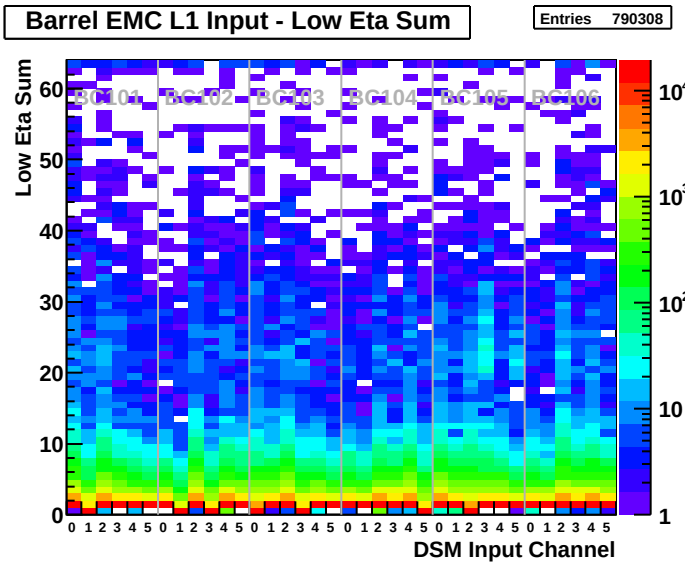
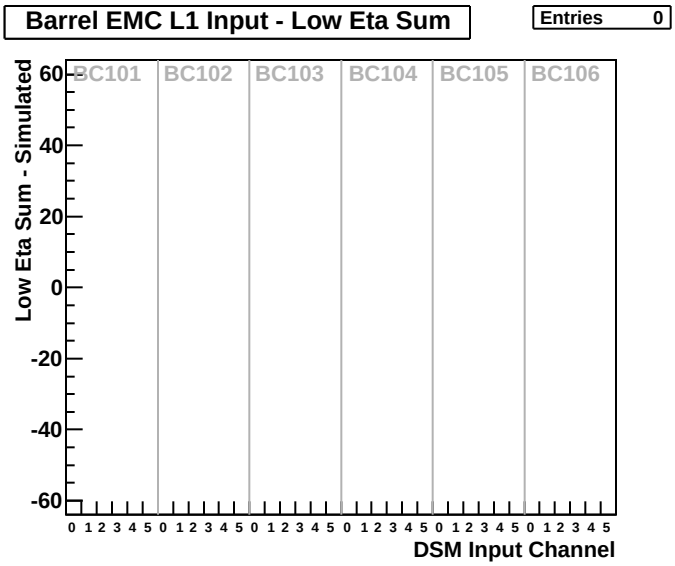
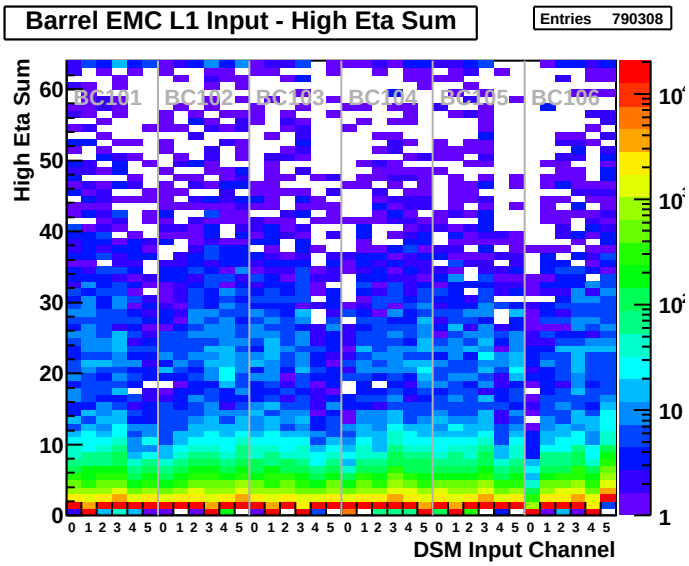
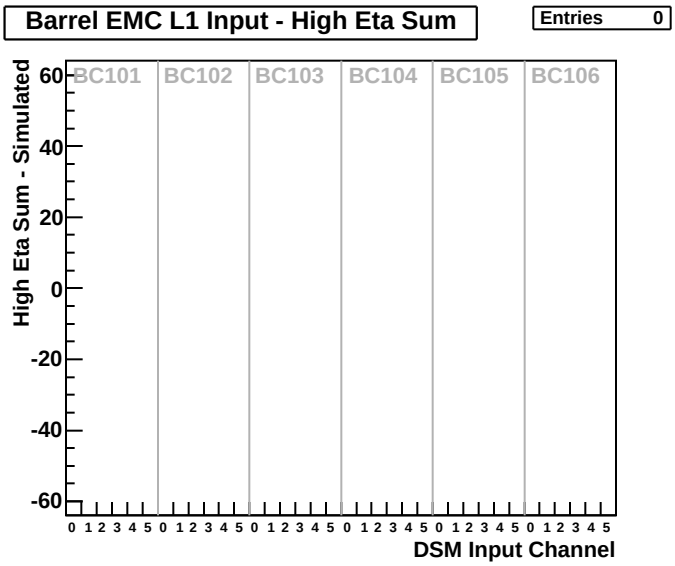
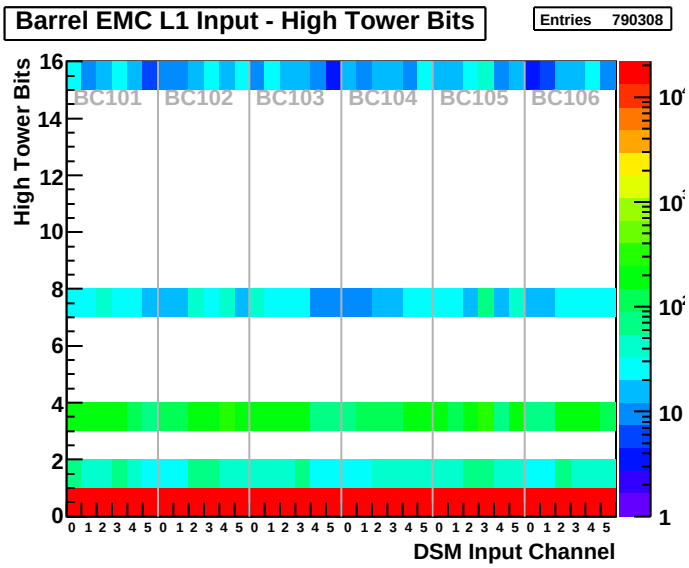
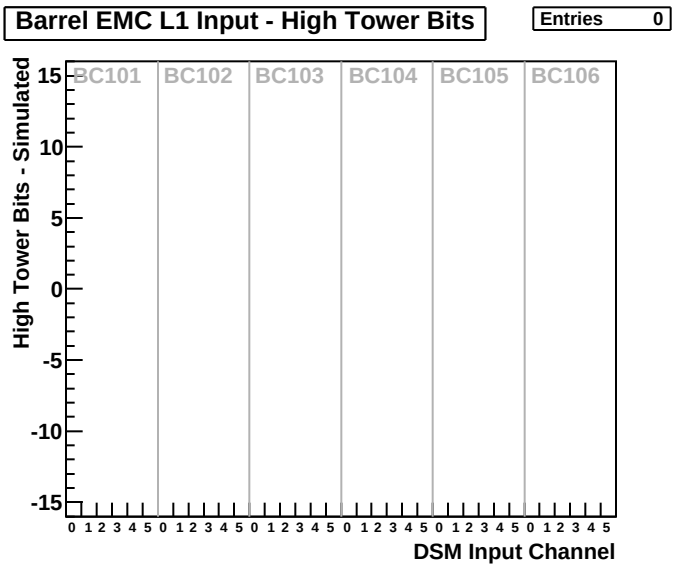

Barrel EMC L1 Input - Low Eta Sum
Entries 790308
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

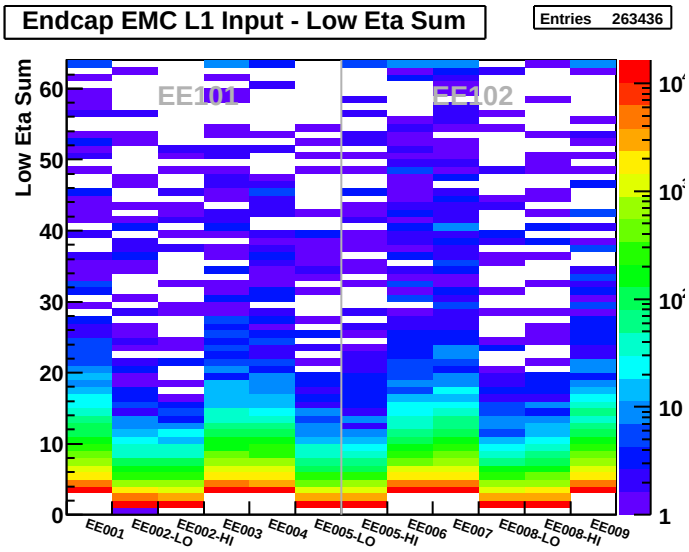

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

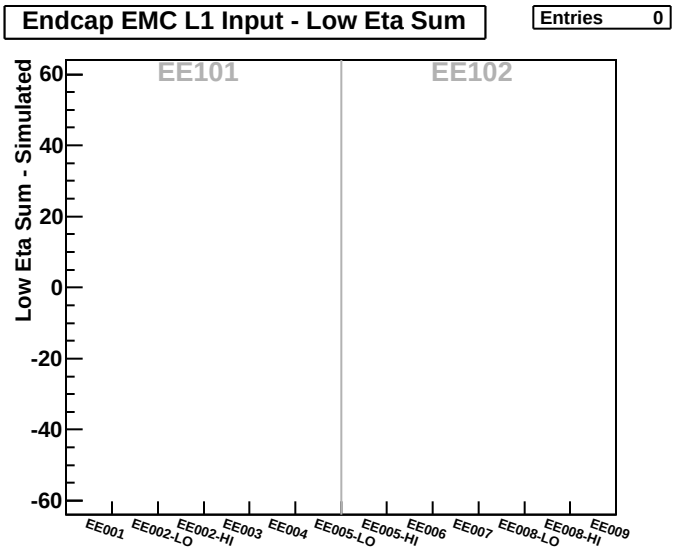

Barrel EMC L1 Input - High Eta Sum
Entries 790308
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

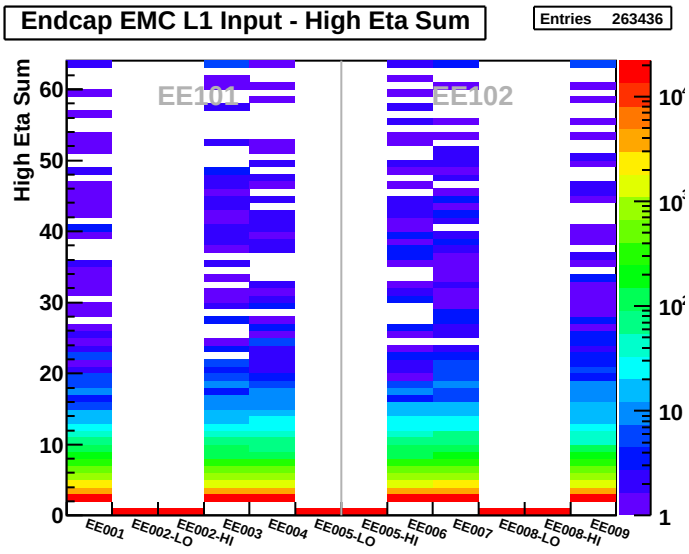

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

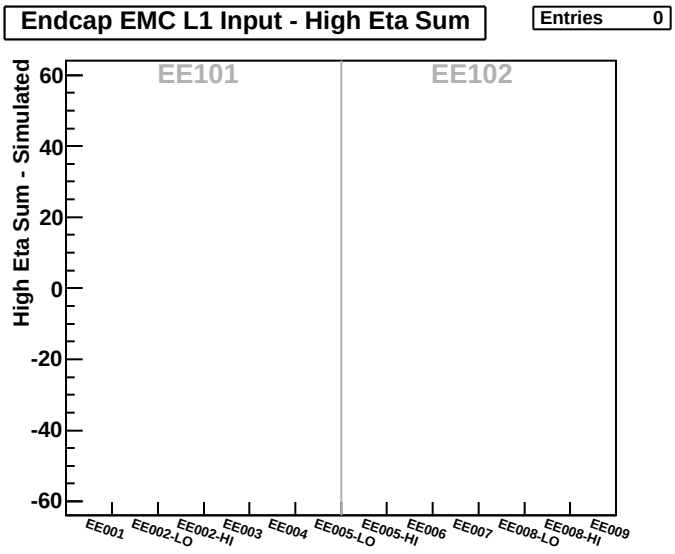

Barrel EMC L1 Input - High Tower Bits
Entries 790308
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

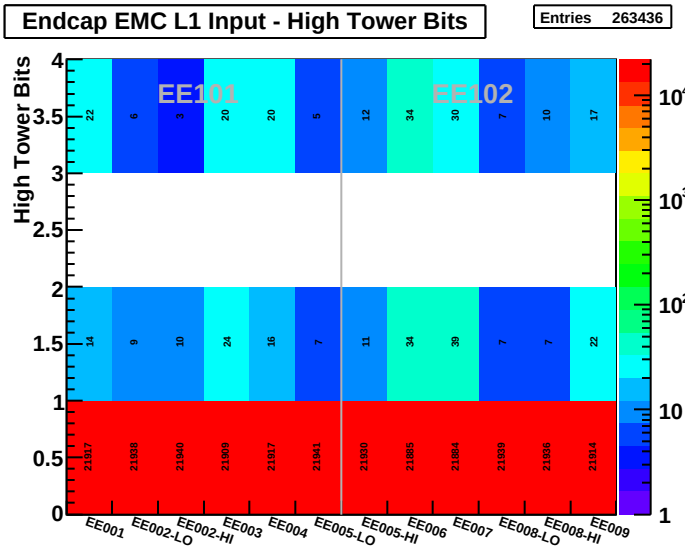

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

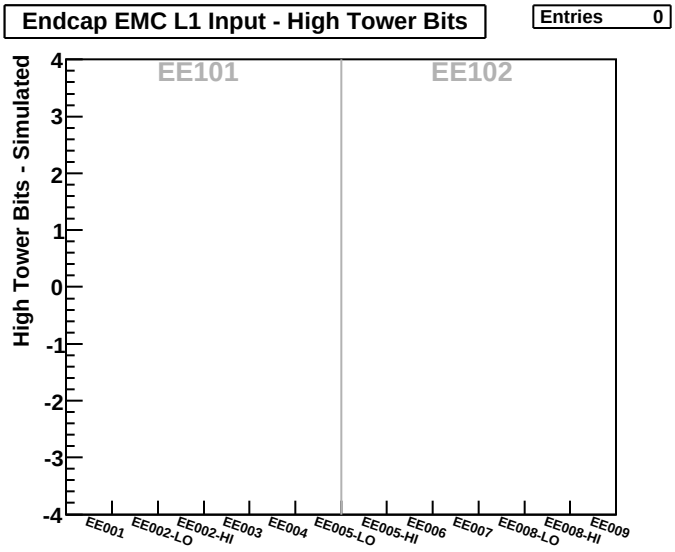

Endcap EMC L1 Input - Low Eta Sum
Entries 263436
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

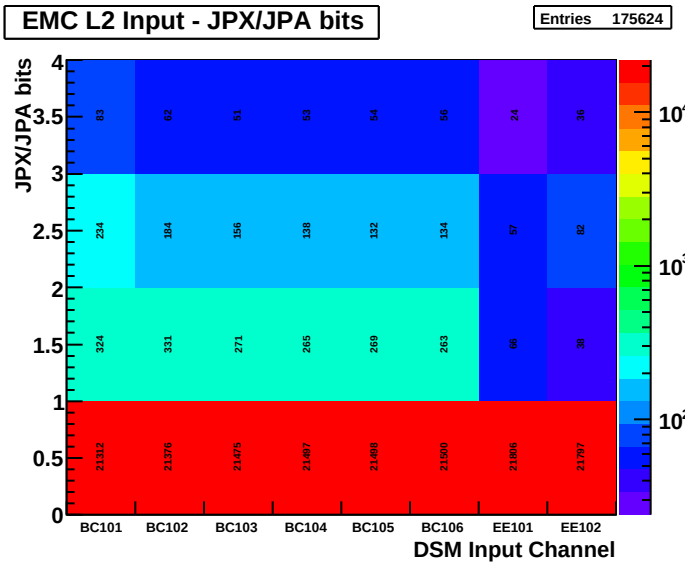

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

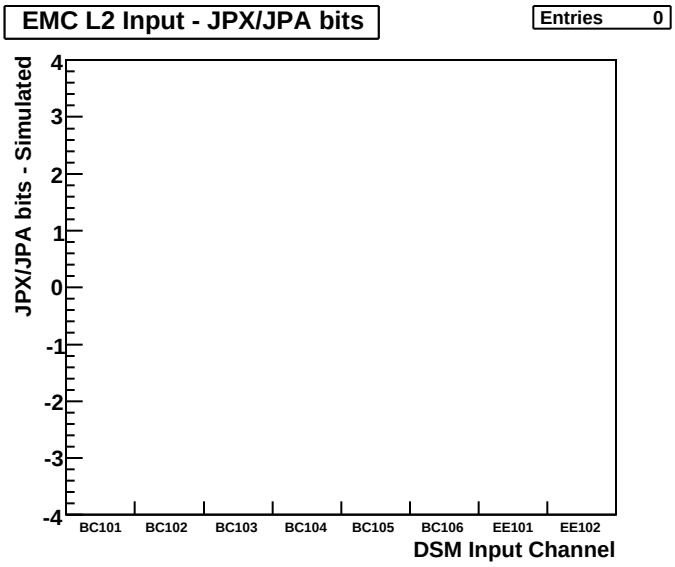

Endcap EMC L1 Input - High Eta Sum
Entries 263436
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

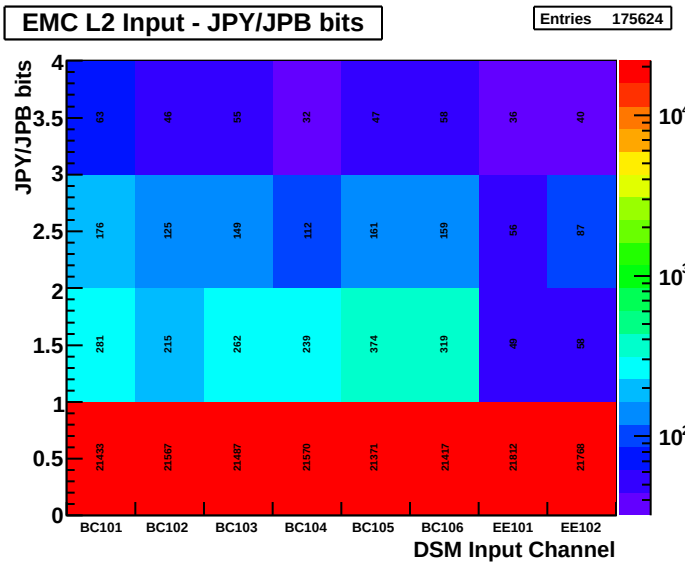

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

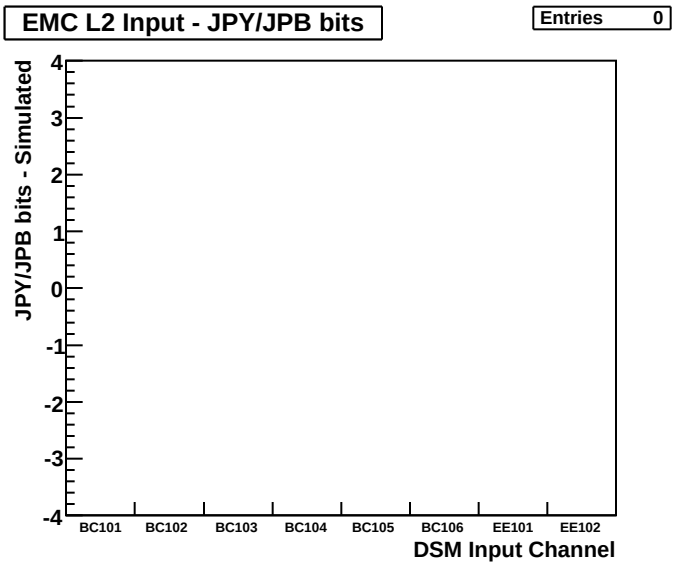

Endcap EMC L1 Input - High Tower Bits
Entries 263436
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

