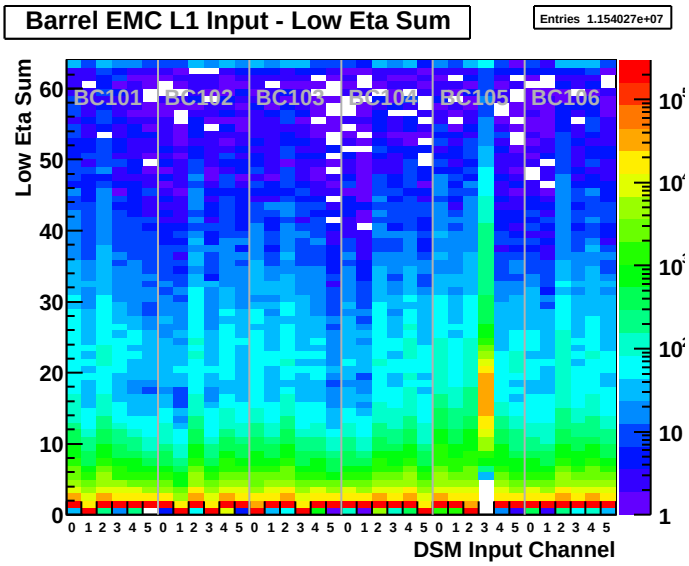
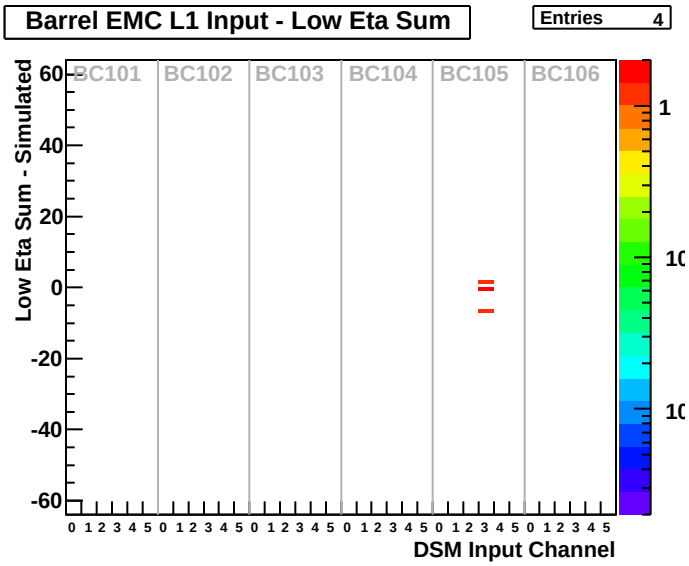
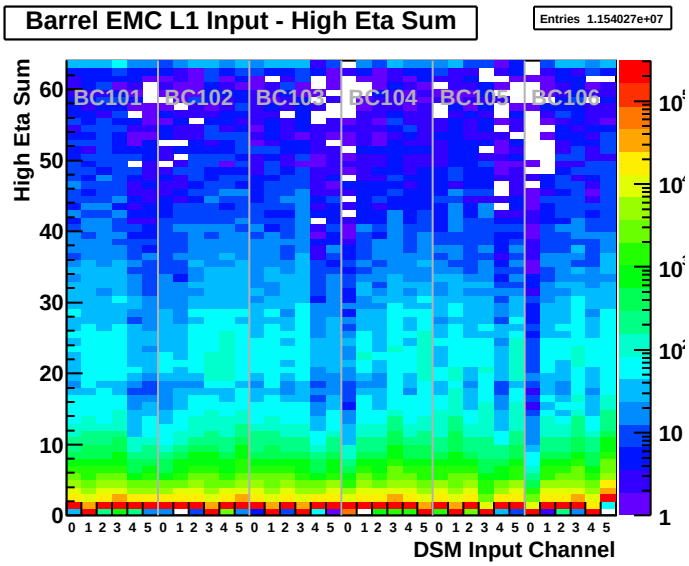
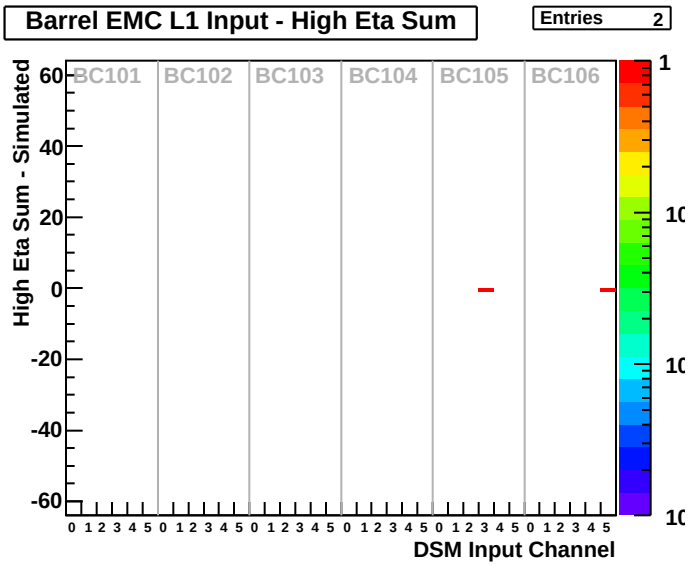
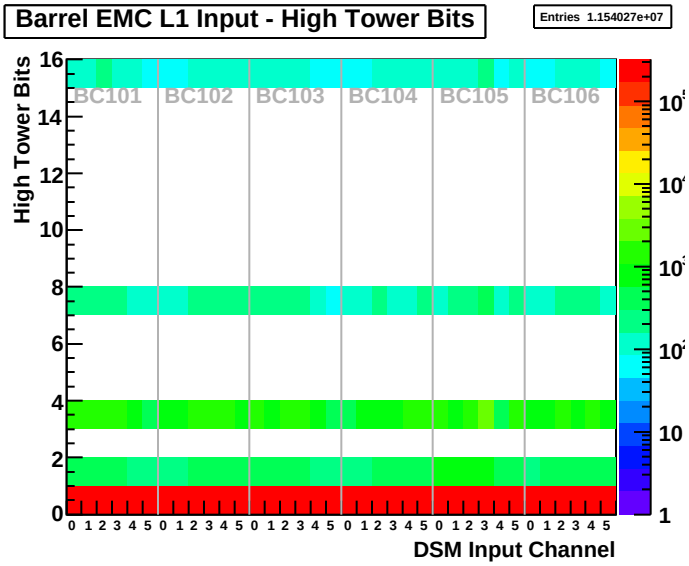
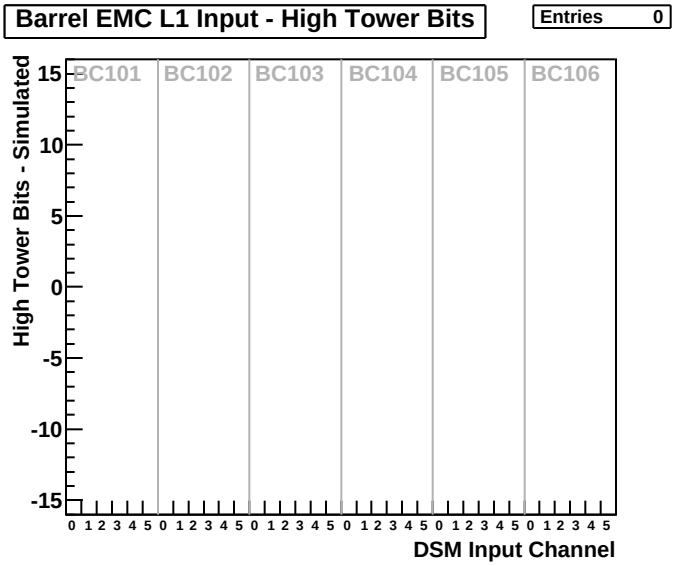

Barrel EMC L1 Input - Low Eta Sum
Entries 1.154027e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

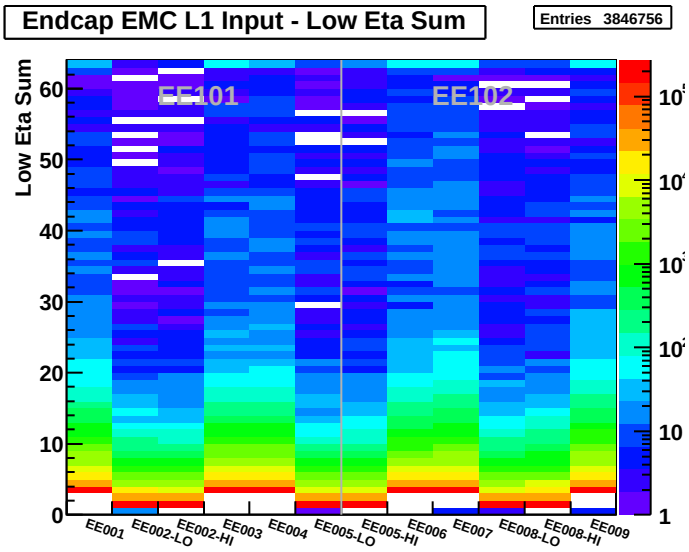

Barrel EMC L1 Input - Low Eta Sum
Entries 4
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

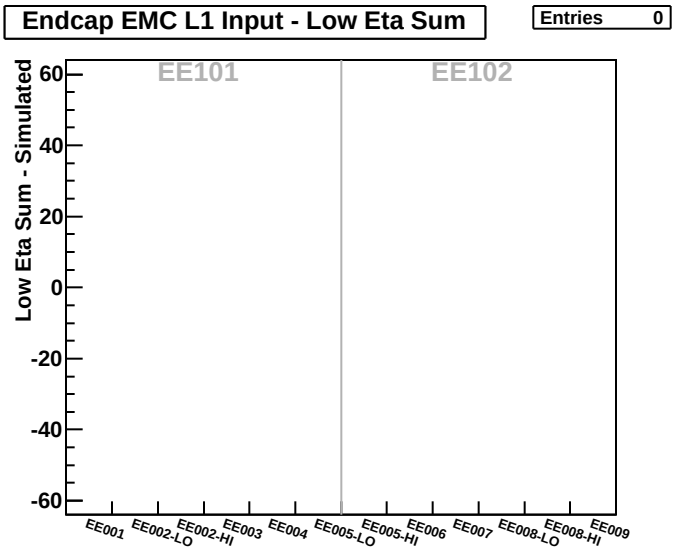

Barrel EMC L1 Input - High Eta Sum
Entries 1.154027e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

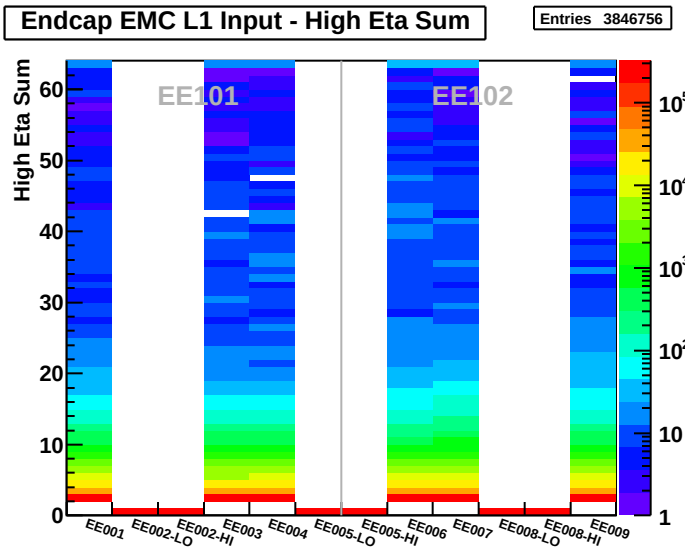

Barrel EMC L1 Input - High Eta Sum
Entries 2
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

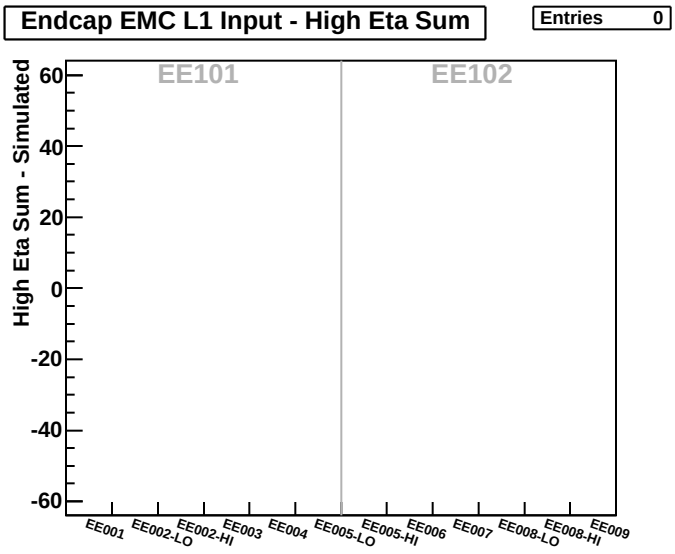

Barrel EMC L1 Input - High Tower Bits
Entries 1.154027e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

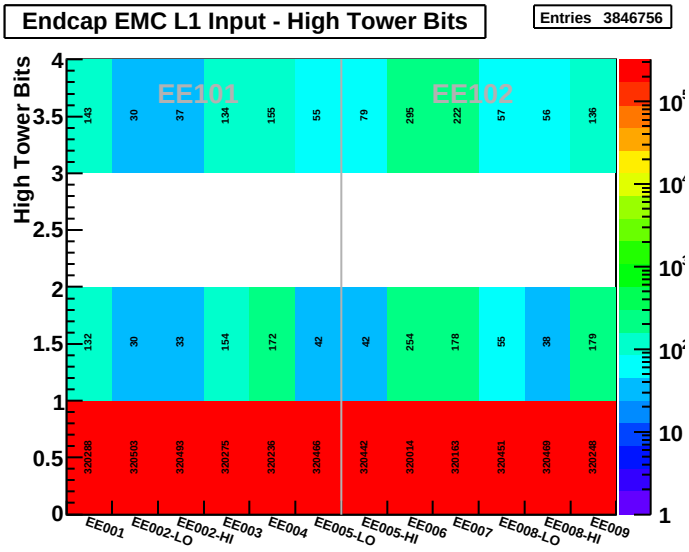

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

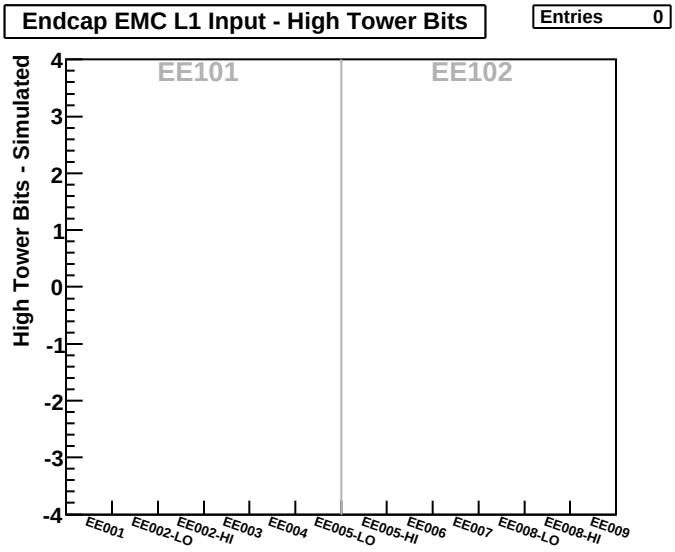

Endcap EMC L1 Input - Low Eta Sum
Entries 3846756
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

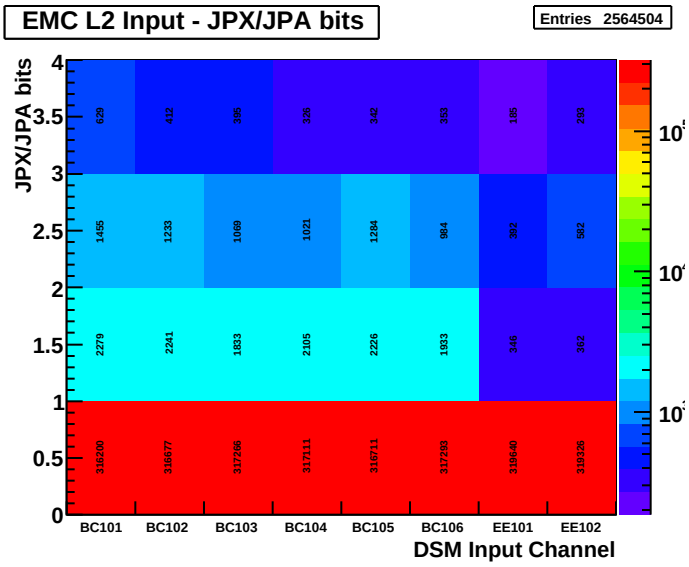

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

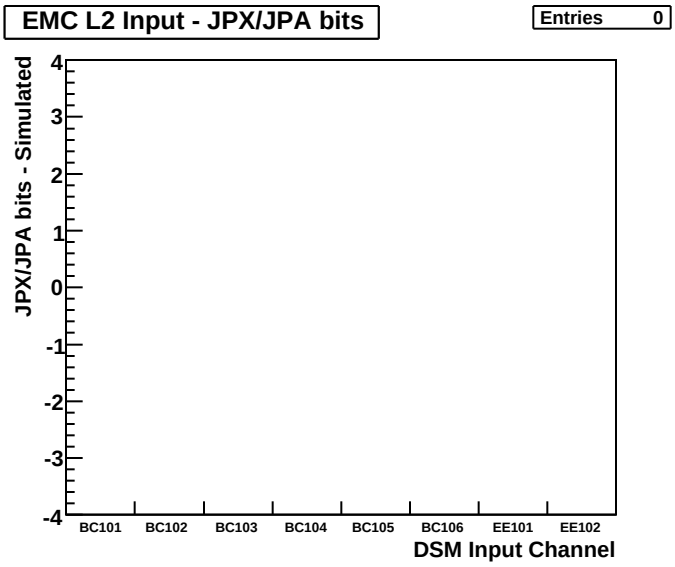

Endcap EMC L1 Input - High Eta Sum
Entries 3846756
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

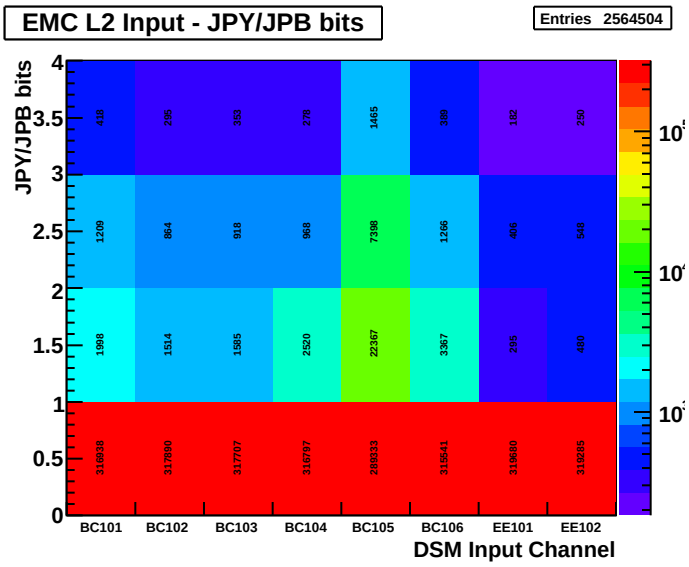

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

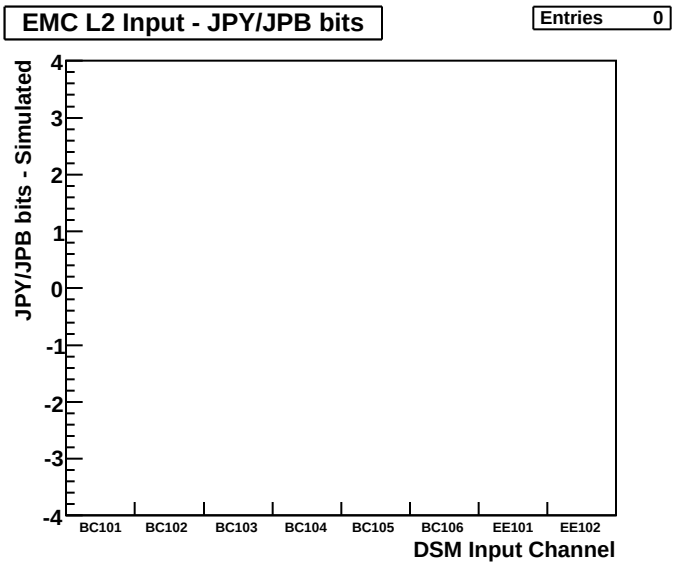

Endcap EMC L1 Input - High Tower Bits
Entries 3846756
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

