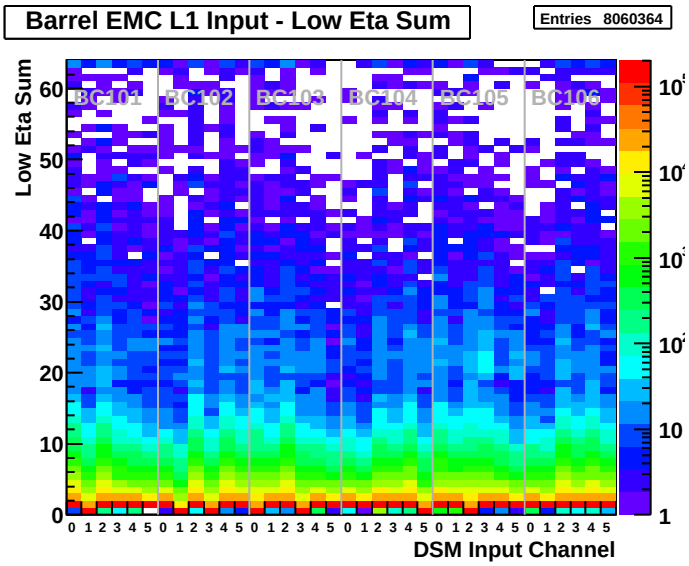
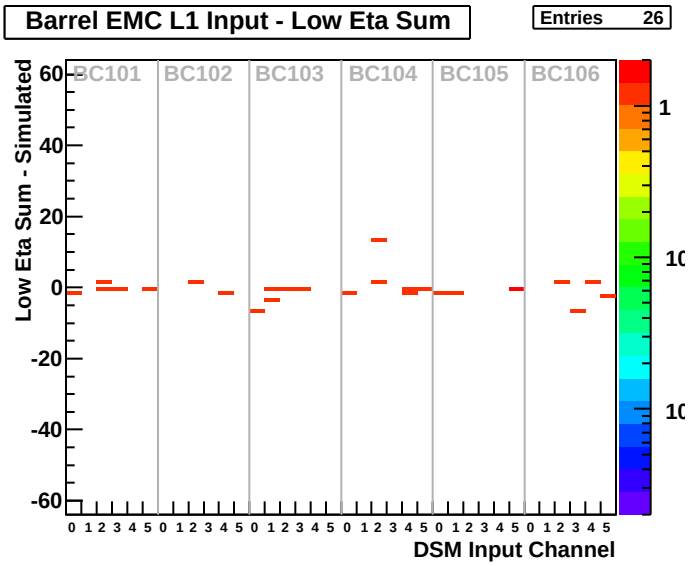
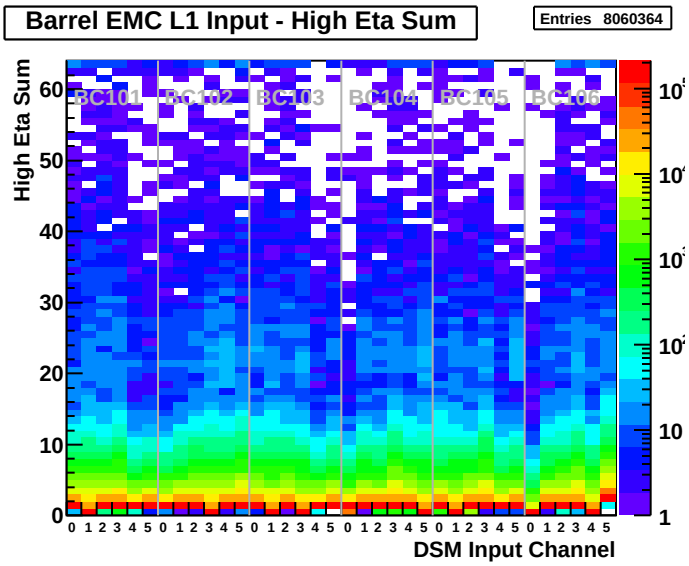
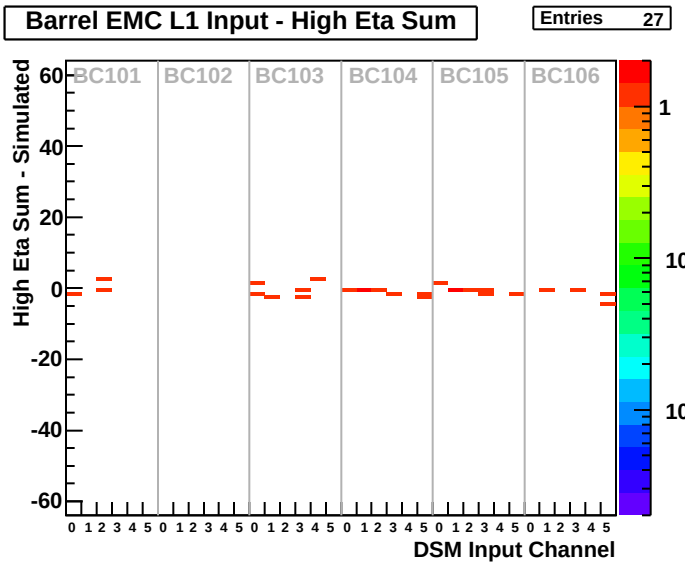
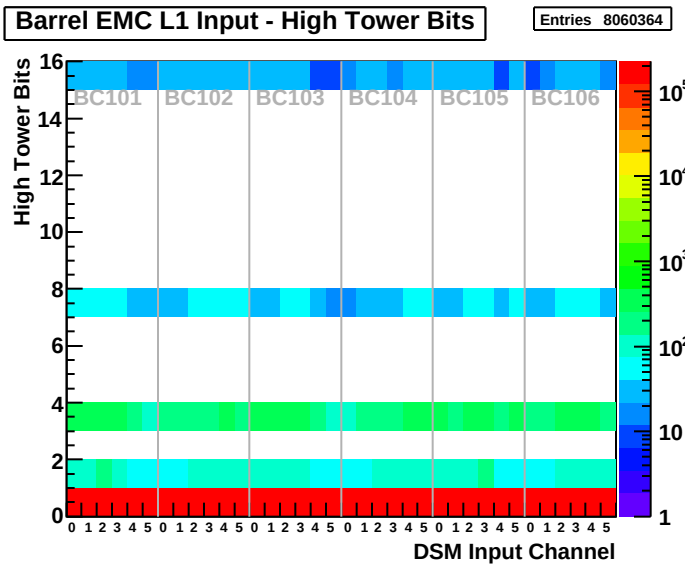
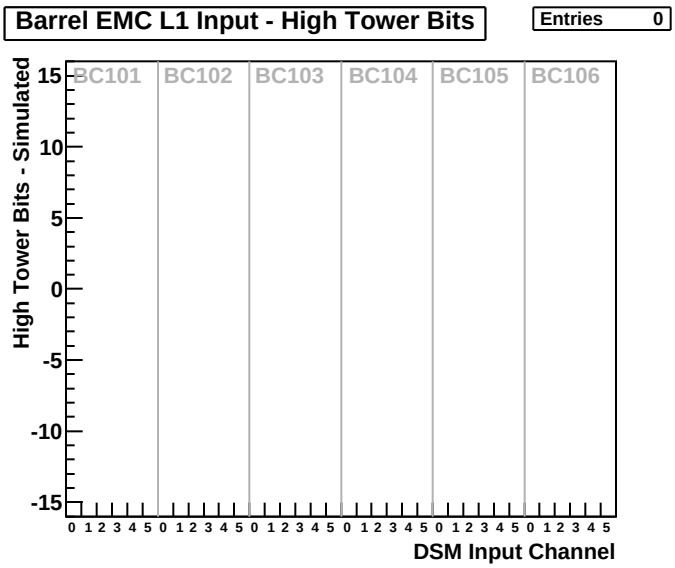

Barrel EMC L1 Input - Low Eta Sum
Entries 8060364
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

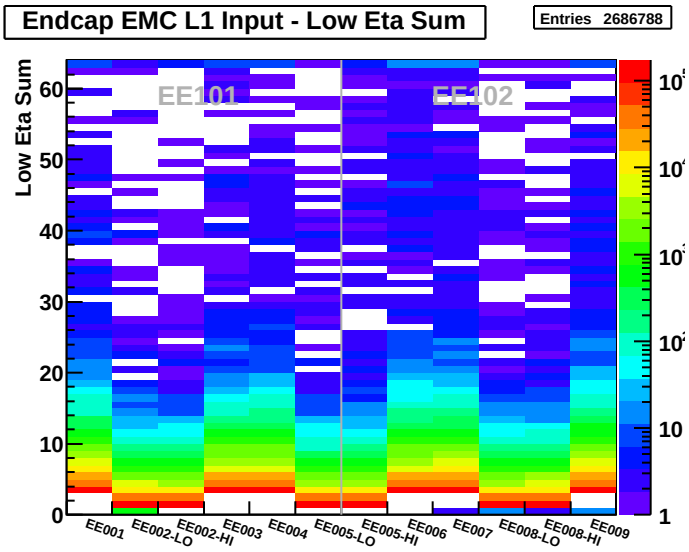

Barrel EMC L1 Input - Low Eta Sum
Entries 26
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

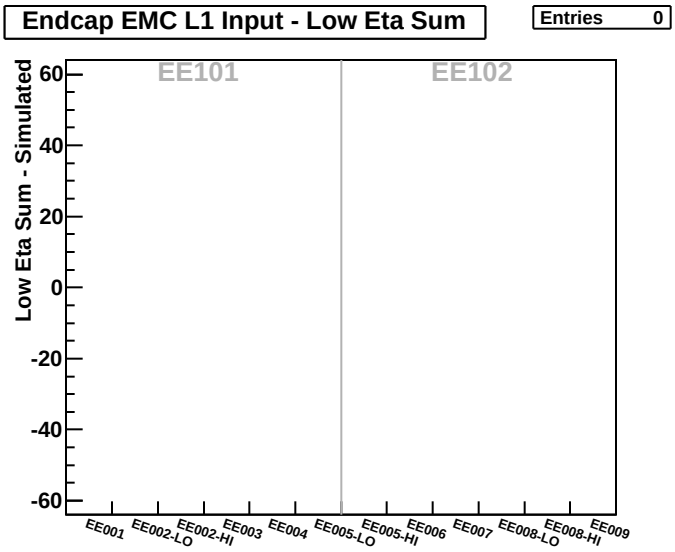

Barrel EMC L1 Input - High Eta Sum
Entries 8060364
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

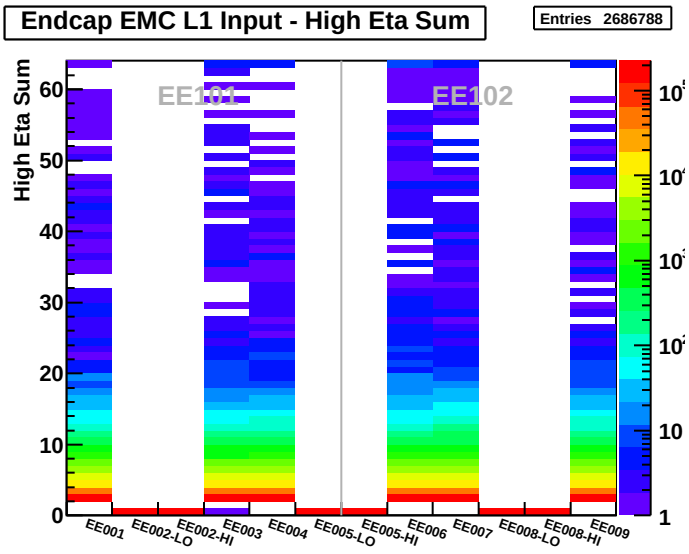

Barrel EMC L1 Input - High Eta Sum
Entries 27
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

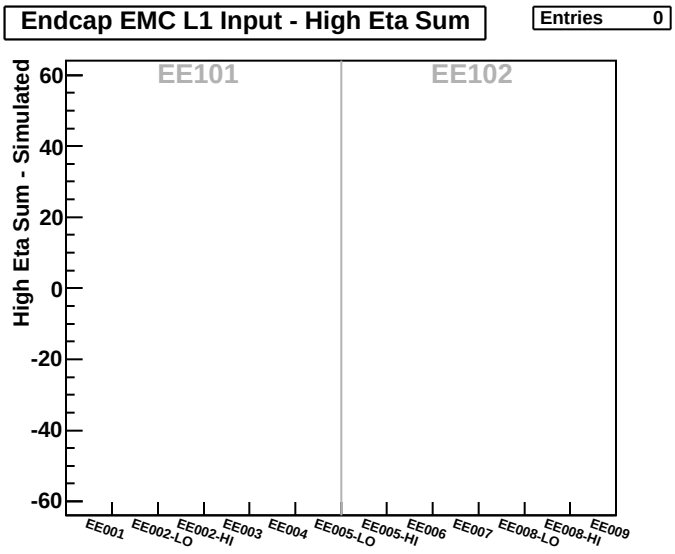

Barrel EMC L1 Input - High Tower Bits
Entries 8060364
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

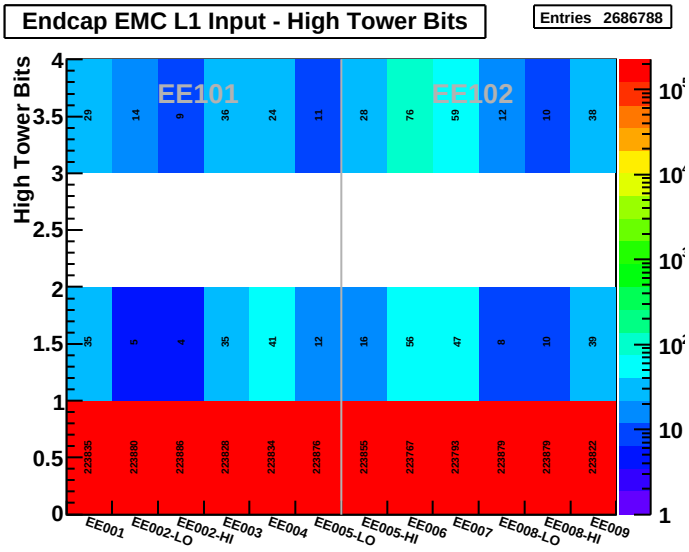

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

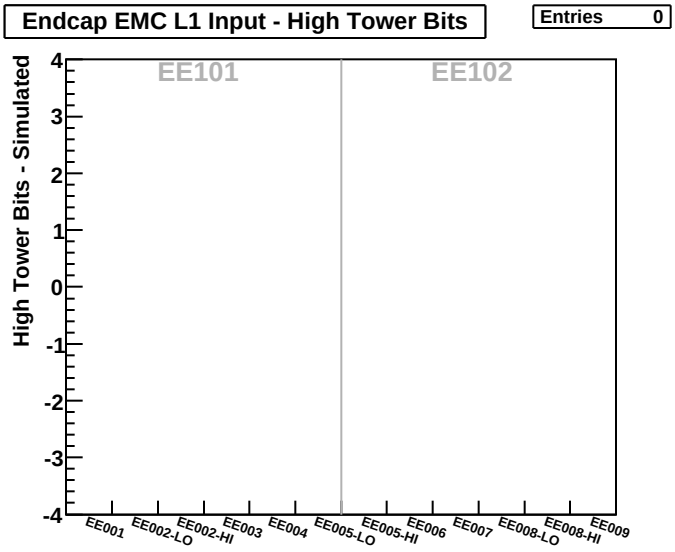

Endcap EMC L1 Input - Low Eta Sum
Entries 2686788
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

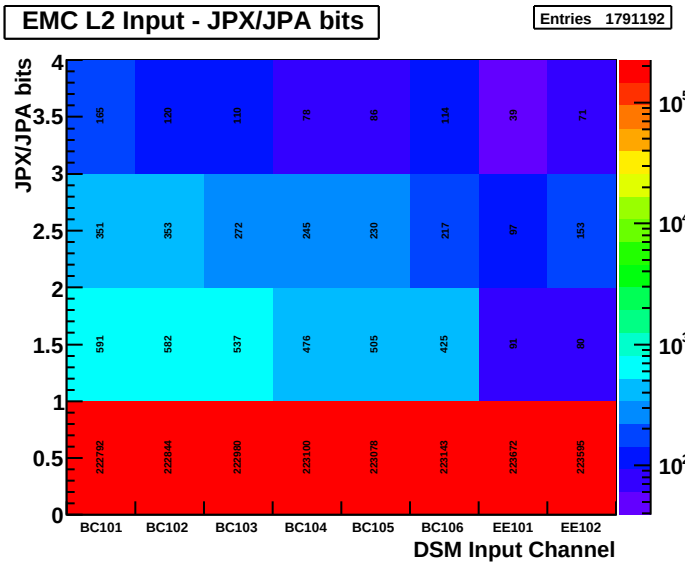

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

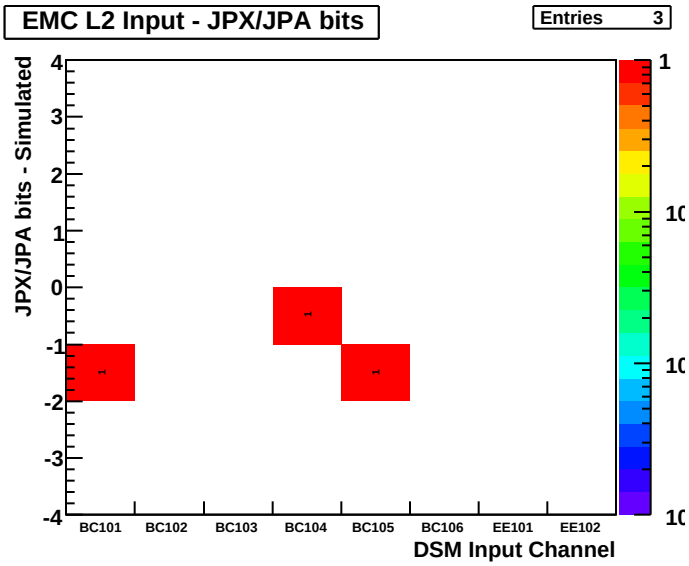

Endcap EMC L1 Input - High Eta Sum
Entries 2686788
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

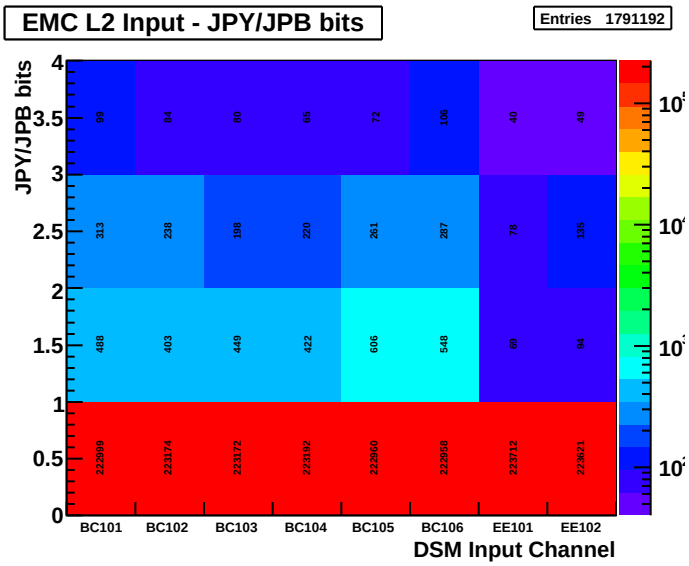

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

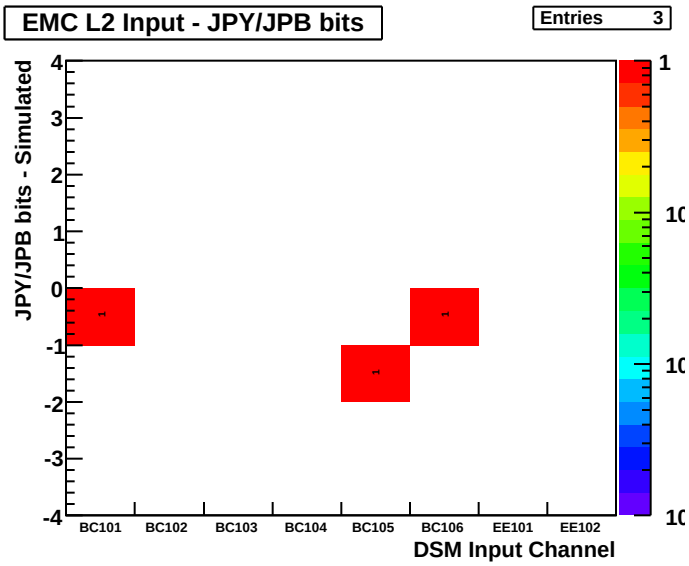

Endcap EMC L1 Input - High Tower Bits
Entries 2686788
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

