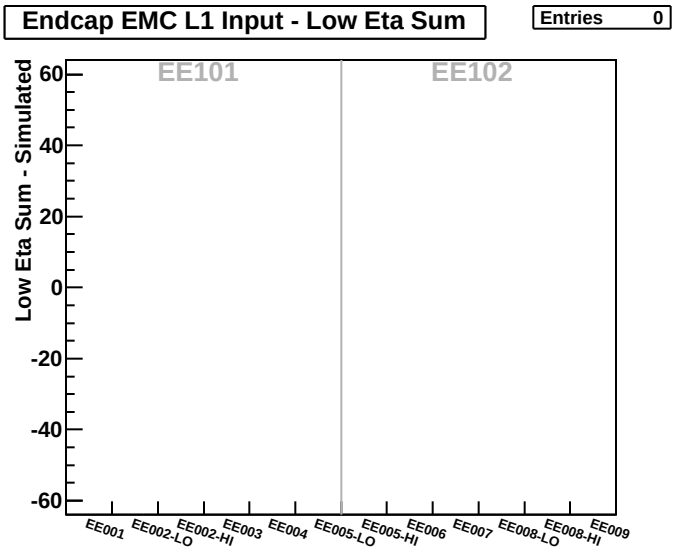

Barrel EMC L1 Input - High Eta Sum
Entries 1248912
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

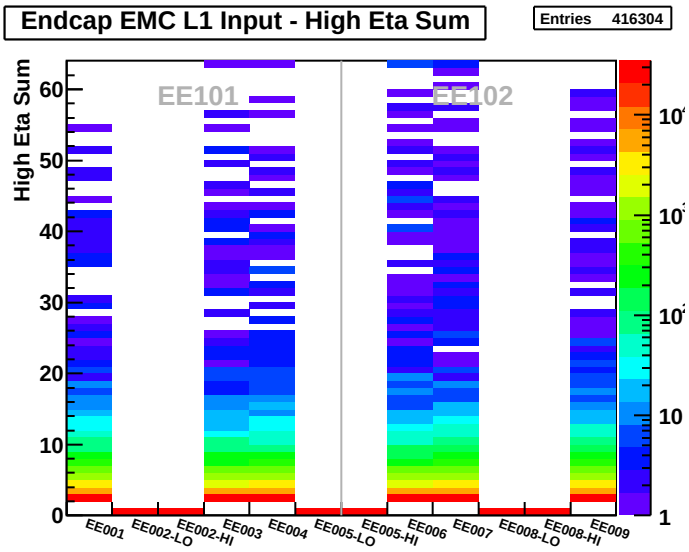

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

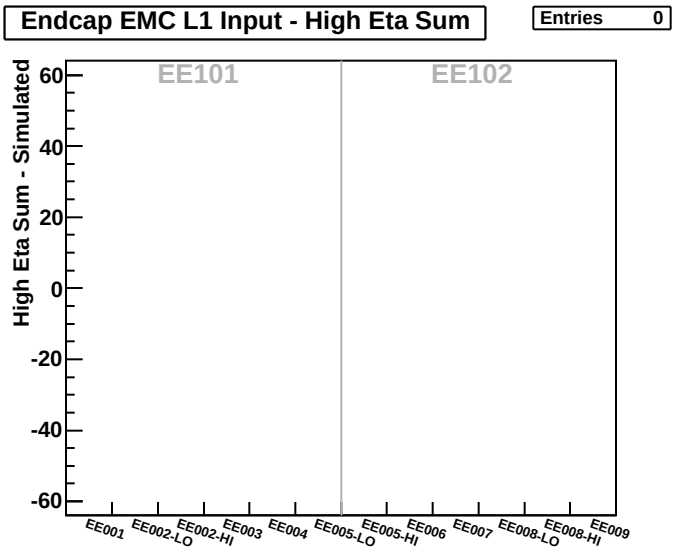

Barrel EMC L1 Input - High Tower Bits
Entries 1248912
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

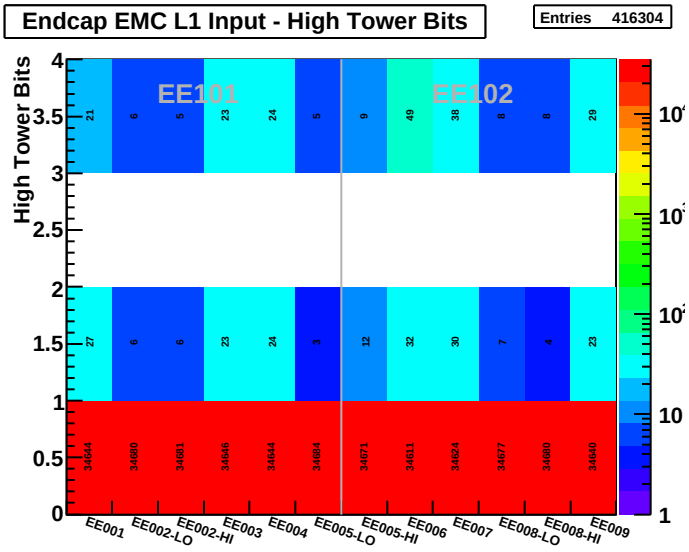

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

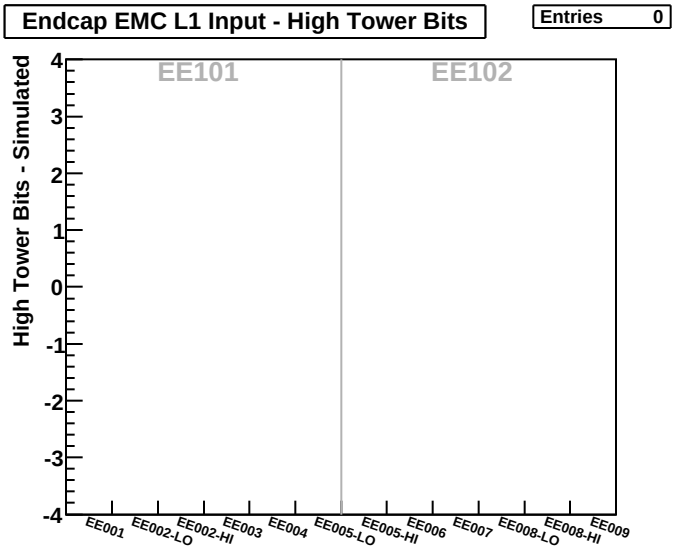

Endcap EMC L1 Input - Low Eta Sum
Entries 416304
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

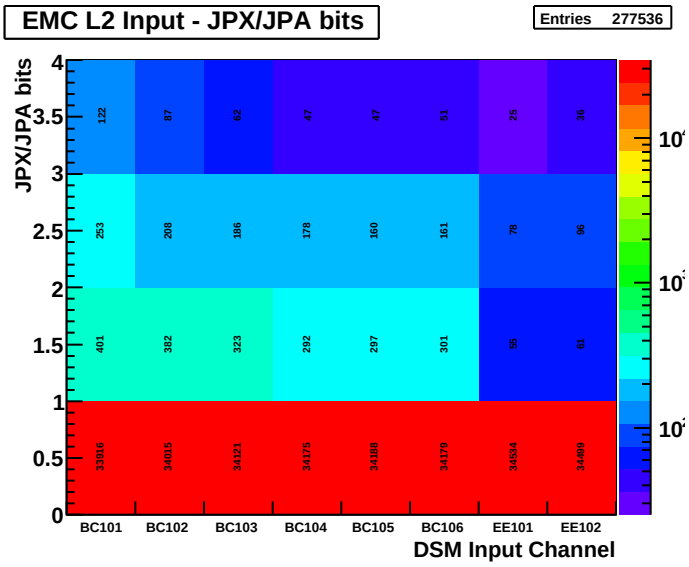

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

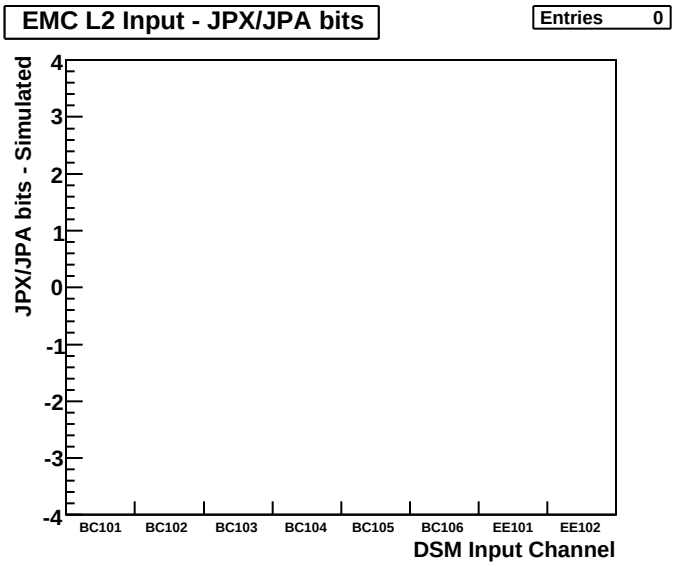

Endcap EMC L1 Input - High Eta Sum
Entries 416304
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

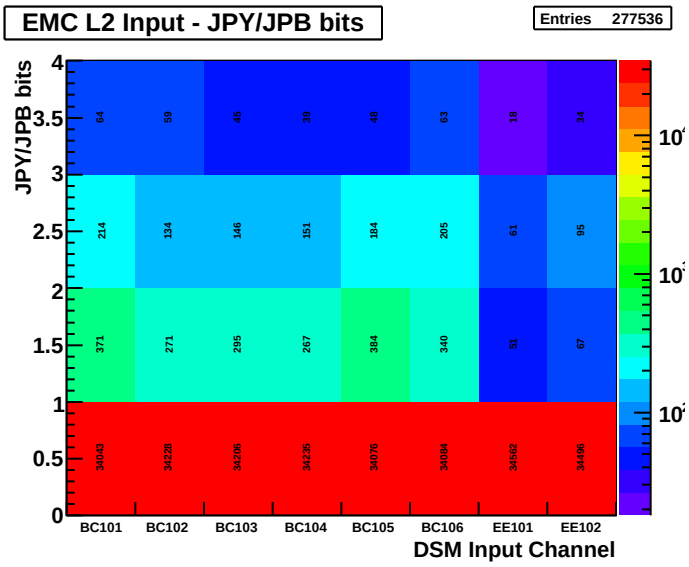

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

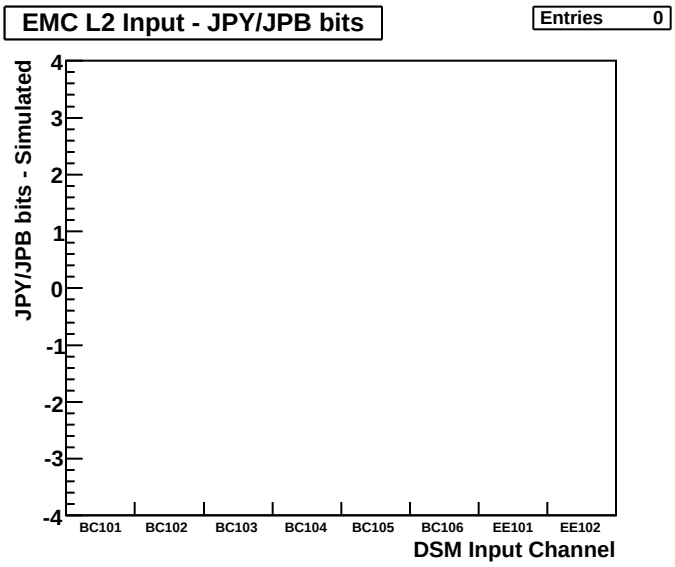

Endcap EMC L1 Input - High Tower Bits
Entries 416304
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

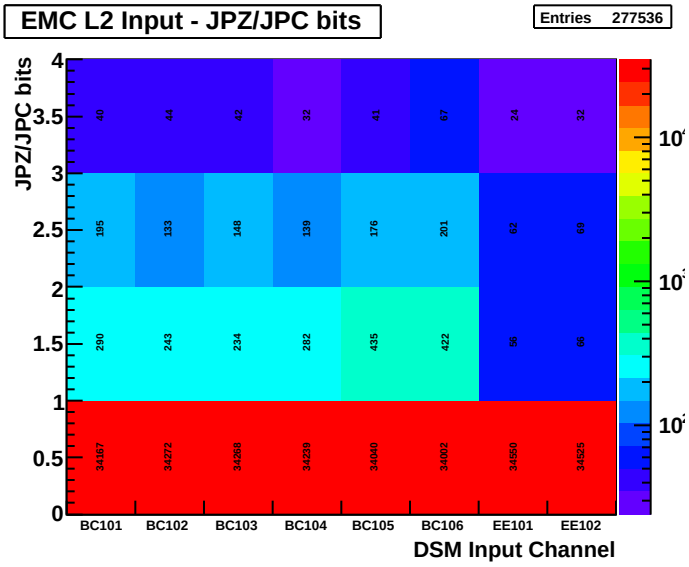

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

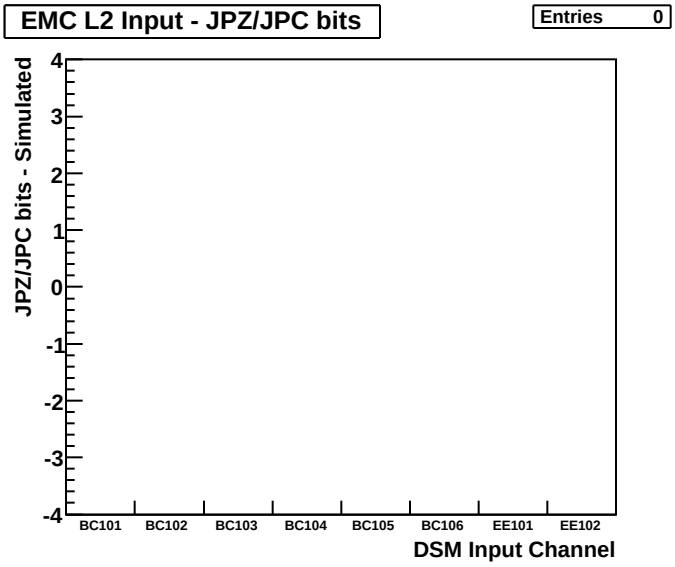

EMC L2 Input - JPX/JPA bits
Entries 277536
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
122 87 62 47 47 51 25 36
253 208 186 178 160 161 78 96
401 382 323 292 297 301 55 61
33916 34015 34121 34175 34188 34179 34534 34499

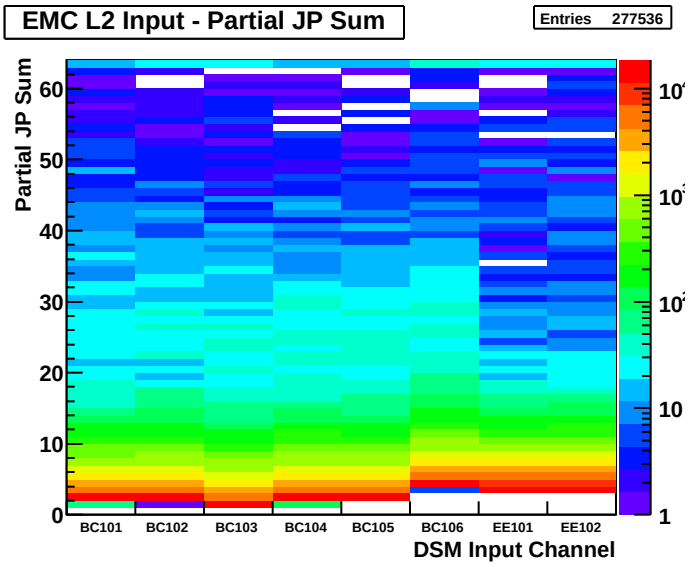

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

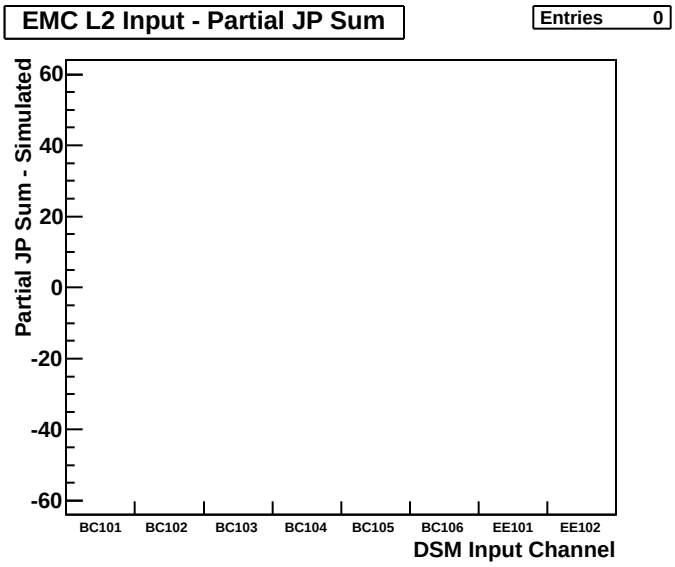

EMC L2 Input - JPY/JPB bits
Entries 277536
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
64 59 45 39 48 63 18 34
214 134 146 151 184 205 61 95
371 271 295 267 384 340 51 67
34043 34228 34206 34235 34076 34084 34562 34496

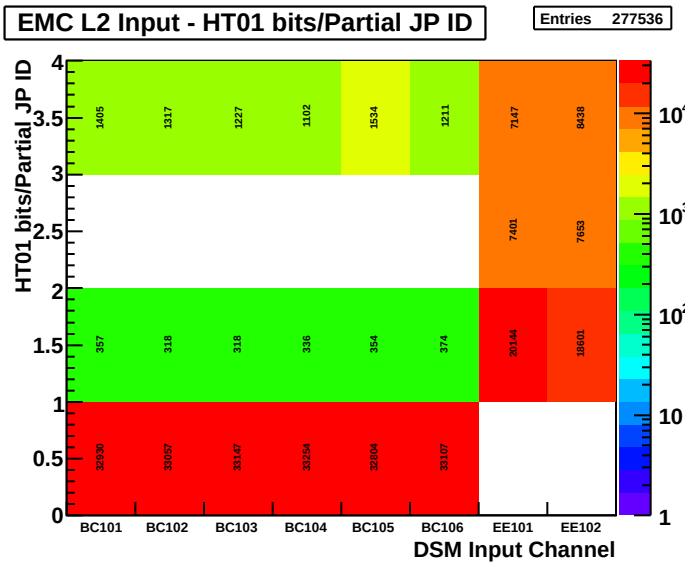

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

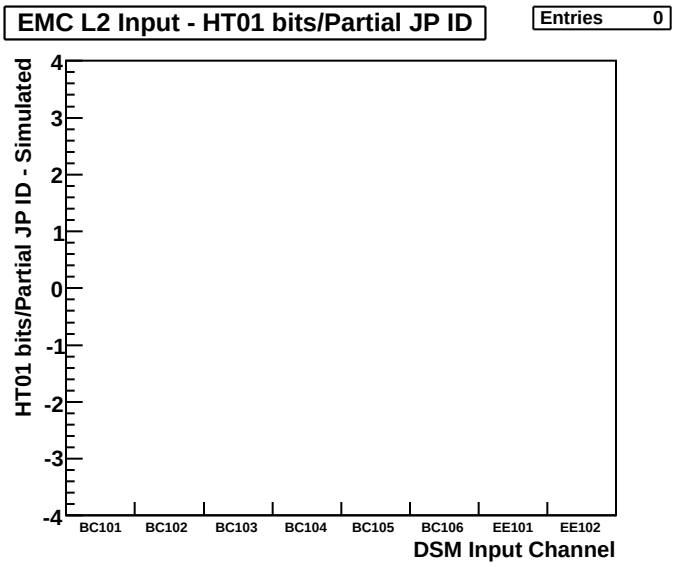

EMC L2 Input - JPZ/JPC bits
Entries 277536
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
40 44 42 32 41 67 24 32
195 133 148 139 176 201 62 69
290 243 234 282 435 422 56 66
34167 34272 34268 34239 34040 34002 34550 34525