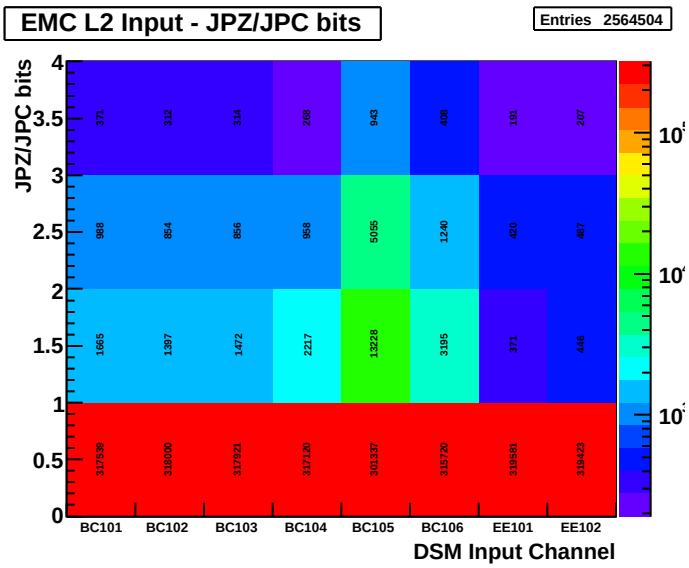

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

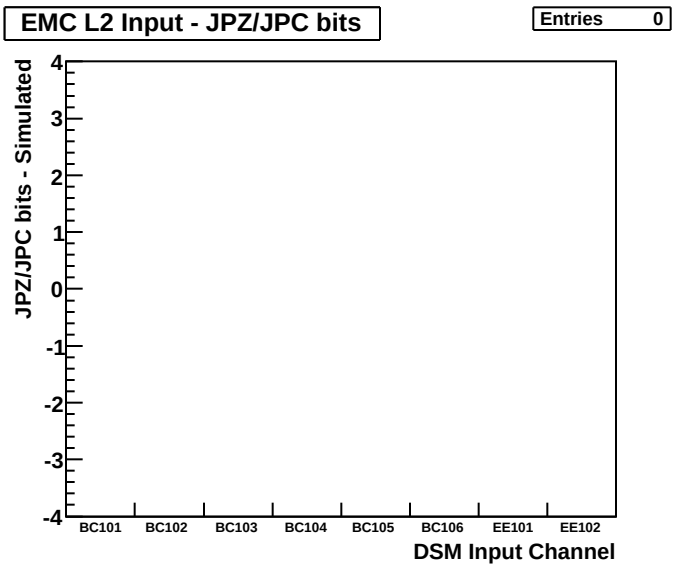

EMC L2 Input - JPX/JPA bits
Entries 2564504
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
629 412 395 326 342 353 185 293
1455 1233 1069 1021 1284 984 392 582
2279 2241 1833 2105 2226 1933 346 382
316200 315677 317266 317111 316711 317293 319640 319326

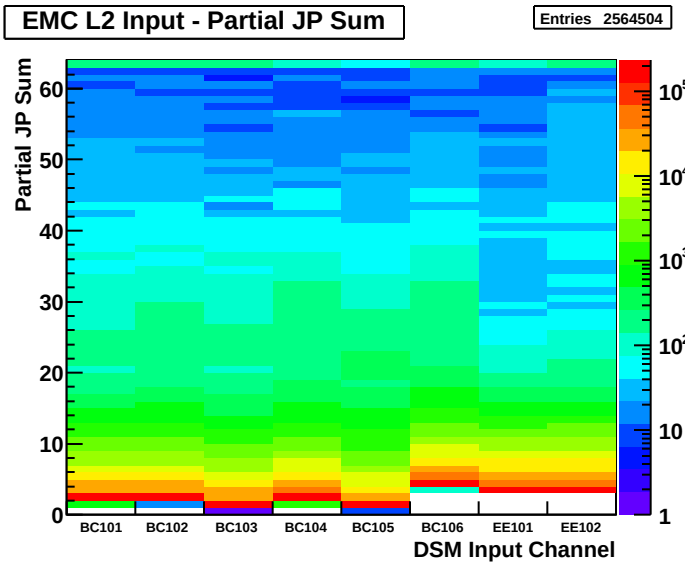

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

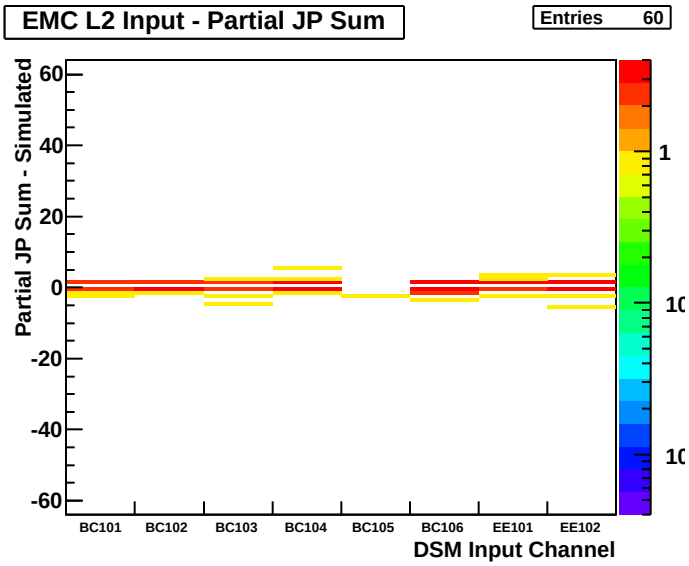

EMC L2 Input - JPY/JPB bits
Entries 2564504
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
416 295 353 278 1465 389 182 250
1209 864 918 968 7398 1266 408 548
1998 1514 1595 2520 22367 3367 295 430
316938 317090 317707 316797 289333 315541 319680 319285

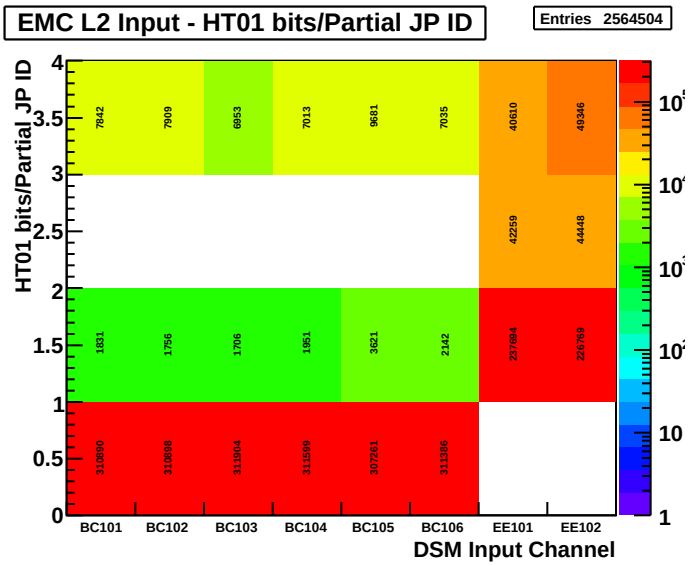

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

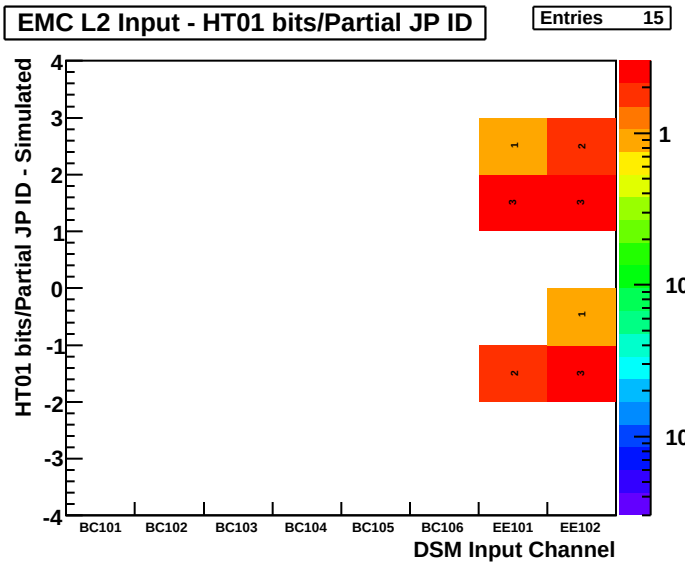

EMC L2 Input - JPZ/JPC bits
Entries 2564504
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
371 312 314 268 943 408 191 207
988 854 856 968 5055 1240 420 487
1665 1397 1472 2217 13228 3195 371 446
317539 318000 317921 317120 301337 315720 319581 319423

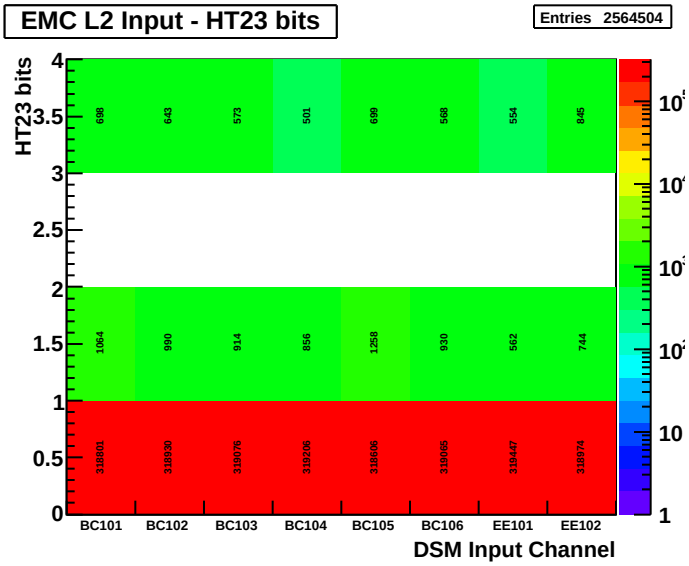

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

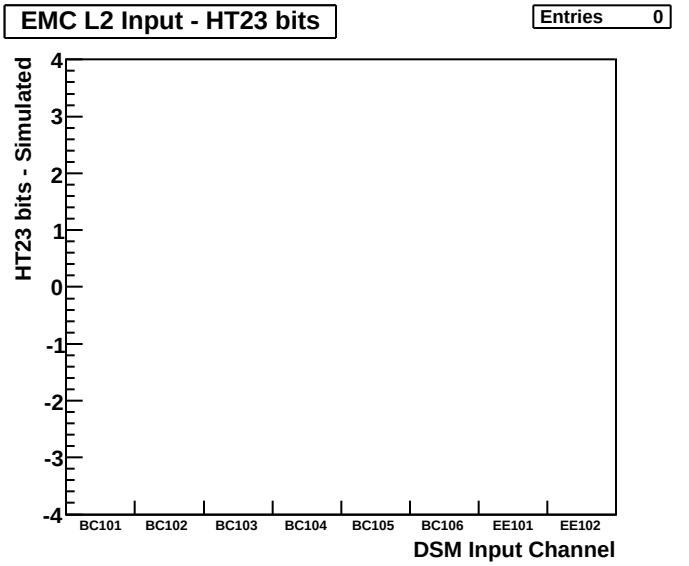

EMC L2 Input - Partial JP Sum
Entries 2564504
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

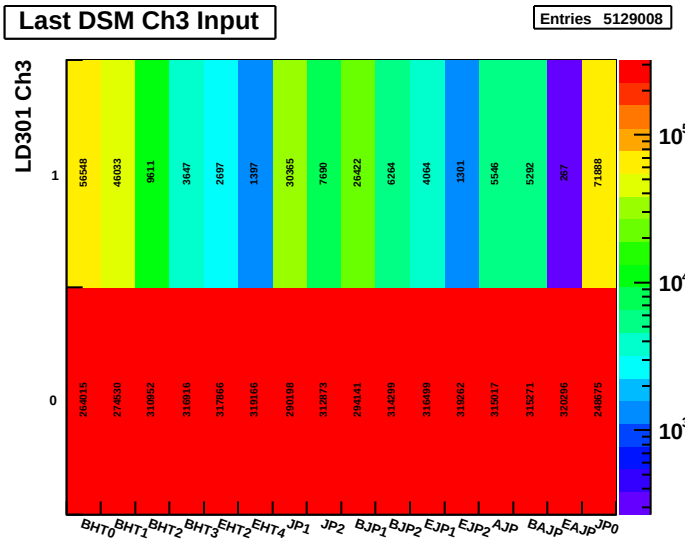

EMC L2 Input - Partial JP Sum
Entries 60
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

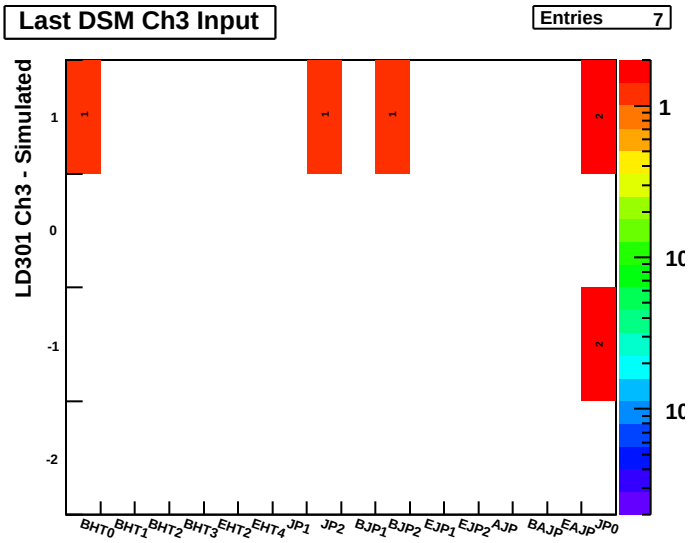

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2564504
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

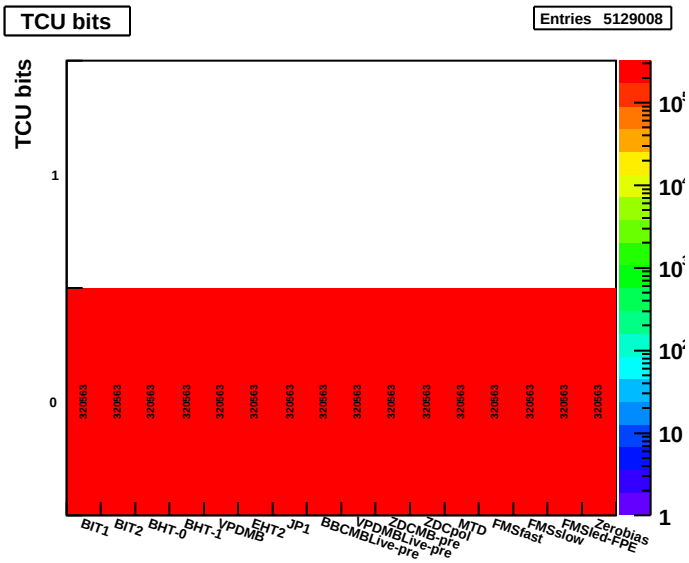

EMC L2 Input - HT01 bits/Partial JP ID
Entries 15
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

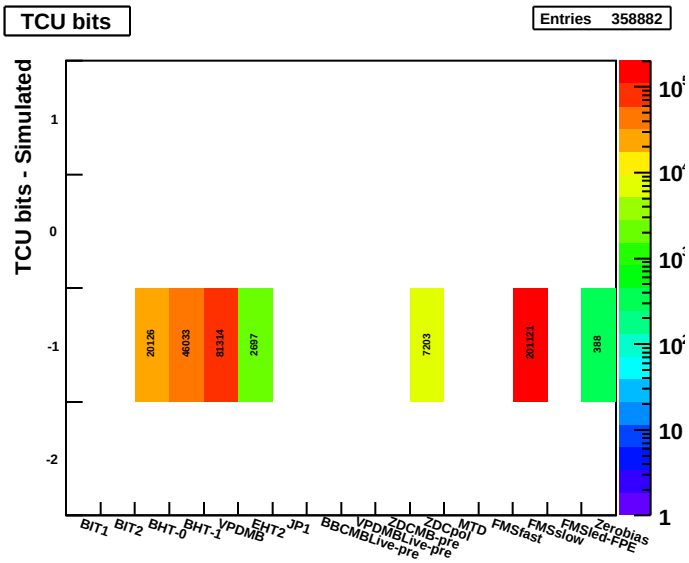

EMC L2 Input - HT23 bits
Entries 2564504
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

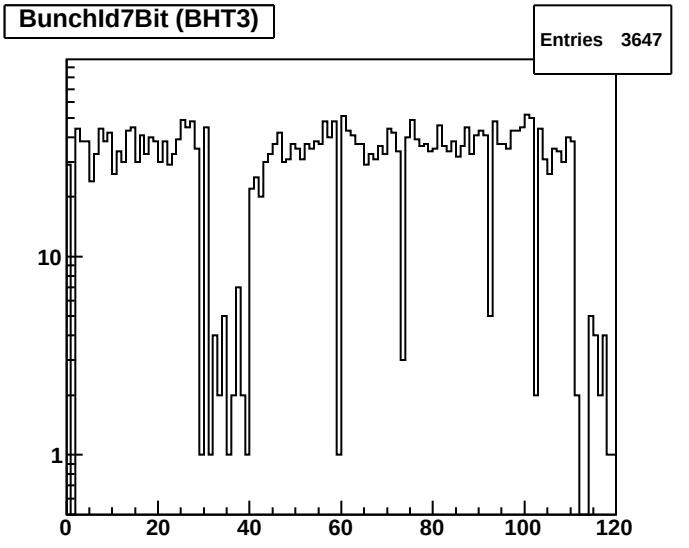

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

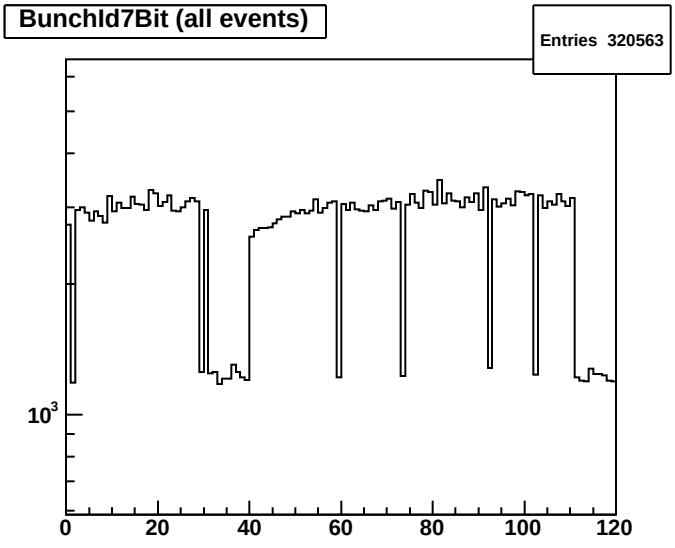

Last DSM Ch3 Input
Entries 5129008
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

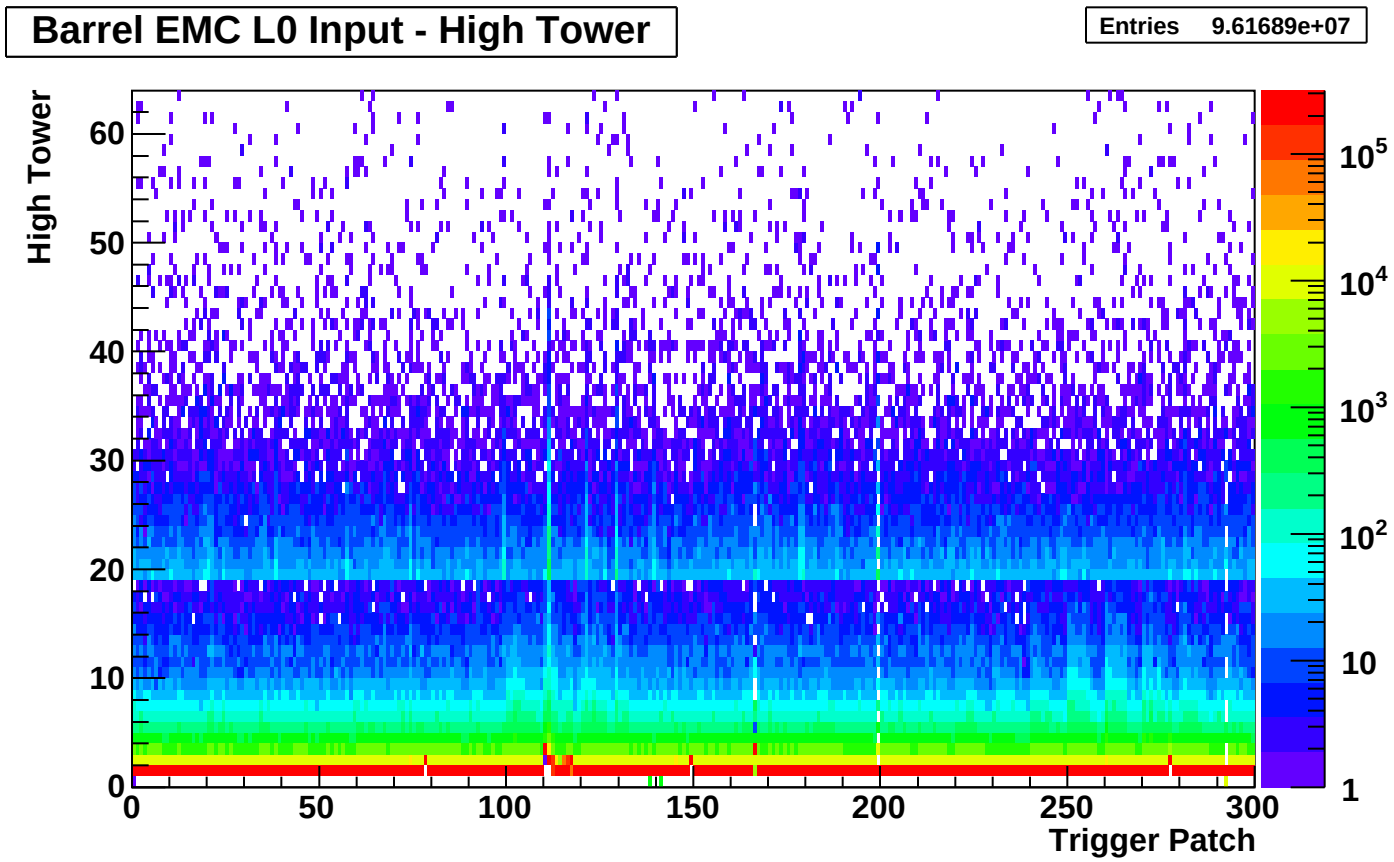

Last DSM Ch3 Input
Entries 7
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

