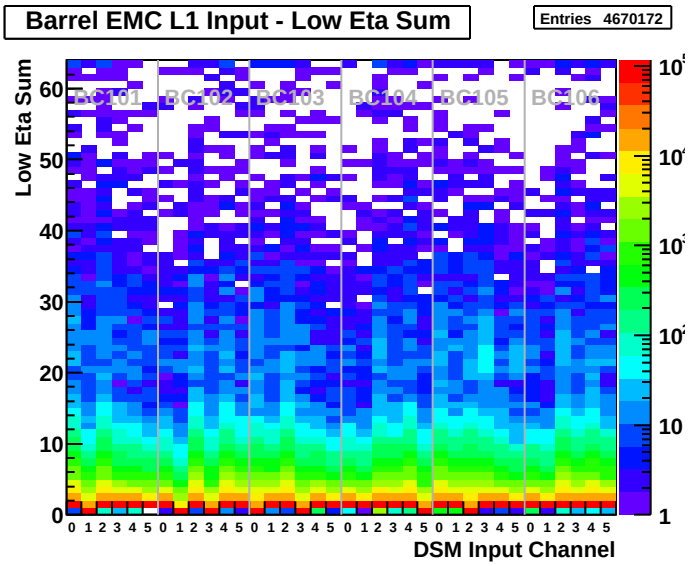
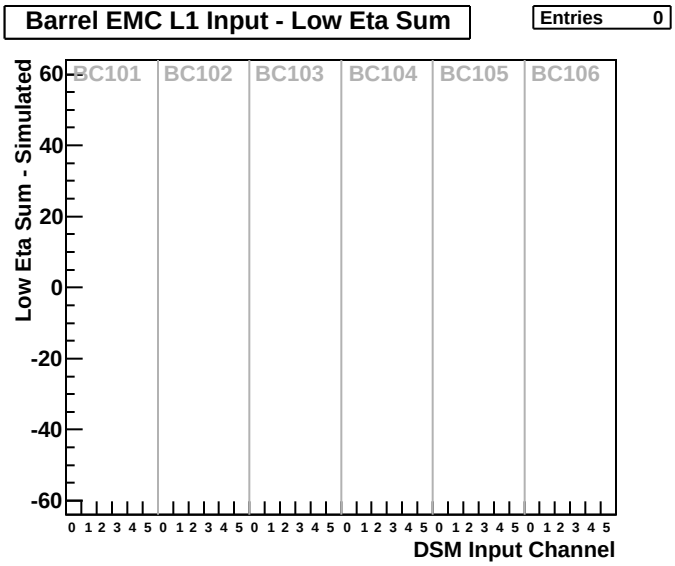
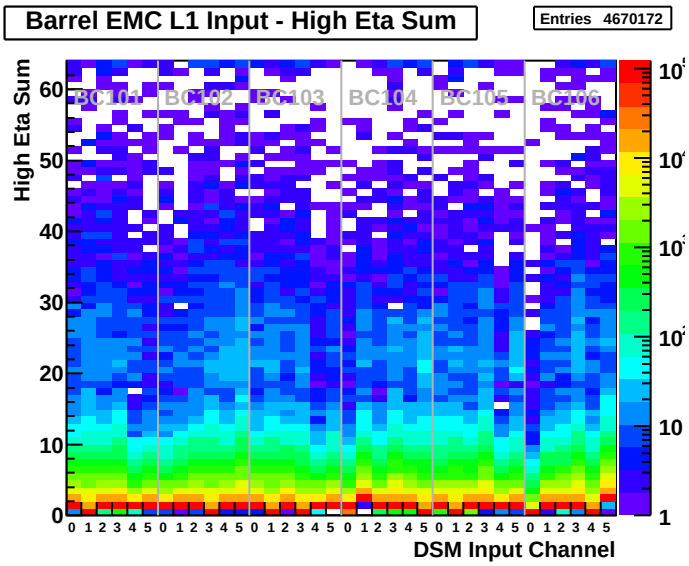
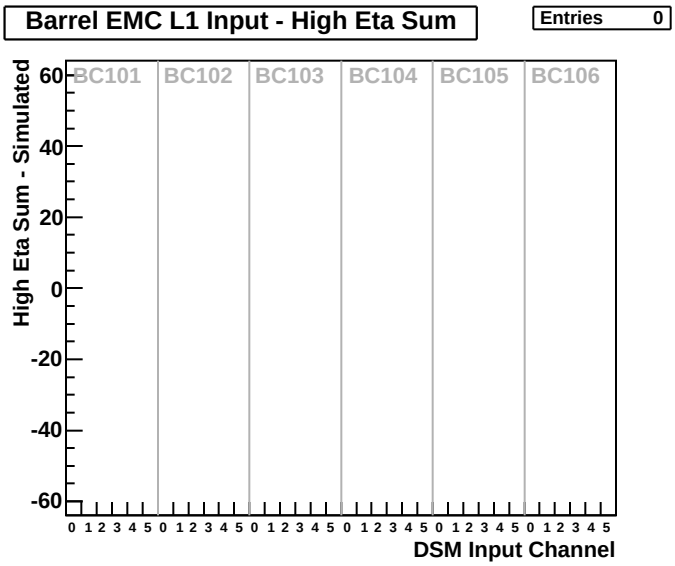
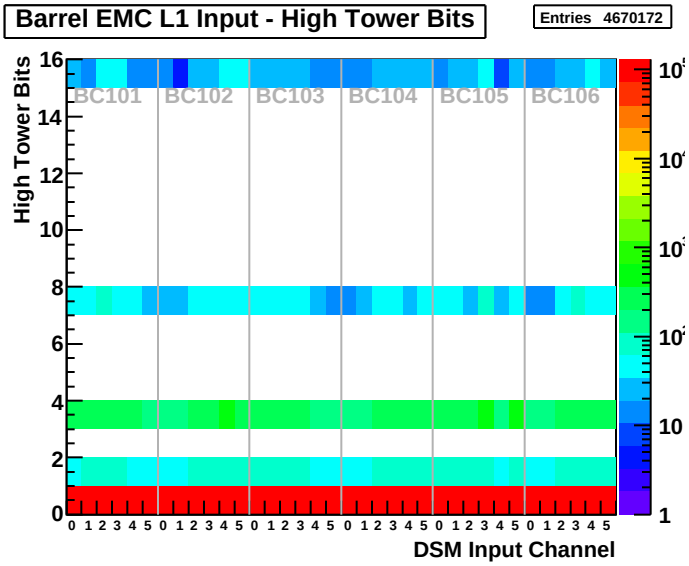
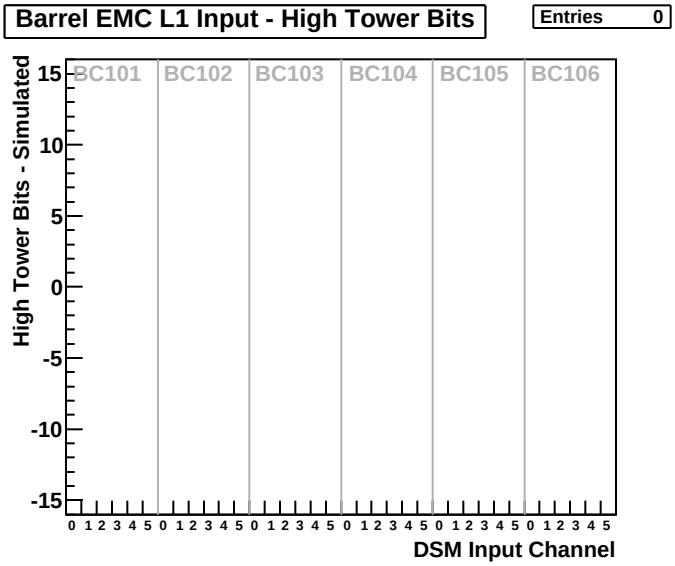

Barrel EMC L1 Input - Low Eta Sum
Entries 4670172
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

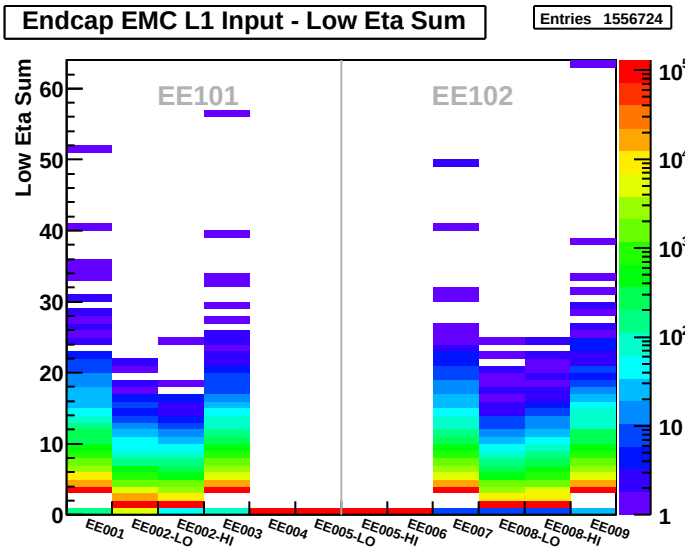

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

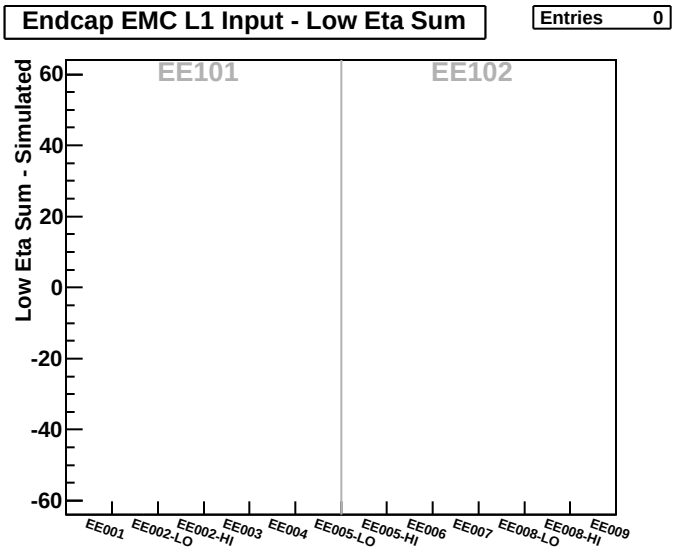

Barrel EMC L1 Input - High Eta Sum
Entries 4670172
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

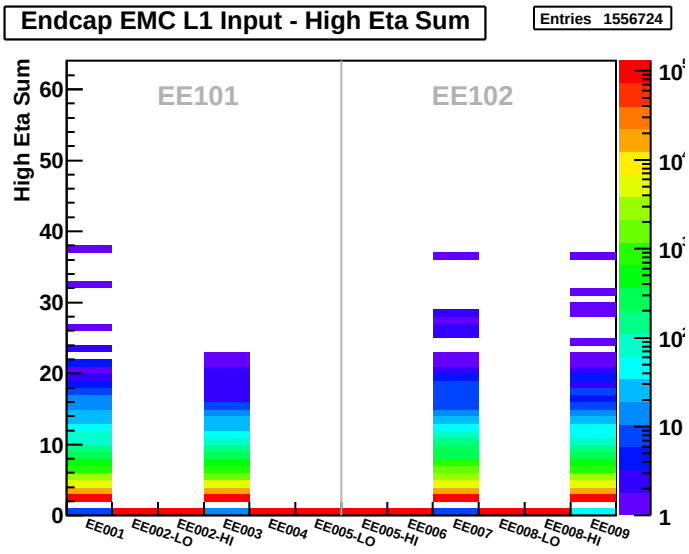

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

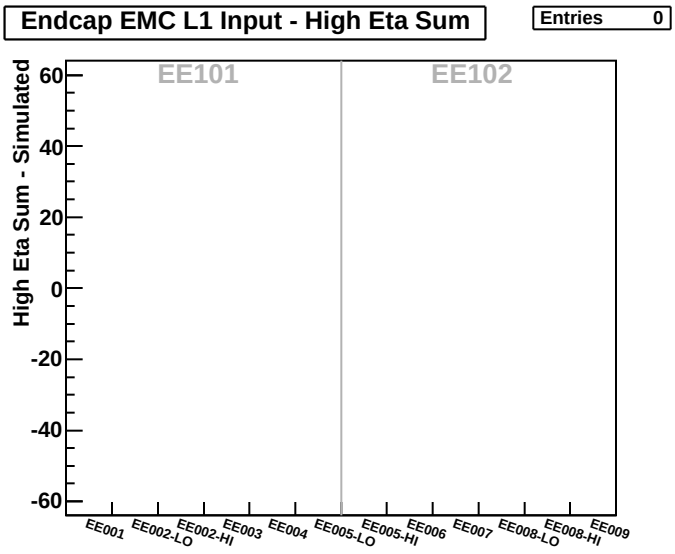

Barrel EMC L1 Input - High Tower Bits
Entries 4670172
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

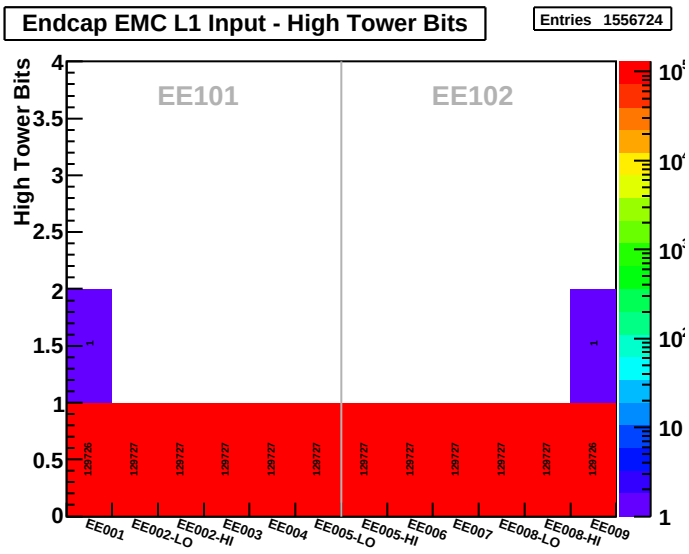

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

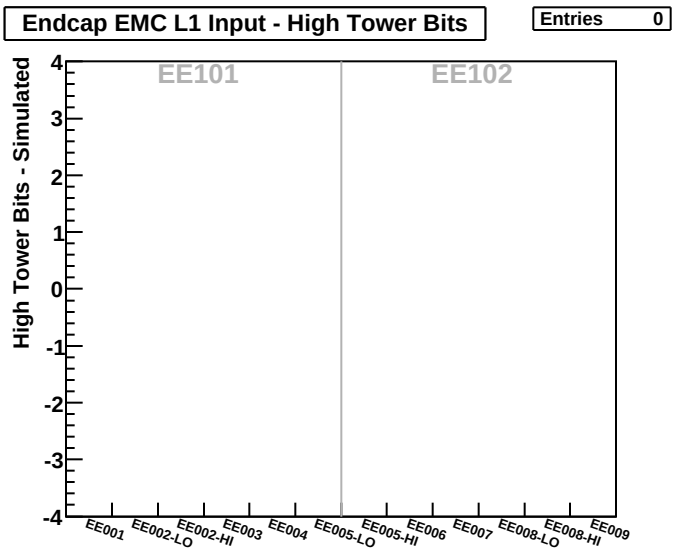

Endcap EMC L1 Input - Low Eta Sum
Entries 1556724
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

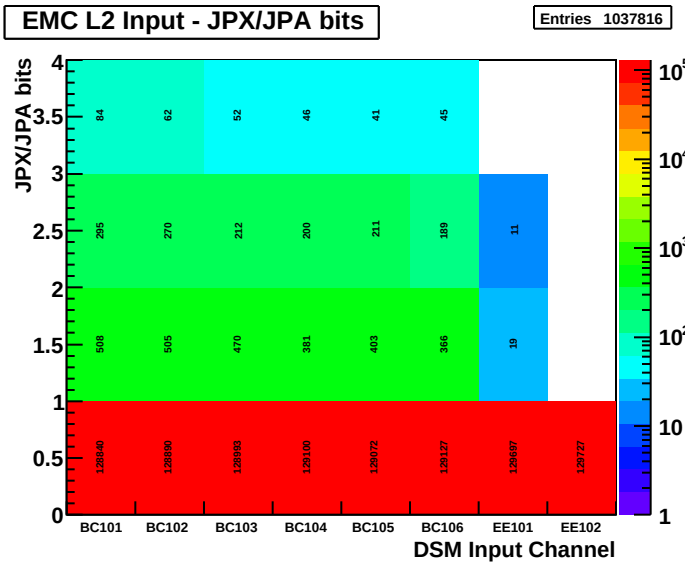

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

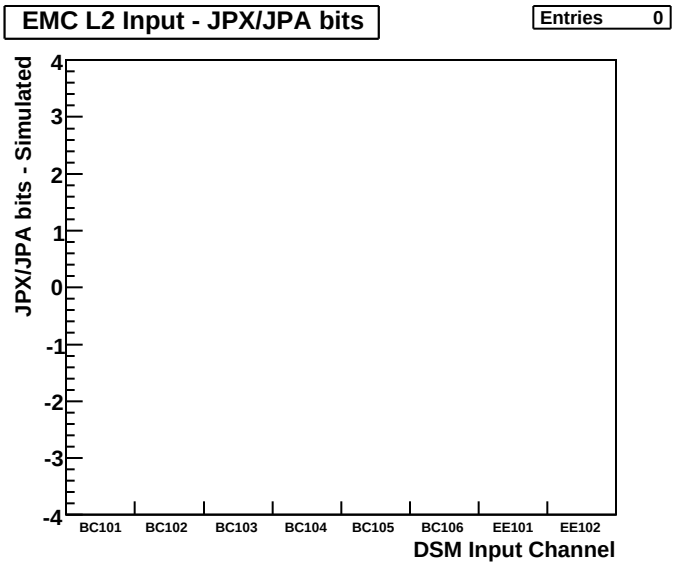

Endcap EMC L1 Input - High Eta Sum
Entries 1556724
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

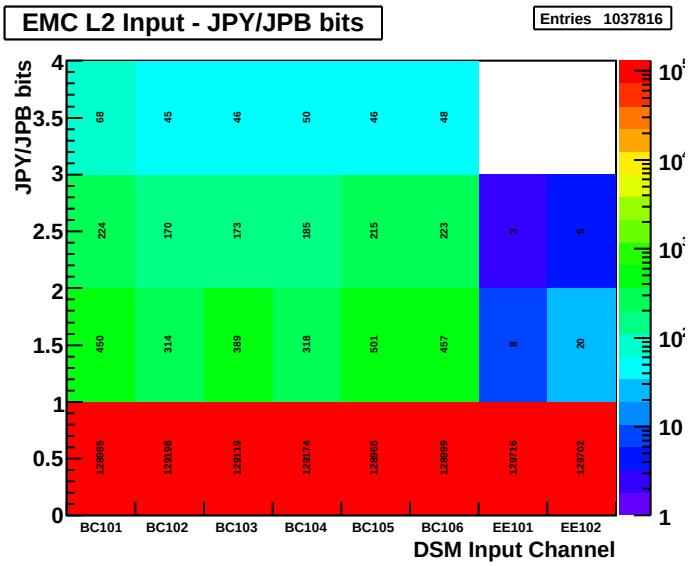

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

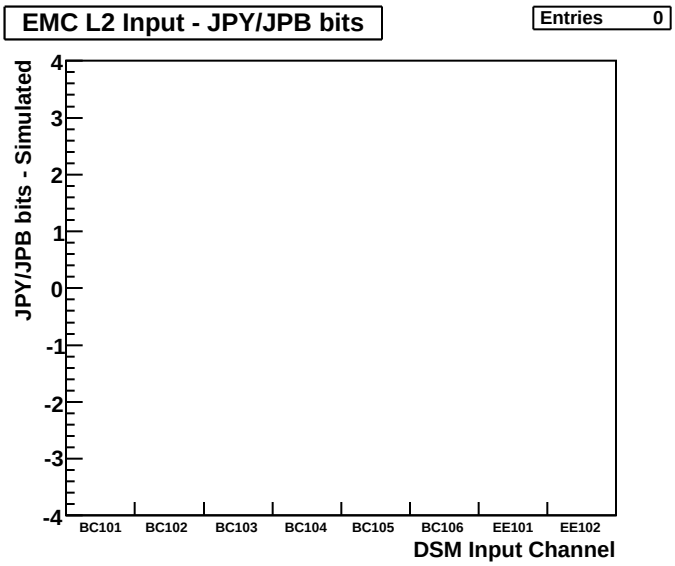

Endcap EMC L1 Input - High Tower Bits
Entries 1556724
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

