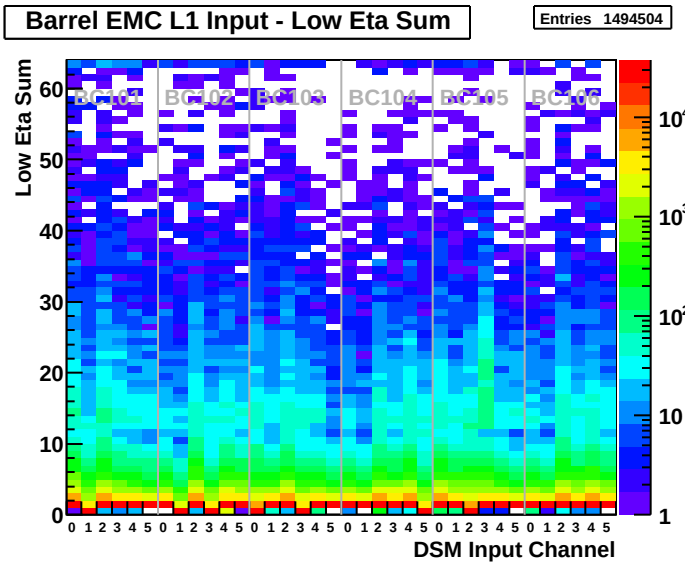
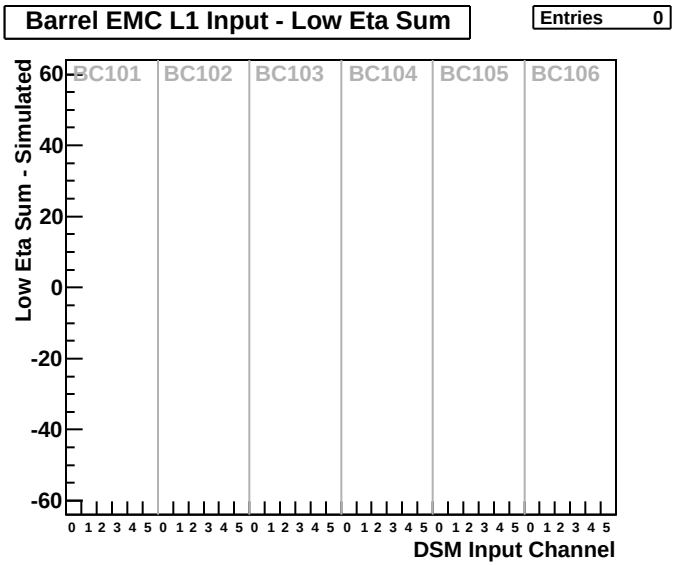
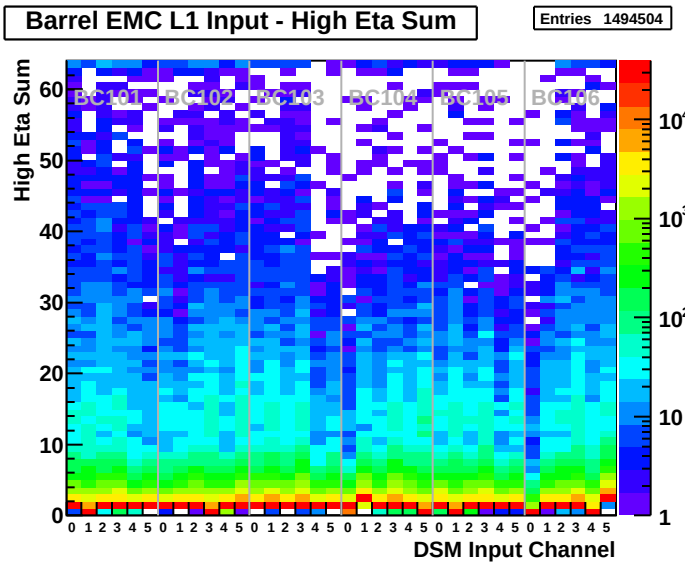
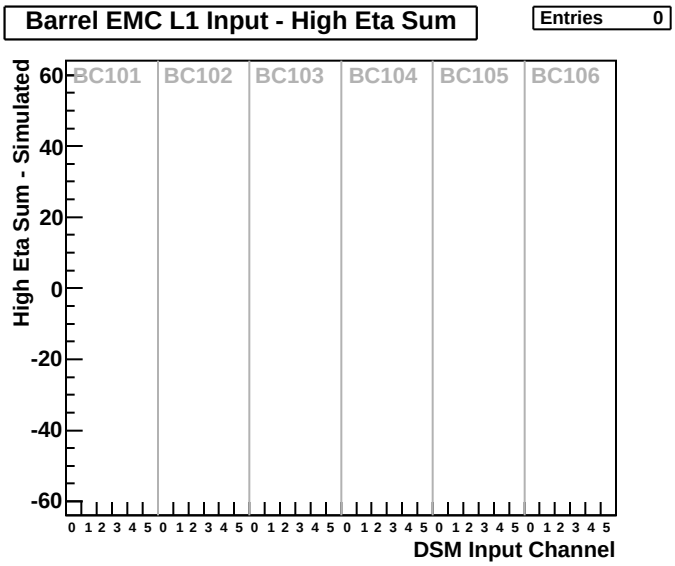
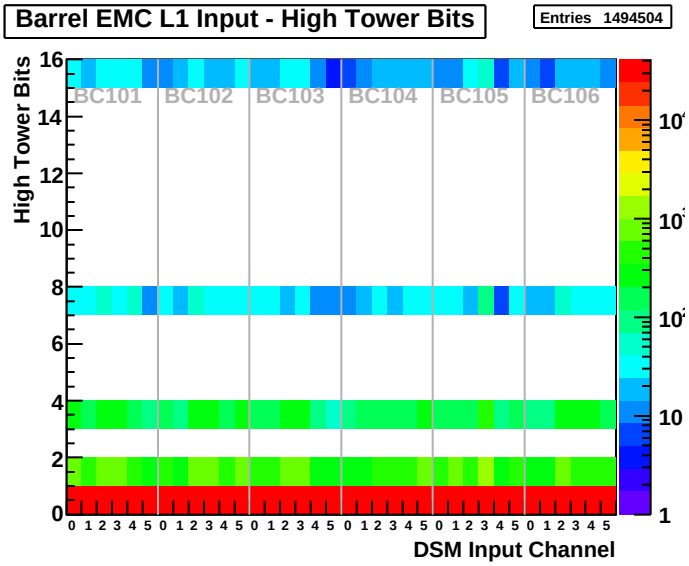
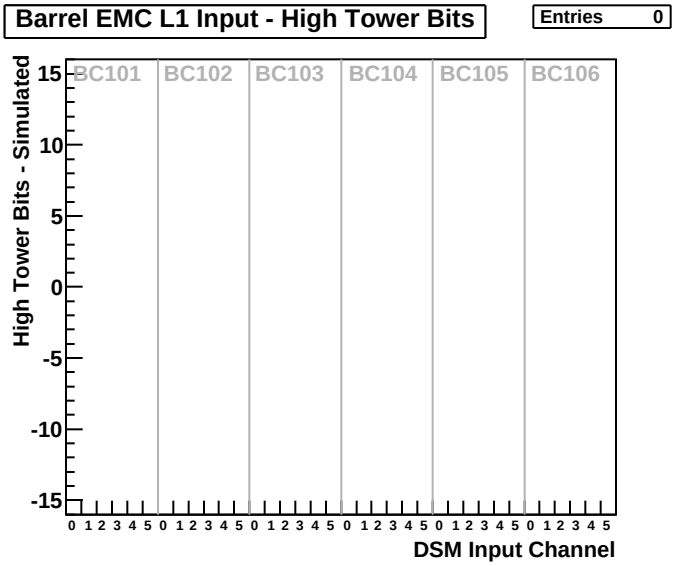

Barrel EMC L1 Input - Low Eta Sum
Entries 1494504
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

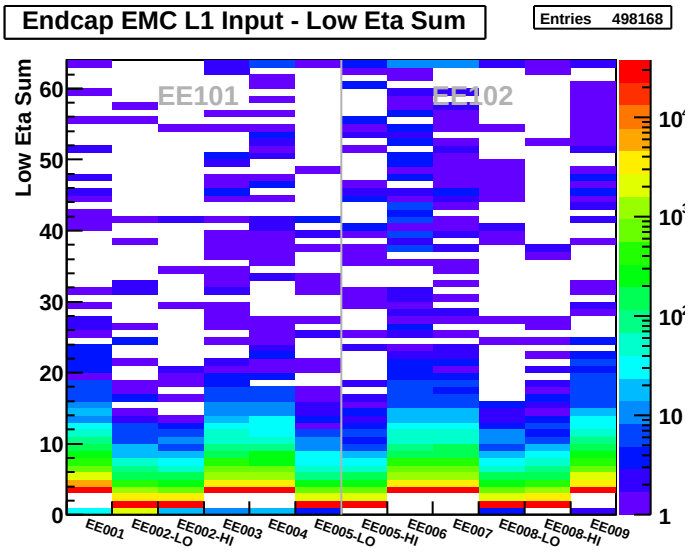

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

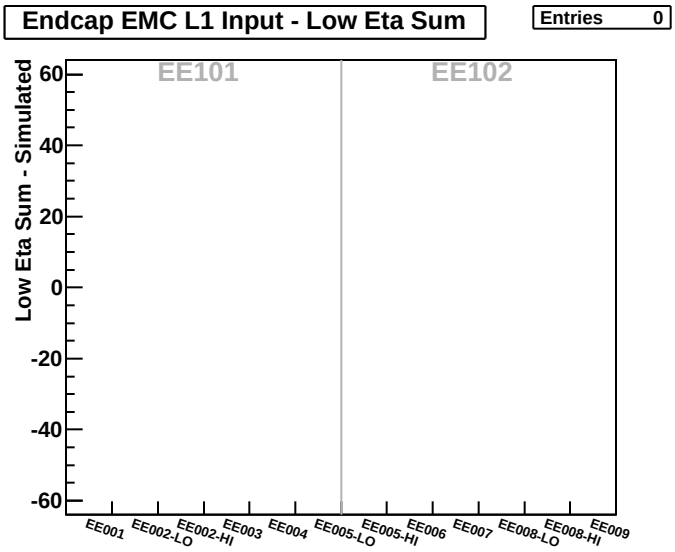

Barrel EMC L1 Input - High Eta Sum
Entries 1494504
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

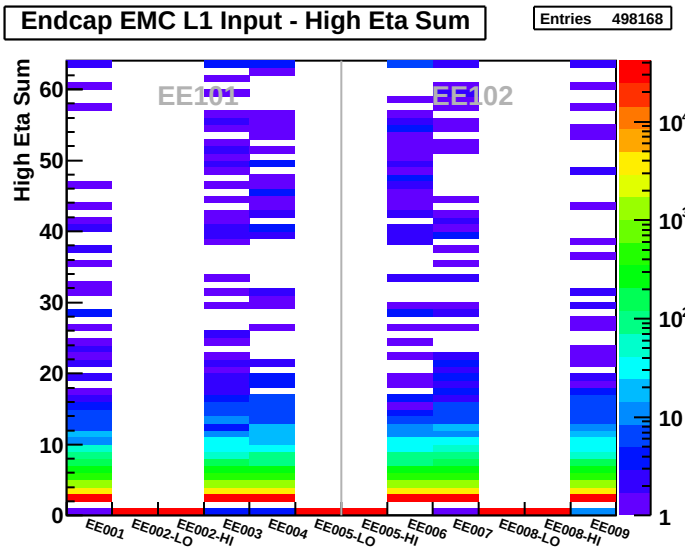

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

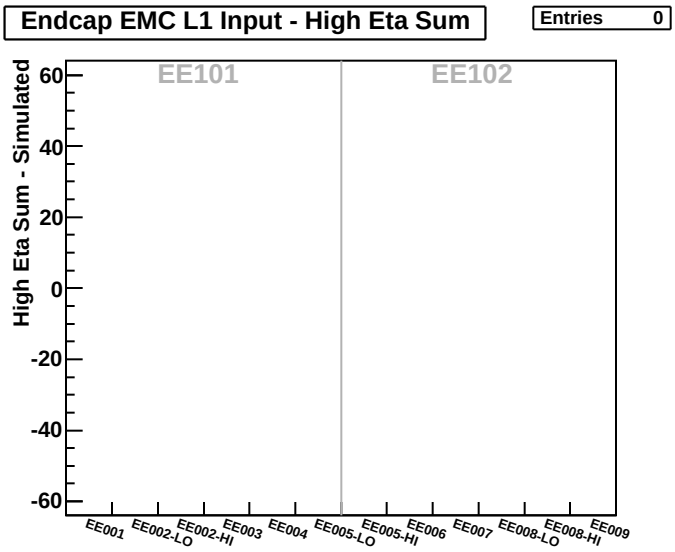

Barrel EMC L1 Input - High Tower Bits
Entries 1494504
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

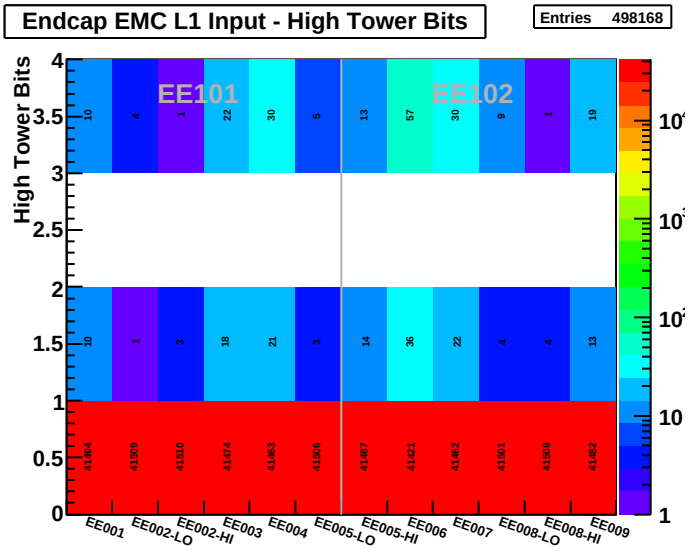

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

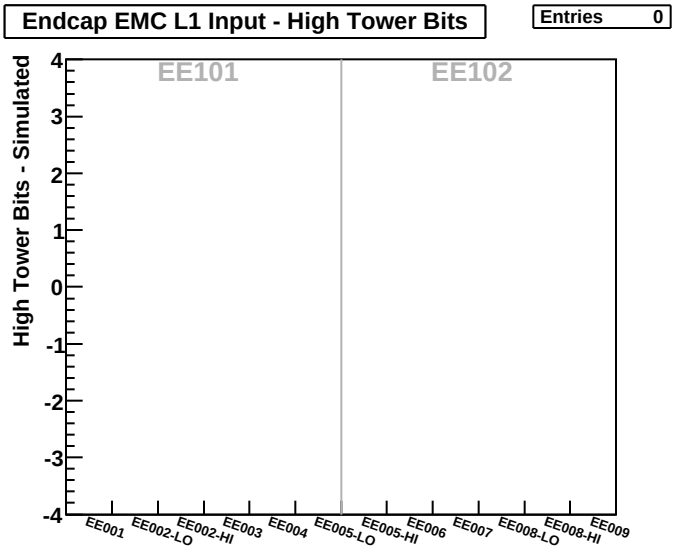

Endcap EMC L1 Input - Low Eta Sum
Entries 498168
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

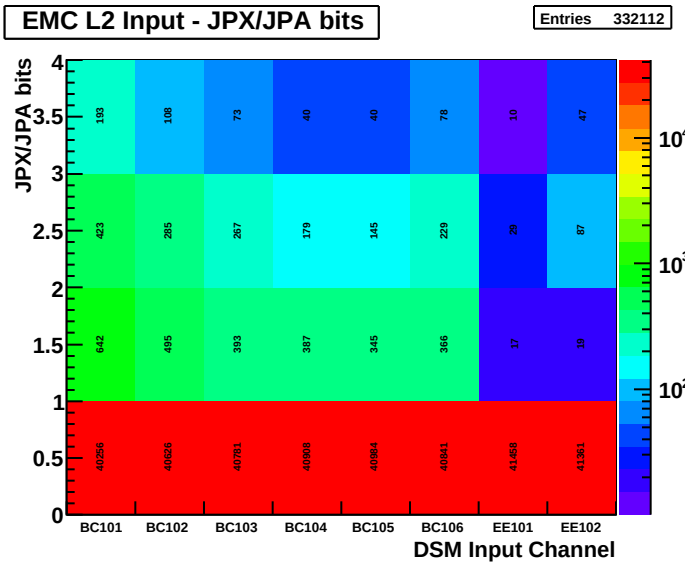

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

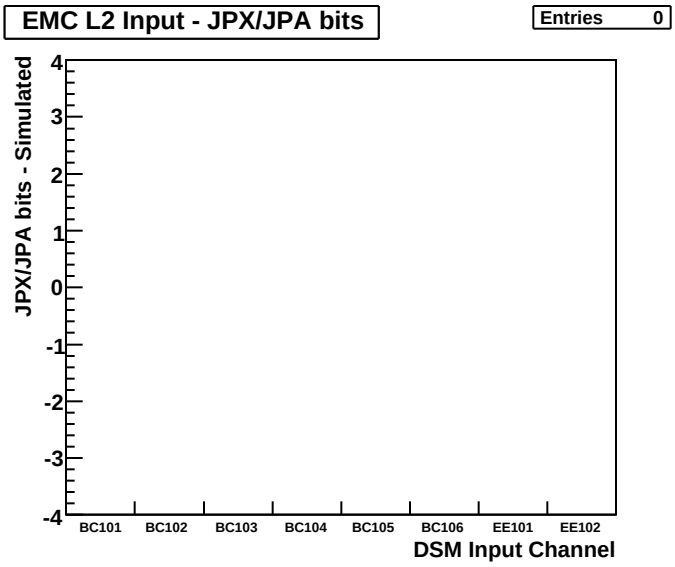

Endcap EMC L1 Input - High Eta Sum
Entries 498168
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

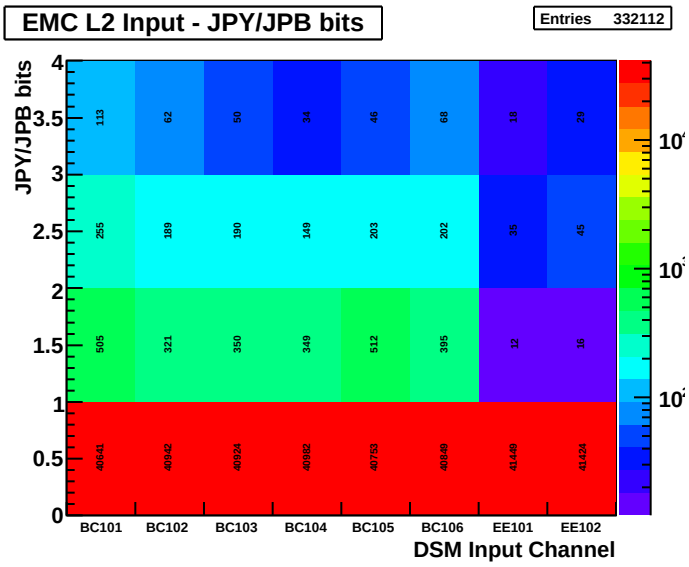

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

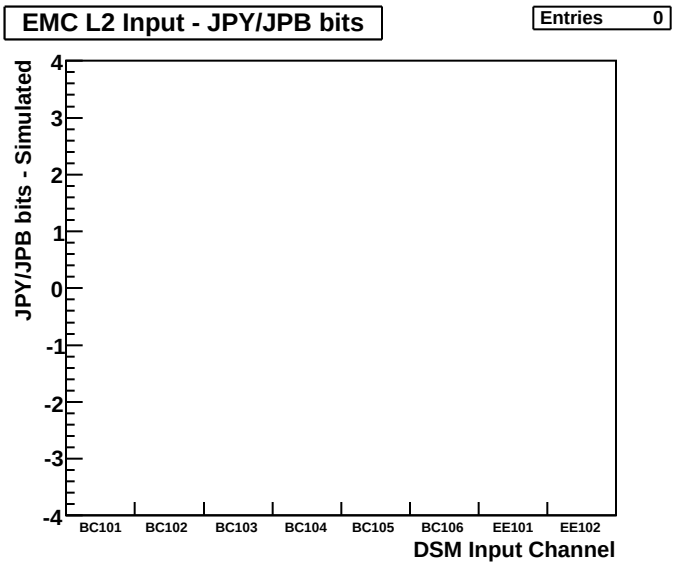

Endcap EMC L1 Input - High Tower Bits
Entries 498168
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

