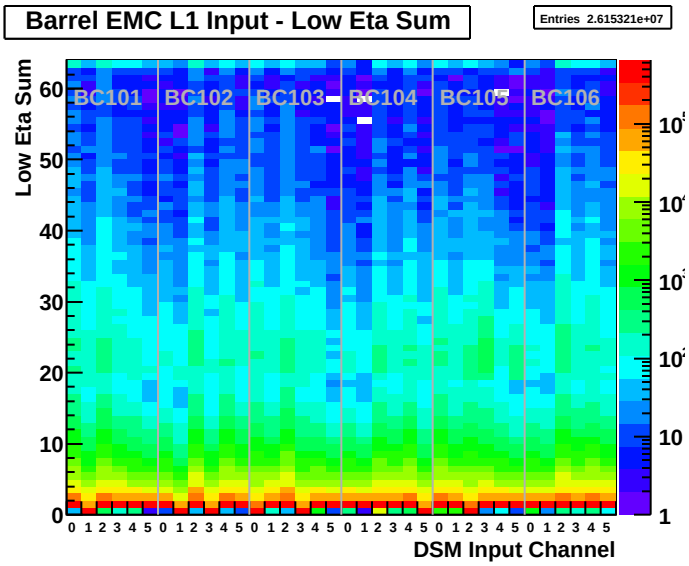
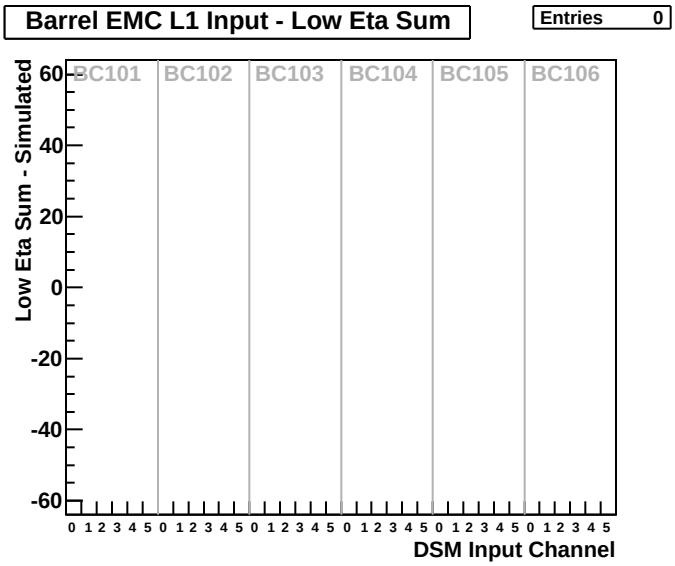
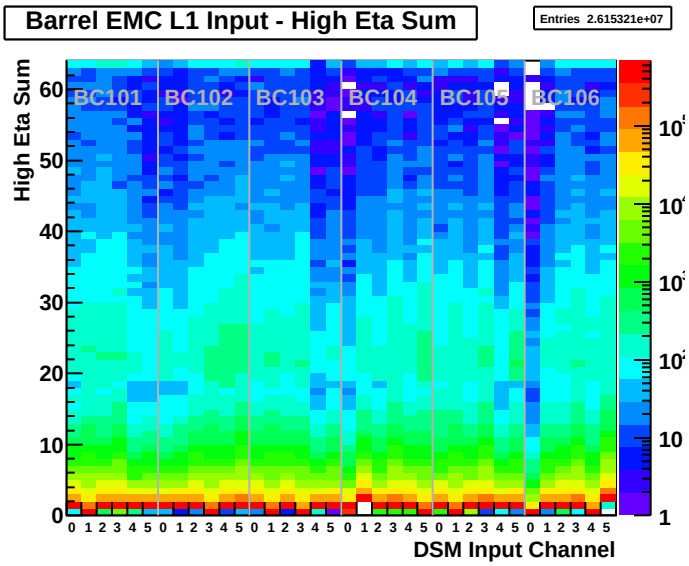
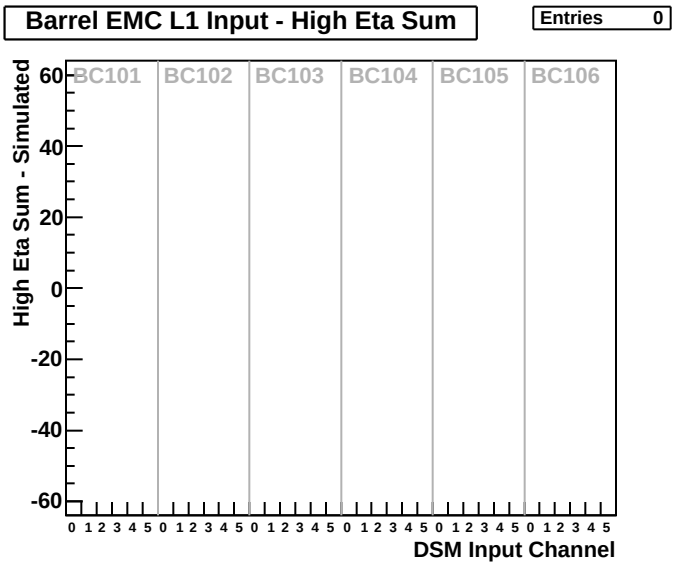
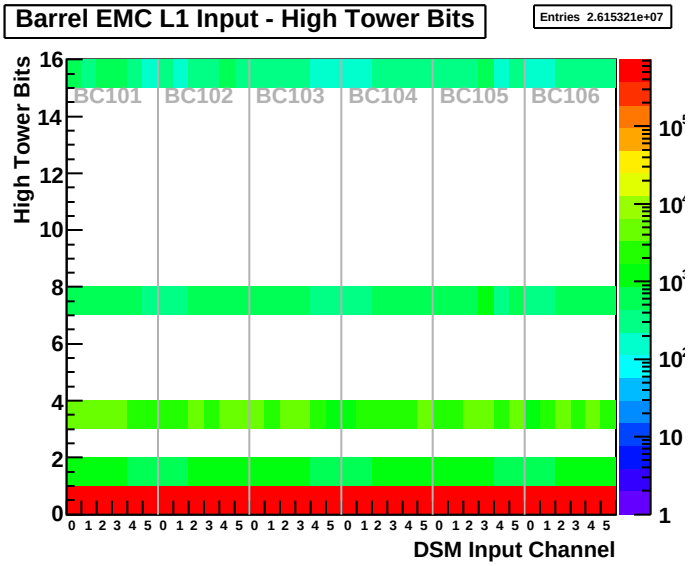
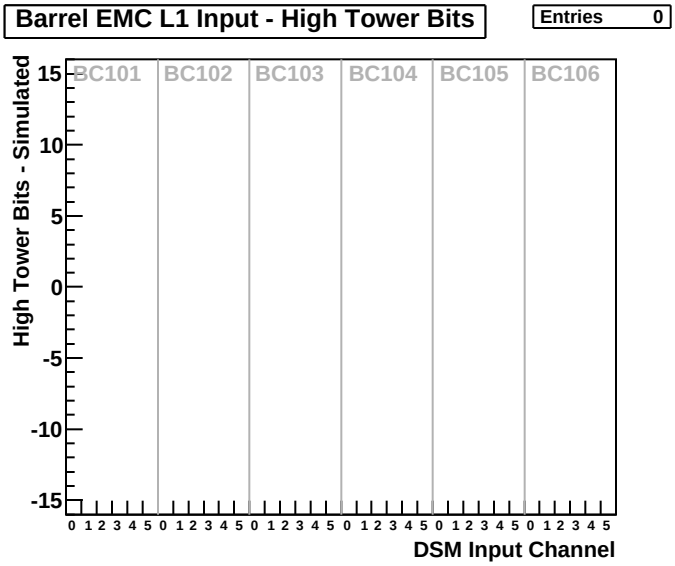

Barrel EMC L1 Input - Low Eta Sum
Entries 2.615321e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

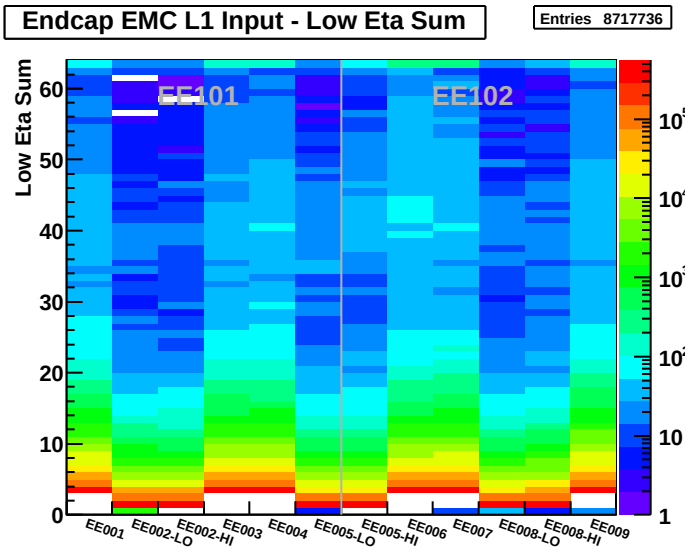

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

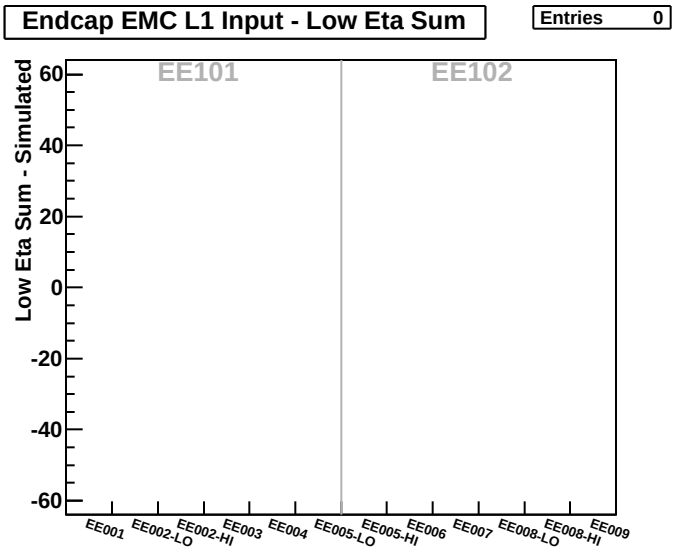

Barrel EMC L1 Input - High Eta Sum
Entries 2.615321e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

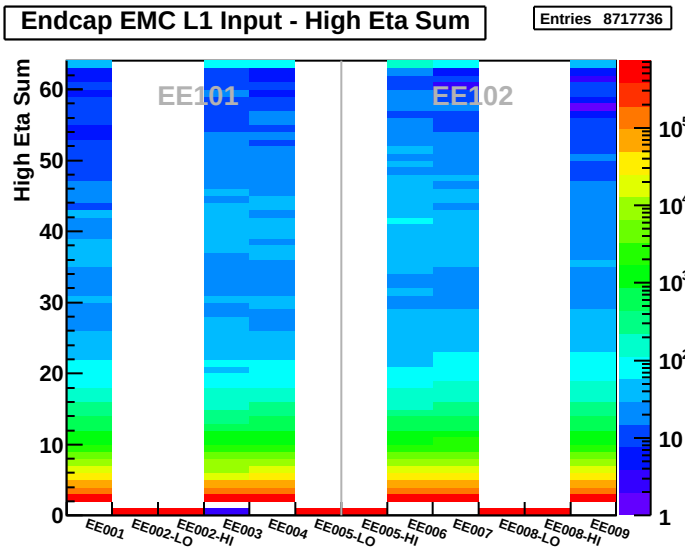

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

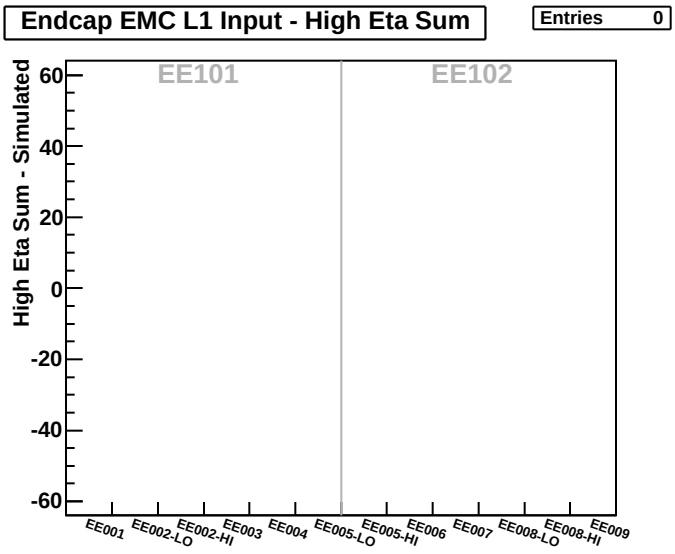

Barrel EMC L1 Input - High Tower Bits
Entries 2.615321e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

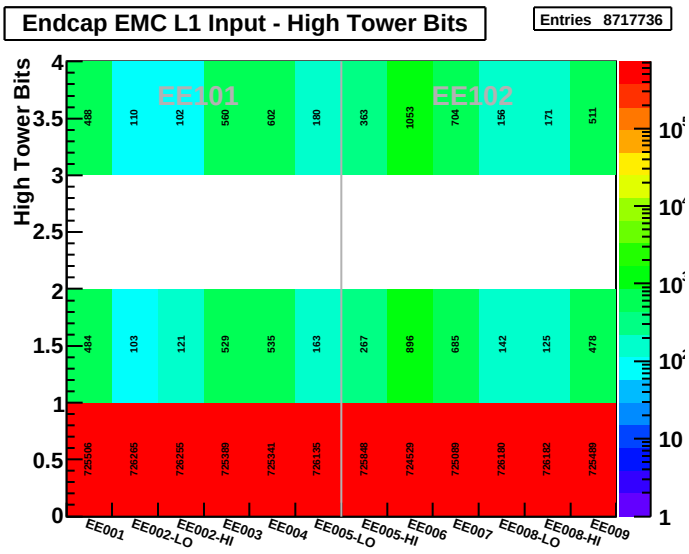

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

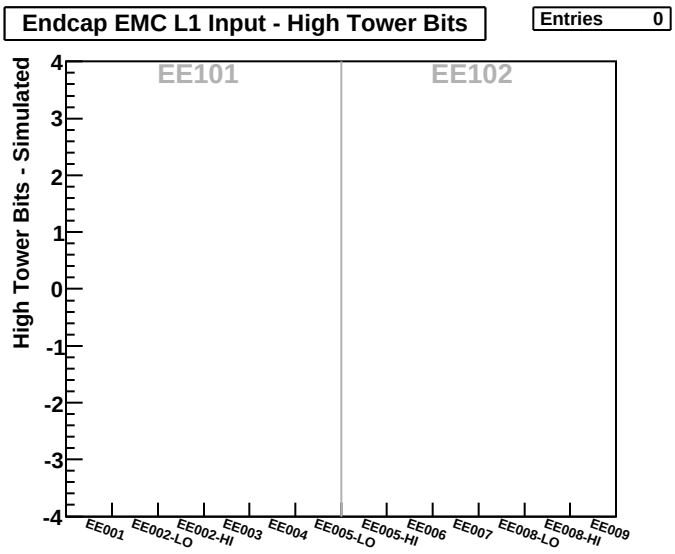

Endcap EMC L1 Input - Low Eta Sum
Entries 8717736
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

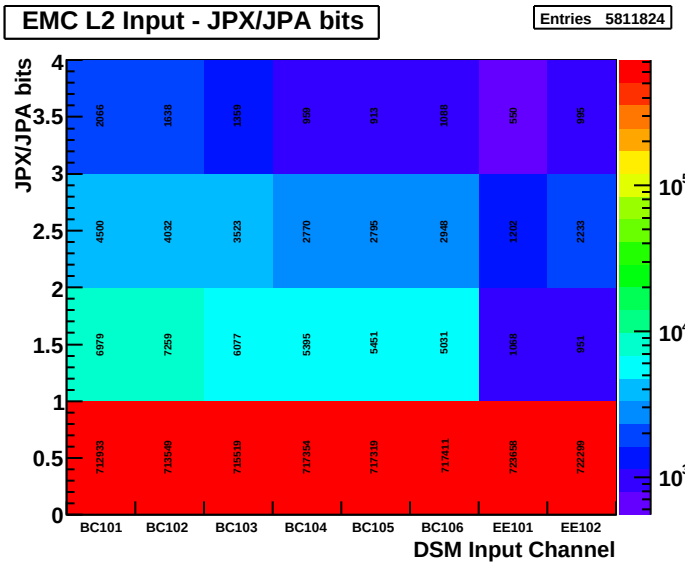

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

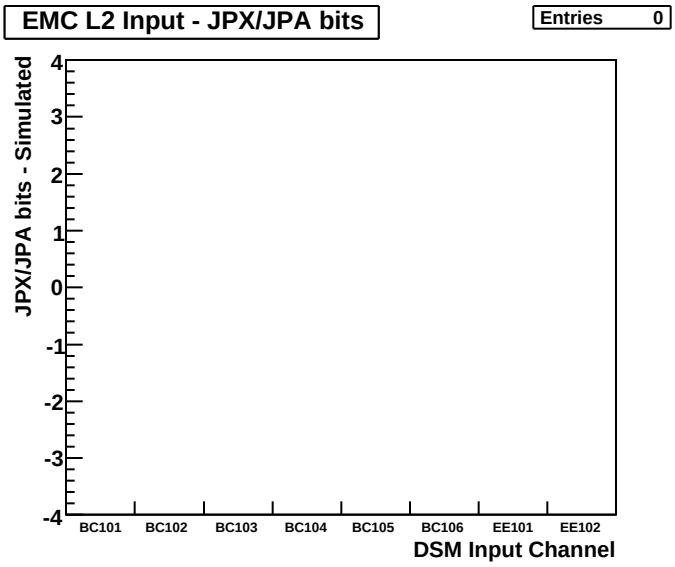

Endcap EMC L1 Input - High Eta Sum
Entries 8717736
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

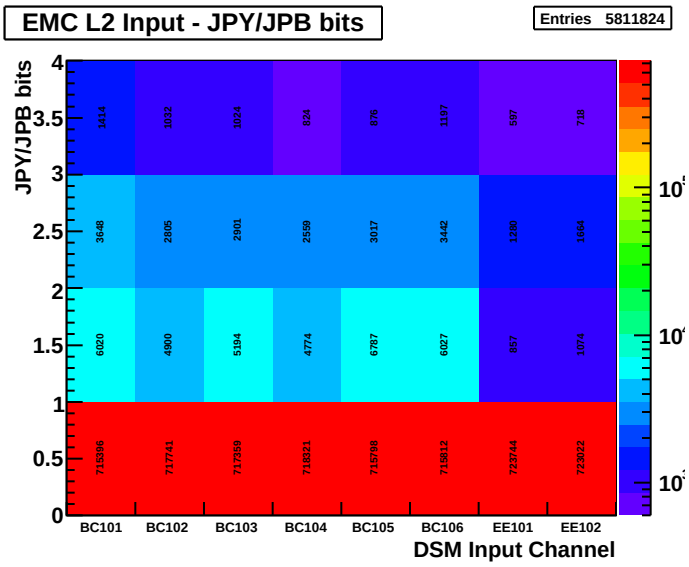

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

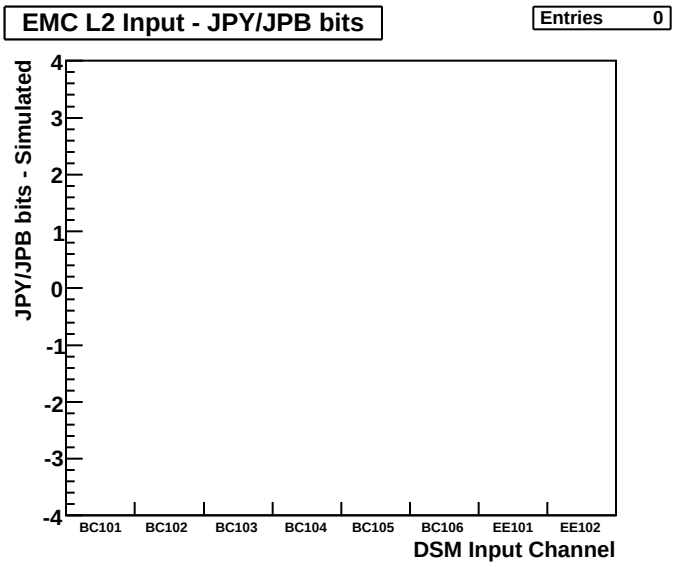

Endcap EMC L1 Input - High Tower Bits
Entries 8717736
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

