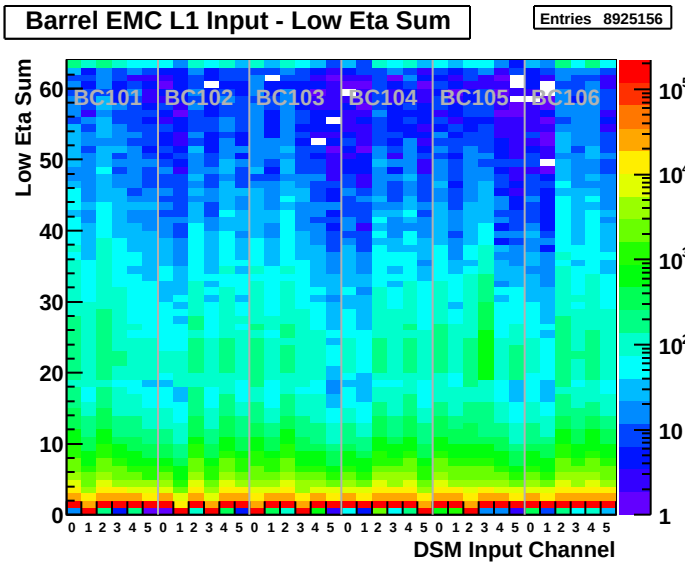
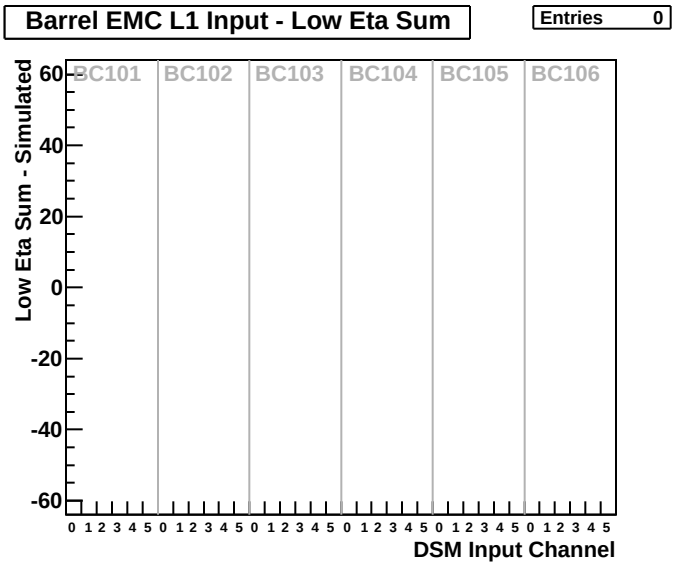
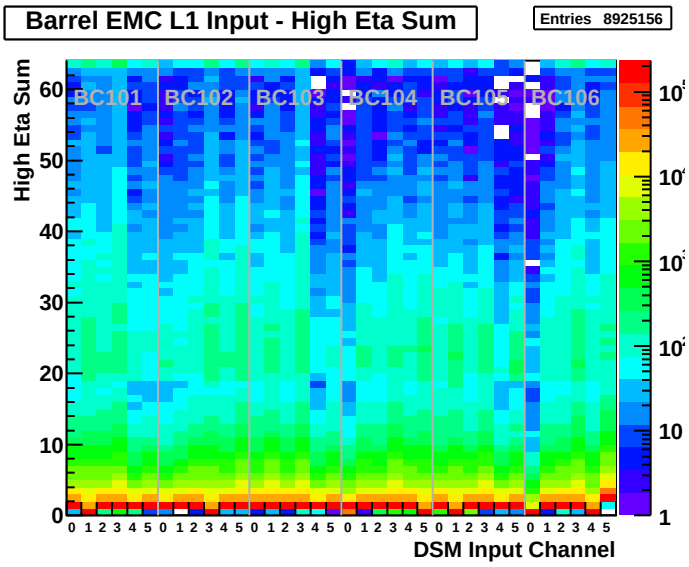
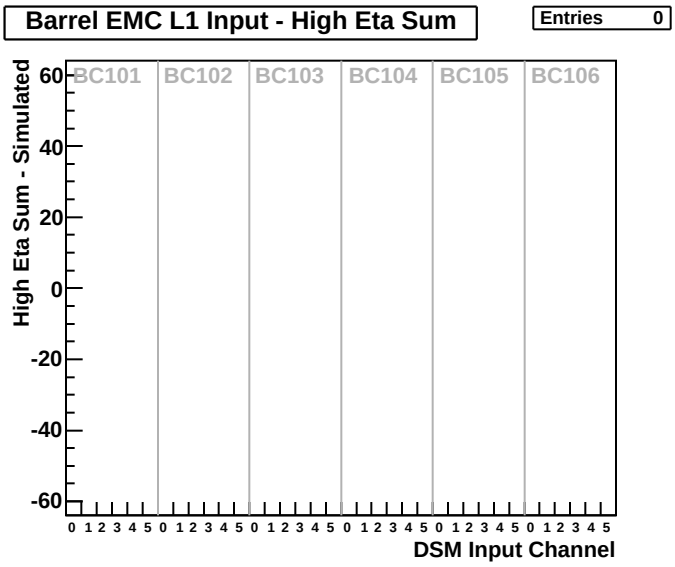
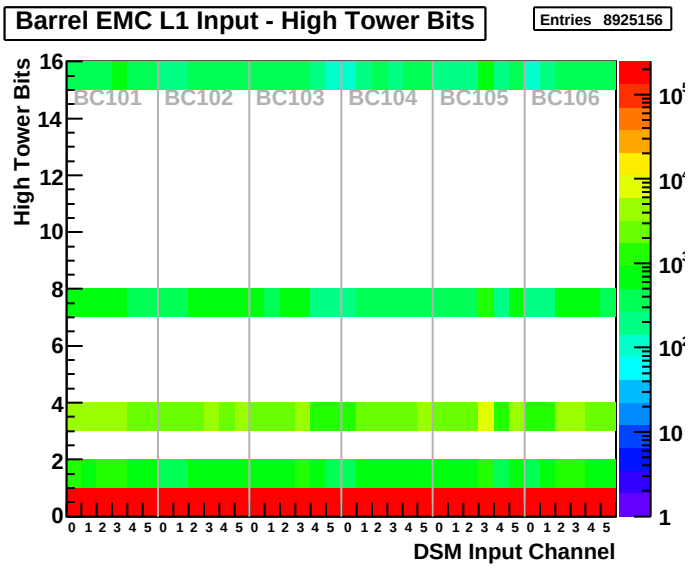
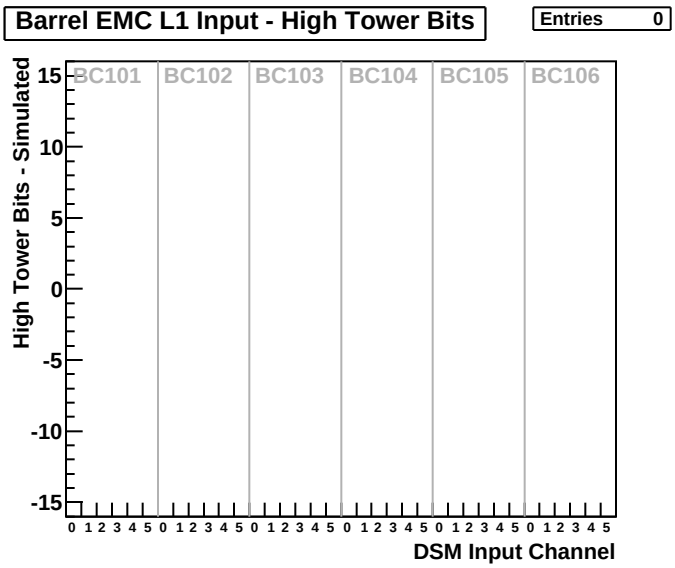

Barrel EMC L1 Input - Low Eta Sum
Entries 8925156
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

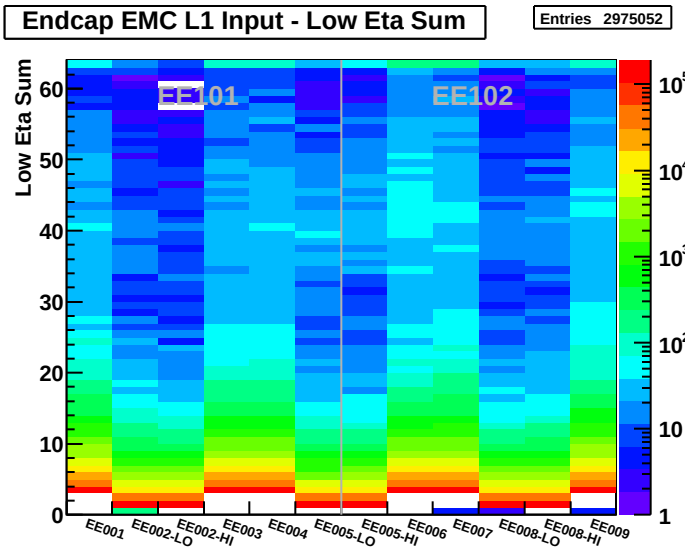

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

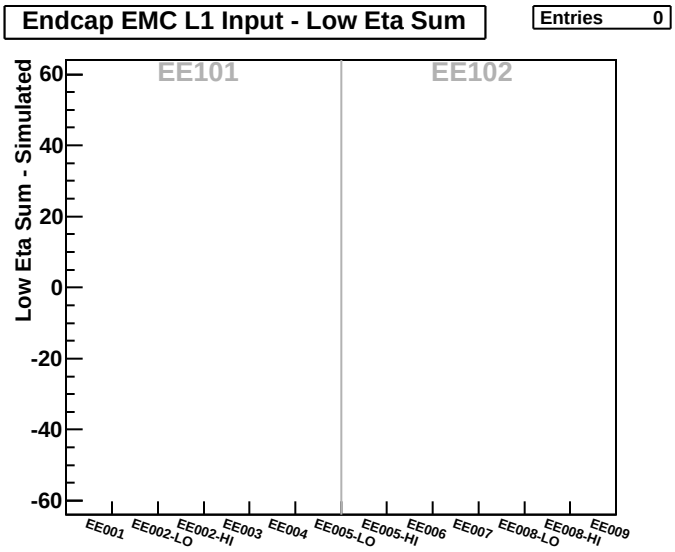

Barrel EMC L1 Input - High Eta Sum
Entries 8925156
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

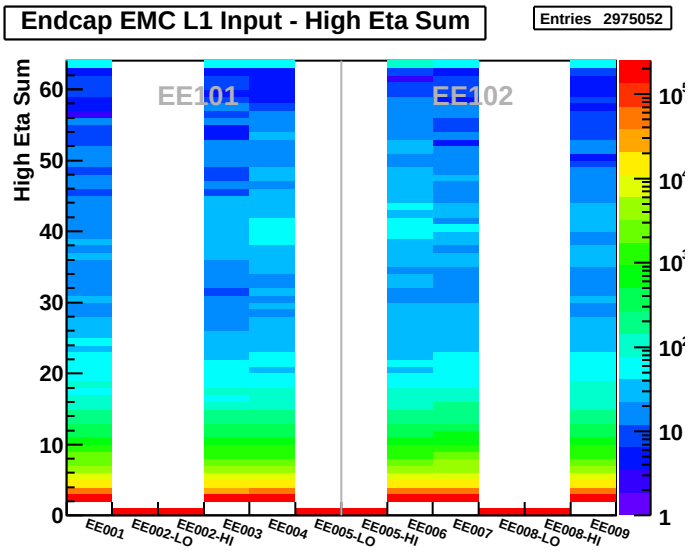

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

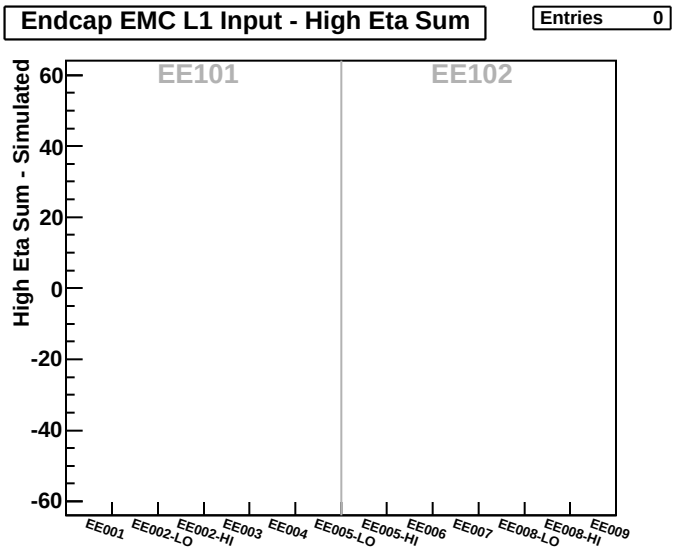

Barrel EMC L1 Input - High Tower Bits
Entries 8925156
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

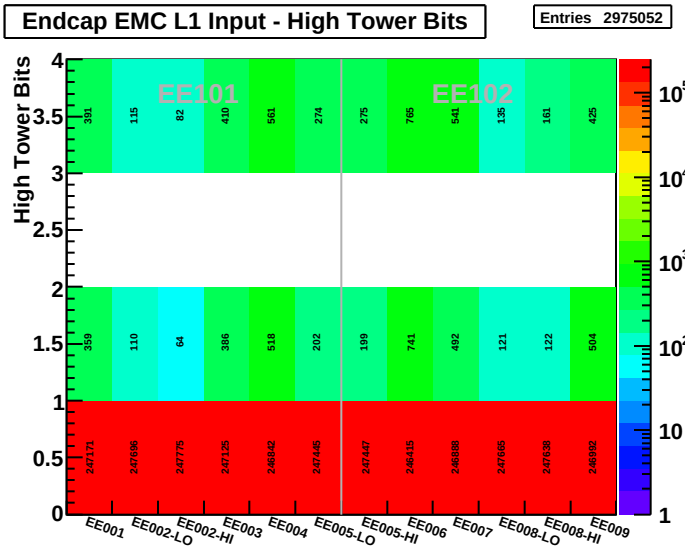

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

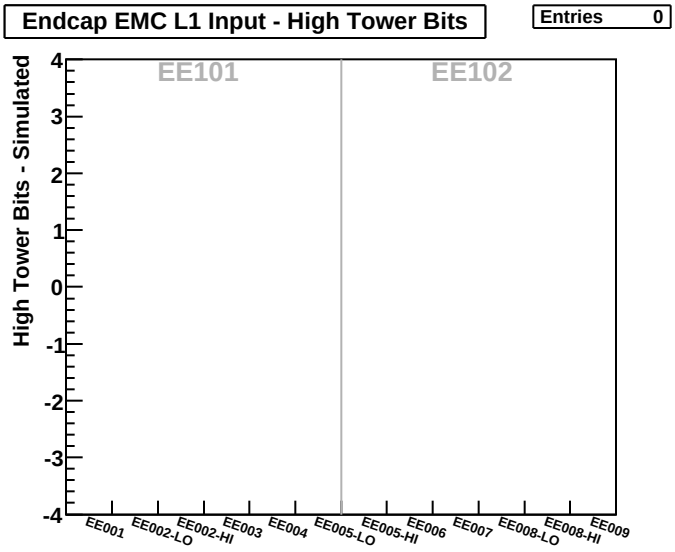

Endcap EMC L1 Input - Low Eta Sum
Entries 2975052
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

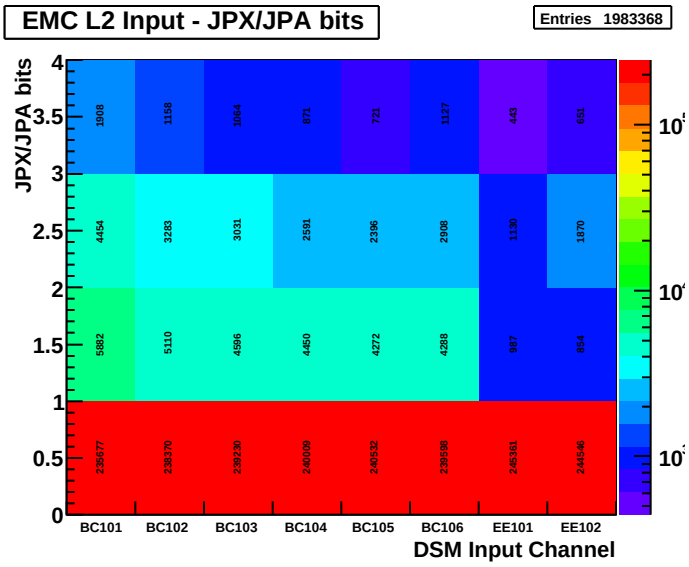

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

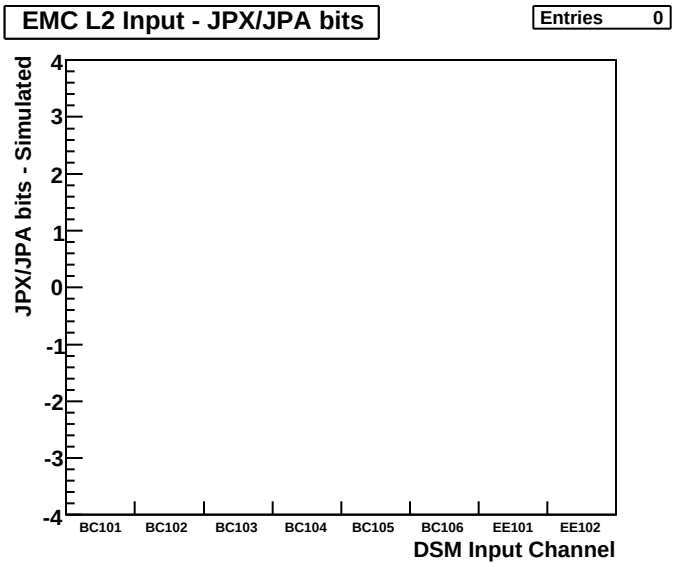

Endcap EMC L1 Input - High Eta Sum
Entries 2975052
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

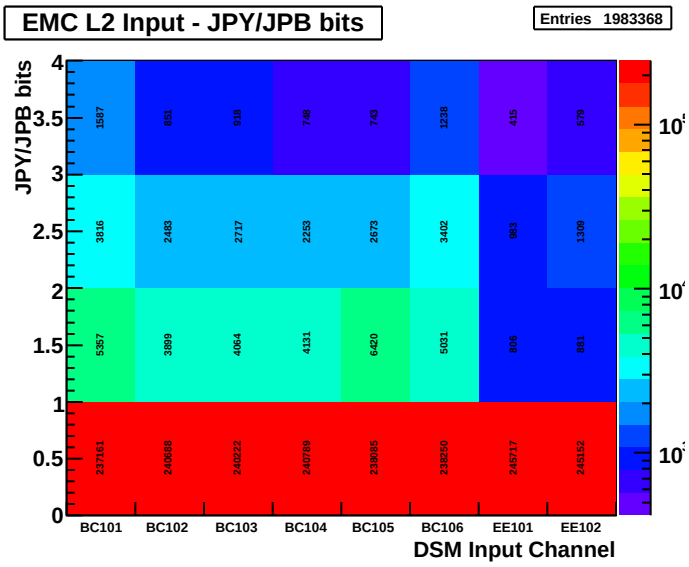

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

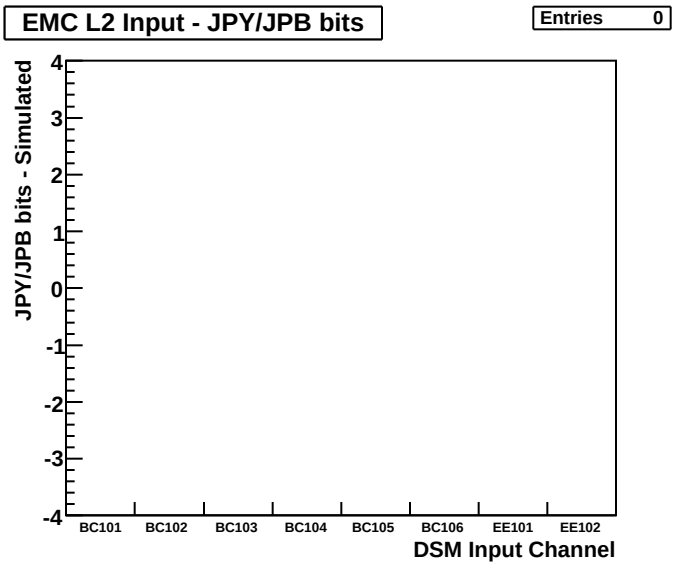

Endcap EMC L1 Input - High Tower Bits
Entries 2975052
High Tower Bits
EE101
EE102
391 115 82 410 561 274 275 765 541 135 161 425
359 110 64 386 518 202 199 741 492 121 122 504
247171 247696 247775 247125 246942 247445 247447 246415 246888 247665 247638 246992
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