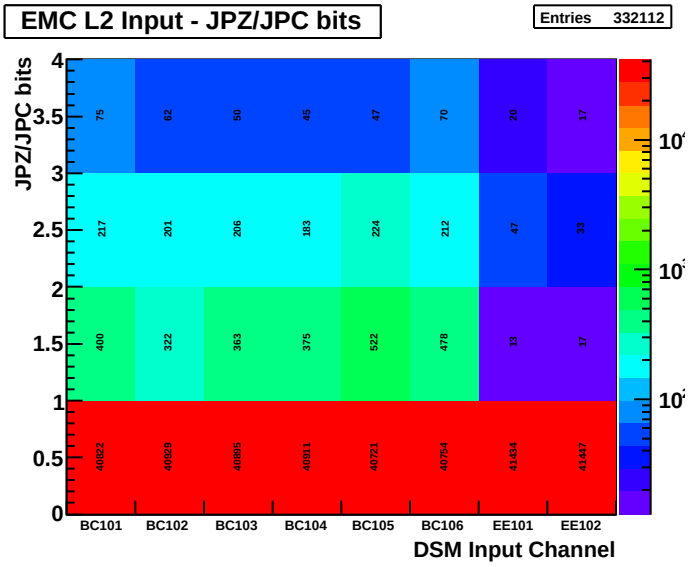

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

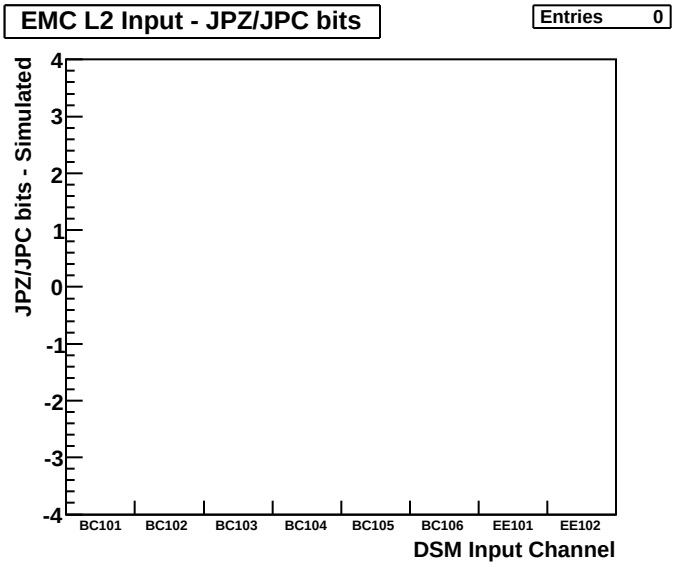

EMC L2 Input - JPX/JPA bits
Entries 332112
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
193 108 73 40 40 78 10 47
423 285 267 179 145 229 29 87
642 495 393 387 345 366 17 19
40256 40626 40781 40908 40984 40941 41458 41361

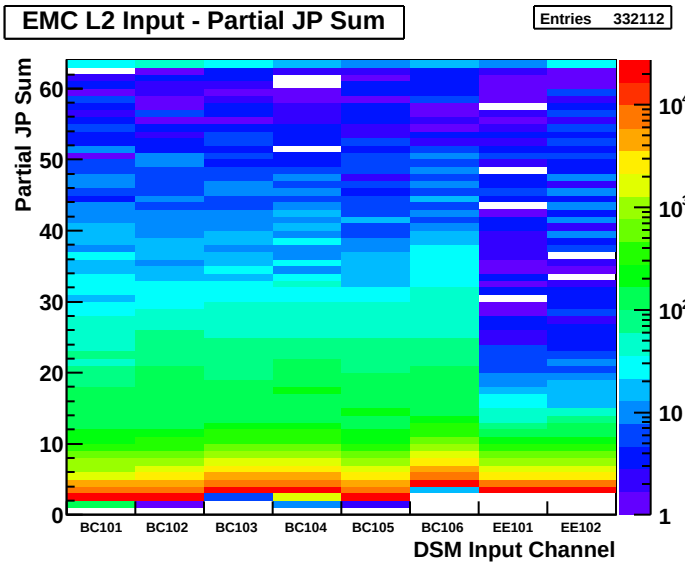

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

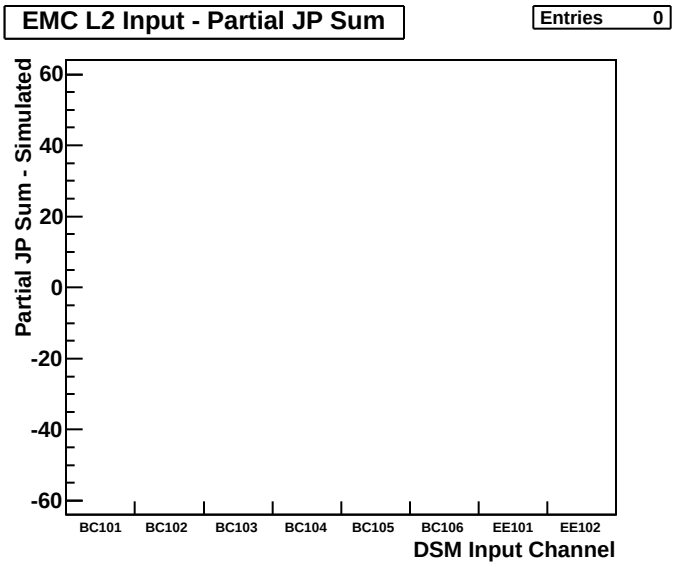

EMC L2 Input - JPY/JPB bits
Entries 332112
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
113 62 50 34 46 68 18 29
255 189 190 149 203 202 35 45
505 321 350 349 512 395 12 16
40641 40942 40924 40982 40753 40849 41449 41424

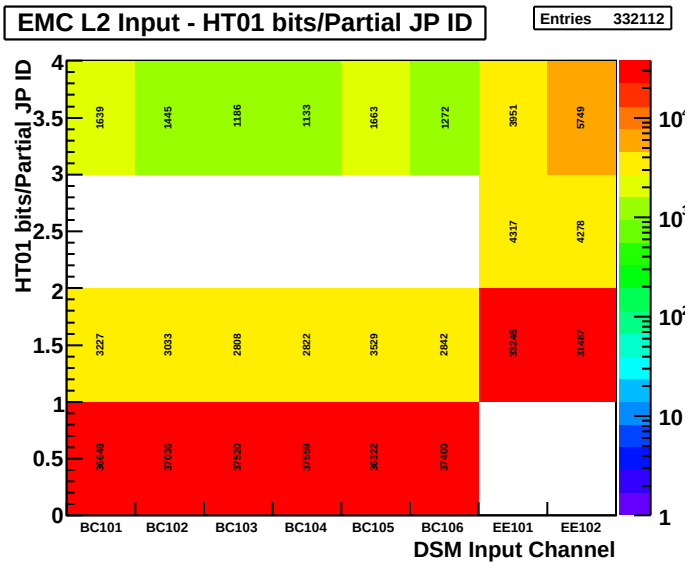

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

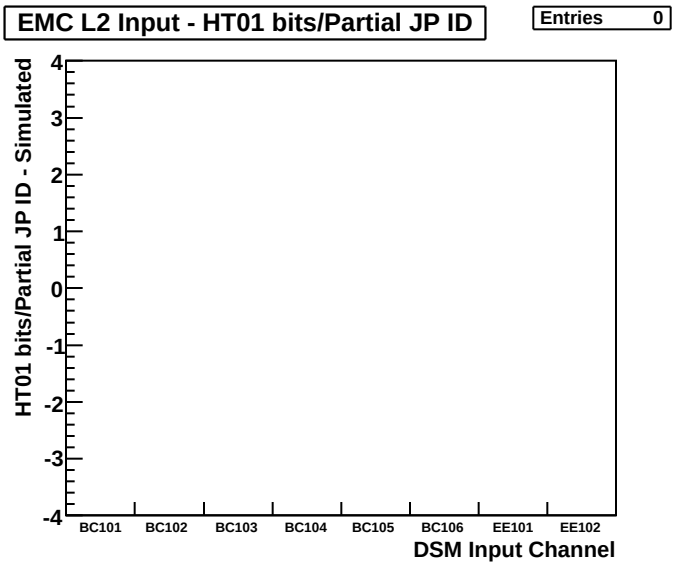

EMC L2 Input - JPZ/JPC bits
Entries 332112
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
75 62 50 45 47 70 20 17
217 201 206 183 224 212 47 33
400 322 363 375 522 478 13 17
40822 40829 40895 40911 40721 40754 41434 41447

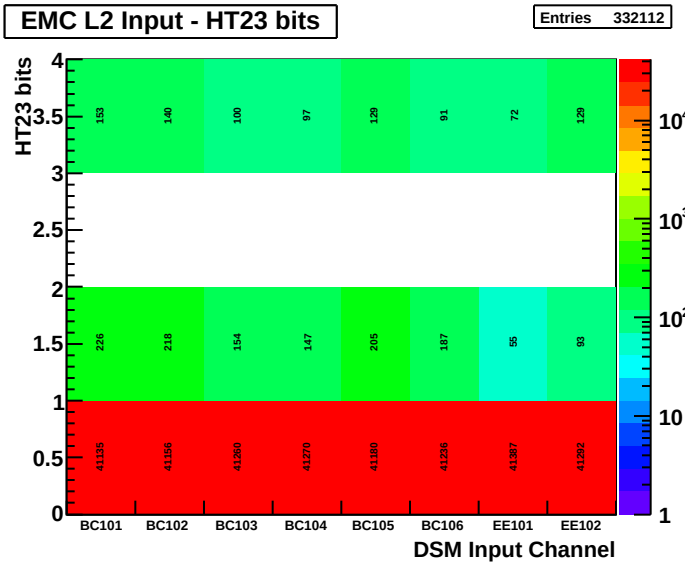

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

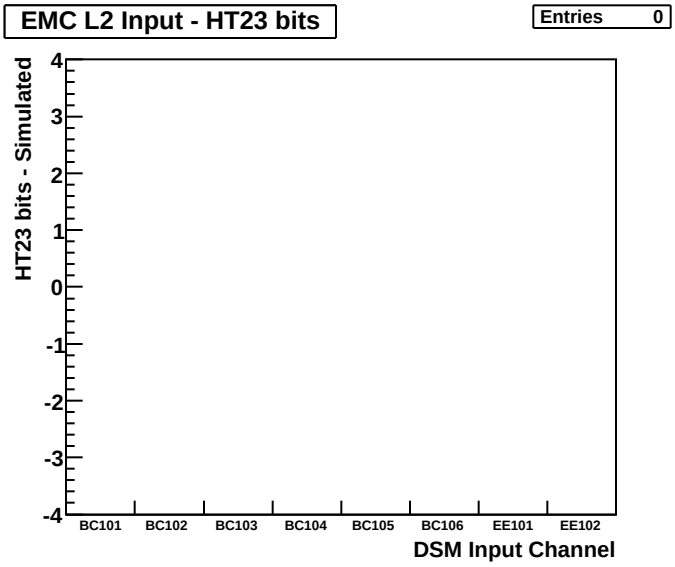

EMC L2 Input - Partial JP Sum
Entries 332112
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

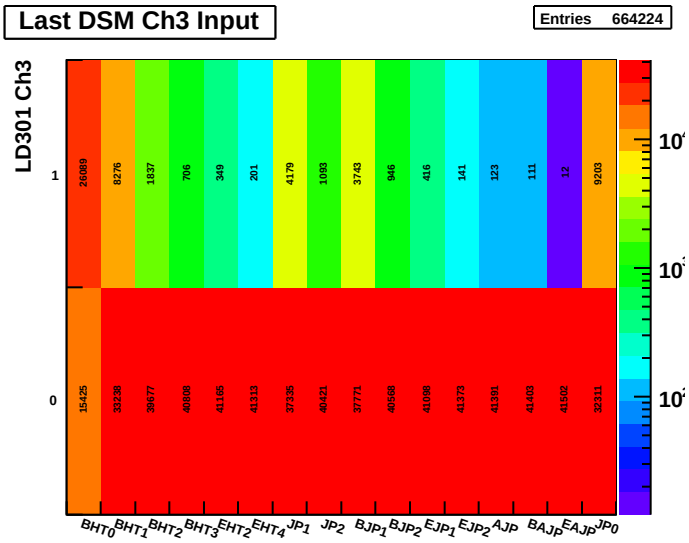

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

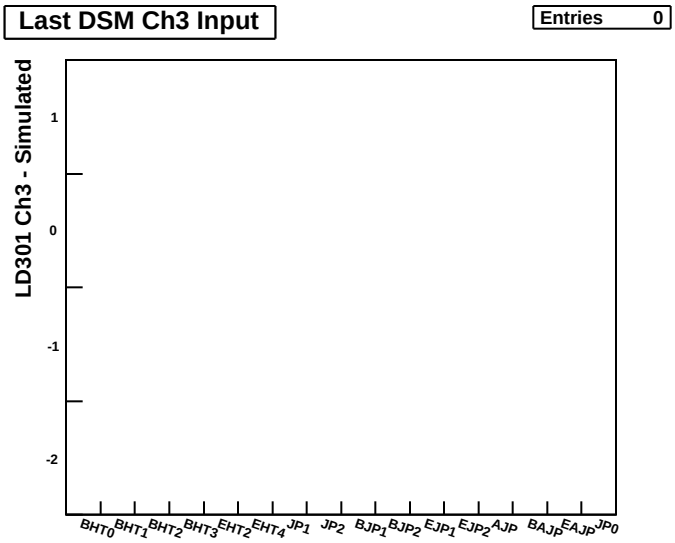

EMC L2 Input - HT01 bits/Partial JP ID
Entries 332112
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

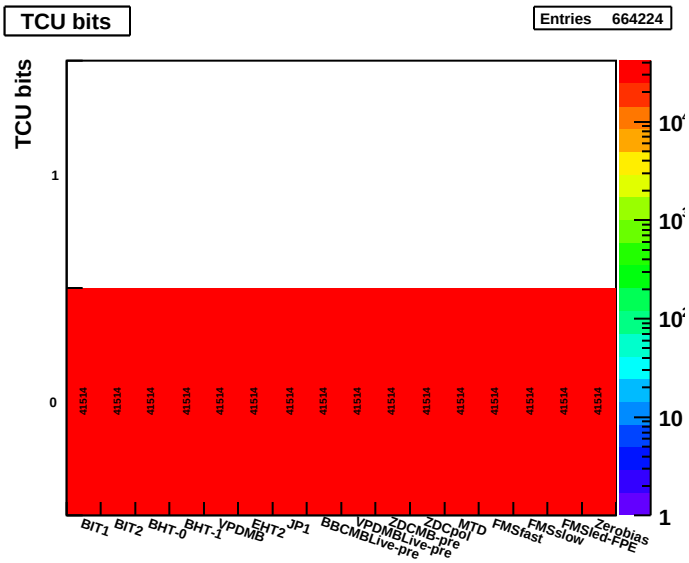

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

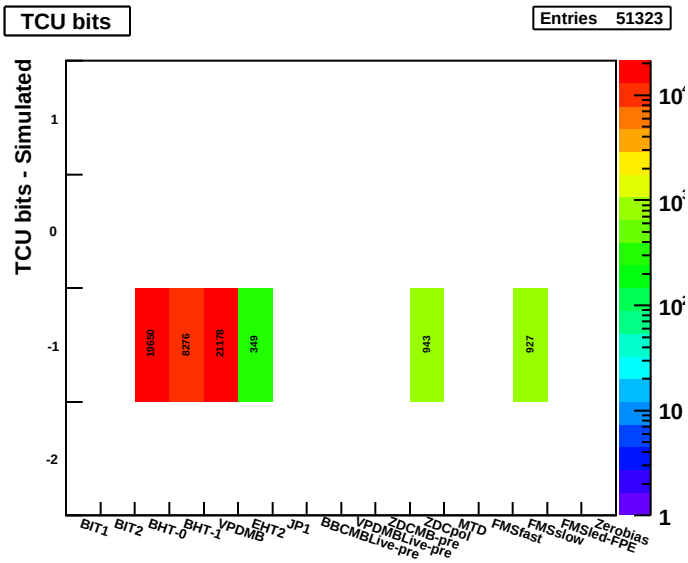

EMC L2 Input - HT23 bits
Entries 332112
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

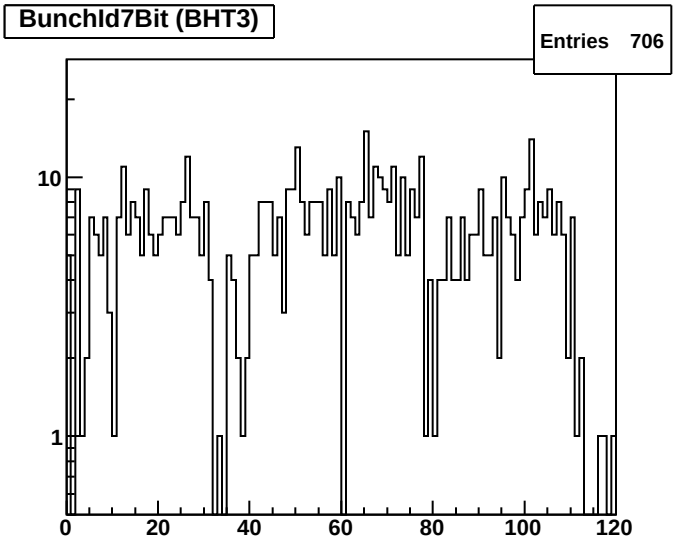

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

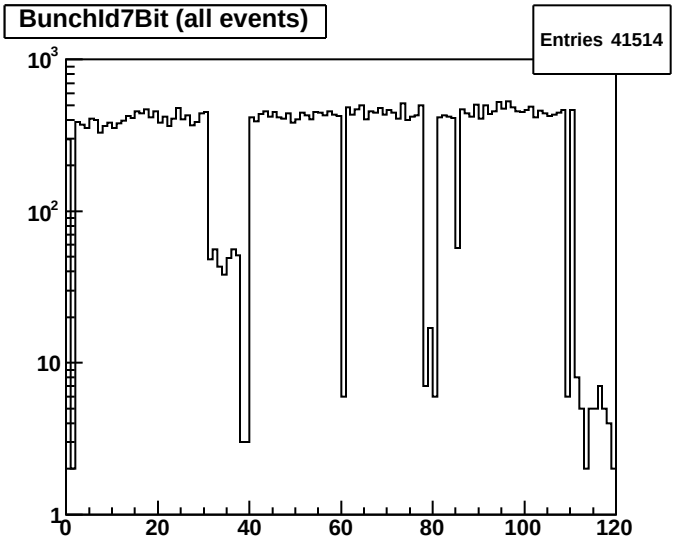

Last DSM Ch3 Input
Entries 664224
LD301 Ch3
1
0
26089 8276 1837 706 349 201 4179 1093 3743 946 416 141 123 111 12 9203
15425 33238 39677 40808 41165 41313 37335 40421 37771 40568 41098 41373 41391 41403 41502 32311
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

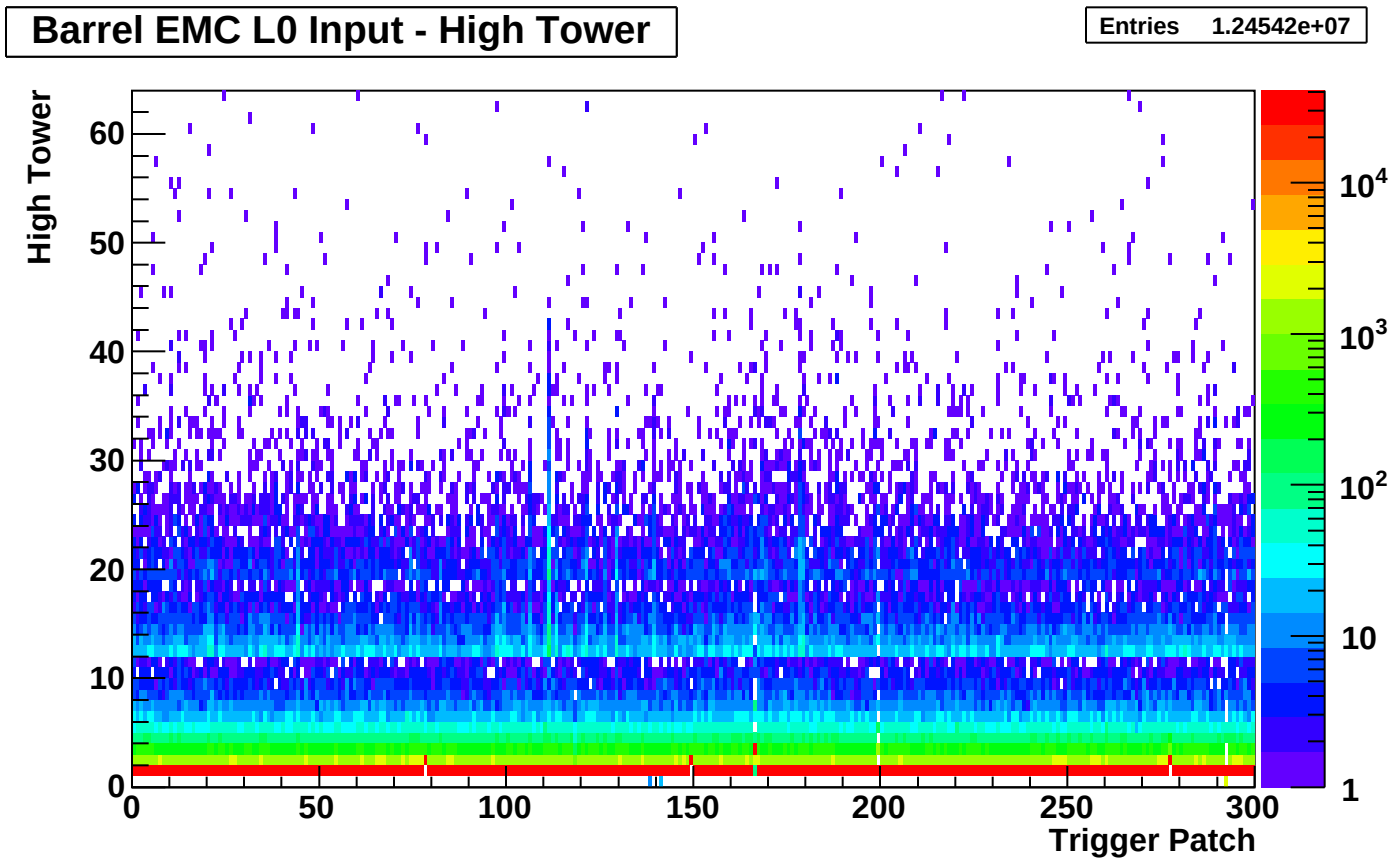

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
1
0
-1
-2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

