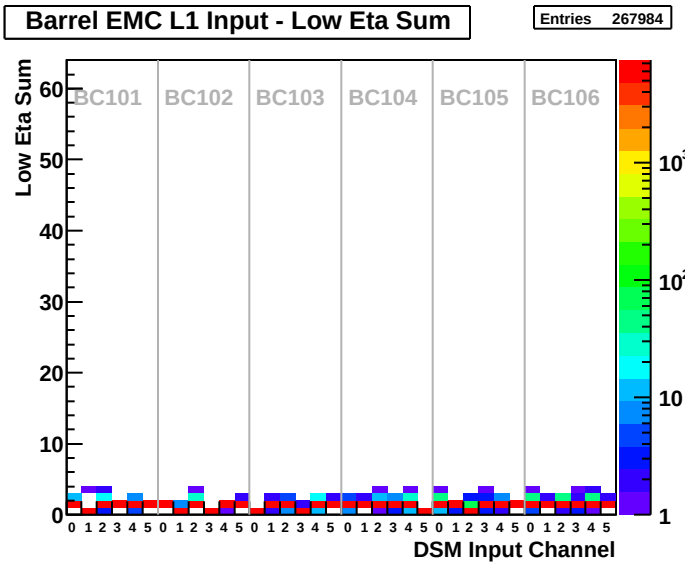
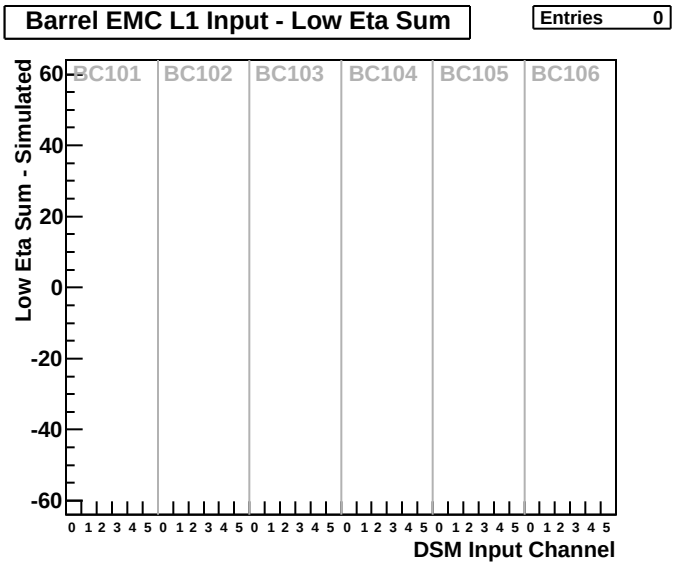
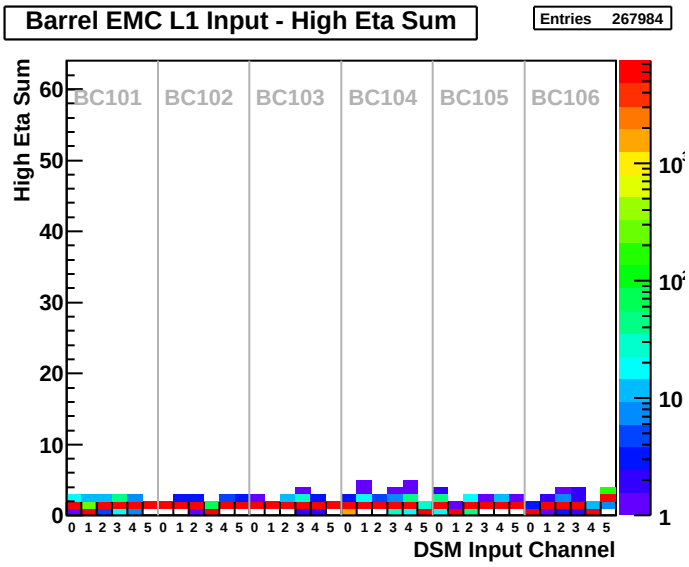
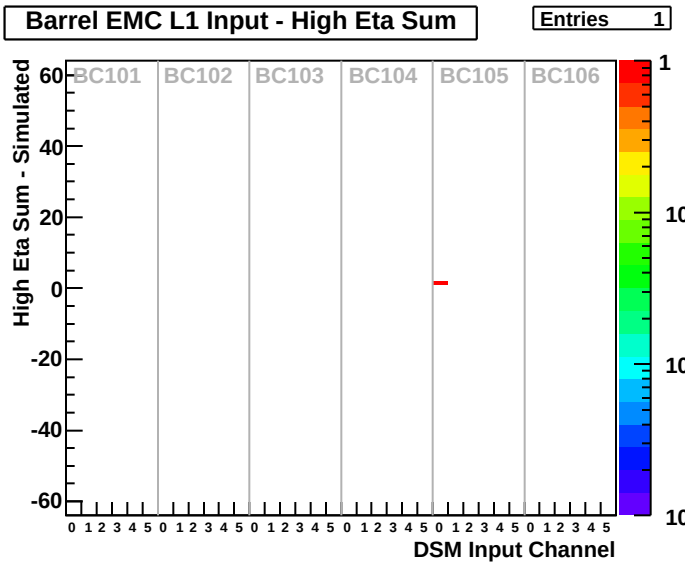
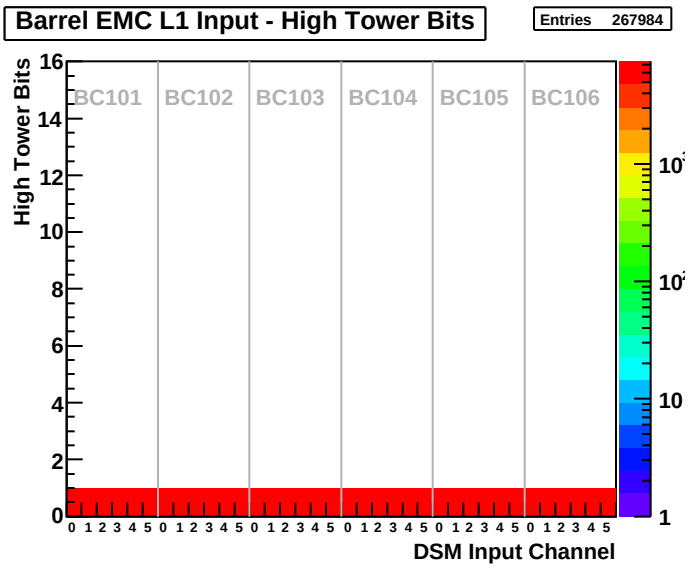
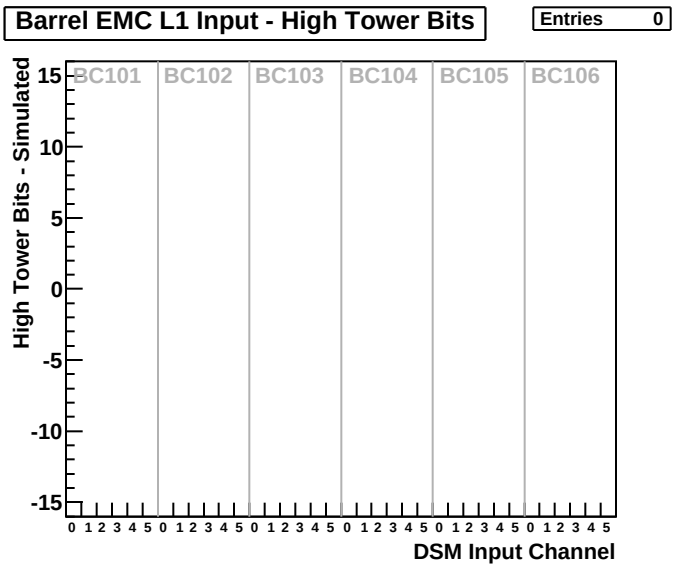

Barrel EMC L1 Input - Low Eta Sum
Entries 267984
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

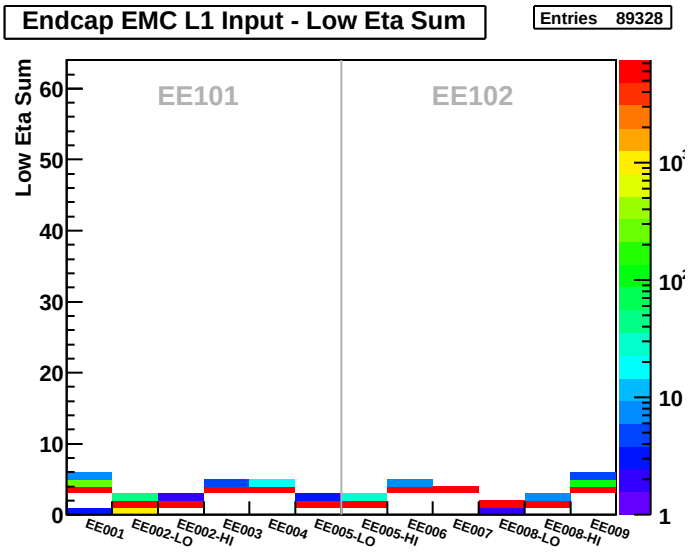

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

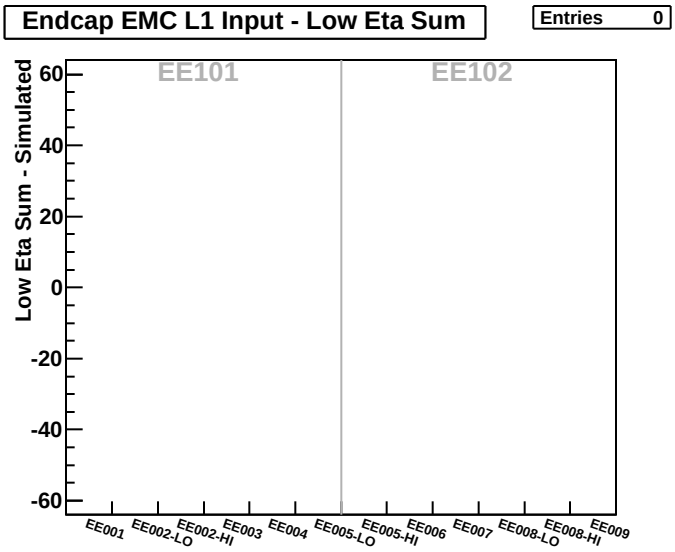

Barrel EMC L1 Input - High Eta Sum
Entries 267984
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

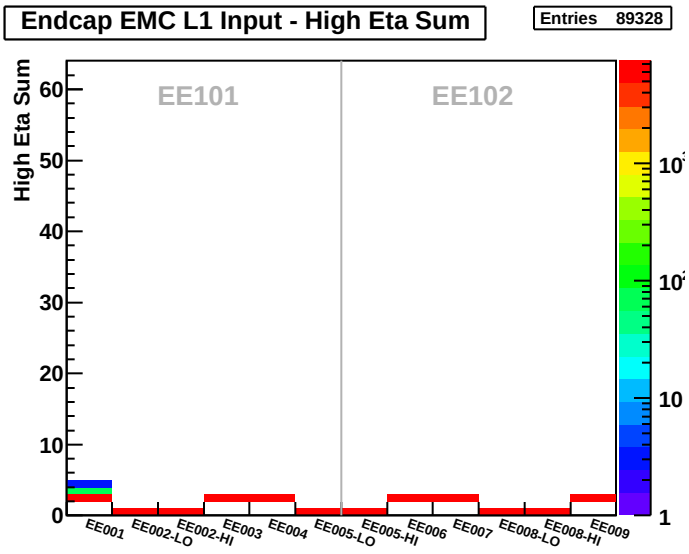

Barrel EMC L1 Input - High Eta Sum
Entries 1
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

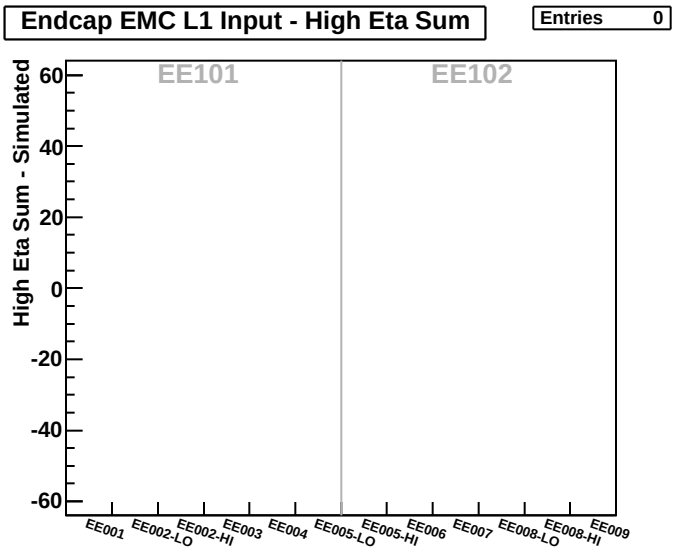

Barrel EMC L1 Input - High Tower Bits
Entries 267984
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

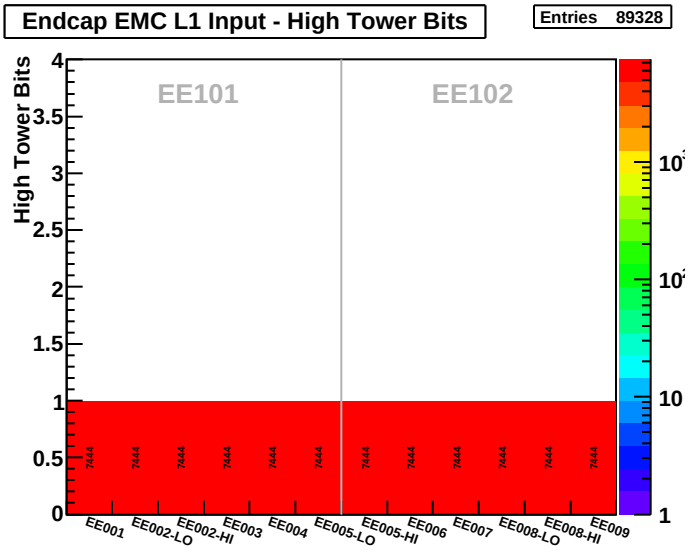

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

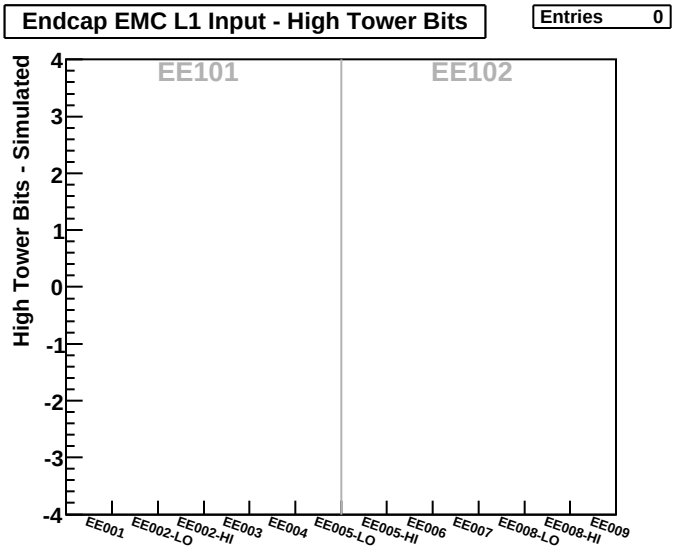

Endcap EMC L1 Input - Low Eta Sum
Entries 89328
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

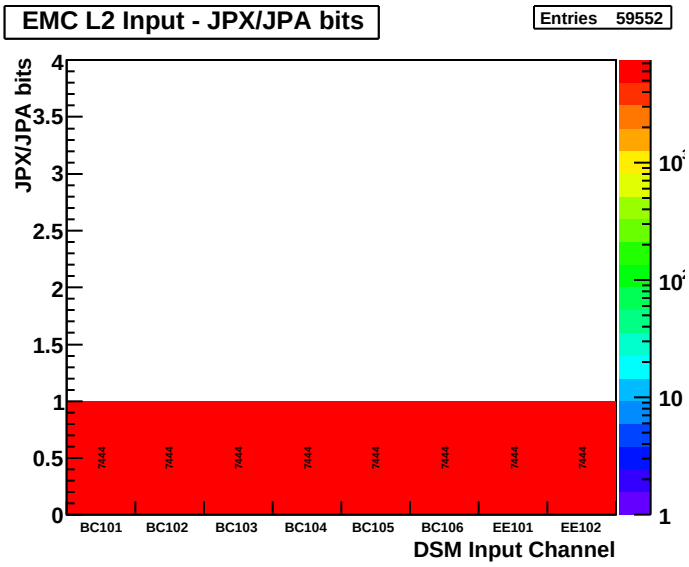

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

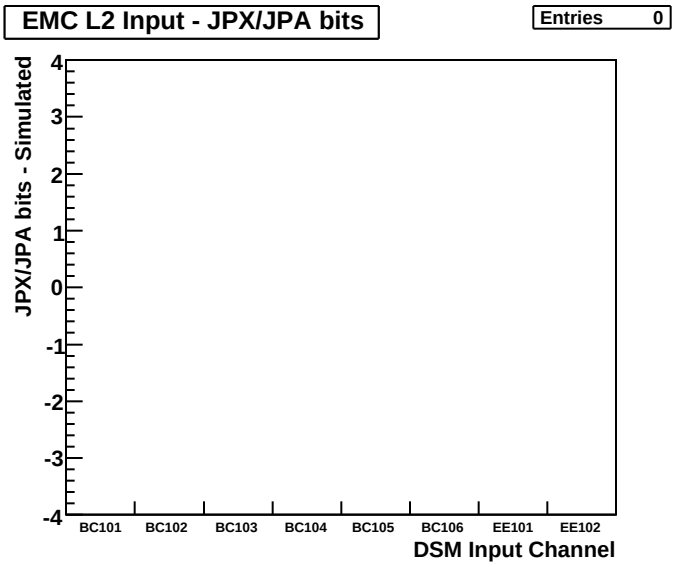

Endcap EMC L1 Input - High Eta Sum
Entries 89328
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

