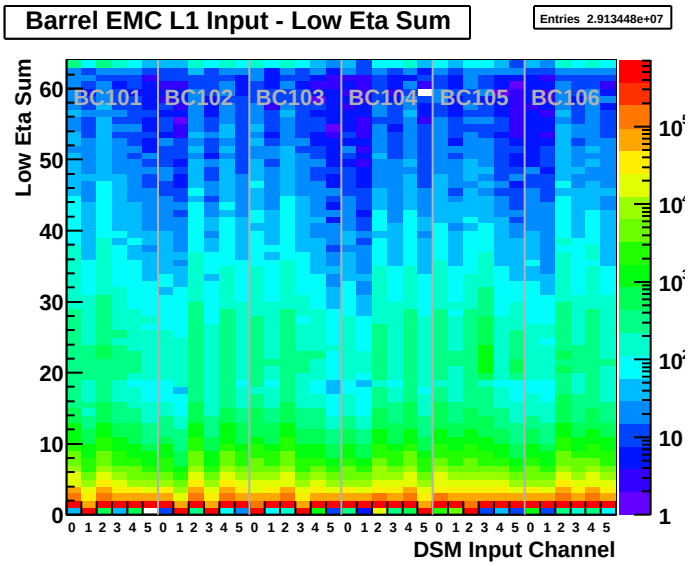
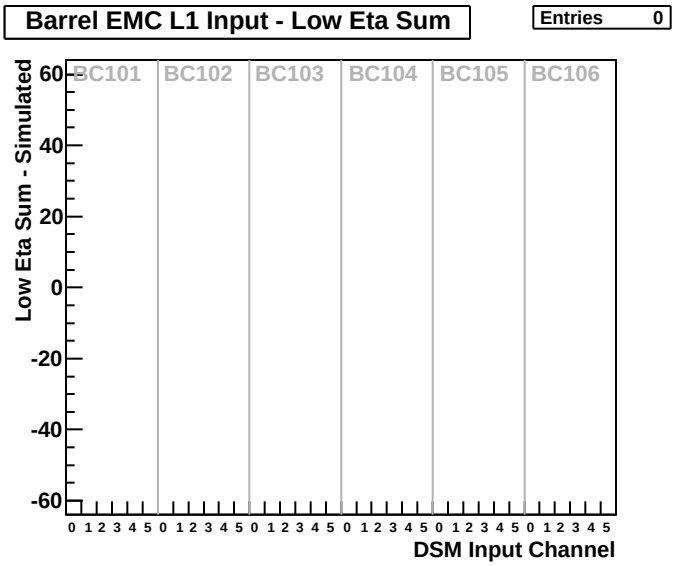
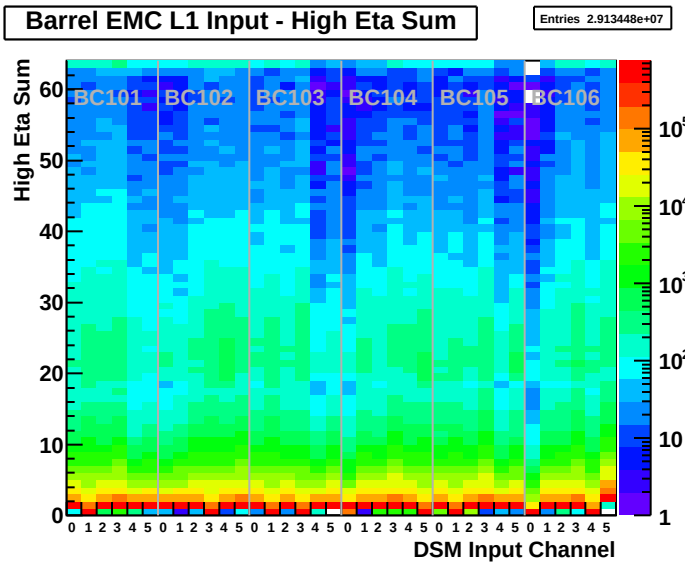
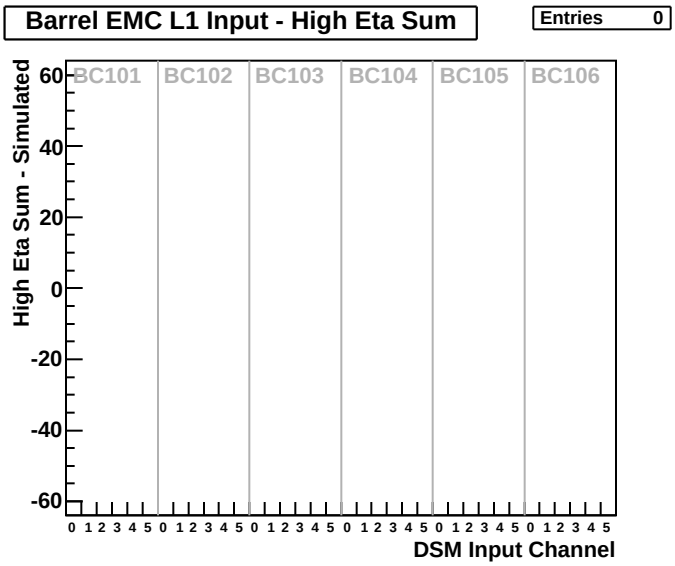
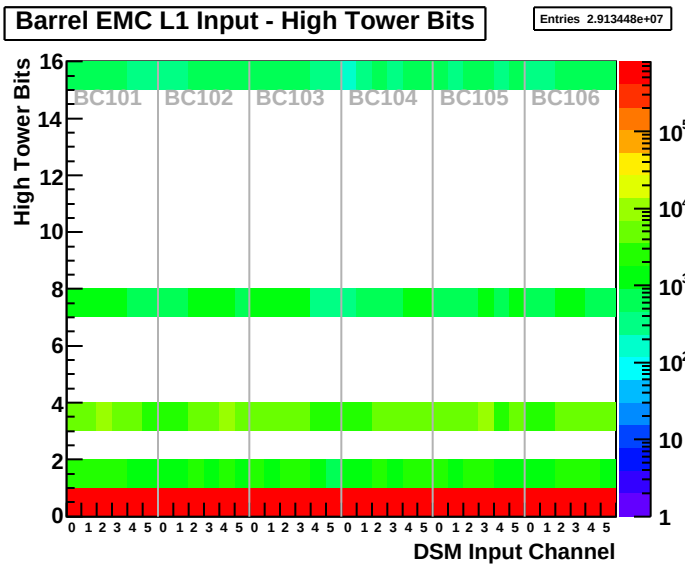
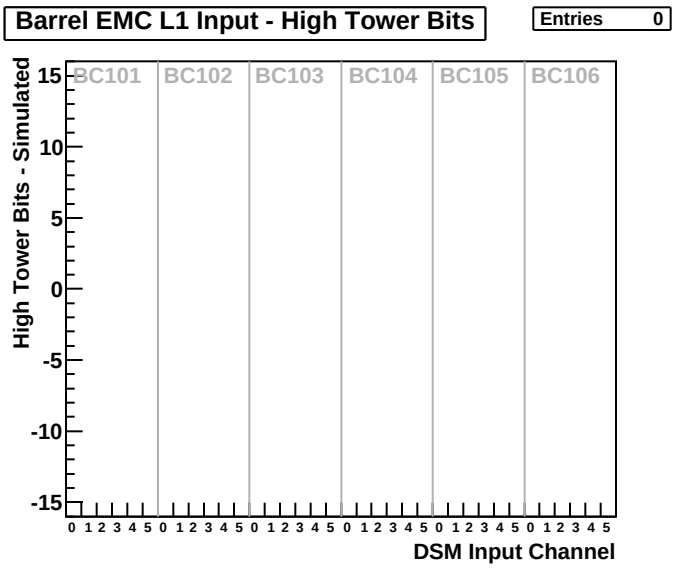

Barrel EMC L1 Input - Low Eta Sum
Entries 2.913448e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

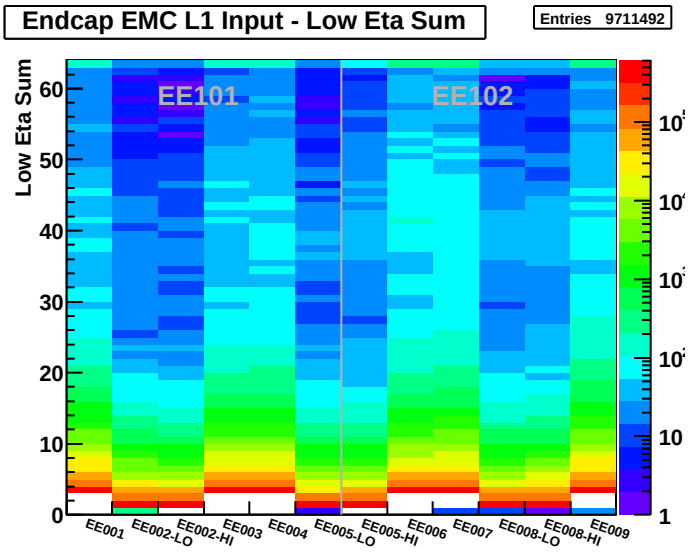

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

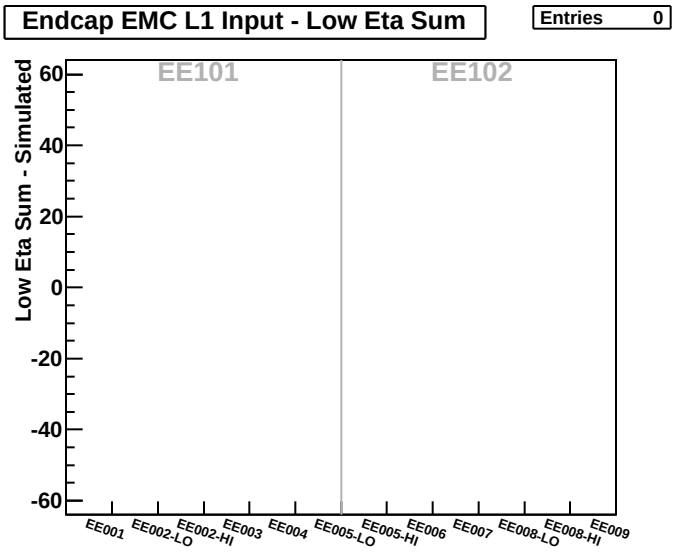

Barrel EMC L1 Input - High Eta Sum
Entries 2.913448e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

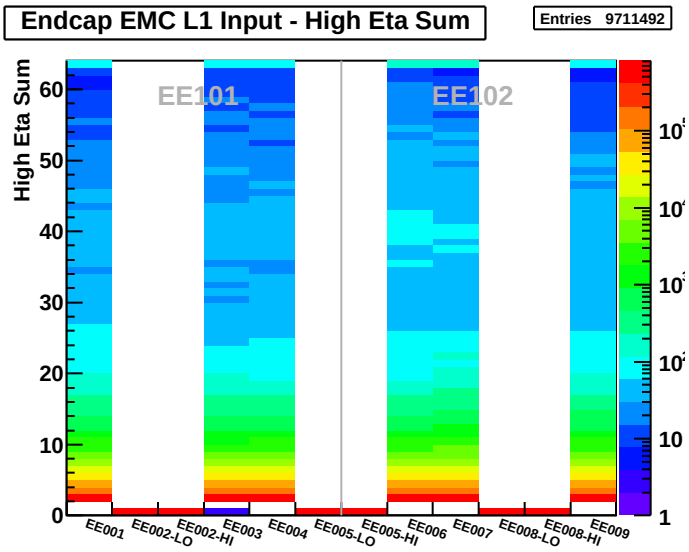

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

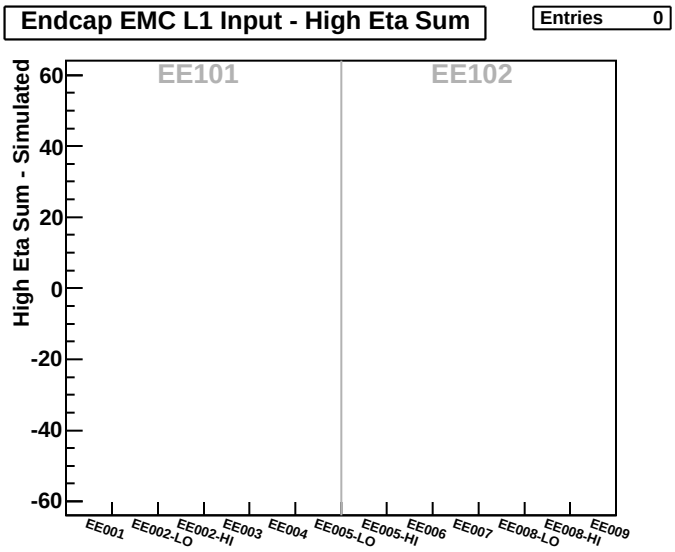

Barrel EMC L1 Input - High Tower Bits
Entries 2.913448e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

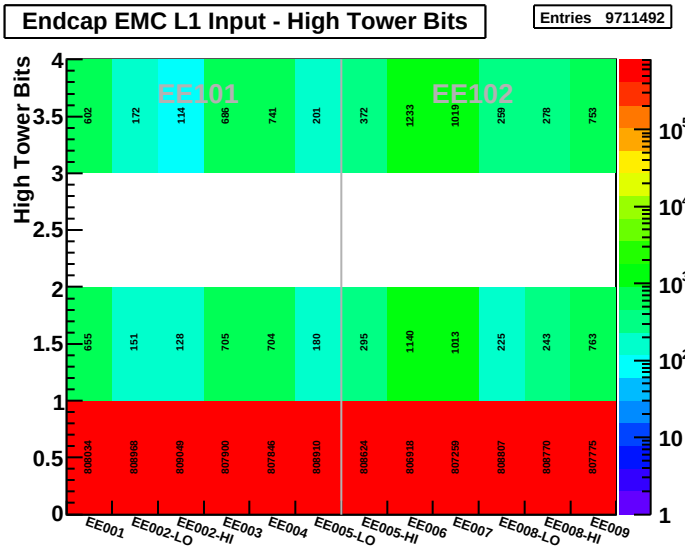

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

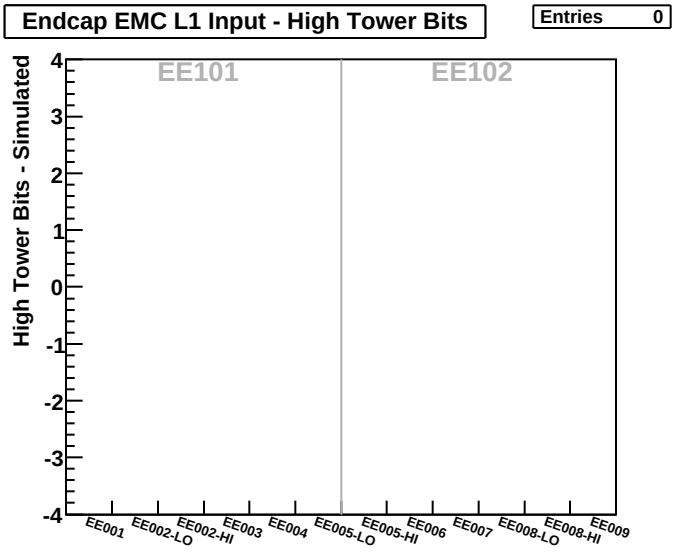

Endcap EMC L1 Input - Low Eta Sum
Entries 9711492
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

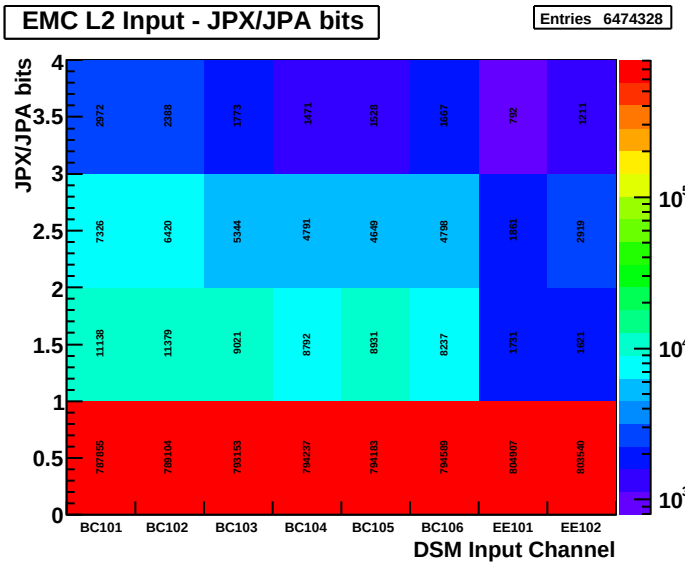

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

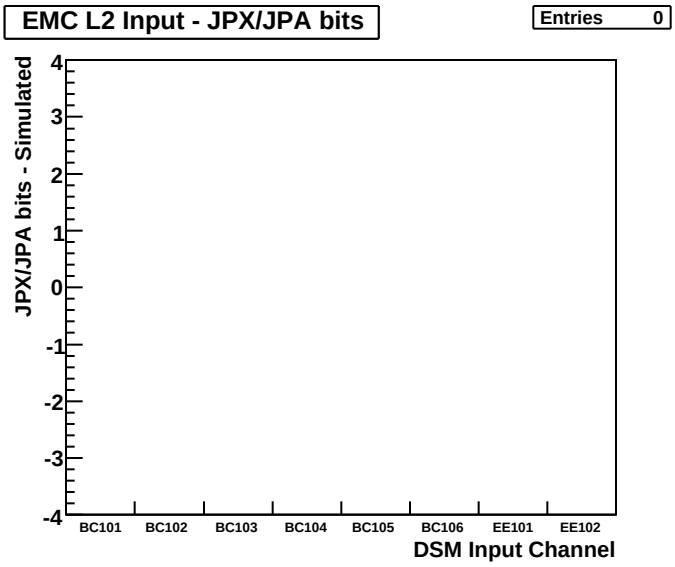

Endcap EMC L1 Input - High Eta Sum
Entries 9711492
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

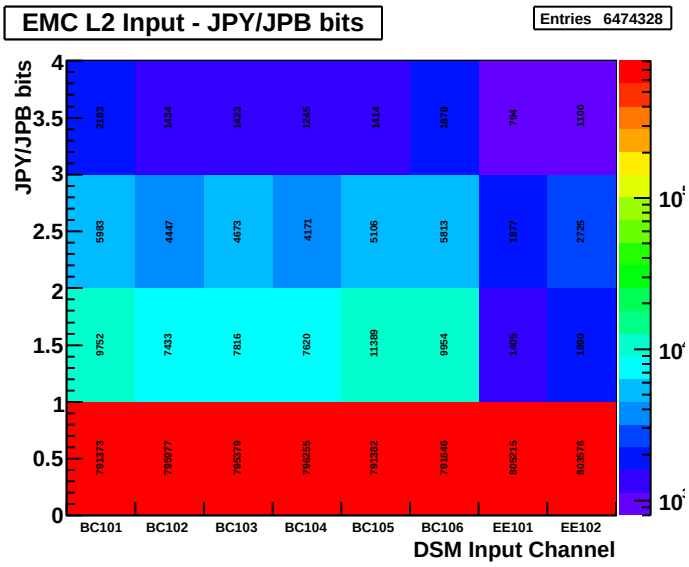

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

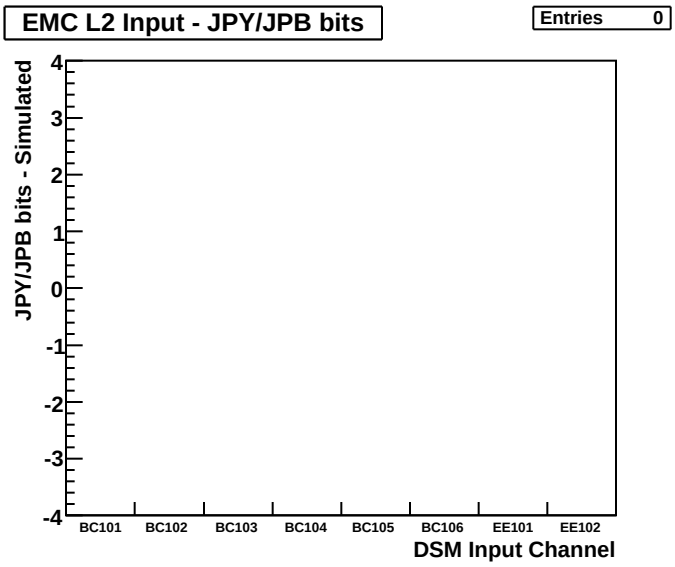

Endcap EMC L1 Input - High Tower Bits
Entries 9711492
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