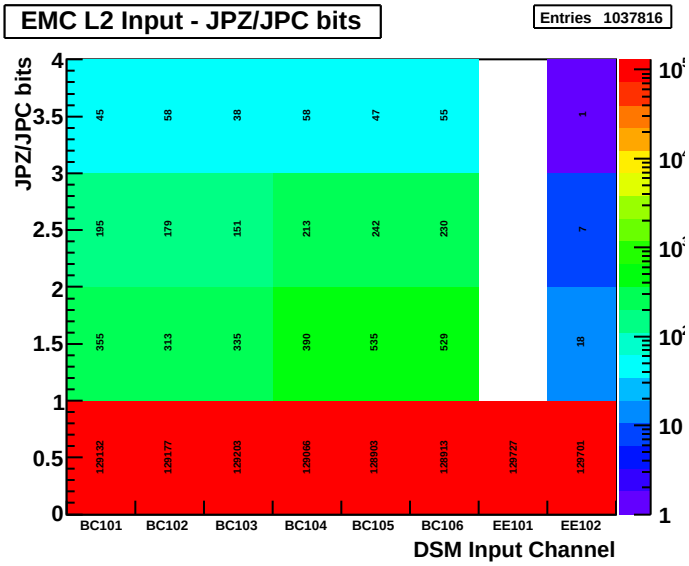

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

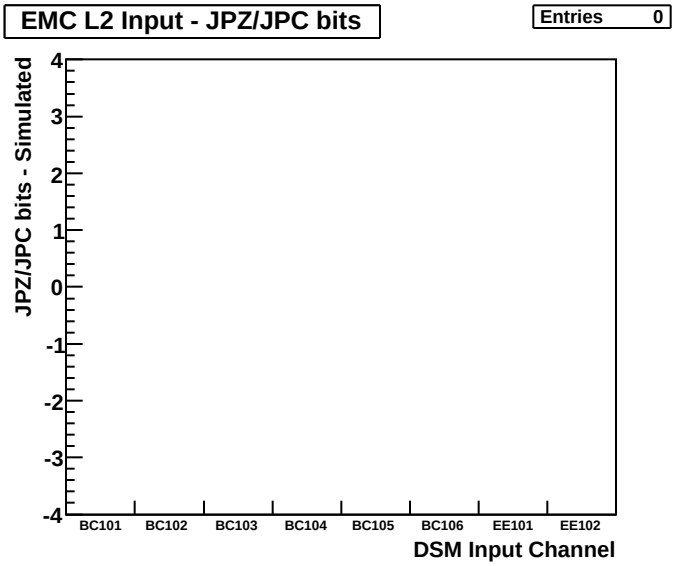

EMC L2 Input - JPX/JPA bits
Entries 1037816
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
84 62 52 46 41 45
295 270 212 200 211 189 11
508 505 470 381 403 366 19
128840 128880 128933 129100 129072 129127 129697 129727

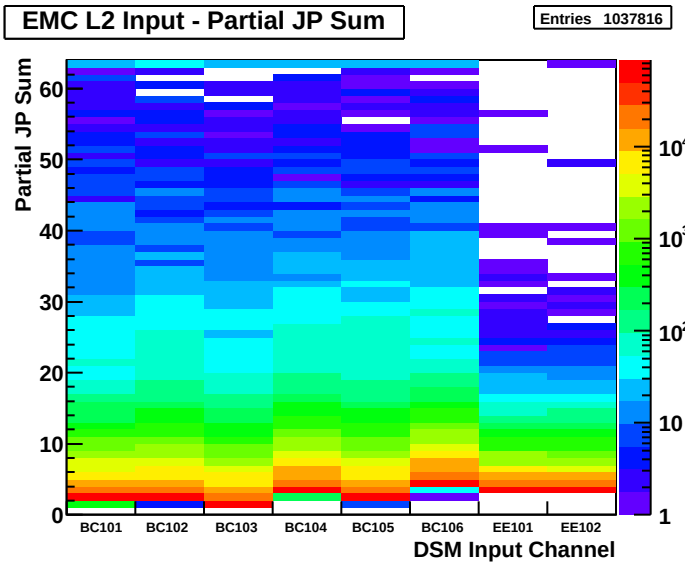

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

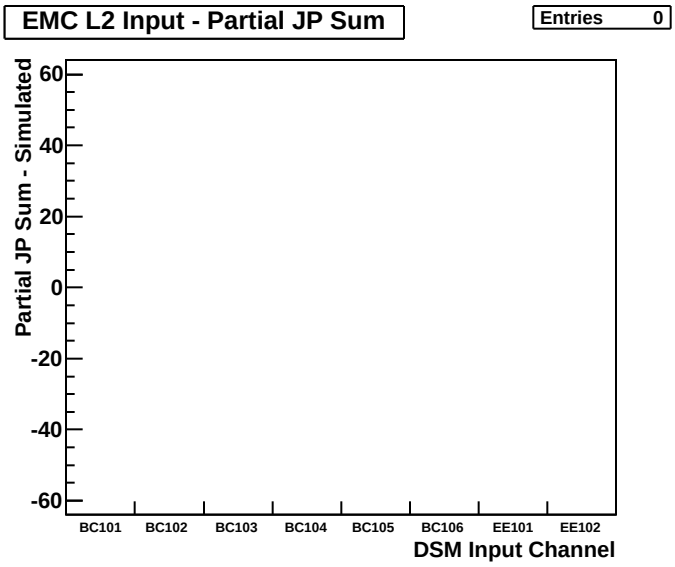

EMC L2 Input - JPY/JPB bits
Entries 1037816
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
68 45 46 50 46 48
224 170 173 185 215 223 3 5
450 314 389 318 501 457 8 20
128865 128198 128119 128174 128865 128999 129716 129702

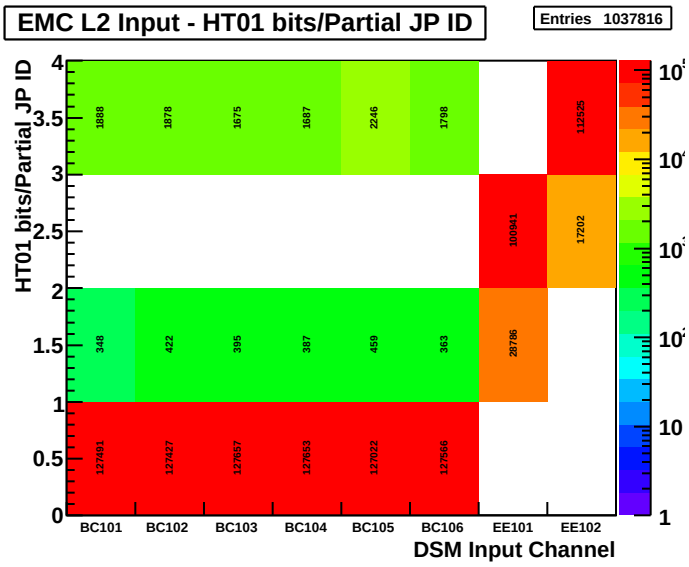

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

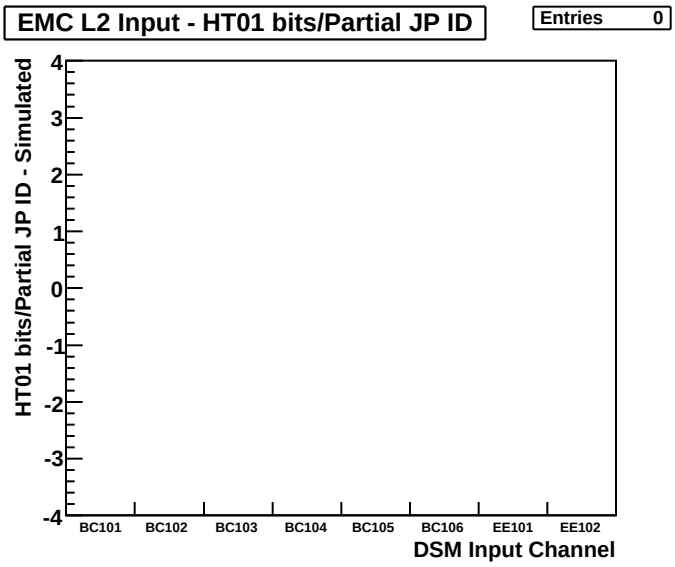

EMC L2 Input - JPZ/JPC bits
Entries 1037816
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
45 58 38 58 47 55 1
195 179 151 213 242 230 7
355 313 335 390 535 529 18
129132 129177 129203 129066 128903 128913 129727 129701

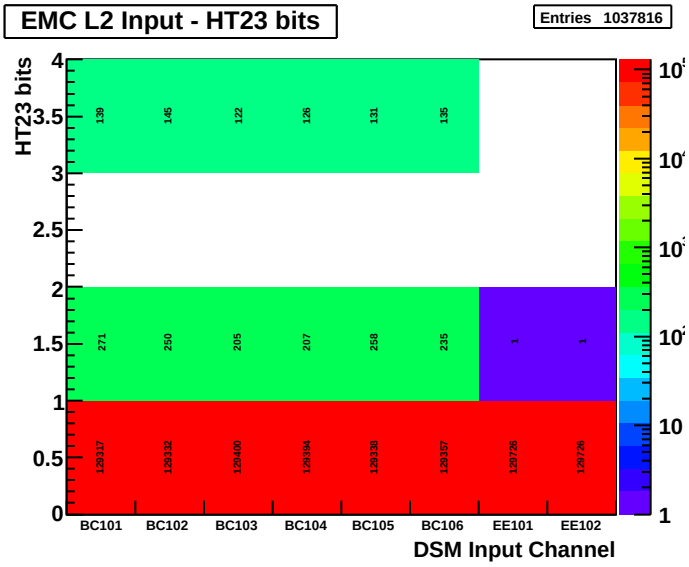

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

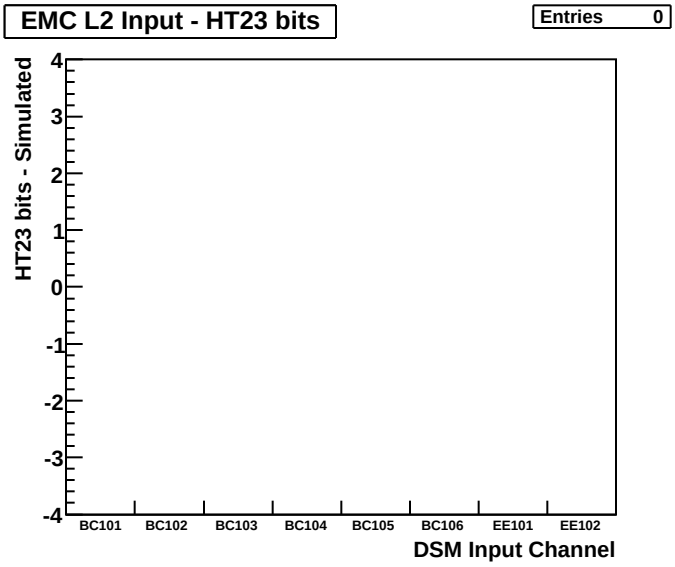

EMC L2 Input - Partial JP Sum
Entries 1037816
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

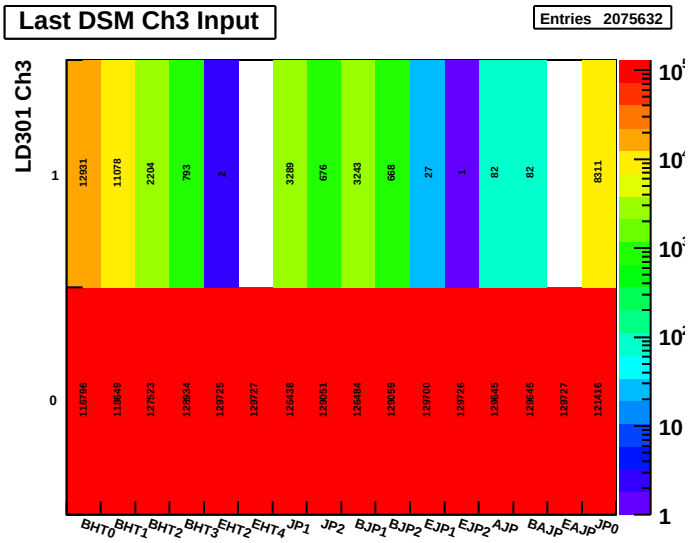

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

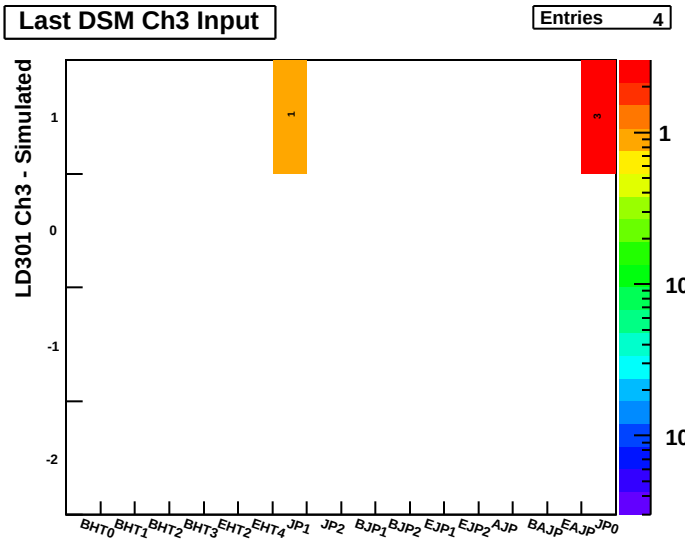

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1037816
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

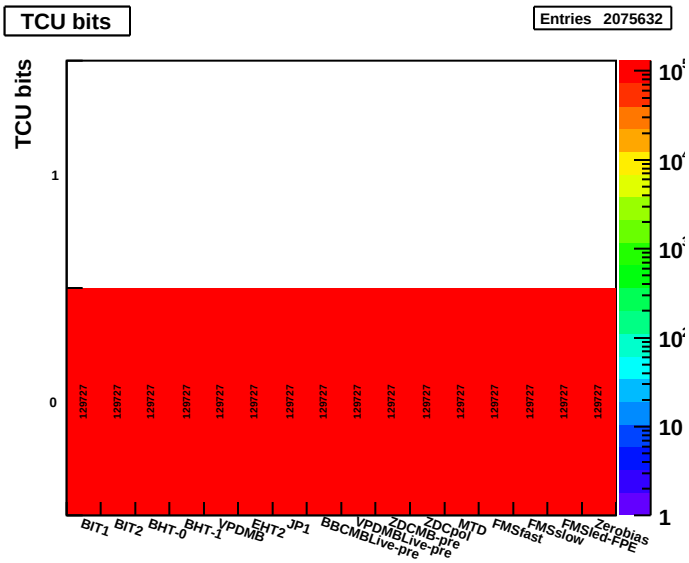

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

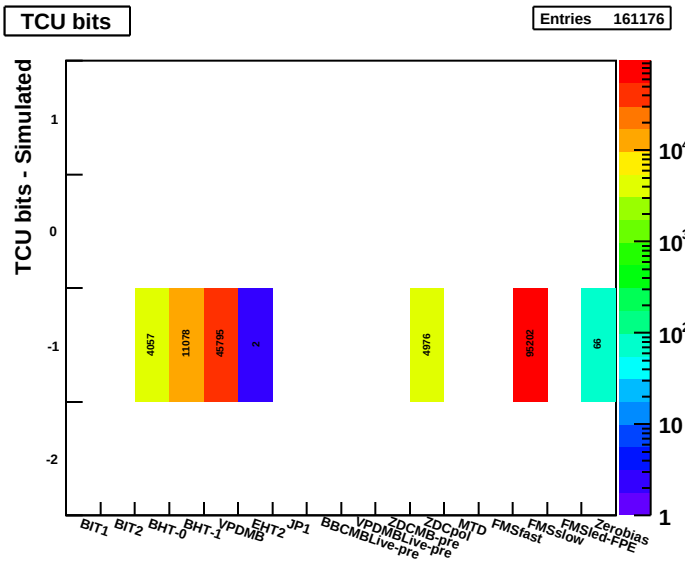

EMC L2 Input - HT23 bits
Entries 1037816
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

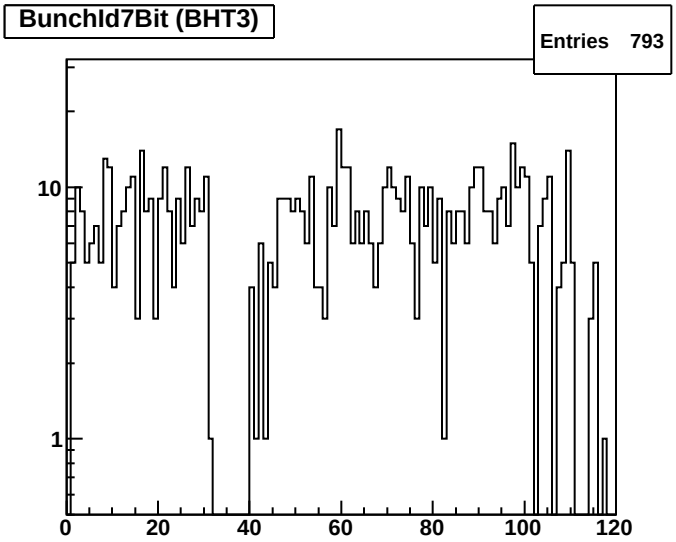

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

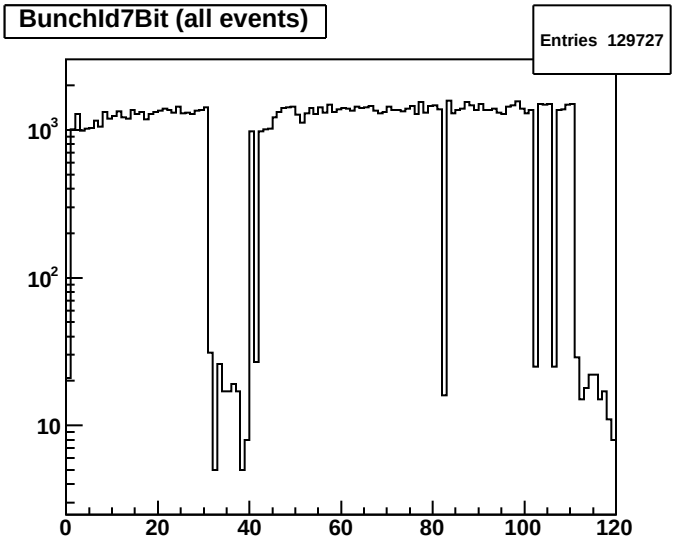

Last DSM Ch3 Input
Entries 2075632
LD301 Ch3
12931 11078 2204 793 2 3289 676 3243 668 27 1 82 82 8311
116786 118849 127523 128934 129725 129727 126438 128051 126484 128059 129700 129726 129645 129645 129727 121416
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

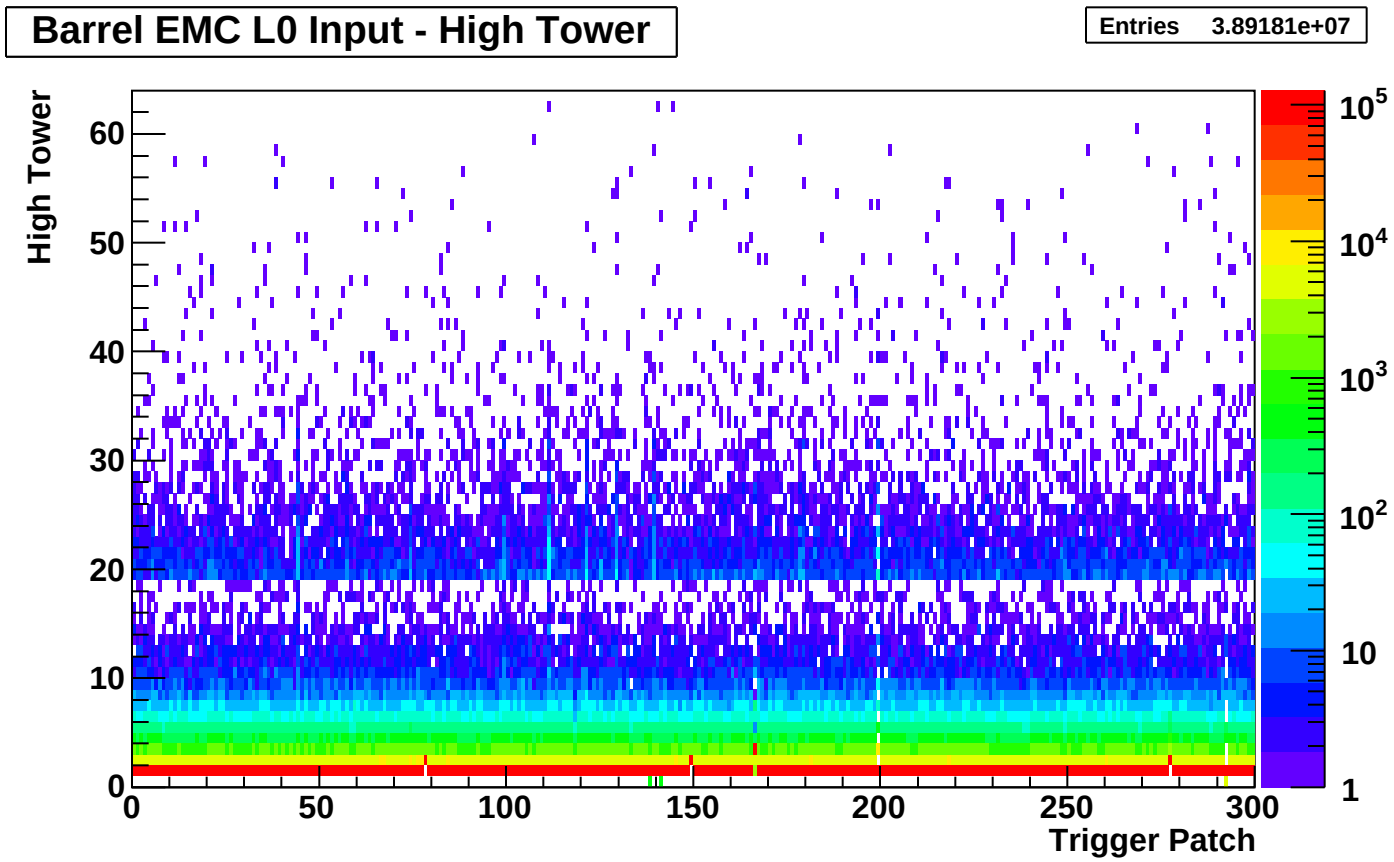

Last DSM Ch3 Input
Entries 4
LD301 Ch3 - Simulated
1
3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