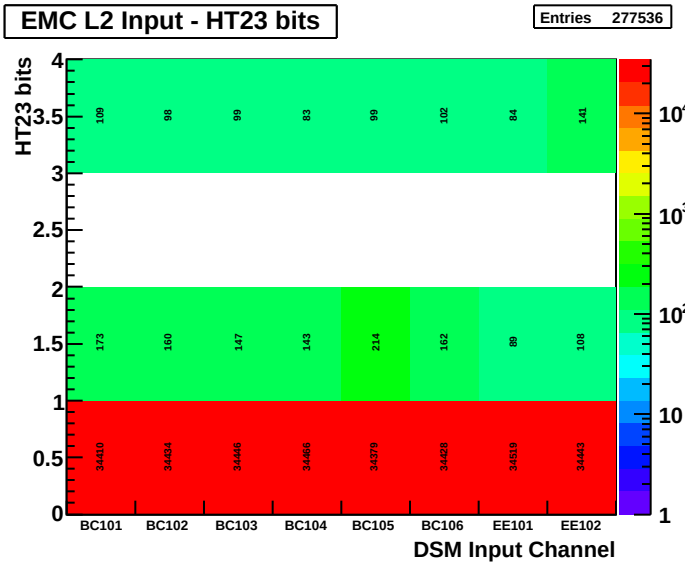

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

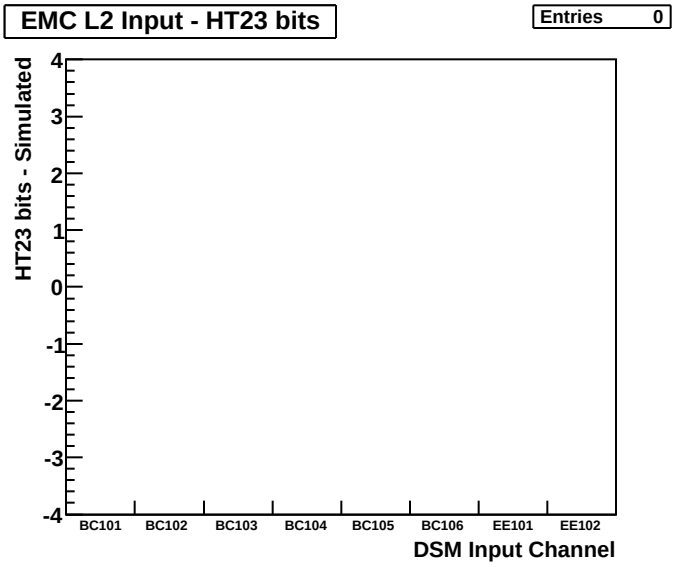

EMC L2 Input - Partial JP Sum
Entries 277536
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

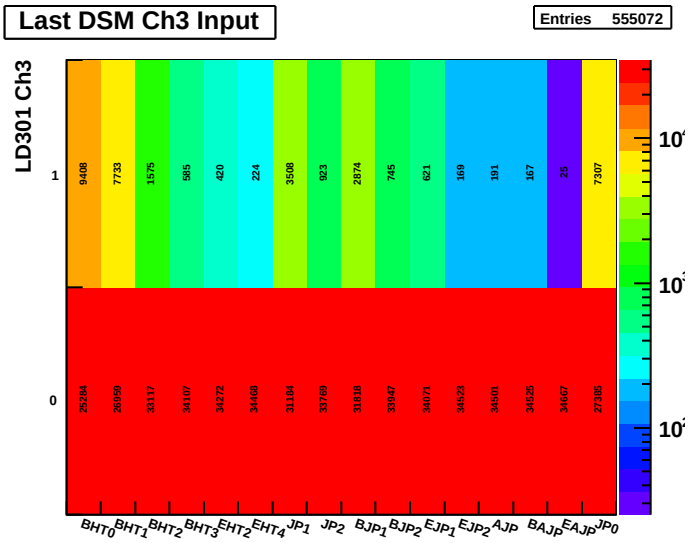

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

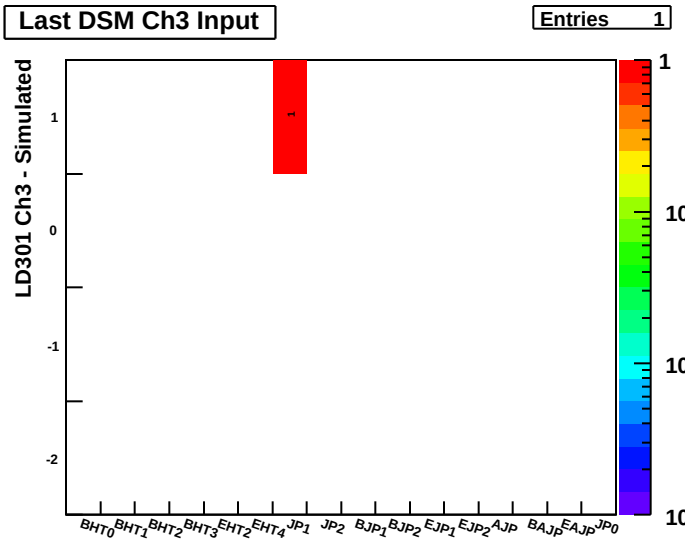

EMC L2 Input - HT01 bits/Partial JP ID
Entries 277536
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

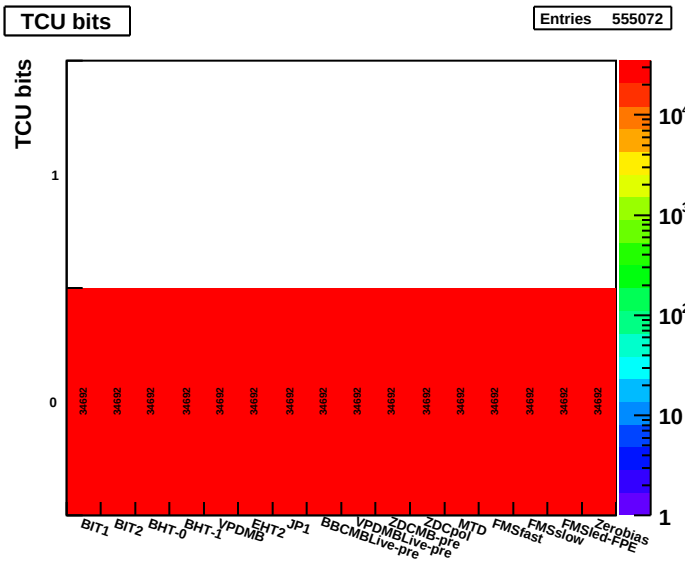

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

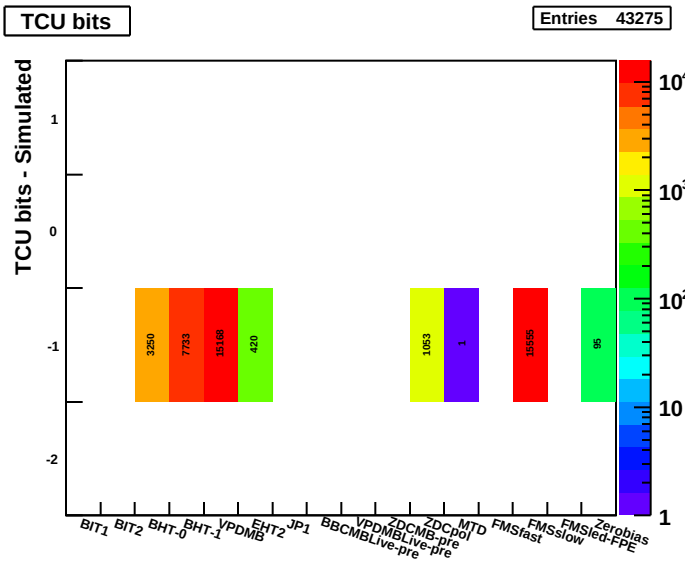

EMC L2 Input - HT23 bits
Entries 277536
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

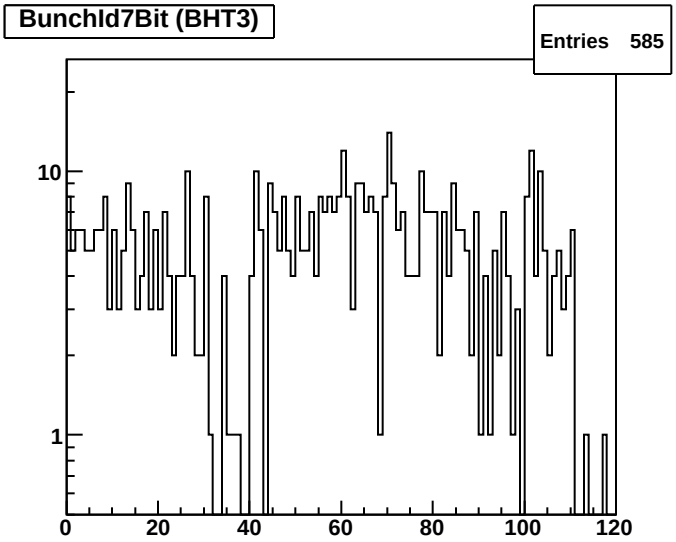

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

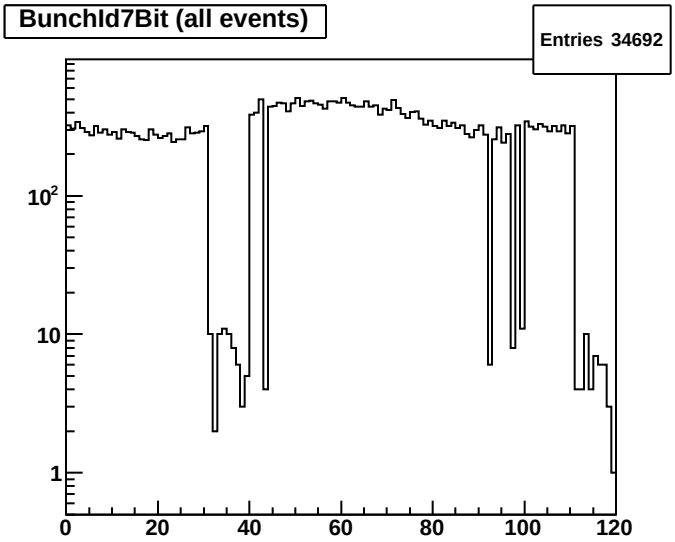

Last DSM Ch3 Input
Entries 555072
LD301 Ch3
9408 7733 1575 585 420 224 3508 923 2874 745 621 169 191 167 25 7307
25284 26959 33117 34107 34272 34468 31184 33769 31818 33947 34071 34523 34501 34525 34667 27385
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

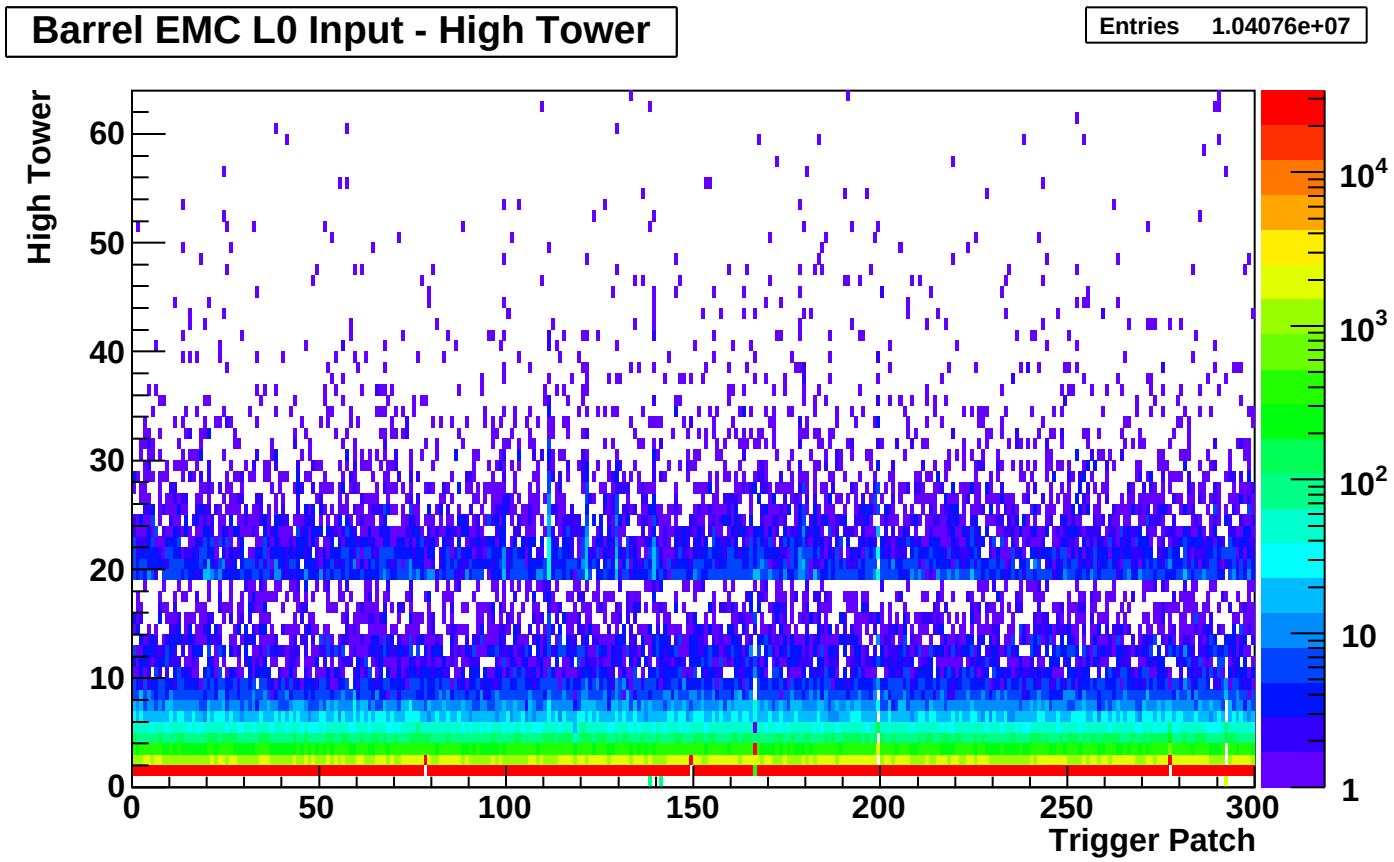

Last DSM Ch3 Input
Entries 1
LD301 Ch3 - Simulated
1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

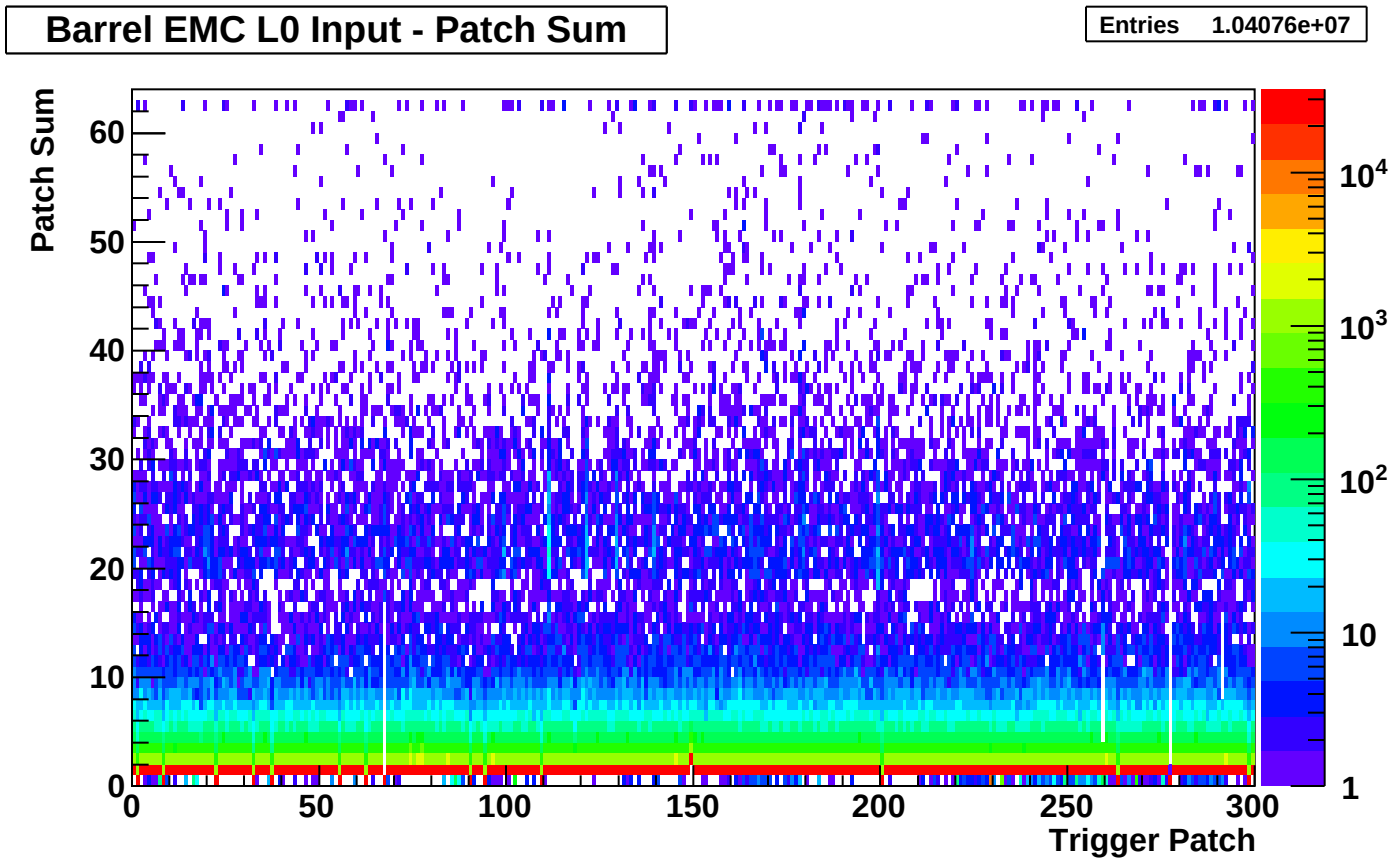

TCU bits
Entries 555072
TCU bits
34692 34692 34692 34692 34692 34692 34692 34692 34692 34692 34692 34692 34692 34692 34692 34692
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

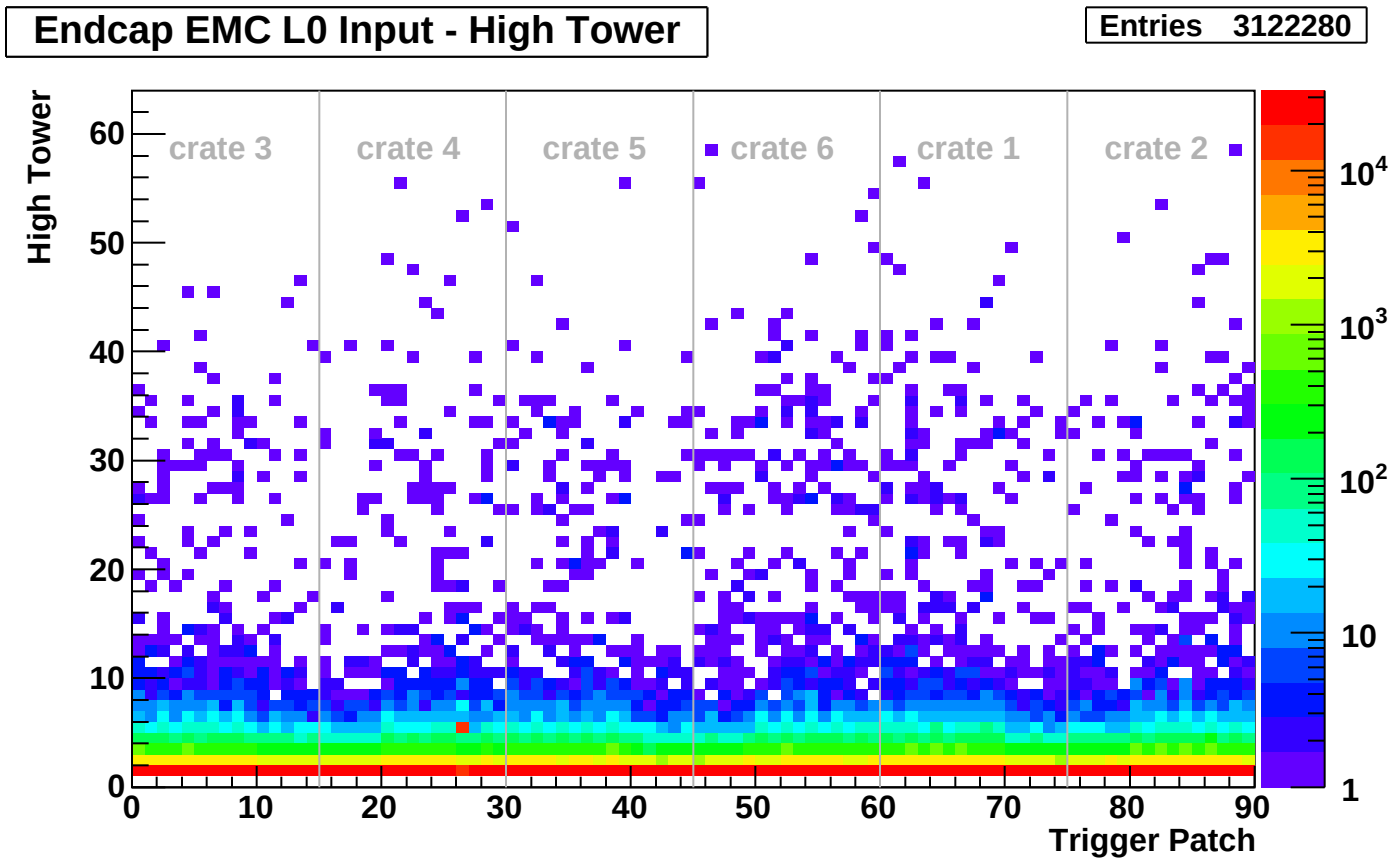

TCU bits
Entries 43275
TCU bits - Simulated
3250 7733 15168 420 1063 1 15555 95
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

