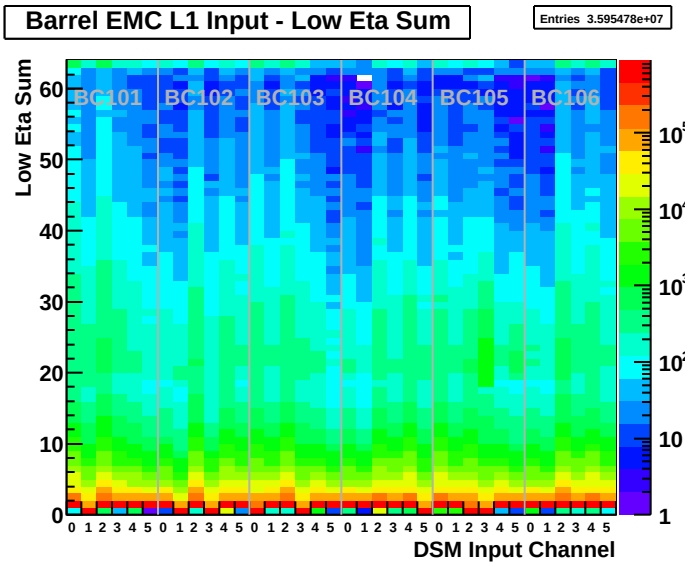
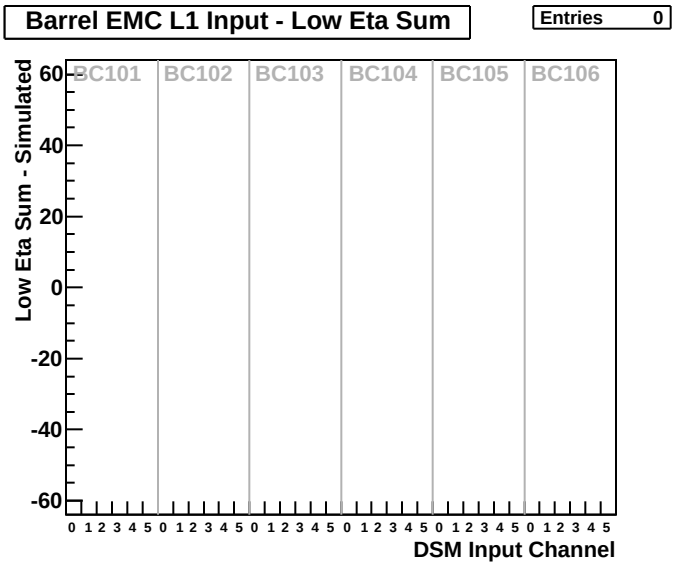
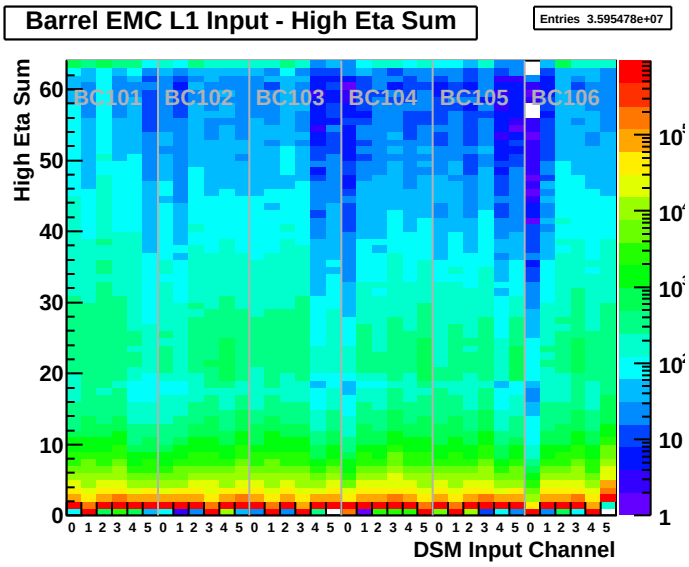
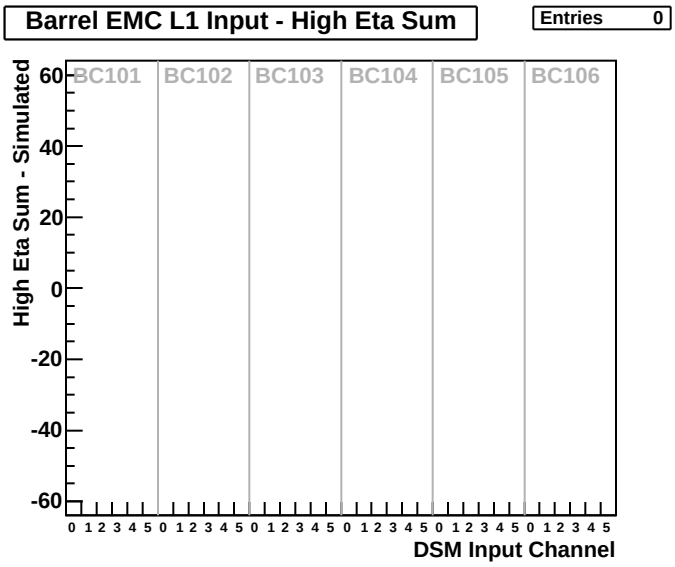
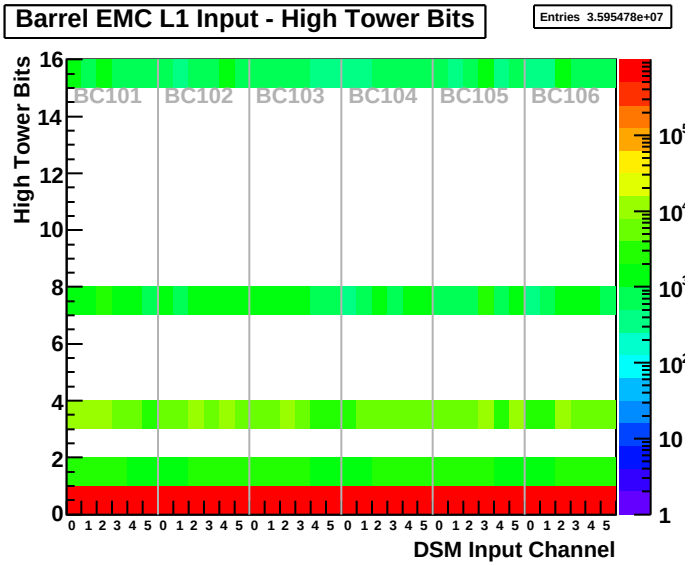
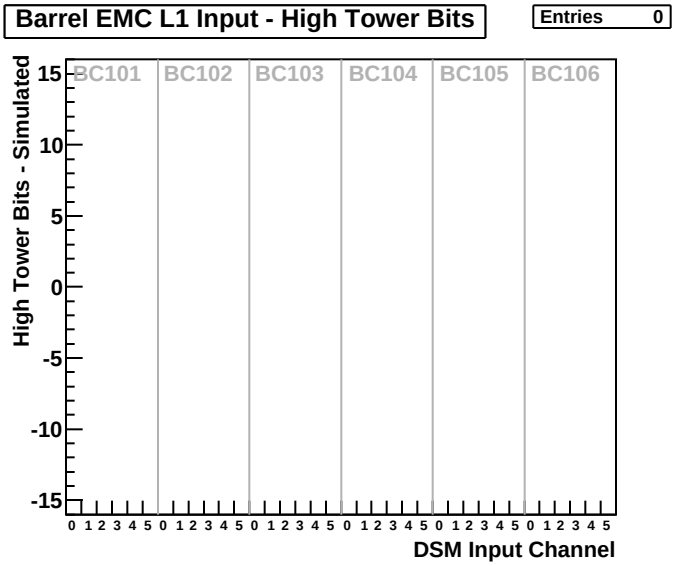

Barrel EMC L1 Input - Low Eta Sum
Entries 3.595478e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

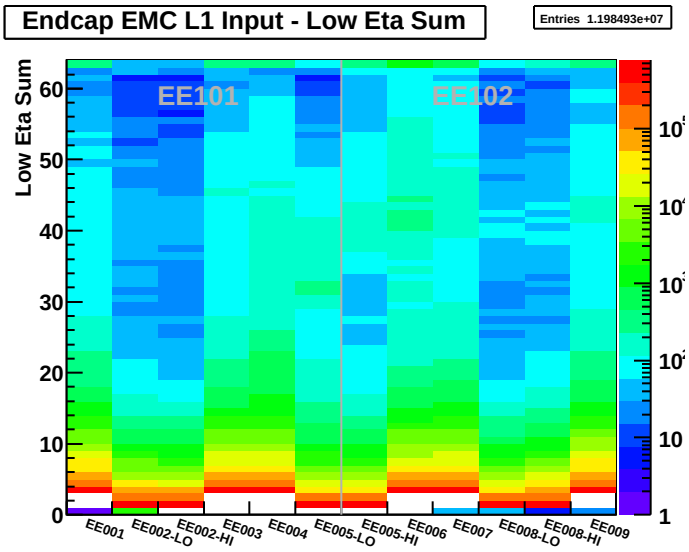

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

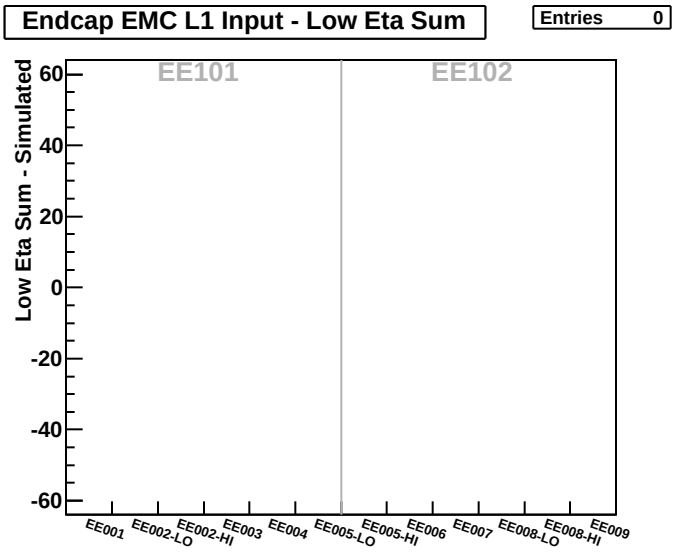

Barrel EMC L1 Input - High Eta Sum
Entries 3.595478e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

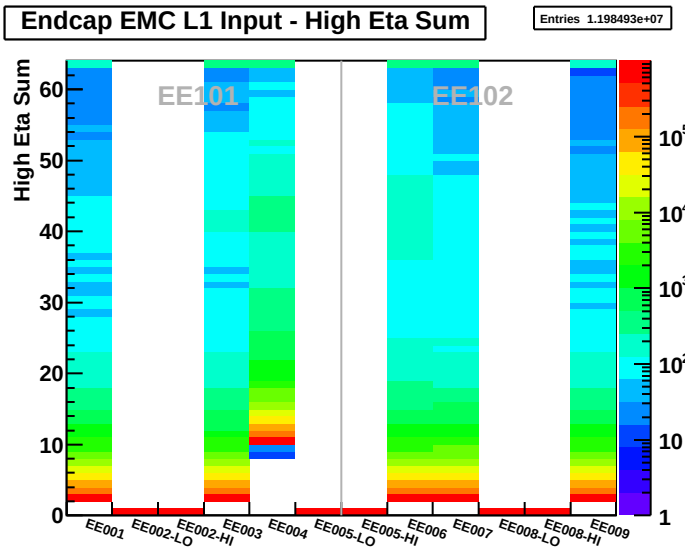

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

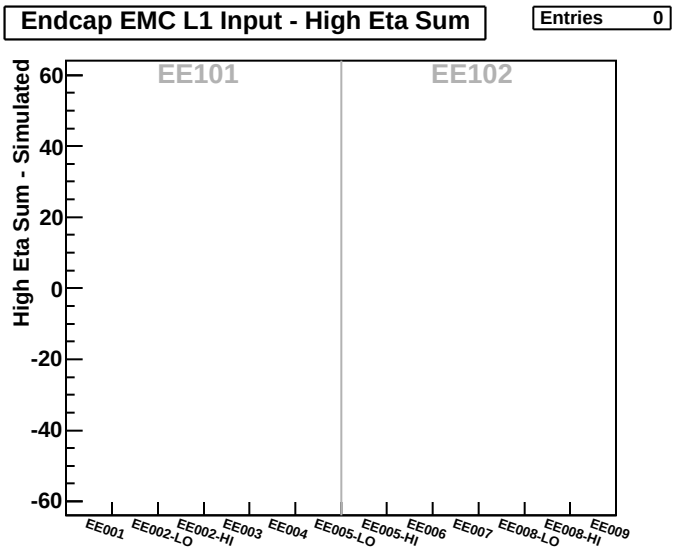

Barrel EMC L1 Input - High Tower Bits
Entries 3.595478e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

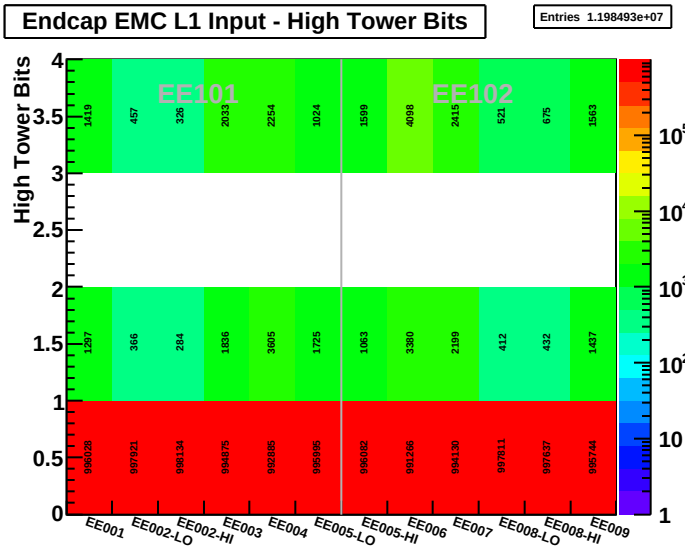

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

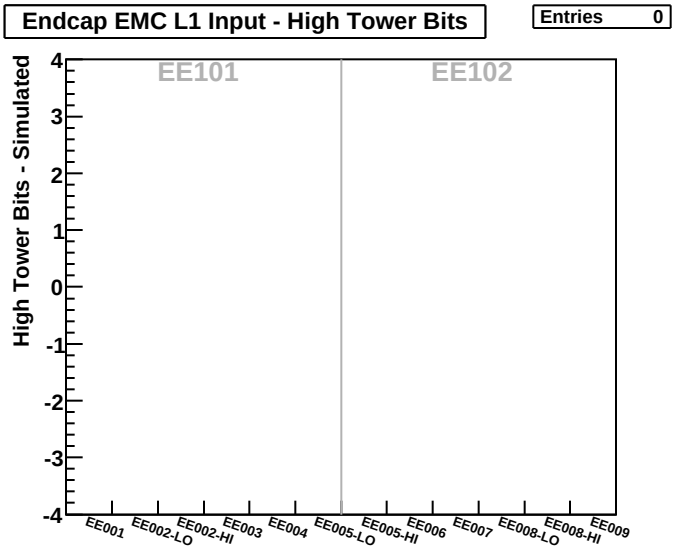

Endcap EMC L1 Input - Low Eta Sum
Entries 1.198493e+07
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

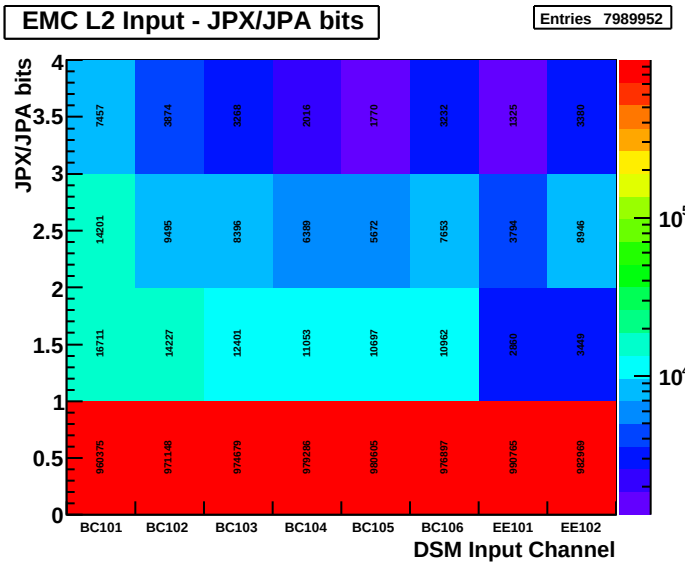

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

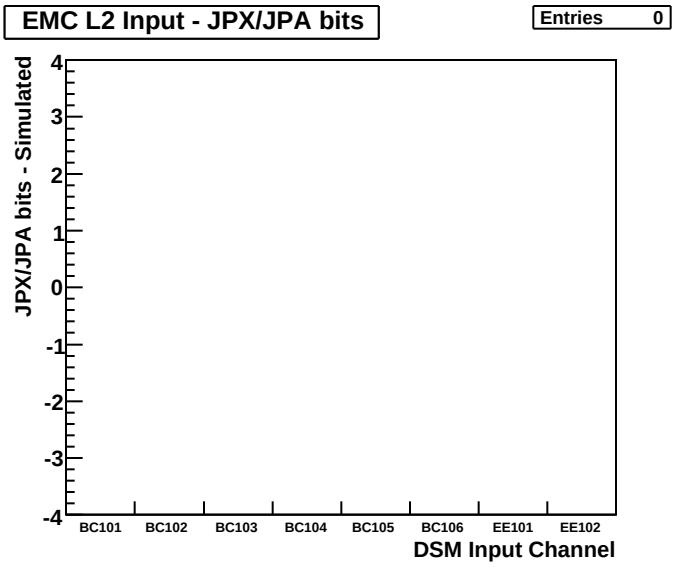

Endcap EMC L1 Input - High Eta Sum
Entries 1.198493e+07
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

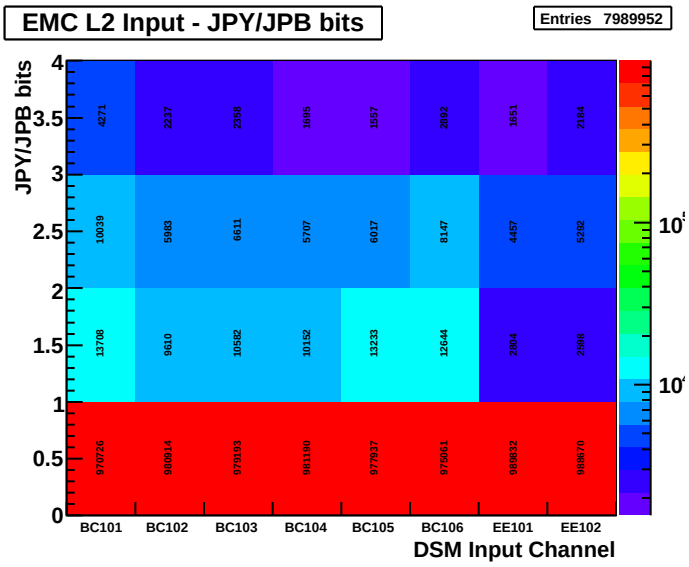

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

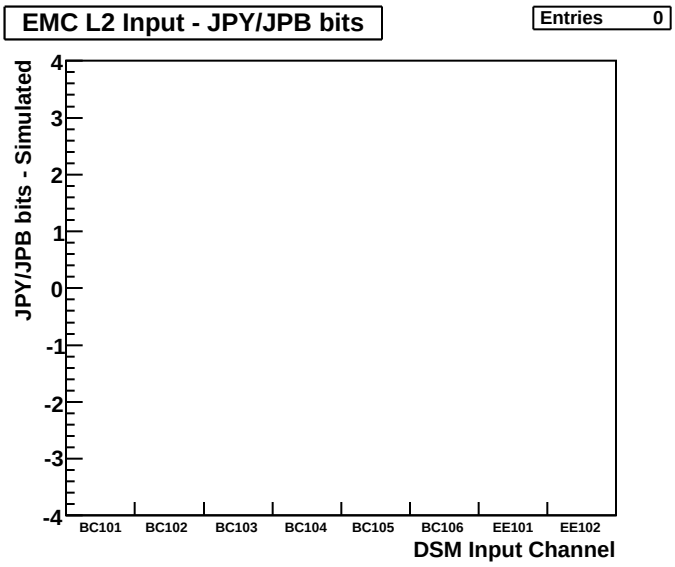

Endcap EMC L1 Input - High Tower Bits
Entries 1.198493e+07
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