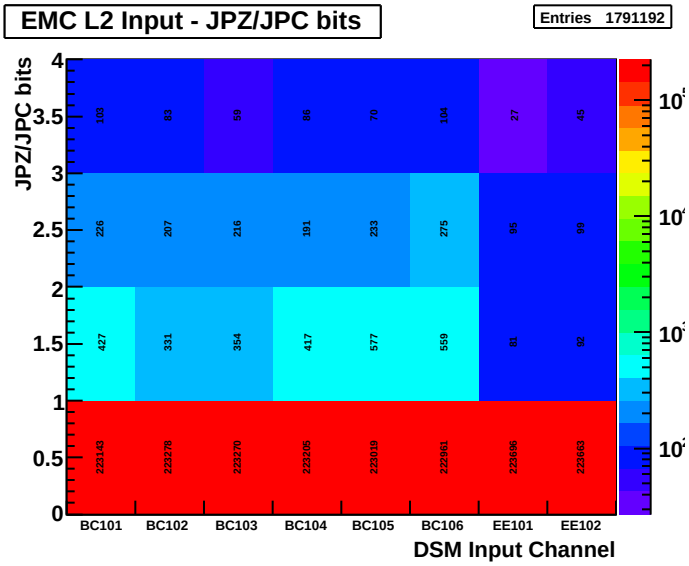

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

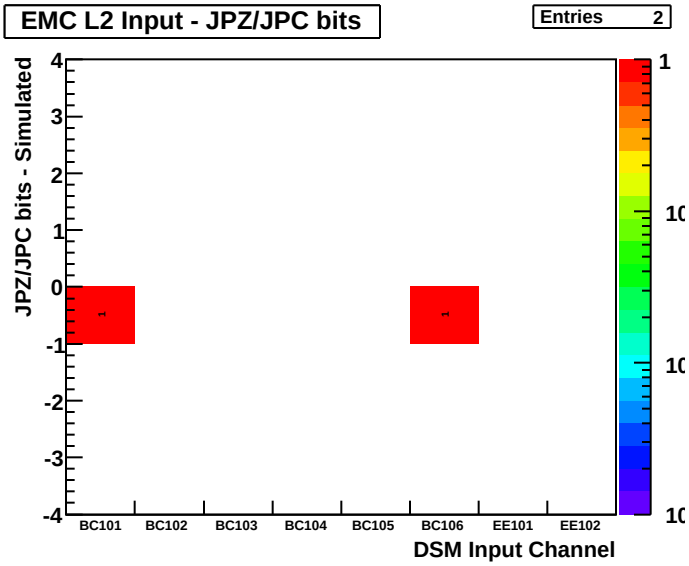

EMC L2 Input - JPX/JPA bits
Entries 1791192
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
165 120 110 76 86 114 39 71
351 353 272 245 230 217 97 153
591 582 537 476 505 425 91 80
222792 222844 222980 223100 223078 223143 223672 223595

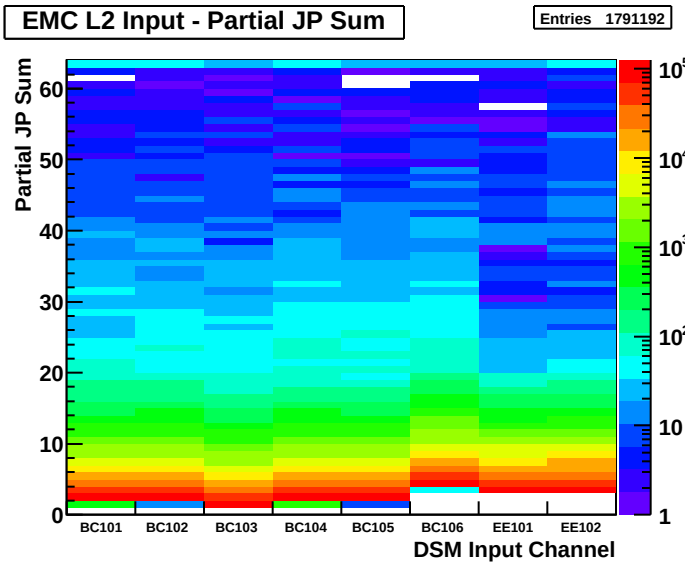

EMC L2 Input - JPX/JPA bits
Entries 3
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

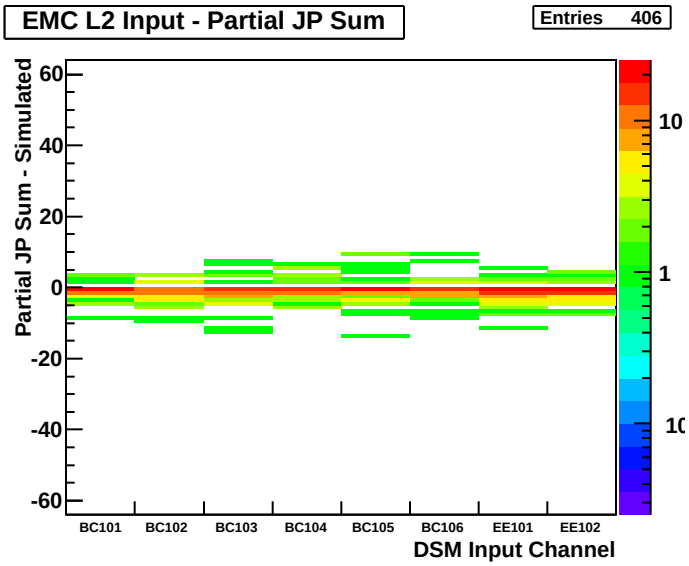

EMC L2 Input - JPY/JPB bits
Entries 1791192
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
99 84 80 65 72 106 40 49
313 238 198 220 261 287 78 135
488 403 449 422 606 548 69 94
222999 223174 223172 223192 223060 222958 223712 223621

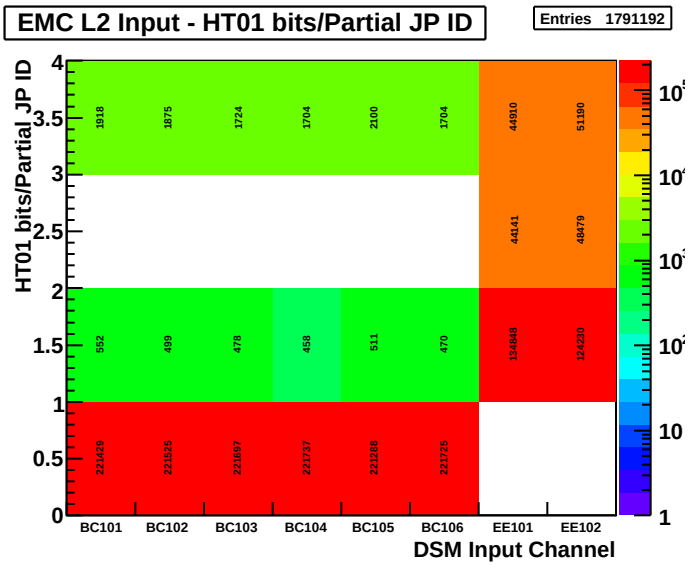

EMC L2 Input - JPY/JPB bits
Entries 3
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

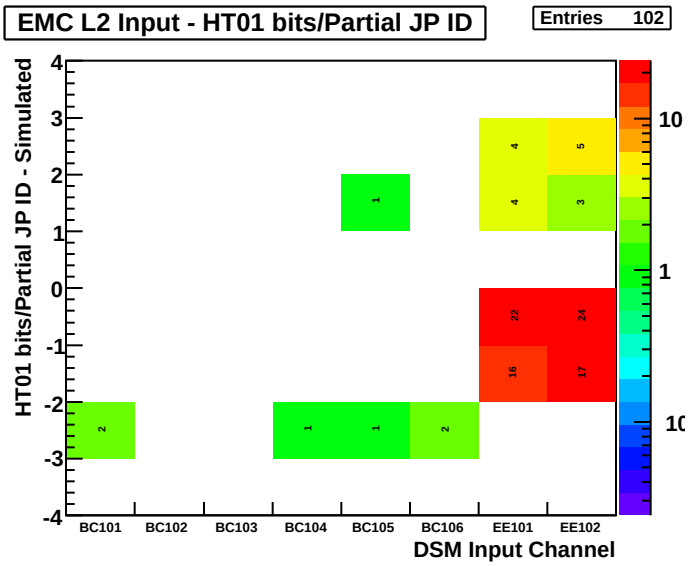

EMC L2 Input - JPZ/JPC bits
Entries 1791192
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
103 83 59 86 70 104 27 45
226 207 216 191 233 275 95 99
427 331 354 417 577 559 81 92
223143 223278 223270 223205 223019 222961 223595 223563

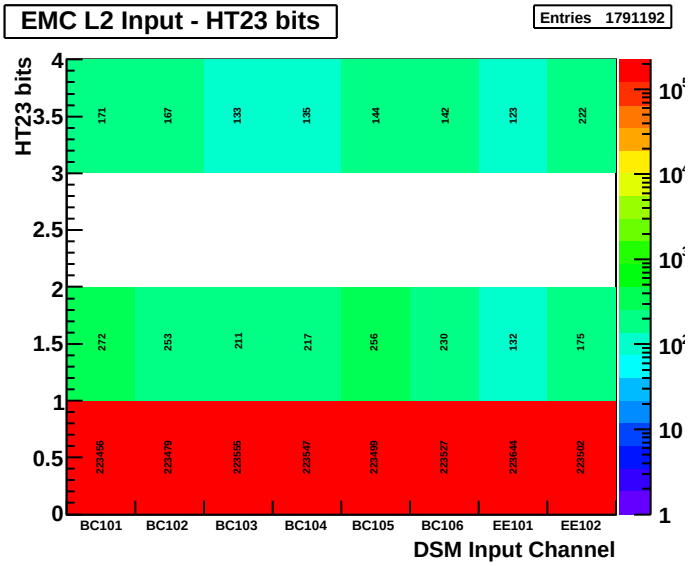

EMC L2 Input - JPZ/JPC bits
Entries 2
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

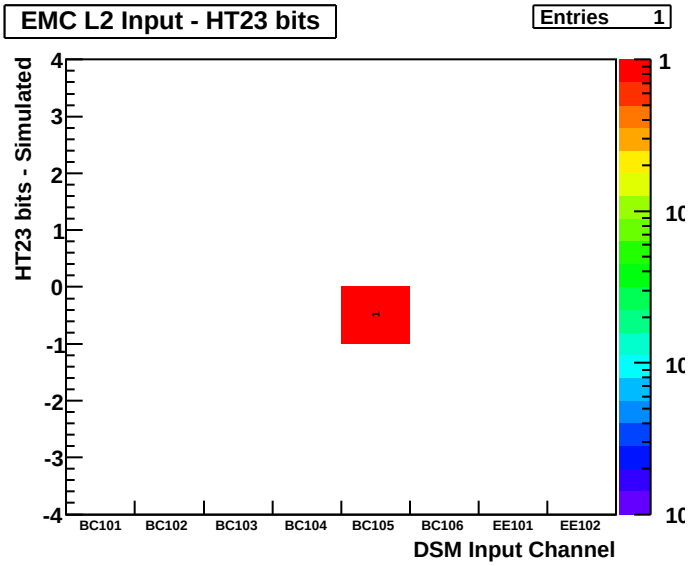

EMC L2 Input - Partial JP Sum
Entries 1791192
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

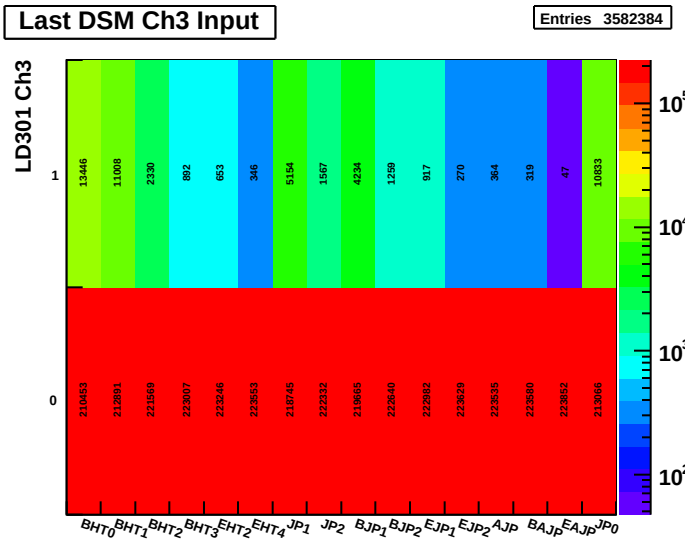

EMC L2 Input - Partial JP Sum
Entries 406
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

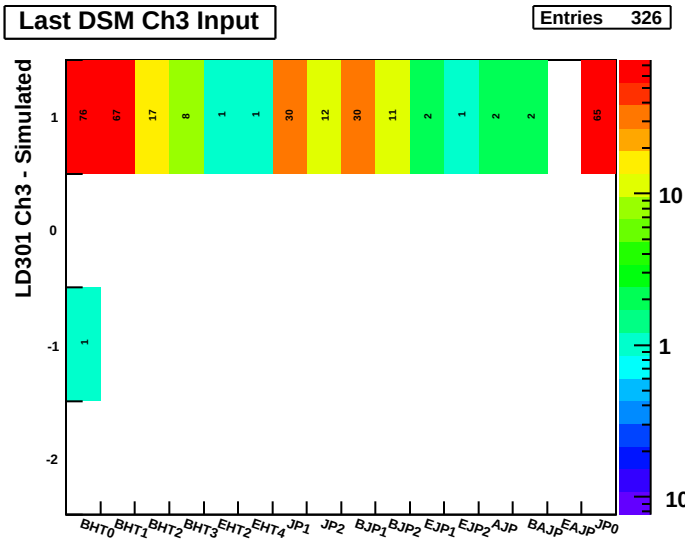

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1791192
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

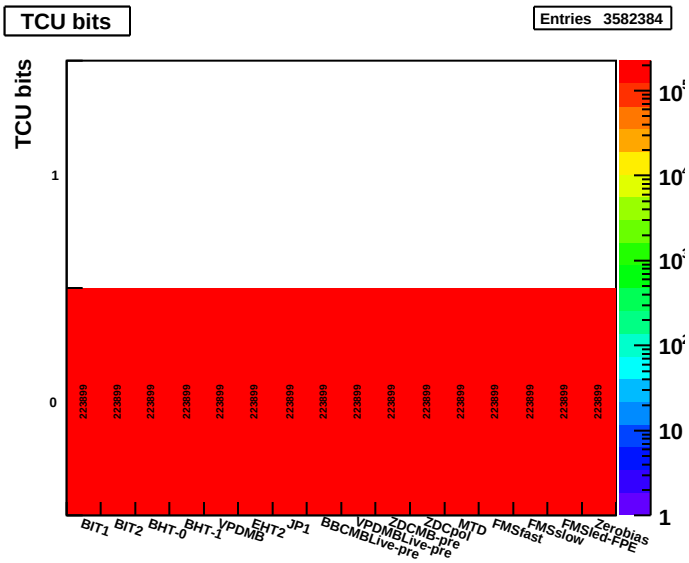

EMC L2 Input - HT01 bits/Partial JP ID
Entries 102
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

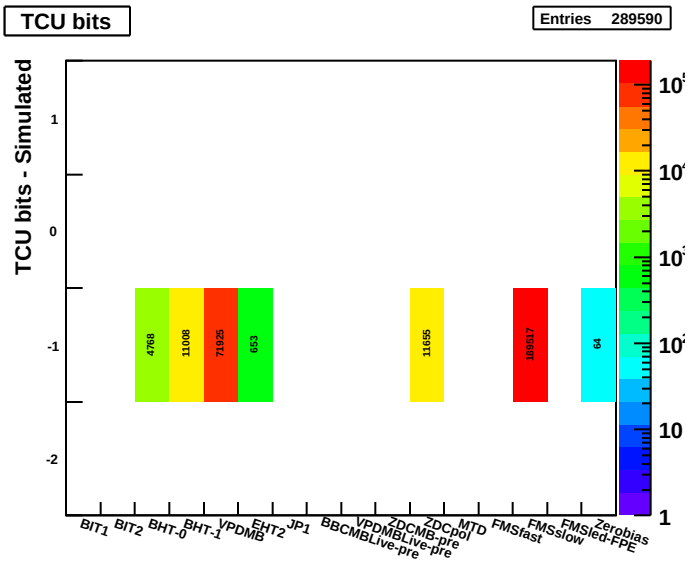

EMC L2 Input - HT23 bits
Entries 1791192
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

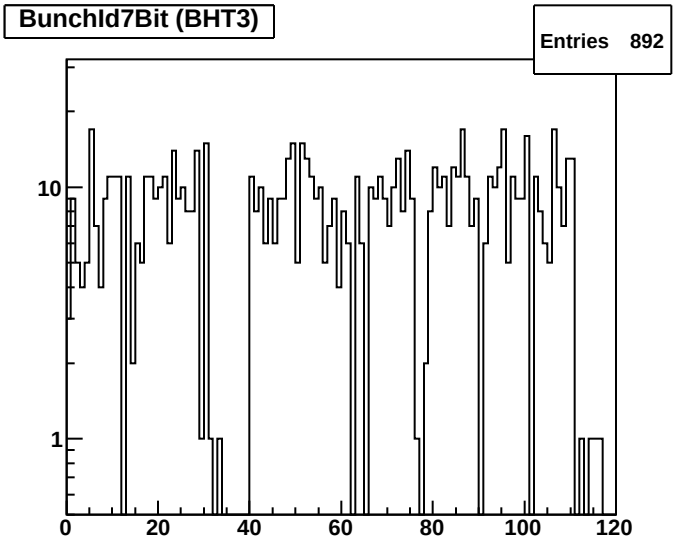

EMC L2 Input - HT23 bits
Entries 1
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

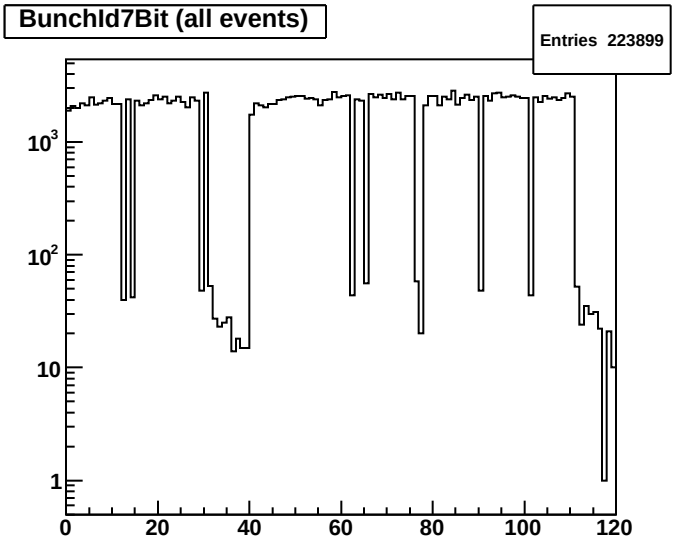

Last DSM Ch3 Input
Entries 3582384
LD301 Ch3
13446 11008 2330 892 653 346 5154 1567 4234 1259 917 270 364 319 47 10833
210453 212891 221569 223007 223246 223553 218745 222332 219665 222640 222982 223629 223535 223580 223852 213066
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

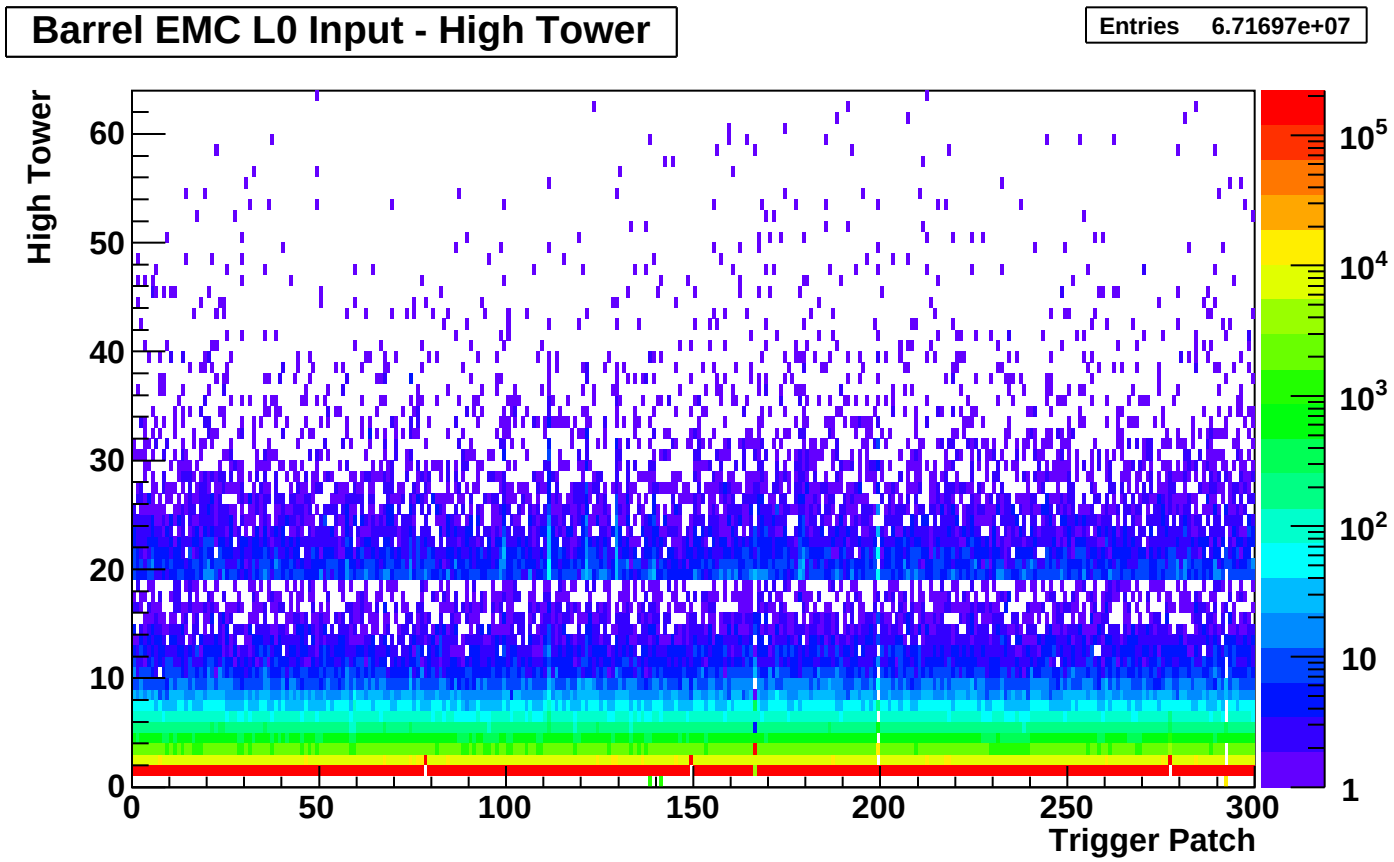

Last DSM Ch3 Input
Entries 326
LD301 Ch3 - Simulated
76 67 17 8 1 1 30 12 30 11 2 1 2 2 65
1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