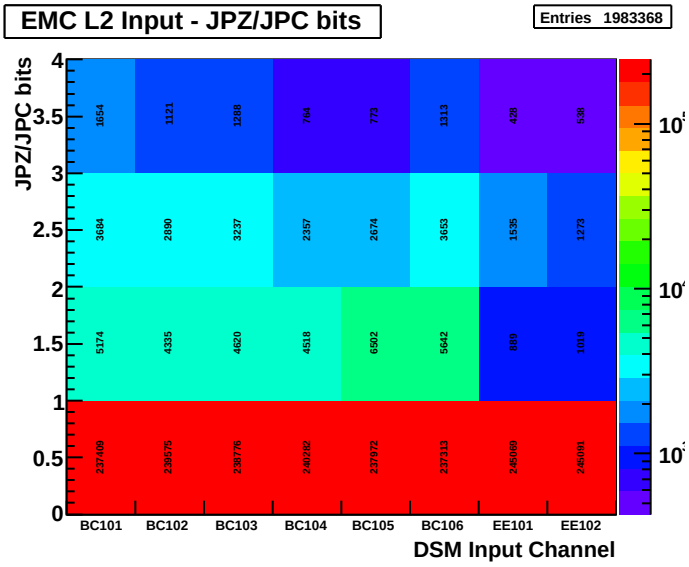

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

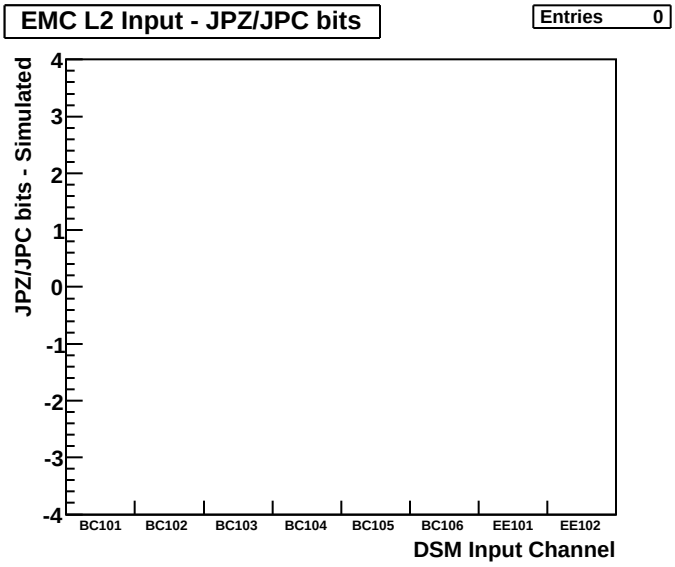

EMC L2 Input - JPX/JPA bits
Entries 1983368
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1908 1158 1064 871 721 1127 443 651
4454 3283 3031 2591 2396 2908 1130 1870
5882 5110 4596 4450 4272 4288 987 854
235677 238370 239230 240009 240532 239598 245361 244546

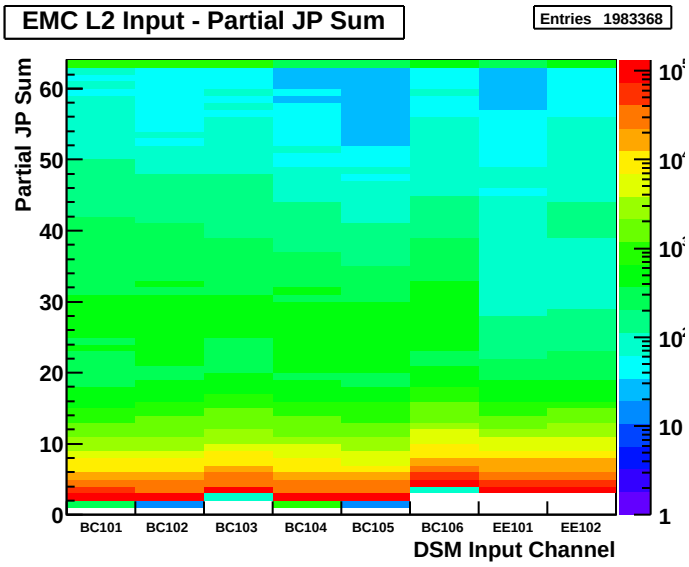

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

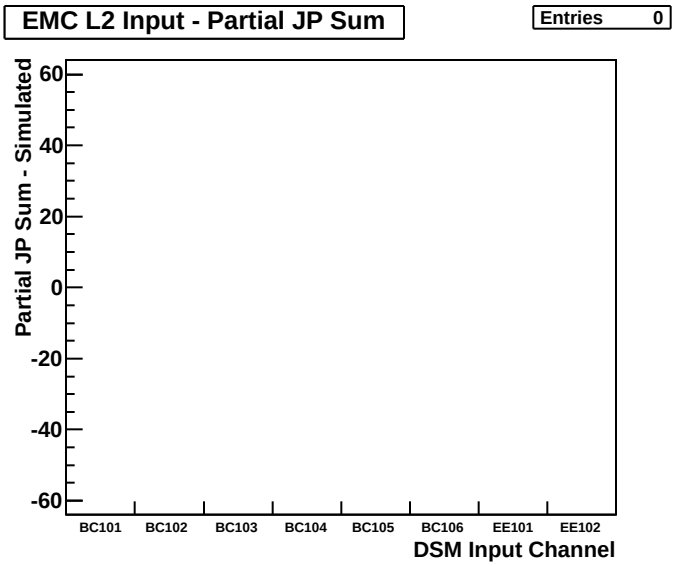

EMC L2 Input - JPY/JPB bits
Entries 1983368
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1587 851 918 748 743 1238 415 578
3816 2483 2717 2253 2673 3402 983 1309
5357 3899 4064 4131 6420 5031 806 831
237161 240688 240222 240789 239085 239250 245717 245152

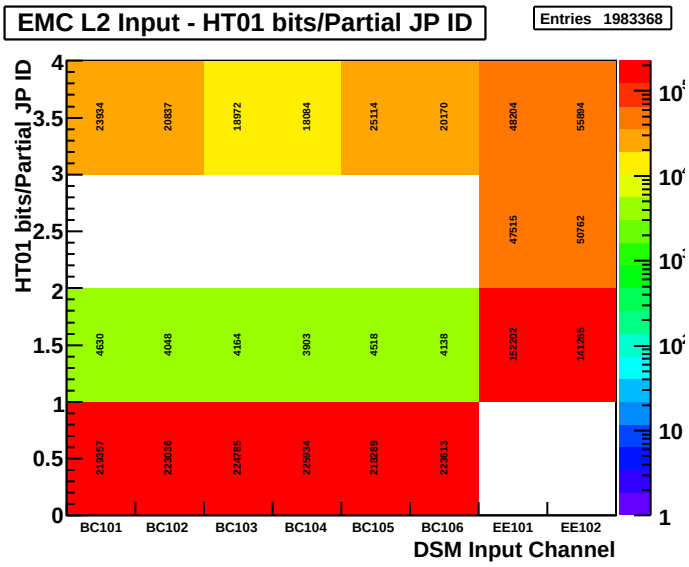

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

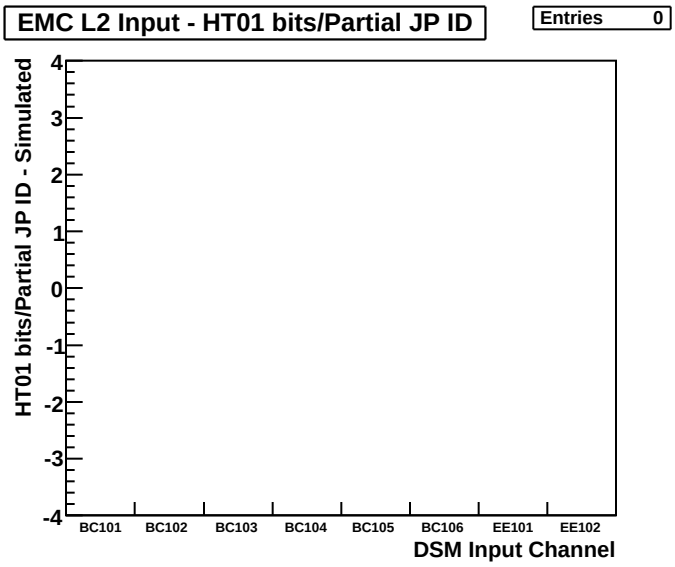

EMC L2 Input - JPZ/JPC bits
Entries 1983368
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1654 1121 1288 764 773 1313 428 538
3684 2890 3237 2357 2674 3653 1535 1273
5174 4335 4620 4518 6502 5642 889 1019
237409 239575 238776 240282 237972 237313 245089 245091

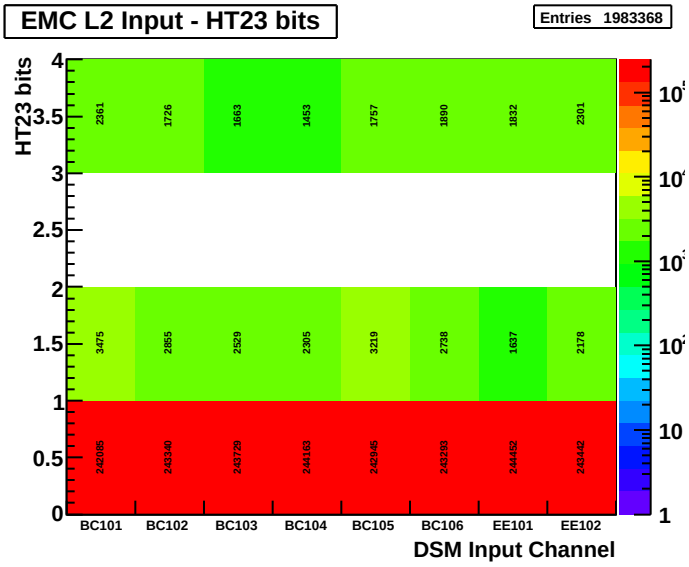

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

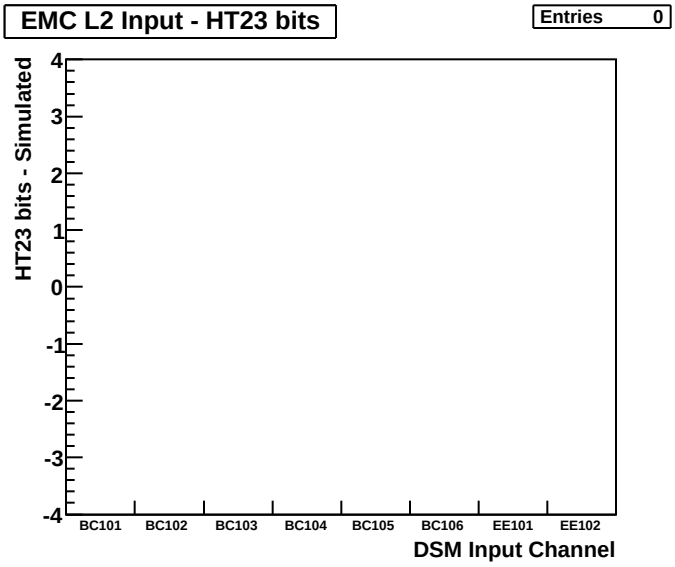

EMC L2 Input - Partial JP Sum
Entries 1983368
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

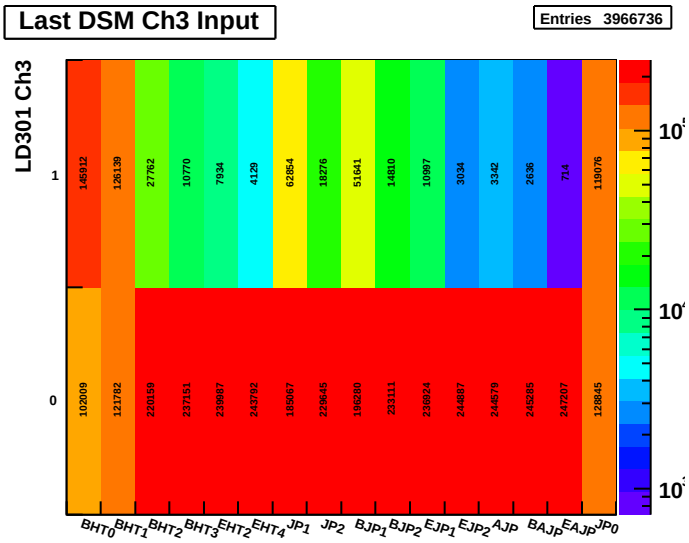

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

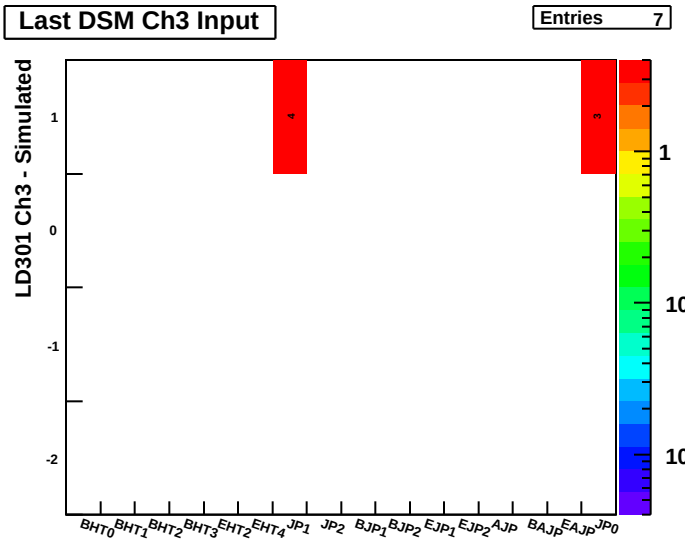

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1983368
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

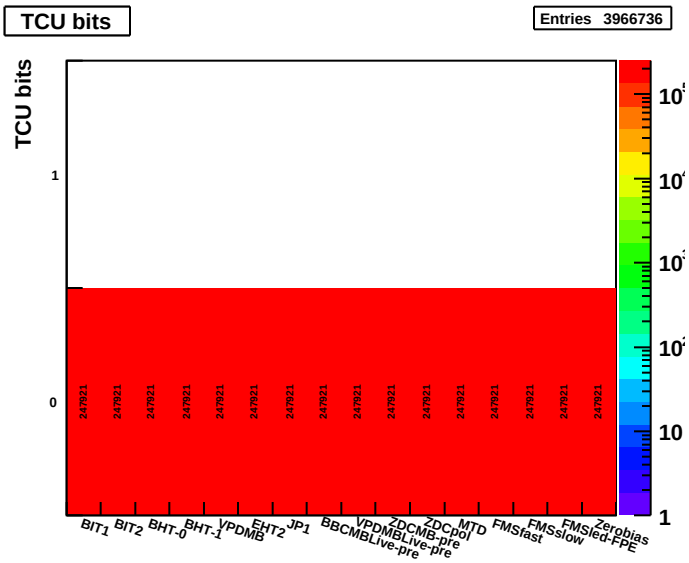

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

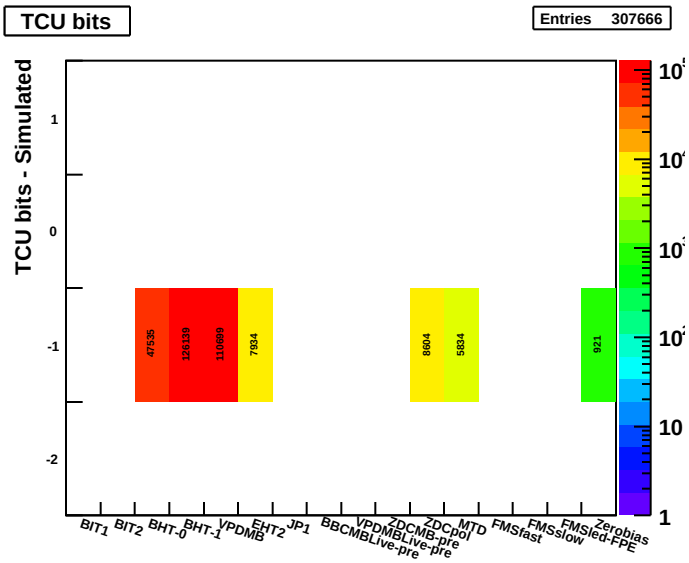

EMC L2 Input - HT23 bits
Entries 1983368
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

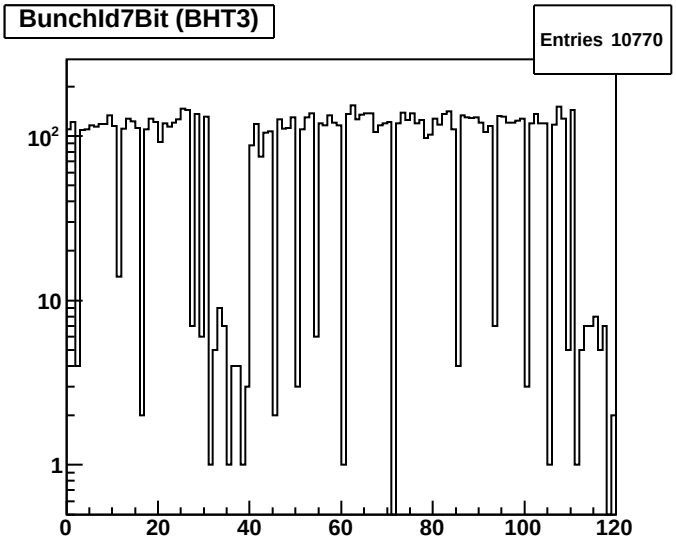

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

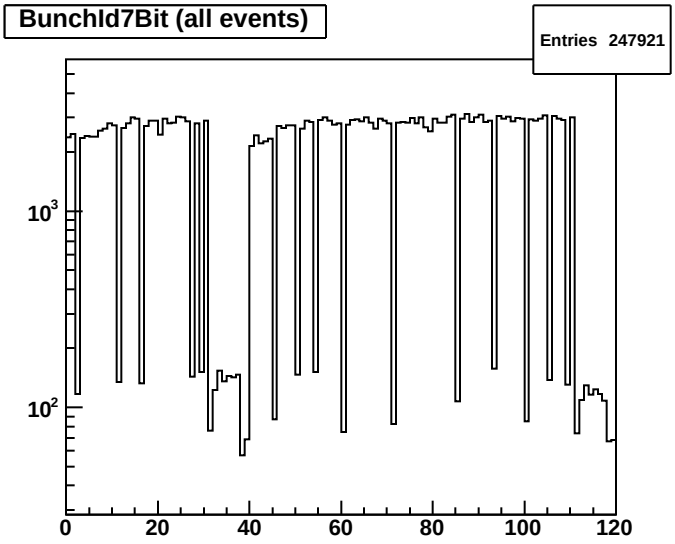

Last DSM Ch3 Input
Entries 3966736
LD301 Ch3
1
0
145912
126139
27762
10770
7934
4129
62854
18276
51641
14810
10997
3034
3342
2636
714
119076
102009
121782
220159
237151
239987
243792
185067
226645
196280
233111
236924
244837
244579
245285
247207
128845
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

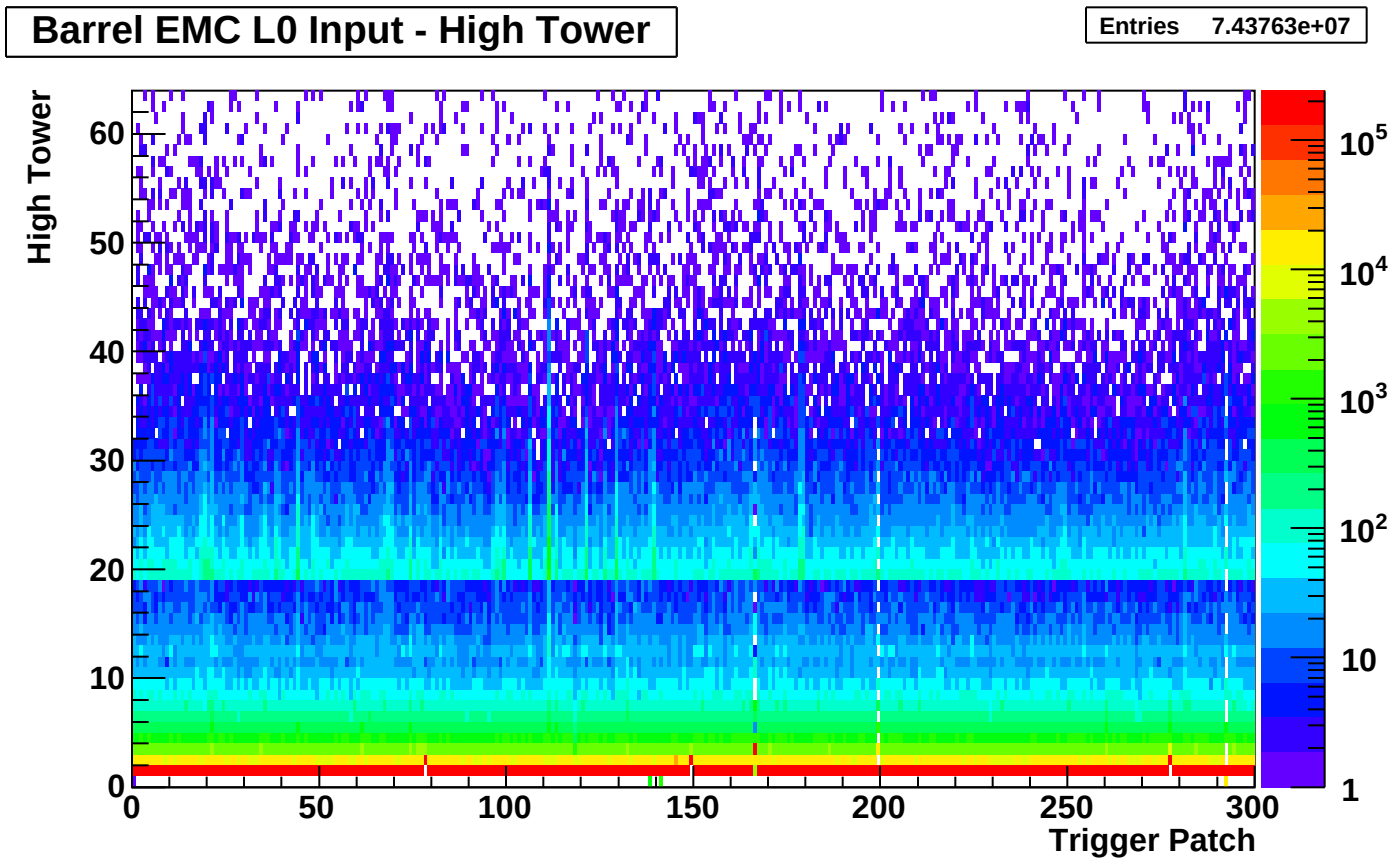

Last DSM Ch3 Input
Entries 7
LD301 Ch3 - Simulated
1
0
-1
-2
4
3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

