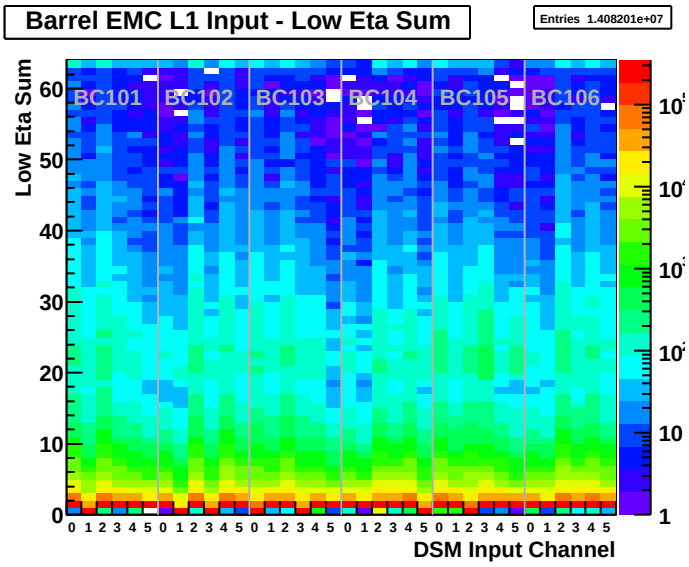
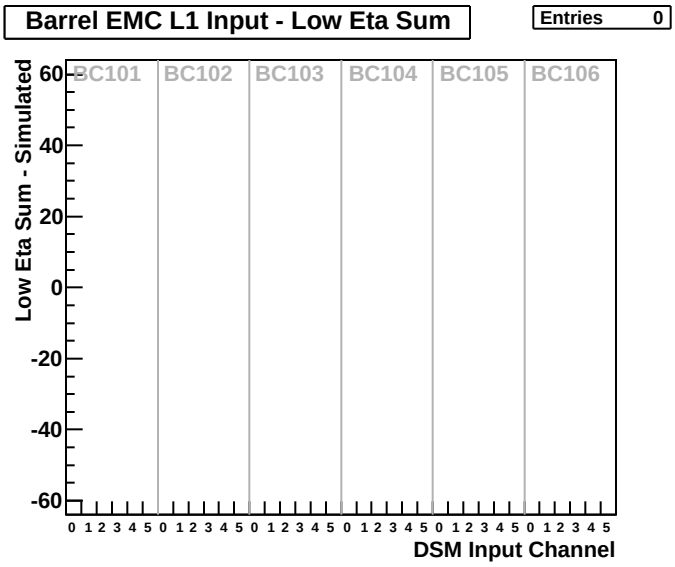
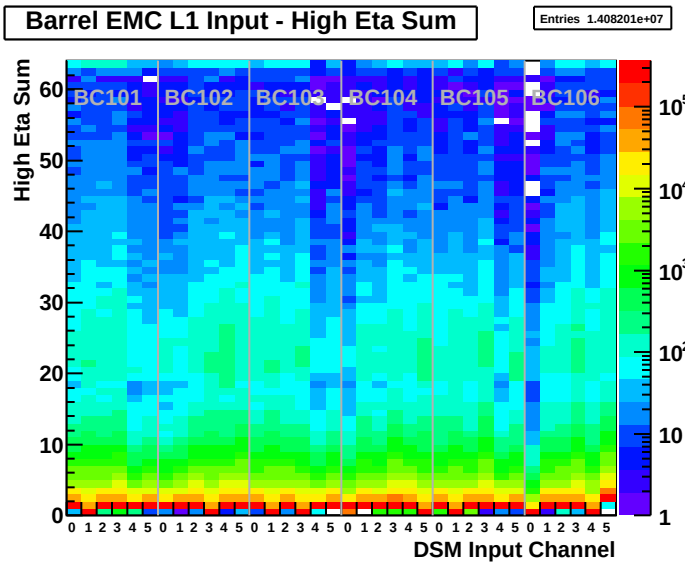
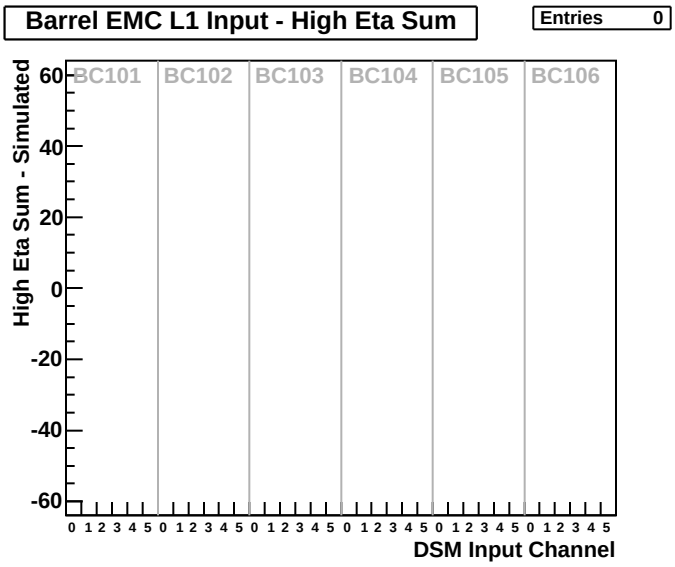
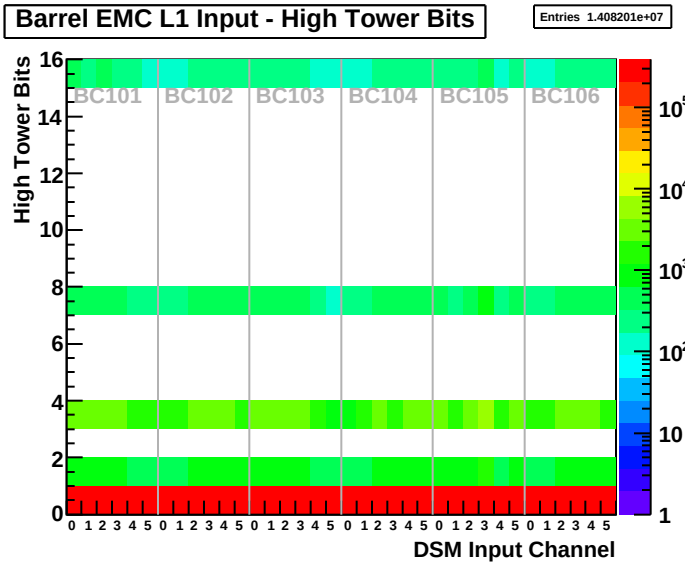
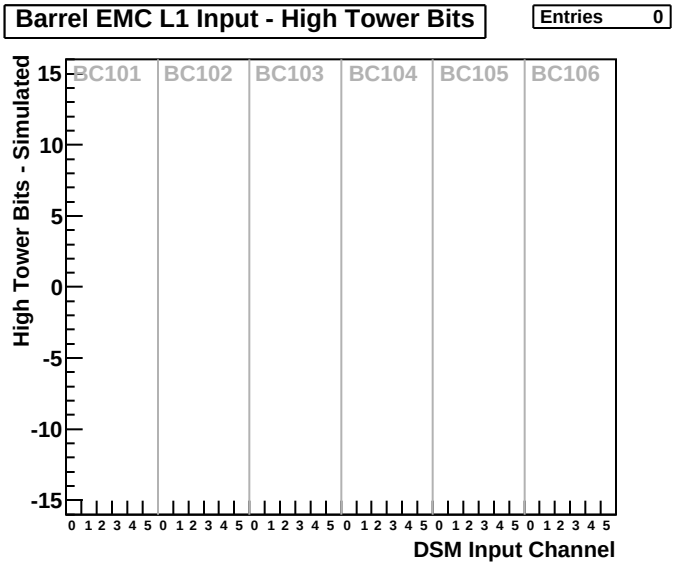

Barrel EMC L1 Input - Low Eta Sum
Entries 1.408201e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

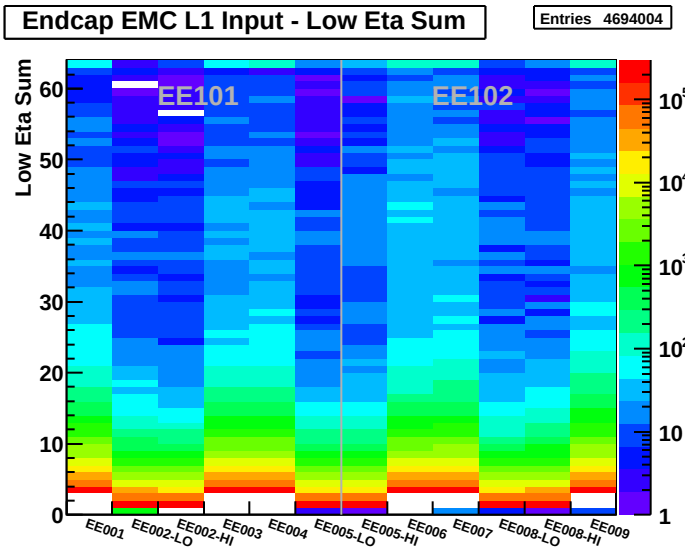

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

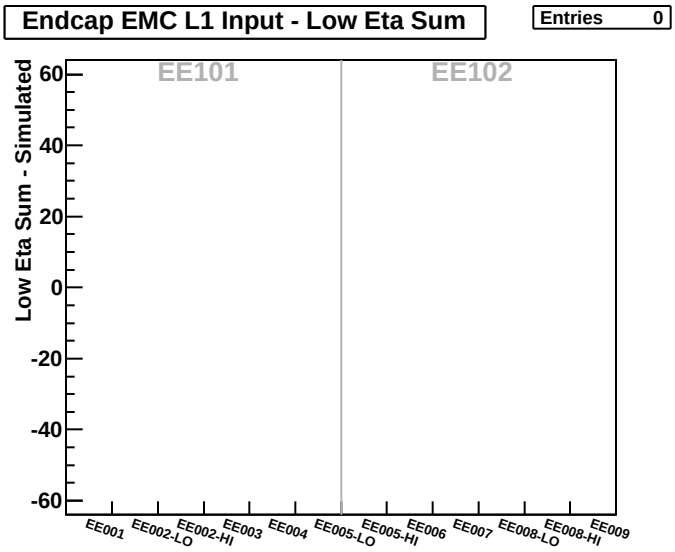

Barrel EMC L1 Input - High Eta Sum
Entries 1.408201e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

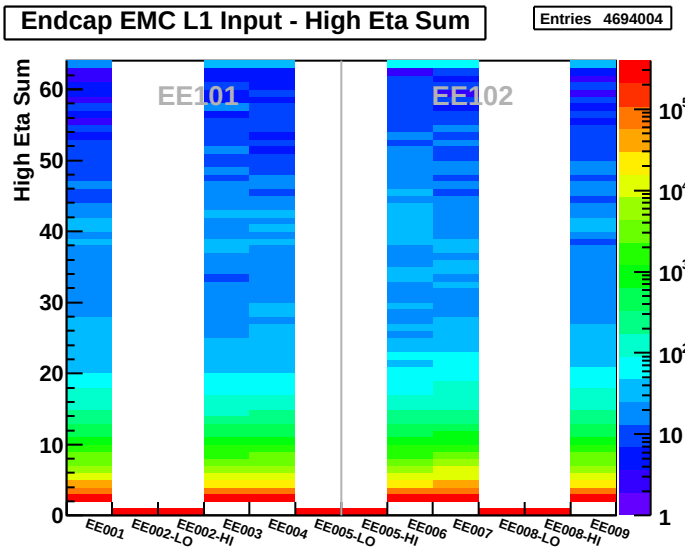

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

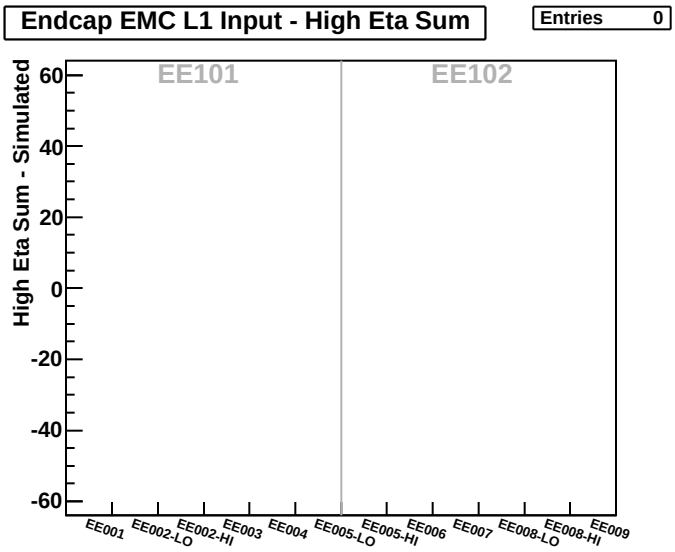

Barrel EMC L1 Input - High Tower Bits
Entries 1.408201e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

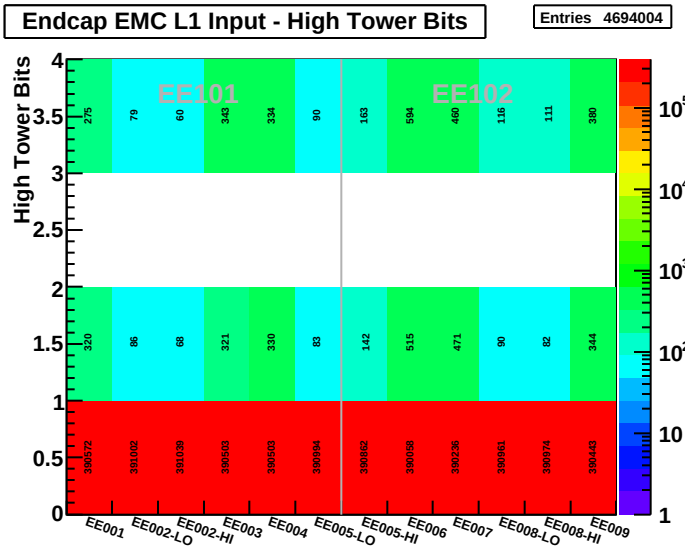

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

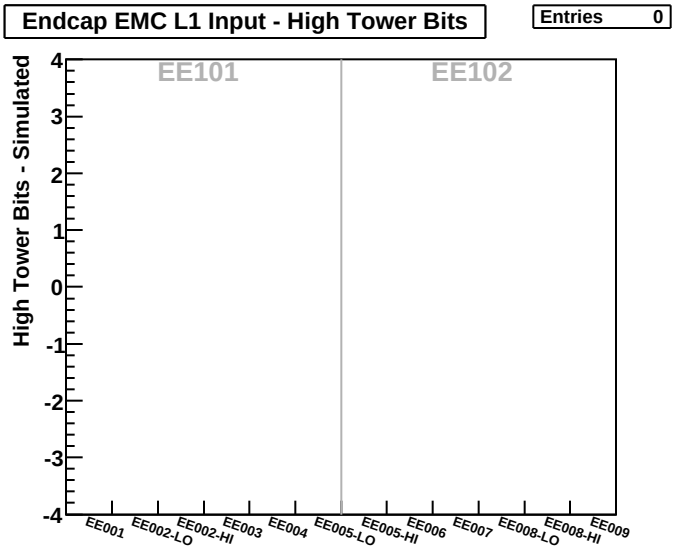

Endcap EMC L1 Input - Low Eta Sum
Entries 4694004
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

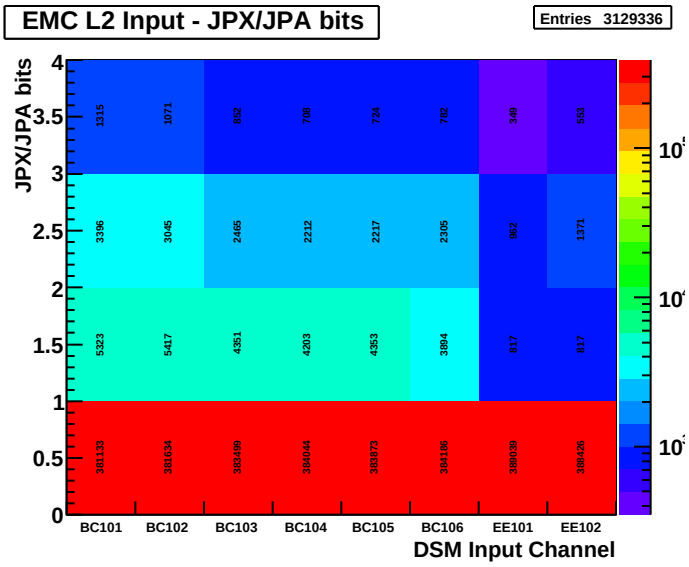

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

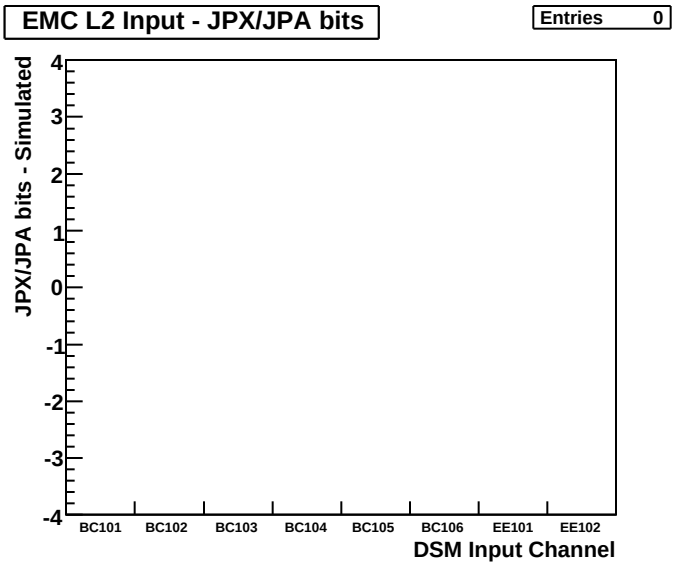

Endcap EMC L1 Input - High Eta Sum
Entries 4694004
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

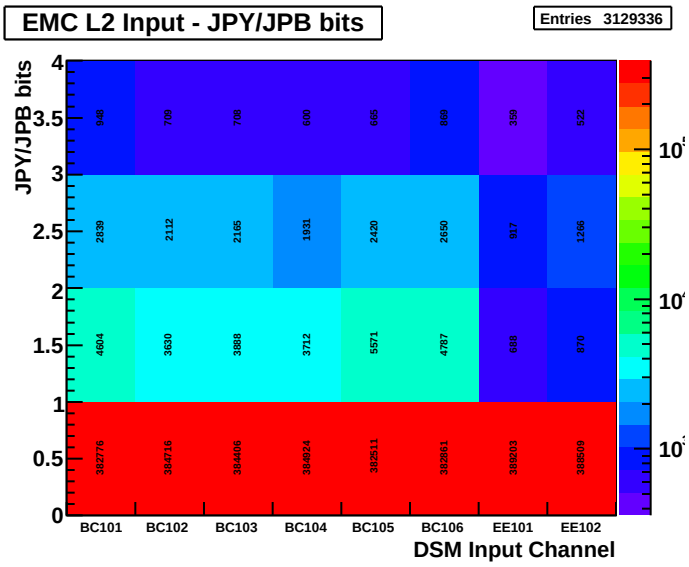

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

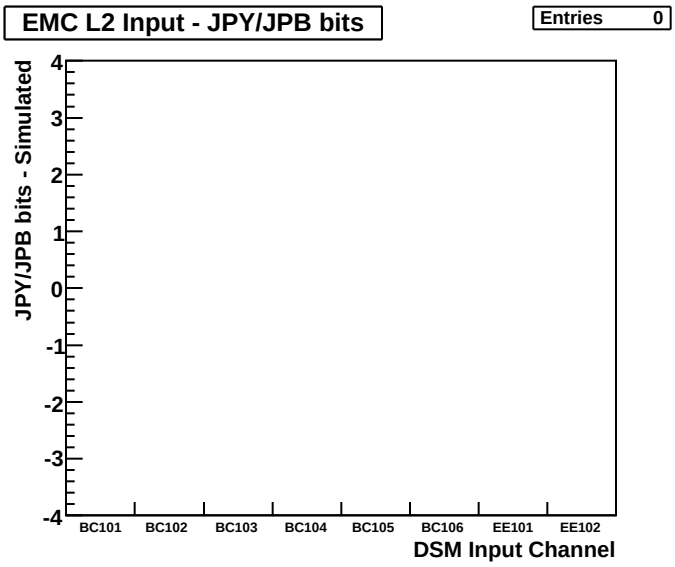

Endcap EMC L1 Input - High Tower Bits
Entries 4694004
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

