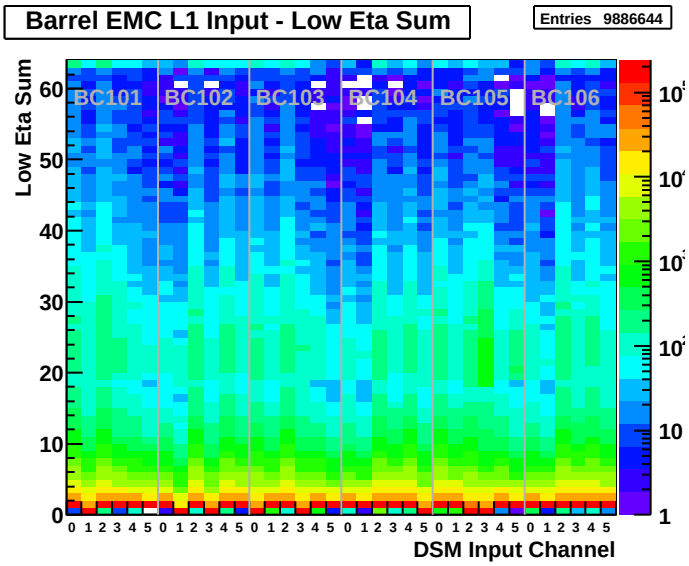
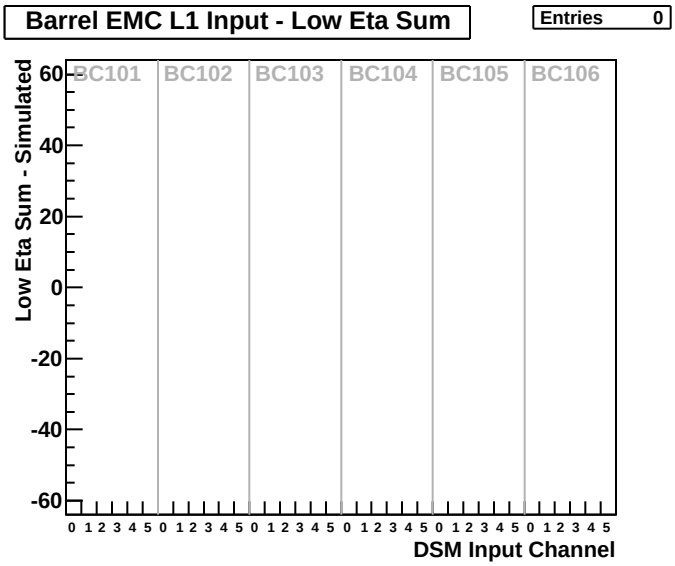
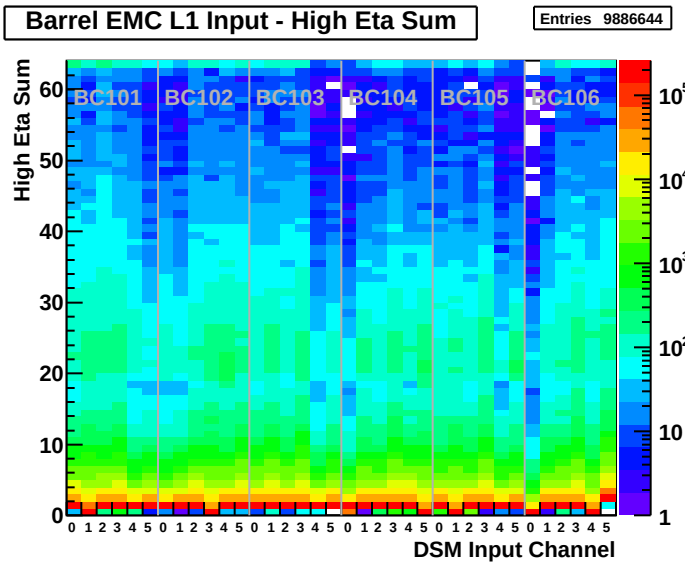
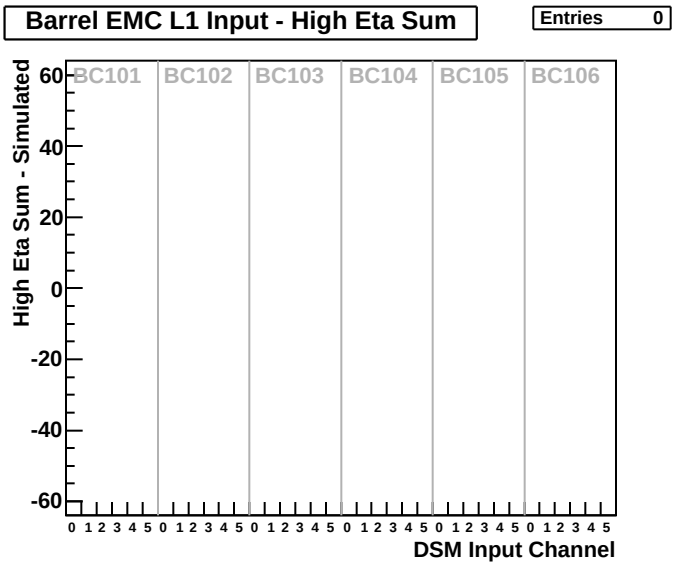
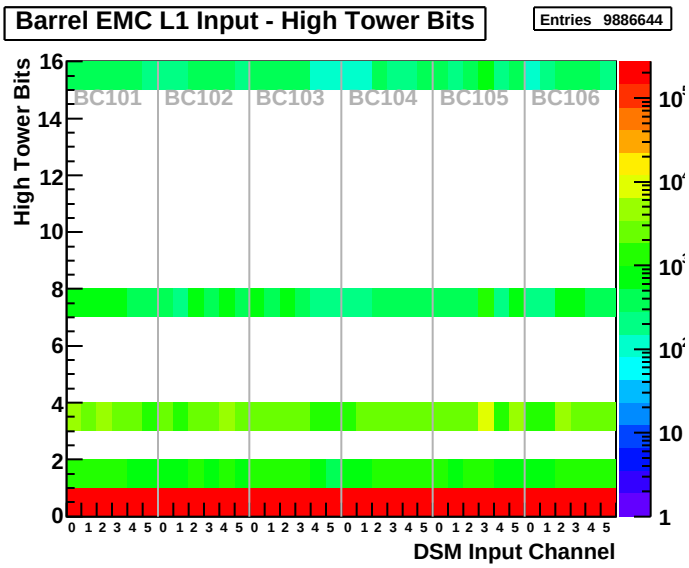
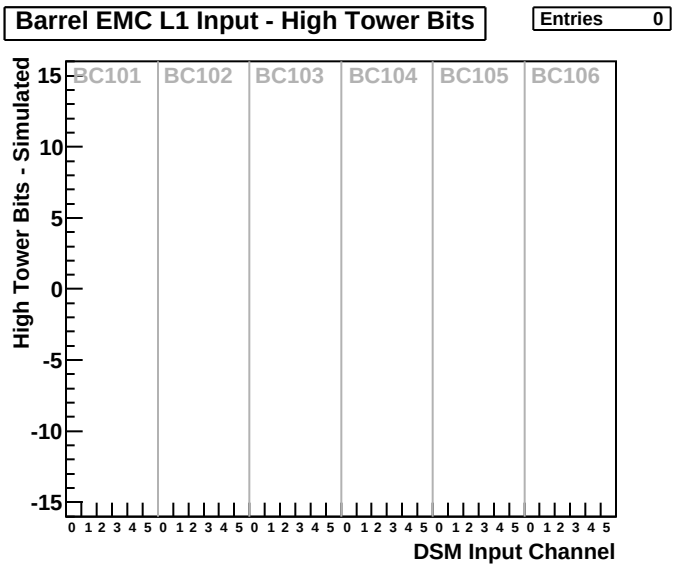

Barrel EMC L1 Input - Low Eta Sum
Entries 9886644
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

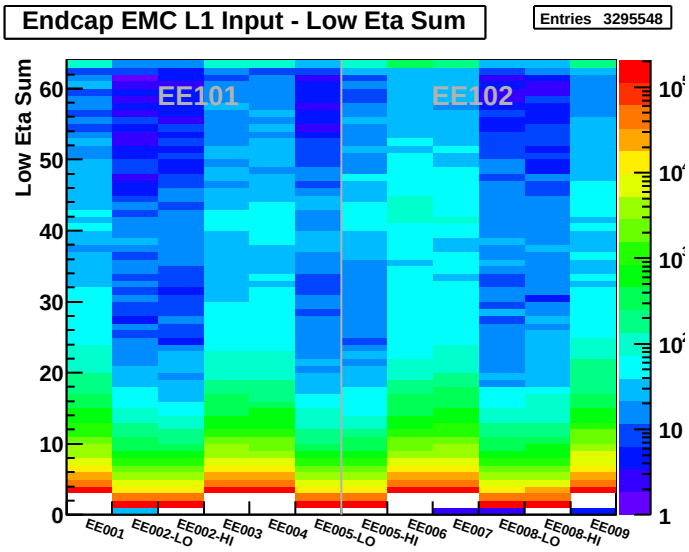

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

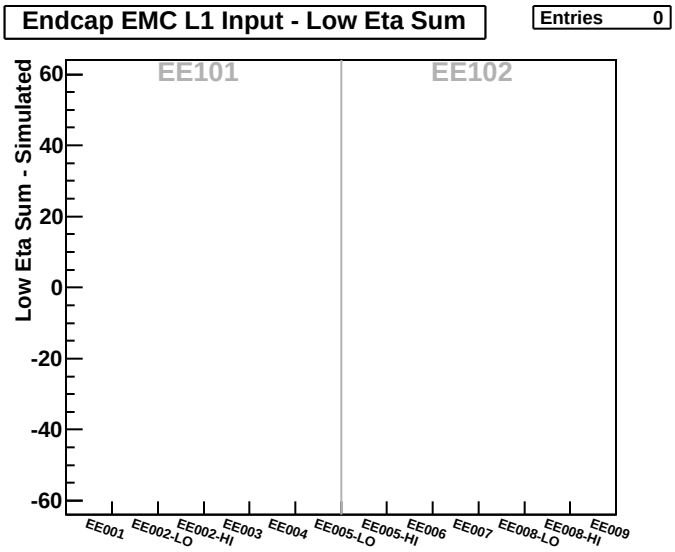

Barrel EMC L1 Input - High Eta Sum
Entries 9886644
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

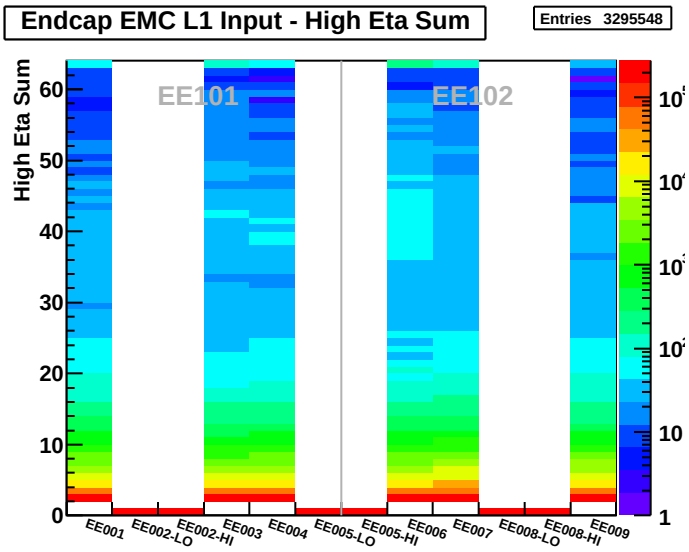

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

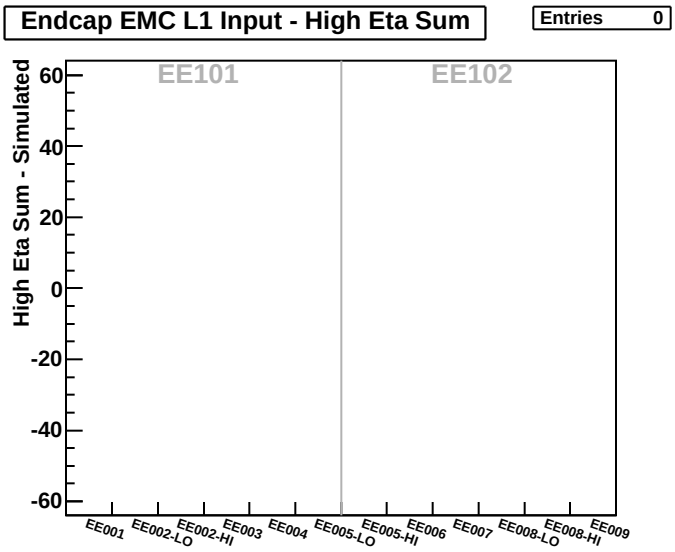

Barrel EMC L1 Input - High Tower Bits
Entries 9886644
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

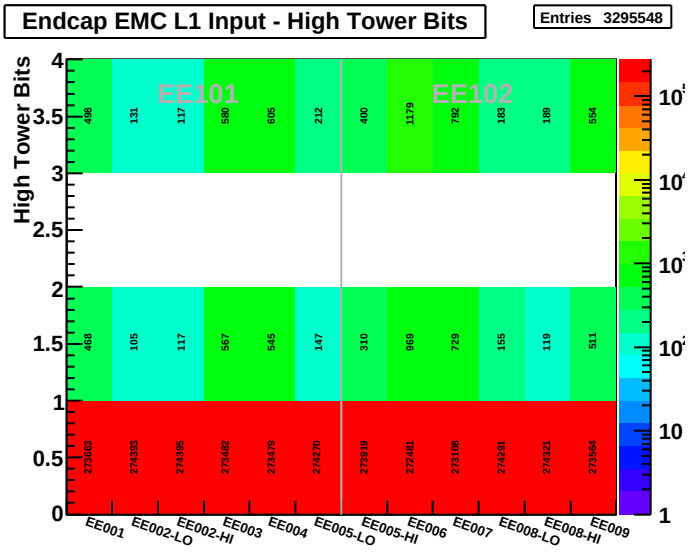

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

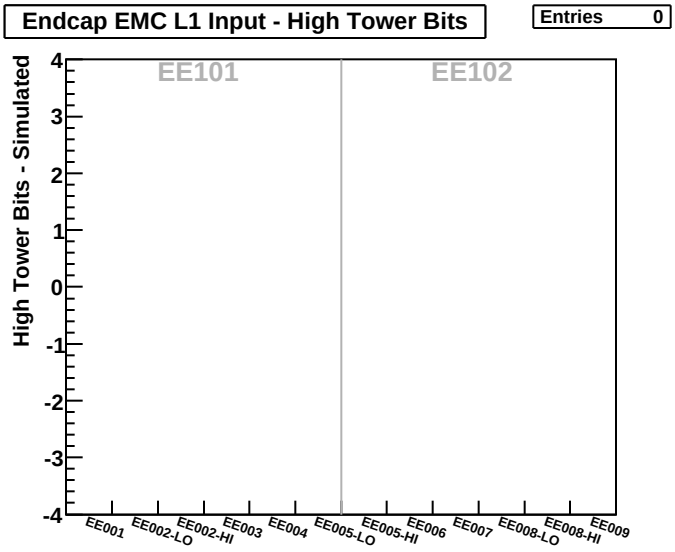

Endcap EMC L1 Input - Low Eta Sum
Entries 3295548
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

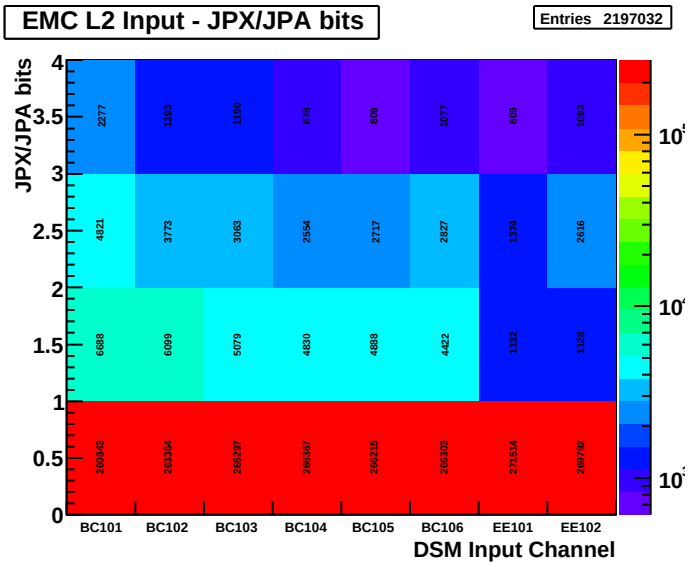

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

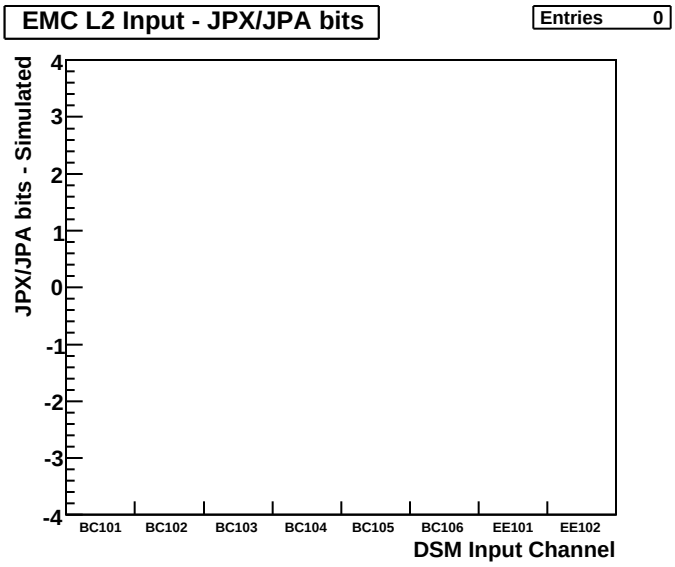

Endcap EMC L1 Input - High Eta Sum
Entries 3295548
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

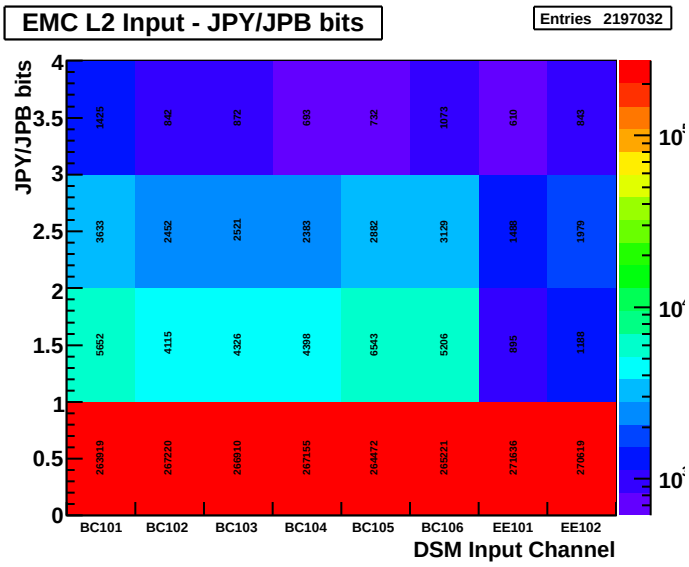

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

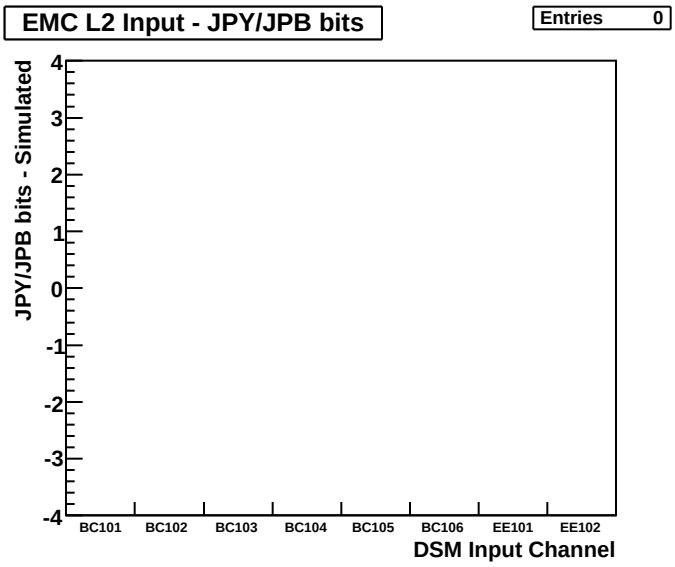

Endcap EMC L1 Input - High Tower Bits
Entries 3295548
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