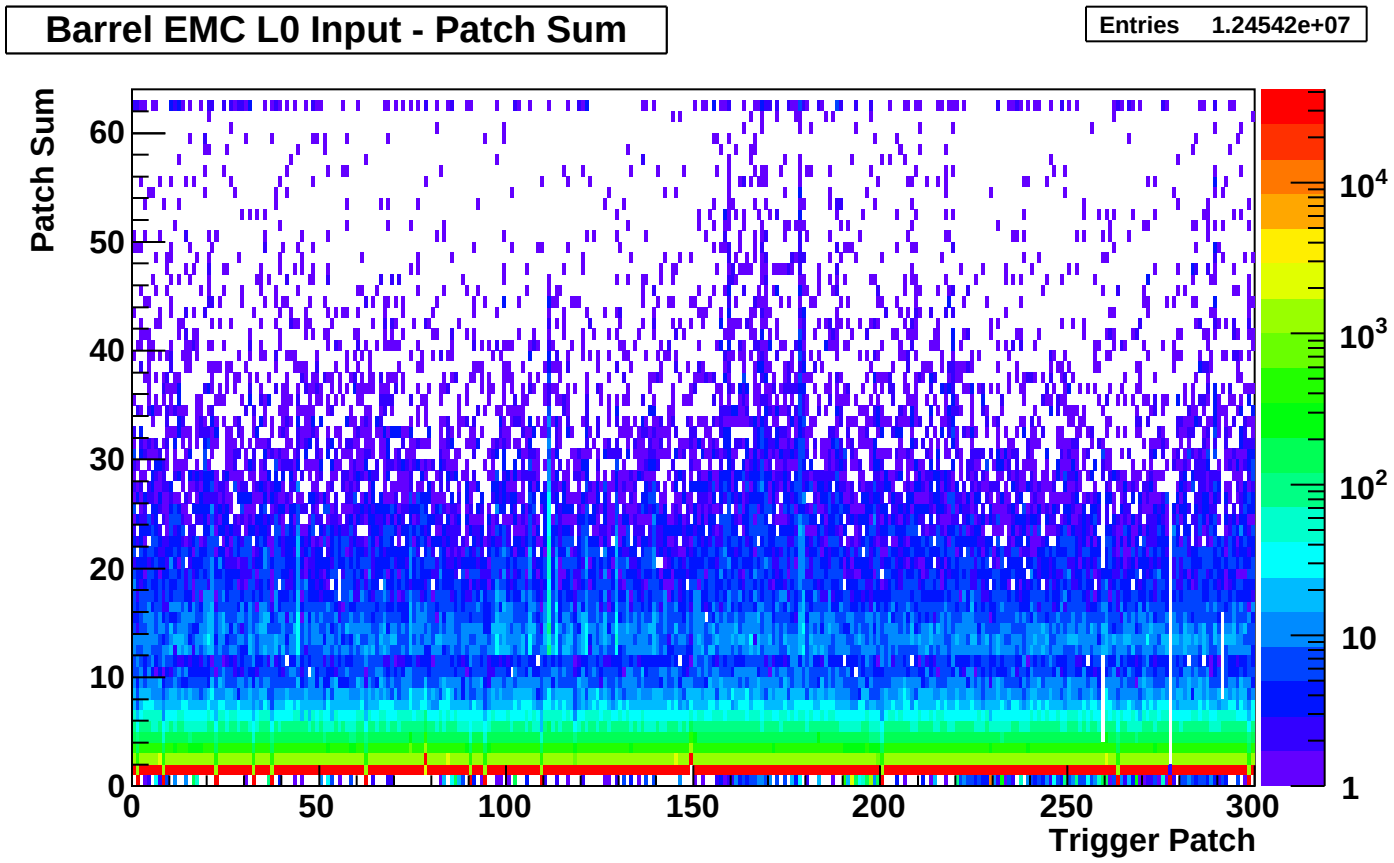

TCU bits
Entries 664224
TCU bits
1
0
41514 41514 41514 41514 41514 41514 41514 41514 41514 41514 41514 41514 41514 41514 41514 41514
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias
1

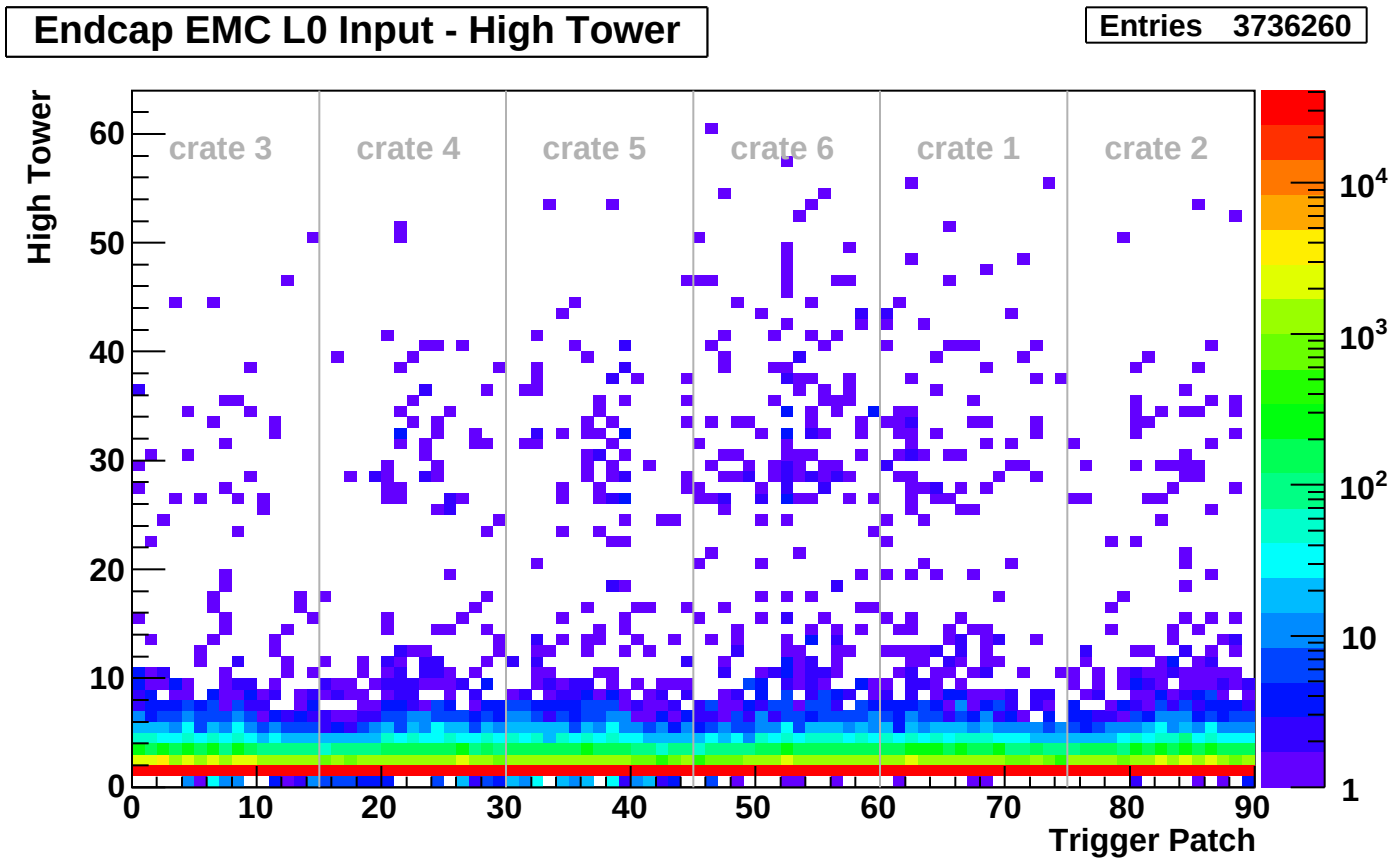

TCU bits
Entries 51323
TCU bits - Simulated
1
0
-1
-2
19650 8276 21178 349 943 927
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias
1

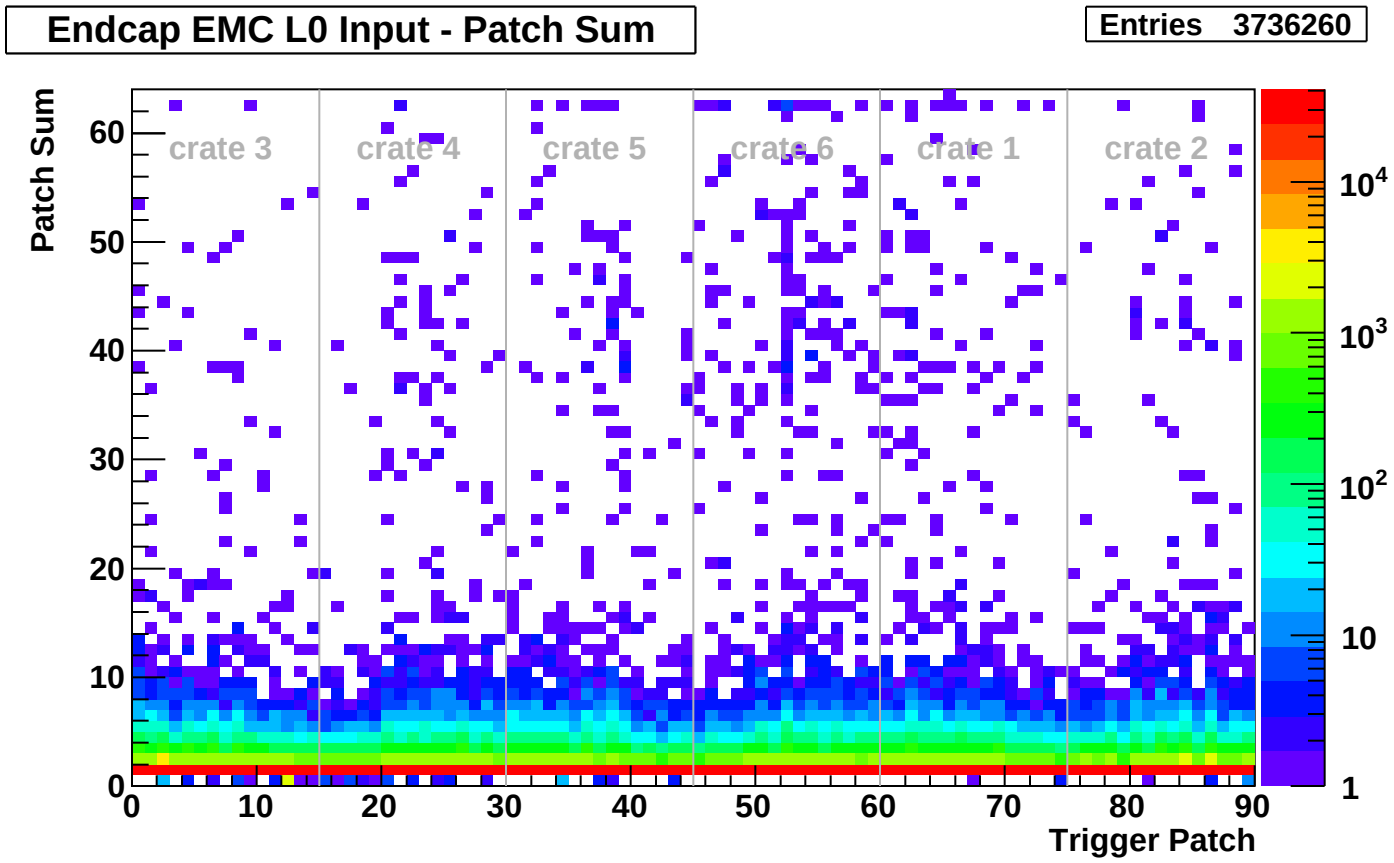

BunchId7Bit (BHT3)
Entries 706
10
1
0 20 40 60 80 100 120

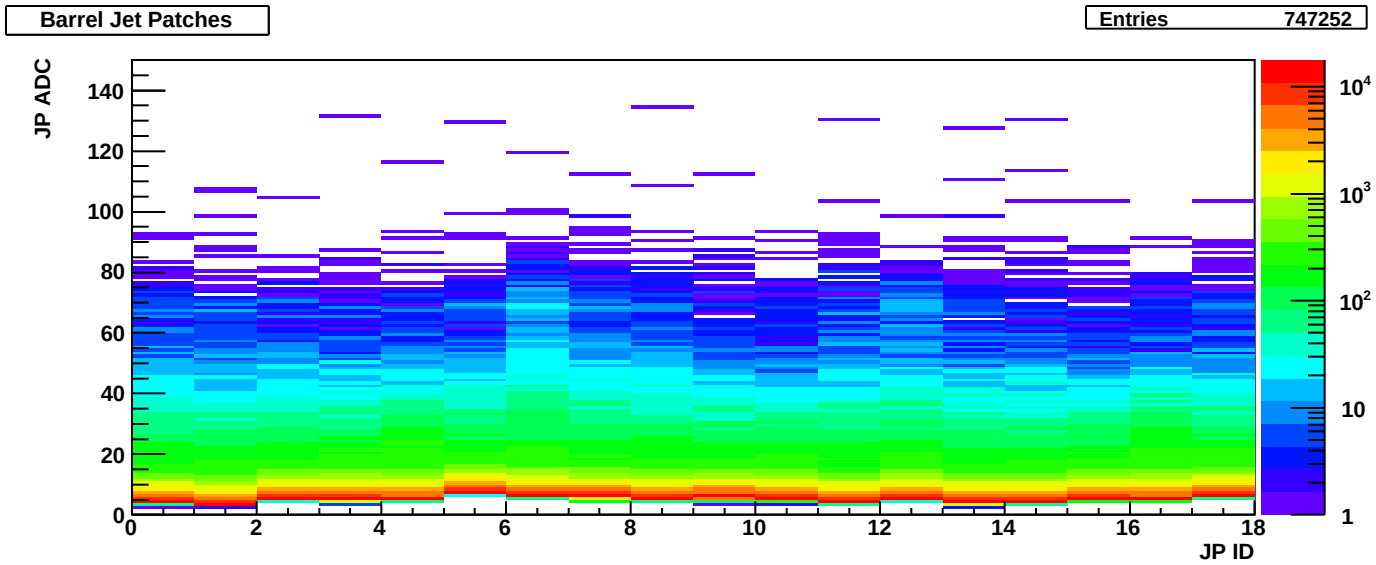

BunchId7Bit (all events)
Entries 41514
10^3
10^2
10
1
0 20 40 60 80 100 120

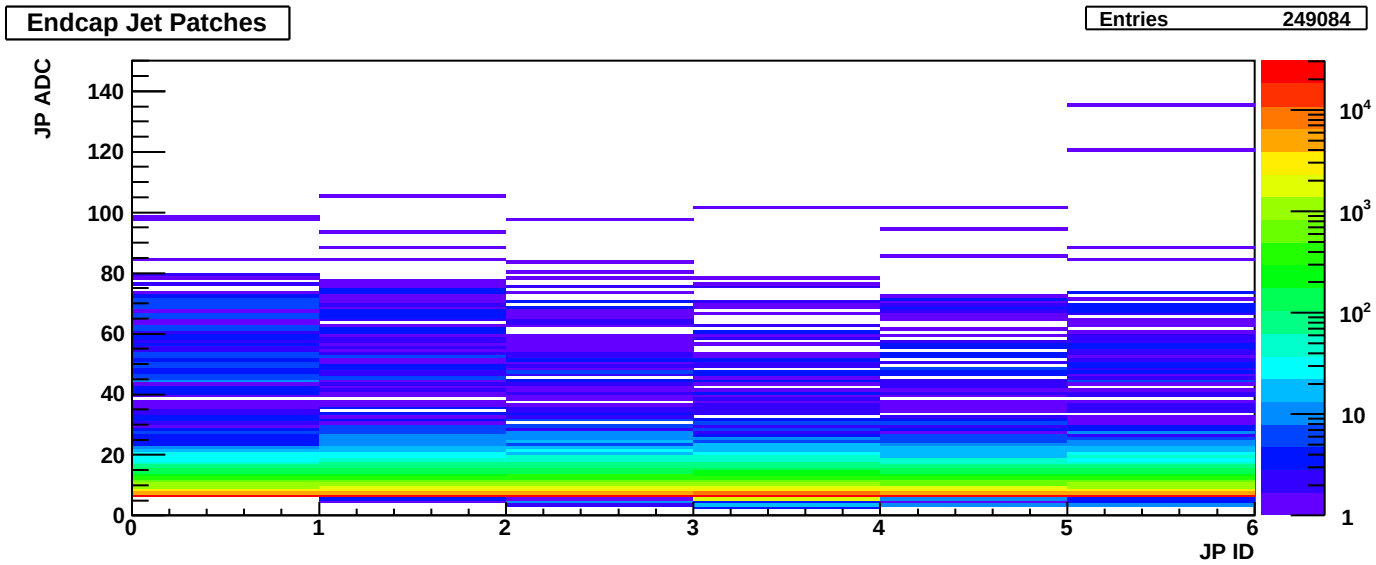

Barrel EMC L0 Input - High Tower
Entries 1.24542e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

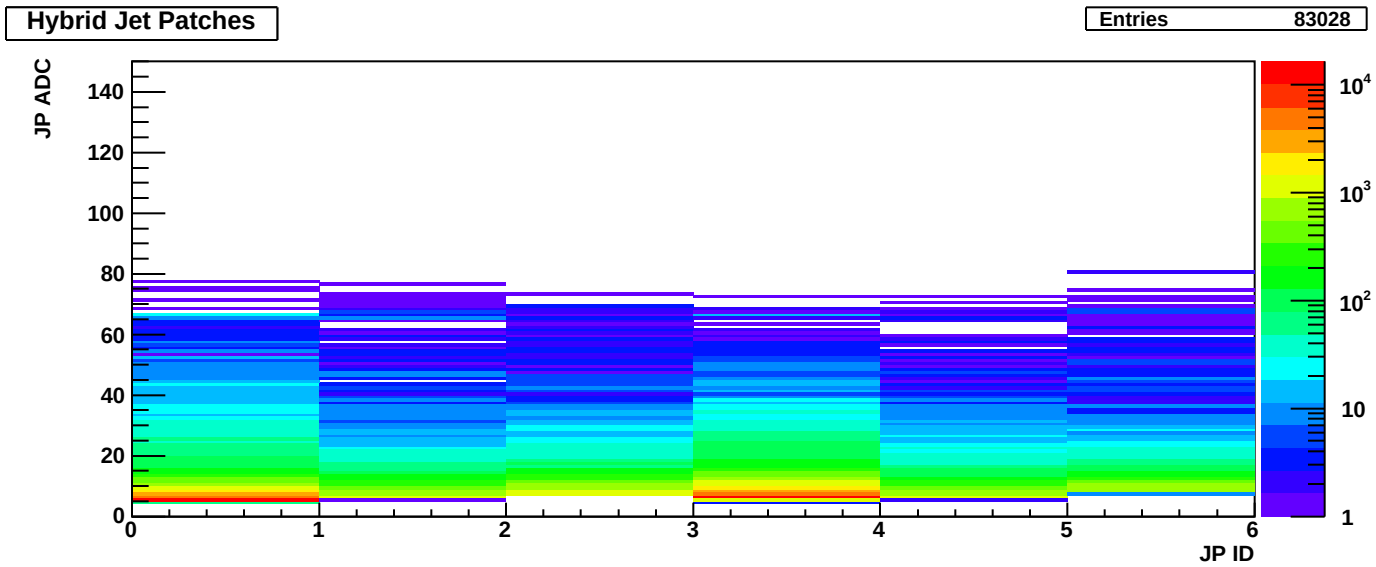

Barrel EMC L0 Input - Patch Sum
Entries 1.24542e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

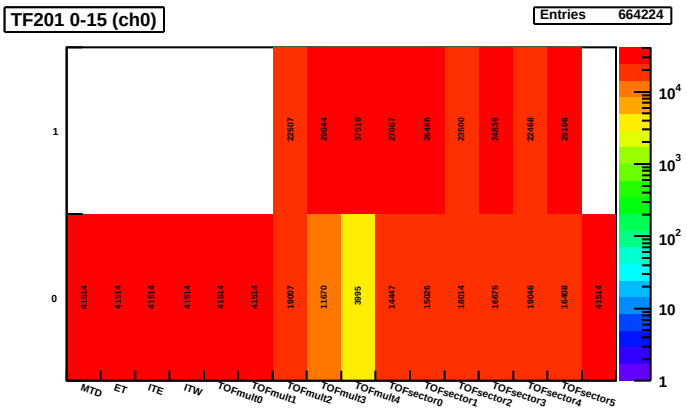

Endcap EMC L0 Input - High Tower
Entries 3736260
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

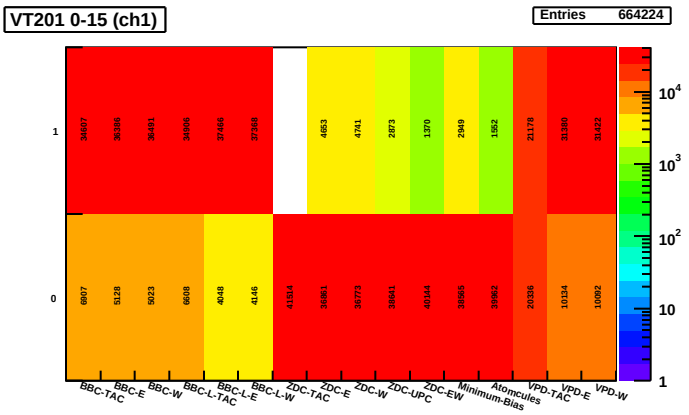

Endcap EMC L0 Input - Patch Sum
Entries 3736260
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