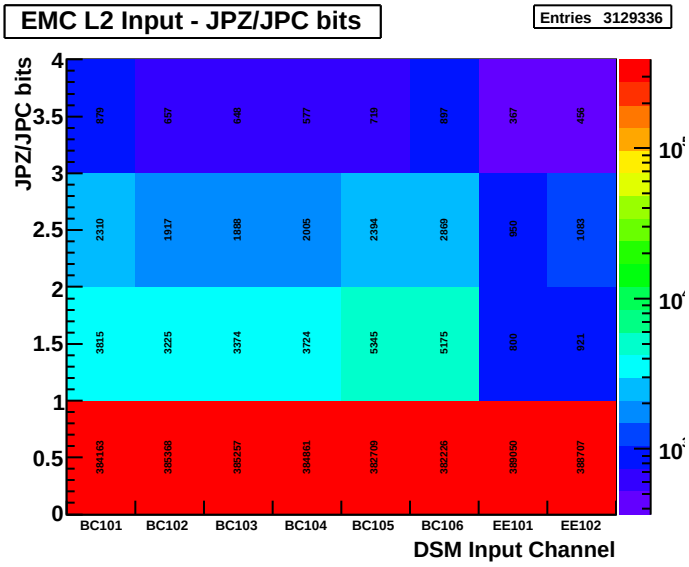

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

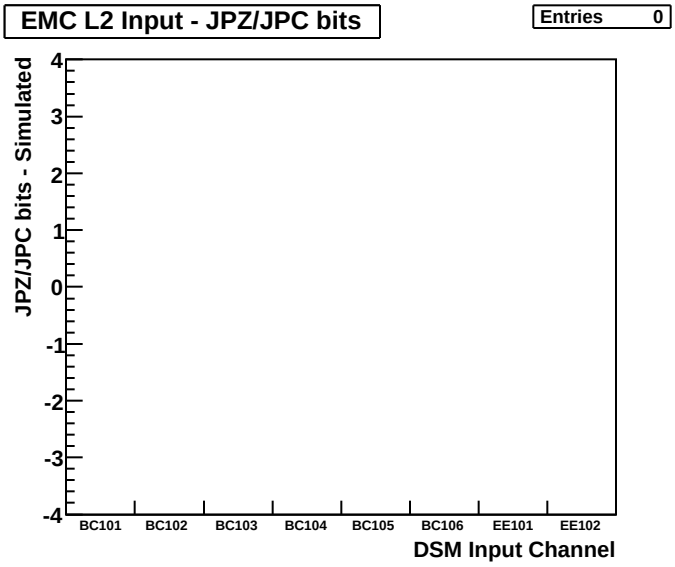

EMC L2 Input - JPX/JPA bits
Entries 3129336
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1315 1071 652 708 724 782 349 553
3396 3045 2465 2212 2217 2305 982 1371
5323 5417 4351 4203 4353 3894 817 817
381133 381634 382499 384044 383873 384186 389039 388426

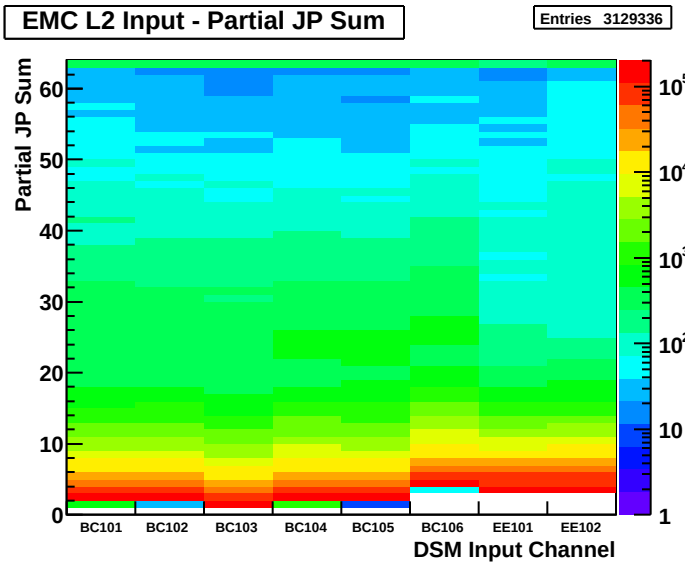

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

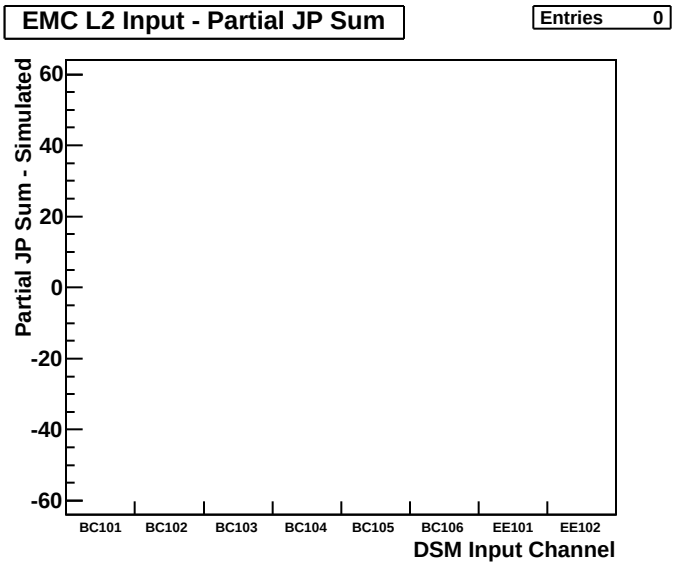

EMC L2 Input - JPY/JPB bits
Entries 3129336
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
946 709 708 600 665 869 359 522
2839 2112 2165 1931 2420 2650 917 1266
4604 3630 3988 3712 5571 4787 688 870
382776 384716 384406 384924 382511 382861 389203 388509

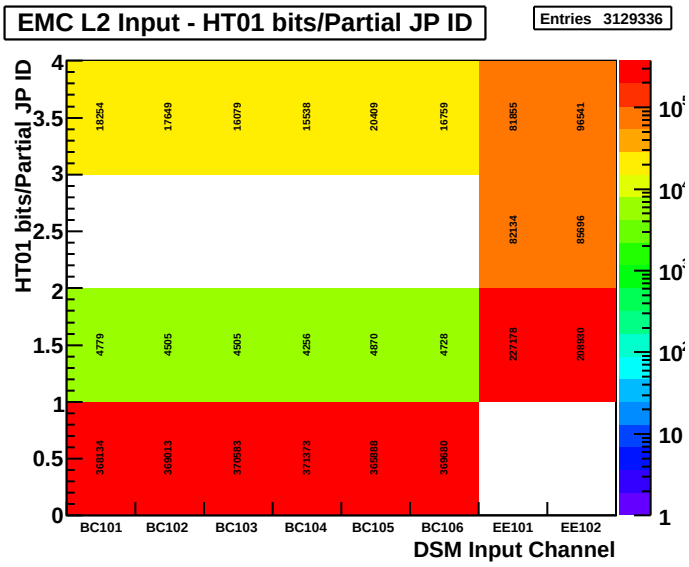

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

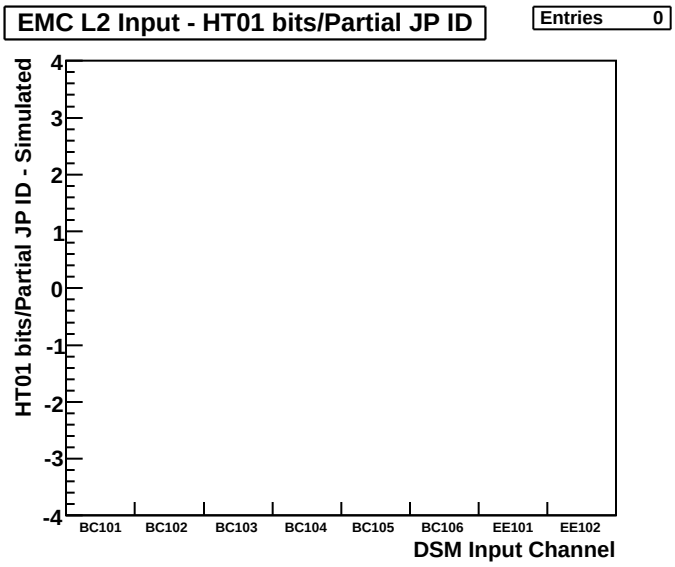

EMC L2 Input - JPZ/JPC bits
Entries 3129336
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
879 657 648 577 719 897 367 456
2310 1917 1888 2005 2394 2869 950 1083
3815 3225 3374 3724 5345 5175 800 921
384163 385368 385257 384861 382709 382226 389050 388707

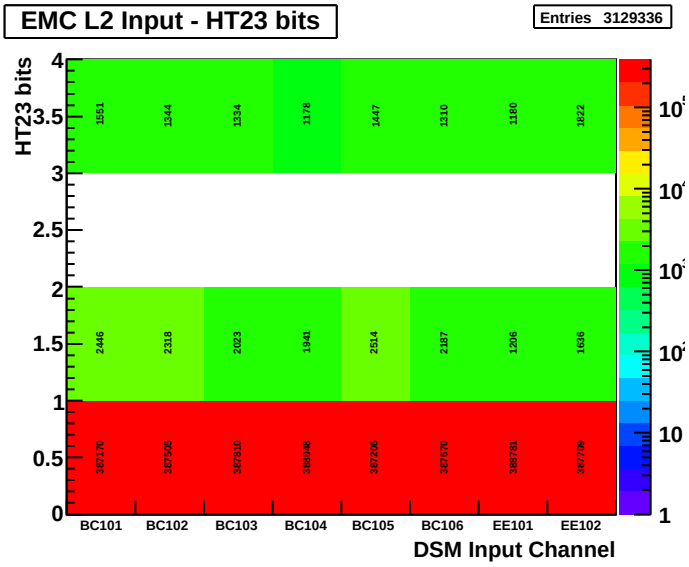

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

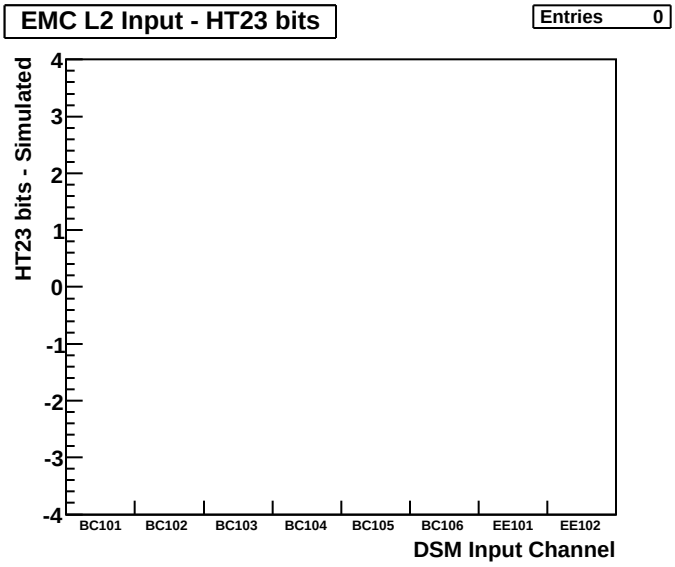

EMC L2 Input - Partial JP Sum
Entries 3129336
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

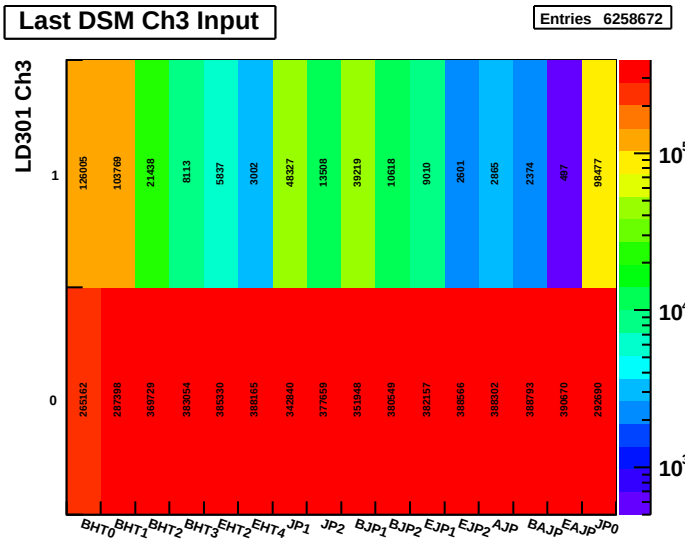

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

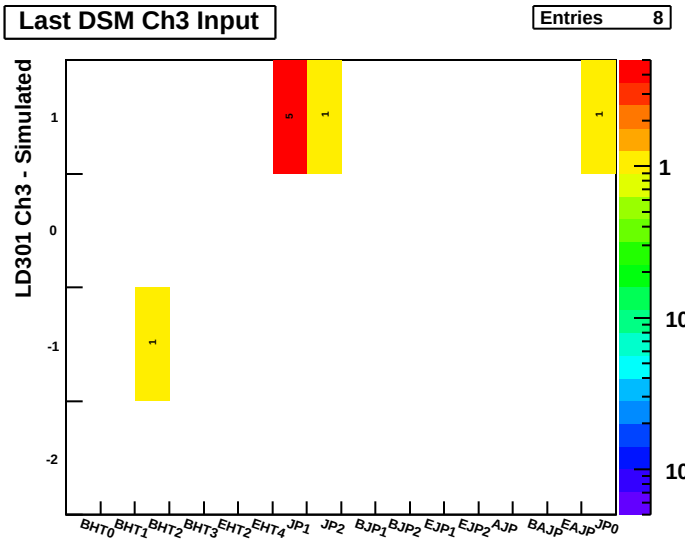

EMC L2 Input - HT01 bits/Partial JP ID
Entries 3129336
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

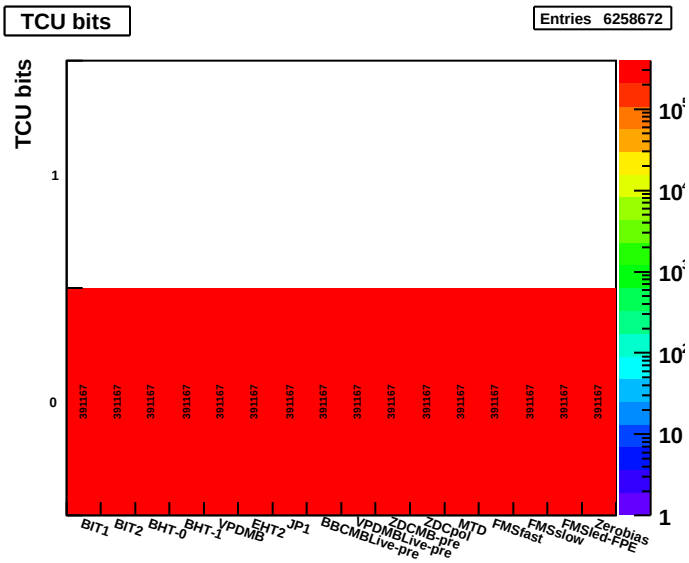

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

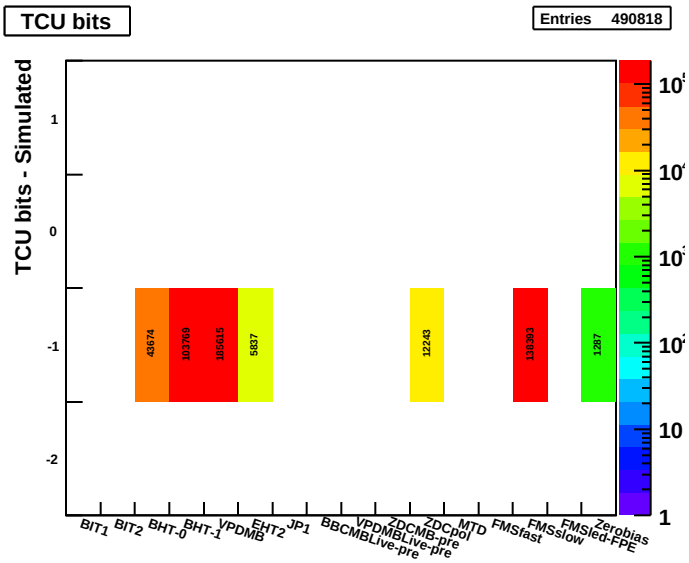

EMC L2 Input - HT23 bits
Entries 3129336
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

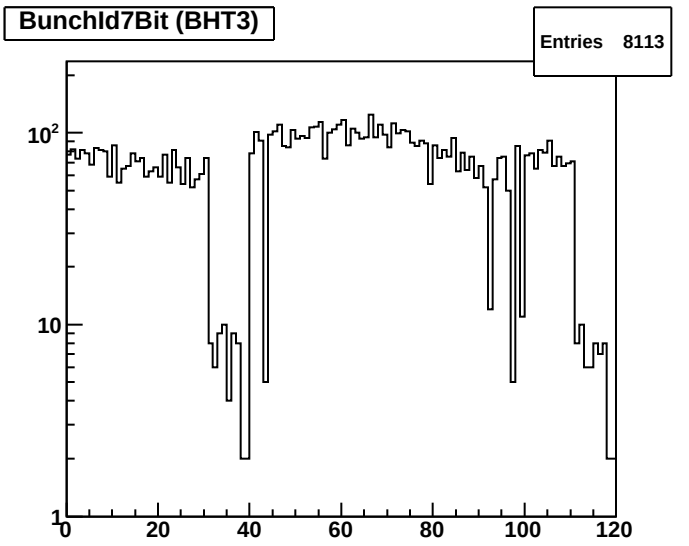

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

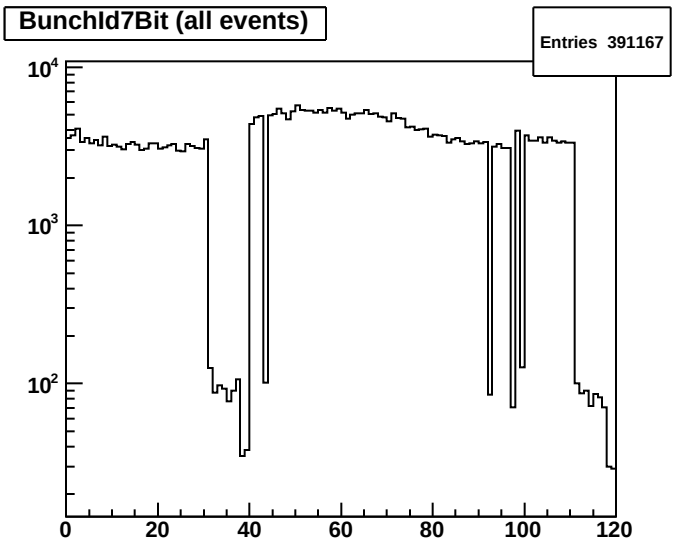

Last DSM Ch3 Input
Entries 6258672
LD301 Ch3
1
0
126005 103769 21438 8113 5837 3002 48327 13508 39219 10618 9010 2601 2865 2374 497 98477
265162 287398 369729 383054 385330 388165 342840 377659 351948 380549 382157 388566 388302 388793 390670 292690
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

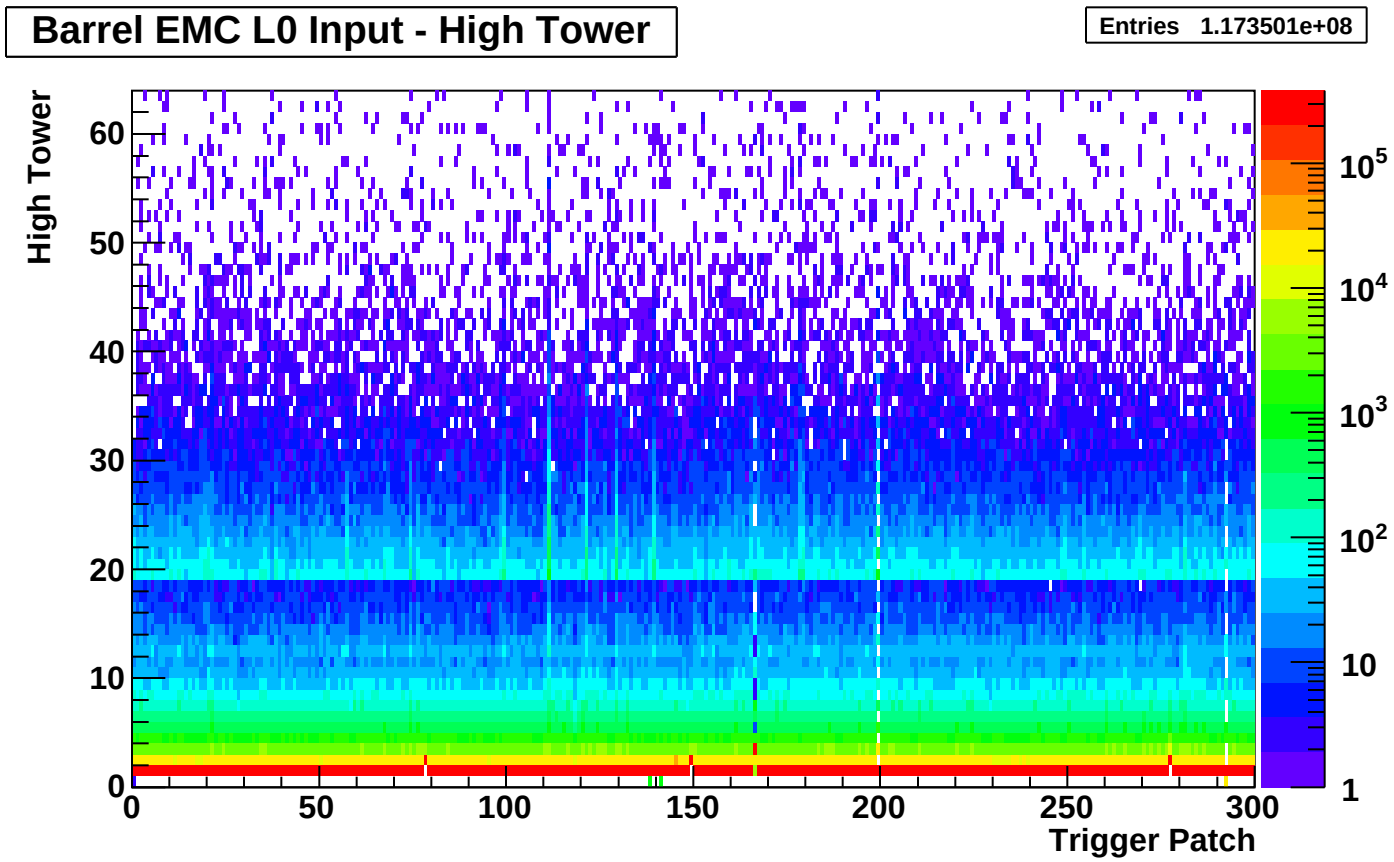

Last DSM Ch3 Input
Entries 8
LD301 Ch3 - Simulated
1
0
-1
-2
5 1 1 1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