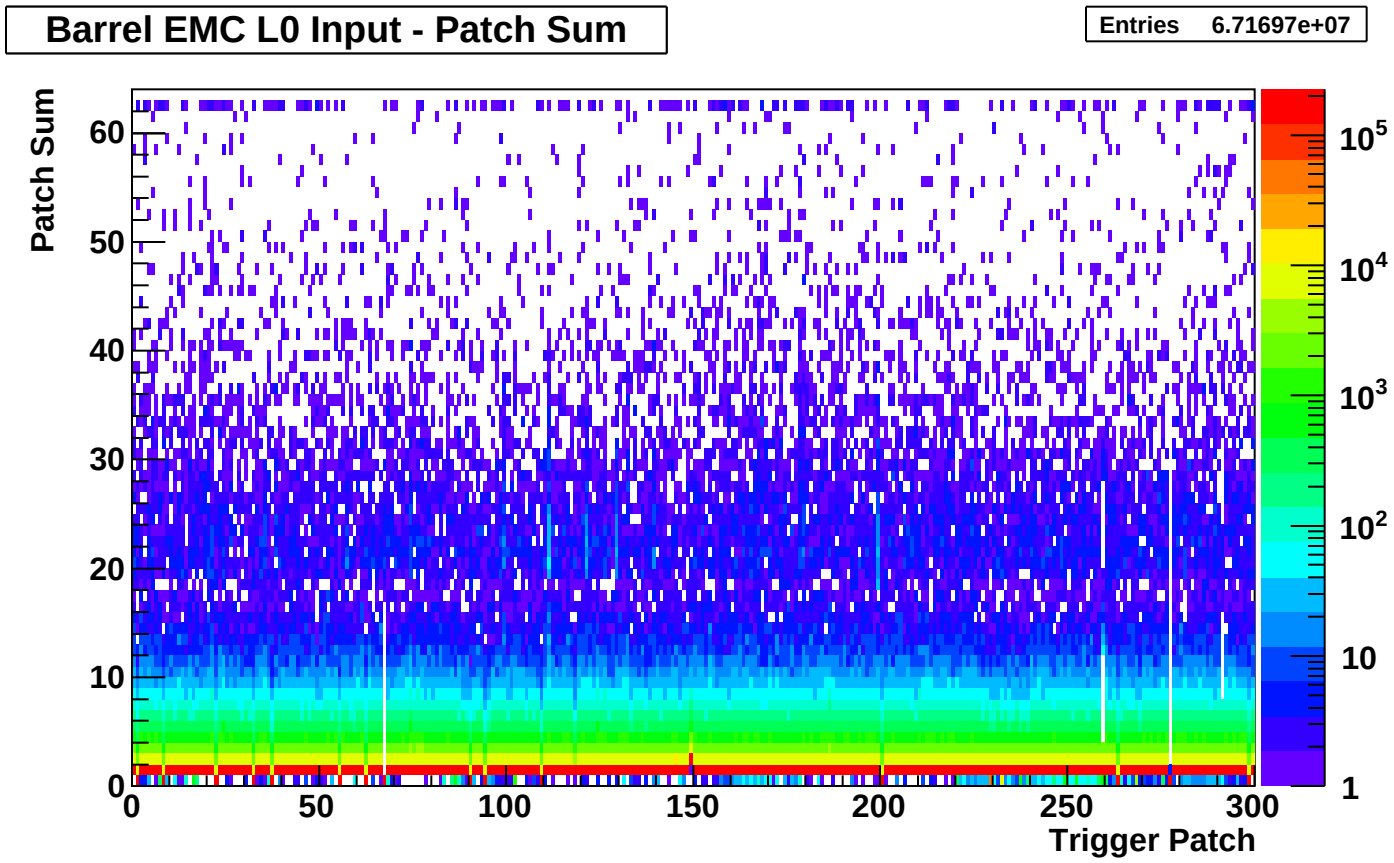

TCU bits
Entries 3582384
TCU bits
223899
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

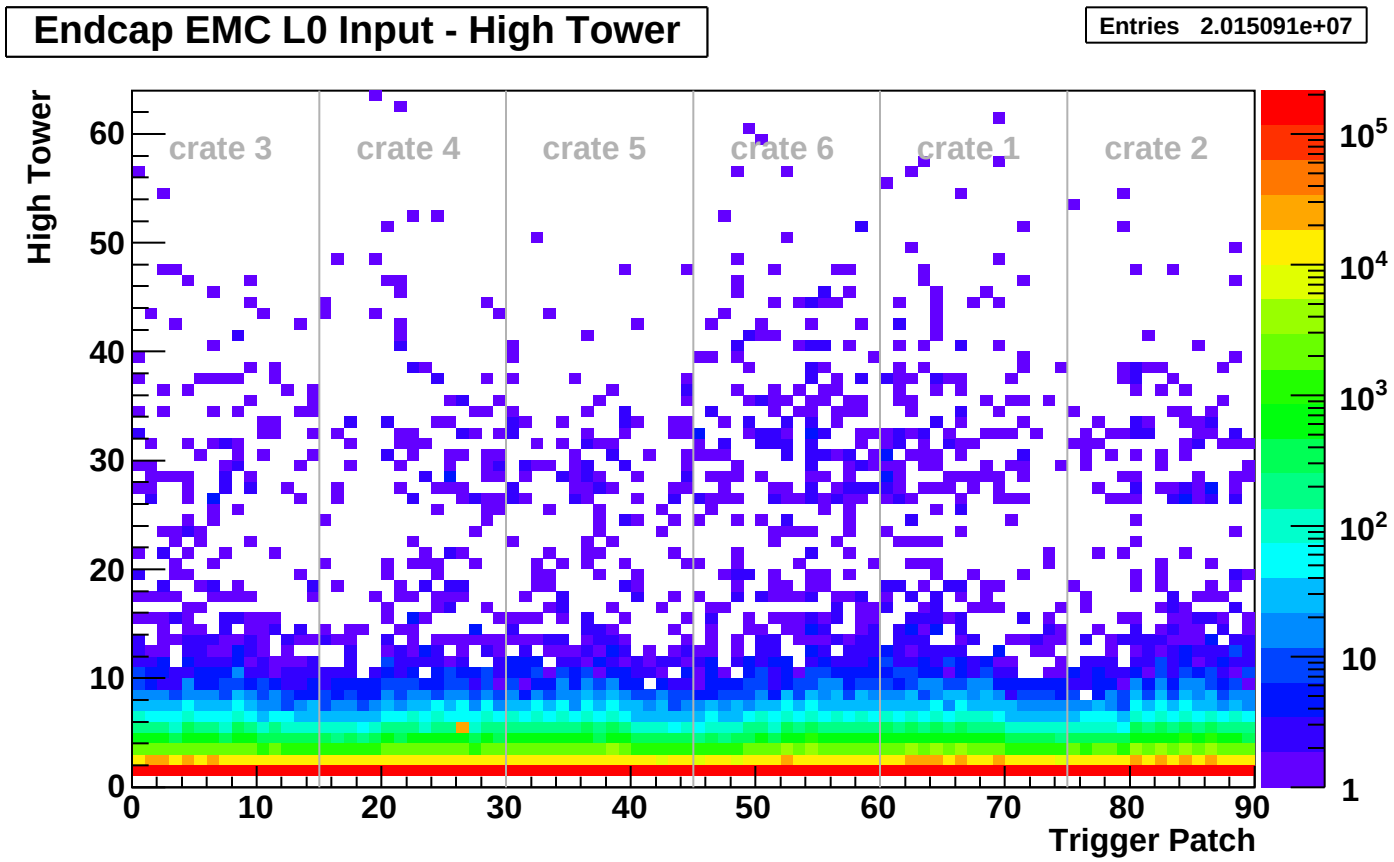

TCU bits
Entries 289590
TCU bits - Simulated
4768 11008 71925 653 11655 189517 64
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

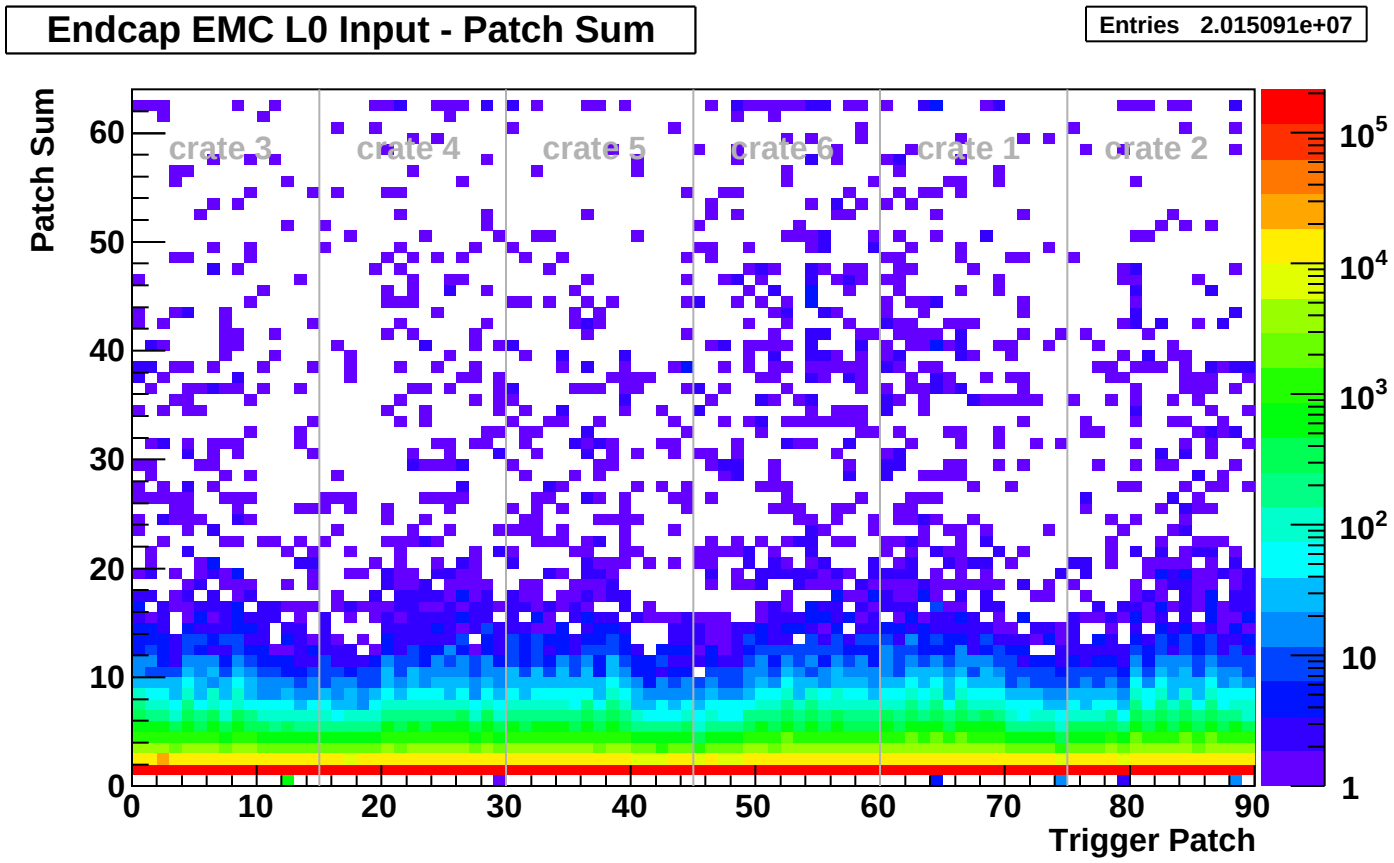

BunchId7Bit (BHT3)
Entries 892

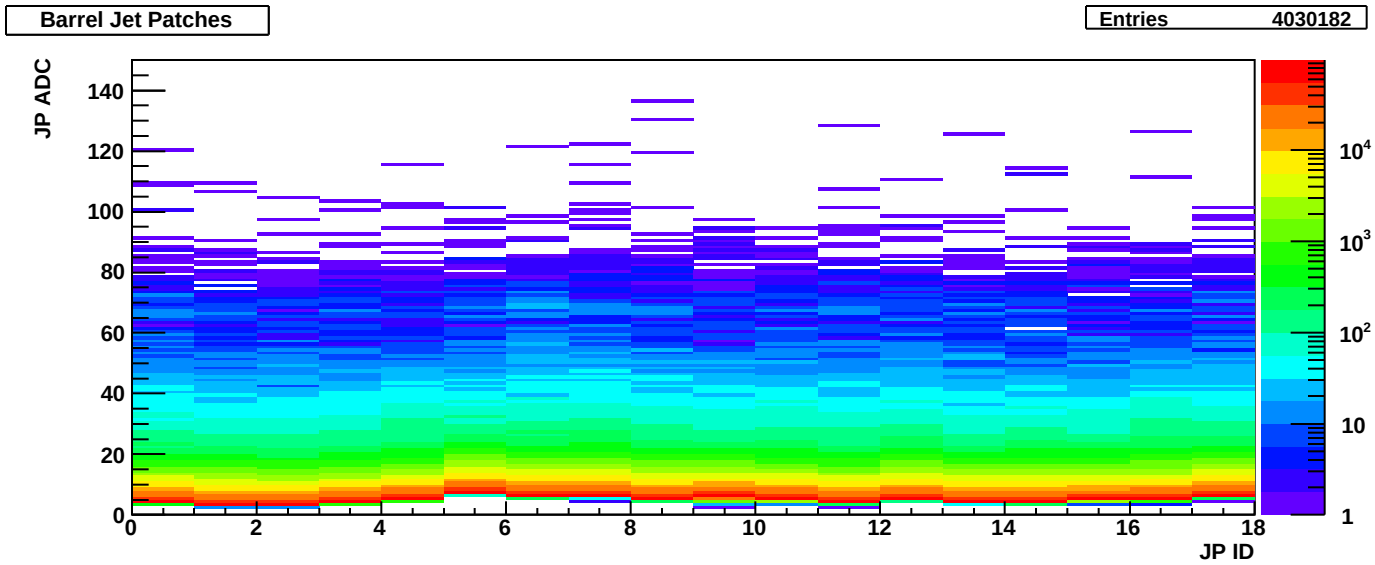

BunchId7Bit (all events)
Entries 223899

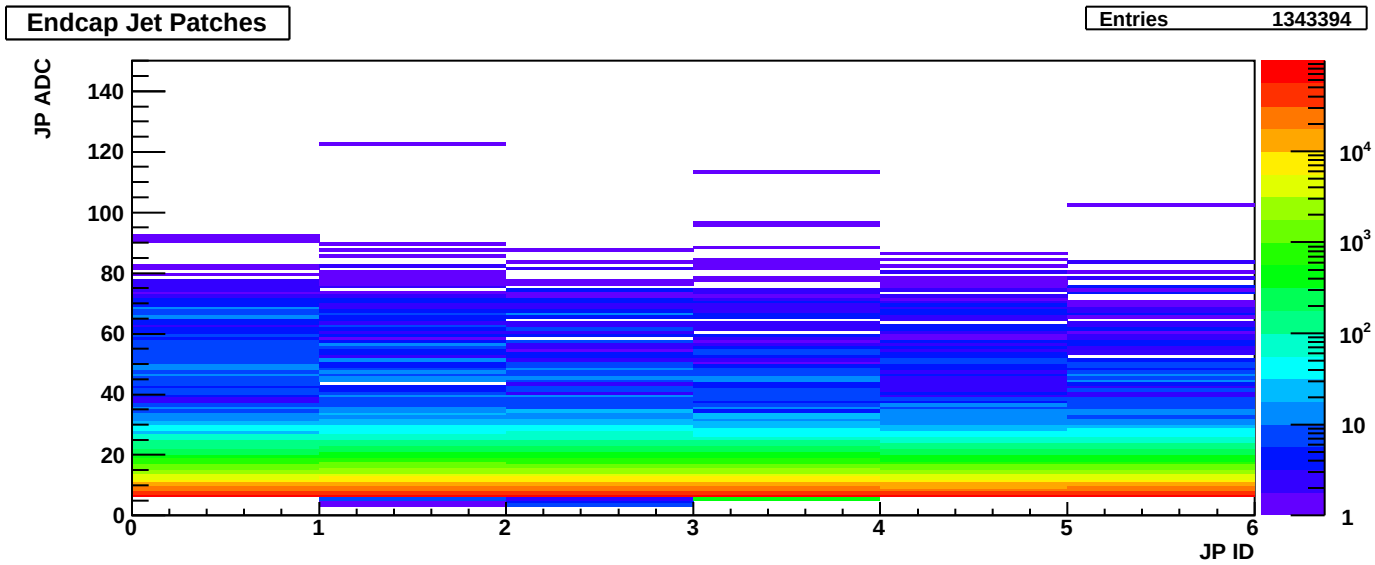

Barrel EMC L0 Input - High Tower
Entries 6.71697e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

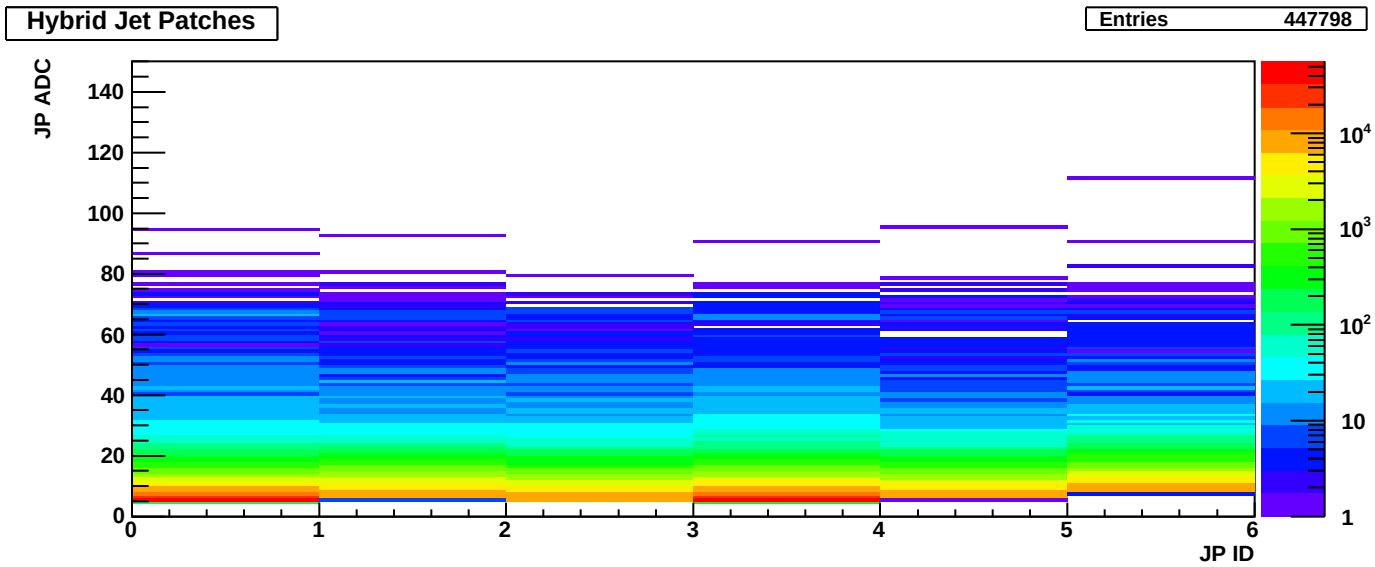

Barrel EMC L0 Input - Patch Sum
Entries 6.71697e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

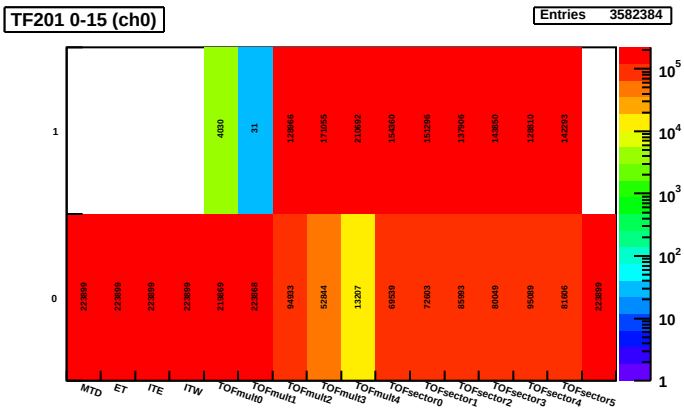

Endcap EMC L0 Input - High Tower
Entries 2.015091e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

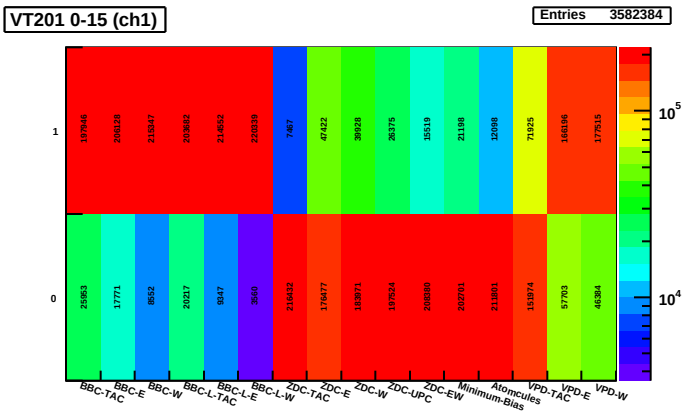

Endcap EMC L0 Input - Patch Sum
Entries 2.015091e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