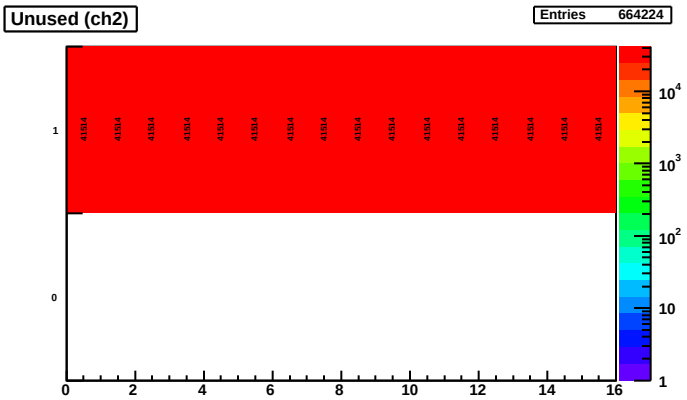

Barrel Jet Patches
Entries 747252
JP ADC
JP ID

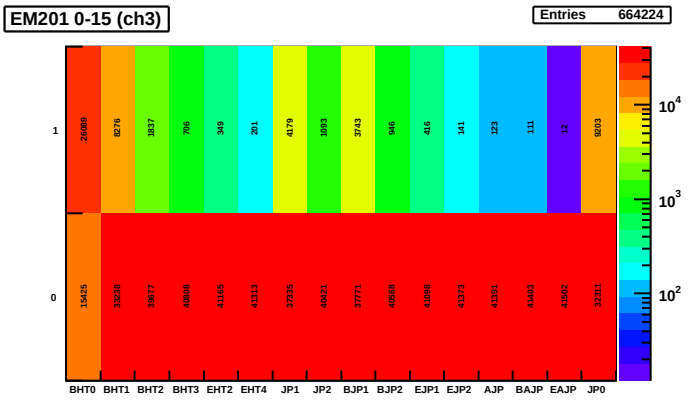

Endcap Jet Patches
Entries 249084
JP ADC
JP ID

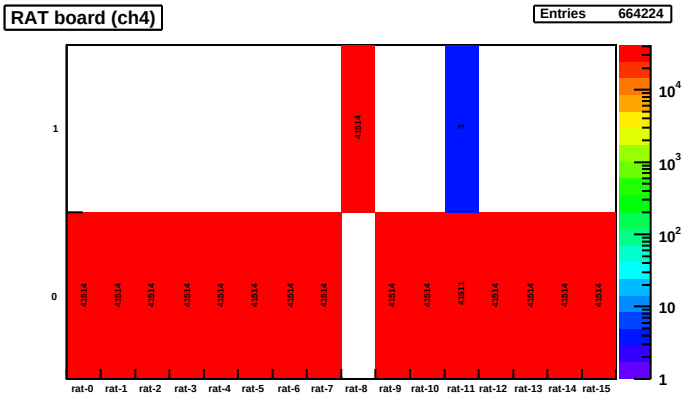

Hybrid Jet Patches
Entries 83028
JP ADC
JP ID

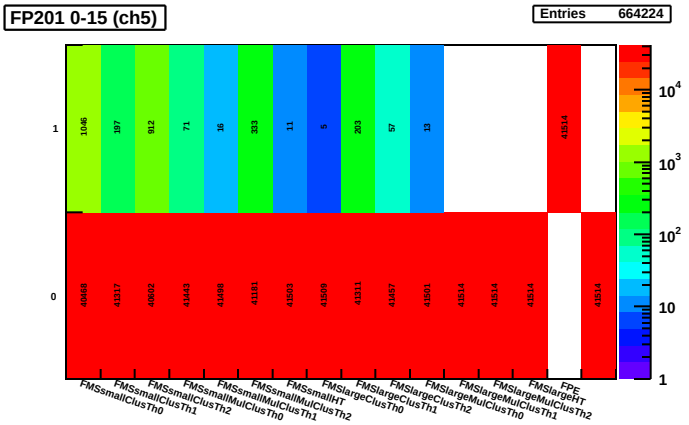

TF201 0-15 (ch0)
Entries 664224
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

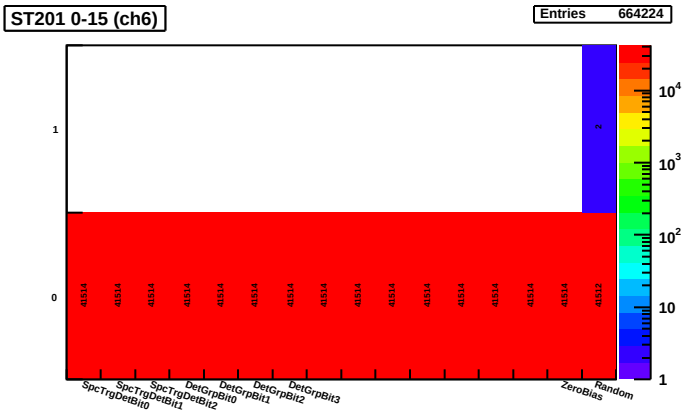

VT201 0-15 (ch1)
Entries 664224
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Atomcules Minimum-Bias VPD-TAC VPD-E VPD-W

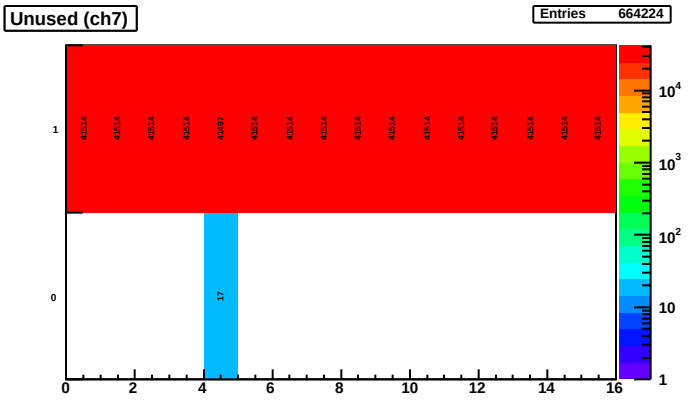

Unused (ch2)
Entries 664224

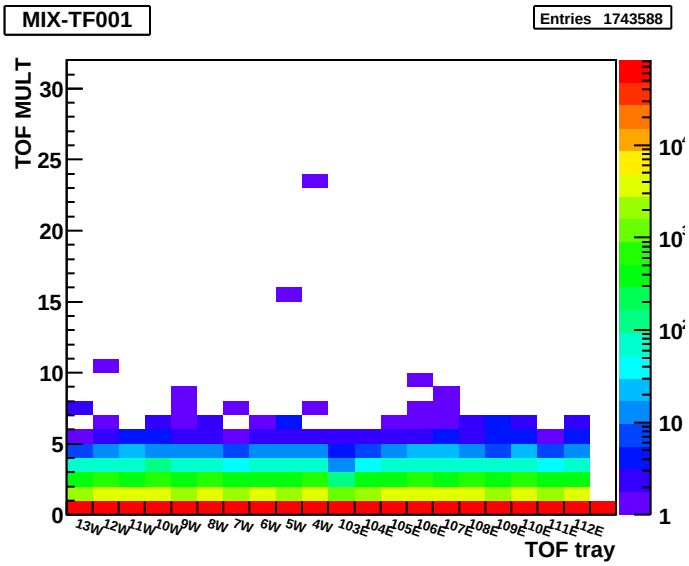

EM201 0-15 (ch3)
Entries 664224
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

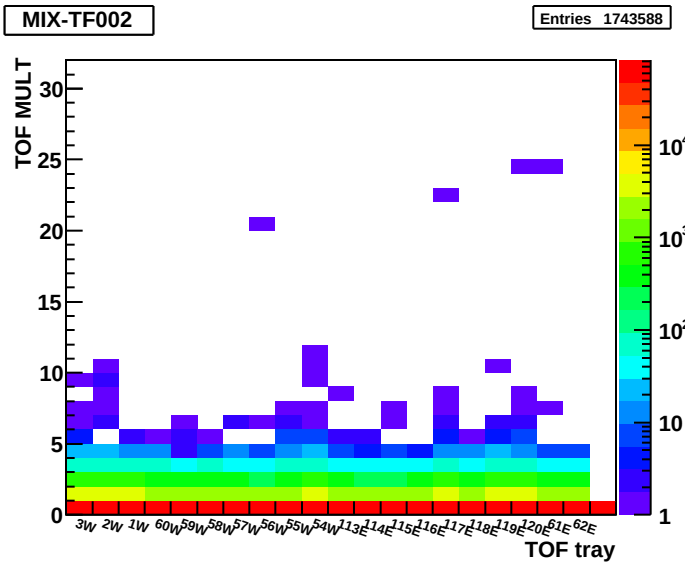

RAT board (ch4)
Entries 664224
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

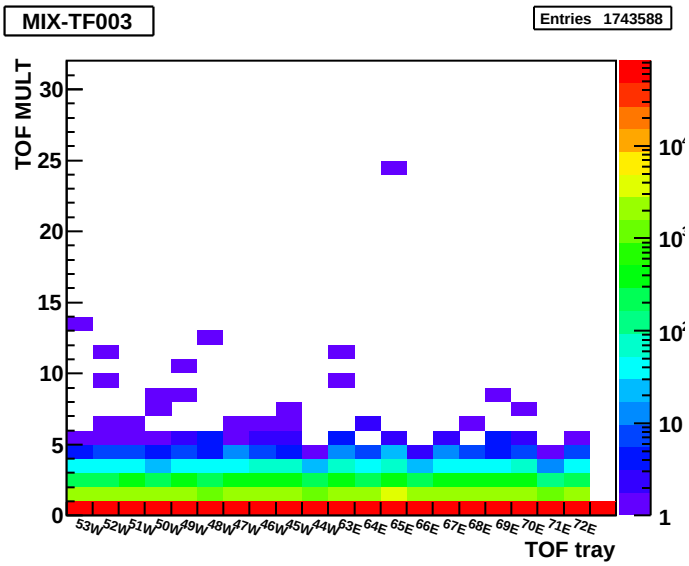

FP201 0-15 (ch5)
Entries 664224
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

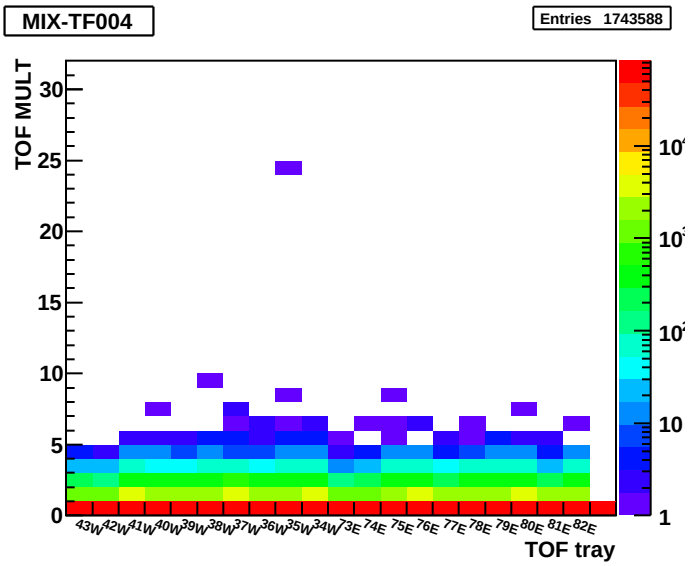

ST201 0-15 (ch6)
Entries 664224
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