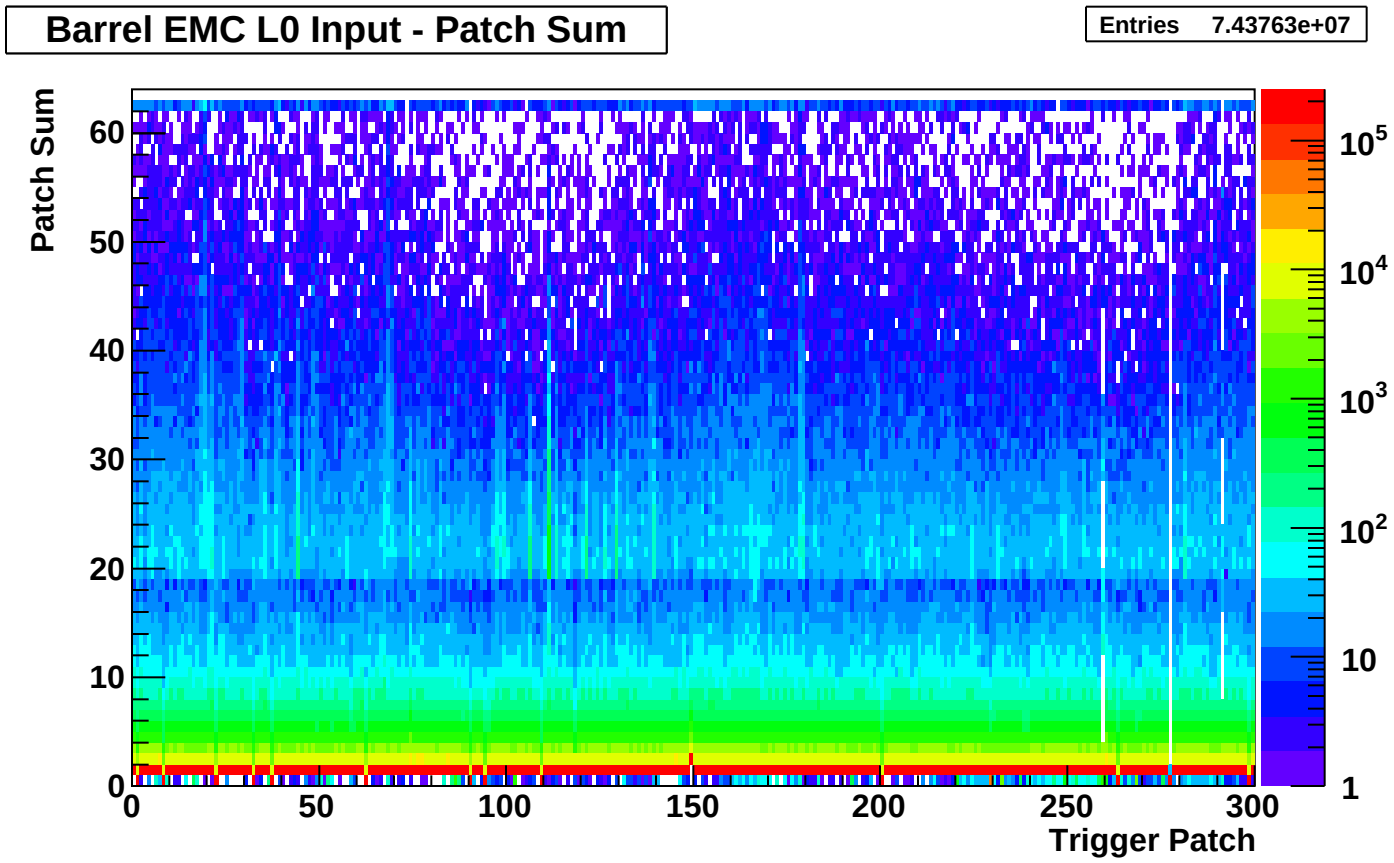

TCU bits
Entries 3966736
TCU bits
1
0
247921
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDC-pol MTD FMSfast FMSslow FMSled-FPE Zerobias

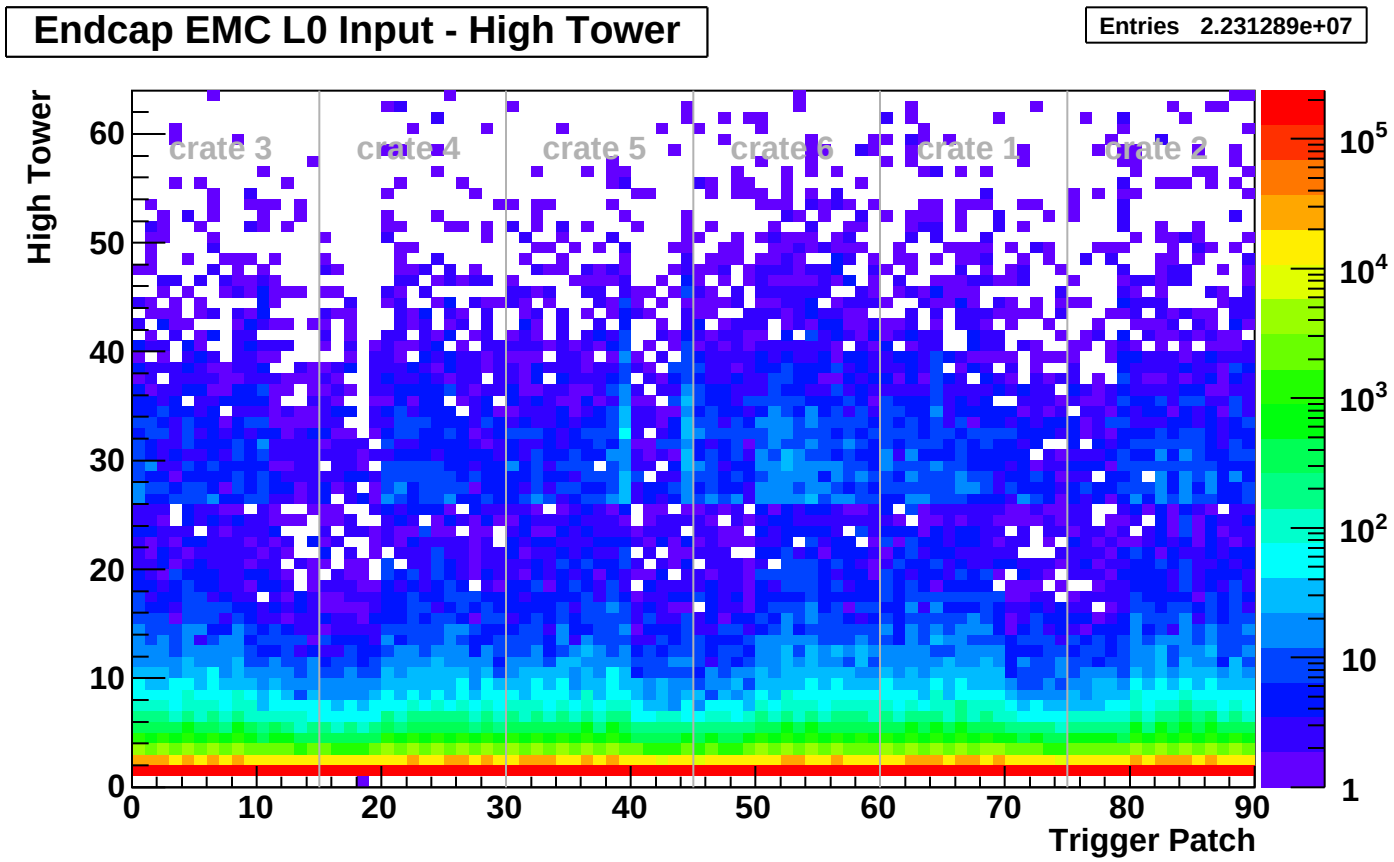

TCU bits
Entries 307666
TCU bits - Simulated
1
0
-1
-2
47535
126139
110699
7934
8604
5834
921
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDC-pol MTD FMSfast FMSslow FMSled-FPE Zerobias

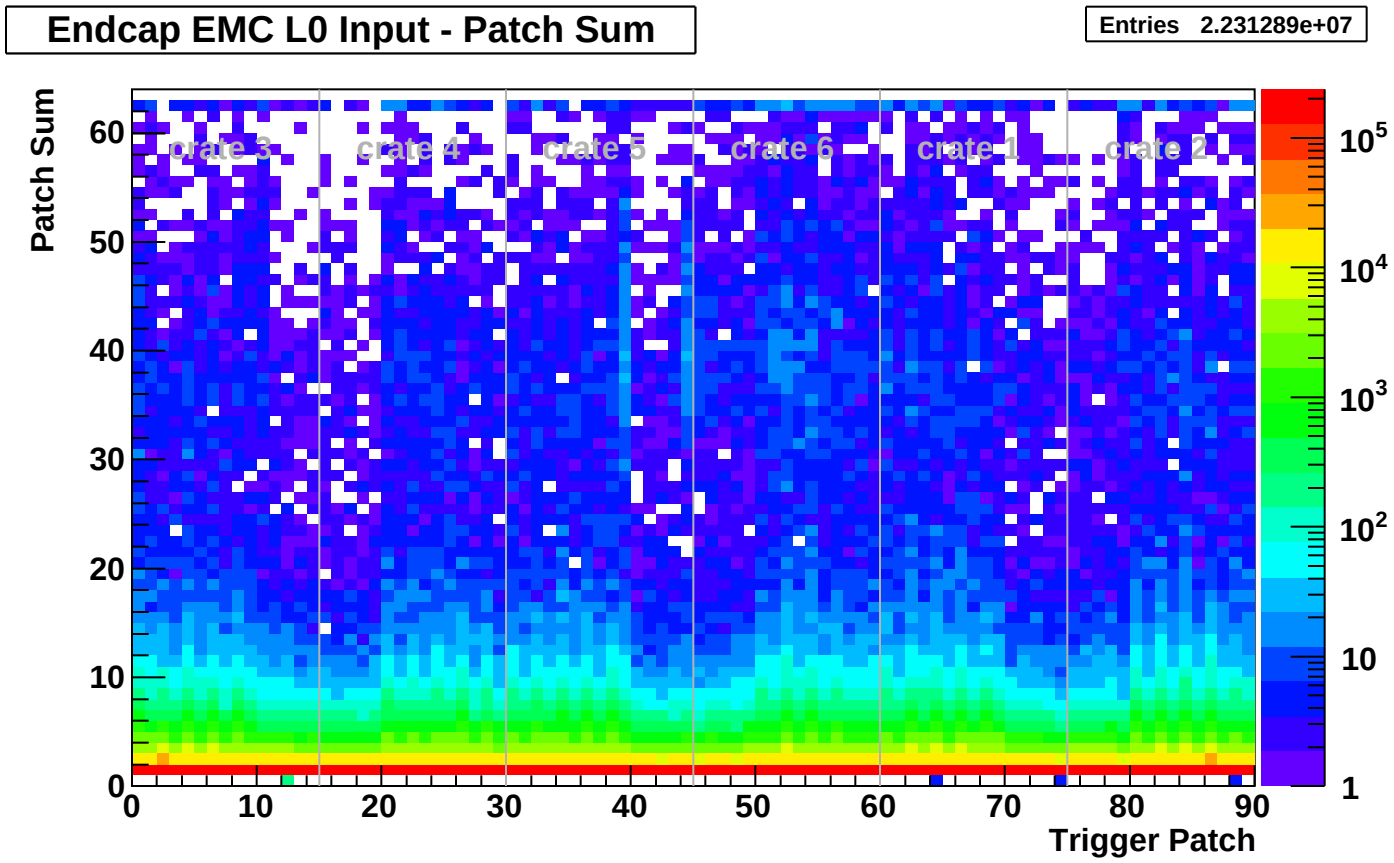

BunchId7Bit (BHT3)
Entries 10770
10²
10
1
0
20
40
60
80
100
120

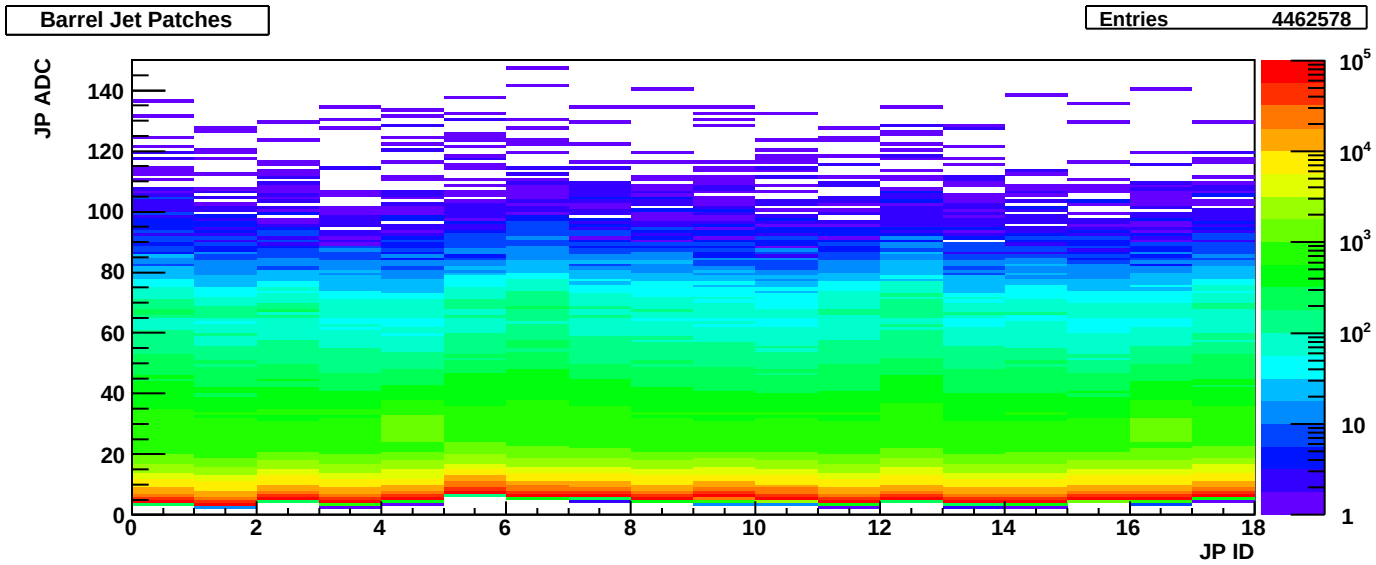

BunchId7Bit (all events)
Entries 247921
10³
10²
0
20
40
60
80
100
120

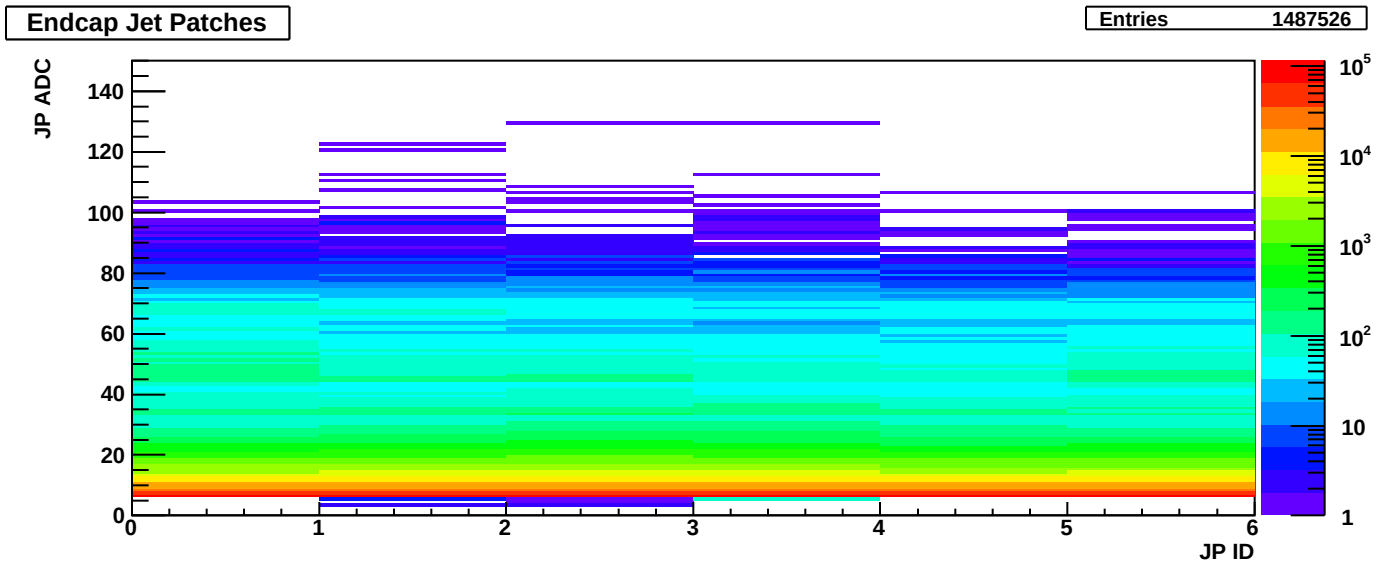

Barrel EMC L0 Input - High Tower
Entries 7.43763e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

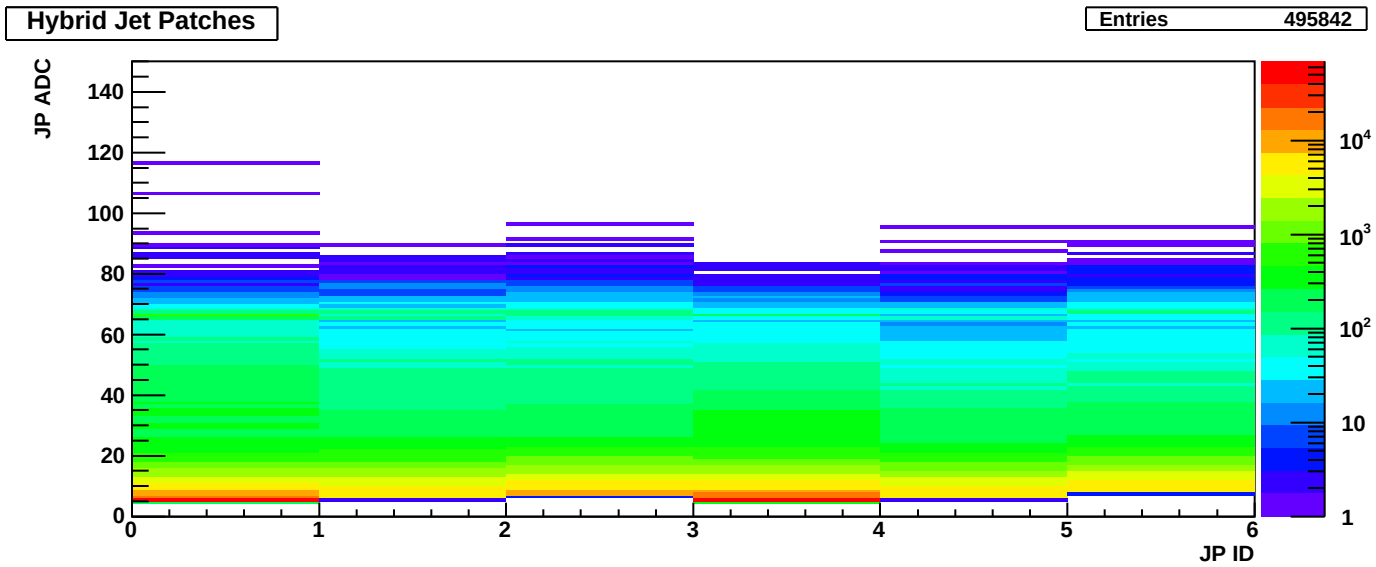

Barrel EMC L0 Input - Patch Sum
Entries 7.43763e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

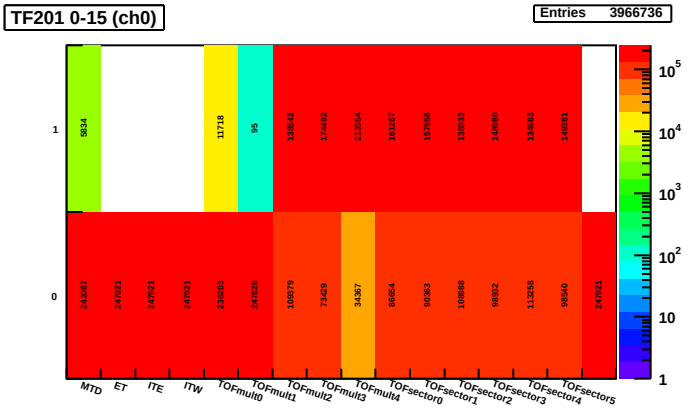

Endcap EMC L0 Input - High Tower
Entries 2.231289e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