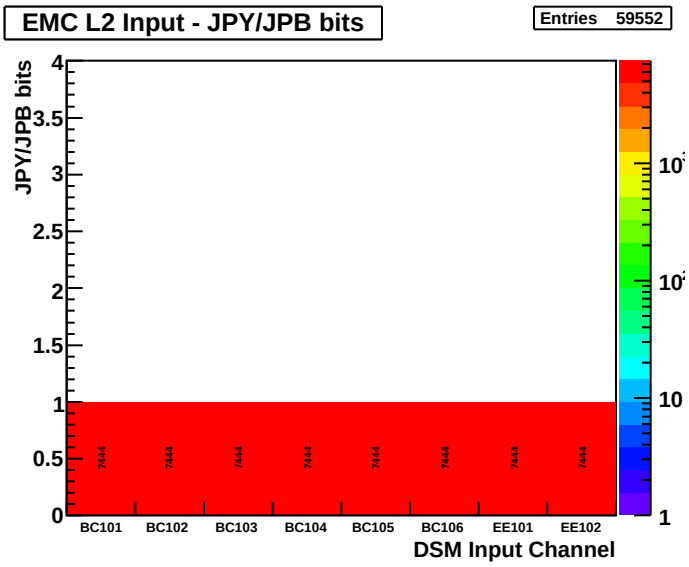

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

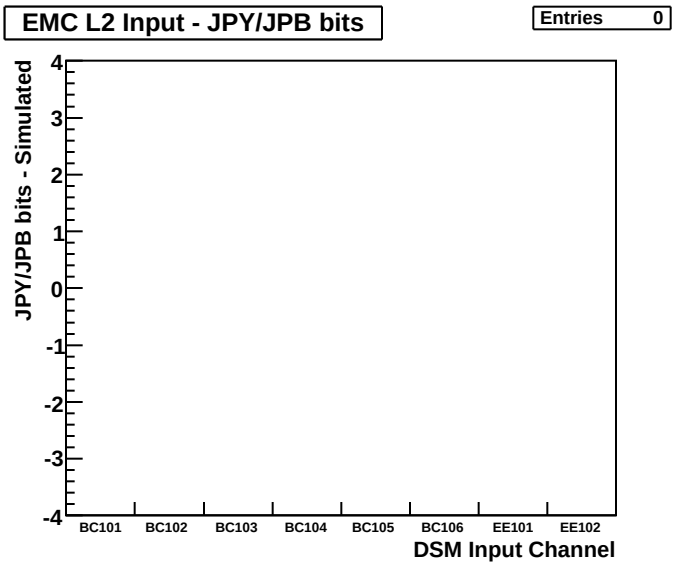

Endcap EMC L1 Input - High Tower Bits
Entries 89328
High Tower Bits
EE101
EE102
7444
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

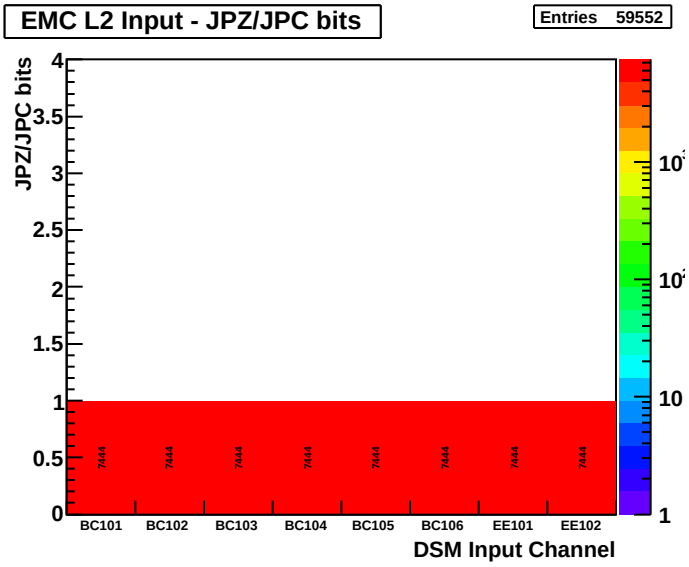

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

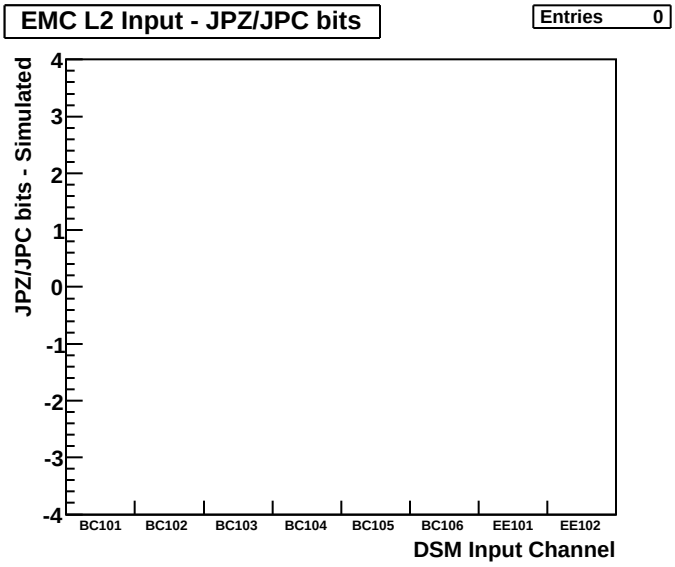

EMC L2 Input - JPX/JPA bits
Entries 59552
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
7444

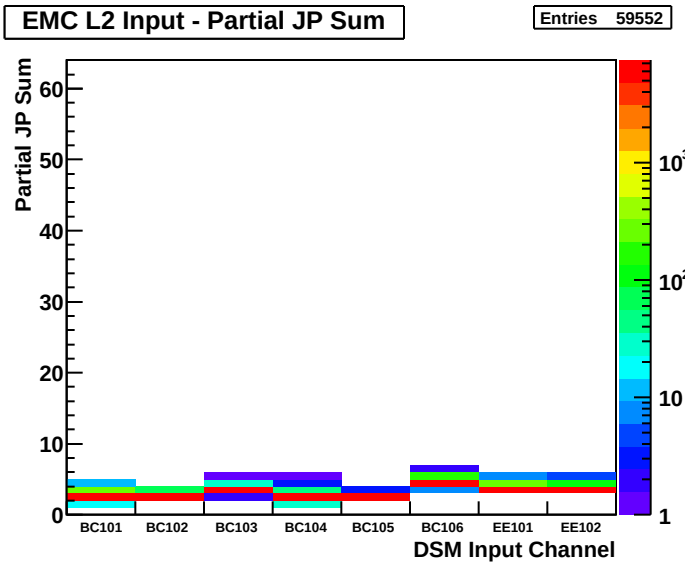

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

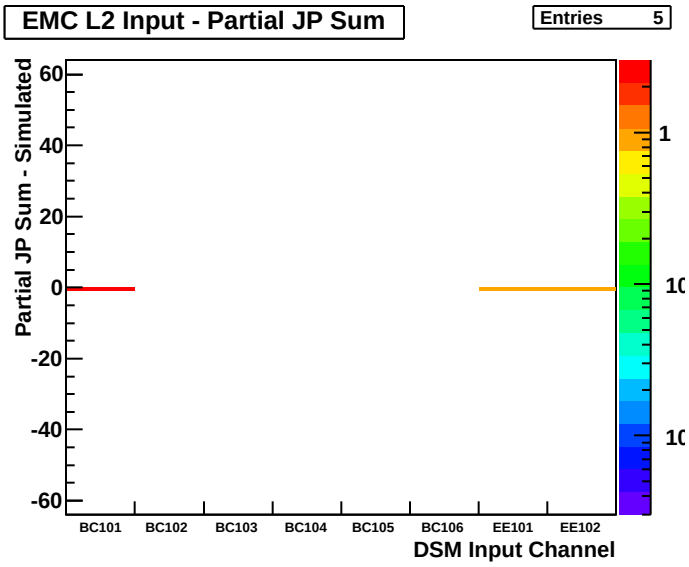

EMC L2 Input - JPY/JPB bits
Entries 59552
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
7444

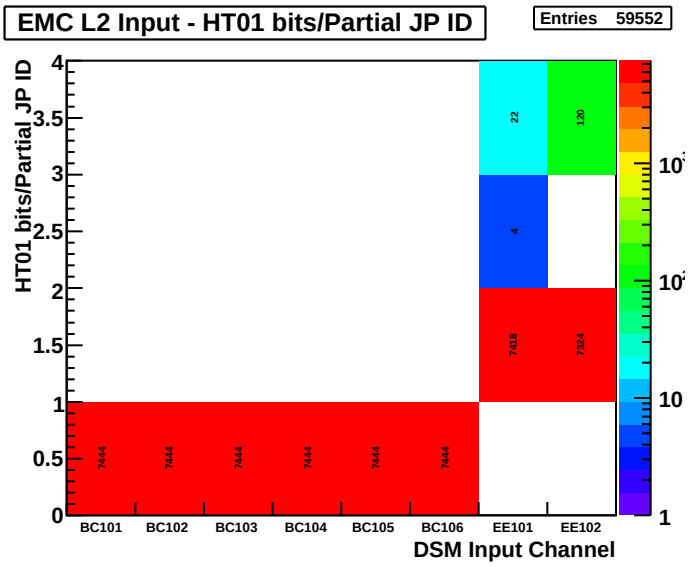

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

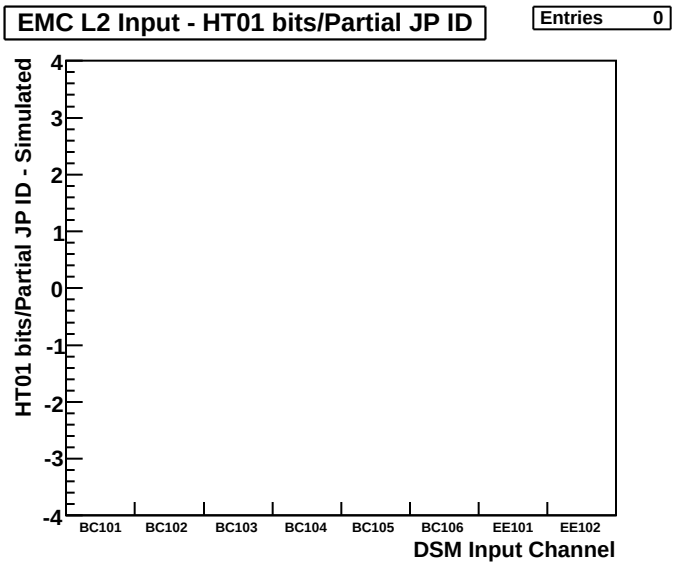

EMC L2 Input - JPZ/JPC bits
Entries 59552
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
7444

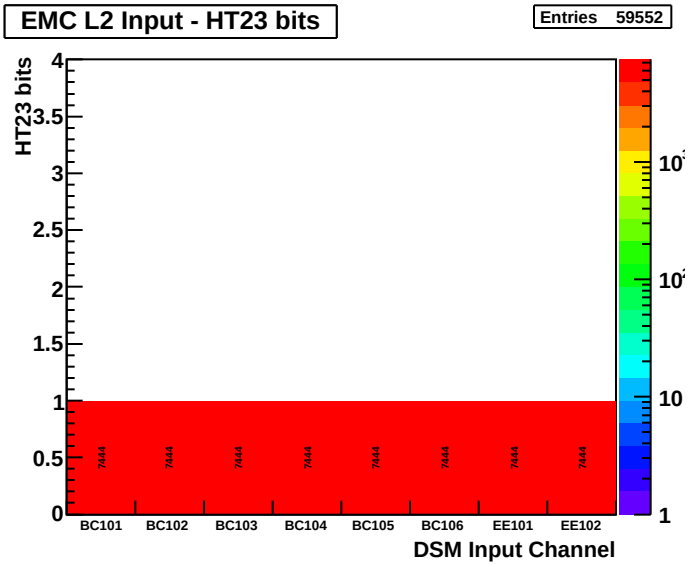

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

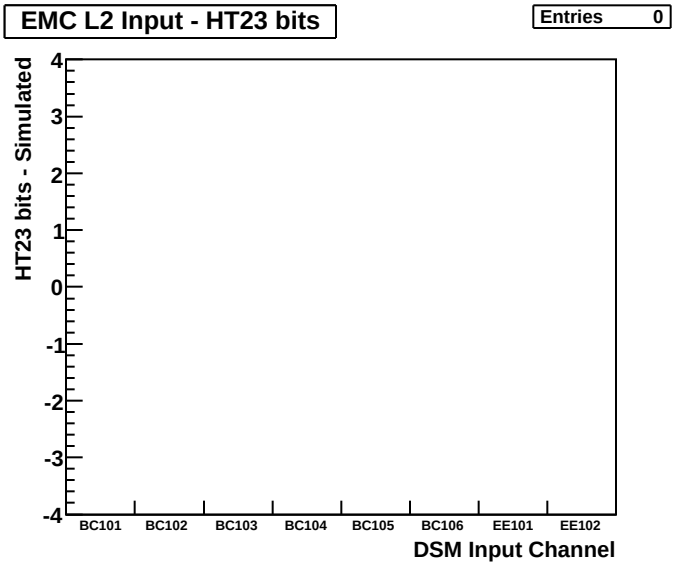

EMC L2 Input - Partial JP Sum
Entries 59552
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

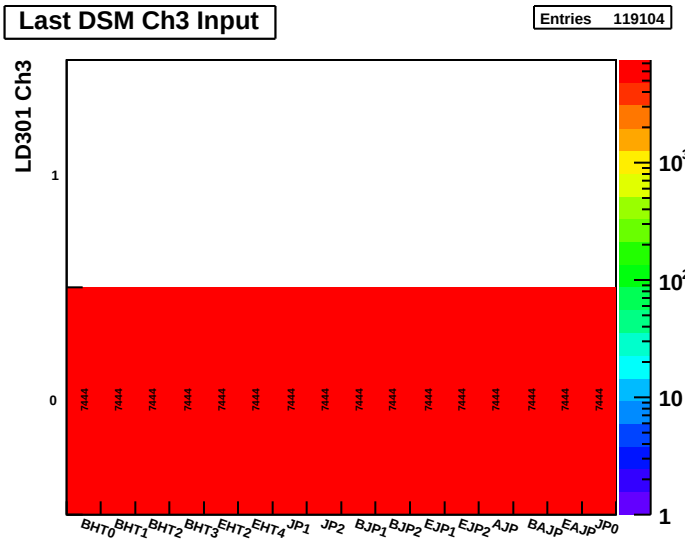

EMC L2 Input - Partial JP Sum
Entries 5
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

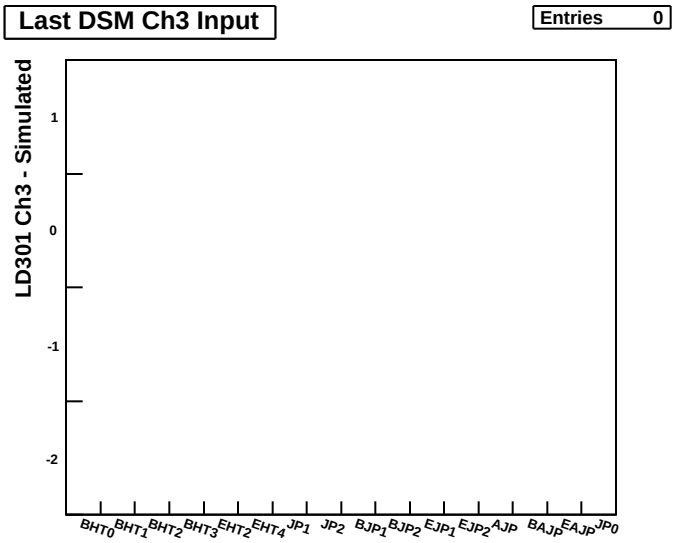

EMC L2 Input - HT01 bits/Partial JP ID
Entries 59552
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

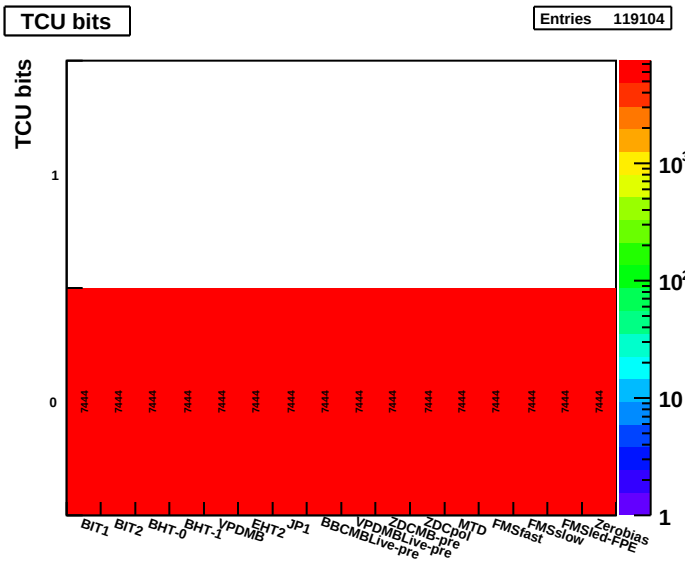

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

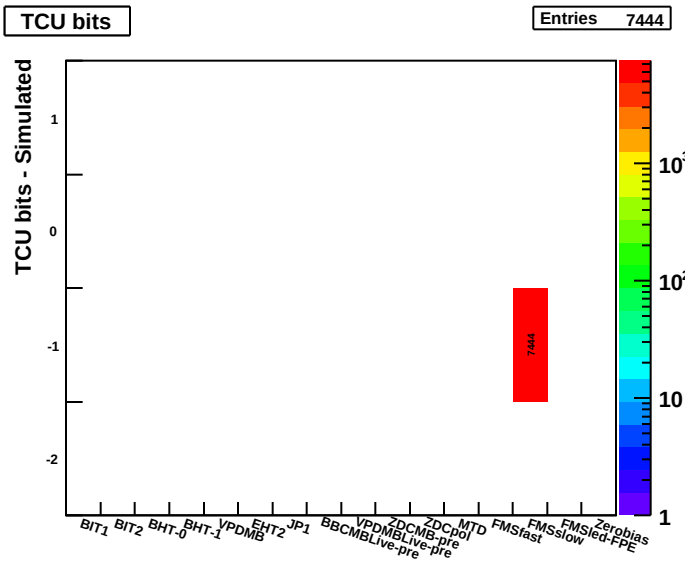

EMC L2 Input - HT23 bits
Entries 59552
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