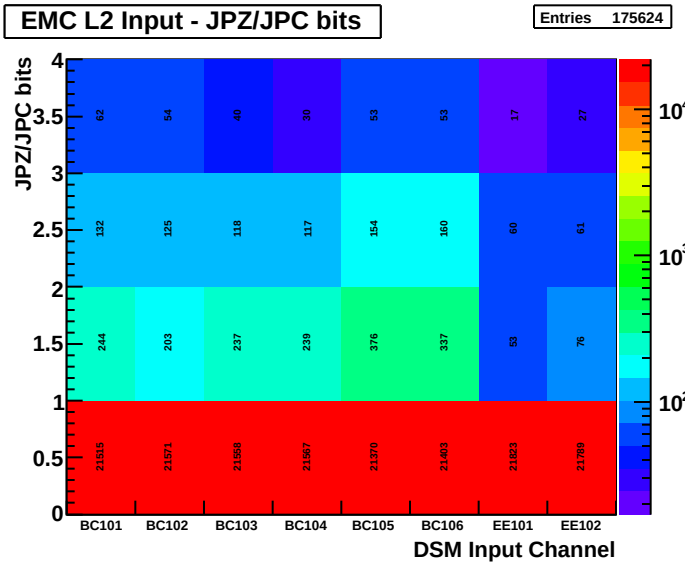

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

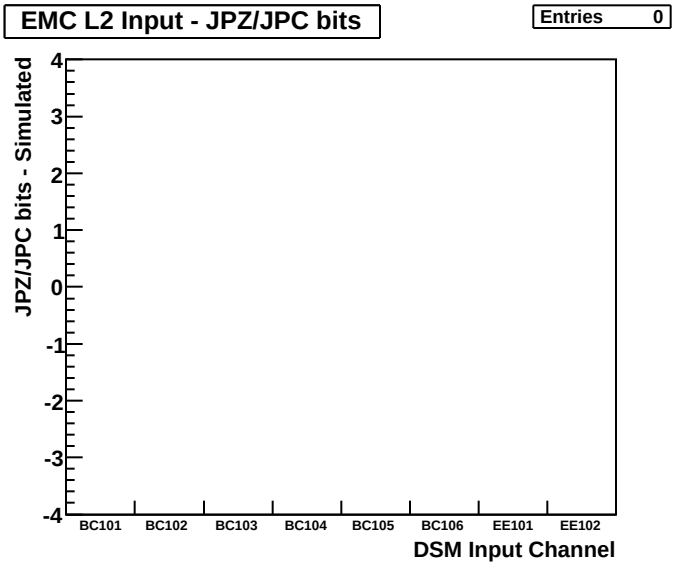

EMC L2 Input - JPX/JPA bits
Entries 175624
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
83 62 51 53 54 56 24 36
234 184 156 138 132 134 57 82
324 331 271 265 269 263 66 38
21312 21376 21475 21497 21498 21500 21806 21797

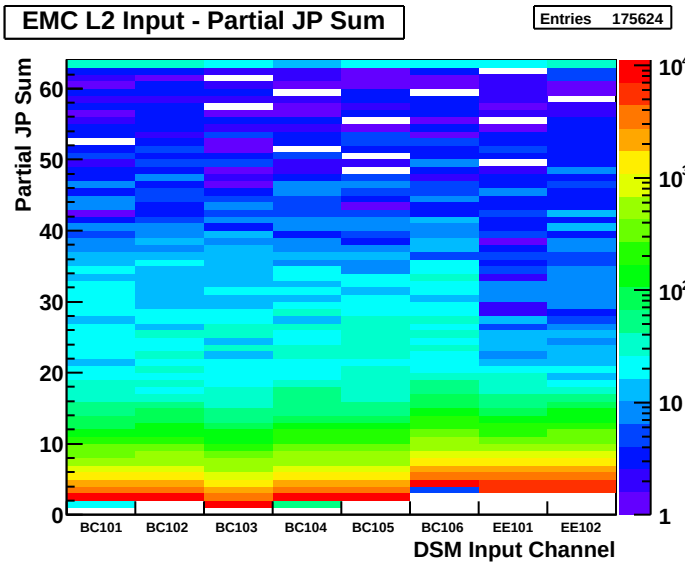

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

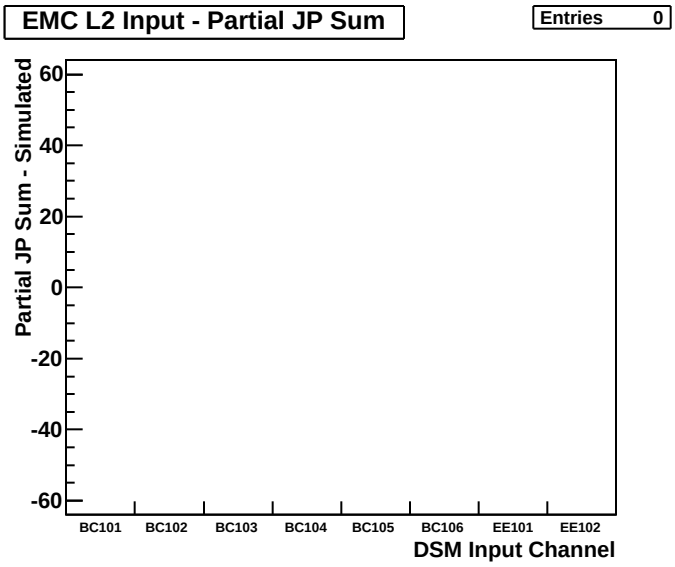

EMC L2 Input - JPY/JPB bits
Entries 175624
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
63 46 55 32 47 58 36 40
176 125 149 112 161 159 56 67
281 215 262 239 374 319 49 58
21433 21567 21487 21570 21371 21417 21812 21768

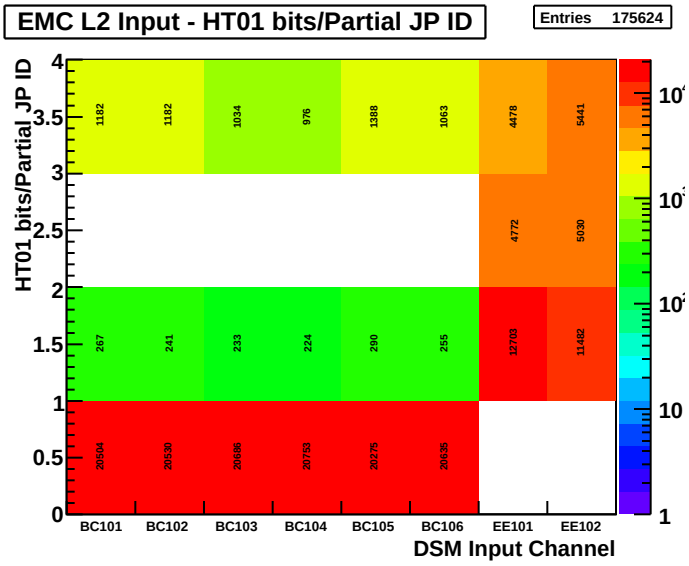

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

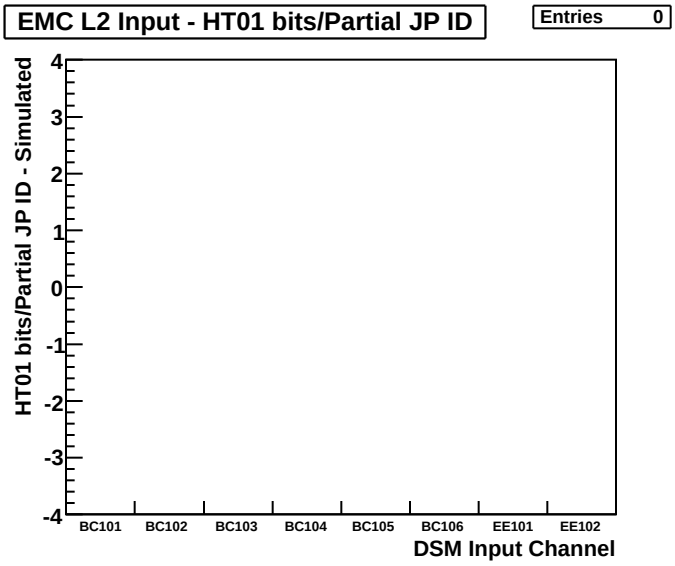

EMC L2 Input - JPZ/JPC bits
Entries 175624
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
62 54 40 30 53 53 17 27
132 125 118 117 154 160 60 61
244 203 237 239 376 337 53 76
21515 21571 21558 21567 21370 21403 21823 21769

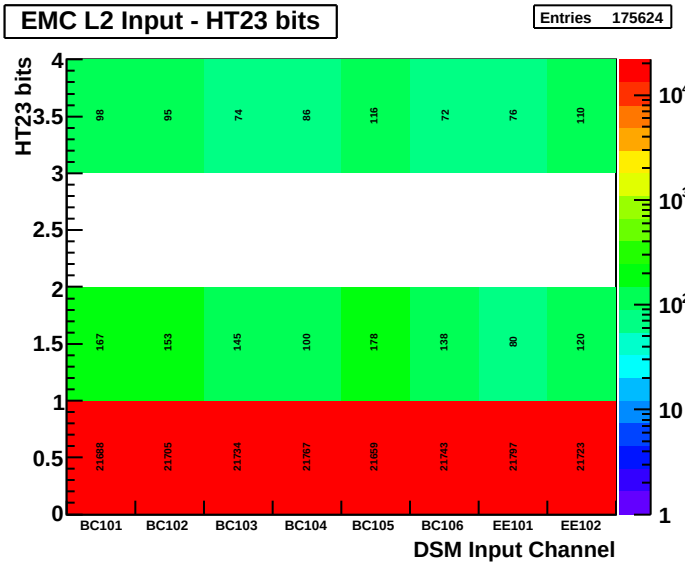

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

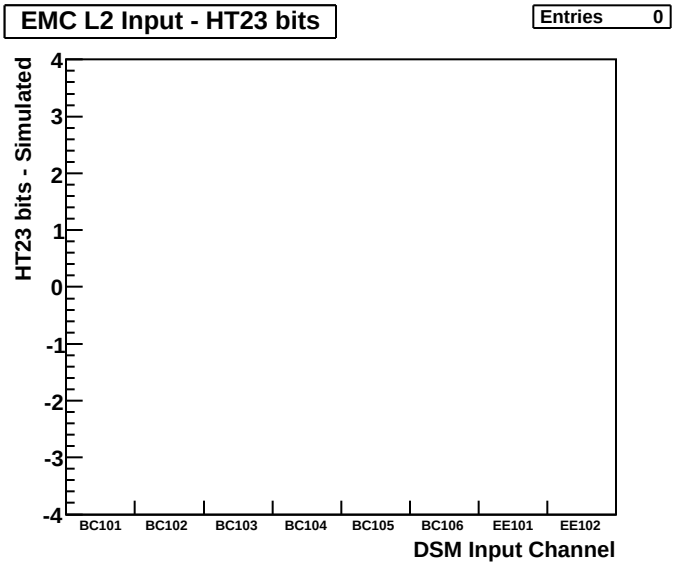

EMC L2 Input - Partial JP Sum
Entries 175624
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

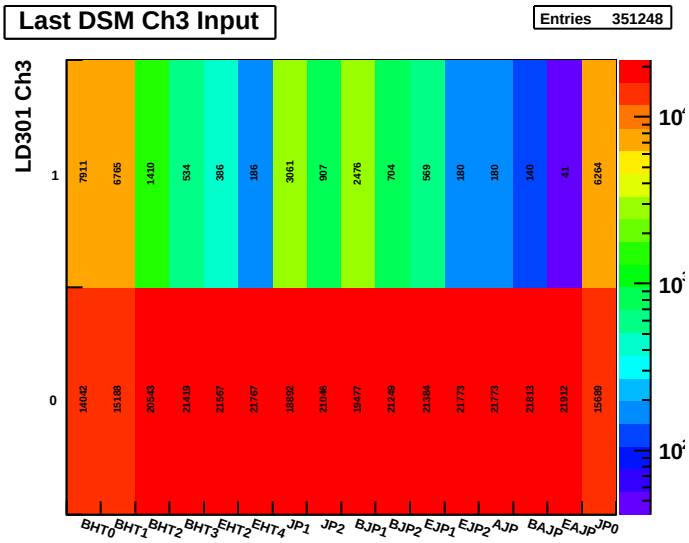

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

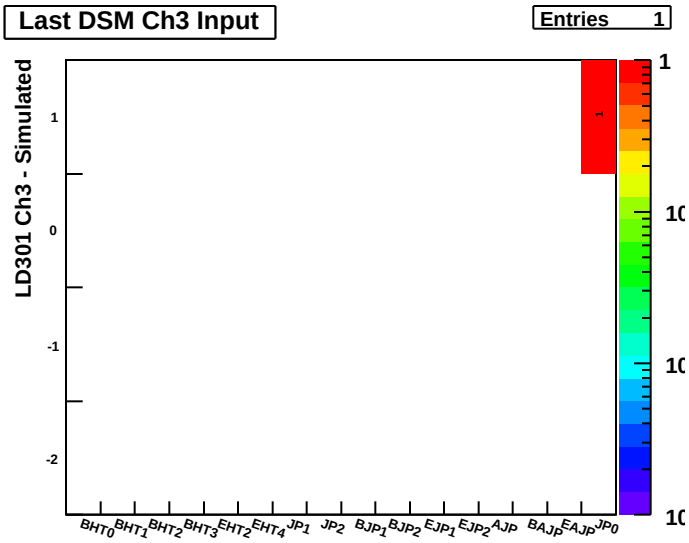

EMC L2 Input - HT01 bits/Partial JP ID
Entries 175624
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

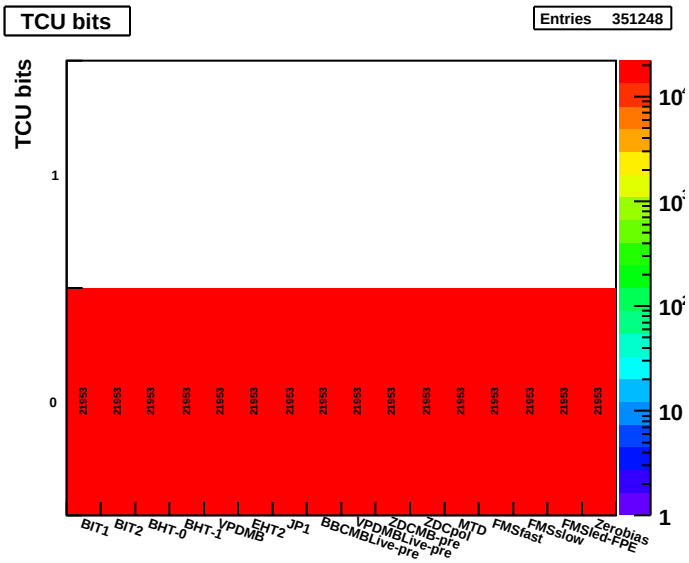

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

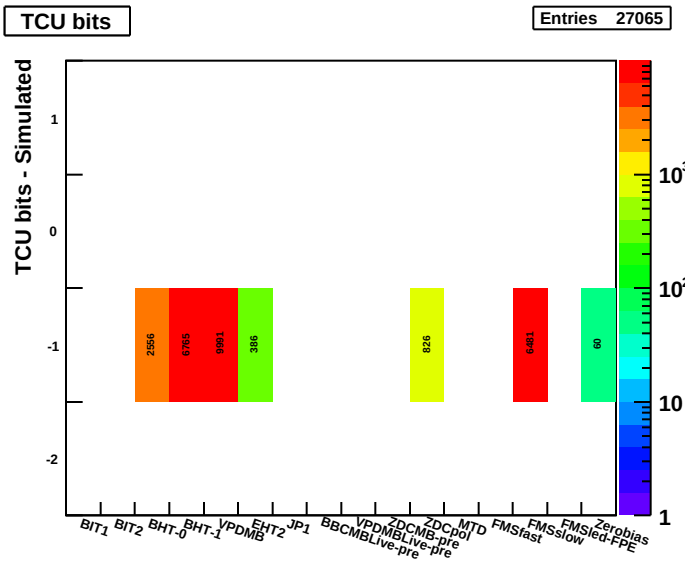

EMC L2 Input - HT23 bits
Entries 175624
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

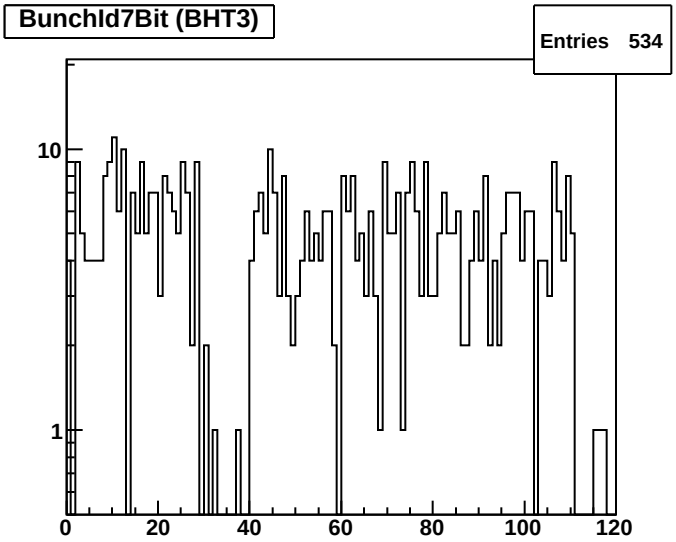

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

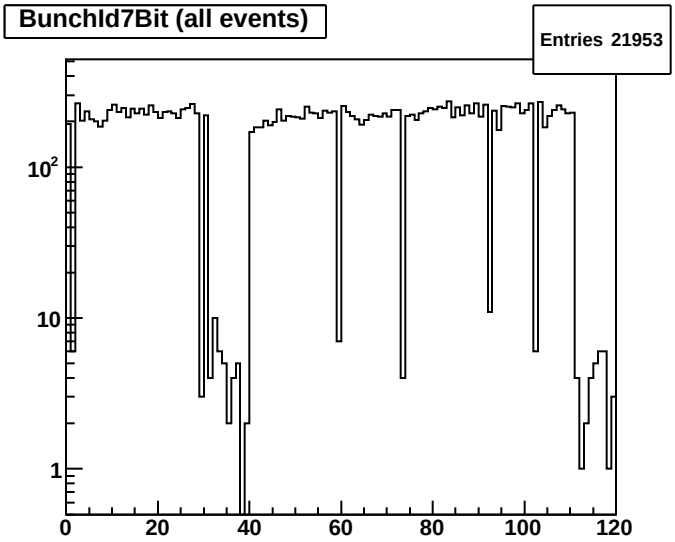

Last DSM Ch3 Input
Entries 351248
LD301 Ch3
7911 6765 1410 534 386 186 3061 907 2476 704 569 180 180 140 41 6264
14042 15188 20543 21419 21567 21767 18892 21046 19477 21249 21384 21773 21773 21813 21912 15689
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

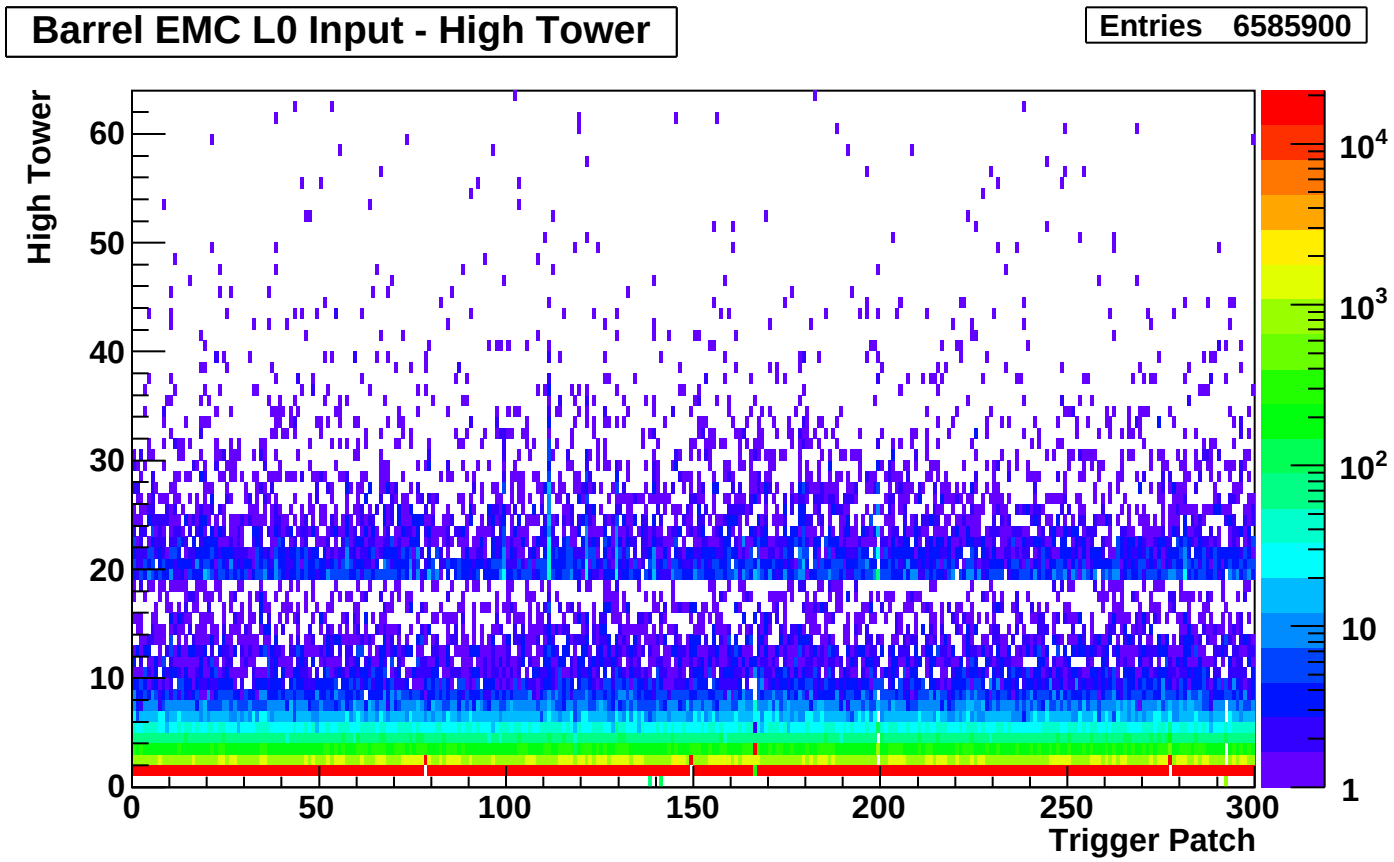

Last DSM Ch3 Input
Entries 1
LD301 Ch3 - Simulated
1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

