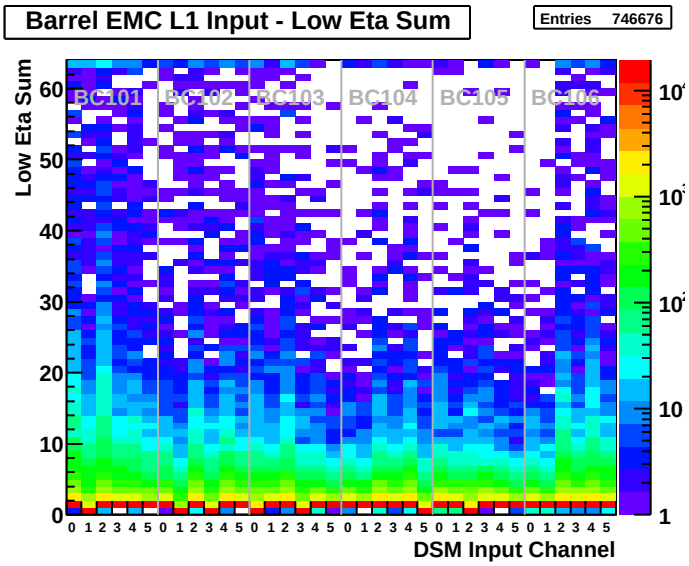
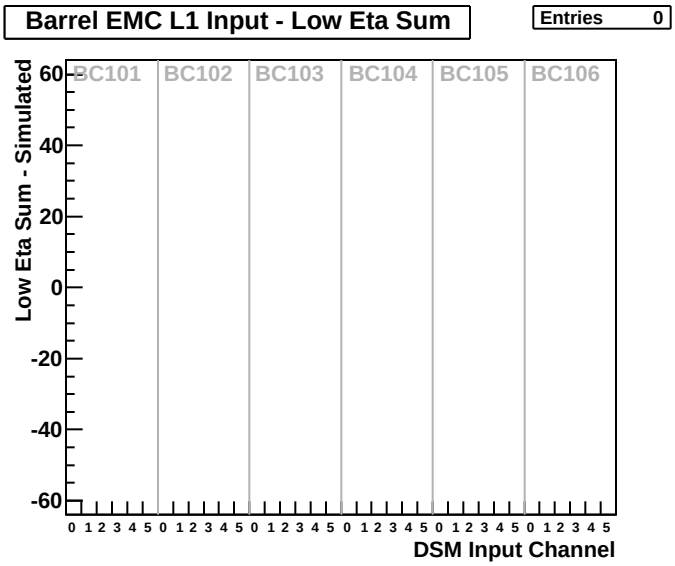
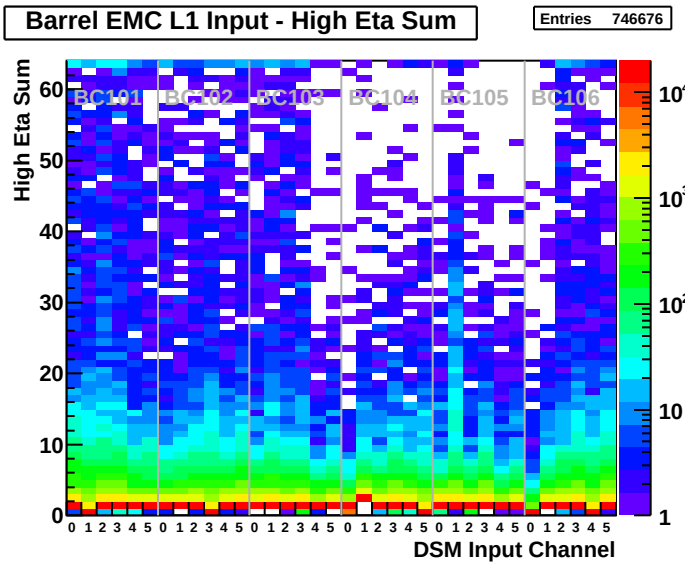
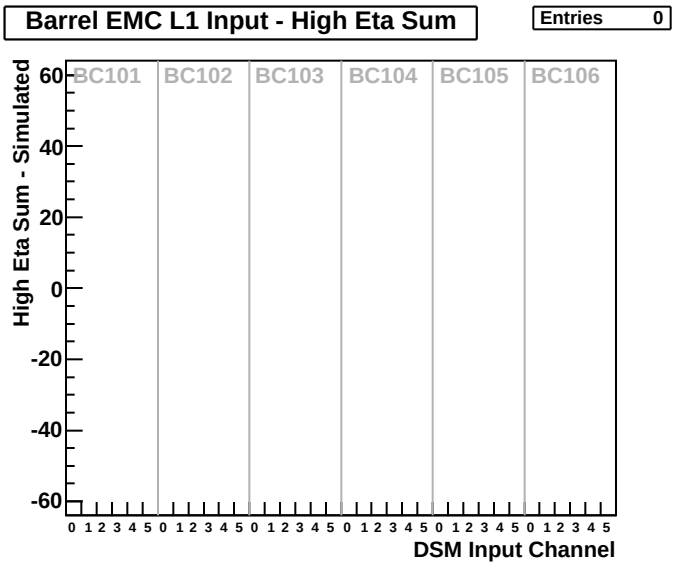
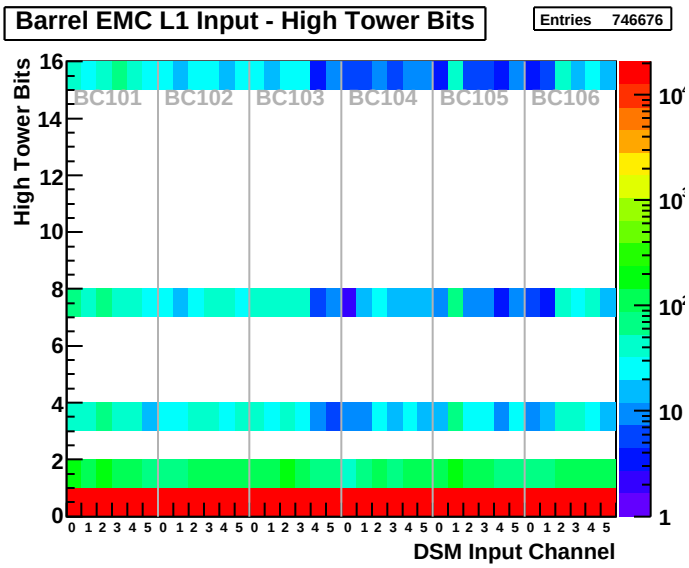
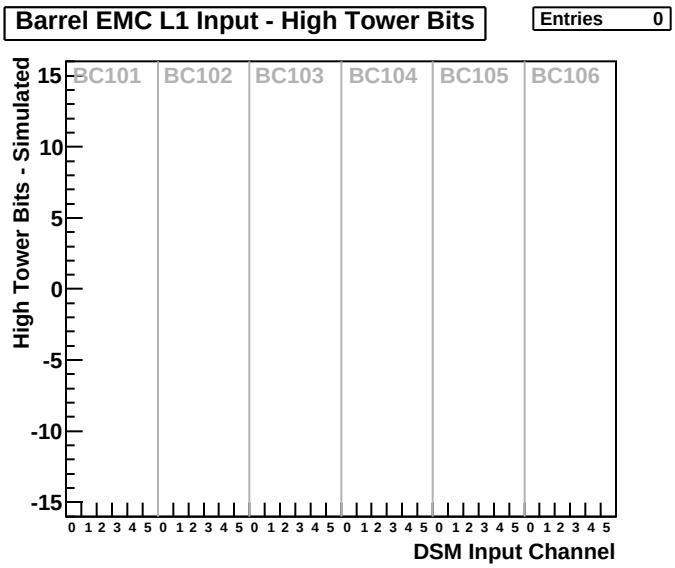

Barrel EMC L1 Input - Low Eta Sum
Entries 746676
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

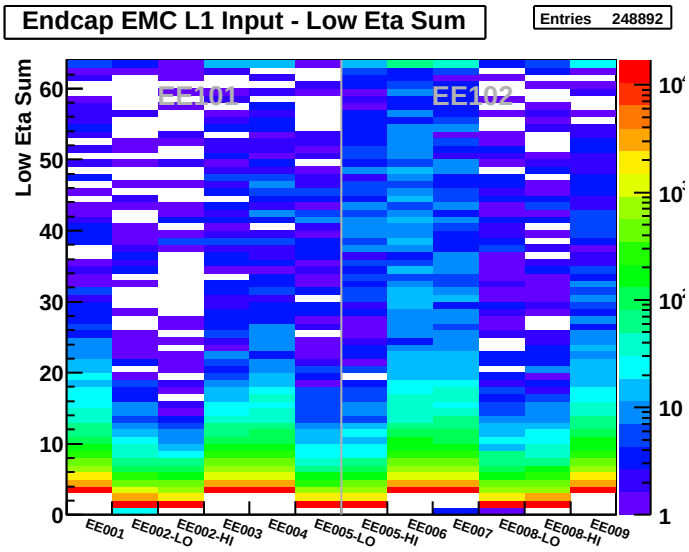

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

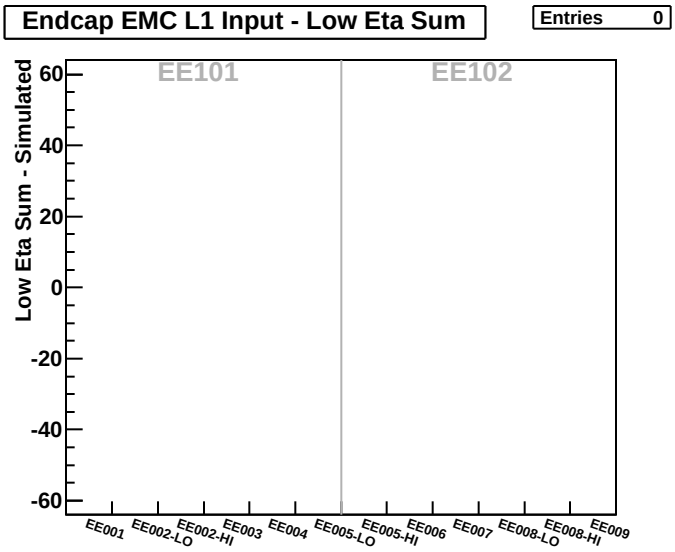

Barrel EMC L1 Input - High Eta Sum
Entries 746676
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

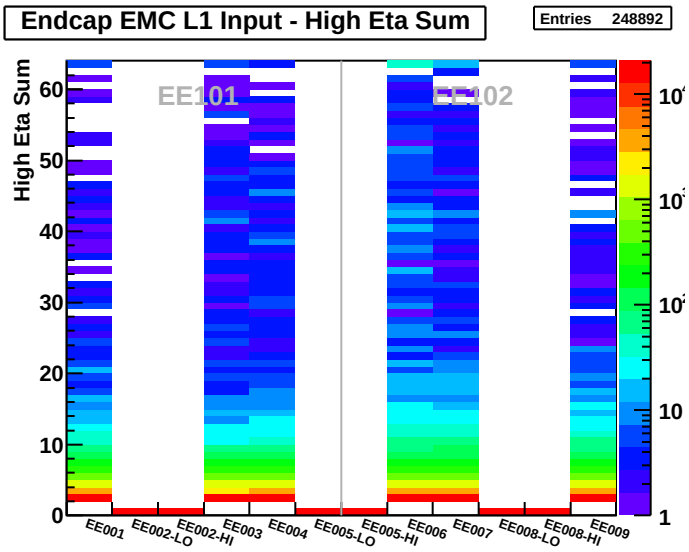

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

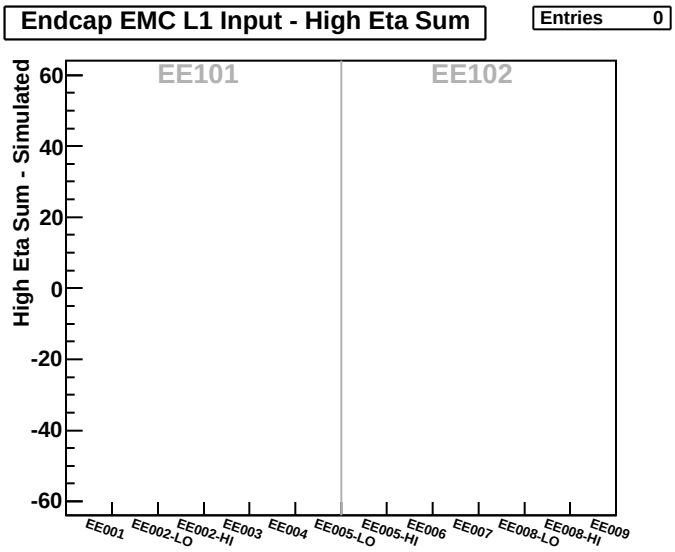

Barrel EMC L1 Input - High Tower Bits
Entries 746676
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

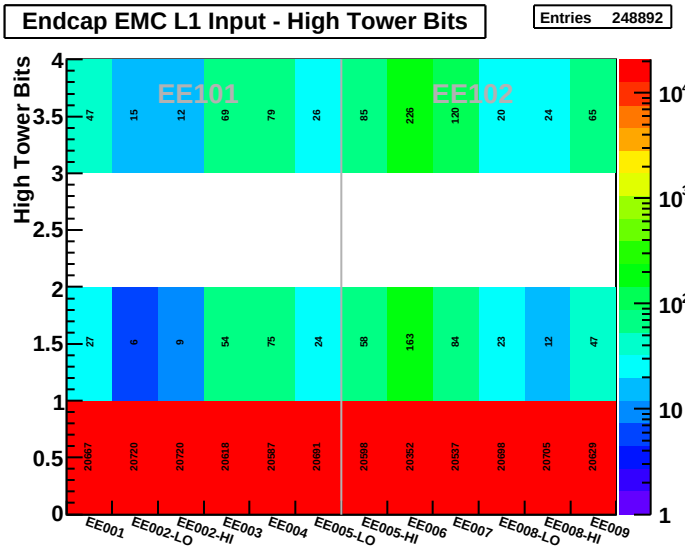

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

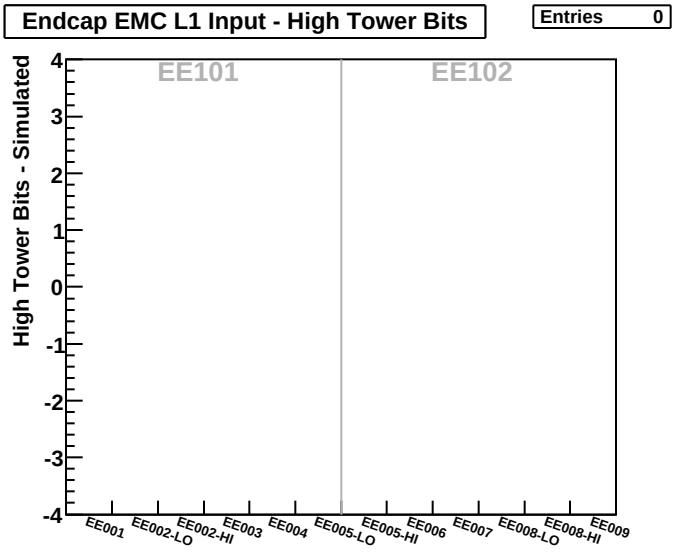

Endcap EMC L1 Input - Low Eta Sum
Entries 248892
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

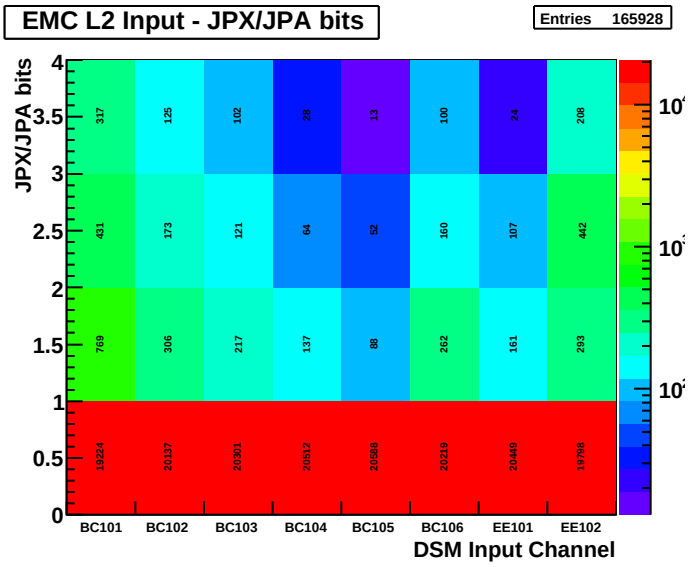

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

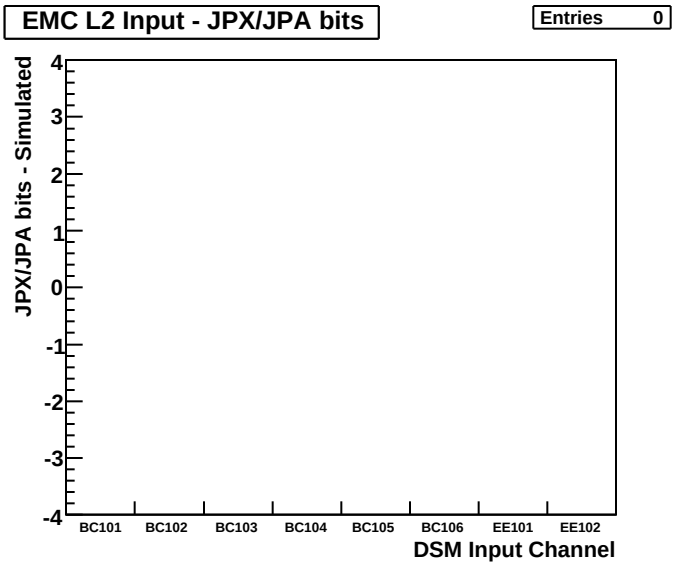

Endcap EMC L1 Input - High Eta Sum
Entries 248892
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

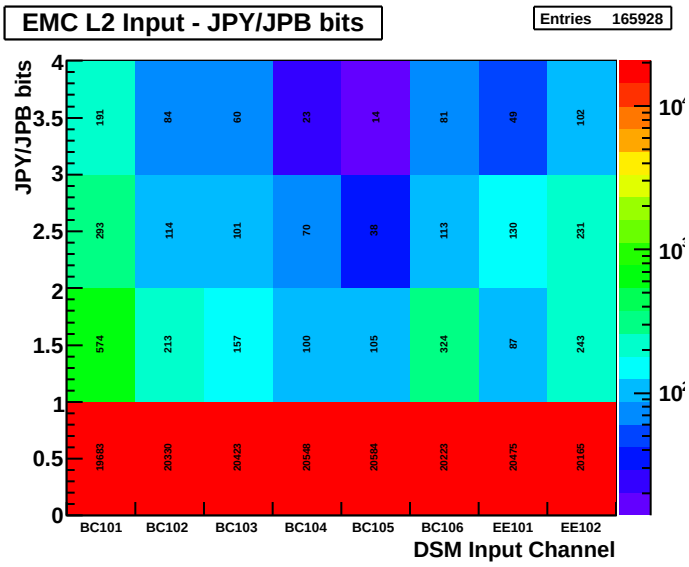

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

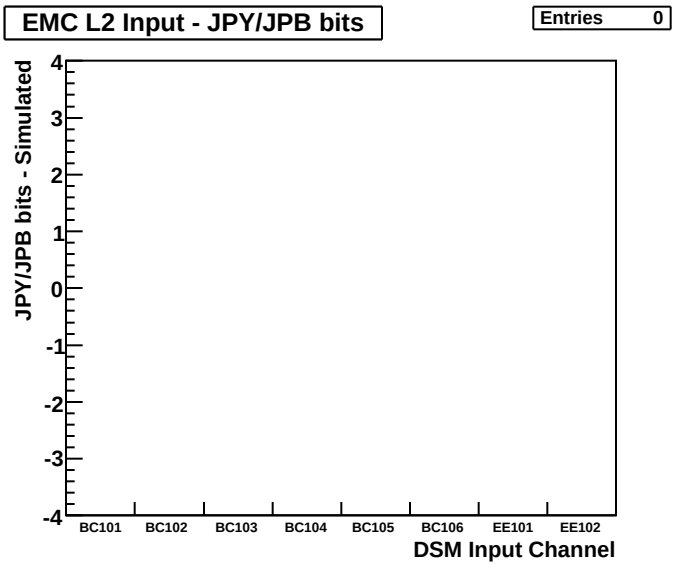

Endcap EMC L1 Input - High Tower Bits
Entries 248892
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