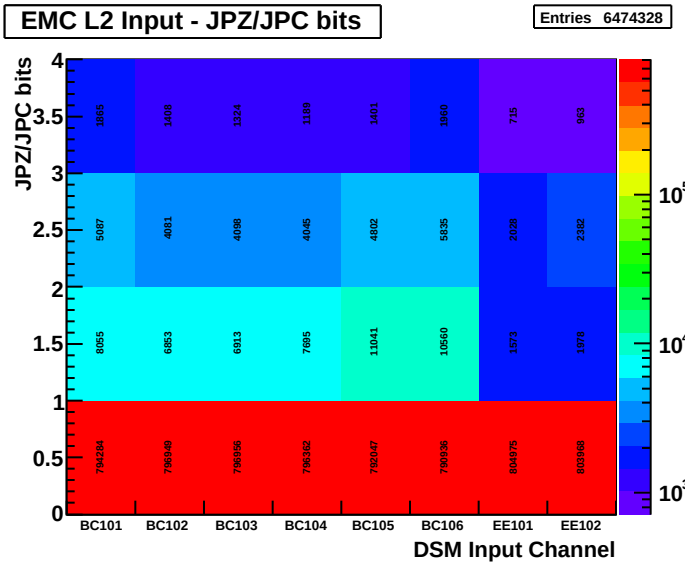

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

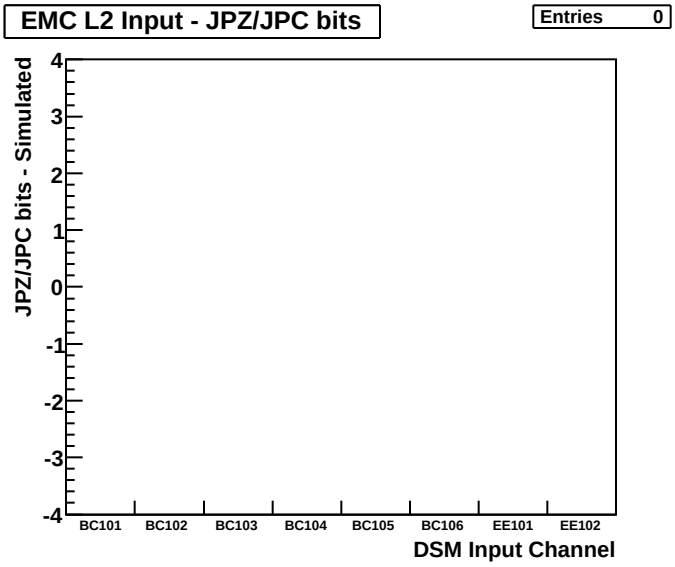

EMC L2 Input - JPX/JPA bits
Entries 6474328
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2972 2388 1773 1471 1528 1667 792 1211
7326 6420 5344 4791 4649 4798 1861 2919
11138 11379 9021 8792 8931 8237 1731 1621
787855 788104 793153 794237 794183 794589 804907 803540

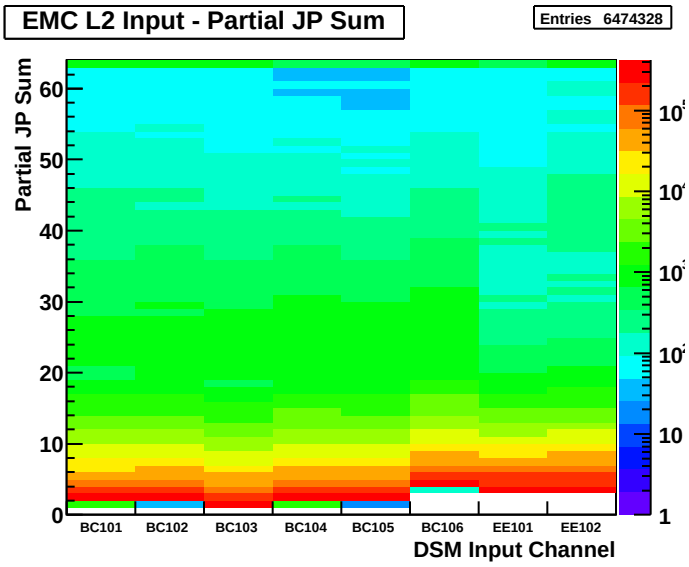

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

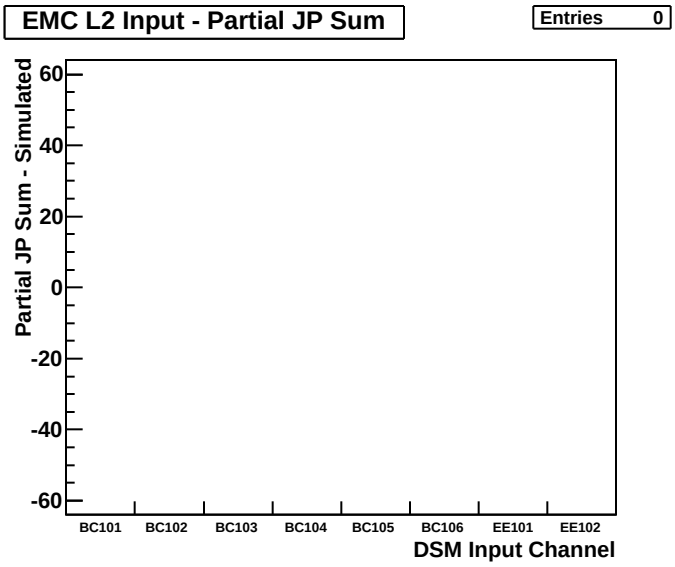

EMC L2 Input - JPY/JPB bits
Entries 6474328
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2183 1434 1423 1245 1414 1978 794 1100
5983 4447 4673 4171 5106 5813 1877 2725
9752 7433 7816 7620 11389 9954 1405 1930
791373 793377 793379 796255 791382 791646 805215 803576

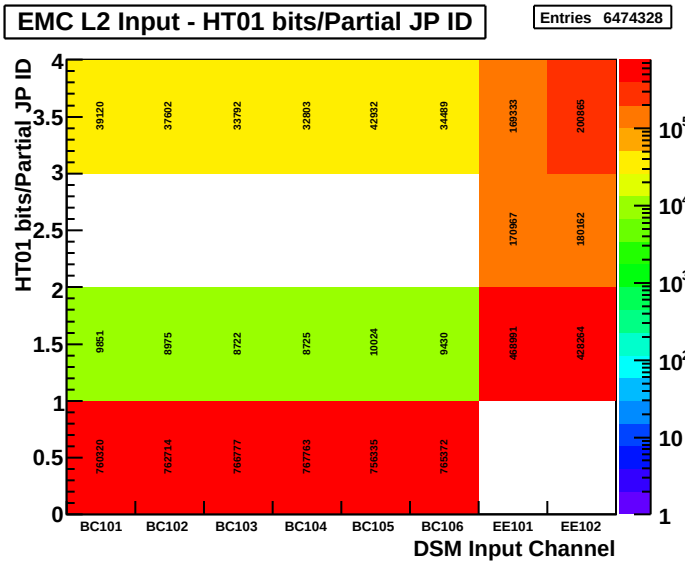

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

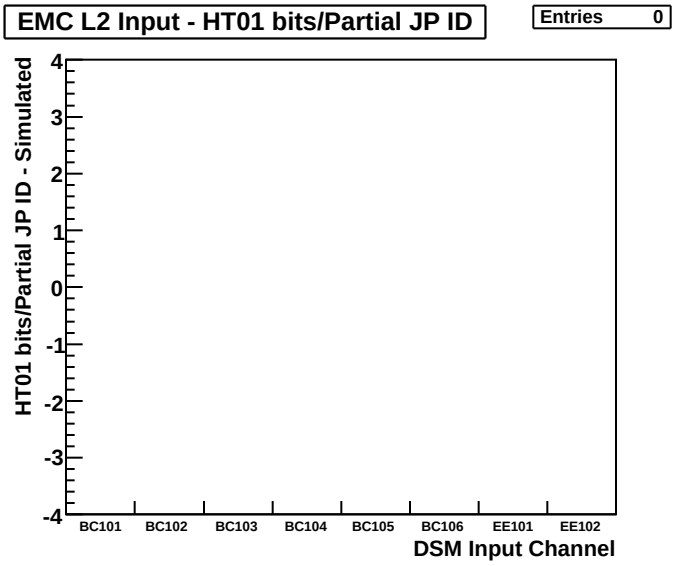

EMC L2 Input - JPZ/JPC bits
Entries 6474328
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1865 1408 1324 1189 1401 1960 715 963
5087 4081 4098 4045 4802 5835 2028 2382
8055 6853 6813 7695 11041 10560 1573 1978
794284 796349 796356 796362 792047 790938 804975 803968

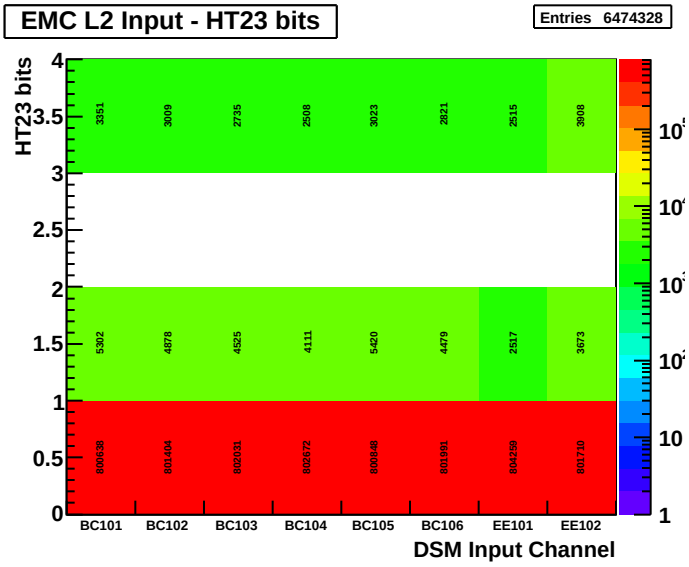

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

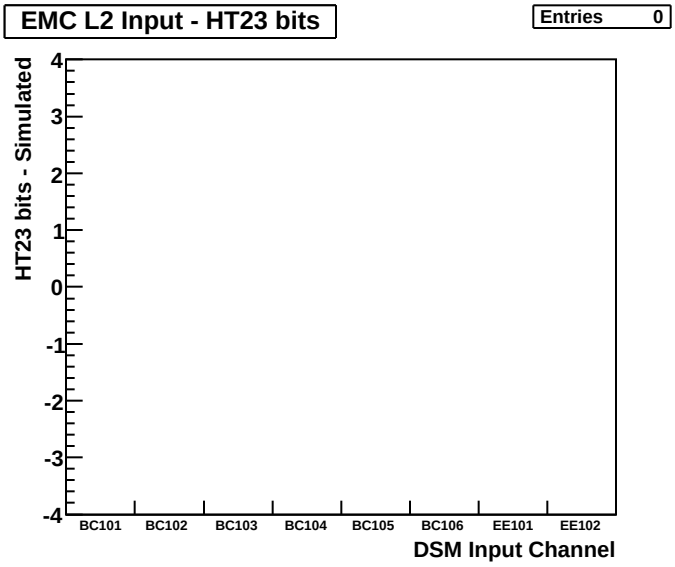

EMC L2 Input - Partial JP Sum
Entries 6474328
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

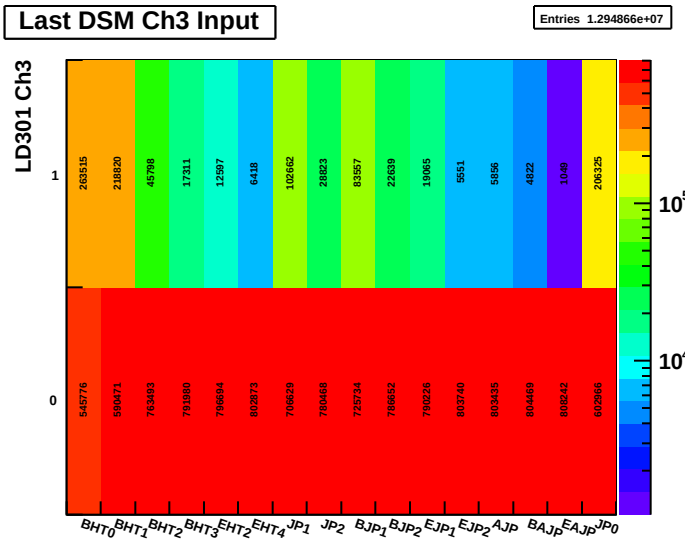

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

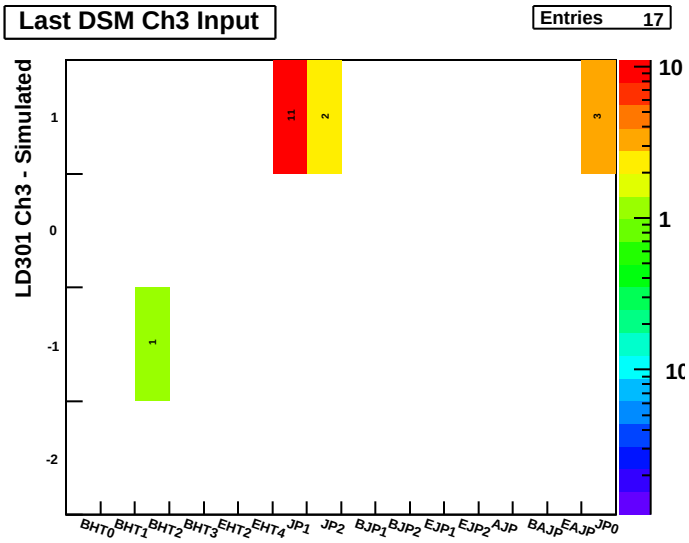

EMC L2 Input - HT01 bits/Partial JP ID
Entries 6474328
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

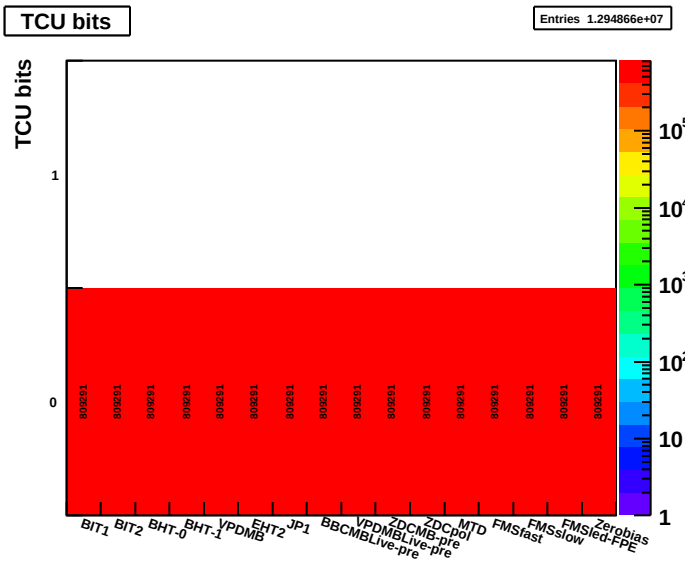

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

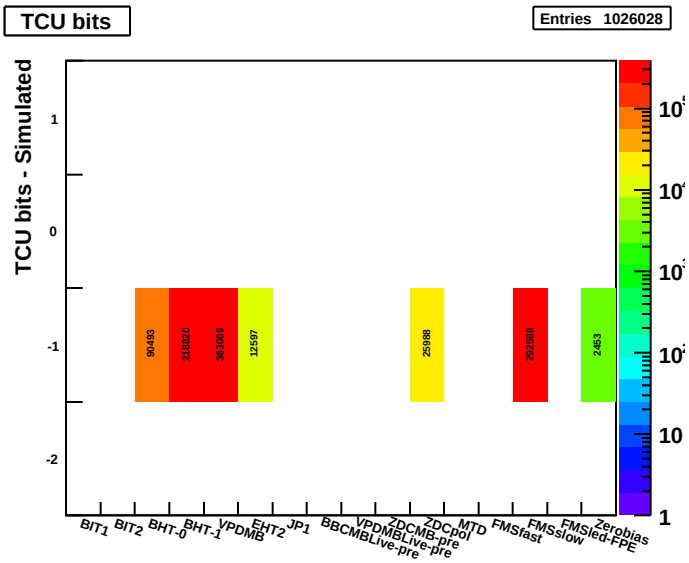

EMC L2 Input - HT23 bits
Entries 6474328
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

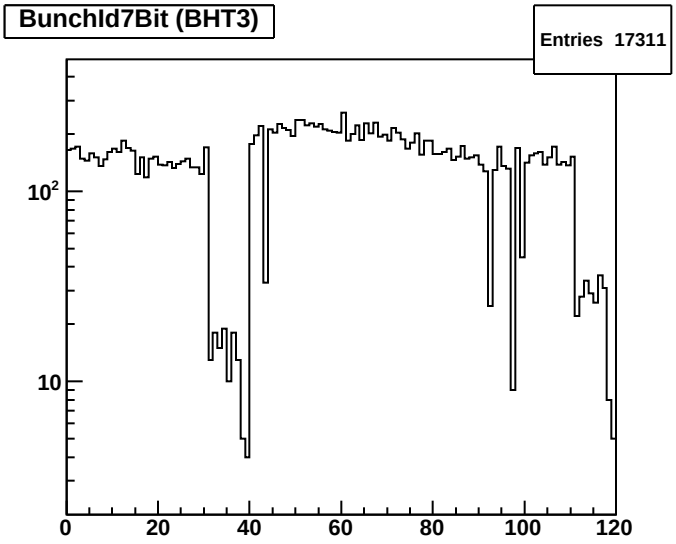

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

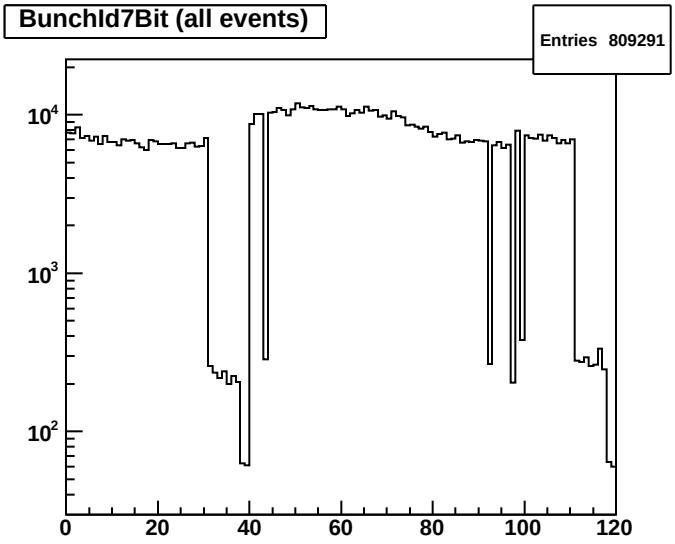

Last DSM Ch3 Input
Entries 1.294866e+07
LD301 Ch3
263515 218820 45798 17311 12597 6418 102662 28823 83557 22639 19065 5551 5856 4822 1049 206325
545776 590471 763493 791980 796694 802873 706629 780468 725734 786652 790226 803740 803435 804469 808242 602966
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

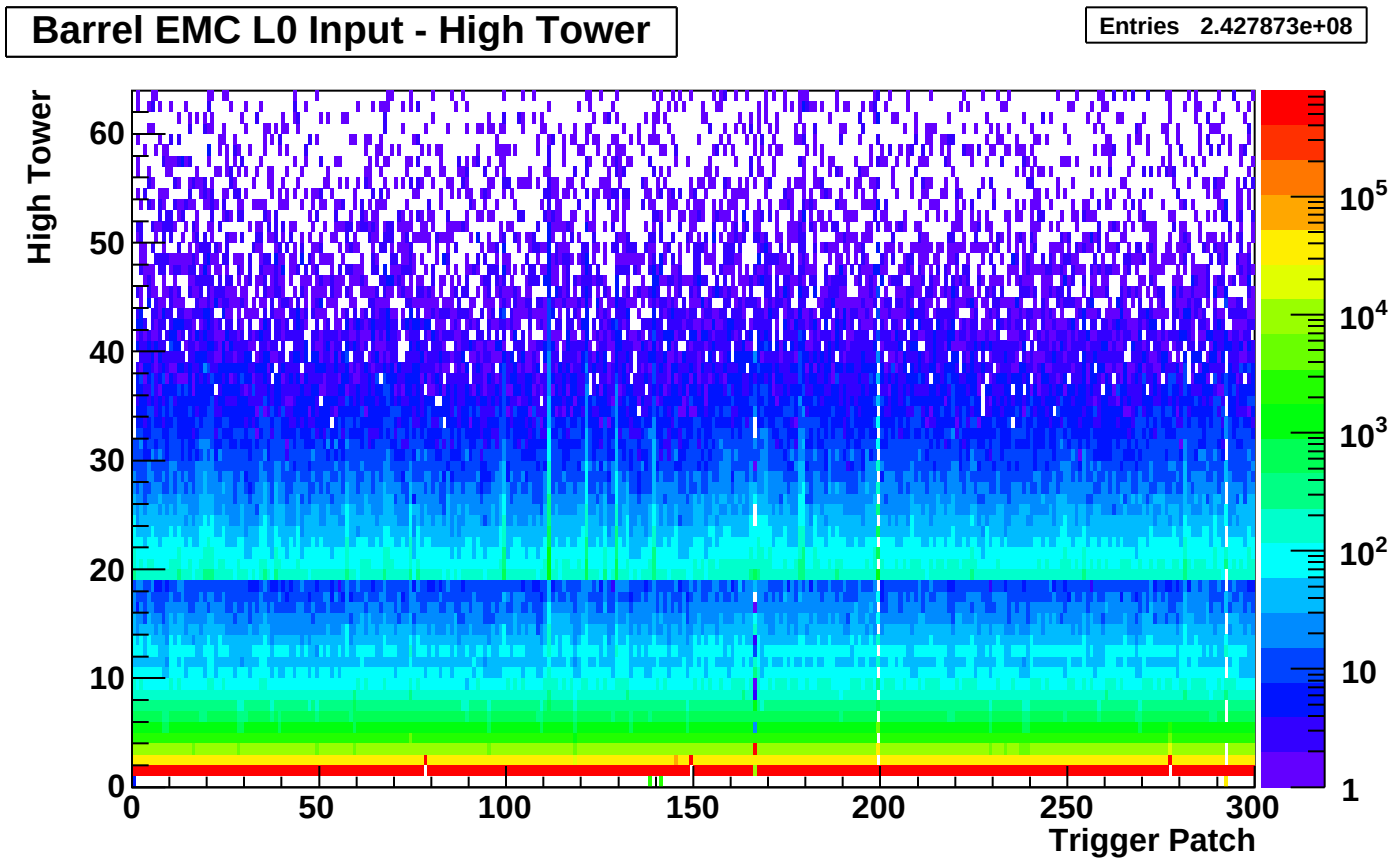

Last DSM Ch3 Input
Entries 17
LD301 Ch3 - Simulated
11 2 3
1
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