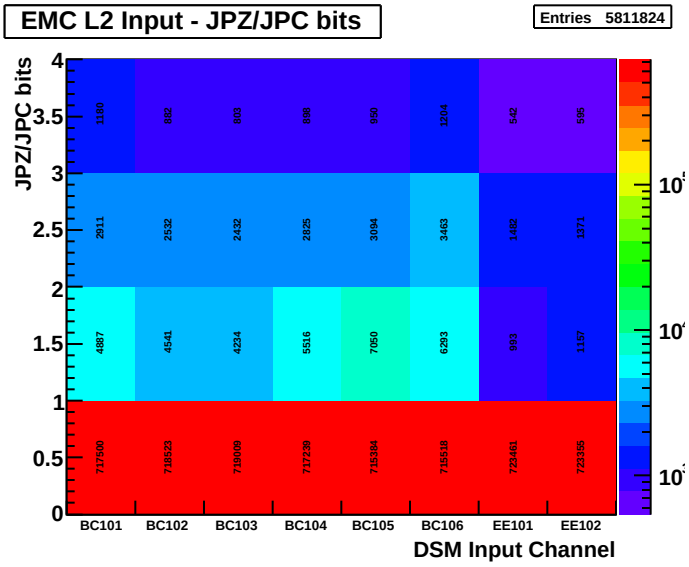

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

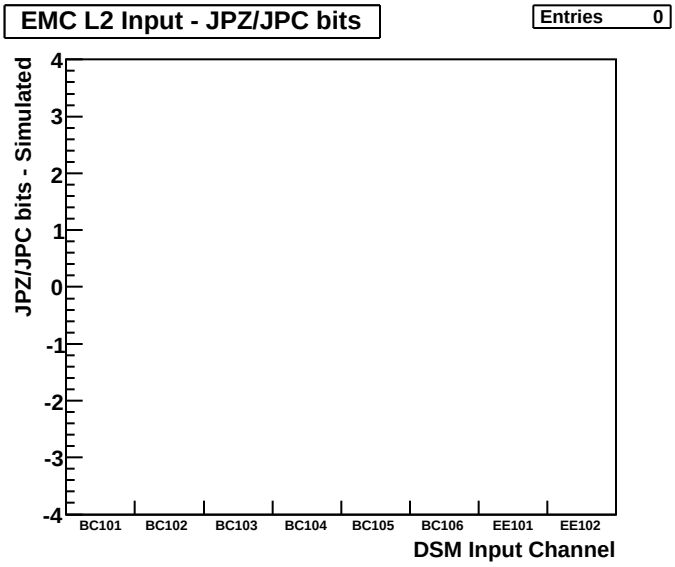

EMC L2 Input - JPX/JPA bits
Entries 5811824
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2066 1638 1359 959 913 1088 550 995
4500 4032 3523 2770 2795 2948 1202 2233
6979 7259 6077 5395 5451 5031 1068 951
712933 713549 715519 717354 717319 717411 723658 722299

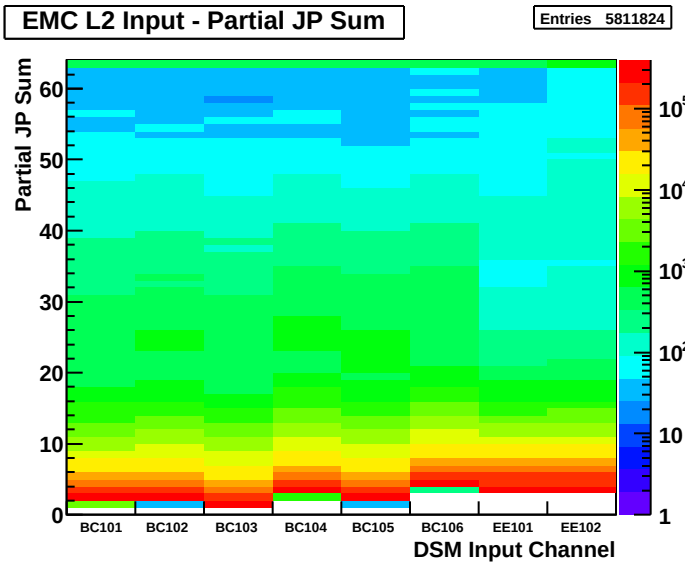

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

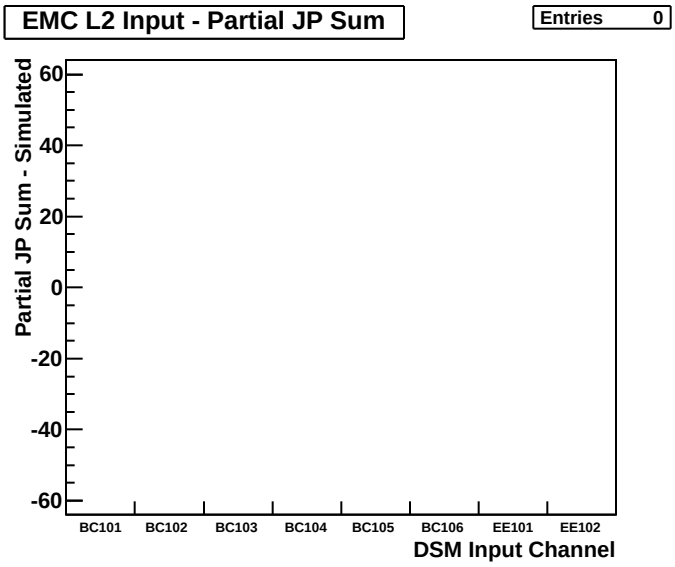

EMC L2 Input - JPY/JPB bits
Entries 5811824
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1414 1032 1024 824 876 1197 597 718
3648 2805 2901 2559 3017 3442 1280 1664
6020 4900 5194 4774 6787 6027 857 1074
715396 717741 717359 718321 715798 719312 723744 723022

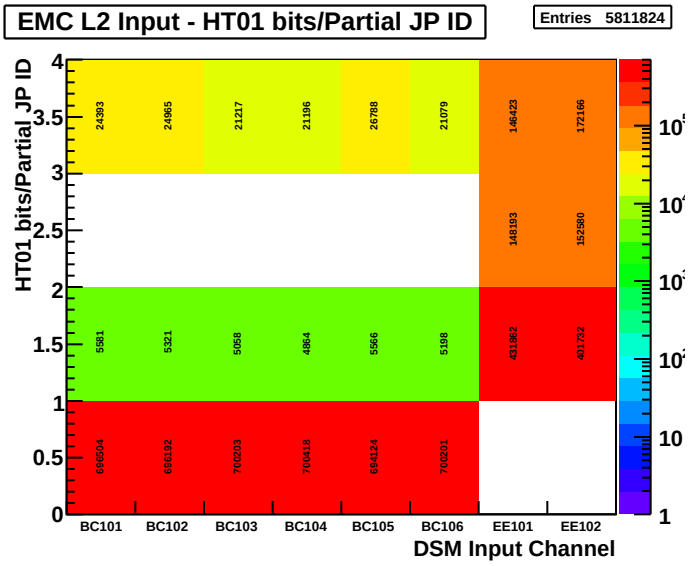

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

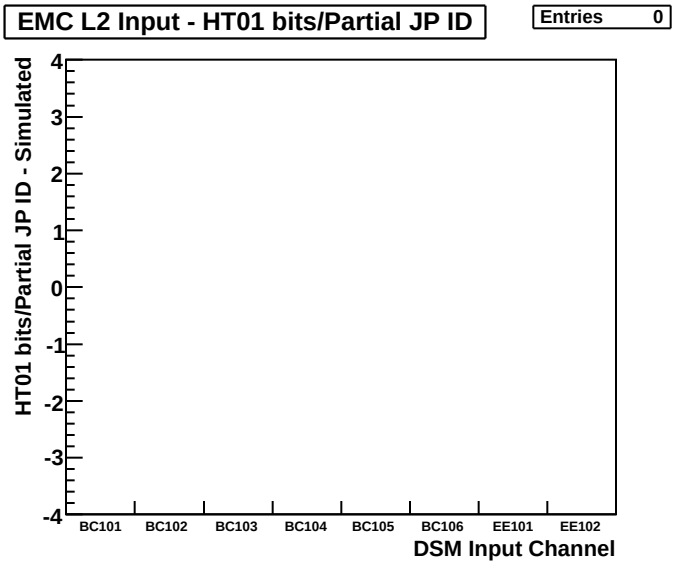

EMC L2 Input - JPZ/JPC bits
Entries 5811824
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1180 882 803 898 950 1204 542 595
2911 2532 2432 2825 3094 3463 1482 1371
4887 4541 4234 5516 7060 6293 933 1157
717500 718523 719009 717239 715384 715518 723461 723355

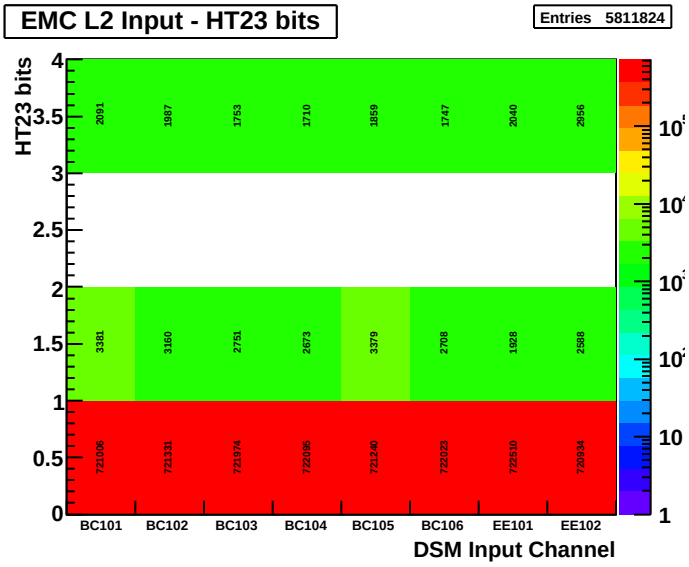

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

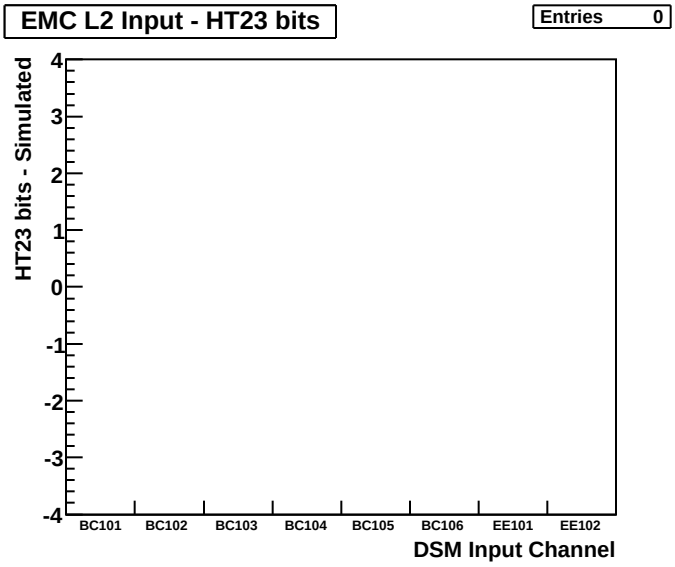

EMC L2 Input - Partial JP Sum
Entries 5811824
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

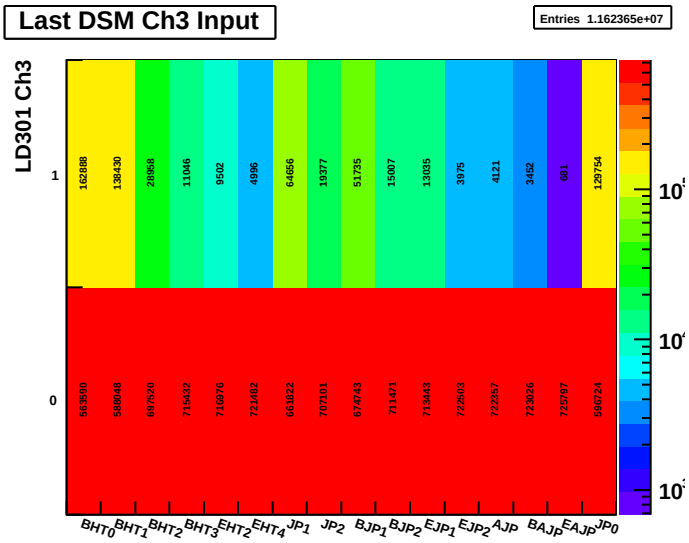

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

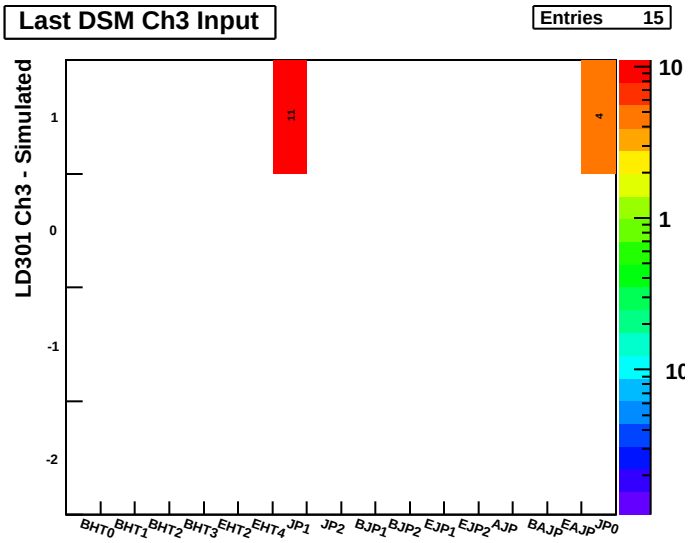

EMC L2 Input - HT01 bits/Partial JP ID
Entries 5811824
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

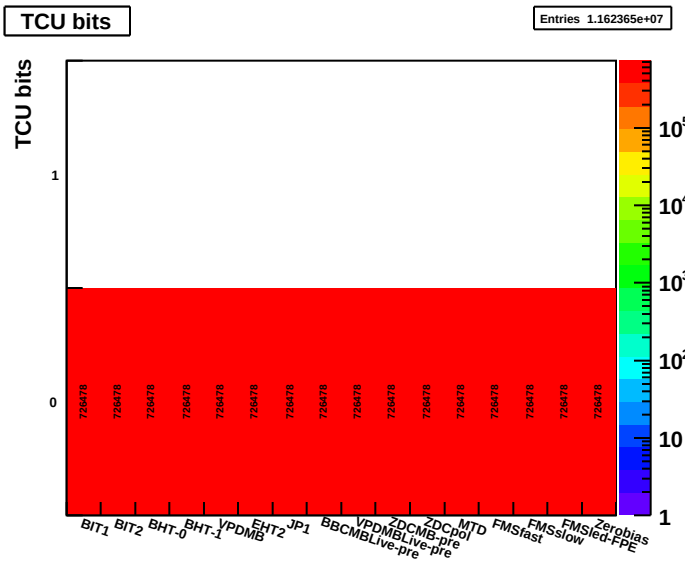

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

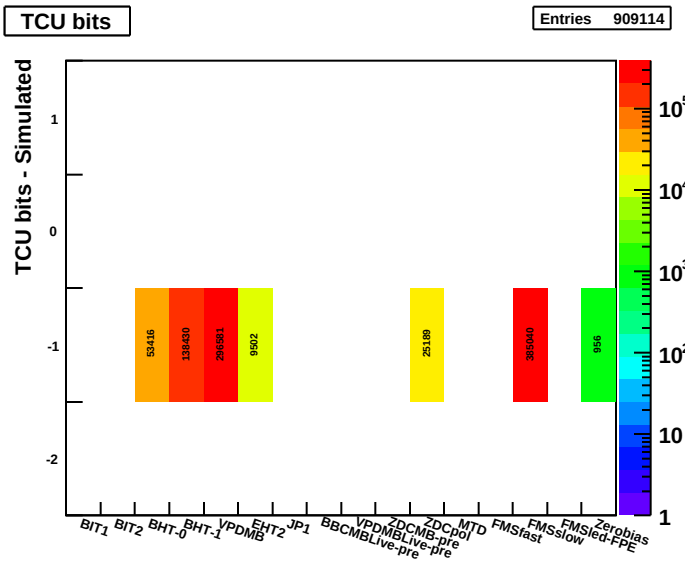

EMC L2 Input - HT23 bits
Entries 5811824
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

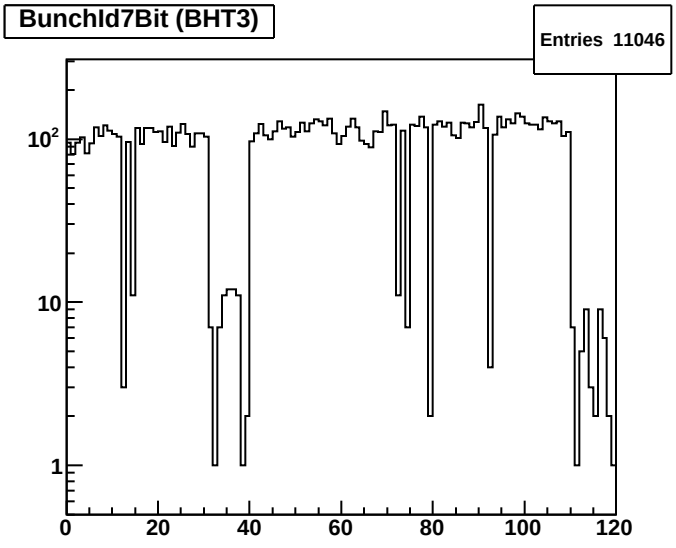

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

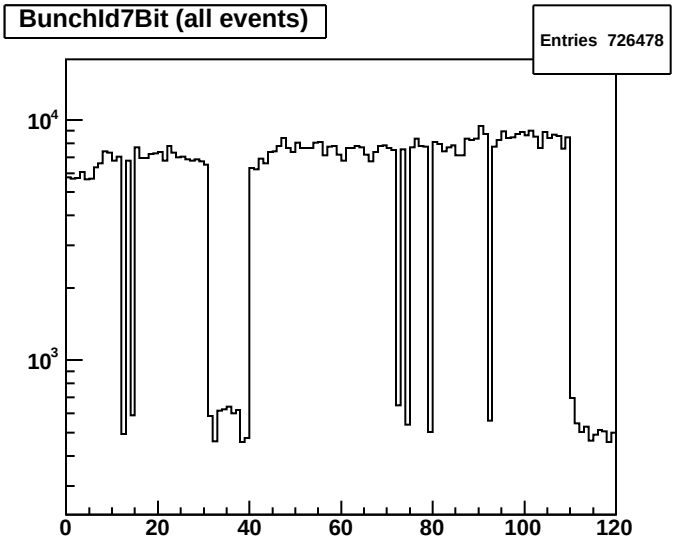

Last DSM Ch3 Input
Entries 1.162365e+07
LD301 Ch3
162888 138430 28958 11046 9502 4996 64656 19377 51735 15007 13035 3975 4121 3452 681 129754
563590 588048 697520 715432 716976 721482 661822 707101 674743 711471 713443 722503 722357 723026 725797 596724
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

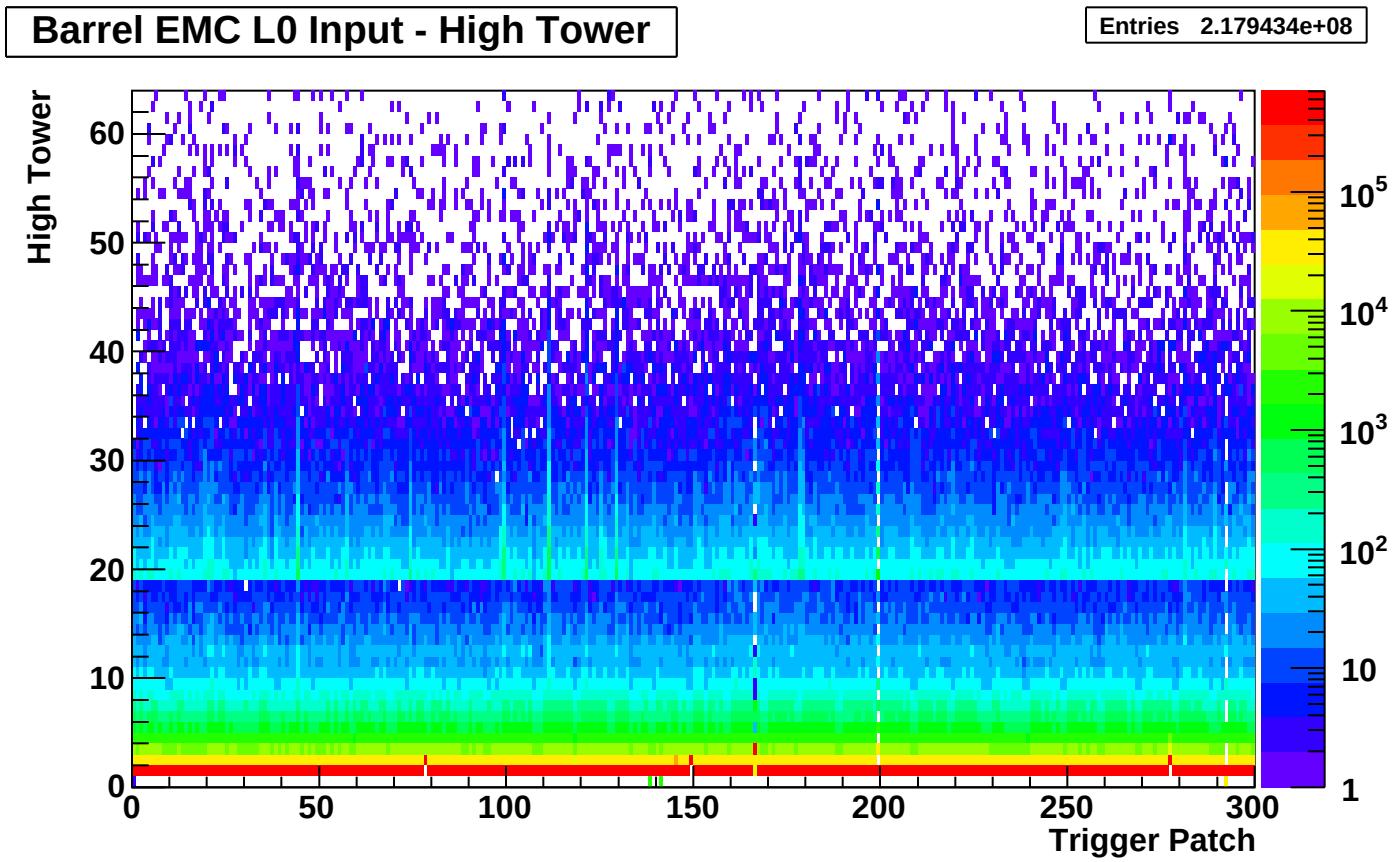

Last DSM Ch3 Input
Entries 15
LD301 Ch3 - Simulated
11
4
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

