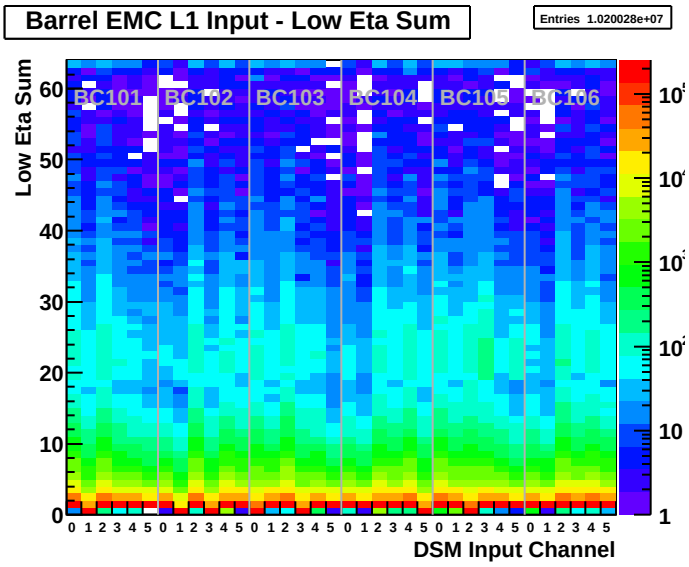
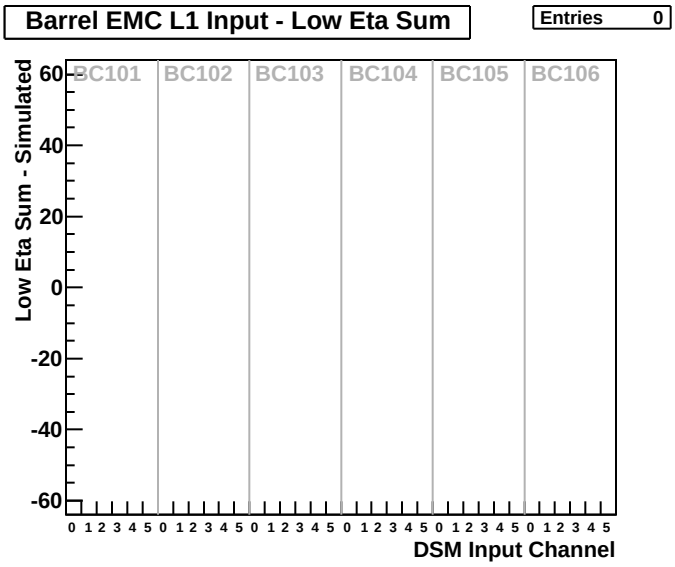
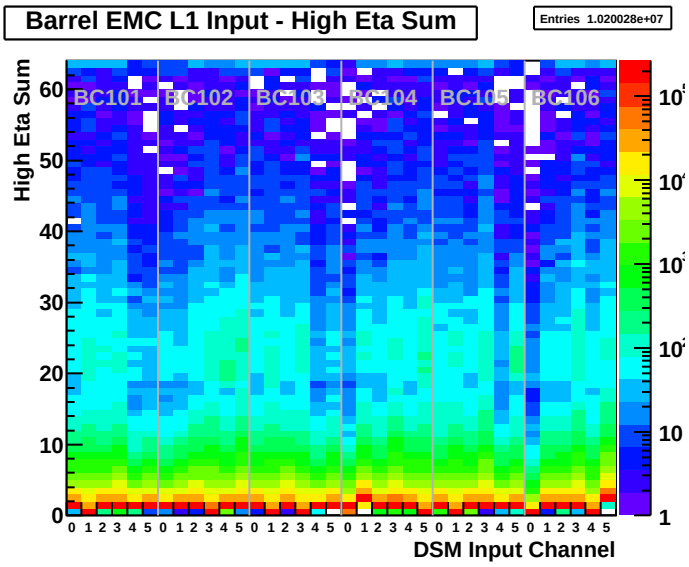
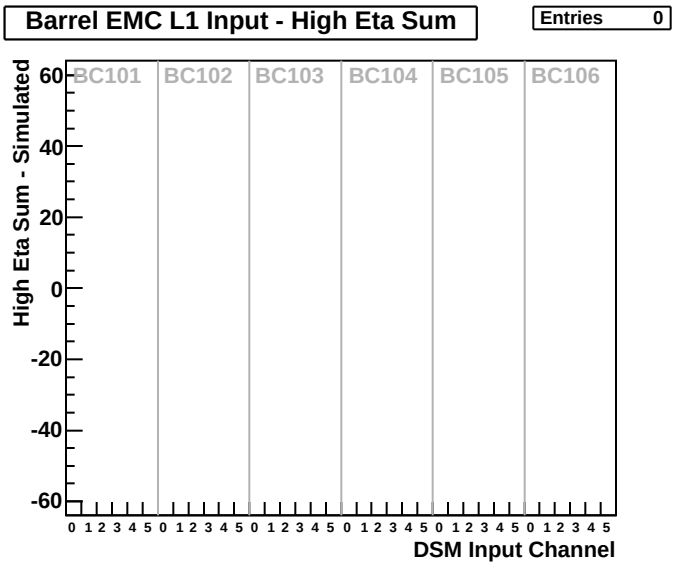
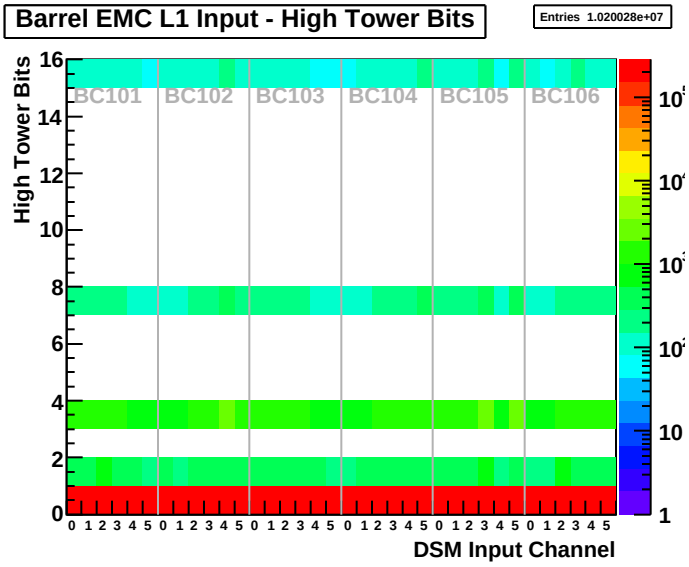
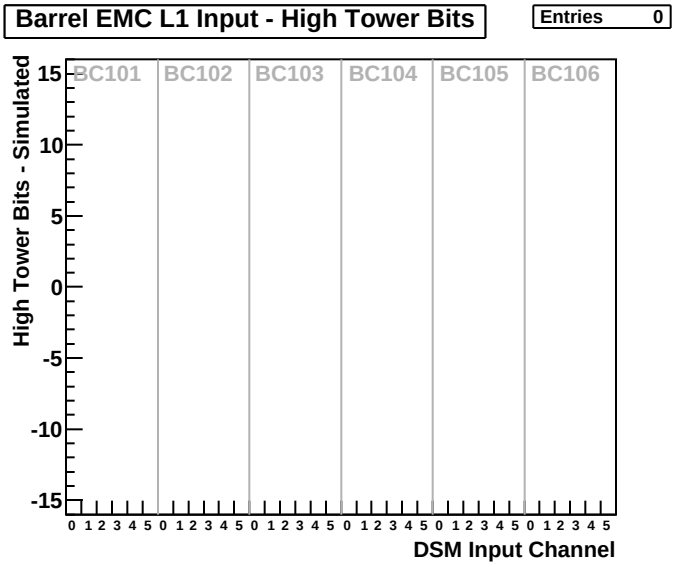

Barrel EMC L1 Input - Low Eta Sum
Entries 1.020028e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

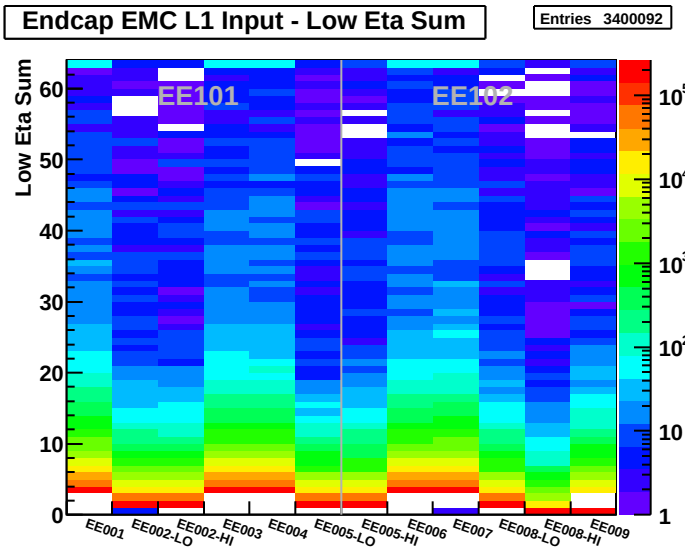

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

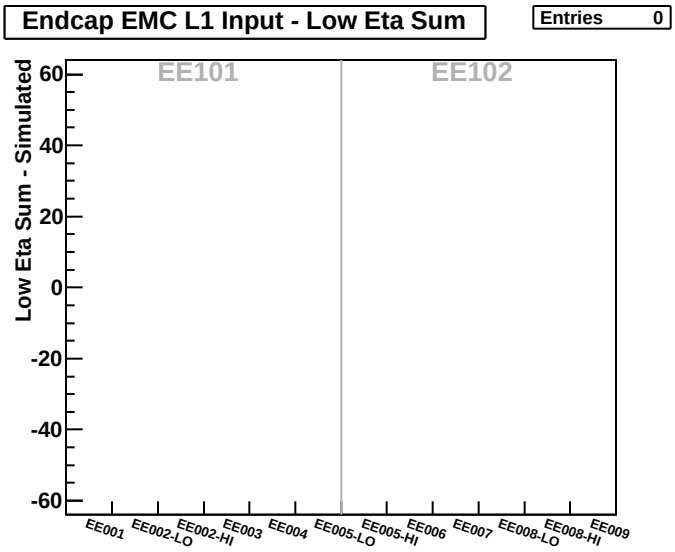

Barrel EMC L1 Input - High Eta Sum
Entries 1.020028e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

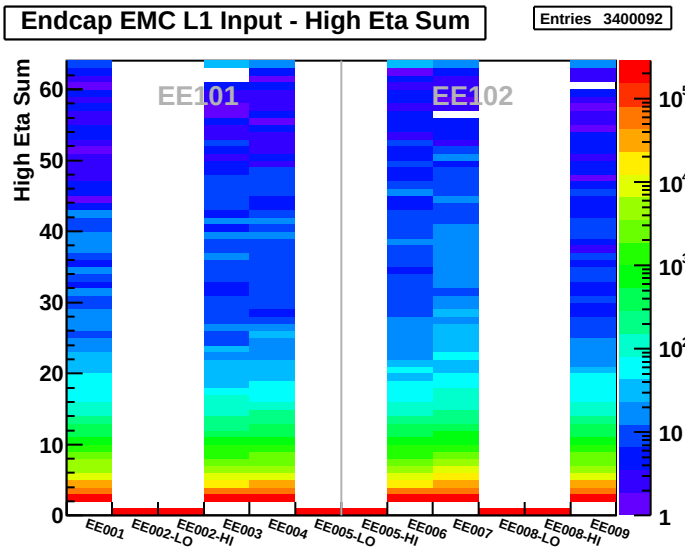

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

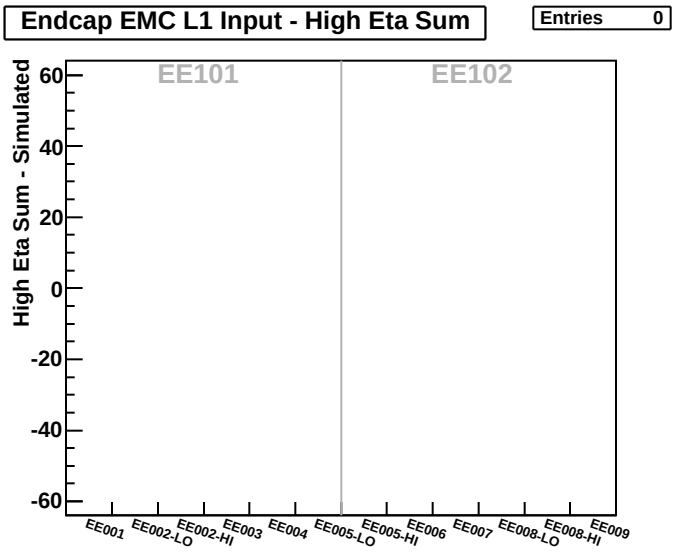

Barrel EMC L1 Input - High Tower Bits
Entries 1.020028e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

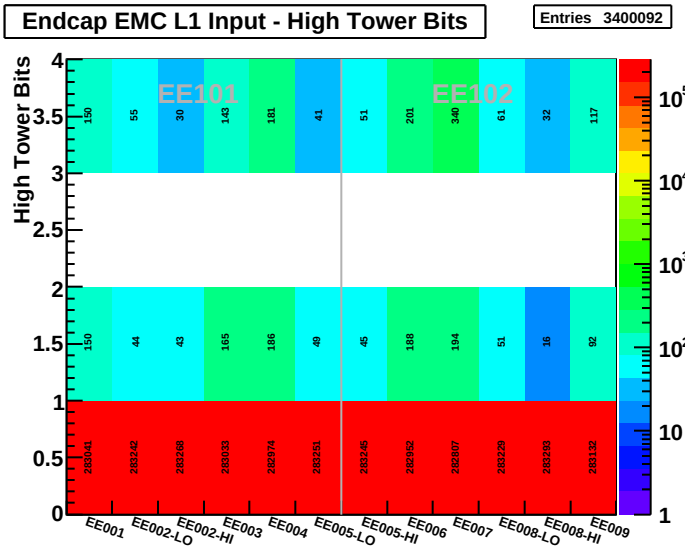

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

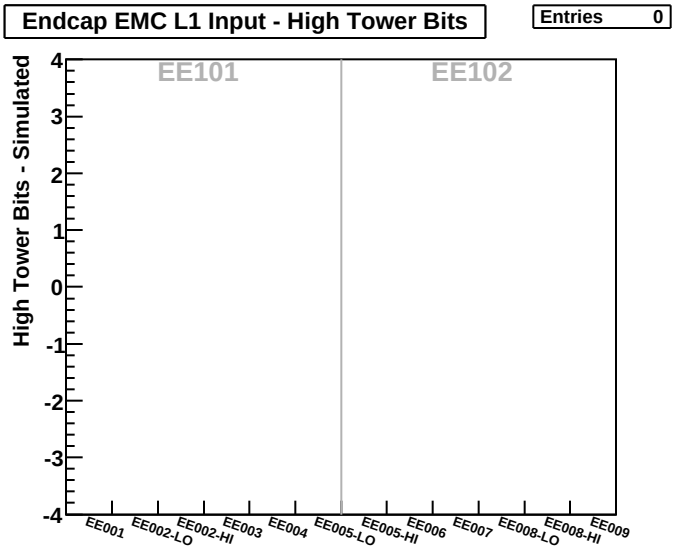

Endcap EMC L1 Input - Low Eta Sum
Entries 3400092
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

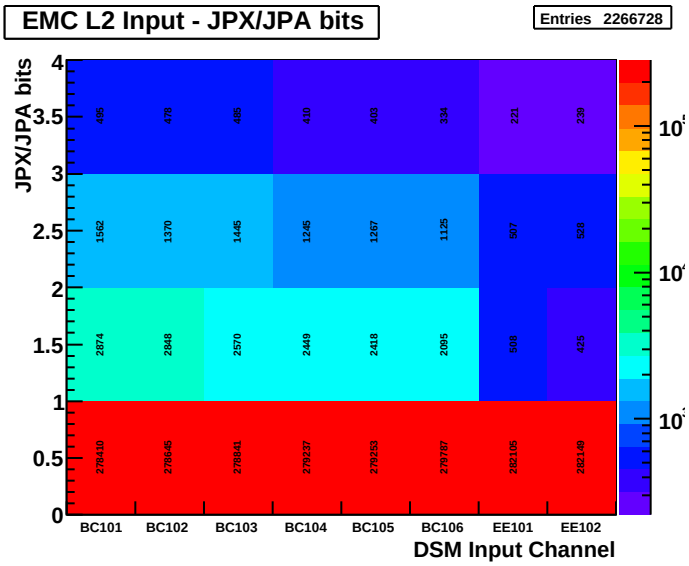

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

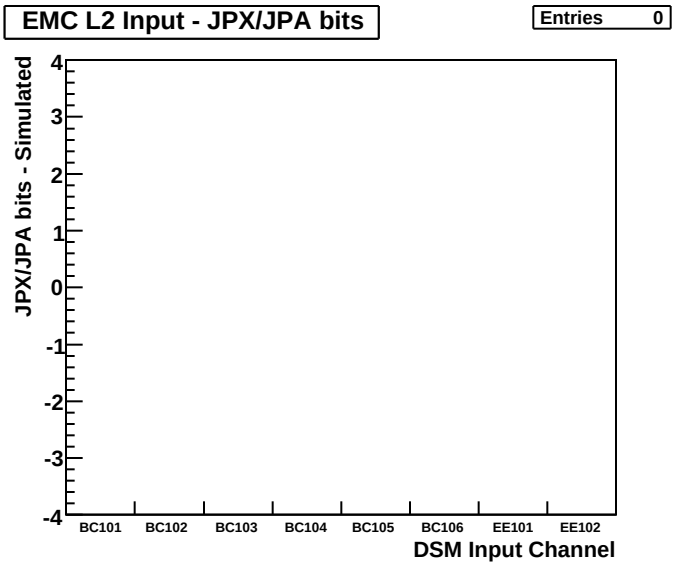

Endcap EMC L1 Input - High Eta Sum
Entries 3400092
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

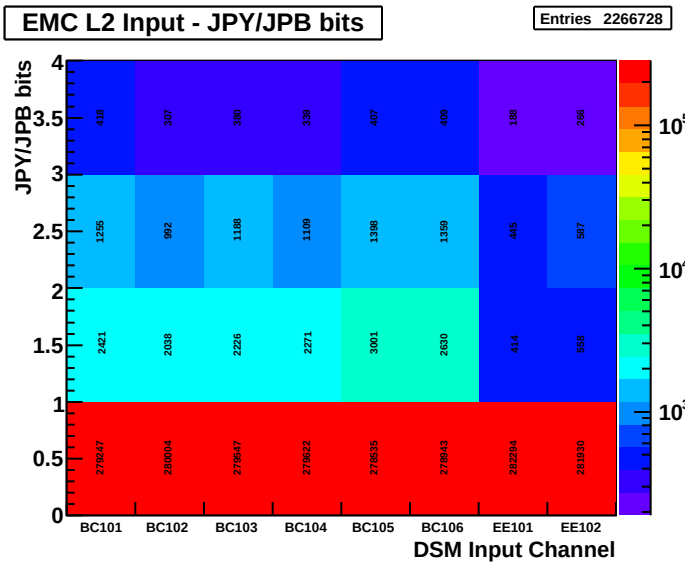

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

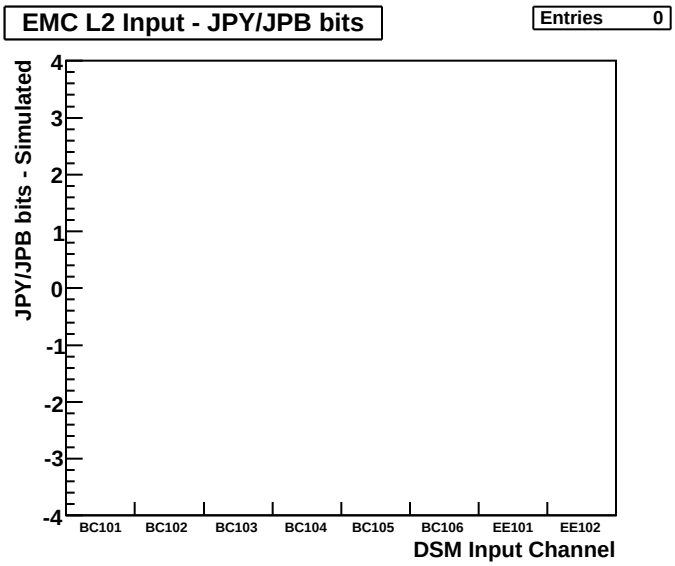

Endcap EMC L1 Input - High Tower Bits
Entries 3400092
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

