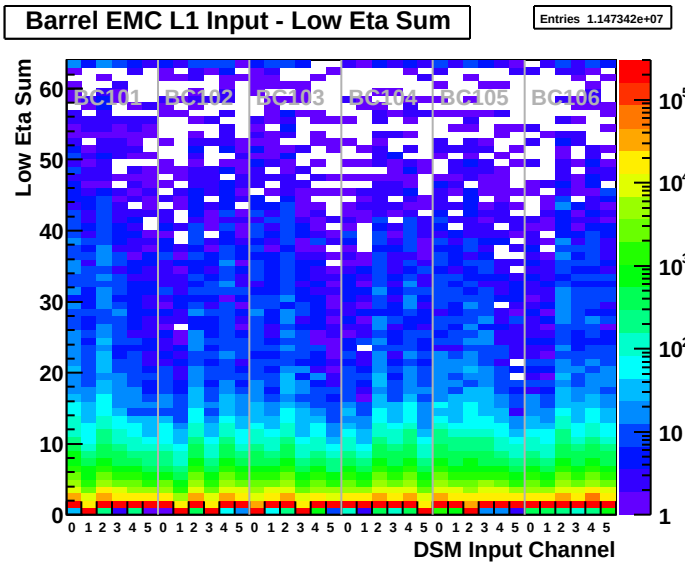
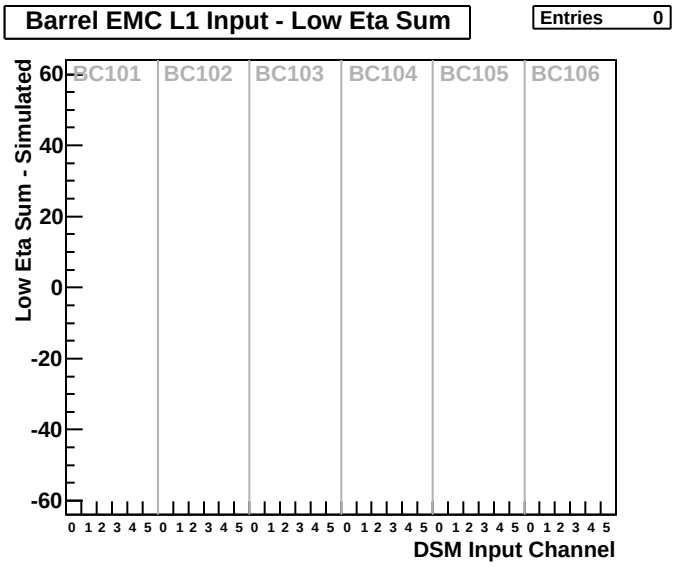
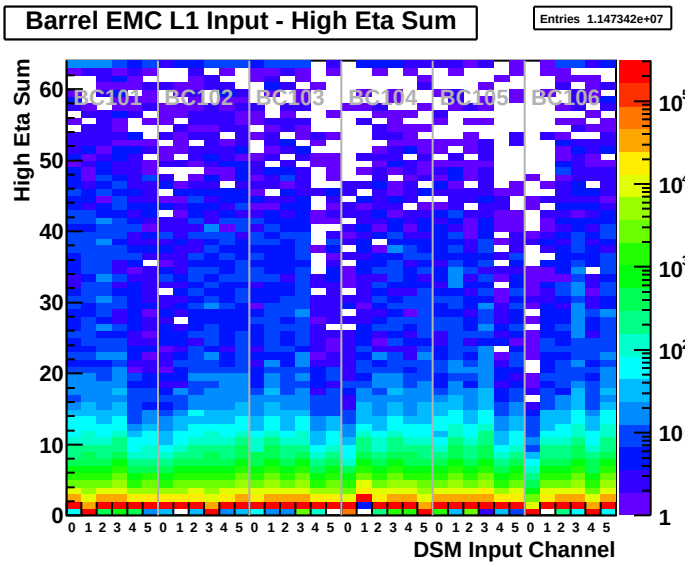
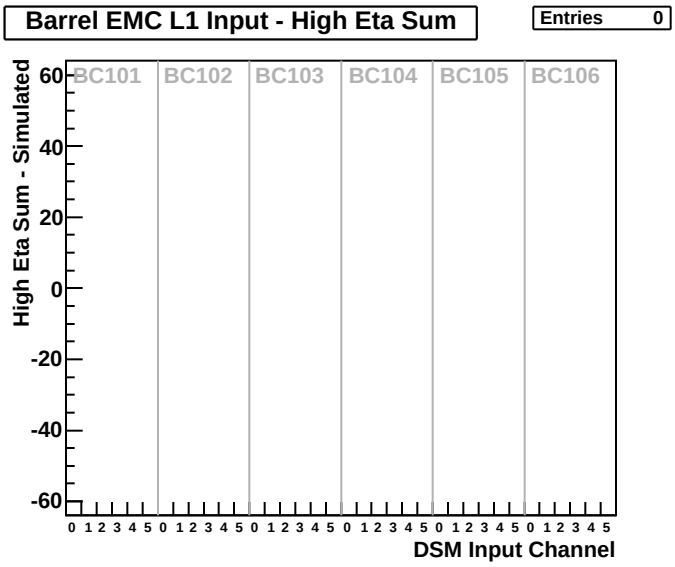
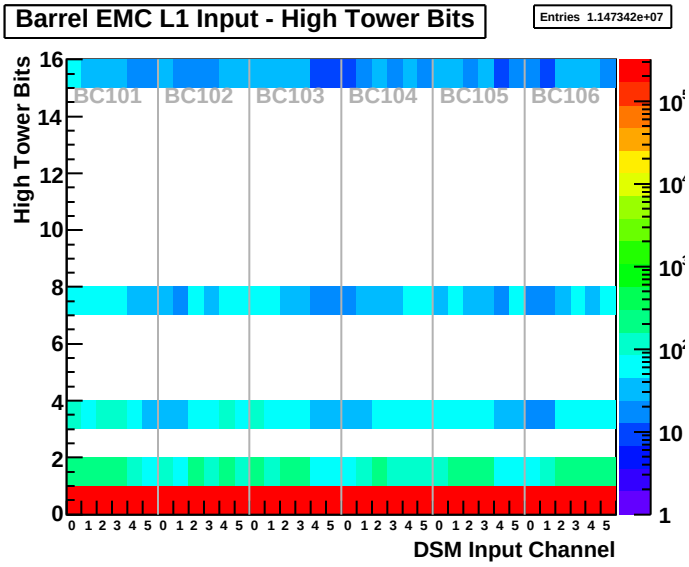
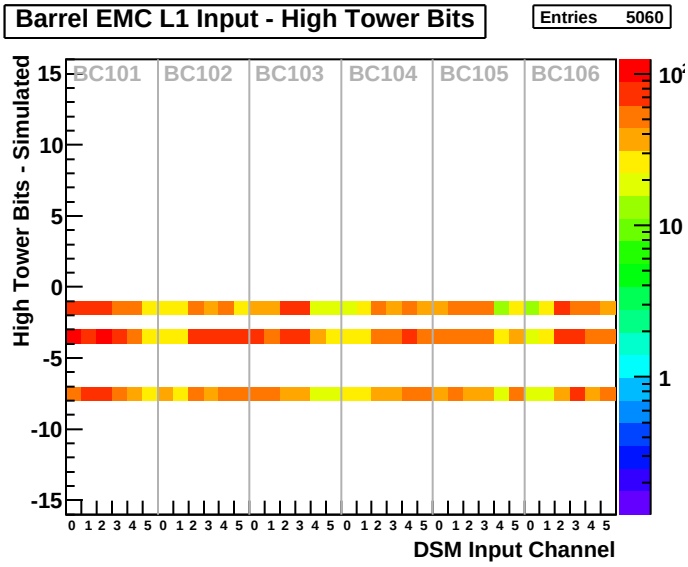

Barrel EMC L1 Input - Low Eta Sum
Entries 1.147342e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

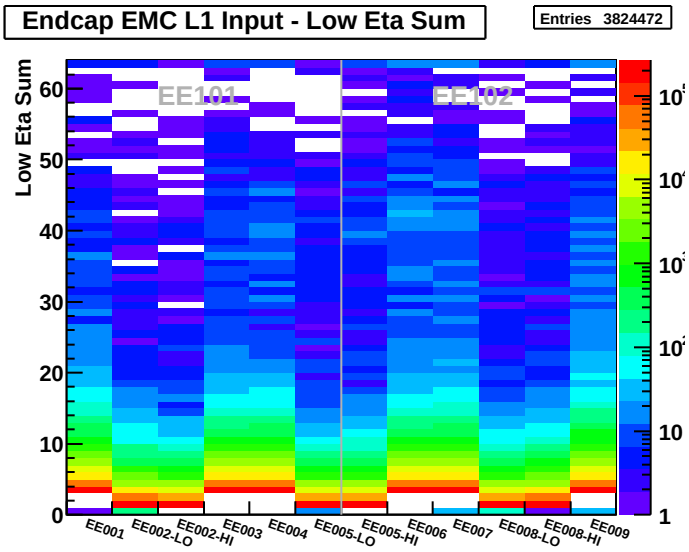

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

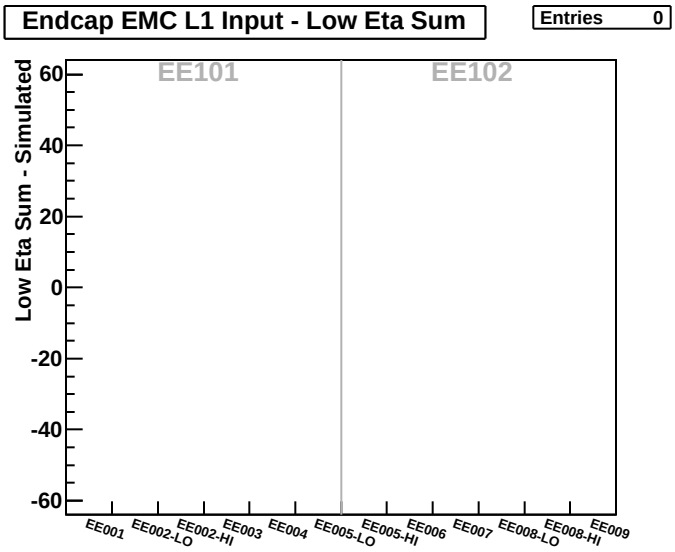

Barrel EMC L1 Input - High Eta Sum
Entries 1.147342e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

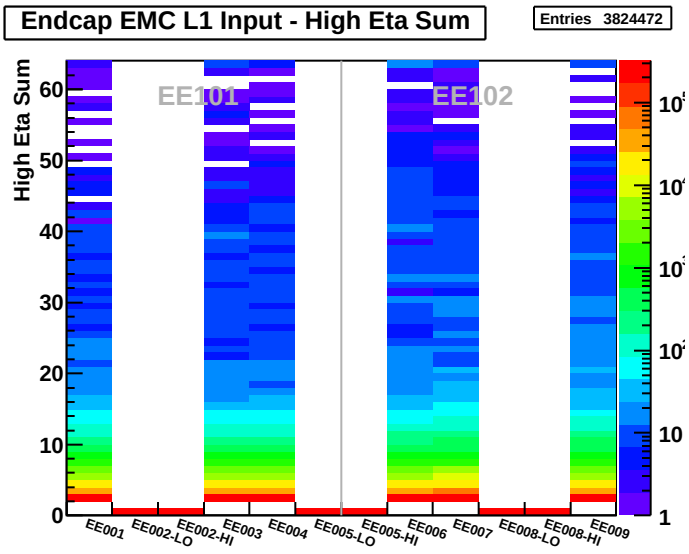

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

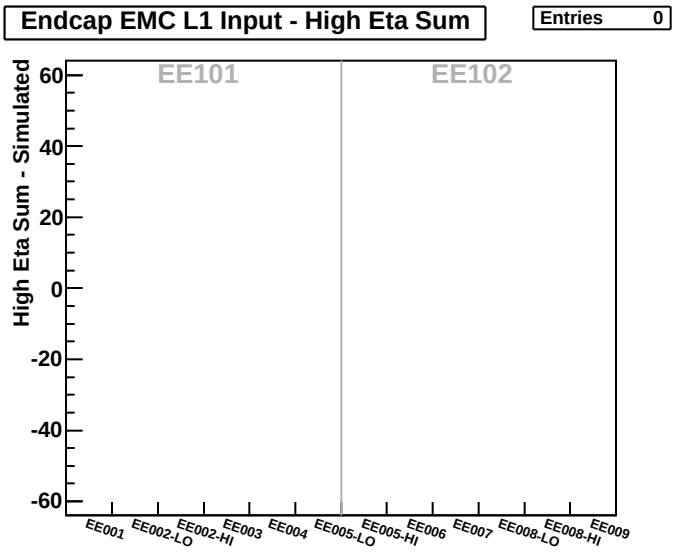

Barrel EMC L1 Input - High Tower Bits
Entries 1.147342e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

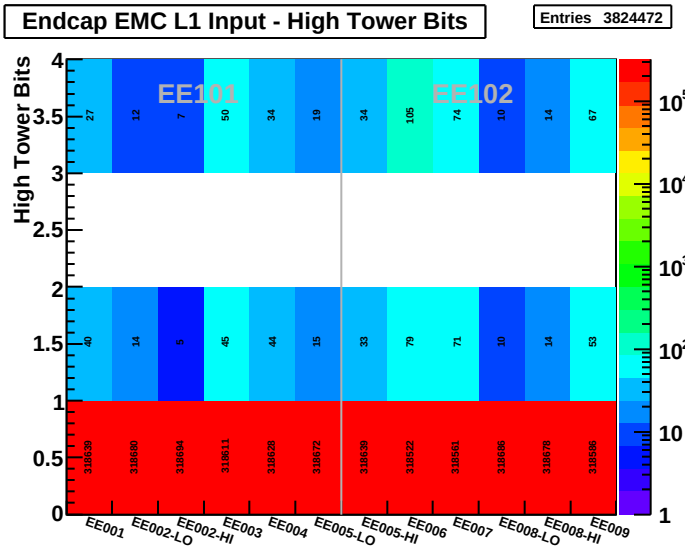

Barrel EMC L1 Input - High Tower Bits
Entries 5060
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

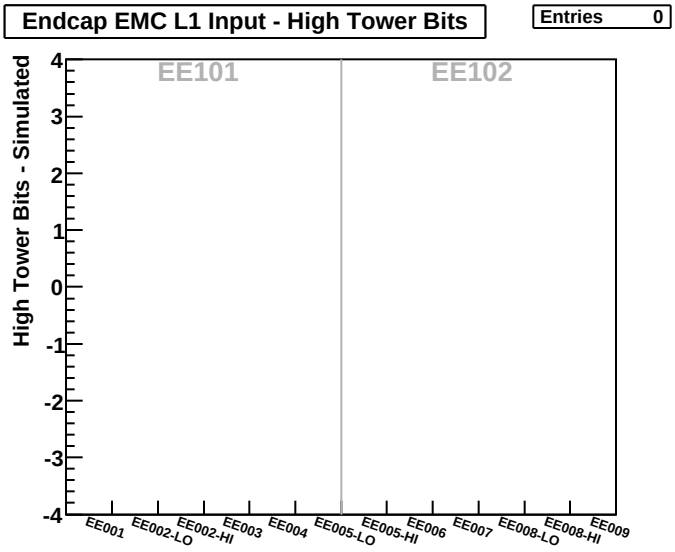

Endcap EMC L1 Input - Low Eta Sum
Entries 3824472
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

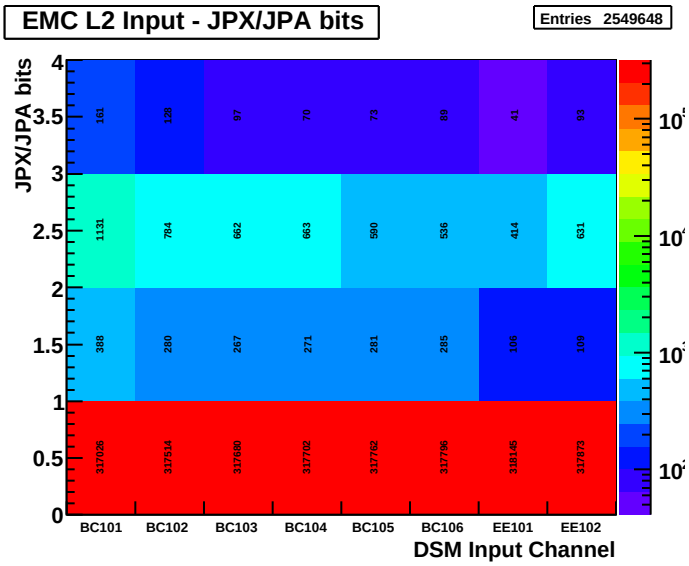

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

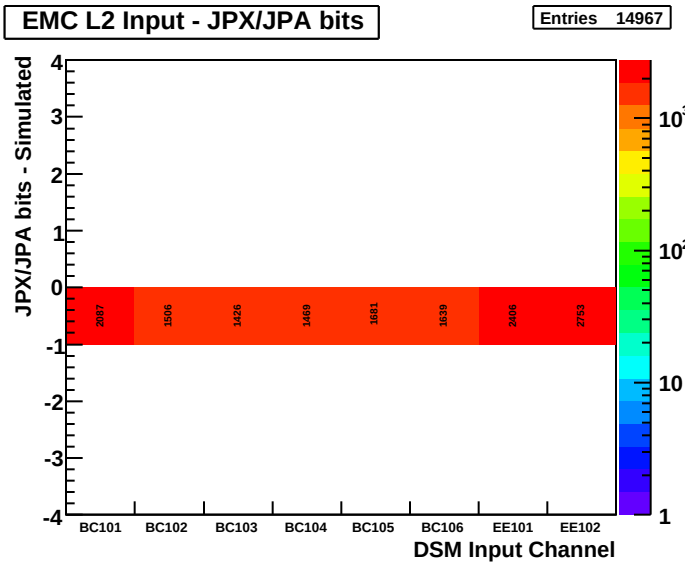

Endcap EMC L1 Input - High Eta Sum
Entries 3824472
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

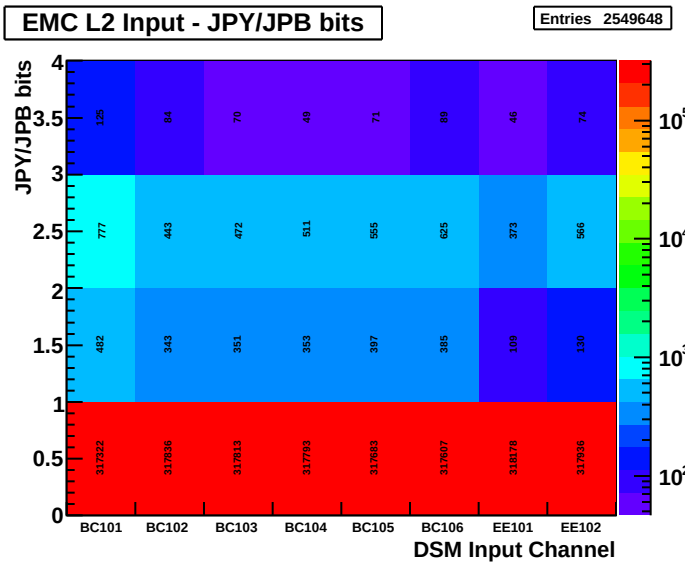

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

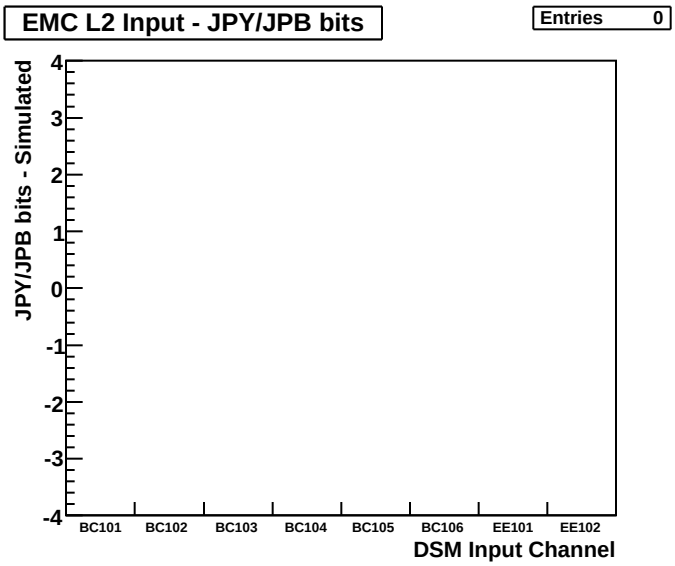

Endcap EMC L1 Input - High Tower Bits
Entries 3824472
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