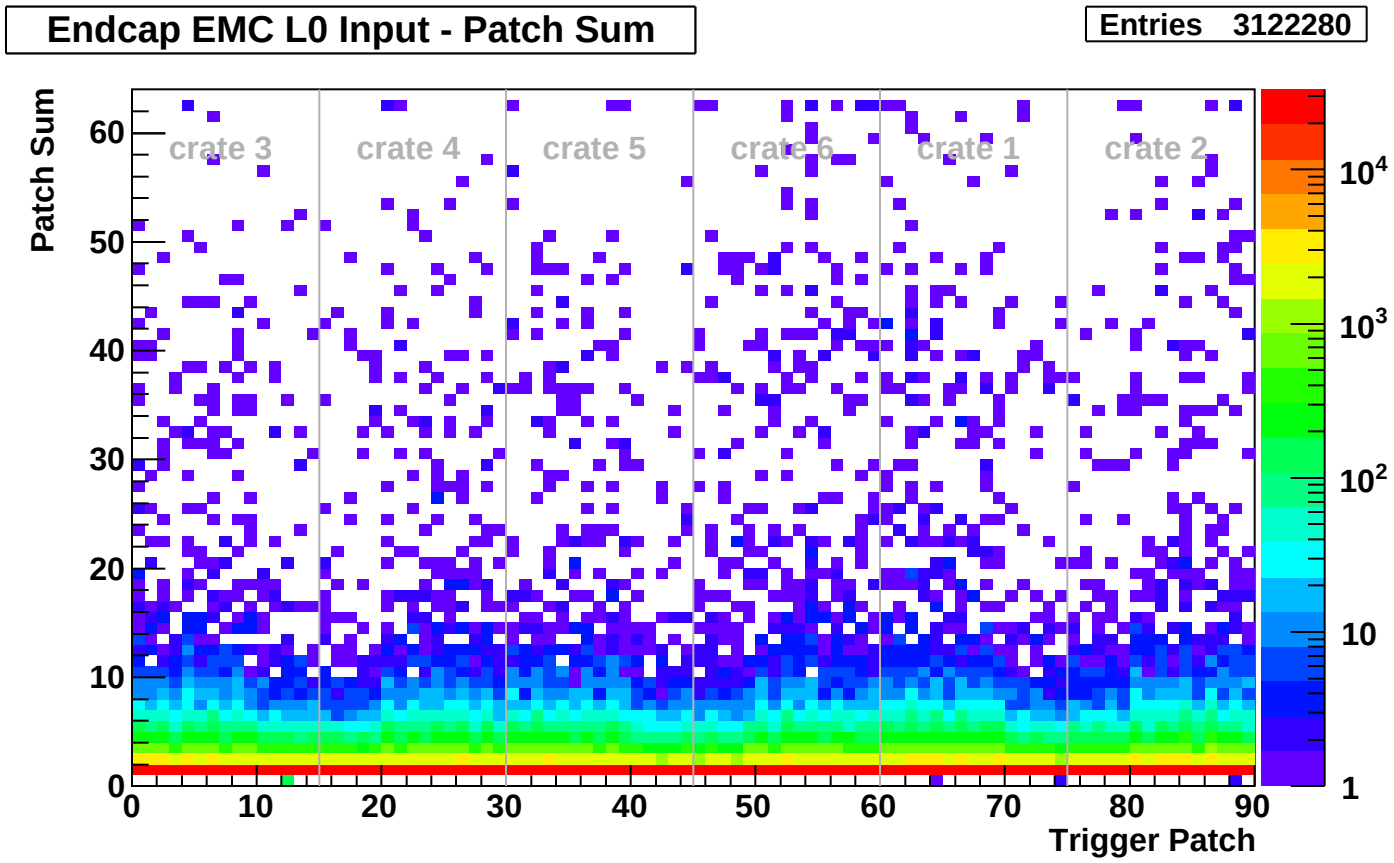

BunchId7Bit (BHT3)
Entries 585

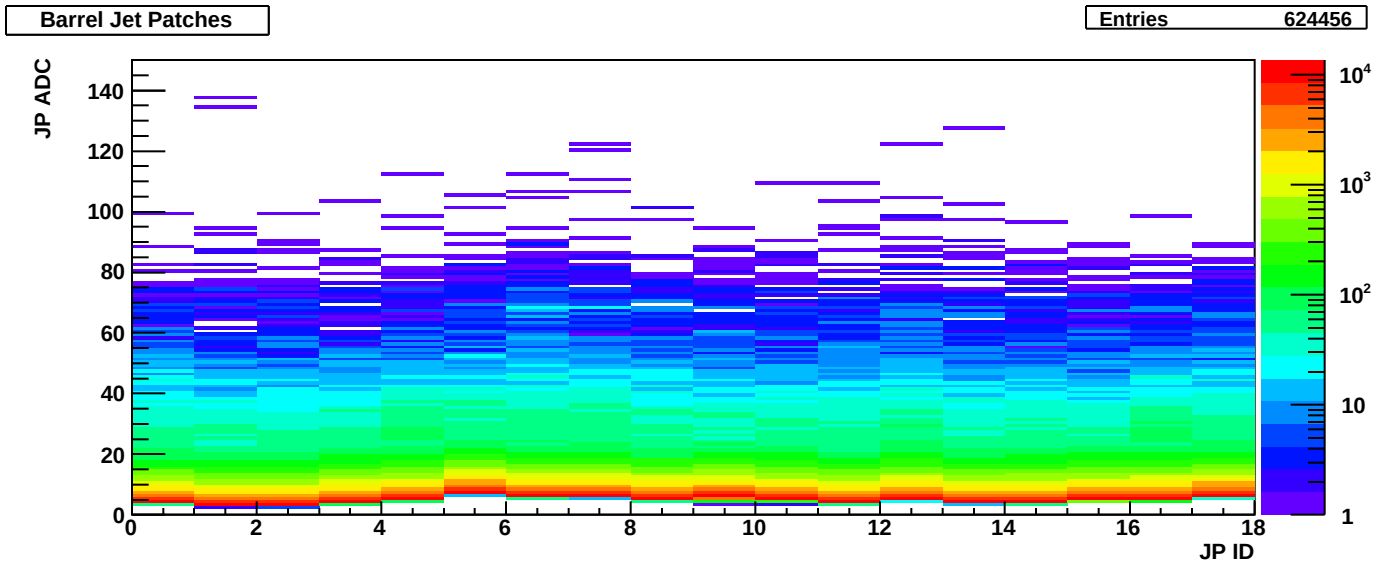

BunchId7Bit (all events)
Entries 34692

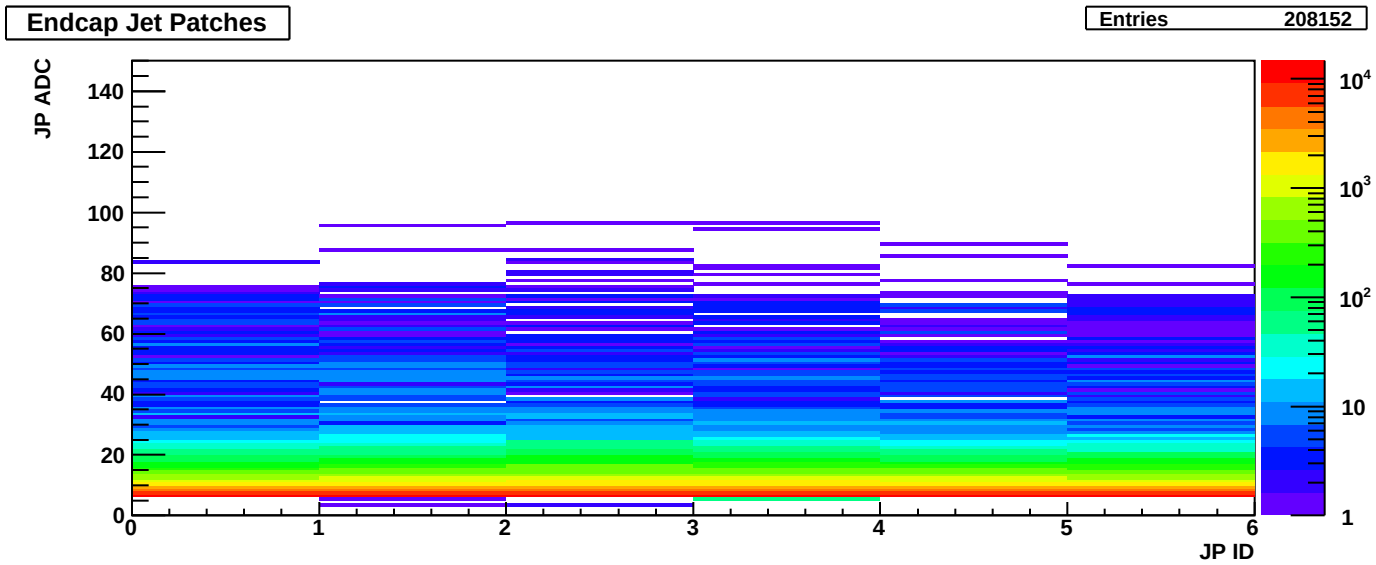

Barrel EMC L0 Input - High Tower
Entries 1.04076e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

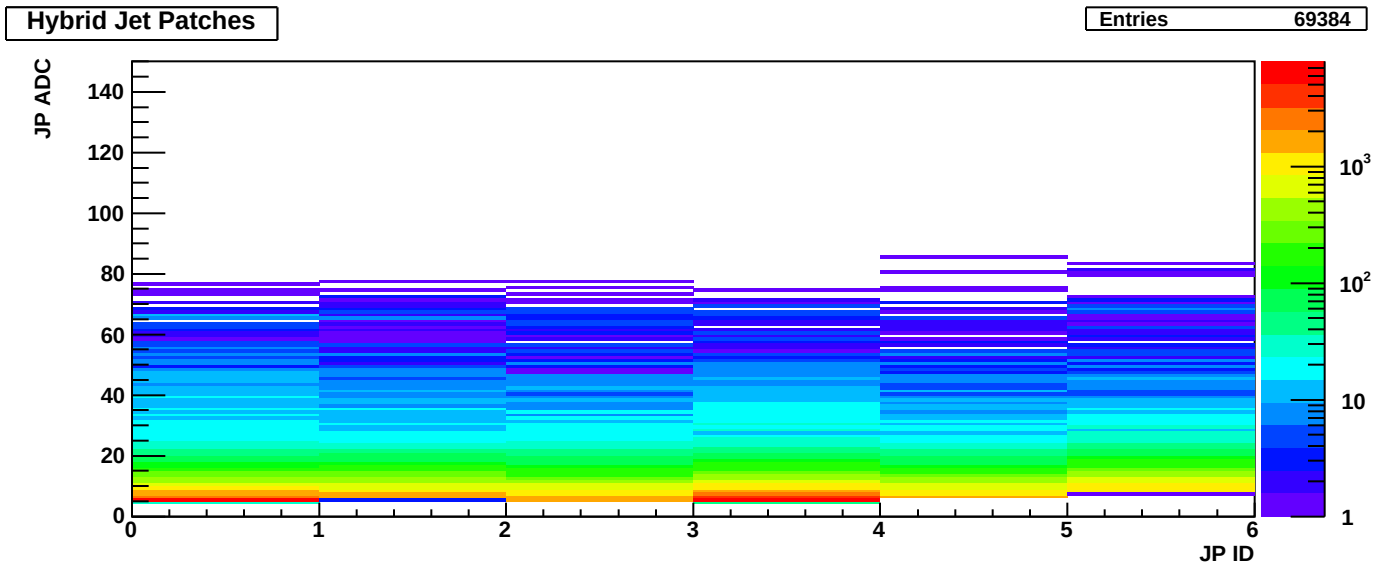

Barrel EMC L0 Input - Patch Sum
Entries 1.04076e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

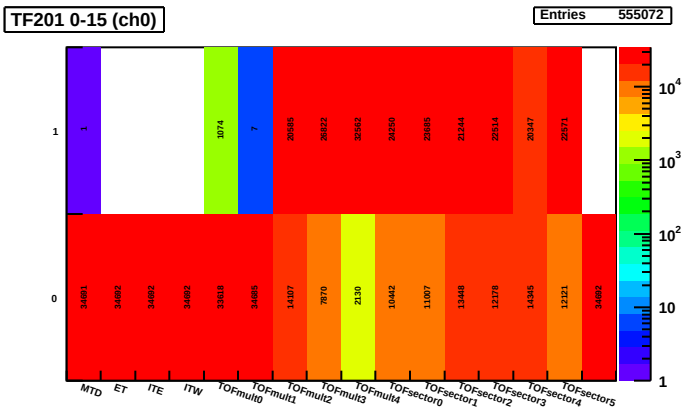

Endcap EMC L0 Input - High Tower
Entries 3122280
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

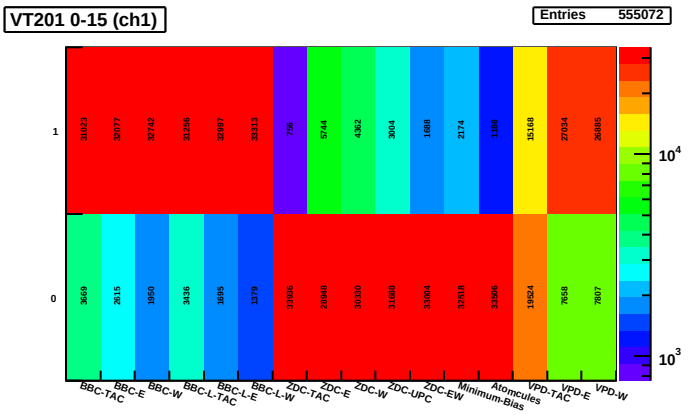

Endcap EMC L0 Input - Patch Sum
Entries 3122280
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

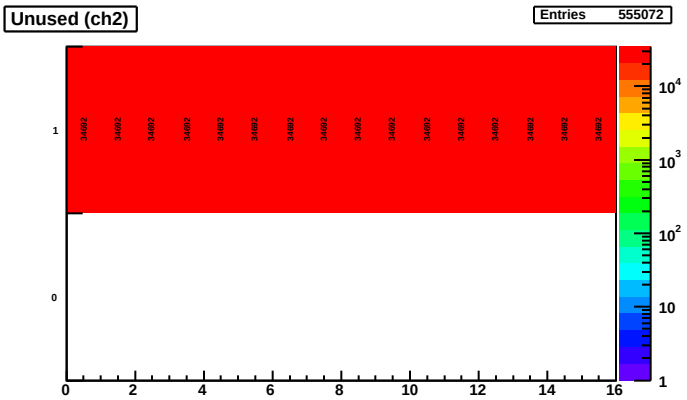

Barrel Jet Patches
Entries 624456
JP ADC
JP ID

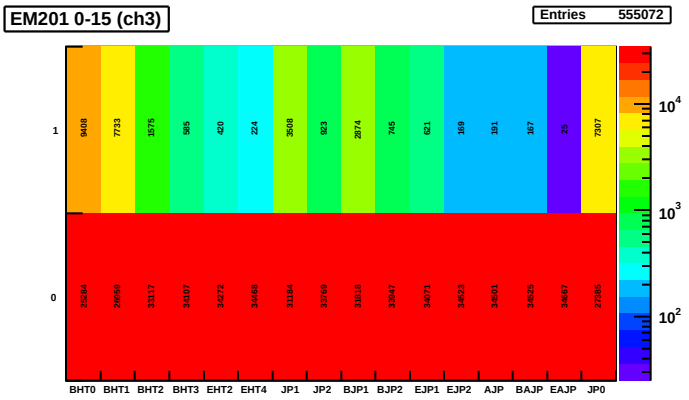

Endcap Jet Patches
Entries 208152
JP ADC
JP ID

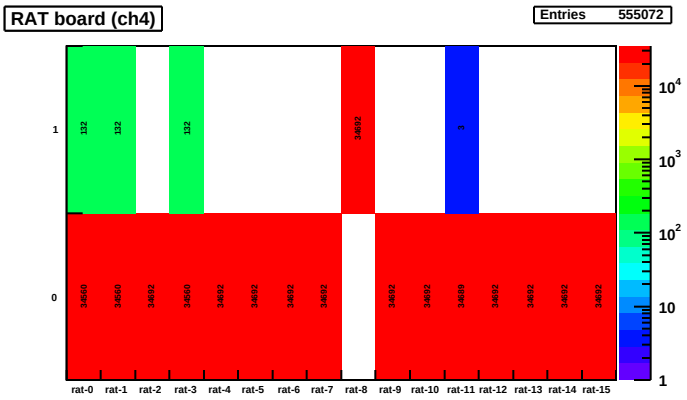

Hybrid Jet Patches
Entries 69384
JP ADC
JP ID

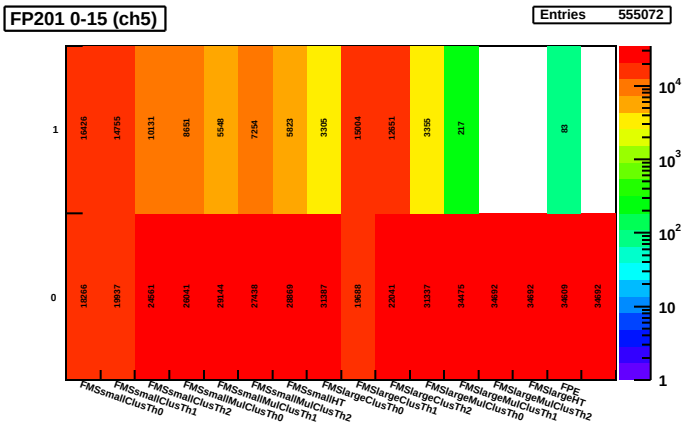

TF201 0-15 (ch0)
Entries 555072
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

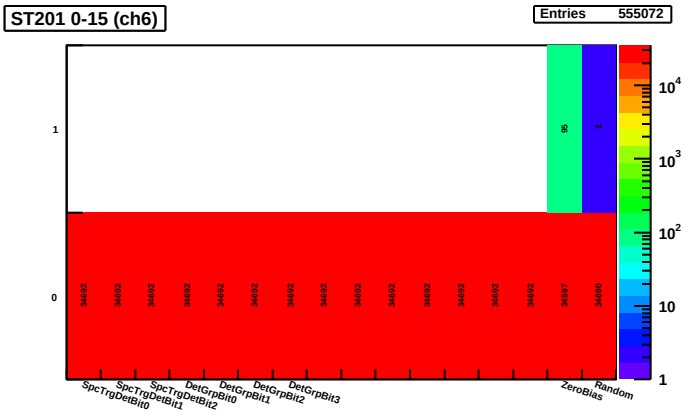

VT201 0-15 (ch1)
Entries 555072
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

