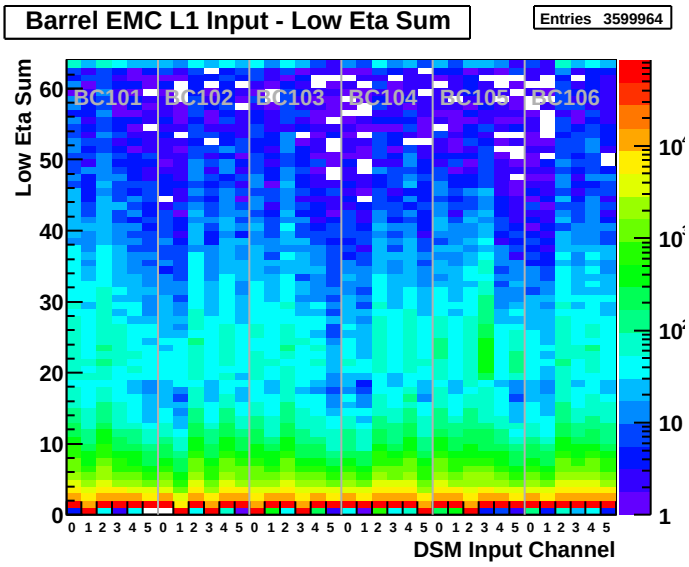
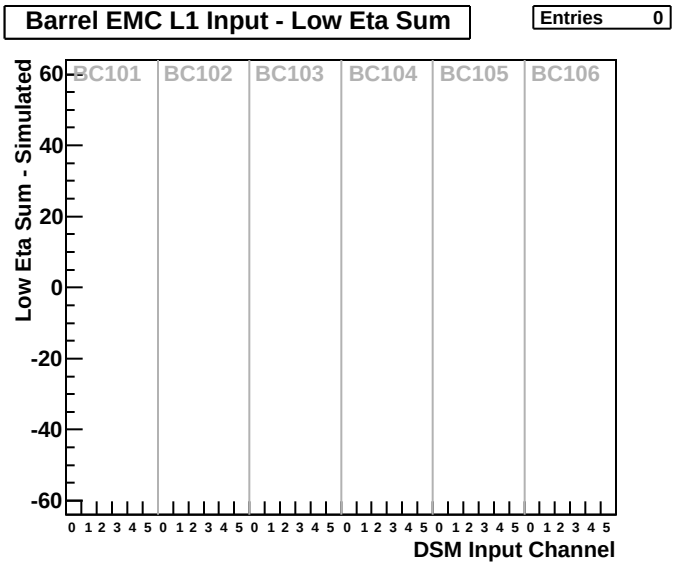
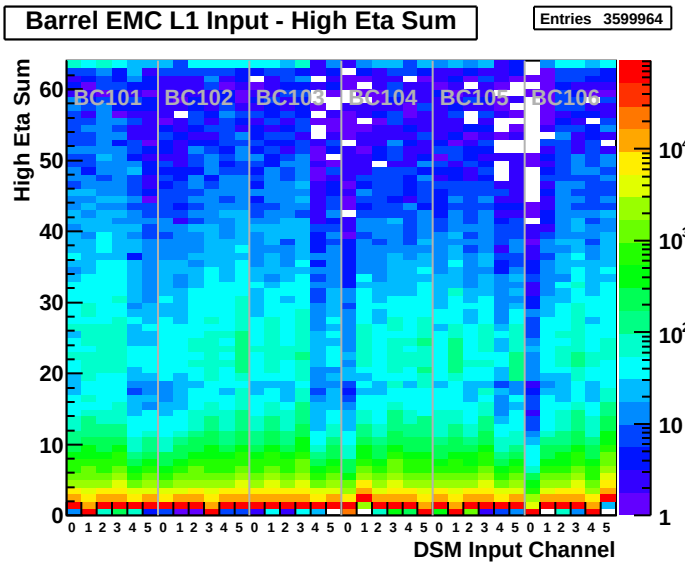
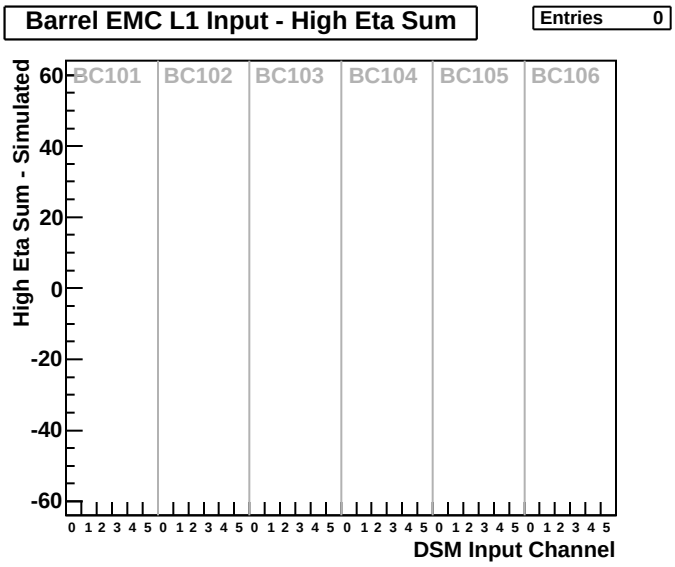
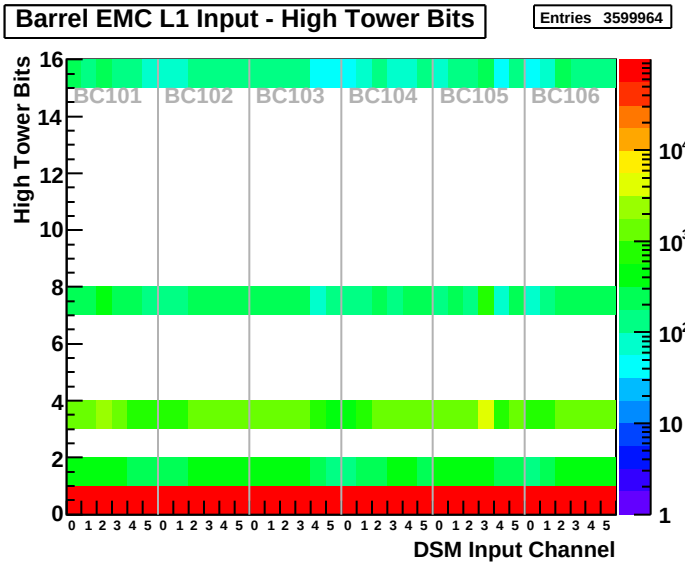
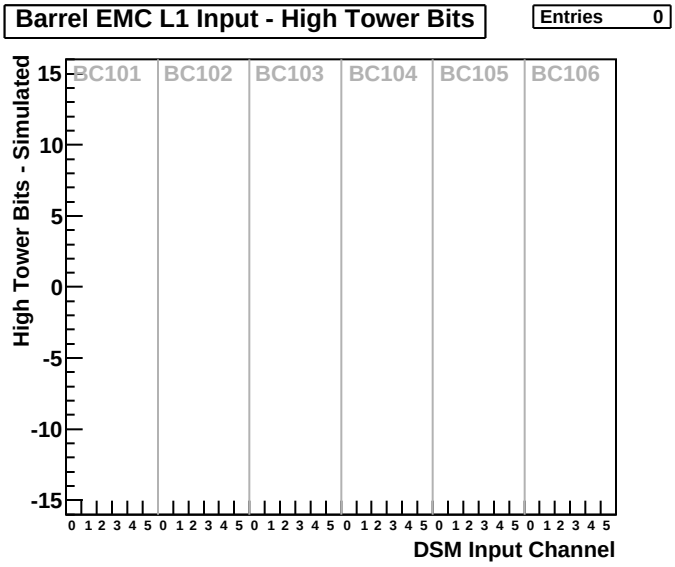

Barrel EMC L1 Input - Low Eta Sum
Entries 3599964
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

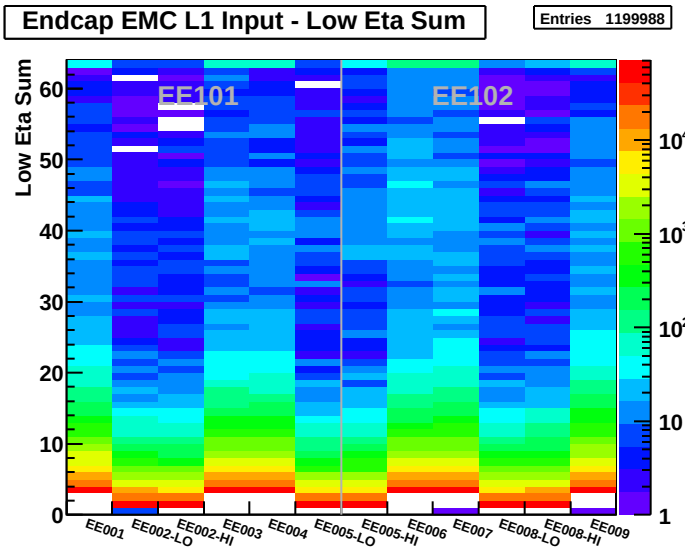

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

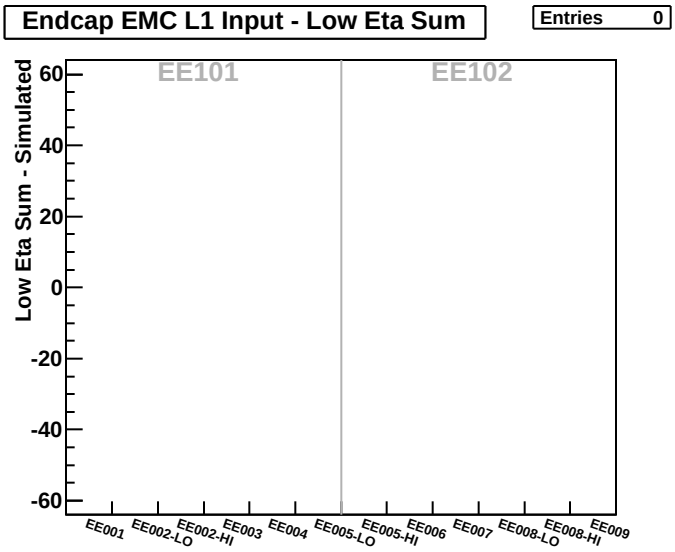

Barrel EMC L1 Input - High Eta Sum
Entries 3599964
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

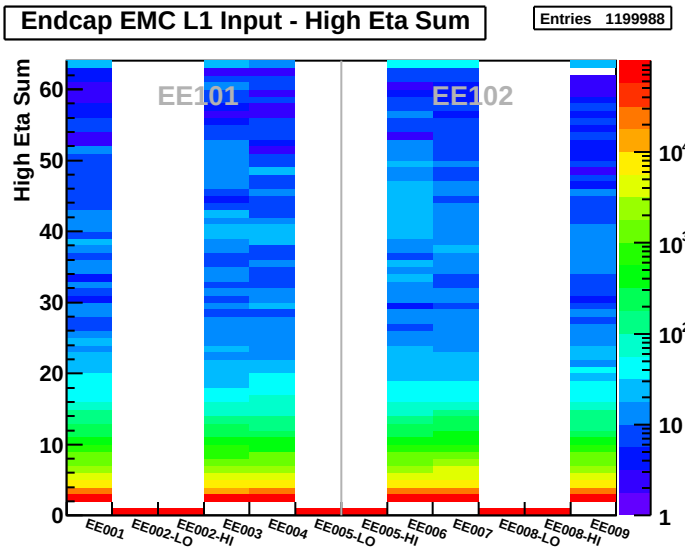

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

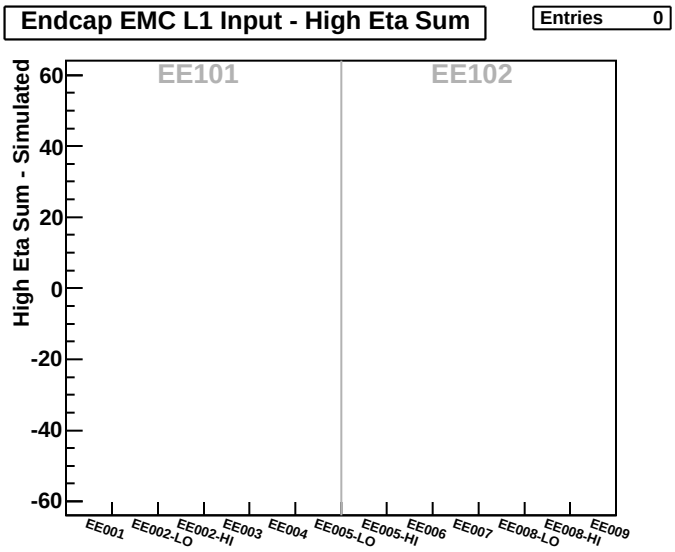

Barrel EMC L1 Input - High Tower Bits
Entries 3599964
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

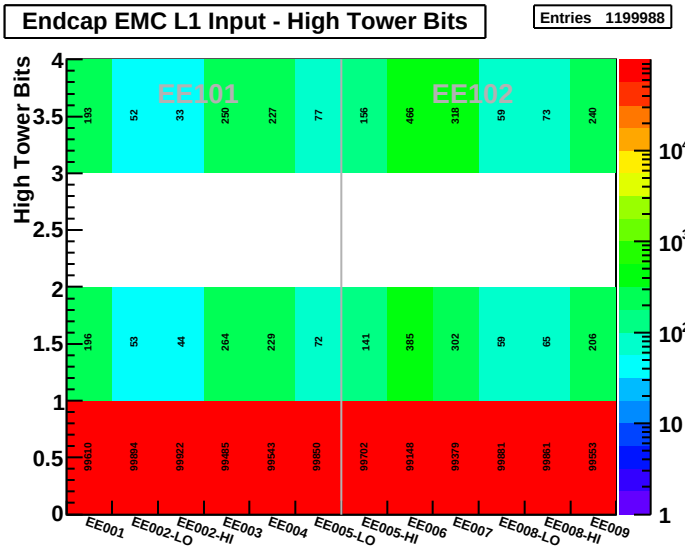

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

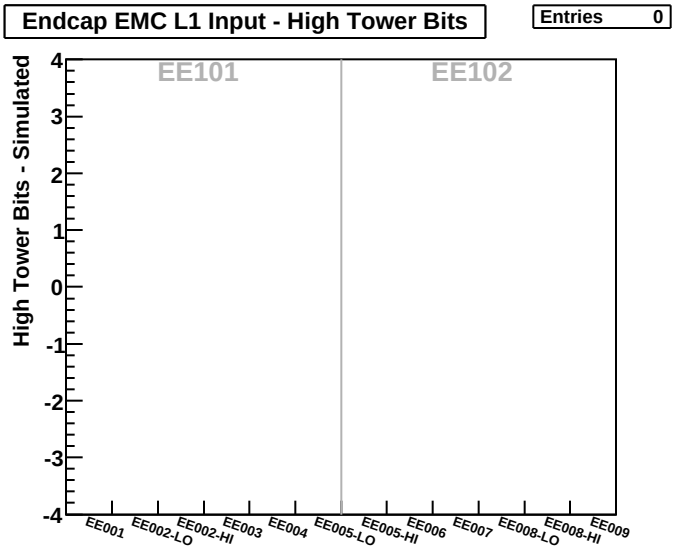

Endcap EMC L1 Input - Low Eta Sum
Entries 1199988
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

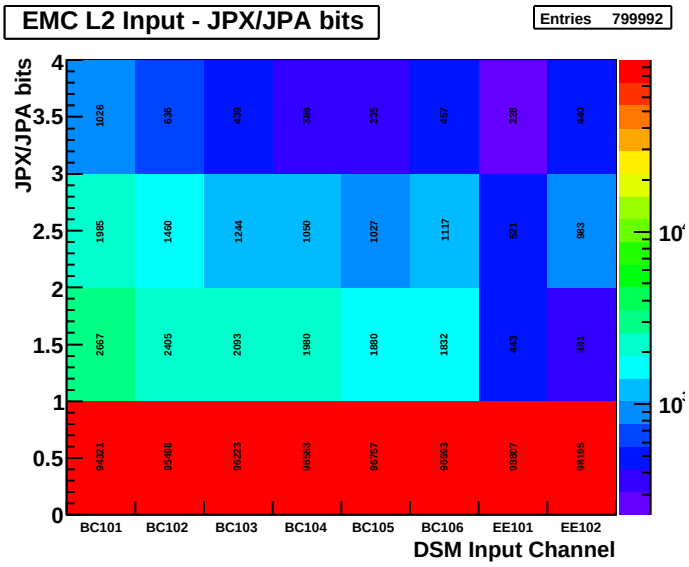

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

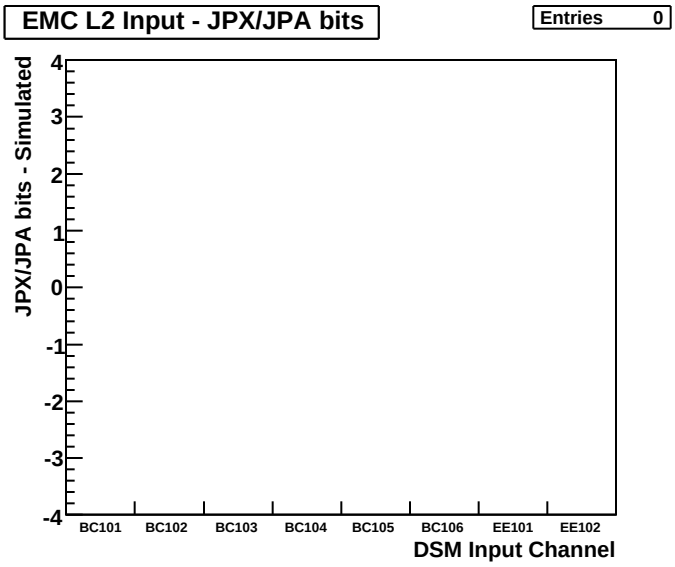

Endcap EMC L1 Input - High Eta Sum
Entries 1199988
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

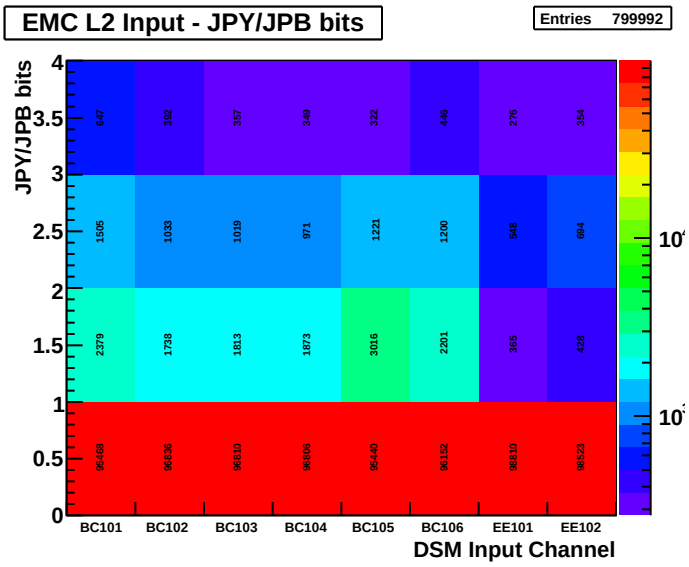

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

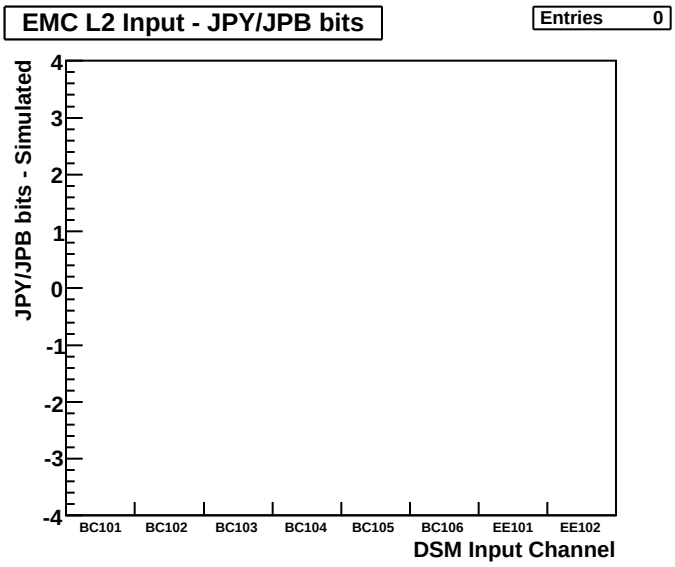

Endcap EMC L1 Input - High Tower Bits
Entries 1199988
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