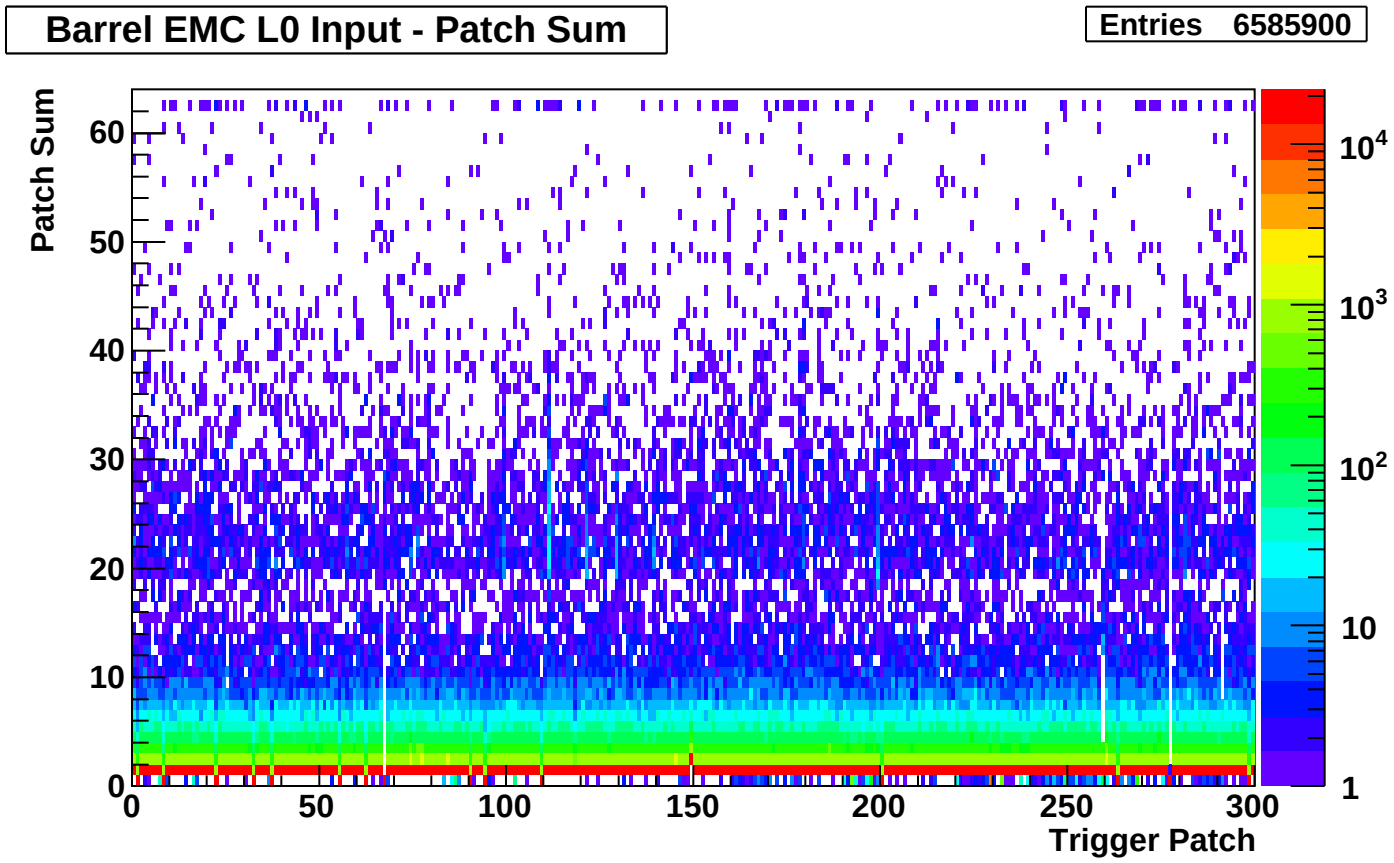

TCU bits
Entries 351248
TCU bits
21953
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

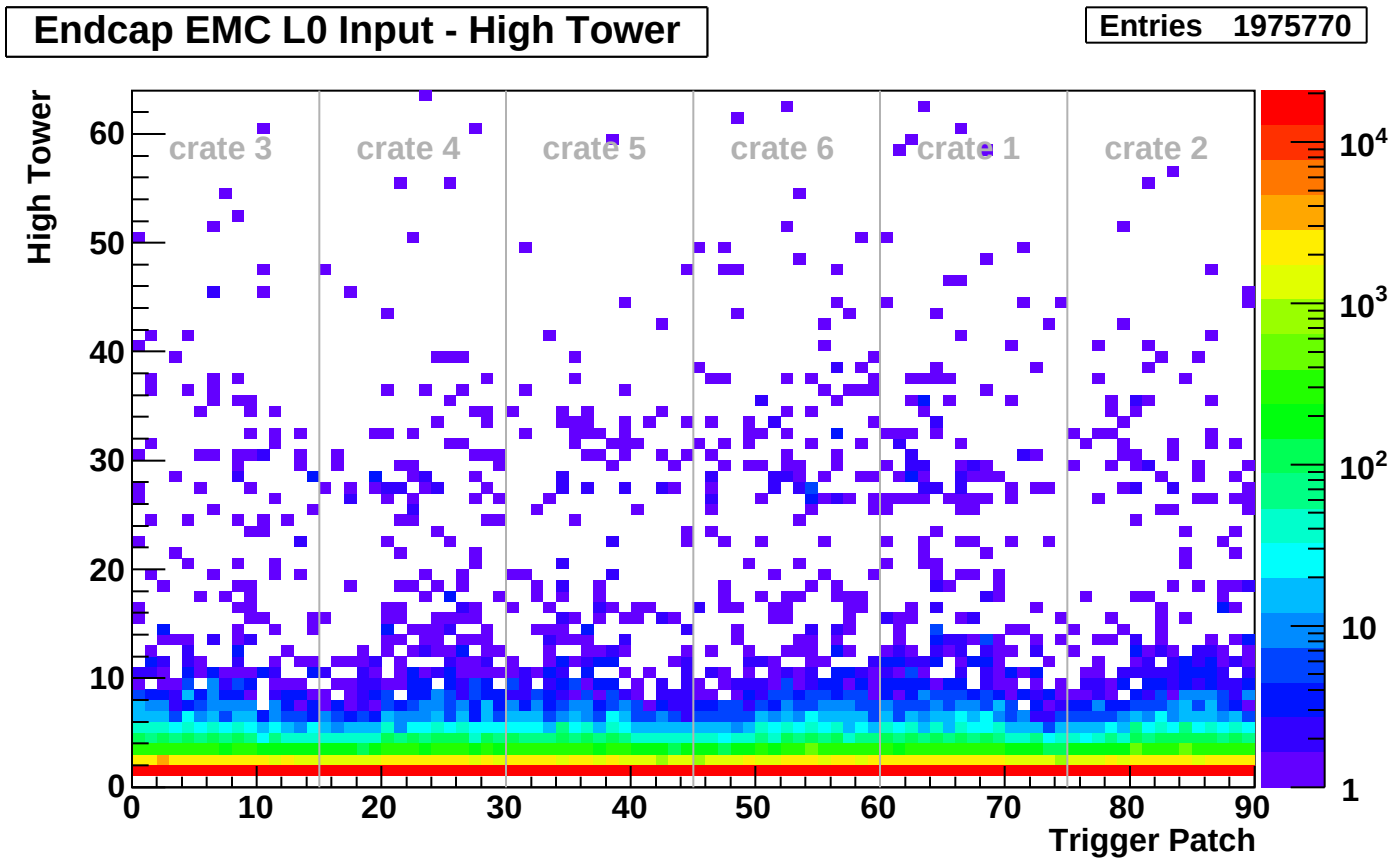

TCU bits
Entries 27065
TCU bits - Simulated
2556 6765 9991 386 826 6481 60
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

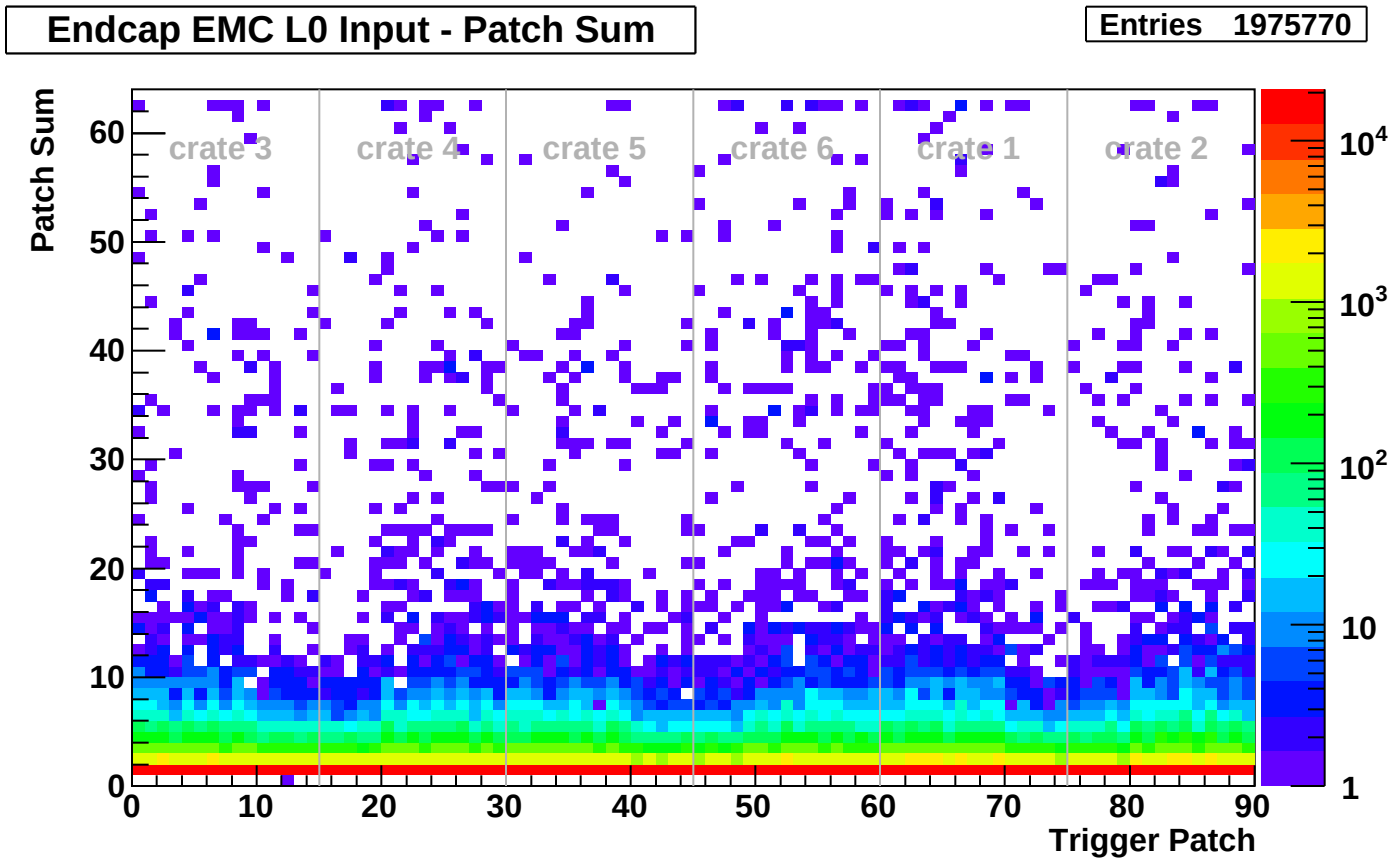

BunchId7Bit (BHT3)
Entries 534

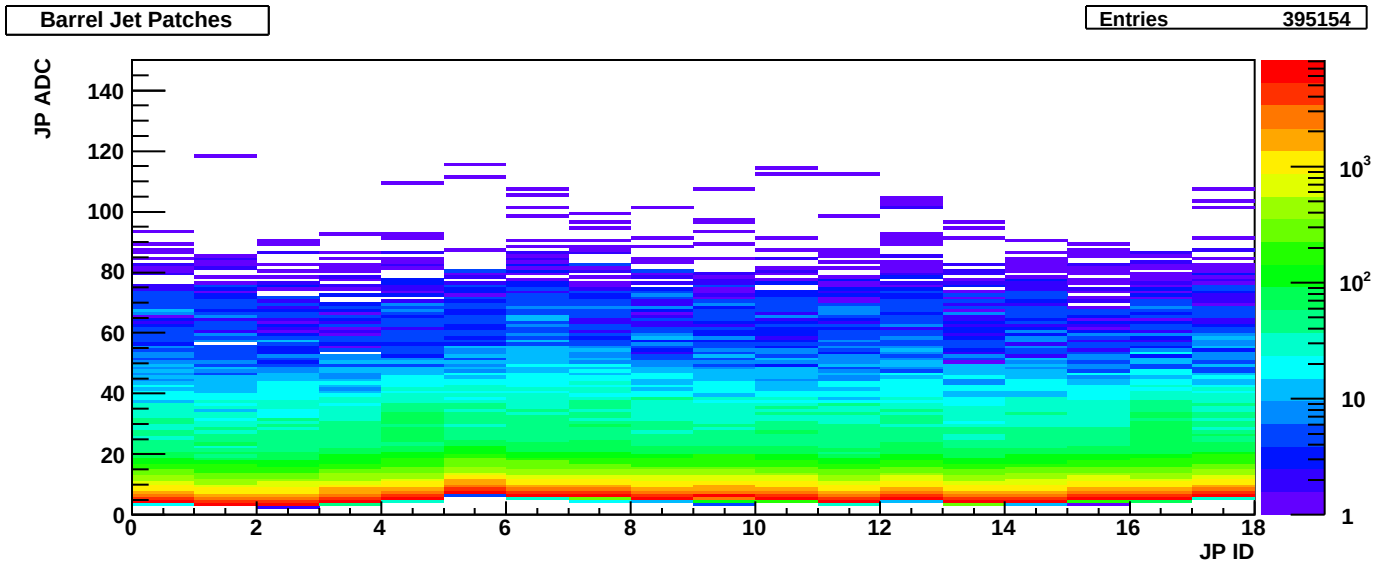

BunchId7Bit (all events)
Entries 21953

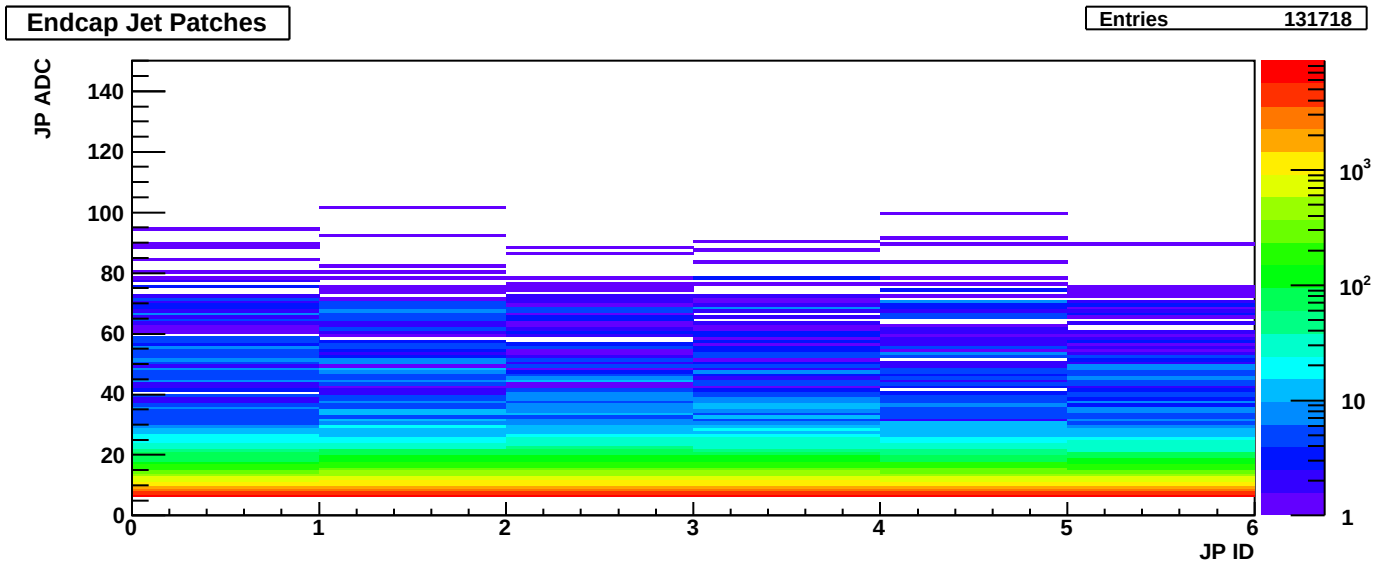

Barrel EMC L0 Input - High Tower
Entries 6585900
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

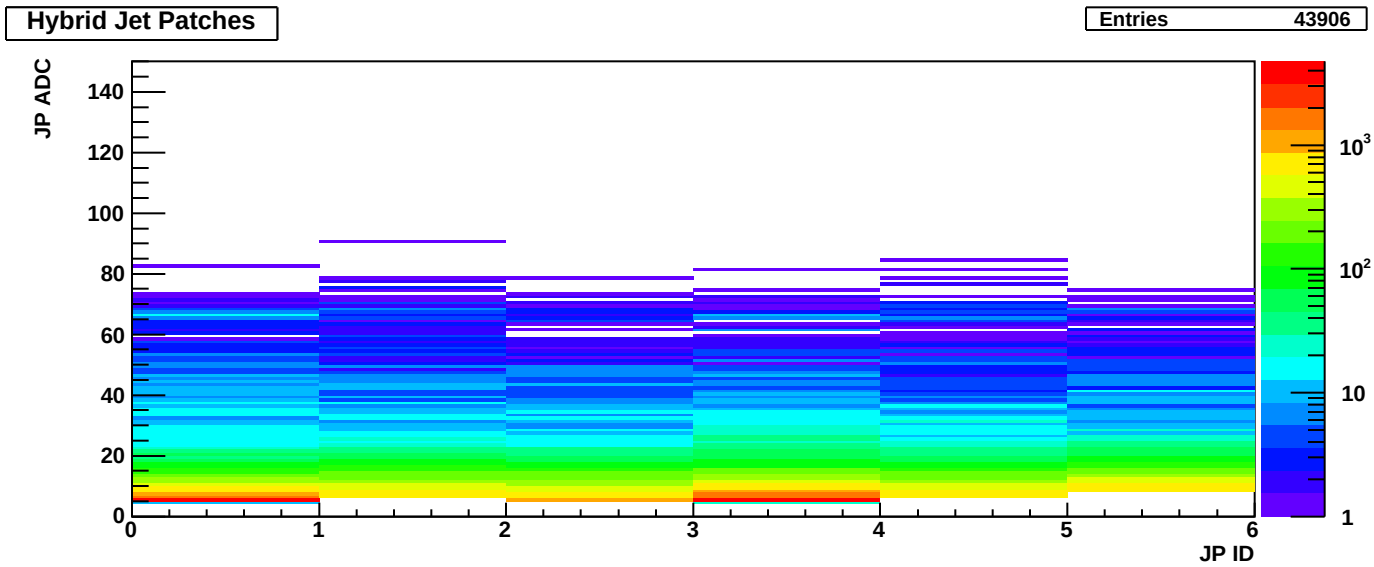

Barrel EMC L0 Input - Patch Sum
Entries 6585900
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

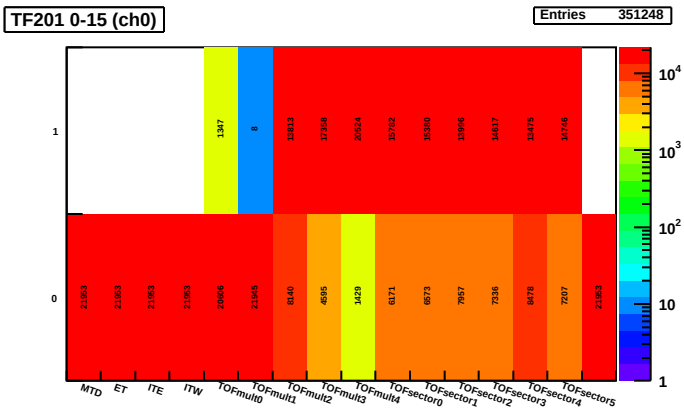

Endcap EMC L0 Input - High Tower
Entries 1975770
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

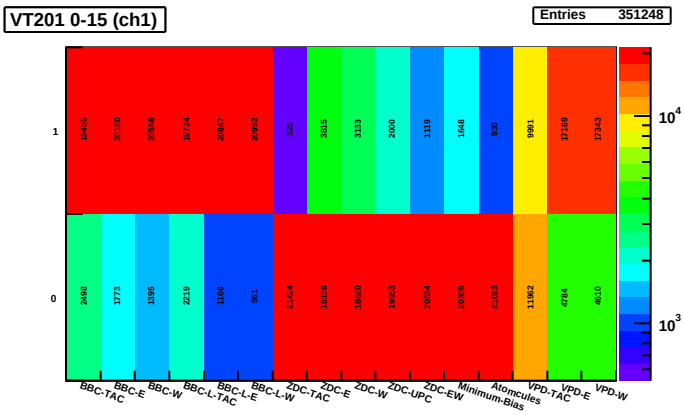

Endcap EMC L0 Input - Patch Sum
Entries 1975770
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