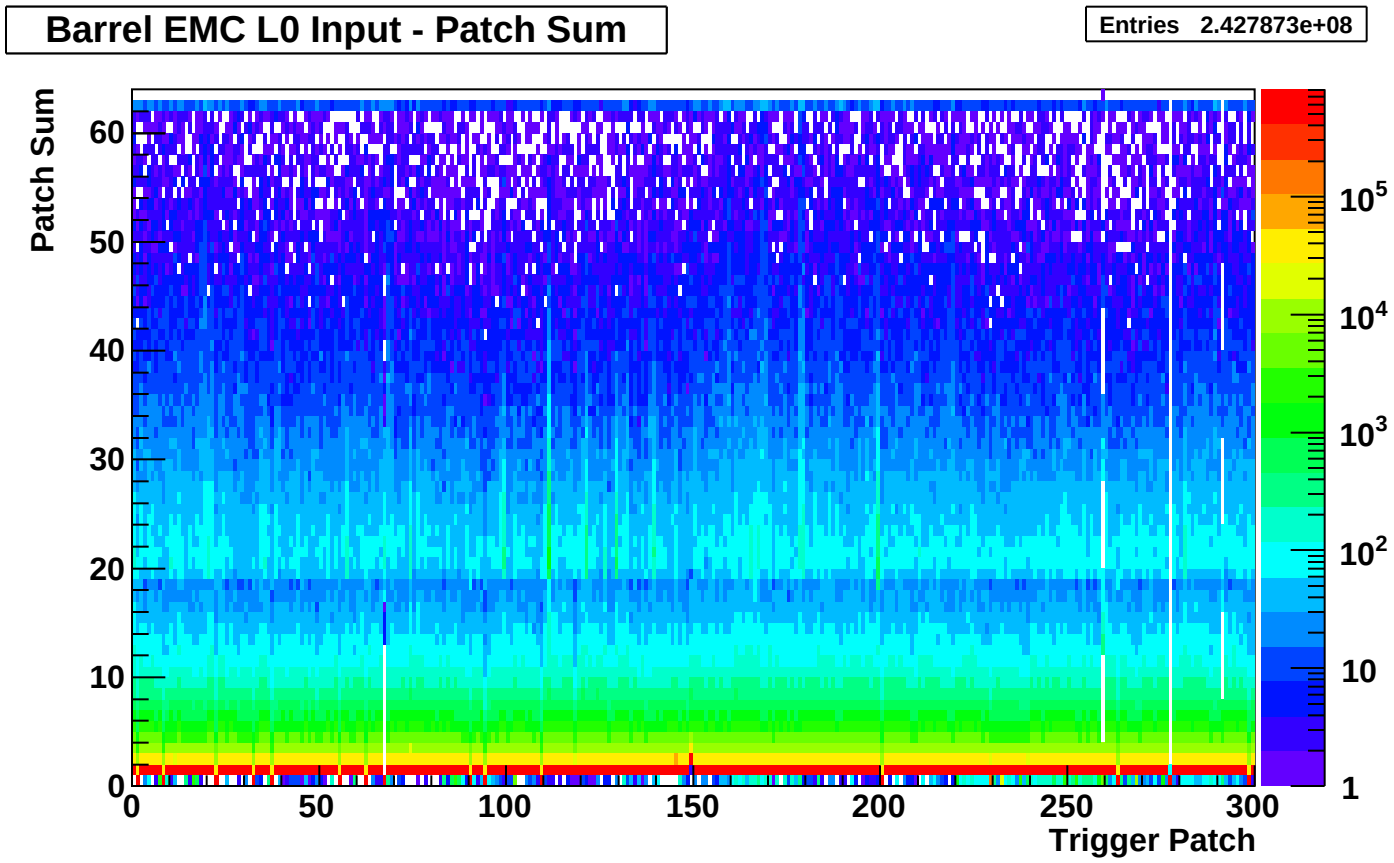

TCU bits
Entries 1.294866e+07
TCU bits
809291
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

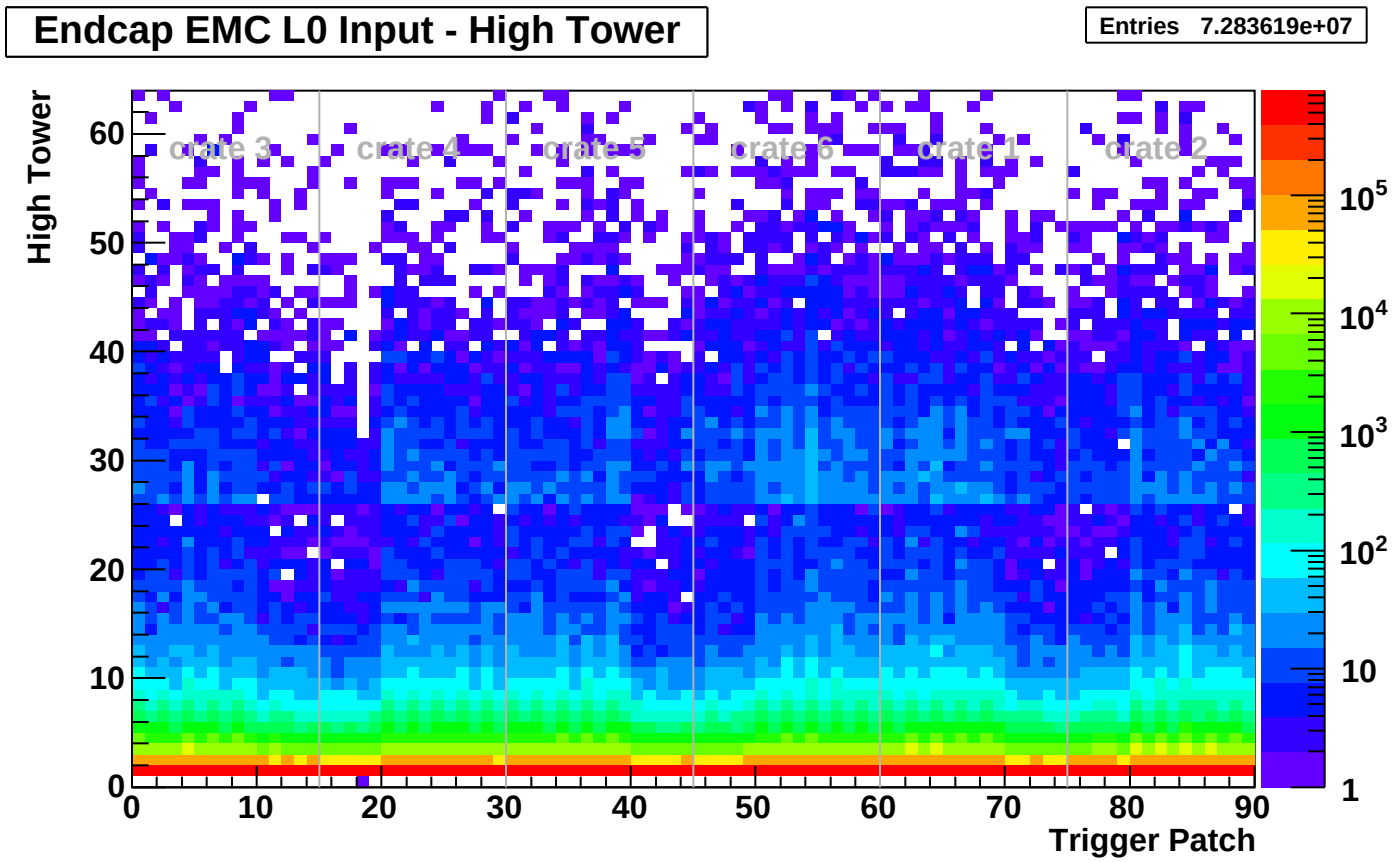

TCU bits
Entries 1026028
TCU bits - Simulated
90493 218820 383089 12597 25988 292588 2453
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

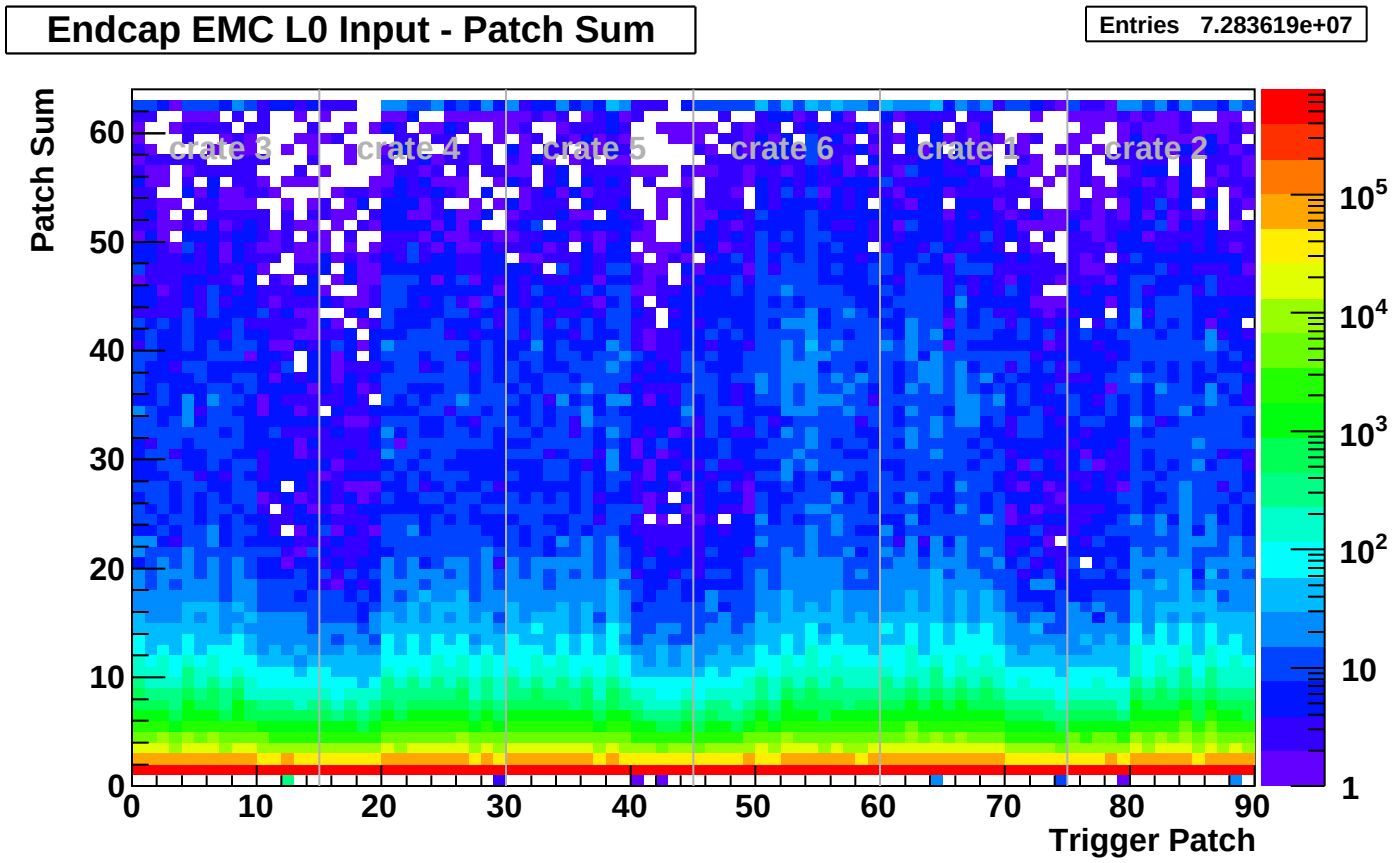

BunchId7Bit (BHT3)
Entries 17311

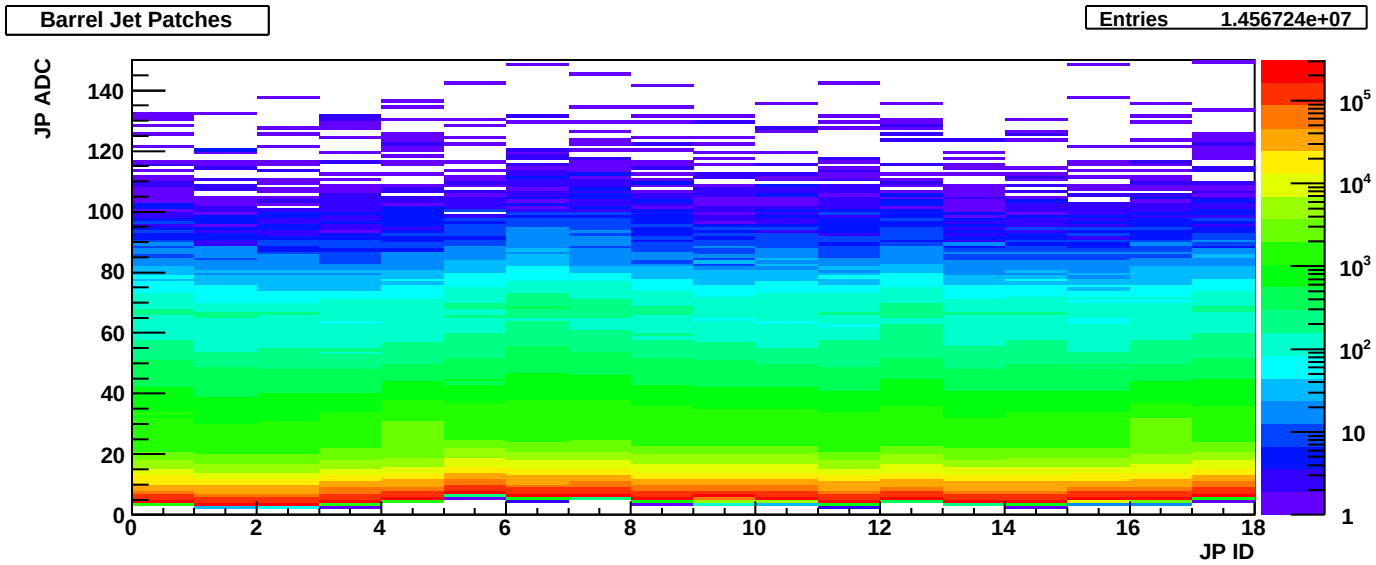

BunchId7Bit (all events)
Entries 809291

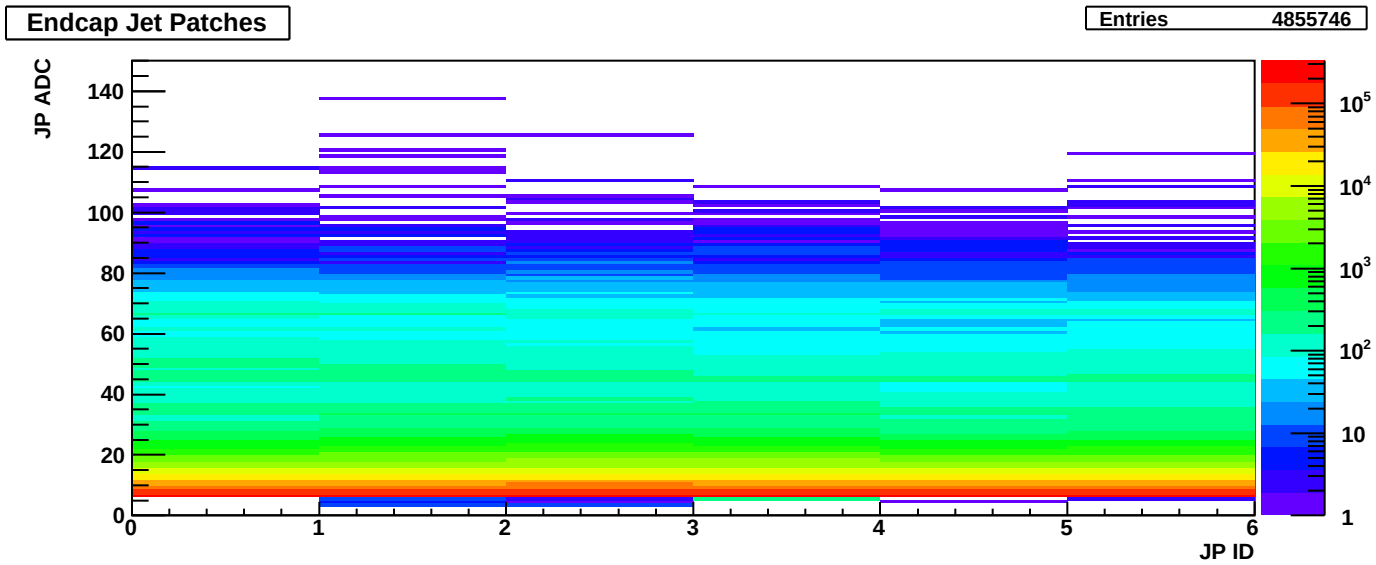

Barrel EMC L0 Input - High Tower
Entries 2.427873e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

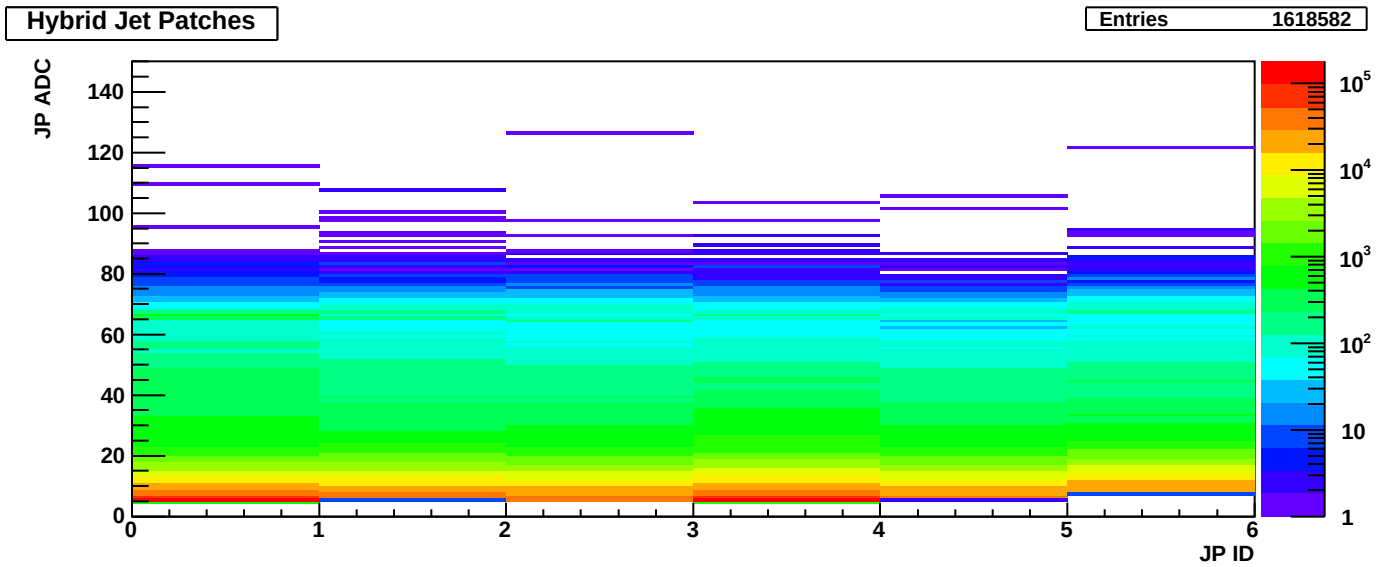

Barrel EMC L0 Input - Patch Sum
Entries 2.427873e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

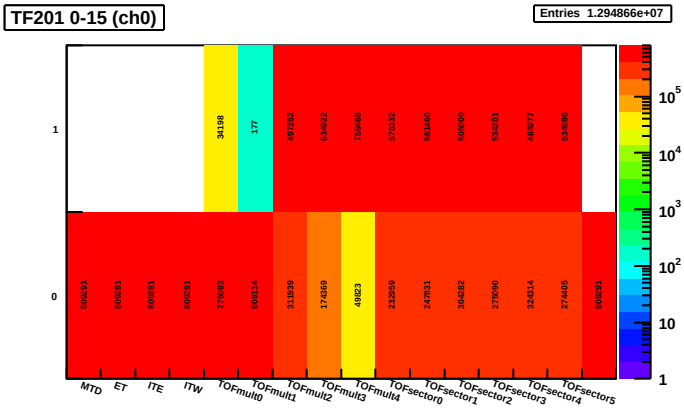

Endcap EMC L0 Input - High Tower
Entries 7.283619e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

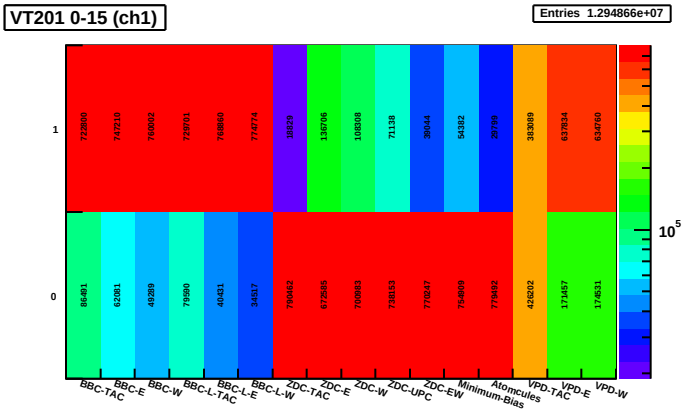

Endcap EMC L0 Input - Patch Sum
Entries 7.283619e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

