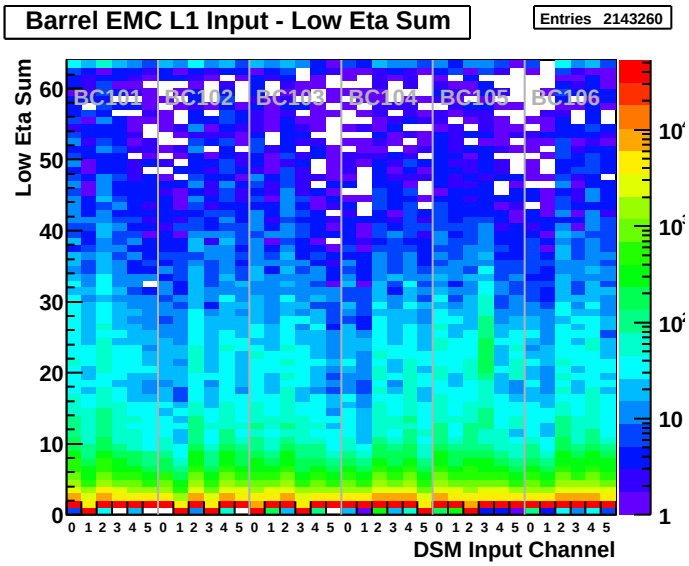
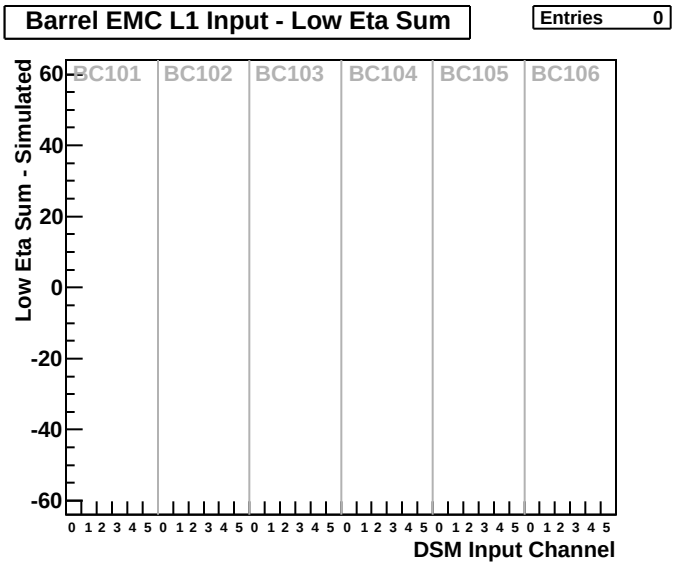
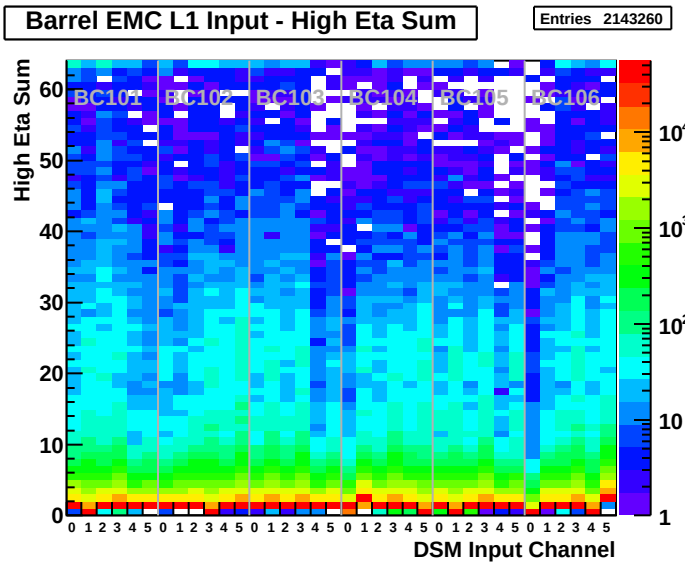
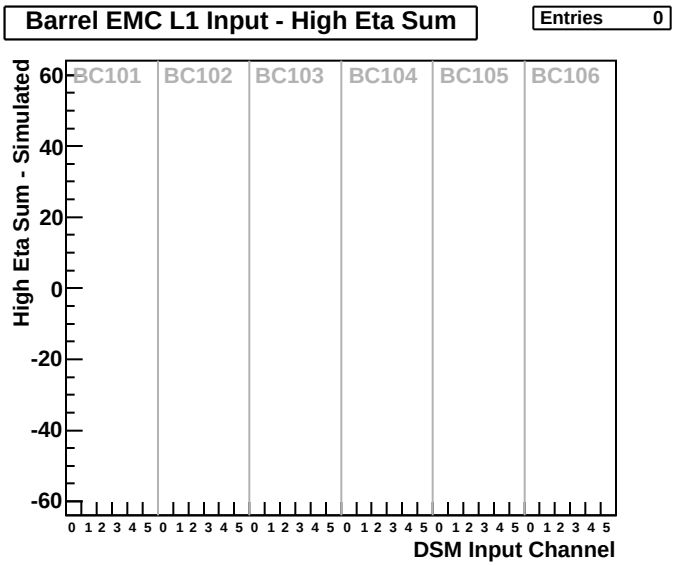
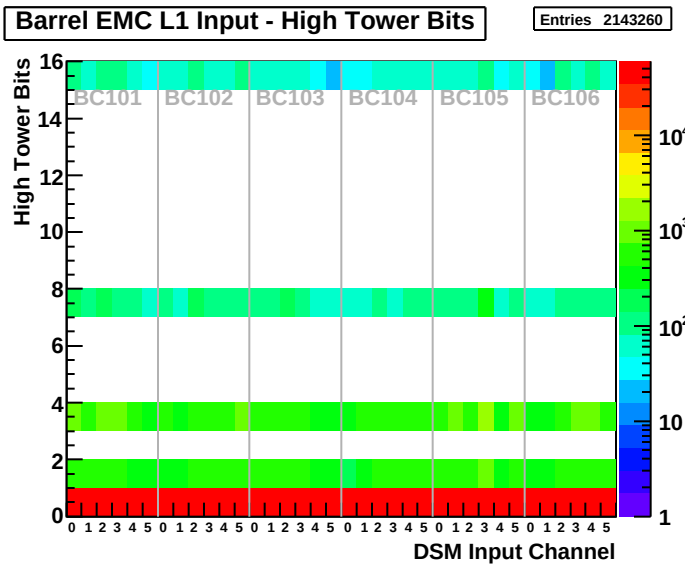
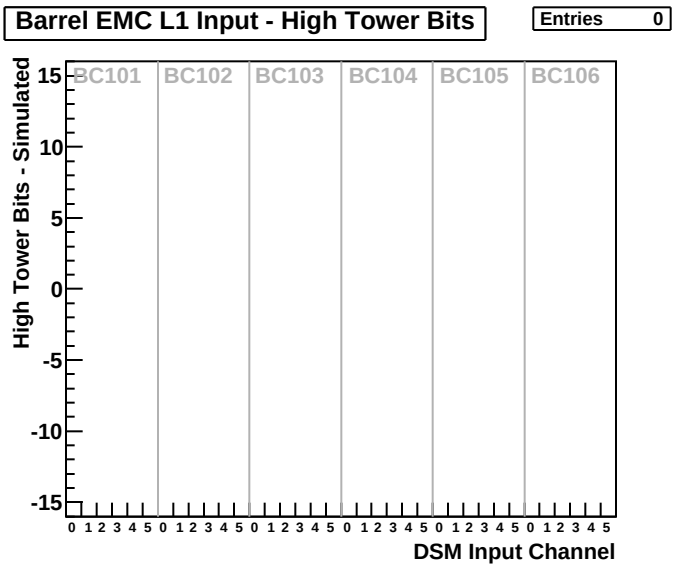

Barrel EMC L1 Input - Low Eta Sum
Entries 2143260
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

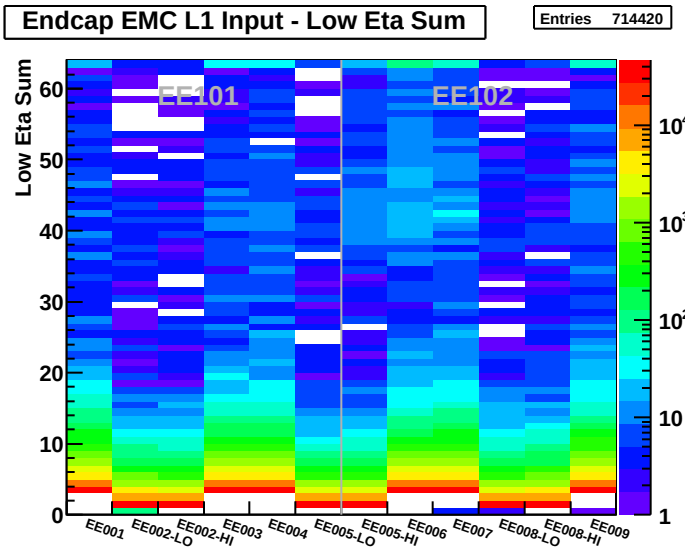

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

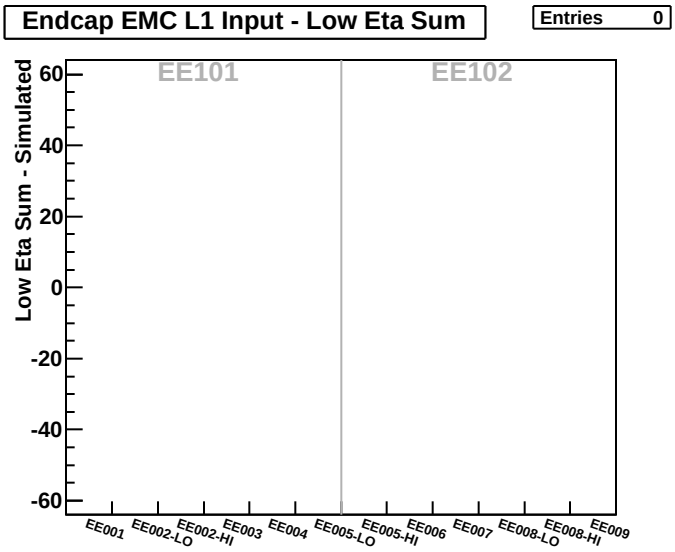

Barrel EMC L1 Input - High Eta Sum
Entries 2143260
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

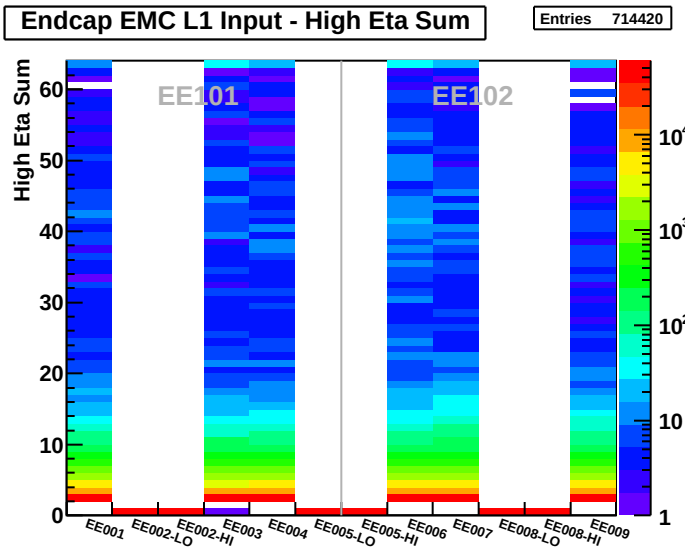

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

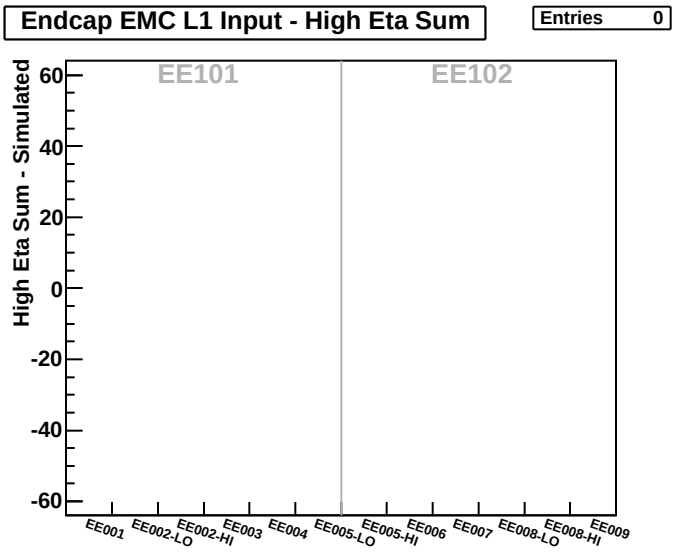

Barrel EMC L1 Input - High Tower Bits
Entries 2143260
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

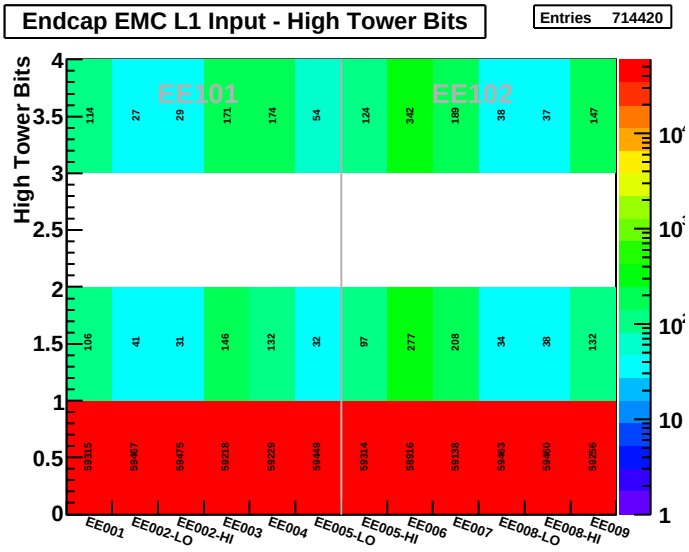

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

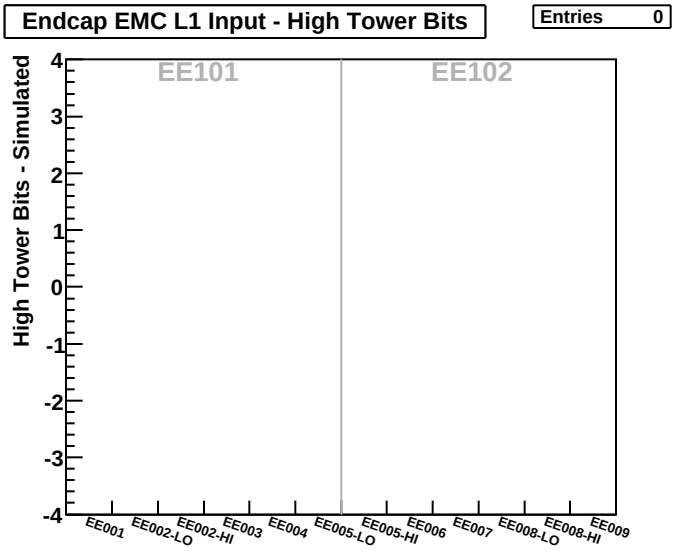

Endcap EMC L1 Input - Low Eta Sum
Entries 714420
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

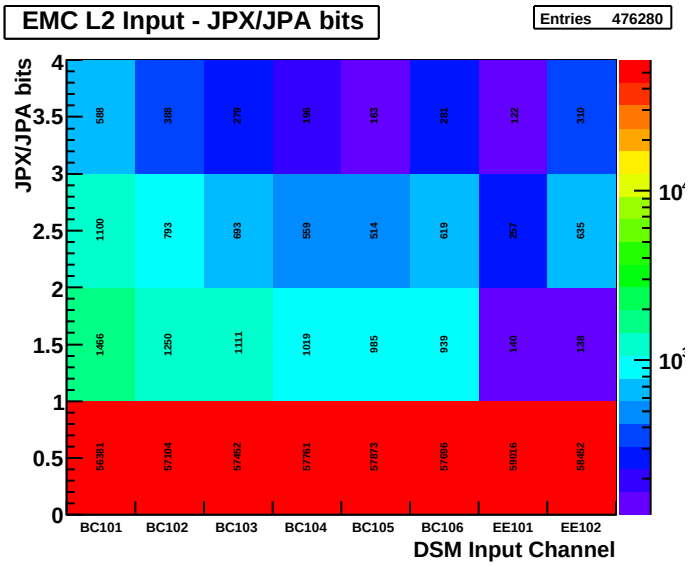

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

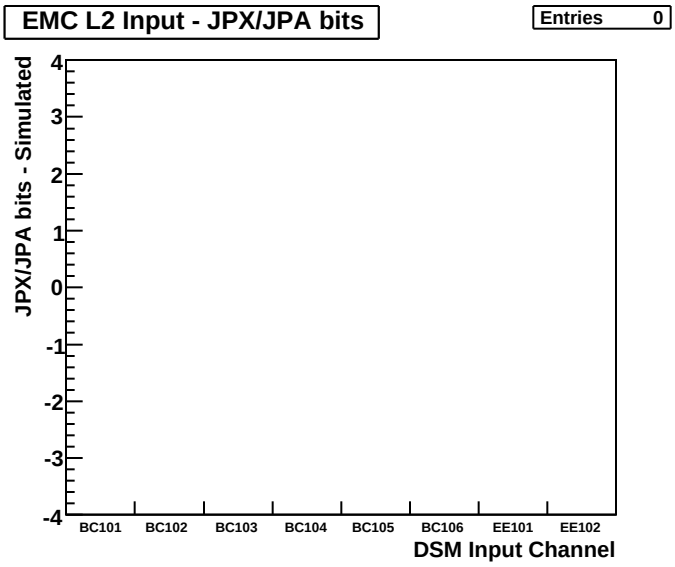

Endcap EMC L1 Input - High Eta Sum
Entries 714420
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

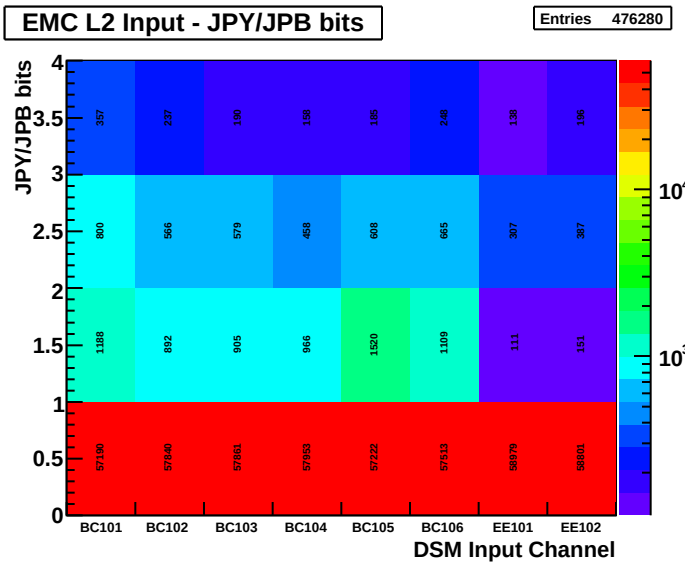

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

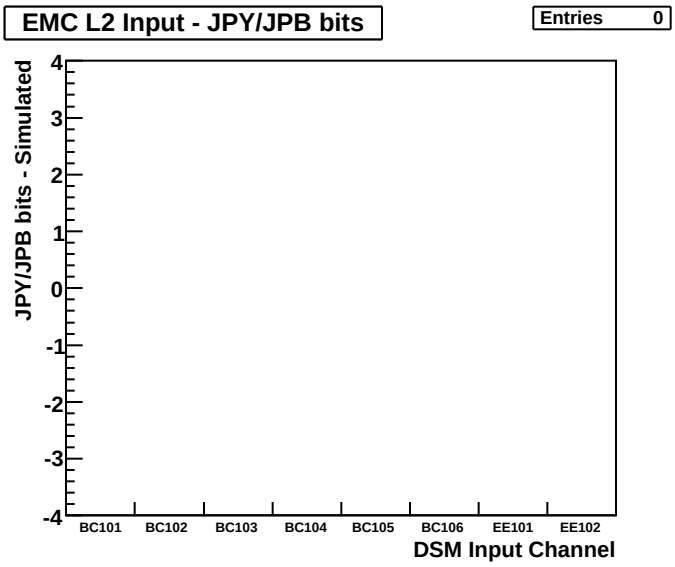

Endcap EMC L1 Input - High Tower Bits
Entries 714420
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