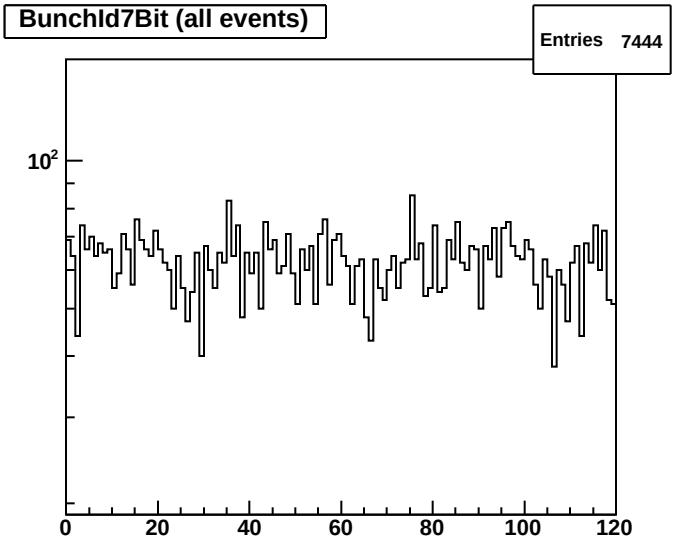

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

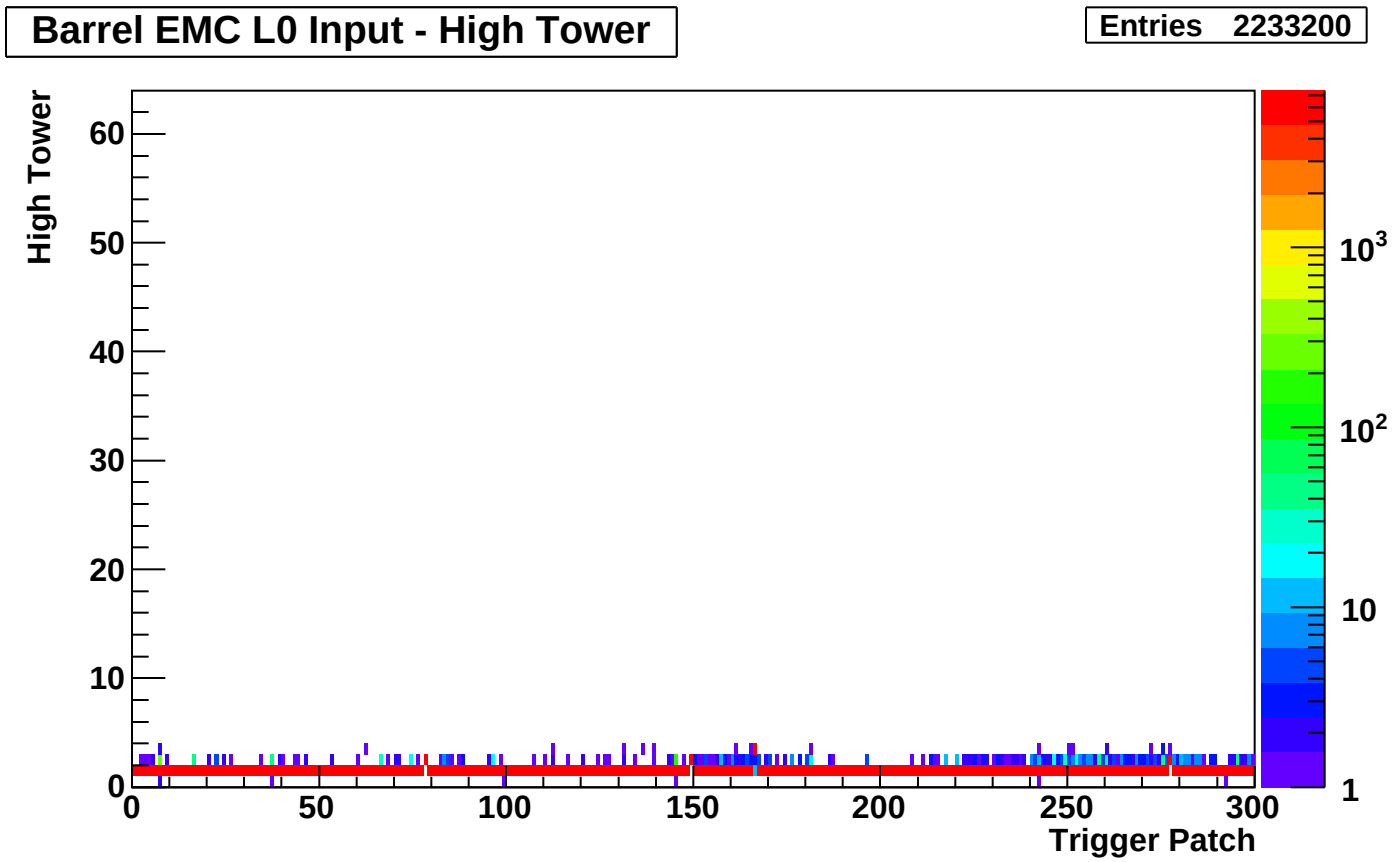

Last DSM Ch3 Input
Entries 119104
LD301 Ch3
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

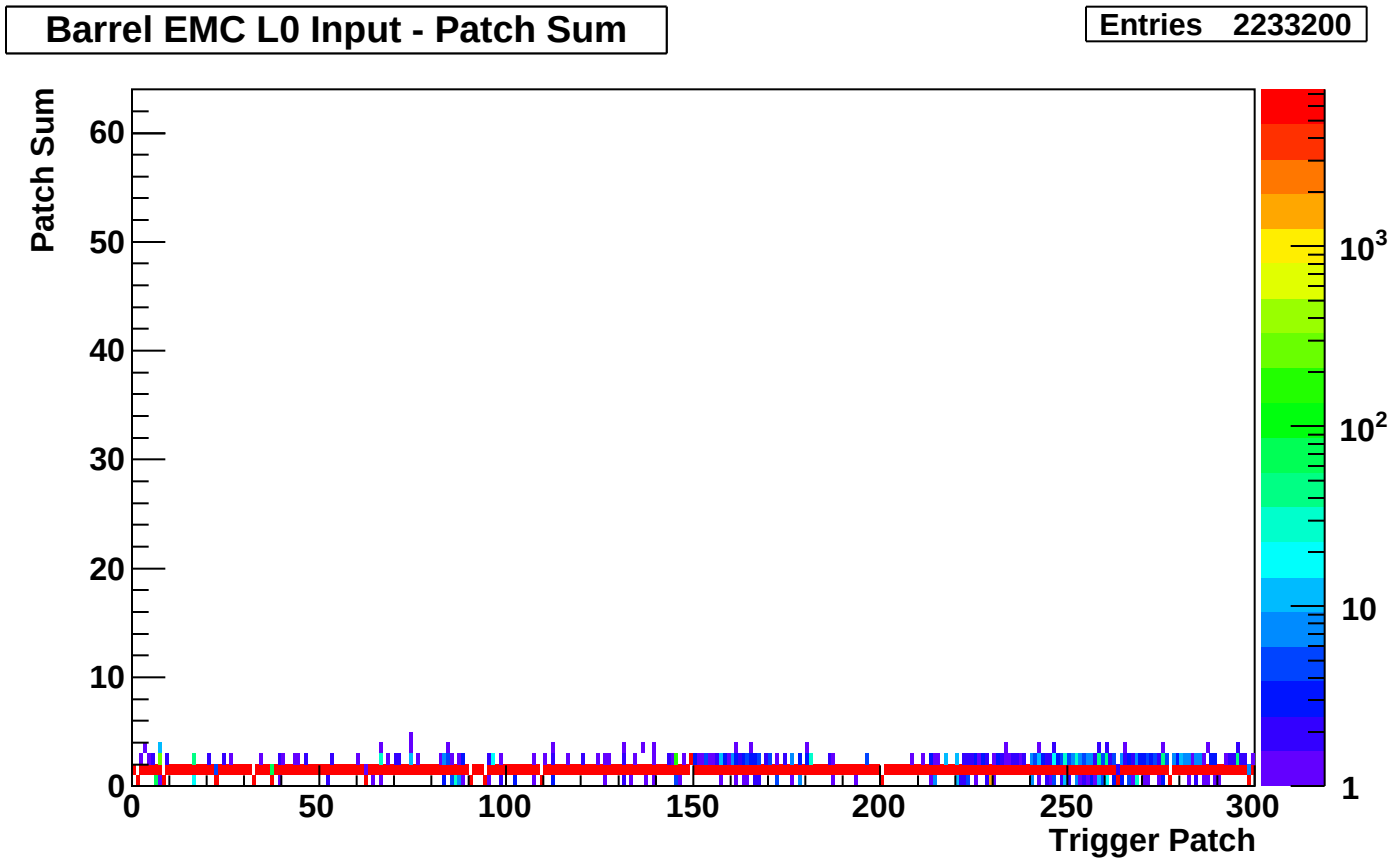

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

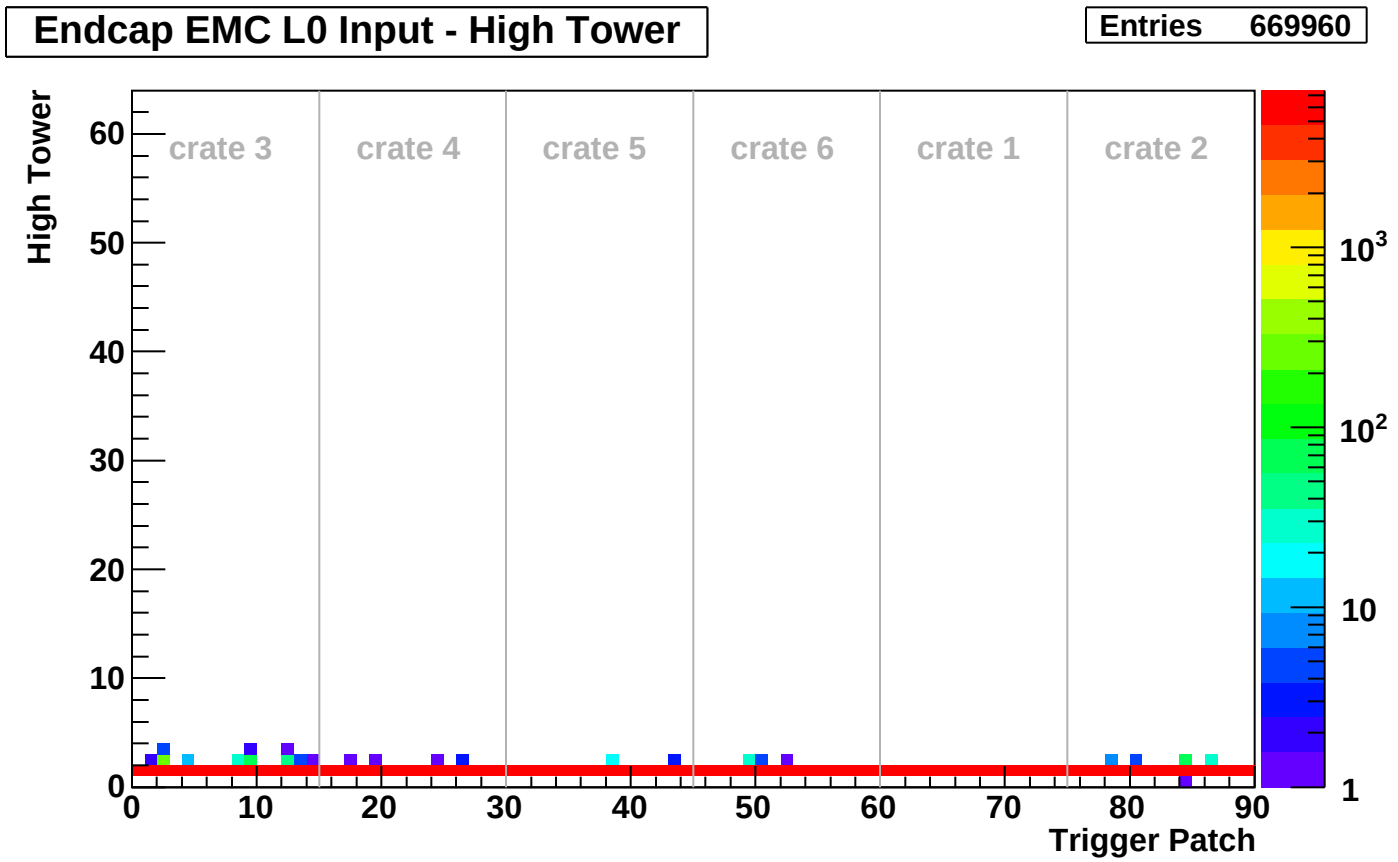

TCU bits
Entries 119104
TCU bits
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

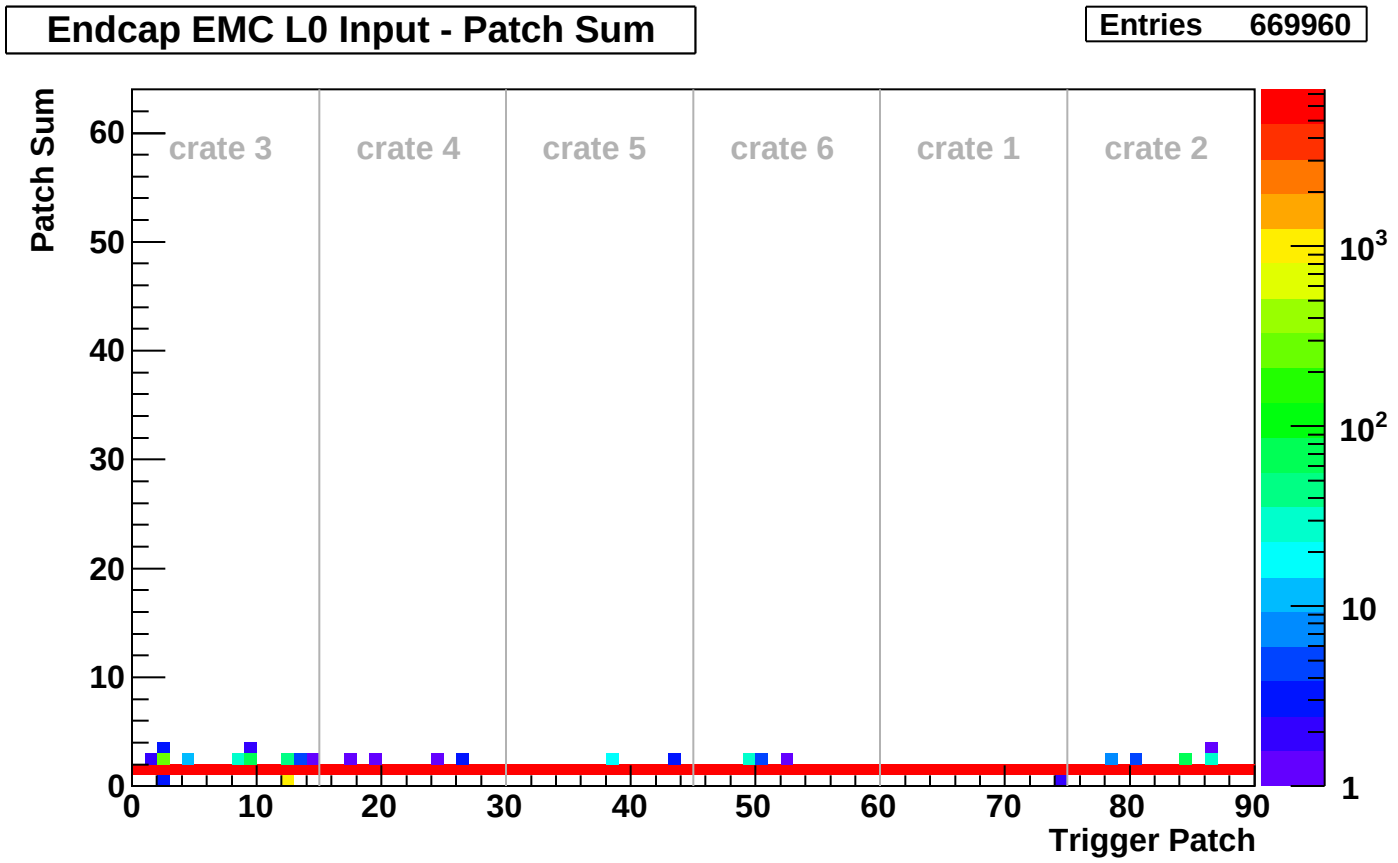

TCU bits
Entries 7444
TCU bits - Simulated
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

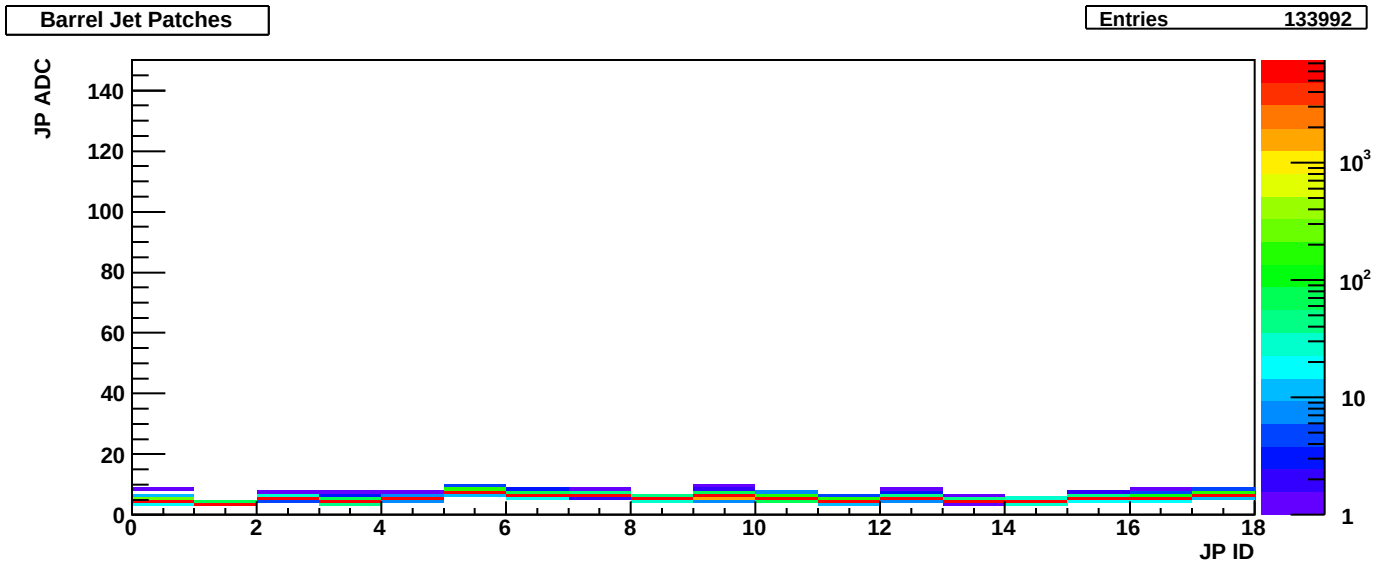

BunchId7Bit (all events)
Entries 7444
0 20 40 60 80 100 120

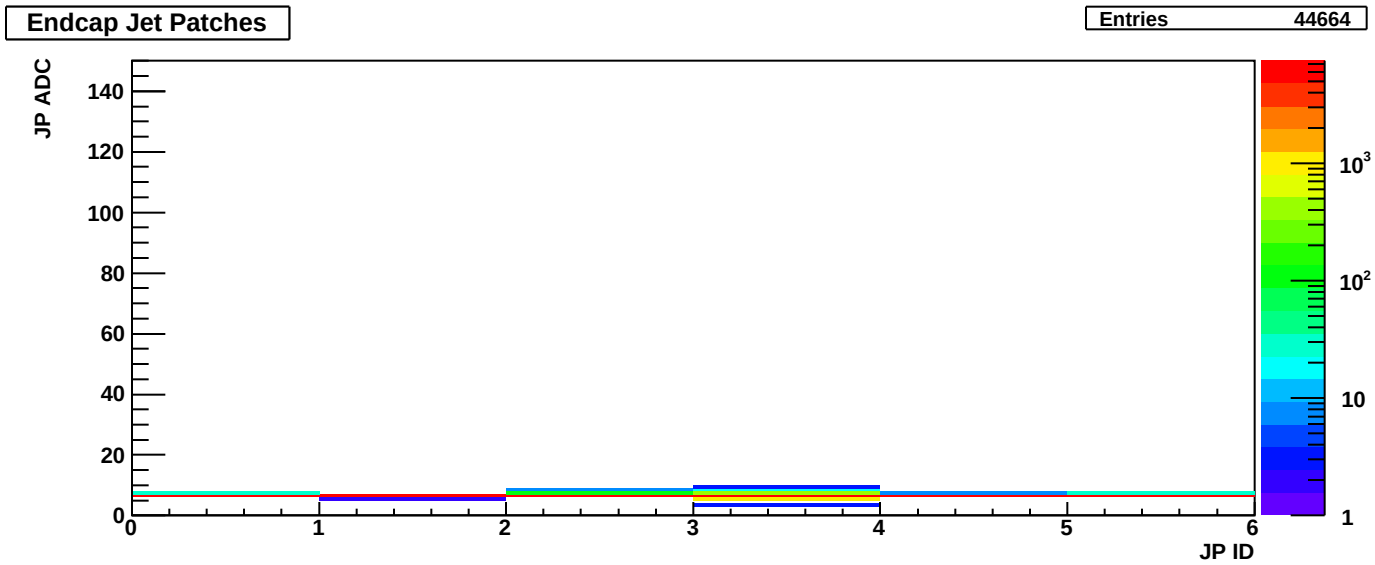

Barrel EMC L0 Input - High Tower
Entries 2233200
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