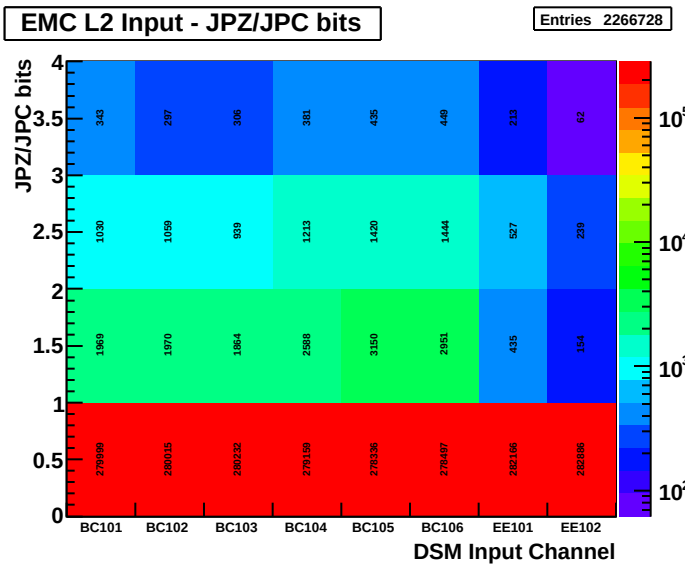

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

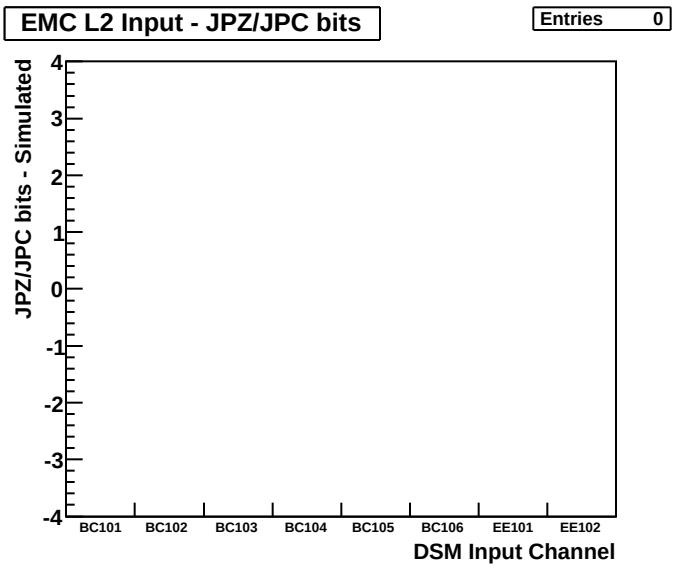

EMC L2 Input - JPX/JPA bits
Entries 2266728
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
495 478 485 410 403 334 221 239
1562 1370 1445 1245 1267 1125 597 528
2874 2848 2570 2449 2418 2095 508 425
278410 278645 278841 279237 279253 279787 282105 282149

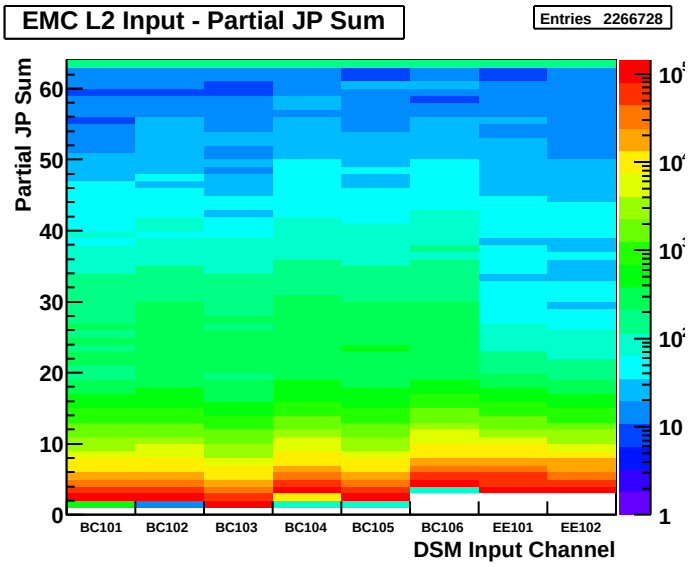

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

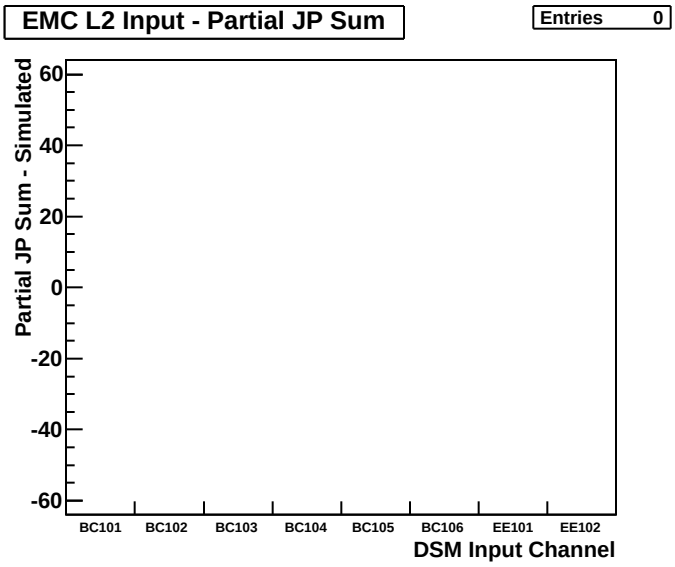

EMC L2 Input - JPY/JPB bits
Entries 2266728
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
416 307 300 338 407 409 188 266
1255 992 1188 1109 1398 1359 445 587
2421 2038 2226 2271 3001 2630 414 558
278247 280004 279547 279622 279535 279943 282294 281930

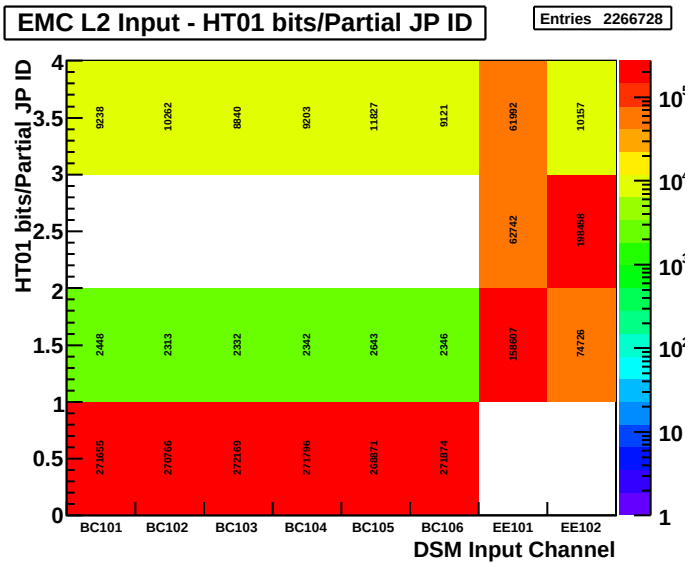

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

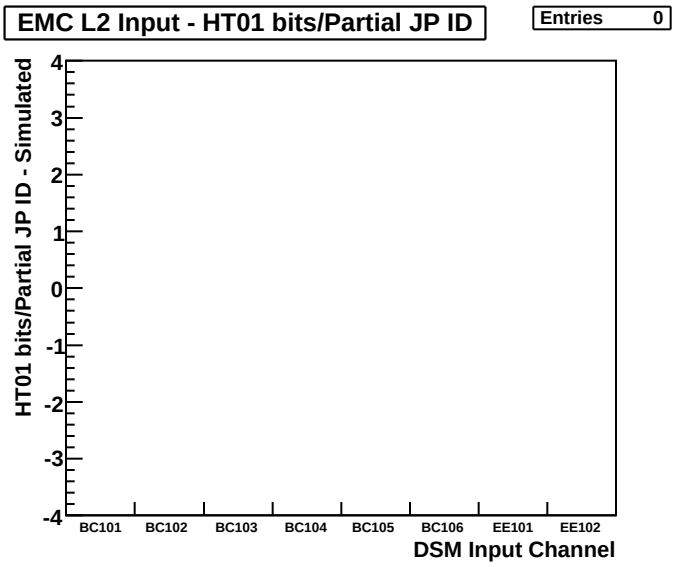

EMC L2 Input - JPZ/JPC bits
Entries 2266728
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
343 297 306 381 435 449 213 62
1030 1059 939 1213 1420 1444 527 239
1969 1970 1864 2588 3150 2951 435 154
279999 280015 280232 279159 278338 278497 282166 282386

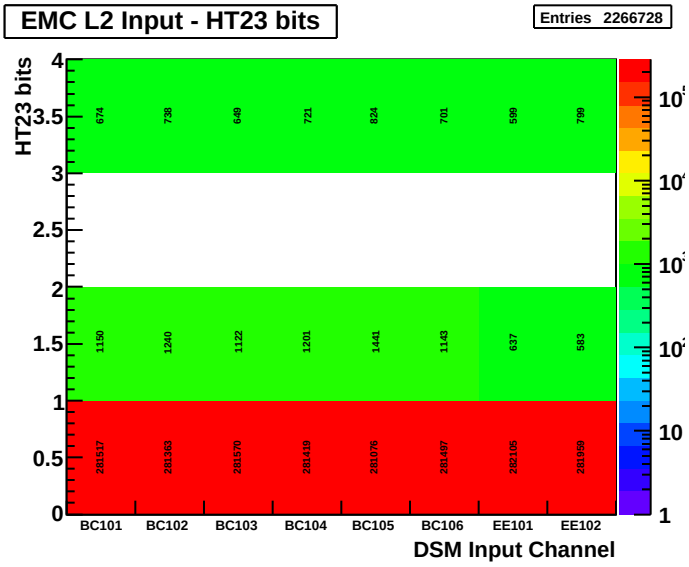

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

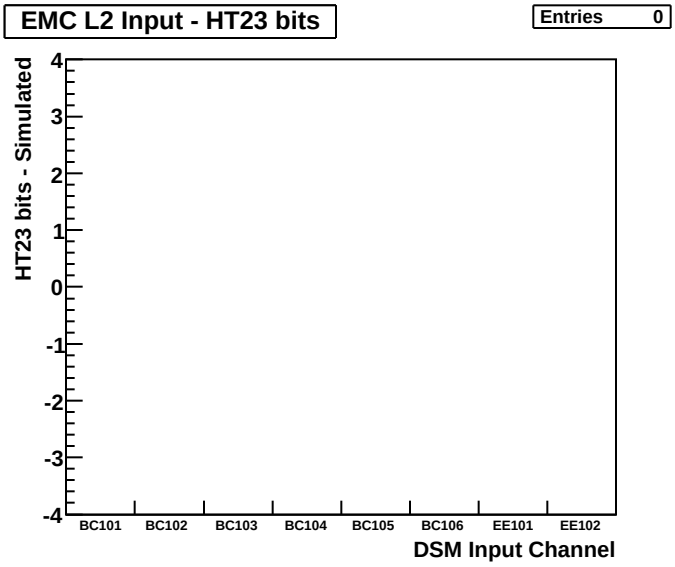

EMC L2 Input - Partial JP Sum
Entries 2266728
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

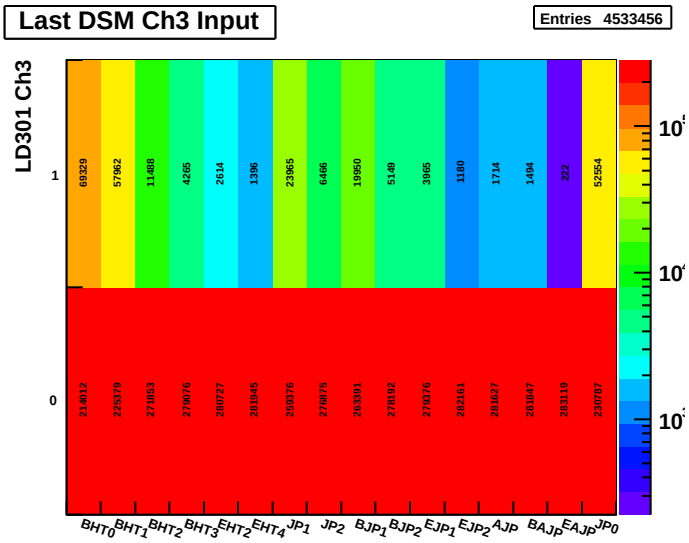

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

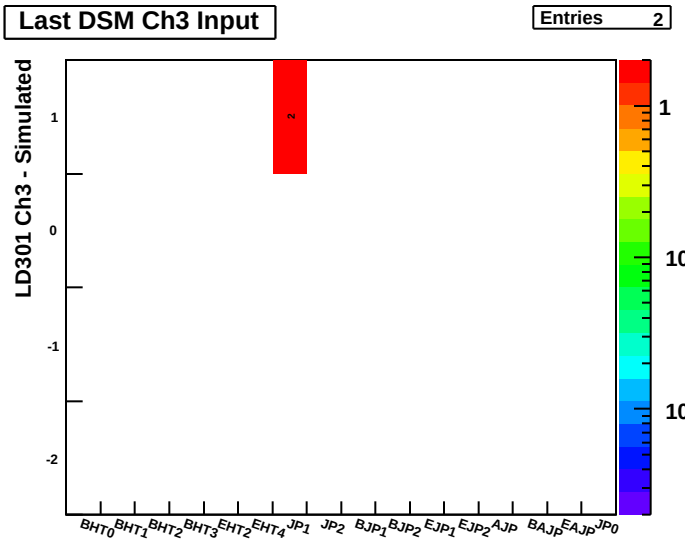

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2266728
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

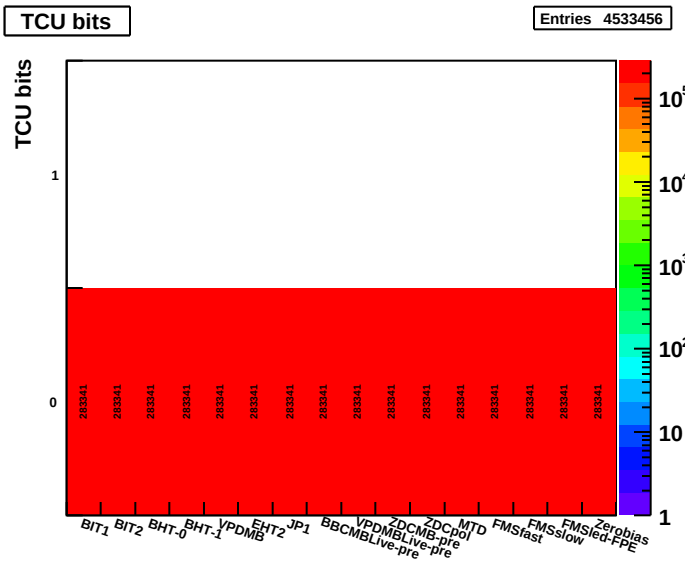

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

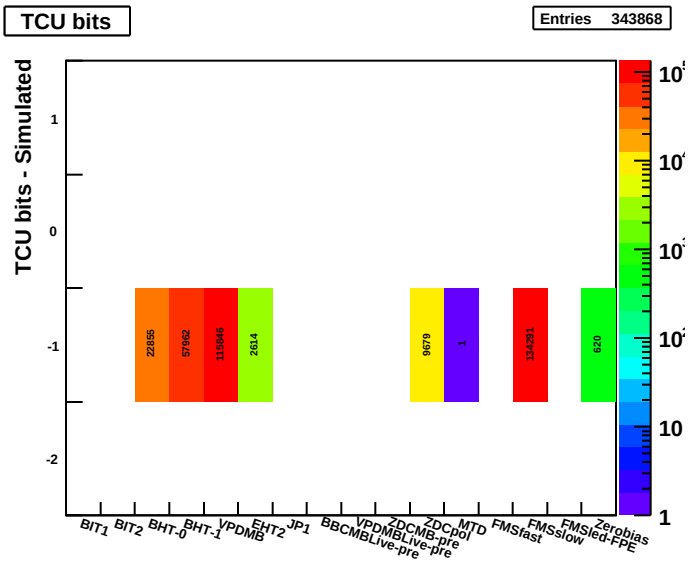

EMC L2 Input - HT23 bits
Entries 2266728
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

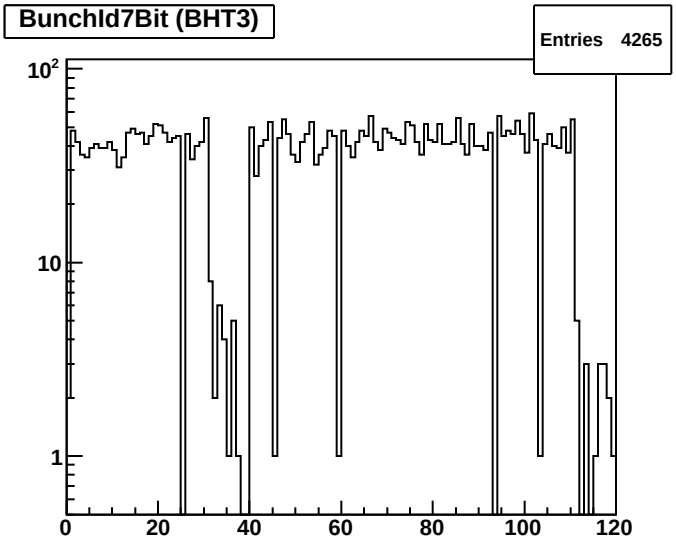

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

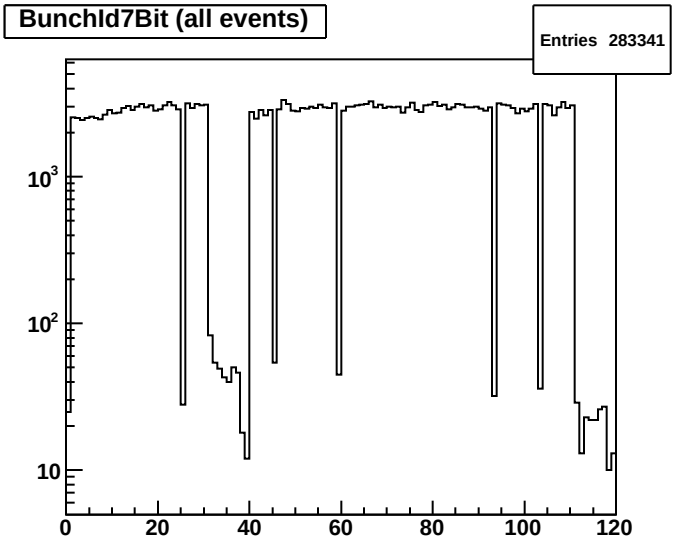

Last DSM Ch3 Input
Entries 4533456
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

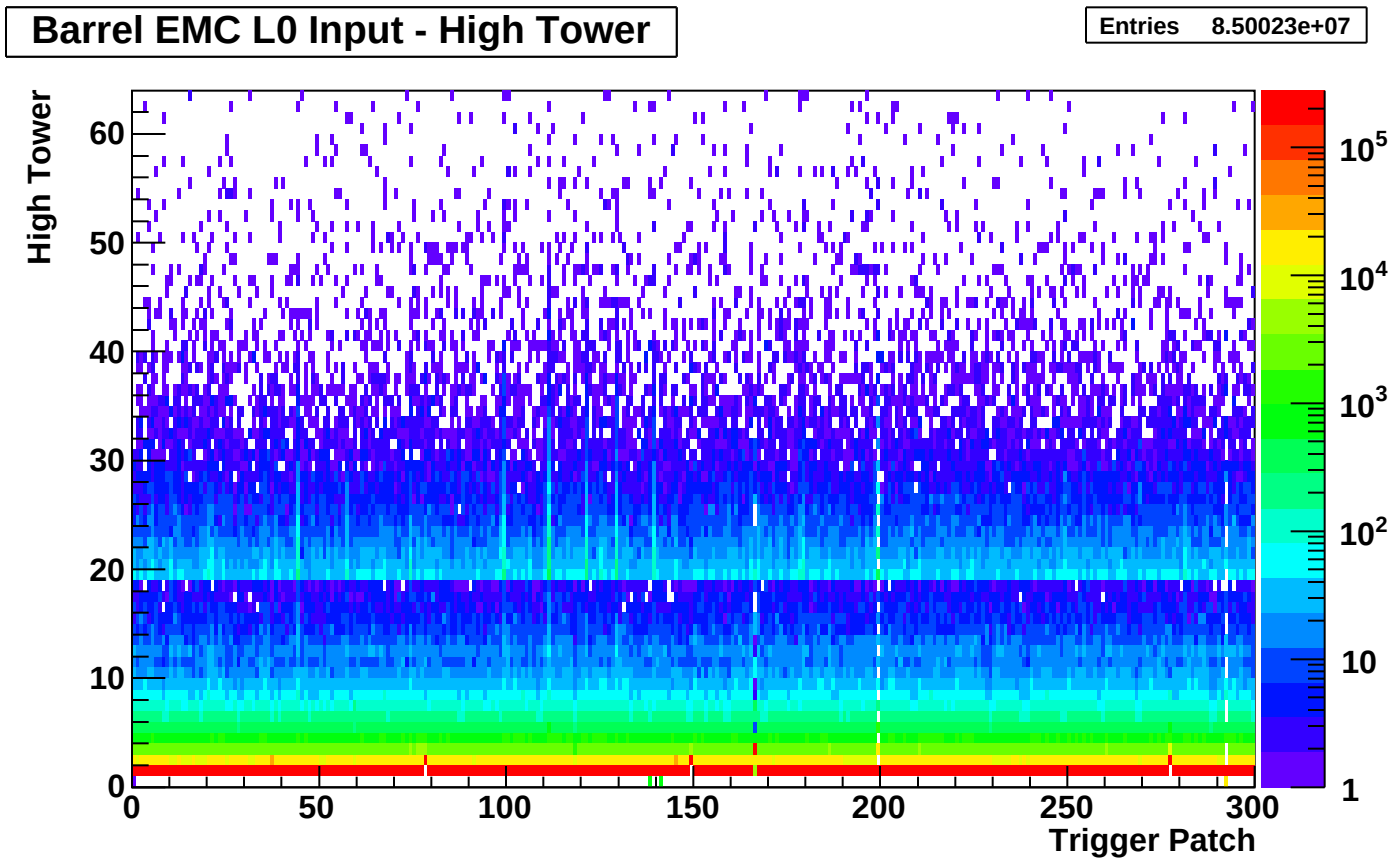

Last DSM Ch3 Input
Entries 2
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