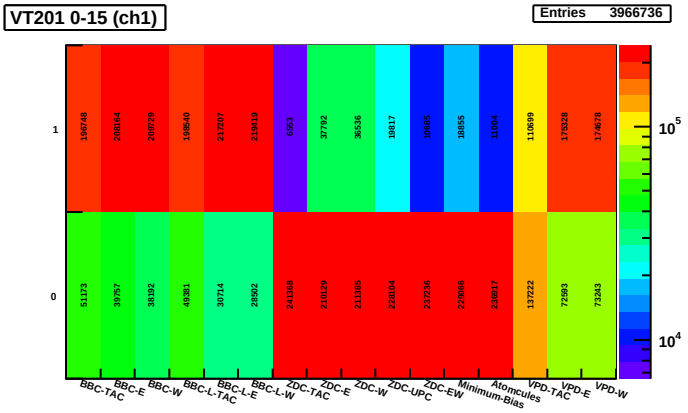

Endcap EMC L0 Input - Patch Sum
Entries 2.231289e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

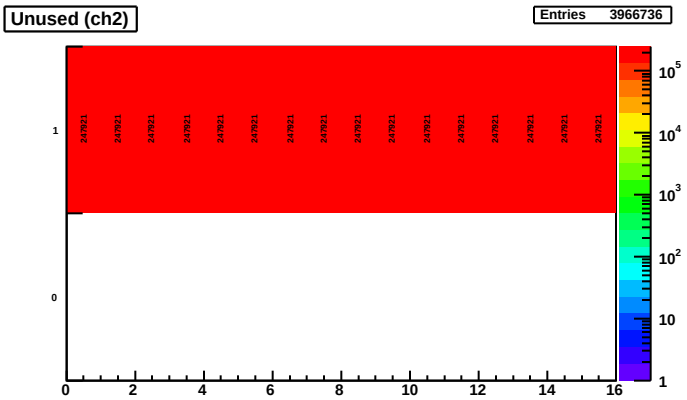

Barrel Jet Patches
Entries 4462578
JP ADC
JP ID

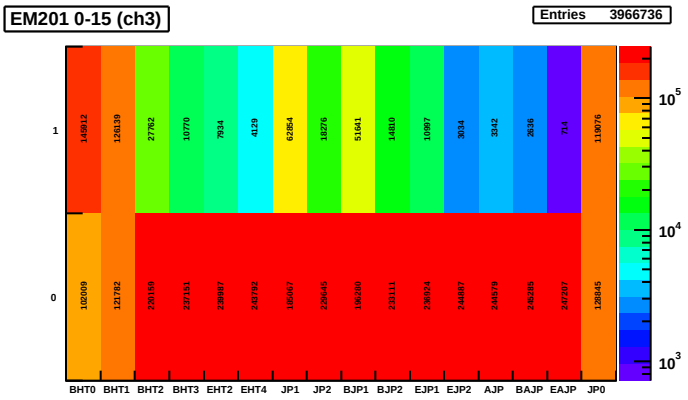

Endcap Jet Patches
Entries 1487526
JP ADC
JP ID

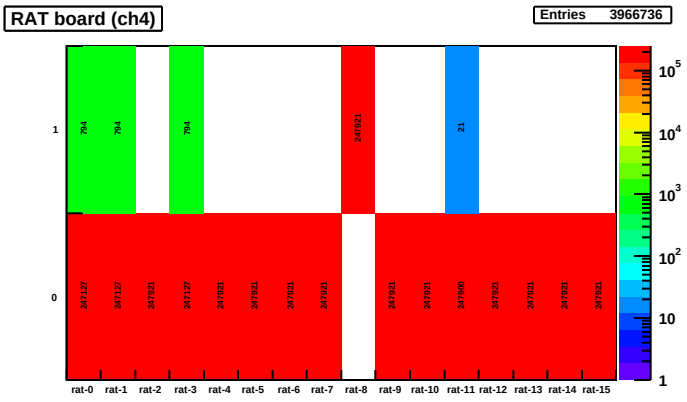

Hybrid Jet Patches
Entries 495842
JP ADC
JP ID

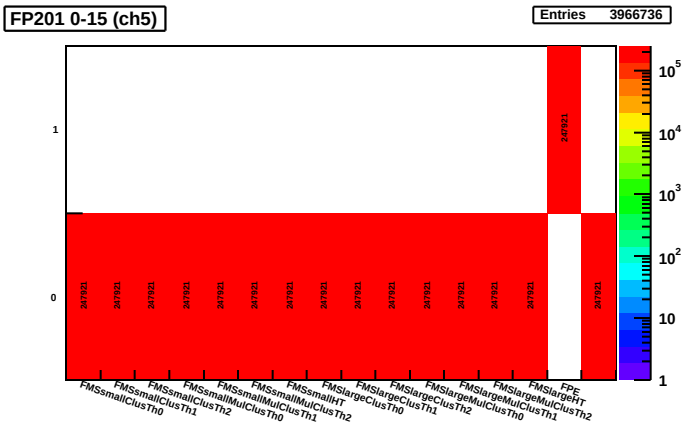

TF201 0-15 (ch0)
Entries 3966736
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

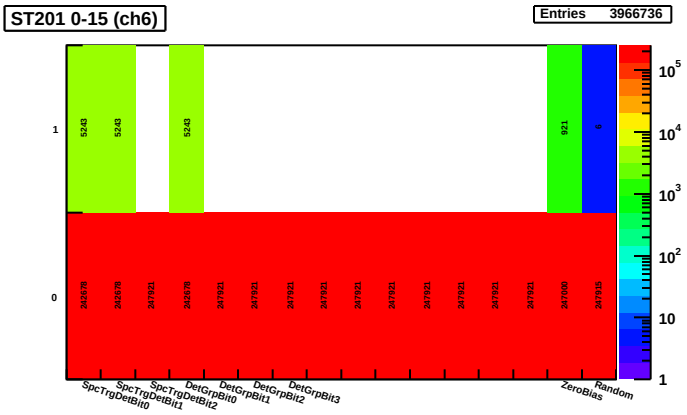

VT201 0-15 (ch1)
Entries 3966736
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

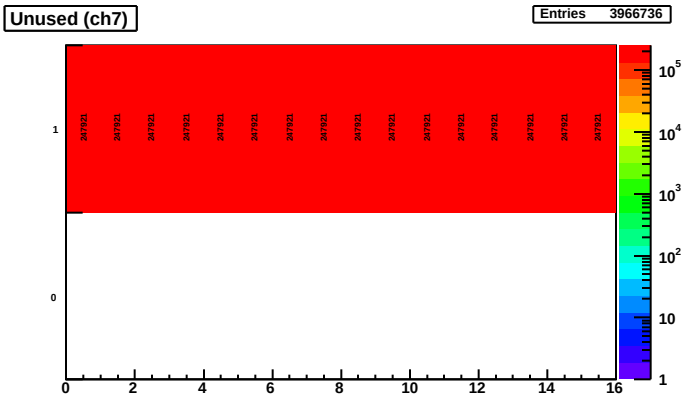

Unused (ch2)
Entries 3966736

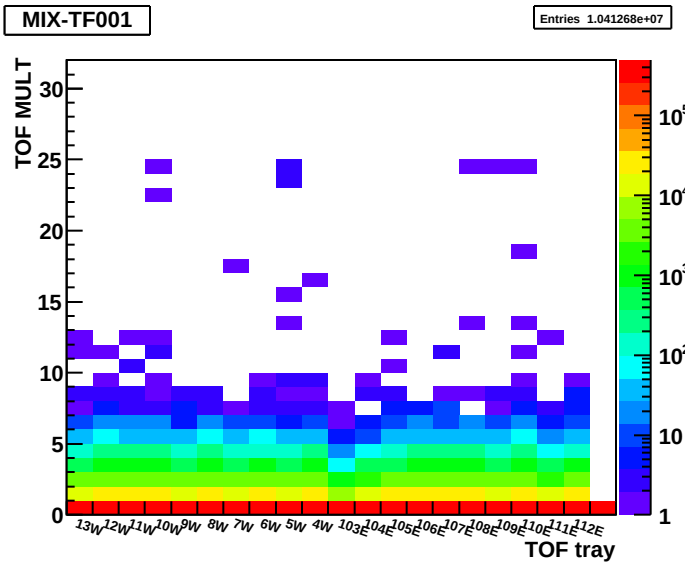

EM201 0-15 (ch3)
Entries 3966736
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

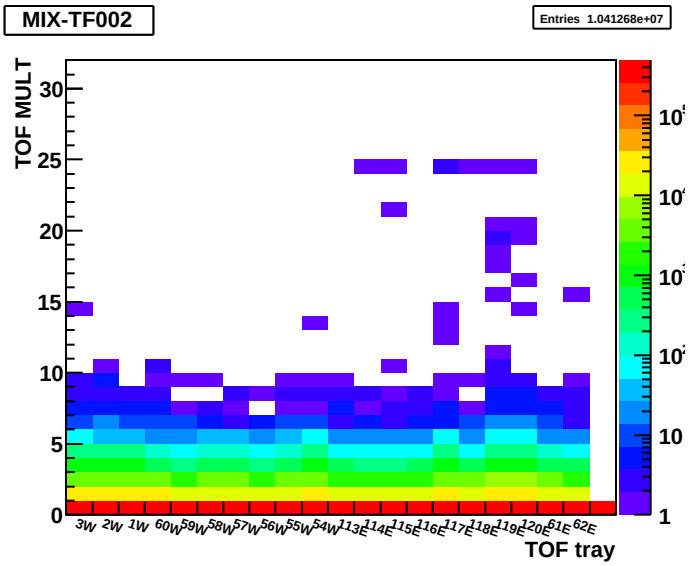

RAT board (ch4)
Entries 3966736
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

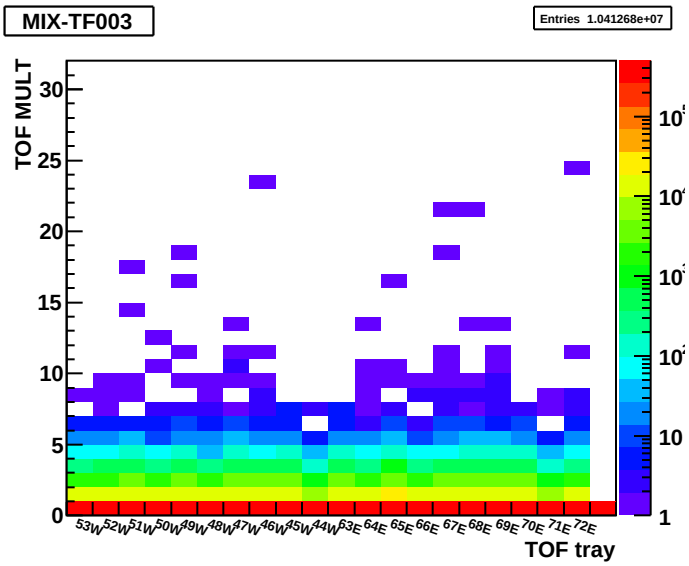

FP201 0-15 (ch5)
Entries 3966736
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

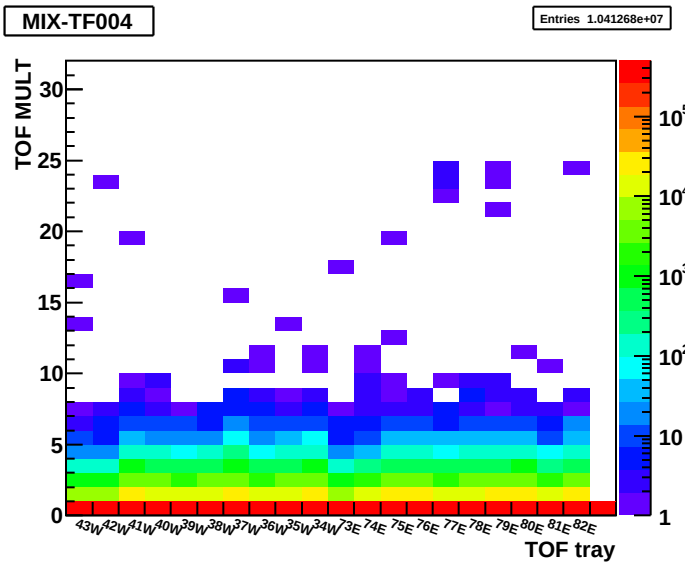

ST201 0-15 (ch6)
Entries 3966736
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetGrpBit0 DetGrpBit1 DetGrpBit2 DetGrpBit3 ZeroBias Random