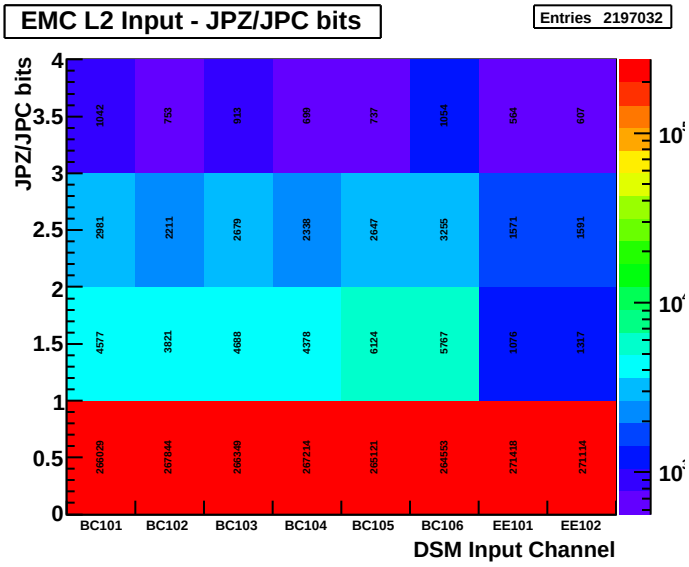

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

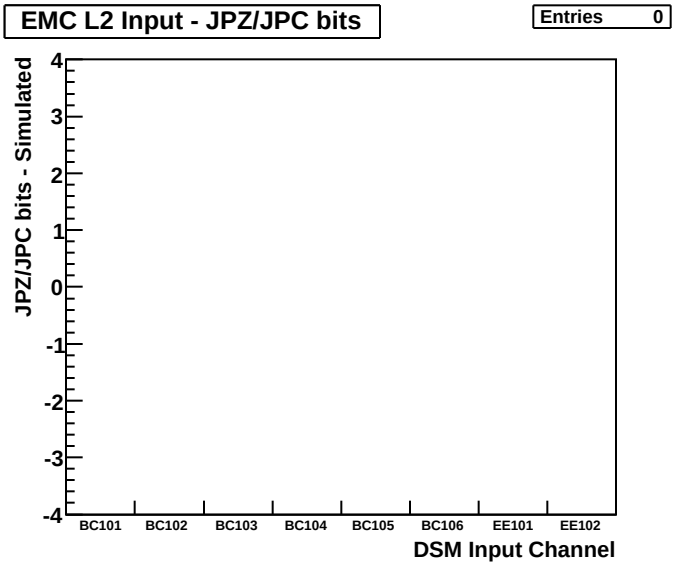

EMC L2 Input - JPX/JPA bits
Entries 2197032
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2277 1393 1180 878 809 1077 609 1093
4821 3773 3063 2554 2717 2827 1374 2616
6688 6099 5079 4830 4888 4422 1132 1128
260643 263364 265287 266367 266215 265303 271534 269792

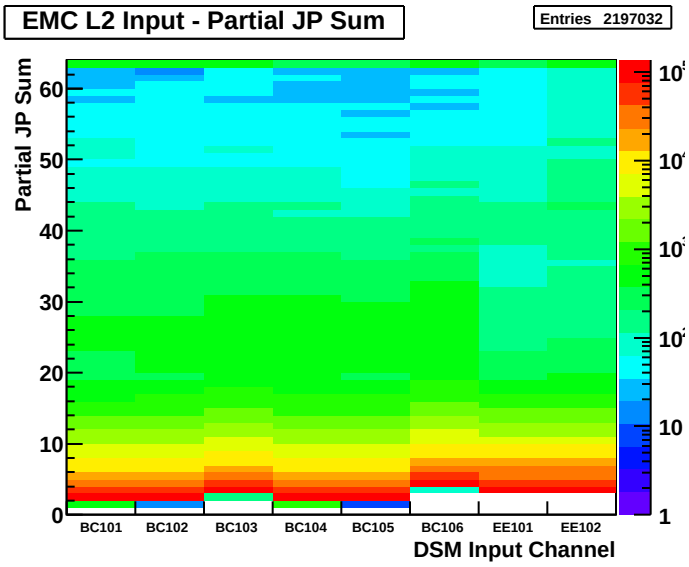

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

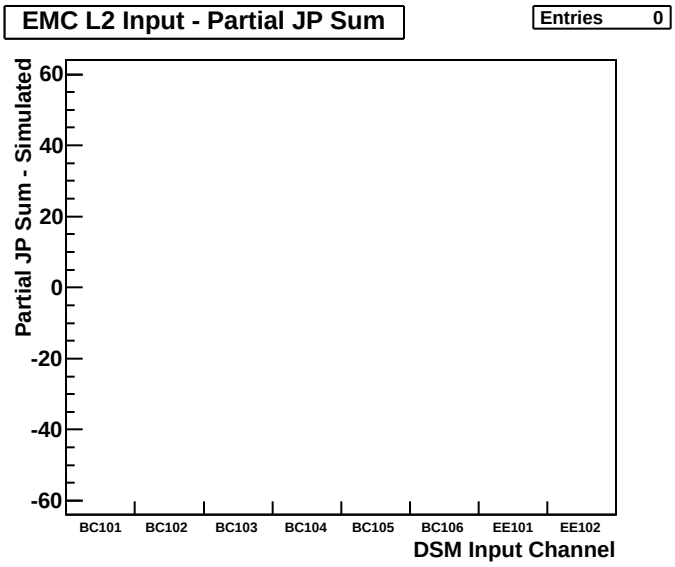

EMC L2 Input - JPY/JPB bits
Entries 2197032
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1425 842 872 698 732 1073 610 843
3633 2452 2521 2383 2882 3129 1488 1979
5652 4115 4226 4398 6543 5206 895 1188
263919 267220 266910 267155 264472 265221 271636 270619

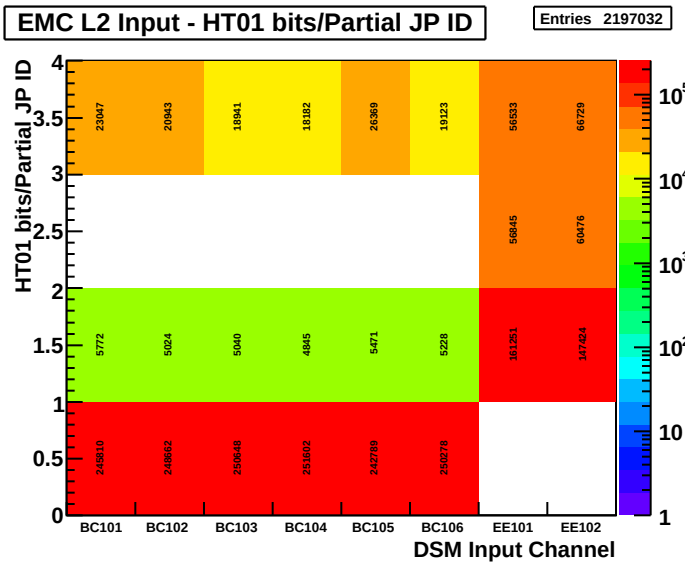

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

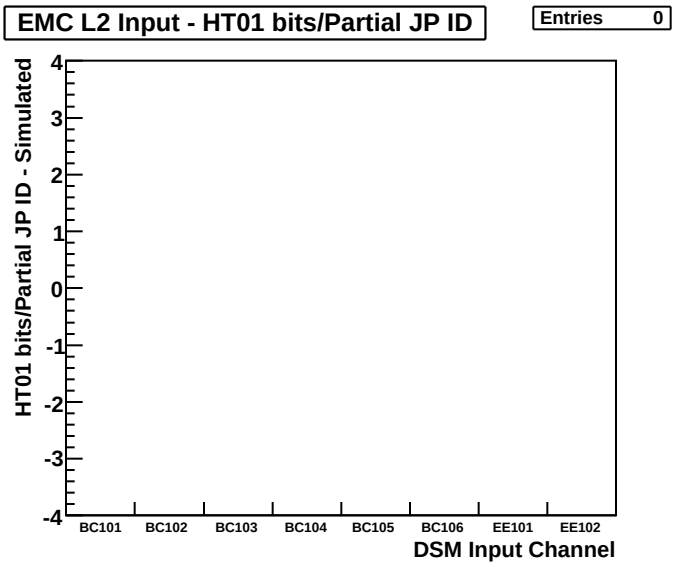

EMC L2 Input - JPZ/JPC bits
Entries 2197032
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1042 753 913 699 737 1054 564 607
2861 2211 2679 2338 2647 3255 1571 1591
4577 3821 4688 4378 6124 5767 1076 1317
266029 267344 266340 267214 265121 264553 271418 271114

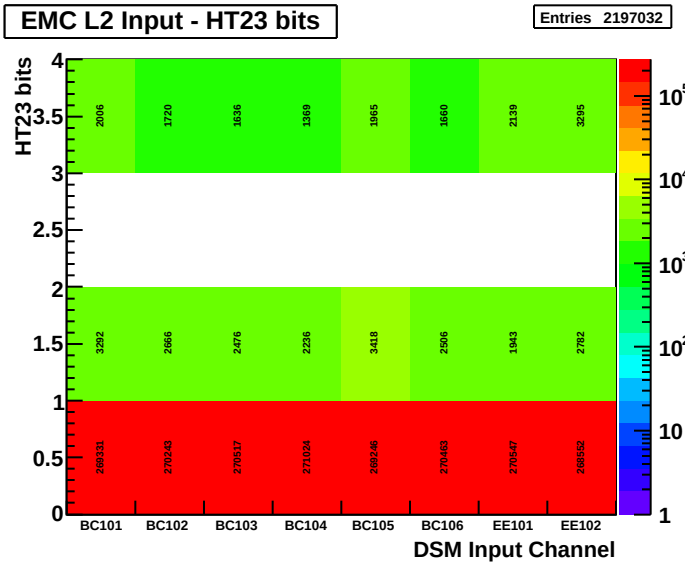

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

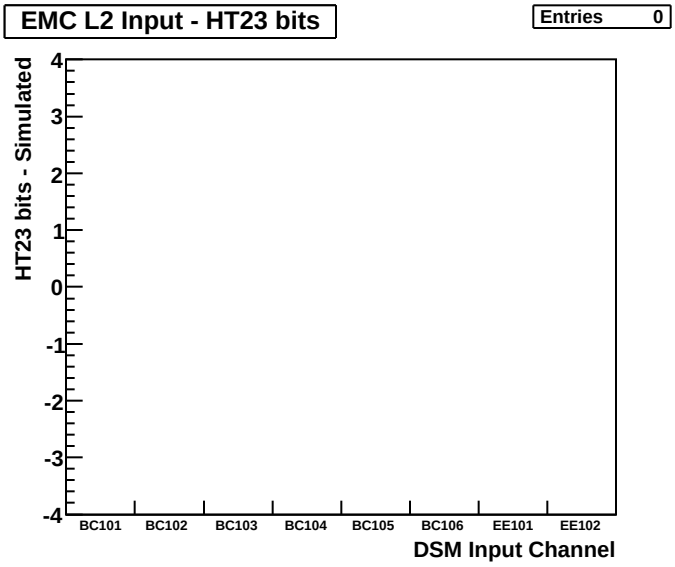

EMC L2 Input - Partial JP Sum
Entries 2197032
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

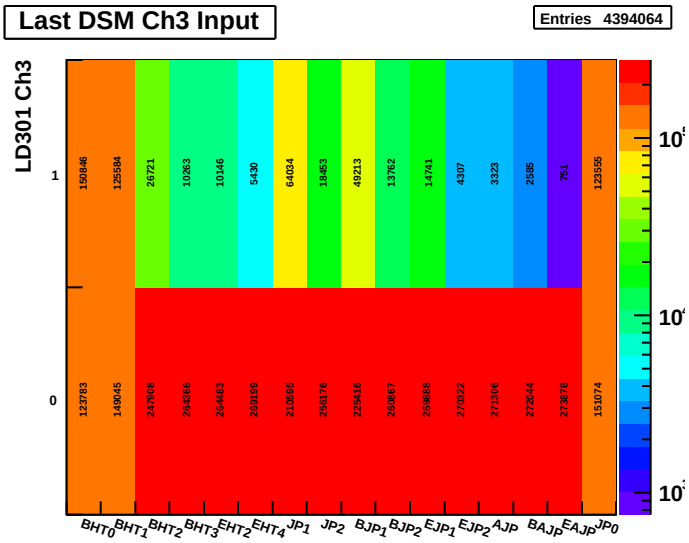

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

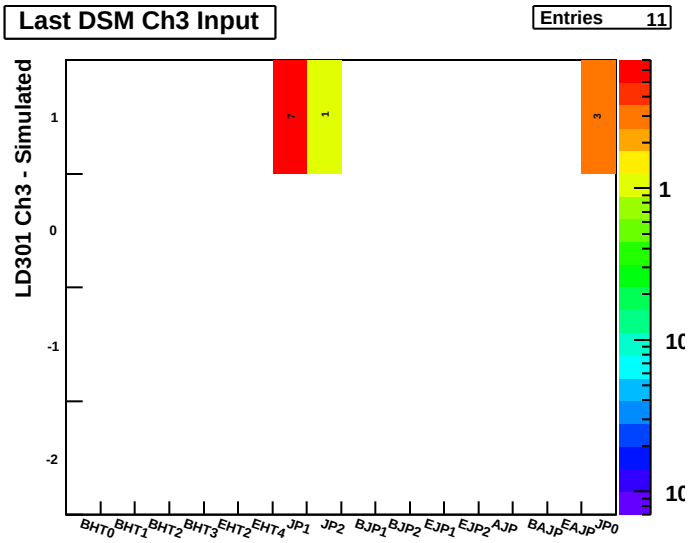

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2197032
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

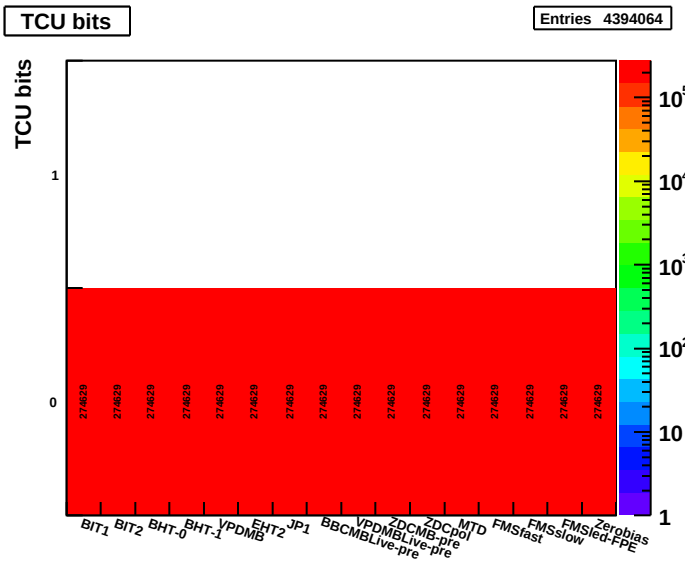

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

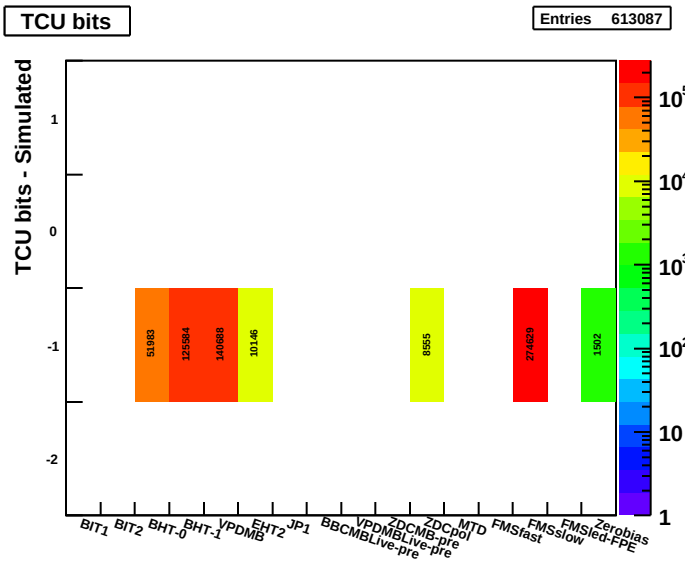

EMC L2 Input - HT23 bits
Entries 2197032
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

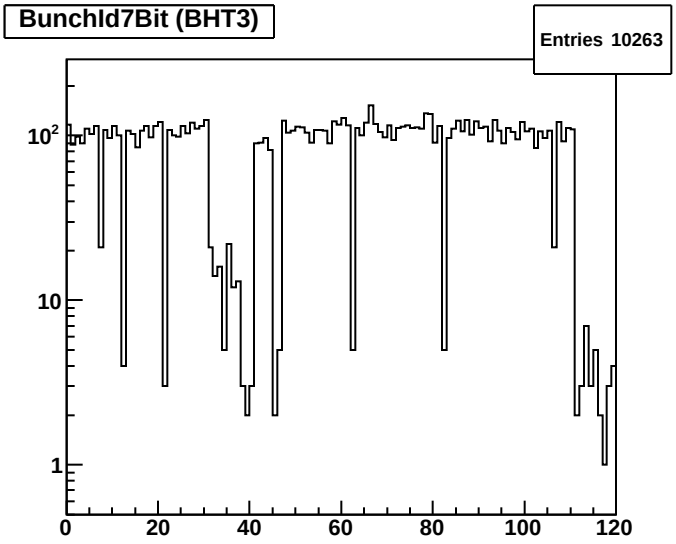

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

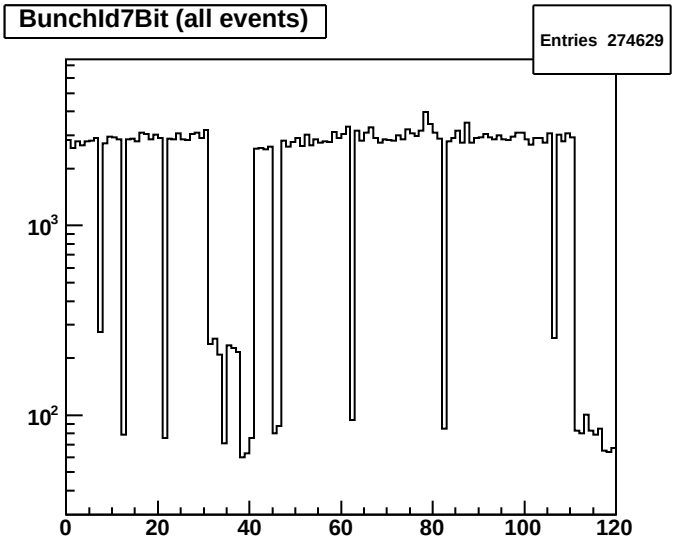

Last DSM Ch3 Input
Entries 4394064
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

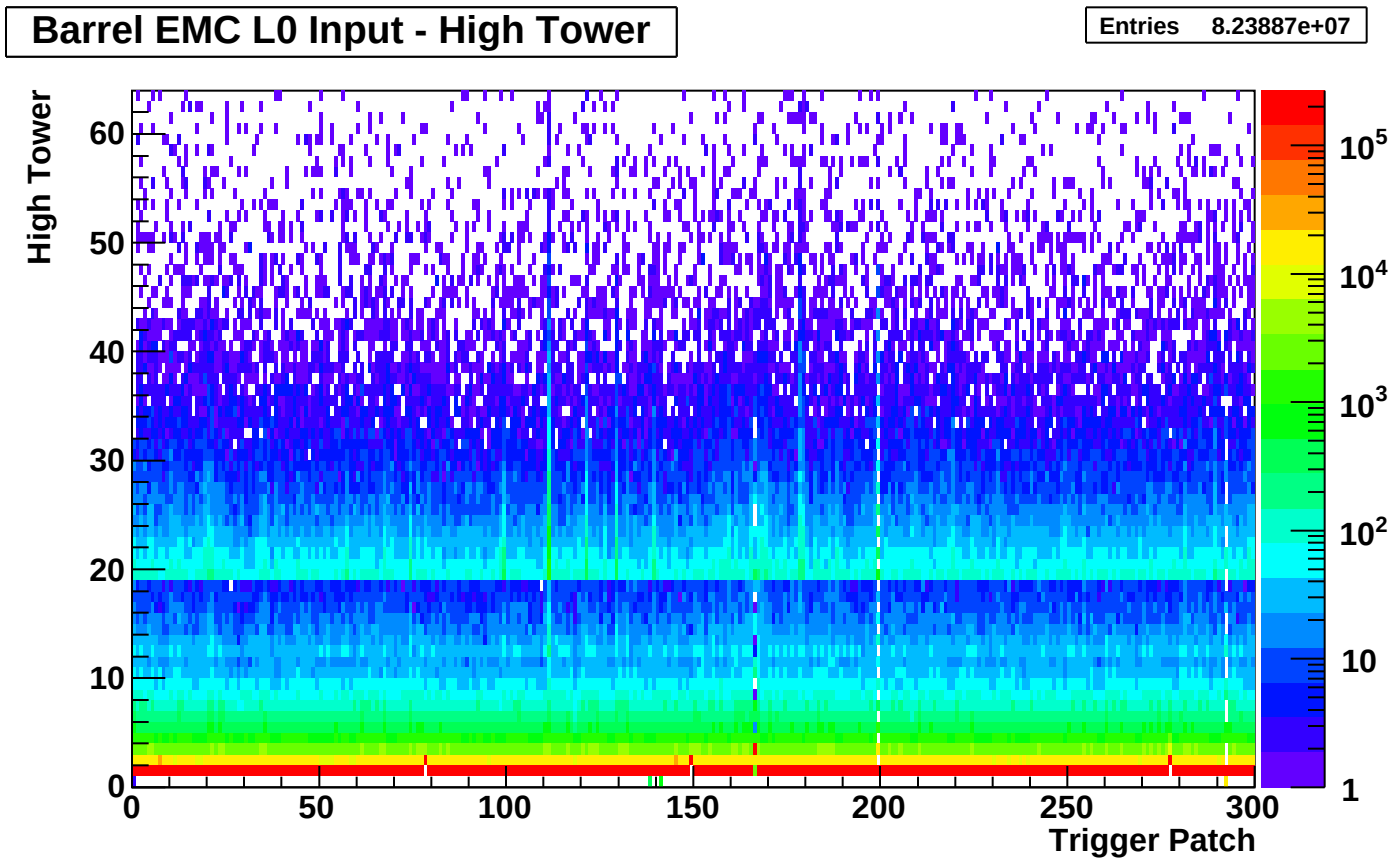

Last DSM Ch3 Input
Entries 11
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