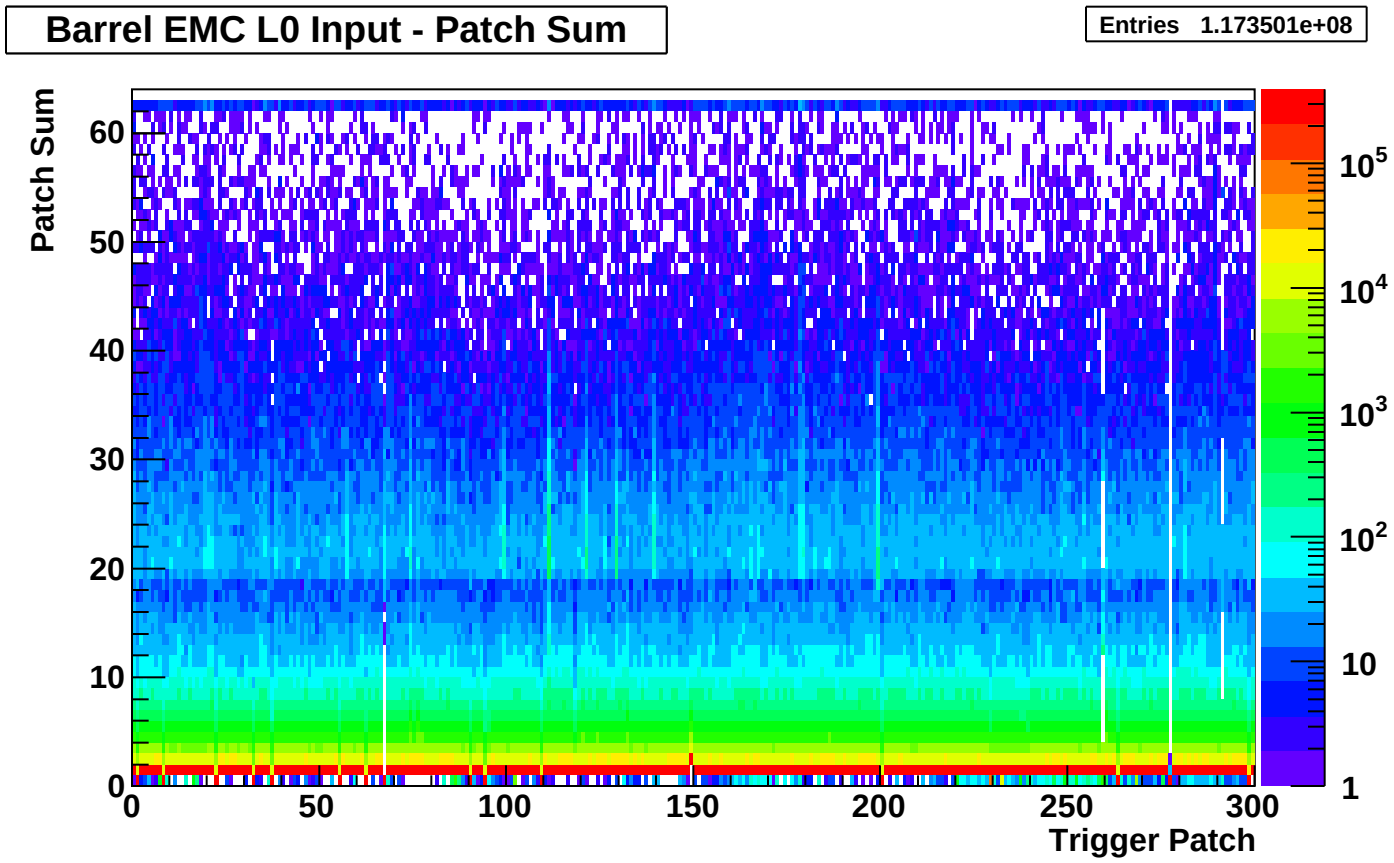

TCU bits
Entries 6258672
TCU bits
1
0
391167 391167 391167 391167 391167 391167 391167 391167 391167 391167 391167 391167 391167 391167 391167 391167
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

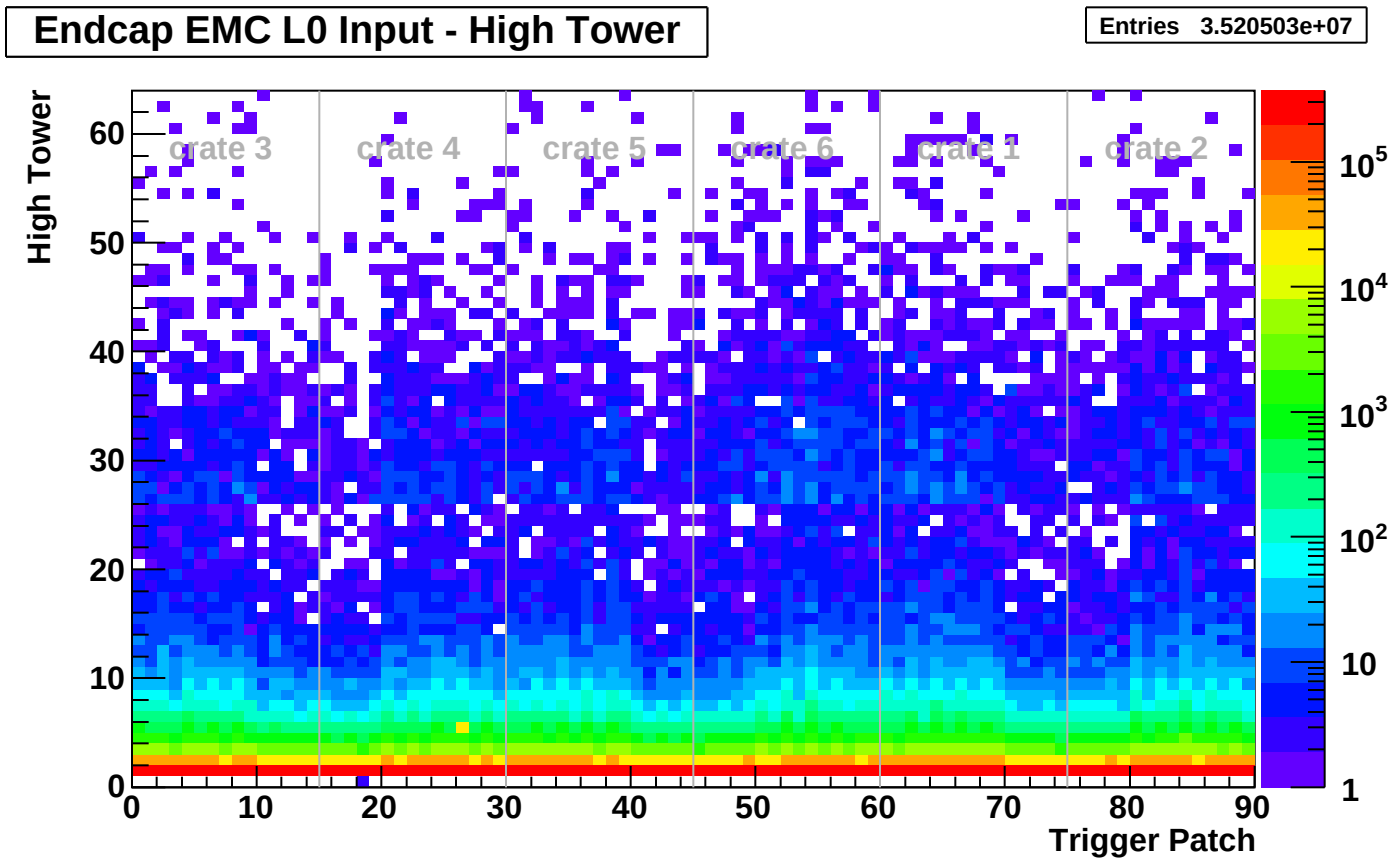

TCU bits
Entries 490818
TCU bits - Simulated
1
0
-1
-2
43674 103769 185615 5837 12243 133393 1287
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

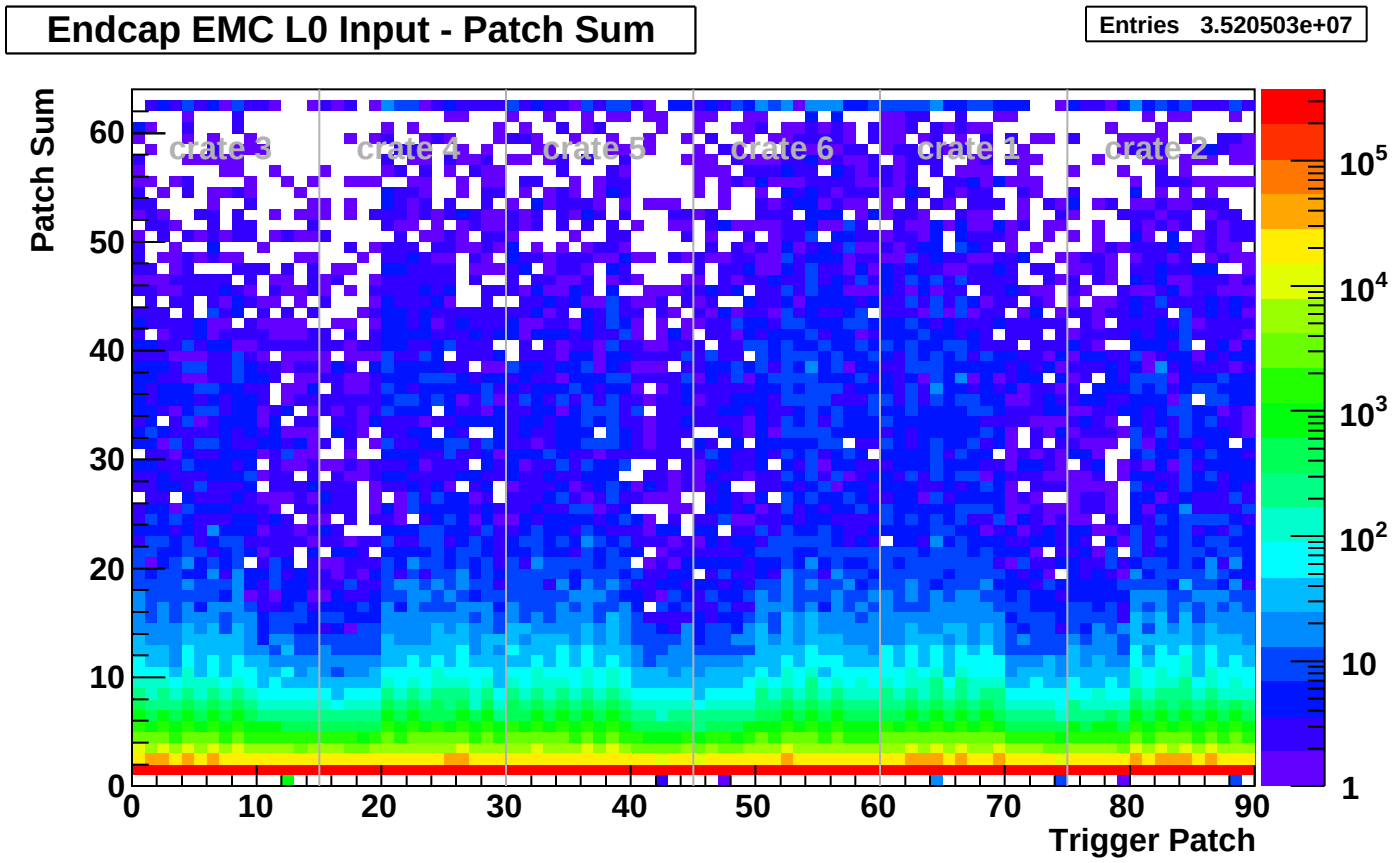

BunchId7Bit (BHT3)
Entries 8113
10²
10
1
0 20 40 60 80 100 120

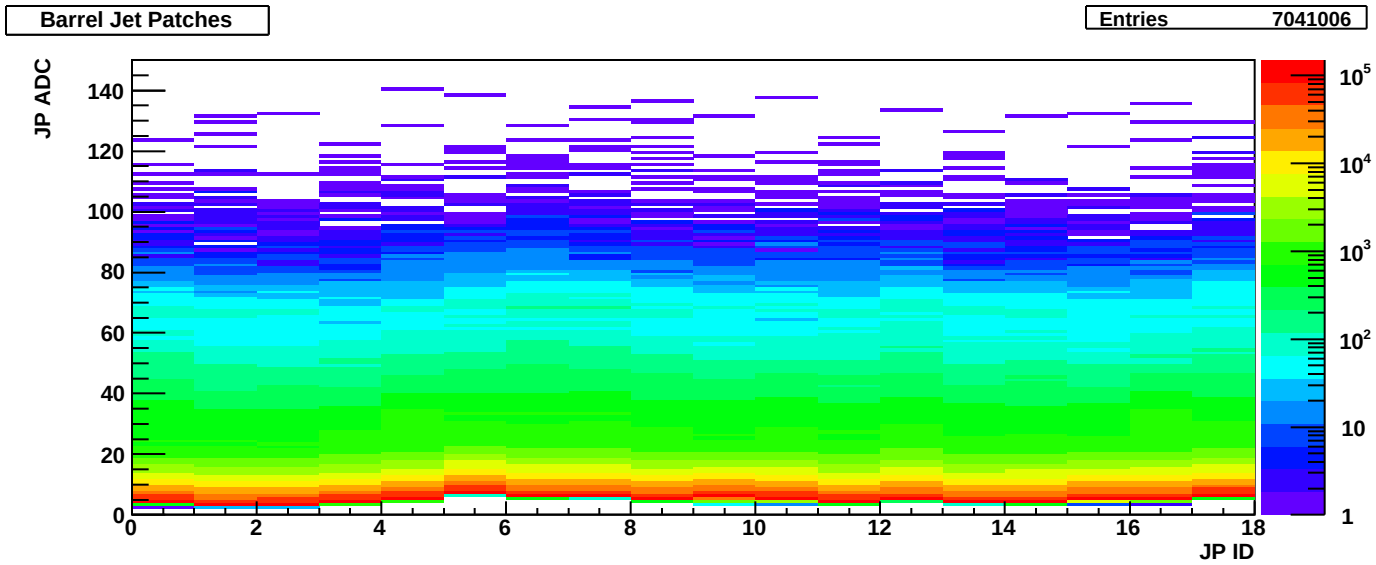

BunchId7Bit (all events)
Entries 391167
10⁴
10³
10²
0 20 40 60 80 100 120

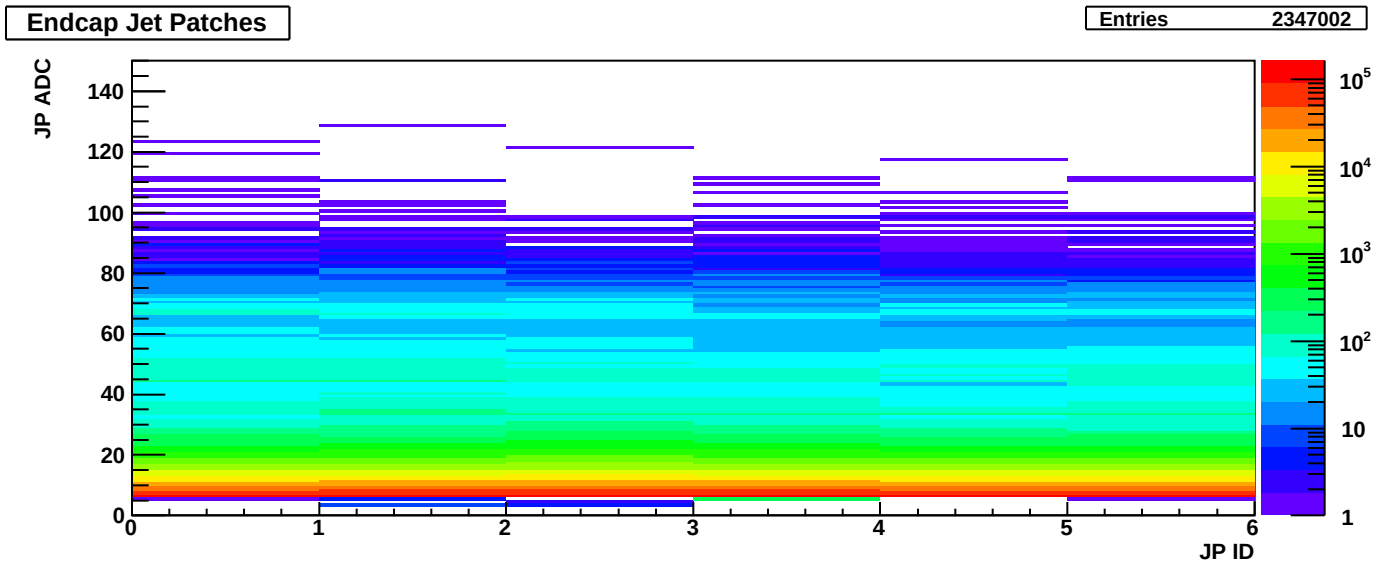

Barrel EMC L0 Input - High Tower
Entries 1.173501e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

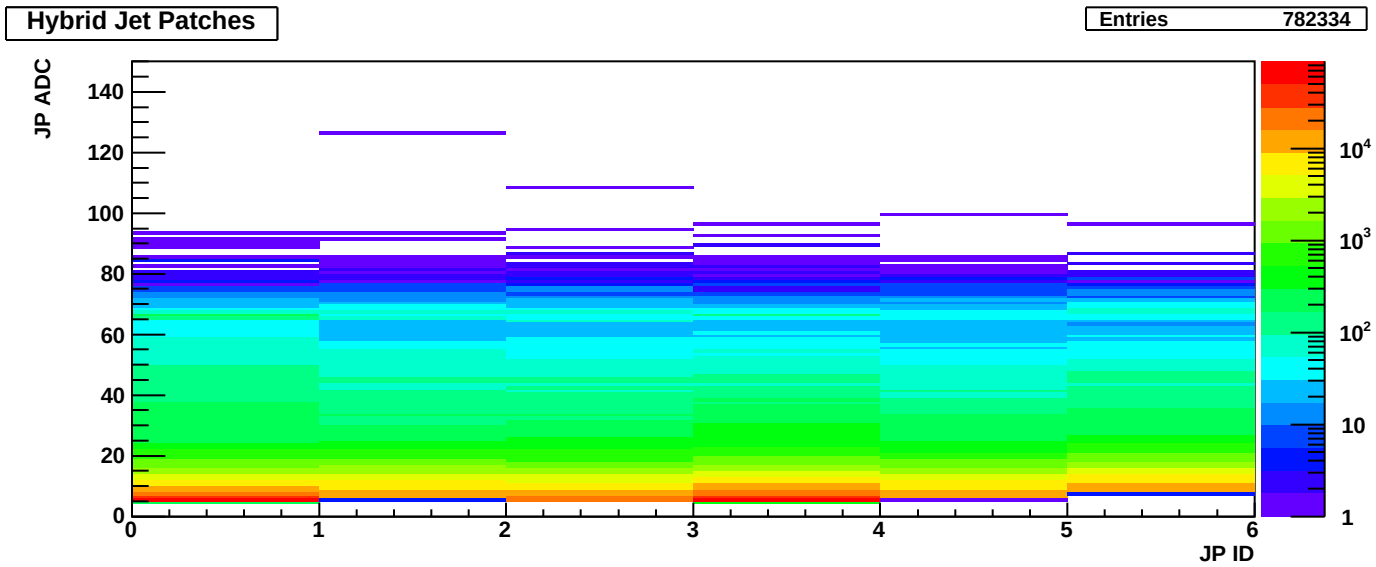

Barrel EMC L0 Input - Patch Sum
Entries 1.173501e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

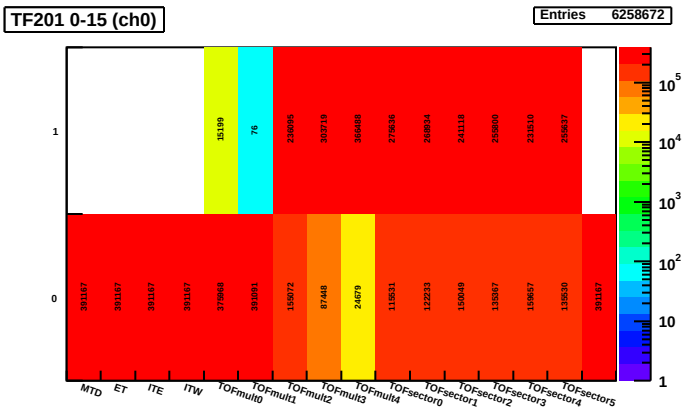

Endcap EMC L0 Input - High Tower
Entries 3.520503e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

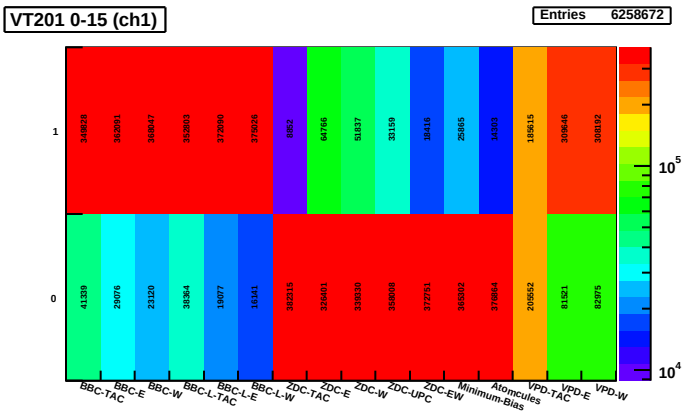

Endcap EMC L0 Input - Patch Sum
Entries 3.520503e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