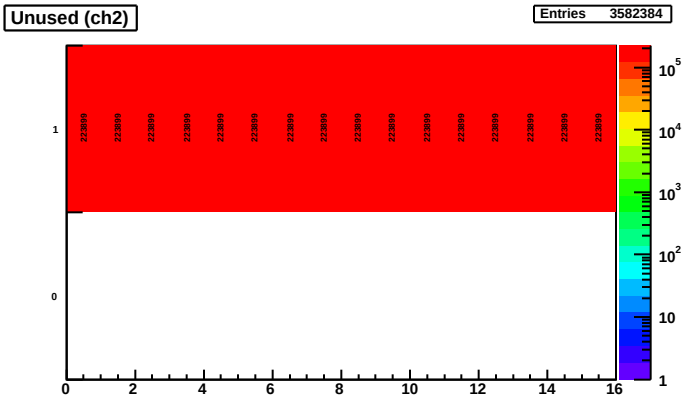

Barrel Jet Patches
Entries 4030182
JP ADC
JP ID

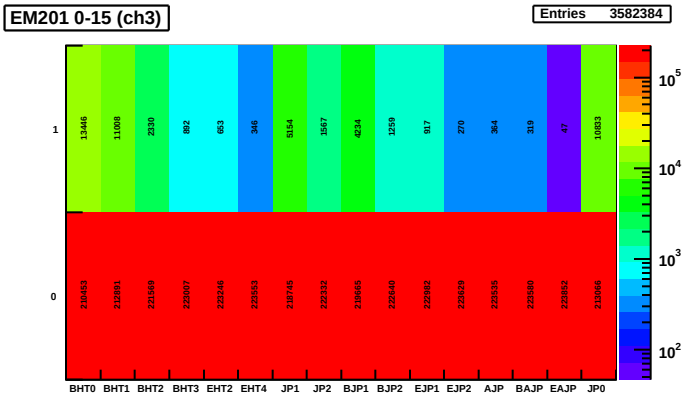

Endcap Jet Patches
Entries 1343394
JP ADC
JP ID

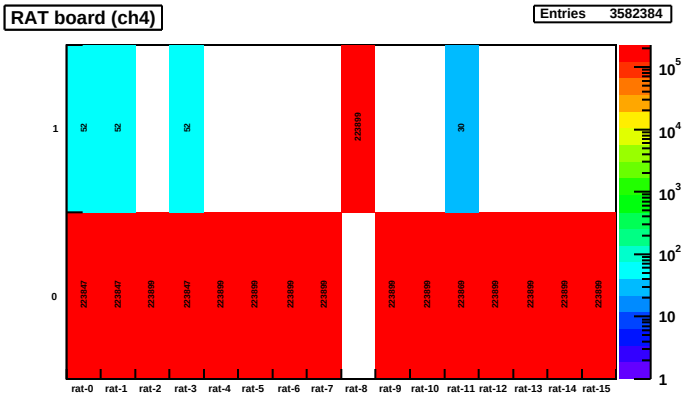

Hybrid Jet Patches
Entries 447798
JP ADC
JP ID

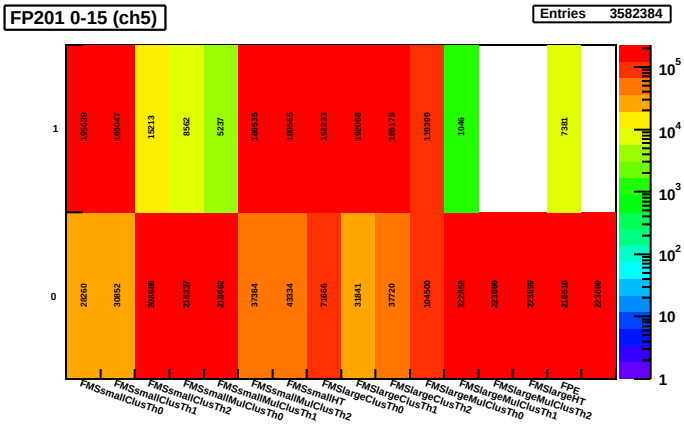

TF201 0-15 (ch0)
Entries 3582384
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

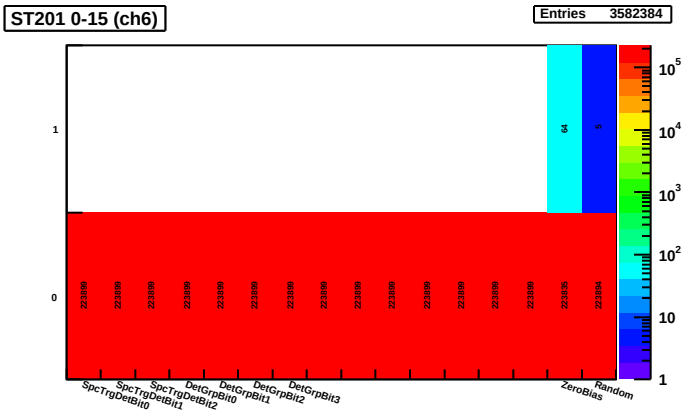

VT201 0-15 (ch1)
Entries 3582384
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

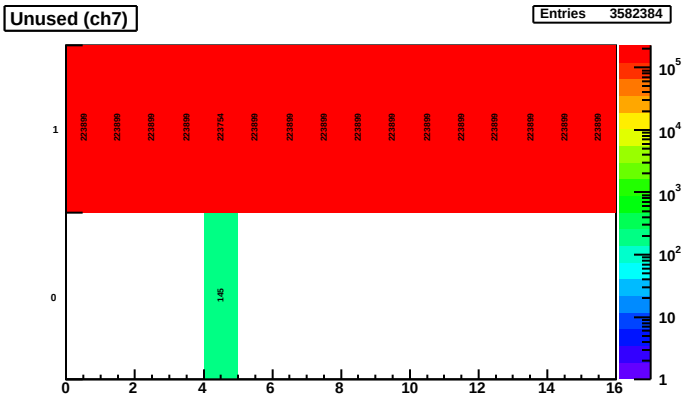

Unused (ch2)
Entries 3582384

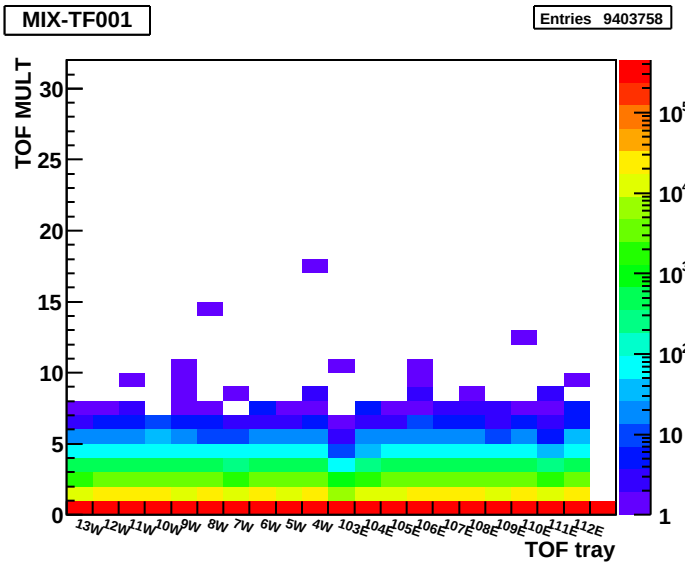

EM201 0-15 (ch3)
Entries 3582384
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

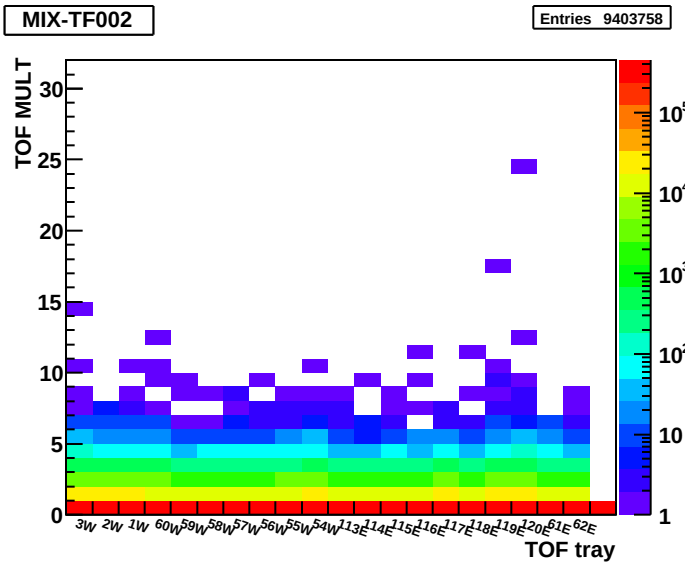

RAT board (ch4)
Entries 3582384
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

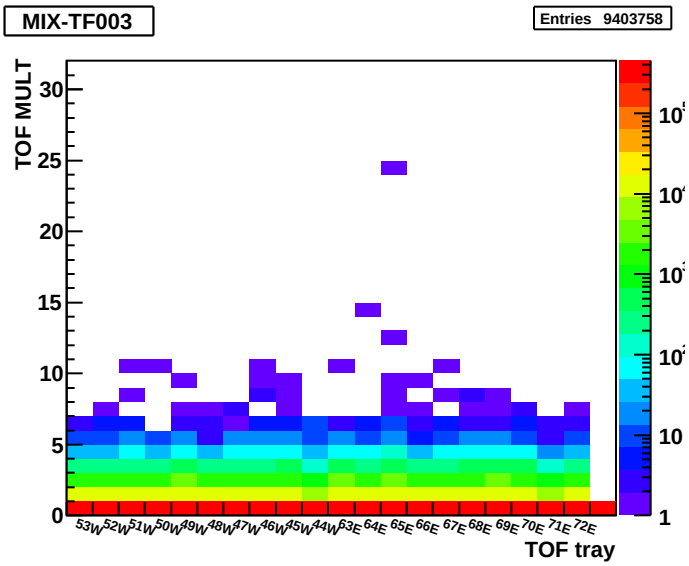

FP201 0-15 (ch5)
Entries 3582384
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

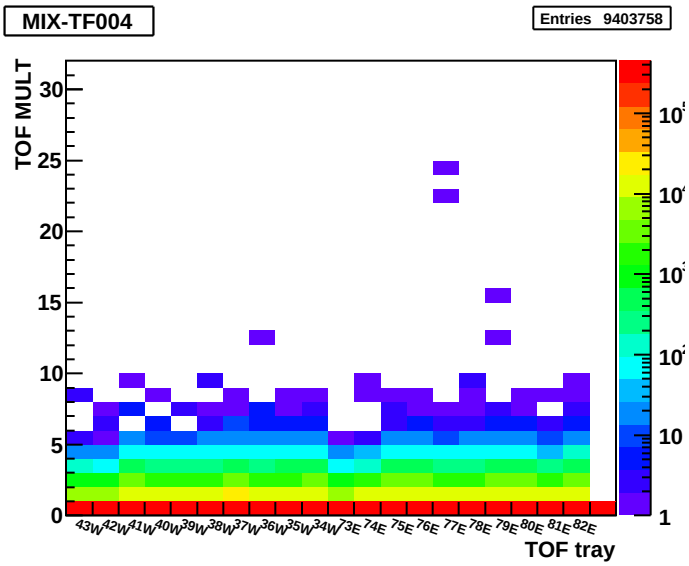

ST201 0-15 (ch6)
Entries 3582384
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetCrpBit0
DetCrpBit1
DetCrpBit2
DetCrpBit3
ZeroBias
Random

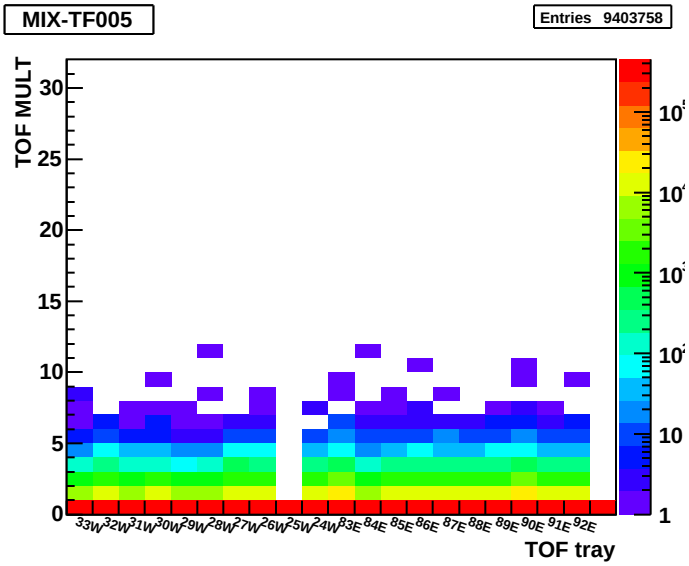

Unused (ch7)
Entries 3582384

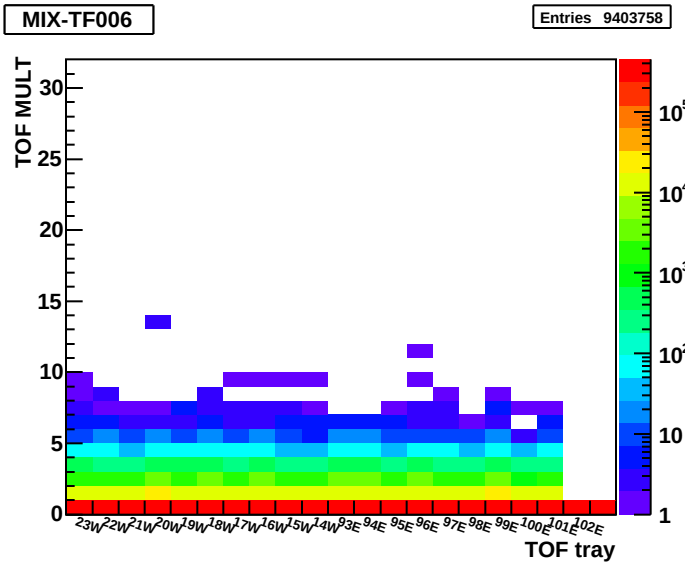

MIX-TF001
Entries 9403758
TOF MULT
TOF tray

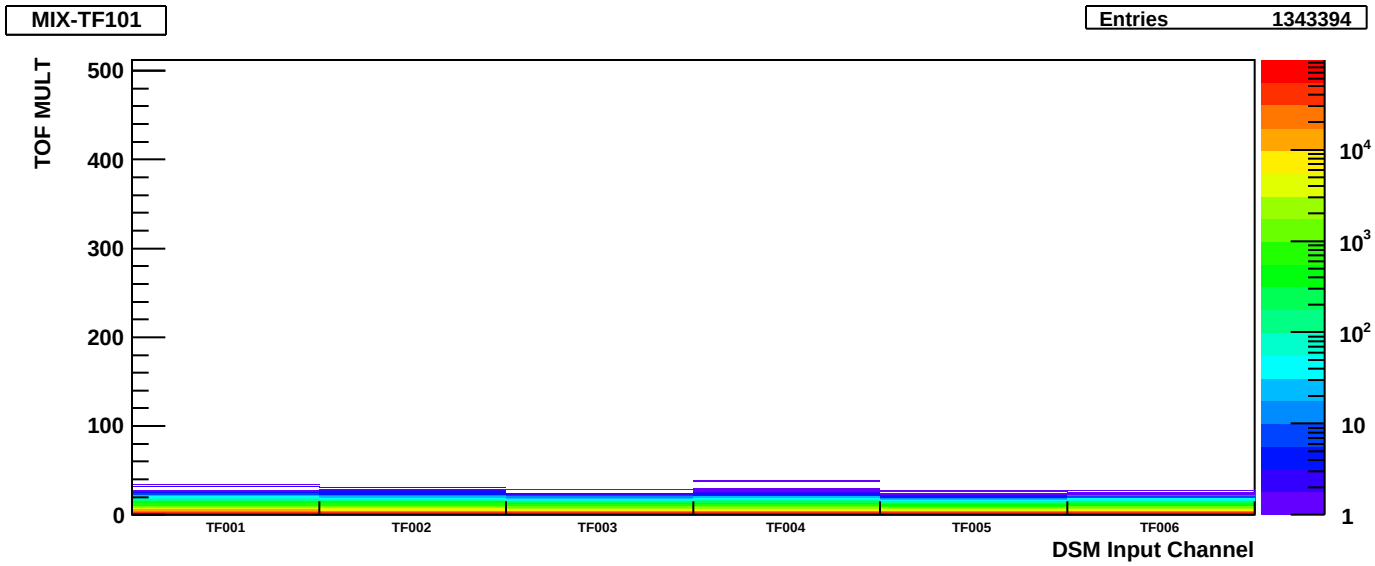

MIX-TF002
Entries 9403758
TOF MULT
TOF tray

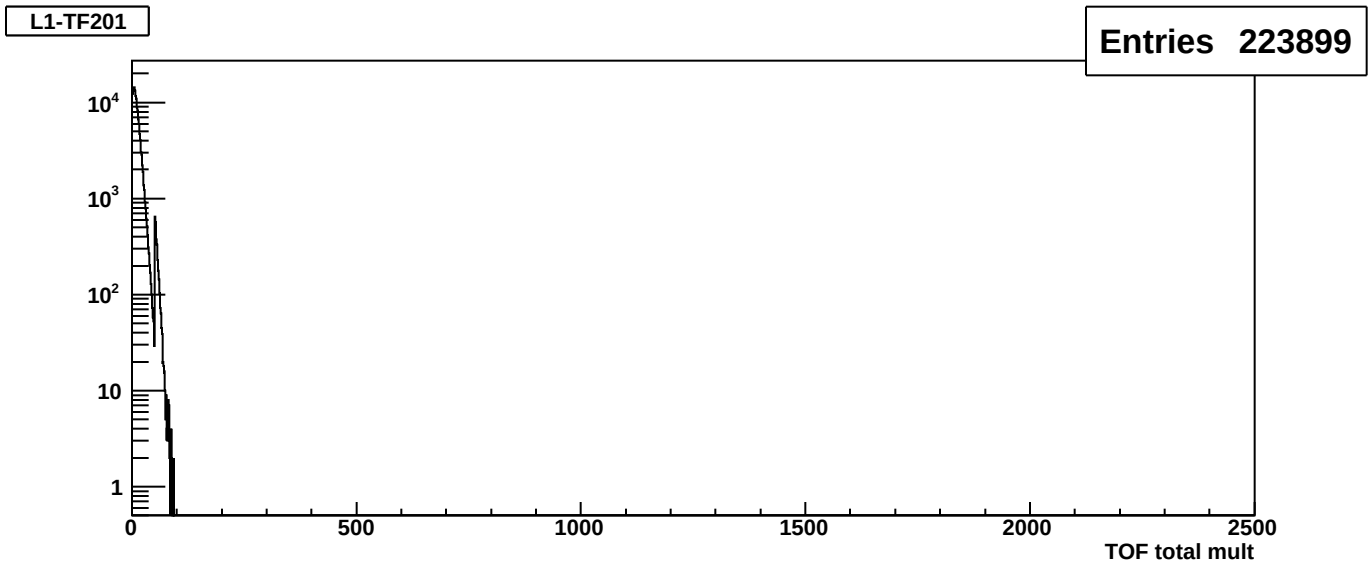

MIX-TF003
Entries 9403758
TOF MULT
TOF tray

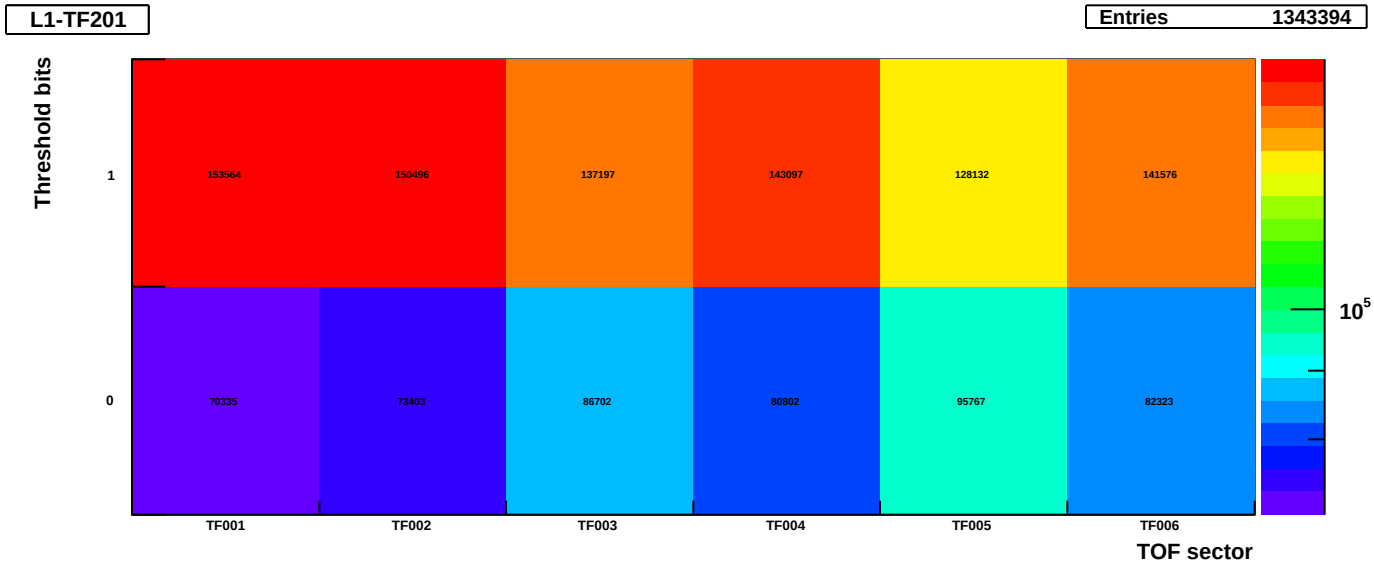

MIX-TF004
Entries 9403758
TOF MULT
TOF tray

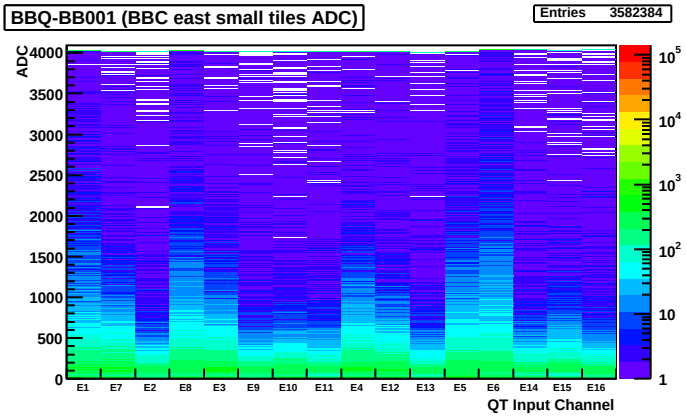

MIX-TF005
Entries 9403758
TOF MULT
TOF tray

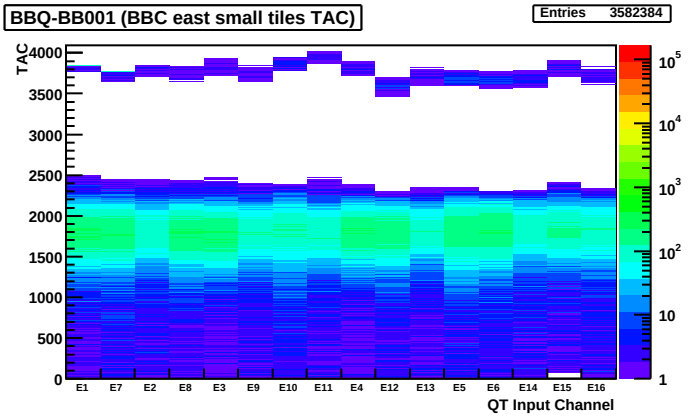

MIX-TF006
Entries 9403758
TOF MULT
TOF tray

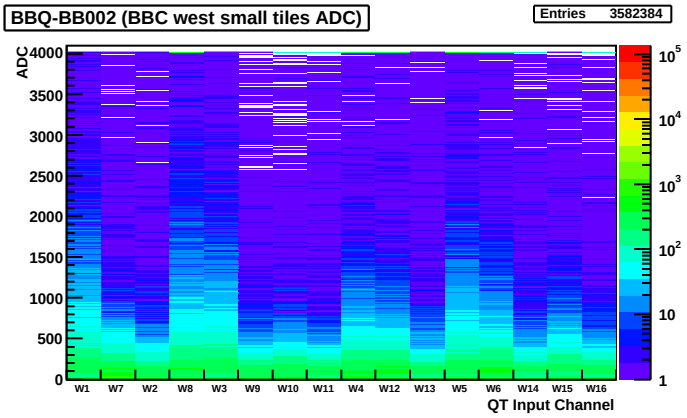

MIX-TF101
Entries 1343394
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
$10^4$
$10^3$
$10^2$
10
1