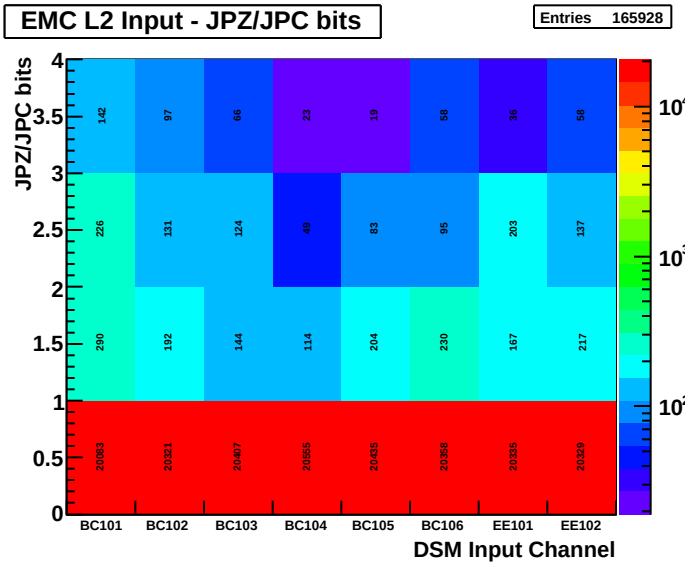

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

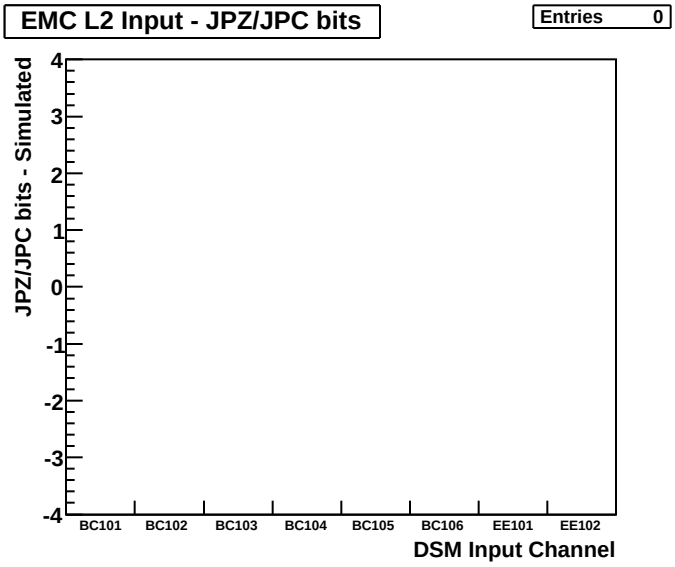

EMC L2 Input - JPX/JPA bits
Entries 165928
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
317 125 102 28 13 100 24 208
431 173 121 64 52 160 107 442
769 306 217 137 88 262 161 293
19224 20137 20301 20512 20598 20219 20449 19798

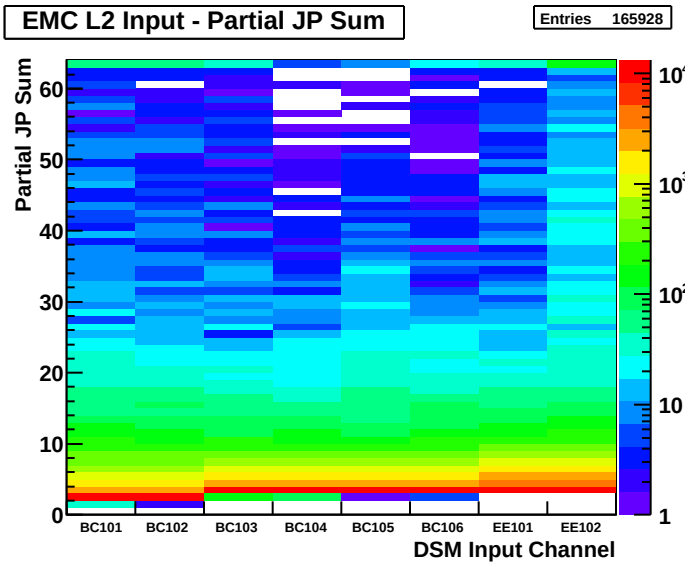

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

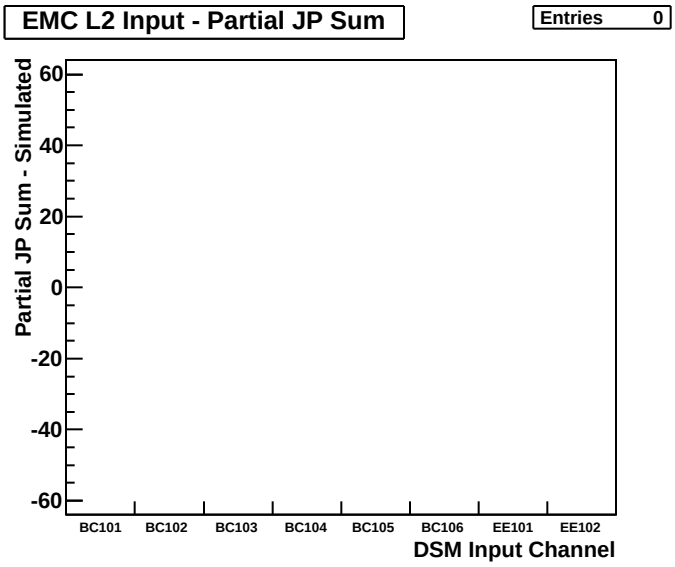

EMC L2 Input - JPY/JPB bits
Entries 165928
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
191 84 60 23 14 81 49 102
293 114 101 70 38 113 130 231
574 213 157 100 105 324 87 243
19683 20330 20423 20548 20594 20223 20475 20165

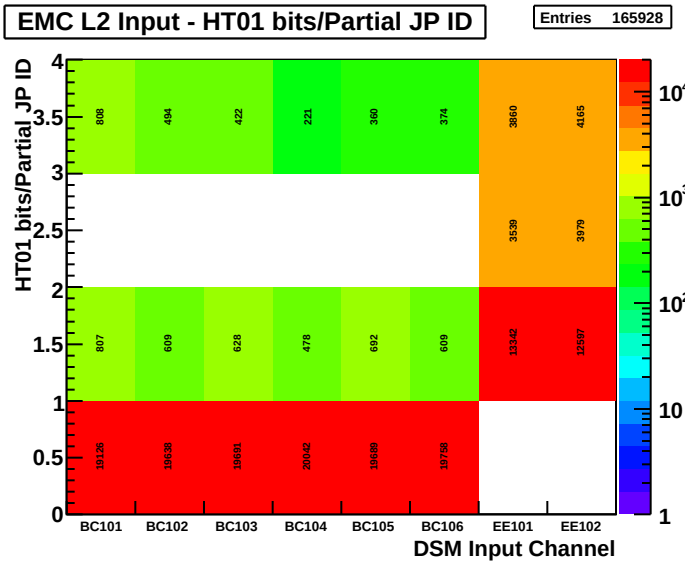

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

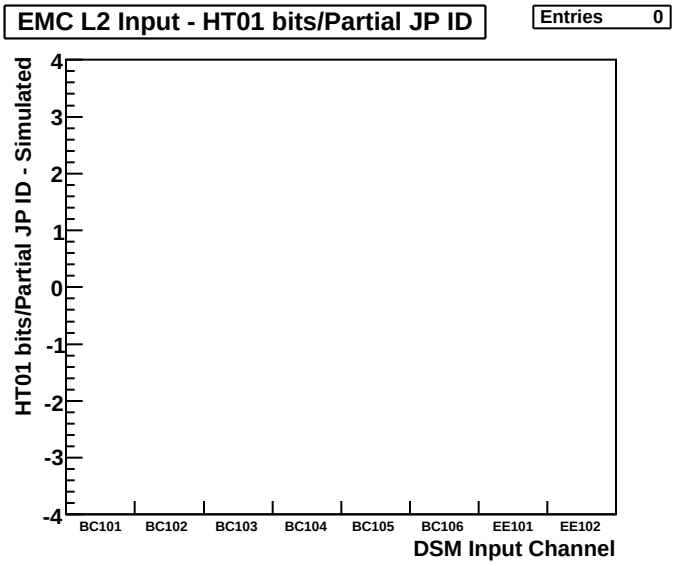

EMC L2 Input - JPZ/JPC bits
Entries 165928
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
142 97 66 23 19 58 36 58
226 131 124 49 83 95 203 137
290 192 144 114 204 230 167 217
20083 20321 20407 20555 20435 20358 20335 20329

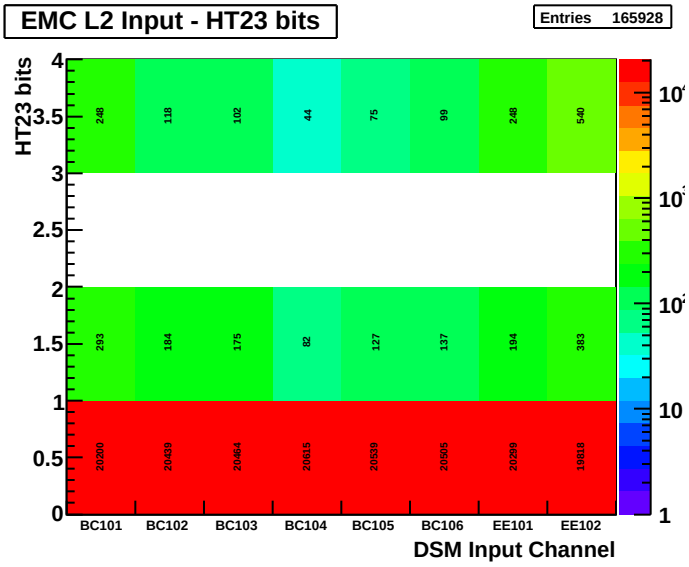

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

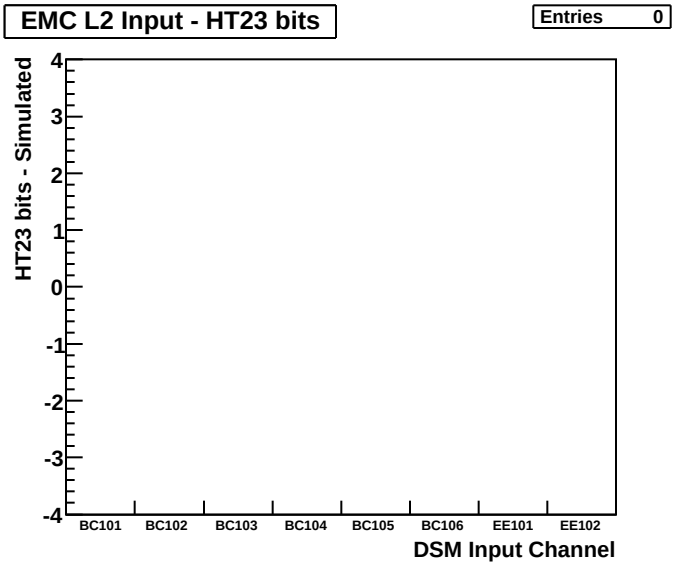

EMC L2 Input - Partial JP Sum
Entries 165928
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

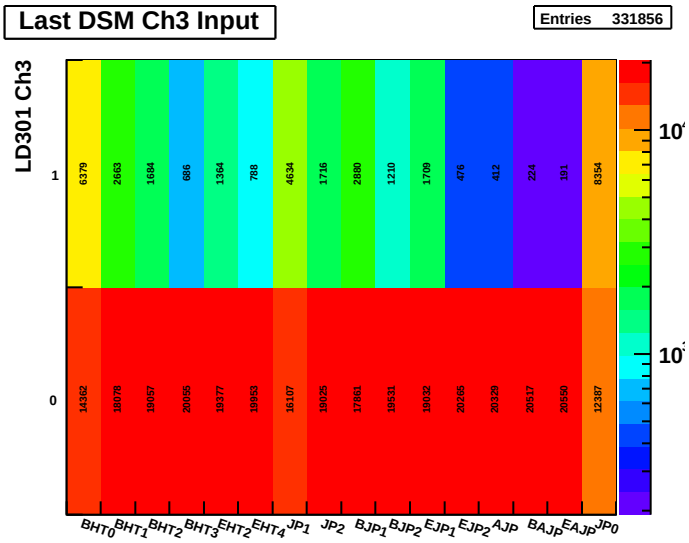

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

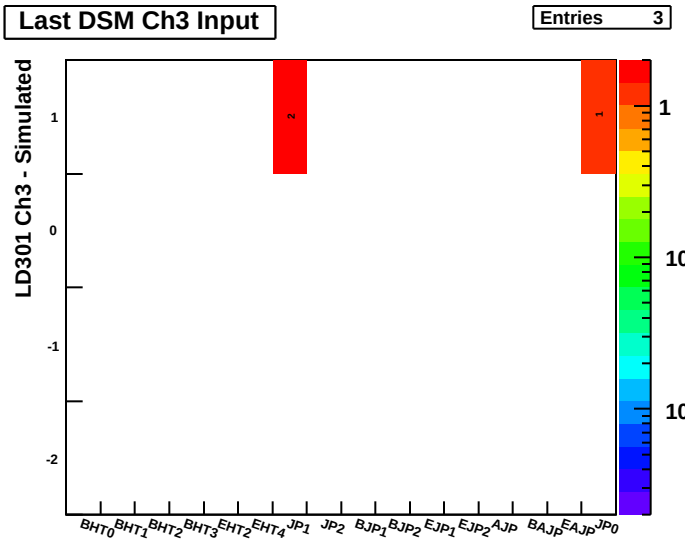

EMC L2 Input - HT01 bits/Partial JP ID
Entries 165928
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

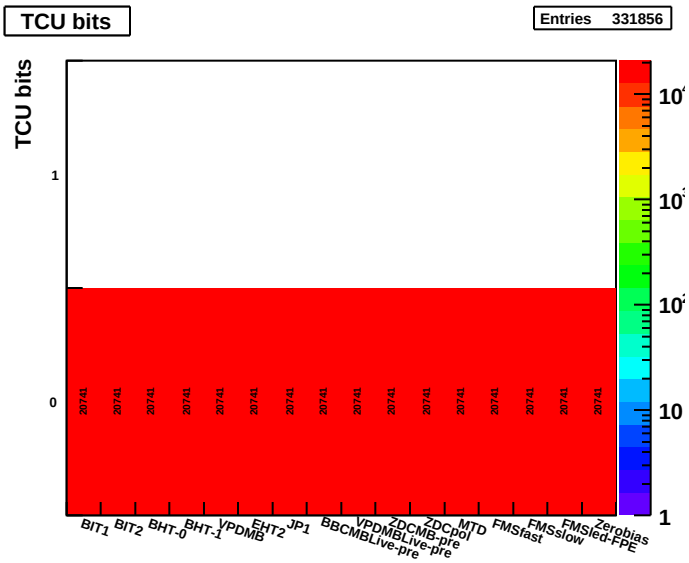

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

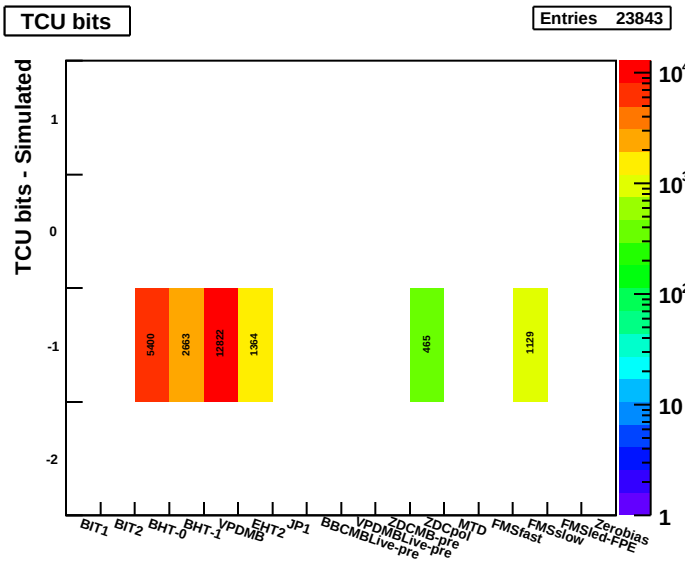

EMC L2 Input - HT23 bits
Entries 165928
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

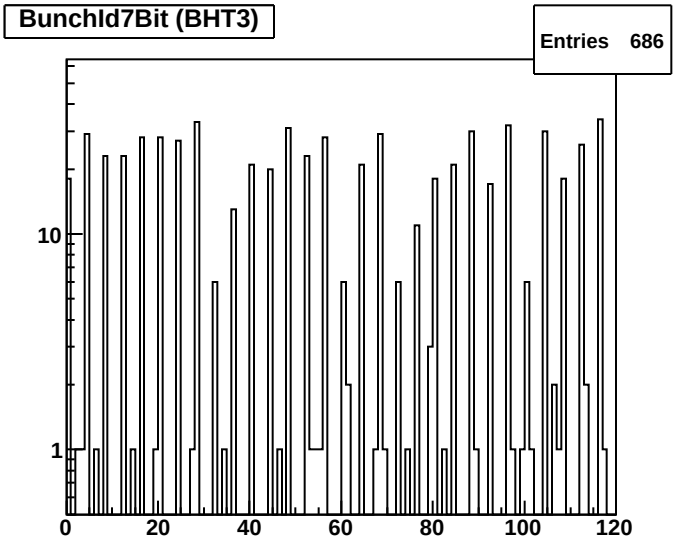

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

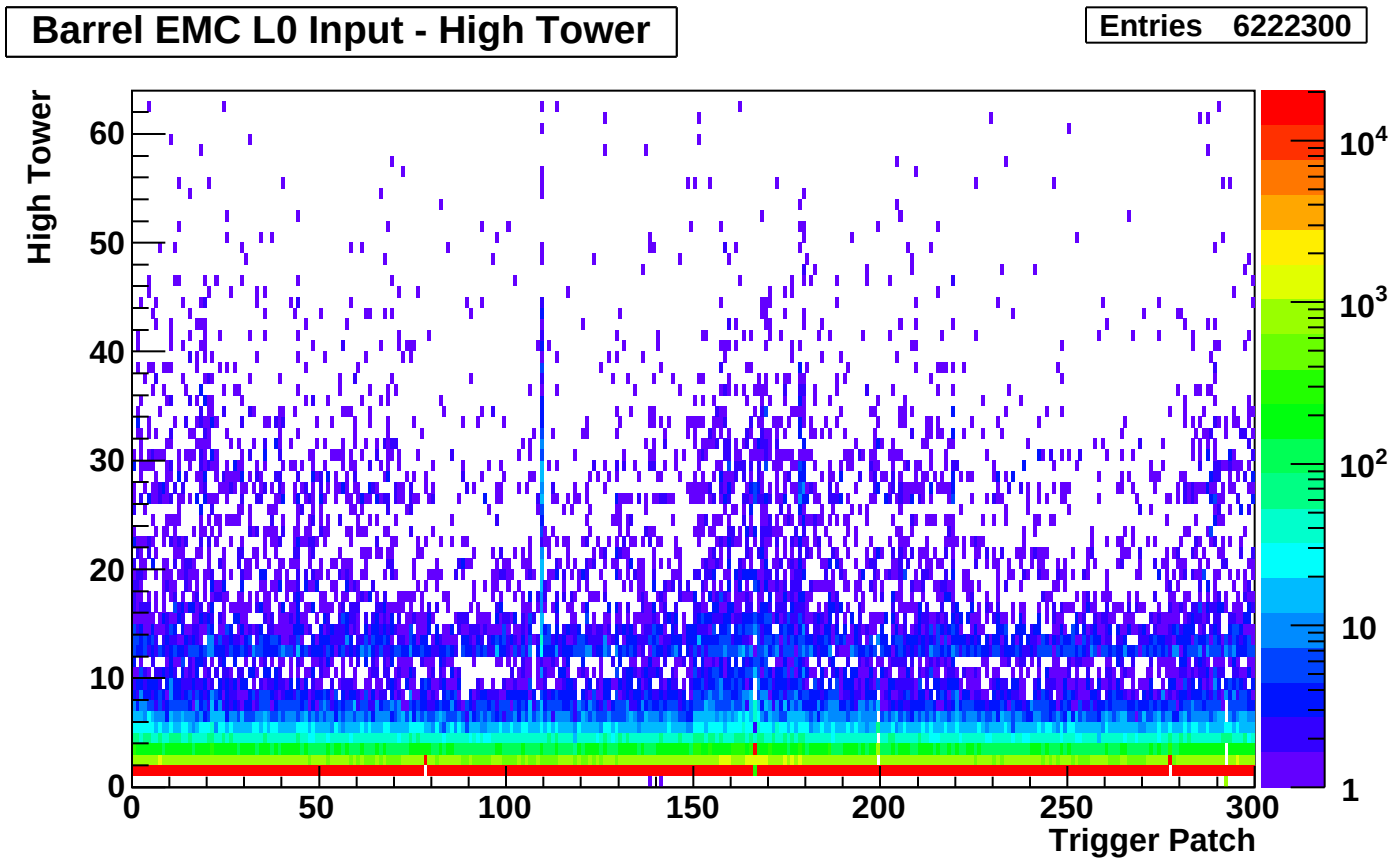

Last DSM Ch3 Input
Entries 331856
LD301 Ch3
1
0
6379 2663 1684 686 1364 788 4634 1716 2880 1210 1709 476 412 224 191 8354
14362 19078 19057 20055 19377 19953 16107 19025 17861 19531 19032 20265 20329 20517 20550 12387
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