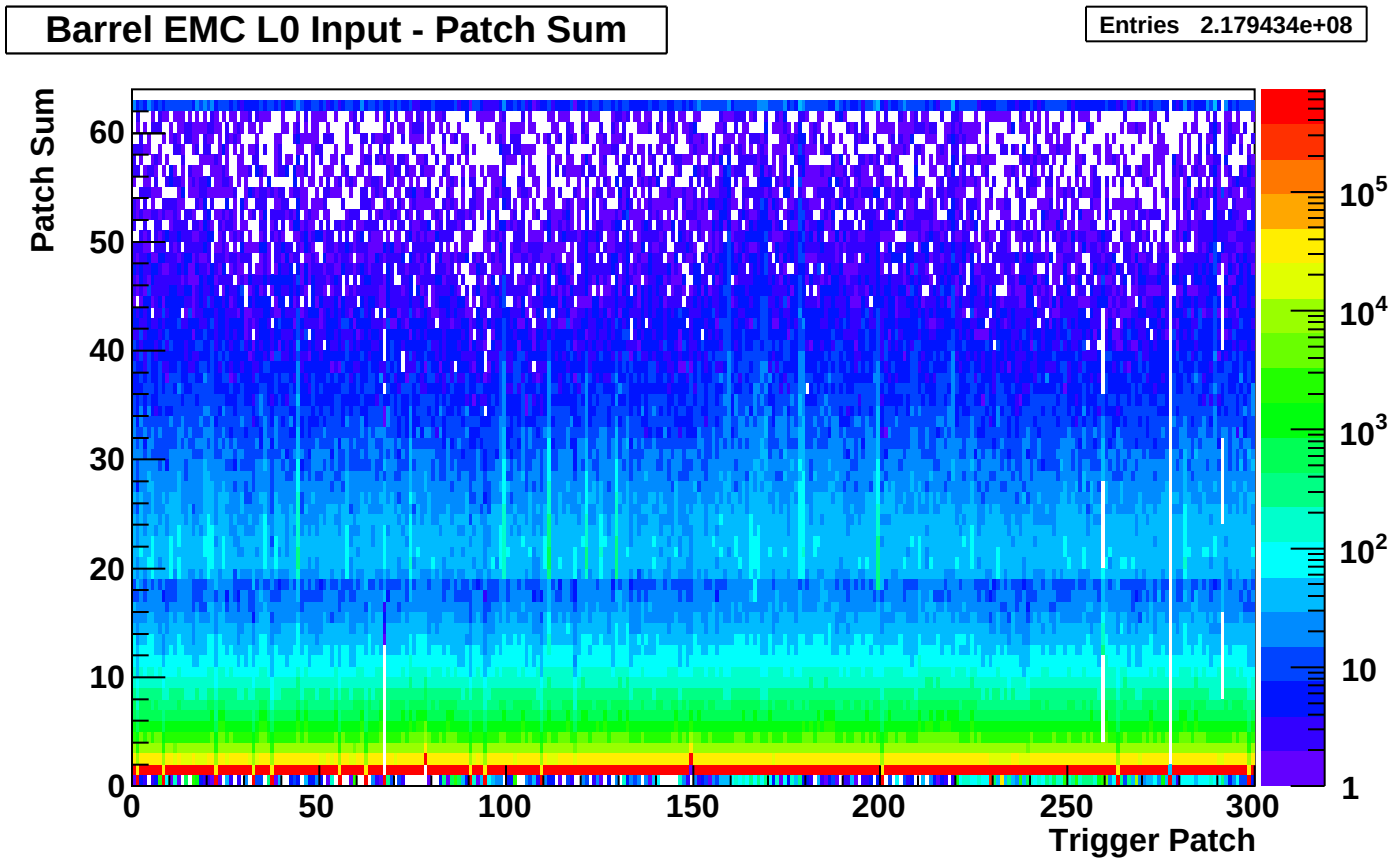

TCU bits
Entries 1.162365e+07
TCU bits
726478
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

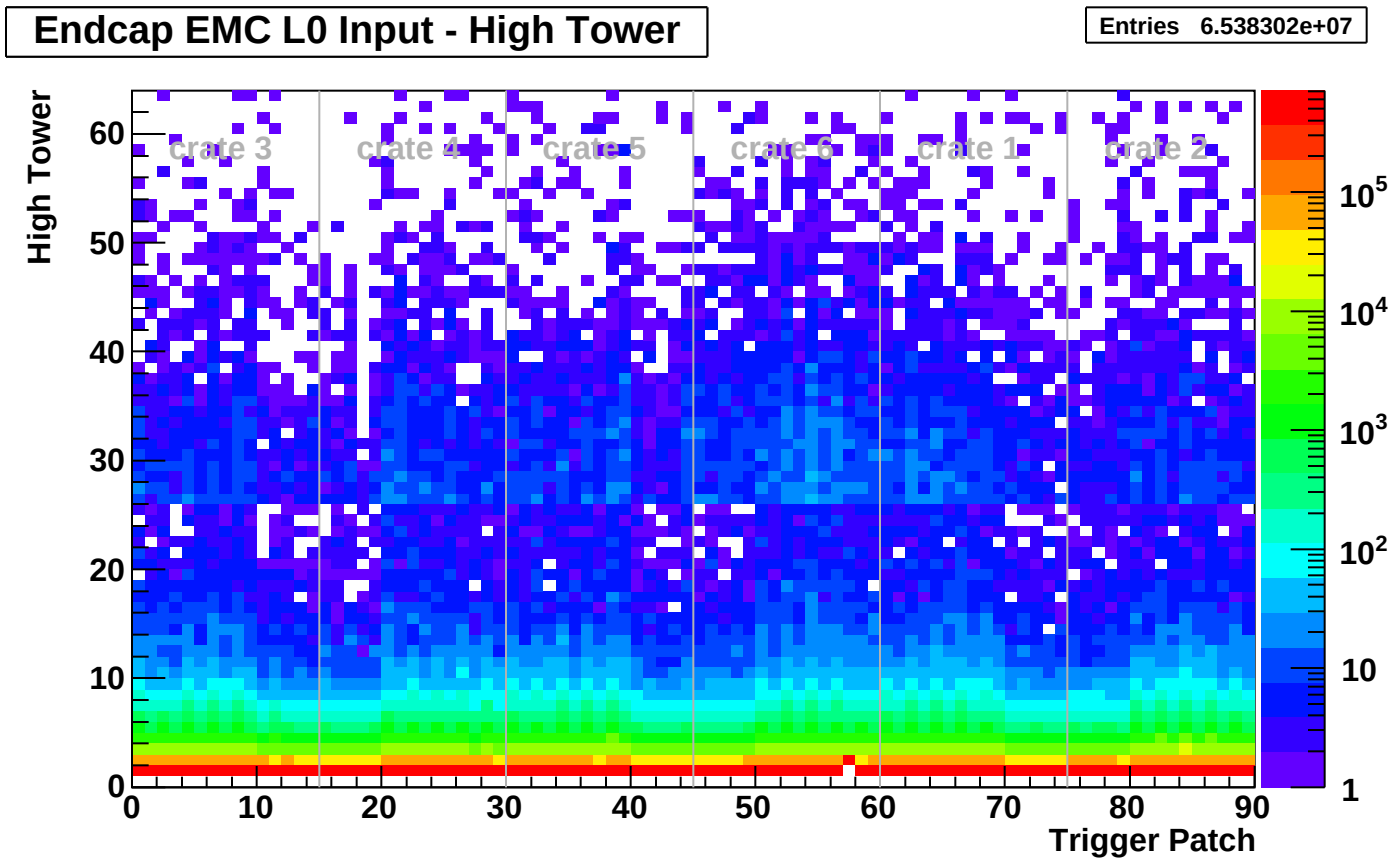

TCU bits
Entries 909114
TCU bits - Simulated
53416 138430 296581 9502 25189 385040 956
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

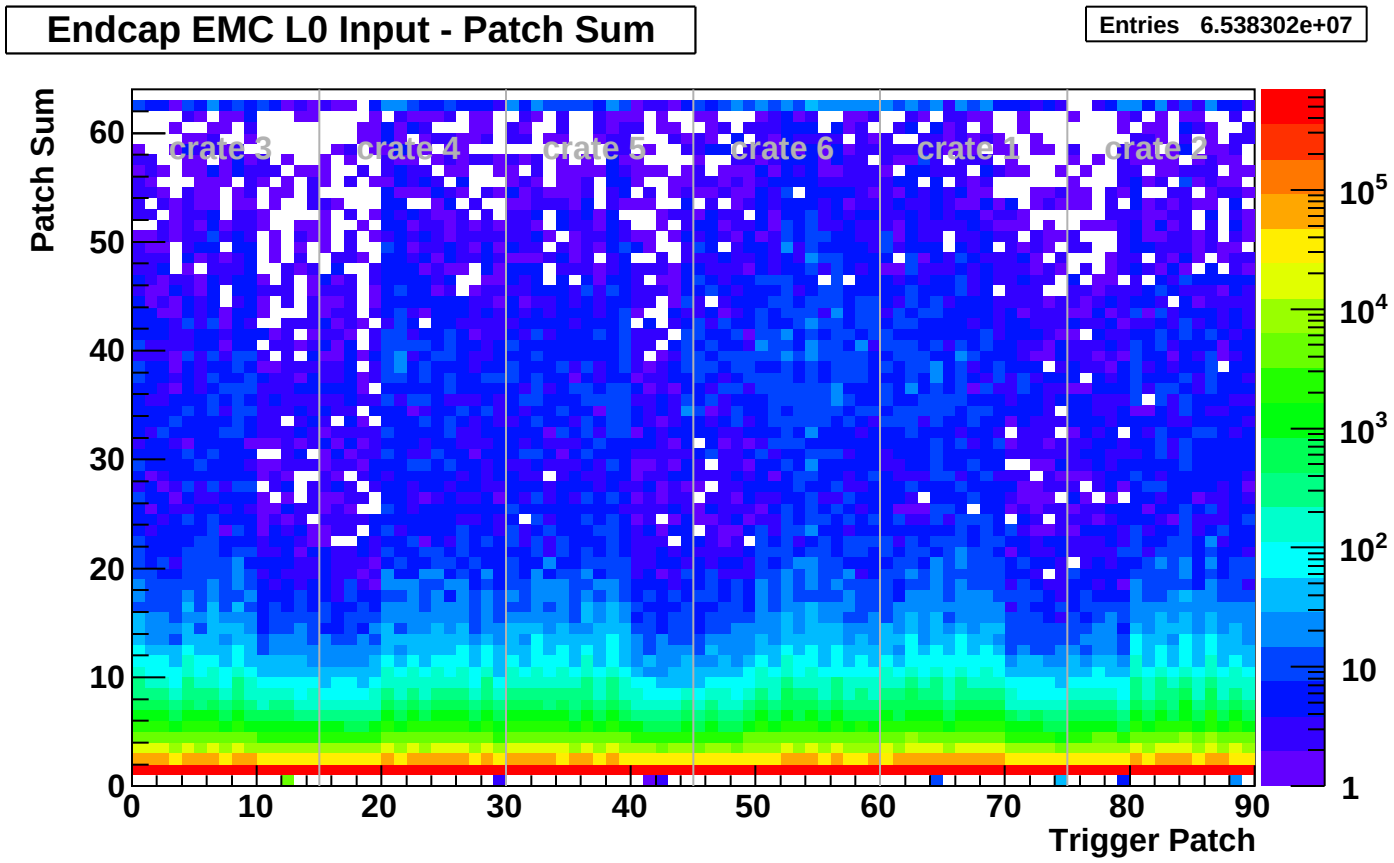

BunchId7Bit (BHT3)
Entries 11046

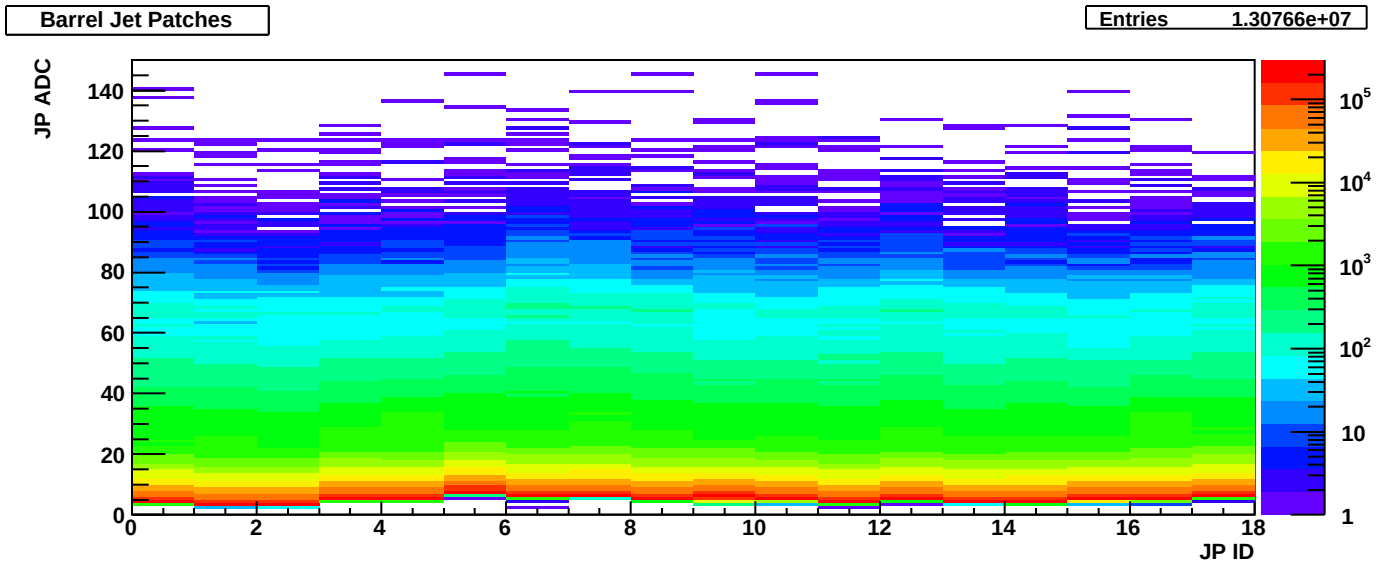

BunchId7Bit (all events)
Entries 726478

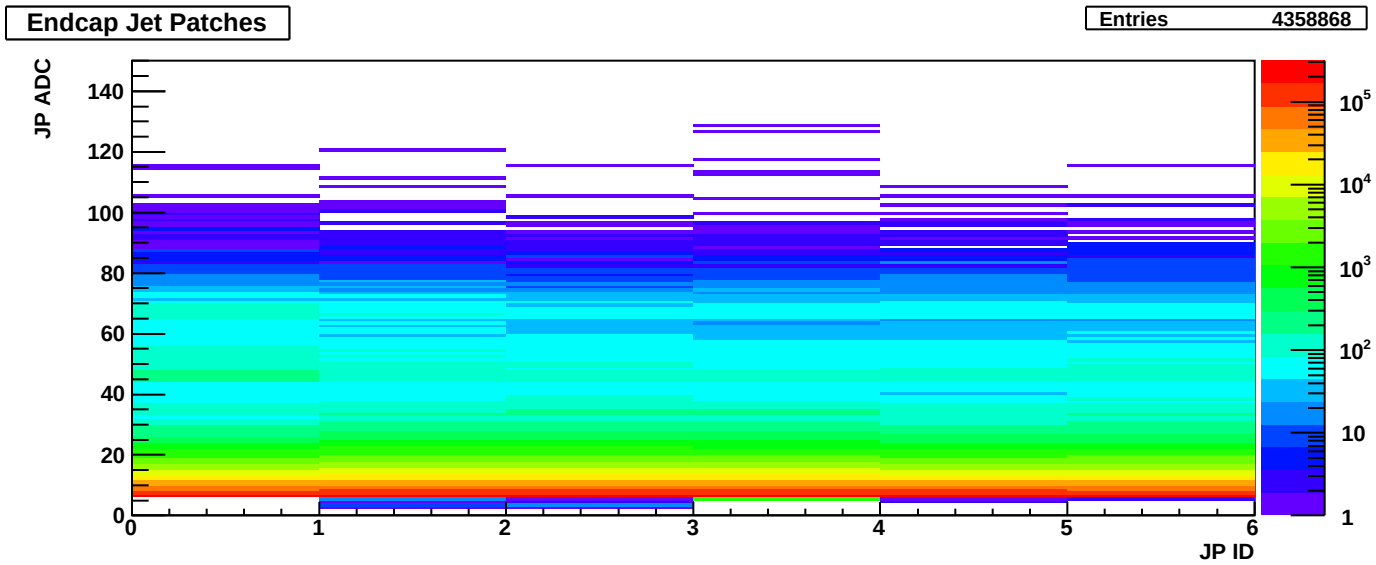

Barrel EMC L0 Input - High Tower
Entries 2.179434e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

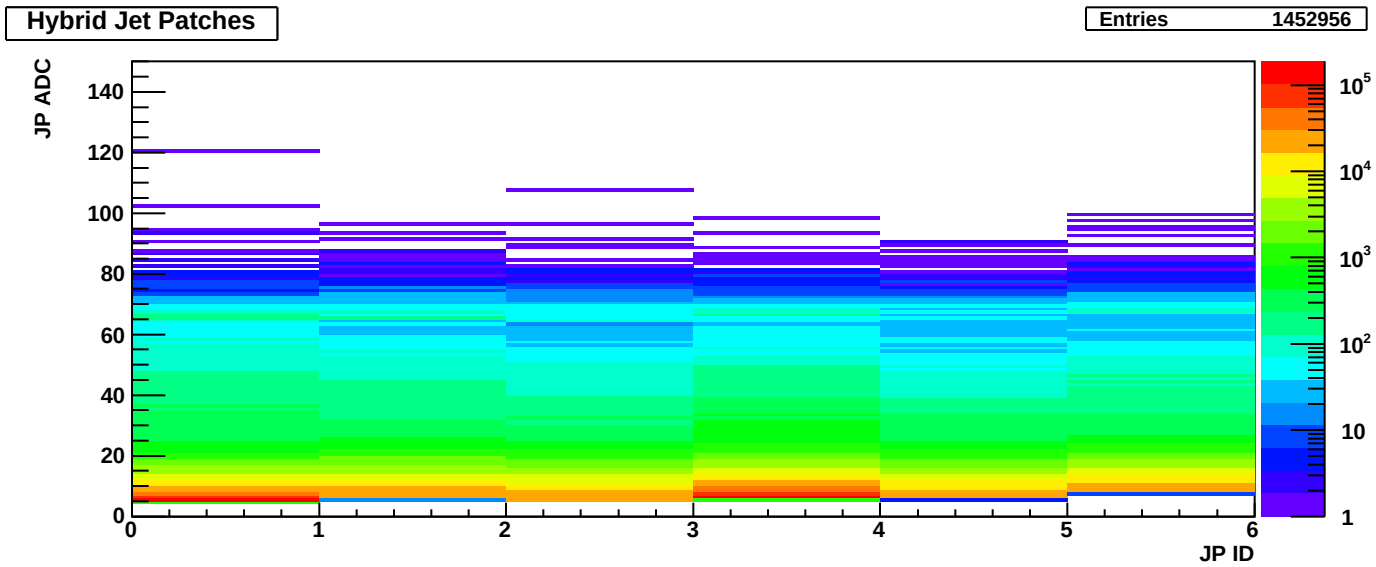

Barrel EMC L0 Input - Patch Sum
Entries 2.179434e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

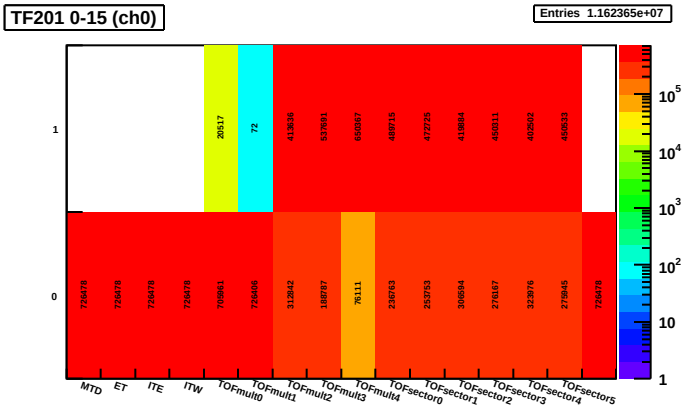

Endcap EMC L0 Input - High Tower
Entries 6.538302e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

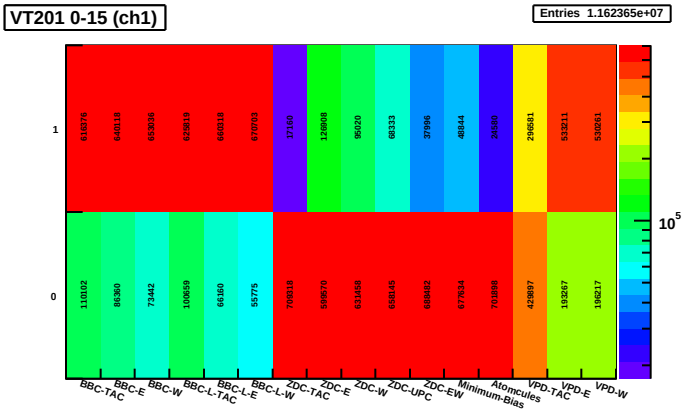

Endcap EMC L0 Input - Patch Sum
Entries 6.538302e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