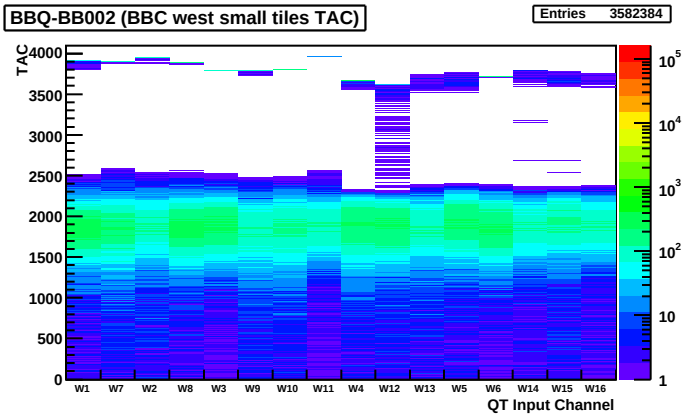

L1-TF201
Entries 223899
$10^4$
$10^3$
$10^2$
10
1
0
500
1000
1500
2000
2500
TOF total mult

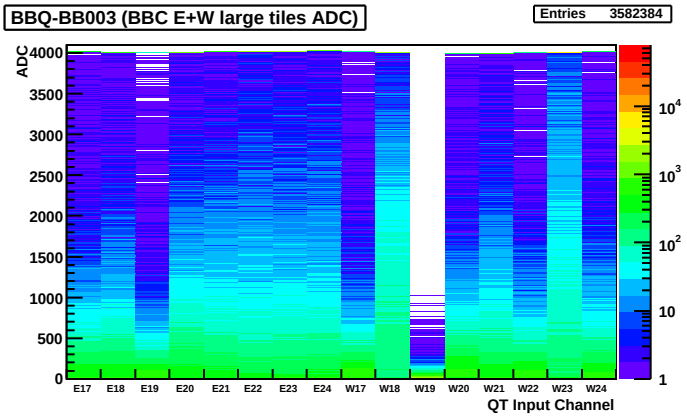

L1-TF201
Entries 1343394
Threshold bits
1
0
153564
150496
137197
143097
128132
141576
70335
73403
86702
80802
95767
82323
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
$10^5$

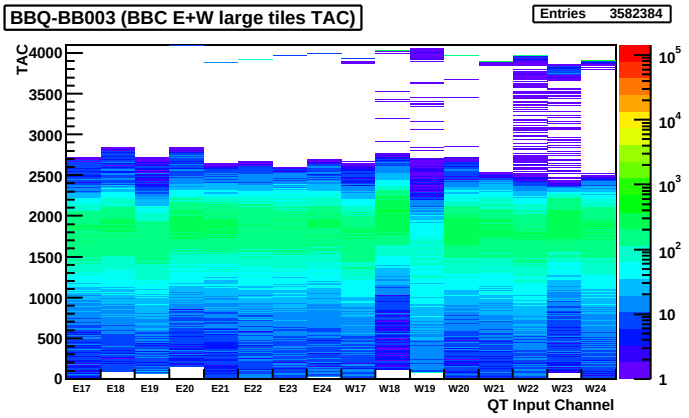

BBQ-BB001 (BBC east small tiles ADC)
Entries 3582384
ADC
QT Input Channel

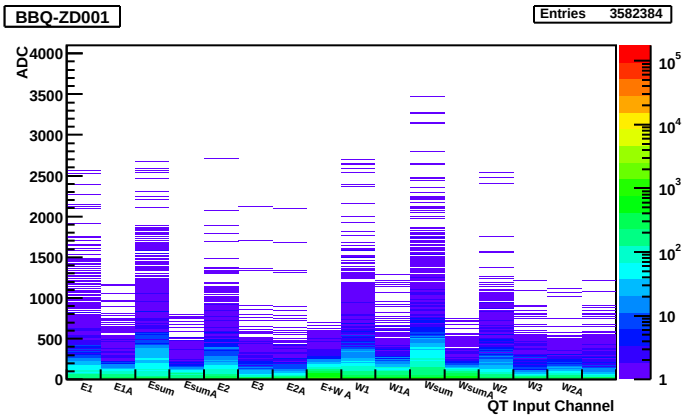

BBQ-BB001 (BBC east small tiles TAC)
Entries 3582384
TAC
QT Input Channel

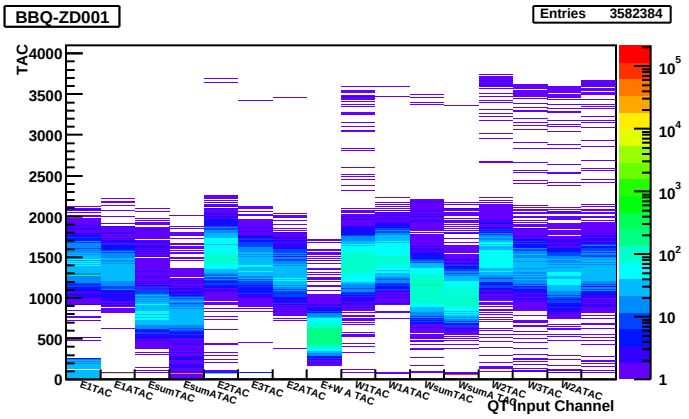

BBQ-BB002 (BBC west small tiles ADC)
Entries 3582384
ADC
QT Input Channel

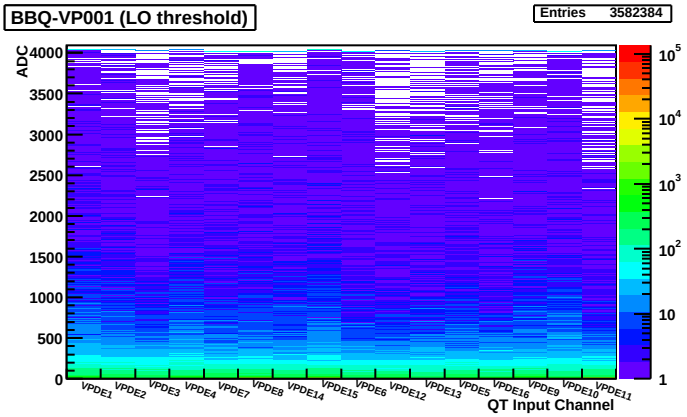

BBQ-BB002 (BBC west small tiles TAC)
Entries 3582384
TAC
QT Input Channel

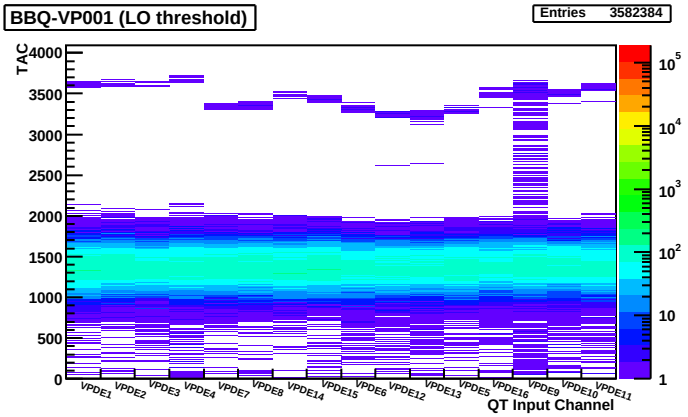

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3582384
ADC
QT Input Channel

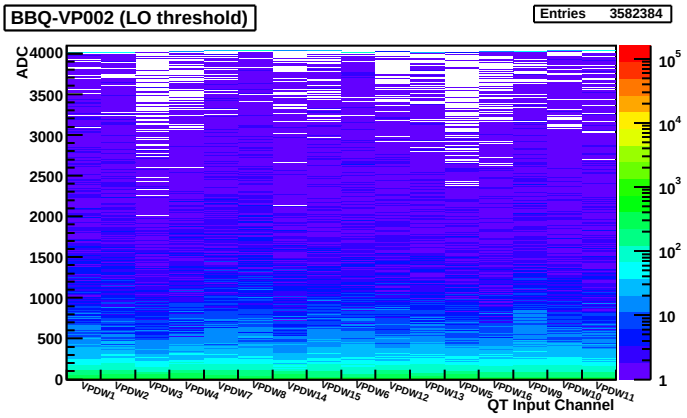

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3582384
TAC
QT Input Channel