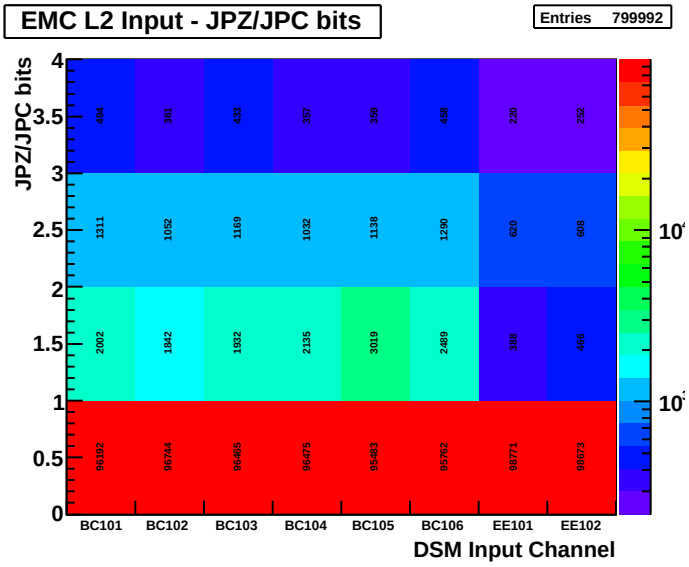

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

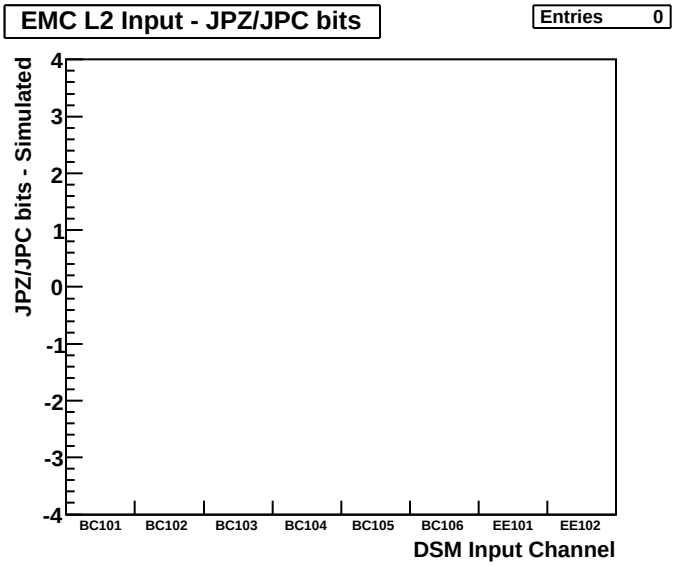

EMC L2 Input - JPX/JPA bits
Entries 799992
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1026 636 439 386 335 457 228 440
1985 1460 1244 1050 1027 1117 521 983
2667 2405 2093 1980 1880 1832 443 381
94321 95498 96223 96583 96757 96593 98807 98195

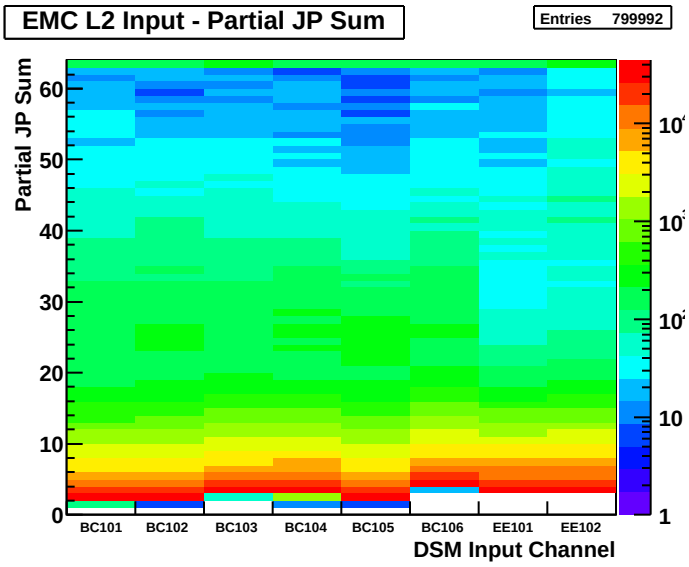

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

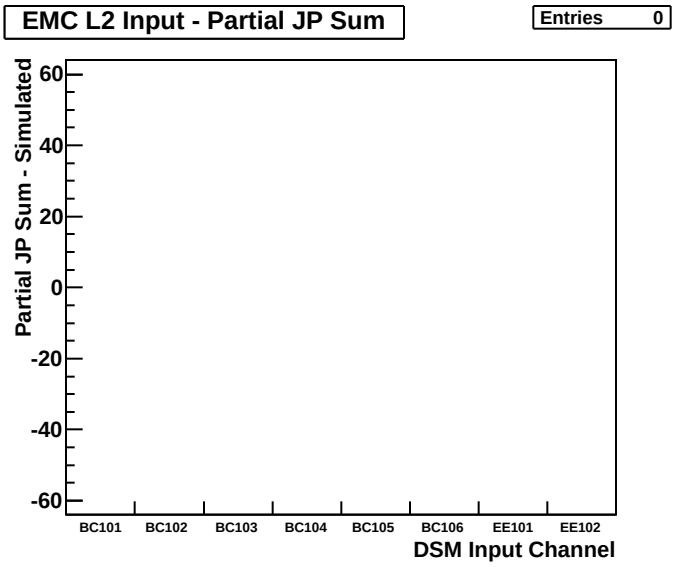

EMC L2 Input - JPY/JPB bits
Entries 799992
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
647 392 357 340 322 446 276 354
1505 1033 1019 971 1221 1200 548 694
2379 1738 1813 1873 3016 2201 365 428
95468 96836 96810 96806 95440 96152 98810 98523

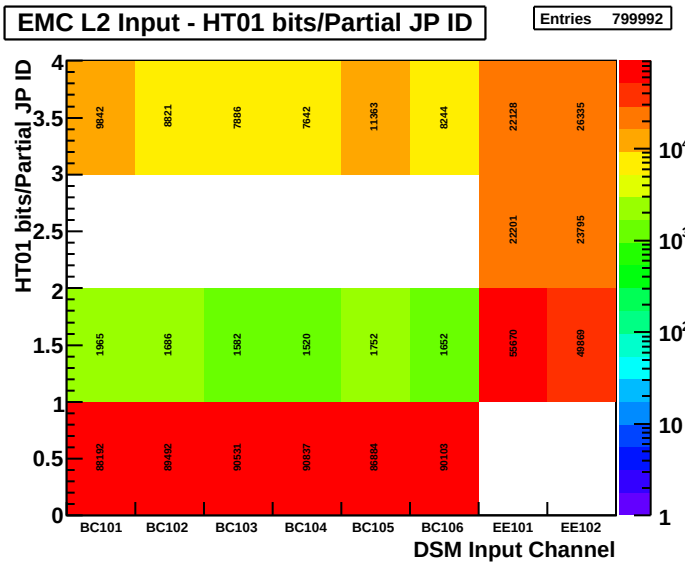

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

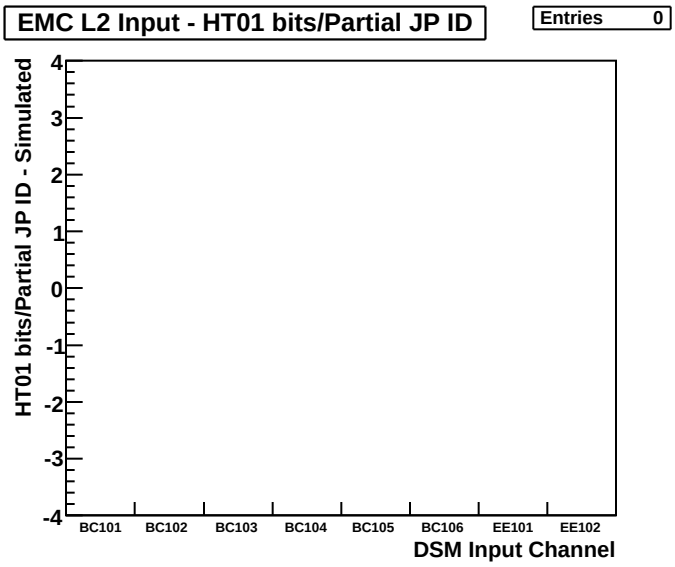

EMC L2 Input - JPZ/JPC bits
Entries 799992
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
494 361 433 357 359 458 220 252
1311 1052 1169 1032 1138 1290 620 608
2002 1842 1932 2135 3019 2489 388 466
96392 96744 96465 96475 95483 95762 98771 98673

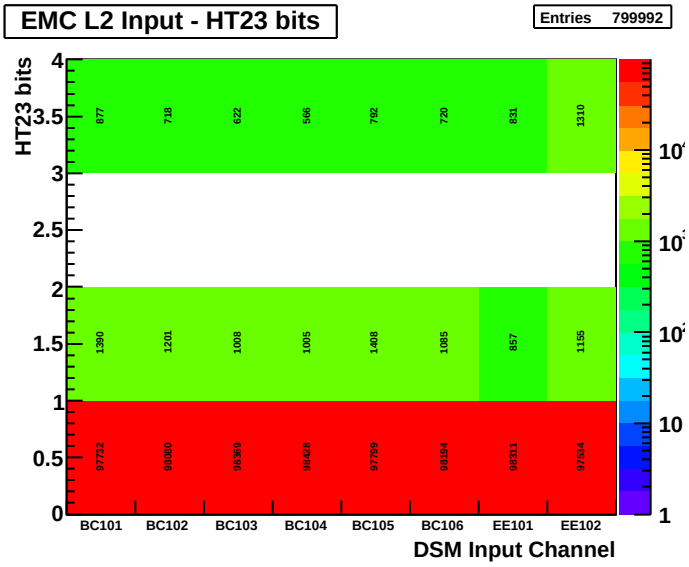

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

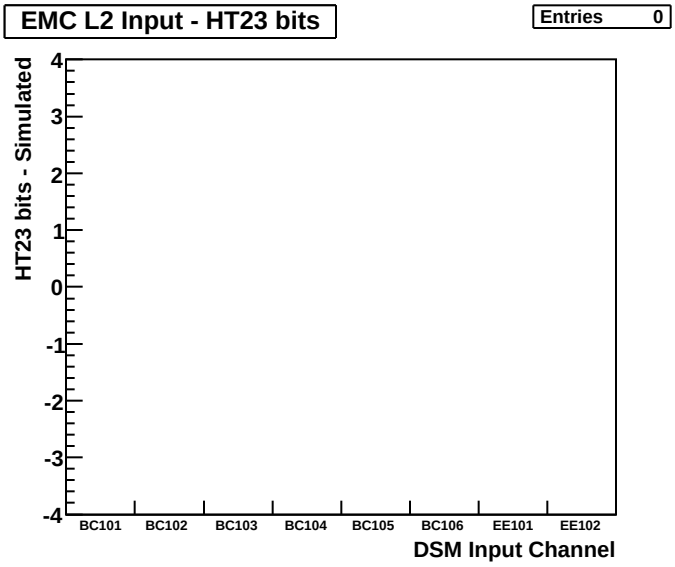

EMC L2 Input - Partial JP Sum
Entries 799992
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

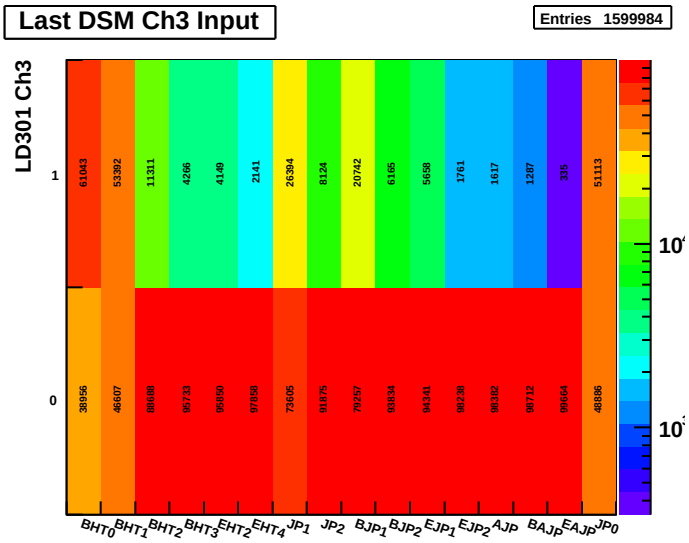

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

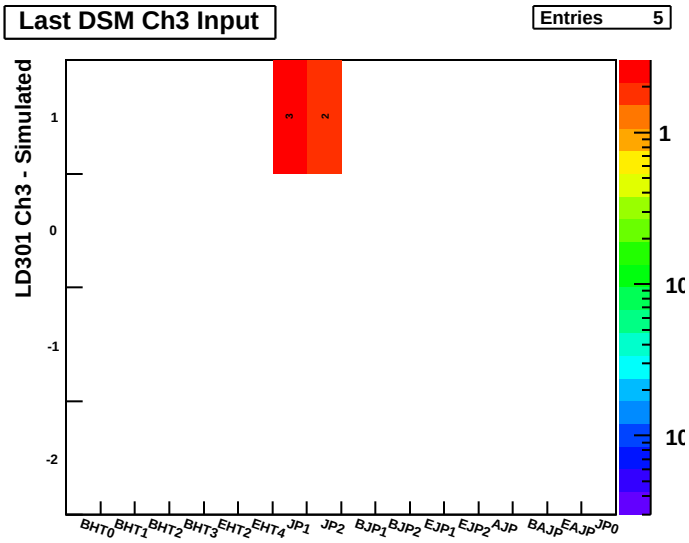

EMC L2 Input - HT01 bits/Partial JP ID
Entries 799992
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

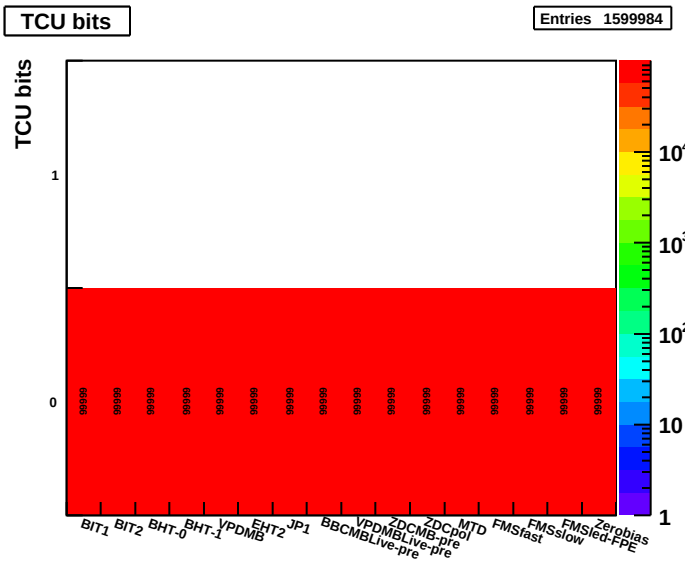

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

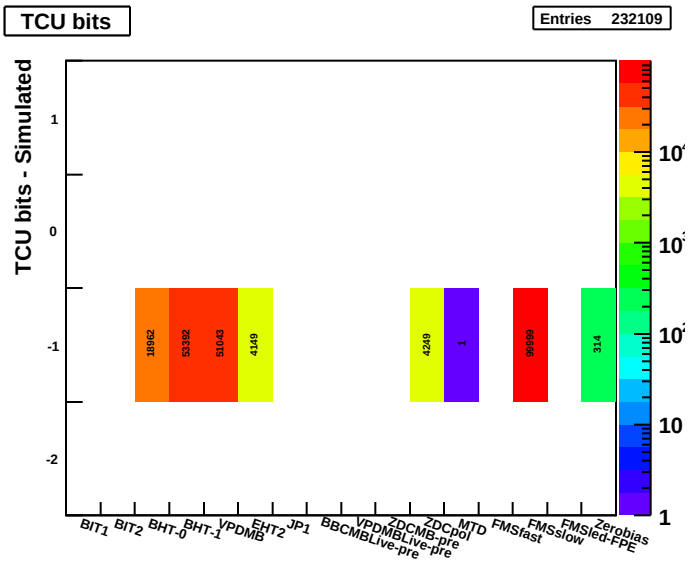

EMC L2 Input - HT23 bits
Entries 799992
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

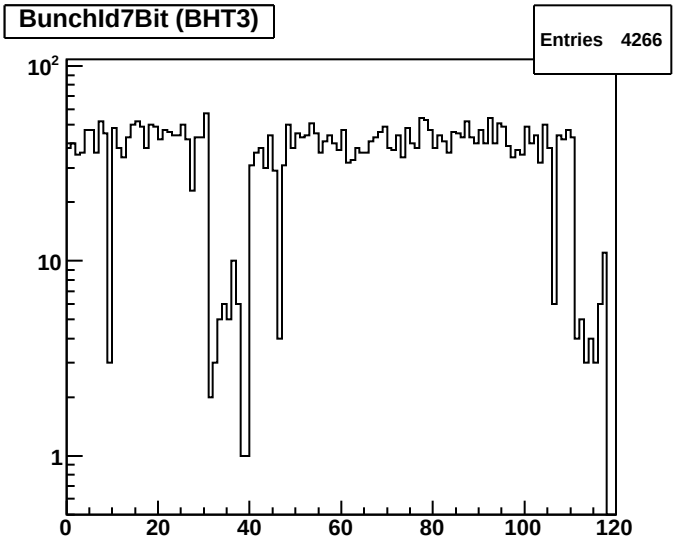

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

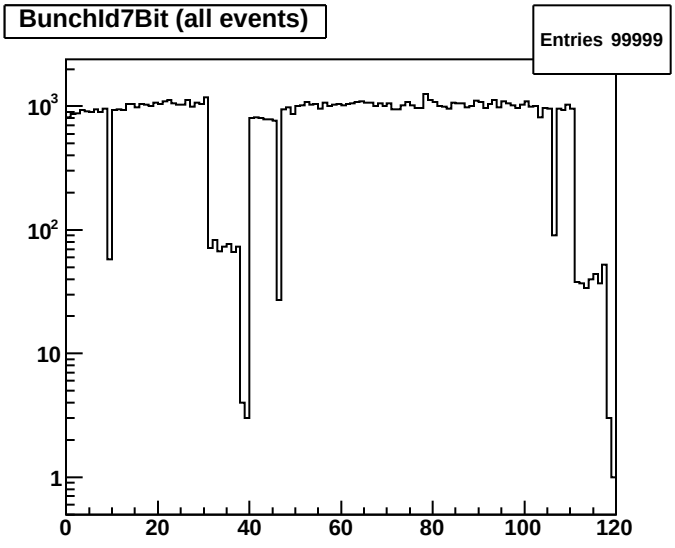

Last DSM Ch3 Input
Entries 1599984
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

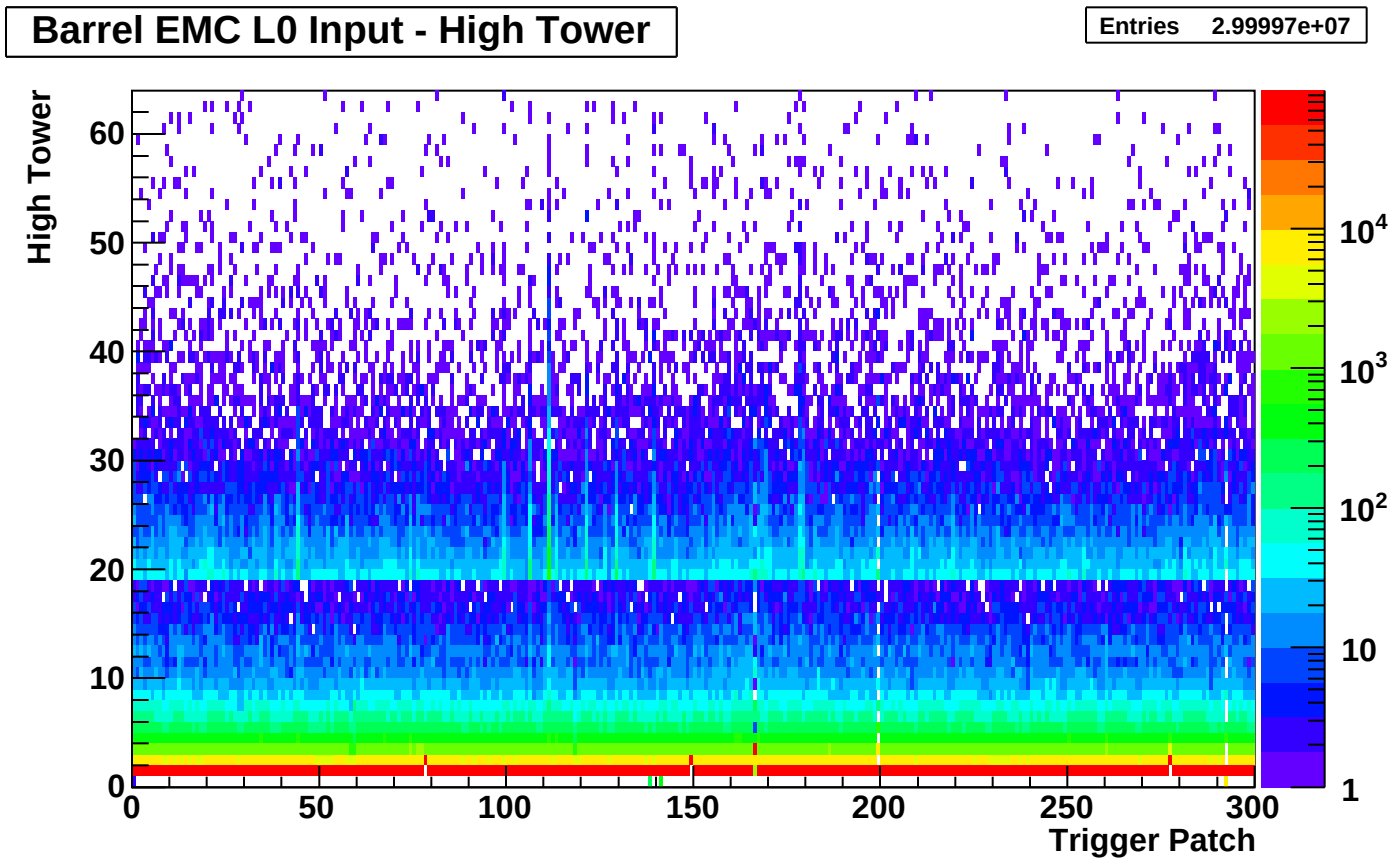

Last DSM Ch3 Input
Entries 5
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