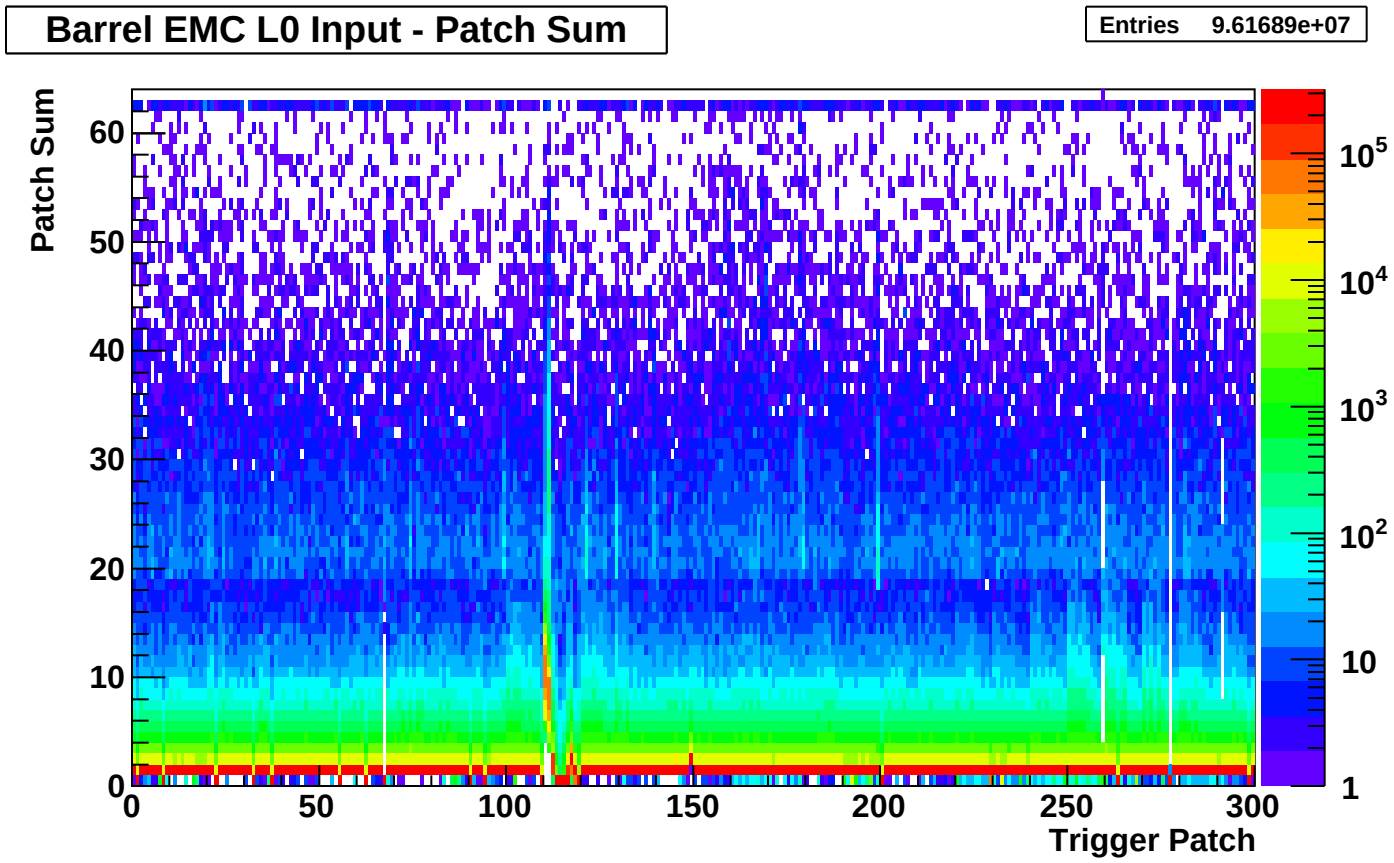

TCU bits
Entries 5129008
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

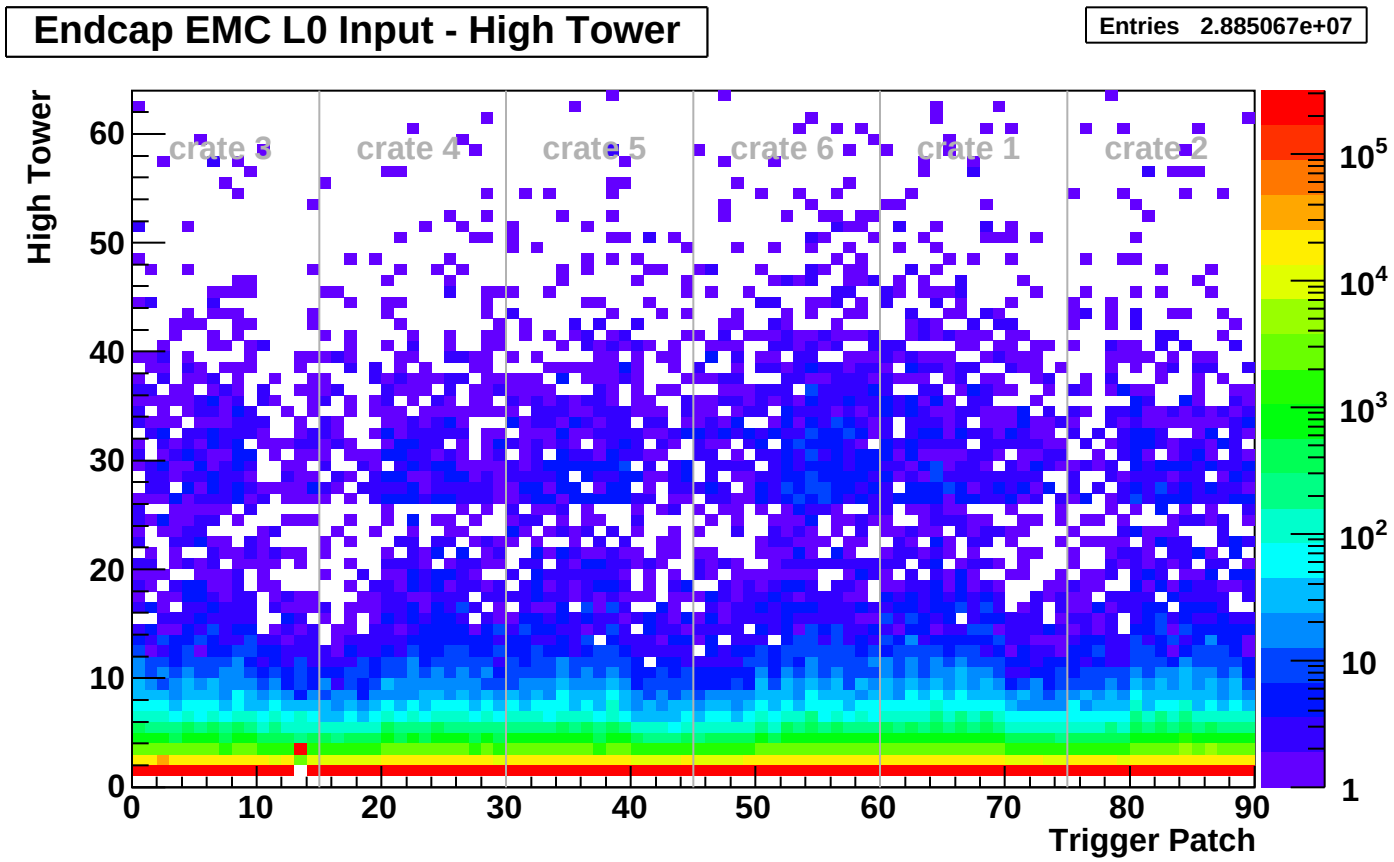

TCU bits
Entries 358882
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

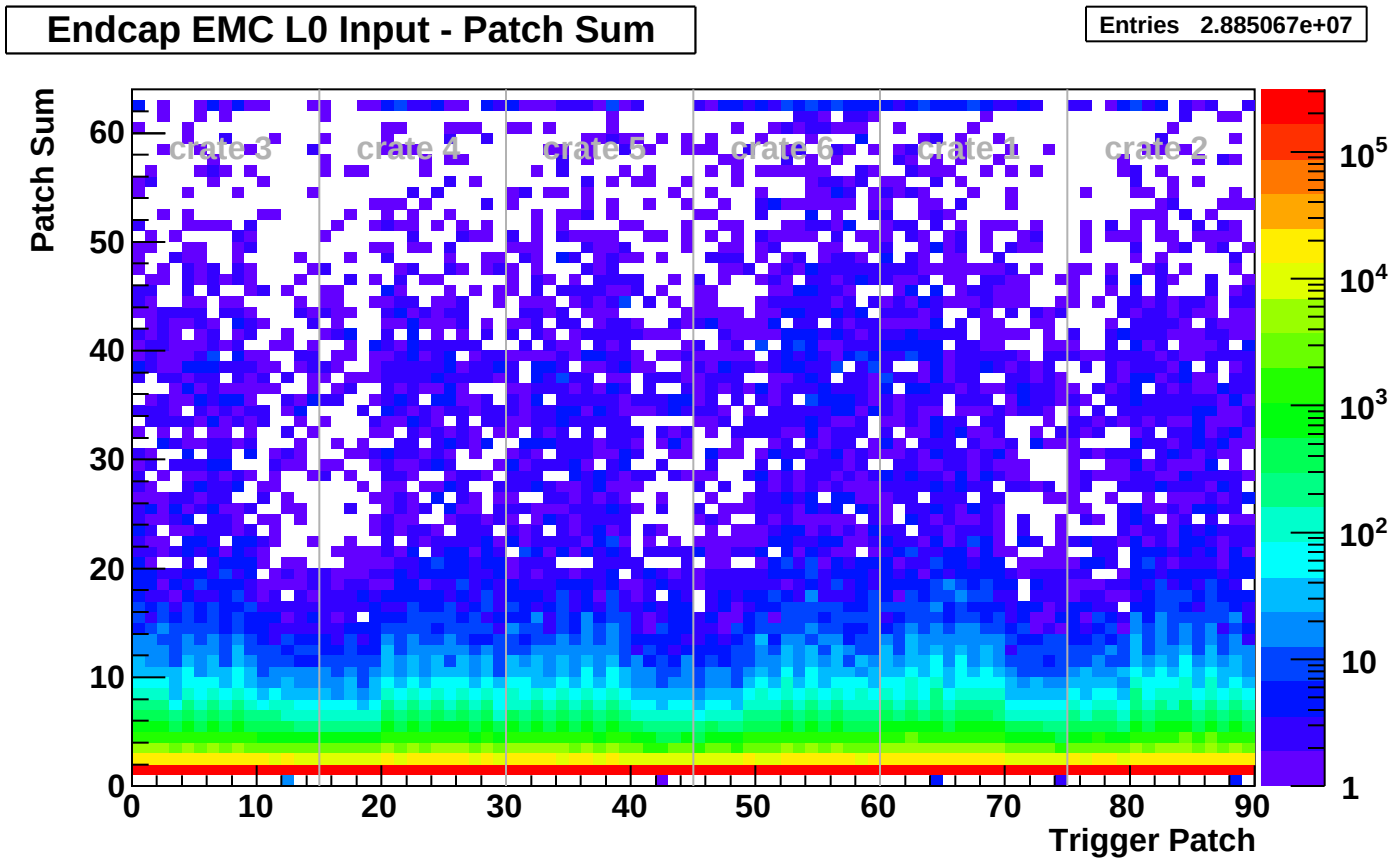

BunchId7Bit (BHT3)
Entries 3647

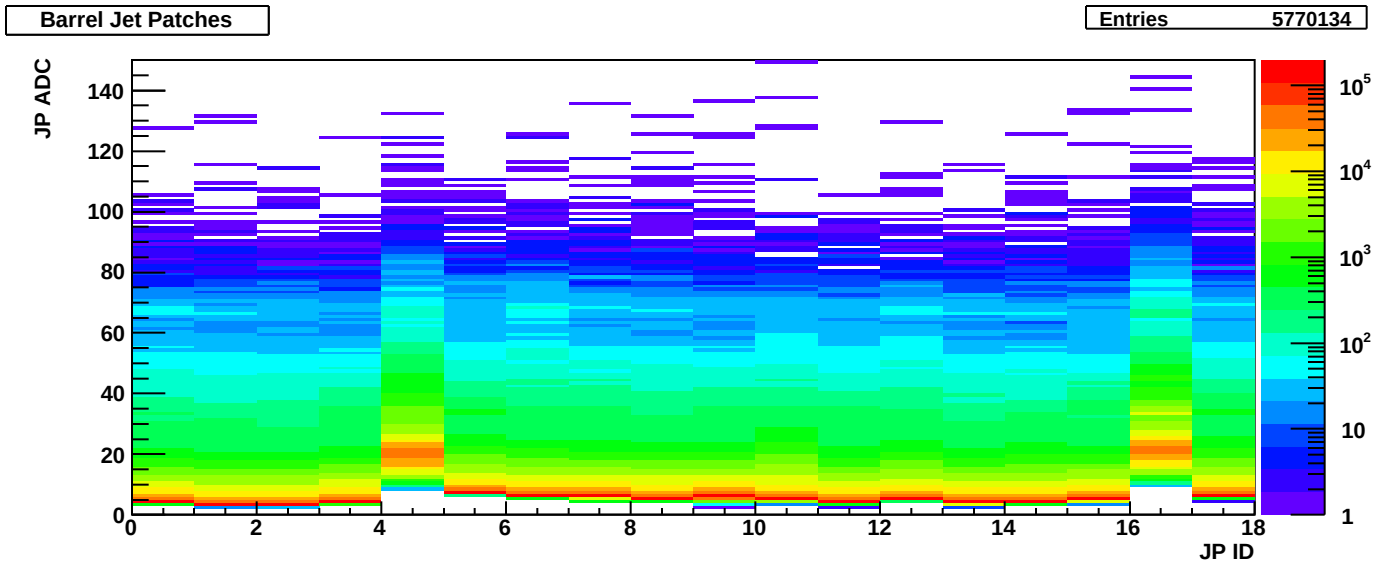

BunchId7Bit (all events)
Entries 320563

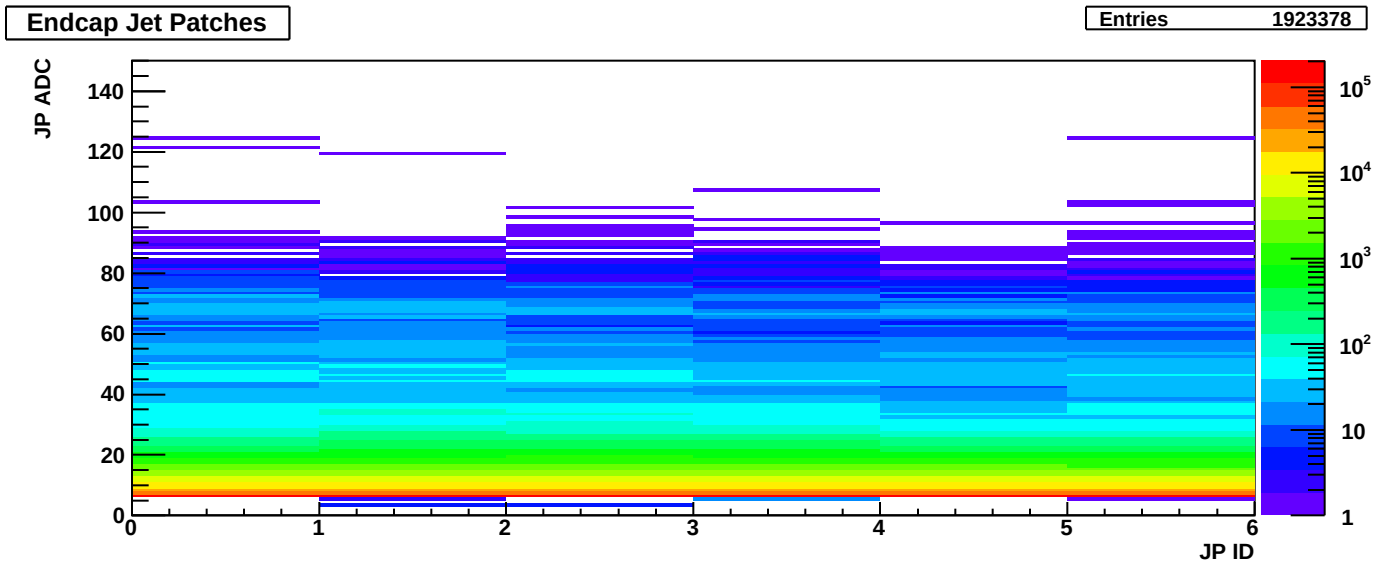

Barrel EMC L0 Input - High Tower
Entries 9.61689e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

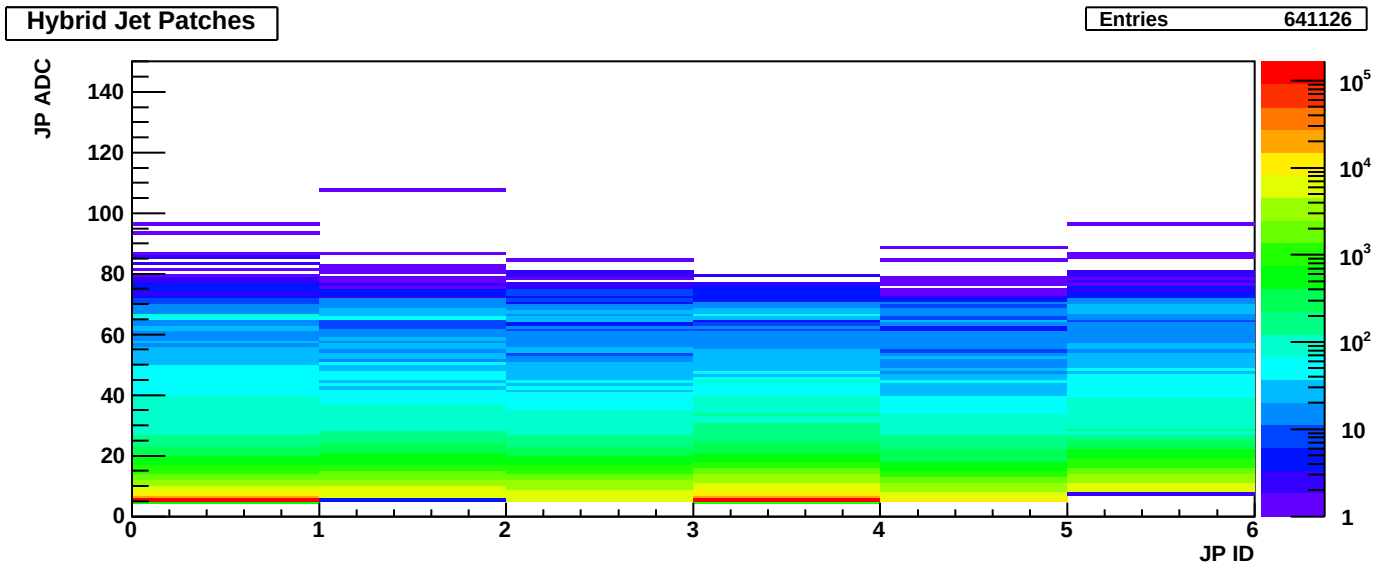

Barrel EMC L0 Input - Patch Sum
Entries 9.61689e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

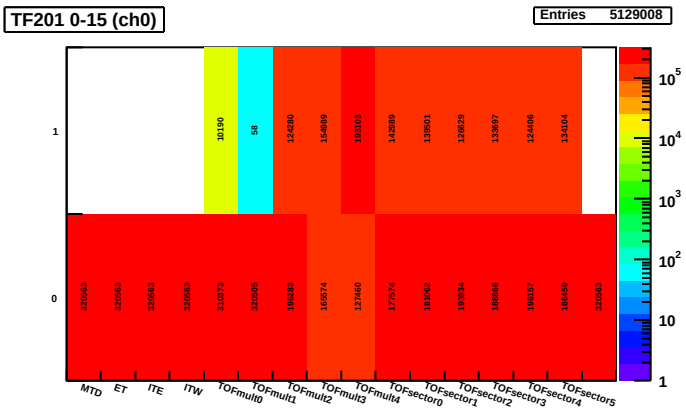

Endcap EMC L0 Input - High Tower
Entries 2.885067e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

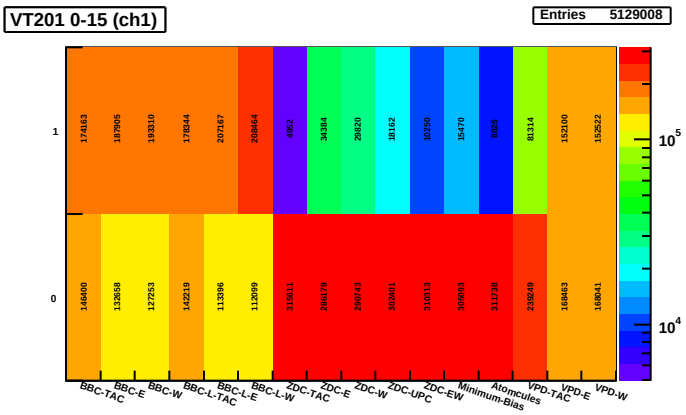

Endcap EMC L0 Input - Patch Sum
Entries 2.885067e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