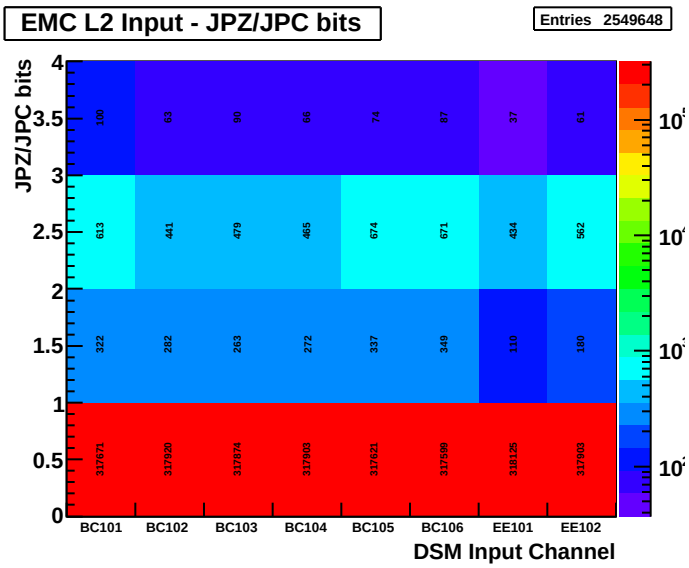

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

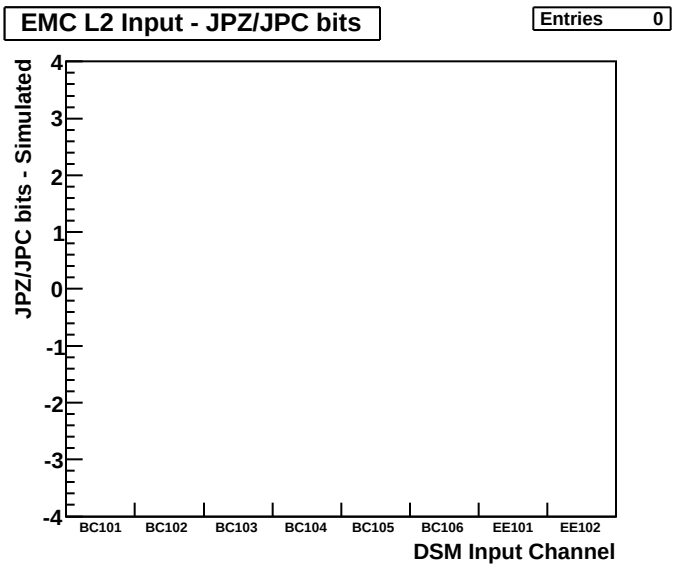

EMC L2 Input - JPX/JPA bits
Entries 2549648
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
161 128 97 70 73 89 41 93
1131 784 662 663 590 536 414 631
388 280 267 271 281 285 106 109
317026 317514 317680 317702 317762 317796 318145 317873

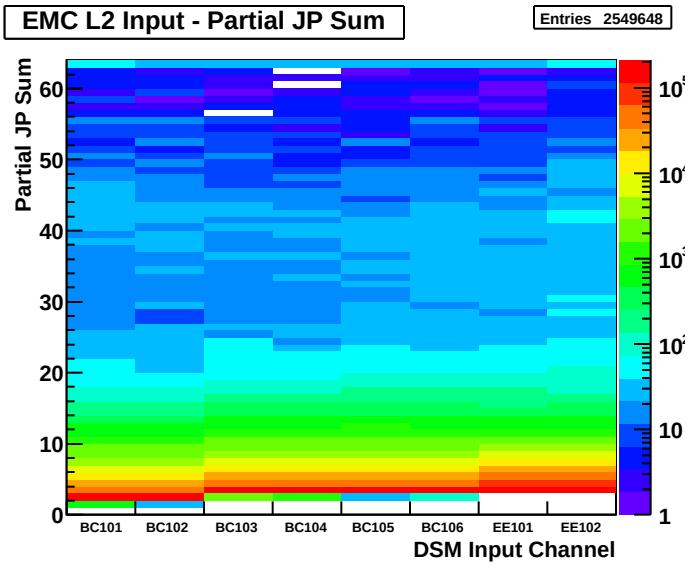

EMC L2 Input - JPX/JPA bits
Entries 14967
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2087 1506 1426 1469 1681 1639 2406 2753

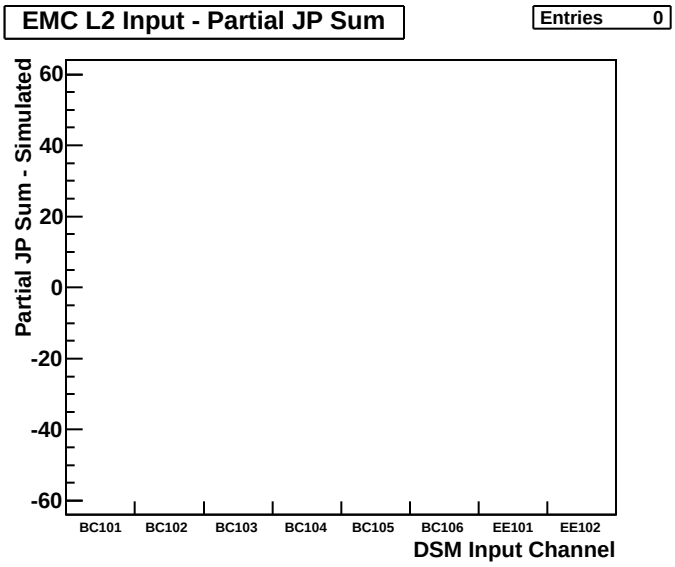

EMC L2 Input - JPY/JPB bits
Entries 2549648
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
125 84 70 49 71 89 46 74
777 443 472 511 555 625 373 566
482 343 351 353 397 385 109 130
317322 317836 317813 317793 317683 317607 318178 317936

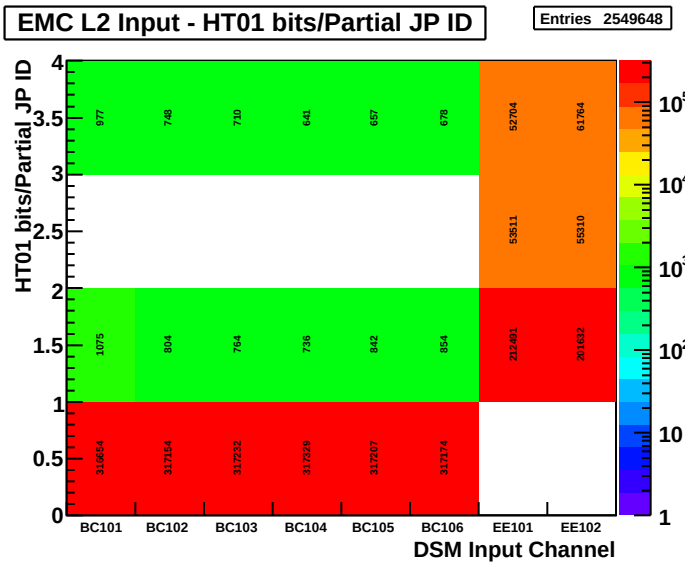

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

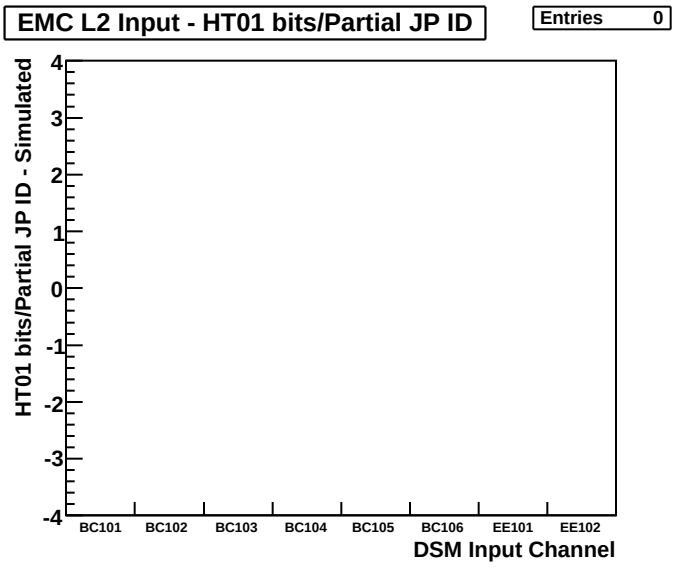

EMC L2 Input - JPZ/JPC bits
Entries 2549648
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
100 63 90 66 74 87 37 61
613 441 479 465 674 671 434 562
322 282 263 272 337 349 110 180
317671 317820 317874 317903 317621 317599 318125 317903

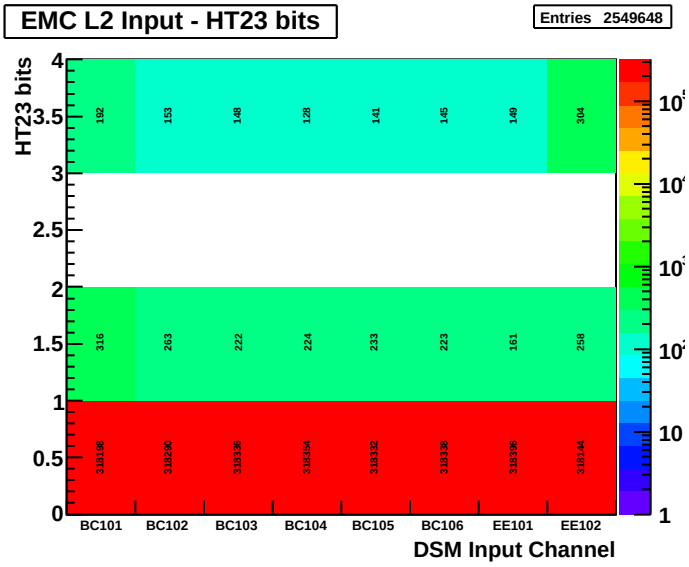

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

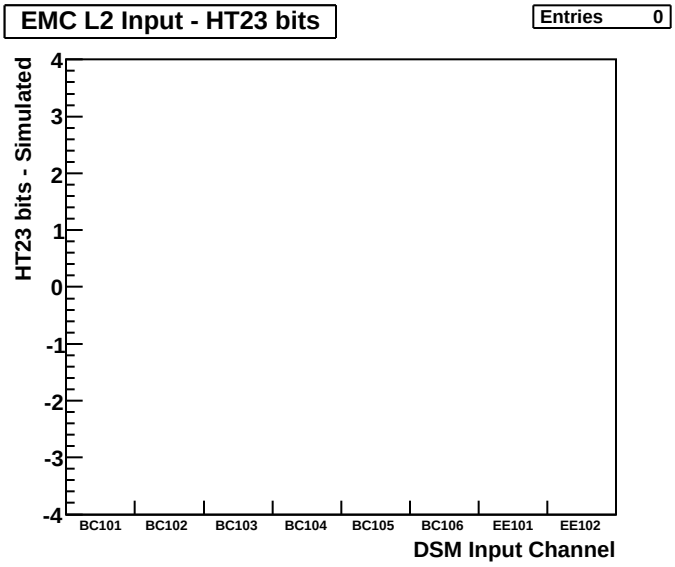

EMC L2 Input - Partial JP Sum
Entries 2549648
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

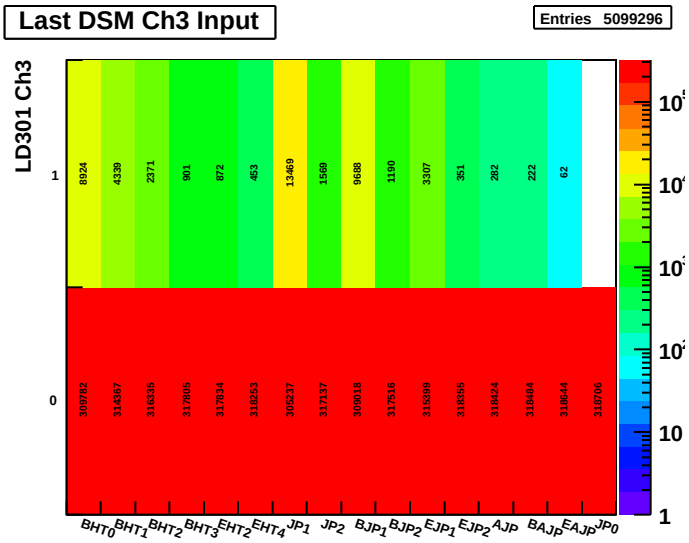

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

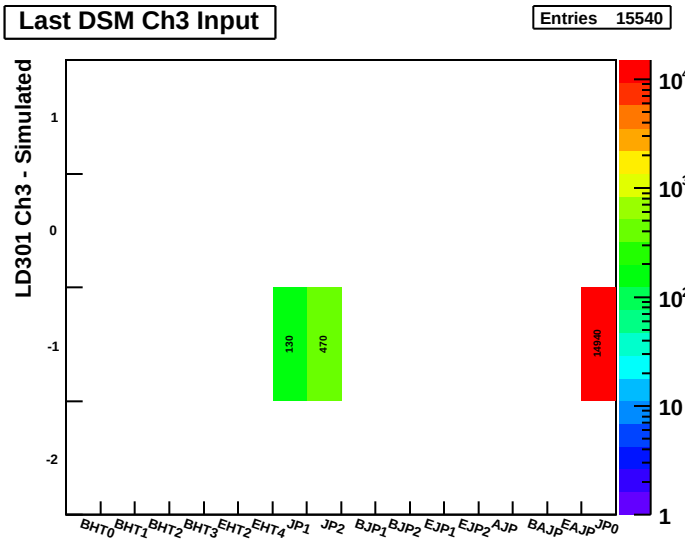

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2549648
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

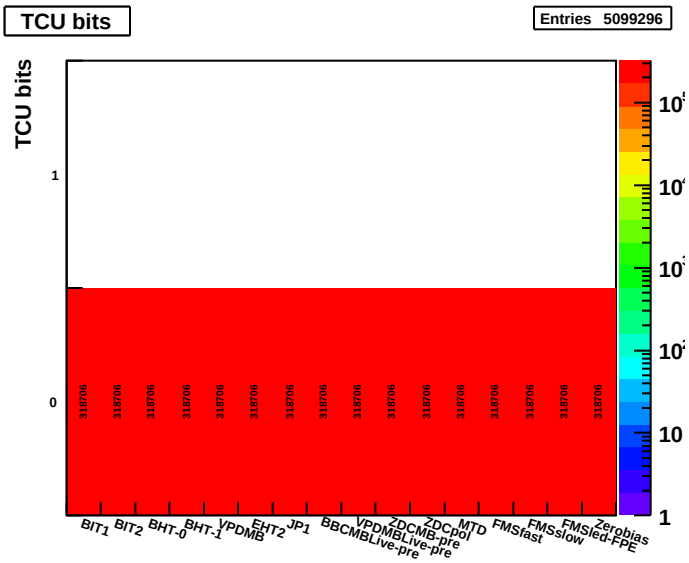

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

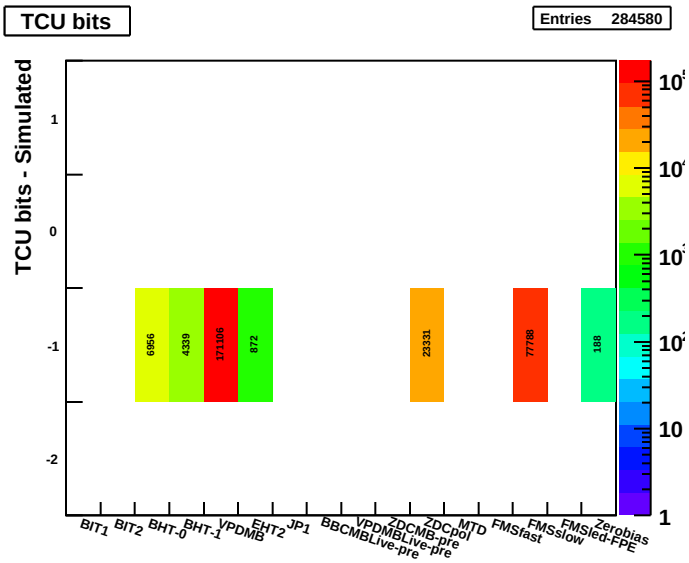

EMC L2 Input - HT23 bits
Entries 2549648
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

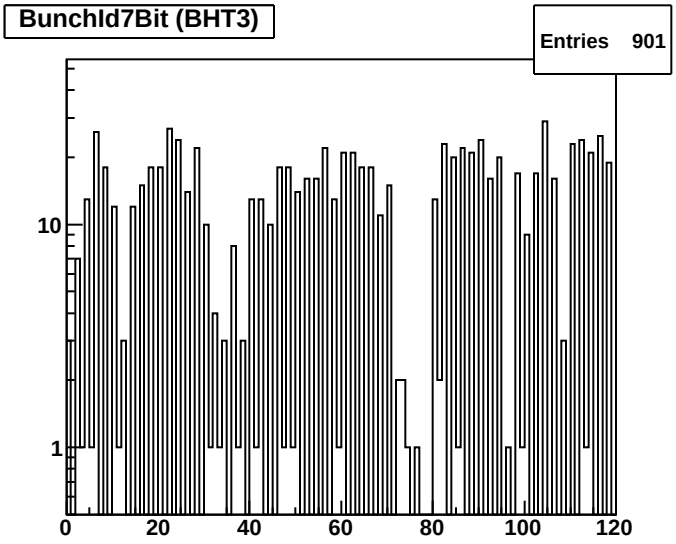

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

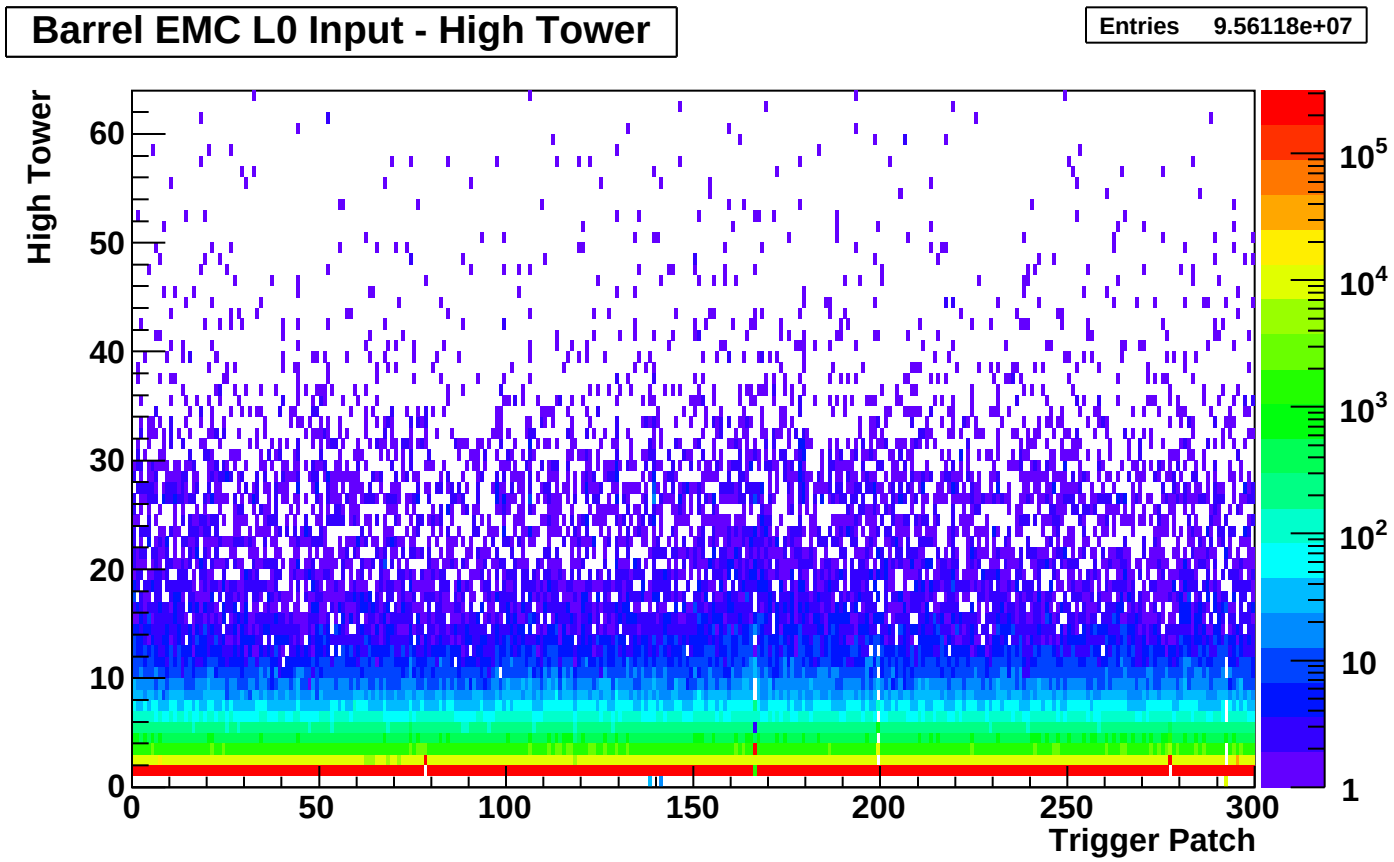

Last DSM Ch3 Input
Entries 5099296
LD301 Ch3
8924 4339 2371 901 872 453 13469 1569 9688 1190 3307 351 282 222 62
309782 314367 316335 317805 317834 318253 305237 317137 309018 317516 315399 318355 318424 318484 318644 318706
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