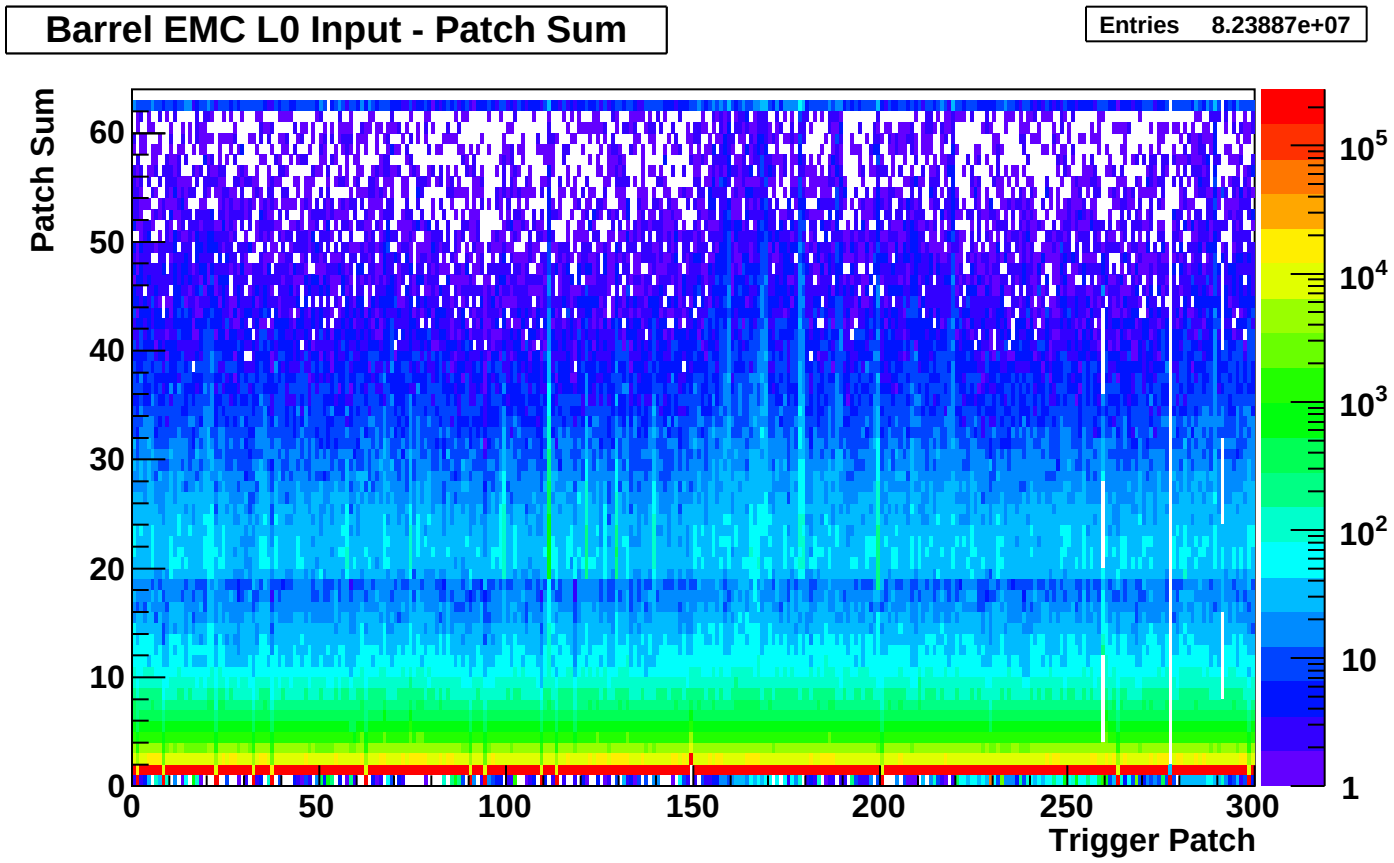

TCU bits
Entries 4394064
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

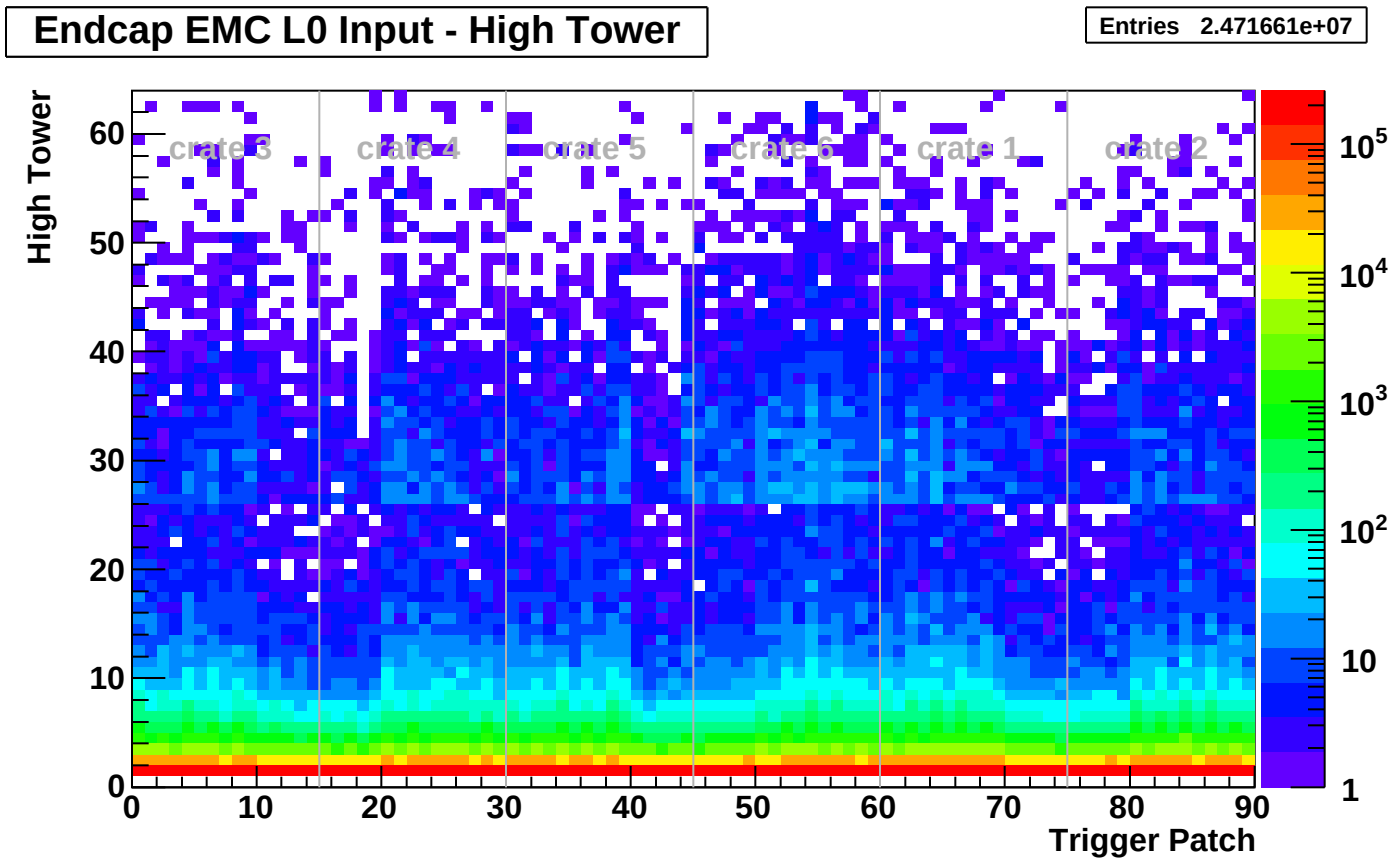

TCU bits
Entries 613087
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

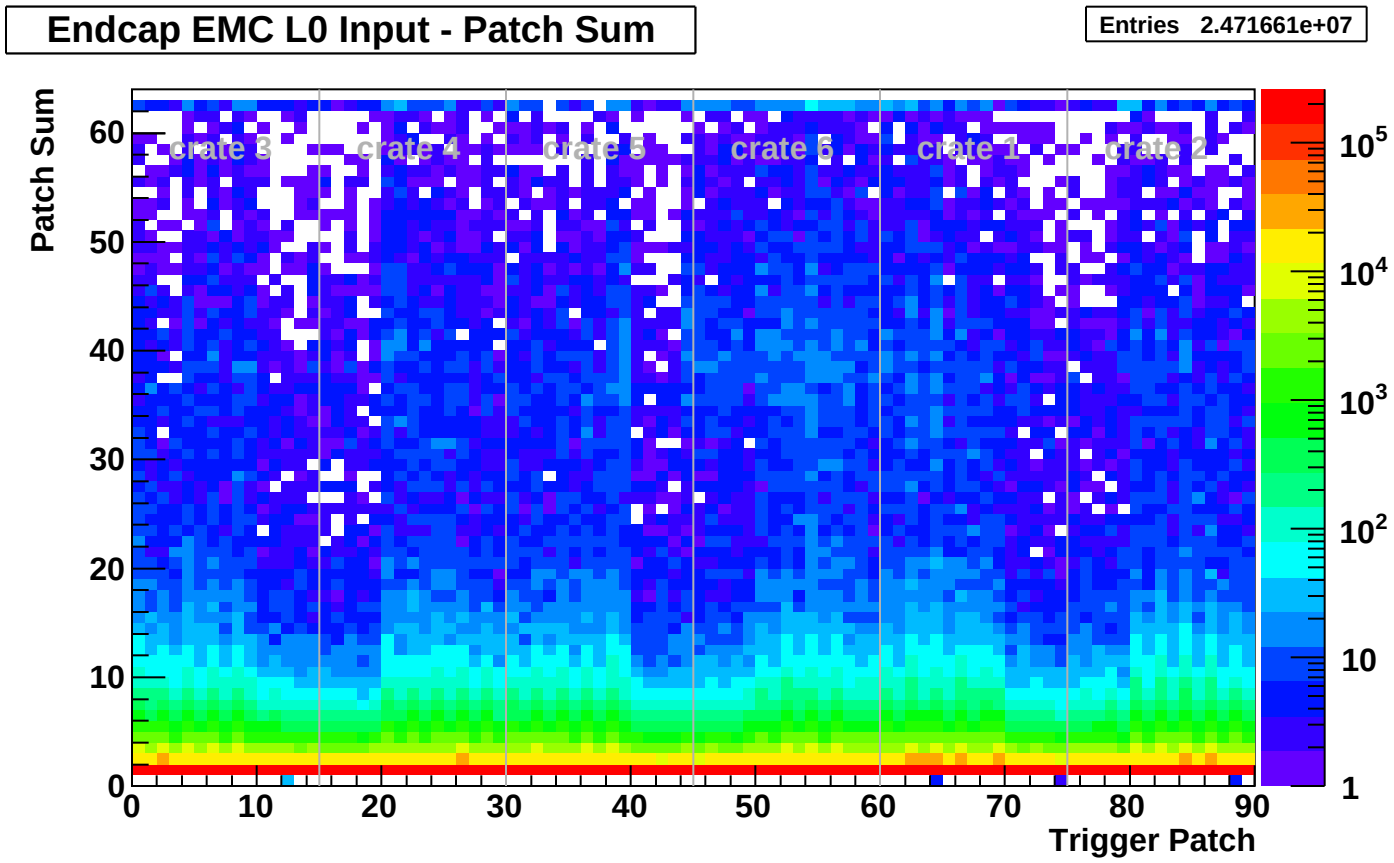

BunchId7Bit (BHT3)
Entries 10263

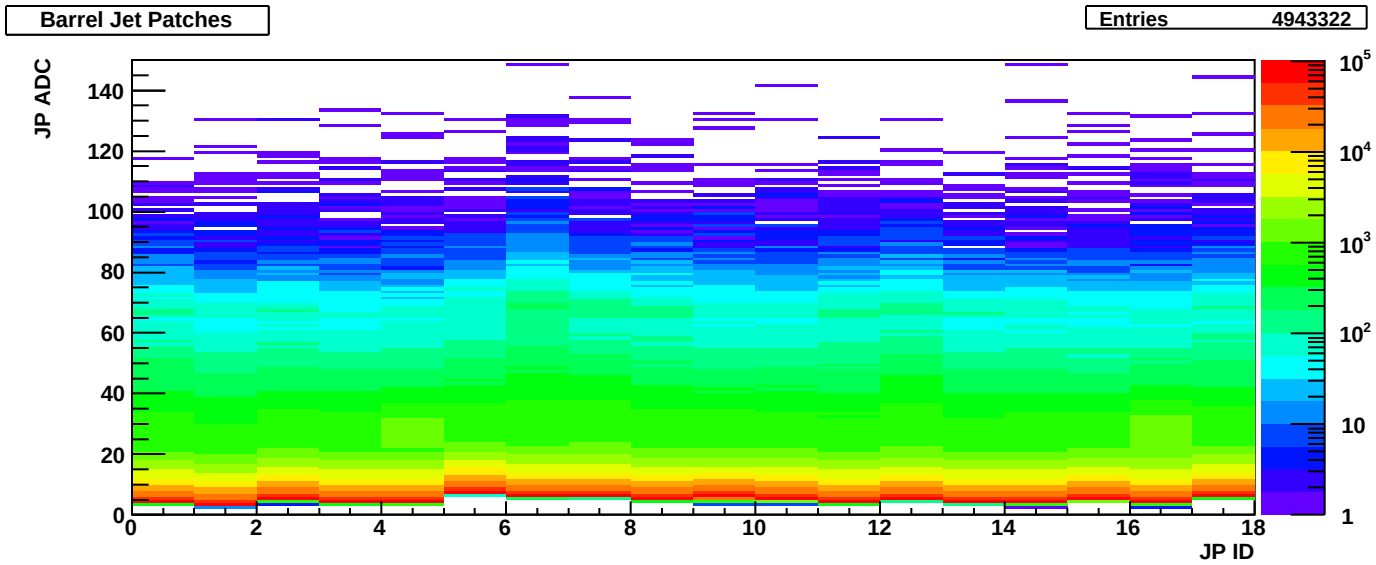

BunchId7Bit (all events)
Entries 274629

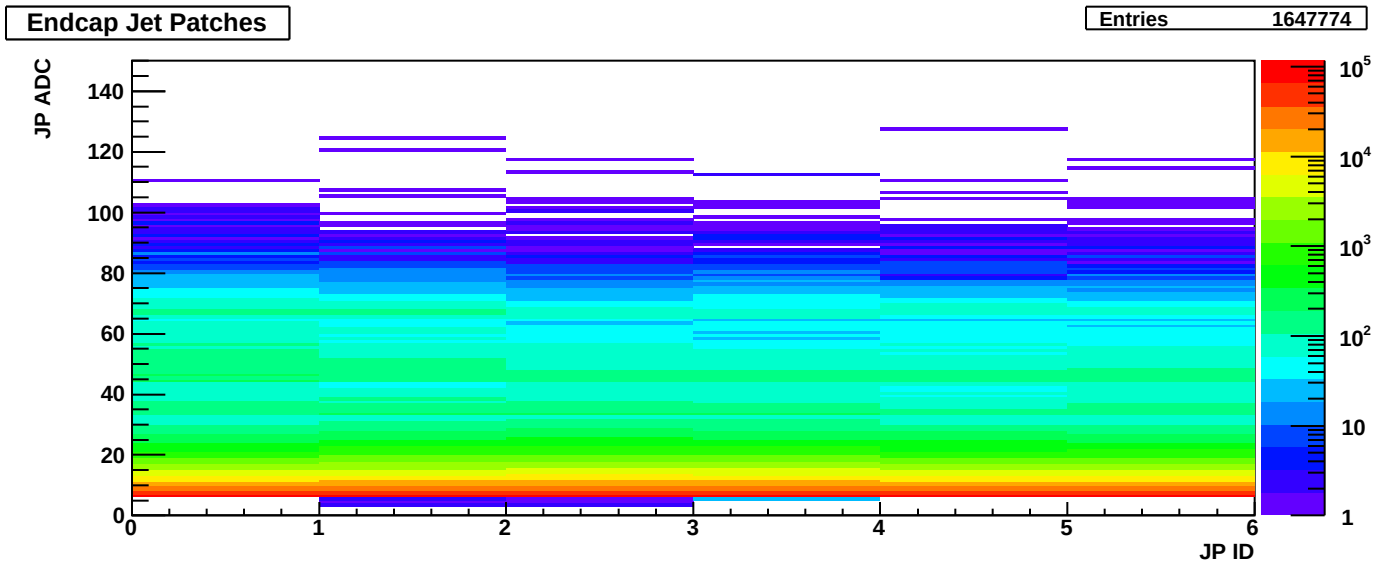

Barrel EMC L0 Input - High Tower
Entries 8.23887e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

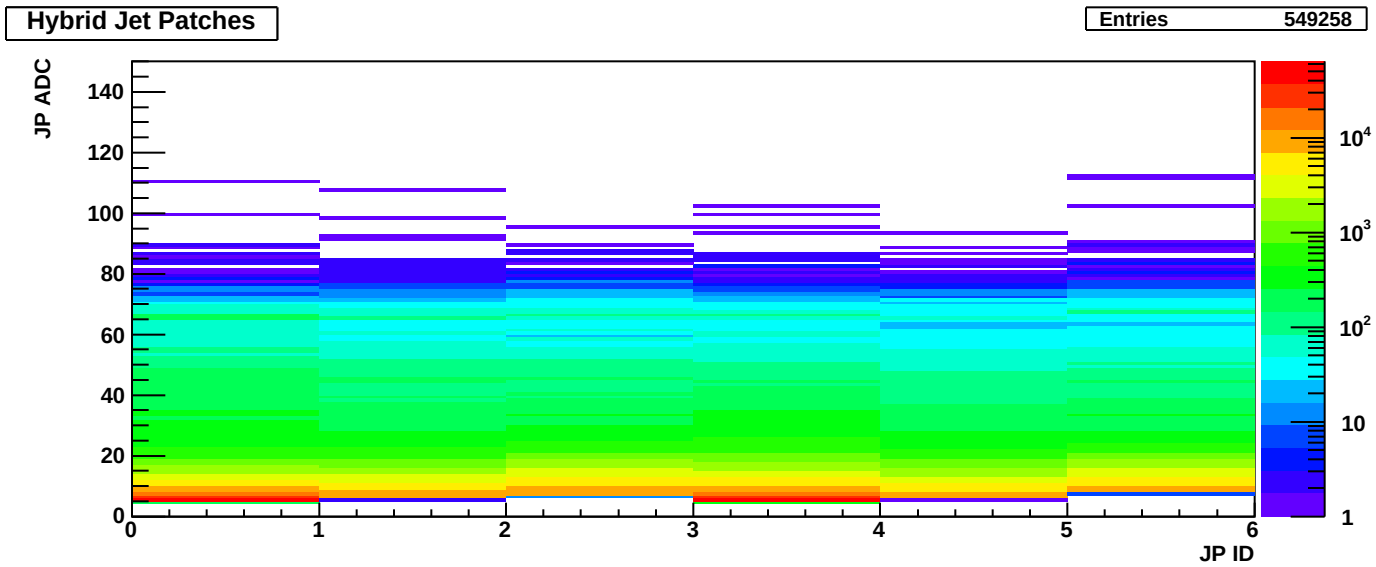

Barrel EMC L0 Input - Patch Sum
Entries 8.23887e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

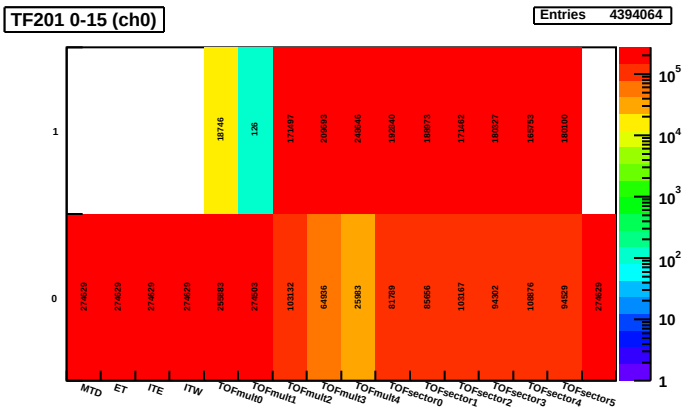

Endcap EMC L0 Input - High Tower
Entries 2.471661e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

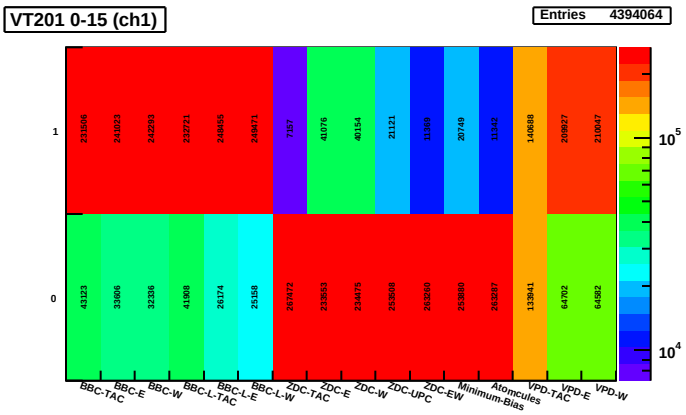

Endcap EMC L0 Input - Patch Sum
Entries 2.471661e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

