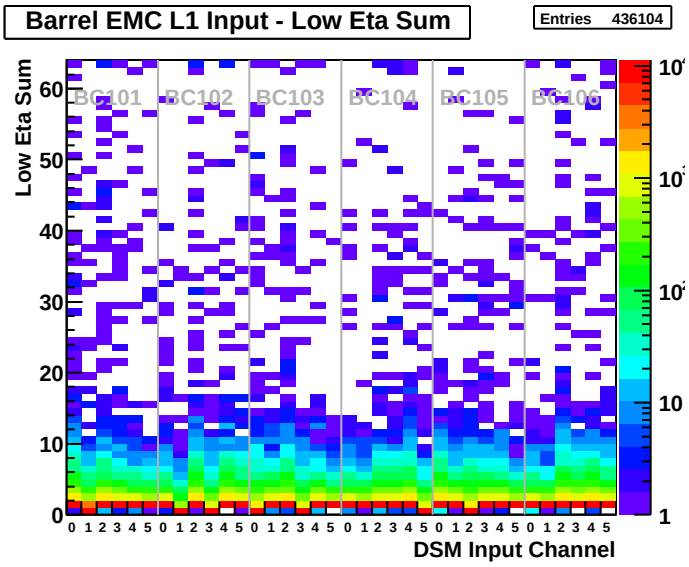
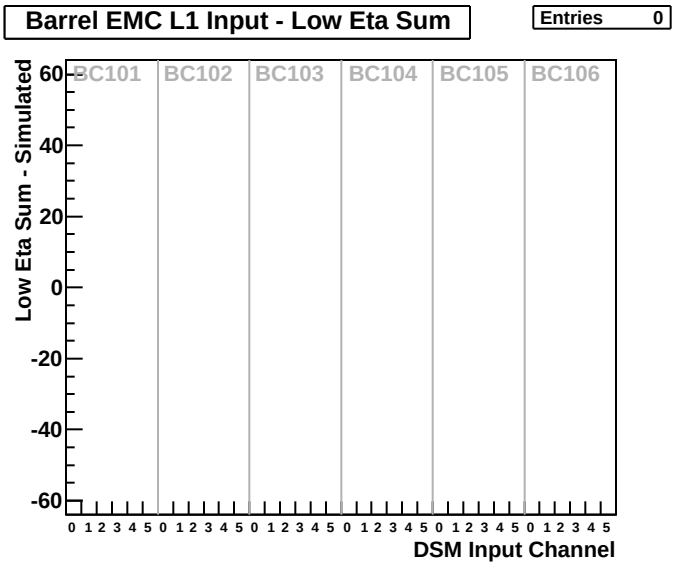
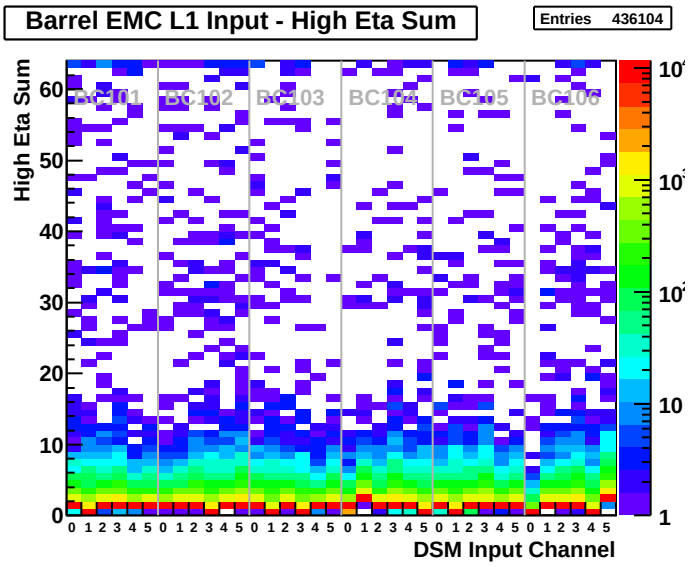
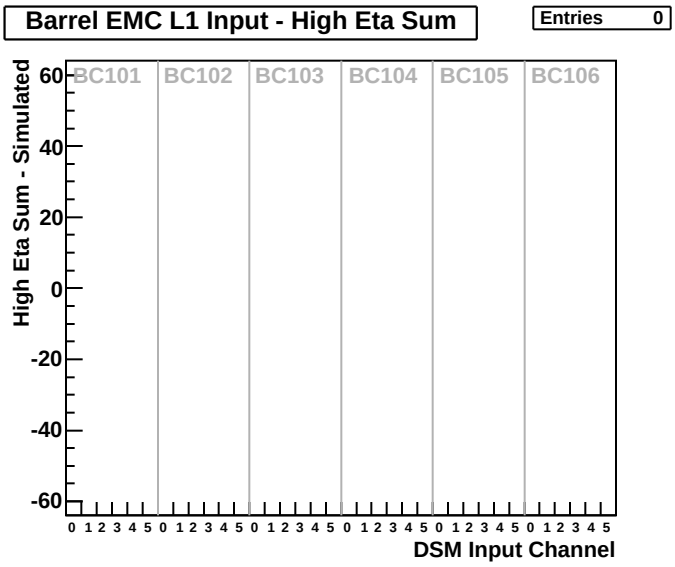
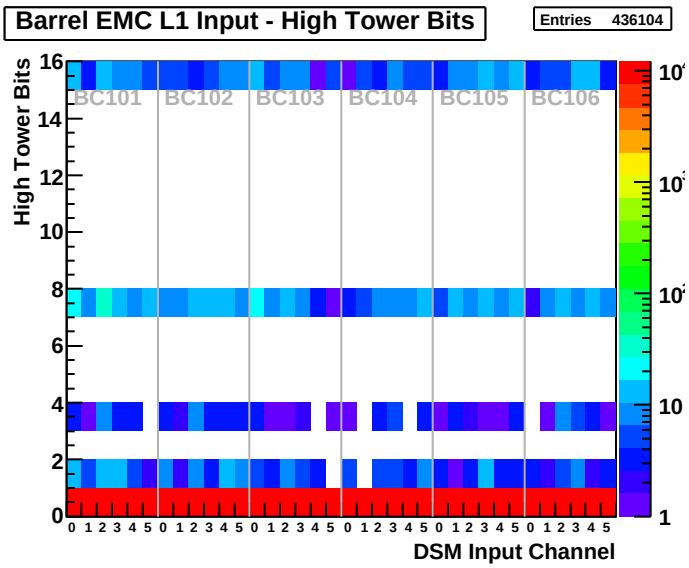
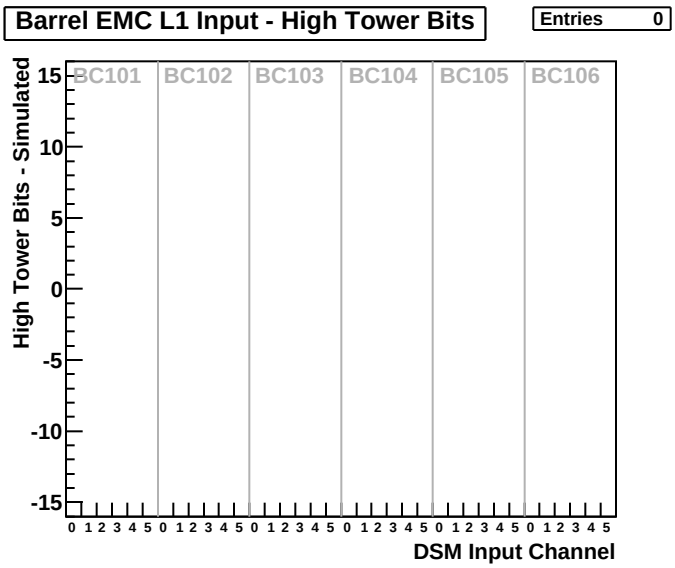

Barrel EMC L1 Input - Low Eta Sum
Entries 436104
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

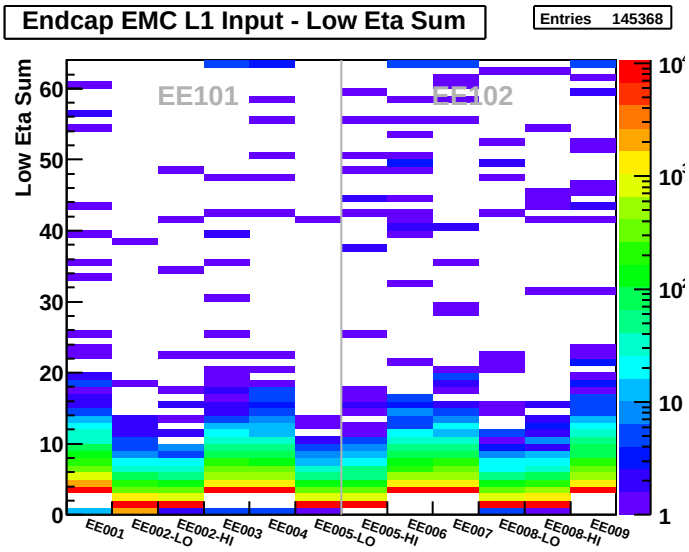

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

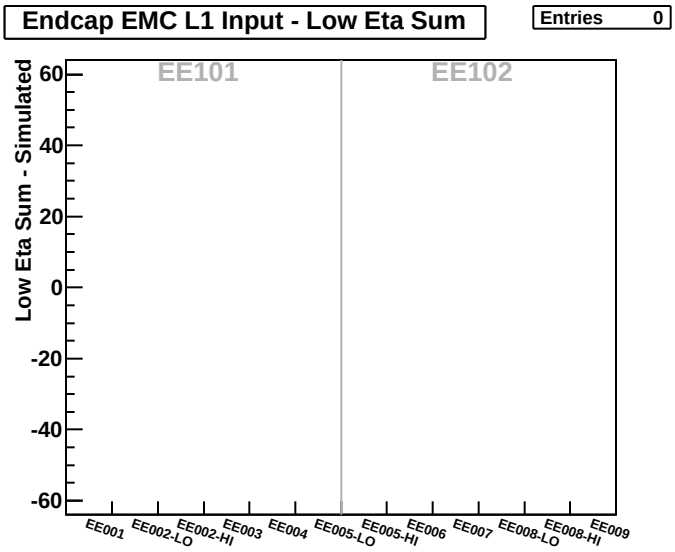

Barrel EMC L1 Input - High Eta Sum
Entries 436104
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

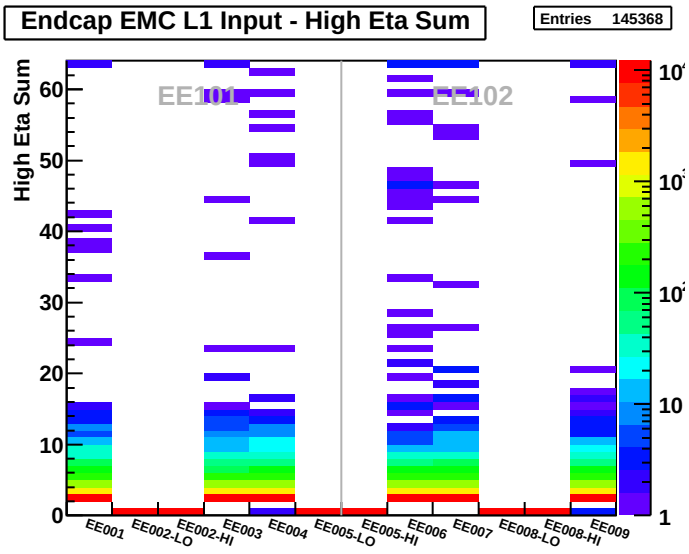

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

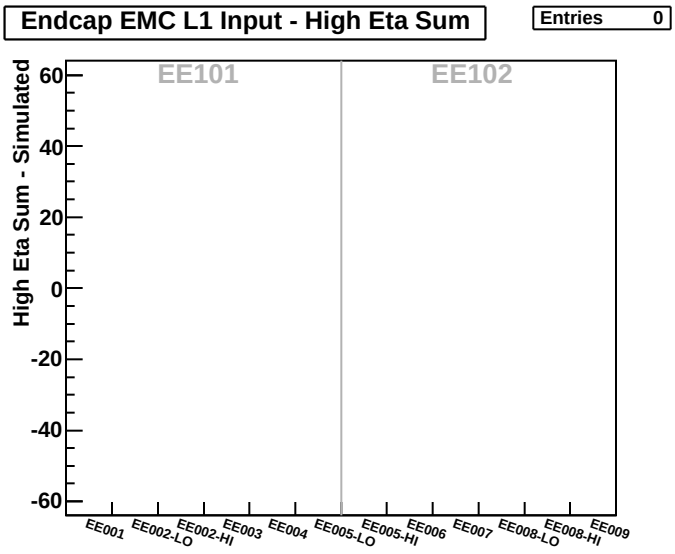

Barrel EMC L1 Input - High Tower Bits
Entries 436104
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

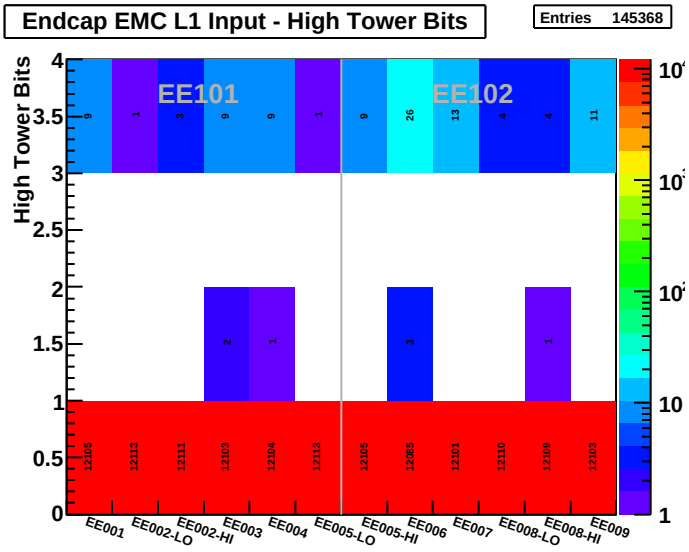

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

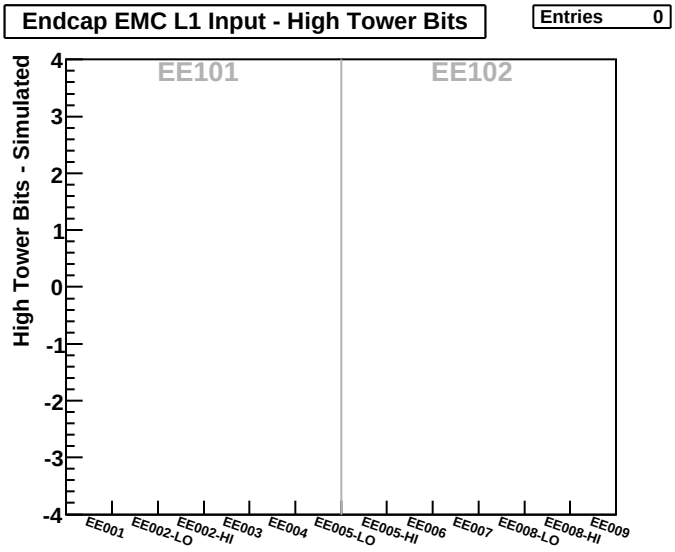

Endcap EMC L1 Input - Low Eta Sum
Entries 145368
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

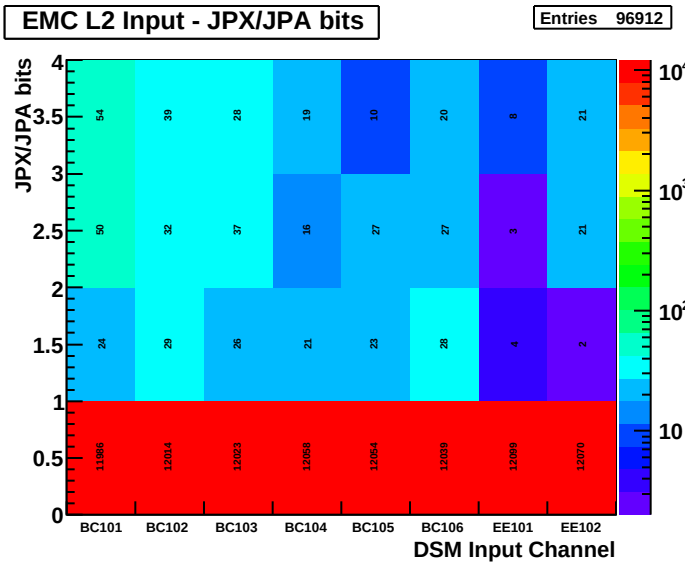

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

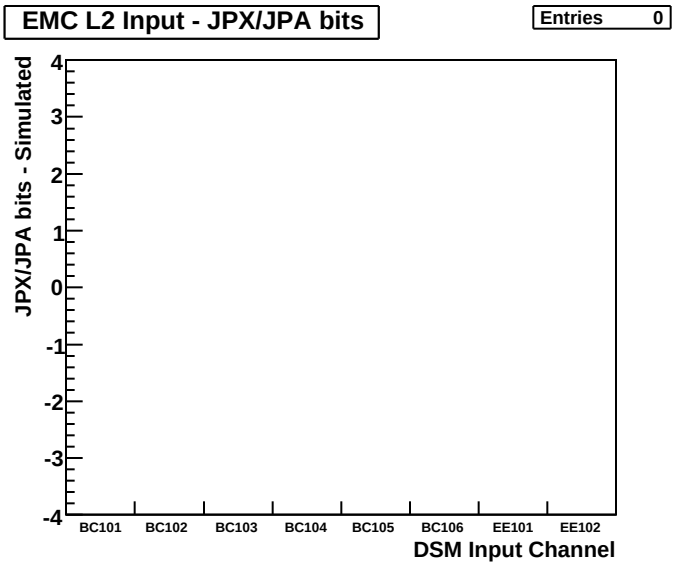

Endcap EMC L1 Input - High Eta Sum
Entries 145368
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

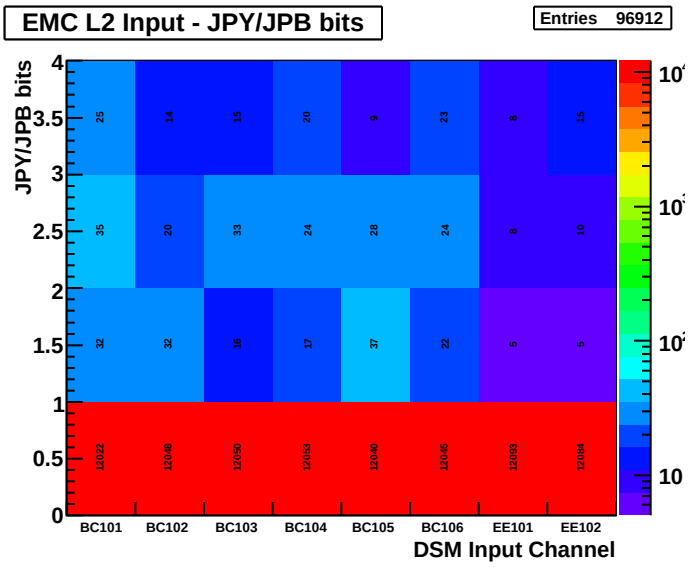

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

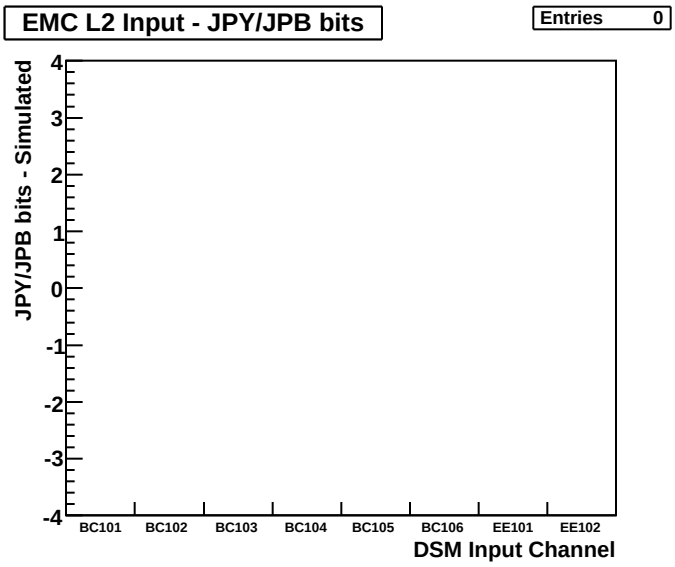

Endcap EMC L1 Input - High Tower Bits
Entries 145368
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