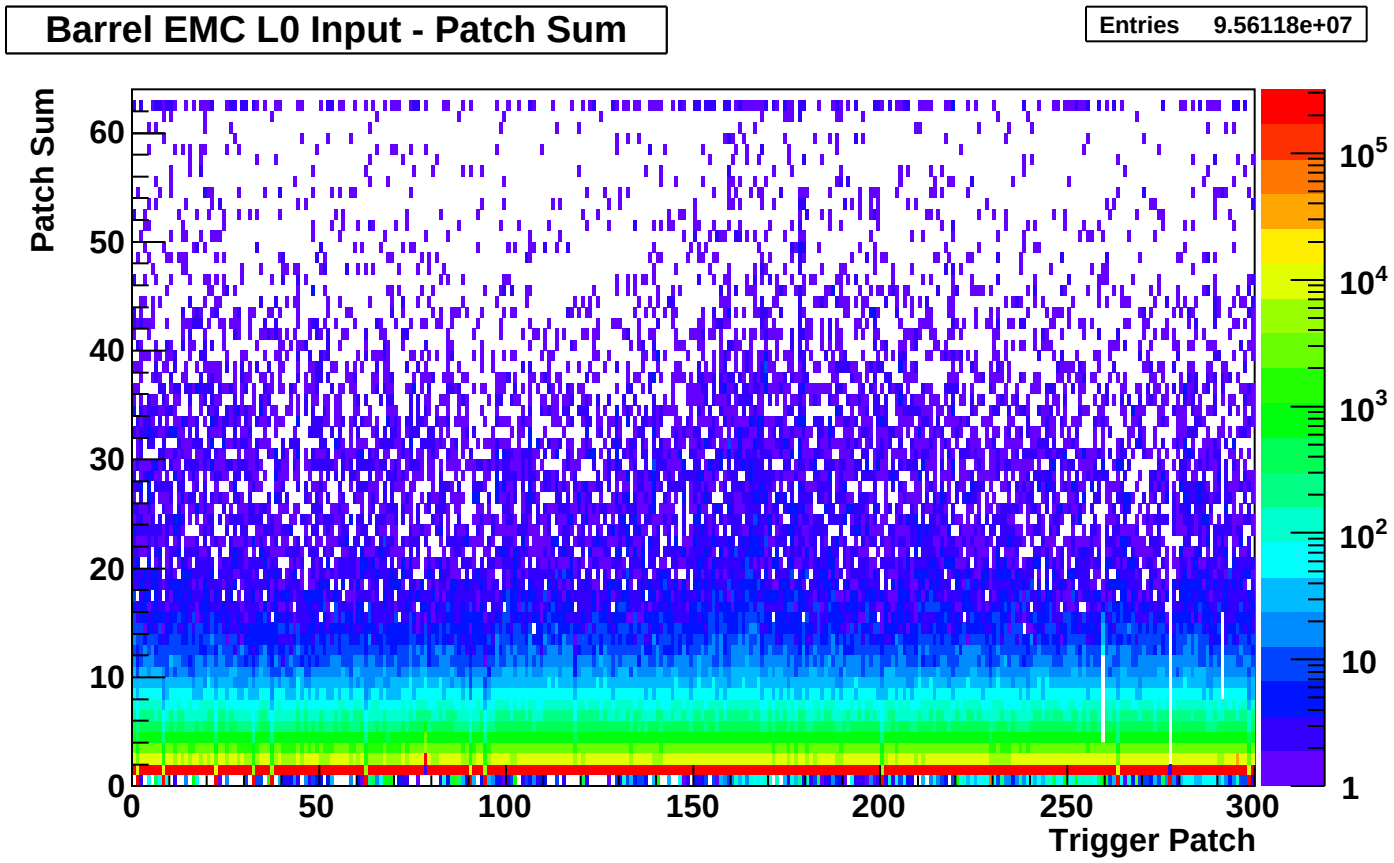

Last DSM Ch3 Input
Entries 15540
LD301 Ch3 - Simulated
130 470 14940
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

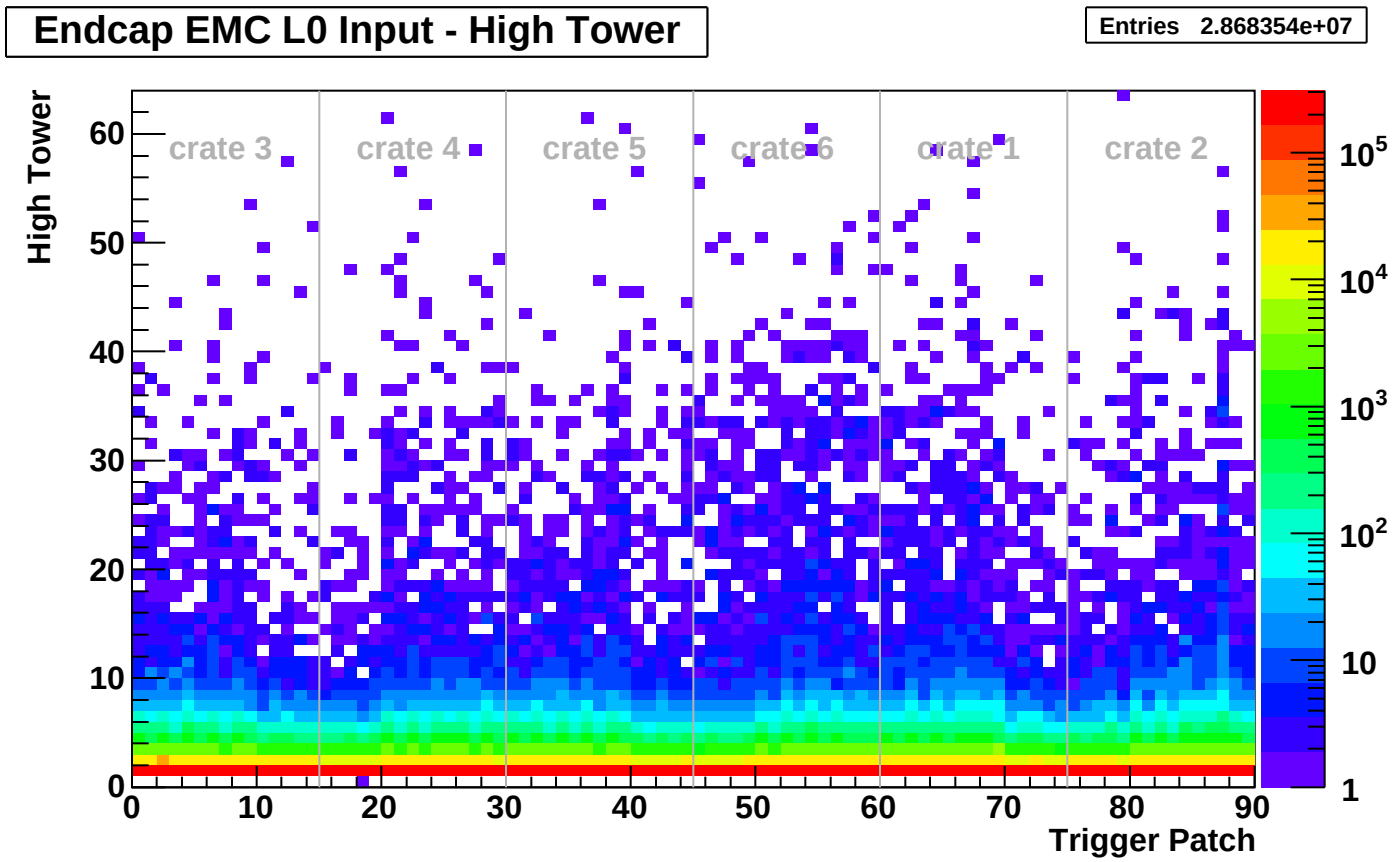

TCU bits
Entries 5099296
TCU bits
318706
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

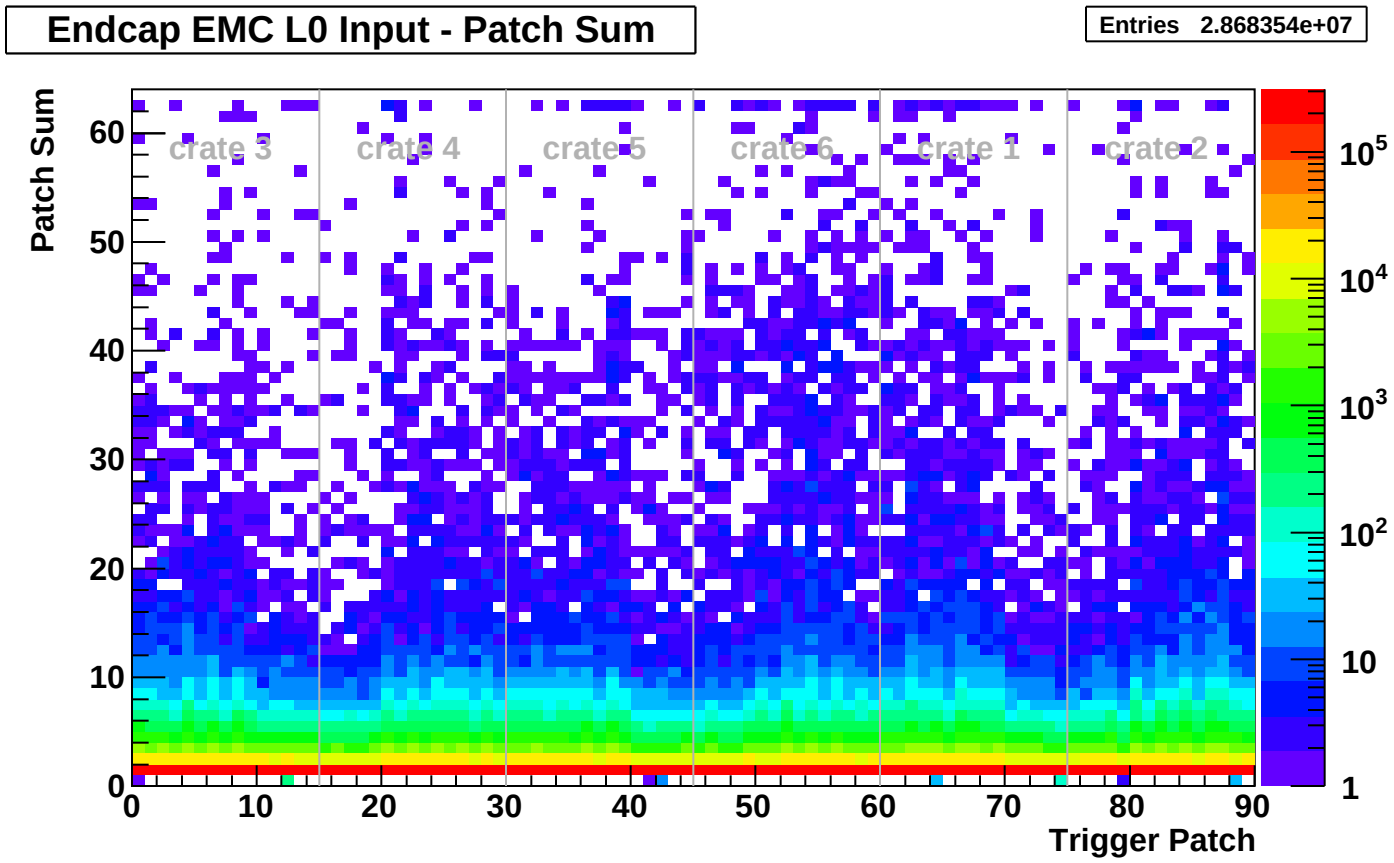

TCU bits
Entries 284580
TCU bits - Simulated
6956 4339 171106 872 23331 77788 188
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

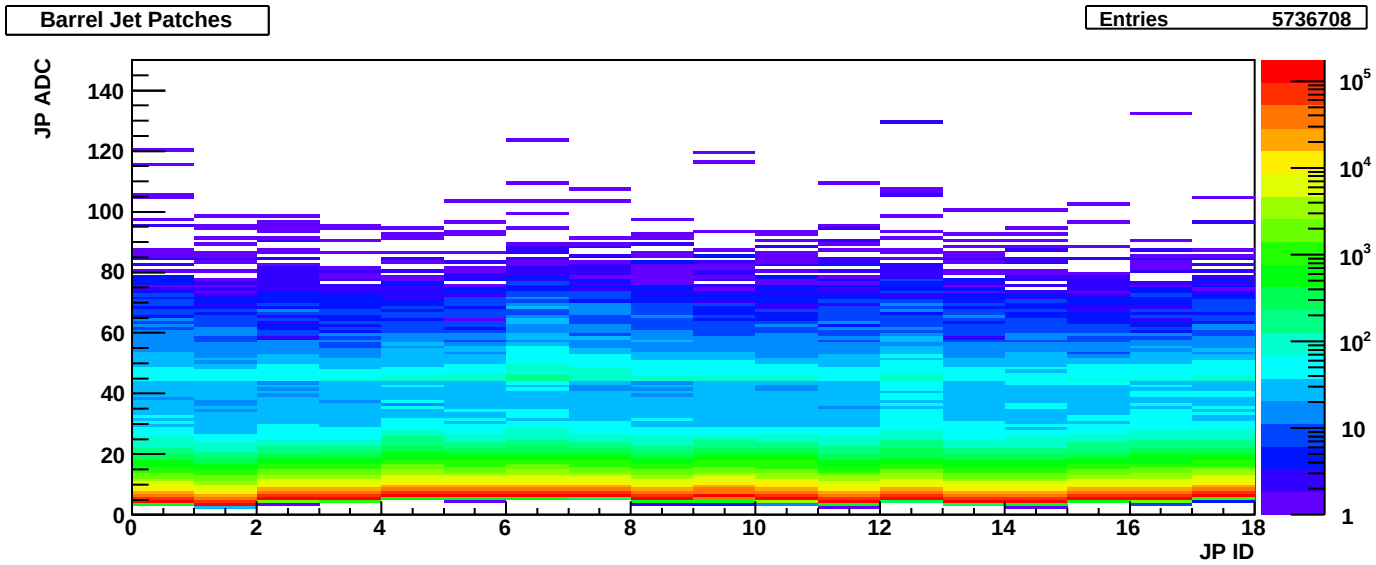

BunchId7Bit (BHT3)
Entries 901
0 20 40 60 80 100 120

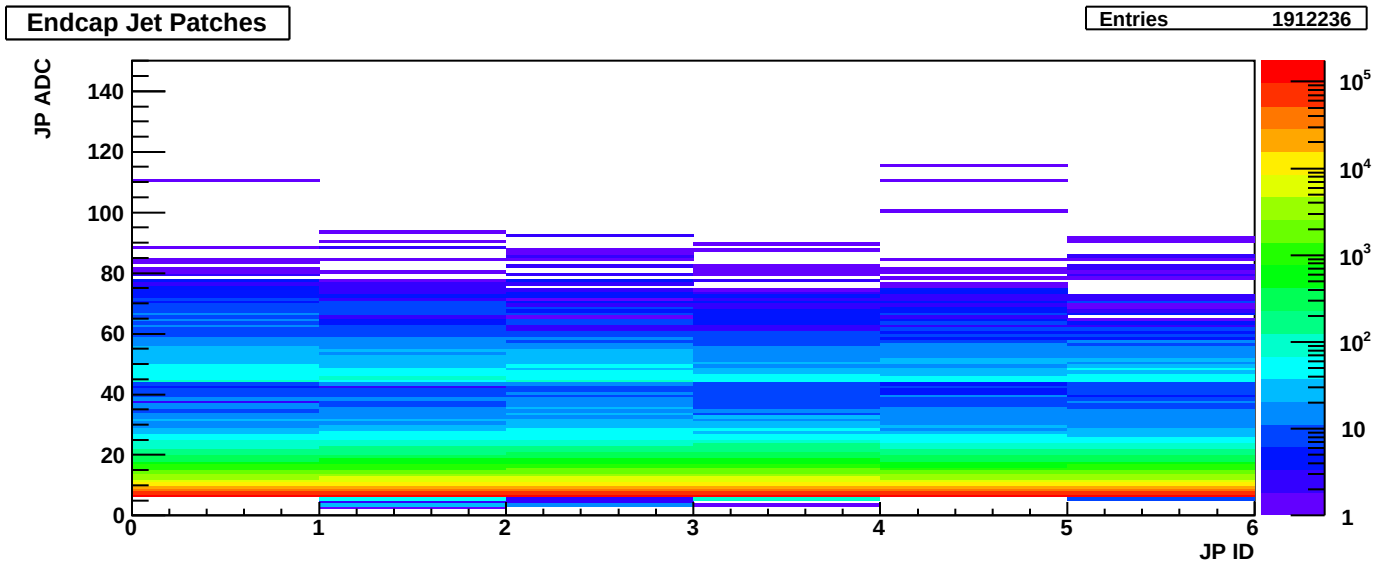

Barrel EMC L0 Input - High Tower
Entries 9.56118e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

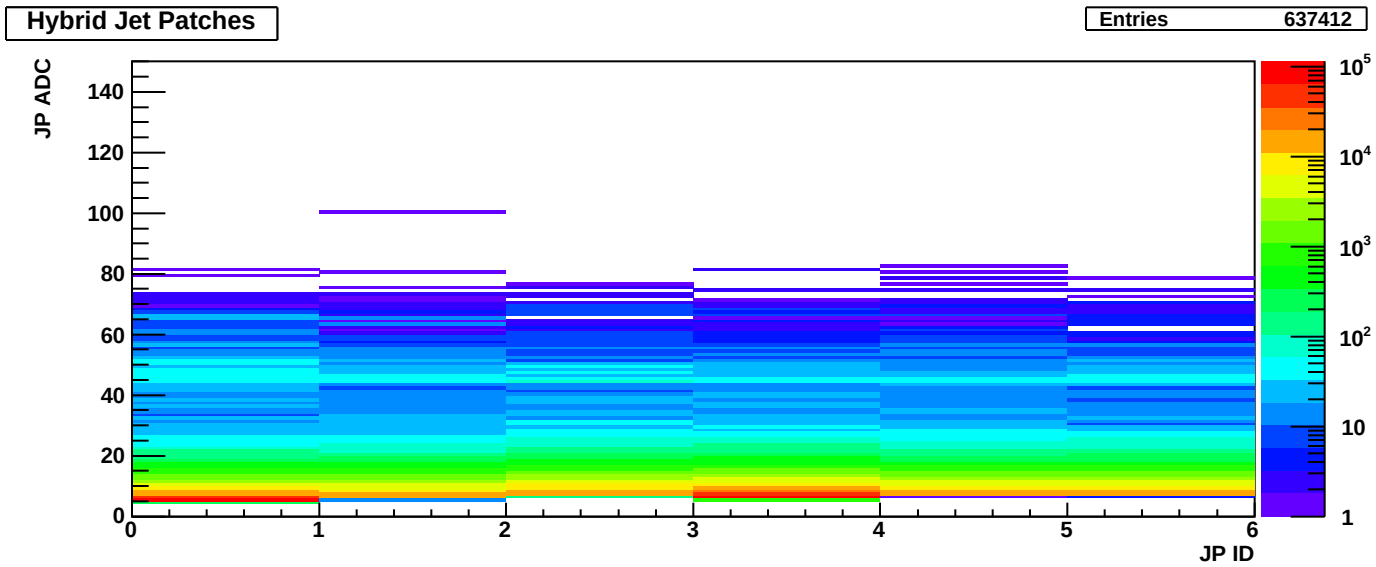

Barrel EMC L0 Input - Patch Sum
Entries 9.56118e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

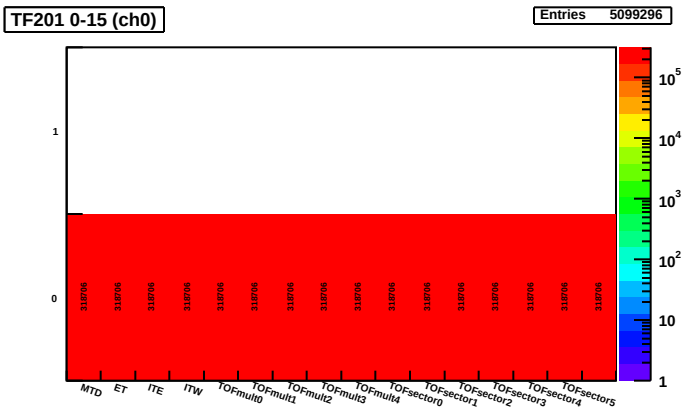

Endcap EMC L0 Input - High Tower
Entries 2.868354e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

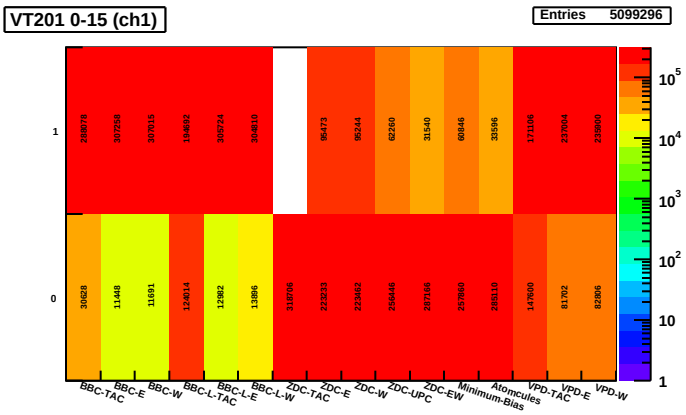

Endcap EMC L0 Input - Patch Sum
Entries 2.868354e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