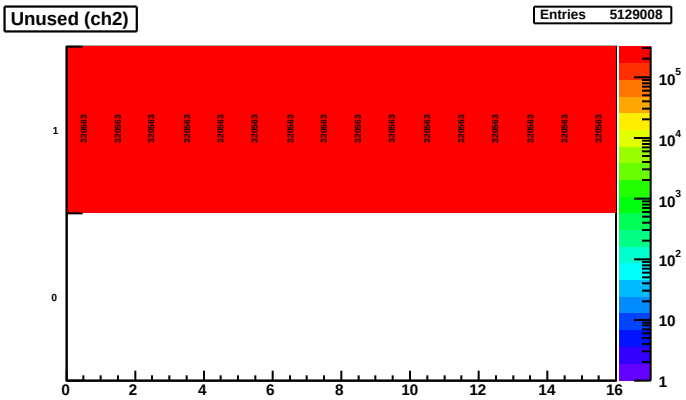

Barrel Jet Patches
Entries 5770134
JP ADC
JP ID

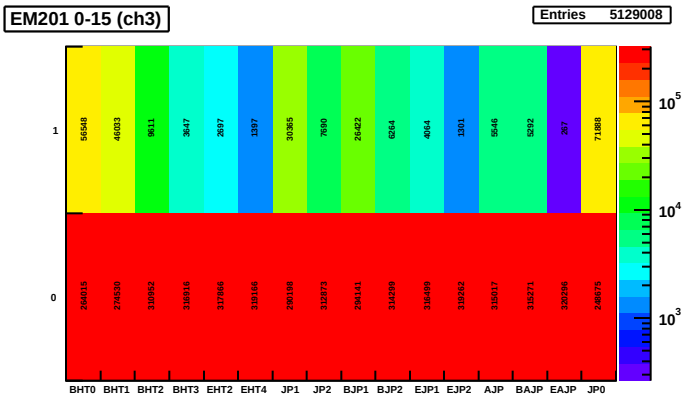

Endcap Jet Patches
Entries 1923378
JP ADC
JP ID

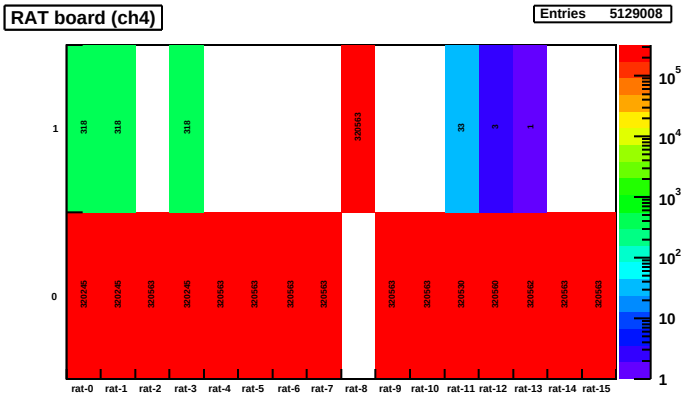

Hybrid Jet Patches
Entries 641126
JP ADC
JP ID

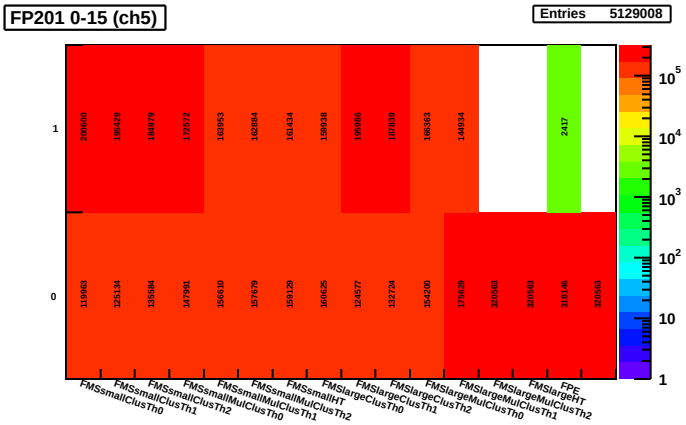

TF201 0-15 (ch0)
Entries 5129008
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

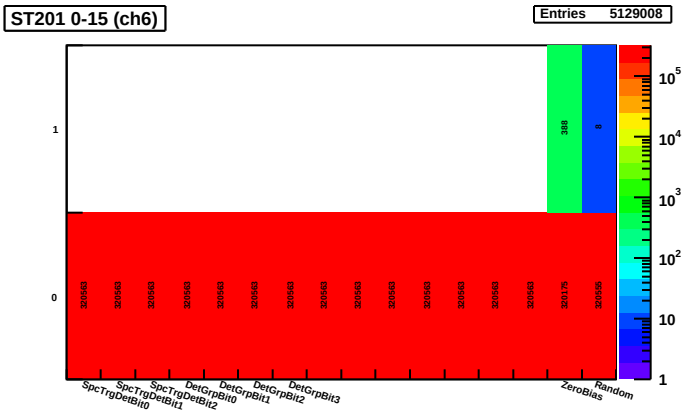

VT201 0-15 (ch1)
Entries 5129008
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

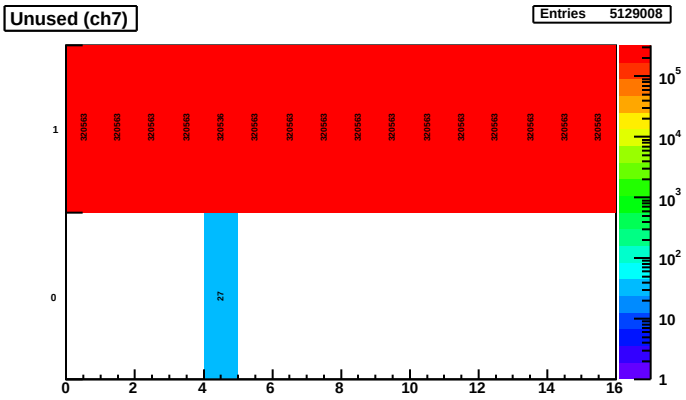

Unused (ch2)
Entries 5129008

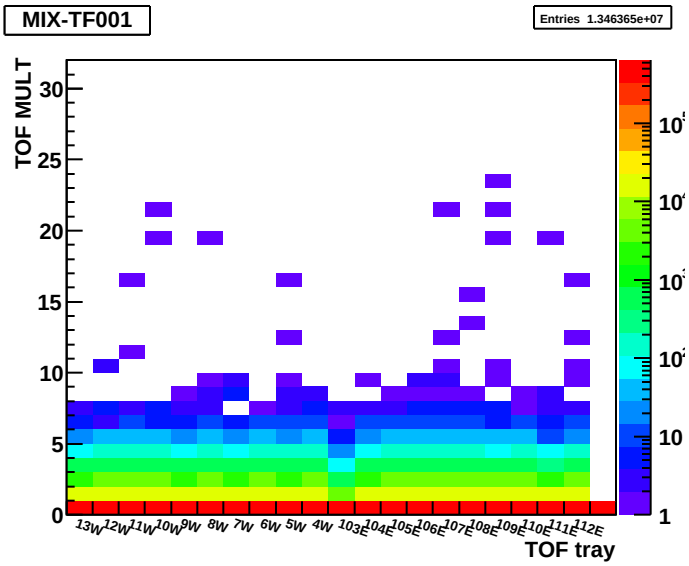

EM201 0-15 (ch3)
Entries 5129008
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

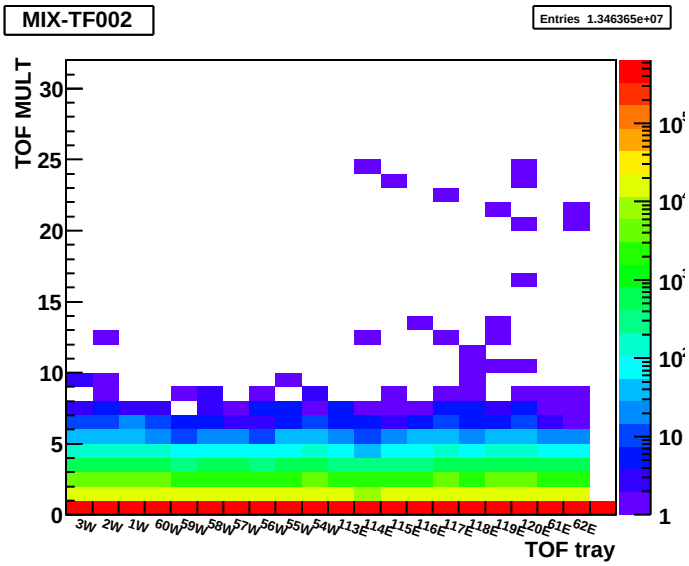

RAT board (ch4)
Entries 5129008
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

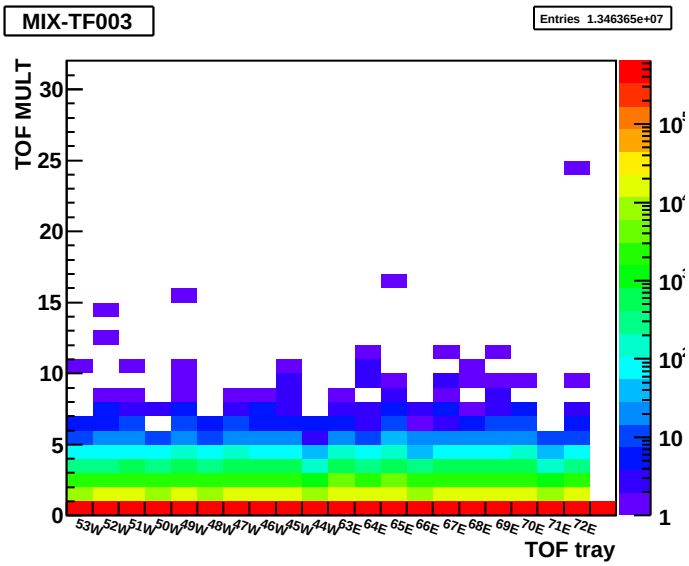

FP201 0-15 (ch5)
Entries 5129008
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

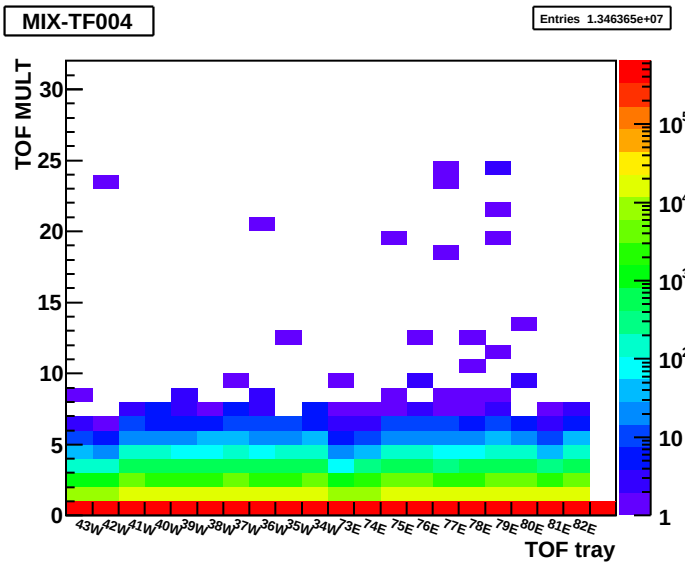

ST201 0-15 (ch6)
Entries 5129008
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