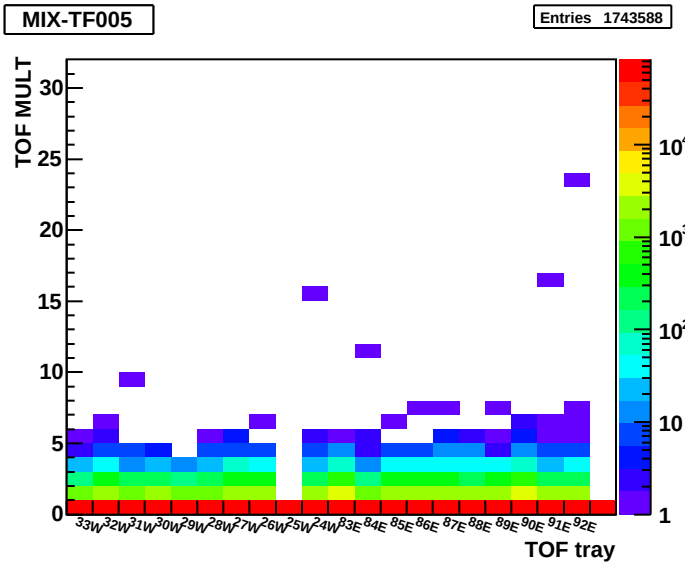

Unused (ch7)
Entries 664224

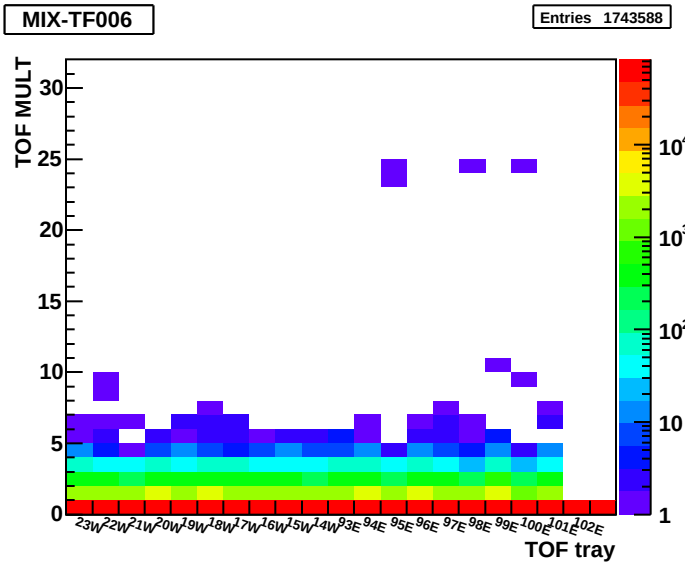

MIX-TF001
Entries 1743588
TOF MULT
TOF tray

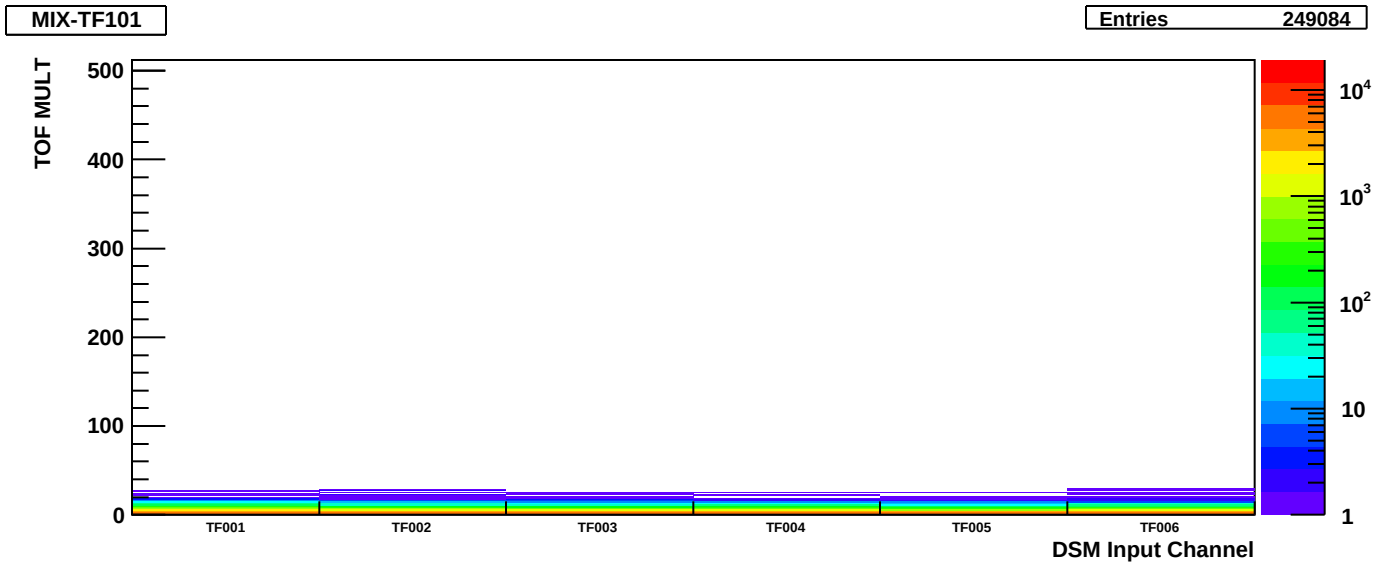

MIX-TF002
Entries 1743588
TOF MULT
TOF tray

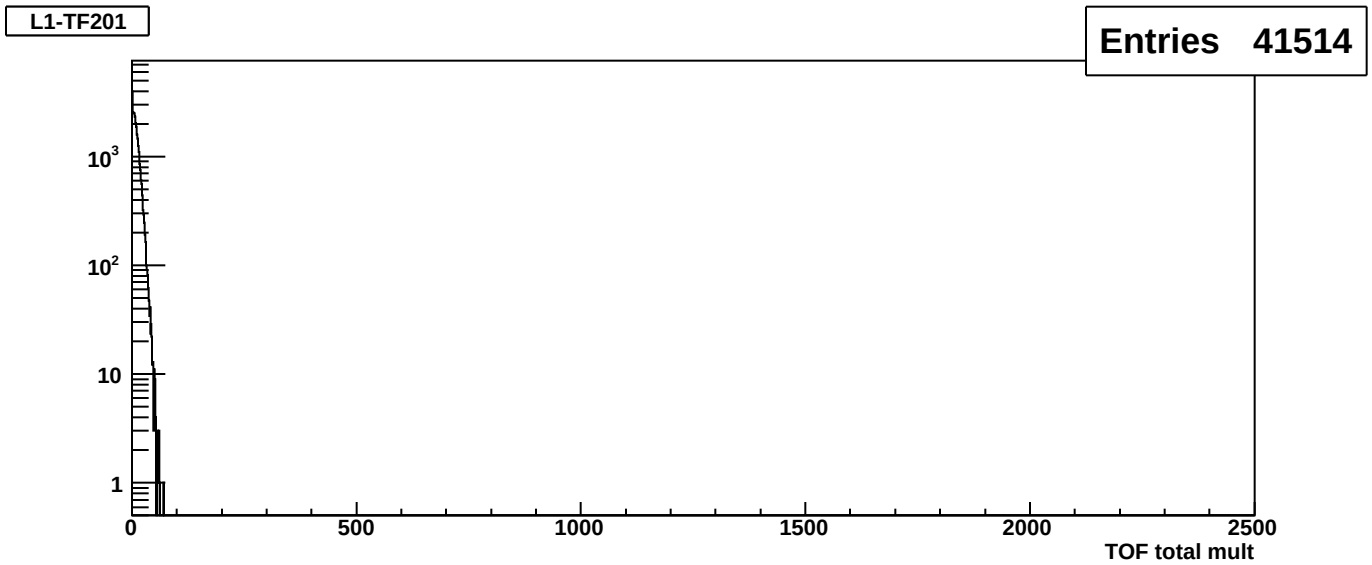

MIX-TF003
Entries 1743588
TOF MULT
TOF tray

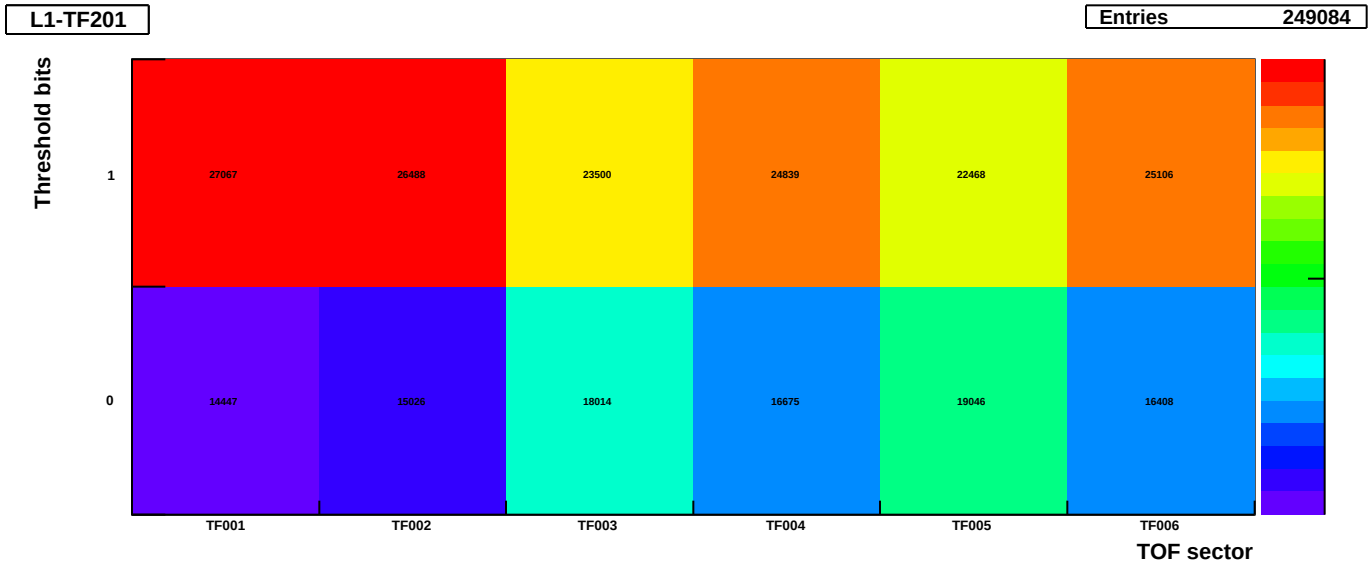

MIX-TF004
Entries 1743588
TOF MULT
TOF tray

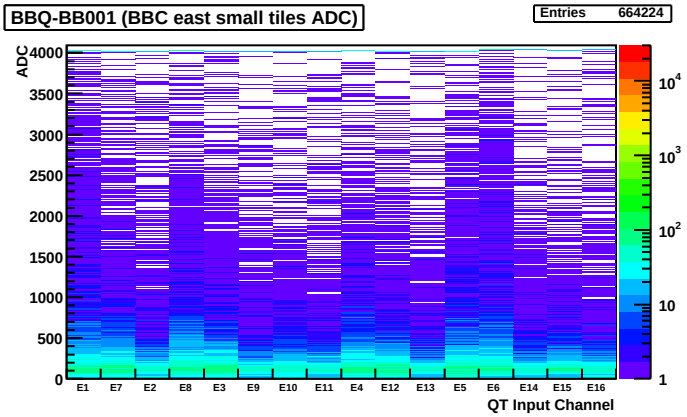

MIX-TF005
Entries 1743588
TOF MULT
TOF tray

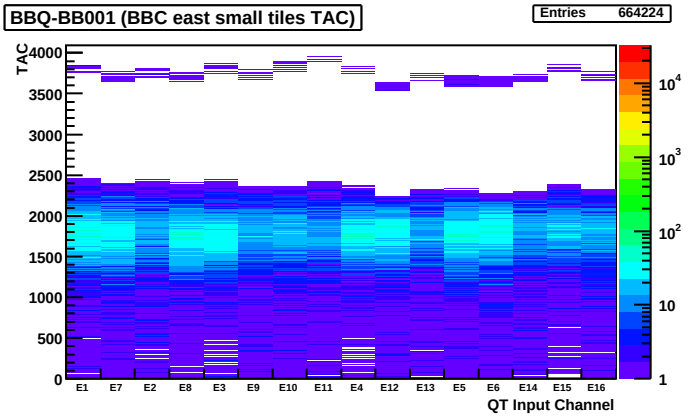

MIX-TF006
Entries 1743588
TOF MULT
TOF tray

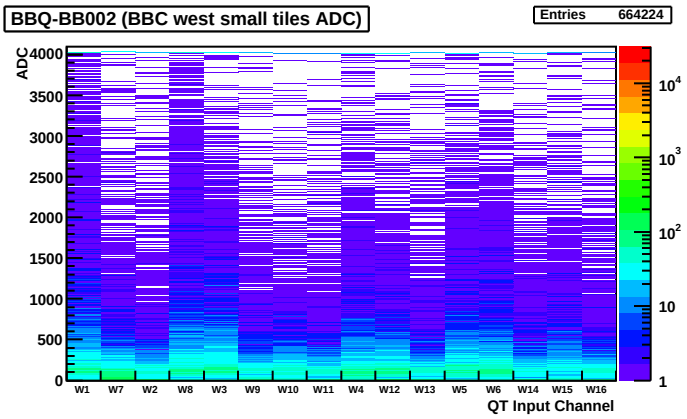

MIX-TF101
Entries 249084
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

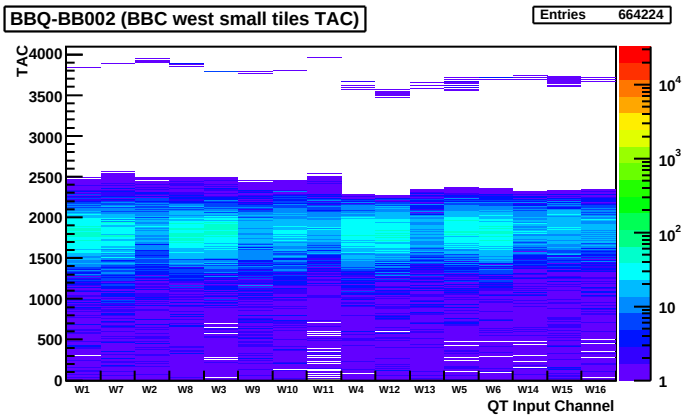

L1-TF201
Entries 41514
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

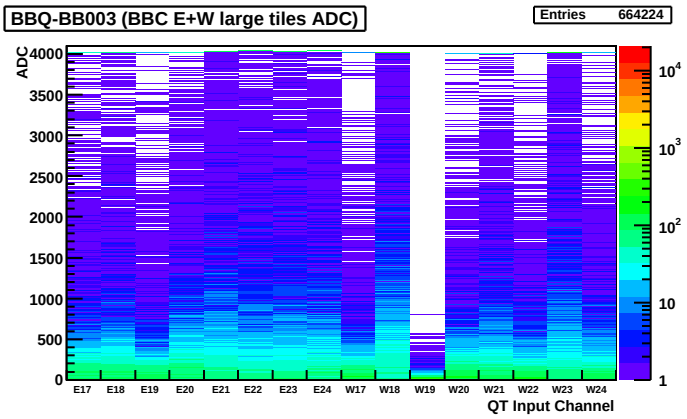

L1-TF201
Entries 249084
Threshold bits
1
0
27067
26488
23500
24839
22468
25106
14447
15026
18014
16675
19046
16408
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

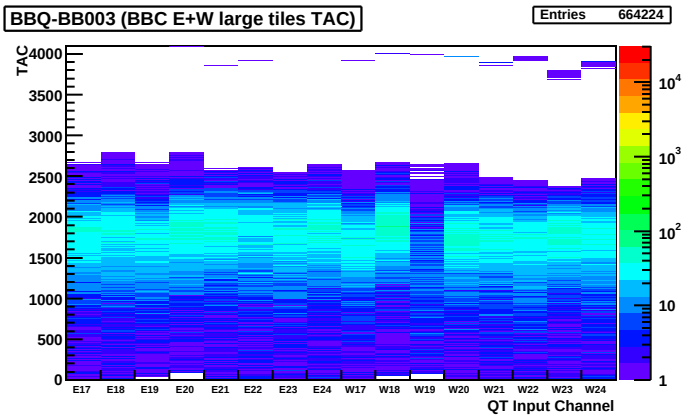

BBQ-BB001 (BBC east small tiles ADC)
Entries 664224
ADC
QT Input Channel

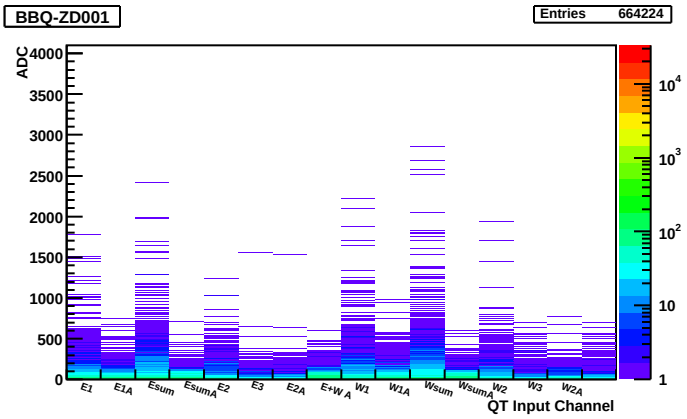

BBQ-BB001 (BBC east small tiles TAC)
Entries 664224
TAC
QT Input Channel

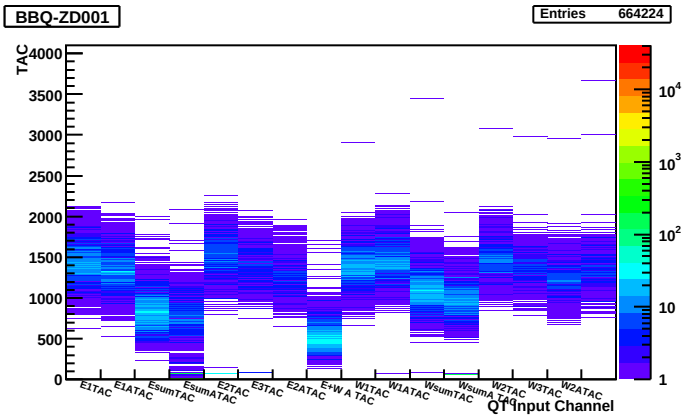

BBQ-BB002 (BBC west small tiles ADC)
Entries 664224
ADC
QT Input Channel

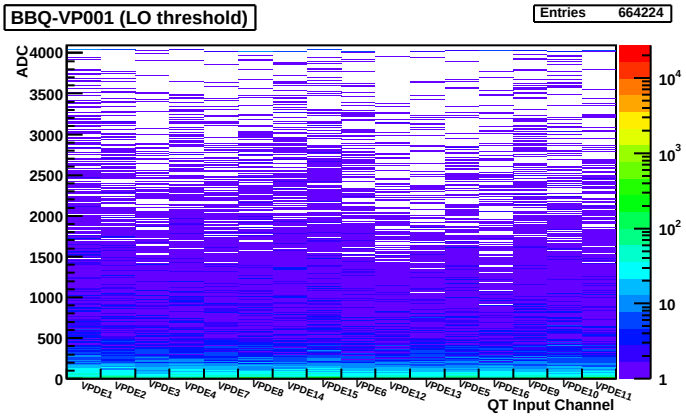

BBQ-BB002 (BBC west small tiles TAC)
Entries 664224
TAC
QT Input Channel

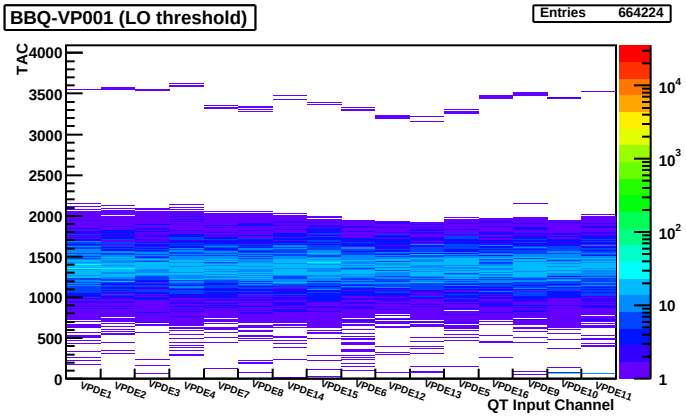

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 664224
ADC
QT Input Channel

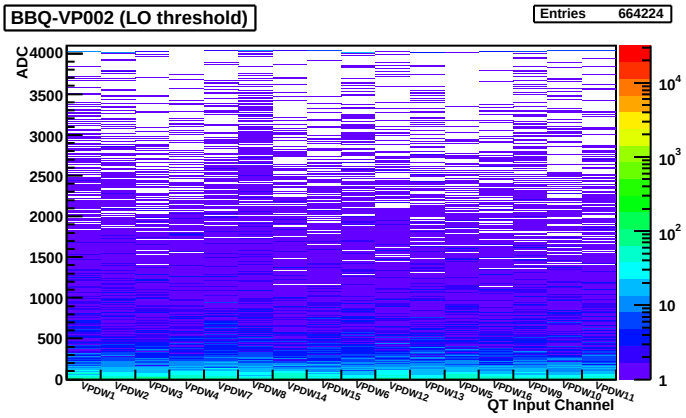

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 664224
TAC
QT Input Channel