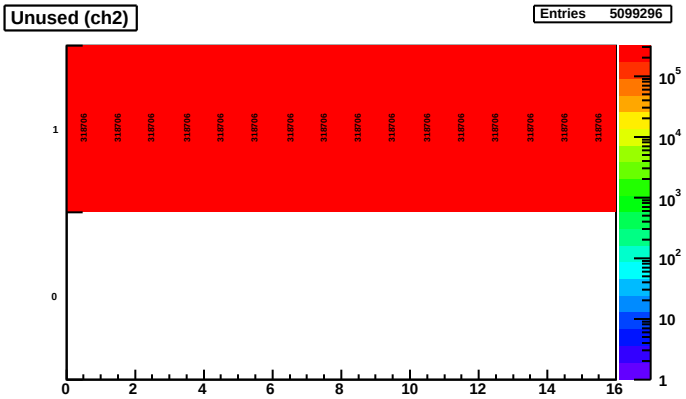

Barrel Jet Patches
Entries 5736708
JP ADC
JP ID

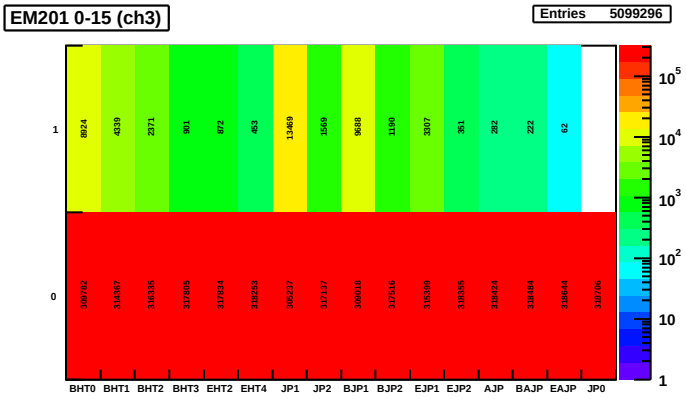

Endcap Jet Patches
Entries 1912236
JP ADC
JP ID

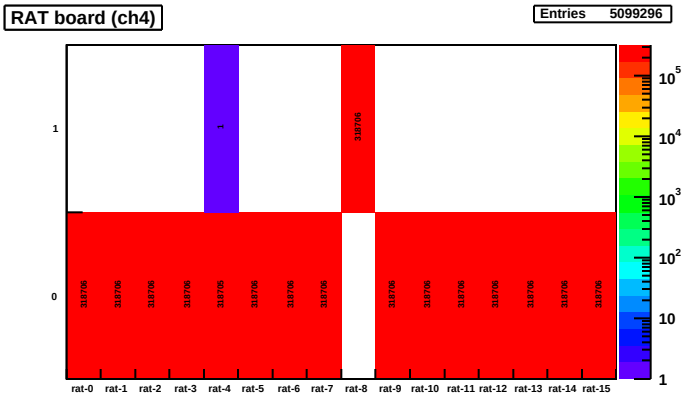

Hybrid Jet Patches
Entries 637412
JP ADC
JP ID

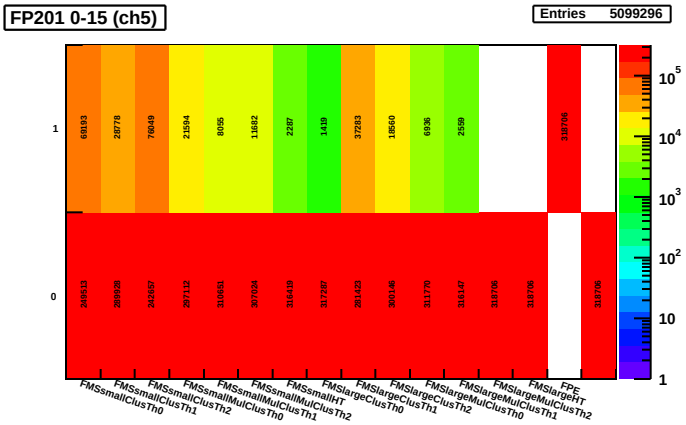

TF201 0-15 (ch0)
Entries 5099296
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

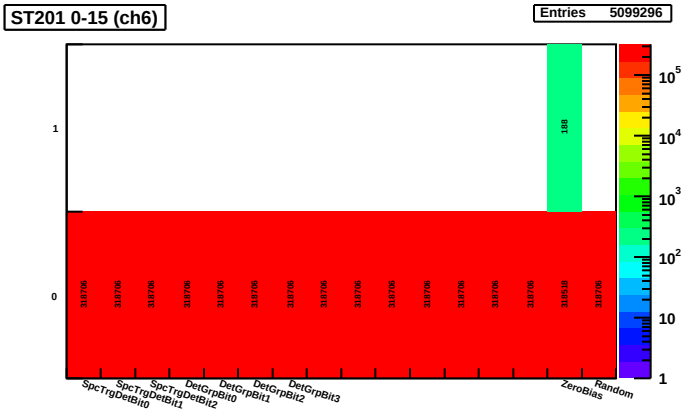

VT201 0-15 (ch1)
Entries 5099296
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

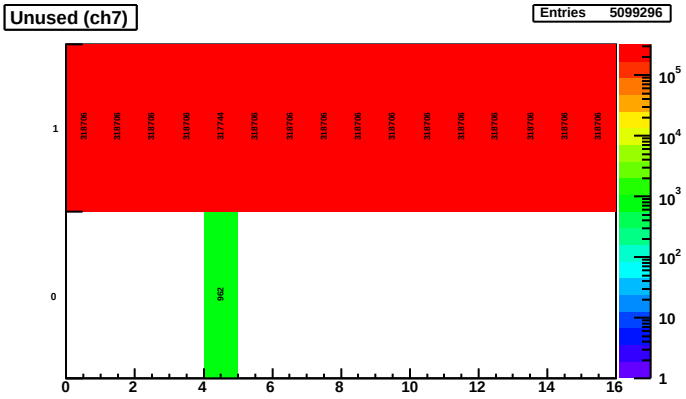

Unused (ch2)
Entries 5099296

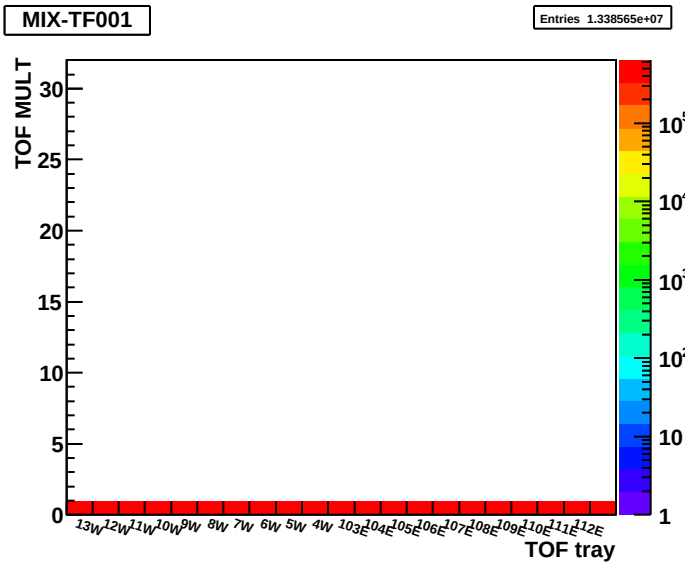

EM201 0-15 (ch3)
Entries 5099296
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

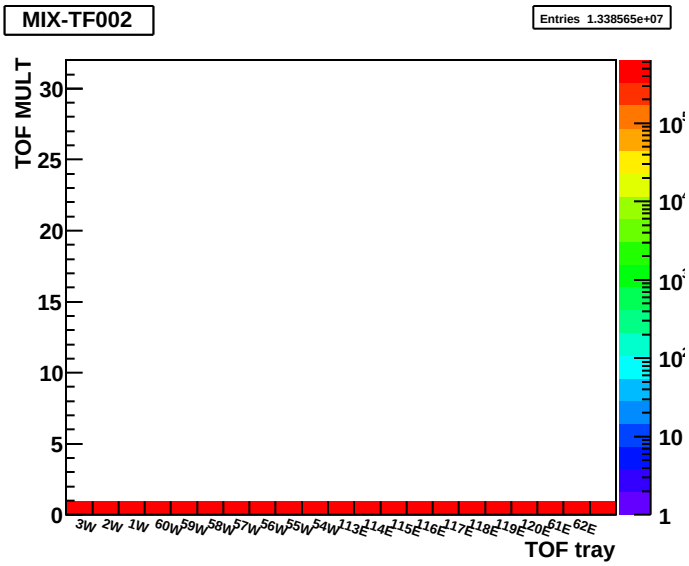

RAT board (ch4)
Entries 5099296
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

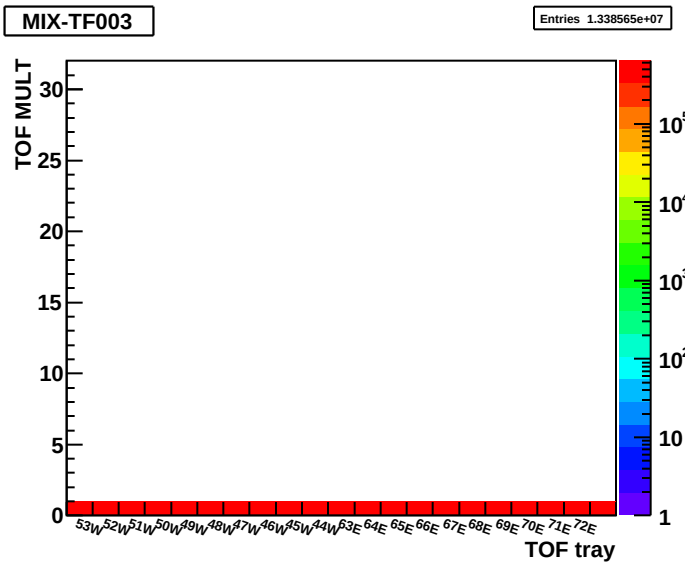

FP201 0-15 (ch5)
Entries 5099296
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

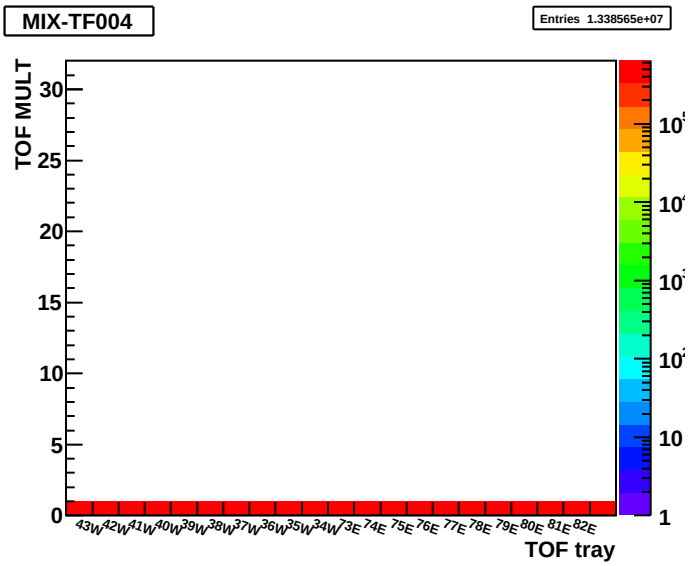

ST201 0-15 (ch6)
Entries 5099296
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