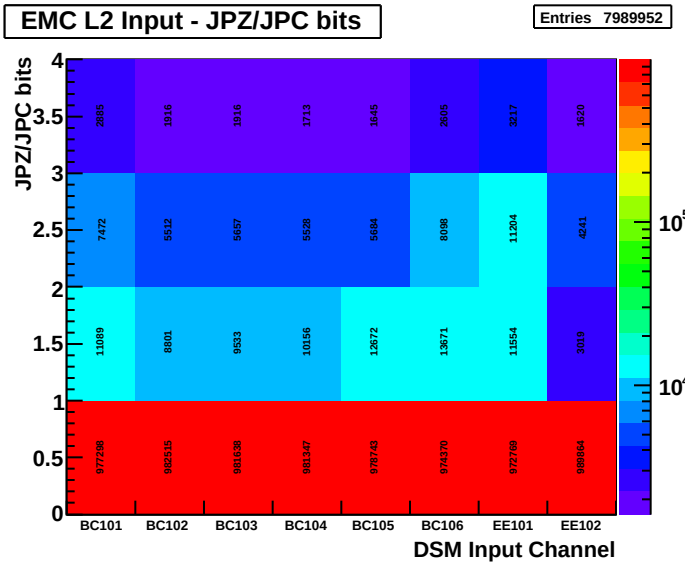

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

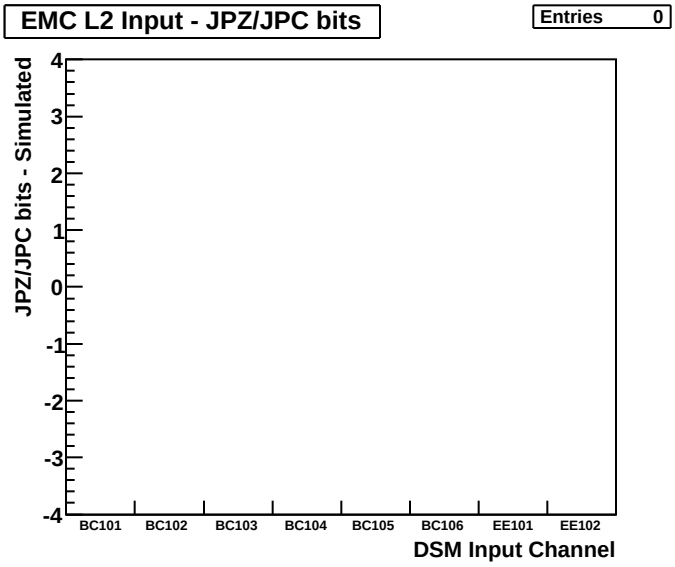

EMC L2 Input - JPX/JPA bits
Entries 7989952
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
7457 3874 3268 2016 1770 3232 1325 3380
14201 9495 8396 6389 5672 7653 3794 8946
16711 14227 12401 11053 10697 10962 2880 3449
960375 971148 974679 978286 980605 976897 990765 982969

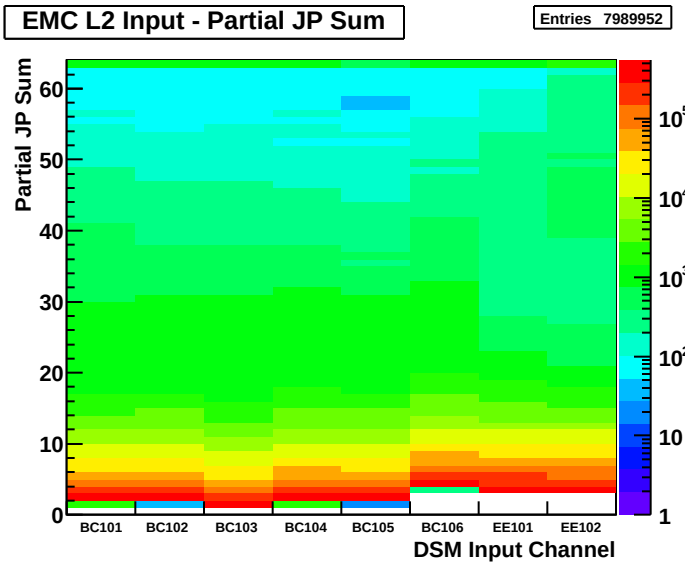

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

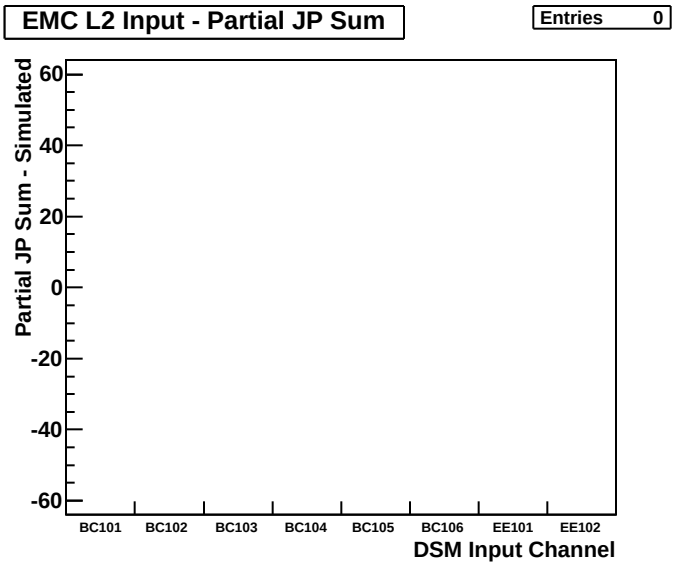

EMC L2 Input - JPY/JPB bits
Entries 7989952
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
4271 2237 2358 1695 1557 2892 1551 2184
10039 5983 6611 5707 6017 8147 4457 5292
13708 9610 10582 10152 13233 12644 2804 2398
970726 980914 979193 981190 977937 975061 988832 988670

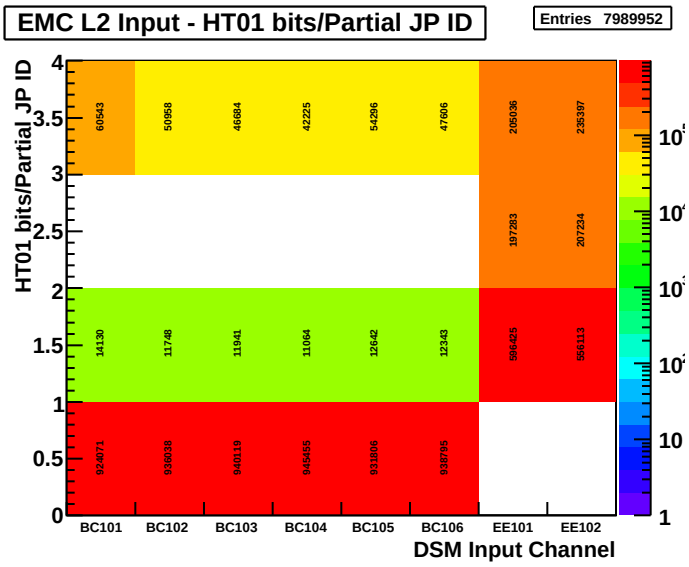

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

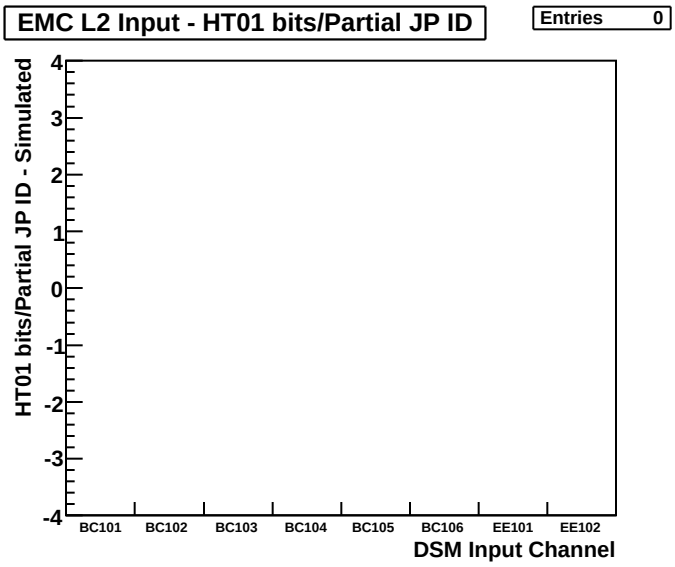

EMC L2 Input - JPZ/JPC bits
Entries 7989952
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2885 1916 1916 1713 1645 2605 3217 1620
7472 5532 5657 5528 5684 8098 11204 4241
11089 8801 9633 10156 12672 13671 11554 3019
977298 982515 981638 981347 978743 974370 972769 989864

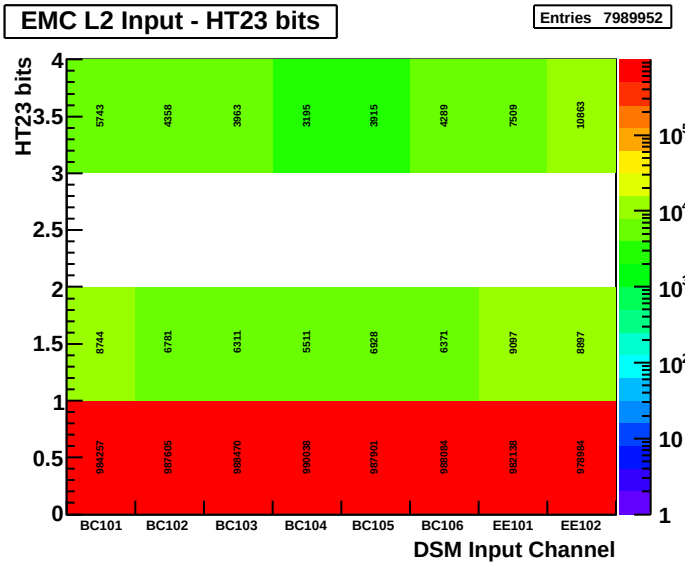

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

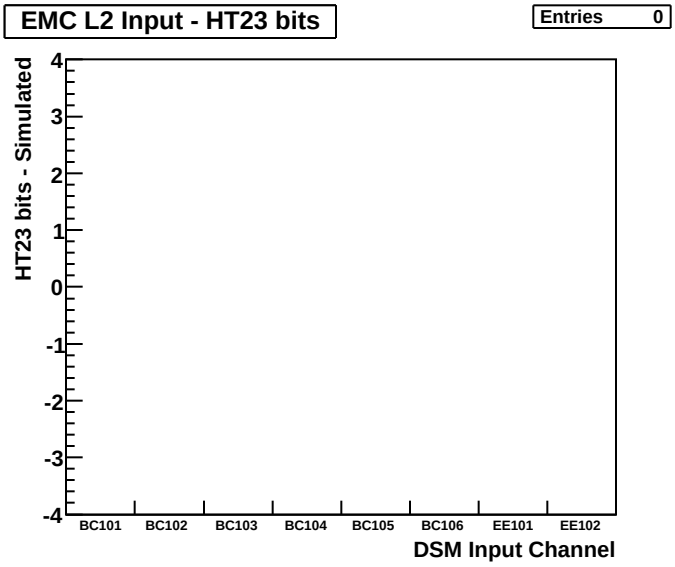

EMC L2 Input - Partial JP Sum
Entries 7989952
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

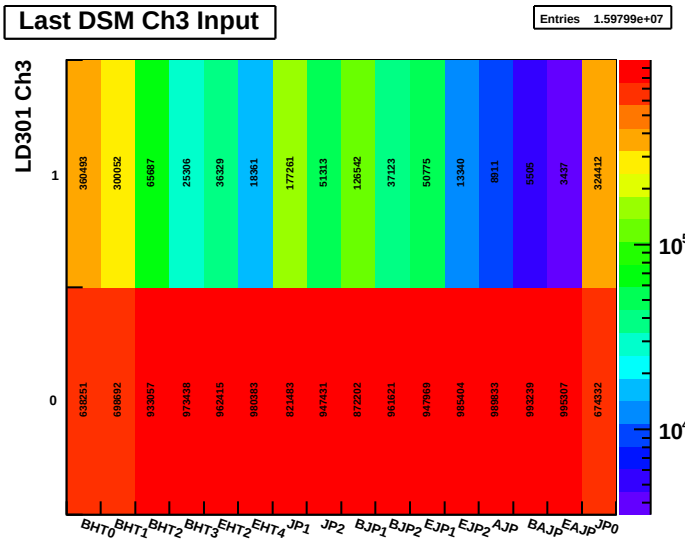

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

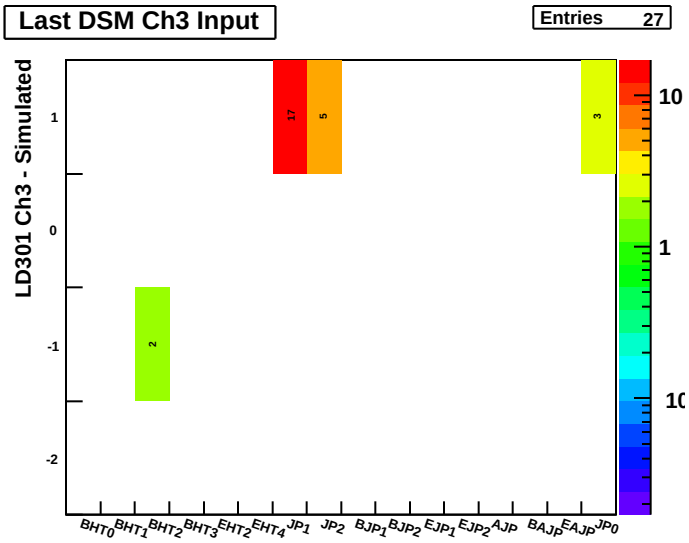

EMC L2 Input - HT01 bits/Partial JP ID
Entries 7989952
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

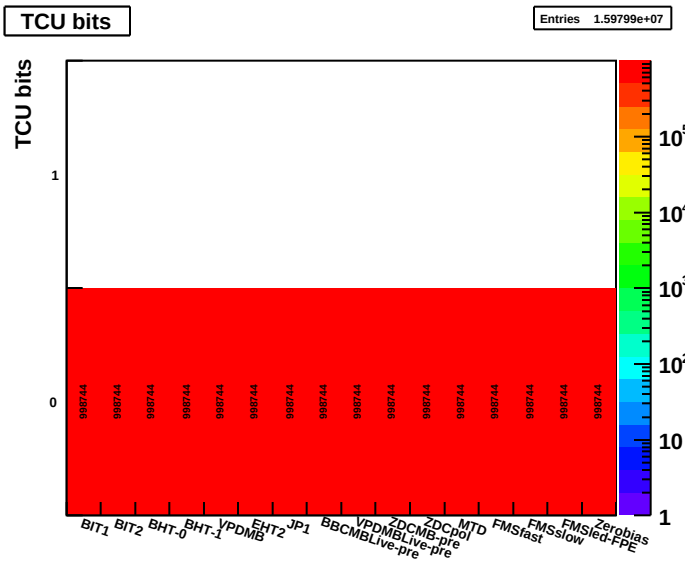

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

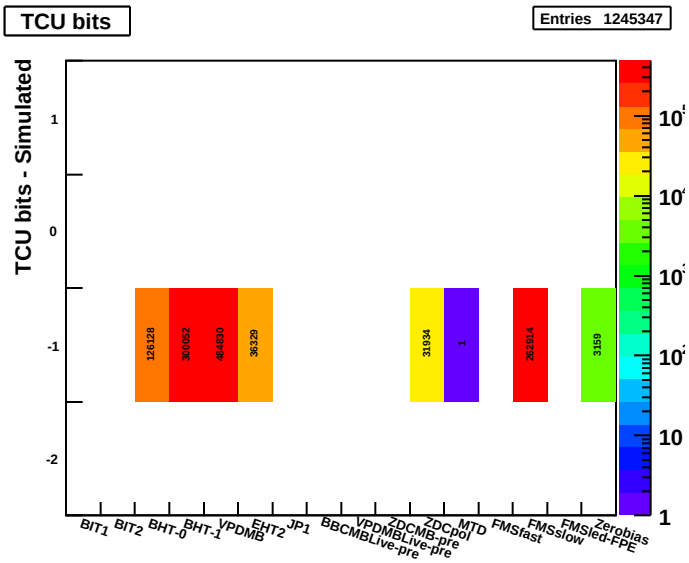

EMC L2 Input - HT23 bits
Entries 7989952
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

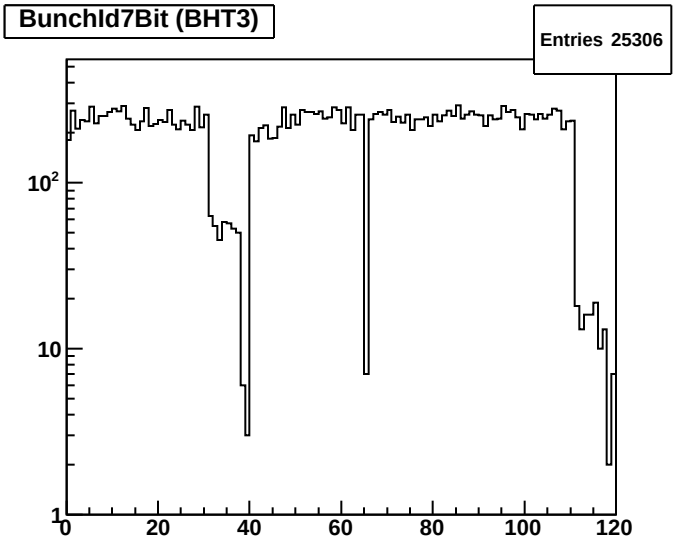

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

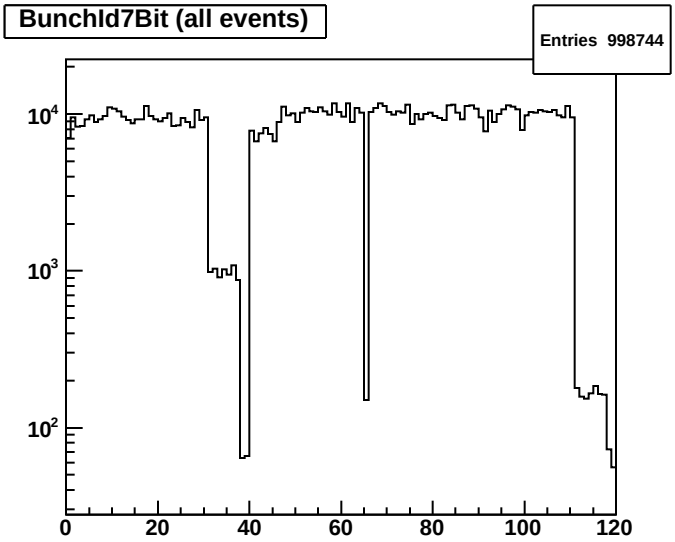

Last DSM Ch3 Input
Entries 1.59799e+07
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

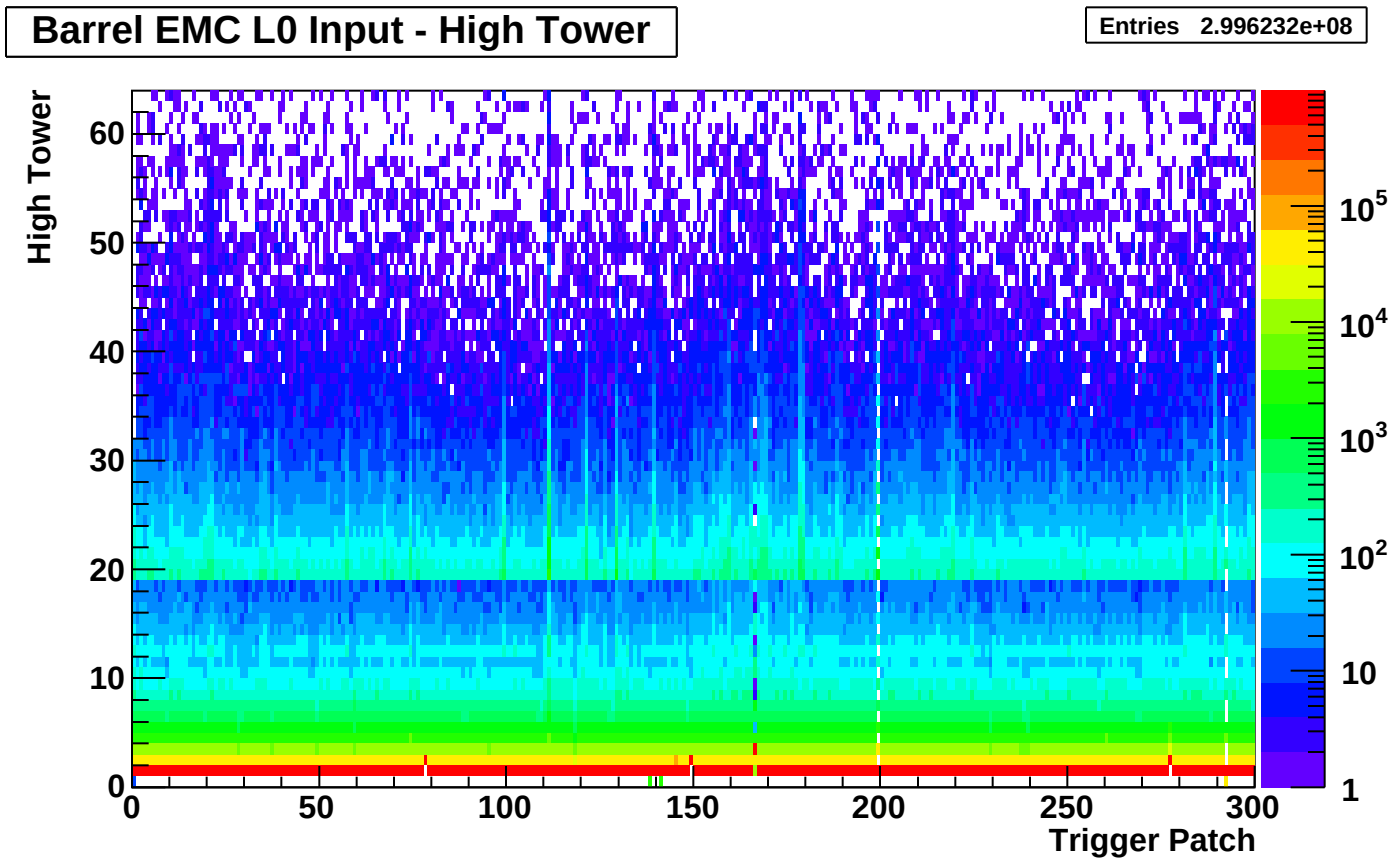

Last DSM Ch3 Input
Entries 27
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