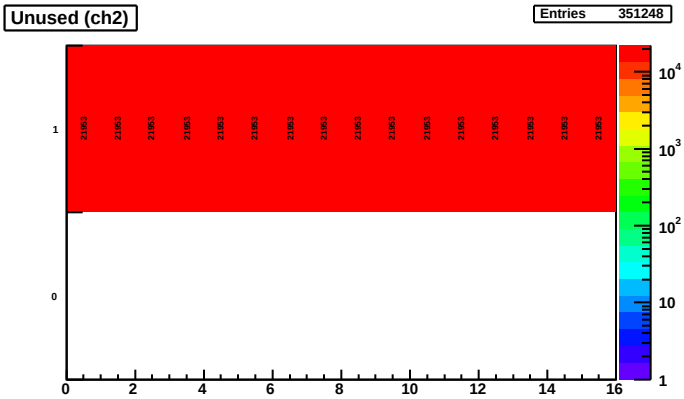

Barrel Jet Patches
Entries 395154
JP ADC
JP ID

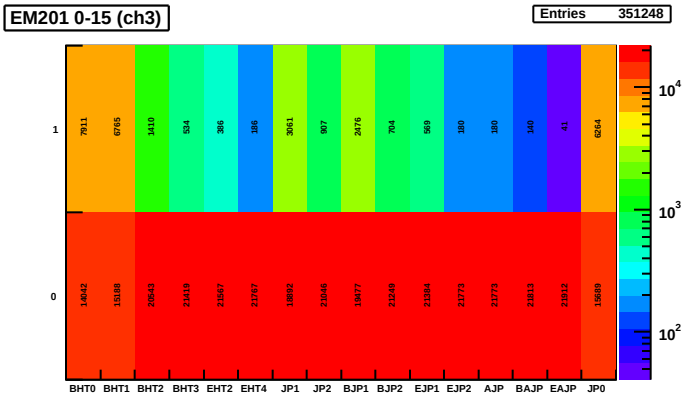

Endcap Jet Patches
Entries 131718
JP ADC
JP ID

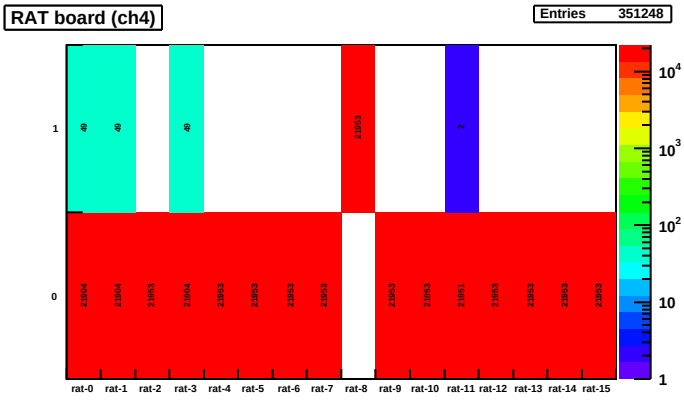

Hybrid Jet Patches
Entries 43906
JP ADC
JP ID

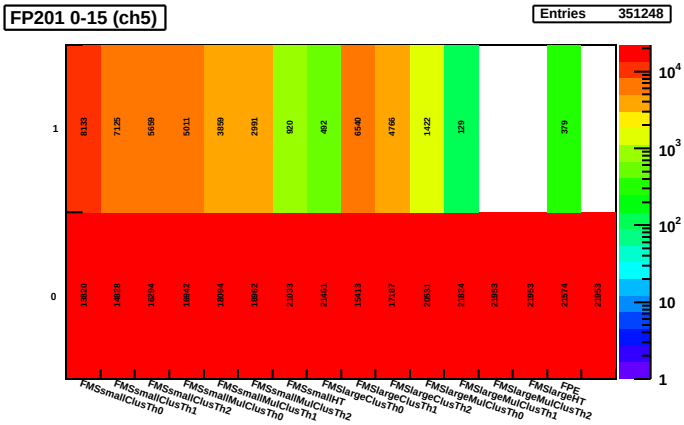

TF201 0-15 (ch0)
Entries 351248
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

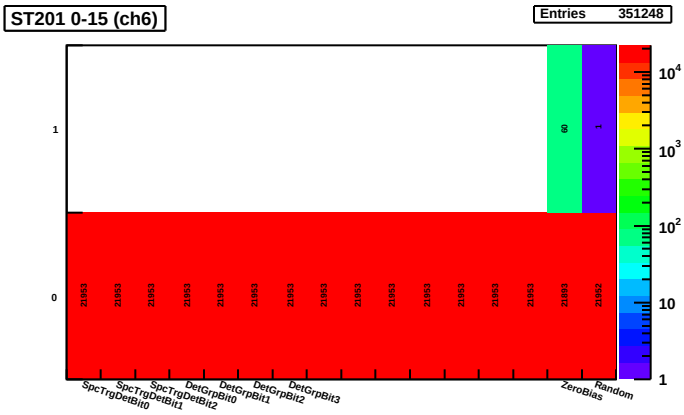

VT201 0-15 (ch1)
Entries 351248
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

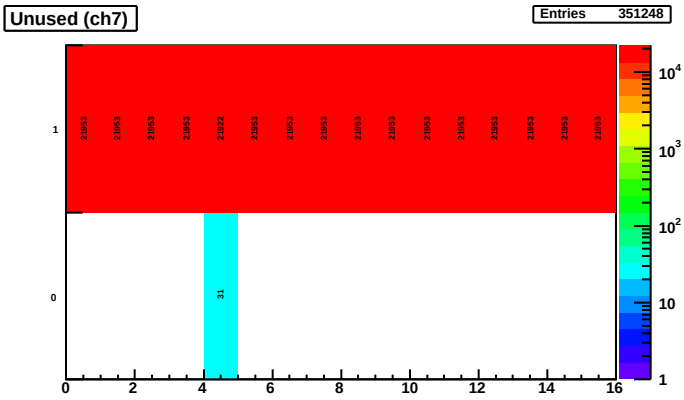

Unused (ch2)
Entries 351248

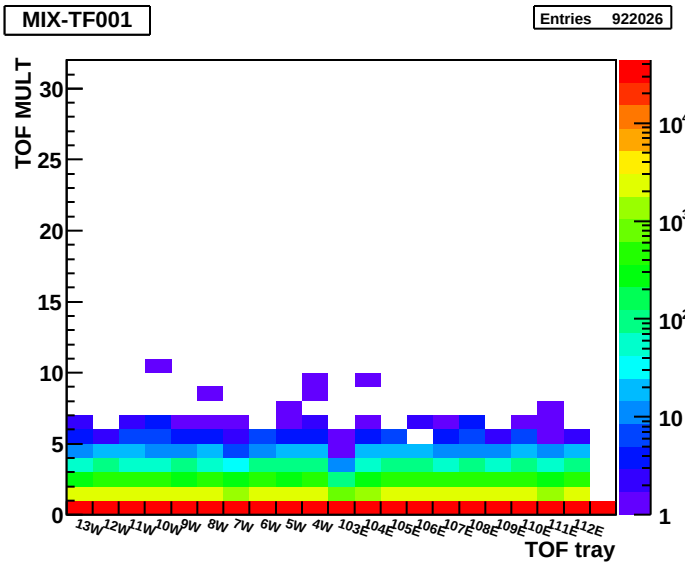

EM201 0-15 (ch3)
Entries 351248
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

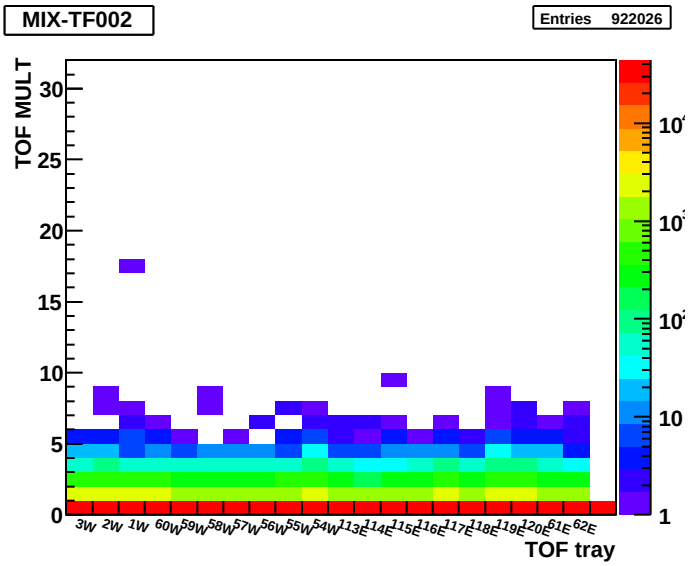

RAT board (ch4)
Entries 351248
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

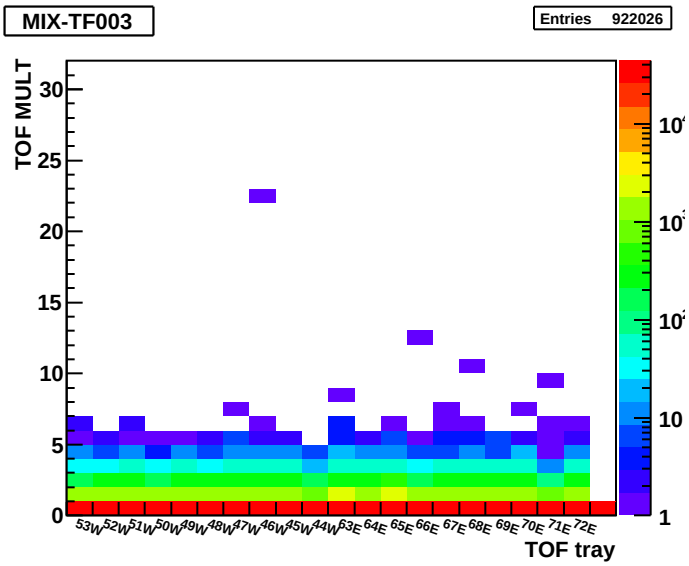

FP201 0-15 (ch5)
Entries 351248
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

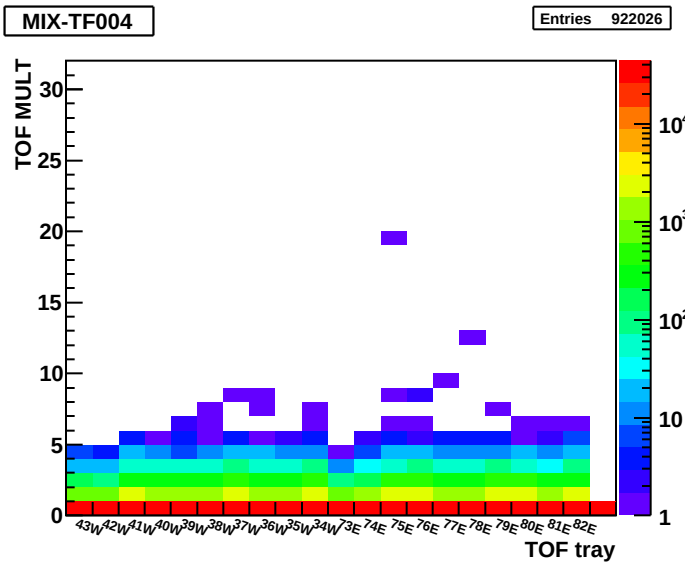

ST201 0-15 (ch6)
Entries 351248
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