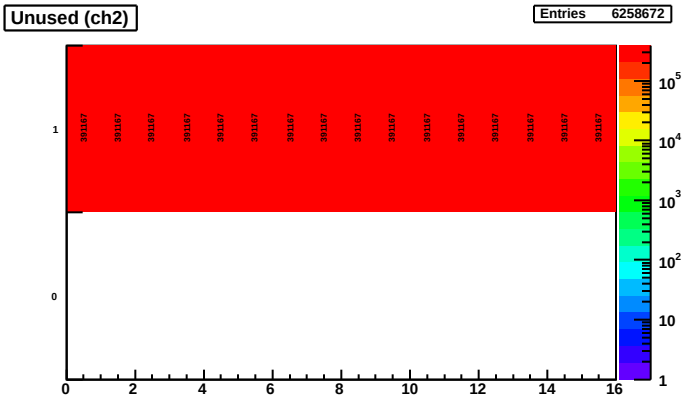

Barrel Jet Patches
Entries 7041006
JP ADC
JP ID

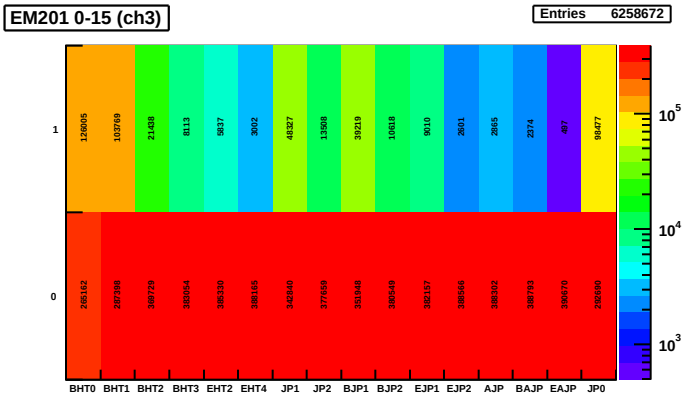

Endcap Jet Patches
Entries 2347002
JP ADC
JP ID

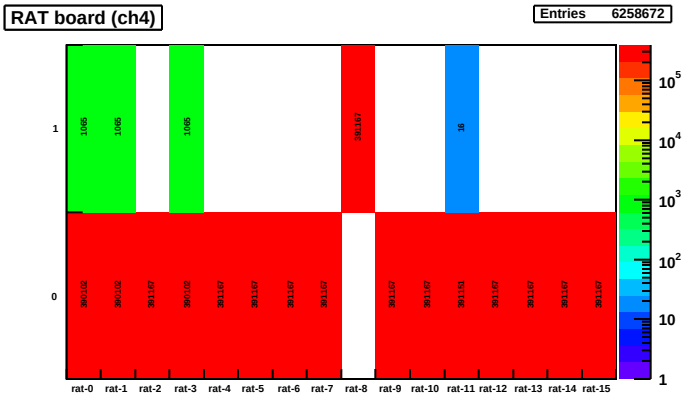

Hybrid Jet Patches
Entries 782334
JP ADC
JP ID

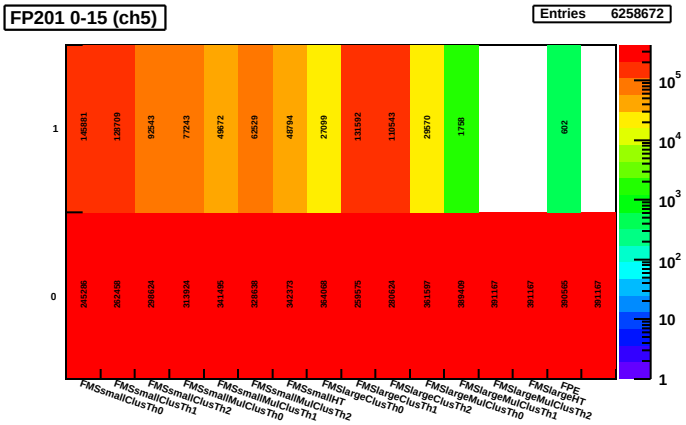

TF201 0-15 (ch0)
Entries 6258672
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

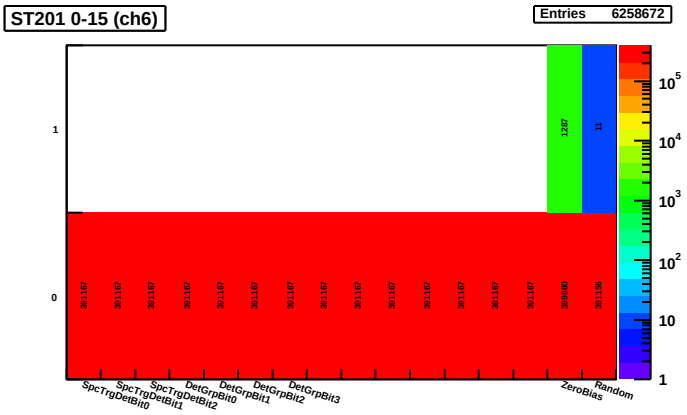

VT201 0-15 (ch1)
Entries 6258672
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

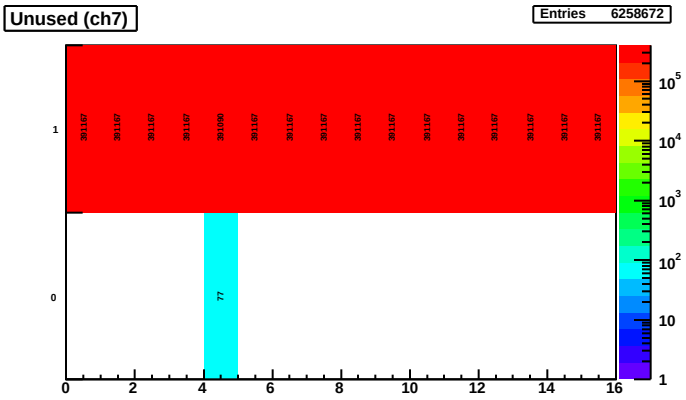

Unused (ch2)
Entries 6258672

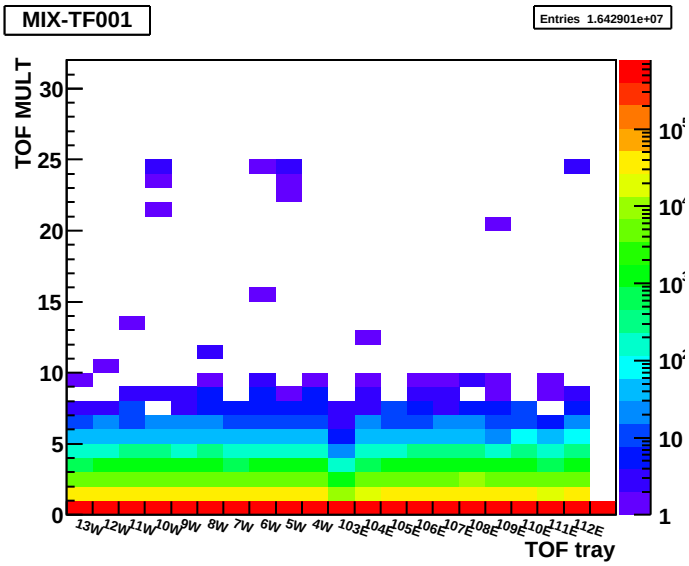

EM201 0-15 (ch3)
Entries 6258672
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

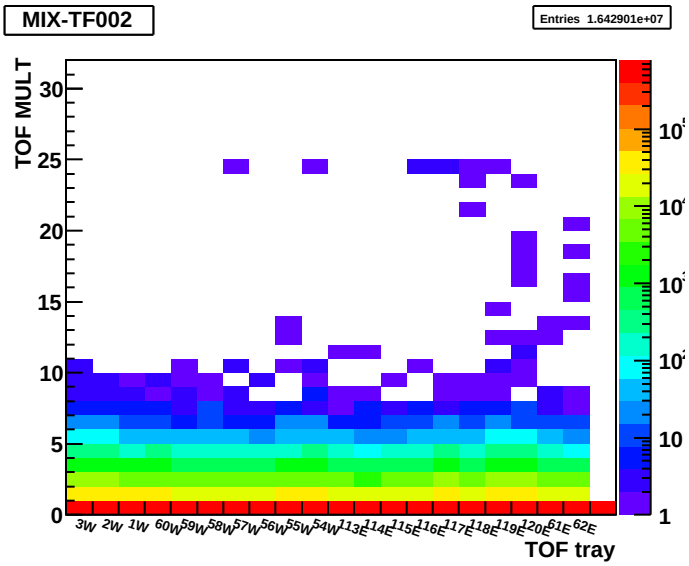

RAT board (ch4)
Entries 6258672
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

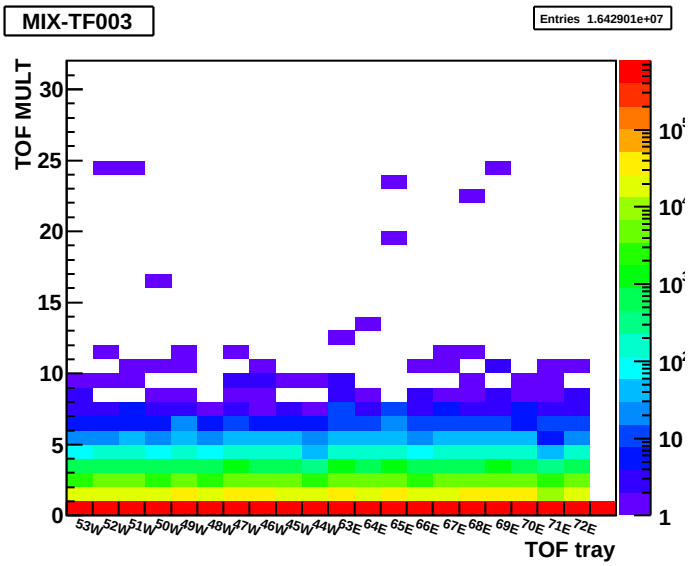

FP201 0-15 (ch5)
Entries 6258672
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

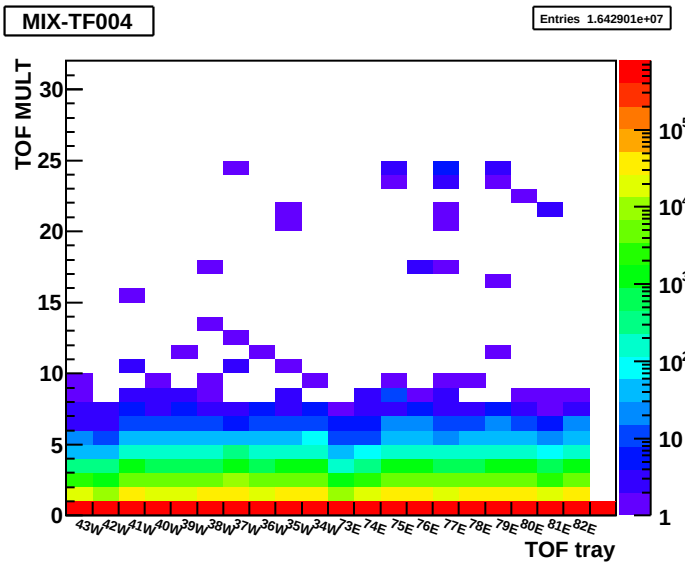

ST201 0-15 (ch6)
Entries 6258672
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

