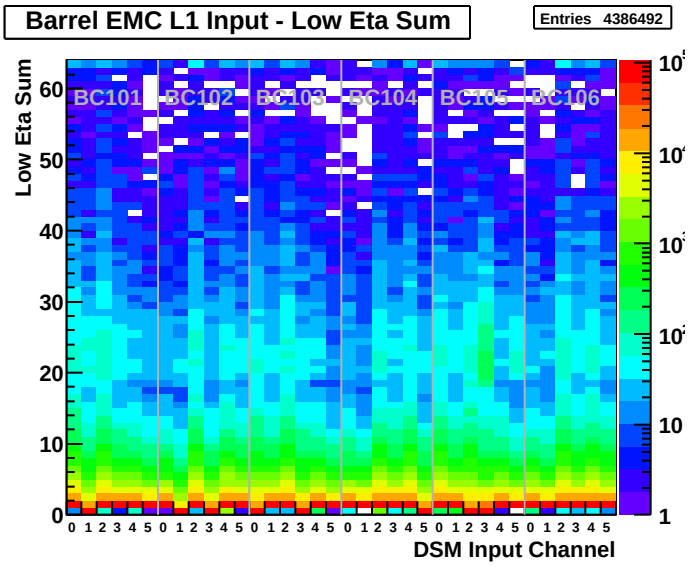
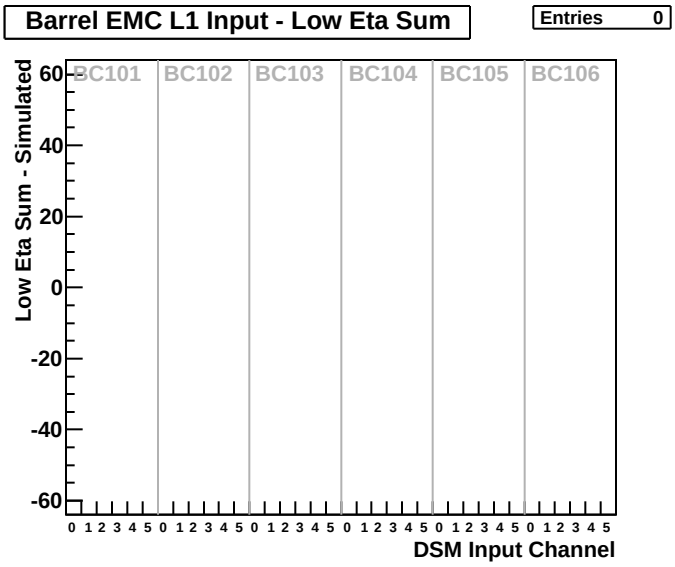
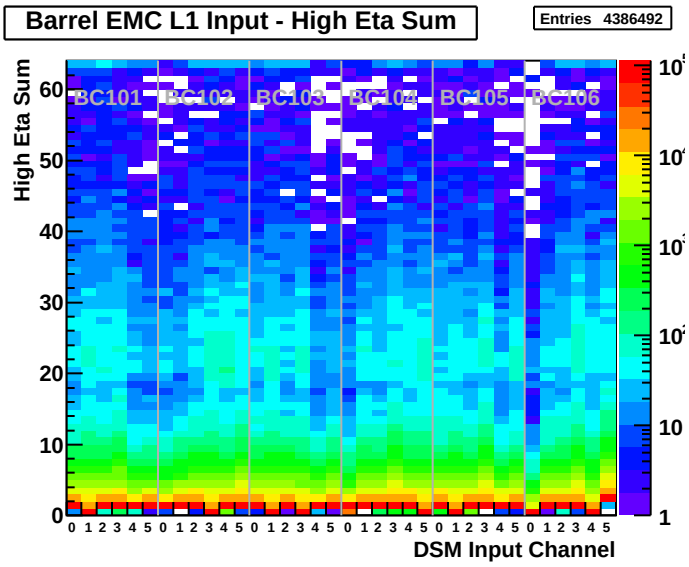
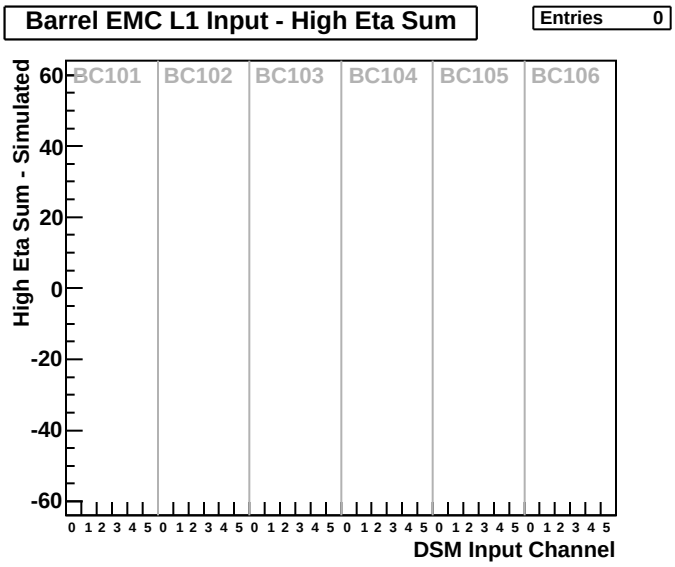
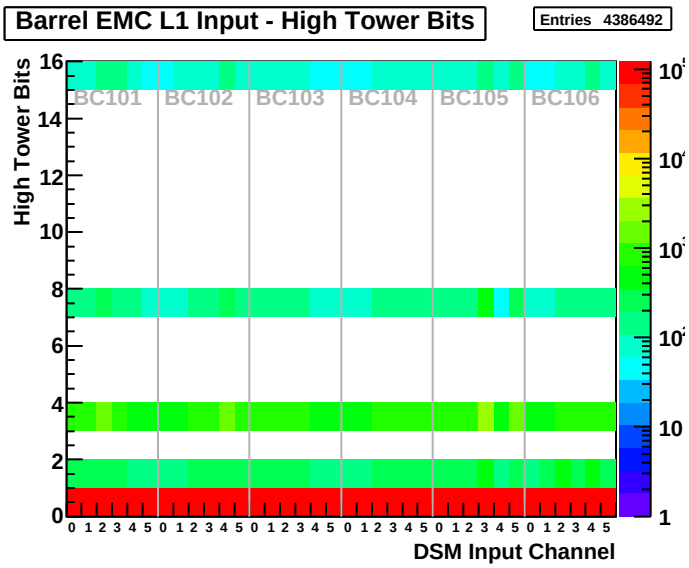
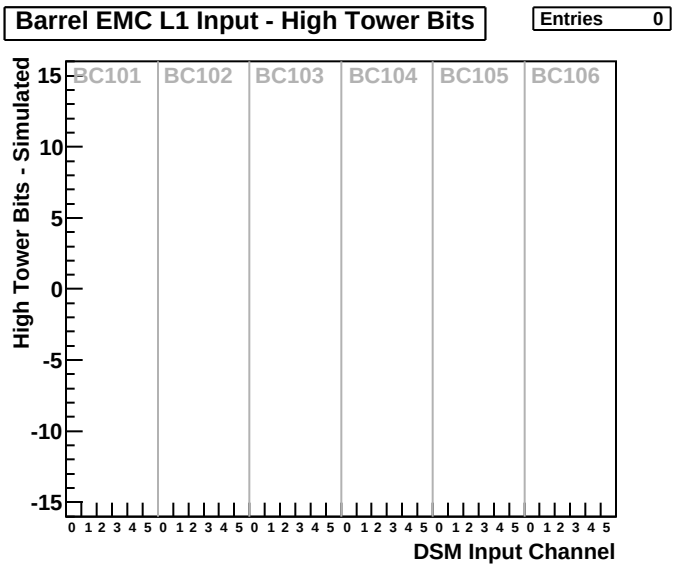

Barrel EMC L1 Input - Low Eta Sum
Entries 4386492
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

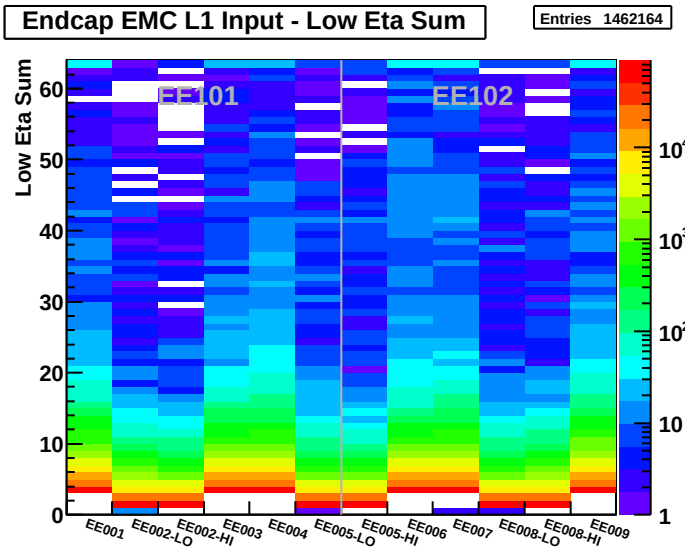

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

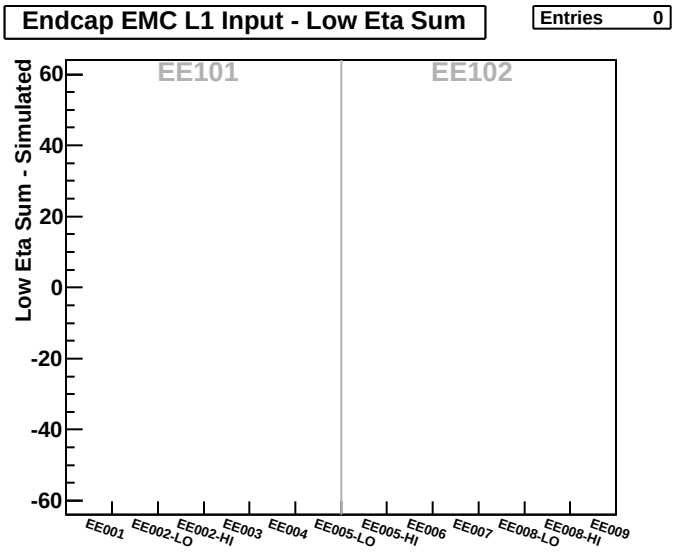

Barrel EMC L1 Input - High Eta Sum
Entries 4386492
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

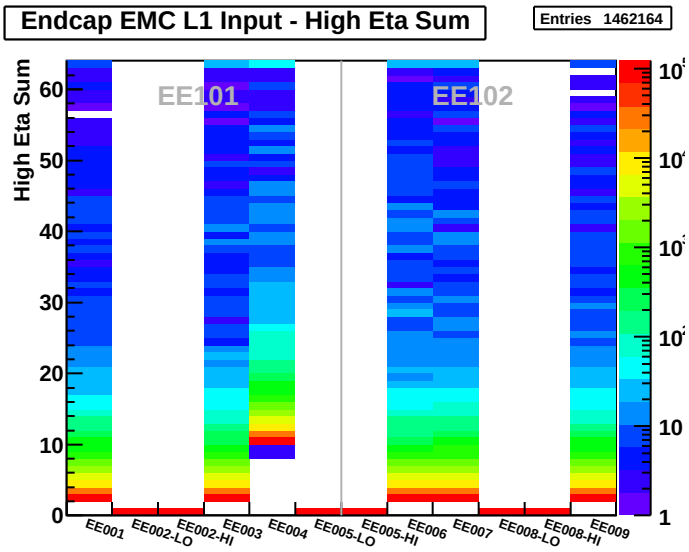

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

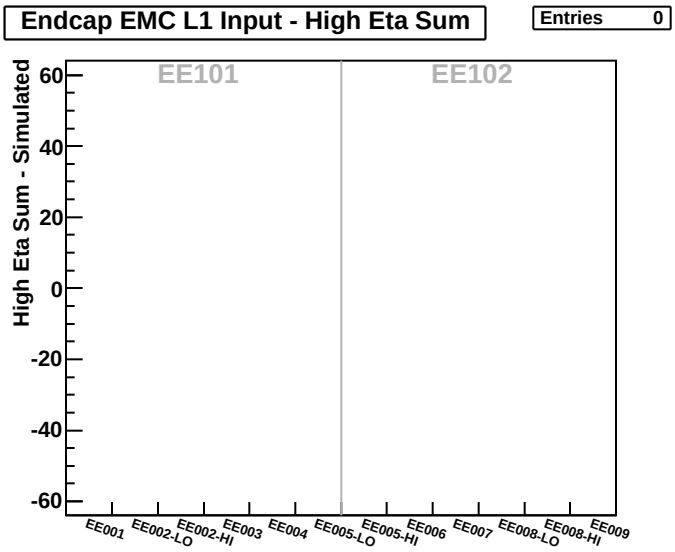

Barrel EMC L1 Input - High Tower Bits
Entries 4386492
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

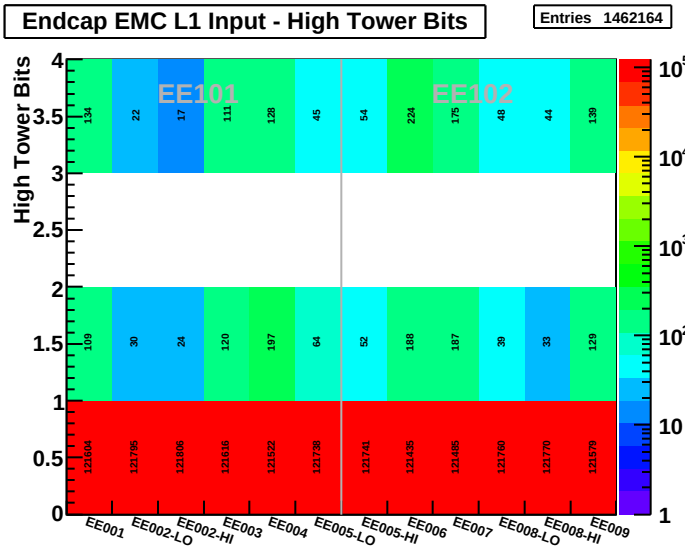

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

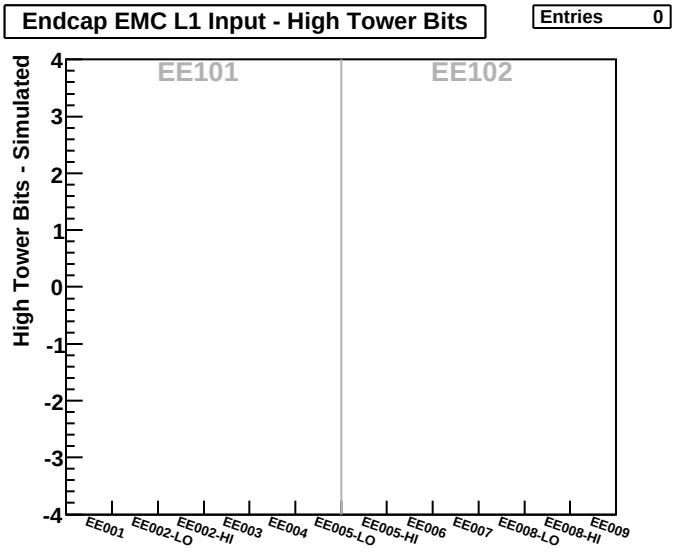

Endcap EMC L1 Input - Low Eta Sum
Entries 1462164
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

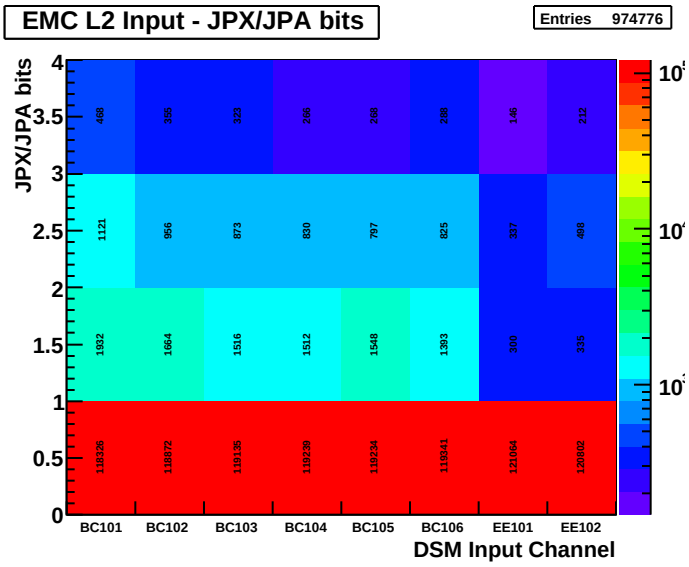

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

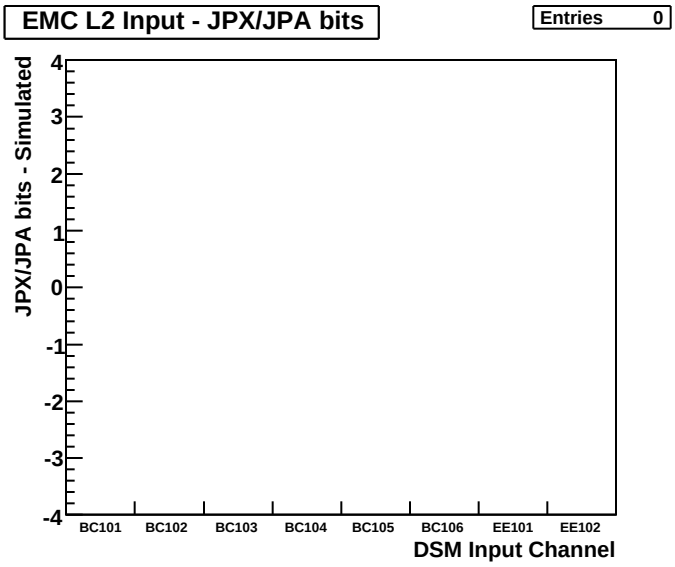

Endcap EMC L1 Input - High Eta Sum
Entries 1462164
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

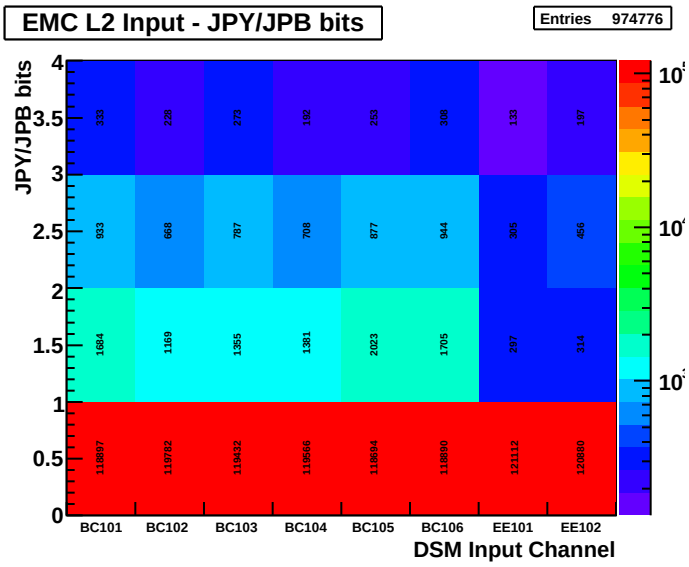

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

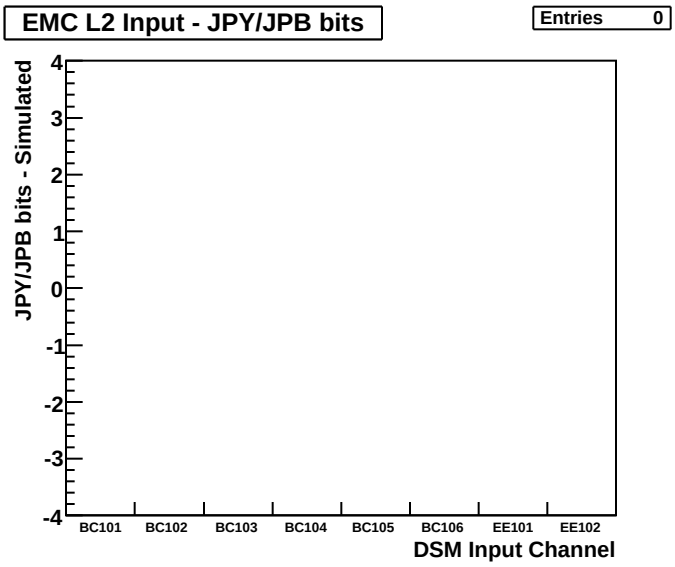

Endcap EMC L1 Input - High Tower Bits
Entries 1462164
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