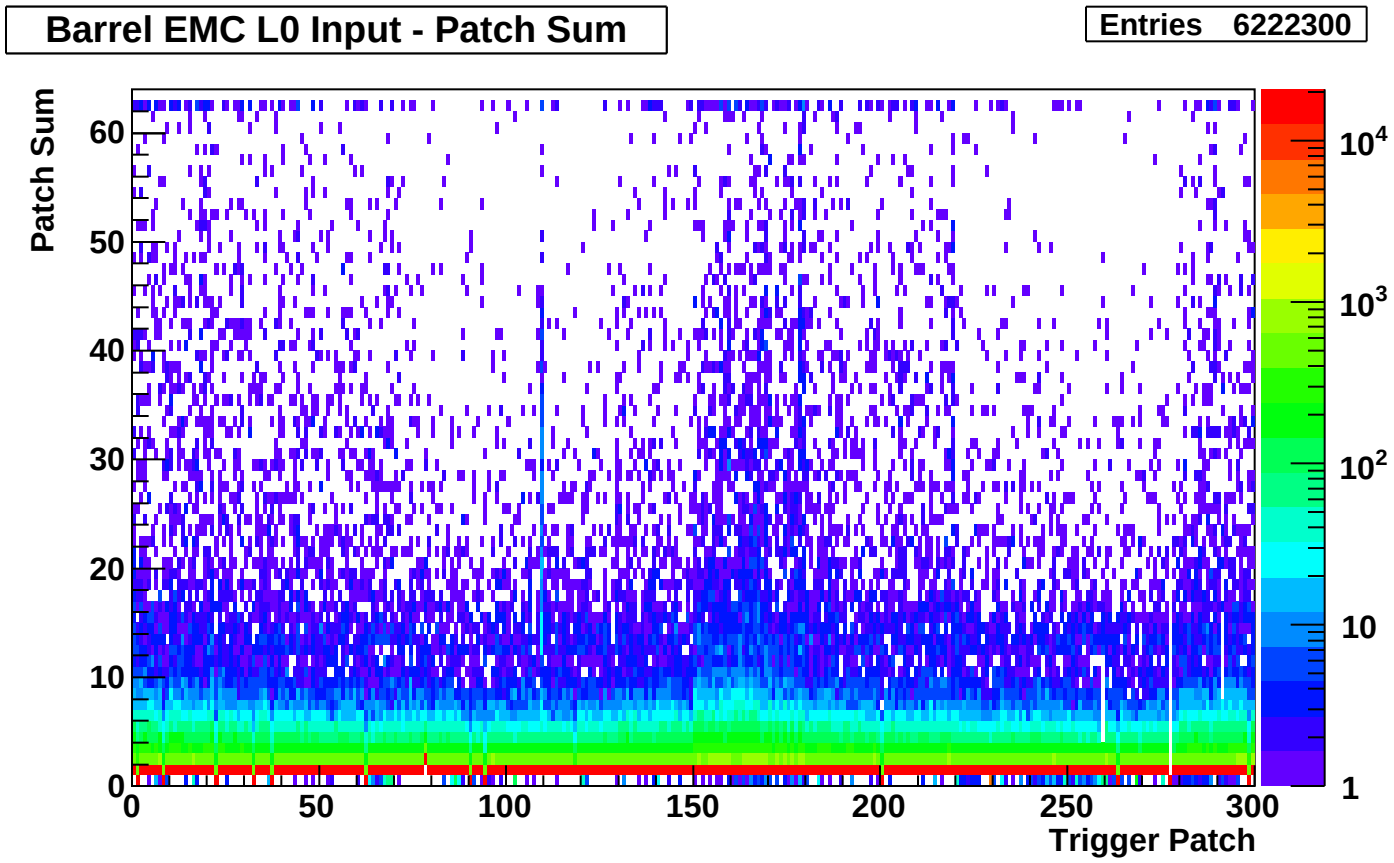

Last DSM Ch3 Input
Entries 3
LD301 Ch3 - Simulated
1
0
-1
-2
2
1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

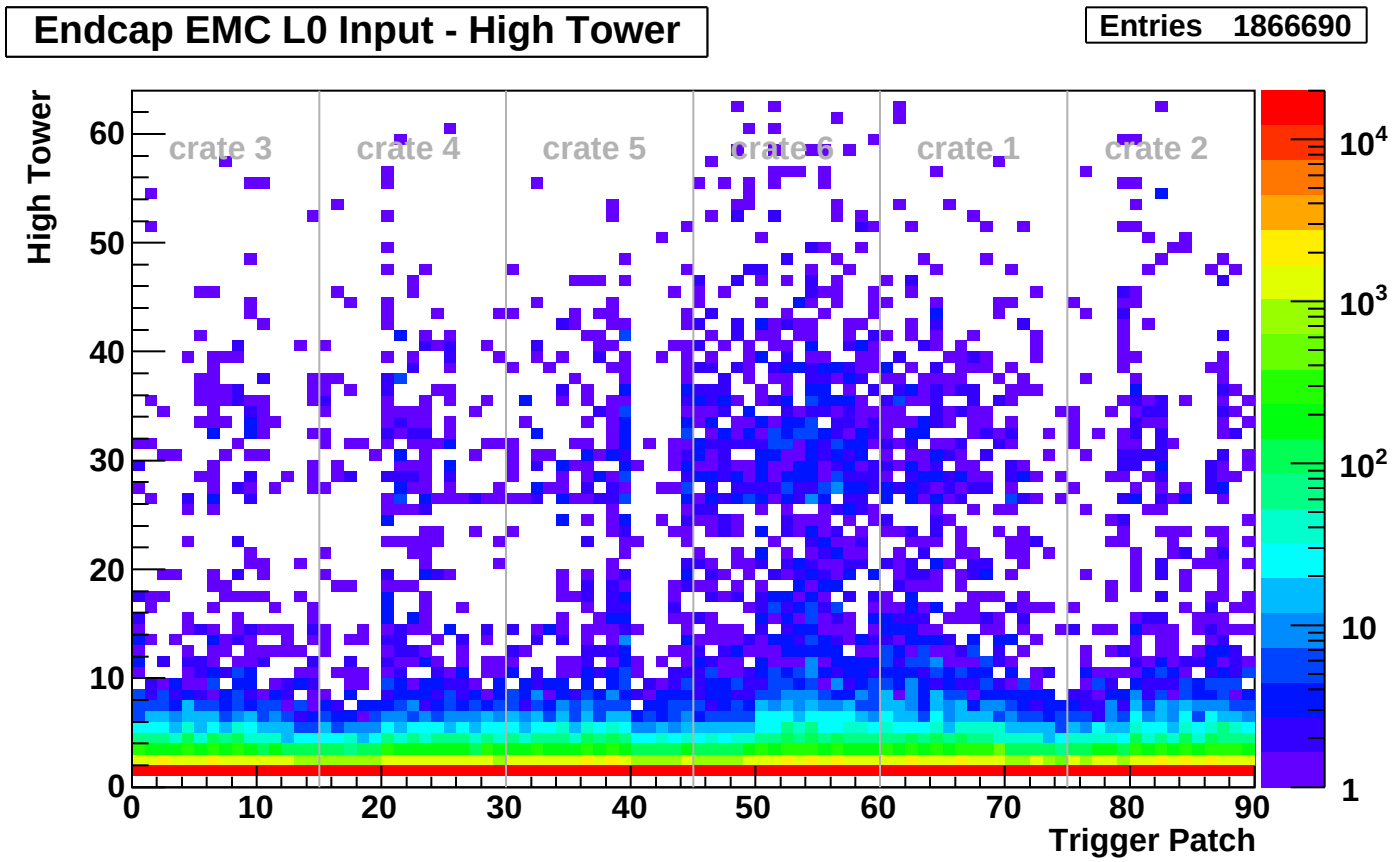

TCU bits
Entries 331856
TCU bits
1
0
20741 20741 20741 20741 20741 20741 20741 20741 20741 20741 20741 20741 20741 20741 20741 20741
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

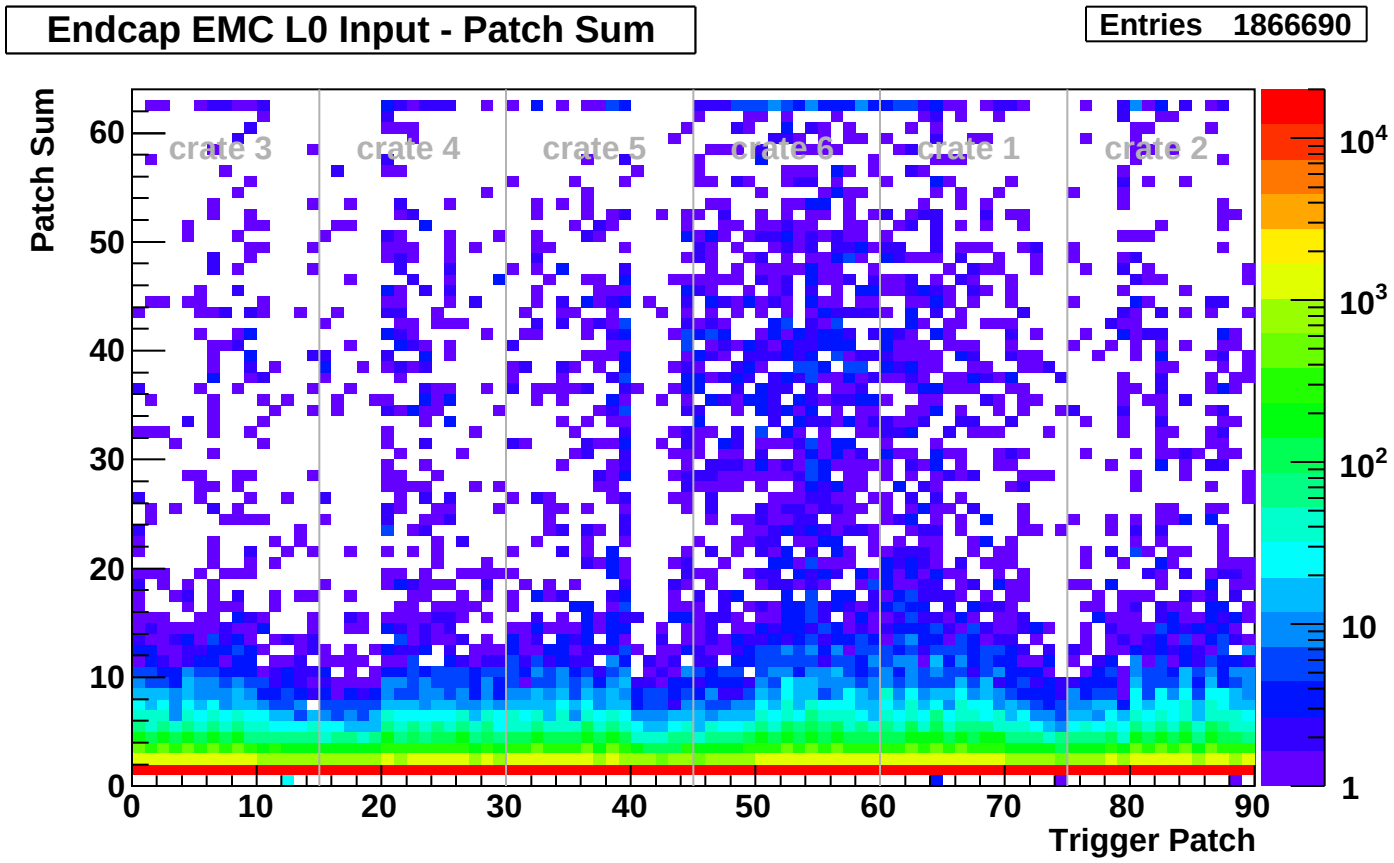

TCU bits
Entries 23843
TCU bits - Simulated
1
0
-1
-2
5400 2663 12822 1364 465 1129
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

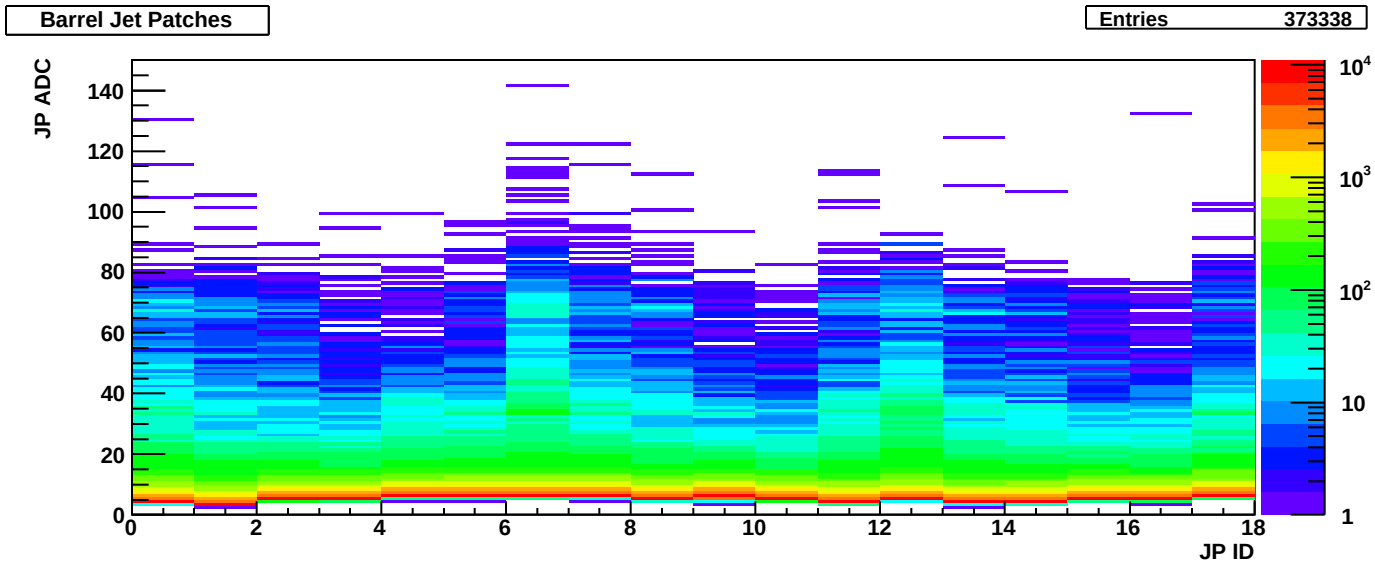

BunchId7Bit (BHT3)
Entries 686
10
1
0 20 40 60 80 100 120

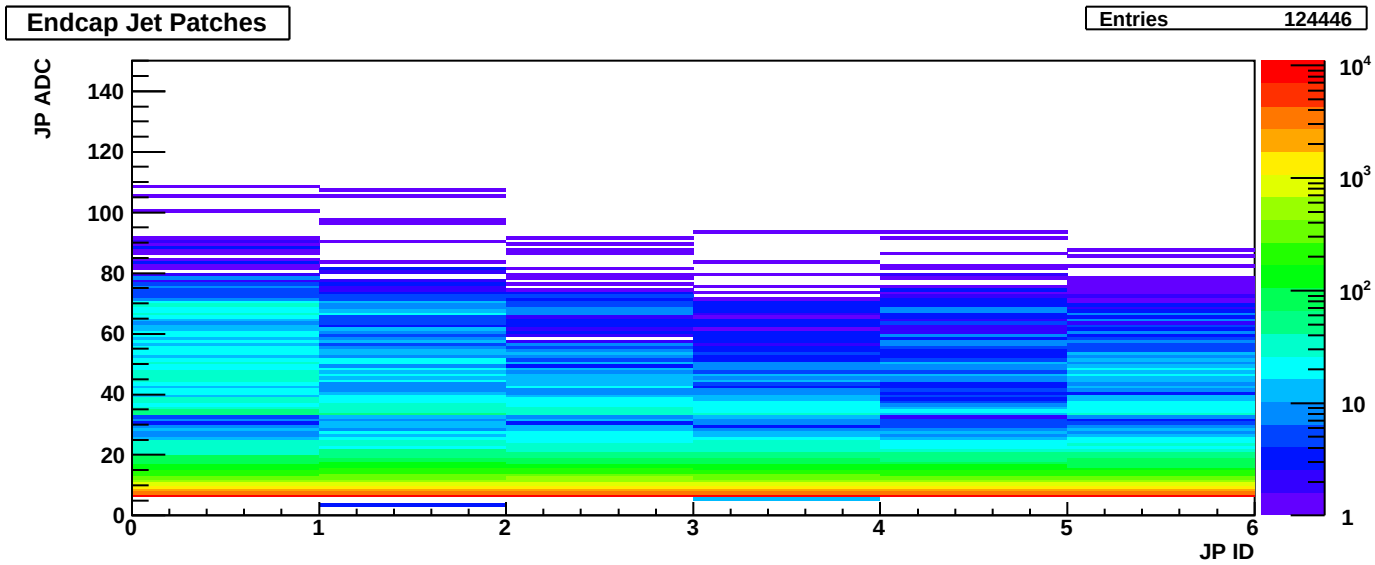

Barrel EMC L0 Input - High Tower
Entries 6222300
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

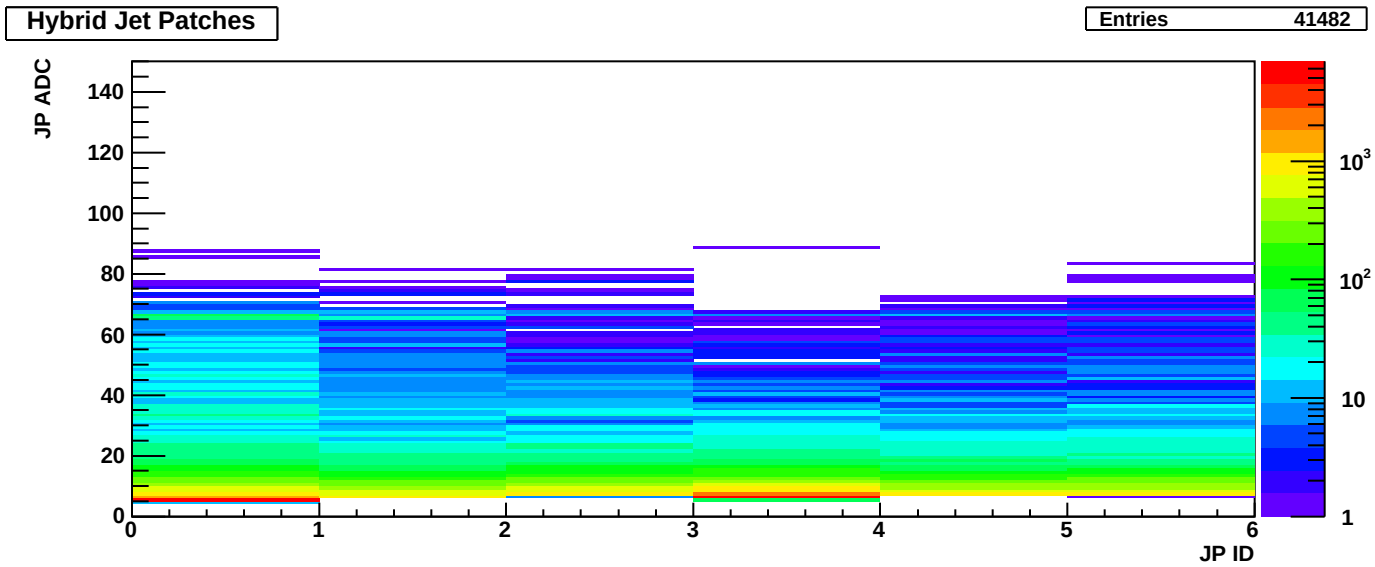

Barrel EMC L0 Input - Patch Sum
Entries 6222300
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

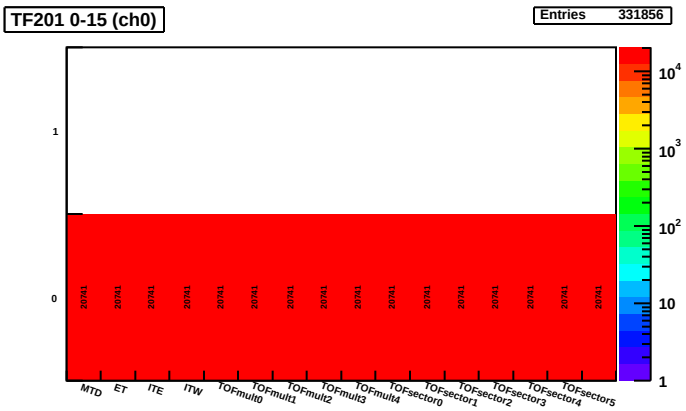

Endcap EMC L0 Input - High Tower
Entries 1866690
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

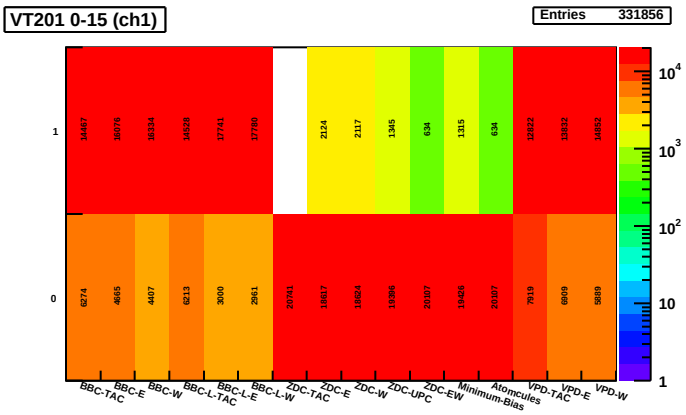

Endcap EMC L0 Input - Patch Sum
Entries 1866690
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