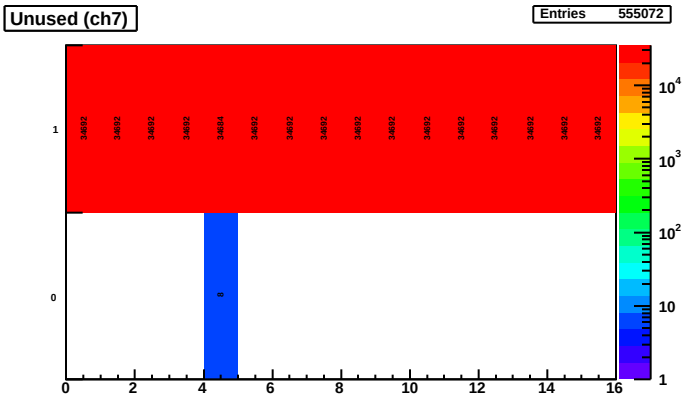

Unused (ch2)
Entries 555072

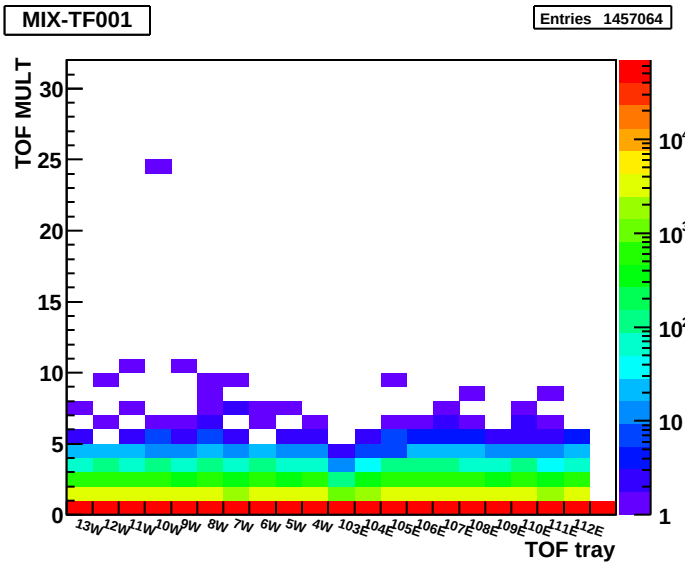

EM201 0-15 (ch3)
Entries 555072
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

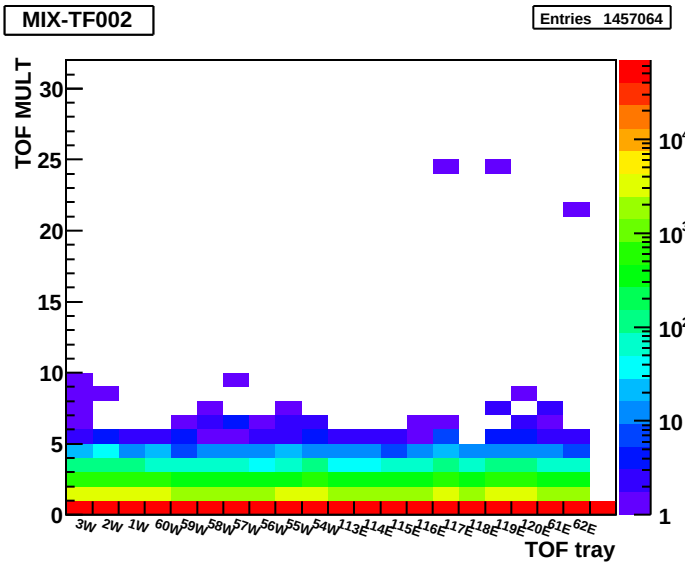

RAT board (ch4)
Entries 555072
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

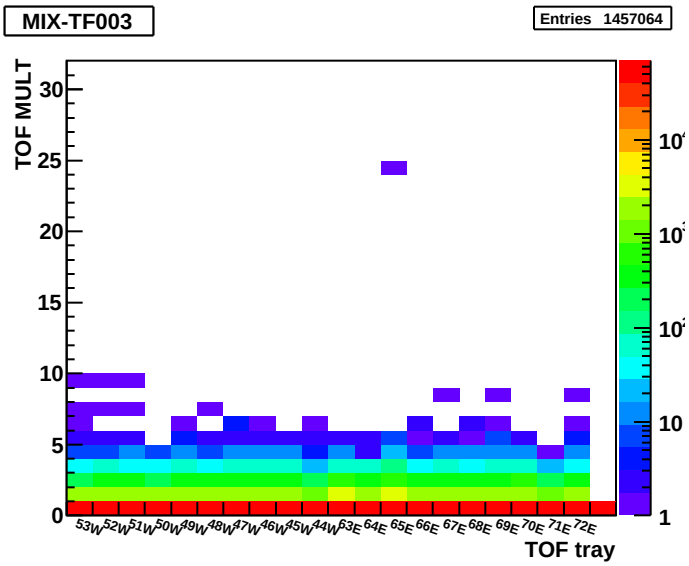

FP201 0-15 (ch5)
Entries 555072
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

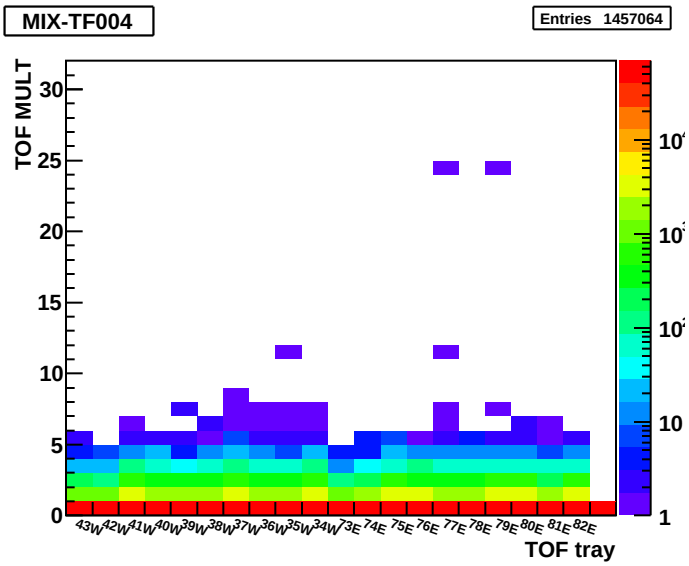

ST201 0-15 (ch6)
Entries 555072
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

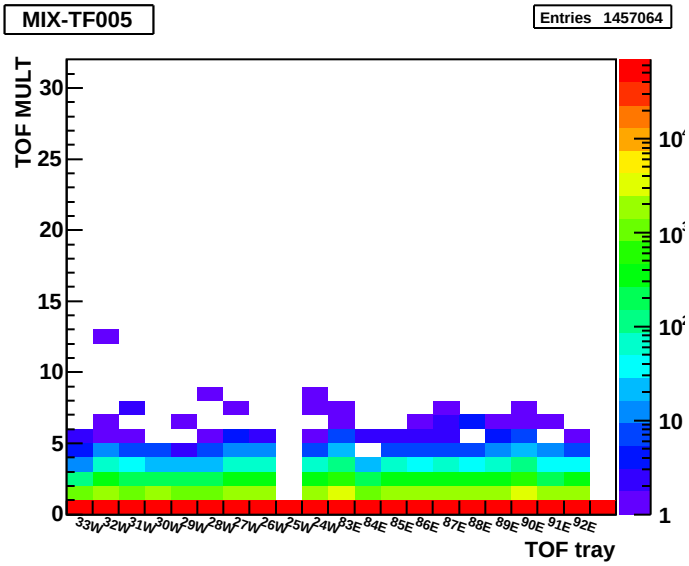

Unused (ch7)
Entries 555072

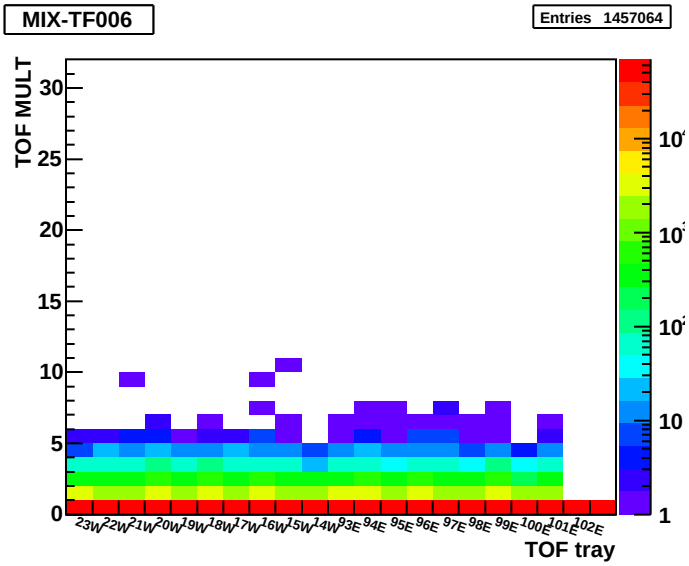

MIX-TF001
Entries 1457064
TOF MULT
TOF tray

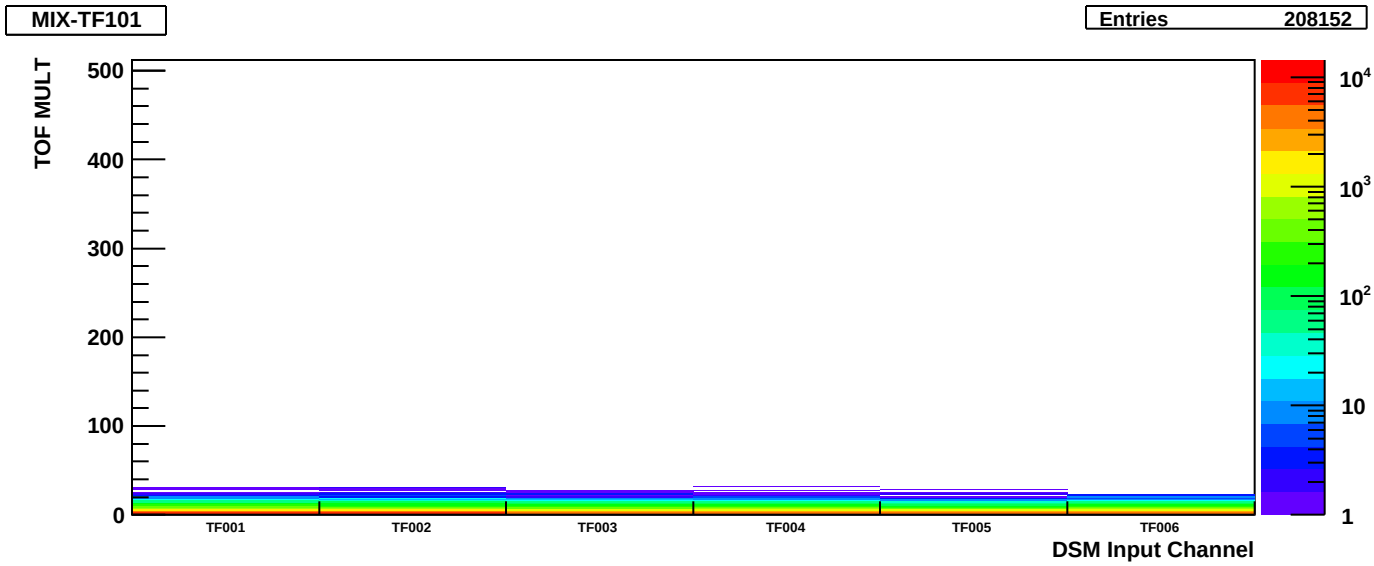

MIX-TF002
Entries 1457064
TOF MULT
TOF tray

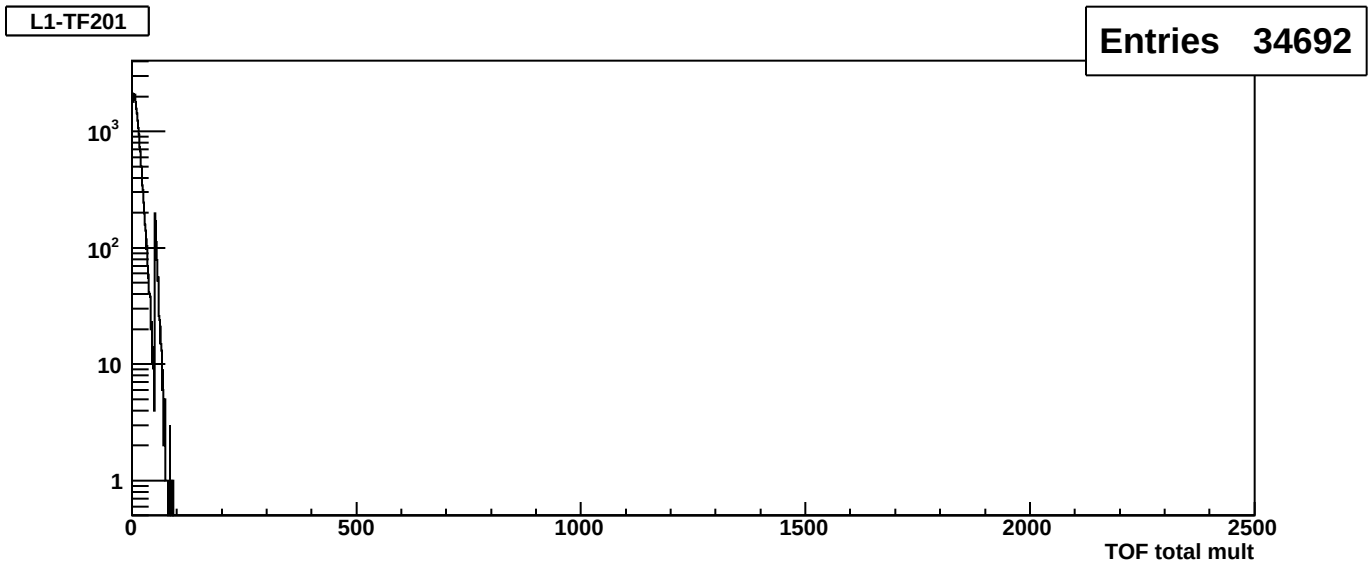

MIX-TF003
Entries 1457064
TOF MULT
TOF tray

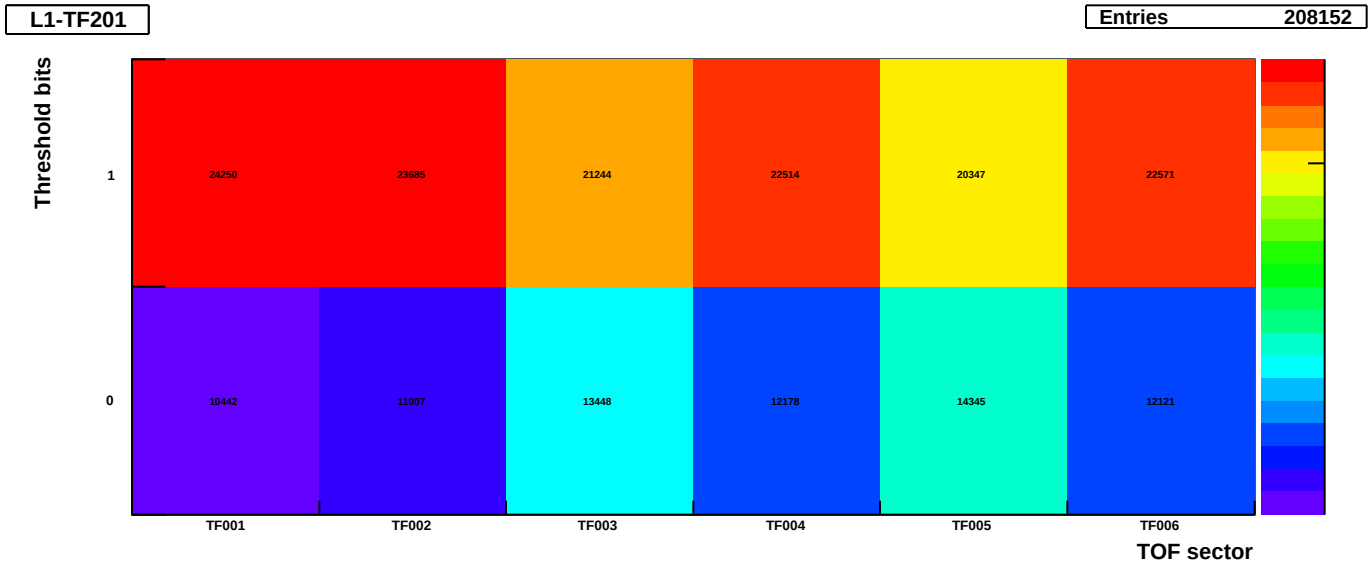

MIX-TF004
Entries 1457064
TOF MULT
TOF tray

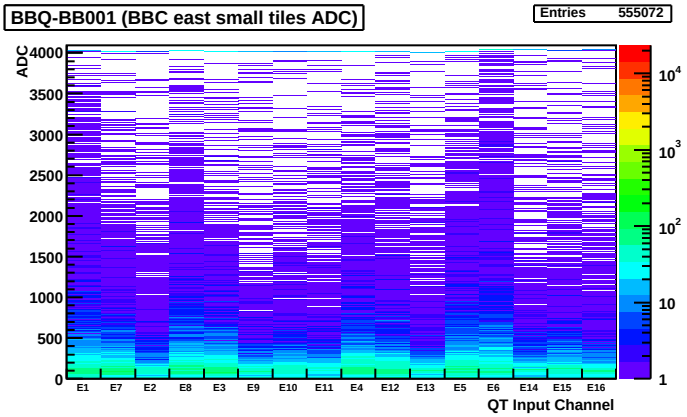

MIX-TF005
Entries 1457064
TOF MULT
TOF tray

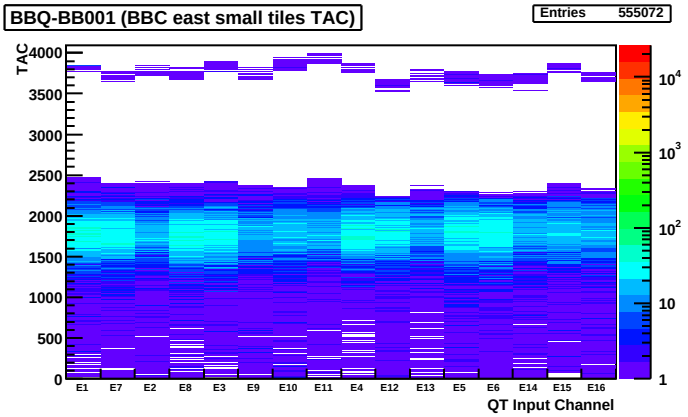

MIX-TF006
Entries 1457064
TOF MULT
TOF tray

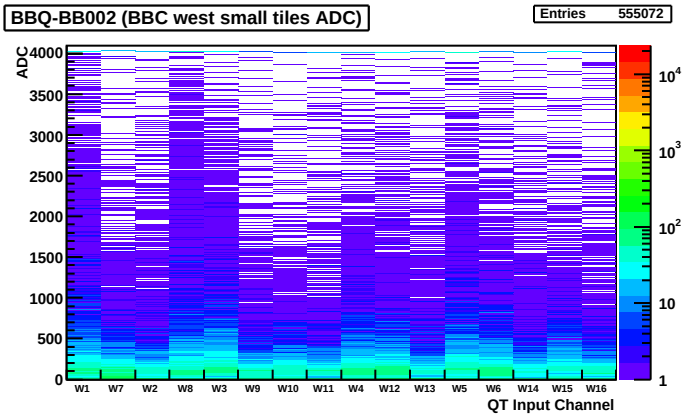

MIX-TF101
Entries 208152
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

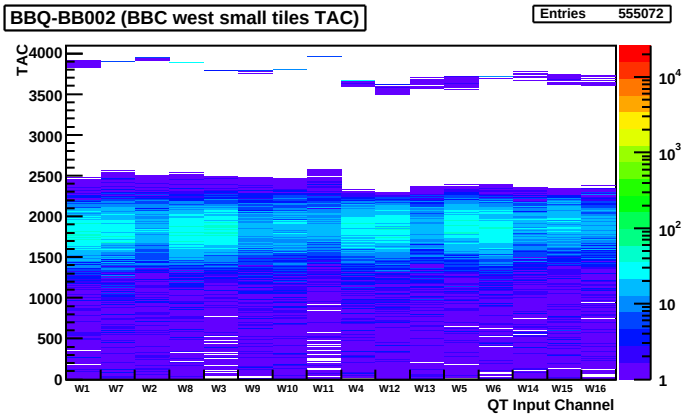

L1-TF201
Entries 34692
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

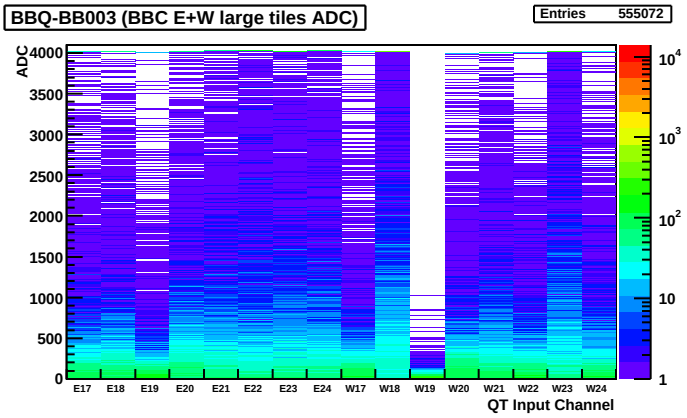

L1-TF201
Entries 208152
Threshold bits
1
0
24250
23685
21244
22514
20347
22571
10442
11007
13448
12178
14345
12121
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