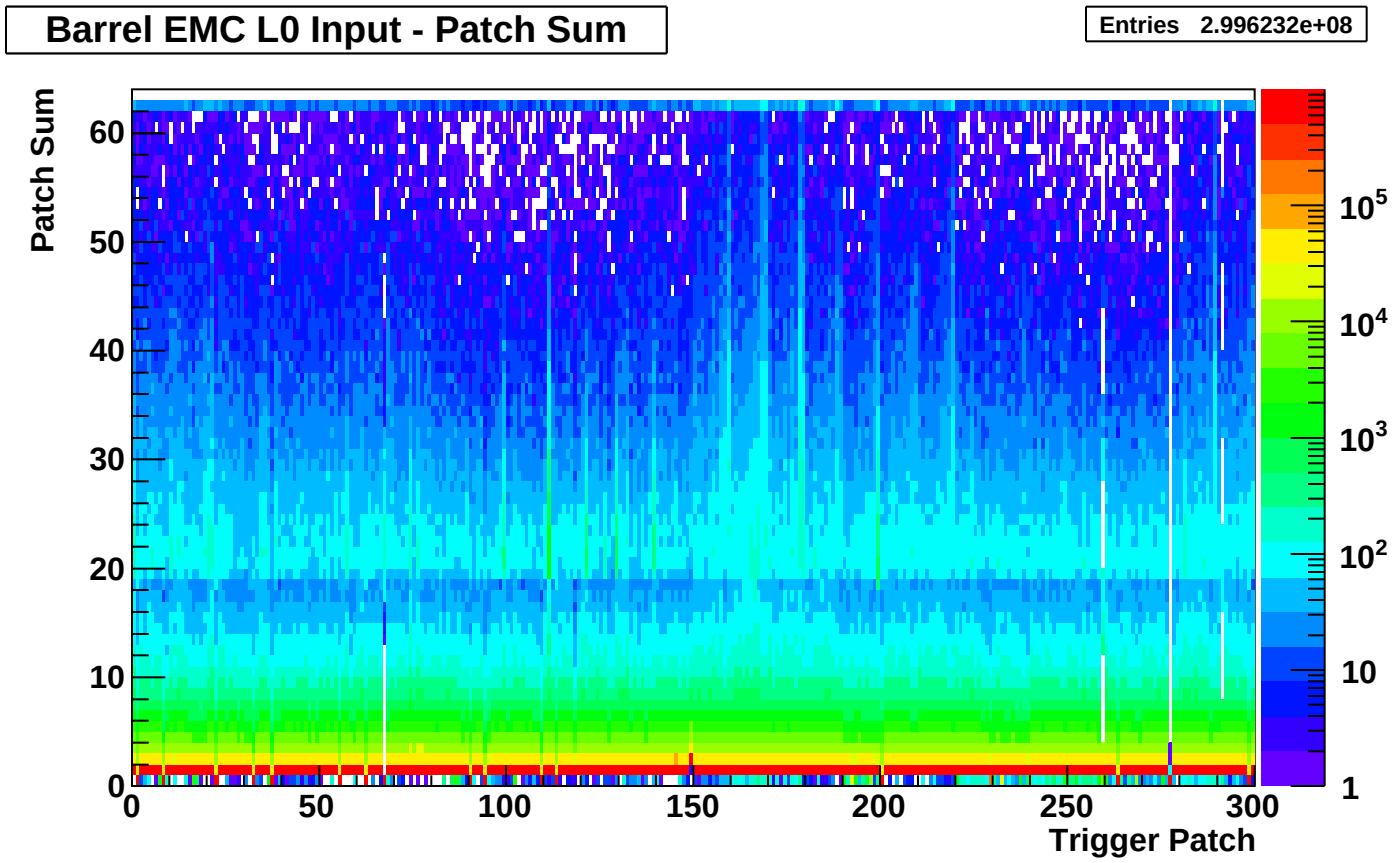

TCU bits
Entries 1.59799e+07
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

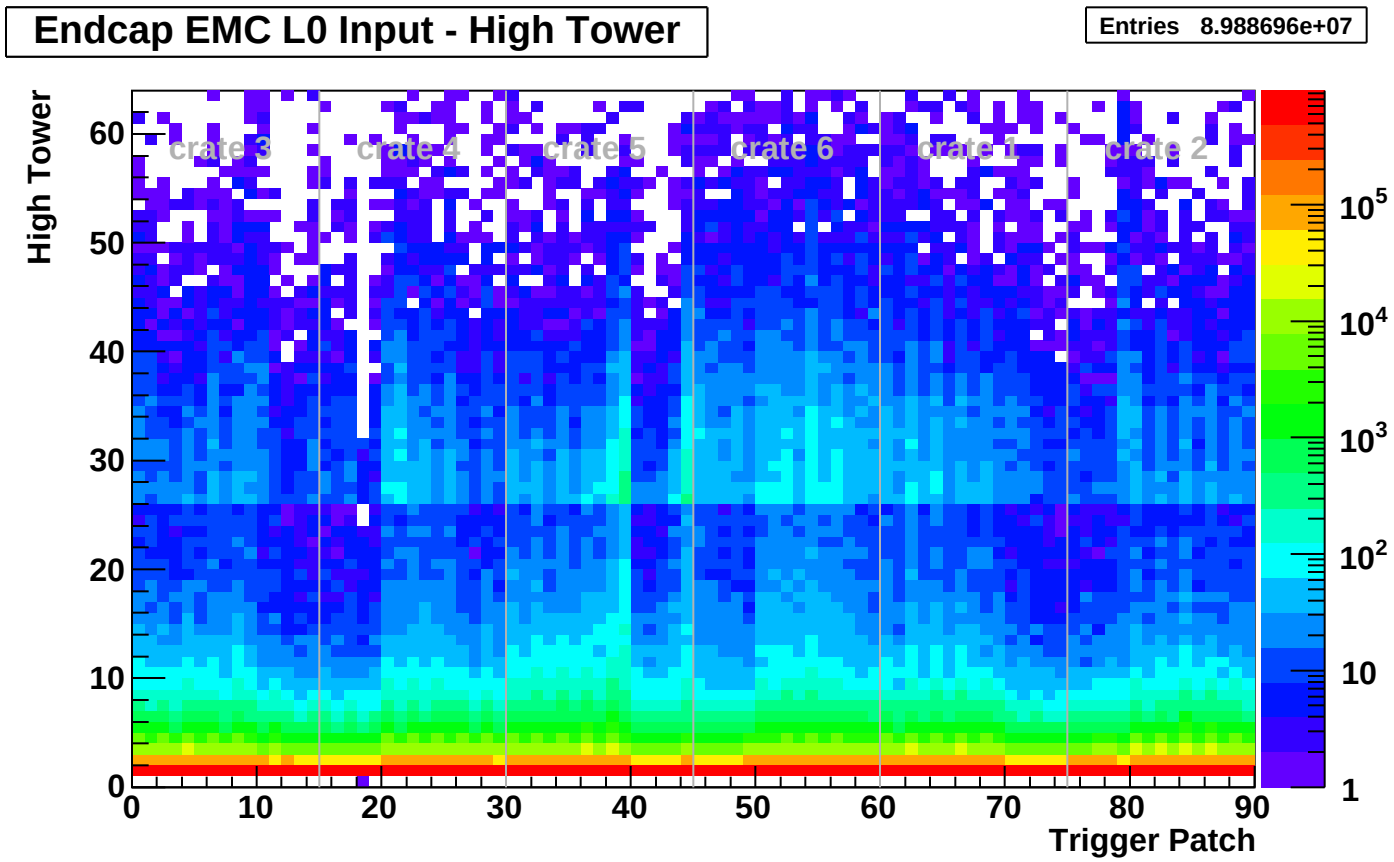

TCU bits
Entries 1245347
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

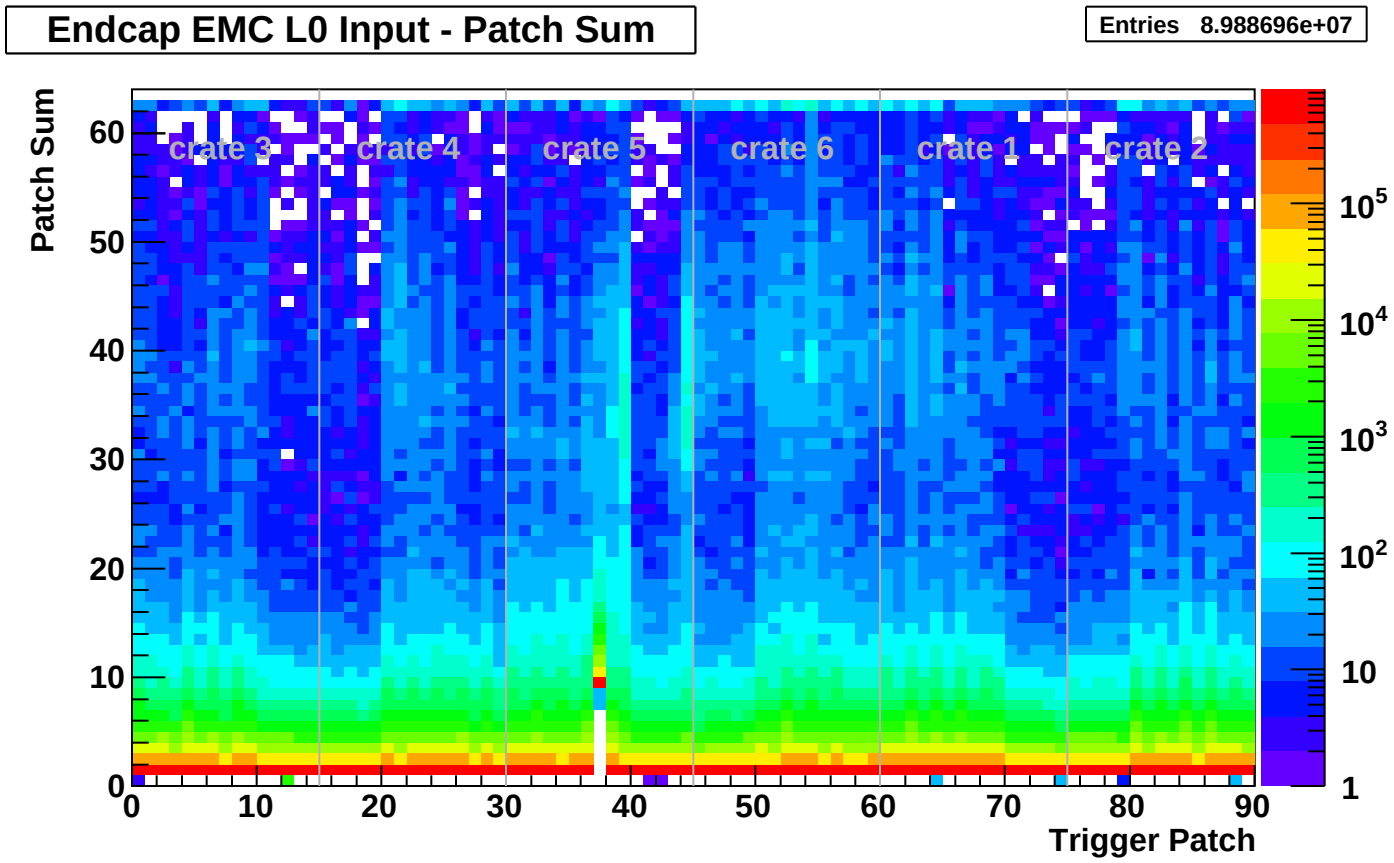

BunchId7Bit (BHT3)
Entries 25306

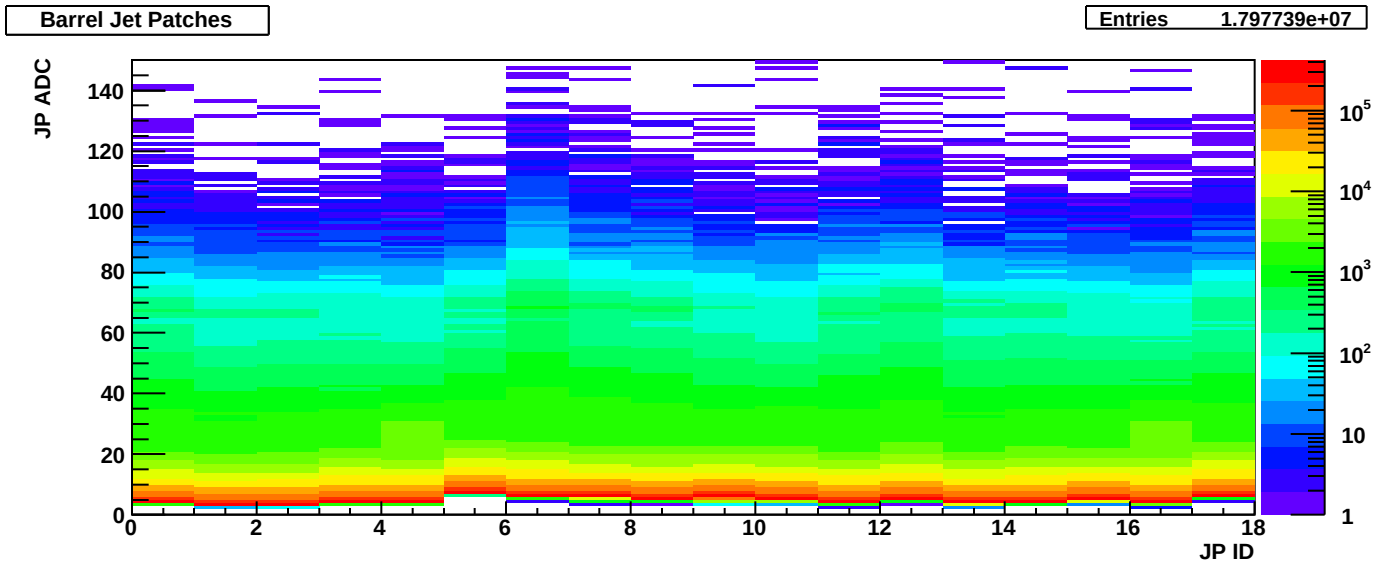

BunchId7Bit (all events)
Entries 998744

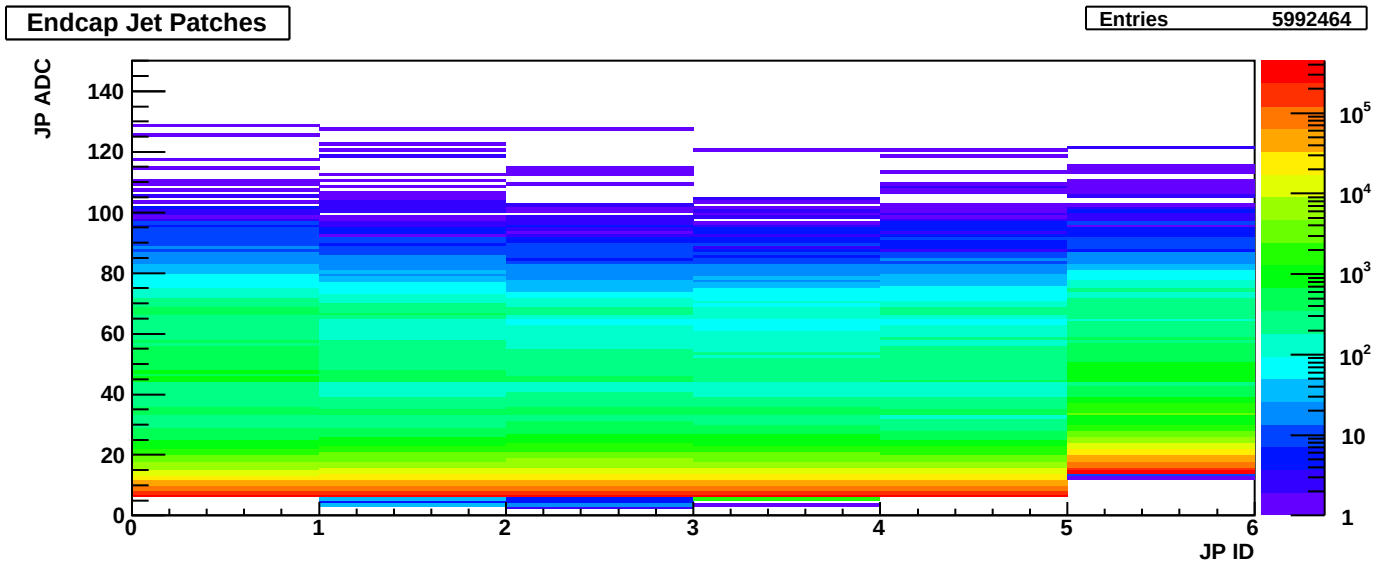

Barrel EMC L0 Input - High Tower
Entries 2.996232e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

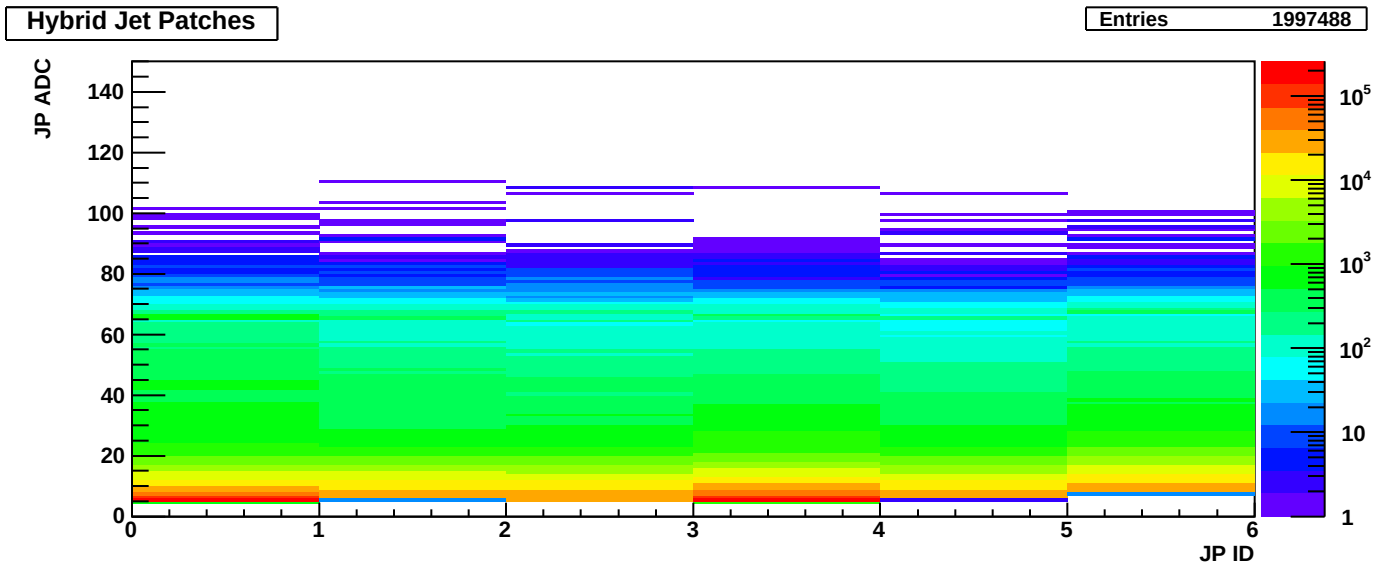

Barrel EMC L0 Input - Patch Sum
Entries 2.996232e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

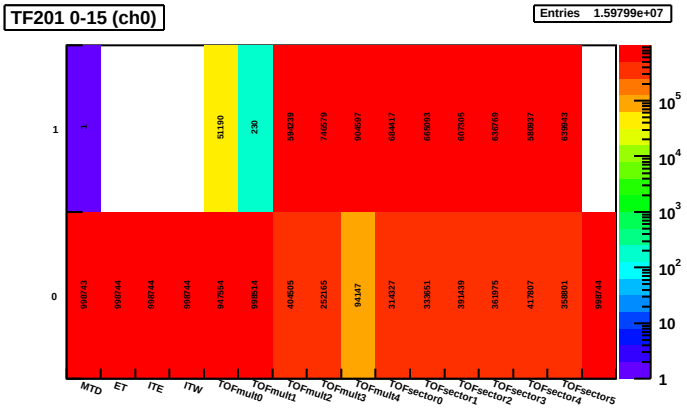

Endcap EMC L0 Input - High Tower
Entries 8.988696e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

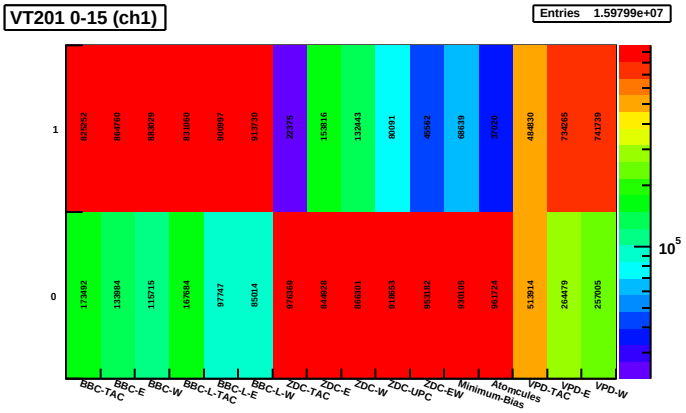

Endcap EMC L0 Input - Patch Sum
Entries 8.988696e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