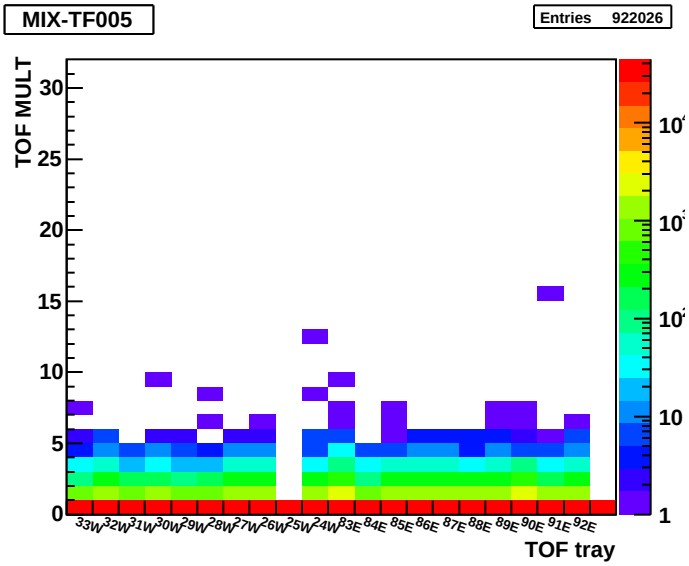

Unused (ch7)
Entries 351248

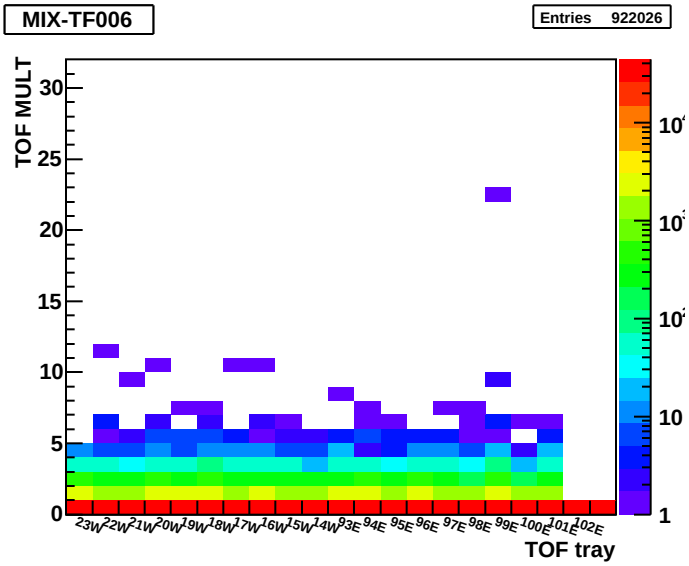

MIX-TF001
Entries 922026
TOF MULT
TOF tray

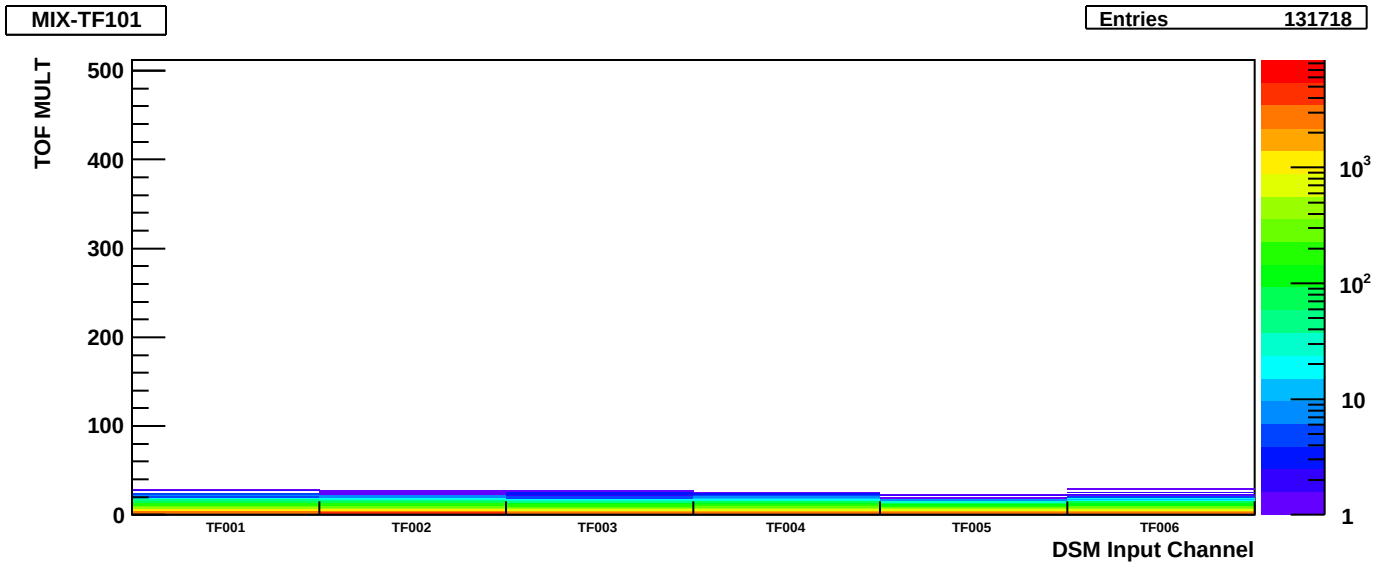

MIX-TF002
Entries 922026
TOF MULT
TOF tray

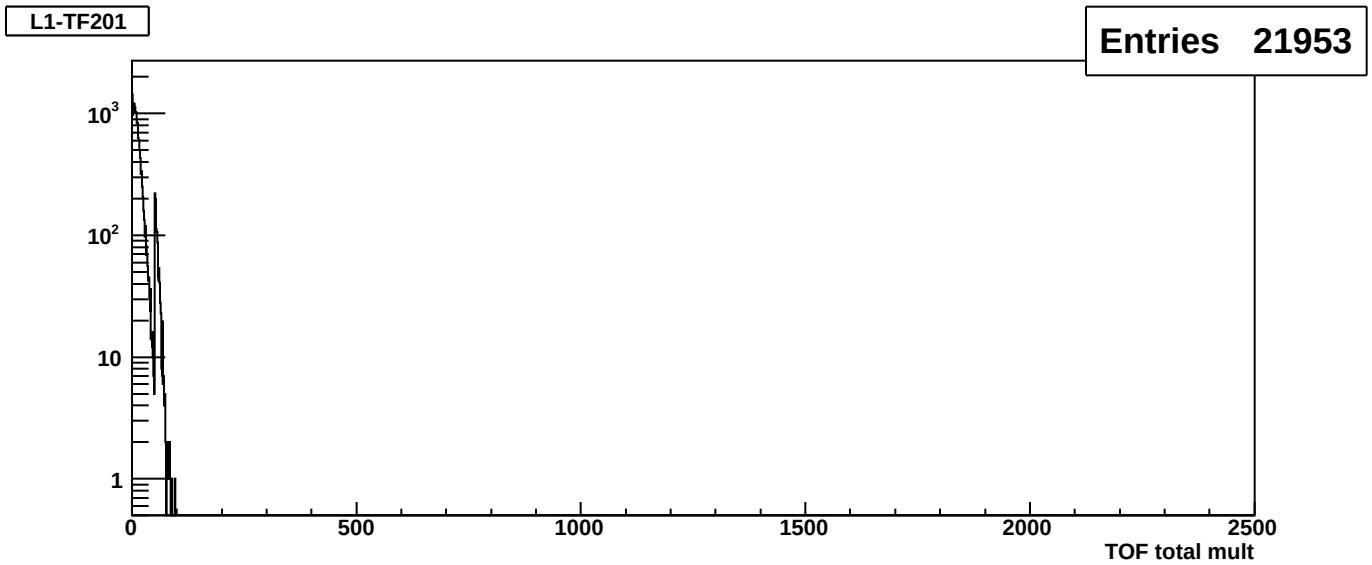

MIX-TF003
Entries 922026
TOF MULT
TOF tray

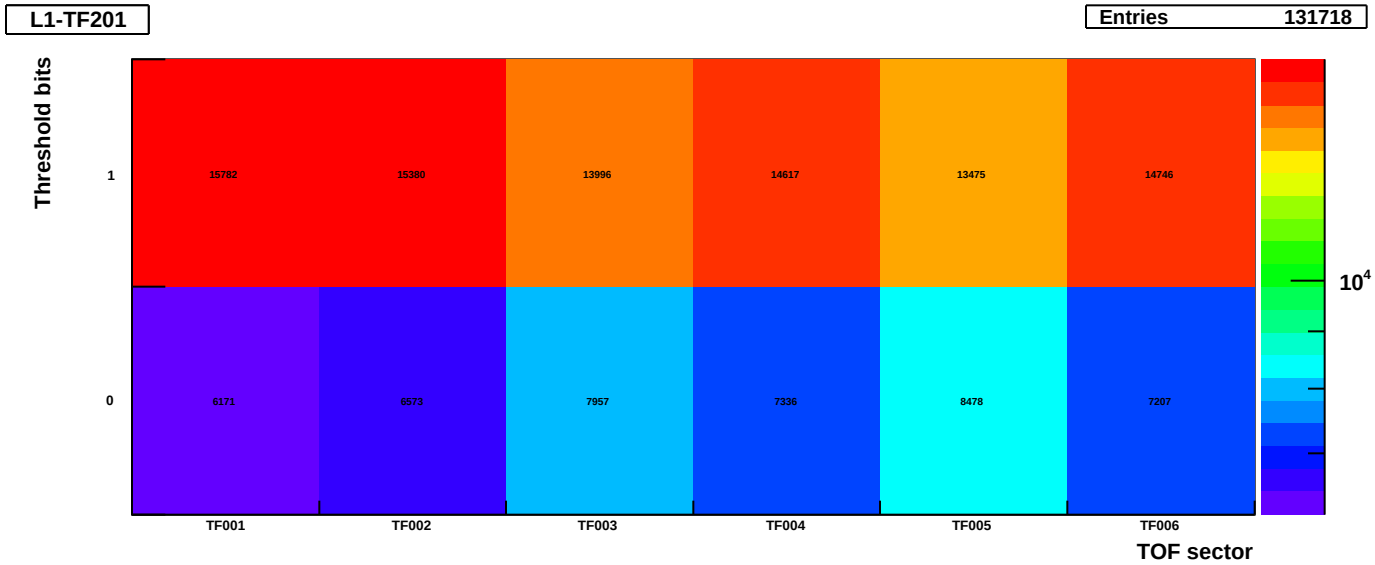

MIX-TF004
Entries 922026
TOF MULT
TOF tray

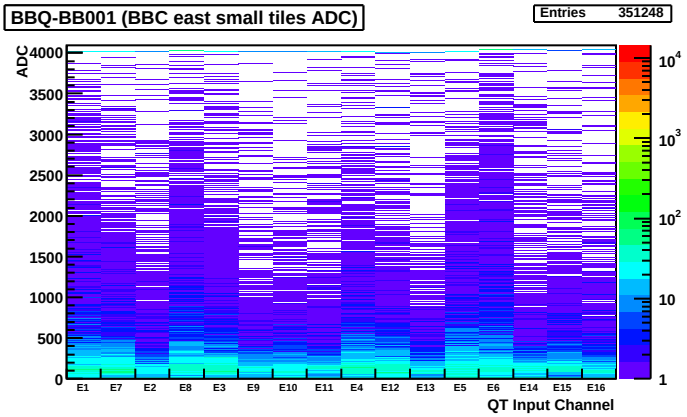

MIX-TF005
Entries 922026
TOF MULT
TOF tray

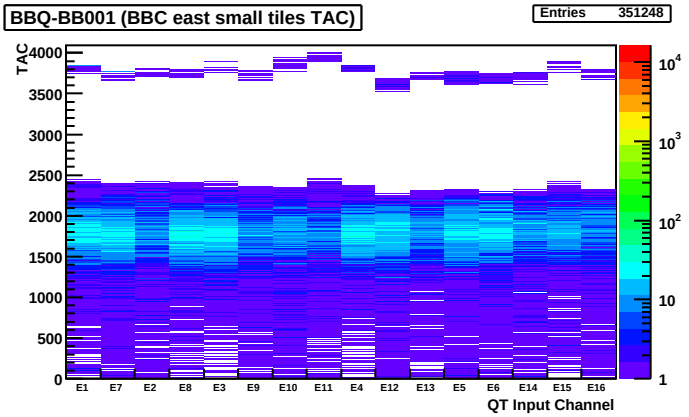

MIX-TF006
Entries 922026
TOF MULT
TOF tray

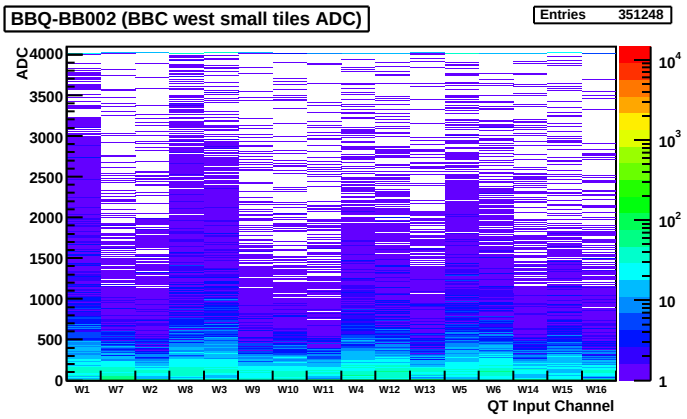

MIX-TF101
Entries 131718
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

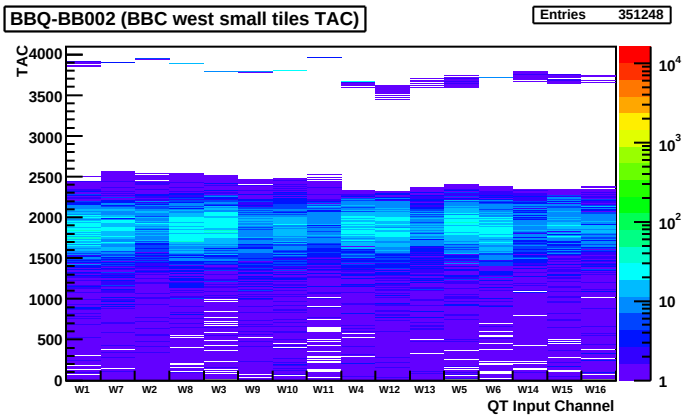

L1-TF201
Entries 21953
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

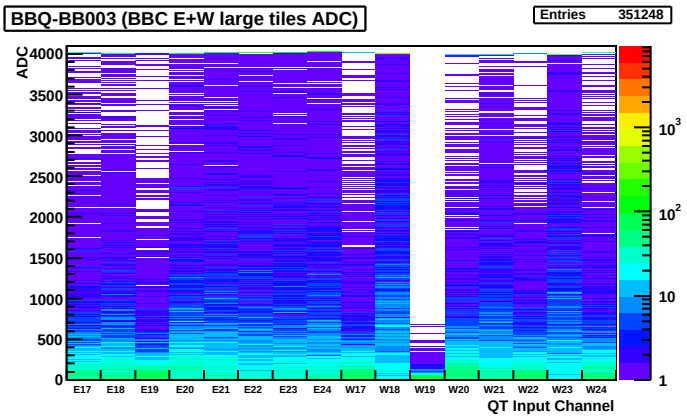

L1-TF201
Entries 131718
Threshold bits
1
0
15782
15380
13996
14617
13475
14746
6171
6573
7957
7336
8478
7207
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4

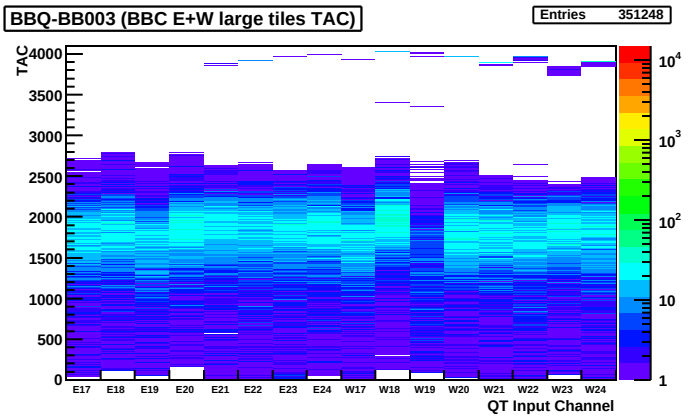

BBQ-BB001 (BBC east small tiles ADC)
Entries 351248
ADC
QT Input Channel

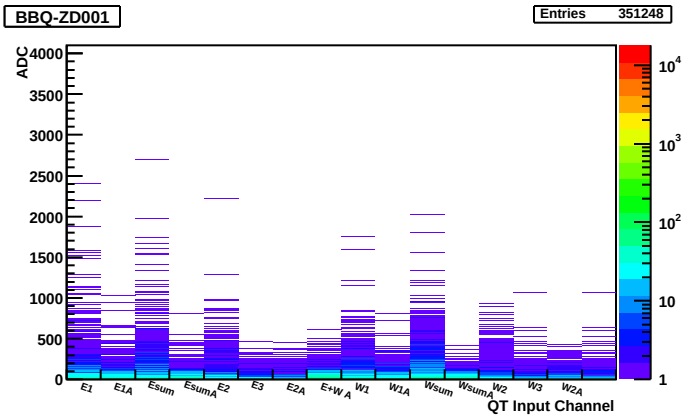

BBQ-BB001 (BBC east small tiles TAC)
Entries 351248
TAC
QT Input Channel

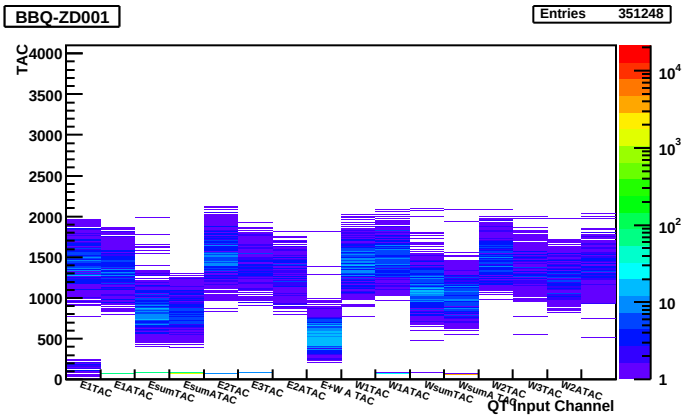

BBQ-BB002 (BBC west small tiles ADC)
Entries 351248
ADC
QT Input Channel

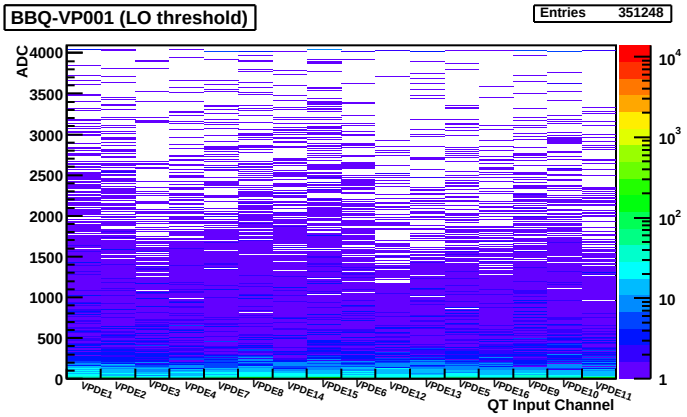

BBQ-BB002 (BBC west small tiles TAC)
Entries 351248
TAC
QT Input Channel

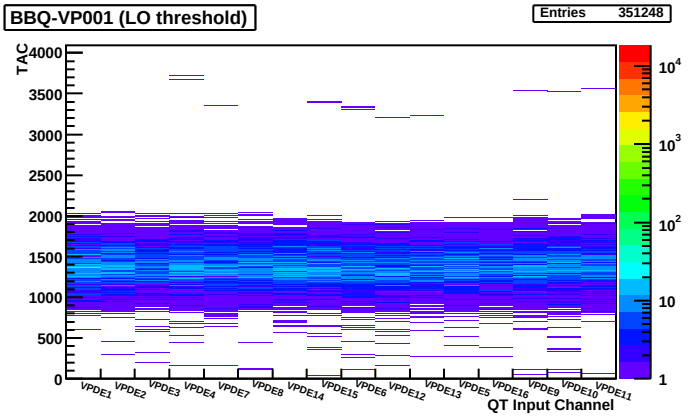

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 351248
ADC
QT Input Channel

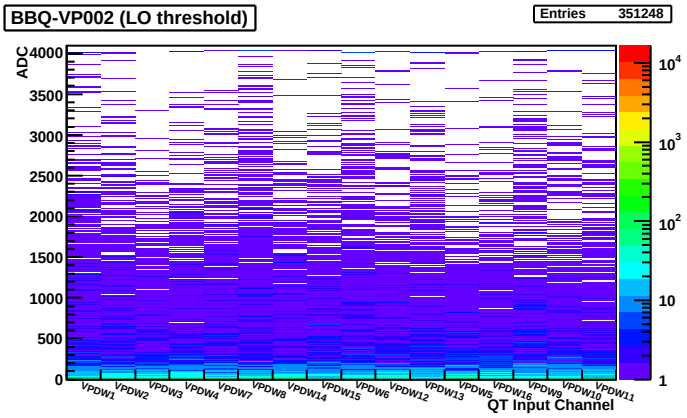

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 351248
TAC
QT Input Channel