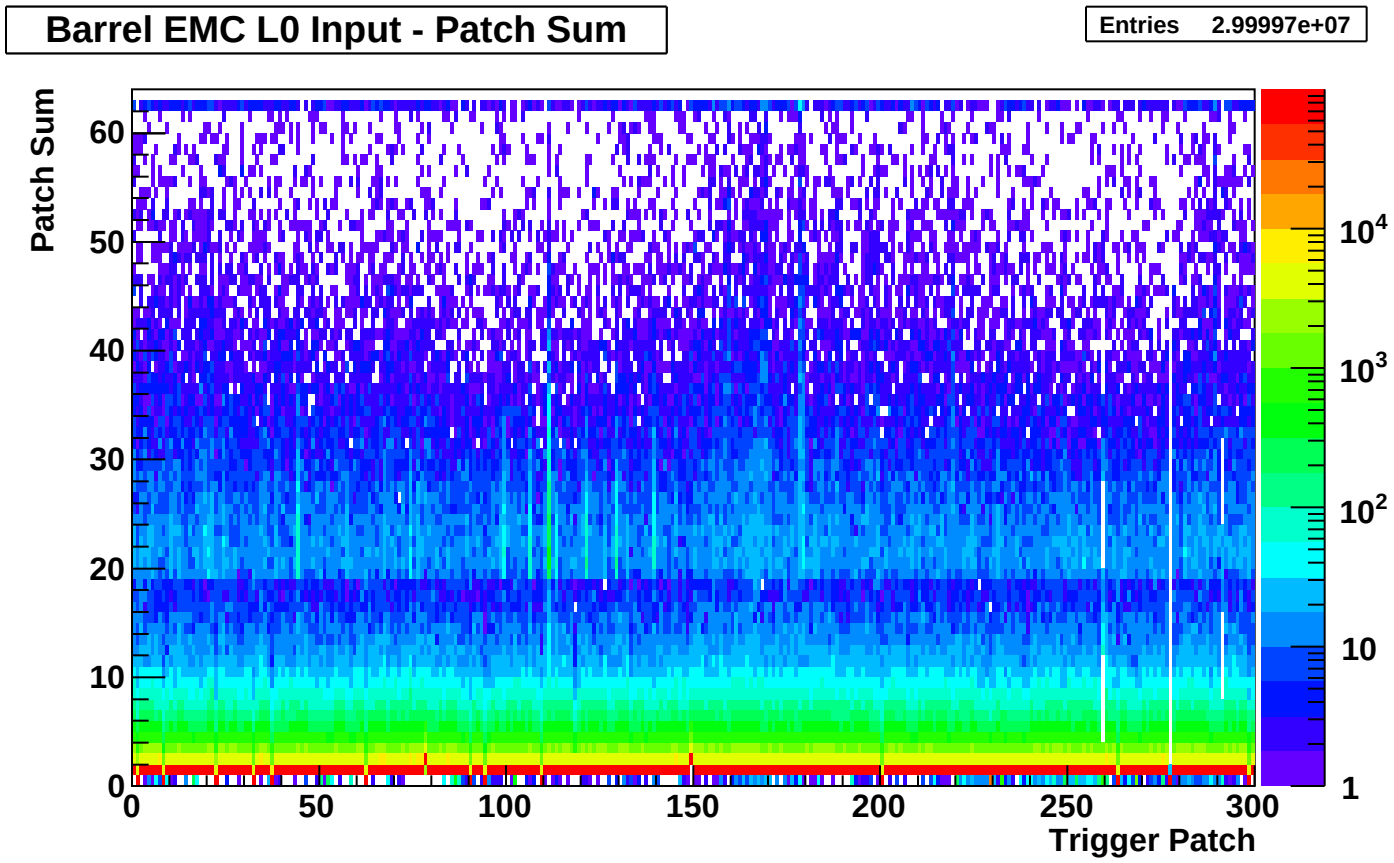

TCU bits
Entries 1599984
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

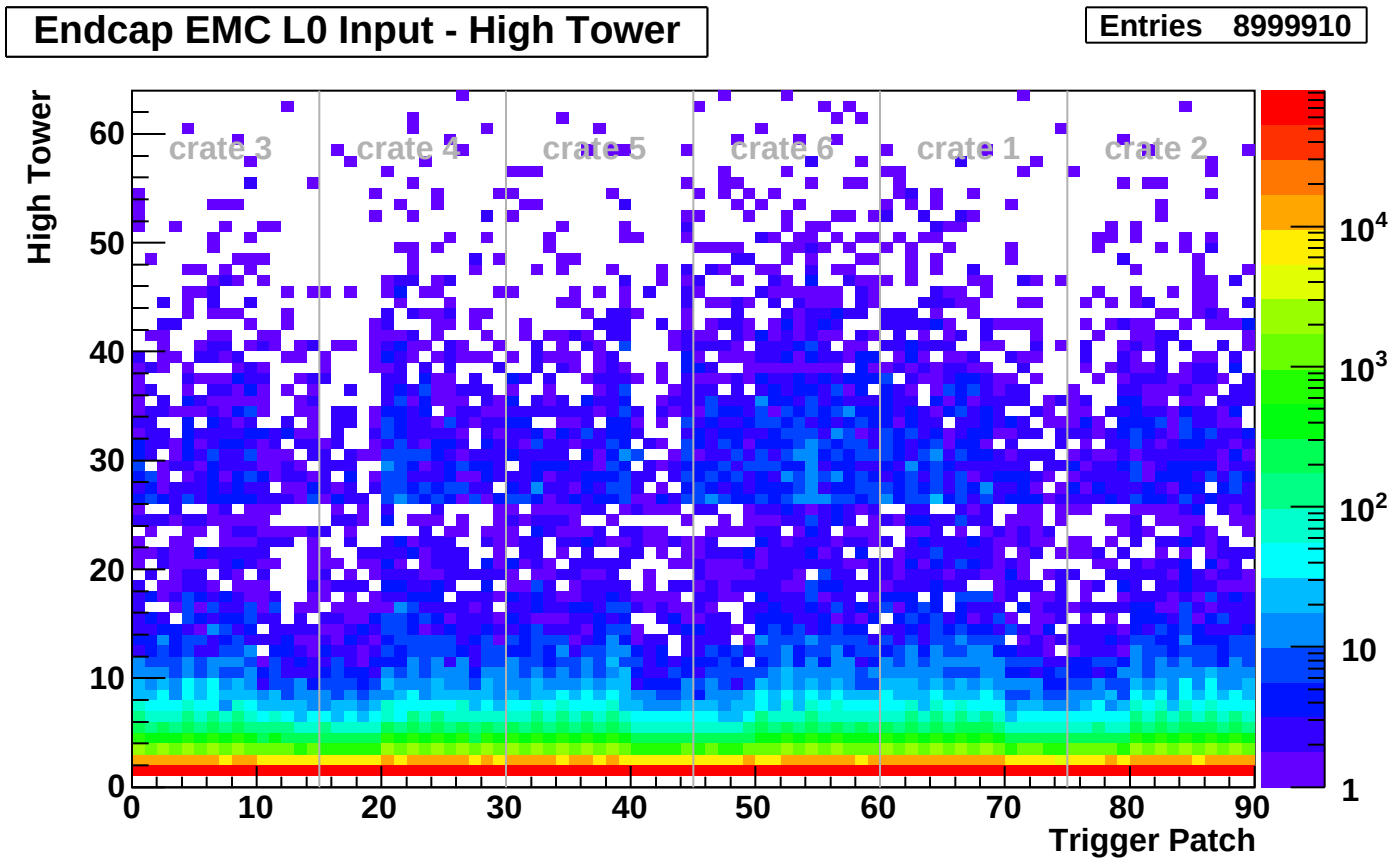

TCU bits
Entries 232109
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

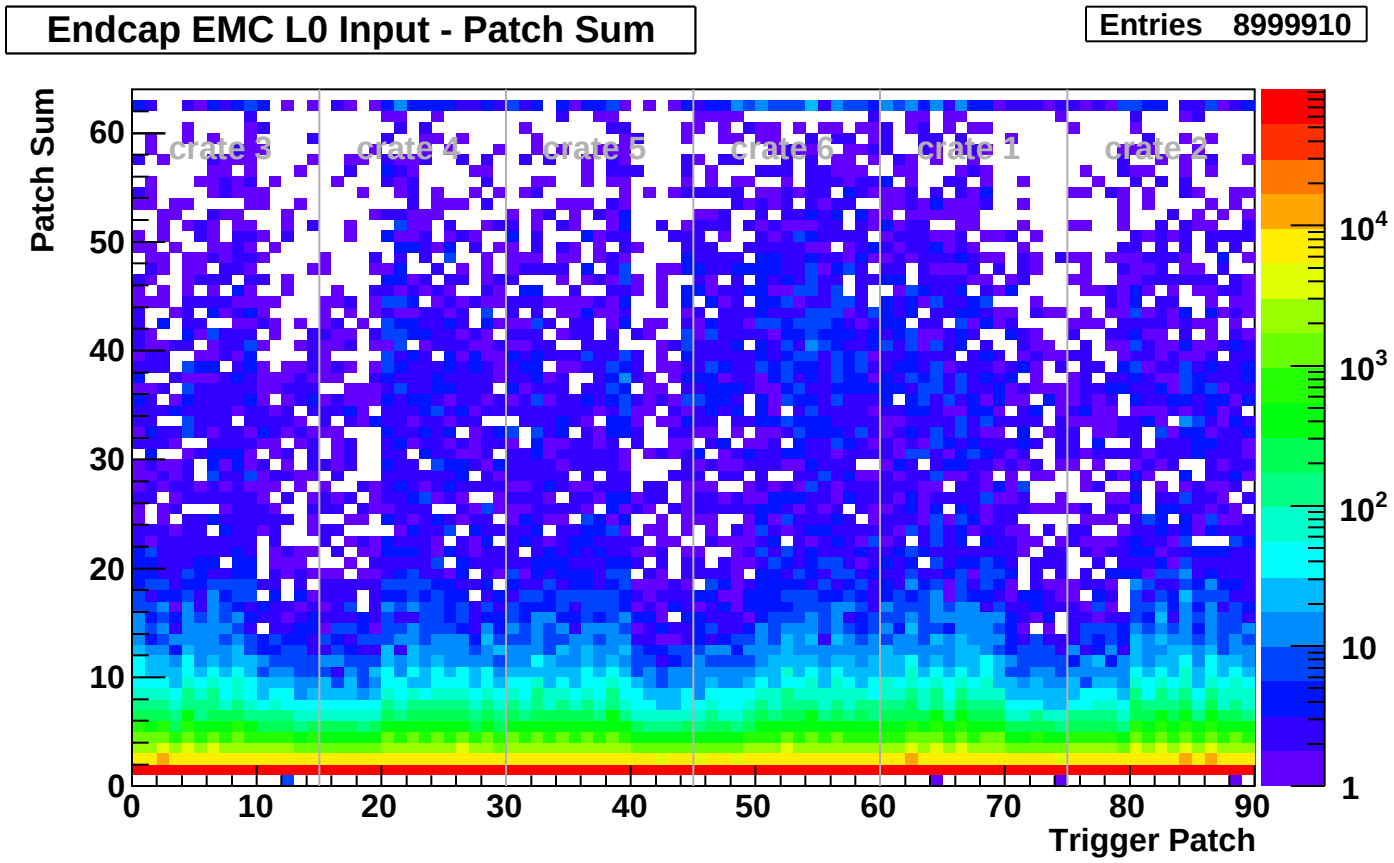

BunchId7Bit (BHT3)
Entries 4266

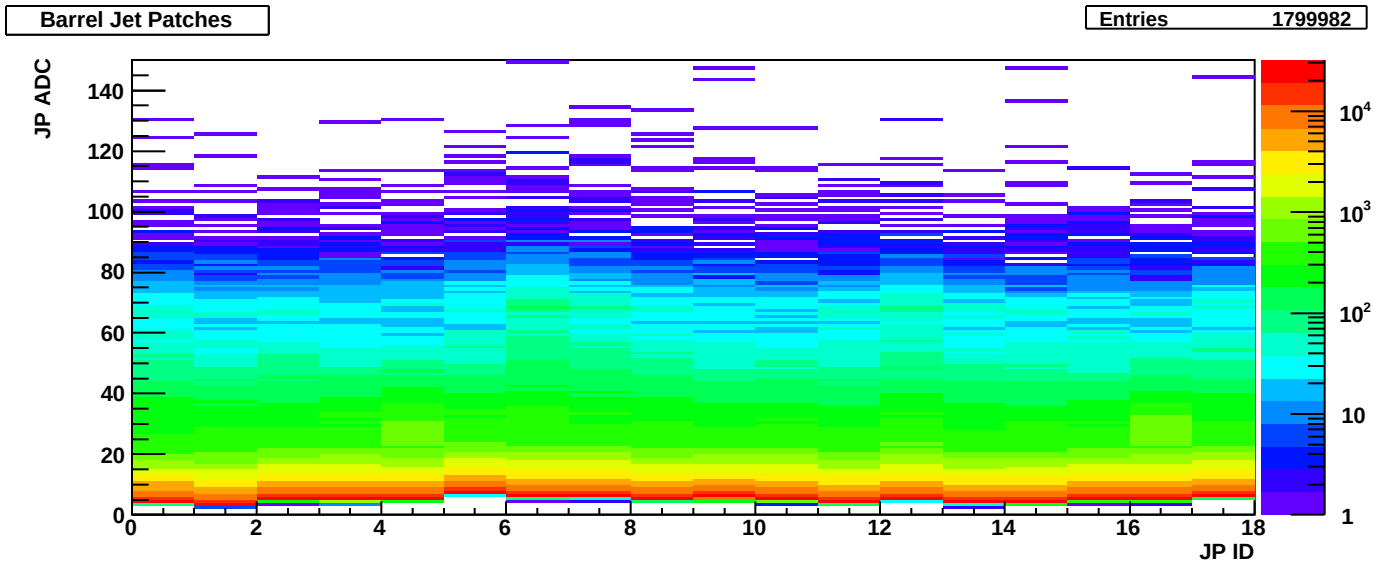

BunchId7Bit (all events)
Entries 99999

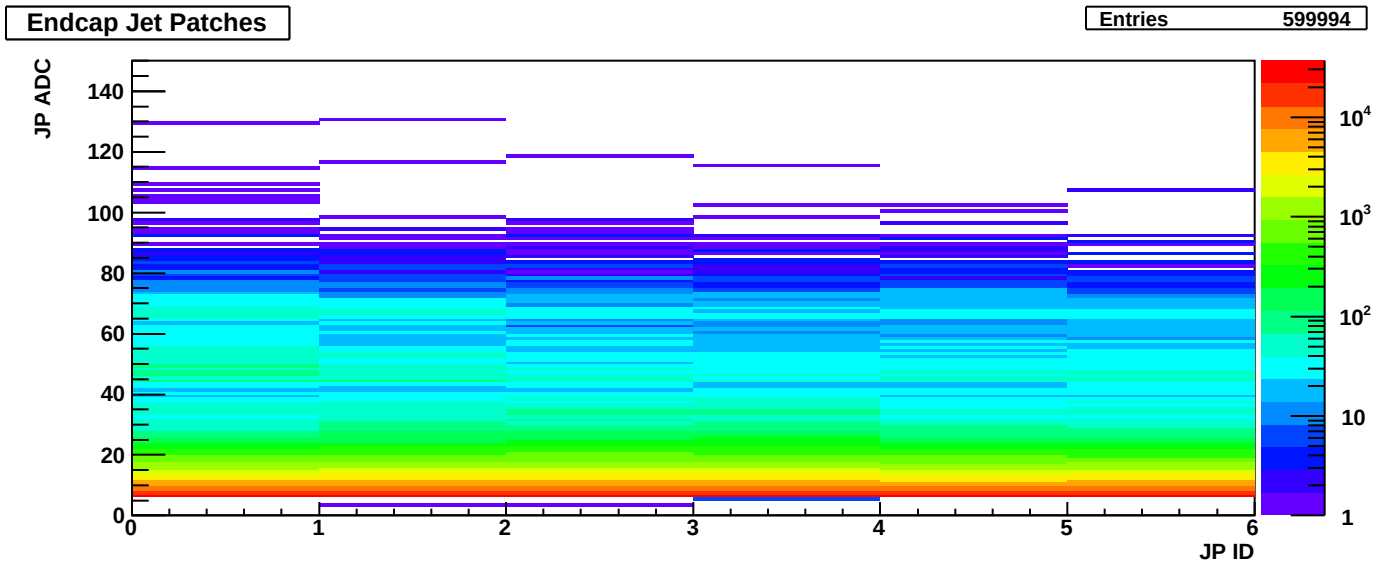

Barrel EMC L0 Input - High Tower
Entries 2.99997e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

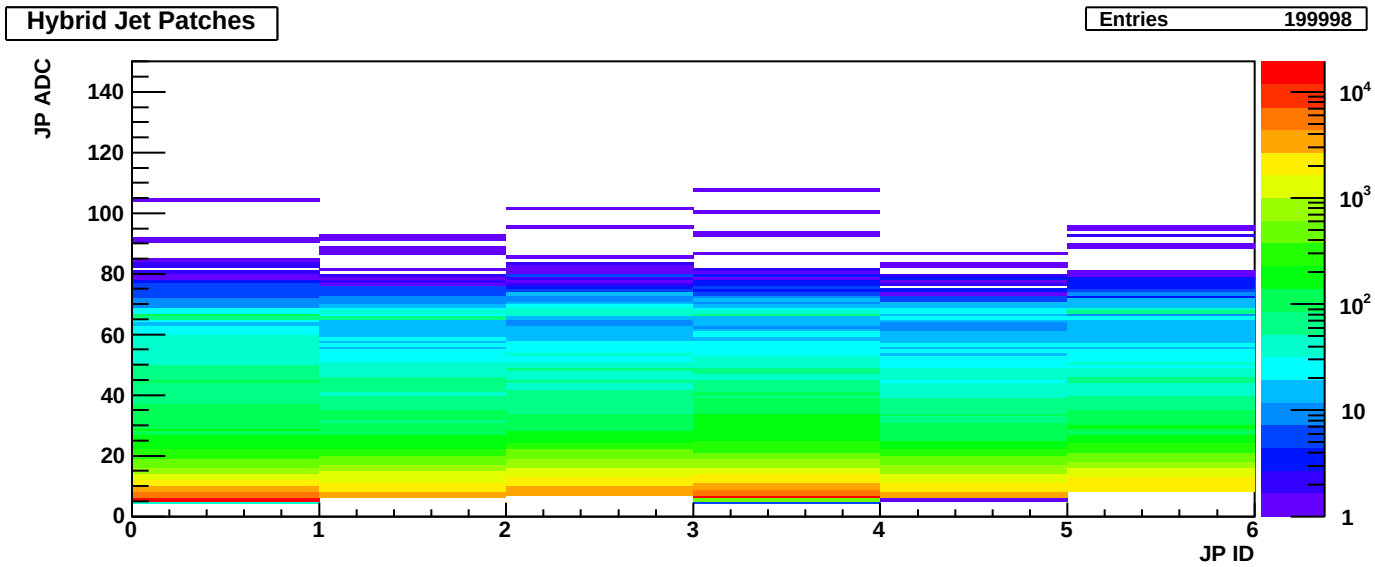

Barrel EMC L0 Input - Patch Sum
Entries 2.99997e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

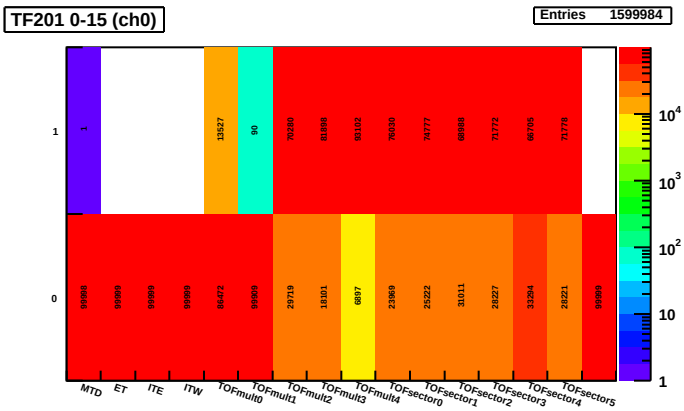

Endcap EMC L0 Input - High Tower
Entries 8999910
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

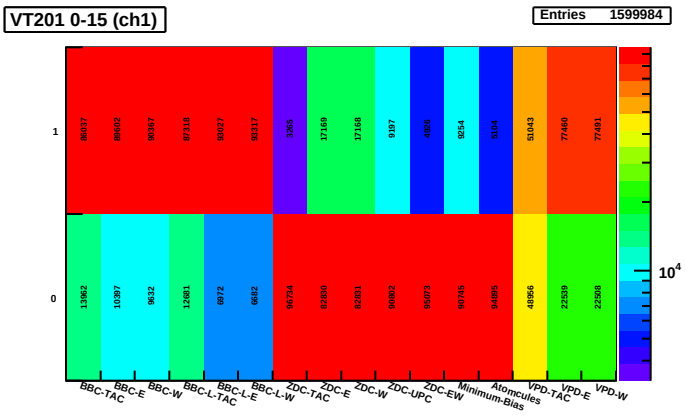

Endcap EMC L0 Input - Patch Sum
Entries 8999910
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