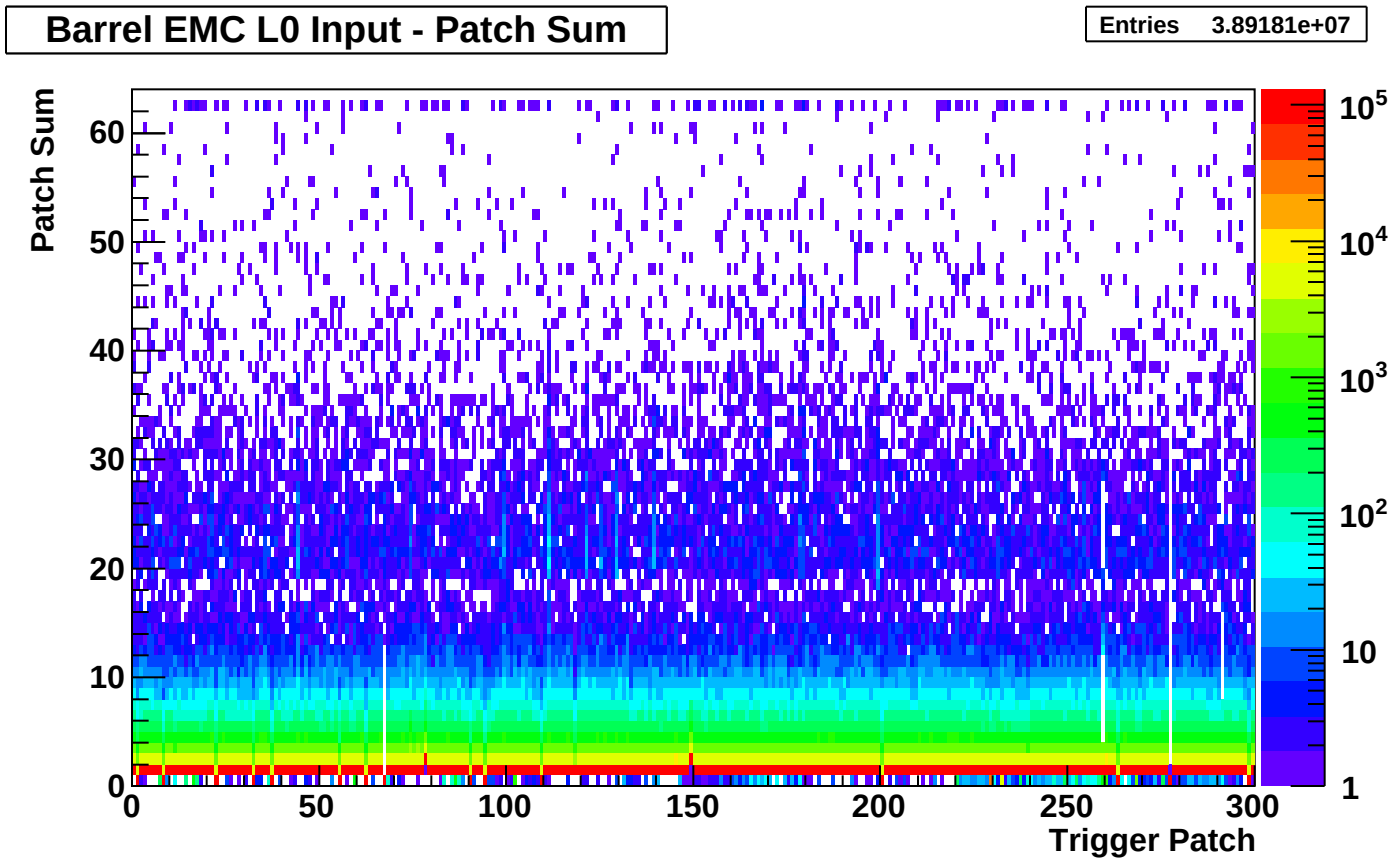

TCU bits
Entries 2075632
TCU bits
129727
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

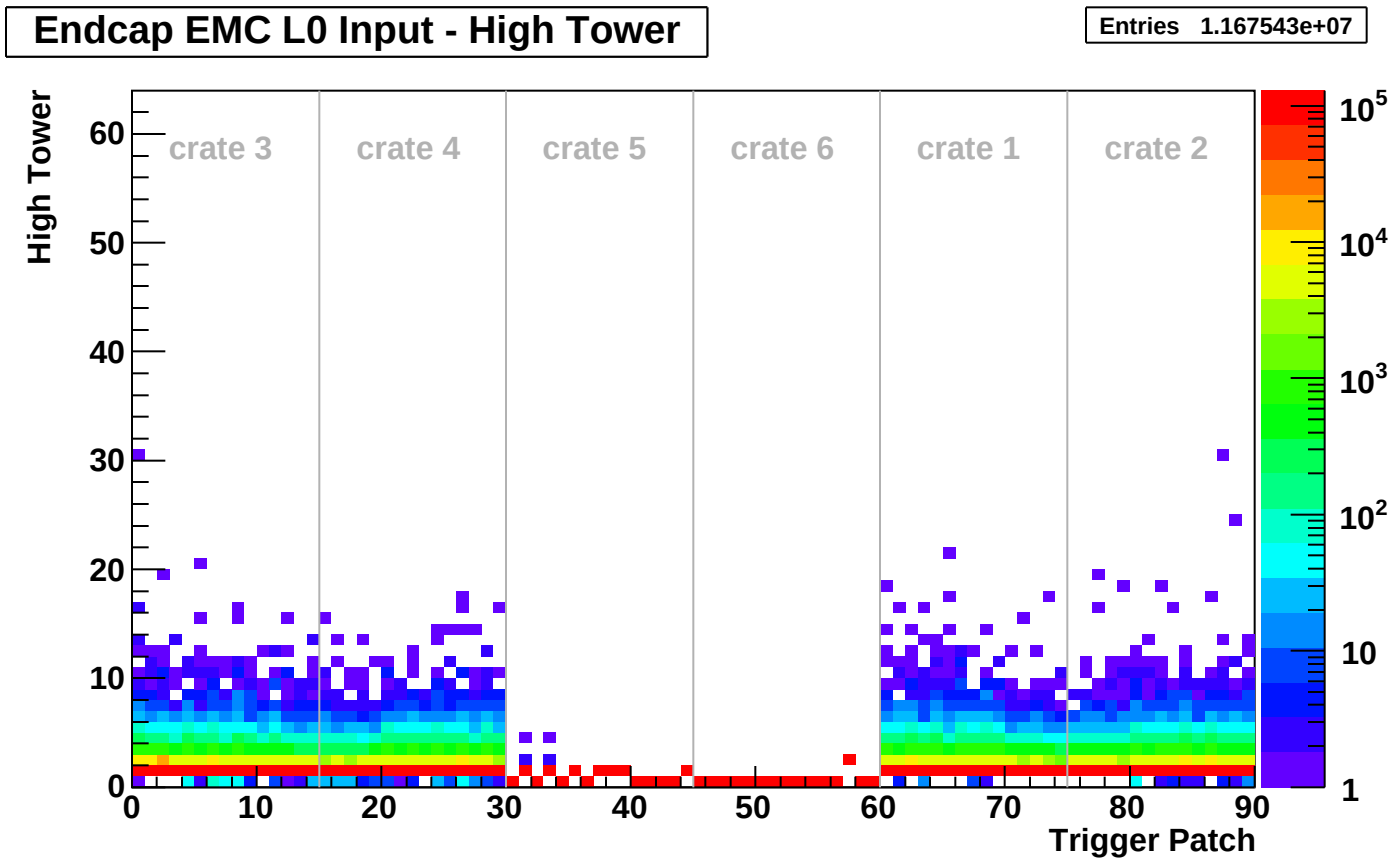

TCU bits
Entries 161176
TCU bits - Simulated
4057 11078 45795 2 4976 95202 66
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

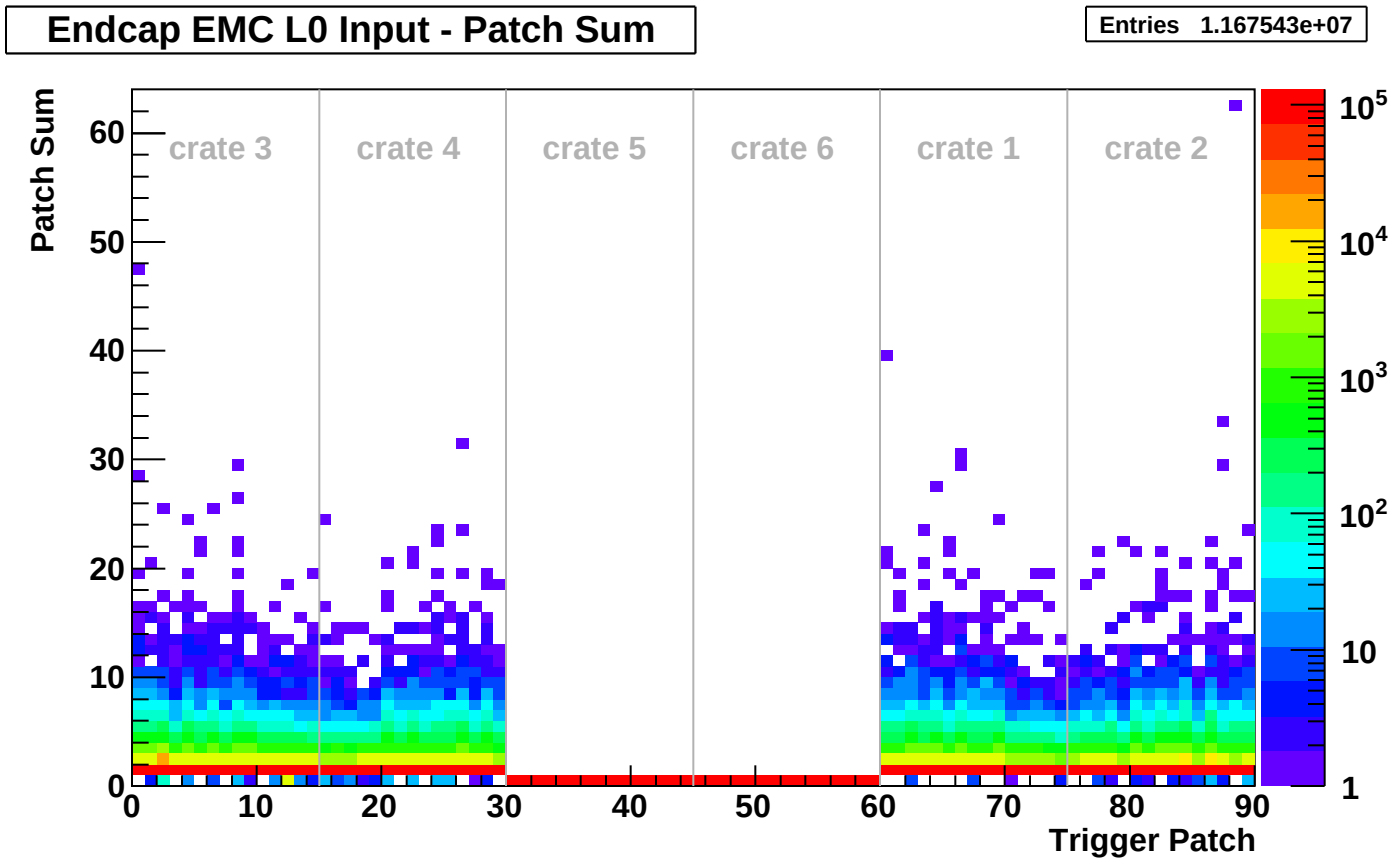

BunchId7Bit (BHT3)
Entries 793

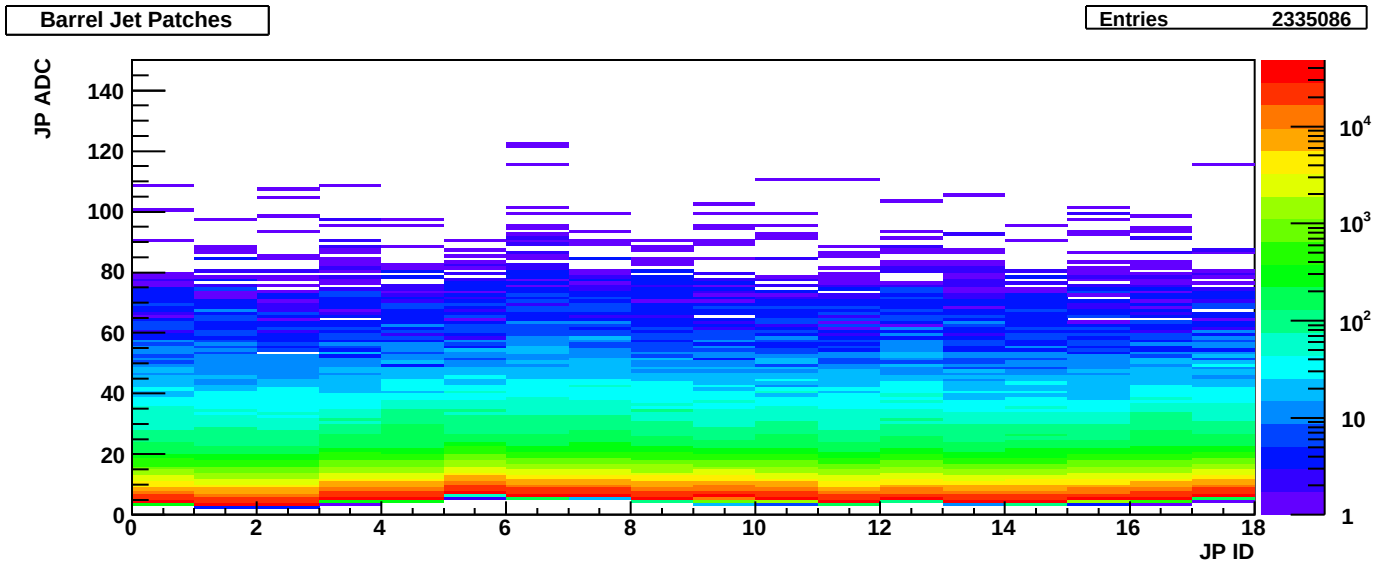

BunchId7Bit (all events)
Entries 129727

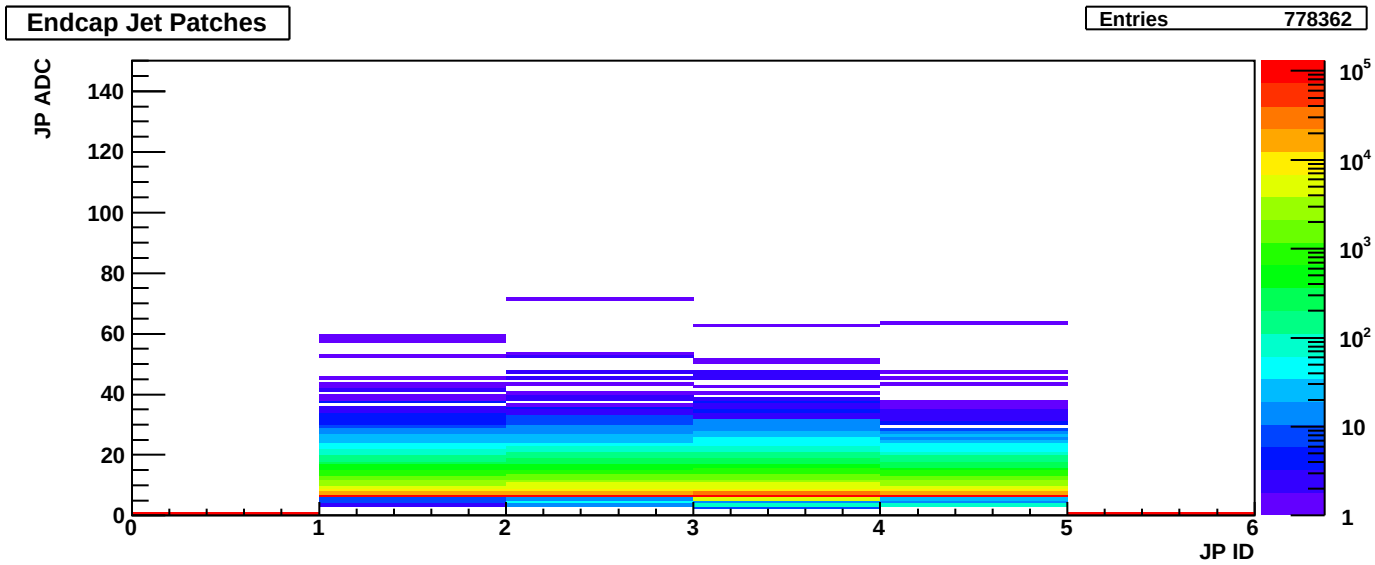

Barrel EMC L0 Input - High Tower
Entries 3.89181e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

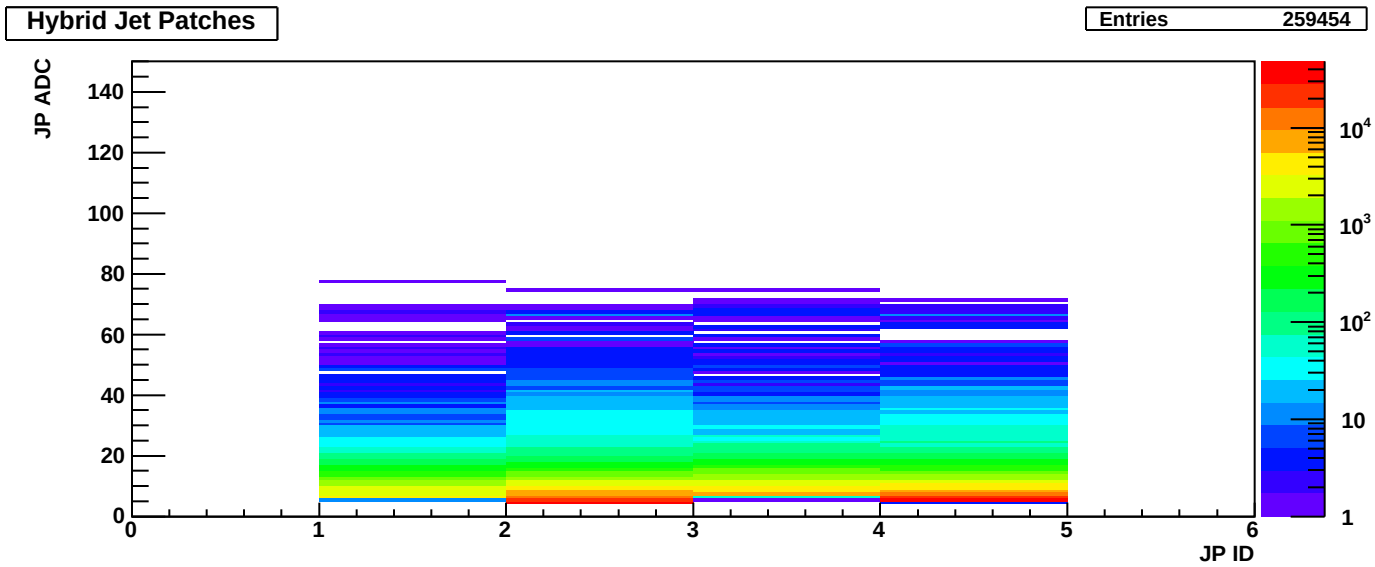

Barrel EMC L0 Input - Patch Sum
Entries 3.89181e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

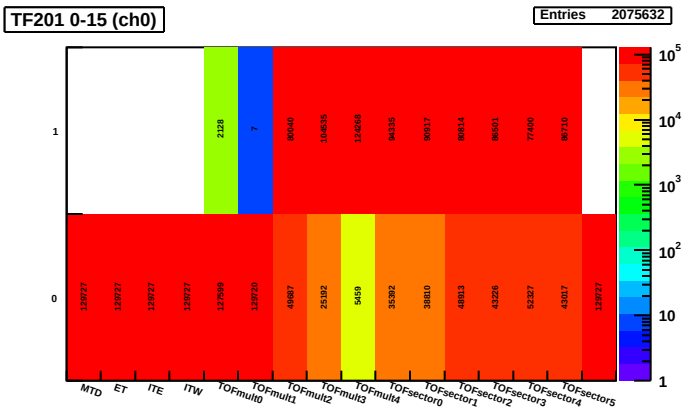

Endcap EMC L0 Input - High Tower
Entries 1.167543e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

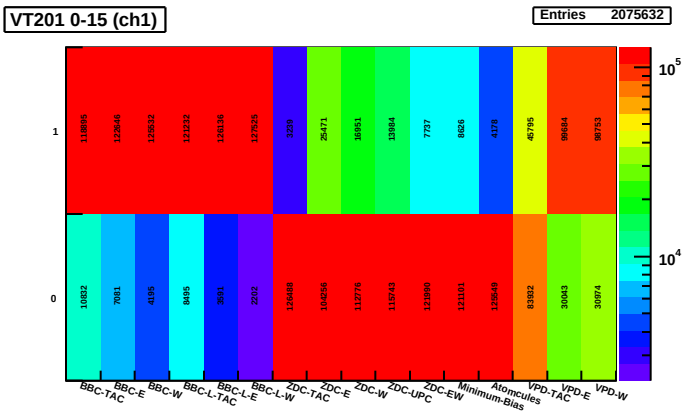

Endcap EMC L0 Input - Patch Sum
Entries 1.167543e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