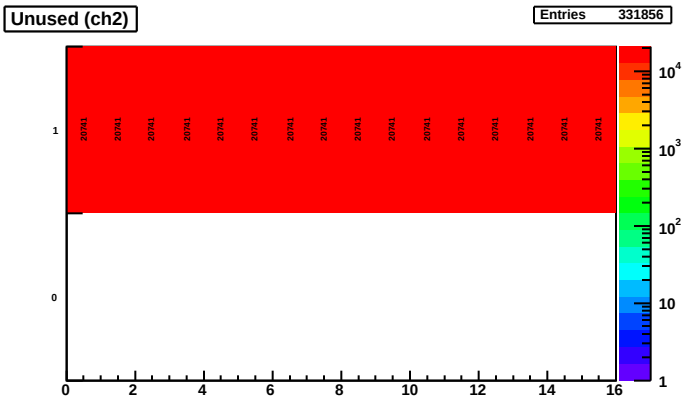

Barrel Jet Patches
Entries 373338
JP ADC
JP ID

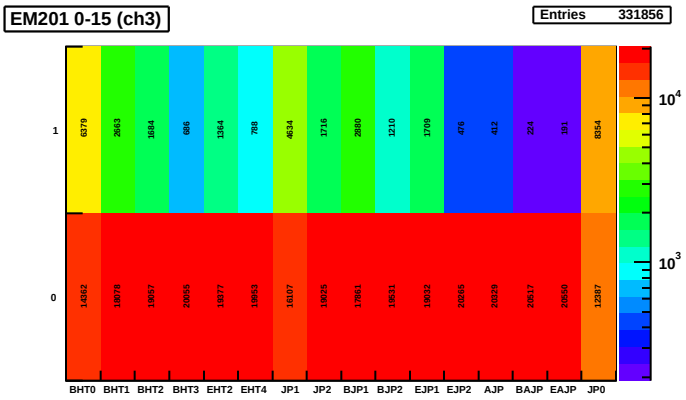

Endcap Jet Patches
Entries 124446
JP ADC
JP ID

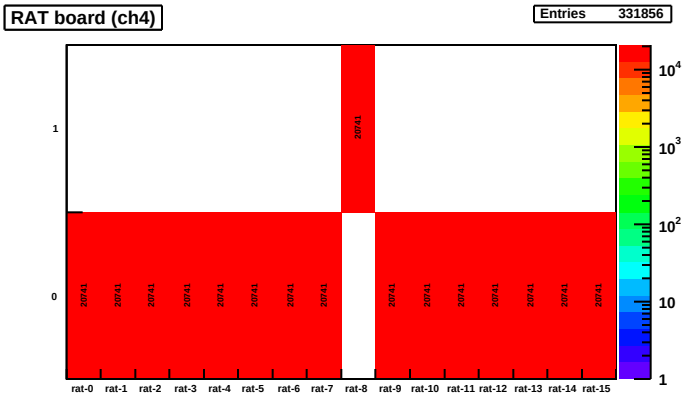

Hybrid Jet Patches
Entries 41482
JP ADC
JP ID

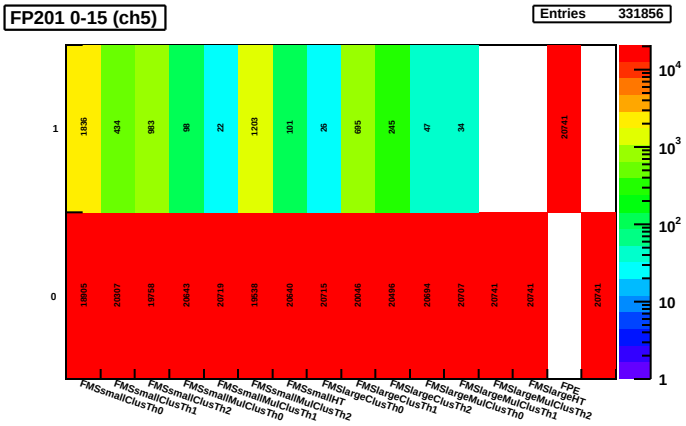

TF201 0-15 (ch0)
Entries 331856
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

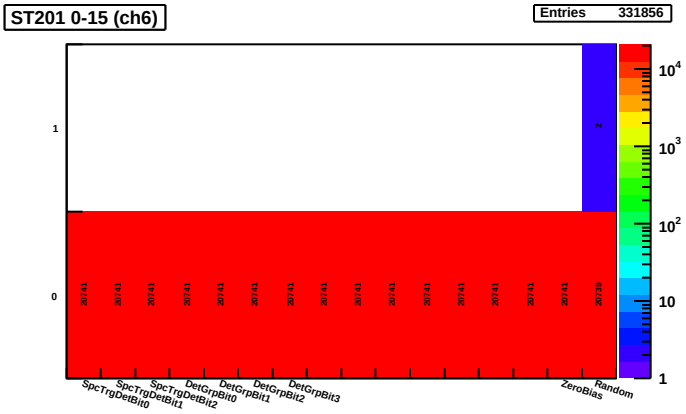

VT201 0-15 (ch1)
Entries 331856
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

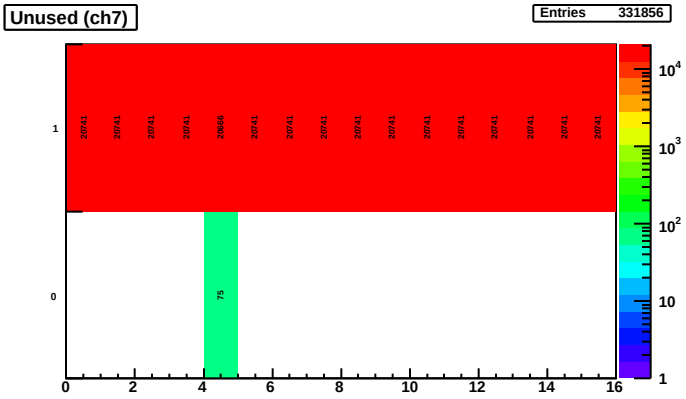

Unused (ch2)
Entries 331856

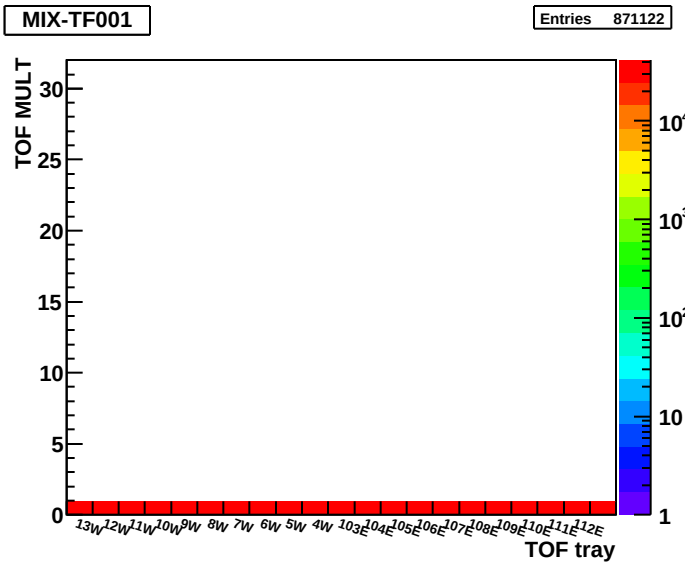

EM201 0-15 (ch3)
Entries 331856
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

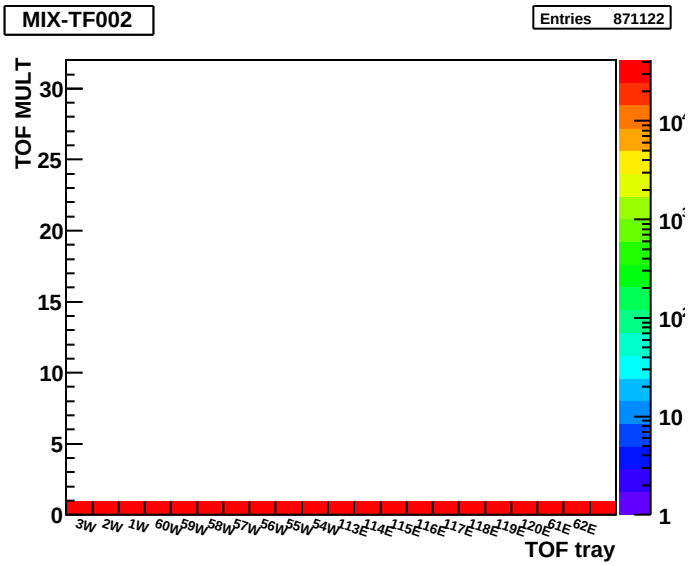

RAT board (ch4)
Entries 331856
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

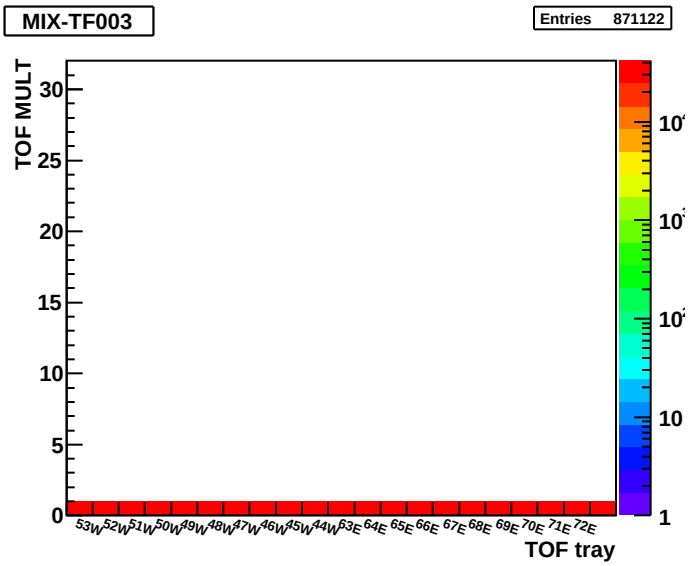

FP201 0-15 (ch5)
Entries 331856
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

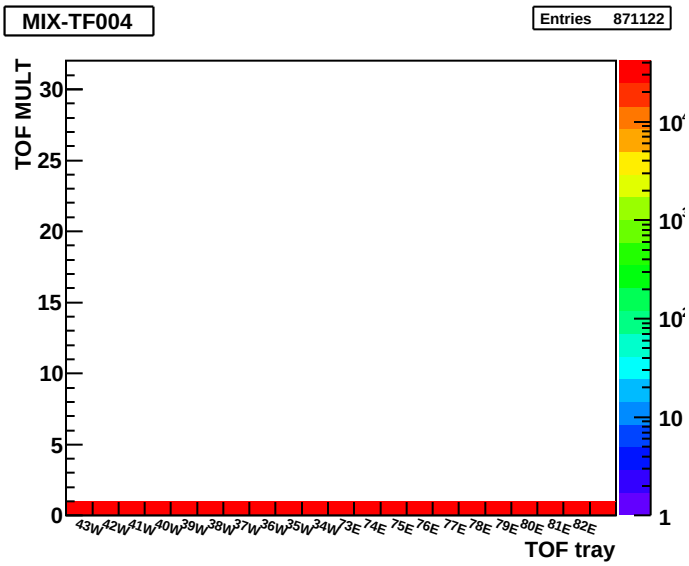

ST201 0-15 (ch6)
Entries 331856
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