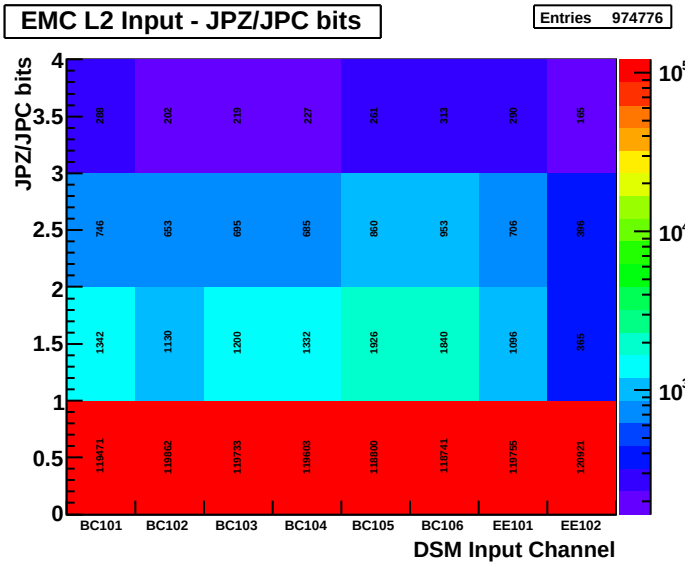

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

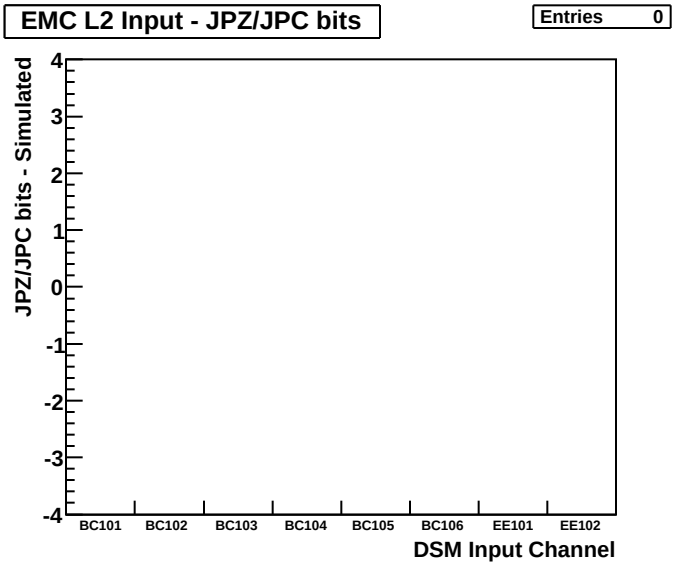

EMC L2 Input - JPX/JPA bits
Entries 974776
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
468 355 323 266 268 288 146 212
1121 956 873 830 797 825 337 498
1932 1664 1516 1512 1548 1393 300 335
118326 118872 119135 119239 119234 119341 121064 120802

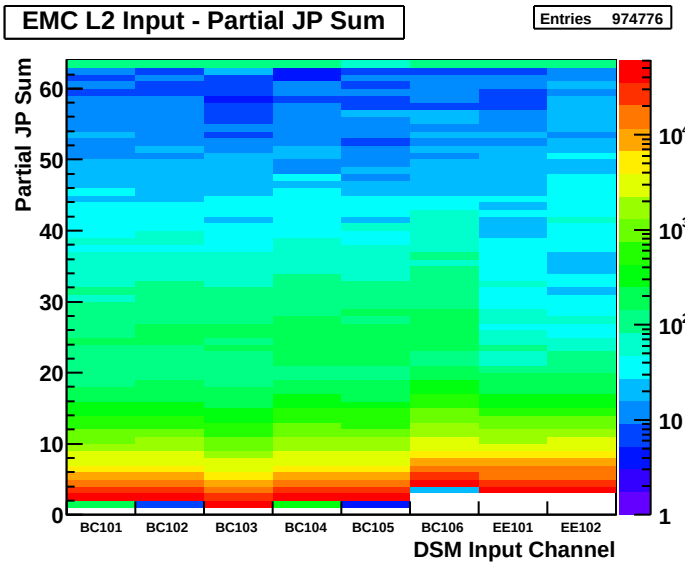

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

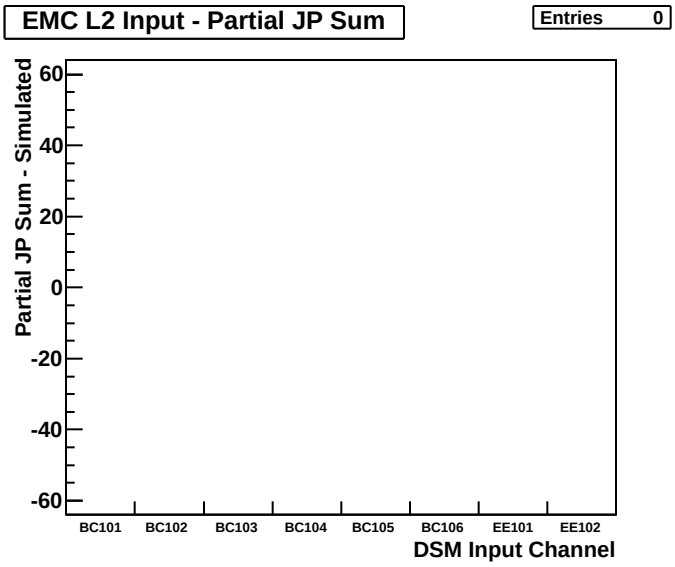

EMC L2 Input - JPY/JPB bits
Entries 974776
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
338 228 278 192 253 308 133 197
933 668 787 708 877 944 305 456
1684 1169 1355 1381 2023 1705 297 314
118897 119782 119432 119566 118694 118890 121112 120880

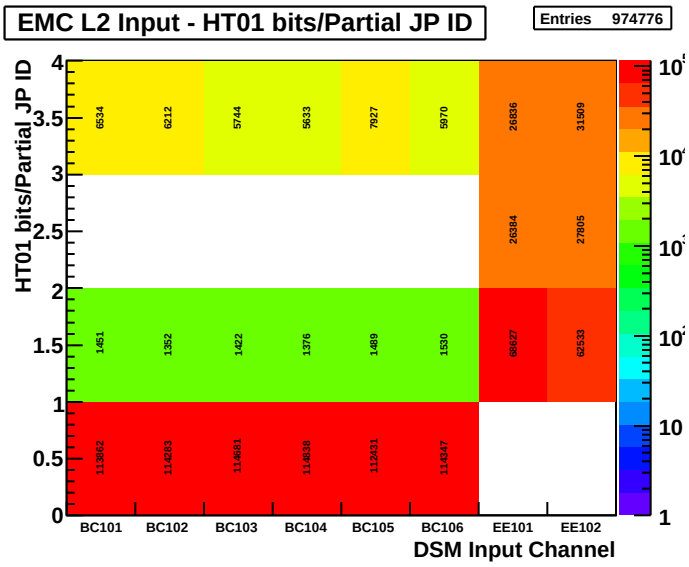

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

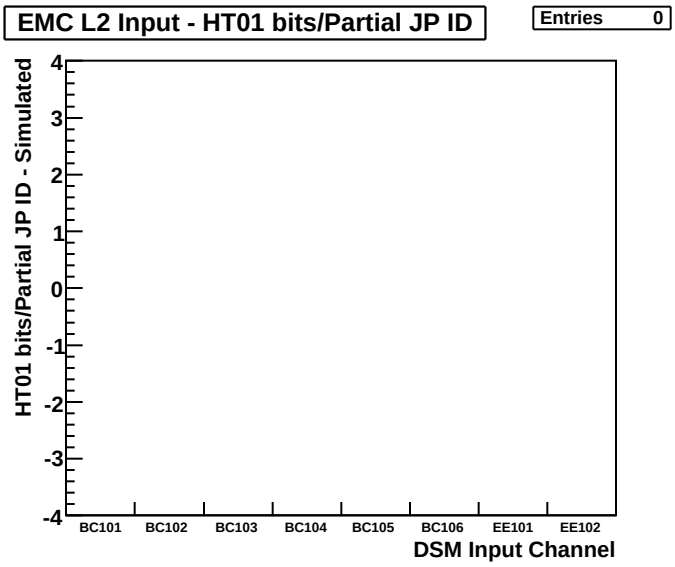

EMC L2 Input - JPZ/JPC bits
Entries 974776
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
238 202 219 227 261 313 230 165
746 653 695 685 860 953 706 336
1342 1130 1200 1332 1926 1840 1096 365
119471 119862 119733 119603 118800 118741 119755 120921

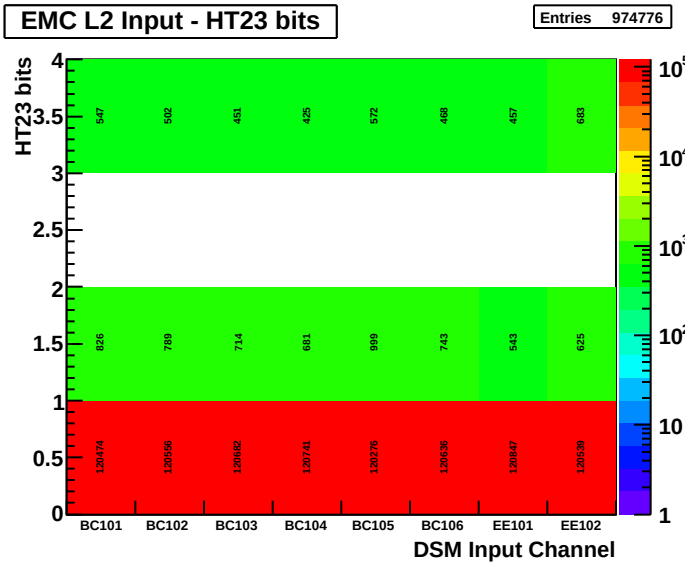

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

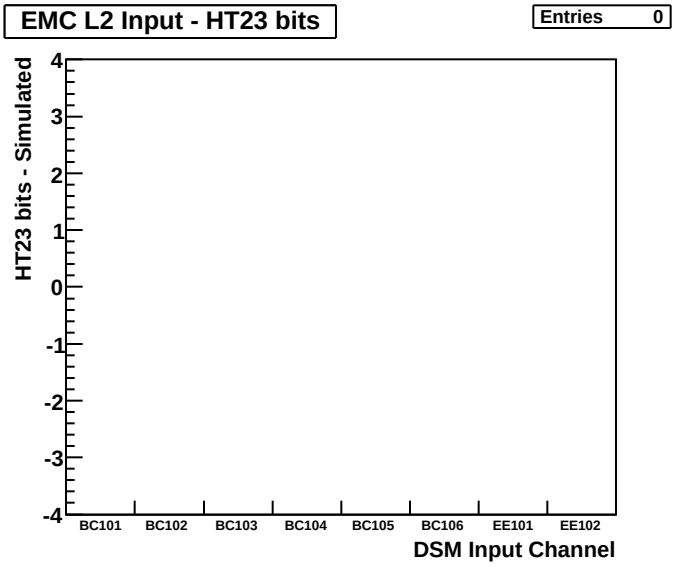

EMC L2 Input - Partial JP Sum
Entries 974776
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

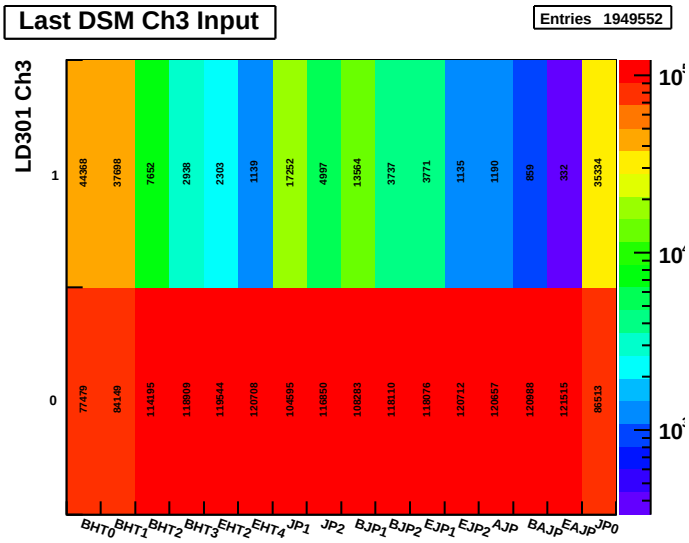

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

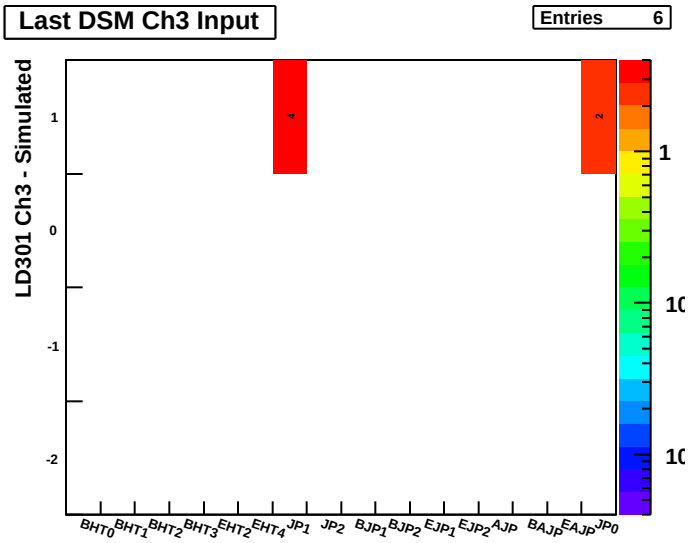

EMC L2 Input - HT01 bits/Partial JP ID
Entries 974776
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

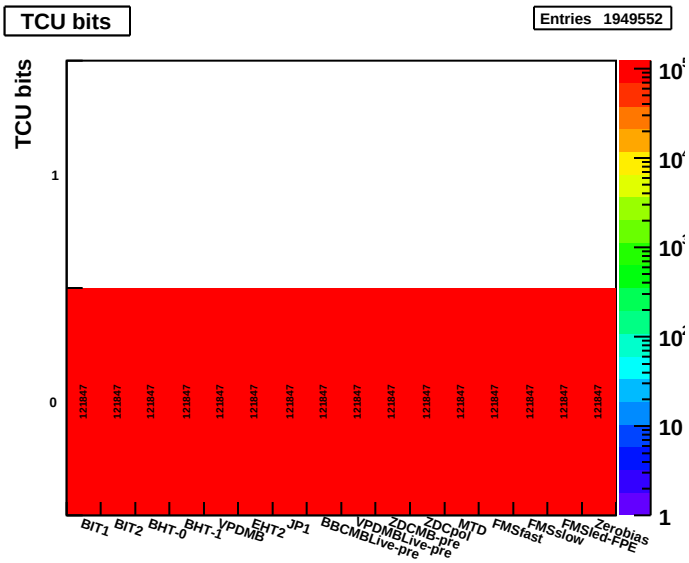

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

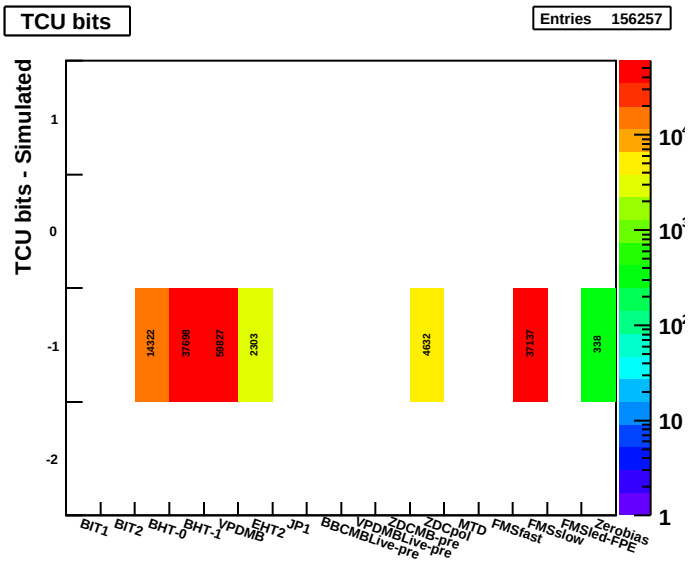

EMC L2 Input - HT23 bits
Entries 974776
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

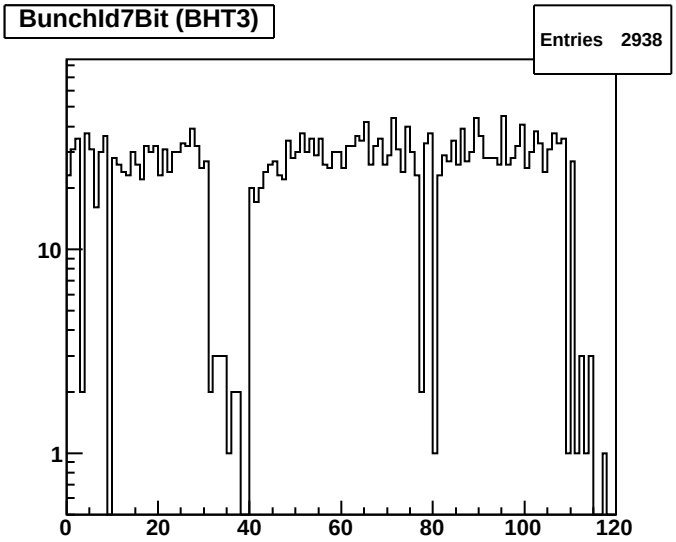

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

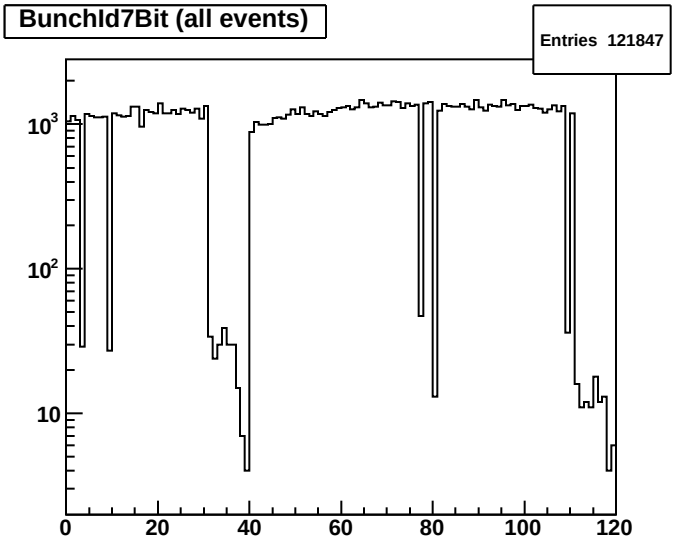

Last DSM Ch3 Input
Entries 1949552
LD301 Ch3
44368 37698 7652 2938 2303 1139 17252 4997 13564 3737 3771 1135 1190 859 332 35334
77479 84149 114195 118909 119544 120708 104595 116850 108283 118110 118076 120712 120657 120988 121515 86513
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

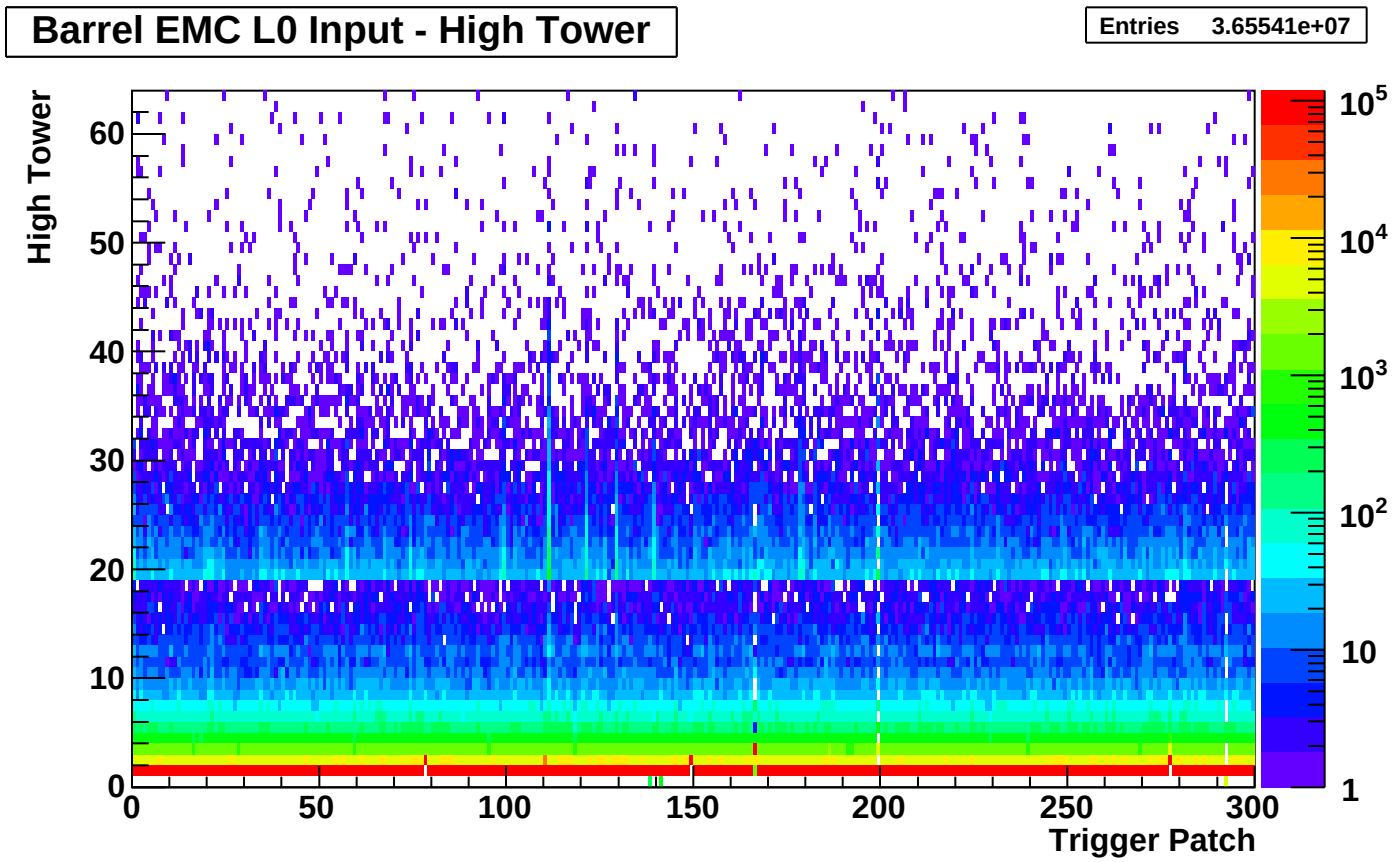

Last DSM Ch3 Input
Entries 6
LD301 Ch3 - Simulated
4
2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