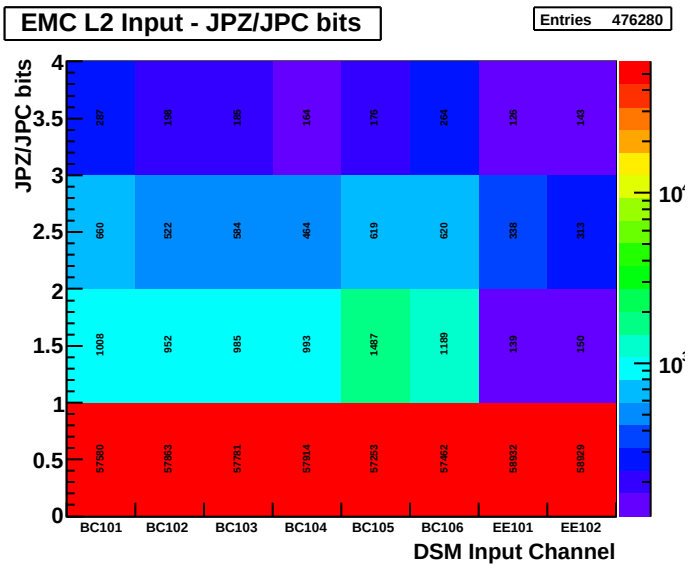

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

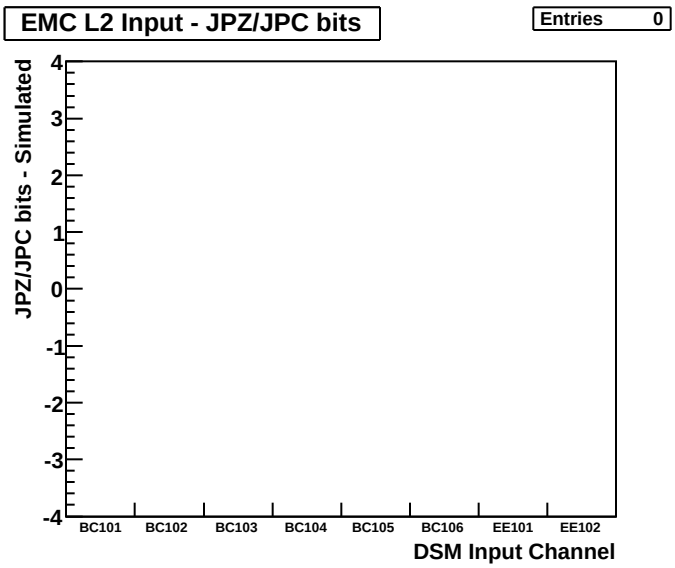

EMC L2 Input - JPX/JPA bits
Entries 476280
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
588 388 279 196 163 281 122 310
1100 793 693 559 514 619 257 635
1466 1250 1111 1019 985 939 140 138
56381 57104 57452 57761 57873 57696 59016 58452

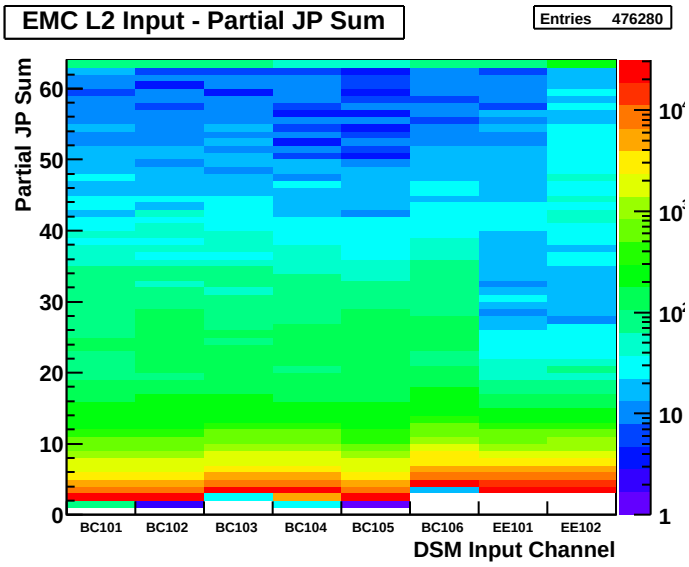

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

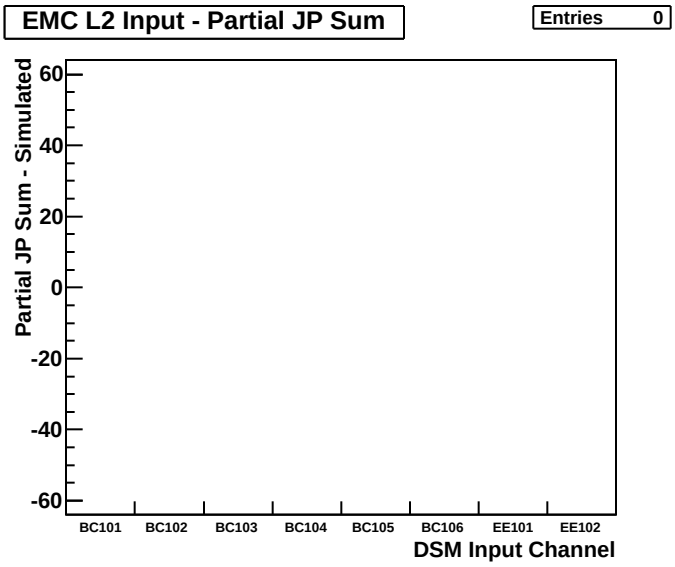

EMC L2 Input - JPY/JPB bits
Entries 476280
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
357 237 190 158 185 246 138 196
800 566 579 458 608 665 307 387
1188 892 905 966 1520 1109 111 151
57190 57840 57861 57953 57222 57513 58979 58801

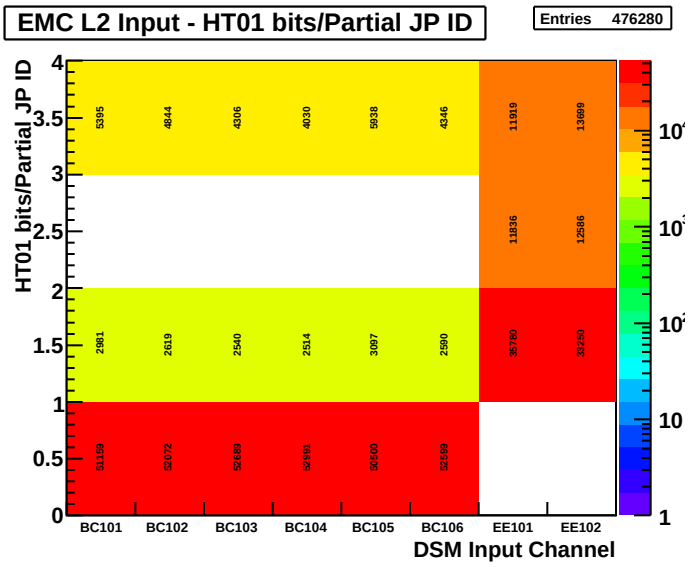

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

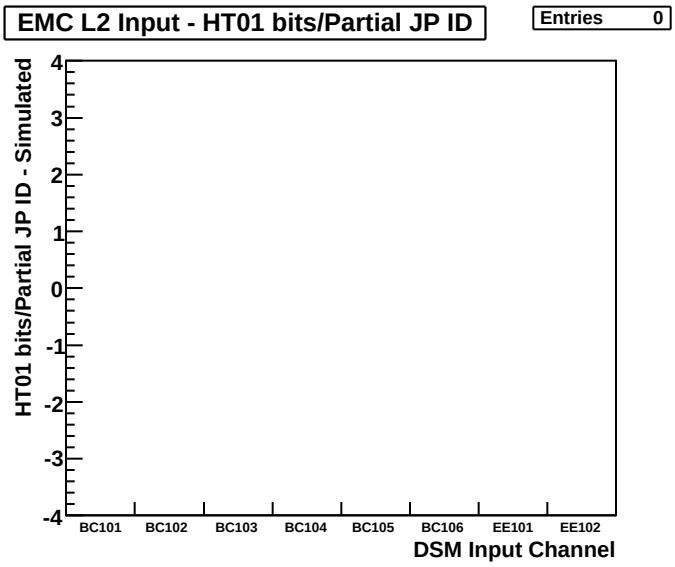

EMC L2 Input - JPZ/JPC bits
Entries 476280
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
287 198 185 164 176 264 126 143
660 522 584 464 619 620 338 313
1008 952 985 993 1487 1189 139 150
57580 57863 57781 57814 57753 57462 58932 58929

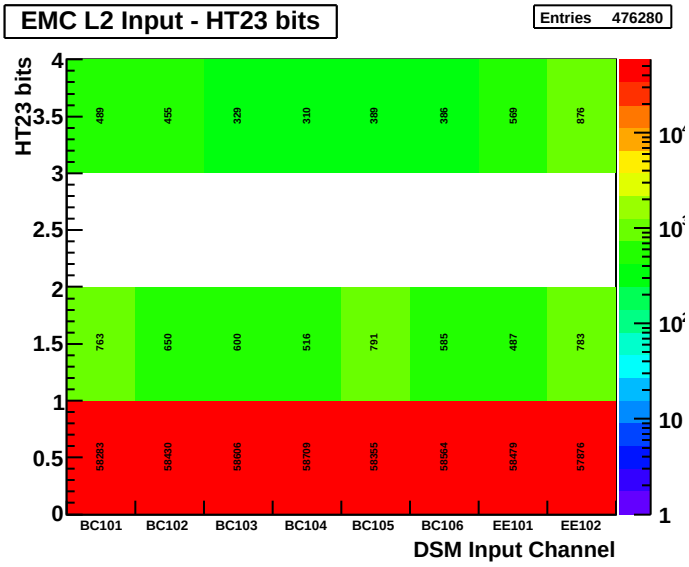

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

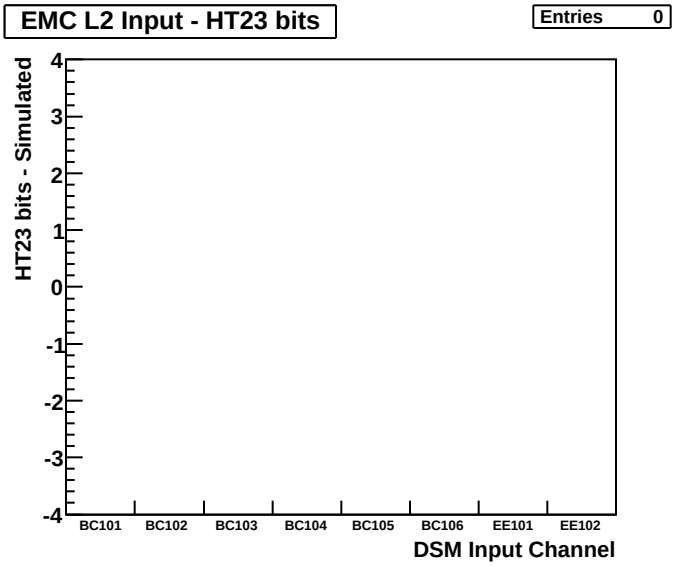

EMC L2 Input - Partial JP Sum
Entries 476280
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

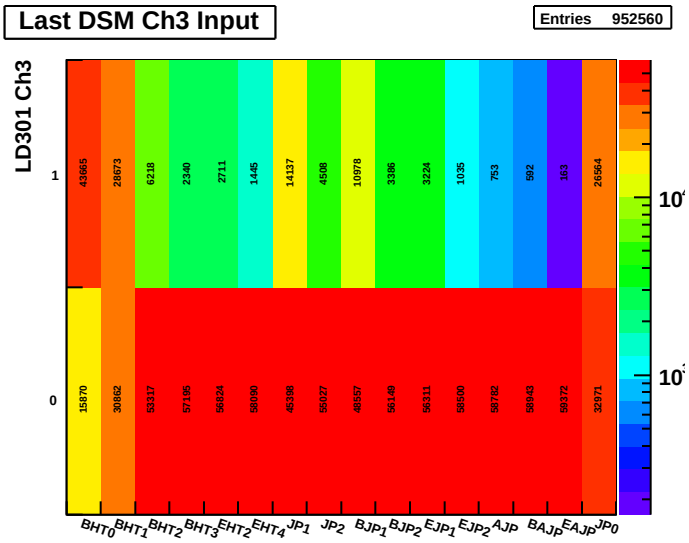

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

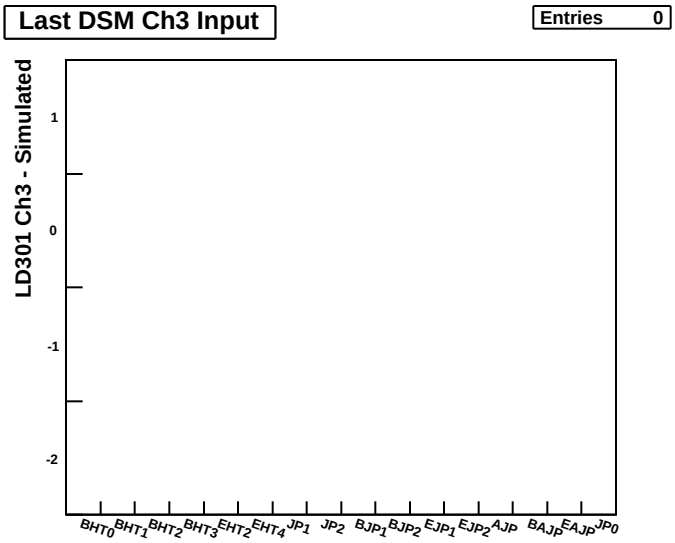

EMC L2 Input - HT01 bits/Partial JP ID
Entries 476280
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

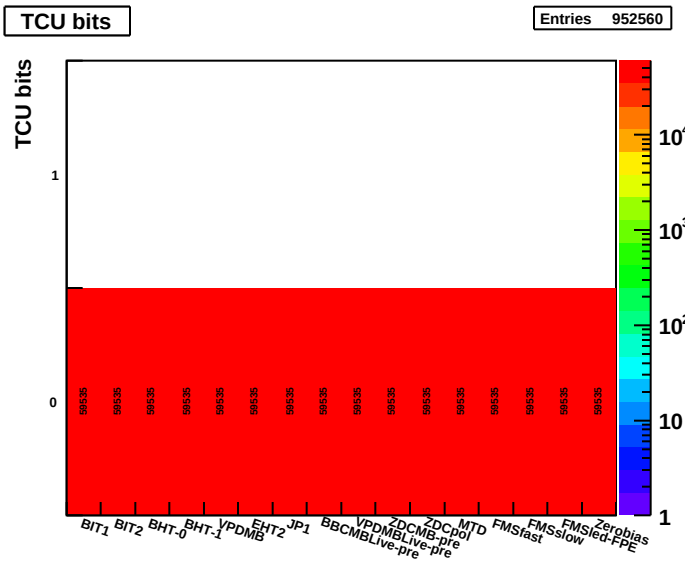

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

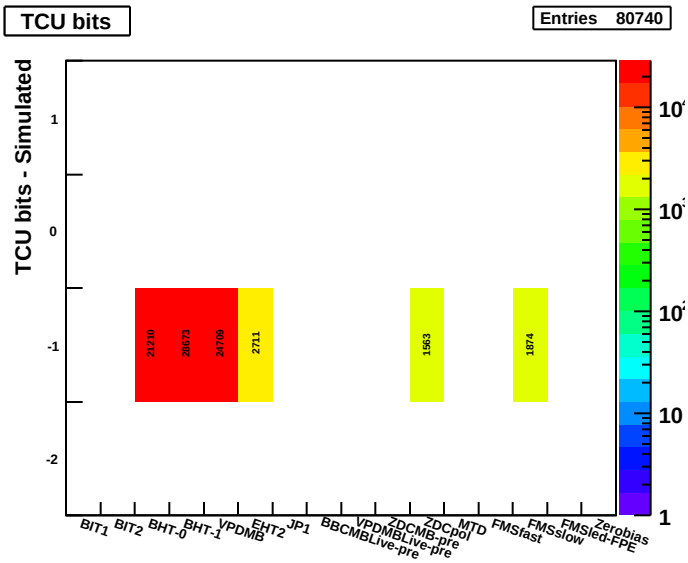

EMC L2 Input - HT23 bits
Entries 476280
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

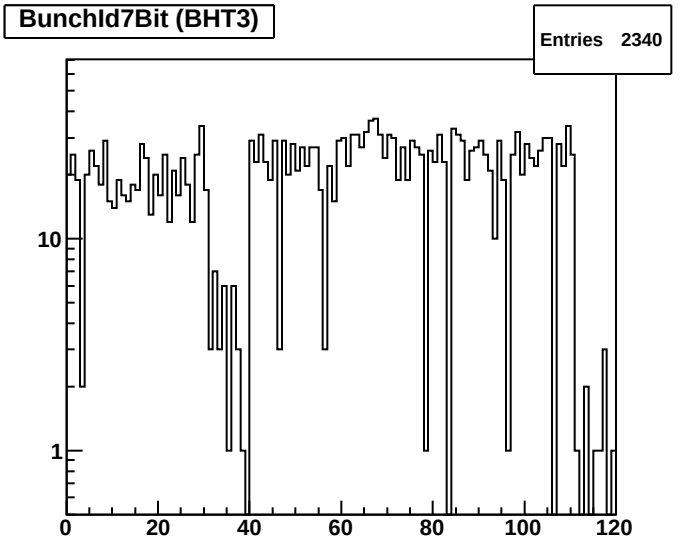

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

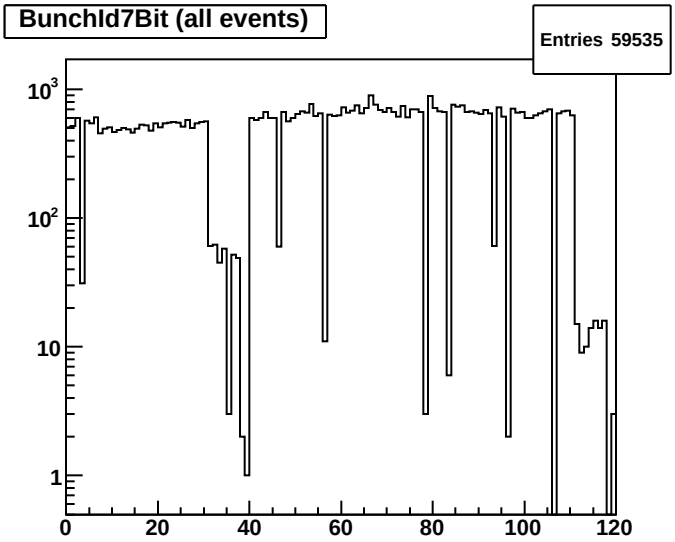

Last DSM Ch3 Input
Entries 952560
LD301 Ch3
1
0
43665
28673
6218
2340
2711
1445
14137
4508
10978
3386
3224
1035
753
592
163
26564
15870
30862
53317
57195
56824
58090
45398
55027
49557
56149
56311
58500
58782
58943
59372
32971
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

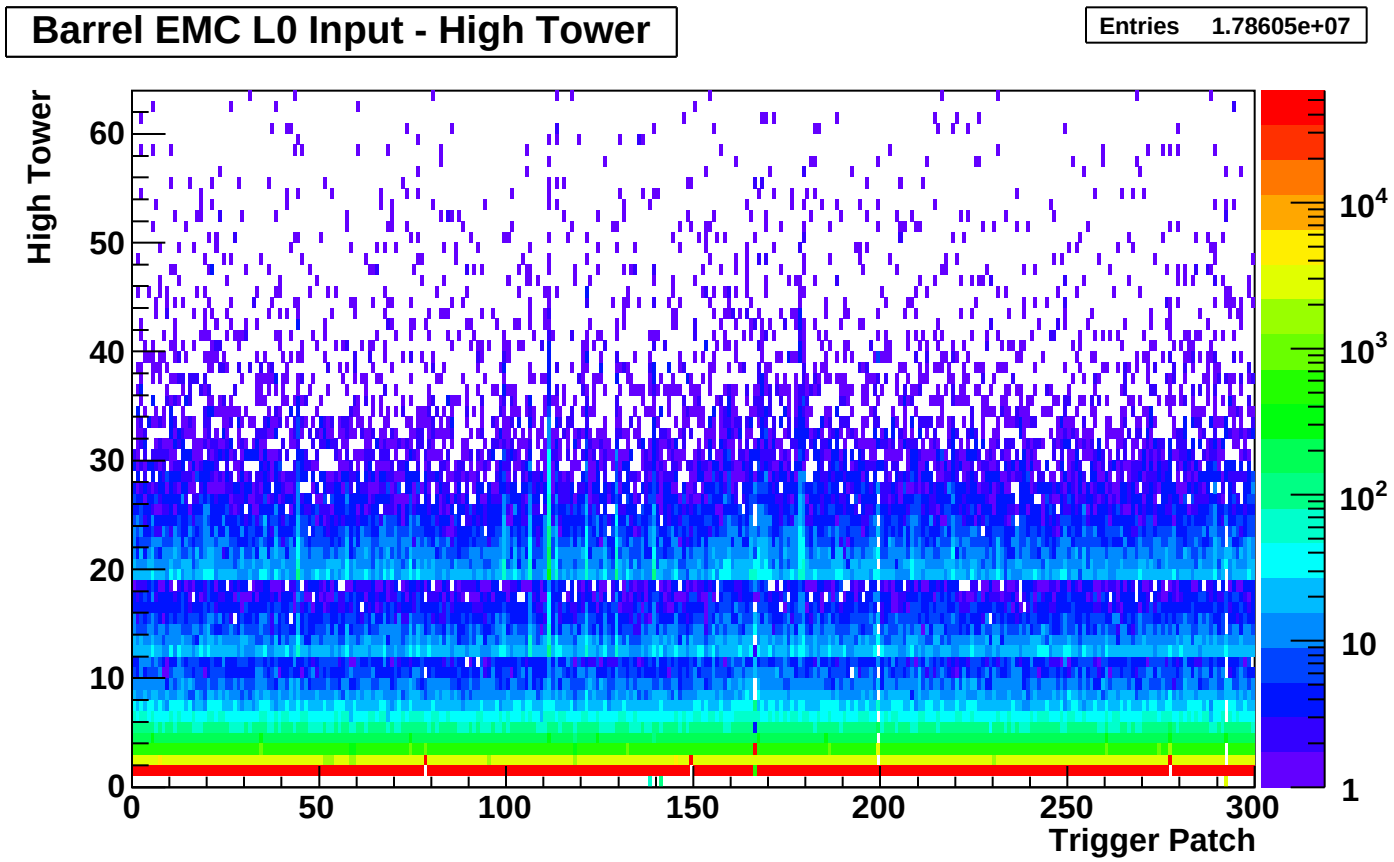

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
1
0
-1
-2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