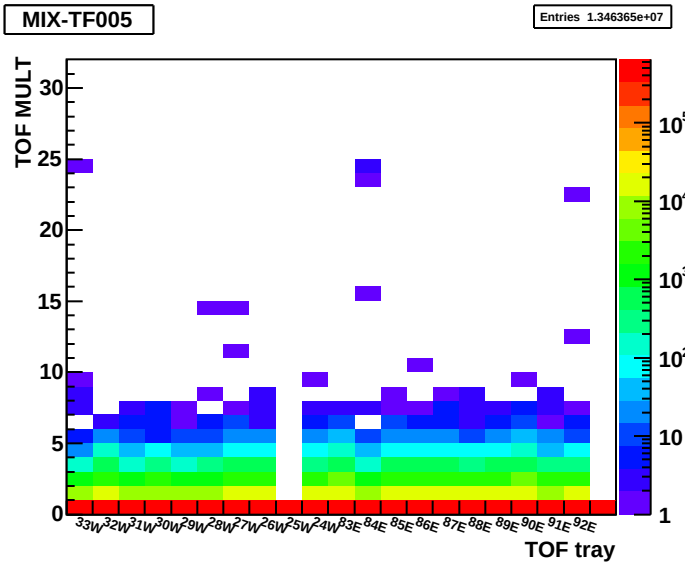

Unused (ch7)
Entries 5129008

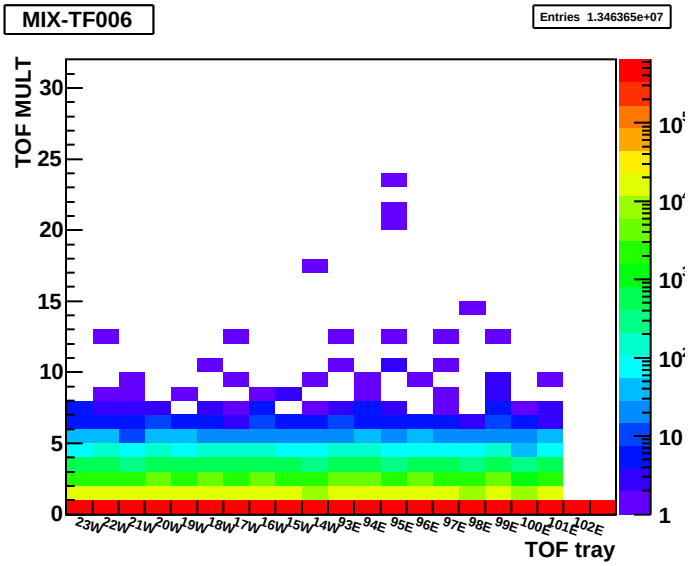

MIX-TF001
Entries 1.346365e+07
TOF MULT
TOF tray

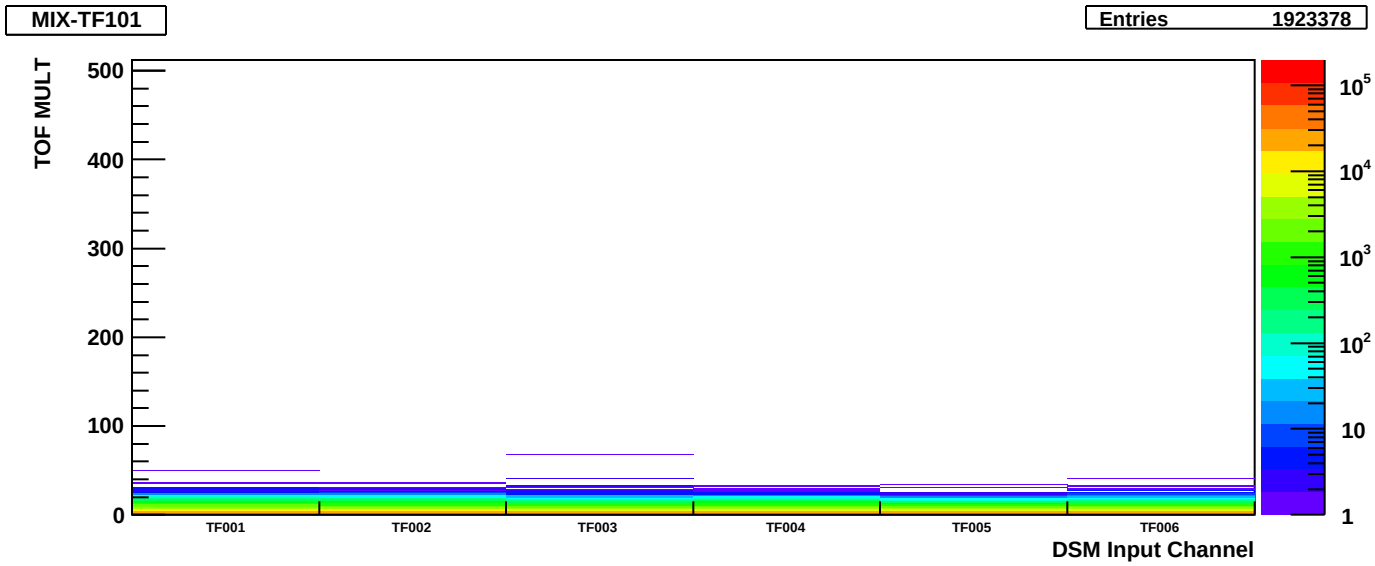

MIX-TF002
Entries 1.346365e+07
TOF MULT
TOF tray

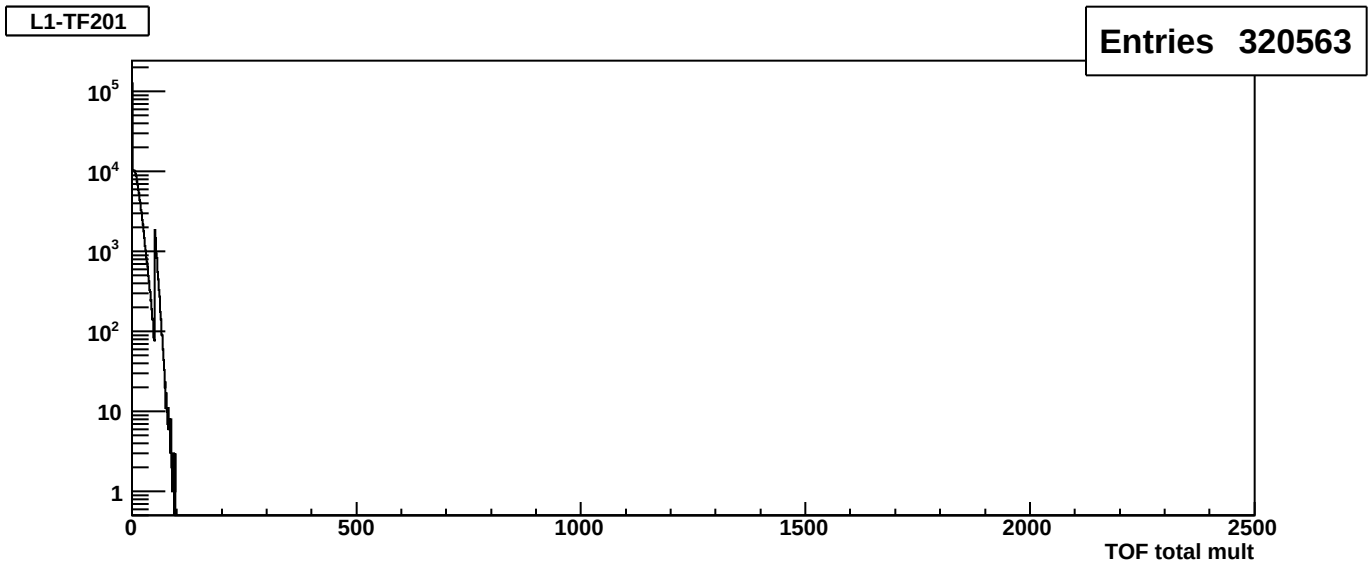

MIX-TF003
Entries 1.346365e+07
TOF MULT
TOF tray

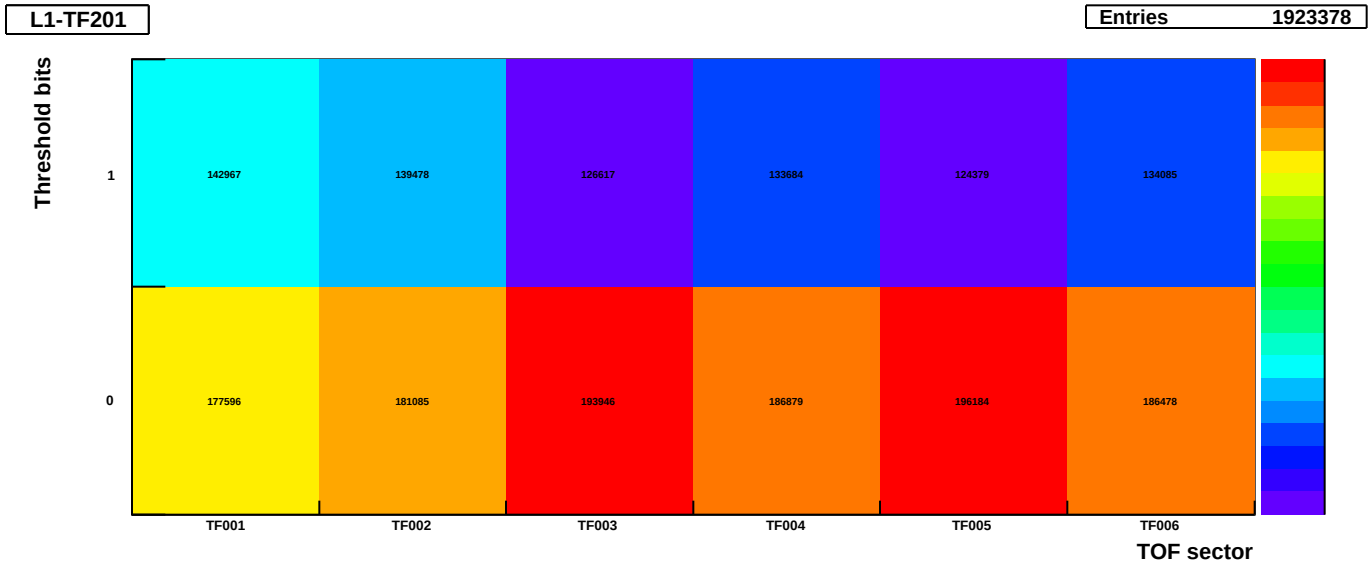

MIX-TF004
Entries 1.346365e+07
TOF MULT
TOF tray

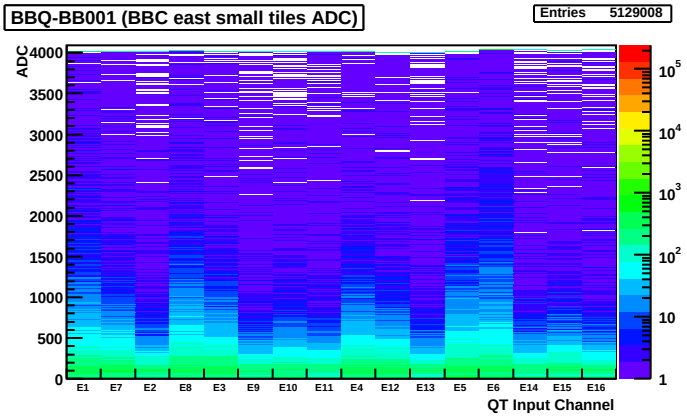

MIX-TF005
Entries 1.346365e+07
TOF MULT
TOF tray

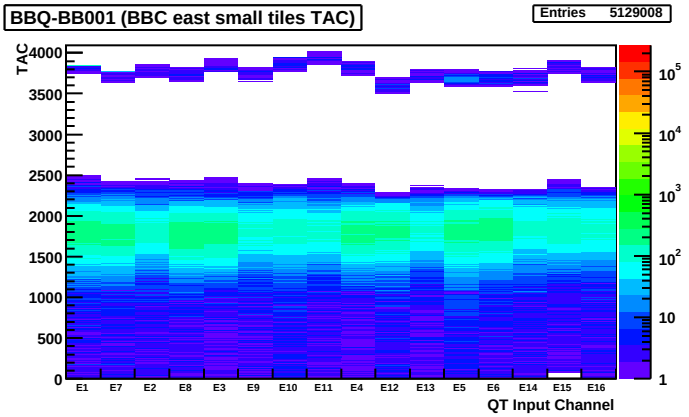

MIX-TF006
Entries 1.346365e+07
TOF MULT
TOF tray

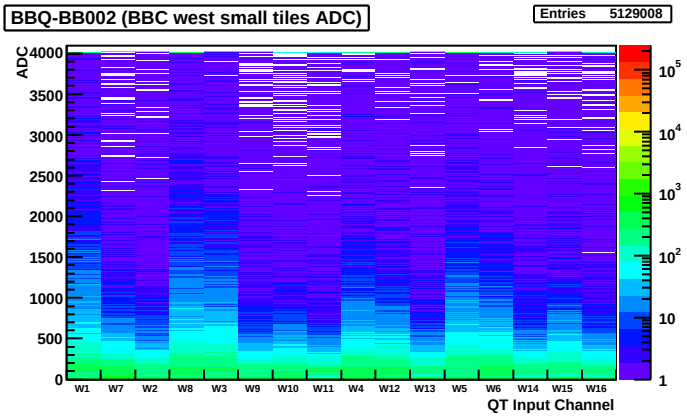

MIX-TF101
Entries 1923378
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

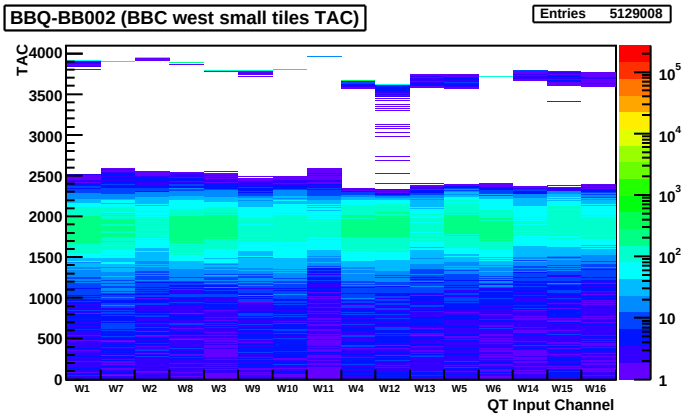

L1-TF201
Entries 320563
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

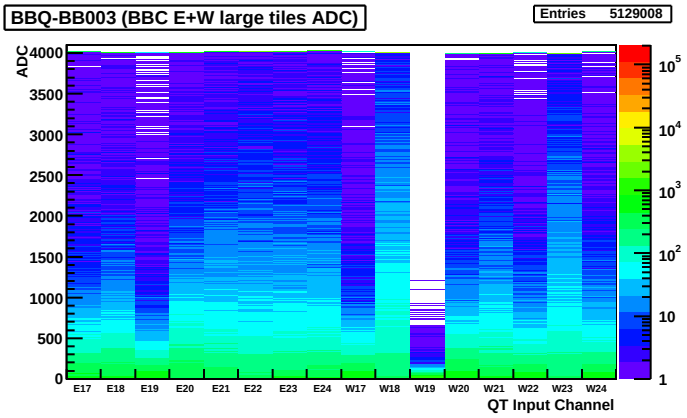

L1-TF201
Entries 1923378
Threshold bits
1
0
142967
139478
126617
133684
124379
134085
177596
181085
193946
186879
196184
186478
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

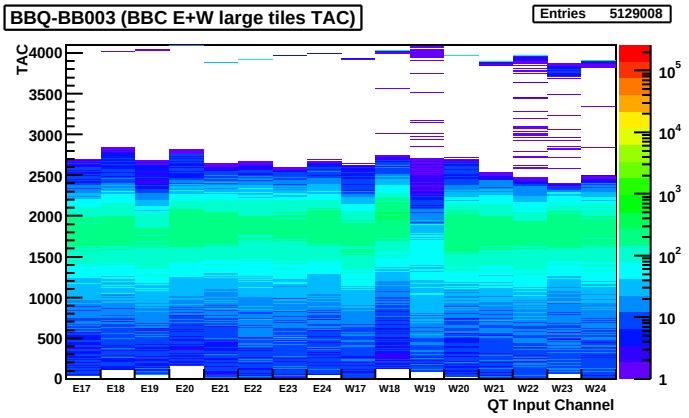

BBQ-BB001 (BBC east small tiles ADC)
Entries 5129008
ADC
QT Input Channel

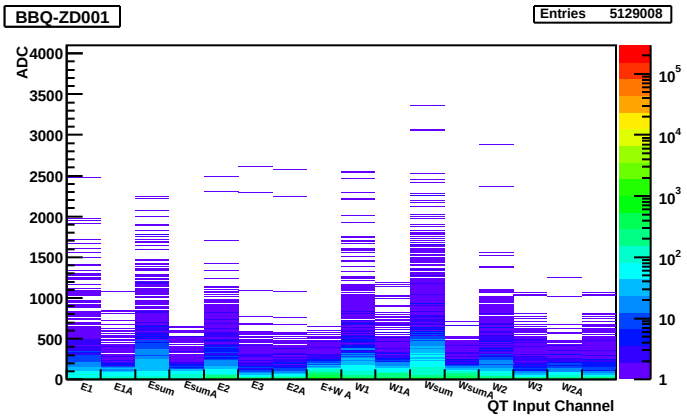

BBQ-BB001 (BBC east small tiles TAC)
Entries 5129008
TAC
QT Input Channel

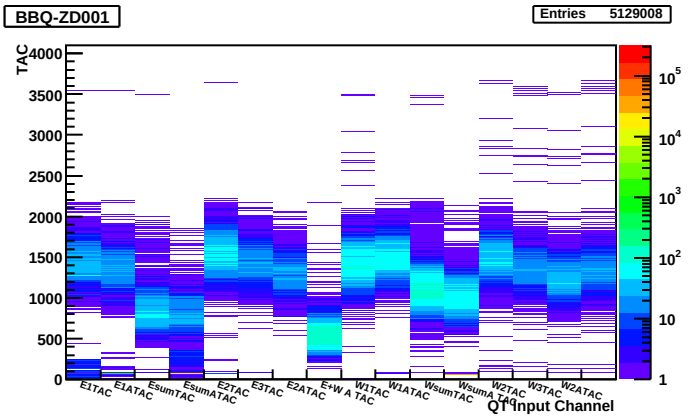

BBQ-BB002 (BBC west small tiles ADC)
Entries 5129008
ADC
QT Input Channel

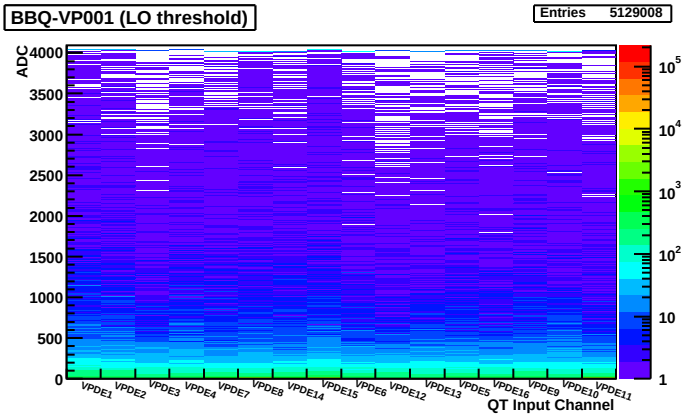

BBQ-BB002 (BBC west small tiles TAC)
Entries 5129008
TAC
QT Input Channel

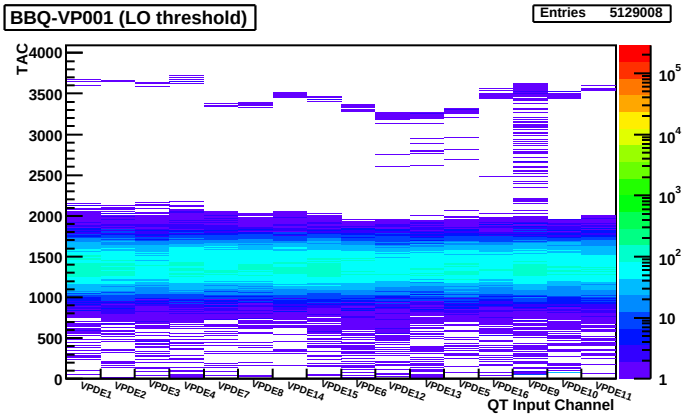

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 5129008
ADC
QT Input Channel

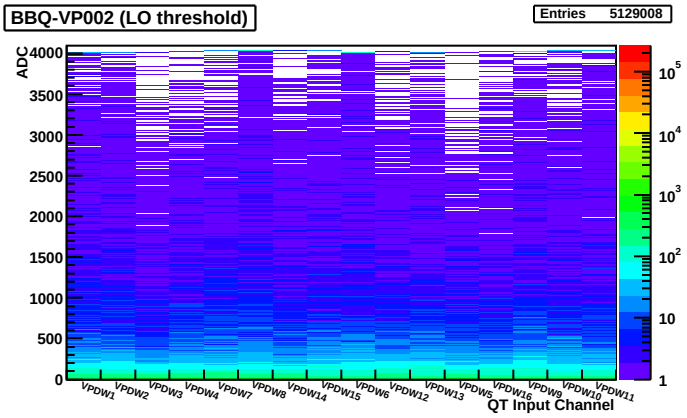

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 5129008
TAC
QT Input Channel