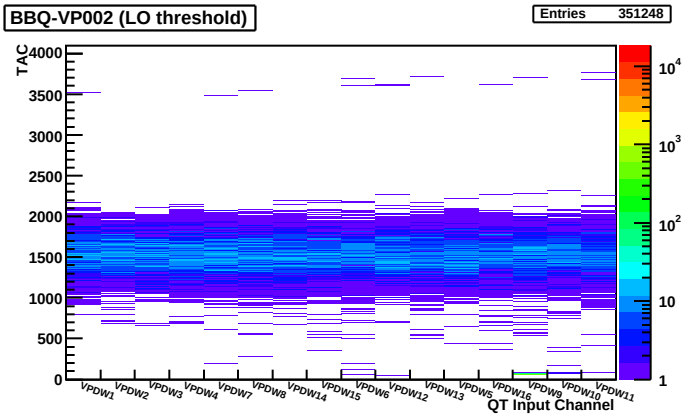

BBQ-ZD001
Entries 351248
ADC
QT Input Channel

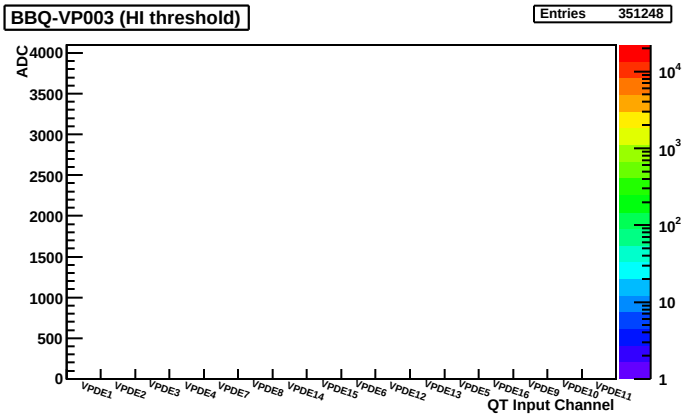

BBQ-ZD001
Entries 351248
TAC
QT Input Channel

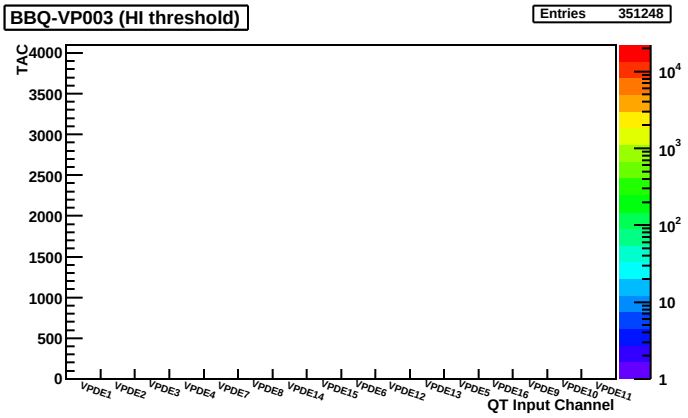

BBQ-VP001 (LO threshold)
Entries 351248
ADC
QT Input Channel

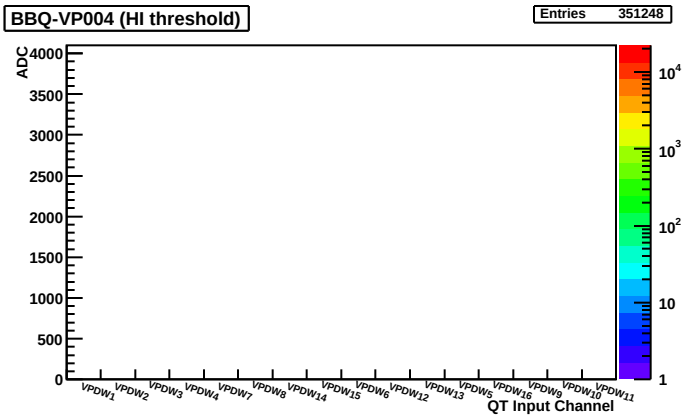

BBQ-VP001 (LO threshold)
Entries 351248
TAC
QT Input Channel

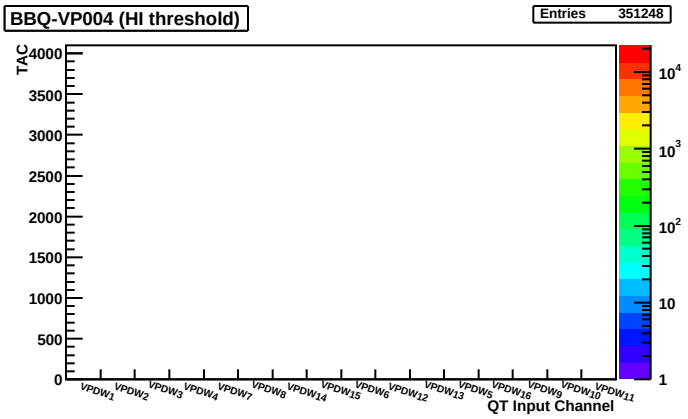

BBQ-VP002 (LO threshold)
Entries 351248
ADC
QT Input Channel

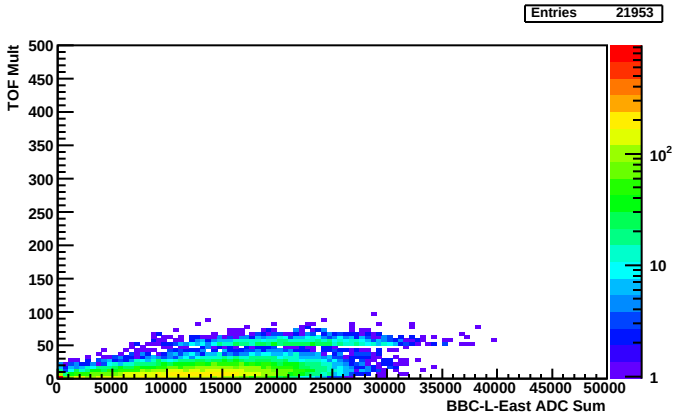

BBQ-VP002 (LO threshold)
Entries 351248
TAC
QT Input Channel

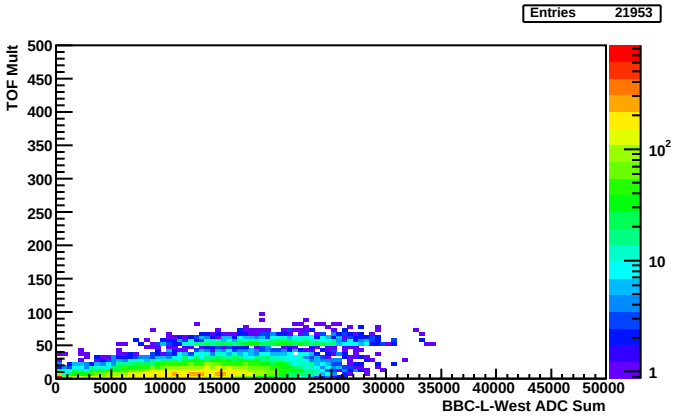

BBQ-VP003 (HI threshold)
Entries 351248
ADC
QT Input Channel

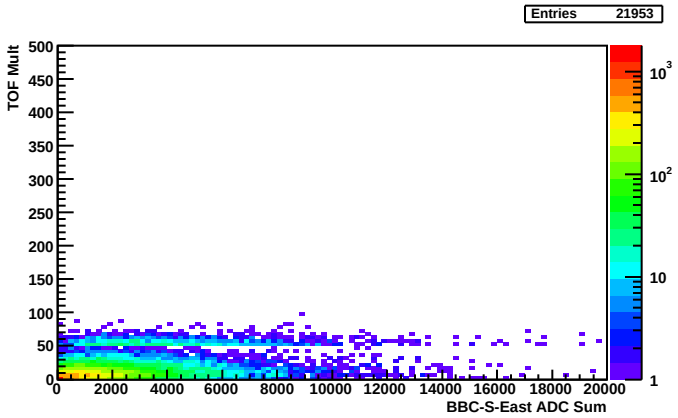

BBQ-VP003 (HI threshold)
Entries 351248
TAC
QT Input Channel

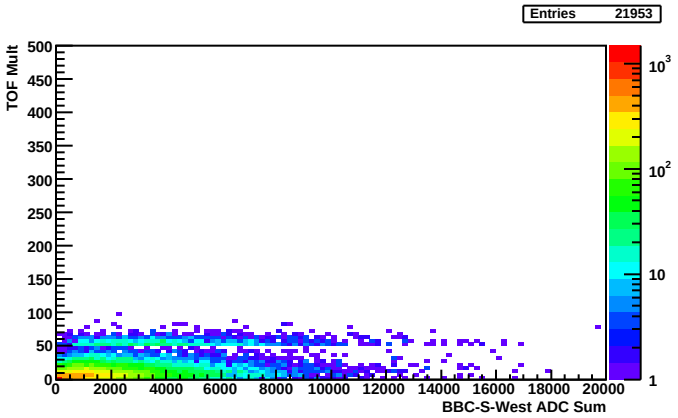

BBQ-VP004 (HI threshold)
Entries 351248
ADC
QT Input Channel

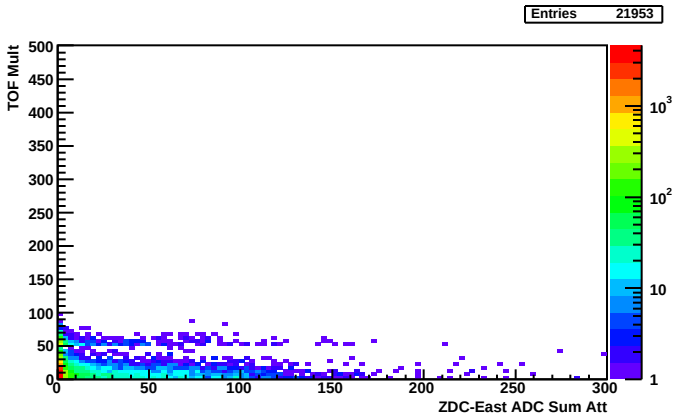

BBQ-VP004 (HI threshold)
Entries 351248
TAC
QT Input Channel

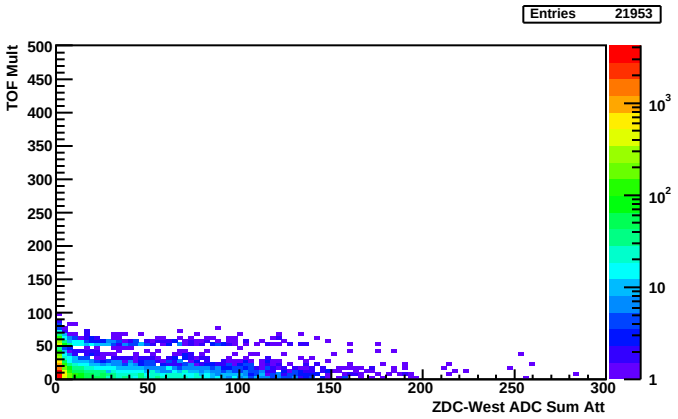

Entries 21953
TOF Mult
BBC-L-East ADC Sum

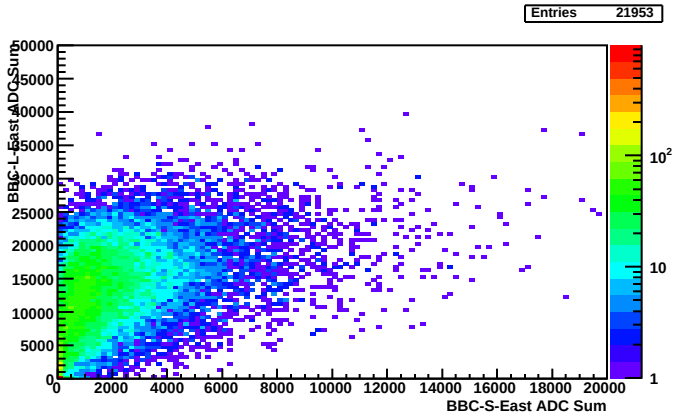

Entries 21953
TOF Mult
BBC-L-West ADC Sum

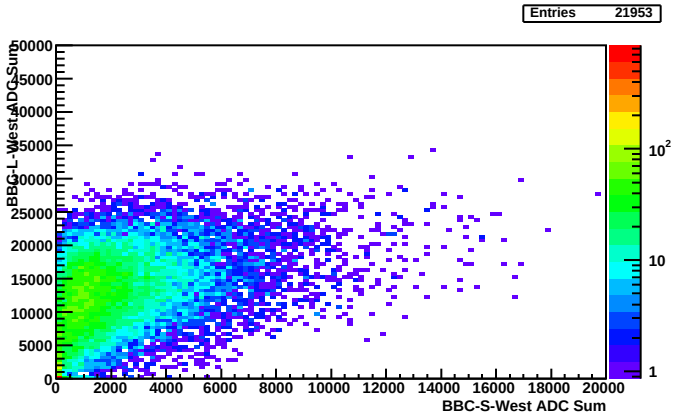

Entries 21953
TOF Mult
BBC-S-East ADC Sum

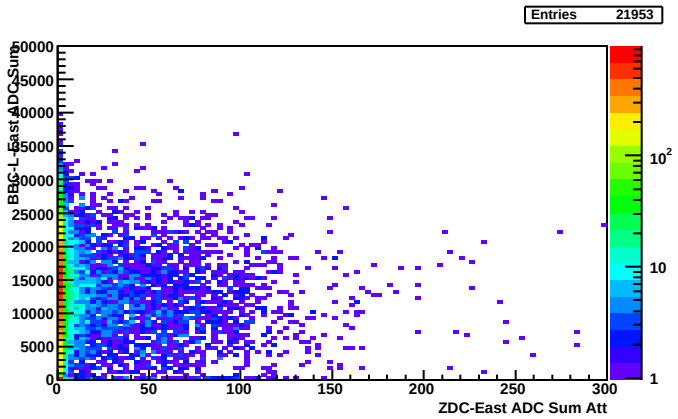

Entries 21953
TOF Mult
BBC-S-West ADC Sum

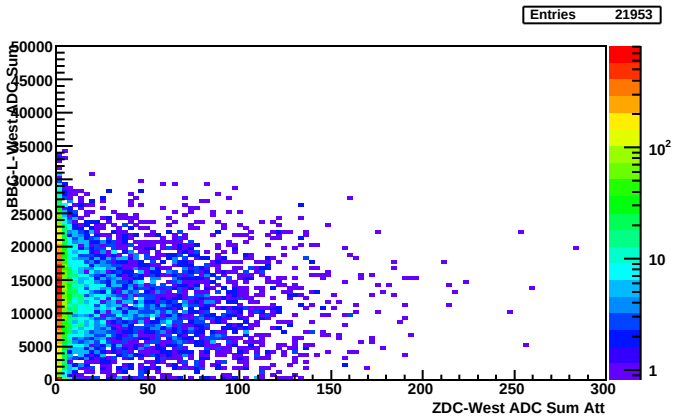

Entries 21953
TOF Mult
ZDC-East ADC Sum Att

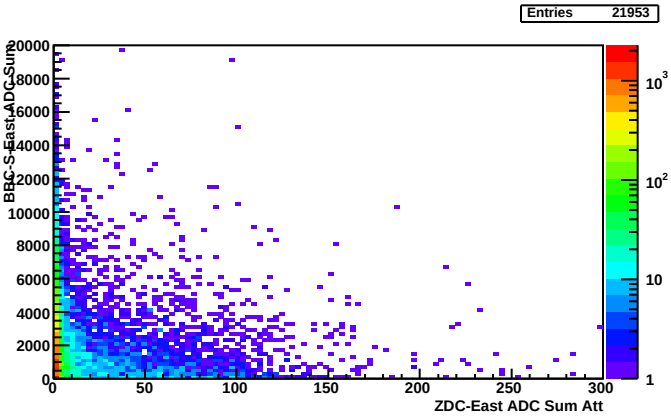

Entries 21953
TOF Mult
ZDC-West ADC Sum Att

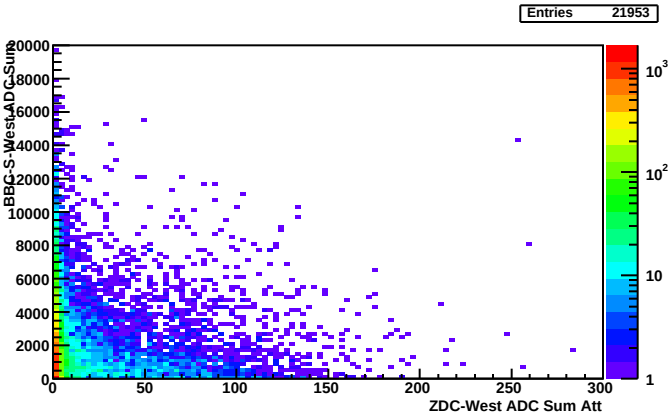

Entries 21953
BBC-L-East ADC Sum
BBC-S-East ADC Sum

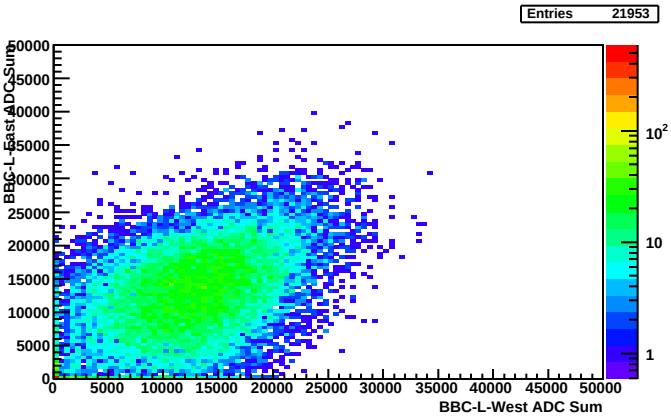

Entries 21953
BBC-L-West ADC Sum
BBC-S-West ADC Sum

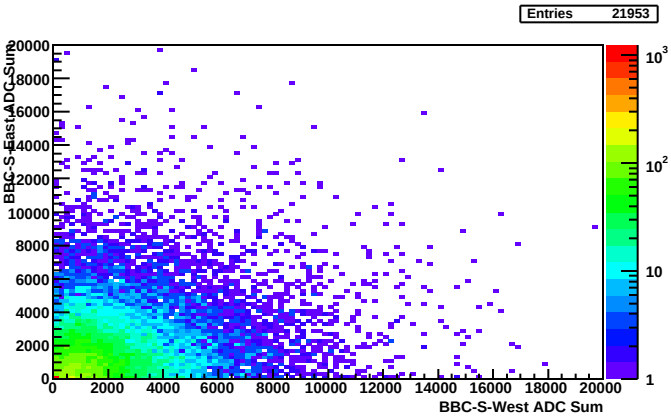

Entries 21953
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

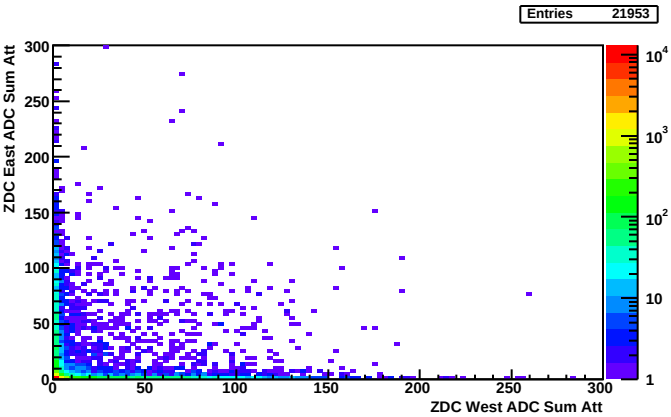

Entries 21953
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

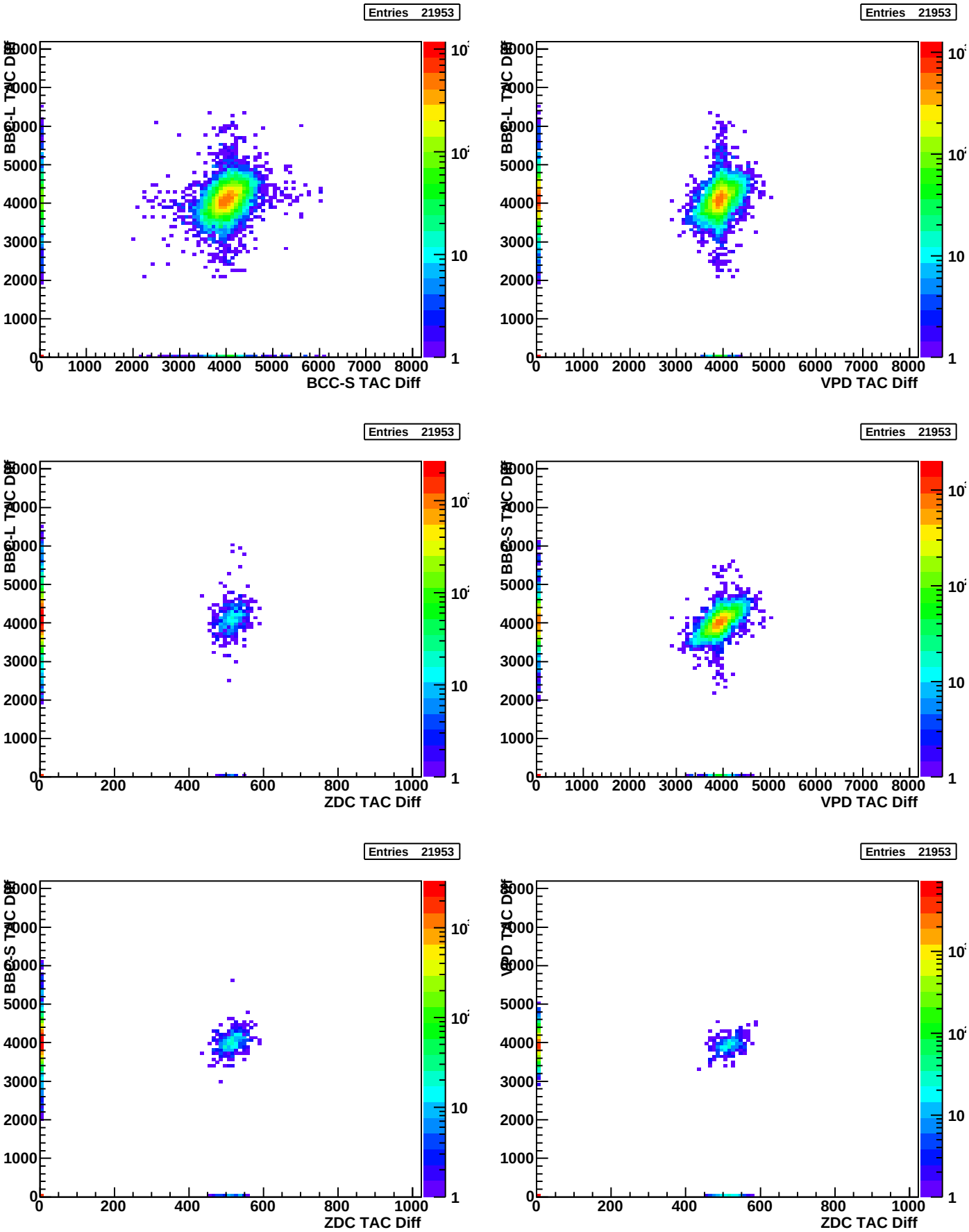

Entries 21953
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

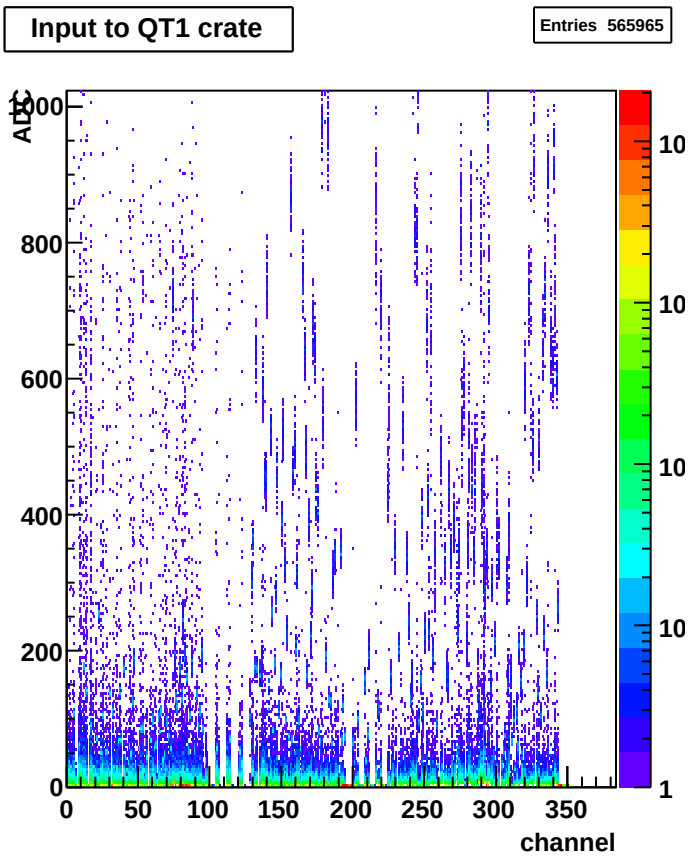

Entries 21953
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

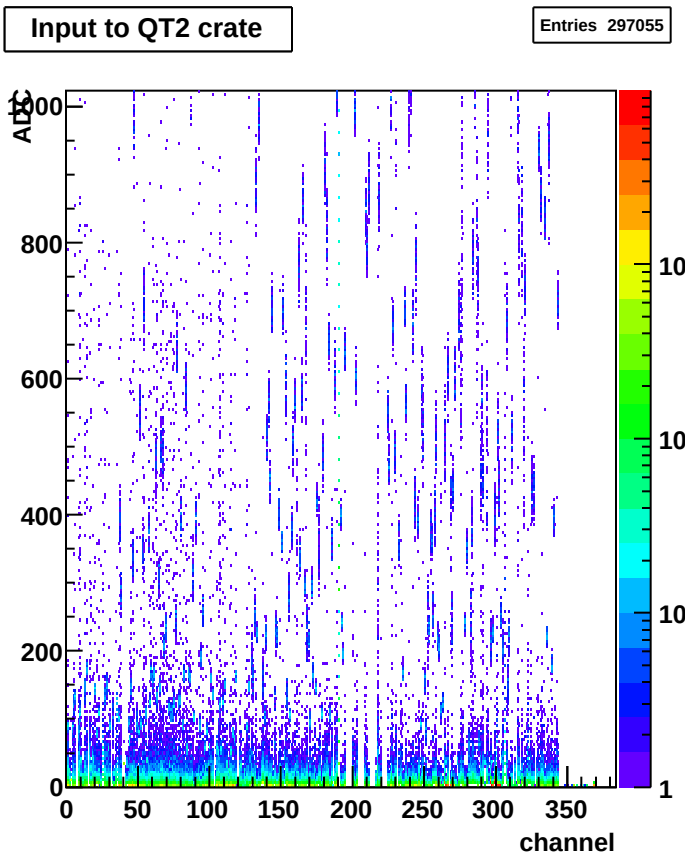

Entries 21953
BBC-L-East ADC Sum
BBC-L-West ADC Sum

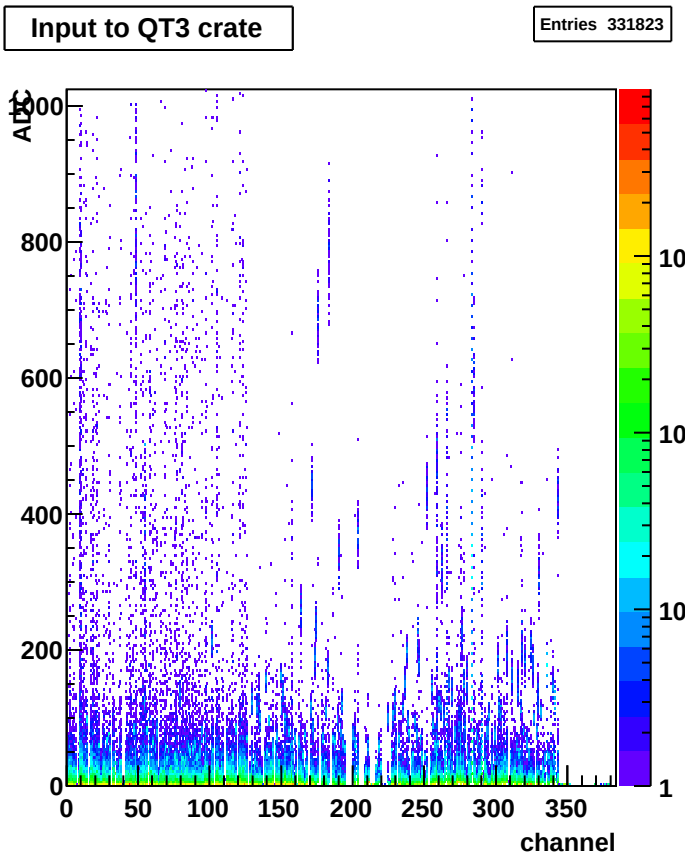

Entries 21953
BBC-S-East ADC Sum
BBC-S-West ADC Sum

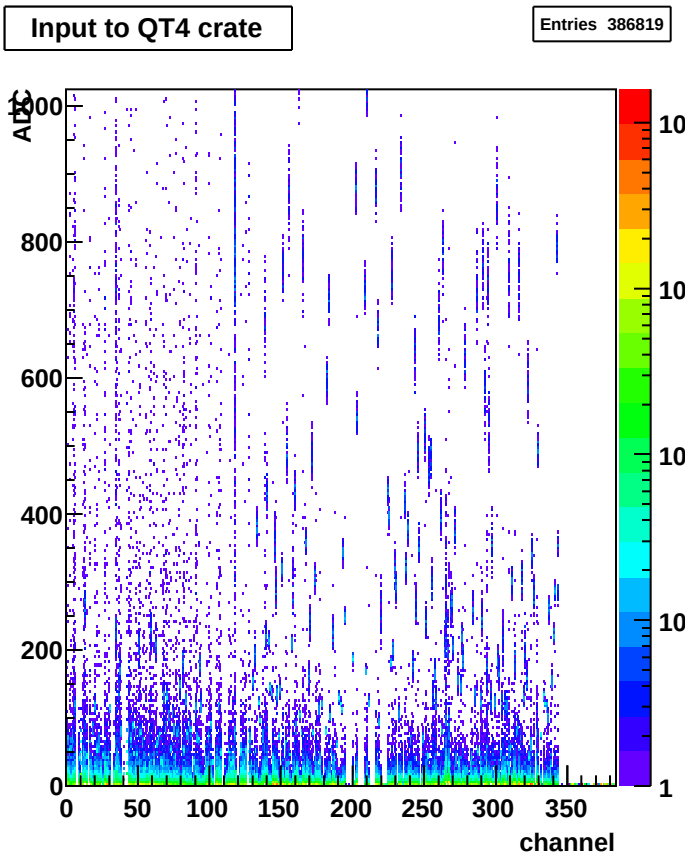

Entries 21953
ZDC East ADC Sum Att
ZDC West ADC Sum Att

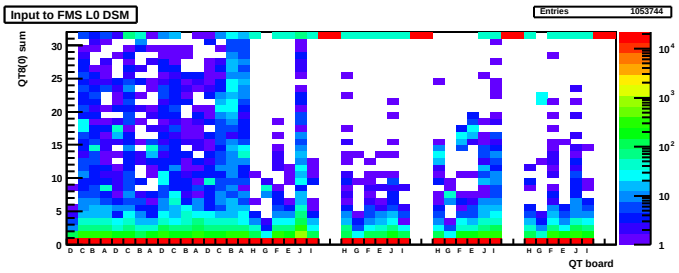

Entries 21953
BBC-L TAC Diff
BCC-S TAC Diff
Entries 21953
BBC-L TAC Diff
VPD TAC Diff
Entries 21953
BBC-L TAC Diff
ZDC TAC Diff
Entries 21953
BBC-S TAC Diff
VPD TAC Diff
Entries 21953
BBC-S TAC Diff
ZDC TAC Diff
Entries 21953
VPD TAC Diff
ZDC TAC Diff