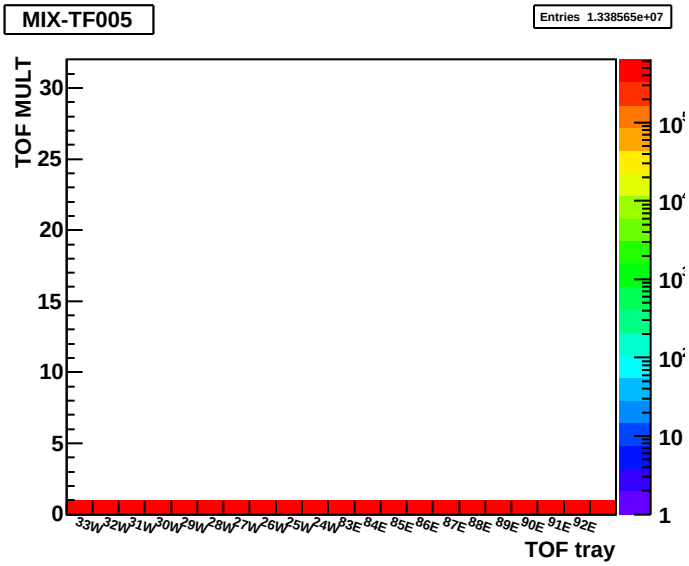

Unused (ch7)
Entries 5099296

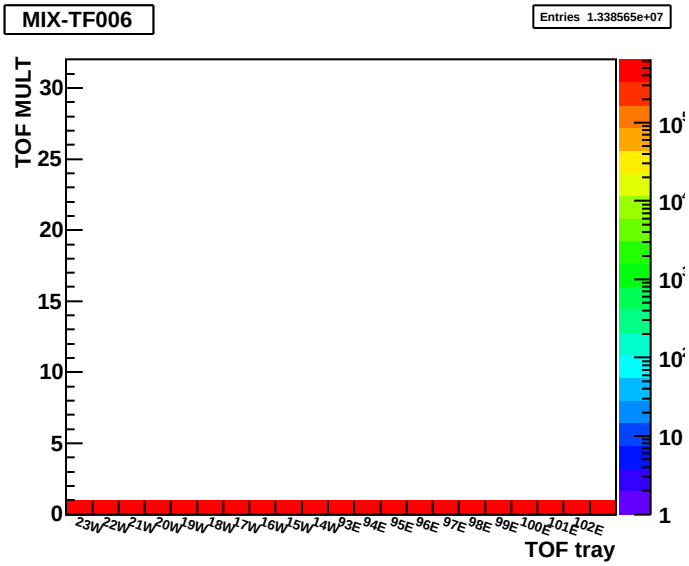

MIX-TF001
Entries 1.338565e+07
TOF MULT
TOF tray

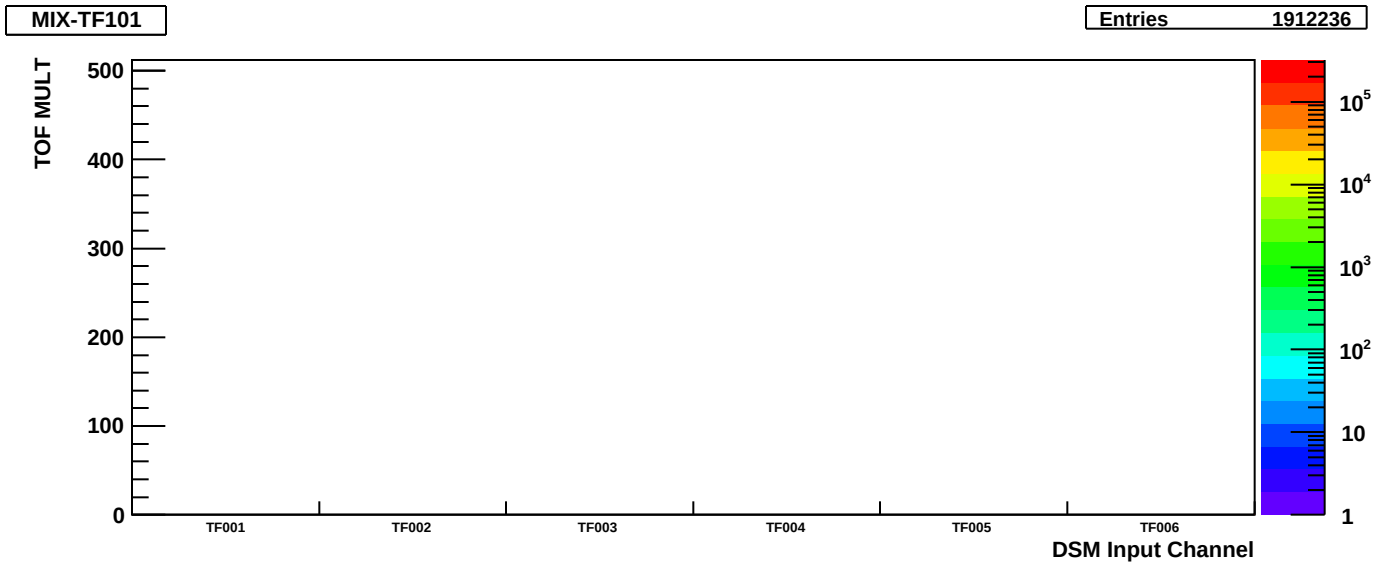

MIX-TF002
Entries 1.338565e+07
TOF MULT
TOF tray

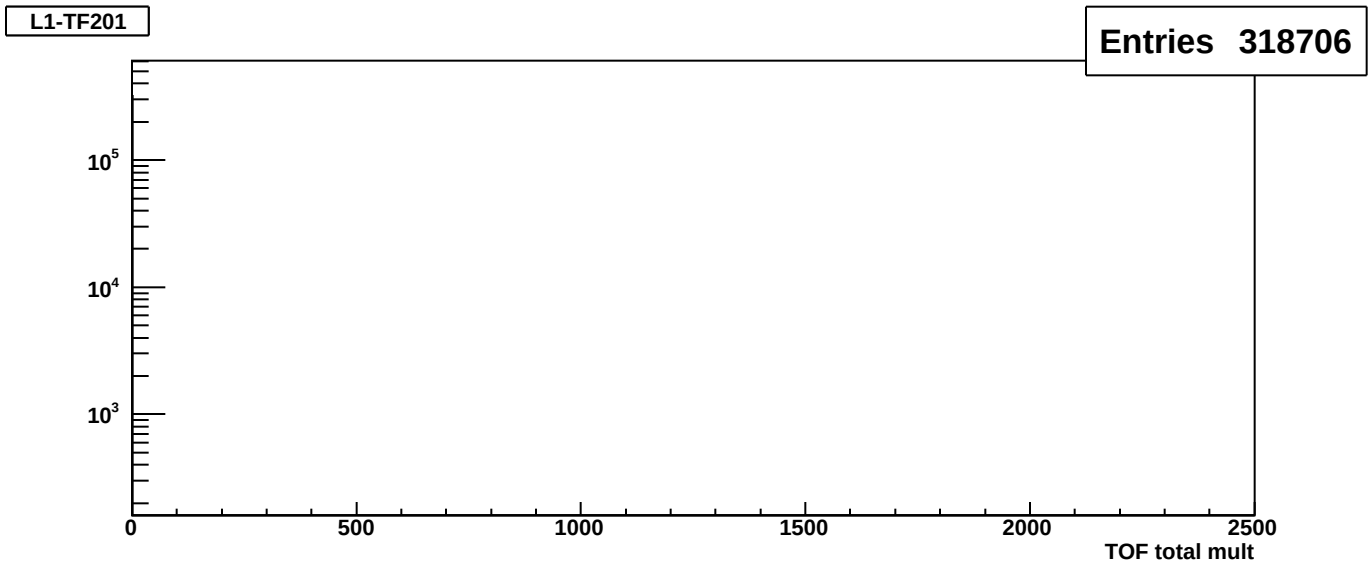

MIX-TF003
Entries 1.338565e+07
TOF MULT
TOF tray

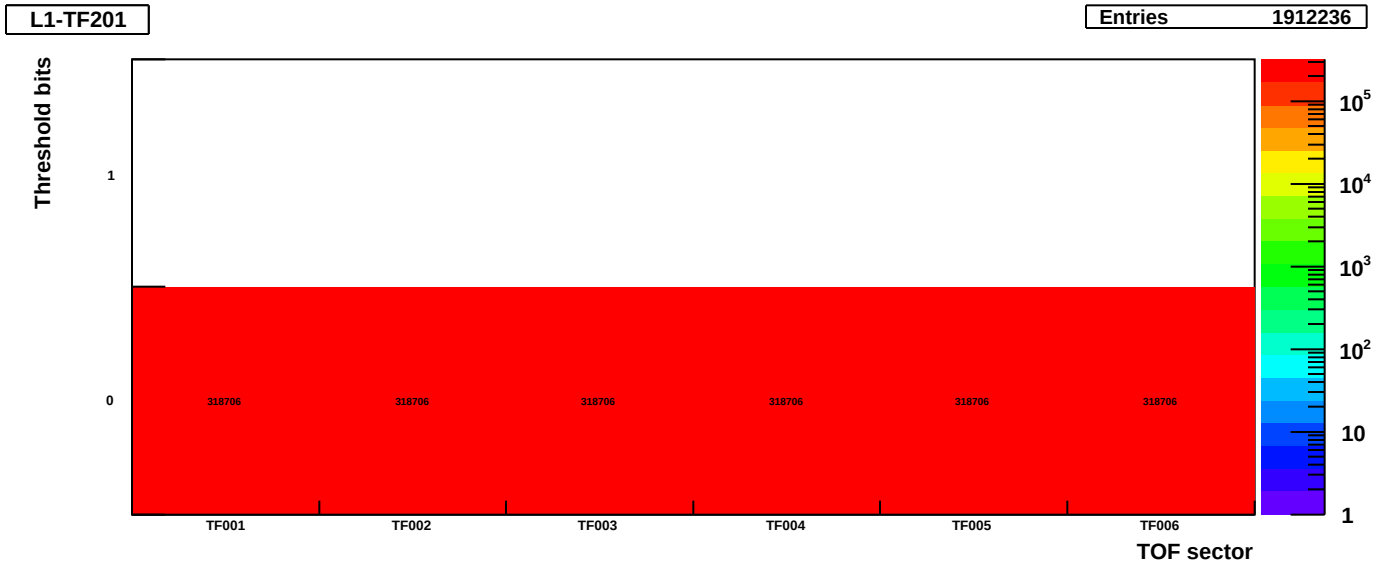

MIX-TF004
Entries 1.338565e+07
TOF MULT
TOF tray

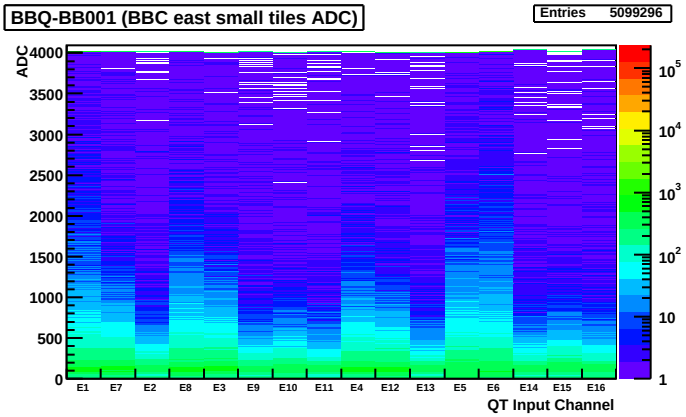

MIX-TF005
Entries 1.338565e+07
TOF MULT
TOF tray

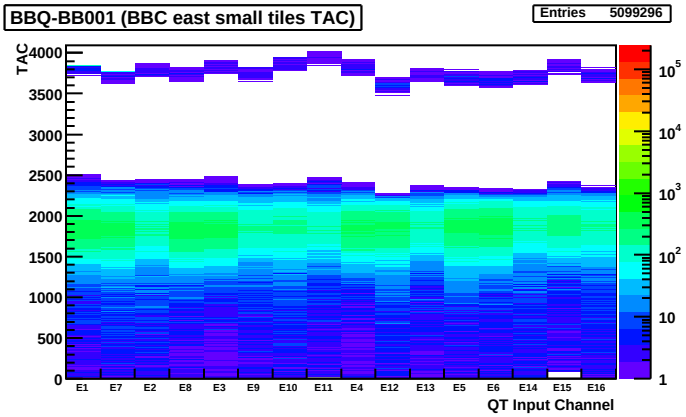

MIX-TF006
Entries 1.338565e+07
TOF MULT
TOF tray

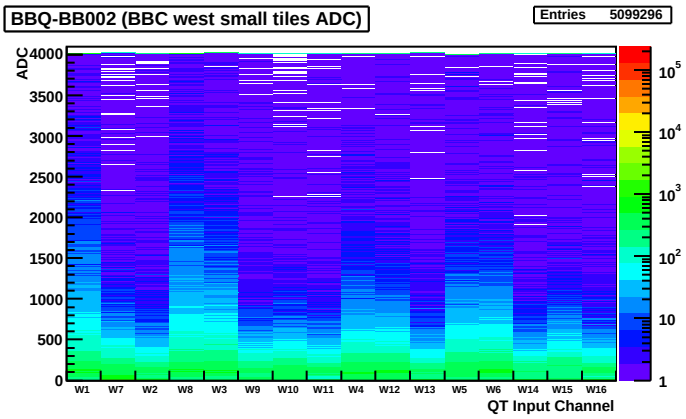

MIX-TF101
Entries 1912236
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

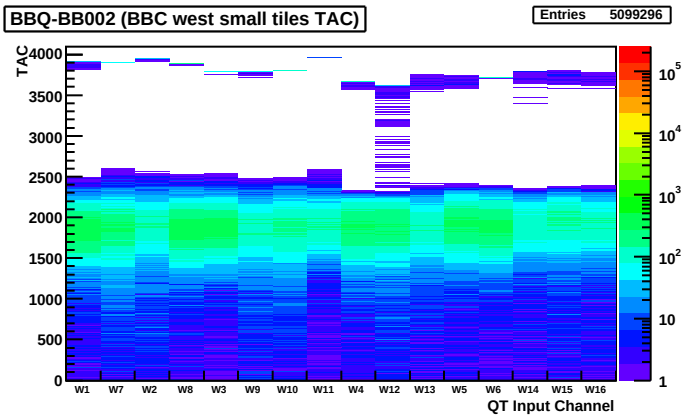

L1-TF201
Entries 318706
10^5
10^4
10^3
0
500
1000
1500
2000
2500
TOF total mult

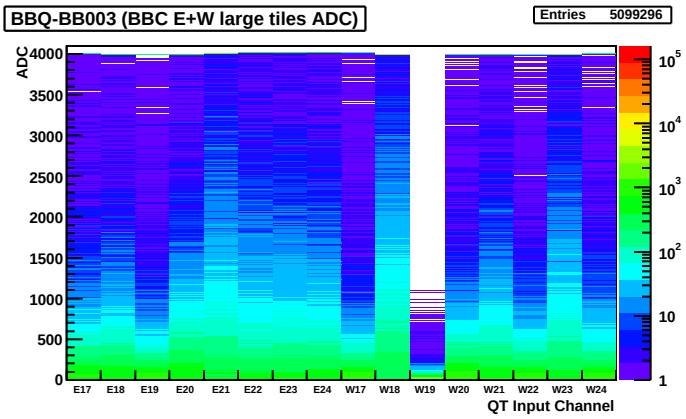

L1-TF201
Entries 1912236
Threshold bits
1
0
318706
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5
10^4
10^3
10^2
10
1

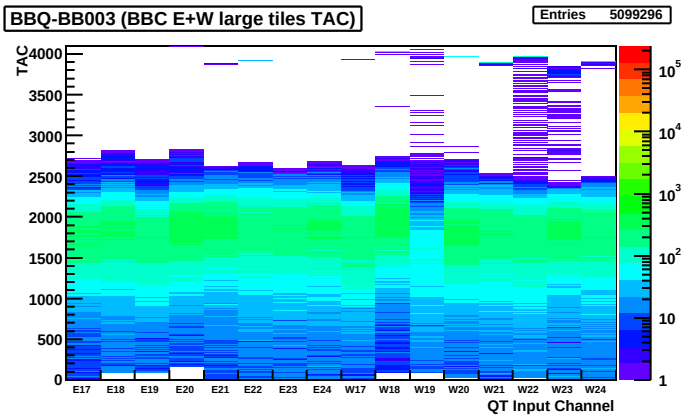

BBQ-BB001 (BBC east small tiles ADC)
Entries 5099296
ADC
QT Input Channel

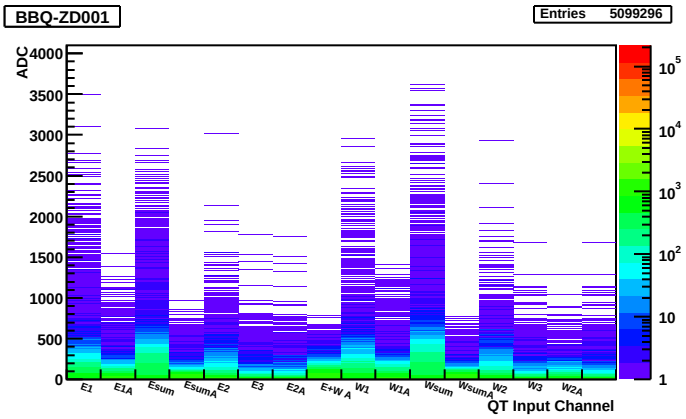

BBQ-BB001 (BBC east small tiles TAC)
Entries 5099296
TAC
QT Input Channel

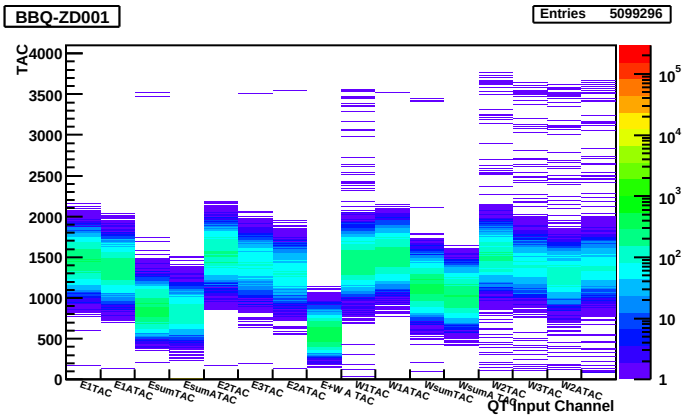

BBQ-BB002 (BBC west small tiles ADC)
Entries 5099296
ADC
QT Input Channel

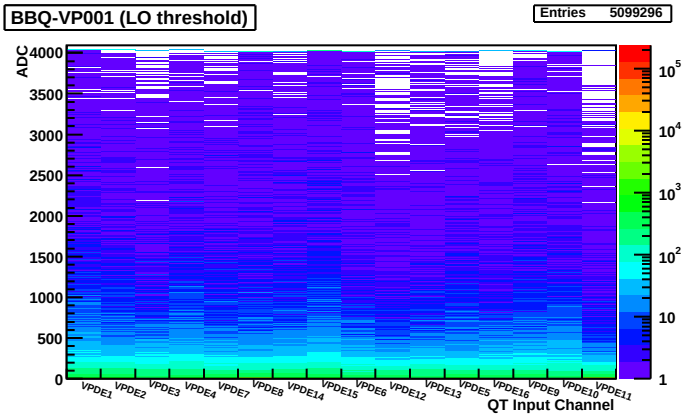

BBQ-BB002 (BBC west small tiles TAC)
Entries 5099296
TAC
QT Input Channel

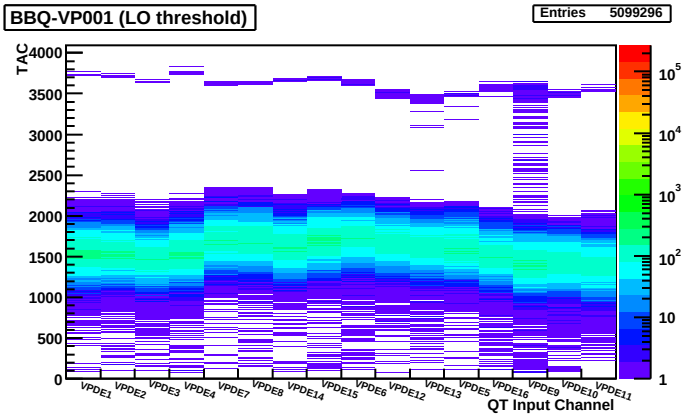

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 5099296
ADC
QT Input Channel

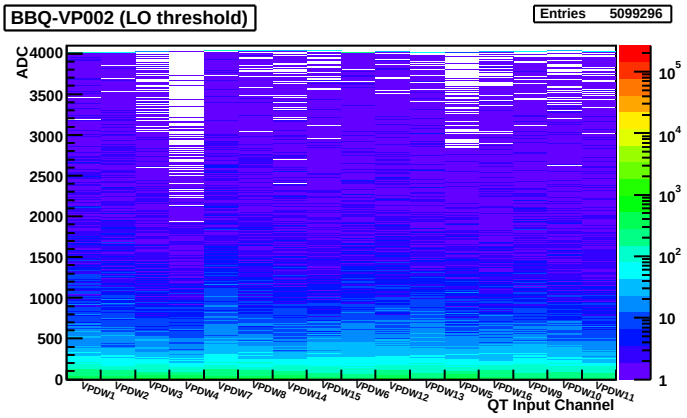

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 5099296
TAC
QT Input Channel