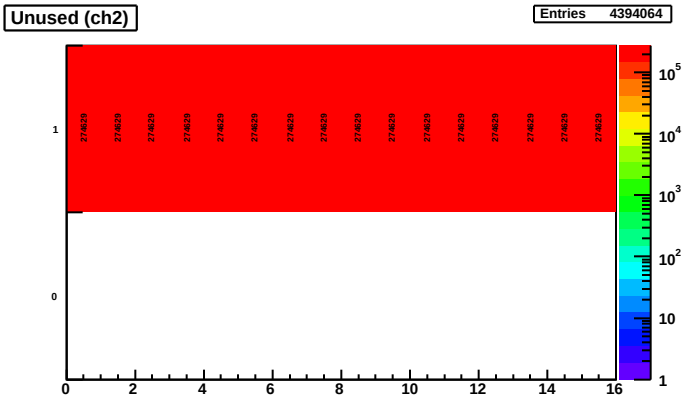

Barrel Jet Patches
Entries 4943322
JP ADC
JP ID

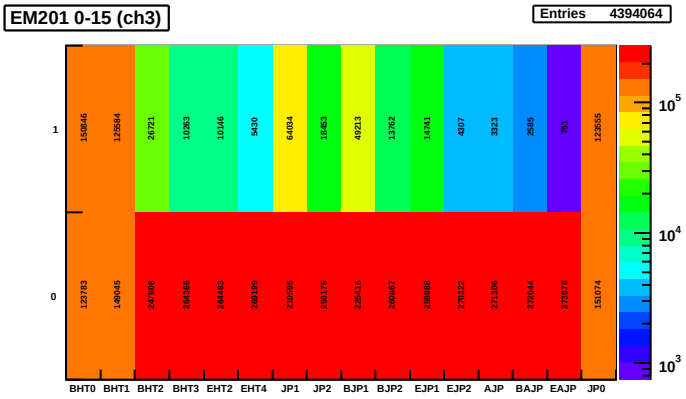

Endcap Jet Patches
Entries 1647774
JP ADC
JP ID

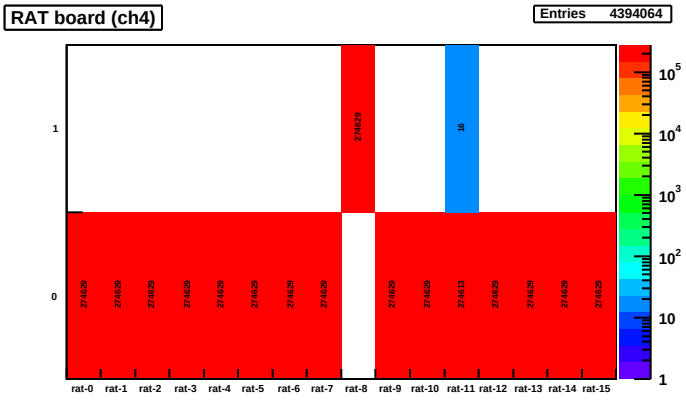

Hybrid Jet Patches
Entries 549258
JP ADC
JP ID

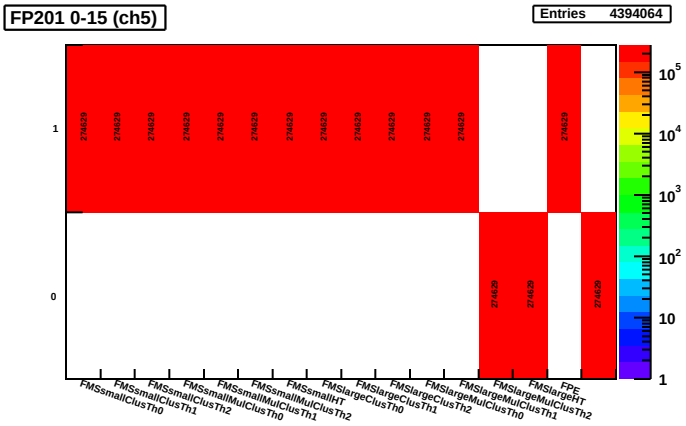

TF201 0-15 (ch0)
Entries 4394064
MTD
ET
ITE
ITW
TOFmult0
TOFmult1
TOFmult2
TOFmult3
TOFmult4
TOFsector0
TOFsector1
TOFsector2
TOFsector3
TOFsector4
TOFsector5

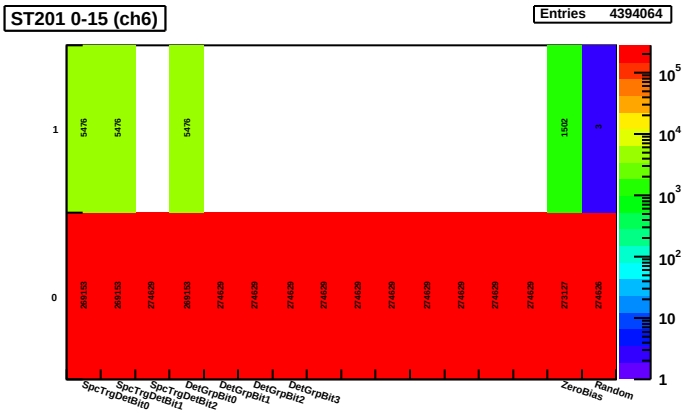

VT201 0-15 (ch1)
Entries 4394064
BBC-TAC
BBC-E
BBC-W
BBC-L-TAC
BBC-L-E
BBC-L-W
ZDC-TAC
ZDC-E
ZDC-W
ZDC-UPC
ZDC-EW
Minimum-Bias
Atomcules
VPD-TAC
VPD-E
VPD-W

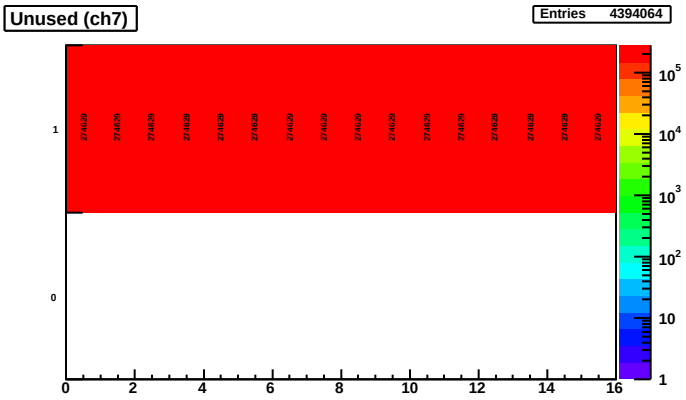

Unused (ch2)
Entries 4394064

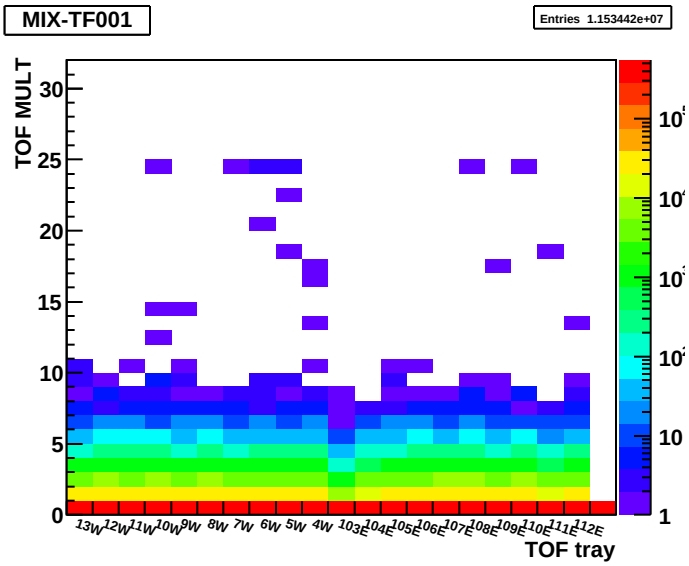

EM201 0-15 (ch3)
Entries 4394064
BHT0
BHT1
BHT2
BHT3
EHT2
EHT4
JP1
JP2
BJP1
BJP2
EJP1
EJP2
AJP
BAJP
EAJP
JP0

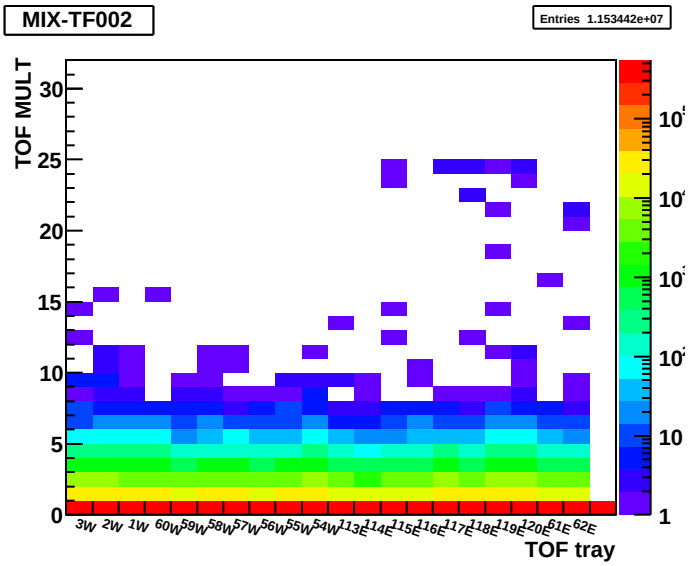

RAT board (ch4)
Entries 4394064
rat-0
rat-1
rat-2
rat-3
rat-4
rat-5
rat-6
rat-7
rat-8
rat-9
rat-10
rat-11
rat-12
rat-13
rat-14
rat-15

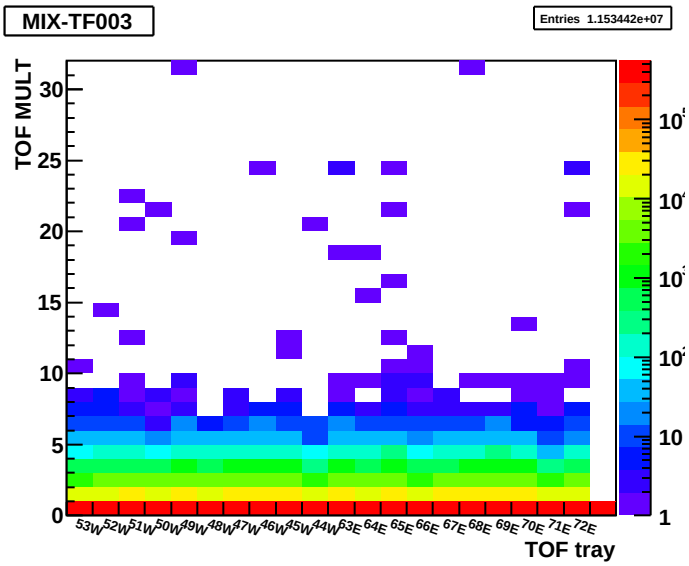

FP201 0-15 (ch5)
Entries 4394064
FMSsmallClusTh0
FMSsmallClusTh1
FMSsmallClusTh2
FMSsmallMulClusTh0
FMSsmallMulClusTh1
FMSsmallMulClusTh2
FMSsmallHT
FMSlargeClusTh0
FMSlargeClusTh1
FMSlargeClusTh2
FMSlargeMulClusTh0
FMSlargeMulClusTh1
FMSlargeMulClusTh2
FMSlargeHT
FPE

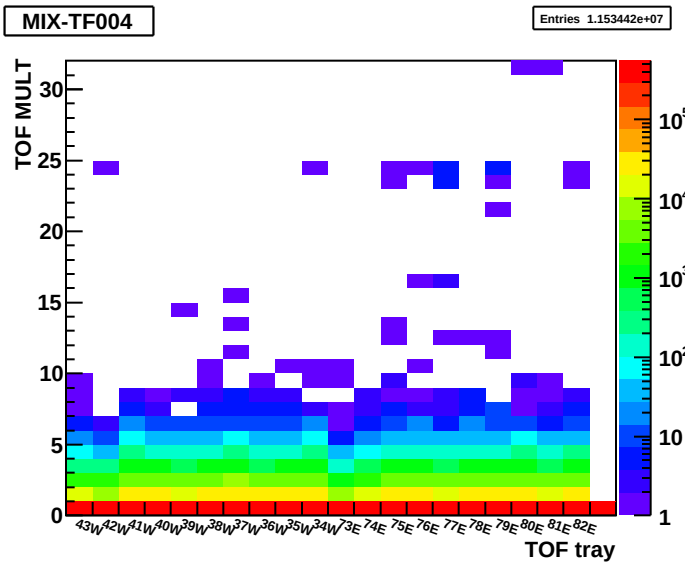

ST201 0-15 (ch6)
Entries 4394064
SpcTrgDetBit0
SpcTrgDetBit1
SpcTrgDetBit2
DetGrpBit0
DetGrpBit1
DetGrpBit2
DetGrpBit3
ZeroBias
Random