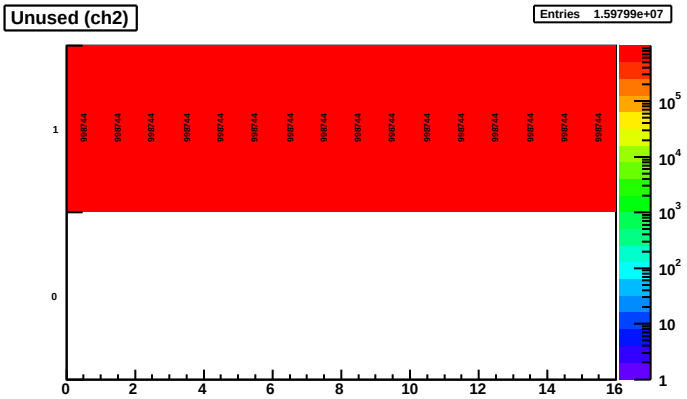

Barrel Jet Patches
Entries 1.797739e+07
JP ADC
JP ID

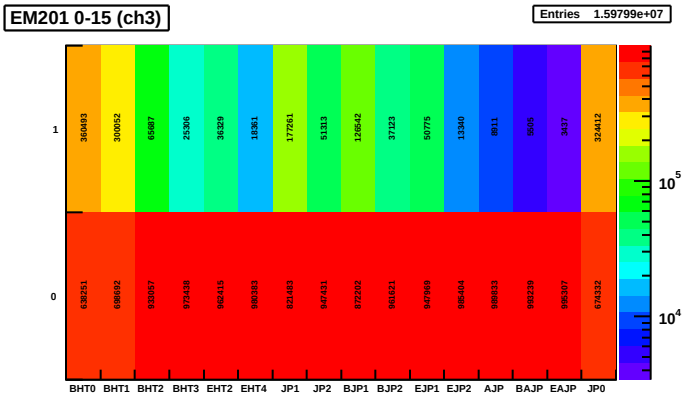

Endcap Jet Patches
Entries 5992464
JP ADC
JP ID

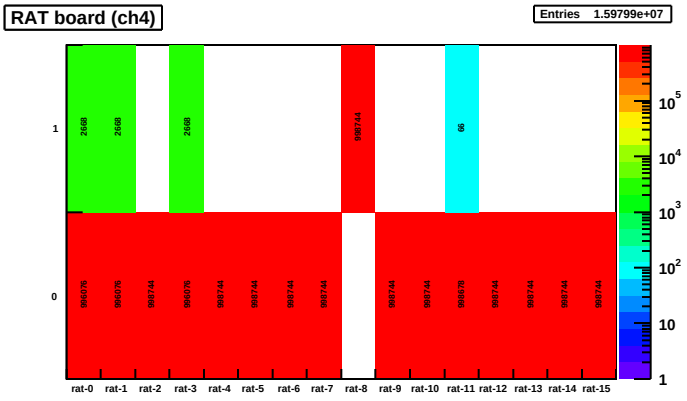

Hybrid Jet Patches
Entries 1997488
JP ADC
JP ID

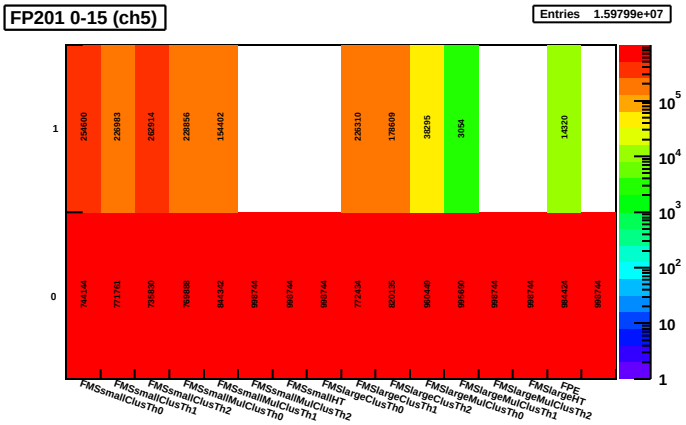

TF201 0-15 (ch0)
Entries 1.59799e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

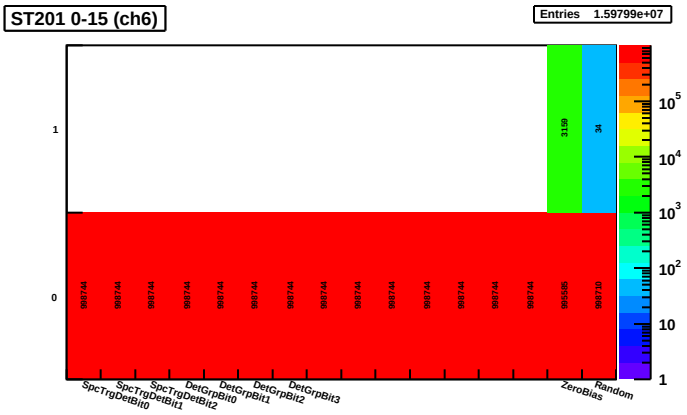

VT201 0-15 (ch1)
Entries 1.59799e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

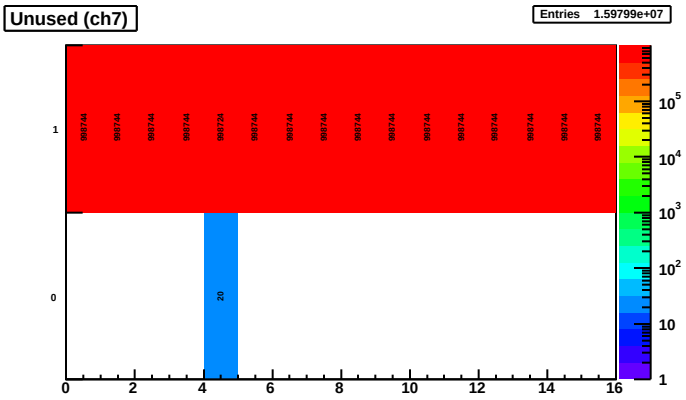

Unused (ch2)
Entries 1.59799e+07

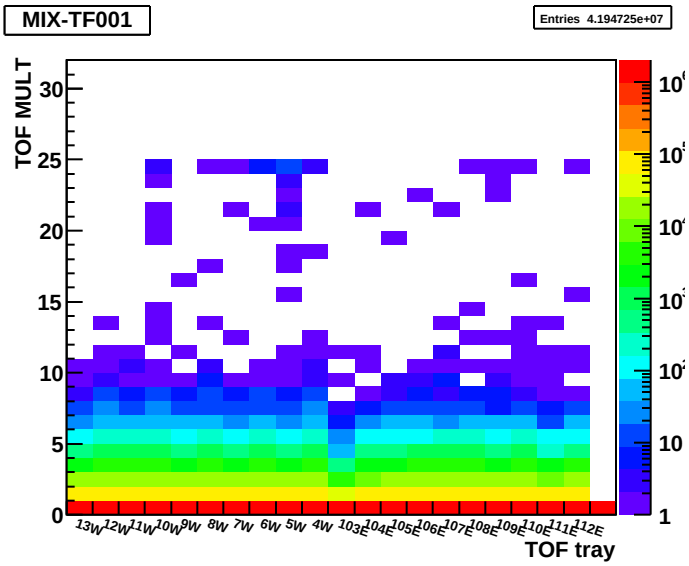

EM201 0-15 (ch3)
Entries 1.59799e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

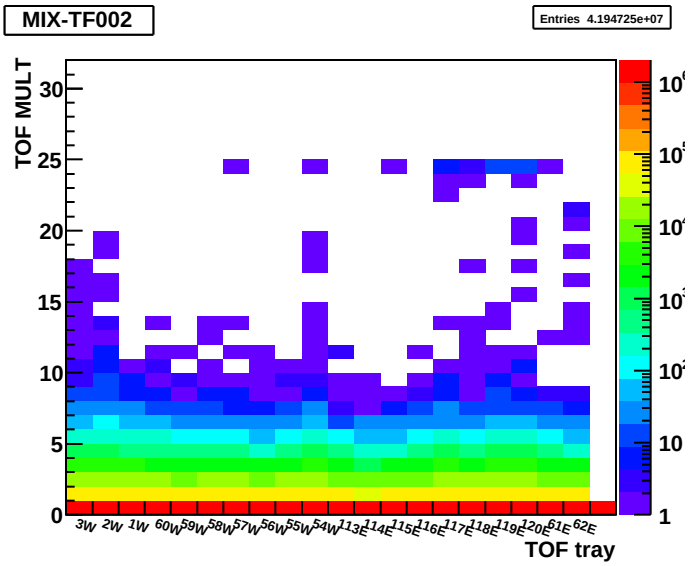

RAT board (ch4)
Entries 1.59799e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

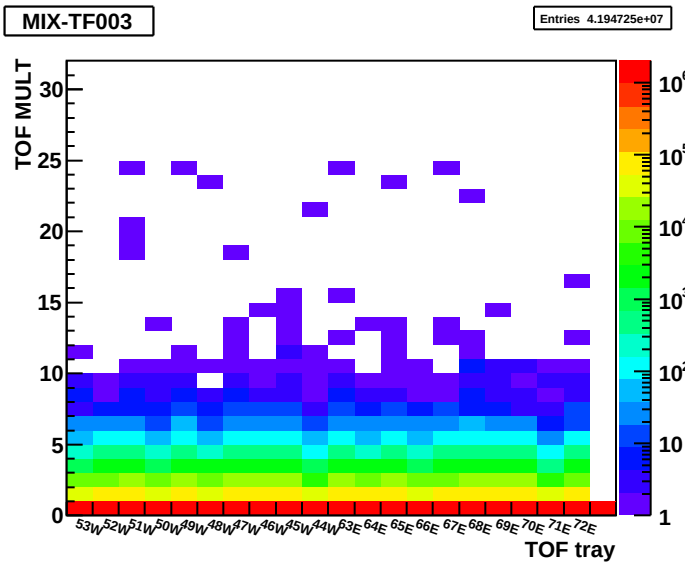

FP201 0-15 (ch5)
Entries 1.59799e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

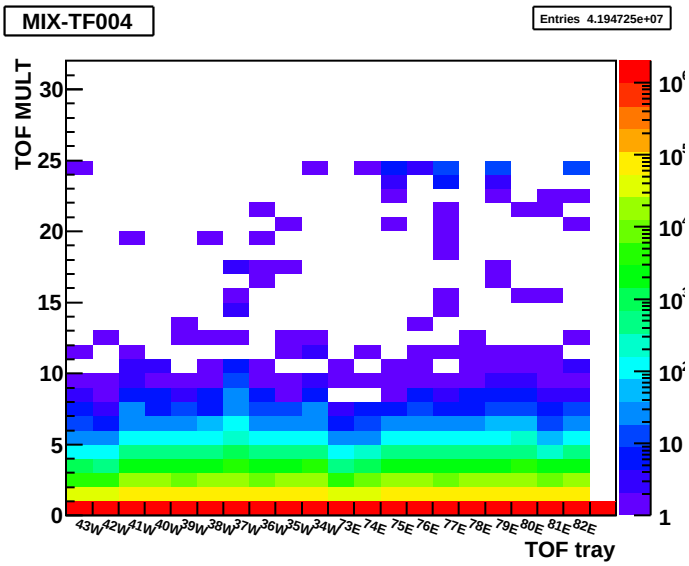

ST201 0-15 (ch6)
Entries 1.59799e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