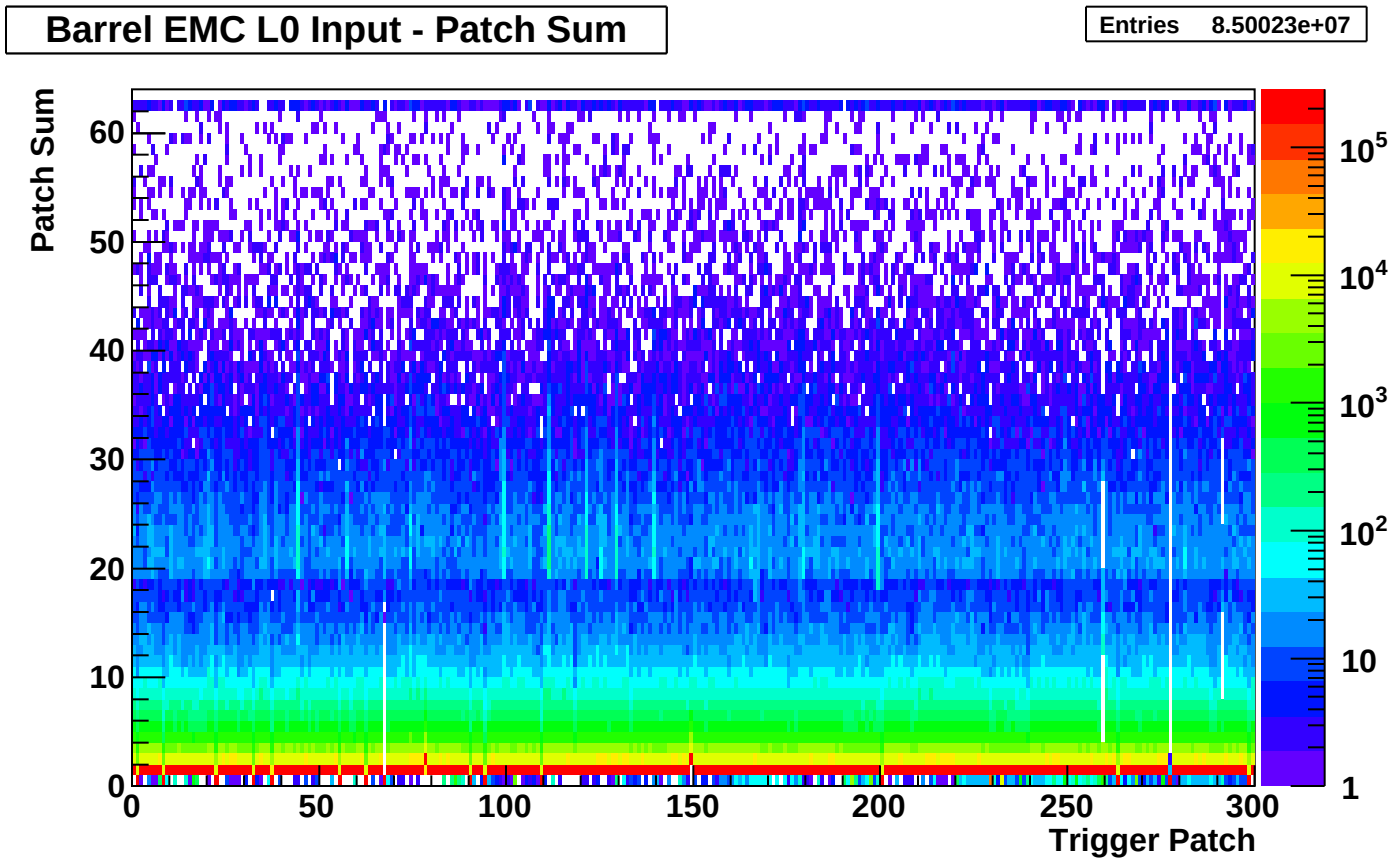

TCU bits
Entries 4533456
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

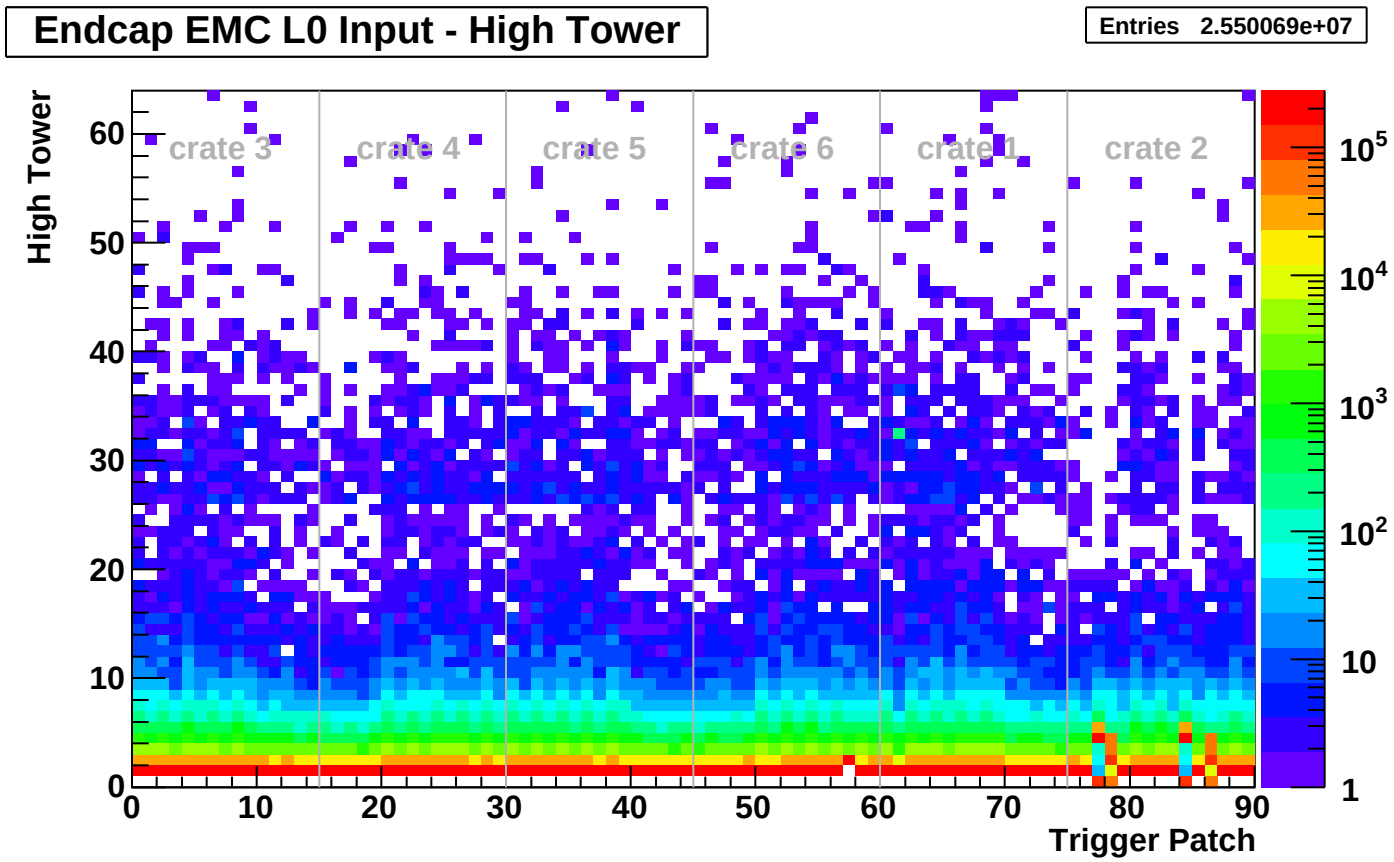

TCU bits
Entries 343868
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

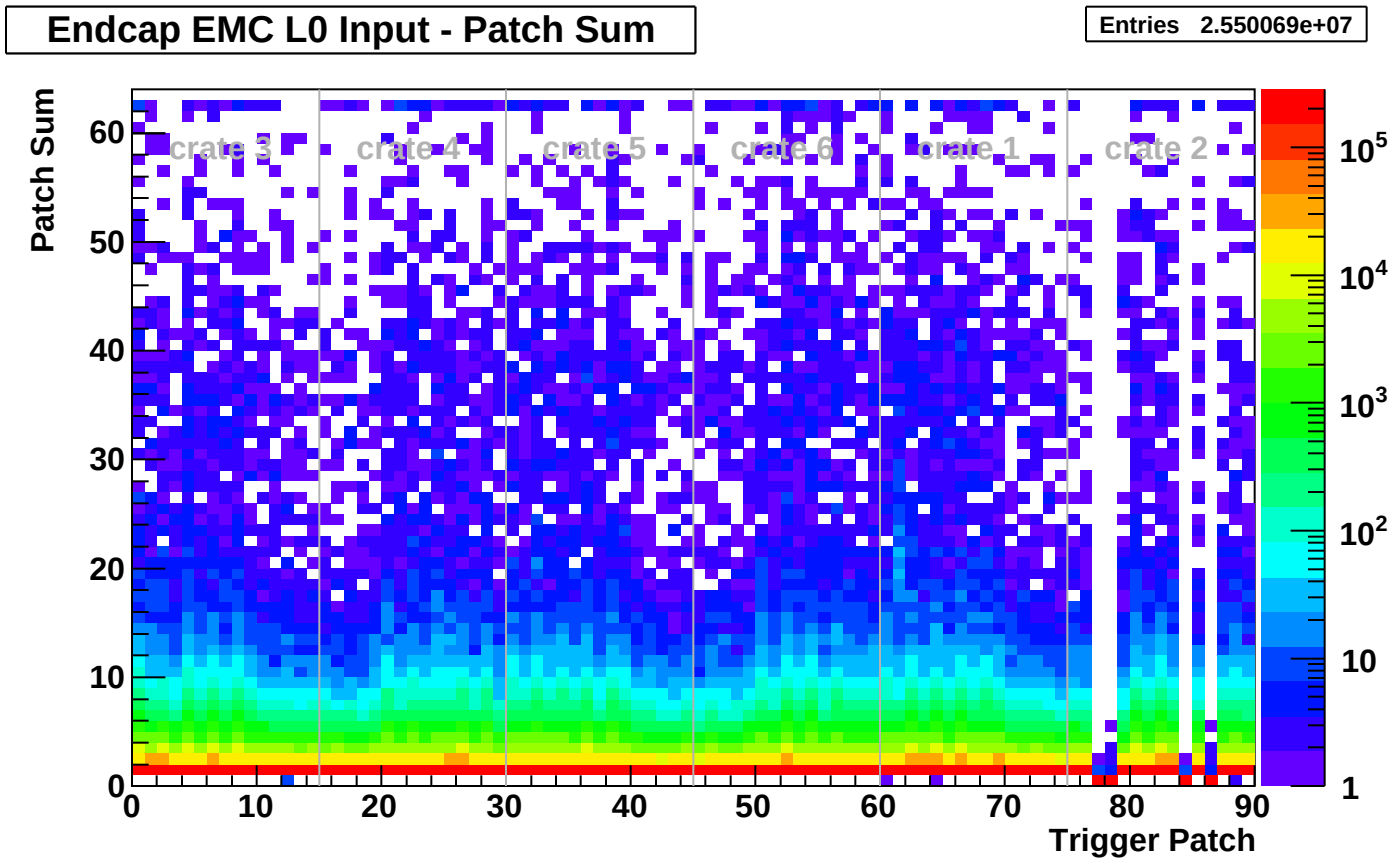

BunchId7Bit (BHT3)
Entries 4265

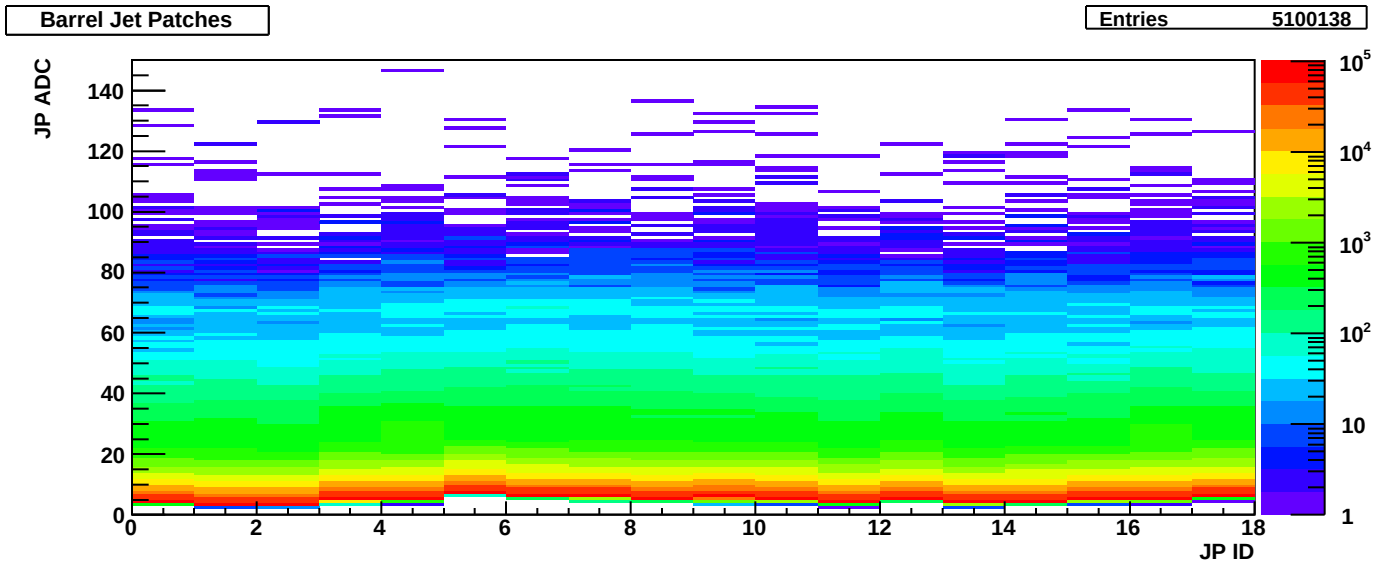

BunchId7Bit (all events)
Entries 283341

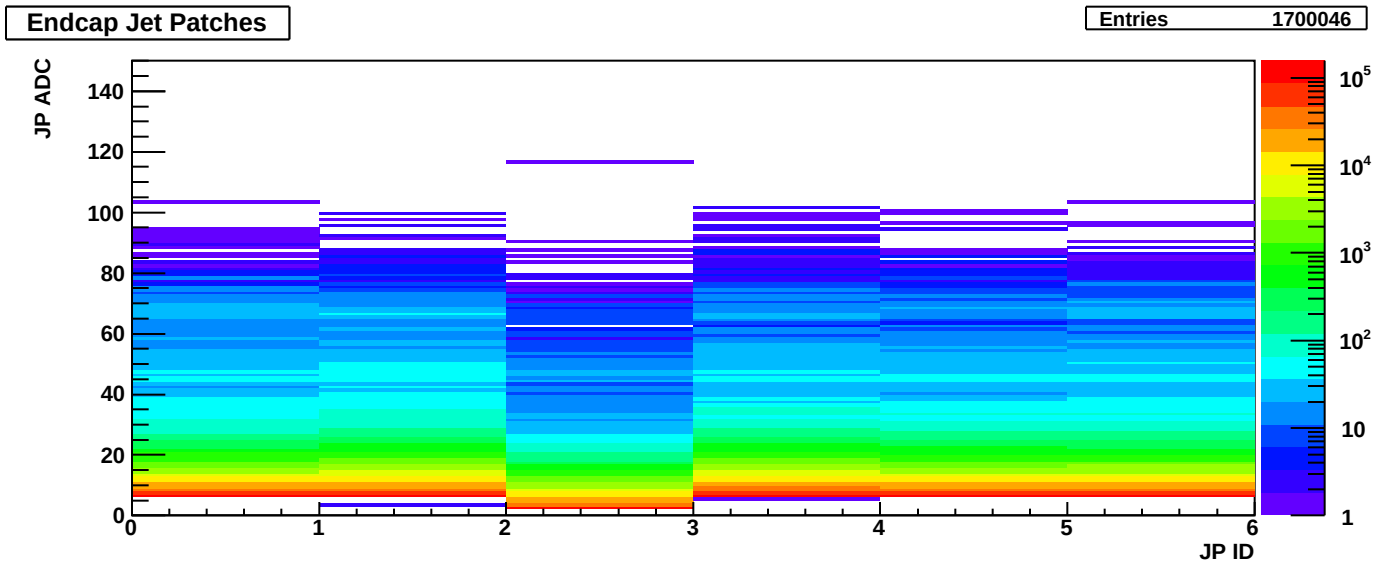

Barrel EMC L0 Input - High Tower
Entries 8.50023e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

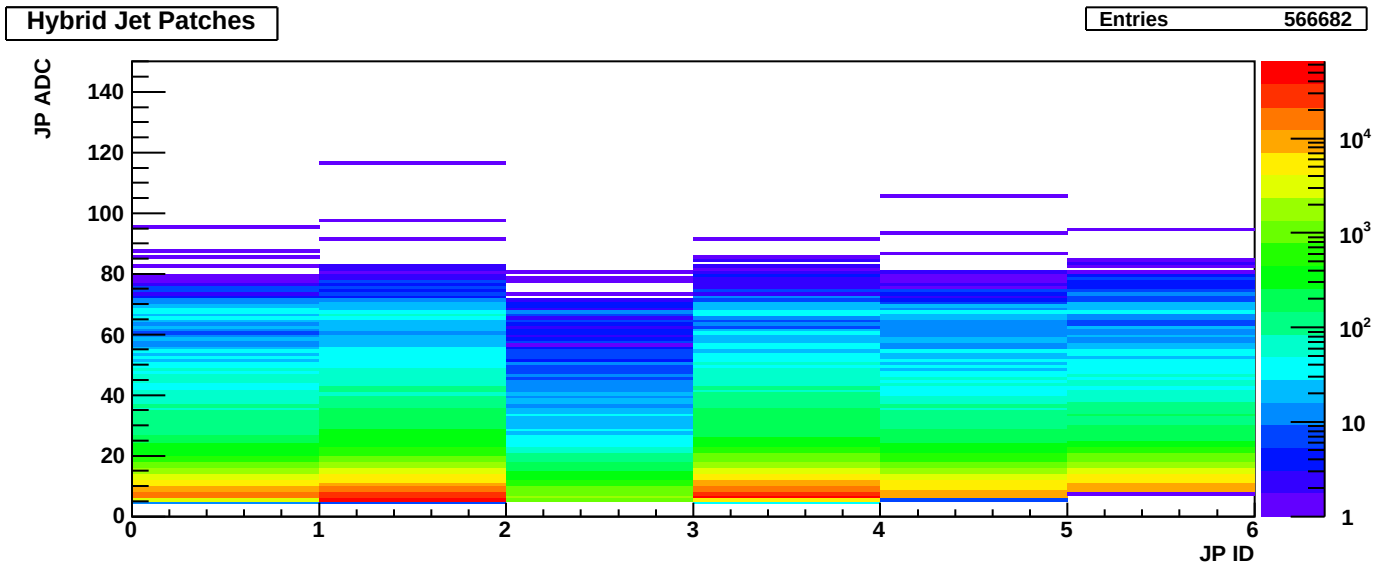

Barrel EMC L0 Input - Patch Sum
Entries 8.50023e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

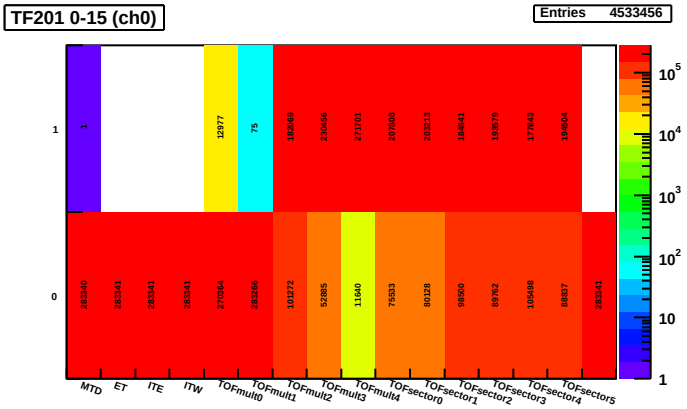

Endcap EMC L0 Input - High Tower
Entries 2.550069e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

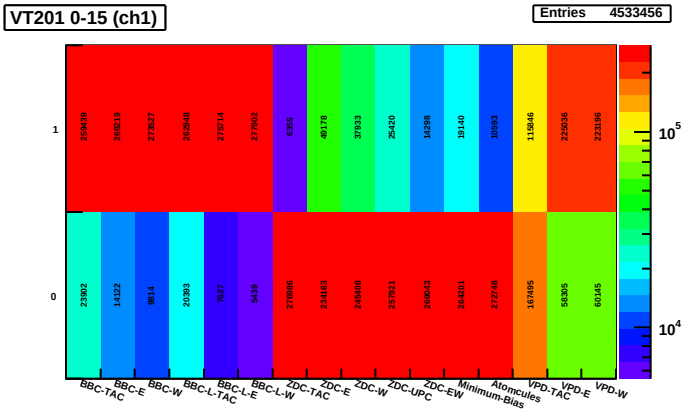

Endcap EMC L0 Input - Patch Sum
Entries 2.550069e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