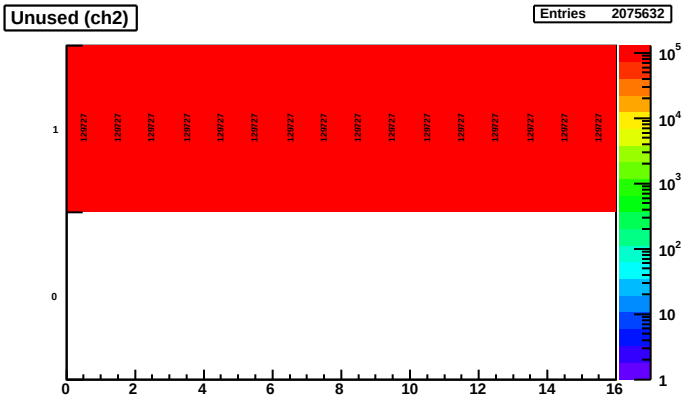

Barrel Jet Patches
Entries 2335086
JP ADC
JP ID

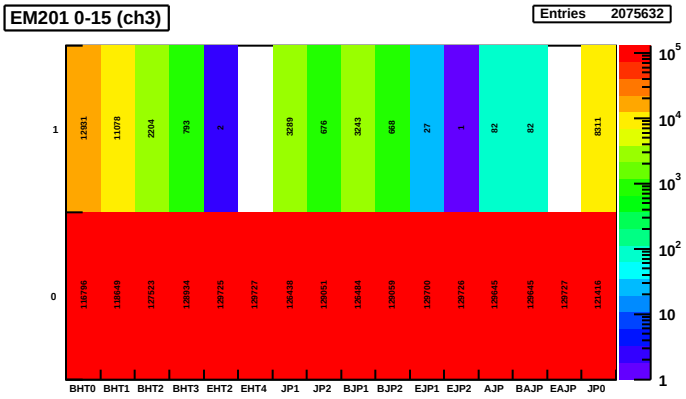

Endcap Jet Patches
Entries 778362
JP ADC
JP ID

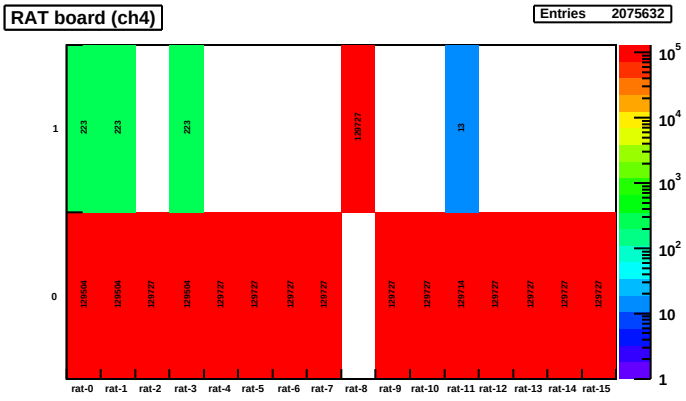

Hybrid Jet Patches
Entries 259454
JP ADC
JP ID

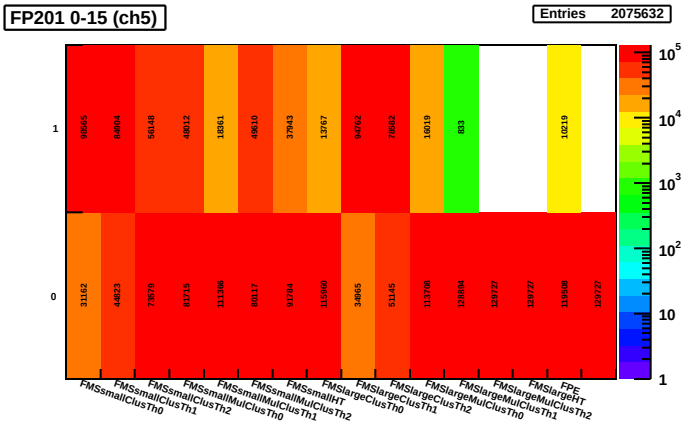

TF201 0-15 (ch0)
Entries 2075632
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

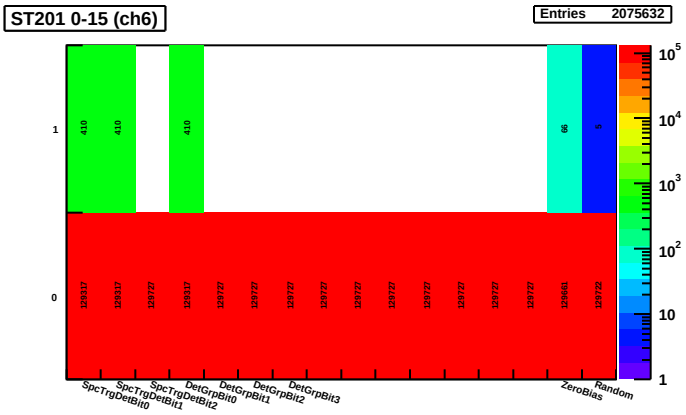

VT201 0-15 (ch1)
Entries 2075632
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

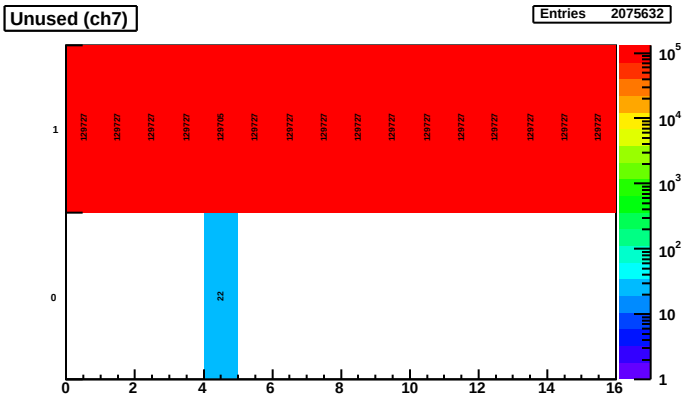

Unused (ch2)
Entries 2075632

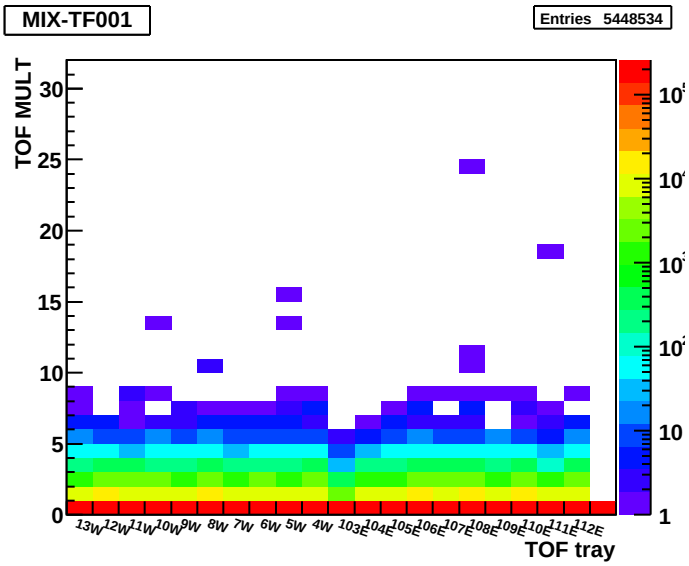

EM201 0-15 (ch3)
Entries 2075632
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

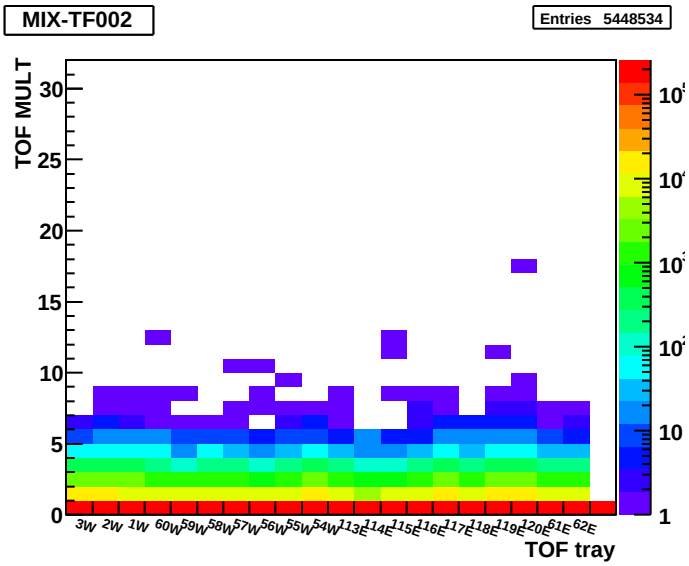

RAT board (ch4)
Entries 2075632
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

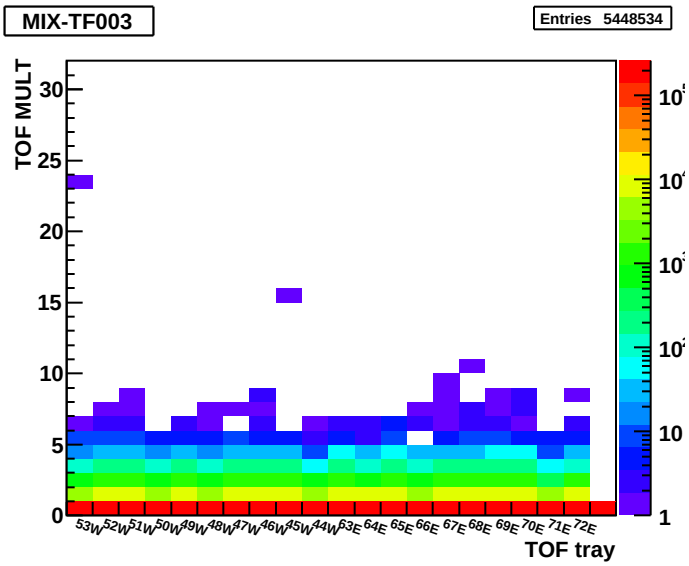

FP201 0-15 (ch5)
Entries 2075632
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

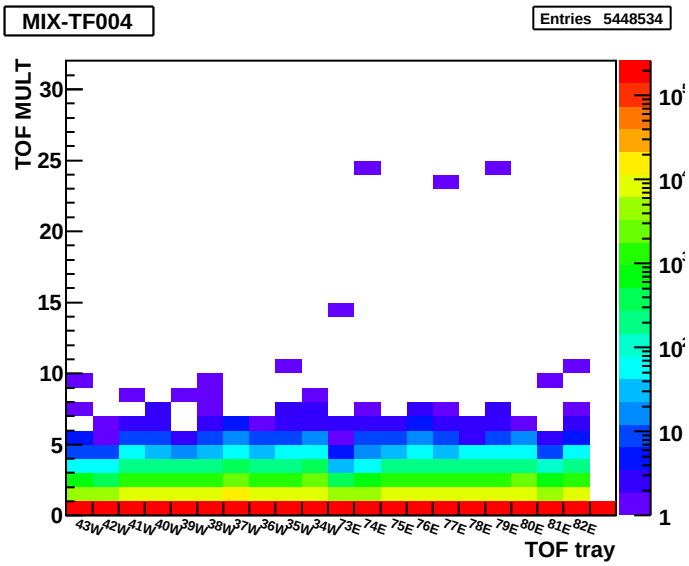

ST201 0-15 (ch6)
Entries 2075632
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