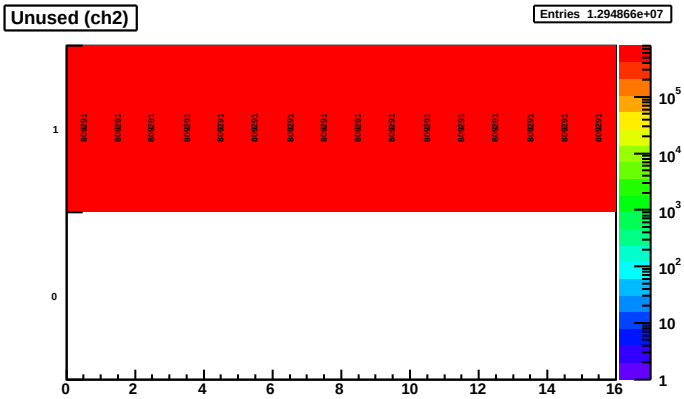

Barrel Jet Patches
Entries 1.456724e+07
JP ADC
JP ID

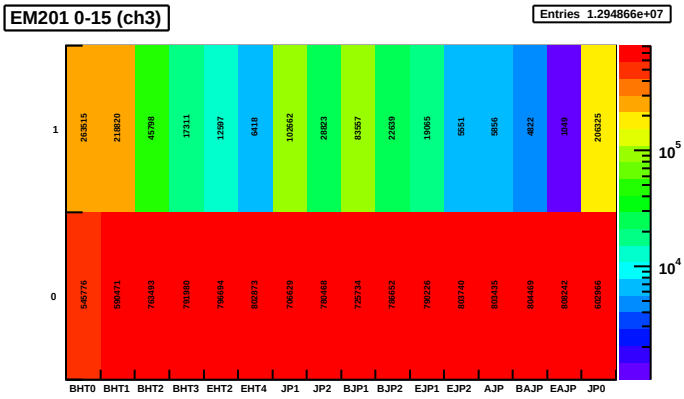

Endcap Jet Patches
Entries 4855746
JP ADC
JP ID

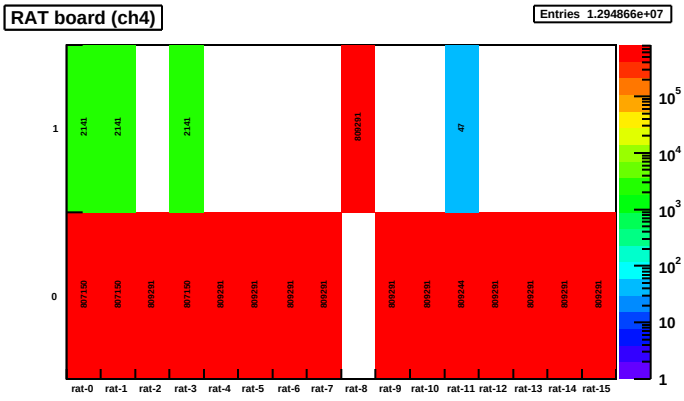

Hybrid Jet Patches
Entries 1618582
JP ADC
JP ID

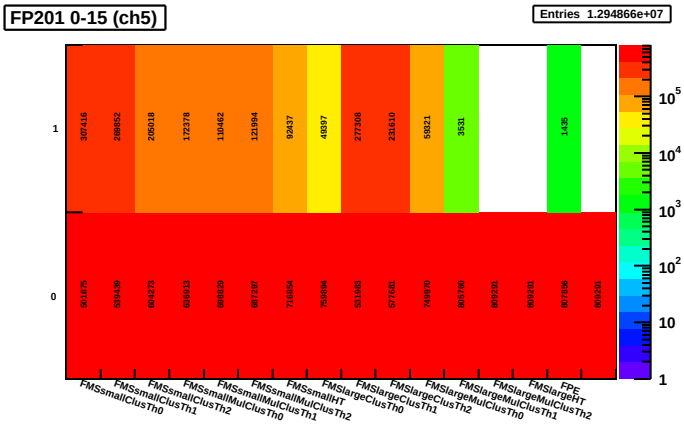

TF201 0-15 (ch0)
Entries 1.294866e+07
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

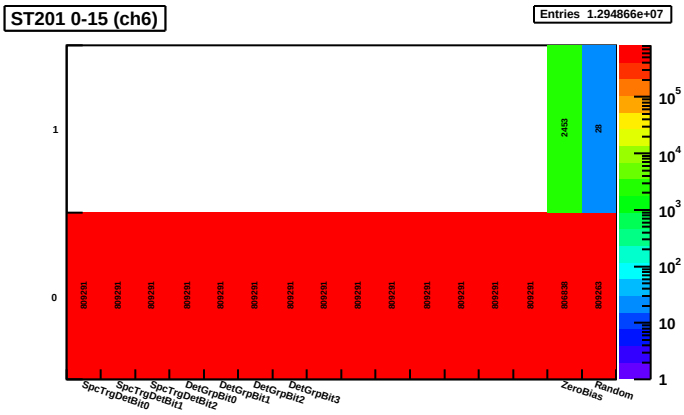

VT201 0-15 (ch1)
Entries 1.294866e+07
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

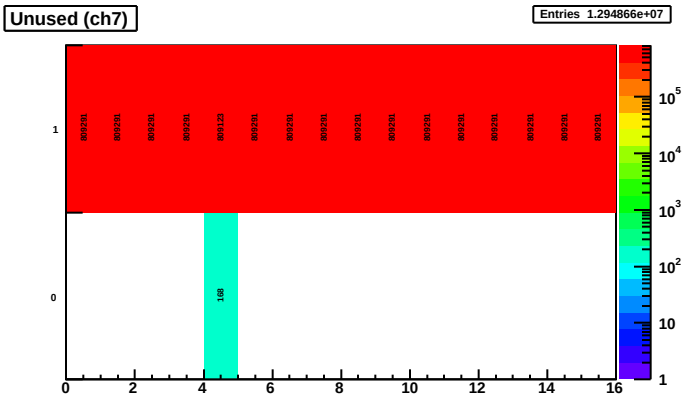

Unused (ch2)
Entries 1.294866e+07

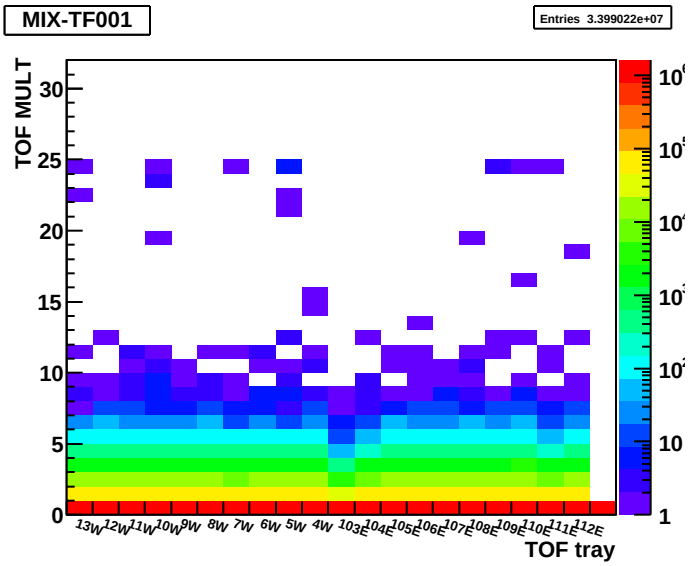

EM201 0-15 (ch3)
Entries 1.294866e+07
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

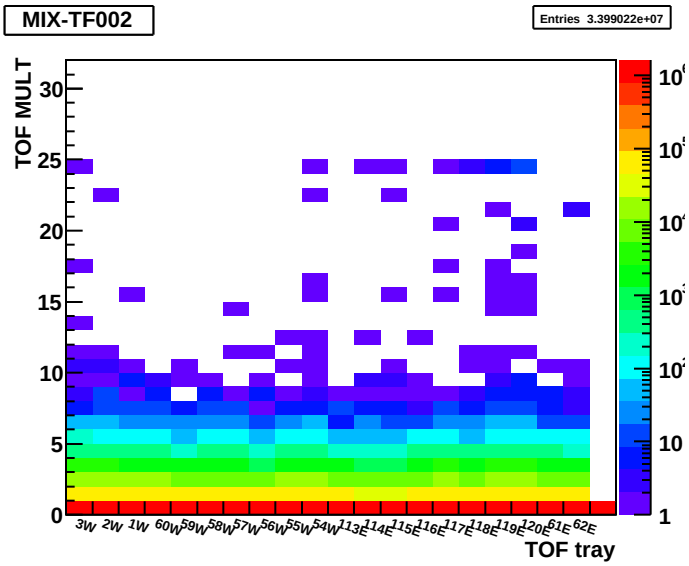

RAT board (ch4)
Entries 1.294866e+07
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

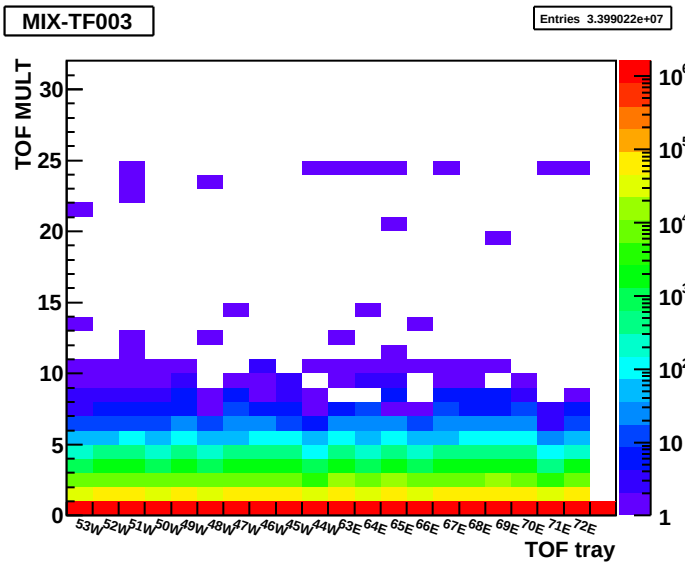

FP201 0-15 (ch5)
Entries 1.294866e+07
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

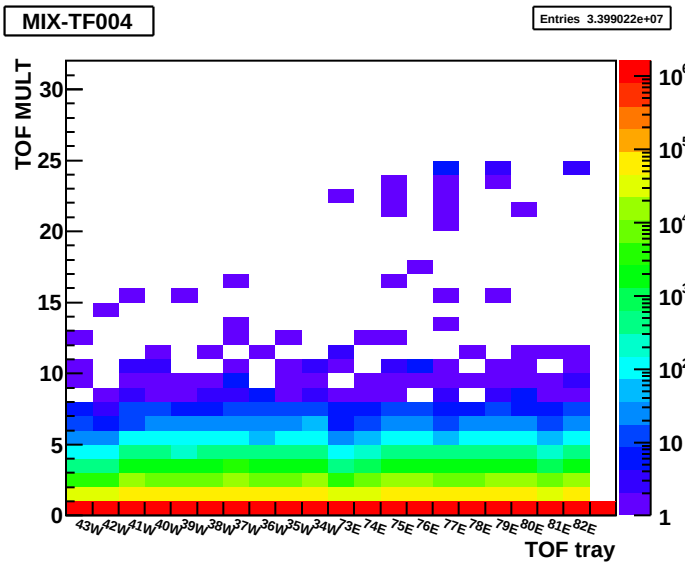

ST201 0-15 (ch6)
Entries 1.294866e+07
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