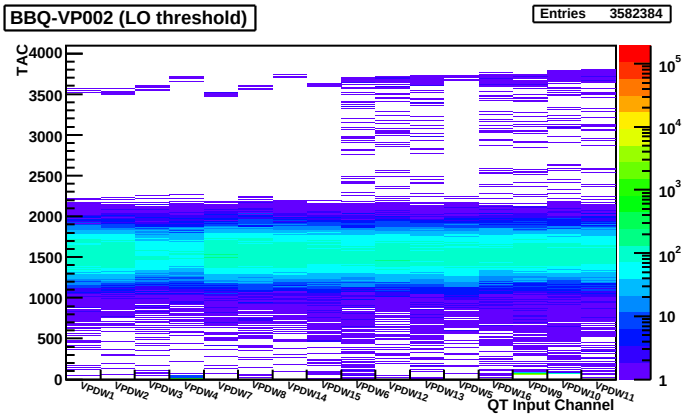

BBQ-ZD001
Entries 3582384
ADC
QT Input Channel

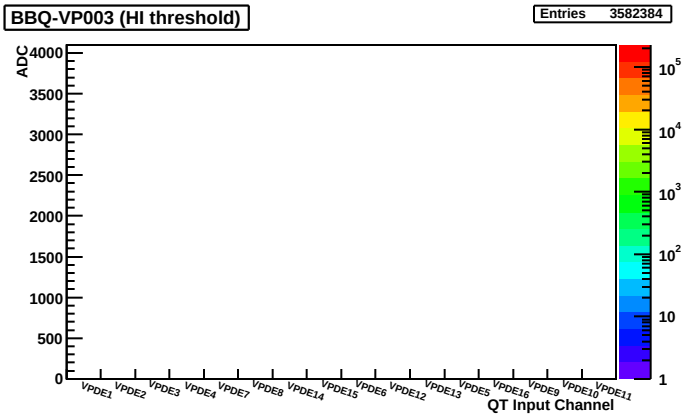

BBQ-ZD001
Entries 3582384
TAC
QT Input Channel

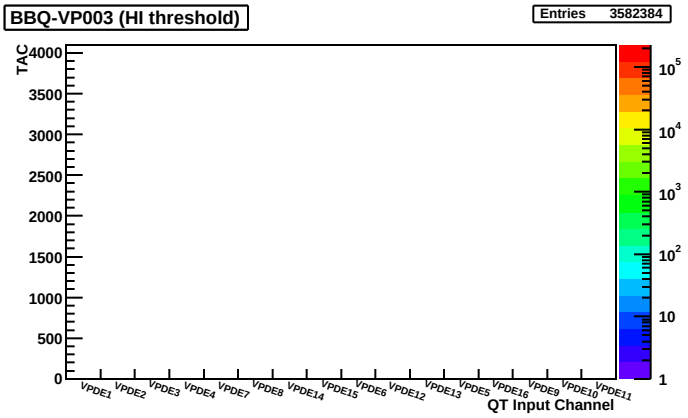

BBQ-VP001 (LO threshold)
Entries 3582384
ADC
QT Input Channel

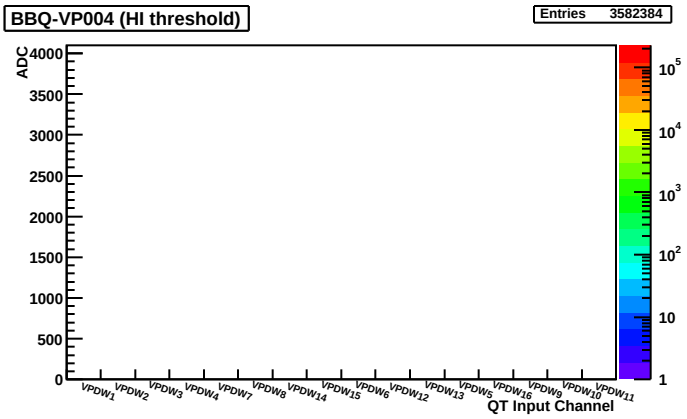

BBQ-VP001 (LO threshold)
Entries 3582384
TAC
QT Input Channel

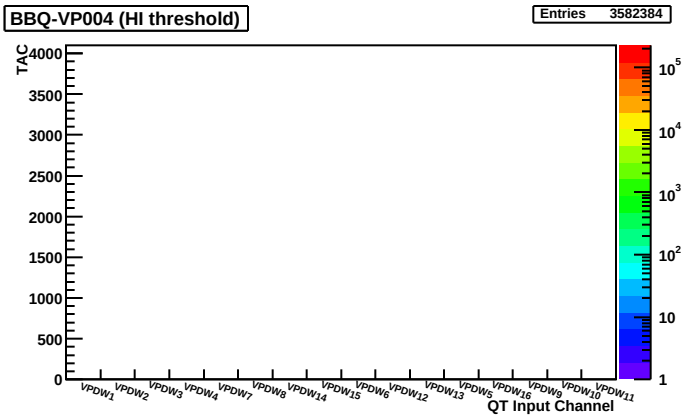

BBQ-VP002 (LO threshold)
Entries 3582384
ADC
QT Input Channel

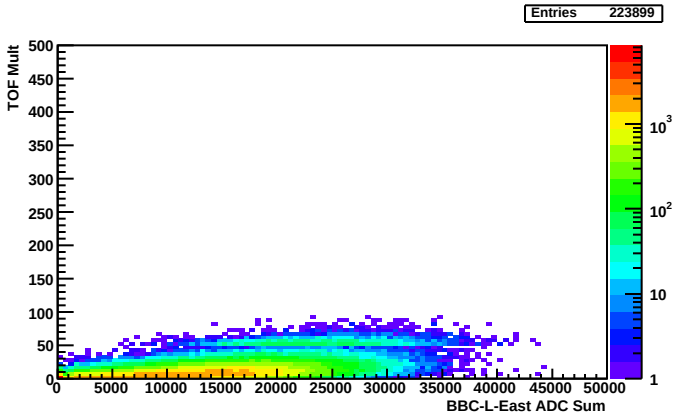

BBQ-VP002 (LO threshold)
Entries 3582384
TAC
QT Input Channel

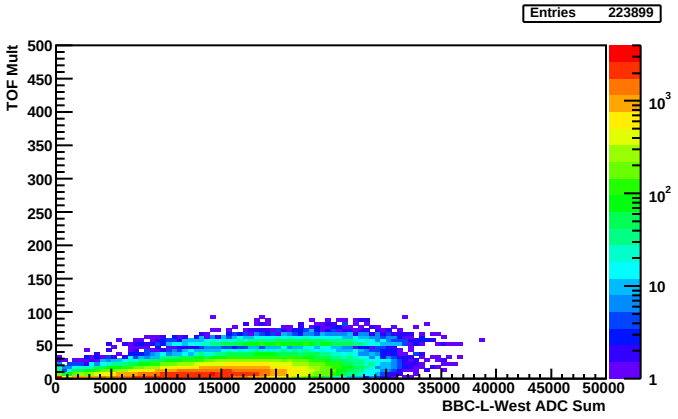

BBQ-VP003 (HI threshold)
Entries 3582384
ADC
QT Input Channel

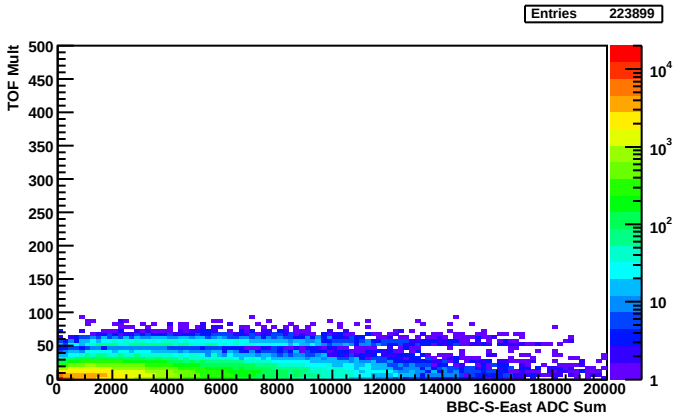

BBQ-VP003 (HI threshold)
Entries 3582384
TAC
QT Input Channel

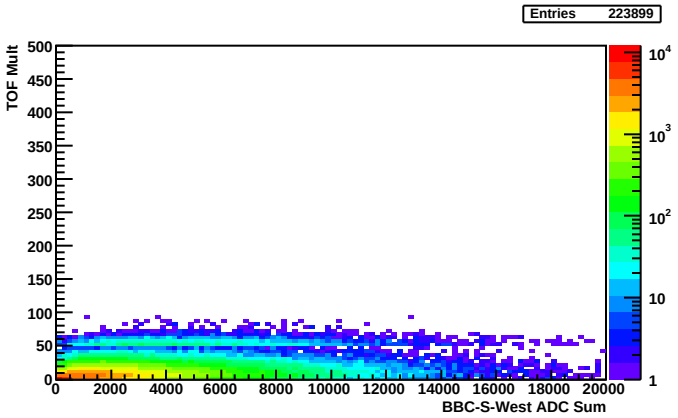

BBQ-VP004 (HI threshold)
Entries 3582384
ADC
QT Input Channel

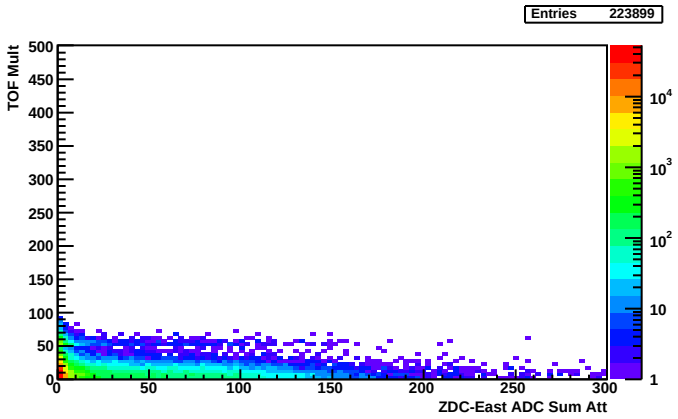

BBQ-VP004 (HI threshold)
Entries 3582384
TAC
QT Input Channel

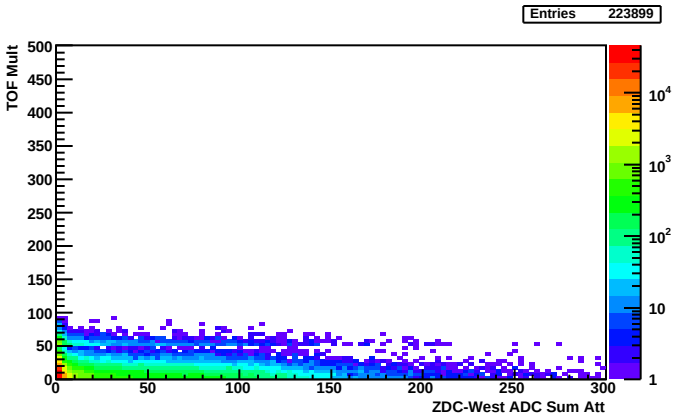

Entries 223899
TOF Mult
BBC-L-East ADC Sum

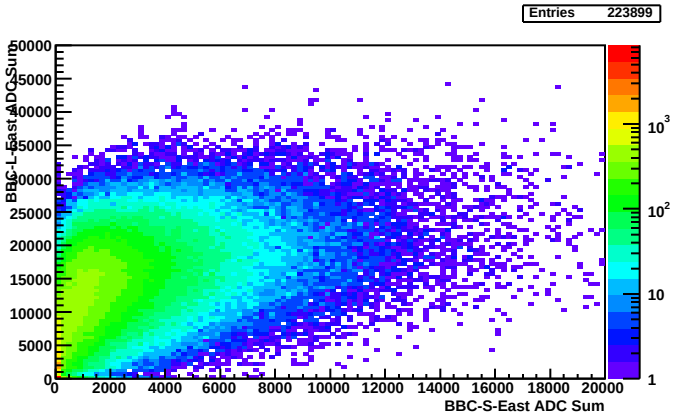

Entries 223899
TOF Mult
BBC-L-West ADC Sum

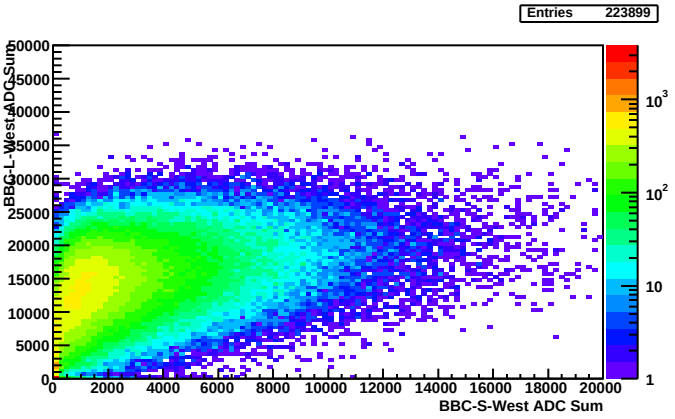

Entries 223899
TOF Mult
BBC-S-East ADC Sum

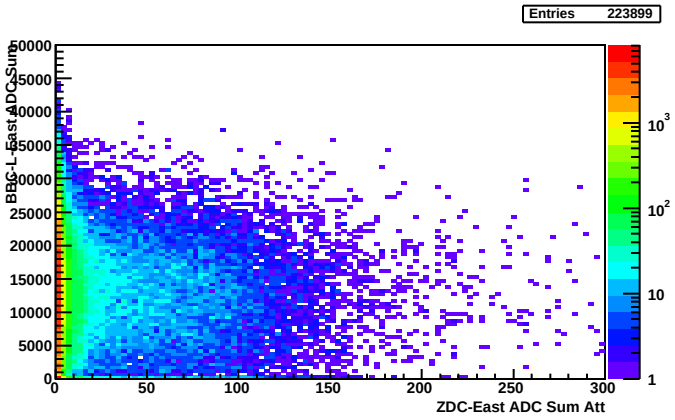

Entries 223899
TOF Mult
BBC-S-West ADC Sum

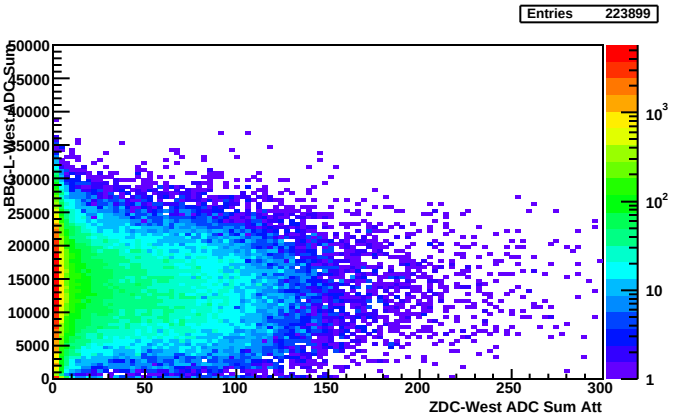

Entries 223899
TOF Mult
ZDC-East ADC Sum Att

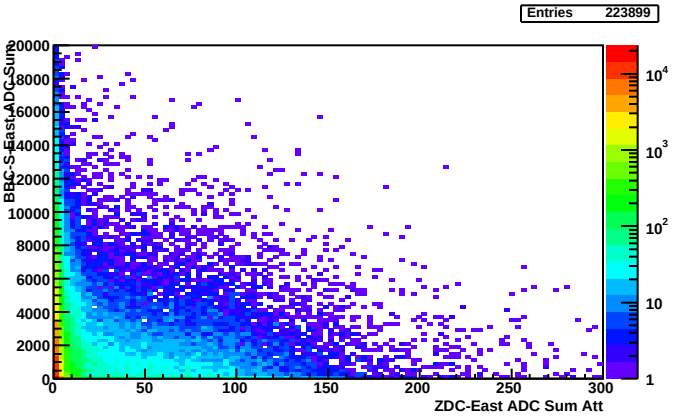

Entries 223899
TOF Mult
ZDC-West ADC Sum Att

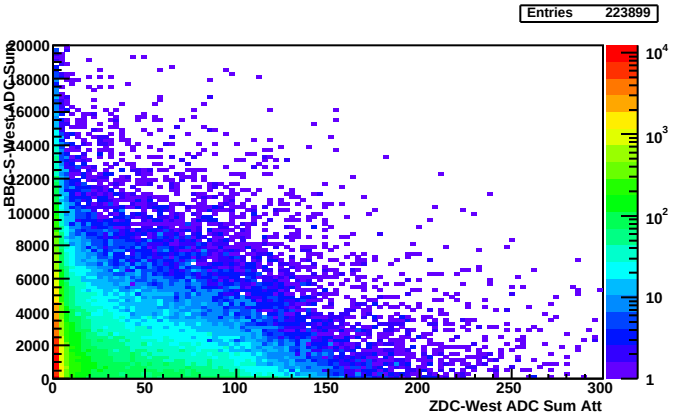

Entries 223899
BBC-L-East ADC Sum
BBC-S-East ADC Sum

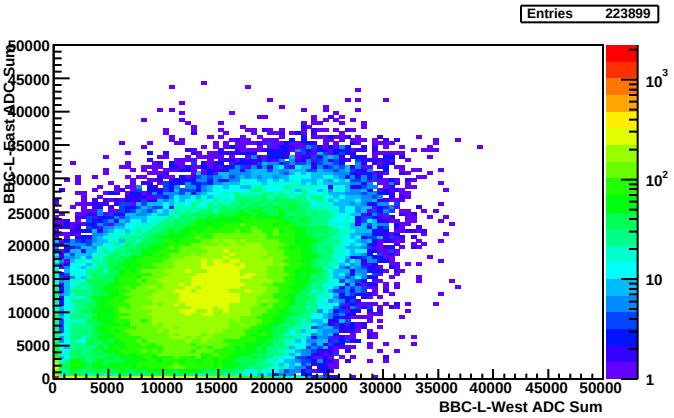

Entries 223899
BBC-L-West ADC Sum
BBC-S-West ADC Sum

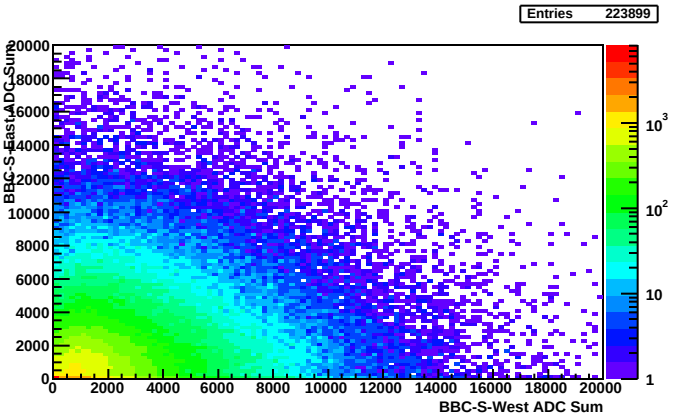

Entries 223899
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

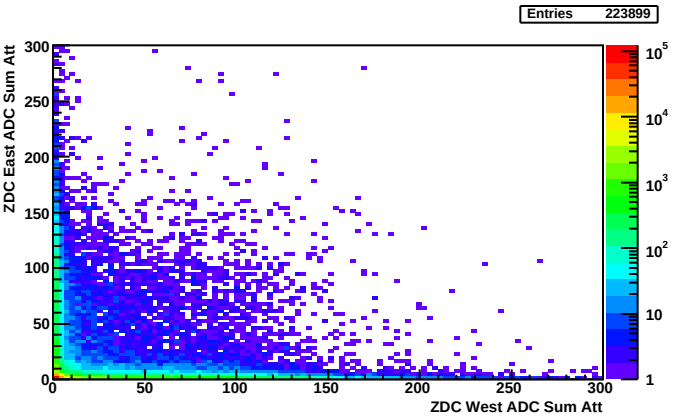

Entries 223899
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

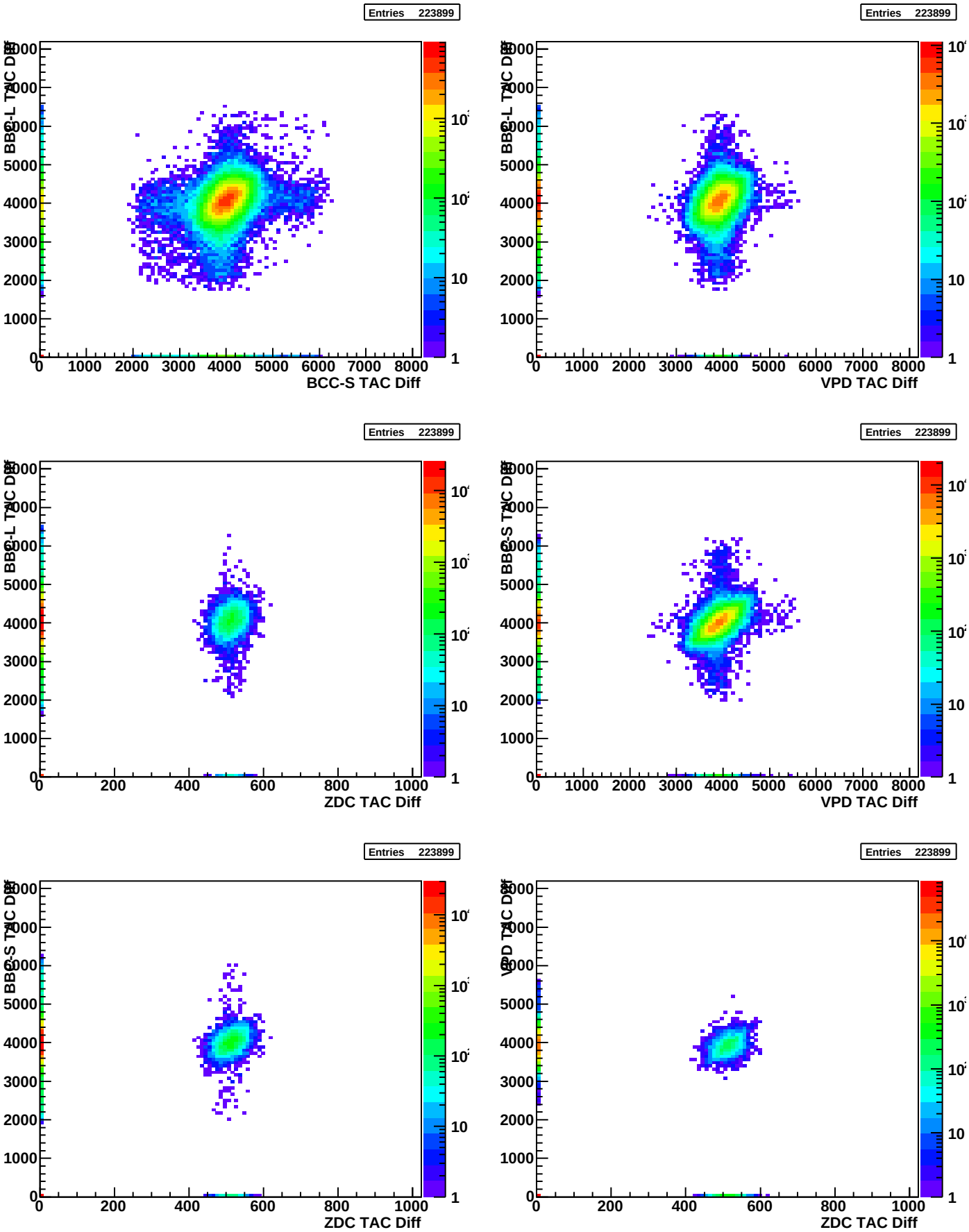

Entries 223899
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

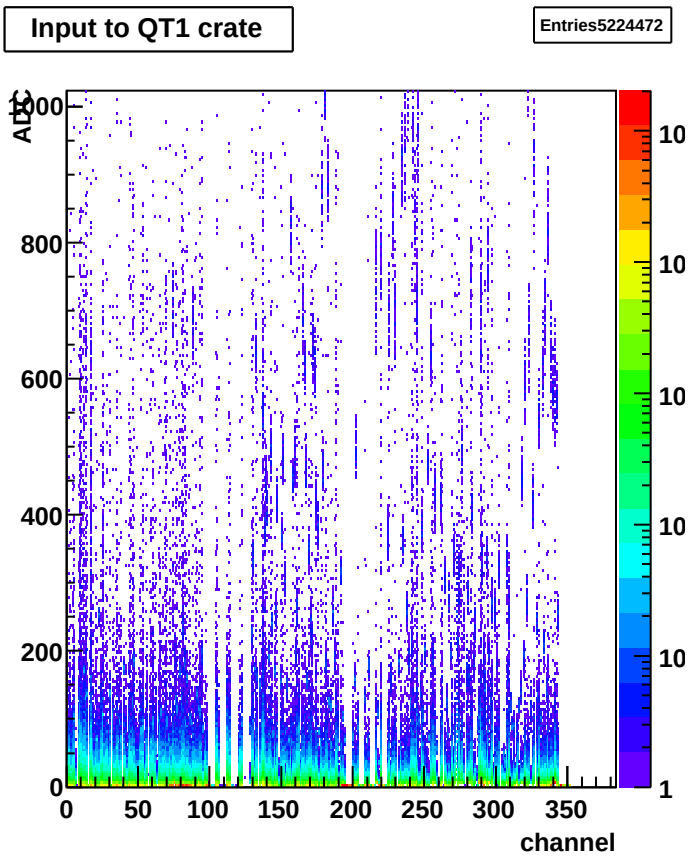

Entries 223899
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

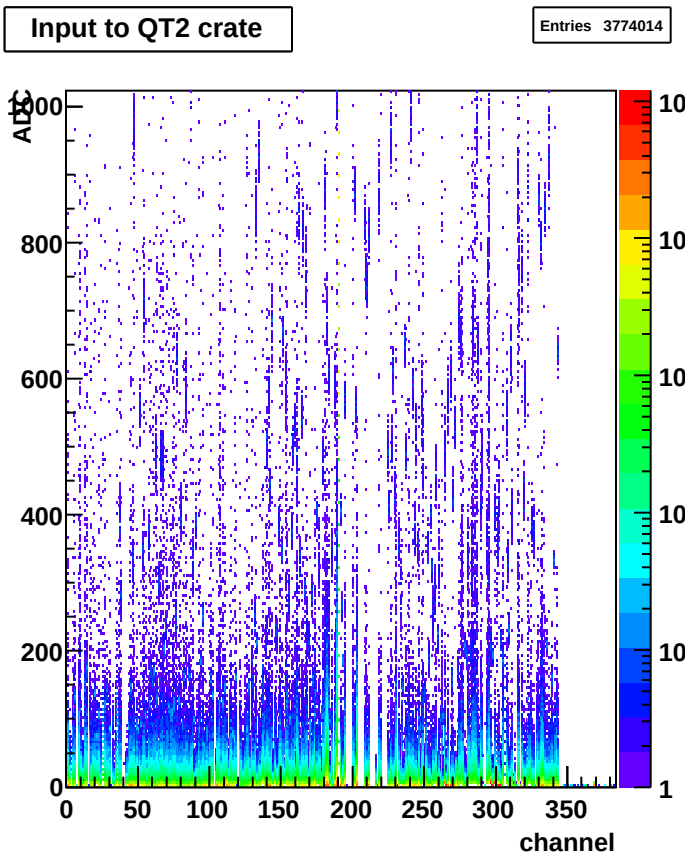

Entries 223899
BBC-L-East ADC Sum
BBC-L-West ADC Sum

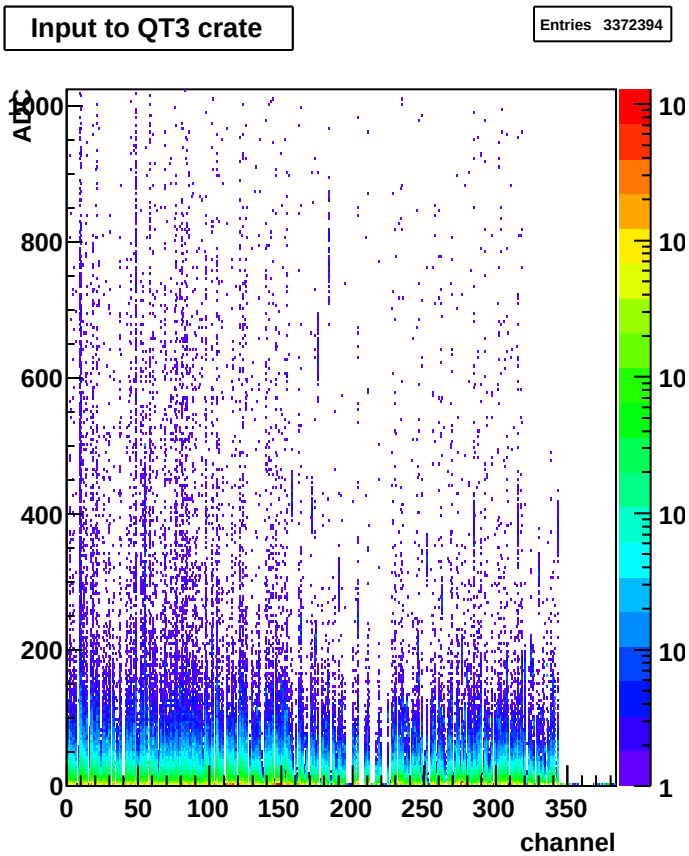

Entries 223899
BBC-S-East ADC Sum
BBC-S-West ADC Sum

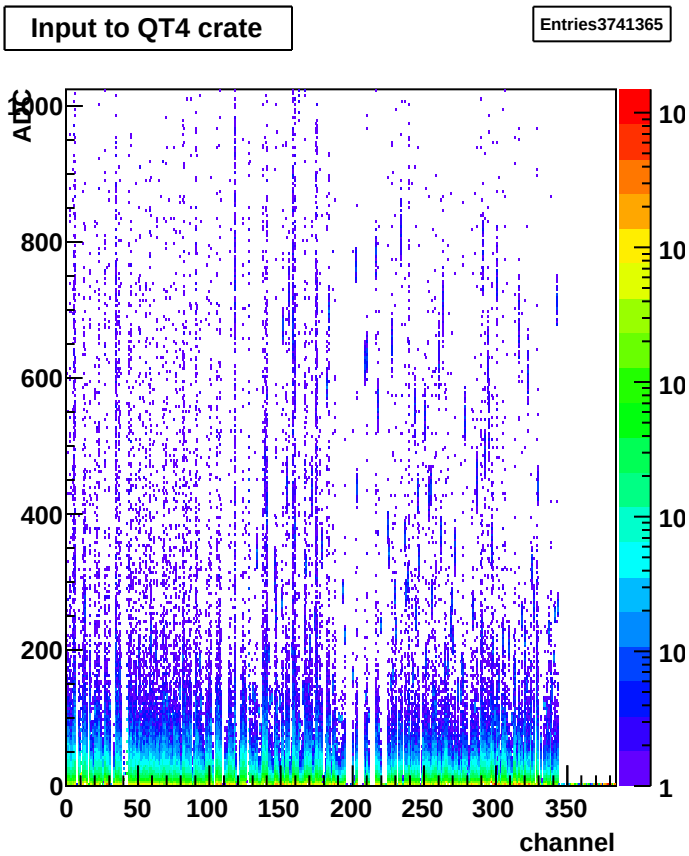

Entries 223899
ZDC East ADC Sum Att
ZDC West ADC Sum Att

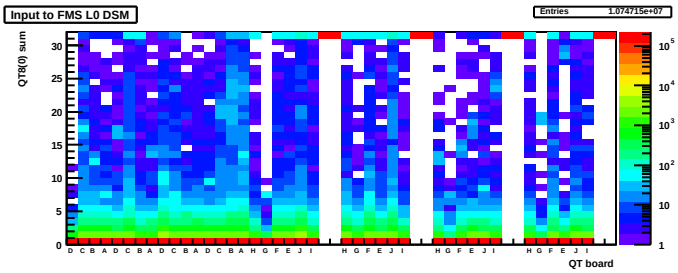

Entries 223899
BBC-L TAC Diff
BCC-S TAC Diff
Entries 223899
BBC-L TAC Diff
VPD TAC Diff
Entries 223899
BBC-L TAC Diff
ZDC TAC Diff
Entries 223899
BBC-S TAC Diff
VPD TAC Diff
Entries 223899
BBC-S TAC Diff
ZDC TAC Diff
Entries 223899
VPD TAC Diff
ZDC TAC Diff