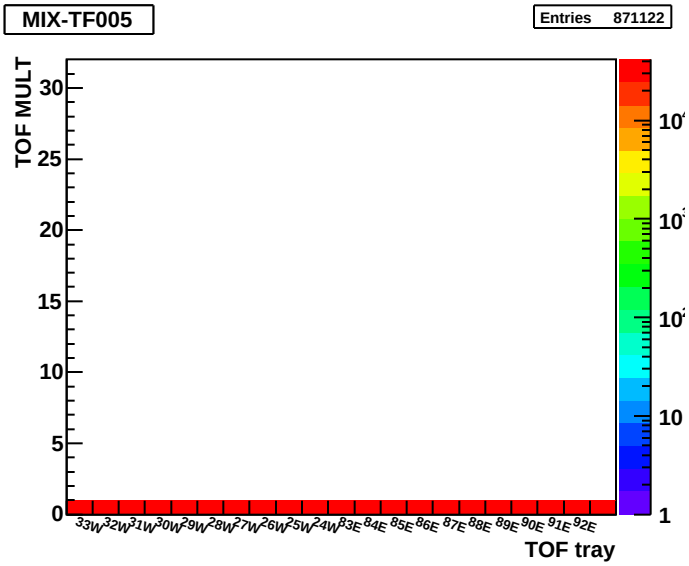

Unused (ch7)
Entries 331856

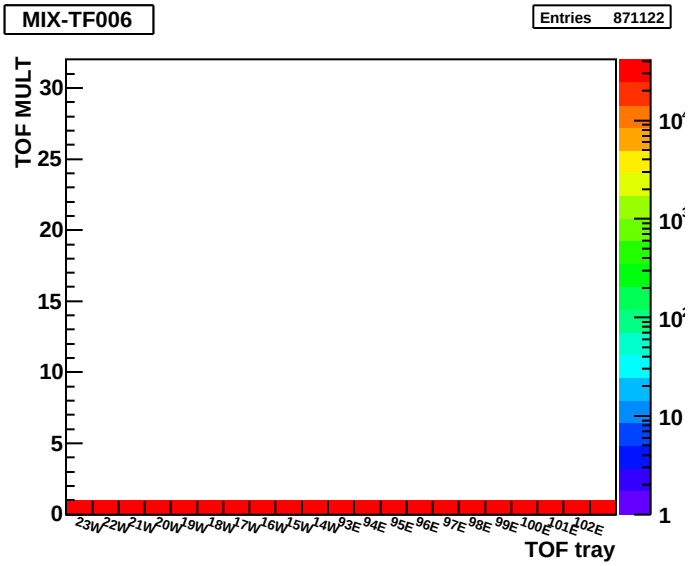

MIX-TF001
Entries 871122
TOF MULT
TOF tray

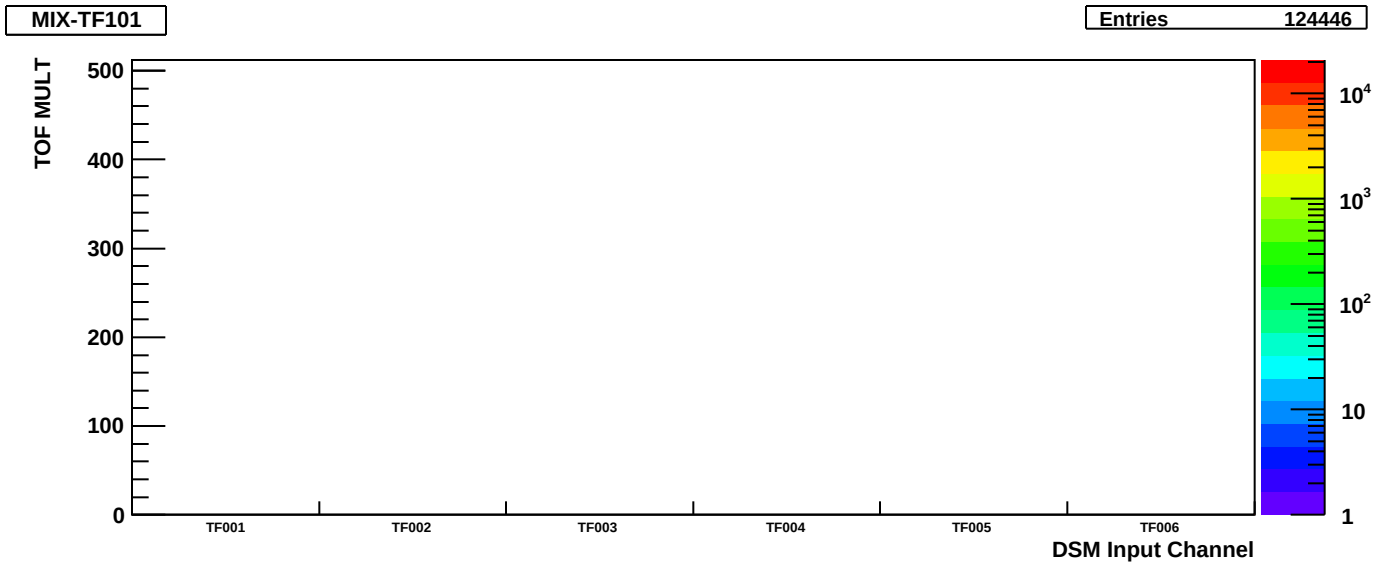

MIX-TF002
Entries 871122
TOF MULT
TOF tray

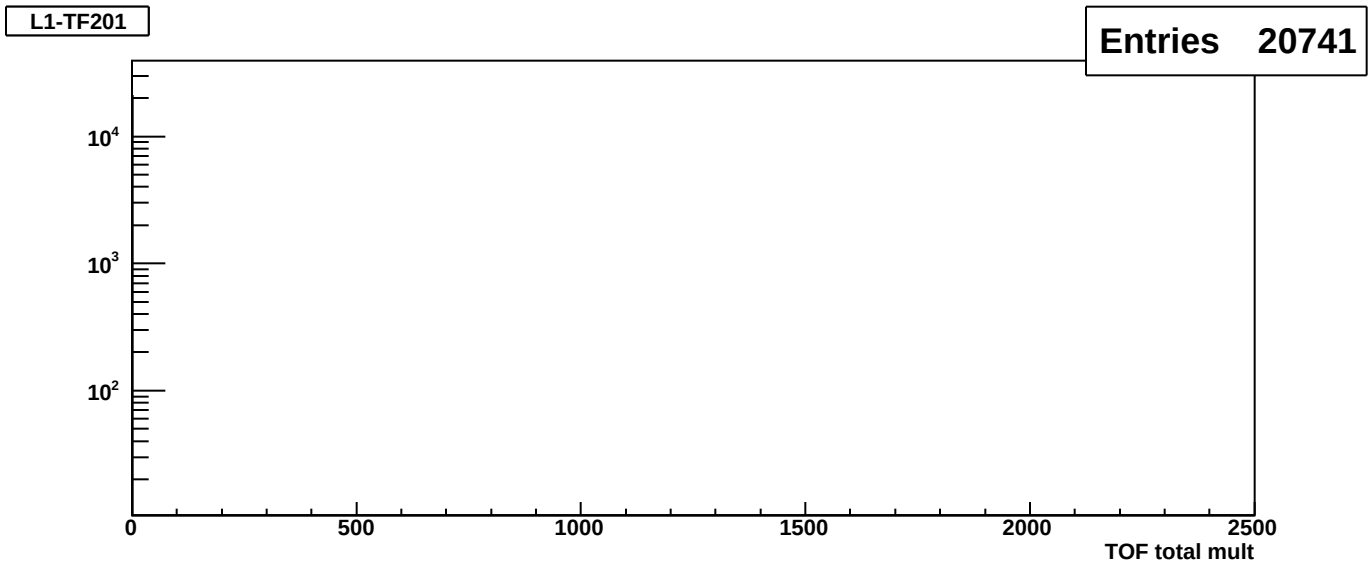

MIX-TF003
Entries 871122
TOF MULT
TOF tray

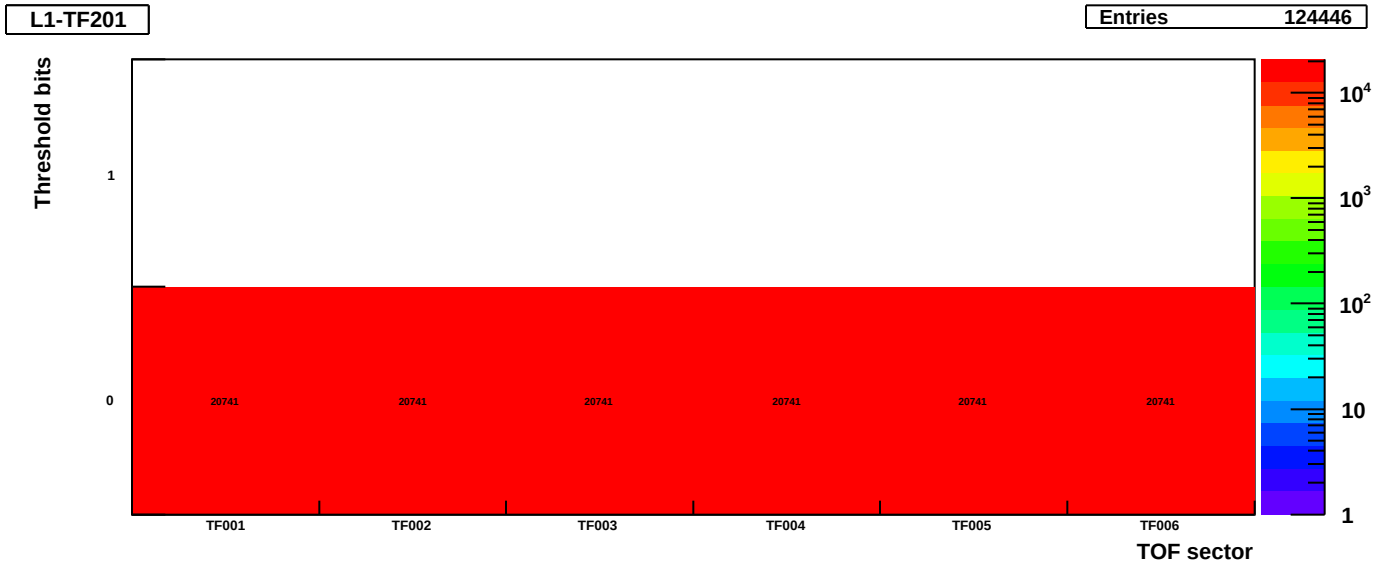

MIX-TF004
Entries 871122
TOF MULT
TOF tray

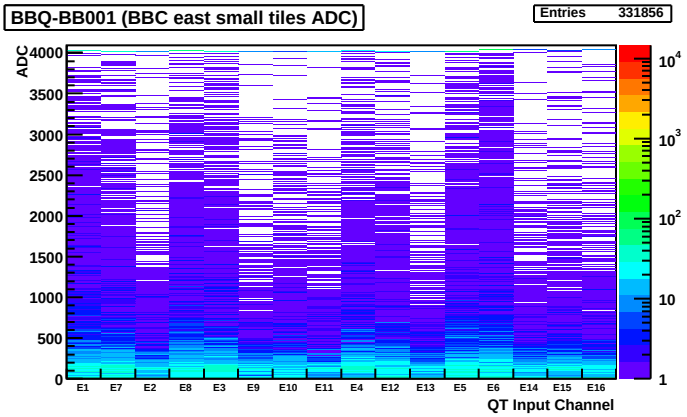

MIX-TF005
Entries 871122
TOF MULT
TOF tray

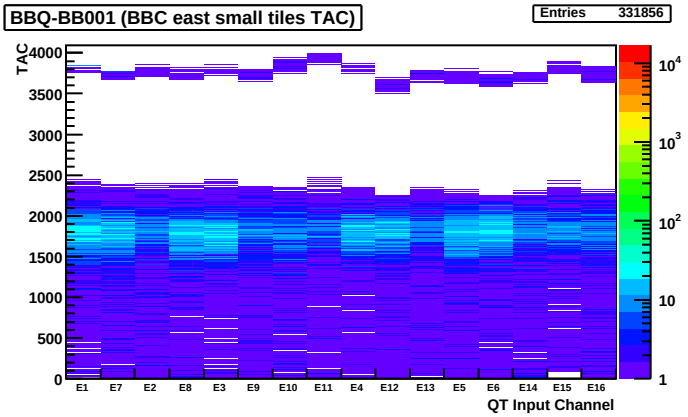

MIX-TF006
Entries 871122
TOF MULT
TOF tray

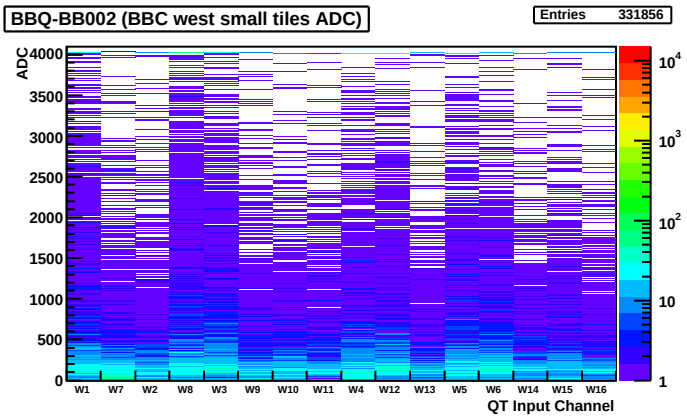

MIX-TF101
Entries 124446
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

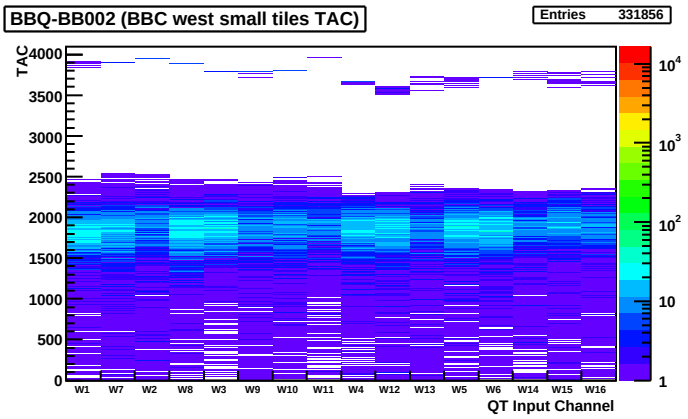

L1-TF201
Entries 20741
10^4
10^3
10^2
0
500
1000
1500
2000
2500
TOF total mult

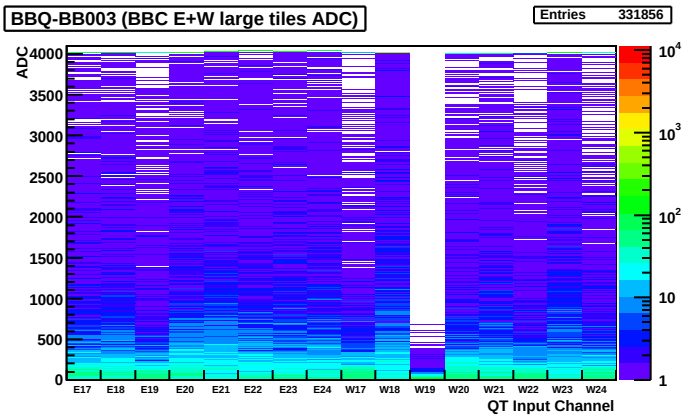

L1-TF201
Entries 124446
Threshold bits
1
0
20741
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4
10^3
10^2
10
1

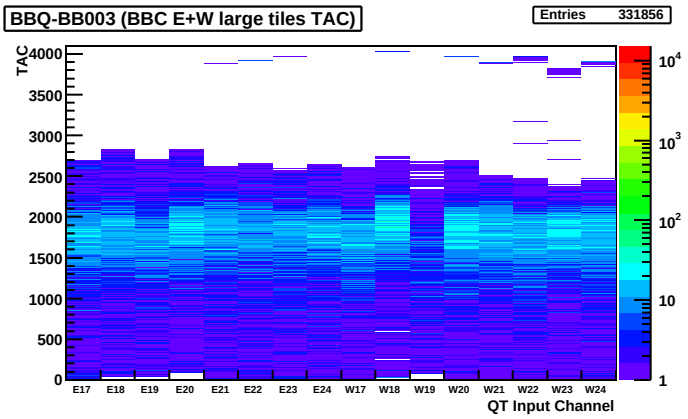

BBQ-BB001 (BBC east small tiles ADC)
Entries 331856
ADC
QT Input Channel

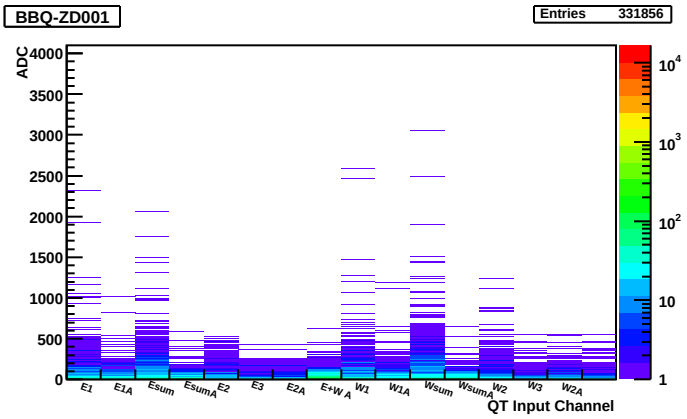

BBQ-BB001 (BBC east small tiles TAC)
Entries 331856
TAC
QT Input Channel

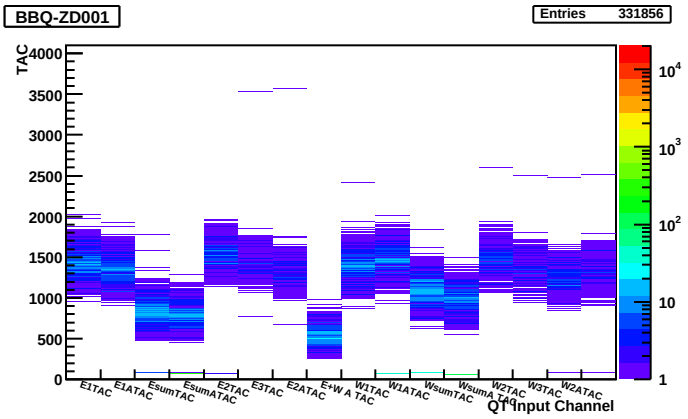

BBQ-BB002 (BBC west small tiles ADC)
Entries 331856
ADC
QT Input Channel

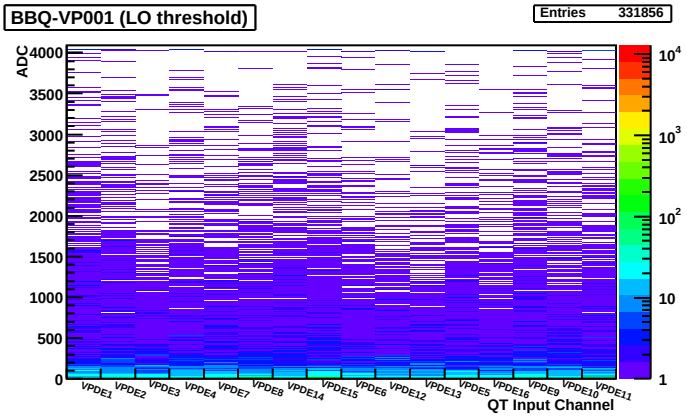

BBQ-BB002 (BBC west small tiles TAC)
Entries 331856
TAC
QT Input Channel

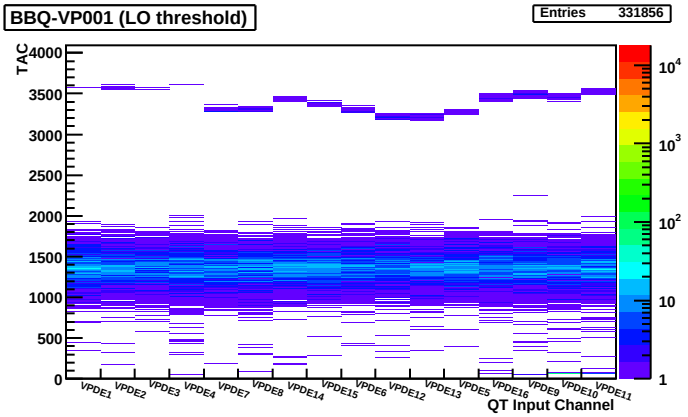

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 331856
ADC
QT Input Channel

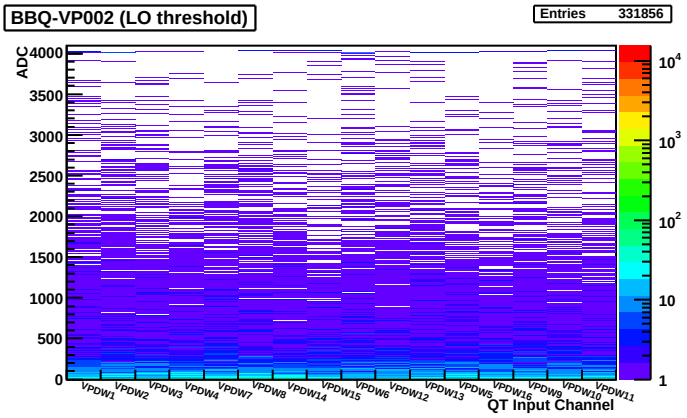

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 331856
TAC
QT Input Channel