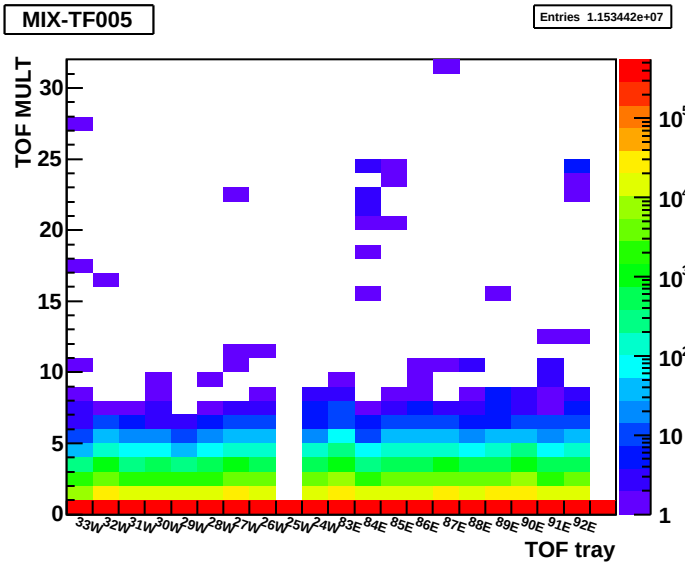

Unused (ch7)
Entries 4394064

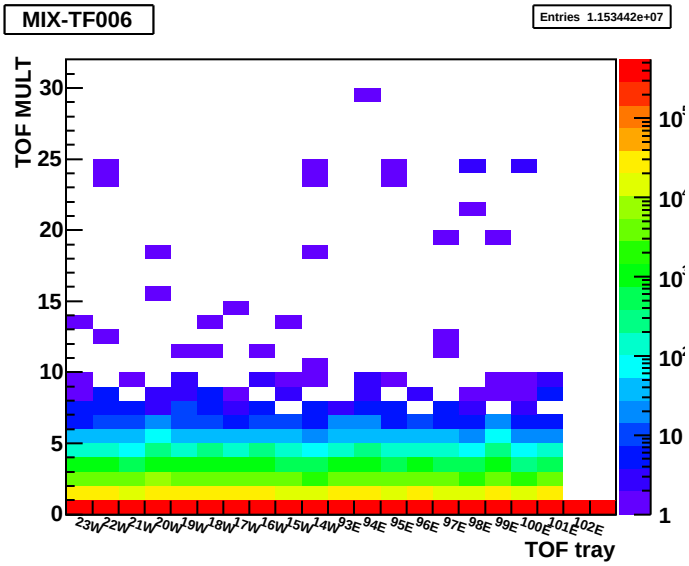

MIX-TF001
Entries 1.153442e+07
TOF MULT
TOF tray

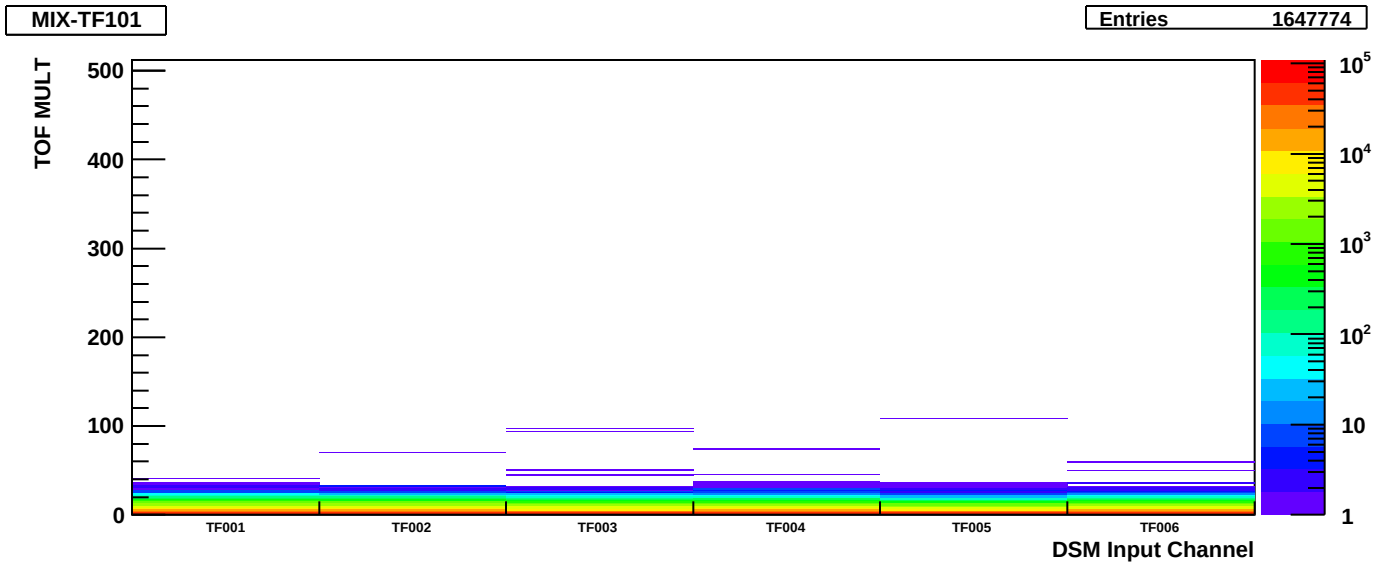

MIX-TF002
Entries 1.153442e+07
TOF MULT
TOF tray

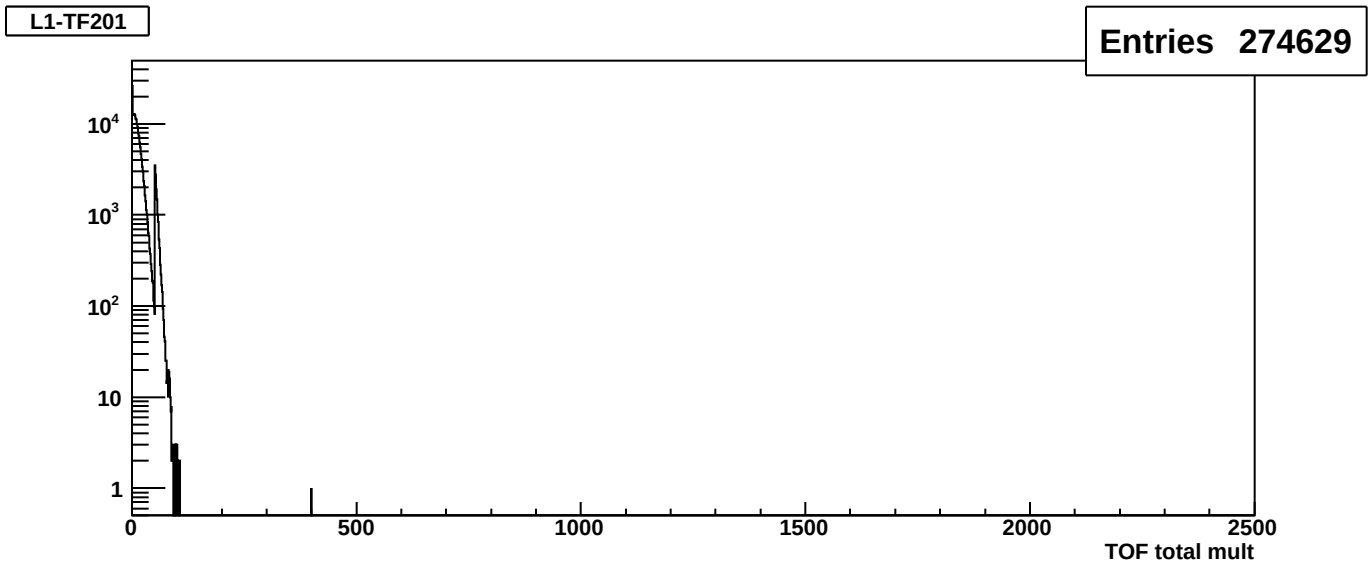

MIX-TF003
Entries 1.153442e+07
TOF MULT
TOF tray

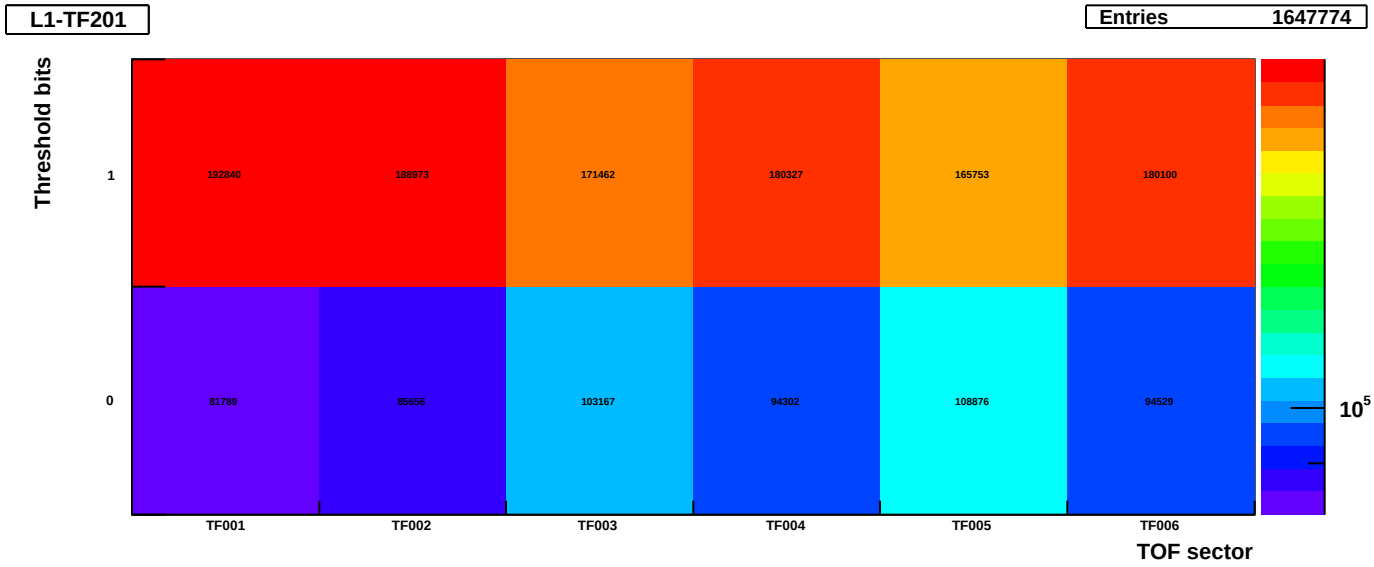

MIX-TF004
Entries 1.153442e+07
TOF MULT
TOF tray

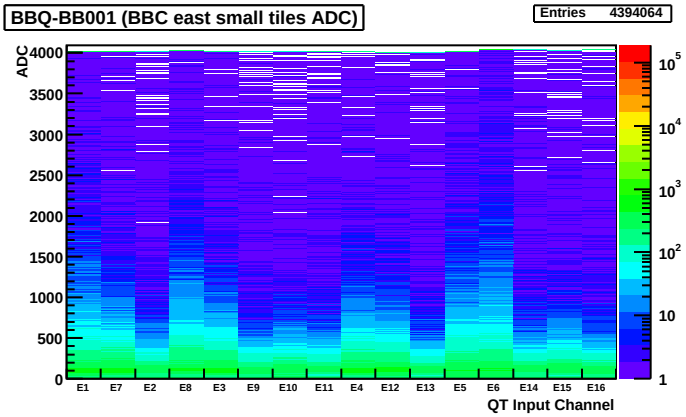

MIX-TF005
Entries 1.153442e+07
TOF MULT
TOF tray

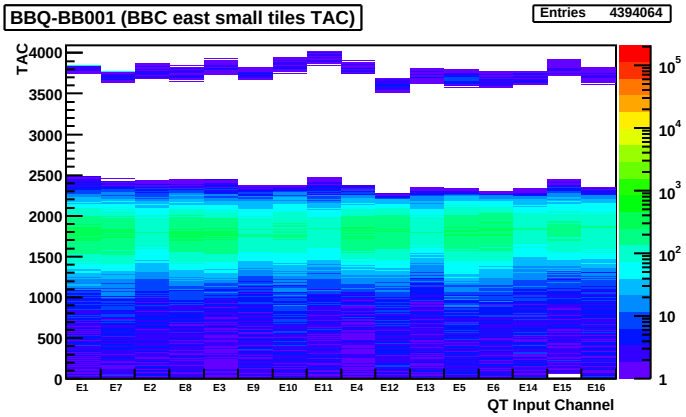

MIX-TF006
Entries 1.153442e+07
TOF MULT
TOF tray

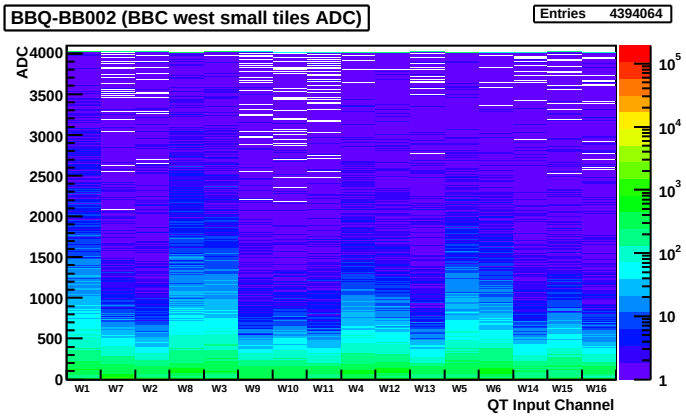

MIX-TF101
Entries 1647774
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

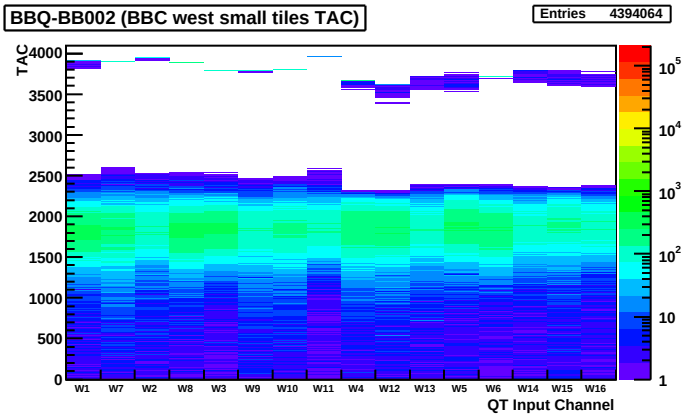

L1-TF201
Entries 274629
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

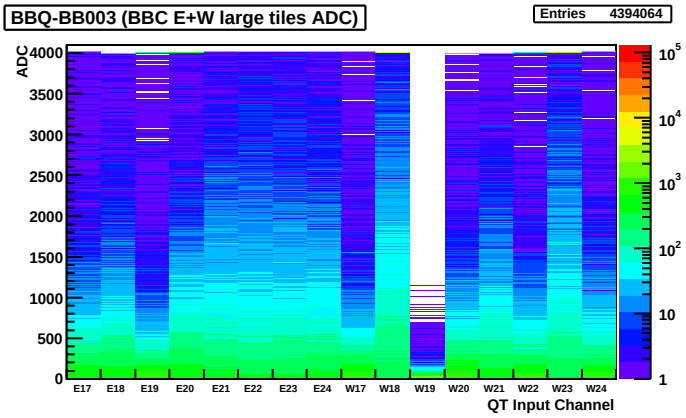

L1-TF201
Entries 1647774
Threshold bits
1
0
192840
188973
171462
180327
165753
180100
81789
85656
103167
94302
108876
94529
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

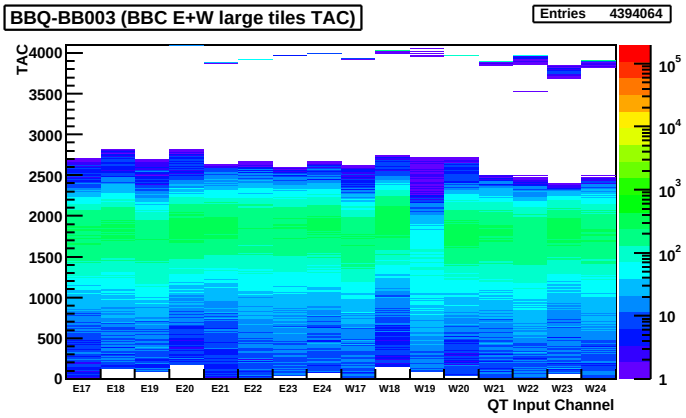

BBQ-BB001 (BBC east small tiles ADC)
Entries 4394064
ADC
QT Input Channel

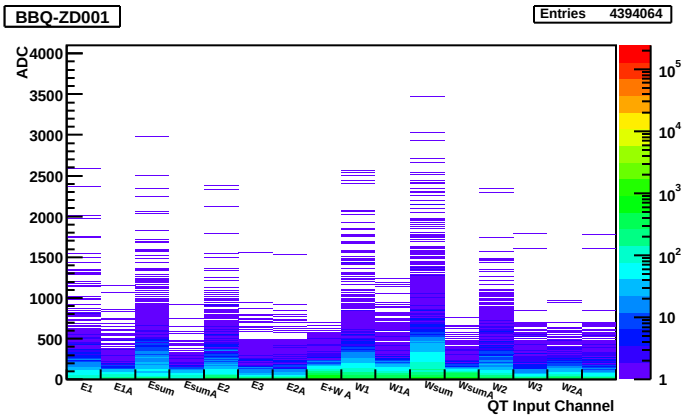

BBQ-BB001 (BBC east small tiles TAC)
Entries 4394064
TAC
QT Input Channel

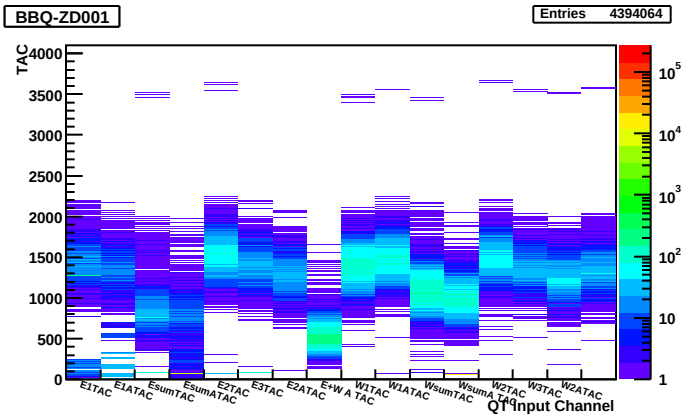

BBQ-BB002 (BBC west small tiles ADC)
Entries 4394064
ADC
QT Input Channel

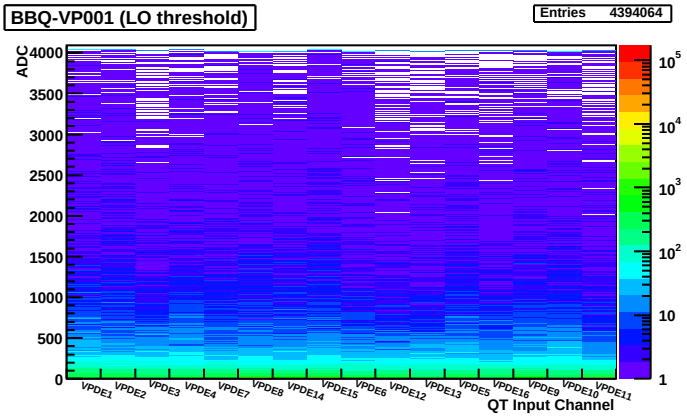

BBQ-BB002 (BBC west small tiles TAC)
Entries 4394064
TAC
QT Input Channel

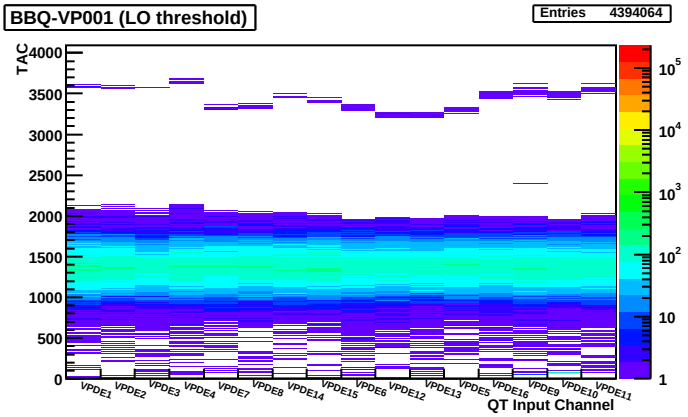

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4394064
ADC
QT Input Channel

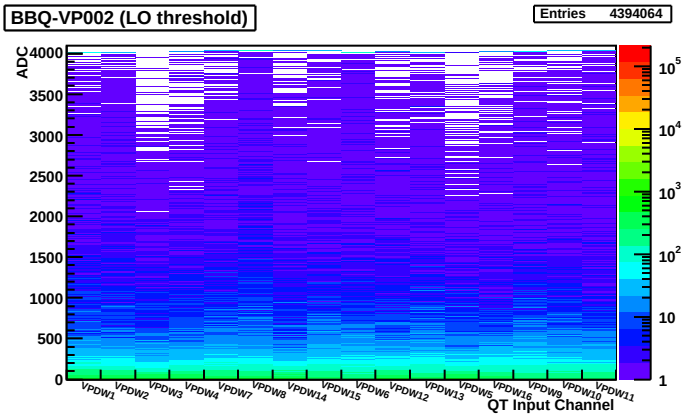

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4394064
TAC
QT Input Channel

