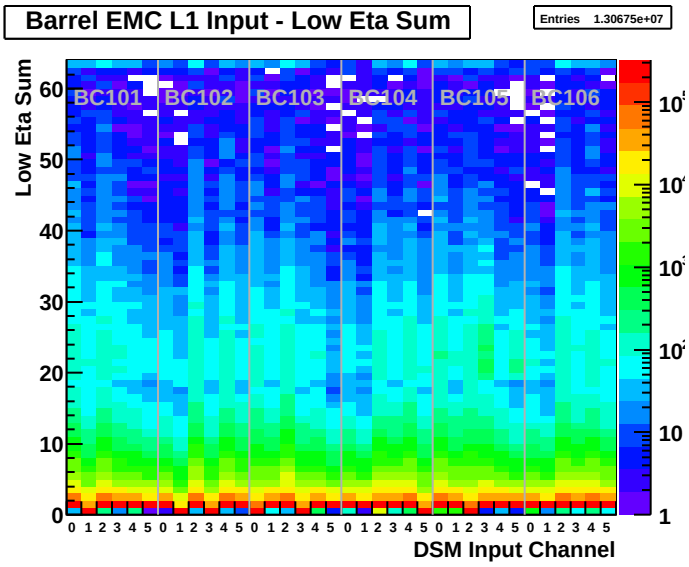
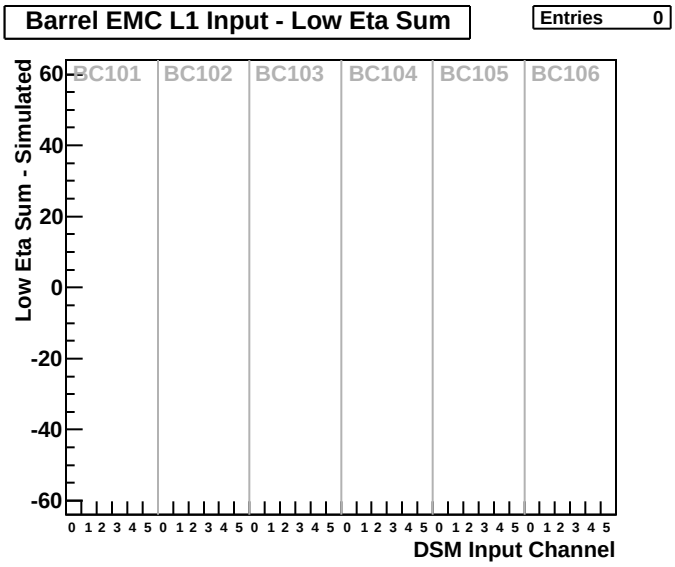
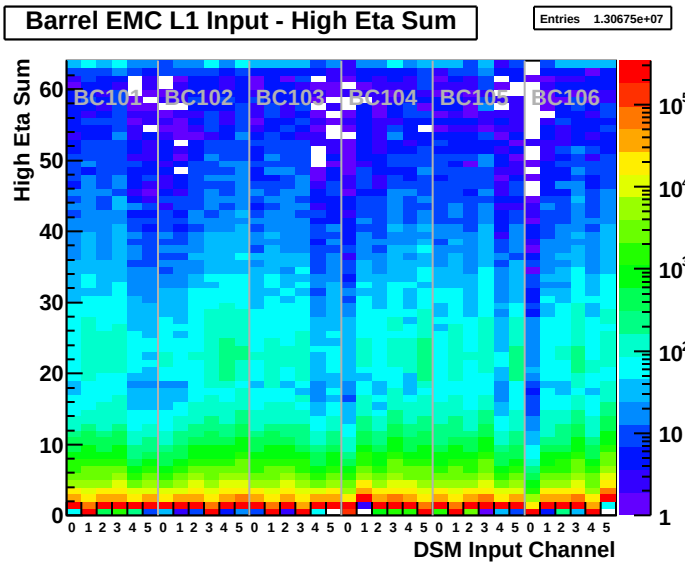
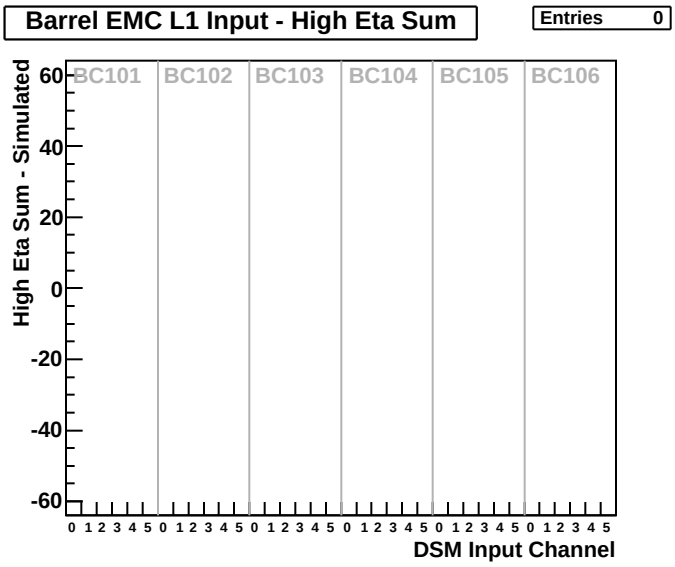
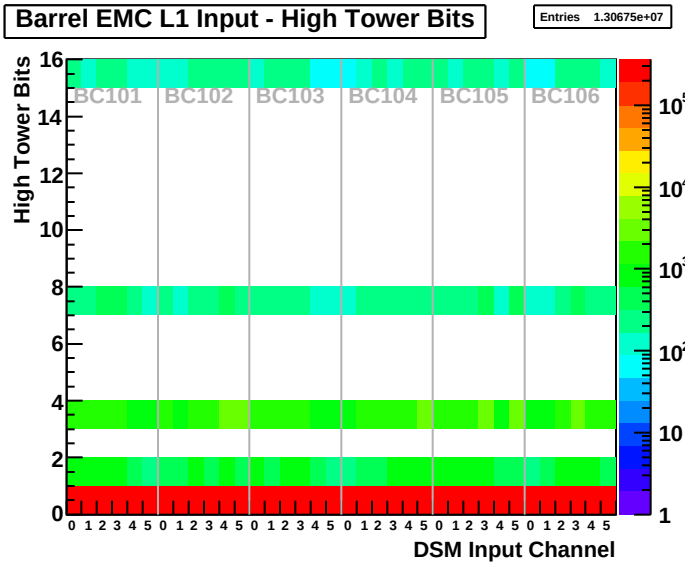
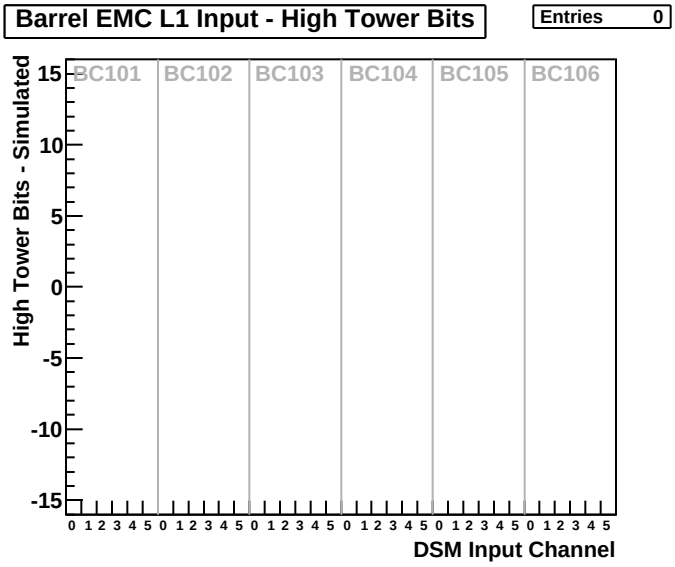

Barrel EMC L1 Input - Low Eta Sum
Entries 1.30675e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

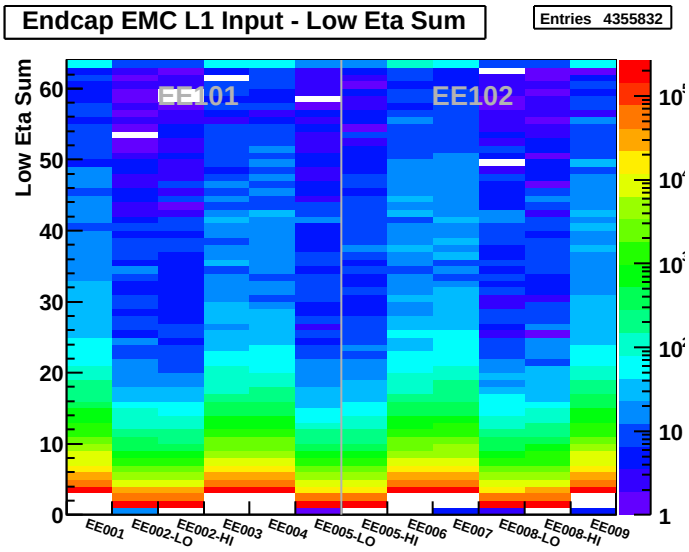

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

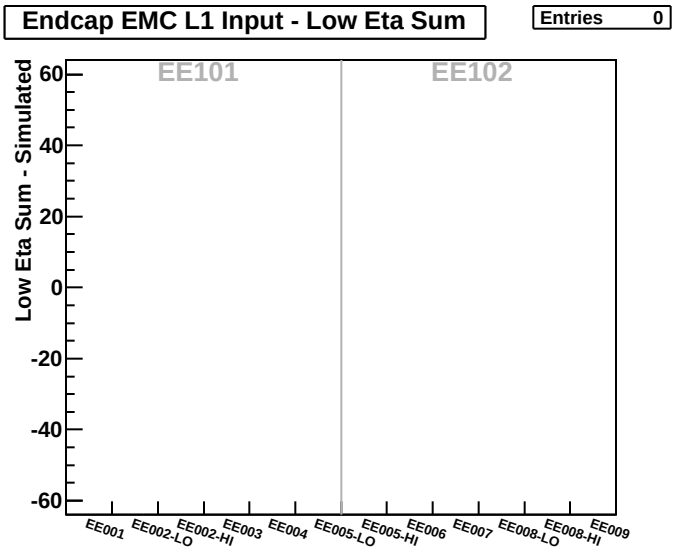

Barrel EMC L1 Input - High Eta Sum
Entries 1.30675e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

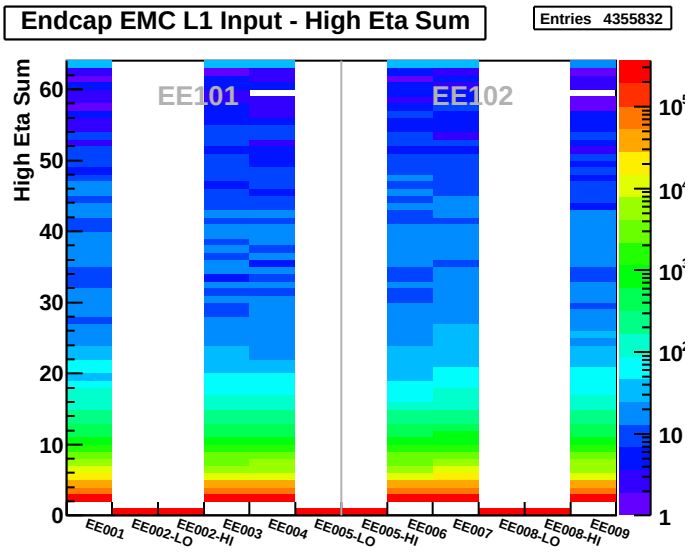

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

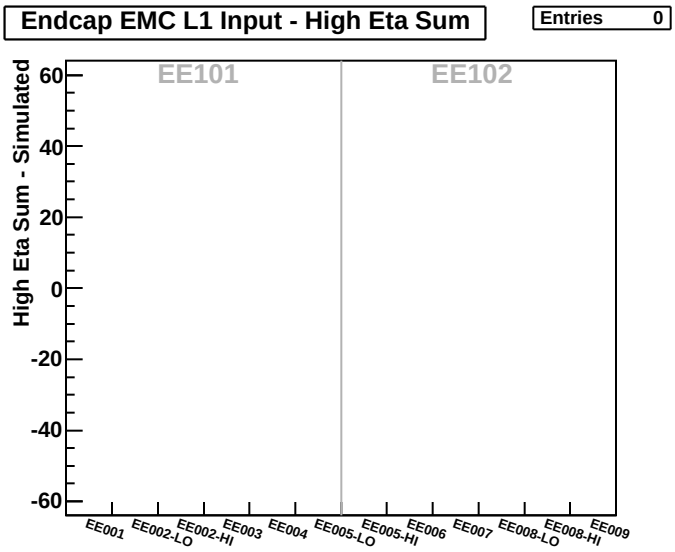

Barrel EMC L1 Input - High Tower Bits
Entries 1.30675e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

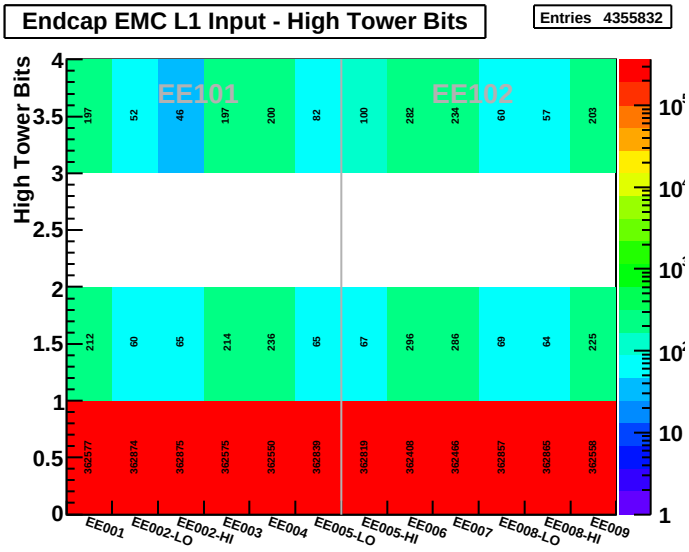

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

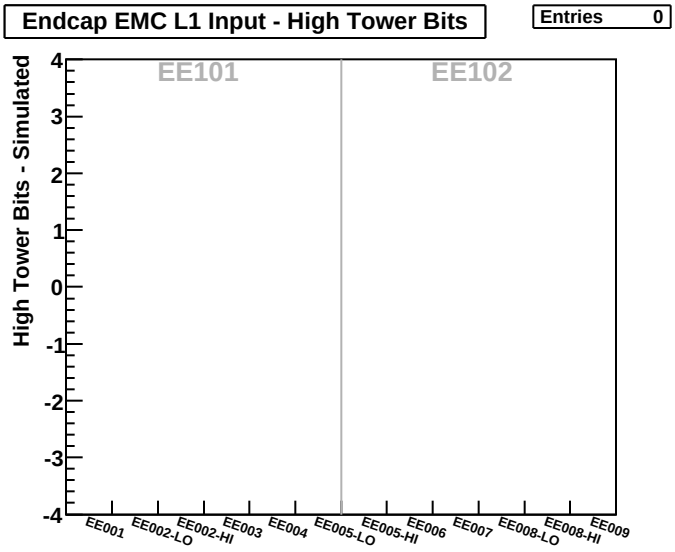

Endcap EMC L1 Input - Low Eta Sum
Entries 4355832
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

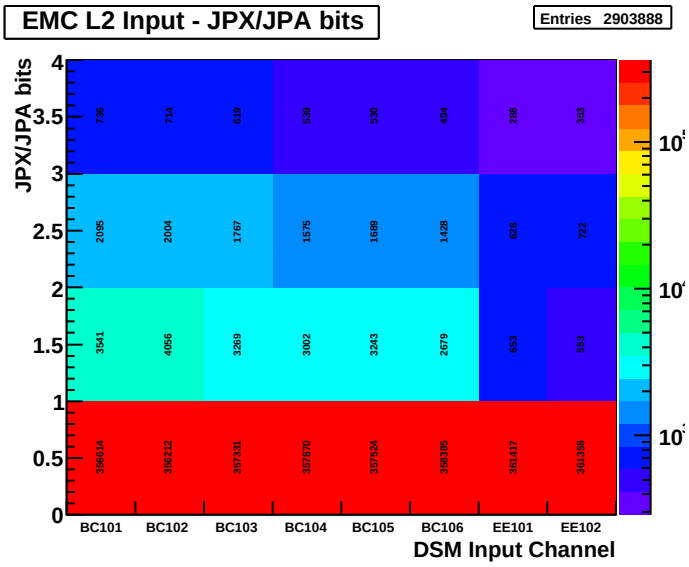

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

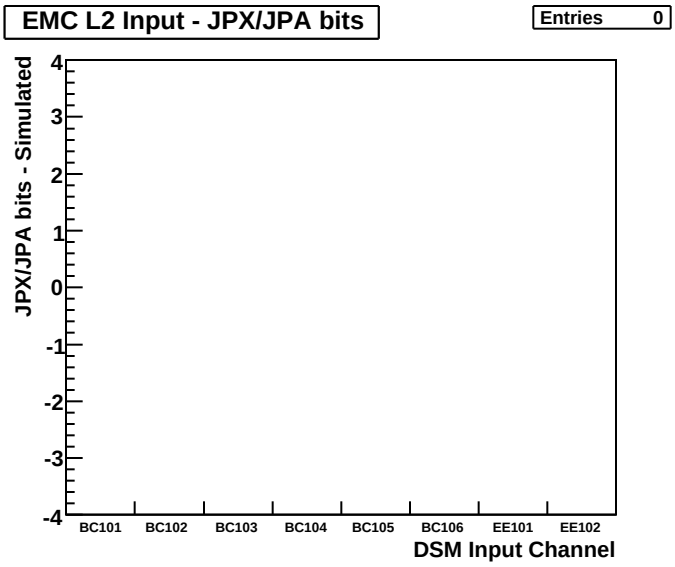

Endcap EMC L1 Input - High Eta Sum
Entries 4355832
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

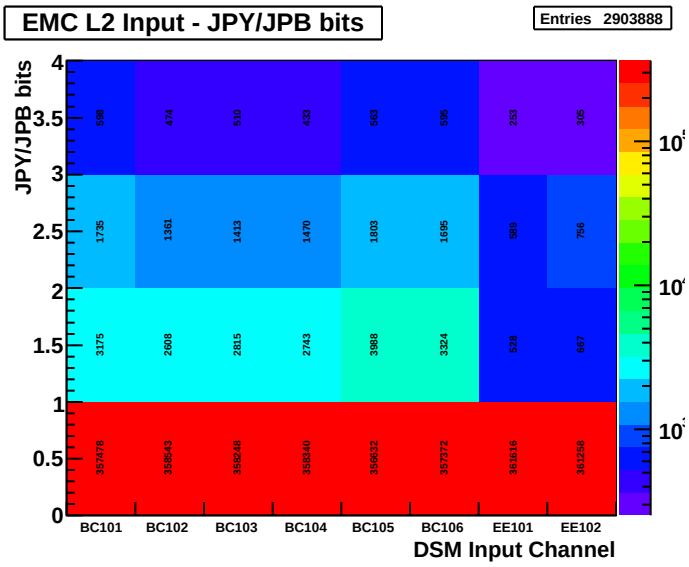

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

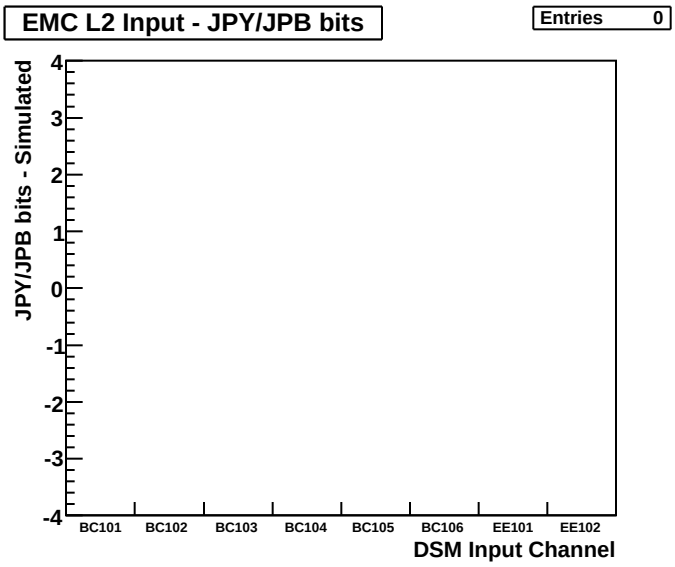

Endcap EMC L1 Input - High Tower Bits
Entries 4355832
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