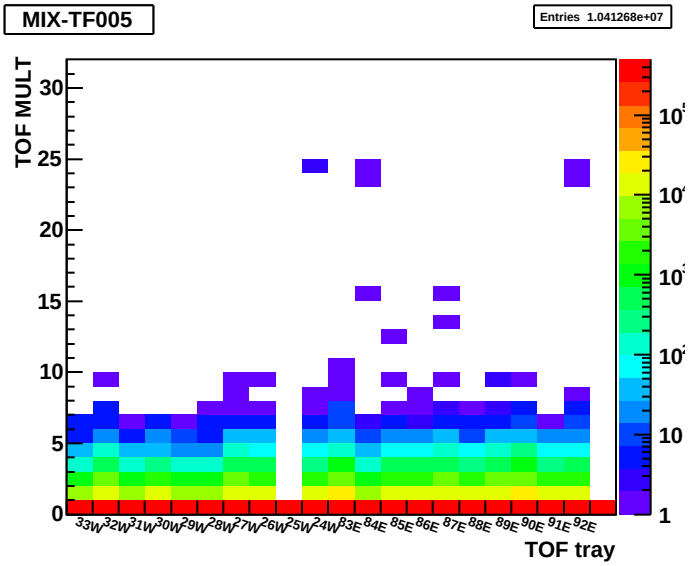

Unused (ch7)
Entries 3966736

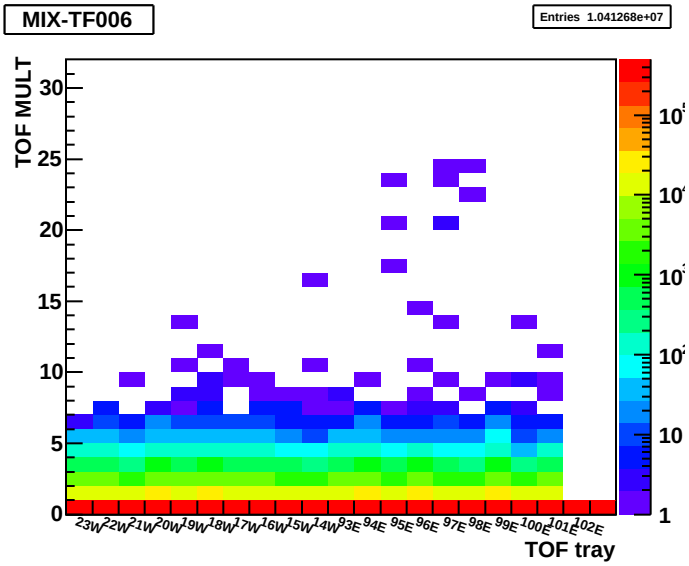

MIX-TF001
Entries 1.041268e+07
TOF MULT
TOF tray

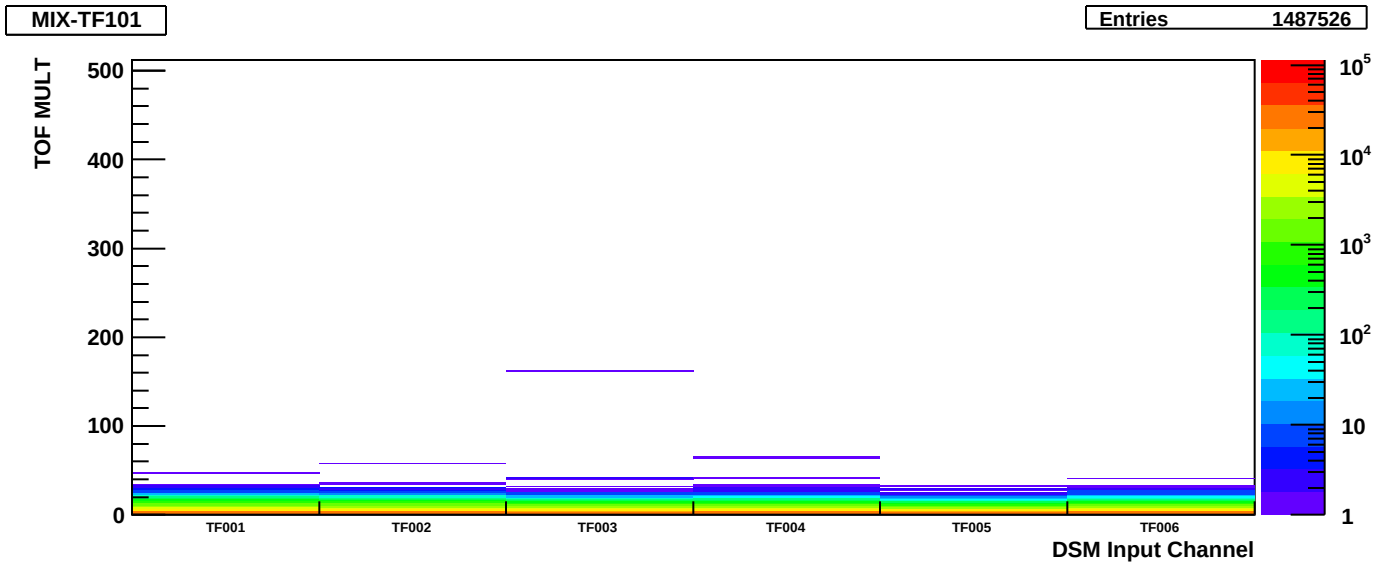

MIX-TF002
Entries 1.041268e+07
TOF MULT
TOF tray

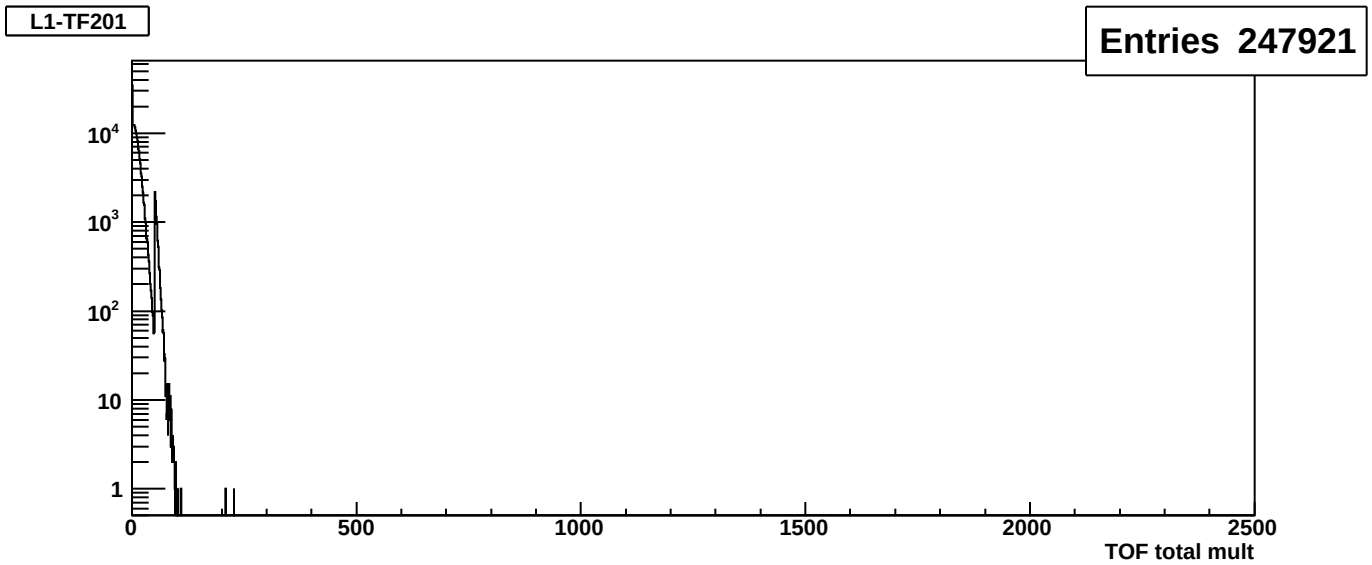

MIX-TF003
Entries 1.041268e+07
TOF MULT
TOF tray

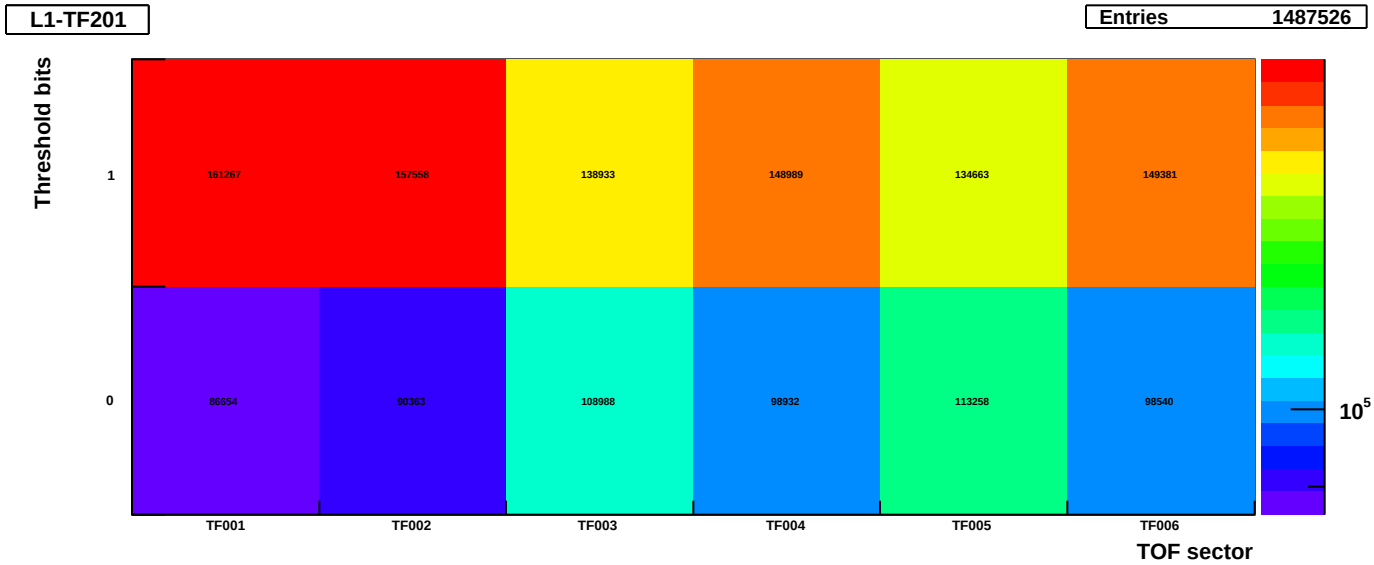

MIX-TF004
Entries 1.041268e+07
TOF MULT
TOF tray

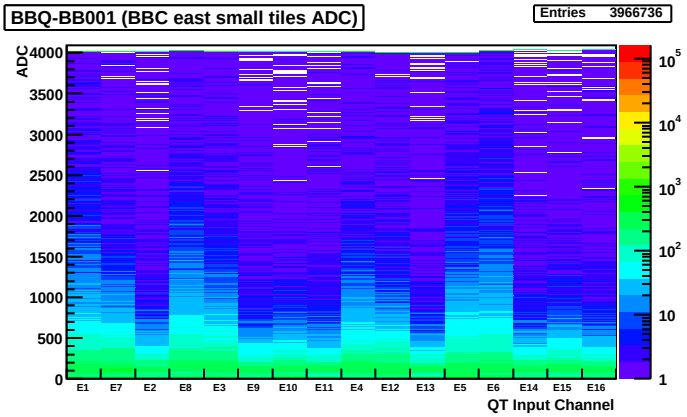

MIX-TF005
Entries 1.041268e+07
TOF MULT
TOF tray

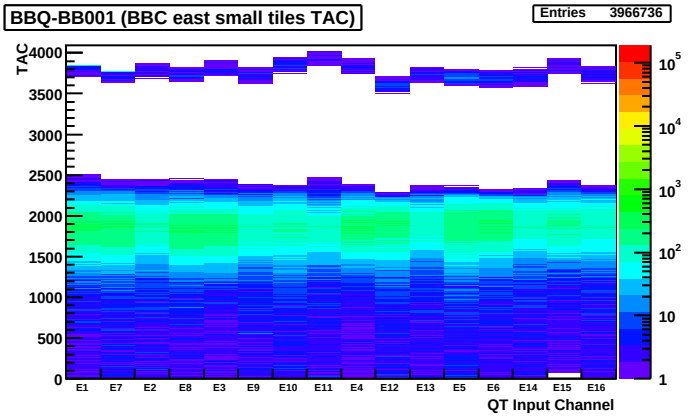

MIX-TF006
Entries 1.041268e+07
TOF MULT
TOF tray

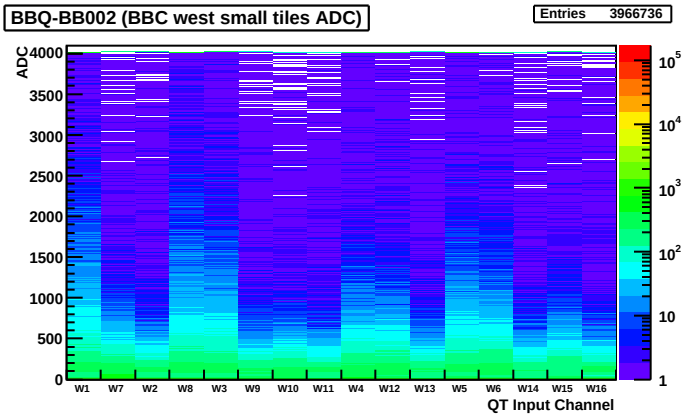

MIX-TF101
Entries 1487526
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

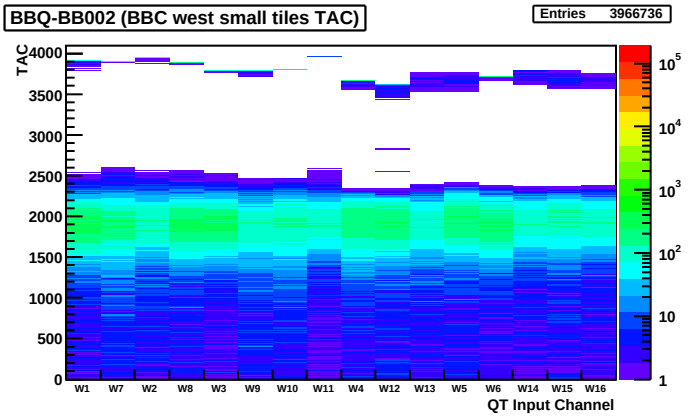

L1-TF201
Entries 247921
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

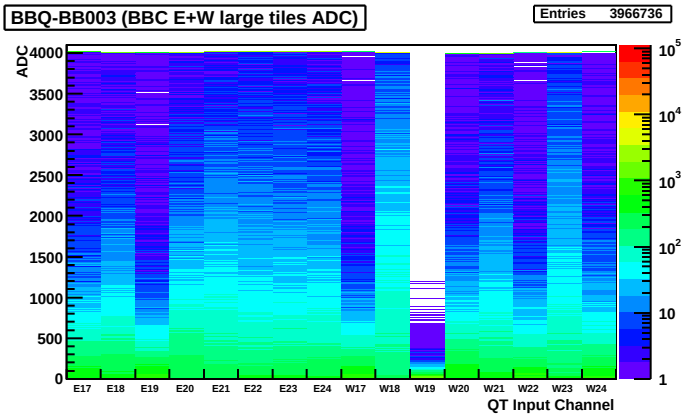

L1-TF201
Entries 1487526
Threshold bits
1
0
161267
157558
138933
148989
134663
149381
86654
90363
108988
98932
113258
98540
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

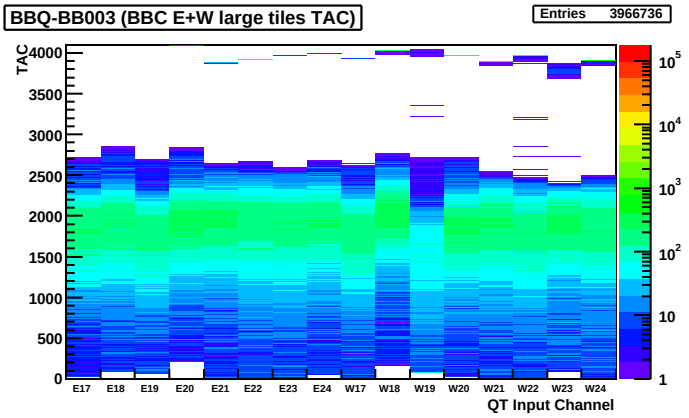

BBQ-BB001 (BBC east small tiles ADC)
Entries 3966736
ADC
QT Input Channel

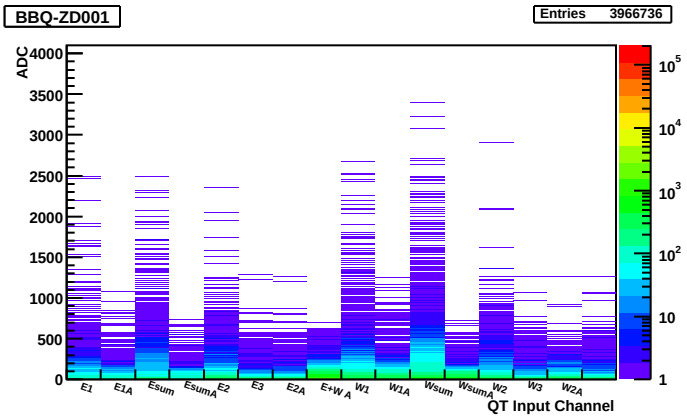

BBQ-BB001 (BBC east small tiles TAC)
Entries 3966736
TAC
QT Input Channel

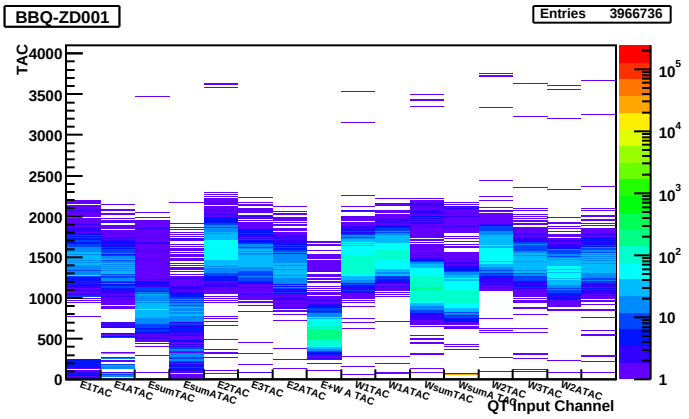

BBQ-BB002 (BBC west small tiles ADC)
Entries 3966736
ADC
QT Input Channel

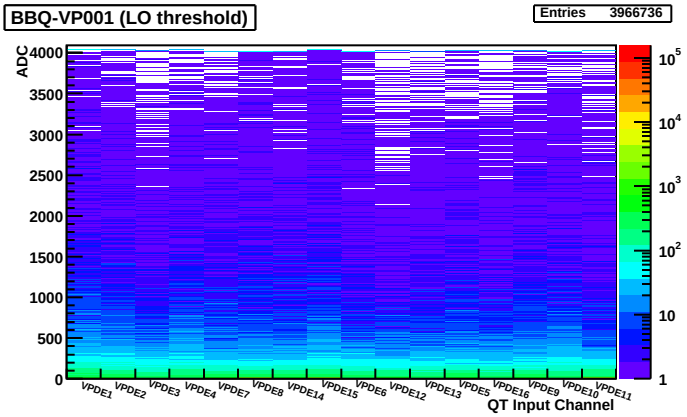

BBQ-BB002 (BBC west small tiles TAC)
Entries 3966736
TAC
QT Input Channel

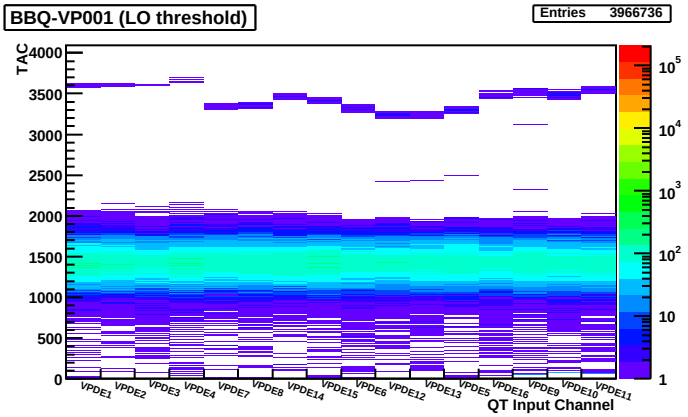

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3966736
ADC
QT Input Channel

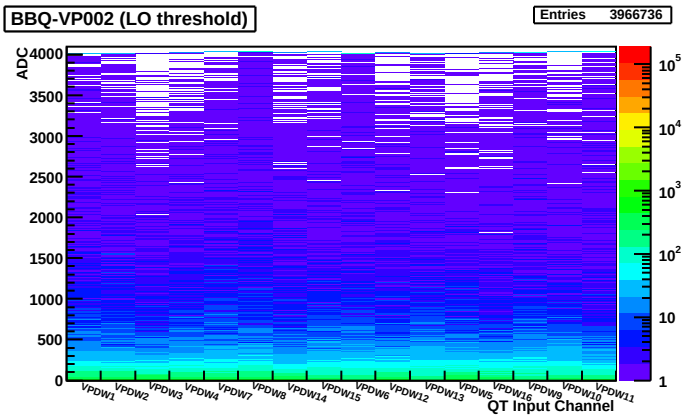

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3966736
TAC
QT Input Channel