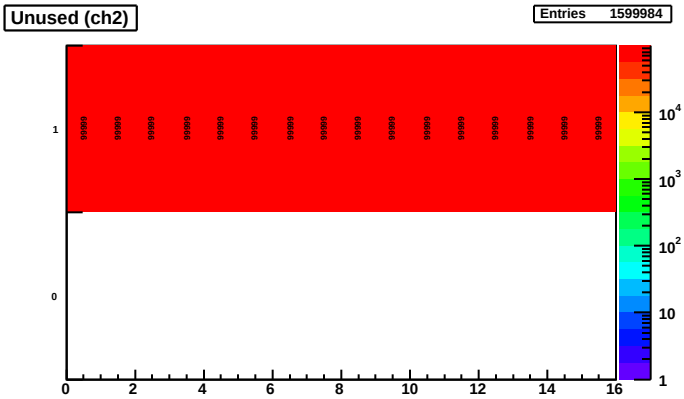

Barrel Jet Patches
Entries 1799982
JP ADC
JP ID

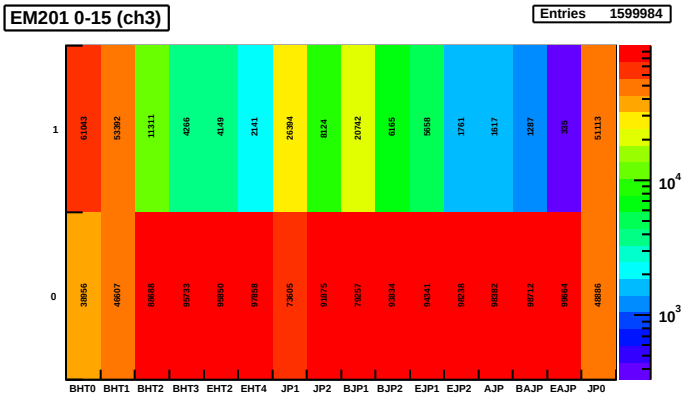

Endcap Jet Patches
Entries 599994
JP ADC
JP ID

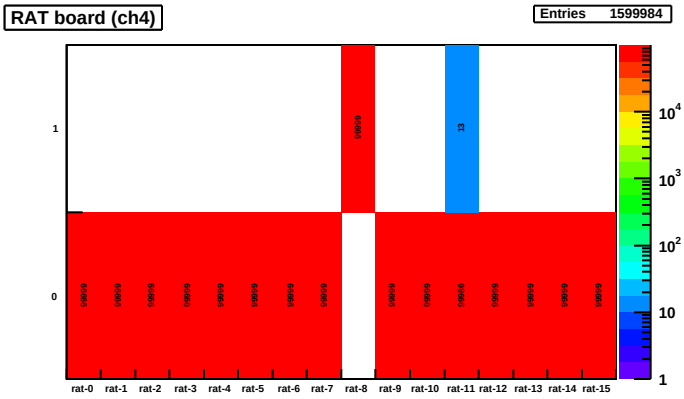

Hybrid Jet Patches
Entries 199998
JP ADC
JP ID

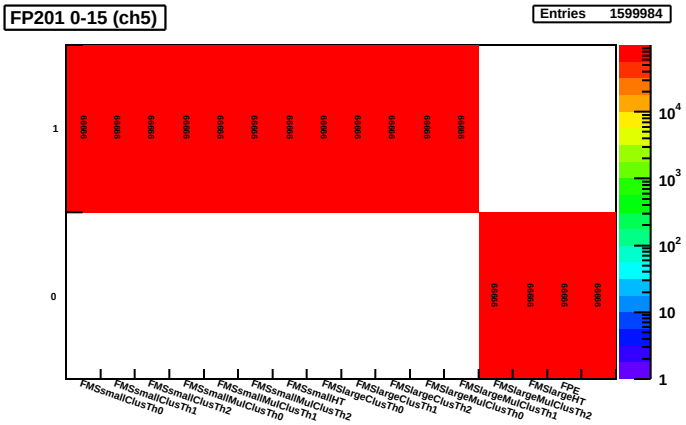

TF201 0-15 (ch0)
Entries 1599984
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

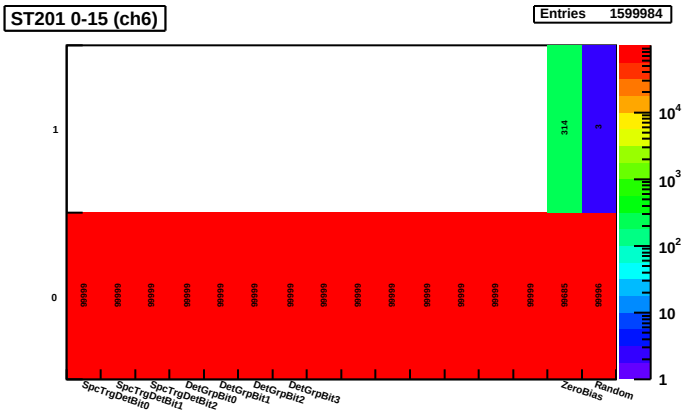

VT201 0-15 (ch1)
Entries 1599984
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

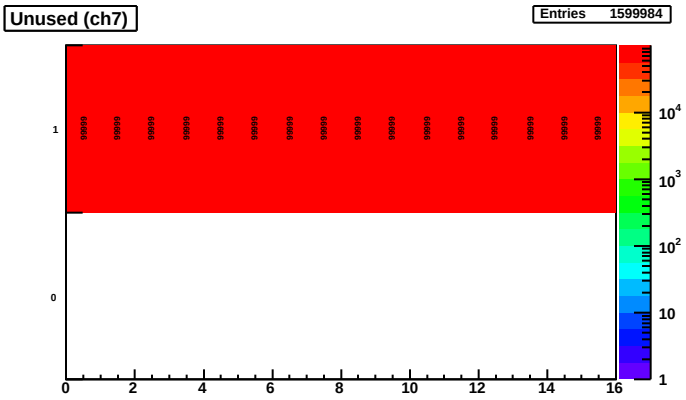

Unused (ch2)
Entries 1599984

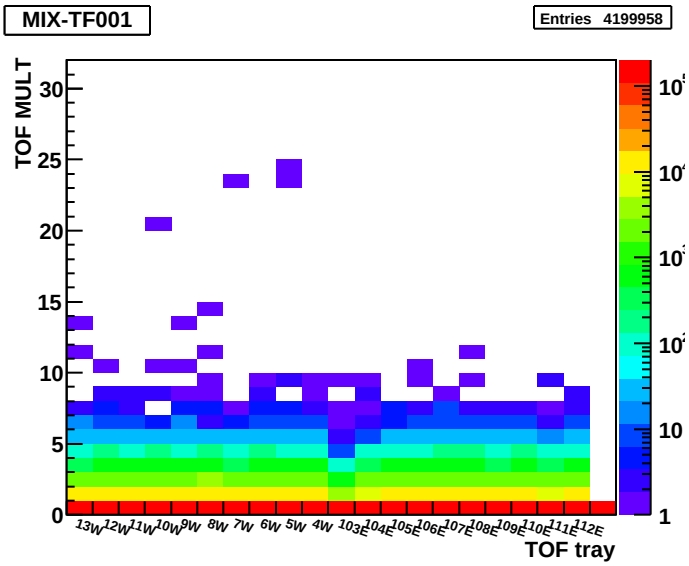

EM201 0-15 (ch3)
Entries 1599984
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

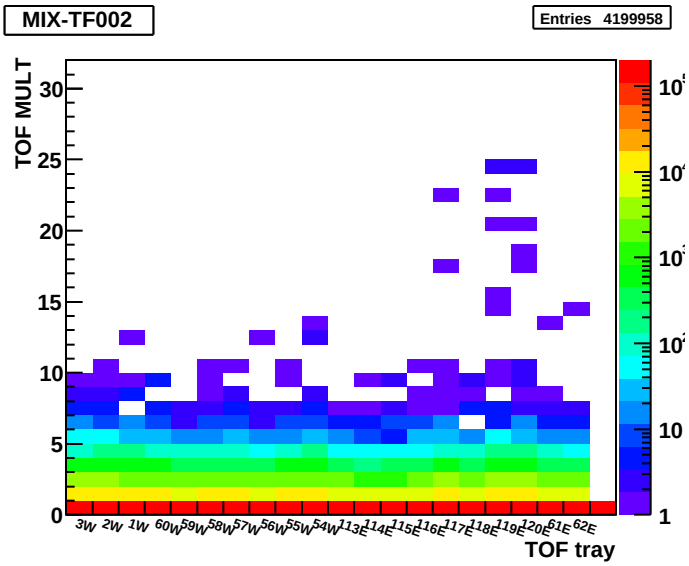

RAT board (ch4)
Entries 1599984
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

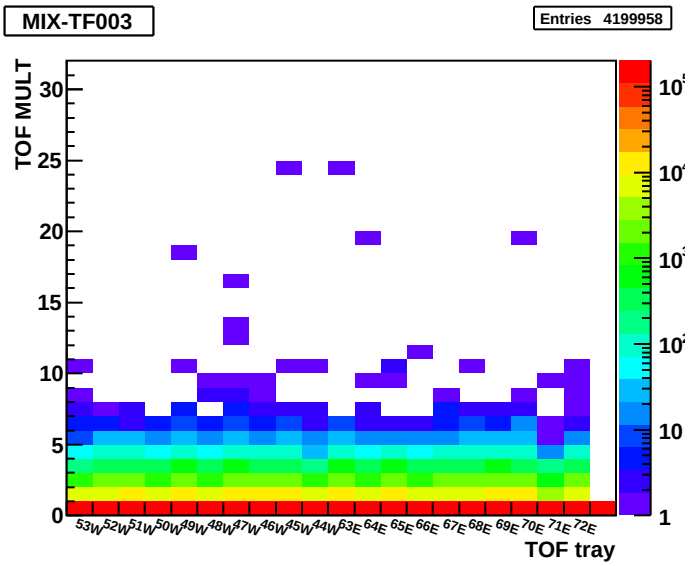

FP201 0-15 (ch5)
Entries 1599984
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

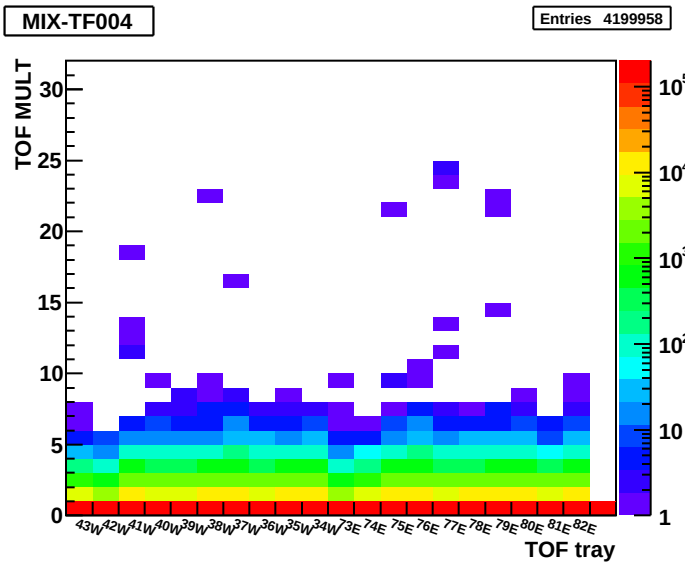

ST201 0-15 (ch6)
Entries 1599984
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