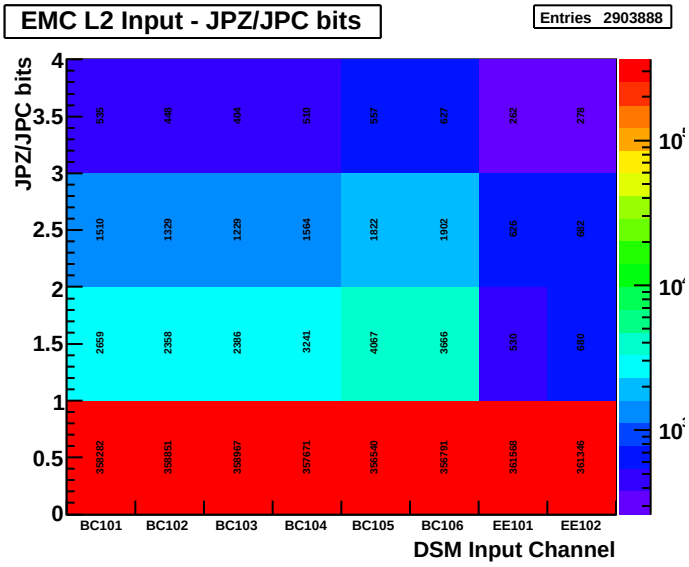

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

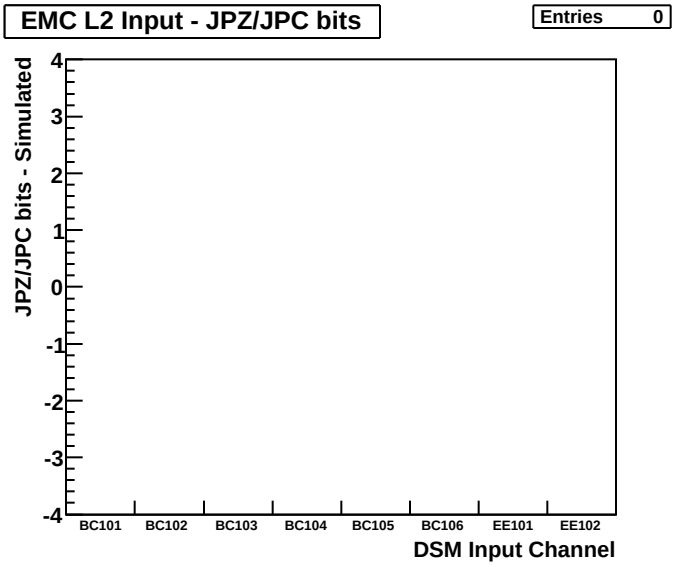

EMC L2 Input - JPX/JPA bits
Entries 2903888
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
736 714 619 539 530 494 288 353
2095 2004 1767 1575 1689 1428 628 722
3541 4056 3269 3002 3243 2679 653 553
356614 356212 357331 357870 357524 358385 361417 361338

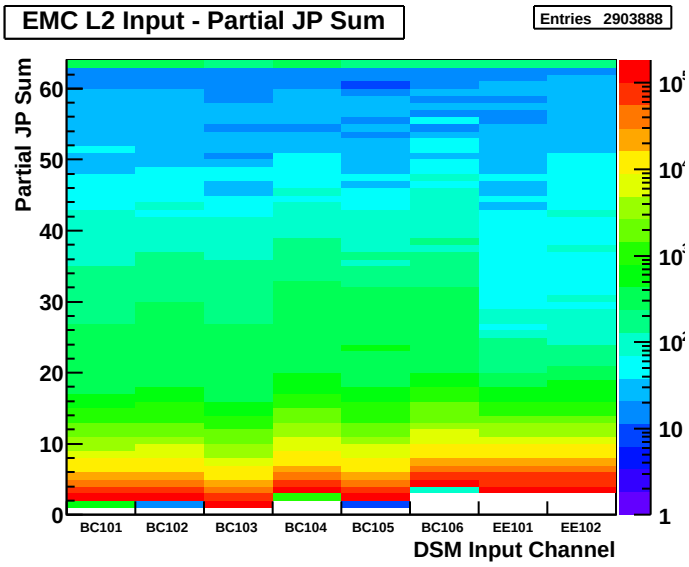

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

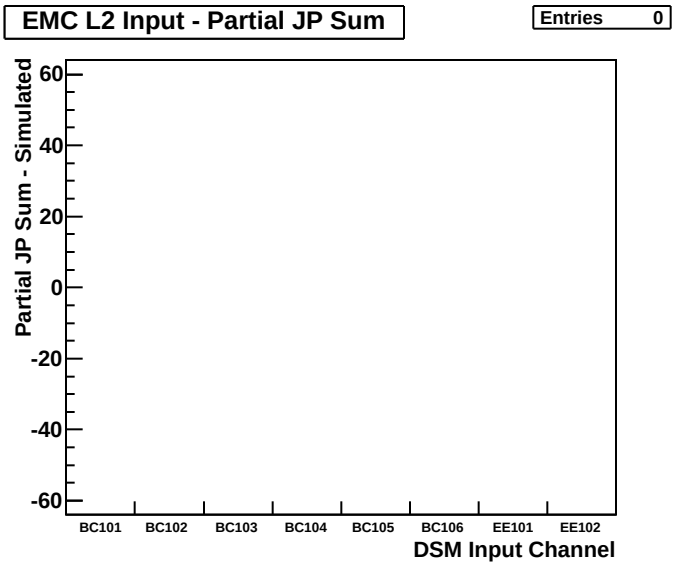

EMC L2 Input - JPY/JPB bits
Entries 2903888
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
586 474 510 433 563 595 253 305
1735 1361 1413 1470 1803 1695 589 756
3175 2608 2815 2743 3988 3324 528 667
357478 358543 358248 358340 356632 357372 361616 361258

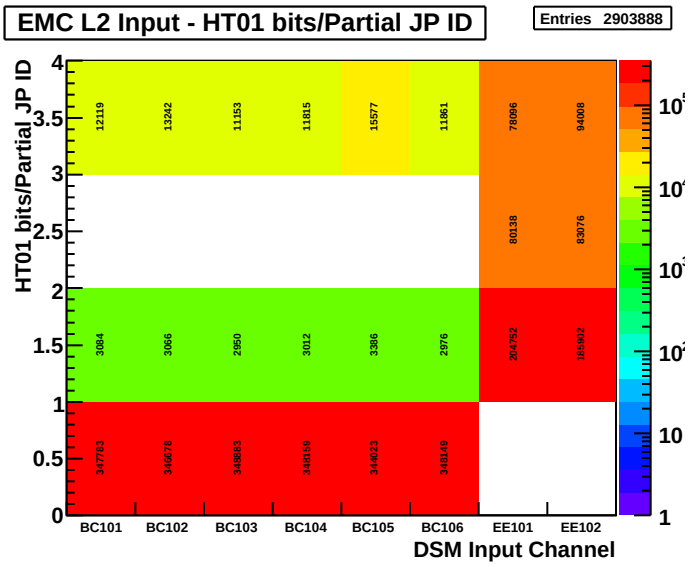

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

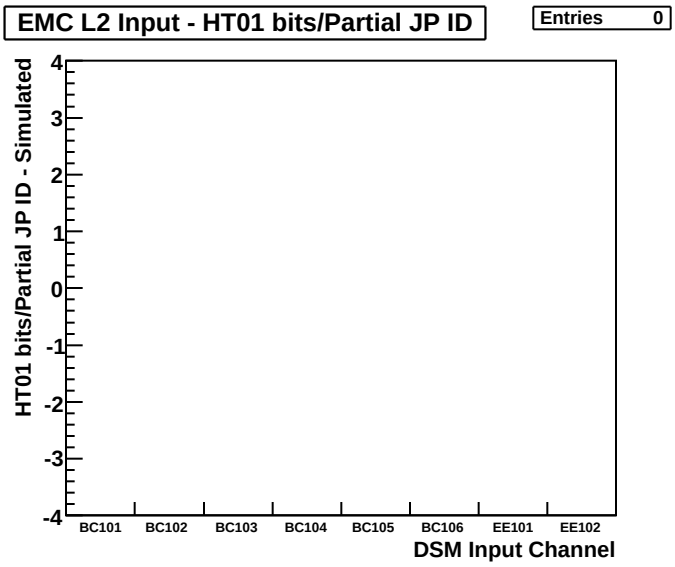

EMC L2 Input - JPZ/JPC bits
Entries 2903888
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
535 448 404 510 557 627 262 278
1510 1329 1229 1564 1822 1902 626 682
2659 2358 2386 3241 4067 3666 530 630
358282 358851 358967 357671 356540 356791 361588 361346

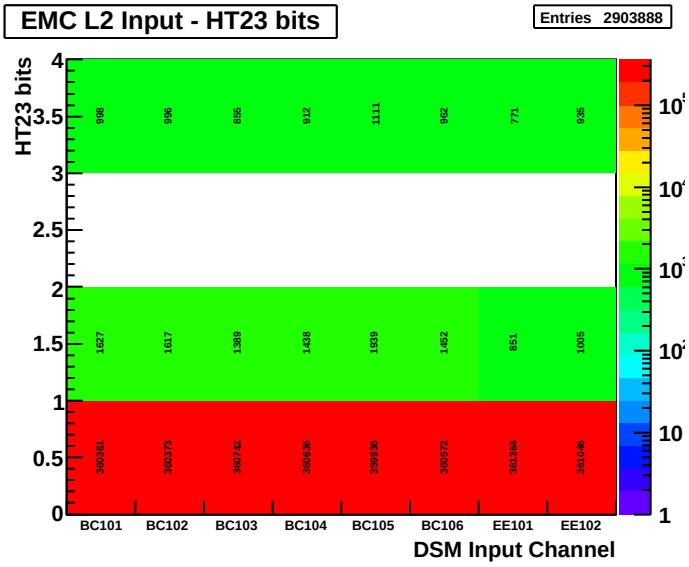

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

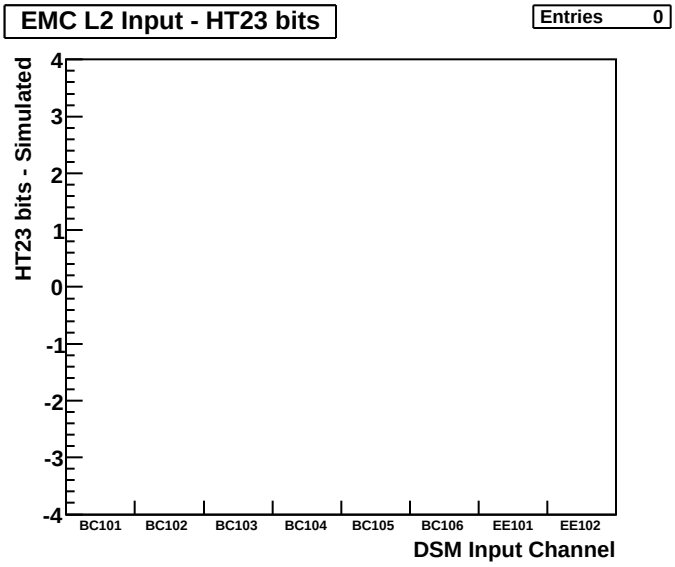

EMC L2 Input - Partial JP Sum
Entries 2903888
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

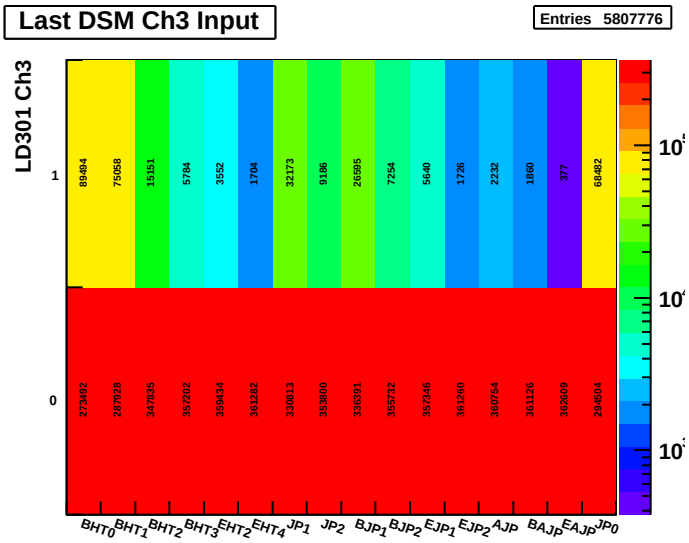

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

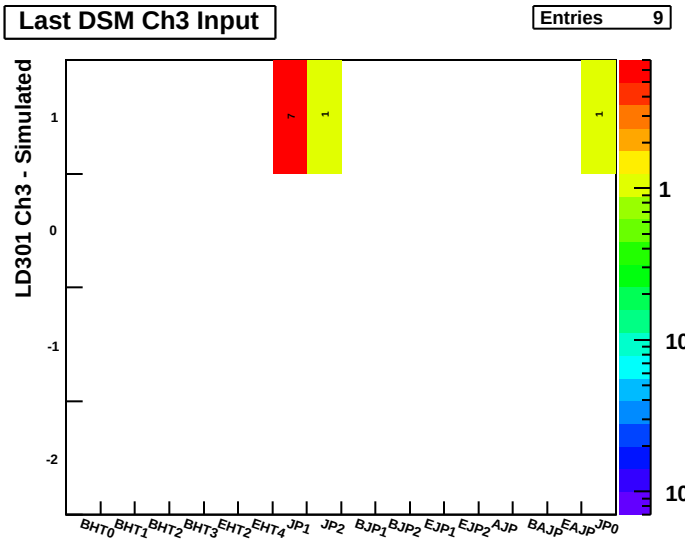

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2903888
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

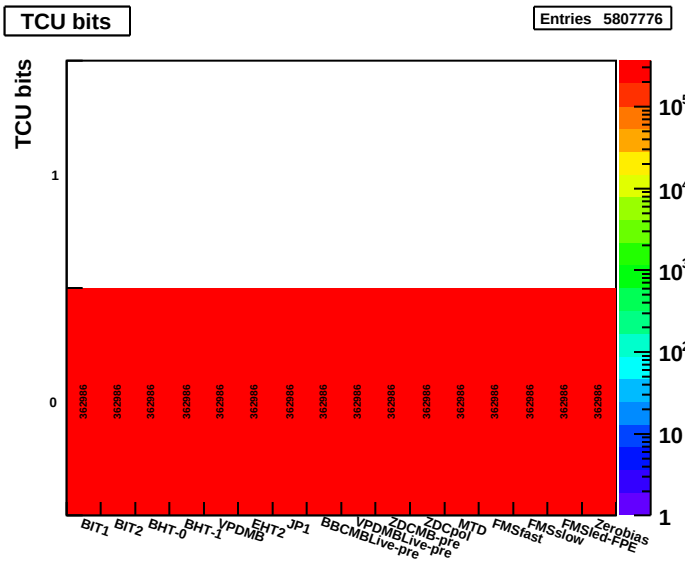

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

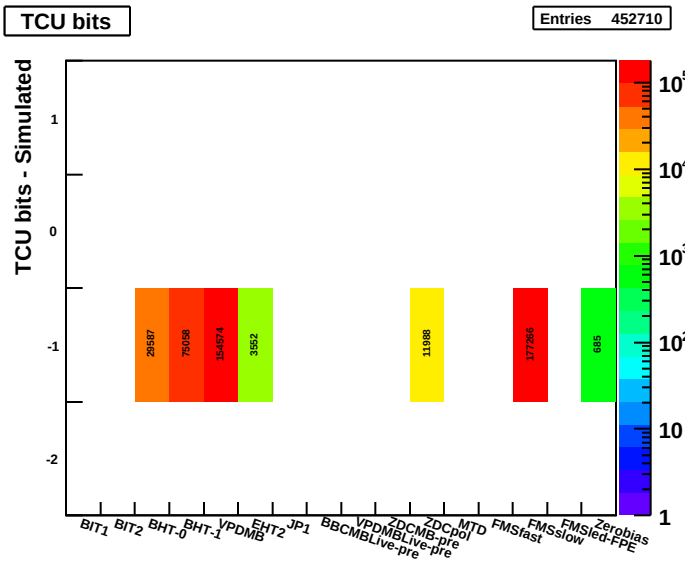

EMC L2 Input - HT23 bits
Entries 2903888
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

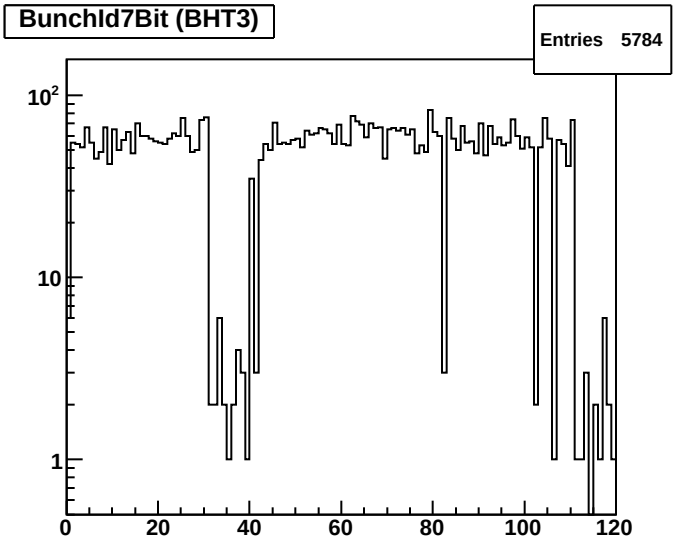

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

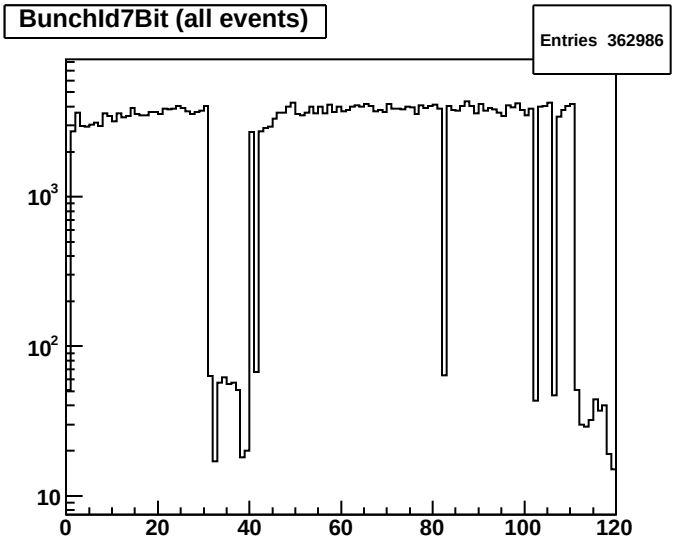

Last DSM Ch3 Input
Entries 5807776
LD301 Ch3
1
0
89484 75058 15151 5784 3552 1704 32173 9186 26595 7254 5640 1726 2232 1860 377 68482
273482 287928 347835 357202 359434 361282 330813 353800 336391 355732 357346 361260 360754 361126 362609 294504
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

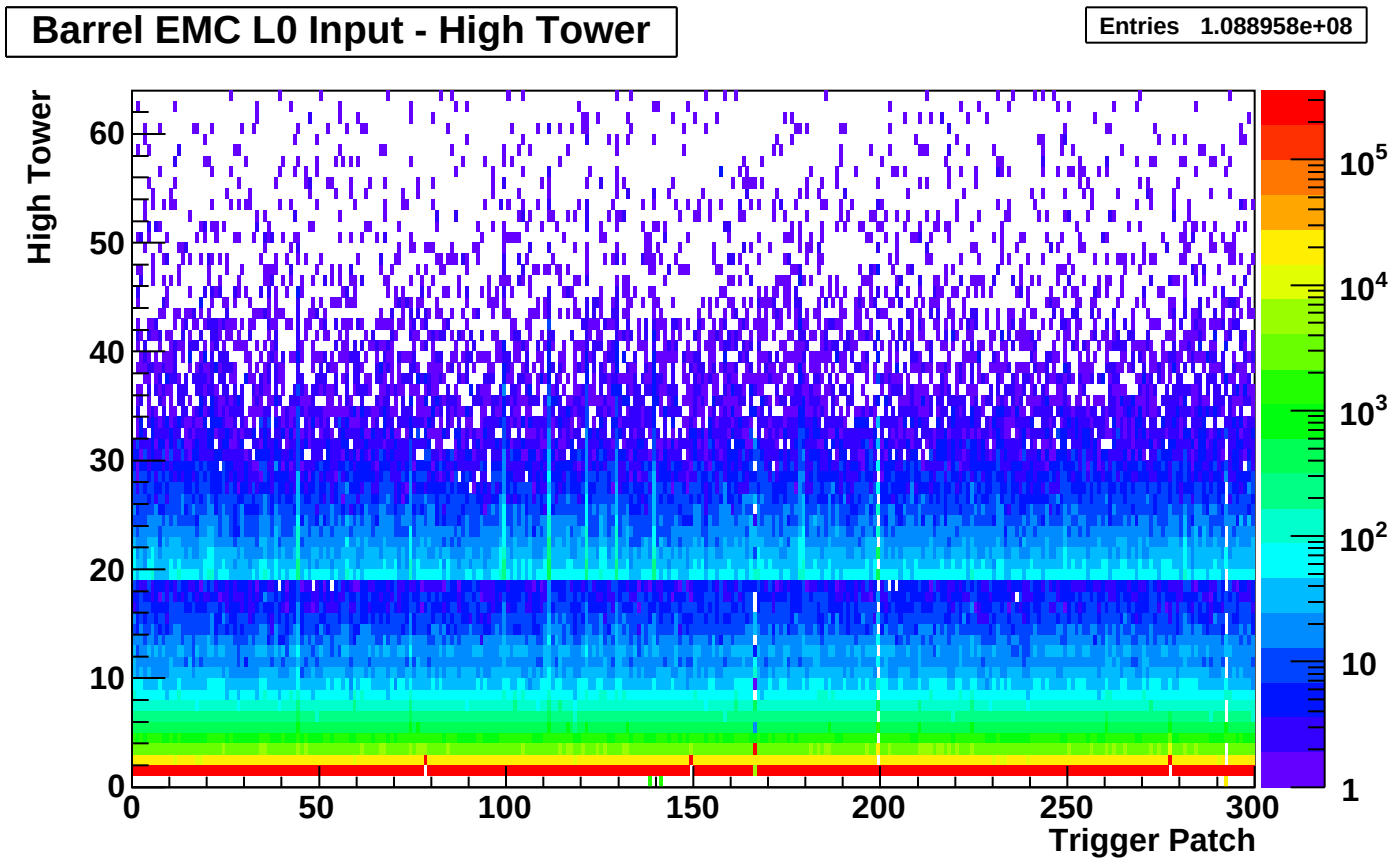

Last DSM Ch3 Input
Entries 9
LD301 Ch3 - Simulated
1
0
-1
-2
7 1 1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