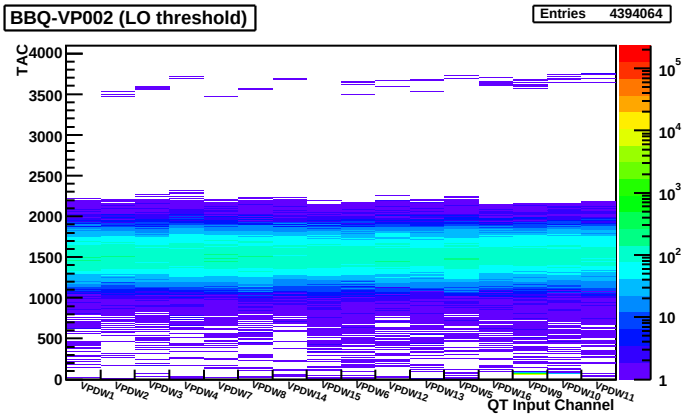

BBQ-ZD001
Entries 4394064
ADC
QT Input Channel

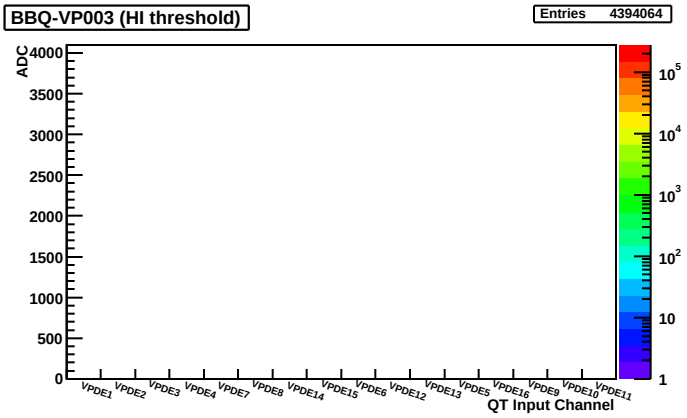

BBQ-ZD001
Entries 4394064
TAC
QT Input Channel

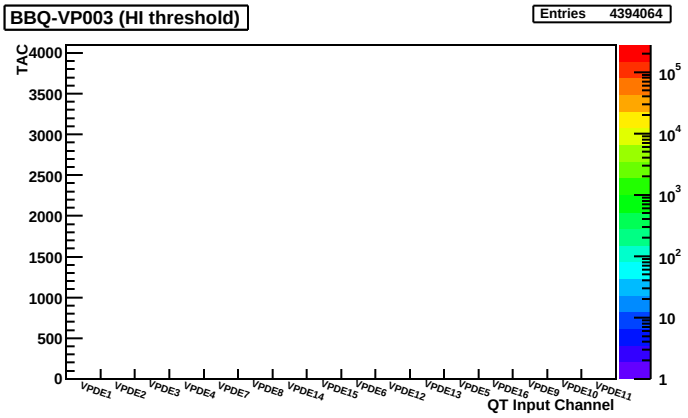

BBQ-VP001 (LO threshold)
Entries 4394064
ADC
QT Input Channel

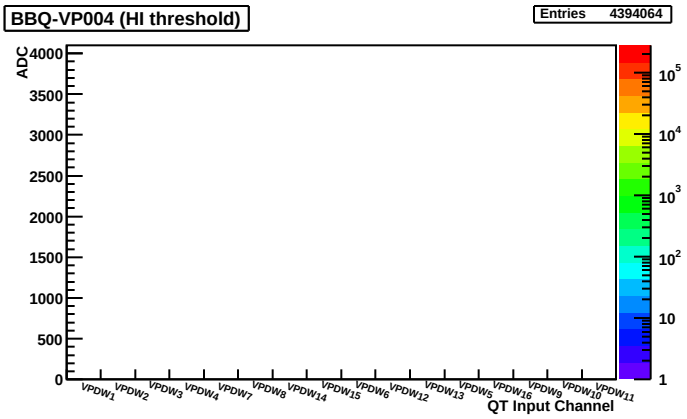

BBQ-VP001 (LO threshold)
Entries 4394064
TAC
QT Input Channel

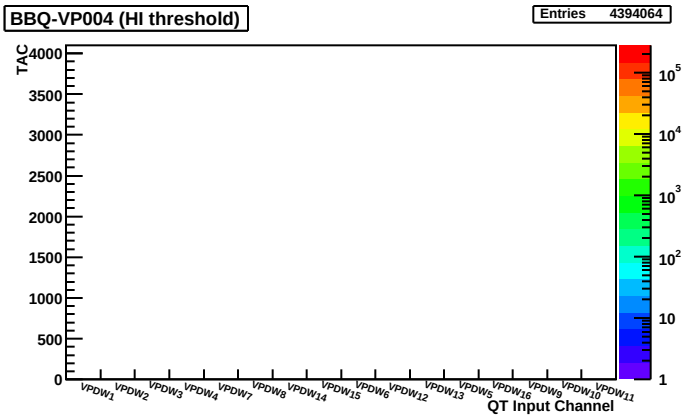

BBQ-VP002 (LO threshold)
Entries 4394064
ADC
QT Input Channel

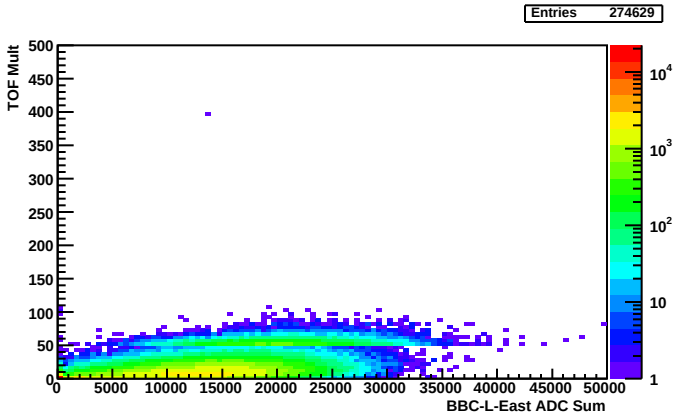

BBQ-VP002 (LO threshold)
Entries 4394064
TAC
QT Input Channel

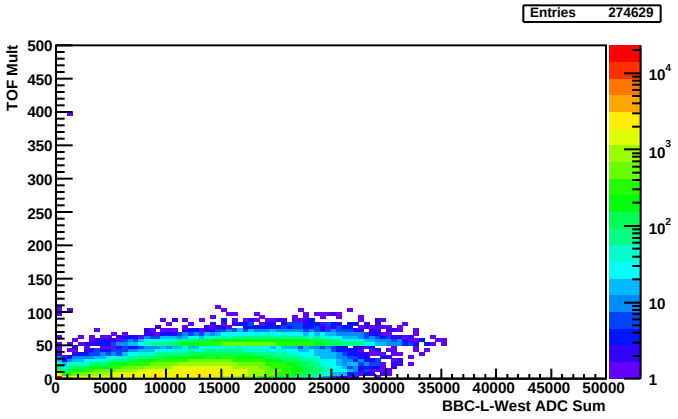

BBQ-VP003 (HI threshold)
Entries 4394064
ADC
QT Input Channel

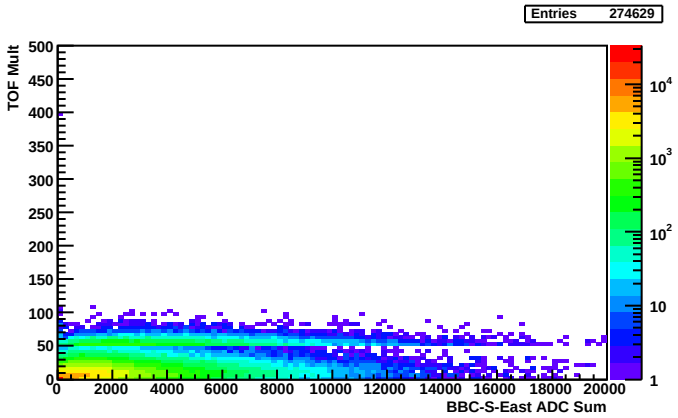

BBQ-VP003 (HI threshold)
Entries 4394064
TAC
QT Input Channel

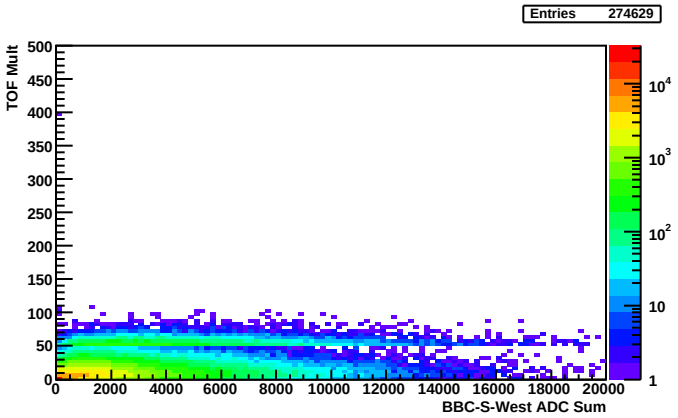

BBQ-VP004 (HI threshold)
Entries 4394064
ADC
QT Input Channel

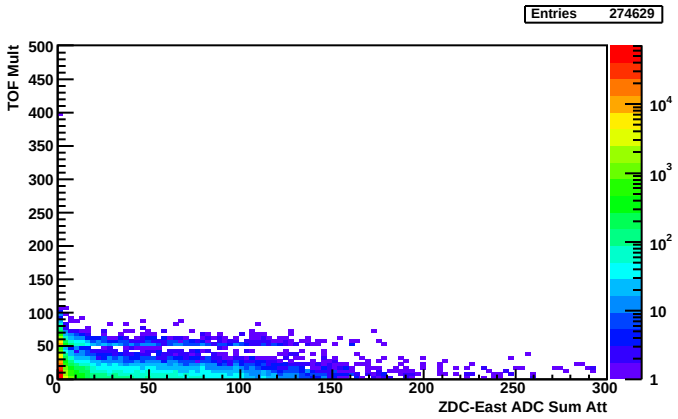

BBQ-VP004 (HI threshold)
Entries 4394064
TAC
QT Input Channel

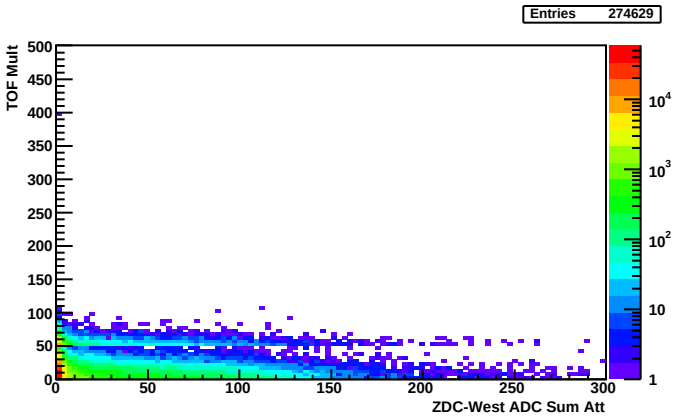

Entries 274629
TOF Mult
BBC-L-East ADC Sum

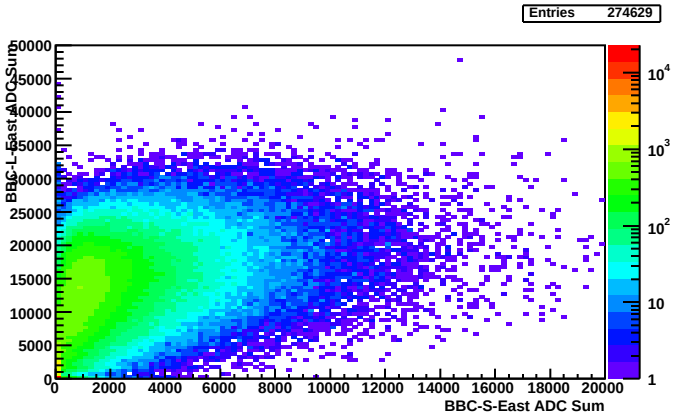

Entries 274629
TOF Mult
BBC-L-West ADC Sum

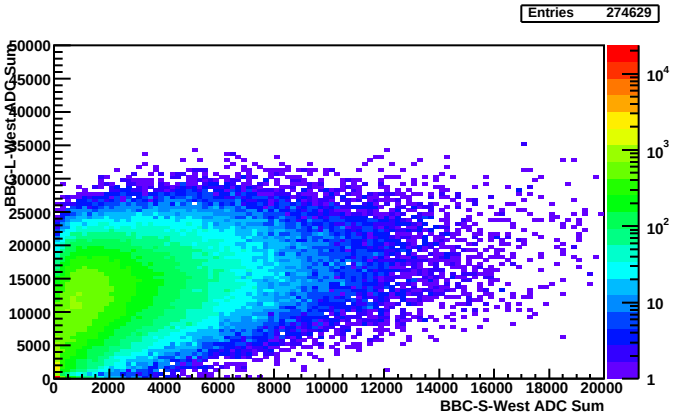

Entries 274629
TOF Mult
BBC-S-East ADC Sum

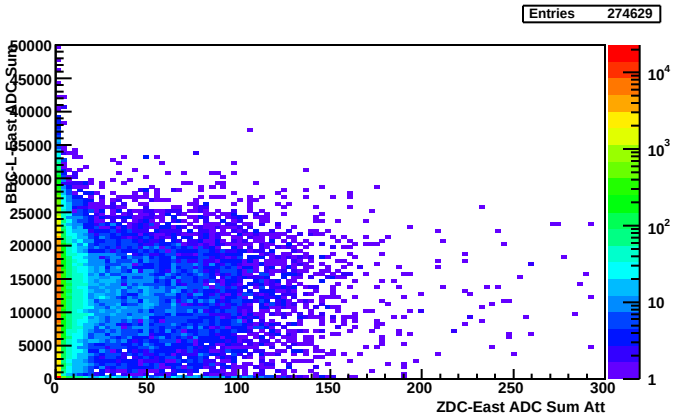

Entries 274629
TOF Mult
BBC-S-West ADC Sum

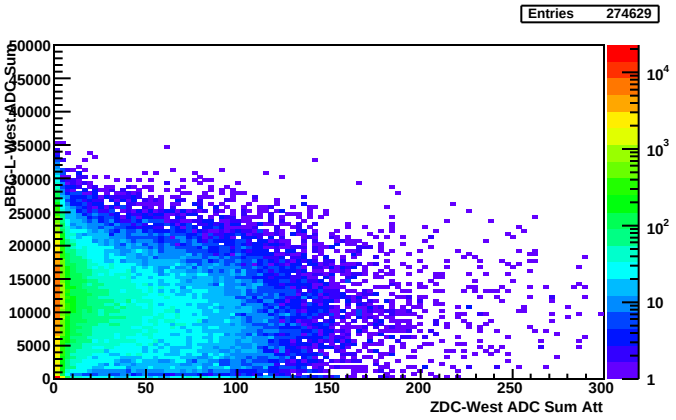

Entries 274629
TOF Mult
ZDC-East ADC Sum Att

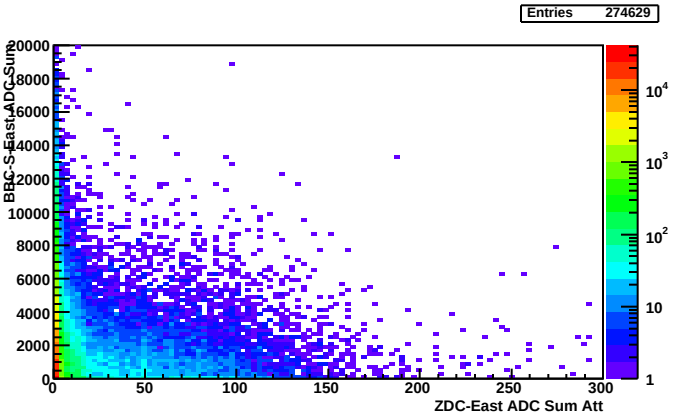

Entries 274629
TOF Mult
ZDC-West ADC Sum Att

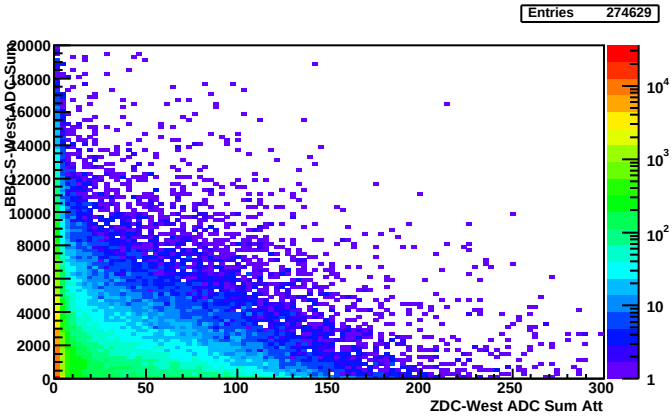

Entries 274629
BBC-L-East ADC Sum
BBC-S-East ADC Sum

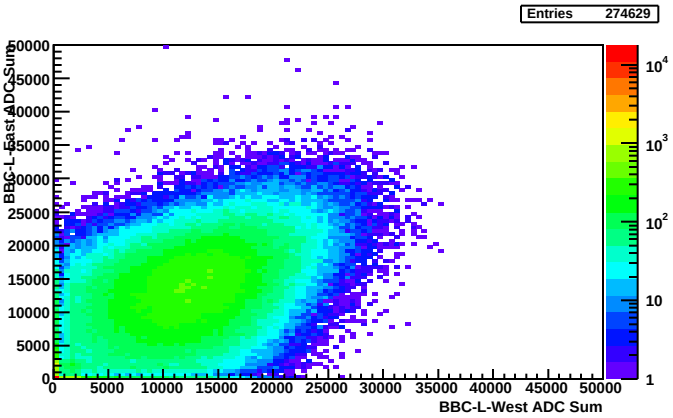

Entries 274629
BBC-L-West ADC Sum
BBC-S-West ADC Sum

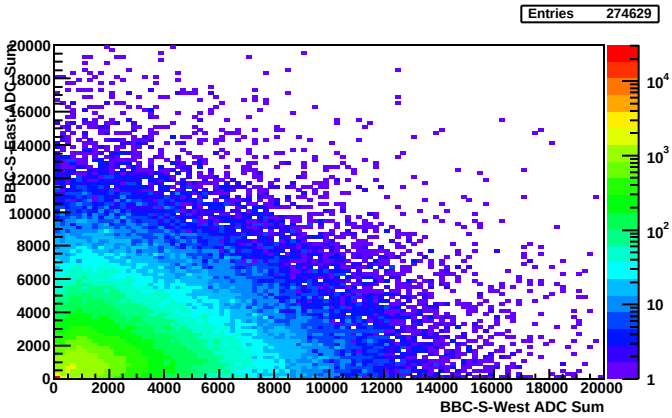

Entries 274629
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

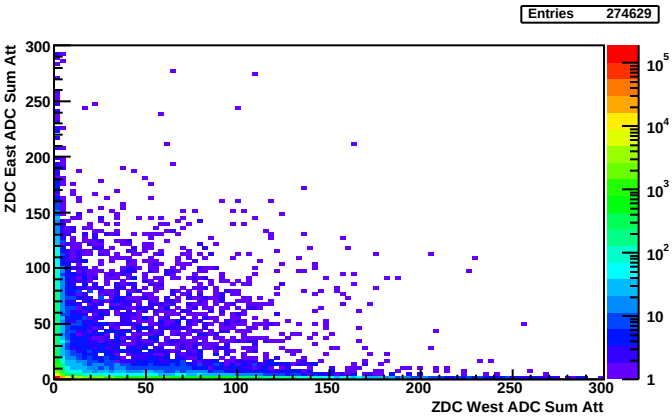

Entries 274629
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

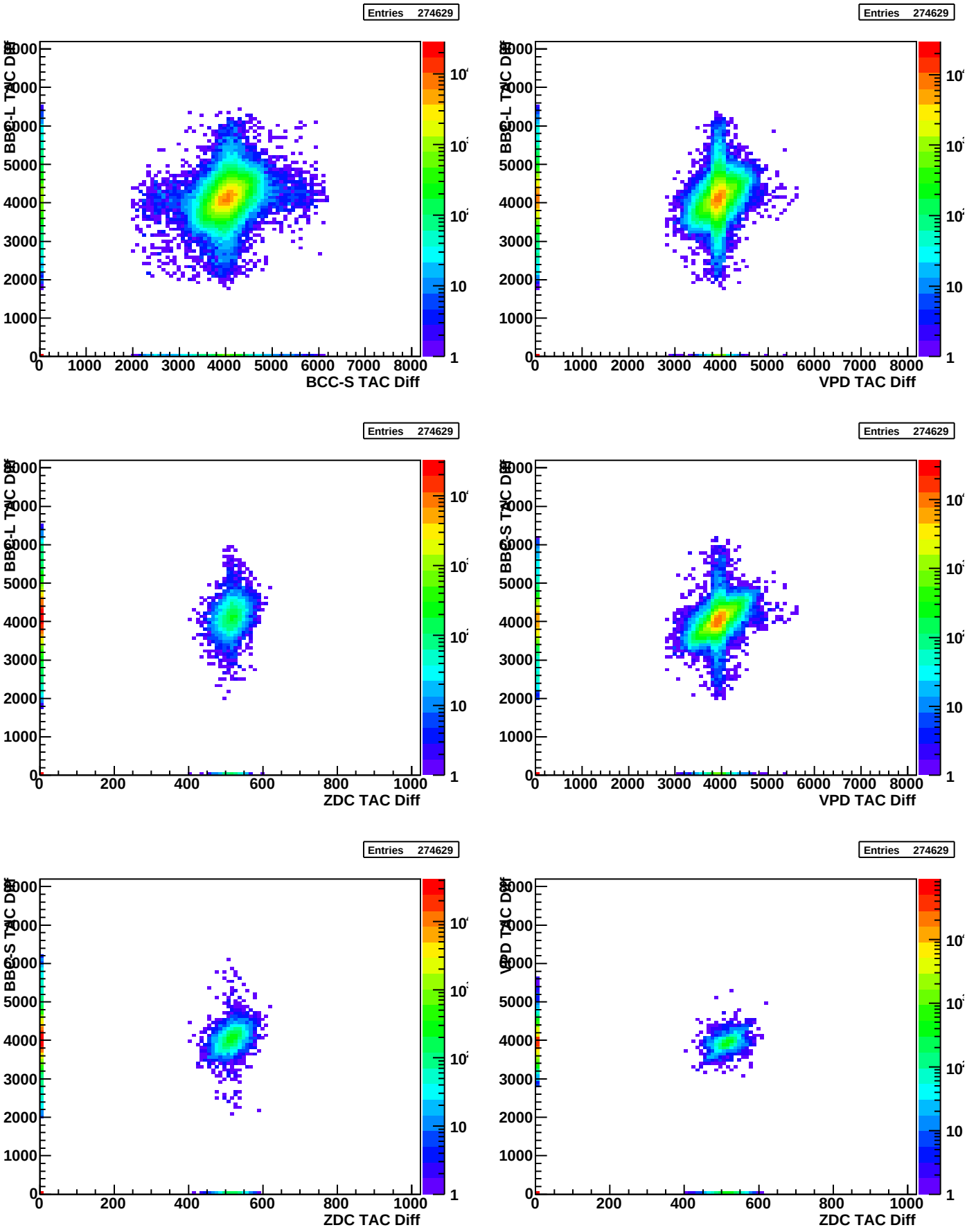

Entries 274629
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

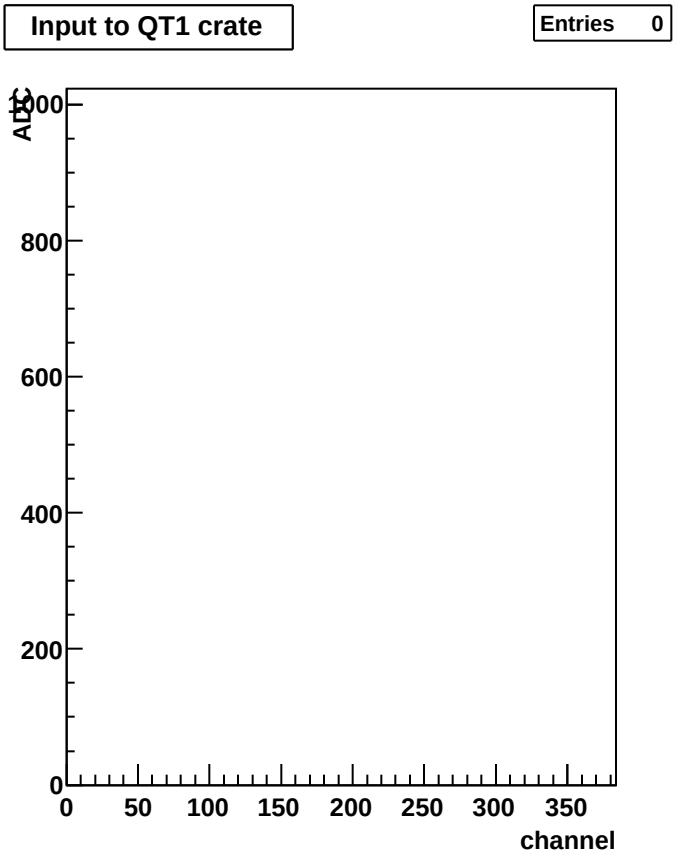

Entries 274629
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

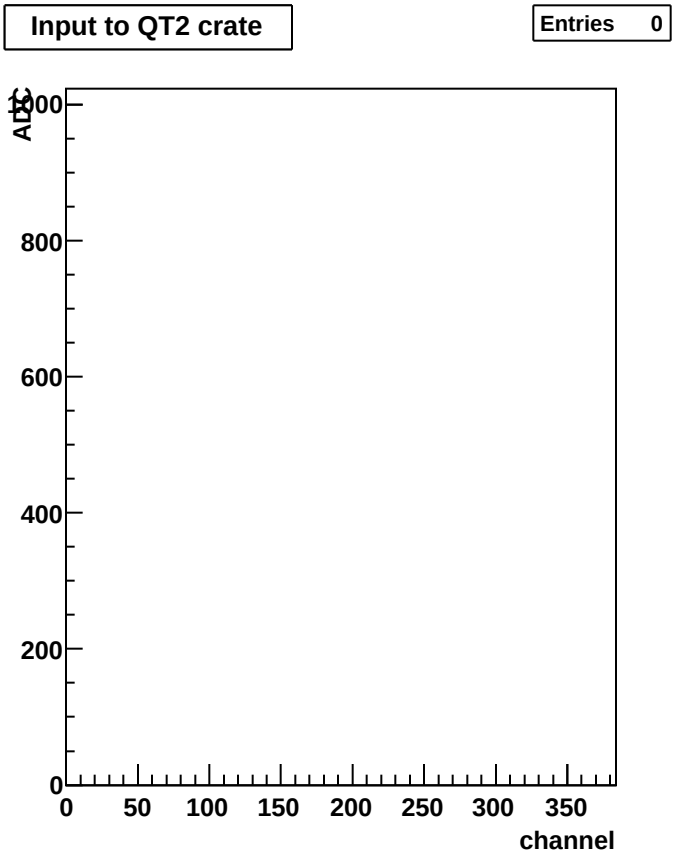

Entries 274629
BBC-L-East ADC Sum
BBC-L-West ADC Sum

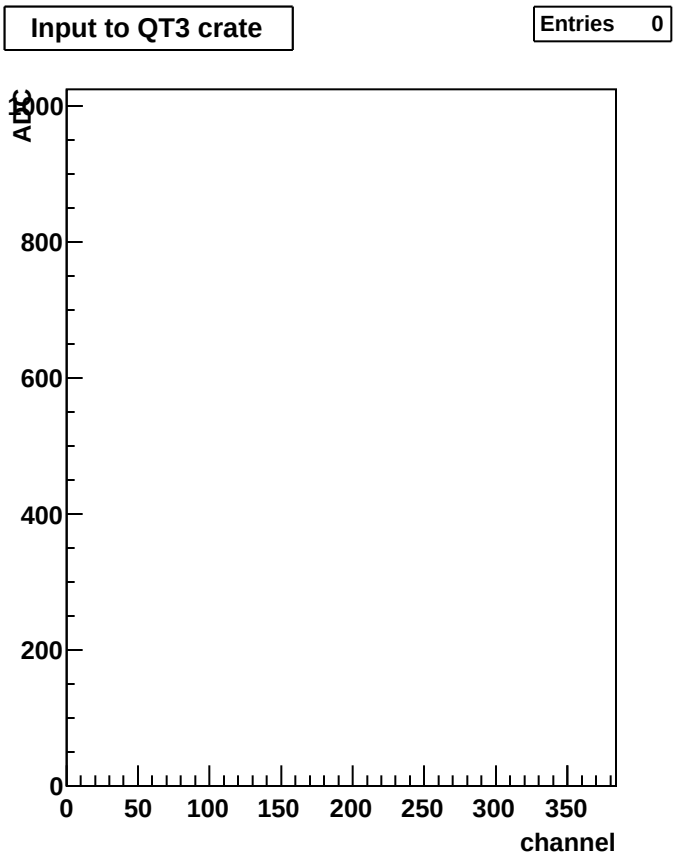

Entries 274629
BBC-S-East ADC Sum
BBC-S-West ADC Sum

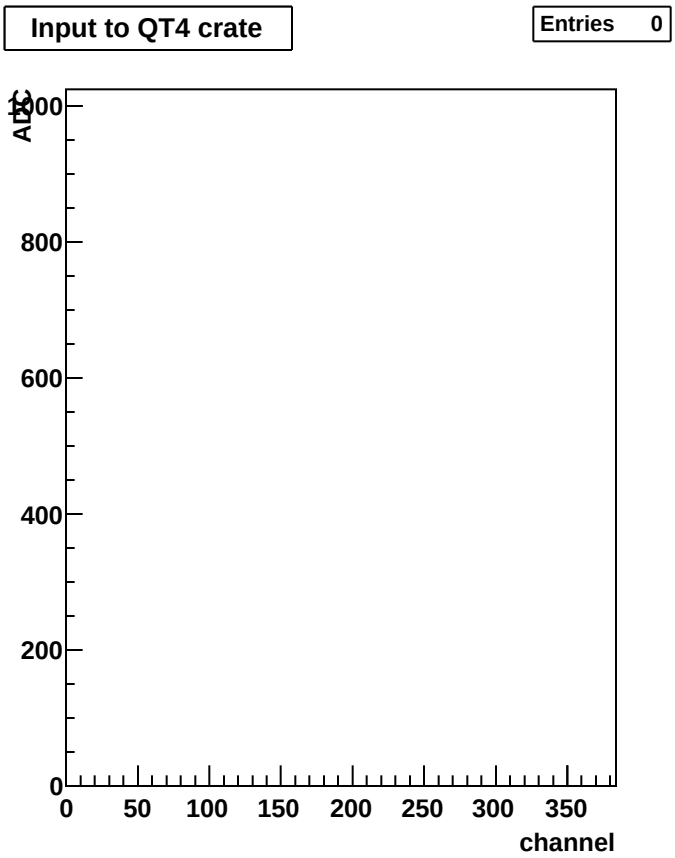

Entries 274629
ZDC East ADC Sum Att
ZDC West ADC Sum Att

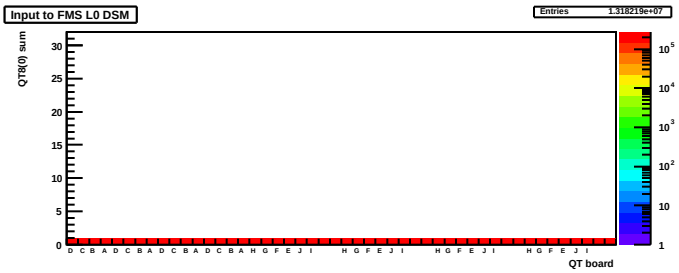

Entries 274629
BBC-L TAC Diff
BCC-S TAC Diff
Entries 274629
BBC-L TAC Diff
VPD TAC Diff
Entries 274629
BBC-L TAC Diff
ZDC TAC Diff
Entries 274629
BBC-S TAC Diff
VPD TAC Diff
Entries 274629
BBC-S TAC Diff
ZDC TAC Diff
Entries 274629
VPD TAC Diff
ZDC TAC Diff