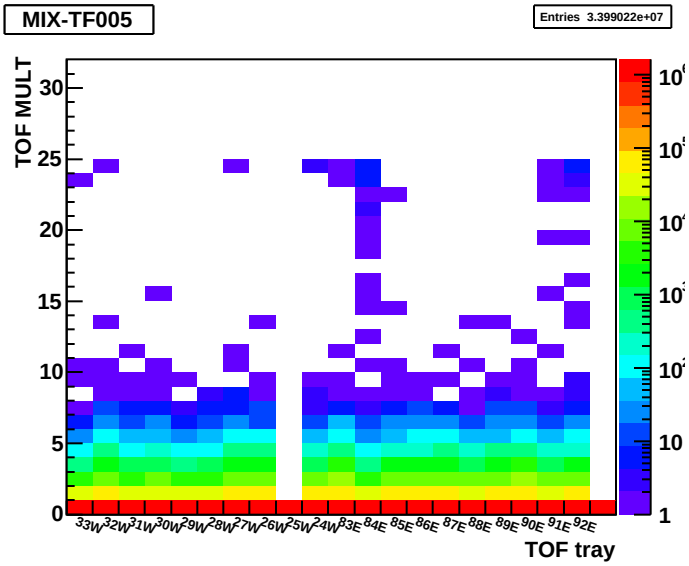

Unused (ch7)
Entries 1.294866e+07

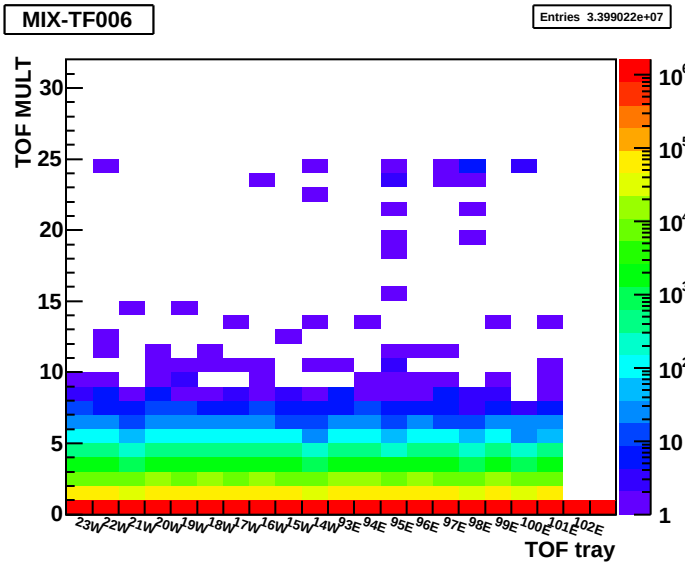

MIX-TF001
Entries 3.399022e+07
TOF MULT
TOF tray

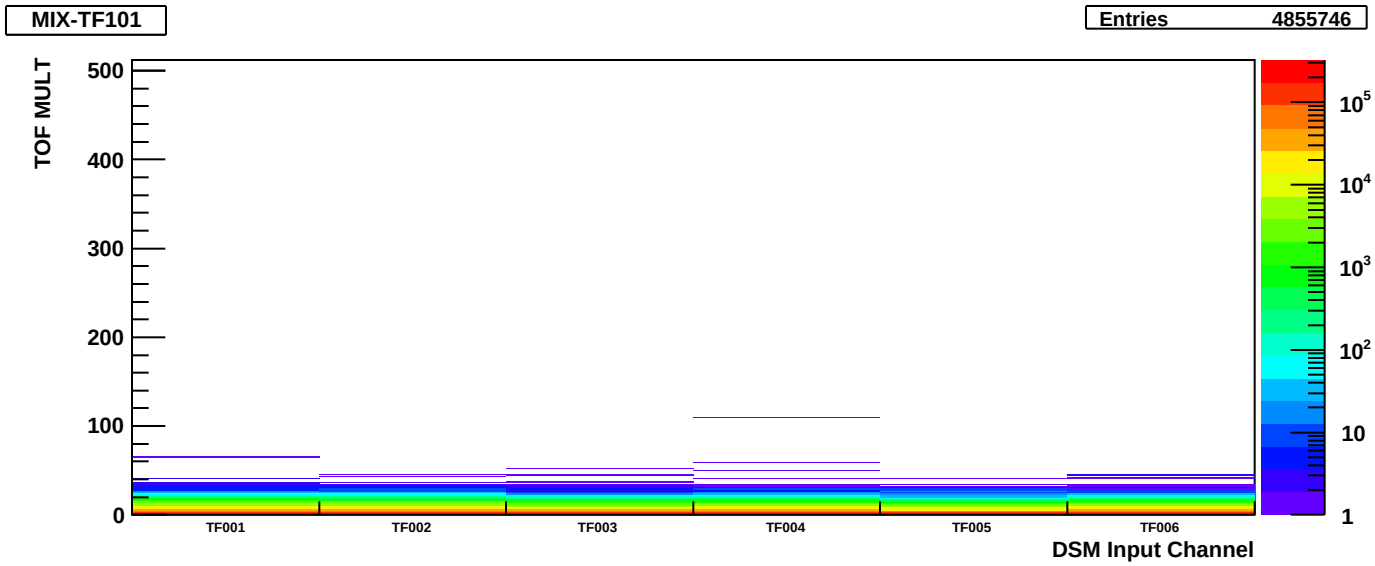

MIX-TF002
Entries 3.399022e+07
TOF MULT
TOF tray

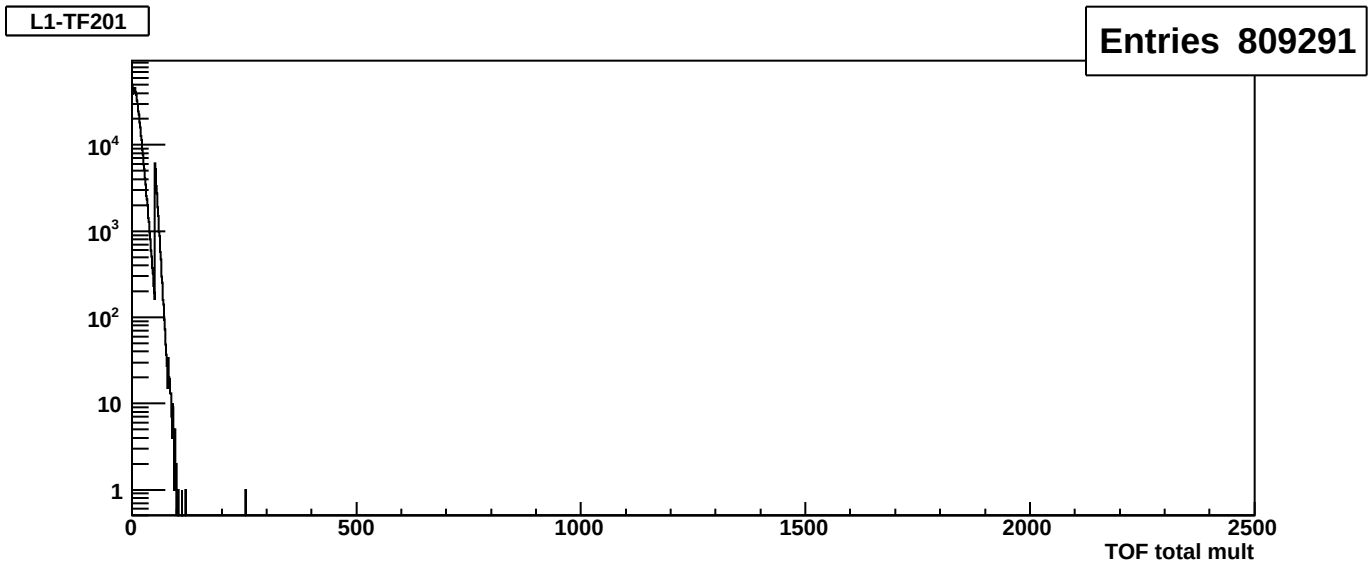

MIX-TF003
Entries 3.399022e+07
TOF MULT
TOF tray

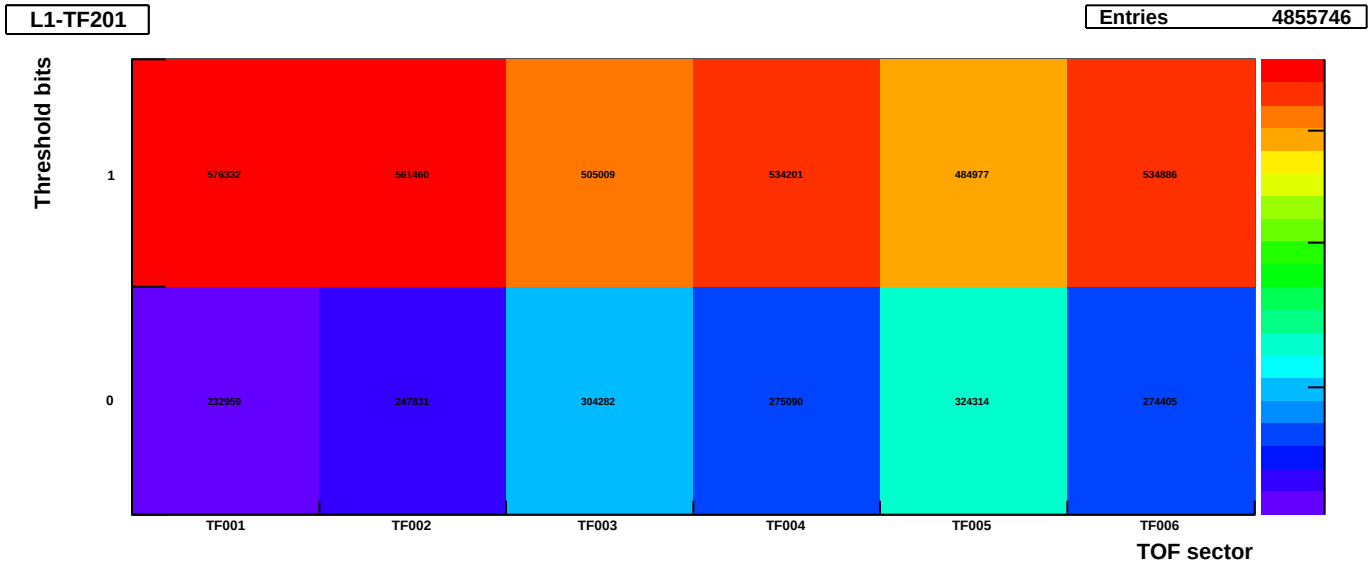

MIX-TF004
Entries 3.399022e+07
TOF MULT
TOF tray

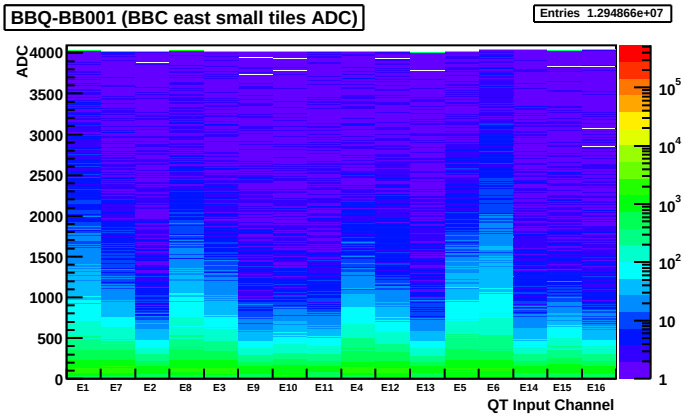

MIX-TF005
Entries 3.399022e+07
TOF MULT
TOF tray

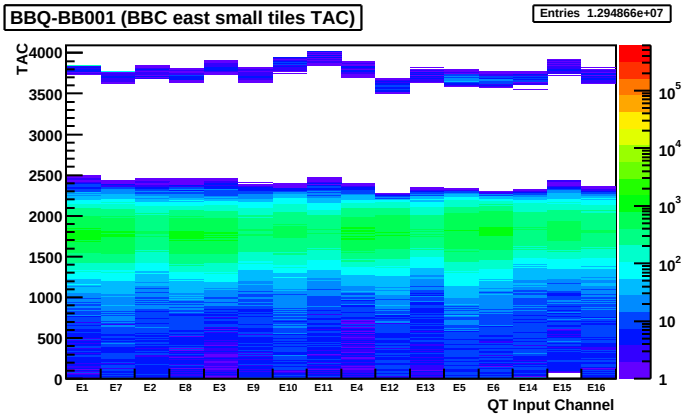

MIX-TF006
Entries 3.399022e+07
TOF MULT
TOF tray

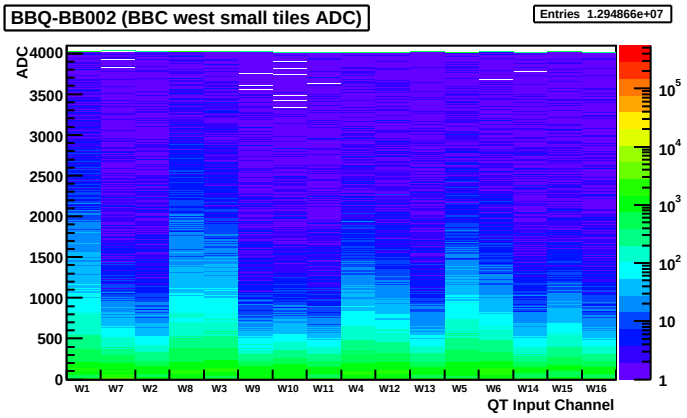

MIX-TF101
Entries 4855746
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

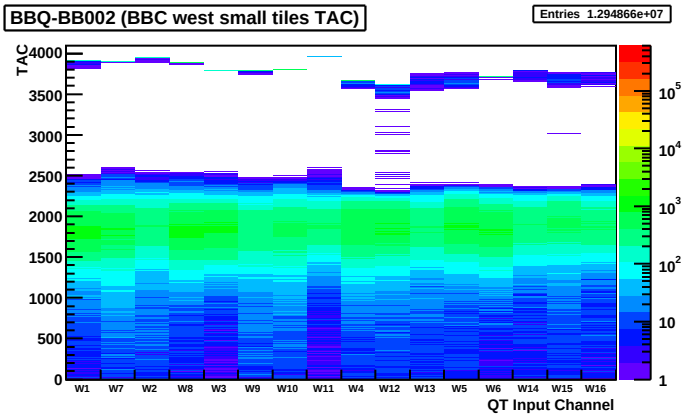

L1-TF201
Entries 809291
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

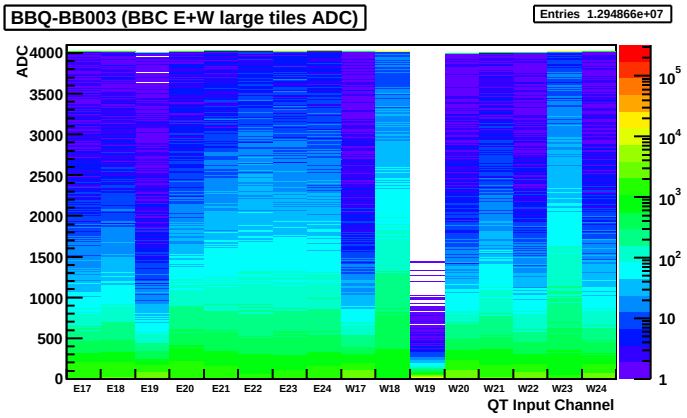

L1-TF201
Entries 4855746
Threshold bits
1
0
576332
561460
505009
534201
484977
534886
232959
247831
304282
275090
324314
274405
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

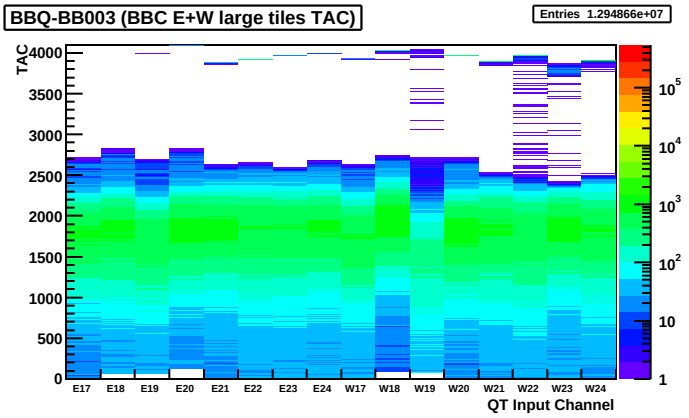

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.294866e+07
ADC
QT Input Channel

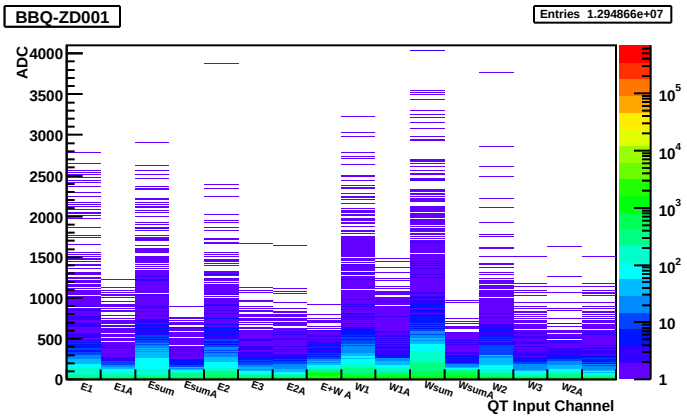

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.294866e+07
TAC
QT Input Channel

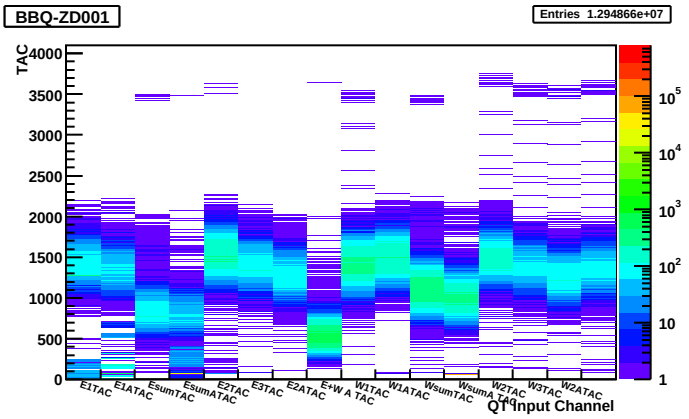

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.294866e+07
ADC
QT Input Channel

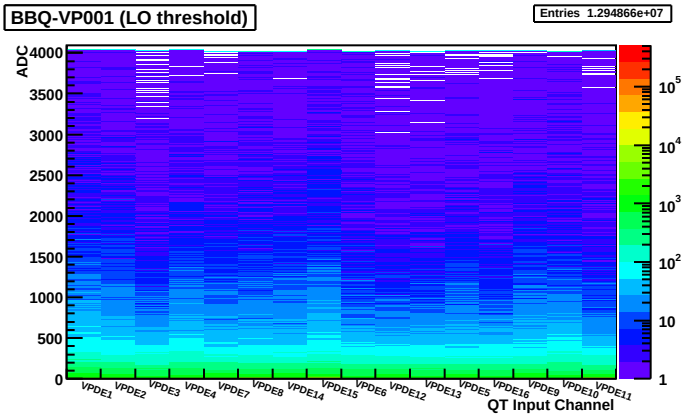

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.294866e+07
TAC
QT Input Channel

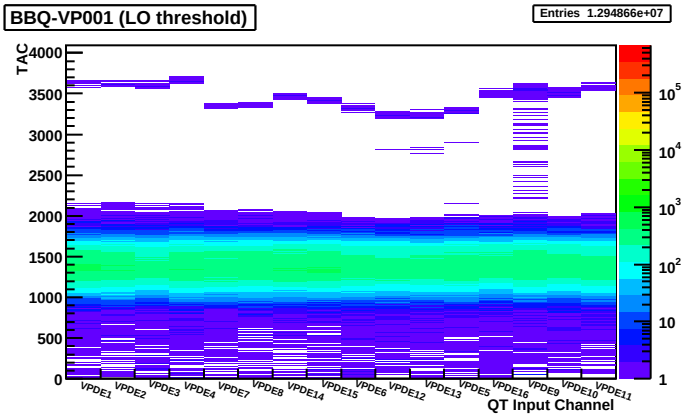

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.294866e+07
ADC
QT Input Channel

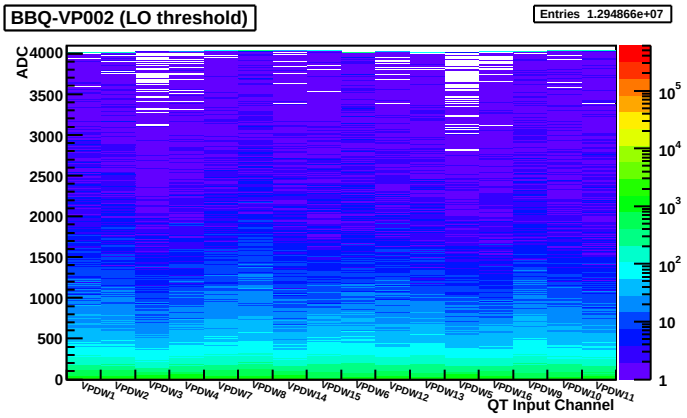

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.294866e+07
TAC
QT Input Channel