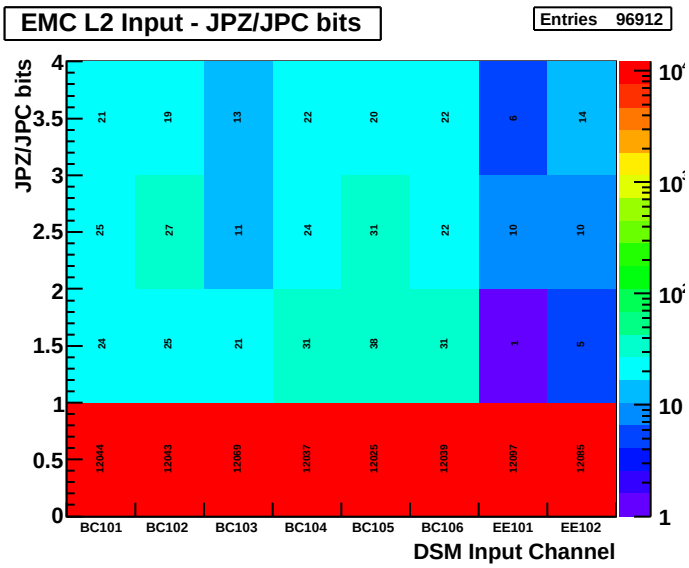

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

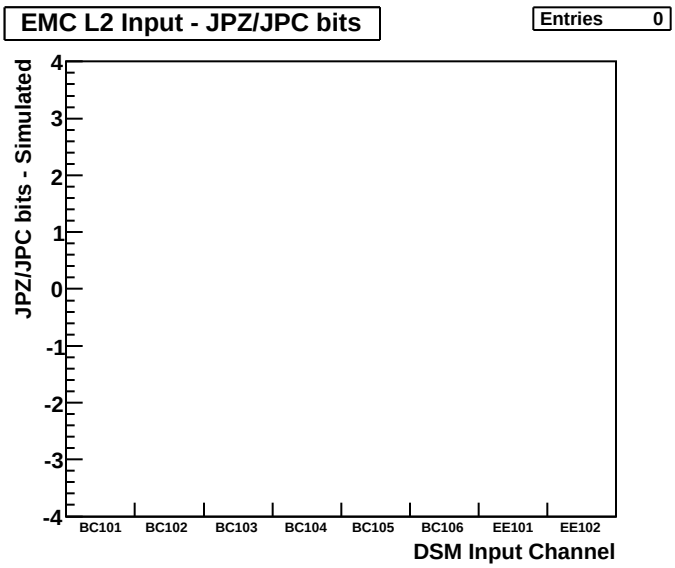

EMC L2 Input - JPX/JPA bits
Entries 96912
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

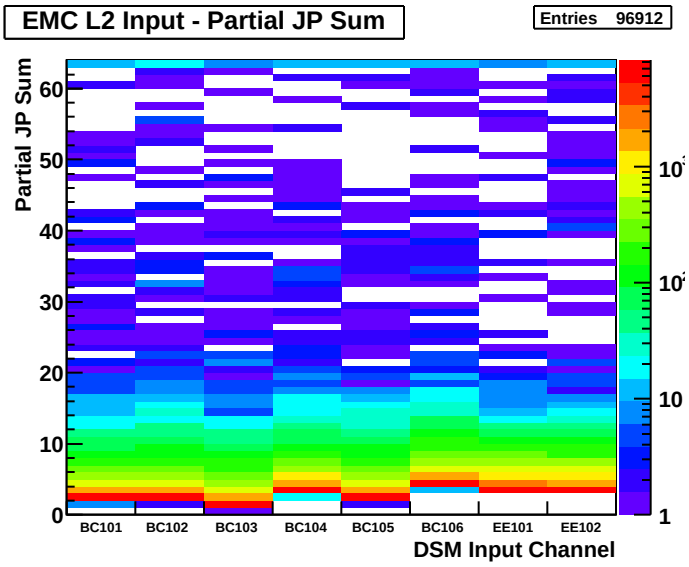

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

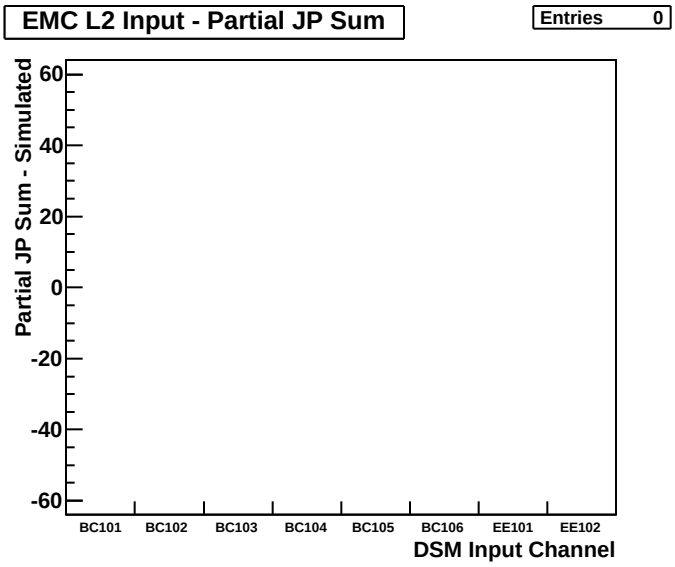

EMC L2 Input - JPY/JPB bits
Entries 96912
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

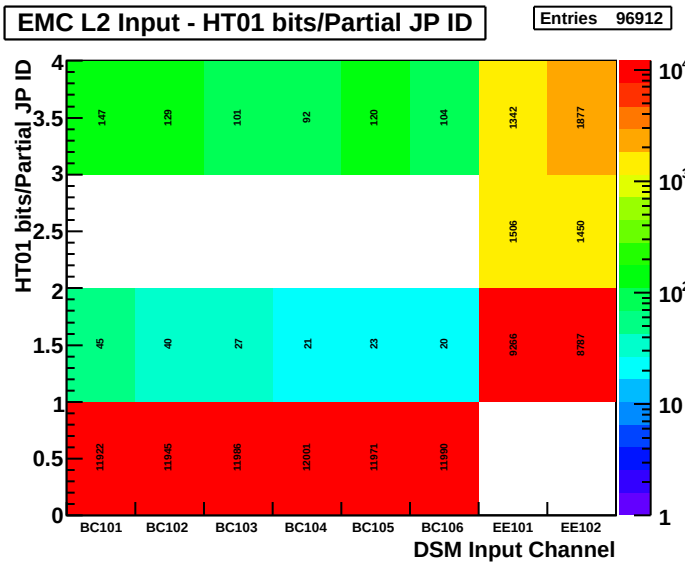

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

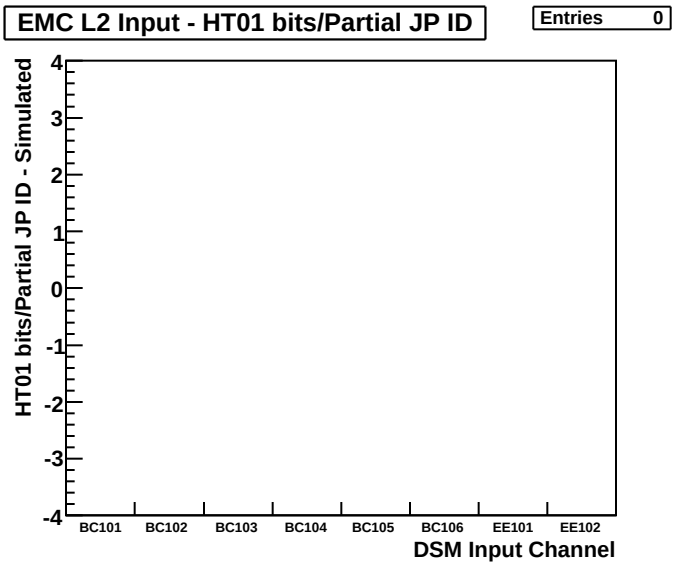

EMC L2 Input - JPZ/JPC bits
Entries 96912
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

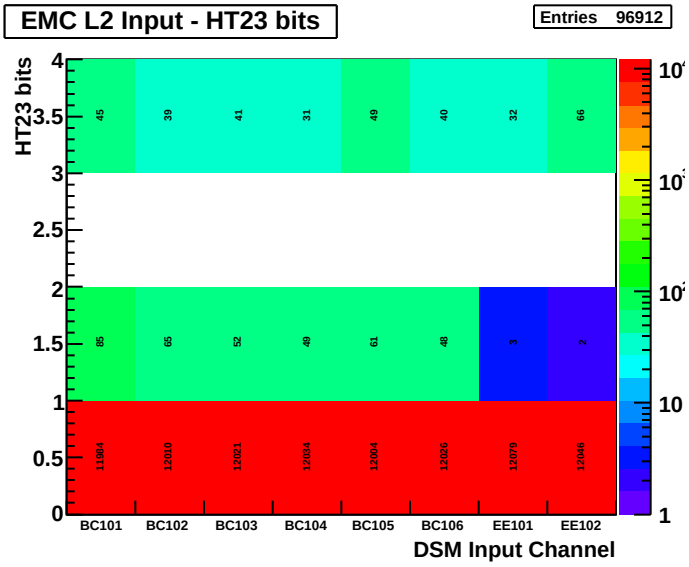

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

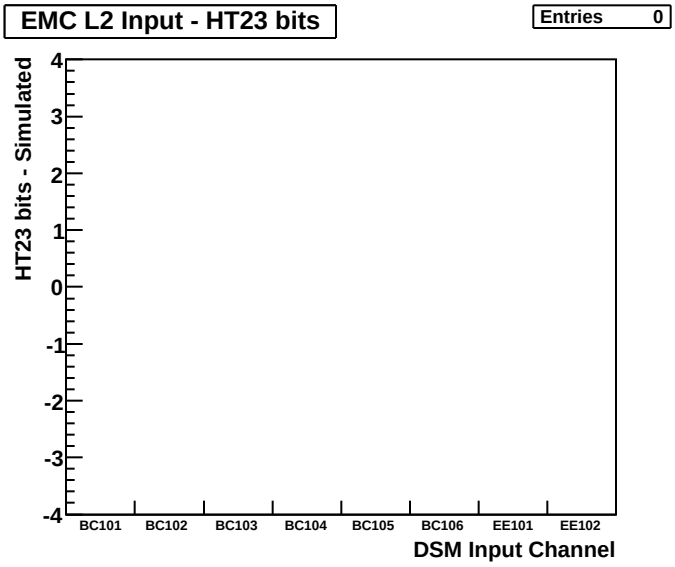

EMC L2 Input - Partial JP Sum
Entries 96912
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

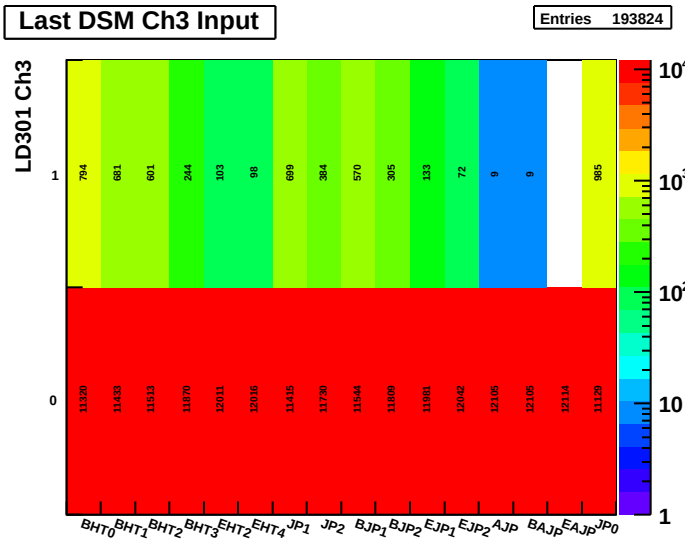

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

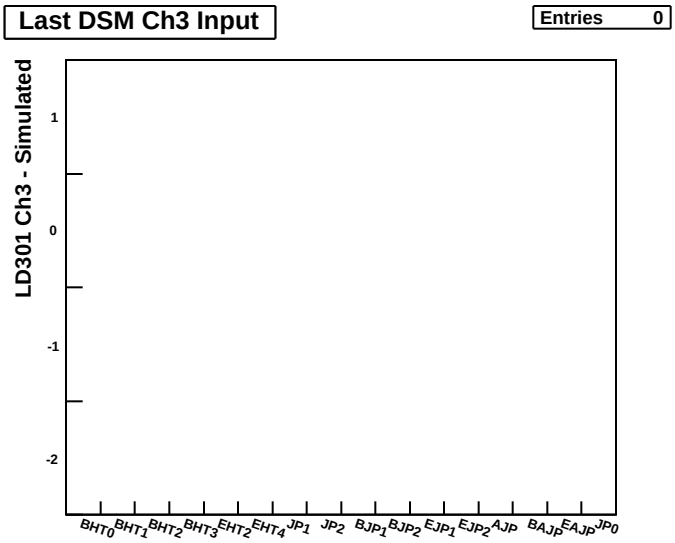

EMC L2 Input - HT01 bits/Partial JP ID
Entries 96912
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

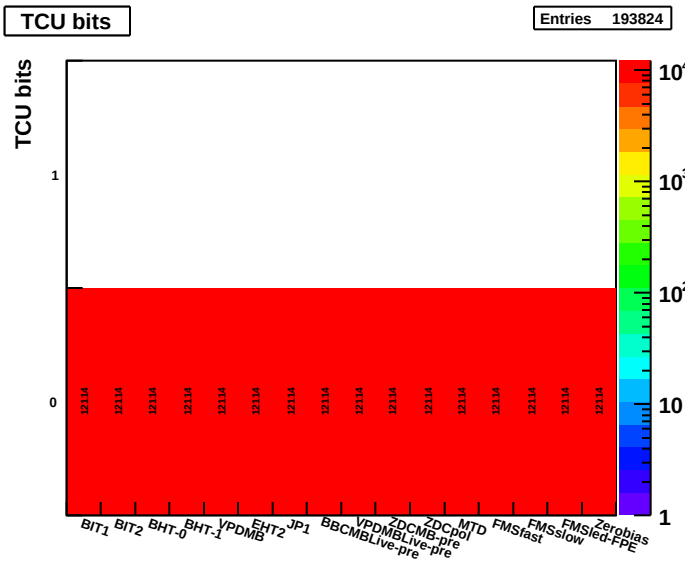

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

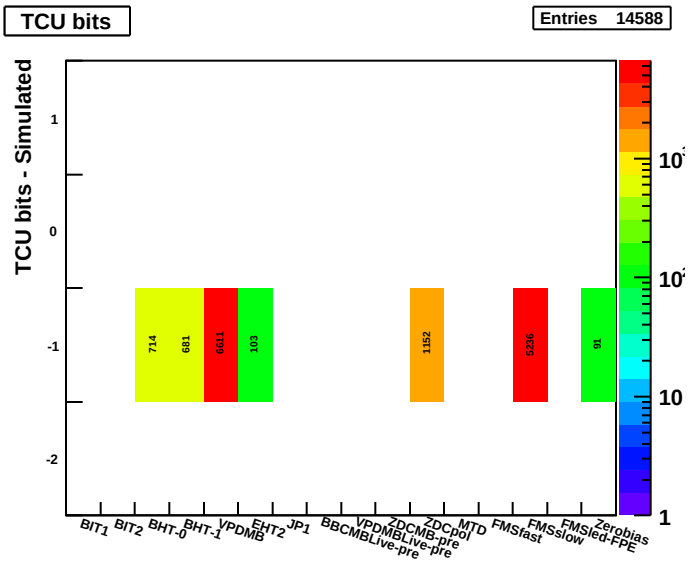

EMC L2 Input - HT23 bits
Entries 96912
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

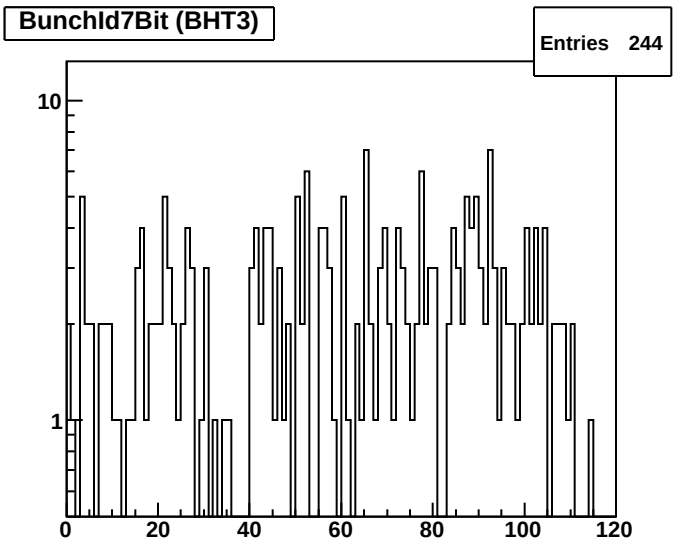

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

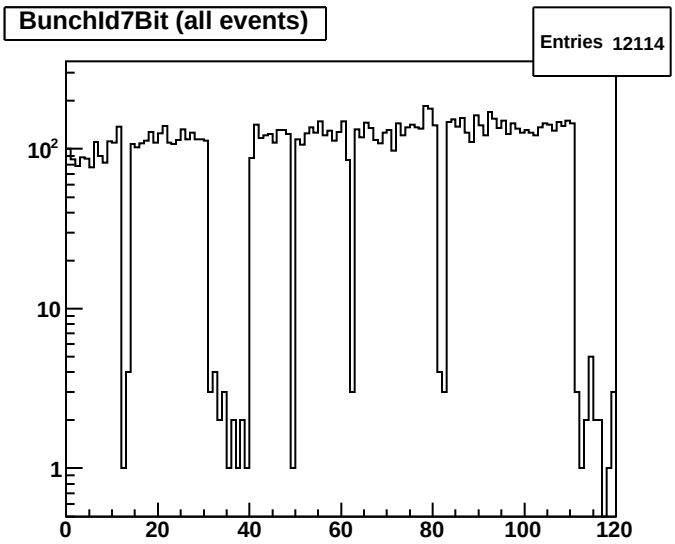

Last DSM Ch3 Input
Entries 193824
LD301 Ch3
794 681 601 244 103 98 699 384 570 305 133 72 9 9 985
11320 11433 11513 11870 12011 12016 11415 11730 11544 11809 11981 12042 12105 12105 12114 11129
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