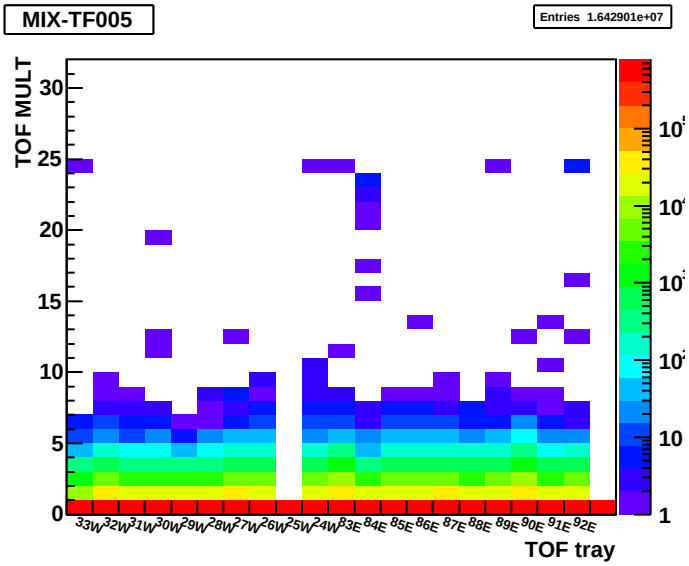

Unused (ch7)
Entries 6258672

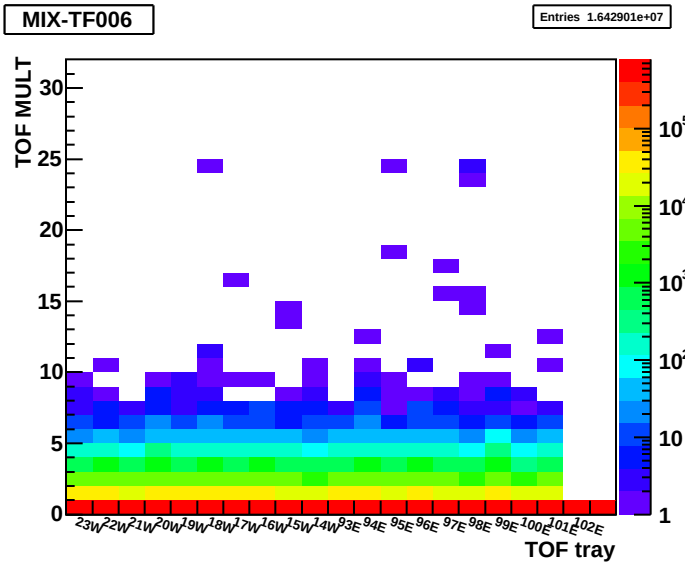

MIX-TF001
Entries 1.642901e+07
TOF MULT
TOF tray

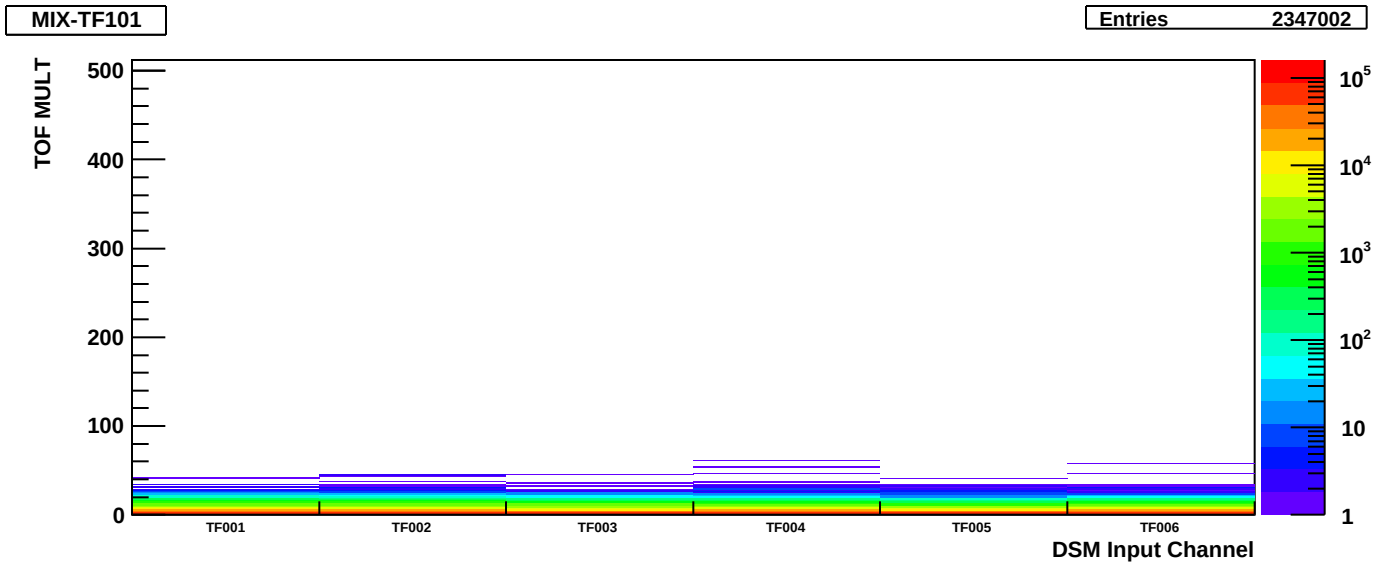

MIX-TF002
Entries 1.642901e+07
TOF MULT
TOF tray

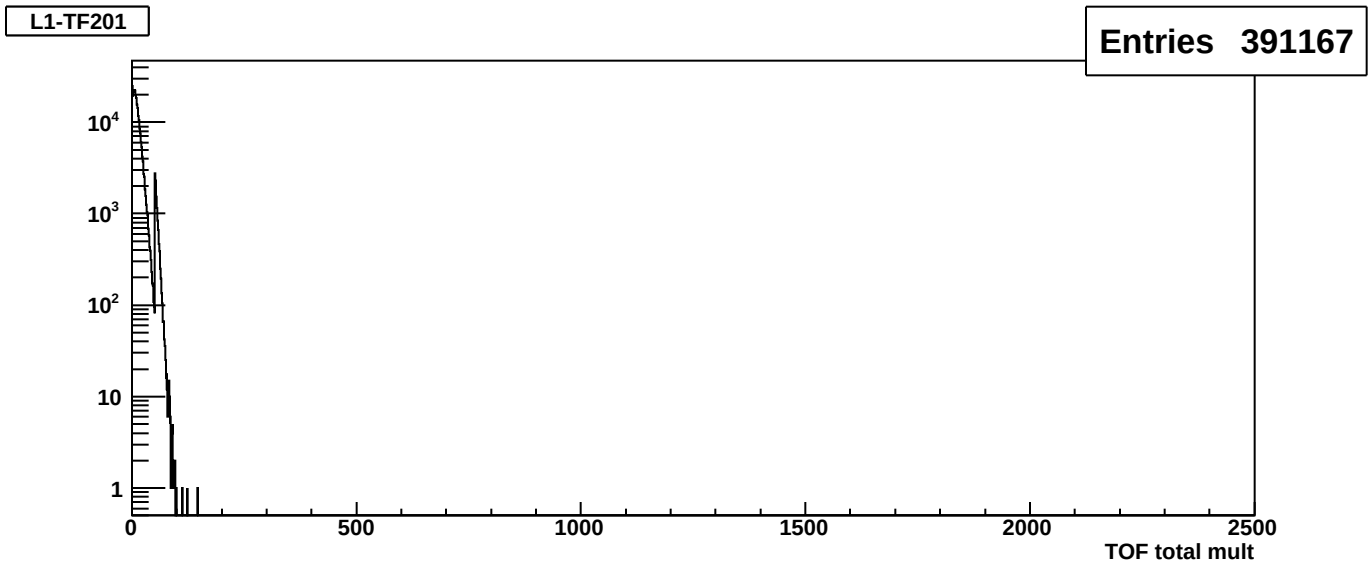

MIX-TF003
Entries 1.642901e+07
TOF MULT
TOF tray

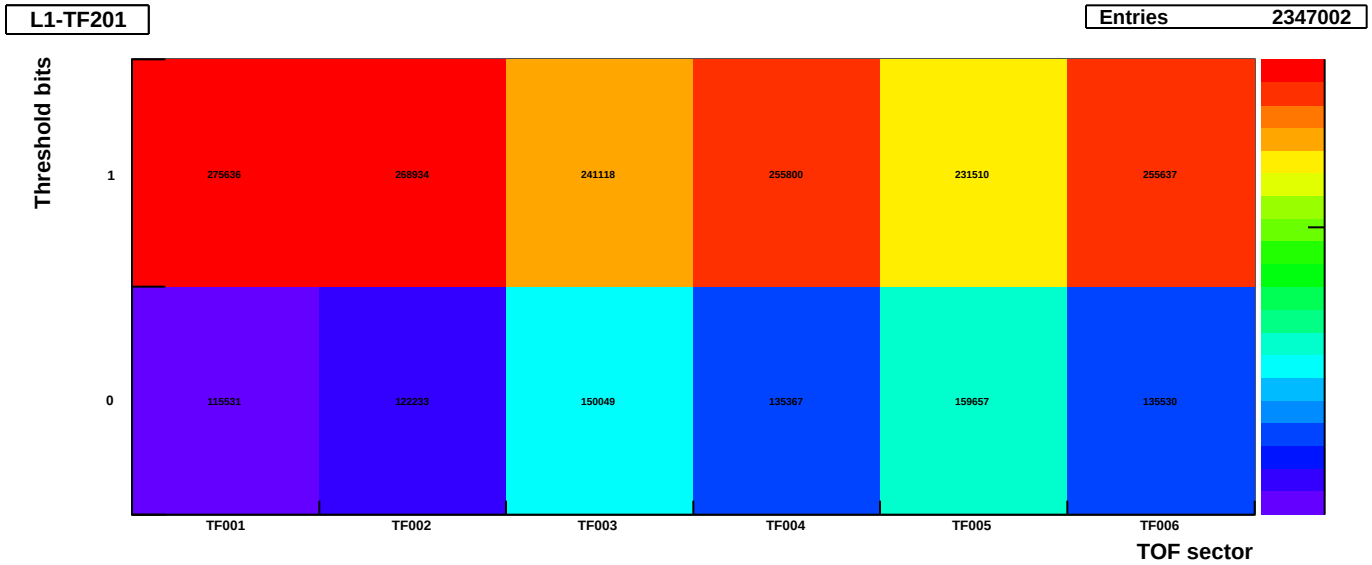

MIX-TF004
Entries 1.642901e+07
TOF MULT
TOF tray

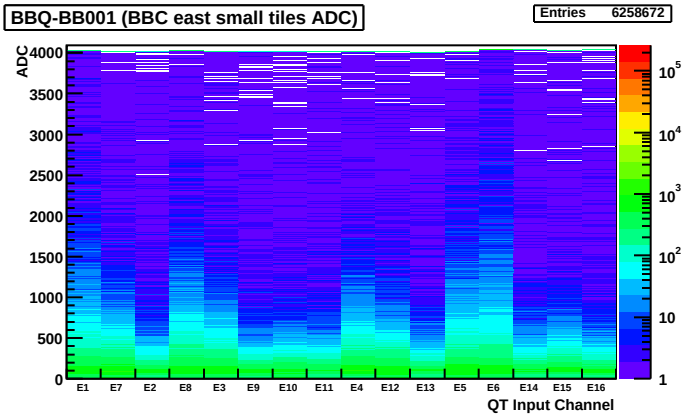

MIX-TF005
Entries 1.642901e+07
TOF MULT
TOF tray

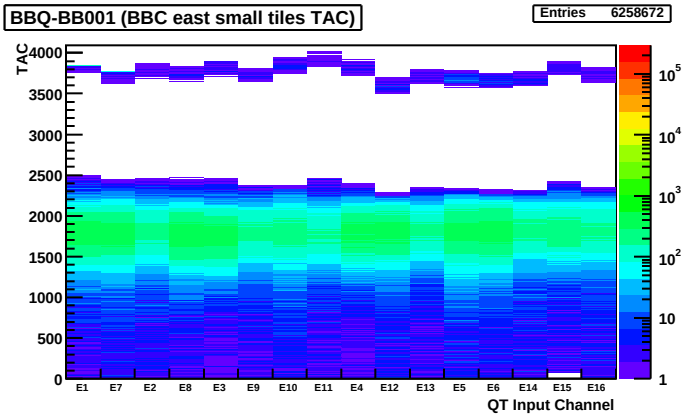

MIX-TF006
Entries 1.642901e+07
TOF MULT
TOF tray

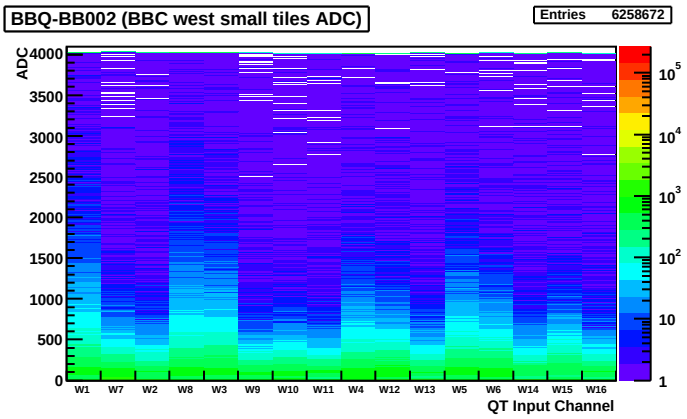

MIX-TF101
Entries 2347002
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

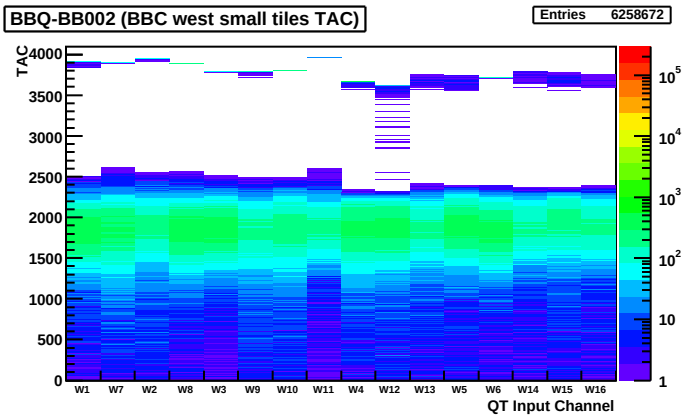

L1-TF201
Entries 391167
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

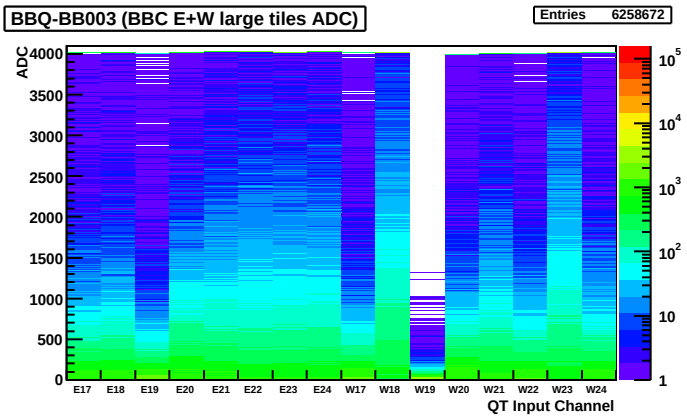

L1-TF201
Entries 2347002
Threshold bits
1
0
275636
268934
241118
255800
231510
255637
115531
122233
150049
135367
159657
135530
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

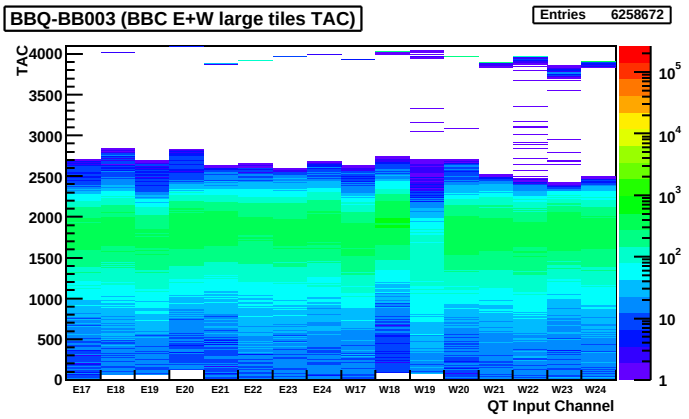

BBQ-BB001 (BBC east small tiles ADC)
Entries 6258672
ADC
QT Input Channel

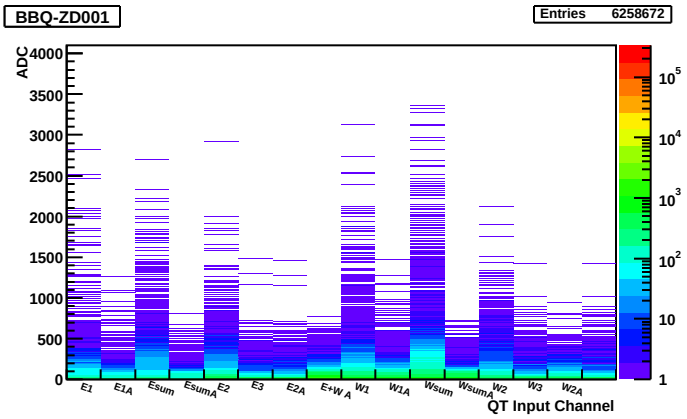

BBQ-BB001 (BBC east small tiles TAC)
Entries 6258672
TAC
QT Input Channel

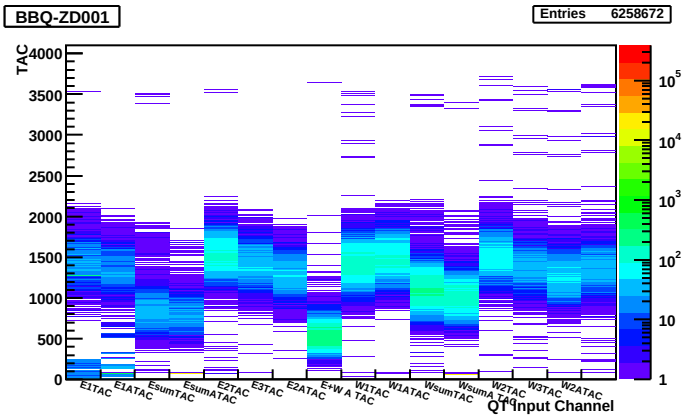

BBQ-BB002 (BBC west small tiles ADC)
Entries 6258672
ADC
QT Input Channel

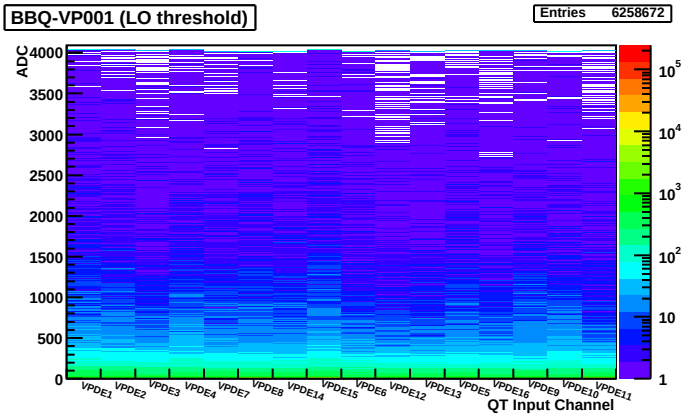

BBQ-BB002 (BBC west small tiles TAC)
Entries 6258672
TAC
QT Input Channel

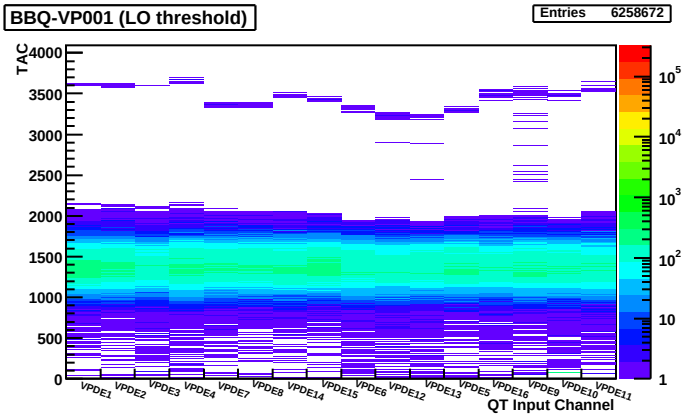

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 6258672
ADC
QT Input Channel

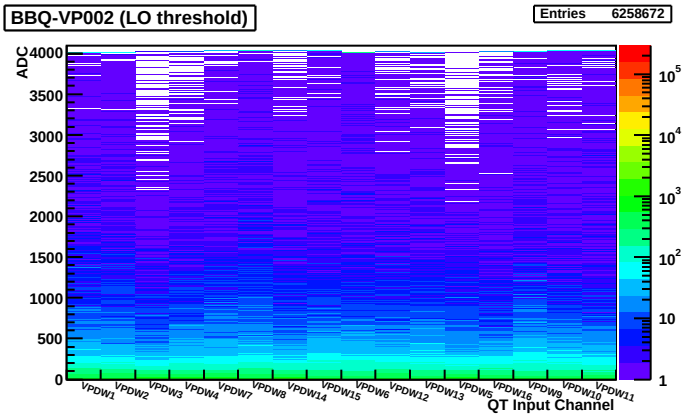

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 6258672
TAC
QT Input Channel