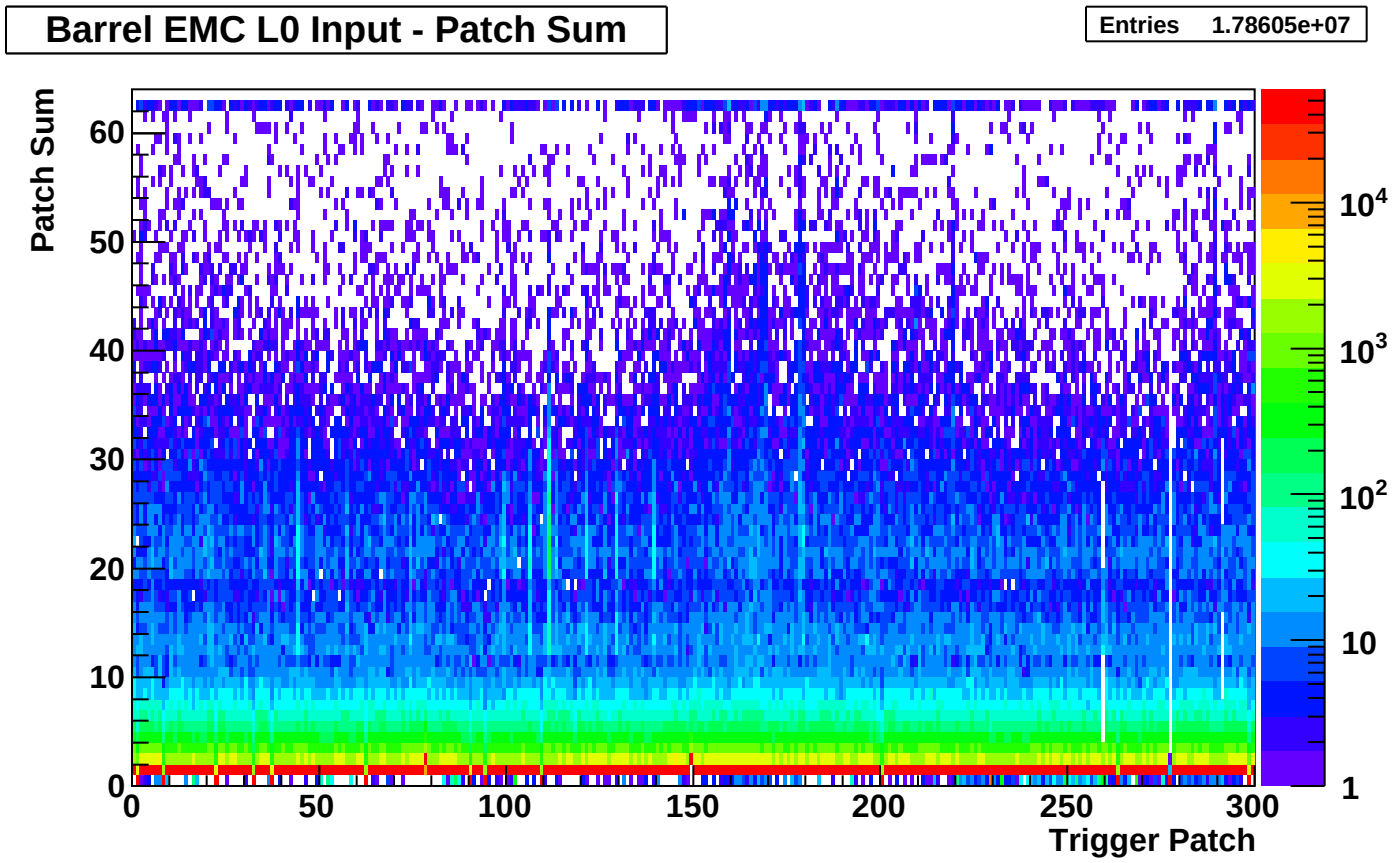

TCU bits
Entries 952560
TCU bits
1
0
59535
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

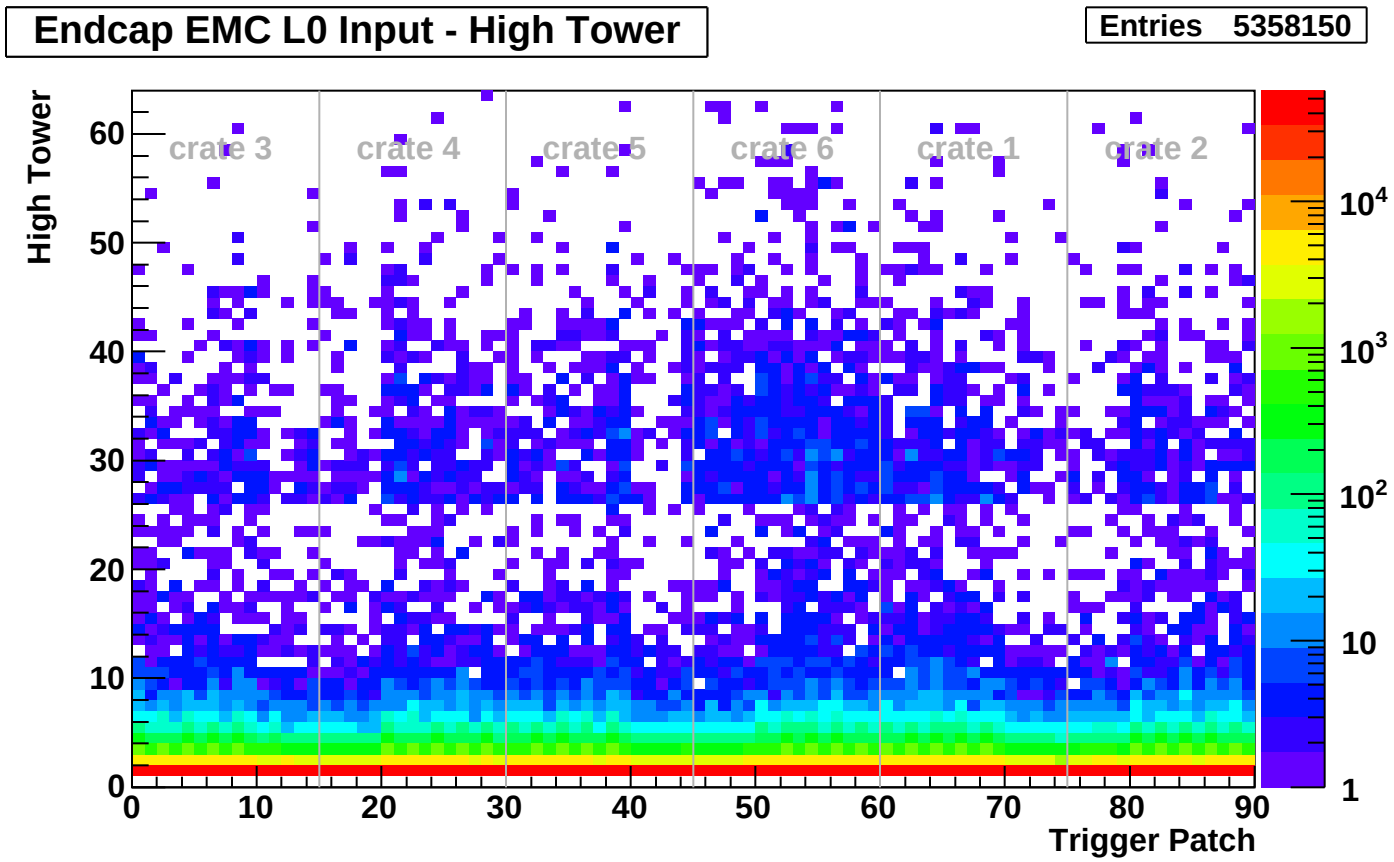

TCU bits
Entries 80740
TCU bits - Simulated
1
0
-1
-2
21210
28673
24709
2711
1563
1874
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

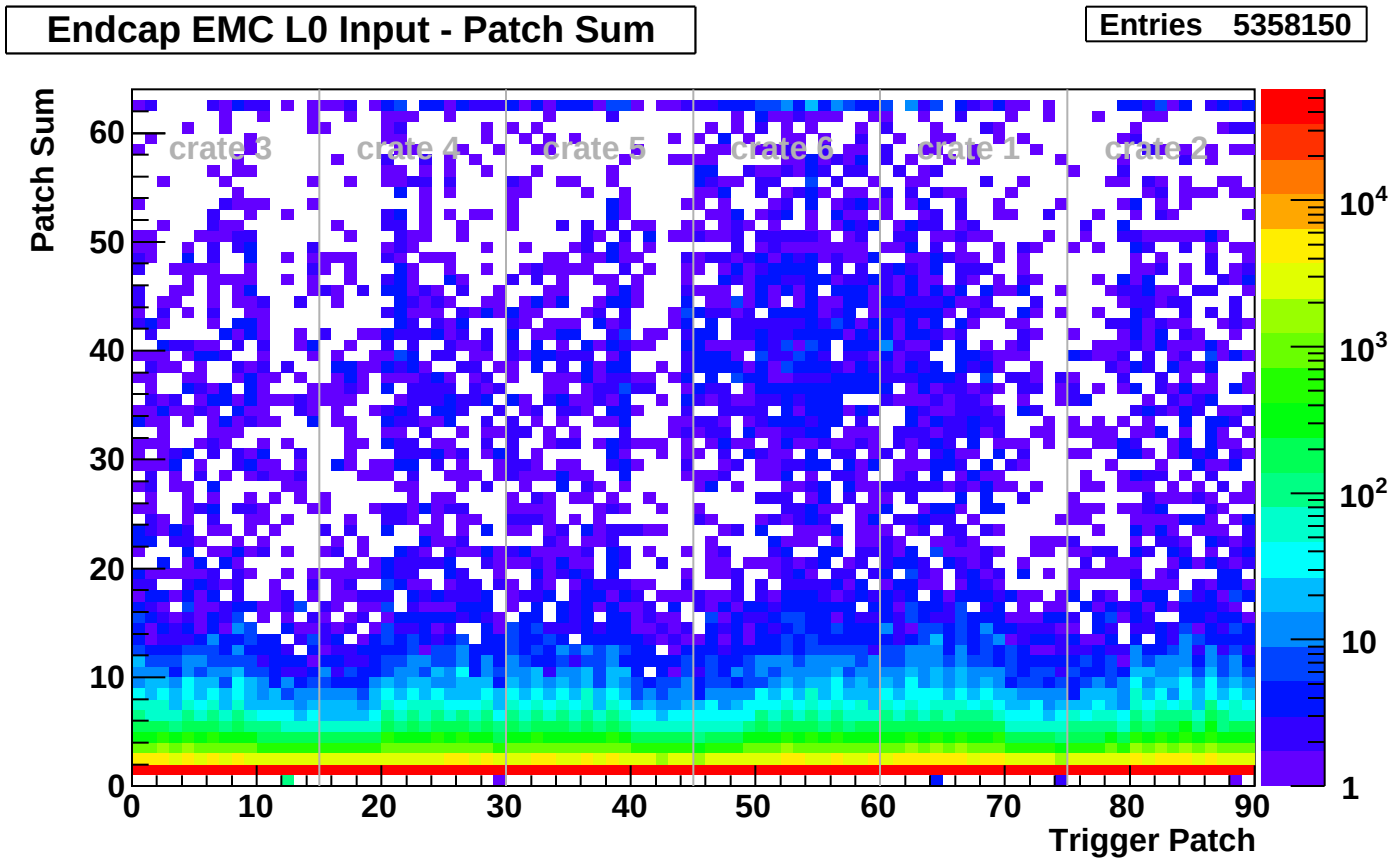

BunchId7Bit (BHT3)
Entries 2340
10
1
0
20
40
60
80
100
120

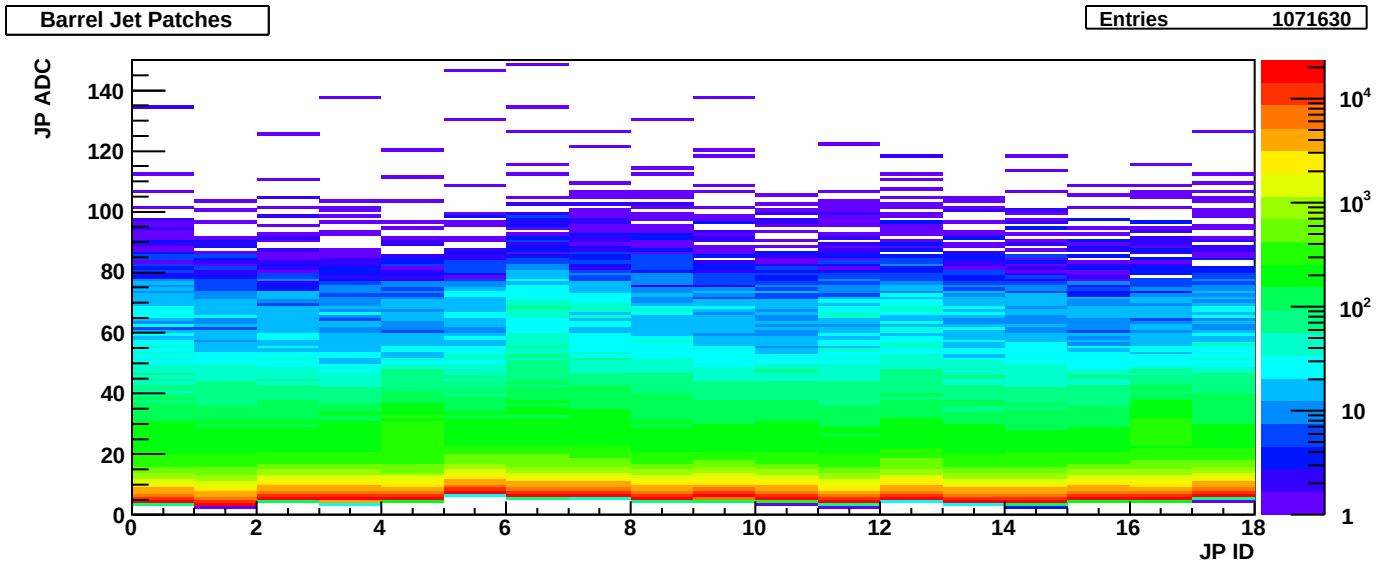

BunchId7Bit (all events)
Entries 59535
10^3
10^2
10
1
0
20
40
60
80
100
120

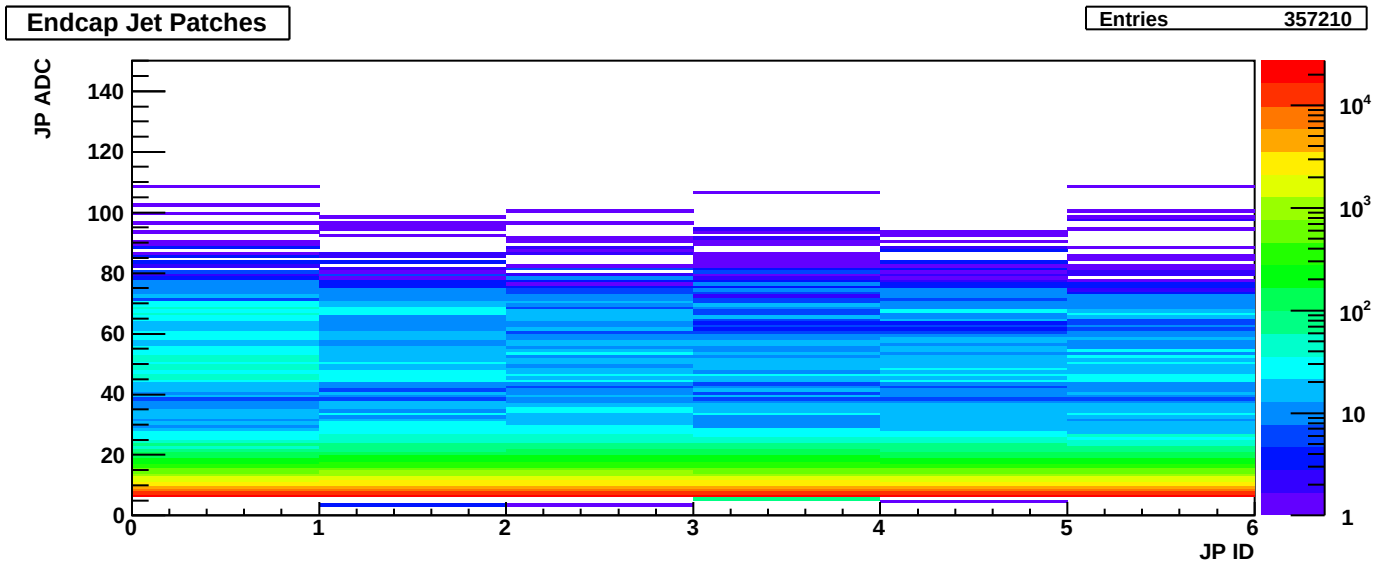

Barrel EMC L0 Input - High Tower
Entries 1.78605e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

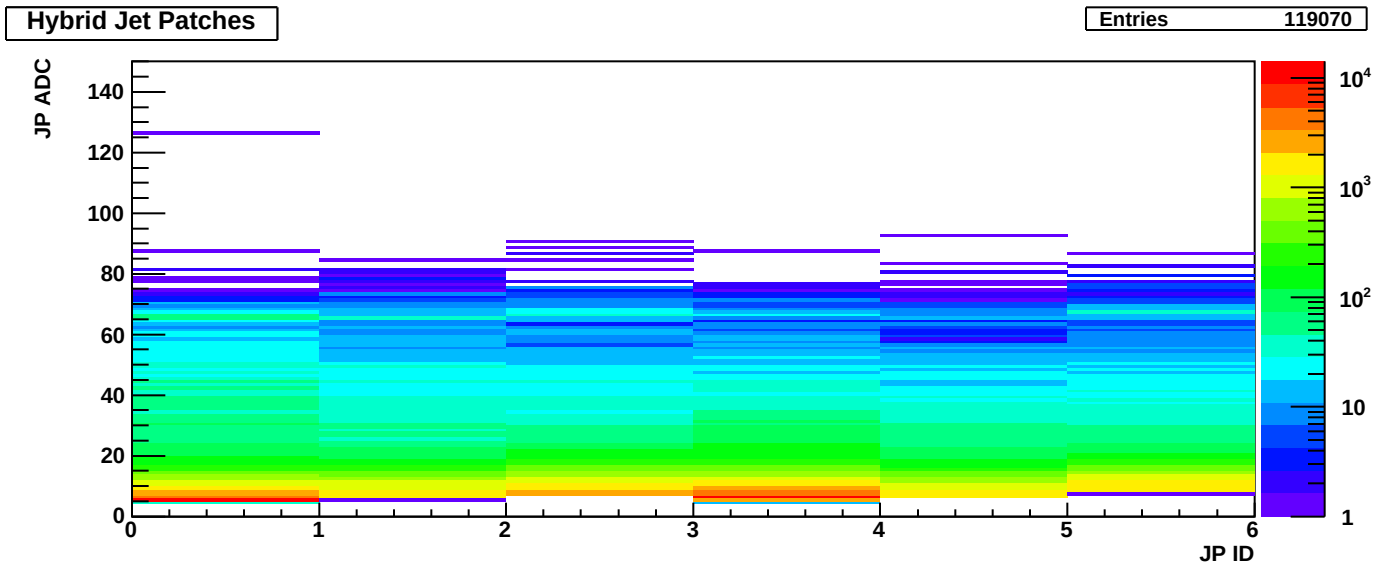

Barrel EMC L0 Input - Patch Sum
Entries 1.78605e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

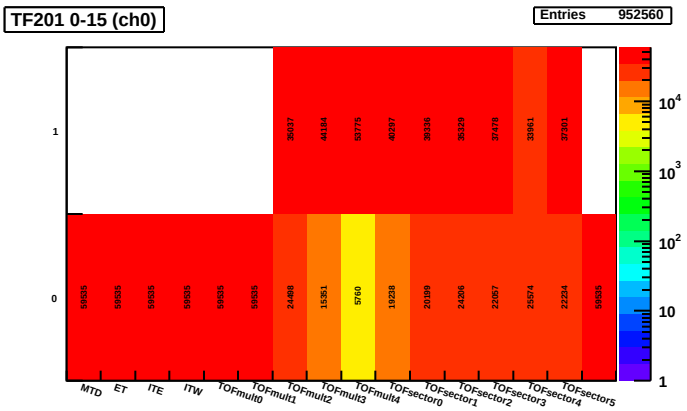

Endcap EMC L0 Input - High Tower
Entries 5358150
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

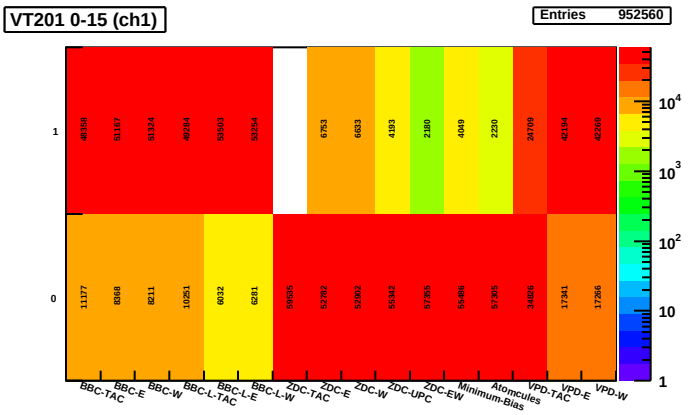

Endcap EMC L0 Input - Patch Sum
Entries 5358150
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