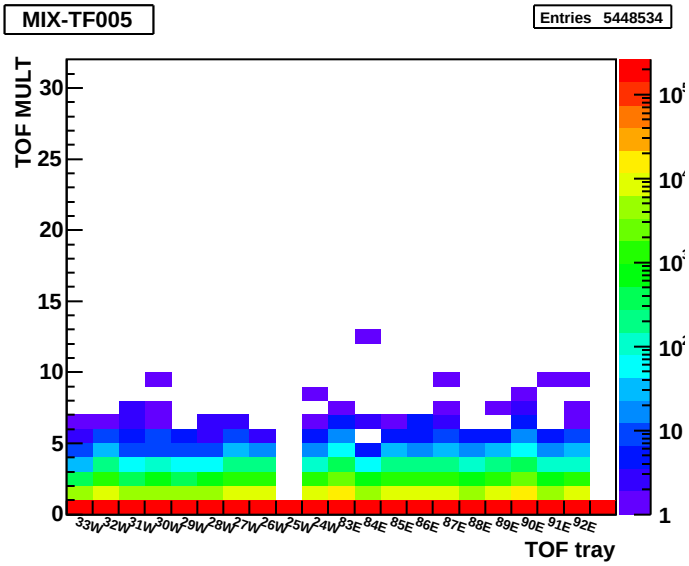

Unused (ch7)
Entries 2075632

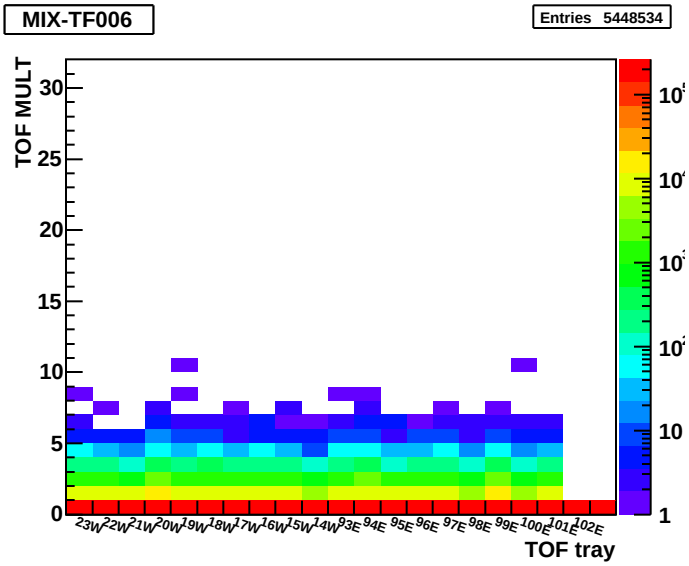

MIX-TF001
Entries 5448534
TOF MULT
TOF tray

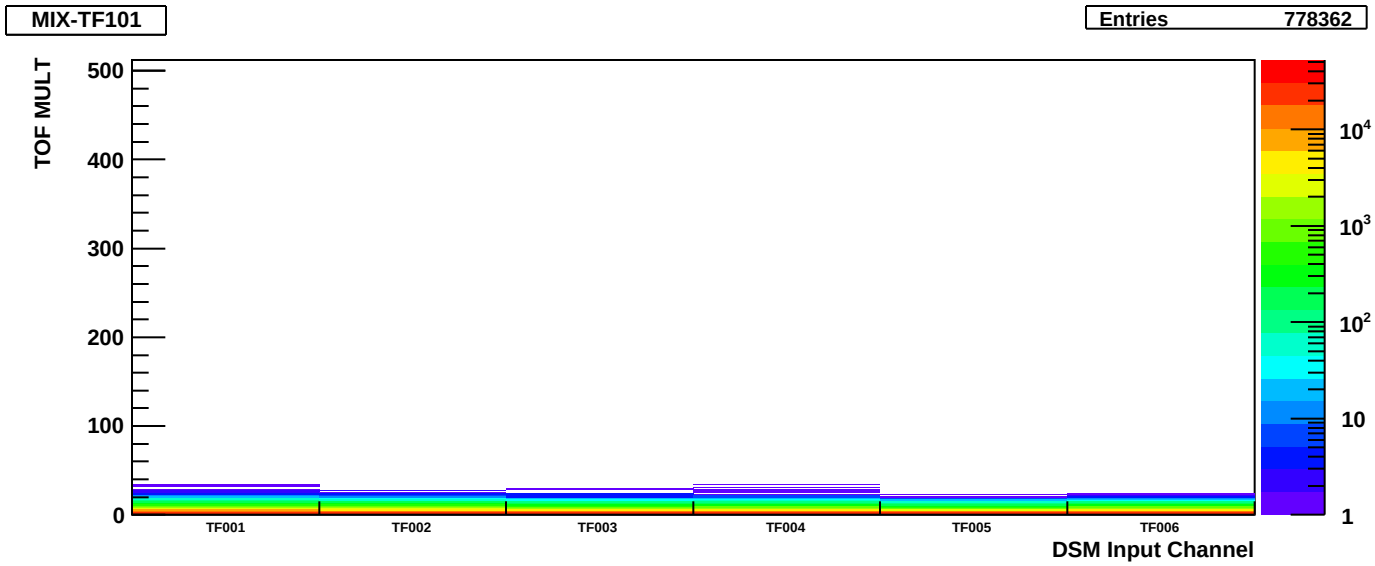

MIX-TF002
Entries 5448534
TOF MULT
TOF tray

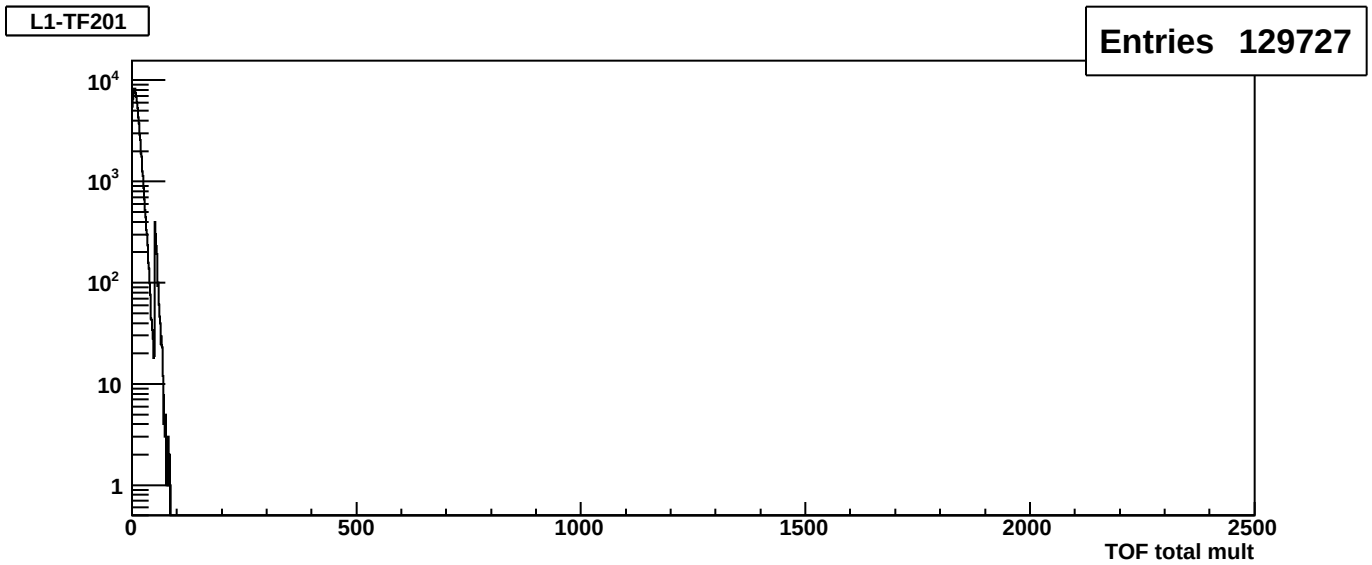

MIX-TF003
Entries 5448534
TOF MULT
TOF tray

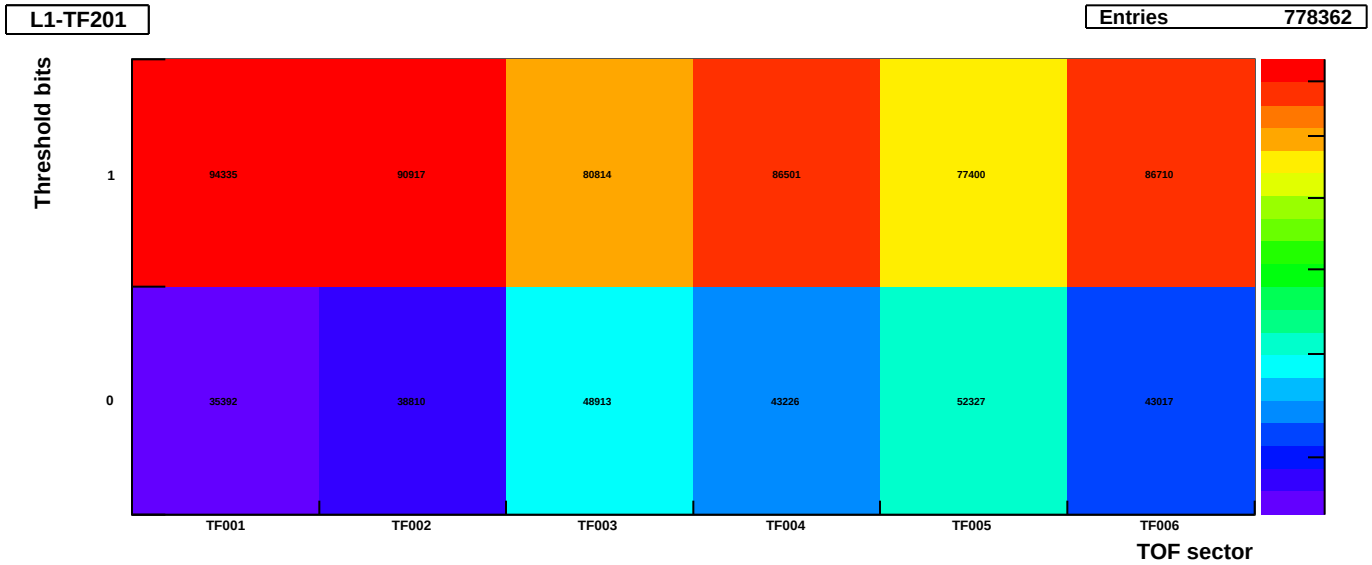

MIX-TF004
Entries 5448534
TOF MULT
TOF tray

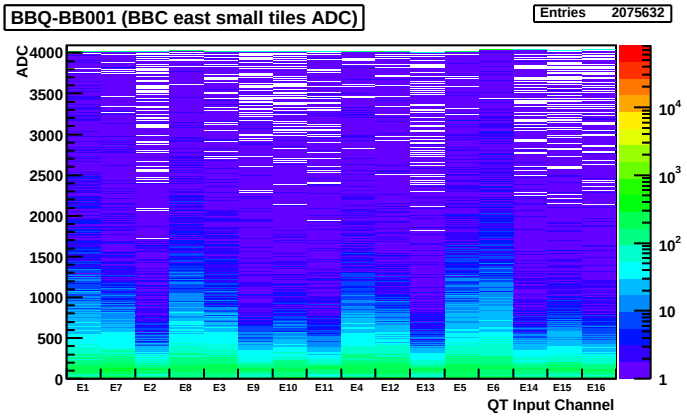

MIX-TF005
Entries 5448534
TOF MULT
TOF tray

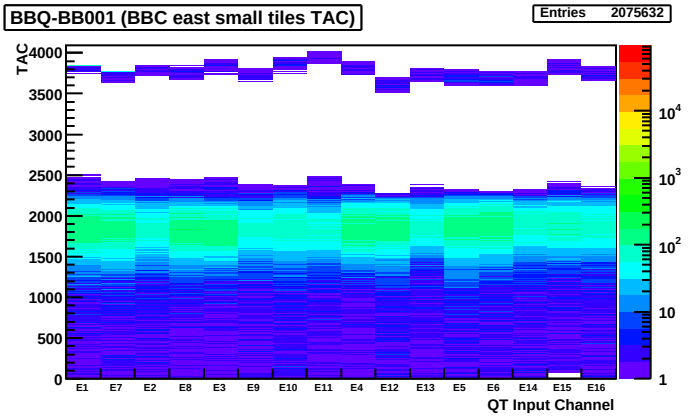

MIX-TF006
Entries 5448534
TOF MULT
TOF tray

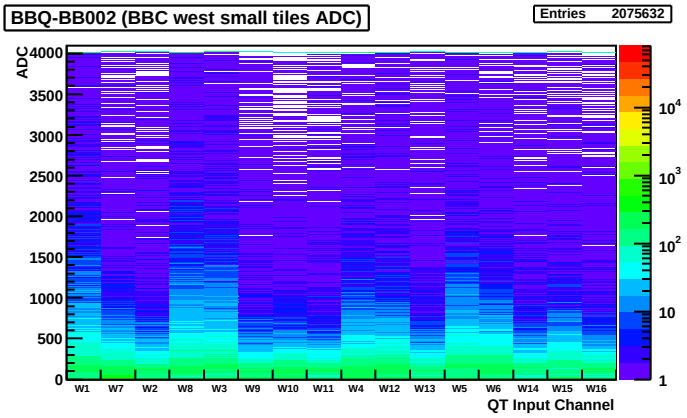

MIX-TF101
Entries 778362
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

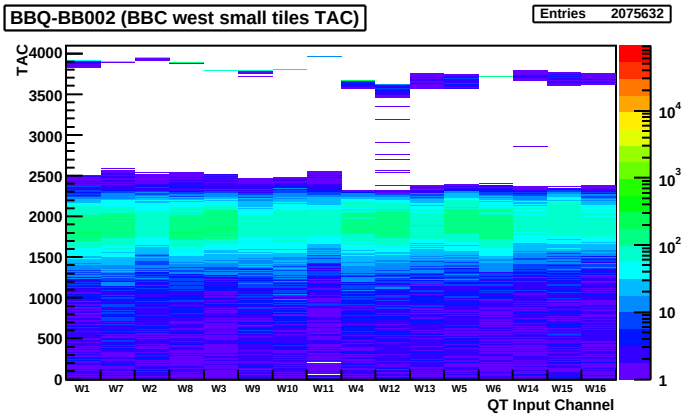

L1-TF201
Entries 129727
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

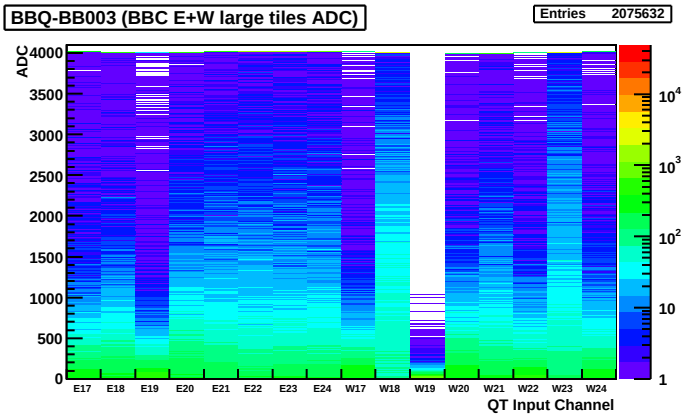

L1-TF201
Entries 778362
Threshold bits
1
0
94335
90917
80814
86501
77400
86710
35392
38810
48913
43226
52327
43017
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

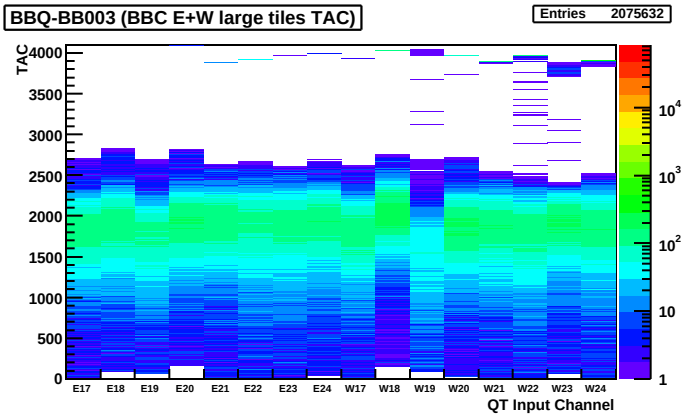

BBQ-BB001 (BBC east small tiles ADC)
Entries 2075632
ADC
QT Input Channel

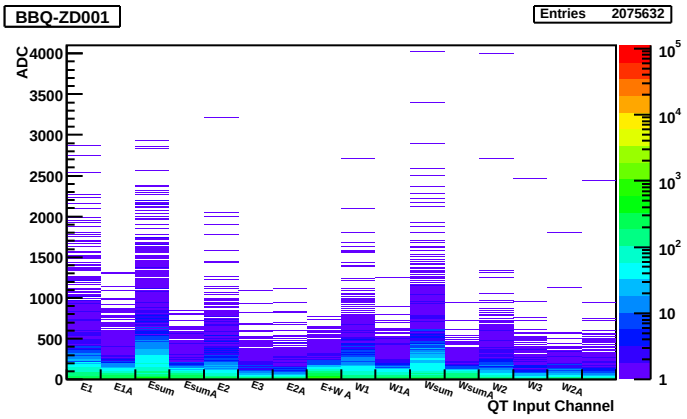

BBQ-BB001 (BBC east small tiles TAC)
Entries 2075632
TAC
QT Input Channel

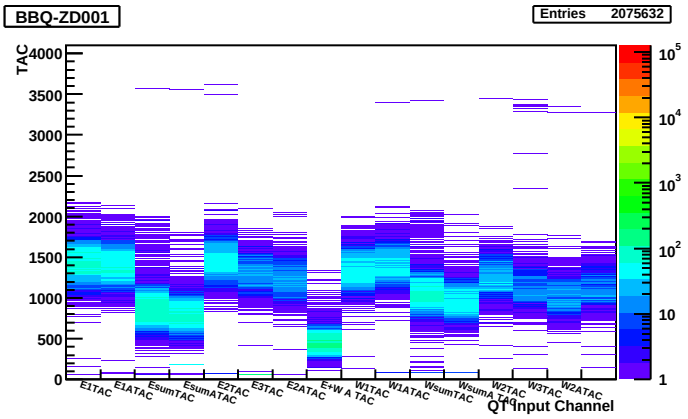

BBQ-BB002 (BBC west small tiles ADC)
Entries 2075632
ADC
QT Input Channel

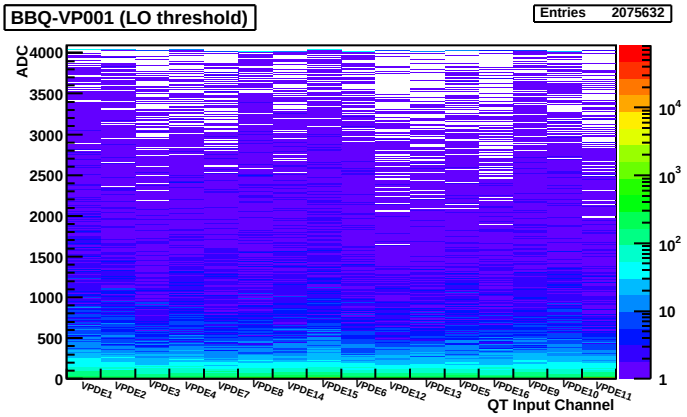

BBQ-BB002 (BBC west small tiles TAC)
Entries 2075632
TAC
QT Input Channel

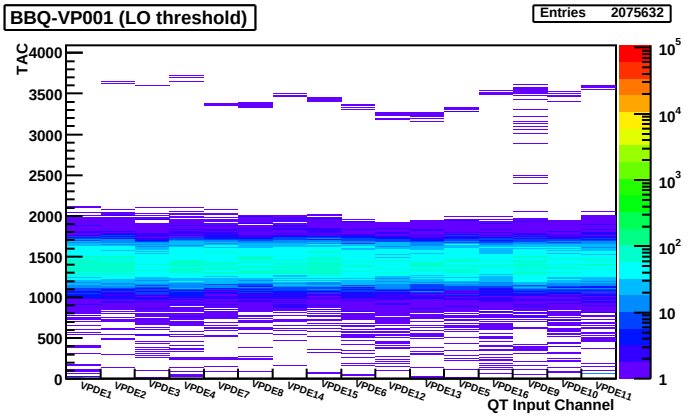

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2075632
ADC
QT Input Channel

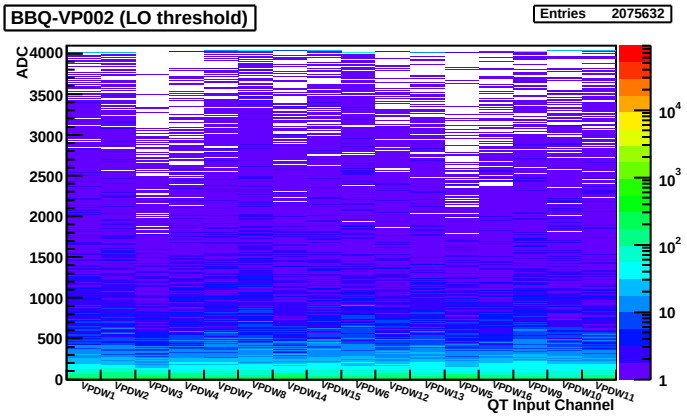

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2075632
TAC
QT Input Channel