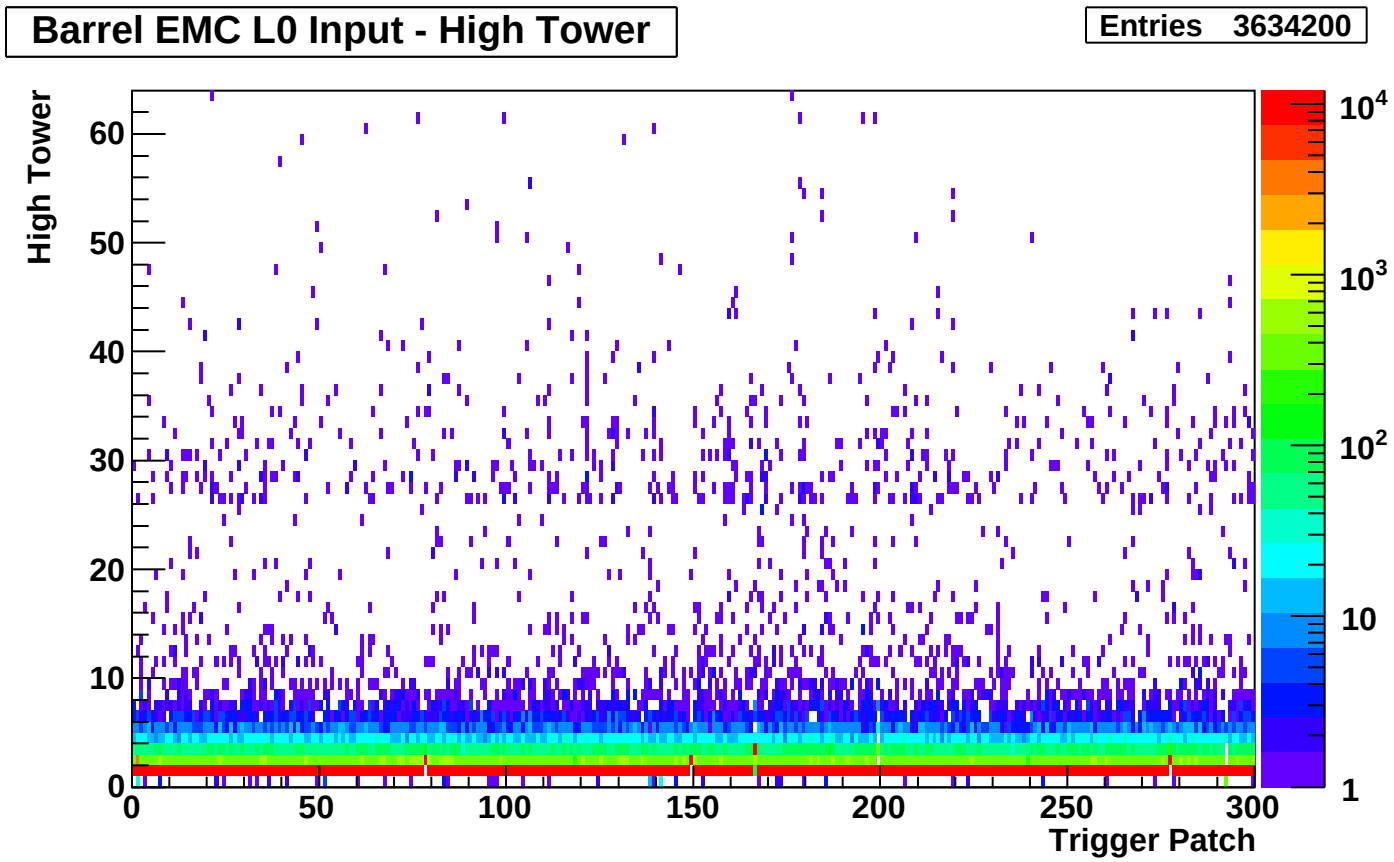

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

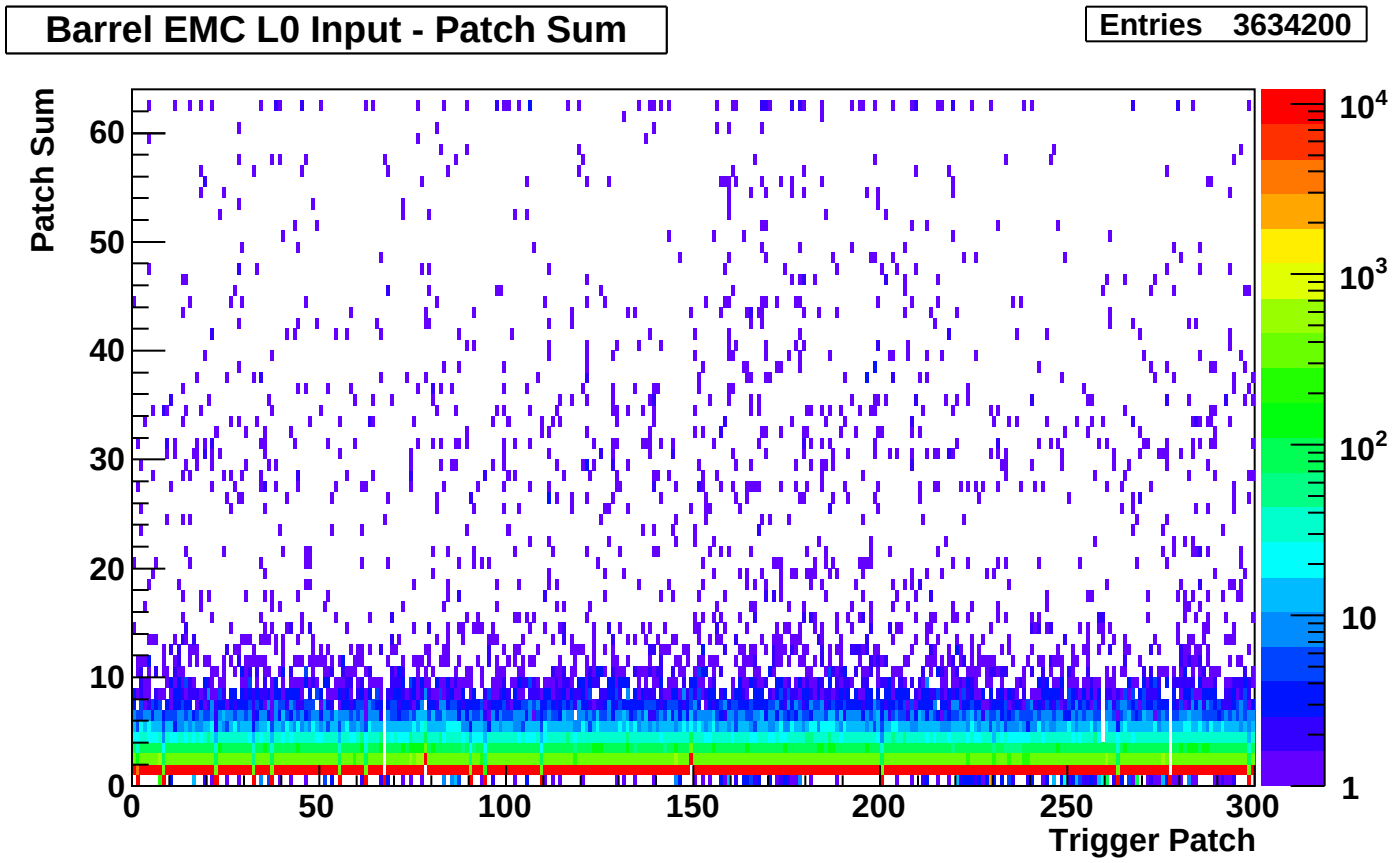

TCU bits
Entries 193824
TCU bits
12114 12114 12114 12114 12114 12114 12114 12114 12114 12114 12114 12114 12114 12114 12114 12114
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

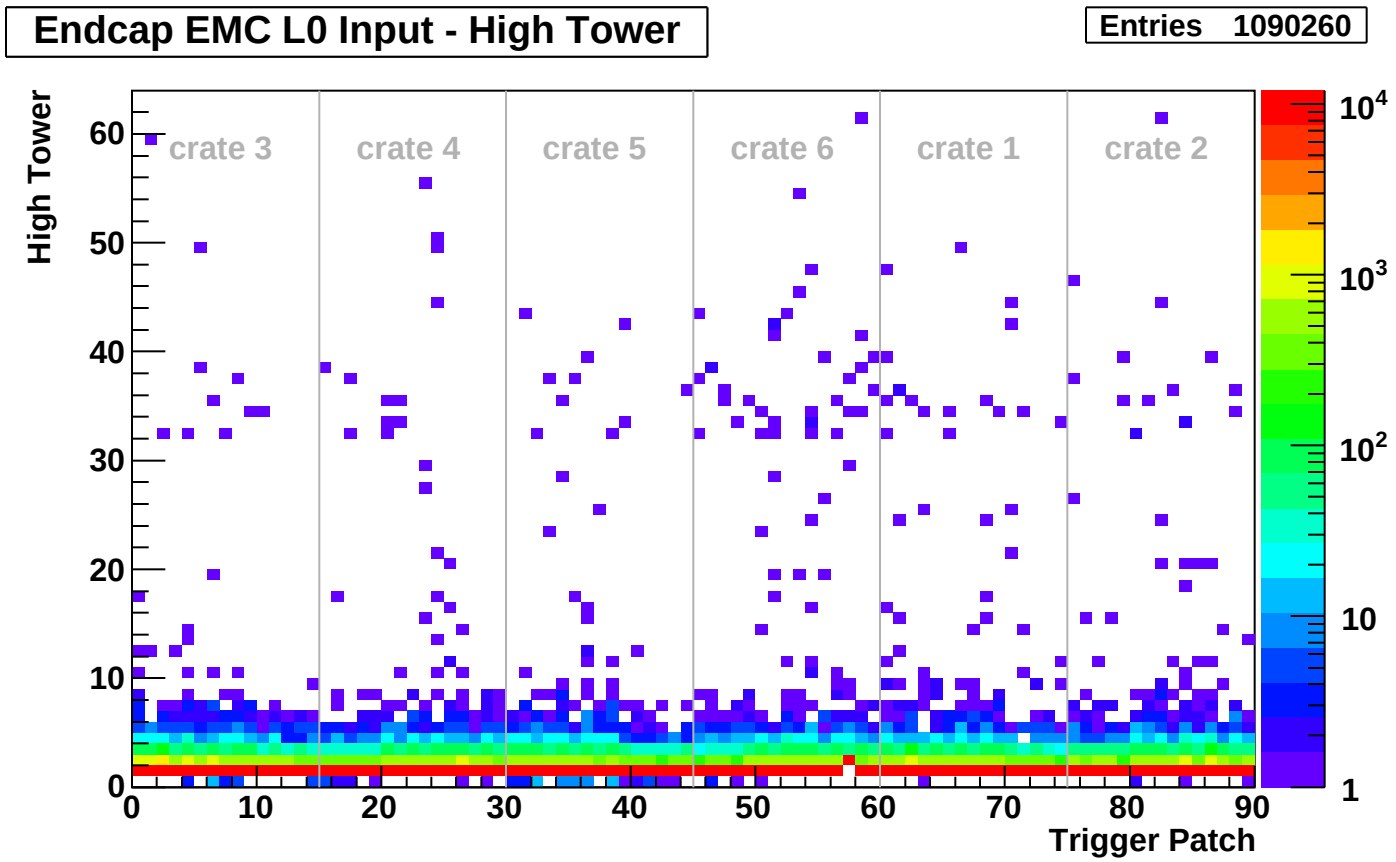

TCU bits
Entries 14588
TCU bits - Simulated
714 681 6611 103 1152 5236 91
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

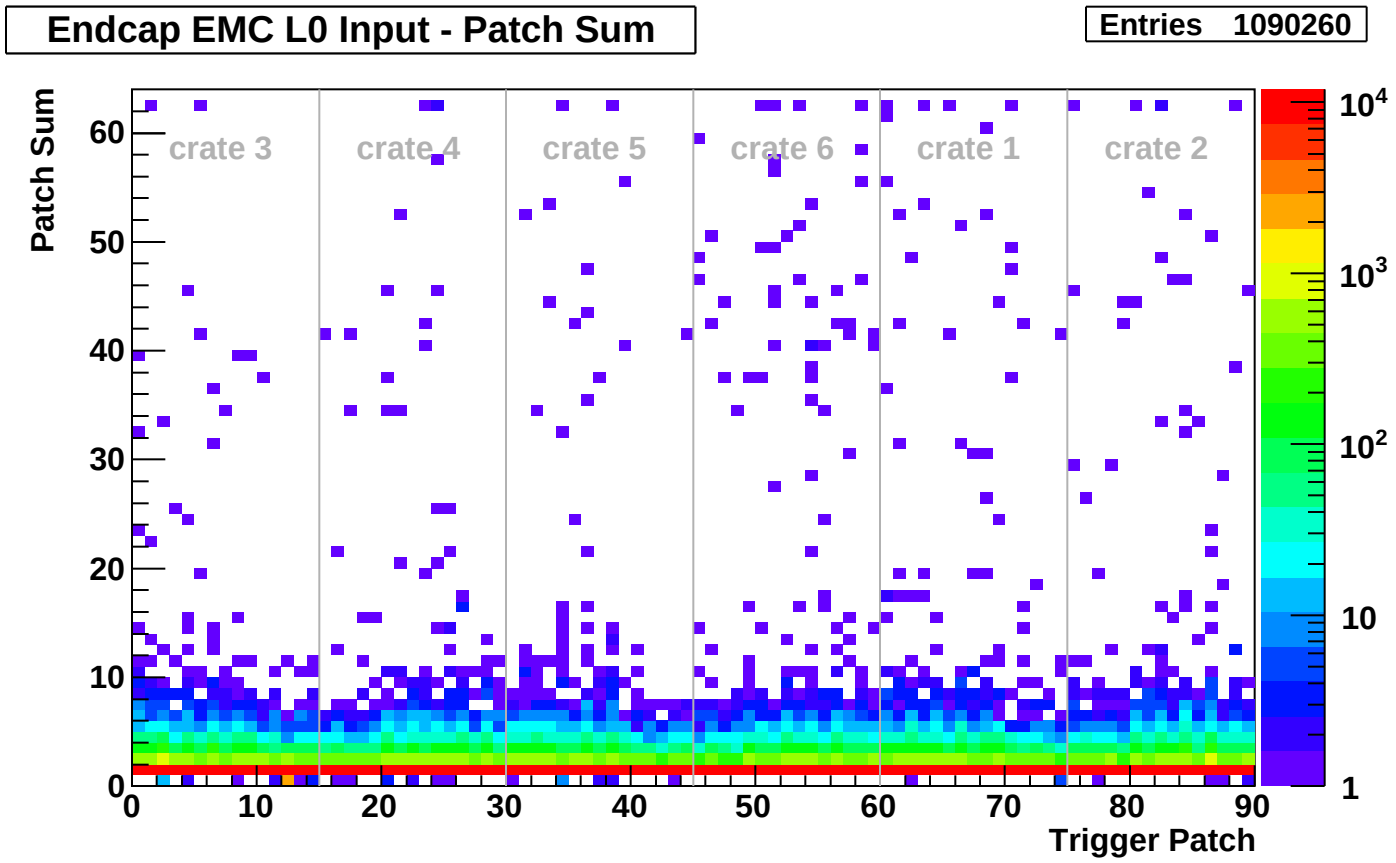

BunchId7Bit (BHT3)
Entries 244

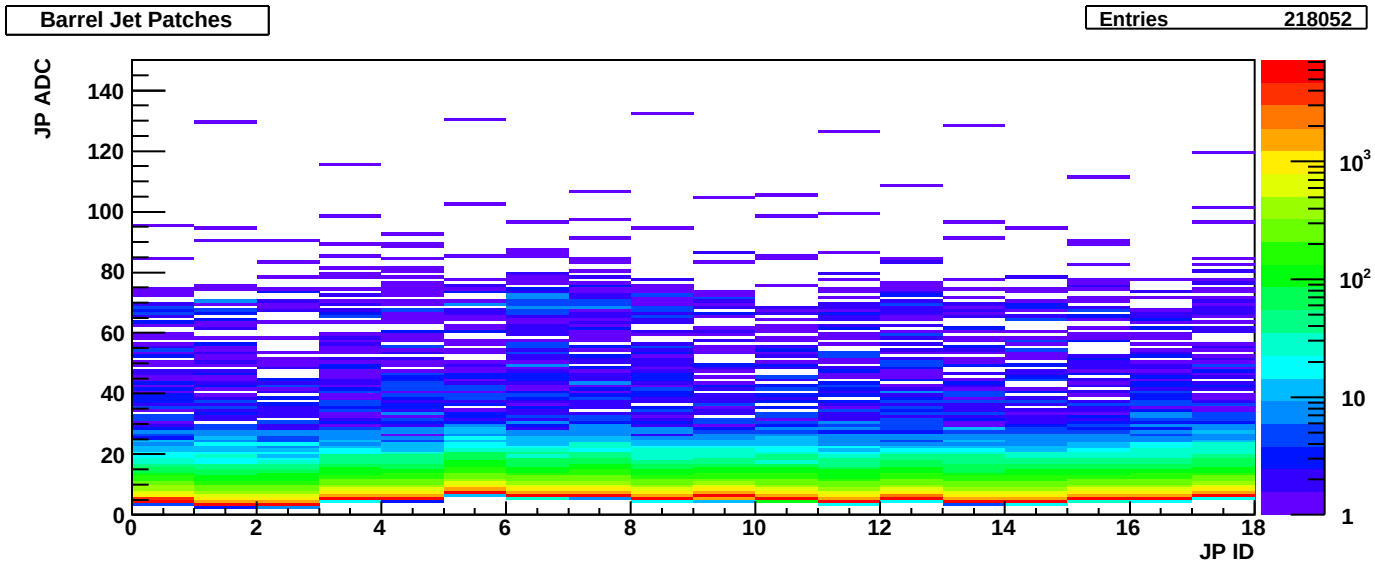

BunchId7Bit (all events)
Entries 12114

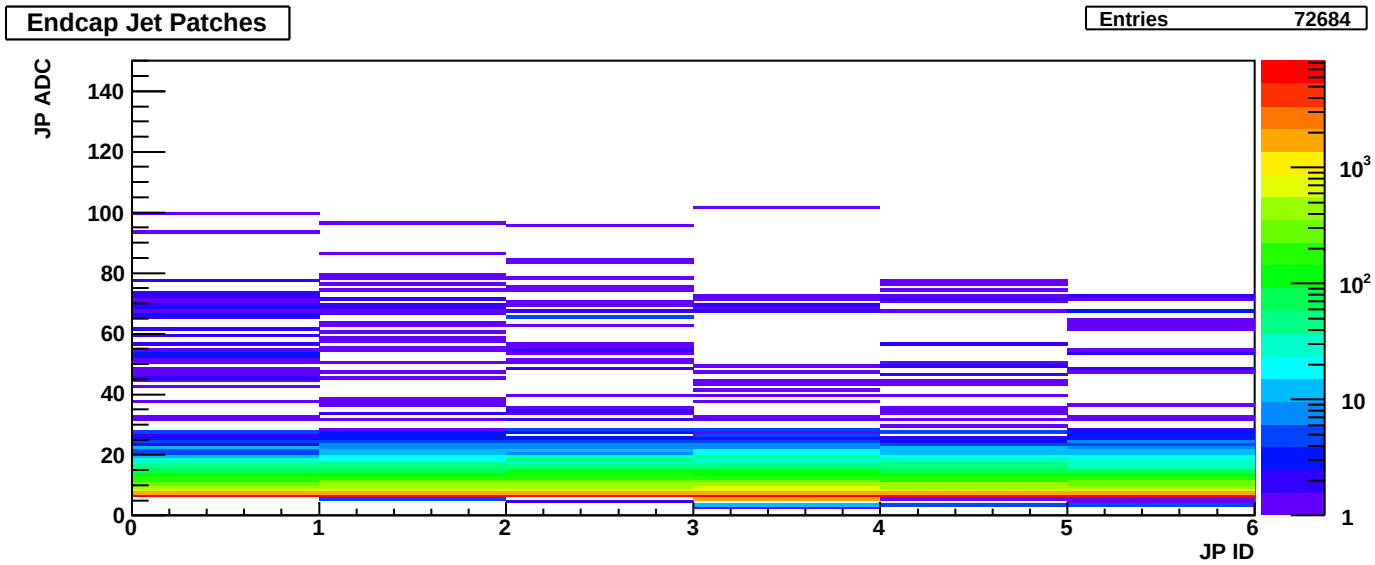

Barrel EMC L0 Input - High Tower
Entries 3634200
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

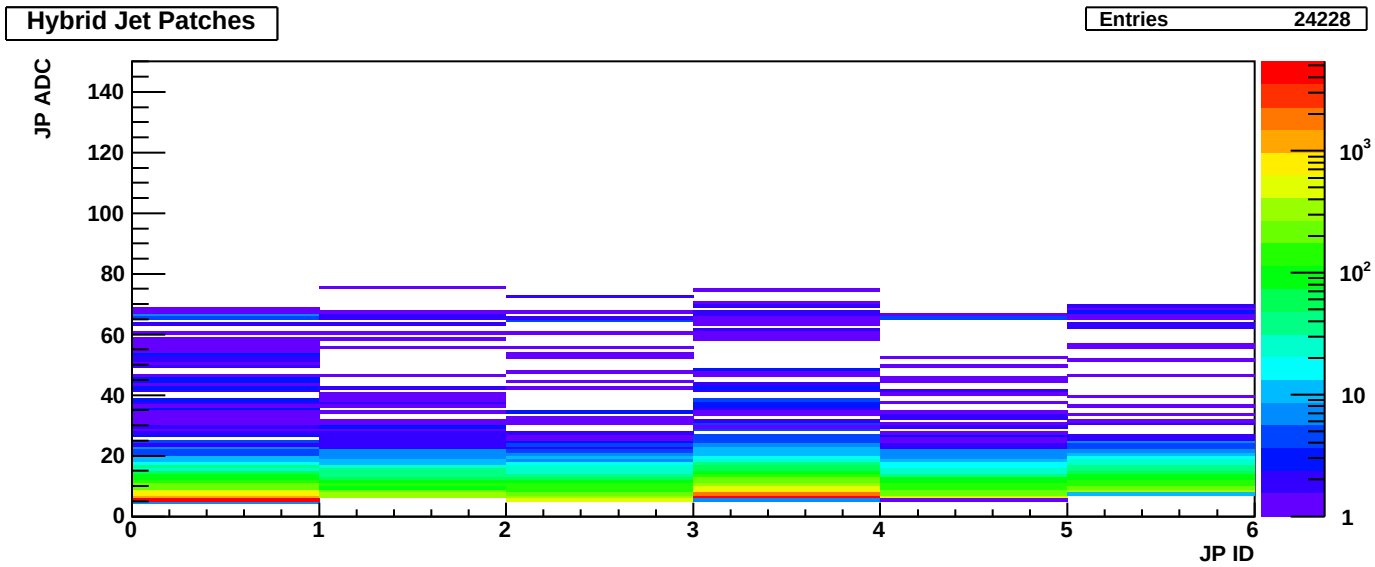

Barrel EMC L0 Input - Patch Sum
Entries 3634200
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

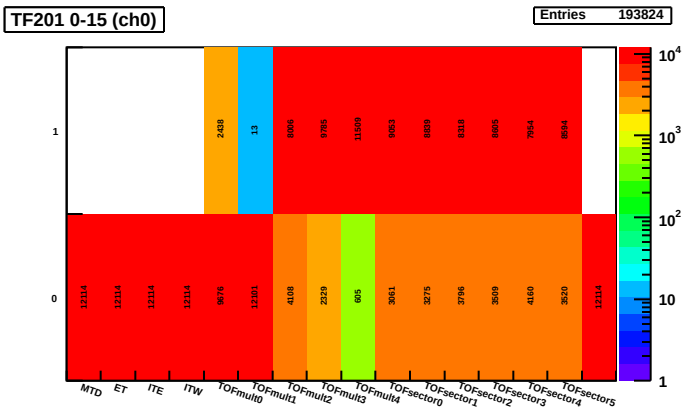

Endcap EMC L0 Input - High Tower
Entries 1090260
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

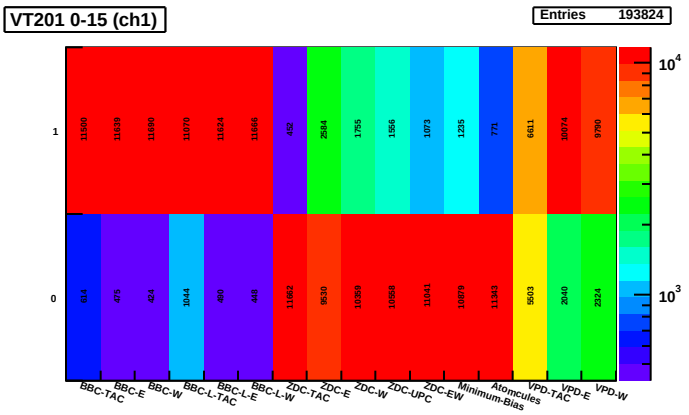

Endcap EMC L0 Input - Patch Sum
Entries 1090260
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