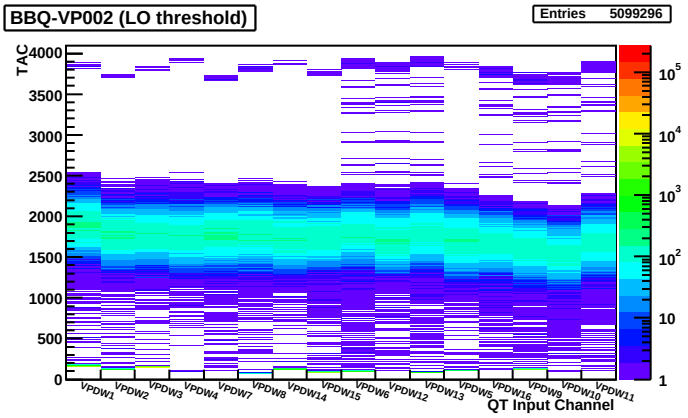

BBQ-ZD001
Entries 5099296
ADC
QT Input Channel

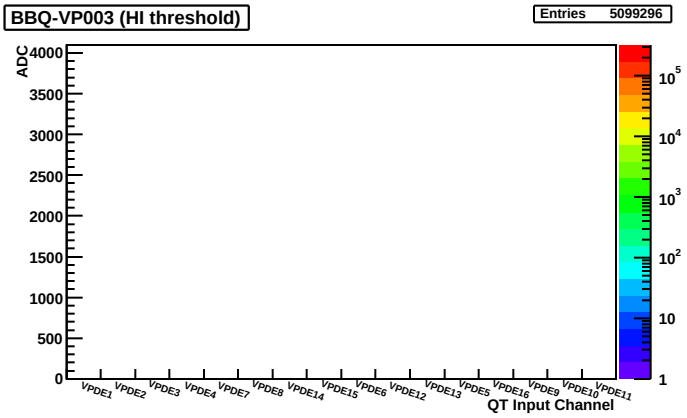

BBQ-ZD001
Entries 5099296
TAC
QT Input Channel

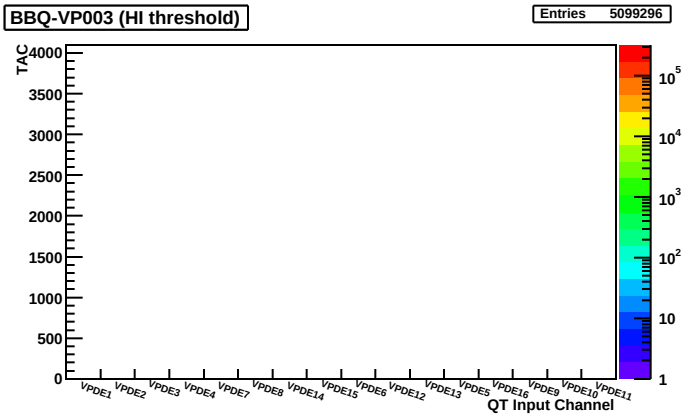

BBQ-VP001 (LO threshold)
Entries 5099296
ADC
QT Input Channel

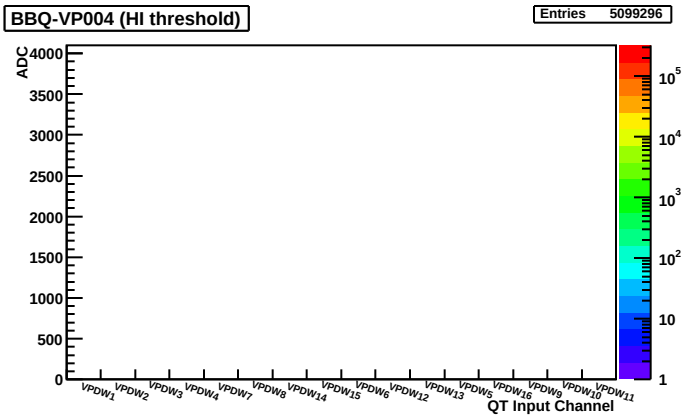

BBQ-VP001 (LO threshold)
Entries 5099296
TAC
QT Input Channel

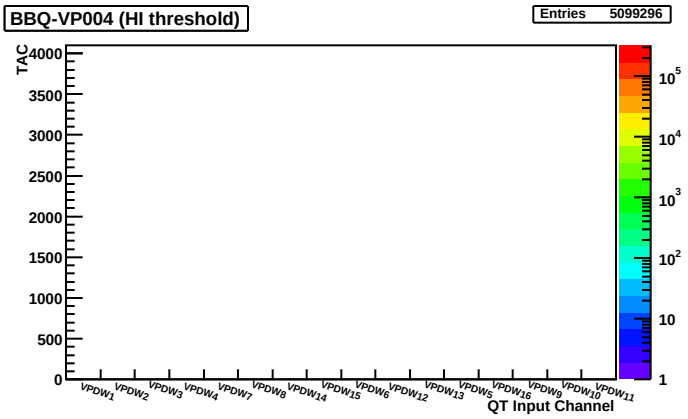

BBQ-VP002 (LO threshold)
Entries 5099296
ADC
QT Input Channel

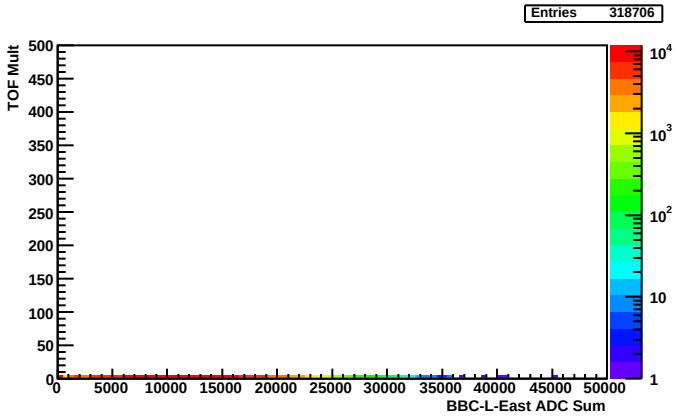

BBQ-VP002 (LO threshold)
Entries 5099296
TAC
QT Input Channel

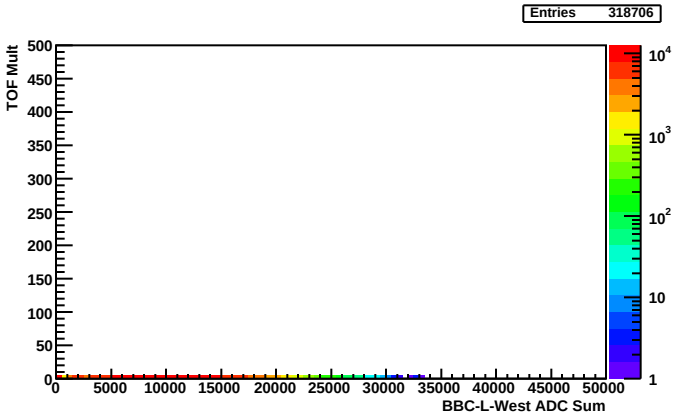

BBQ-VP003 (HI threshold)
Entries 5099296
ADC
QT Input Channel

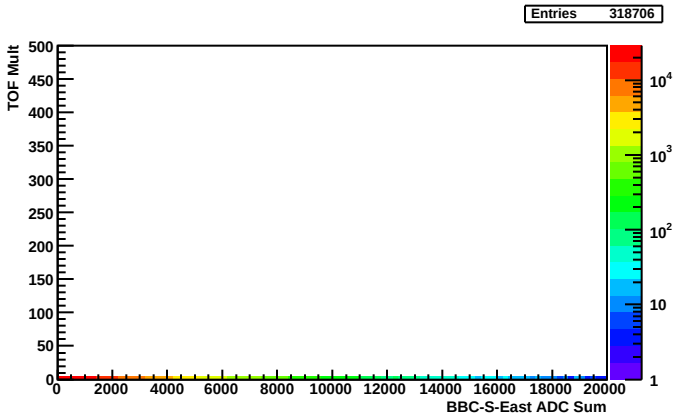

BBQ-VP003 (HI threshold)
Entries 5099296
TAC
QT Input Channel

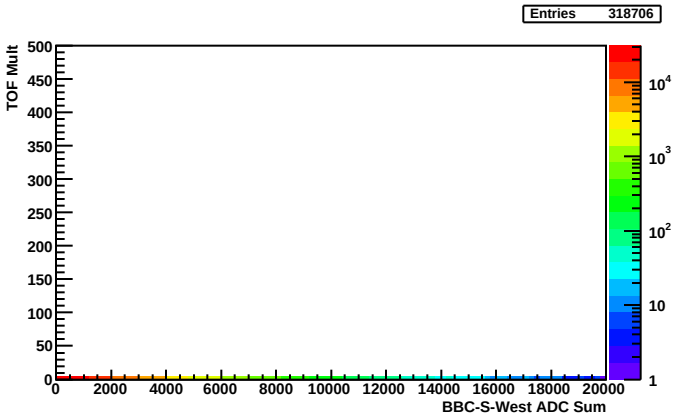

BBQ-VP004 (HI threshold)
Entries 5099296
ADC
QT Input Channel

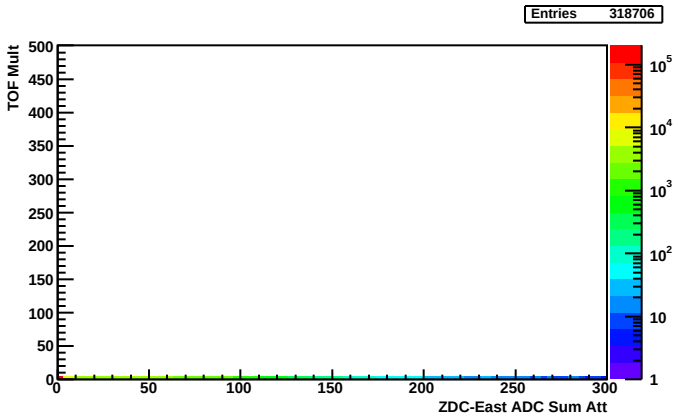

BBQ-VP004 (HI threshold)
Entries 5099296
TAC
QT Input Channel

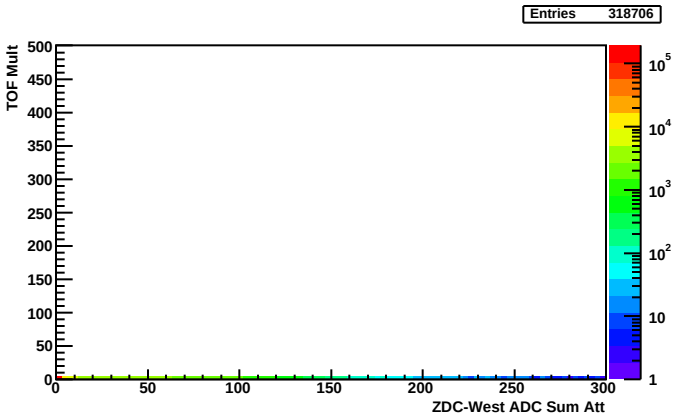

Entries 318706
TOF Mult
BBC-L-East ADC Sum

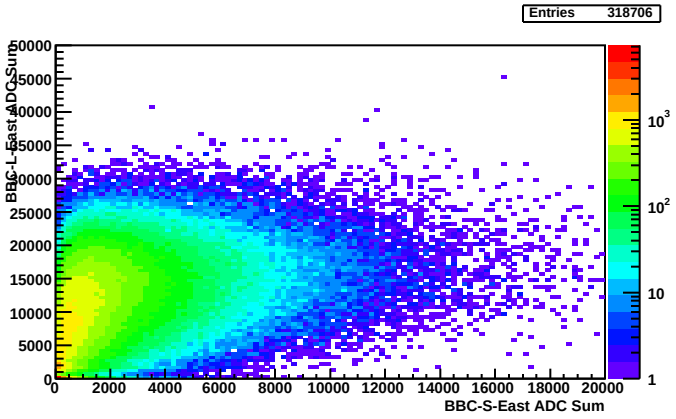

Entries 318706
TOF Mult
BBC-L-West ADC Sum

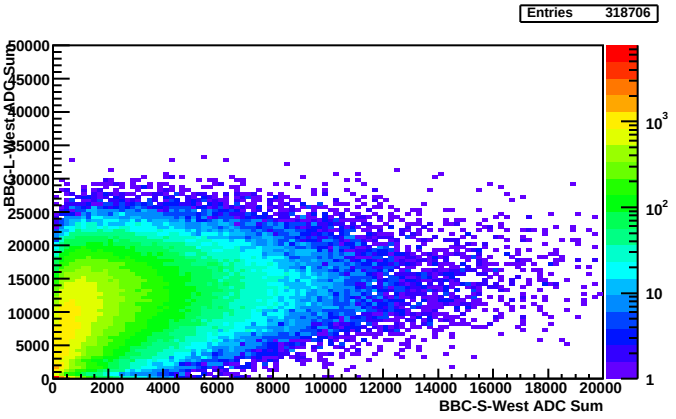

Entries 318706
TOF Mult
BBC-S-East ADC Sum

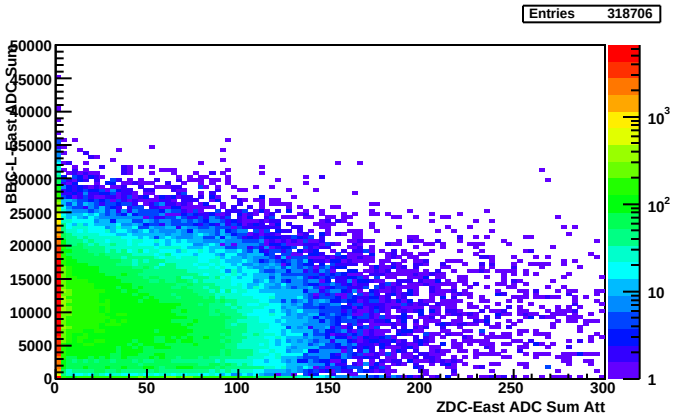

Entries 318706
TOF Mult
BBC-S-West ADC Sum

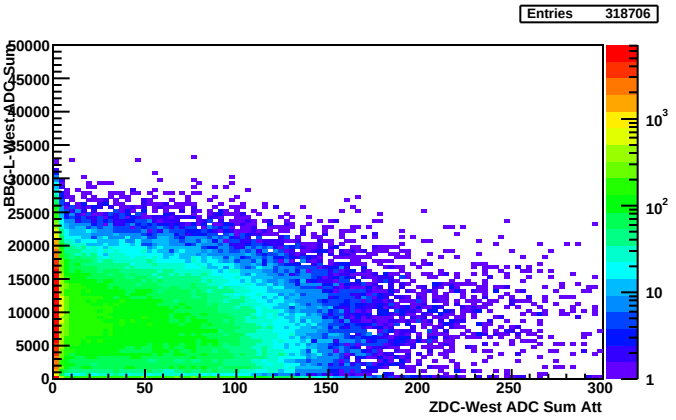

Entries 318706
TOF Mult
ZDC-East ADC Sum Att

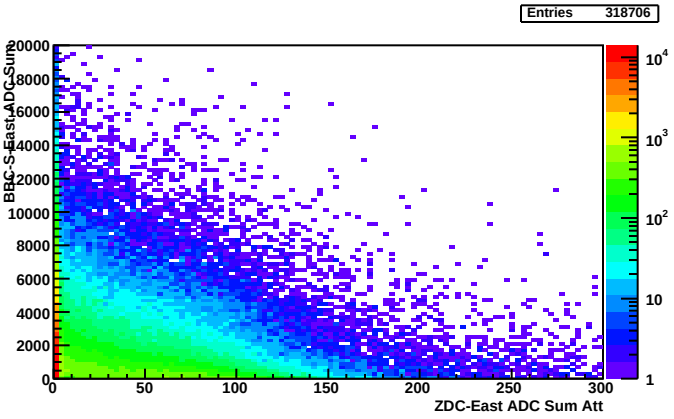

Entries 318706
TOF Mult
ZDC-West ADC Sum Att

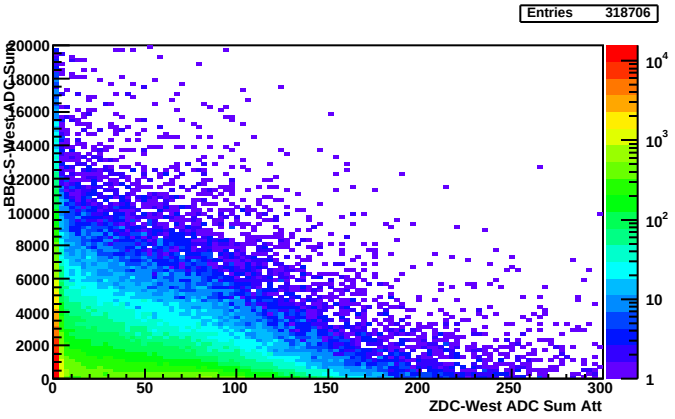

Entries 318706
BBC-L-East ADC Sum
BBC-S-East ADC Sum

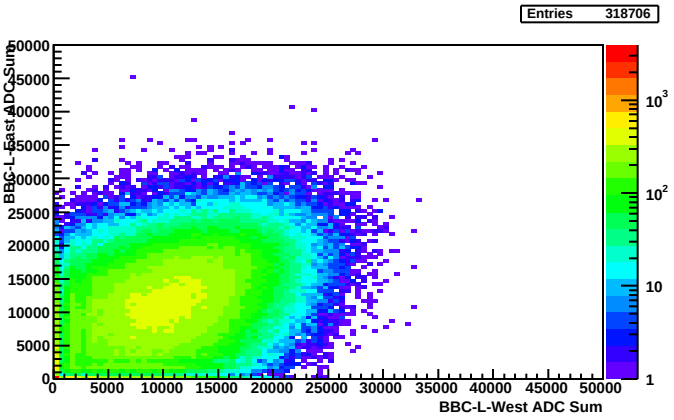

Entries 318706
BBC-L-West ADC Sum
BBC-S-West ADC Sum

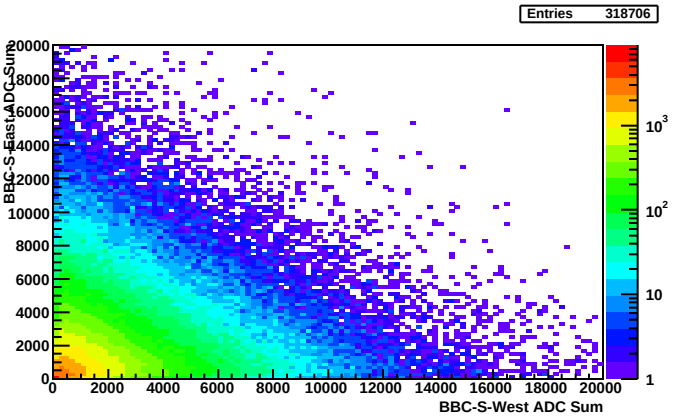

Entries 318706
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

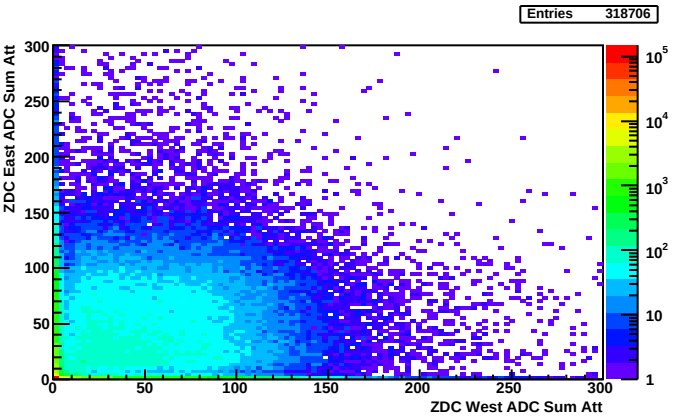

Entries 318706
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

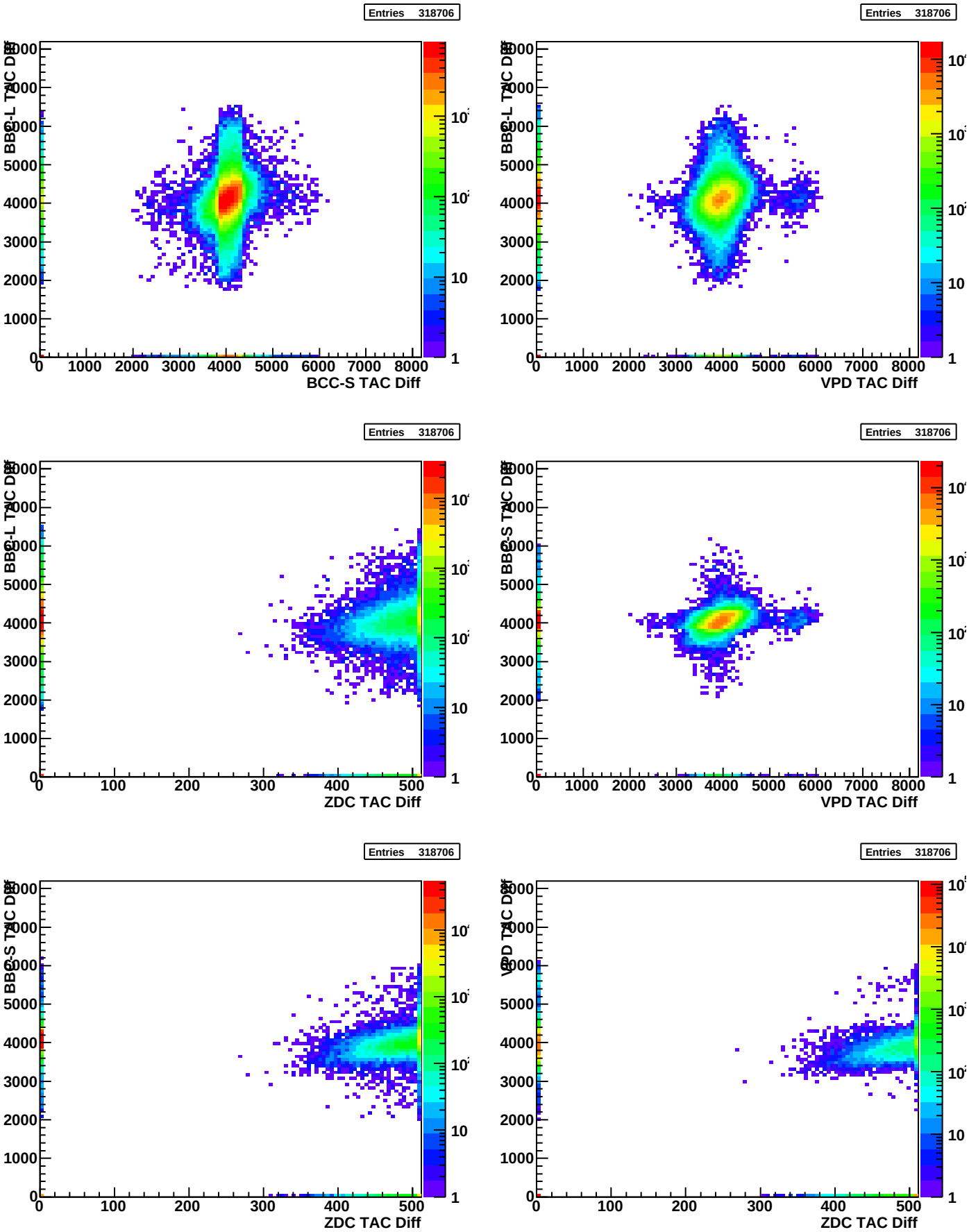

Entries 318706
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

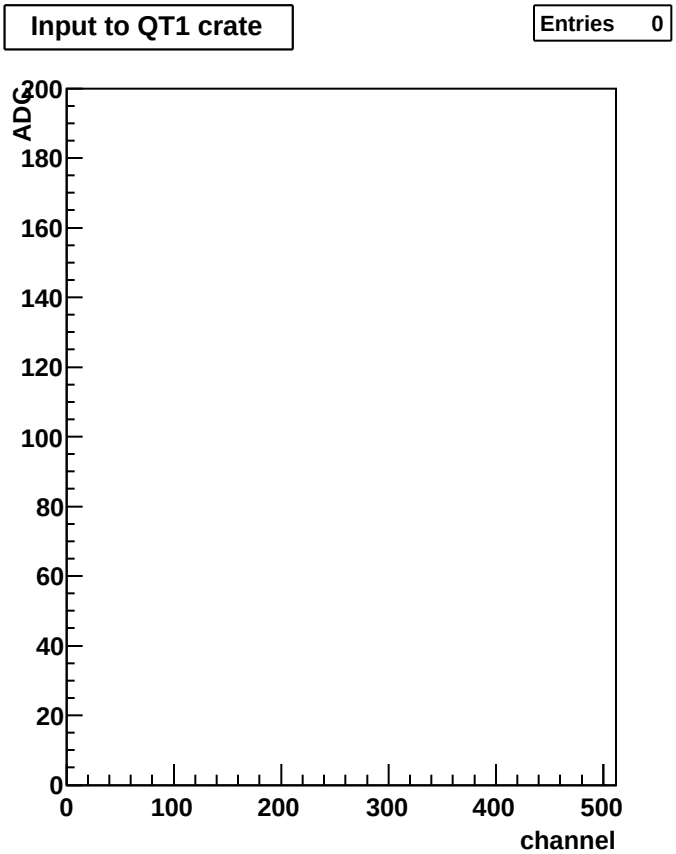

Entries 318706
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

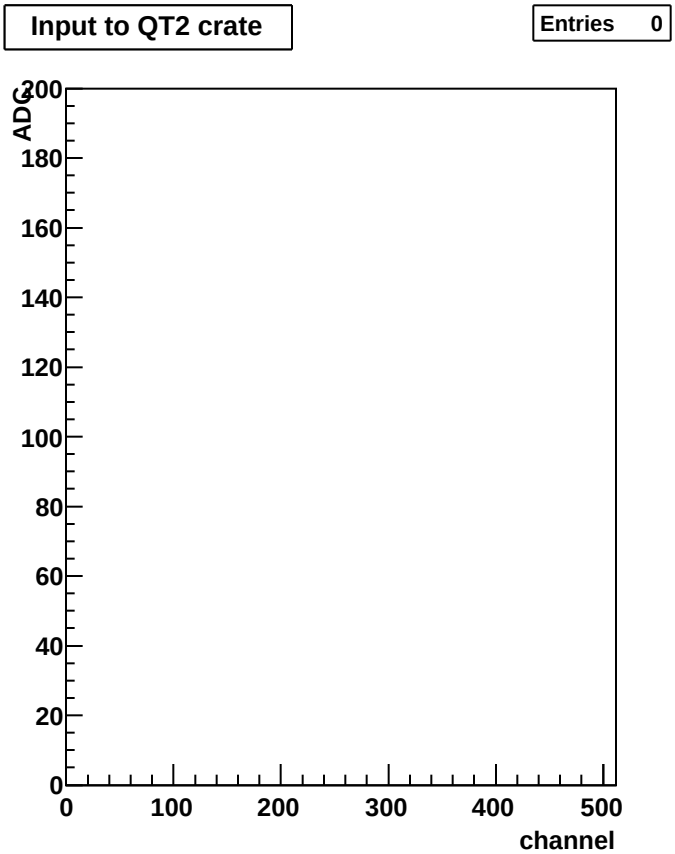

Entries 318706
BBC-L-East ADC Sum
BBC-L-West ADC Sum

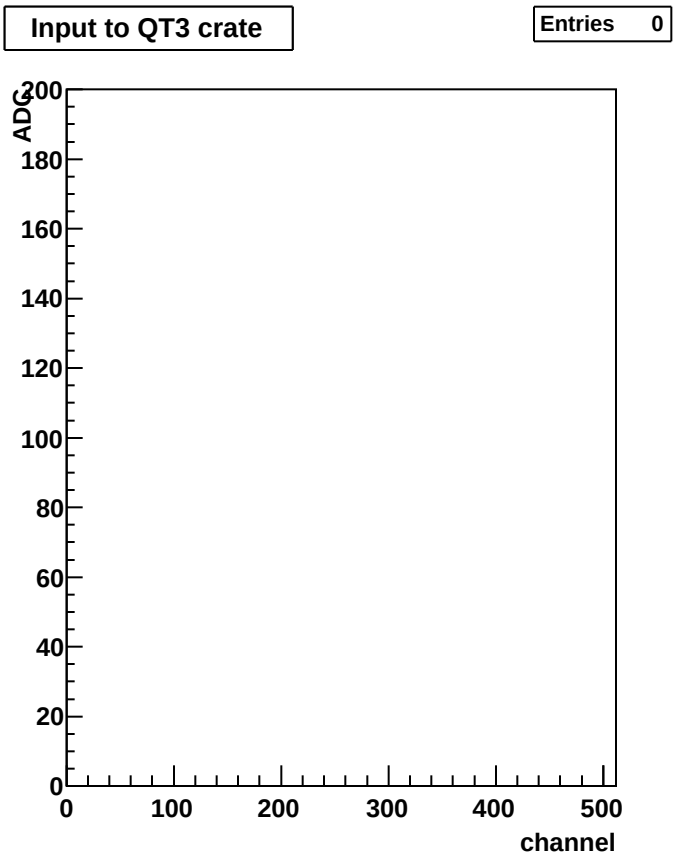

Entries 318706
BBC-S-East ADC Sum
BBC-S-West ADC Sum

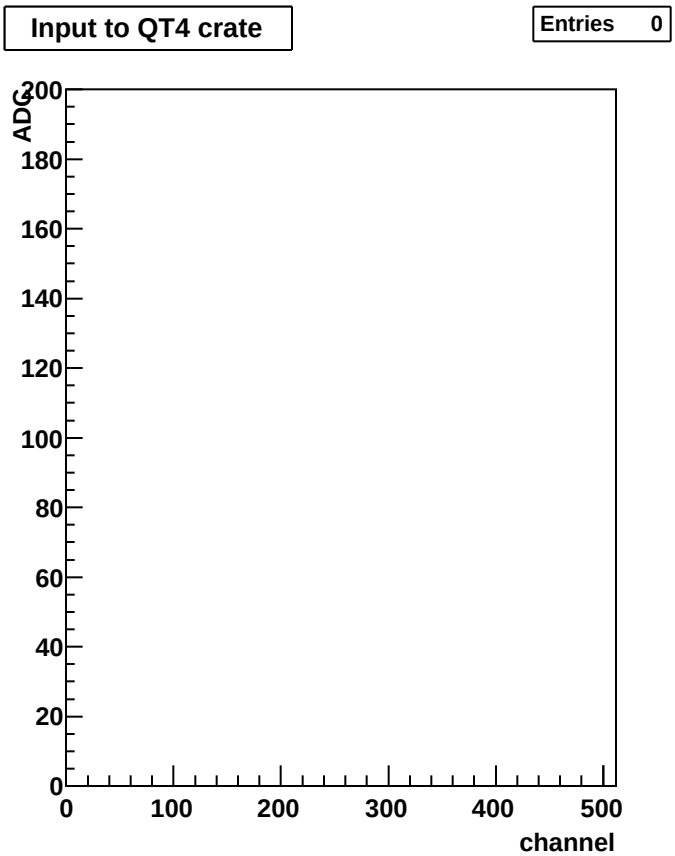

Entries 318706
ZDC East ADC Sum Att
ZDC West ADC Sum Att

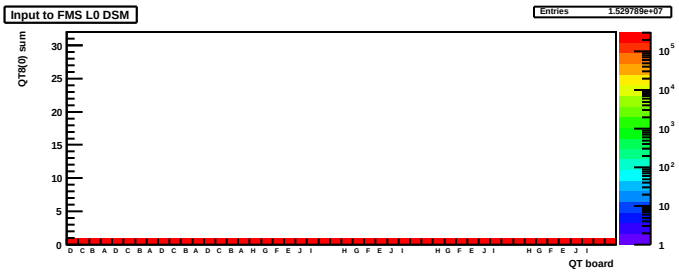

Entries 318706
BBC-L TAC Diff
BCC-S TAC Diff
Entries 318706
BBC-L TAC Diff
VPD TAC Diff
Entries 318706
BBC-L TAC Diff
ZDC TAC Diff
Entries 318706
BBC-S TAC Diff
VPD TAC Diff
Entries 318706
BBC-S TAC Diff
ZDC TAC Diff
Entries 318706
VPD TAC Diff
ZDC TAC Diff