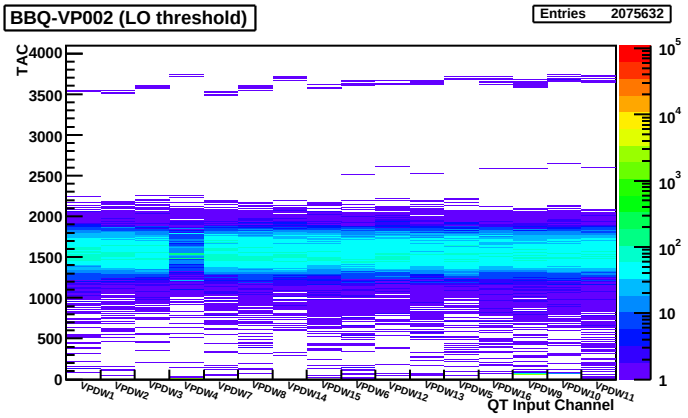

BBQ-ZD001
Entries 2075632
ADC
QT Input Channel

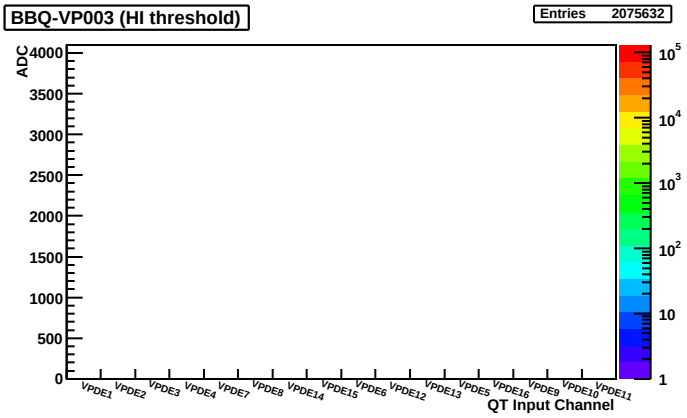

BBQ-ZD001
Entries 2075632
TAC
QT Input Channel

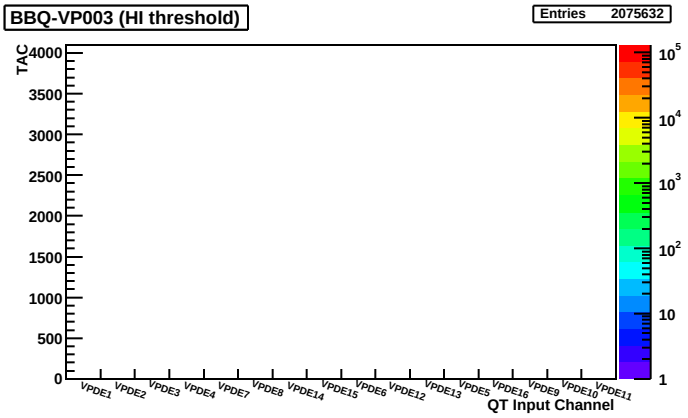

BBQ-VP001 (LO threshold)
Entries 2075632
ADC
QT Input Channel

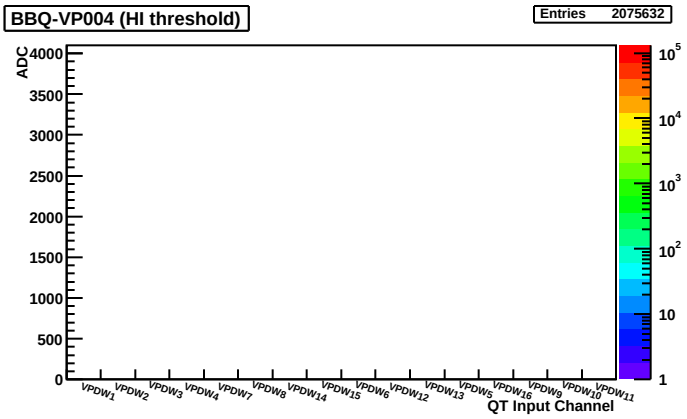

BBQ-VP001 (LO threshold)
Entries 2075632
TAC
QT Input Channel

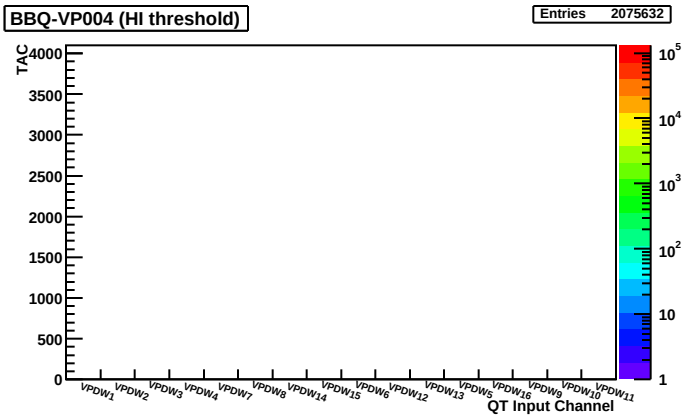

BBQ-VP002 (LO threshold)
Entries 2075632
ADC
QT Input Channel

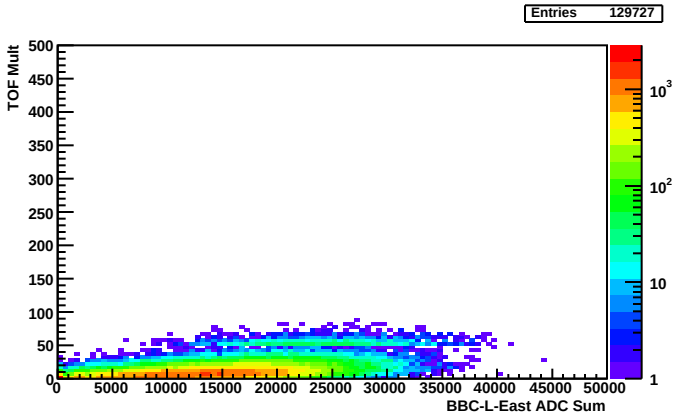

BBQ-VP002 (LO threshold)
Entries 2075632
TAC
QT Input Channel

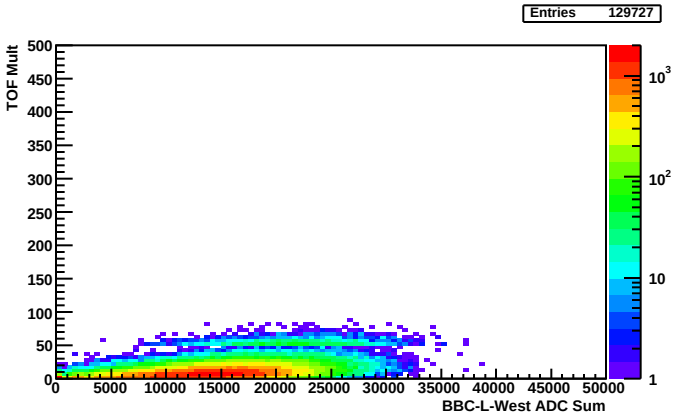

BBQ-VP003 (HI threshold)
Entries 2075632
ADC
QT Input Channel

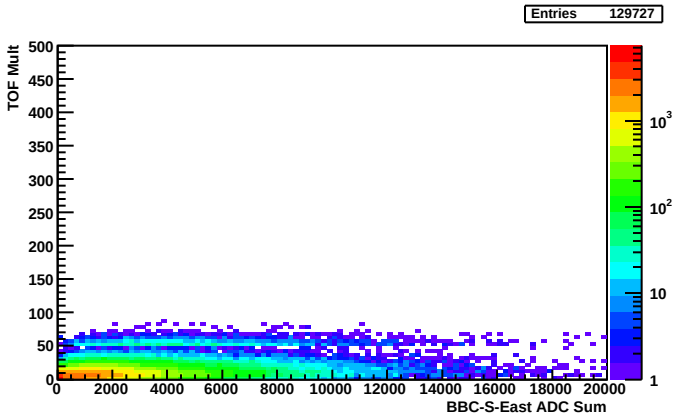

BBQ-VP003 (HI threshold)
Entries 2075632
TAC
QT Input Channel

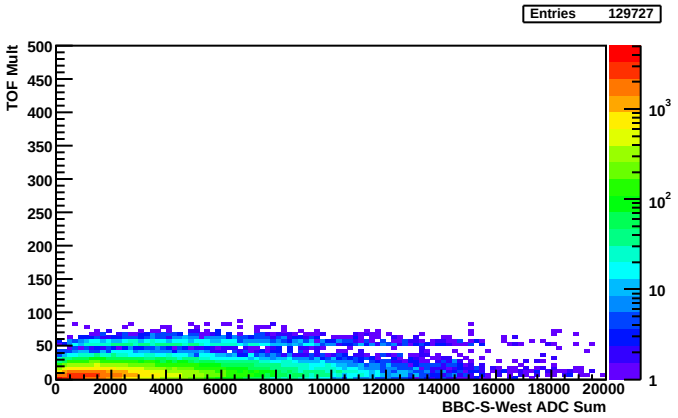

BBQ-VP004 (HI threshold)
Entries 2075632
ADC
QT Input Channel

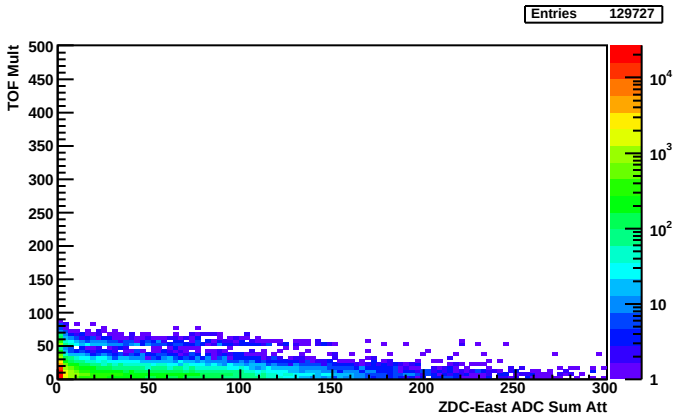

BBQ-VP004 (HI threshold)
Entries 2075632
TAC
QT Input Channel

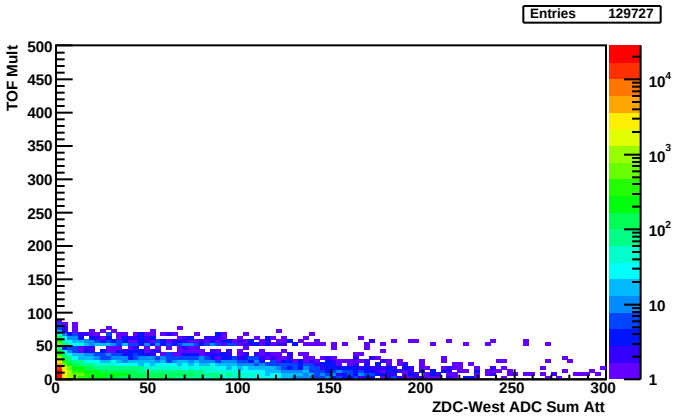

Entries 129727
TOF Mult
BBC-L-East ADC Sum

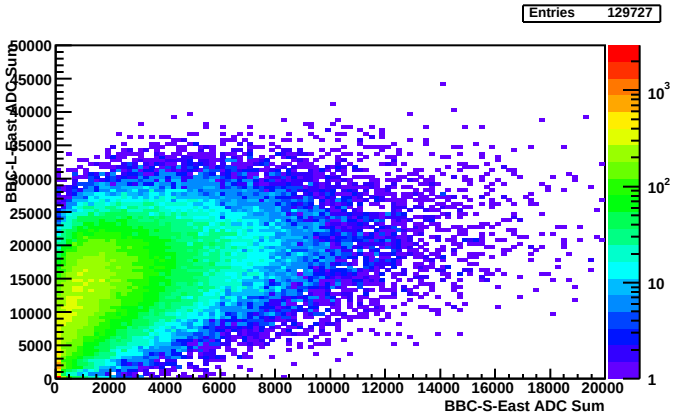

Entries 129727
TOF Mult
BBC-L-West ADC Sum

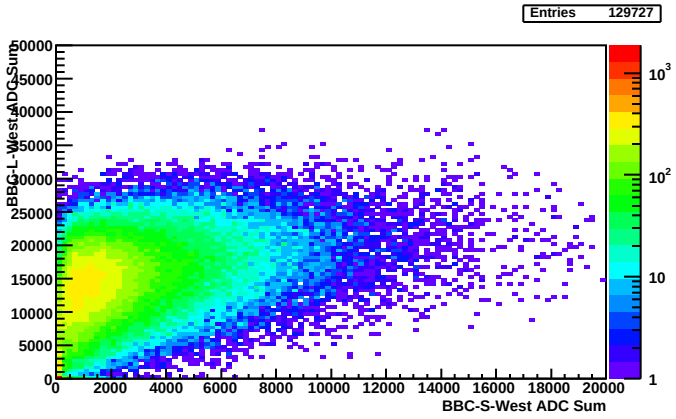

Entries 129727
TOF Mult
BBC-S-East ADC Sum

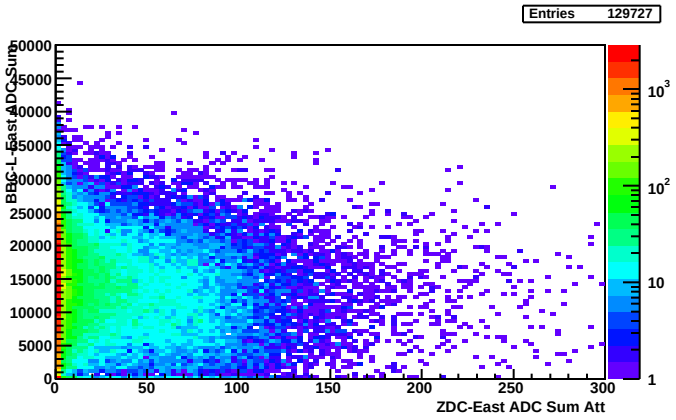

Entries 129727
TOF Mult
BBC-S-West ADC Sum

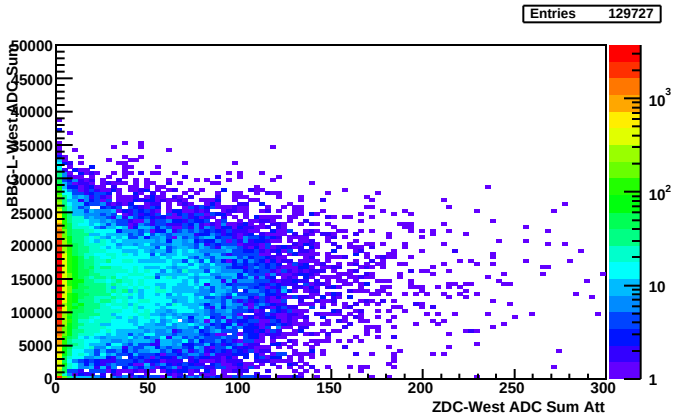

Entries 129727
TOF Mult
ZDC-East ADC Sum Att

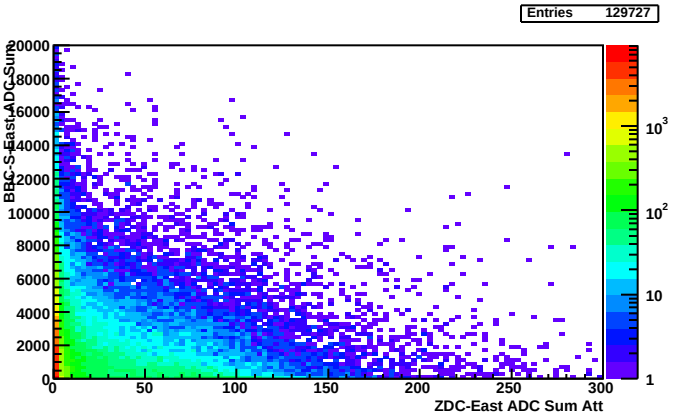

Entries 129727
TOF Mult
ZDC-West ADC Sum Att

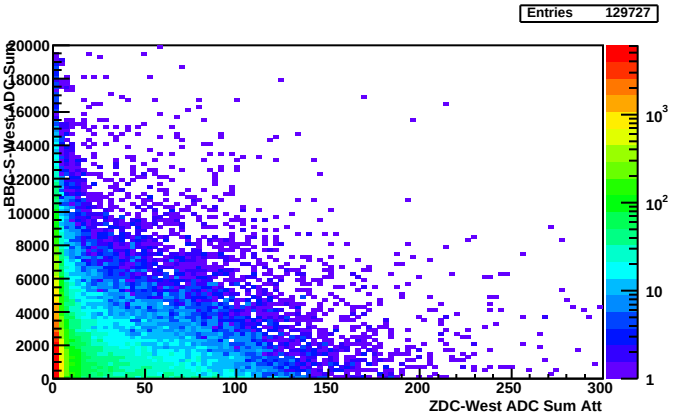

Entries 129727
BBC-L-East ADC Sum
BBC-S-East ADC Sum

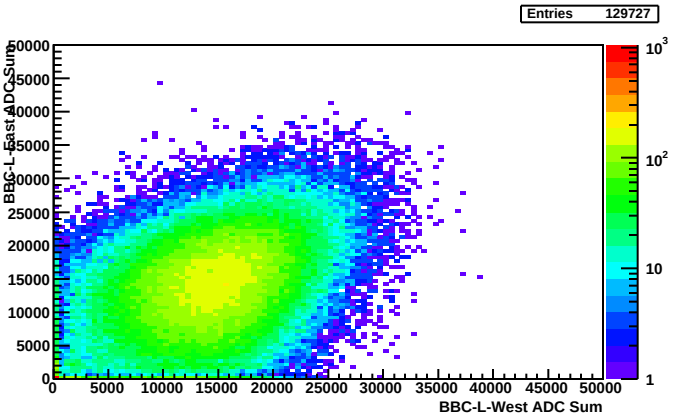

Entries 129727
BBC-L-West ADC Sum
BBC-S-West ADC Sum

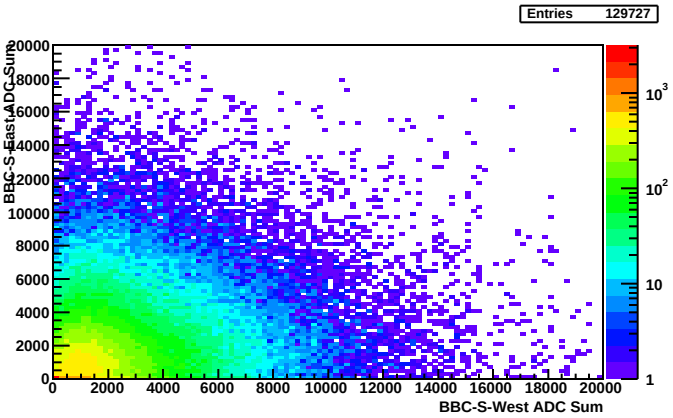

Entries 129727
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

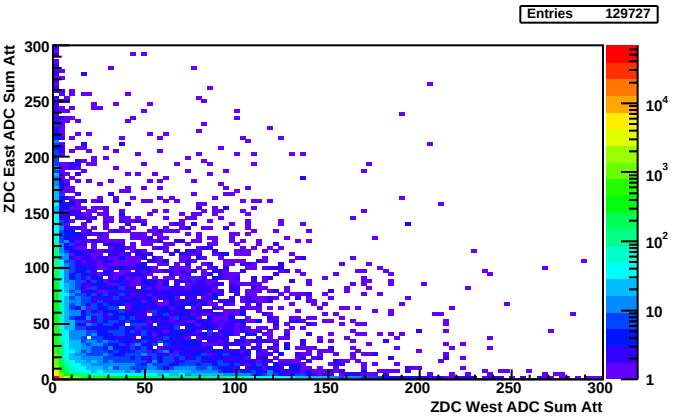

Entries 129727
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

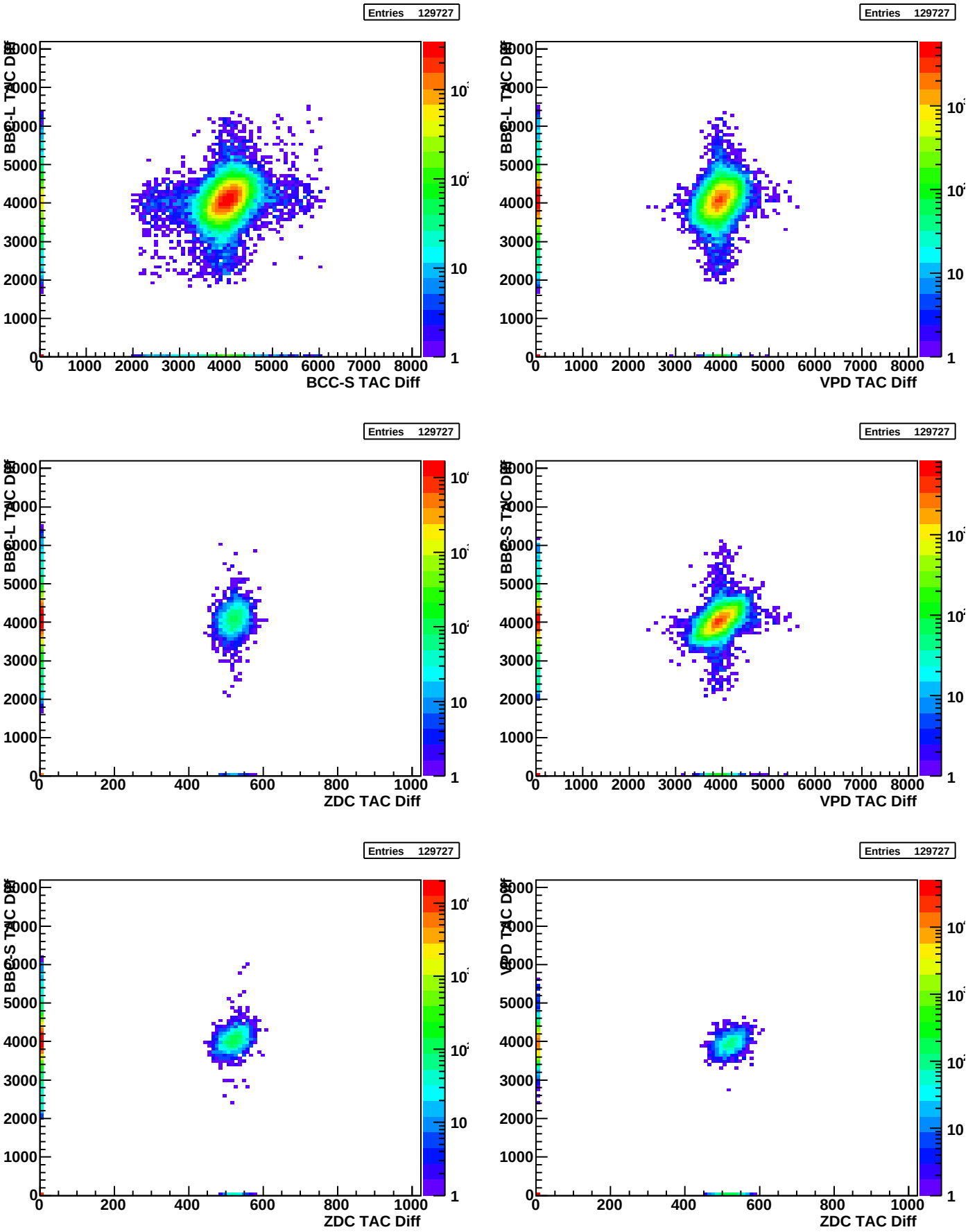

Entries 129727
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

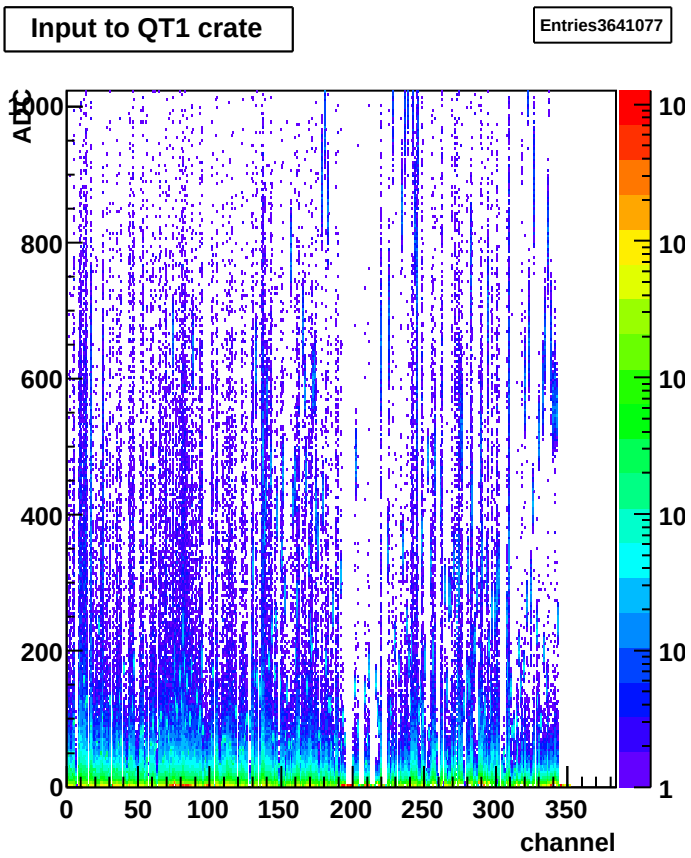

Entries 129727
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

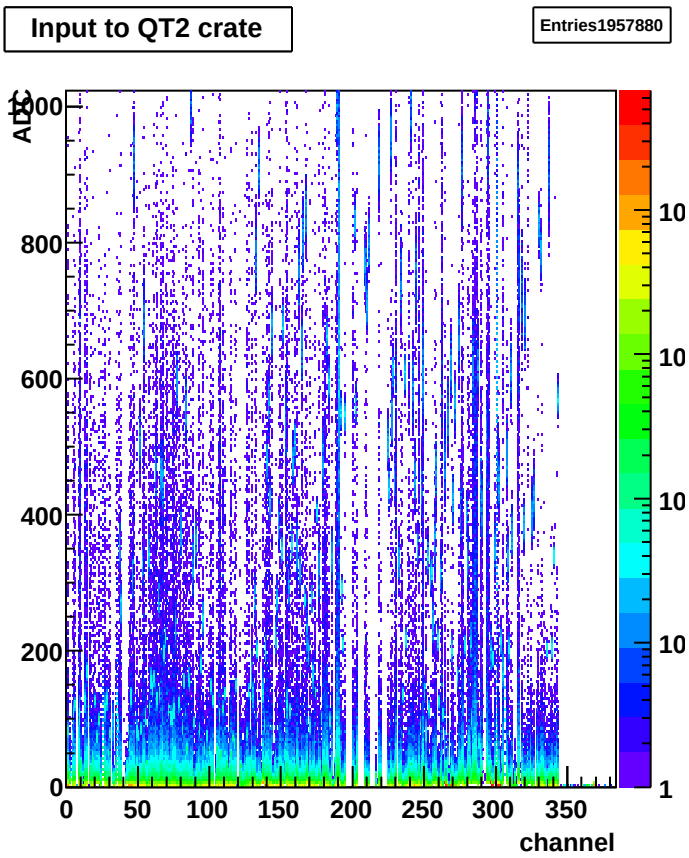

Entries 129727
BBC-L-East ADC Sum
BBC-L-West ADC Sum

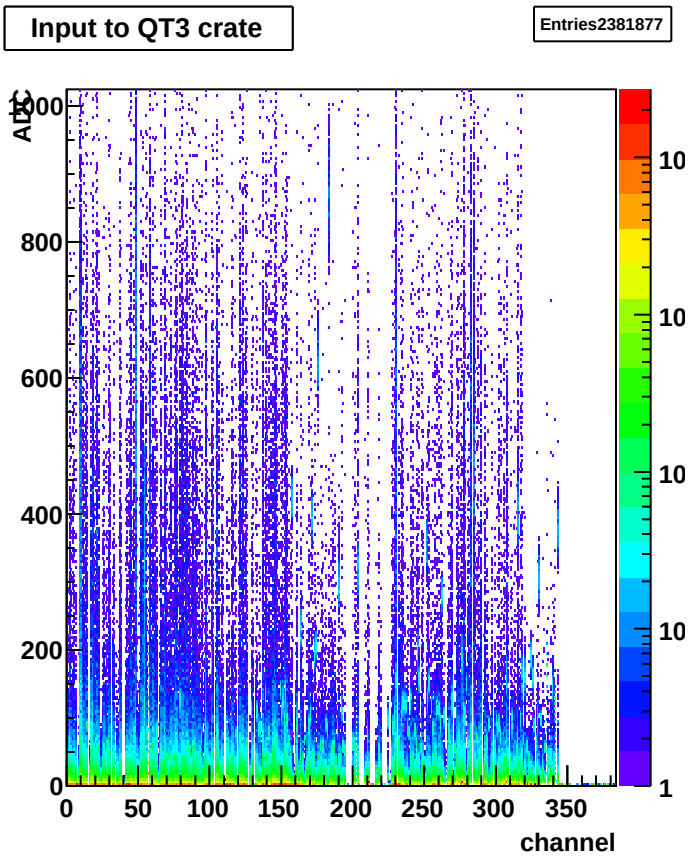

Entries 129727
BBC-S-East ADC Sum
BBC-S-West ADC Sum

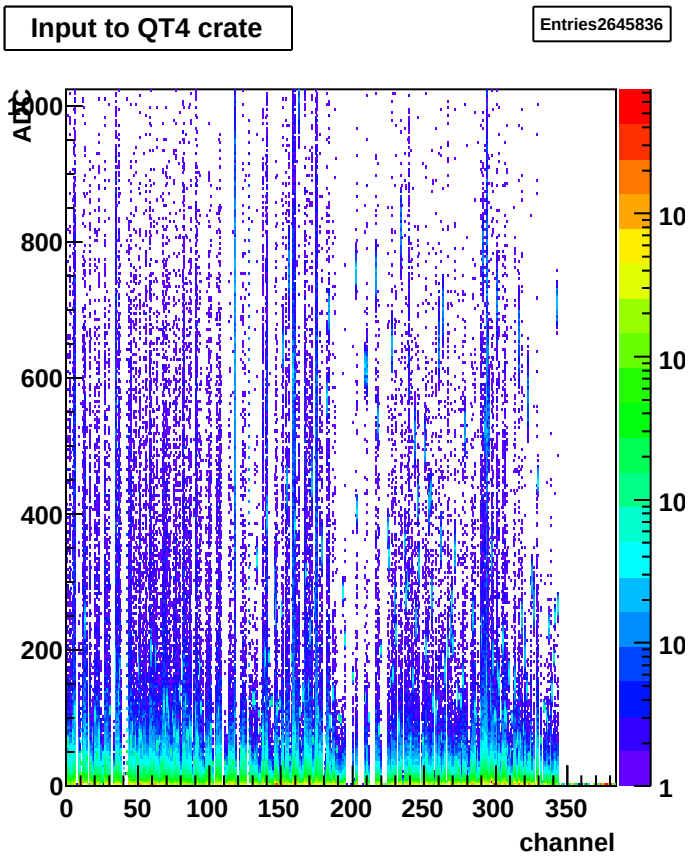

Entries 129727
ZDC East ADC Sum Att
ZDC West ADC Sum Att

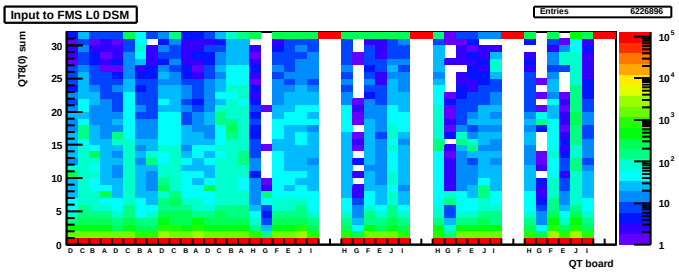

Entries 129727
BBC-L TAC Diff
BCC-S TAC Diff
Entries 129727
BBC-L TAC Diff
VPD TAC Diff
Entries 129727
BBC-L TAC Diff
ZDC TAC Diff
Entries 129727
BBC-S TAC Diff
VPD TAC Diff
Entries 129727
BBC-S TAC Diff
ZDC TAC Diff
Entries 129727
VPD TAC Diff
ZDC TAC Diff