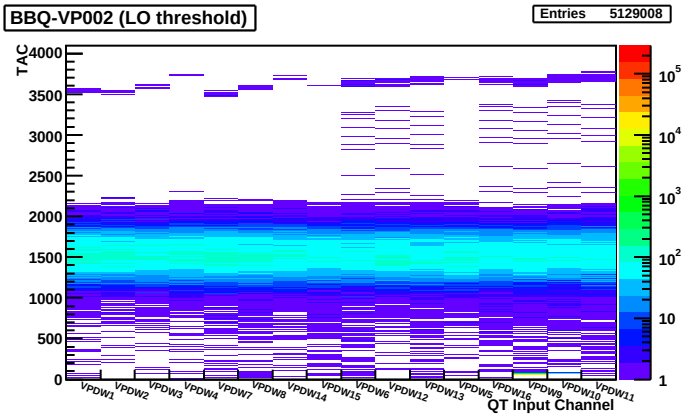

BBQ-ZD001
Entries 5129008
ADC
QT Input Channel

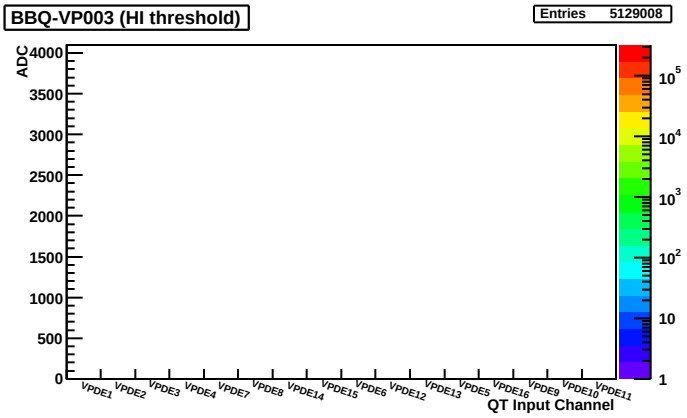

BBQ-ZD001
Entries 5129008
TAC
QT Input Channel

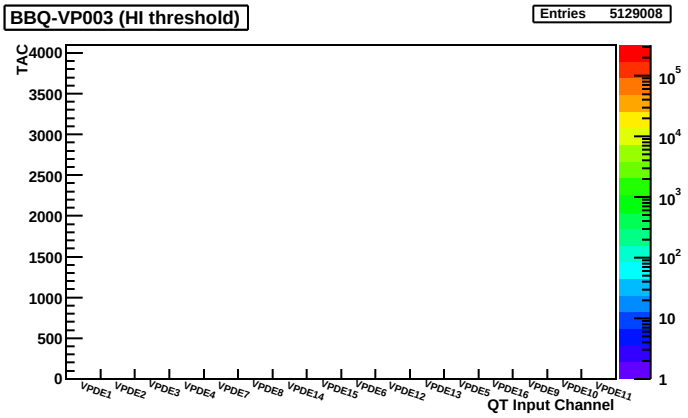

BBQ-VP001 (LO threshold)
Entries 5129008
ADC
QT Input Channel

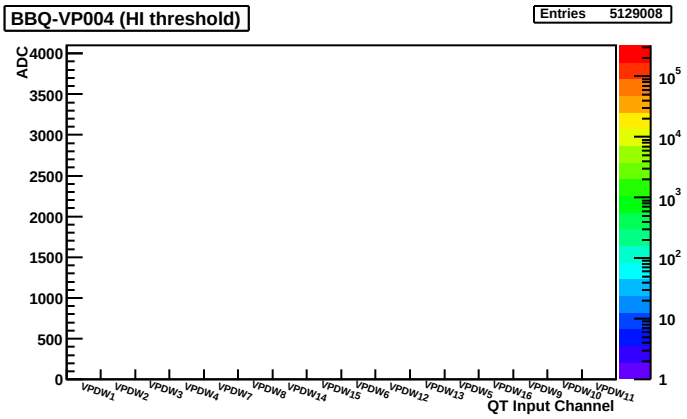

BBQ-VP001 (LO threshold)
Entries 5129008
TAC
QT Input Channel

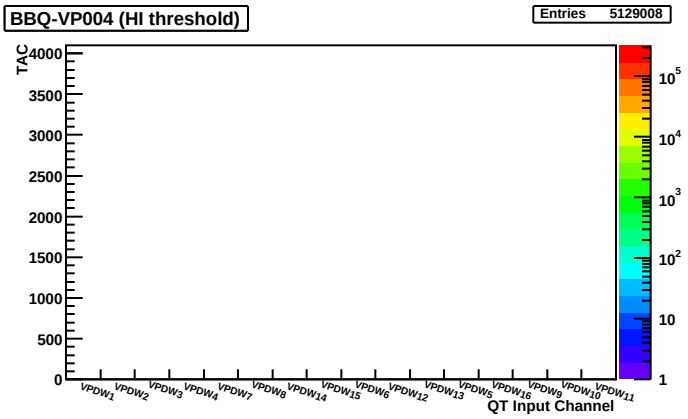

BBQ-VP002 (LO threshold)
Entries 5129008
ADC
QT Input Channel

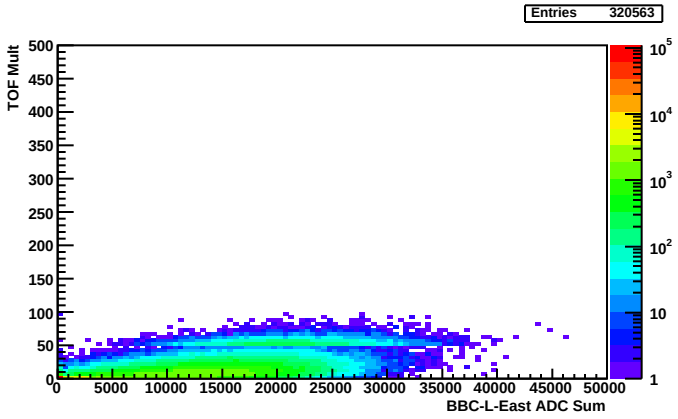

BBQ-VP002 (LO threshold)
Entries 5129008
TAC
QT Input Channel

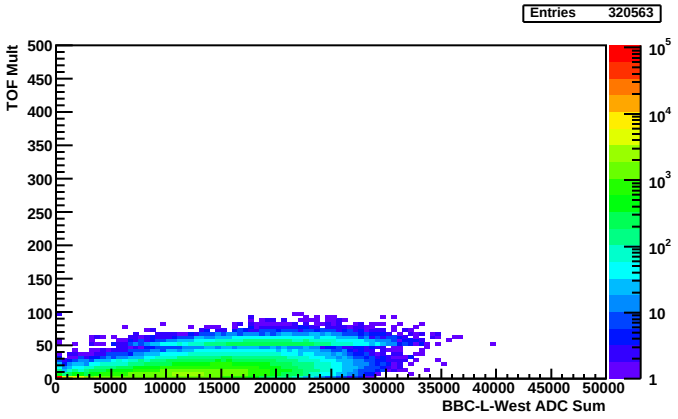

BBQ-VP003 (HI threshold)
Entries 5129008
ADC
QT Input Channel

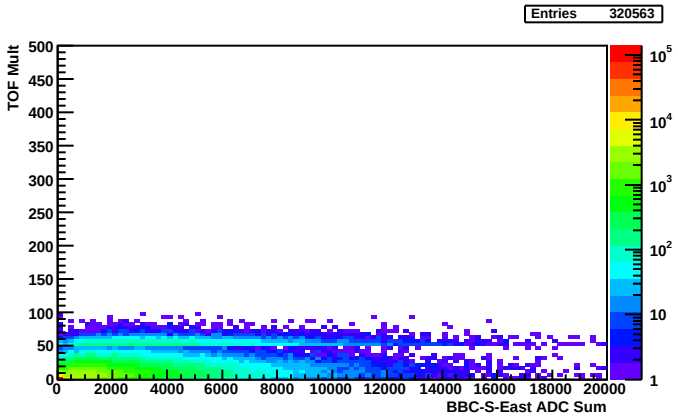

BBQ-VP003 (HI threshold)
Entries 5129008
TAC
QT Input Channel

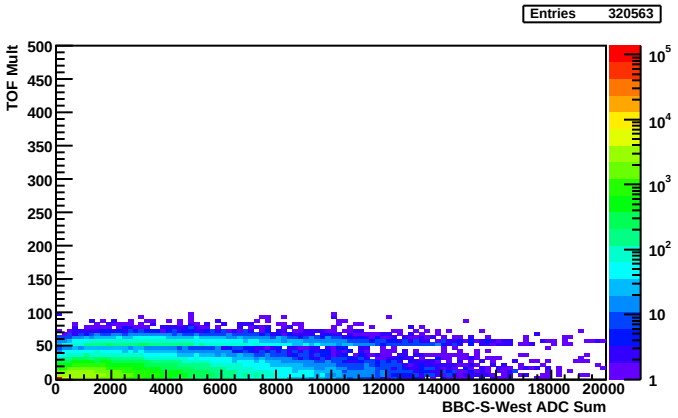

BBQ-VP004 (HI threshold)
Entries 5129008
ADC
QT Input Channel

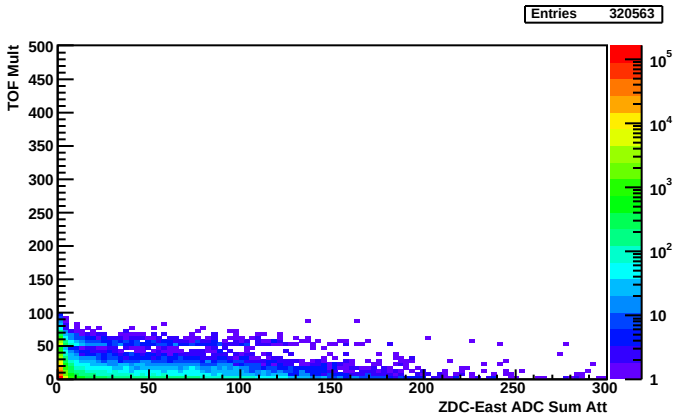

BBQ-VP004 (HI threshold)
Entries 5129008
TAC
QT Input Channel

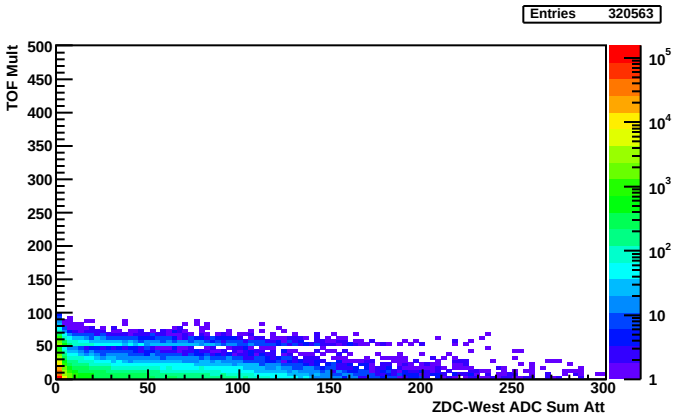

Entries 320563
TOF Mult
BBC-L-East ADC Sum

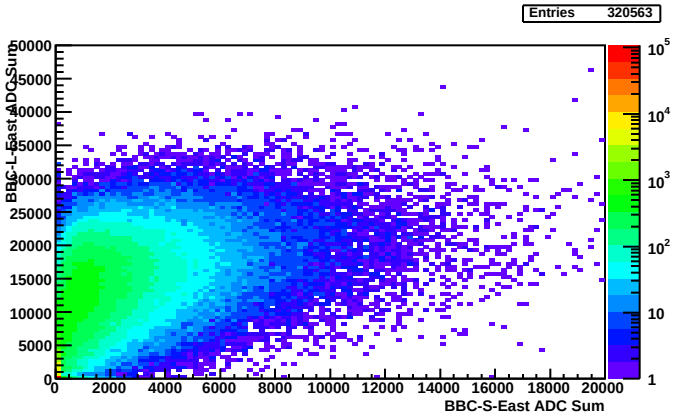

Entries 320563
TOF Mult
BBC-L-West ADC Sum

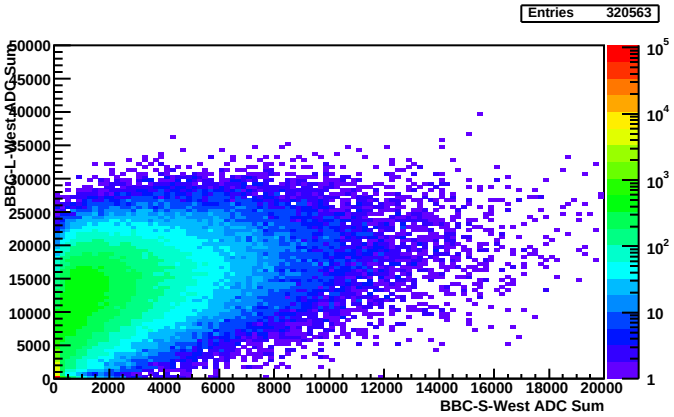

Entries 320563
TOF Mult
BBC-S-East ADC Sum

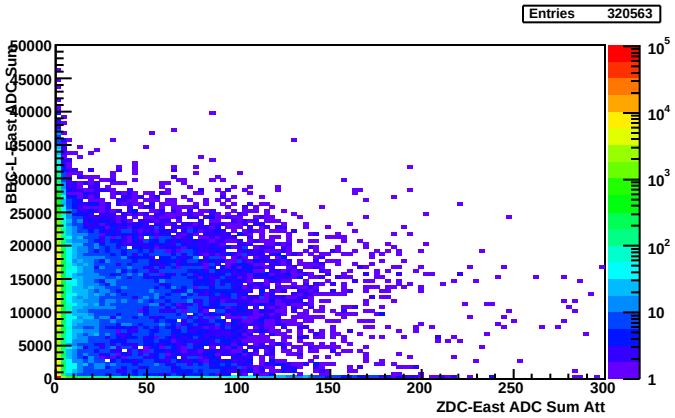

Entries 320563
TOF Mult
BBC-S-West ADC Sum

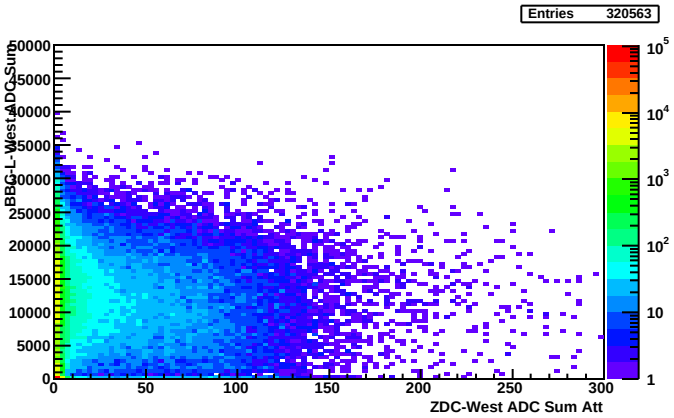

Entries 320563
TOF Mult
ZDC-East ADC Sum Att

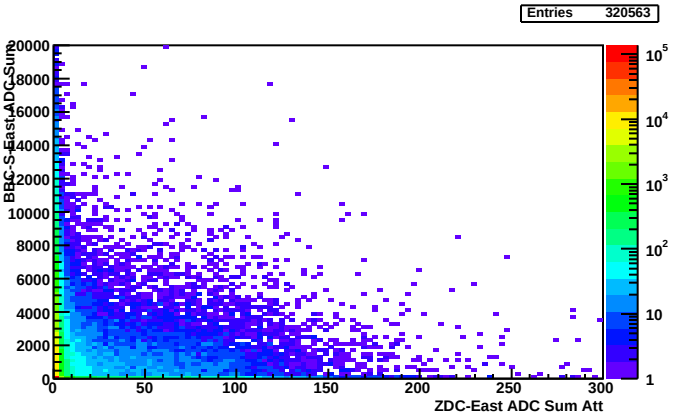

Entries 320563
TOF Mult
ZDC-West ADC Sum Att

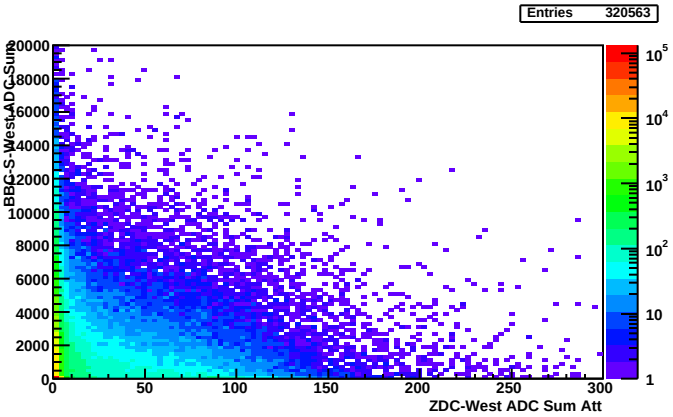

Entries 320563
BBC-L-East ADC Sum
BBC-S-East ADC Sum

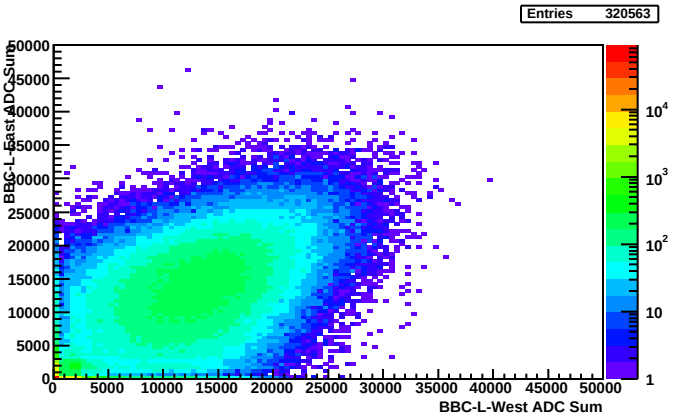

Entries 320563
BBC-L-West ADC Sum
BBC-S-West ADC Sum

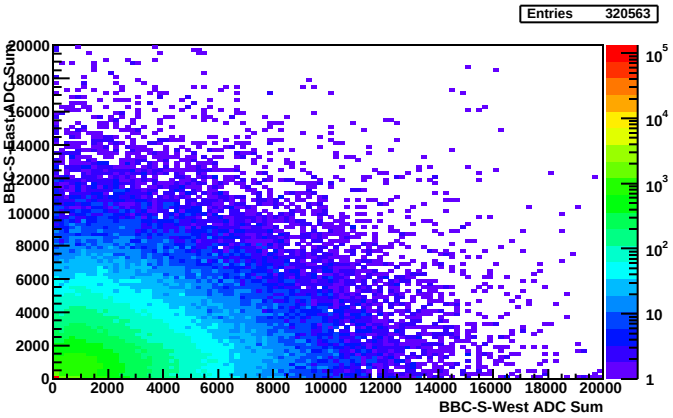

Entries 320563
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

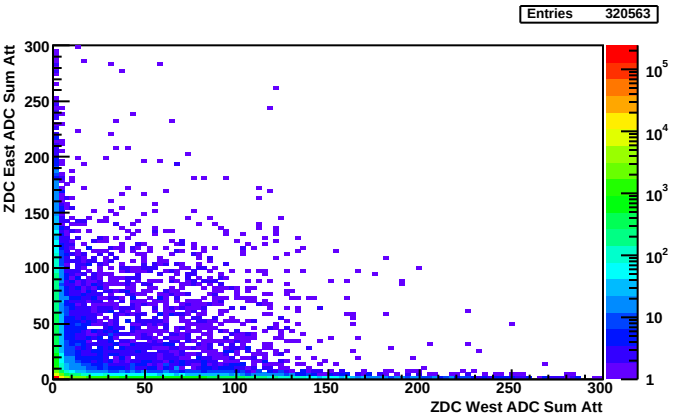

Entries 320563
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

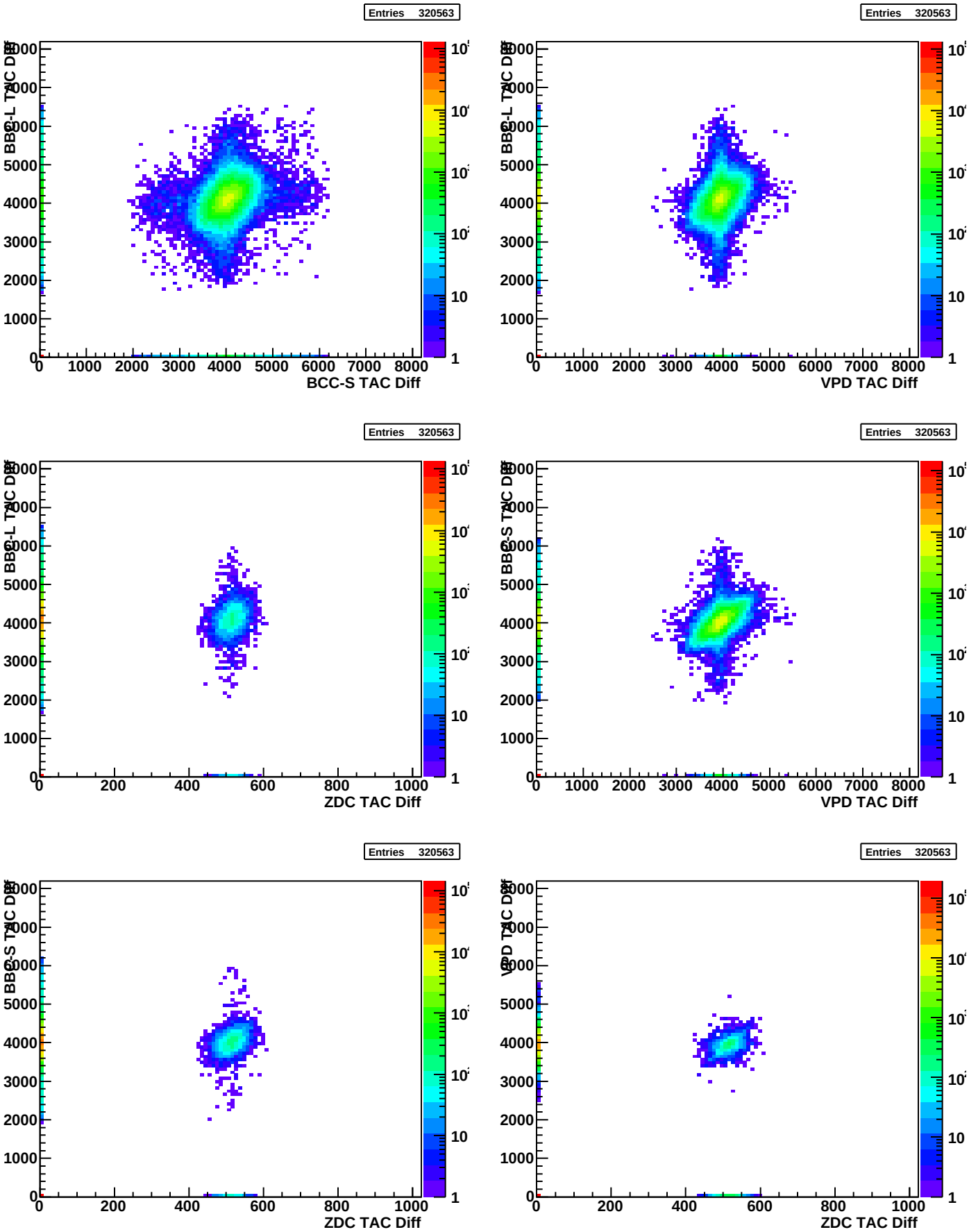

Entries 320563
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

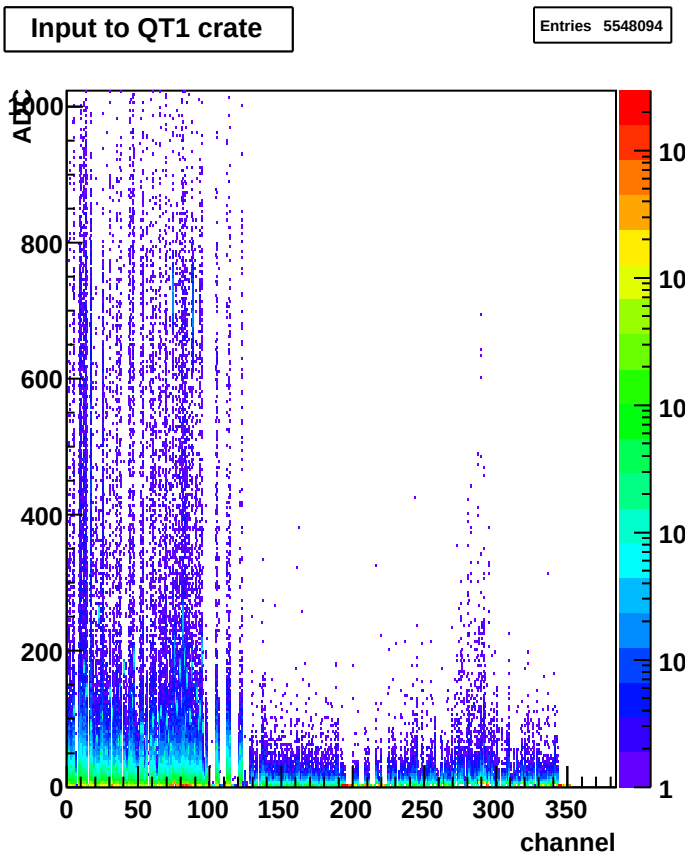

Entries 320563
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

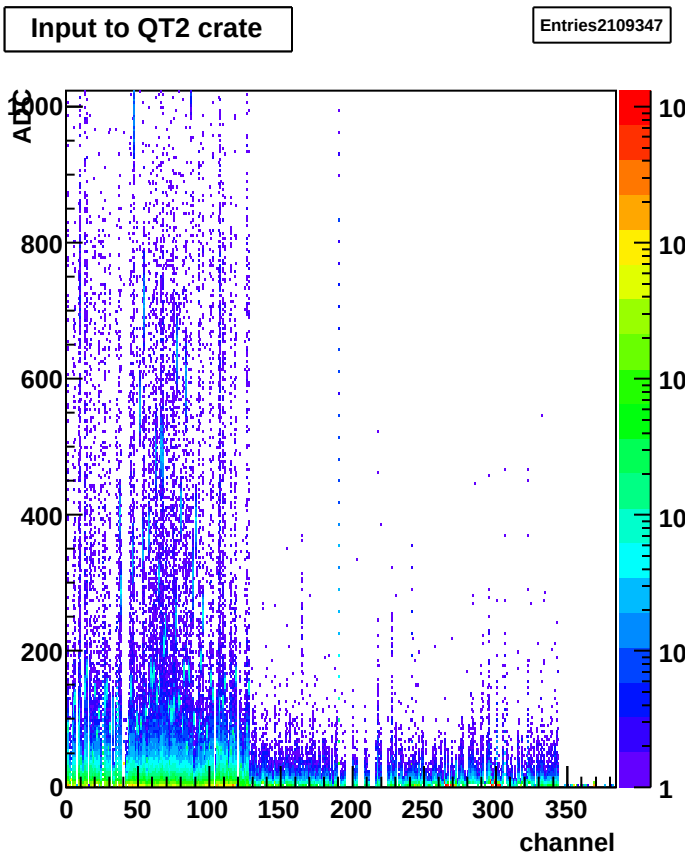

Entries 320563
BBC-L-East ADC Sum
BBC-L-West ADC Sum

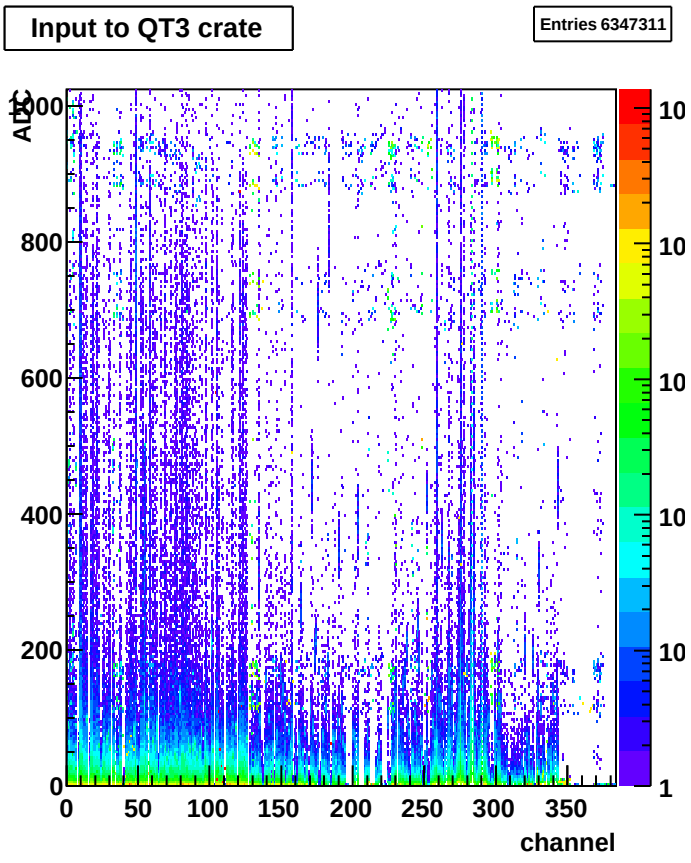

Entries 320563
BBC-S-East ADC Sum
BBC-S-West ADC Sum

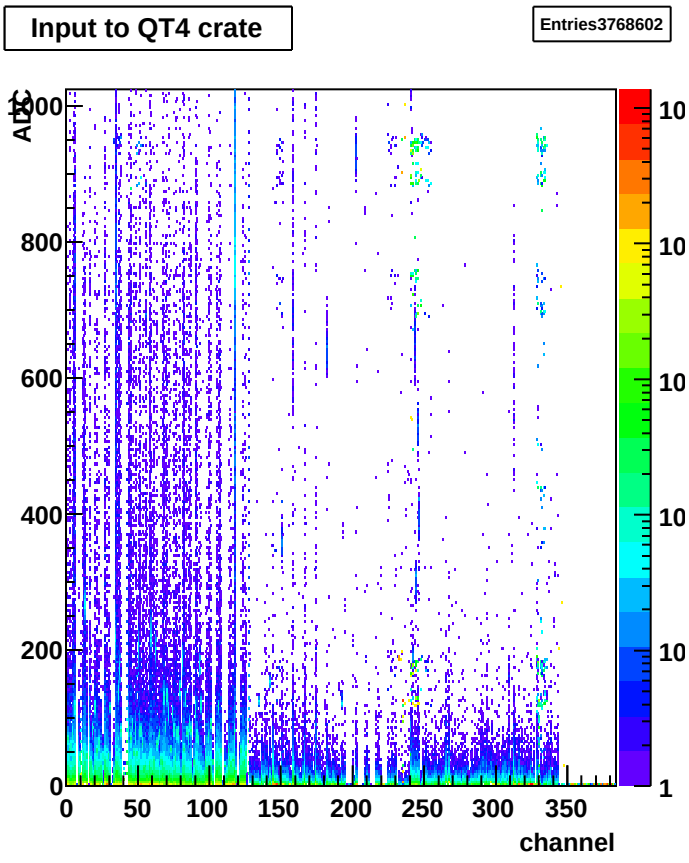

Entries 320563
ZDC East ADC Sum Att
ZDC West ADC Sum Att

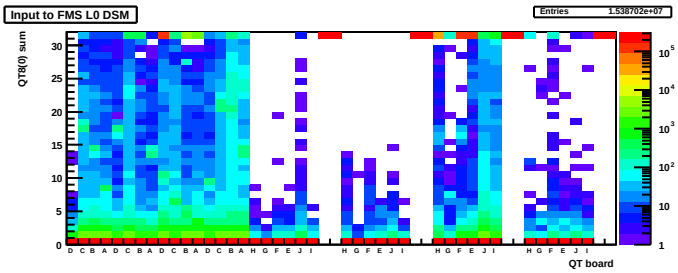

Entries 320563
BBC-L TAC Diff
BCC-S TAC Diff
Entries 320563
BBC-L TAC Diff
VPD TAC Diff
Entries 320563
BBC-L TAC Diff
ZDC TAC Diff
Entries 320563
BBC-S TAC Diff
VPD TAC Diff
Entries 320563
BBC-S TAC Diff
ZDC TAC Diff
Entries 320563
VPD TAC Diff
ZDC TAC Diff