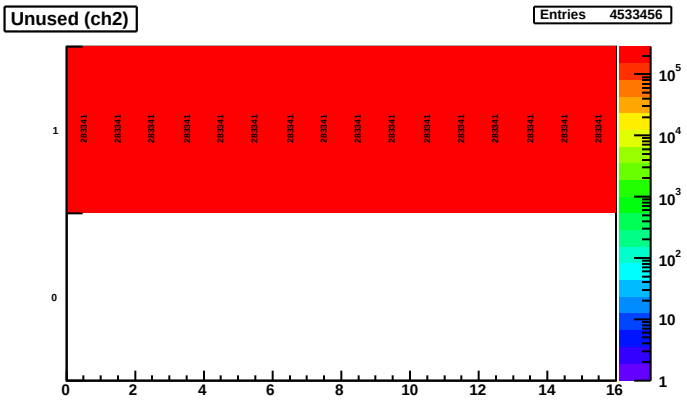

Barrel Jet Patches
Entries 5100138
JP ADC
JP ID

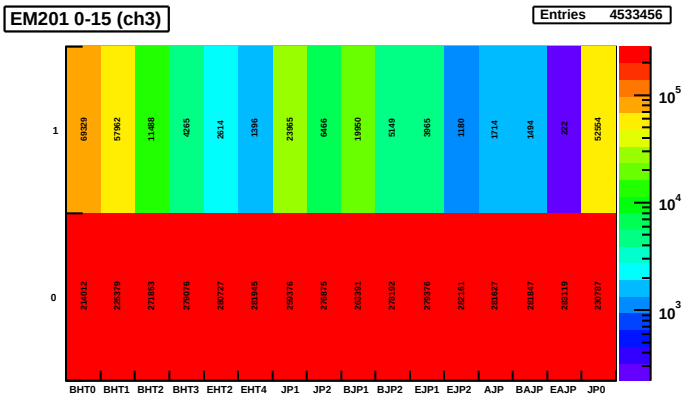

Endcap Jet Patches
Entries 1700046
JP ADC
JP ID

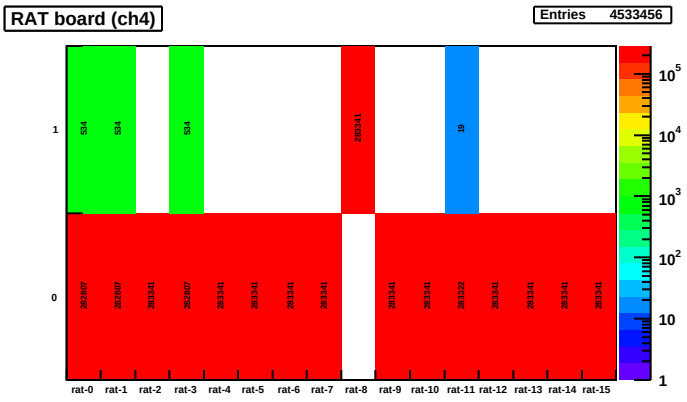

Hybrid Jet Patches
Entries 566682
JP ADC
JP ID

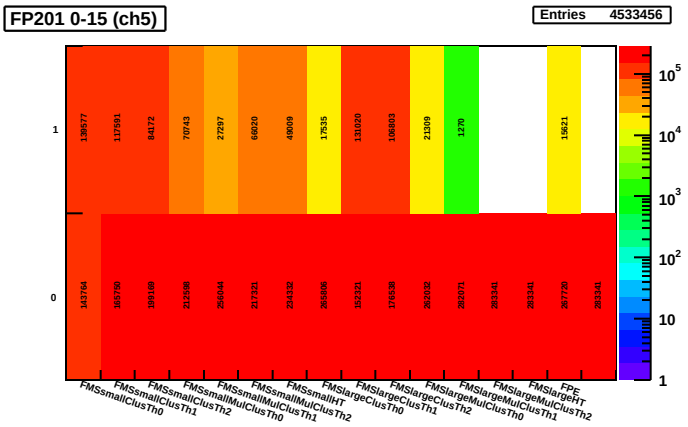

TF201 0-15 (ch0)
Entries 4533456
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

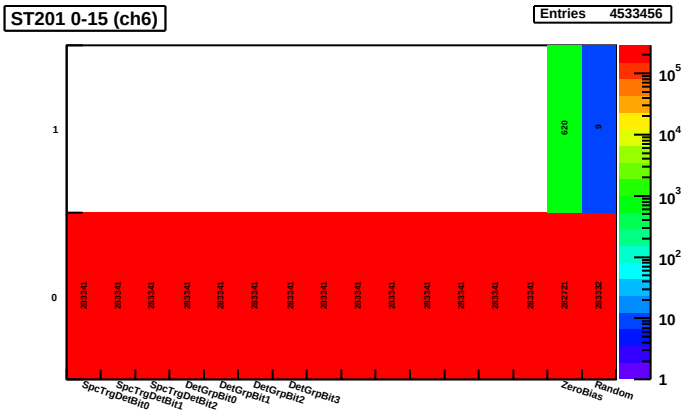

VT201 0-15 (ch1)
Entries 4533456
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

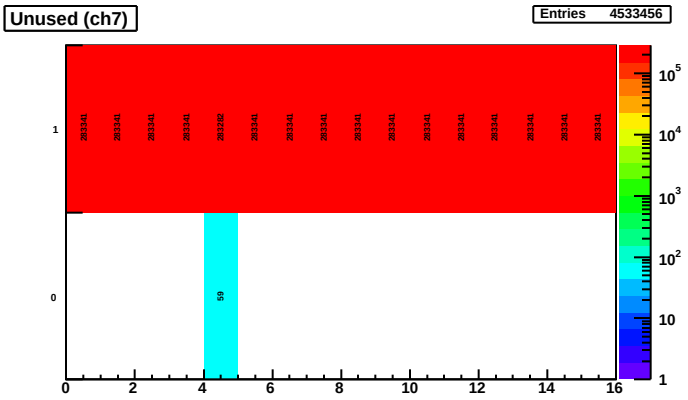

Unused (ch2)
Entries 4533456

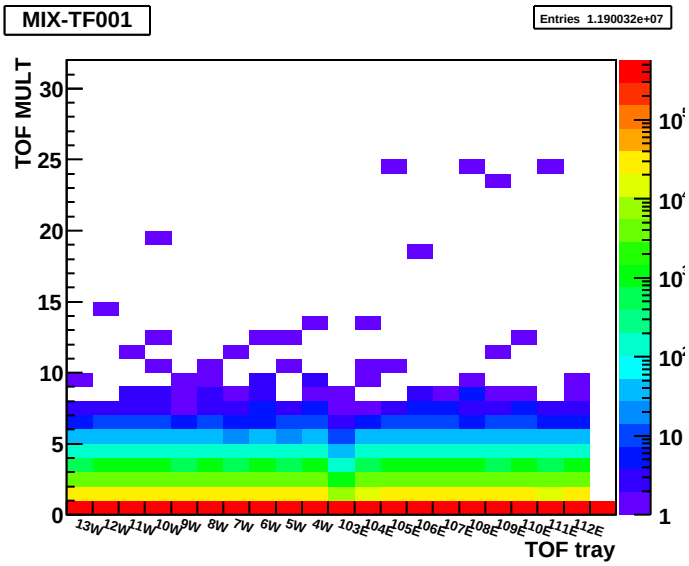

EM201 0-15 (ch3)
Entries 4533456
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

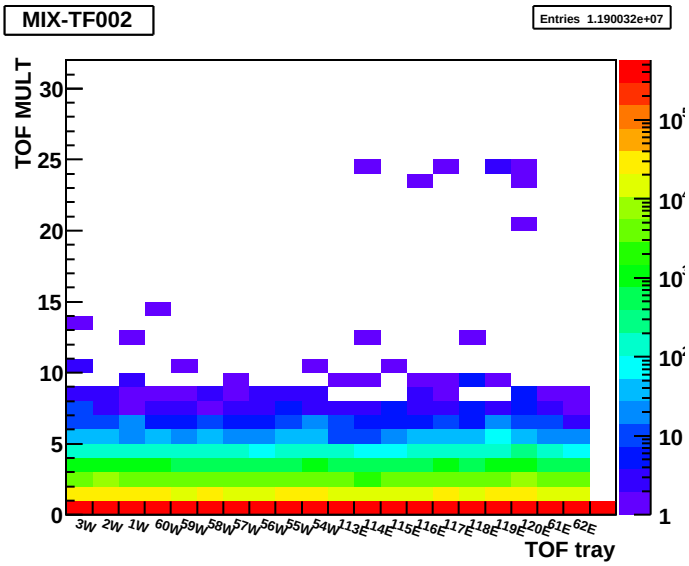

RAT board (ch4)
Entries 4533456
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

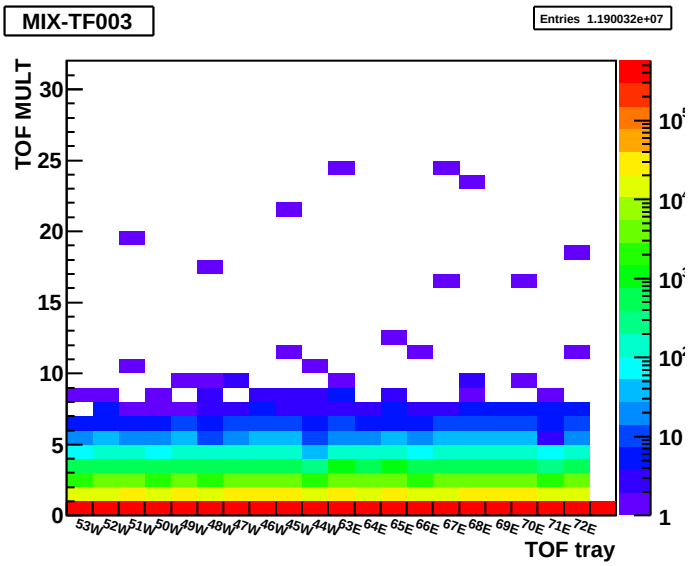

FP201 0-15 (ch5)
Entries 4533456
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

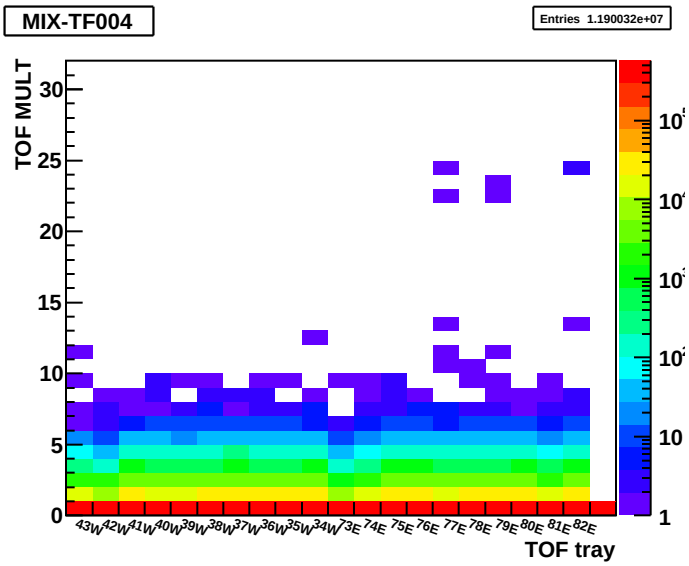

ST201 0-15 (ch6)
Entries 4533456
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