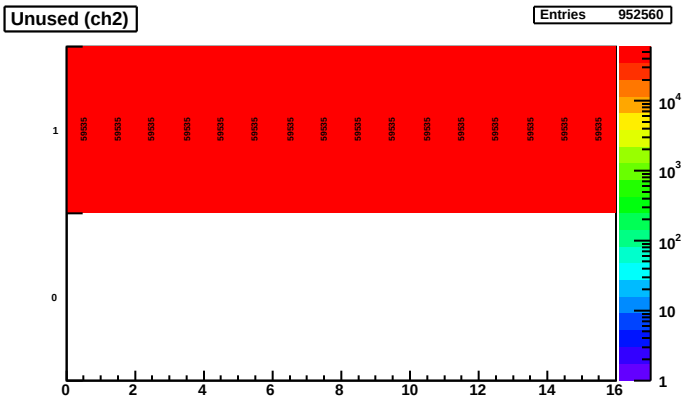

Barrel Jet Patches
Entries 1071630
JP ADC
JP ID

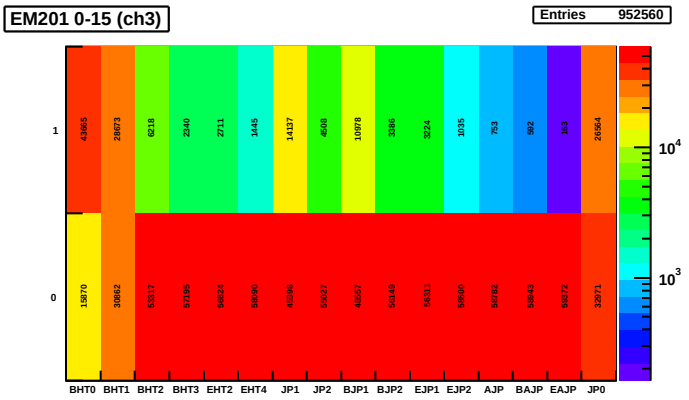

Endcap Jet Patches
Entries 357210
JP ADC
JP ID

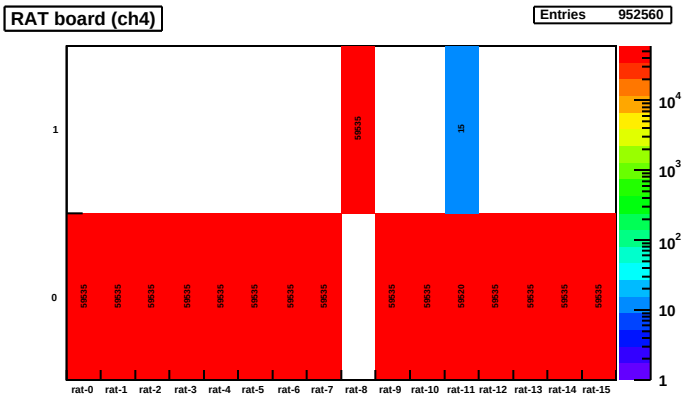

Hybrid Jet Patches
Entries 119070
JP ADC
JP ID

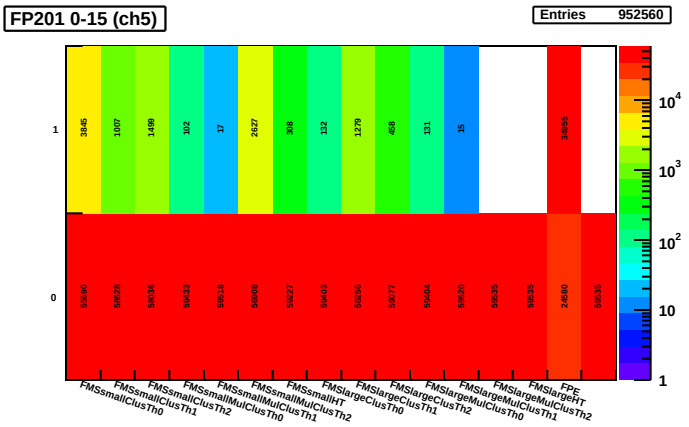

TF201 0-15 (ch0)
Entries 952560
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

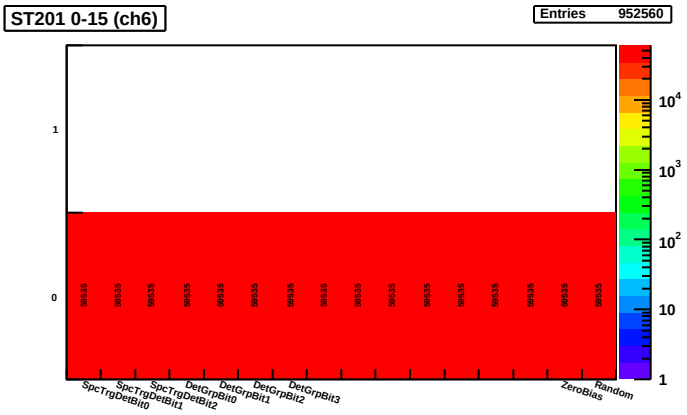

VT201 0-15 (ch1)
Entries 952560
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

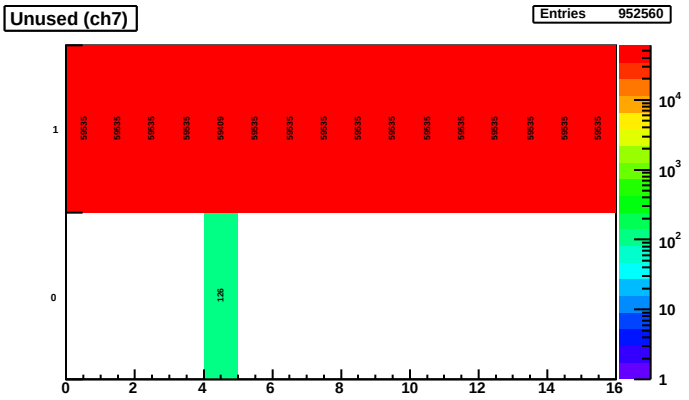

Unused (ch2)
Entries 952560

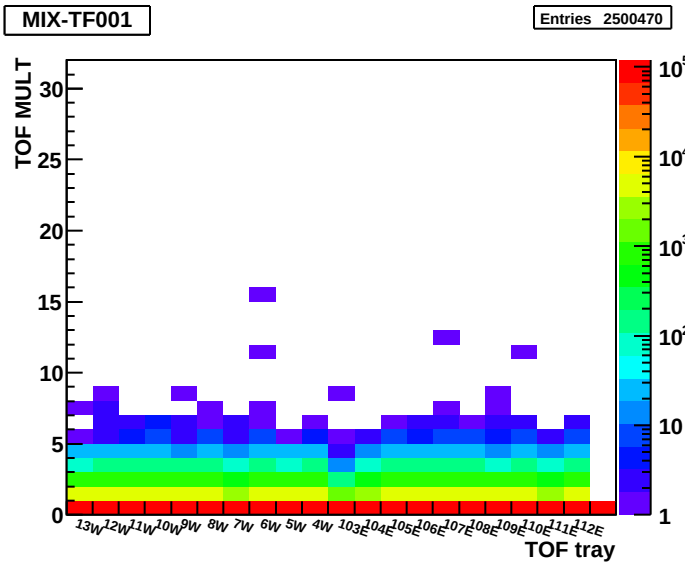

EM201 0-15 (ch3)
Entries 952560
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

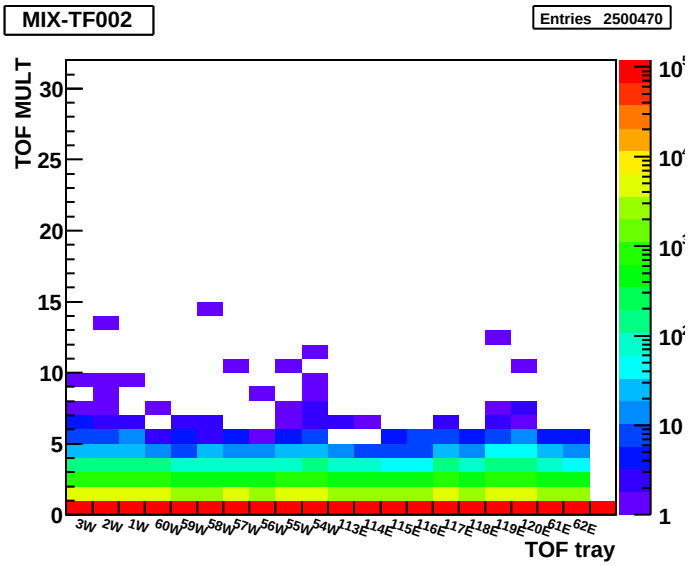

RAT board (ch4)
Entries 952560
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

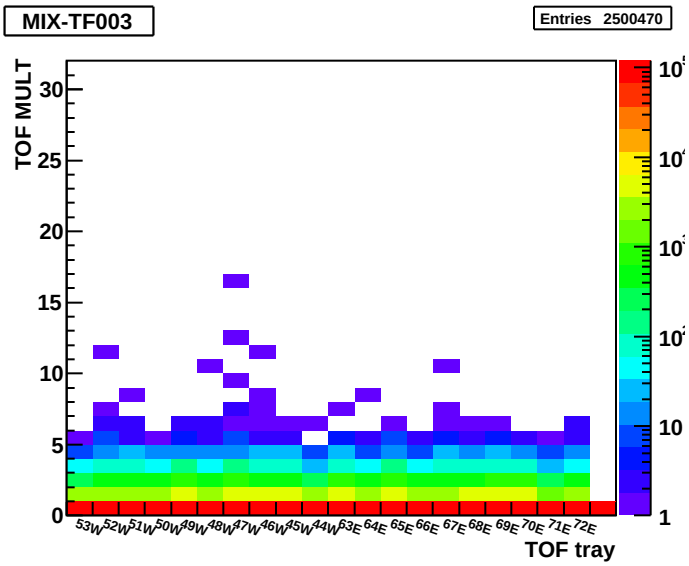

FP201 0-15 (ch5)
Entries 952560
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

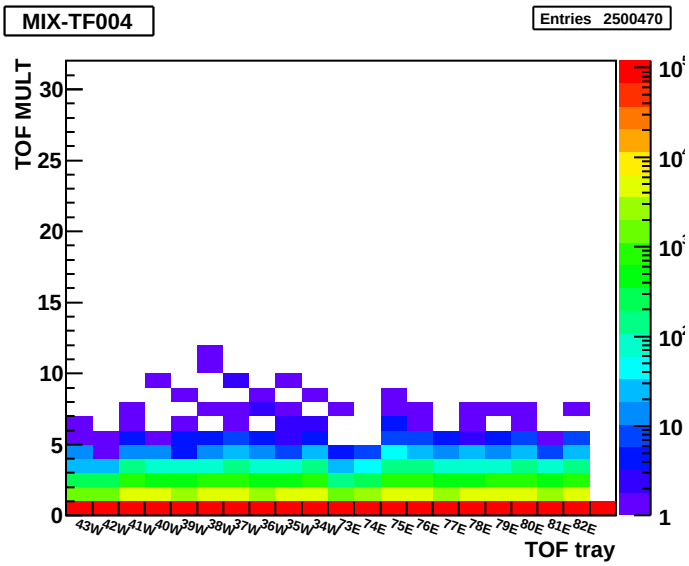

ST201 0-15 (ch6)
Entries 952560
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random