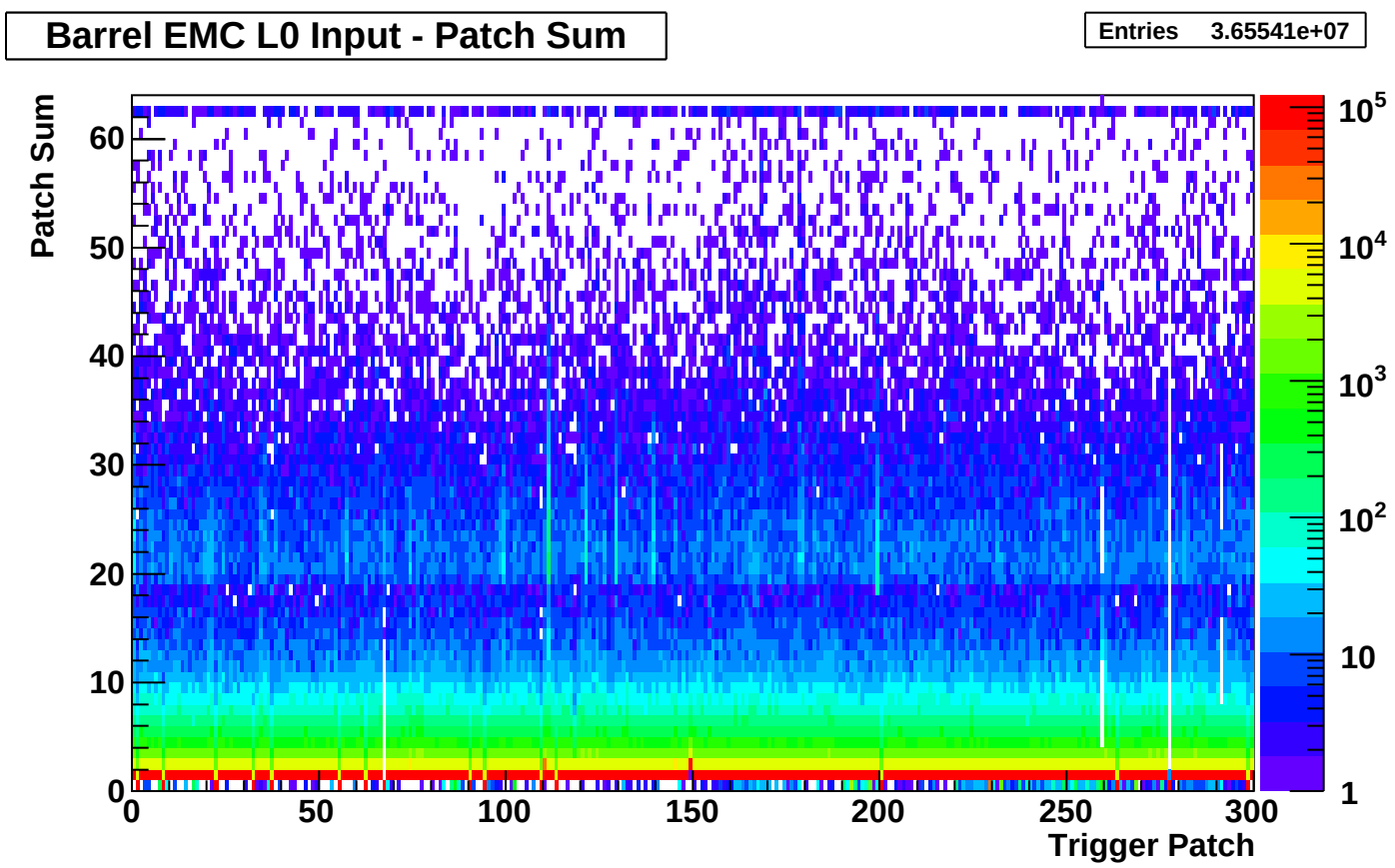

TCU bits
Entries 1949552
TCU bits
121847
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

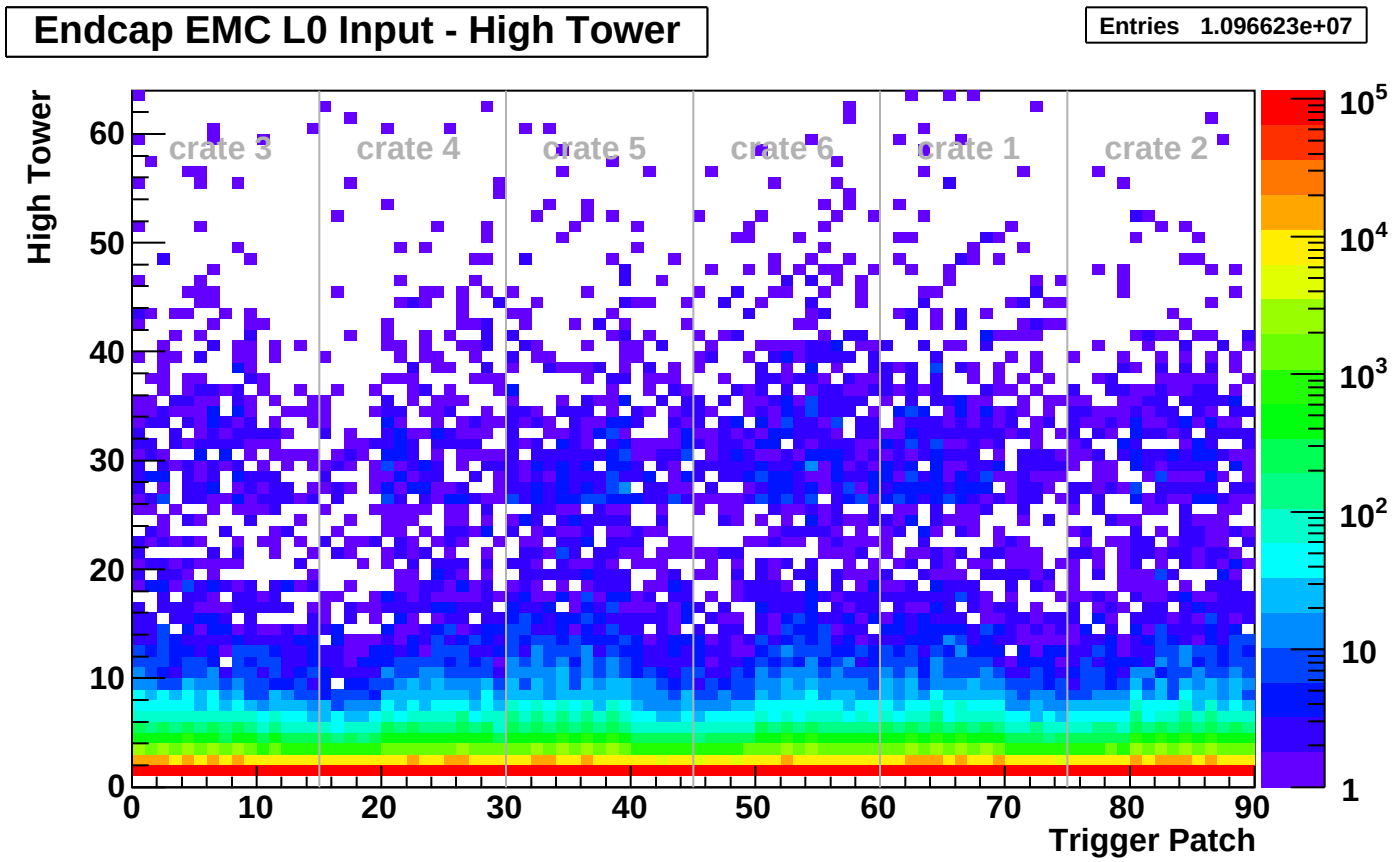

TCU bits
Entries 156257
TCU bits - Simulated
14322 37698 59827 2303 4632 37137 338
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

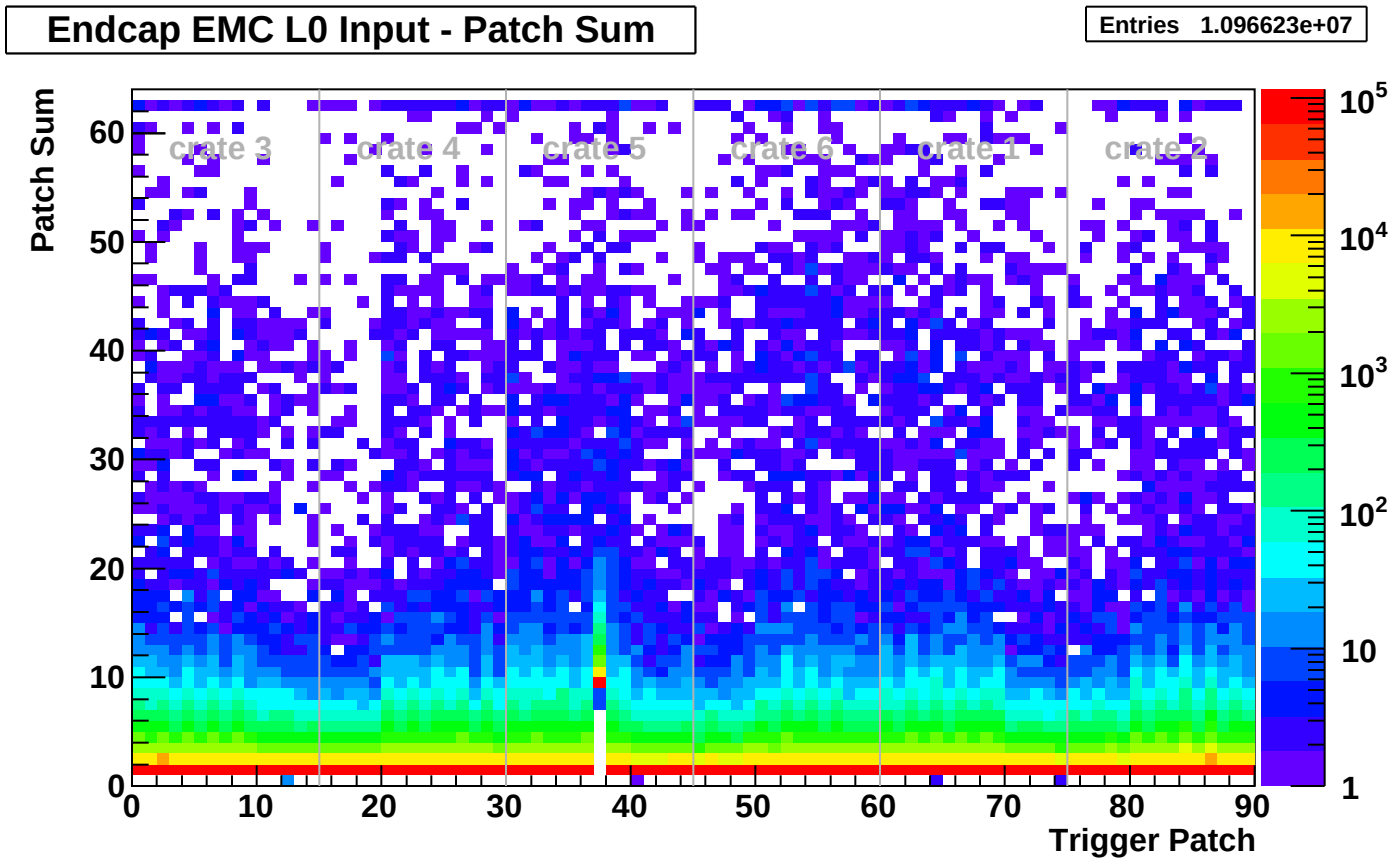

BunchId7Bit (BHT3)
Entries 2938

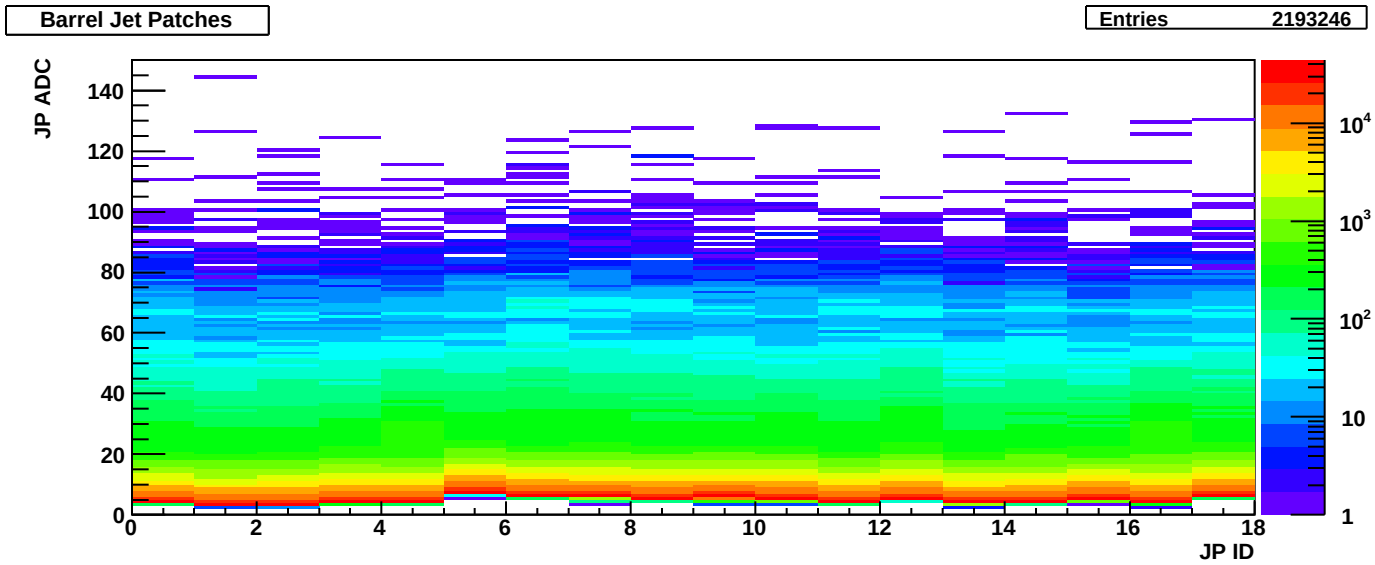

BunchId7Bit (all events)
Entries 121847

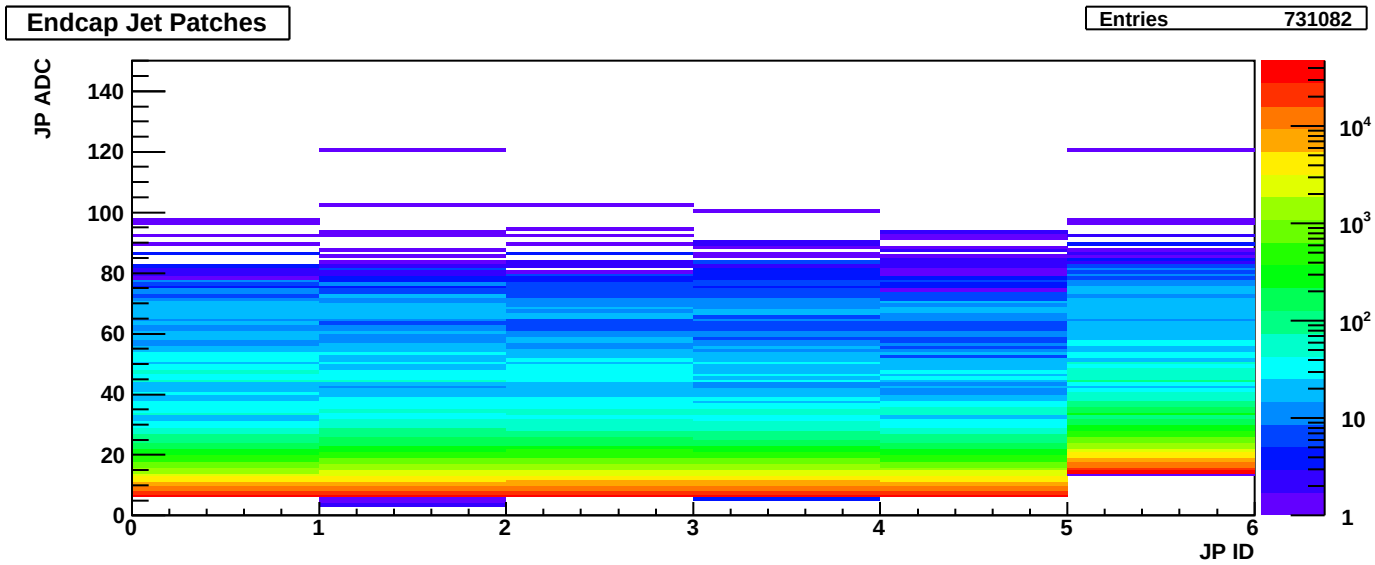

Barrel EMC L0 Input - High Tower
Entries 3.65541e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

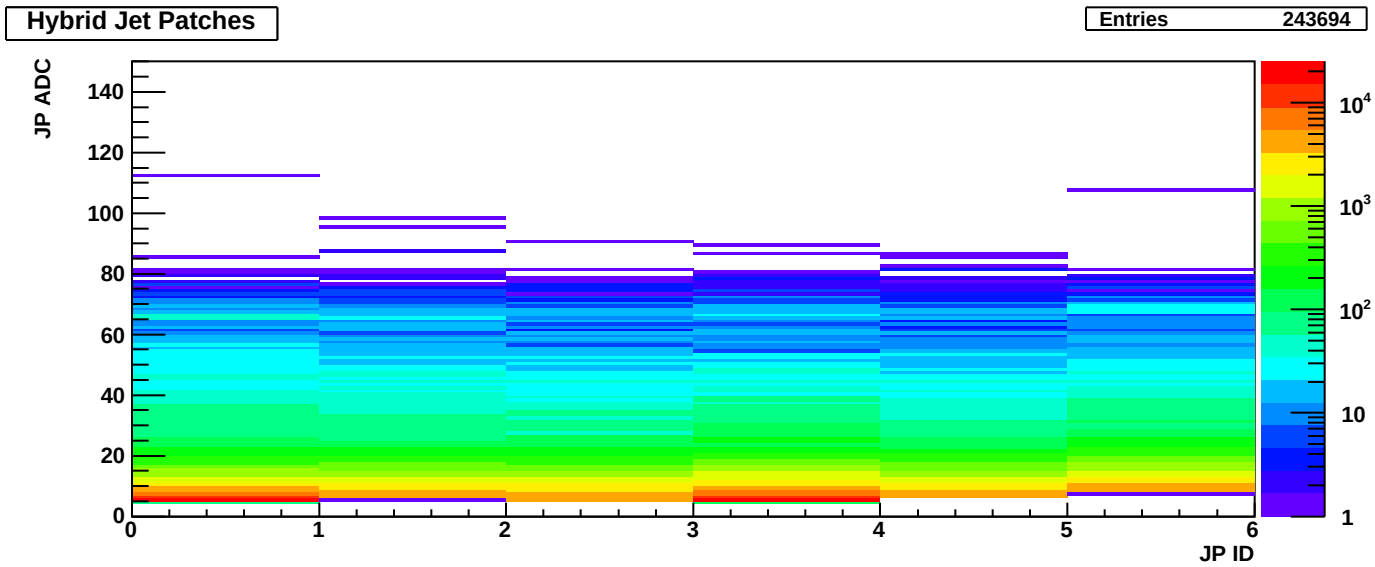

Barrel EMC L0 Input - Patch Sum
Entries 3.65541e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

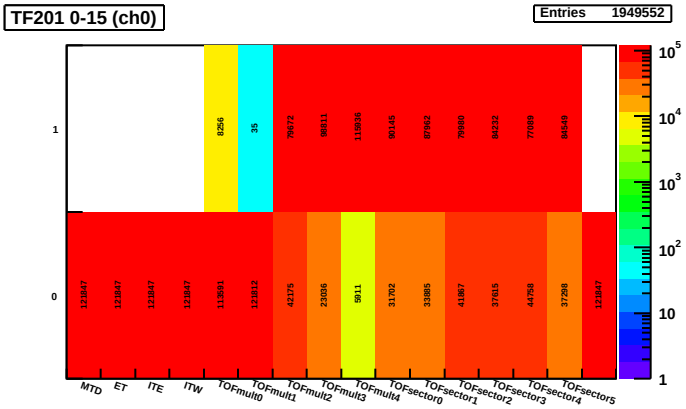

Endcap EMC L0 Input - High Tower
Entries 1.096623e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

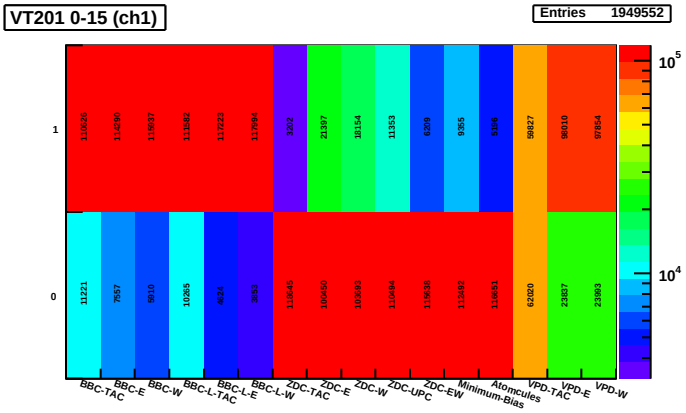

Endcap EMC L0 Input - Patch Sum
Entries 1.096623e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