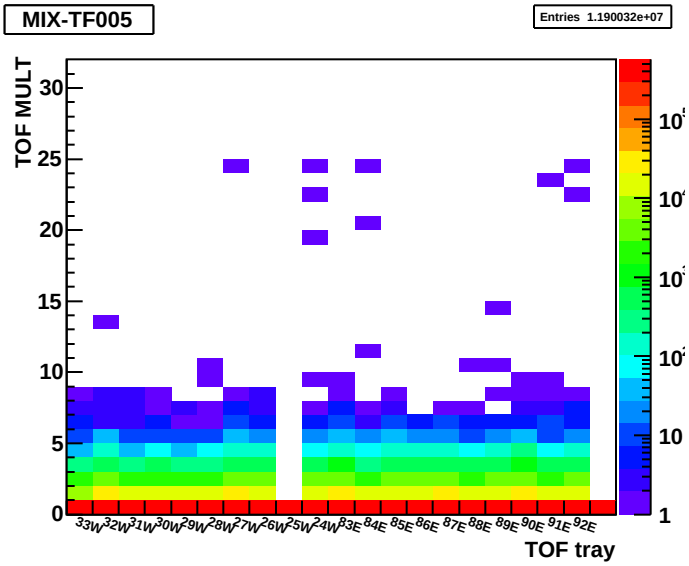

Unused (ch7)
Entries 4533456

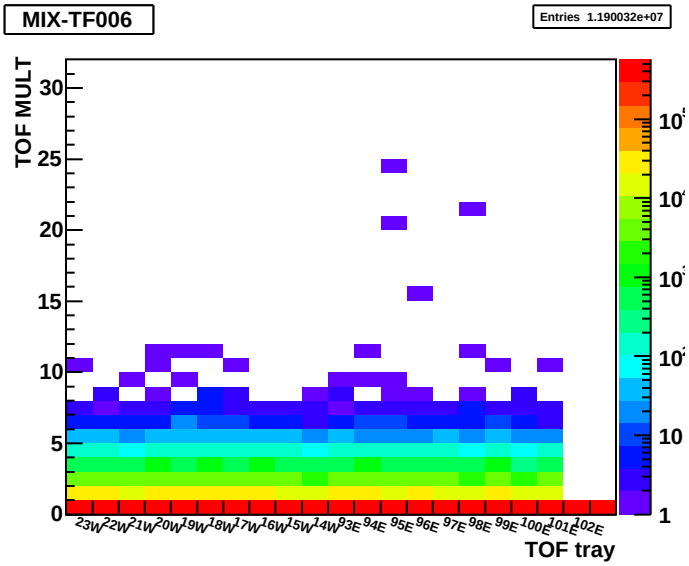

MIX-TF001
Entries 1.190032e+07
TOF MULT
TOF tray

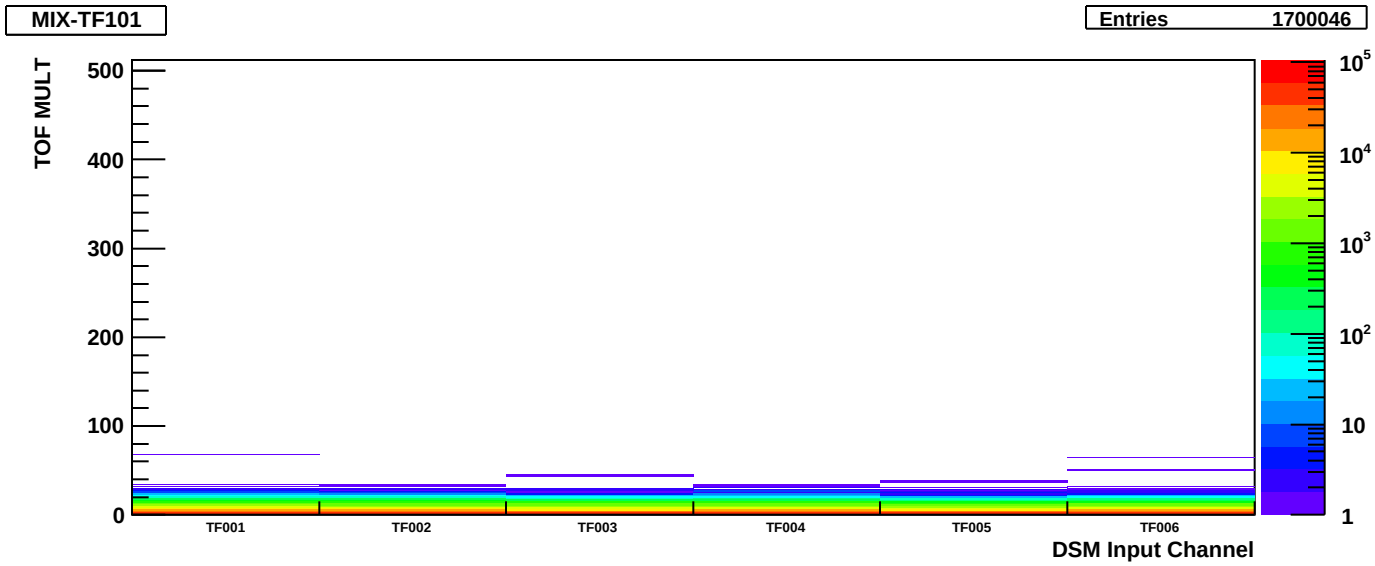

MIX-TF002
Entries 1.190032e+07
TOF MULT
TOF tray

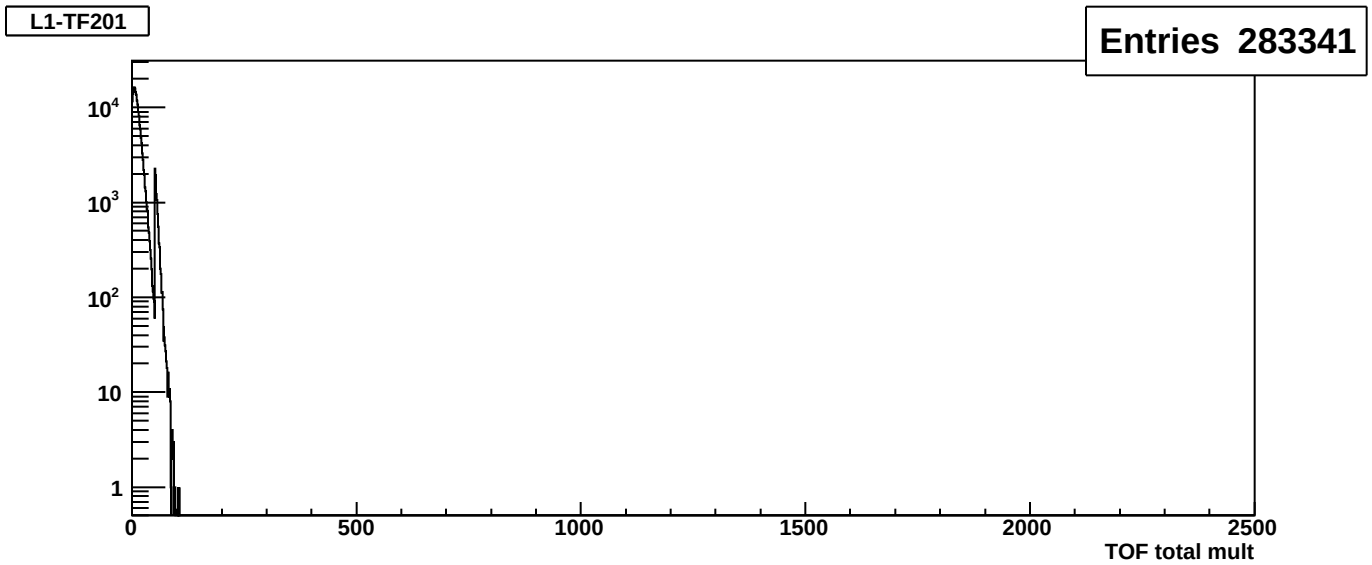

MIX-TF003
Entries 1.190032e+07
TOF MULT
TOF tray

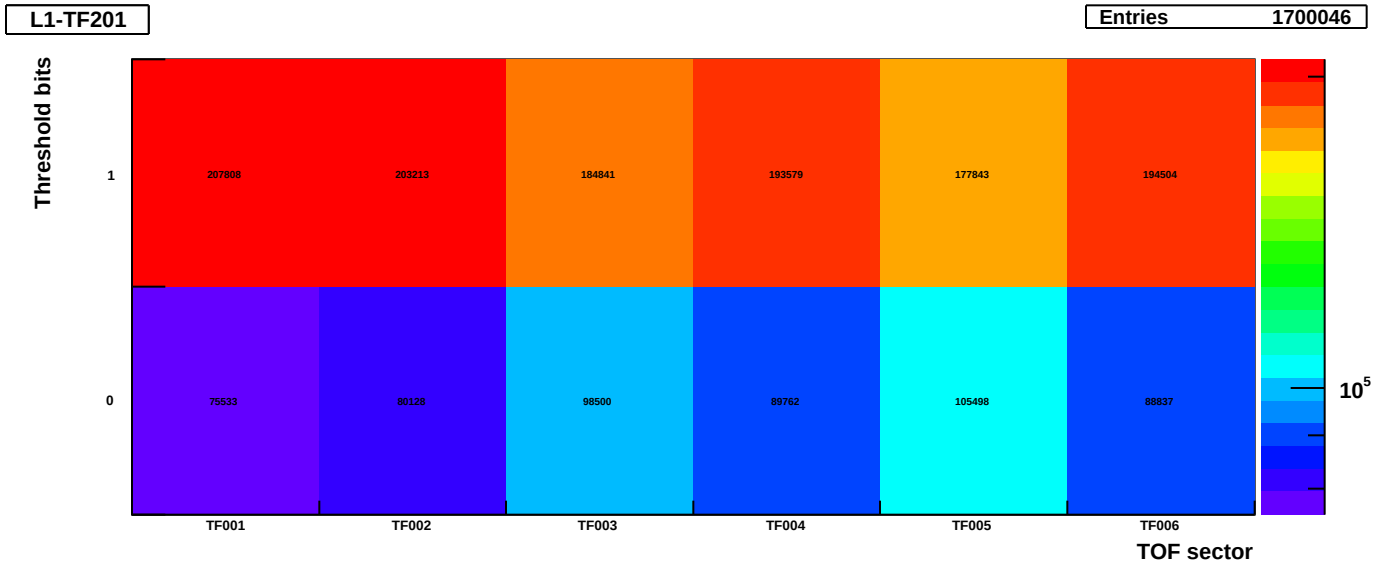

MIX-TF004
Entries 1.190032e+07
TOF MULT
TOF tray

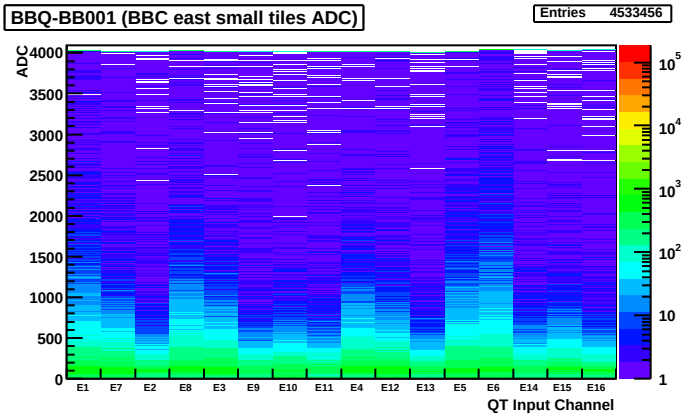

MIX-TF005
Entries 1.190032e+07
TOF MULT
TOF tray

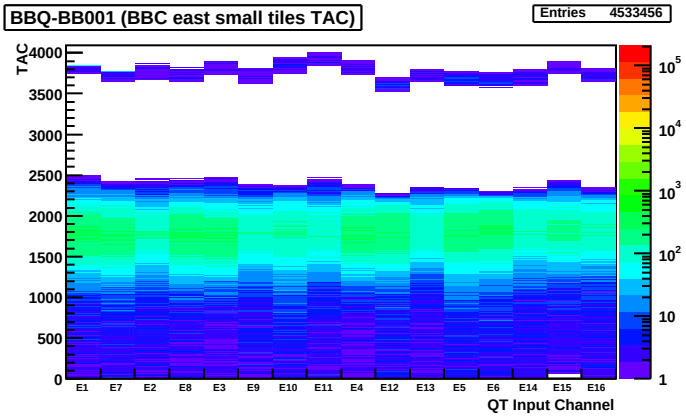

MIX-TF006
Entries 1.190032e+07
TOF MULT
TOF tray

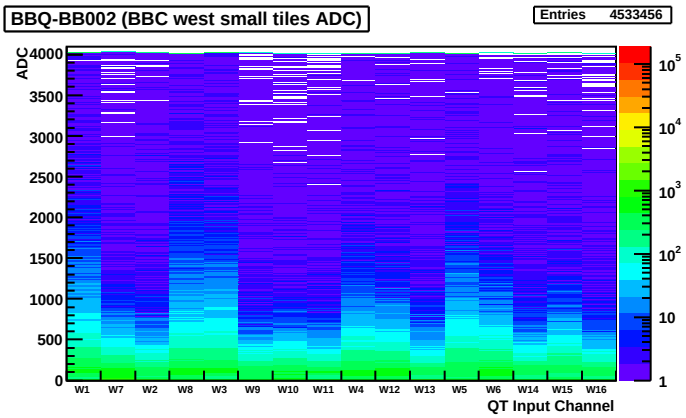

MIX-TF101
Entries 1700046
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

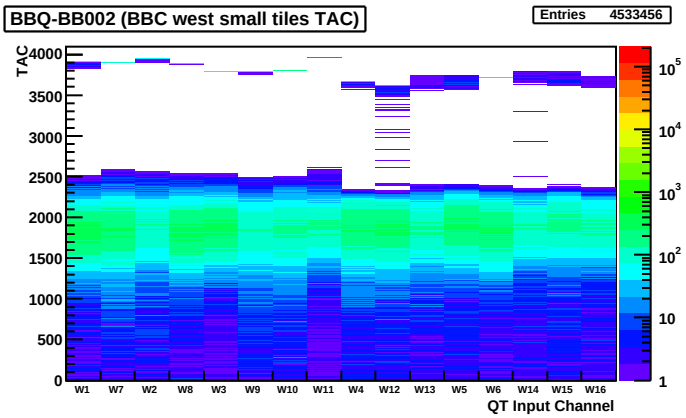

L1-TF201
Entries 283341
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

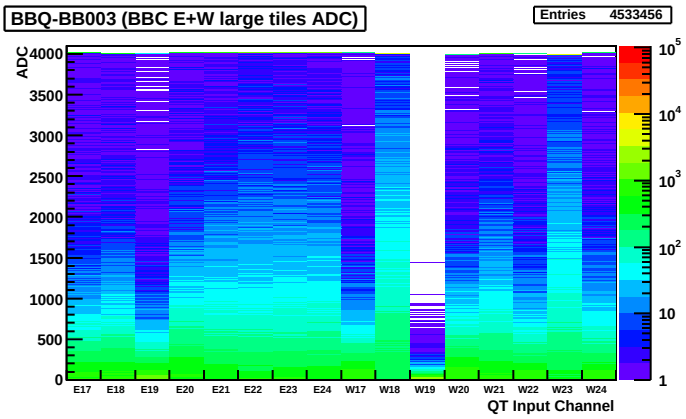

L1-TF201
Entries 1700046
Threshold bits
1
0
207808
203213
184841
193579
177843
194504
75533
80128
98500
89762
105498
88837
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

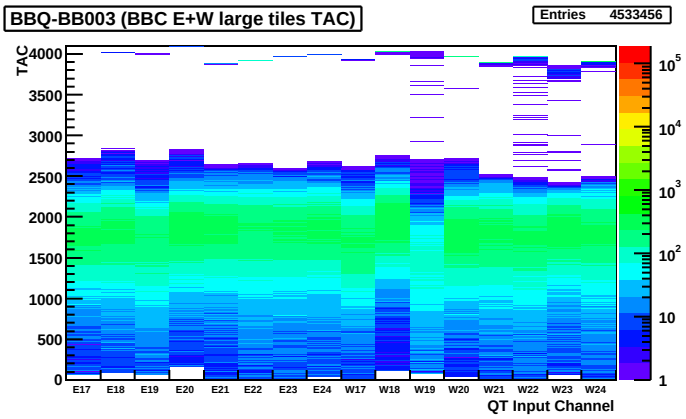

BBQ-BB001 (BBC east small tiles ADC)
Entries 4533456
ADC
QT Input Channel

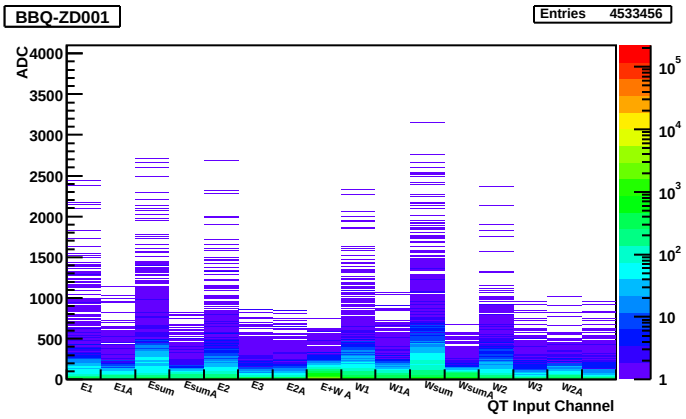

BBQ-BB001 (BBC east small tiles TAC)
Entries 4533456
TAC
QT Input Channel

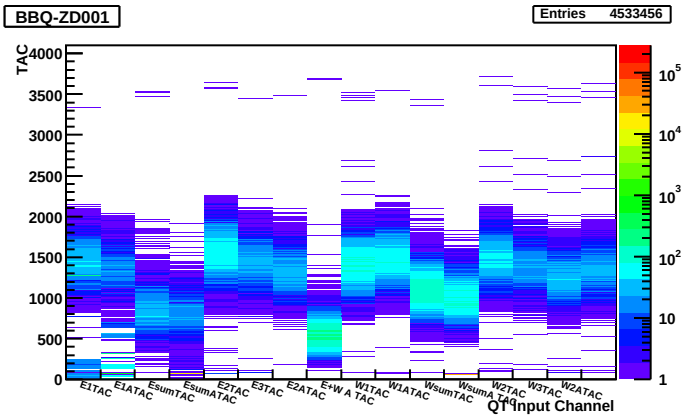

BBQ-BB002 (BBC west small tiles ADC)
Entries 4533456
ADC
QT Input Channel

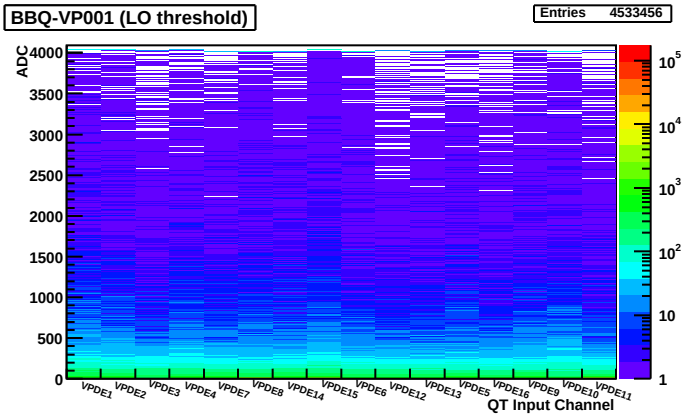

BBQ-BB002 (BBC west small tiles TAC)
Entries 4533456
TAC
QT Input Channel

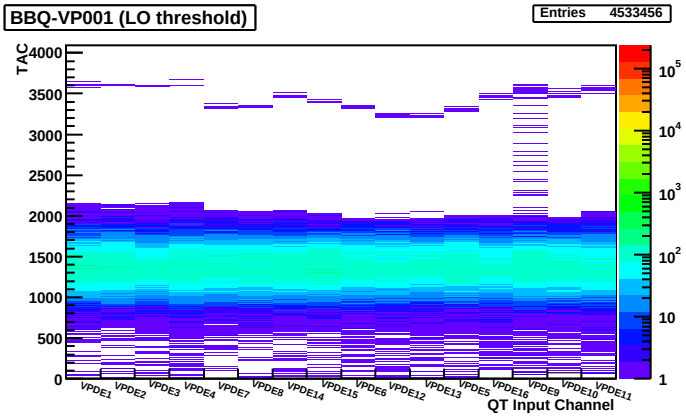

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4533456
ADC
QT Input Channel

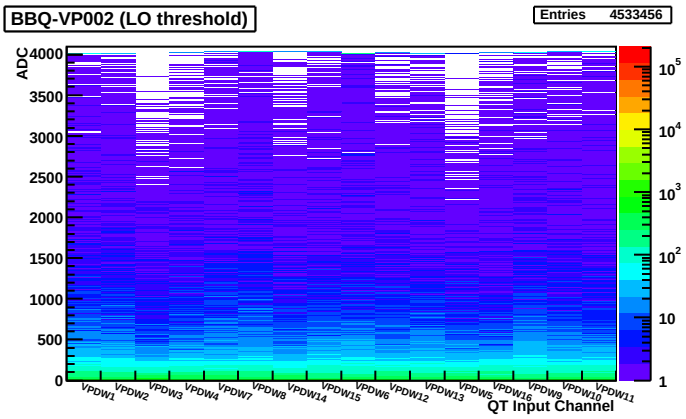

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4533456
TAC
QT Input Channel