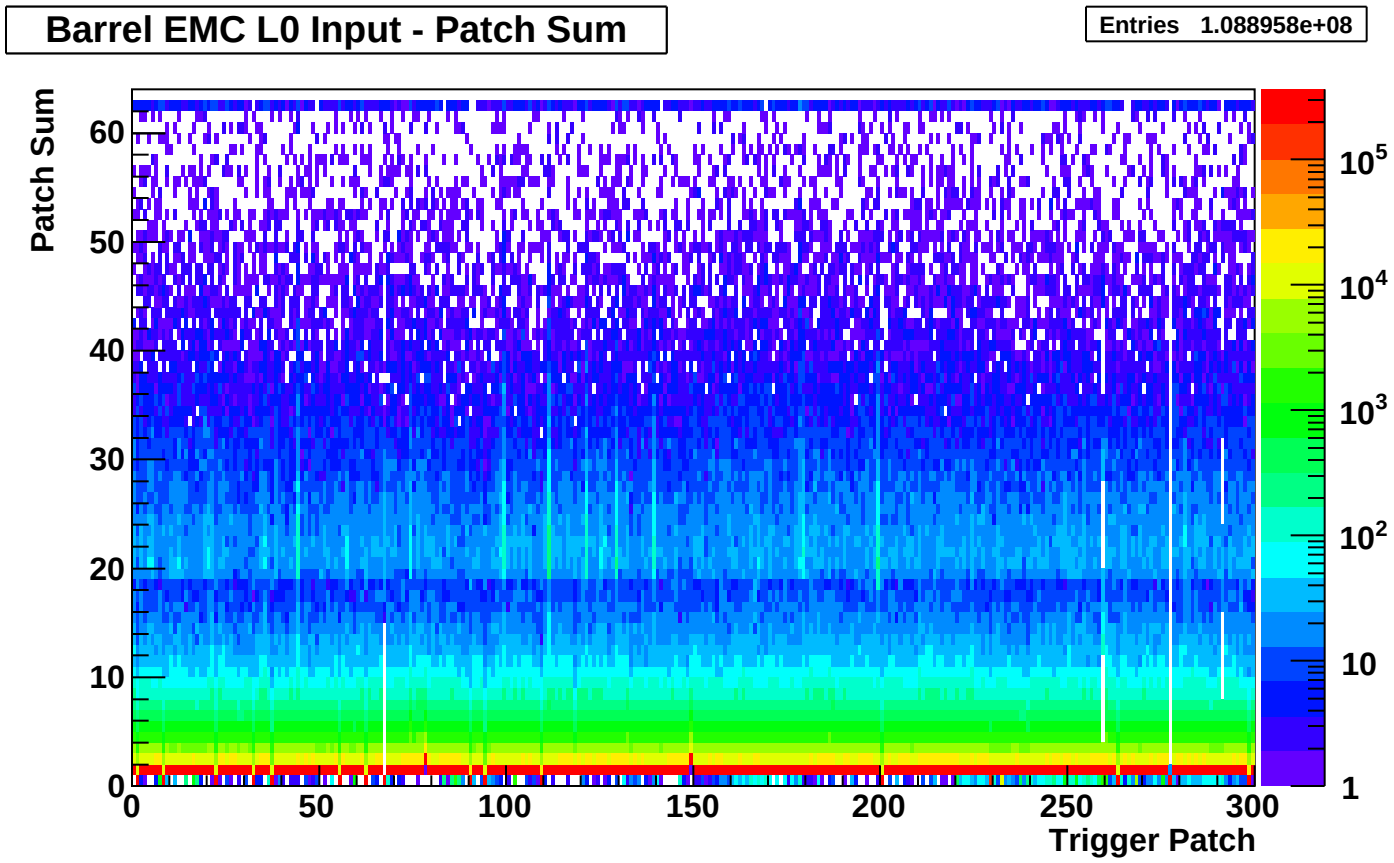

TCU bits
Entries 5807776
TCU bits
1
0
362986 362986 362986 362986 362986 362986 362986 362986 362986 362986 362986 362986 362986 362986 362986 362986
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

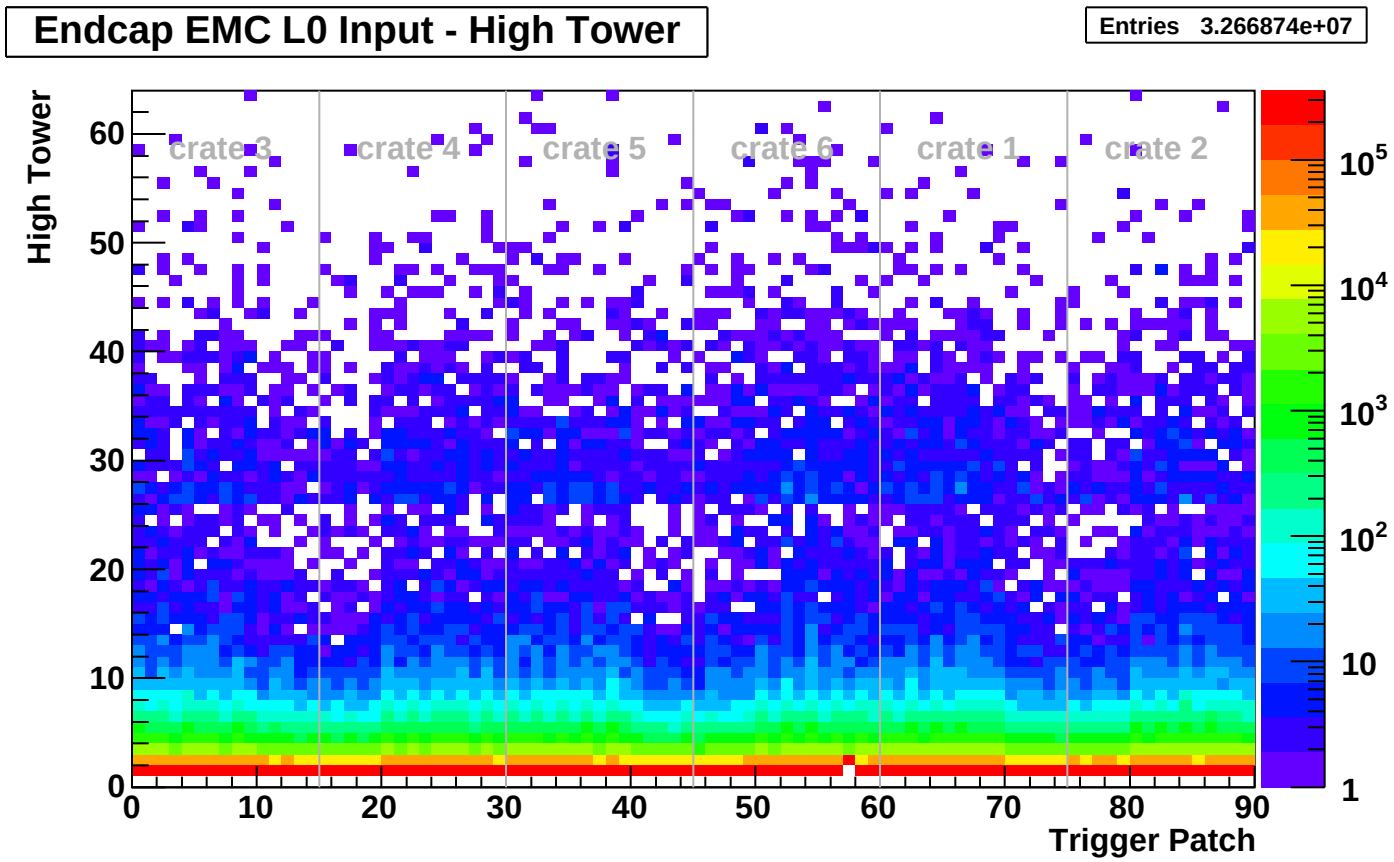

TCU bits
Entries 452710
TCU bits - Simulated
1
0
-1
-2
295587 75058 154574 3552 11988 177266 685
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

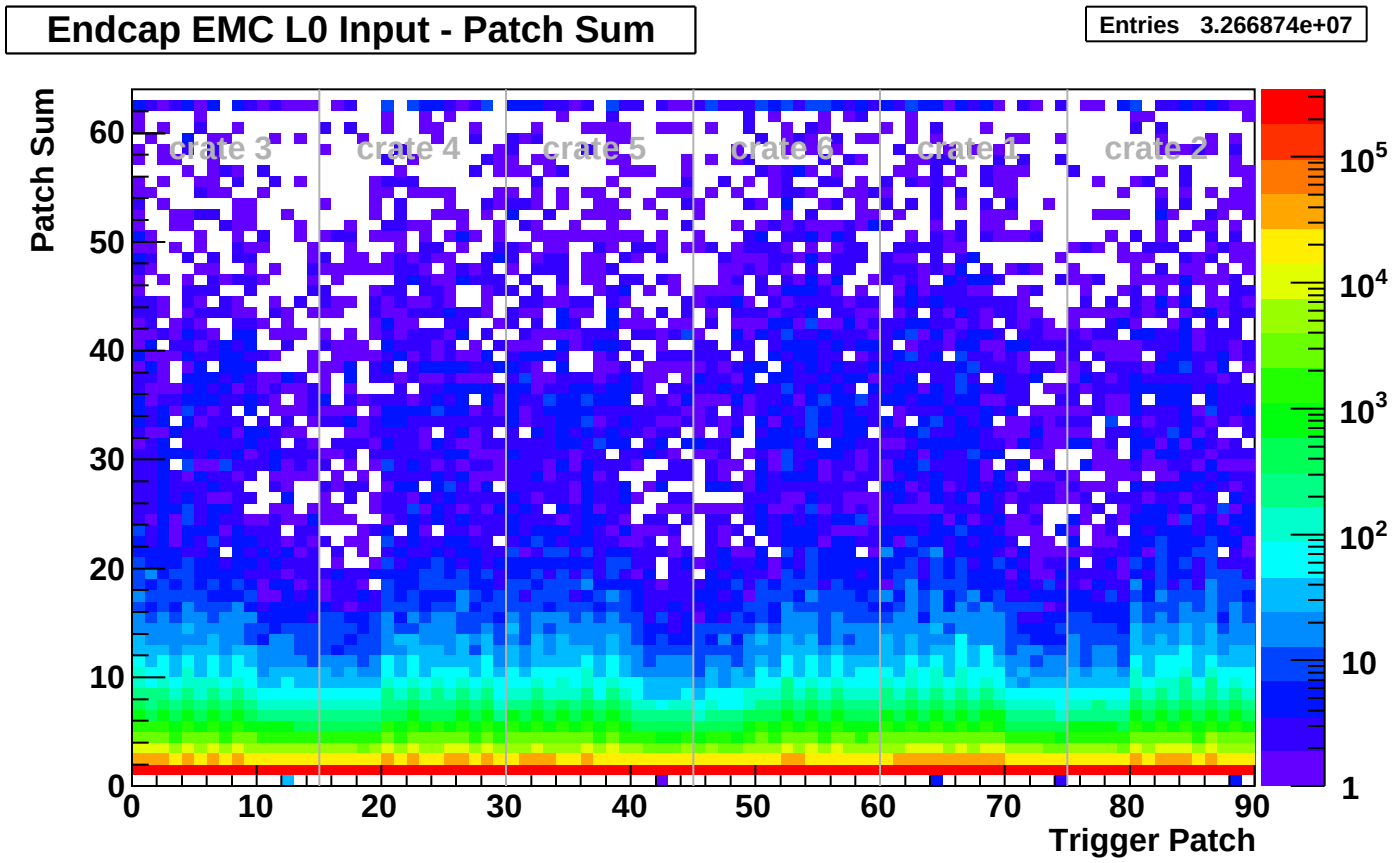

BunchId7Bit (BHT3)
Entries 5784
10²
10
1
0 20 40 60 80 100 120

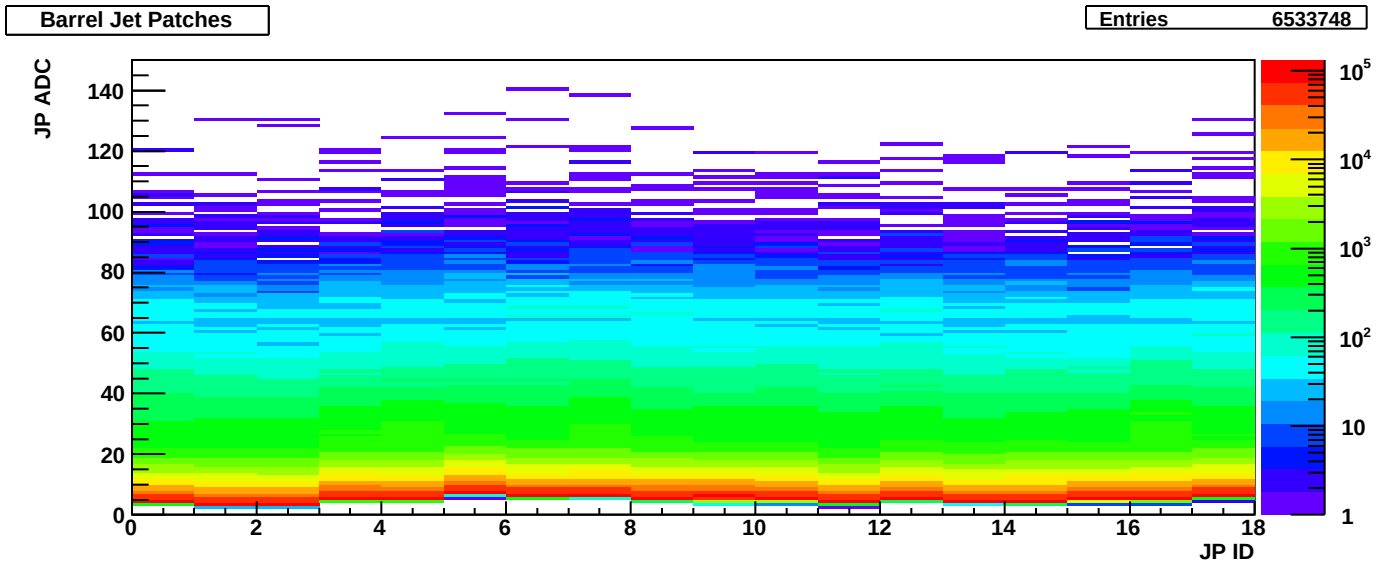

BunchId7Bit (all events)
Entries 362986
10³
10²
10
0 20 40 60 80 100 120

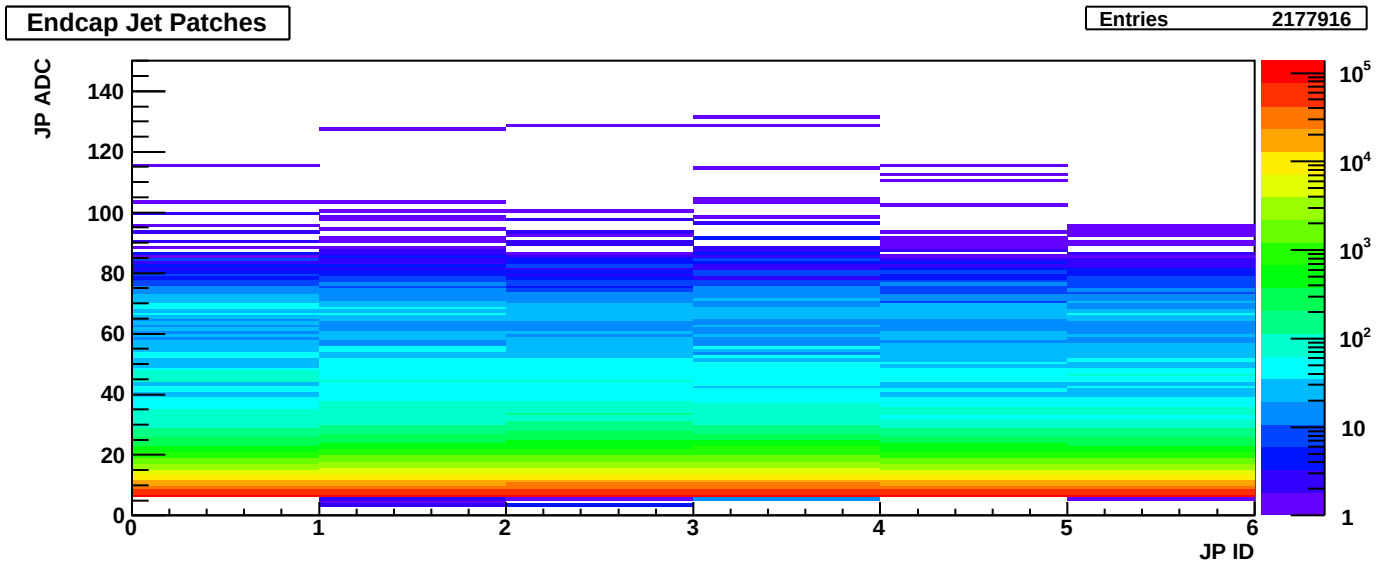

Barrel EMC L0 Input - High Tower
Entries 1.088958e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

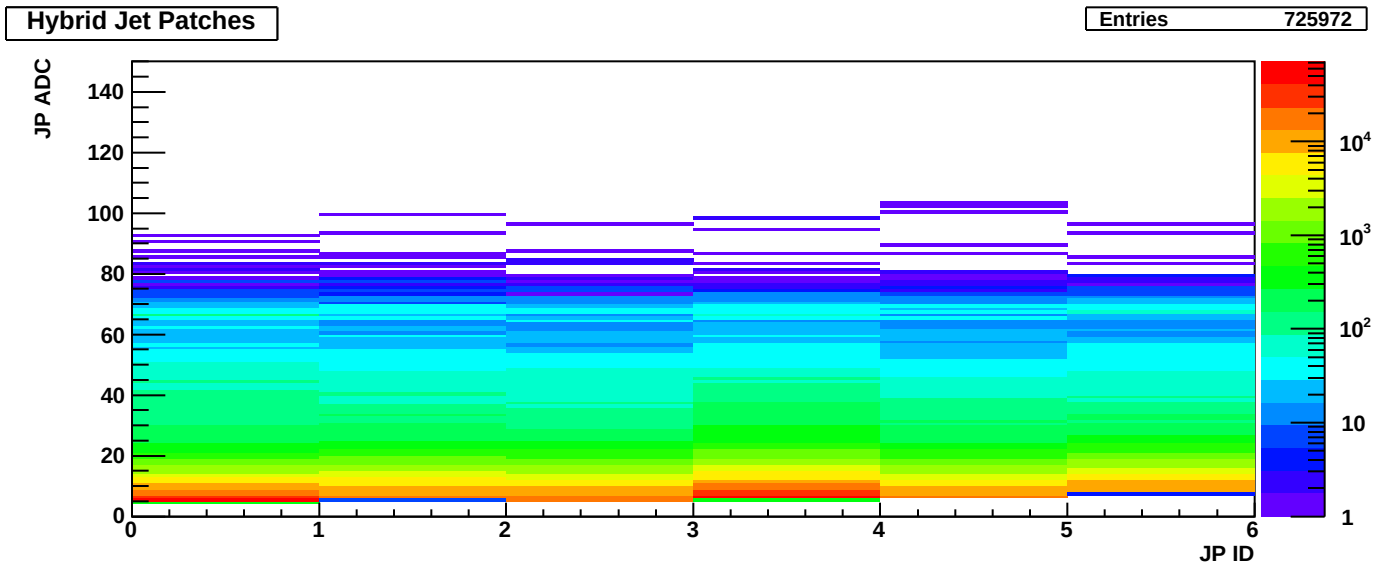

Barrel EMC L0 Input - Patch Sum
Entries 1.088958e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

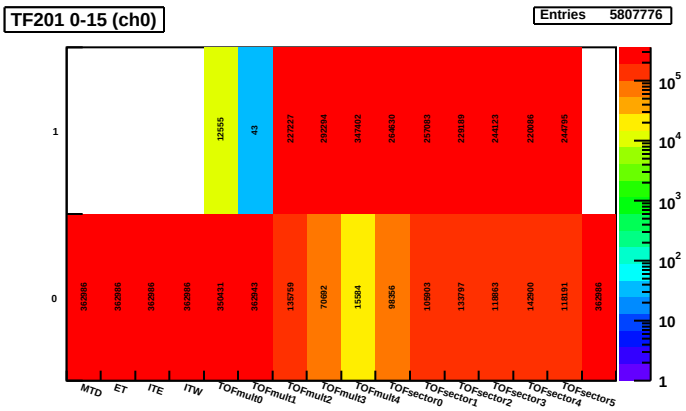

Endcap EMC L0 Input - High Tower
Entries 3.266874e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

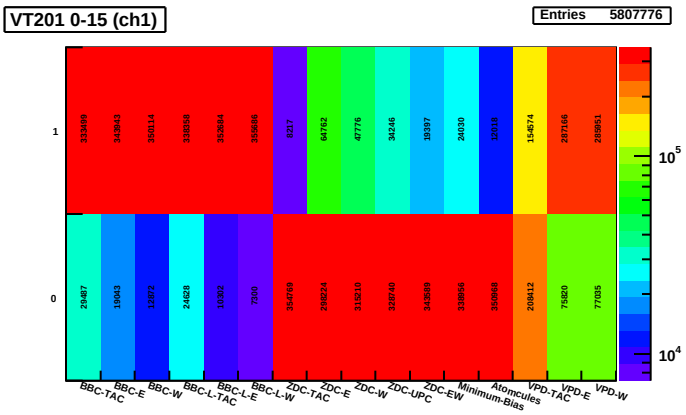

Endcap EMC L0 Input - Patch Sum
Entries 3.266874e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