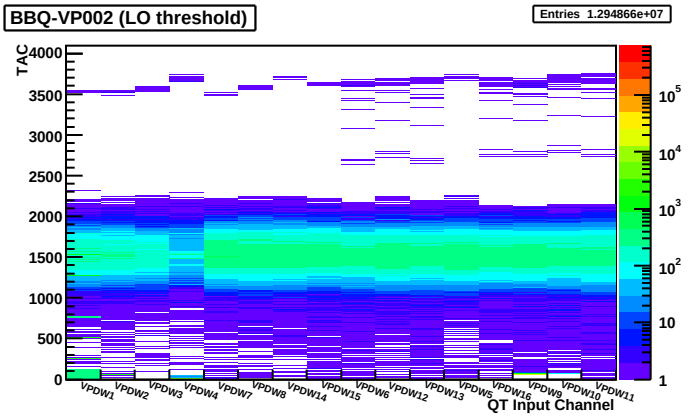

BBQ-ZD001
Entries 1.294866e+07
ADC
QT Input Channel

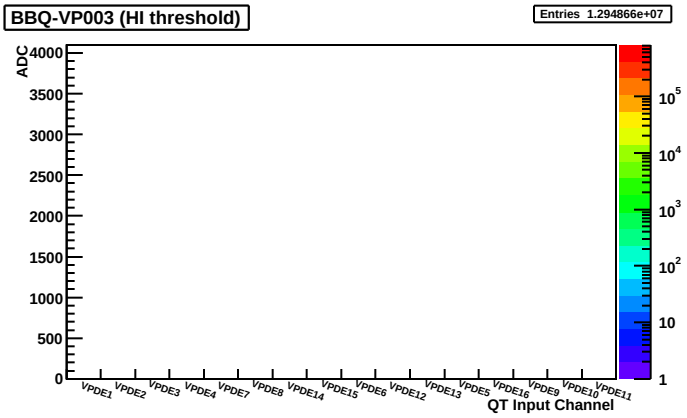

BBQ-ZD001
Entries 1.294866e+07
TAC
QT Input Channel

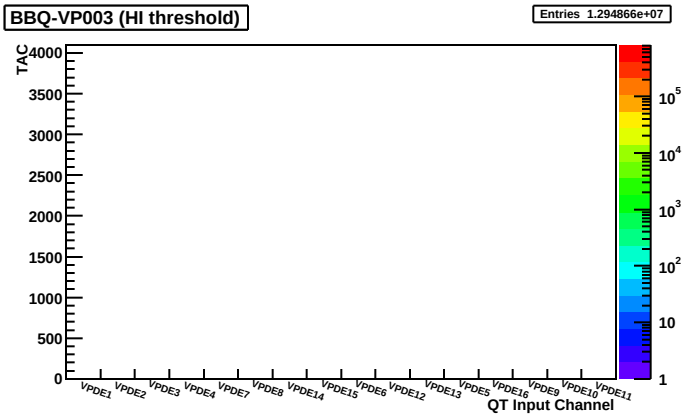

BBQ-VP001 (LO threshold)
Entries 1.294866e+07
ADC
QT Input Channel

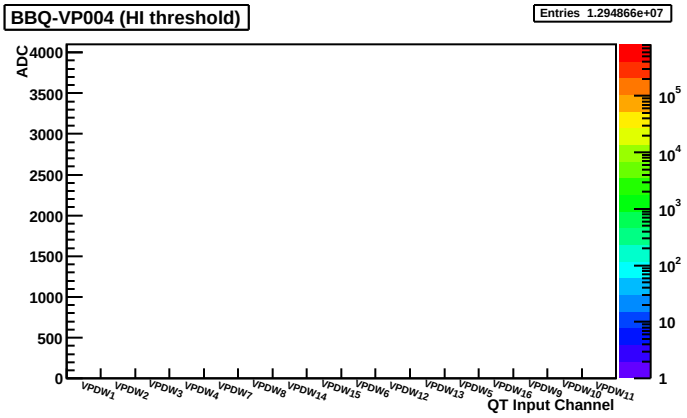

BBQ-VP001 (LO threshold)
Entries 1.294866e+07
TAC
QT Input Channel

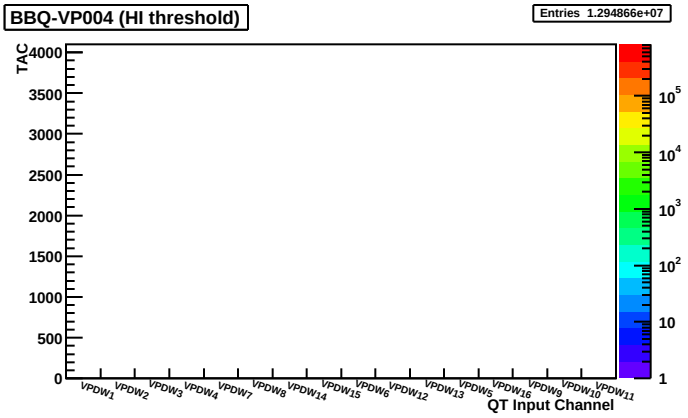

BBQ-VP002 (LO threshold)
Entries 1.294866e+07
ADC
QT Input Channel

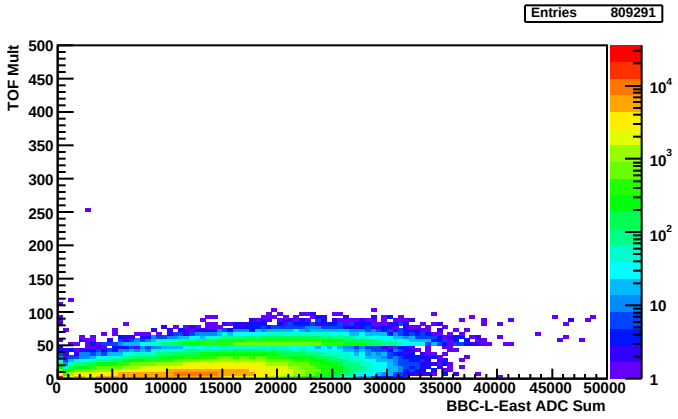

BBQ-VP002 (LO threshold)
Entries 1.294866e+07
TAC
QT Input Channel

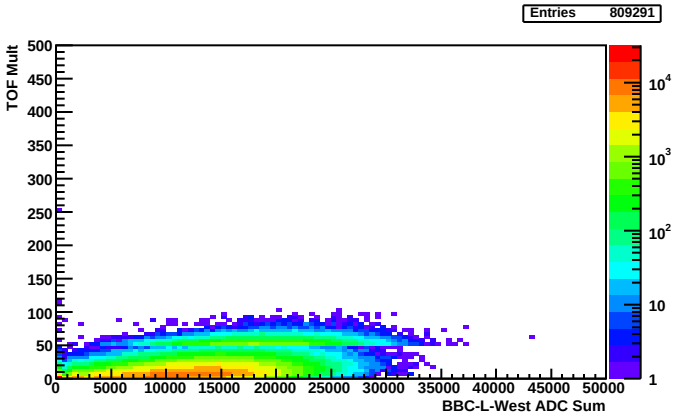

BBQ-VP003 (HI threshold)
Entries 1.294866e+07
ADC
QT Input Channel

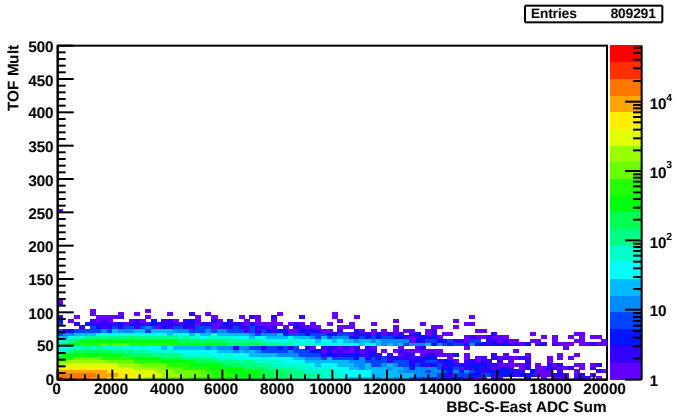

BBQ-VP003 (HI threshold)
Entries 1.294866e+07
TAC
QT Input Channel

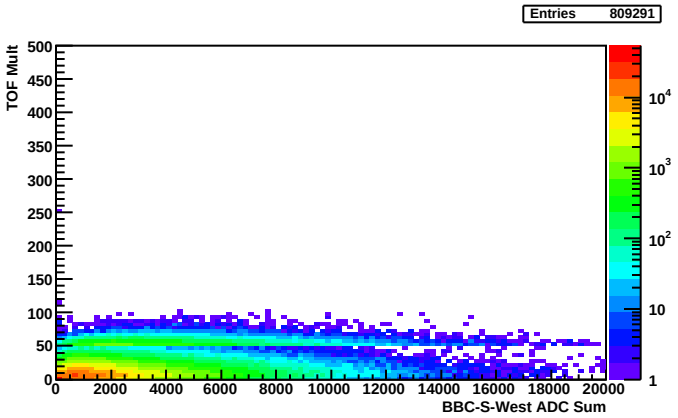

BBQ-VP004 (HI threshold)
Entries 1.294866e+07
ADC
QT Input Channel

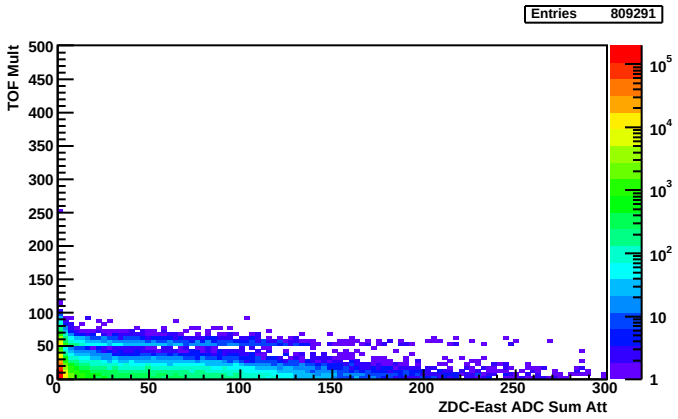

BBQ-VP004 (HI threshold)
Entries 1.294866e+07
TAC
QT Input Channel

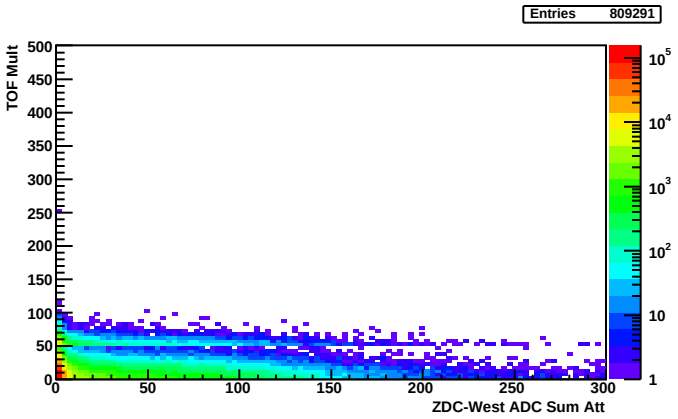

Entries 809291
TOF Mult
BBC-L-East ADC Sum

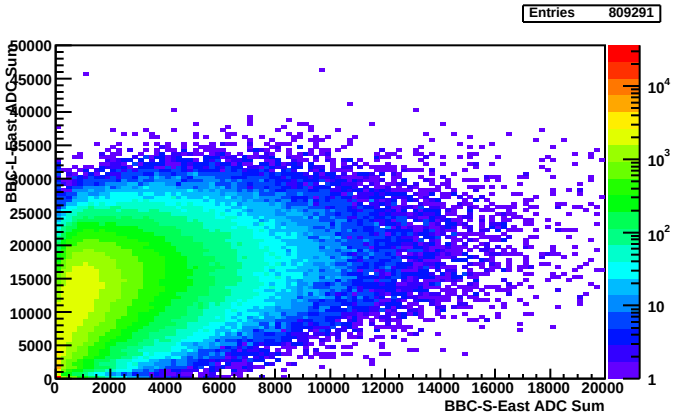

Entries 809291
TOF Mult
BBC-L-West ADC Sum

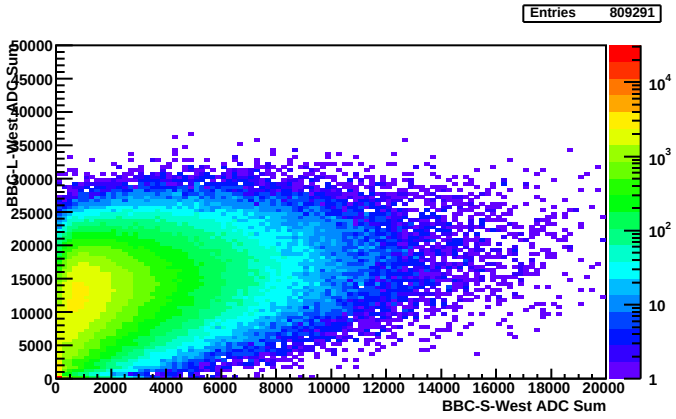

Entries 809291
TOF Mult
BBC-S-East ADC Sum

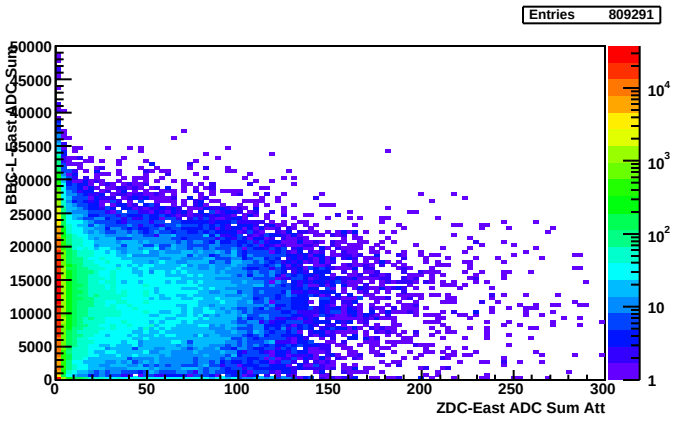

Entries 809291
TOF Mult
BBC-S-West ADC Sum

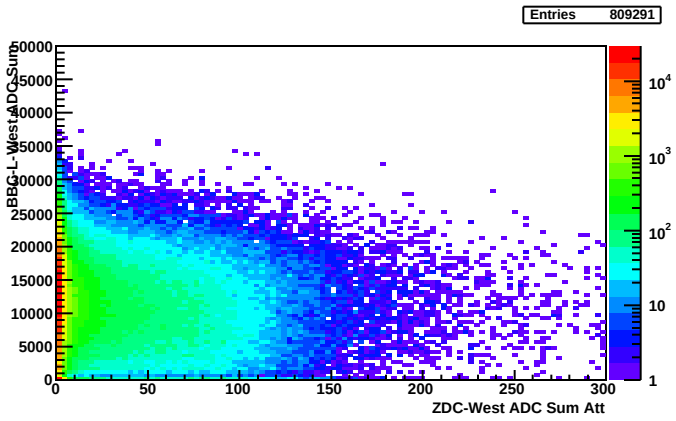

Entries 809291
TOF Mult
ZDC-East ADC Sum Att

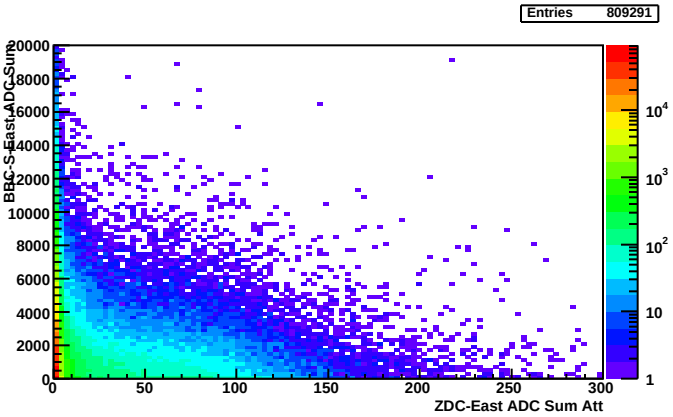

Entries 809291
TOF Mult
ZDC-West ADC Sum Att

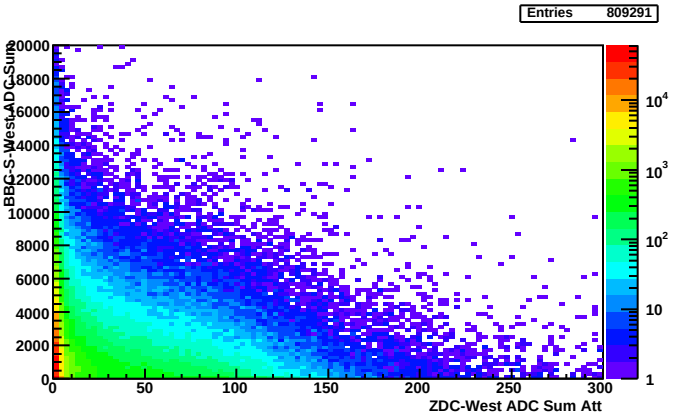

Entries 809291
BBC-L-East ADC Sum
BBC-S-East ADC Sum

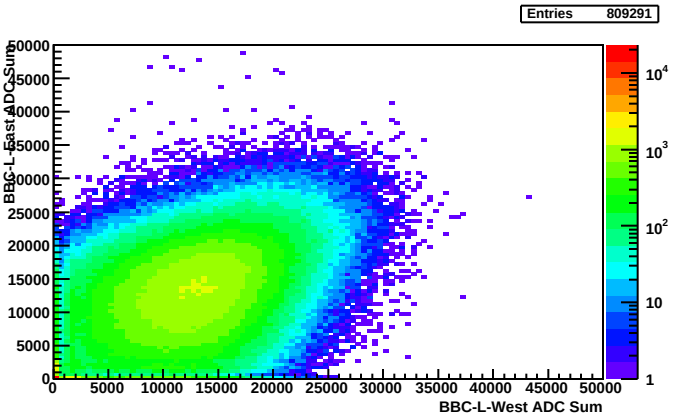

Entries 809291
BBC-L-West ADC Sum
BBC-S-West ADC Sum

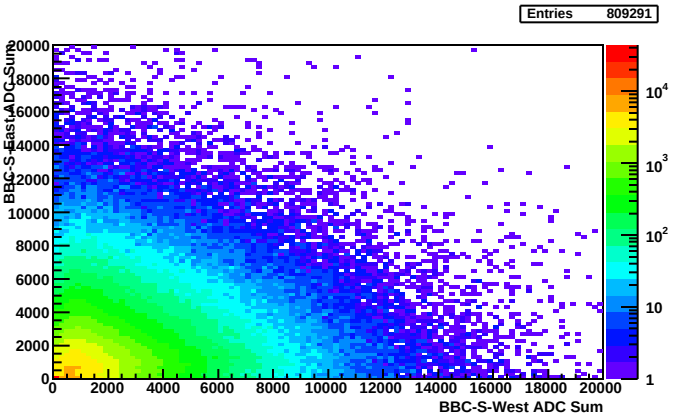

Entries 809291
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

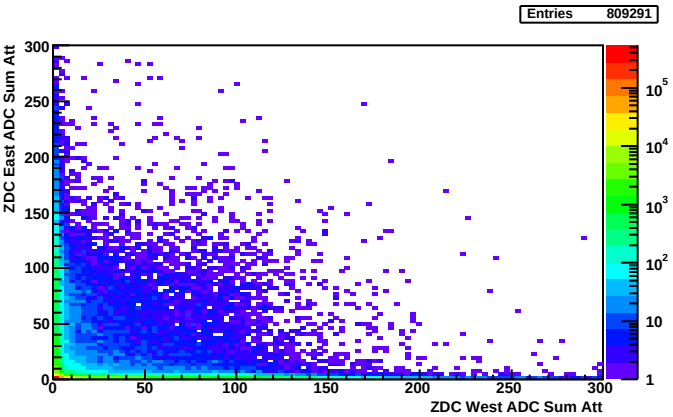

Entries 809291
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

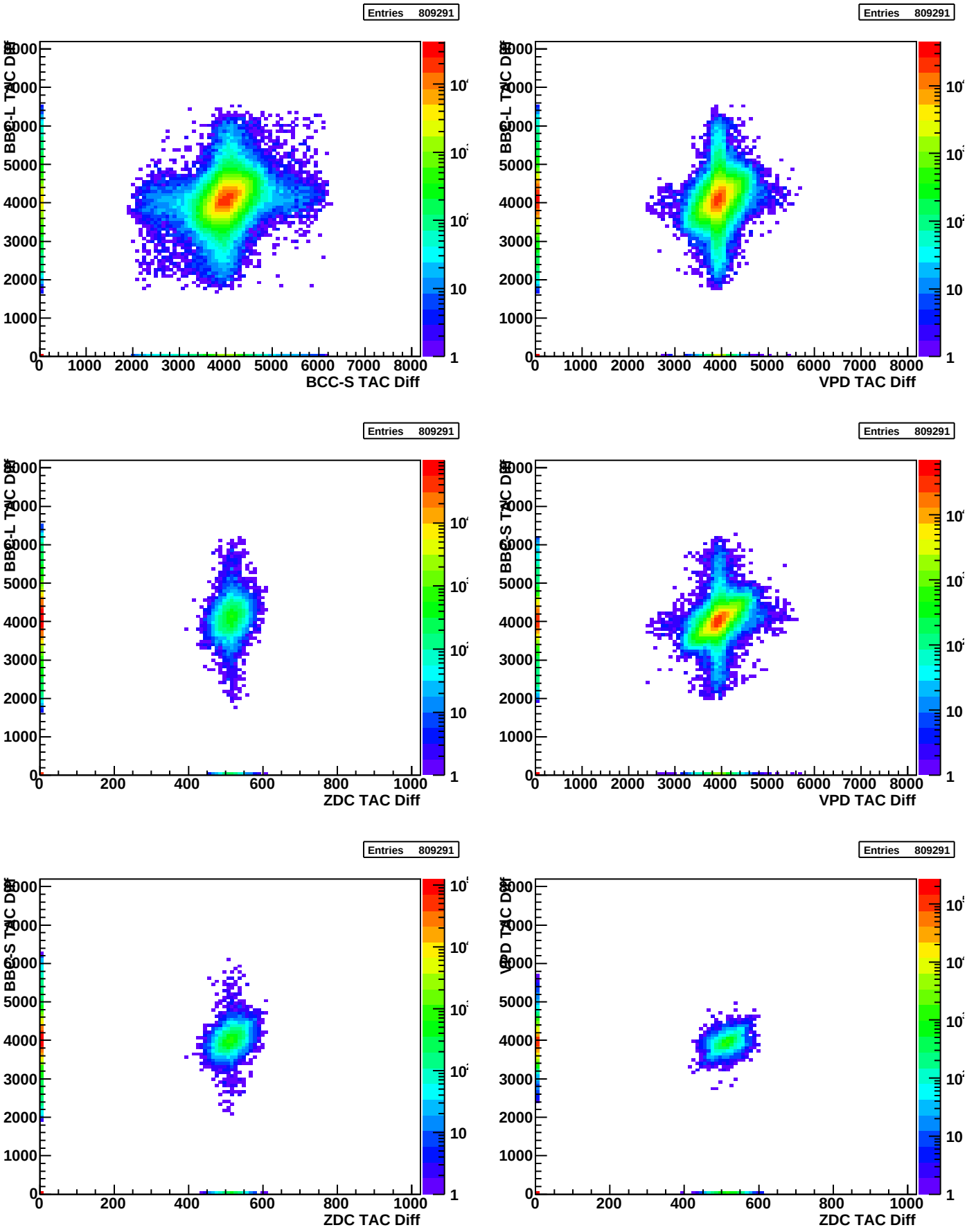

Entries 809291
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

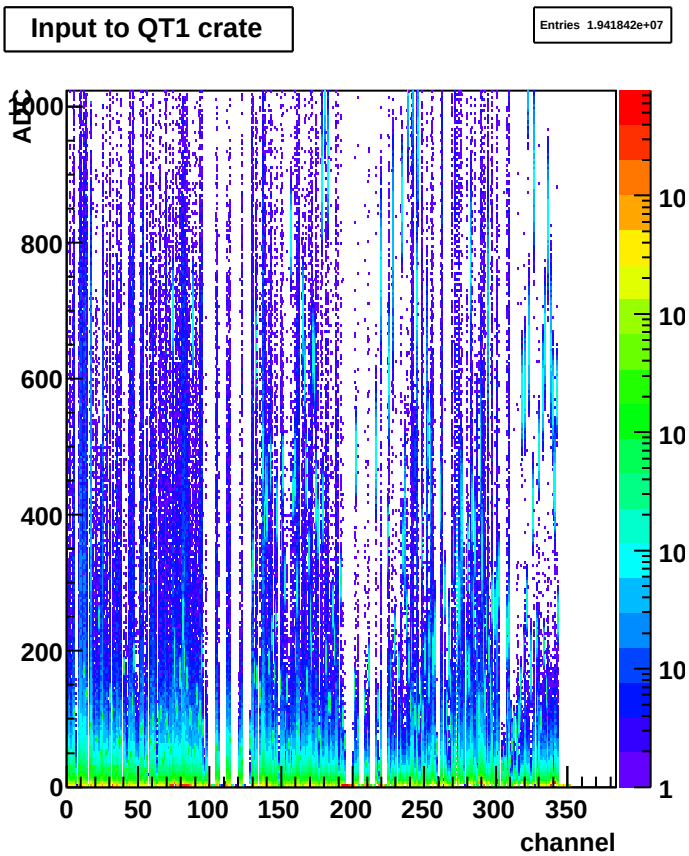

Entries 809291
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

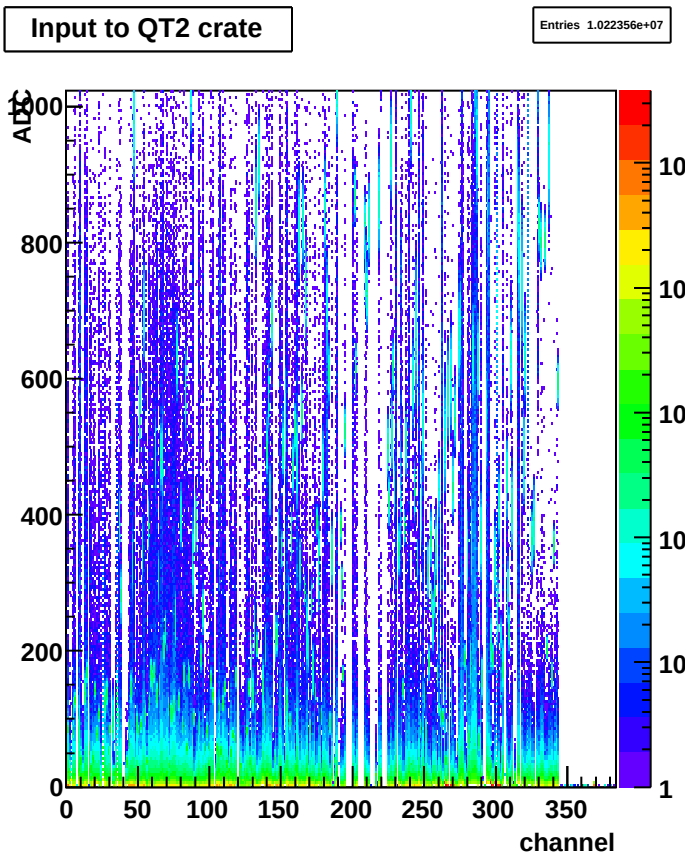

Entries 809291
BBC-L-East ADC Sum
BBC-L-West ADC Sum

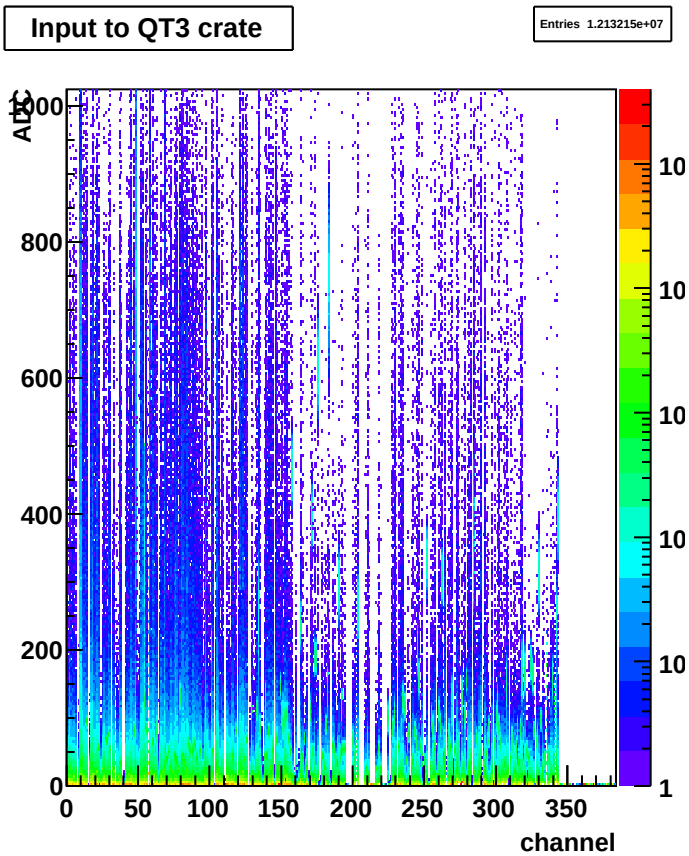

Entries 809291
BBC-S-East ADC Sum
BBC-S-West ADC Sum

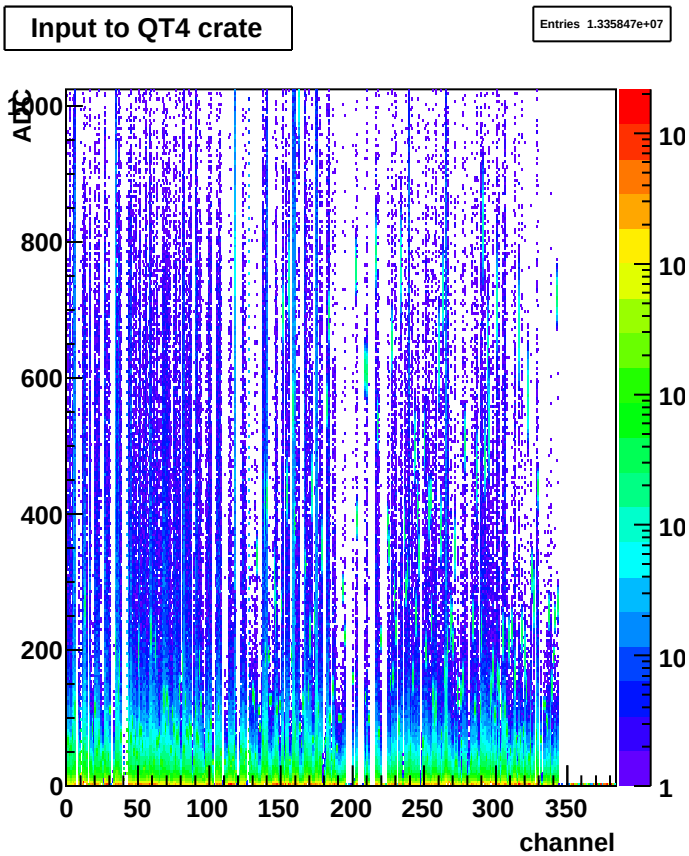

Entries 809291
ZDC East ADC Sum Att
ZDC West ADC Sum Att

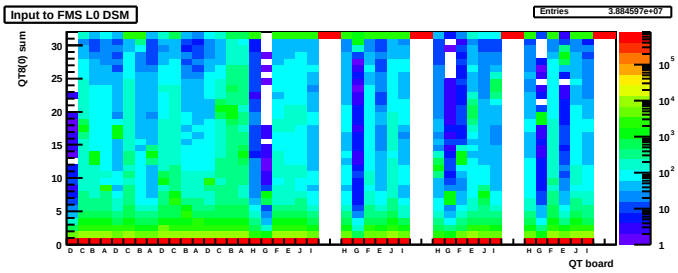

Entries 809291
BBC-L TAC Diff
BCC-S TAC Diff
Entries 809291
BBC-L TAC Diff
VPD TAC Diff
Entries 809291
BBC-L TAC Diff
ZDC TAC Diff
Entries 809291
BBC-S TAC Diff
VPD TAC Diff
Entries 809291
BBC-S TAC Diff
ZDC TAC Diff
Entries 809291
VPD TAC Diff
ZDC TAC Diff