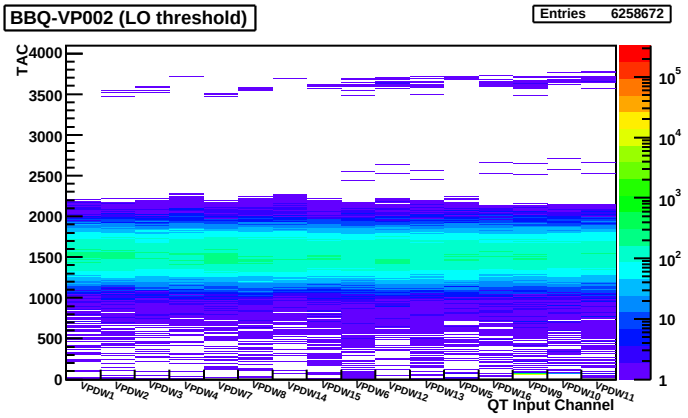

BBQ-ZD001
Entries 6258672
ADC
QT Input Channel

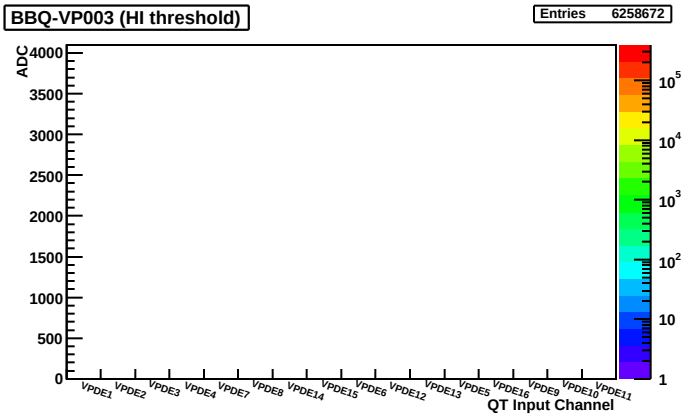

BBQ-ZD001
Entries 6258672
TAC
QT Input Channel

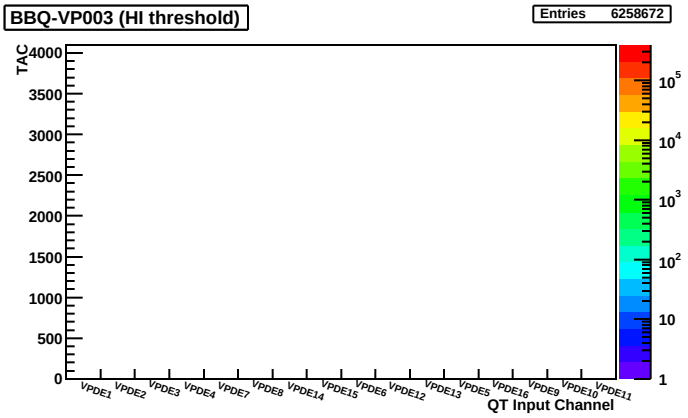

BBQ-VP001 (LO threshold)
Entries 6258672
ADC
QT Input Channel

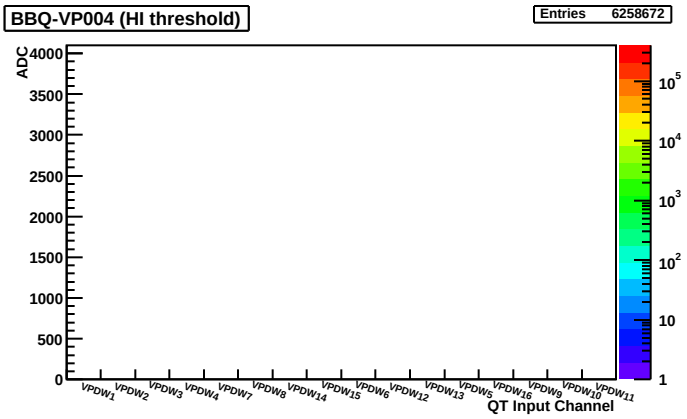

BBQ-VP001 (LO threshold)
Entries 6258672
TAC
QT Input Channel

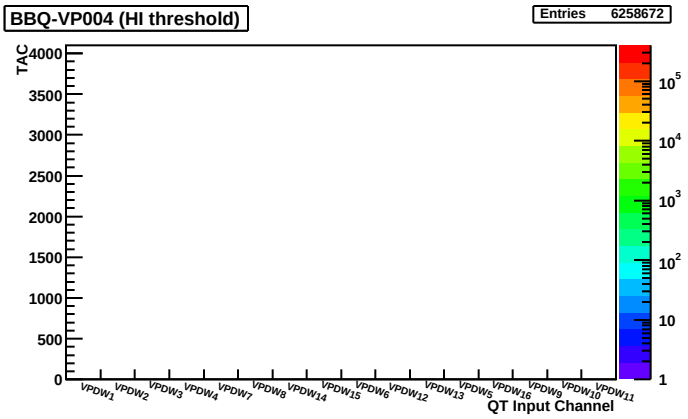

BBQ-VP002 (LO threshold)
Entries 6258672
ADC
QT Input Channel

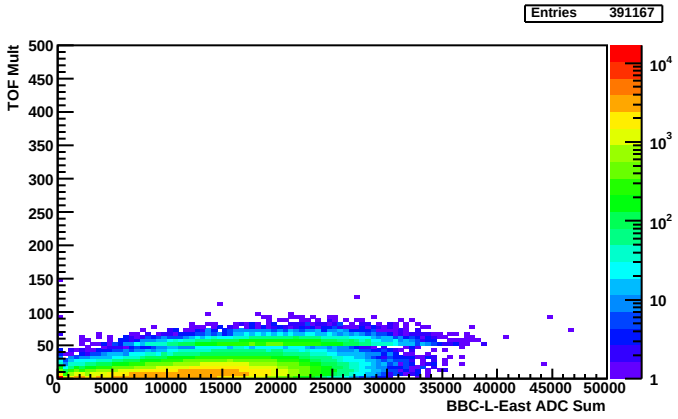

BBQ-VP002 (LO threshold)
Entries 6258672
TAC
QT Input Channel

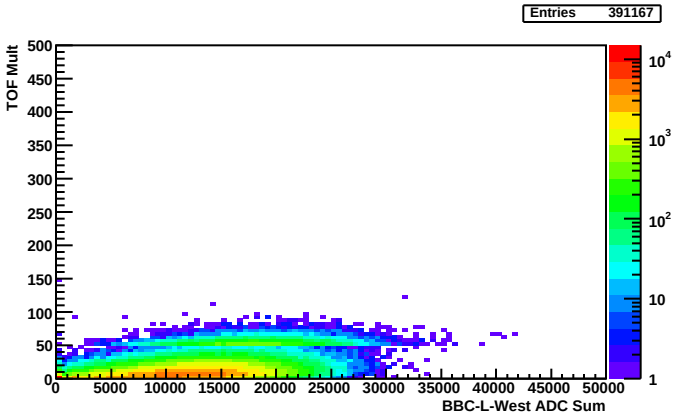

BBQ-VP003 (HI threshold)
Entries 6258672
ADC
QT Input Channel

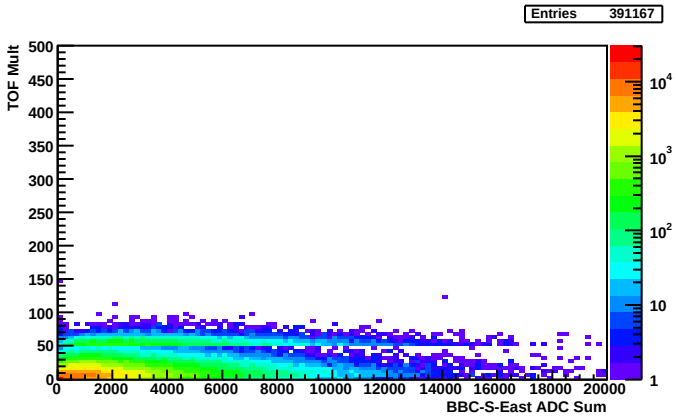

BBQ-VP003 (HI threshold)
Entries 6258672
TAC
QT Input Channel

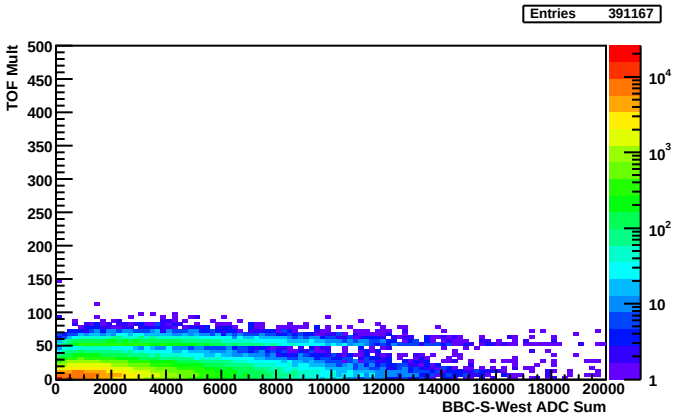

BBQ-VP004 (HI threshold)
Entries 6258672
ADC
QT Input Channel

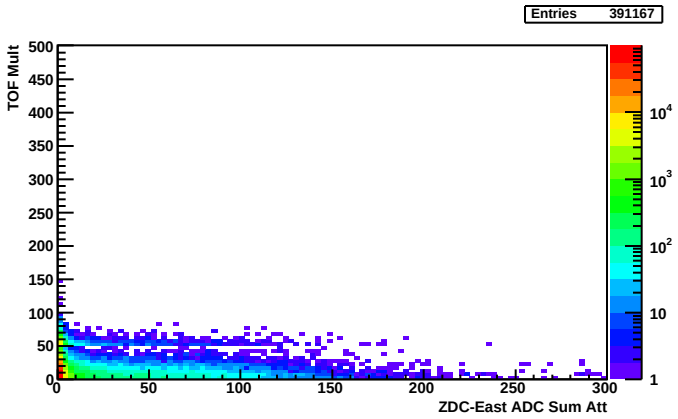

BBQ-VP004 (HI threshold)
Entries 6258672
TAC
QT Input Channel

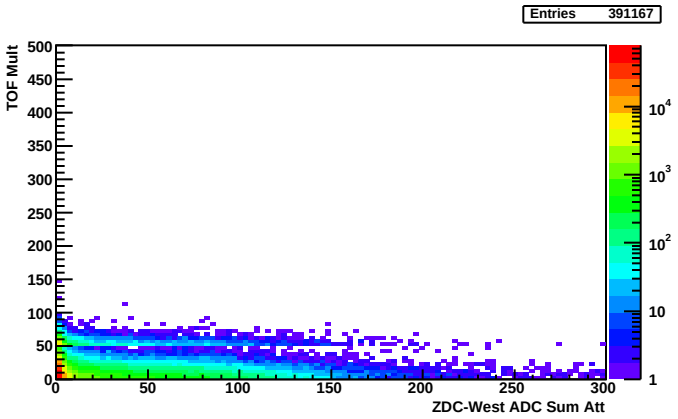

Entries 391167
TOF Mult
BBC-L-East ADC Sum

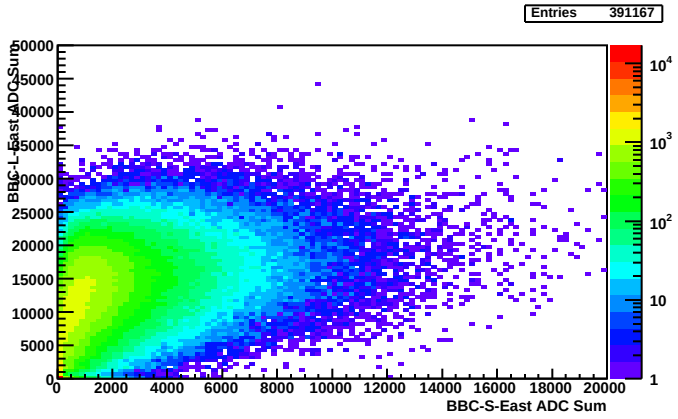

Entries 391167
TOF Mult
BBC-L-West ADC Sum

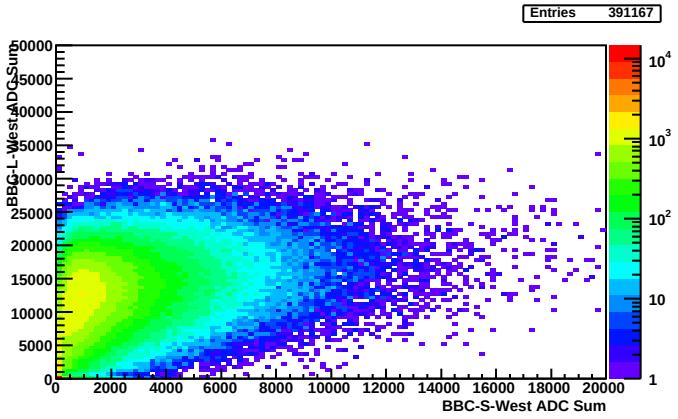

Entries 391167
TOF Mult
BBC-S-East ADC Sum

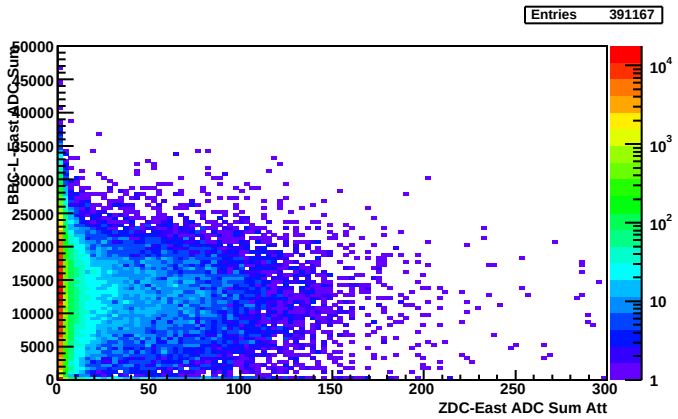

Entries 391167
TOF Mult
BBC-S-West ADC Sum

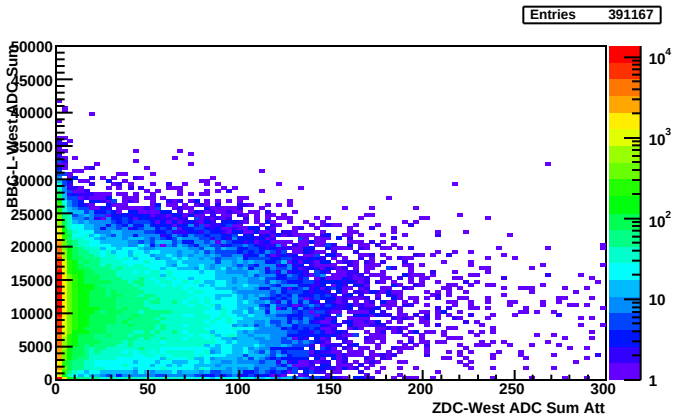

Entries 391167
TOF Mult
ZDC-East ADC Sum Att

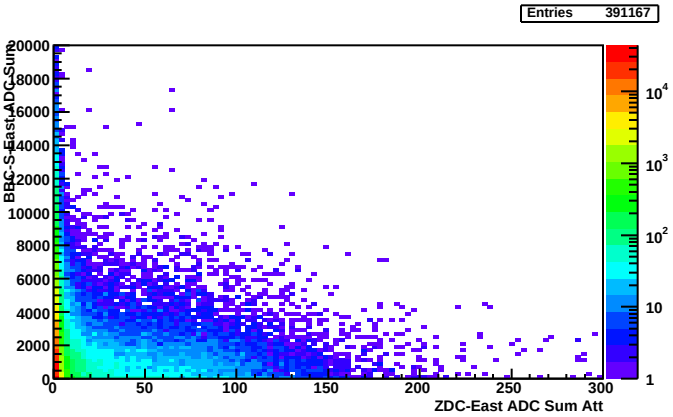

Entries 391167
TOF Mult
ZDC-West ADC Sum Att

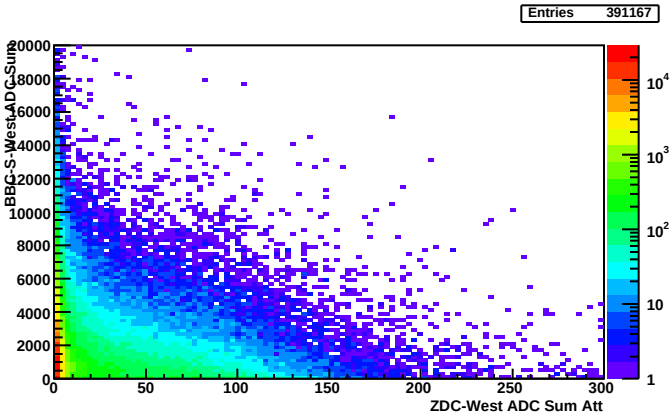

Entries 391167
BBC-L-East ADC Sum
BBC-S-East ADC Sum

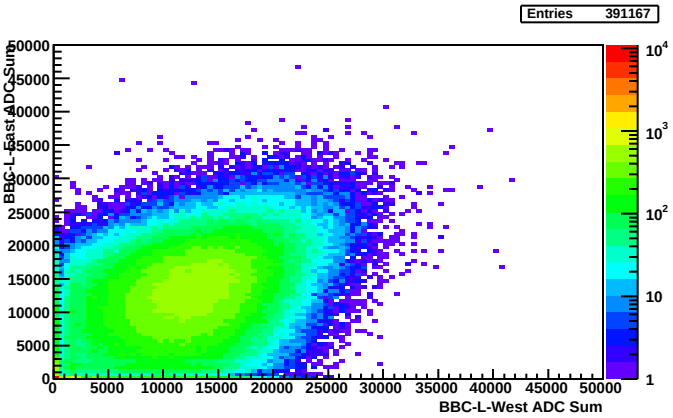

Entries 391167
BBC-L-West ADC Sum
BBC-S-West ADC Sum

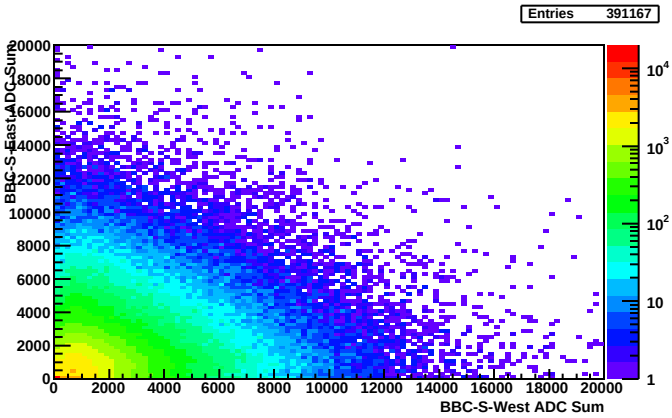

Entries 391167
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

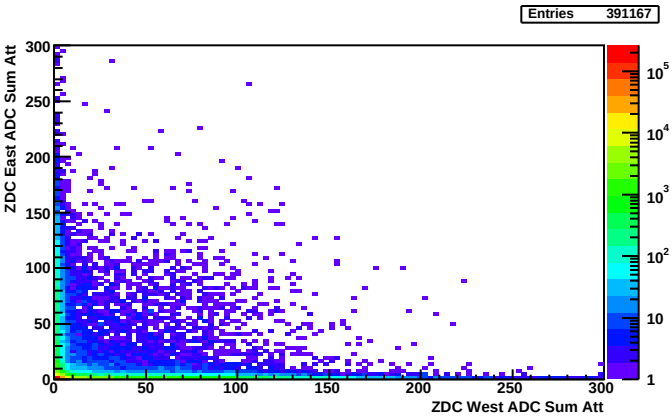

Entries 391167
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

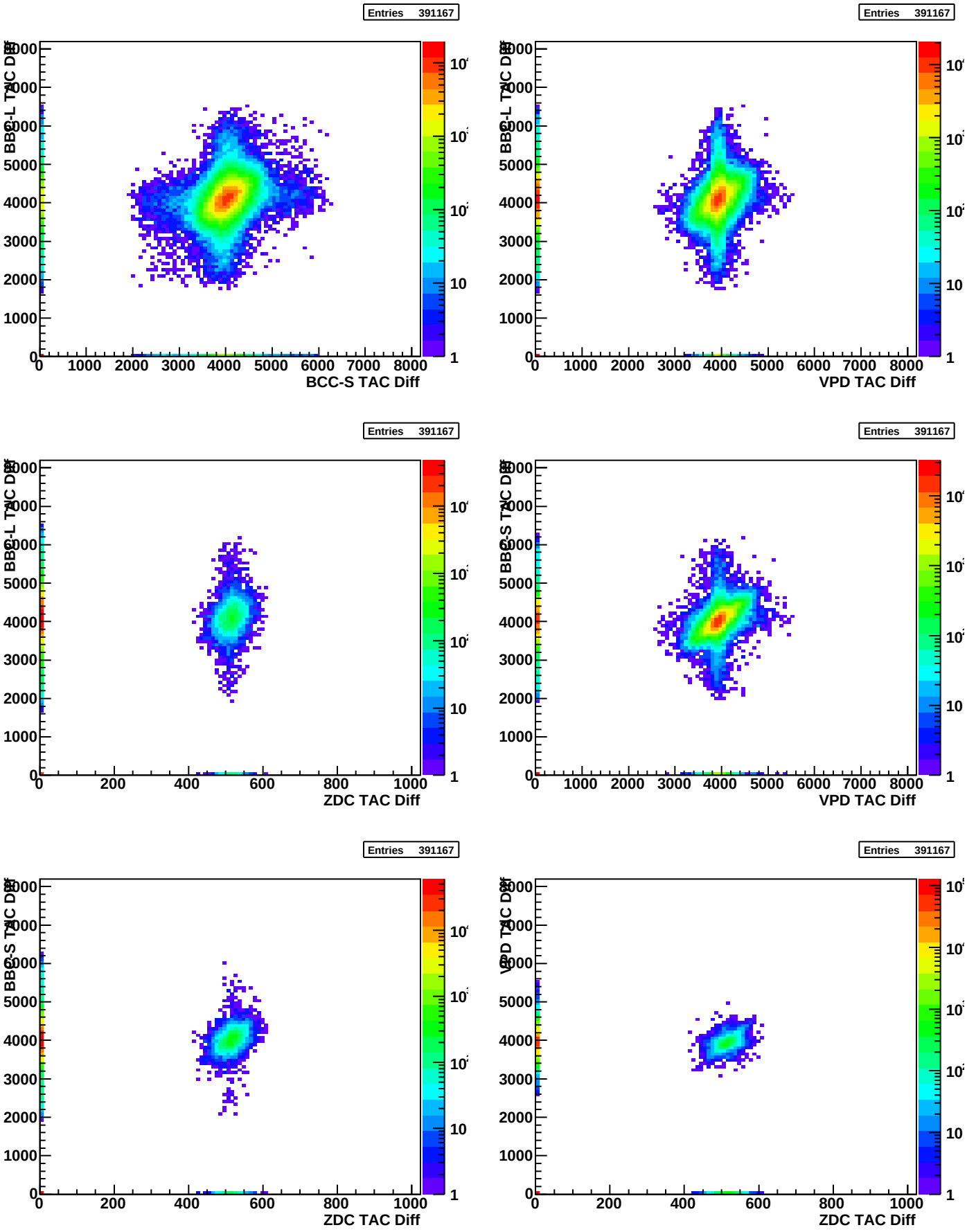

Entries 391167
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

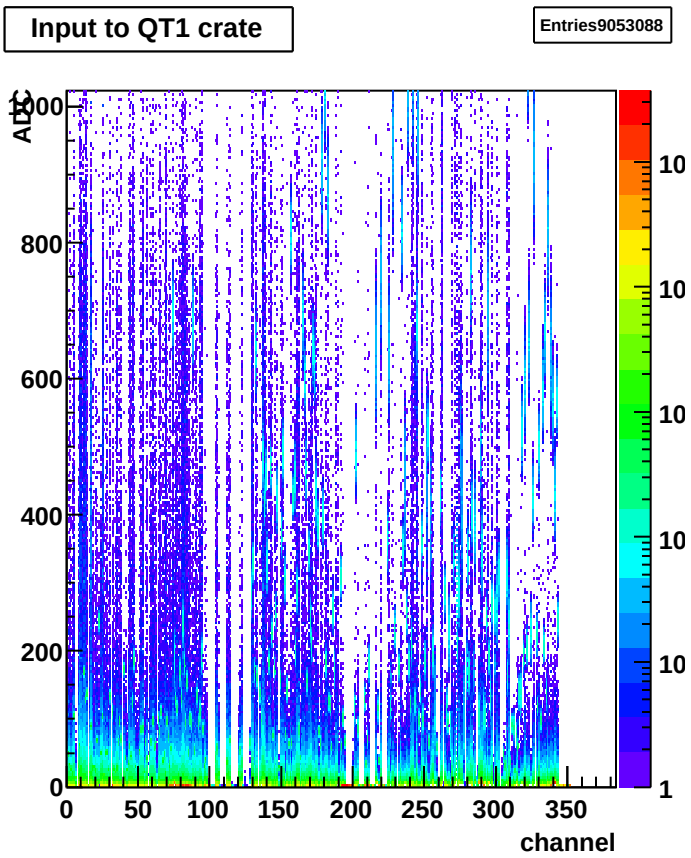

Entries 391167
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

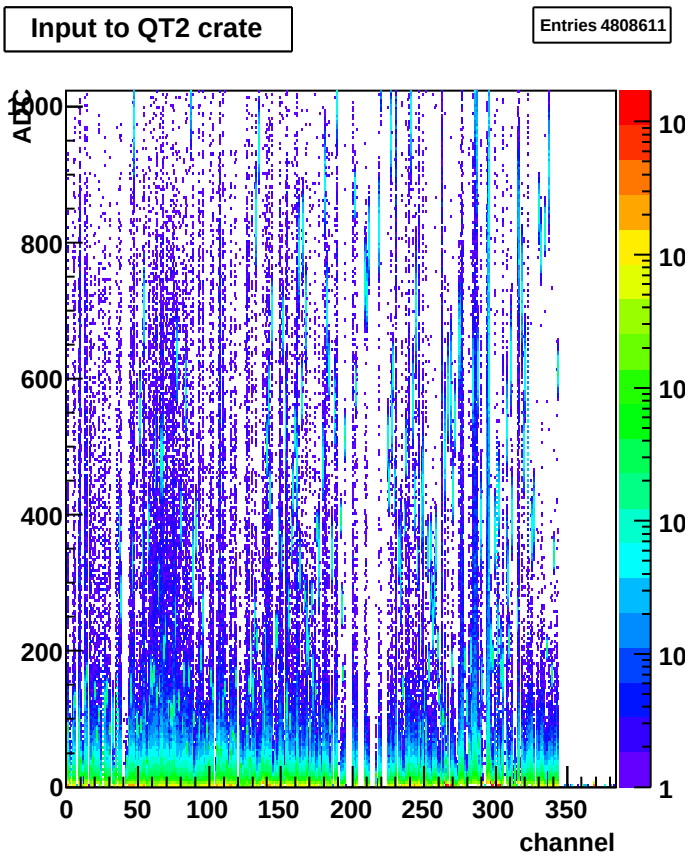

Entries 391167
BBC-L-East ADC Sum
BBC-L-West ADC Sum

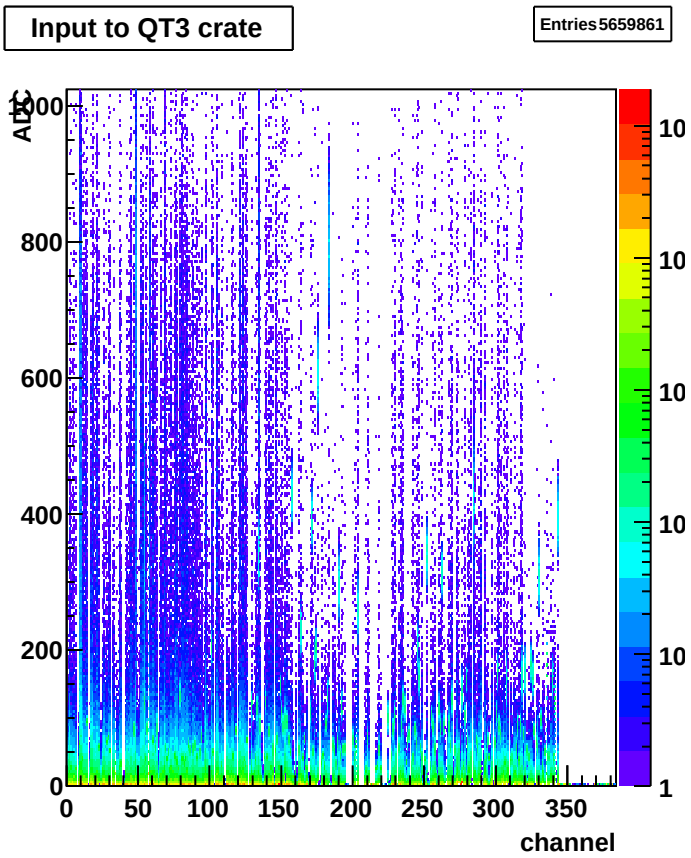

Entries 391167
BBC-S-East ADC Sum
BBC-S-West ADC Sum

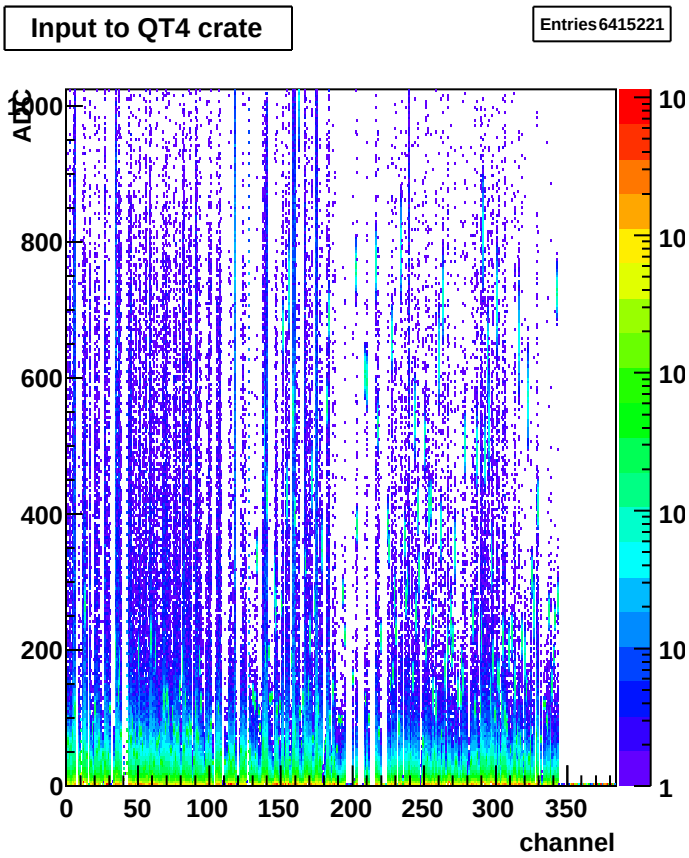

Entries 391167
ZDC East ADC Sum Att
ZDC West ADC Sum Att

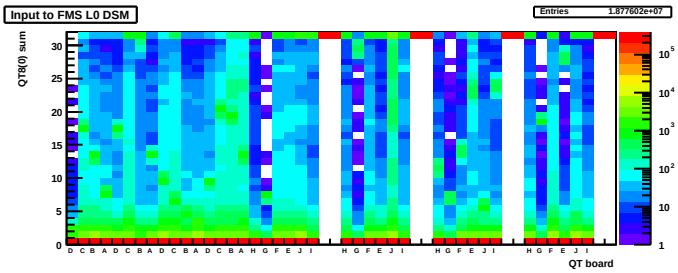

Entries 391167
BBC-L TAC Diff
BCC-S TAC Diff
Entries 391167
BBC-L TAC Diff
VPD TAC Diff
Entries 391167
BBC-L TAC Diff
ZDC TAC Diff
Entries 391167
BBC-S TAC Diff
VPD TAC Diff
Entries 391167
BBC-S TAC Diff
ZDC TAC Diff
Entries 391167
VPD TAC Diff
ZDC TAC Diff