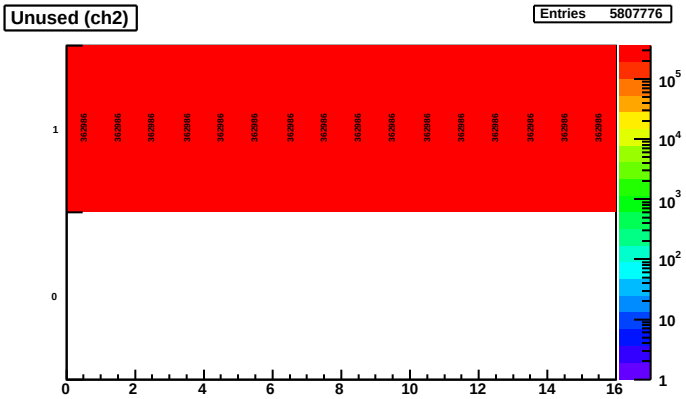

Barrel Jet Patches
Entries 6533748
JP ADC
JP ID

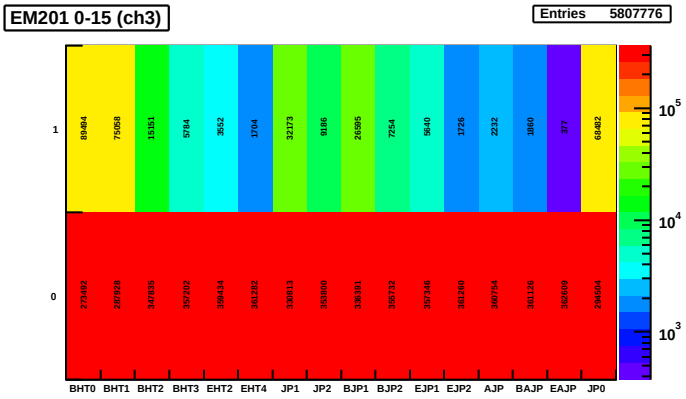

Endcap Jet Patches
Entries 2177916
JP ADC
JP ID

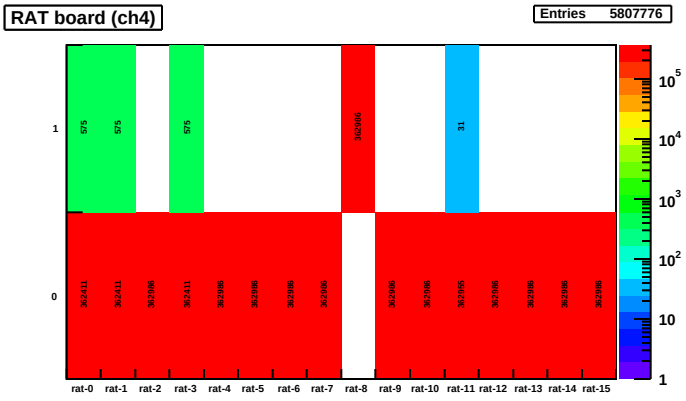

Hybrid Jet Patches
Entries 725972
JP ADC
JP ID

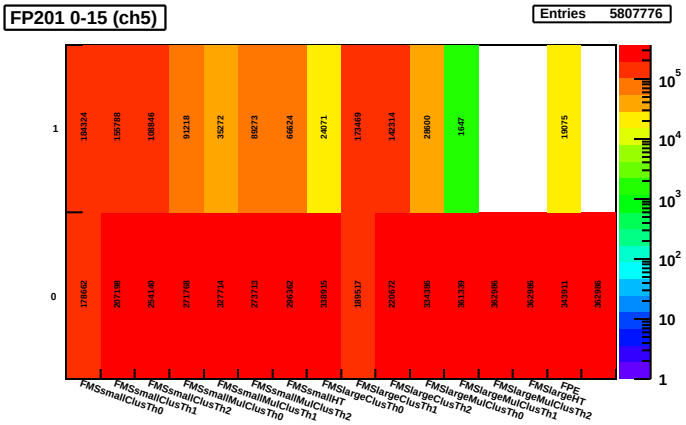

TF201 0-15 (ch0)
Entries 5807776
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

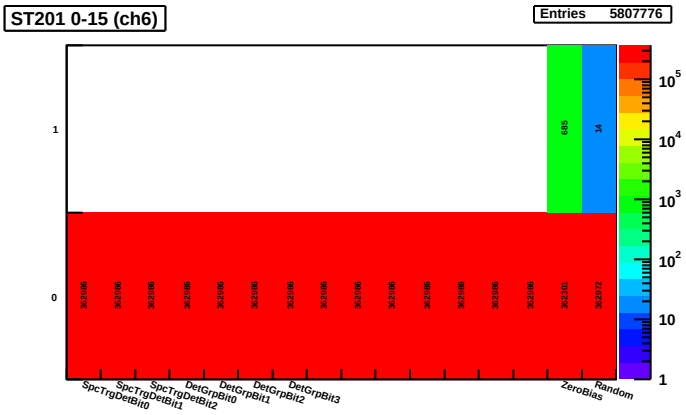

VT201 0-15 (ch1)
Entries 5807776
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

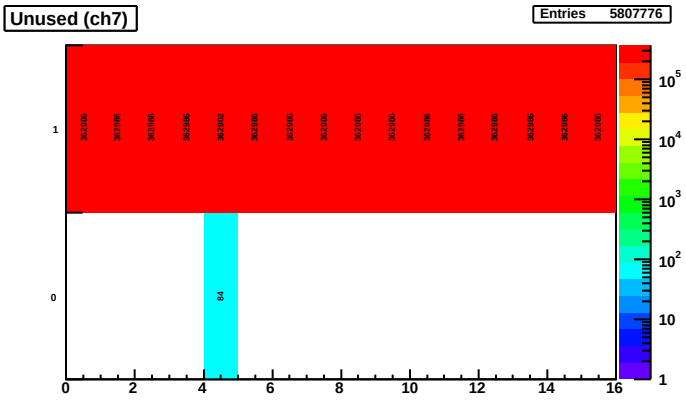

Unused (ch2)
Entries 5807776

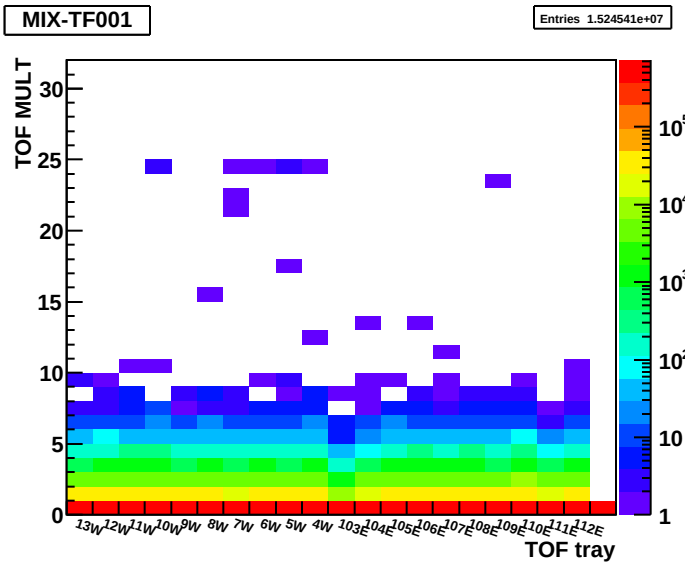

EM201 0-15 (ch3)
Entries 5807776
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

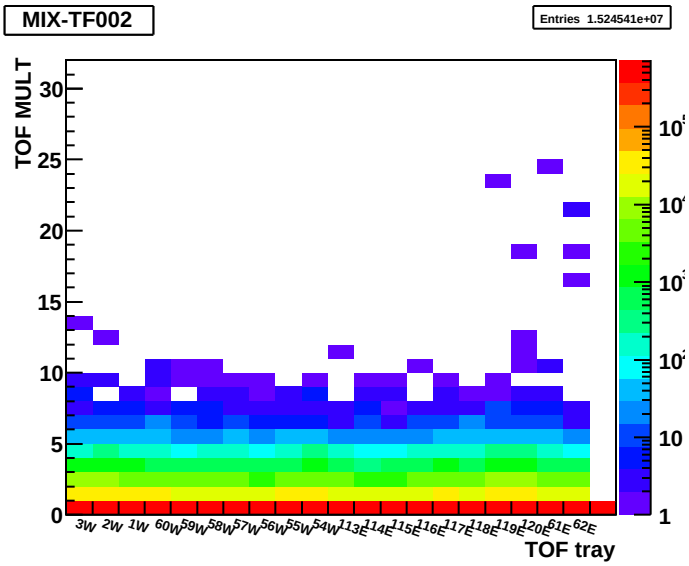

RAT board (ch4)
Entries 5807776
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

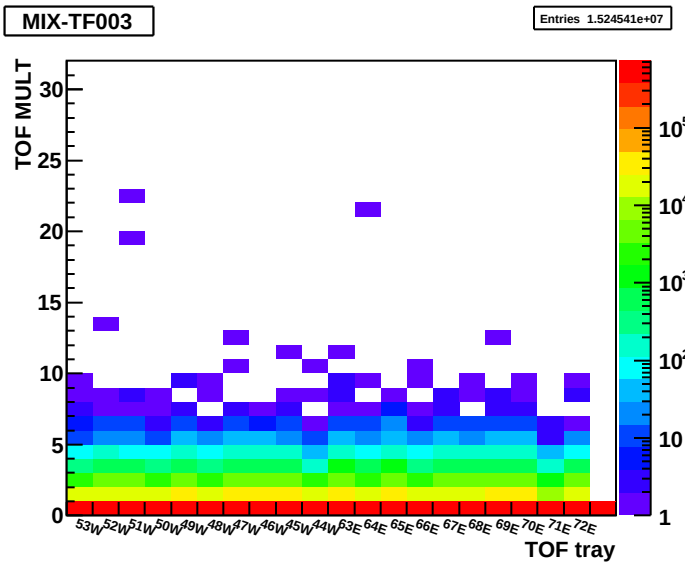

FP201 0-15 (ch5)
Entries 5807776
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

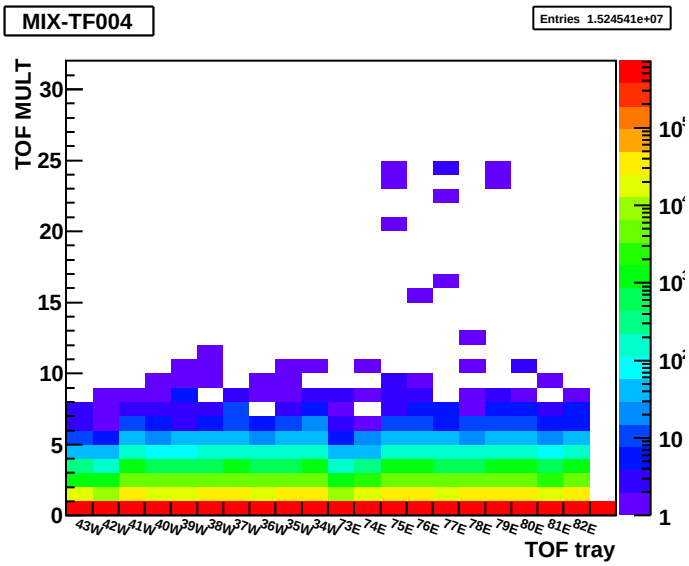

ST201 0-15 (ch6)
Entries 5807776
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