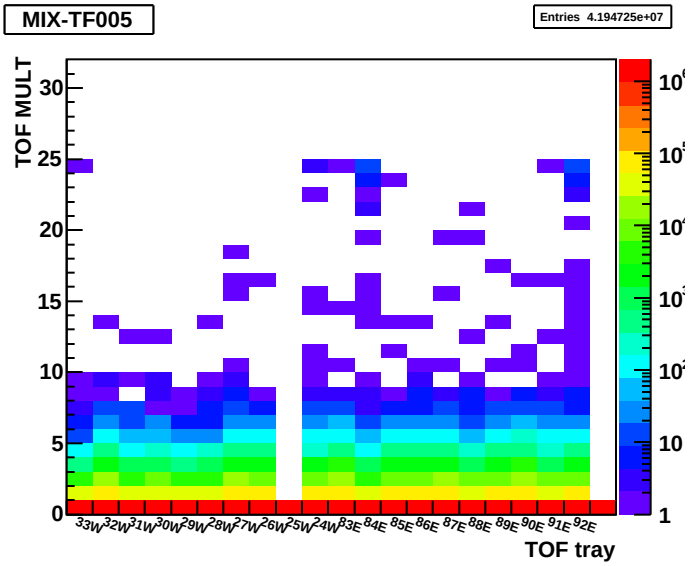

Unused (ch7)
Entries 1.59799e+07

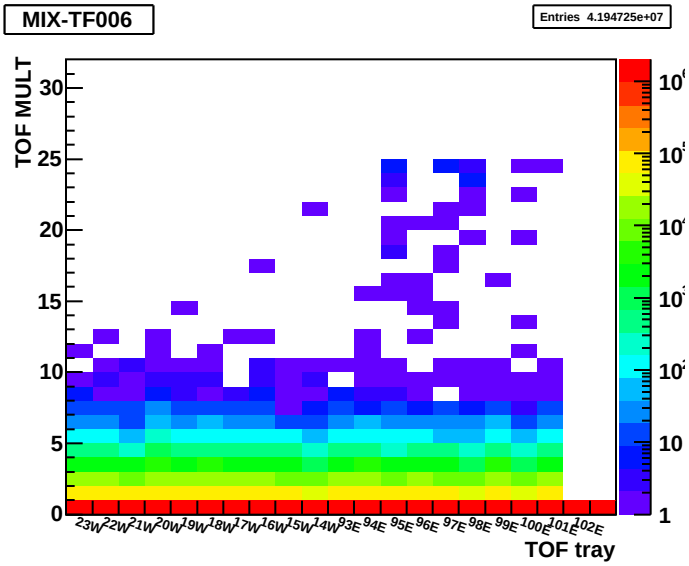

MIX-TF001
Entries 4.194725e+07
TOF MULT
TOF tray

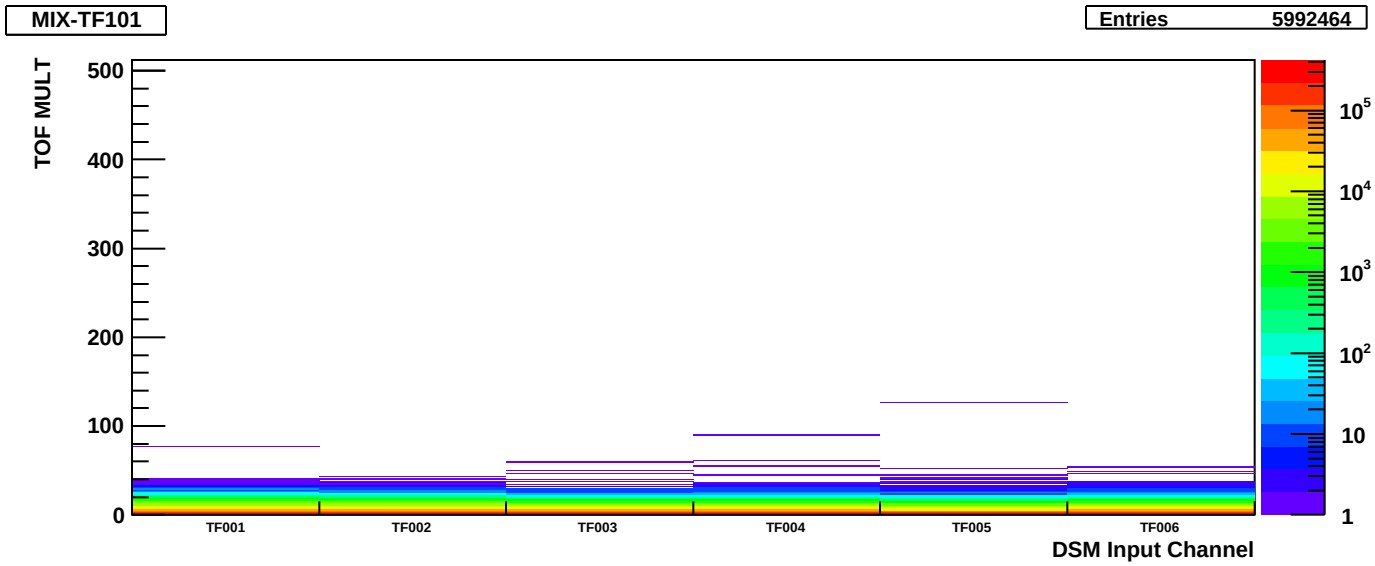

MIX-TF002
Entries 4.194725e+07
TOF MULT
TOF tray

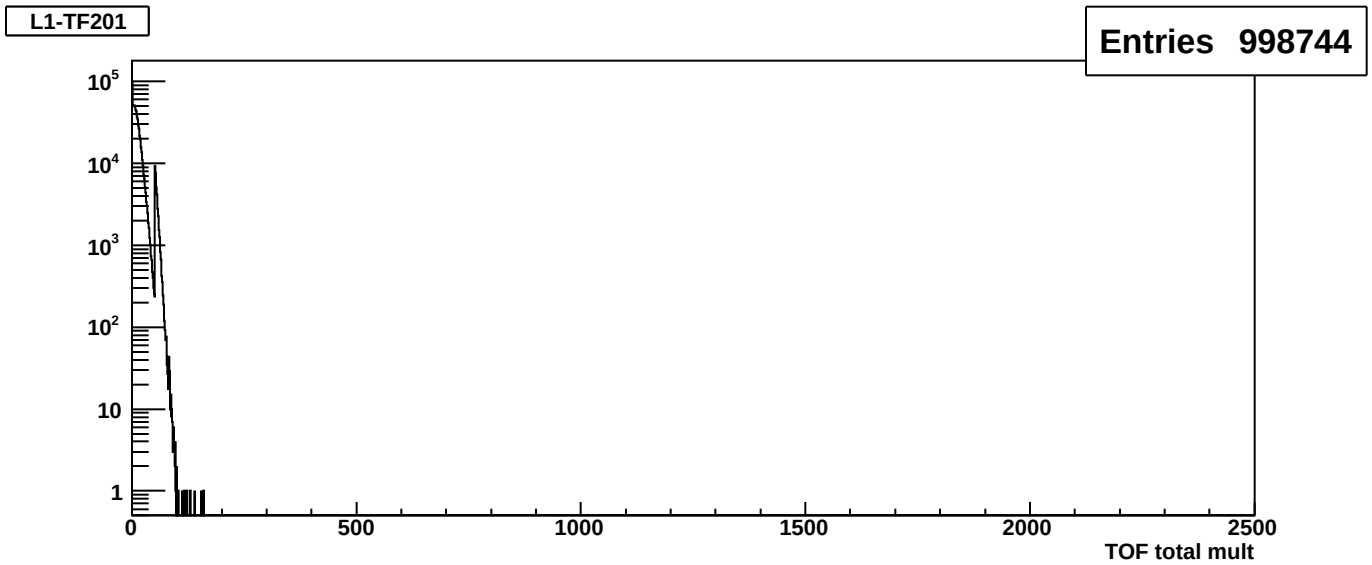

MIX-TF003
Entries 4.194725e+07
TOF MULT
TOF tray

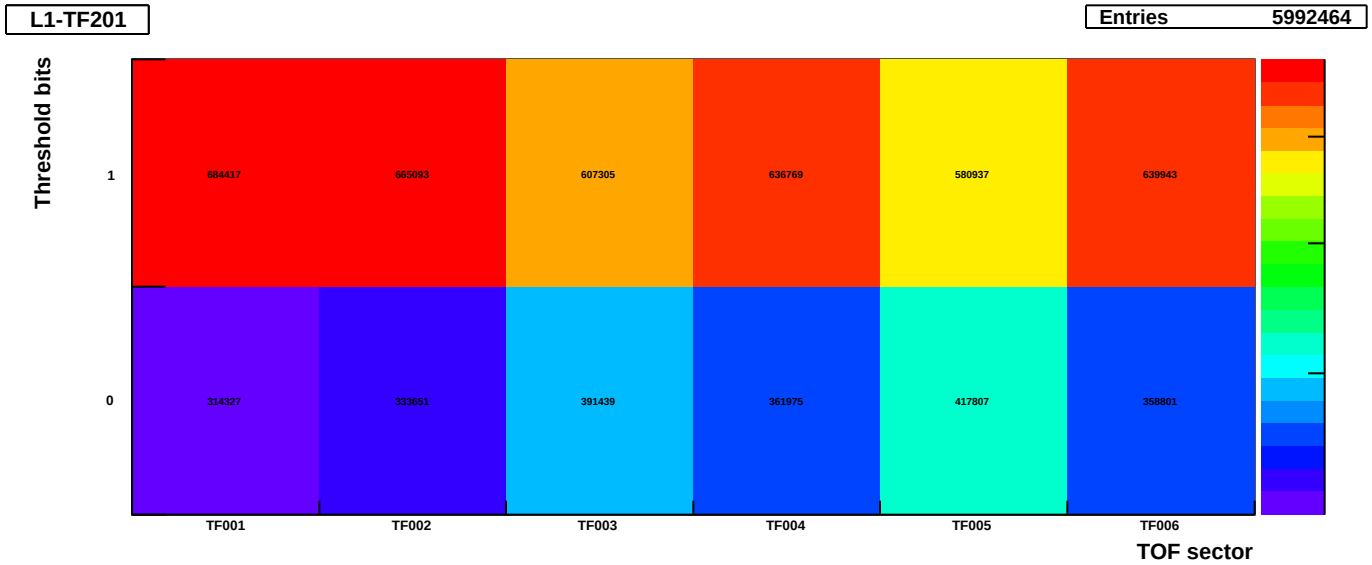

MIX-TF004
Entries 4.194725e+07
TOF MULT
TOF tray

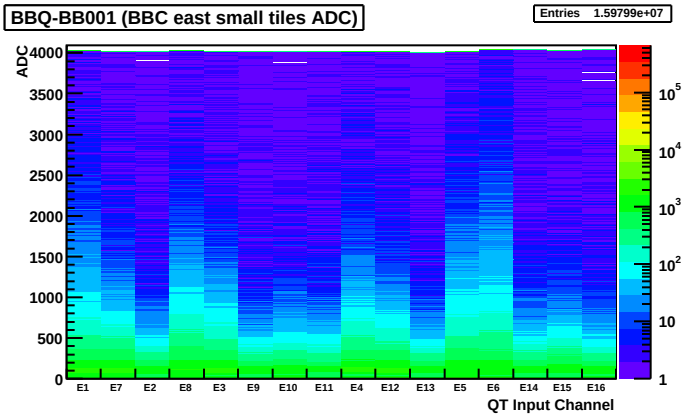

MIX-TF005
Entries 4.194725e+07
TOF MULT
TOF tray

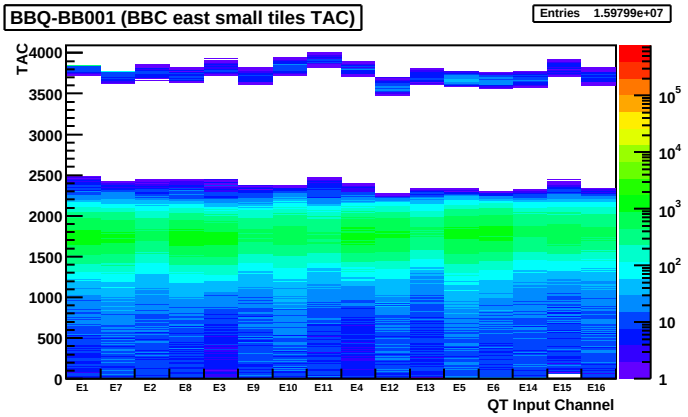

MIX-TF006
Entries 4.194725e+07
TOF MULT
TOF tray

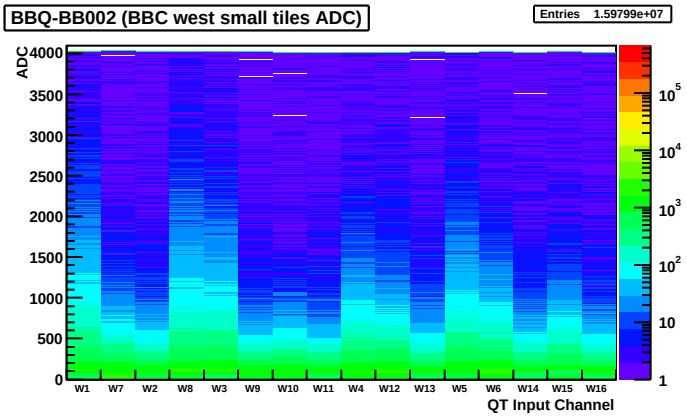

MIX-TF101
Entries 5992464
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

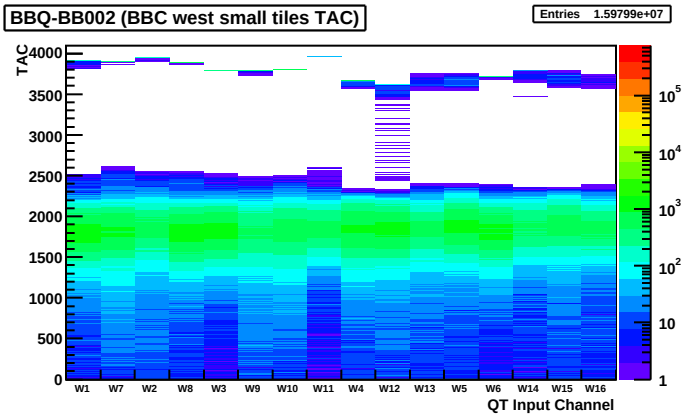

L1-TF201
Entries 998744
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

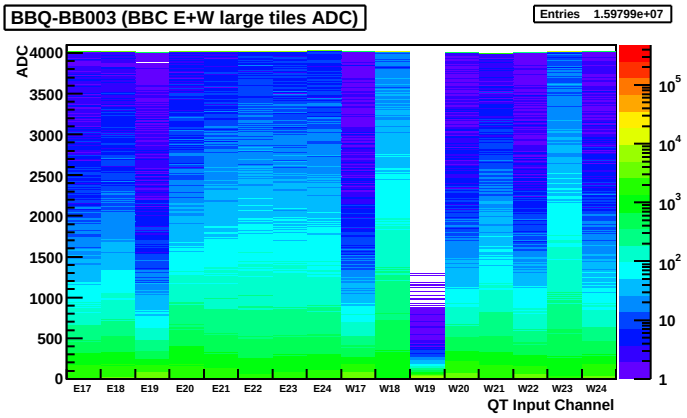

L1-TF201
Entries 5992464
Threshold bits
1
0
684417
665093
607305
636769
580937
639943
314327
333651
391439
361975
417807
358801
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

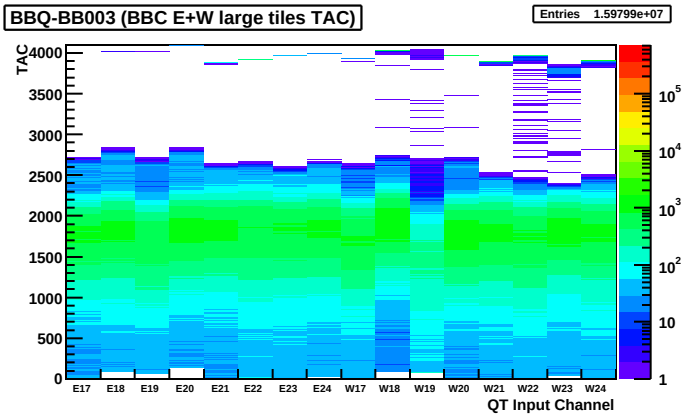

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.59799e+07
ADC
QT Input Channel

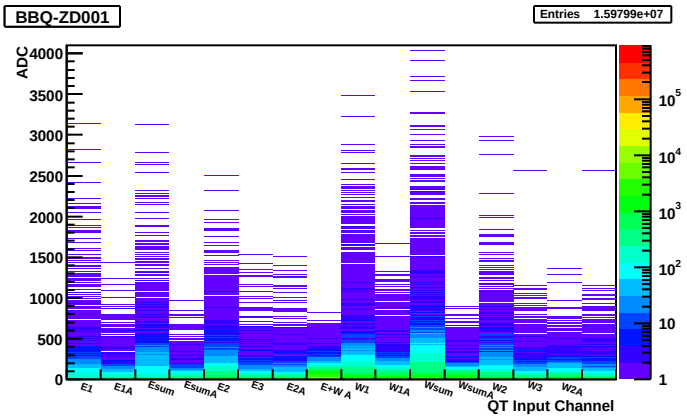

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.59799e+07
TAC
QT Input Channel

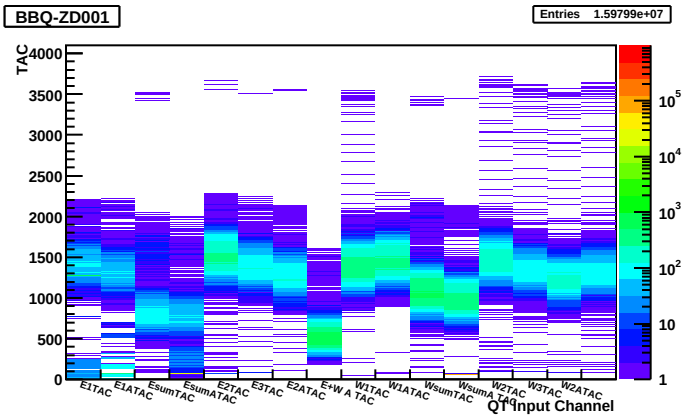

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.59799e+07
ADC
QT Input Channel

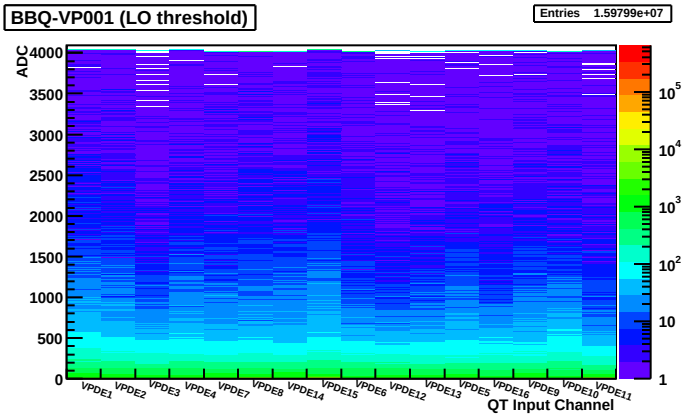

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.59799e+07
TAC
QT Input Channel

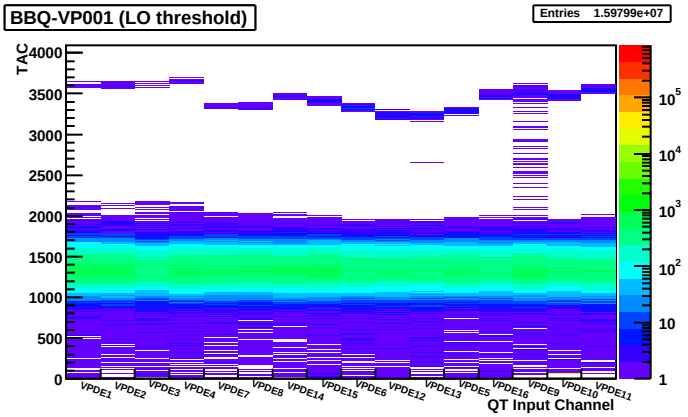

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.59799e+07
ADC
QT Input Channel

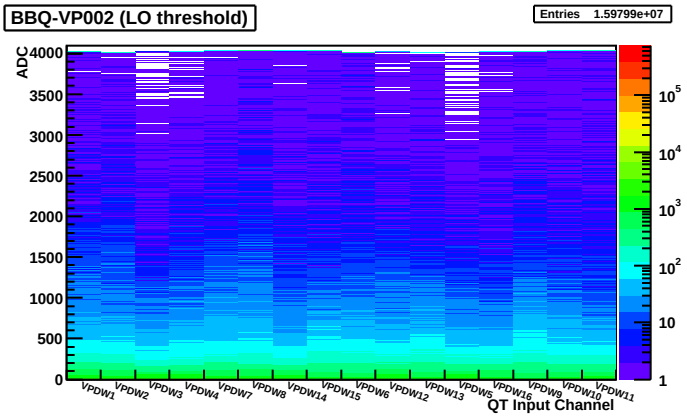

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.59799e+07
TAC
QT Input Channel