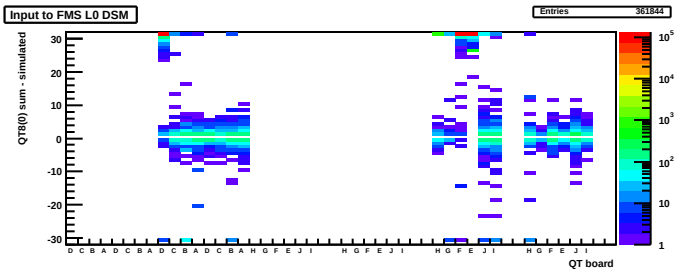

Input to QT1 crate
Entries 5548094
ADC
channel

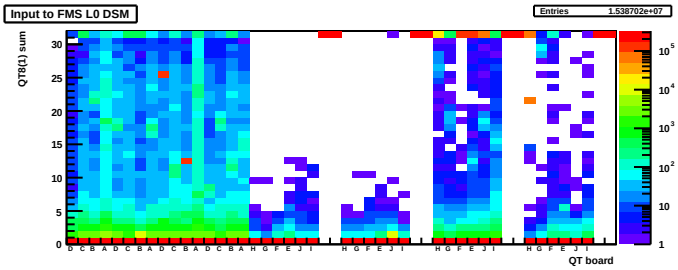

Input to QT2 crate
Entries2109347
ADC
channel

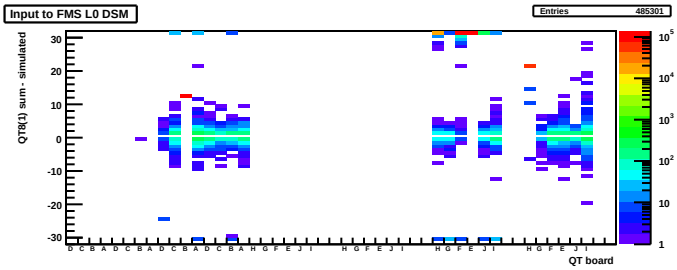

Input to QT3 crate
Entries 6347311
ADC
channel

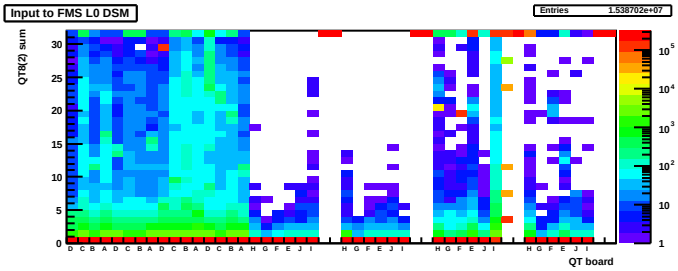

Input to QT4 crate
Entries3768602
ADC
channel

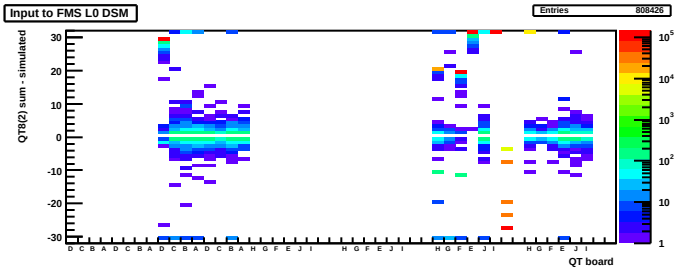

Input to FMS L0 DSM
Entries 1.538702e+07
QT8(0) sum
QT board

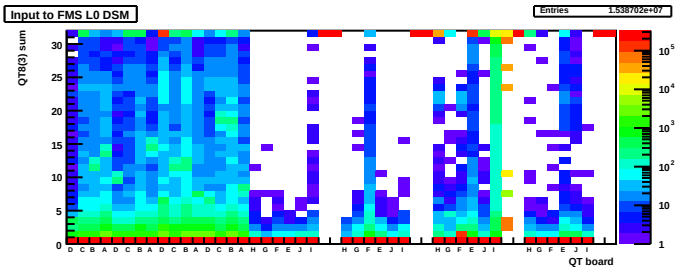

Input to FMS L0 DSM
Entries 361844
QT8(0) sum - simulated
QT board

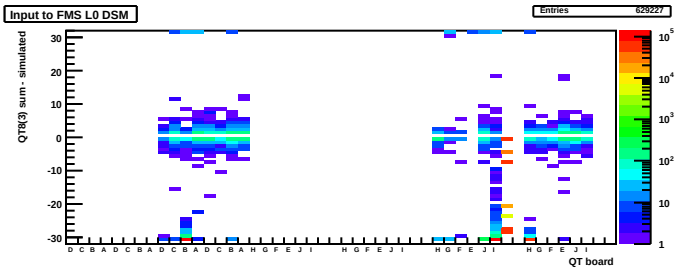

Input to FMS L0 DSM
Entries 1.538702e+07
QT8(1) sum
QT board

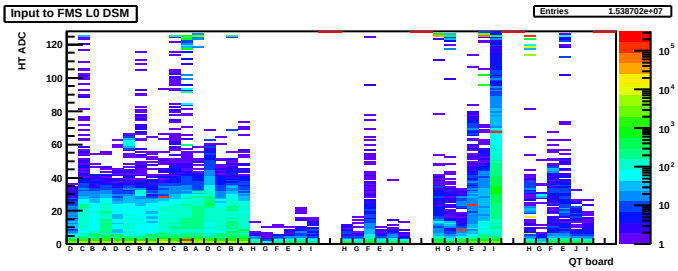

Input to FMS L0 DSM
Entries 485301
QT8(1) sum - simulated
QT board

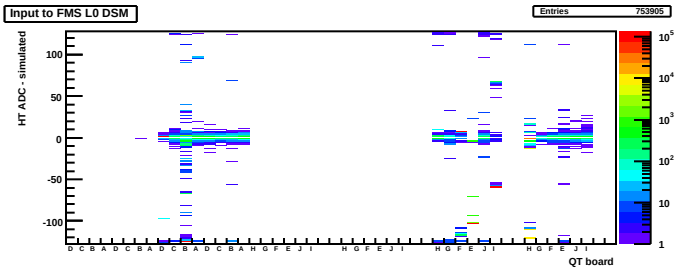

Input to FMS L0 DSM
Entries 1.538702e+07
QT8(2) sum
QT board

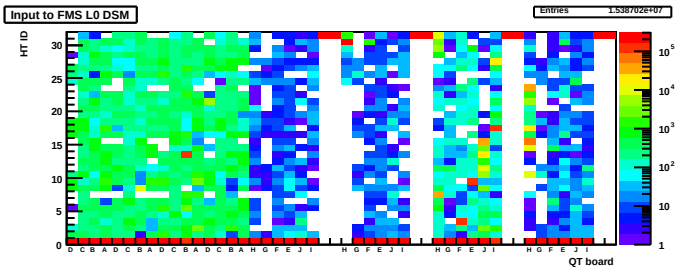

Input to FMS L0 DSM
Entries 808426
QT8(2) sum - simulated
QT board

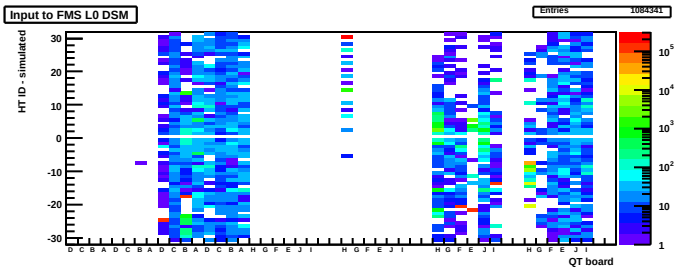

Input to FMS L0 DSM
Entries 1.538702e+07
QT8(3) sum
QT board

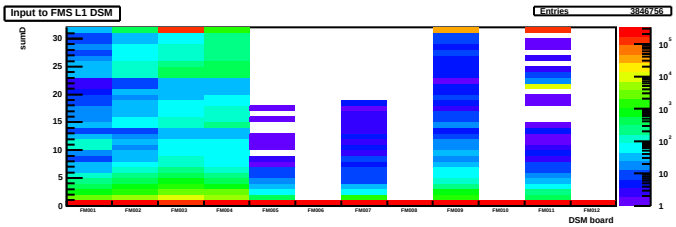

Input to FMS L0 DSM
Entries 629227
QT8(3) sum - simulated
QT board

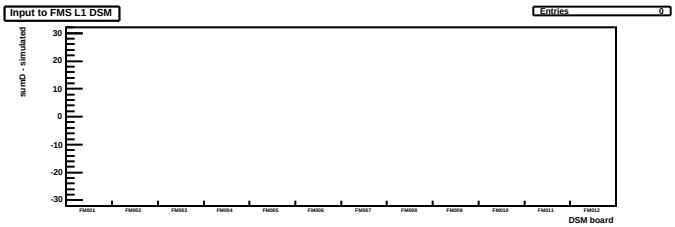

Input to FMS L0 DSM
Entries 1.538702e+07
HT ADC
QT board

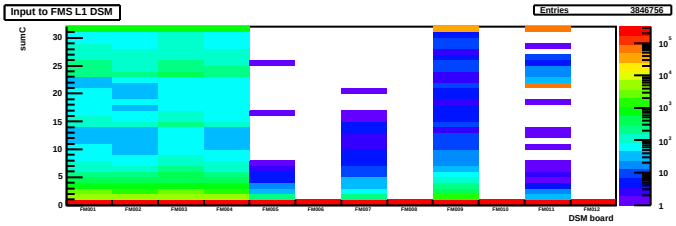

Input to FMS L0 DSM
Entries 753905
HT ADC - simulated
QT board

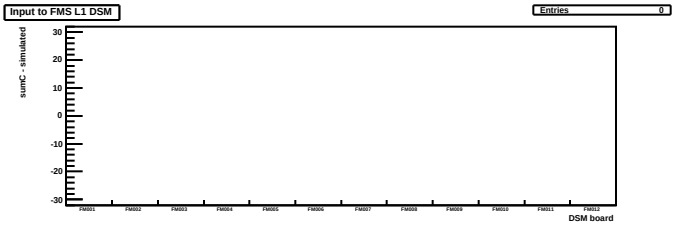

Input to FMS L0 DSM
Entries 1.538702e+07
HT ID
QT board

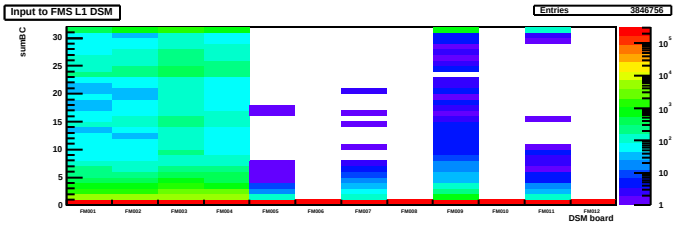

Input to FMS L0 DSM
Entries 1084341
HT ID - simulated
QT board

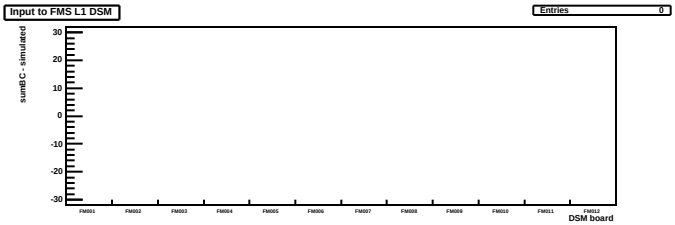

Input to FMS L1 DSM
Entries 3846756
sumD
DSM board

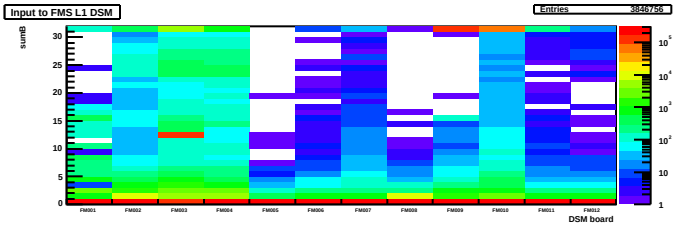

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

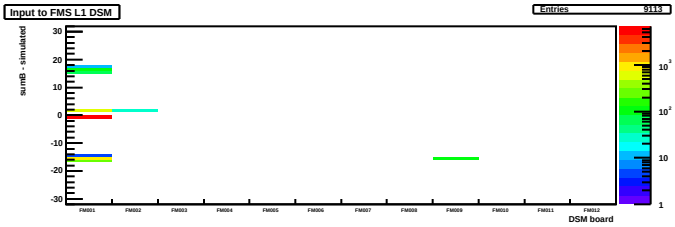

Input to FMS L1 DSM
Entries 3846756
sumC
DSM board

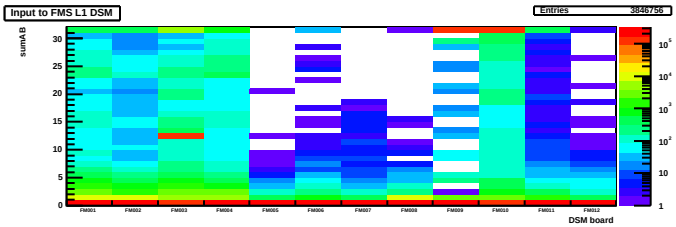

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

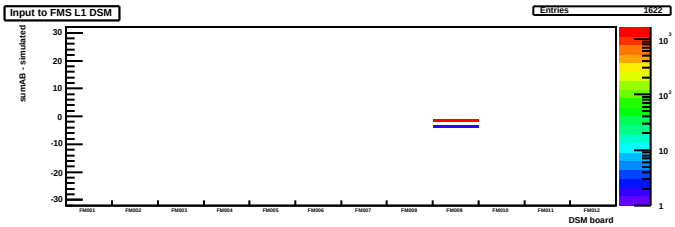

Input to FMS L1 DSM
Entries 3846756
sumBC
DSM board

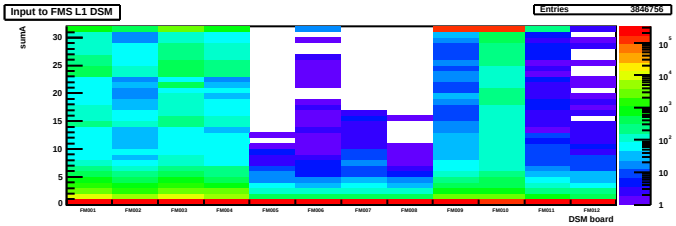

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

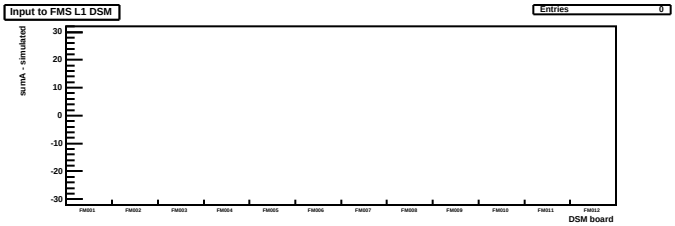

Input to FMS L1 DSM
Entries 3846756
sumB
DSM board

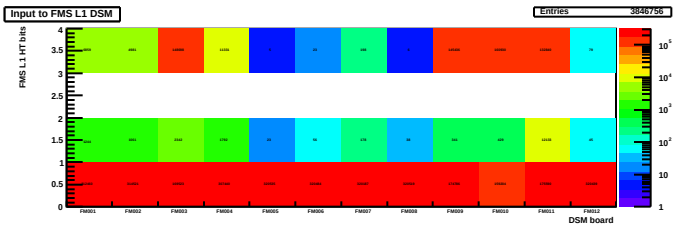

Input to FMS L1 DSM
Entries 9113
sumB - simulated
DSM board

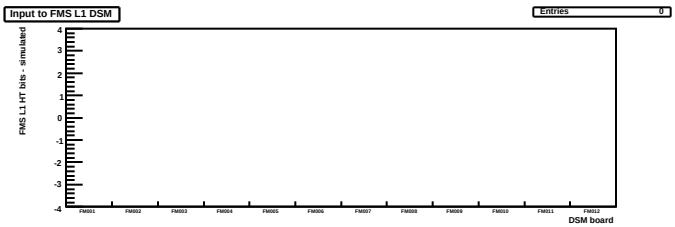

Input to FMS L1 DSM
Entries 3846756
sumAB
DSM board

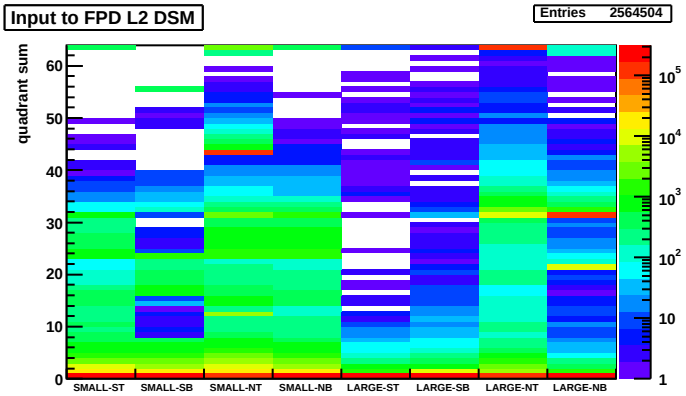

Input to FMS L1 DSM
Entries 1622
sumAB - simulated
DSM board

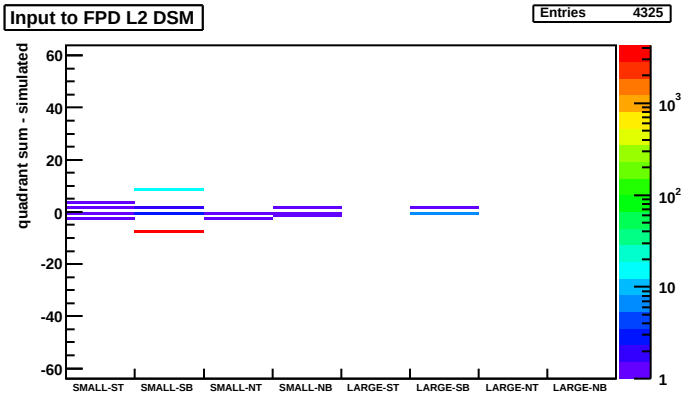

Input to FMS L1 DSM
Entries 3846756
sumA
DSM board

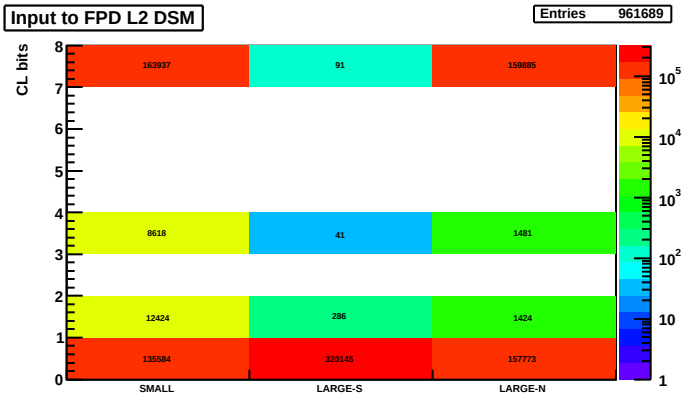

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

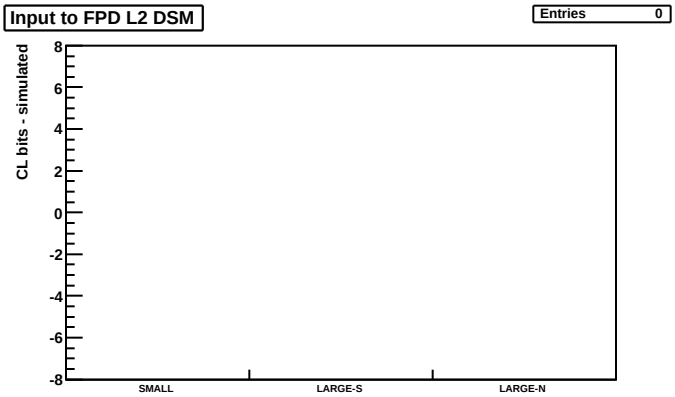

Input to FMS L1 DSM
Entries 3846756
FMS L1 HT bits
DSM board

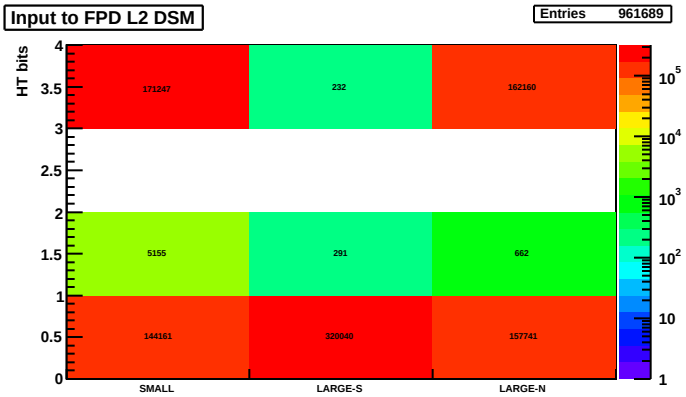

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

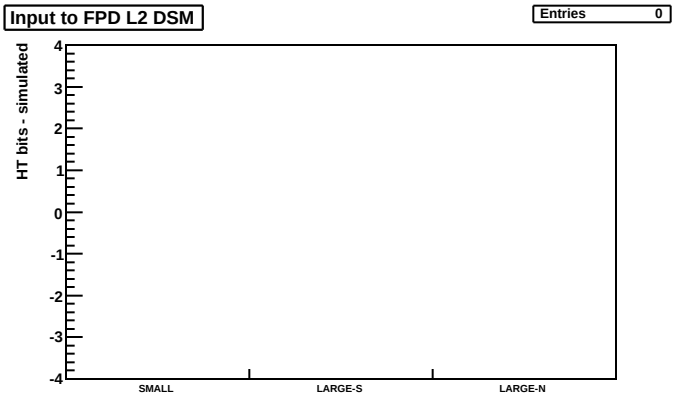

Input to FPD L2 DSM
Entries 2564504
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