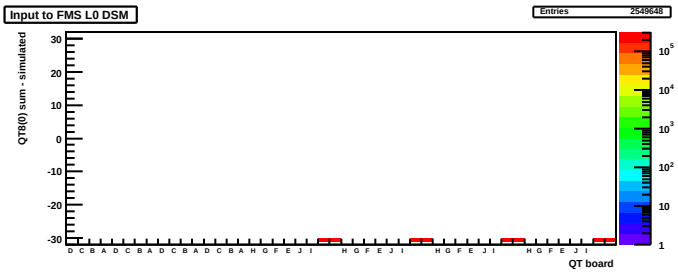

Input to QT1 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

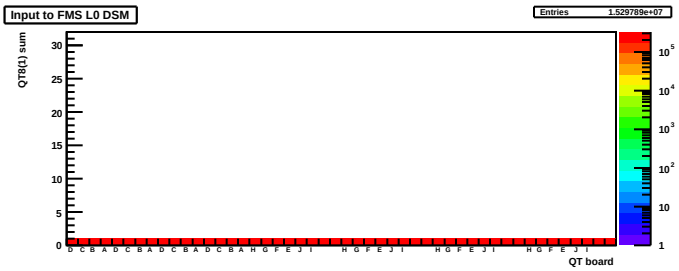

Input to QT2 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

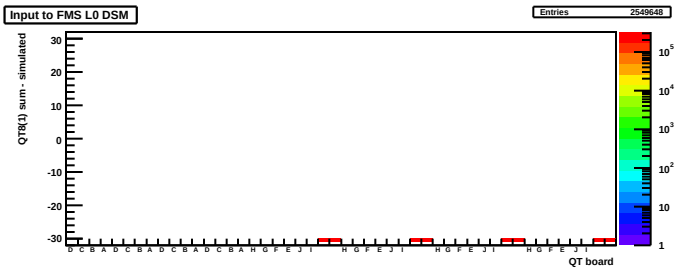

Input to QT3 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

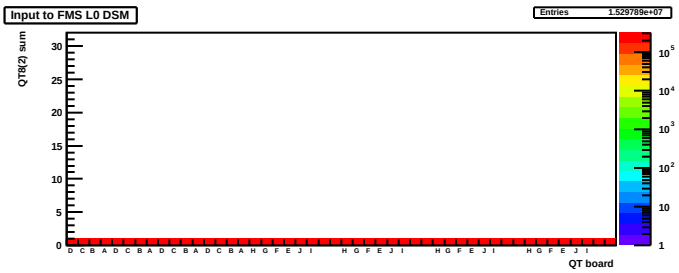

Input to QT4 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

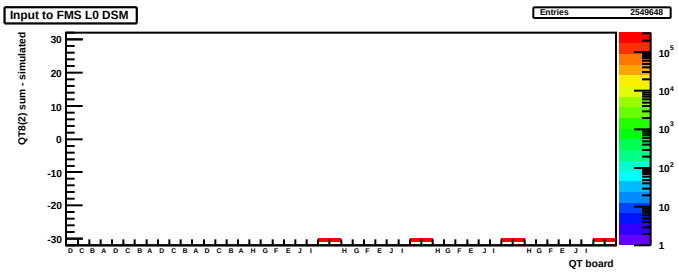

Input to FMS L0 DSM
Entries 1.529789e+07
QT8(0) sum
QT board

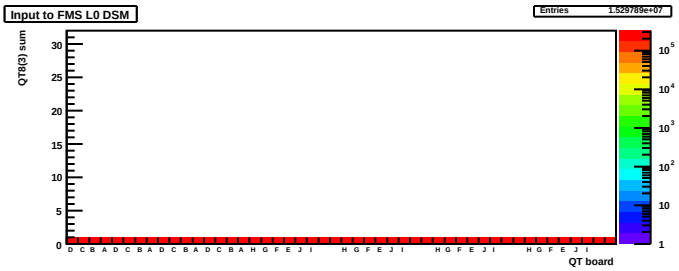

Input to FMS L0 DSM
Entries 2549648
QT8(0) sum - simulated
QT board

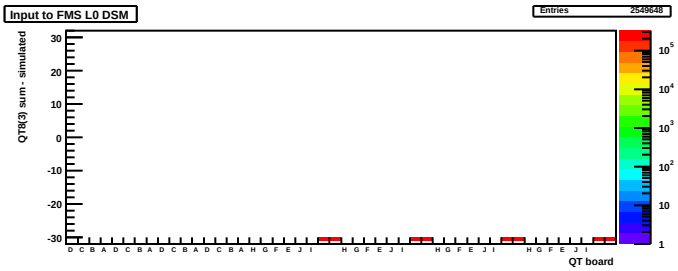

Input to FMS L0 DSM
Entries 1.529789e+07
QT8(1) sum
QT board

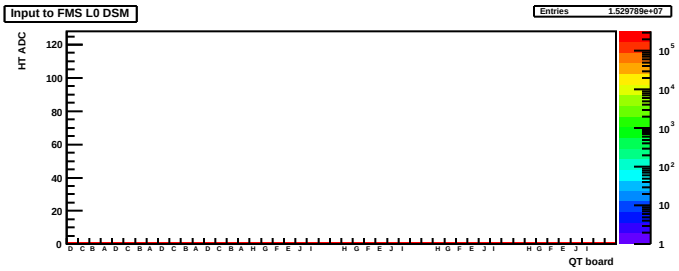

Input to FMS L0 DSM
Entries 2549648
QT8(1) sum - simulated
QT board

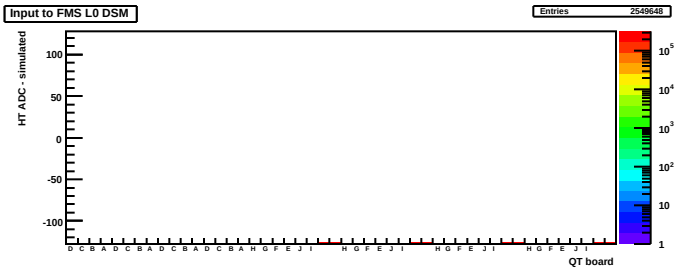

Input to FMS L0 DSM
Entries 1.529789e+07
QT8(2) sum
QT board

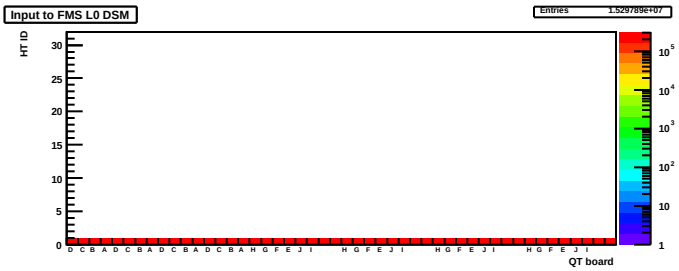

Input to FMS L0 DSM
Entries 2549648
QT8(2) sum - simulated
QT board

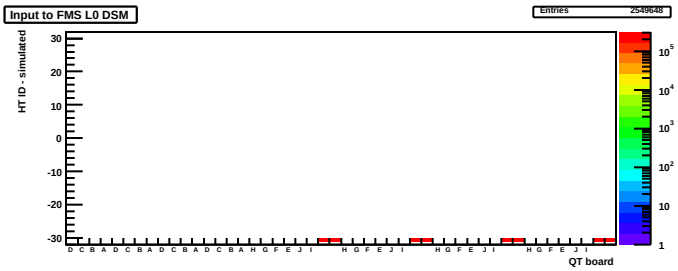

Input to FMS L0 DSM
Entries 1.529789e+07
QT8(3) sum
QT board

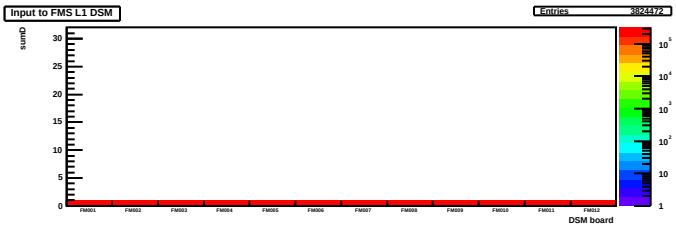

Input to FMS L0 DSM
Entries 2549648
QT8(3) sum - simulated
QT board

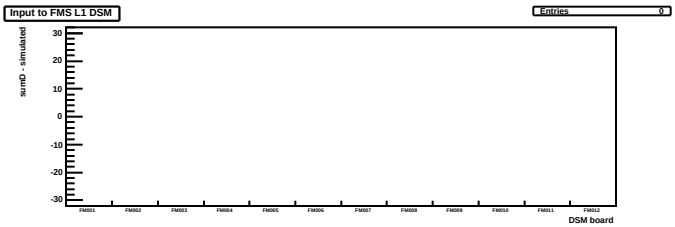

Input to FMS L0 DSM
Entries 1.529789e+07
HT ADC
QT board

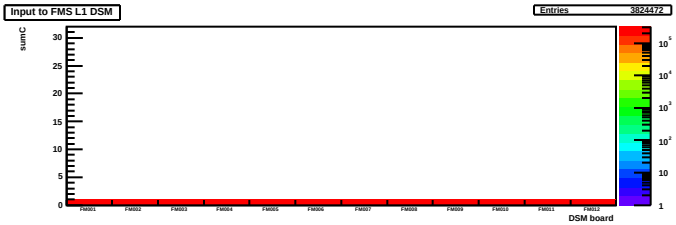

Input to FMS L0 DSM
Entries 2549648
HT ADC - simulated
QT board

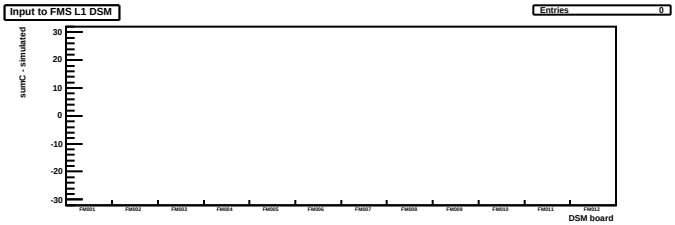

Input to FMS L0 DSM
Entries 1.529789e+07
HT ID
QT board

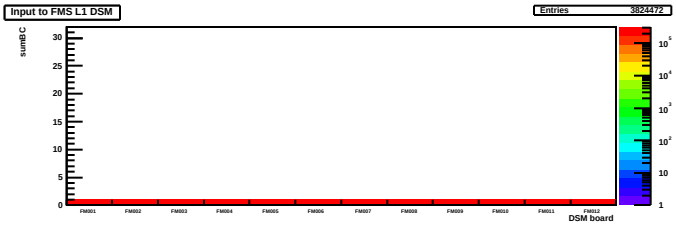

Input to FMS L0 DSM
Entries 2549648
HT ID - simulated
QT board

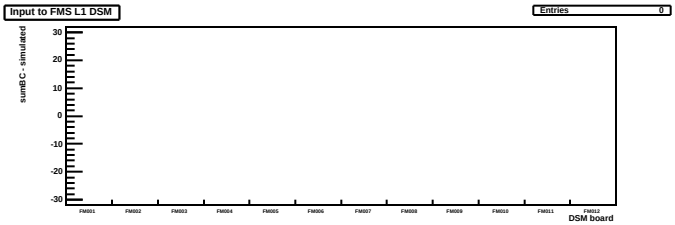

Input to FMS L1 DSM
Entries 3824472
sumD
DSM board

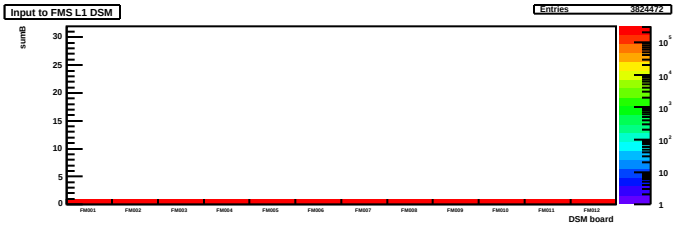

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

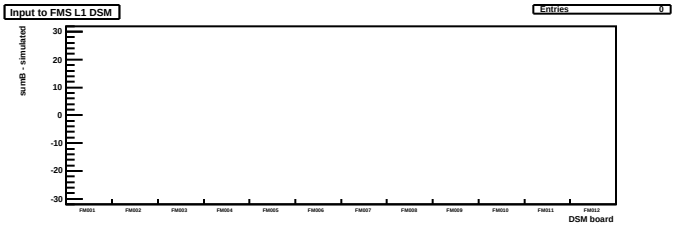

Input to FMS L1 DSM
Entries 3824472
sumC
DSM board

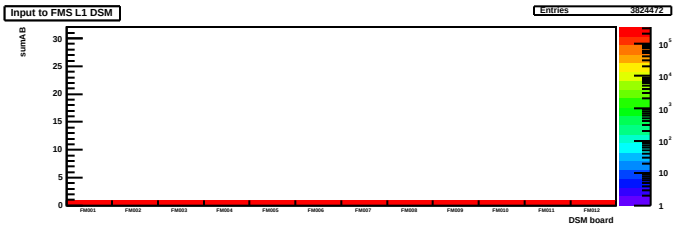

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

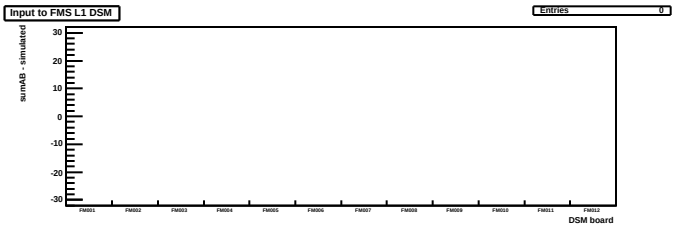

Input to FMS L1 DSM
Entries 3824472
sumBC
DSM board

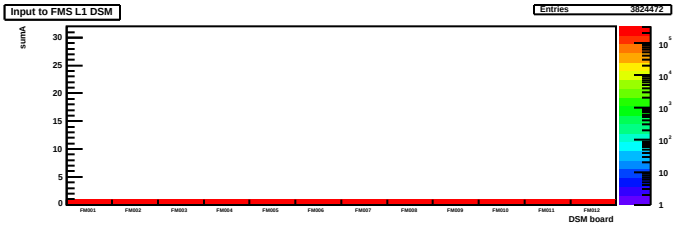

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

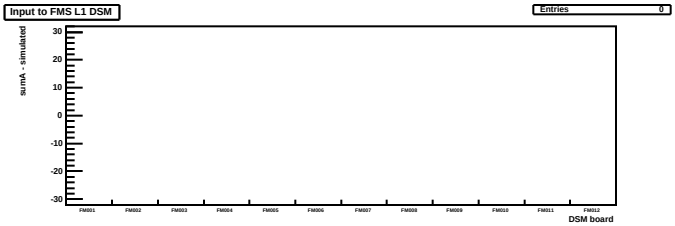

Input to FMS L1 DSM
Entries 3824472
sumB
DSM board

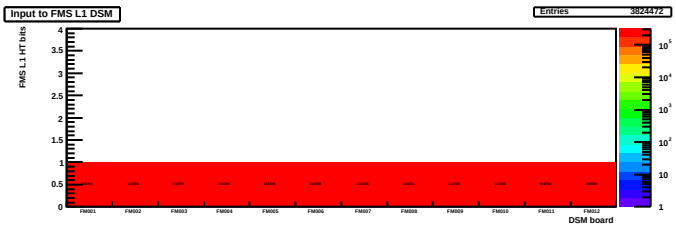

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

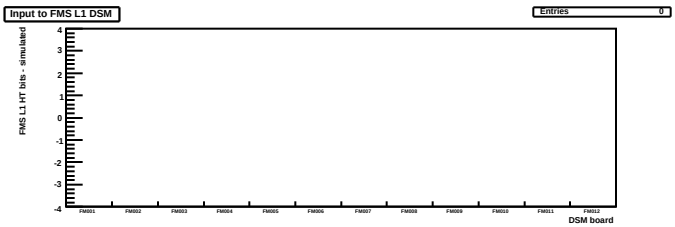

Input to FMS L1 DSM
Entries 3824472
sumAB
DSM board

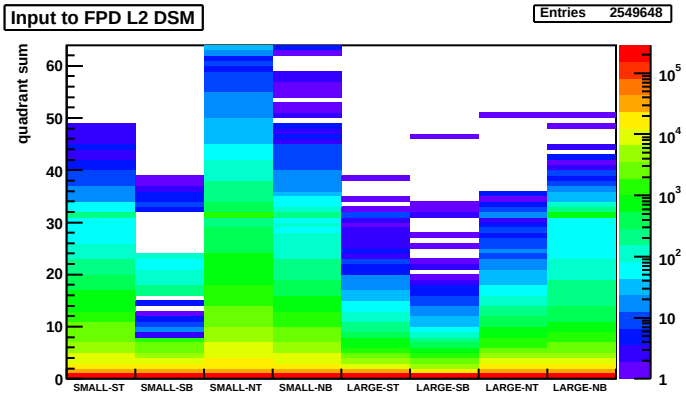

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

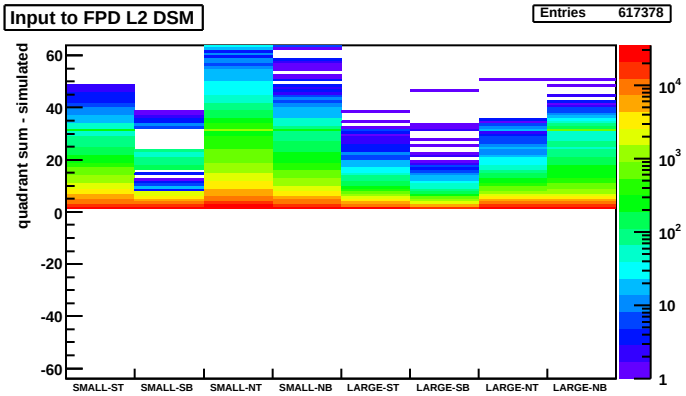

Input to FMS L1 DSM
Entries 3824472
sumA
DSM board

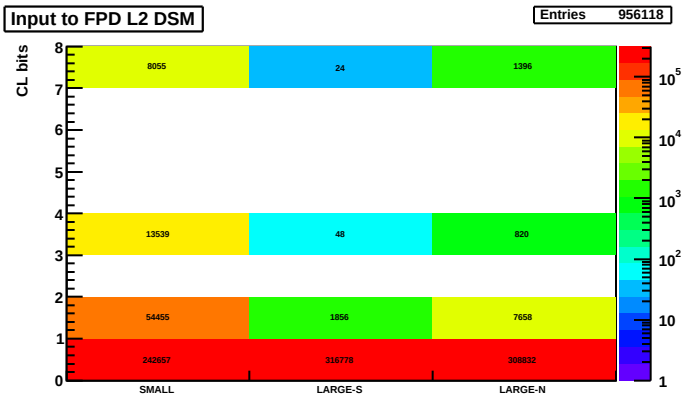

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

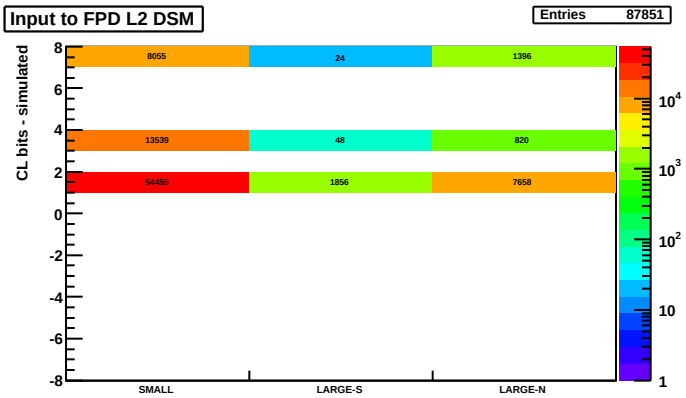

Input to FMS L1 DSM
Entries 3824472
FMS L1 HT bits
DSM board

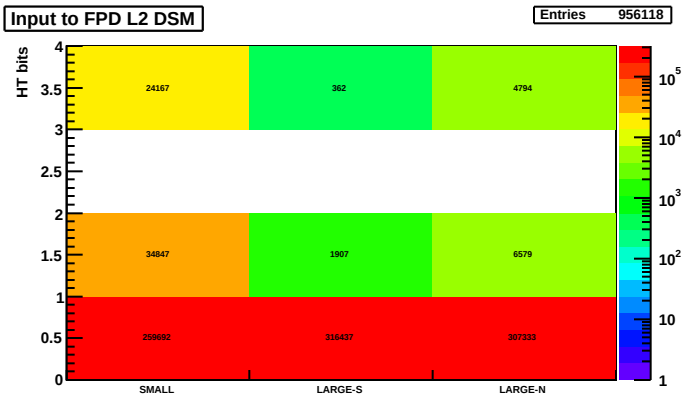

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

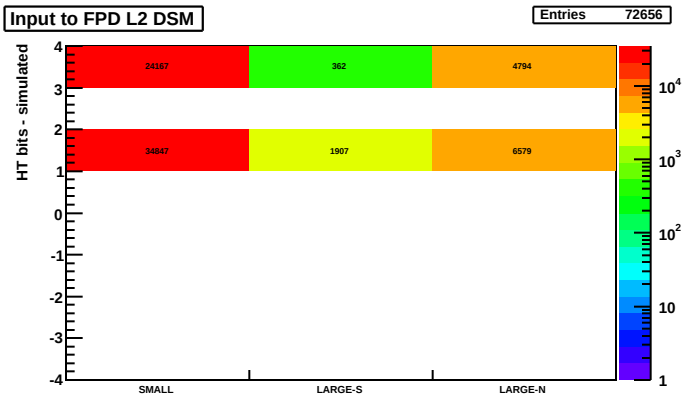

Input to FPD L2 DSM
Entries 2549648
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