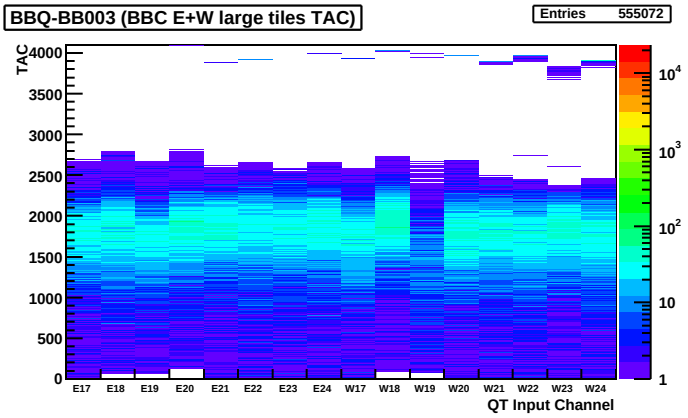

BBQ-BB001 (BBC east small tiles ADC)
Entries 555072
ADC
QT Input Channel

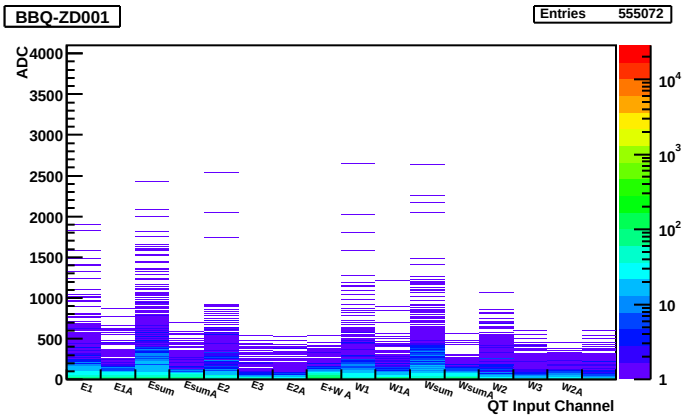

BBQ-BB001 (BBC east small tiles TAC)
Entries 555072
TAC
QT Input Channel

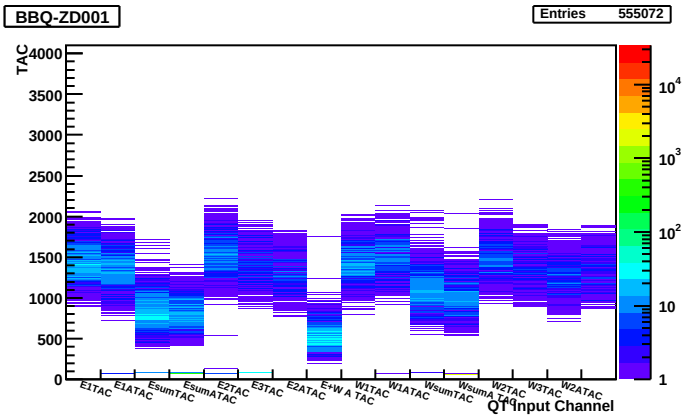

BBQ-BB002 (BBC west small tiles ADC)
Entries 555072
ADC
QT Input Channel

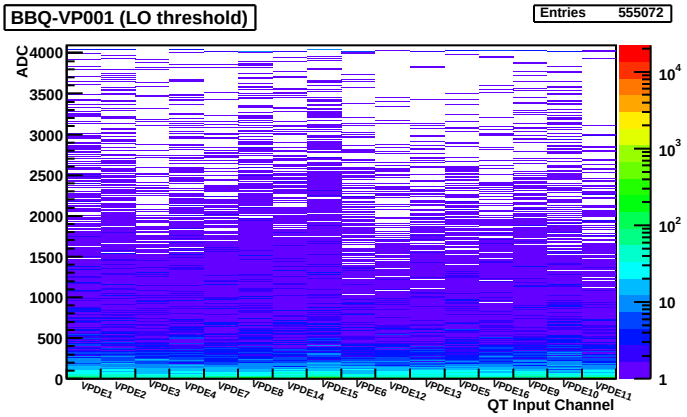

BBQ-BB002 (BBC west small tiles TAC)
Entries 555072
TAC
QT Input Channel

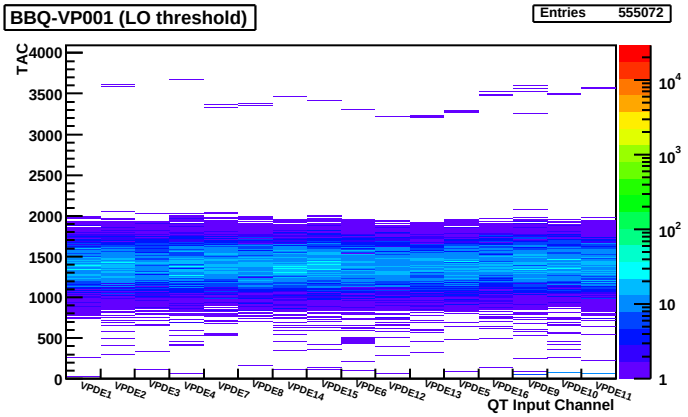

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 555072
ADC
QT Input Channel

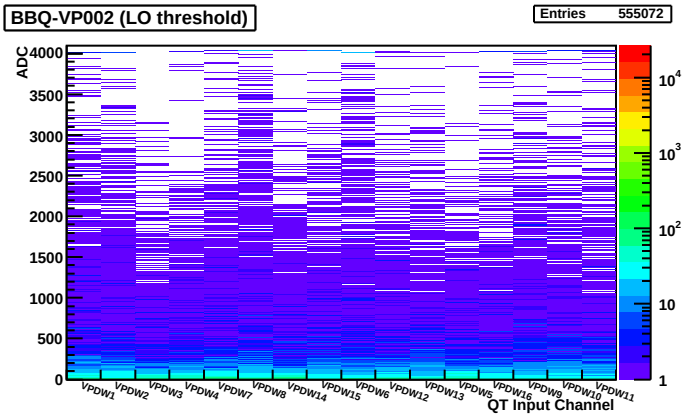

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 555072
TAC
QT Input Channel