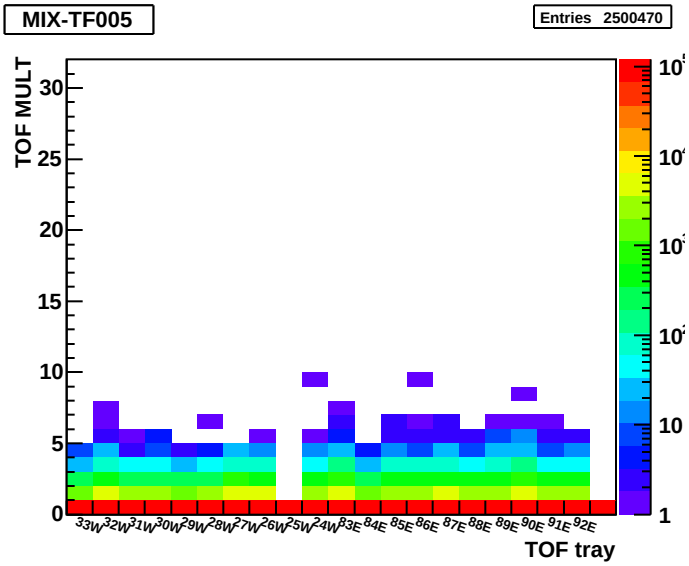

Unused (ch7)
Entries 952560

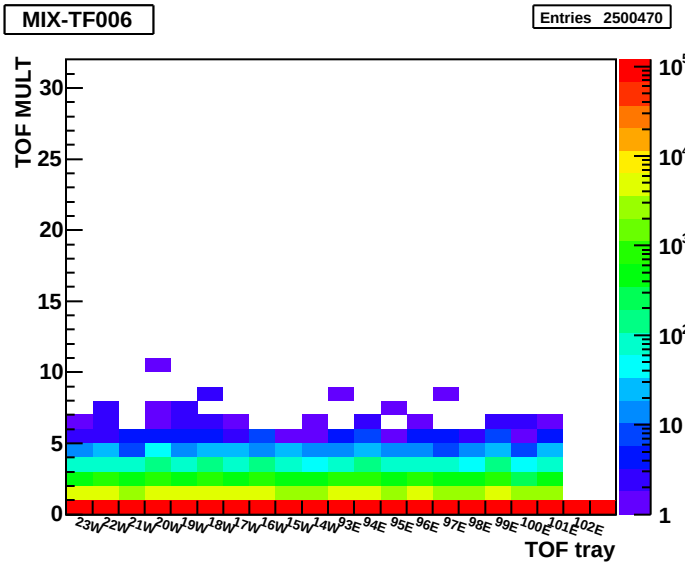

MIX-TF001
Entries 2500470
TOF MULT
TOF tray

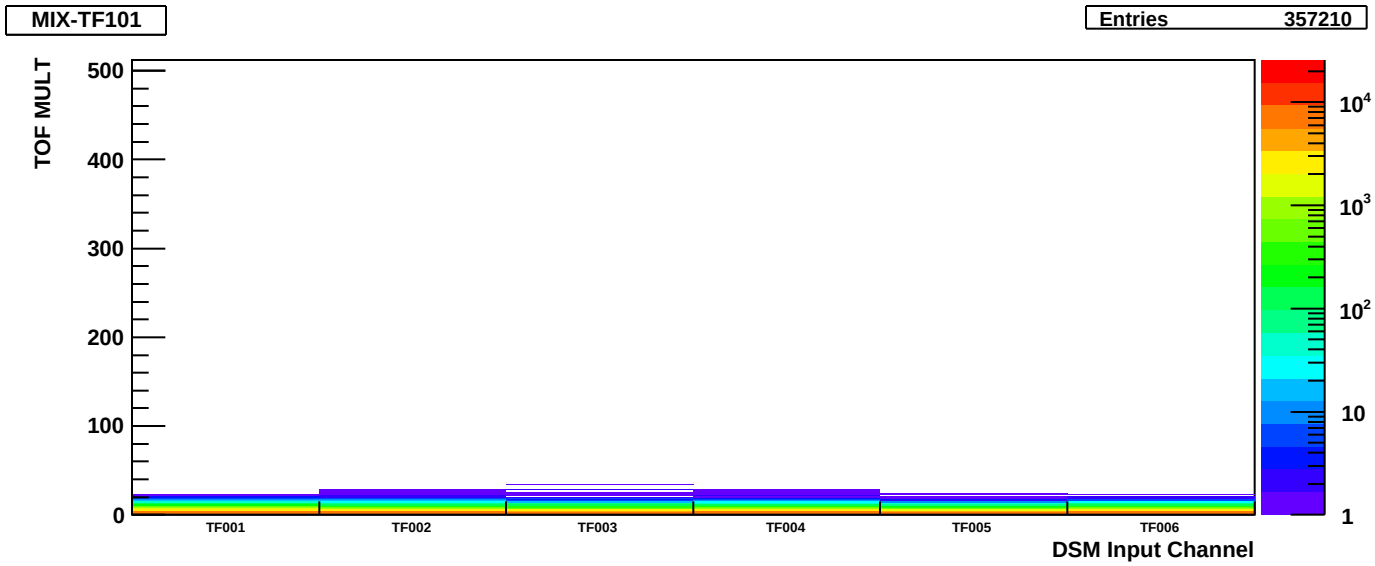

MIX-TF002
Entries 2500470
TOF MULT
TOF tray

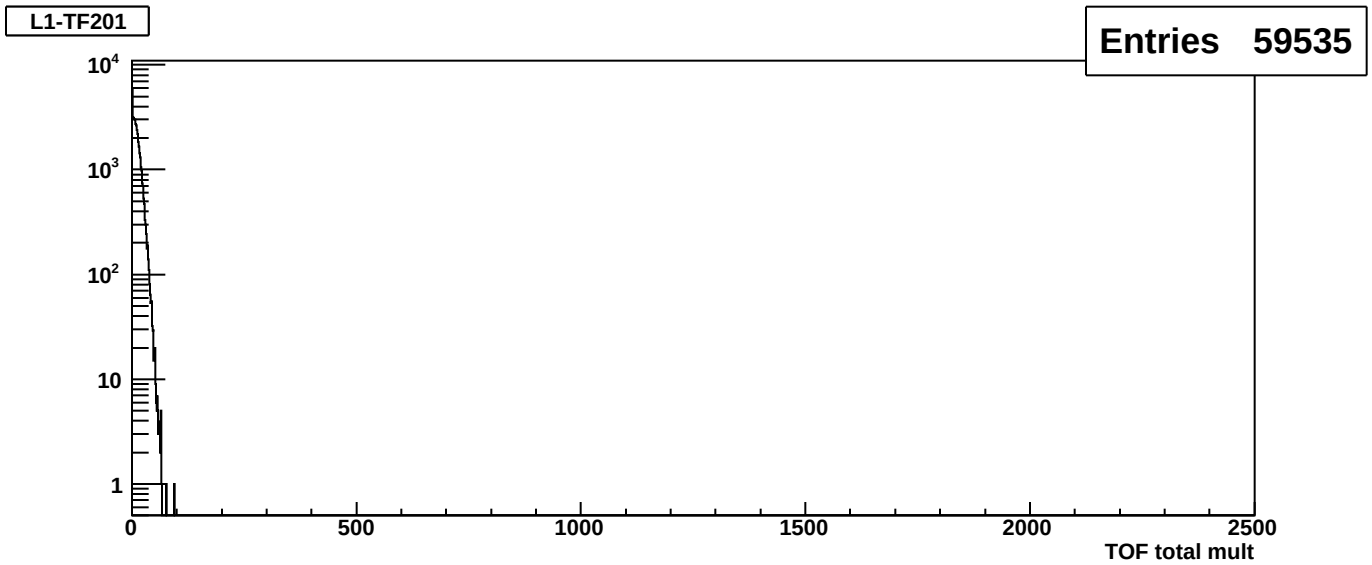

MIX-TF003
Entries 2500470
TOF MULT
TOF tray

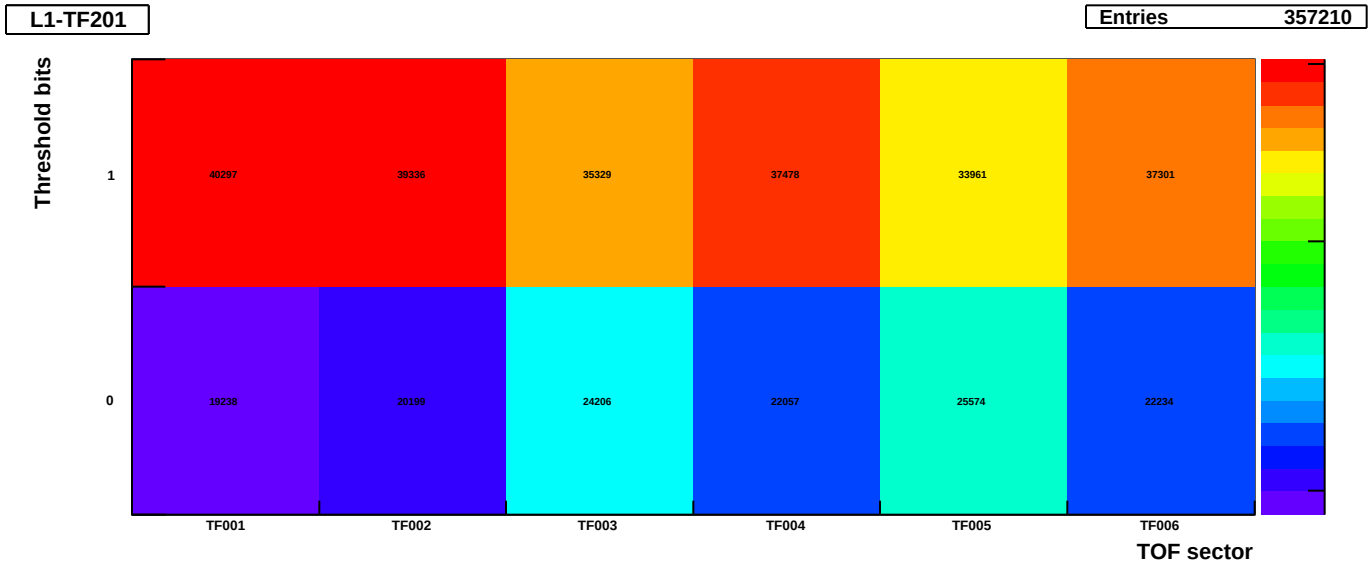

MIX-TF004
Entries 2500470
TOF MULT
TOF tray

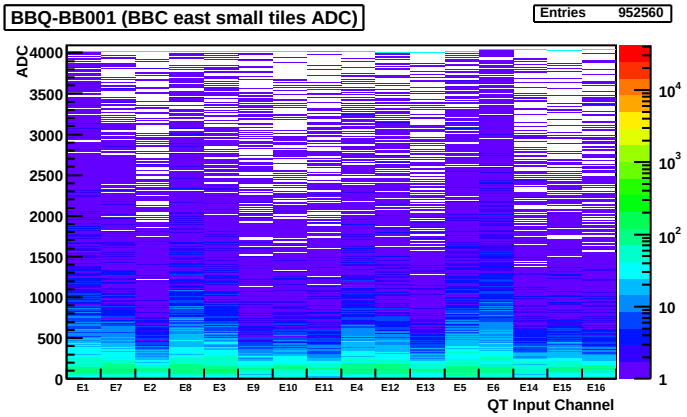

MIX-TF005
Entries 2500470
TOF MULT
TOF tray

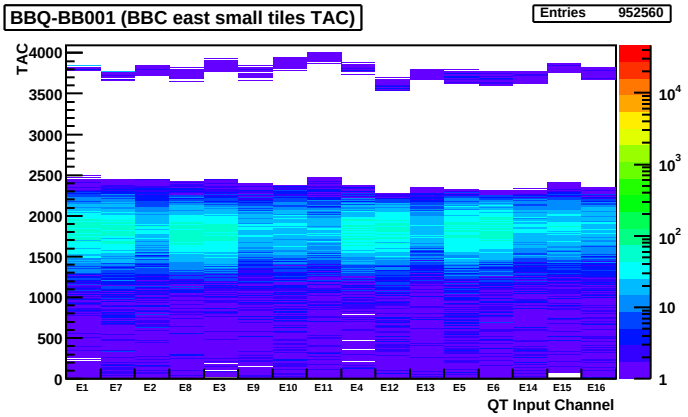

MIX-TF006
Entries 2500470
TOF MULT
TOF tray

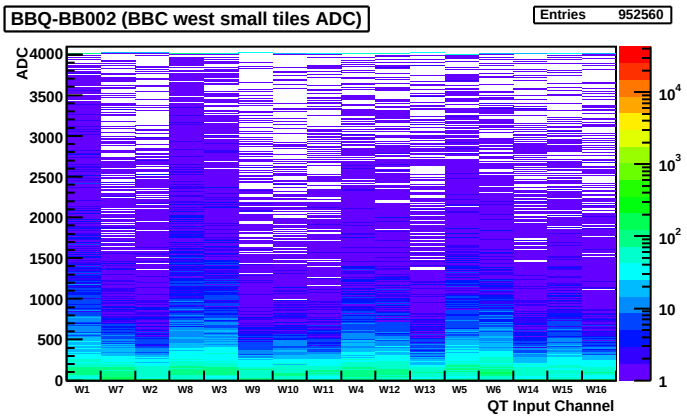

MIX-TF101
Entries 357210
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

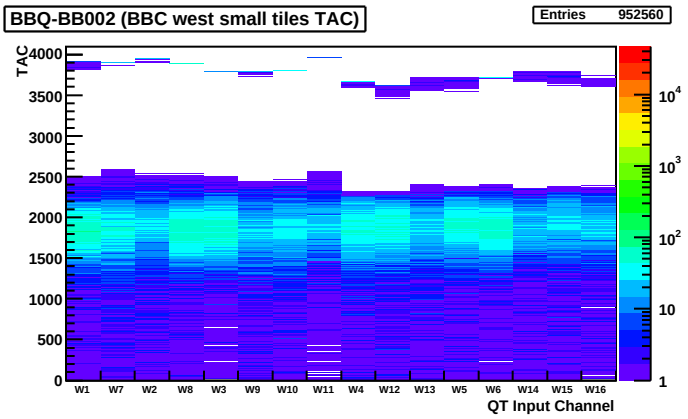

L1-TF201
Entries 59535
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

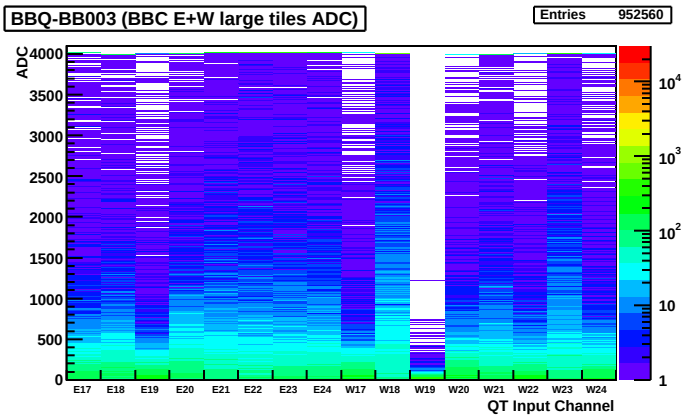

L1-TF201
Entries 357210
Threshold bits
1
0
40297
39336
35329
37478
33961
37301
19238
20199
24206
22057
25574
22234
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

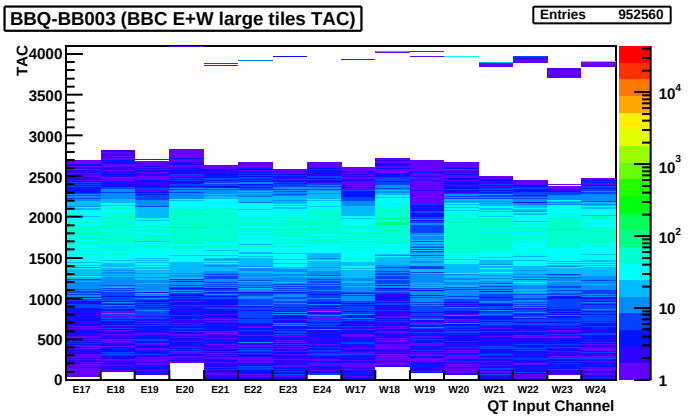

BBQ-BB001 (BBC east small tiles ADC)
Entries 952560
ADC
QT Input Channel

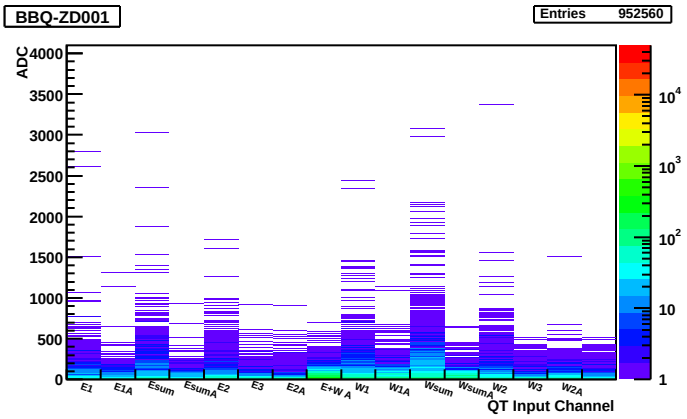

BBQ-BB001 (BBC east small tiles TAC)
Entries 952560
TAC
QT Input Channel

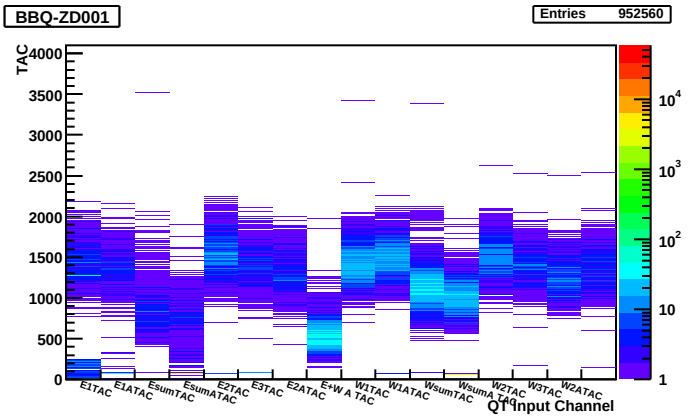

BBQ-BB002 (BBC west small tiles ADC)
Entries 952560
ADC
QT Input Channel

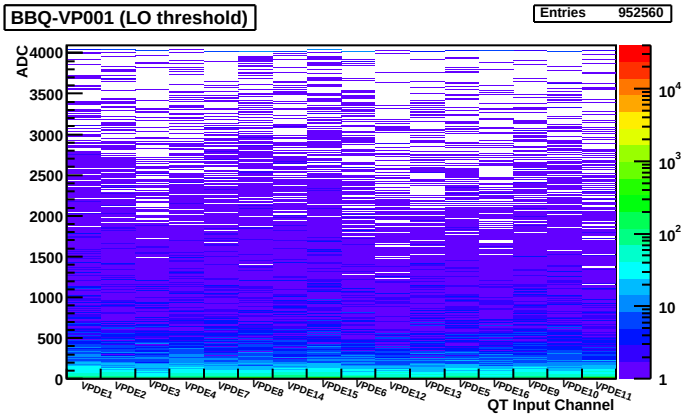

BBQ-BB002 (BBC west small tiles TAC)
Entries 952560
TAC
QT Input Channel

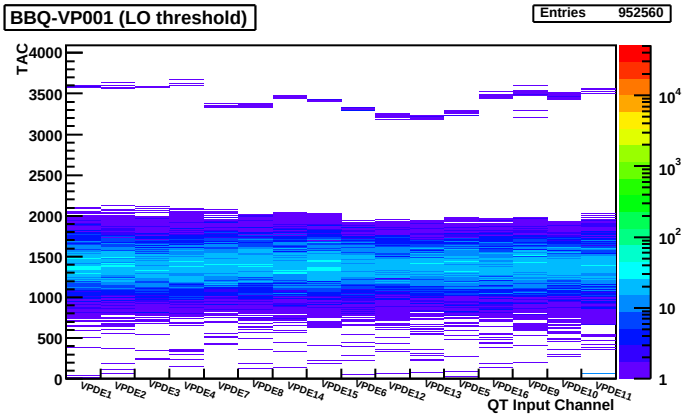

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 952560
ADC
QT Input Channel

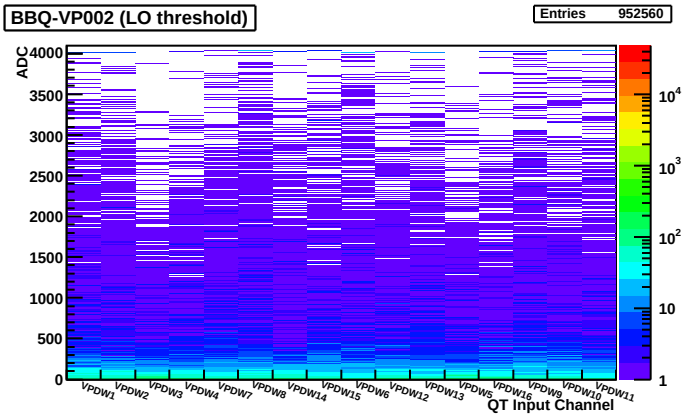

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 952560
TAC
QT Input Channel