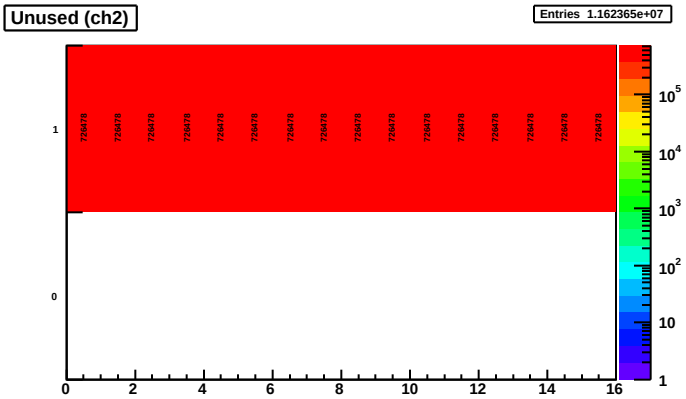

Barrel Jet Patches
Entries 1.30766e+07
JP ADC
JP ID

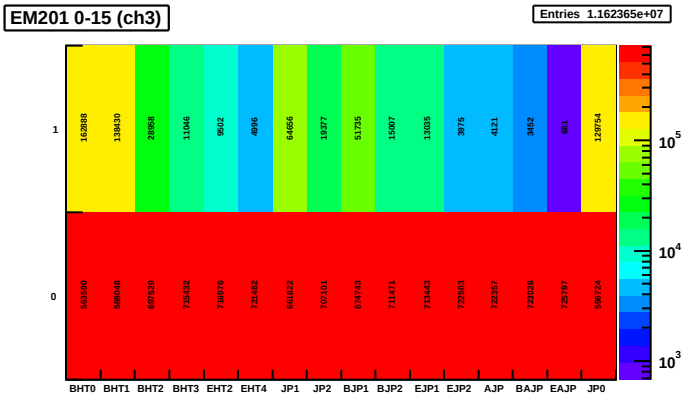

Endcap Jet Patches
Entries 4358868
JP ADC
JP ID

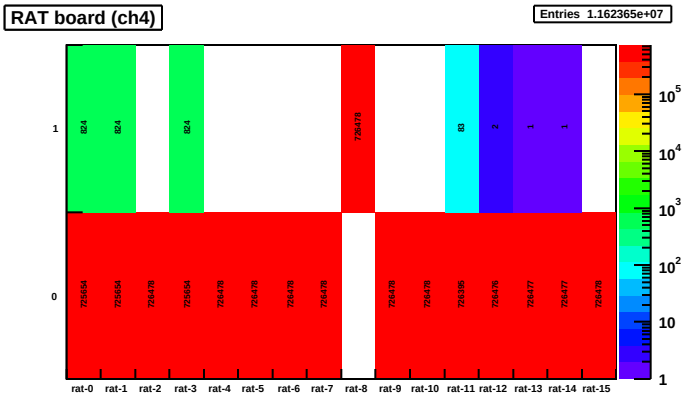

Hybrid Jet Patches
Entries 1452956
JP ADC
JP ID

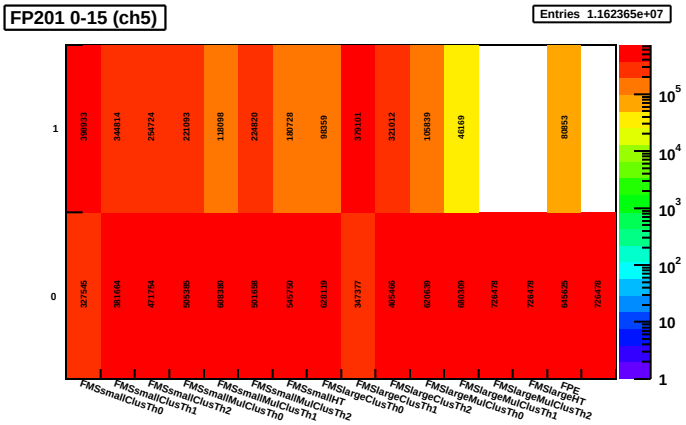

TF201 0-15 (ch0)
Entries 1.162365e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

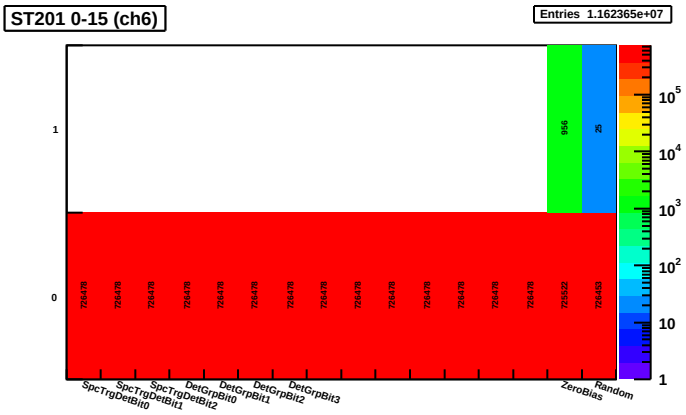

VT201 0-15 (ch1)
Entries 1.162365e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

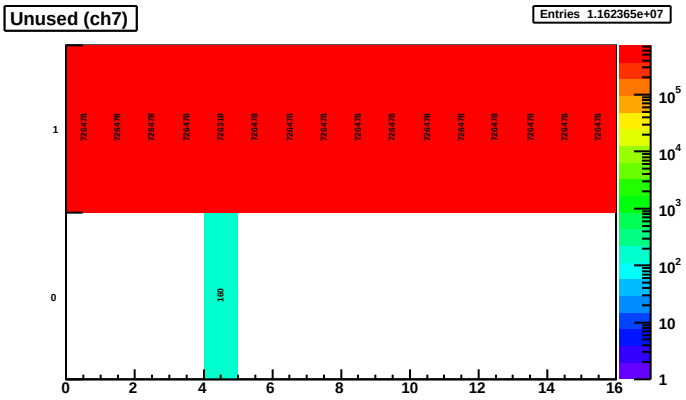

Unused (ch2)
Entries 1.162365e+07

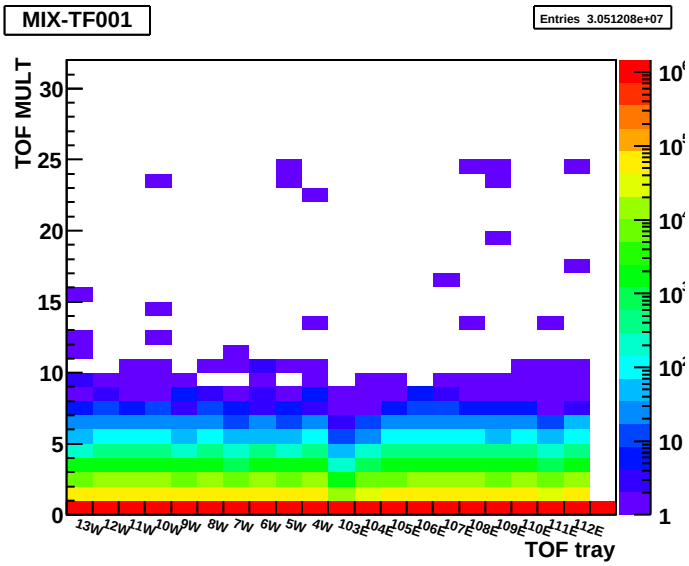

EM201 0-15 (ch3)
Entries 1.162365e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

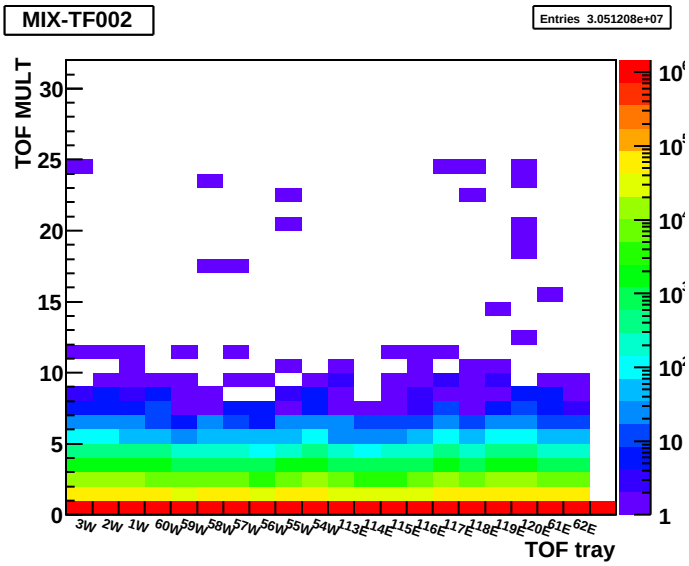

RAT board (ch4)
Entries 1.162365e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

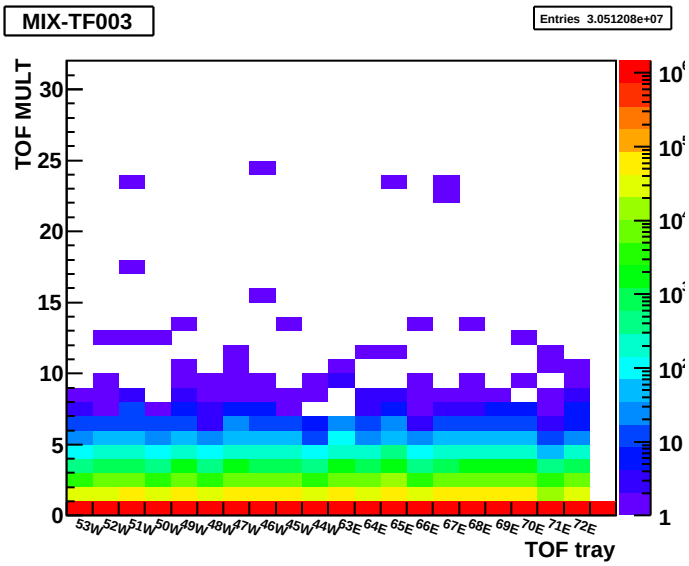

FP201 0-15 (ch5)
Entries 1.162365e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

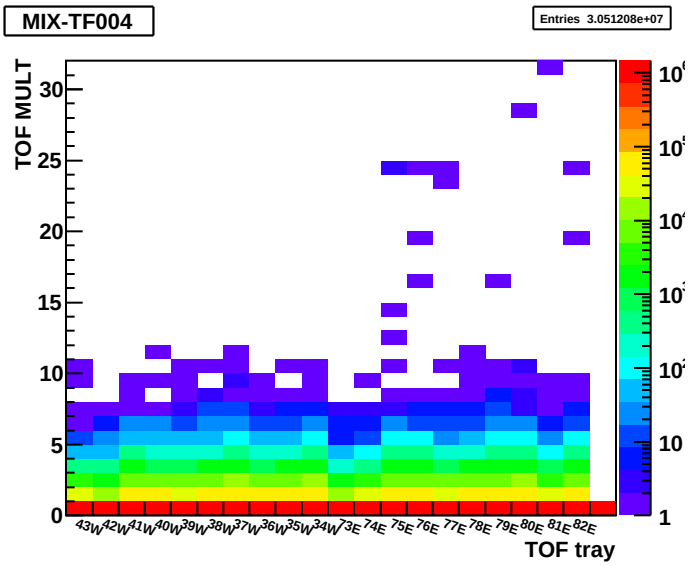

ST201 0-15 (ch6)
Entries 1.162365e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