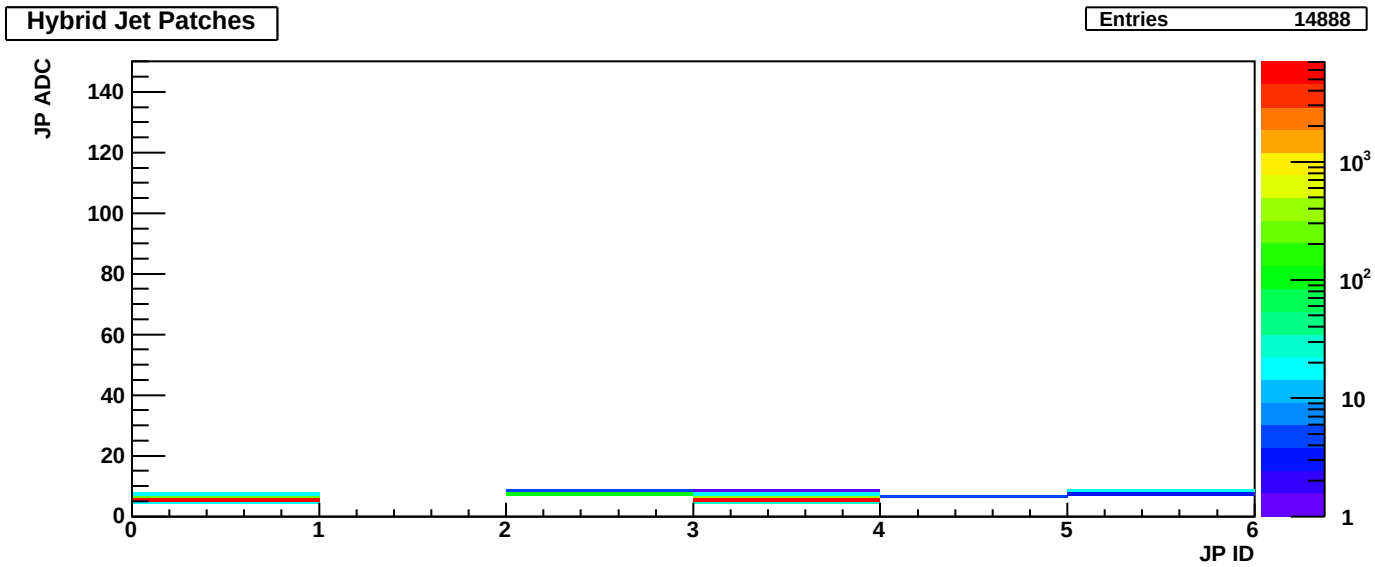

Barrel EMC L0 Input - Patch Sum
Entries 2233200
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

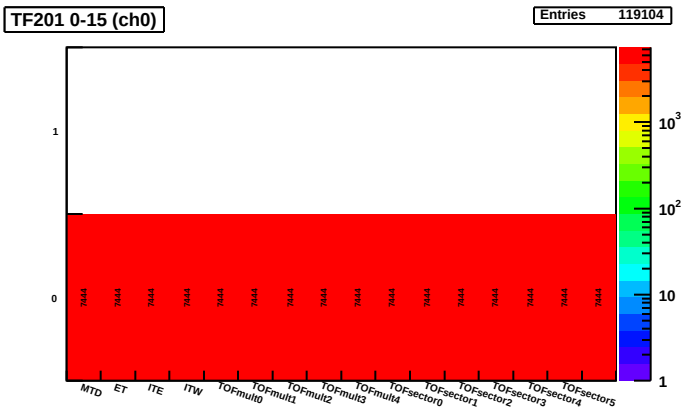

Endcap EMC L0 Input - High Tower
Entries 669960
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

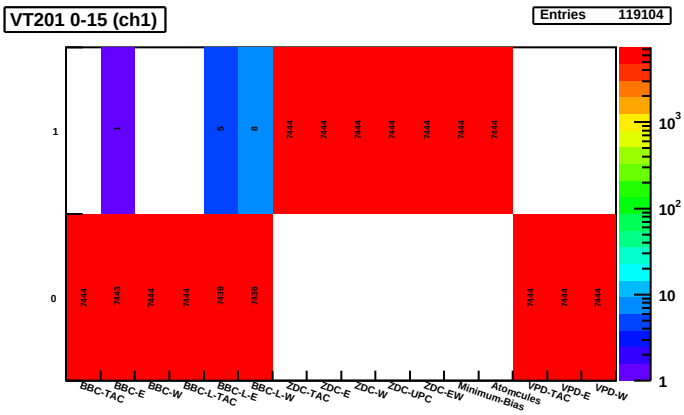

Endcap EMC L0 Input - Patch Sum
Entries 669960
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

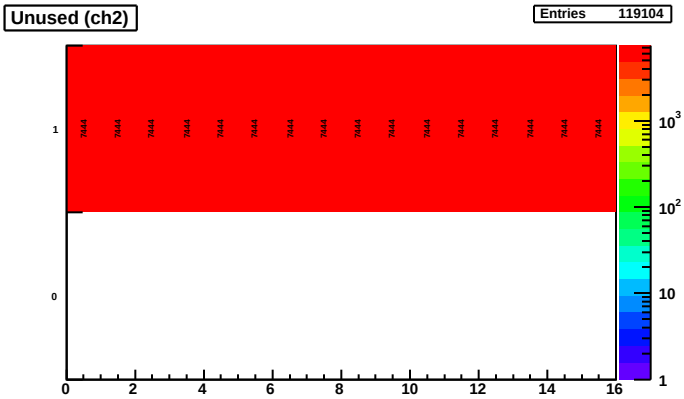

Barrel Jet Patches
Entries 133992
JP ADC
JP ID

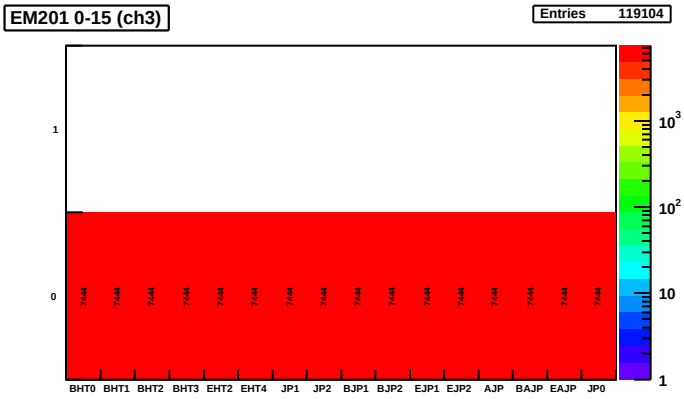

Endcap Jet Patches
Entries 44664
JP ADC
JP ID

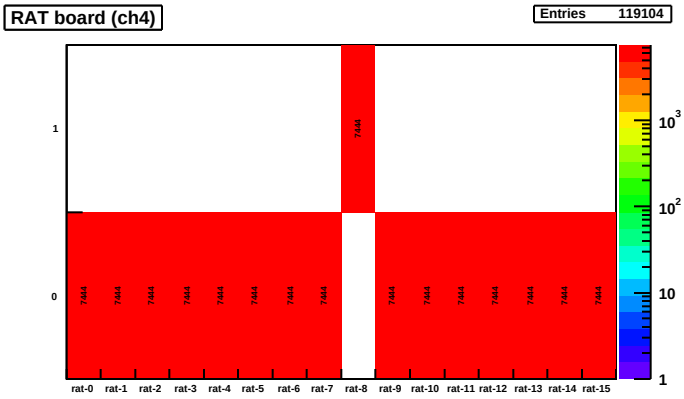

Hybrid Jet Patches
Entries 14888
JP ADC
JP ID

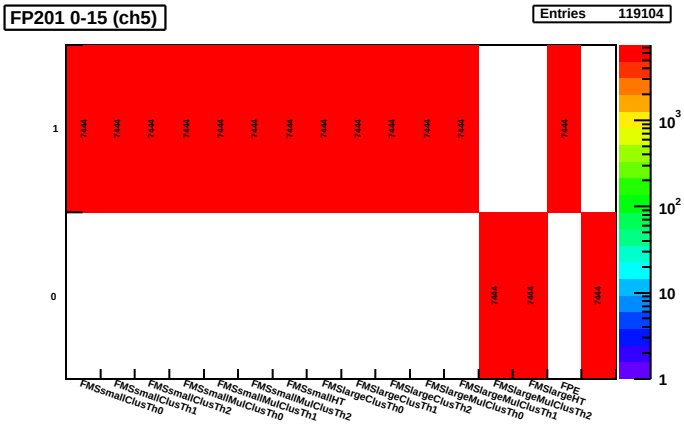

TF201 0-15 (ch0)
Entries 119104
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

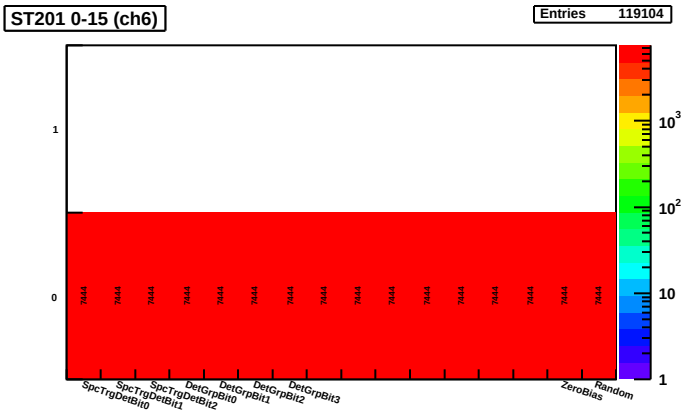

VT201 0-15 (ch1)
Entries 119104
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

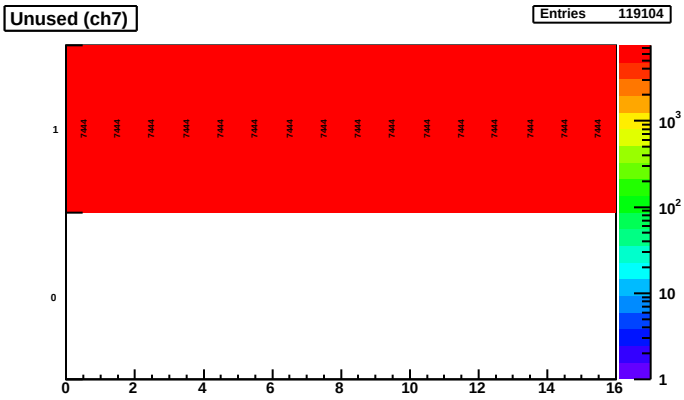

Unused (ch2)
Entries 119104

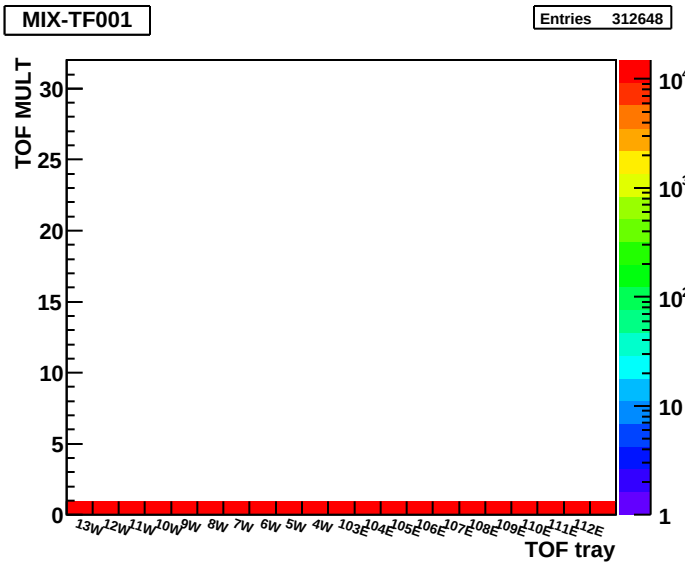

EM201 0-15 (ch3)
Entries 119104
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

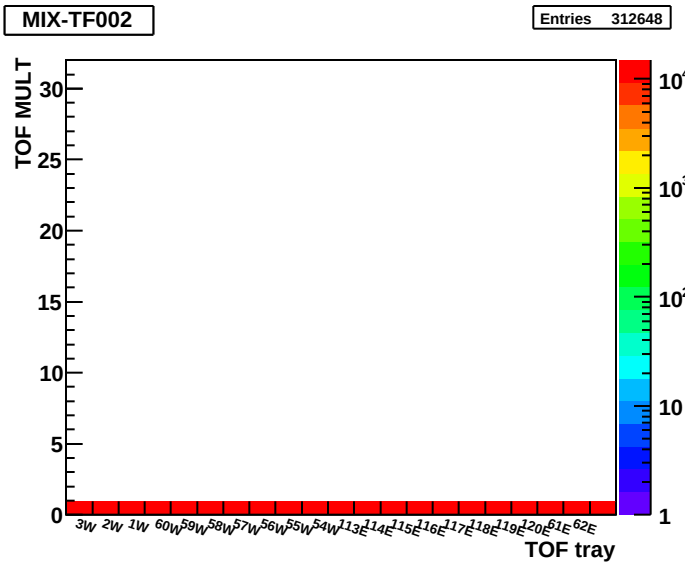

RAT board (ch4)
Entries 119104
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

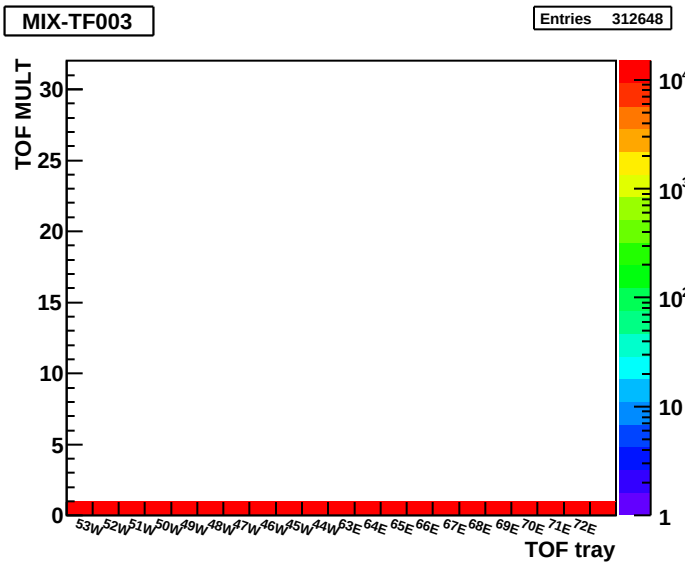

FP201 0-15 (ch5)
Entries 119104
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

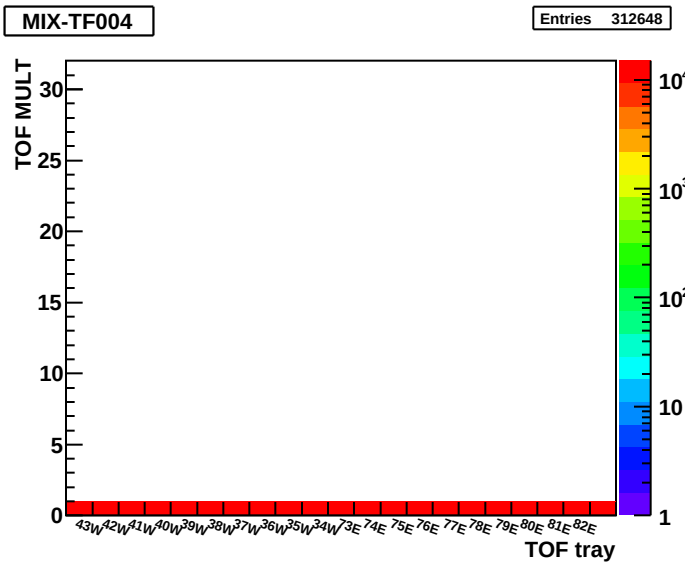

ST201 0-15 (ch6)
Entries 119104
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