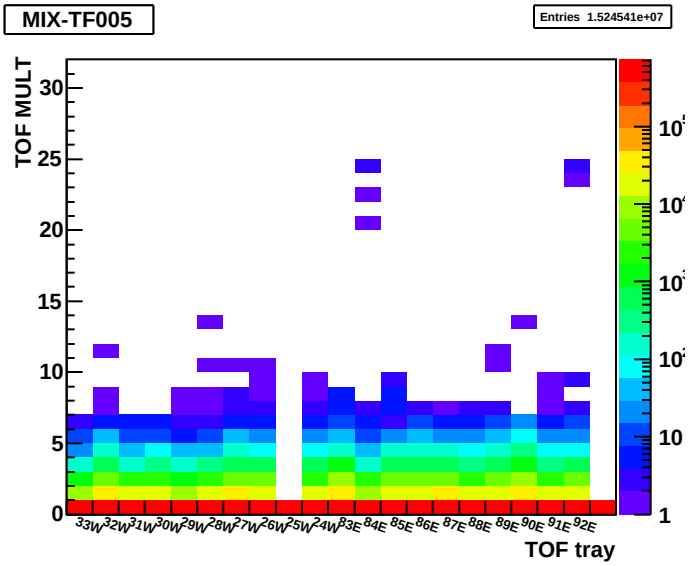

Unused (ch7)
Entries 5807776

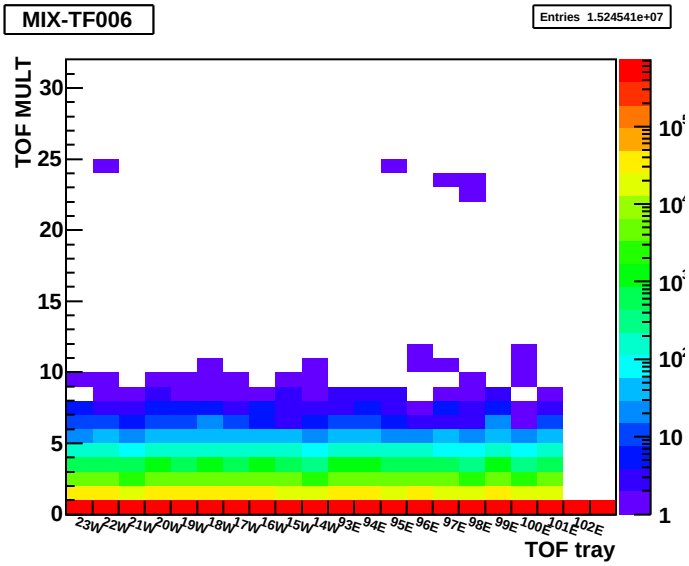

MIX-TF001
Entries 1.524541e+07
TOF MULT
TOF tray

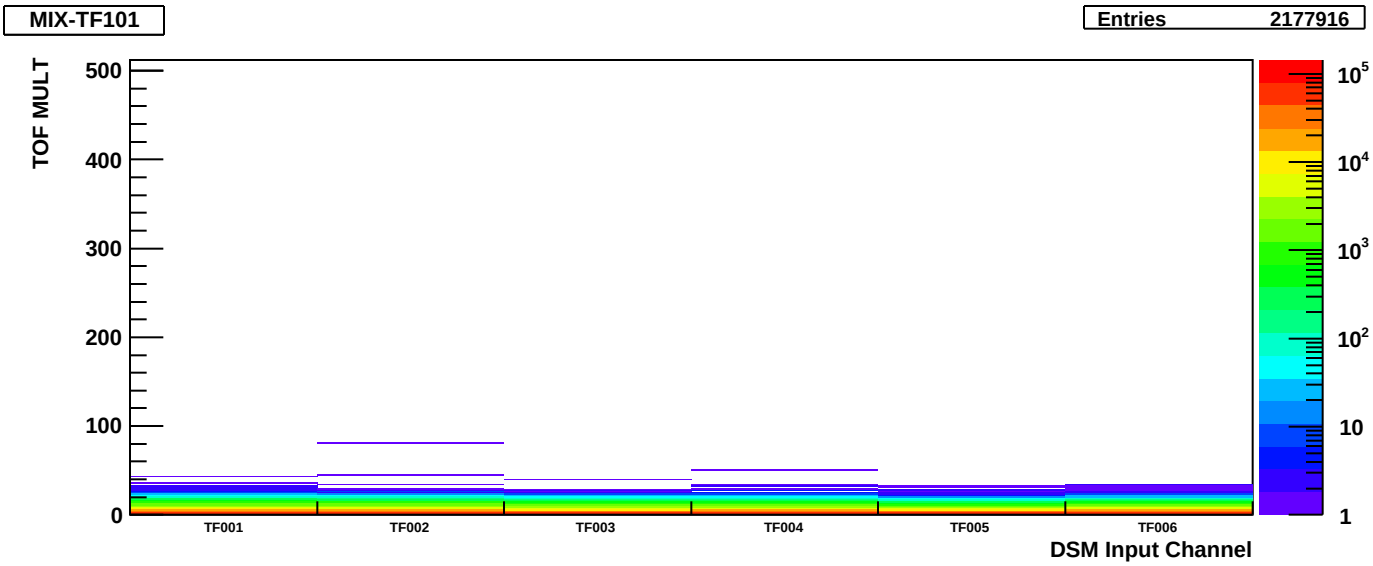

MIX-TF002
Entries 1.524541e+07
TOF MULT
TOF tray

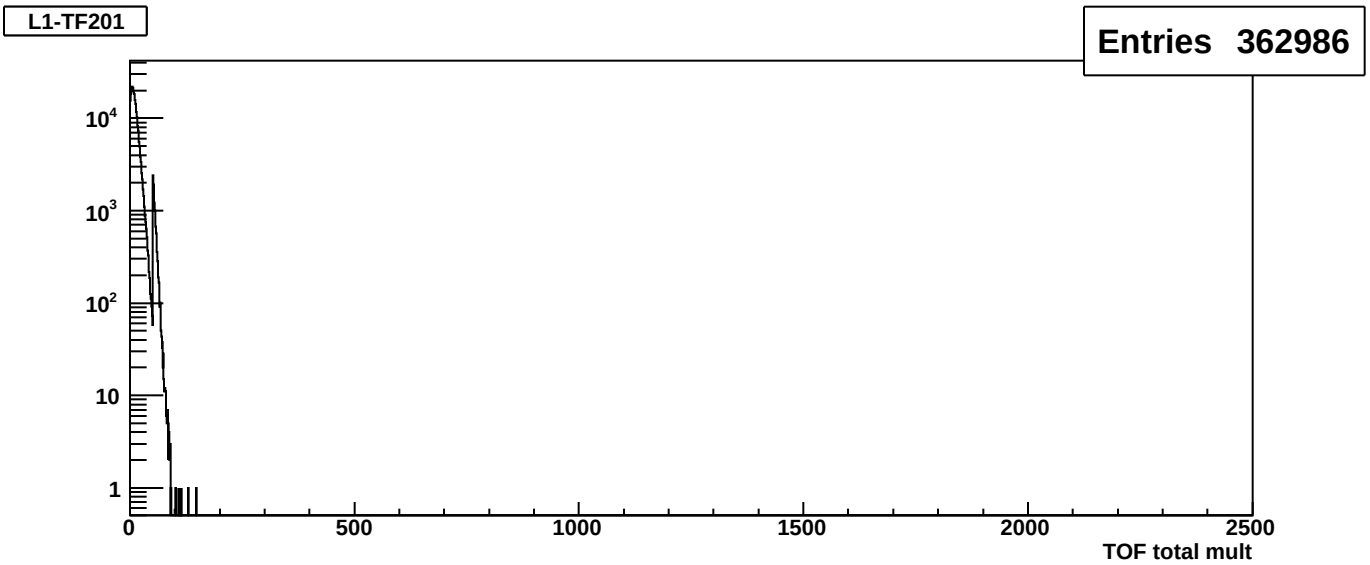

MIX-TF003
Entries 1.524541e+07
TOF MULT
TOF tray

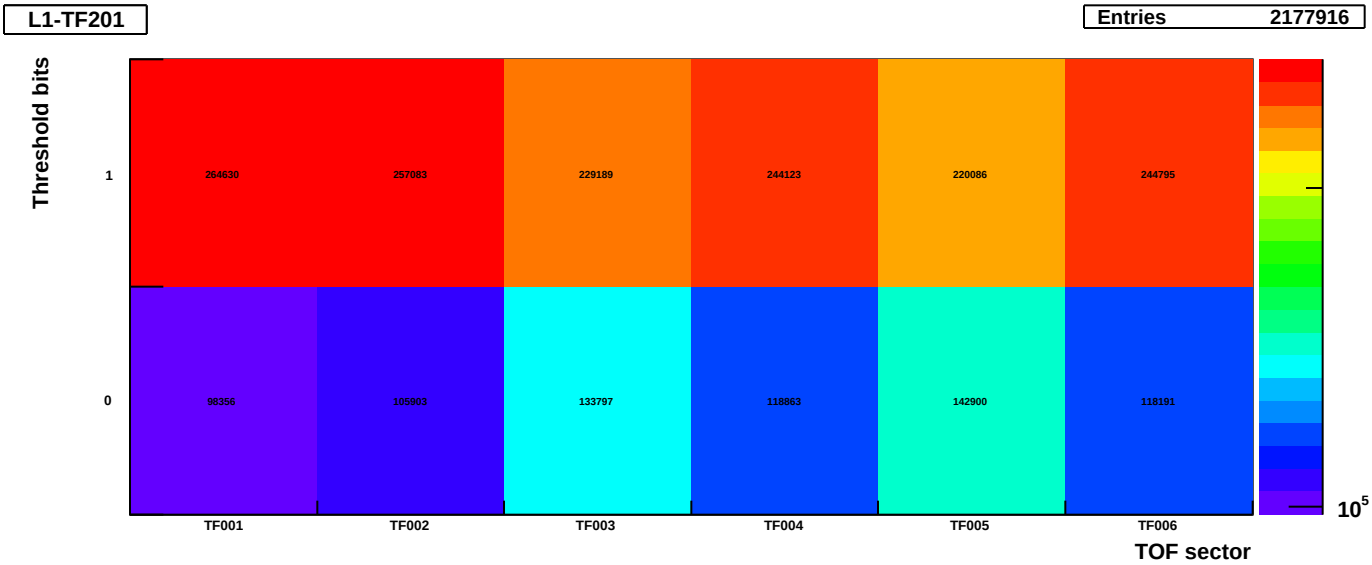

MIX-TF004
Entries 1.524541e+07
TOF MULT
TOF tray

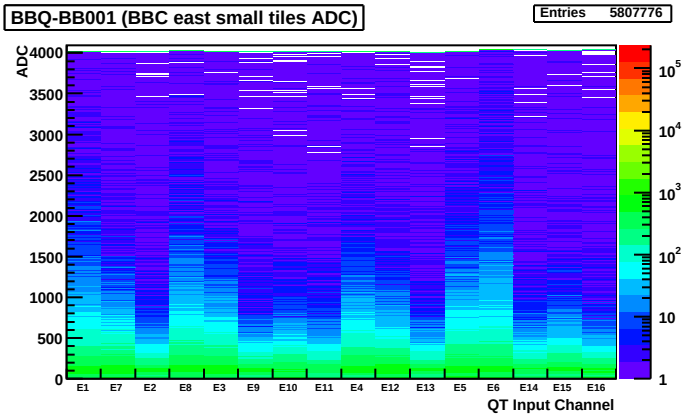

MIX-TF005
Entries 1.524541e+07
TOF MULT
TOF tray

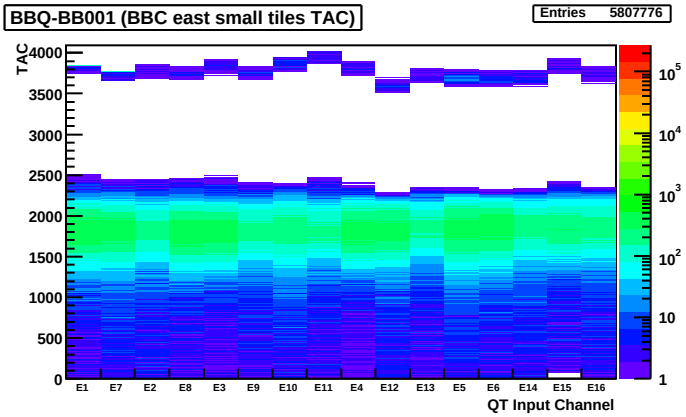

MIX-TF006
Entries 1.524541e+07
TOF MULT
TOF tray

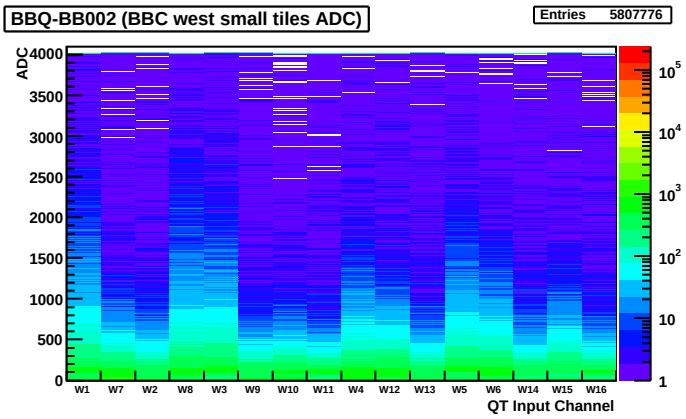

MIX-TF101
Entries 2177916
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

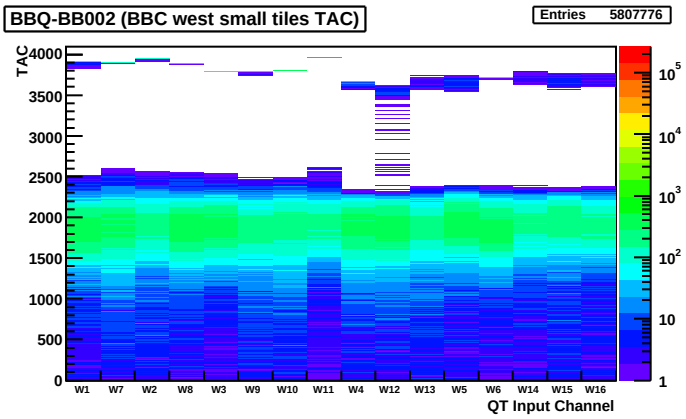

L1-TF201
Entries 362986
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

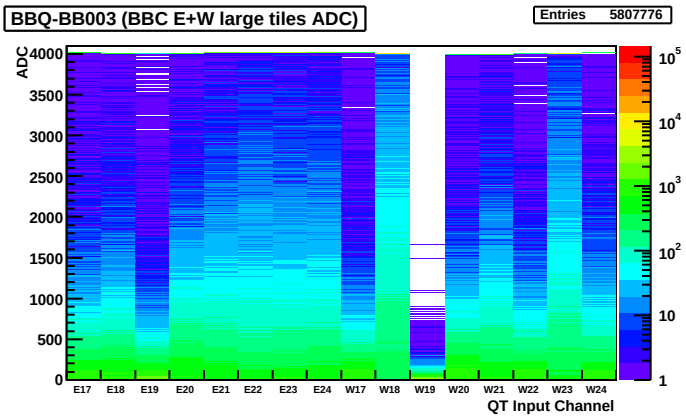

L1-TF201
Entries 2177916
Threshold bits
1
0
264630
257083
229189
244123
220086
244795
98356
105903
133797
118863
142900
118191
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

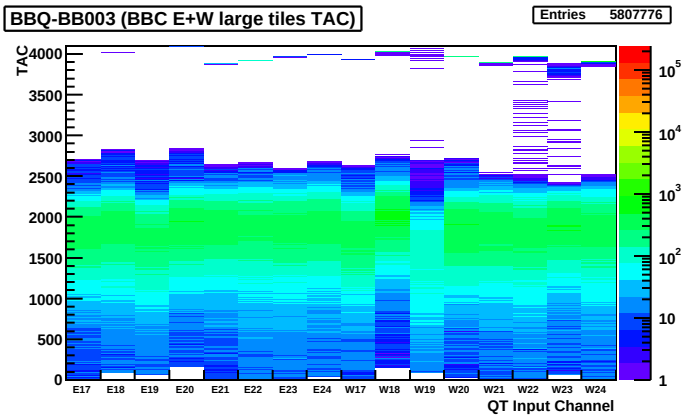

BBQ-BB001 (BBC east small tiles ADC)
Entries 5807776
ADC
QT Input Channel

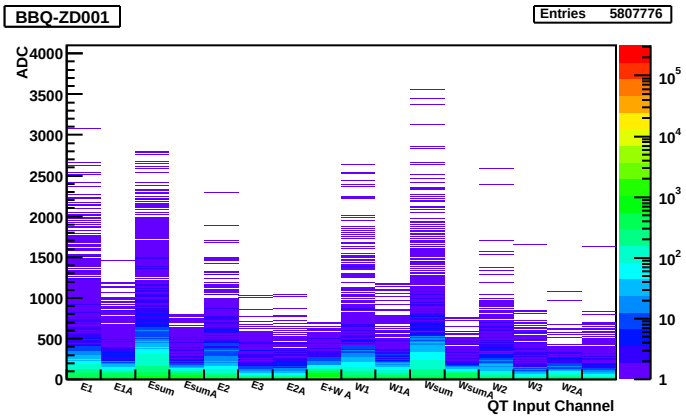

BBQ-BB001 (BBC east small tiles TAC)
Entries 5807776
TAC
QT Input Channel

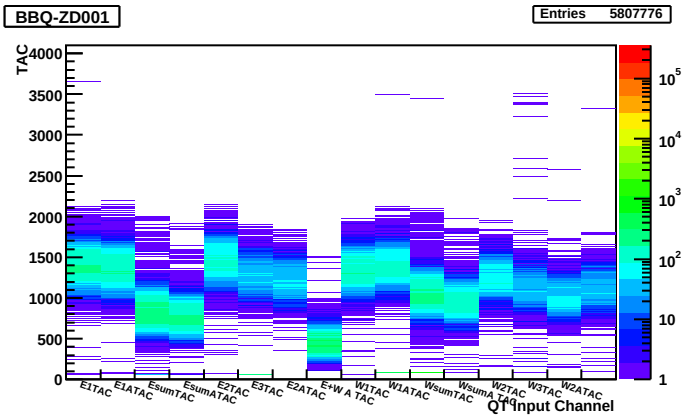

BBQ-BB002 (BBC west small tiles ADC)
Entries 5807776
ADC
QT Input Channel

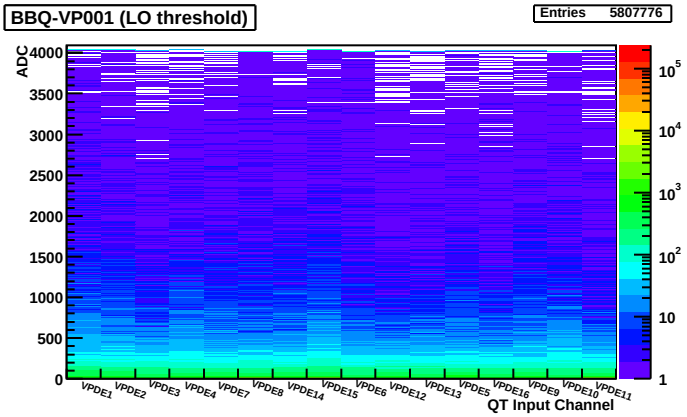

BBQ-BB002 (BBC west small tiles TAC)
Entries 5807776
TAC
QT Input Channel

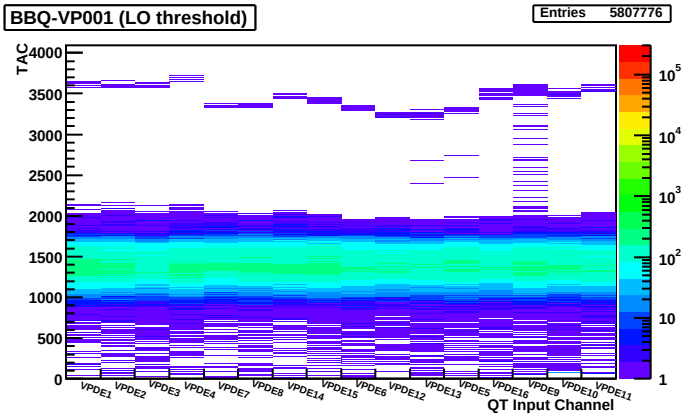

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 5807776
ADC
QT Input Channel

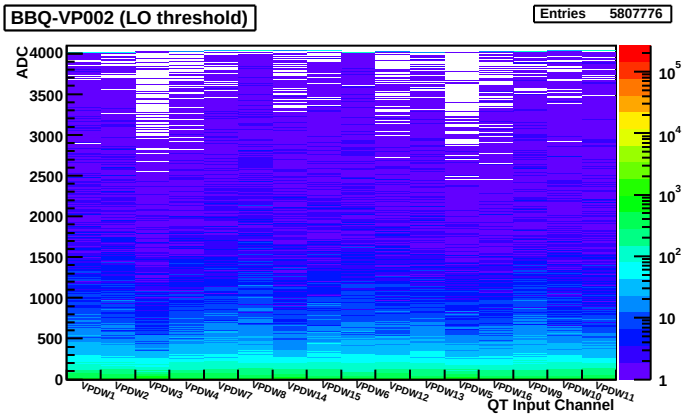

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 5807776
TAC
QT Input Channel