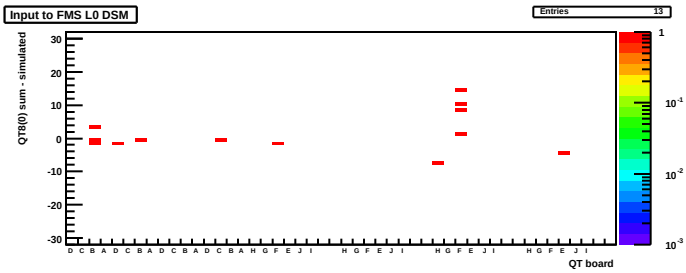

Input to QT1 crate
Entries5224472
ADC
channel

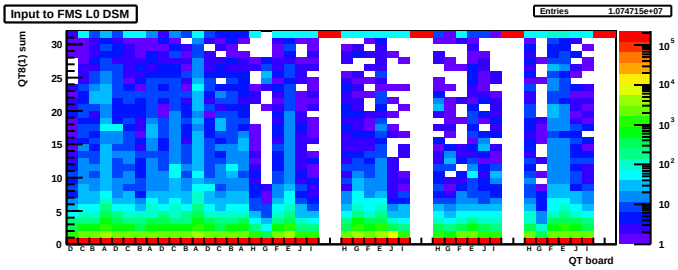

Input to QT2 crate
Entries 3774014
ADC
channel

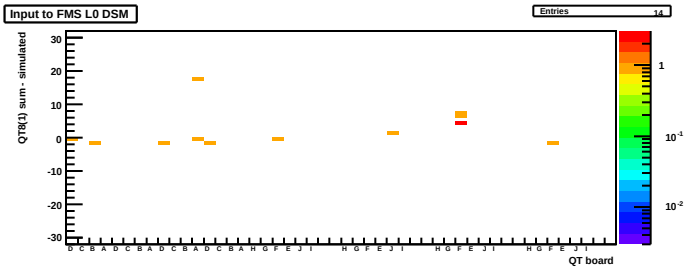

Input to QT3 crate
Entries 3372394
ADC
channel

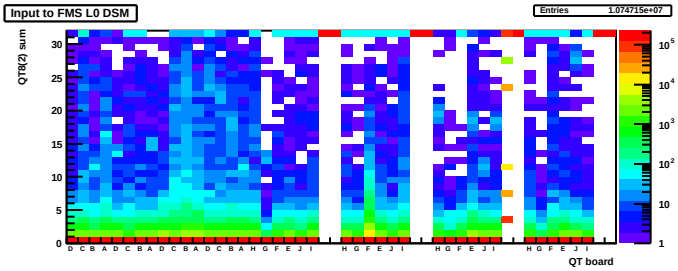

Input to QT4 crate
Entries3741365
ADC
channel

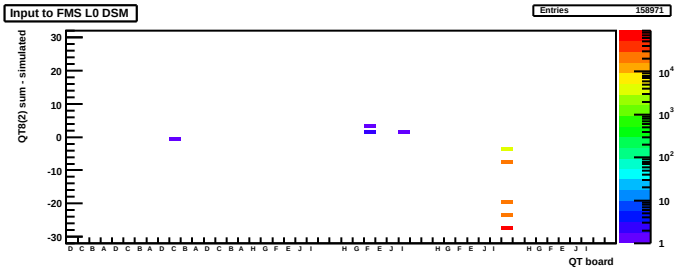

Input to FMS L0 DSM
Entries 1.074715e+07
QT8(0) sum
QT board

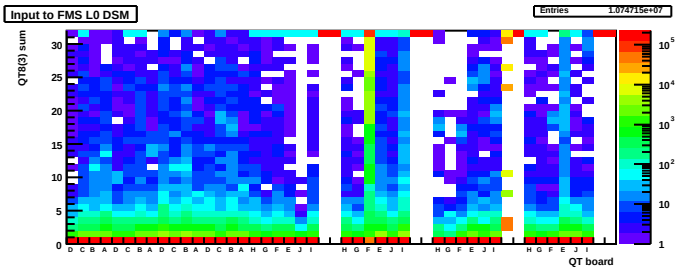

Input to FMS L0 DSM
Entries 13
QT8(0) sum - simulated
QT board

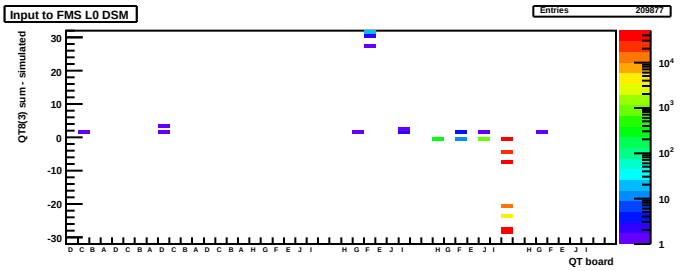

Input to FMS L0 DSM
Entries 1.074715e+07
QT8(1) sum
QT board

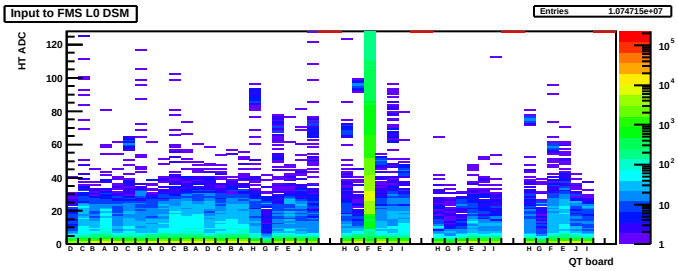

Input to FMS L0 DSM
Entries 14
QT8(1) sum - simulated
QT board

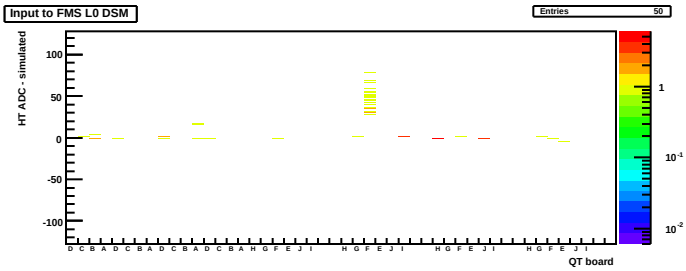

Input to FMS L0 DSM
Entries 1.074715e+07
QT8(2) sum
QT board

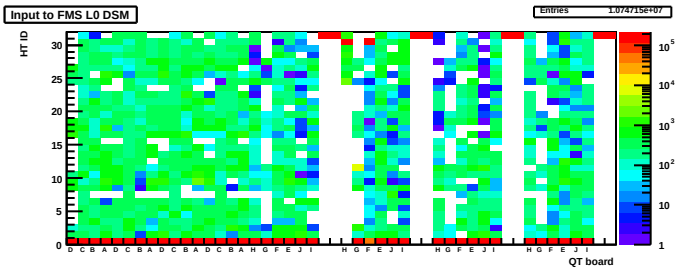

Input to FMS L0 DSM
Entries 158971
QT8(2) sum - simulated
QT board

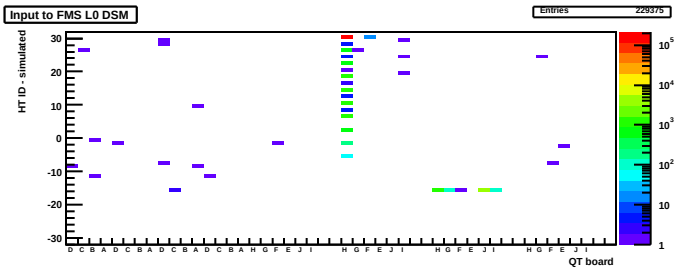

Input to FMS L0 DSM
Entries 1.074715e+07
QT8(3) sum
QT board

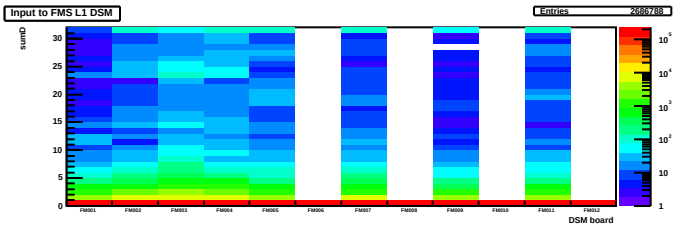

Input to FMS L0 DSM
Entries 209877
QT8(3) sum - simulated
QT board

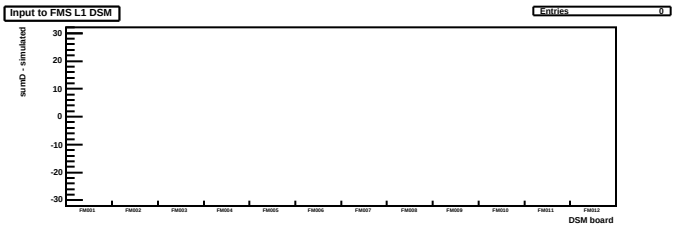

Input to FMS L0 DSM
Entries 1.074715e+07
HT ADC
QT board

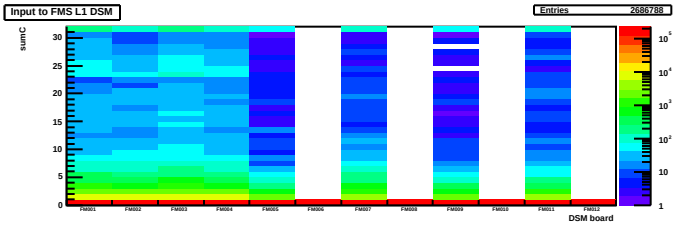

Input to FMS L0 DSM
Entries 50
HT ADC - simulated
QT board

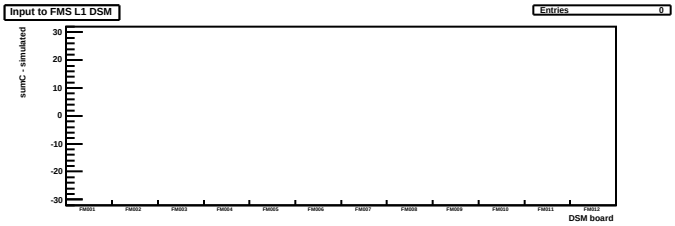

Input to FMS L0 DSM
Entries 1.074715e+07
HT ID
QT board

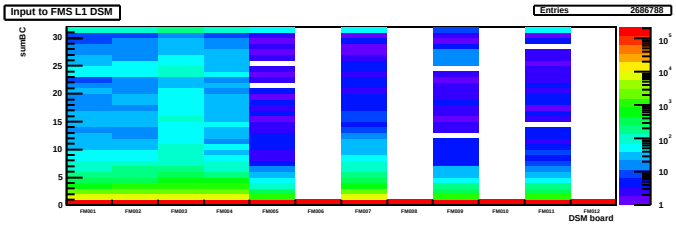

Input to FMS L0 DSM
Entries 229375
HT ID - simulated
QT board

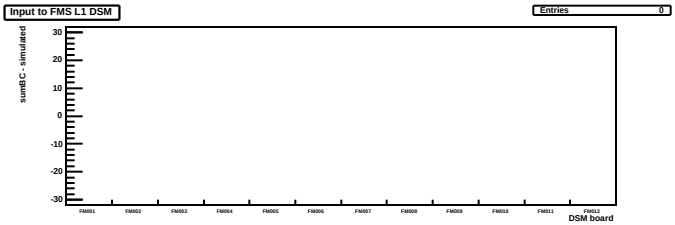

Input to FMS L1 DSM
Entries 2686788
sumD
DSM board

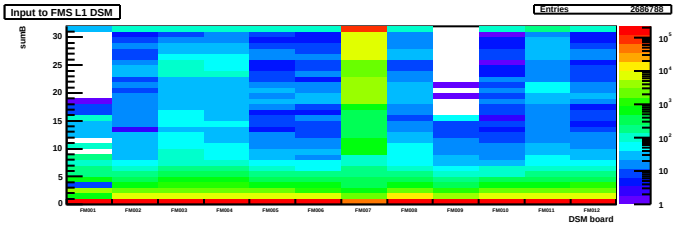

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

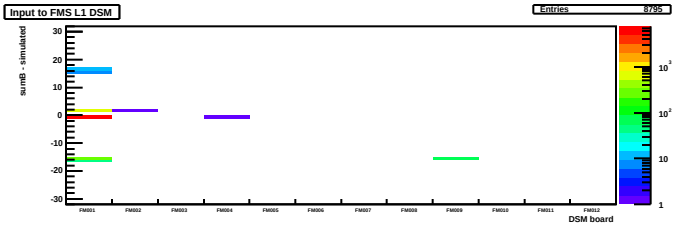

Input to FMS L1 DSM
Entries 2686788
sumC
DSM board

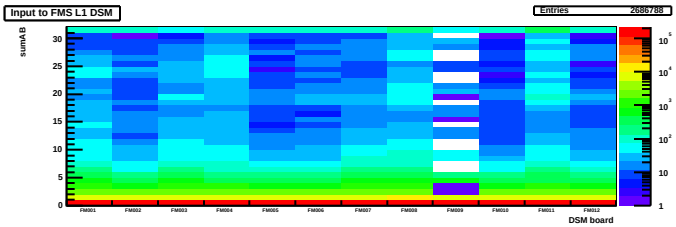

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

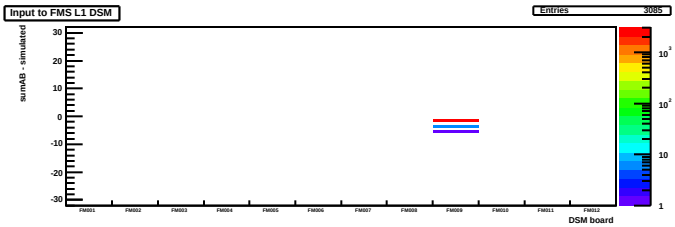

Input to FMS L1 DSM
Entries 2686788
sumBC
DSM board

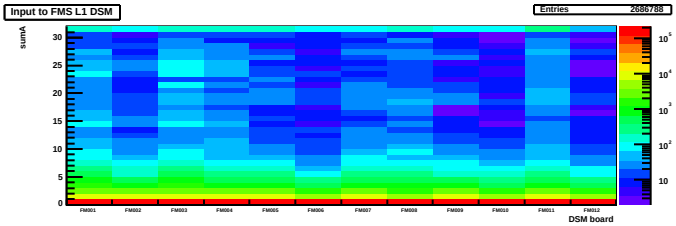

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

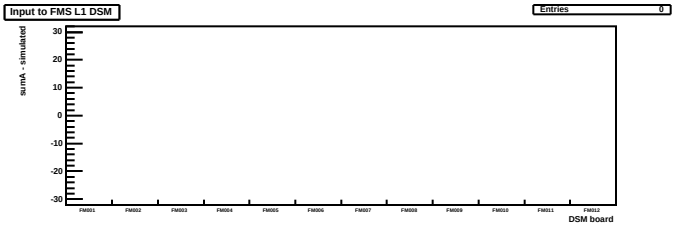

Input to FMS L1 DSM
Entries 2686788
sumB
DSM board

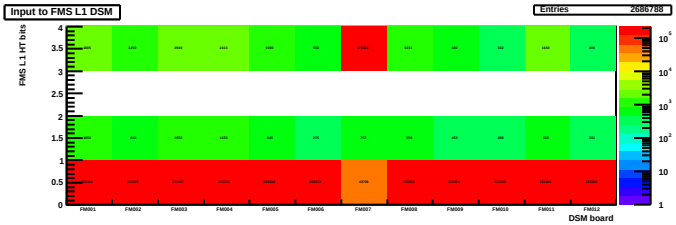

Input to FMS L1 DSM
Entries 8795
sumB - simulated
DSM board

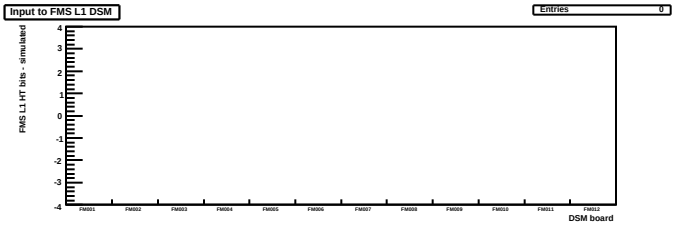

Input to FMS L1 DSM
Entries 2686788
sumAB
DSM board

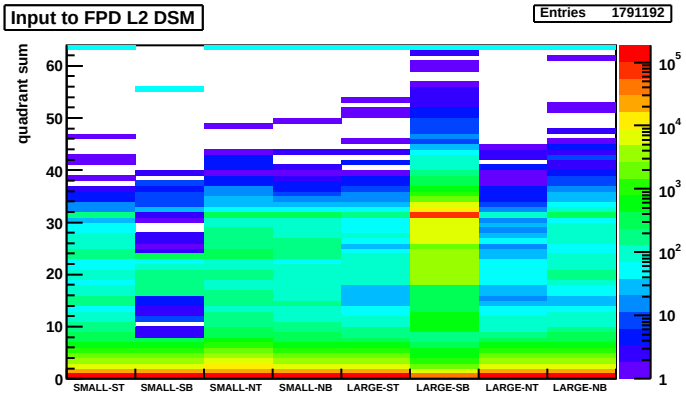

Input to FMS L1 DSM
Entries 3085
sumAB - simulated
DSM board

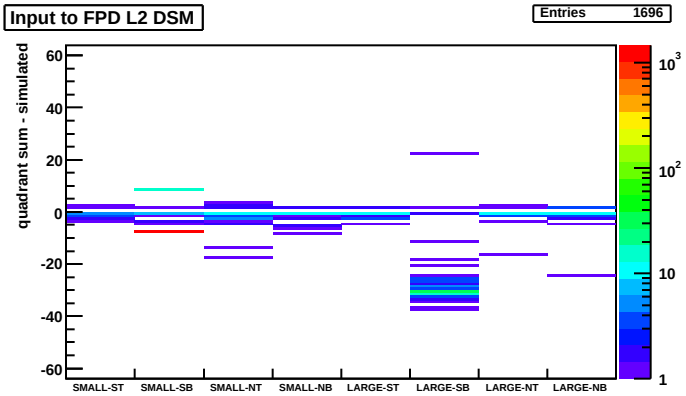

Input to FMS L1 DSM
Entries 2686788
sumA
DSM board

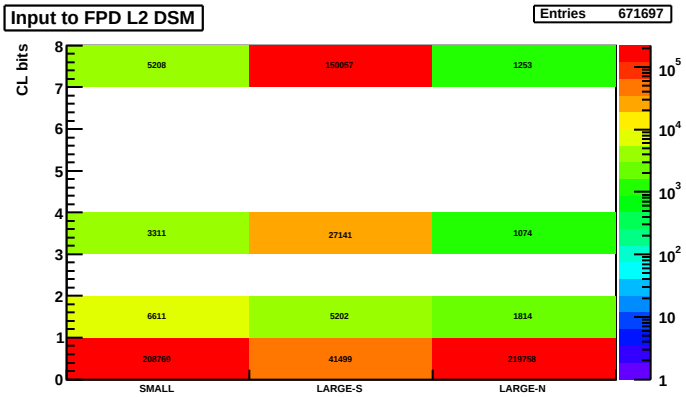

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

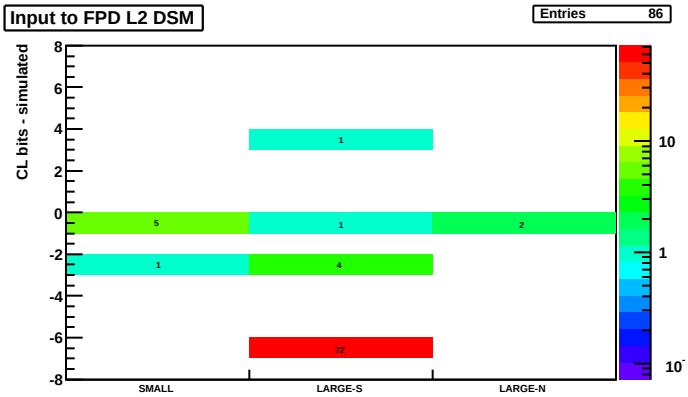

Input to FMS L1 DSM
Entries 2686788
FMS L1 HT bits
DSM board

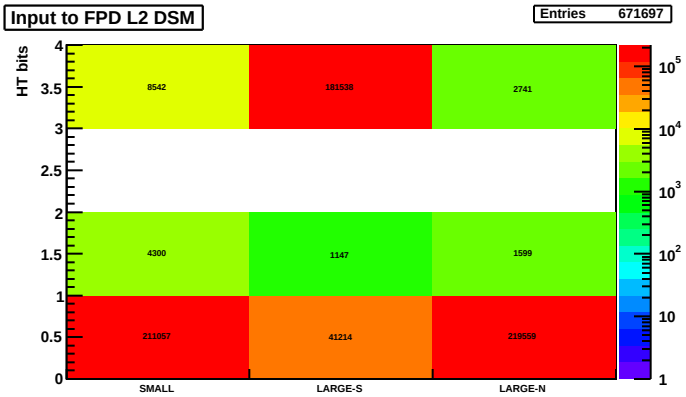

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

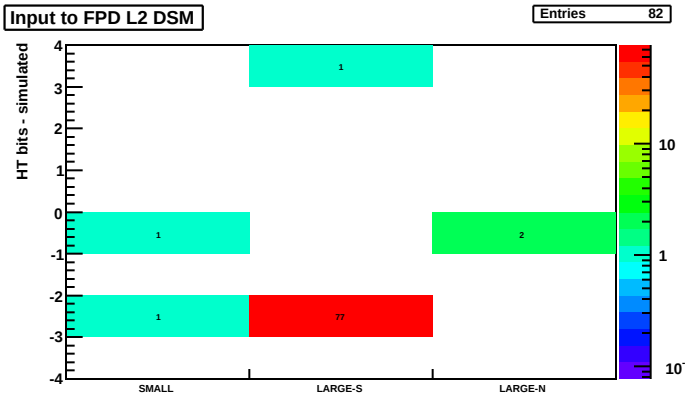

Input to FPD L2 DSM
Entries 1791192
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