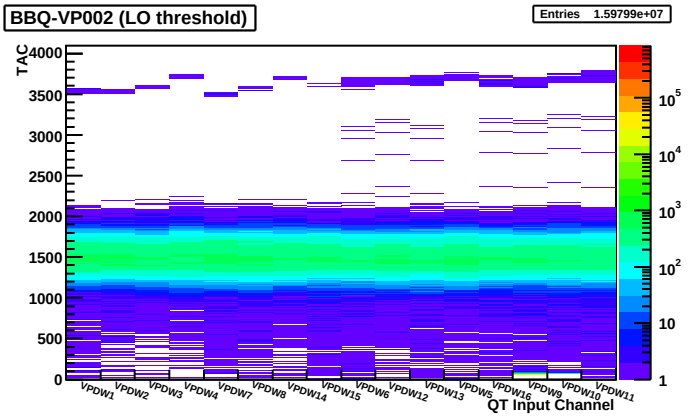

BBQ-ZD001
Entries 1.59799e+07
ADC
QT Input Channel

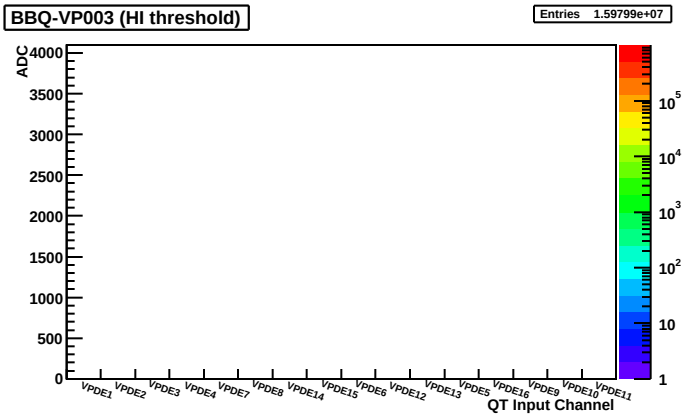

BBQ-ZD001
Entries 1.59799e+07
TAC
QT Input Channel

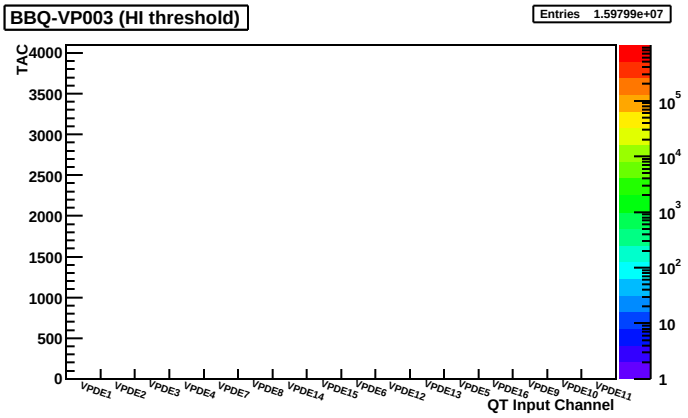

BBQ-VP001 (LO threshold)
Entries 1.59799e+07
ADC
QT Input Channel

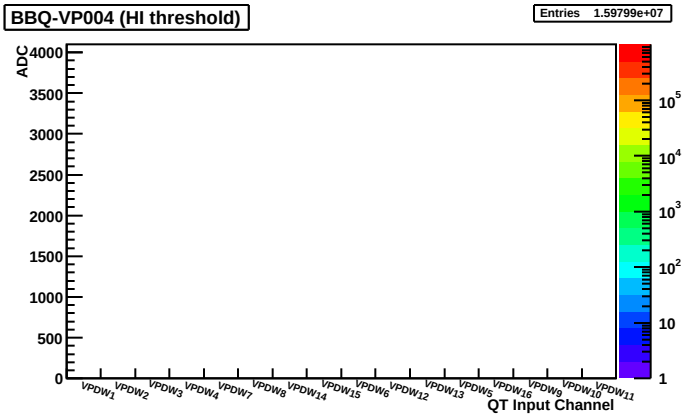

BBQ-VP001 (LO threshold)
Entries 1.59799e+07
TAC
QT Input Channel

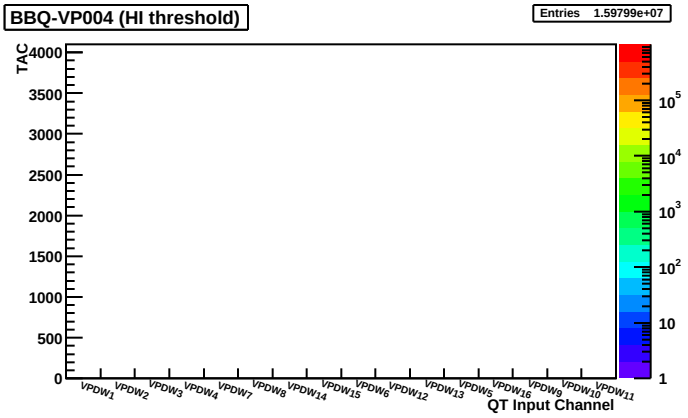

BBQ-VP002 (LO threshold)
Entries 1.59799e+07
ADC
QT Input Channel

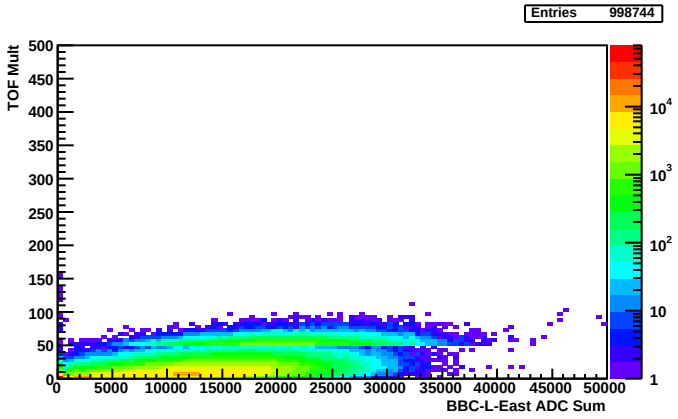

BBQ-VP002 (LO threshold)
Entries 1.59799e+07
TAC
QT Input Channel

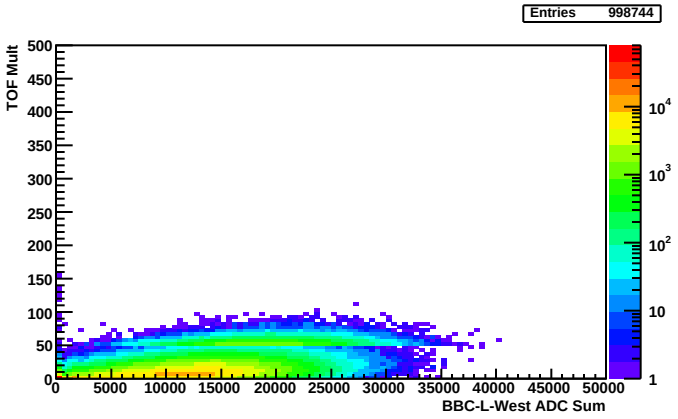

BBQ-VP003 (HI threshold)
Entries 1.59799e+07
ADC
QT Input Channel

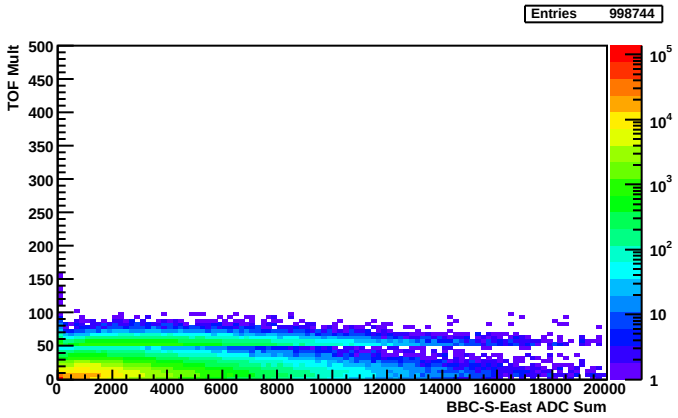

BBQ-VP003 (HI threshold)
Entries 1.59799e+07
TAC
QT Input Channel

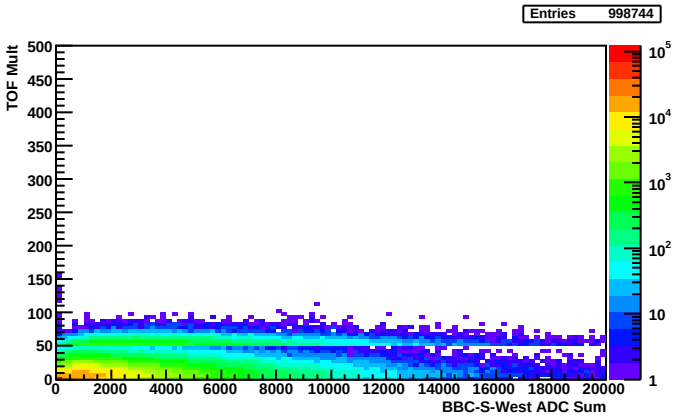

BBQ-VP004 (HI threshold)
Entries 1.59799e+07
ADC
QT Input Channel

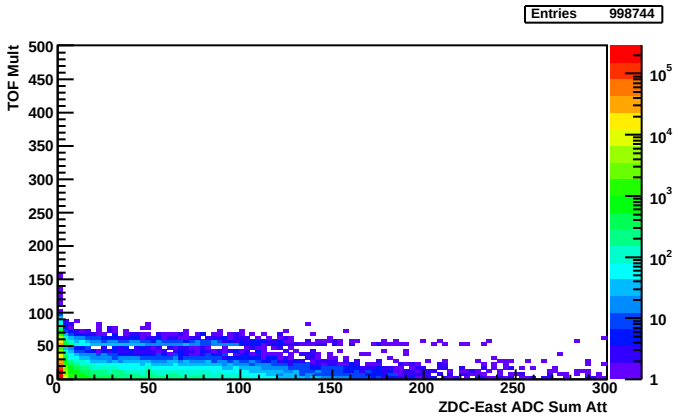

BBQ-VP004 (HI threshold)
Entries 1.59799e+07
TAC
QT Input Channel

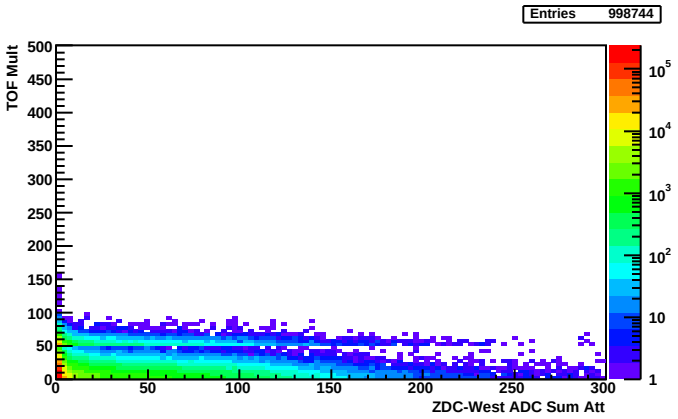

Entries 998744
TOF Mult
BBC-L-East ADC Sum

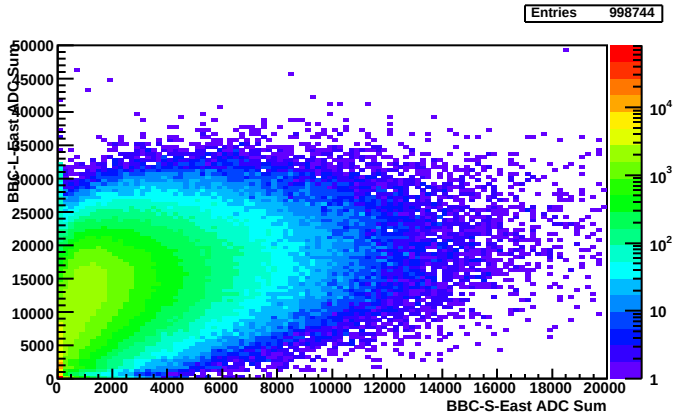

Entries 998744
TOF Mult
BBC-L-West ADC Sum

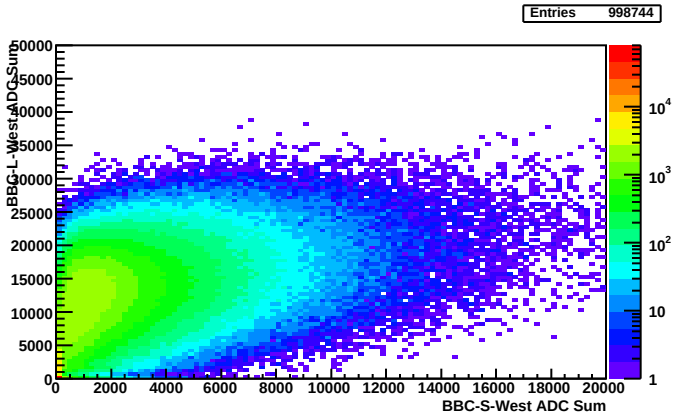

Entries 998744
TOF Mult
BBC-S-East ADC Sum

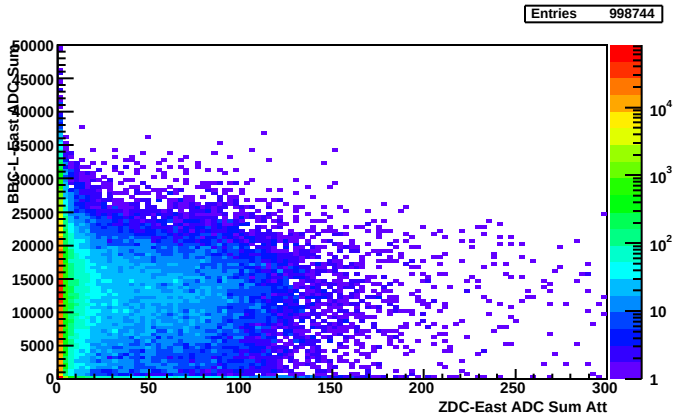

Entries 998744
TOF Mult
BBC-S-West ADC Sum

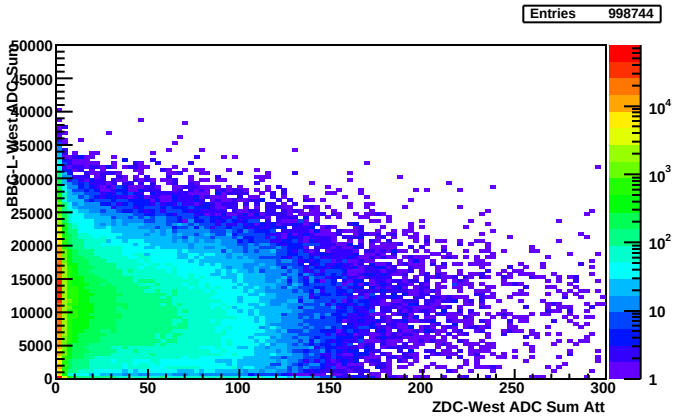

Entries 998744
TOF Mult
ZDC-East ADC Sum Att

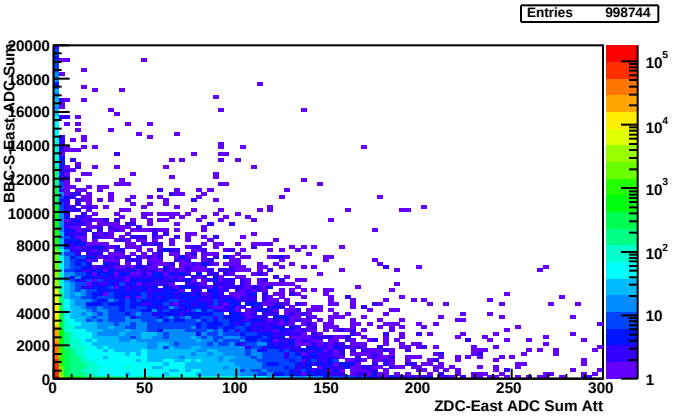

Entries 998744
TOF Mult
ZDC-West ADC Sum Att

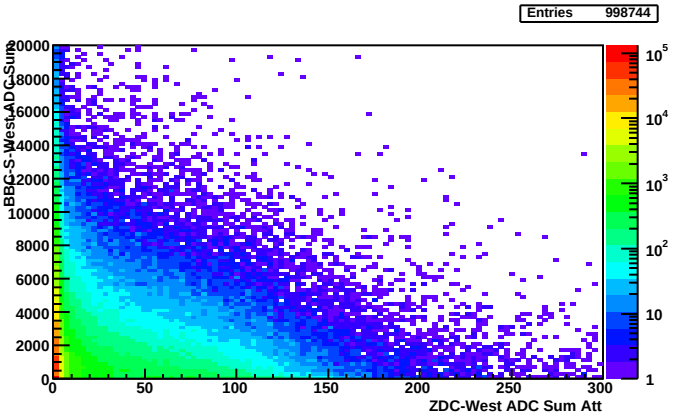

Entries 998744
BBC-L-East ADC Sum
BBC-S-East ADC Sum

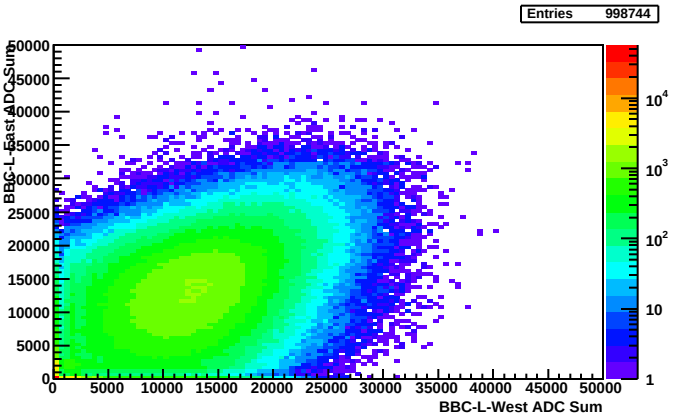

Entries 998744
BBC-L-West ADC Sum
BBC-S-West ADC Sum

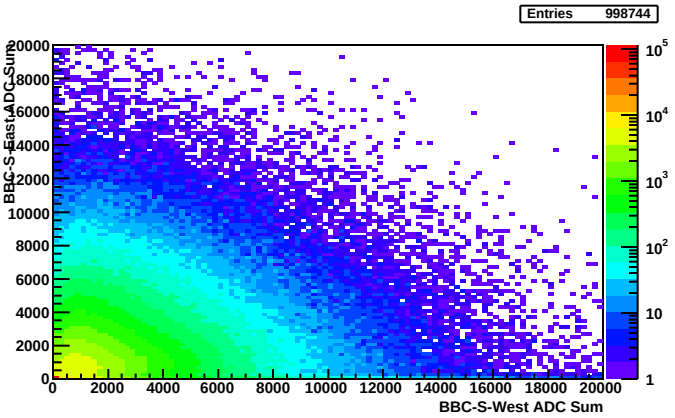

Entries 998744
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

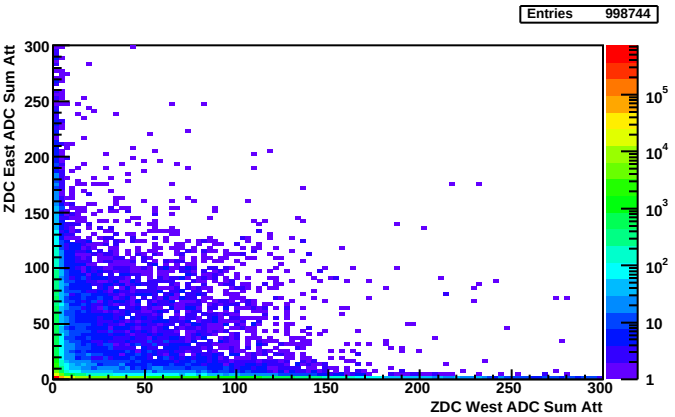

Entries 998744
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

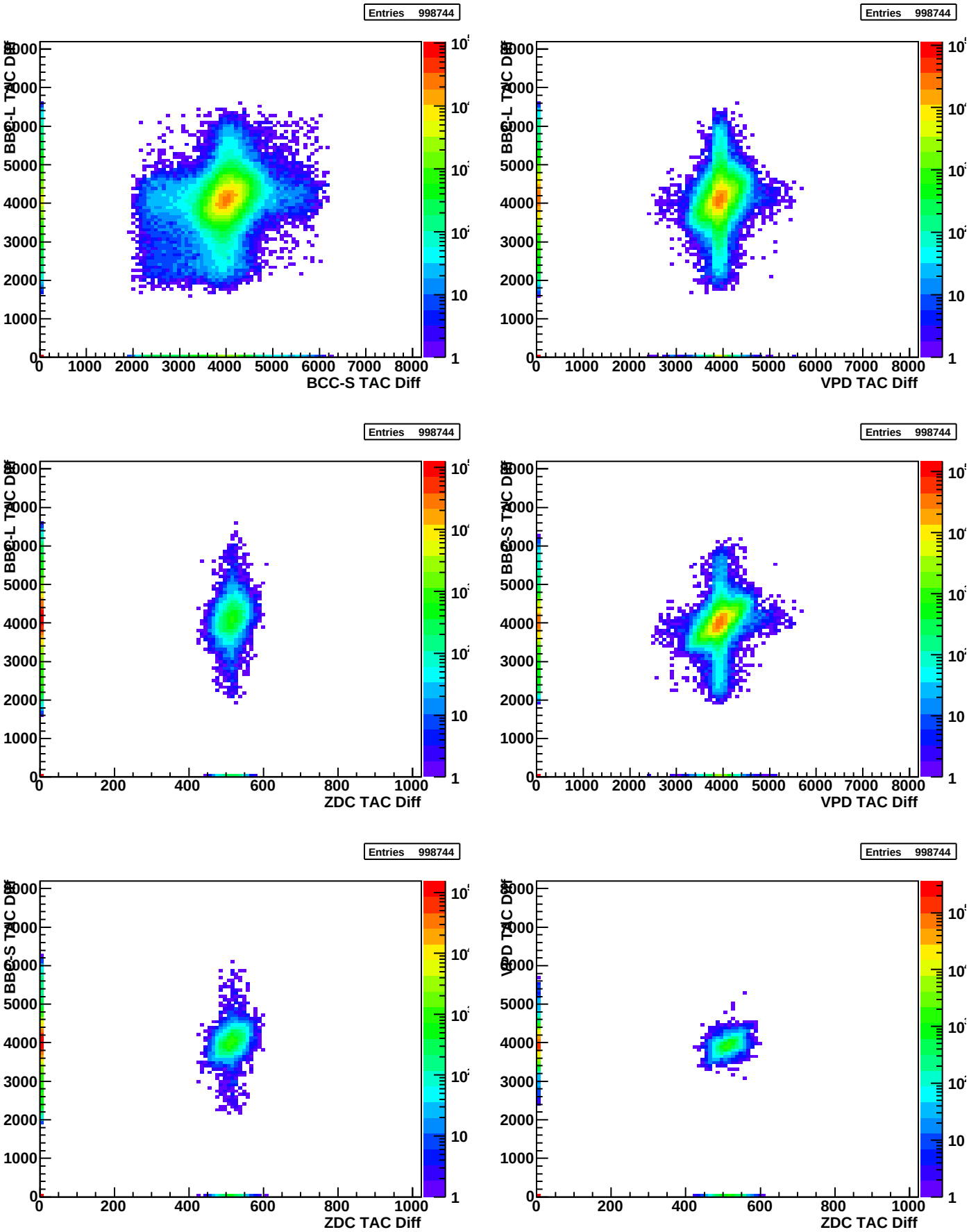

Entries 998744
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

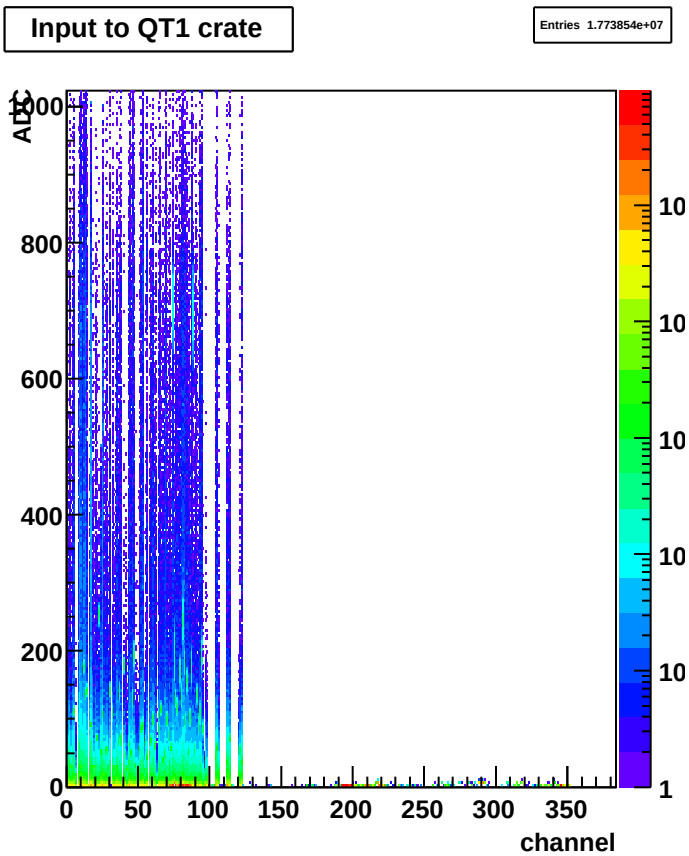

Entries 998744
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

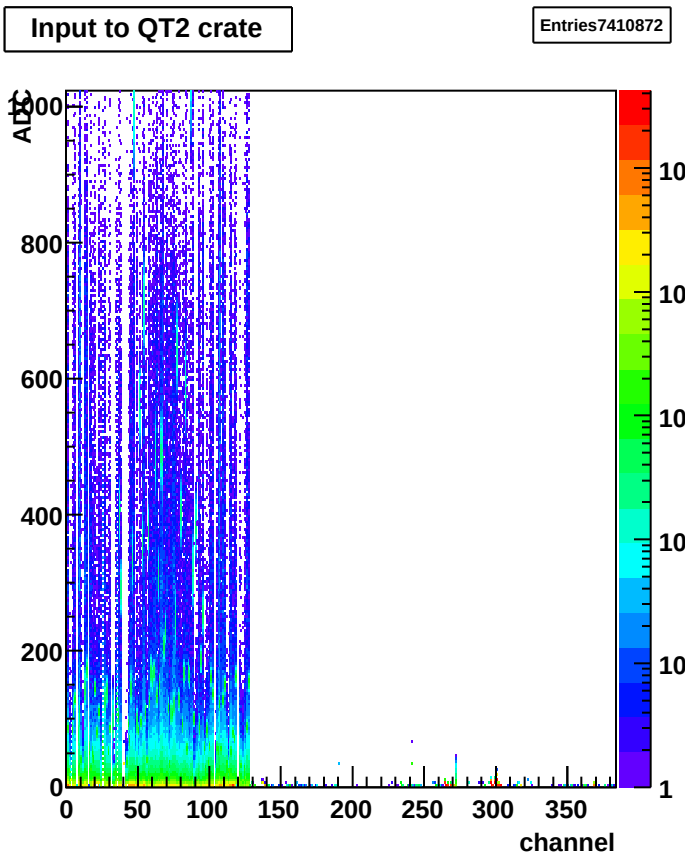

Entries 998744
BBC-L-East ADC Sum
BBC-L-West ADC Sum

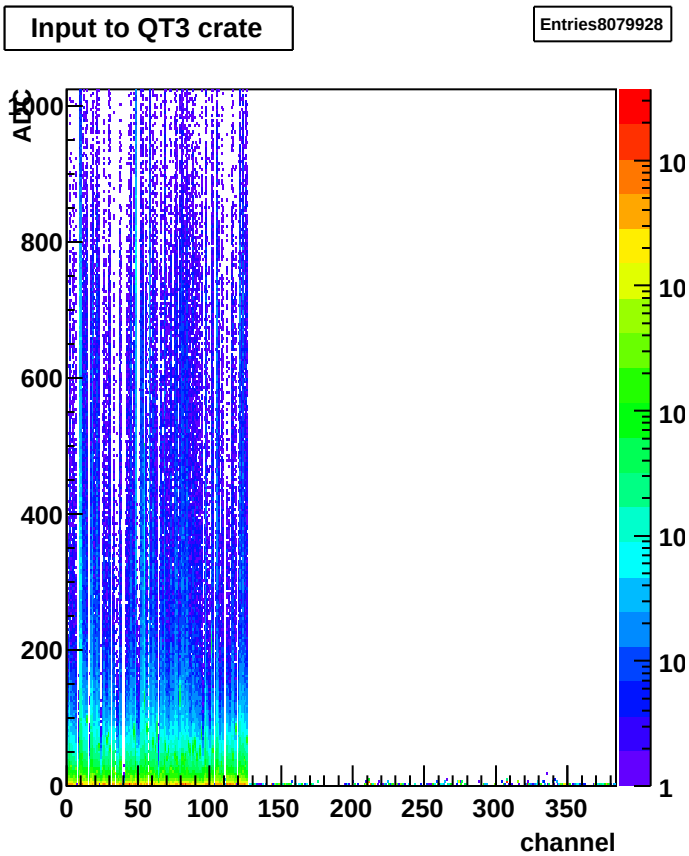

Entries 998744
BBC-S-East ADC Sum
BBC-S-West ADC Sum

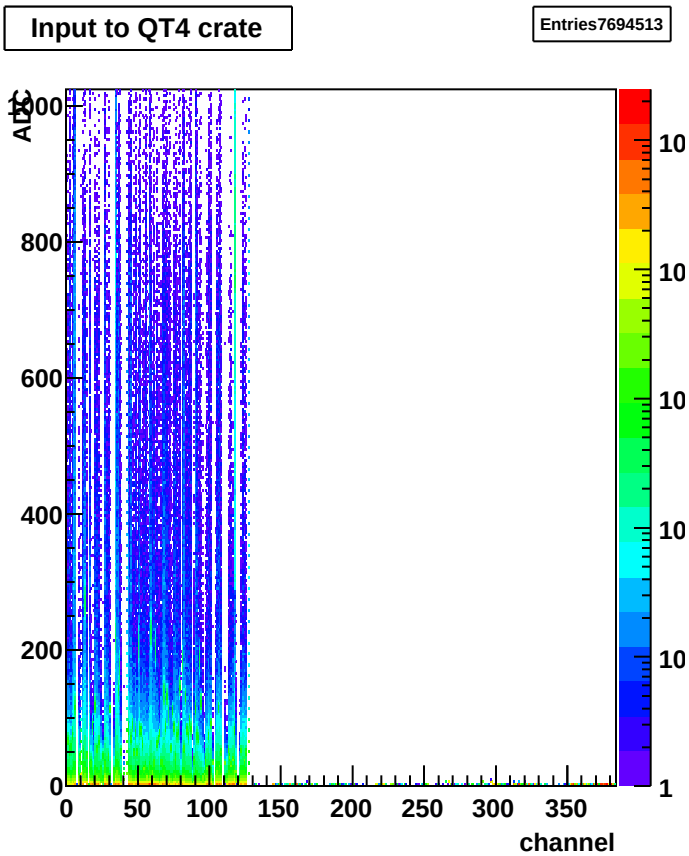

Entries 998744
ZDC East ADC Sum Att
ZDC West ADC Sum Att

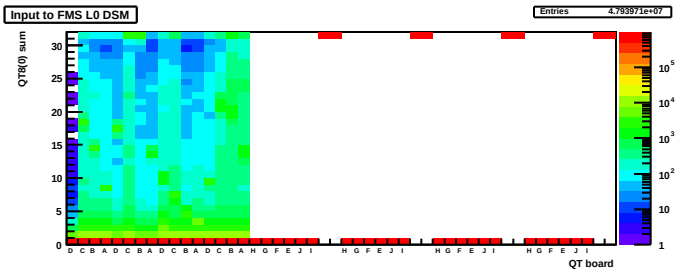

Entries 998744
BBC-L TAC Diff
BCC-S TAC Diff
Entries 998744
BBC-L TAC Diff
VPD TAC Diff
Entries 998744
BBC-L TAC Diff
ZDC TAC Diff
Entries 998744
BBC-S TAC Diff
VPD TAC Diff
Entries 998744
BBC-S TAC Diff
ZDC TAC Diff
Entries 998744
VPD TAC Diff
ZDC TAC Diff