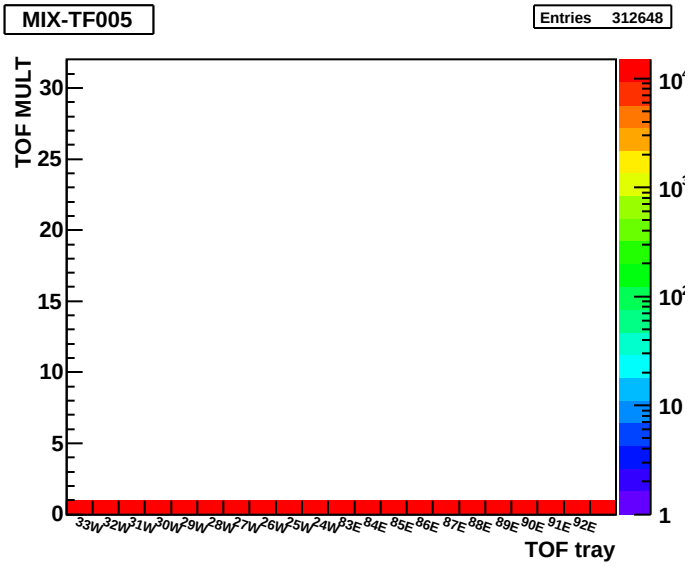

Unused (ch7)
Entries 119104

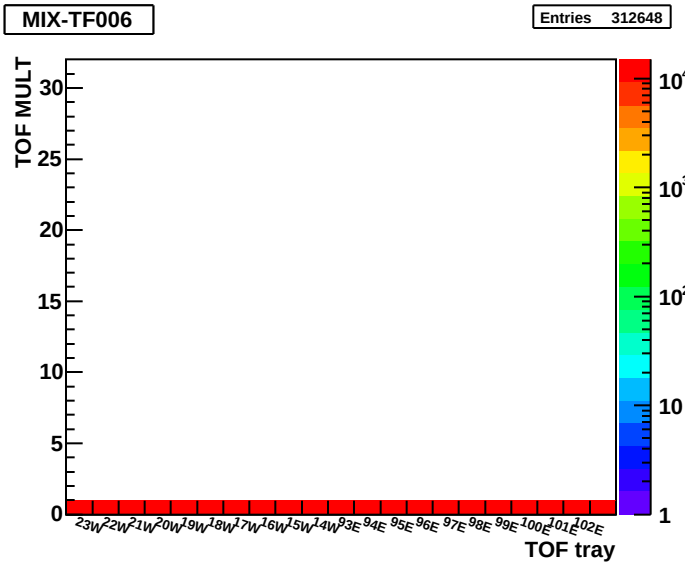

MIX-TF001
Entries 312648
TOF MULT
TOF tray

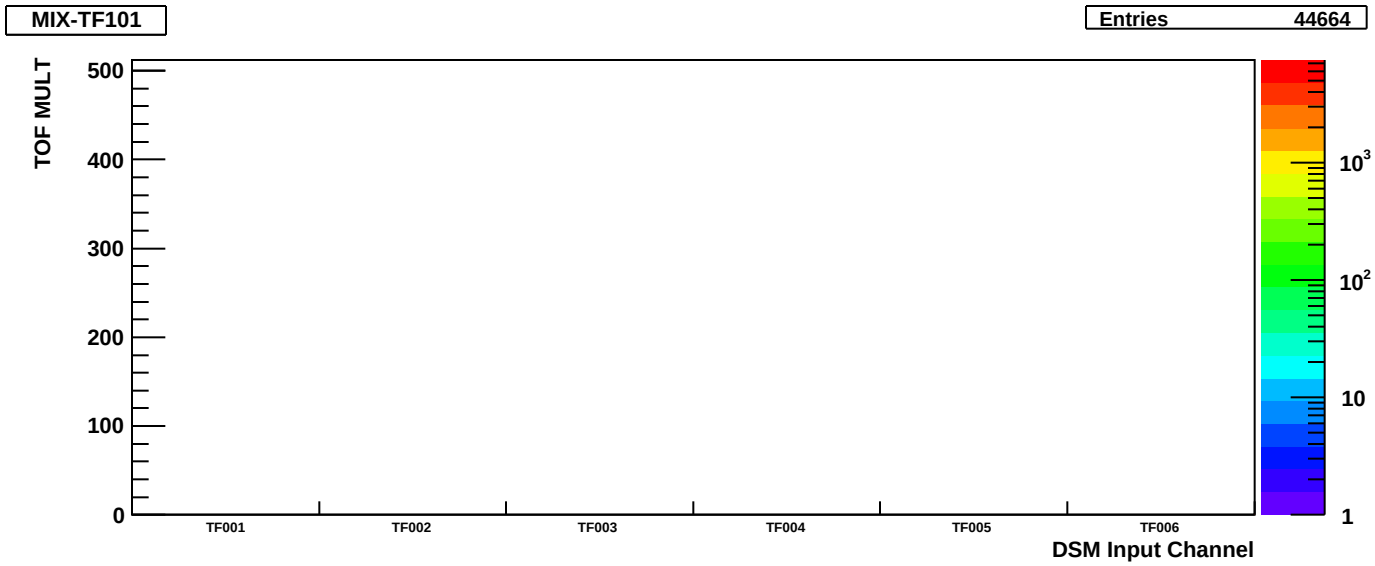

MIX-TF002
Entries 312648
TOF MULT
TOF tray

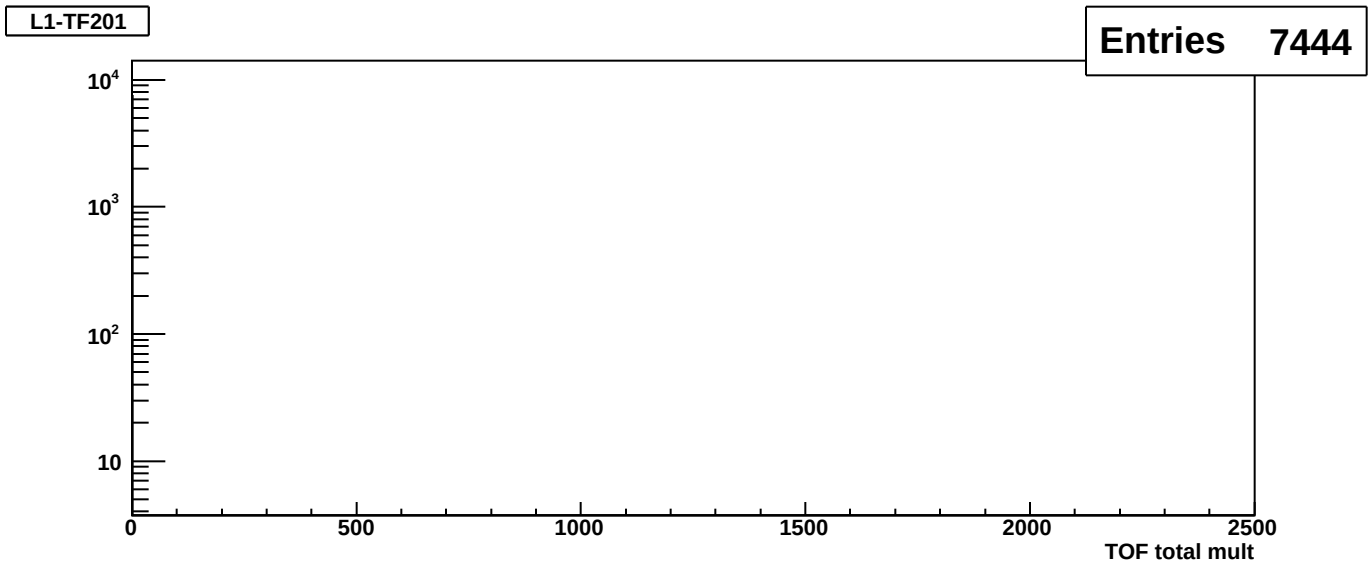

MIX-TF003
Entries 312648
TOF MULT
TOF tray

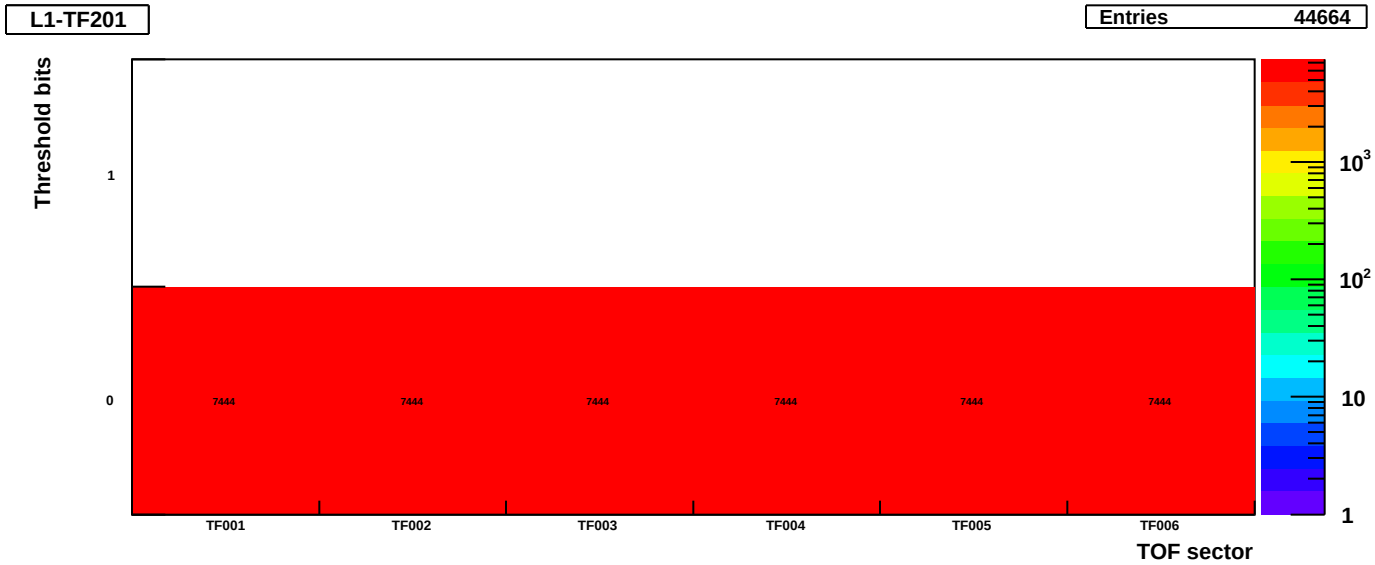

MIX-TF004
Entries 312648
TOF MULT
TOF tray

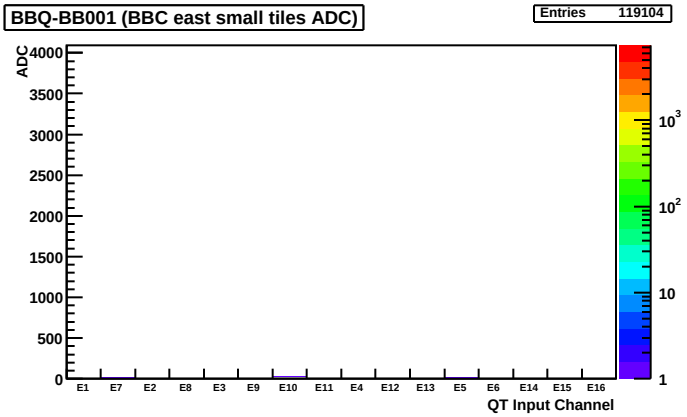

MIX-TF005
Entries 312648
TOF MULT
TOF tray

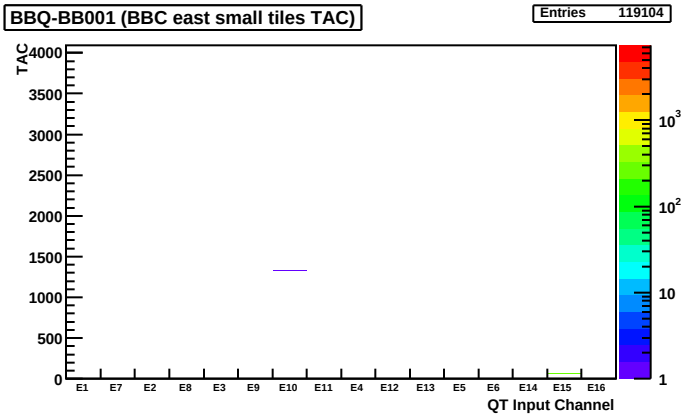

MIX-TF006
Entries 312648
TOF MULT
TOF tray

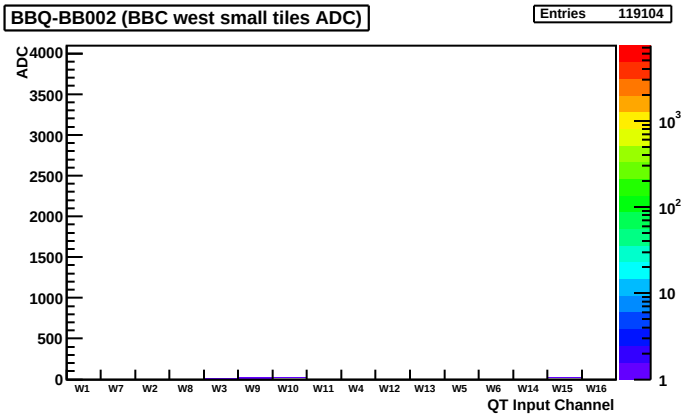

MIX-TF101
Entries 44664
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

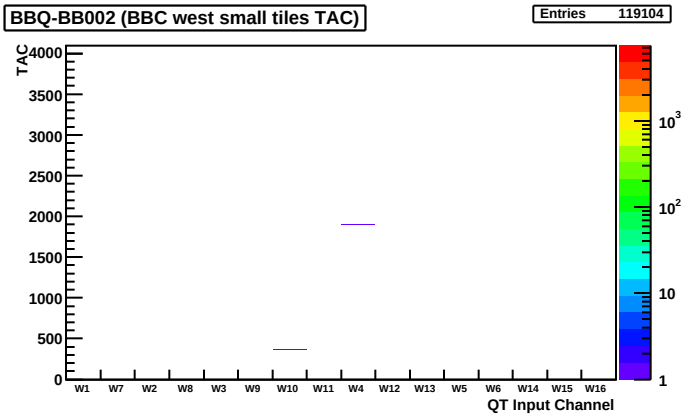

L1-TF201
Entries 7444
10^4
10^3
10^2
10
0
500
1000
1500
2000
2500
TOF total mult

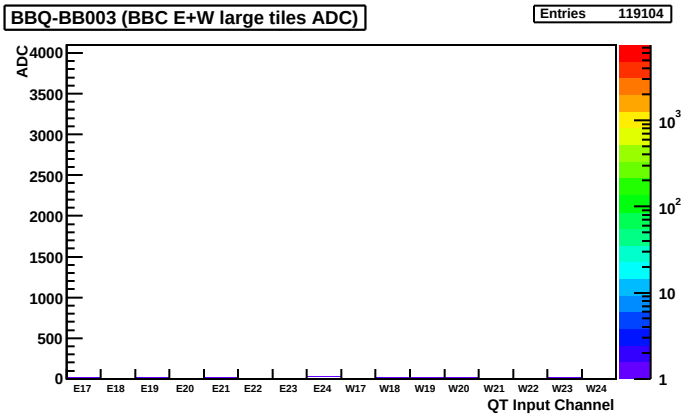

L1-TF201
Entries 44664
Threshold bits
1
0
7444
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^3
10^2
10
1

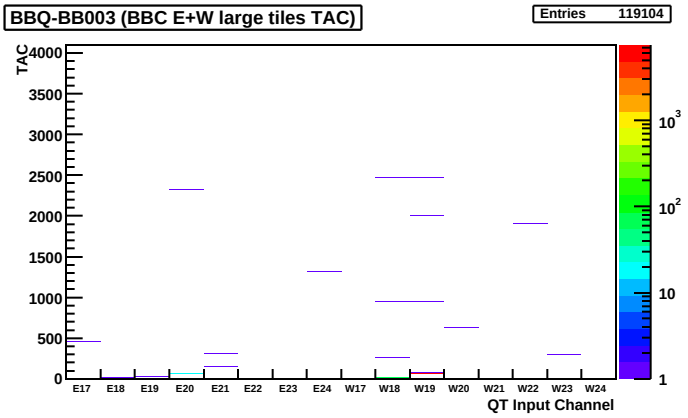

BBQ-BB001 (BBC east small tiles ADC)
Entries 119104
ADC
QT Input Channel

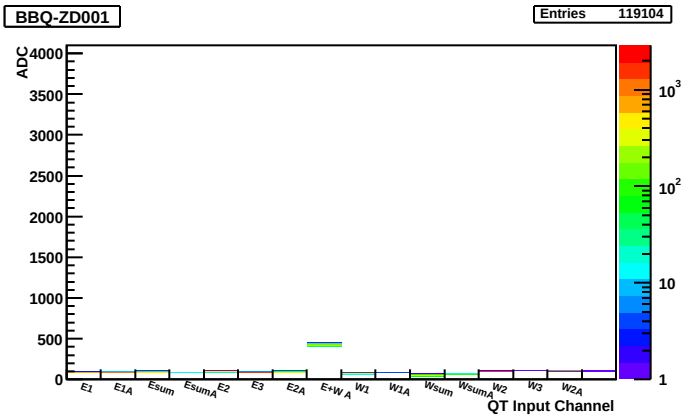

BBQ-BB001 (BBC east small tiles TAC)
Entries 119104
TAC
QT Input Channel

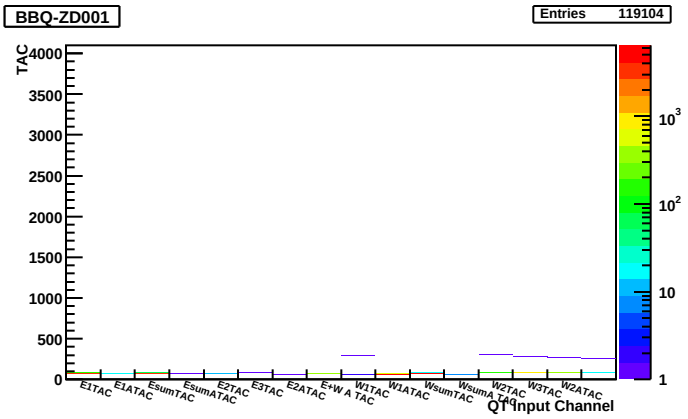

BBQ-BB002 (BBC west small tiles ADC)
Entries 119104
ADC
QT Input Channel

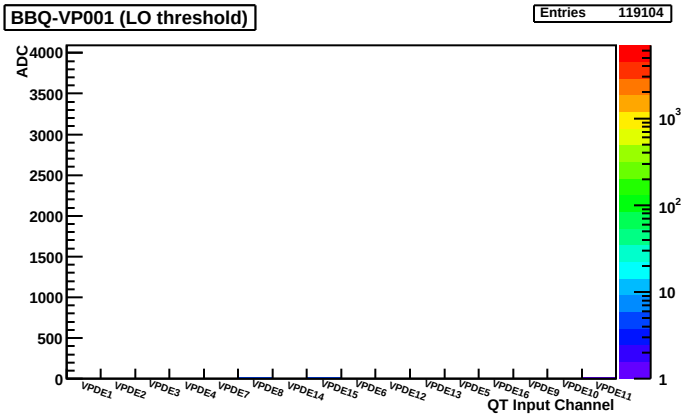

BBQ-BB002 (BBC west small tiles TAC)
Entries 119104
TAC
QT Input Channel

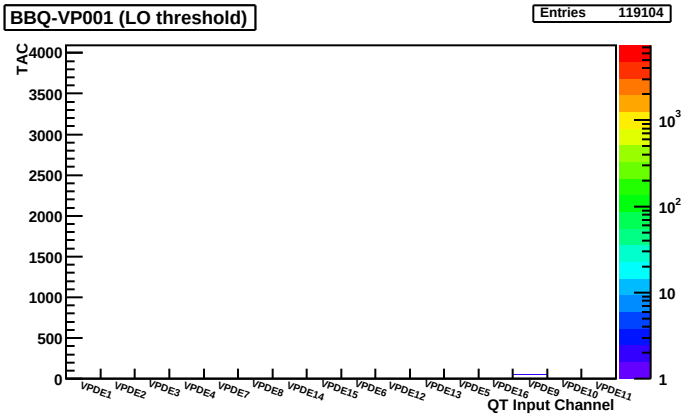

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 119104
ADC
QT Input Channel