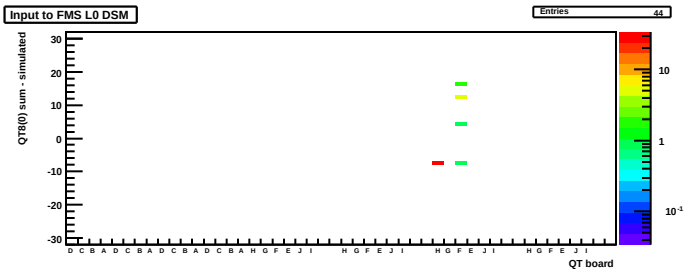

Input to QT1 crate
Entries 1.941842e+07
ADC
channel

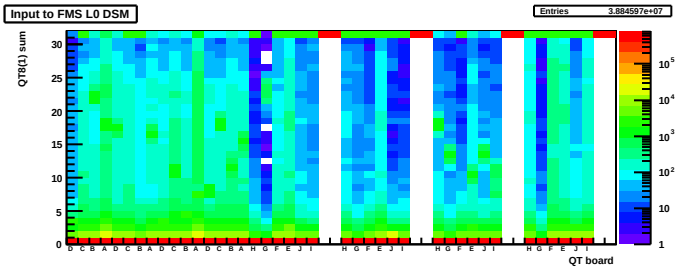

Input to QT2 crate
Entries 1.022356e+07
ADC
channel

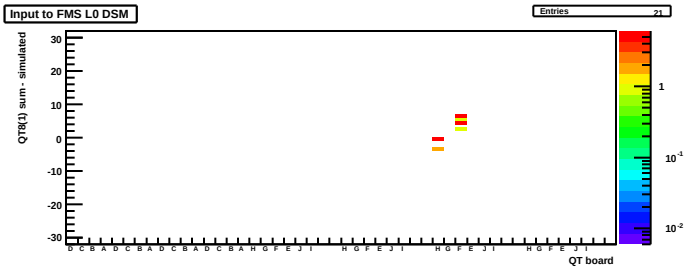

Input to QT3 crate
Entries 1.213215e+07
ADC
channel

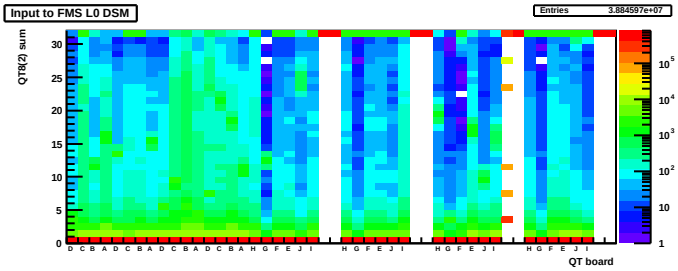

Input to QT4 crate
Entries 1.335847e+07
ADC
channel

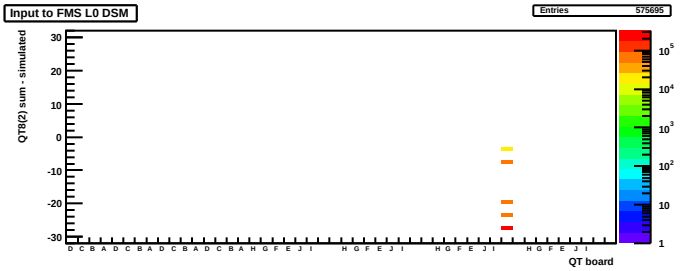

Input to FMS L0 DSM
Entries 3.884597e+07
QT8(0) sum
QT board

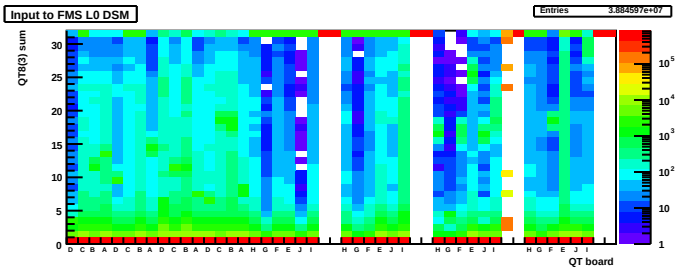

Input to FMS L0 DSM
Entries 44
QT8(0) sum - simulated
QT board

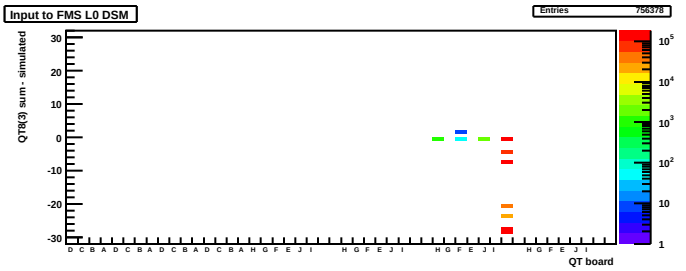

Input to FMS L0 DSM
Entries 3.884597e+07
QT8(1) sum
QT board

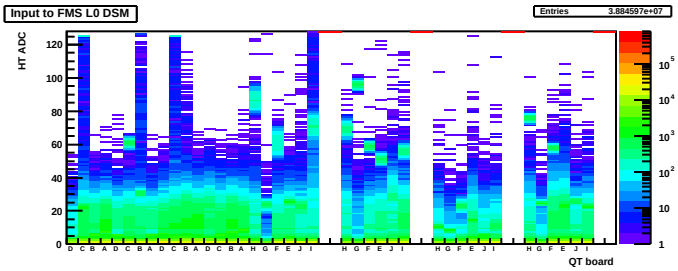

Input to FMS L0 DSM
Entries 21
QT8(1) sum - simulated
QT board

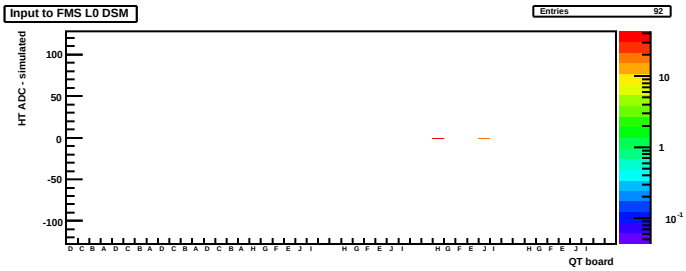

Input to FMS L0 DSM
Entries 3.884597e+07
QT8(2) sum
QT board

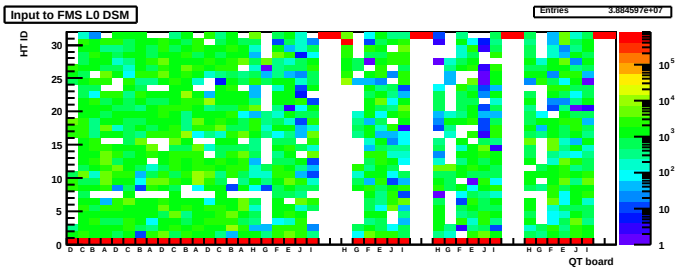

Input to FMS L0 DSM
Entries 575695
QT8(2) sum - simulated
QT board

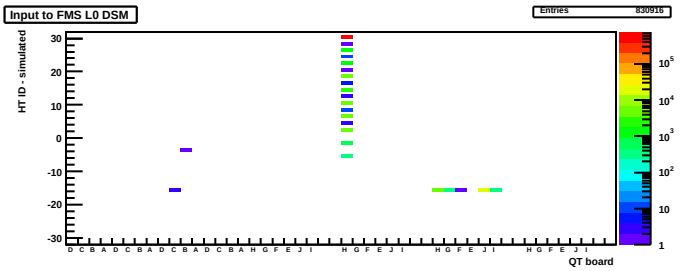

Input to FMS L0 DSM
Entries 3.884597e+07
QT8(3) sum
QT board

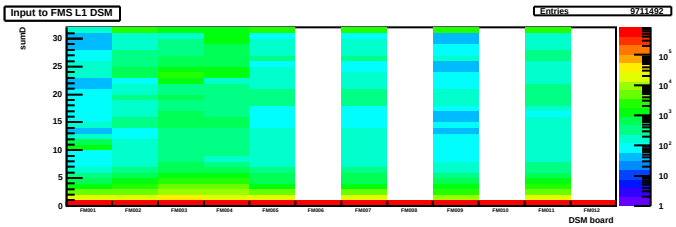

Input to FMS L0 DSM
Entries 756378
QT8(3) sum - simulated
QT board

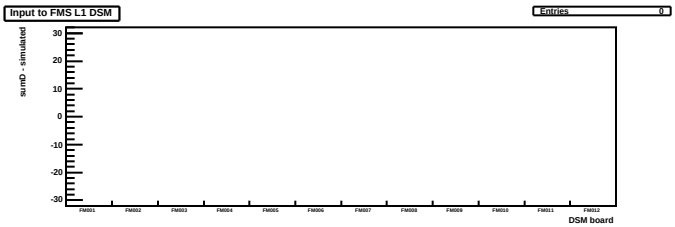

Input to FMS L0 DSM
Entries 3.884597e+07
HT ADC
QT board

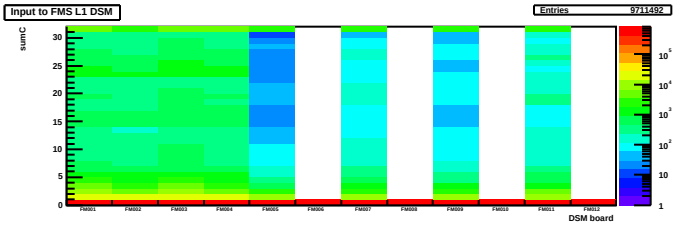

Input to FMS L0 DSM
Entries 92
HT ADC - simulated
QT board

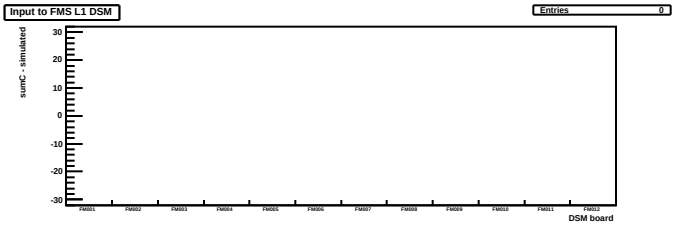

Input to FMS L0 DSM
Entries 3.884597e+07
HT ID
QT board

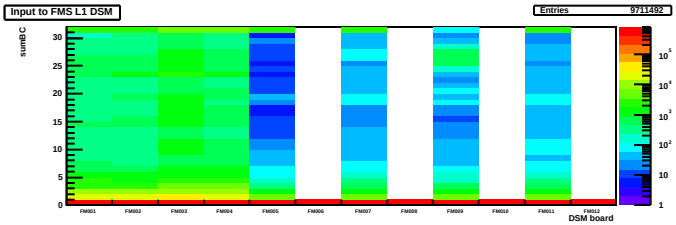

Input to FMS L0 DSM
Entries 830916
HT ID - simulated
QT board

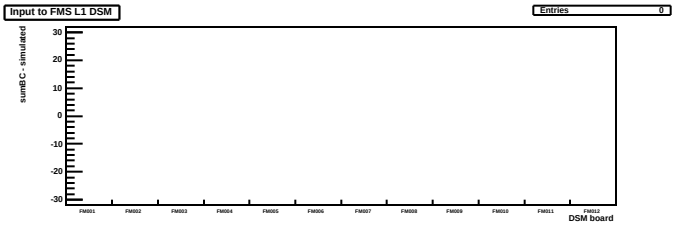

Input to FMS L1 DSM
Entries 9711492
sumD
DSM board

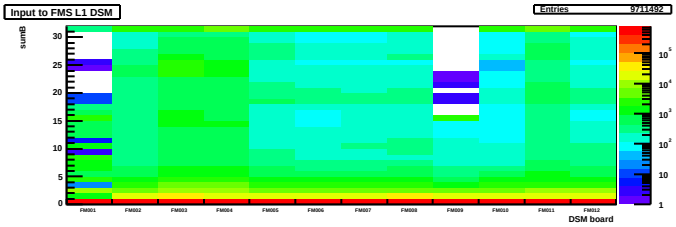

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

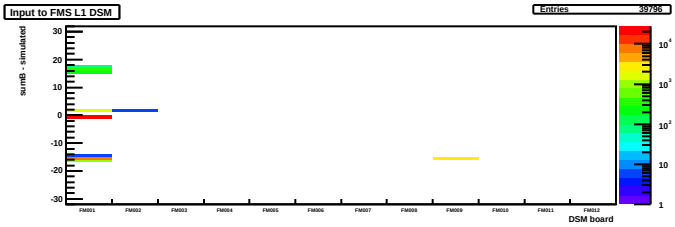

Input to FMS L1 DSM
Entries 9711492
sumC
DSM board

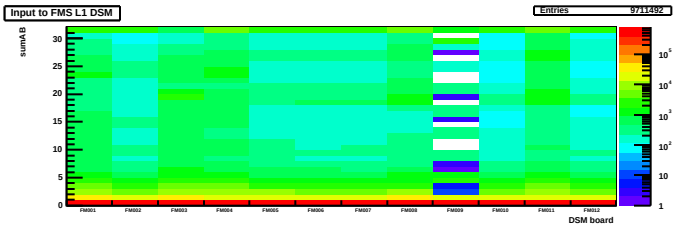

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

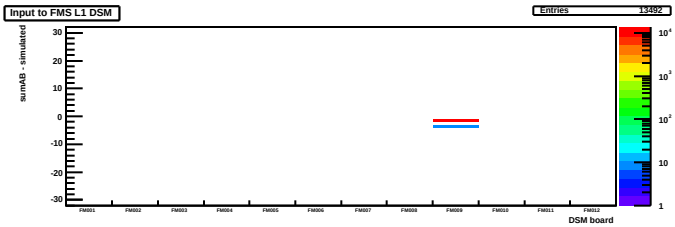

Input to FMS L1 DSM
Entries 9711492
sumBC
DSM board

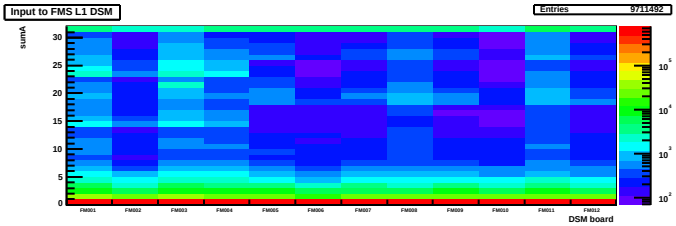

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

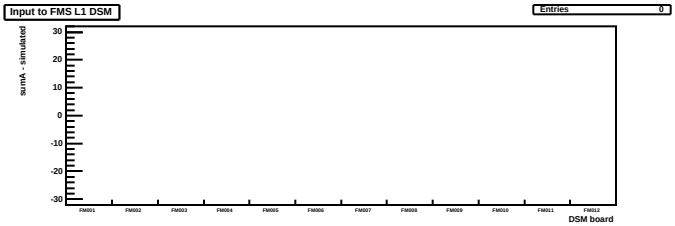

Input to FMS L1 DSM
Entries 9711492
sumB
DSM board

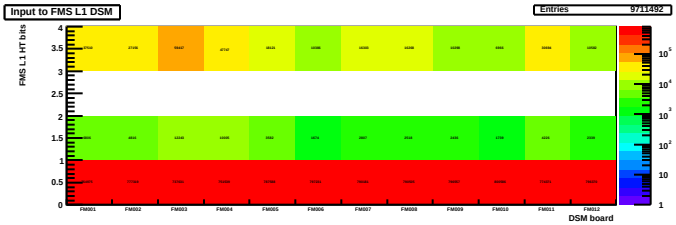

Input to FMS L1 DSM
Entries 39796
sumB - simulated
DSM board

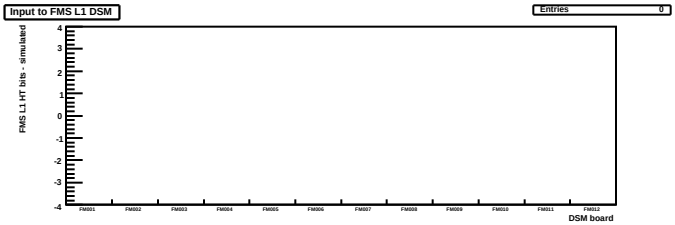

Input to FMS L1 DSM
Entries 9711492
sumAB
DSM board

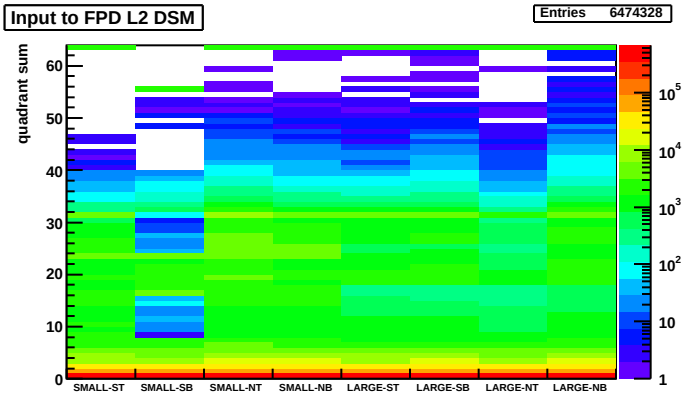

Input to FMS L1 DSM
Entries 13492
sumAB - simulated
DSM board

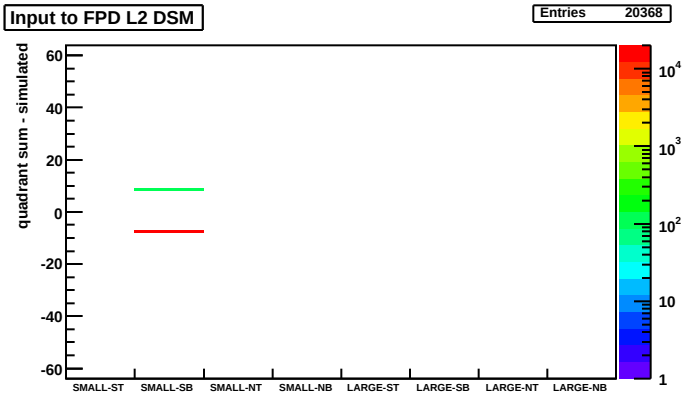

Input to FMS L1 DSM
Entries 9711492
sumA
DSM board

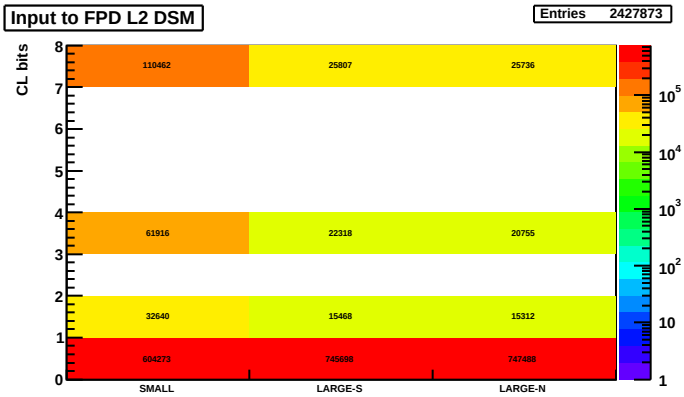

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

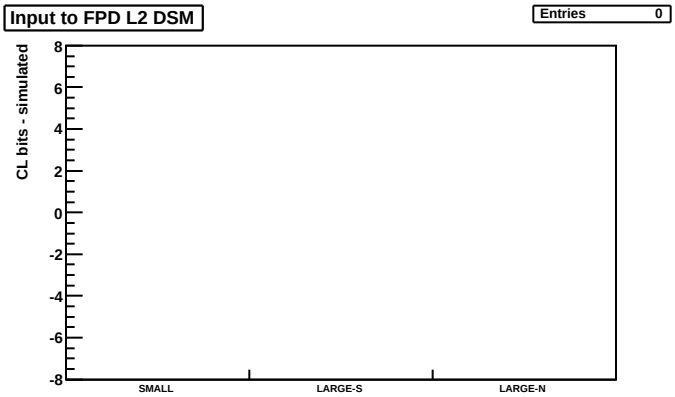

Input to FMS L1 DSM
Entries 9711492
FMS L1 HT bits
DSM board

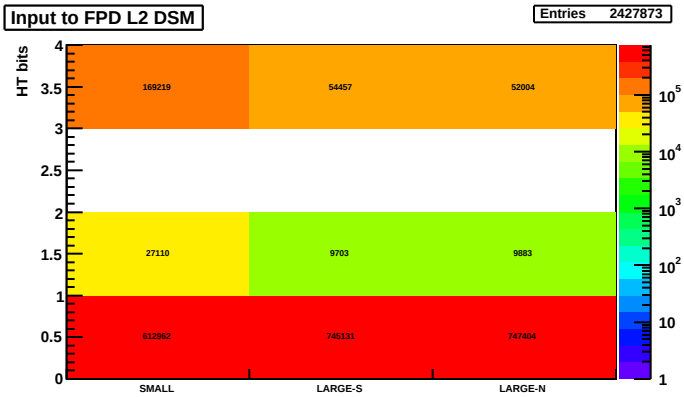

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

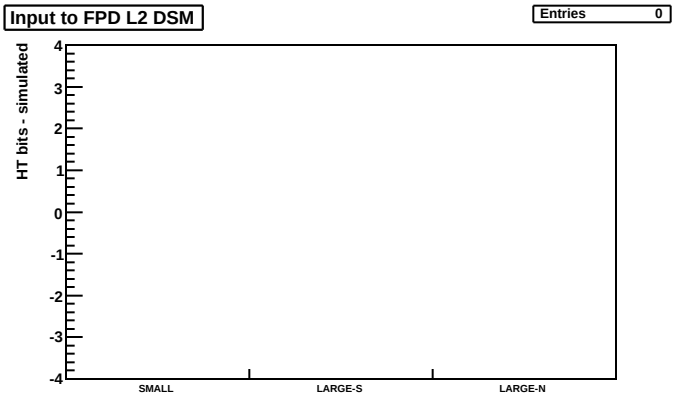

Input to FPD L2 DSM
Entries 6474328
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