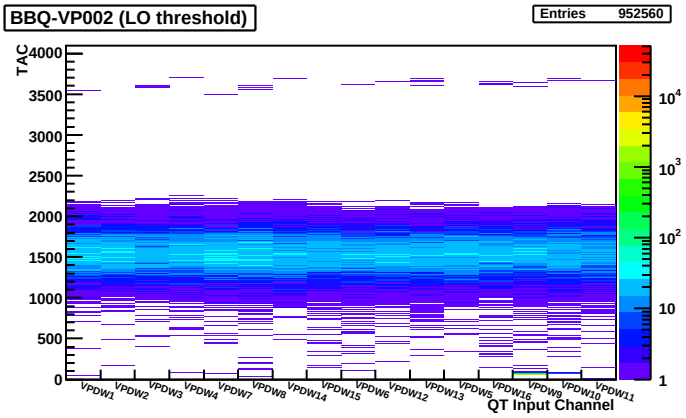

BBQ-ZD001
Entries 952560
ADC
QT Input Channel

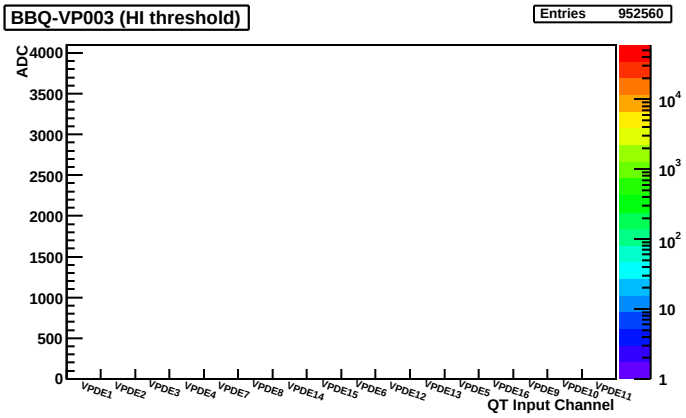

BBQ-ZD001
Entries 952560
TAC
QT Input Channel

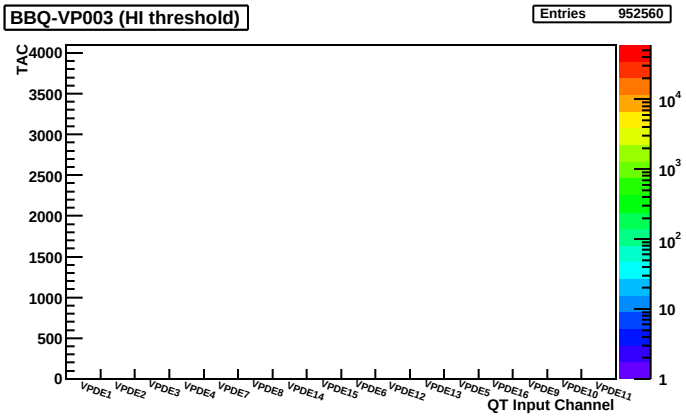

BBQ-VP001 (LO threshold)
Entries 952560
ADC
QT Input Channel

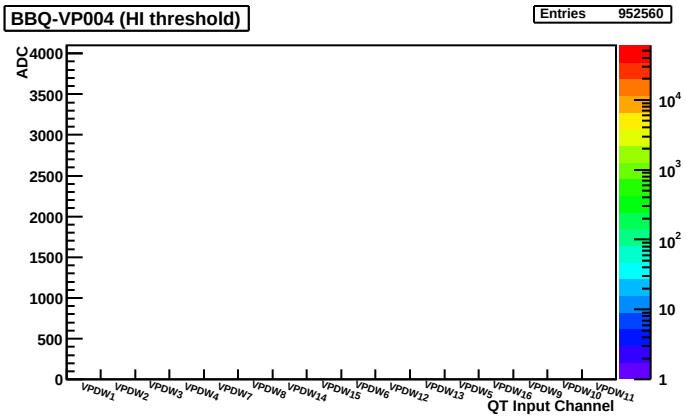

BBQ-VP001 (LO threshold)
Entries 952560
TAC
QT Input Channel

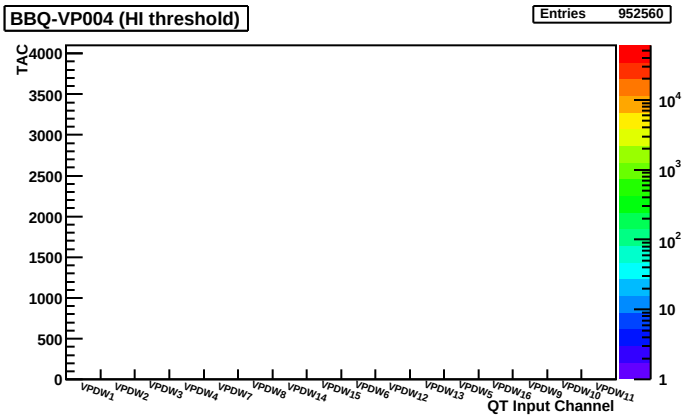

BBQ-VP002 (LO threshold)
Entries 952560
ADC
QT Input Channel

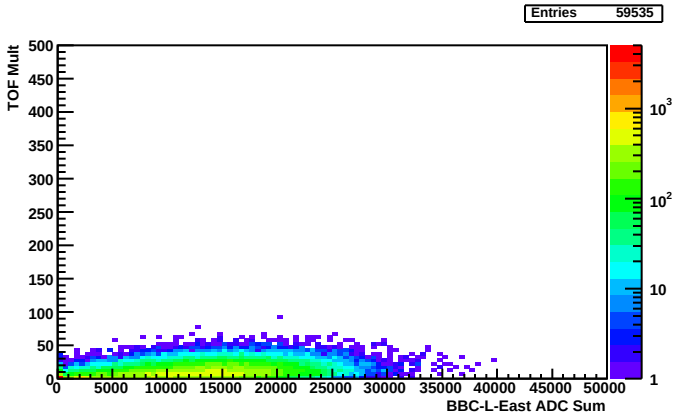

BBQ-VP002 (LO threshold)
Entries 952560
TAC
QT Input Channel

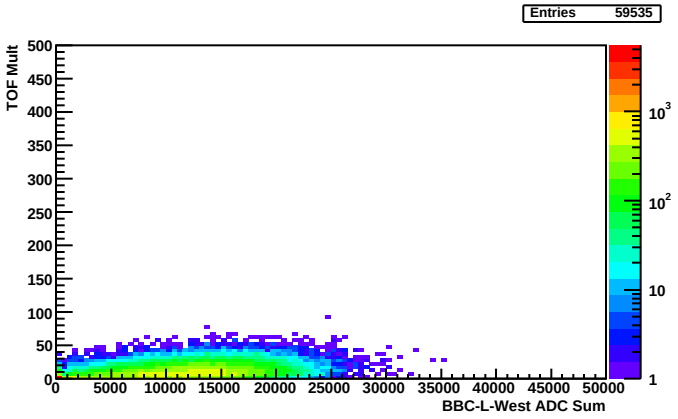

BBQ-VP003 (HI threshold)
Entries 952560
ADC
QT Input Channel

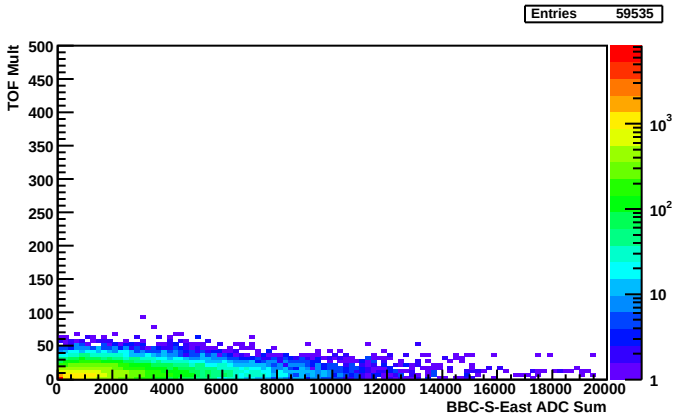

BBQ-VP003 (HI threshold)
Entries 952560
TAC
QT Input Channel

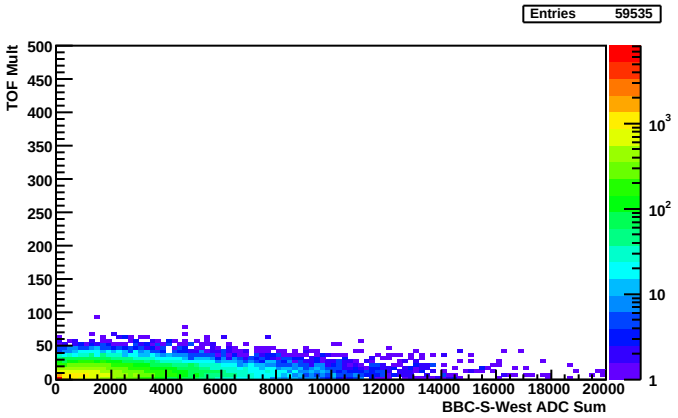

BBQ-VP004 (HI threshold)
Entries 952560
ADC
QT Input Channel

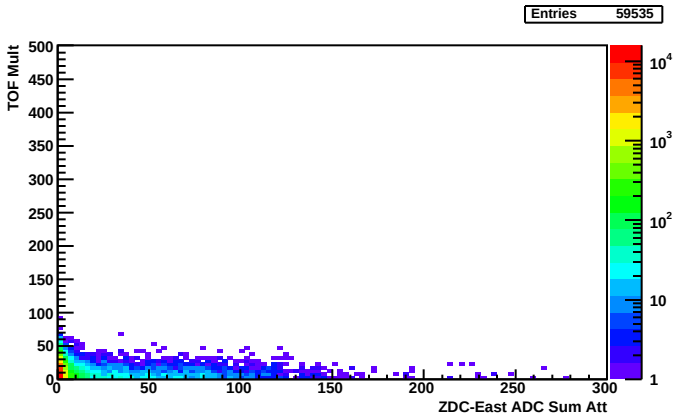

BBQ-VP004 (HI threshold)
Entries 952560
TAC
QT Input Channel

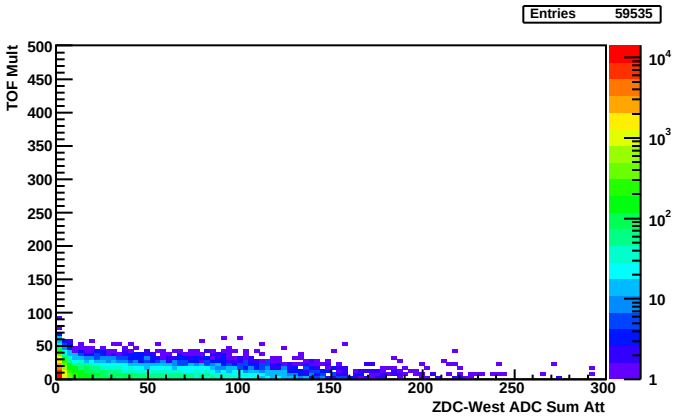

Entries 59535
TOF Mult
BBC-L-East ADC Sum

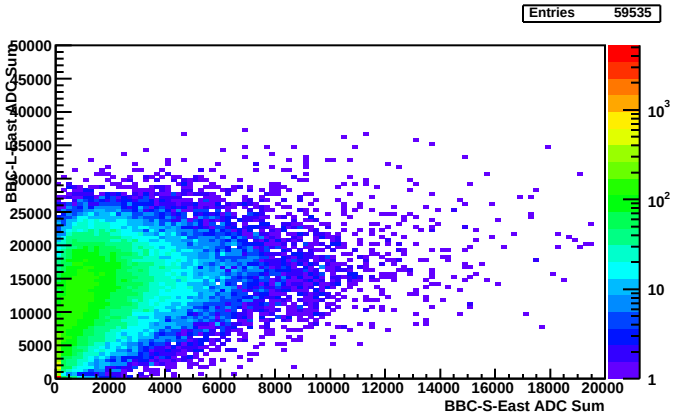

Entries 59535
TOF Mult
BBC-L-West ADC Sum

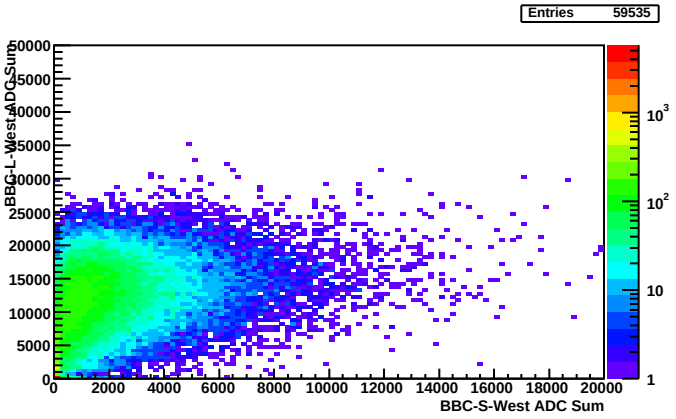

Entries 59535
TOF Mult
BBC-S-East ADC Sum

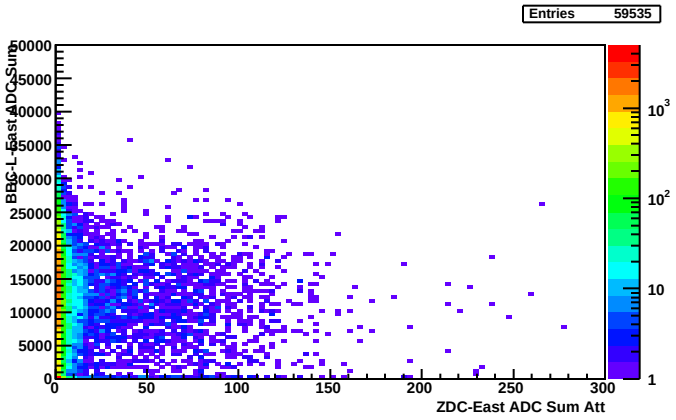

Entries 59535
TOF Mult
BBC-S-West ADC Sum

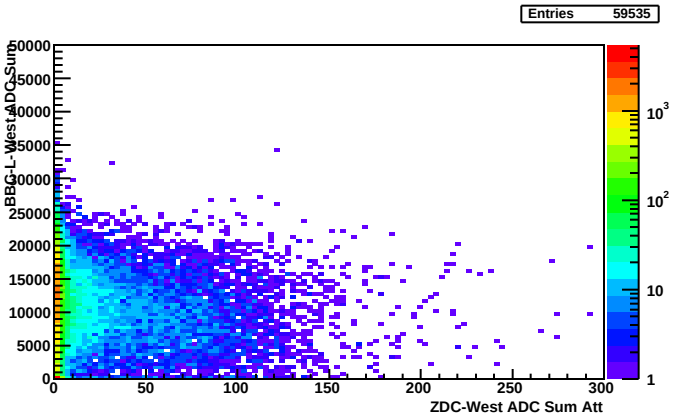

Entries 59535
TOF Mult
ZDC-East ADC Sum Att

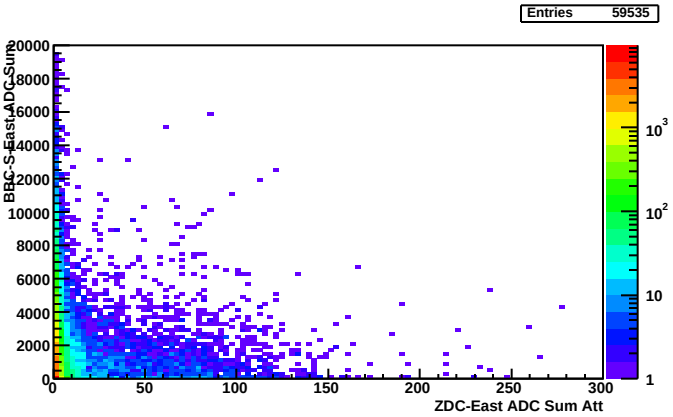

Entries 59535
TOF Mult
ZDC-West ADC Sum Att

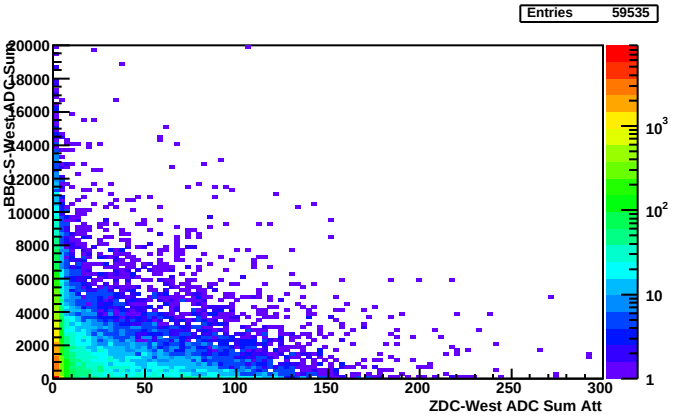

Entries 59535
BBC-L-East ADC Sum
BBC-S-East ADC Sum

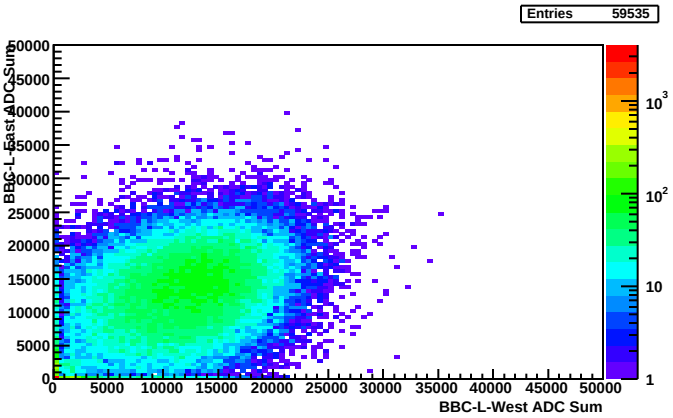

Entries 59535
BBC-L-West ADC Sum
BBC-S-West ADC Sum

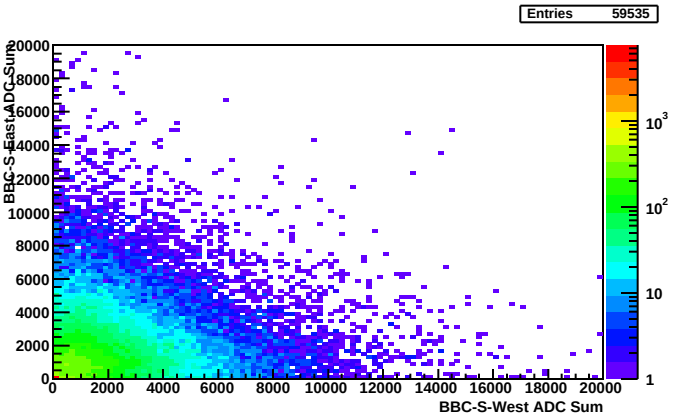

Entries 59535
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

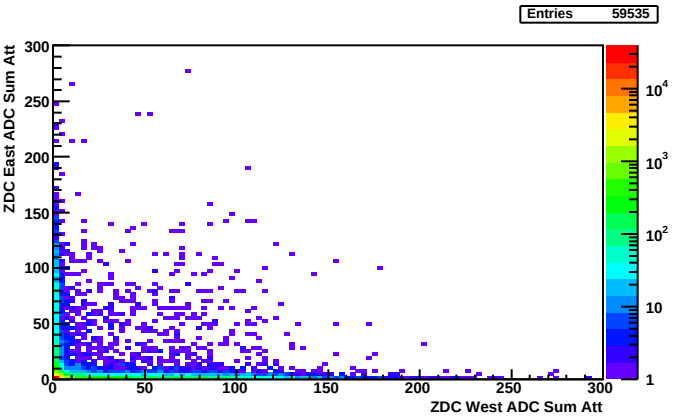

Entries 59535
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

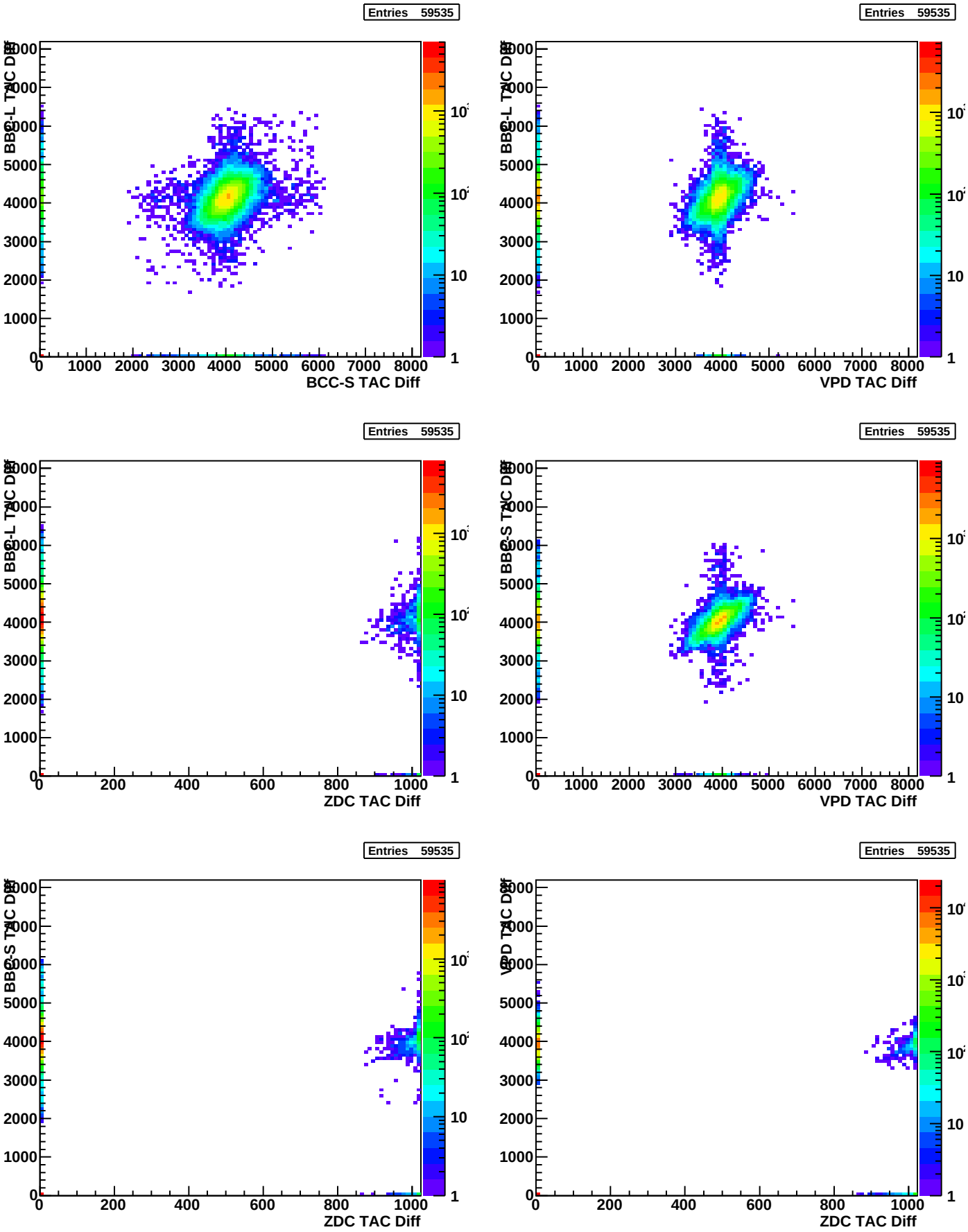

Entries 59535
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

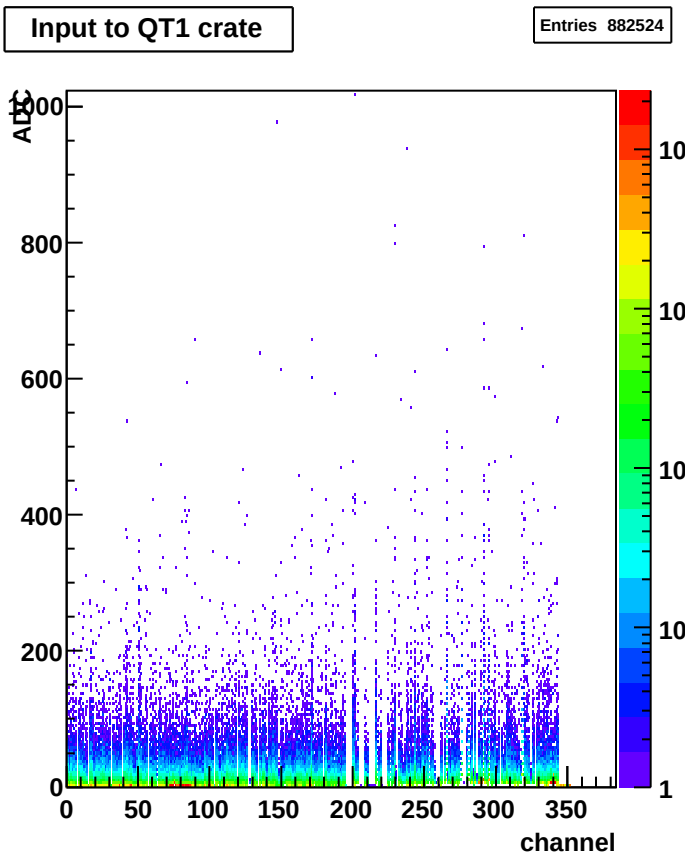

Entries 59535
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

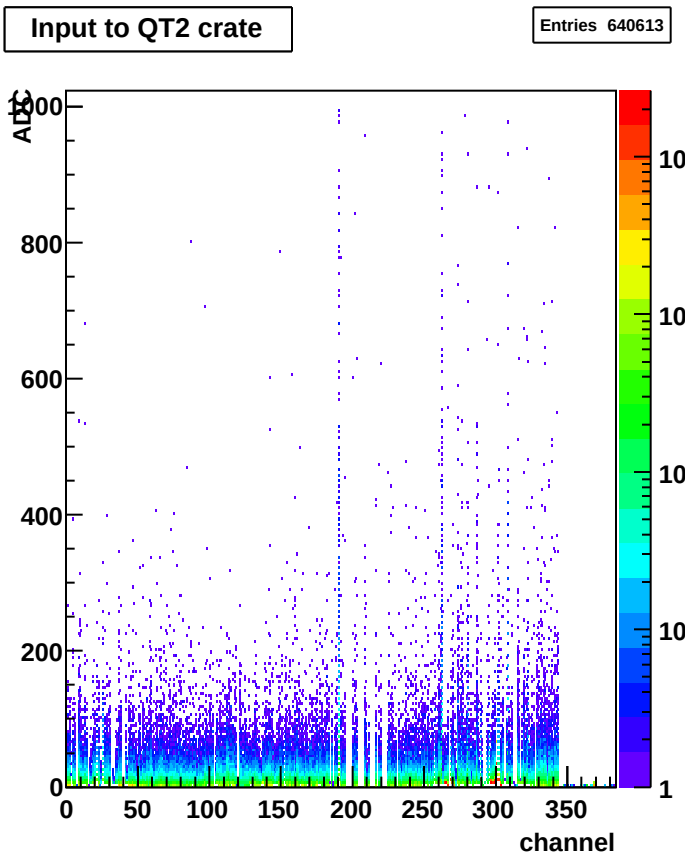

Entries 59535
BBC-L-East ADC Sum
BBC-L-West ADC Sum

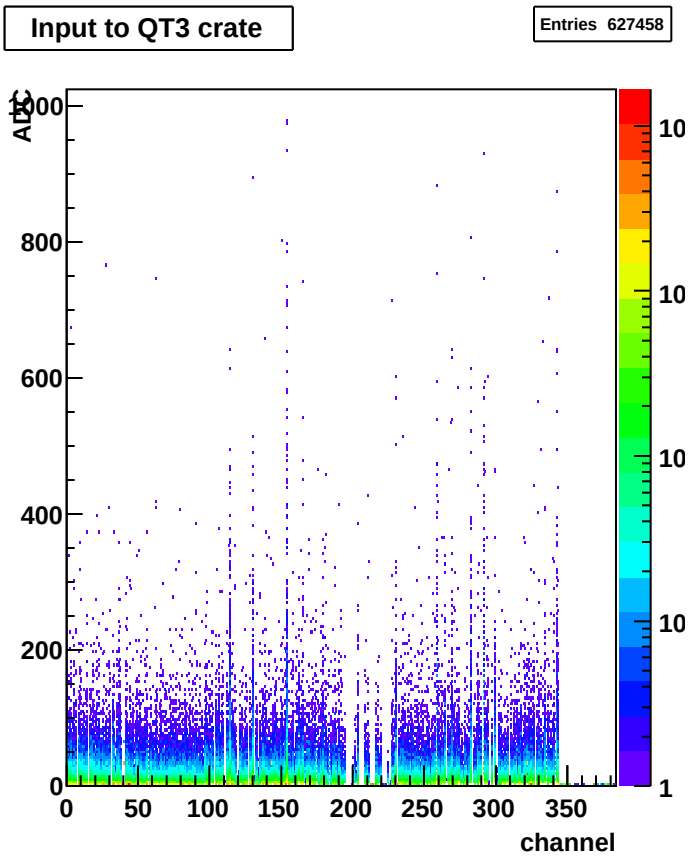

Entries 59535
BBC-S-East ADC Sum
BBC-S-West ADC Sum

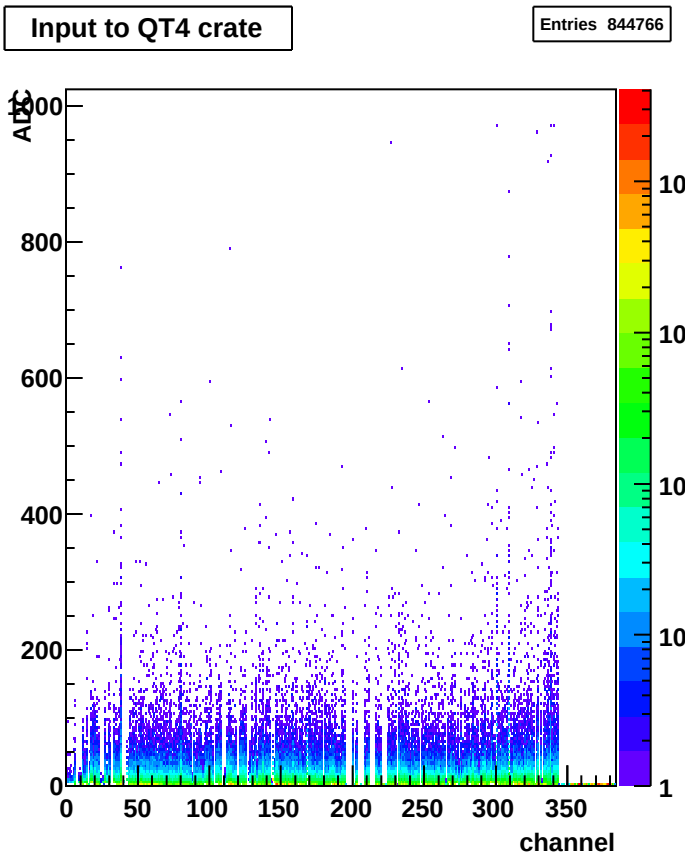

Entries 59535
ZDC East ADC Sum Att
ZDC West ADC Sum Att

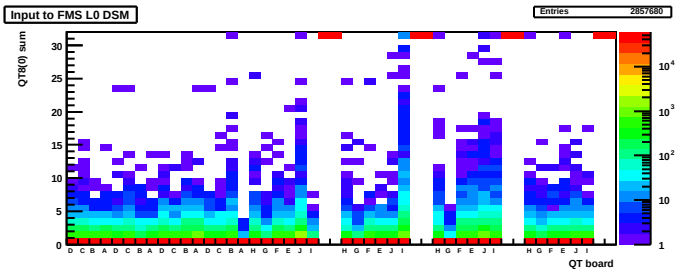

Entries 59535
BBC-L TAC Diff
BCC-S TAC Diff
Entries 59535
BBC-L TAC Diff
VPD TAC Diff
Entries 59535
BBC-L TAC Diff
ZDC TAC Diff
Entries 59535
BBC-S TAC Diff
VPD TAC Diff
Entries 59535
BBC-S TAC Diff
ZDC TAC Diff
Entries 59535
VPD TAC Diff
ZDC TAC Diff