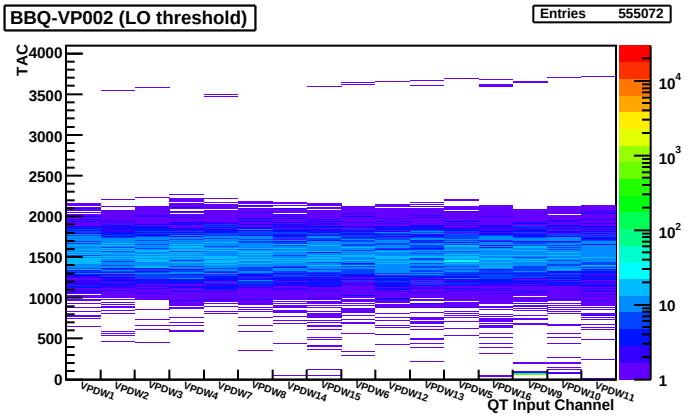

BBQ-ZD001
Entries 555072
ADC
QT Input Channel

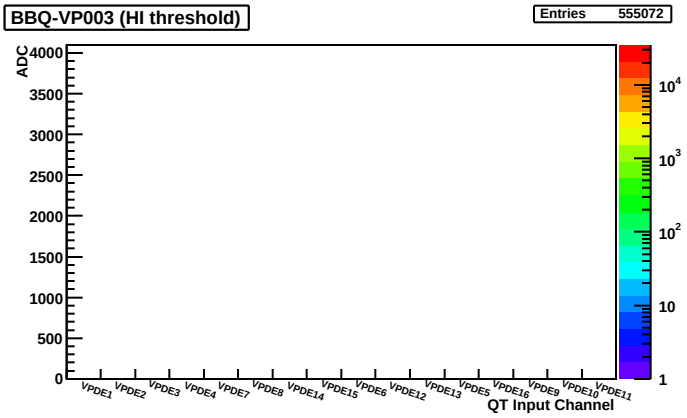

BBQ-ZD001
Entries 555072
TAC
QT Input Channel

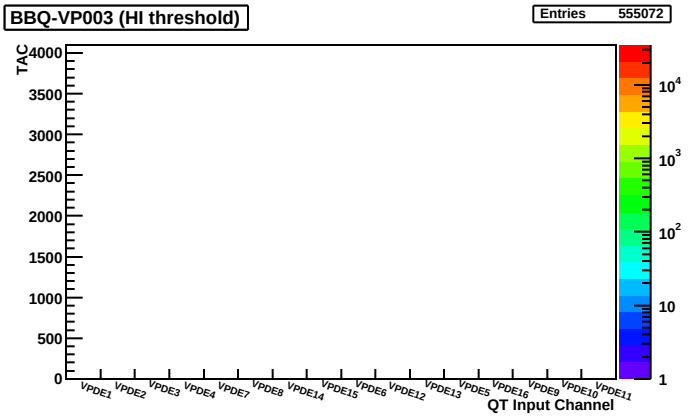

BBQ-VP001 (LO threshold)
Entries 555072
ADC
QT Input Channel

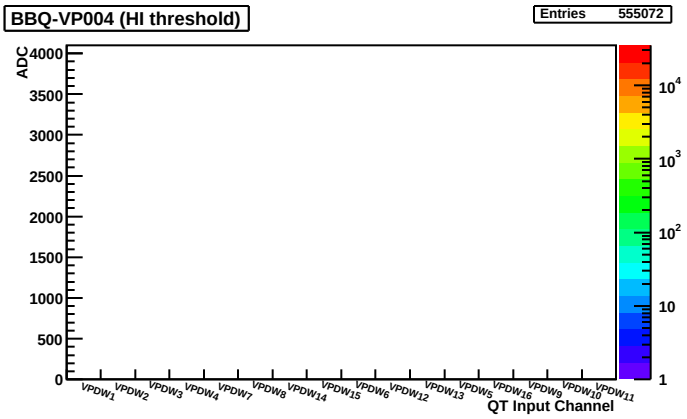

BBQ-VP001 (LO threshold)
Entries 555072
TAC
QT Input Channel

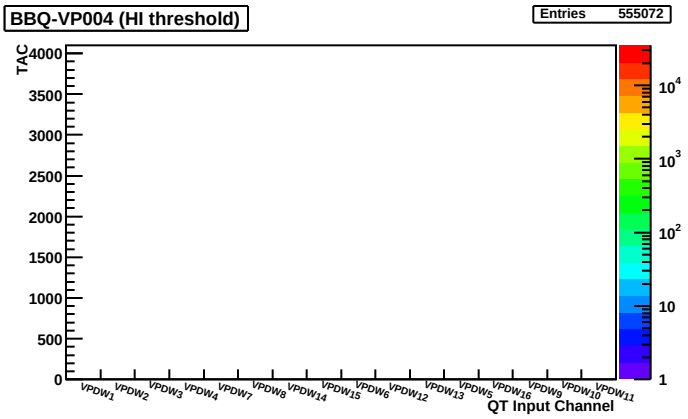

BBQ-VP002 (LO threshold)
Entries 555072
ADC
QT Input Channel

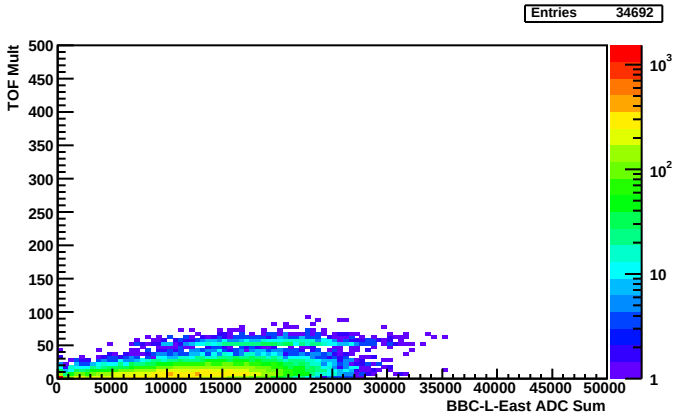

BBQ-VP002 (LO threshold)
Entries 555072
TAC
QT Input Channel

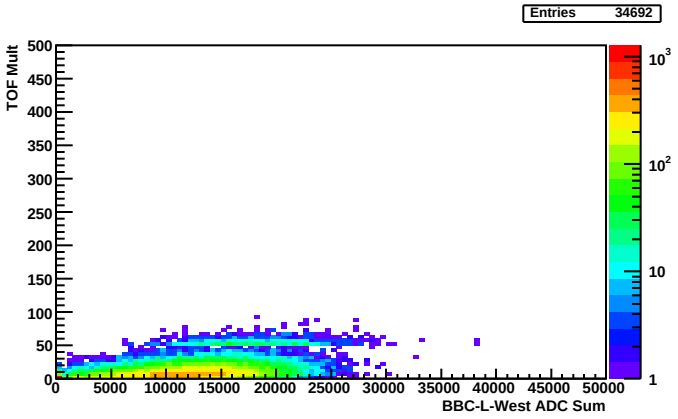

BBQ-VP003 (HI threshold)
Entries 555072
ADC
QT Input Channel

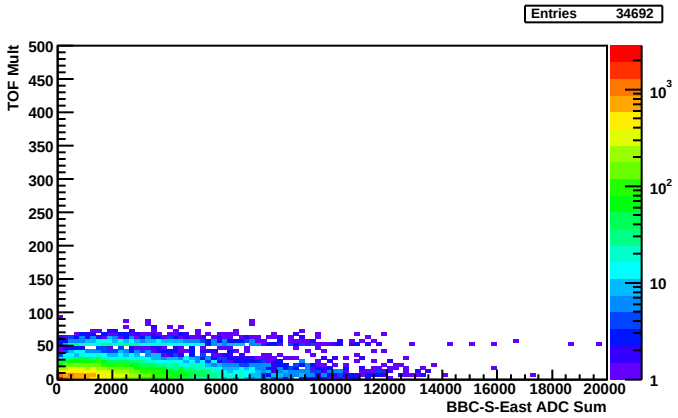

BBQ-VP003 (HI threshold)
Entries 555072
TAC
QT Input Channel

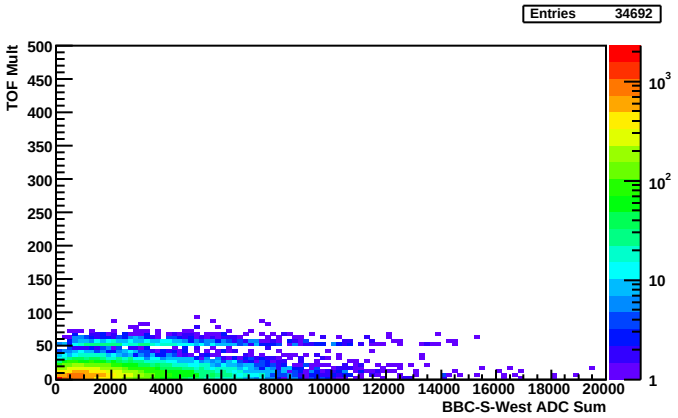

BBQ-VP004 (HI threshold)
Entries 555072
ADC
QT Input Channel

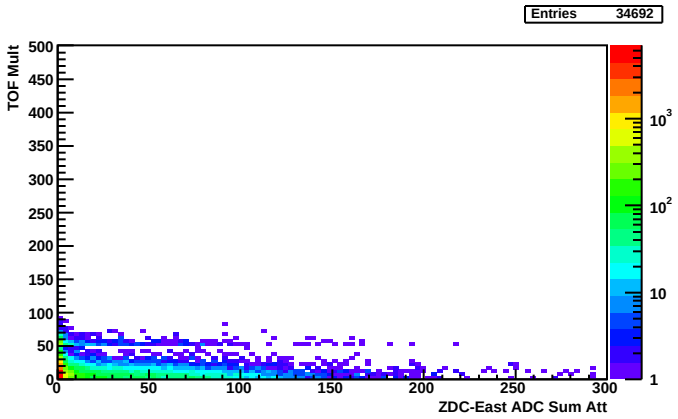

BBQ-VP004 (HI threshold)
Entries 555072
TAC
QT Input Channel

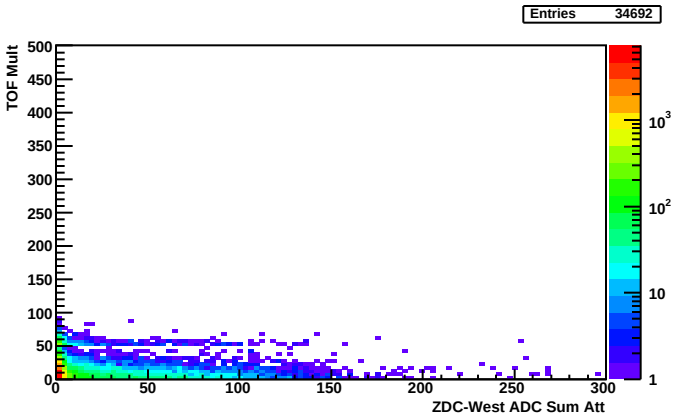

Entries 34692
TOF Mult
BBC-L-East ADC Sum

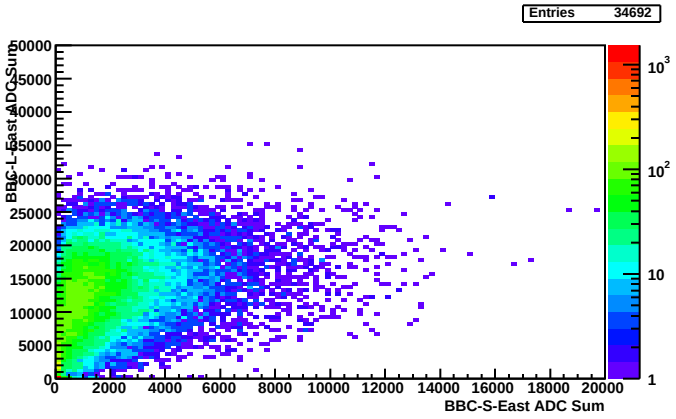

Entries 34692
TOF Mult
BBC-L-West ADC Sum

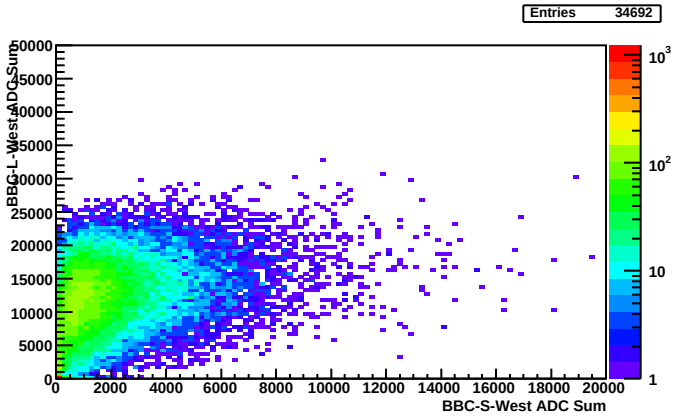

Entries 34692
TOF Mult
BBC-S-East ADC Sum

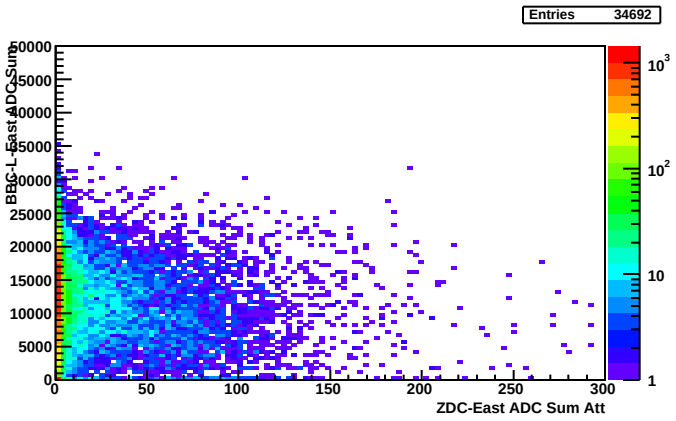

Entries 34692
TOF Mult
BBC-S-West ADC Sum

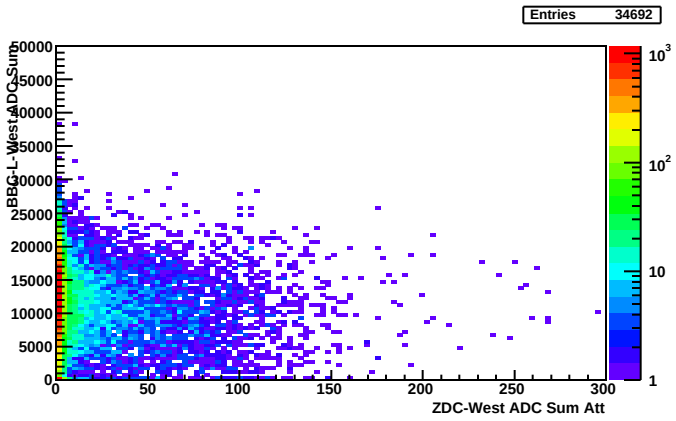

Entries 34692
TOF Mult
ZDC-East ADC Sum Att

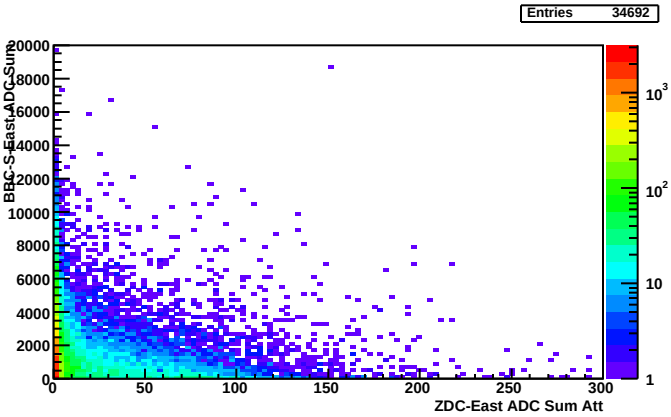

Entries 34692
TOF Mult
ZDC-West ADC Sum Att

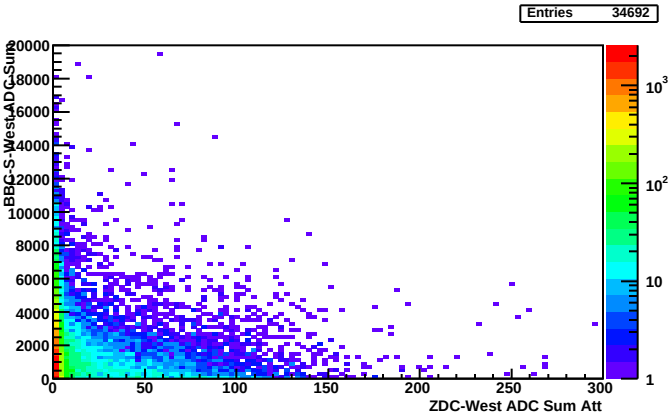

Entries 34692
BBC-L-East ADC Sum
BBC-S-East ADC Sum

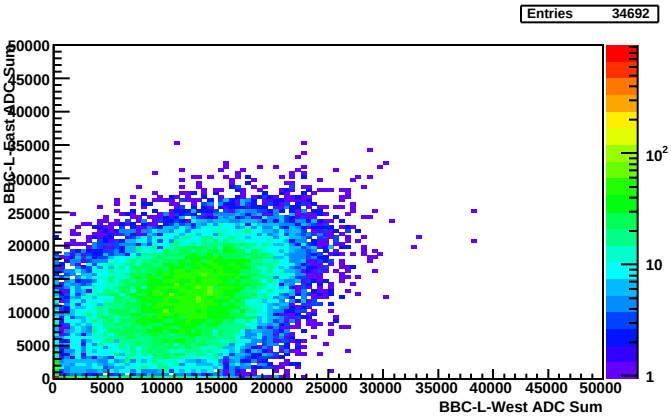

Entries 34692
BBC-L-West ADC Sum
BBC-S-West ADC Sum

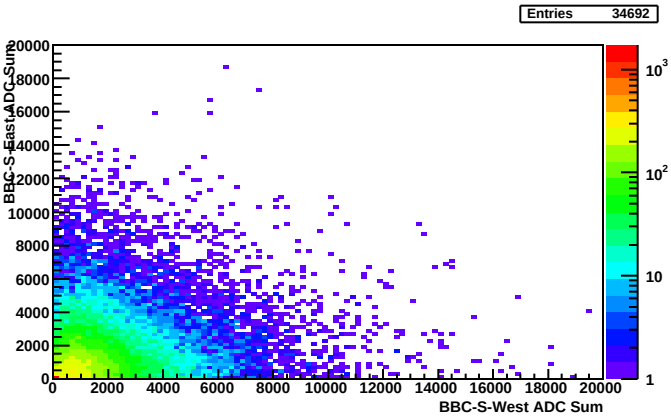

Entries 34692
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

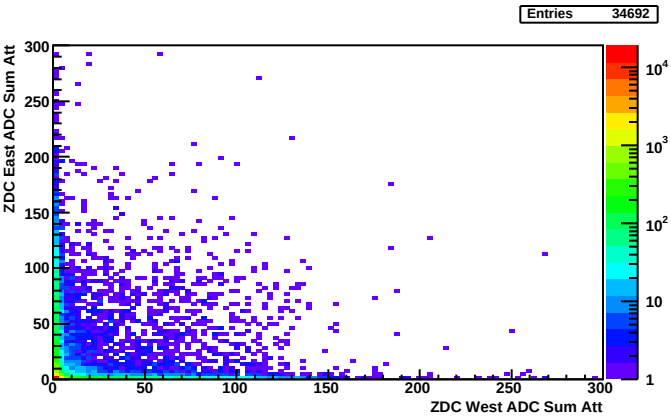

Entries 34692
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

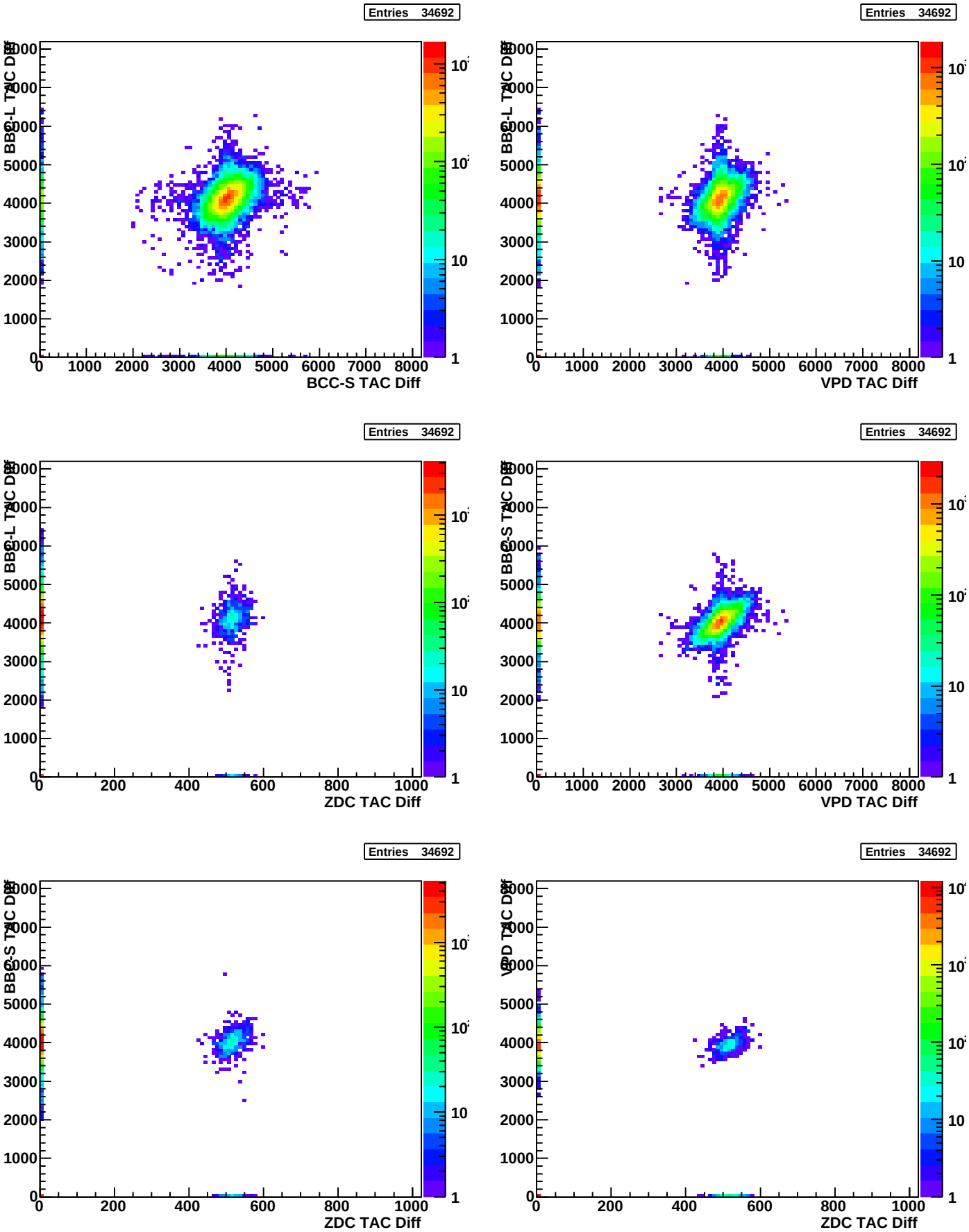

Entries 34692
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

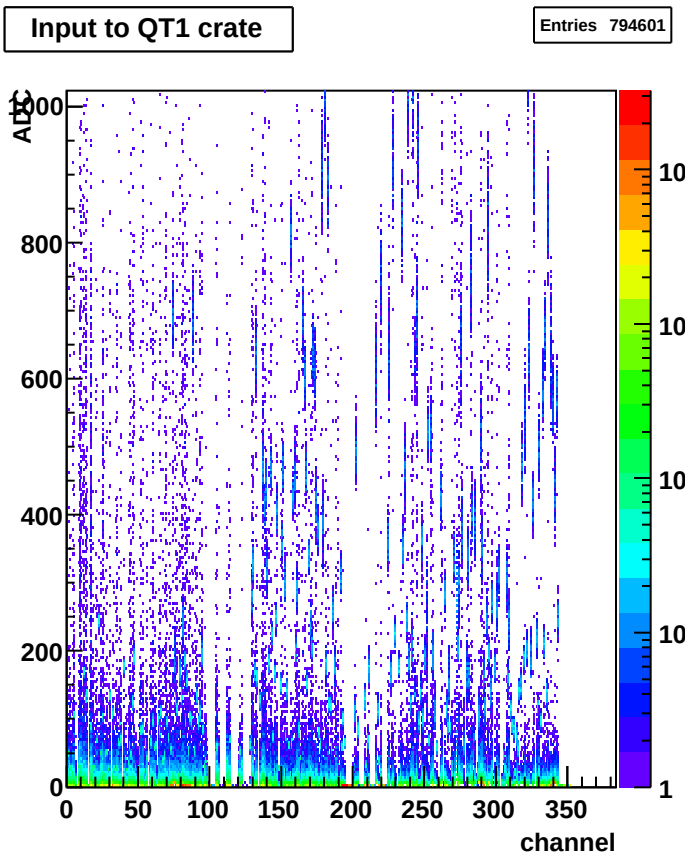

Entries 34692
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

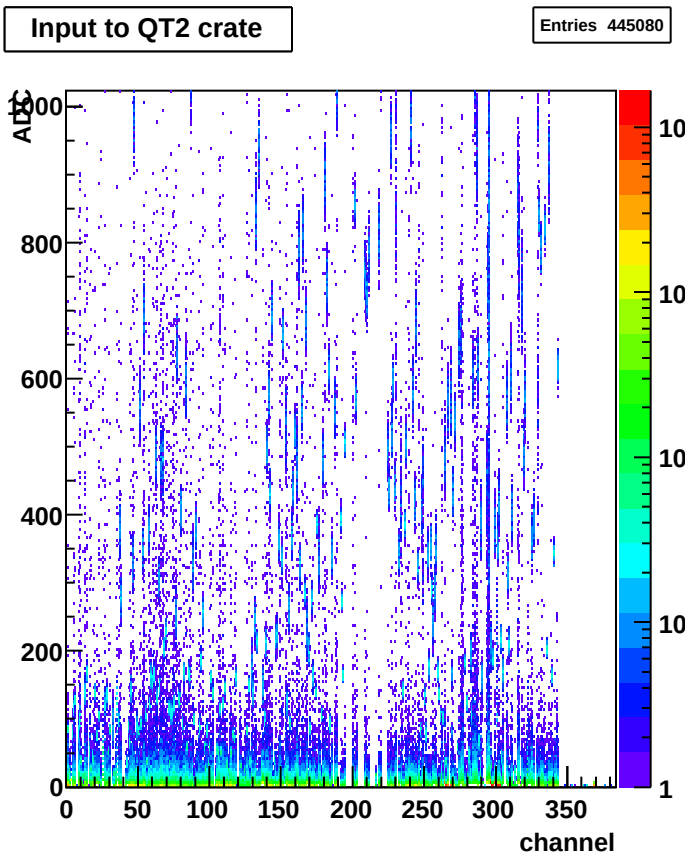

Entries 34692
BBC-L-East ADC Sum
BBC-L-West ADC Sum

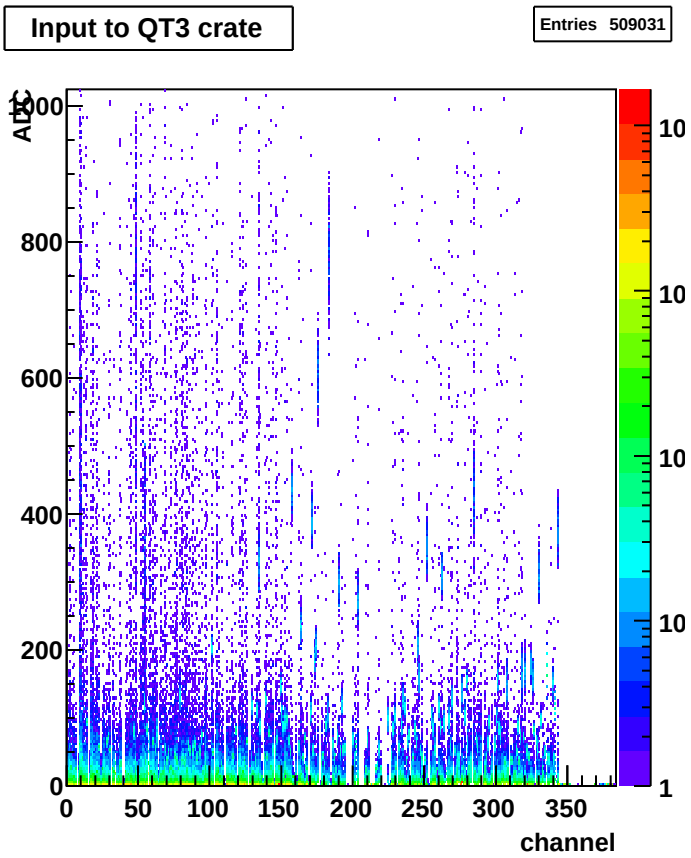

Entries 34692
BBC-S-East ADC Sum
BBC-S-West ADC Sum

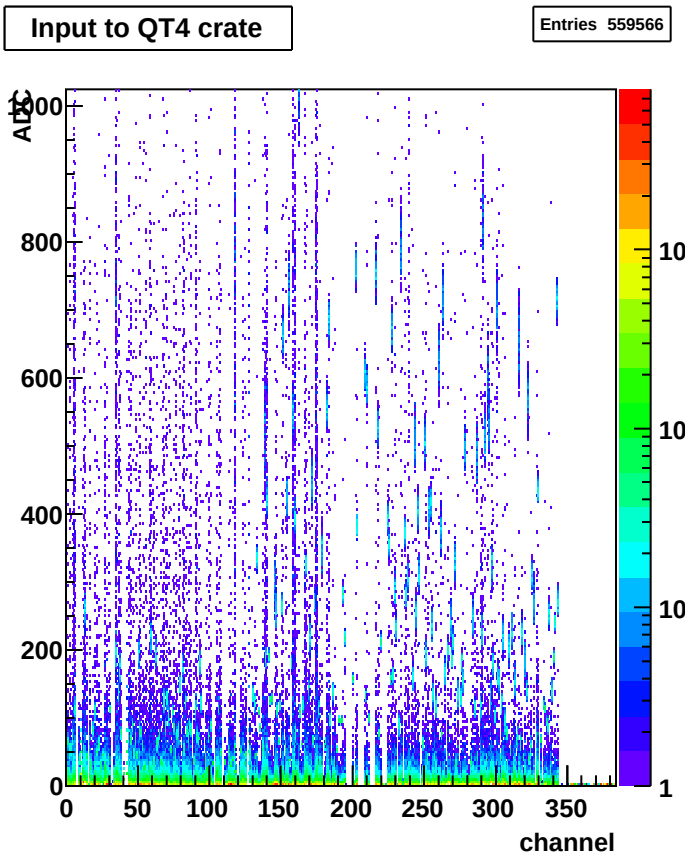

Entries 34692
ZDC East ADC Sum Att
ZDC West ADC Sum Att

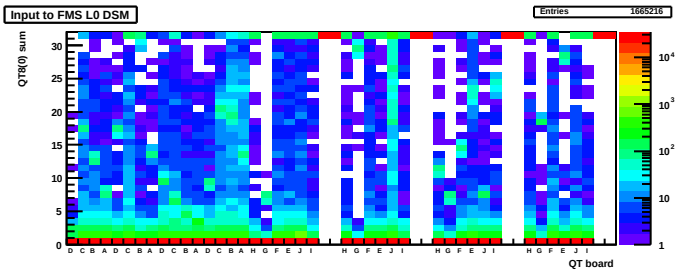

Entries 34692
BBC-L TAC Diff
BCC-S TAC Diff
Entries 34692
BBC-L TAC Diff
VPD TAC Diff
Entries 34692
BBC-L TAC Diff
ZDC TAC Diff
Entries 34692
BBC-S TAC Diff
VPD TAC Diff
Entries 34692
BBC-S TAC Diff
ZDC TAC Diff
Entries 34692
VPD TAC Diff
ZDC TAC Diff