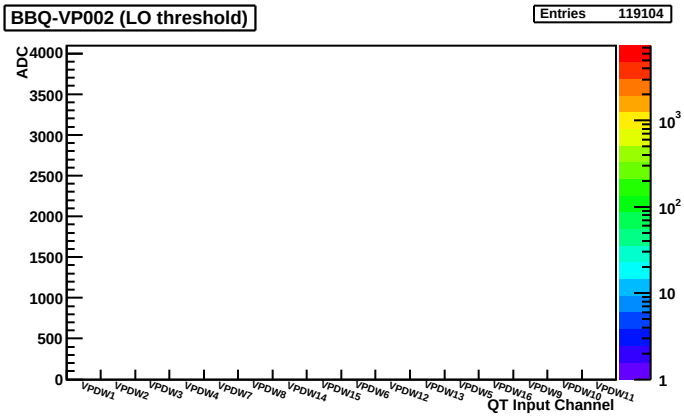

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 119104
TAC
QT Input Channel

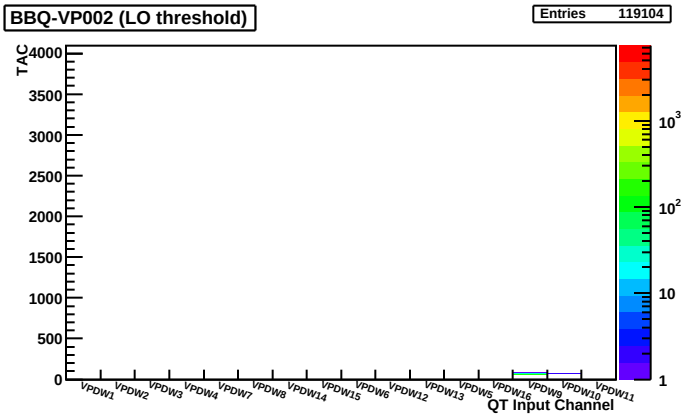

BBQ-ZD001
Entries 119104
ADC
QT Input Channel

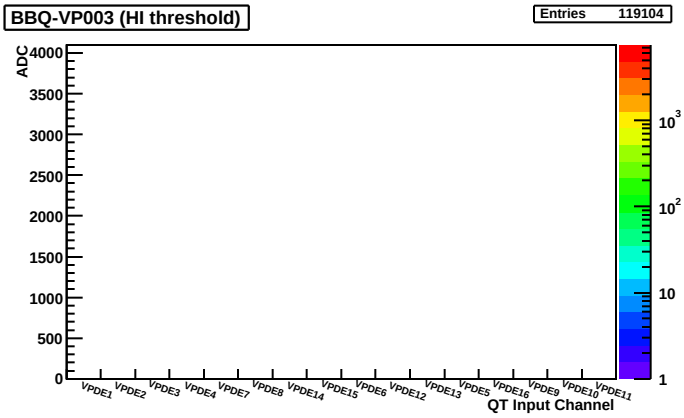

BBQ-ZD001
Entries 119104
TAC
QT Input Channel

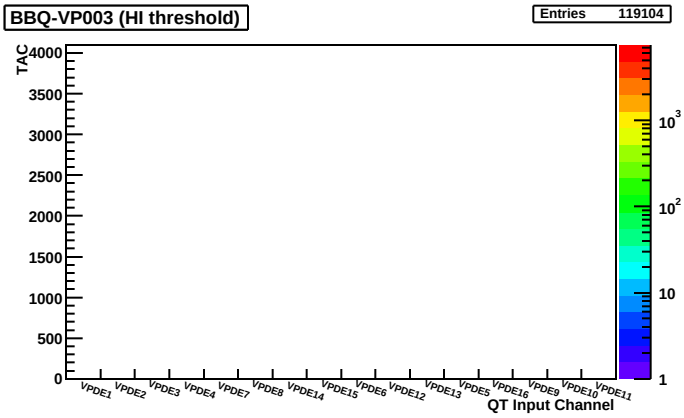

BBQ-VP001 (LO threshold)
Entries 119104
ADC
QT Input Channel

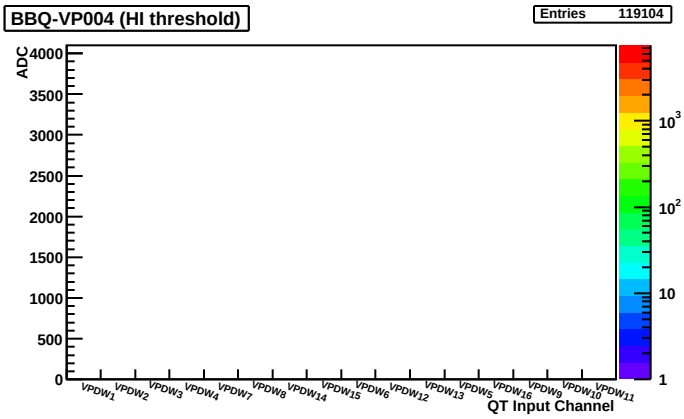

BBQ-VP001 (LO threshold)
Entries 119104
TAC
QT Input Channel

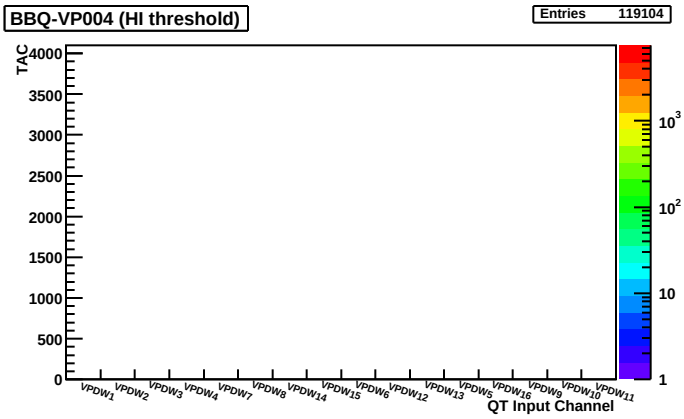

BBQ-VP002 (LO threshold)
Entries 119104
ADC
QT Input Channel

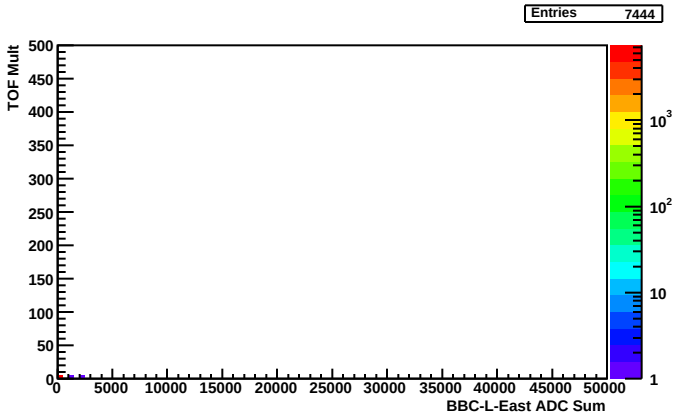

BBQ-VP002 (LO threshold)
Entries 119104
TAC
QT Input Channel

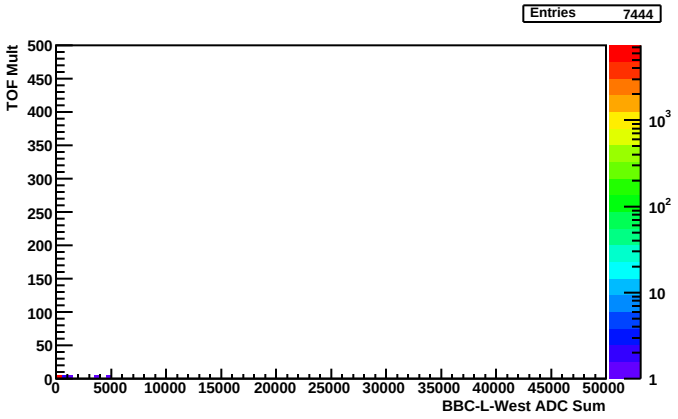

BBQ-VP003 (HI threshold)
Entries 119104
ADC
QT Input Channel

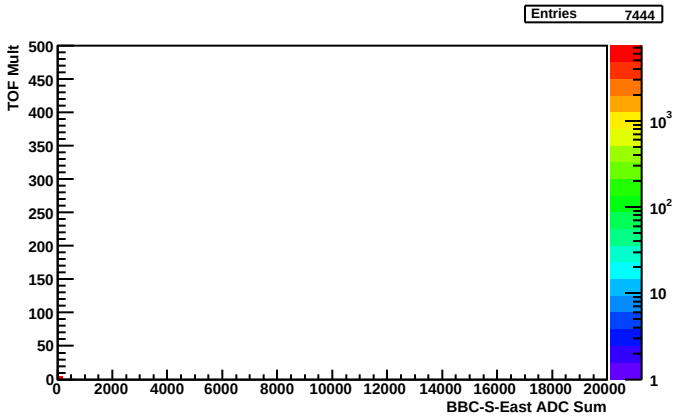

BBQ-VP003 (HI threshold)
Entries 119104
TAC
QT Input Channel

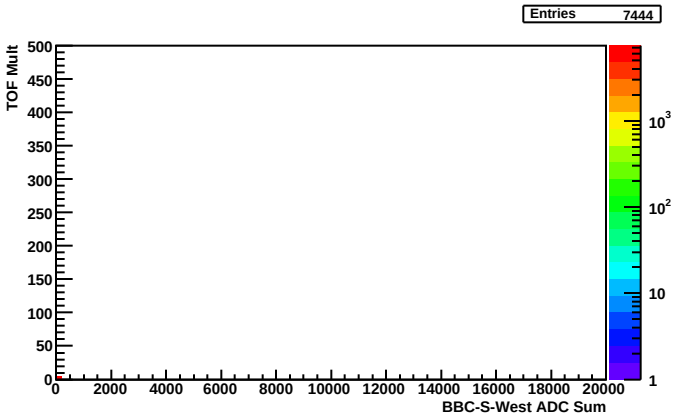

BBQ-VP004 (HI threshold)
Entries 119104
ADC
QT Input Channel

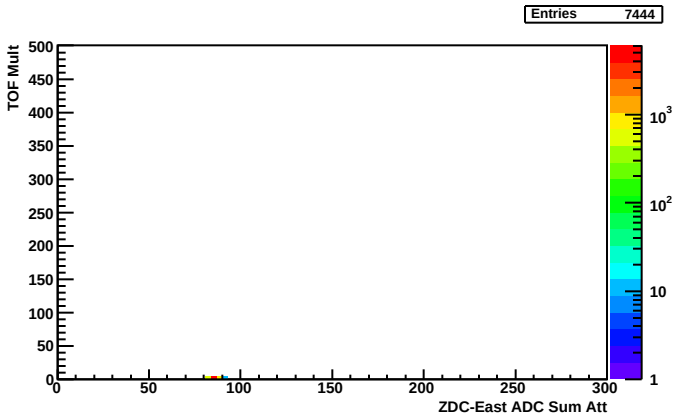

BBQ-VP004 (HI threshold)
Entries 119104
TAC
QT Input Channel

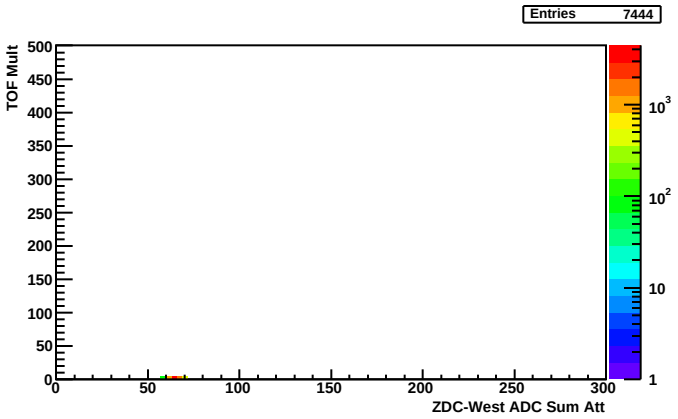

Entries 7444
TOF Mult
BBC-L-East ADC Sum

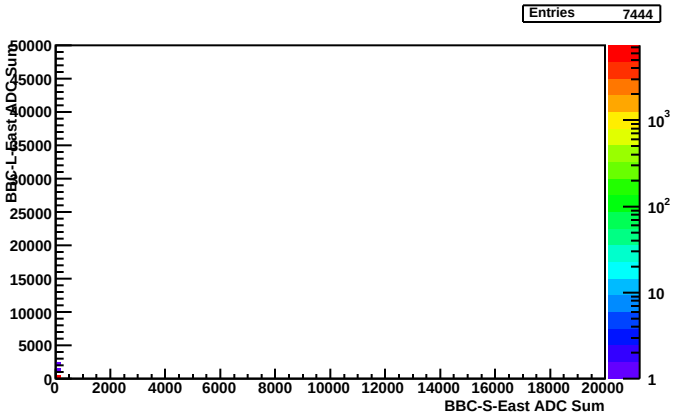

Entries 7444
TOF Mult
BBC-L-West ADC Sum

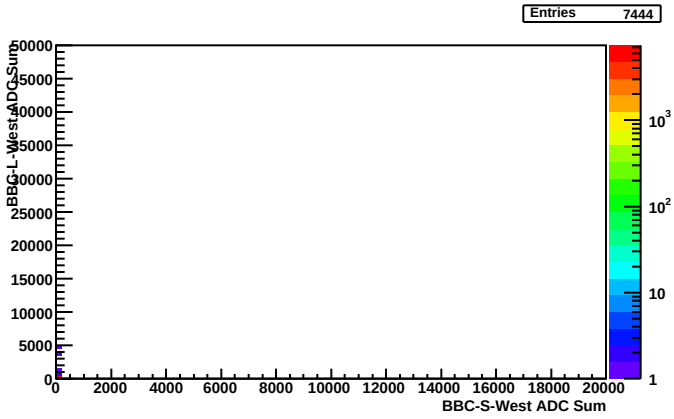

Entries 7444
TOF Mult
BBC-S-East ADC Sum

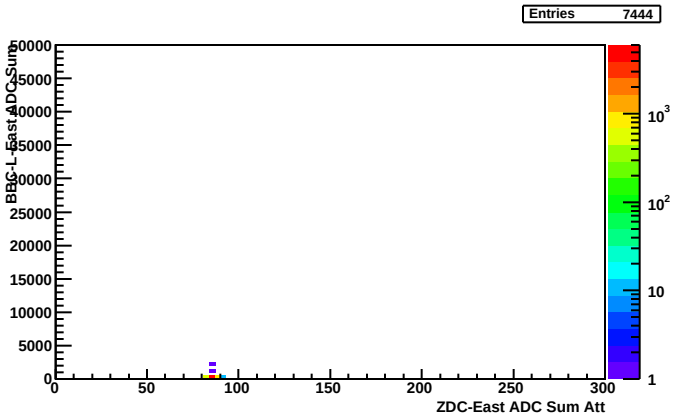

Entries 7444
TOF Mult
BBC-S-West ADC Sum

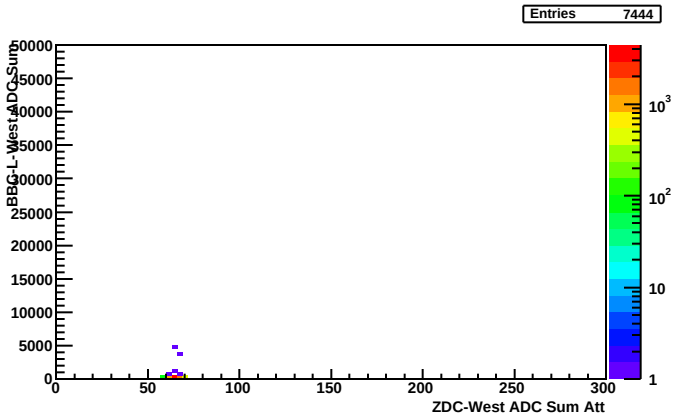

Entries 7444
TOF Mult
ZDC-East ADC Sum Att

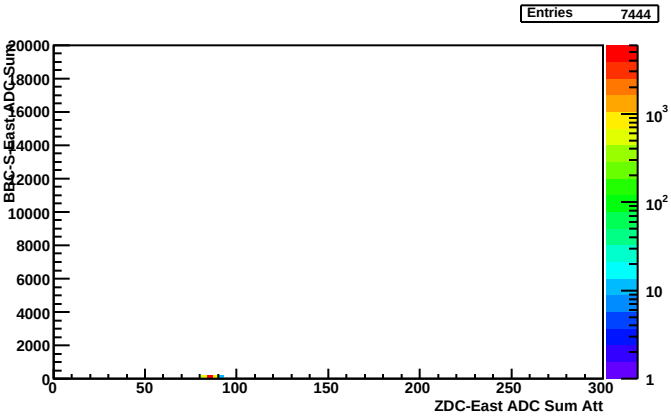

Entries 7444
TOF Mult
ZDC-West ADC Sum Att

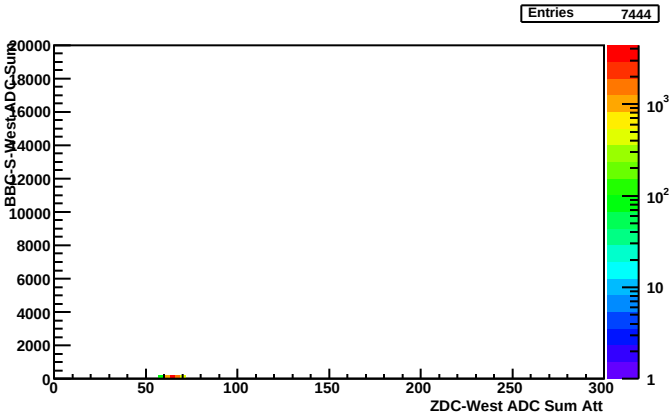

Entries 7444
BBC-L-East ADC Sum
BBC-S-East ADC Sum

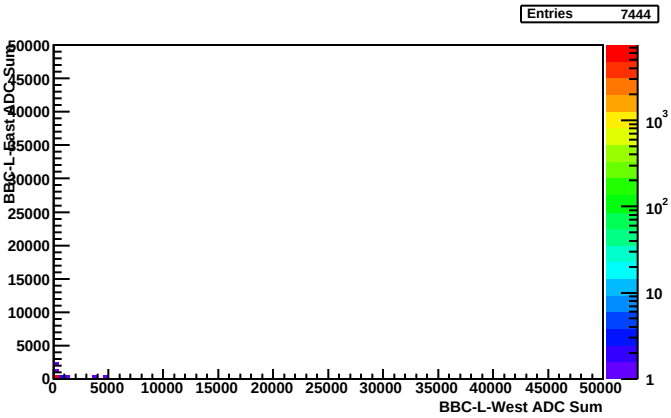

Entries 7444
BBC-L-West ADC Sum
BBC-S-West ADC Sum

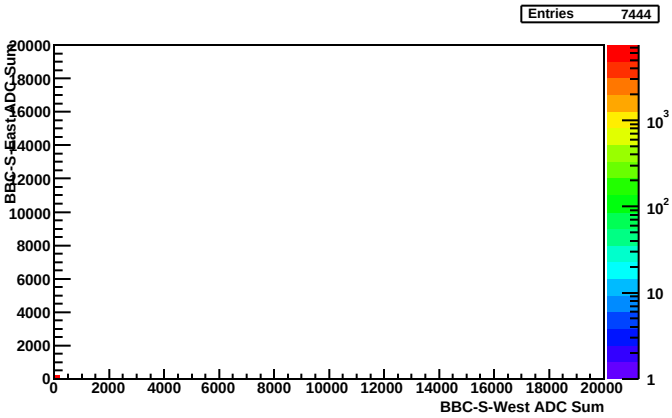

Entries 7444