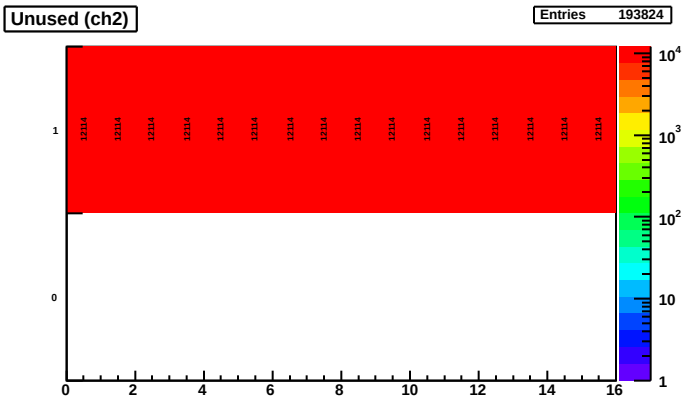

Barrel Jet Patches
Entries 218052
JP ADC
JP ID

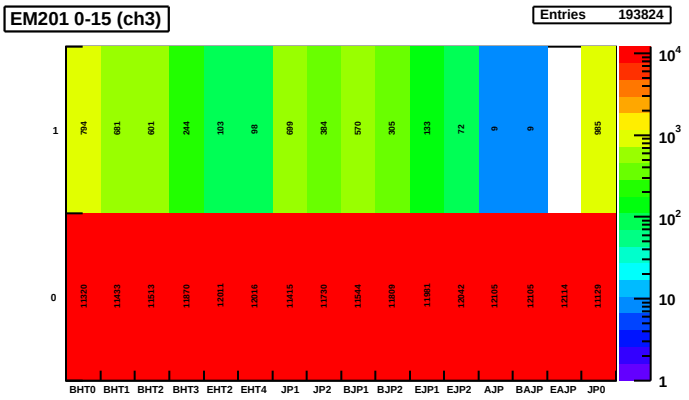

Endcap Jet Patches
Entries 72684
JP ADC
JP ID

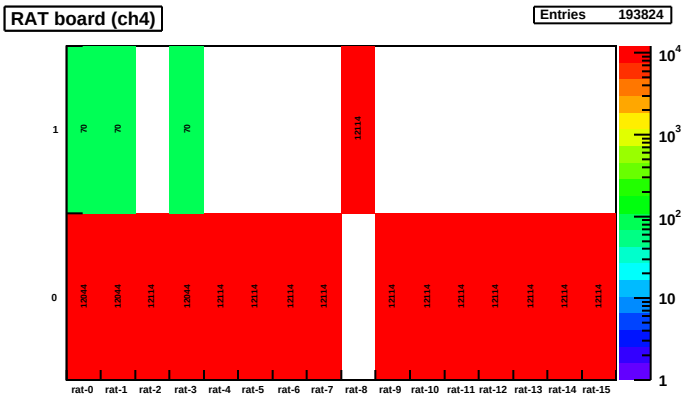

Hybrid Jet Patches
Entries 24228
JP ADC
JP ID

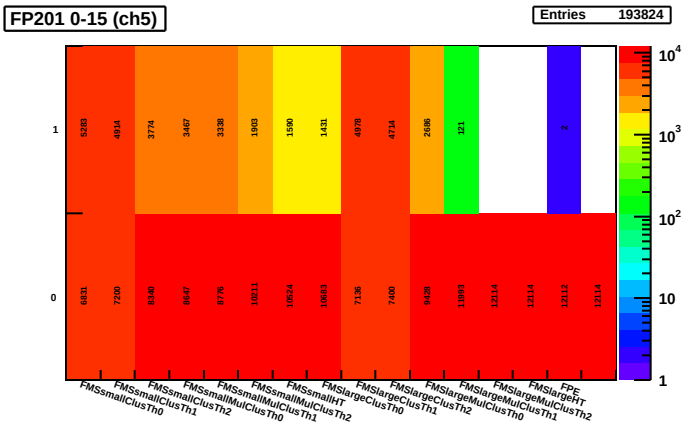

TF201 0-15 (ch0)
Entries 193824
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

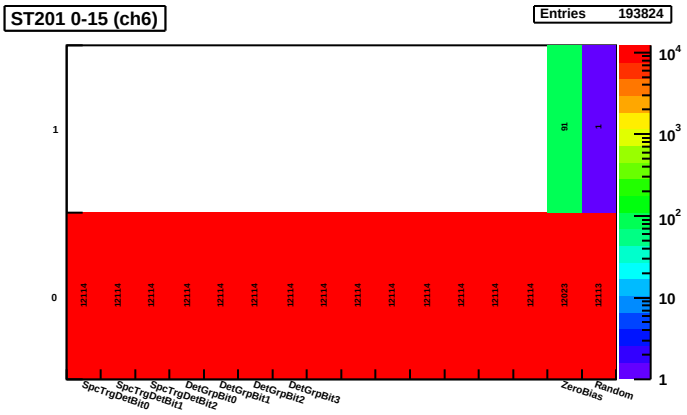

VT201 0-15 (ch1)
Entries 193824
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

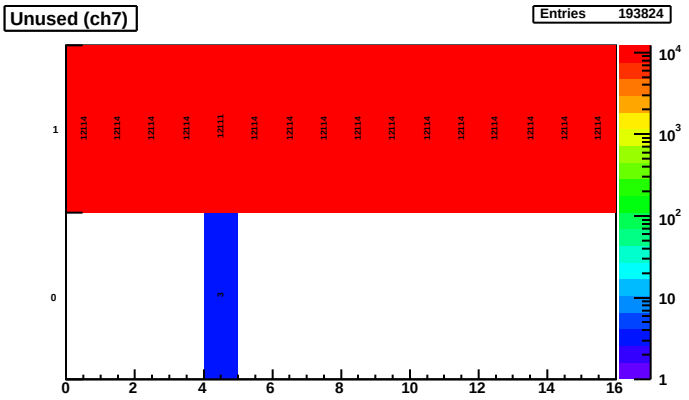

Unused (ch2)
Entries 193824

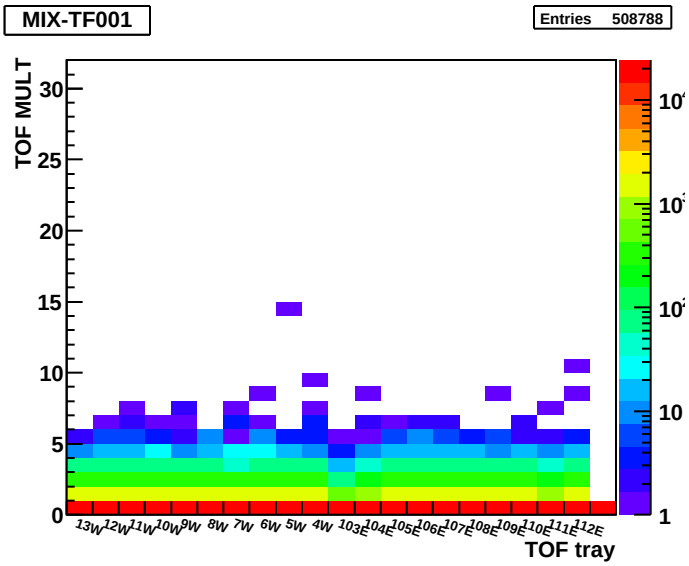

EM201 0-15 (ch3)
Entries 193824
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

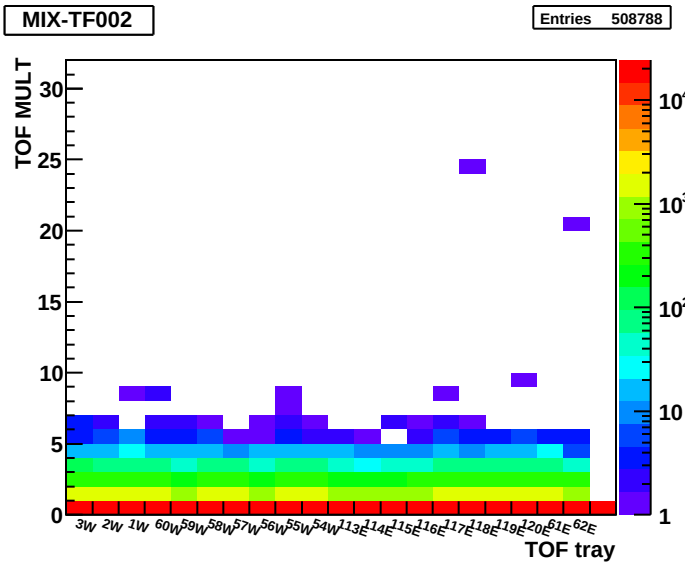

RAT board (ch4)
Entries 193824
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

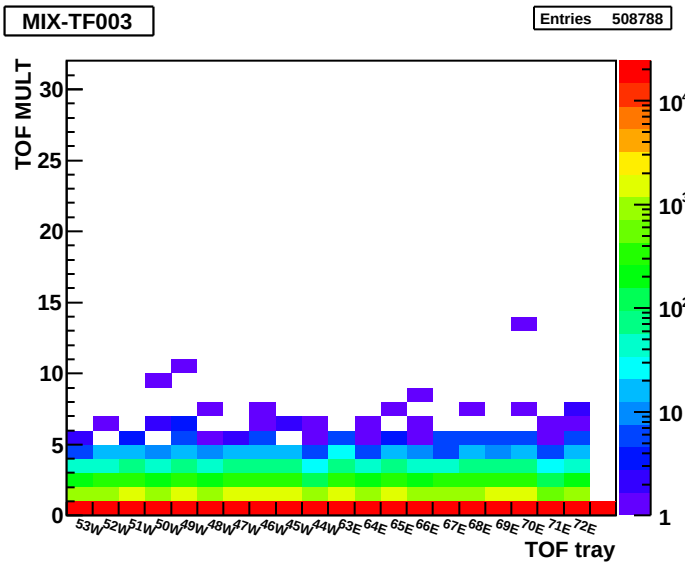

FP201 0-15 (ch5)
Entries 193824
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

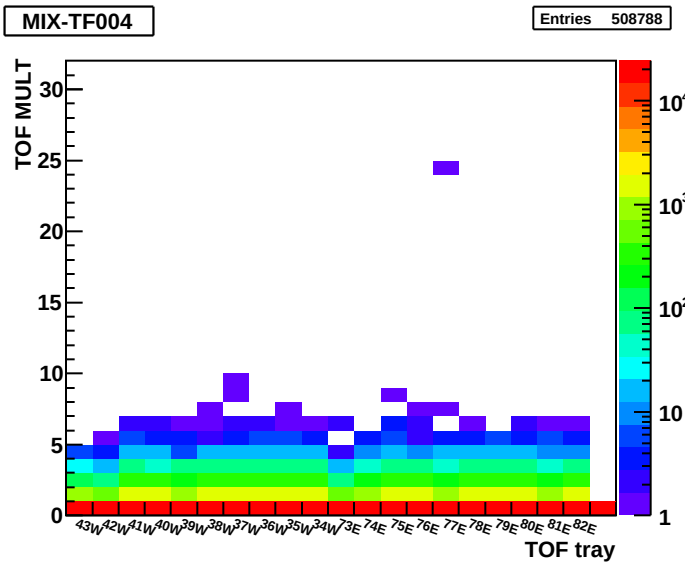

ST201 0-15 (ch6)
Entries 193824
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