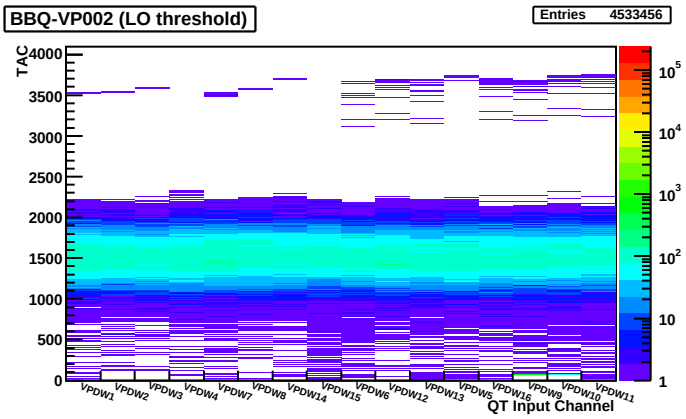

BBQ-ZD001
Entries 4533456
ADC
QT Input Channel

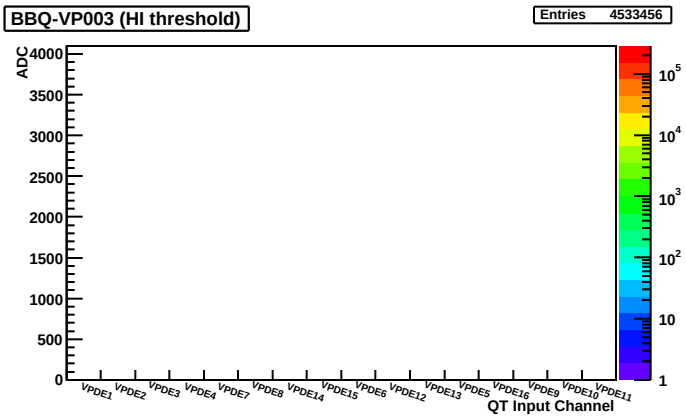

BBQ-ZD001
Entries 4533456
TAC
QT Input Channel

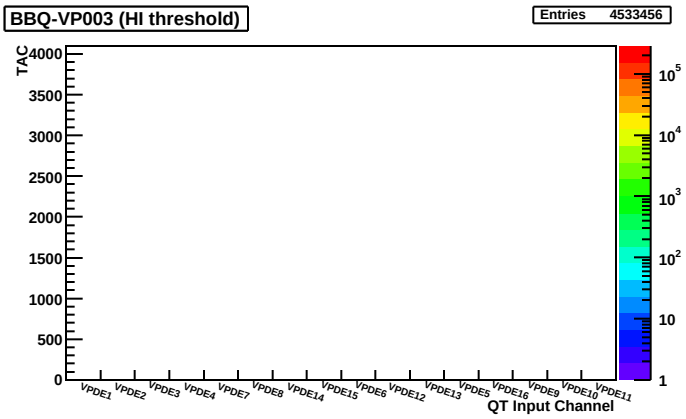

BBQ-VP001 (LO threshold)
Entries 4533456
ADC
QT Input Channel

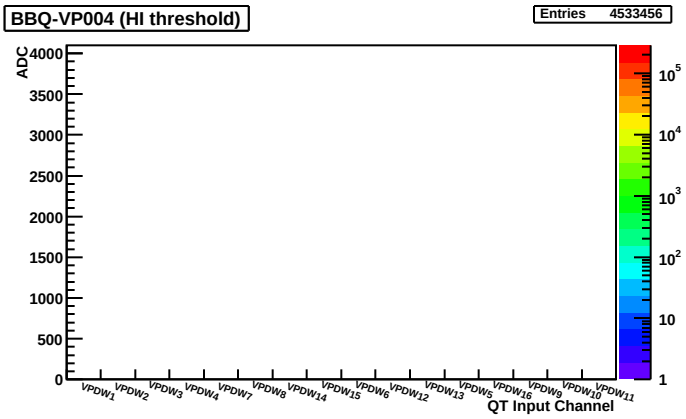

BBQ-VP001 (LO threshold)
Entries 4533456
TAC
QT Input Channel

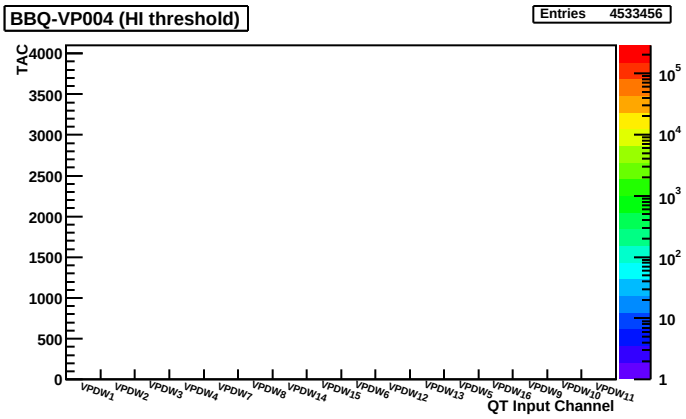

BBQ-VP002 (LO threshold)
Entries 4533456
ADC
QT Input Channel

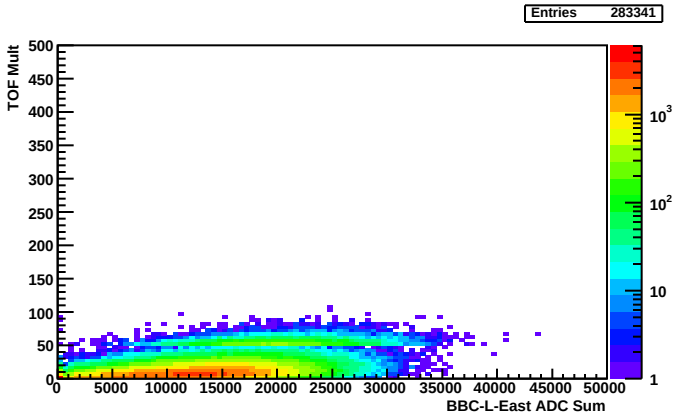

BBQ-VP002 (LO threshold)
Entries 4533456
TAC
QT Input Channel

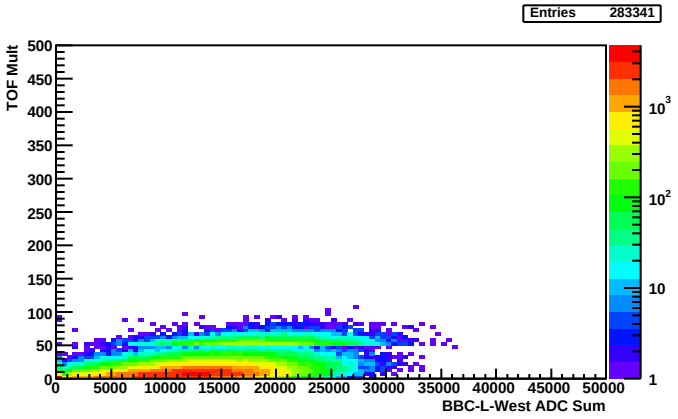

BBQ-VP003 (HI threshold)
Entries 4533456
ADC
QT Input Channel

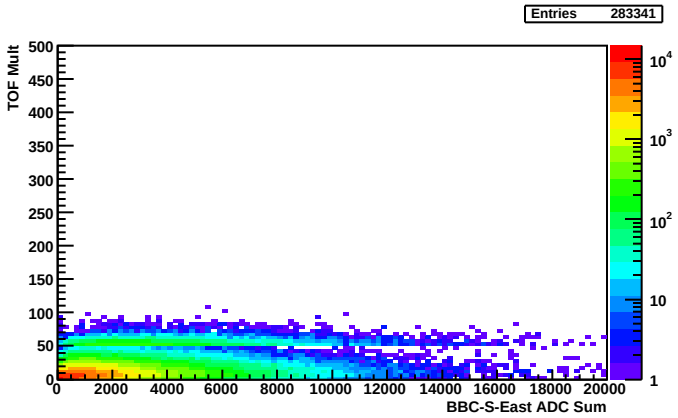

BBQ-VP003 (HI threshold)
Entries 4533456
TAC
QT Input Channel

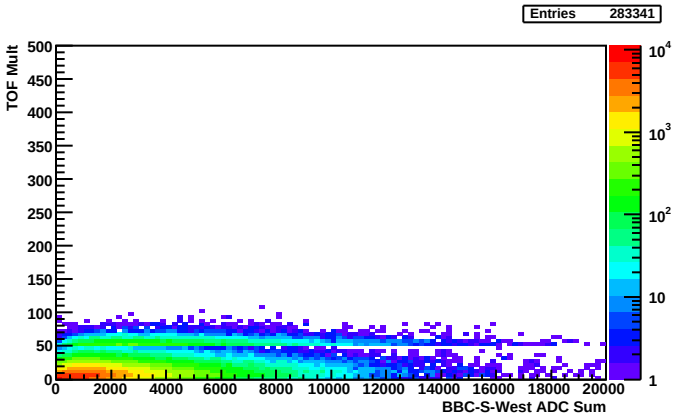

BBQ-VP004 (HI threshold)
Entries 4533456
ADC
QT Input Channel

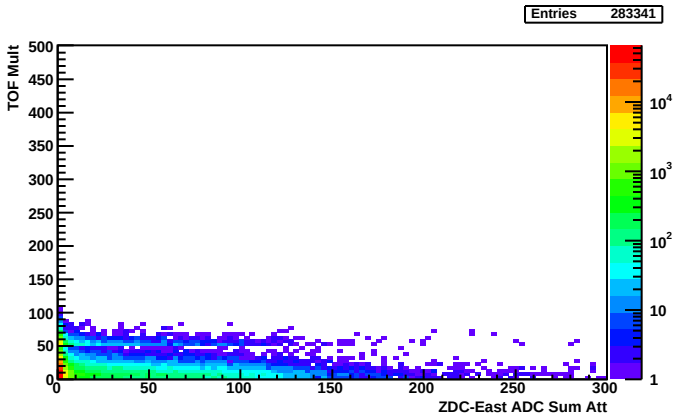

BBQ-VP004 (HI threshold)
Entries 4533456
TAC
QT Input Channel

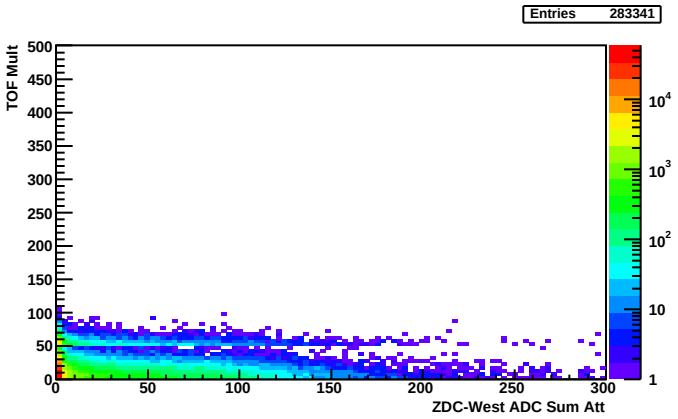

Entries 283341
TOF Mult
BBC-L-East ADC Sum

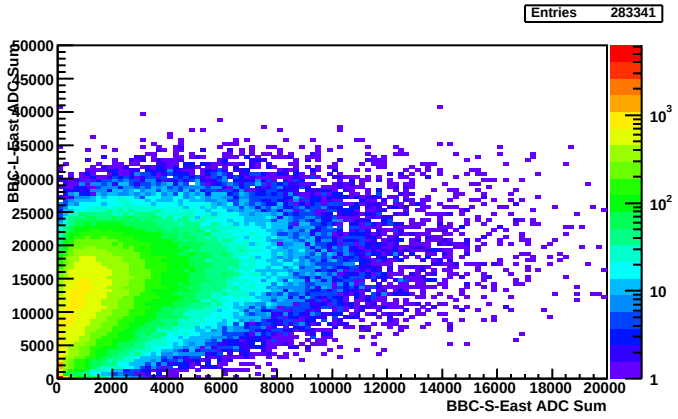

Entries 283341
TOF Mult
BBC-L-West ADC Sum

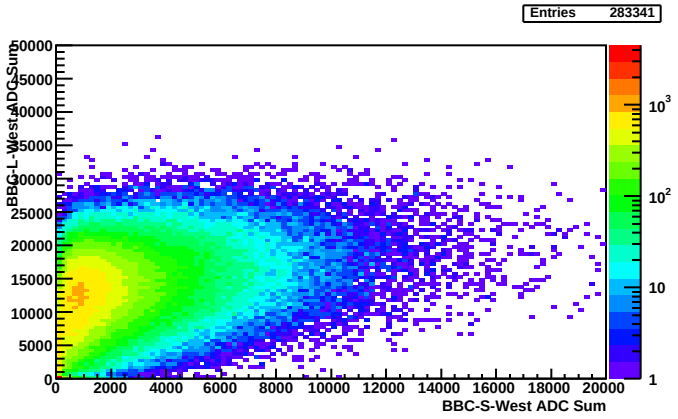

Entries 283341
TOF Mult
BBC-S-East ADC Sum

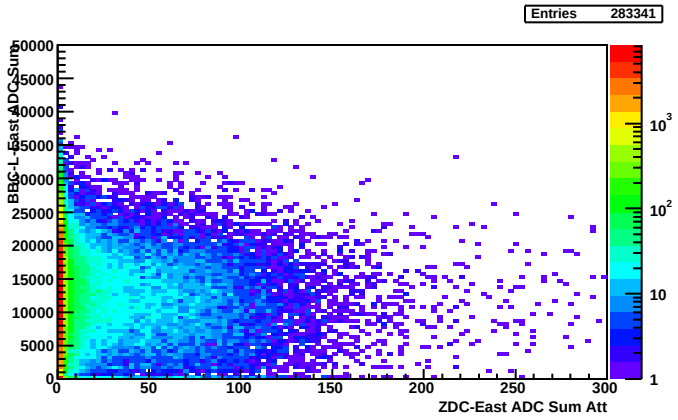

Entries 283341
TOF Mult
BBC-S-West ADC Sum

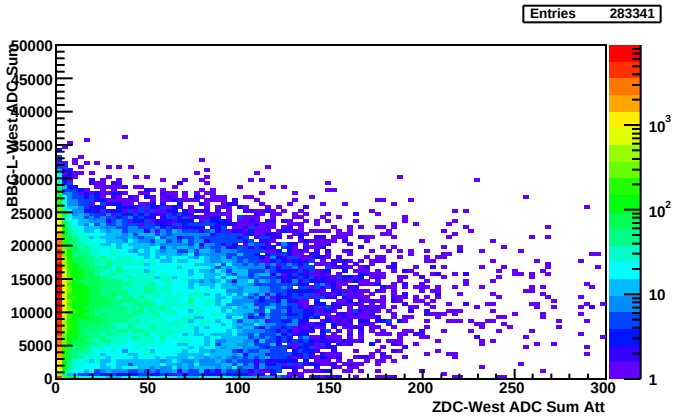

Entries 283341
TOF Mult
ZDC-East ADC Sum Att

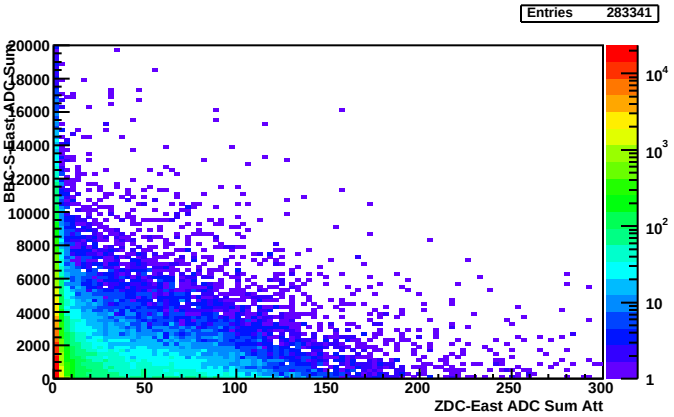

Entries 283341
TOF Mult
ZDC-West ADC Sum Att

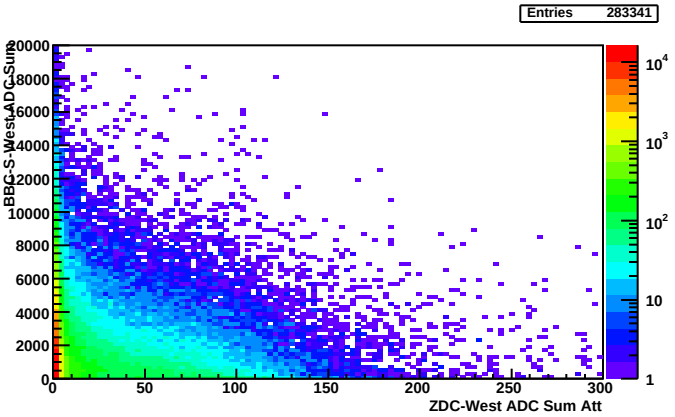

Entries 283341
BBC-L-East ADC Sum
BBC-S-East ADC Sum

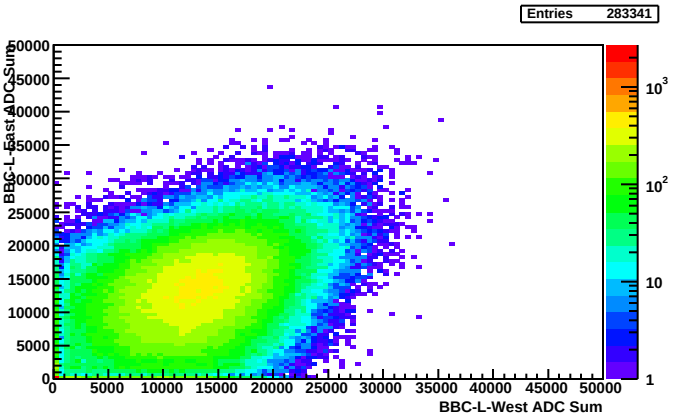

Entries 283341
BBC-L-West ADC Sum
BBC-S-West ADC Sum

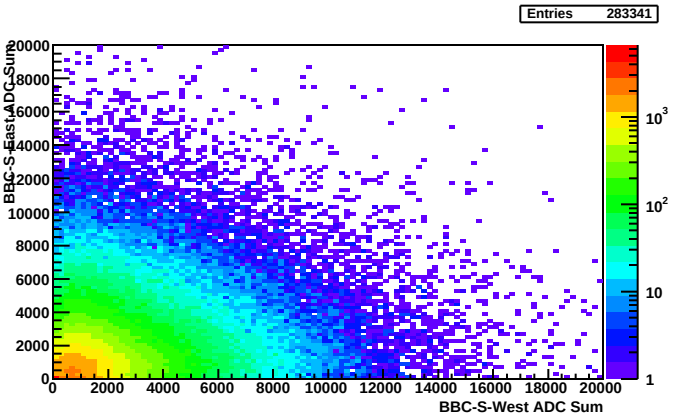

Entries 283341
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

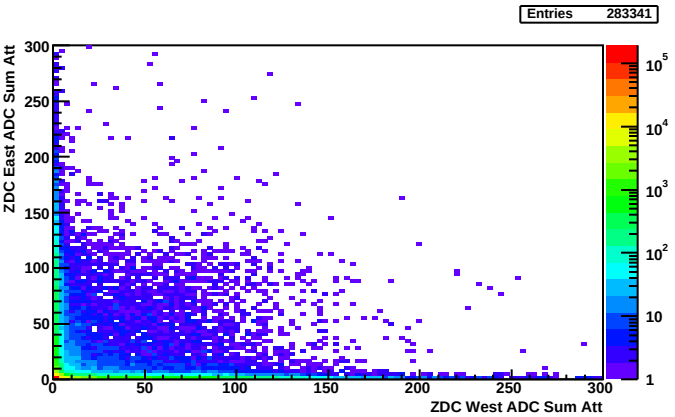

Entries 283341
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

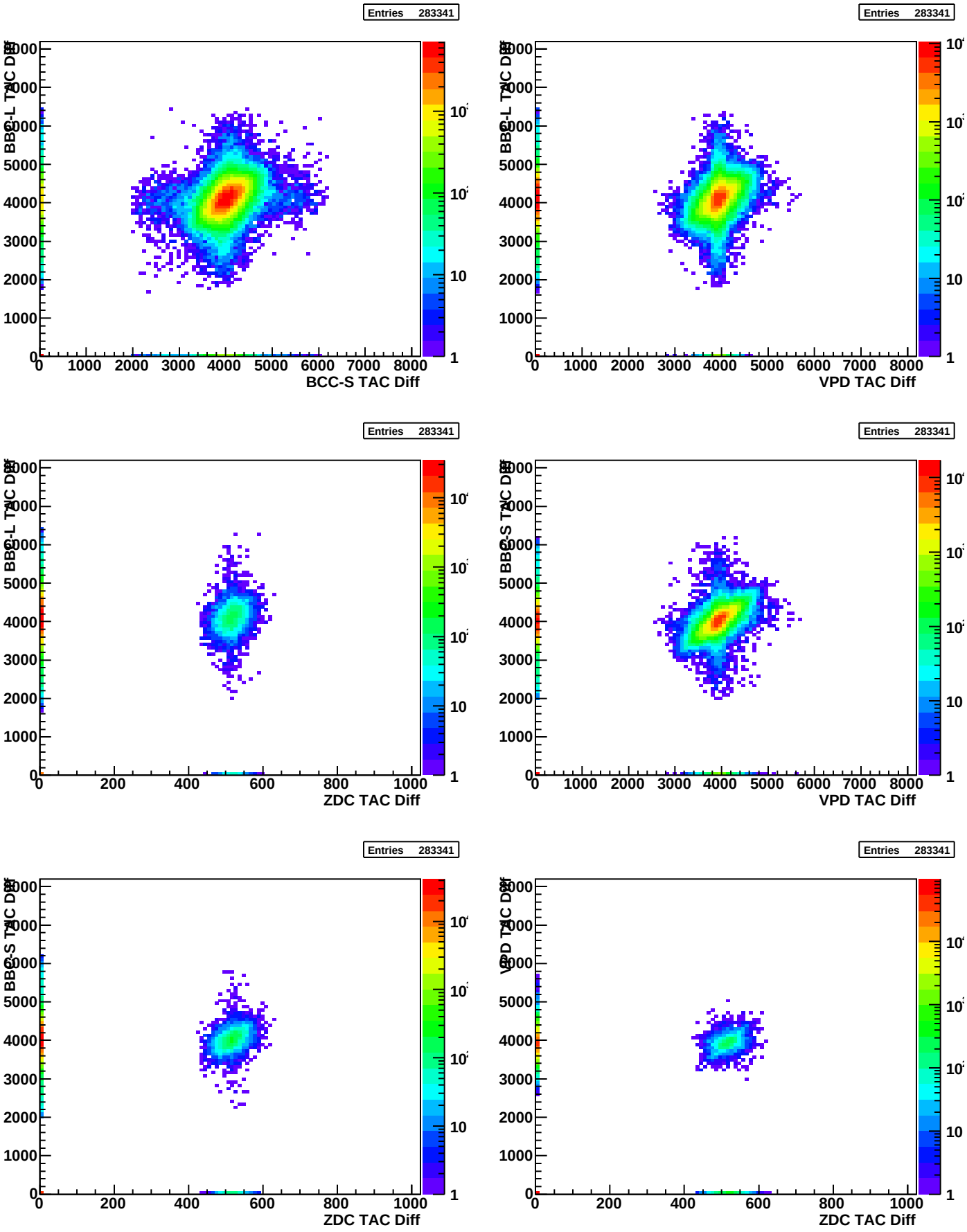

Entries 283341
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

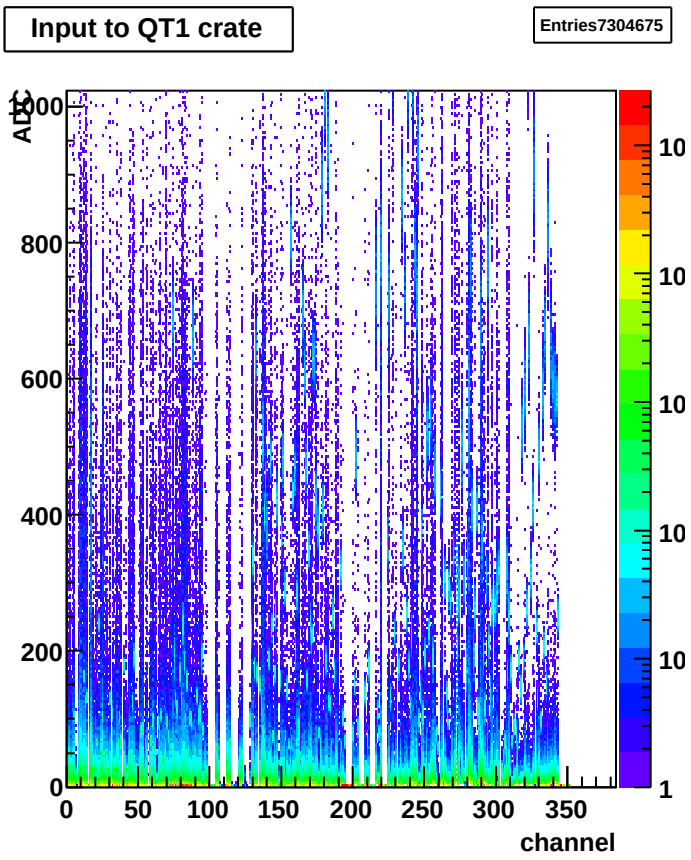

Entries 283341
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

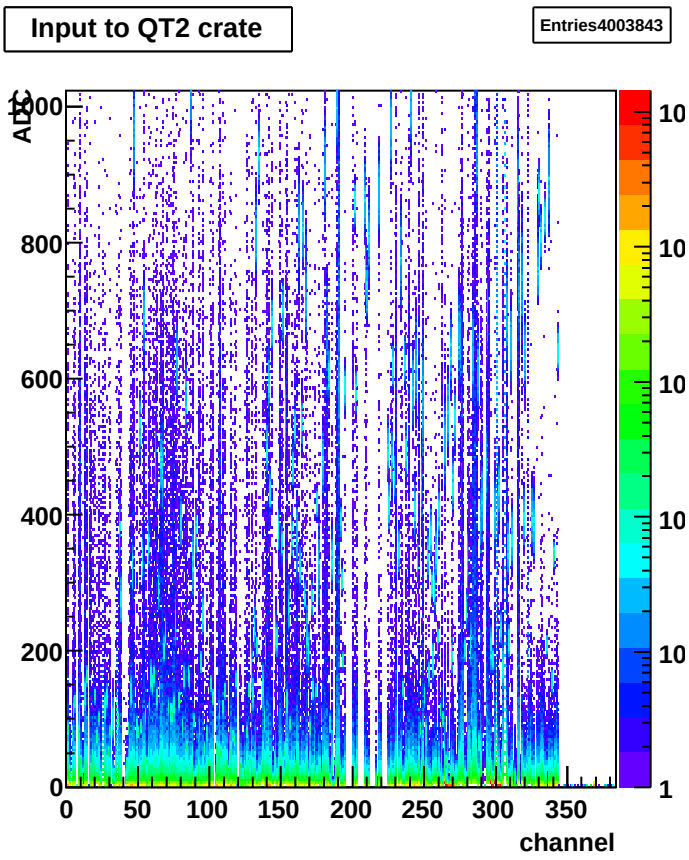

Entries 283341
BBC-L-East ADC Sum
BBC-L-West ADC Sum

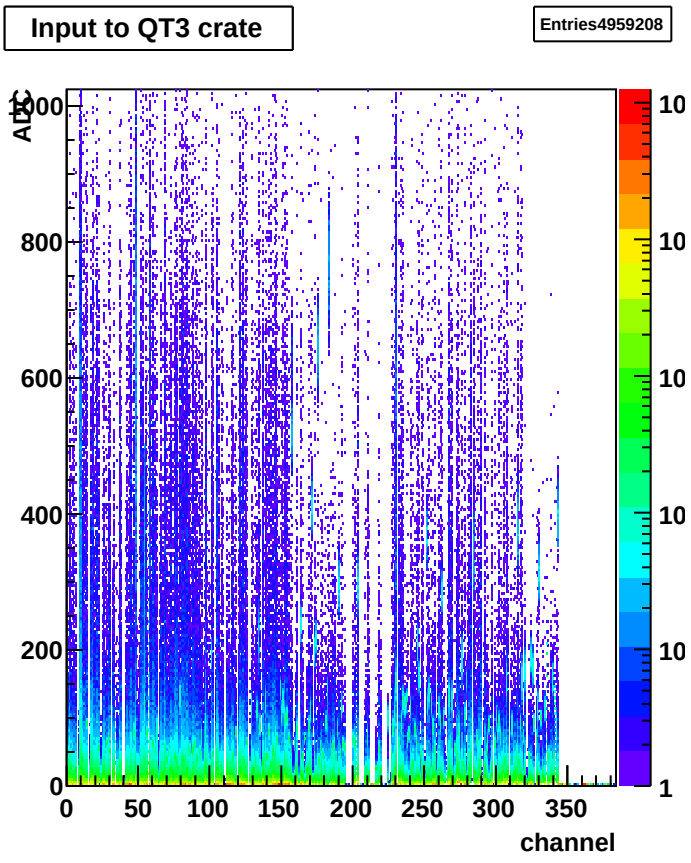

Entries 283341
BBC-S-East ADC Sum
BBC-S-West ADC Sum

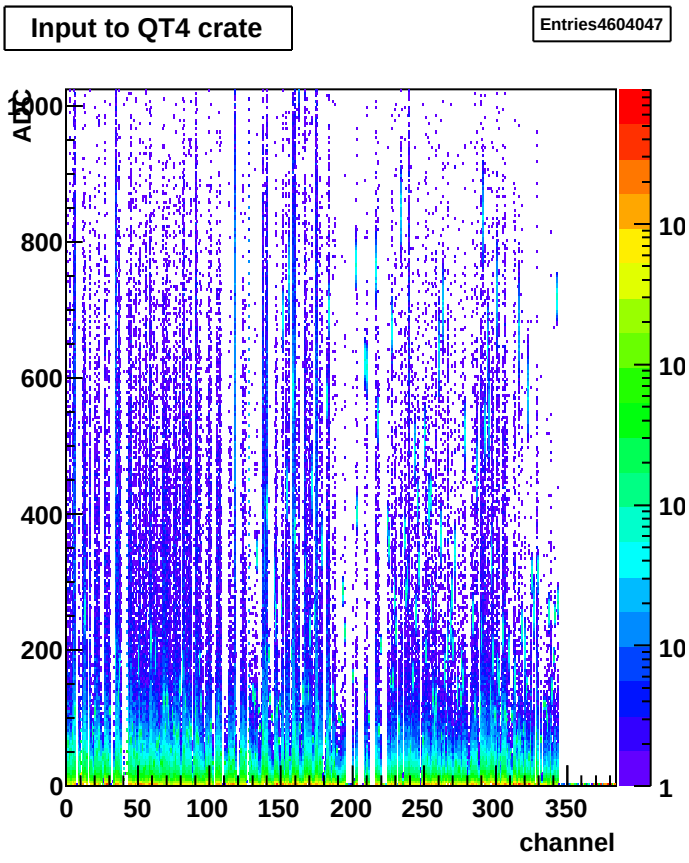

Entries 283341
ZDC East ADC Sum Att
ZDC West ADC Sum Att

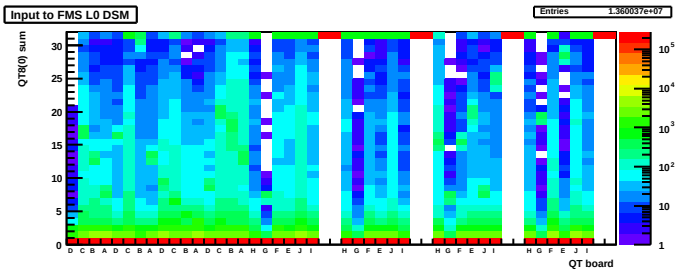

Entries 283341
BBC-L TAC Diff
BCC-S TAC Diff
Entries 283341
BBC-L TAC Diff
VPD TAC Diff
Entries 283341
BBC-L TAC Diff
ZDC TAC Diff
Entries 283341
BBC-S TAC Diff
VPD TAC Diff
Entries 283341
BBC-S TAC Diff
ZDC TAC Diff
Entries 283341
VPD TAC Diff
ZDC TAC Diff