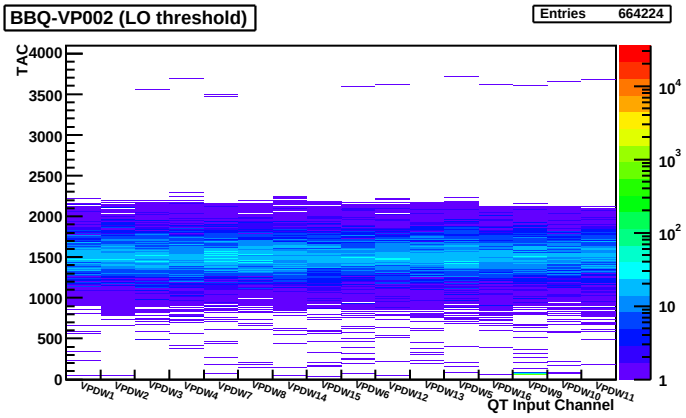

BBQ-ZD001
Entries 664224
ADC
QT Input Channel

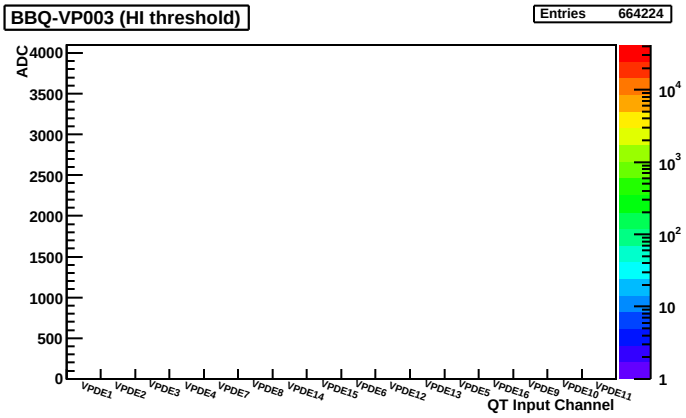

BBQ-ZD001
Entries 664224
TAC
QT Input Channel

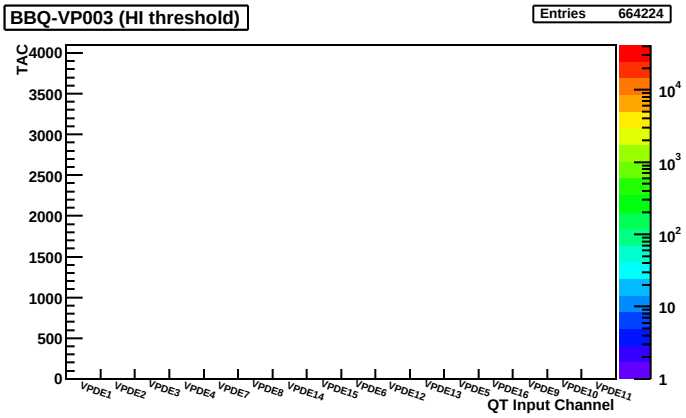

BBQ-VP001 (LO threshold)
Entries 664224
ADC
QT Input Channel

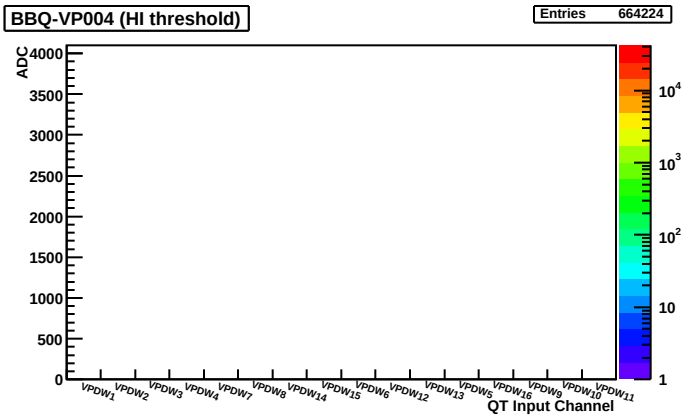

BBQ-VP001 (LO threshold)
Entries 664224
TAC
QT Input Channel

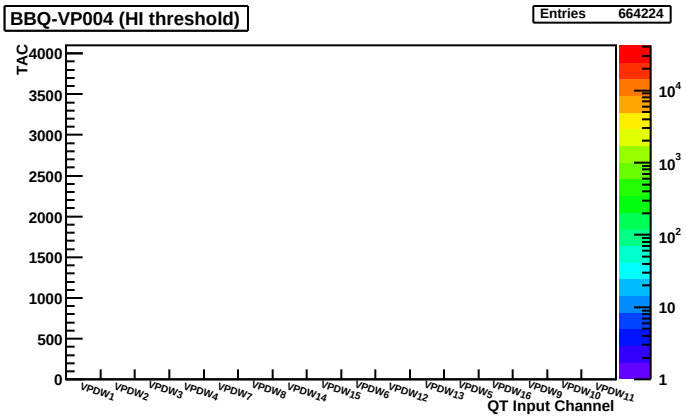

BBQ-VP002 (LO threshold)
Entries 664224
ADC
QT Input Channel

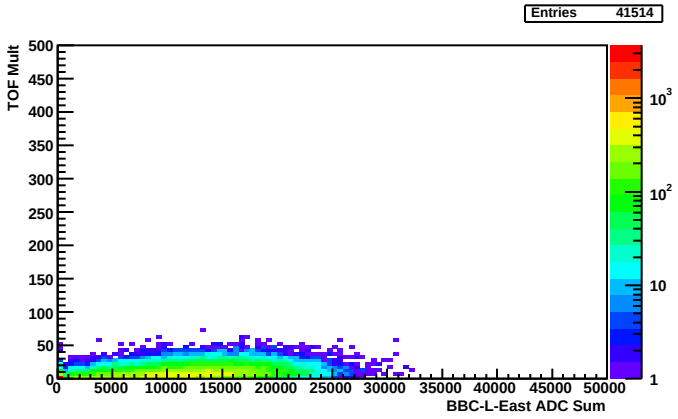

BBQ-VP002 (LO threshold)
Entries 664224
TAC
QT Input Channel

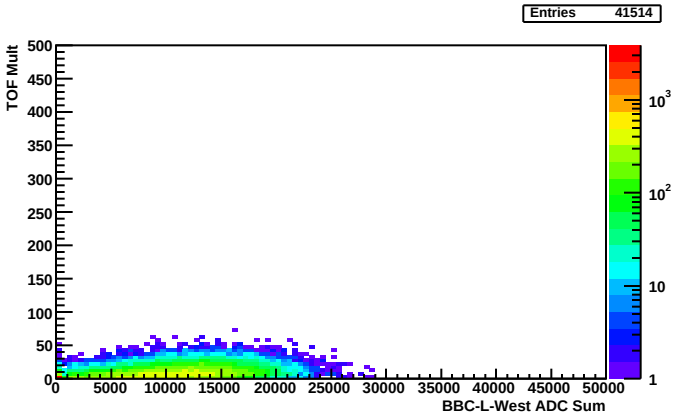

BBQ-VP003 (HI threshold)
Entries 664224
ADC
QT Input Channel

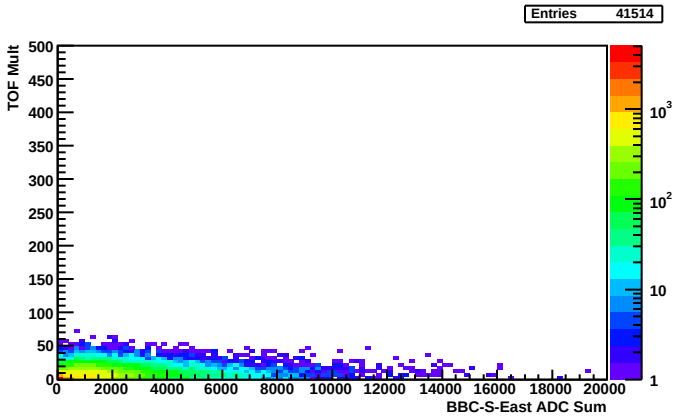

BBQ-VP003 (HI threshold)
Entries 664224
TAC
QT Input Channel

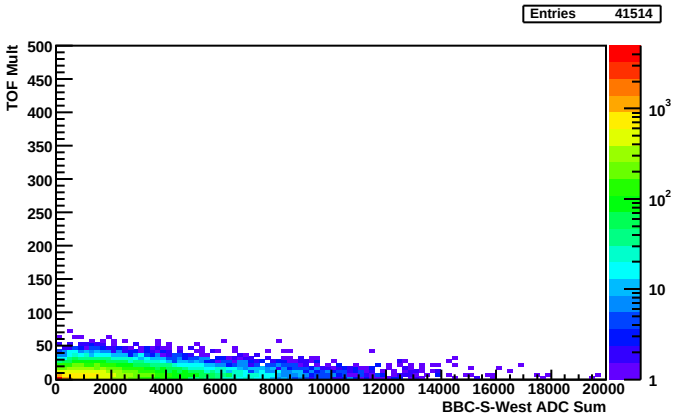

BBQ-VP004 (HI threshold)
Entries 664224
ADC
QT Input Channel

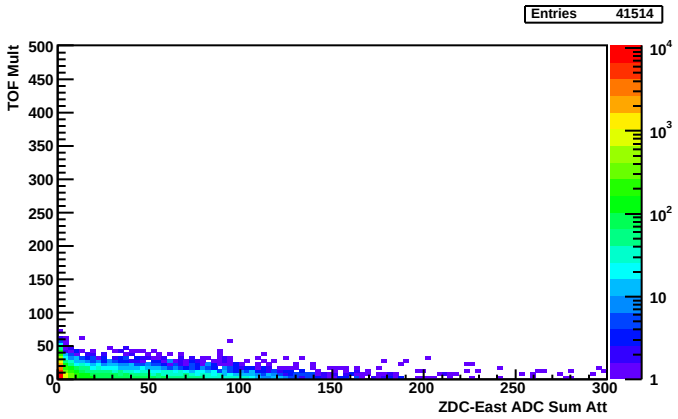

BBQ-VP004 (HI threshold)
Entries 664224
TAC
QT Input Channel

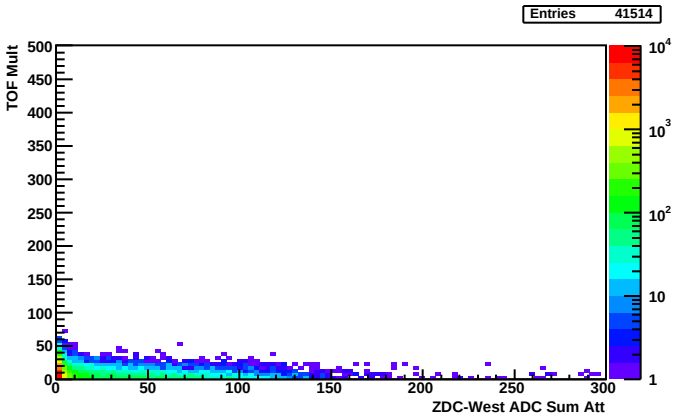

Entries 41514
TOF Mult
BBC-L-East ADC Sum

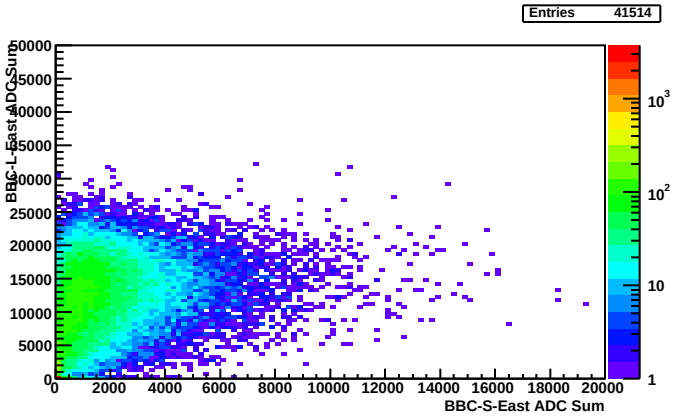

Entries 41514
TOF Mult
BBC-L-West ADC Sum

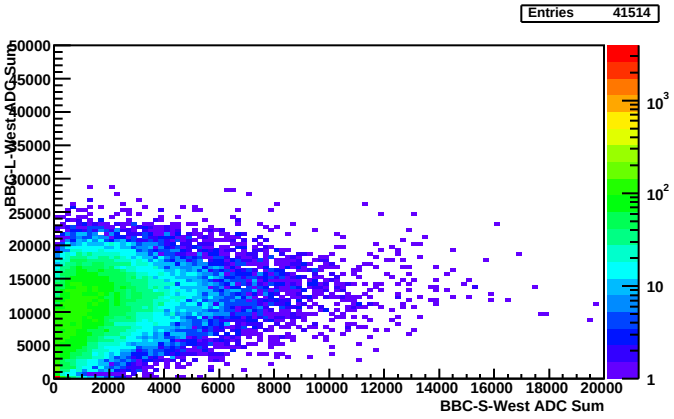

Entries 41514
TOF Mult
BBC-S-East ADC Sum

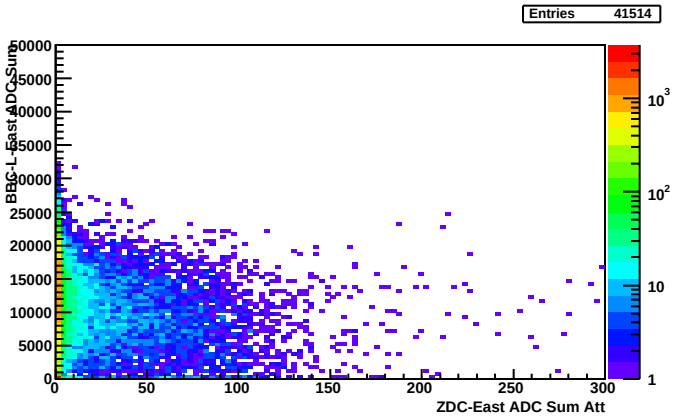

Entries 41514
TOF Mult
BBC-S-West ADC Sum

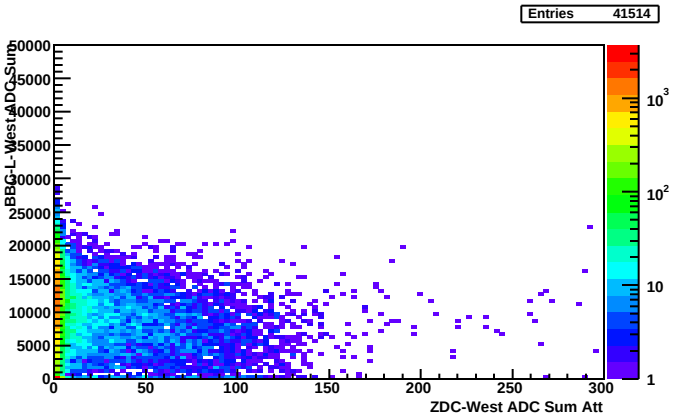

Entries 41514
TOF Mult
ZDC-East ADC Sum Att

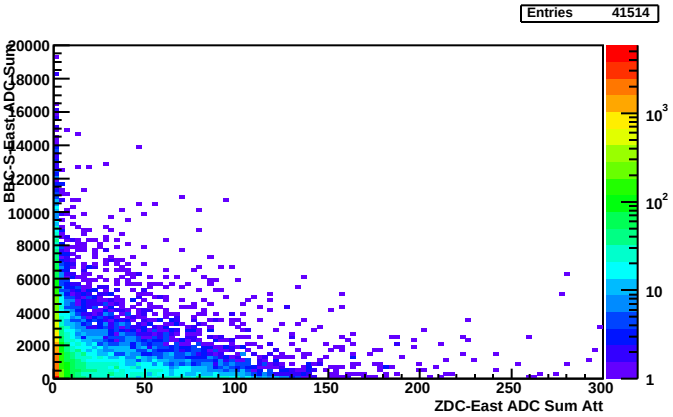

Entries 41514
TOF Mult
ZDC-West ADC Sum Att

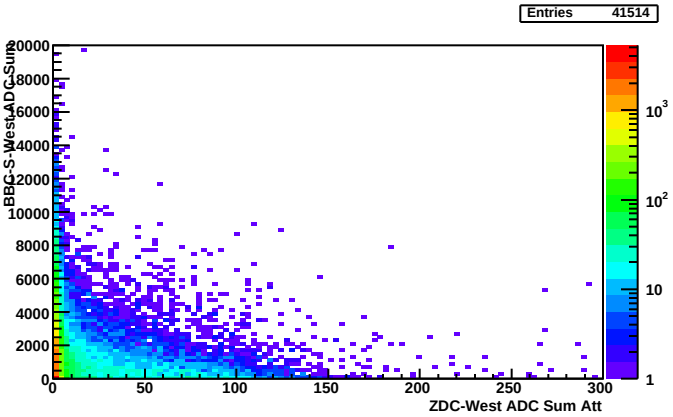

Entries 41514
BBC-L-East ADC Sum
BBC-S-East ADC Sum

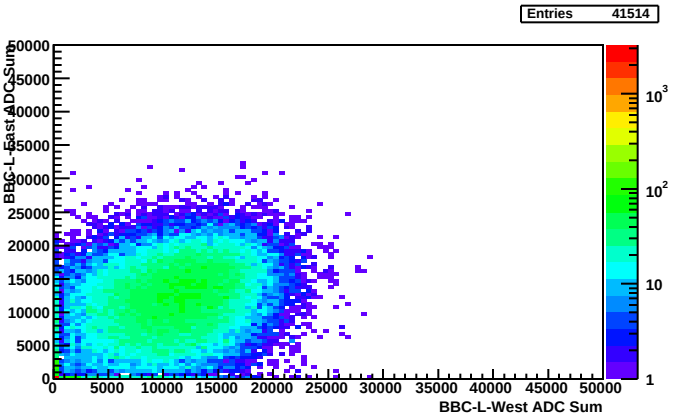

Entries 41514
BBC-L-West ADC Sum
BBC-S-West ADC Sum

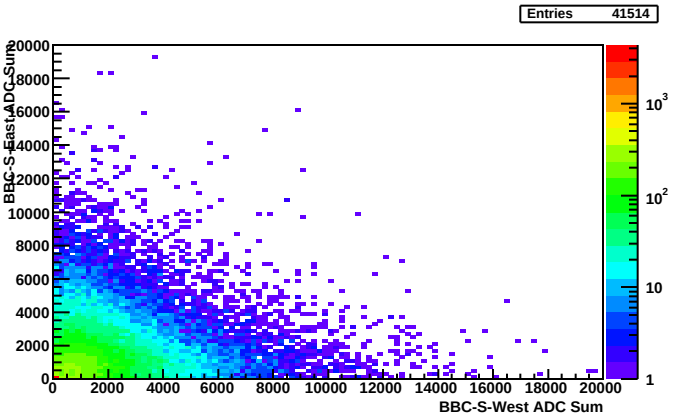

Entries 41514
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

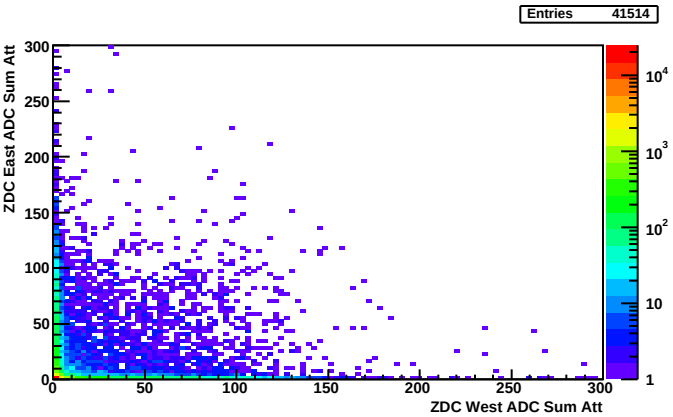

Entries 41514
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

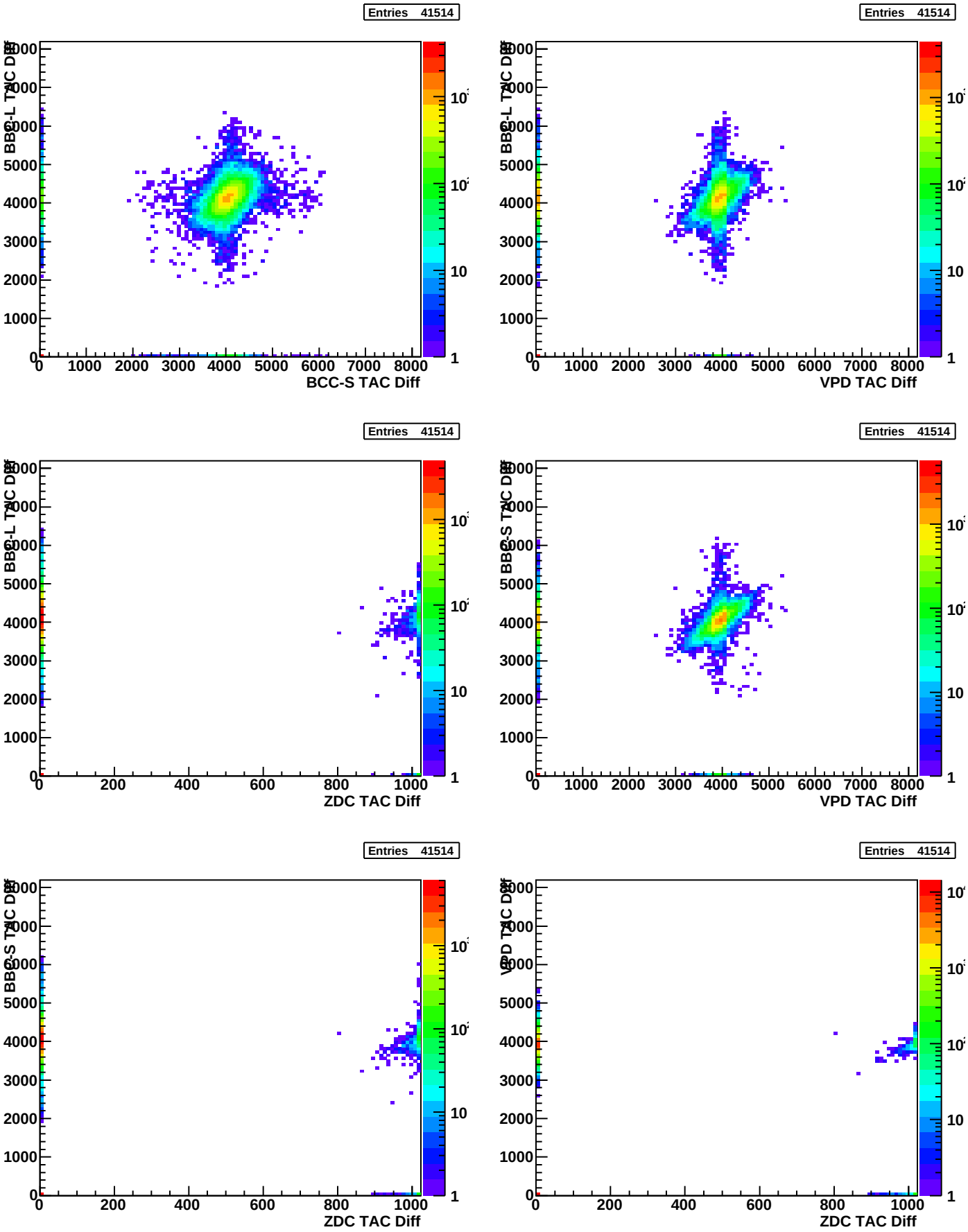

Entries 41514
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

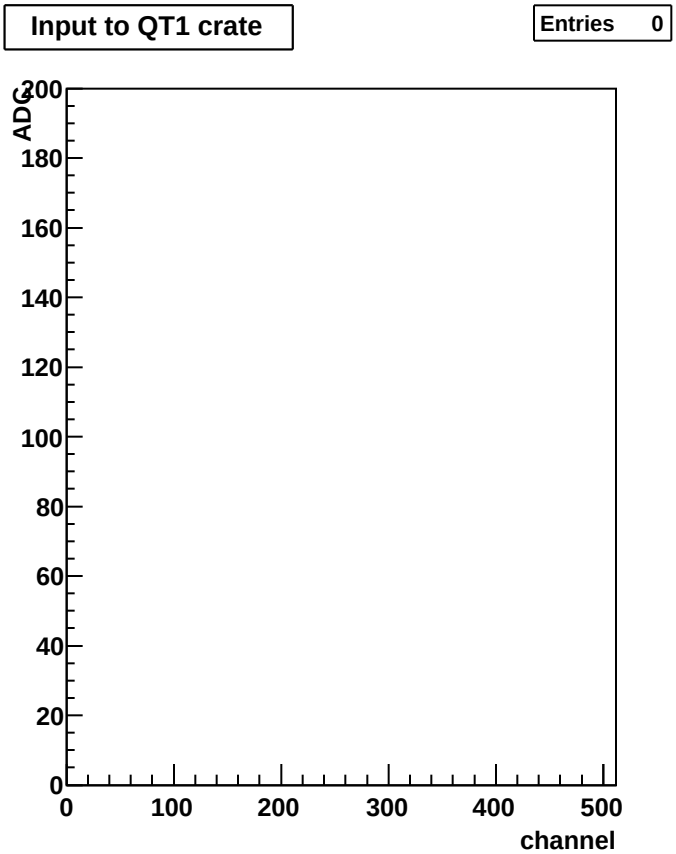

Entries 41514
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

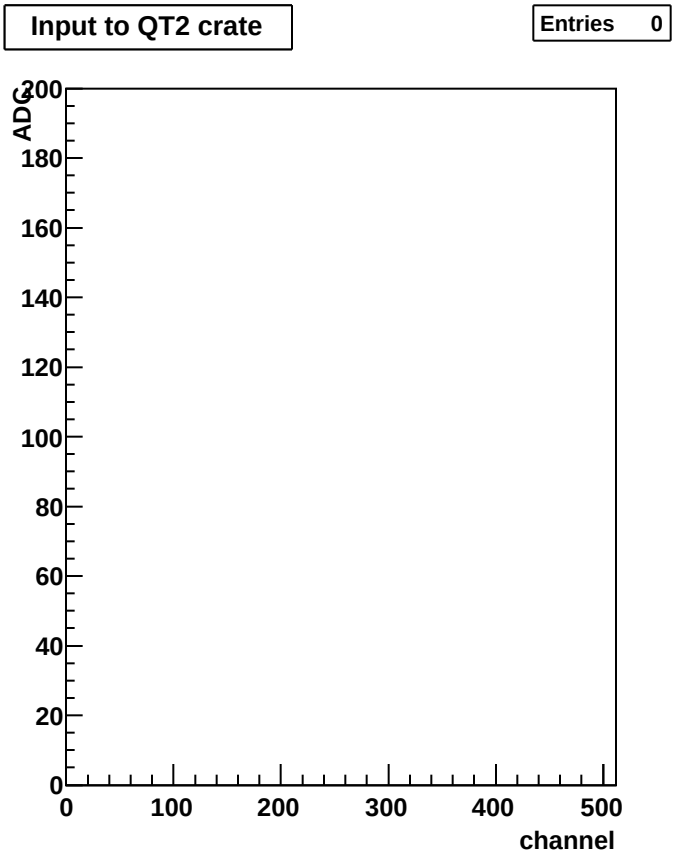

Entries 41514
BBC-L-East ADC Sum
BBC-L-West ADC Sum

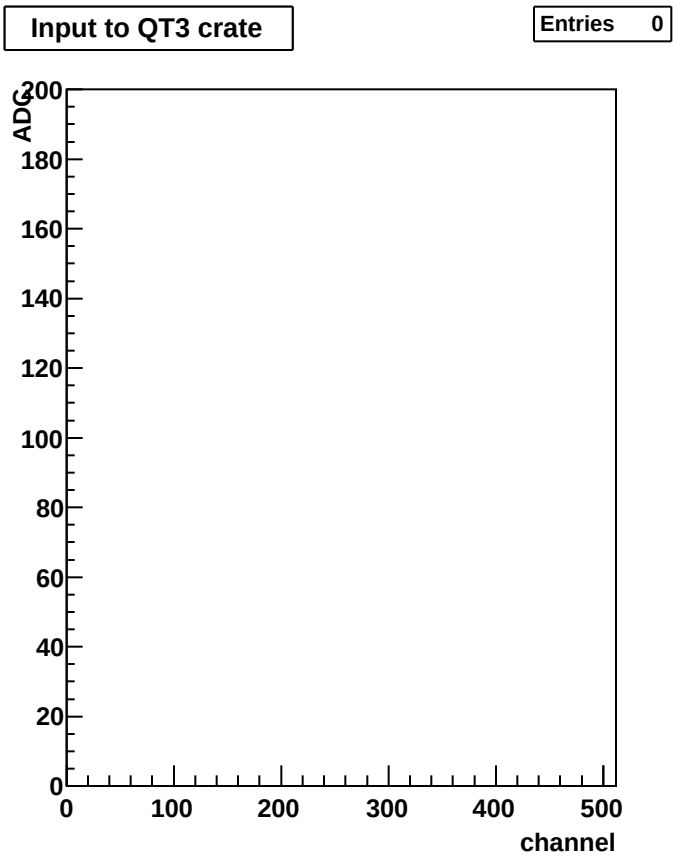

Entries 41514
BBC-S-East ADC Sum
BBC-S-West ADC Sum

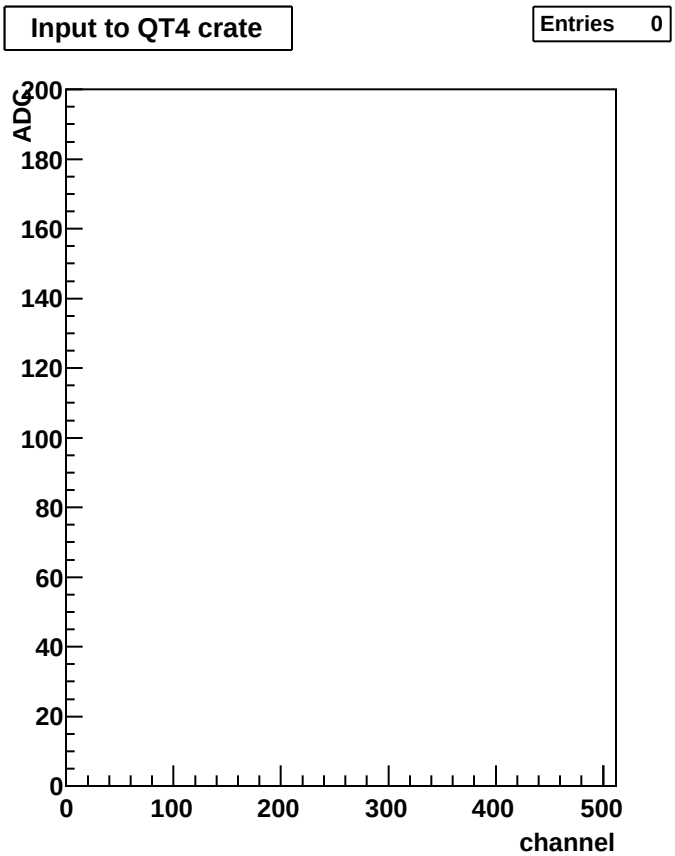

Entries 41514
ZDC East ADC Sum Att
ZDC West ADC Sum Att

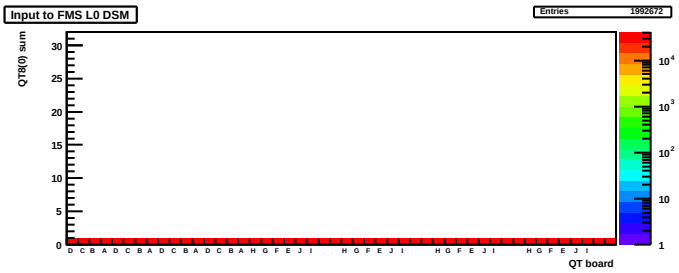

Entries 41514
BBC-L TAC Diff
BCC-S TAC Diff
Entries 41514
BBC-L TAC Diff
VPD TAC Diff
Entries 41514
BBC-L TAC Diff
ZDC TAC Diff
Entries 41514
BBC-S TAC Diff
VPD TAC Diff
Entries 41514
BBC-S TAC Diff
ZDC TAC Diff
Entries 41514
VPD TAC Diff
ZDC TAC Diff