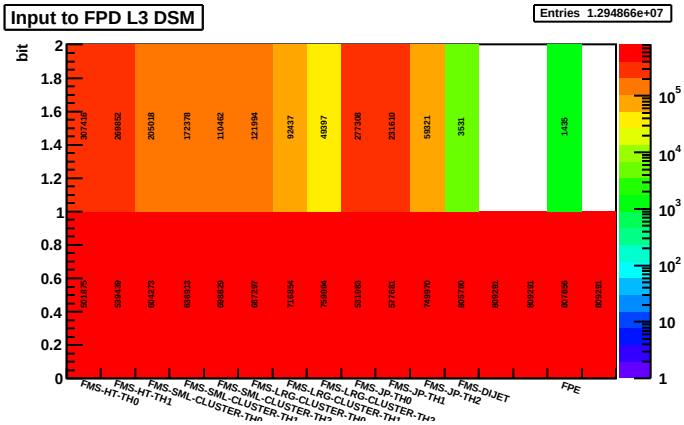

Input to FPD L2 DSM
Entries 20368
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

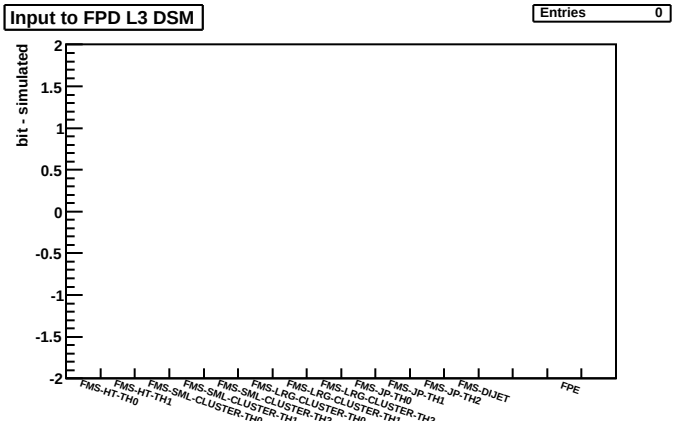

Input to FPD L2 DSM
Entries 2427873
CL bits
110462
25807
25736
61916
22318
20755
32640
15468
15312
604273
745698
747488
SMALL
LARGE-S
LARGE-N

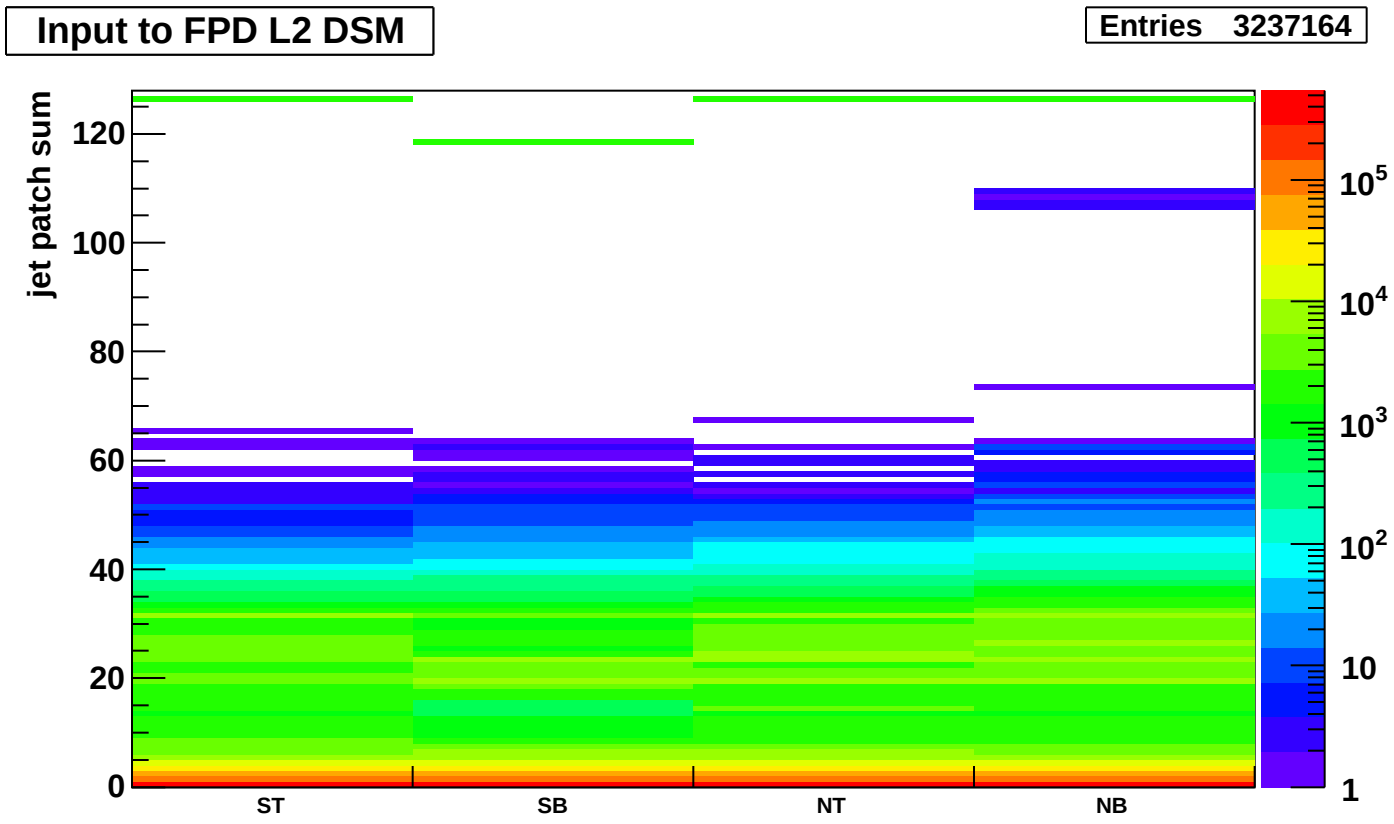

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

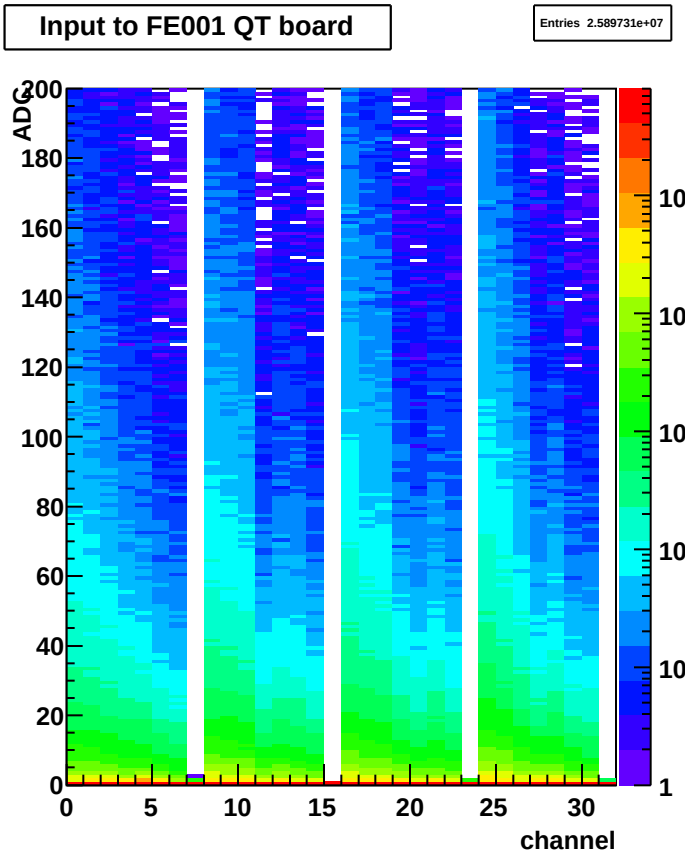

Input to FPD L2 DSM
Entries 2427873
HT bits
169219
54457
52004
27110
9703
9883
612962
745131
747404
SMALL
LARGE-S
LARGE-N

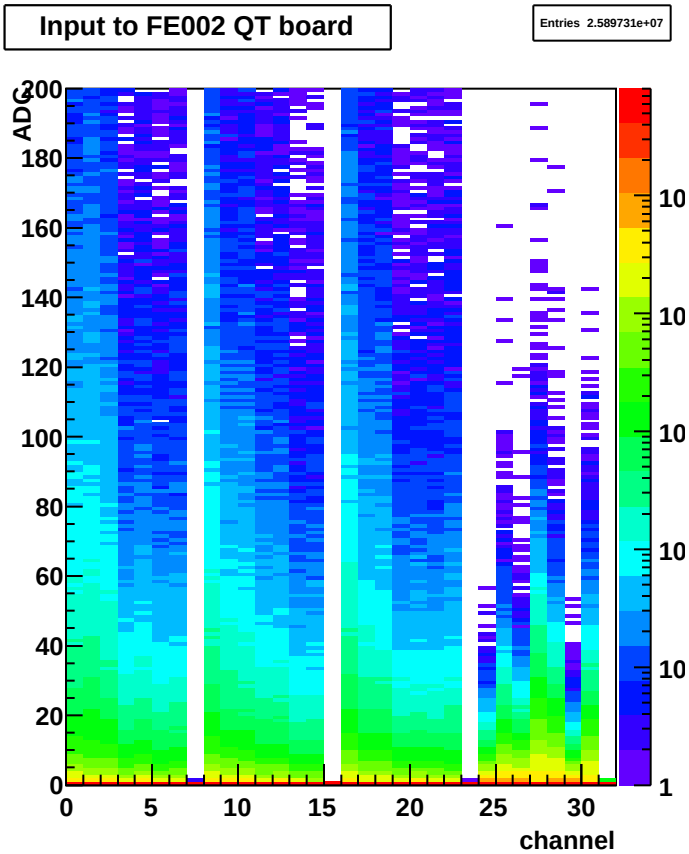

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

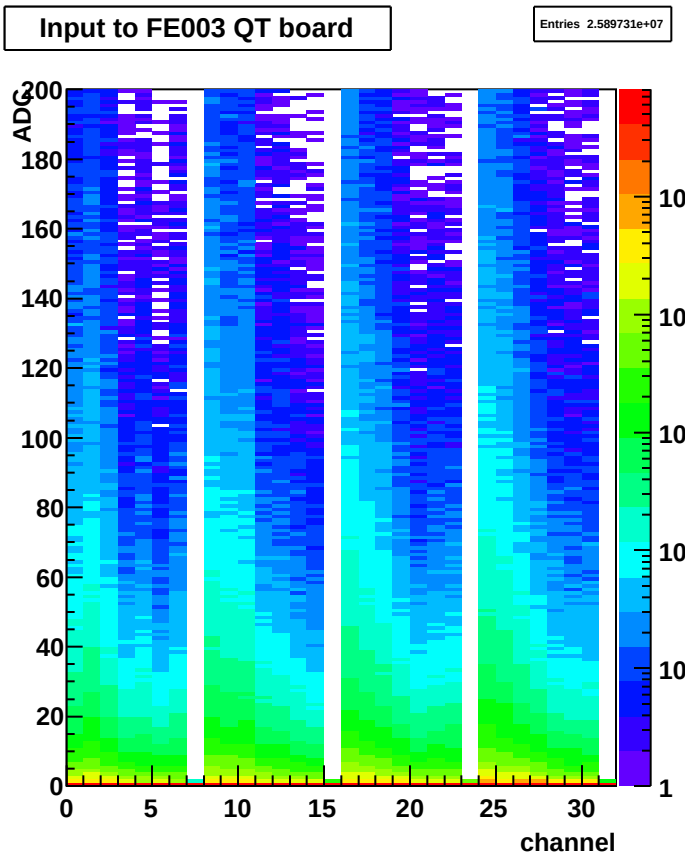

Input to FPD L3 DSM
Entries 1.294866e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

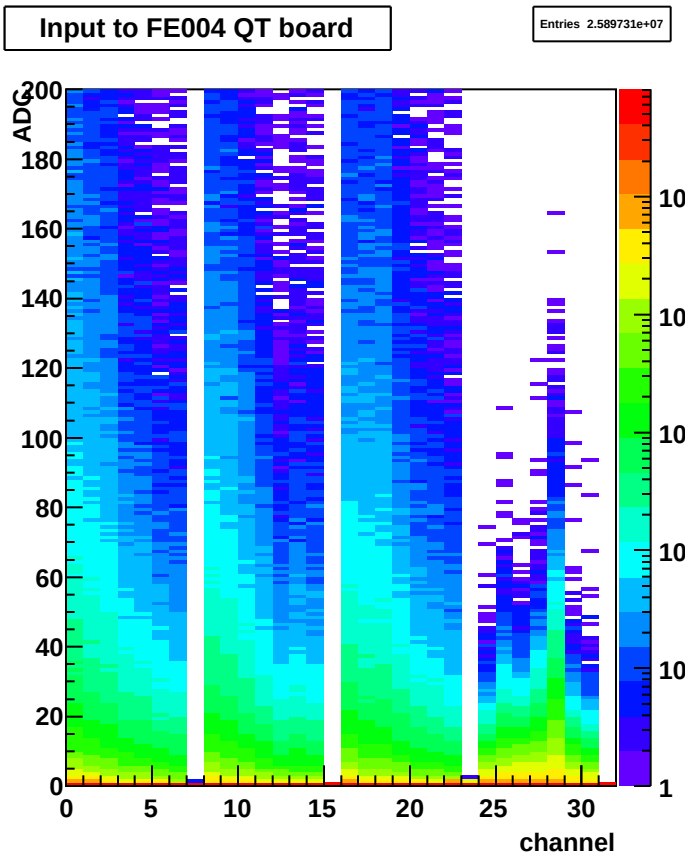

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

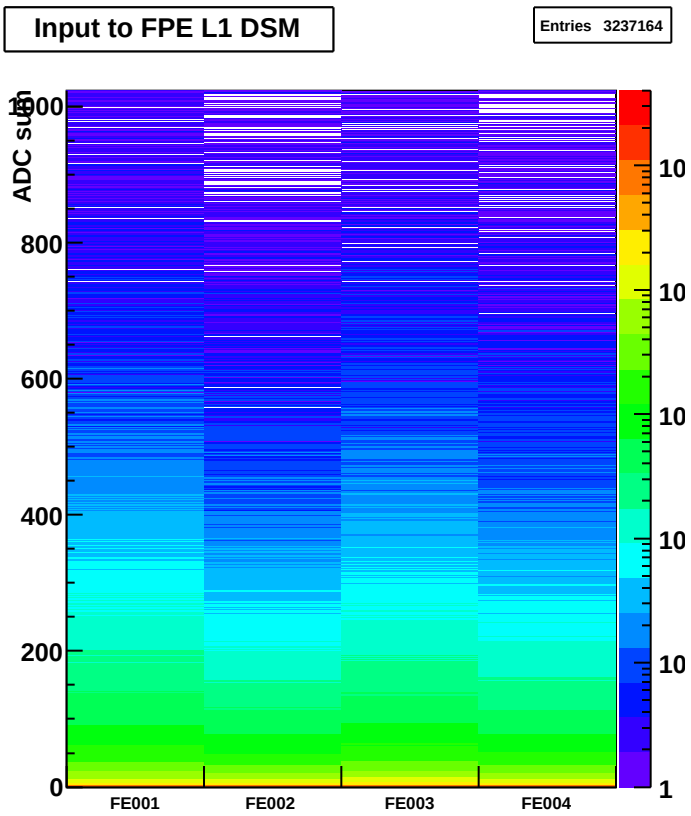

Input to FPD L2 DSM
Entries 3237164
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

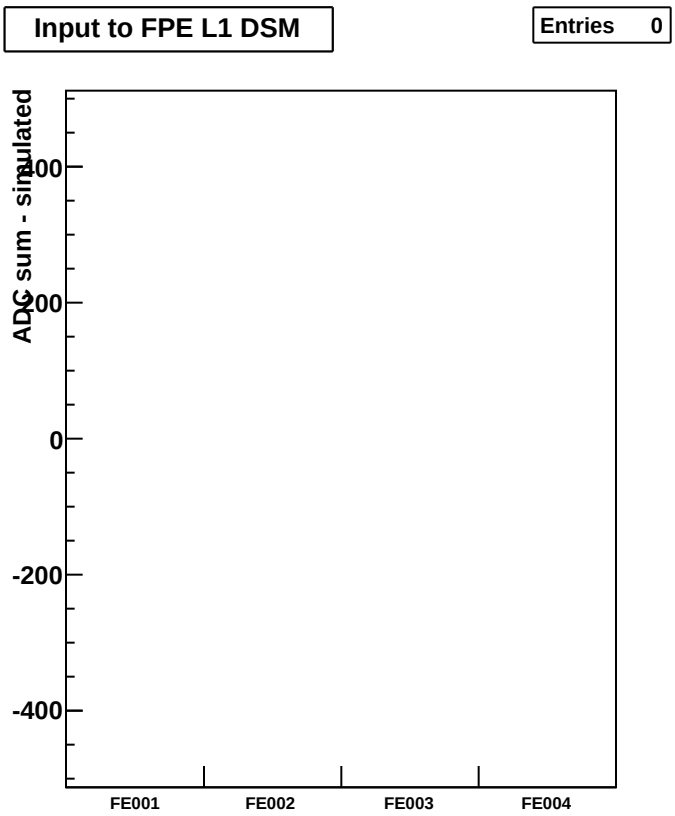

Input to FE001 QT board
Entries 2.589731e+07
ADC
channel

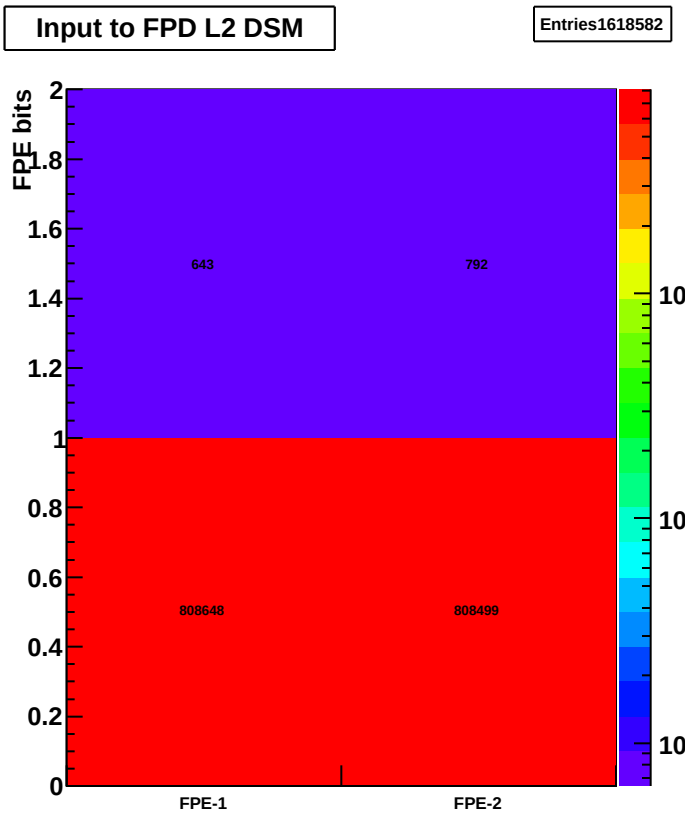

Input to FE002 QT board
Entries 2.589731e+07
ADC
channel

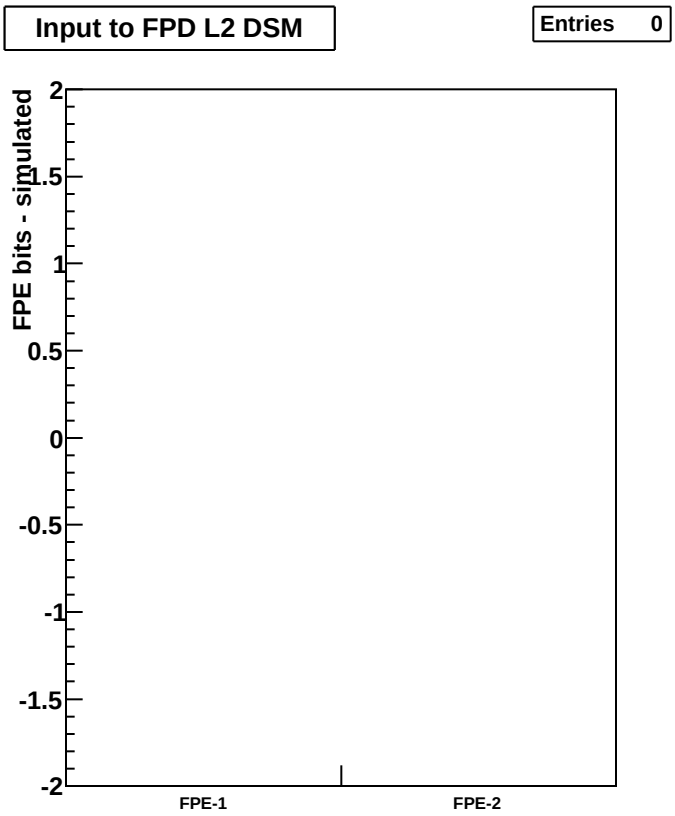

Input to FE003 QT board
Entries 2.589731e+07
ADC
channel


Input to FE004 QT board
Entries 2.589731e+07
ADC
channel


Input to FPE L1 DSM
Entries 3237164
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


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


Input to FPD L2 DSM
Entries1618582
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
643
792
808648
808499
FPE-1
FPE-2
10
10
10


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