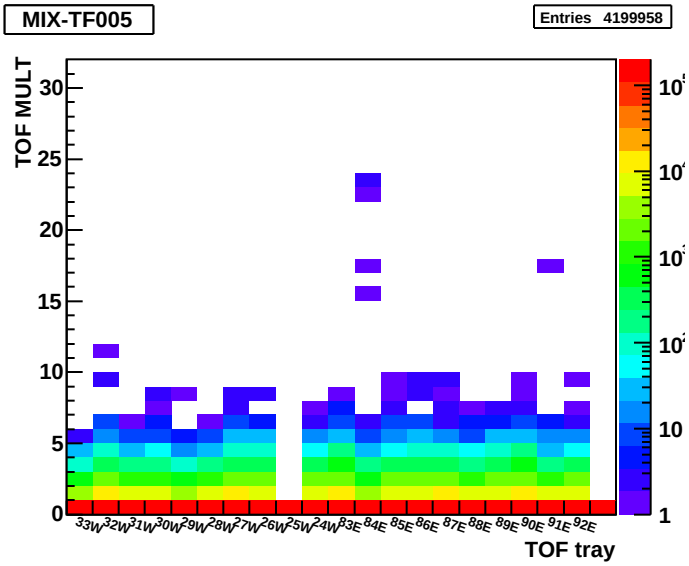

Unused (ch7)
Entries 1599984

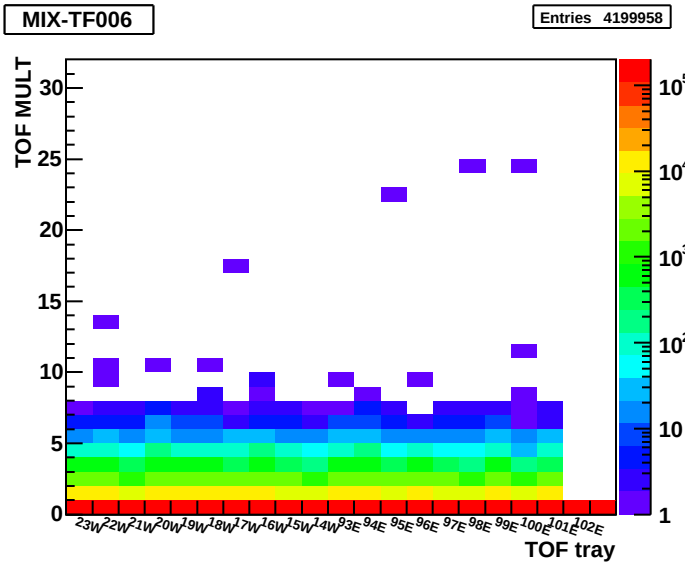

MIX-TF001
Entries 4199958
TOF MULT
TOF tray

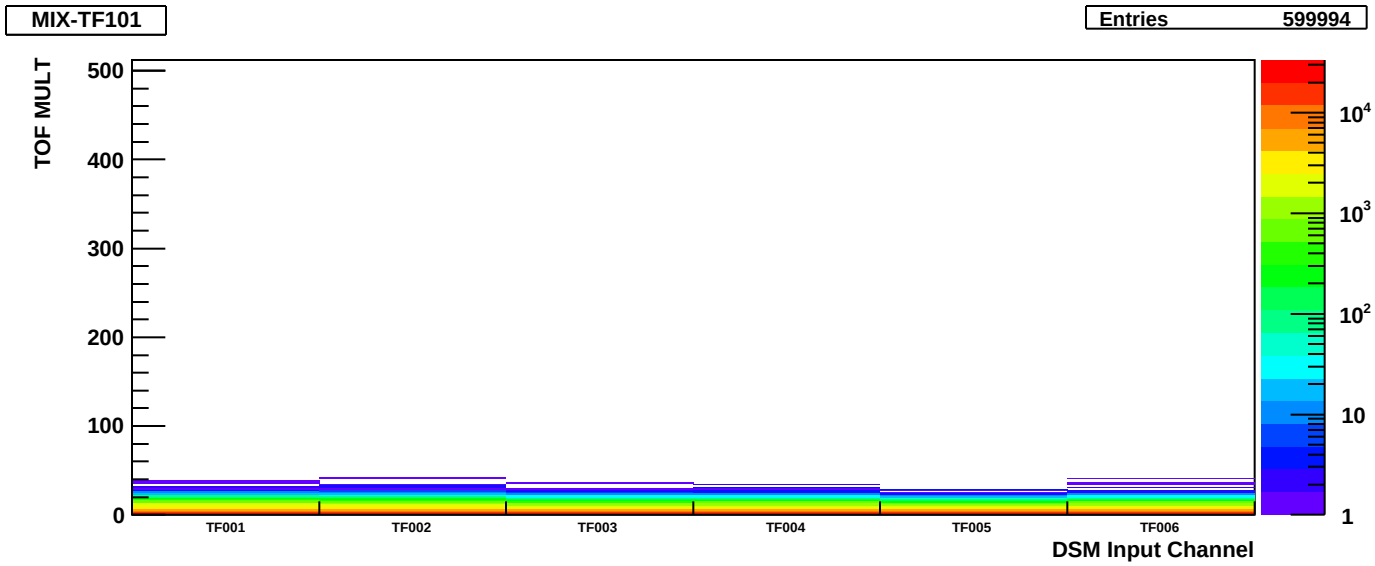

MIX-TF002
Entries 4199958
TOF MULT
TOF tray

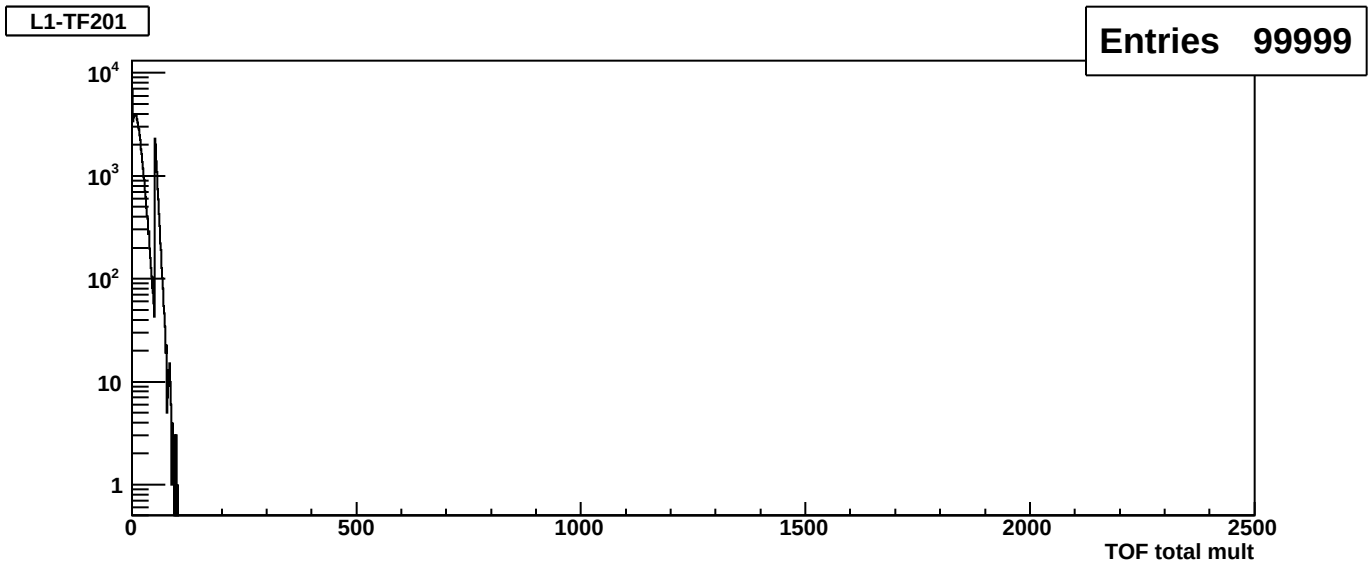

MIX-TF003
Entries 4199958
TOF MULT
TOF tray

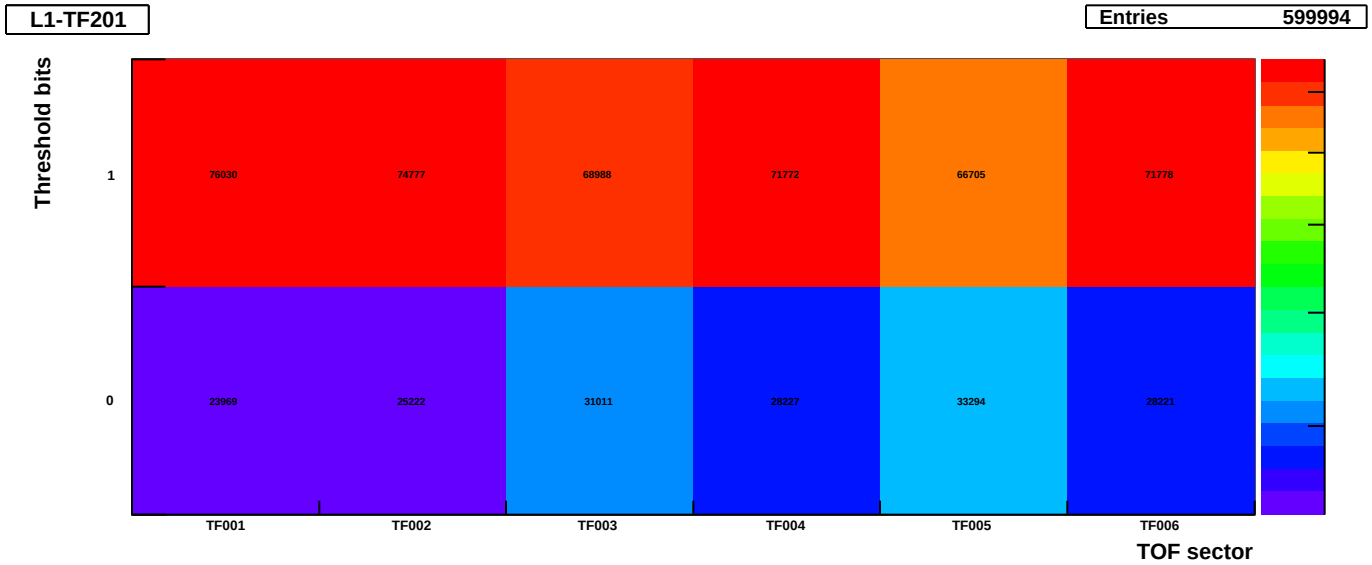

MIX-TF004
Entries 4199958
TOF MULT
TOF tray

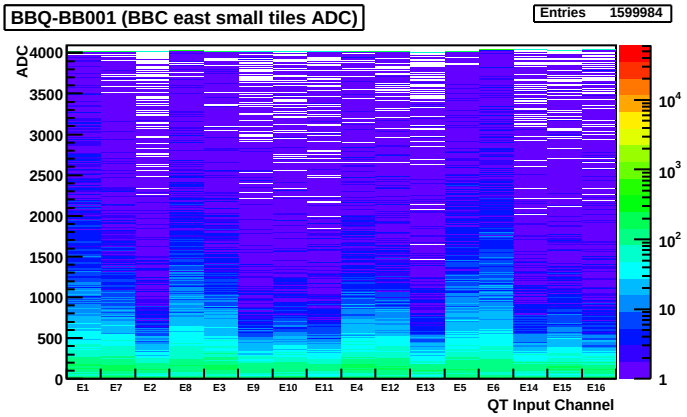

MIX-TF005
Entries 4199958
TOF MULT
TOF tray

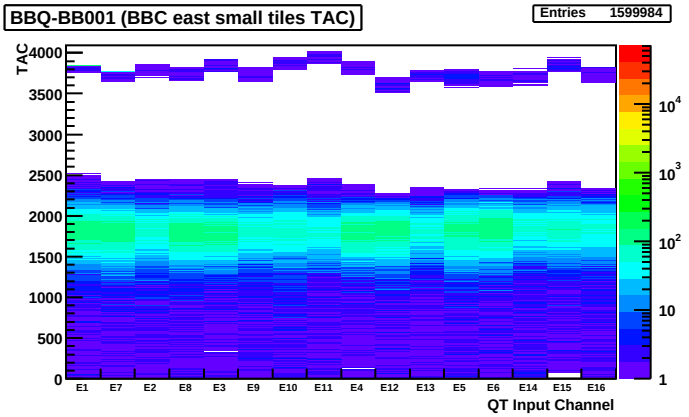

MIX-TF006
Entries 4199958
TOF MULT
TOF tray

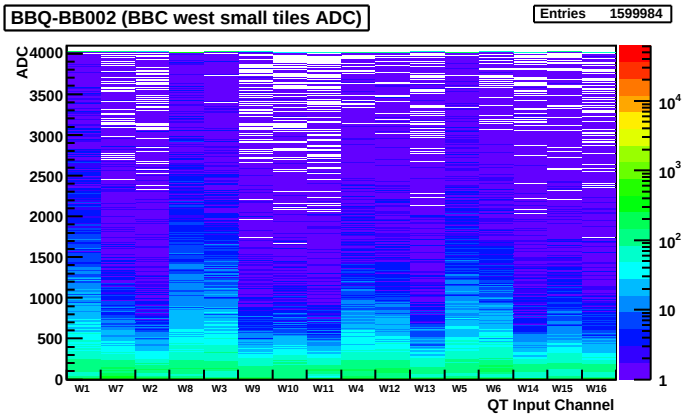

MIX-TF101
Entries 599994
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

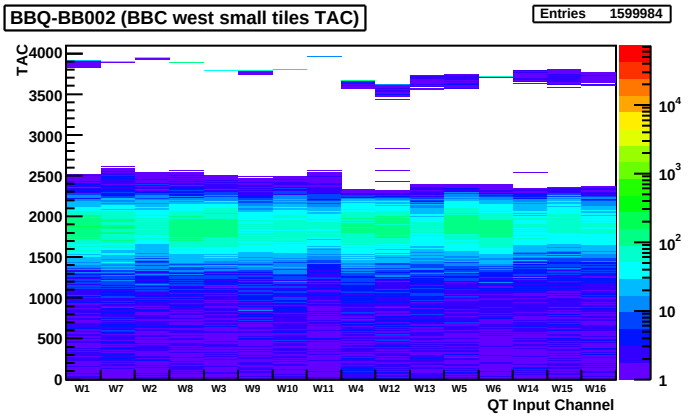

L1-TF201
Entries 99999
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

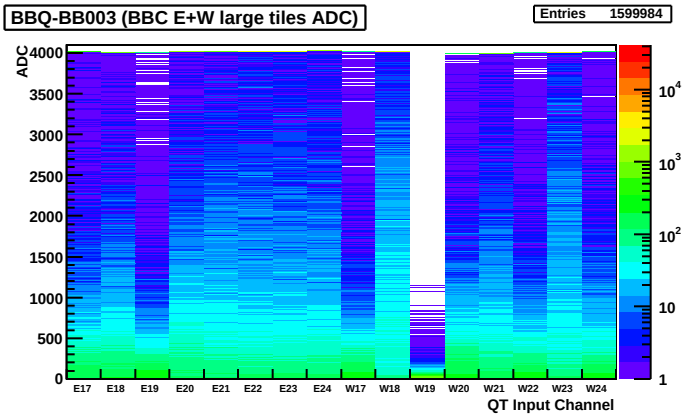

L1-TF201
Entries 599994
Threshold bits
1
0
76030
74777
68988
71772
66705
71778
23969
25222
31011
28227
33294
28221
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

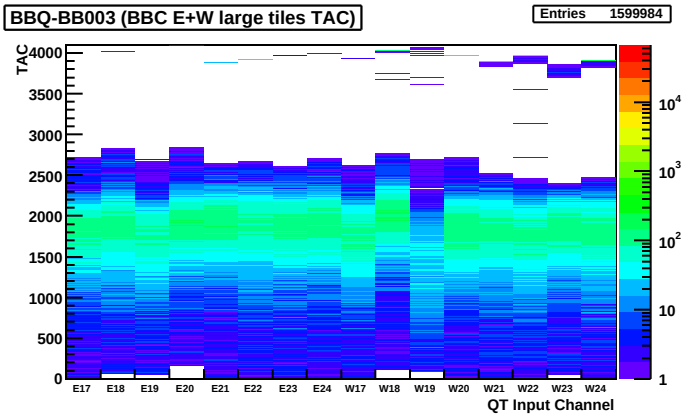

BBQ-BB001 (BBC east small tiles ADC)
Entries 1599984
ADC
QT Input Channel

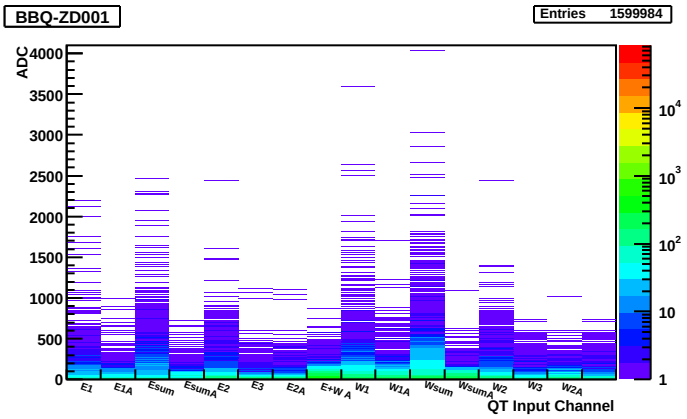

BBQ-BB001 (BBC east small tiles TAC)
Entries 1599984
TAC
QT Input Channel

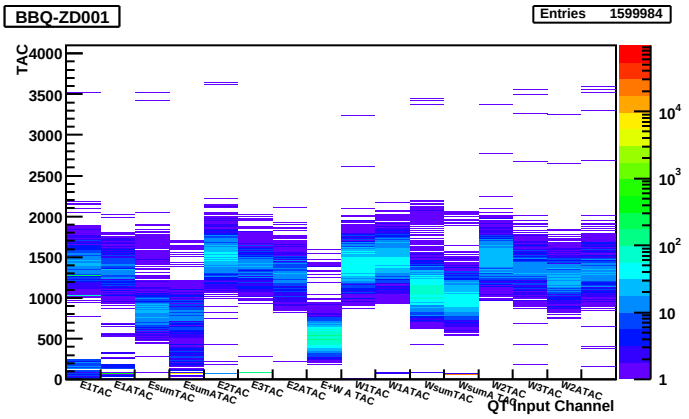

BBQ-BB002 (BBC west small tiles ADC)
Entries 1599984
ADC
QT Input Channel

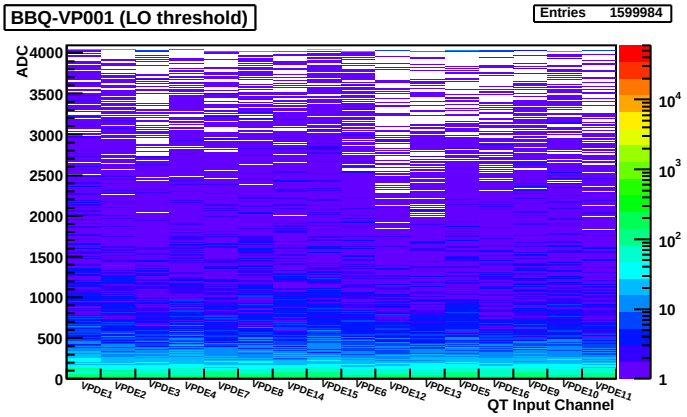

BBQ-BB002 (BBC west small tiles TAC)
Entries 1599984
TAC
QT Input Channel

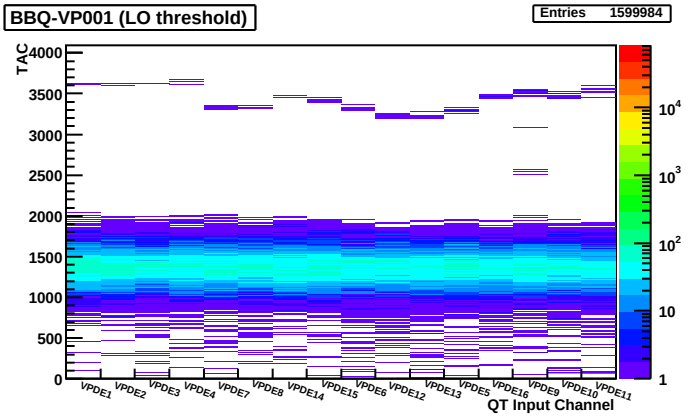

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1599984
ADC
QT Input Channel

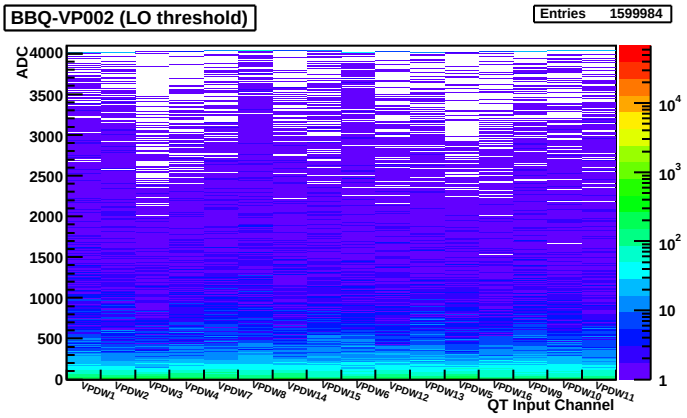

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1599984
TAC
QT Input Channel