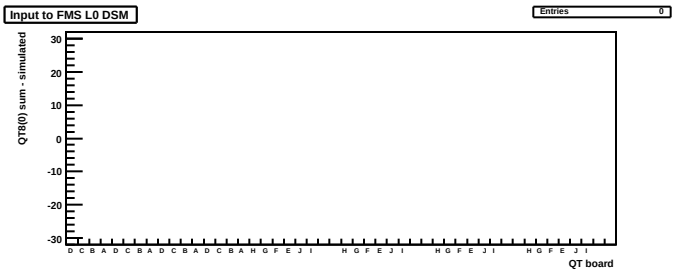

Input to QT1 crate
Entries 565965
ADC
channel

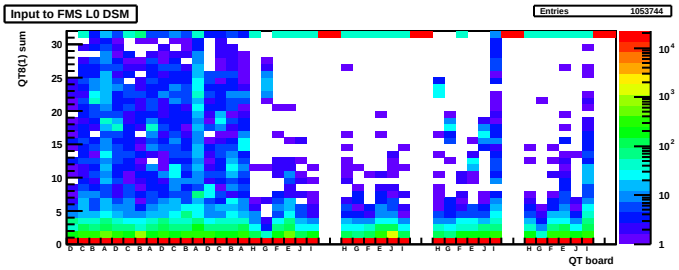

Input to QT2 crate
Entries 297055
ADC
channel

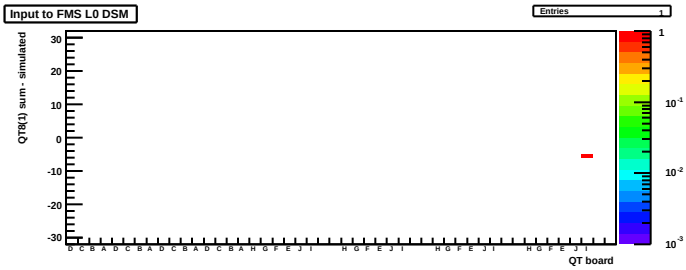

Input to QT3 crate
Entries 331823
ADC
channel

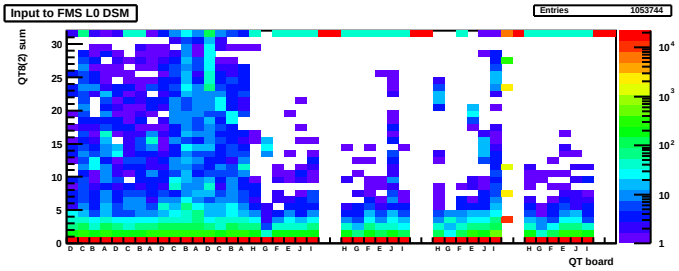

Input to QT4 crate
Entries 386819
ADC
channel

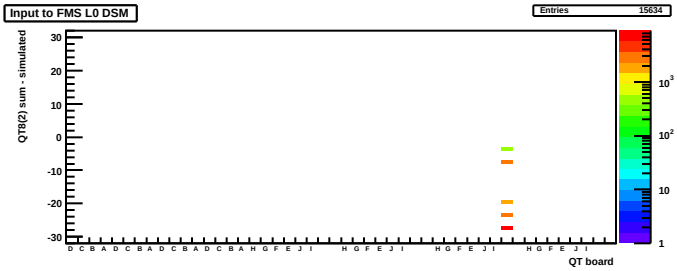

Input to FMS L0 DSM
Entries 1053744
QT8(0) sum
QT board

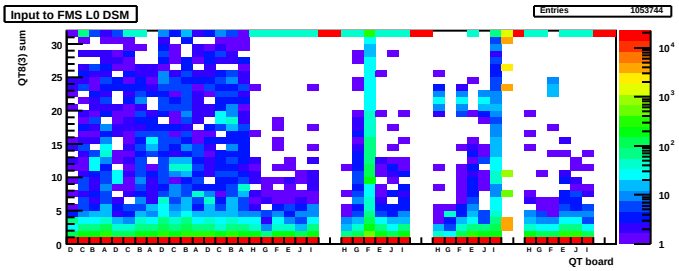

Input to FMS L0 DSM
Entries 0
QT8(0) sum - simulated
QT board

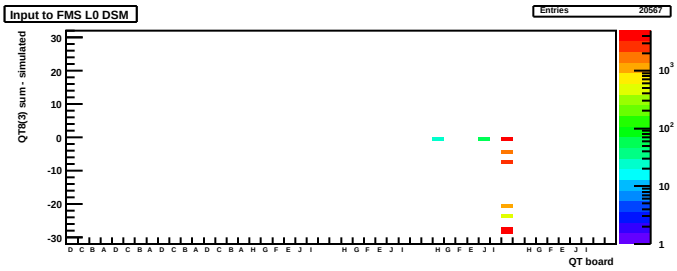

Input to FMS L0 DSM
Entries 1053744
QT8(1) sum
QT board

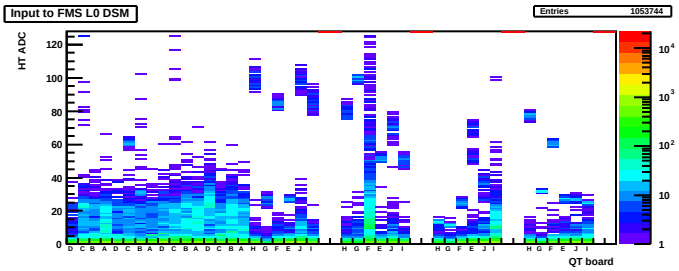

Input to FMS L0 DSM
Entries 1
QT8(1) sum - simulated
QT board

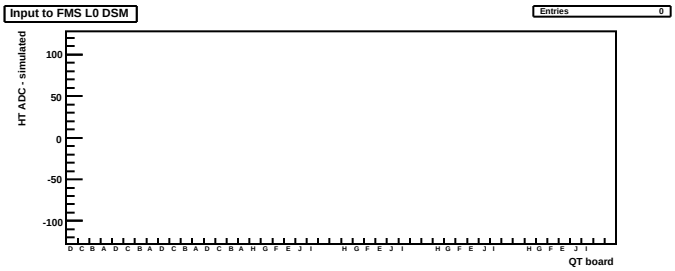

Input to FMS L0 DSM
Entries 1053744
QT8(2) sum
QT board

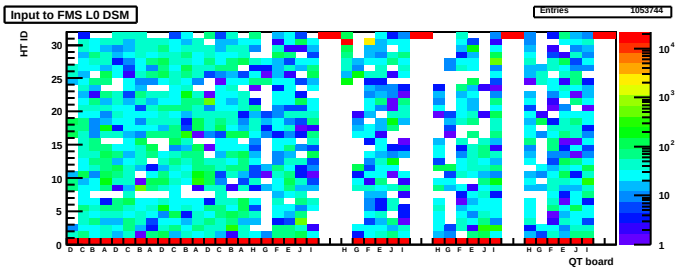

Input to FMS L0 DSM
Entries 15634
QT8(2) sum - simulated
QT board

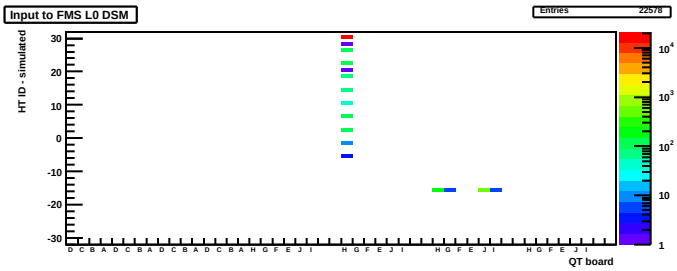

Input to FMS L0 DSM
Entries 1053744
QT8(3) sum
QT board

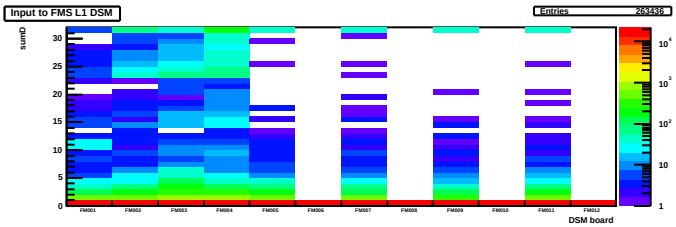

Input to FMS L0 DSM
Entries 20567
QT8(3) sum - simulated
QT board

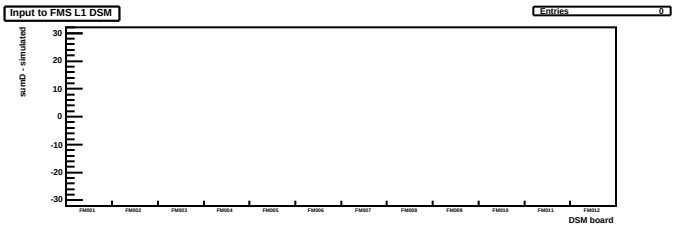

Input to FMS L0 DSM
Entries 1053744
HT ADC
QT board

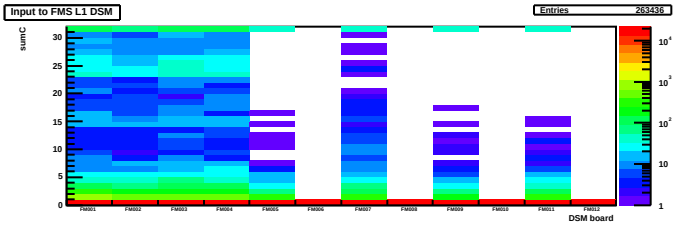

Input to FMS L0 DSM
Entries 0
HT ADC - simulated
QT board

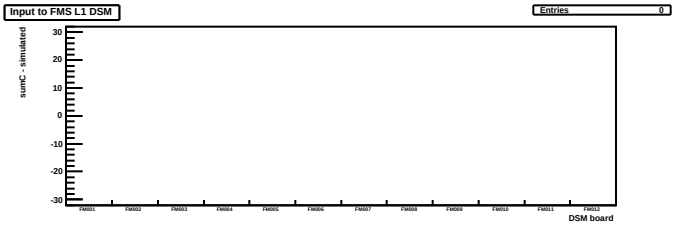

Input to FMS L0 DSM
Entries 1053744
HT ID
QT board

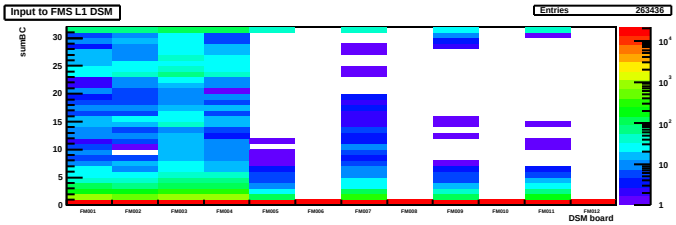

Input to FMS L0 DSM
Entries 22578
HT ID - simulated
QT board

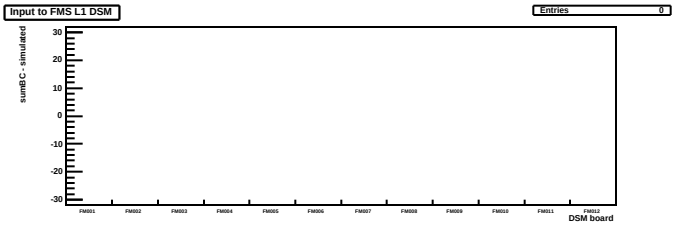

Input to FMS L1 DSM
Entries 263436
sumD
DSM board

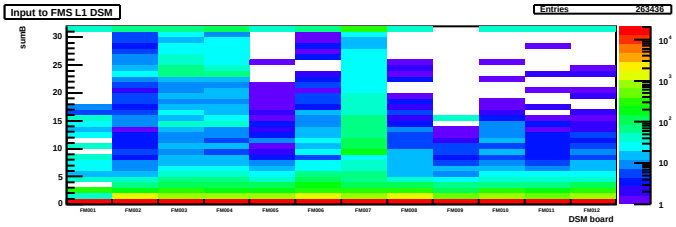

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

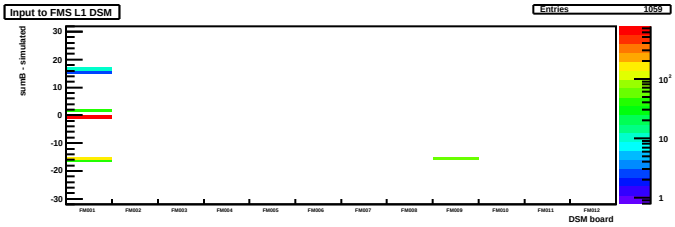

Input to FMS L1 DSM
Entries 263436
sumC
DSM board

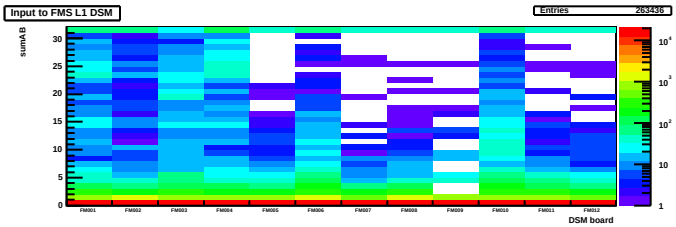

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

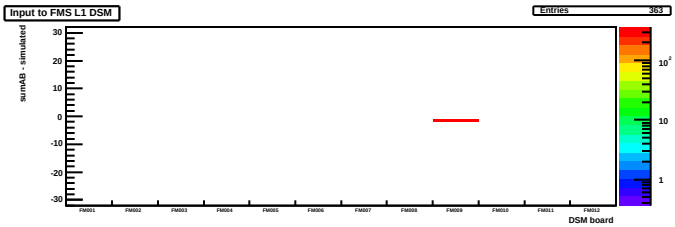

Input to FMS L1 DSM
Entries 263436
sumBC
DSM board

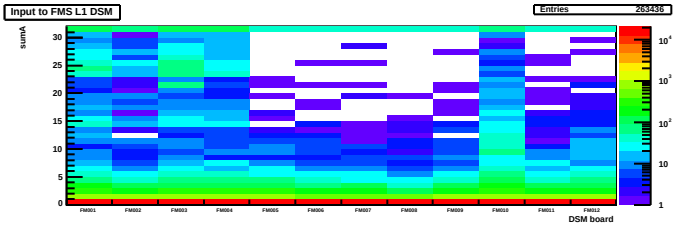

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

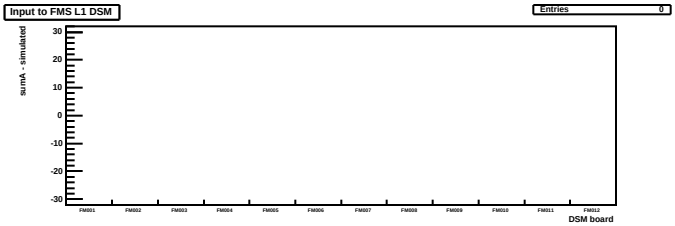

Input to FMS L1 DSM
Entries 263436
sumB
DSM board

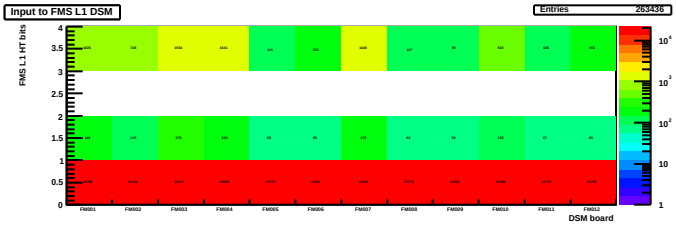

Input to FMS L1 DSM
Entries 1059
sumB - simulated
DSM board

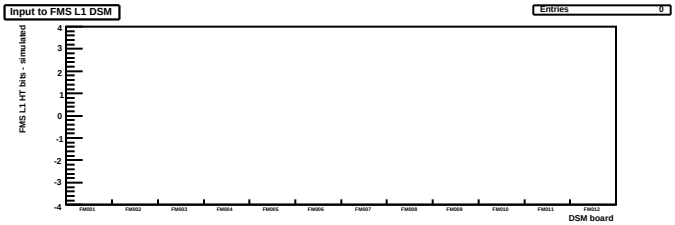

Input to FMS L1 DSM
Entries 263436
sumAB
DSM board

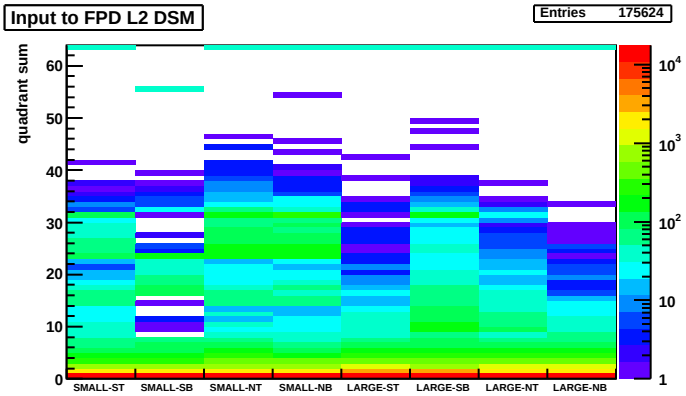

Input to FMS L1 DSM
Entries 363
sumAB - simulated
DSM board

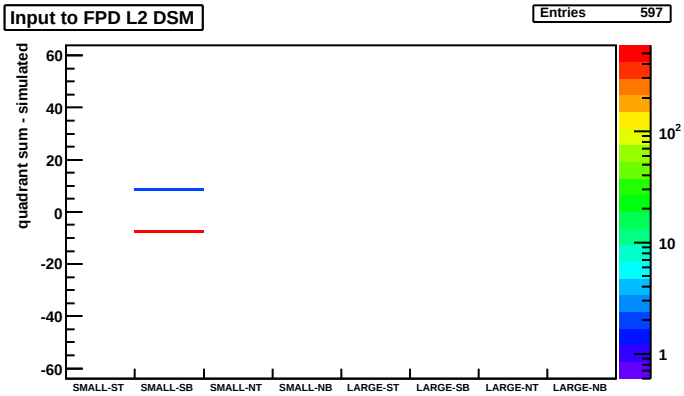

Input to FMS L1 DSM
Entries 263436
sumA
DSM board

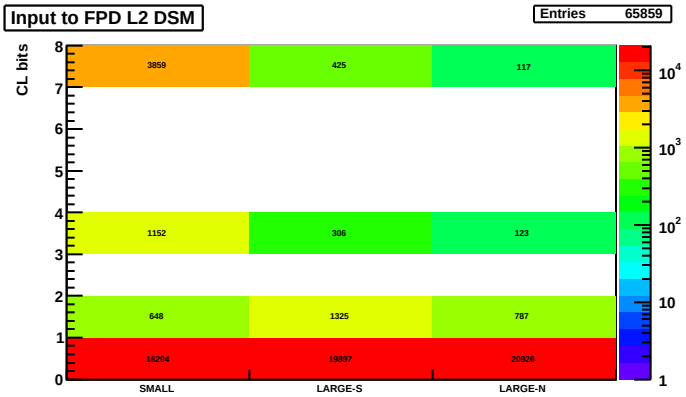

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

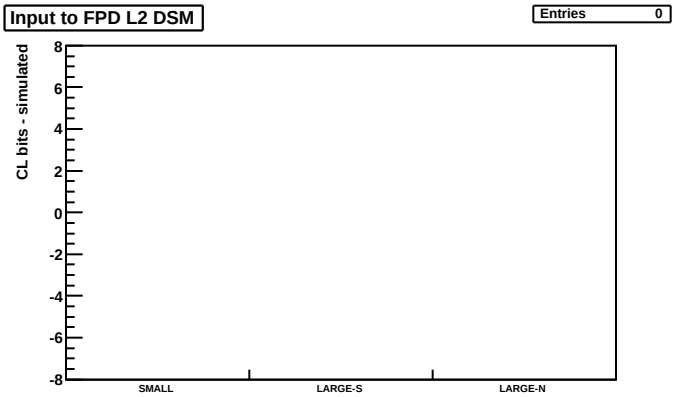

Input to FMS L1 DSM
Entries 263436
FMS L1 HT bits
DSM board

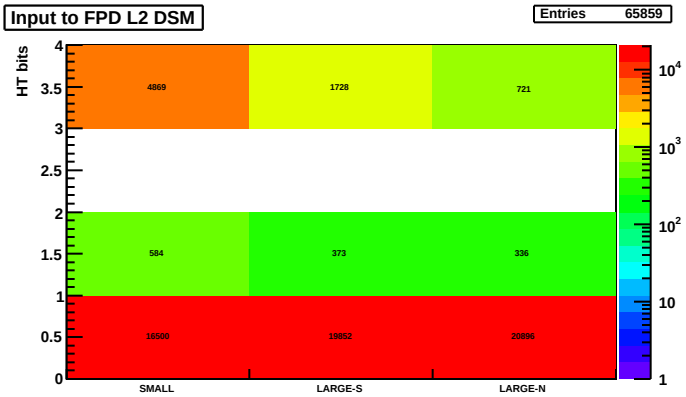

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

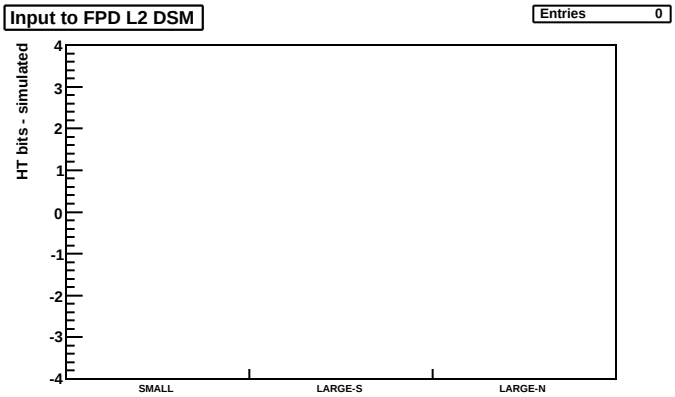

Input to FPD L2 DSM
Entries 175624
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