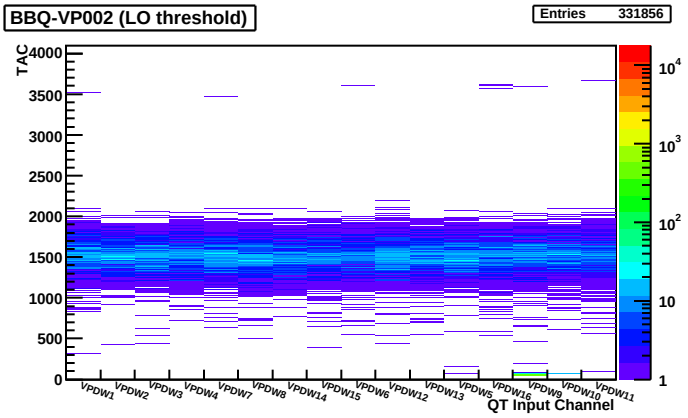

BBQ-ZD001
Entries 331856
ADC
QT Input Channel

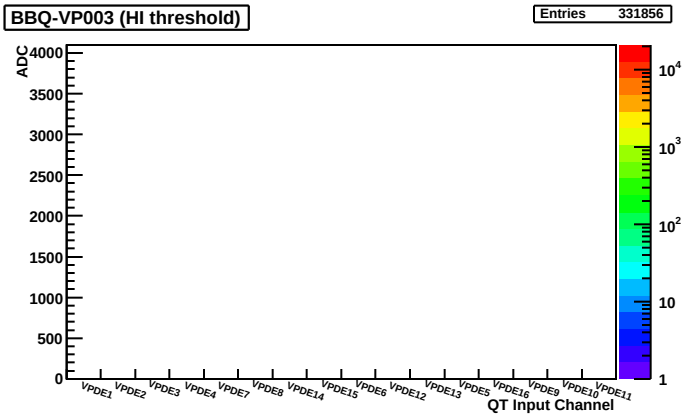

BBQ-ZD001
Entries 331856
TAC
QT Input Channel

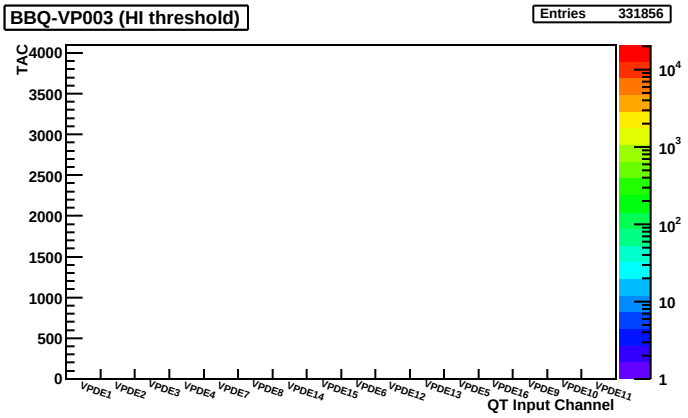

BBQ-VP001 (LO threshold)
Entries 331856
ADC
QT Input Channel

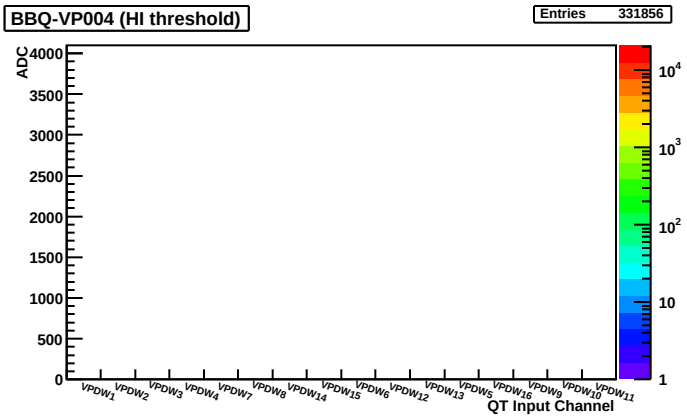

BBQ-VP001 (LO threshold)
Entries 331856
TAC
QT Input Channel

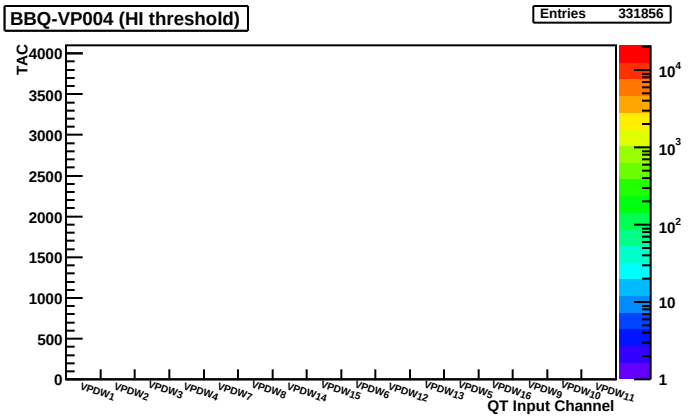

BBQ-VP002 (LO threshold)
Entries 331856
ADC
QT Input Channel

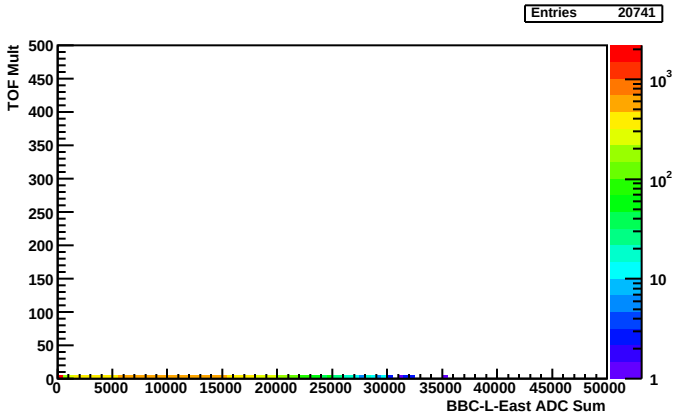

BBQ-VP002 (LO threshold)
Entries 331856
TAC
QT Input Channel

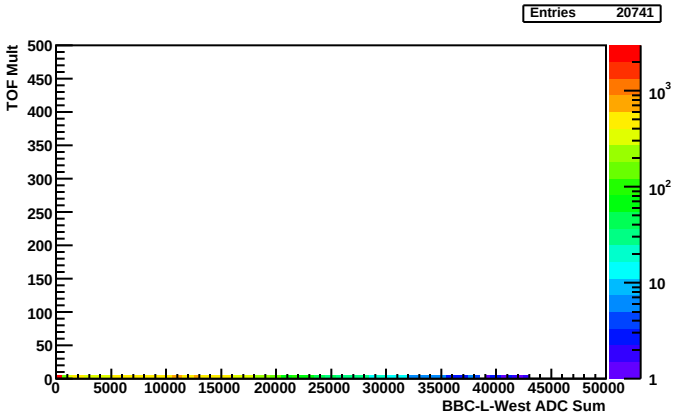

BBQ-VP003 (HI threshold)
Entries 331856
ADC
QT Input Channel

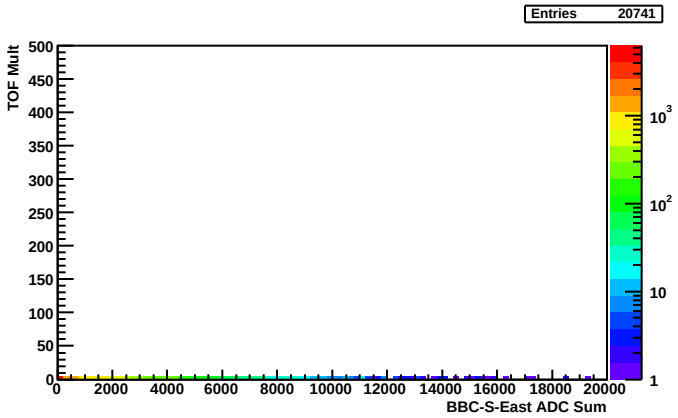

BBQ-VP003 (HI threshold)
Entries 331856
TAC
QT Input Channel

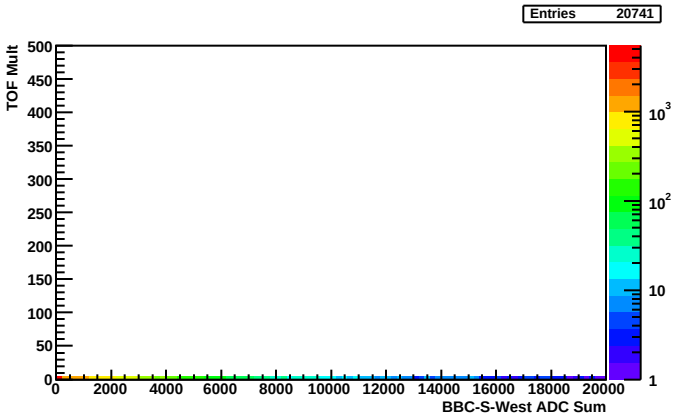

BBQ-VP004 (HI threshold)
Entries 331856
ADC
QT Input Channel

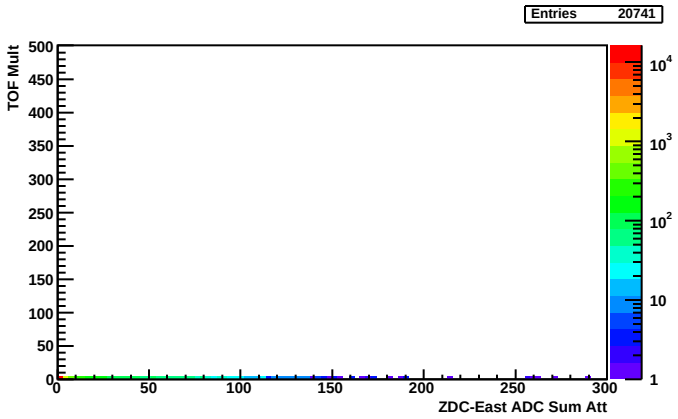

BBQ-VP004 (HI threshold)
Entries 331856
TAC
QT Input Channel

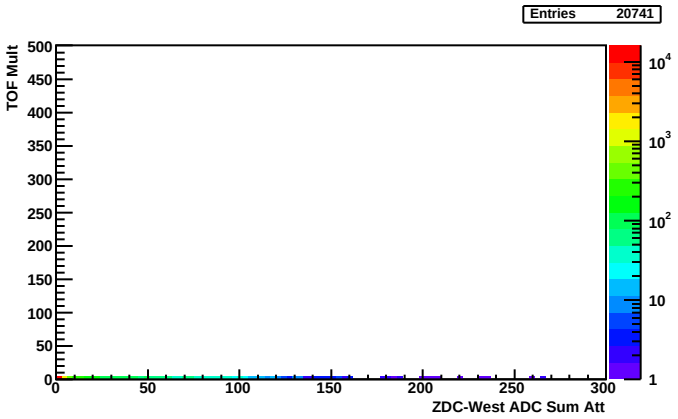

Entries 20741
TOF Mult
BBC-L-East ADC Sum

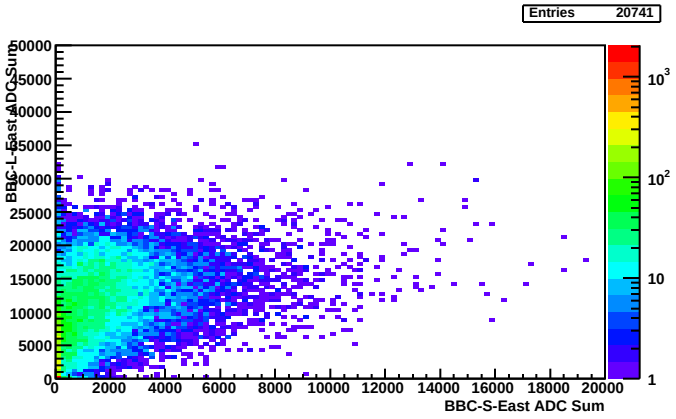

Entries 20741
TOF Mult
BBC-L-West ADC Sum

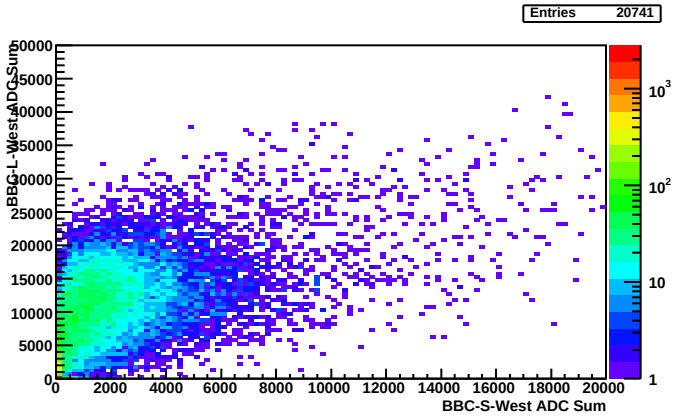

Entries 20741
TOF Mult
BBC-S-East ADC Sum

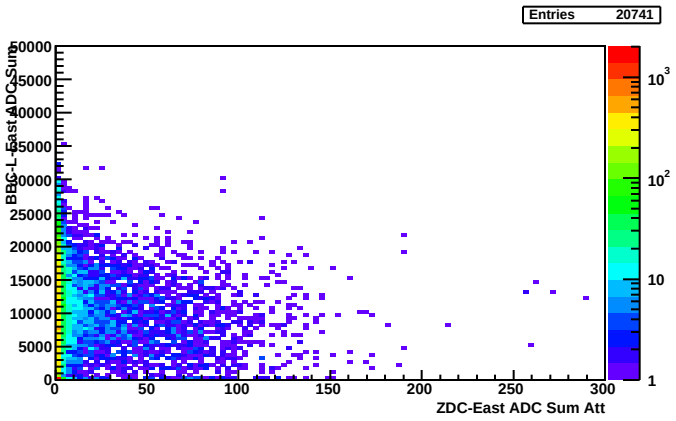

Entries 20741
TOF Mult
BBC-S-West ADC Sum

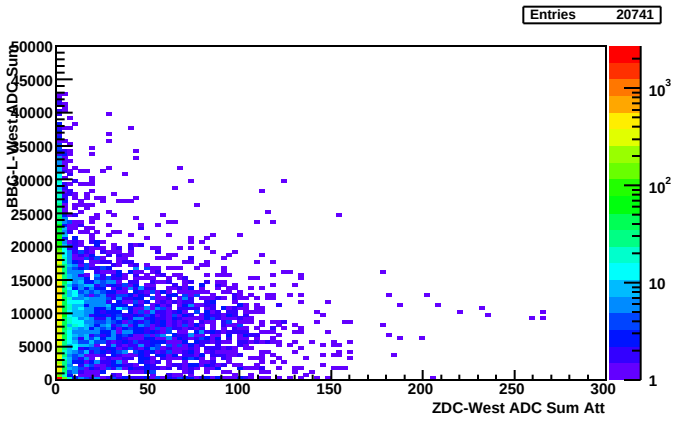

Entries 20741
TOF Mult
ZDC-East ADC Sum Att

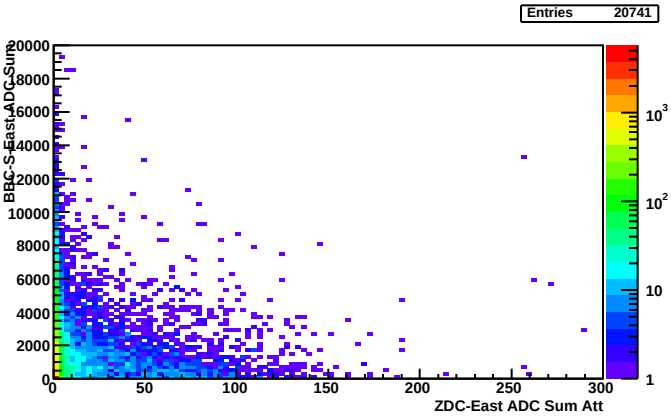

Entries 20741
TOF Mult
ZDC-West ADC Sum Att

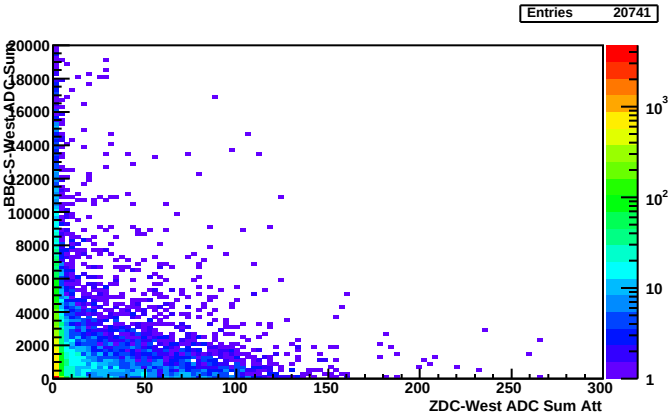

Entries 20741
BBC-L-East ADC Sum
BBC-S-East ADC Sum

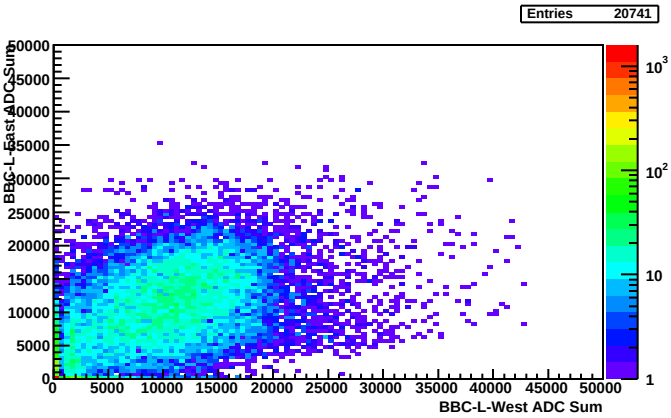

Entries 20741
BBC-L-West ADC Sum
BBC-S-West ADC Sum

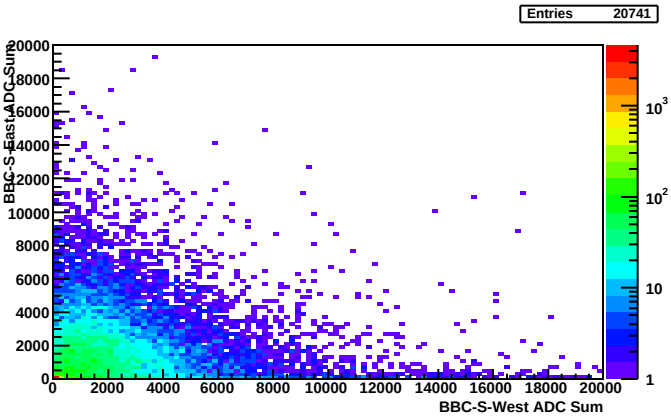

Entries 20741
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

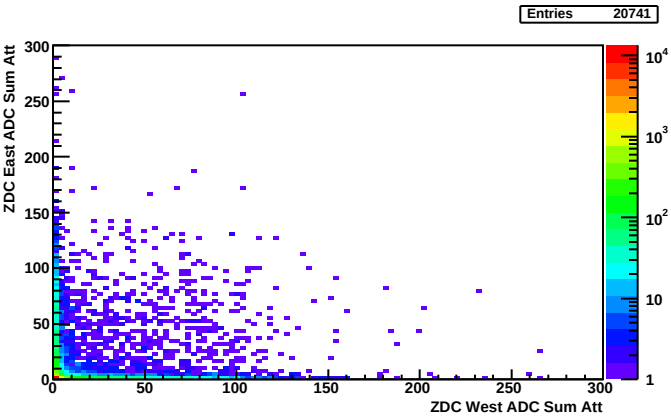

Entries 20741
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

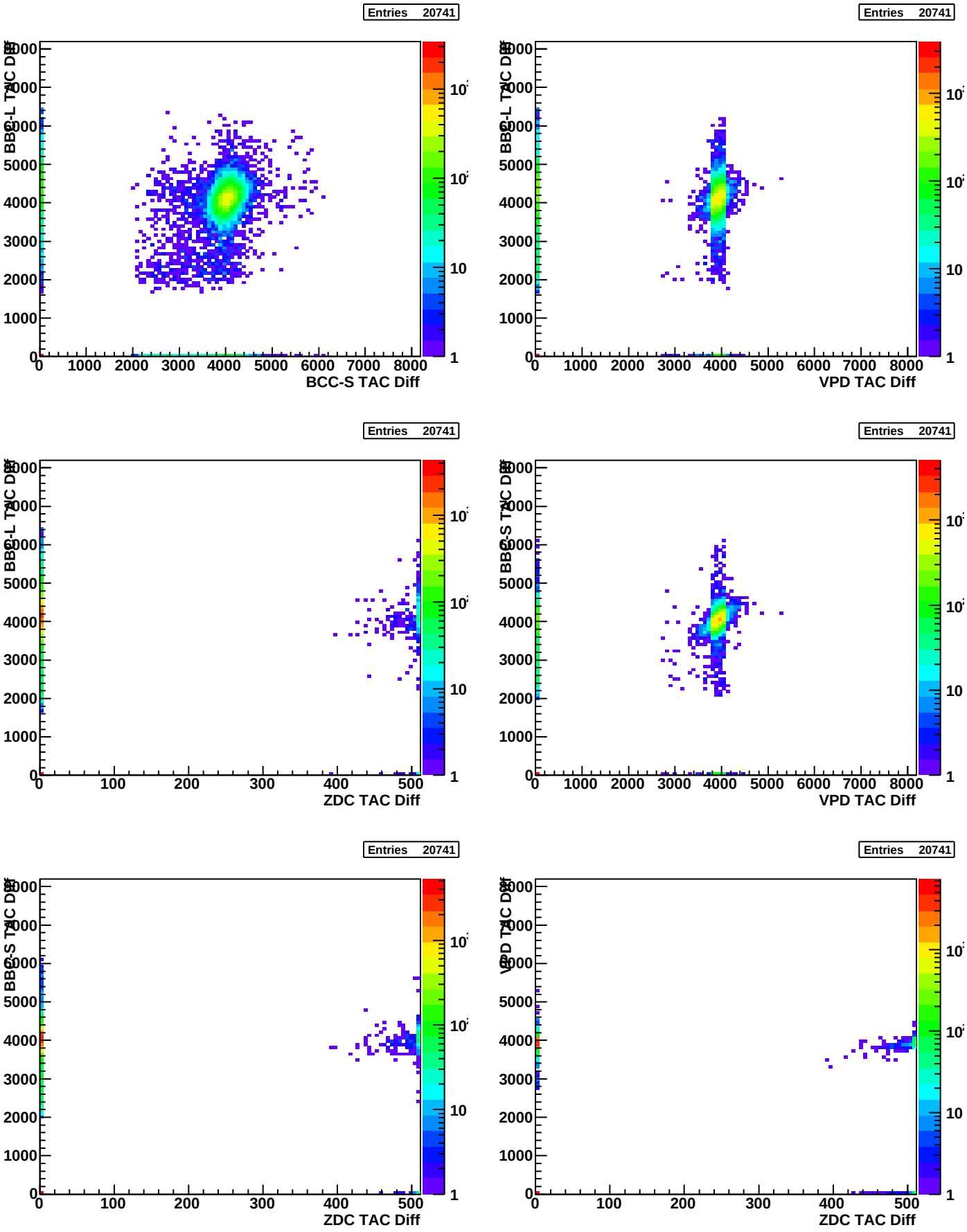

Entries 20741
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

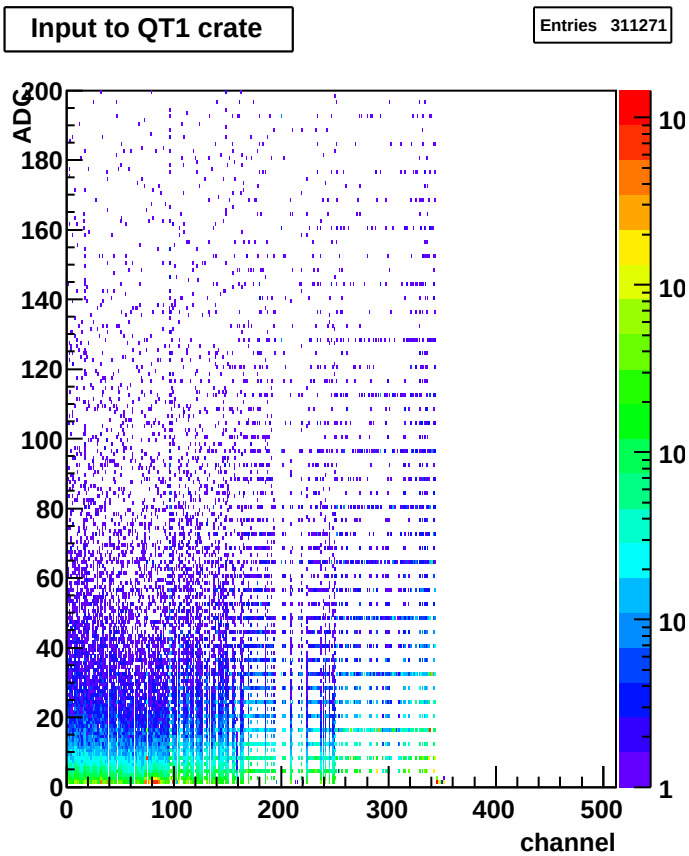

Entries 20741
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

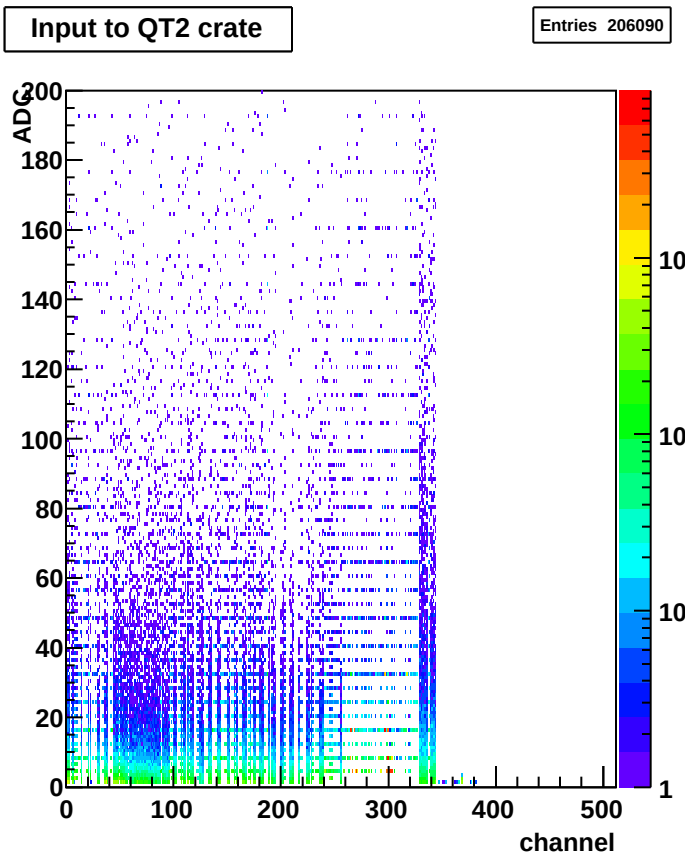

Entries 20741
BBC-L-East ADC Sum
BBC-L-West ADC Sum

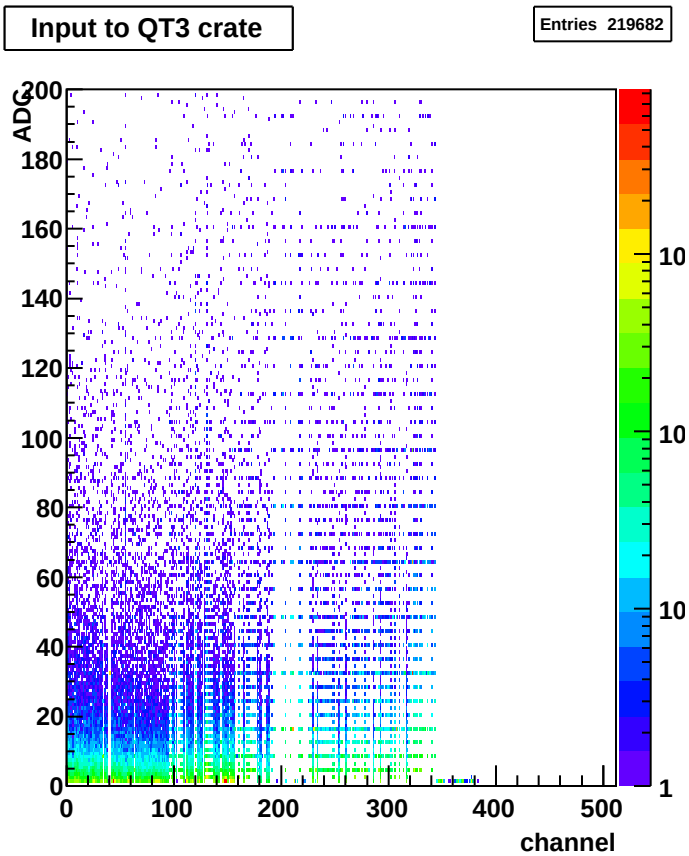

Entries 20741
BBC-S-East ADC Sum
BBC-S-West ADC Sum

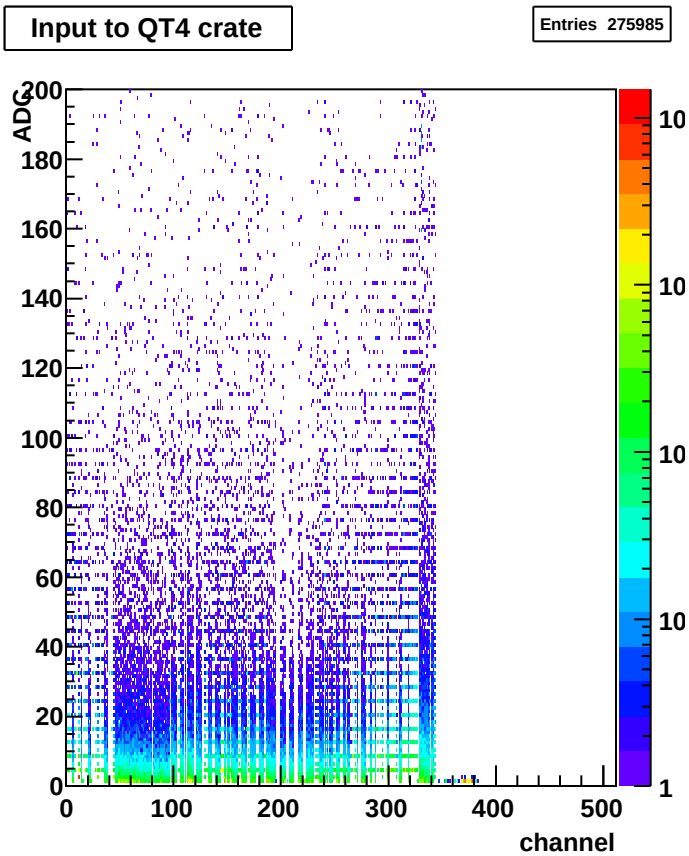

Entries 20741
ZDC East ADC Sum Att
ZDC West ADC Sum Att

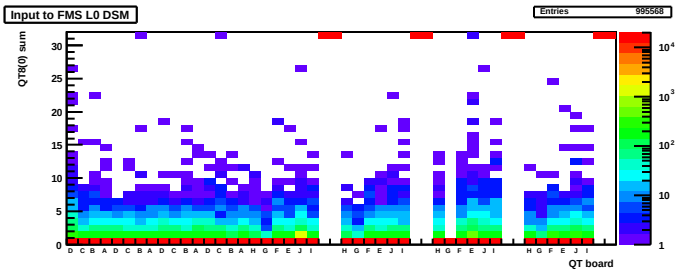

Entries 20741
BBC-L TAC Diff
BCC-S TAC Diff
Entries 20741
BBC-L TAC Diff
VPD TAC Diff
Entries 20741
BBC-L TAC Diff
ZDC TAC Diff
Entries 20741
BBC-S TAC Diff
VPD TAC Diff
Entries 20741
BBC-S TAC Diff
ZDC TAC Diff
Entries 20741
VPD TAC Diff
ZDC TAC Diff