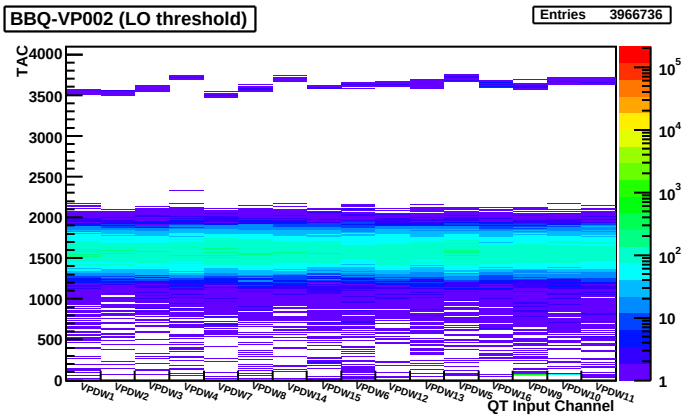

BBQ-ZD001
Entries 3966736
ADC
QT Input Channel

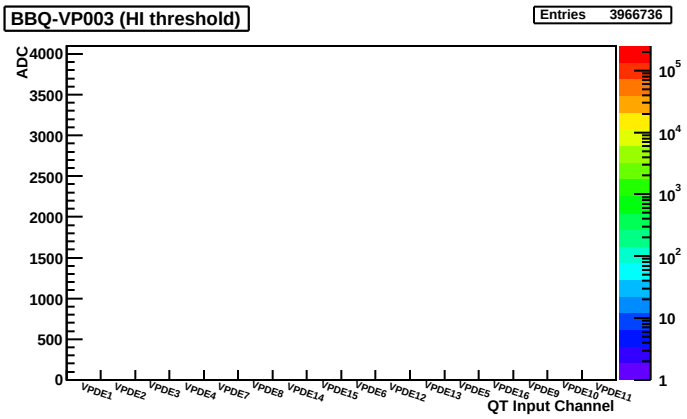

BBQ-ZD001
Entries 3966736
TAC
QT Input Channel

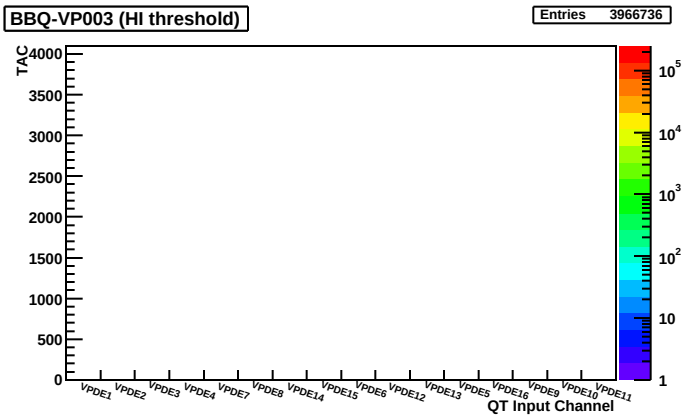

BBQ-VP001 (LO threshold)
Entries 3966736
ADC
QT Input Channel

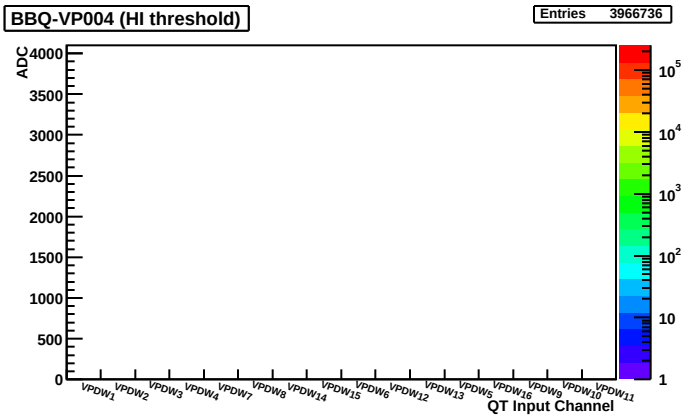

BBQ-VP001 (LO threshold)
Entries 3966736
TAC
QT Input Channel

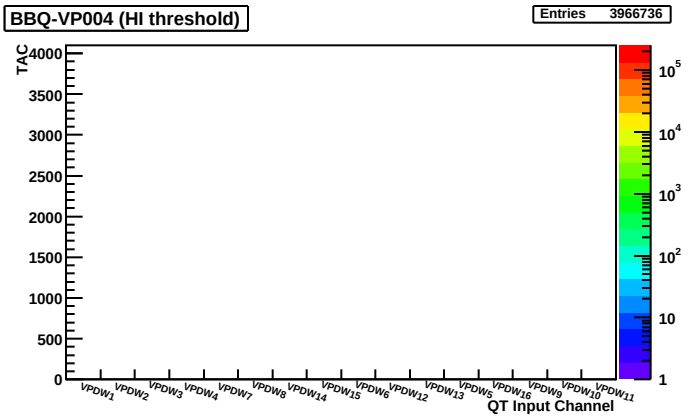

BBQ-VP002 (LO threshold)
Entries 3966736
ADC
QT Input Channel

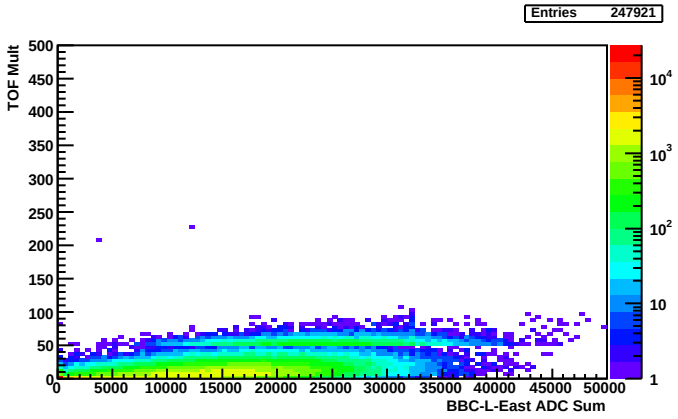

BBQ-VP002 (LO threshold)
Entries 3966736
TAC
QT Input Channel

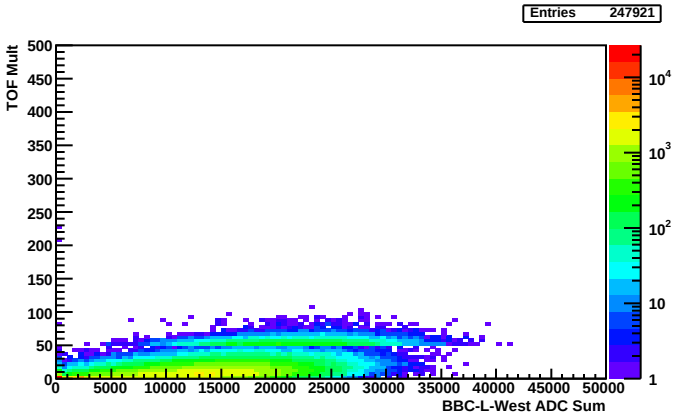

BBQ-VP003 (HI threshold)
Entries 3966736
ADC
QT Input Channel

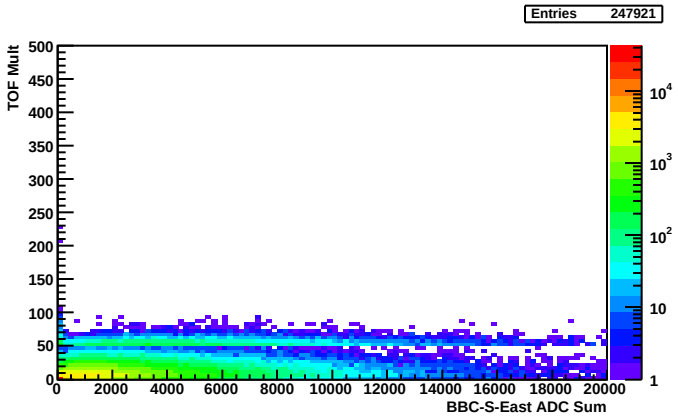

BBQ-VP003 (HI threshold)
Entries 3966736
TAC
QT Input Channel

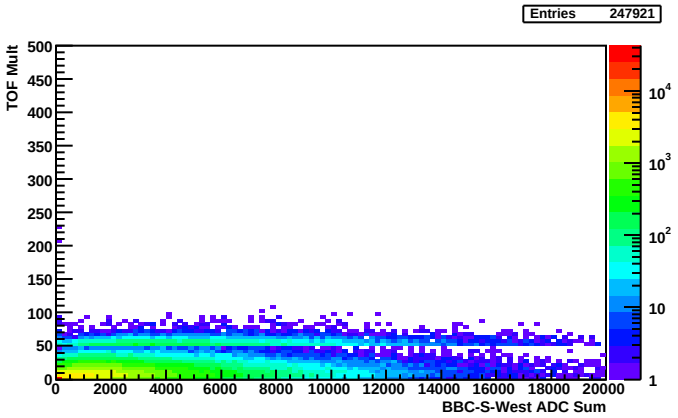

BBQ-VP004 (HI threshold)
Entries 3966736
ADC
QT Input Channel

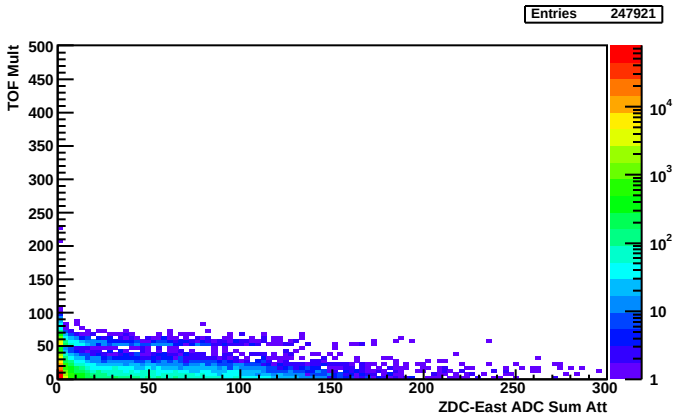

BBQ-VP004 (HI threshold)
Entries 3966736
TAC
QT Input Channel

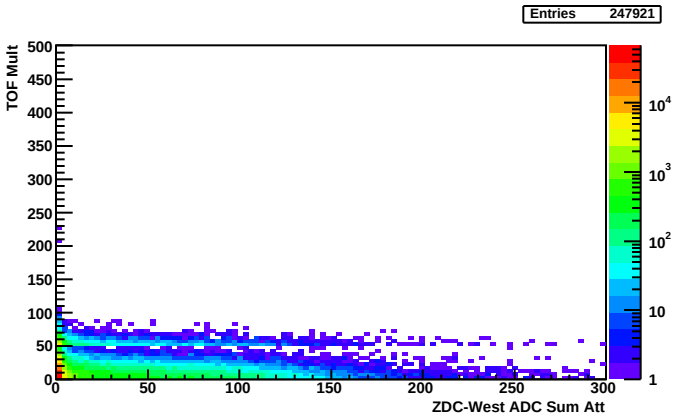

Entries 247921
TOF Mult
BBC-L-East ADC Sum

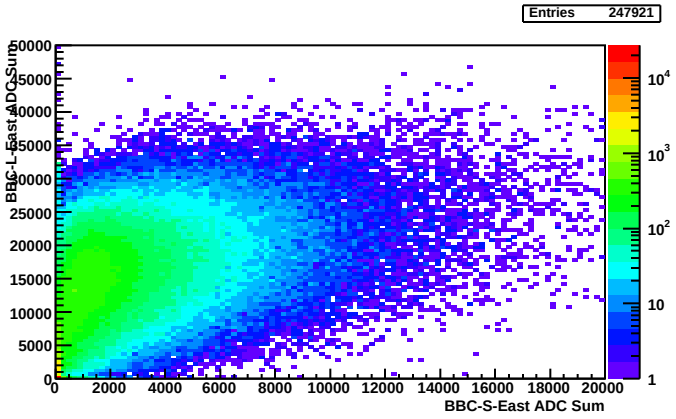

Entries 247921
TOF Mult
BBC-L-West ADC Sum

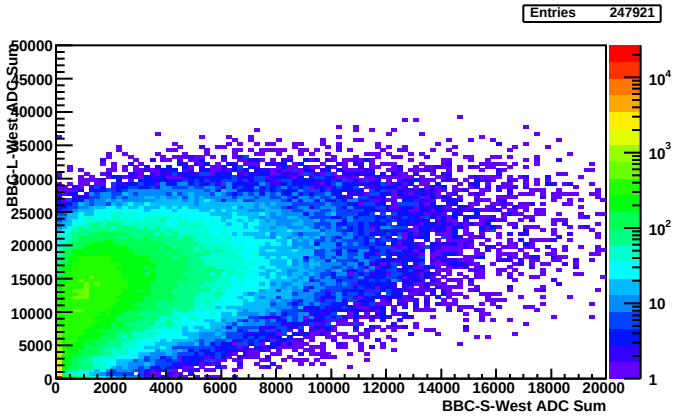

Entries 247921
TOF Mult
BBC-S-East ADC Sum

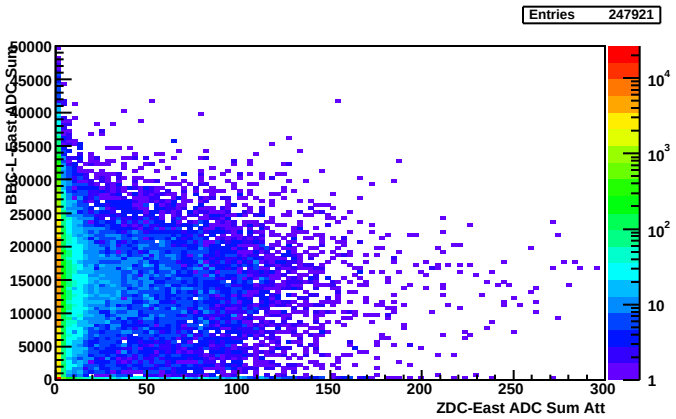

Entries 247921
TOF Mult
BBC-S-West ADC Sum

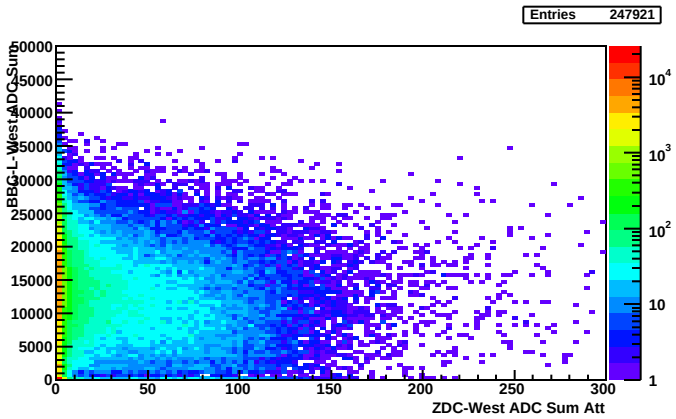

Entries 247921
TOF Mult
ZDC-East ADC Sum Att

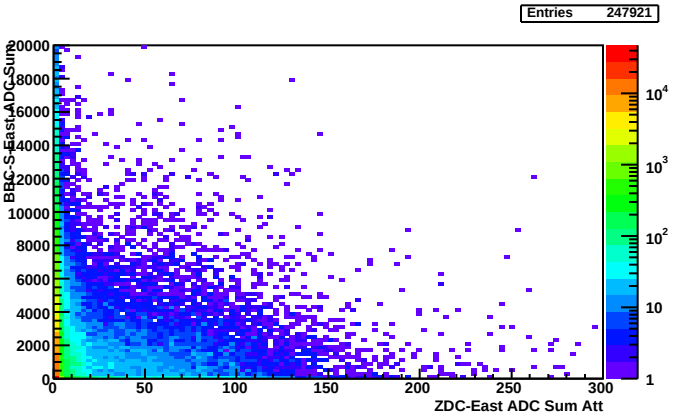

Entries 247921
TOF Mult
ZDC-West ADC Sum Att

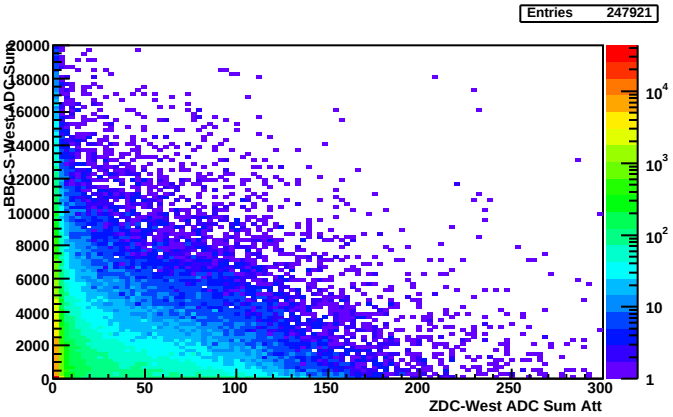

Entries 247921
BBC-L-East ADC Sum
BBC-S-East ADC Sum

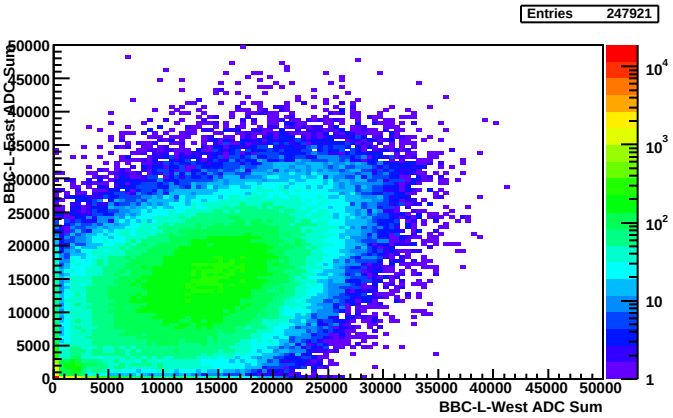

Entries 247921
BBC-L-West ADC Sum
BBC-S-West ADC Sum

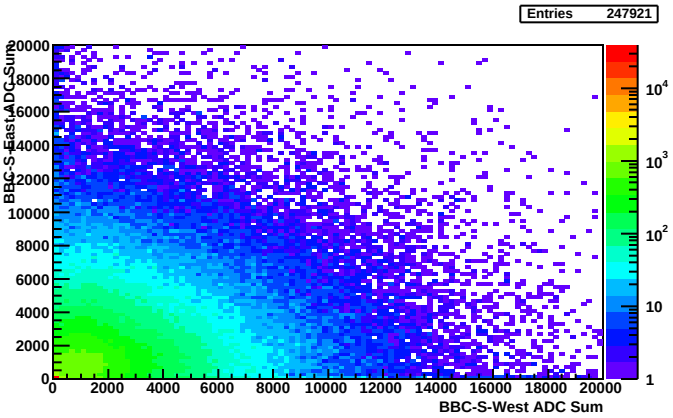

Entries 247921
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

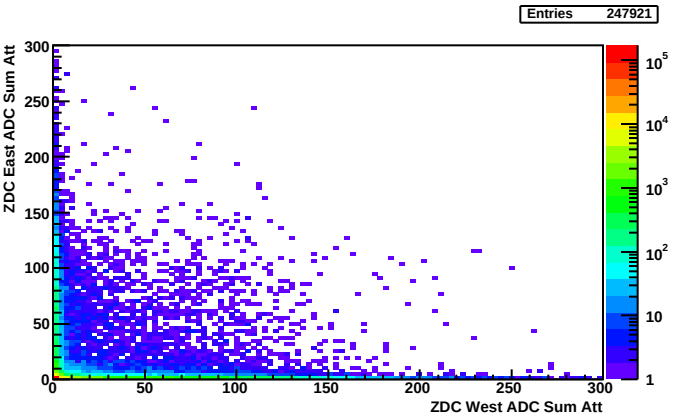

Entries 247921
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

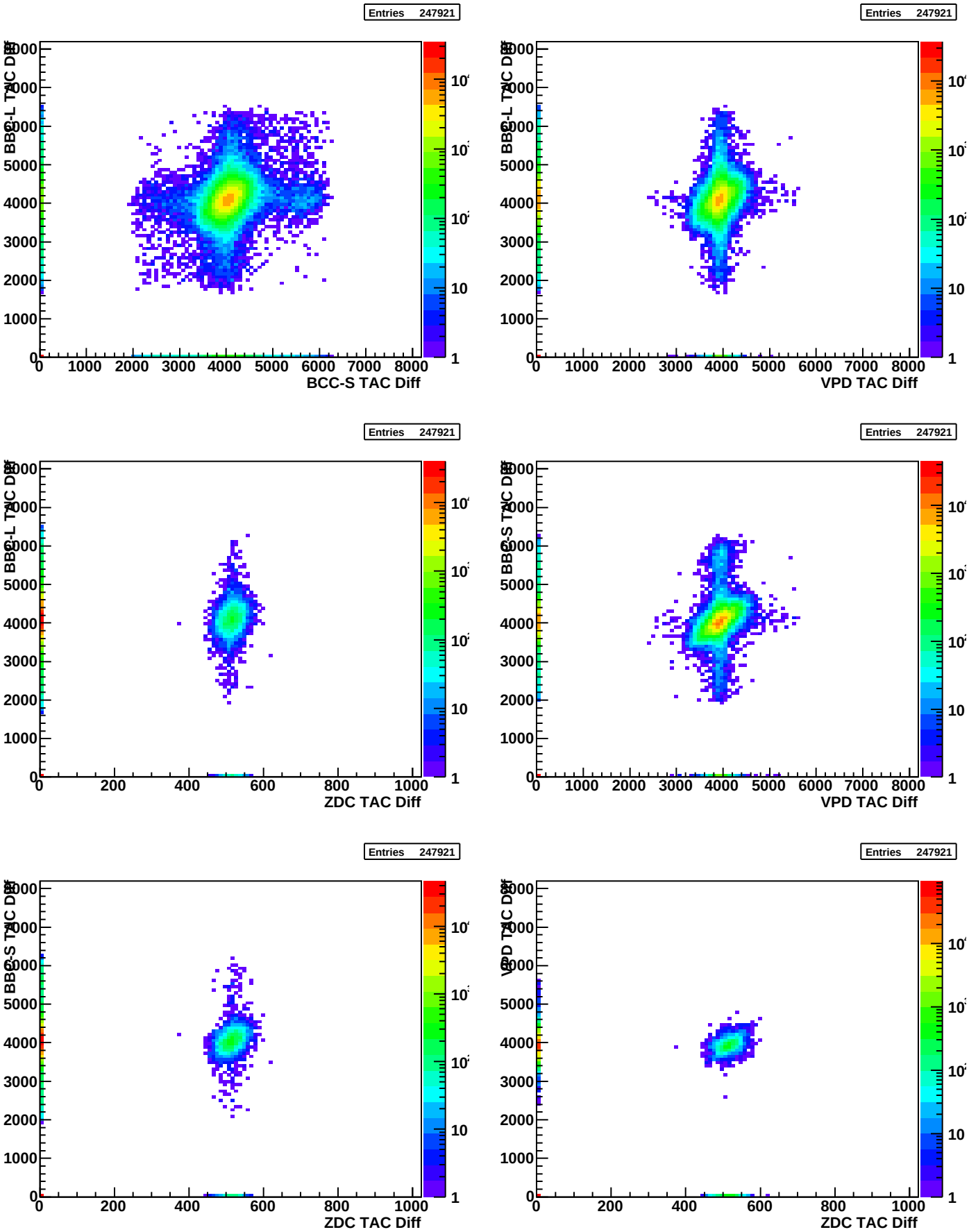

Entries 247921
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

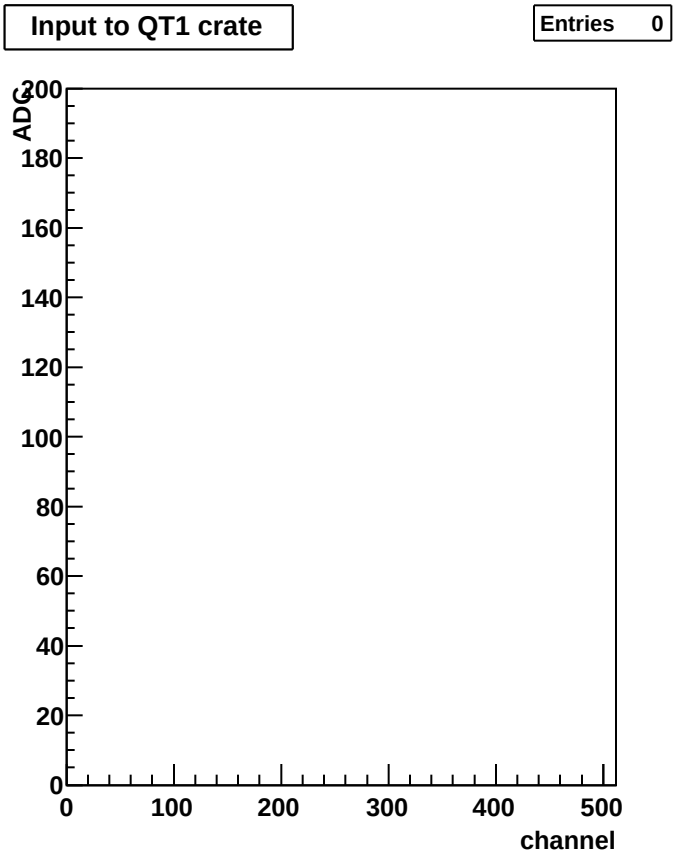

Entries 247921
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

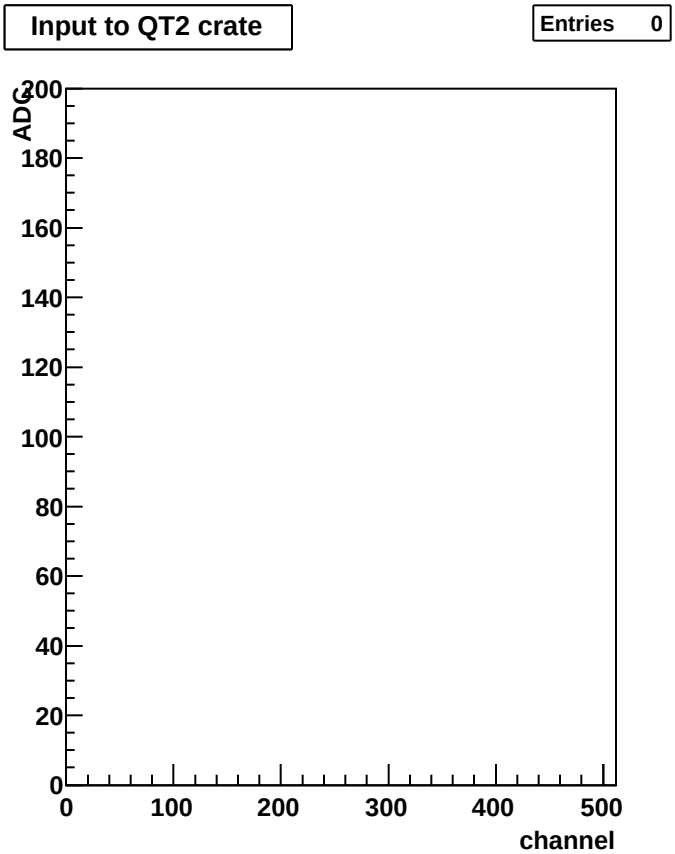

Entries 247921
BBC-L-East ADC Sum
BBC-L-West ADC Sum

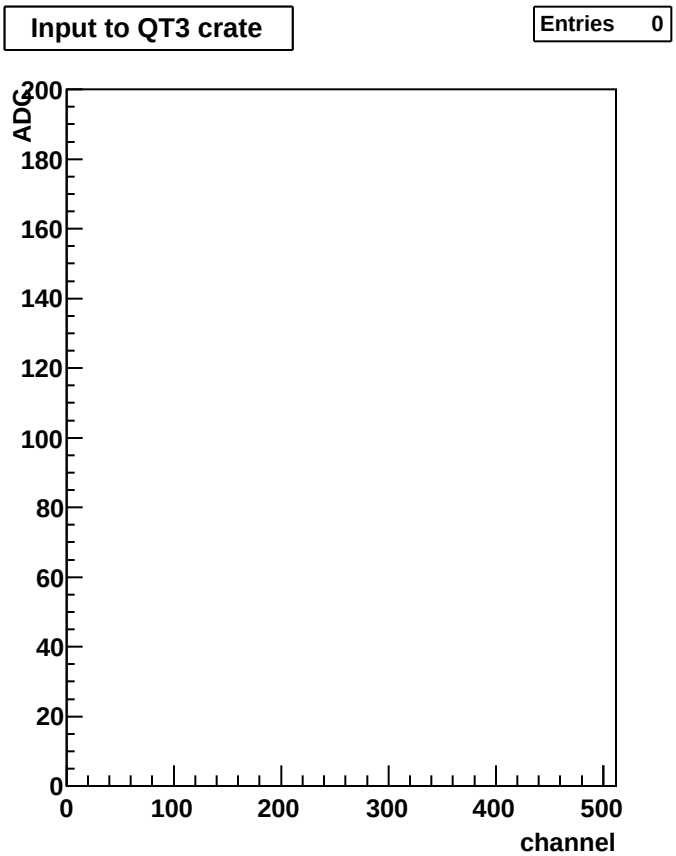

Entries 247921
BBC-S-East ADC Sum
BBC-S-West ADC Sum

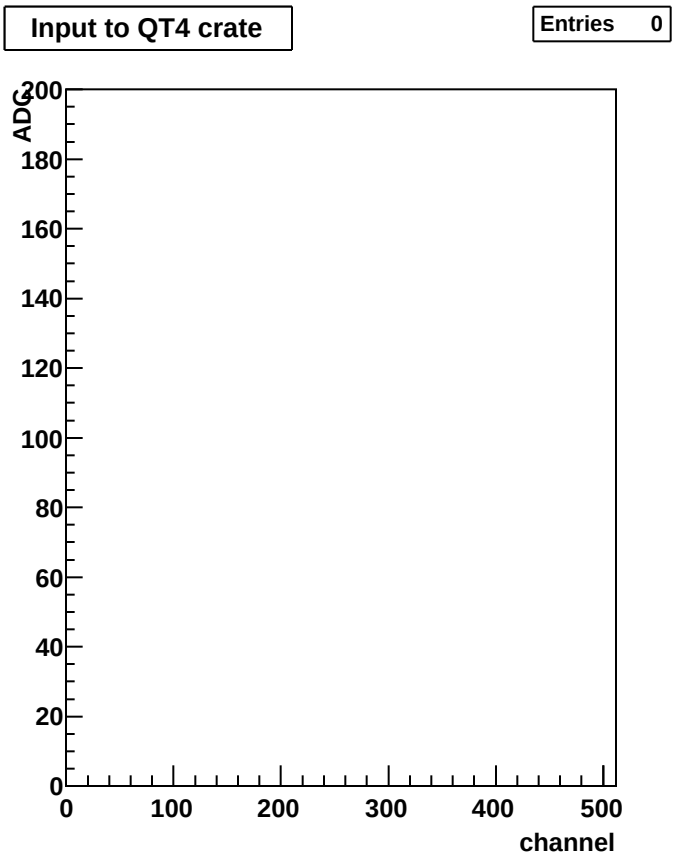

Entries 247921
ZDC East ADC Sum Att
ZDC West ADC Sum Att

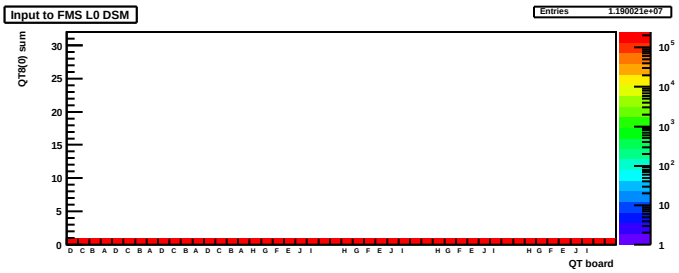

Entries 247921
BBC-L TAC Diff
BCC-S TAC Diff
Entries 247921
BBC-L TAC Diff
VPD TAC Diff
Entries 247921
BBC-L TAC Diff
ZDC TAC Diff
Entries 247921
BBC-S TAC Diff
VPD TAC Diff
Entries 247921
BBC-S TAC Diff
ZDC TAC Diff
Entries 247921
VPD TAC Diff
ZDC TAC Diff