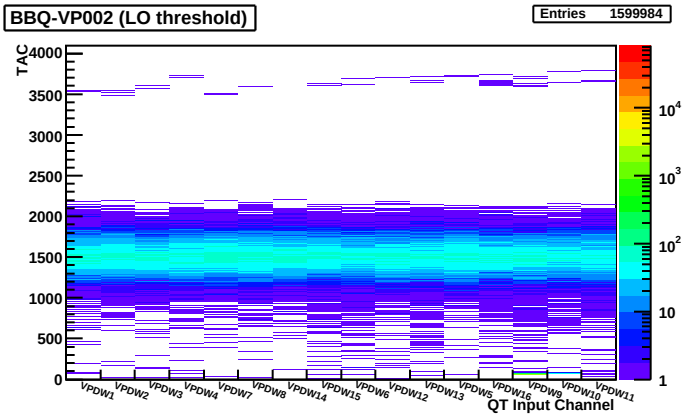

BBQ-ZD001
Entries 1599984
ADC
QT Input Channel

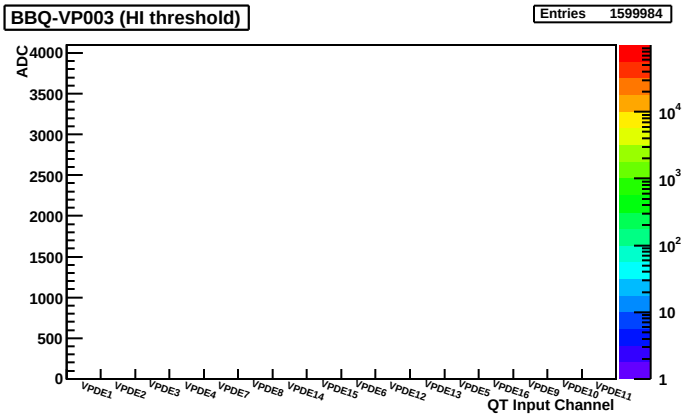

BBQ-ZD001
Entries 1599984
TAC
QT Input Channel

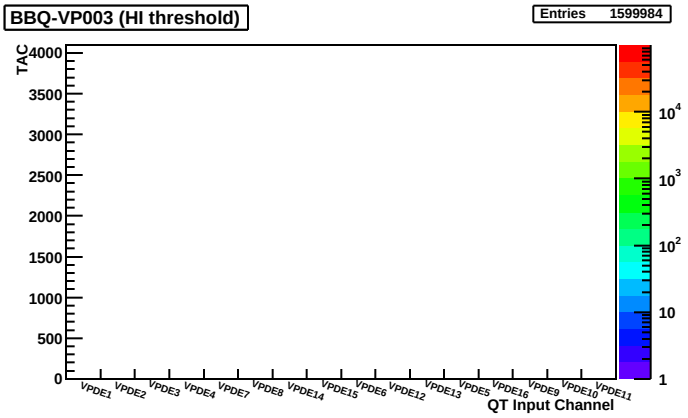

BBQ-VP001 (LO threshold)
Entries 1599984
ADC
QT Input Channel

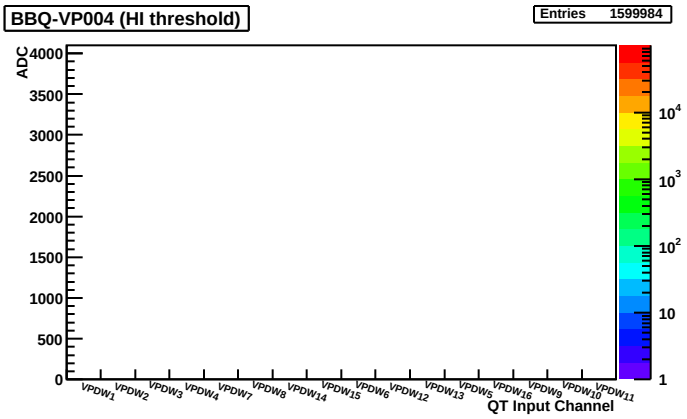

BBQ-VP001 (LO threshold)
Entries 1599984
TAC
QT Input Channel

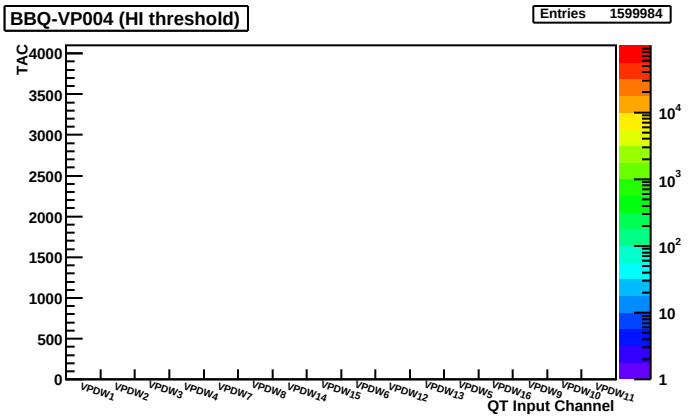

BBQ-VP002 (LO threshold)
Entries 1599984
ADC
QT Input Channel

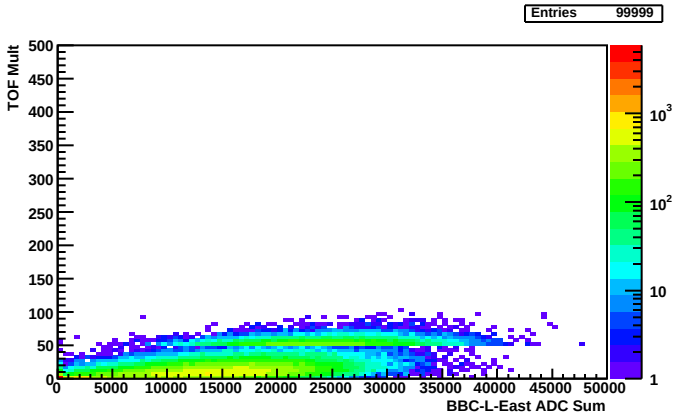

BBQ-VP002 (LO threshold)
Entries 1599984
TAC
QT Input Channel

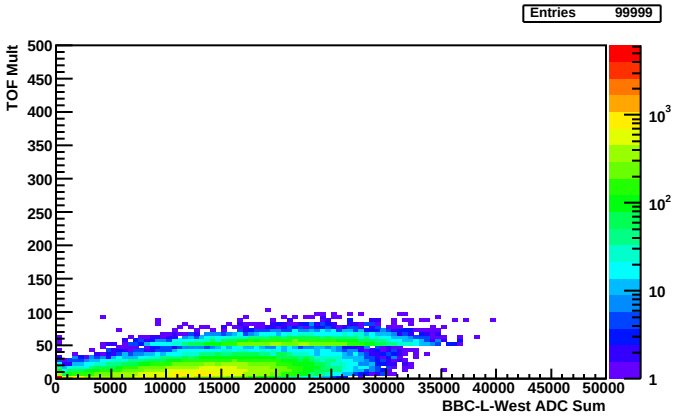

BBQ-VP003 (HI threshold)
Entries 1599984
ADC
QT Input Channel

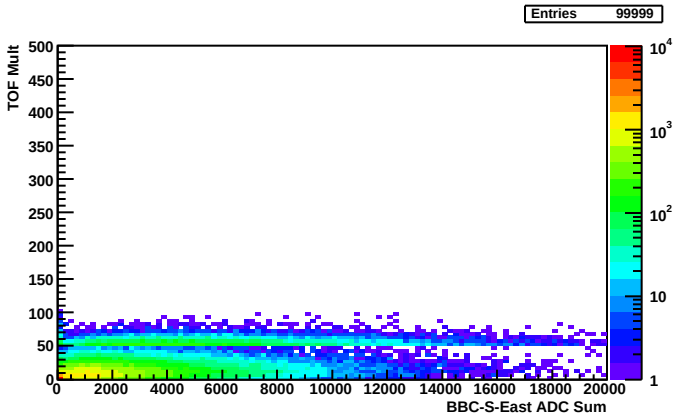

BBQ-VP003 (HI threshold)
Entries 1599984
TAC
QT Input Channel

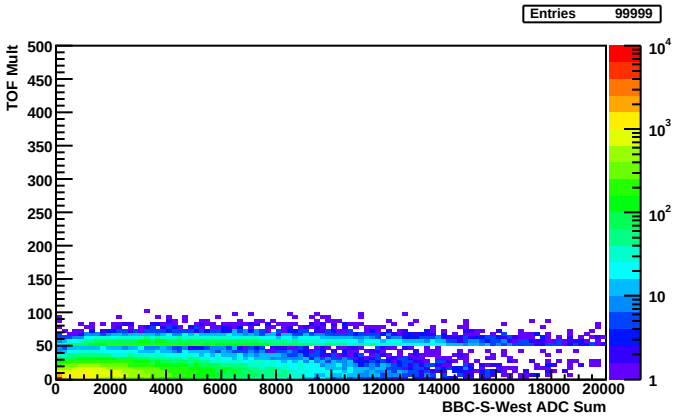

BBQ-VP004 (HI threshold)
Entries 1599984
ADC
QT Input Channel

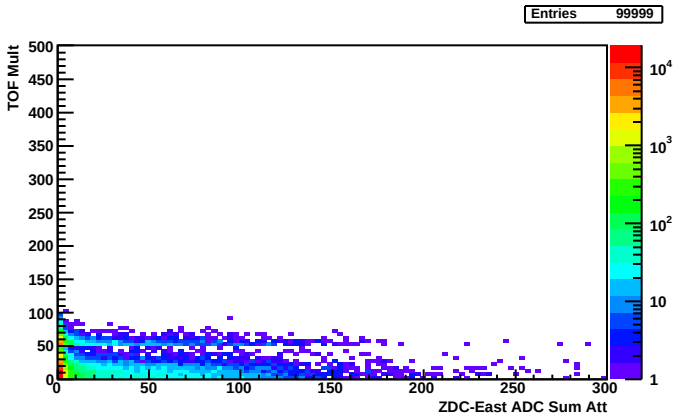

BBQ-VP004 (HI threshold)
Entries 1599984
TAC
QT Input Channel

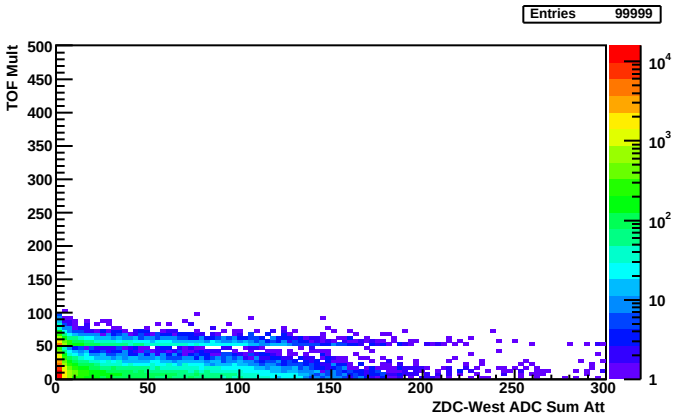

Entries 99999
TOF Mult
BBC-L-East ADC Sum

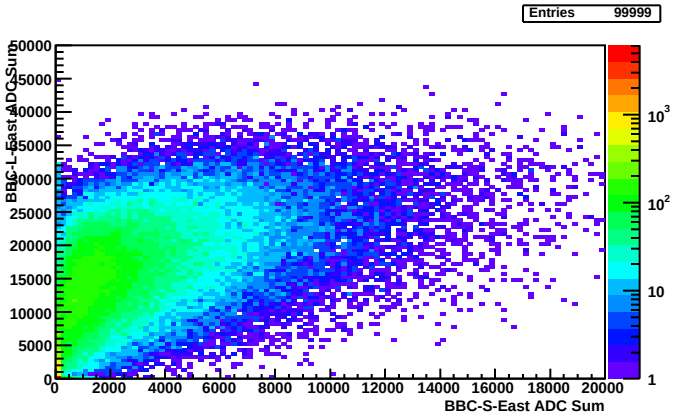

Entries 99999
TOF Mult
BBC-L-West ADC Sum

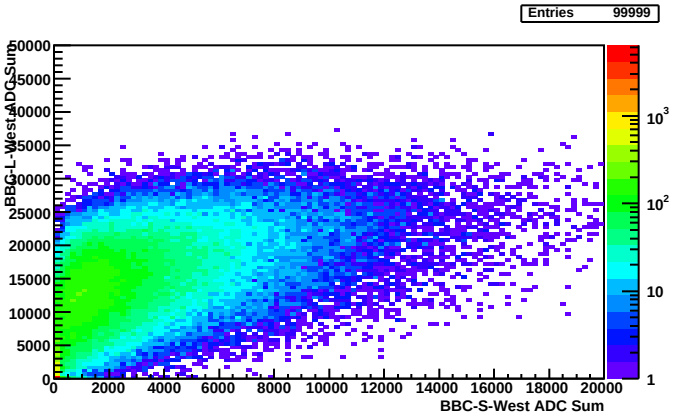

Entries 99999
TOF Mult
BBC-S-East ADC Sum

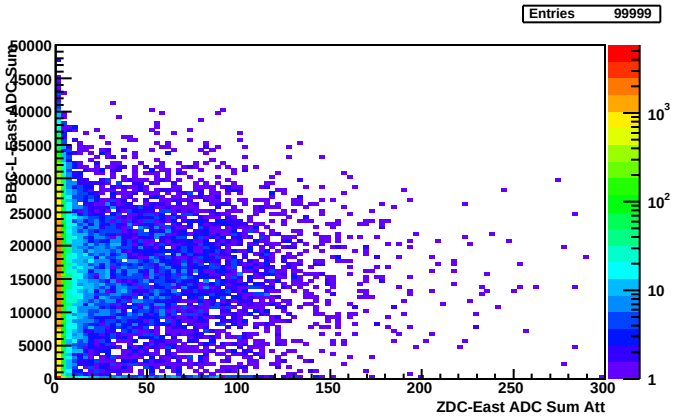

Entries 99999
TOF Mult
BBC-S-West ADC Sum

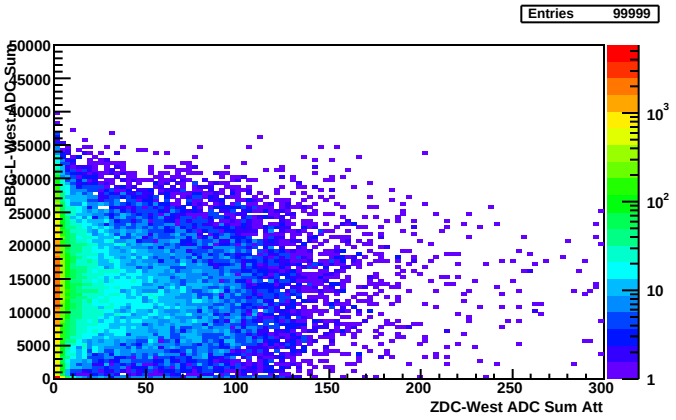

Entries 99999
TOF Mult
ZDC-East ADC Sum Att

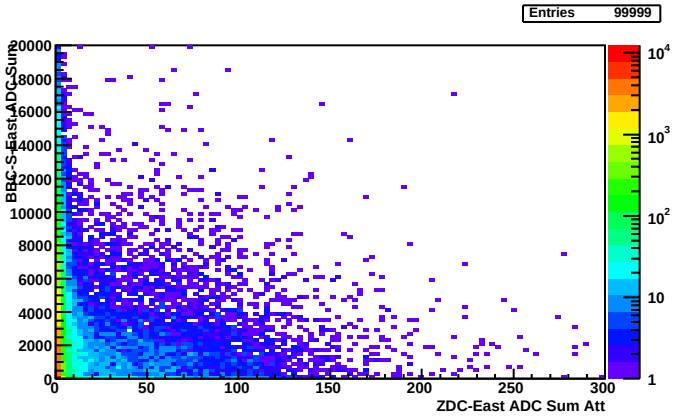

Entries 99999
TOF Mult
ZDC-West ADC Sum Att

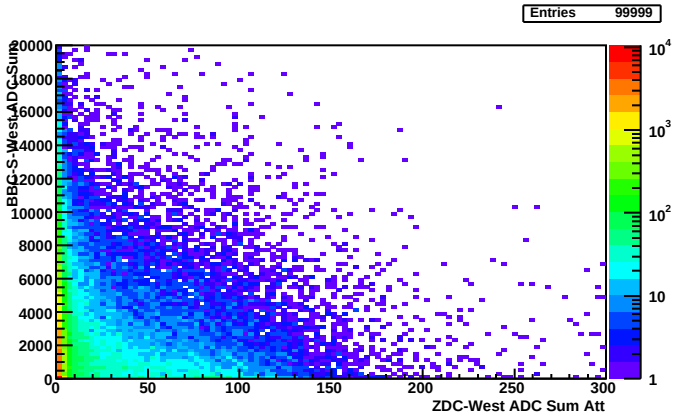

Entries 99999
BBC-L-East ADC Sum
BBC-S-East ADC Sum

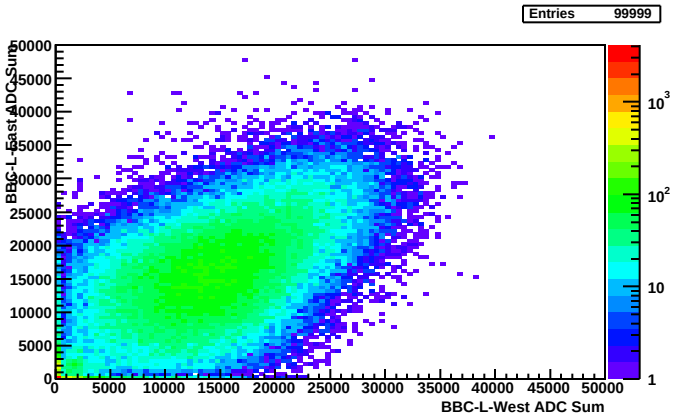

Entries 99999
BBC-L-West ADC Sum
BBC-S-West ADC Sum

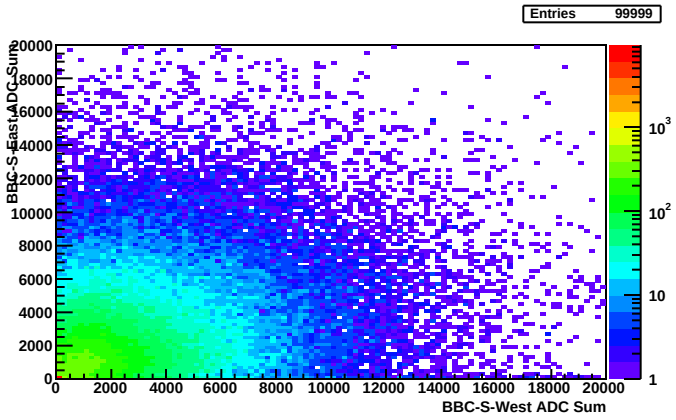

Entries 99999
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

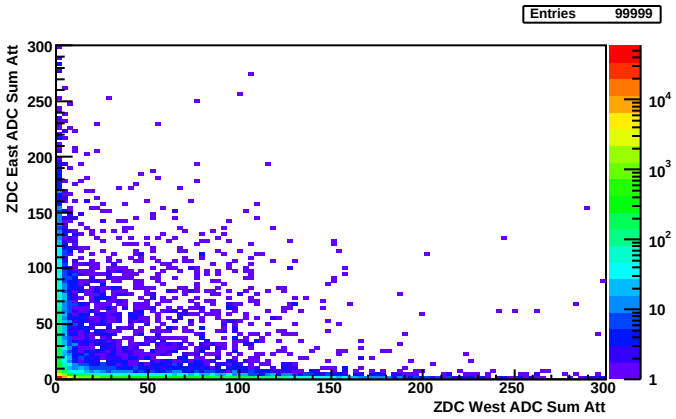

Entries 99999
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

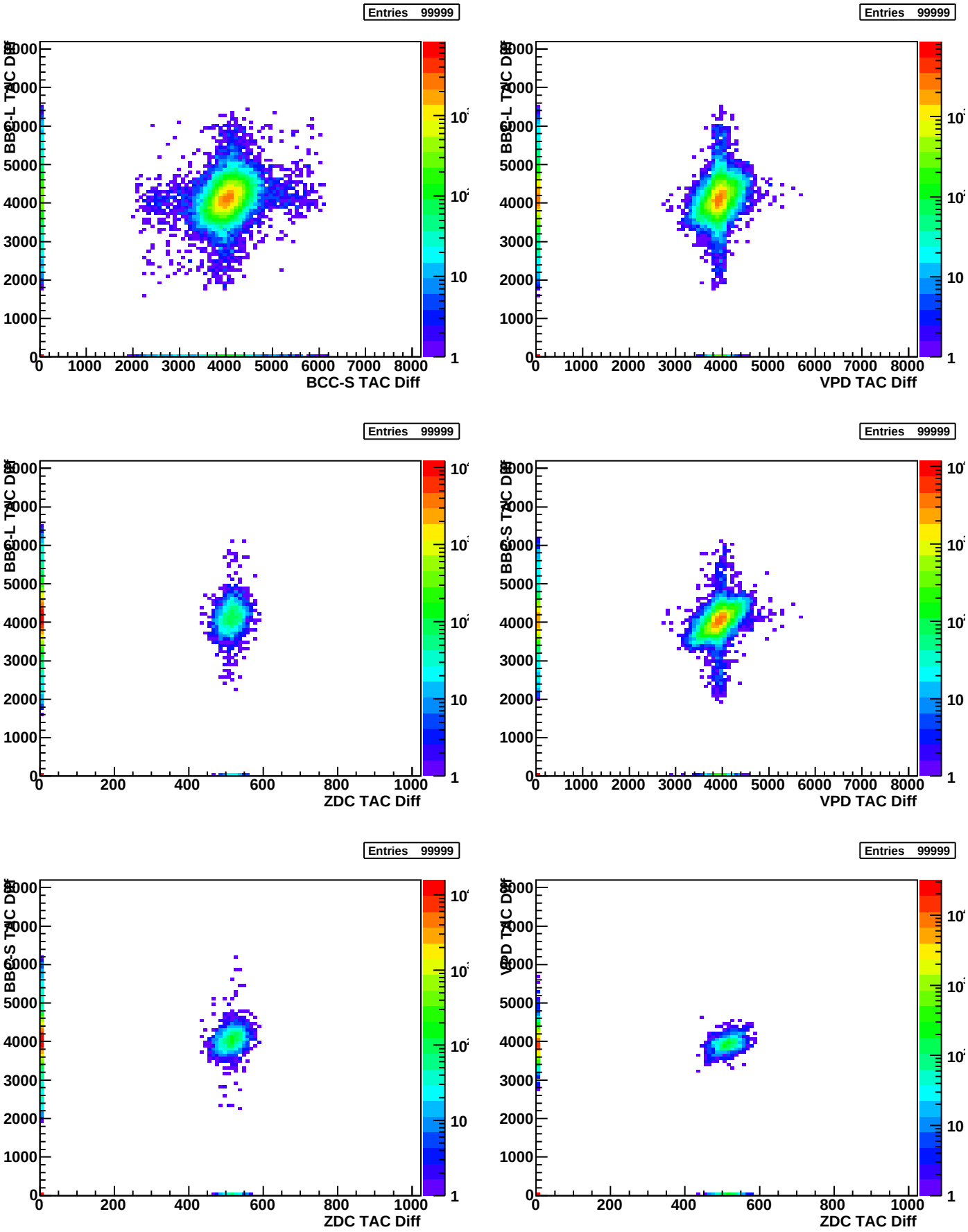

Entries 99999
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

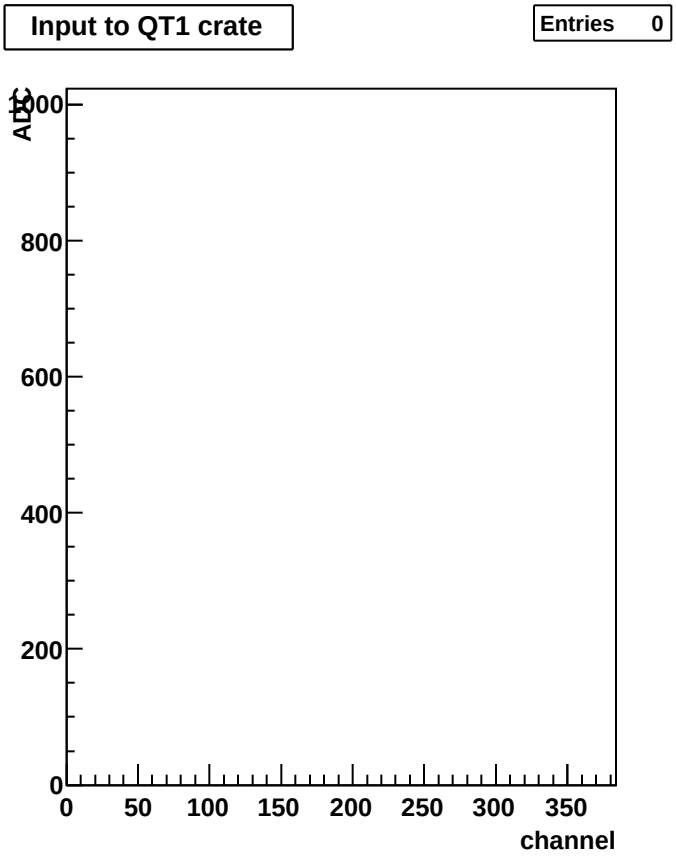

Entries 99999
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

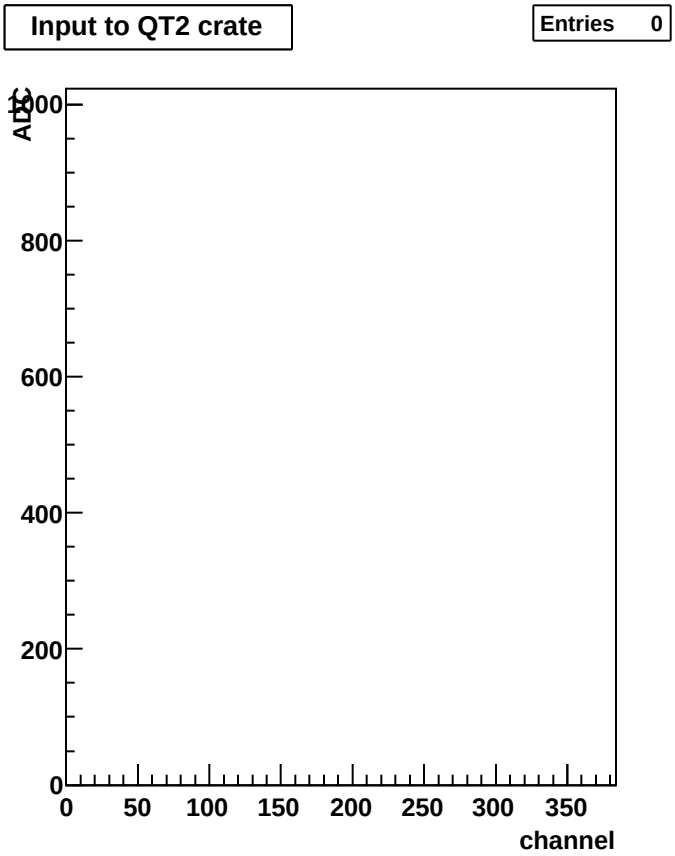

Entries 99999
BBC-L-East ADC Sum
BBC-L-West ADC Sum

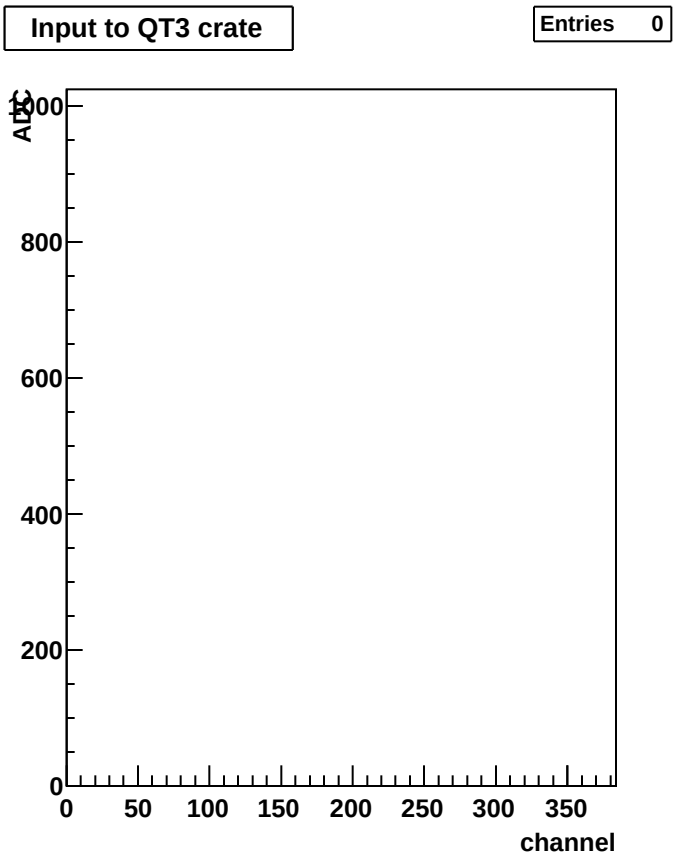

Entries 99999
BBC-S-East ADC Sum
BBC-S-West ADC Sum

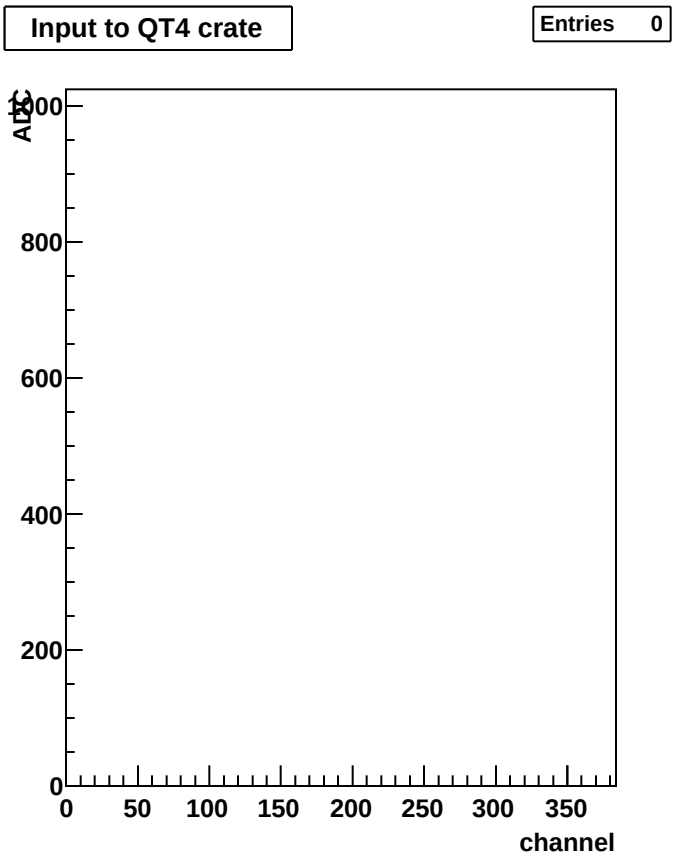

Entries 99999
ZDC East ADC Sum Att
ZDC West ADC Sum Att

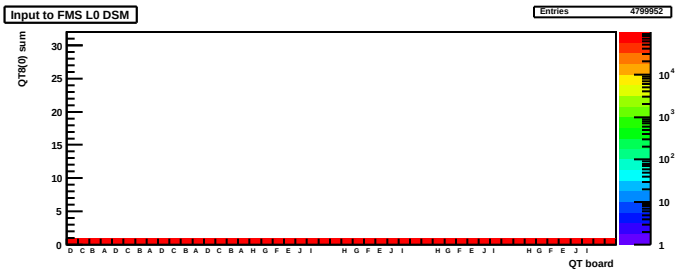

Entries 99999
BBC-L TAC Diff
BCC-S TAC Diff
Entries 99999
BBC-L TAC Diff
VPD TAC Diff
Entries 99999
BBC-L TAC Diff
ZDC TAC Diff
Entries 99999
BBC-S TAC Diff
VPD TAC Diff
Entries 99999
BBC-S TAC Diff
ZDC TAC Diff
Entries 99999
VPD TAC Diff
ZDC TAC Diff