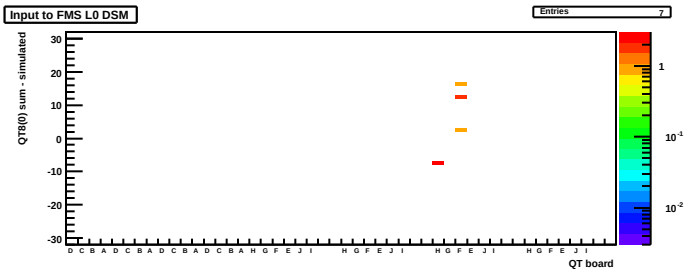

Input to QT1 crate
Entries 794601
ADC
channel

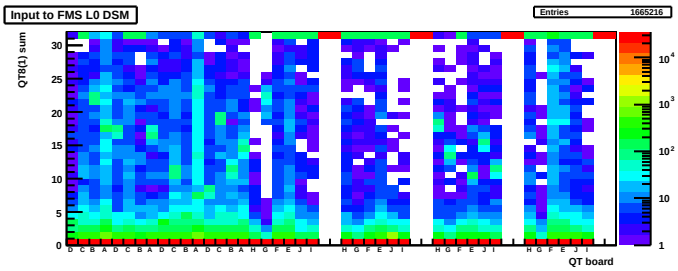

Input to QT2 crate
Entries 445080
ADC
channel

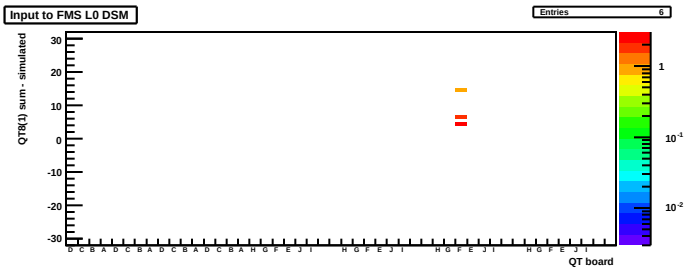

Input to QT3 crate
Entries 509031
ADC
channel

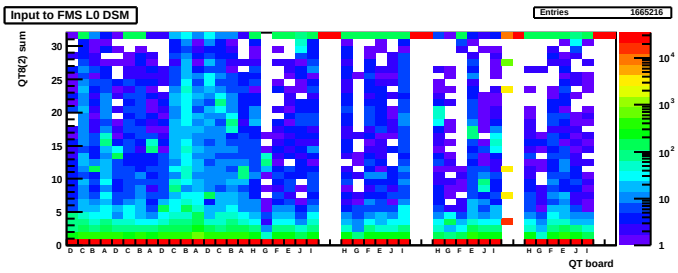

Input to QT4 crate
Entries 559566
ADC
channel

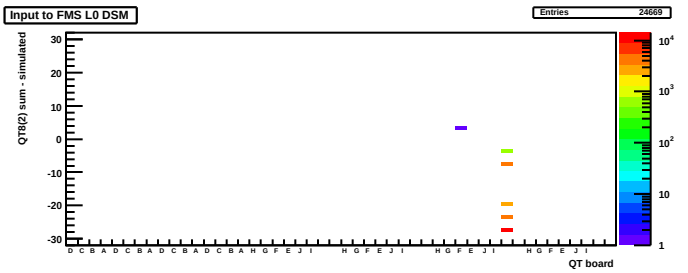

Input to FMS L0 DSM
Entries 1665216
QT8(0) sum
QT board

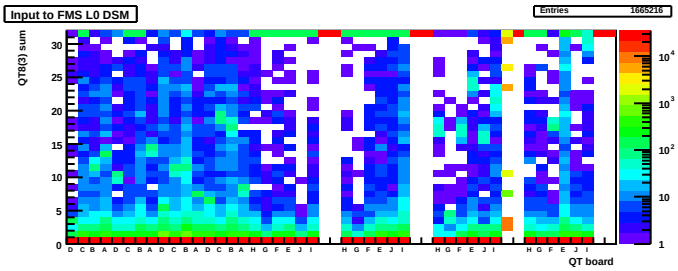

Input to FMS L0 DSM
Entries 7
QT8(0) sum - simulated
QT board

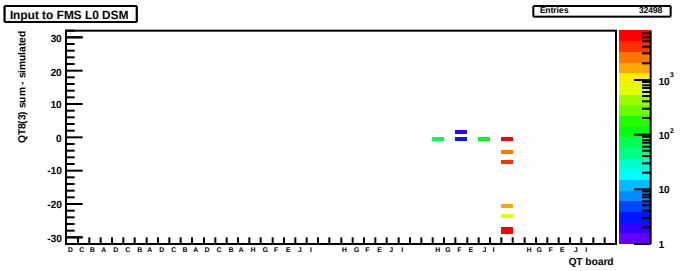

Input to FMS L0 DSM
Entries 1665216
QT8(1) sum
QT board

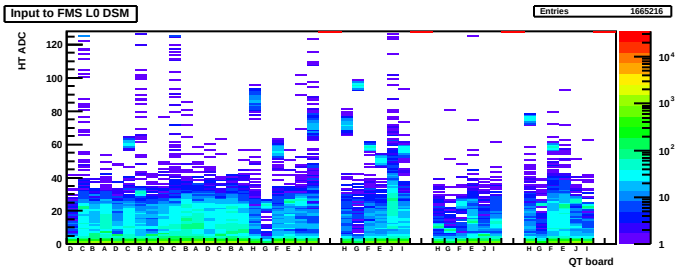

Input to FMS L0 DSM
Entries 6
QT8(1) sum - simulated
QT board

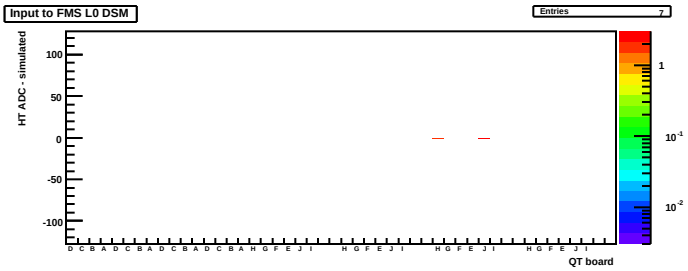

Input to FMS L0 DSM
Entries 1665216
QT8(2) sum
QT board

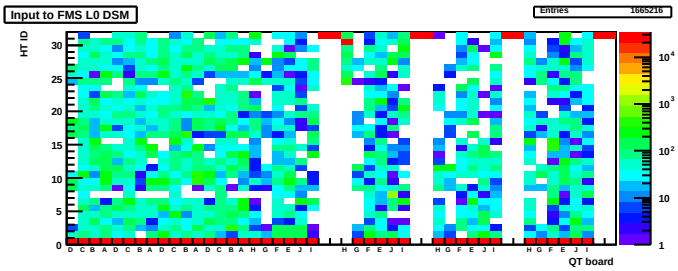

Input to FMS L0 DSM
Entries 24669
QT8(2) sum - simulated
QT board

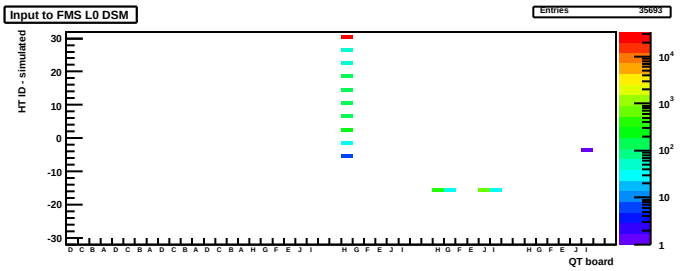

Input to FMS L0 DSM
Entries 1665216
QT8(3) sum
QT board

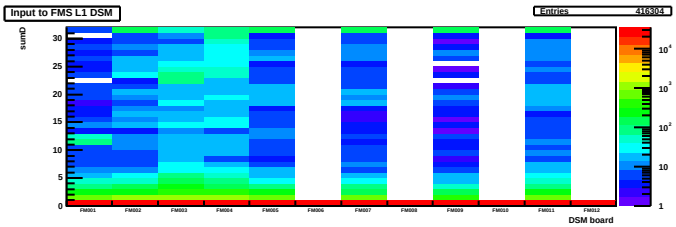

Input to FMS L0 DSM
Entries 32498
QT8(3) sum - simulated
QT board

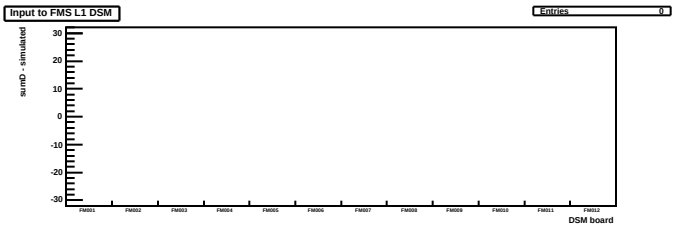

Input to FMS L0 DSM
Entries 1665216
HT ADC
QT board

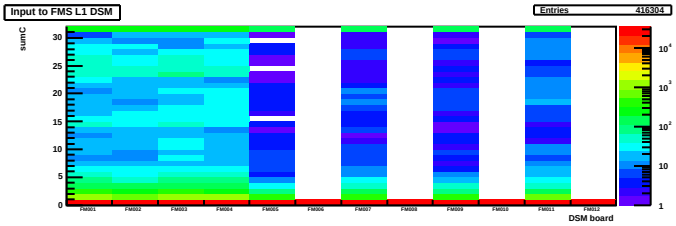

Input to FMS L0 DSM
Entries 7
HT ADC - simulated
QT board

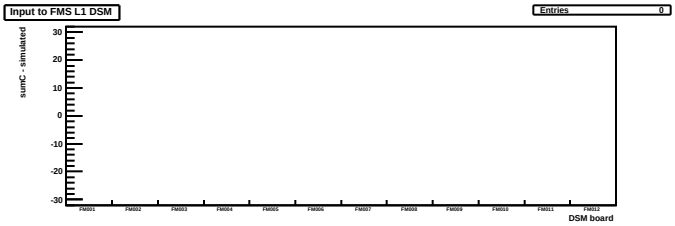

Input to FMS L0 DSM
Entries 1665216
HT ID
QT board

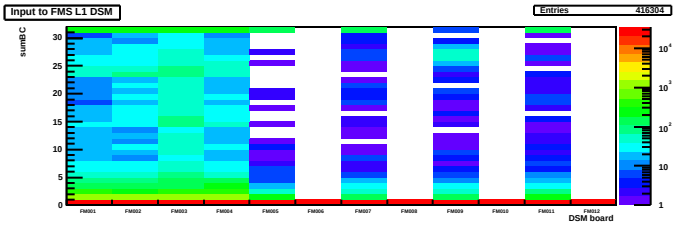

Input to FMS L0 DSM
Entries 35693
HT ID - simulated
QT board

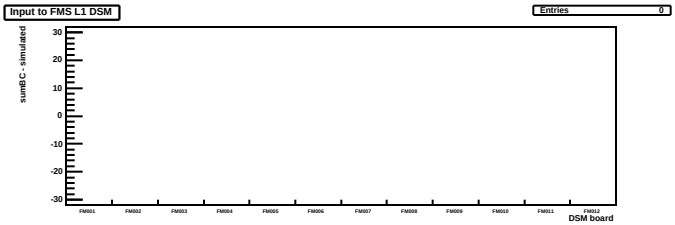

Input to FMS L1 DSM
Entries 416304
sumD
DSM board

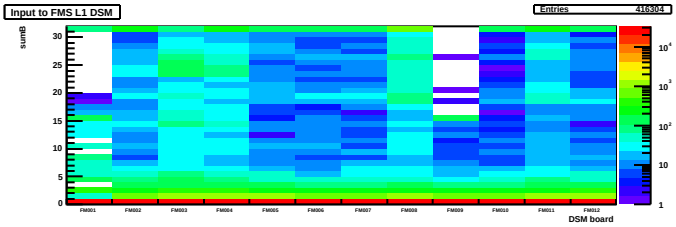

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

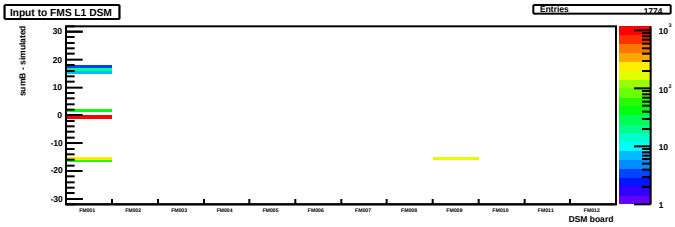

Input to FMS L1 DSM
Entries 416304
sumC
DSM board

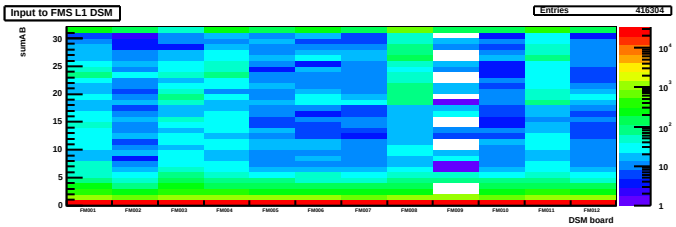

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

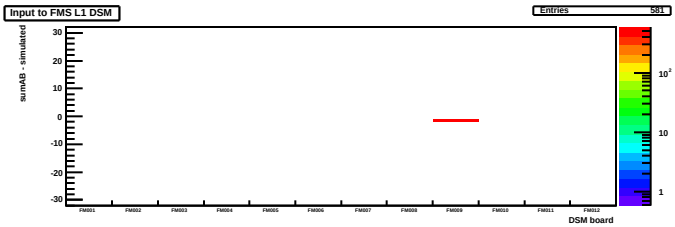

Input to FMS L1 DSM
Entries 416304
sumBC
DSM board

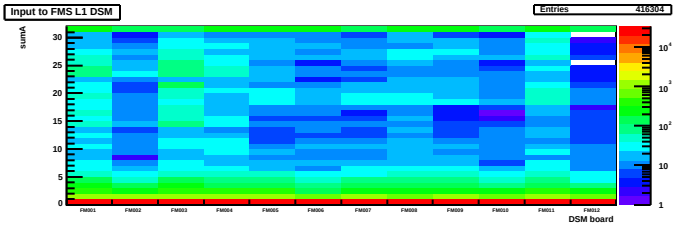

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

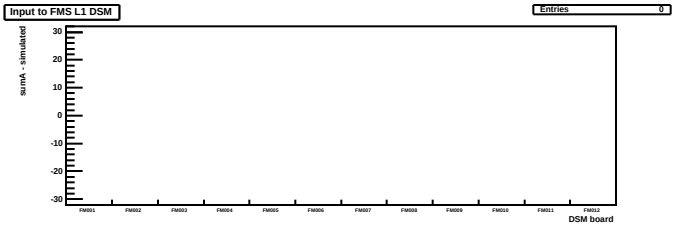

Input to FMS L1 DSM
Entries 416304
sumB
DSM board

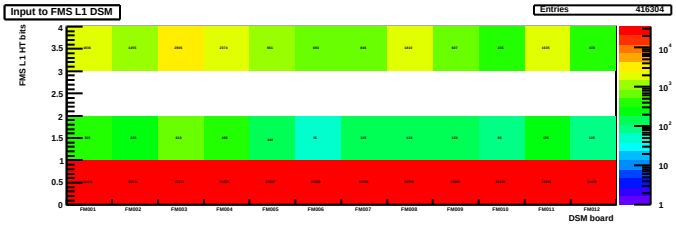

Input to FMS L1 DSM
Entries 1274
sumB - simulated
DSM board

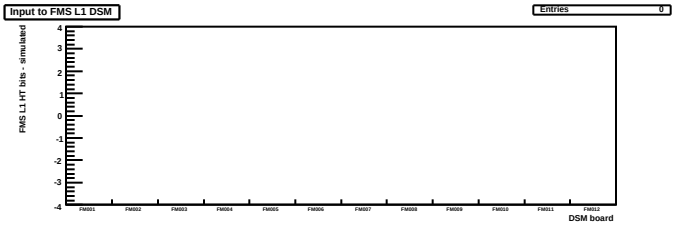

Input to FMS L1 DSM
Entries 416304
sumAB
DSM board

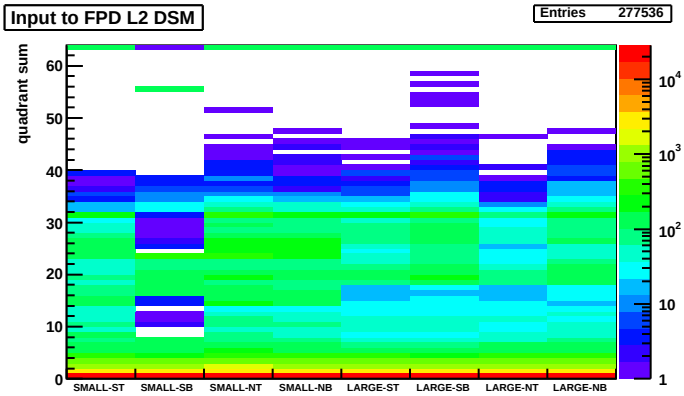

Input to FMS L1 DSM
Entries 581
sumAB - simulated
DSM board

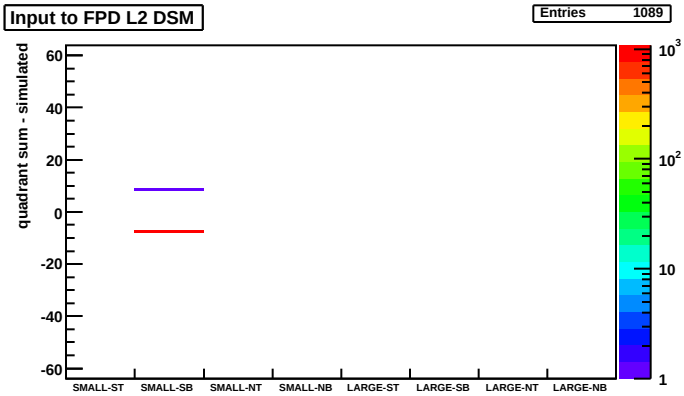

Input to FMS L1 DSM
Entries 416304
sumA
DSM board

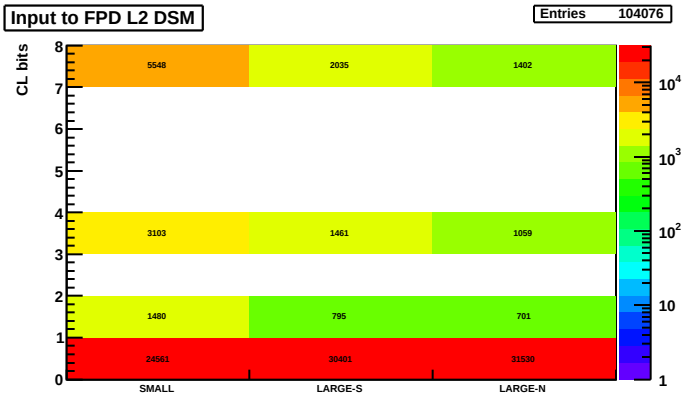

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

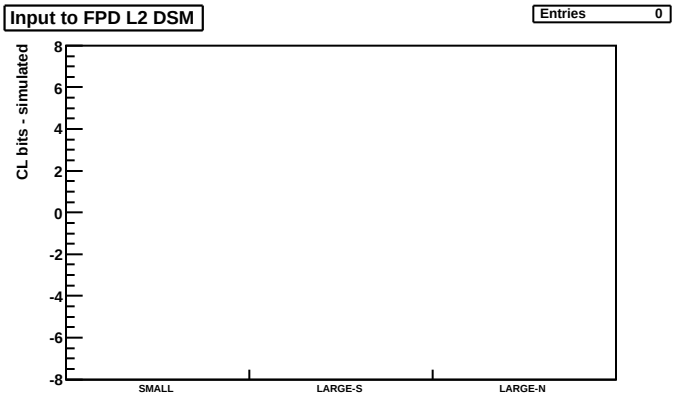

Input to FMS L1 DSM
Entries 416304
FMS L1 HT bits
DSM board

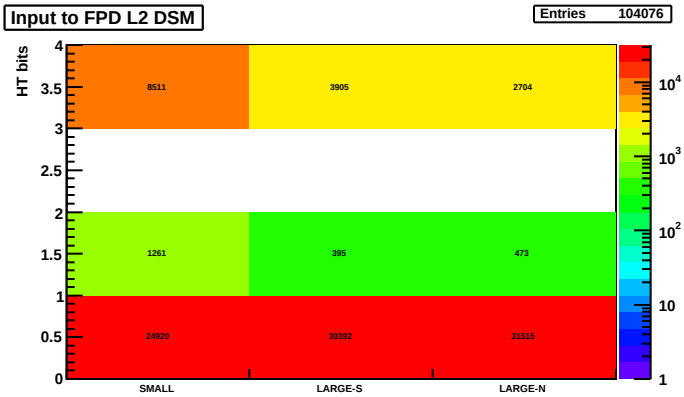

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

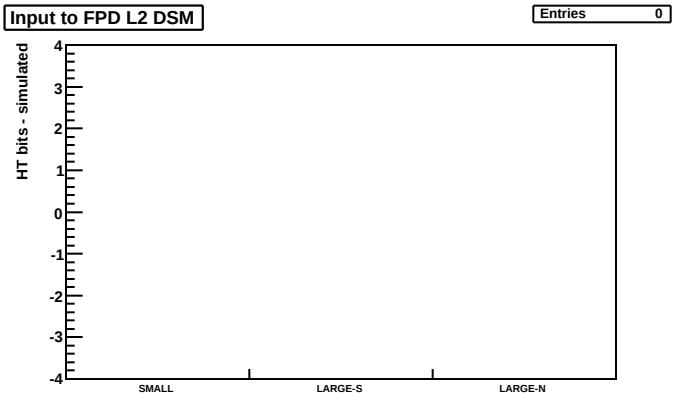

Input to FPD L2 DSM
Entries 277536
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

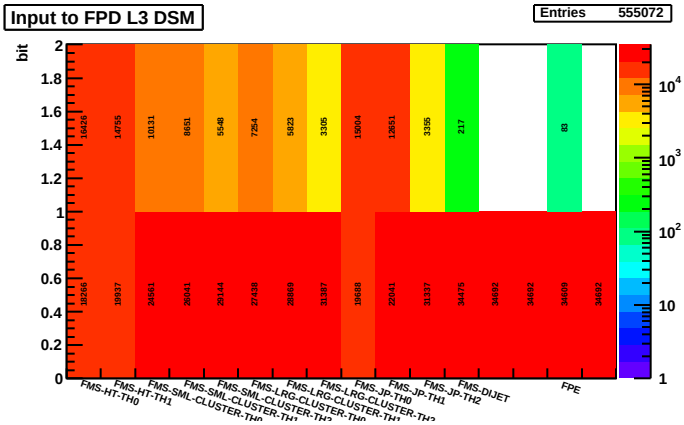

Input to FPD L2 DSM
Entries 1089
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