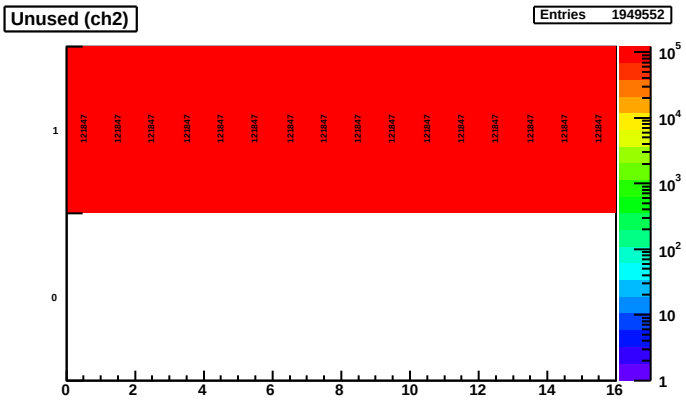

Barrel Jet Patches
Entries 2193246
JP ADC
JP ID

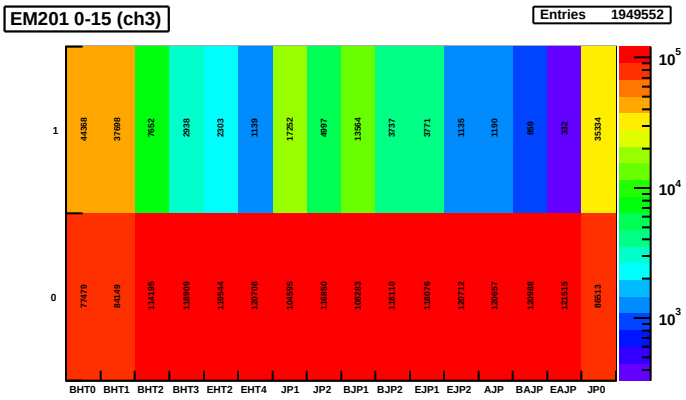

Endcap Jet Patches
Entries 731082
JP ADC
JP ID

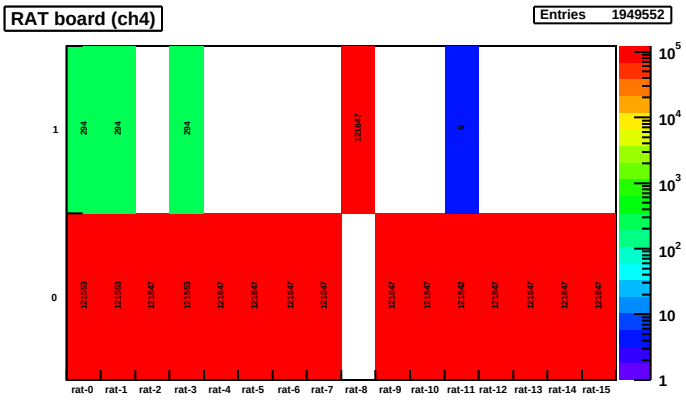

Hybrid Jet Patches
Entries 243694
JP ADC
JP ID

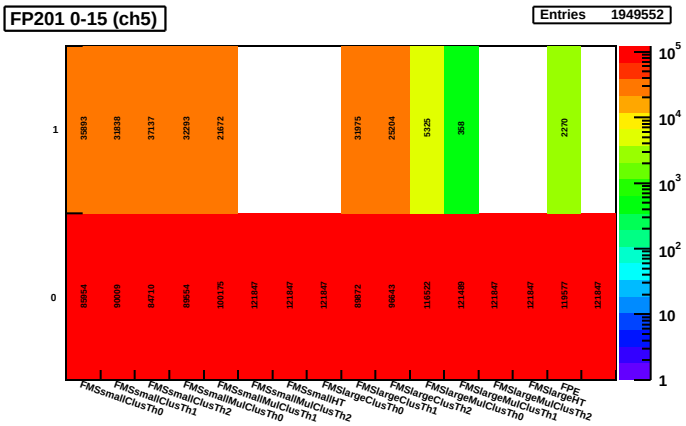

TF201 0-15 (ch0)
Entries 1949552
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

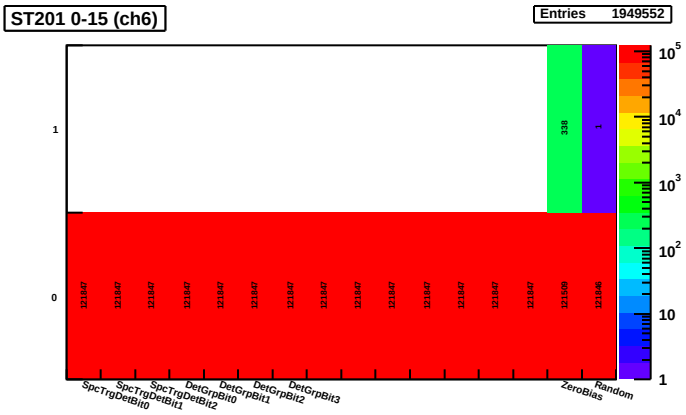

VT201 0-15 (ch1)
Entries 1949552
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

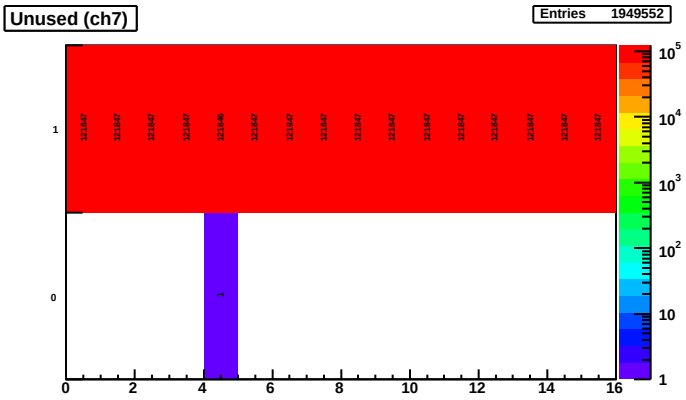

Unused (ch2)
Entries 1949552

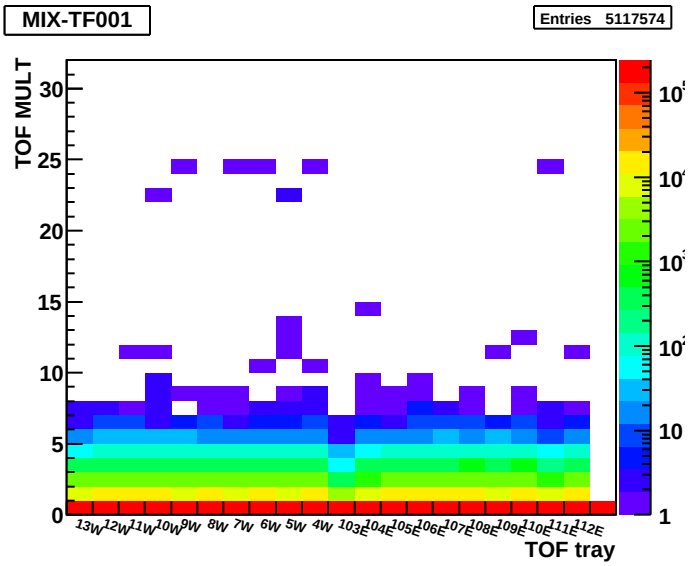

EM201 0-15 (ch3)
Entries 1949552
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

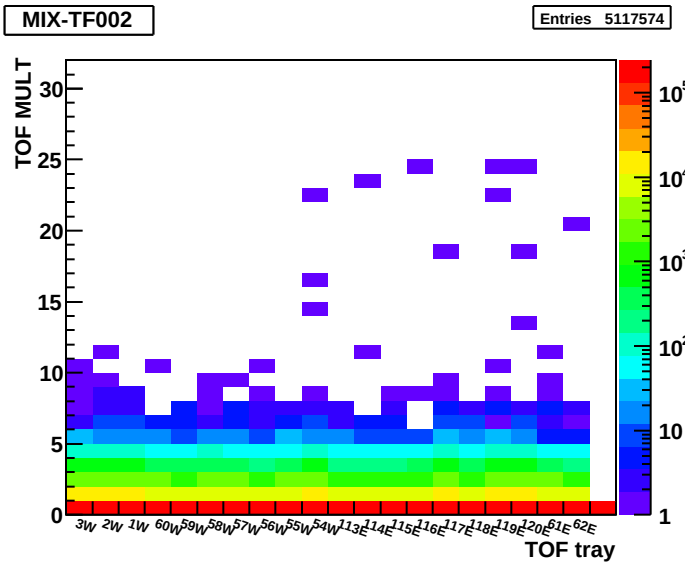

RAT board (ch4)
Entries 1949552
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

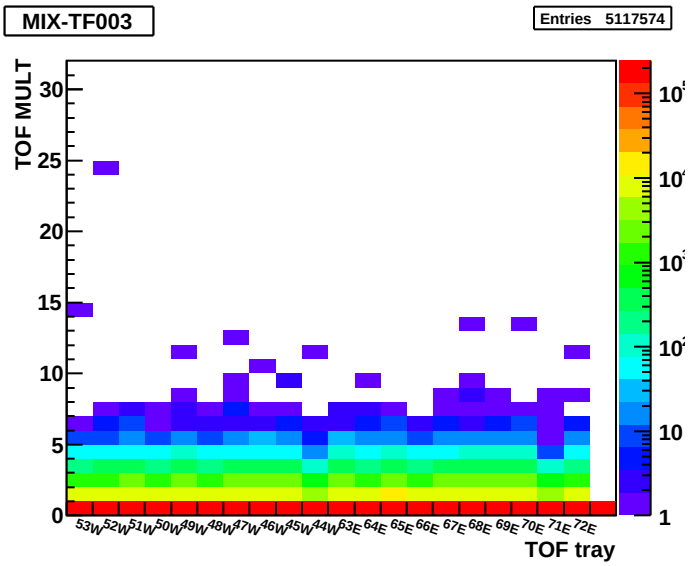

FP201 0-15 (ch5)
Entries 1949552
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

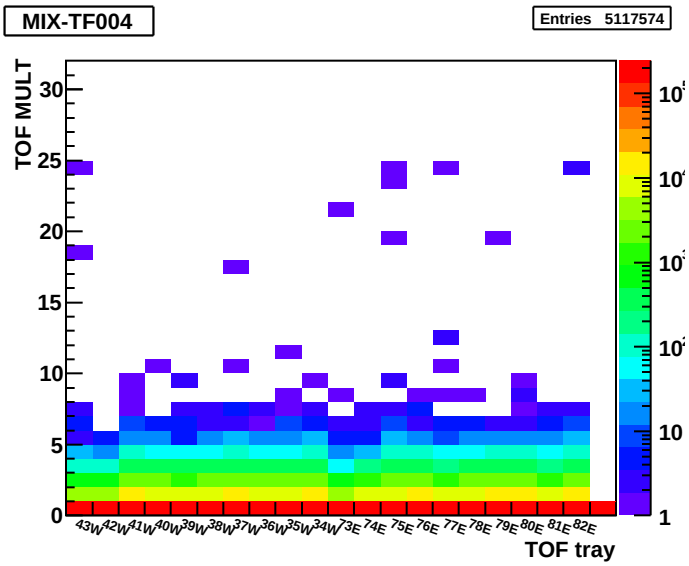

ST201 0-15 (ch6)
Entries 1949552
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