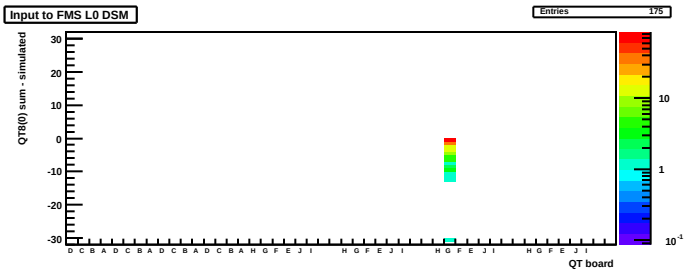

Input to QT1 crate
Entries 311271
ADC
channel

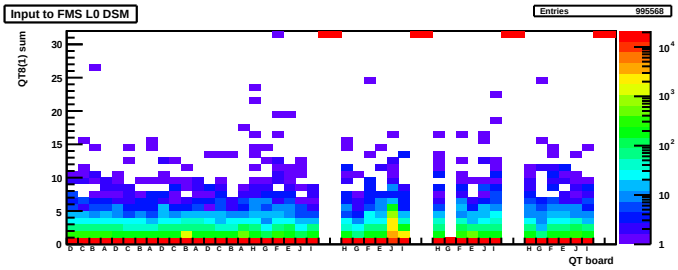

Input to QT2 crate
Entries 206090
ADC
channel

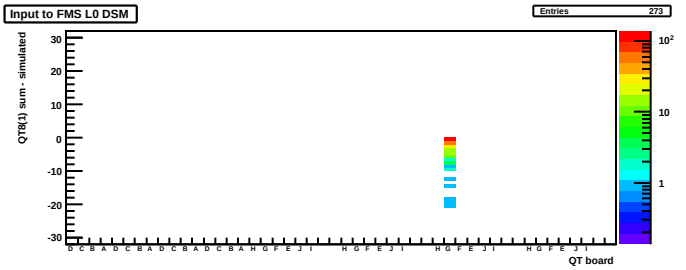

Input to QT3 crate
Entries 219682
ADC
channel

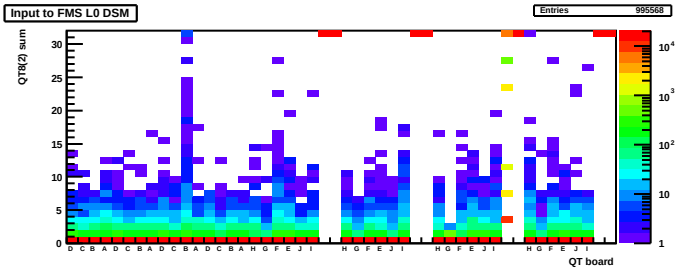

Input to QT4 crate
Entries 275985
ADC
channel

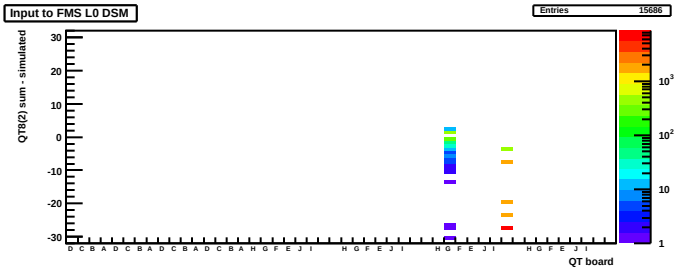

Input to FMS L0 DSM
Entries 995568
QT8(0) sum
QT board

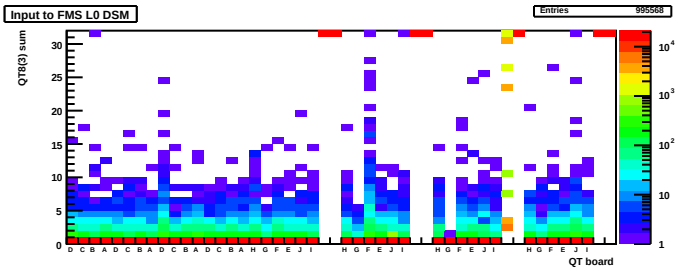

Input to FMS L0 DSM
Entries 175
QT8(0) sum - simulated
QT board

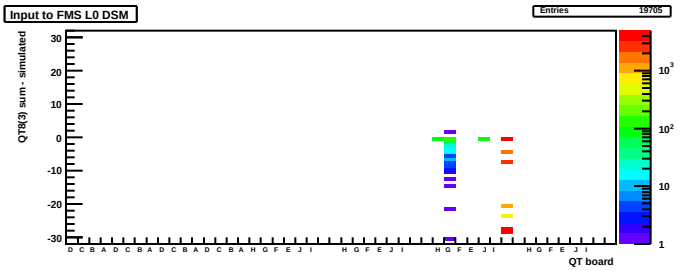

Input to FMS L0 DSM
Entries 995568
QT8(1) sum
QT board

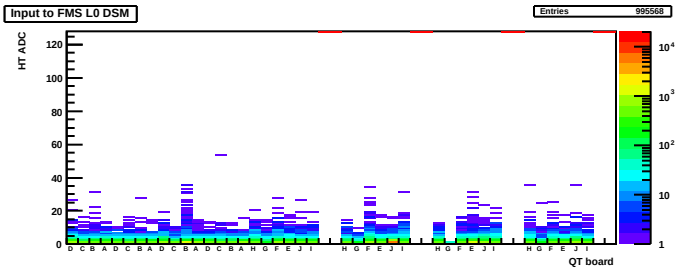

Input to FMS L0 DSM
Entries 273
QT8(1) sum - simulated
QT board

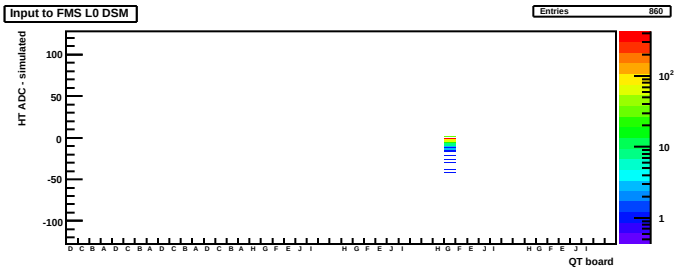

Input to FMS L0 DSM
Entries 995568
QT8(2) sum
QT board

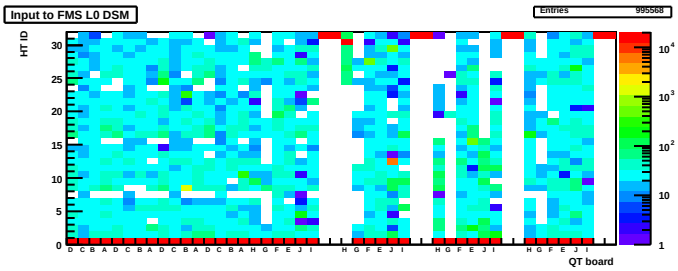

Input to FMS L0 DSM
Entries 15686
QT8(2) sum - simulated
QT board

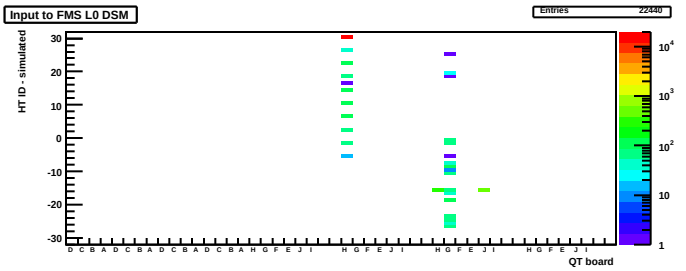

Input to FMS L0 DSM
Entries 995568
QT8(3) sum
QT board

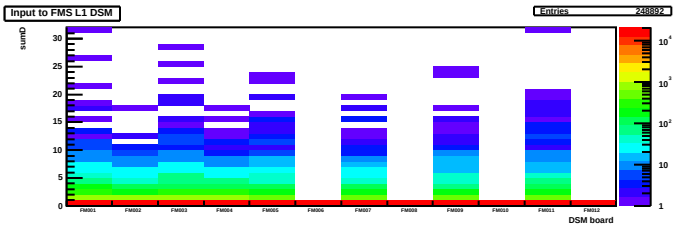

Input to FMS L0 DSM
Entries 19705
QT8(3) sum - simulated
QT board

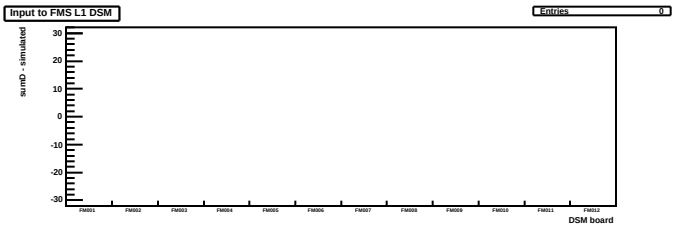

Input to FMS L0 DSM
Entries 995568
HT ADC
QT board

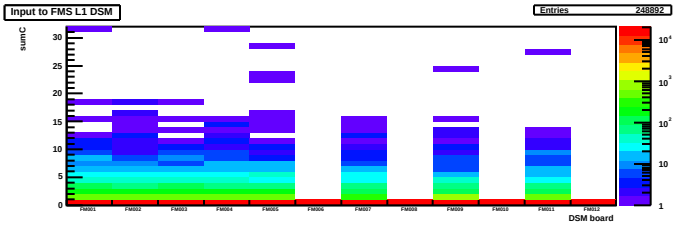

Input to FMS L0 DSM
Entries 860
HT ADC - simulated
QT board

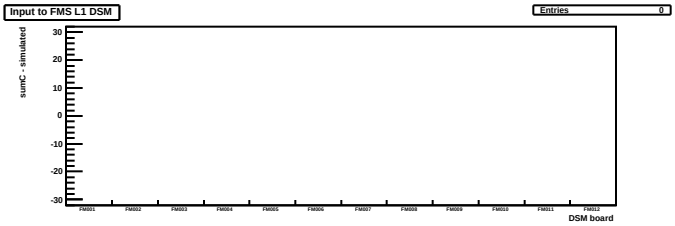

Input to FMS L0 DSM
Entries 995568
HT ID
QT board

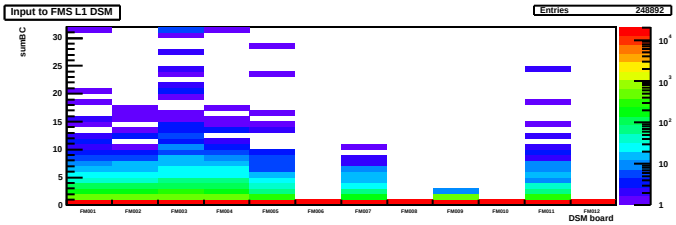

Input to FMS L0 DSM
Entries 22440
HT ID - simulated
QT board

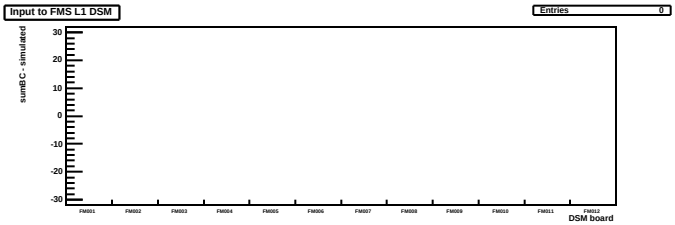

Input to FMS L1 DSM
Entries 248892
sumD
DSM board

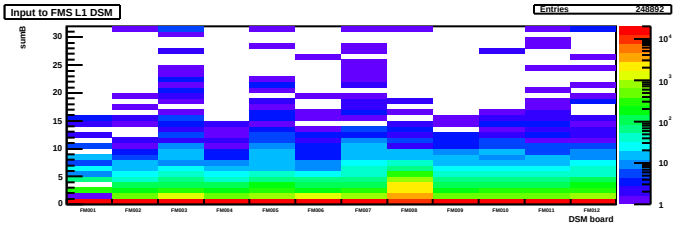

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

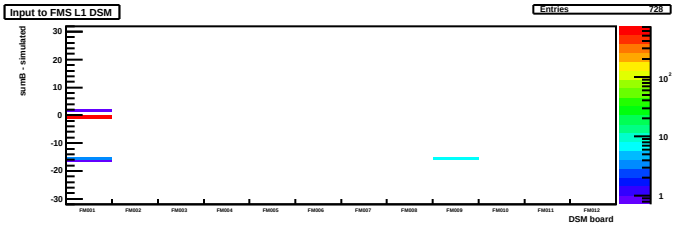

Input to FMS L1 DSM
Entries 248892
sumC
DSM board

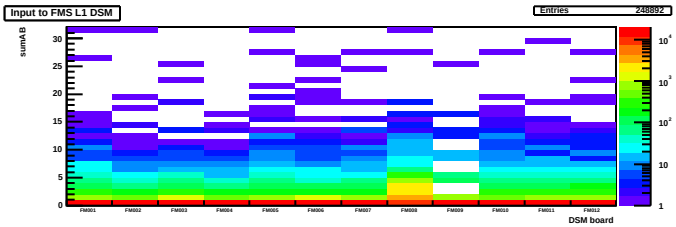

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

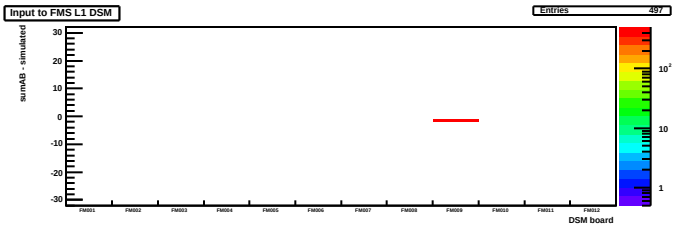

Input to FMS L1 DSM
Entries 248892
sumBC
DSM board

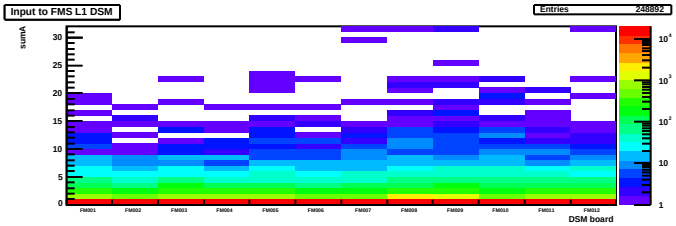

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

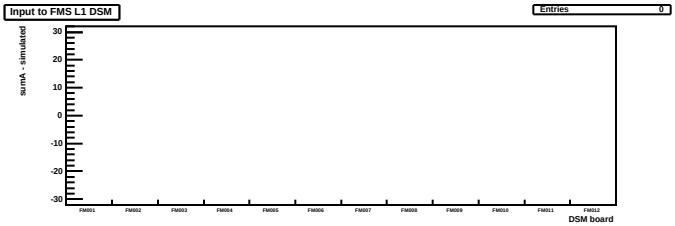

Input to FMS L1 DSM
Entries 248892
sumB
DSM board

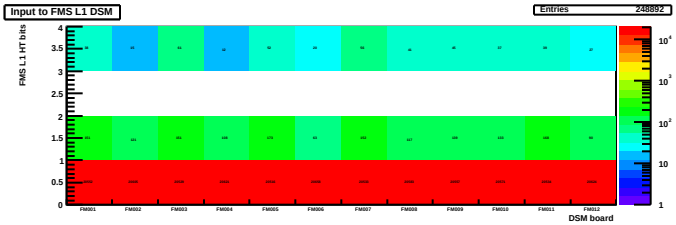

Input to FMS L1 DSM
Entries 728
sumB - simulated
DSM board

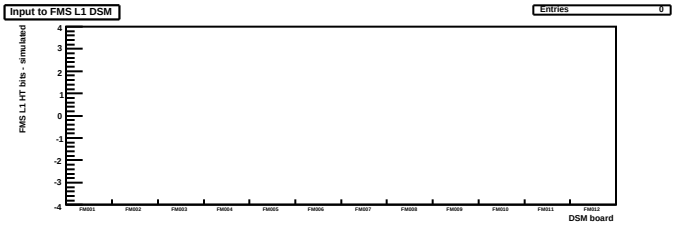

Input to FMS L1 DSM
Entries 248892
sumAB
DSM board

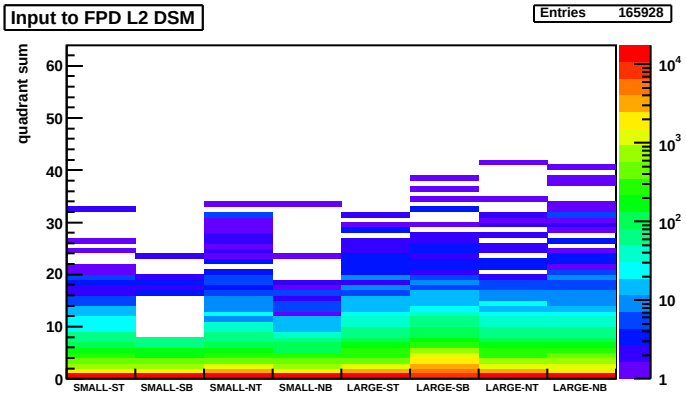

Input to FMS L1 DSM
Entries 497
sumAB - simulated
DSM board

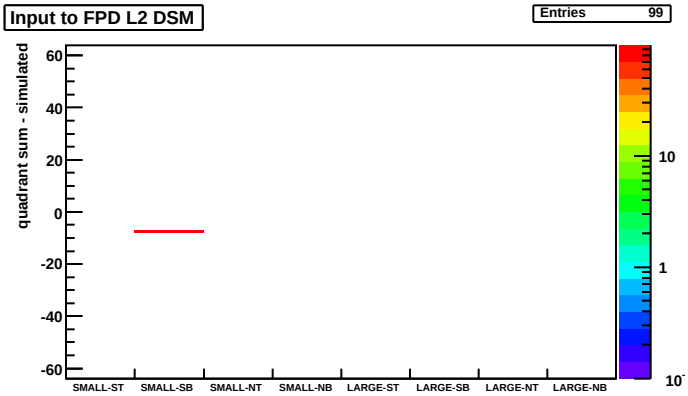

Input to FMS L1 DSM
Entries 248892
sumA
DSM board

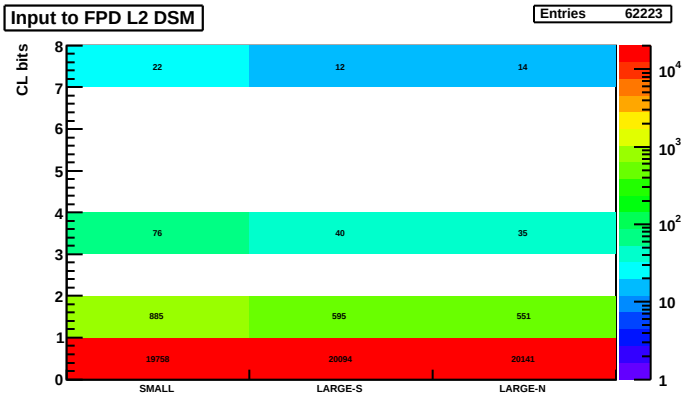

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

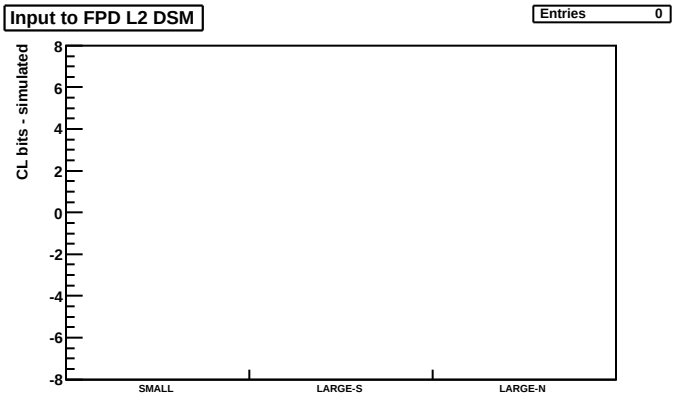

Input to FMS L1 DSM
Entries 248892
FMS L1 HT bits
DSM board

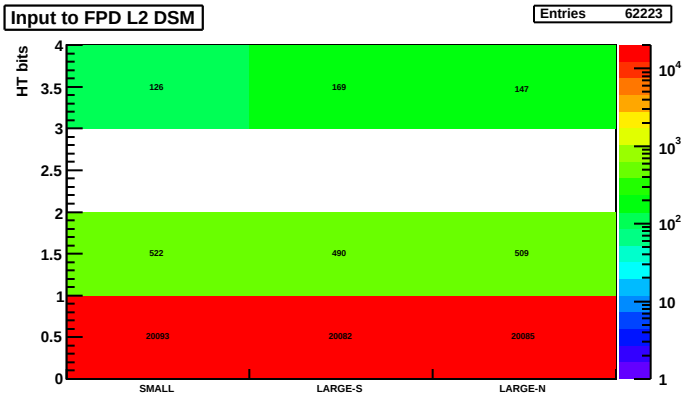

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

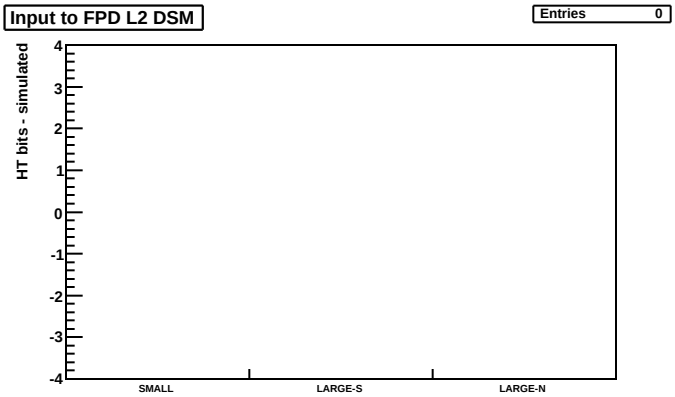

Input to FPD L2 DSM
Entries 165928
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