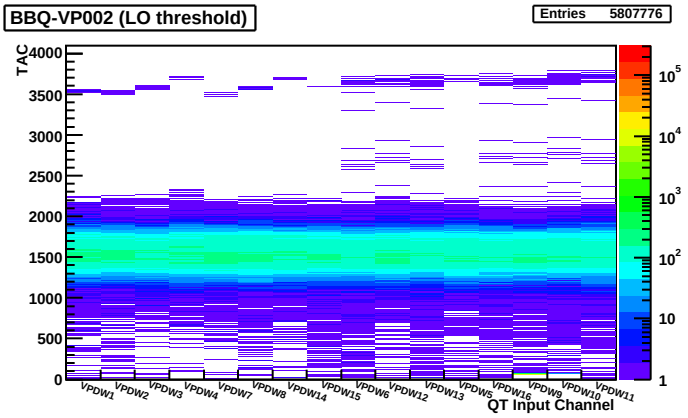

BBQ-ZD001
Entries 5807776
ADC
QT Input Channel

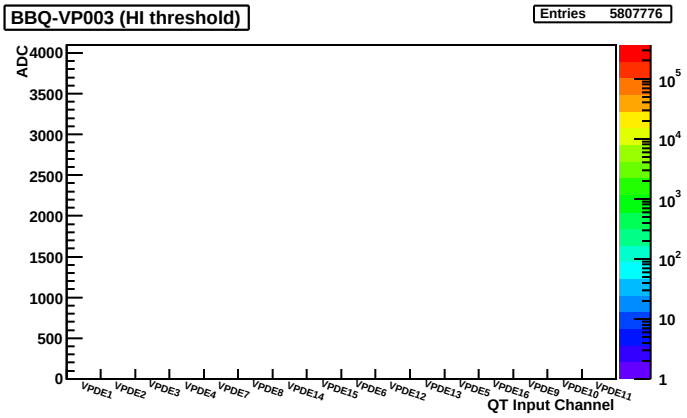

BBQ-ZD001
Entries 5807776
TAC
QT Input Channel

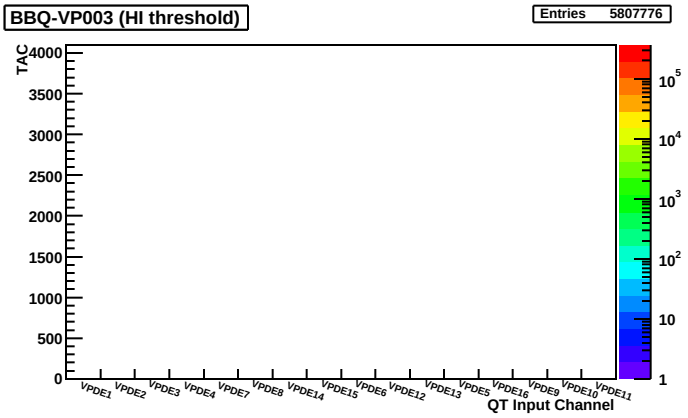

BBQ-VP001 (LO threshold)
Entries 5807776
ADC
QT Input Channel

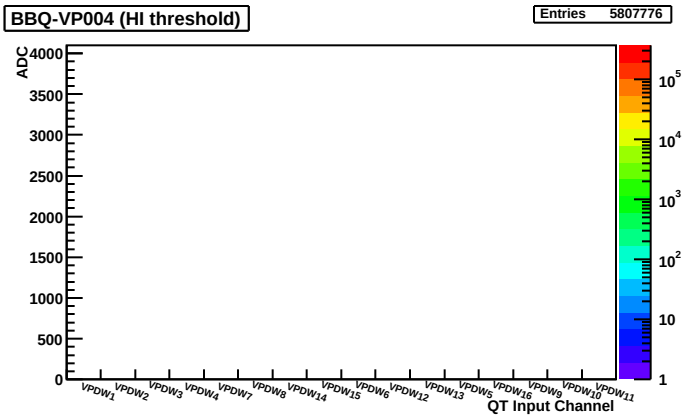

BBQ-VP001 (LO threshold)
Entries 5807776
TAC
QT Input Channel

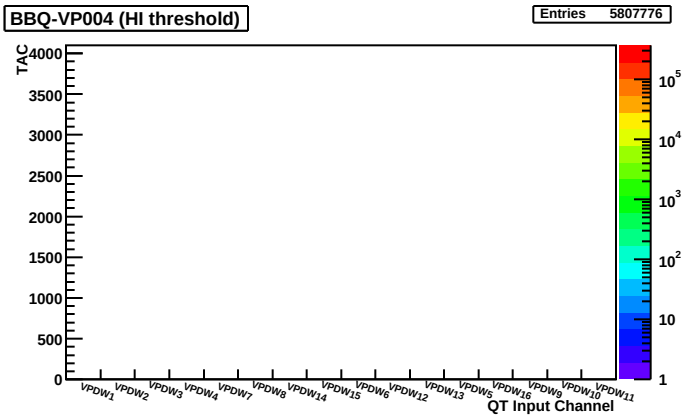

BBQ-VP002 (LO threshold)
Entries 5807776
ADC
QT Input Channel

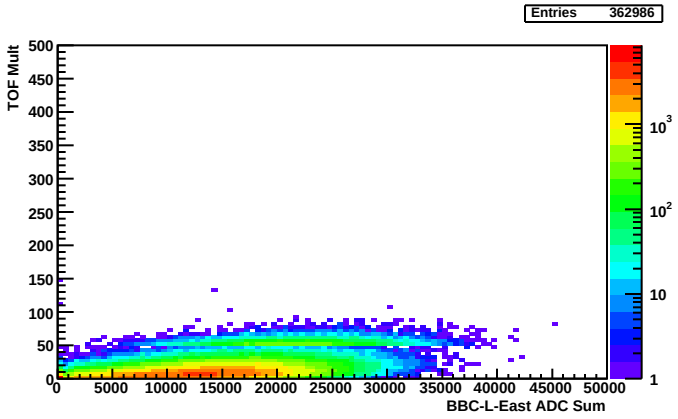

BBQ-VP002 (LO threshold)
Entries 5807776
TAC
QT Input Channel

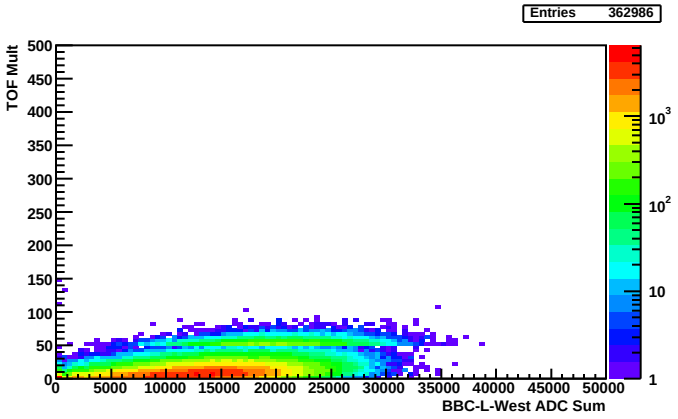

BBQ-VP003 (HI threshold)
Entries 5807776
ADC
QT Input Channel

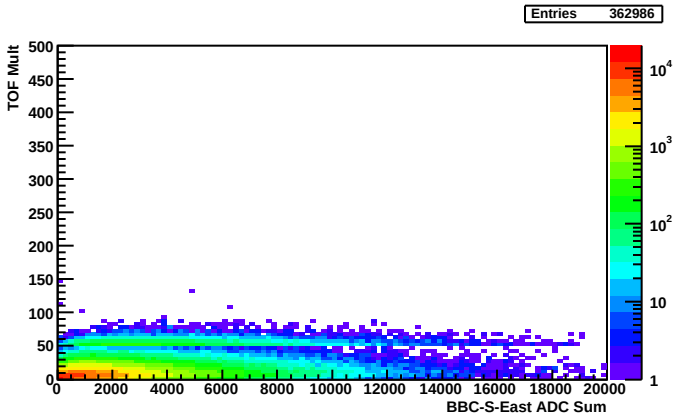

BBQ-VP003 (HI threshold)
Entries 5807776
TAC
QT Input Channel

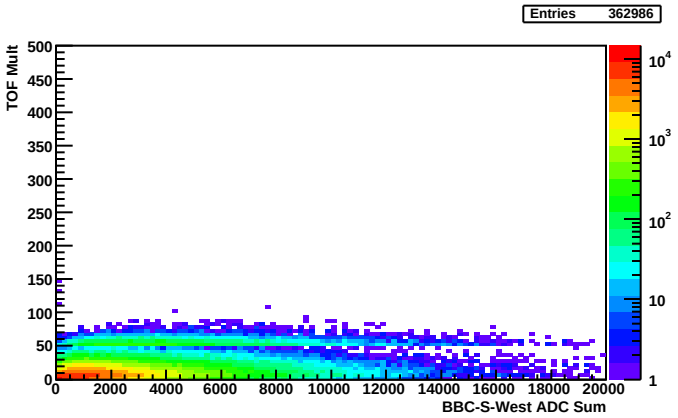

BBQ-VP004 (HI threshold)
Entries 5807776
ADC
QT Input Channel

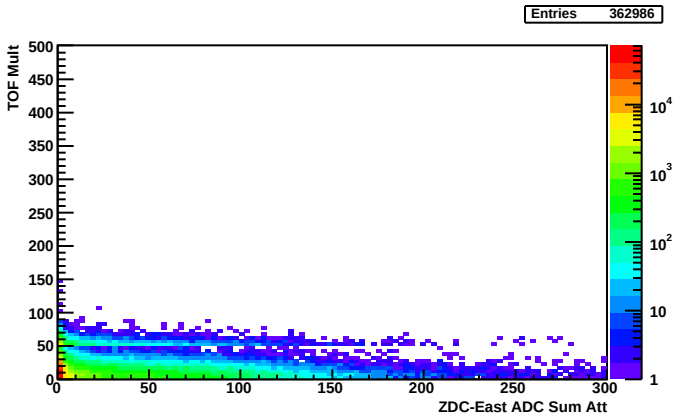

BBQ-VP004 (HI threshold)
Entries 5807776
TAC
QT Input Channel

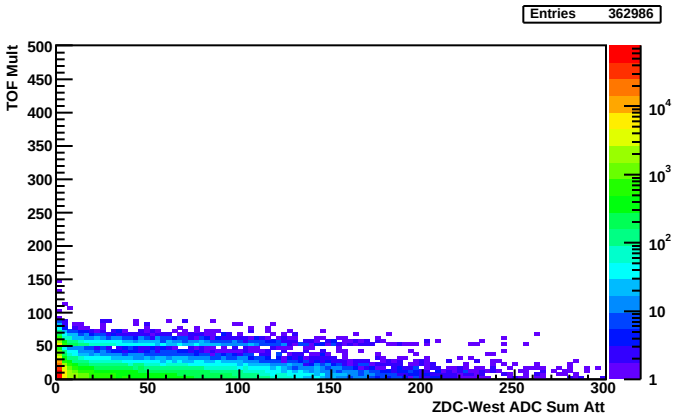

Entries 362986
TOF Mult
BBC-L-East ADC Sum

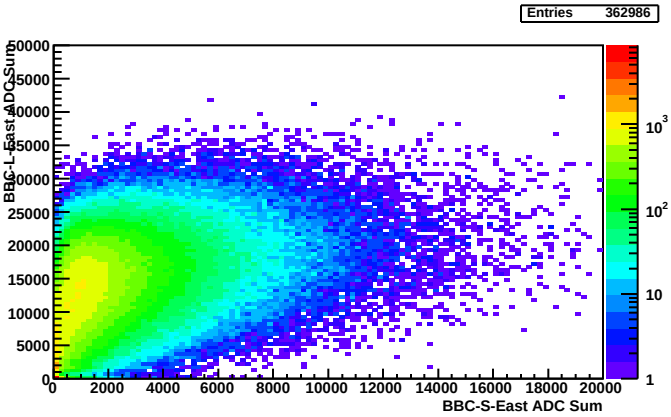

Entries 362986
TOF Mult
BBC-L-West ADC Sum

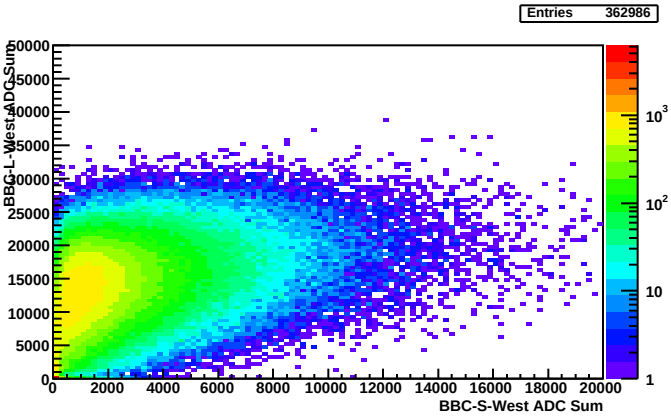

Entries 362986
TOF Mult
BBC-S-East ADC Sum

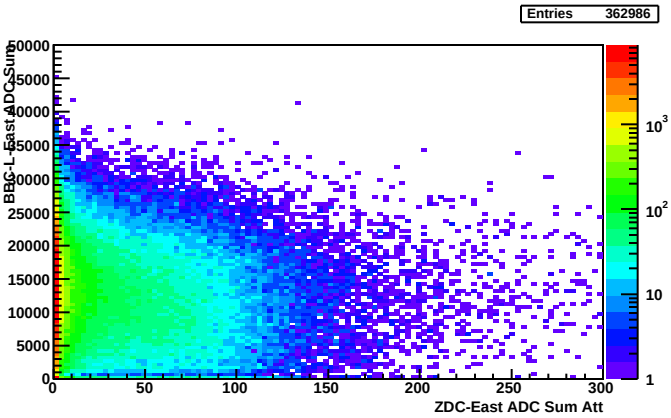

Entries 362986
TOF Mult
BBC-S-West ADC Sum

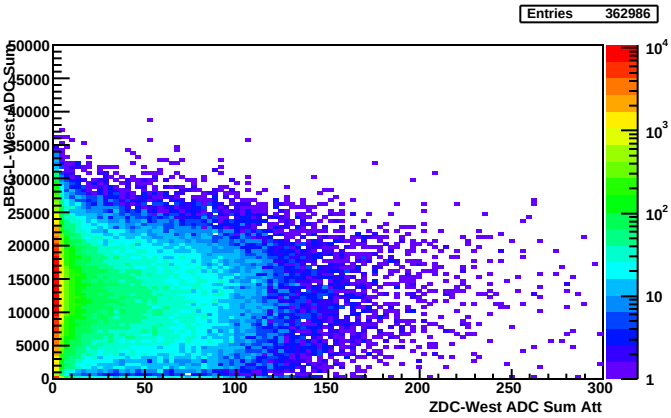

Entries 362986
TOF Mult
ZDC-East ADC Sum Att

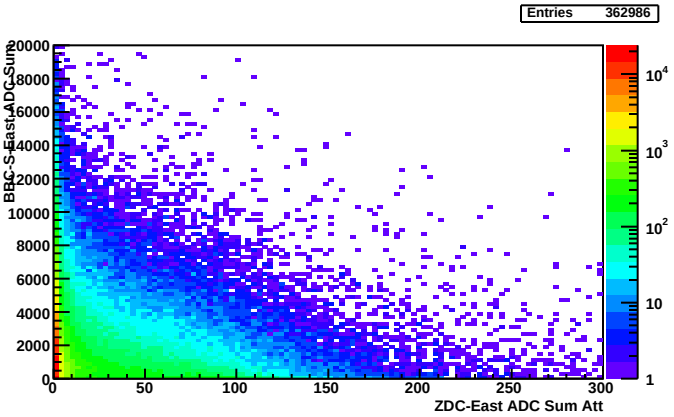

Entries 362986
TOF Mult
ZDC-West ADC Sum Att

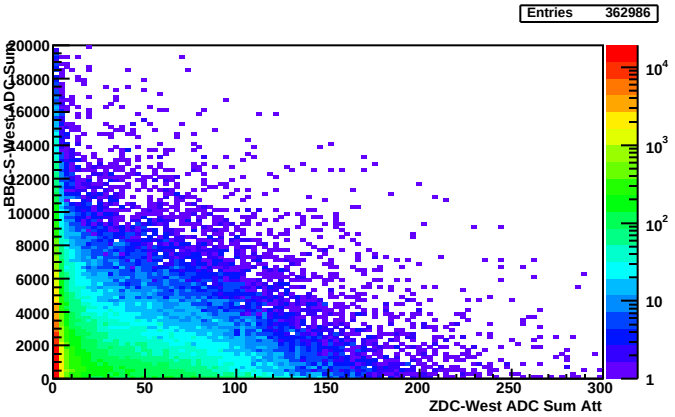

Entries 362986
BBC-L-East ADC Sum
BBC-S-East ADC Sum

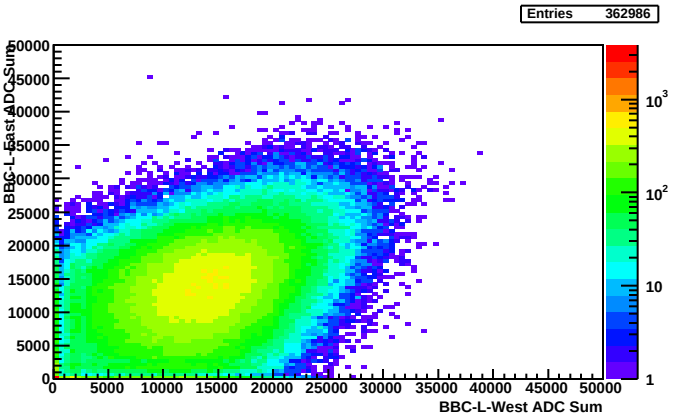

Entries 362986
BBC-L-West ADC Sum
BBC-S-West ADC Sum

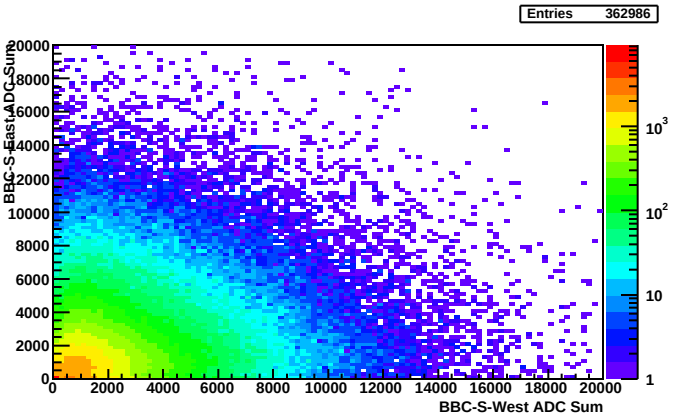

Entries 362986
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

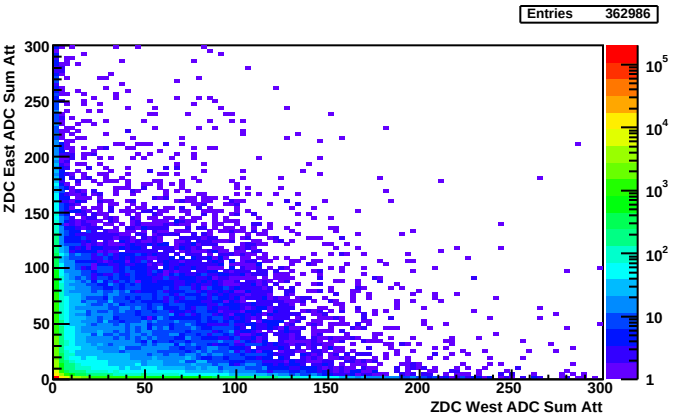

Entries 362986
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

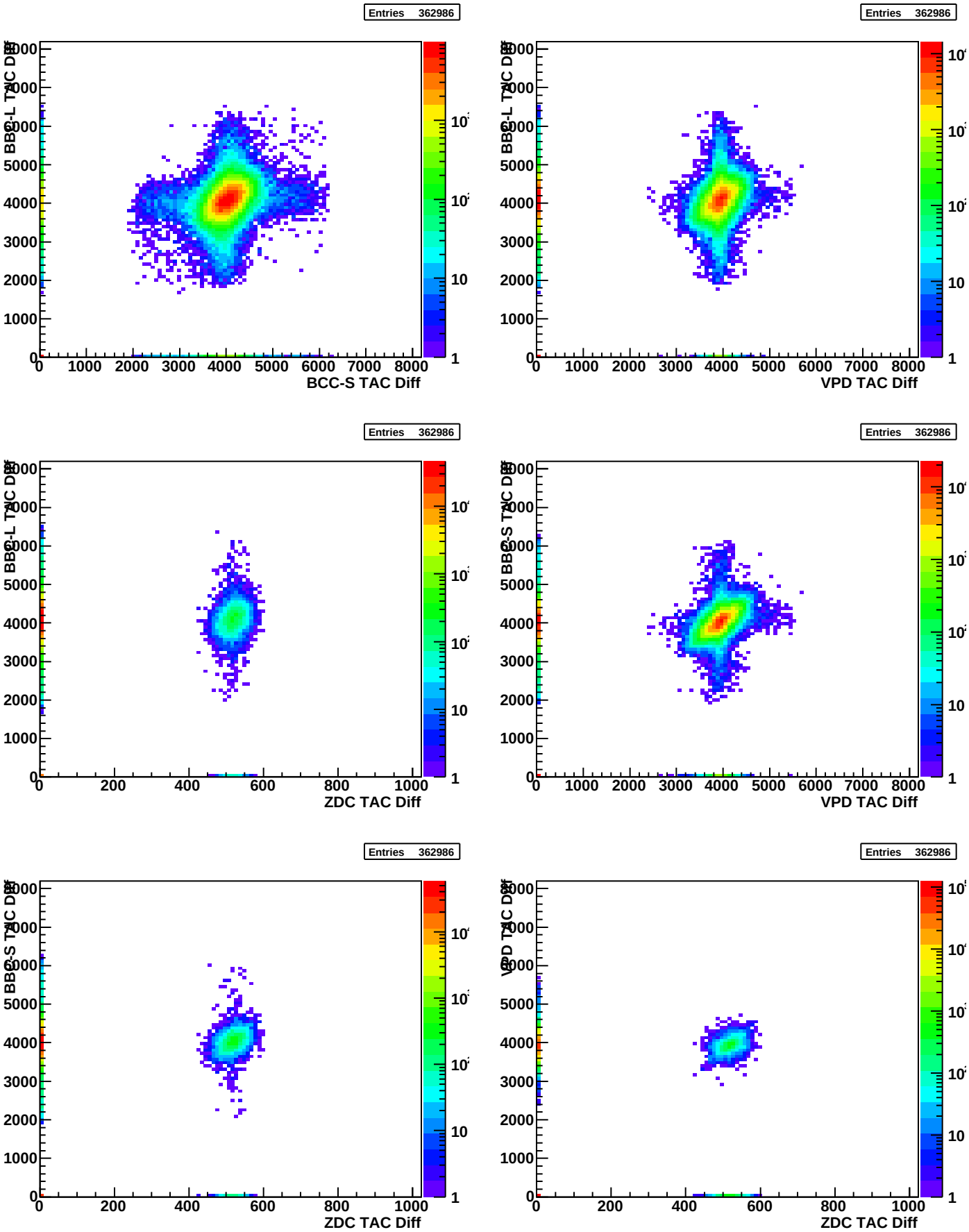

Entries 362986
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

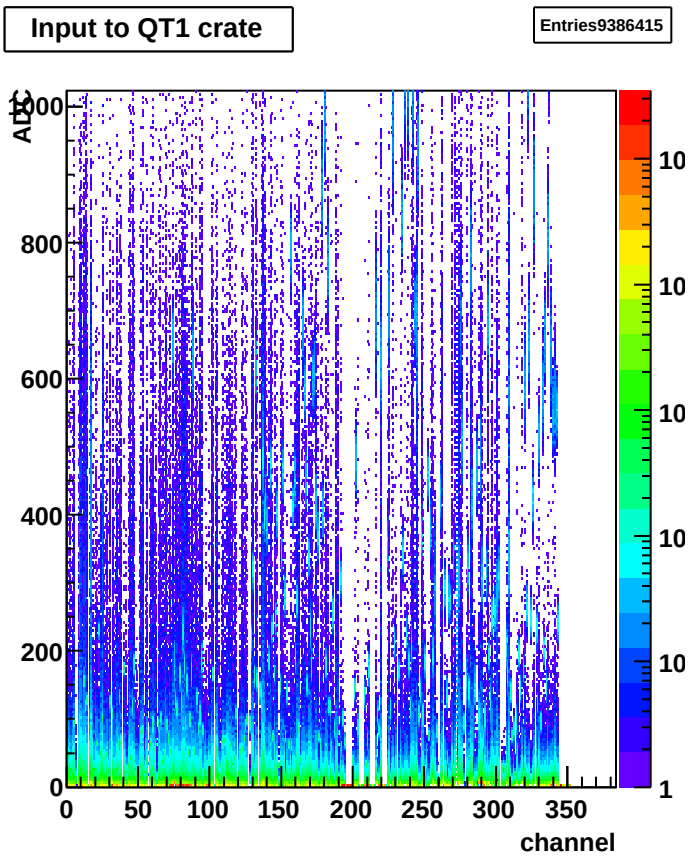

Entries 362986
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

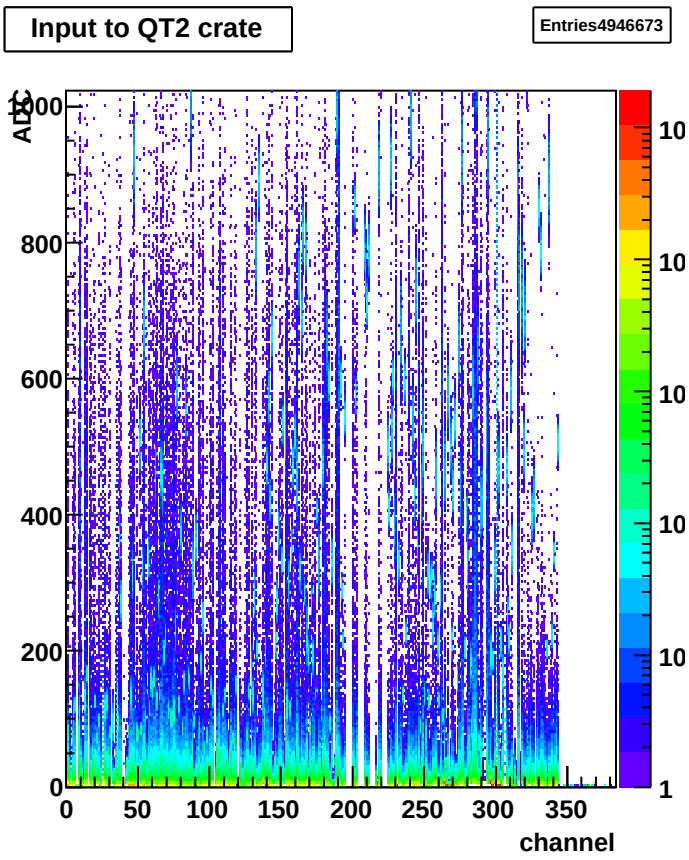

Entries 362986
BBC-L-East ADC Sum
BBC-L-West ADC Sum

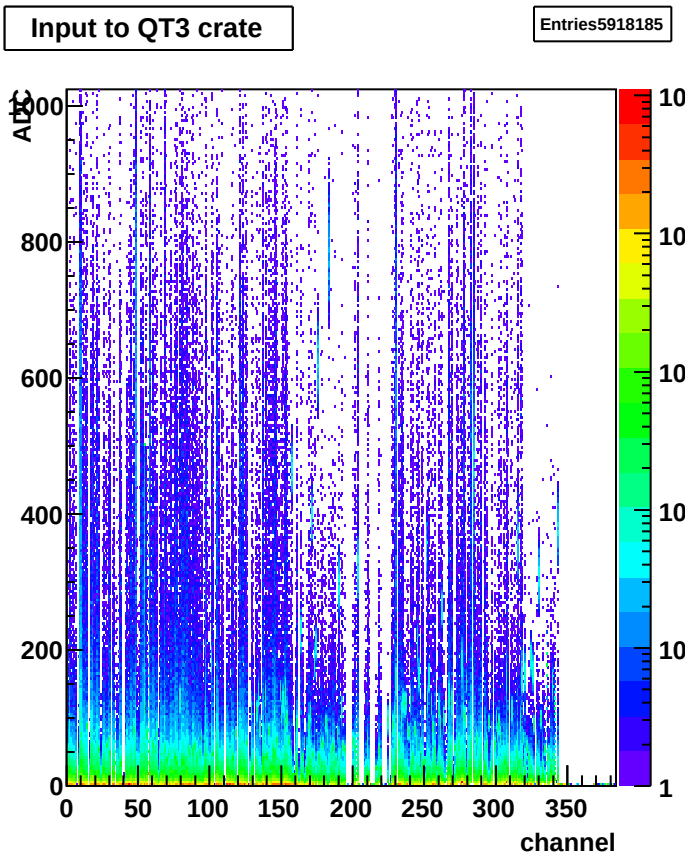

Entries 362986
BBC-S-East ADC Sum
BBC-S-West ADC Sum

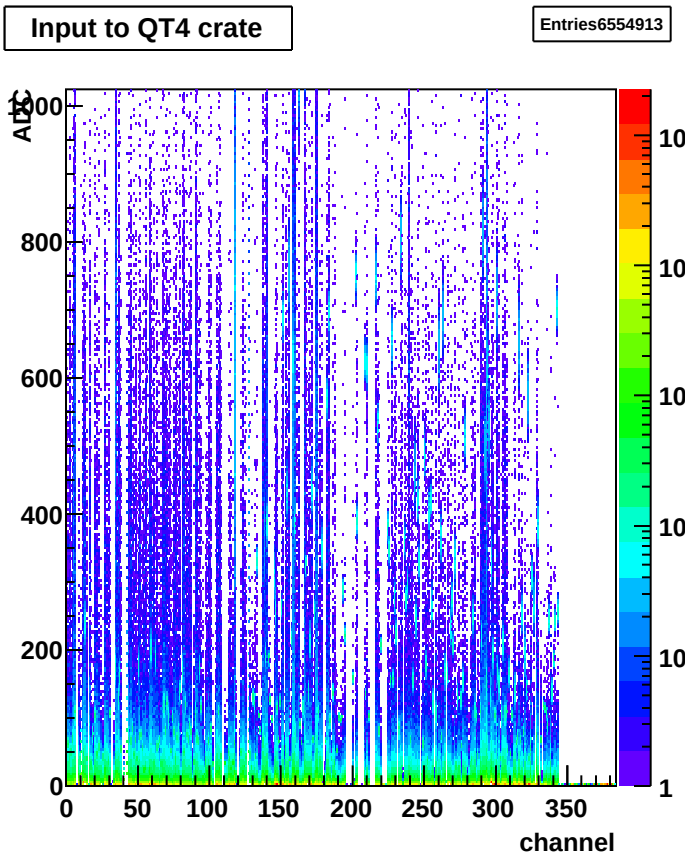

Entries 362986
ZDC East ADC Sum Att
ZDC West ADC Sum Att

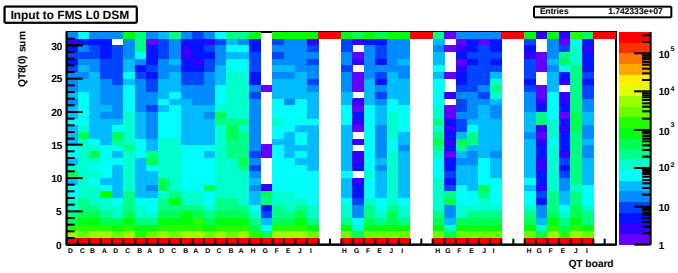

Entries 362986
BBC-L TAC Diff
BCC-S TAC Diff
Entries 362986
BBC-L TAC Diff
VPD TAC Diff
Entries 362986
BBC-L TAC Diff
ZDC TAC Diff
Entries 362986
BBC-S TAC Diff
VPD TAC Diff
Entries 362986
BBC-S TAC Diff
ZDC TAC Diff
Entries 362986
VPD TAC Diff
ZDC TAC Diff