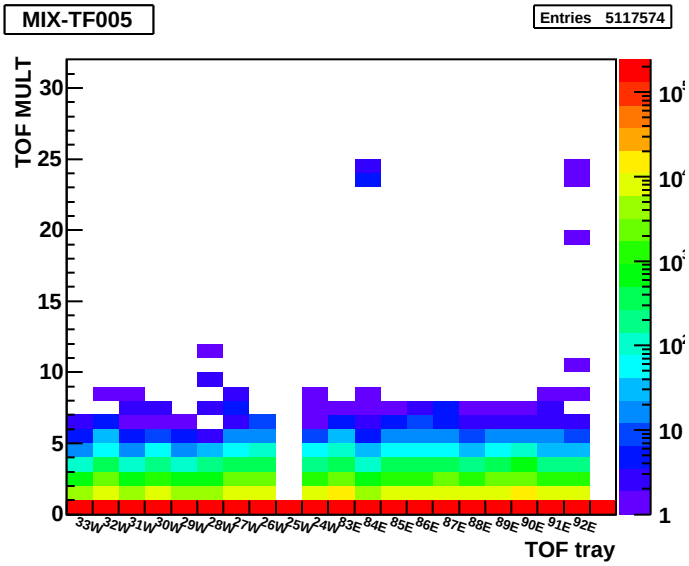

Unused (ch7)
Entries 1949552

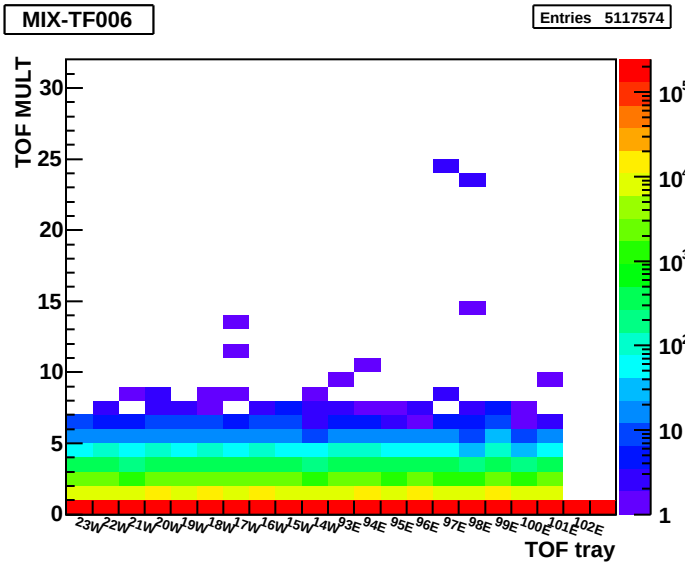

MIX-TF001
Entries 5117574
TOF MULT
TOF tray

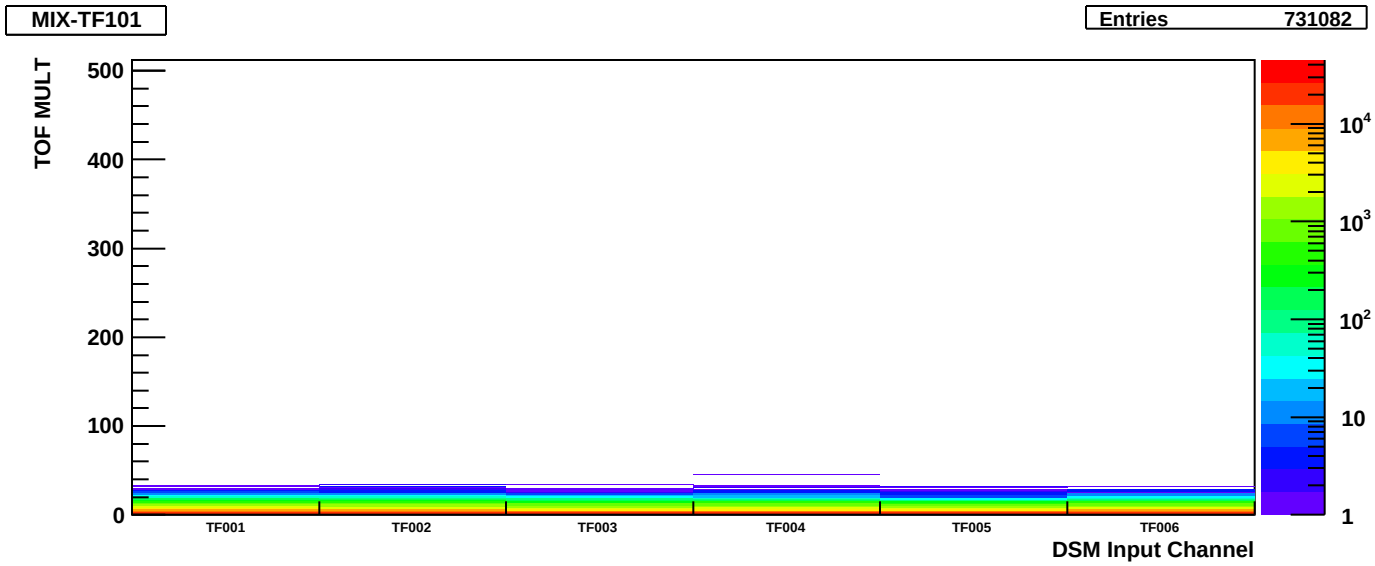

MIX-TF002
Entries 5117574
TOF MULT
TOF tray

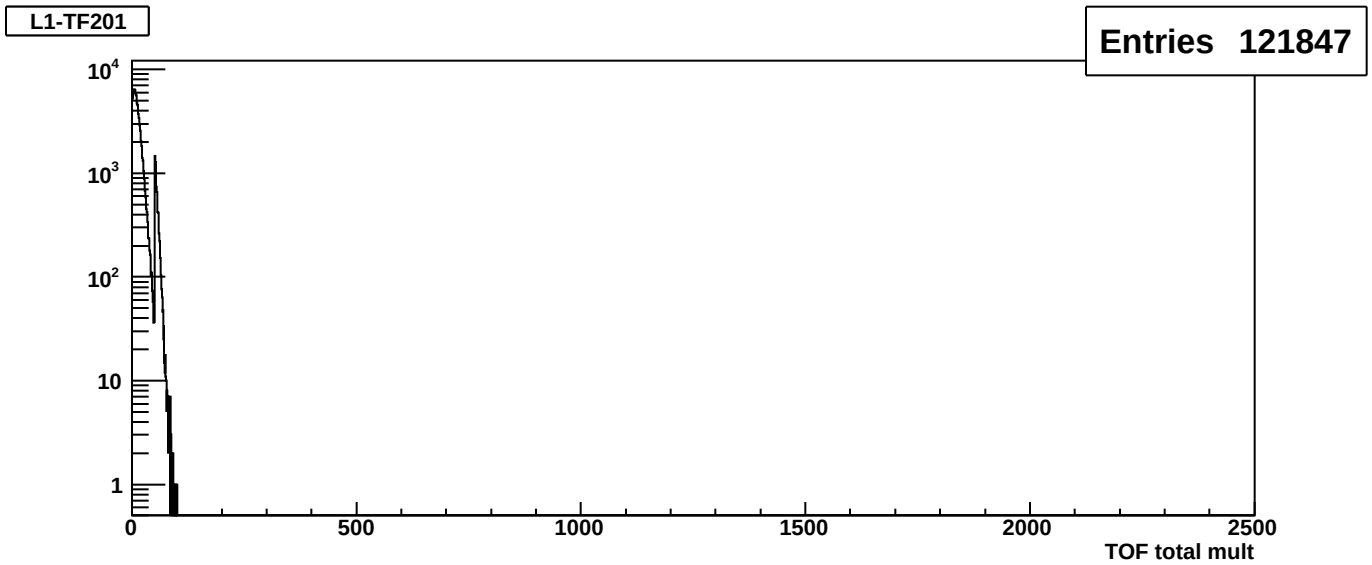

MIX-TF003
Entries 5117574
TOF MULT
TOF tray

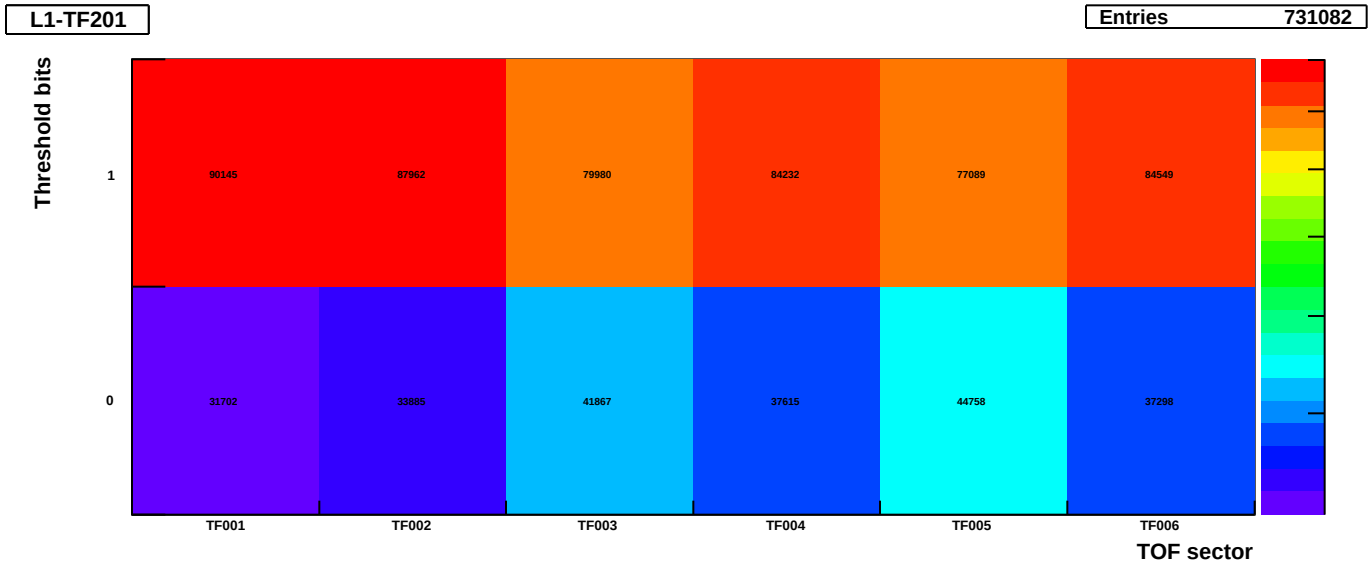

MIX-TF004
Entries 5117574
TOF MULT
TOF tray

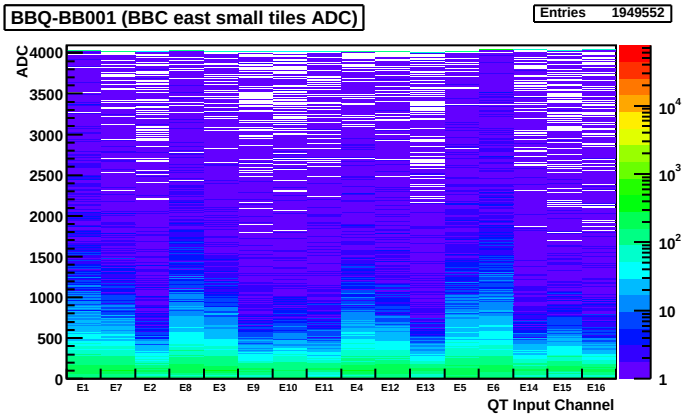

MIX-TF005
Entries 5117574
TOF MULT
TOF tray

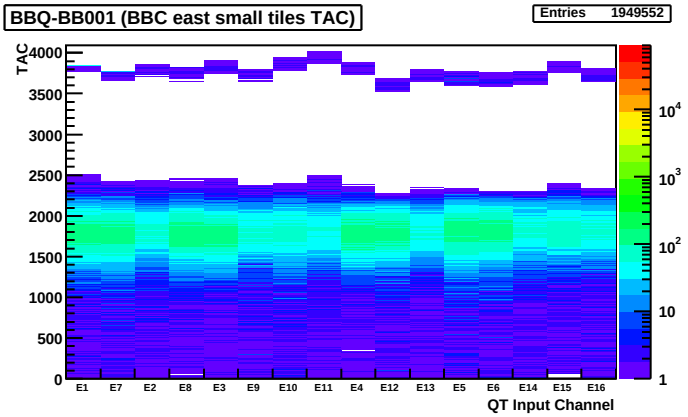

MIX-TF006
Entries 5117574
TOF MULT
TOF tray

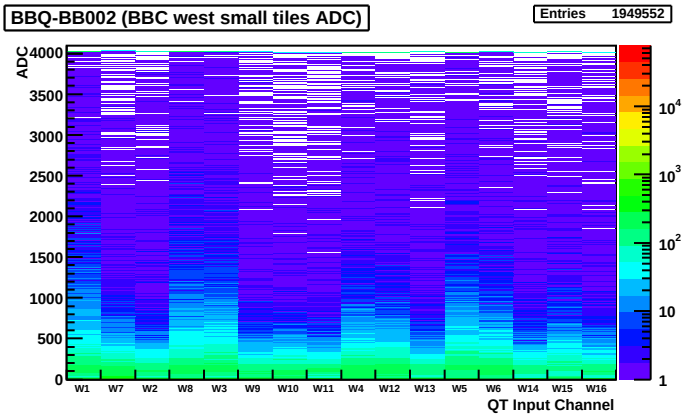

MIX-TF101
Entries 731082
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

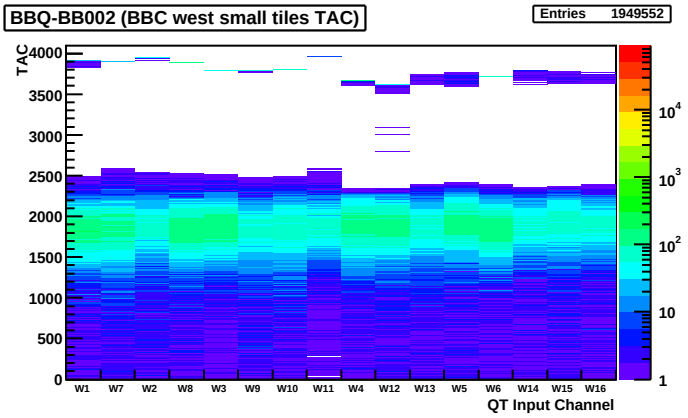

L1-TF201
Entries 121847
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

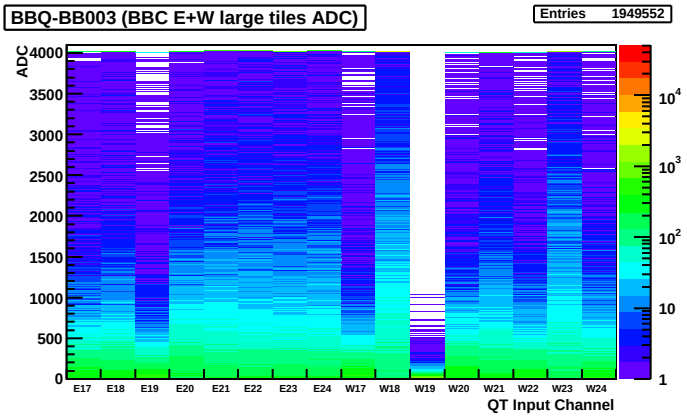

L1-TF201
Entries 731082
Threshold bits
1
0
90145
87962
79980
84232
77089
84549
31702
33885
41867
37615
44758
37298
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

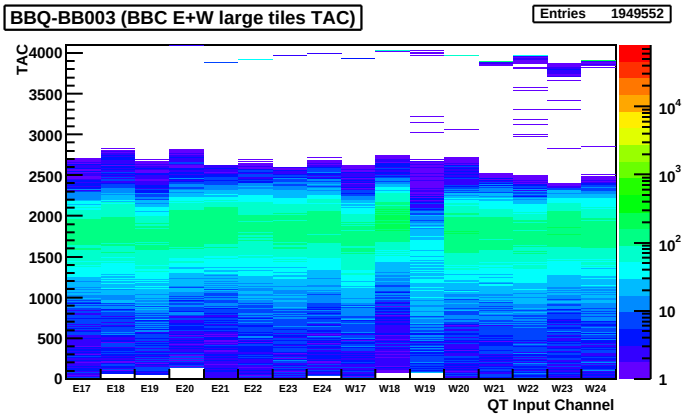

BBQ-BB001 (BBC east small tiles ADC)
Entries 1949552
ADC
QT Input Channel

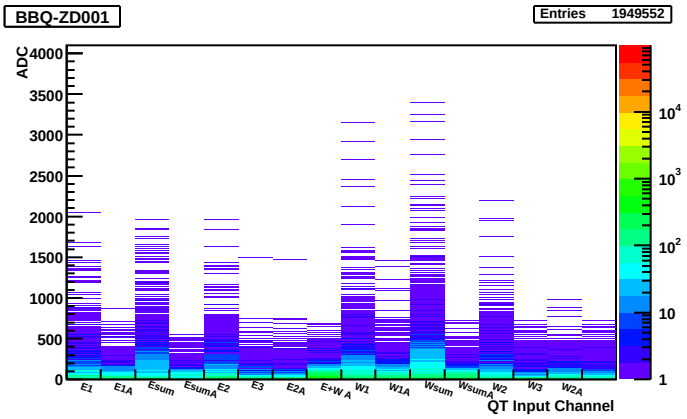

BBQ-BB001 (BBC east small tiles TAC)
Entries 1949552
TAC
QT Input Channel

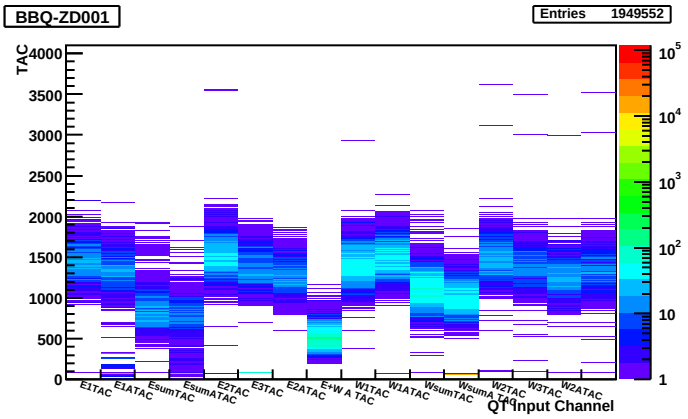

BBQ-BB002 (BBC west small tiles ADC)
Entries 1949552
ADC
QT Input Channel

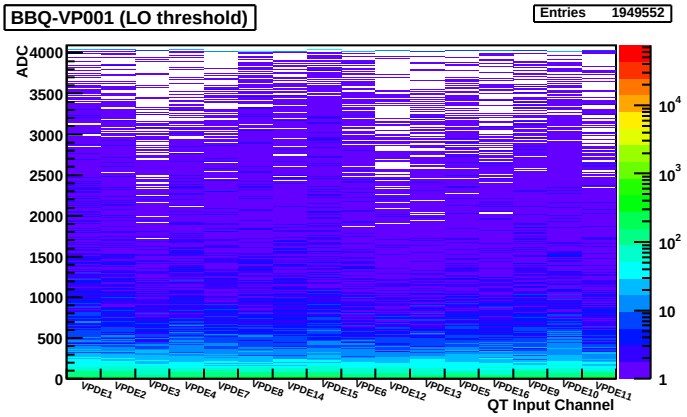

BBQ-BB002 (BBC west small tiles TAC)
Entries 1949552
TAC
QT Input Channel

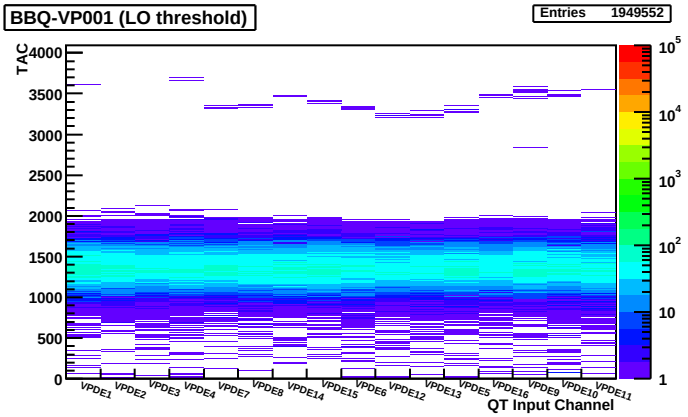

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1949552
ADC
QT Input Channel

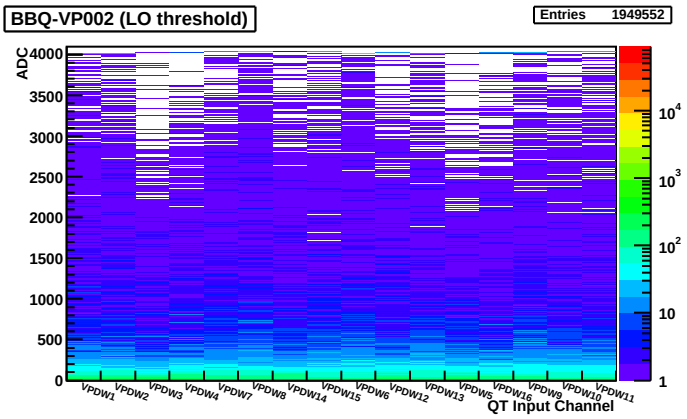

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1949552
TAC
QT Input Channel