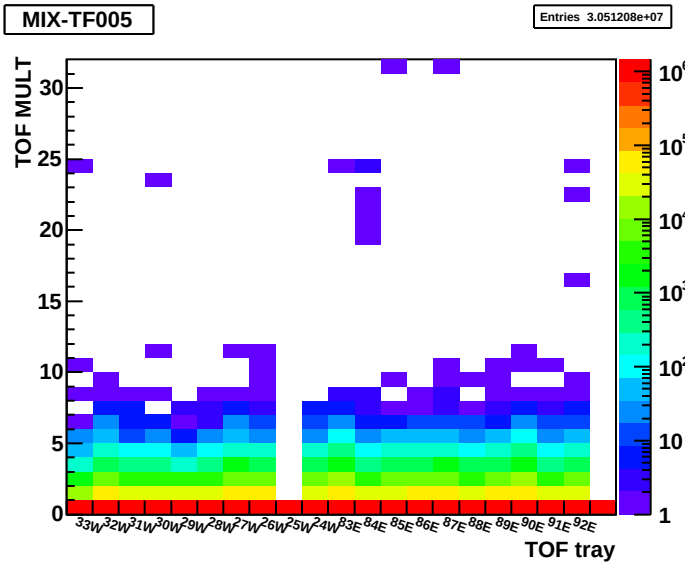

Unused (ch7)
Entries 1.162365e+07

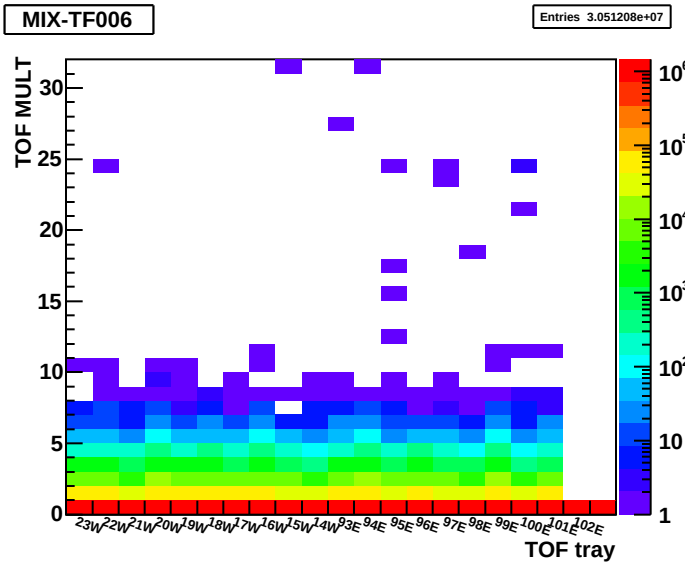

MIX-TF001
Entries 3.051208e+07
TOF MULT
TOF tray

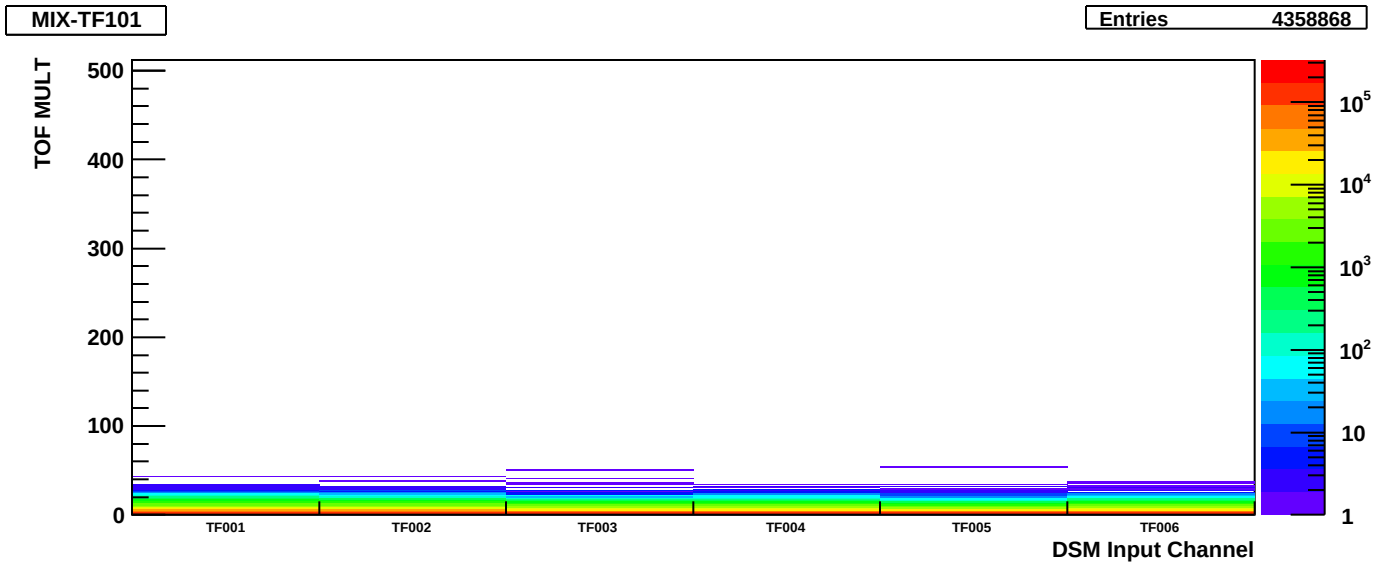

MIX-TF002
Entries 3.051208e+07
TOF MULT
TOF tray

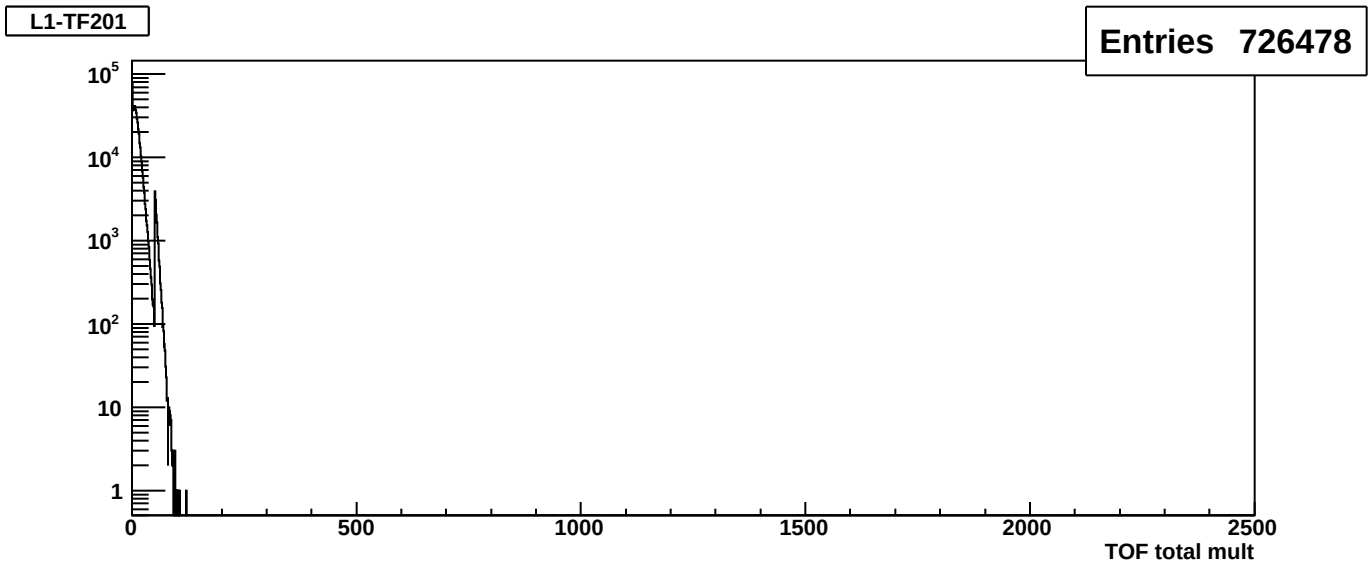

MIX-TF003
Entries 3.051208e+07
TOF MULT
TOF tray

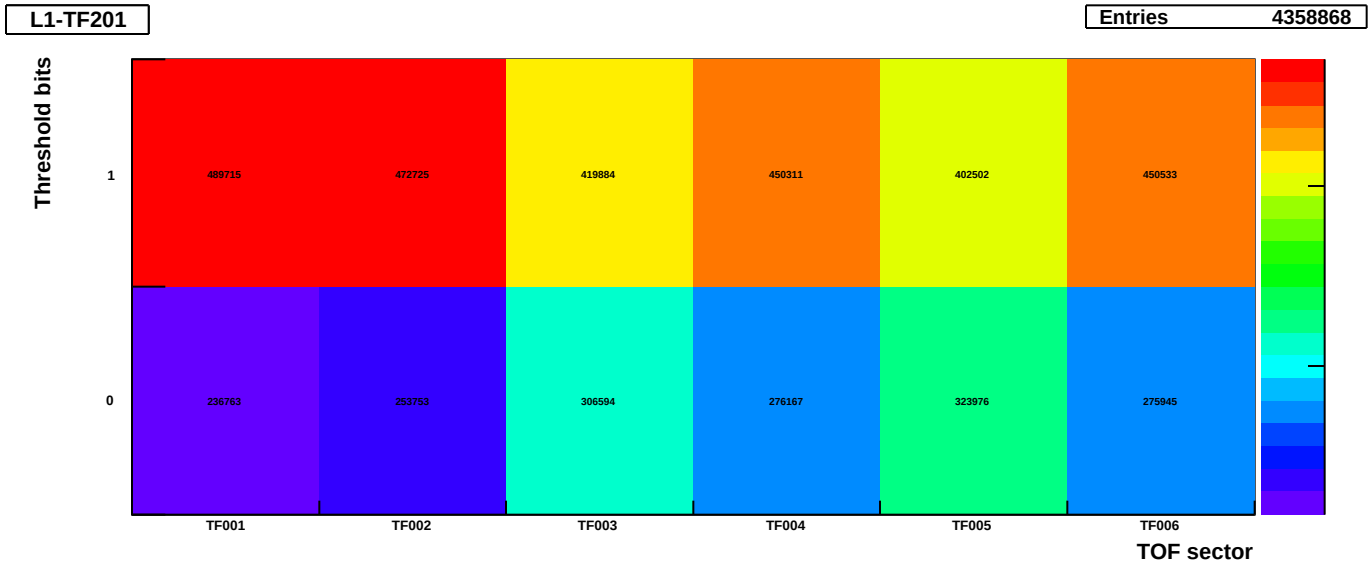

MIX-TF004
Entries 3.051208e+07
TOF MULT
TOF tray

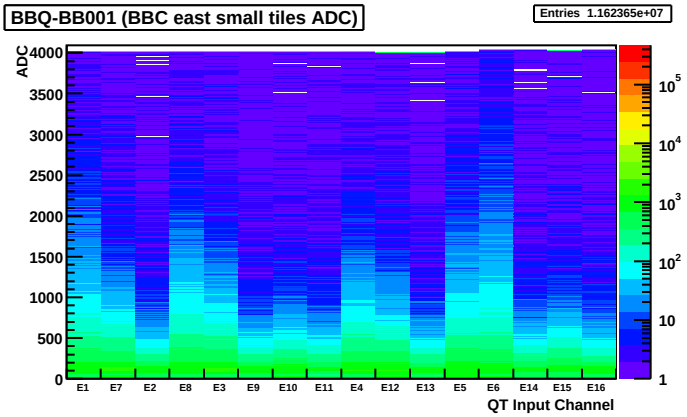

MIX-TF005
Entries 3.051208e+07
TOF MULT
TOF tray

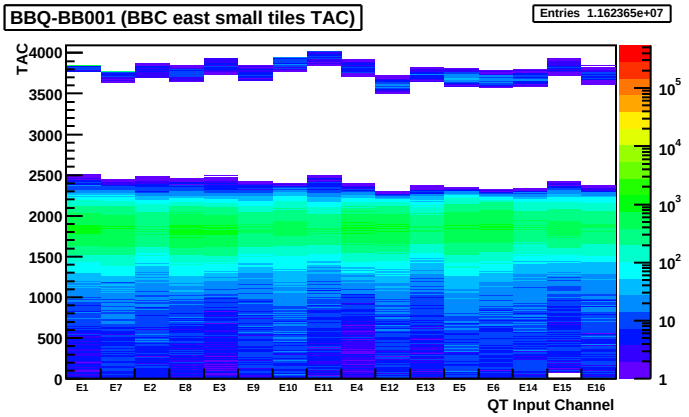

MIX-TF006
Entries 3.051208e+07
TOF MULT
TOF tray

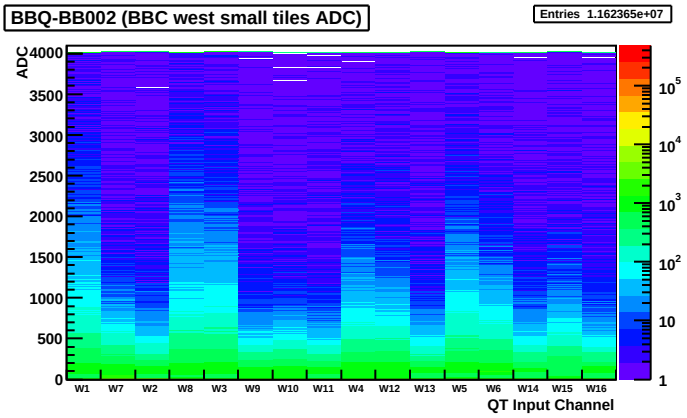

MIX-TF101
Entries 4358868
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

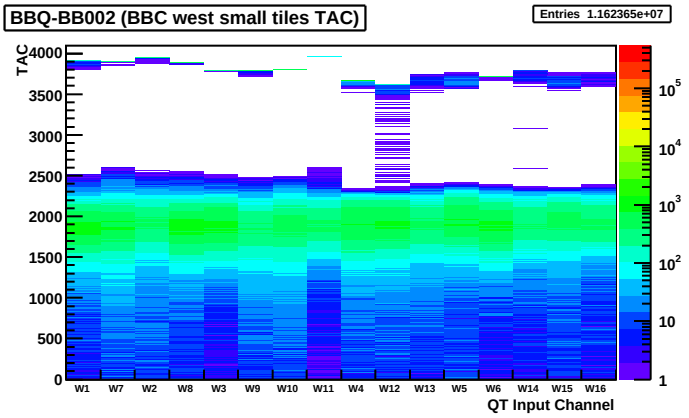

L1-TF201
Entries 726478
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

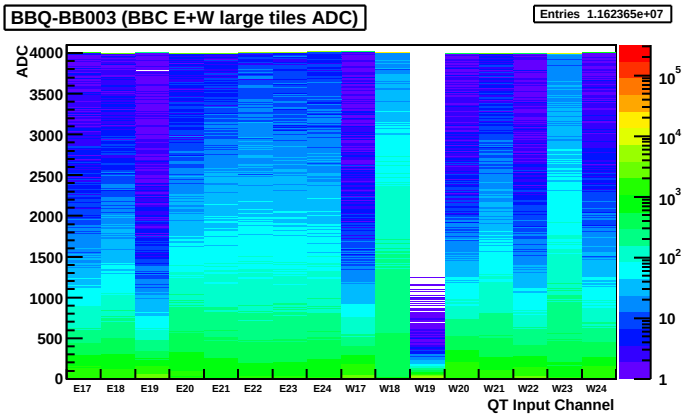

L1-TF201
Entries 4358868
Threshold bits
1
0
489715
472725
419884
450311
402502
450533
236763
253753
306594
276167
323976
275945
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

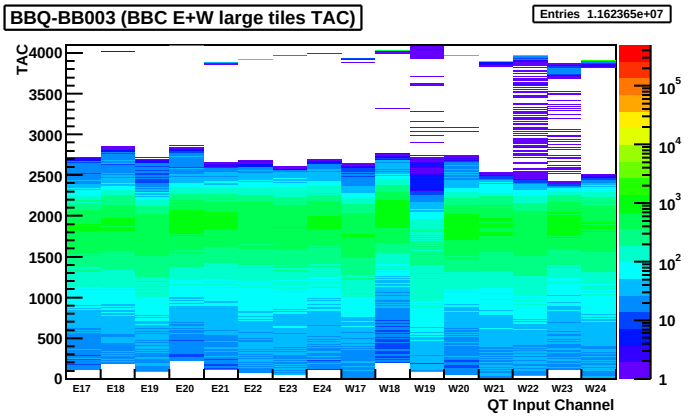

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.162365e+07
ADC
QT Input Channel

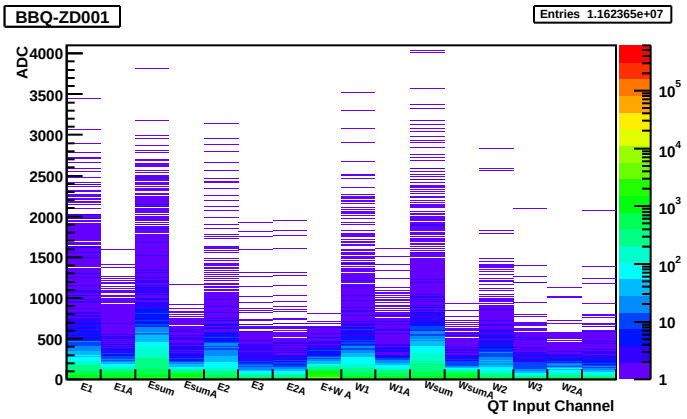

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.162365e+07
TAC
QT Input Channel

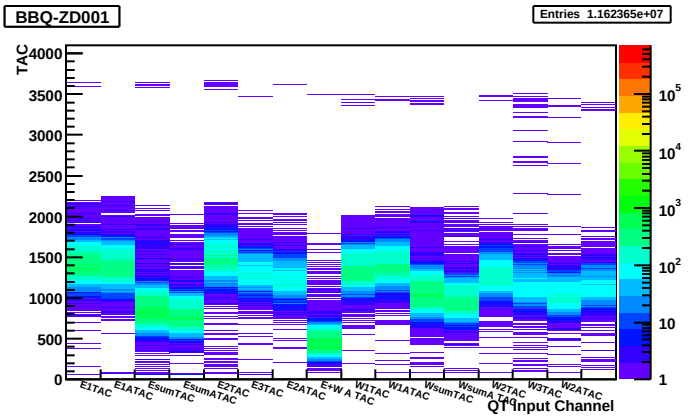

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.162365e+07
ADC
QT Input Channel

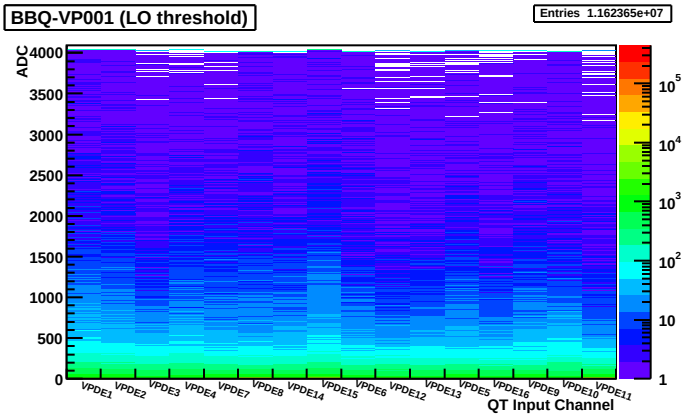

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.162365e+07
TAC
QT Input Channel

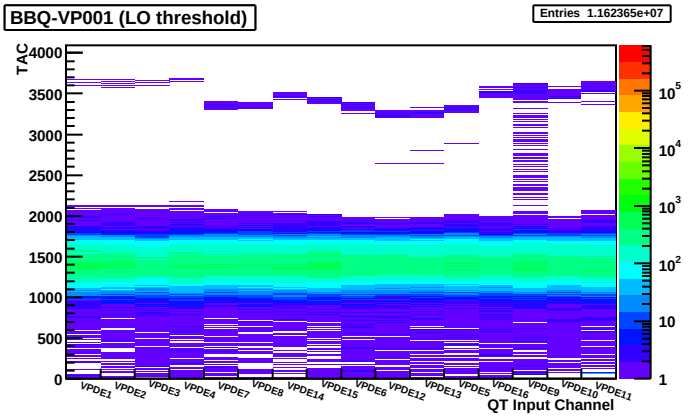

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.162365e+07
ADC
QT Input Channel

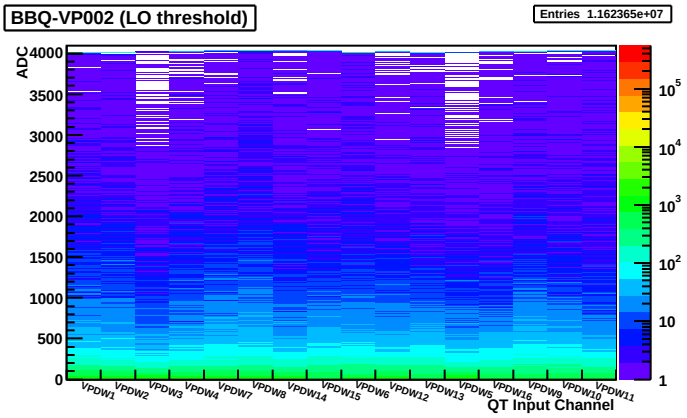

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.162365e+07
TAC
QT Input Channel