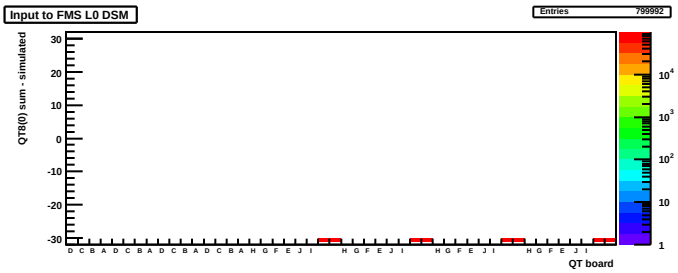

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

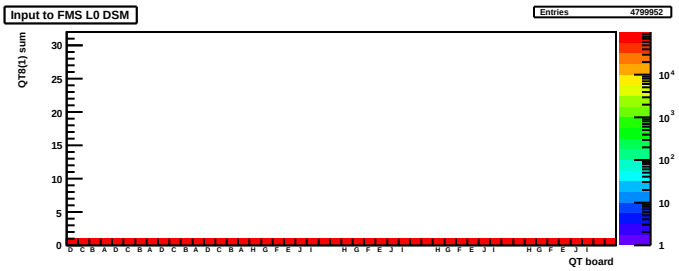

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

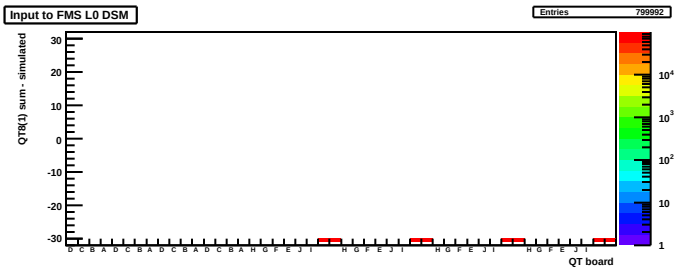

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

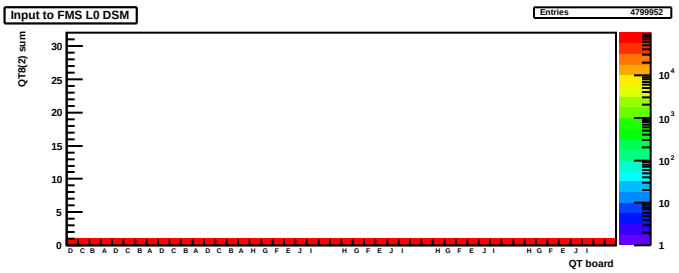

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

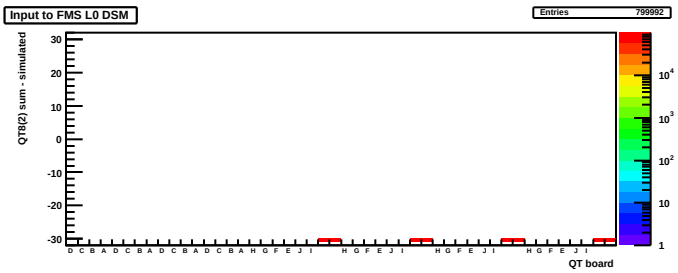

Input to FMS L0 DSM
Entries 4799952
QT8(0) sum
QT board

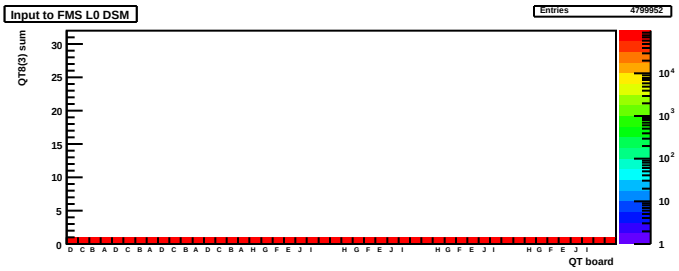

Input to FMS L0 DSM
Entries 799992
QT8(0) sum - simulated
QT board

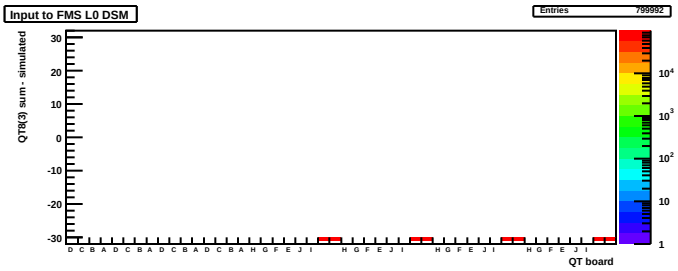

Input to FMS L0 DSM
Entries 4799952
QT8(1) sum
QT board

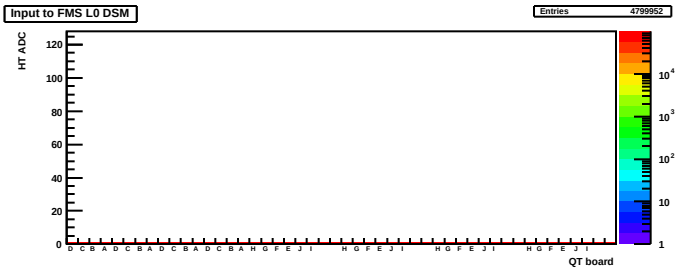

Input to FMS L0 DSM
Entries 799992
QT8(1) sum - simulated
QT board

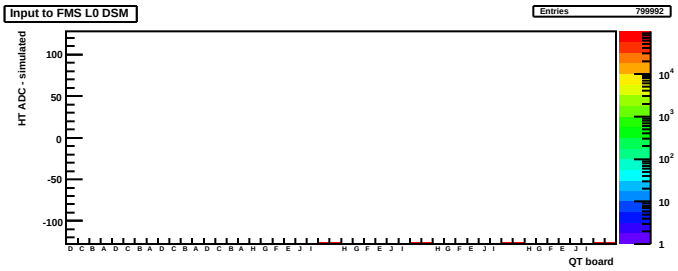

Input to FMS L0 DSM
Entries 4799952
QT8(2) sum
QT board

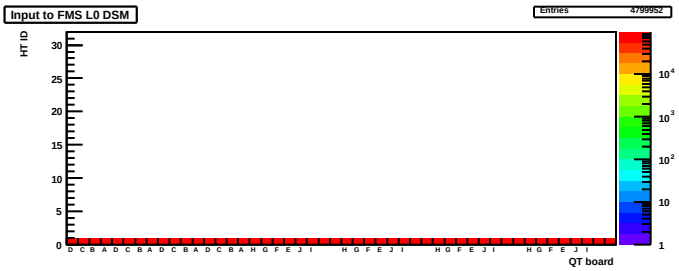

Input to FMS L0 DSM
Entries 799992
QT8(2) sum - simulated
QT board

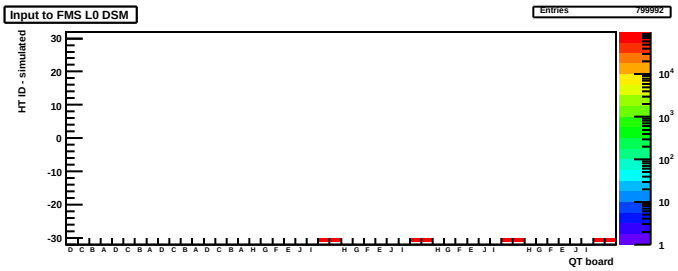

Input to FMS L0 DSM
Entries 4799952
QT8(3) sum
QT board

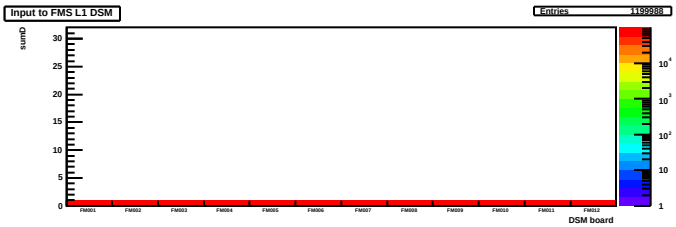

Input to FMS L0 DSM
Entries 799992
QT8(3) sum - simulated
QT board

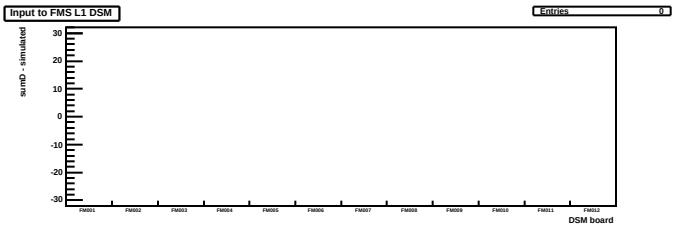

Input to FMS L0 DSM
Entries 4799952
HT ADC
QT board

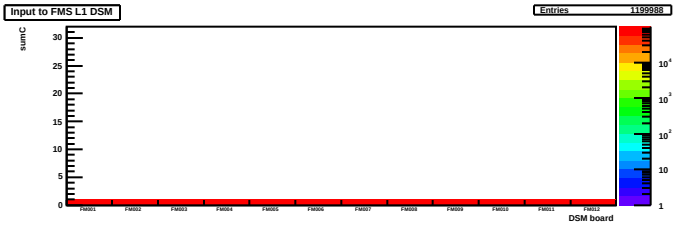

Input to FMS L0 DSM
Entries 799992
HT ADC - simulated
QT board

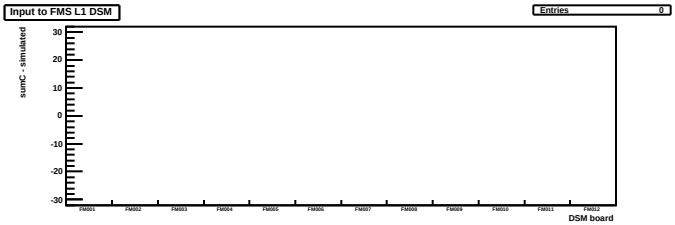

Input to FMS L0 DSM
Entries 4799952
HT ID
QT board

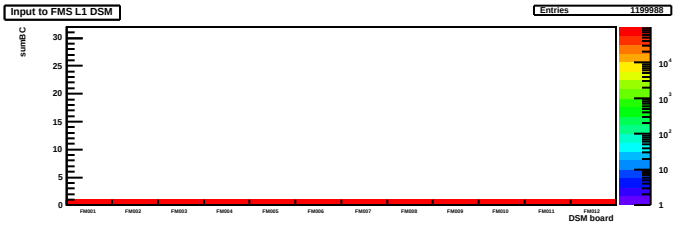

Input to FMS L0 DSM
Entries 799992
HT ID - simulated
QT board

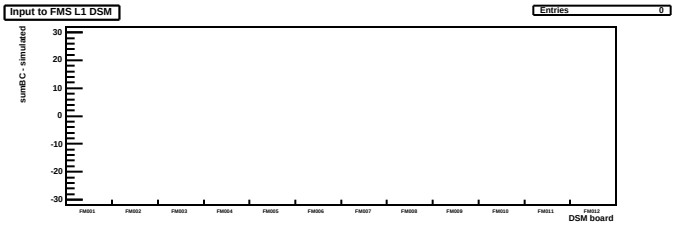

Input to FMS L1 DSM
Entries 1199988
sumD
DSM board

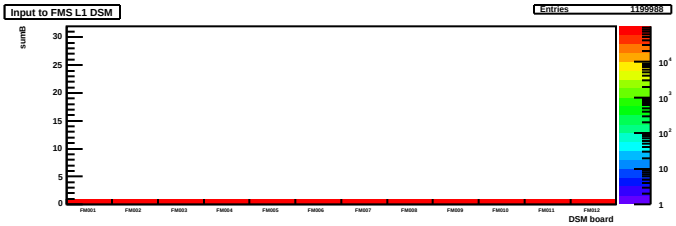

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

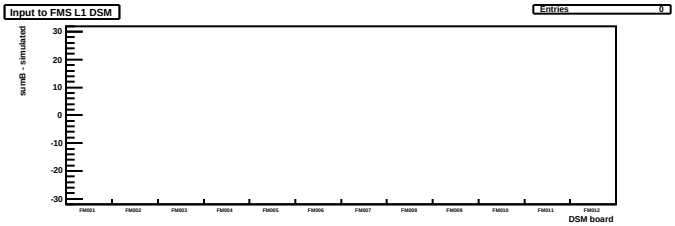

Input to FMS L1 DSM
Entries 1199988
sumC
DSM board

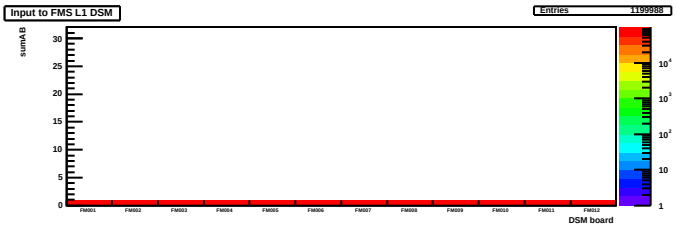

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

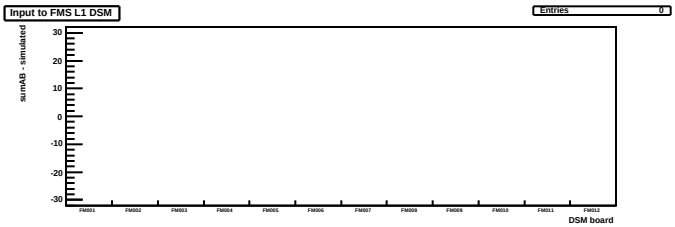

Input to FMS L1 DSM
Entries 1199988
sumBC
DSM board

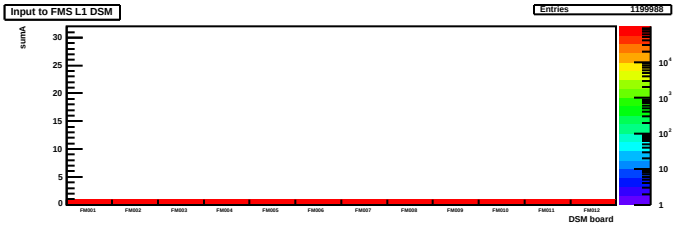

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

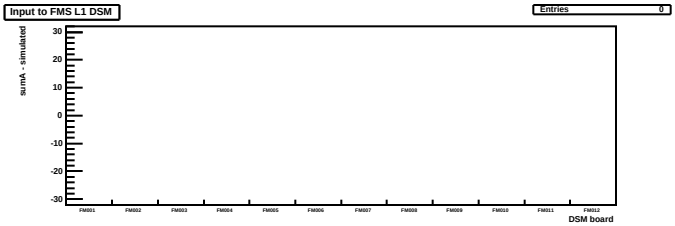

Input to FMS L1 DSM
Entries 1199988
sumB
DSM board

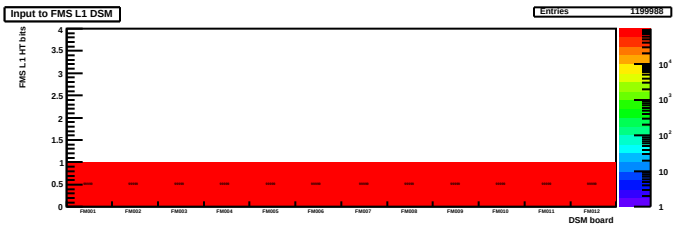

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

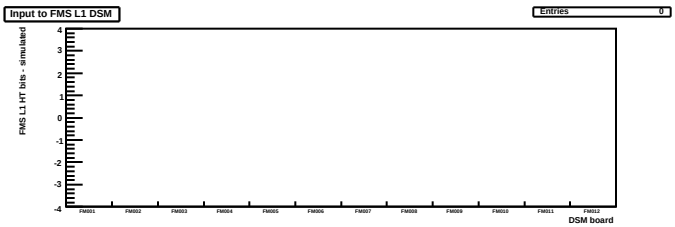

Input to FMS L1 DSM
Entries 1199988
sumAB
DSM board

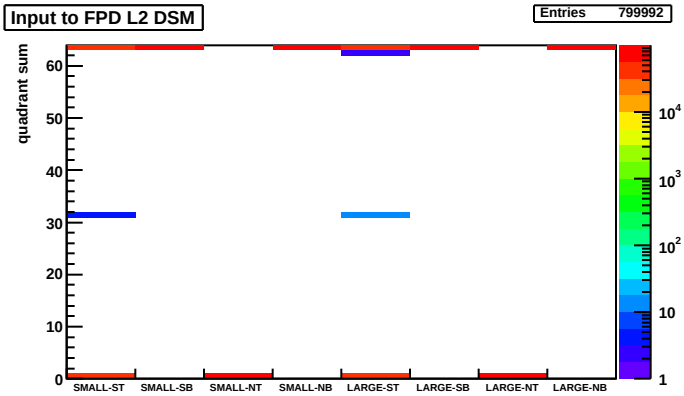

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

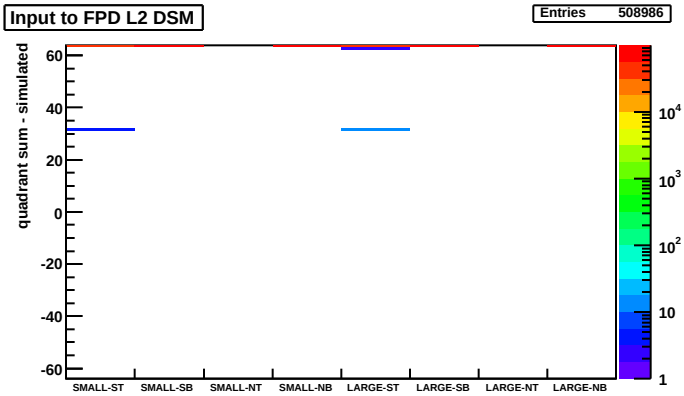

Input to FMS L1 DSM
Entries 1199988
sumA
DSM board

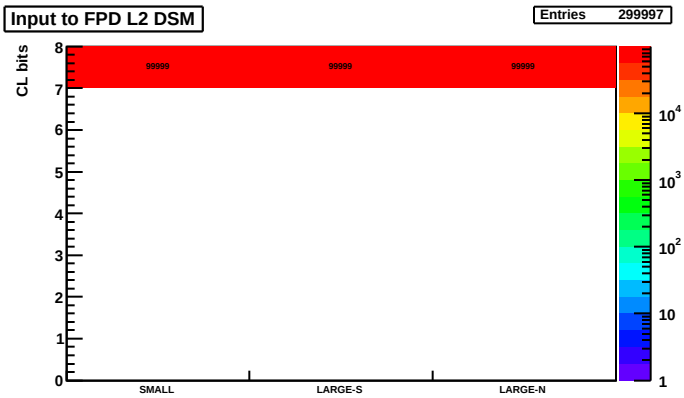

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

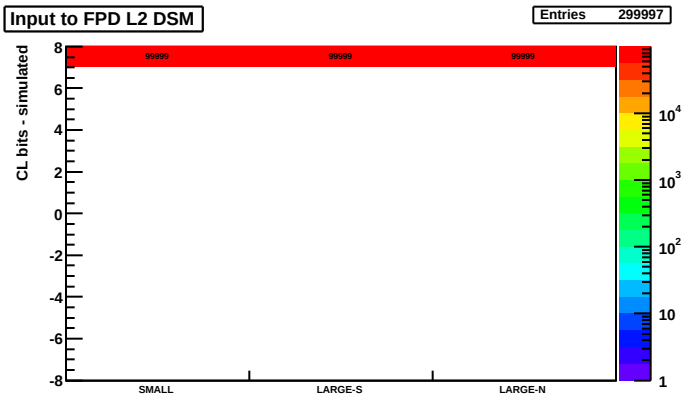

Input to FMS L1 DSM
Entries 1199988
FMS L1 HT bits
DSM board

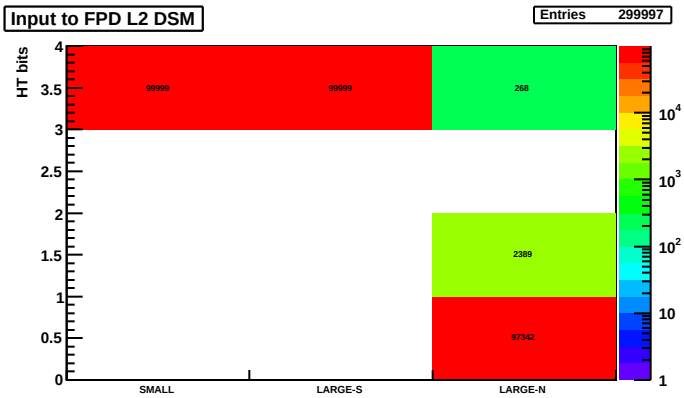

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

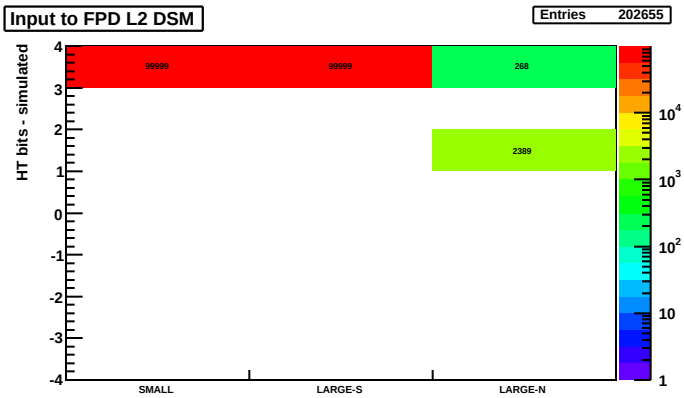

Input to FPD L2 DSM
Entries 799992
quadrant sum
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