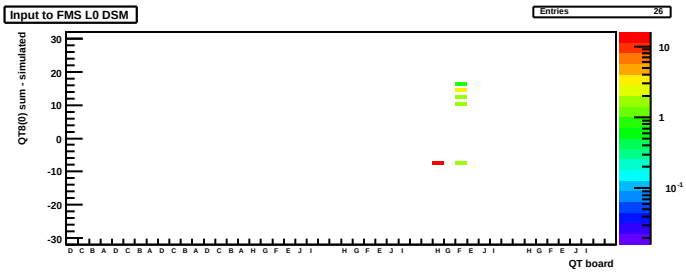

Input to QT1 crate
Entries9053088
ADC
channel

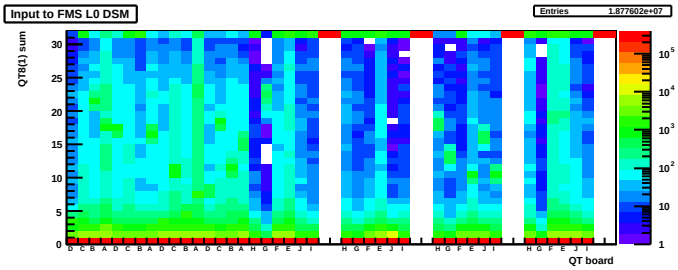

Input to QT2 crate
Entries 4808611
ADC
channel

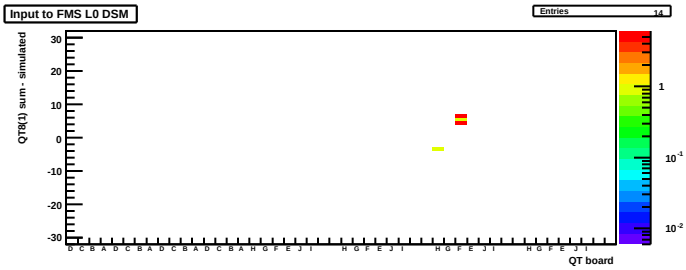

Input to QT3 crate
Entries5659861
ADC
channel

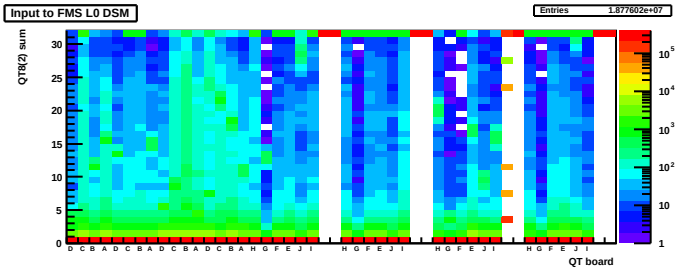

Input to QT4 crate
Entries6415221
ADC
channel

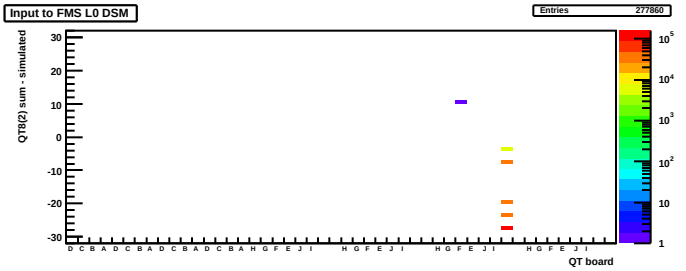

Input to FMS L0 DSM
Entries 1.877602e+07
QT8(0) sum
QT board

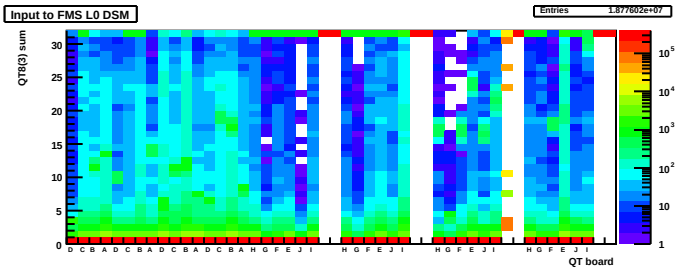

Input to FMS L0 DSM
Entries 26
QT8(0) sum - simulated
QT board

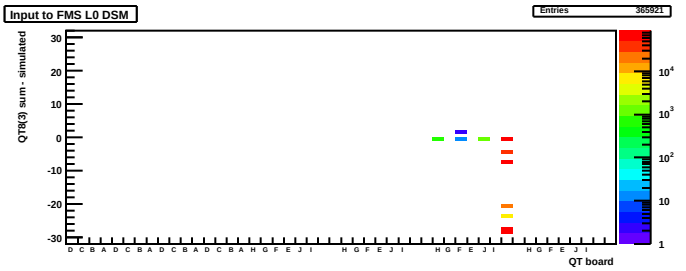

Input to FMS L0 DSM
Entries 1.877602e+07
QT8(1) sum
QT board

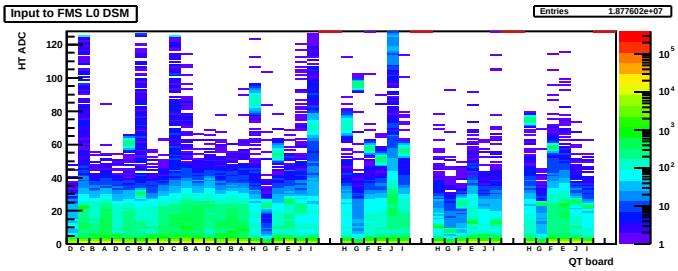

Input to FMS L0 DSM
Entries 14
QT8(1) sum - simulated
QT board

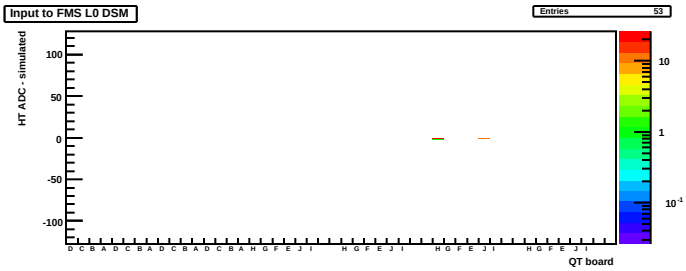

Input to FMS L0 DSM
Entries 1.877602e+07
QT8(2) sum
QT board

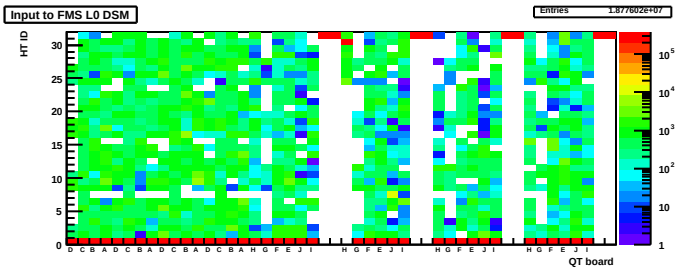

Input to FMS L0 DSM
Entries 277860
QT8(2) sum - simulated
QT board

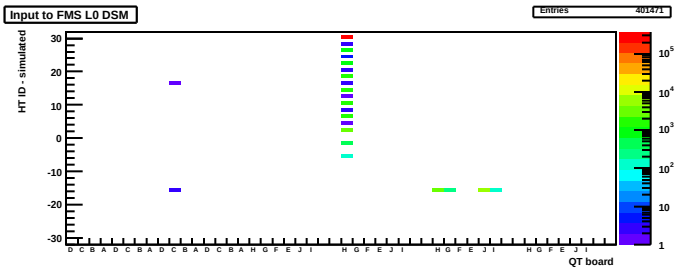

Input to FMS L0 DSM
Entries 1.877602e+07
QT8(3) sum
QT board

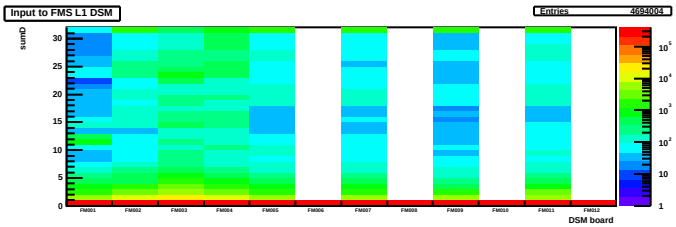

Input to FMS L0 DSM
Entries 365921
QT8(3) sum - simulated
QT board

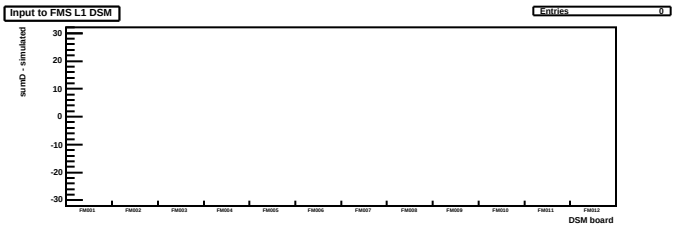

Input to FMS L0 DSM
Entries 1.877602e+07
HT ADC
QT board

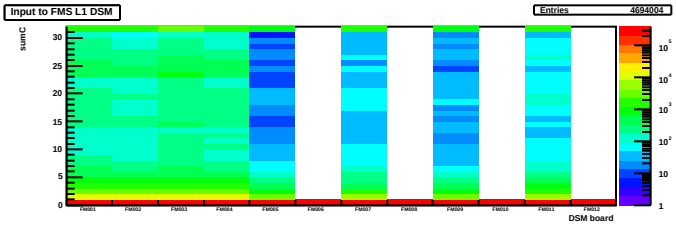

Input to FMS L0 DSM
Entries 53
HT ADC - simulated
QT board

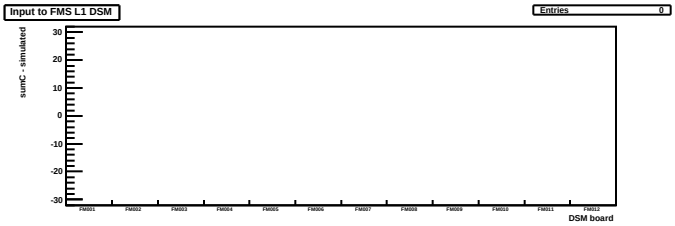

Input to FMS L0 DSM
Entries 1.877602e+07
HT ID
QT board

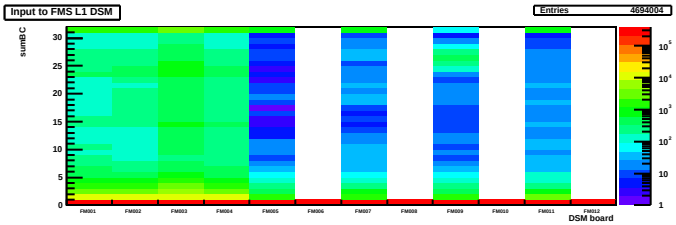

Input to FMS L0 DSM
Entries 401471
HT ID - simulated
QT board

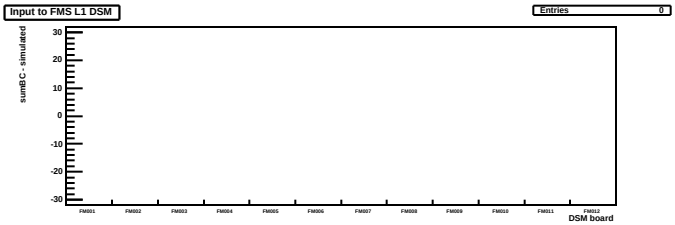

Input to FMS L1 DSM
Entries 4694004
sumD
DSM board

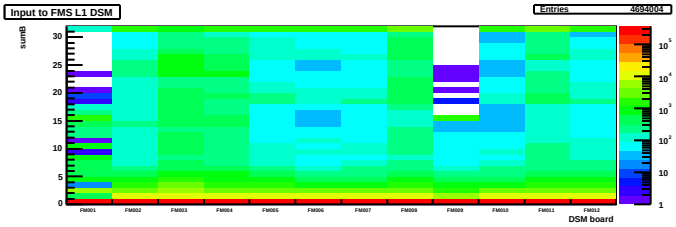

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

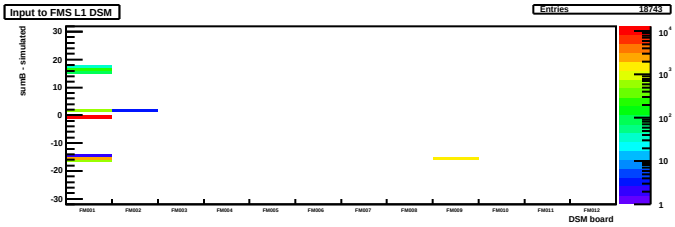

Input to FMS L1 DSM
Entries 4694004
sumC
DSM board

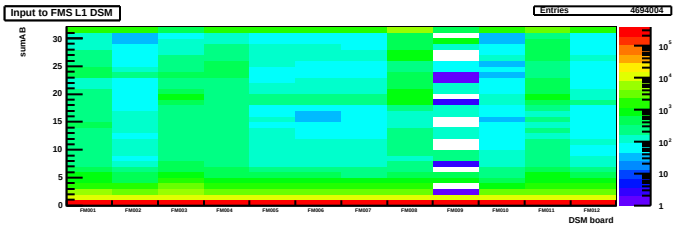

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

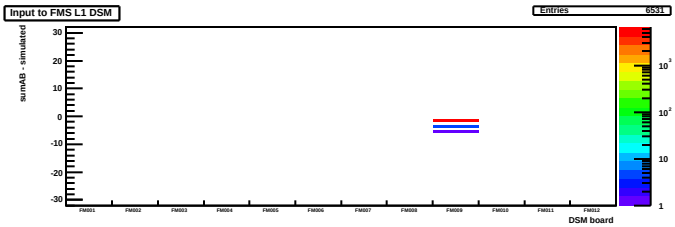

Input to FMS L1 DSM
Entries 4694004
sumBC
DSM board

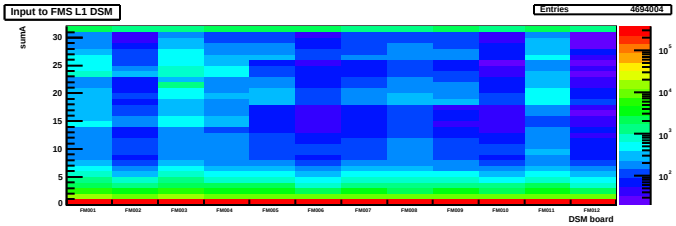

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

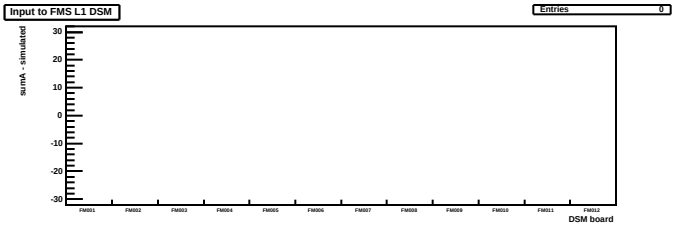

Input to FMS L1 DSM
Entries 4694004
sumB
DSM board

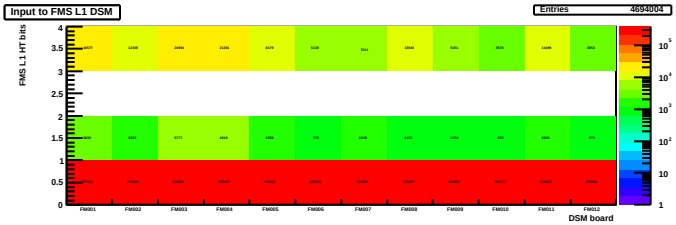

Input to FMS L1 DSM
Entries 18743
sumB - simulated
DSM board

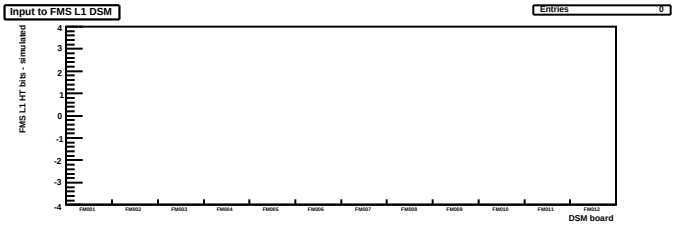

Input to FMS L1 DSM
Entries 4694004
sumAB
DSM board

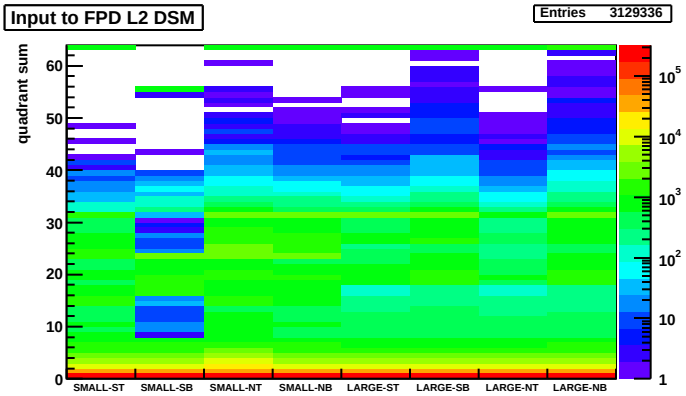

Input to FMS L1 DSM
Entries 6531
sumAB - simulated
DSM board

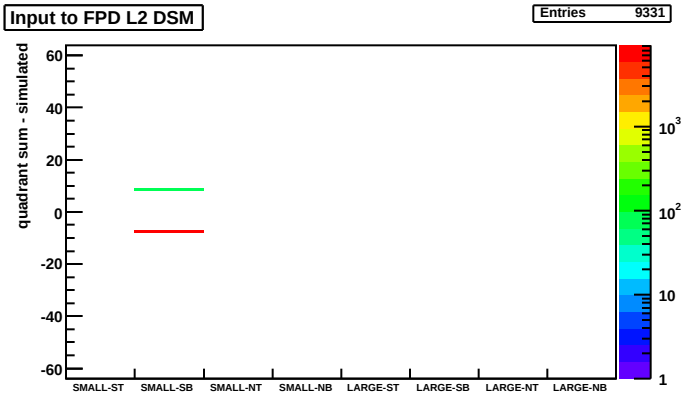

Input to FMS L1 DSM
Entries 4694004
sumA
DSM board

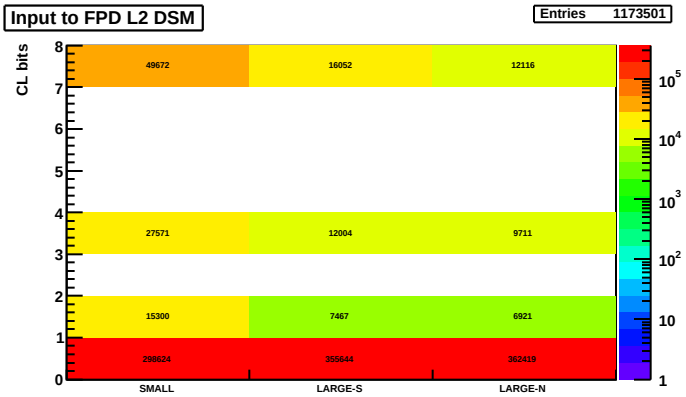

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

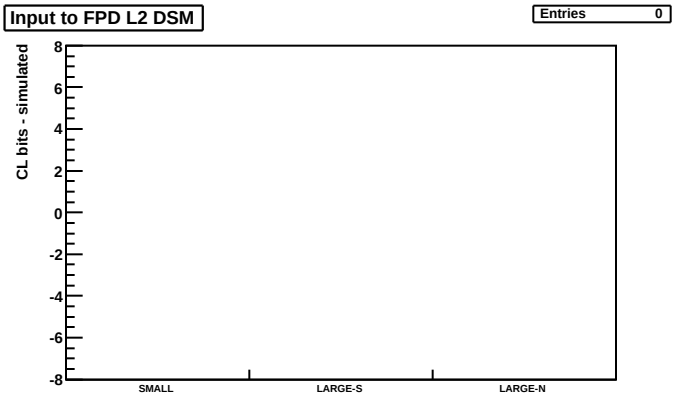

Input to FMS L1 DSM
Entries 4694004
FMS L1 HT bits
DSM board

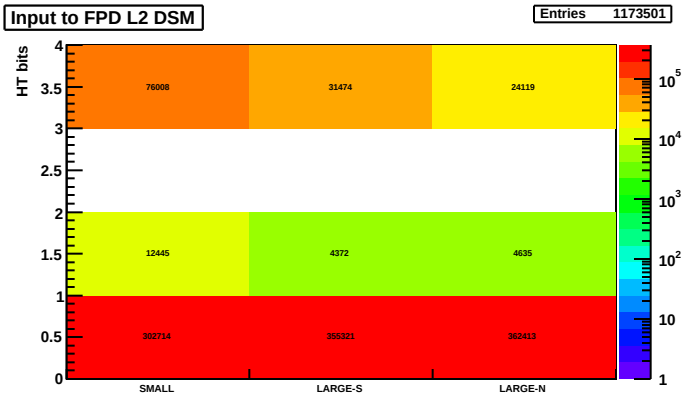

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

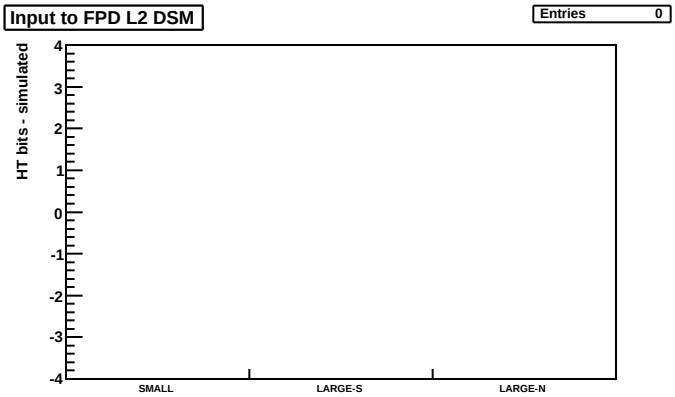

Input to FPD L2 DSM
Entries 3129336
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