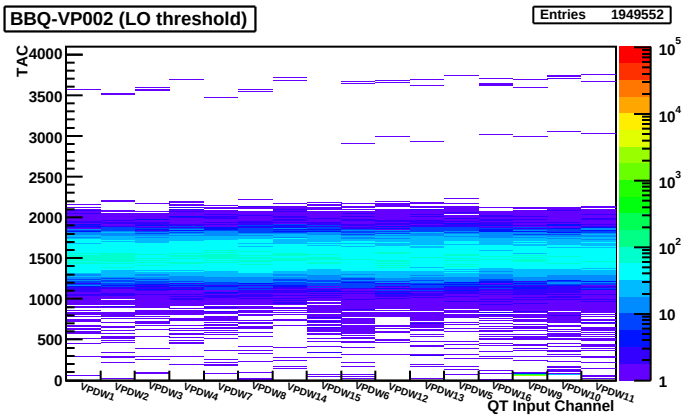

BBQ-ZD001
Entries 1949552
ADC
QT Input Channel

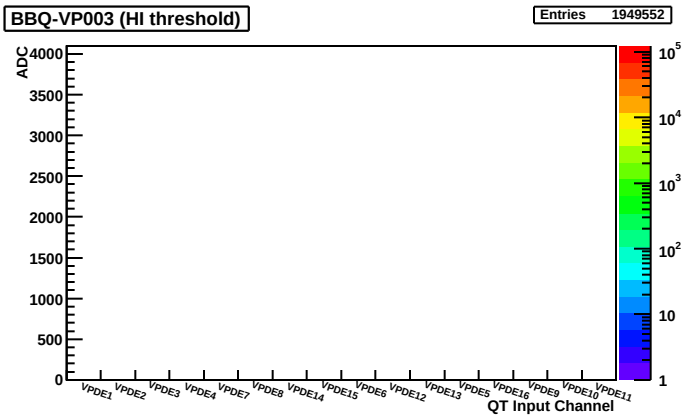

BBQ-ZD001
Entries 1949552
TAC
QT Input Channel

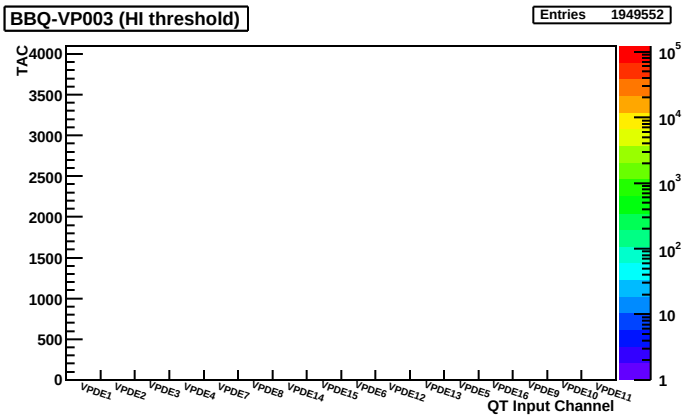

BBQ-VP001 (LO threshold)
Entries 1949552
ADC
QT Input Channel

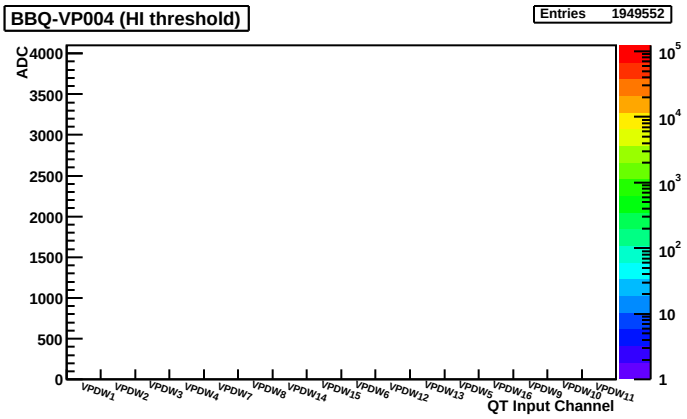

BBQ-VP001 (LO threshold)
Entries 1949552
TAC
QT Input Channel

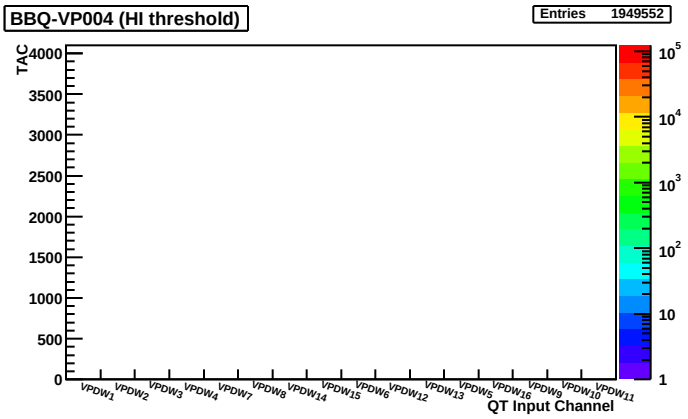

BBQ-VP002 (LO threshold)
Entries 1949552
ADC
QT Input Channel

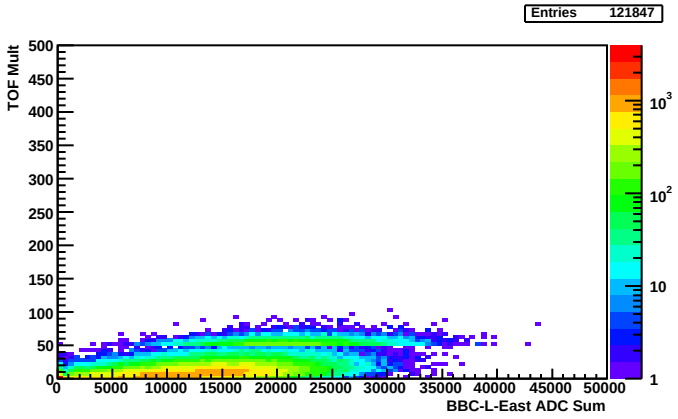

BBQ-VP002 (LO threshold)
Entries 1949552
TAC
QT Input Channel

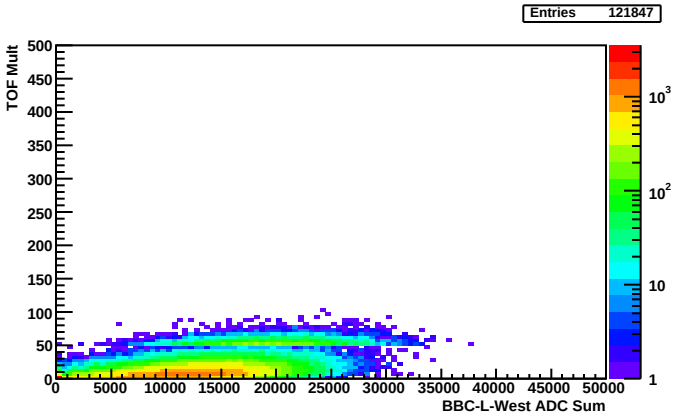

BBQ-VP003 (HI threshold)
Entries 1949552
ADC
QT Input Channel

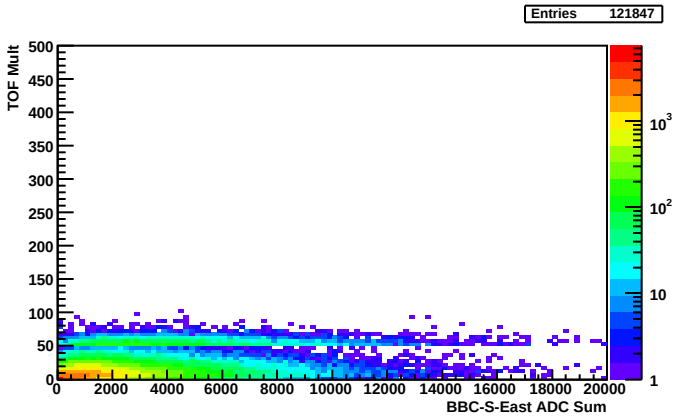

BBQ-VP003 (HI threshold)
Entries 1949552
TAC
QT Input Channel

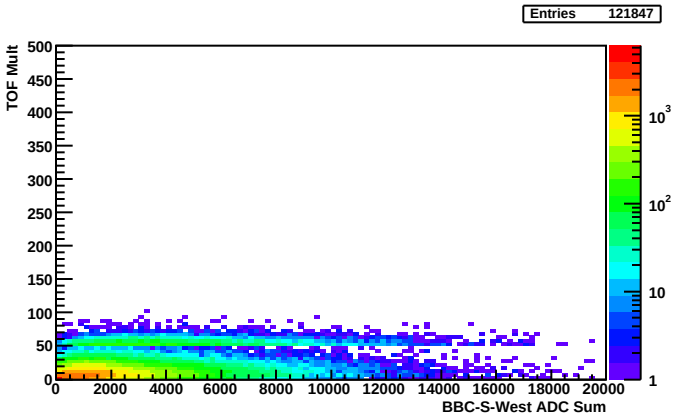

BBQ-VP004 (HI threshold)
Entries 1949552
ADC
QT Input Channel

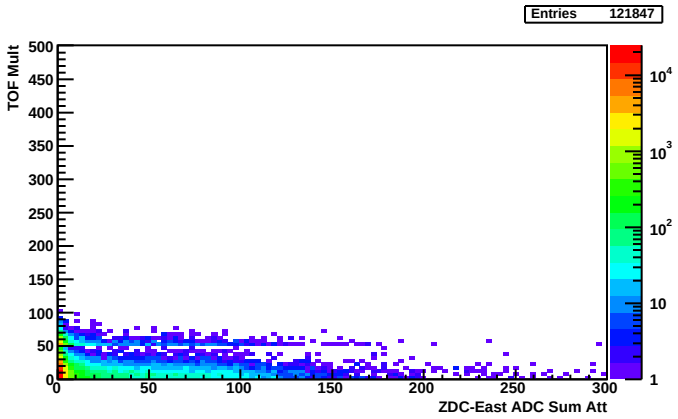

BBQ-VP004 (HI threshold)
Entries 1949552
TAC
QT Input Channel

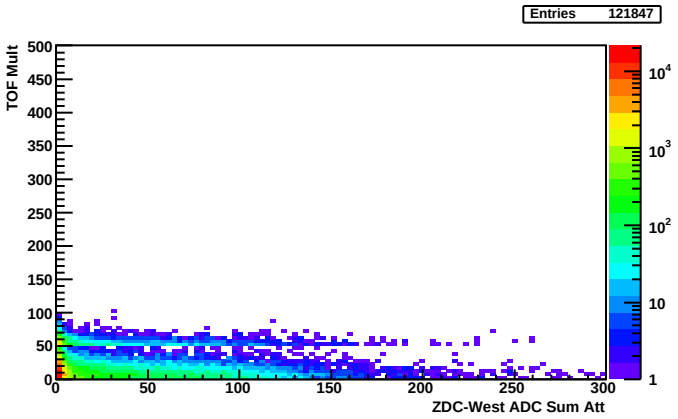

Entries 121847
TOF Mult
BBC-L-East ADC Sum

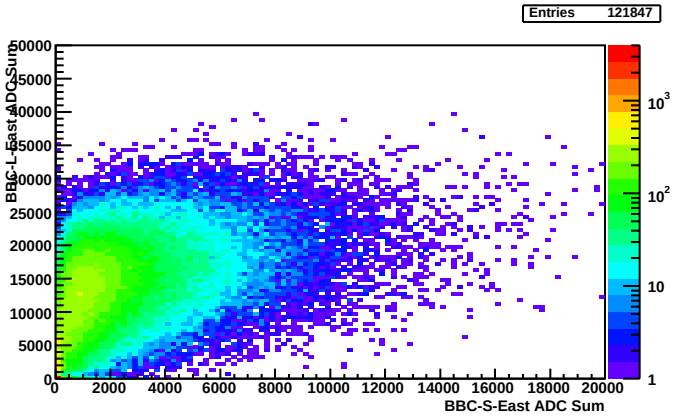

Entries 121847
TOF Mult
BBC-L-West ADC Sum

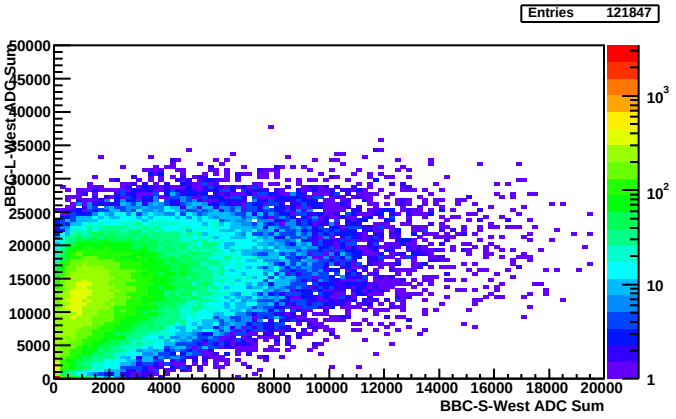

Entries 121847
TOF Mult
BBC-S-East ADC Sum

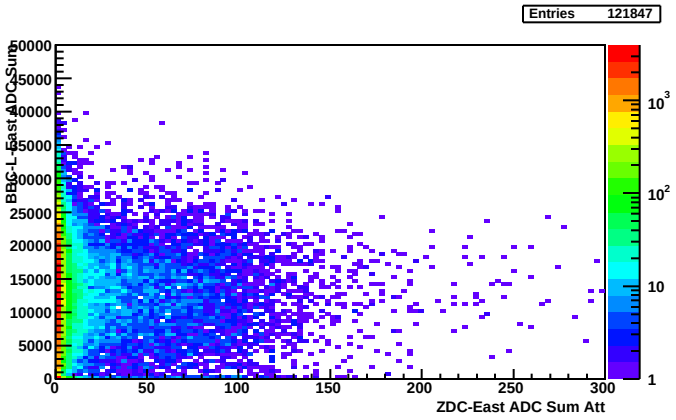

Entries 121847
TOF Mult
BBC-S-West ADC Sum

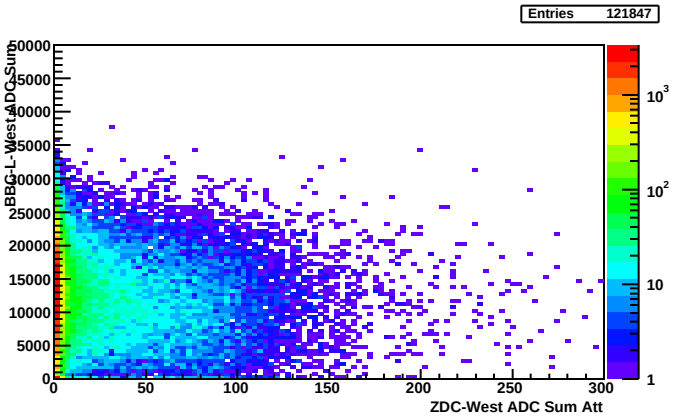

Entries 121847
TOF Mult
ZDC-East ADC Sum Att

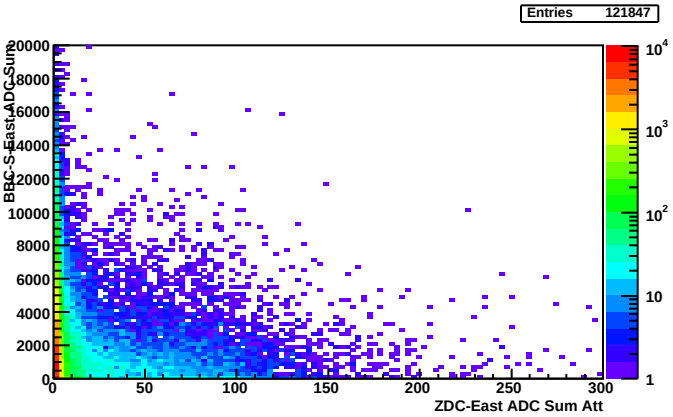

Entries 121847
TOF Mult
ZDC-West ADC Sum Att

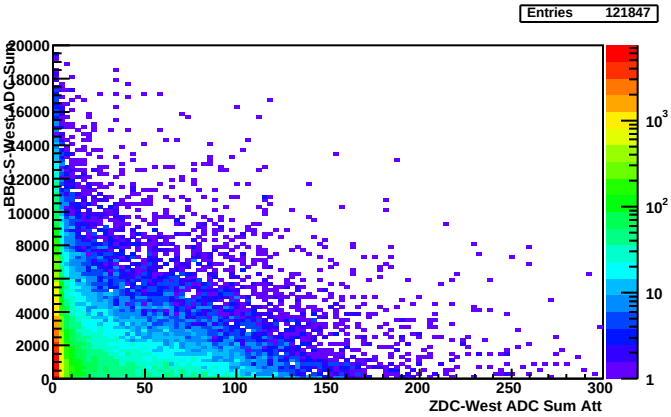

Entries 121847
BBC-L-East ADC Sum
BBC-S-East ADC Sum

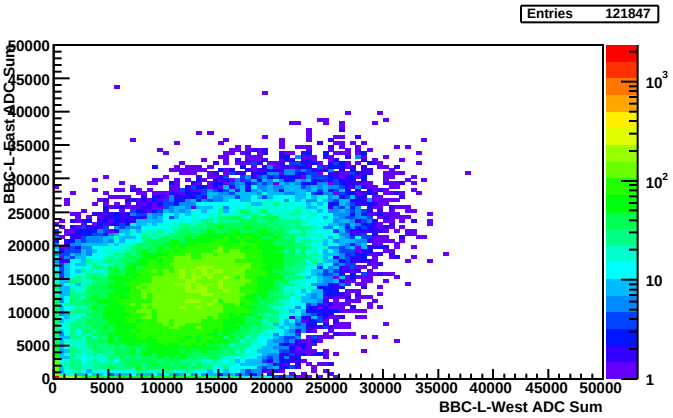

Entries 121847
BBC-L-West ADC Sum
BBC-S-West ADC Sum

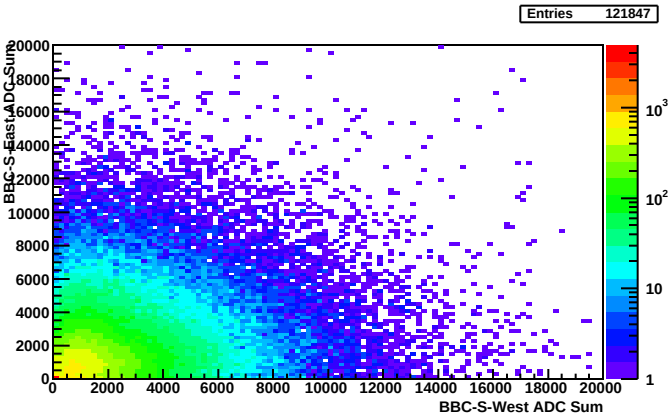

Entries 121847
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

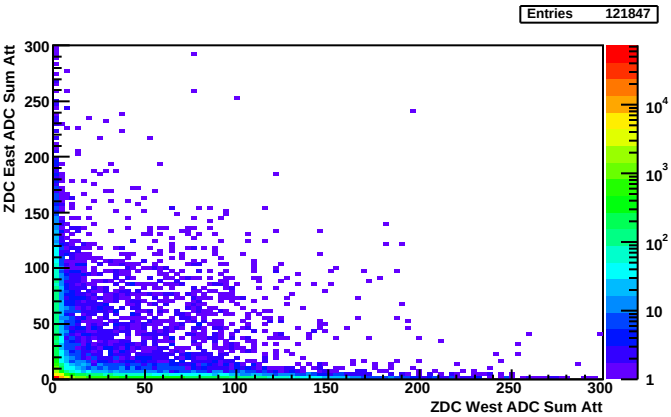

Entries 121847
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

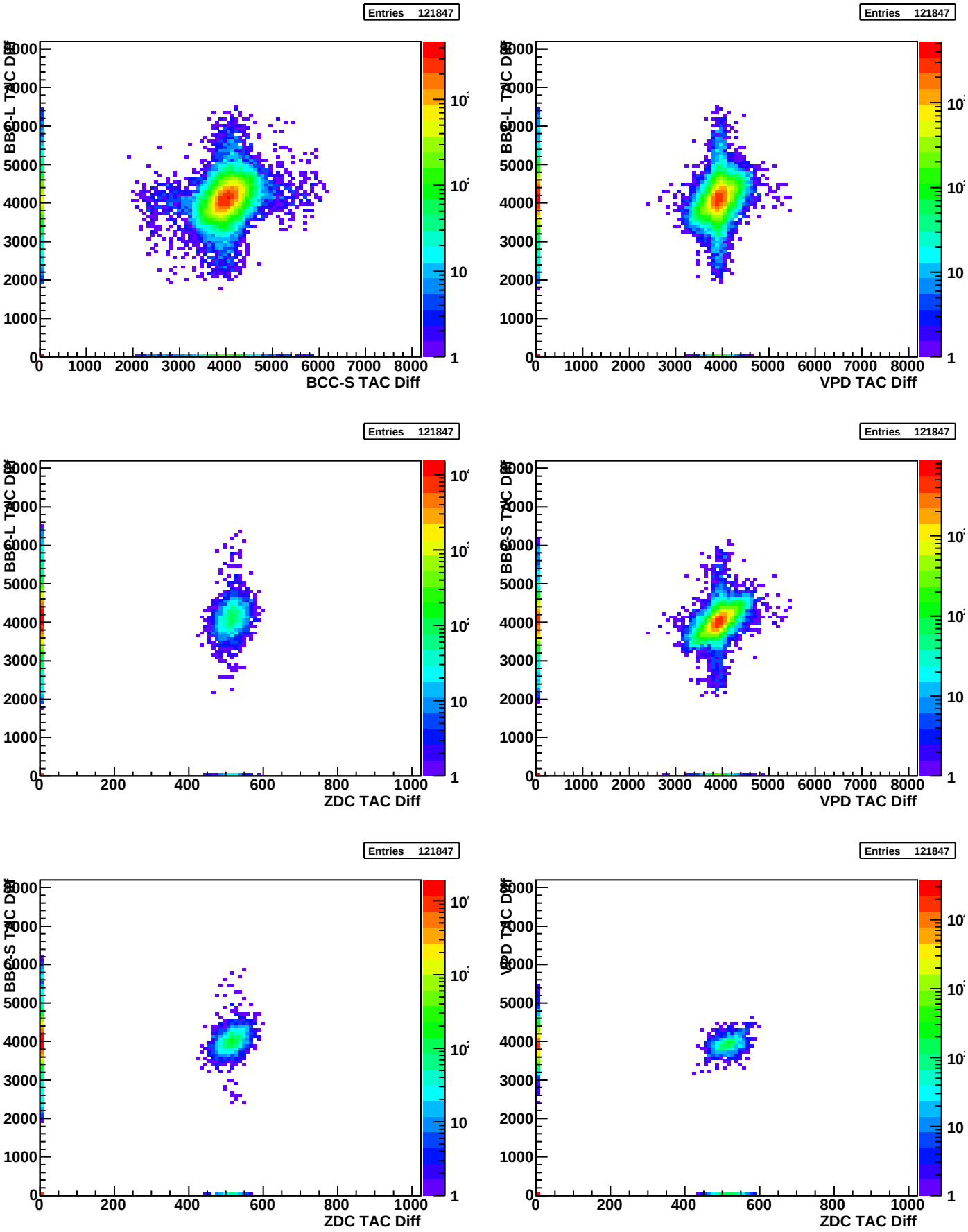

Entries 121847
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

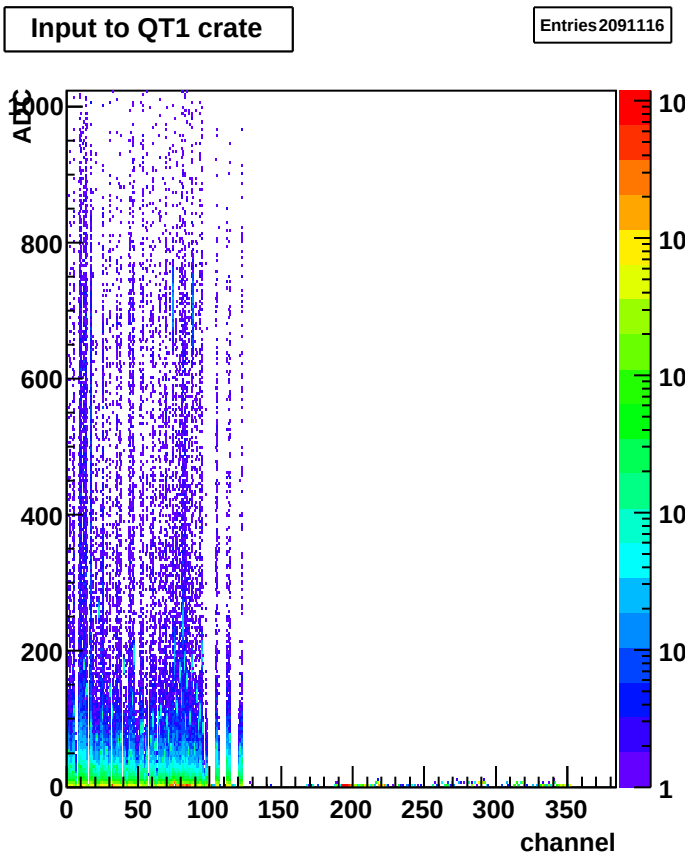

Entries 121847
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

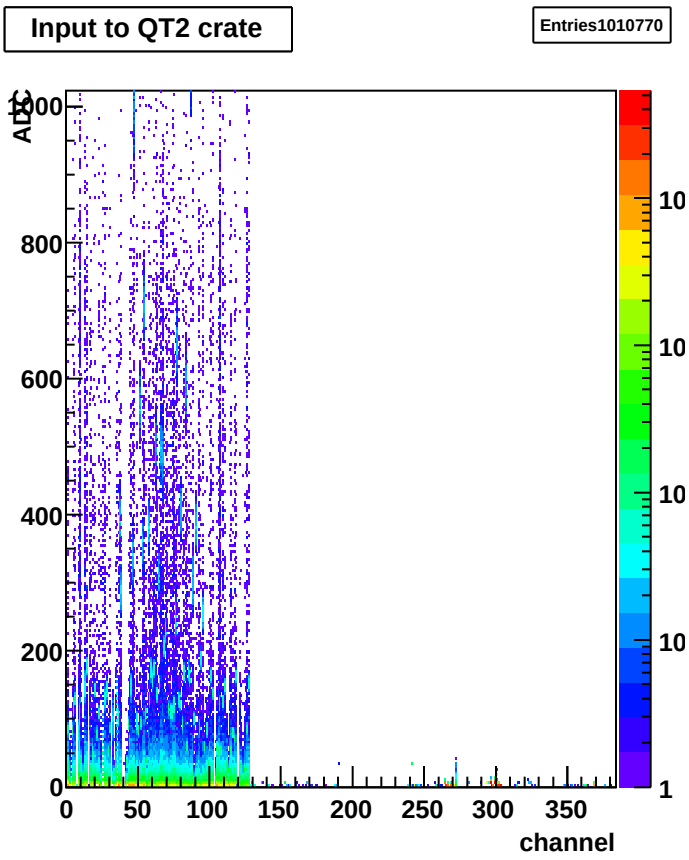

Entries 121847
BBC-L-East ADC Sum
BBC-L-West ADC Sum

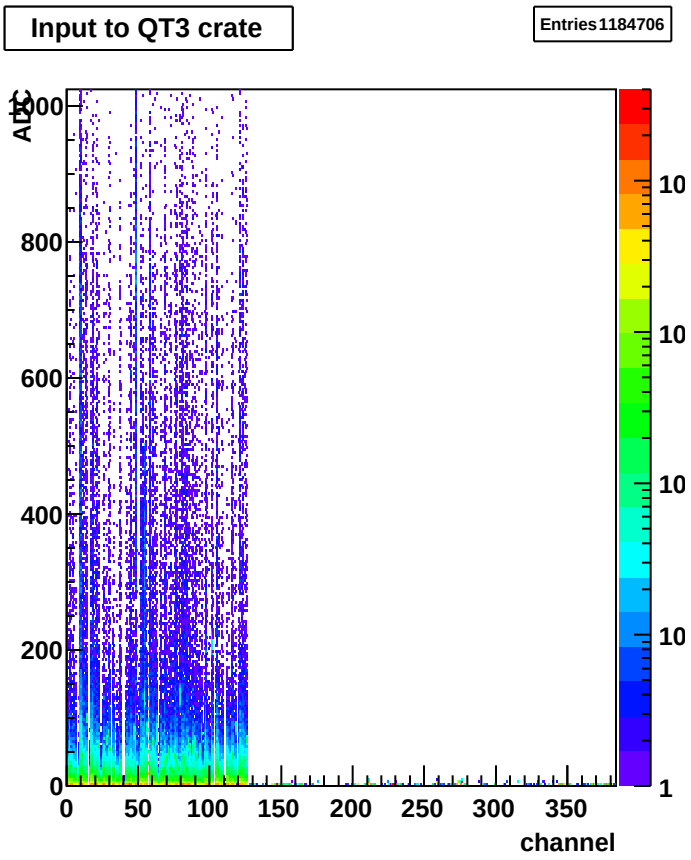

Entries 121847
BBC-S-East ADC Sum
BBC-S-West ADC Sum

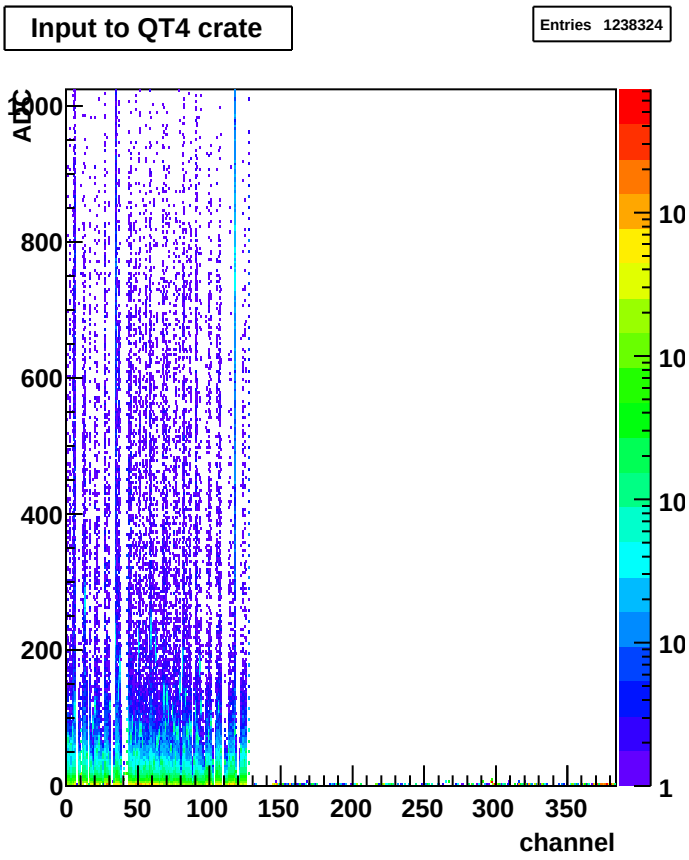

Entries 121847
ZDC East ADC Sum Att
ZDC West ADC Sum Att

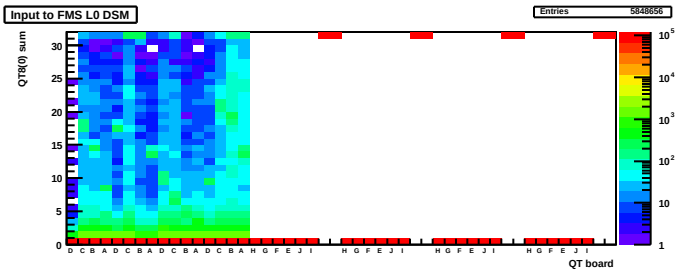

Entries 121847
BBC-L TAC Diff
BCC-S TAC Diff
Entries 121847
BBC-L TAC Diff
VPD TAC Diff
Entries 121847
BBC-L TAC Diff
ZDC TAC Diff
Entries 121847
BBC-S TAC Diff
VPD TAC Diff
Entries 121847
BBC-S TAC Diff
ZDC TAC Diff
Entries 121847
VPD TAC Diff
ZDC TAC Diff