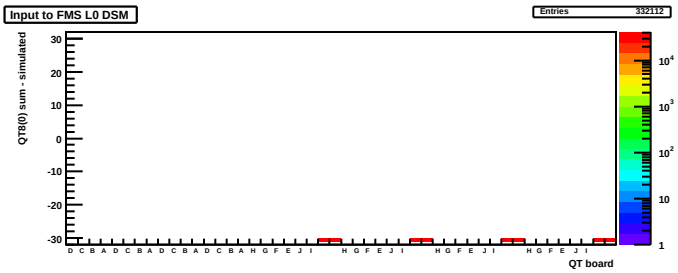

Input to QT1 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

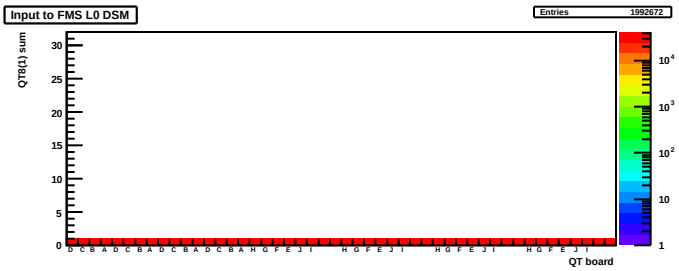

Input to QT2 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

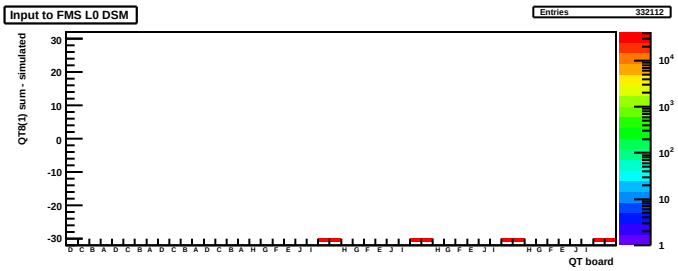

Input to QT3 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

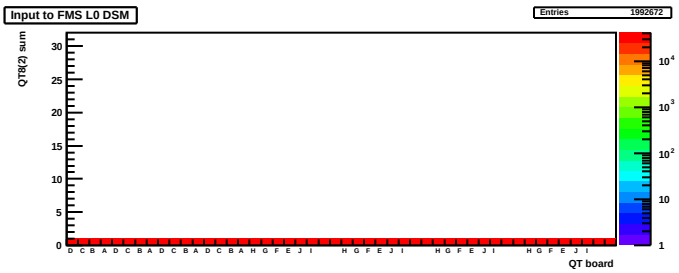

Input to QT4 crate
Entries 0
ADC
200
180
160
140
120
100
80
60
40
20
0
0
100
200
300
400
500
channel

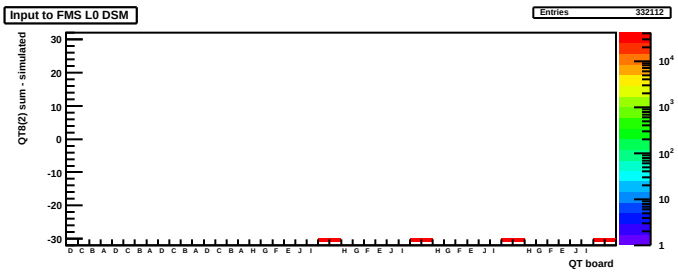

Input to FMS L0 DSM
Entries 1992672
QT8(0) sum
QT board

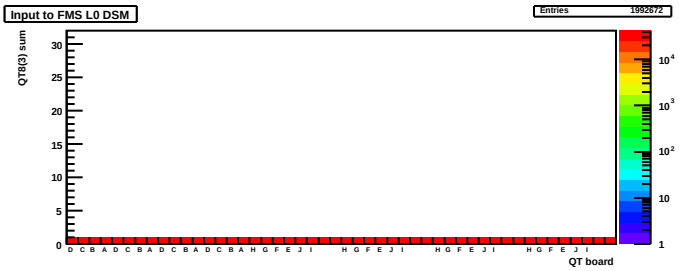

Input to FMS L0 DSM
Entries 332112
QT8(0) sum - simulated
QT board

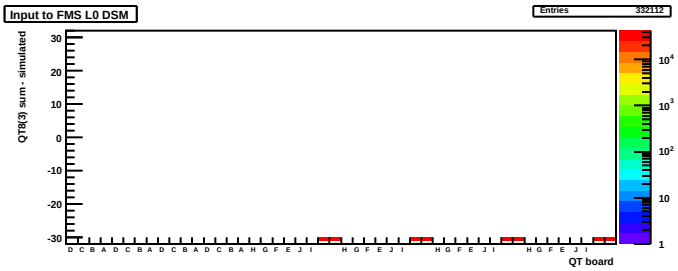

Input to FMS L0 DSM
Entries 1992672
QT8(1) sum
QT board

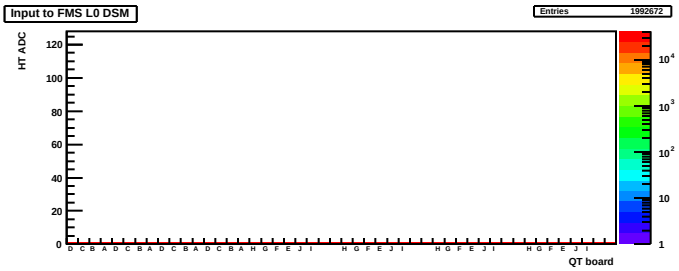

Input to FMS L0 DSM
Entries 332112
QT8(1) sum - simulated
QT board

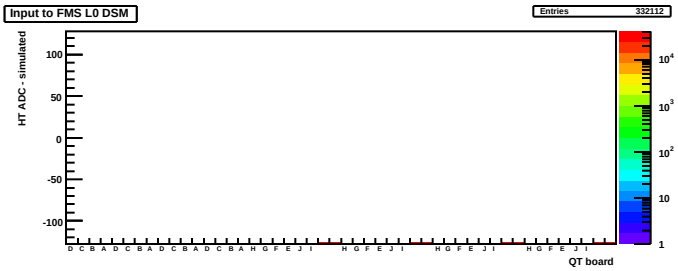

Input to FMS L0 DSM
Entries 1992672
QT8(2) sum
QT board

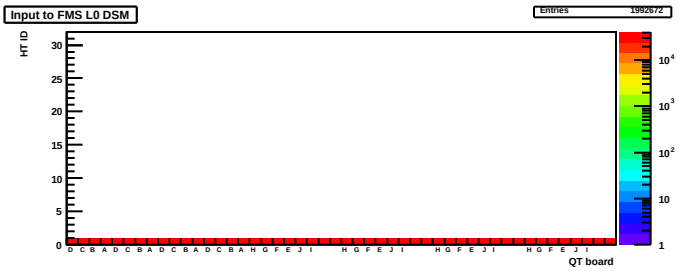

Input to FMS L0 DSM
Entries 332112
QT8(2) sum - simulated
QT board

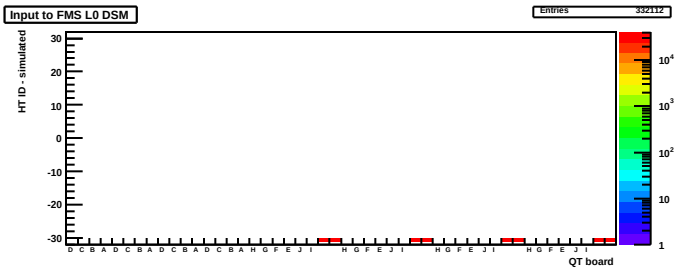

Input to FMS L0 DSM
Entries 1992672
QT8(3) sum
QT board

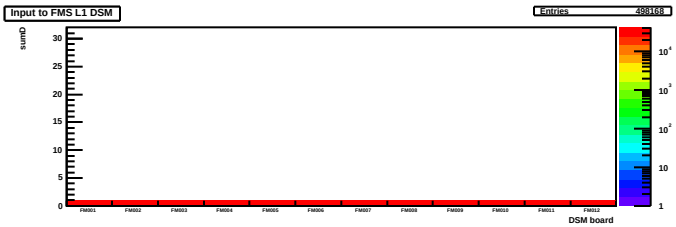

Input to FMS L0 DSM
Entries 332112
QT8(3) sum - simulated
QT board

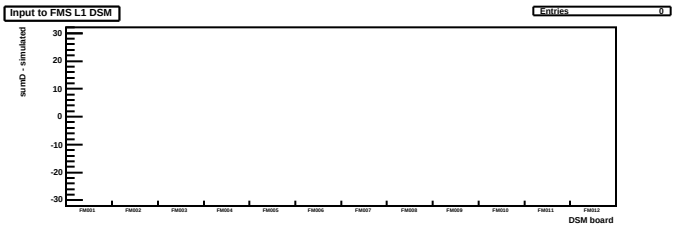

Input to FMS L0 DSM
Entries 1992672
HT ADC
QT board

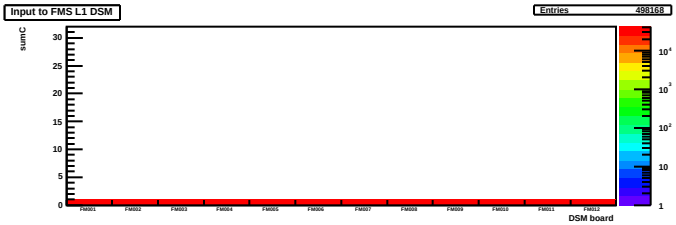

Input to FMS L0 DSM
Entries 332112
HT ADC - simulated
QT board

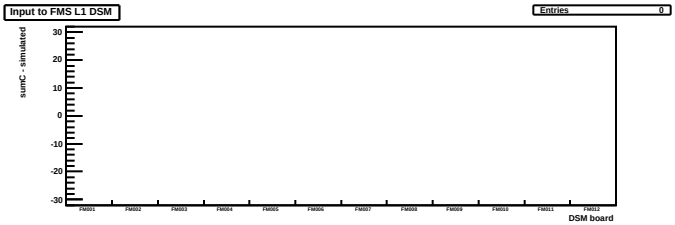

Input to FMS L0 DSM
Entries 1992672
HT ID
QT board

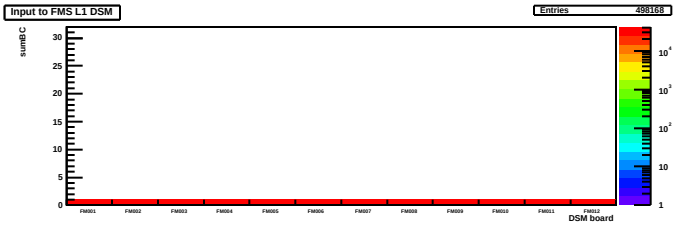

Input to FMS L0 DSM
Entries 332112
HT ID - simulated
QT board

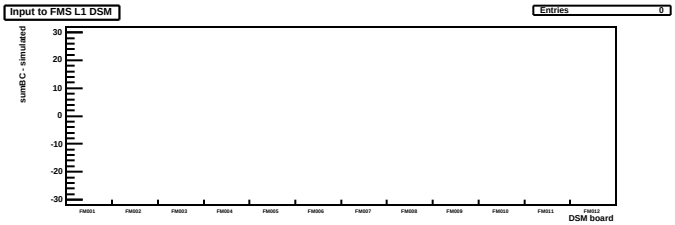

Input to FMS L1 DSM
Entries 498168
sumD
DSM board

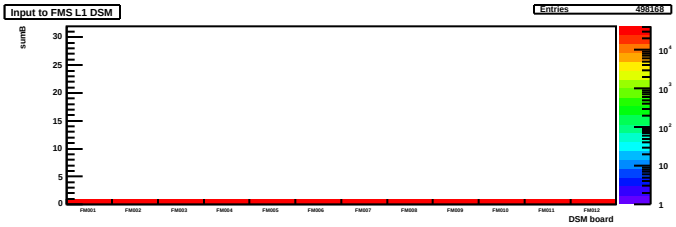

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

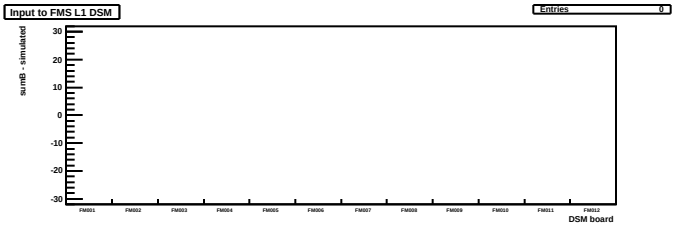

Input to FMS L1 DSM
Entries 498168
sumC
DSM board

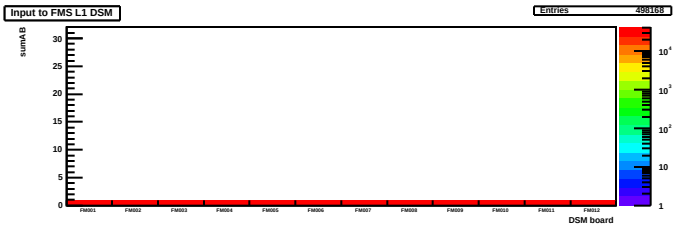

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

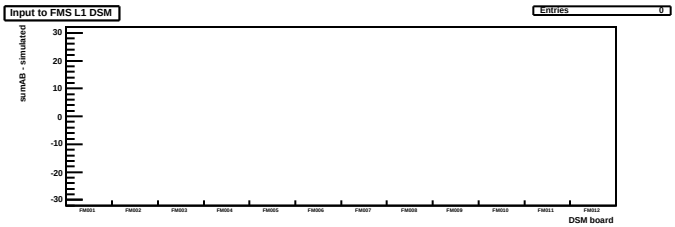

Input to FMS L1 DSM
Entries 498168
sumBC
DSM board

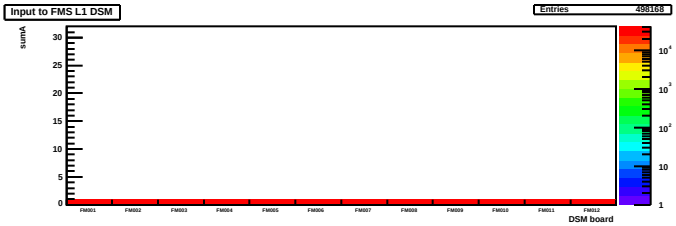

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

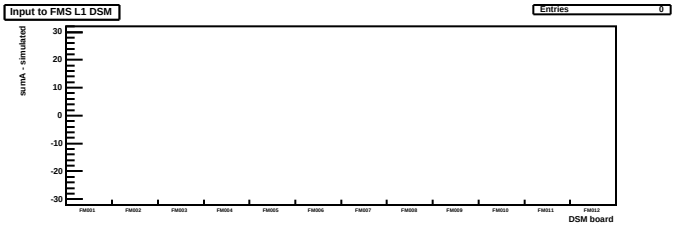

Input to FMS L1 DSM
Entries 498168
sumB
DSM board

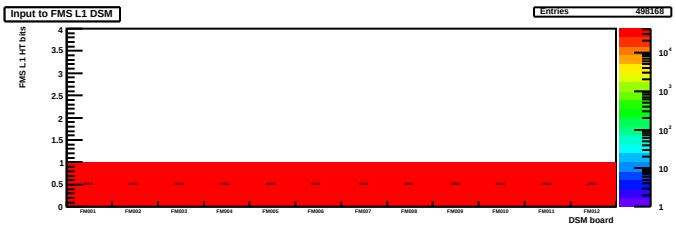

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

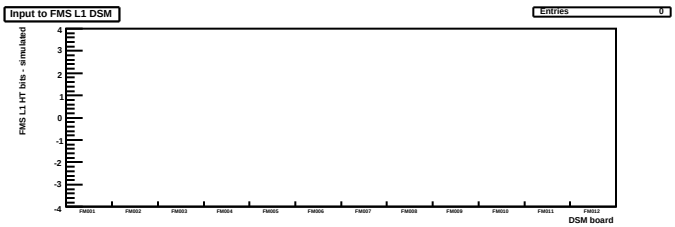

Input to FMS L1 DSM
Entries 498168
sumAB
DSM board

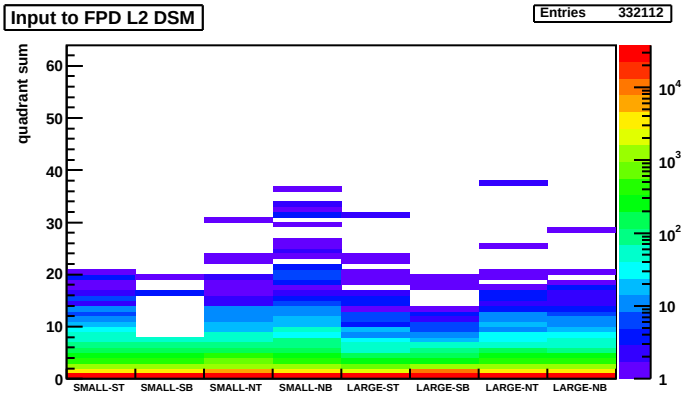

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

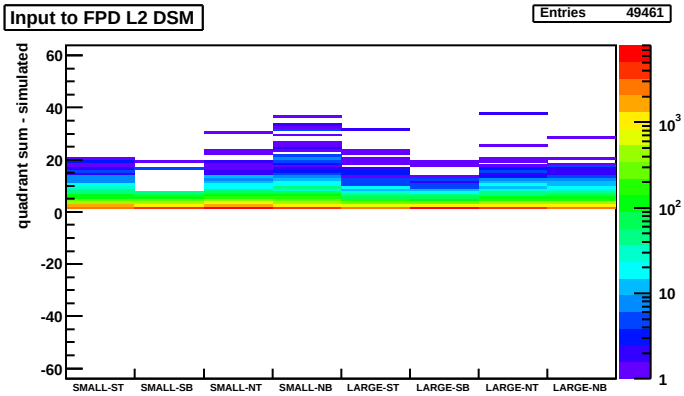

Input to FMS L1 DSM
Entries 498168
sumA
DSM board

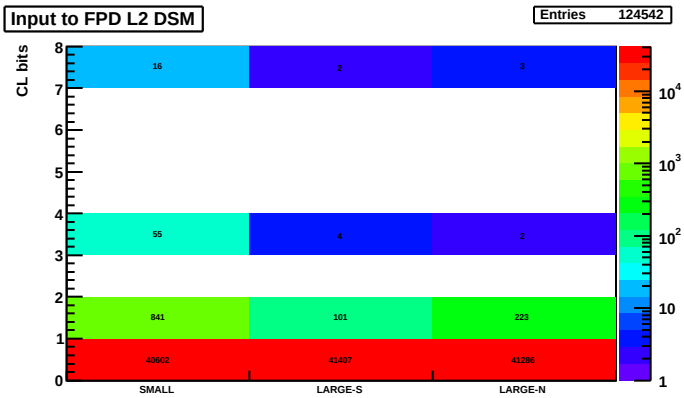

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

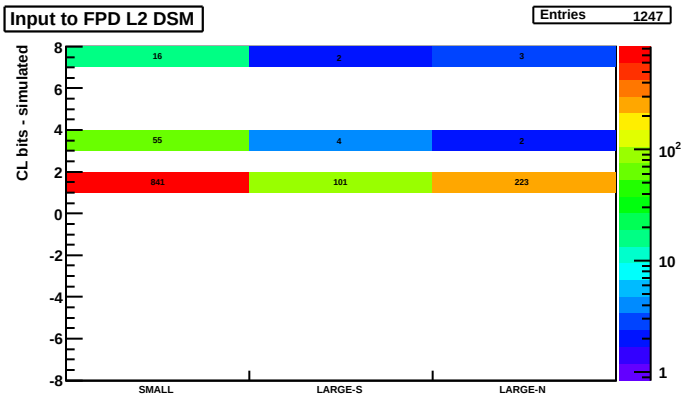

Input to FMS L1 DSM
Entries 498168
FMS L1 HT bits
DSM board

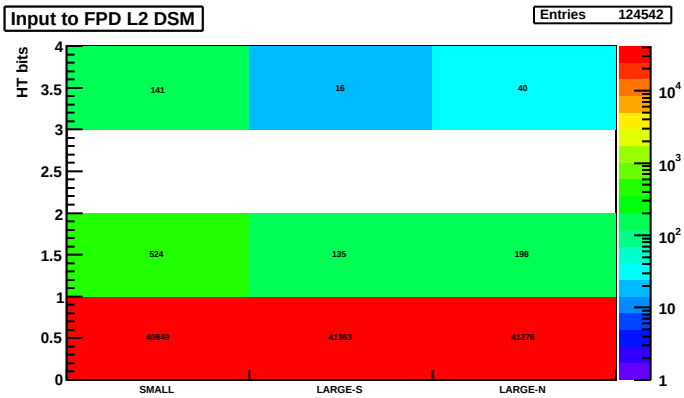

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

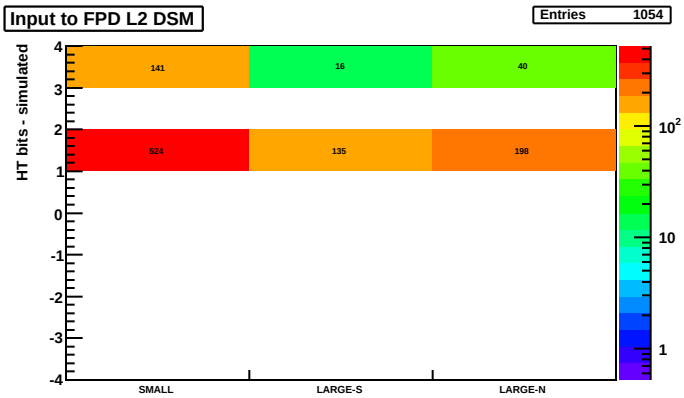

Input to FPD L2 DSM
Entries 332112
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