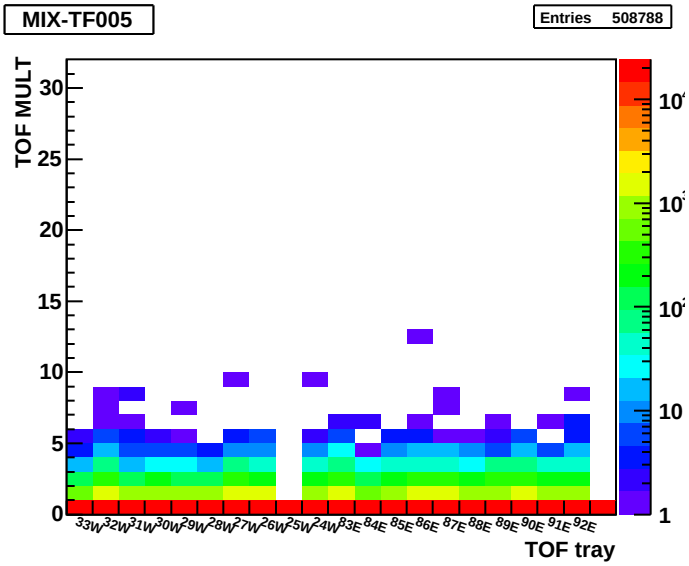

Unused (ch7)
Entries 193824

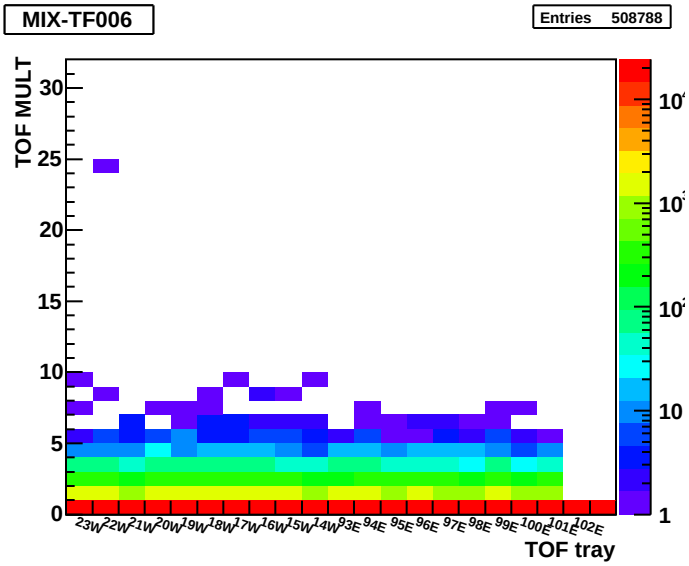

MIX-TF001
Entries 508788
TOF MULT
TOF tray

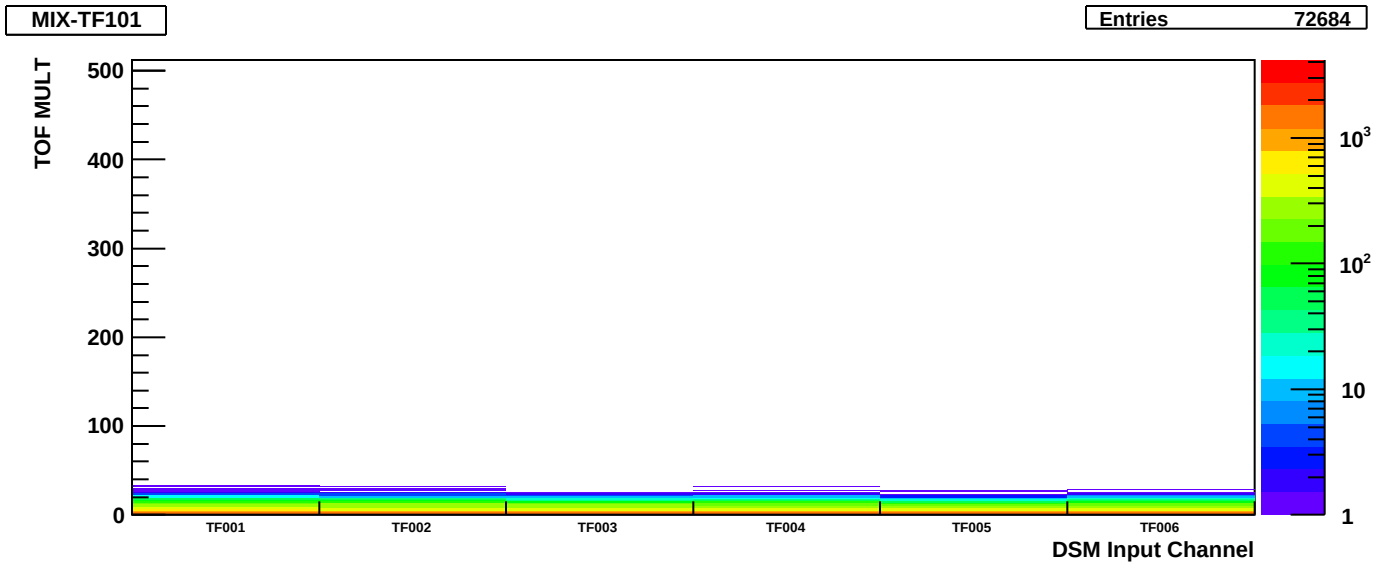

MIX-TF002
Entries 508788
TOF MULT
TOF tray

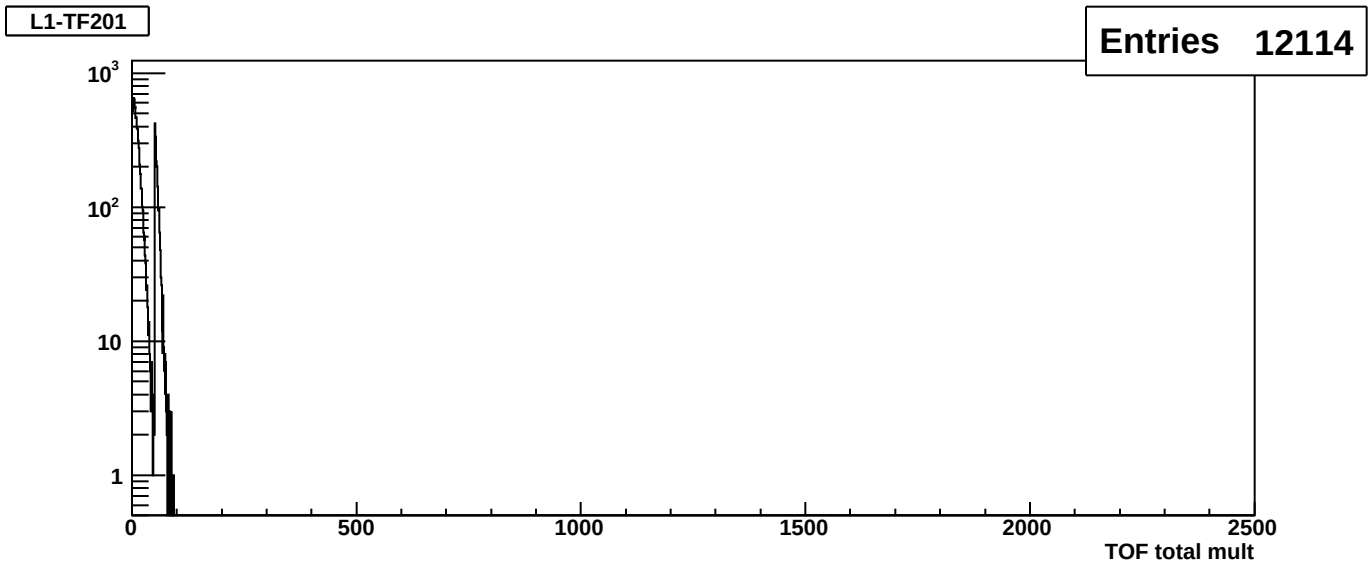

MIX-TF003
Entries 508788
TOF MULT
TOF tray

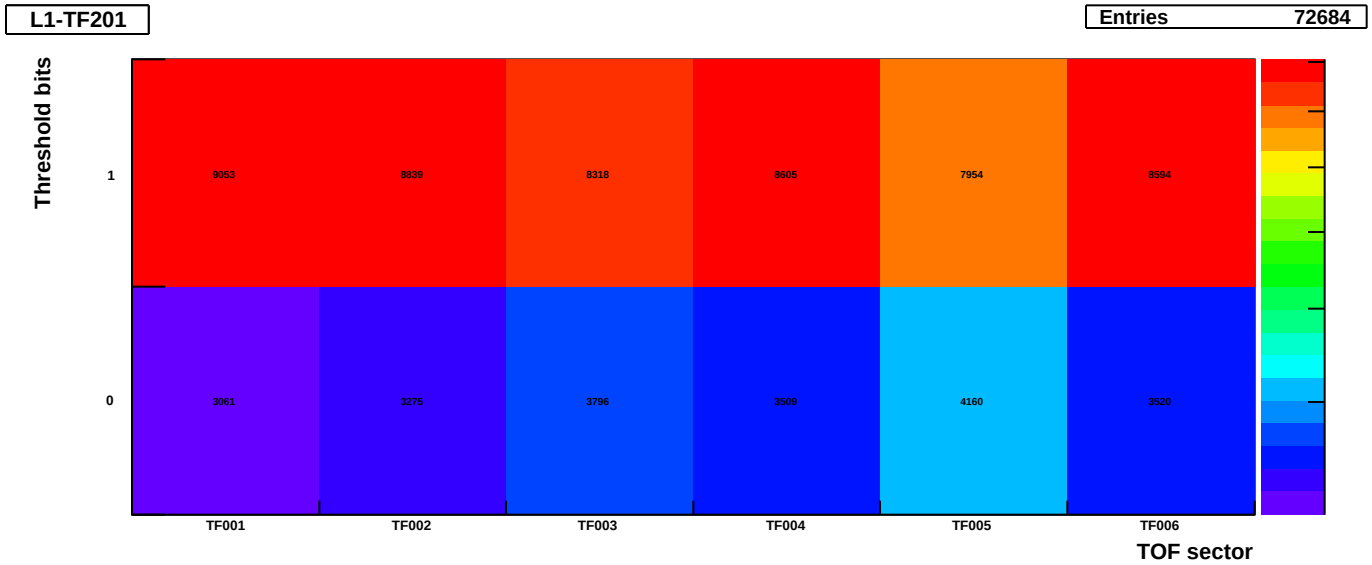

MIX-TF004
Entries 508788
TOF MULT
TOF tray

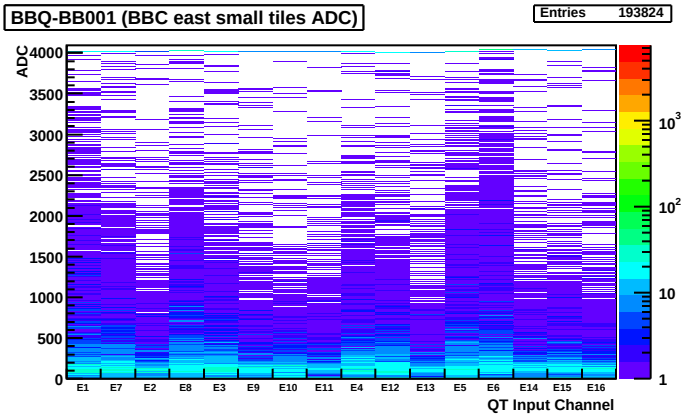

MIX-TF005
Entries 508788
TOF MULT
TOF tray

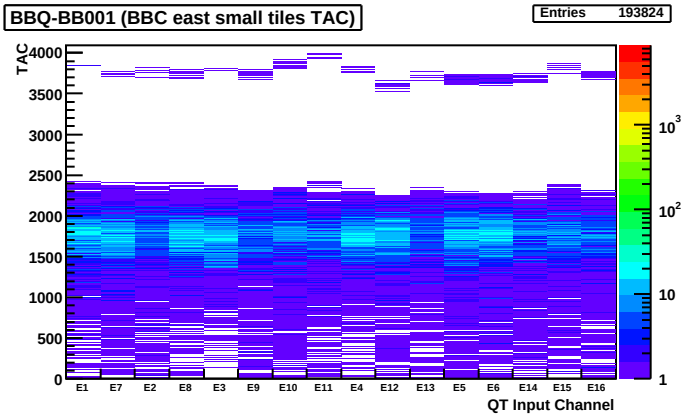

MIX-TF006
Entries 508788
TOF MULT
TOF tray

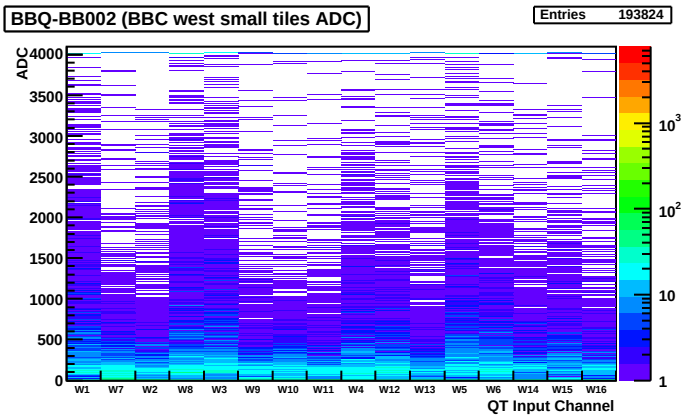

MIX-TF101
Entries 72684
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

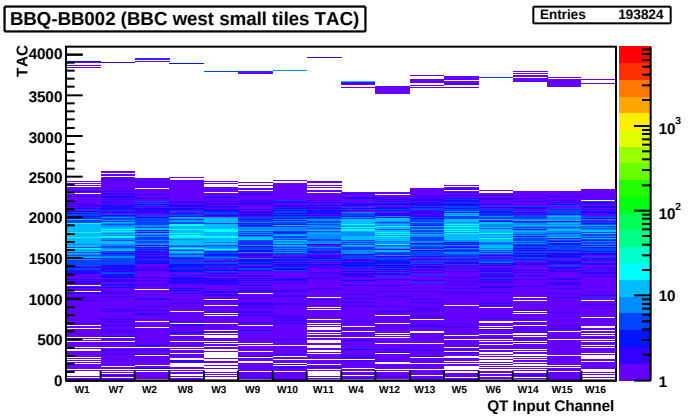

L1-TF201
Entries 12114
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

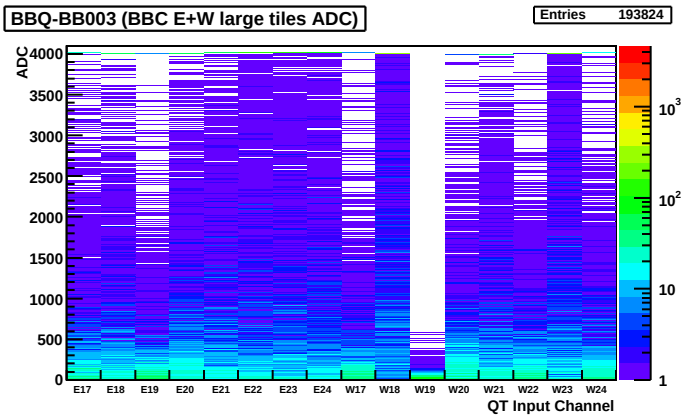

L1-TF201
Entries 72684
Threshold bits
1
0
9053
8839
8318
8605
7954
8594
3061
3275
3796
3509
4160
3520
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

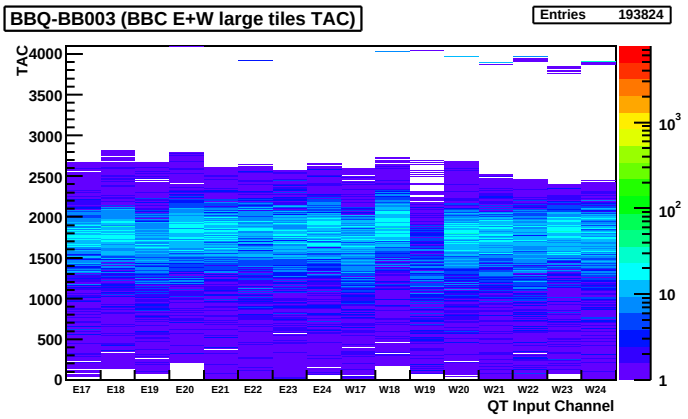

BBQ-BB001 (BBC east small tiles ADC)
Entries 193824
ADC
QT Input Channel

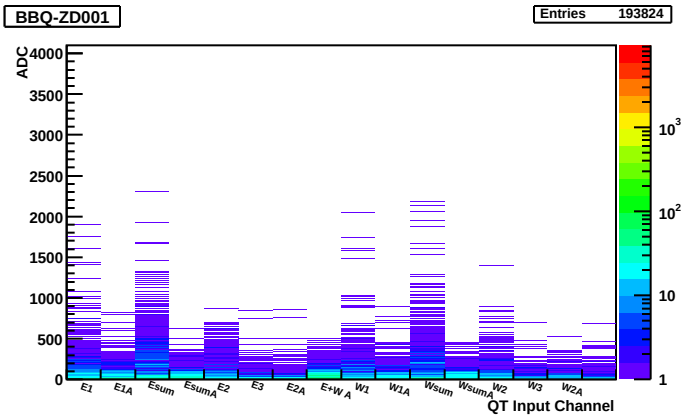

BBQ-BB001 (BBC east small tiles TAC)
Entries 193824
TAC
QT Input Channel

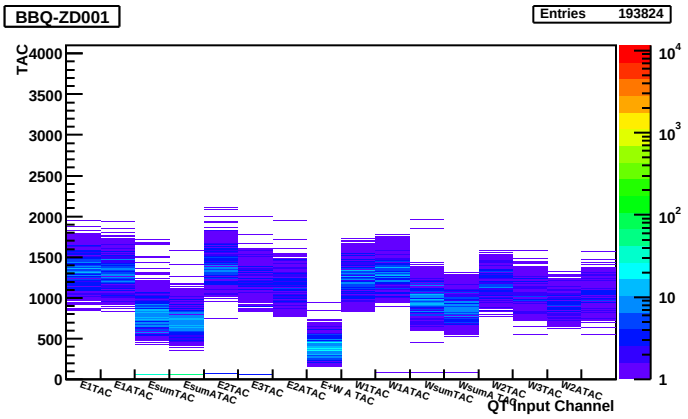

BBQ-BB002 (BBC west small tiles ADC)
Entries 193824
ADC
QT Input Channel

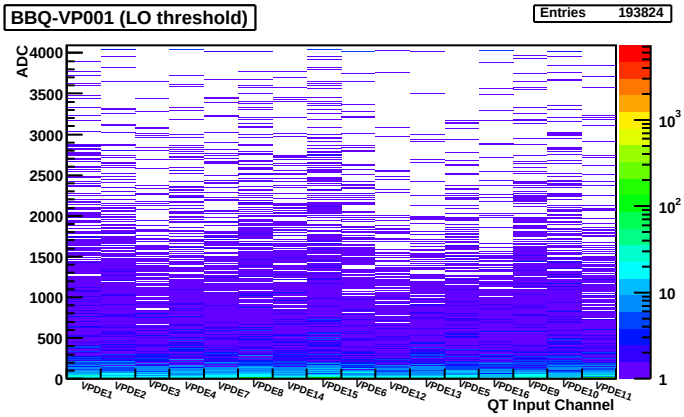

BBQ-BB002 (BBC west small tiles TAC)
Entries 193824
TAC
QT Input Channel

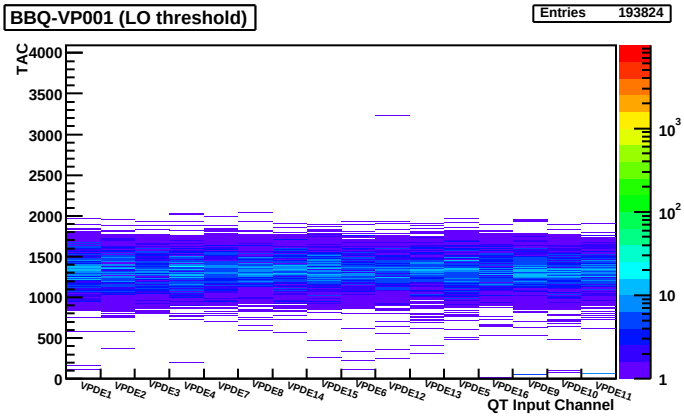

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 193824
ADC
QT Input Channel

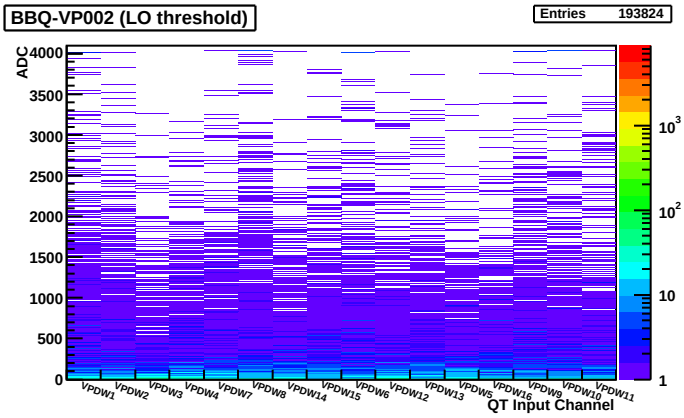

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 193824
TAC
QT Input Channel