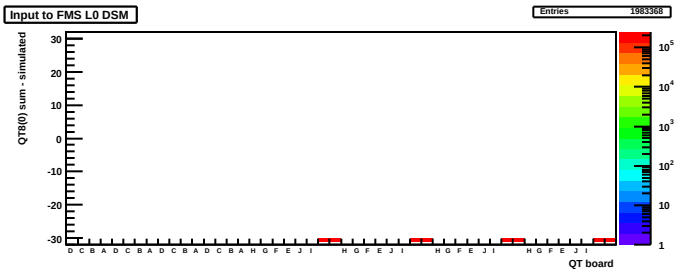

Input to QT1 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

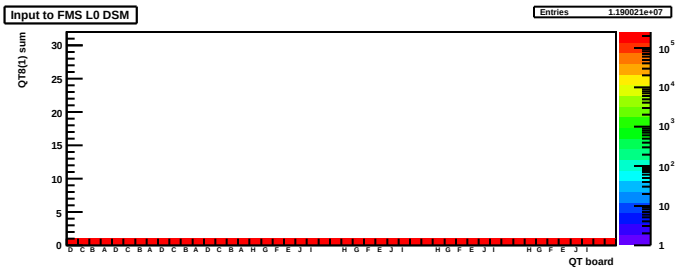

Input to QT2 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

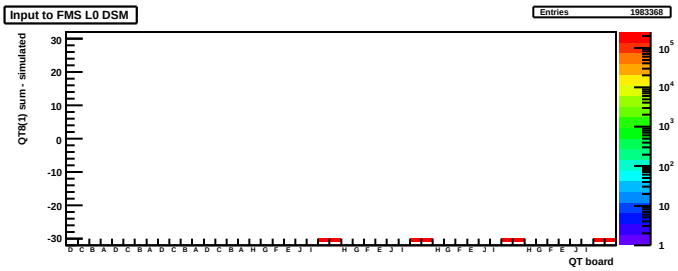

Input to QT3 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

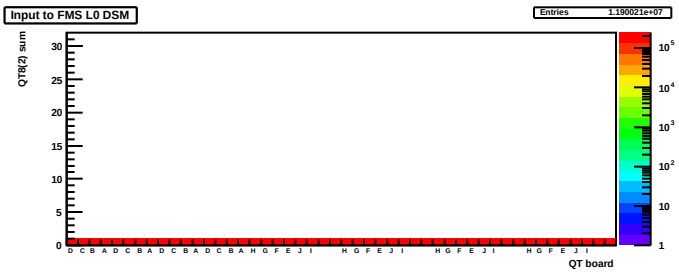

Input to QT4 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

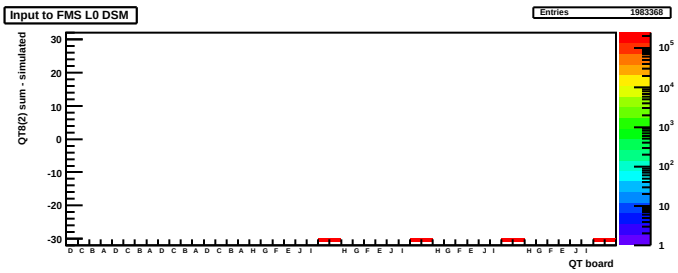

Input to FMS L0 DSM
Entries 1.190021e+07
QT8(0) sum
QT board

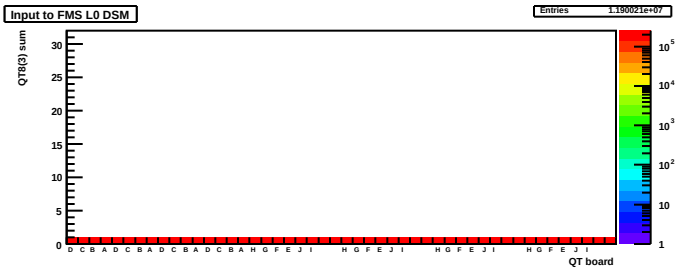

Input to FMS L0 DSM
Entries 1983368
QT8(0) sum - simulated
QT board

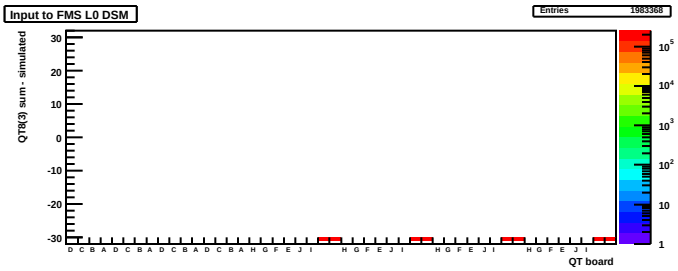

Input to FMS L0 DSM
Entries 1.190021e+07
QT8(1) sum
QT board

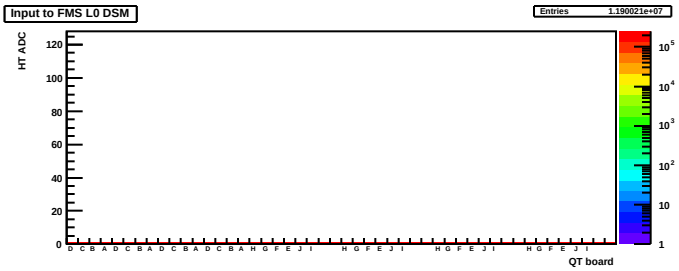

Input to FMS L0 DSM
Entries 1983368
QT8(1) sum - simulated
QT board

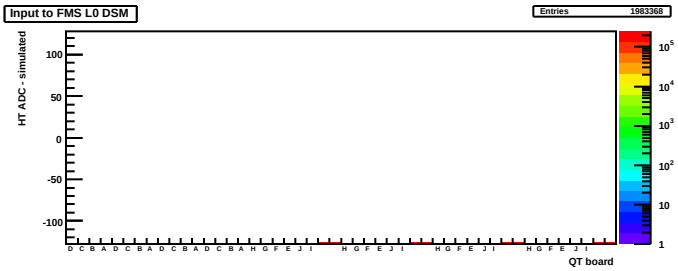

Input to FMS L0 DSM
Entries 1.190021e+07
QT8(2) sum
QT board

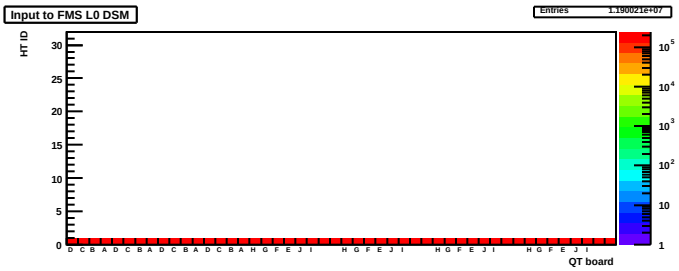

Input to FMS L0 DSM
Entries 1983368
QT8(2) sum - simulated
QT board

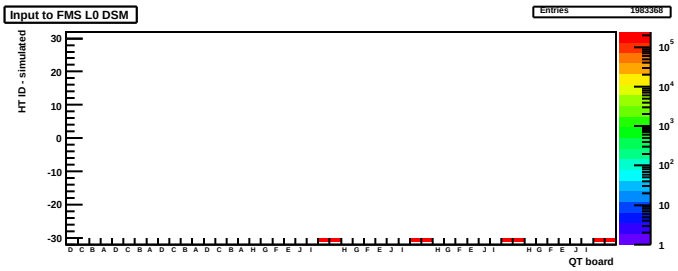

Input to FMS L0 DSM
Entries 1.190021e+07
QT8(3) sum
QT board

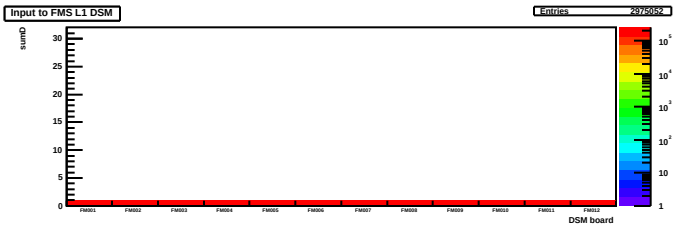

Input to FMS L0 DSM
Entries 1983368
QT8(3) sum - simulated
QT board

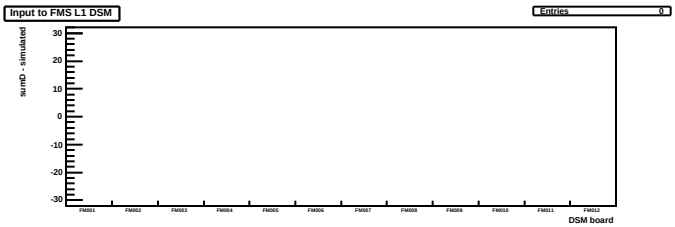

Input to FMS L0 DSM
Entries 1.190021e+07
HT ADC
QT board

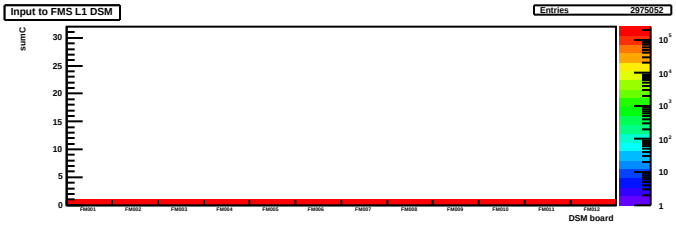

Input to FMS L0 DSM
Entries 1983368
HT ADC - simulated
QT board

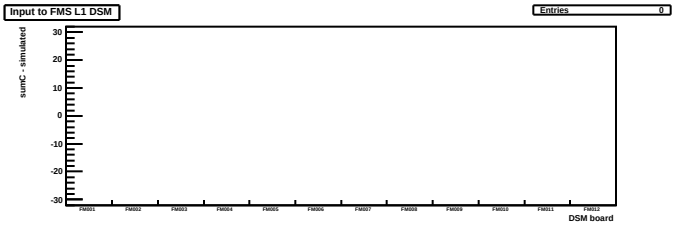

Input to FMS L0 DSM
Entries 1.190021e+07
HT ID
QT board

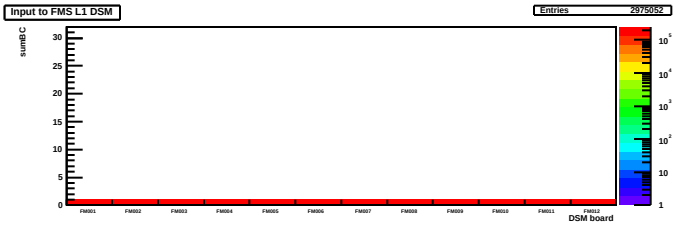

Input to FMS L0 DSM
Entries 1983368
HT ID - simulated
QT board

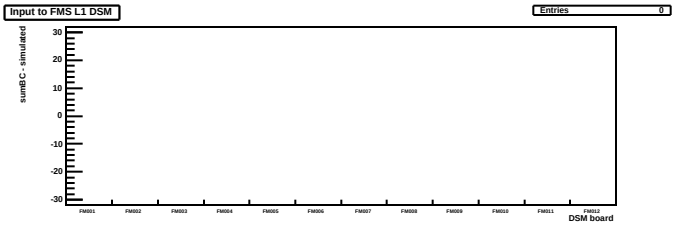

Input to FMS L1 DSM
Entries 2975052
sumD
DSM board

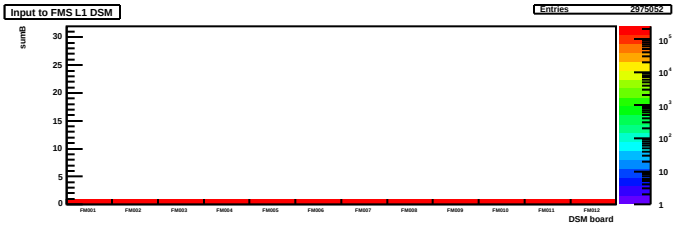

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

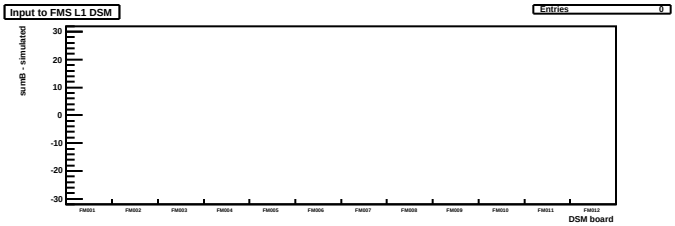

Input to FMS L1 DSM
Entries 2975052
sumC
DSM board

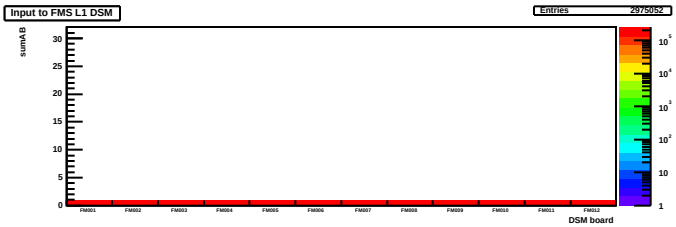

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

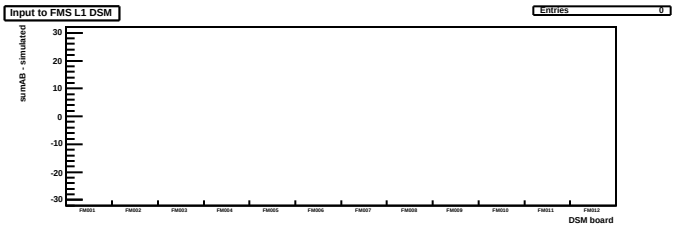

Input to FMS L1 DSM
Entries 2975052
sumBC
DSM board

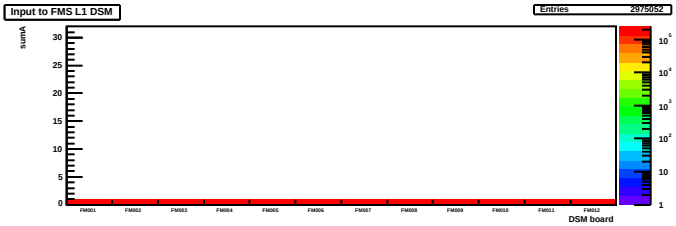

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

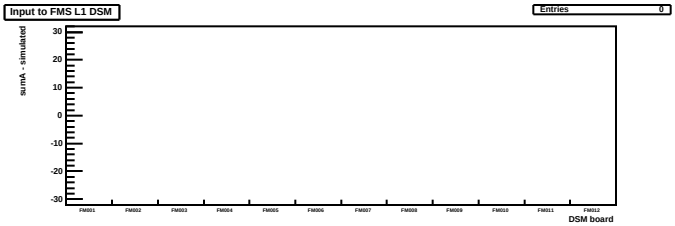

Input to FMS L1 DSM
Entries 2975052
sumB
DSM board

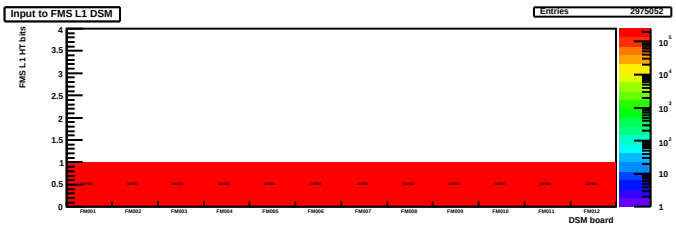

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

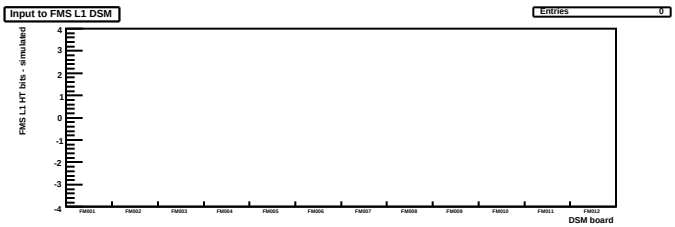

Input to FMS L1 DSM
Entries 2975052
sumAB
DSM board

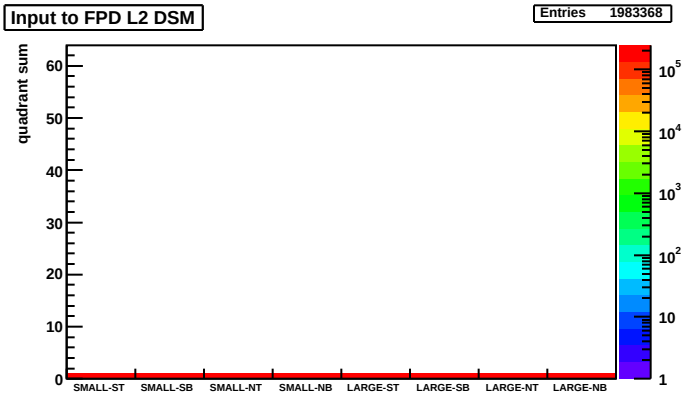

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

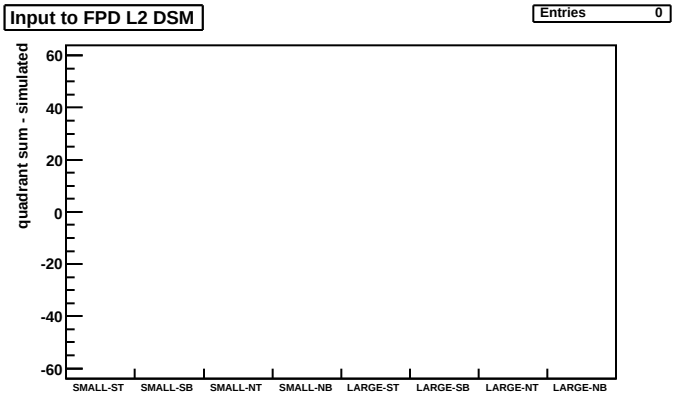

Input to FMS L1 DSM
Entries 2975052
sumA
DSM board

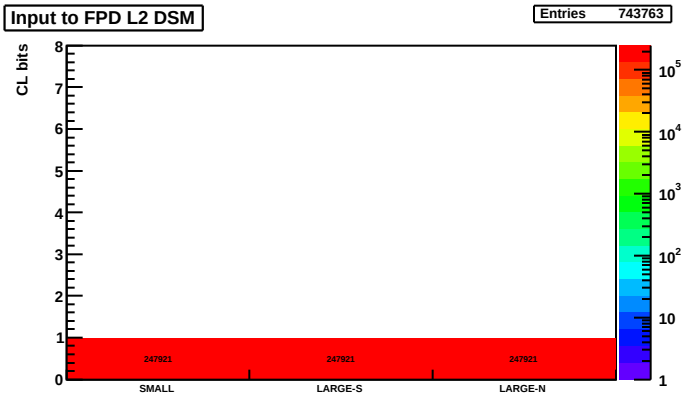

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

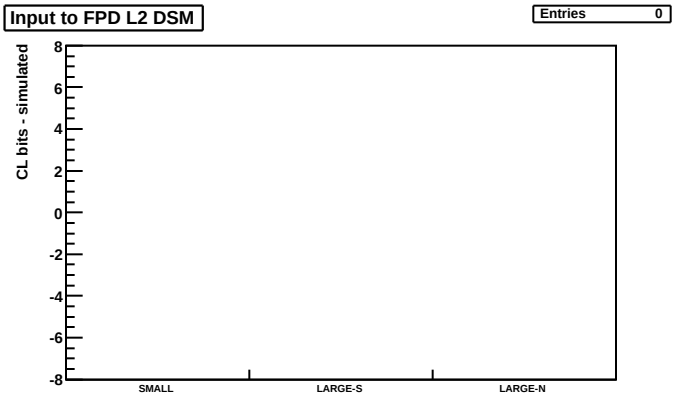

Input to FMS L1 DSM
Entries 2975052
FMS L1 HT bits
DSM board

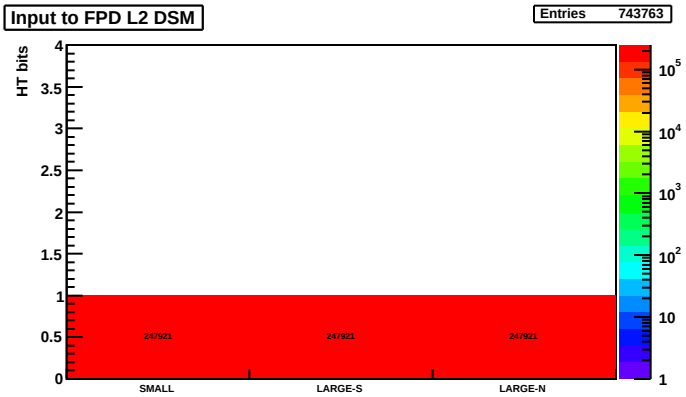

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

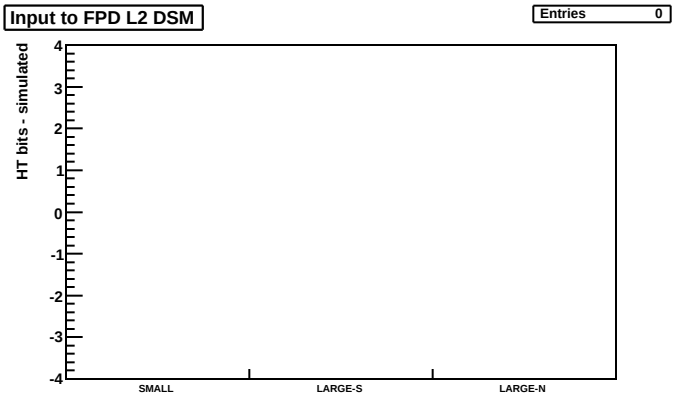

Input to FPD L2 DSM
Entries 1983368
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