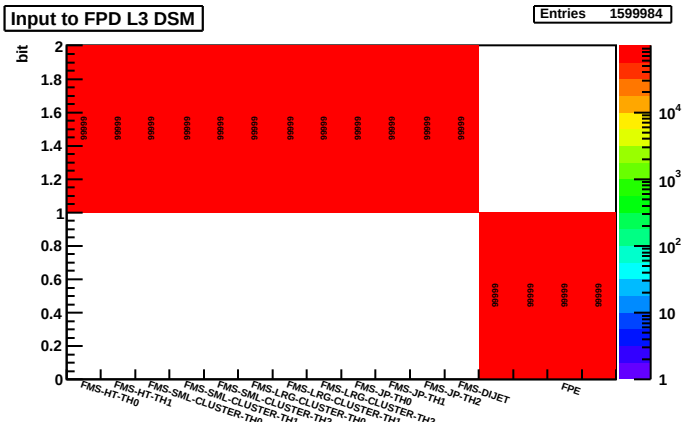

Input to FPD L2 DSM
Entries 508986
quadrant sum - simulated
SMALL-ST SMALL-SB SMALL-NT SMALL-NB LARGE-ST LARGE-SB LARGE-NT LARGE-NB

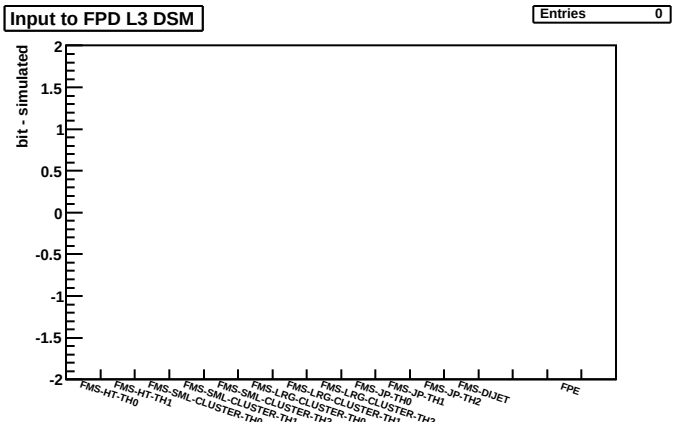

Input to FPD L2 DSM
Entries 299997
CL bits
99999 99999 99999
SMALL LARGE-S LARGE-N

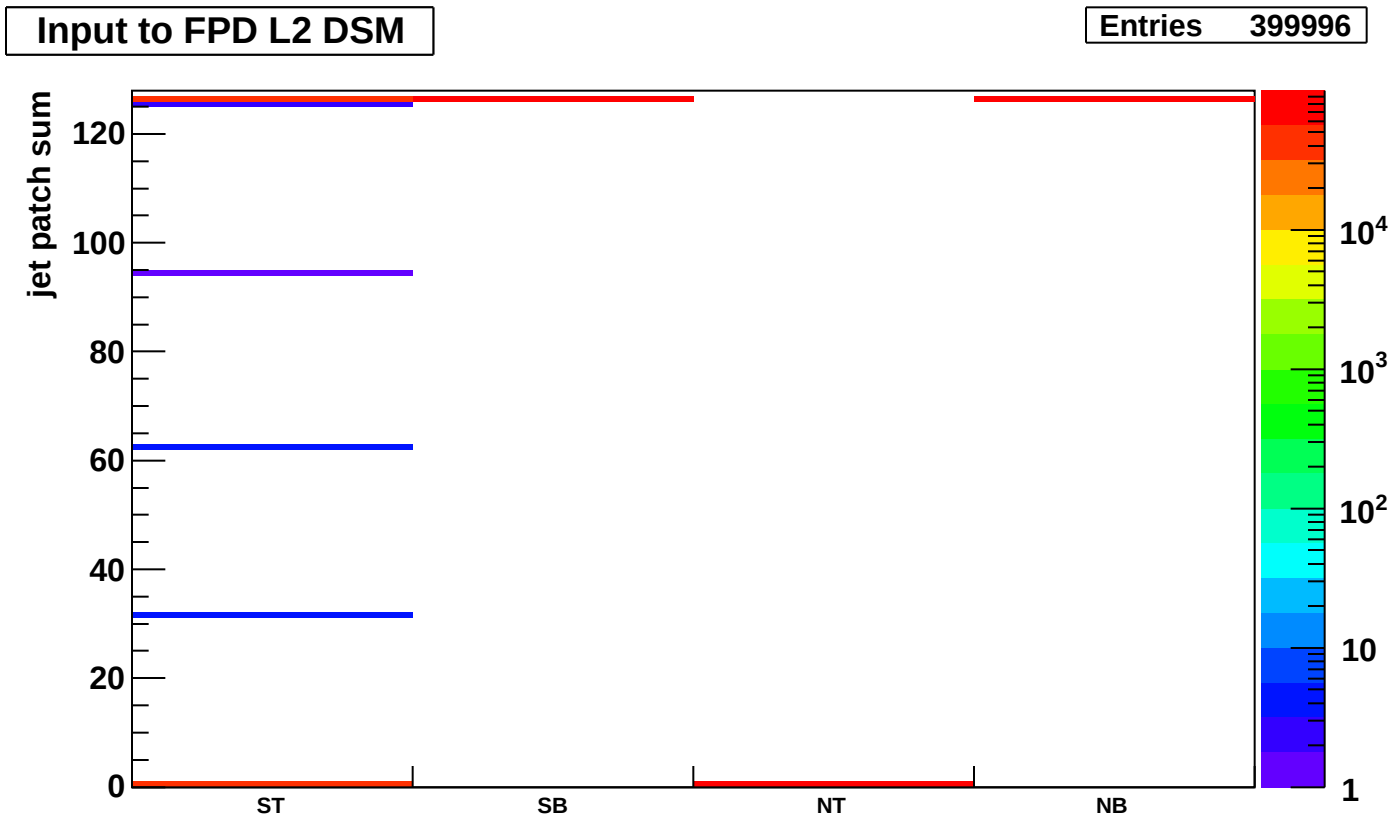

Input to FPD L2 DSM
Entries 299997
CL bits - simulated
99999 99999 99999
SMALL LARGE-S LARGE-N

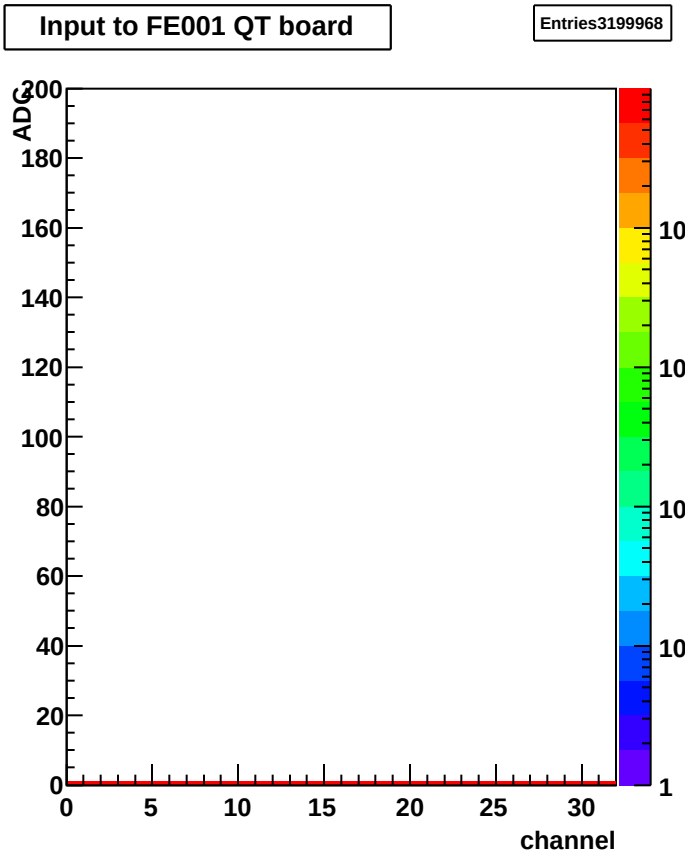

Input to FPD L2 DSM
Entries 299997
HT bits
99999 99999 268
2389
97342
SMALL LARGE-S LARGE-N

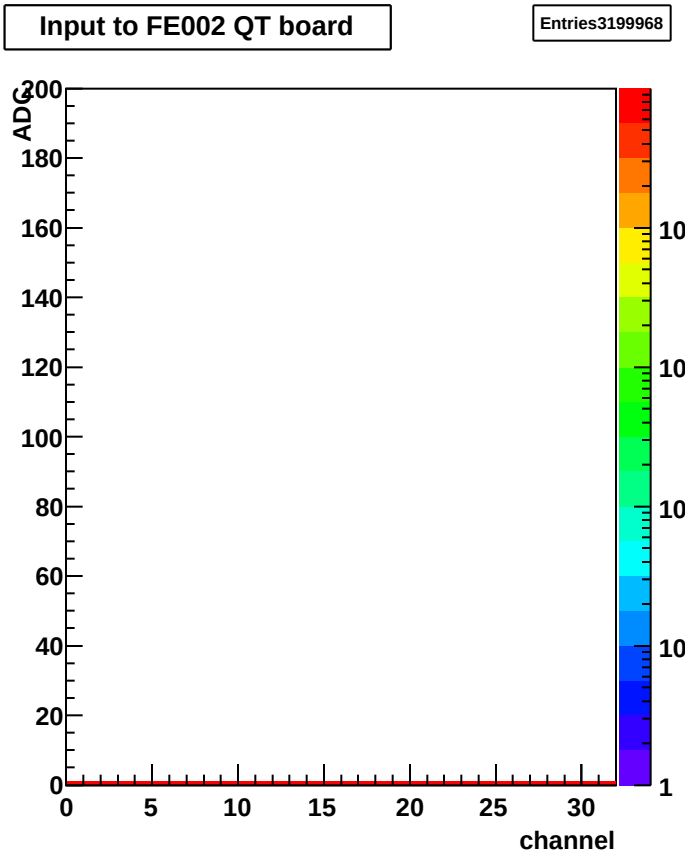

Input to FPD L2 DSM
Entries 202655
HT bits - simulated
99999 99999 268
2389
SMALL LARGE-S LARGE-N

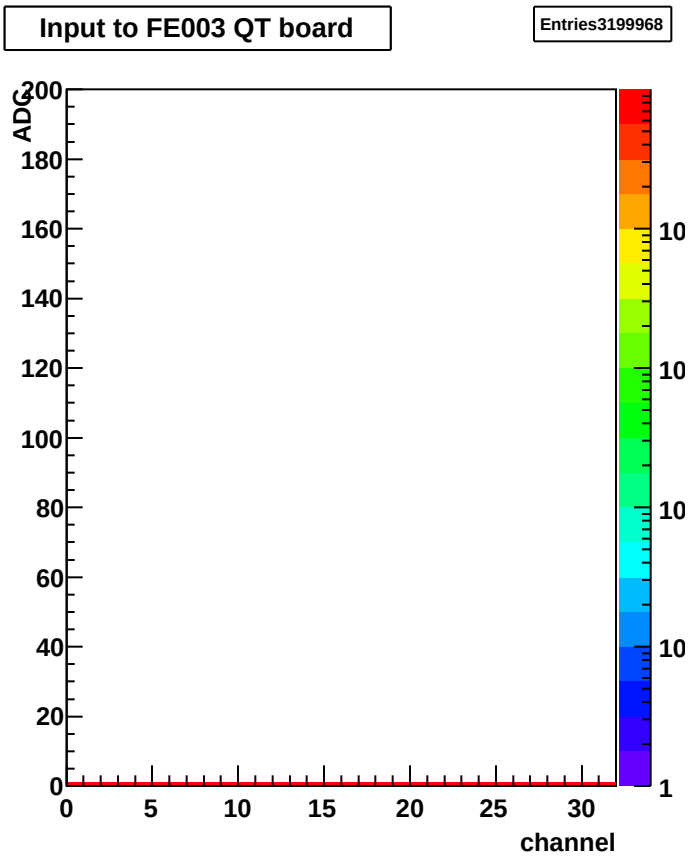

Input to FPD L3 DSM
Entries 1599984
bit
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

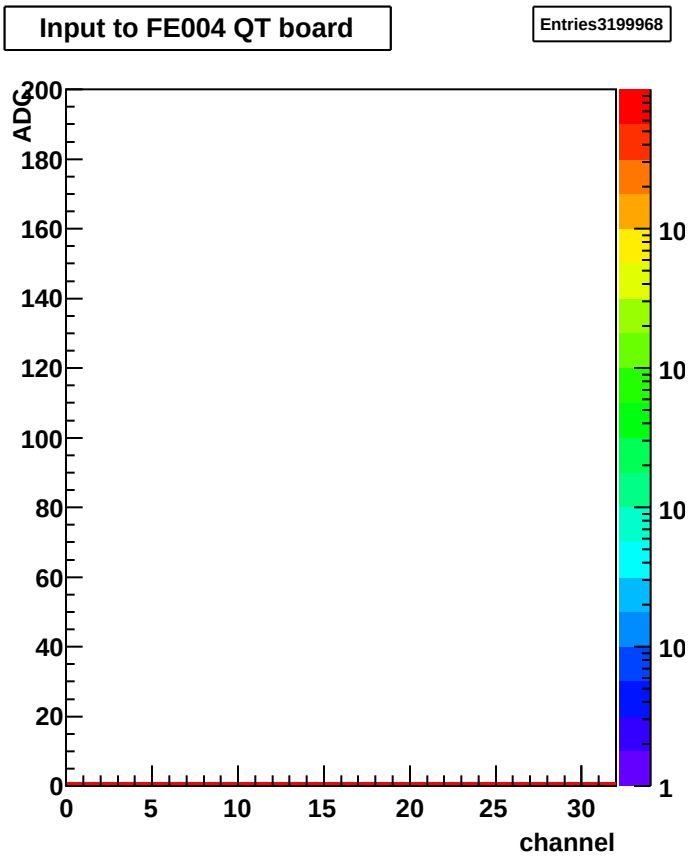

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0 FMS-HT-TH1 FMS-SML-CLUSTER-TH0 FMS-SML-CLUSTER-TH1 FMS-SML-CLUSTER-TH2 FMS-LRG-CLUSTER-TH0 FMS-LRG-CLUSTER-TH1 FMS-LRG-CLUSTER-TH2 FMS-JP-TH0 FMS-JP-TH1 FMS-JP-TH2 FMS-DIJET FPE

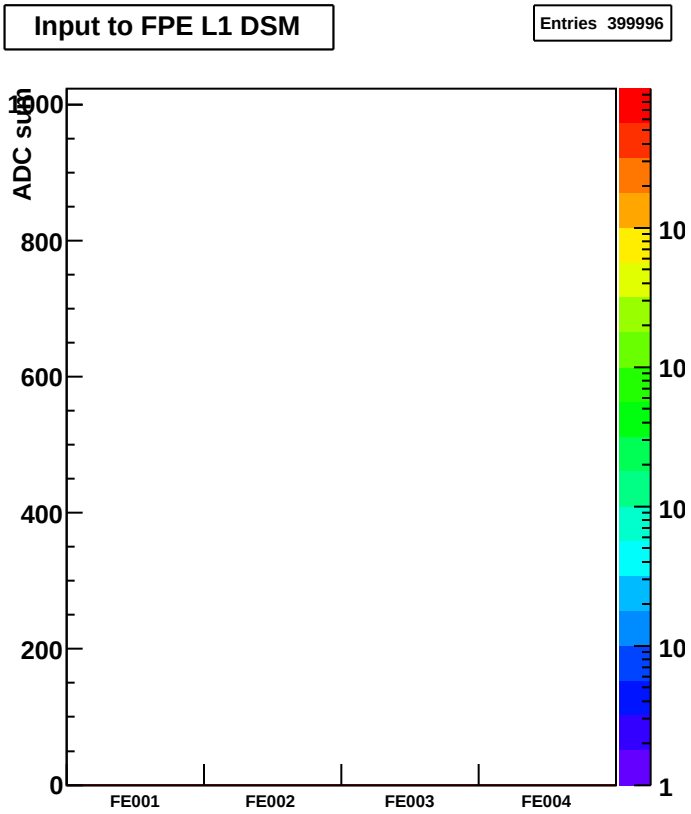

Input to FPD L2 DSM
Entries 399996
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^4
10^3
10^2
10
1

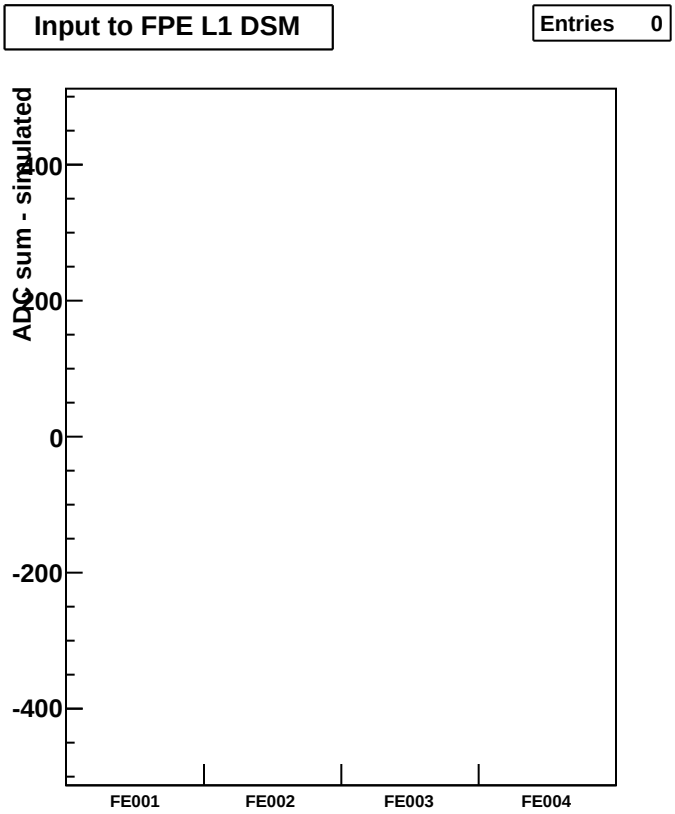

Input to FE001 QT board
Entries3199968
ADC
channel

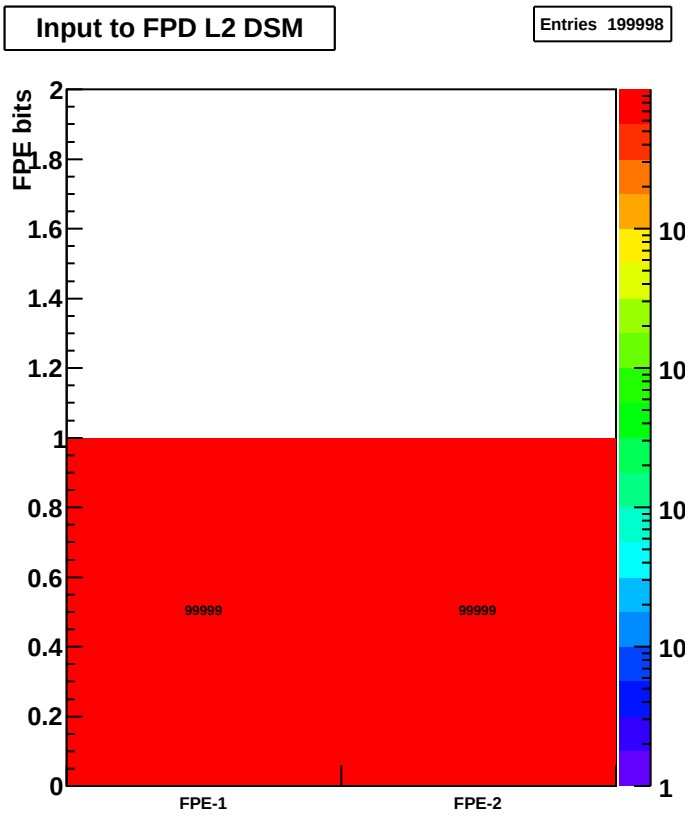

Input to FE002 QT board
Entries3199968
ADC
channel

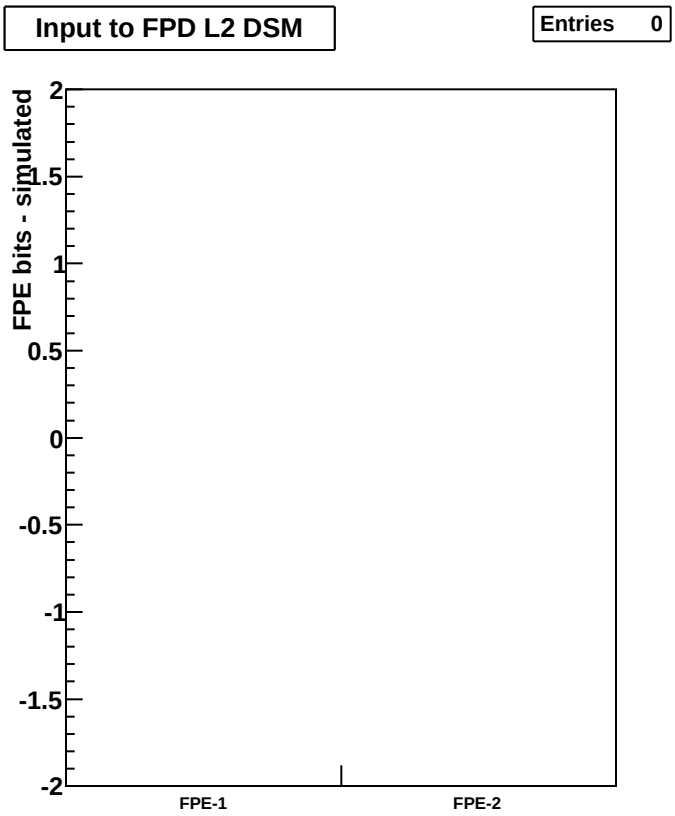

Input to FE003 QT board
Entries3199968
ADC
channel


Input to FE004 QT board
Entries3199968
ADC
channel


Input to FPE L1 DSM
Entries 399996
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 199998
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
99999
99999
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