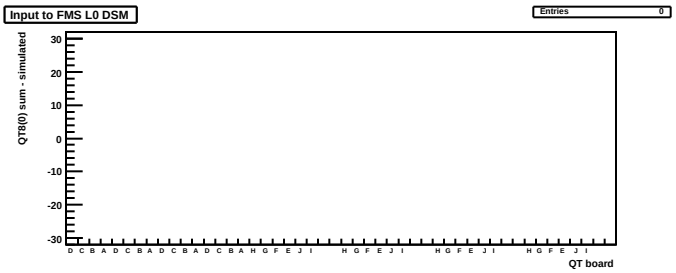

Input to QT1 crate
Entries 1.773854e+07
ADC
channel

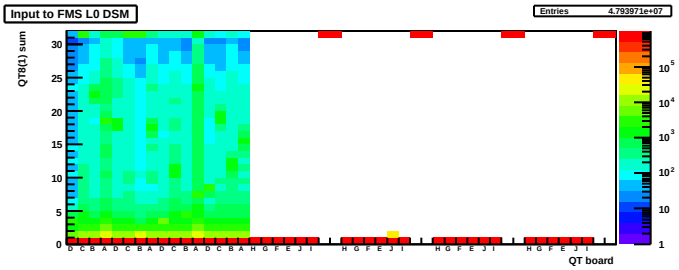

Input to QT2 crate
Entries7410872
ADC
channel

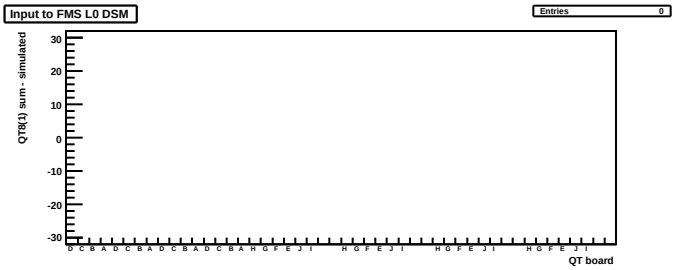

Input to QT3 crate
Entries8079928
ADC
channel

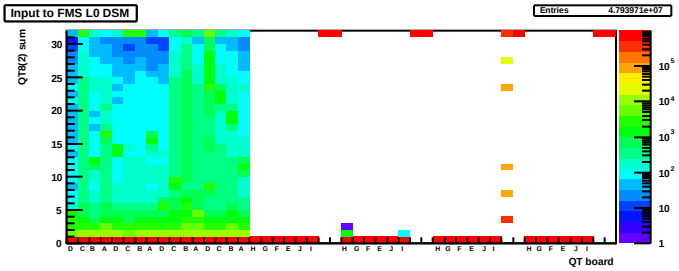

Input to QT4 crate
Entries7694513
ADC
channel

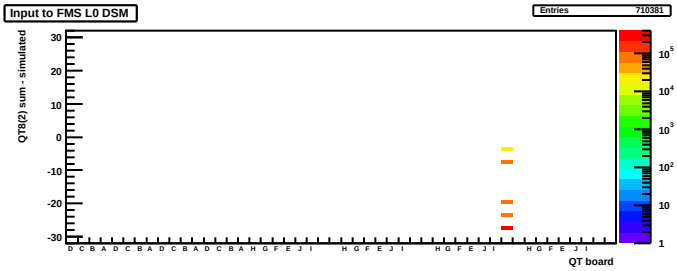

Input to FMS L0 DSM
Entries 4.793971e+07
QT8(0) sum
QT board

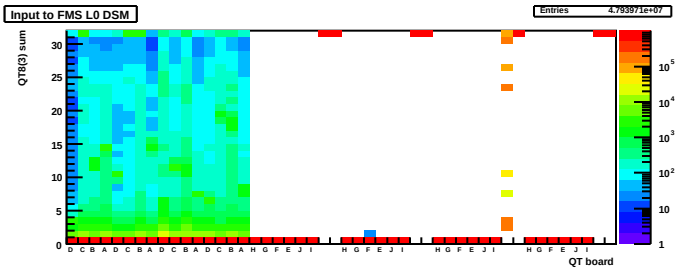

Input to FMS L0 DSM
Entries 0
QT8(0) sum - simulated
QT board

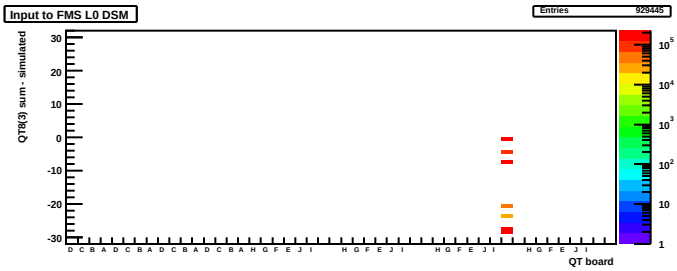

Input to FMS L0 DSM
Entries 4.793971e+07
QT8(1) sum
QT board

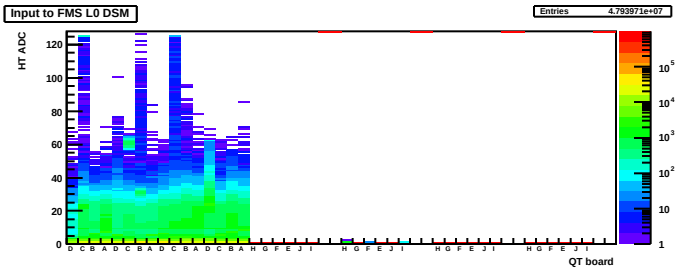

Input to FMS L0 DSM
Entries 0
QT8(1) sum - simulated
QT board

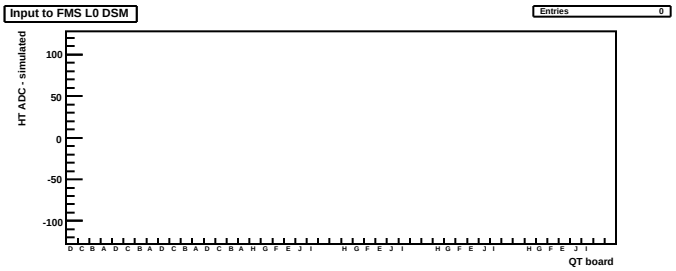

Input to FMS L0 DSM
Entries 4.793971e+07
QT8(2) sum
QT board

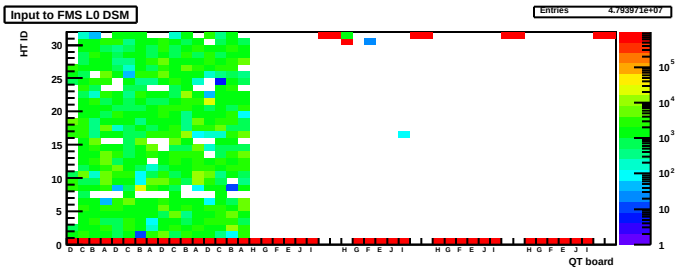

Input to FMS L0 DSM
Entries 710381
QT8(2) sum - simulated
QT board

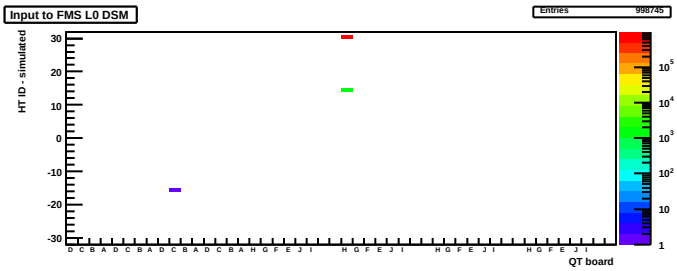

Input to FMS L0 DSM
Entries 4.793971e+07
QT8(3) sum
QT board

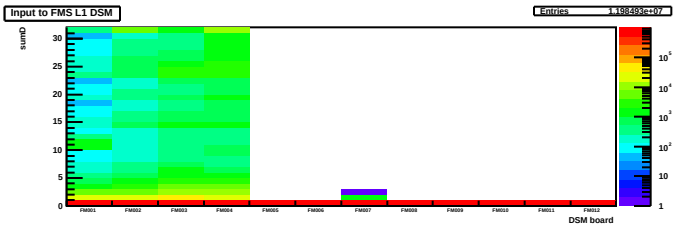

Input to FMS L0 DSM
Entries 929445
QT8(3) sum - simulated
QT board

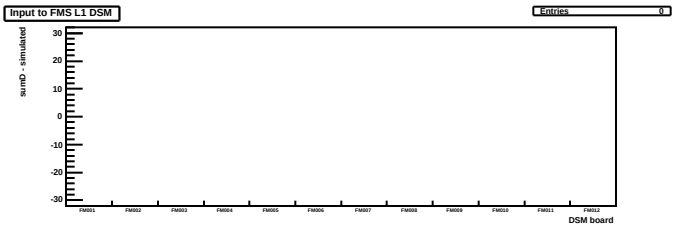

Input to FMS L0 DSM
Entries 4.793971e+07
HT ADC
QT board

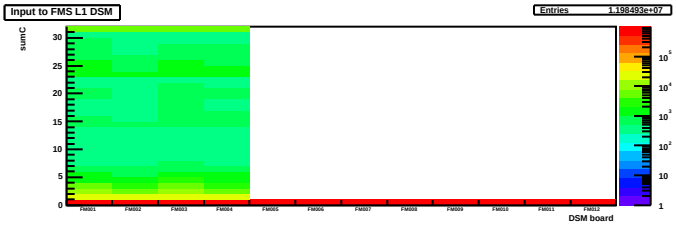

Input to FMS L0 DSM
Entries 0
HT ADC - simulated
QT board

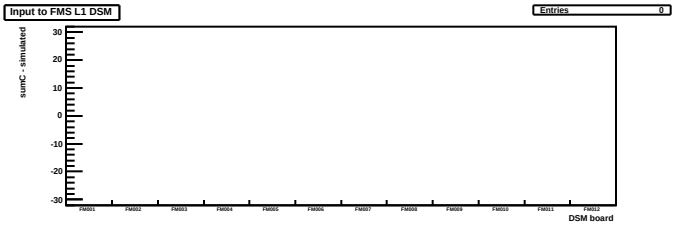

Input to FMS L0 DSM
Entries 4.793971e+07
HT ID
QT board

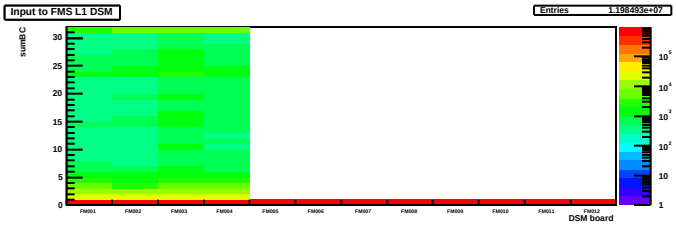

Input to FMS L0 DSM
Entries 998745
HT ID - simulated
QT board

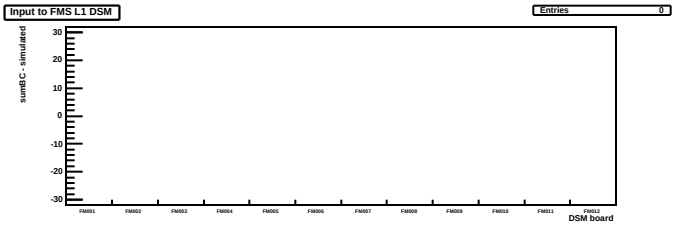

Input to FMS L1 DSM
Entries 1.198493e+07
sumD
DSM board

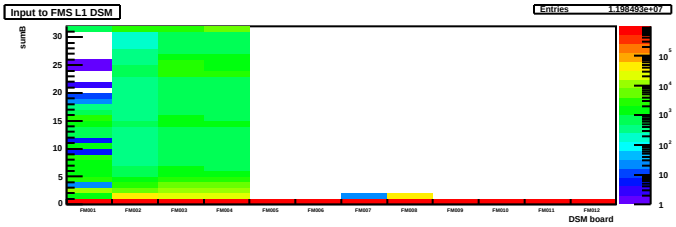

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

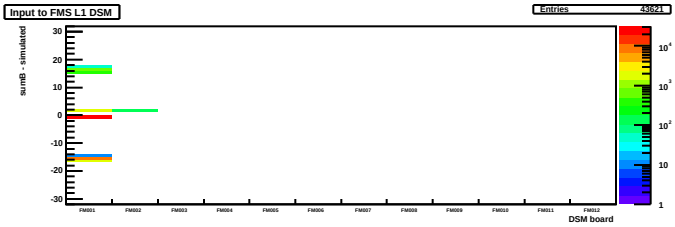

Input to FMS L1 DSM
Entries 1.198493e+07
sumC
DSM board

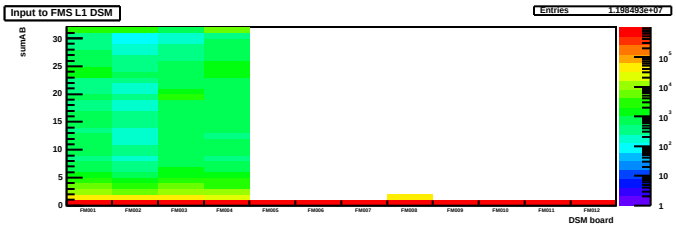

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

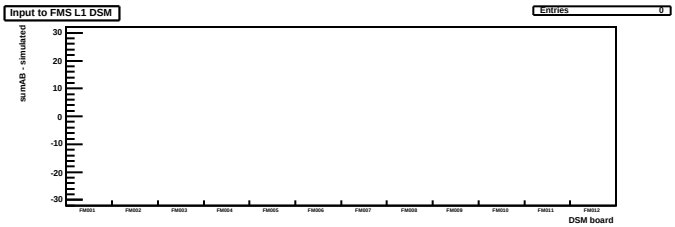

Input to FMS L1 DSM
Entries 1.198493e+07
sumBC
DSM board

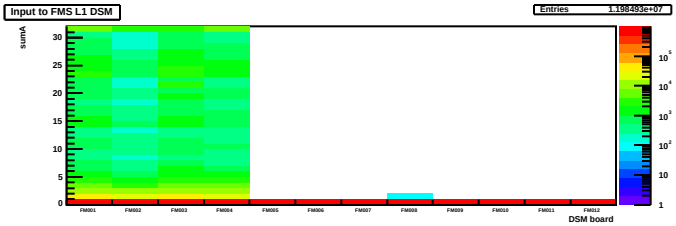

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

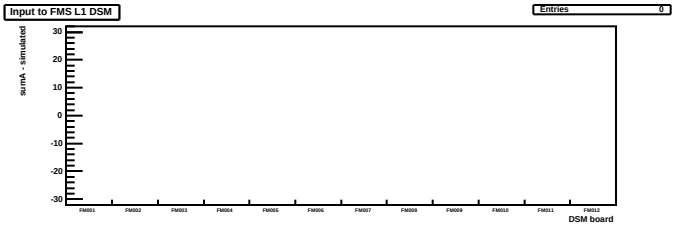

Input to FMS L1 DSM
Entries 1.198493e+07
sumB
DSM board

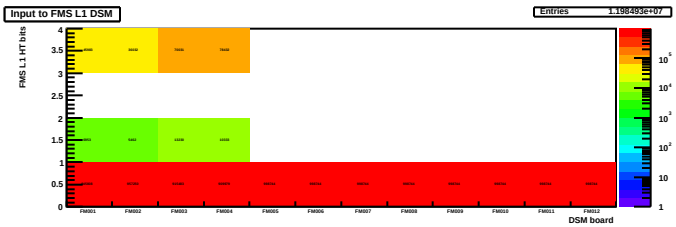

Input to FMS L1 DSM
Entries 43621
sumB - simulated
DSM board

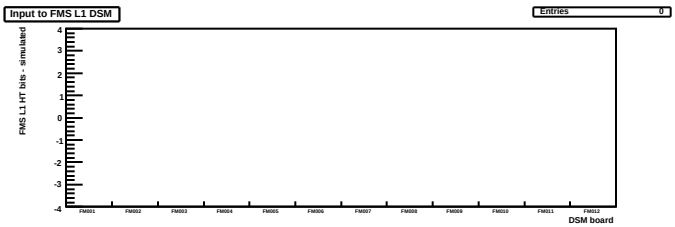

Input to FMS L1 DSM
Entries 1.198493e+07
sumAB
DSM board

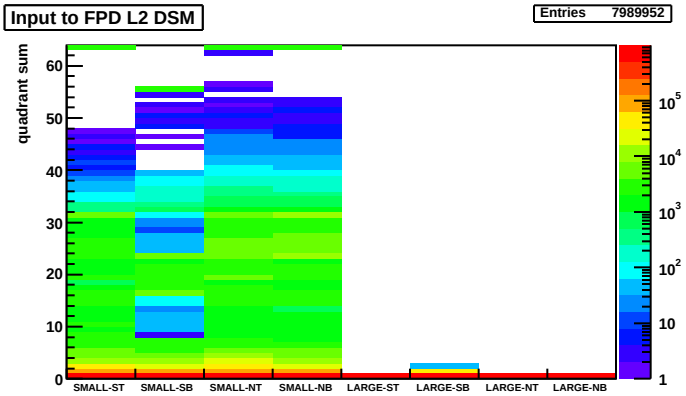

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

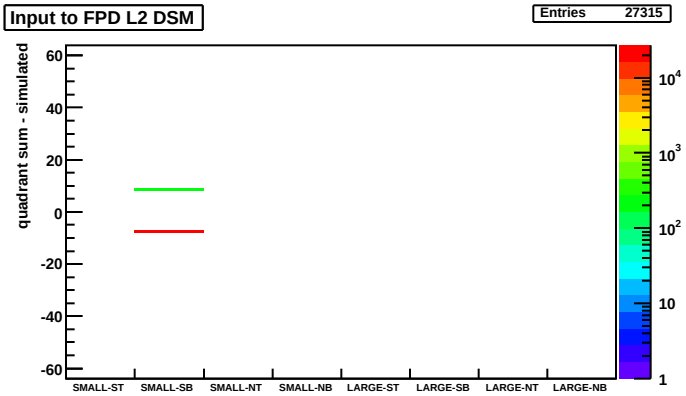

Input to FMS L1 DSM
Entries 1.198493e+07
sumA
DSM board

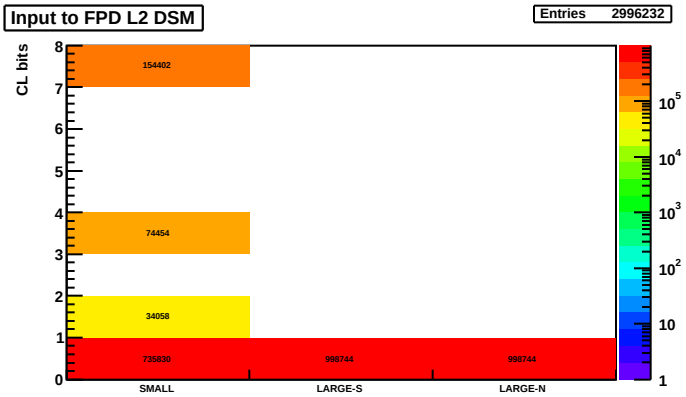

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

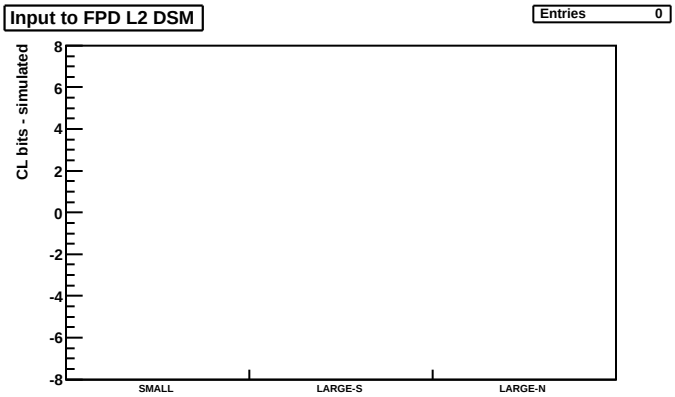

Input to FMS L1 DSM
Entries 1.198493e+07
FMS L1 HT bits
DSM board

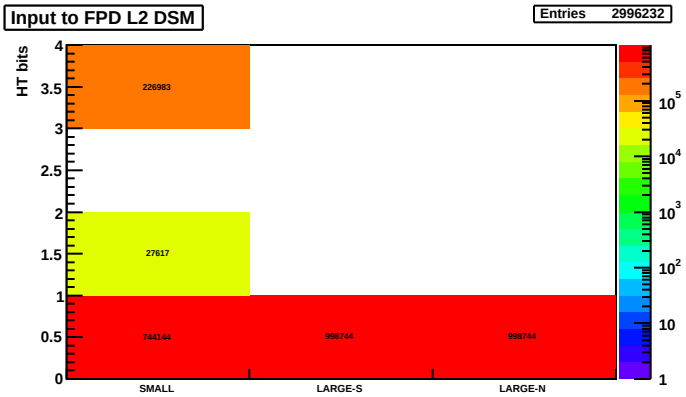

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

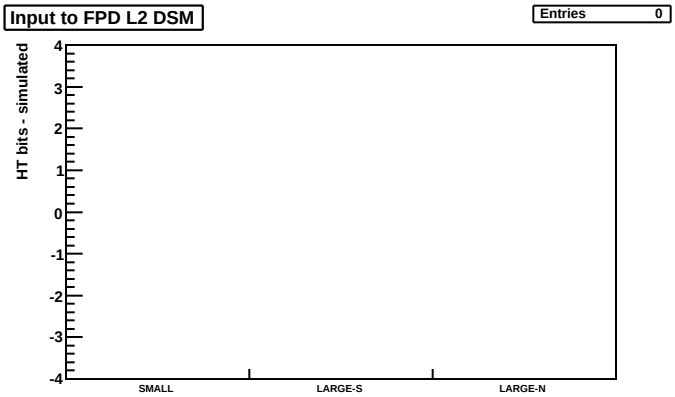

Input to FPD L2 DSM
Entries 7989952
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