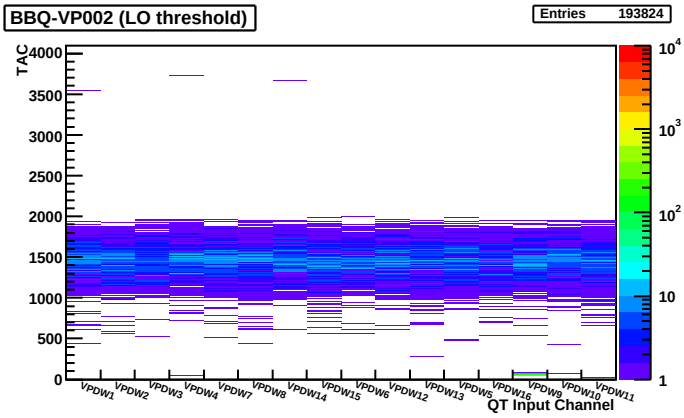

BBQ-ZD001
Entries 193824
ADC
QT Input Channel

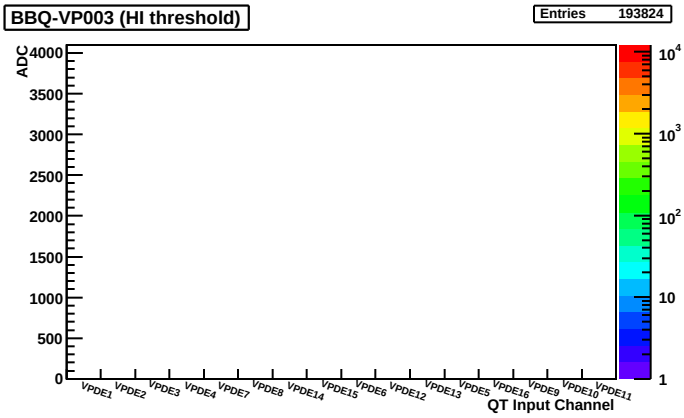

BBQ-ZD001
Entries 193824
TAC
QT Input Channel

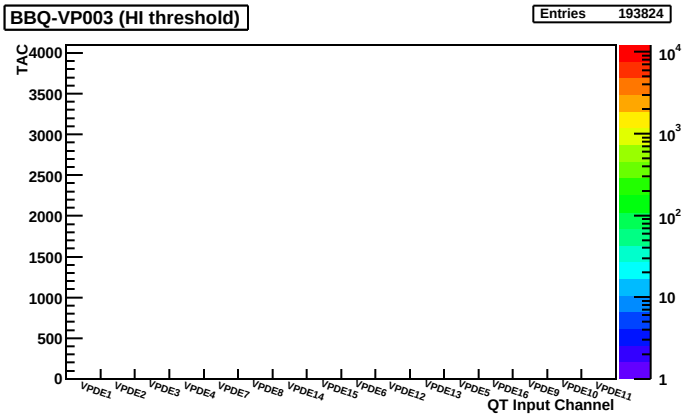

BBQ-VP001 (LO threshold)
Entries 193824
ADC
QT Input Channel

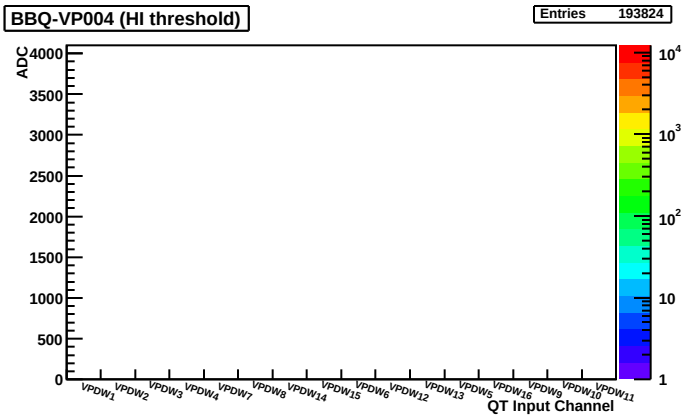

BBQ-VP001 (LO threshold)
Entries 193824
TAC
QT Input Channel

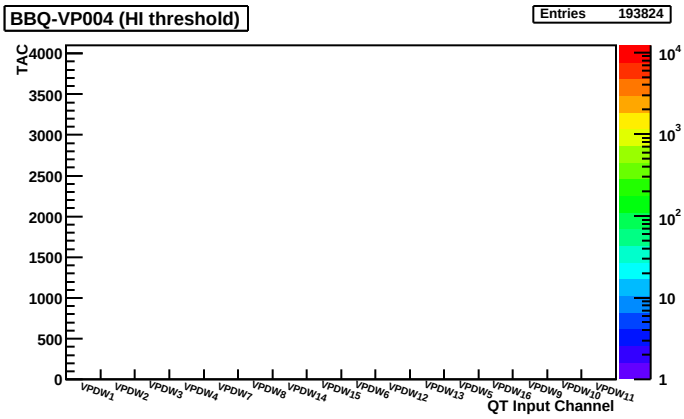

BBQ-VP002 (LO threshold)
Entries 193824
ADC
QT Input Channel

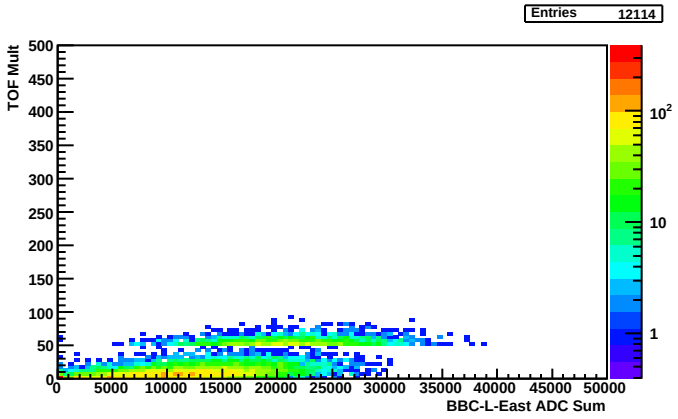

BBQ-VP002 (LO threshold)
Entries 193824
TAC
QT Input Channel

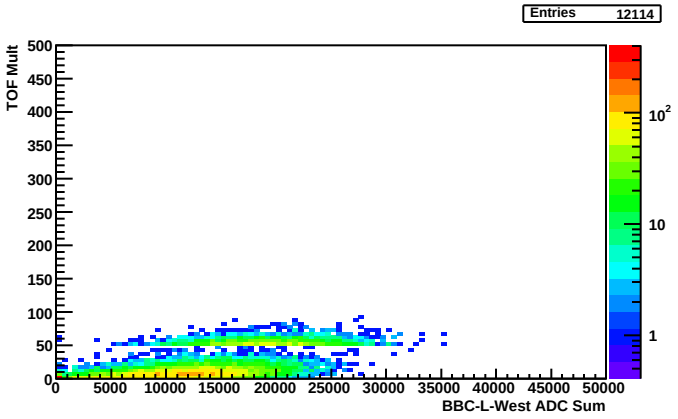

BBQ-VP003 (HI threshold)
Entries 193824
ADC
QT Input Channel

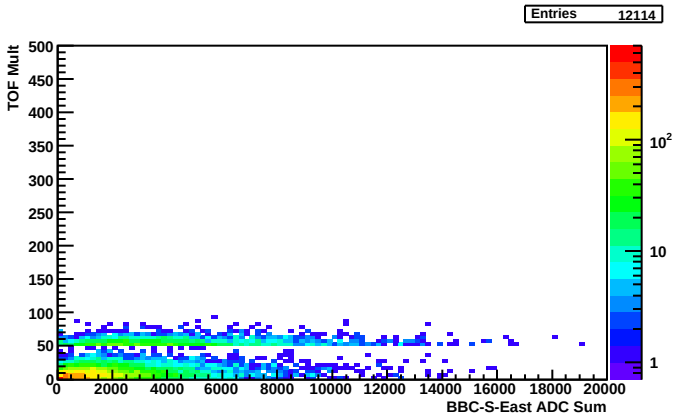

BBQ-VP003 (HI threshold)
Entries 193824
TAC
QT Input Channel

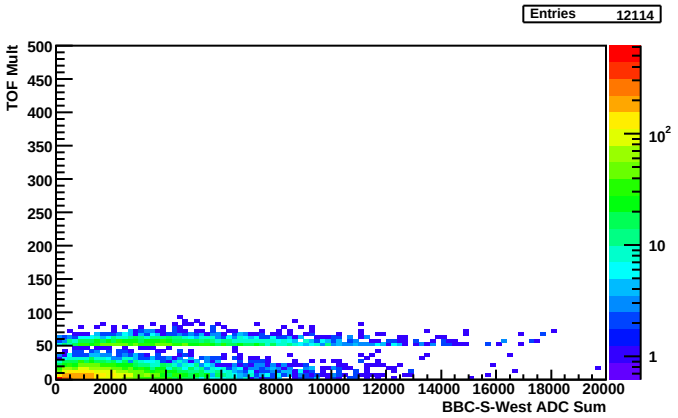

BBQ-VP004 (HI threshold)
Entries 193824
ADC
QT Input Channel

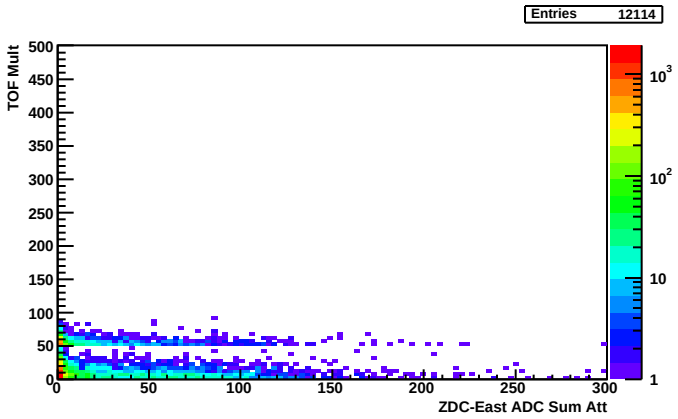

BBQ-VP004 (HI threshold)
Entries 193824
TAC
QT Input Channel

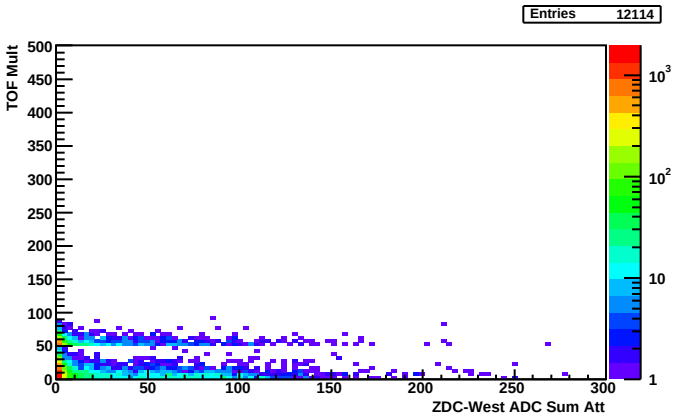

Entries 12114
TOF Mult
BBC-L-East ADC Sum

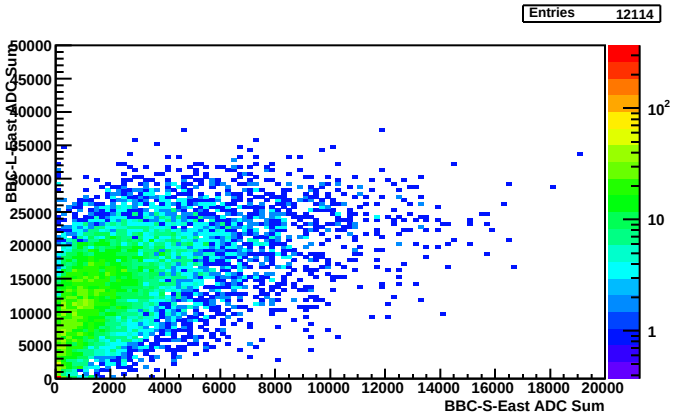

Entries 12114
TOF Mult
BBC-L-West ADC Sum

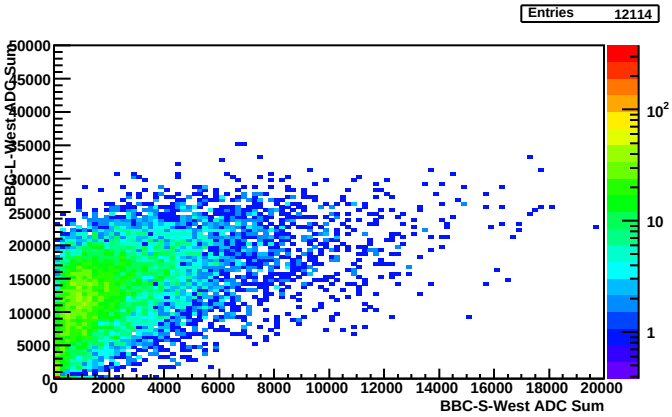

Entries 12114
TOF Mult
BBC-S-East ADC Sum

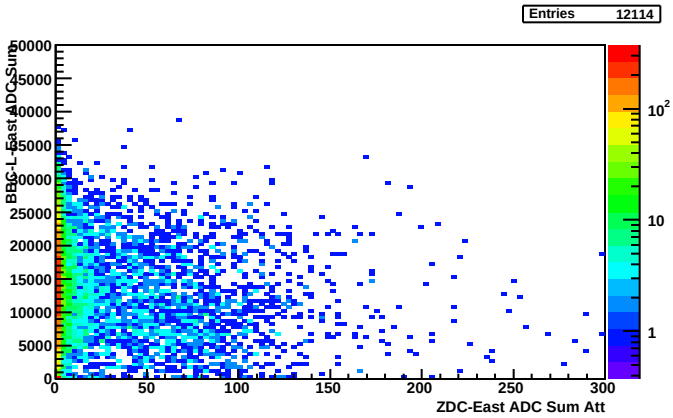

Entries 12114
TOF Mult
BBC-S-West ADC Sum

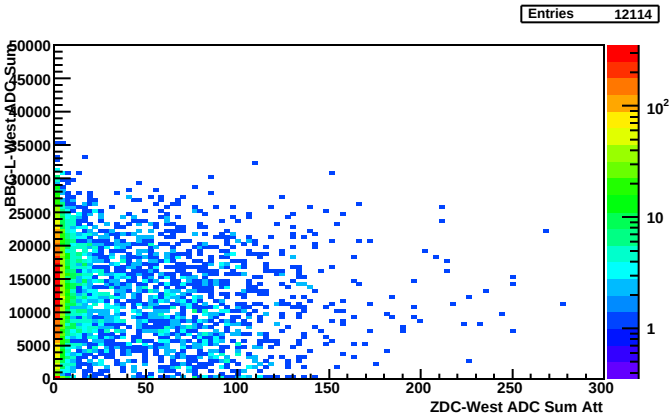

Entries 12114
TOF Mult
ZDC-East ADC Sum Att

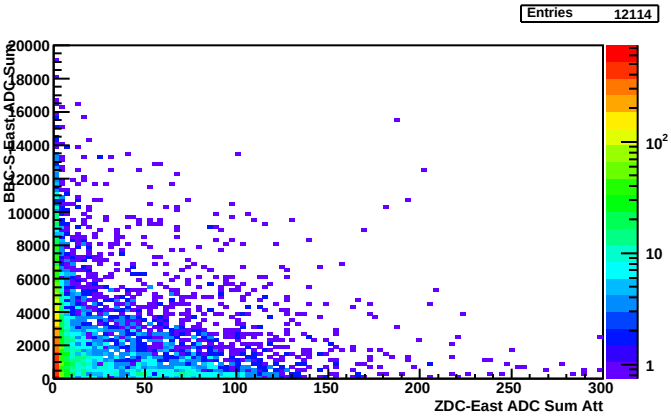

Entries 12114
TOF Mult
ZDC-West ADC Sum Att

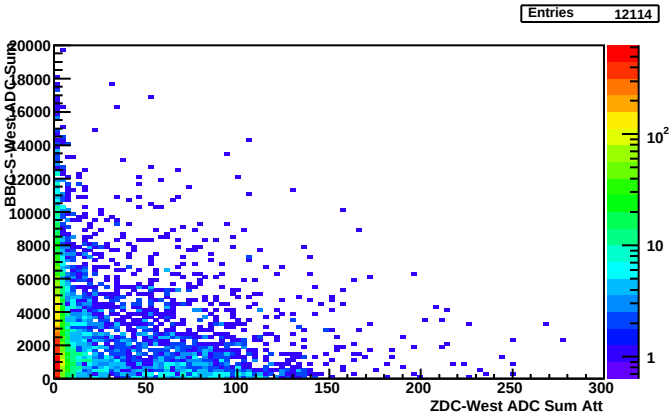

Entries 12114
BBC-L-East ADC Sum
BBC-S-East ADC Sum

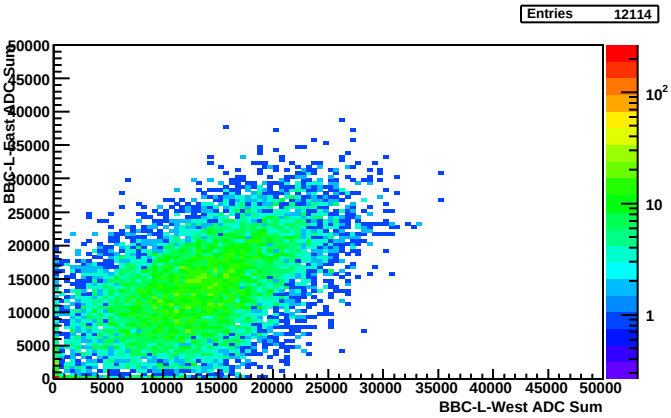

Entries 12114
BBC-L-West ADC Sum
BBC-S-West ADC Sum

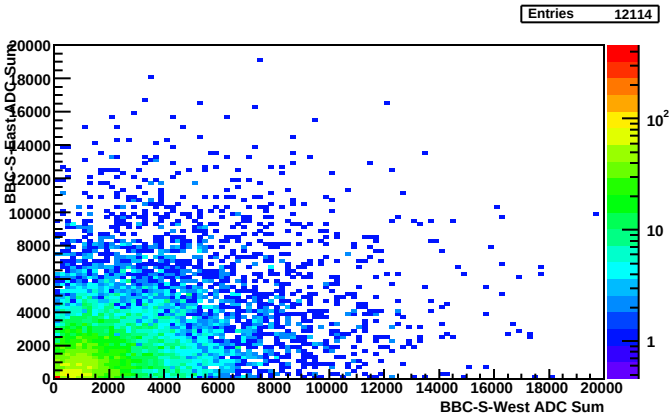

Entries 12114
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

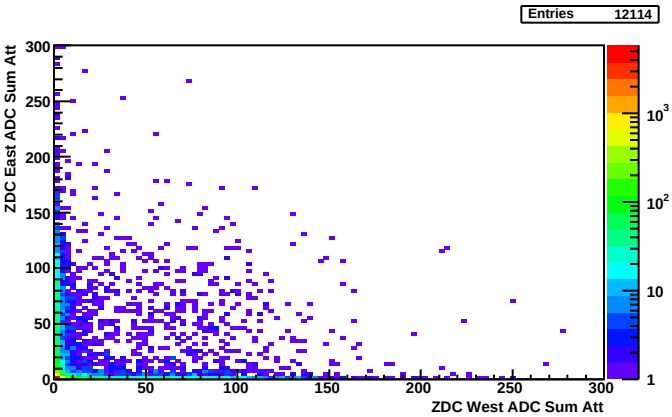

Entries 12114
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

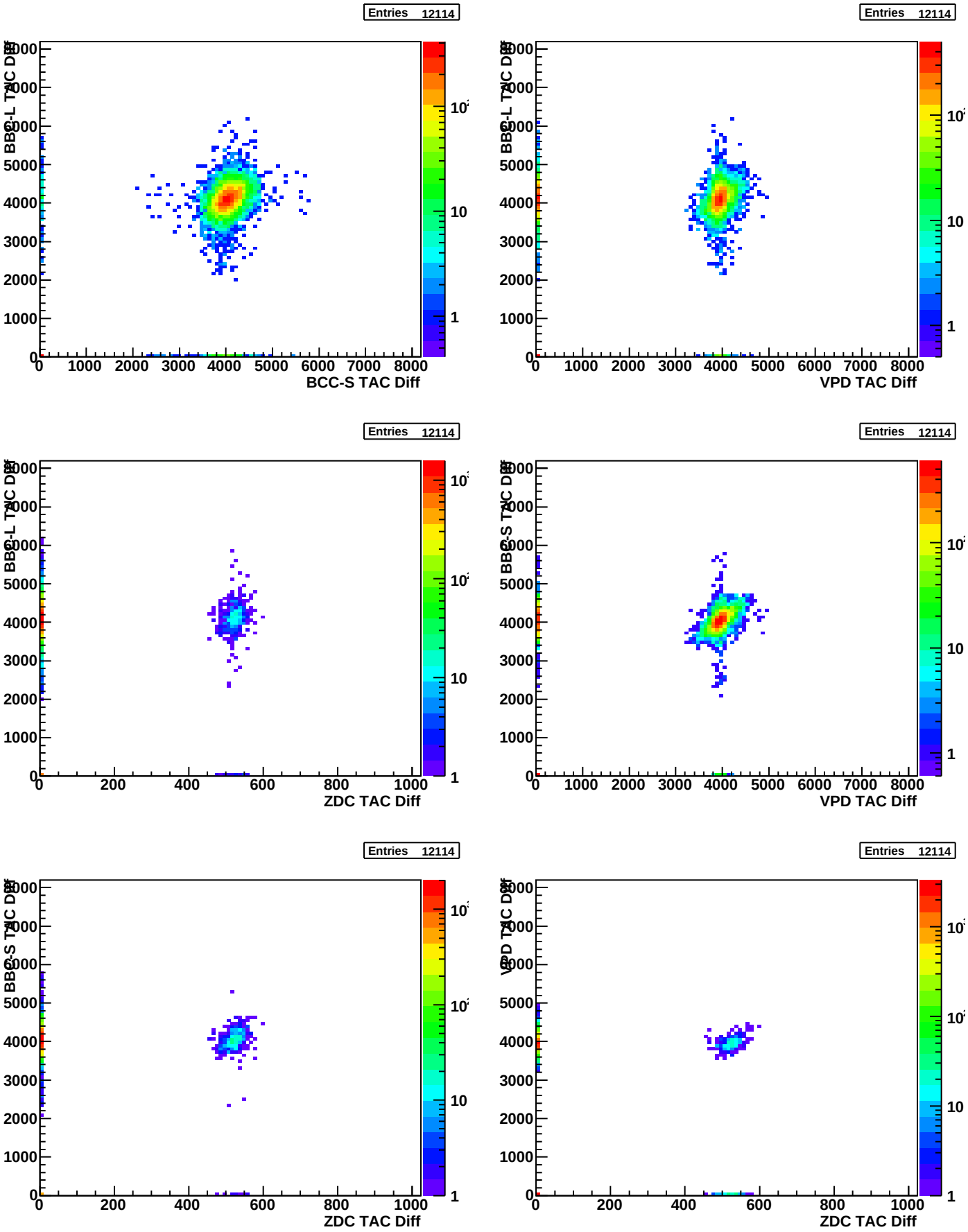

Entries 12114
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

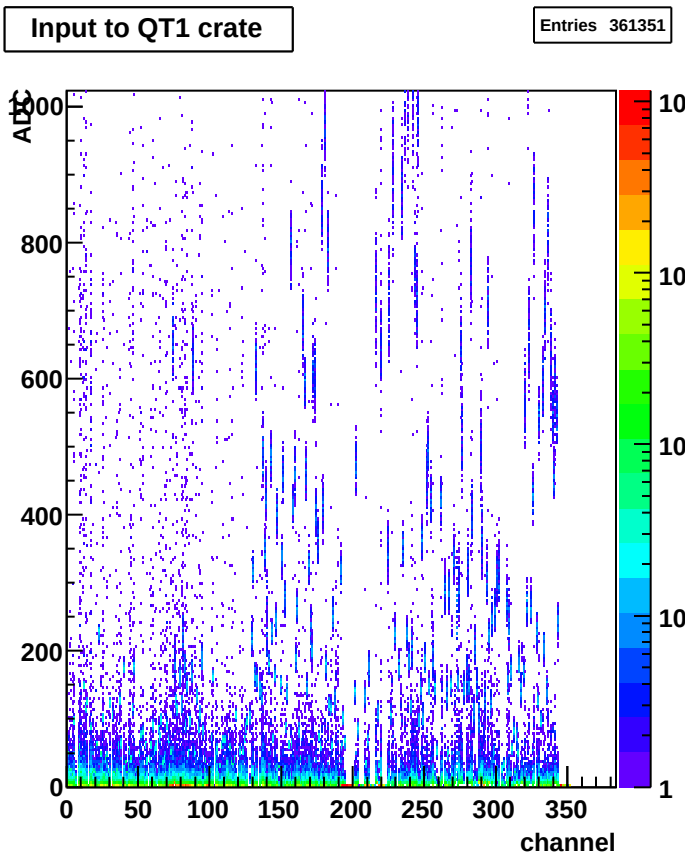

Entries 12114
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

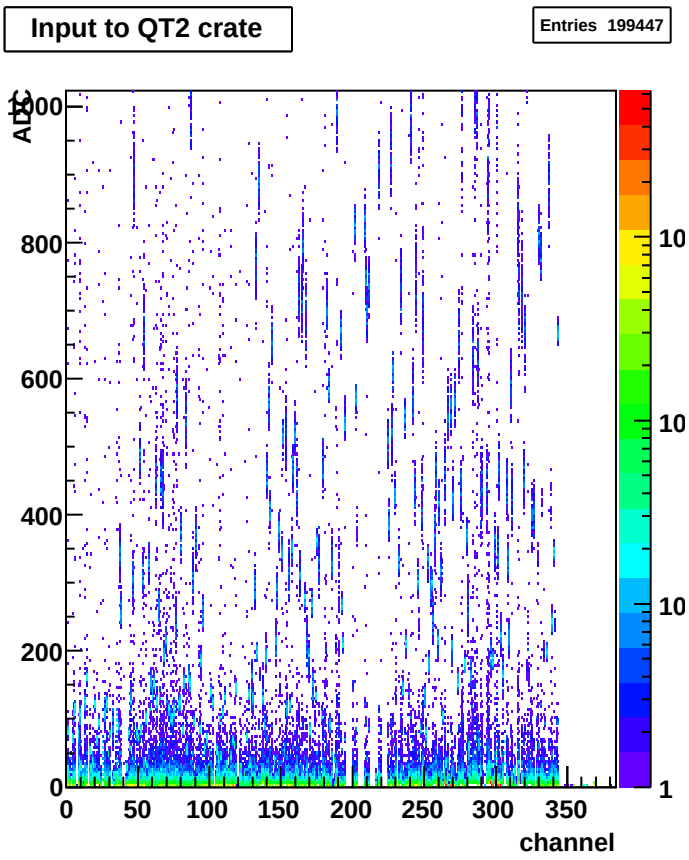

Entries 12114
BBC-L-East ADC Sum
BBC-L-West ADC Sum

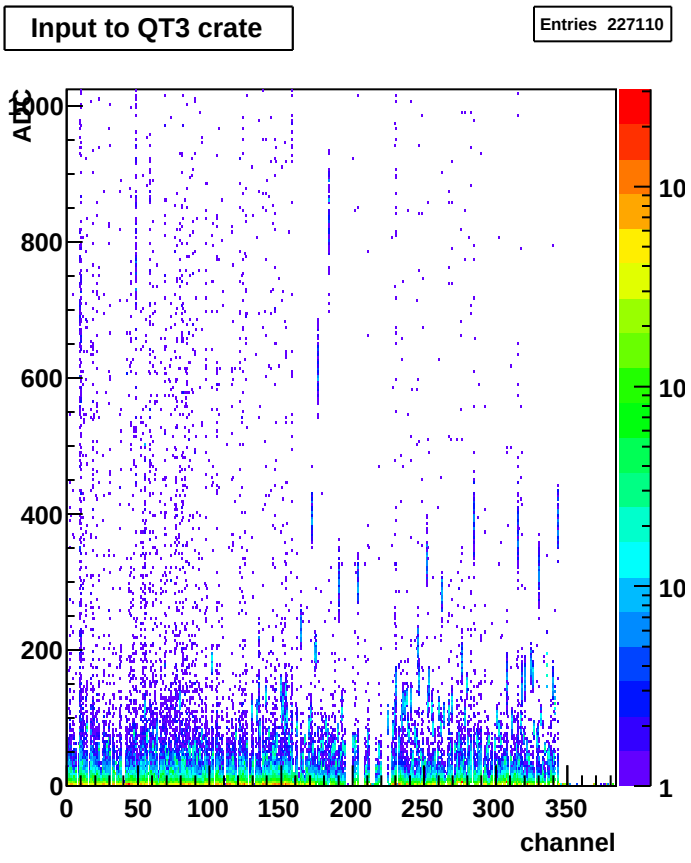

Entries 12114
BBC-S-East ADC Sum
BBC-S-West ADC Sum

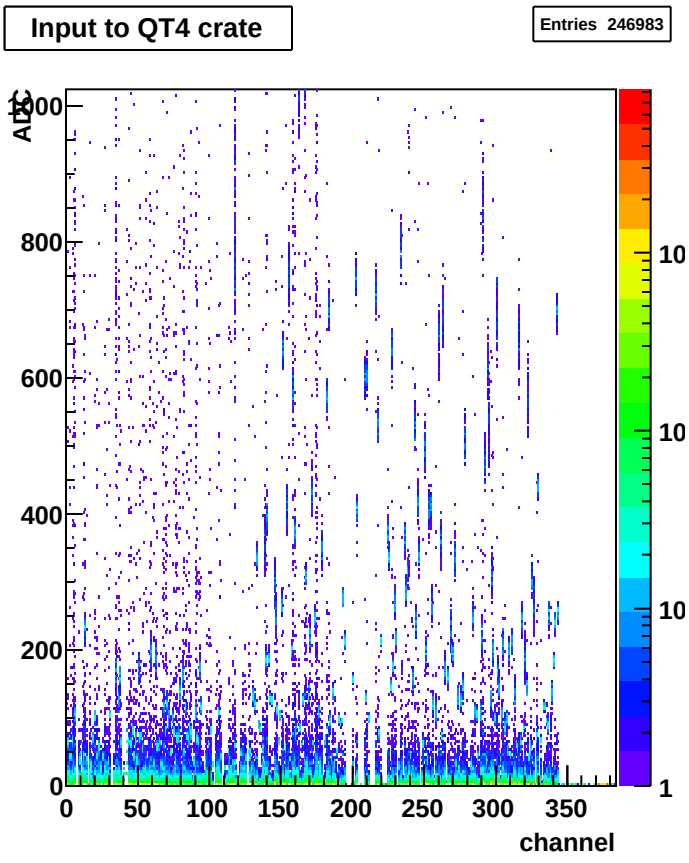

Entries 12114
ZDC East ADC Sum Att
ZDC West ADC Sum Att

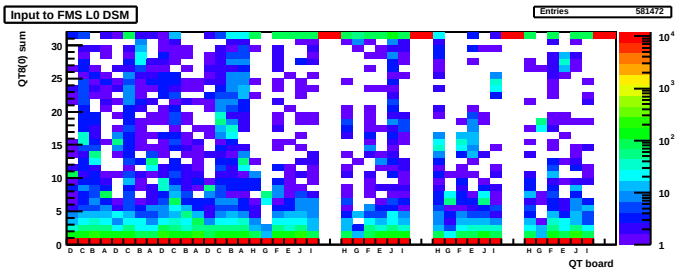

Entries 12114
BBC-L TAC Diff
BCC-S TAC Diff
Entries 12114
BBC-L TAC Diff
VPD TAC Diff
Entries 12114
BBC-L TAC Diff
ZDC TAC Diff
Entries 12114
BBC-S TAC Diff
VPD TAC Diff
Entries 12114
BBC-S TAC Diff
ZDC TAC Diff
Entries 12114
VPD TAC Diff
ZDC TAC Diff