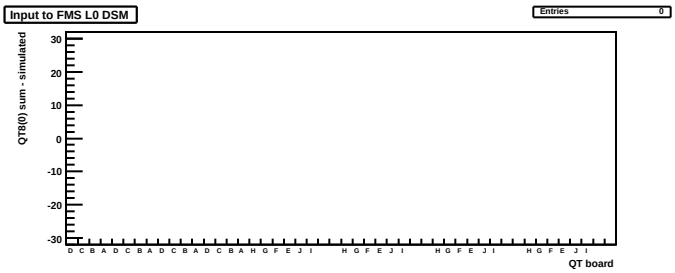

Input to QT1 crate
Entries 2091116
ADC
channel

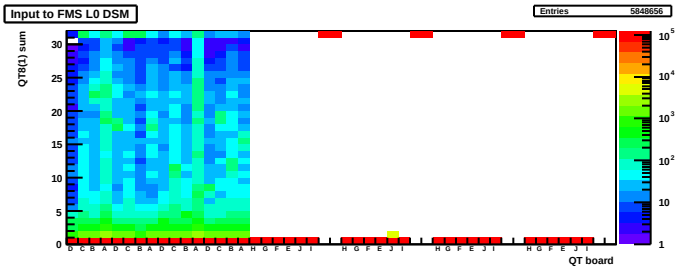

Input to QT2 crate
Entries 1010770
ADC
channel

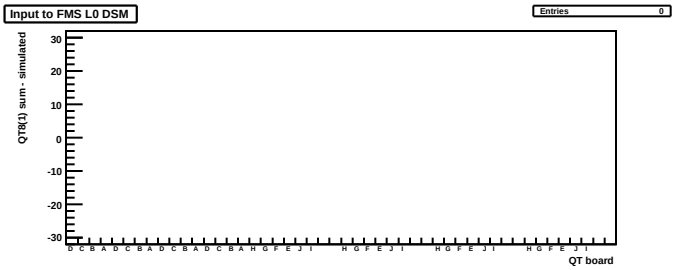

Input to QT3 crate
Entries 1184706
ADC
channel

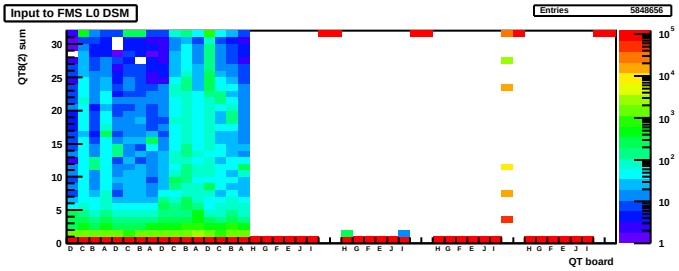

Input to QT4 crate
Entries 1238324
ADC
channel

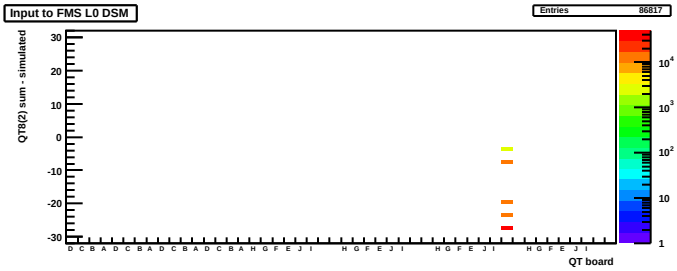

Input to FMS L0 DSM
Entries 5848656
QT8(0) sum
QT board

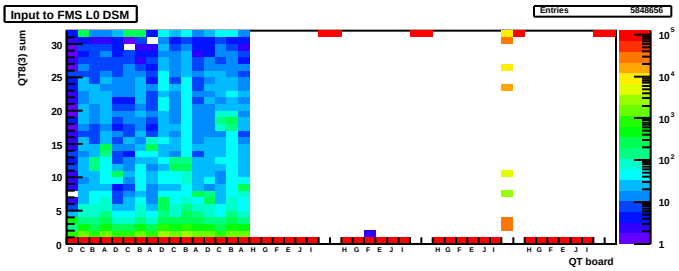

Input to FMS L0 DSM
Entries 0
QT8(0) sum - simulated
QT board

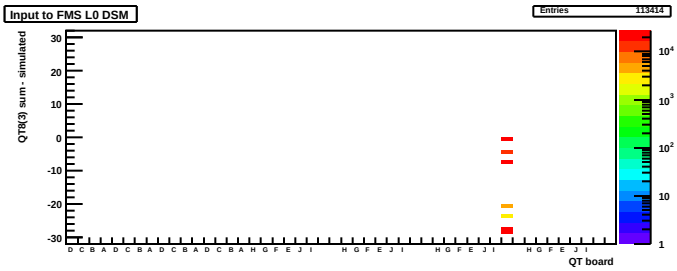

Input to FMS L0 DSM
Entries 5848656
QT8(1) sum
QT board

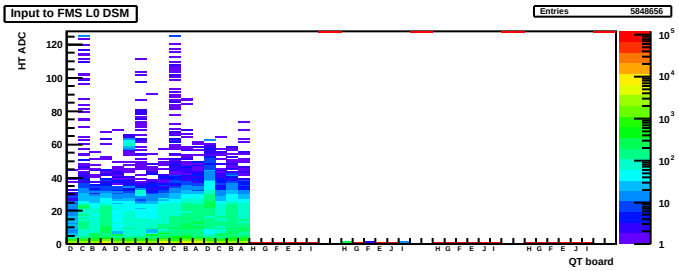

Input to FMS L0 DSM
Entries 0
QT8(1) sum - simulated
QT board

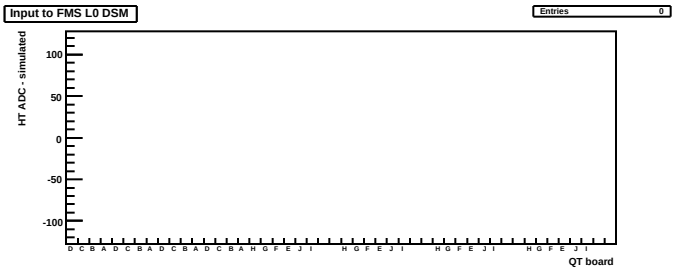

Input to FMS L0 DSM
Entries 5848656
QT8(2) sum
QT board

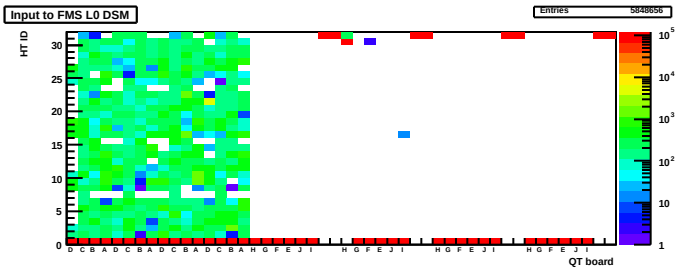

Input to FMS L0 DSM
Entries 86817
QT8(2) sum - simulated
QT board

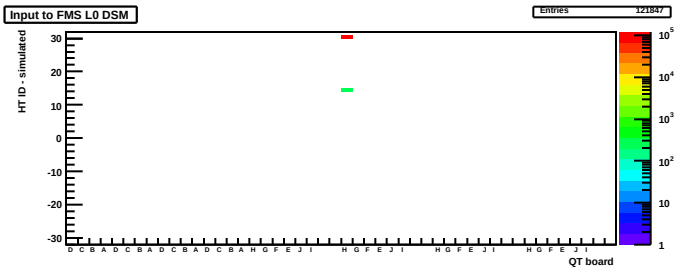

Input to FMS L0 DSM
Entries 5848656
QT8(3) sum
QT board

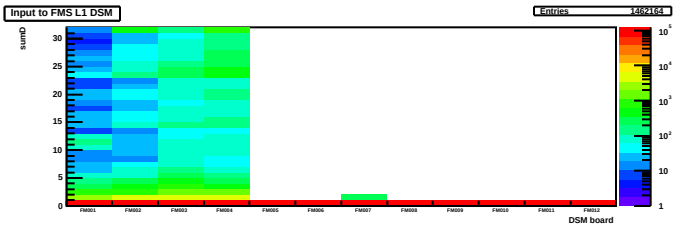

Input to FMS L0 DSM
Entries 113414
QT8(3) sum - simulated
QT board

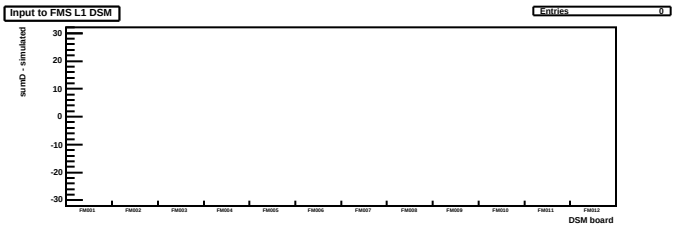

Input to FMS L0 DSM
Entries 5848656
HT ADC
QT board

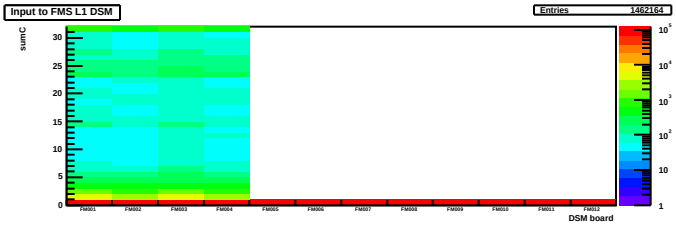

Input to FMS L0 DSM
Entries 0
HT ADC - simulated
QT board

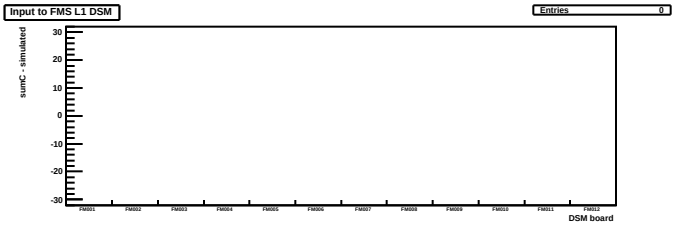

Input to FMS L0 DSM
Entries 5848656
HT ID
QT board

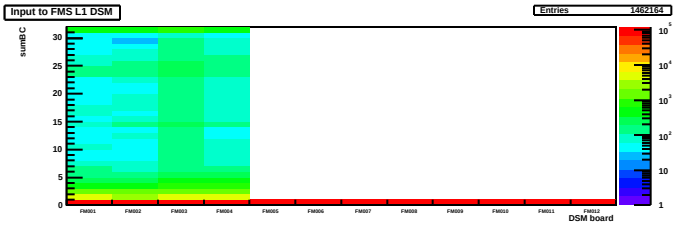

Input to FMS L0 DSM
Entries 121847
HT ID - simulated
QT board

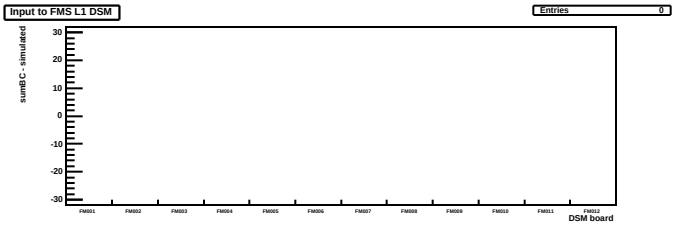

Input to FMS L1 DSM
Entries 1462164
sumD
DSM board

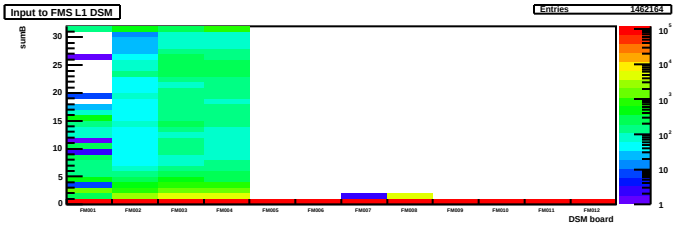

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

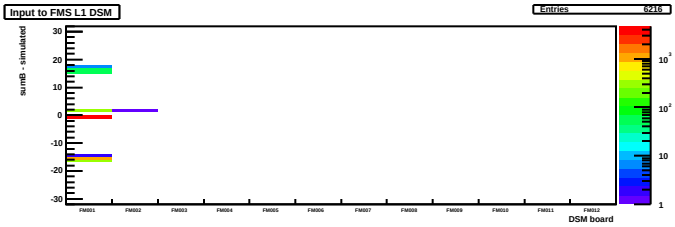

Input to FMS L1 DSM
Entries 1462164
sumC
DSM board

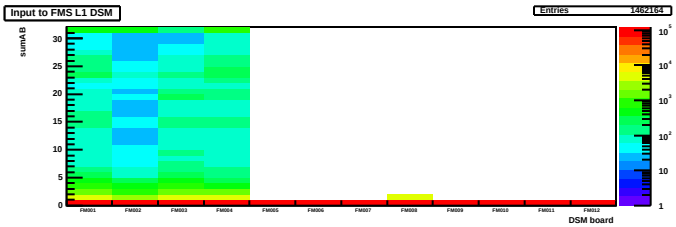

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

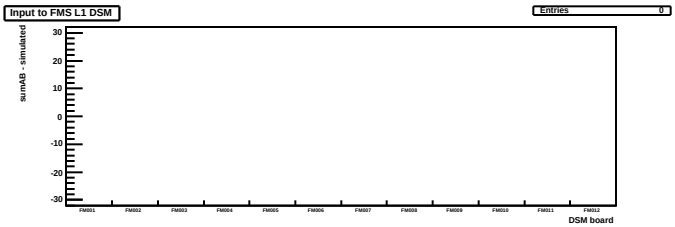

Input to FMS L1 DSM
Entries 1462164
sumBC
DSM board

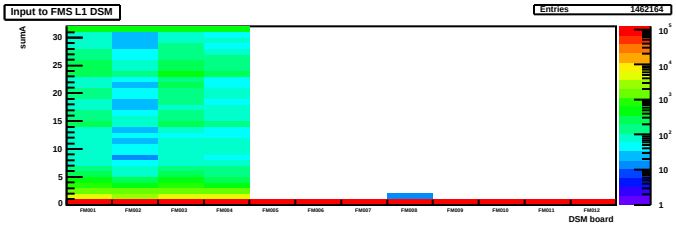

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

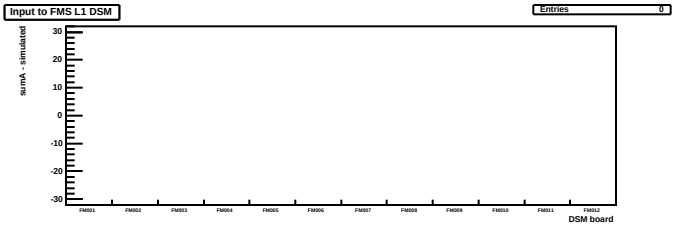

Input to FMS L1 DSM
Entries 1462164
sumB
DSM board

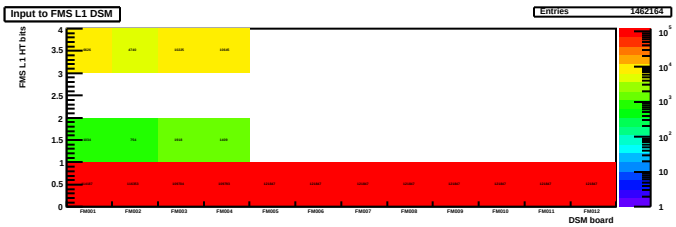

Input to FMS L1 DSM
Entries 6216
sumB - simulated
DSM board

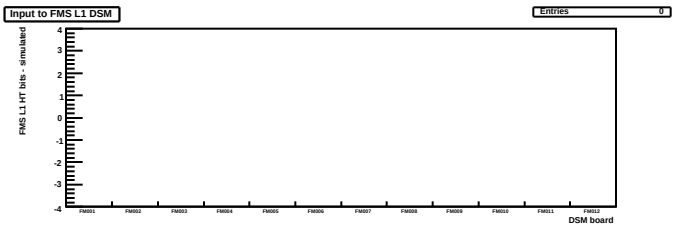

Input to FMS L1 DSM
Entries 1462164
sumAB
DSM board

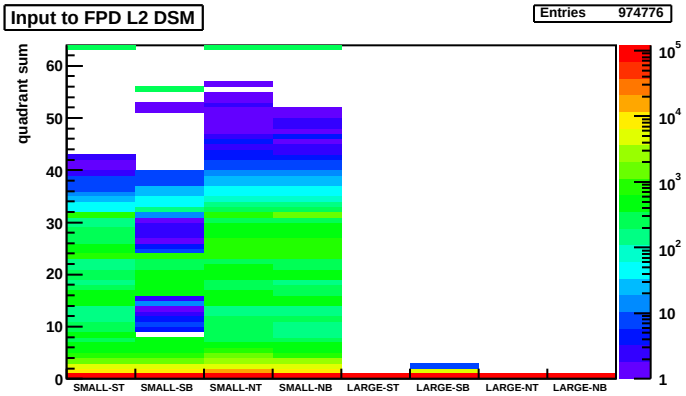

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

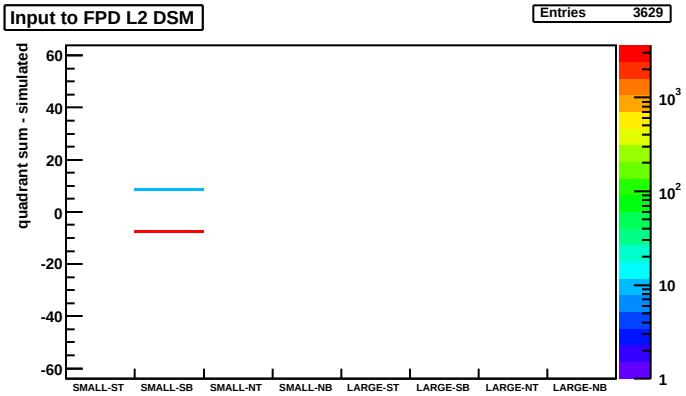

Input to FMS L1 DSM
Entries 1462164
sumA
DSM board

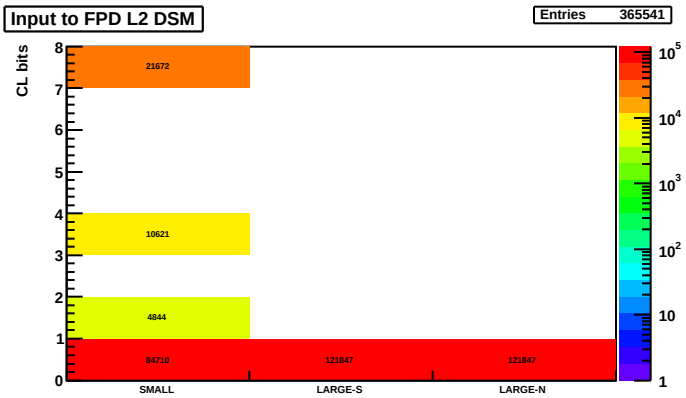

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

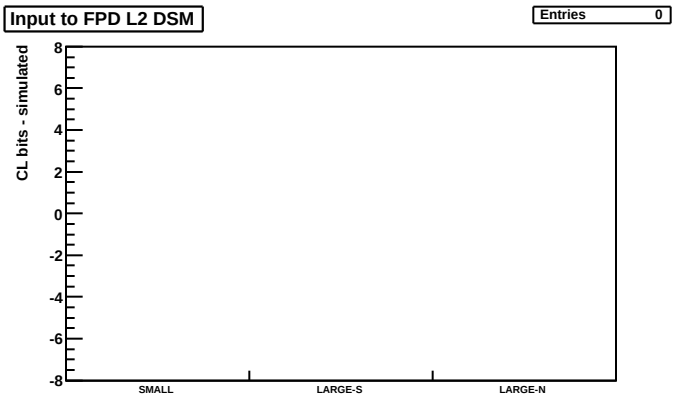

Input to FMS L1 DSM
Entries 1462164
FMS L1 HT bits
DSM board

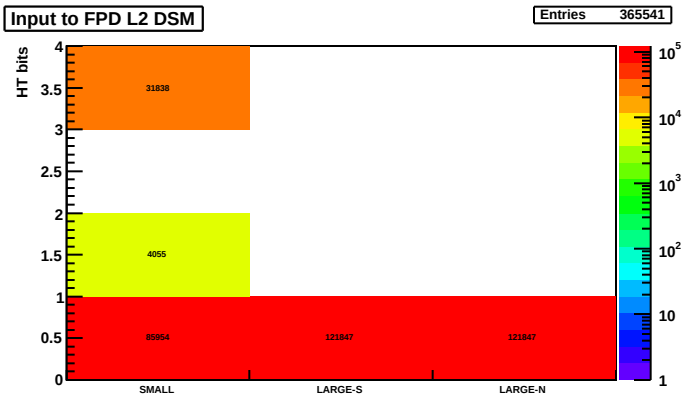

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

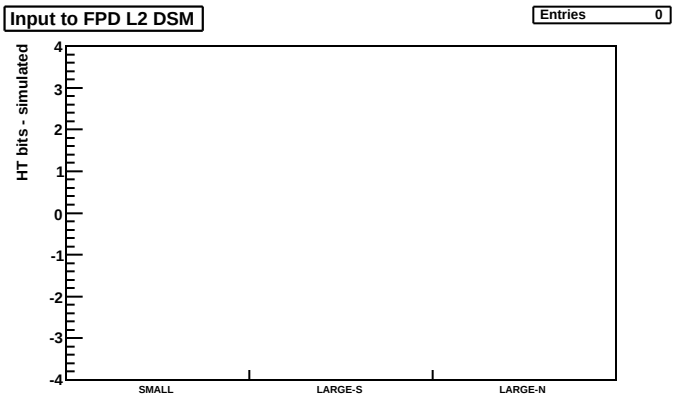

Input to FPD L2 DSM
Entries 974776
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