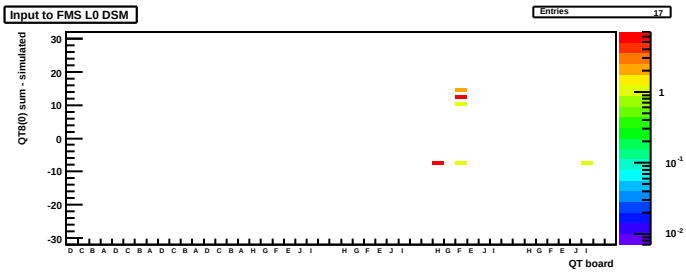

Input to QT1 crate
Entries7304675
ADC
channel

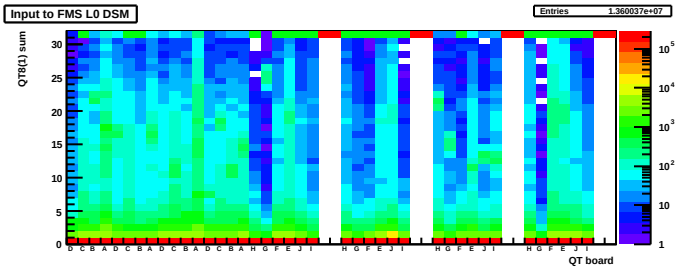

Input to QT2 crate
Entries4003843
ADC
channel

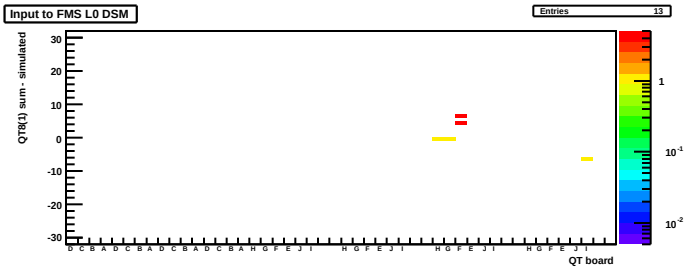

Input to QT3 crate
Entries4959208
ADC
channel

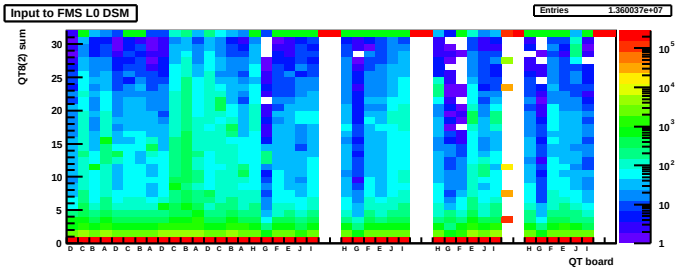

Input to QT4 crate
Entries4604047
ADC
channel

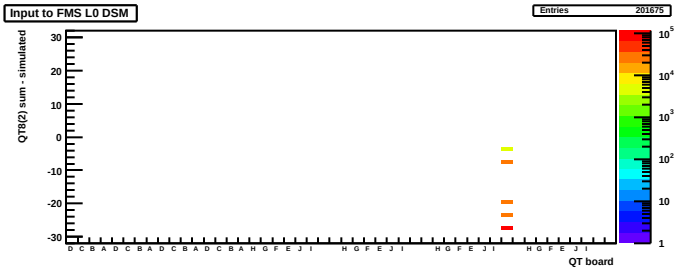

Input to FMS L0 DSM
Entries 1.360037e+07
QT8(0) sum
QT board

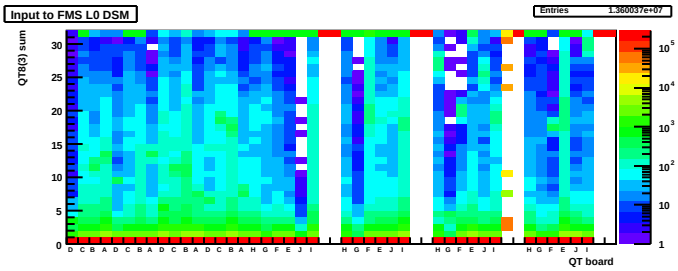

Input to FMS L0 DSM
Entries 17
QT8(0) sum - simulated
QT board

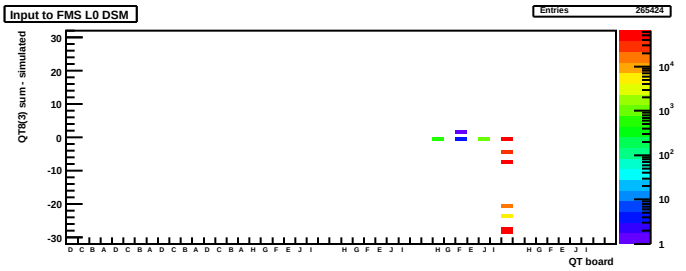

Input to FMS L0 DSM
Entries 1.360037e+07
QT8(1) sum
QT board

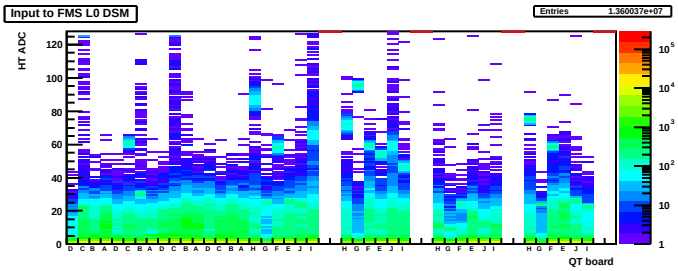

Input to FMS L0 DSM
Entries 13
QT8(1) sum - simulated
QT board

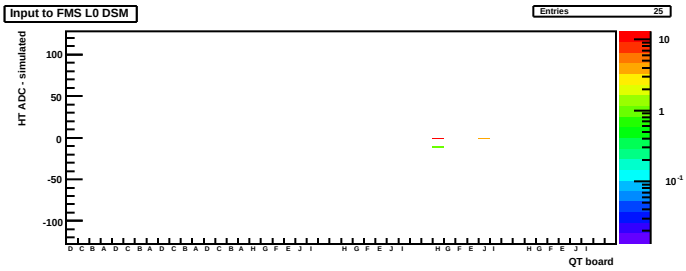

Input to FMS L0 DSM
Entries 1.360037e+07
QT8(2) sum
QT board

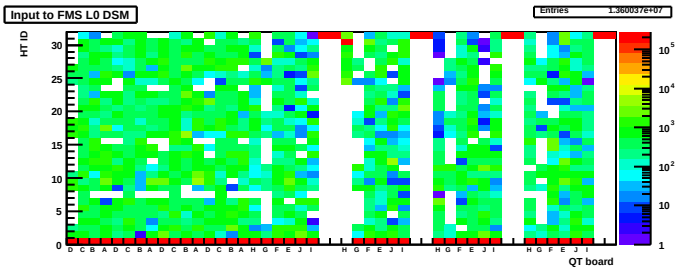

Input to FMS L0 DSM
Entries 201675
QT8(2) sum - simulated
QT board

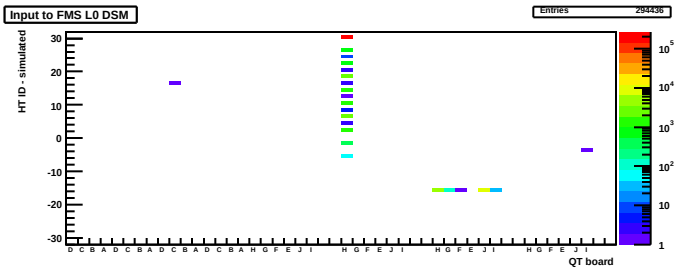

Input to FMS L0 DSM
Entries 1.360037e+07
QT8(3) sum
QT board

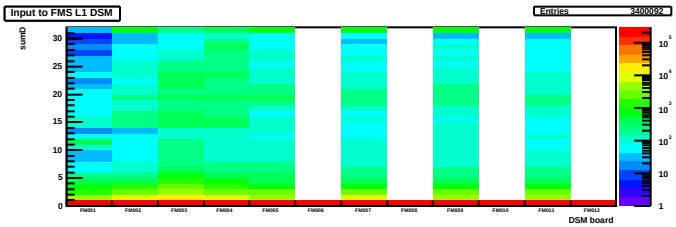

Input to FMS L0 DSM
Entries 265424
QT8(3) sum - simulated
QT board

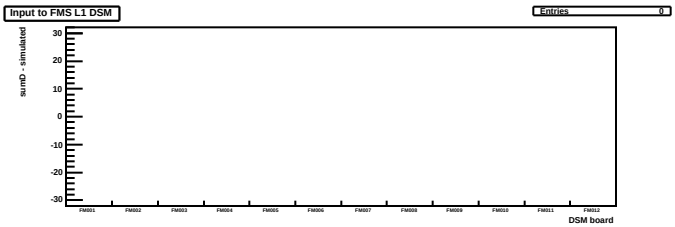

Input to FMS L0 DSM
Entries 1.360037e+07
HT ADC
QT board

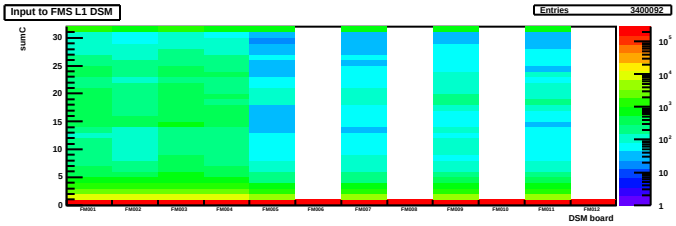

Input to FMS L0 DSM
Entries 25
HT ADC - simulated
QT board

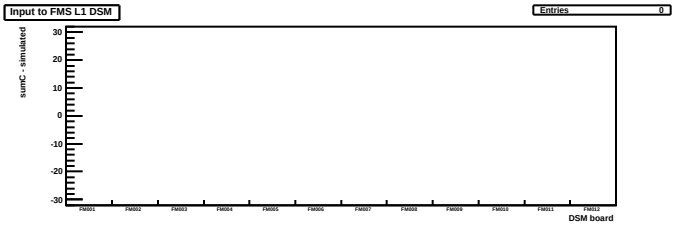

Input to FMS L0 DSM
Entries 1.360037e+07
HT ID
QT board

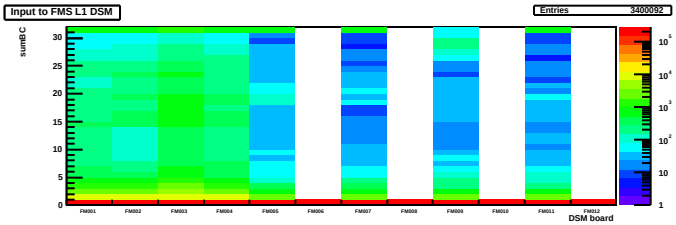

Input to FMS L0 DSM
Entries 284436
HT ID - simulated
QT board

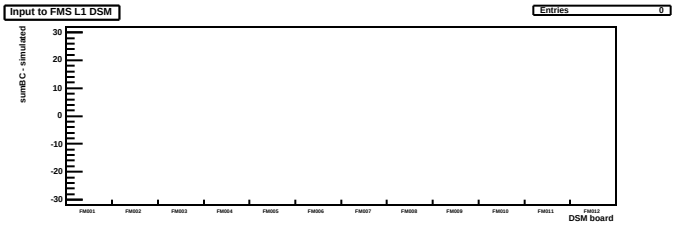

Input to FMS L1 DSM
Entries 3400092
sumD
DSM board

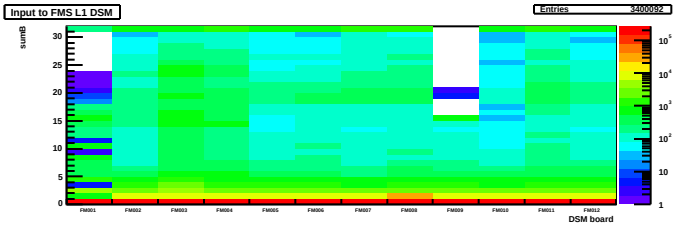

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

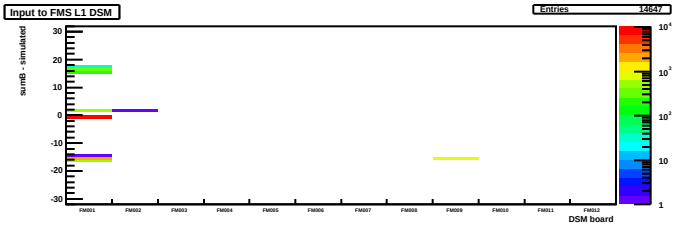

Input to FMS L1 DSM
Entries 3400092
sumC
DSM board

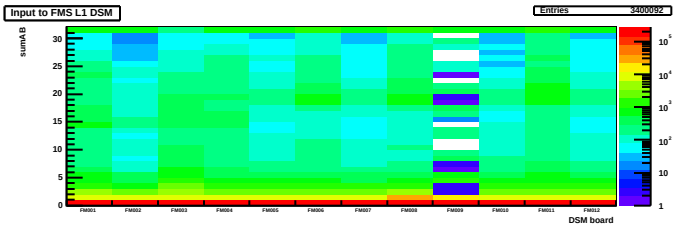

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

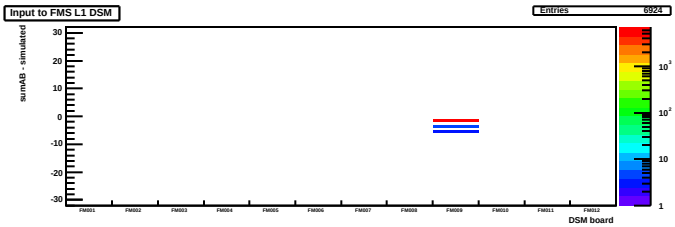

Input to FMS L1 DSM
Entries 3400092
sumBC
DSM board

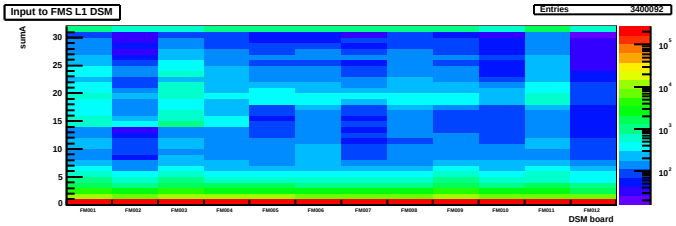

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

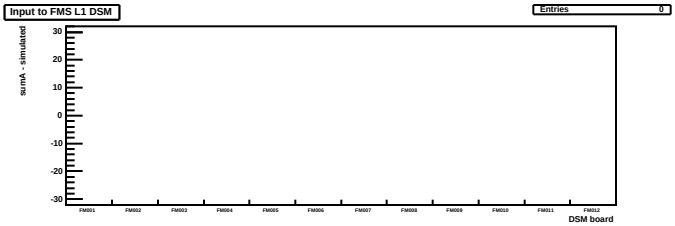

Input to FMS L1 DSM
Entries 3400092
sumB
DSM board

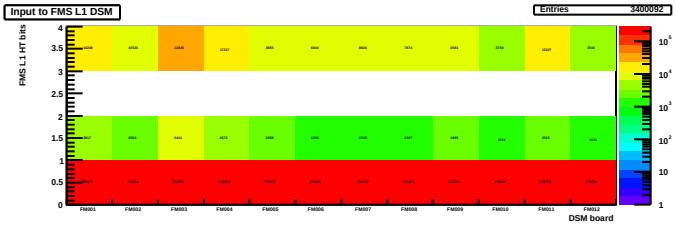

Input to FMS L1 DSM
Entries 14647
sumB - simulated
DSM board

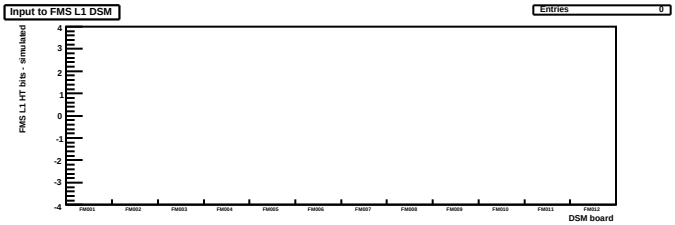

Input to FMS L1 DSM
Entries 3400092
sumAB
DSM board

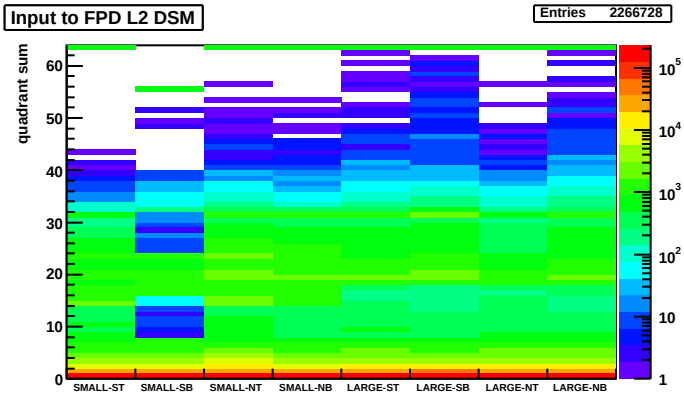

Input to FMS L1 DSM
Entries 6924
sumAB - simulated
DSM board

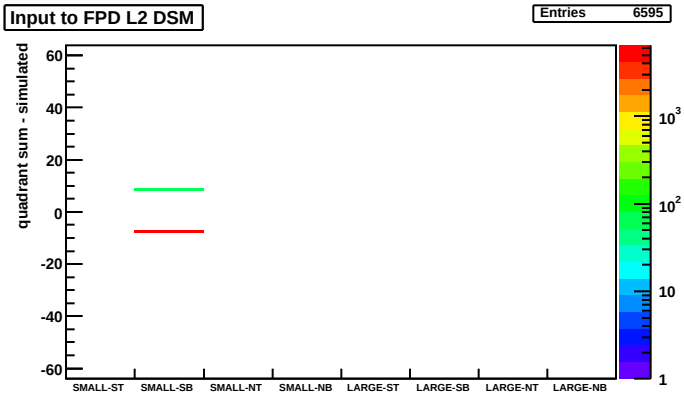

Input to FMS L1 DSM
Entries 3400092
sumA
DSM board

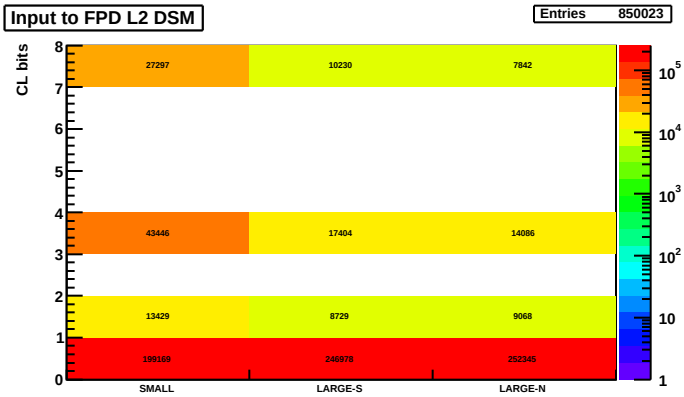

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

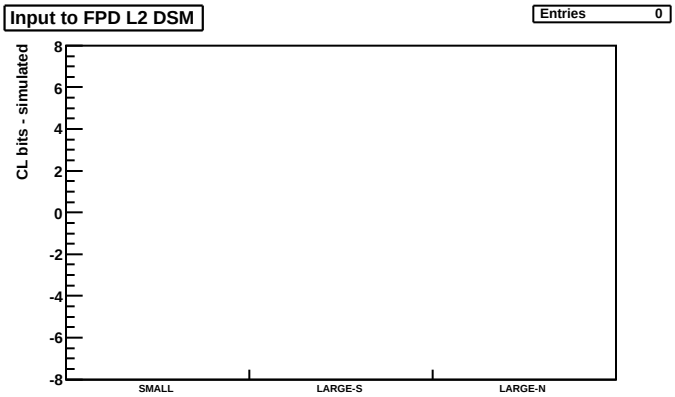

Input to FMS L1 DSM
Entries 3400092
FMS L1 HT bits
DSM board

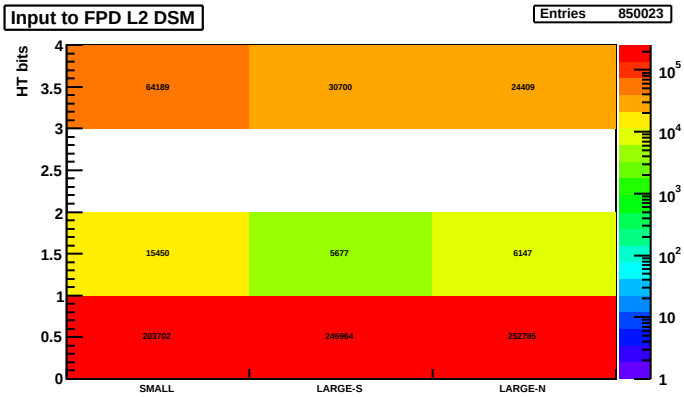

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

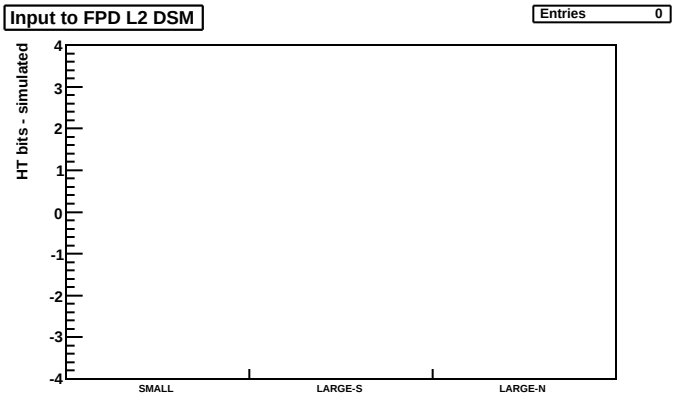

Input to FPD L2 DSM
Entries 2266728
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