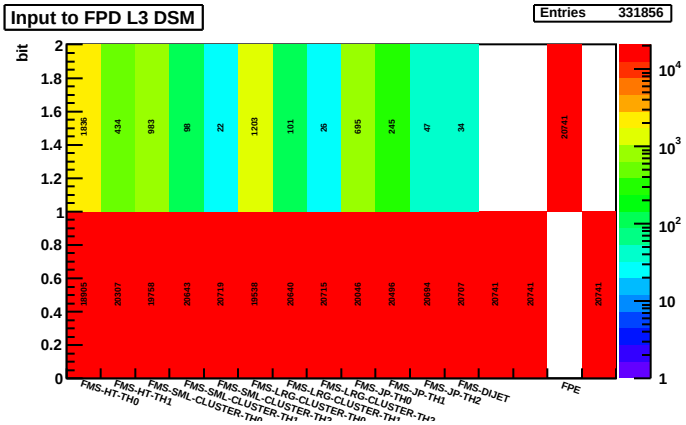

Input to FPD L2 DSM
Entries 99
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

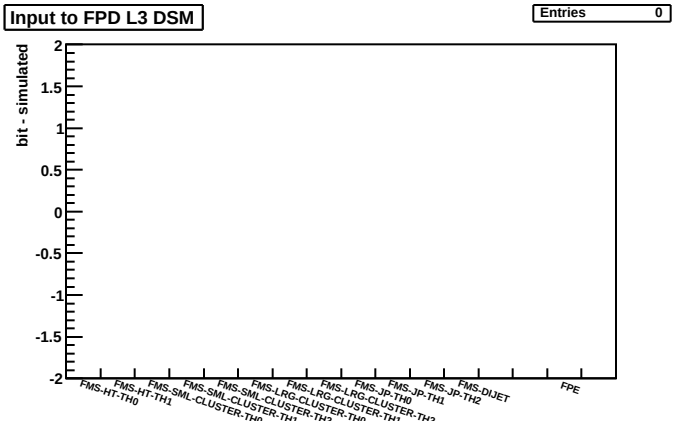

Input to FPD L2 DSM
Entries 62223
CL bits
22
12
14
76
40
35
885
595
551
19758
20094
20141
SMALL
LARGE-S
LARGE-N

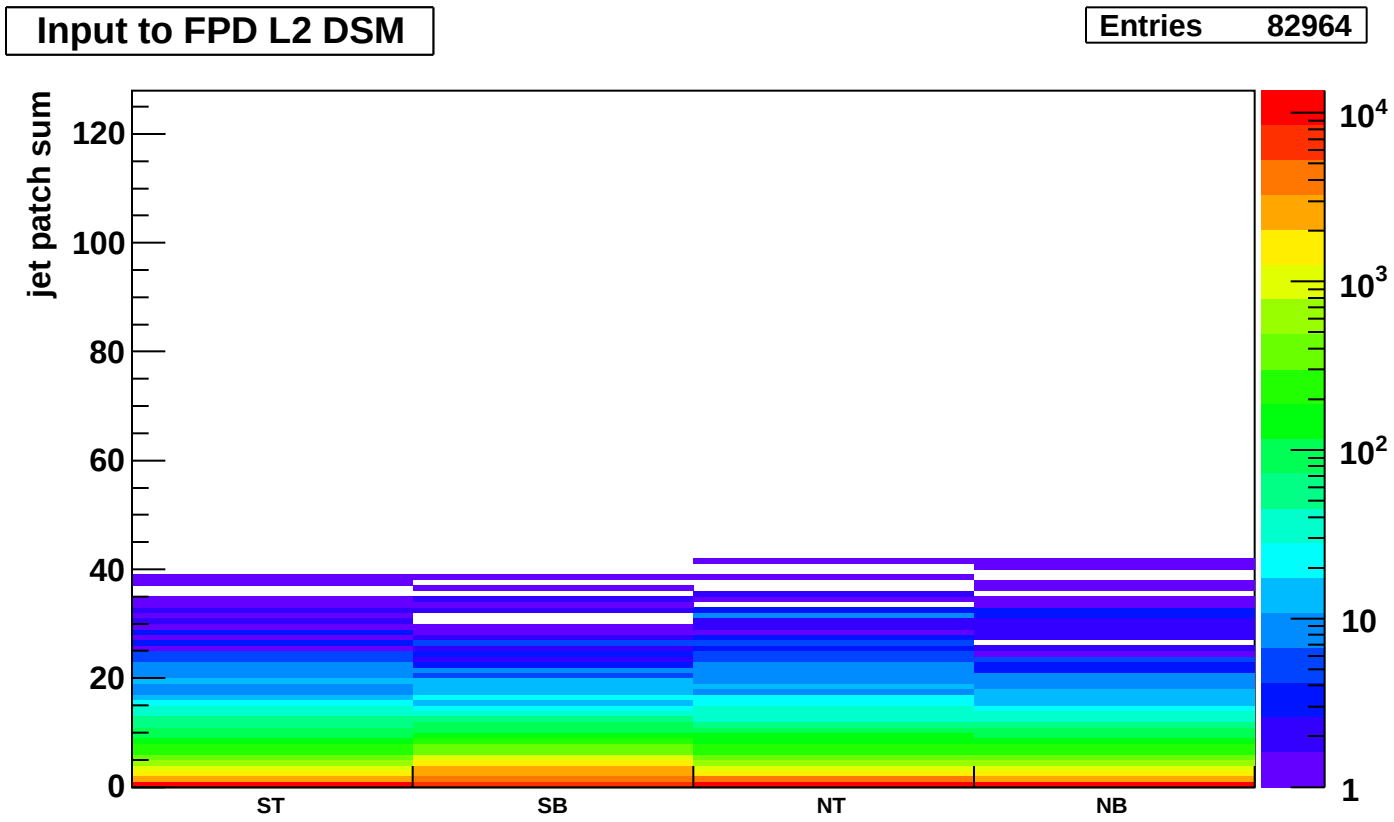

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

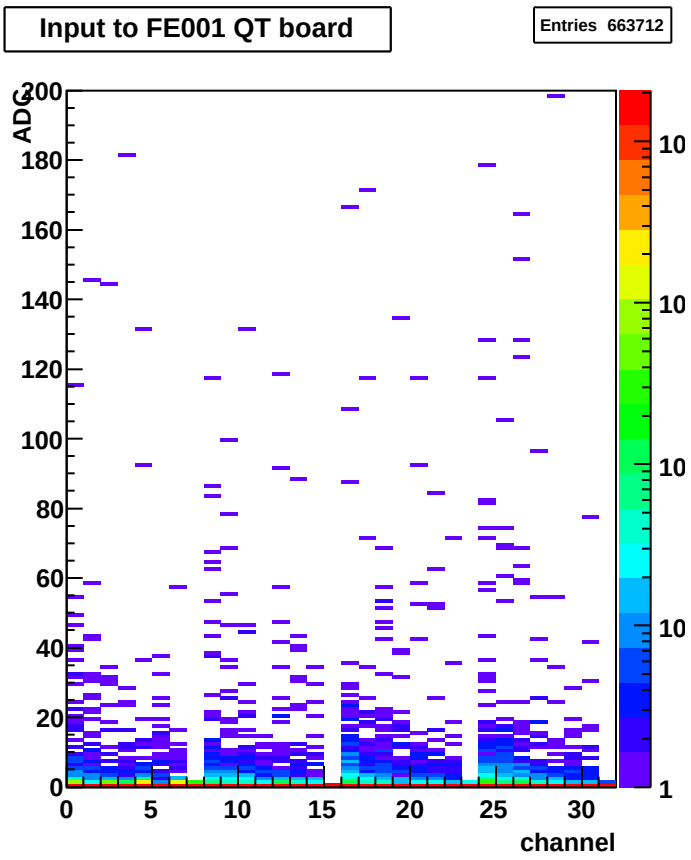

Input to FPD L2 DSM
Entries 62223
HT bits
126
169
147
522
490
509
20093
20082
20085
SMALL
LARGE-S
LARGE-N

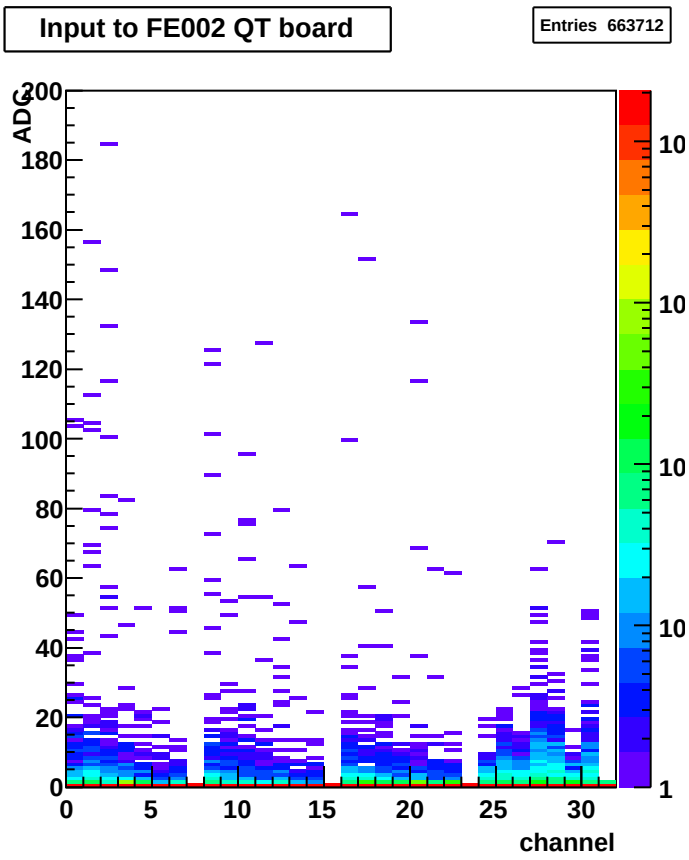

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

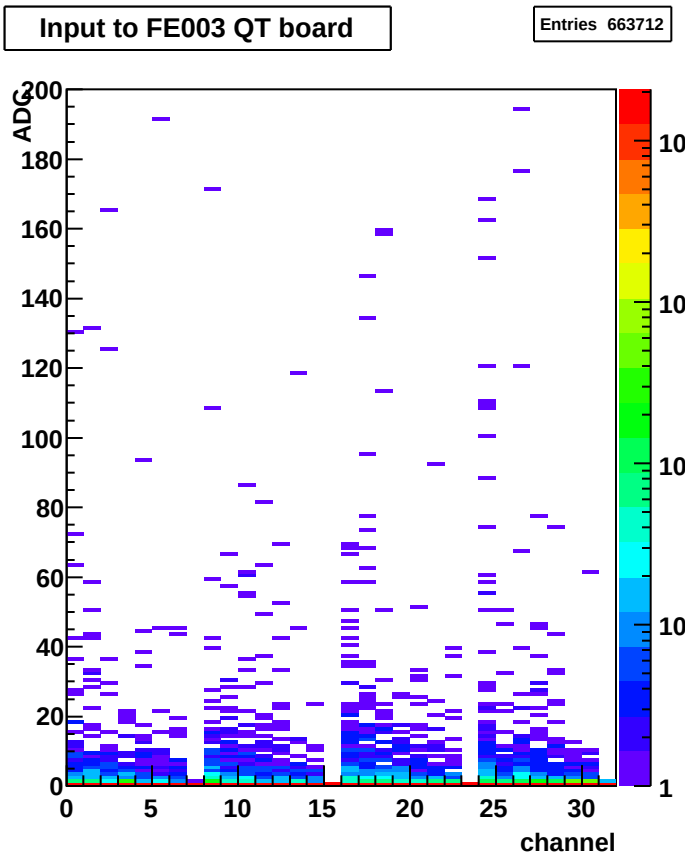

Input to FPD L3 DSM
Entries 331856
bit
1836
434
983
98
22
1203
101
26
695
245
47
34
20741
18905
20307
19758
20643
20719
19538
20640
20715
20046
20486
20694
20707
20741
20741
20741
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

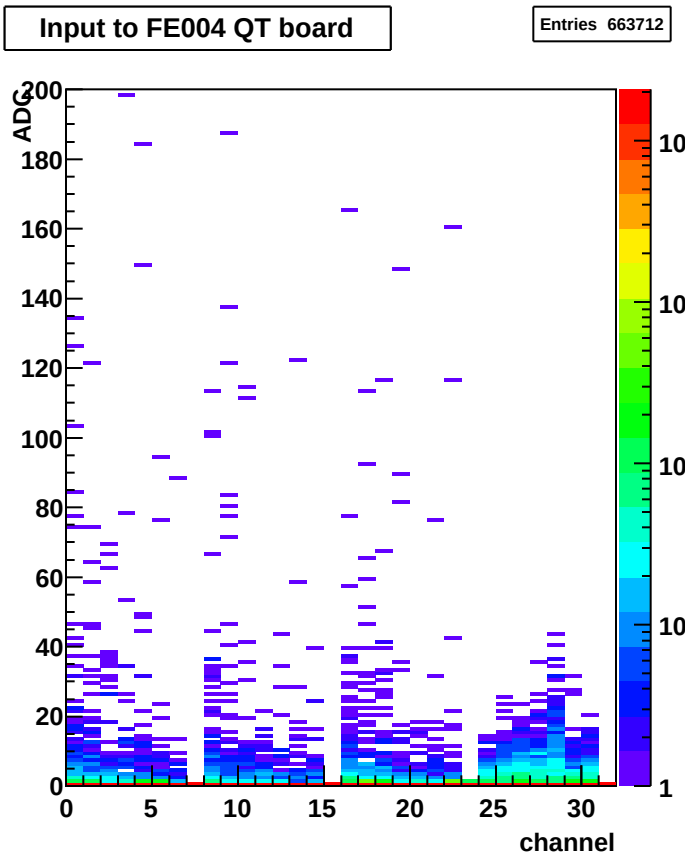

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

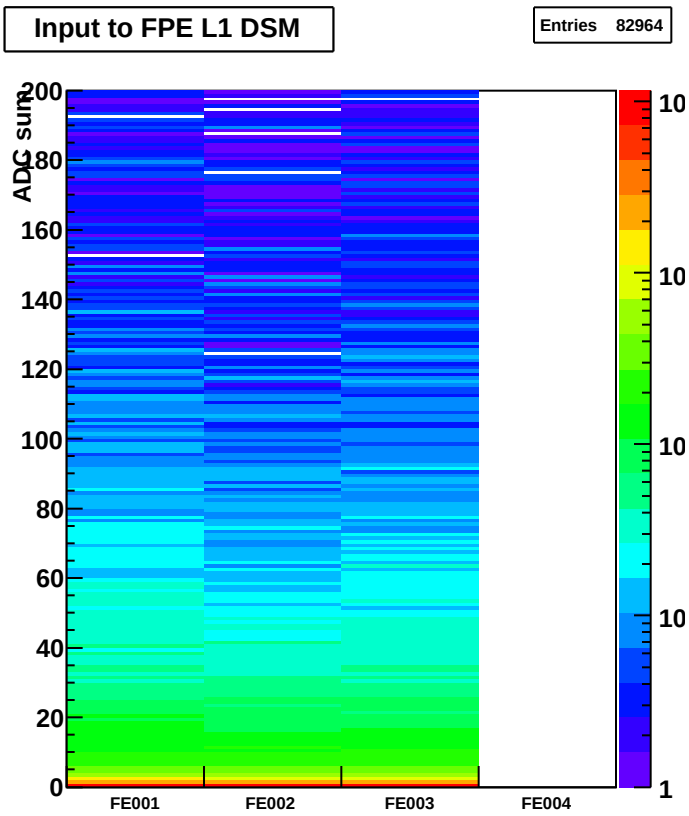

Input to FPD L2 DSM
Entries 82964
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

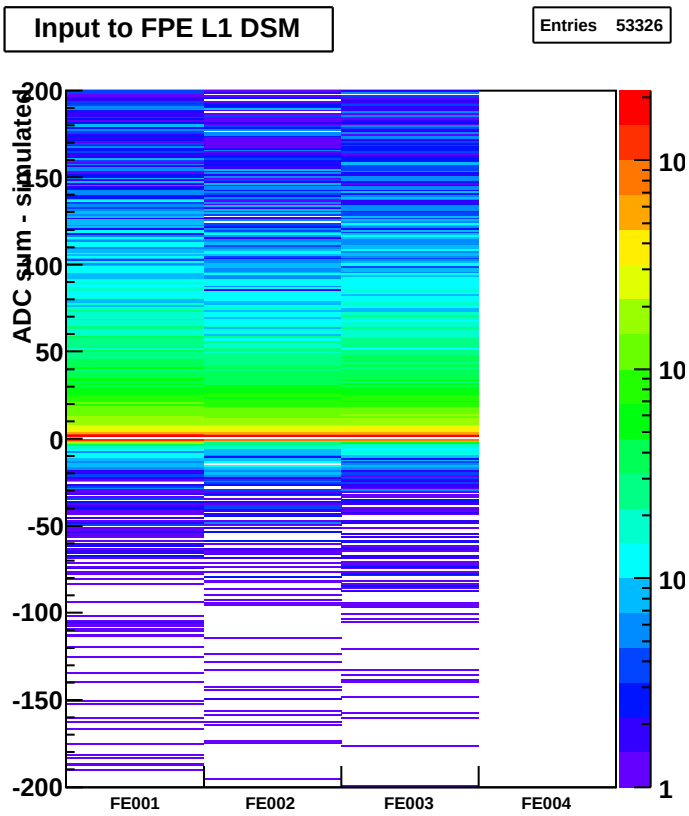

Input to FE001 QT board
Entries 663712
ADC
channel

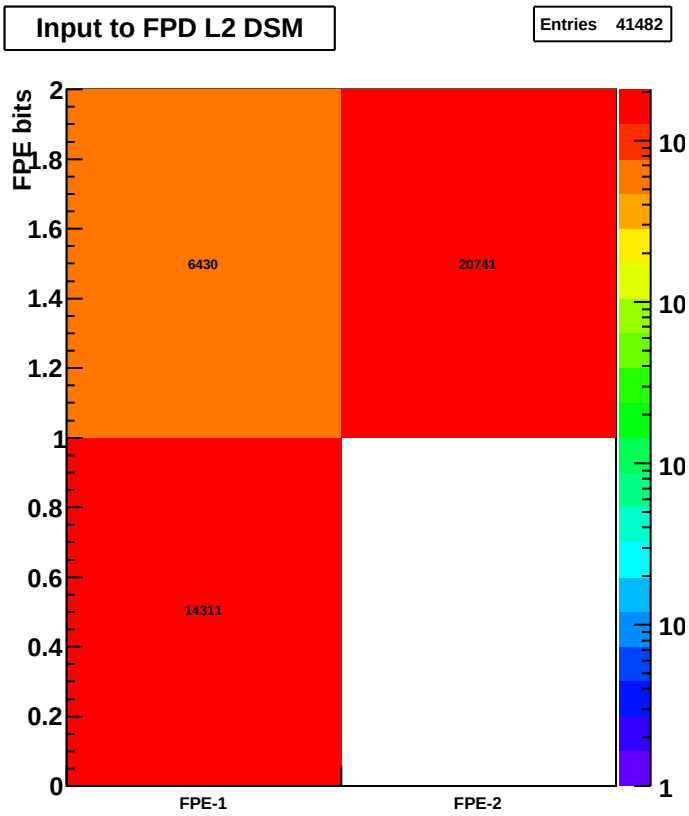

Input to FE002 QT board
Entries 663712
ADC
channel

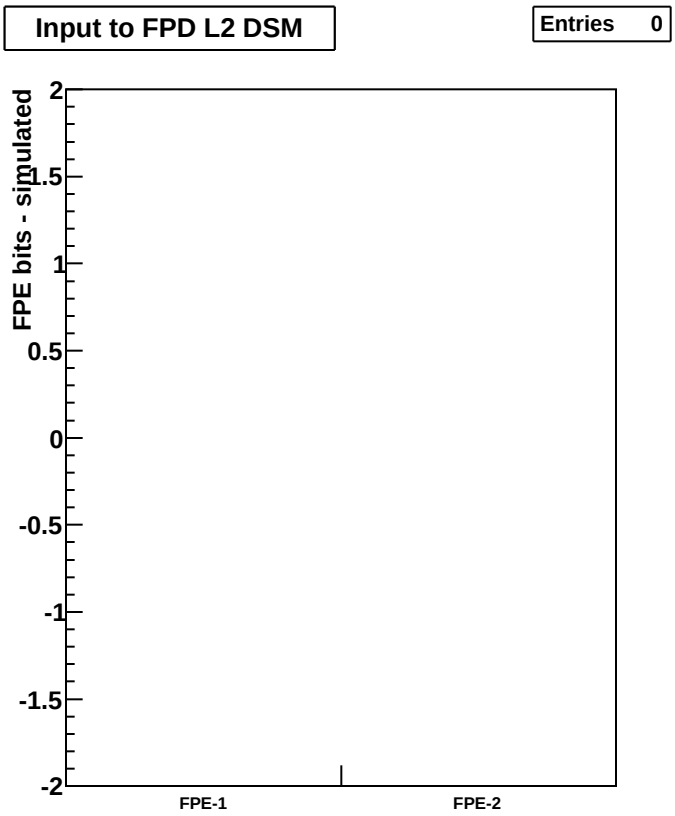

Input to FE003 QT board
Entries 663712
ADC
channel


Input to FE004 QT board
Entries 663712
ADC
channel


Input to FPE L1 DSM
Entries 82964
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 53326
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 41482
FPE bits
6430
20741
14311
FPE-1
FPE-2


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