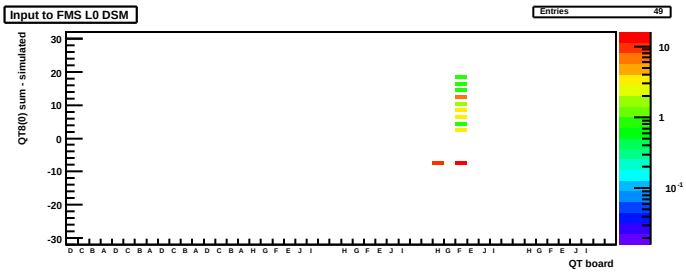

Input to QT1 crate
Entries3641077
ADC
channel

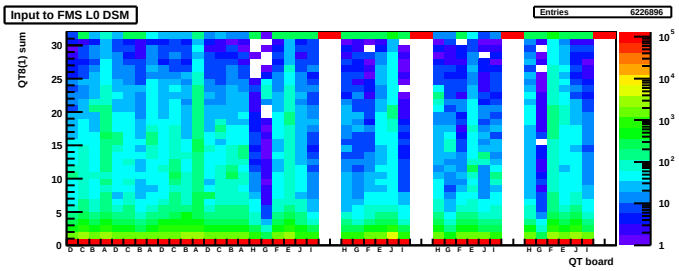

Input to QT2 crate
Entries1957880
ADC
channel

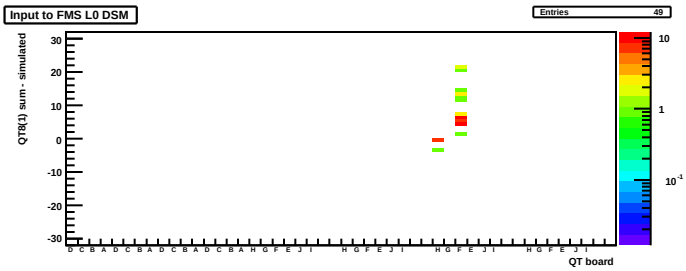

Input to QT3 crate
Entries2381877
ADC
channel

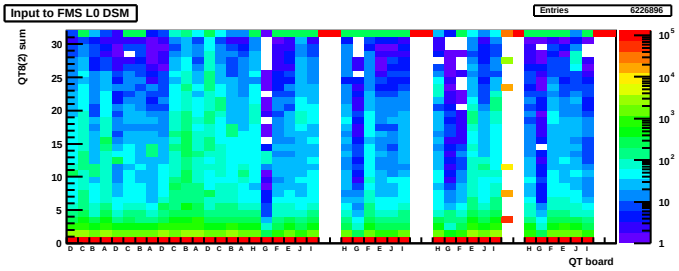

Input to QT4 crate
Entries2645836
ADC
channel

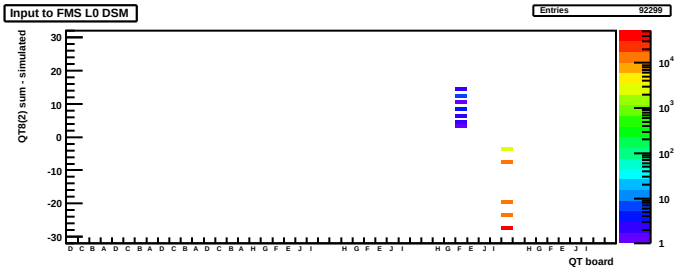

Input to FMS L0 DSM
Entries 6226896
QT8(0) sum
QT board

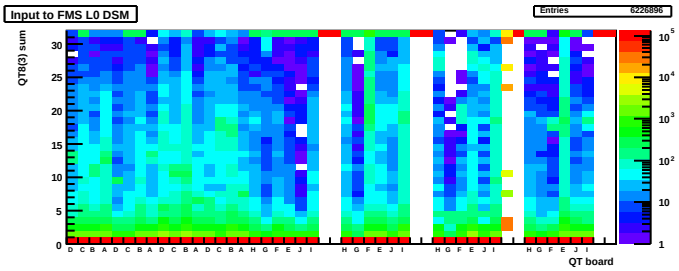

Input to FMS L0 DSM
Entries 49
QT8(0) sum - simulated
QT board

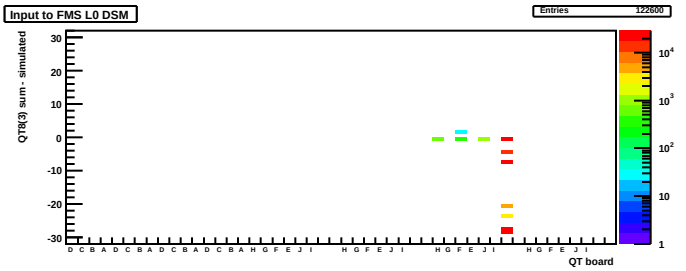

Input to FMS L0 DSM
Entries 6226896
QT8(1) sum
QT board

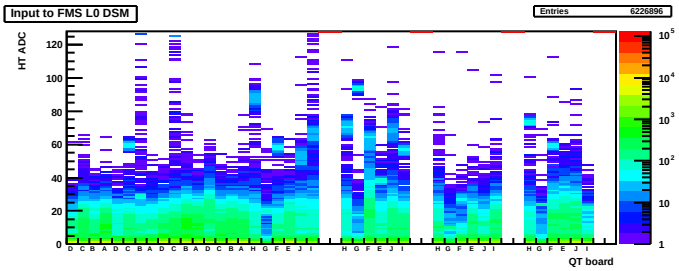

Input to FMS L0 DSM
Entries 49
QT8(1) sum - simulated
QT board

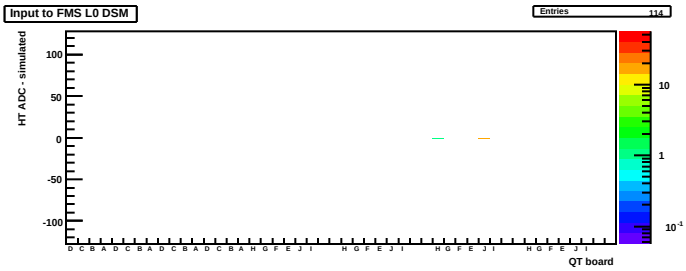

Input to FMS L0 DSM
Entries 6226896
QT8(2) sum
QT board

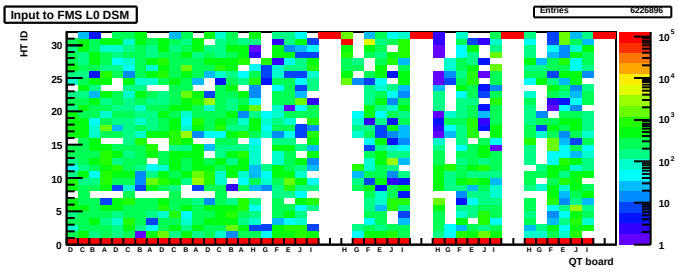

Input to FMS L0 DSM
Entries 92299
QT8(2) sum - simulated
QT board

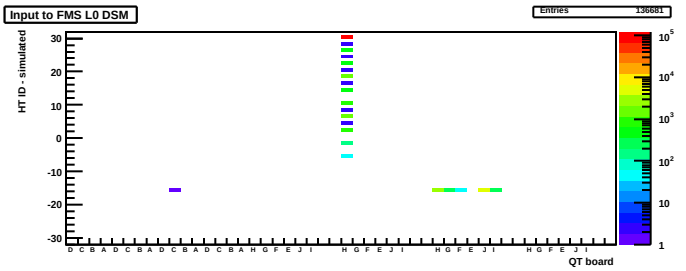

Input to FMS L0 DSM
Entries 6226896
QT8(3) sum
QT board

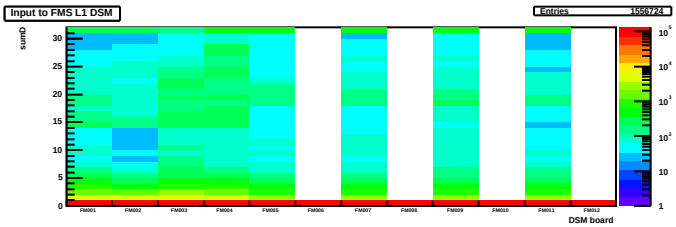

Input to FMS L0 DSM
Entries 122600
QT8(3) sum - simulated
QT board

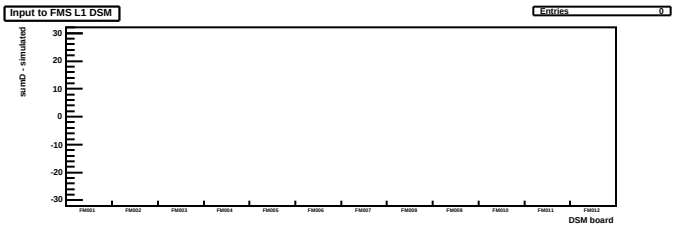

Input to FMS L0 DSM
Entries 6226896
HT ADC
QT board

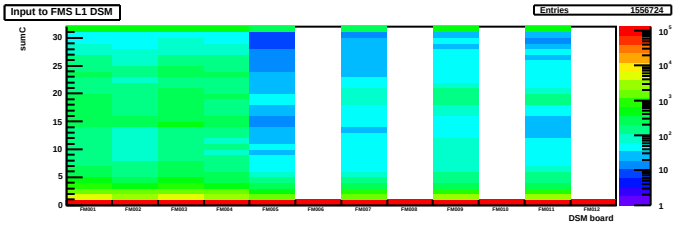

Input to FMS L0 DSM
Entries 114
HT ADC - simulated
QT board

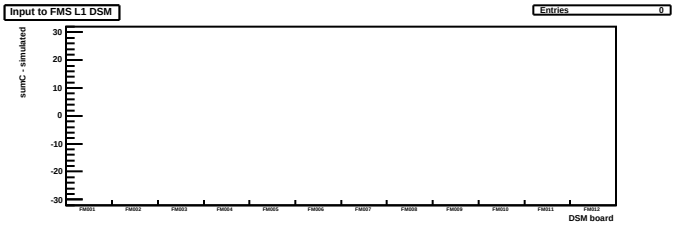

Input to FMS L0 DSM
Entries 6226896
HT ID
QT board

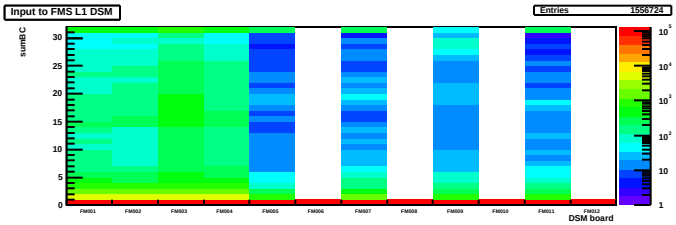

Input to FMS L0 DSM
Entries 136681
HT ID - simulated
QT board

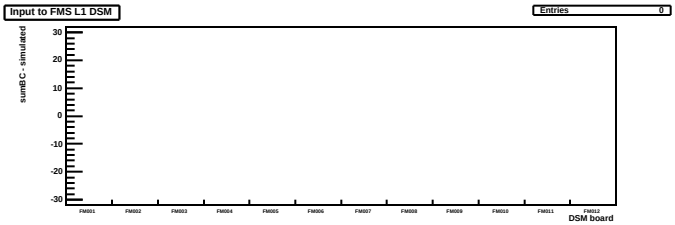

Input to FMS L1 DSM
Entries 1556724
sumD
DSM board

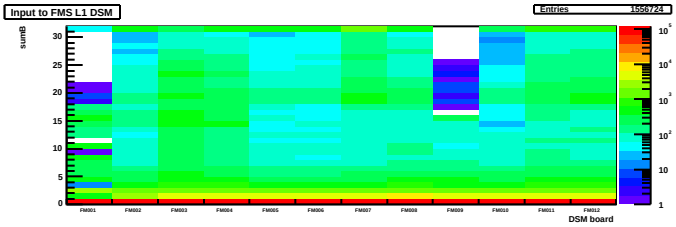

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

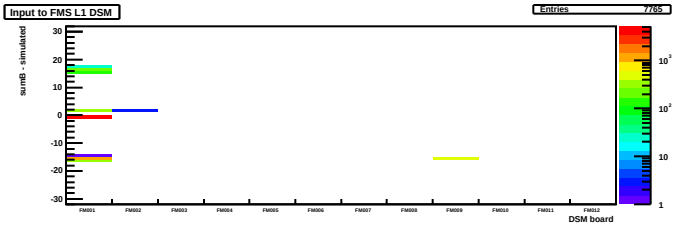

Input to FMS L1 DSM
Entries 1556724
sumC
DSM board

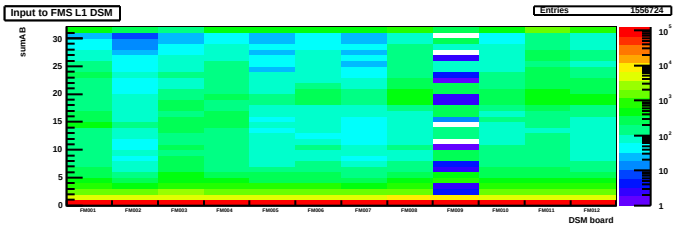

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

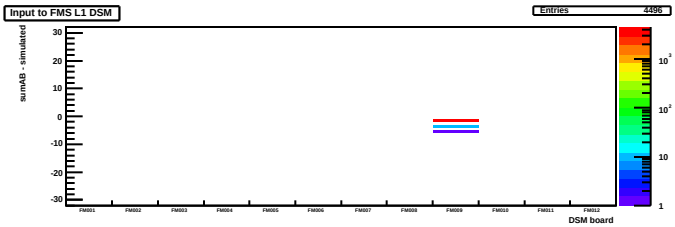

Input to FMS L1 DSM
Entries 1556724
sumBC
DSM board

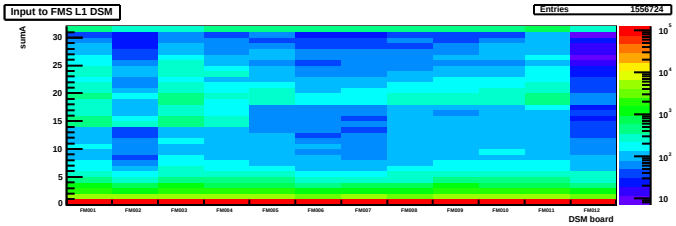

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

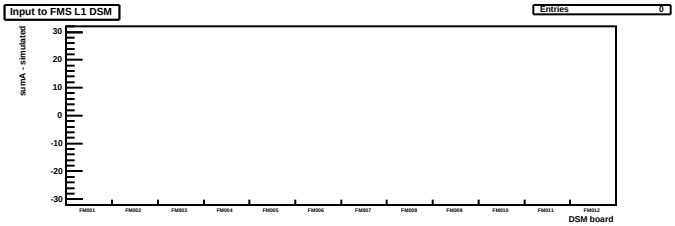

Input to FMS L1 DSM
Entries 1556724
sumB
DSM board

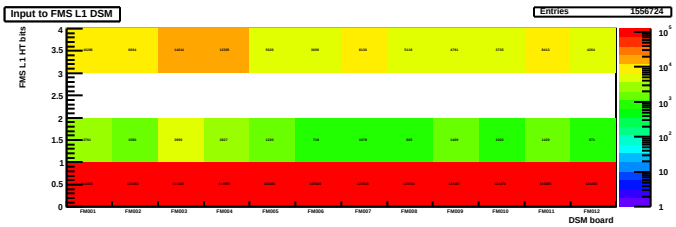

Input to FMS L1 DSM
Entries 7765
sumB - simulated
DSM board

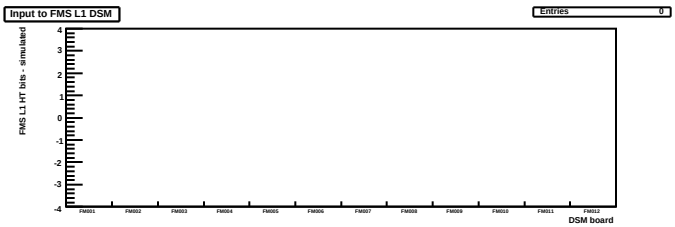

Input to FMS L1 DSM
Entries 1556724
sumAB
DSM board

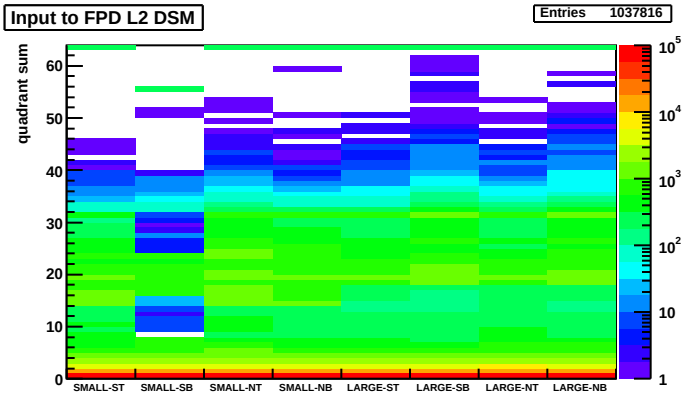

Input to FMS L1 DSM
Entries 4496
sumAB - simulated
DSM board

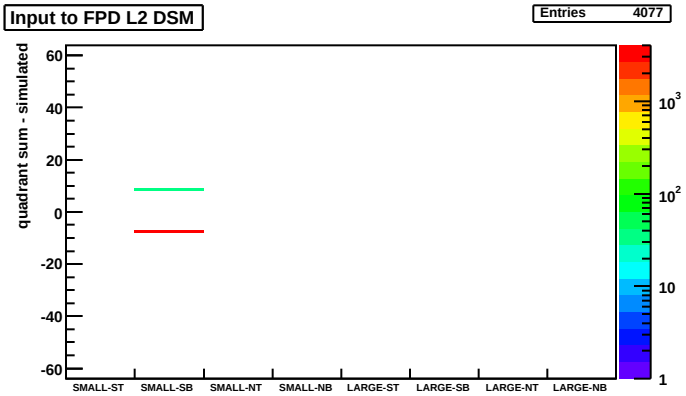

Input to FMS L1 DSM
Entries 1556724
sumA
DSM board

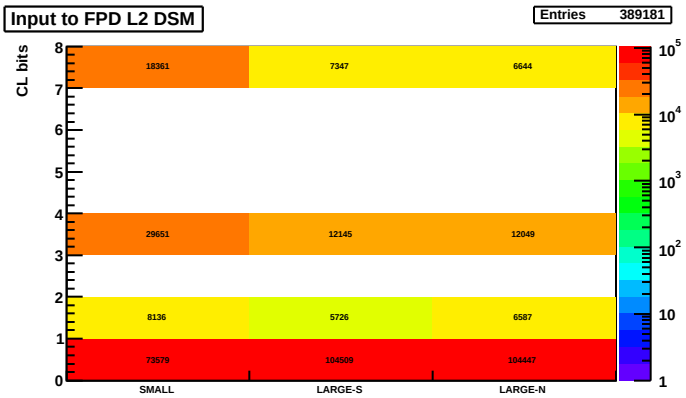

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

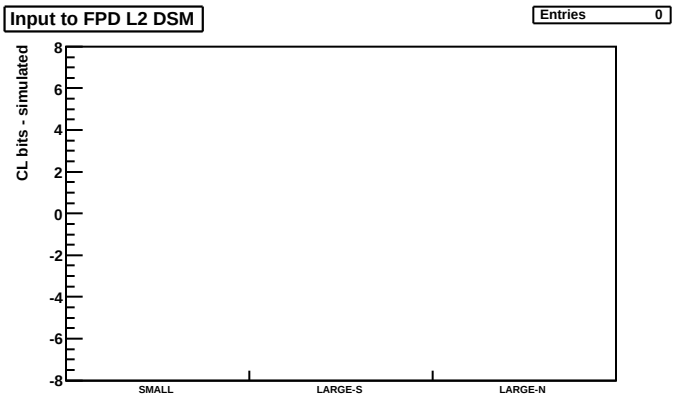

Input to FMS L1 DSM
Entries 1556724
FMS L1 HT bits
DSM board

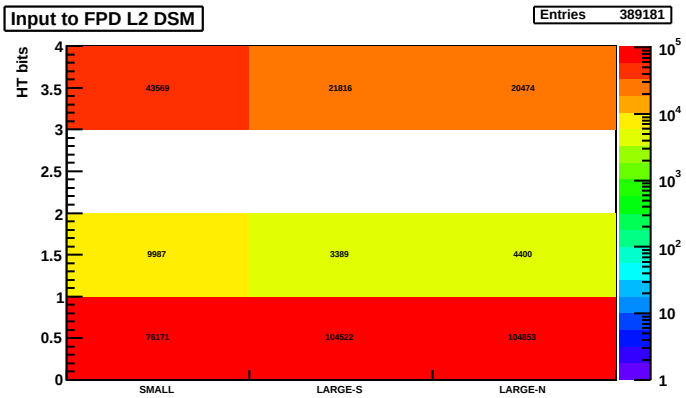

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

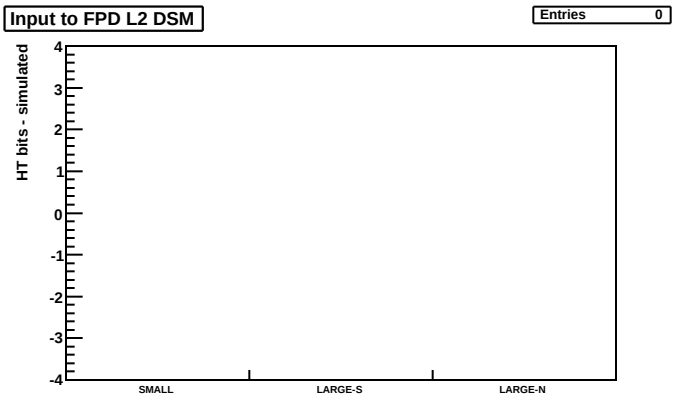

Input to FPD L2 DSM
Entries 1037816
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