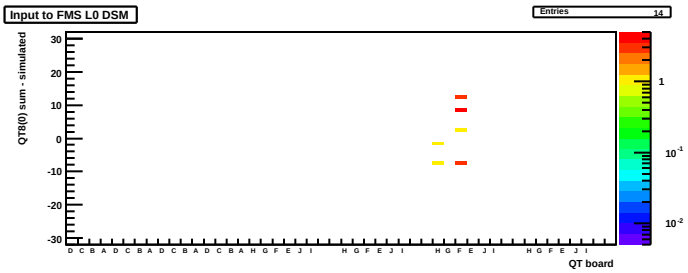

Input to QT1 crate
Entries 361351
ADC
channel

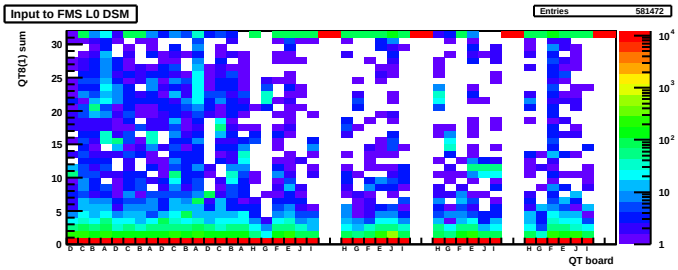

Input to QT2 crate
Entries 199447
ADC
channel

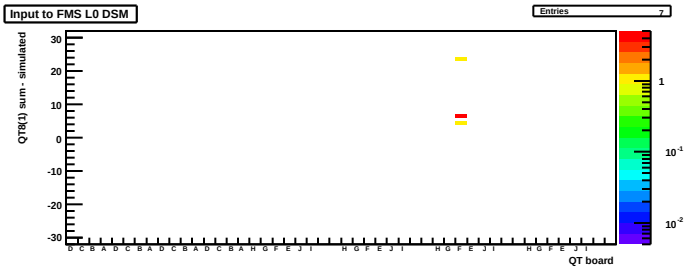

Input to QT3 crate
Entries 227110
ADC
channel

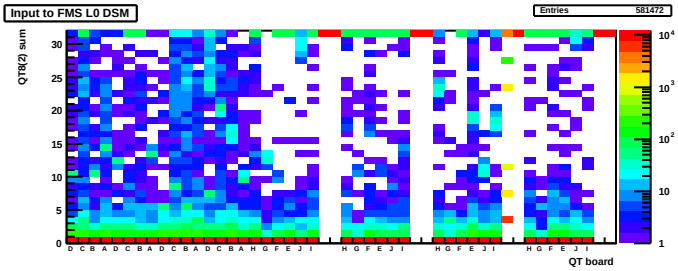

Input to QT4 crate
Entries 246983
ADC
channel

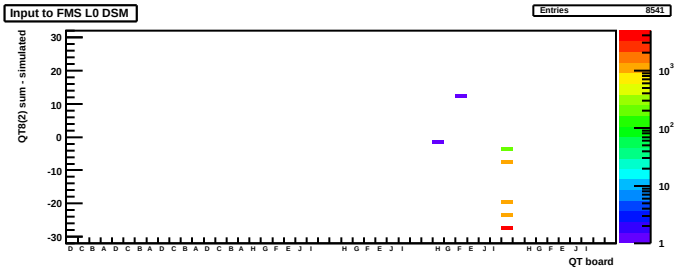

Input to FMS L0 DSM
Entries 581472
QT8(0) sum
QT board

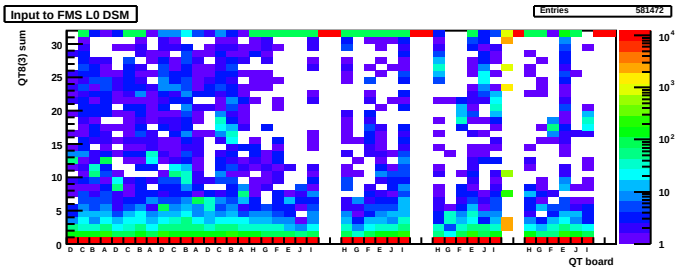

Input to FMS L0 DSM
Entries 14
QT8(0) sum - simulated
QT board

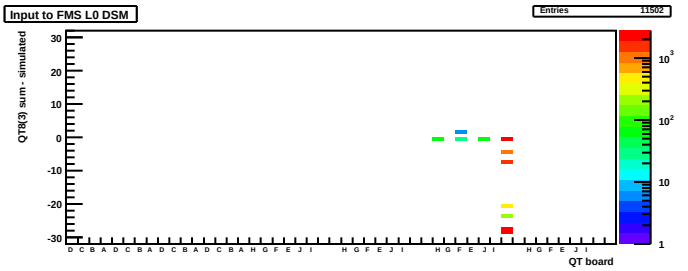

Input to FMS L0 DSM
Entries 581472
QT8(1) sum
QT board

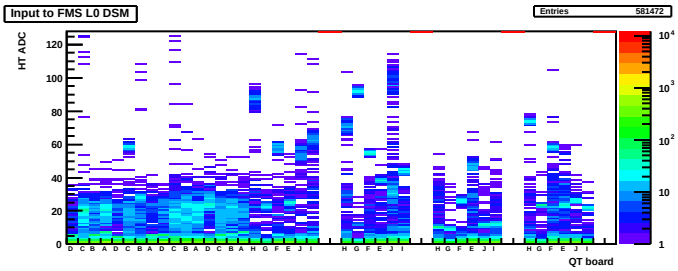

Input to FMS L0 DSM
Entries 7
QT8(1) sum - simulated
QT board

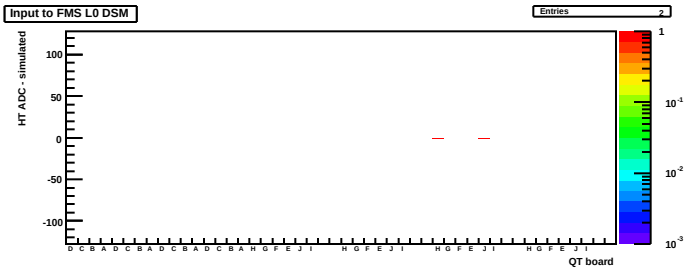

Input to FMS L0 DSM
Entries 581472
QT8(2) sum
QT board

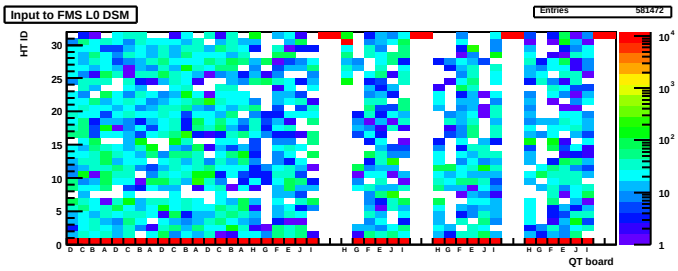

Input to FMS L0 DSM
Entries 8541
QT8(2) sum - simulated
QT board

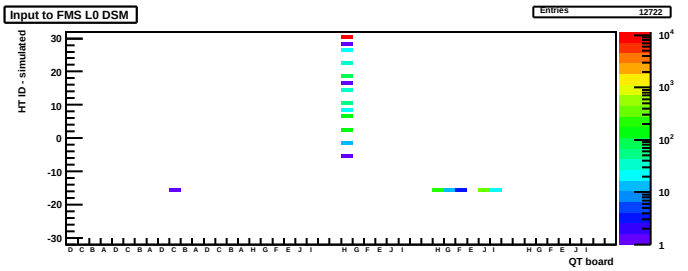

Input to FMS L0 DSM
Entries 581472
QT8(3) sum
QT board

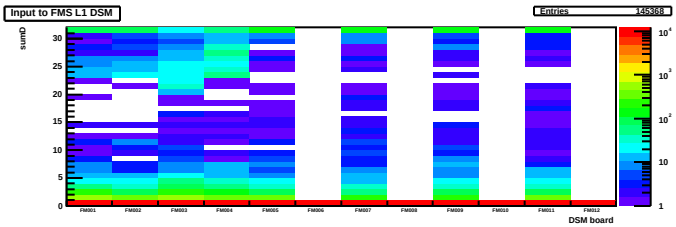

Input to FMS L0 DSM
Entries 11502
QT8(3) sum - simulated
QT board

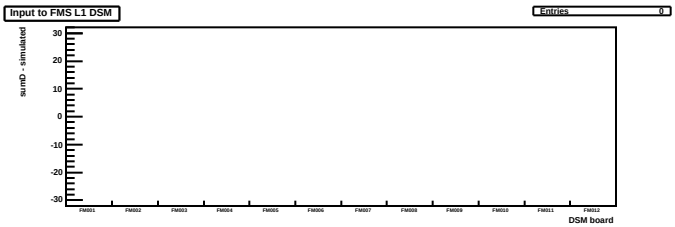

Input to FMS L0 DSM
Entries 581472
HT ADC
QT board

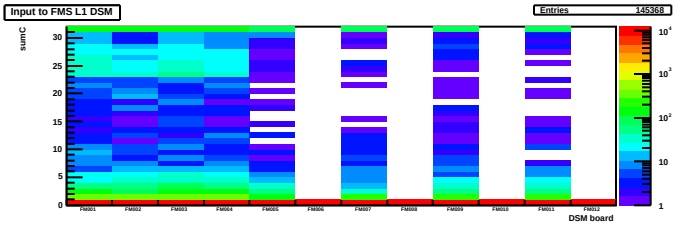

Input to FMS L0 DSM
Entries 2
HT ADC - simulated
QT board

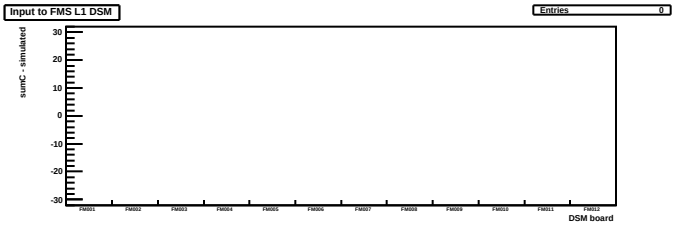

Input to FMS L0 DSM
Entries 581472
HT ID
QT board

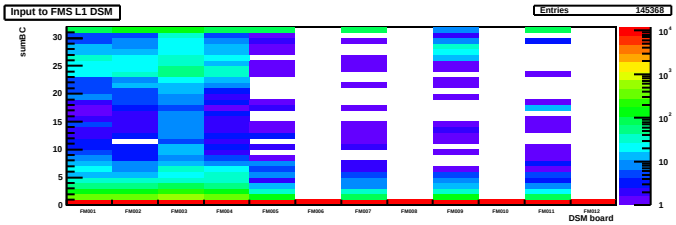

Input to FMS L0 DSM
Entries 12722
HT ID - simulated
QT board

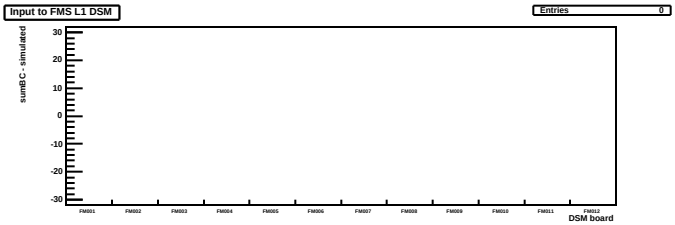

Input to FMS L1 DSM
Entries 145368
sumD
DSM board

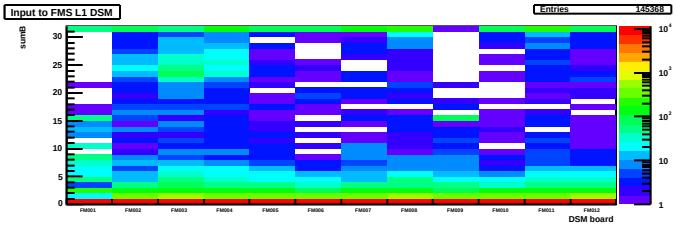

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

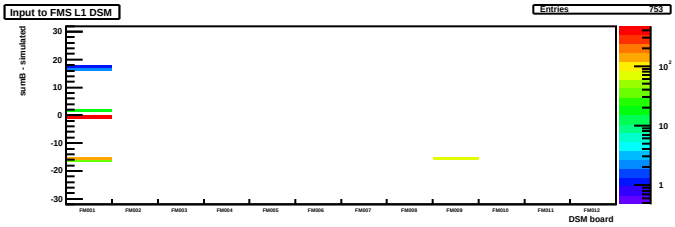

Input to FMS L1 DSM
Entries 145368
sumC
DSM board

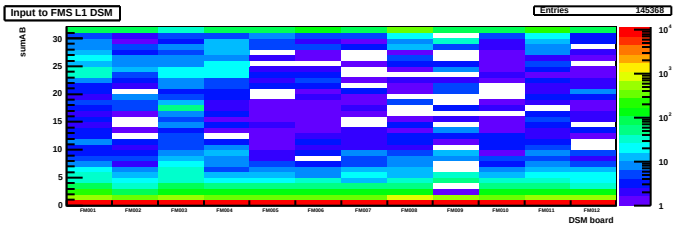

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

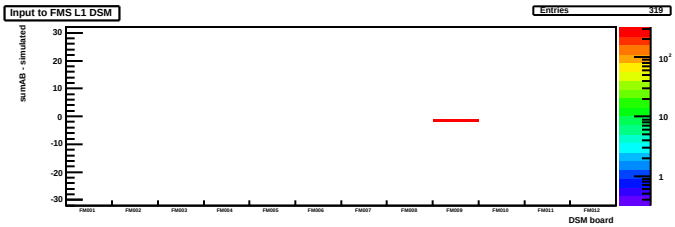

Input to FMS L1 DSM
Entries 145368
sumBC
DSM board

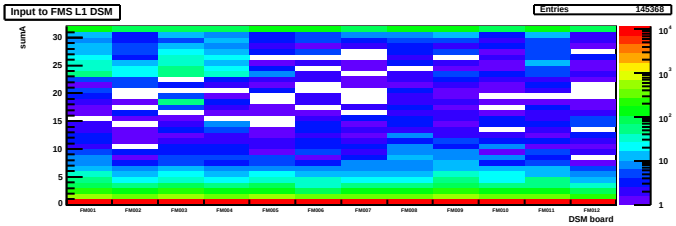

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

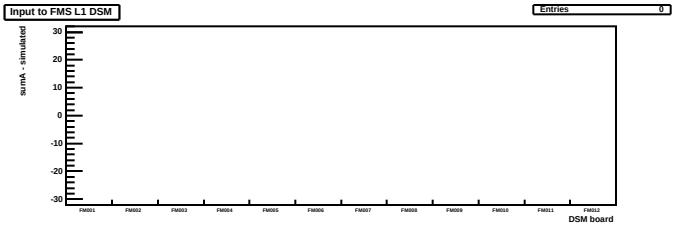

Input to FMS L1 DSM
Entries 145368
sumB
DSM board

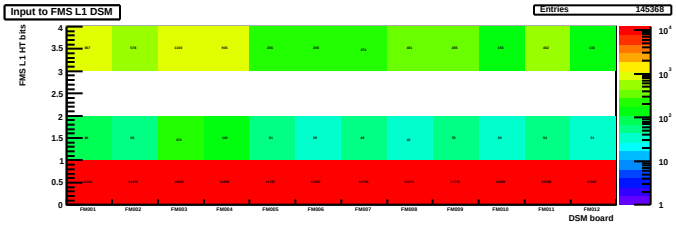

Input to FMS L1 DSM
Entries 753
sumB - simulated
DSM board

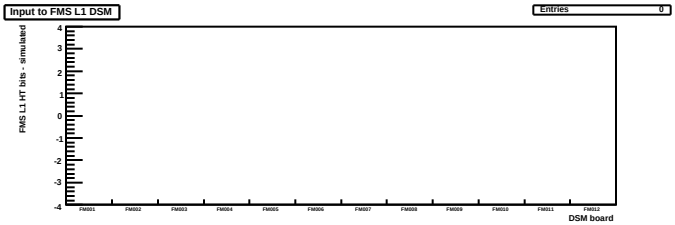

Input to FMS L1 DSM
Entries 145368
sumAB
DSM board

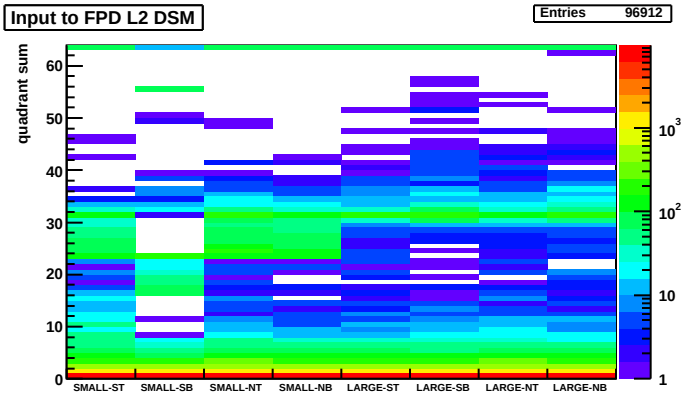

Input to FMS L1 DSM
Entries 319
sumAB - simulated
DSM board

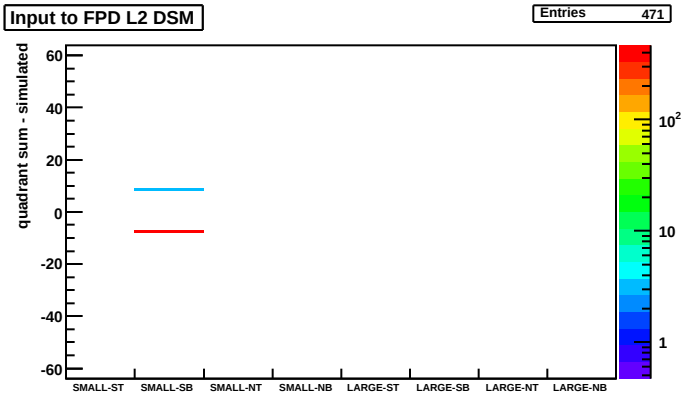

Input to FMS L1 DSM
Entries 145368
sumA
DSM board

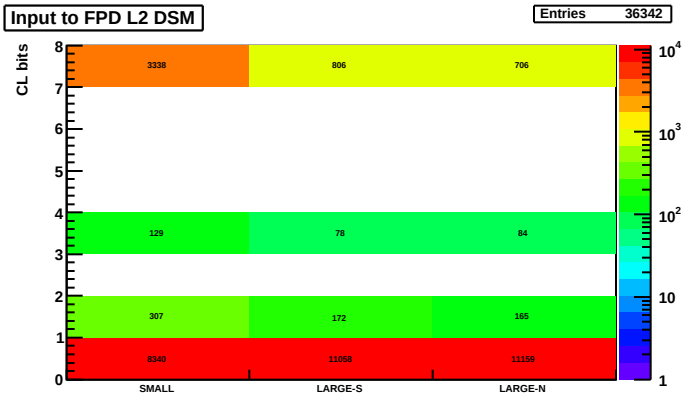

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

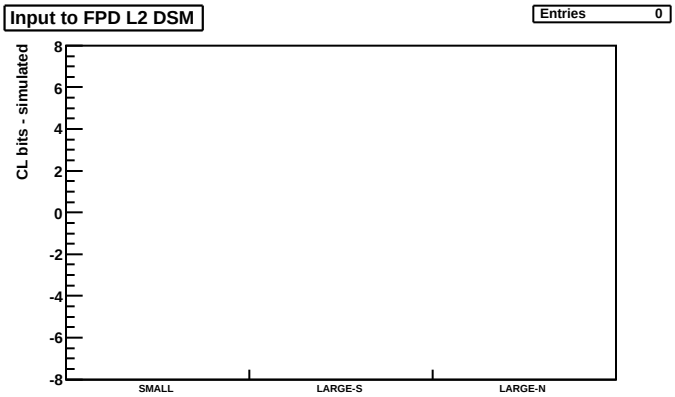

Input to FMS L1 DSM
Entries 145368
FMS L1 HT bits
DSM board

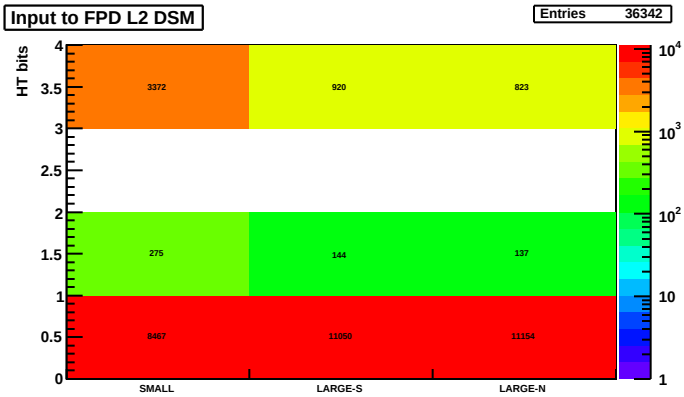

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

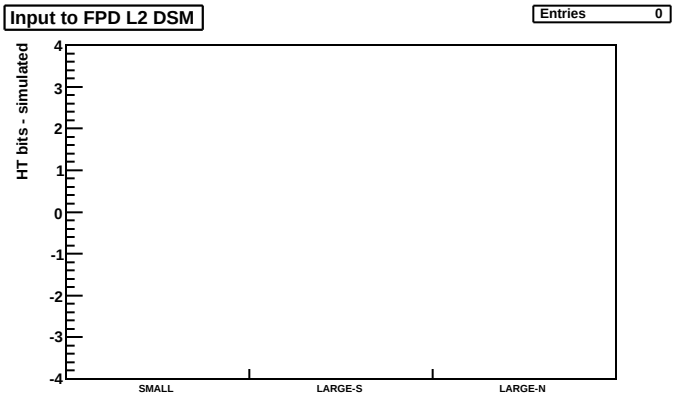

Input to FPD L2 DSM
Entries 96912
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