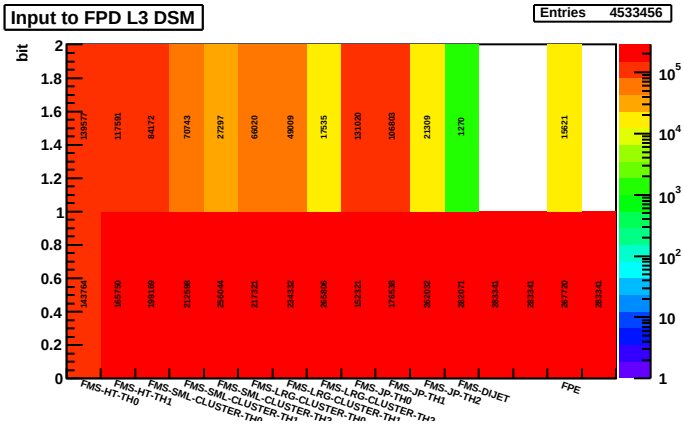

Input to FPD L2 DSM
Entries 6595
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

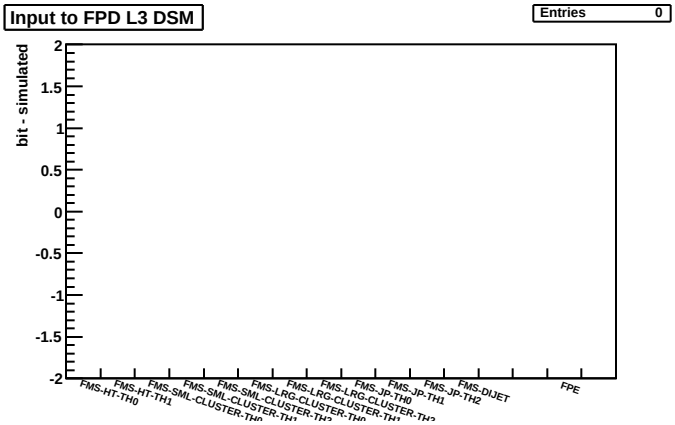

Input to FPD L2 DSM
Entries 850023
CL bits
27297
10230
7842
43446
17404
14086
13429
8729
9068
199169
246978
252345
SMALL
LARGE-S
LARGE-N

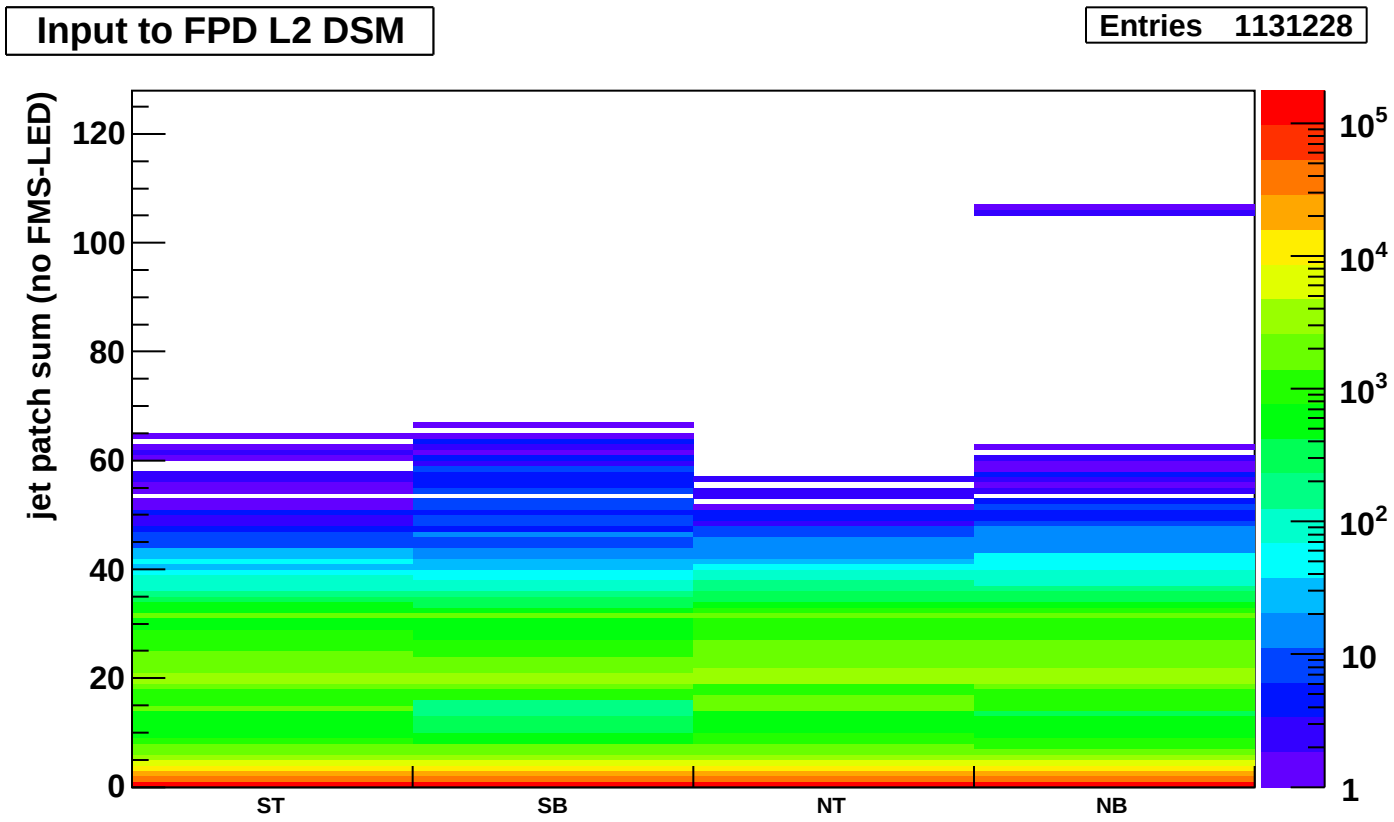

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

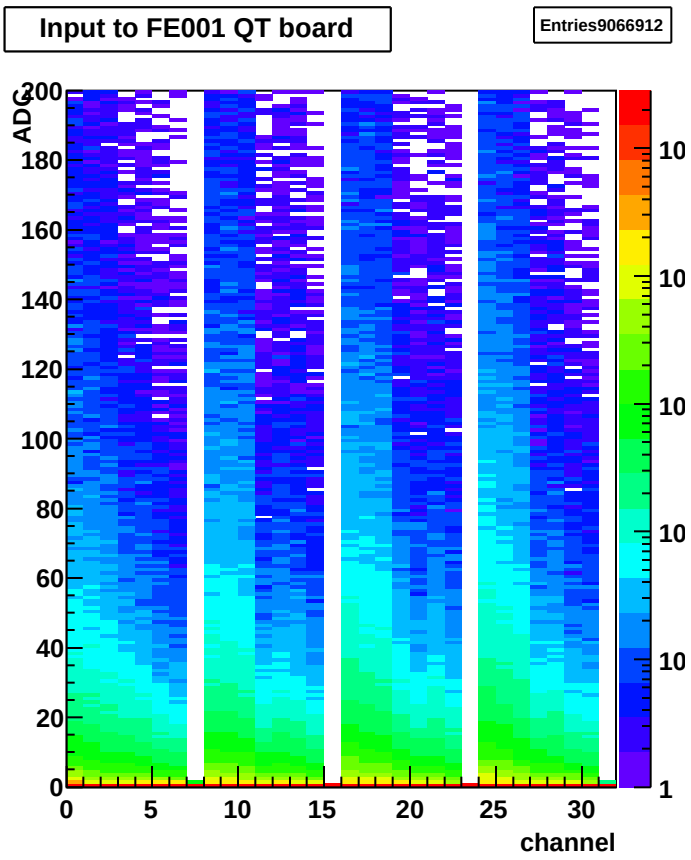

Input to FPD L2 DSM
Entries 850023
HT bits
64189
30700
24409
15450
5677
6147
203702
246964
252785
SMALL
LARGE-S
LARGE-N

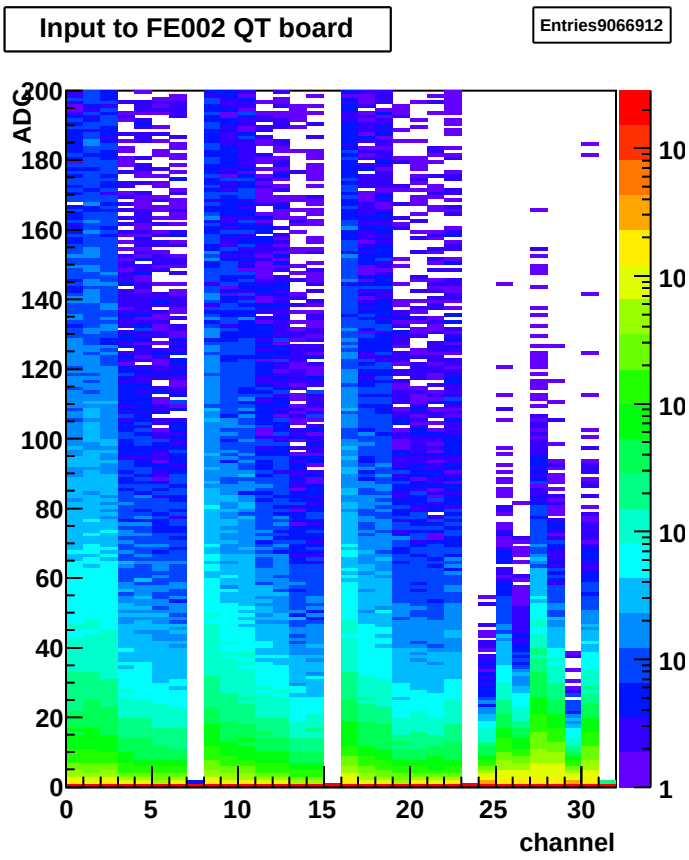

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

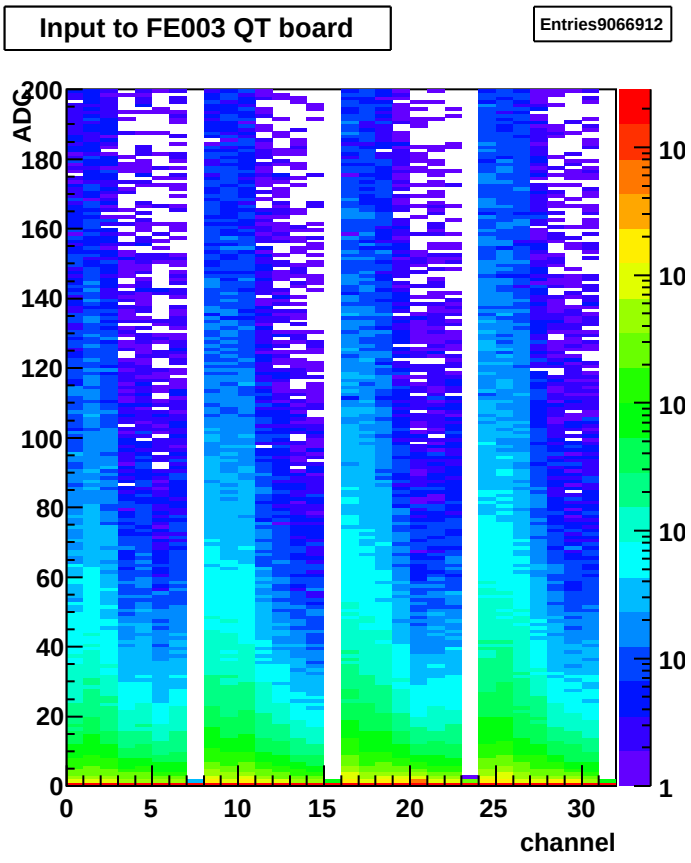

Input to FPD L3 DSM
Entries 4533456
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

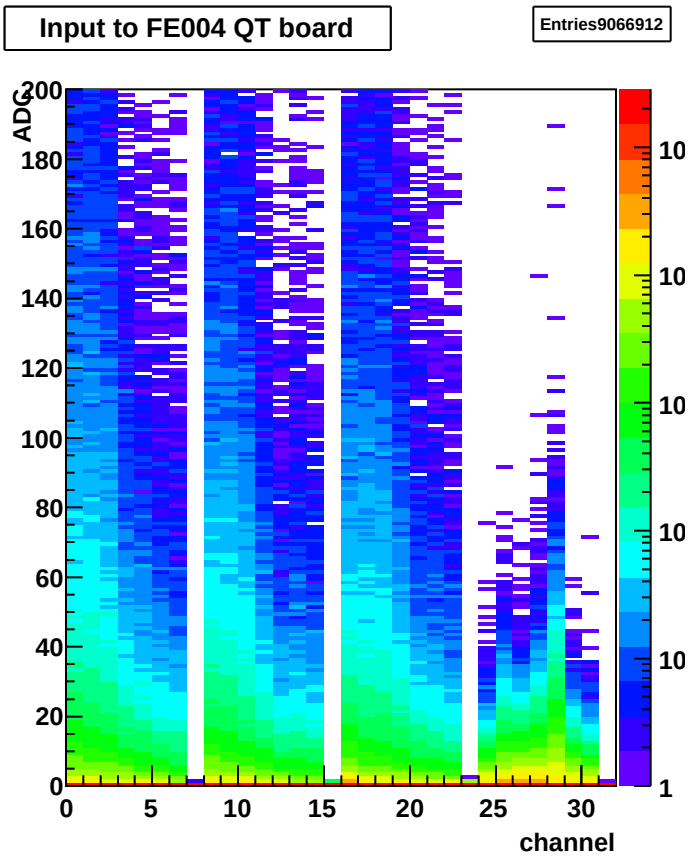

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

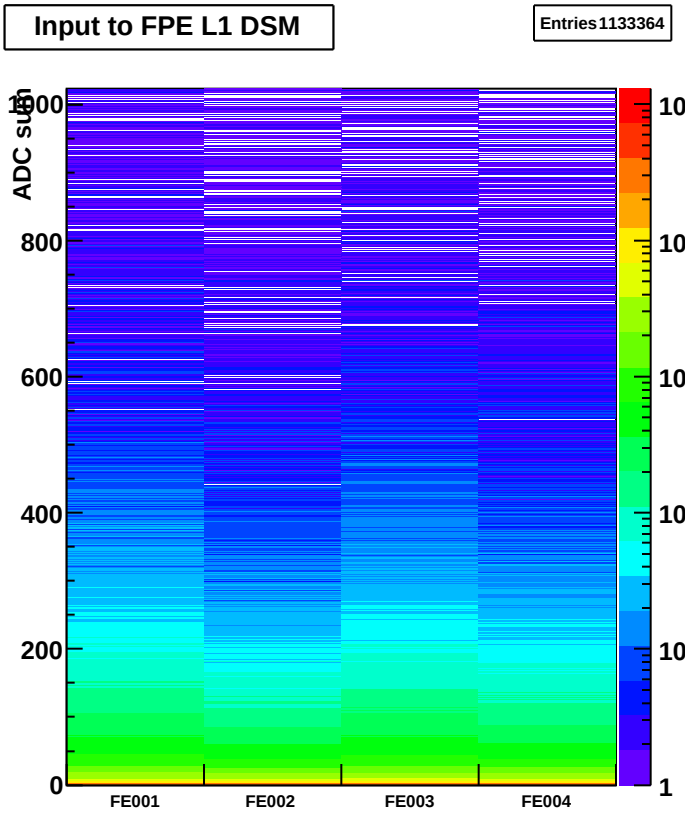

Input to FPD L2 DSM
Entries 1131228
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

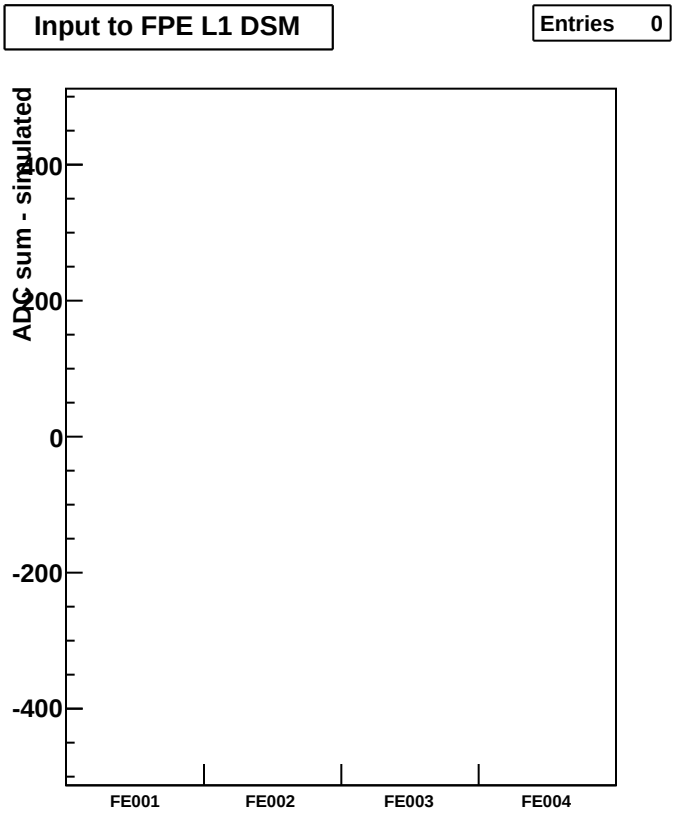

Input to FE001 QT board
Entries9066912
ADC
channel

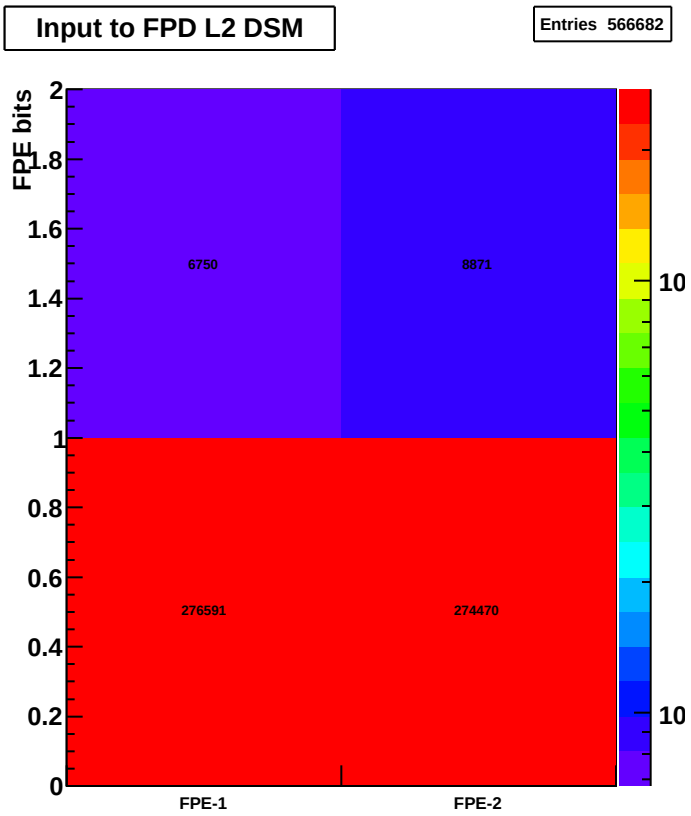

Input to FE002 QT board
Entries9066912
ADC
channel

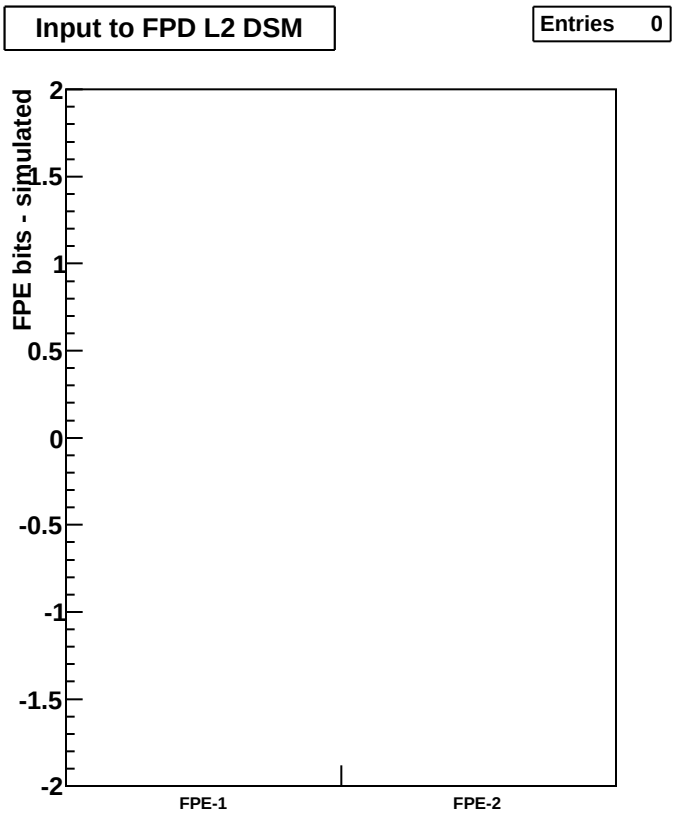

Input to FE003 QT board
Entries9066912
ADC
channel


Input to FE004 QT board
Entries9066912
ADC
channel


Input to FPE L1 DSM
Entries 1133364
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


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


Input to FPD L2 DSM
Entries 566682
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
6750
8871
276591
274470
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