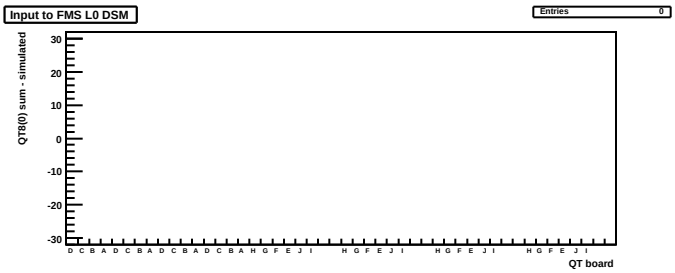

Input to QT1 crate
Entries 882524
ADC
channel

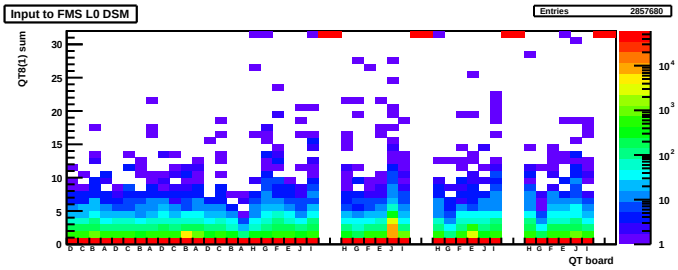

Input to QT2 crate
Entries 640613
ADC
channel

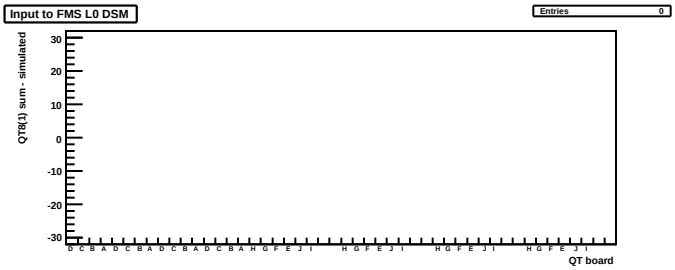

Input to QT3 crate
Entries 627458
ADC
channel

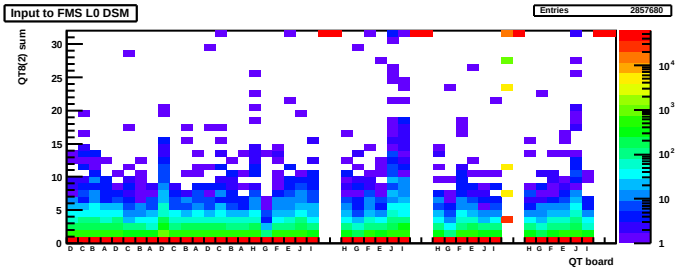

Input to QT4 crate
Entries 844766
ADC
channel

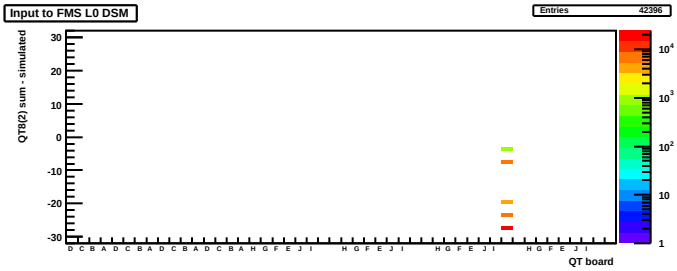

Input to FMS L0 DSM
Entries 2857680
QT8(0) sum
QT board

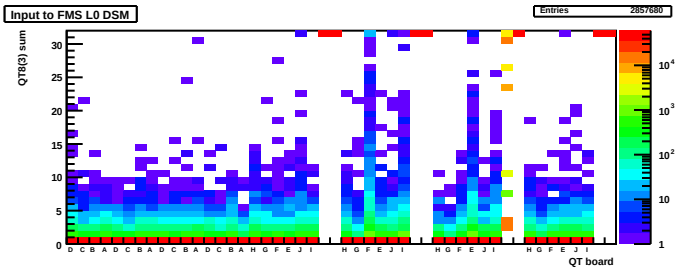

Input to FMS L0 DSM
Entries 0
QT8(0) sum - simulated
QT board

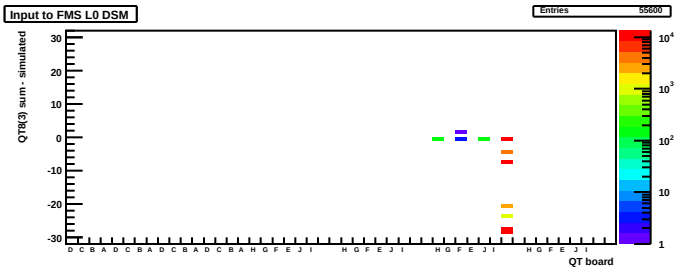

Input to FMS L0 DSM
Entries 2857680
QT8(1) sum
QT board

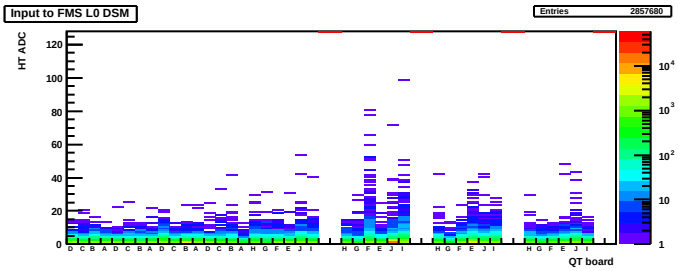

Input to FMS L0 DSM
Entries 0
QT8(1) sum - simulated
QT board

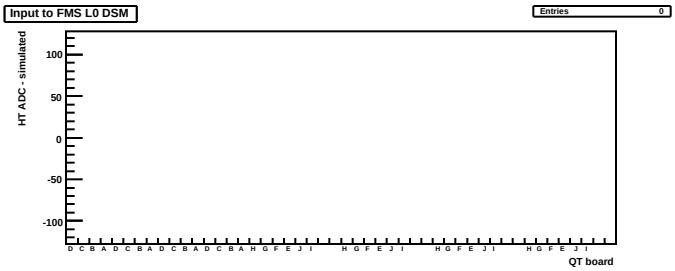

Input to FMS L0 DSM
Entries 2857680
QT8(2) sum
QT board

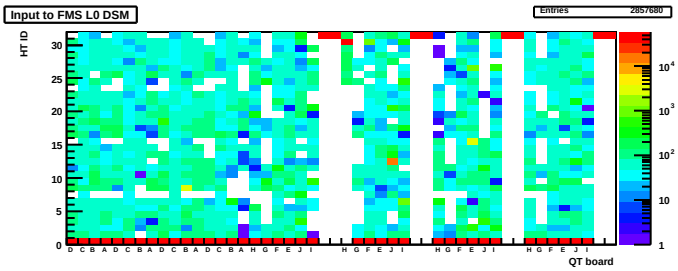

Input to FMS L0 DSM
Entries 42396
QT8(2) sum - simulated
QT board

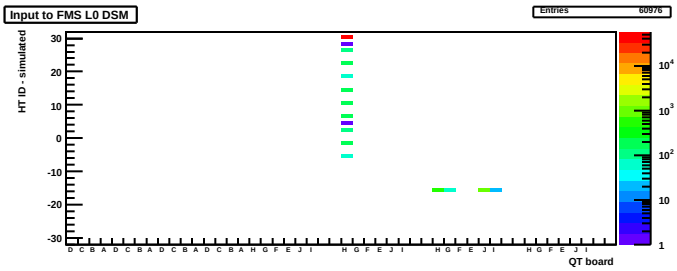

Input to FMS L0 DSM
Entries 2857680
QT8(3) sum
QT board

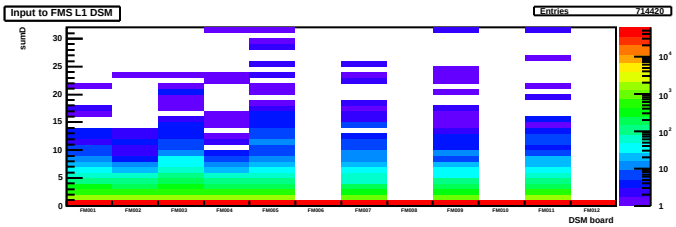

Input to FMS L0 DSM
Entries 55600
QT8(3) sum - simulated
QT board

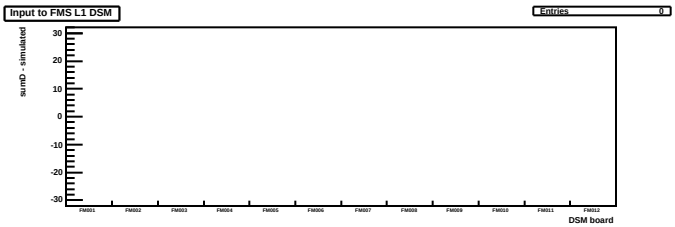

Input to FMS L0 DSM
Entries 2857680
HT ADC
QT board

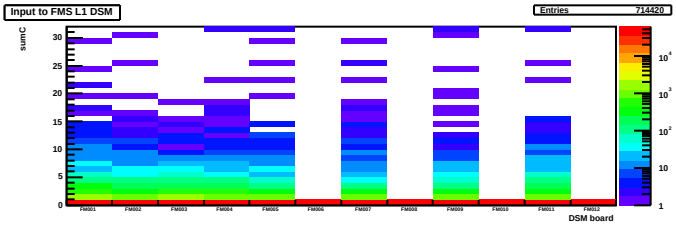

Input to FMS L0 DSM
Entries 0
HT ADC - simulated
QT board

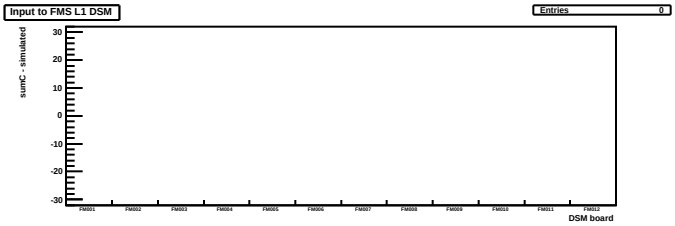

Input to FMS L0 DSM
Entries 2857680
HT ID
QT board

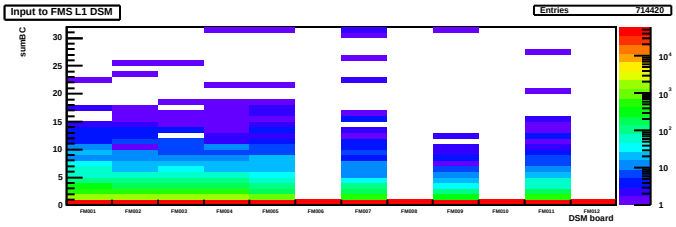

Input to FMS L0 DSM
Entries 60976
HT ID - simulated
QT board

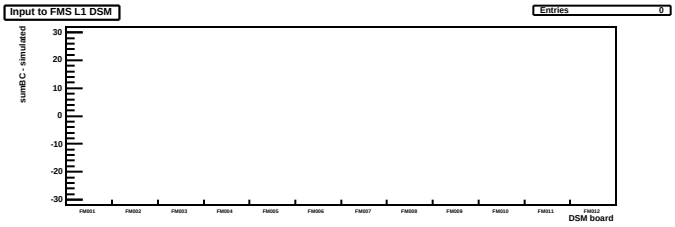

Input to FMS L1 DSM
Entries 714420
sumD
DSM board

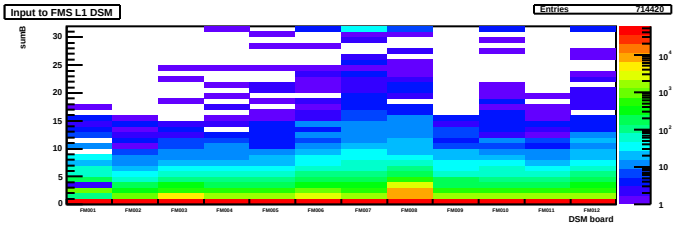

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

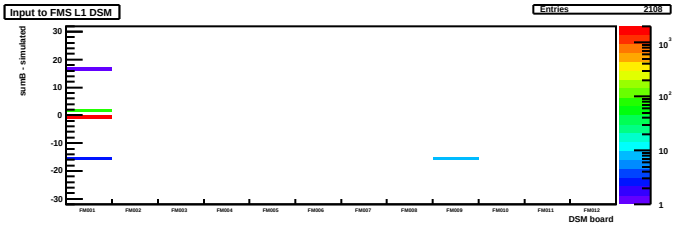

Input to FMS L1 DSM
Entries 714420
sumC
DSM board

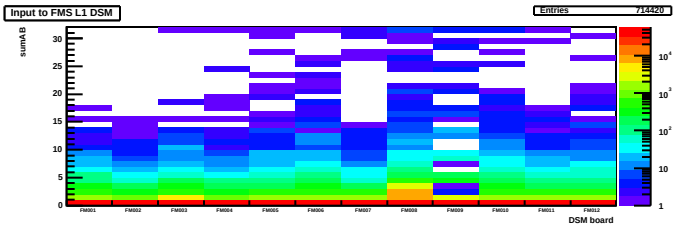

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

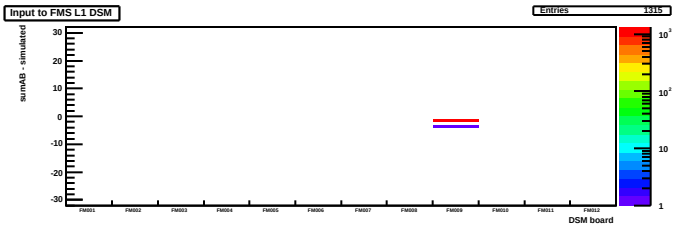

Input to FMS L1 DSM
Entries 714420
sumBC
DSM board

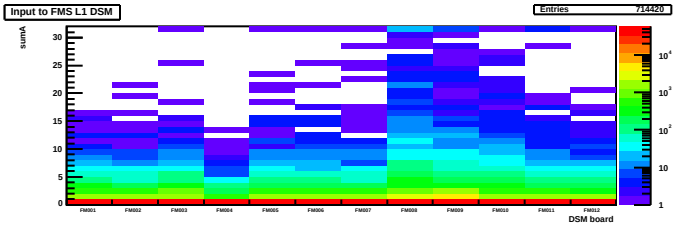

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

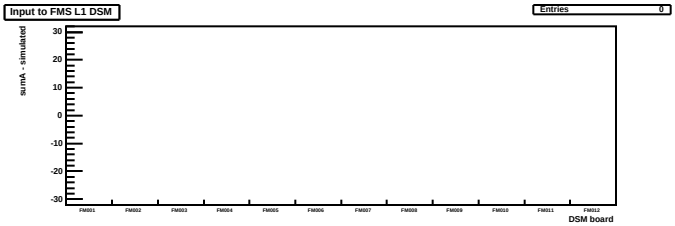

Input to FMS L1 DSM
Entries 714420
sumB
DSM board

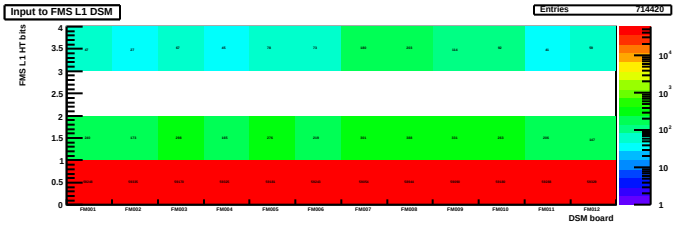

Input to FMS L1 DSM
Entries 2108
sumB - simulated
DSM board

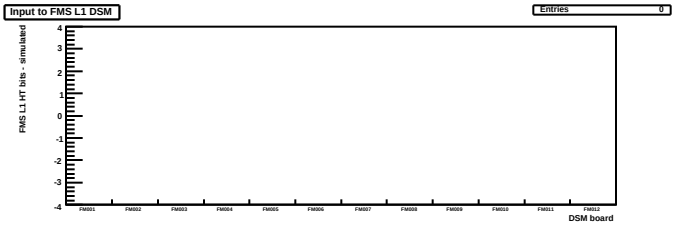

Input to FMS L1 DSM
Entries 714420
sumAB
DSM board

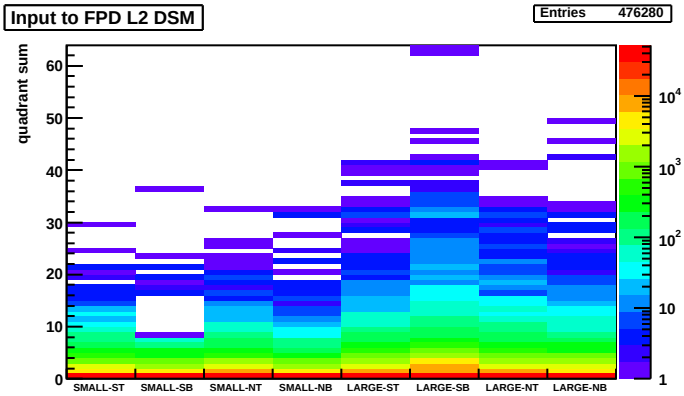

Input to FMS L1 DSM
Entries 1315
sumAB - simulated
DSM board

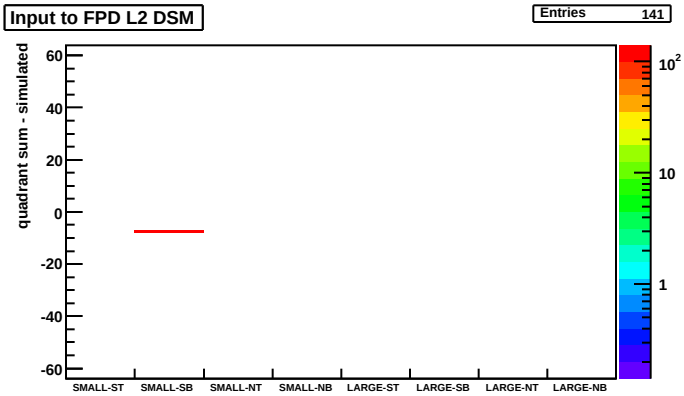

Input to FMS L1 DSM
Entries 714420
sumA
DSM board

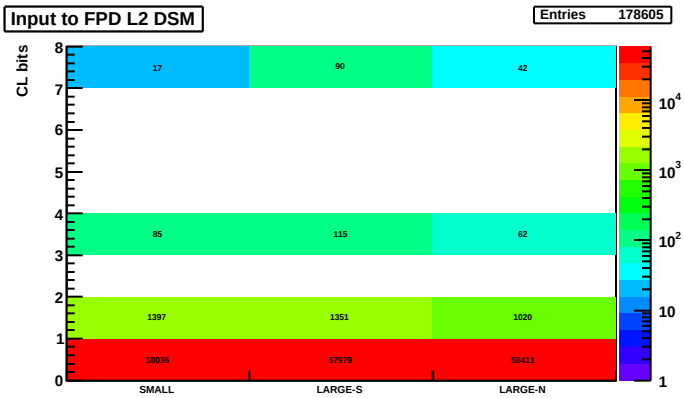

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

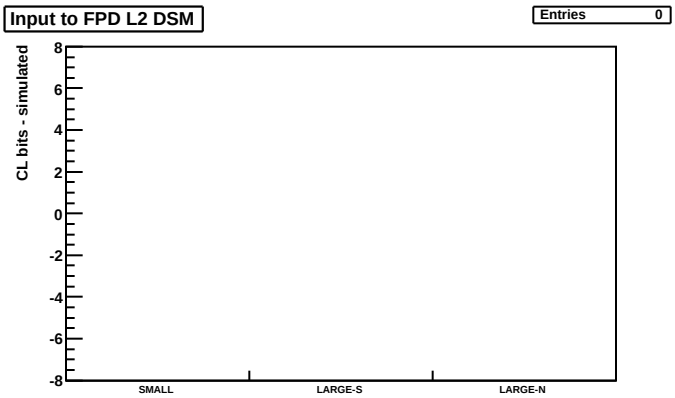

Input to FMS L1 DSM
Entries 714420
FMS L1 HT bits
DSM board

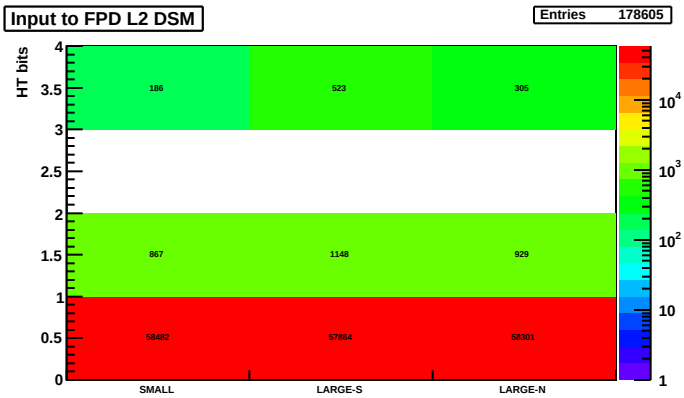

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

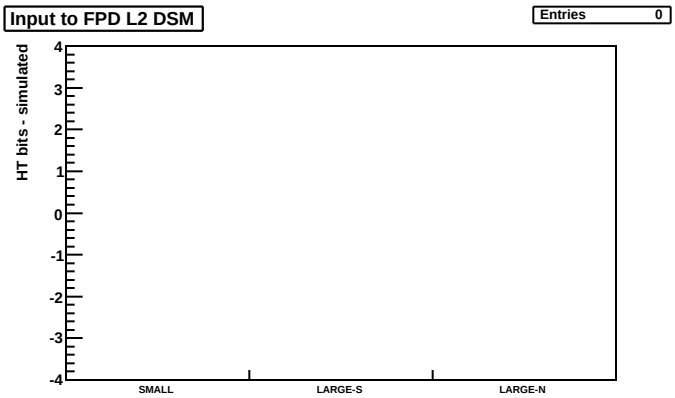

Input to FPD L2 DSM
Entries 476280
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