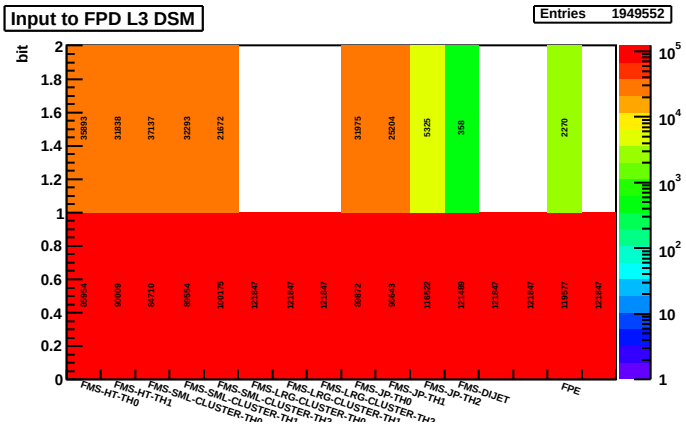

Input to FPD L2 DSM
Entries 3629
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

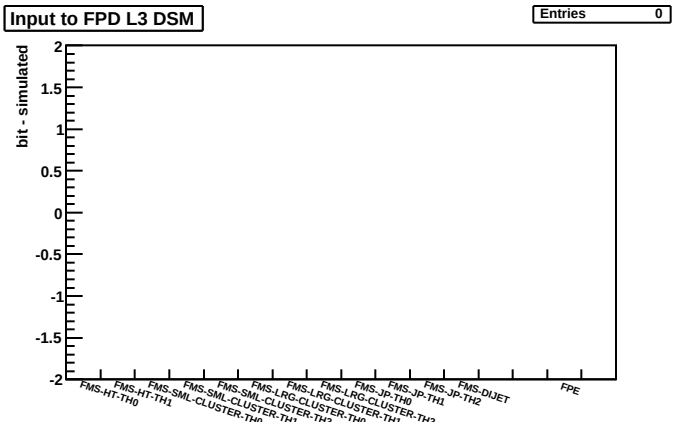

Input to FPD L2 DSM
Entries 365541
CL bits
21672
10621
4844
84710
121847
121847
SMALL
LARGE-S
LARGE-N

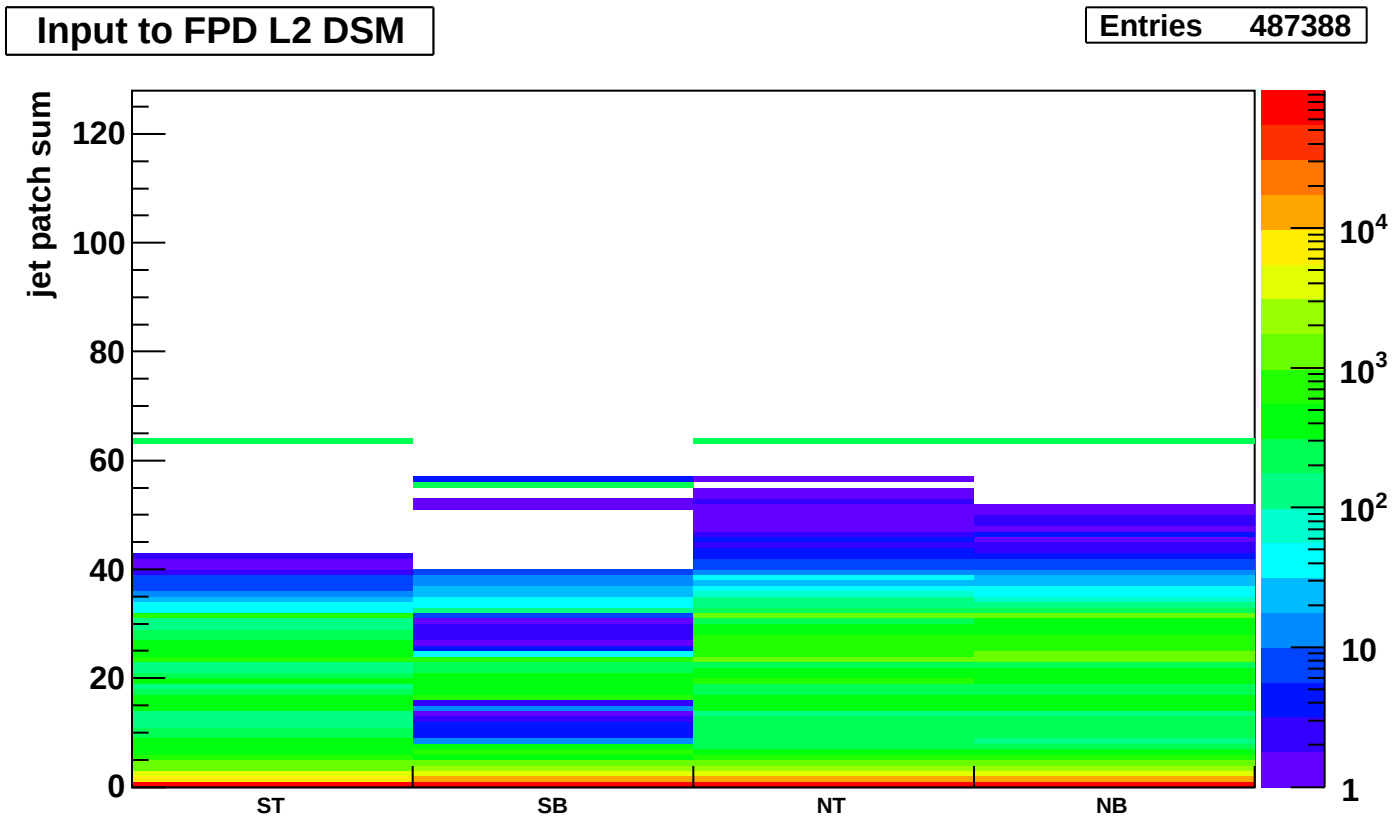

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

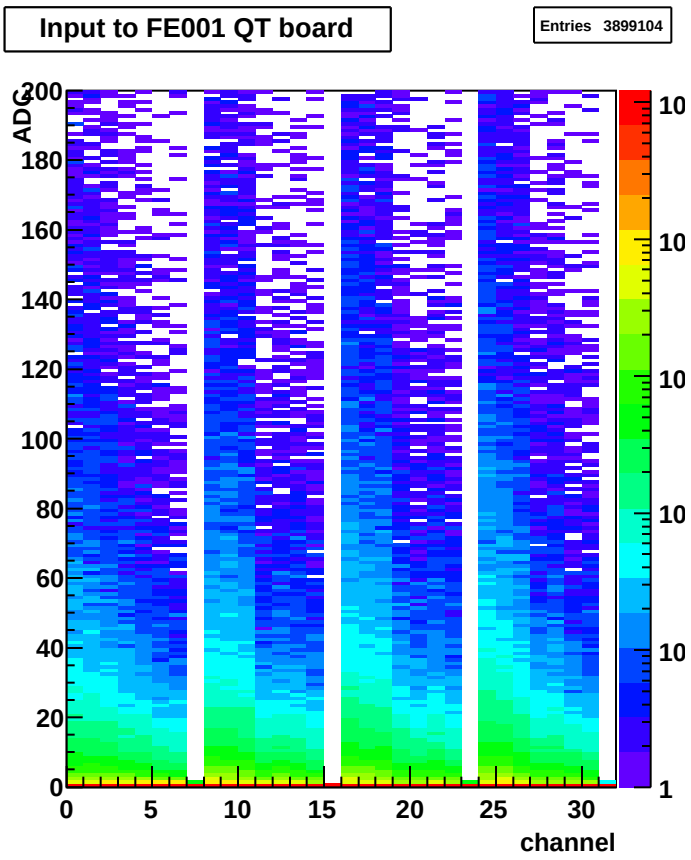

Input to FPD L2 DSM
Entries 365541
HT bits
31838
4055
85954
121847
121847
SMALL
LARGE-S
LARGE-N

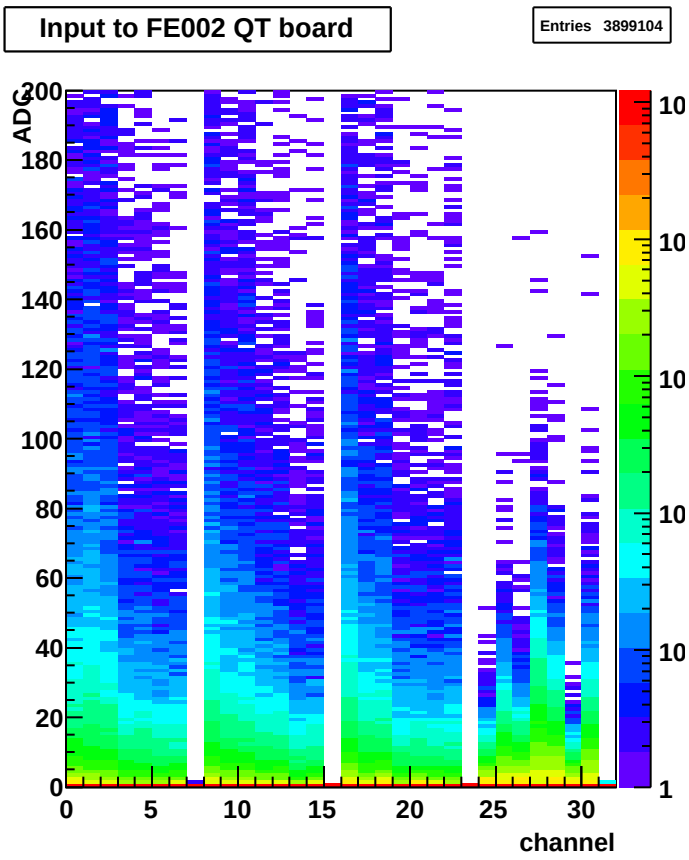

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

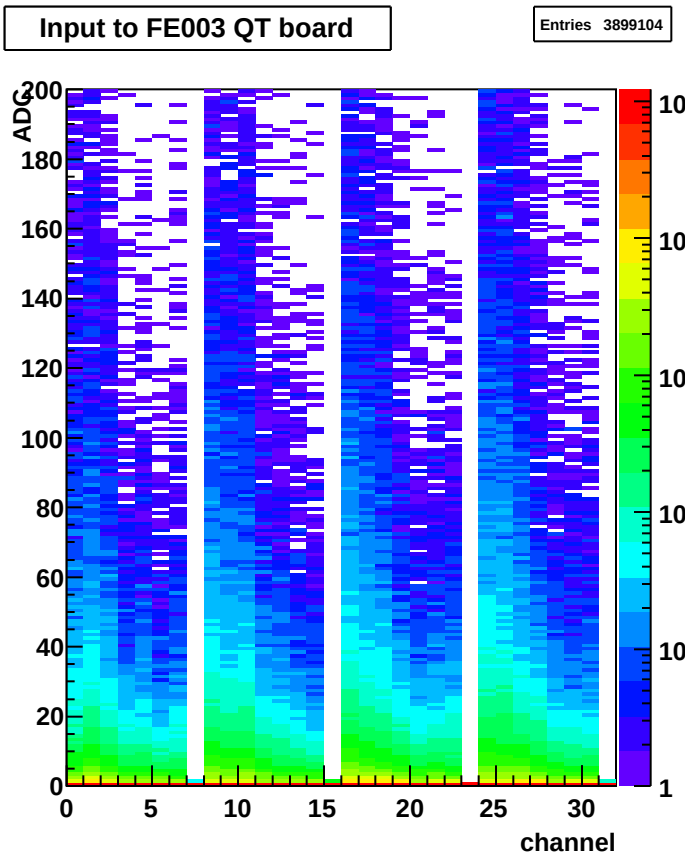

Input to FPD L3 DSM
Entries 1949552
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

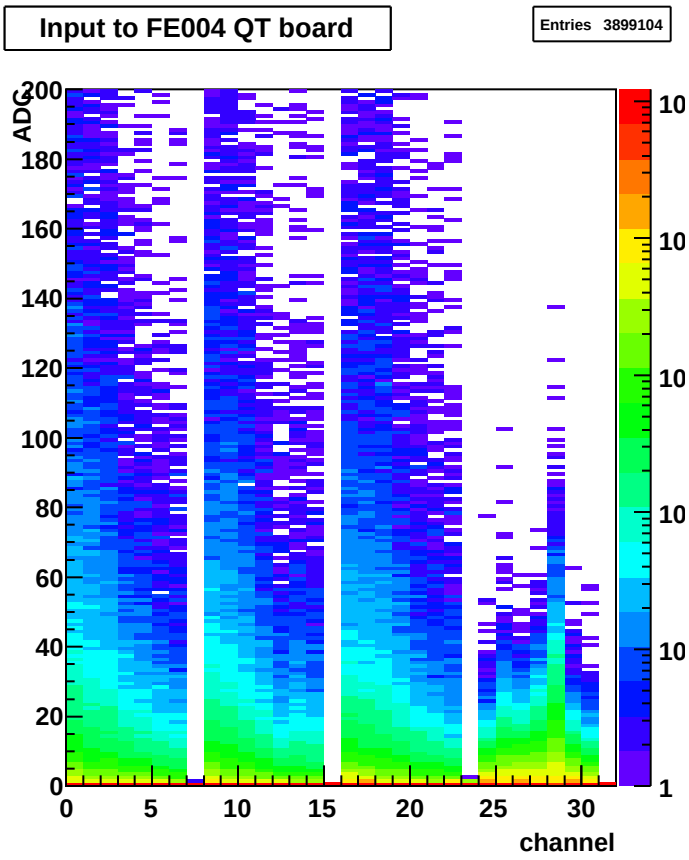

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

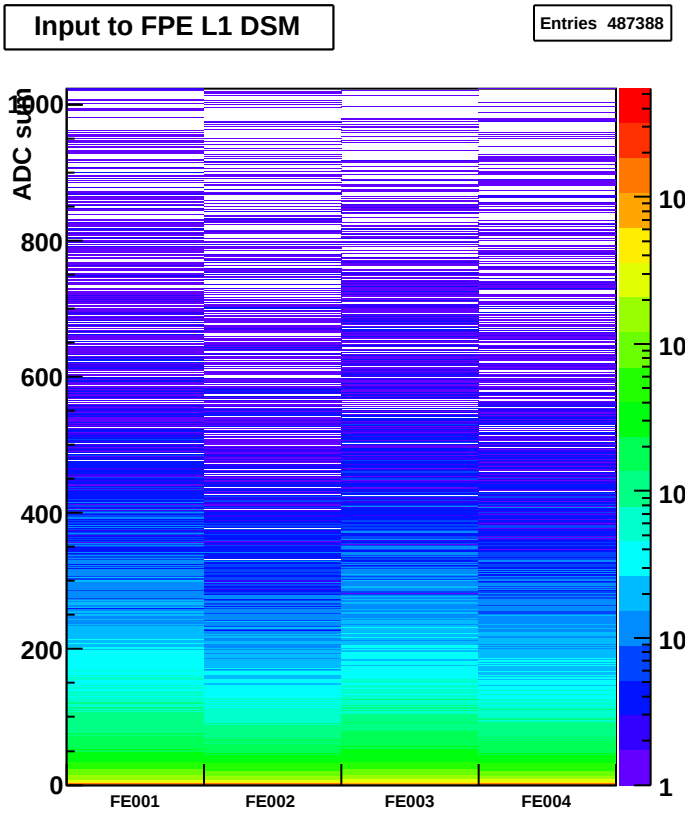

Input to FPD L2 DSM
Entries 487388
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^4
10^3
10^2
10
1

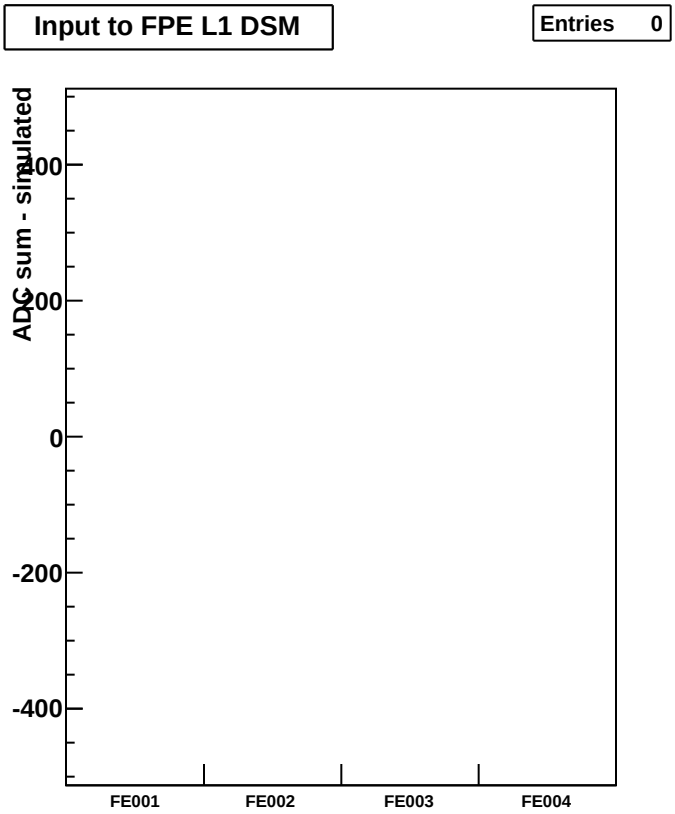

Input to FE001 QT board
Entries 3899104
ADC
channel

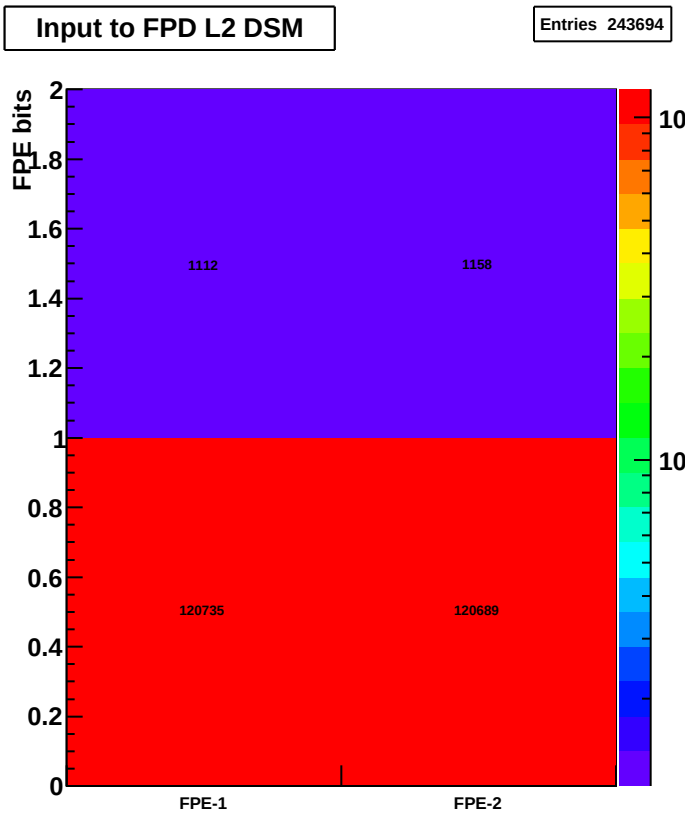

Input to FE002 QT board
Entries 3899104
ADC
channel

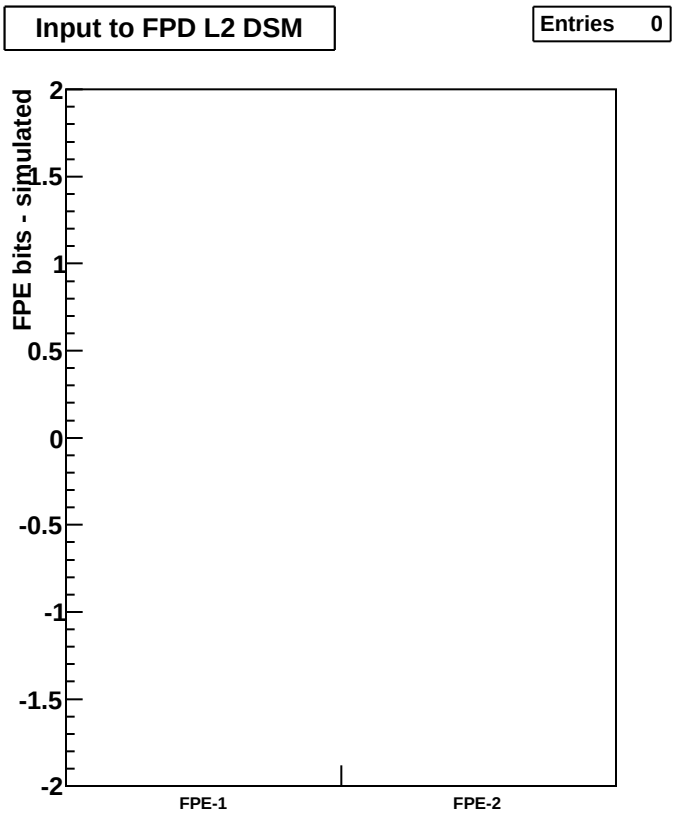

Input to FE003 QT board
Entries 3899104
ADC
channel


Input to FE004 QT board
Entries 3899104
ADC
channel


Input to FPE L1 DSM
Entries 487388
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
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
Entries 243694
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1112
1158
120735
120689
FPE-1
FPE-2
10
10


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