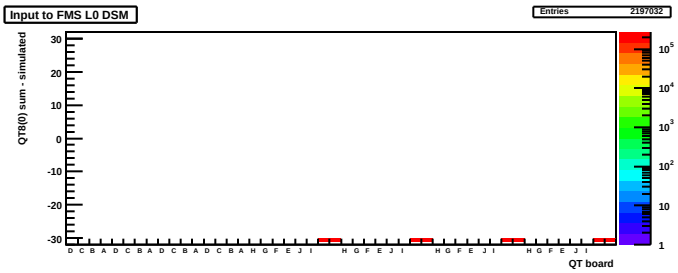

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

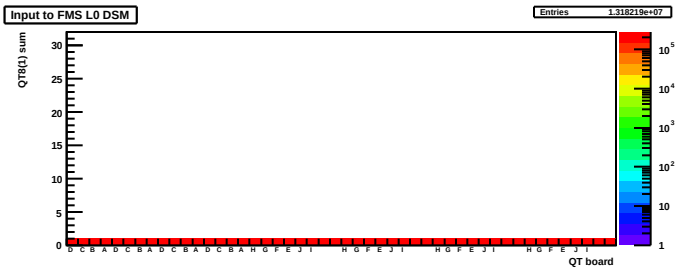

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

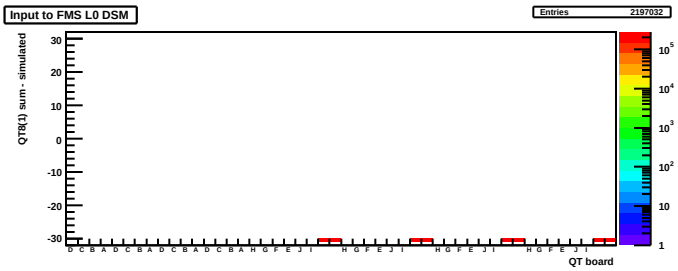

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

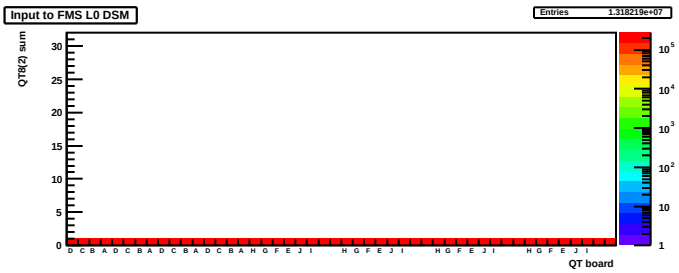

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

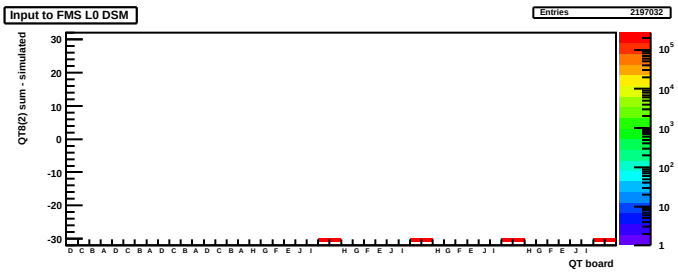

Input to FMS L0 DSM
Entries 1.318219e+07
QT8(0) sum
QT board

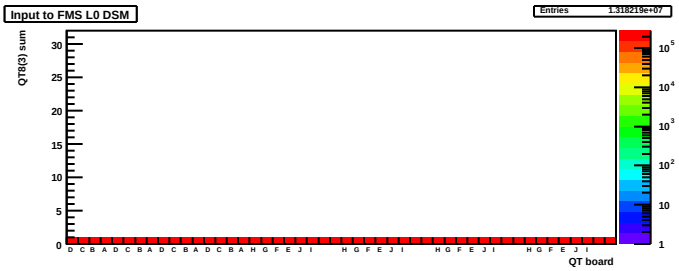

Input to FMS L0 DSM
Entries 2197032
QT8(0) sum - simulated
QT board

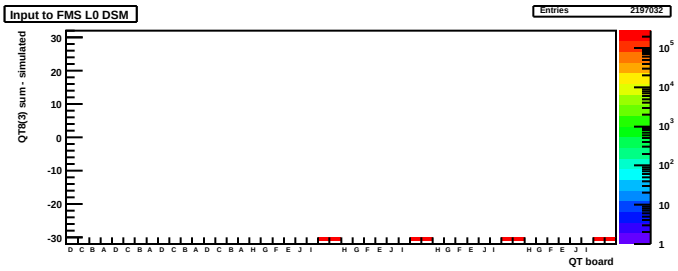

Input to FMS L0 DSM
Entries 1.318219e+07
QT8(1) sum
QT board

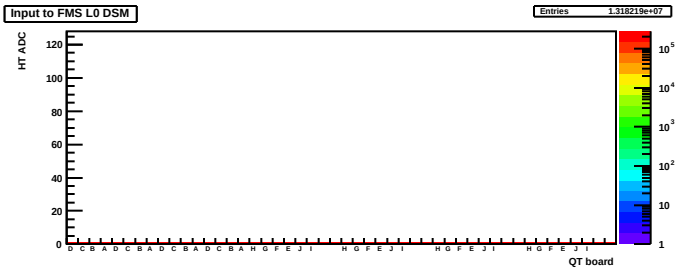

Input to FMS L0 DSM
Entries 2197032
QT8(1) sum - simulated
QT board

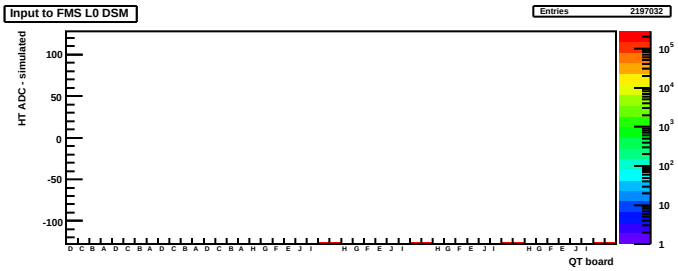

Input to FMS L0 DSM
Entries 1.318219e+07
QT8(2) sum
QT board

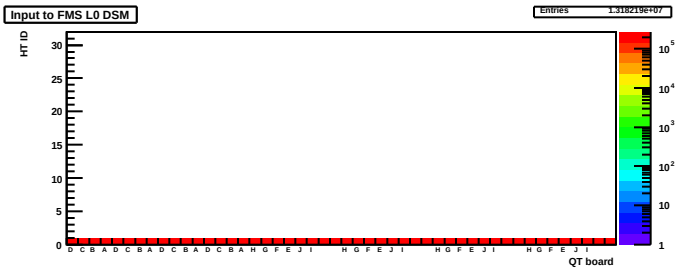

Input to FMS L0 DSM
Entries 2197032
QT8(2) sum - simulated
QT board

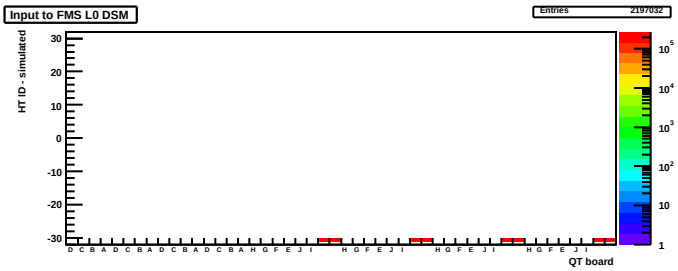

Input to FMS L0 DSM
Entries 1.318219e+07
QT8(3) sum
QT board

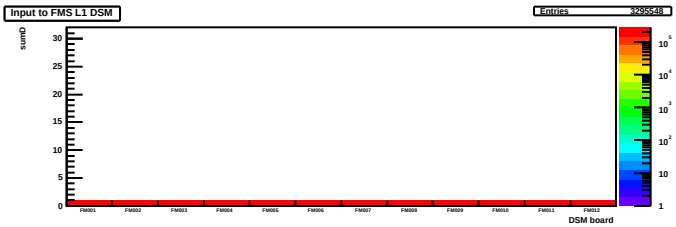

Input to FMS L0 DSM
Entries 2197032
QT8(3) sum - simulated
QT board

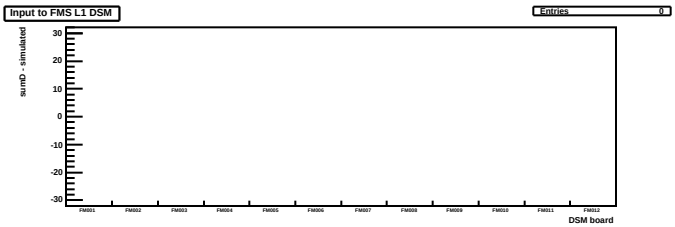

Input to FMS L0 DSM
Entries 1.318219e+07
HT ADC
QT board

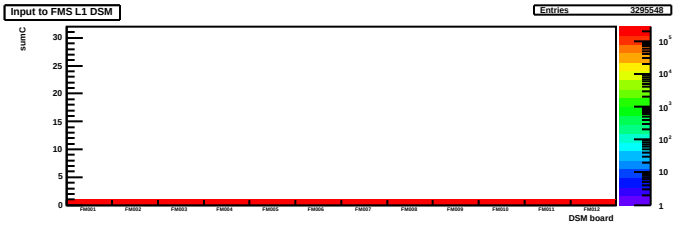

Input to FMS L0 DSM
Entries 2197032
HT ADC - simulated
QT board

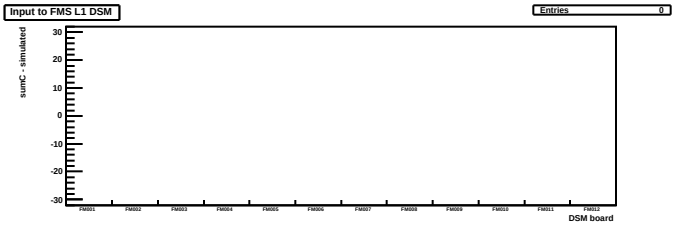

Input to FMS L0 DSM
Entries 1.318219e+07
HT ID
QT board

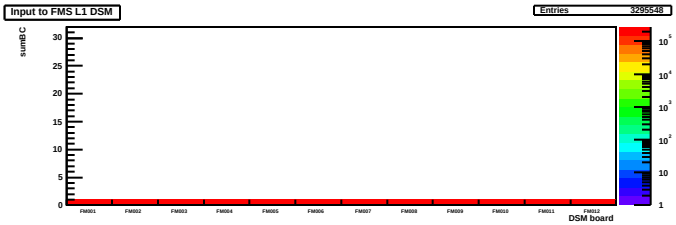

Input to FMS L0 DSM
Entries 2197032
HT ID - simulated
QT board

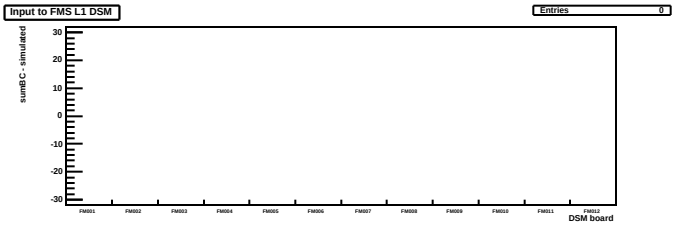

Input to FMS L1 DSM
Entries 3295548
sumD
DSM board

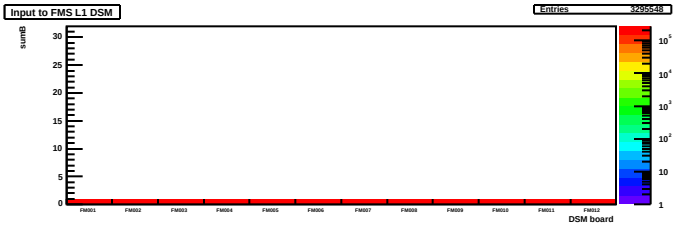

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

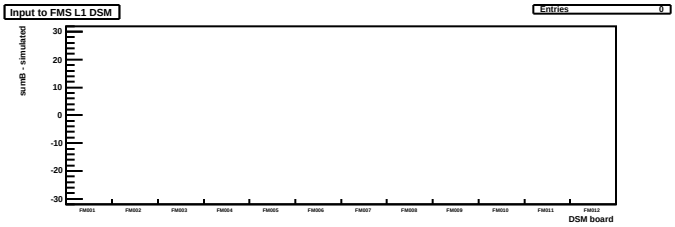

Input to FMS L1 DSM
Entries 3295548
sumC
DSM board

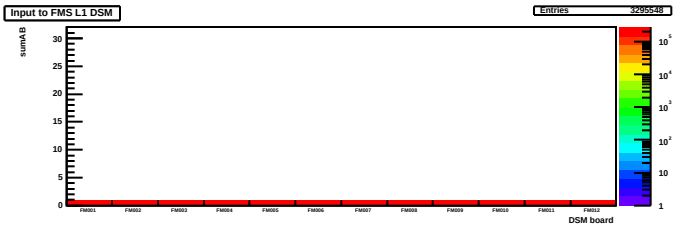

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

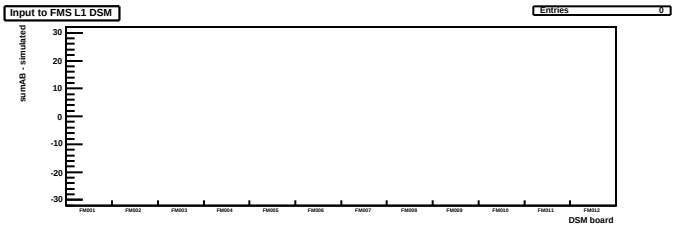

Input to FMS L1 DSM
Entries 3295548
sumBC
DSM board

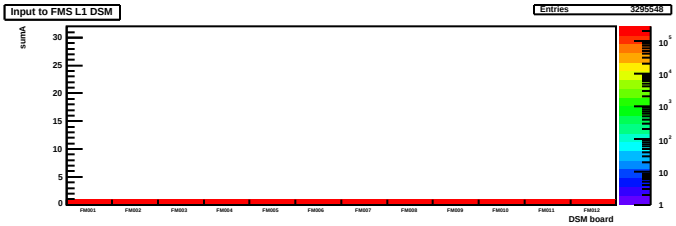

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

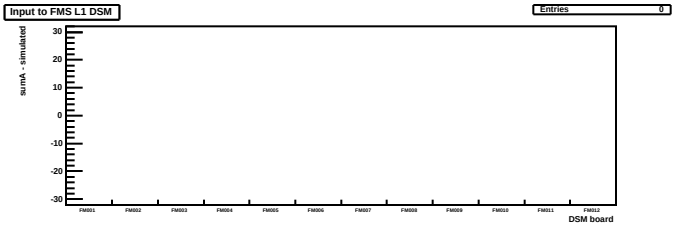

Input to FMS L1 DSM
Entries 3295548
sumB
DSM board

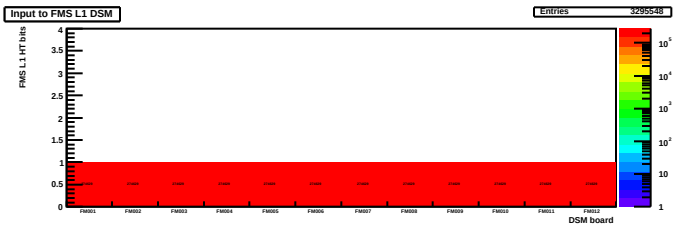

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

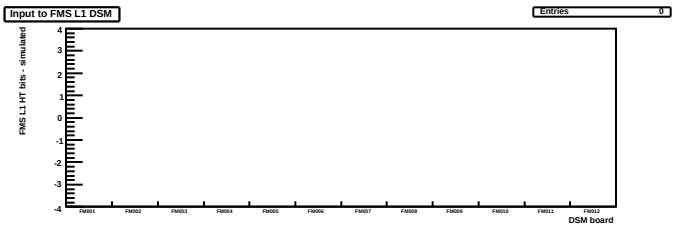

Input to FMS L1 DSM
Entries 3295548
sumAB
DSM board

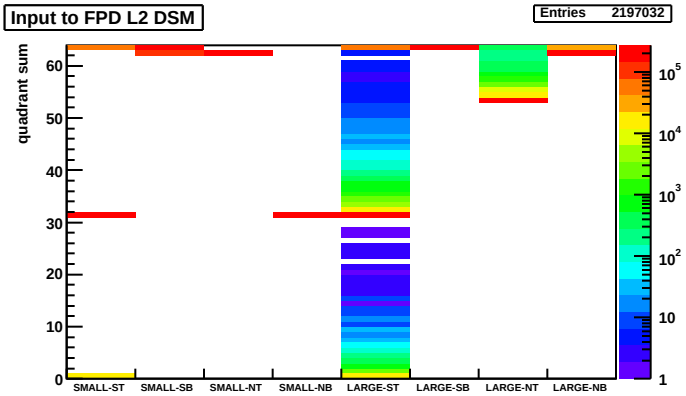

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

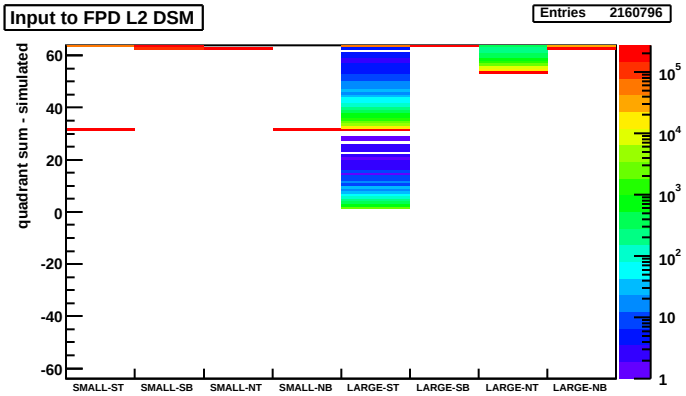

Input to FMS L1 DSM
Entries 3295548
sumA
DSM board

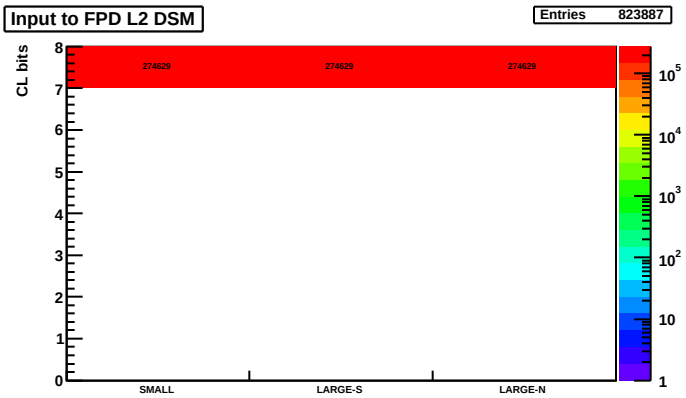

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

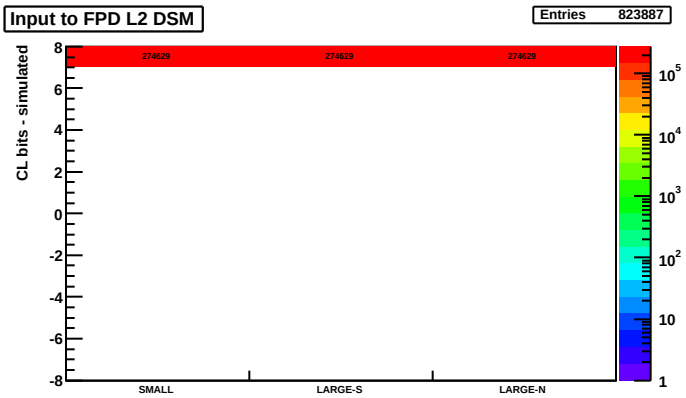

Input to FMS L1 DSM
Entries 3295548
FMS L1 HT bits
DSM board

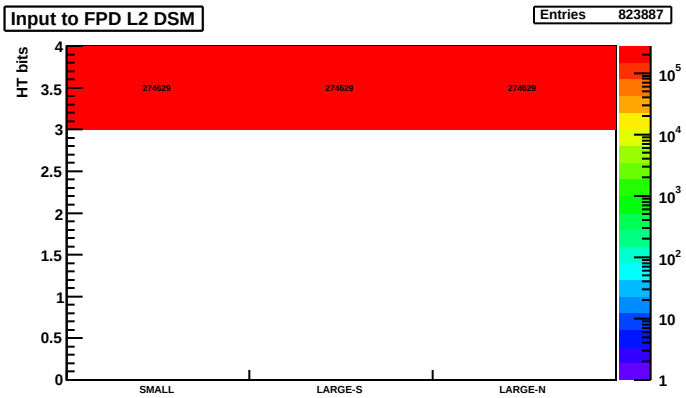

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

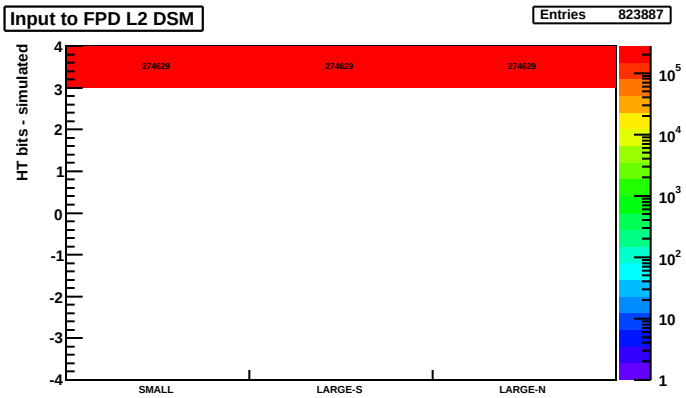

Input to FPD L2 DSM
Entries 2197032
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