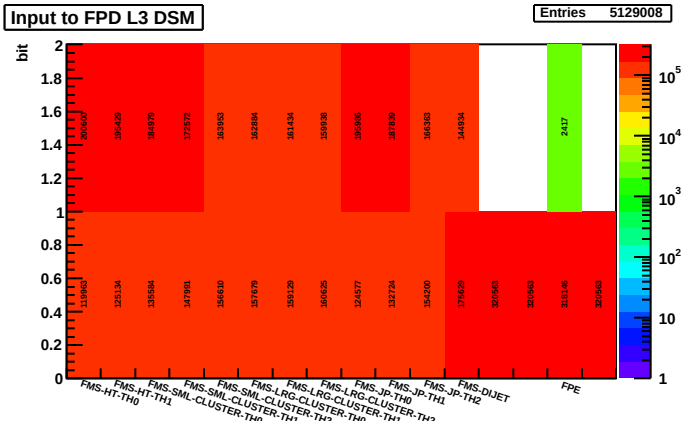

Input to FPD L2 DSM
Entries 4325
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

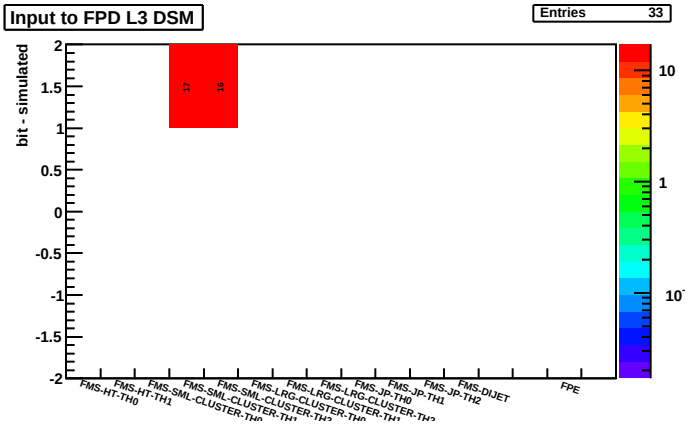

Input to FPD L2 DSM
Entries 961689
CL bits
163937
91
159885
8618
41
1481
12424
286
1424
135584
320145
157773
SMALL
LARGE-S
LARGE-N

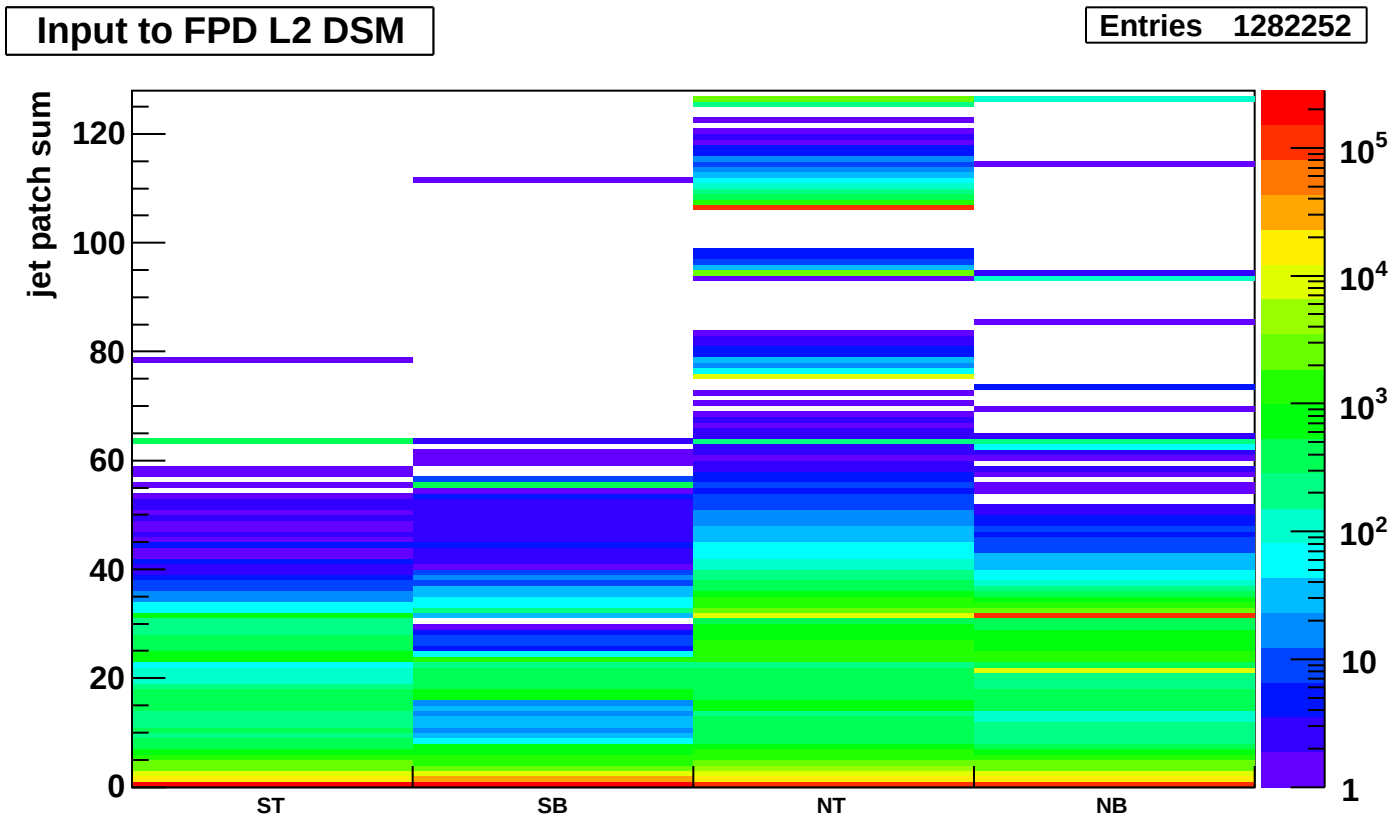

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

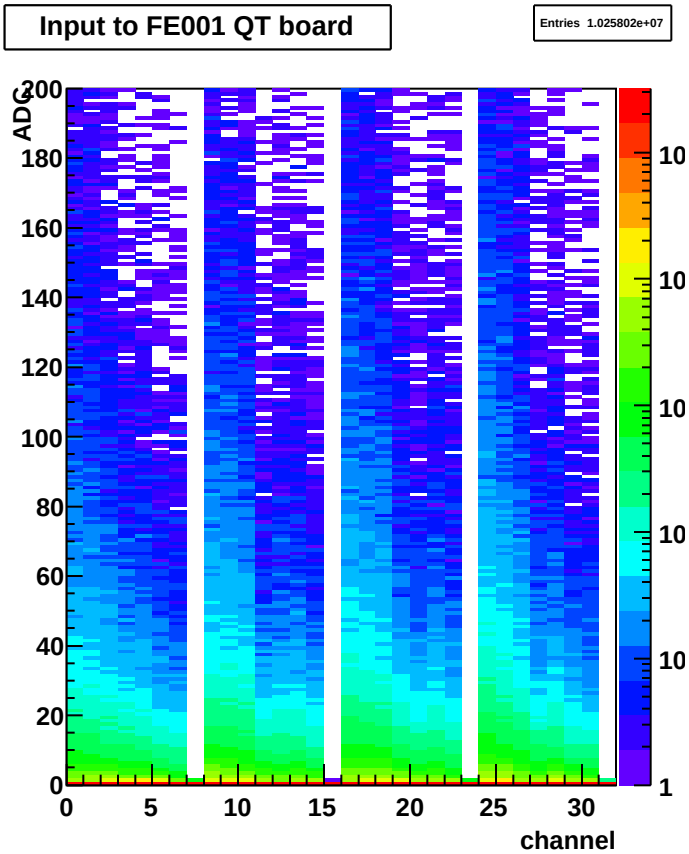

Input to FPD L2 DSM
Entries 961689
HT bits
171247
232
162160
5155
291
662
144161
320040
157741
SMALL
LARGE-S
LARGE-N

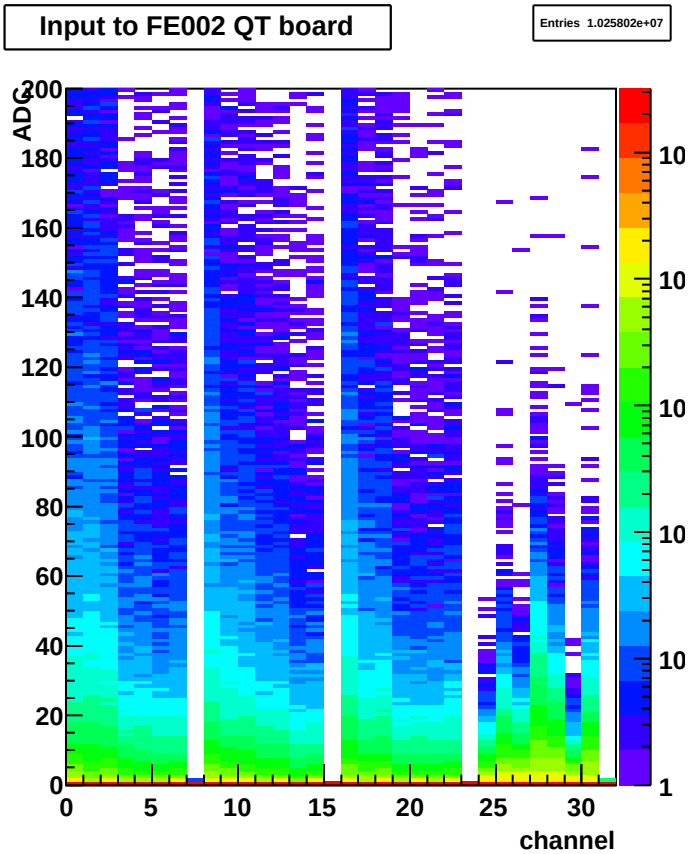

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

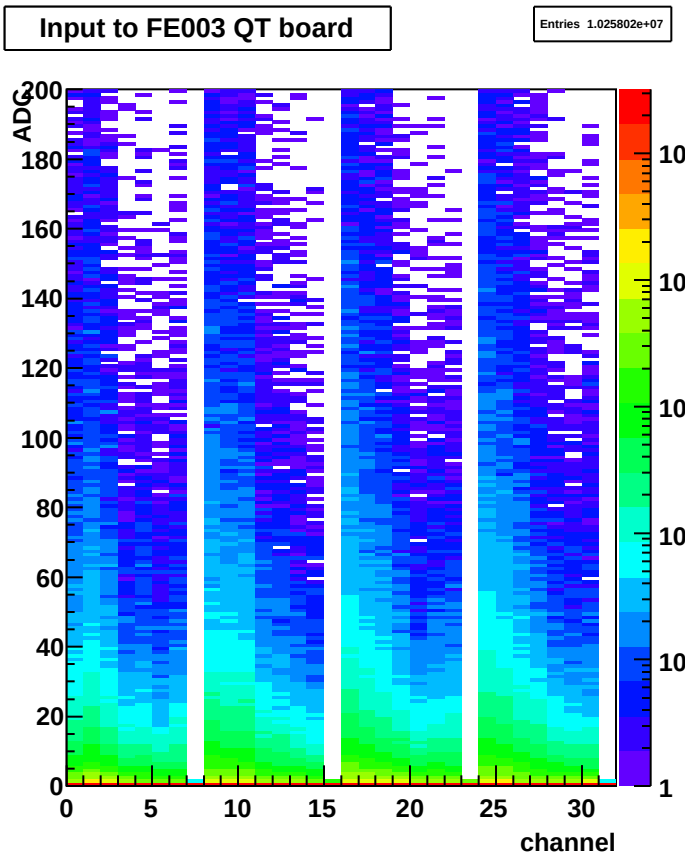

Input to FPD L3 DSM
Entries 5129008
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

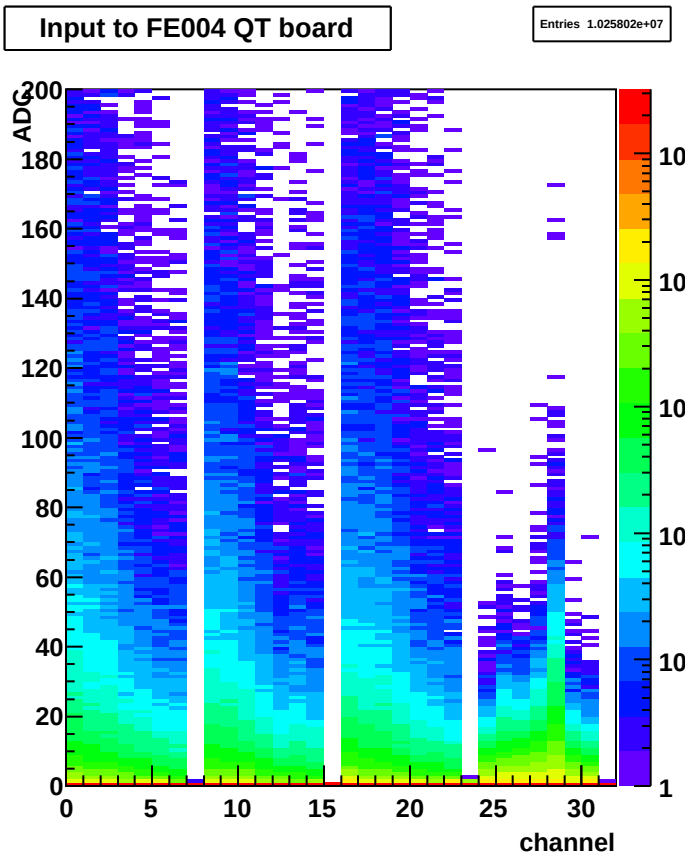

Input to FPD L3 DSM
Entries 33
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

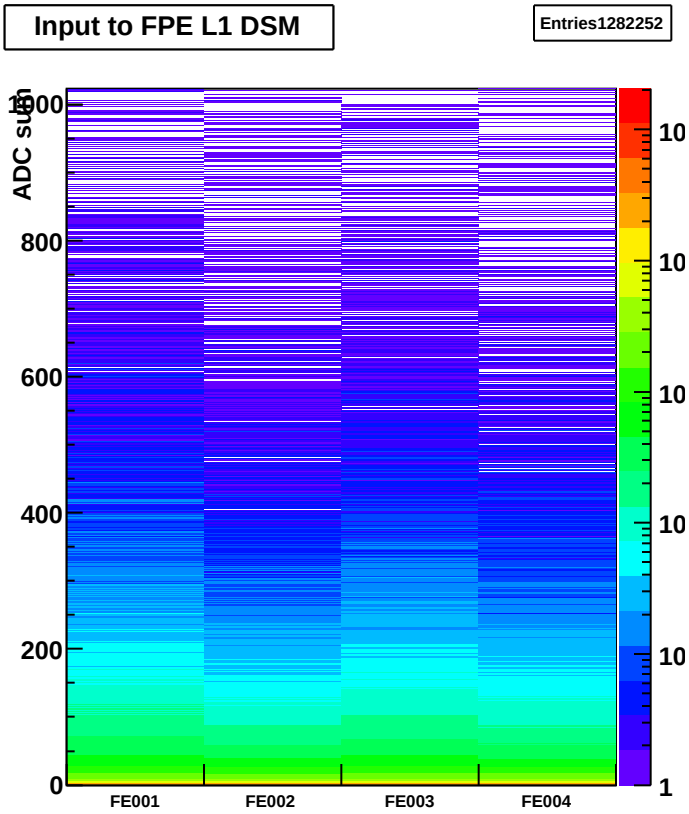

Input to FPD L2 DSM
Entries 1282252
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

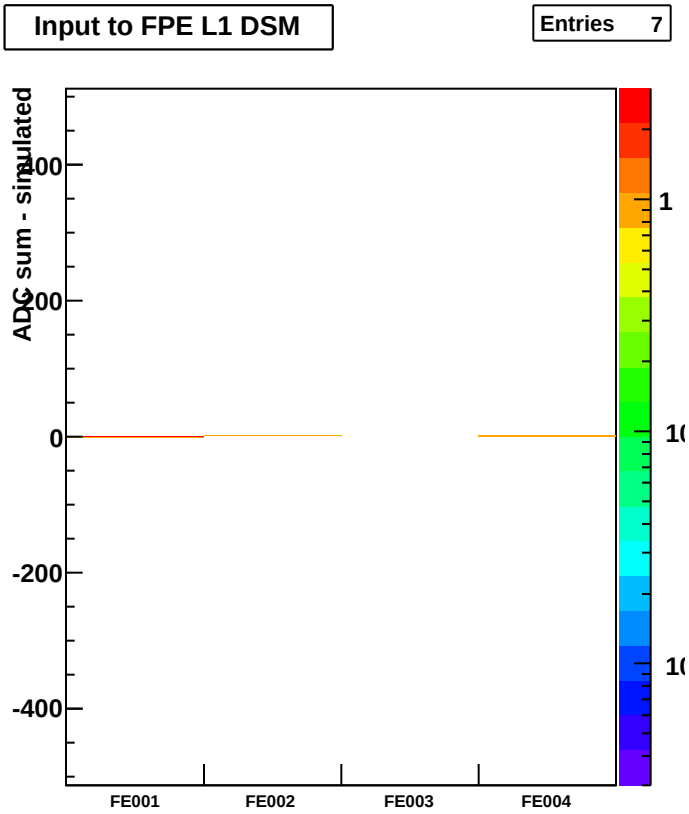

Input to FE001 QT board
Entries 1.025802e+07
ADC
channel

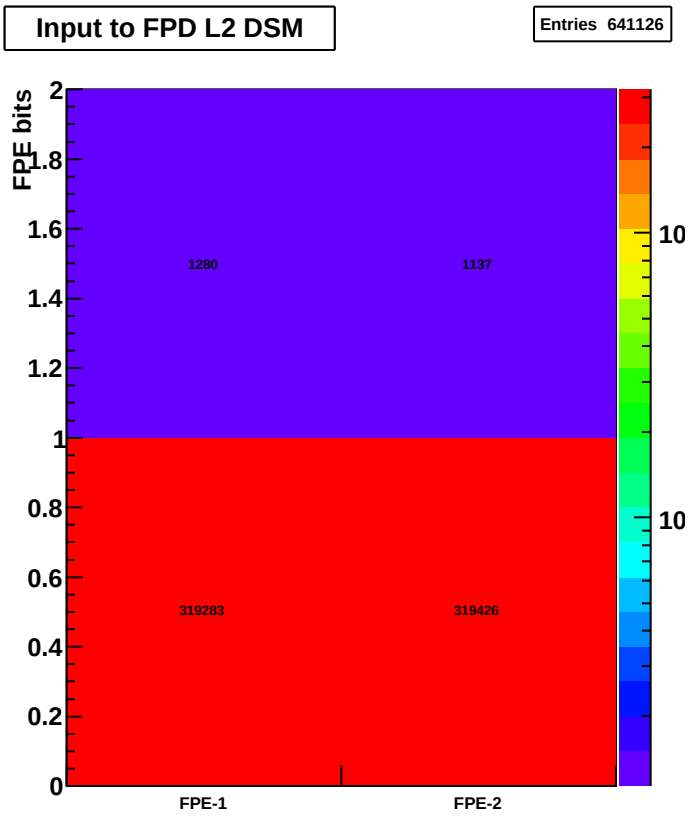

Input to FE002 QT board
Entries 1.025802e+07
ADC
channel

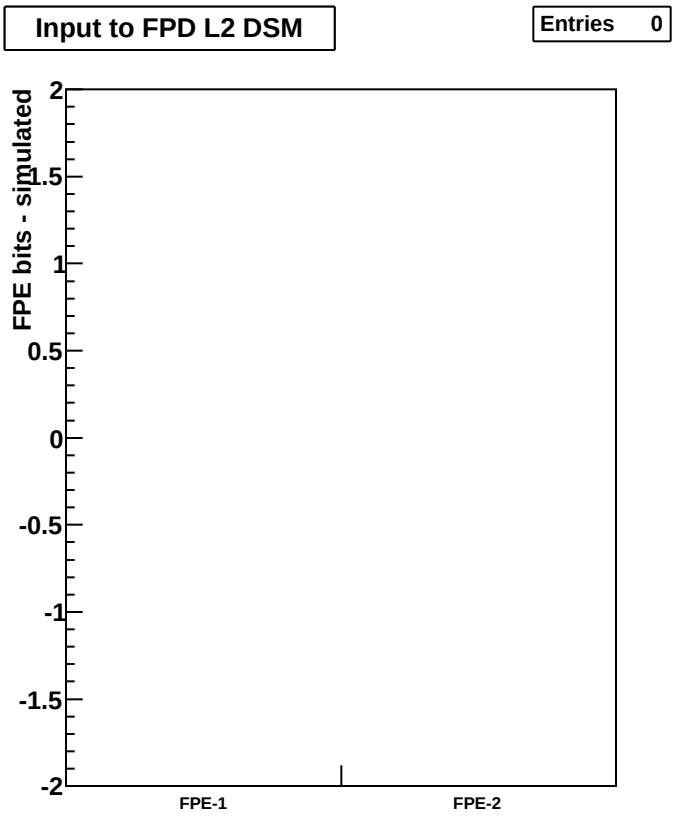

Input to FE003 QT board
Entries 1.025802e+07
ADC
channel


Input to FE004 QT board
Entries 1.025802e+07
ADC
channel


Input to FPE L1 DSM
Entries1282252
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 7
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
1
10
10


Input to FPD L2 DSM
Entries 641126
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1280
1137
319283
319426
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