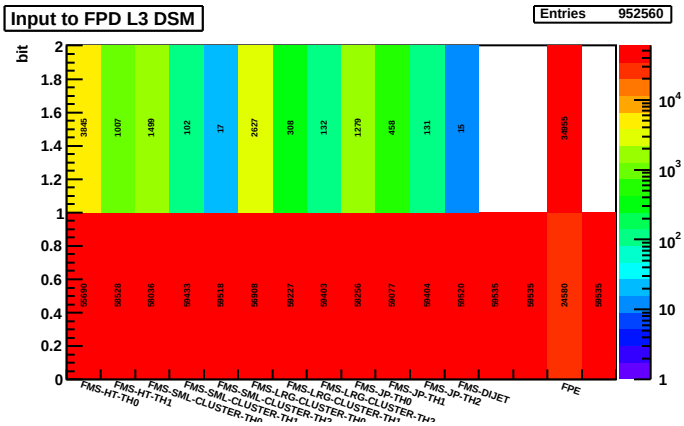

Input to FPD L2 DSM
Entries 141
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

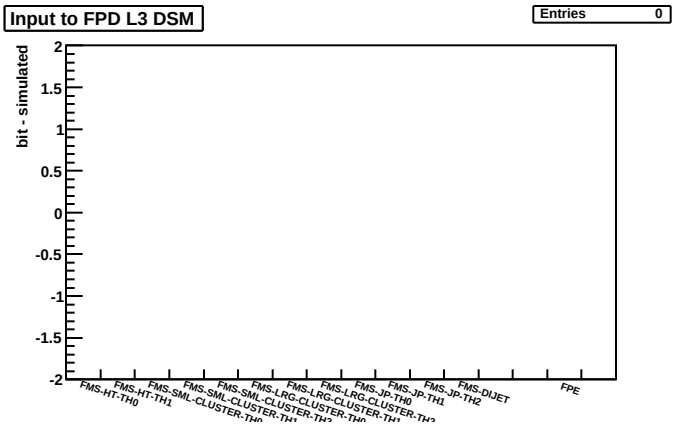

Input to FPD L2 DSM
Entries 178605
CL bits
17
90
42
85
115
62
1397
1351
1020
58036
57979
58411
SMALL
LARGE-S
LARGE-N

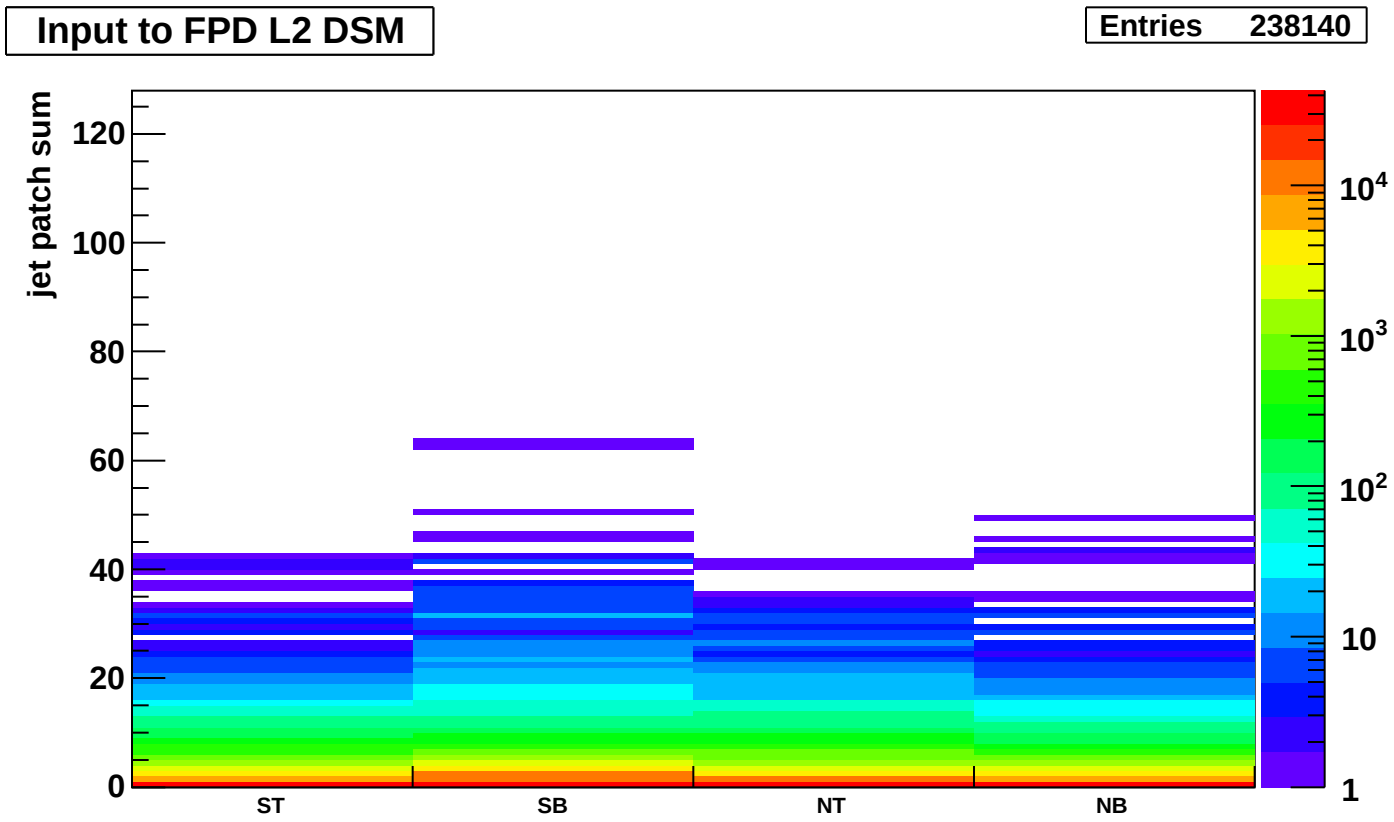

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

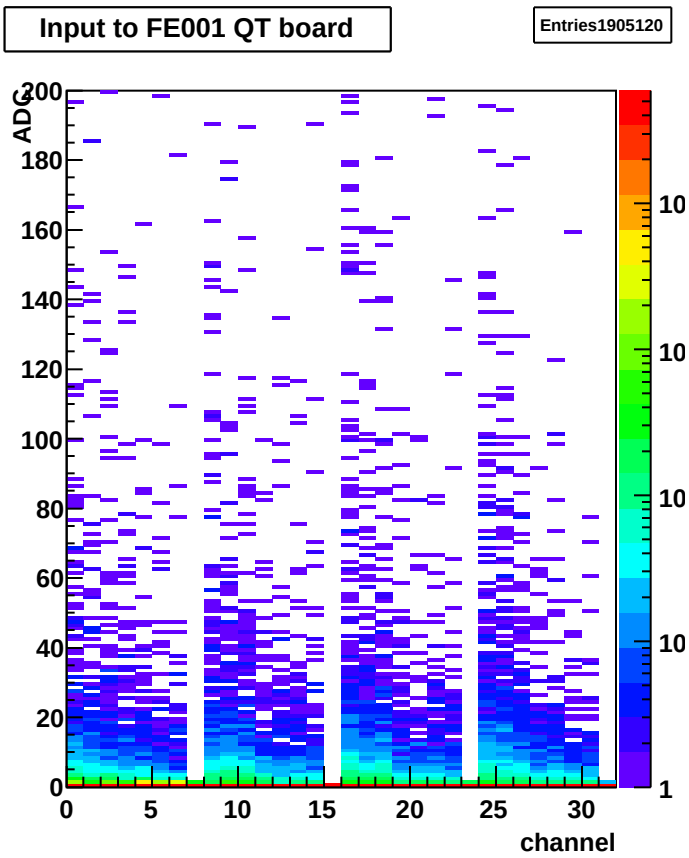

Input to FPD L2 DSM
Entries 178605
HT bits
186
523
305
867
1148
929
58482
57864
58301
SMALL
LARGE-S
LARGE-N

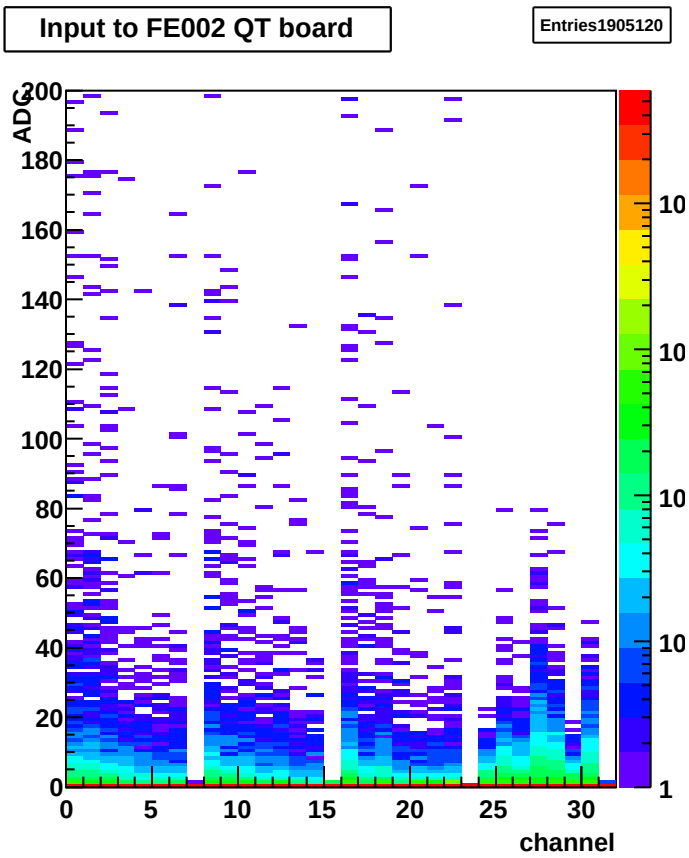

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

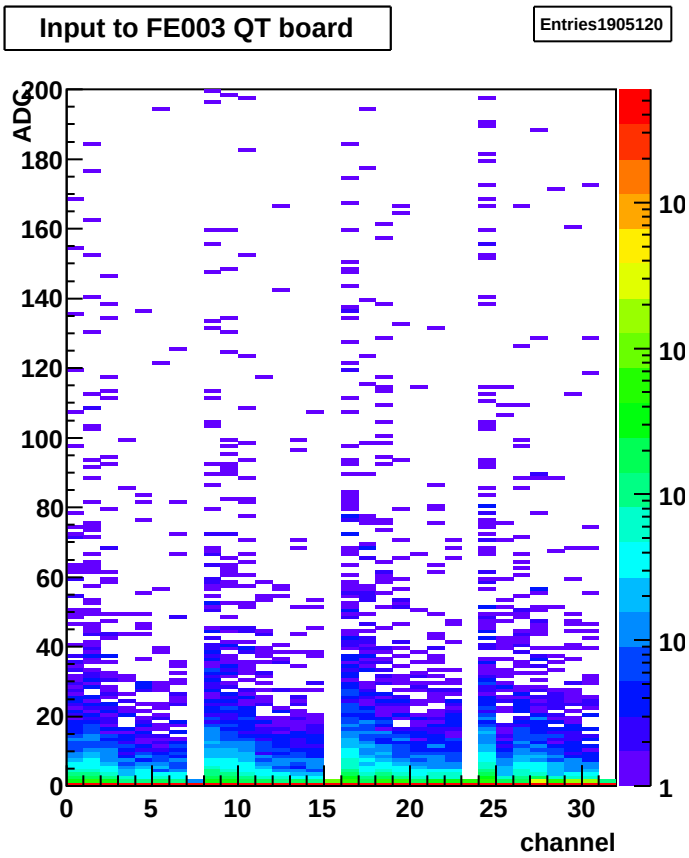

Input to FPD L3 DSM
Entries 952560
bit
3845
1007
1499
102
17
2627
308
132
1279
458
131
15
34955
58580
58528
59036
59433
59518
59908
59227
59403
58256
59077
59404
59520
59535
59535
24580
59535
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

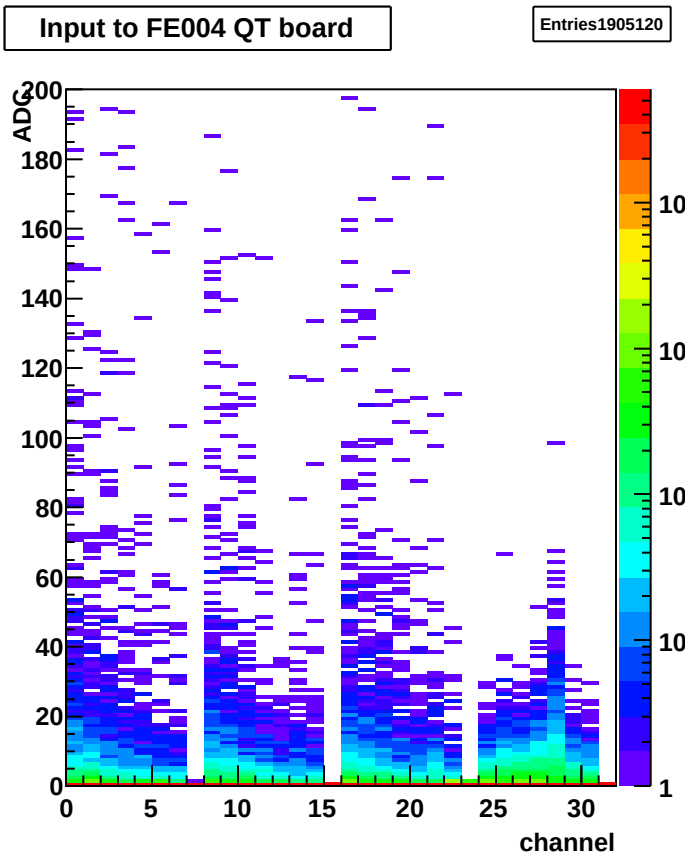

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

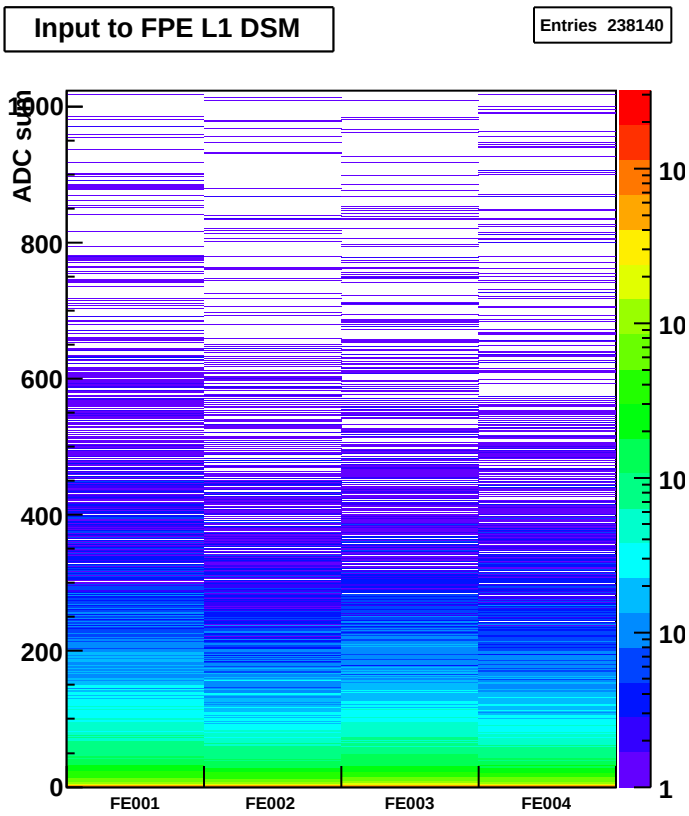

Input to FPD L2 DSM
Entries 238140
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

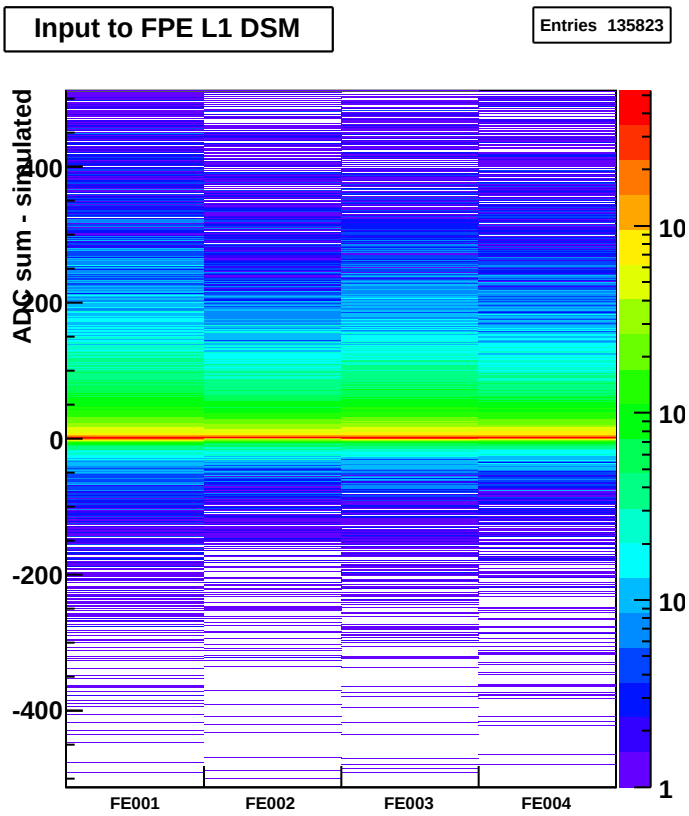

Input to FE001 QT board
Entries1905120
ADC
channel

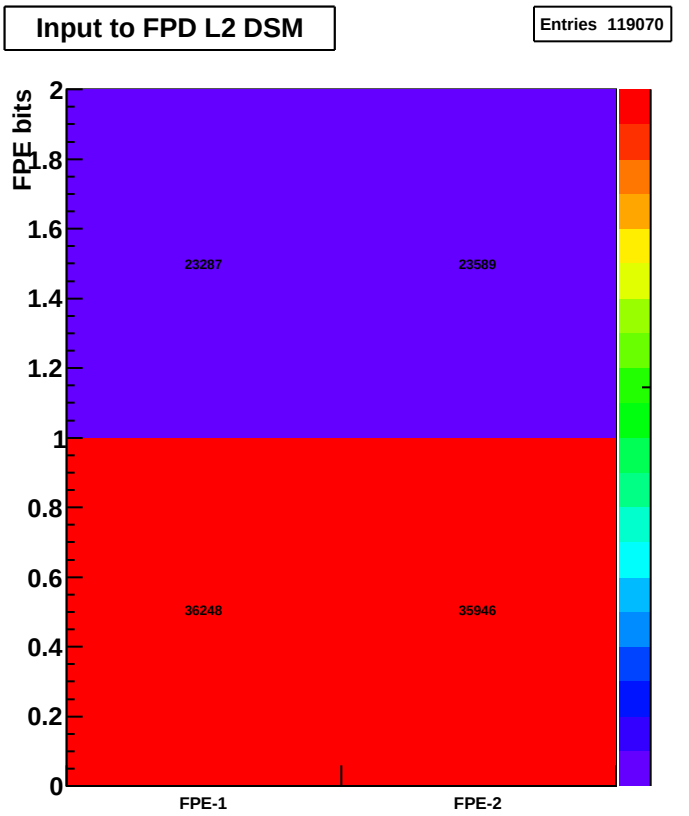

Input to FE002 QT board
Entries1905120
ADC
channel

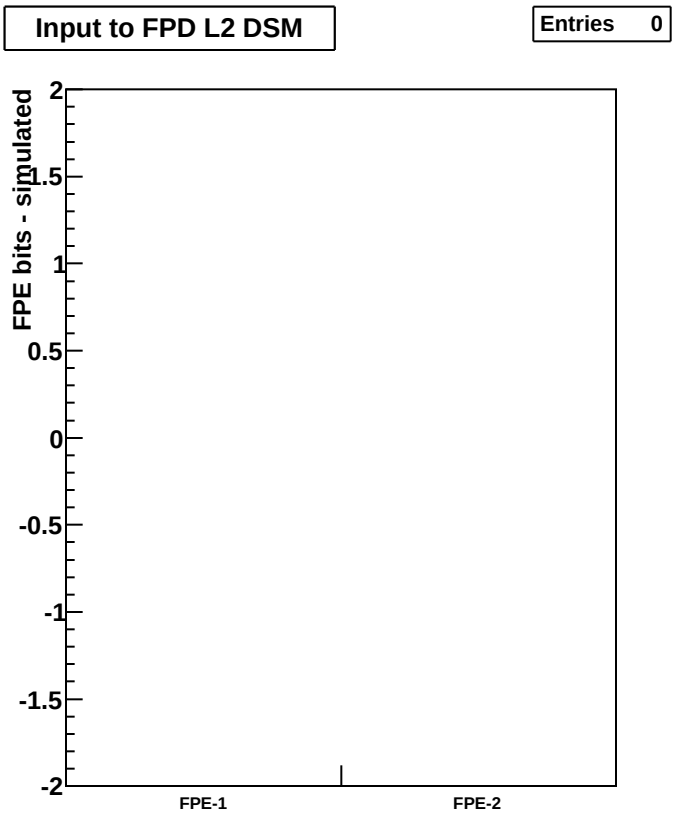

Input to FE003 QT board
Entries1905120
ADC
channel


Input to FE004 QT board
Entries1905120
ADC
channel


Input to FPE L1 DSM
Entries 238140
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPE L1 DSM
Entries 135823
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPD L2 DSM
Entries 119070
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
23287
23589
36248
35946
FPE-1
FPE-2


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