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

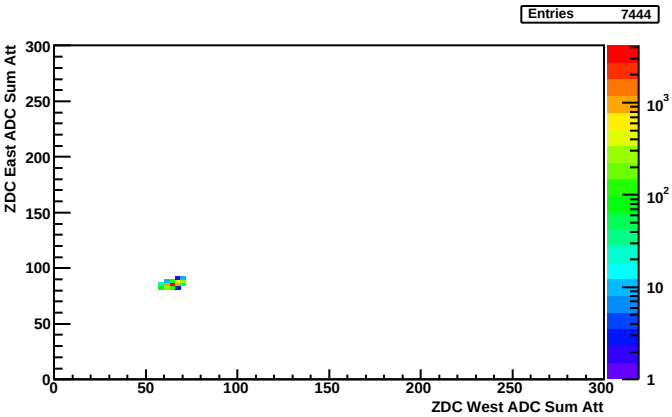

Entries 7444
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

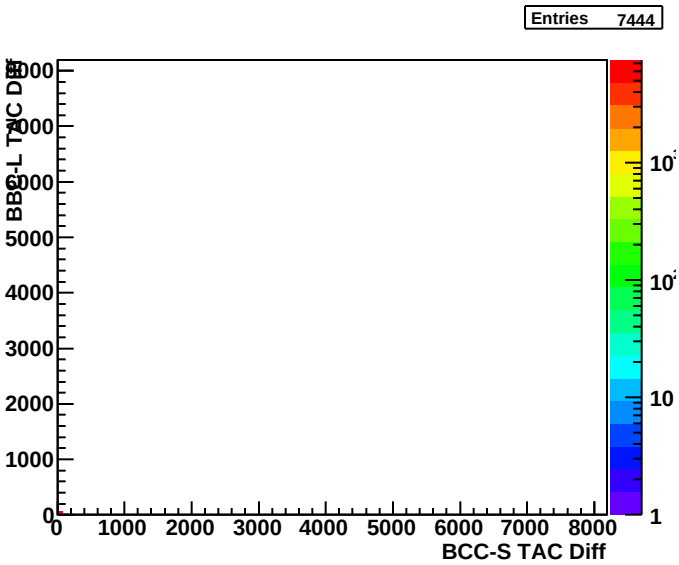

Entries 7444
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

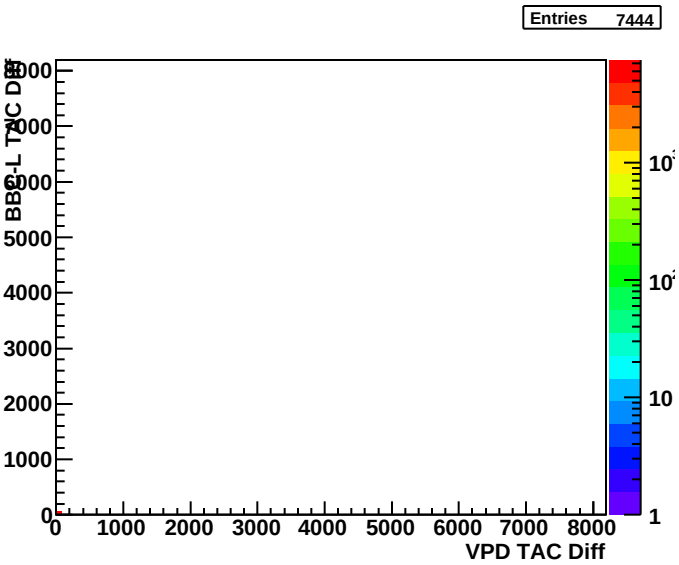

Entries 7444
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

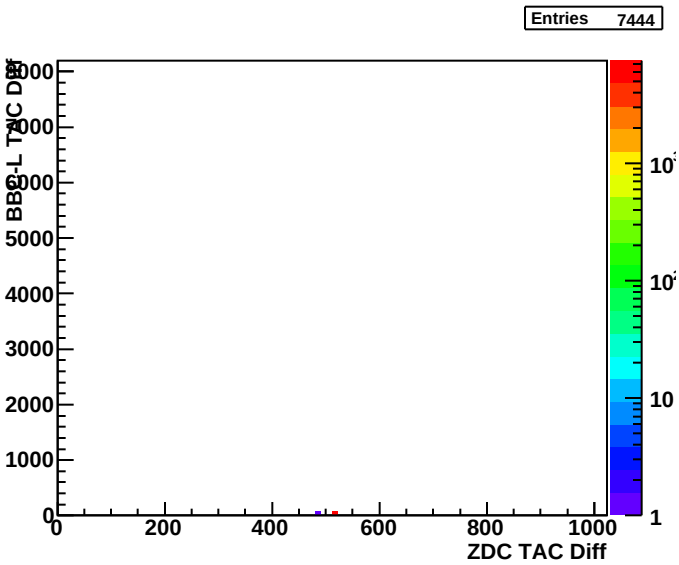

Entries 7444
BBC-L-East ADC Sum
BBC-L-West ADC Sum

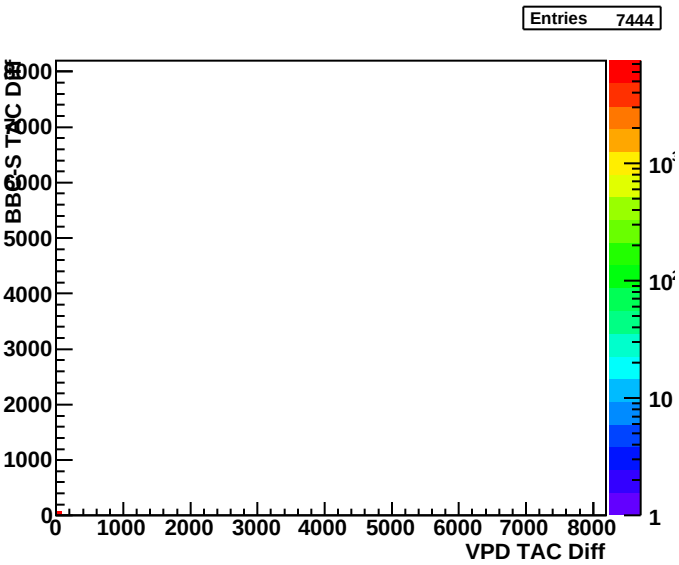

Entries 7444
BBC-S-East ADC Sum
BBC-S-West ADC Sum

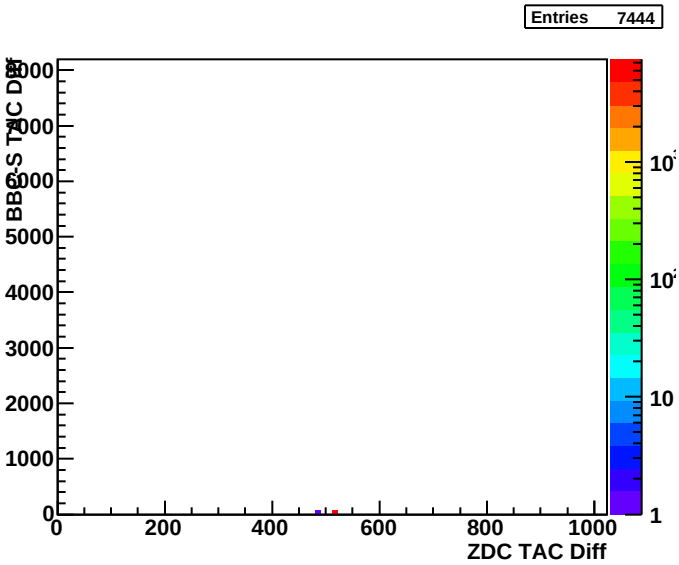

Entries 7444
ZDC East ADC Sum Att
ZDC West ADC Sum Att

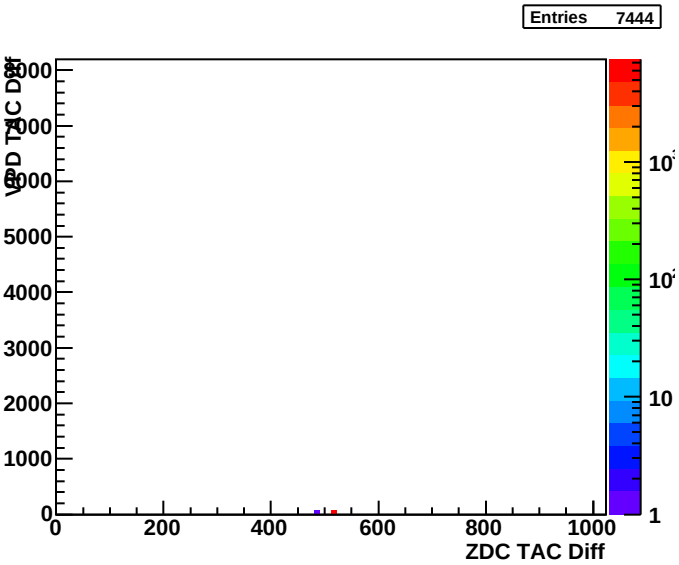

Entries 7444
BBC-L TAC Diff
BCC-S TAC Diff

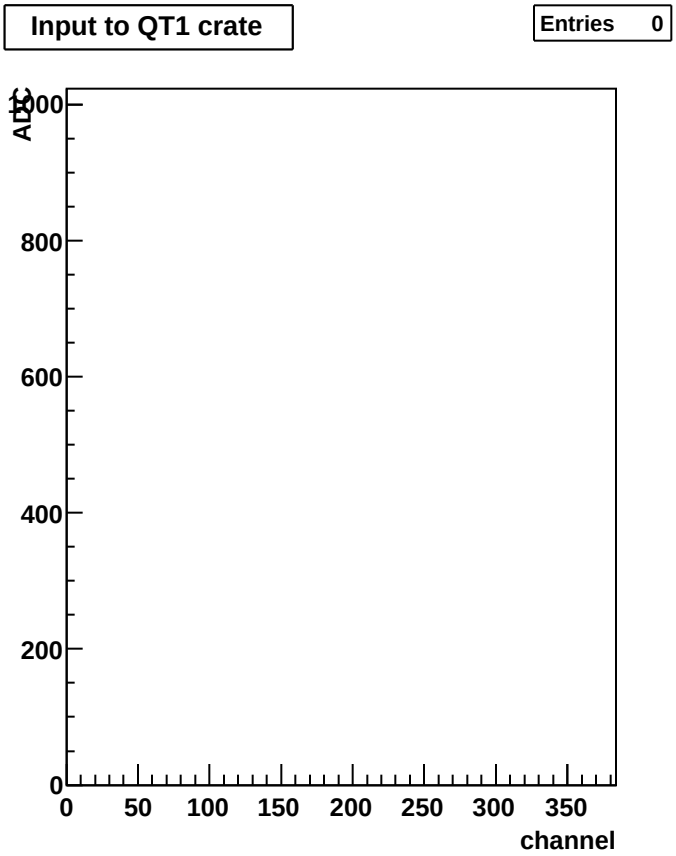

Entries 7444
BBC-L TAC Diff
VPD TAC Diff

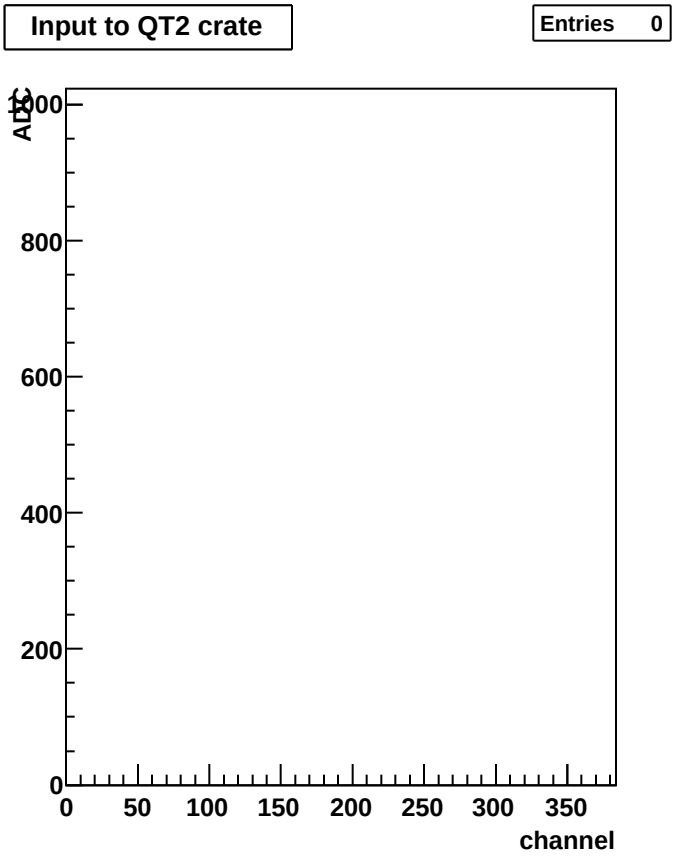

Entries 7444
BBC-L TAC Diff
ZDC TAC Diff

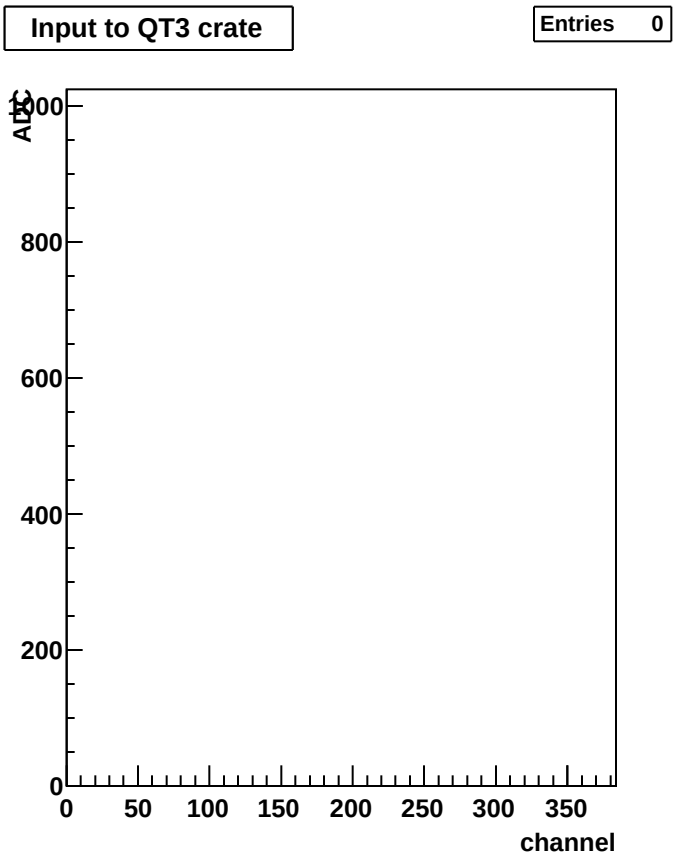

Entries 7444
BBC-S TAC Diff
VPD TAC Diff

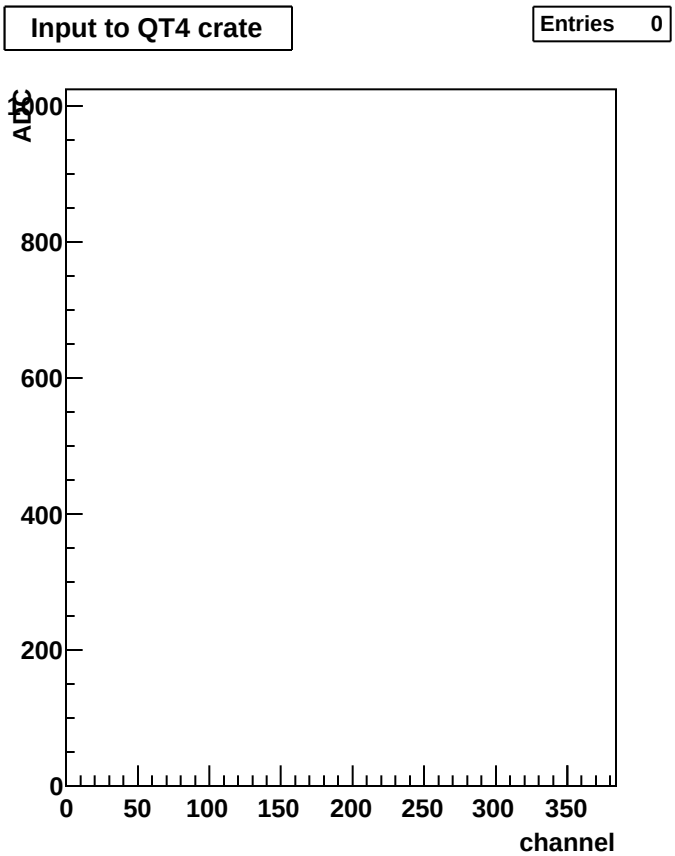

Entries 7444
BBC-S TAC Diff
ZDC TAC Diff

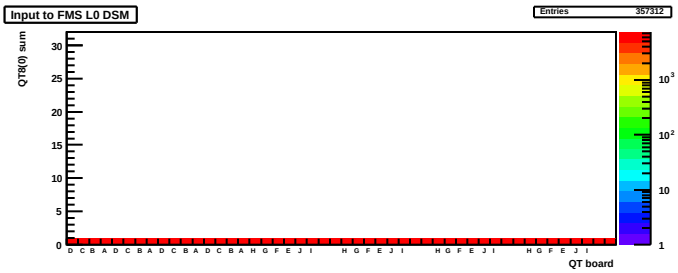

Entries 7444
VPD TAC Diff
ZDC TAC Diff

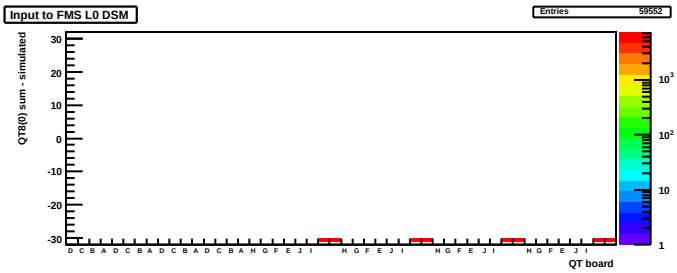

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

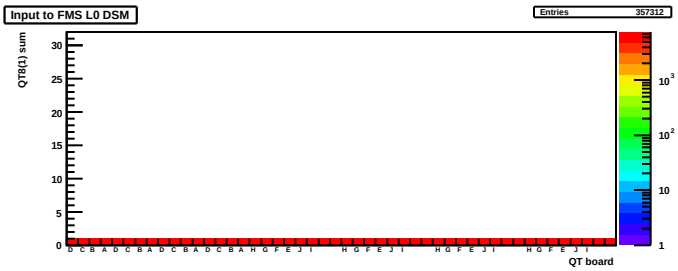

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

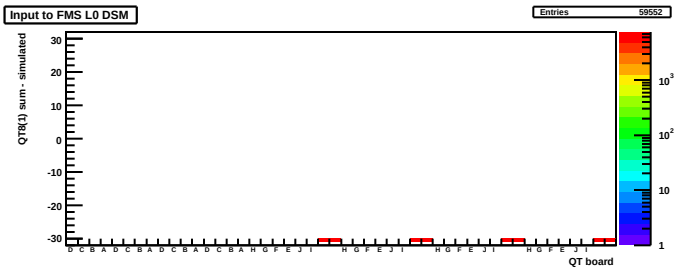

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

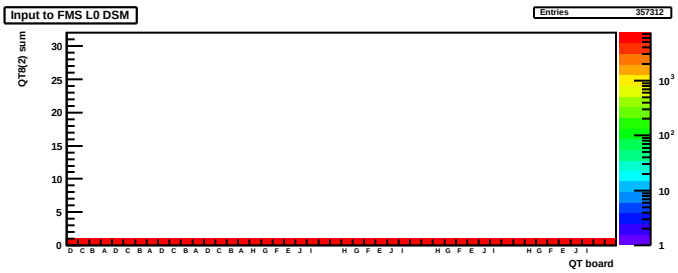

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

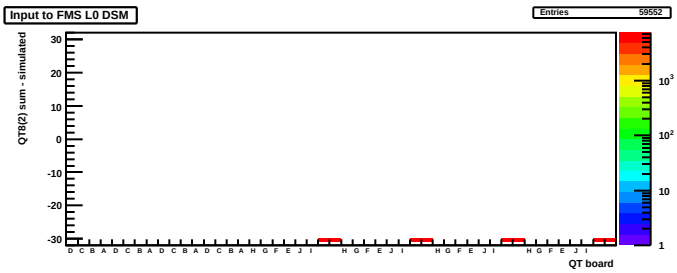

Input to FMS L0 DSM
Entries 357312
QT8(0) sum
QT board

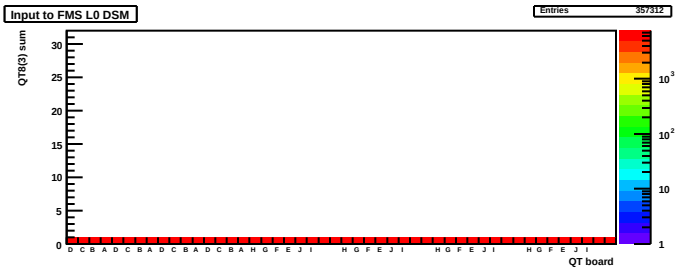

Input to FMS L0 DSM
Entries 59552
QT8(0) sum - simulated
QT board

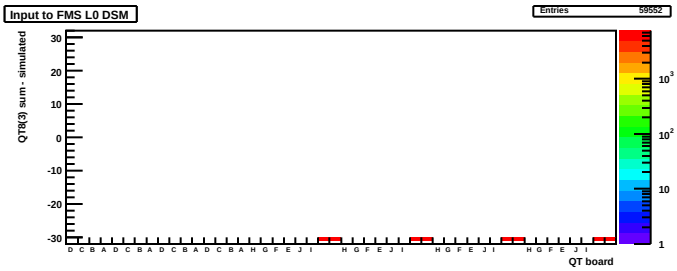

Input to FMS L0 DSM
Entries 357312
QT8(1) sum
QT board

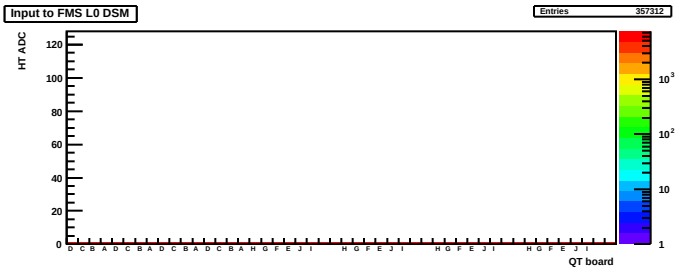

Input to FMS L0 DSM