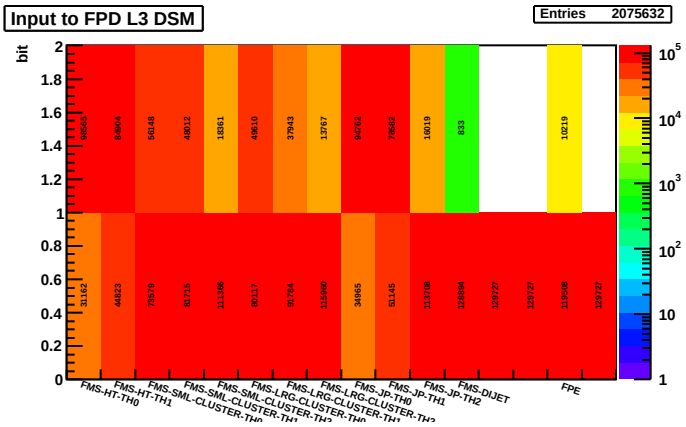

Input to FPD L2 DSM
Entries 4077
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

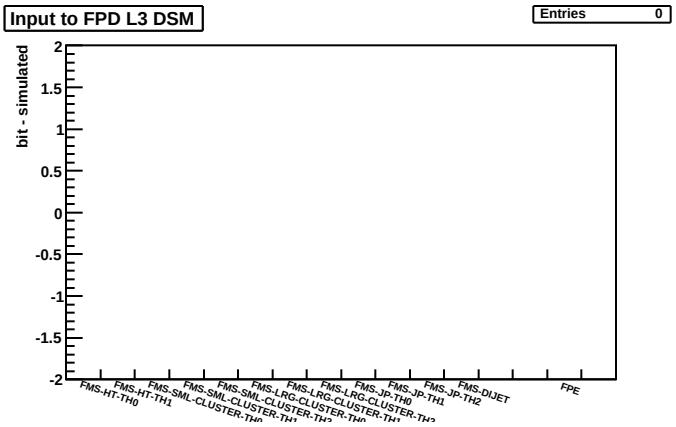

Input to FPD L2 DSM
Entries 389181
CL bits
18361
7347
6644
29651
12145
12049
8136
5726
6587
73579
104509
104447
SMALL
LARGE-S
LARGE-N

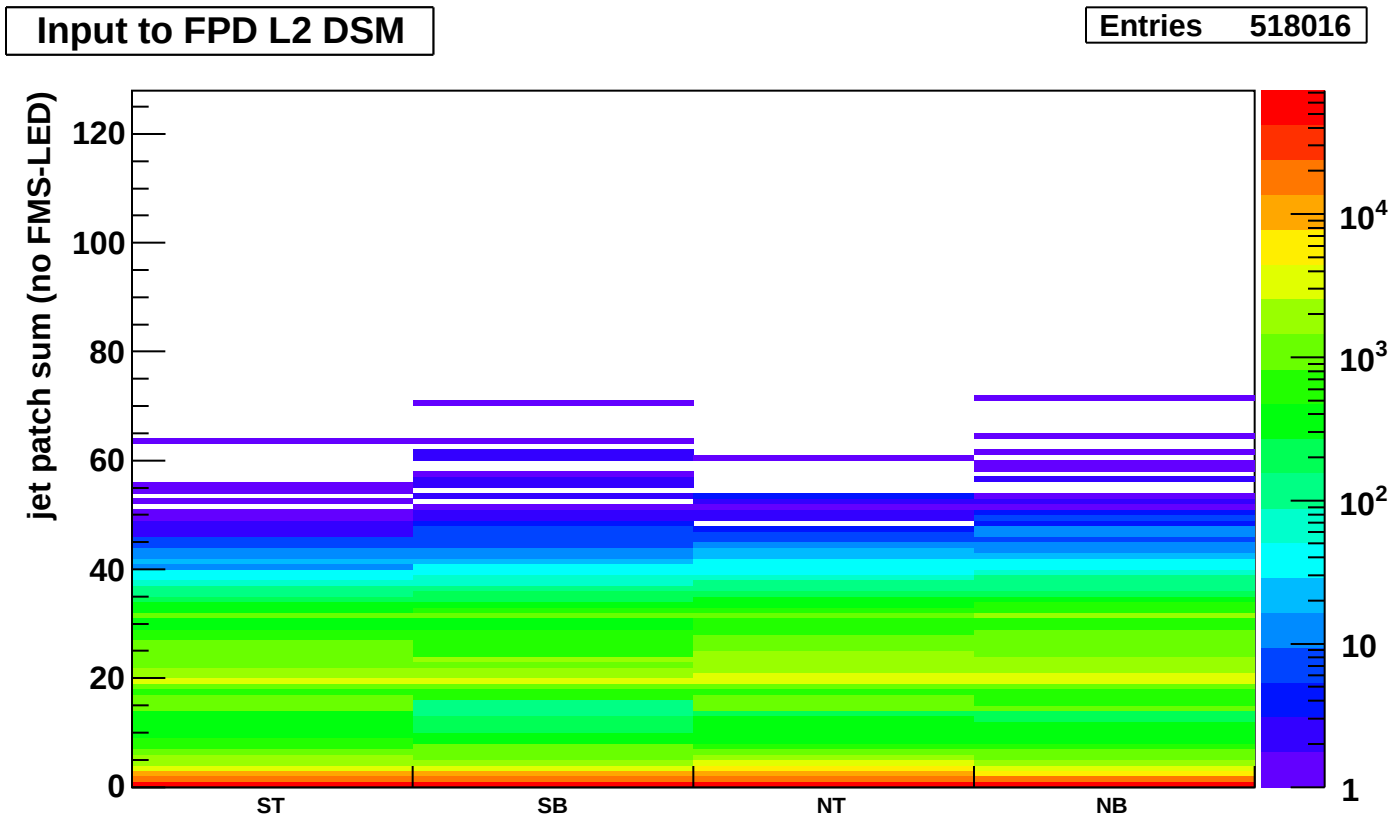

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

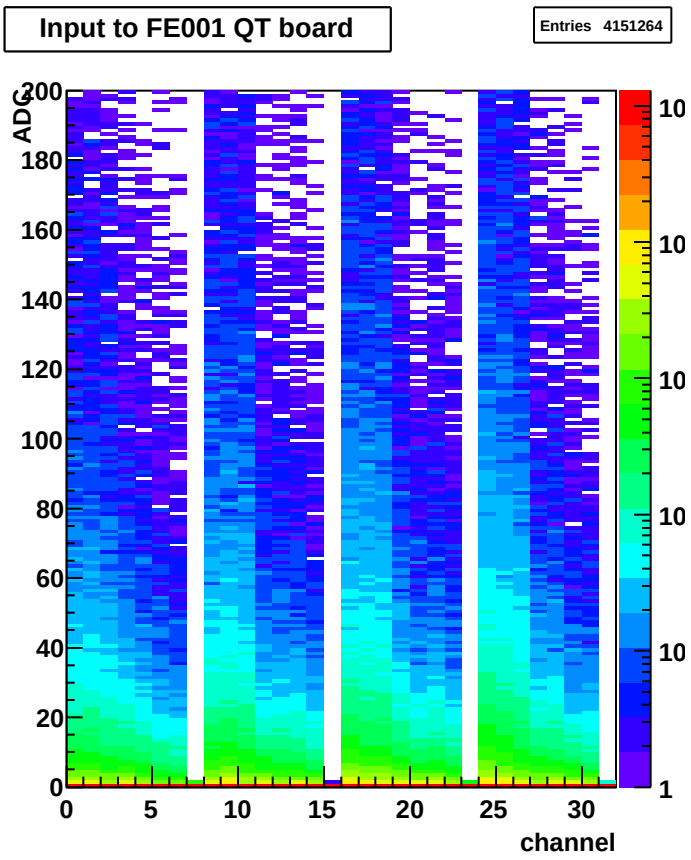

Input to FPD L2 DSM
Entries 389181
HT bits
43569
21816
20474
9987
3389
4400
76171
104522
104853
SMALL
LARGE-S
LARGE-N

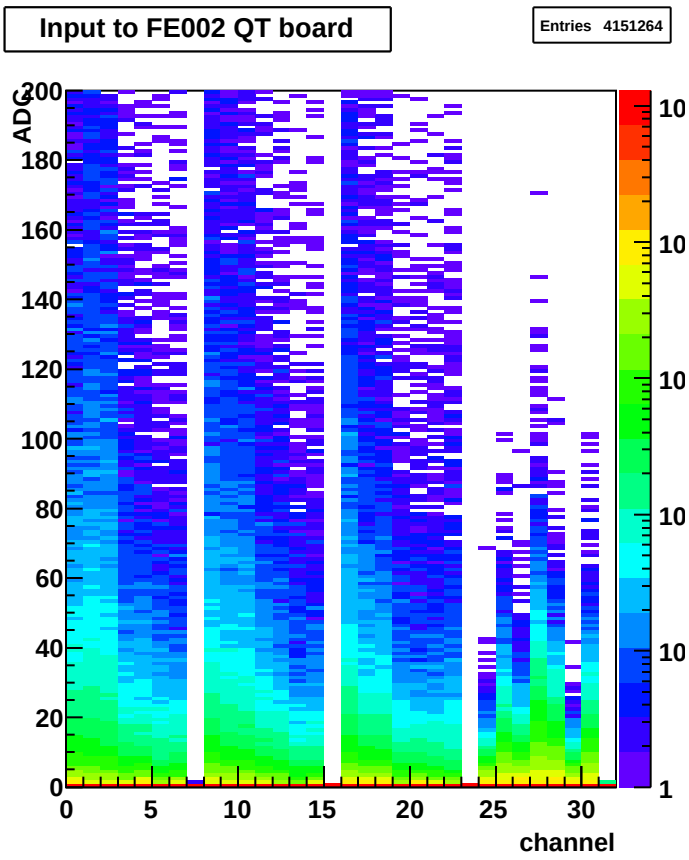

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

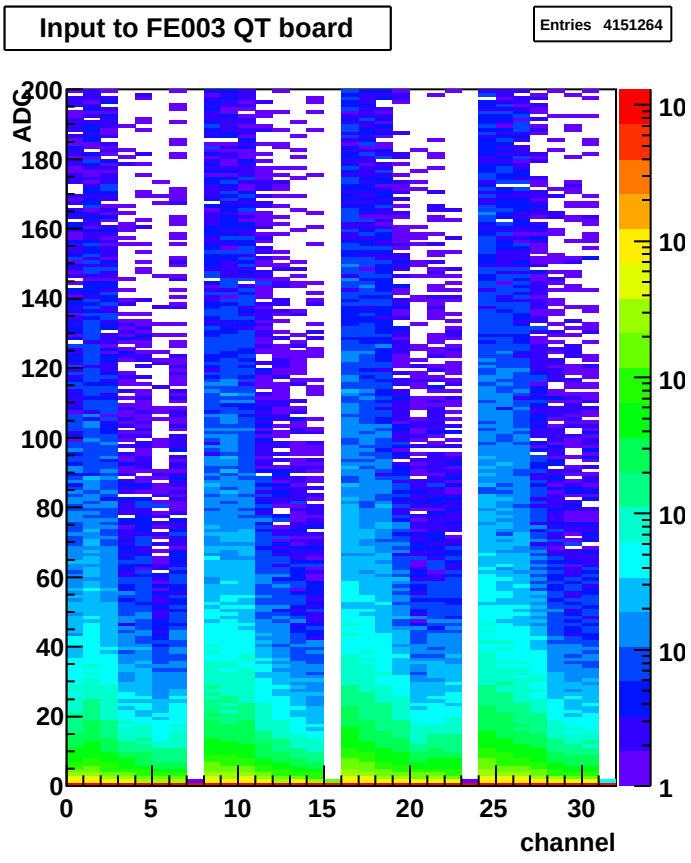

Input to FPD L3 DSM
Entries 2075632
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

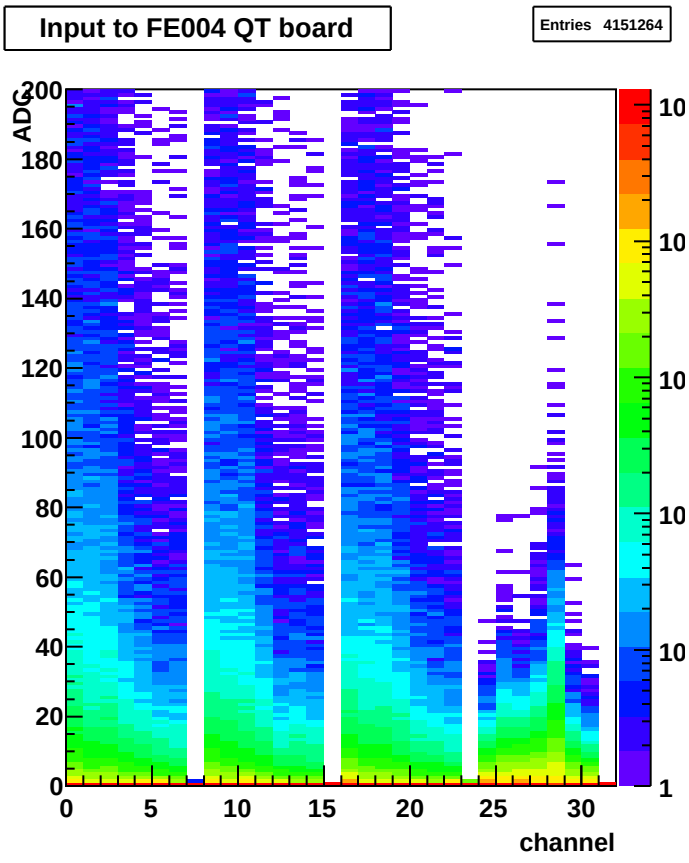

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

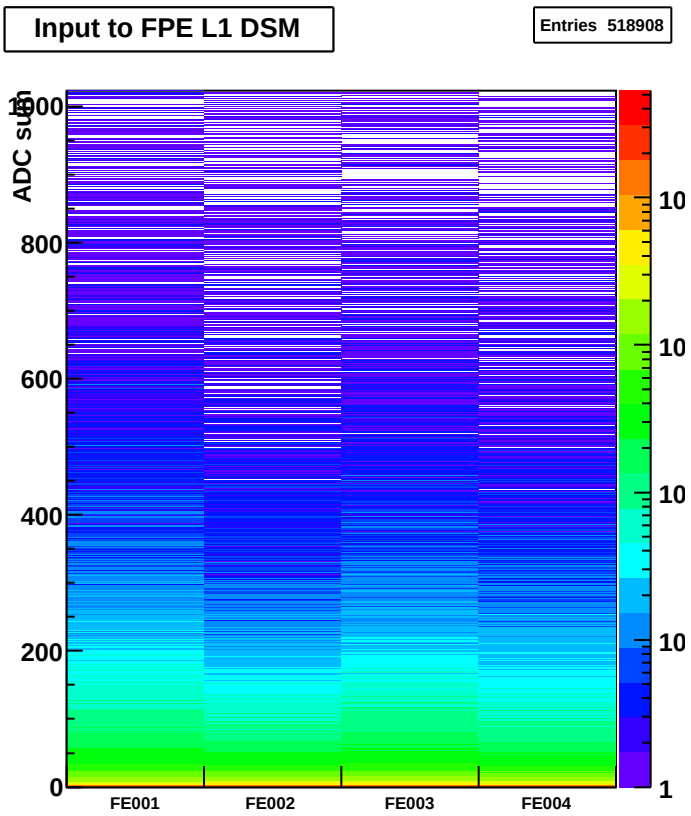

Input to FPD L2 DSM
Entries 518016
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4

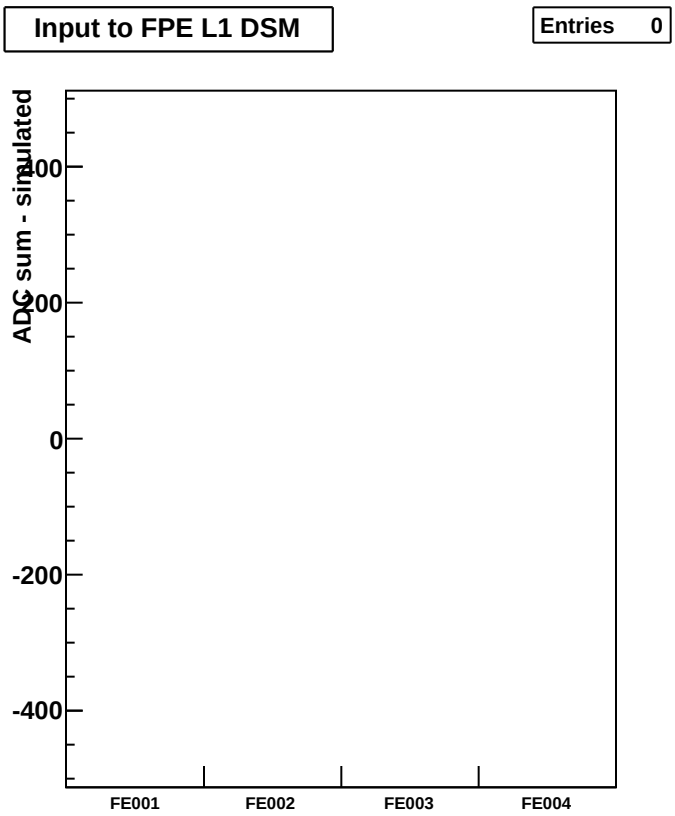

Input to FE001 QT board
Entries 4151264
ADC
channel

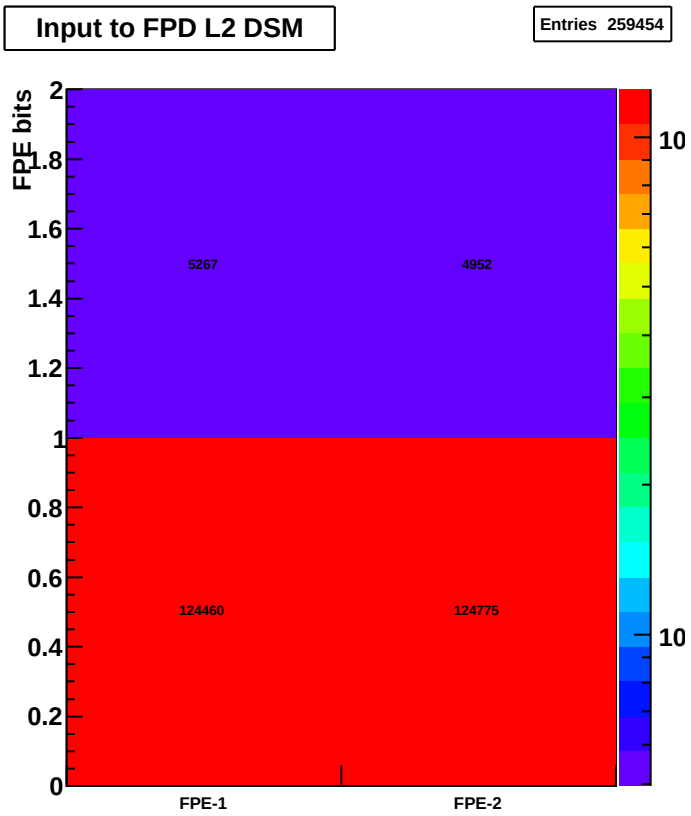

Input to FE002 QT board
Entries 4151264
ADC
channel

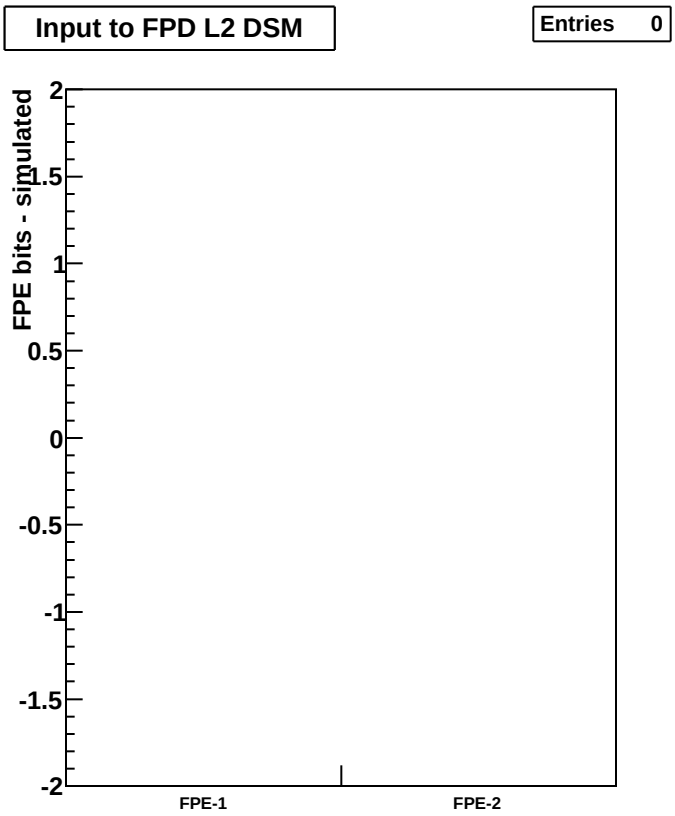

Input to FE003 QT board
Entries 4151264
ADC
channel


Input to FE004 QT board
Entries 4151264
ADC
channel


Input to FPE L1 DSM
Entries 518908
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 259454
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
5267
4952
124460
124775
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