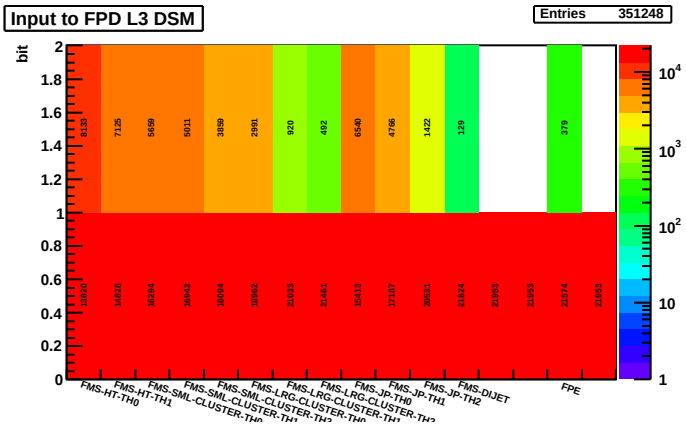

Input to FPD L2 DSM
Entries 597
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

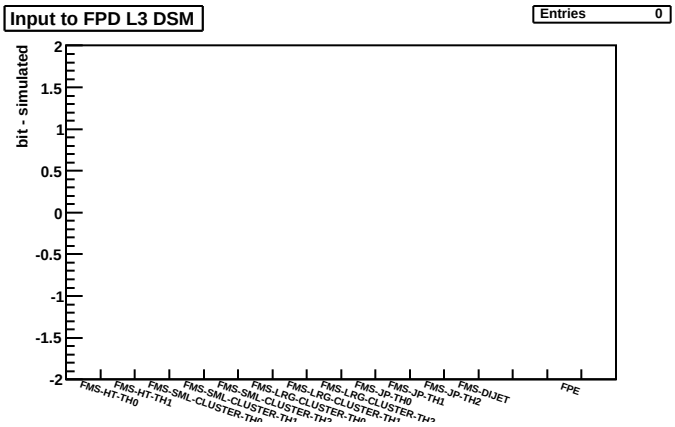

Input to FPD L2 DSM
Entries 65859
CL bits
3859
425
117
1152
306
123
648
1325
787
16294
19897
20926
SMALL
LARGE-S
LARGE-N

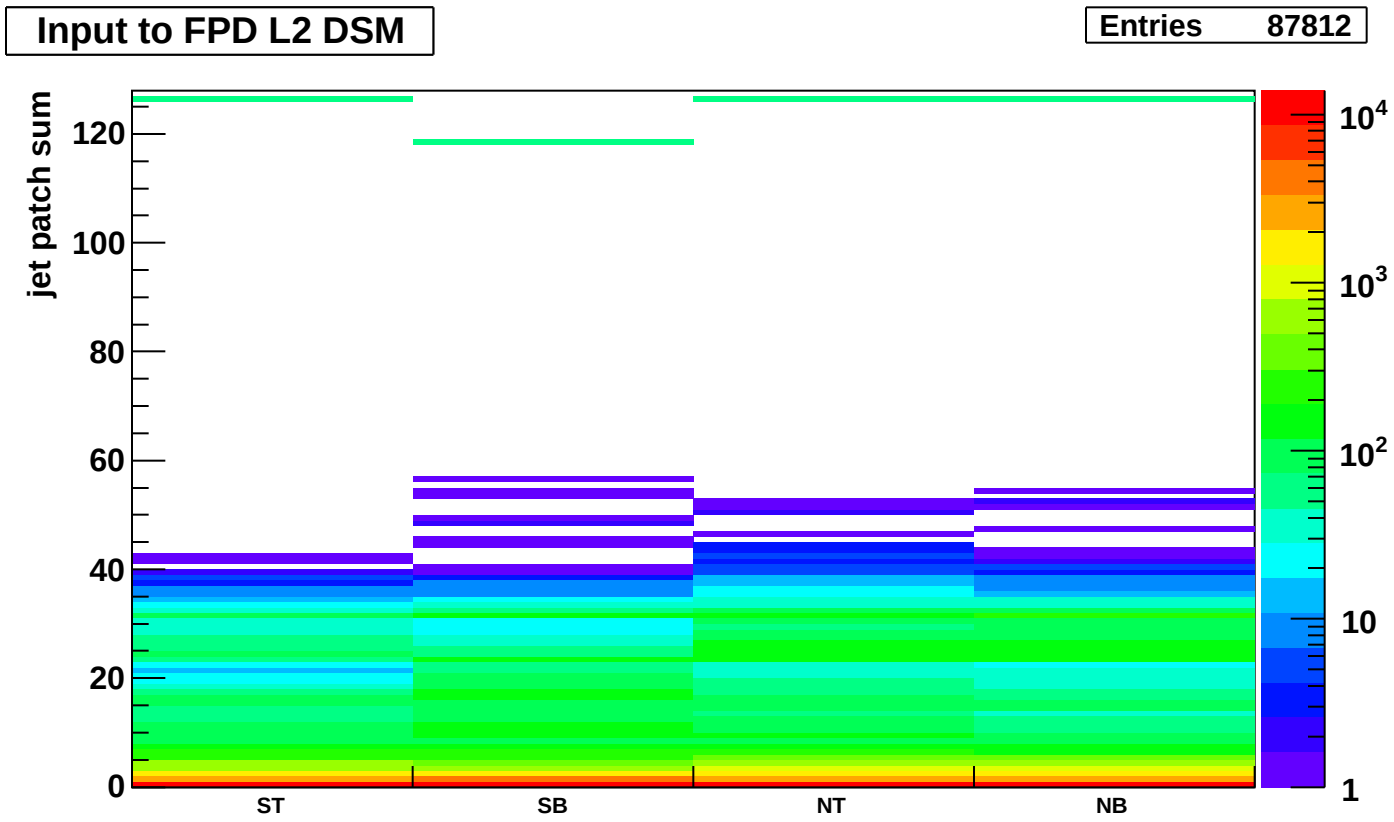

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

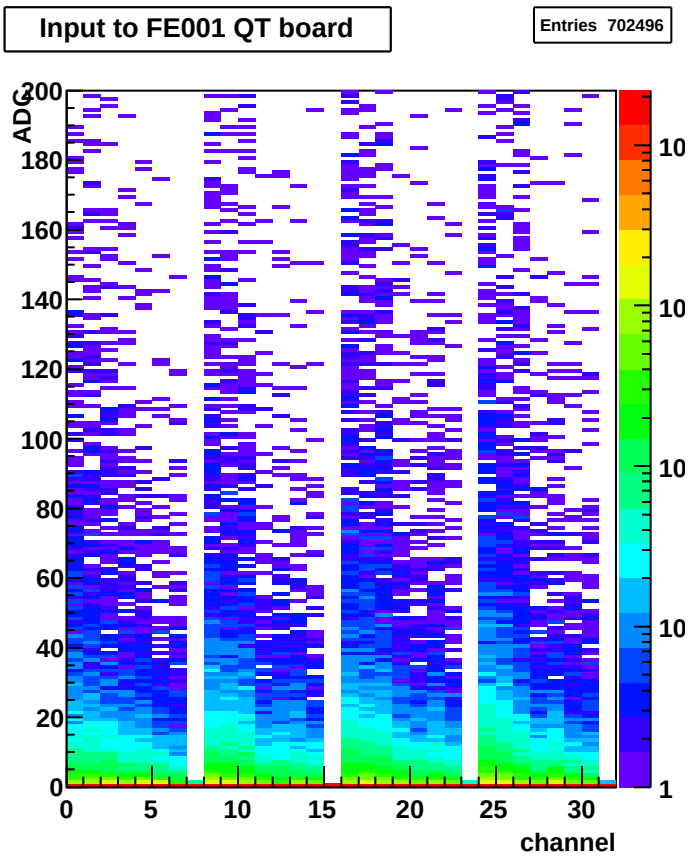

Input to FPD L2 DSM
Entries 65859
HT bits
4869
1728
721
584
373
336
16500
19852
20896
SMALL
LARGE-S
LARGE-N

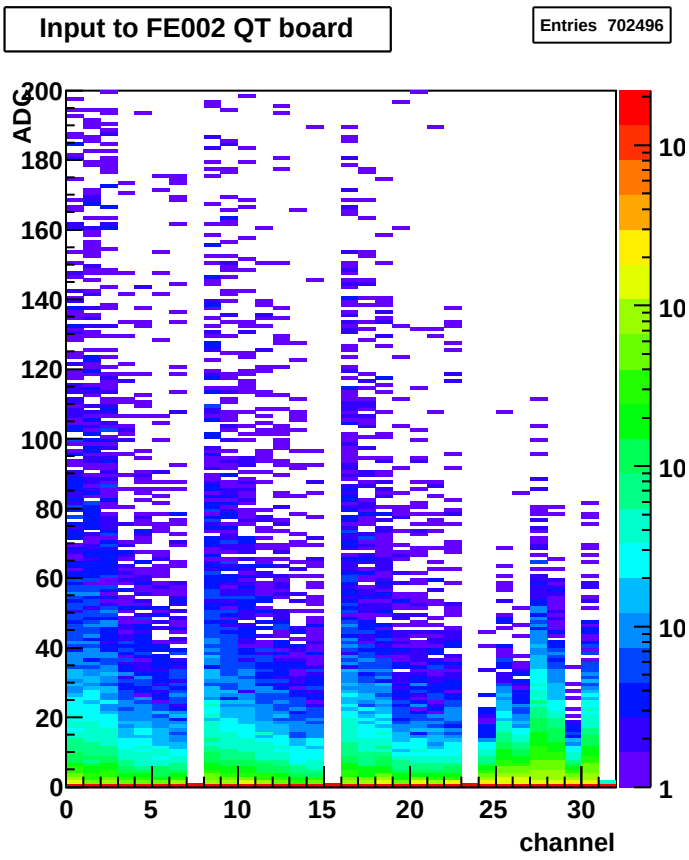

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

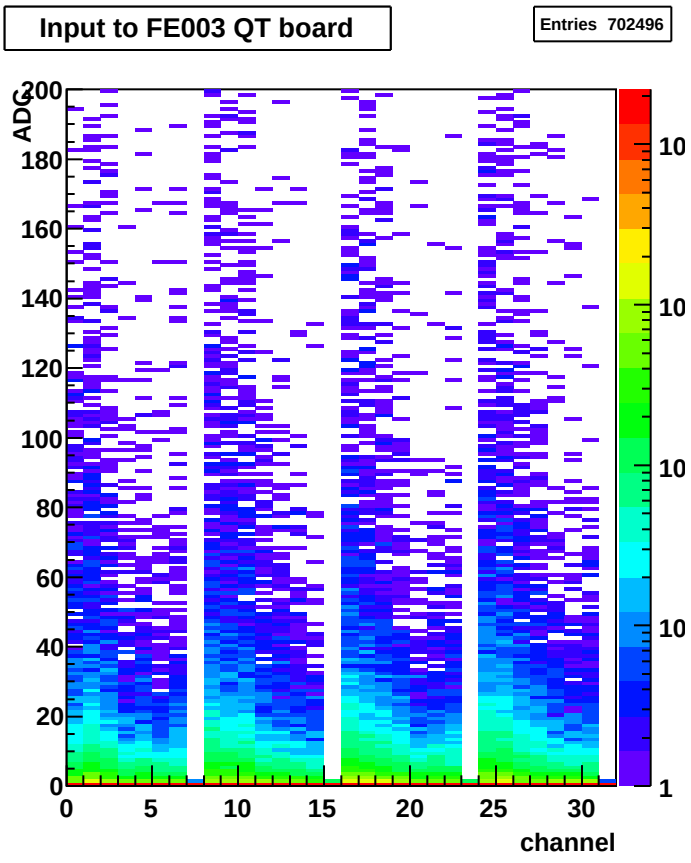

Input to FPD L3 DSM
Entries 351248
bit
8135
7125
5659
5011
3859
2991
920
492
6540
4766
1422
129
379
13820
14828
16294
16942
18934
18952
21033
21461
15413
17187
20531
21824
21953
21953
21574
21953
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

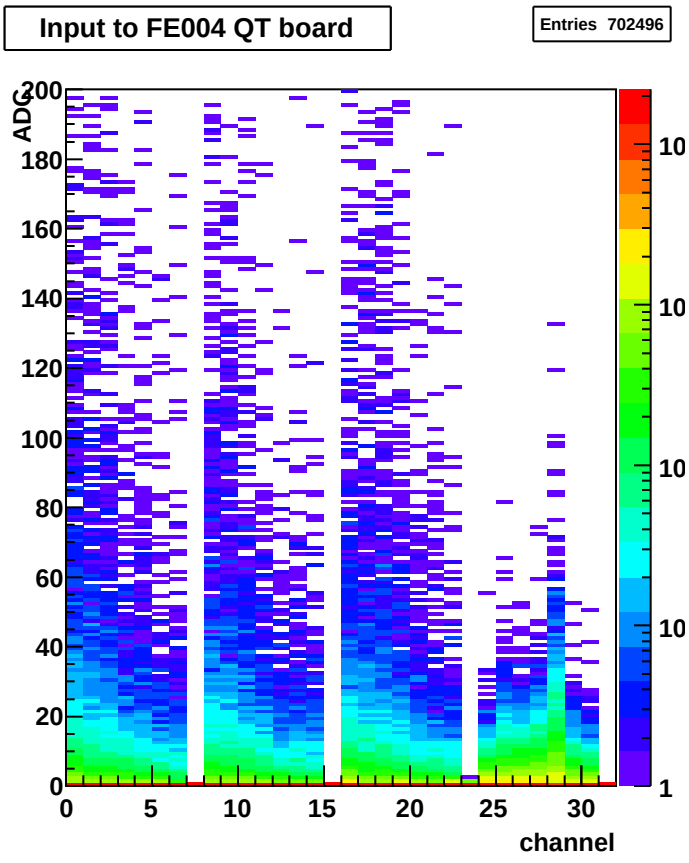

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

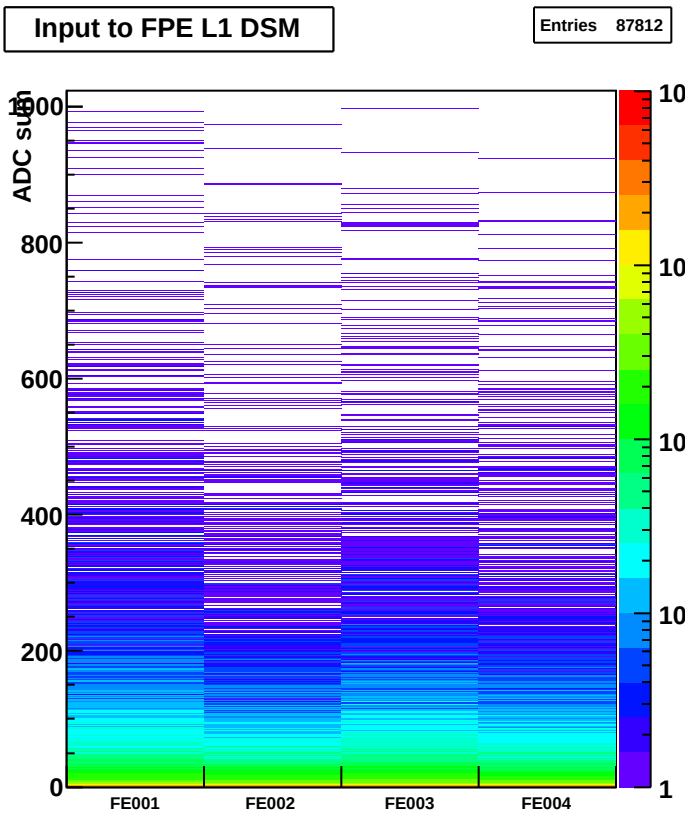

Input to FPD L2 DSM
Entries 87812
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

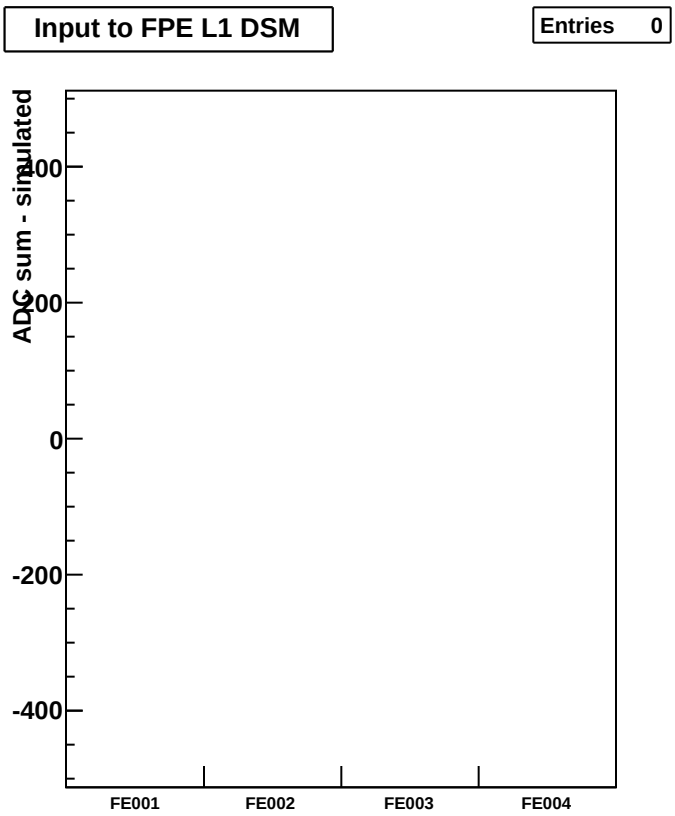

Input to FE001 QT board
Entries 702496
ADC
channel

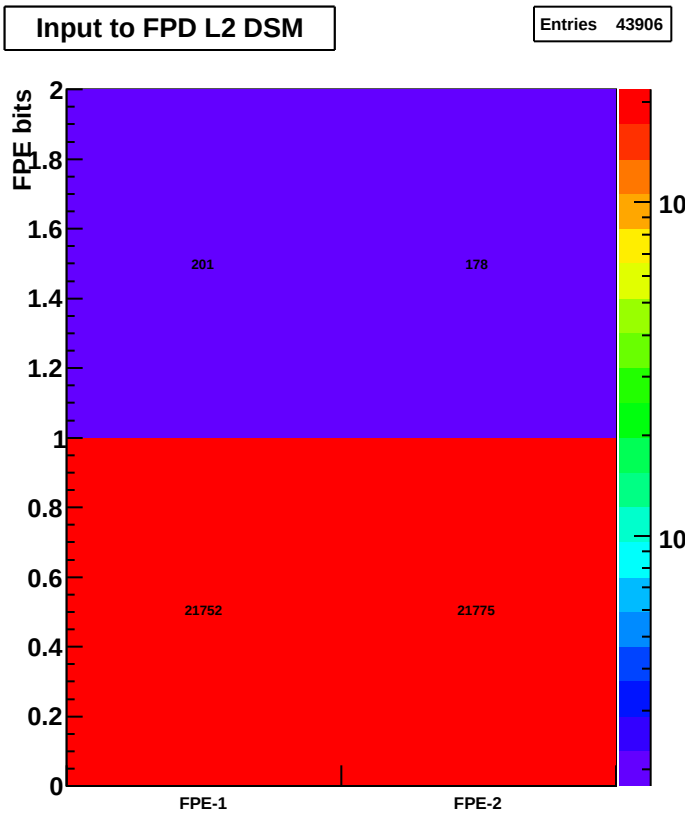

Input to FE002 QT board
Entries 702496
ADC
channel

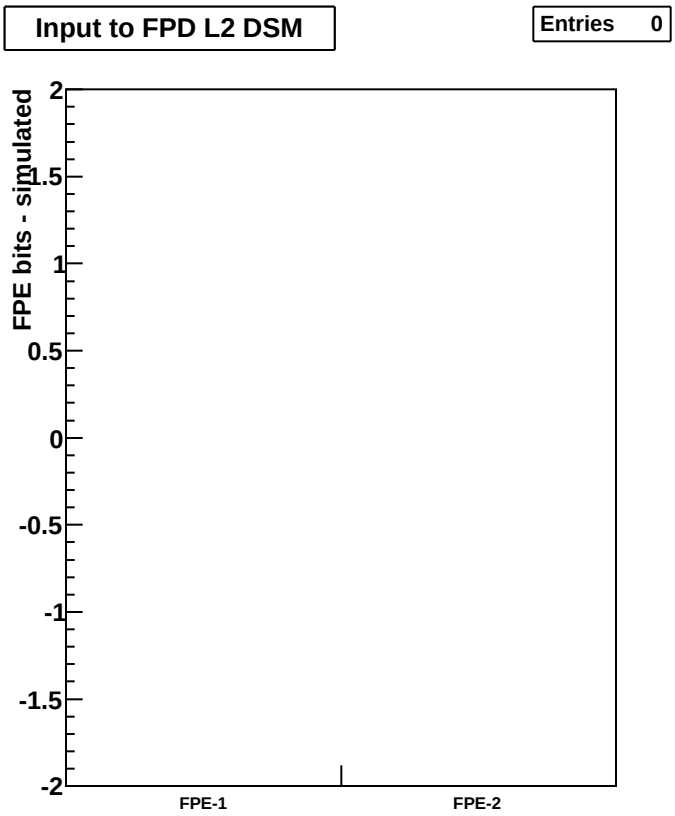

Input to FE003 QT board
Entries 702496
ADC
channel


Input to FE004 QT board
Entries 702496
ADC
channel


Input to FPE L1 DSM
Entries 87812
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 43906
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
201
178
21752
21775
FPE-1
FPE-2
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