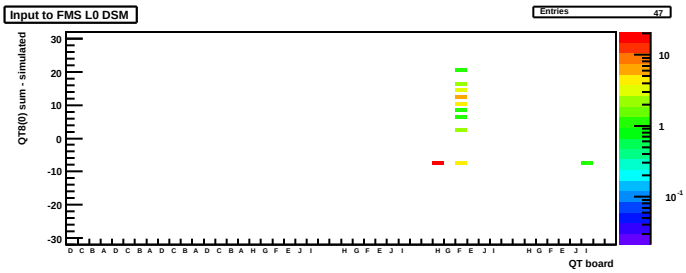

Input to QT1 crate
Entries9386415
ADC
channel

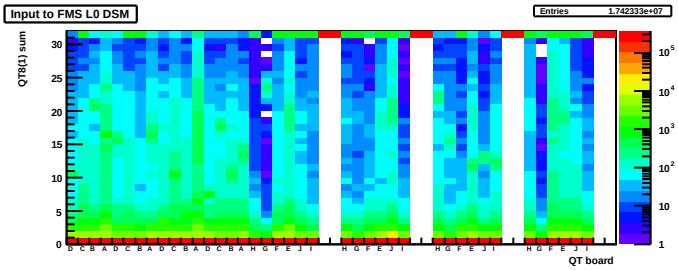

Input to QT2 crate
Entries4946673
ADC
channel

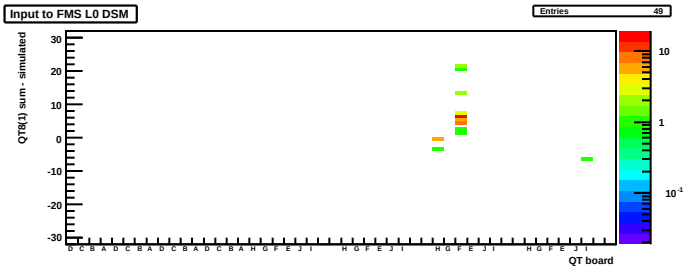

Input to QT3 crate
Entries5918185
ADC
channel

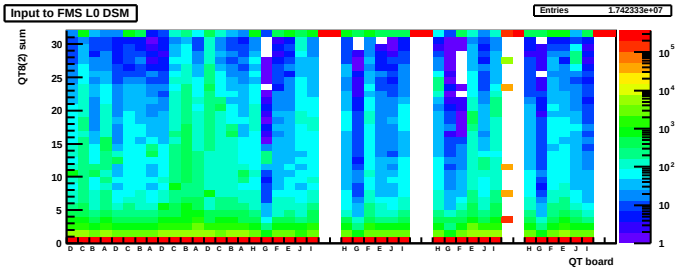

Input to QT4 crate
Entries6554913
ADC
channel

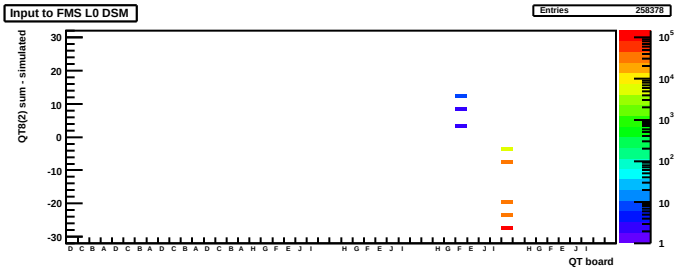

Input to FMS L0 DSM
Entries 1.742333e+07
QT8(0) sum
QT board

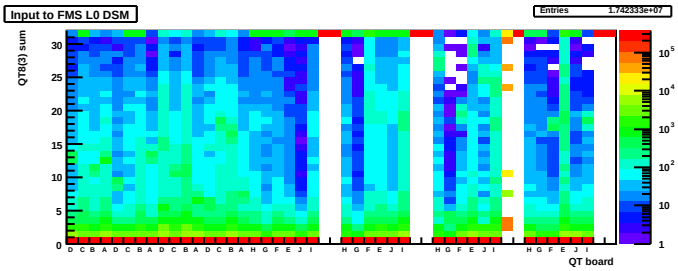

Input to FMS L0 DSM
Entries 47
QT8(0) sum - simulated
QT board

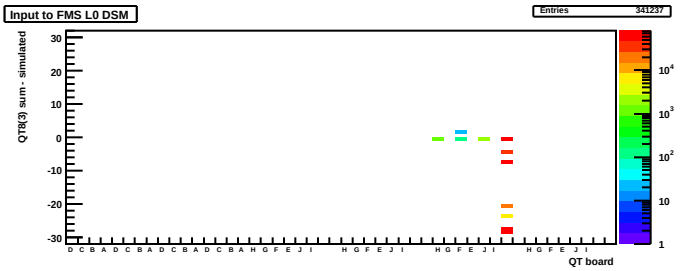

Input to FMS L0 DSM
Entries 1.742333e+07
QT8(1) sum
QT board

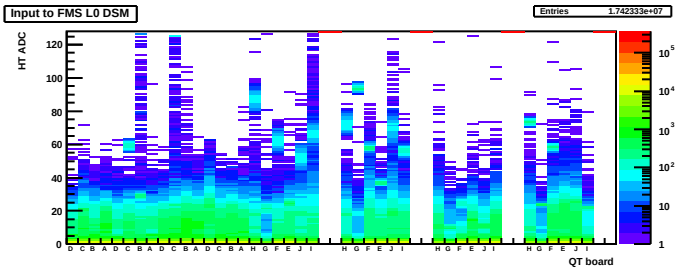

Input to FMS L0 DSM
Entries 49
QT8(1) sum - simulated
QT board

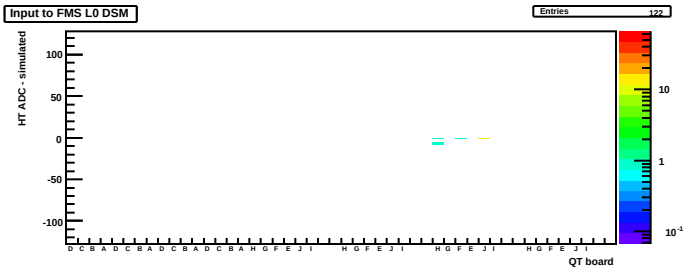

Input to FMS L0 DSM
Entries 1.742333e+07
QT8(2) sum
QT board

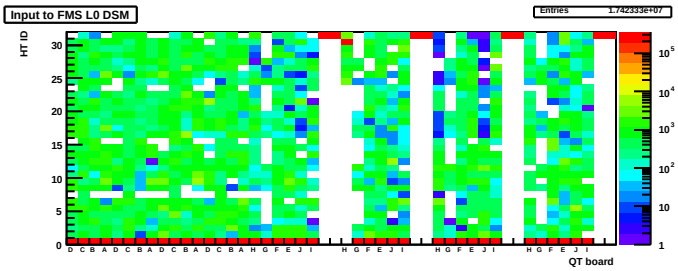

Input to FMS L0 DSM
Entries 258378
QT8(2) sum - simulated
QT board

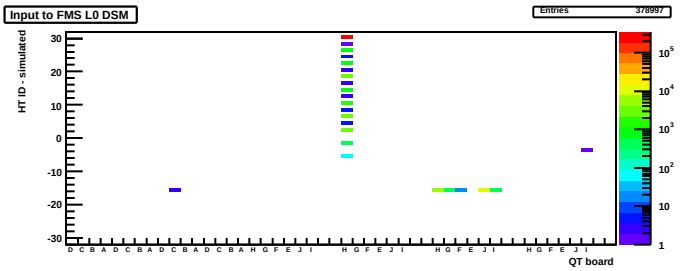

Input to FMS L0 DSM
Entries 1.742333e+07
QT8(3) sum
QT board

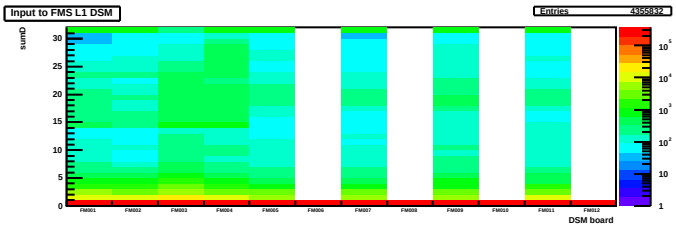

Input to FMS L0 DSM
Entries 341237
QT8(3) sum - simulated
QT board

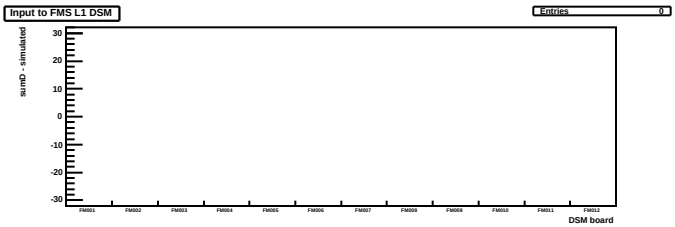

Input to FMS L0 DSM
Entries 1.742333e+07
HT ADC
QT board

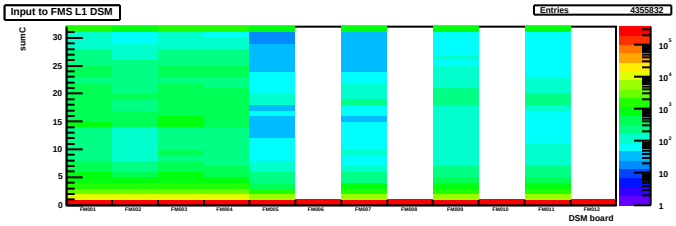

Input to FMS L0 DSM
Entries 122
HT ADC - simulated
QT board

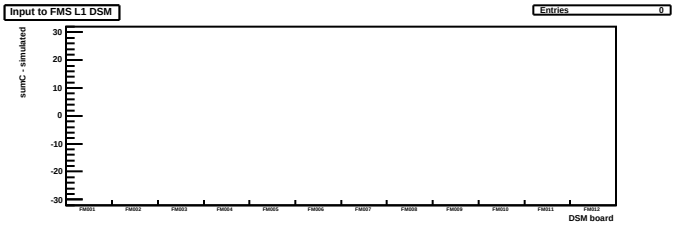

Input to FMS L0 DSM
Entries 1.742333e+07
HT ID
QT board

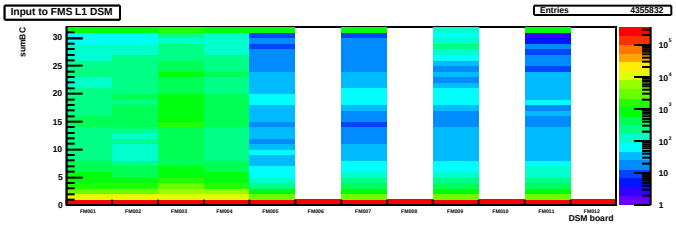

Input to FMS L0 DSM
Entries 378997
HT ID - simulated
QT board

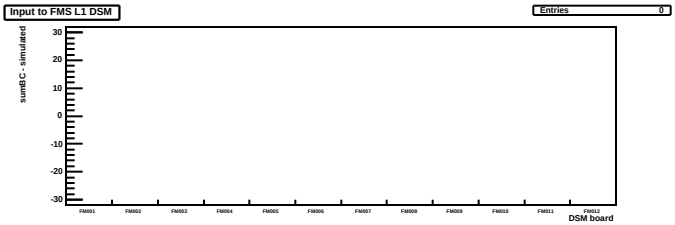

Input to FMS L1 DSM
Entries 4355832
sumD
DSM board

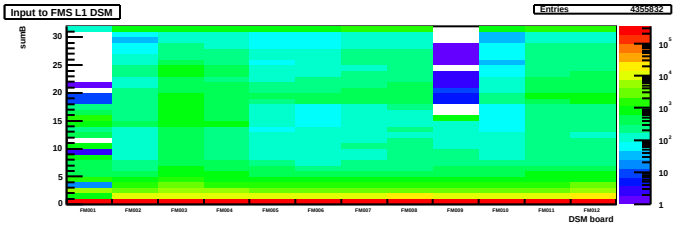

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

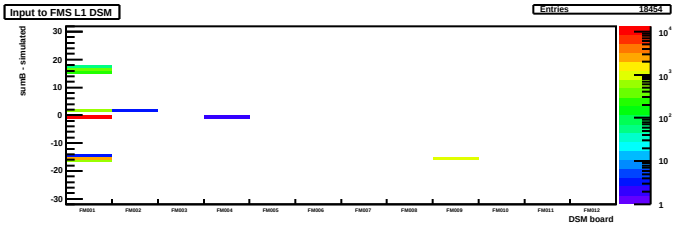

Input to FMS L1 DSM
Entries 4355832
sumC
DSM board

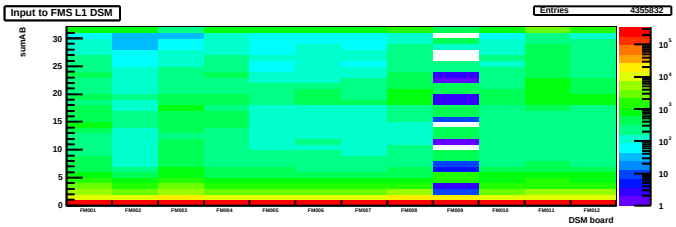

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

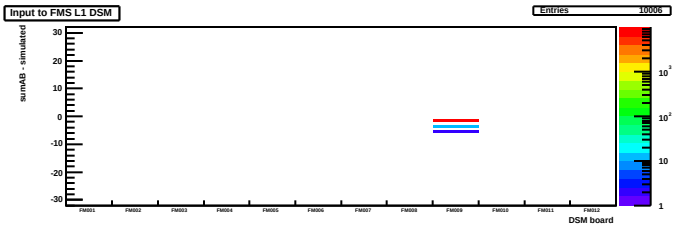

Input to FMS L1 DSM
Entries 4355832
sumBC
DSM board

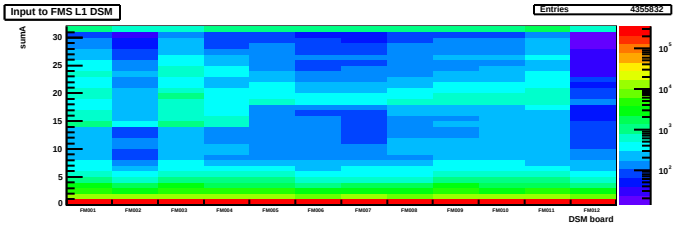

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

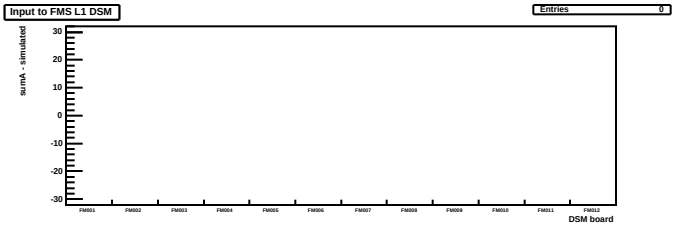

Input to FMS L1 DSM
Entries 4355832
sumB
DSM board

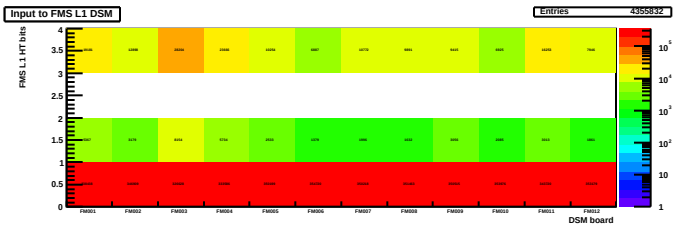

Input to FMS L1 DSM
Entries 18454
sumB - simulated
DSM board

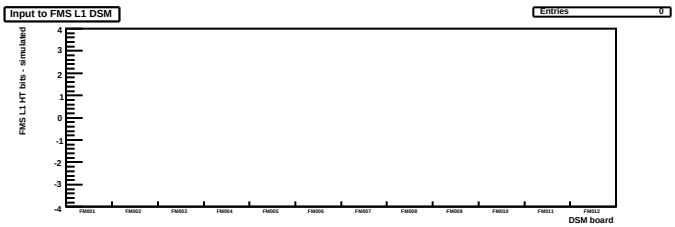

Input to FMS L1 DSM
Entries 4355832
sumAB
DSM board

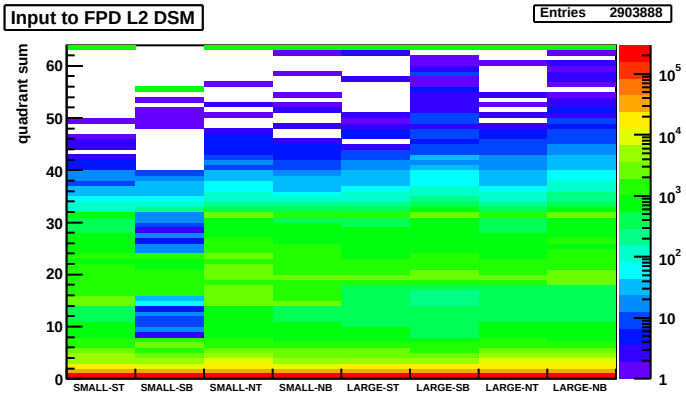

Input to FMS L1 DSM
Entries 10006
sumAB - simulated
DSM board

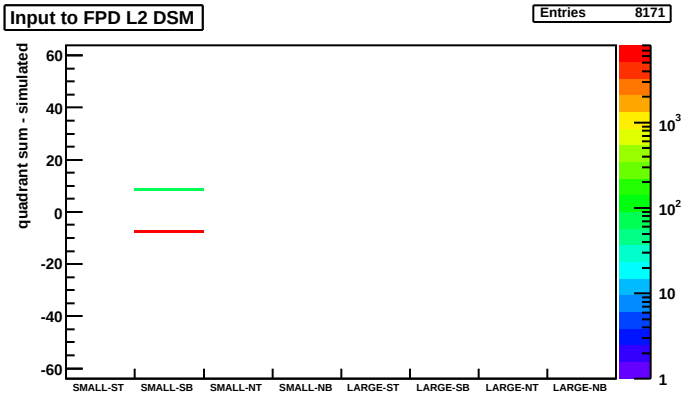

Input to FMS L1 DSM
Entries 4355832
sumA
DSM board

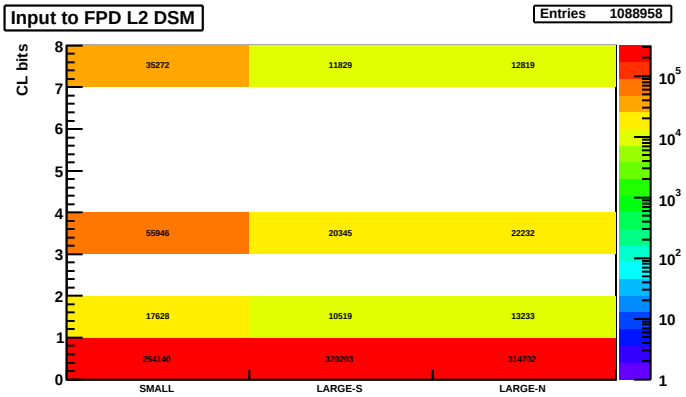

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

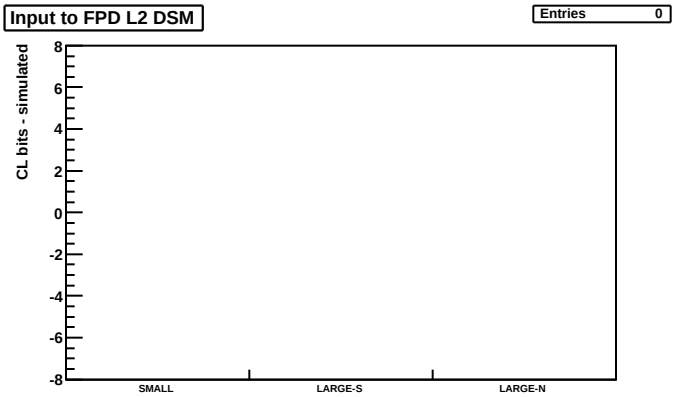

Input to FMS L1 DSM
Entries 4355832
FMS L1 HT bits
DSM board

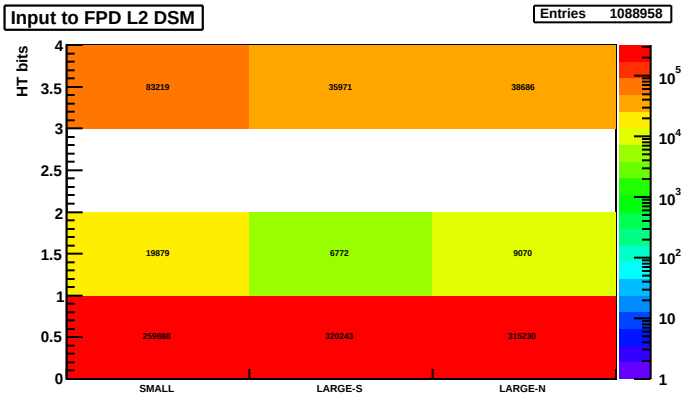

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

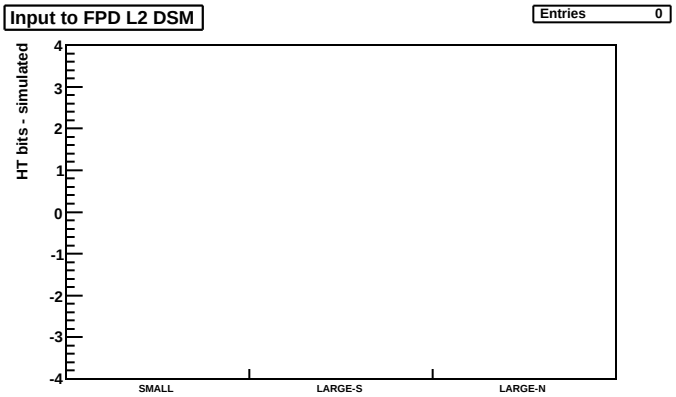

Input to FPD L2 DSM
Entries 2903888
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