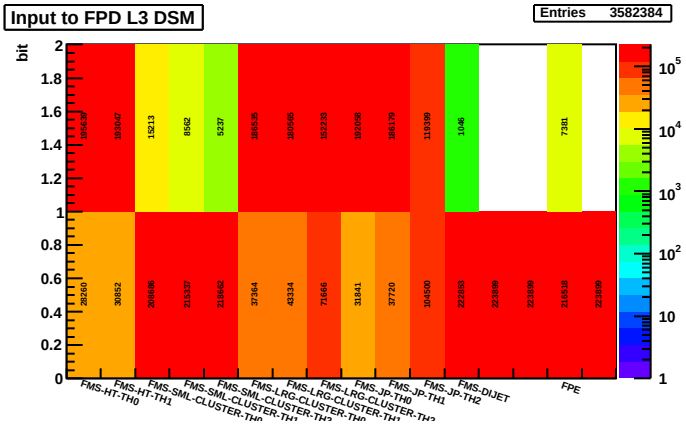

Input to FPD L2 DSM
Entries 1696
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

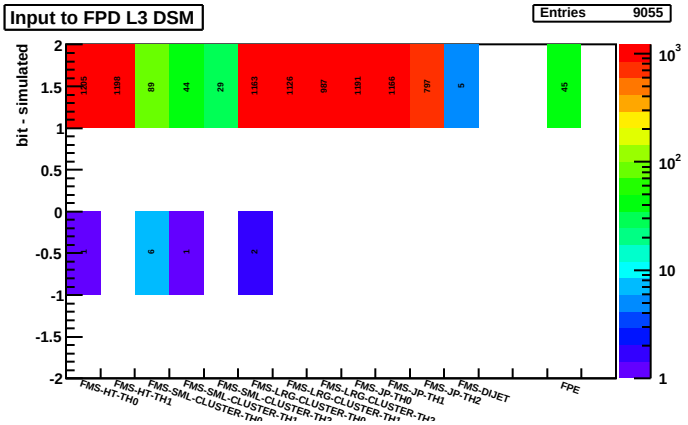

Input to FPD L2 DSM
Entries 671697
CL bits
5208
150057
1253
3311
27141
1074
6611
5202
1814
208769
41499
219758
SMALL
LARGE-S
LARGE-N

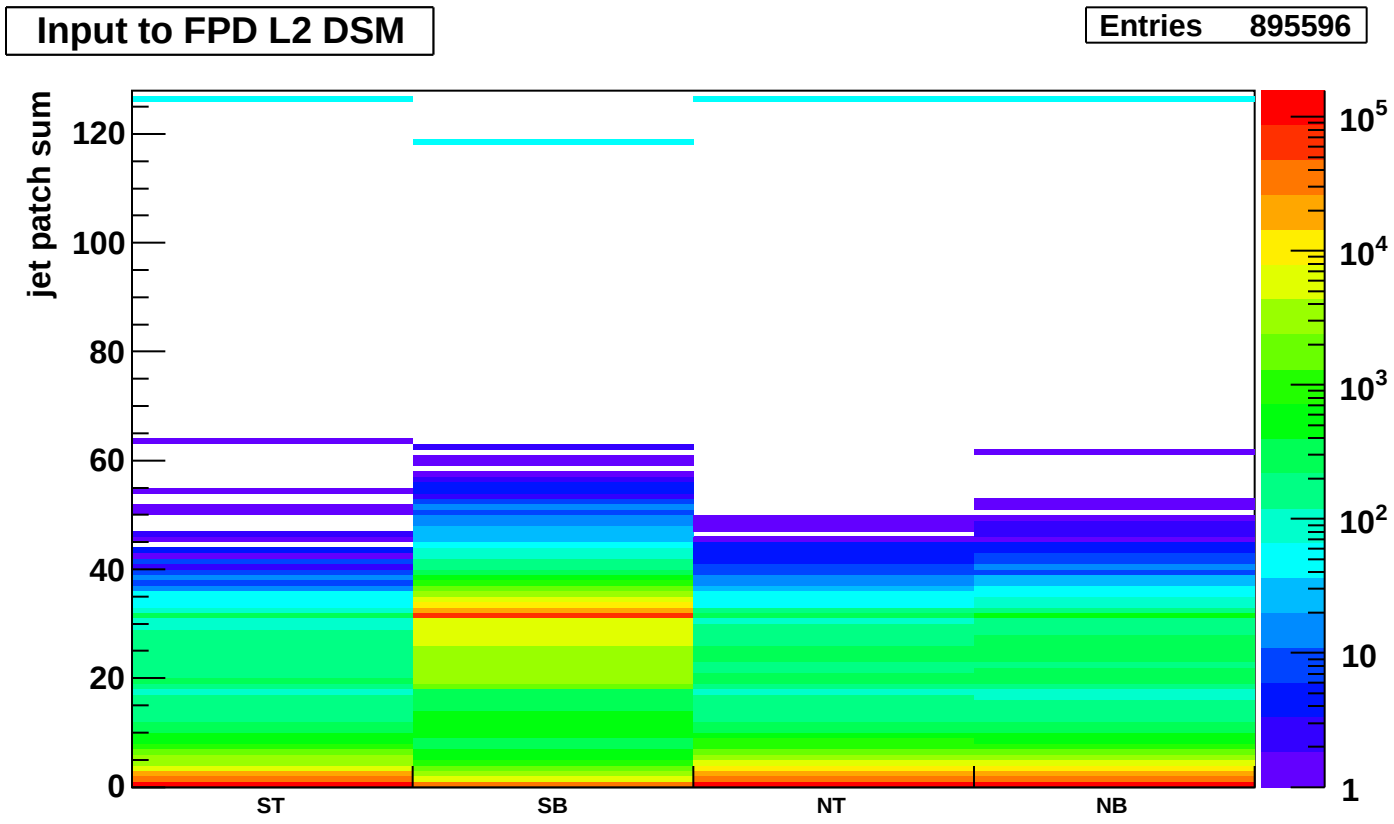

Input to FPD L2 DSM
Entries 86
CL bits - simulated
1
5
1
2
1
4
72
SMALL
LARGE-S
LARGE-N

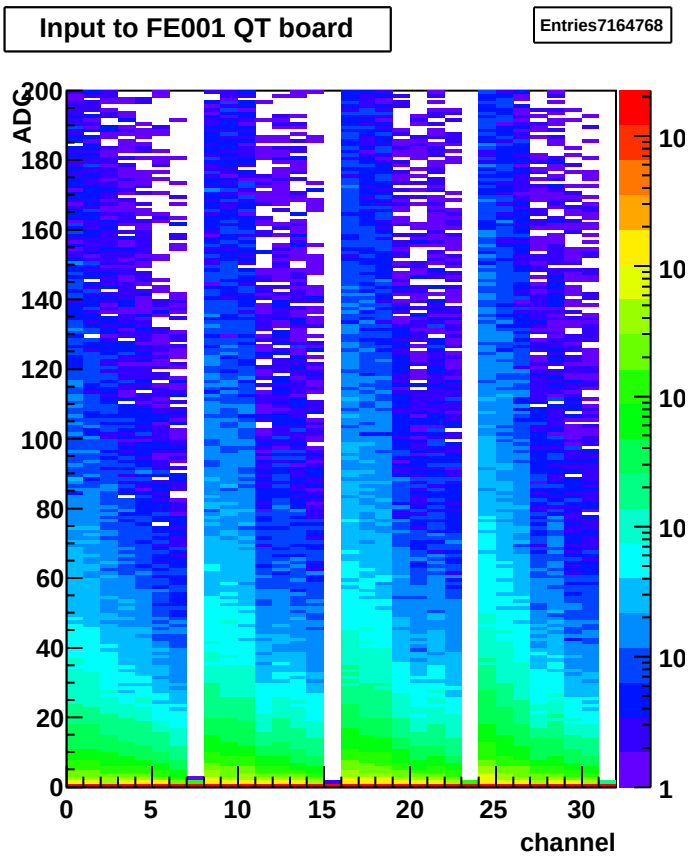

Input to FPD L2 DSM
Entries 671697
HT bits
8542
181538
2741
4300
1147
1599
211057
41214
219559
SMALL
LARGE-S
LARGE-N

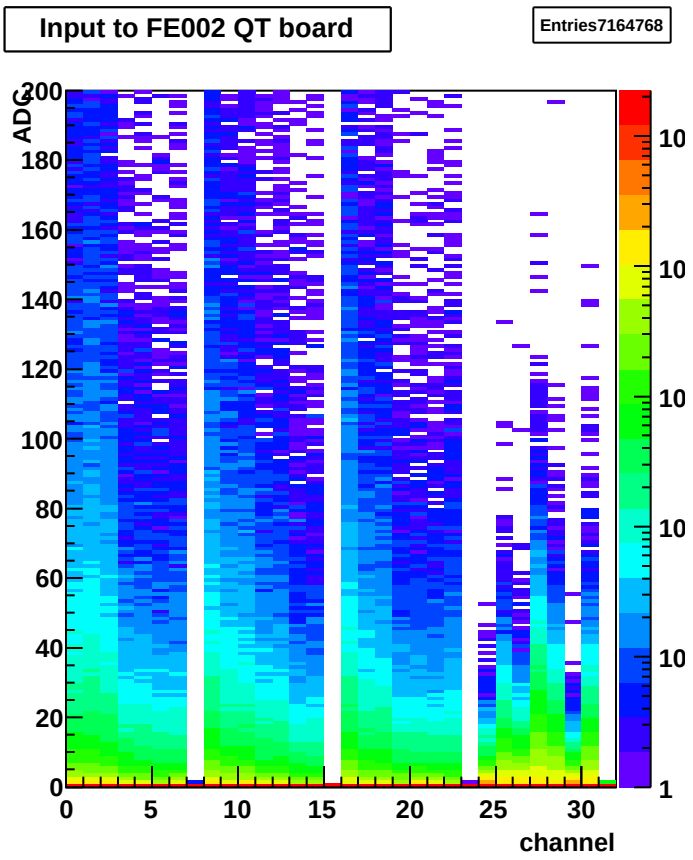

Input to FPD L2 DSM
Entries 82
HT bits - simulated
1
1
2
1
77
SMALL
LARGE-S
LARGE-N

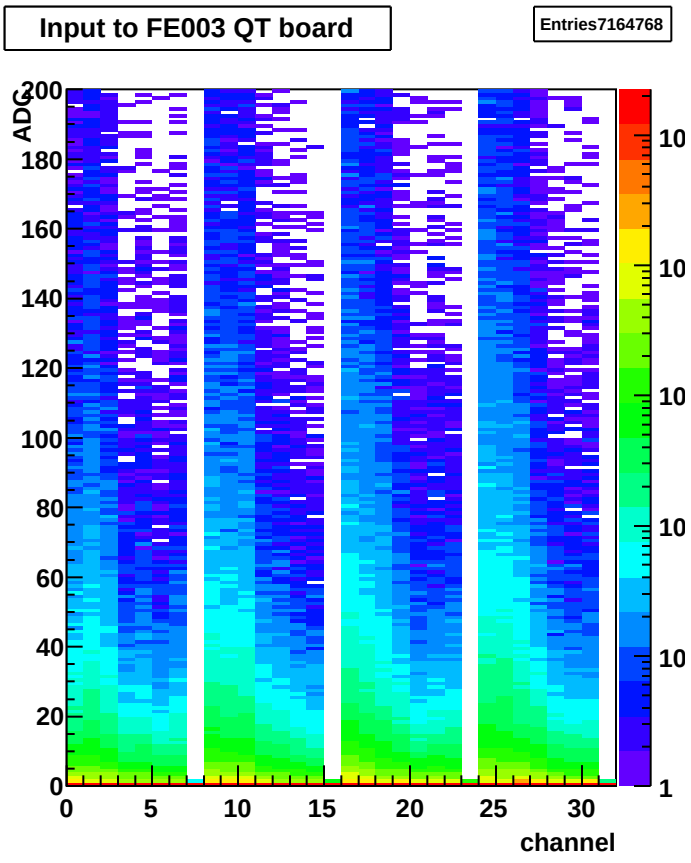

Input to FPD L3 DSM
Entries 3582384
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

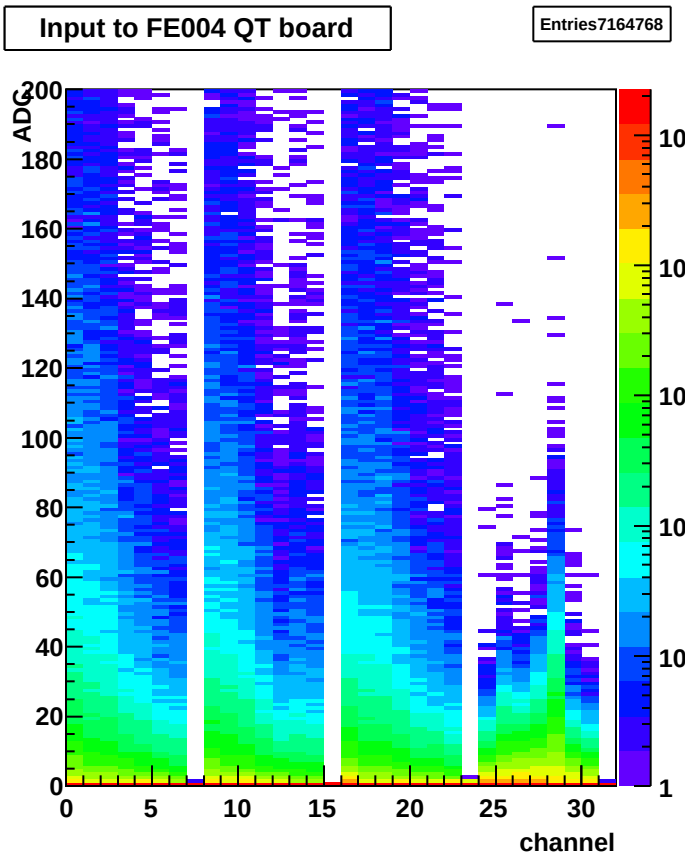

Input to FPD L3 DSM
Entries 9055
bit - simulated
1205
1198
89
44
29
1163
1126
987
1191
1186
797
5
45
1
6
1
2
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

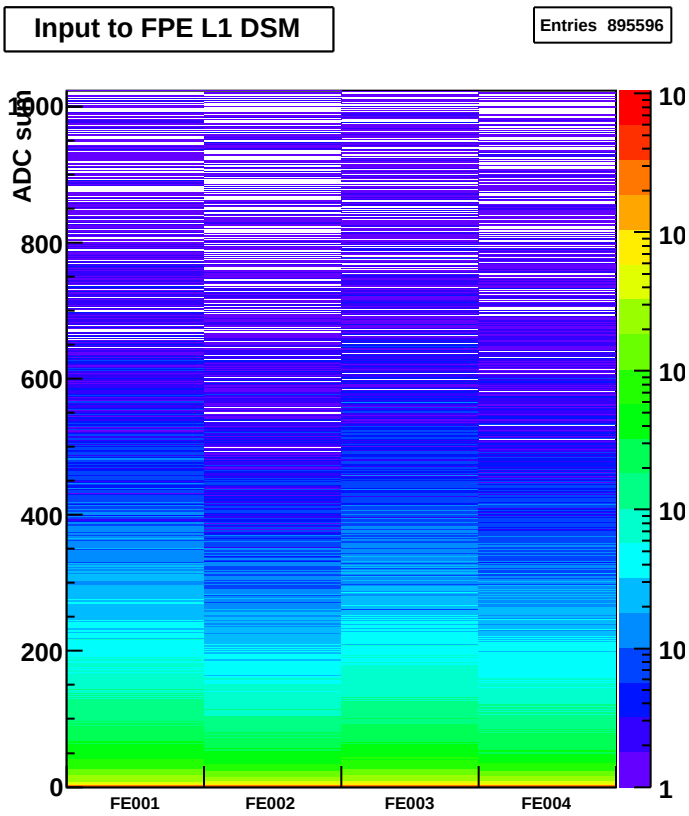

Input to FPD L2 DSM
Entries 895596
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
$10^2$
$10^3$
$10^4$
$10^5$

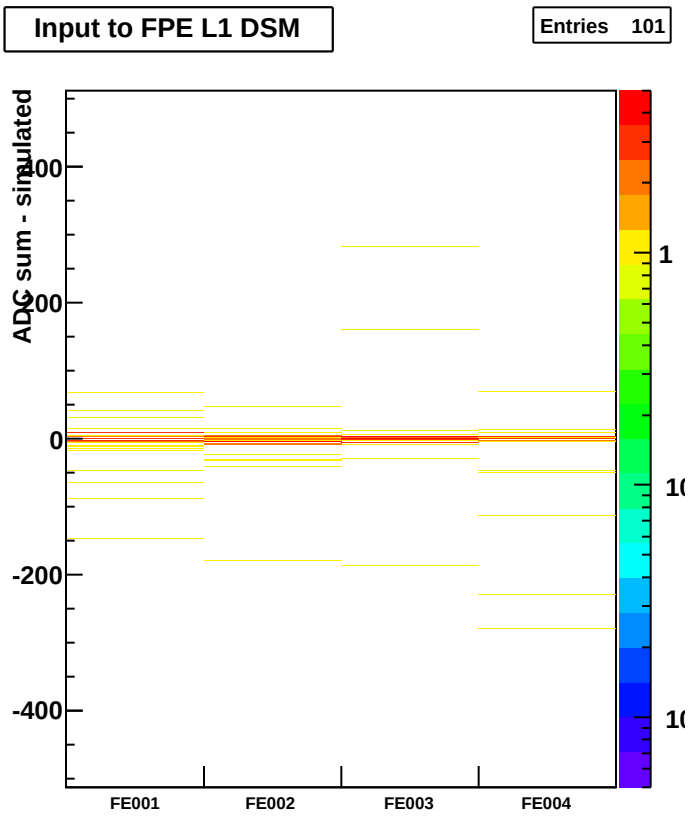

Input to FE001 QT board
Entries7164768
ADC
channel

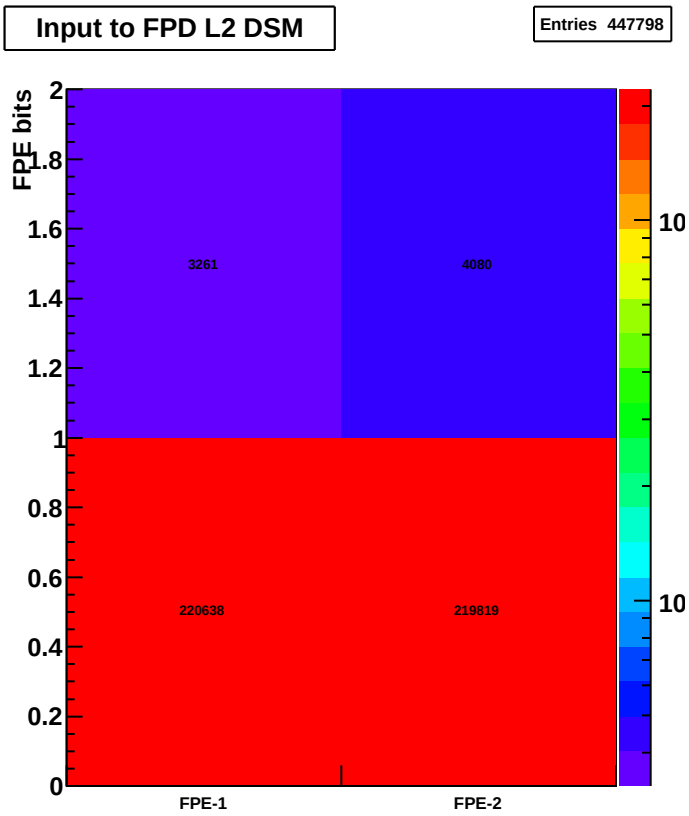

Input to FE002 QT board
Entries7164768
ADC
channel

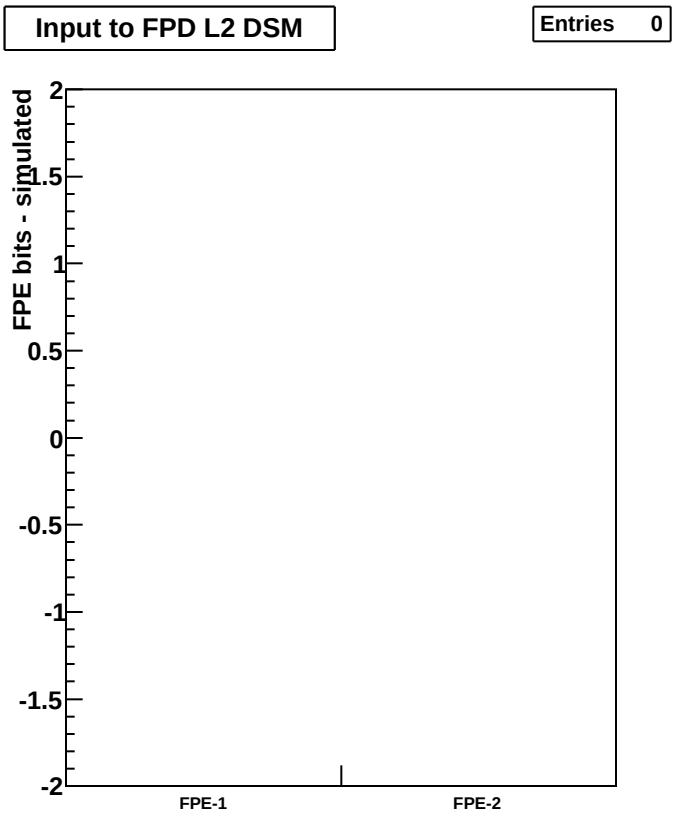

Input to FE003 QT board
Entries7164768
ADC
channel


Input to FE004 QT board
Entries7164768
ADC
channel


Input to FPE L1 DSM
Entries 895596
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 101
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
1
10
10


Input to FPD L2 DSM
Entries 447798
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
3261
4080
220638
219819
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