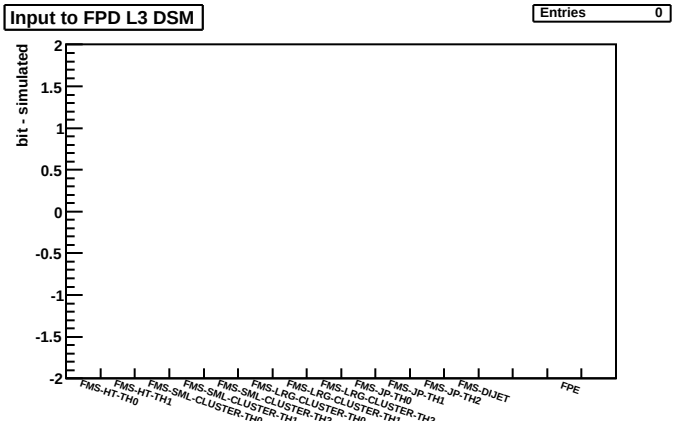

Input to FPD L2 DSM
Entries 104076
CL bits
5548
2035
1402
3103
1461
1059
1480
795
701
24561
30401
31530
SMALL
LARGE-S
LARGE-N

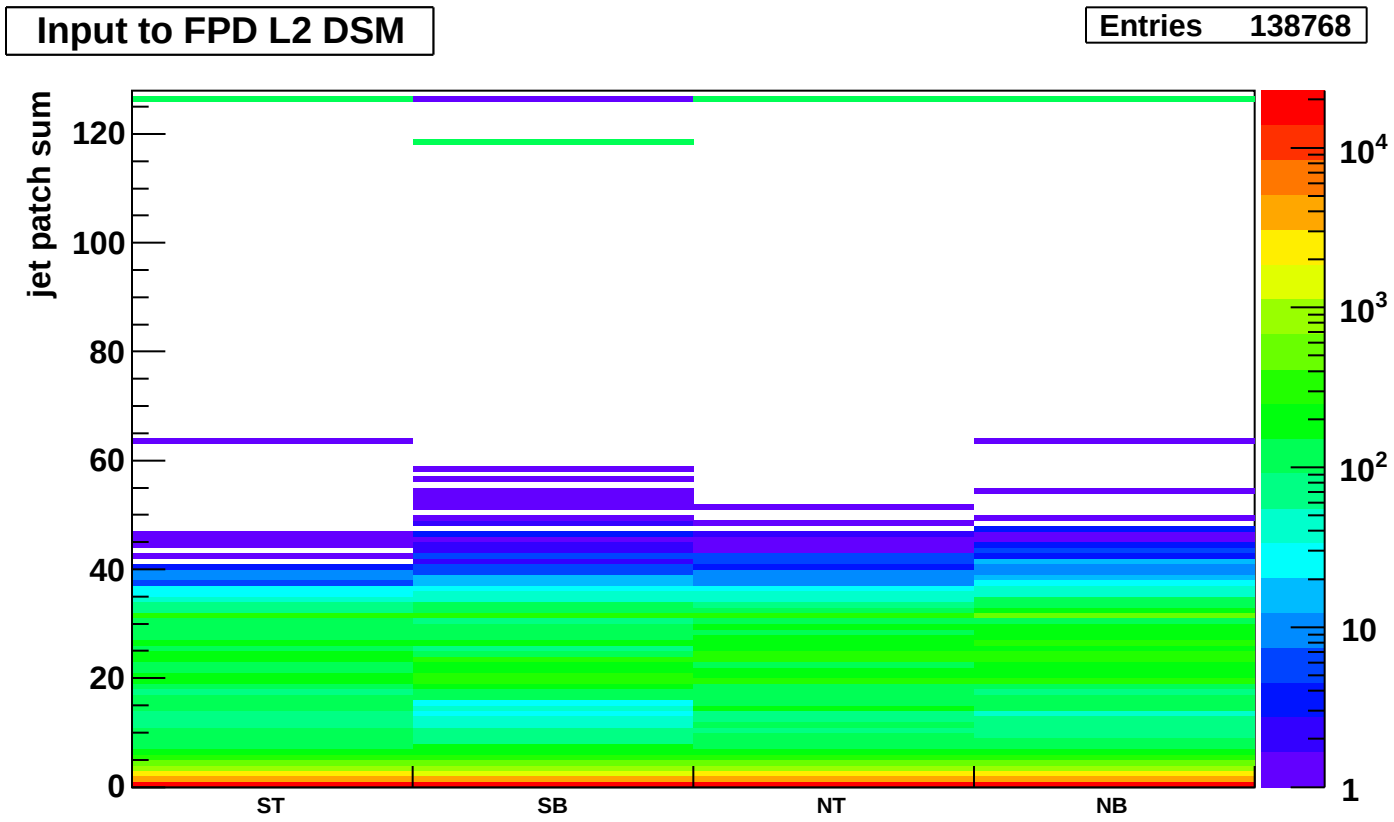

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

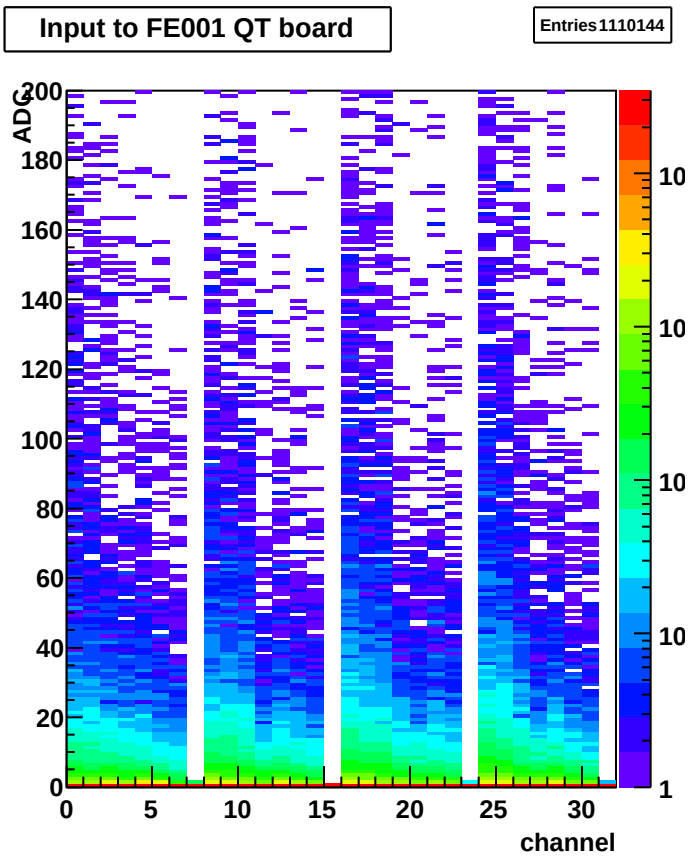

Input to FPD L2 DSM
Entries 104076
HT bits
8511
3905
2704
1261
395
473
24920
30392
31515
SMALL
LARGE-S
LARGE-N

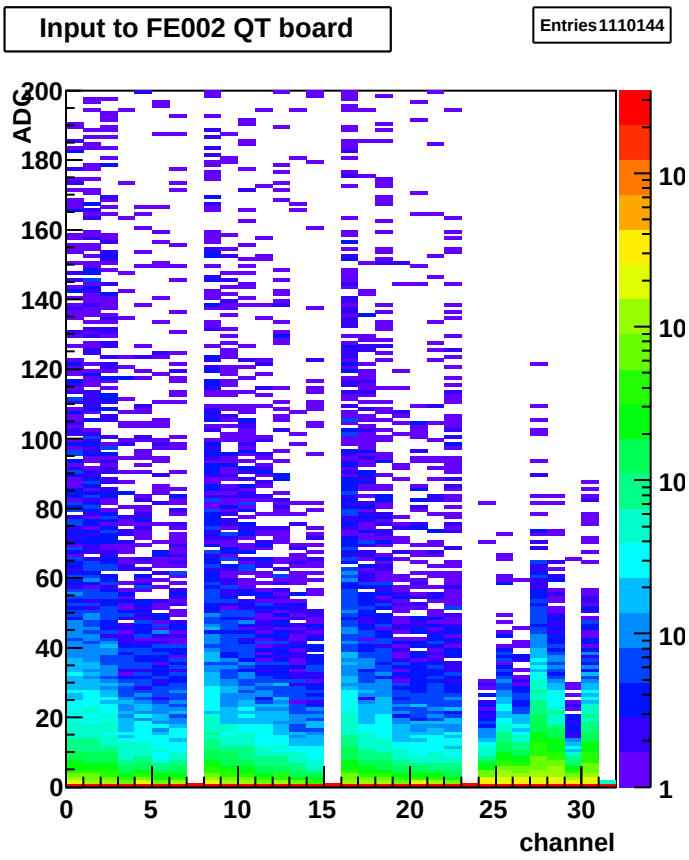

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

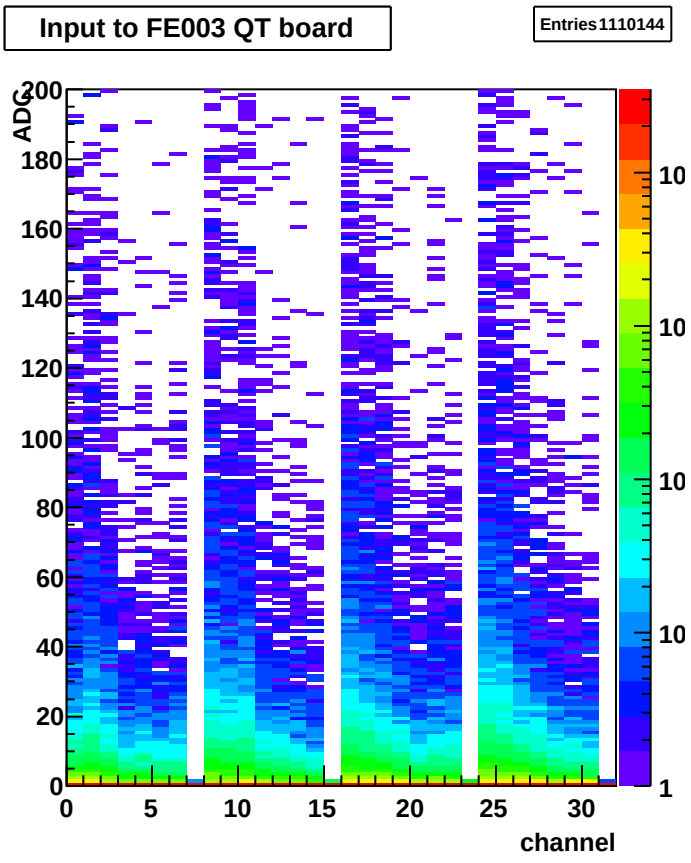

Input to FPD L3 DSM
Entries 555072
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

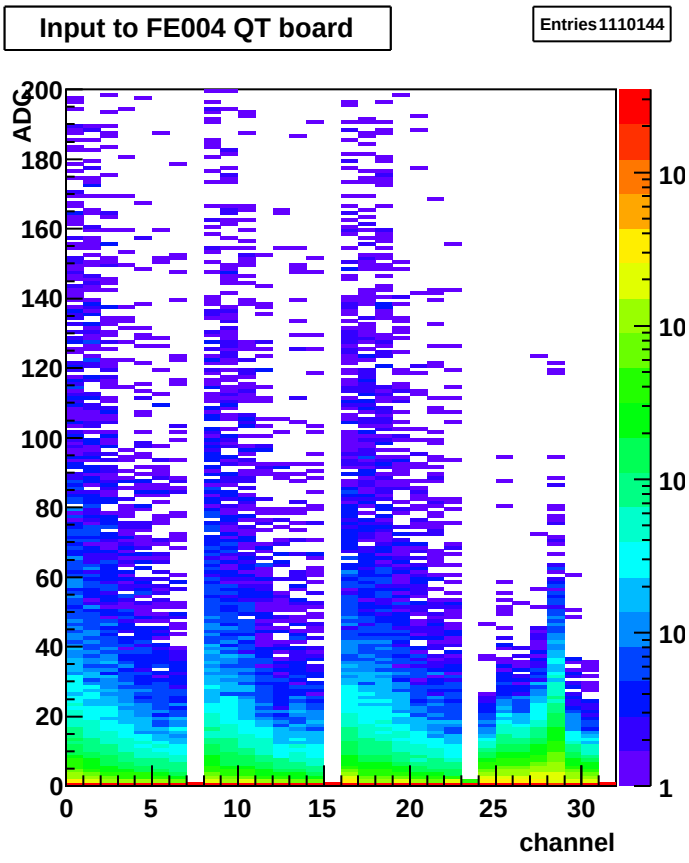

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

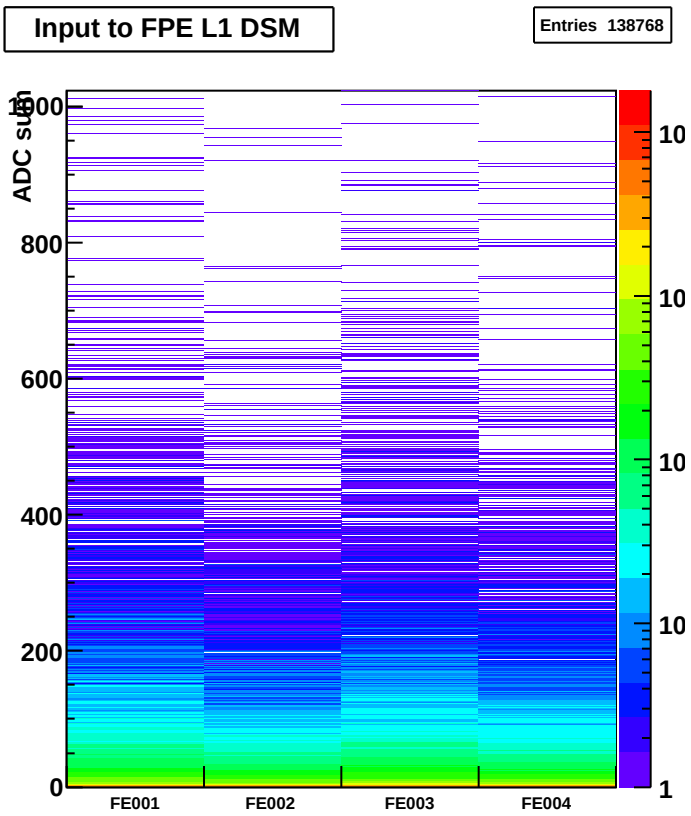

Input to FPD L2 DSM
Entries 138768
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

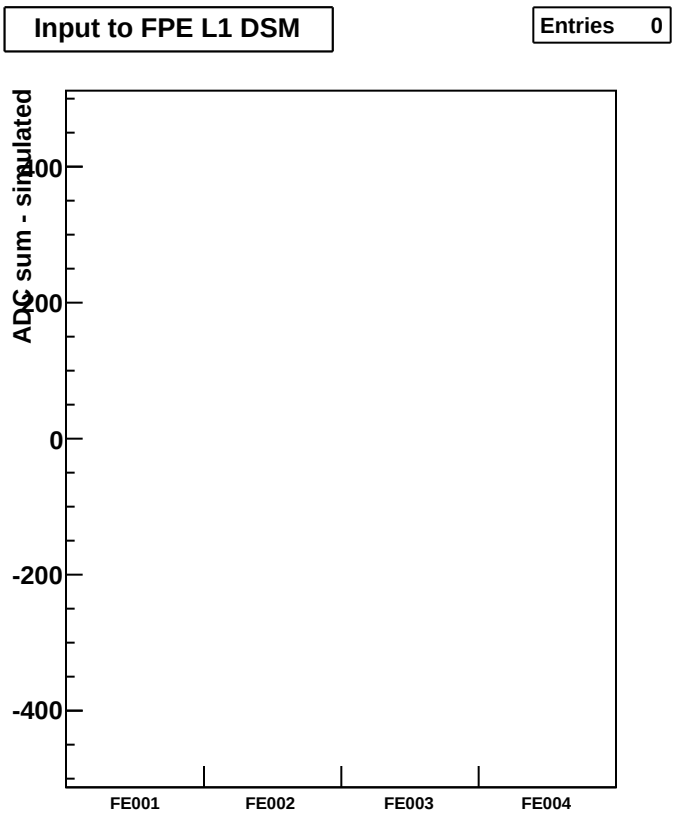

Input to FE001 QT board
Entries 1110144
ADC
channel

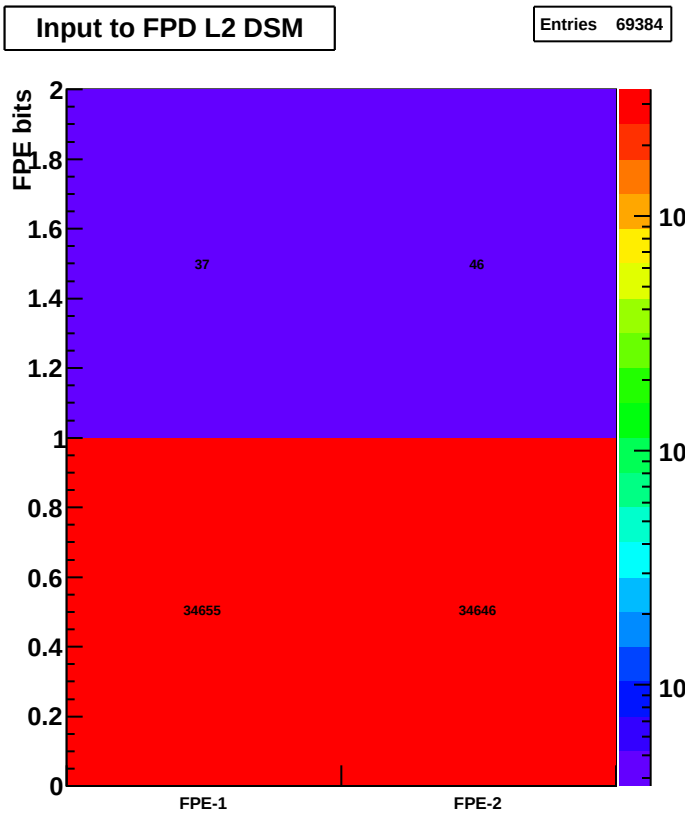

Input to FE002 QT board
Entries 1110144
ADC
channel

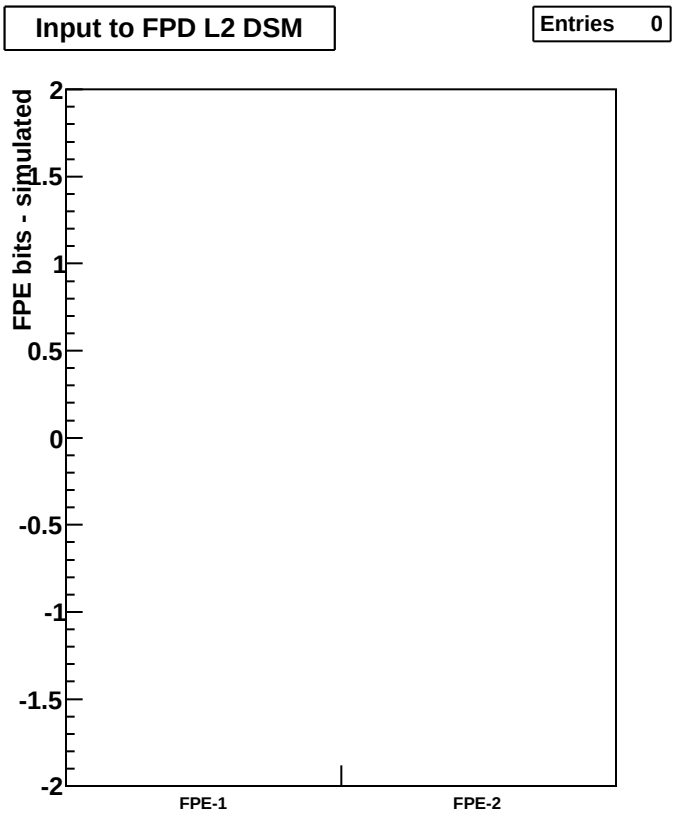

Input to FE003 QT board
Entries 1110144
ADC
channel


Input to FE004 QT board
Entries 1110144
ADC
channel


Input to FPE L1 DSM
Entries 138768
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 69384
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
37
46
34655
34646
FPE-1
FPE-2
10
10
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