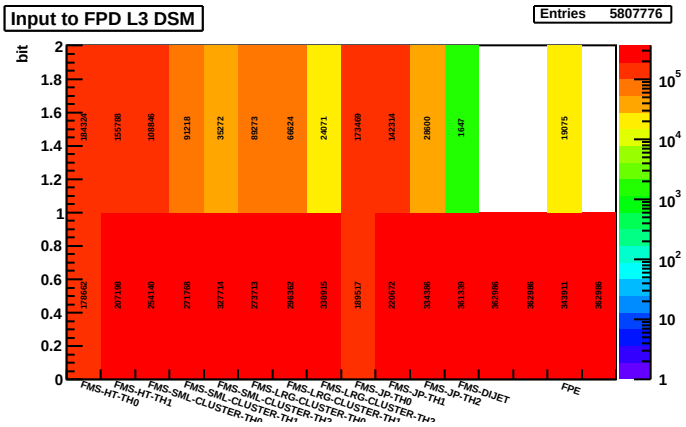

Input to FPD L2 DSM
Entries 8171
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

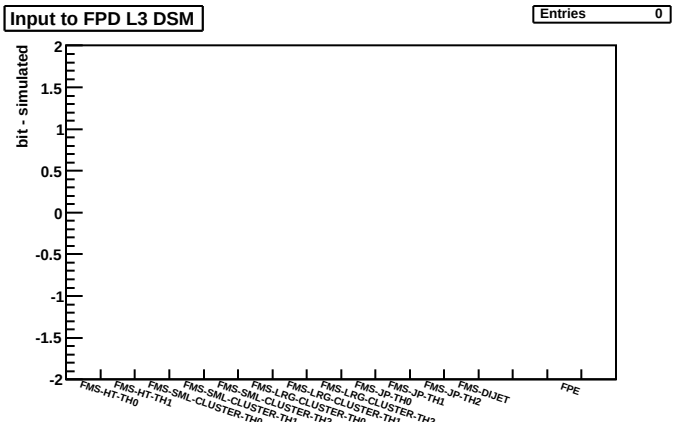

Input to FPD L2 DSM
Entries 1088958
CL bits
35272
11829
12819
55946
20345
22232
17628
10519
13233
254140
320293
314702
SMALL
LARGE-S
LARGE-N

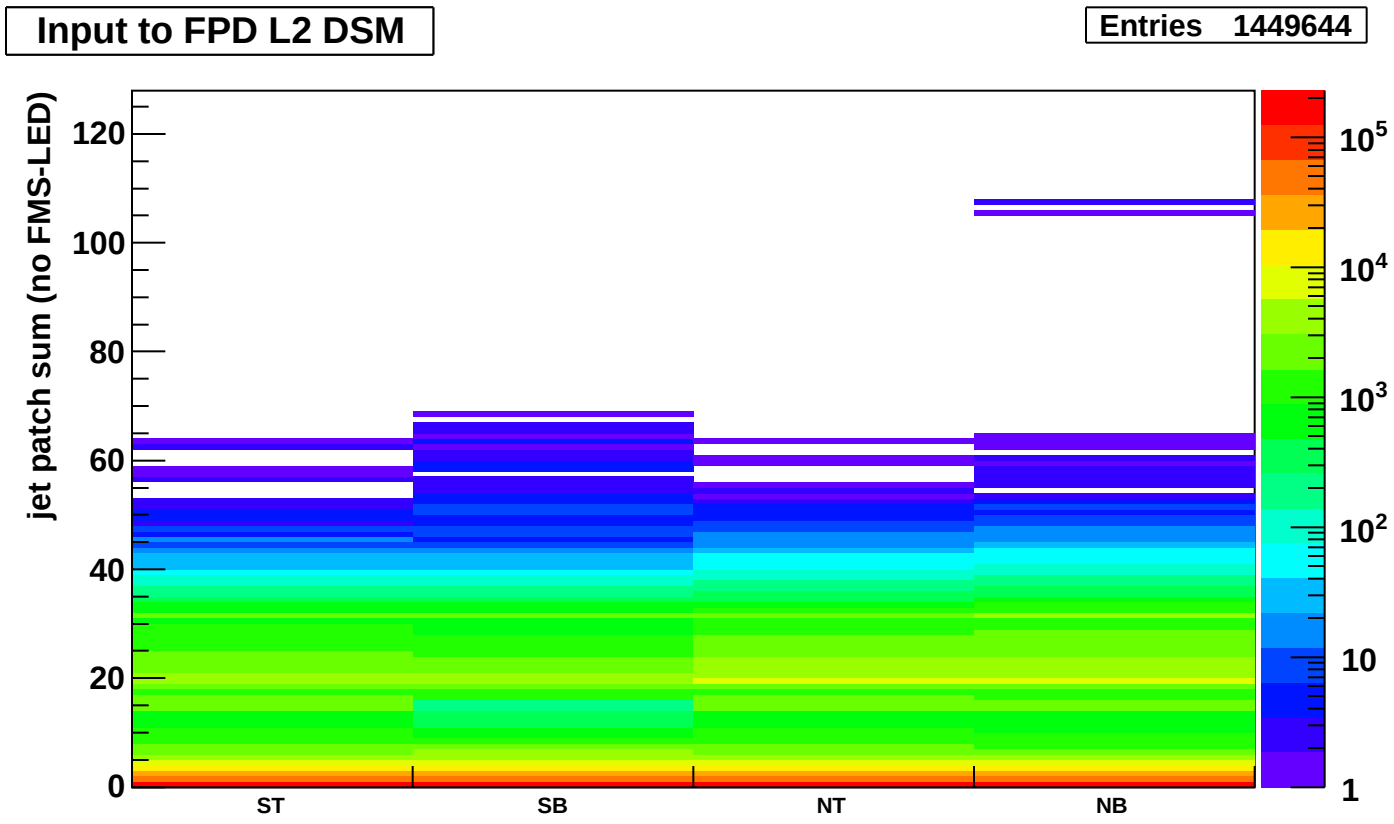

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

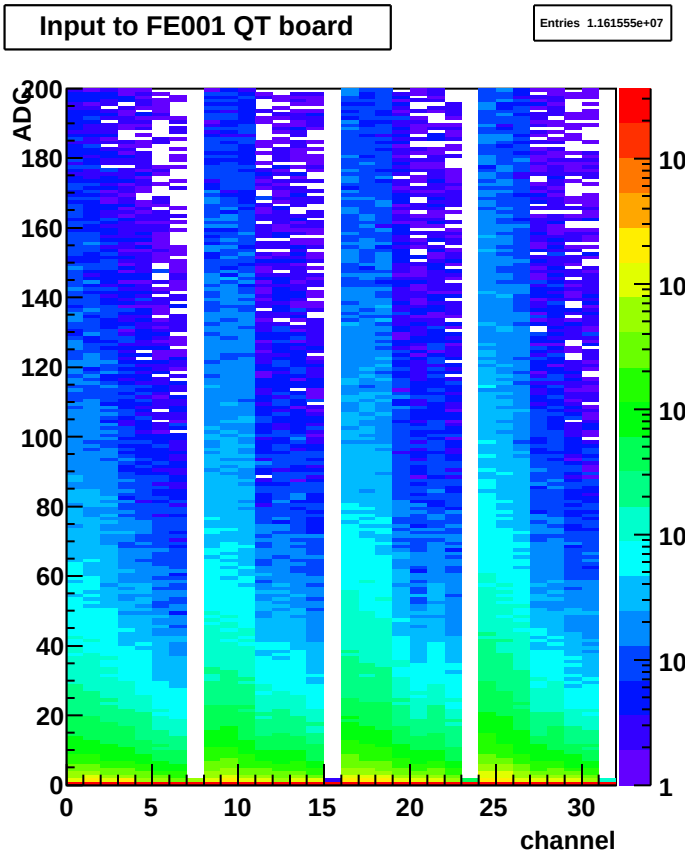

Input to FPD L2 DSM
Entries 1088958
HT bits
83219
35971
38686
19879
6772
9070
259888
320243
315230
SMALL
LARGE-S
LARGE-N

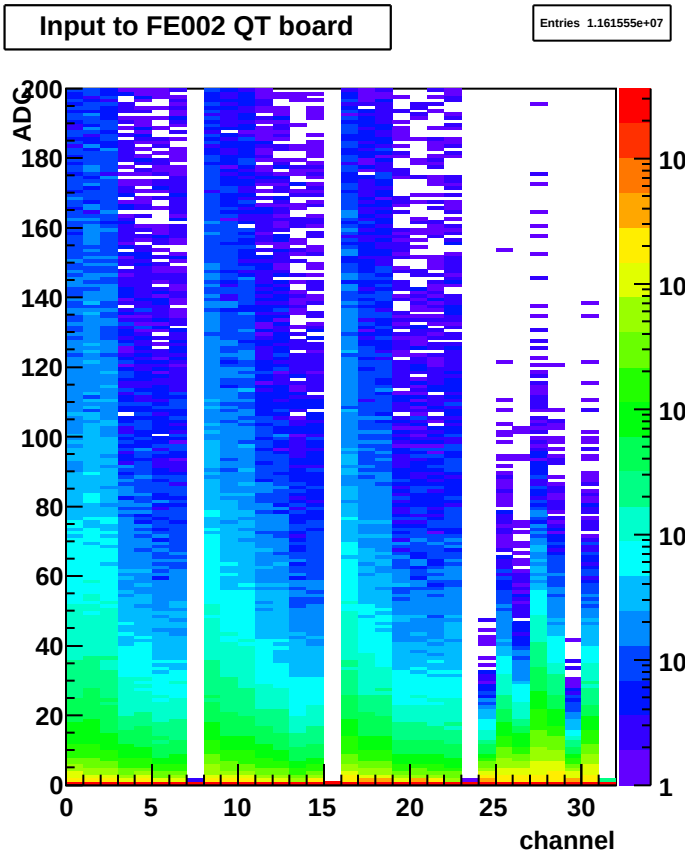

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

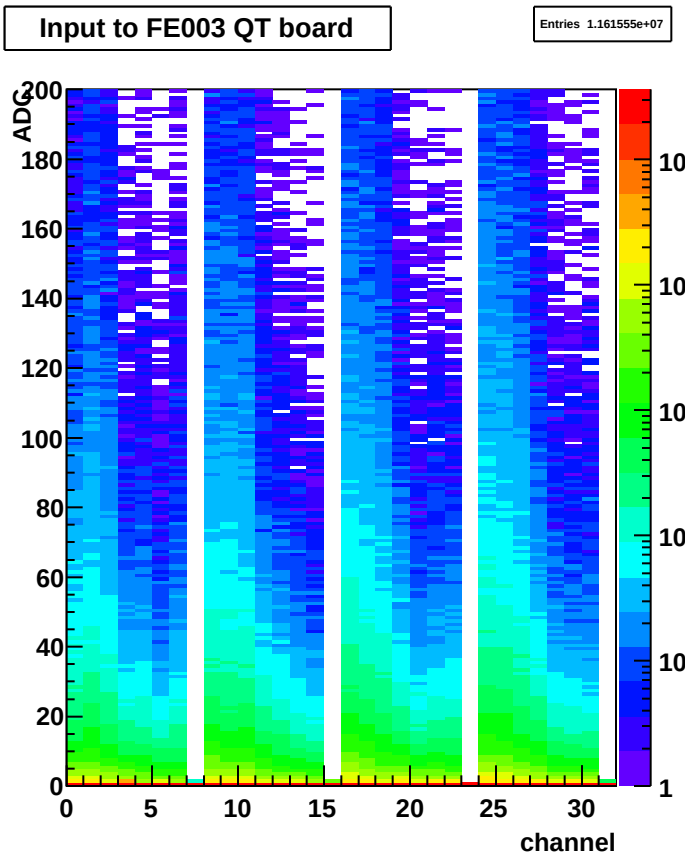

Input to FPD L3 DSM
Entries 5807776
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

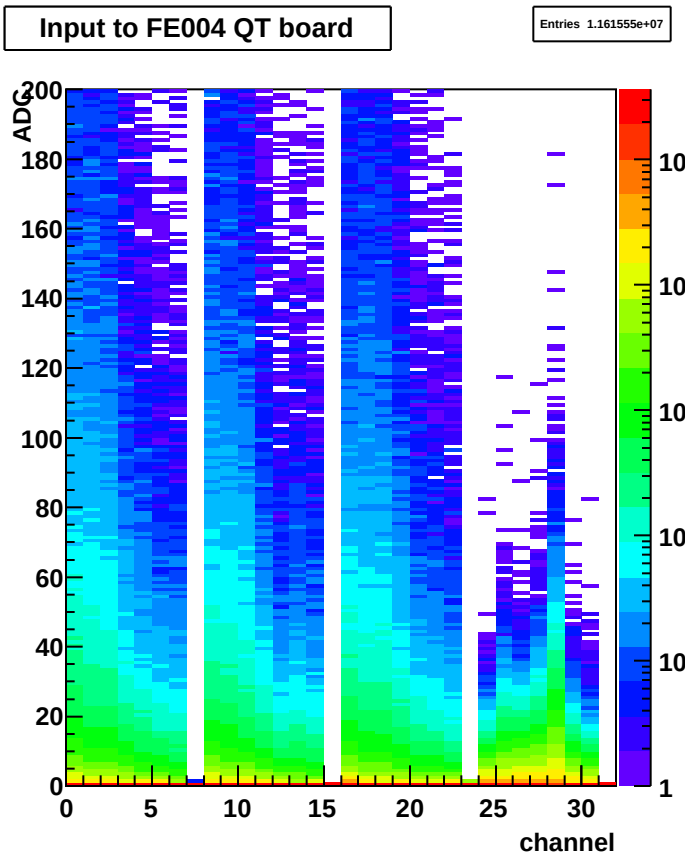

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

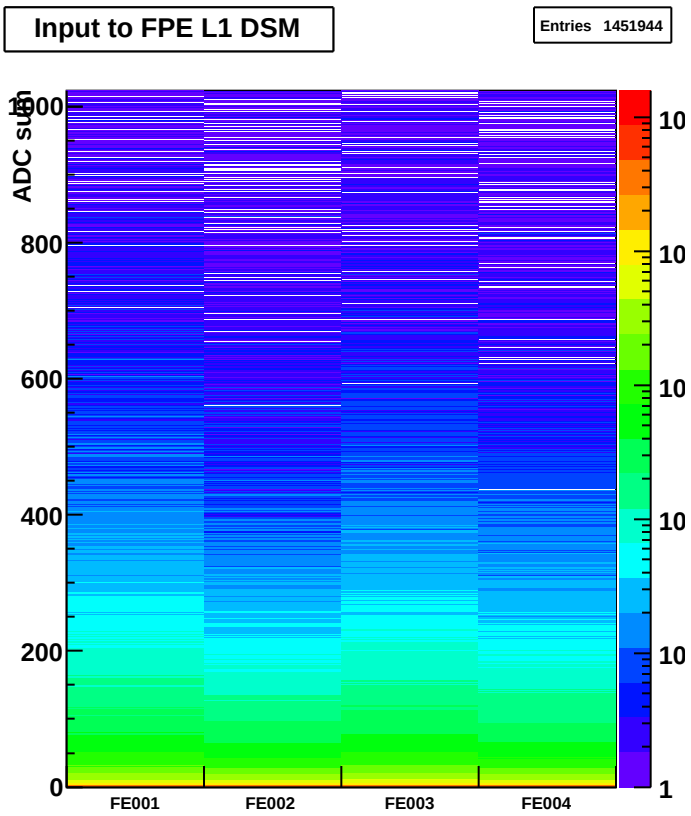

Input to FPD L2 DSM
Entries 1449644
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

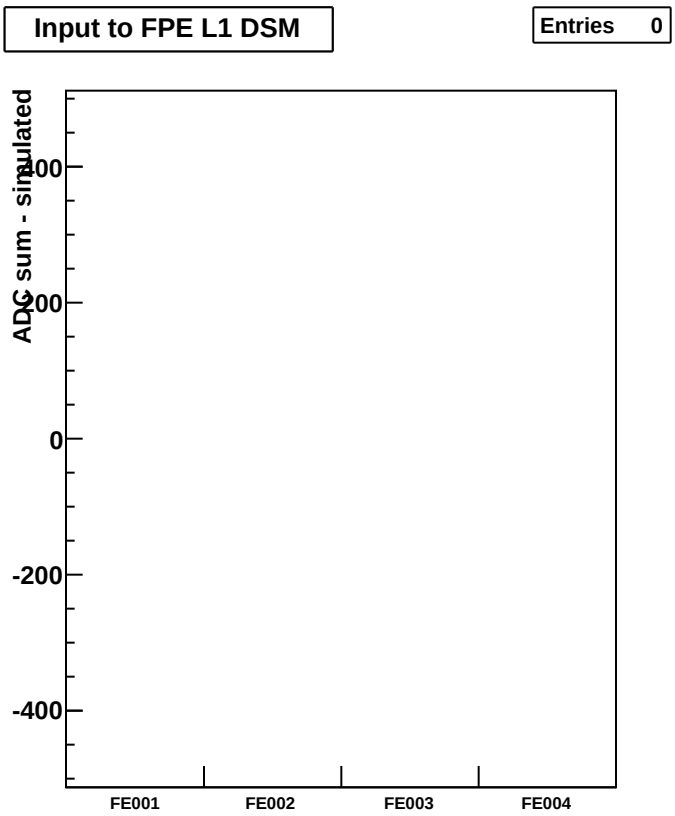

Input to FE001 QT board
Entries 1.161555e+07
ADC
channel

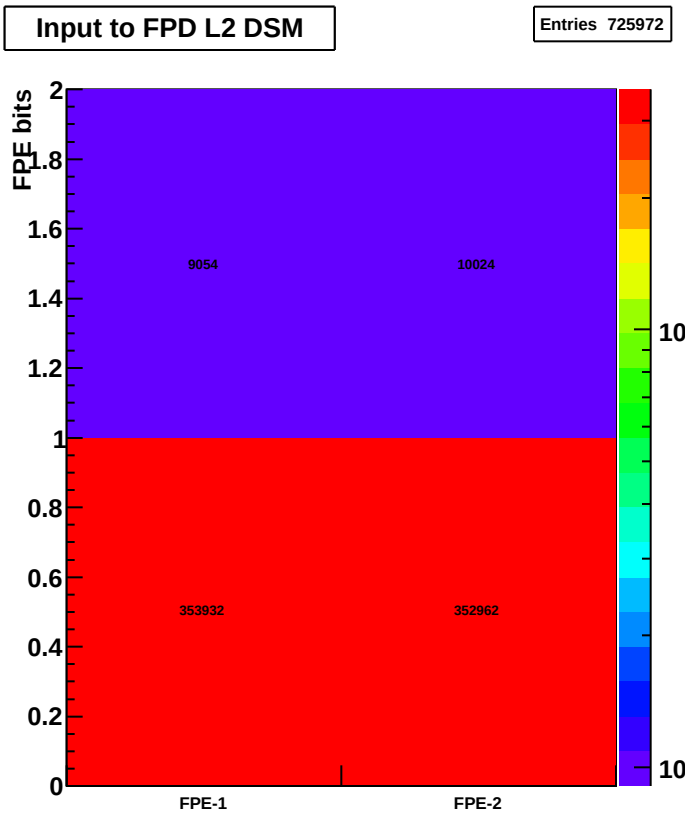

Input to FE002 QT board
Entries 1.161555e+07
ADC
channel

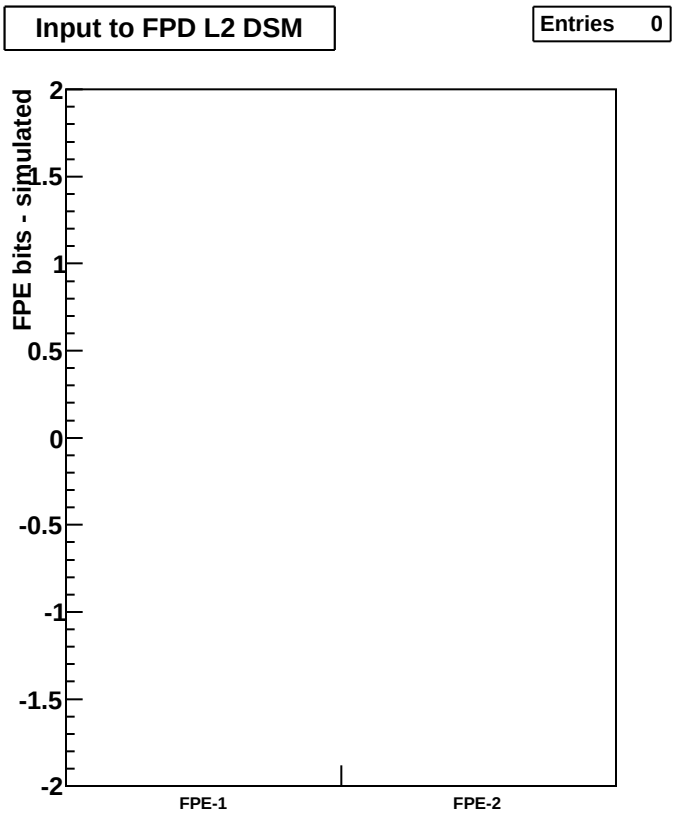

Input to FE003 QT board
Entries 1.161555e+07
ADC
channel


Input to FE004 QT board
Entries 1.161555e+07
ADC
channel


Input to FPE L1 DSM
Entries 1451944
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
0
-200
-400
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 725972
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
9054
10024
353932
352962
FPE-1
FPE-2
10
10


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