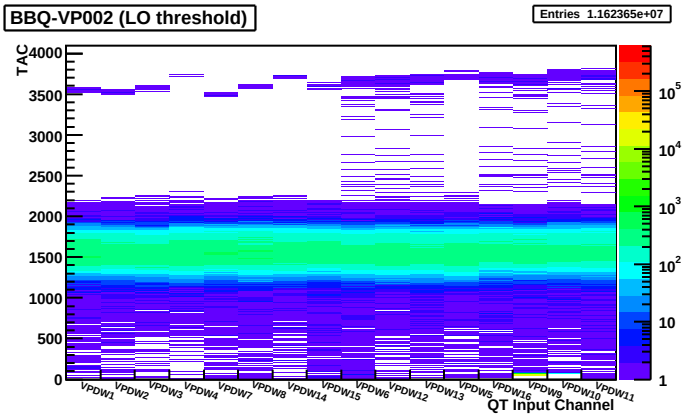

BBQ-ZD001
Entries 1.162365e+07
ADC
QT Input Channel

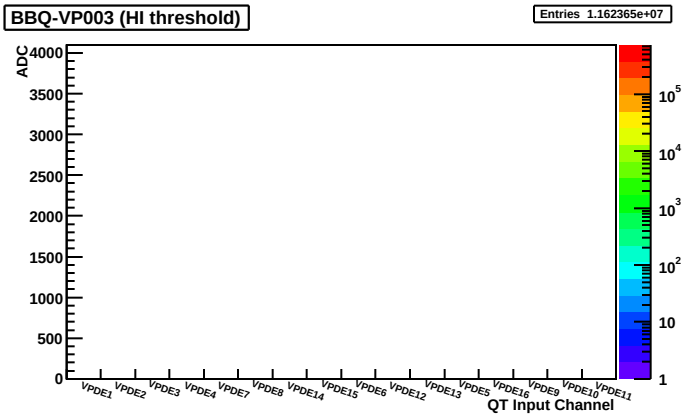

BBQ-ZD001
Entries 1.162365e+07
TAC
QT Input Channel

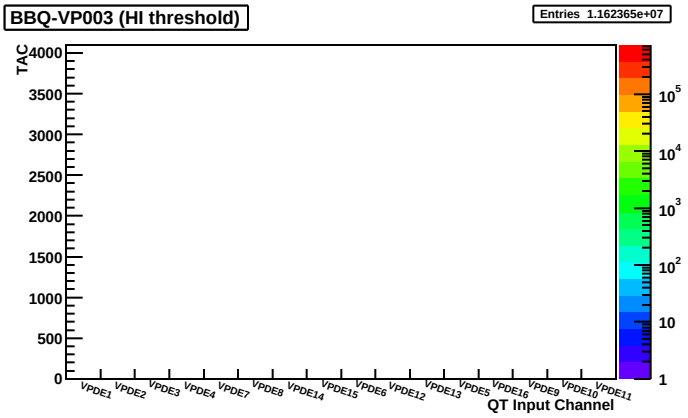

BBQ-VP001 (LO threshold)
Entries 1.162365e+07
ADC
QT Input Channel

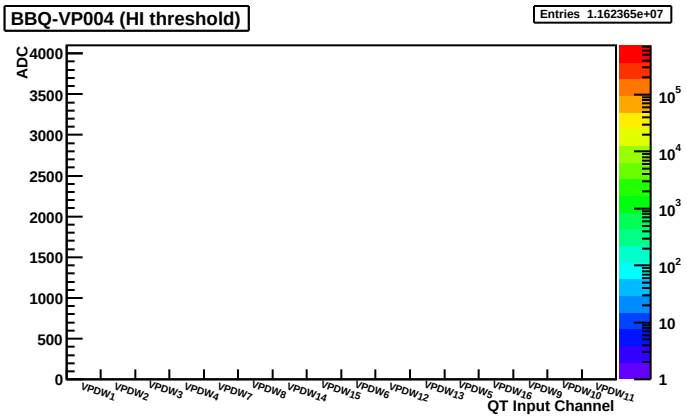

BBQ-VP001 (LO threshold)
Entries 1.162365e+07
TAC
QT Input Channel

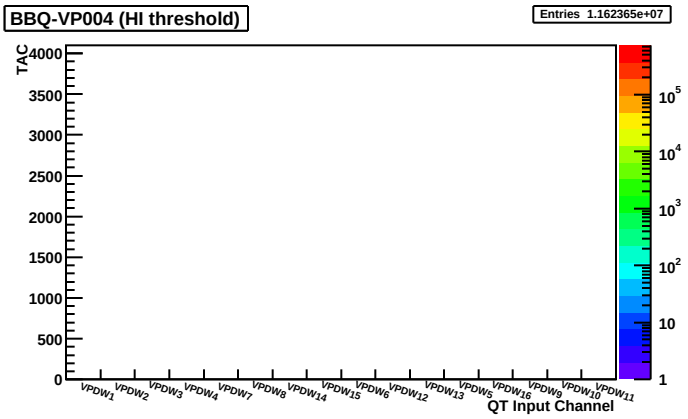

BBQ-VP002 (LO threshold)
Entries 1.162365e+07
ADC
QT Input Channel

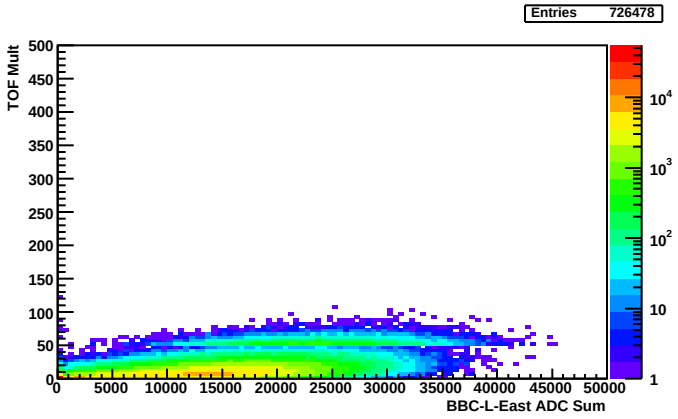

BBQ-VP002 (LO threshold)
Entries 1.162365e+07
TAC
QT Input Channel

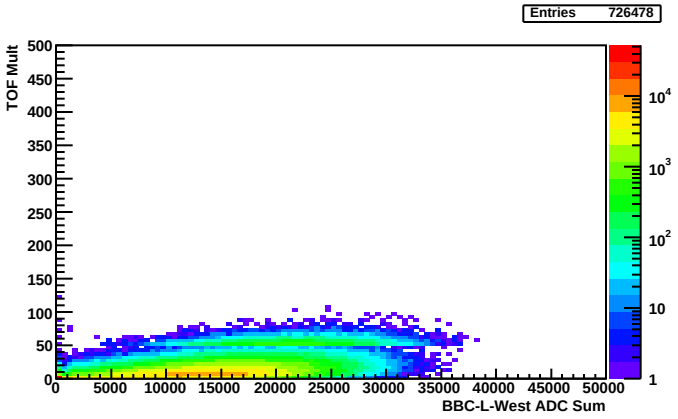

BBQ-VP003 (HI threshold)
Entries 1.162365e+07
ADC
QT Input Channel

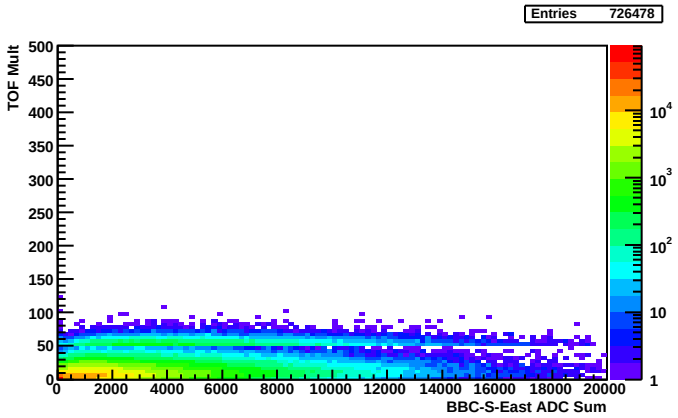

BBQ-VP003 (HI threshold)
Entries 1.162365e+07
TAC
QT Input Channel

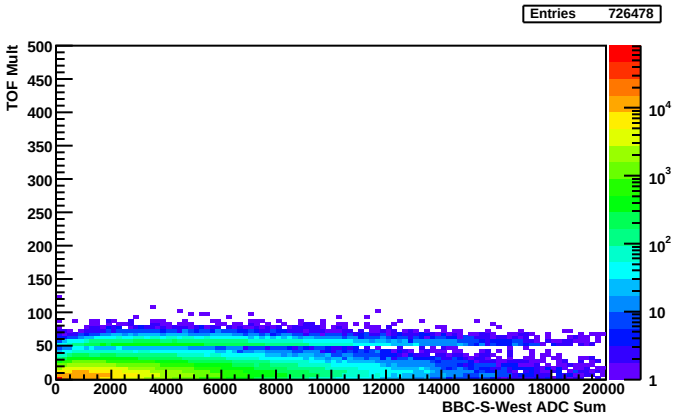

BBQ-VP004 (HI threshold)
Entries 1.162365e+07
ADC
QT Input Channel

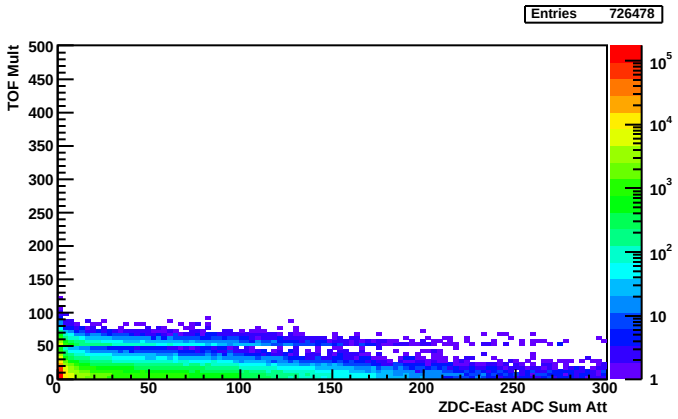

BBQ-VP004 (HI threshold)
Entries 1.162365e+07
TAC
QT Input Channel

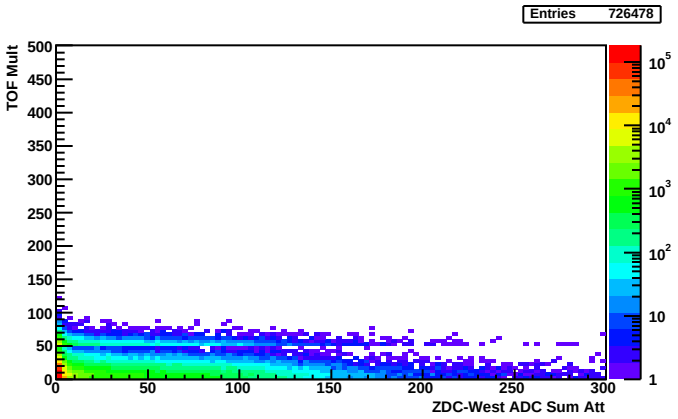

Entries 726478
TOF Mult
BBC-L-East ADC Sum

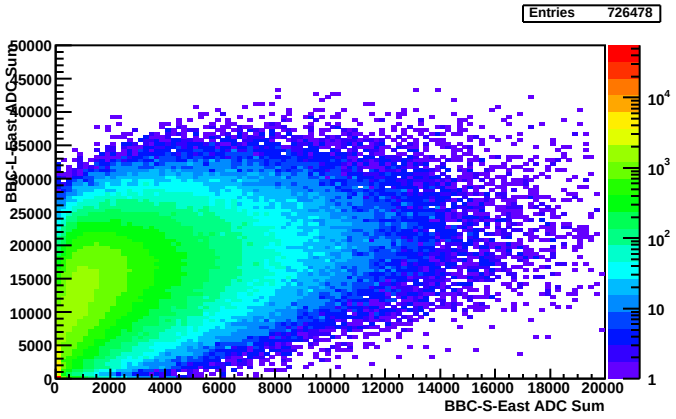

Entries 726478
TOF Mult
BBC-L-West ADC Sum

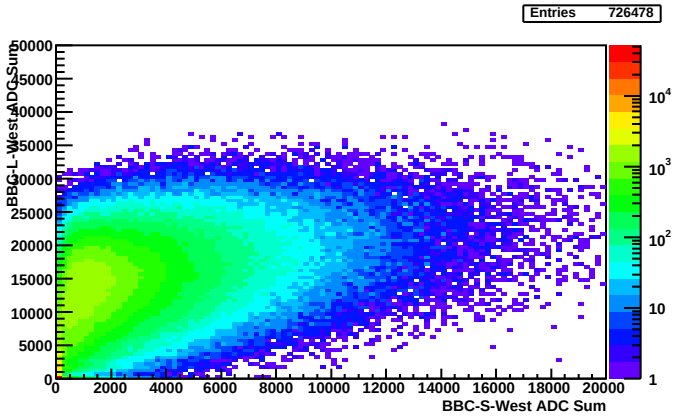

Entries 726478
TOF Mult
BBC-S-East ADC Sum

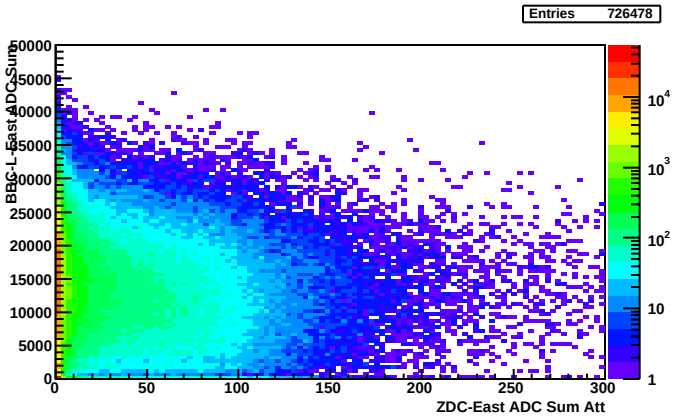

Entries 726478
TOF Mult
BBC-S-West ADC Sum

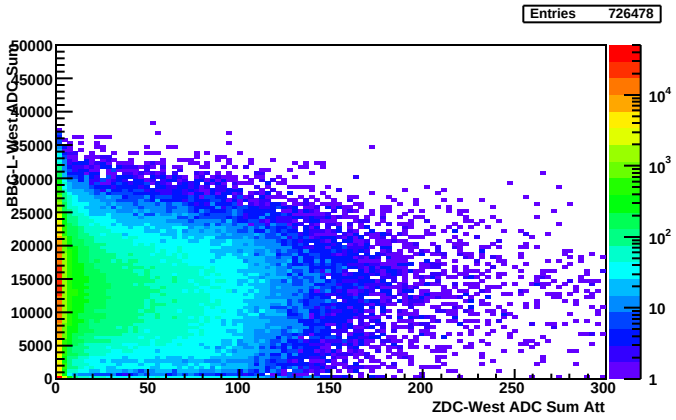

Entries 726478
TOF Mult
ZDC-East ADC Sum Att

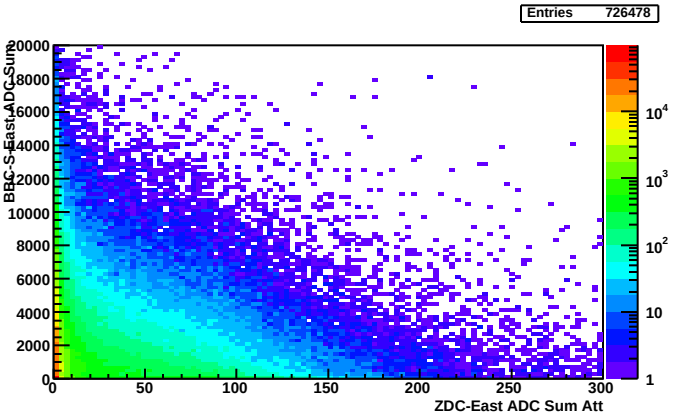

Entries 726478
TOF Mult
ZDC-West ADC Sum Att

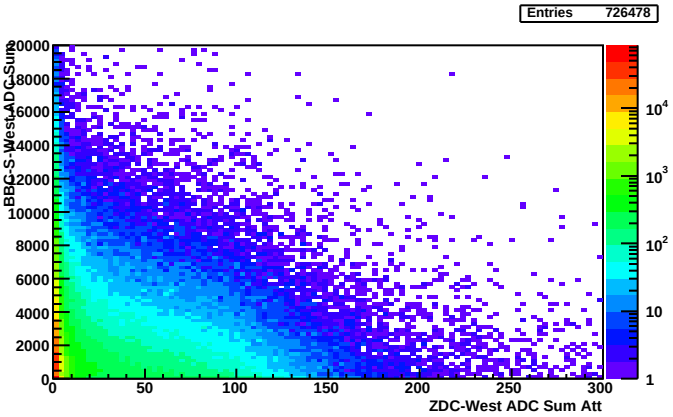

Entries 726478
BBC-L-East ADC Sum
BBC-S-East ADC Sum

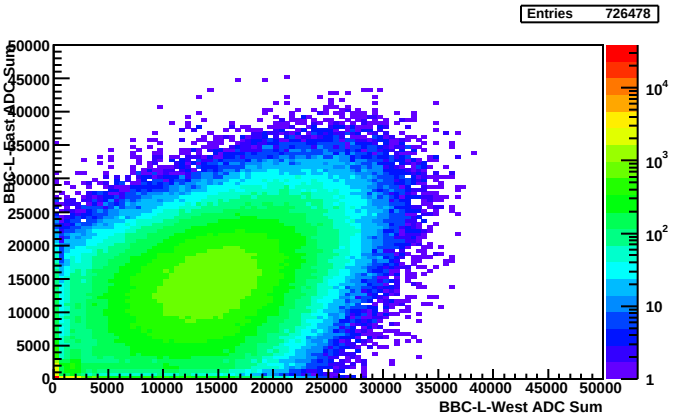

Entries 726478
BBC-L-West ADC Sum
BBC-S-West ADC Sum

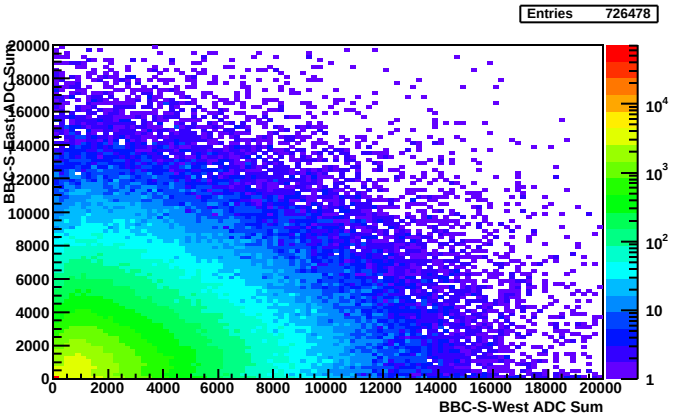

Entries 726478
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

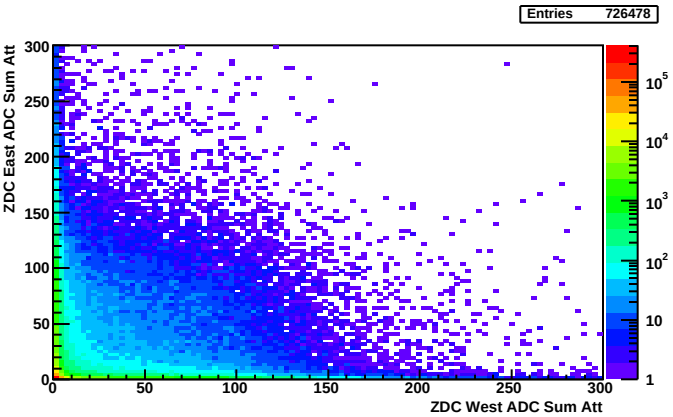

Entries 726478
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

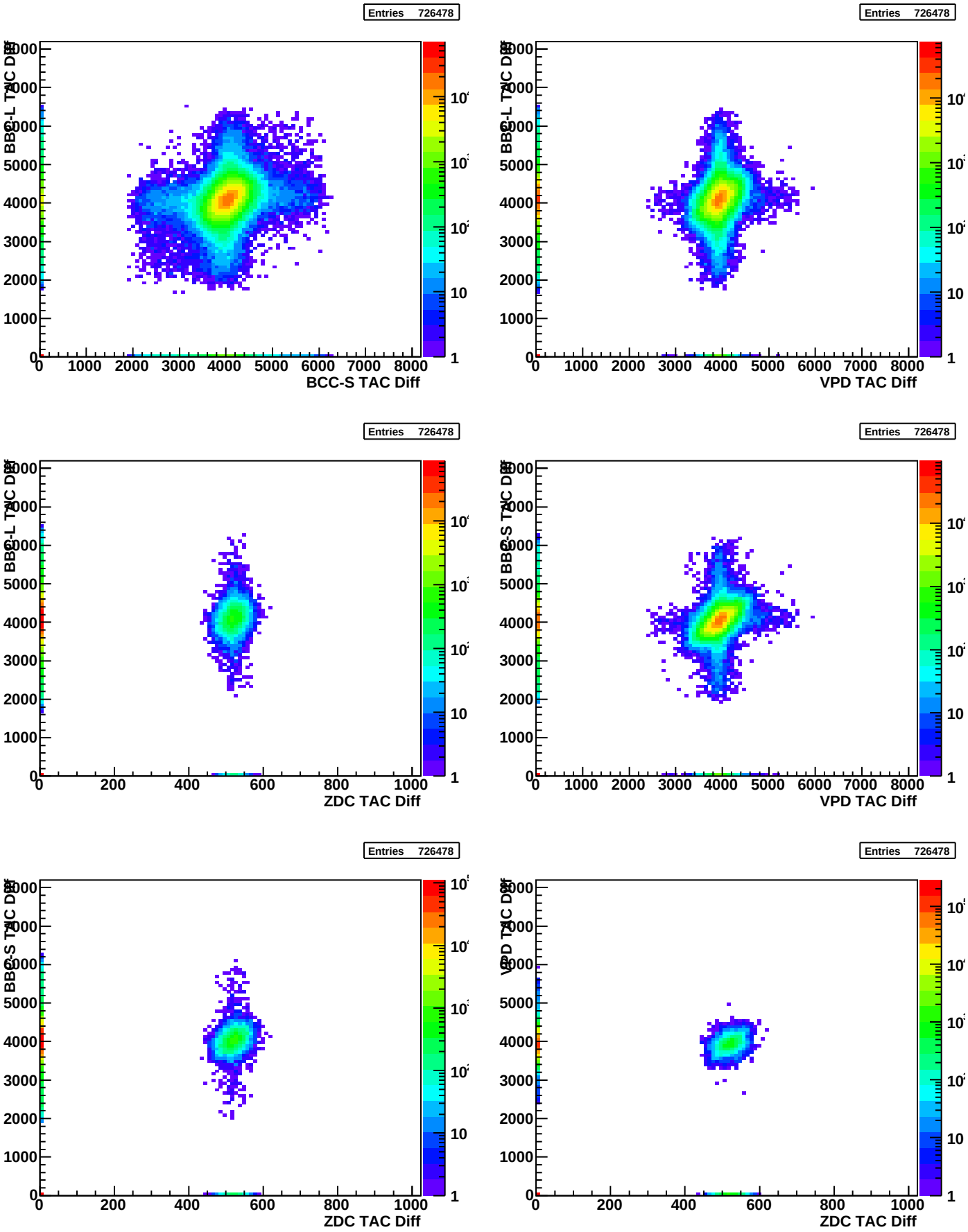

Entries 726478
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

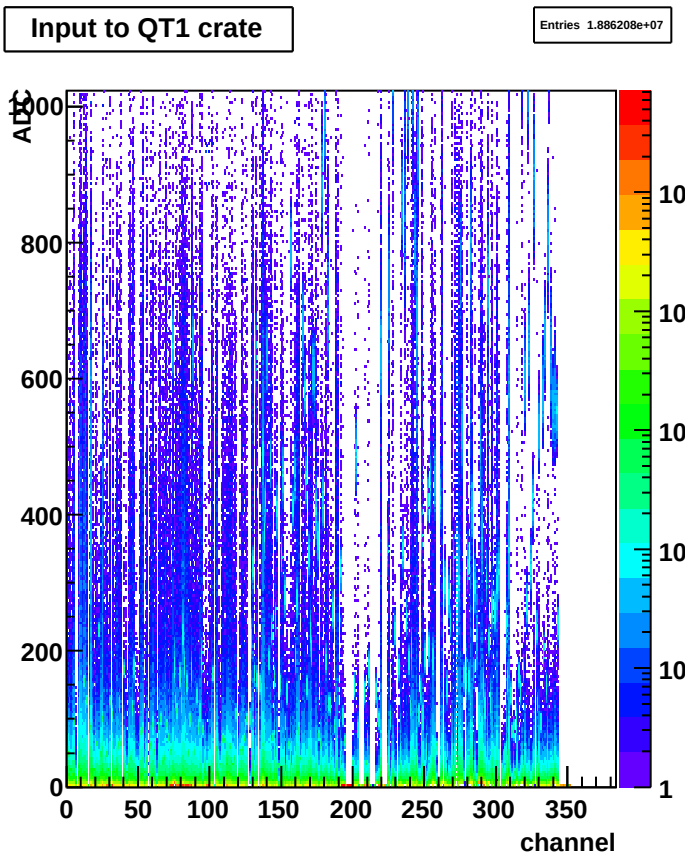

Entries 726478
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

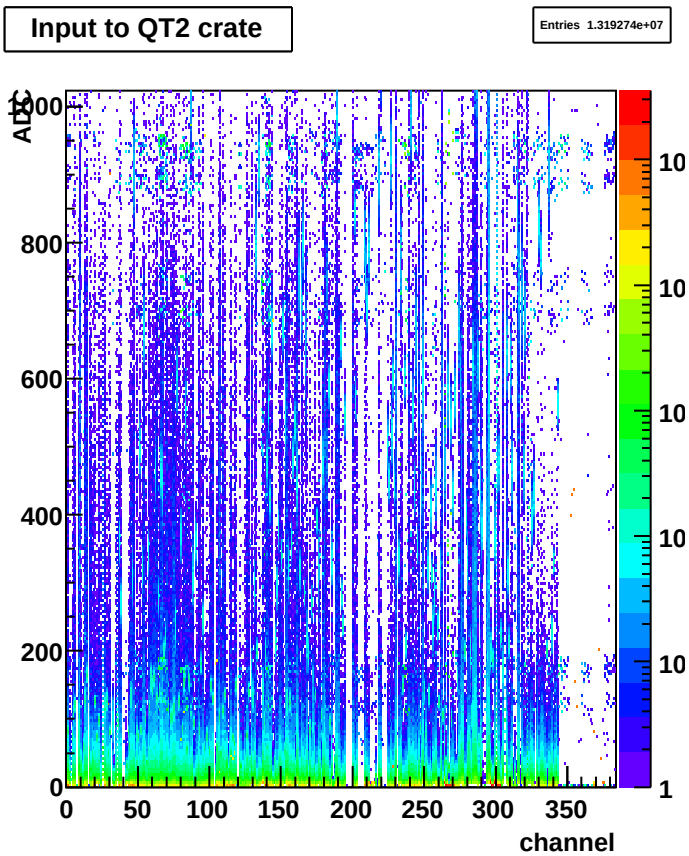

Entries 726478
BBC-L-East ADC Sum
BBC-L-West ADC Sum

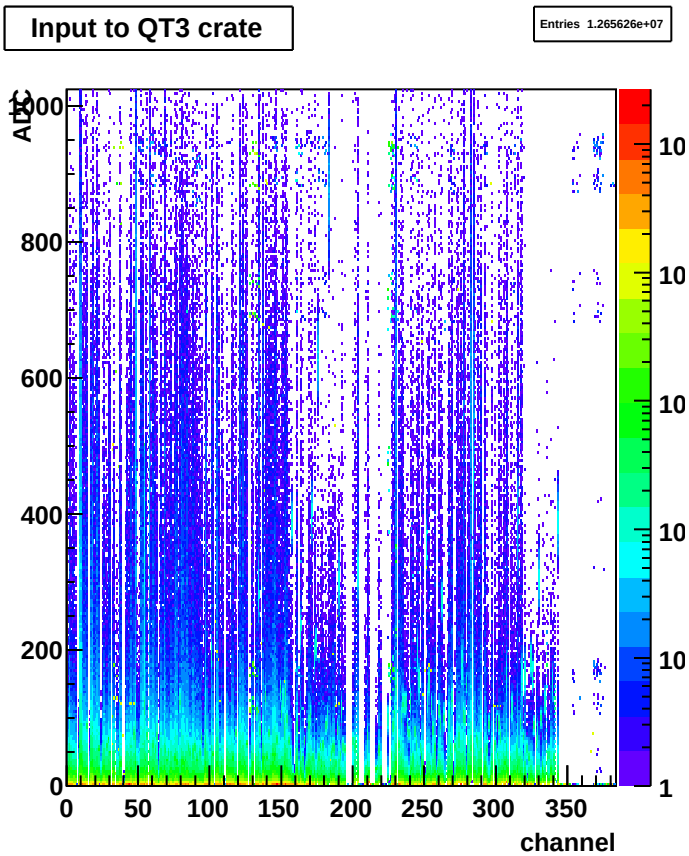

Entries 726478
BBC-S-East ADC Sum
BBC-S-West ADC Sum

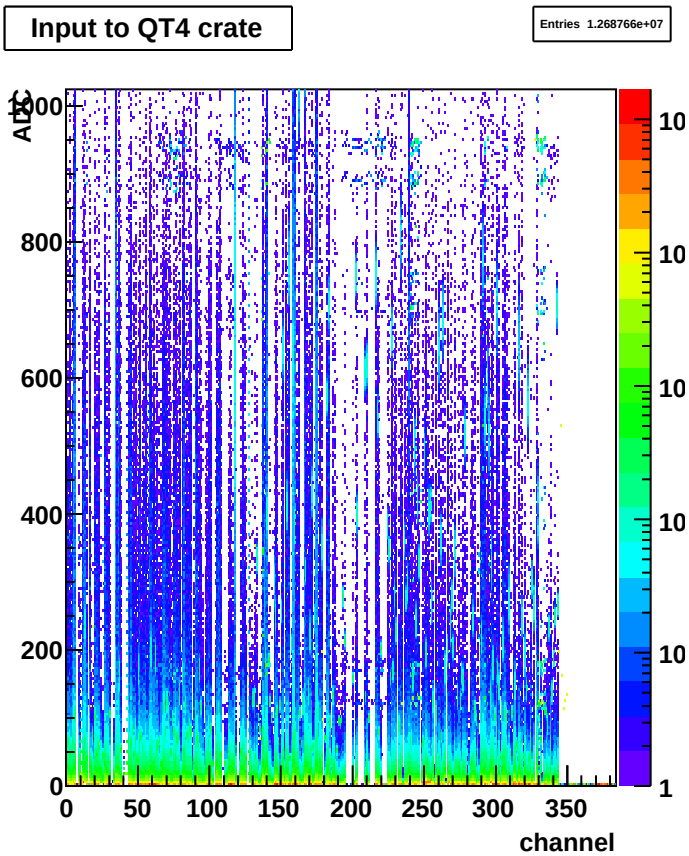

Entries 726478
ZDC East ADC Sum Att
ZDC West ADC Sum Att

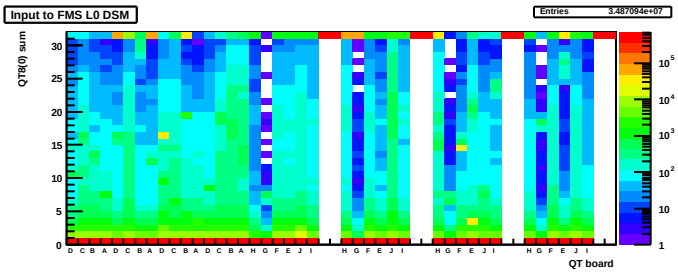

Entries 726478
BBC-L TAC Diff
BCC-S TAC Diff
Entries 726478
BBC-L TAC Diff
VPD TAC Diff
Entries 726478
BBC-L TAC Diff
ZDC TAC Diff
Entries 726478
BBC-S TAC Diff
VPD TAC Diff
Entries 726478
BBC-S TAC Diff
ZDC TAC Diff
Entries 726478
VPD TAC Diff
ZDC TAC Diff