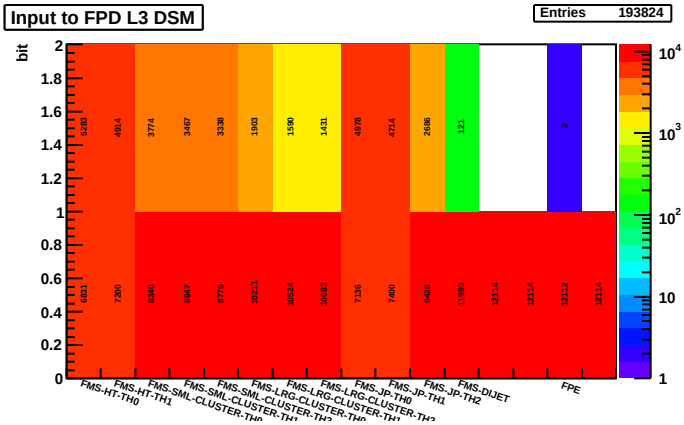

Input to FPD L2 DSM
Entries 471
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

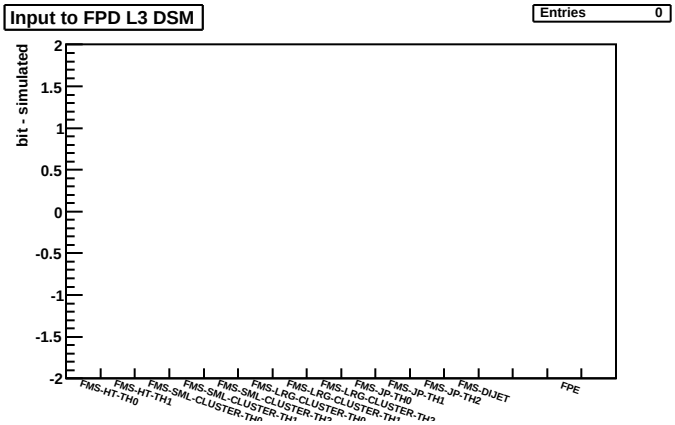

Input to FPD L2 DSM
Entries 36342
CL bits
3338
806
706
129
78
84
307
172
165
8340
11058
11159
SMALL
LARGE-S
LARGE-N

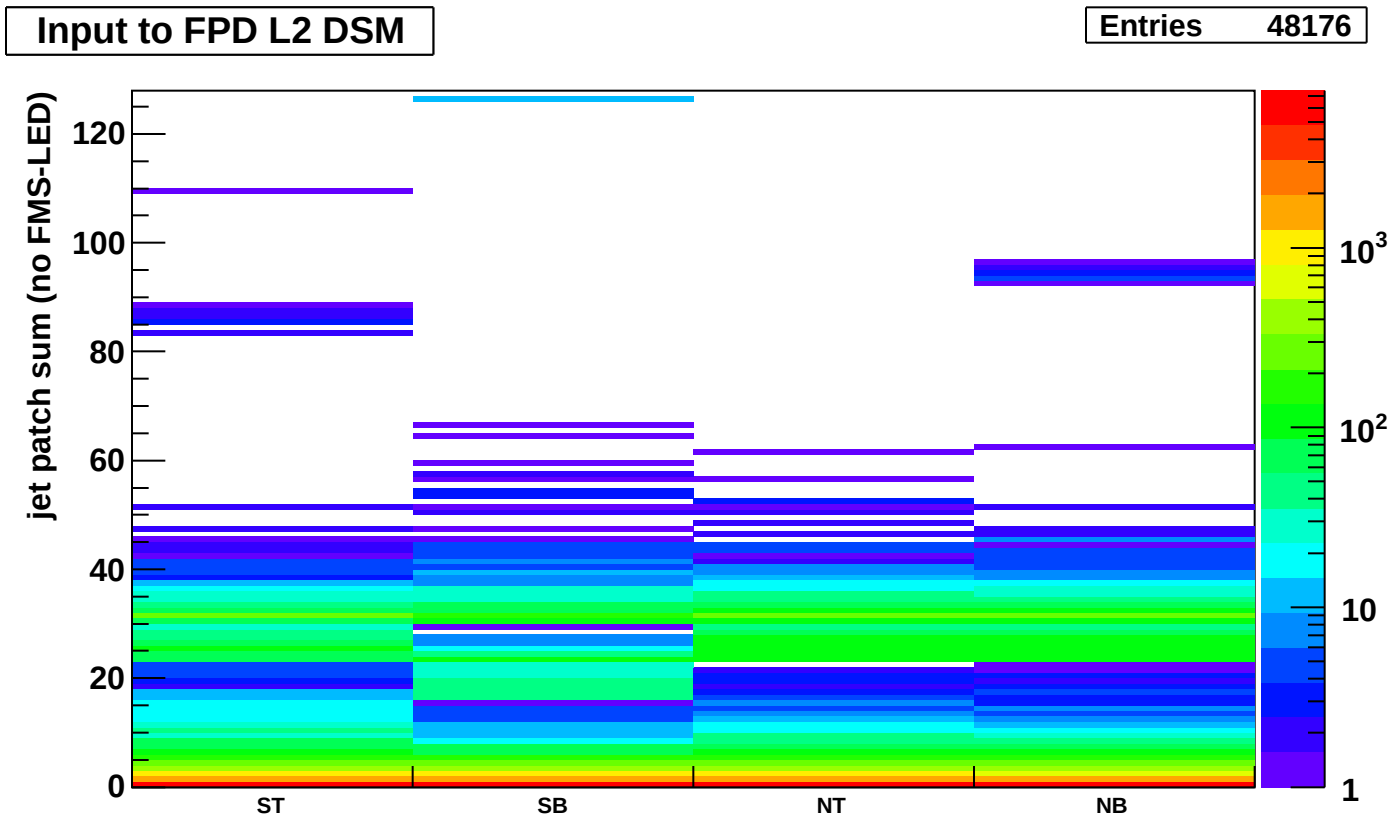

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

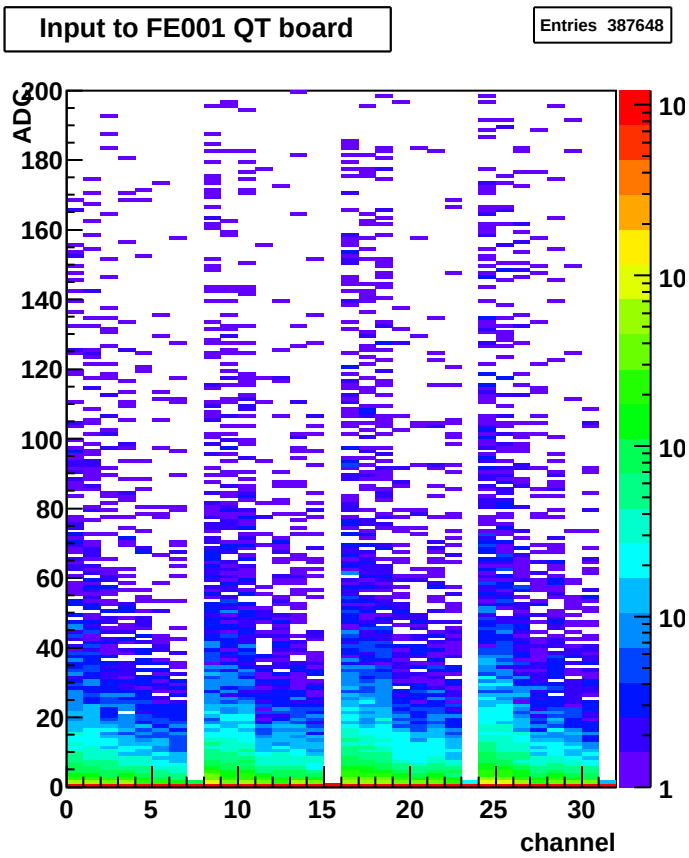

Input to FPD L2 DSM
Entries 36342
HT bits
3372
920
823
275
144
137
8467
11050
11154
SMALL
LARGE-S
LARGE-N

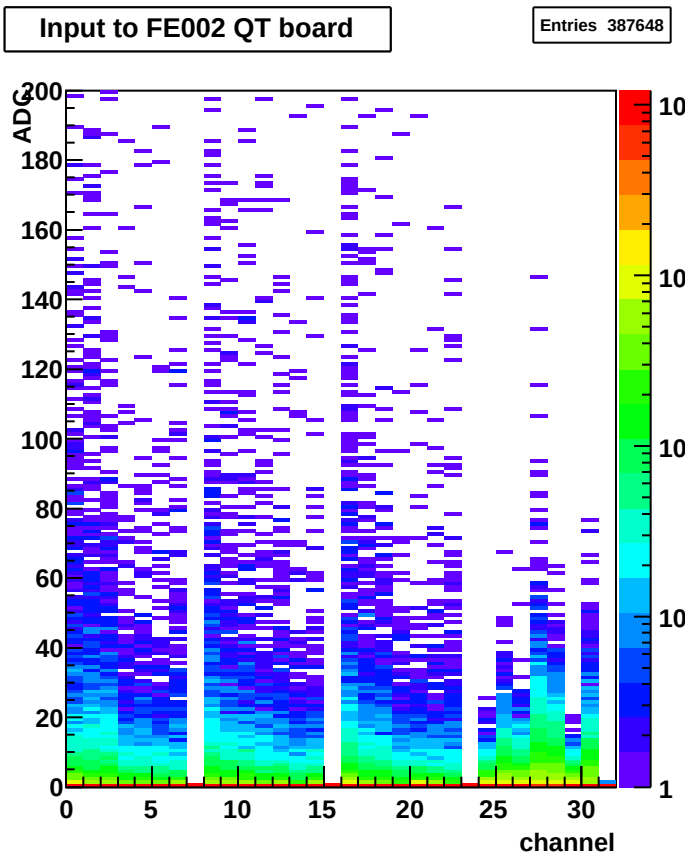

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

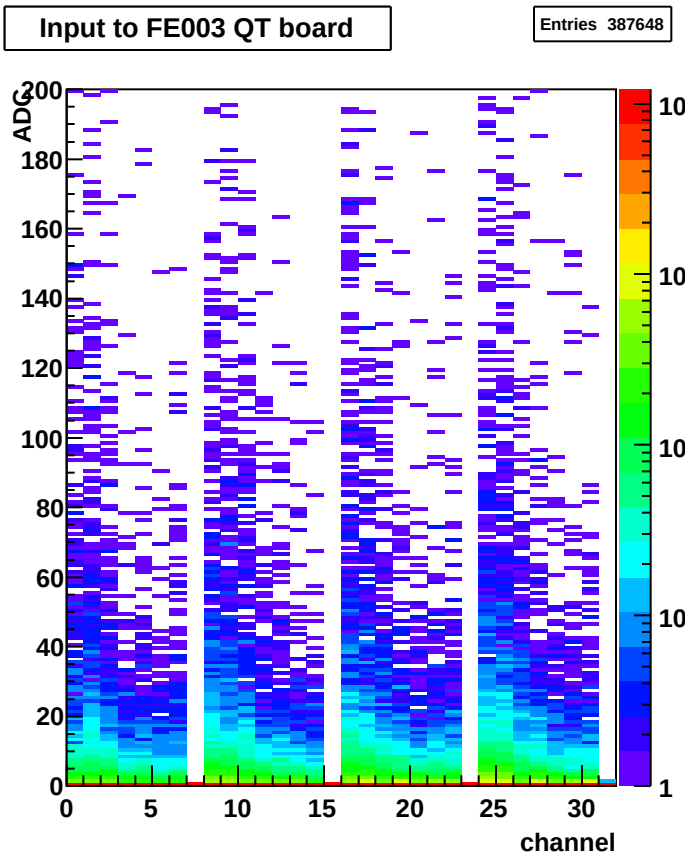

Input to FPD L3 DSM
Entries 193824
bit
5285
4914
3774
3467
3338
1903
1590
1431
4978
4714
2686
121
2
6831
7200
8340
8647
8776
10211
10524
10683
7136
7400
9428
11993
12114
12114
12112
12114
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

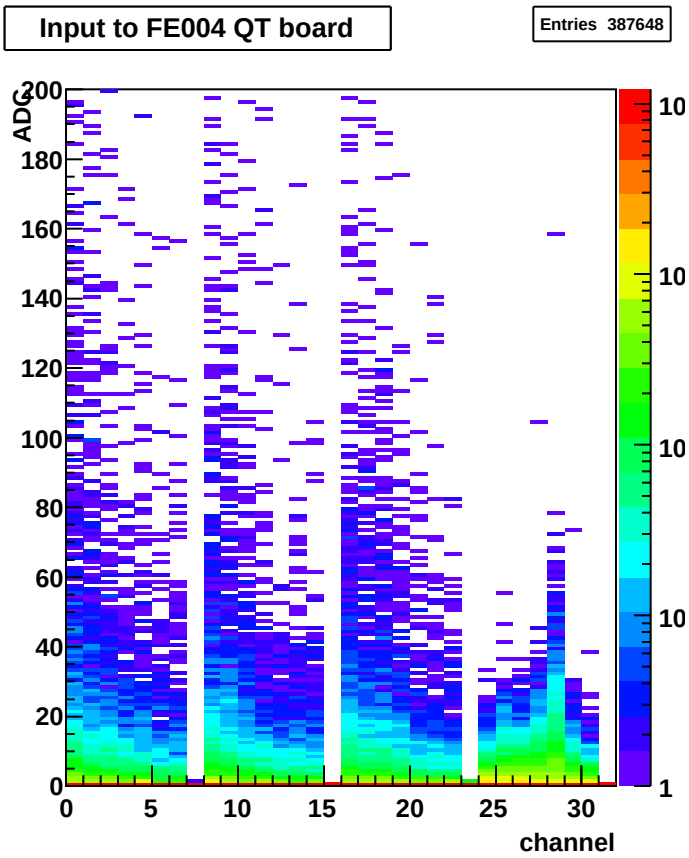

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

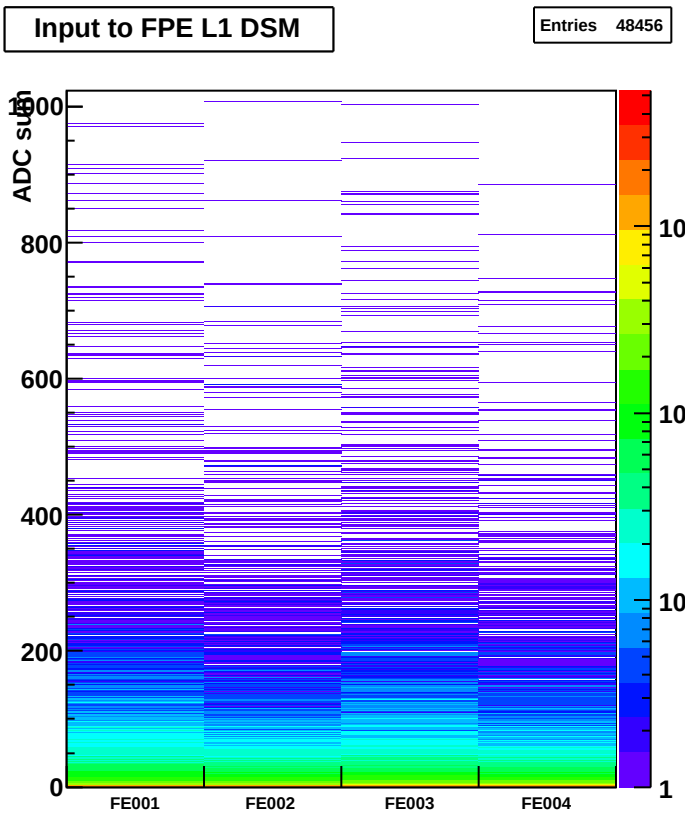

Input to FPD L2 DSM
Entries 48176
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3

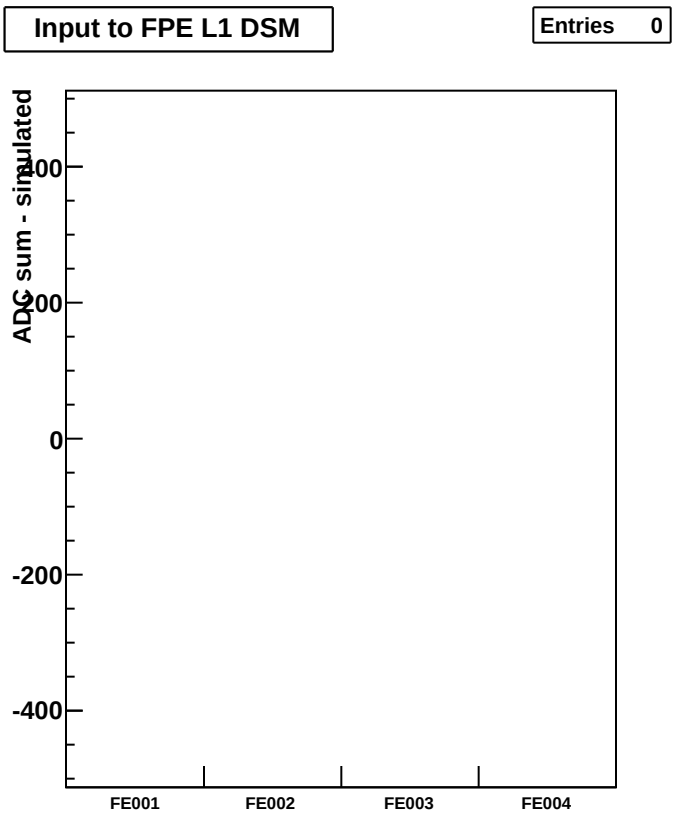

Input to FE001 QT board
Entries 387648
ADC
channel

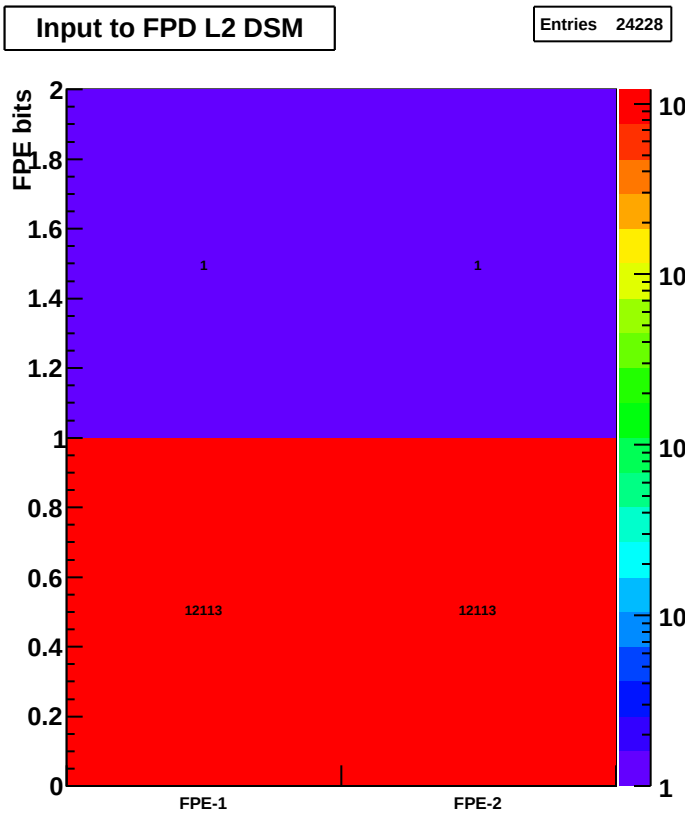

Input to FE002 QT board
Entries 387648
ADC
channel

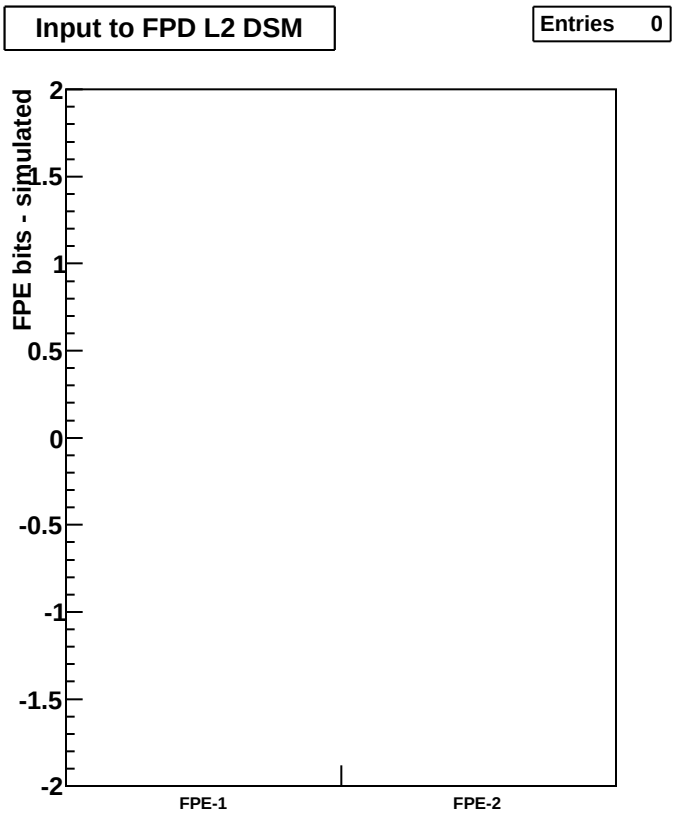

Input to FE003 QT board
Entries 387648
ADC
channel


Input to FE004 QT board
Entries 387648
ADC
channel


Input to FPE L1 DSM
Entries 48456
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
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 24228
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1
1
12113
12113
FPE-1
FPE-2
10
10
10
10
1


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