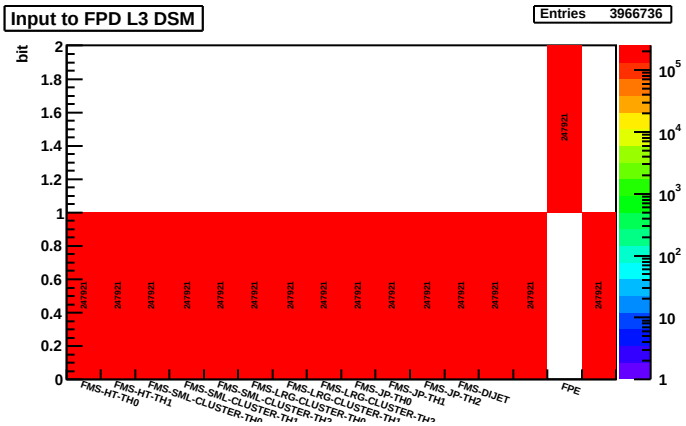

Input to FPD L2 DSM
Entries 0
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

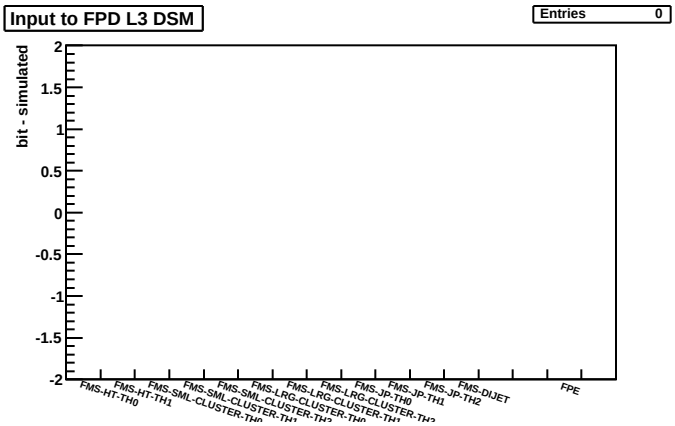

Input to FPD L2 DSM
Entries 743763
CL bits
247921
247921
247921
SMALL
LARGE-S
LARGE-N

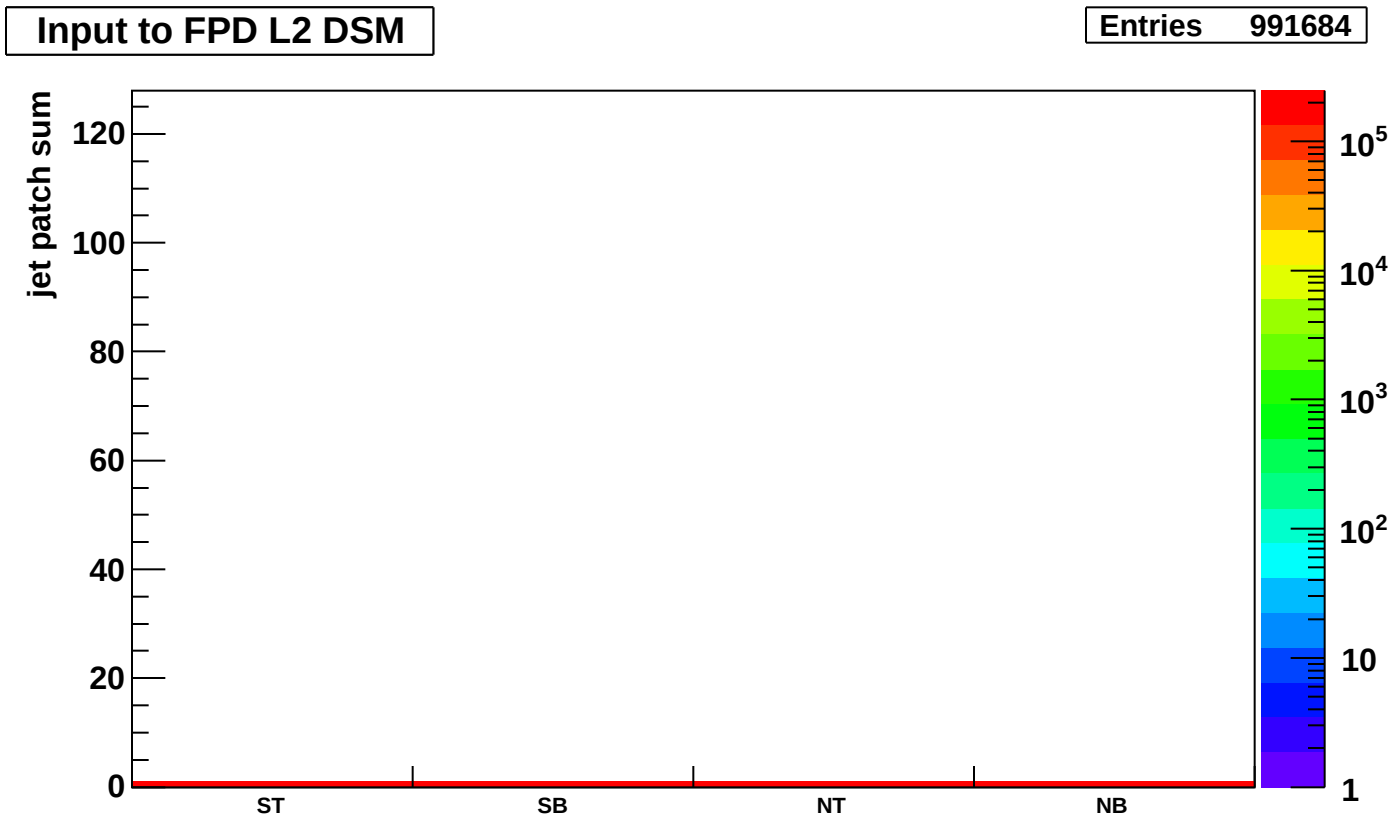

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

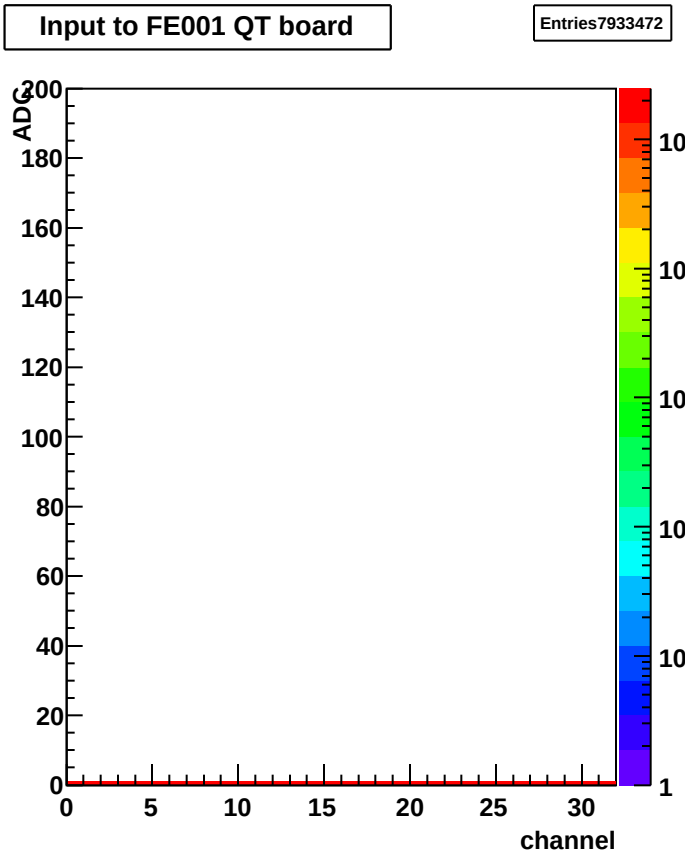

Input to FPD L2 DSM
Entries 743763
HT bits
247921
247921
247921
SMALL
LARGE-S
LARGE-N

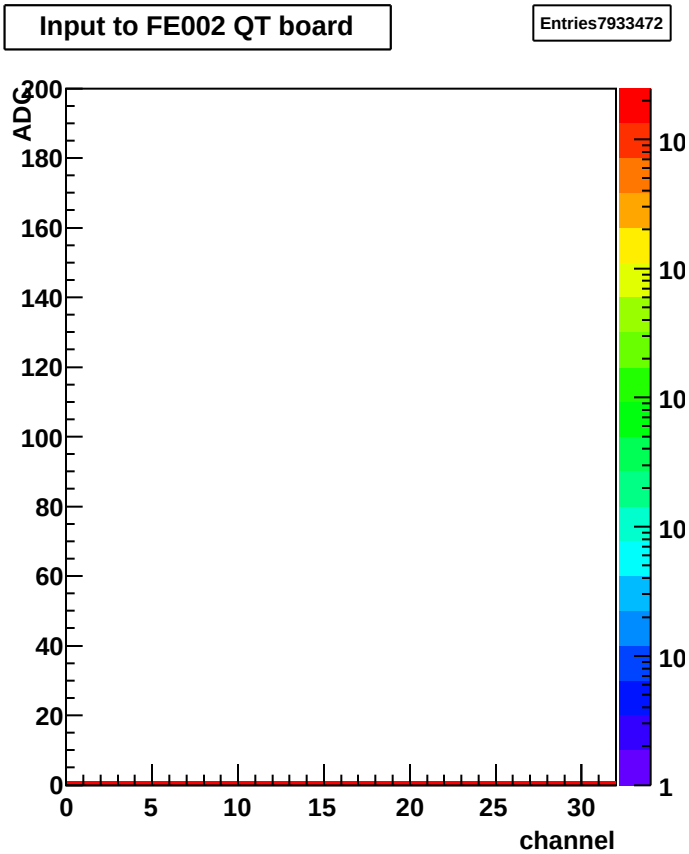

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

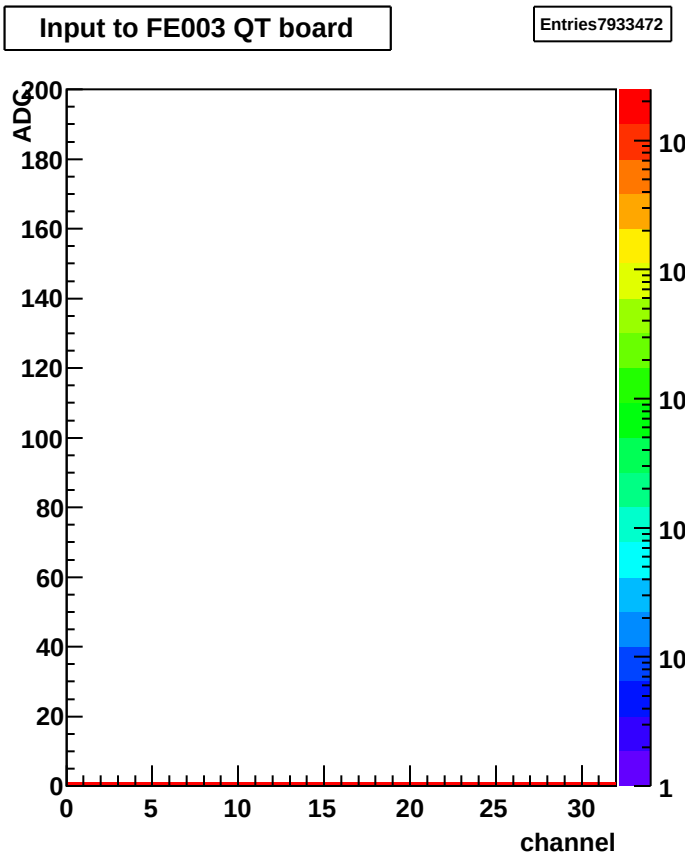

Input to FPD L3 DSM
Entries 3966736
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

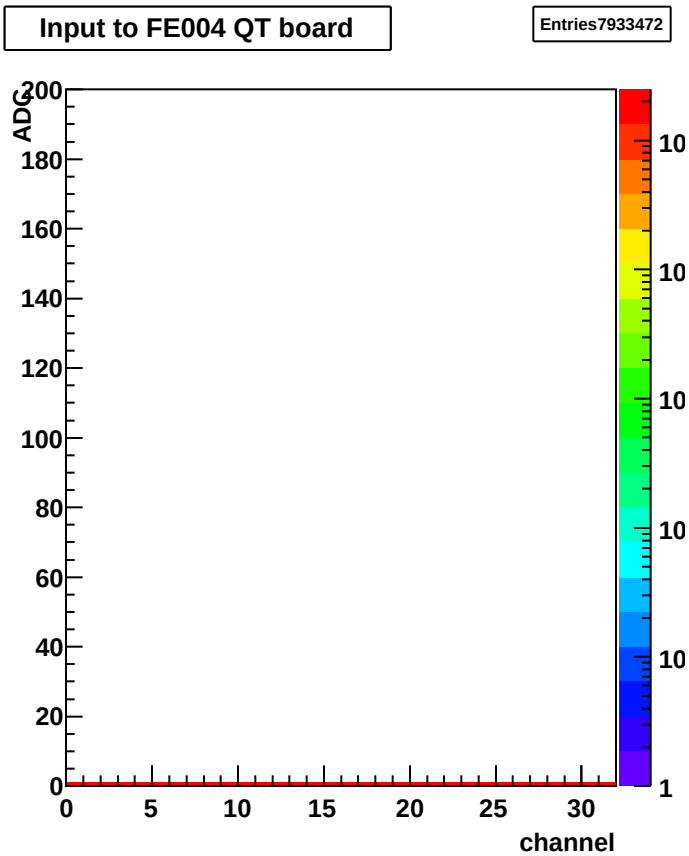

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

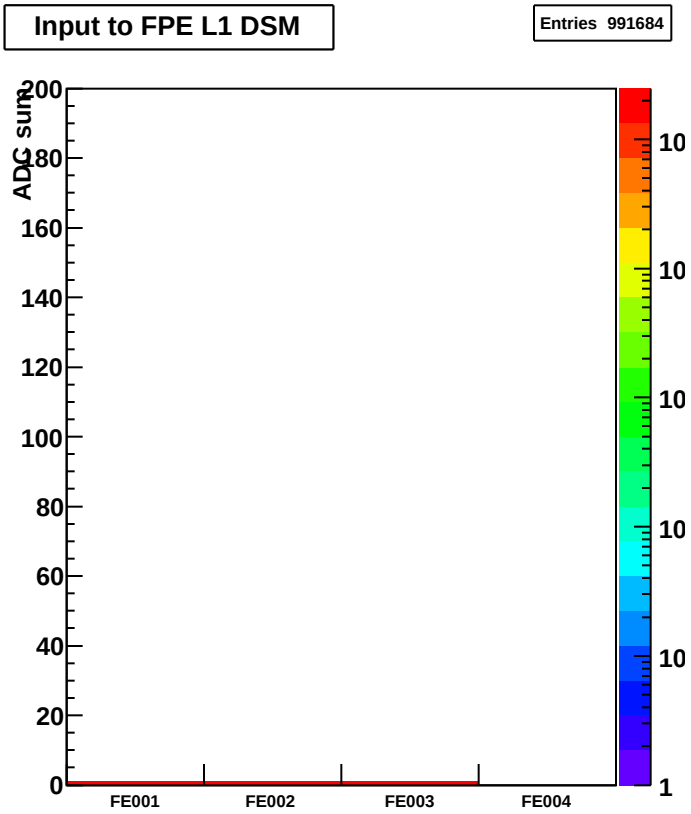

Input to FPD L2 DSM
Entries 991684
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^5
10^4
10^3
10^2
10
1

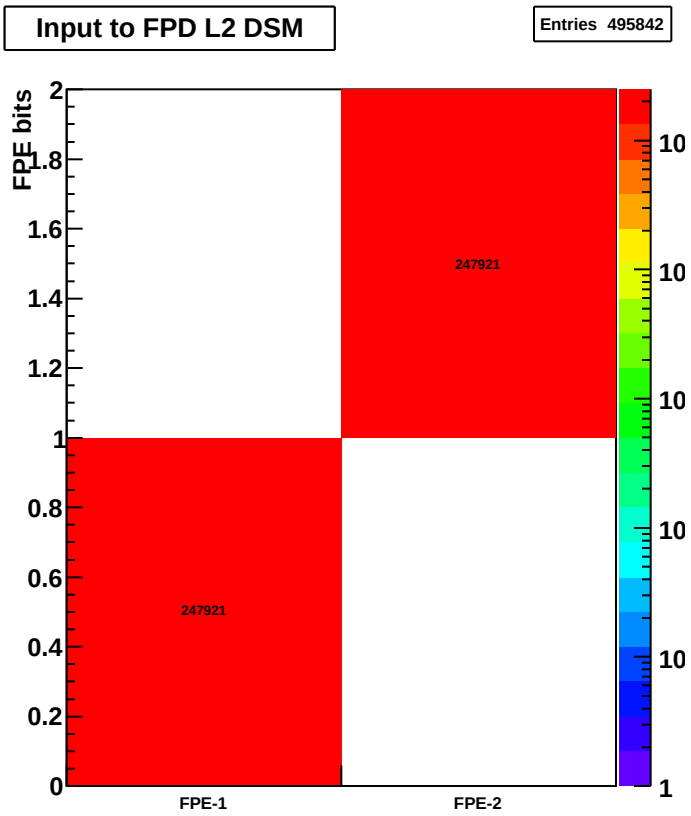

Input to FE001 QT board
Entries7933472
ADC
channel

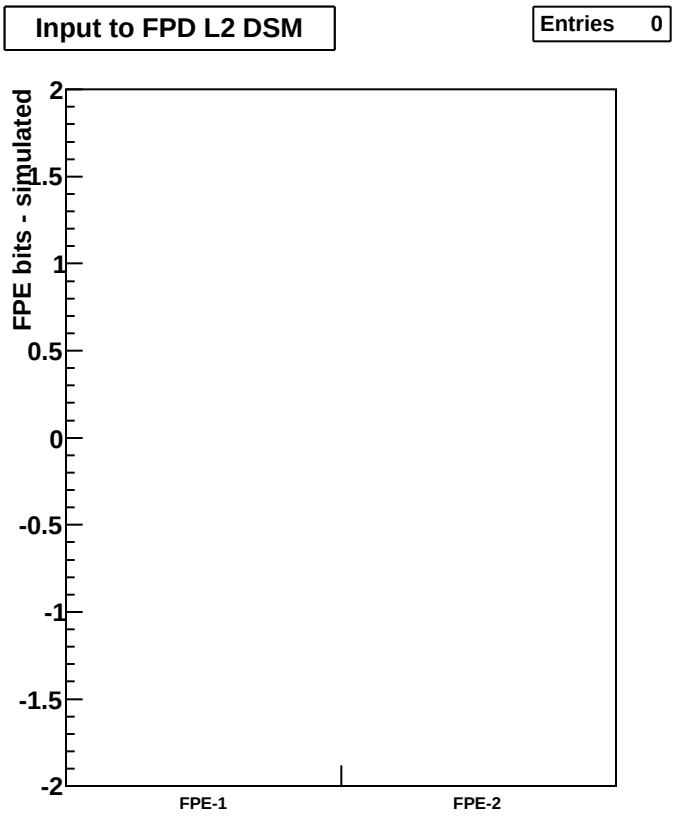

Input to FE002 QT board
Entries7933472
ADC
channel


Input to FE003 QT board
Entries7933472
ADC
channel


Input to FE004 QT board
Entries7933472
ADC
channel


Input to FPE L1 DSM
Entries 991684
ADC sum
200
180
160
140
120
100
80
60
40
20
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPD L2 DSM
Entries 495842
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
247921
247921
FPE-1
FPE-2
10
10
10
10
10
1


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