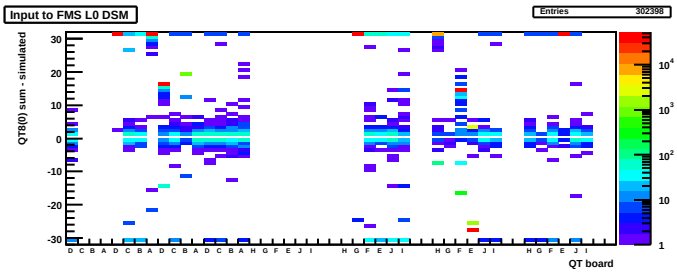

Input to QT1 crate
Entries 1.886208e+07
ADC
channel

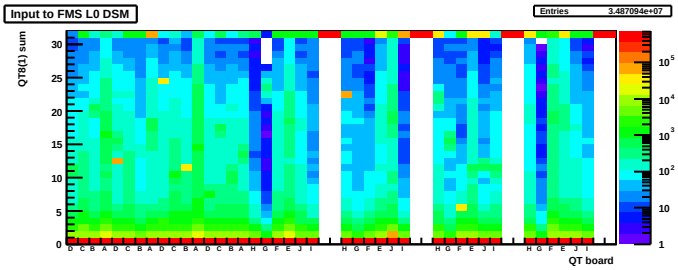

Input to QT2 crate
Entries 1.319274e+07
ADC
channel

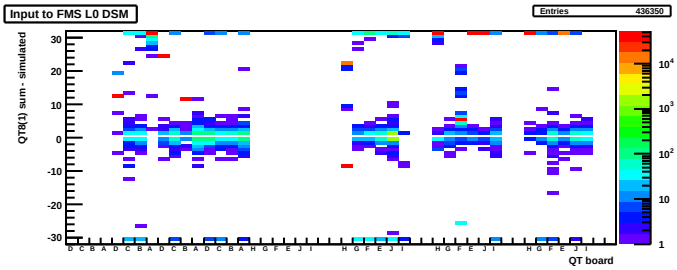

Input to QT3 crate
Entries 1.265626e+07
ADC
channel

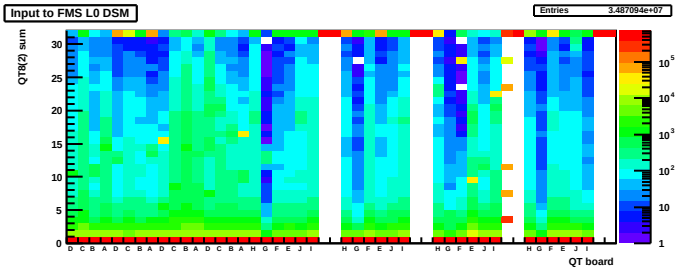

Input to QT4 crate
Entries 1.268766e+07
ADC
channel

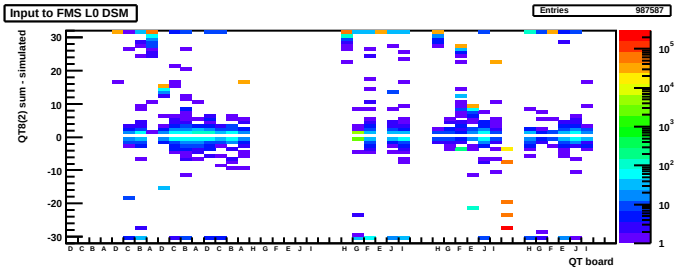

Input to FMS L0 DSM
Entries 3.487094e+07
QT8(0) sum
QT board

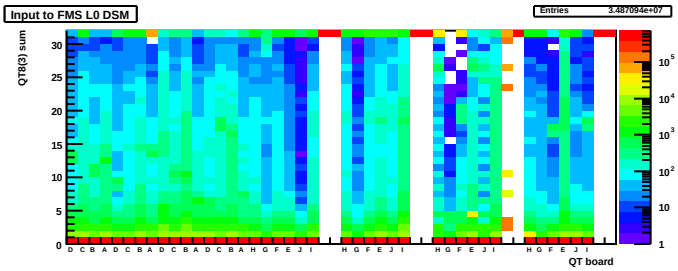

Input to FMS L0 DSM
Entries 302398
QT8(0) sum - simulated
QT board

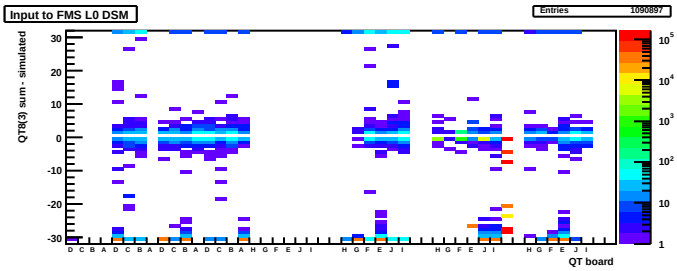

Input to FMS L0 DSM
Entries 3.487094e+07
QT8(1) sum
QT board

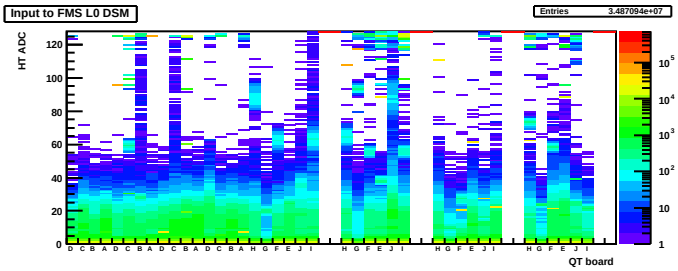

Input to FMS L0 DSM
Entries 436350
QT8(1) sum - simulated
QT board

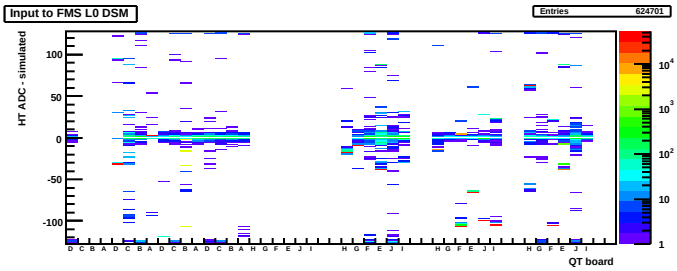

Input to FMS L0 DSM
Entries 3.487094e+07
QT8(2) sum
QT board

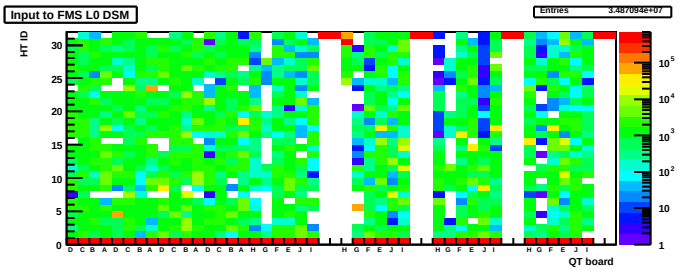

Input to FMS L0 DSM
Entries 987587
QT8(2) sum - simulated
QT board

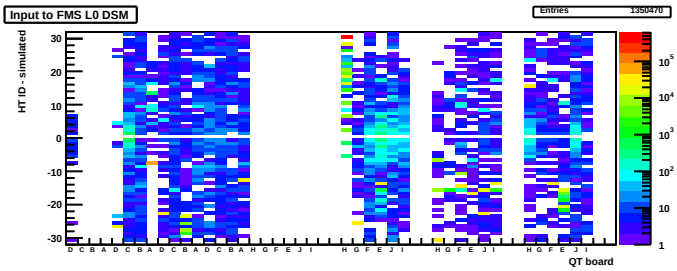

Input to FMS L0 DSM
Entries 3.487094e+07
QT8(3) sum
QT board

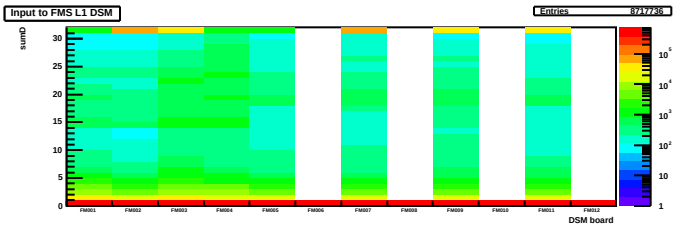

Input to FMS L0 DSM
Entries 1090897
QT8(3) sum - simulated
QT board

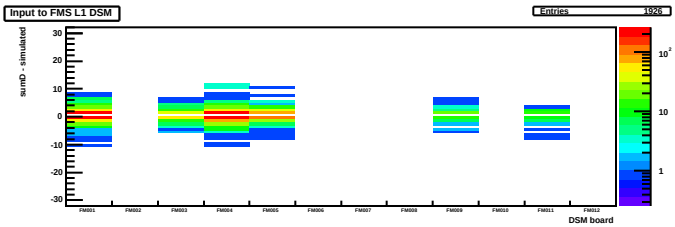

Input to FMS L0 DSM
Entries 3.487094e+07
HT ADC
QT board

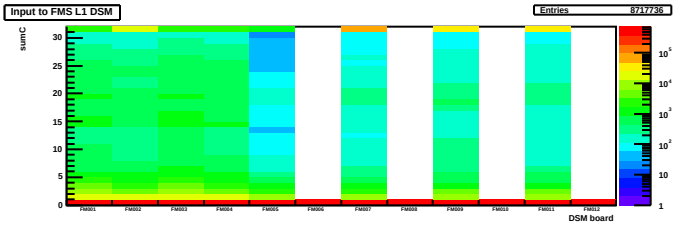

Input to FMS L0 DSM
Entries 624701
HT ADC - simulated
QT board

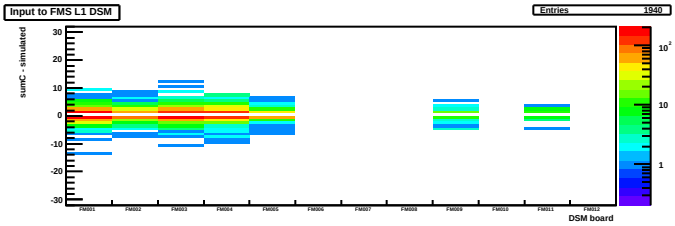

Input to FMS L0 DSM
Entries 3.487094e+07
HT ID
QT board

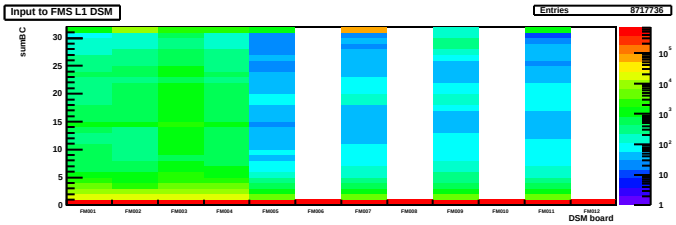

Input to FMS L0 DSM
Entries 1350470
HT ID - simulated
QT board

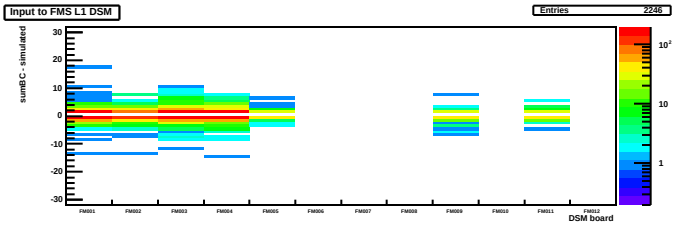

Input to FMS L1 DSM
Entries 8717736
sumD
DSM board

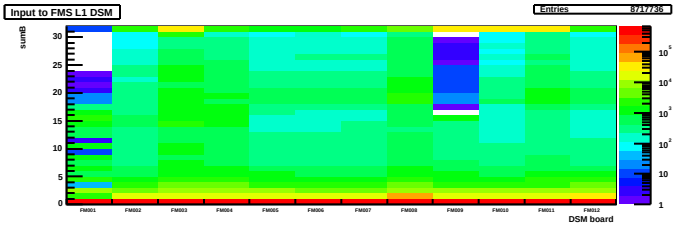

Input to FMS L1 DSM
Entries 1926
sumD - simulated
DSM board

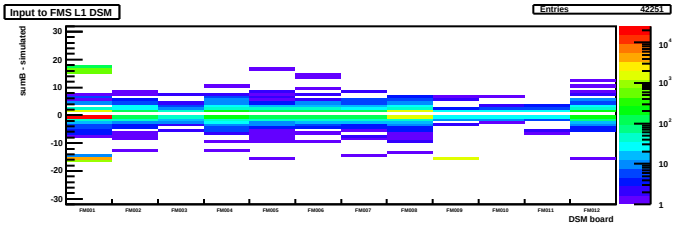

Input to FMS L1 DSM
Entries 8717736
sumC
DSM board

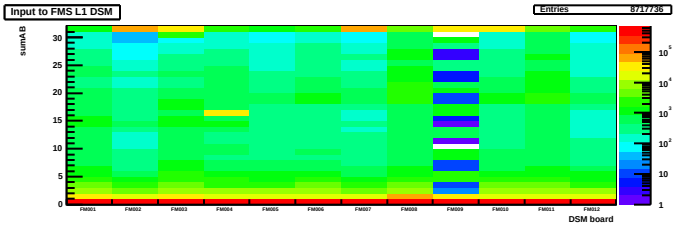

Input to FMS L1 DSM
Entries 1940
sumC - simulated
DSM board

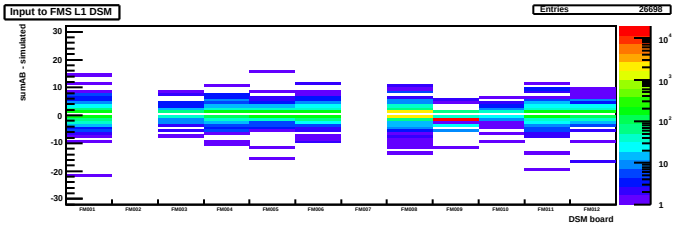

Input to FMS L1 DSM
Entries 8717736
sumBC
DSM board

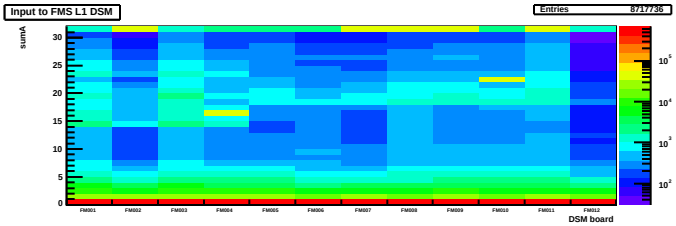

Input to FMS L1 DSM
Entries 2246
sumBC - simulated
DSM board

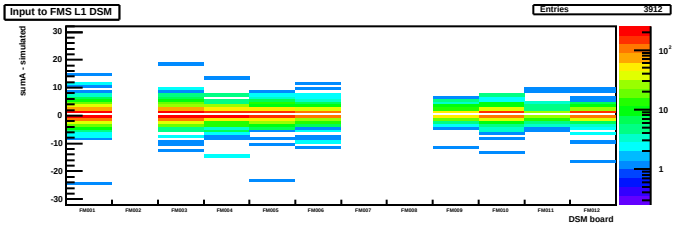

Input to FMS L1 DSM
Entries 8717736
sumB
DSM board

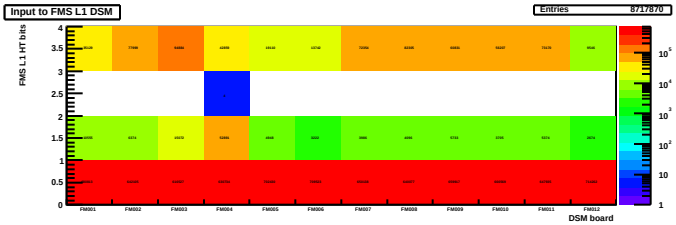

Input to FMS L1 DSM
Entries 42251
sumB - simulated
DSM board

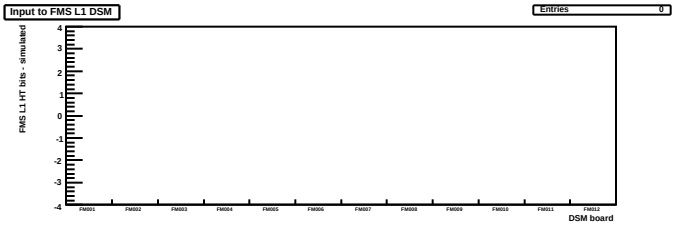

Input to FMS L1 DSM
Entries 8717736
sumAB
DSM board

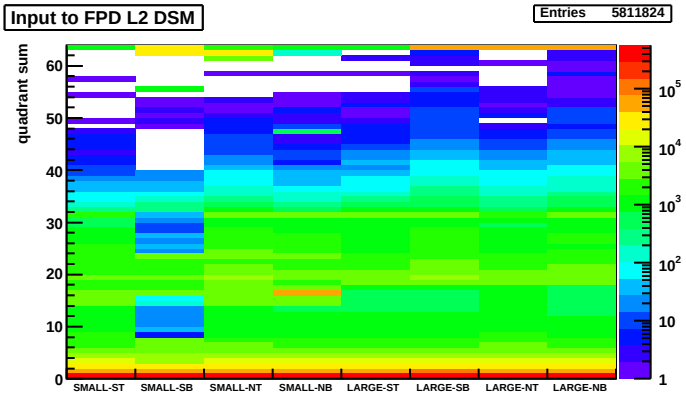

Input to FMS L1 DSM
Entries 26698
sumAB - simulated
DSM board

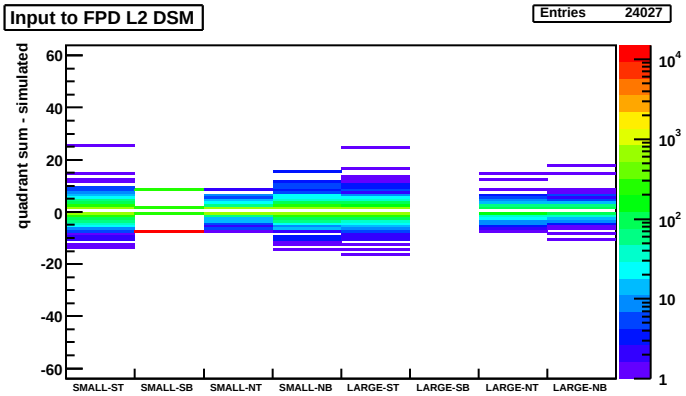

Input to FMS L1 DSM
Entries 8717736
sumA
DSM board

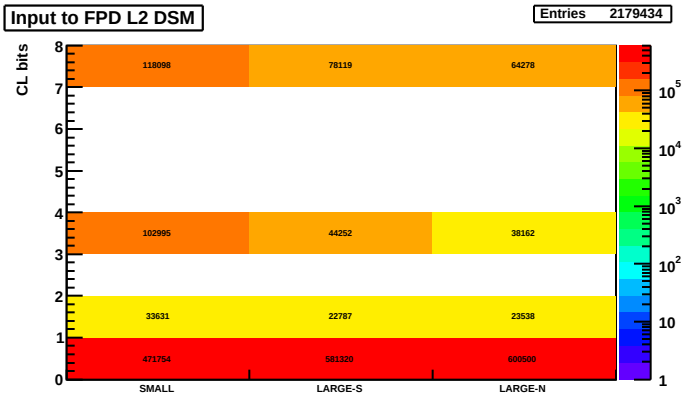

Input to FMS L1 DSM
Entries 3912
sumA - simulated
DSM board

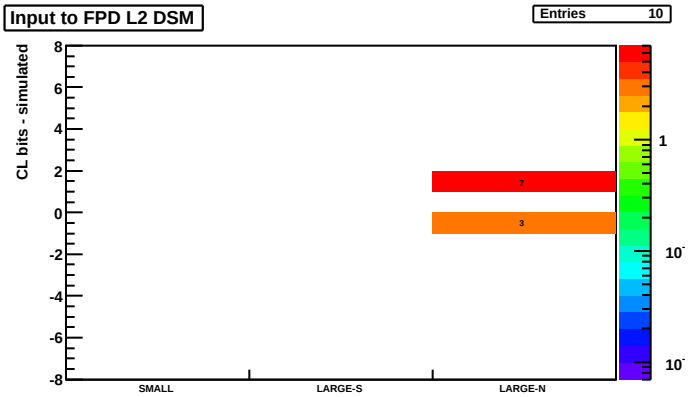

Input to FMS L1 DSM
Entries 8717870
FMS L1 HT bits
DSM board

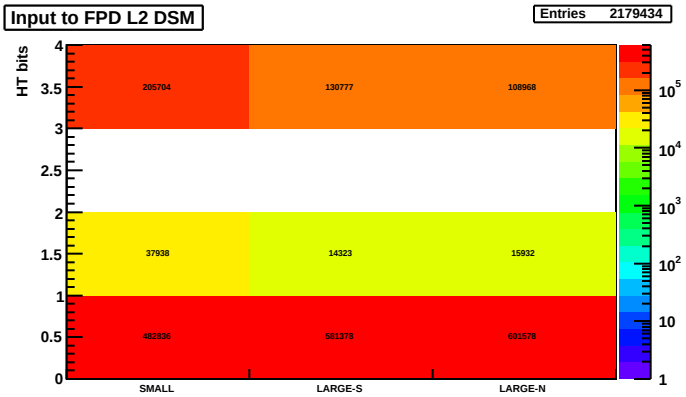

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

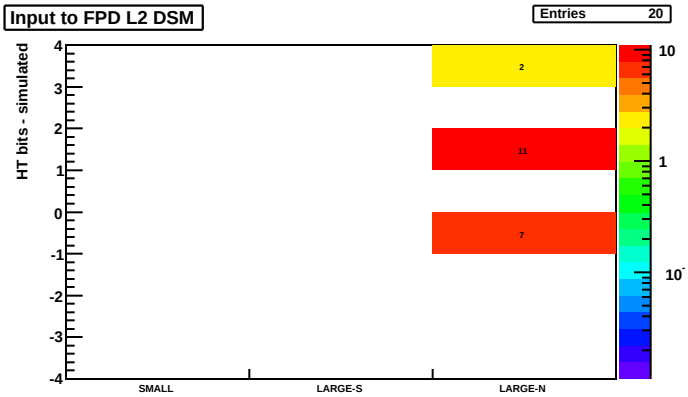

Input to FPD L2 DSM
Entries 5811824
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