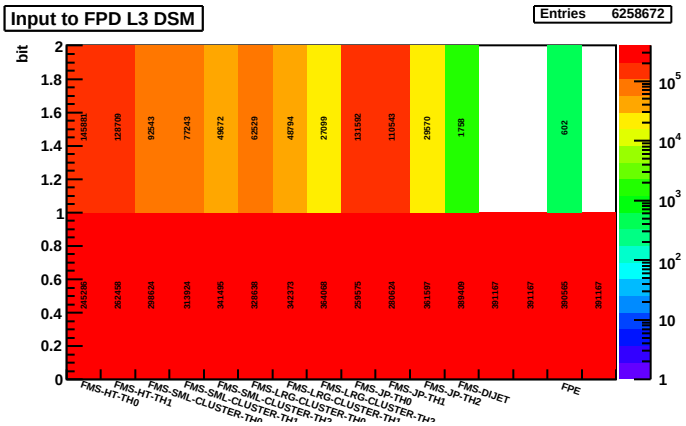

Input to FPD L2 DSM
Entries 9331
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

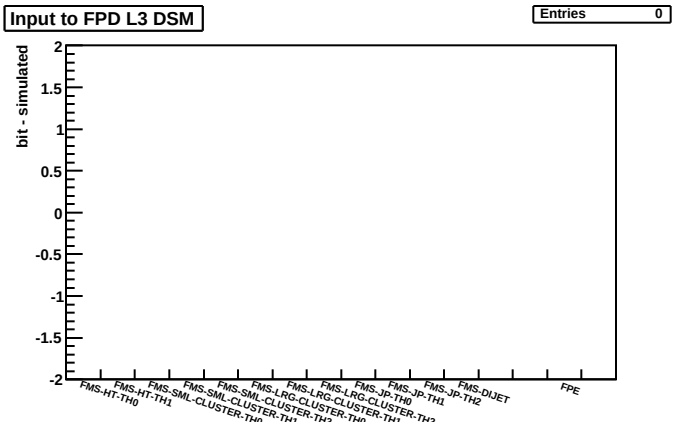

Input to FPD L2 DSM
Entries 1173501
CL bits
49672
16052
12116
27571
12004
9711
15300
7467
6921
298624
355644
362419
SMALL
LARGE-S
LARGE-N

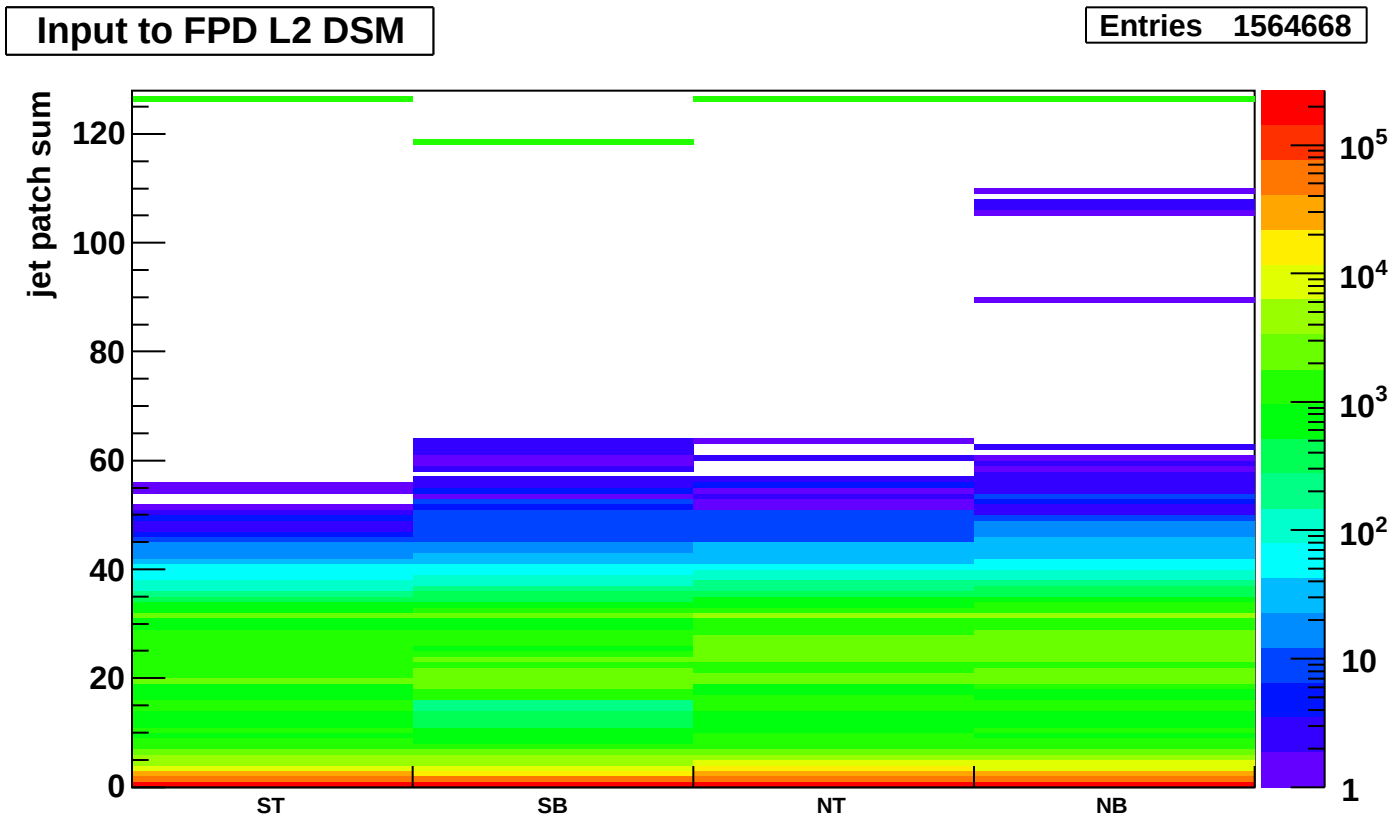

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

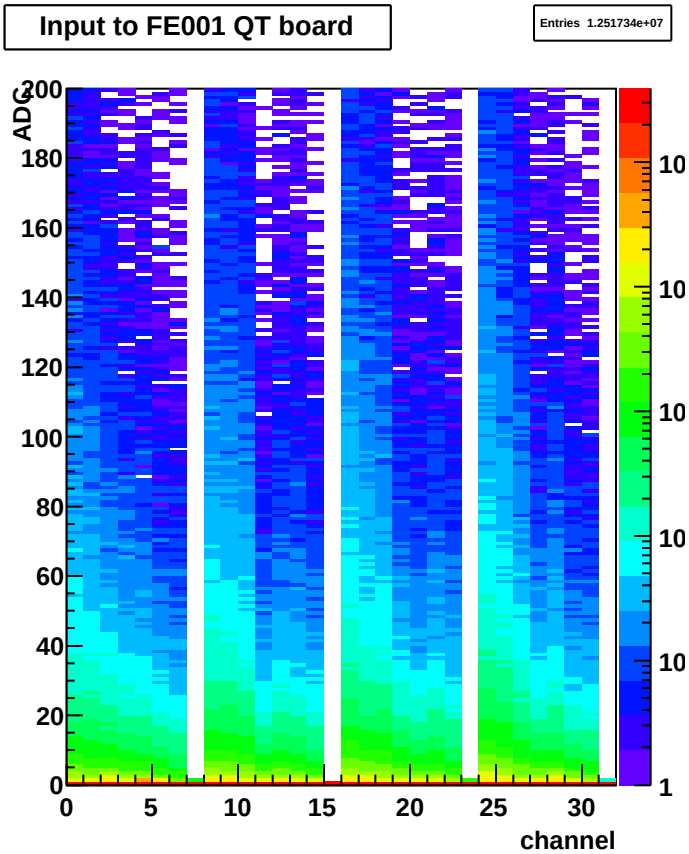

Input to FPD L2 DSM
Entries 1173501
HT bits
76008
31474
24119
12445
4372
4635
302714
355321
362413
SMALL
LARGE-S
LARGE-N

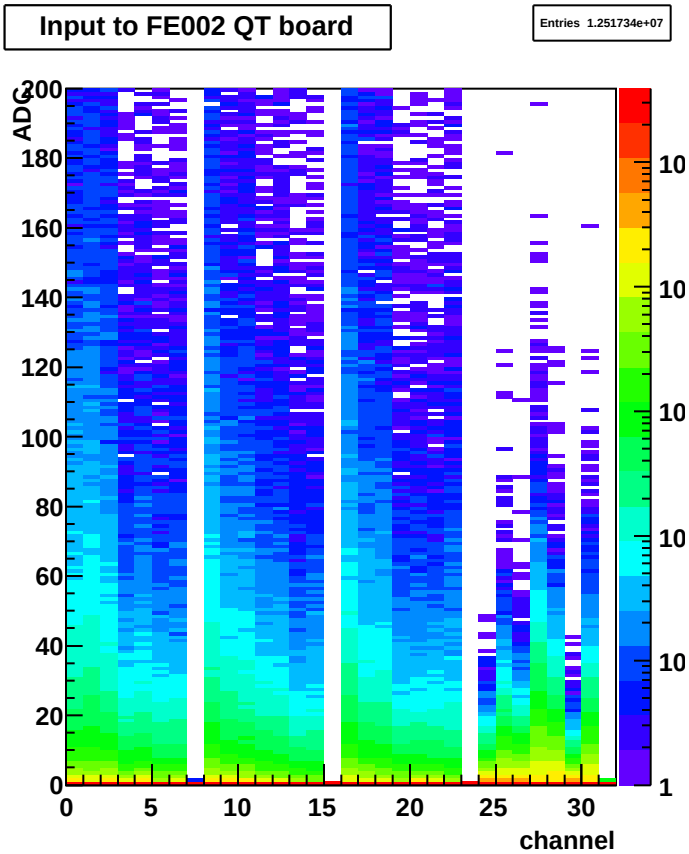

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

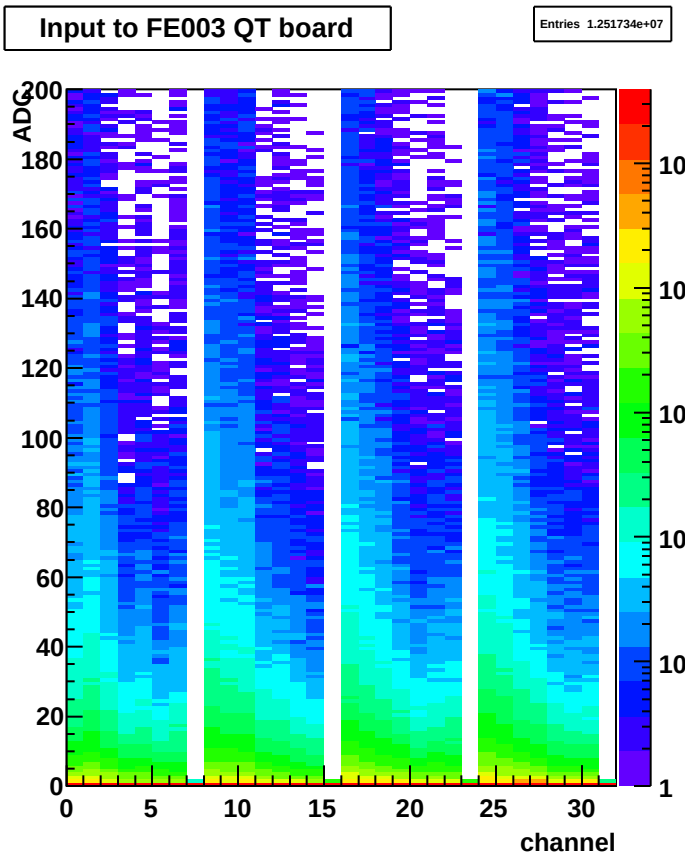

Input to FPD L3 DSM
Entries 6258672
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

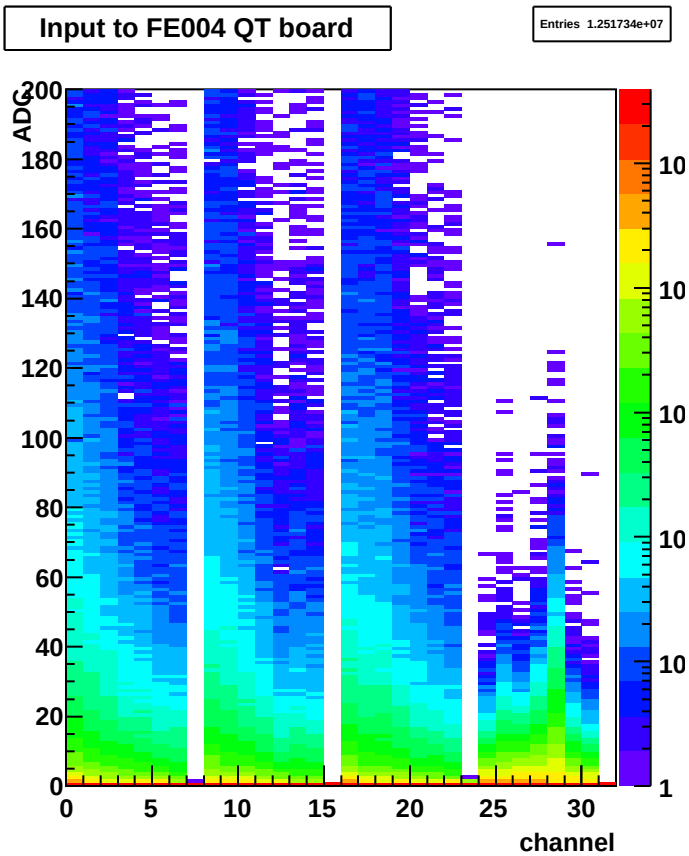

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

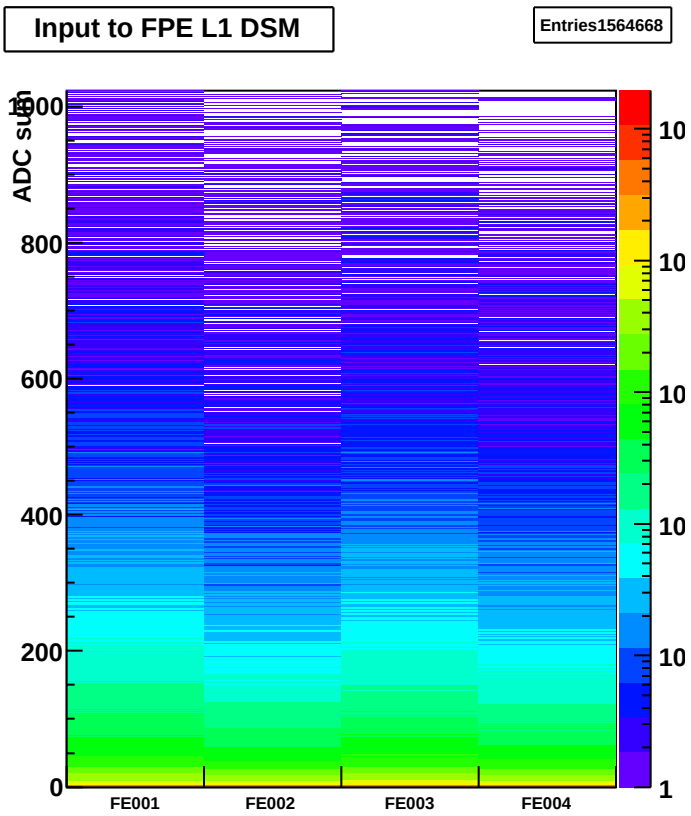

Input to FPD L2 DSM
Entries 1564668
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

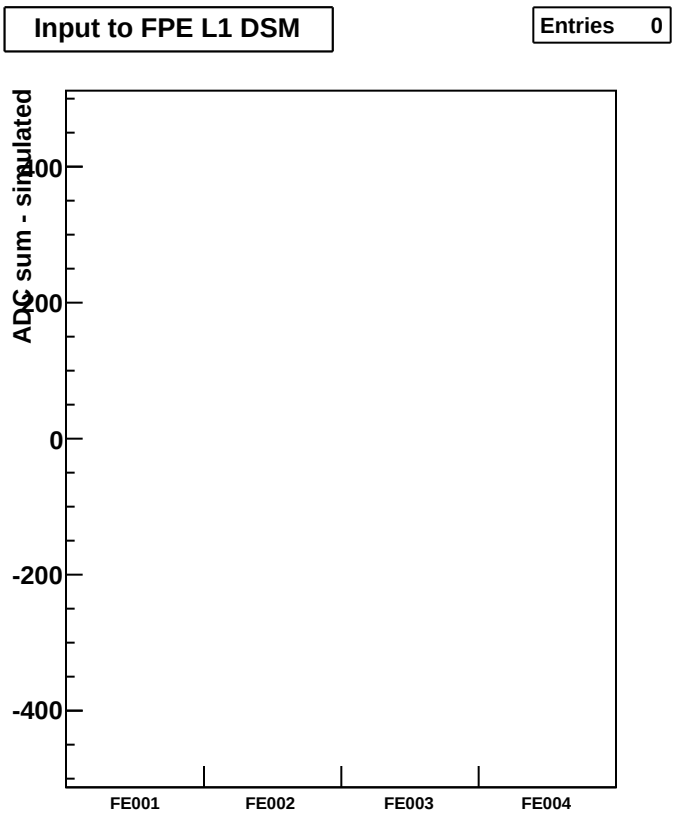

Input to FE001 QT board
Entries 1.251734e+07
ADC
channel

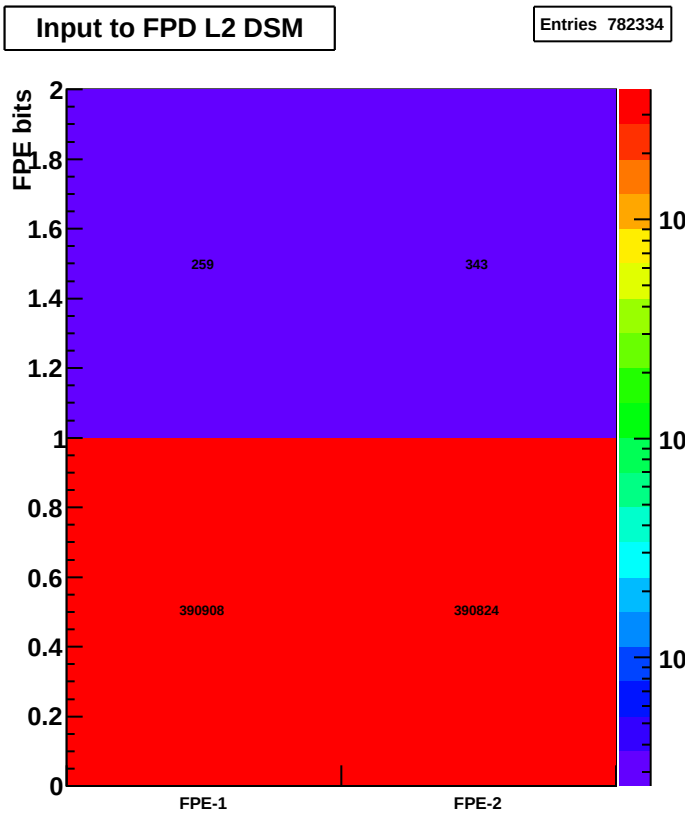

Input to FE002 QT board
Entries 1.251734e+07
ADC
channel

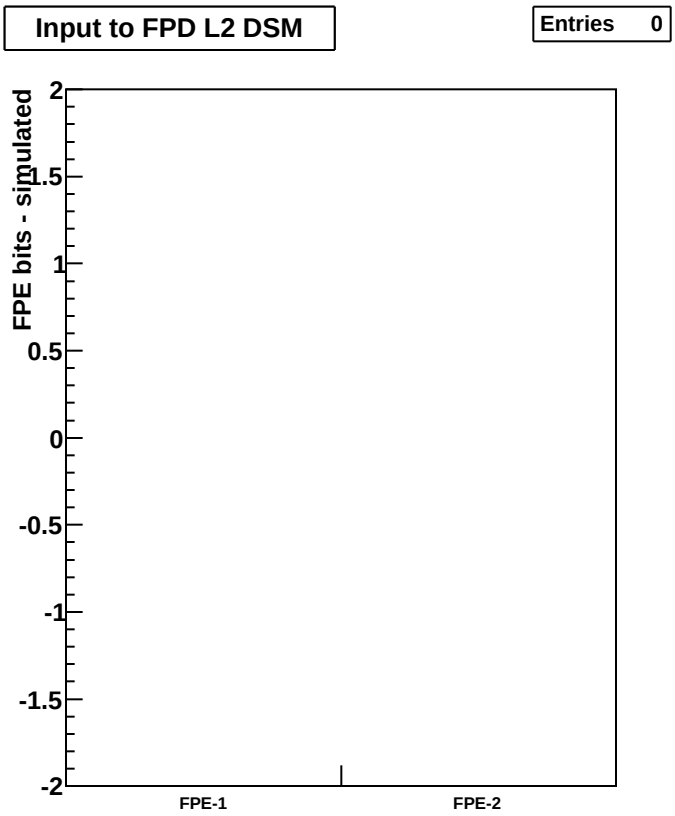

Input to FE003 QT board
Entries 1.251734e+07
ADC
channel


Input to FE004 QT board
Entries 1.251734e+07
ADC
channel


Input to FPE L1 DSM
Entries1564668
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 782334
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
259
343
390908
390824
FPE-1
FPE-2
10
10
10


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