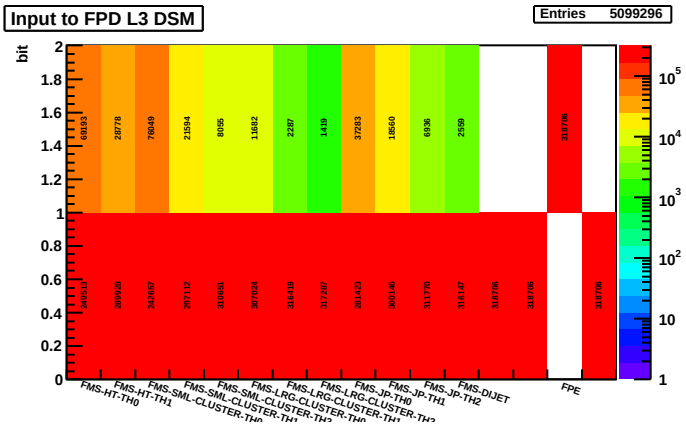

Input to FPD L2 DSM
Entries 617378
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

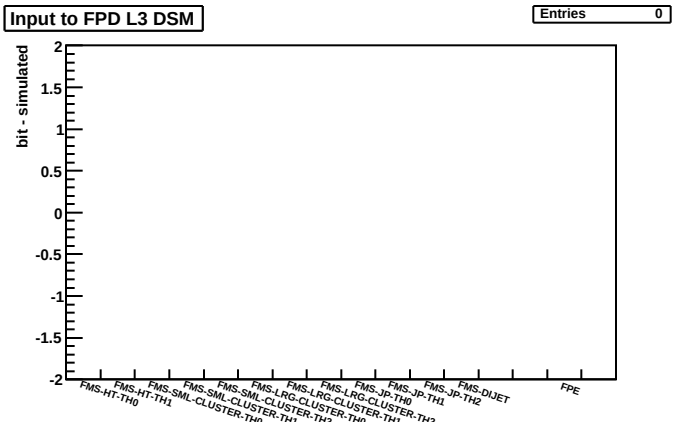

Input to FPD L2 DSM
Entries 956118
CL bits
8055
24
1396
13539
48
820
54455
1856
7658
242657
316778
308832
SMALL
LARGE-S
LARGE-N

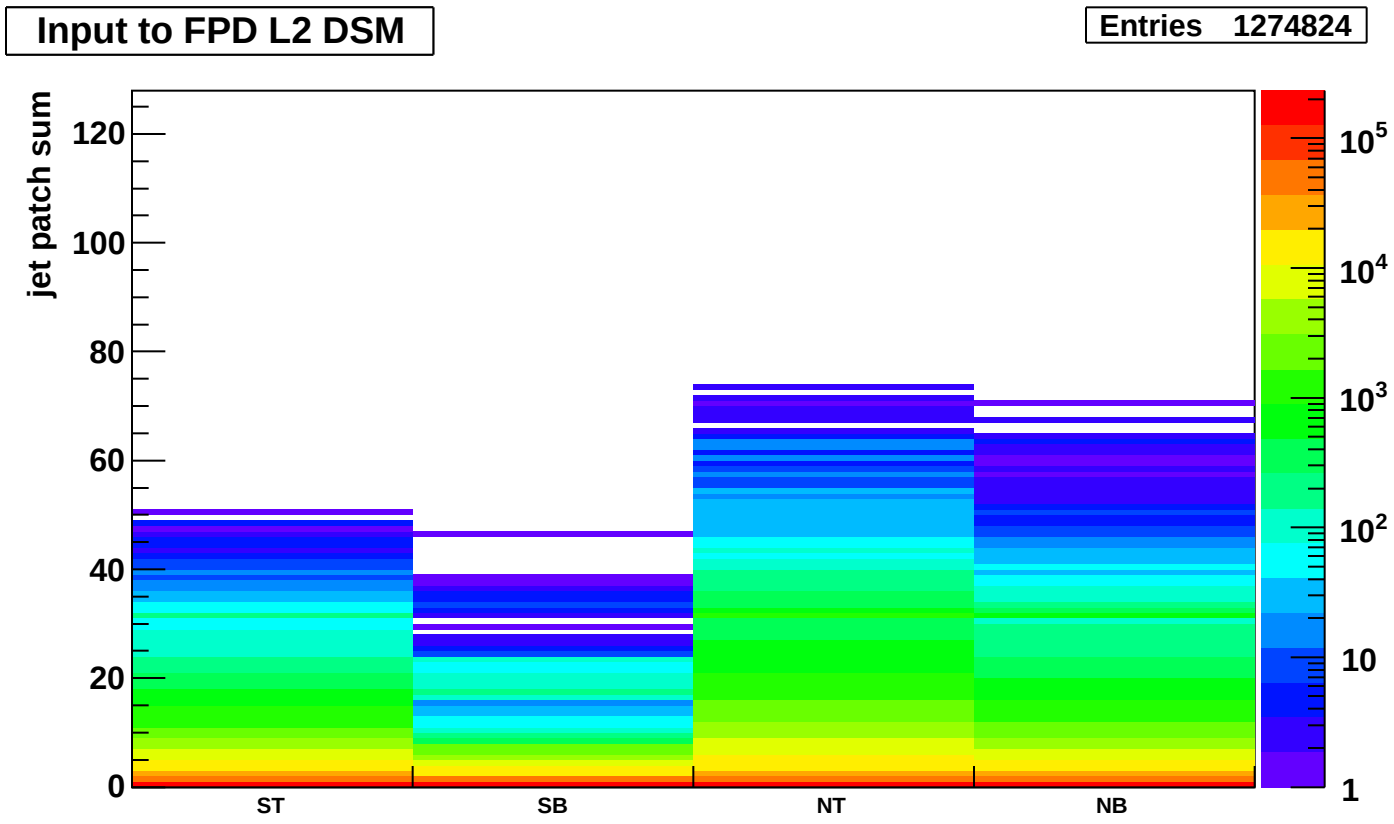

Input to FPD L2 DSM
Entries 87851
CL bits - simulated
8055
24
1396
13539
48
820
54455
1856
7658
SMALL
LARGE-S
LARGE-N

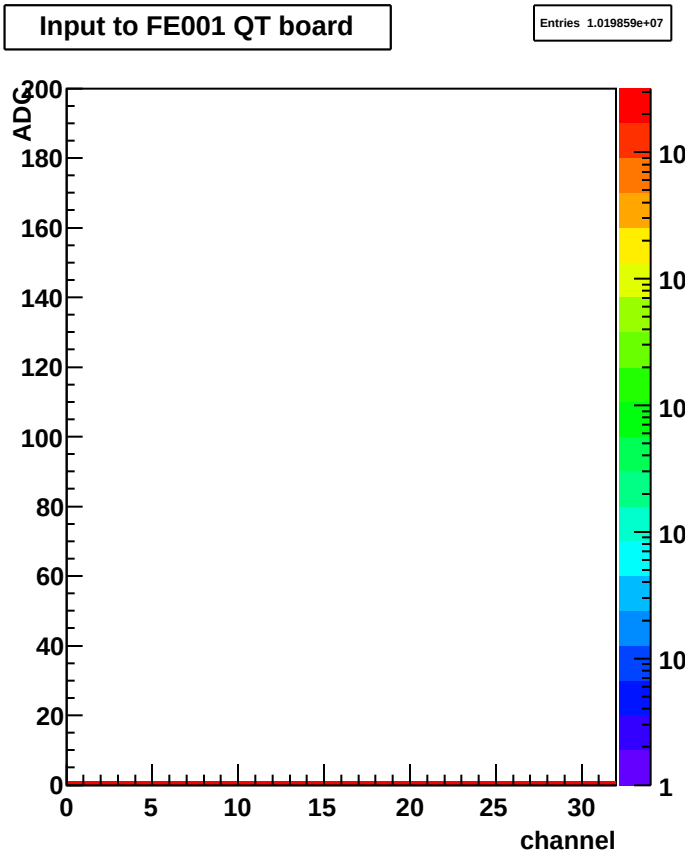

Input to FPD L2 DSM
Entries 956118
HT bits
24167
362
4794
34847
1907
6579
259692
316437
307333
SMALL
LARGE-S
LARGE-N

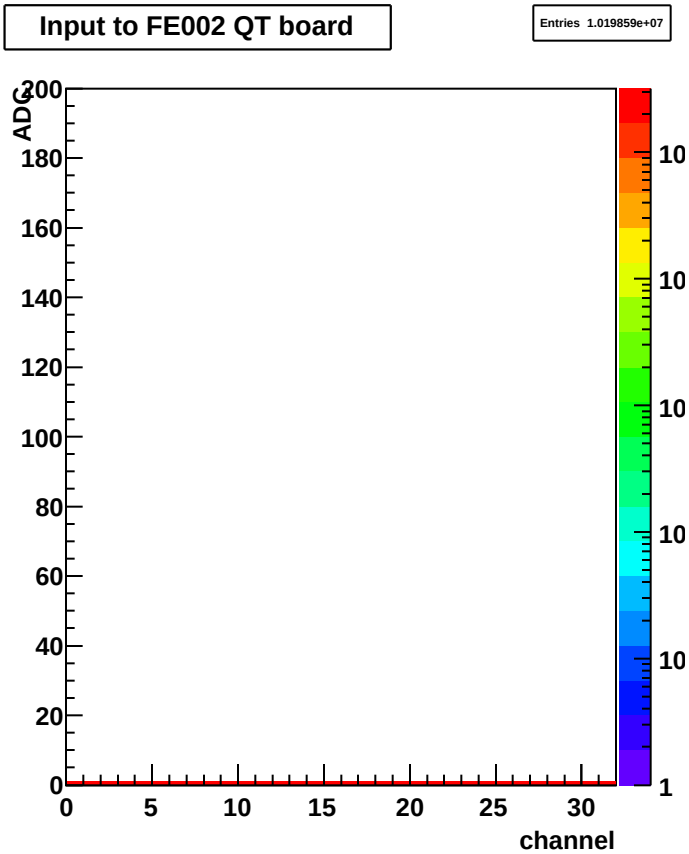

Input to FPD L2 DSM
Entries 72656
HT bits - simulated
24167
362
4794
34847
1907
6579
SMALL
LARGE-S
LARGE-N

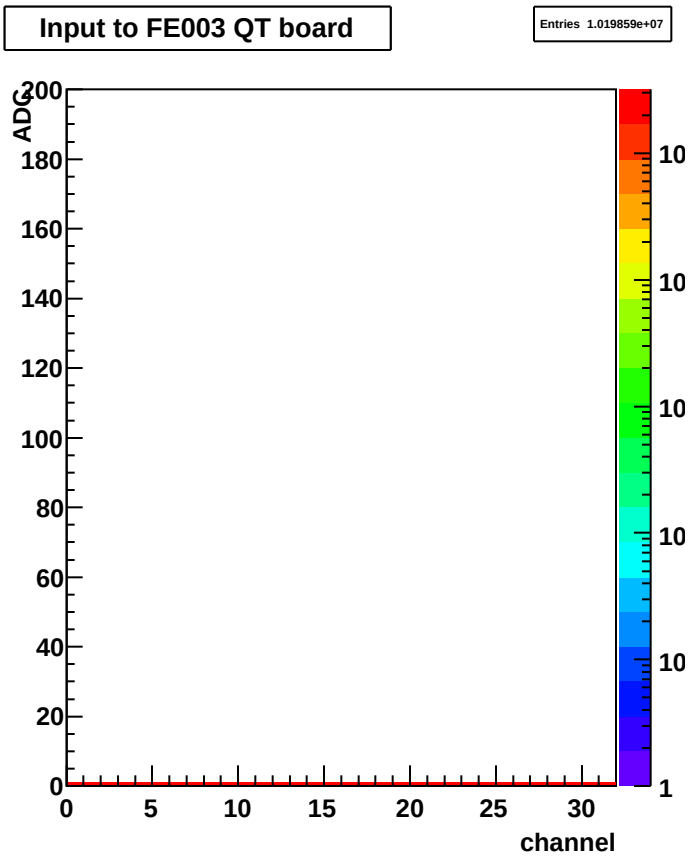

Input to FPD L3 DSM
Entries 5099296
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

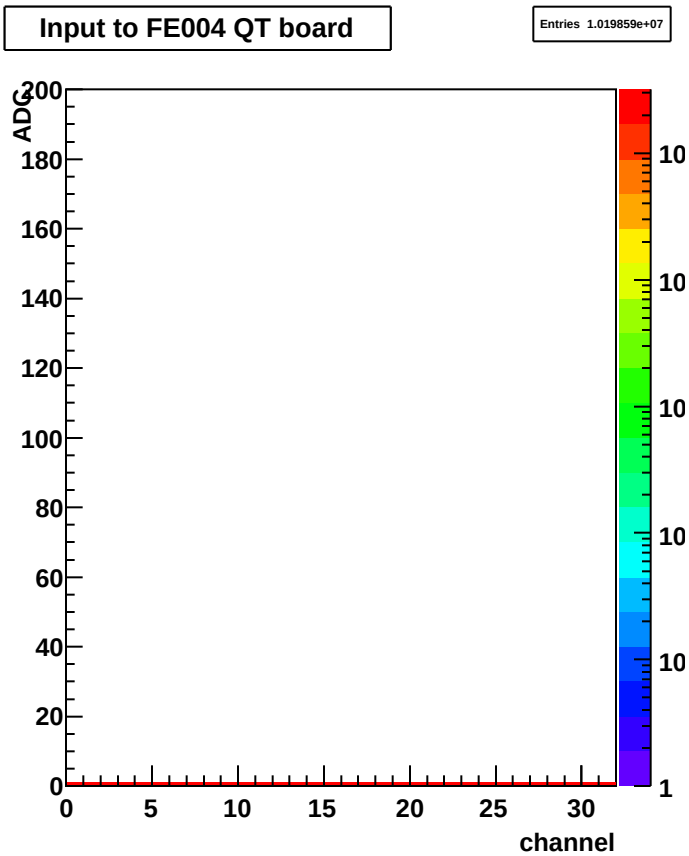

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

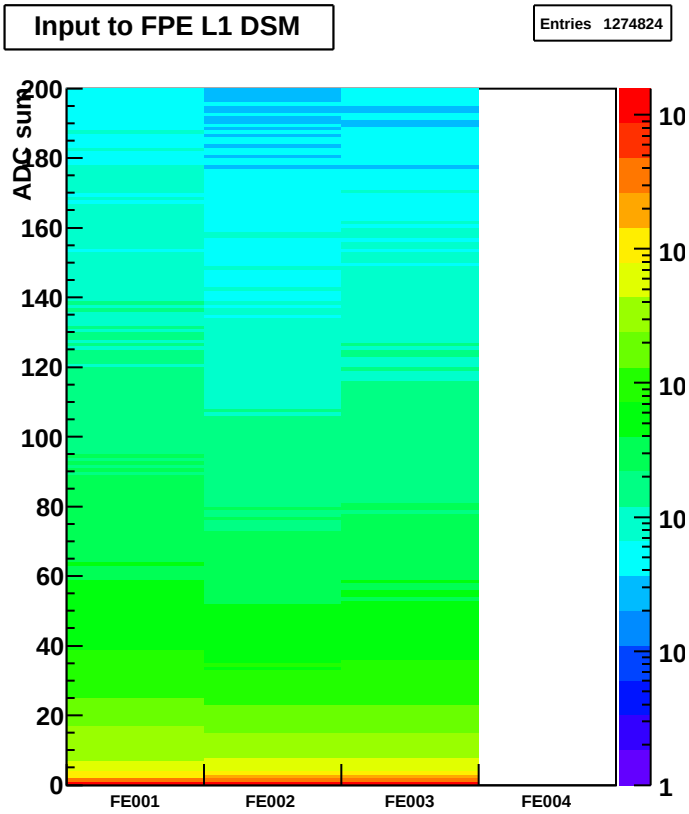

Input to FPD L2 DSM
Entries 1274824
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

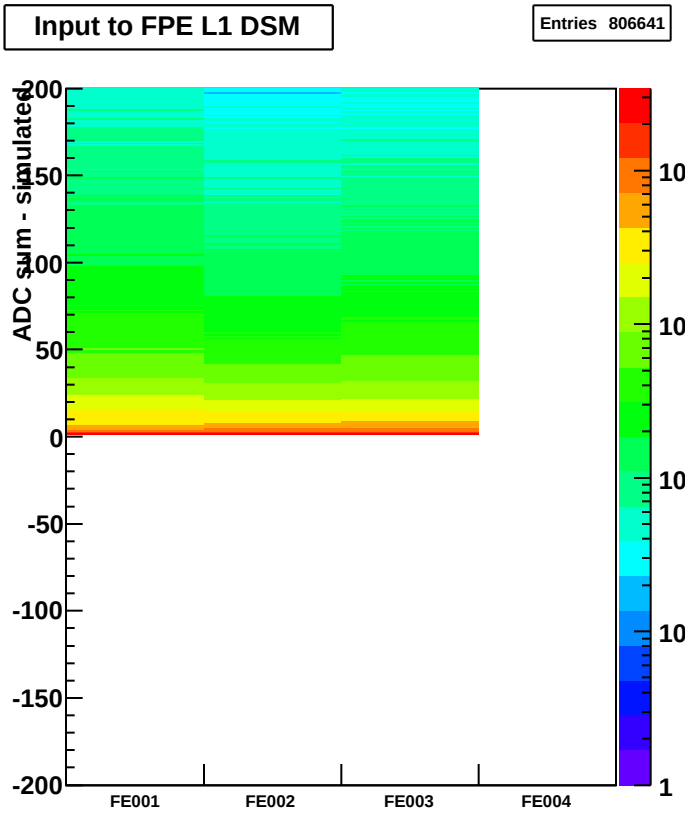

Input to FE001 QT board
Entries 1.019859e+07
ADC
channel

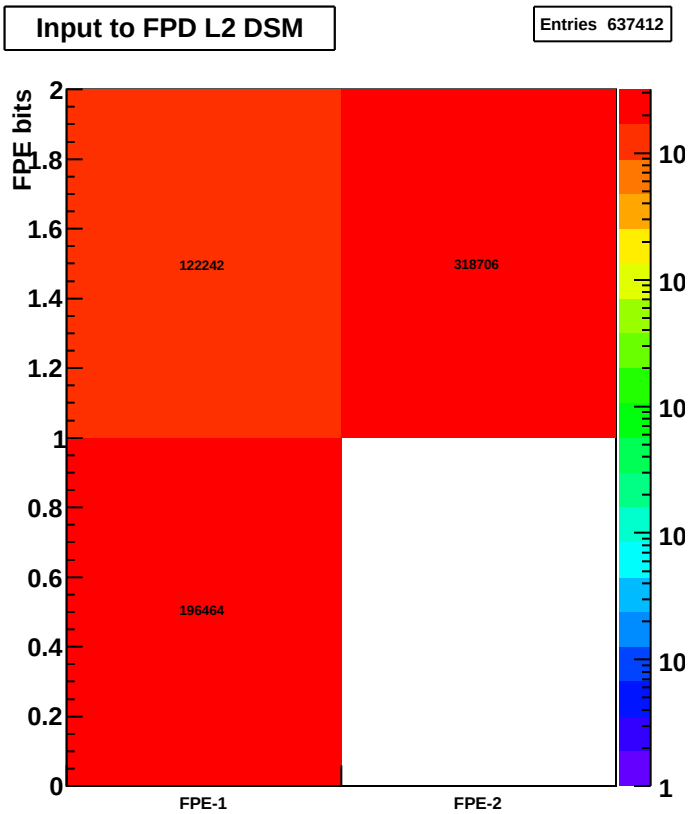

Input to FE002 QT board
Entries 1.019859e+07
ADC
channel

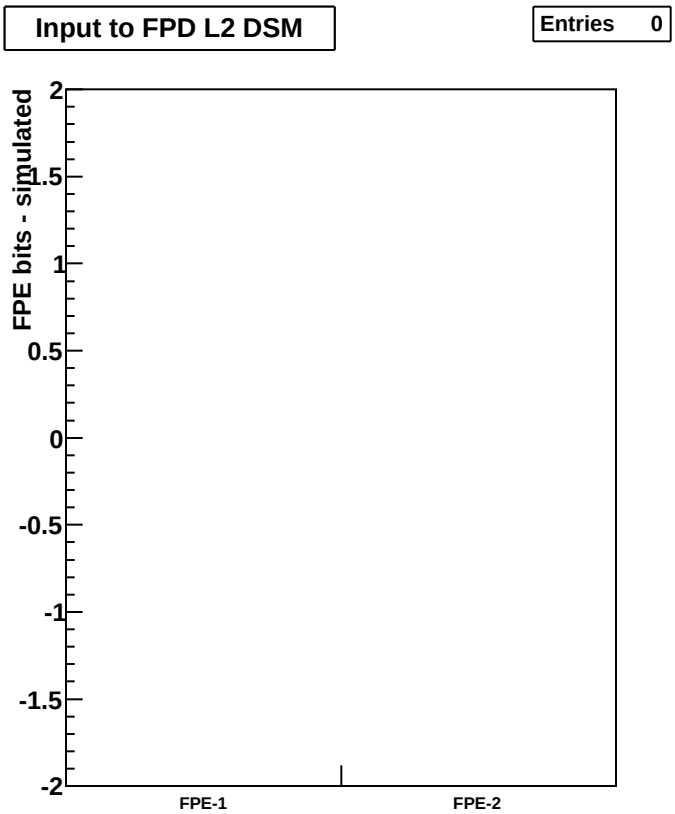

Input to FE003 QT board
Entries 1.019859e+07
ADC
channel


Input to FE004 QT board
Entries 1.019859e+07
ADC
channel


Input to FPE L1 DSM
Entries 1274824
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 806641
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 637412
FPE bits
122242
318706
196464
FPE-1
FPE-2


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