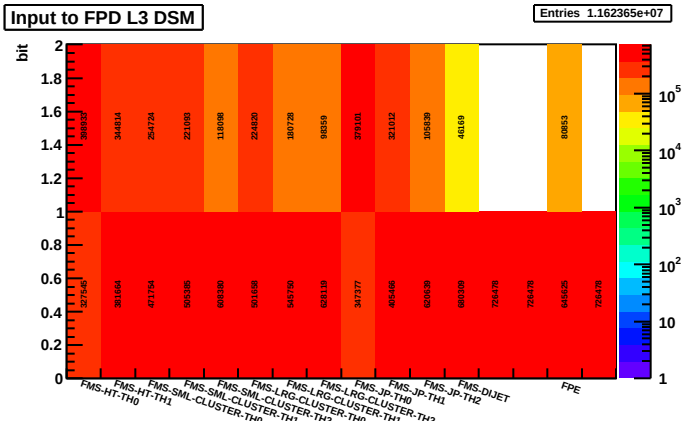

Input to FPD L2 DSM
Entries 24027
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

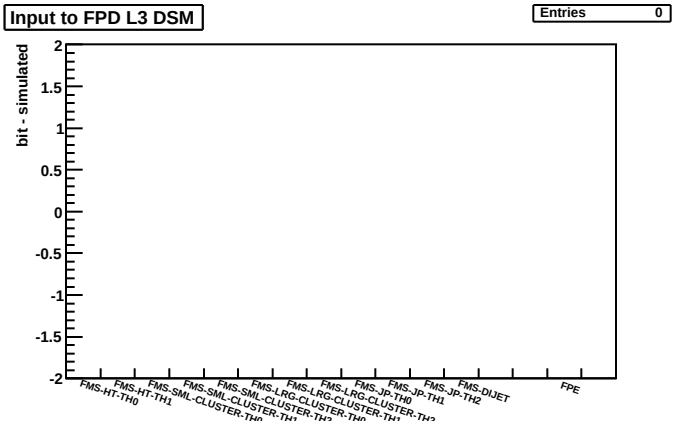

Input to FPD L2 DSM
Entries 2179434
CL bits
118098
78119
64278
102995
44252
38162
33631
22787
23538
471754
581320
600500
SMALL
LARGE-S
LARGE-N

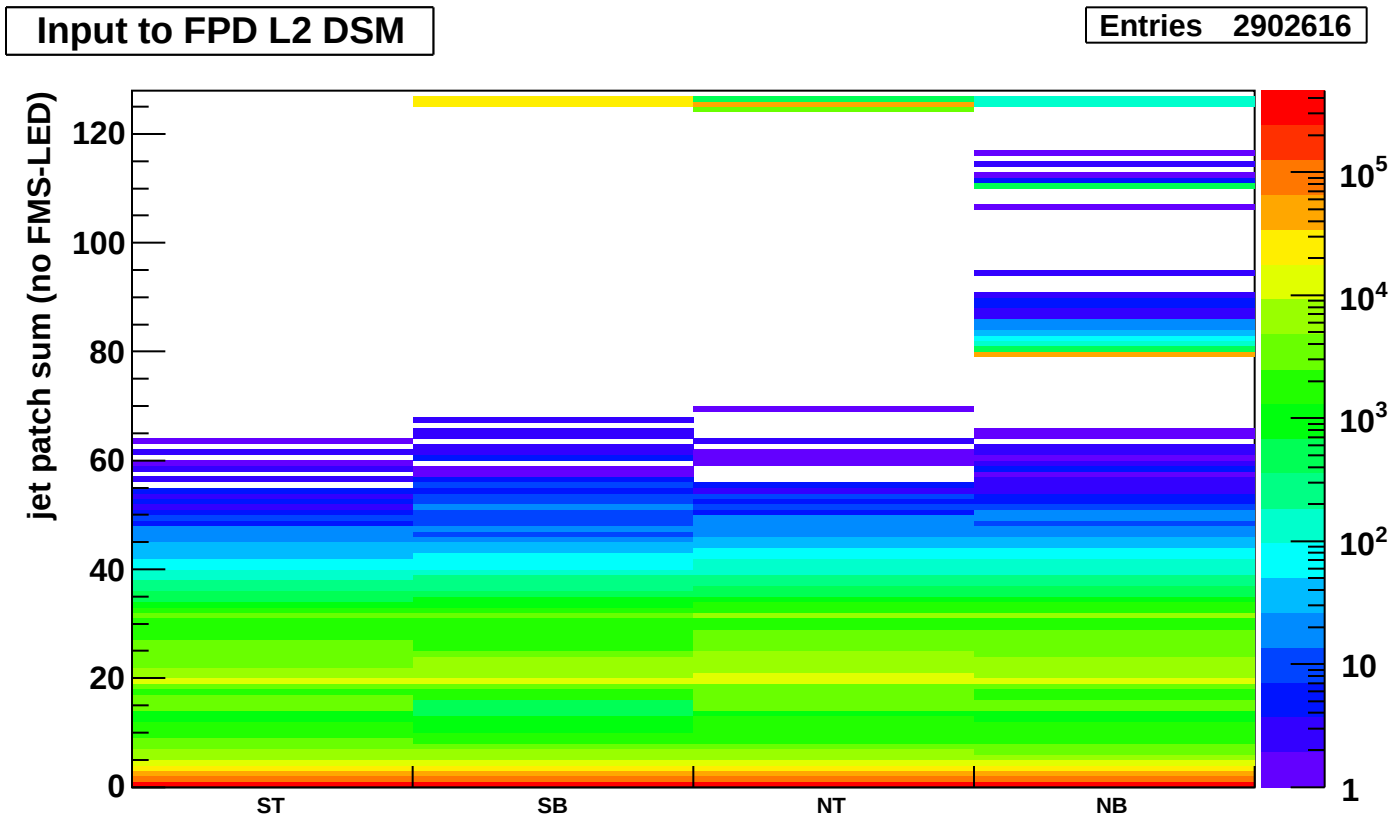

Input to FPD L2 DSM
Entries 10
CL bits - simulated
7
3
SMALL
LARGE-S
LARGE-N

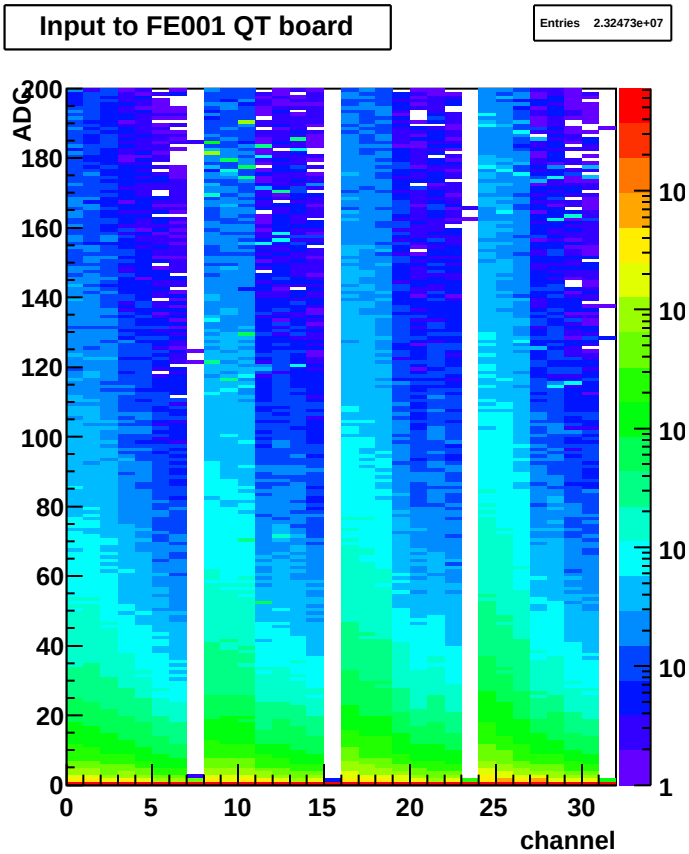

Input to FPD L2 DSM
Entries 2179434
HT bits
205704
130777
108968
37938
14323
15932
482836
581378
601578
SMALL
LARGE-S
LARGE-N

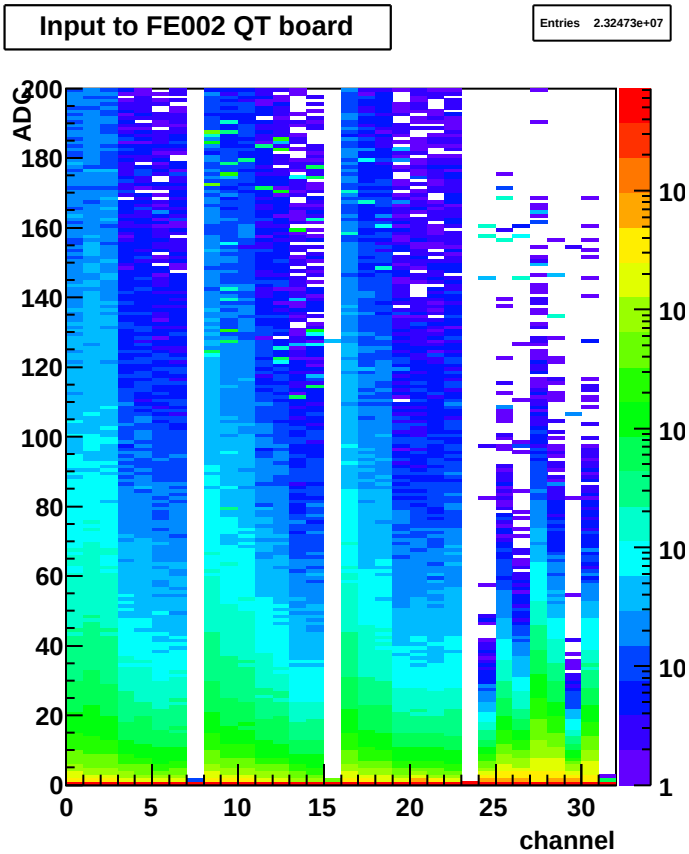

Input to FPD L2 DSM
Entries 20
HT bits - simulated
2
11
7
SMALL
LARGE-S
LARGE-N

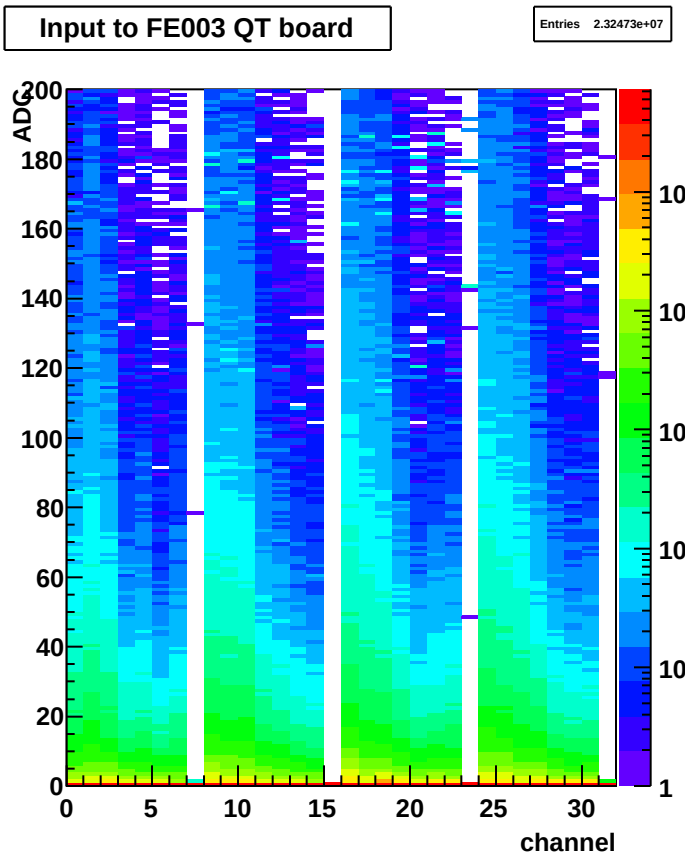

Input to FPD L3 DSM
Entries 1.162365e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

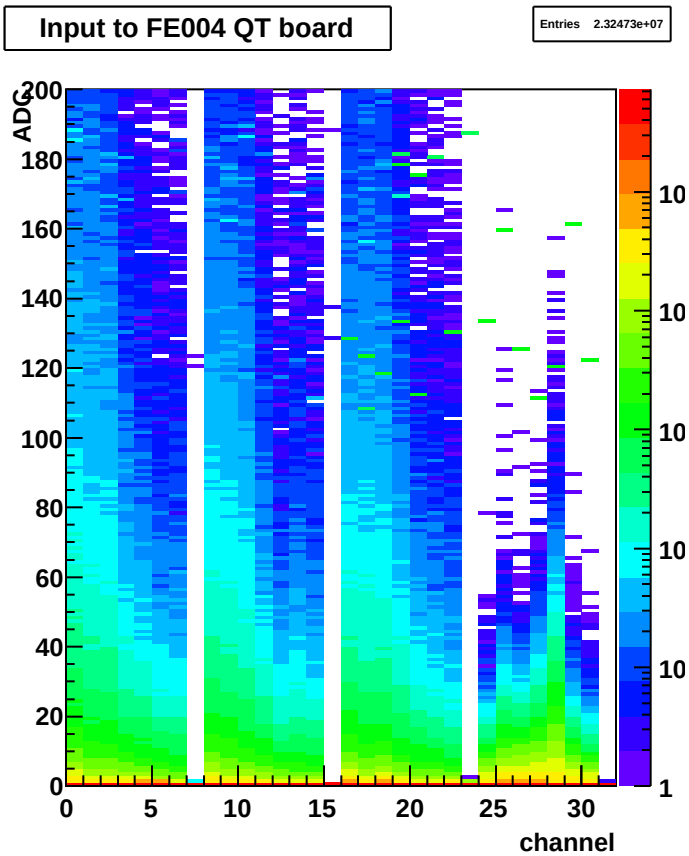

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

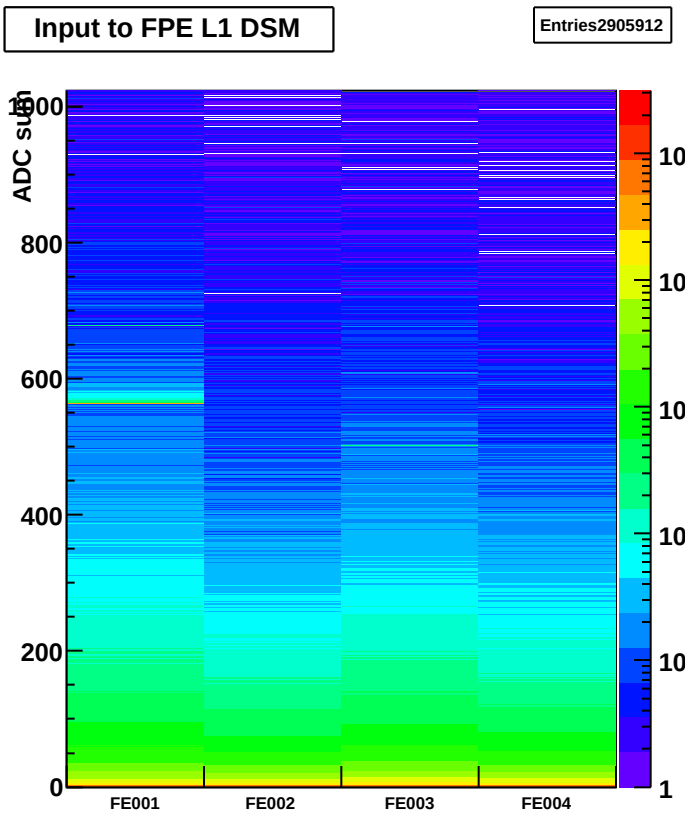

Input to FPD L2 DSM
Entries 2902616
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

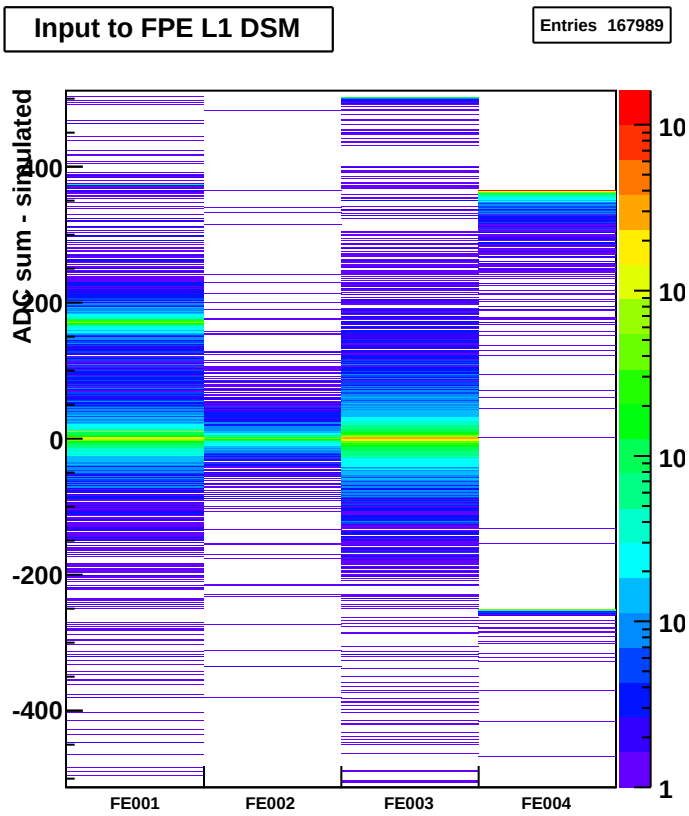

Input to FE001 QT board
Entries 2.32473e+07
ADC
channel

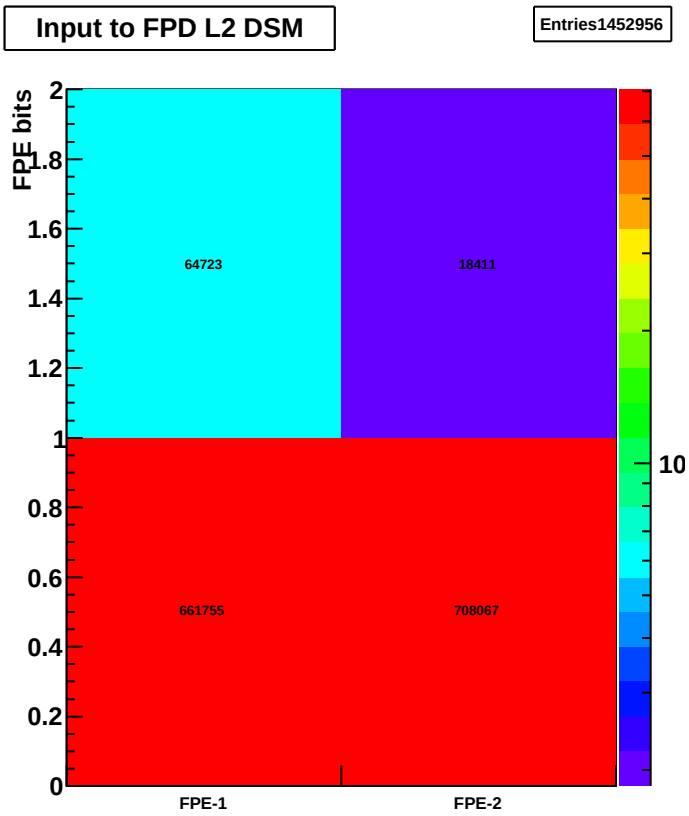

Input to FE002 QT board
Entries 2.32473e+07
ADC
channel

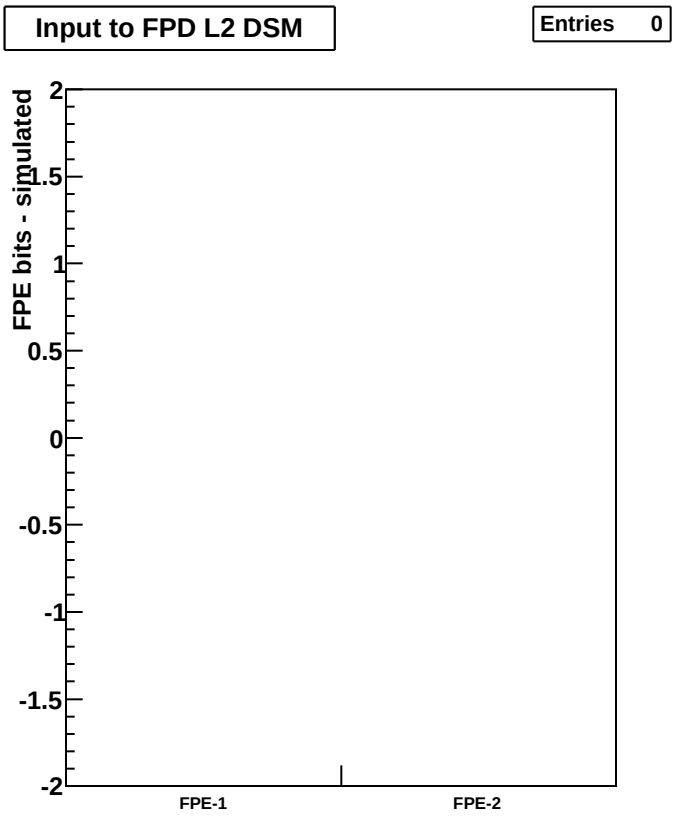

Input to FE003 QT board
Entries 2.32473e+07
ADC
channel


Input to FE004 QT board
Entries 2.32473e+07
ADC
channel


Input to FPE L1 DSM
Entries2905912
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 167989
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPD L2 DSM
Entries1452956
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
64723
18411
661755
708067
FPE-1
FPE-2
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