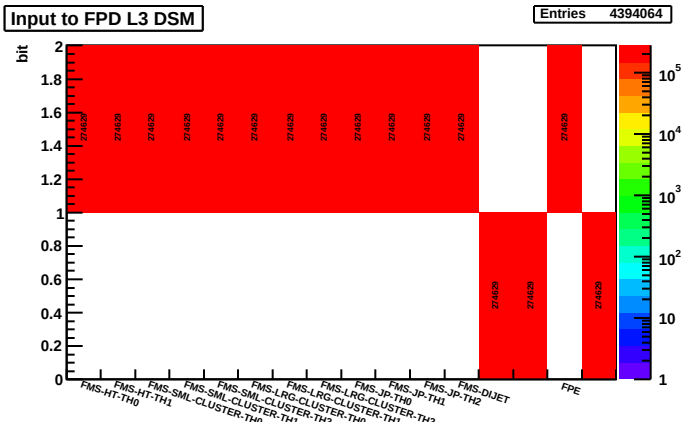

Input to FPD L2 DSM
Entries 2160796
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

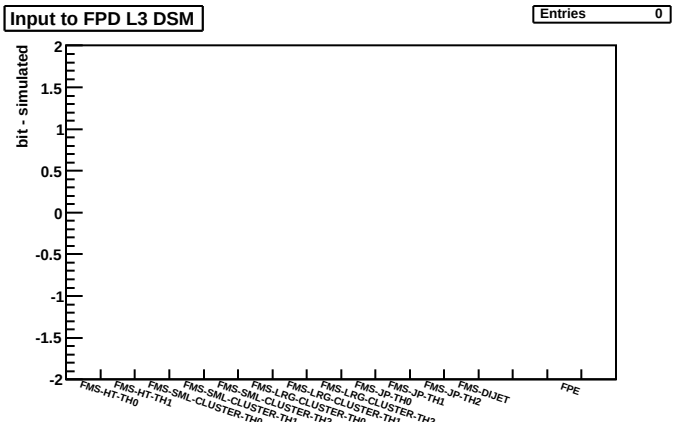

Input to FPD L2 DSM
Entries 823887
CL bits
274629
SMALL
LARGE-S
LARGE-N

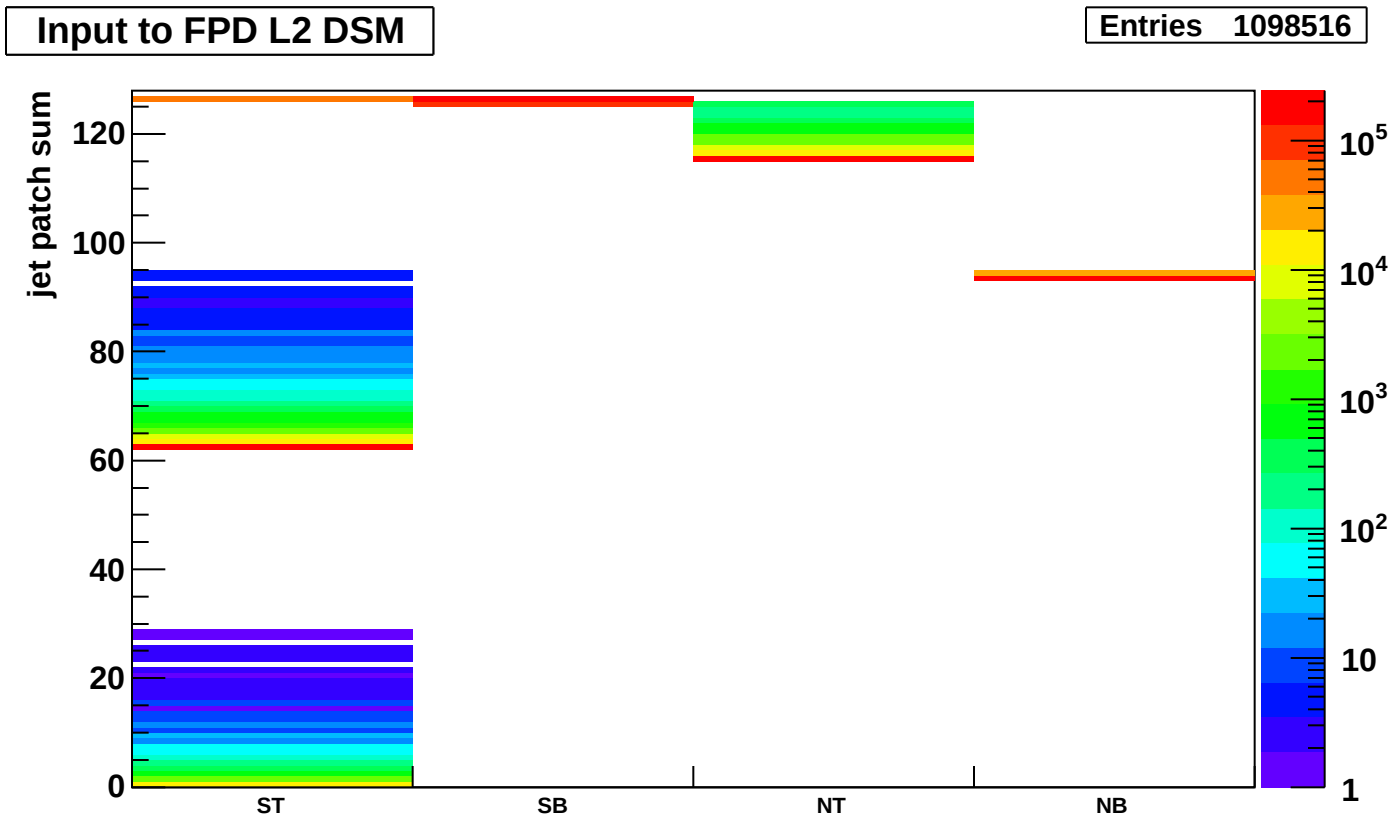

Input to FPD L2 DSM
Entries 823887
CL bits - simulated
274629
SMALL
LARGE-S
LARGE-N

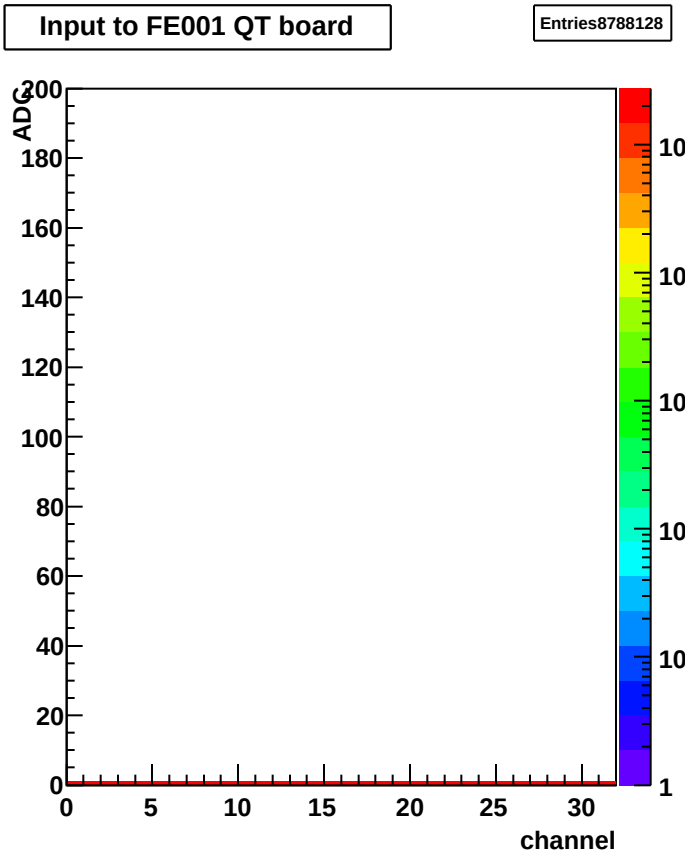

Input to FPD L2 DSM
Entries 823887
HT bits
274629
SMALL
LARGE-S
LARGE-N

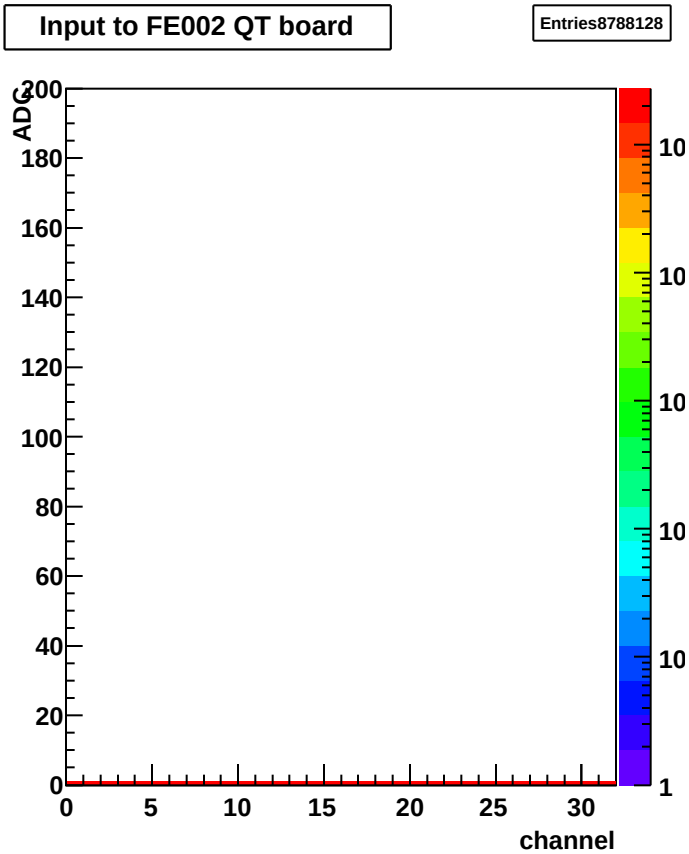

Input to FPD L2 DSM
Entries 823887
HT bits - simulated
274629
SMALL
LARGE-S
LARGE-N

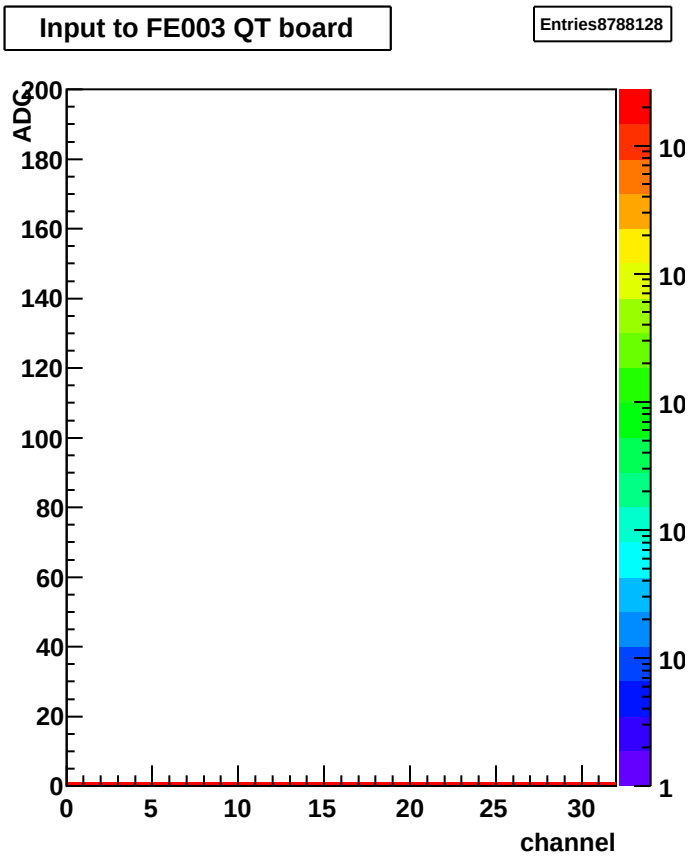

Input to FPD L3 DSM
Entries 4394064
bit
274629
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

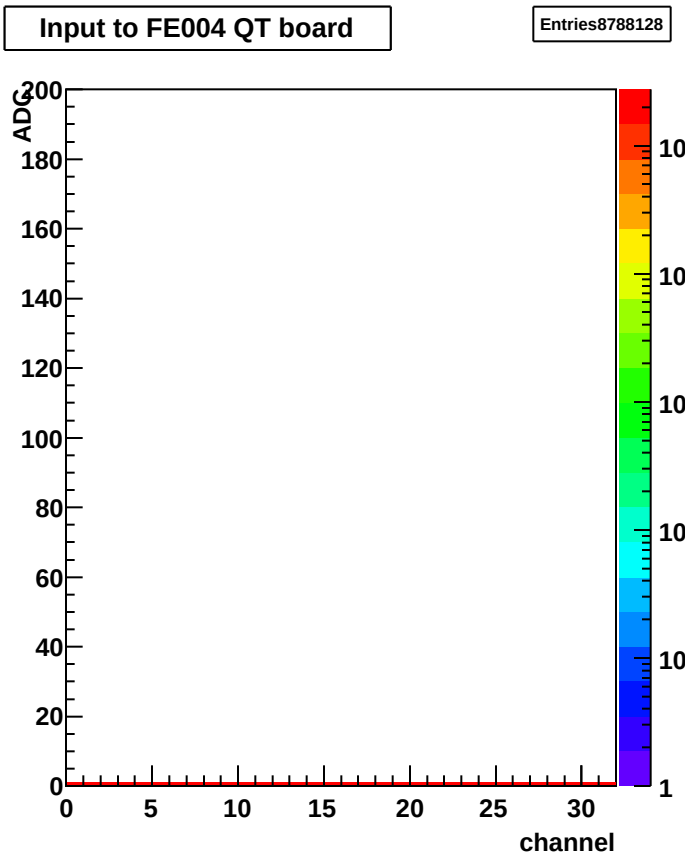

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

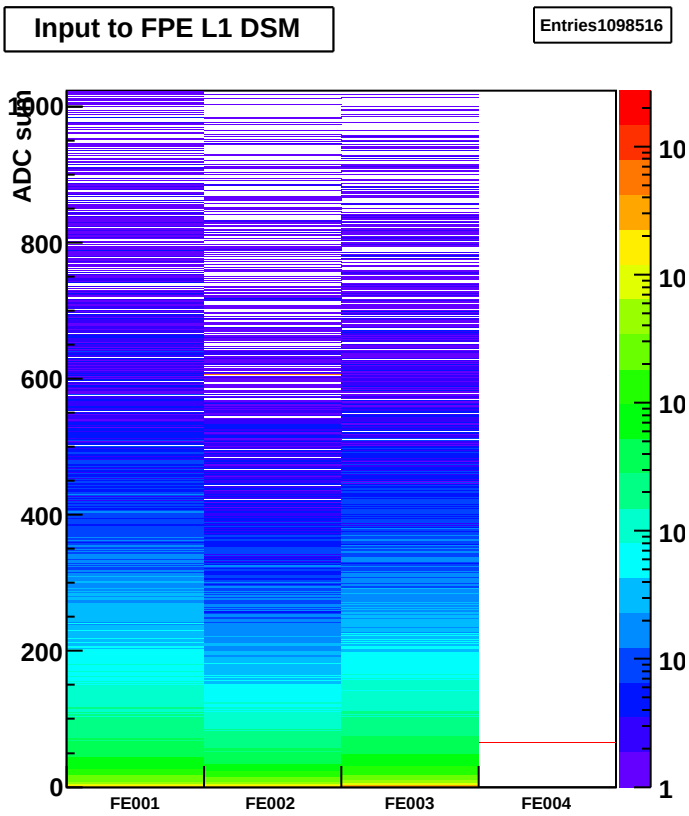

Input to FPD L2 DSM
Entries 1098516
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^5
10^4
10^3
10^2
10
1

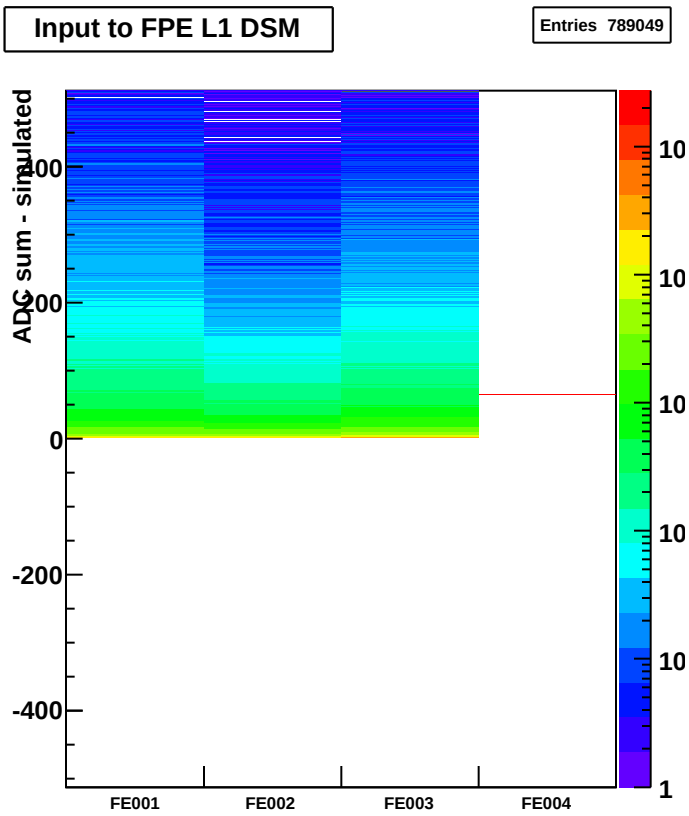

Input to FE001 QT board
Entries8788128
ADC
channel

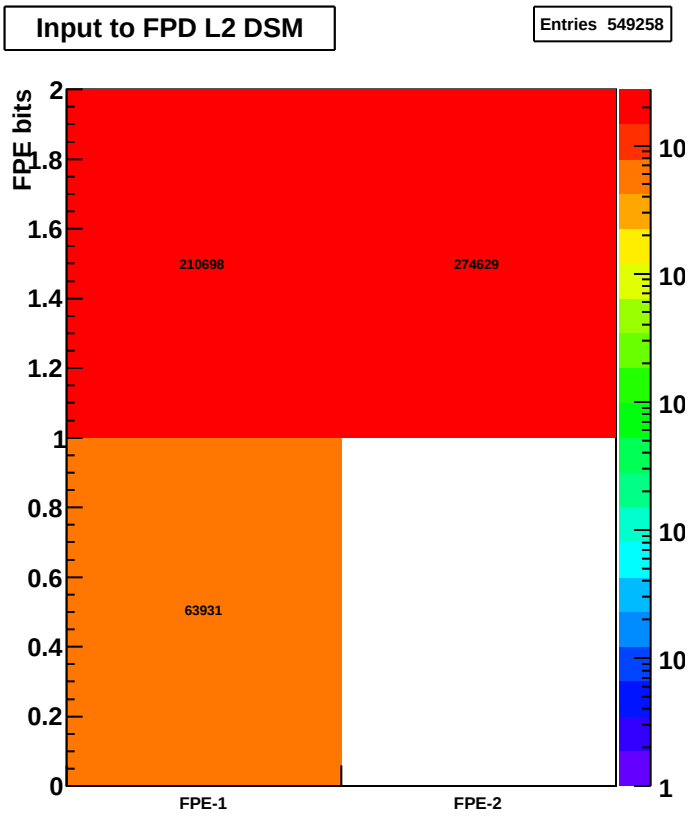

Input to FE002 QT board
Entries8788128
ADC
channel

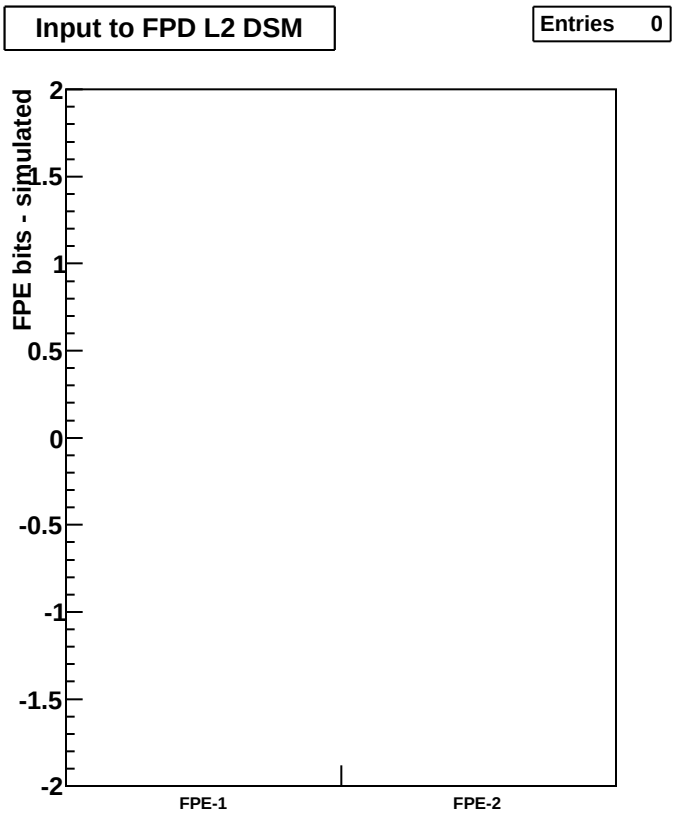

Input to FE003 QT board
Entries8788128
ADC
channel


Input to FE004 QT board
Entries8788128
ADC
channel


Input to FPE L1 DSM
Entries1098516
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 789049
ADC sum - simulated
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPD L2 DSM
Entries 549258
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
210698
274629
63931
FPE-1
FPE-2
10
10
10
10
10
1


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