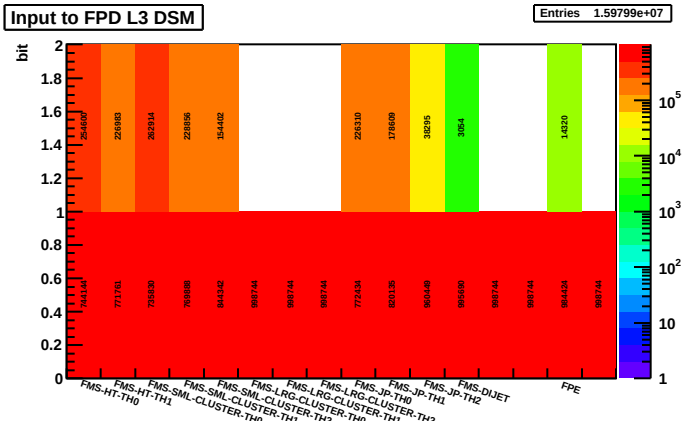

Input to FPD L2 DSM
Entries 27315
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

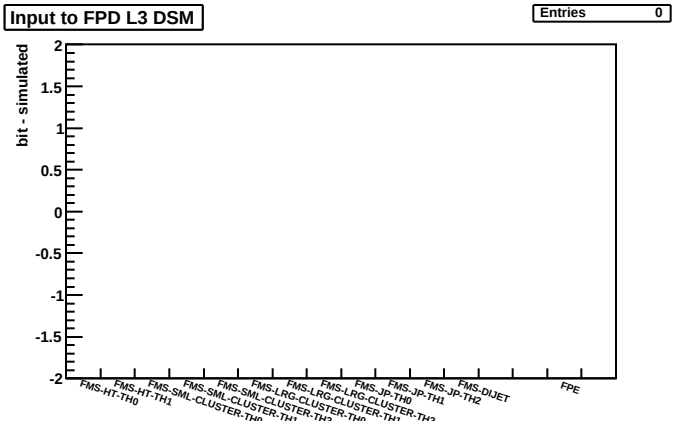

Input to FPD L2 DSM
Entries 2996232
CL bits
154402
74454
34058
735830
998744
998744
SMALL
LARGE-S
LARGE-N

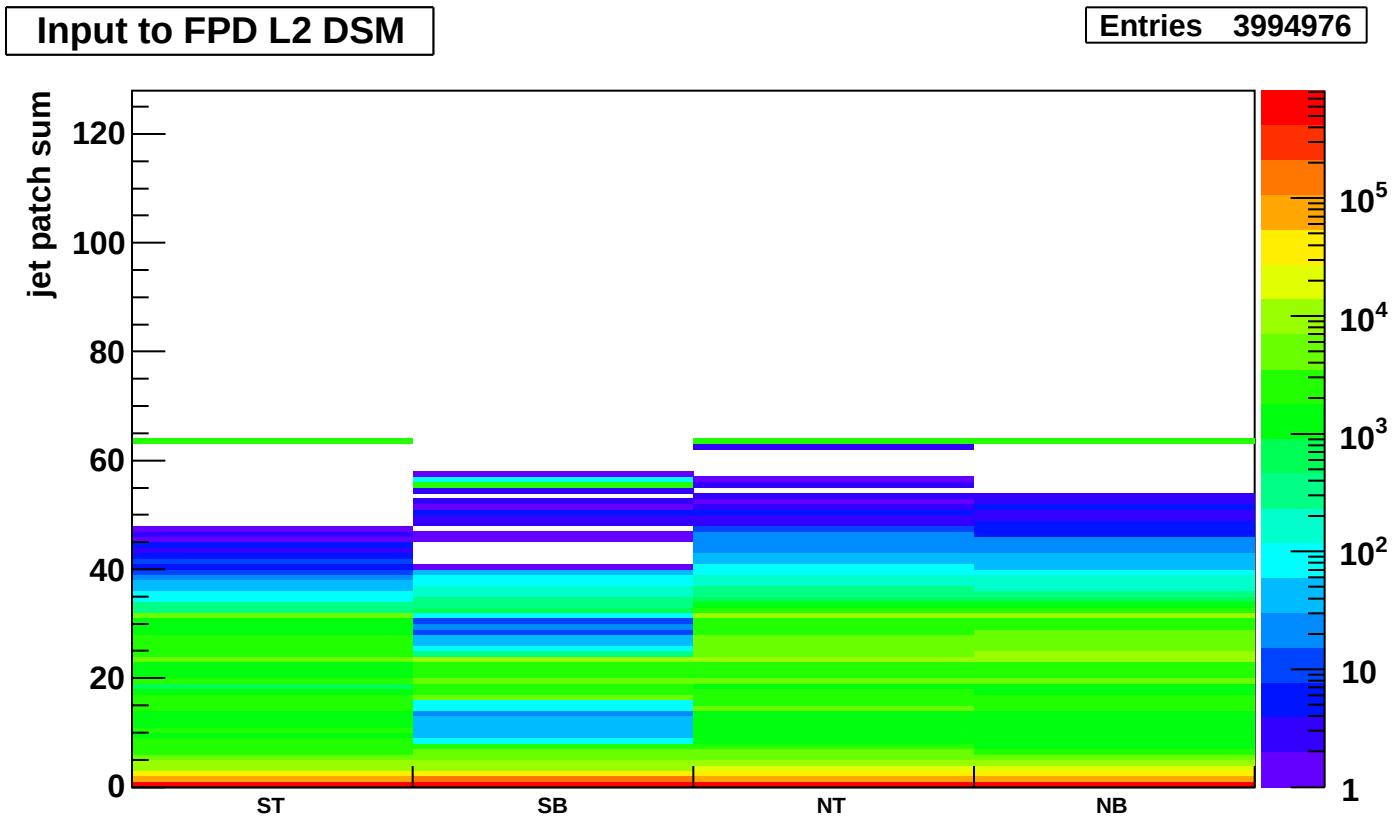

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

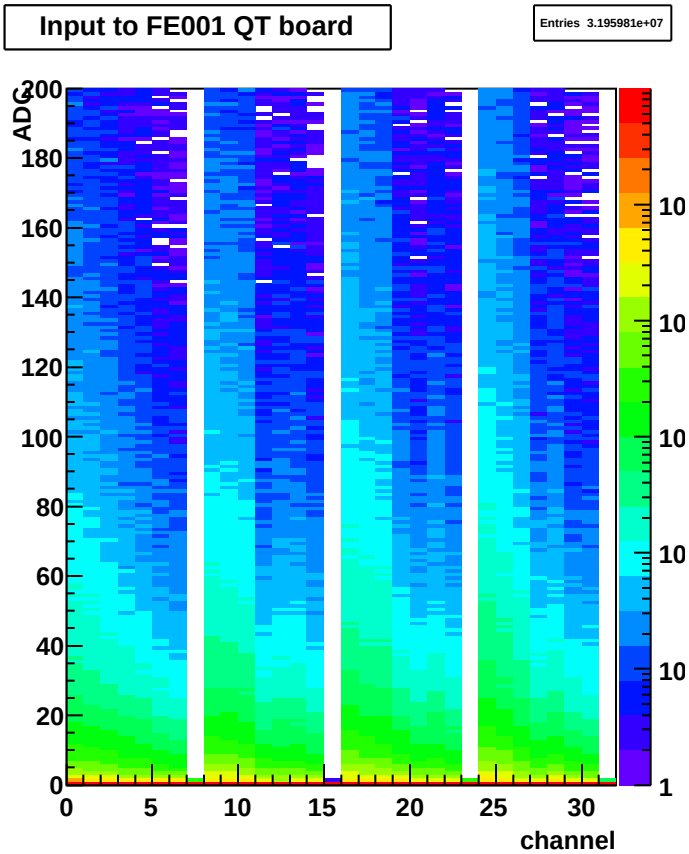

Input to FPD L2 DSM
Entries 2996232
HT bits
226983
27617
744144
998744
998744
SMALL
LARGE-S
LARGE-N

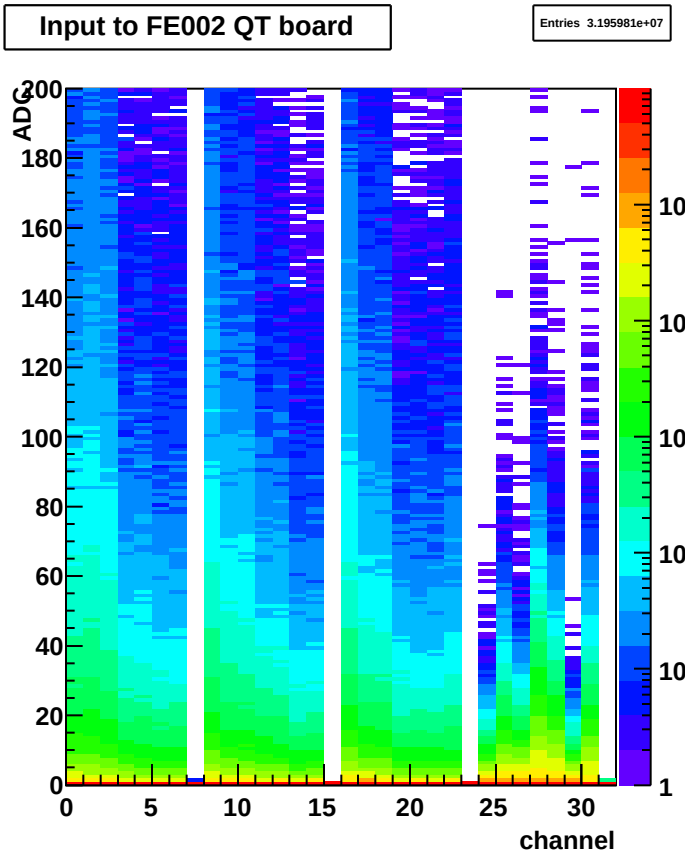

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

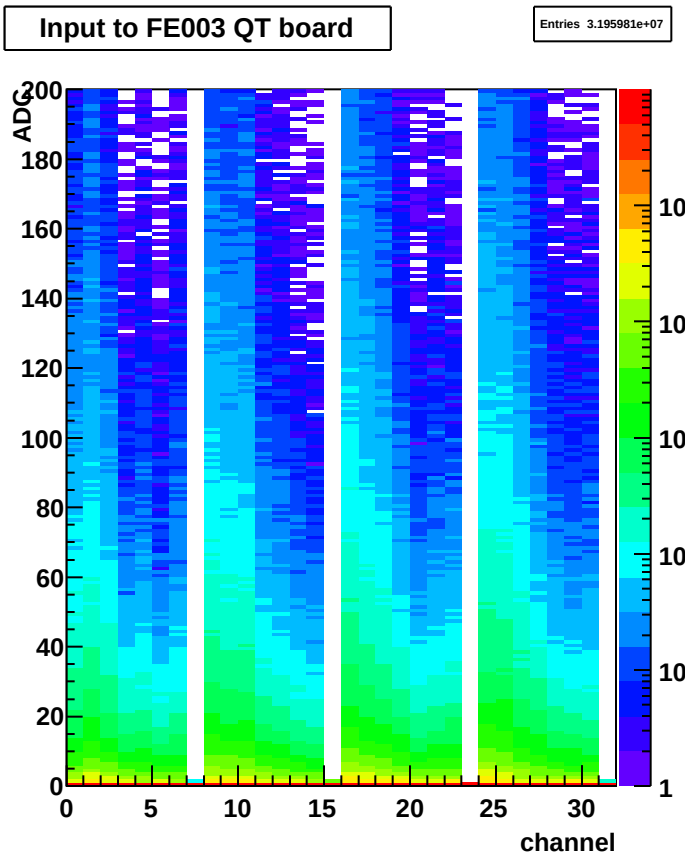

Input to FPD L3 DSM
Entries 1.59799e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

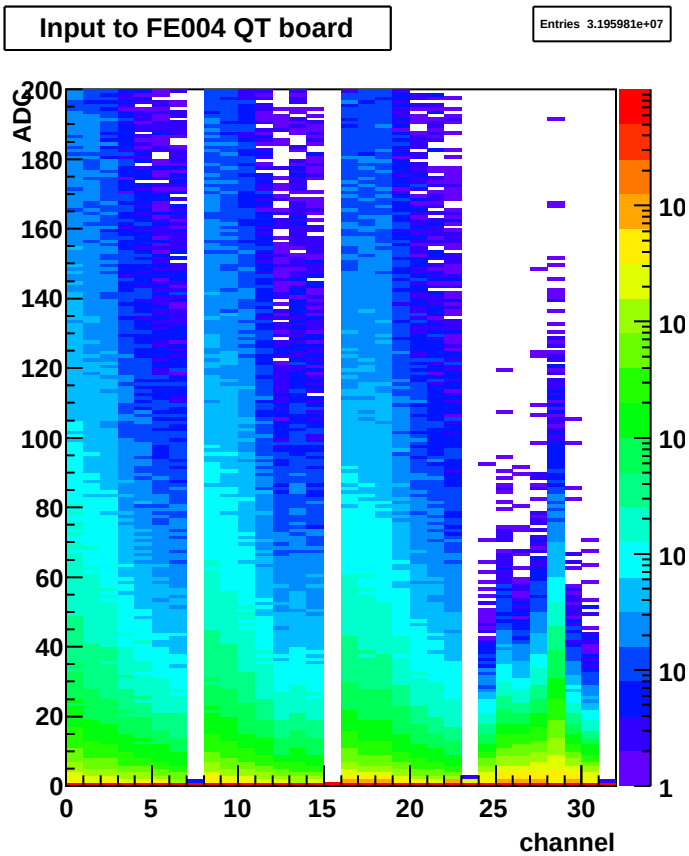

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

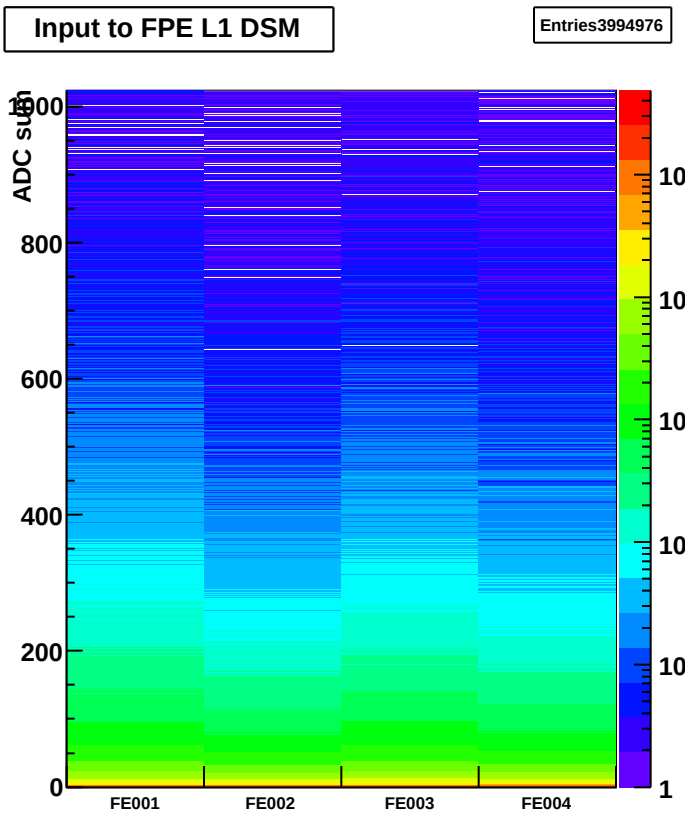

Input to FPD L2 DSM
Entries 3994976
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

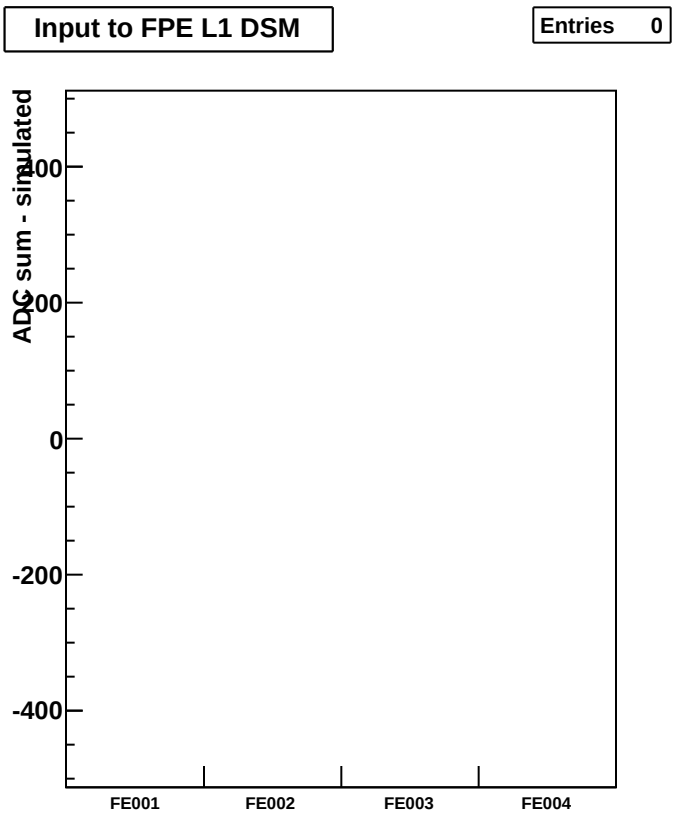

Input to FE001 QT board
Entries 3.195981e+07
ADC
channel

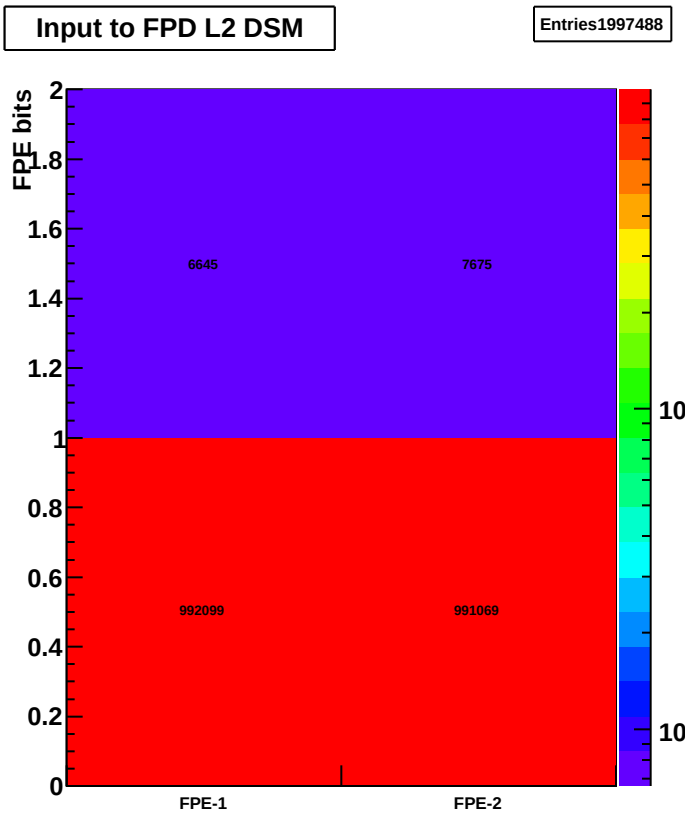

Input to FE002 QT board
Entries 3.195981e+07
ADC
channel

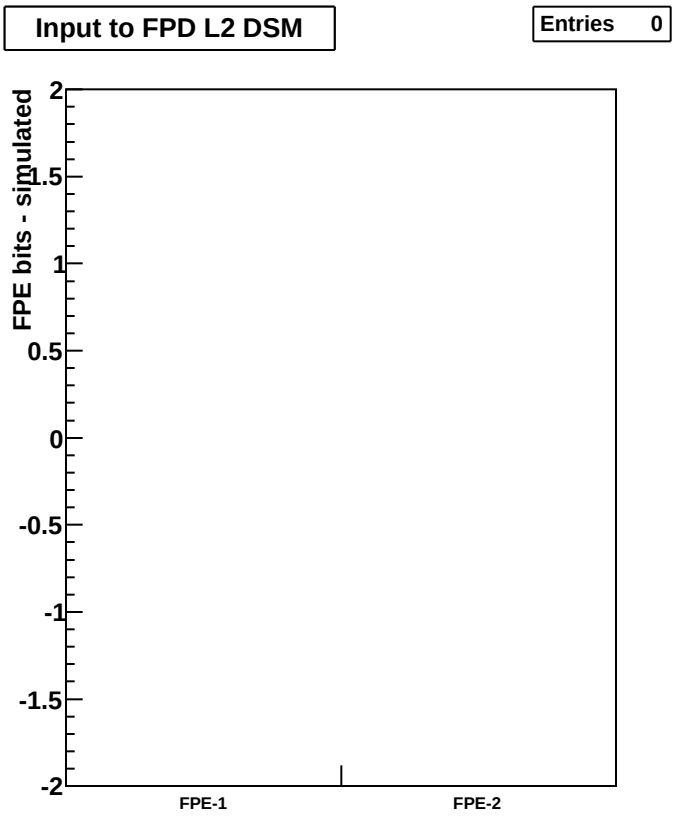

Input to FE003 QT board
Entries 3.195981e+07
ADC
channel


Input to FE004 QT board
Entries 3.195981e+07
ADC
channel


Input to FPE L1 DSM
Entries3994976
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
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
Entries1997488
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
6645
7675
992099
991069
FPE-1
FPE-2
10
10
10


Input to FPD L2 DSM
Entries 0
FPE bits - simulated
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
FPE-1
FPE-2