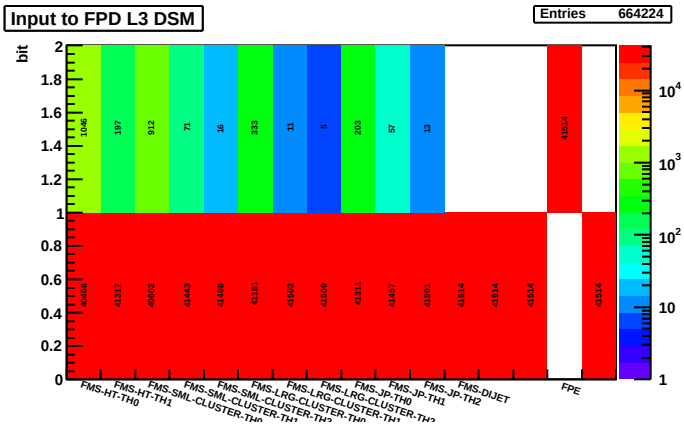

Input to FPD L2 DSM
Entries 49461
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

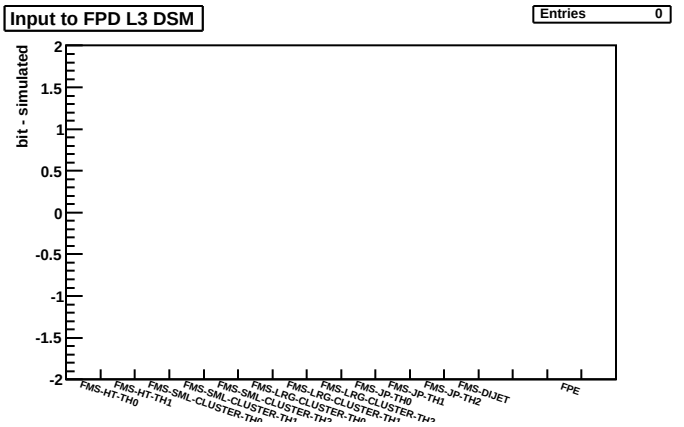

Input to FPD L2 DSM
Entries 124542
CL bits
16
2
3
55
4
2
841
101
223
40602
41407
41286
SMALL
LARGE-S
LARGE-N

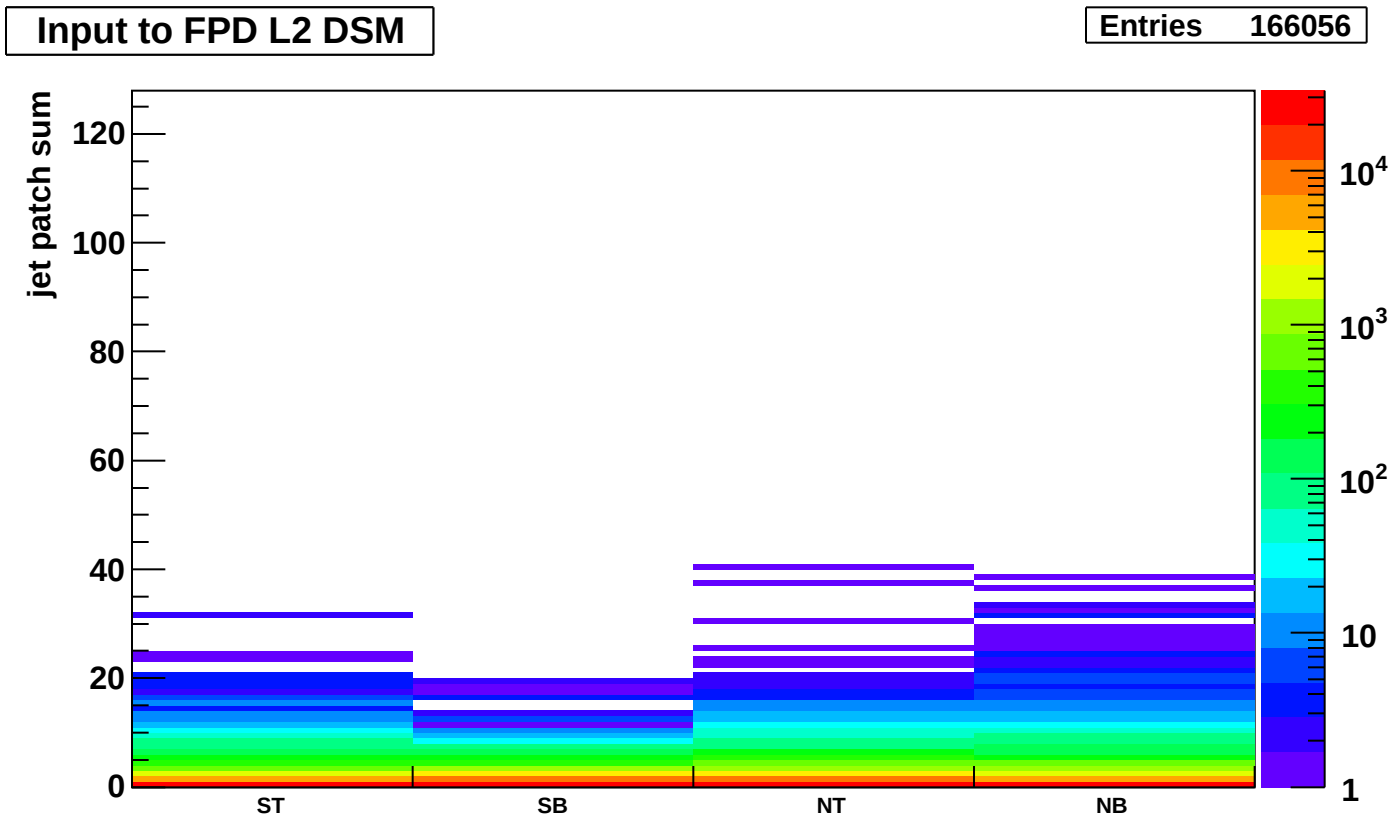

Input to FPD L2 DSM
Entries 1247
CL bits - simulated
16
2
3
55
4
2
841
101
223
SMALL
LARGE-S
LARGE-N

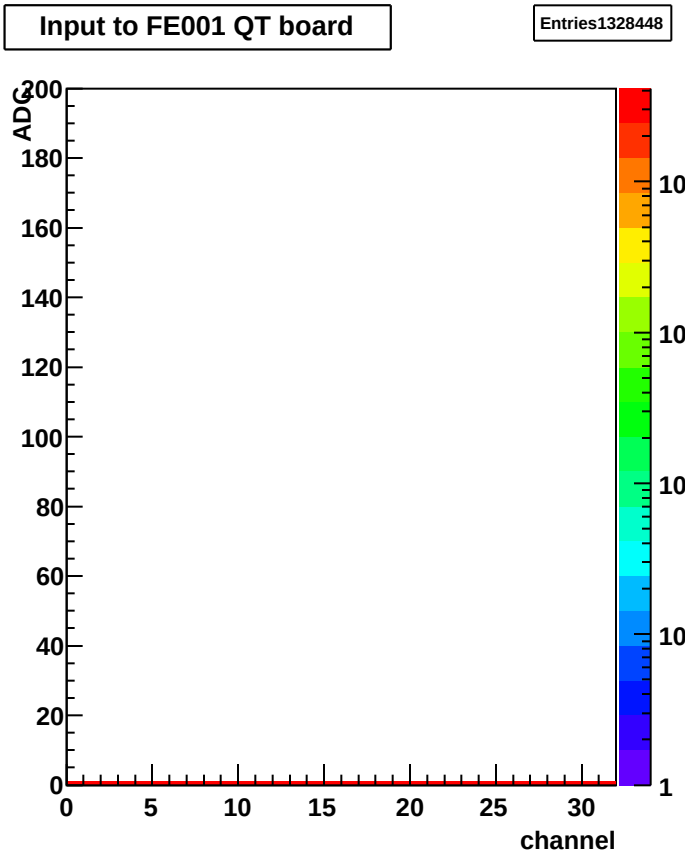

Input to FPD L2 DSM
Entries 124542
HT bits
141
16
40
524
135
198
40849
41363
41276
SMALL
LARGE-S
LARGE-N

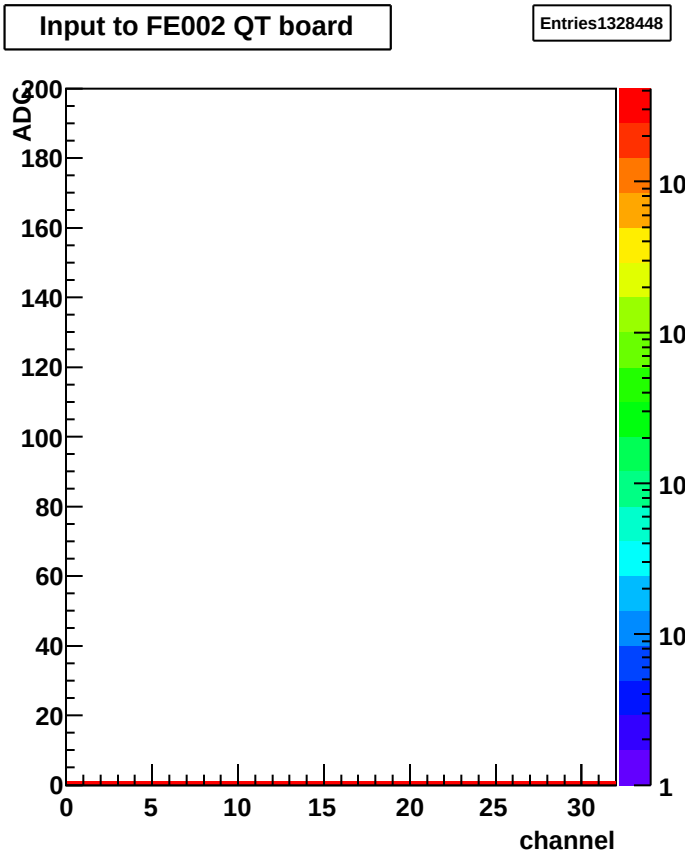

Input to FPD L2 DSM
Entries 1054
HT bits - simulated
141
16
40
524
135
198
SMALL
LARGE-S
LARGE-N

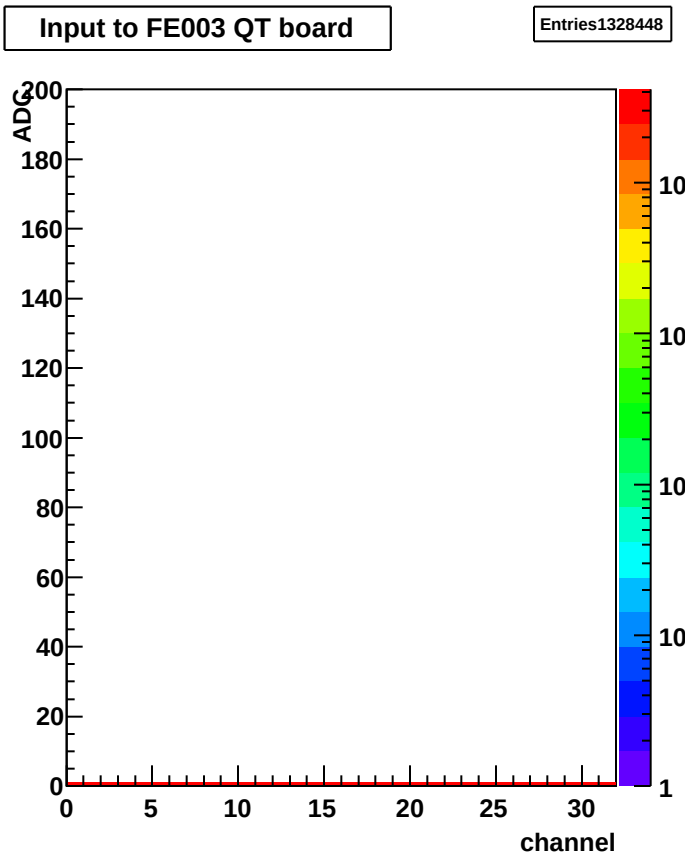

Input to FPD L3 DSM
Entries 664224
bit
1046
197
912
71
16
333
11
5
203
57
13
41514
40465
41317
40602
41443
41498
41181
41503
41509
41311
41457
41501
41514
41514
41514
41514
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

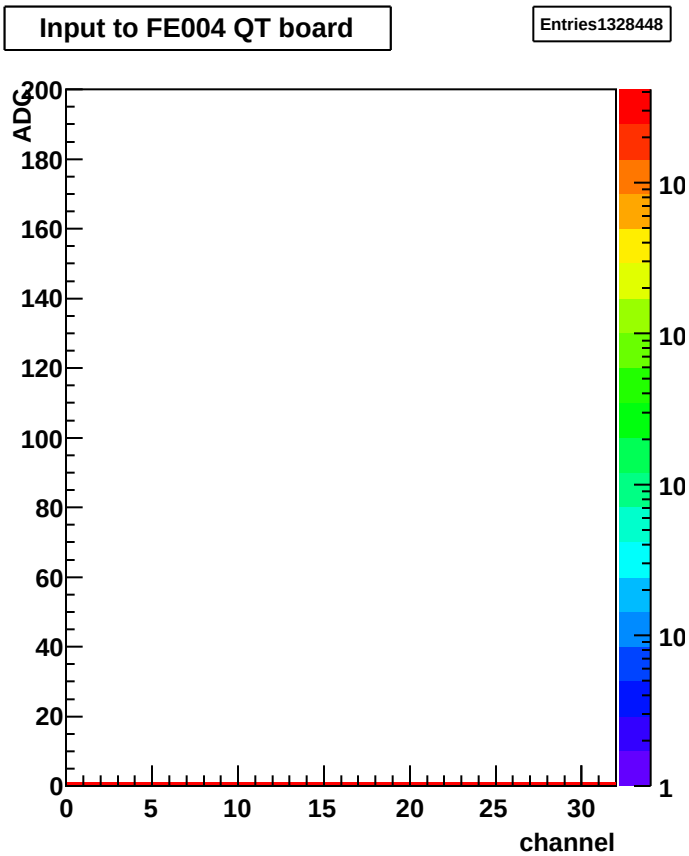

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

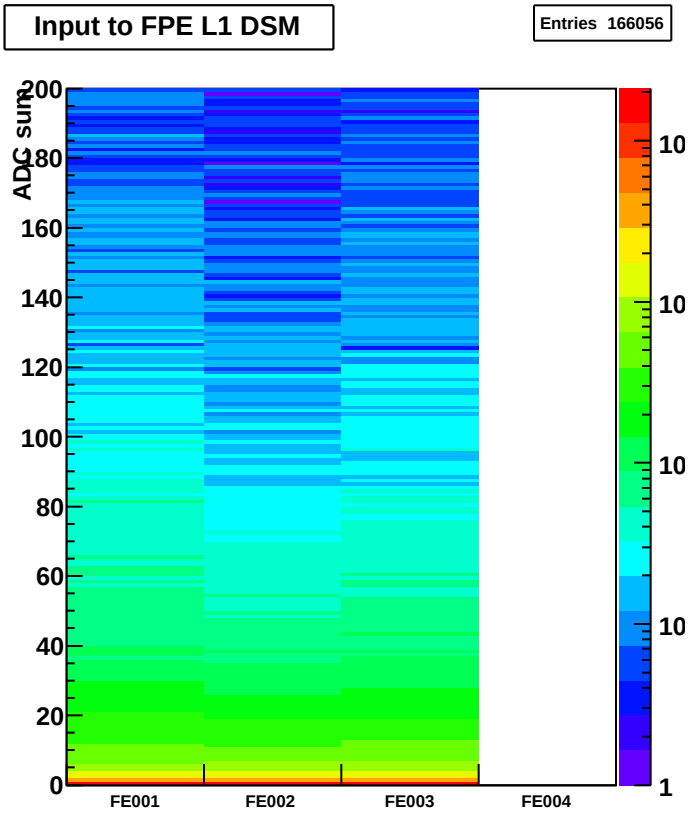

Input to FPD L2 DSM
Entries 166056
jet patch sum
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

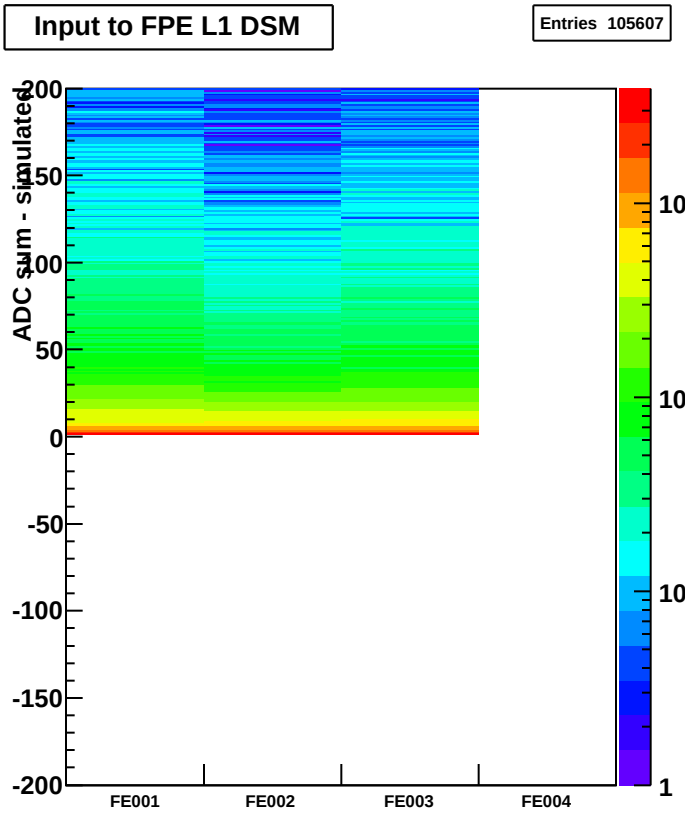

Input to FE001 QT board
Entries1328448
ADC
channel

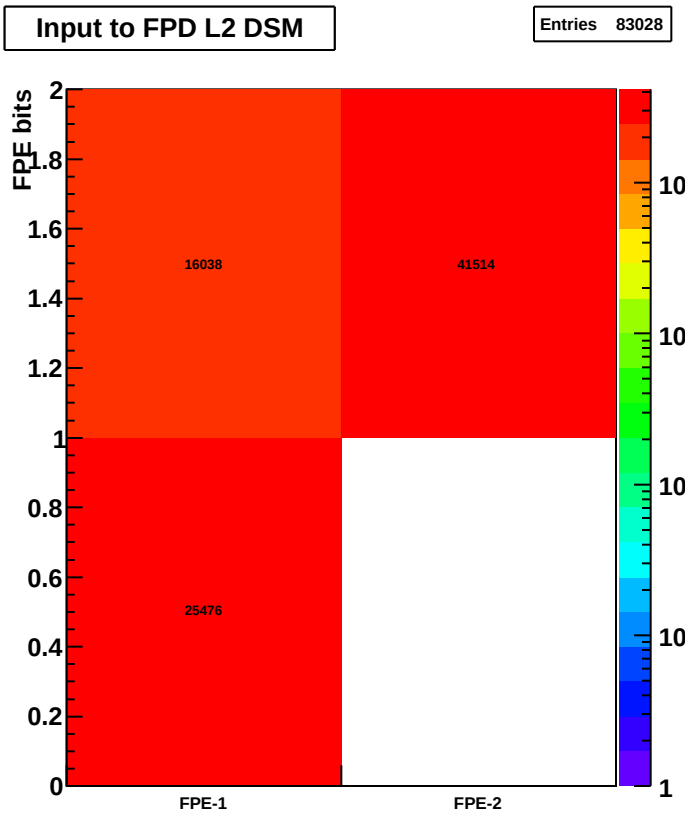

Input to FE002 QT board
Entries1328448
ADC
channel

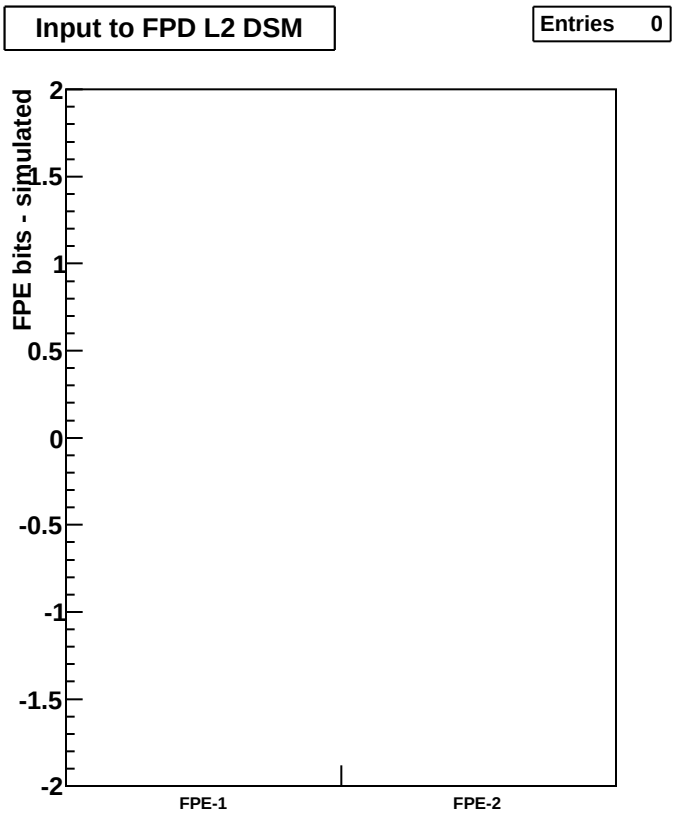

Input to FE003 QT board
Entries1328448
ADC
channel


Input to FE004 QT board
Entries1328448
ADC
channel


Input to FPE L1 DSM
Entries 166056
ADC sum
FE001
FE002
FE003
FE004


Input to FPE L1 DSM
Entries 105607
ADC sum - simulated
FE001
FE002
FE003
FE004


Input to FPD L2 DSM
Entries 83028
FPE bits
16038
41514
25476
FPE-1
FPE-2


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