Entries 59552
QT8(1) sum - simulated
QT board

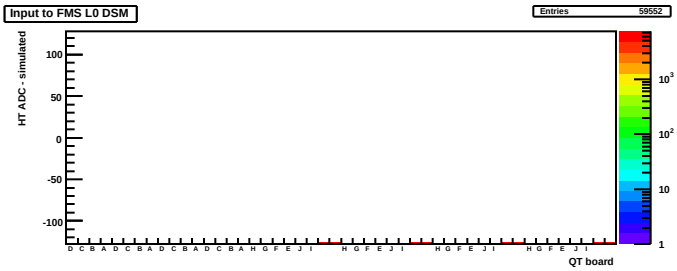

Input to FMS L0 DSM
Entries 357312
QT8(2) sum
QT board

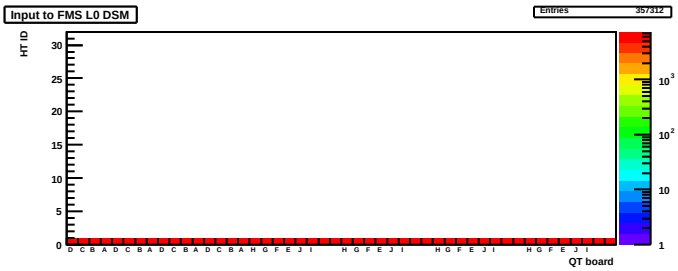

Input to FMS L0 DSM
Entries 59552
QT8(2) sum - simulated
QT board

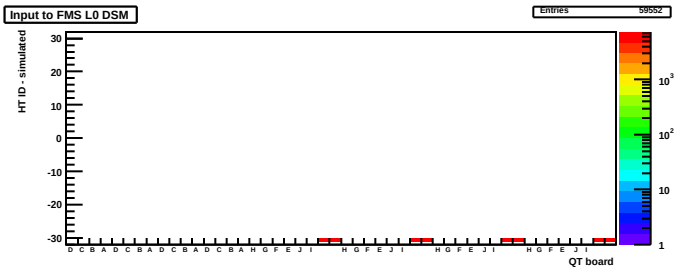

Input to FMS L0 DSM
Entries 357312
QT8(3) sum
QT board

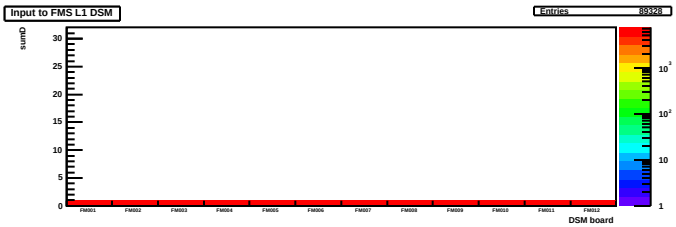

Input to FMS L0 DSM
Entries 59552
QT8(3) sum - simulated
QT board

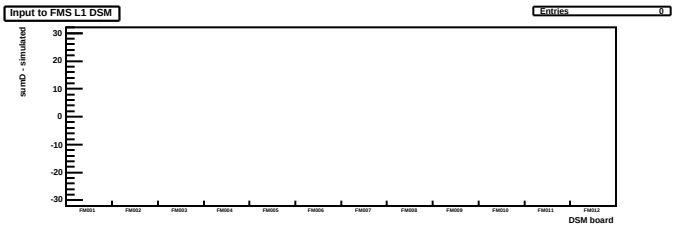

Input to FMS L0 DSM
Entries 357312
HT ADC
QT board

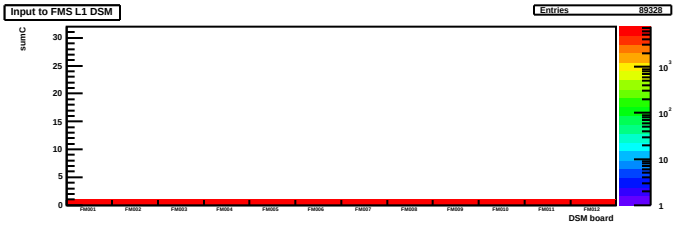

Input to FMS L0 DSM
Entries 59552
HT ADC - simulated
QT board

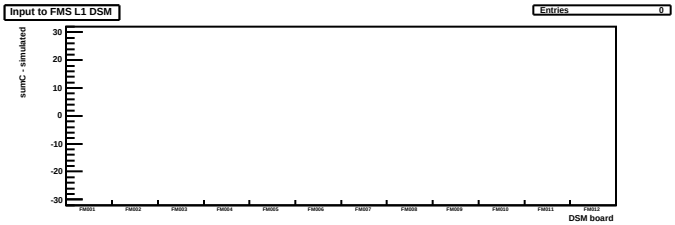

Input to FMS L0 DSM
Entries 357312
HT ID
QT board

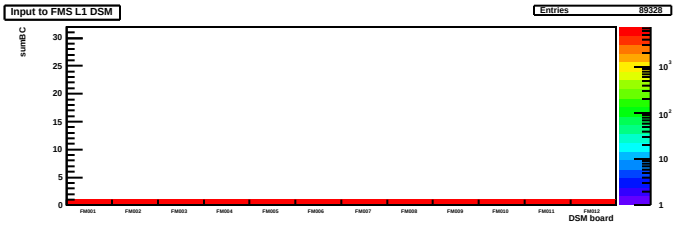

Input to FMS L0 DSM
Entries 59552
HT ID - simulated
QT board

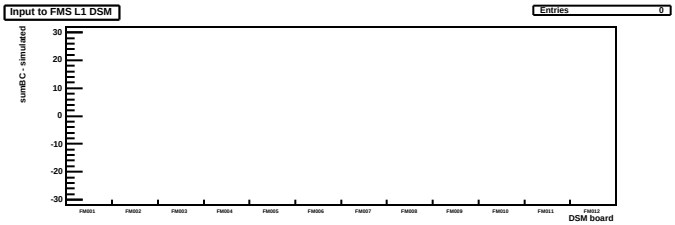

Input to FMS L1 DSM
Entries 89328
sumD
DSM board

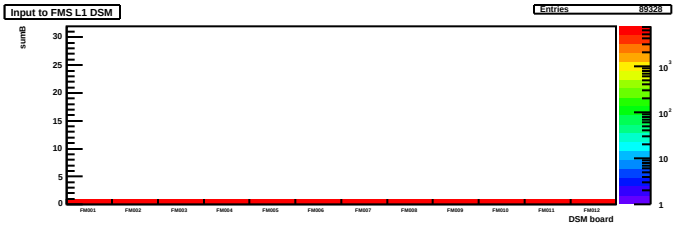

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

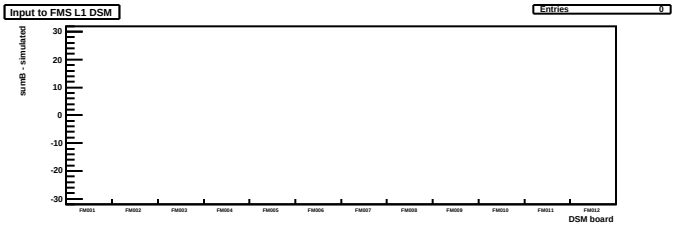

Input to FMS L1 DSM
Entries 89328
sumC
DSM board

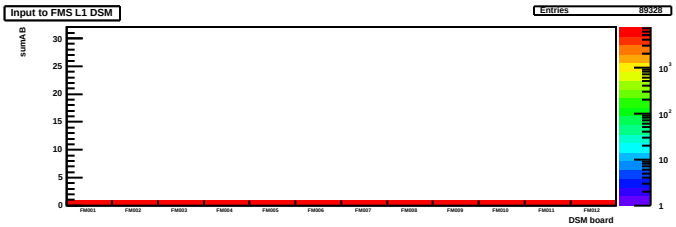

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

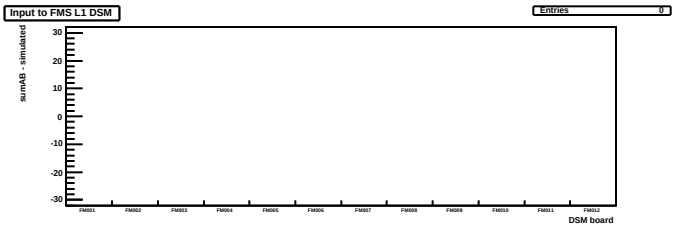

Input to FMS L1 DSM
Entries 89328
sumBC
DSM board

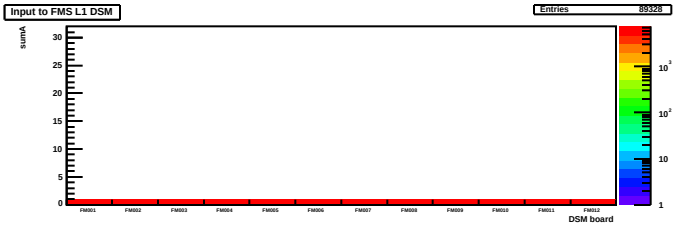

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

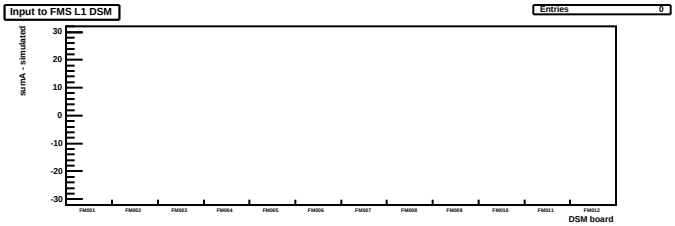

Input to FMS L1 DSM
Entries 89328
sumB
DSM board

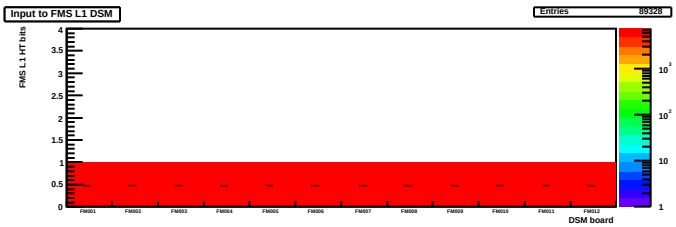

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

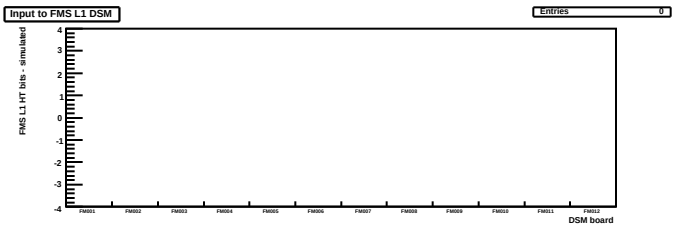

Input to FMS L1 DSM
Entries 89328
sumAB
DSM board

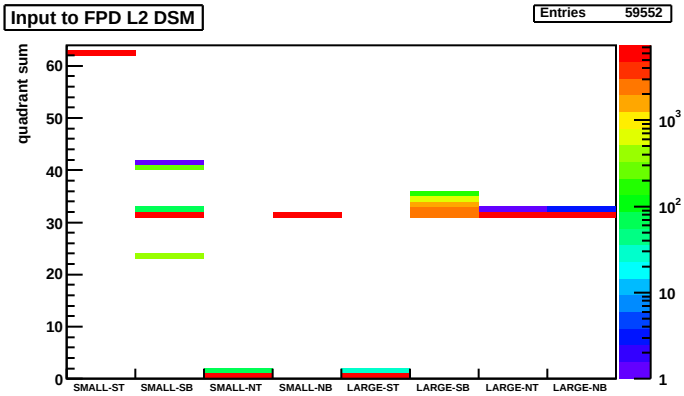

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

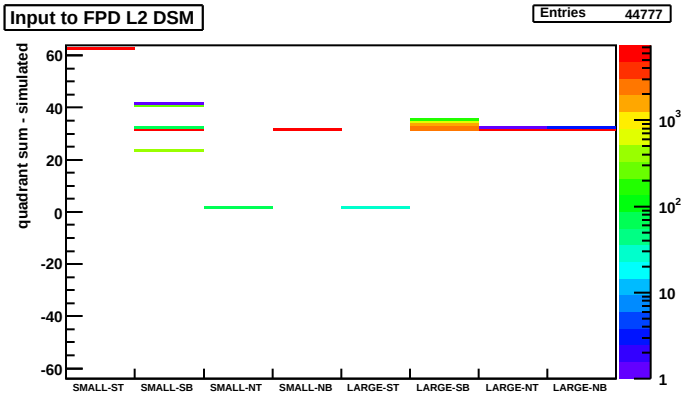

Input to FMS L1 DSM
Entries 89328
sumA
DSM board

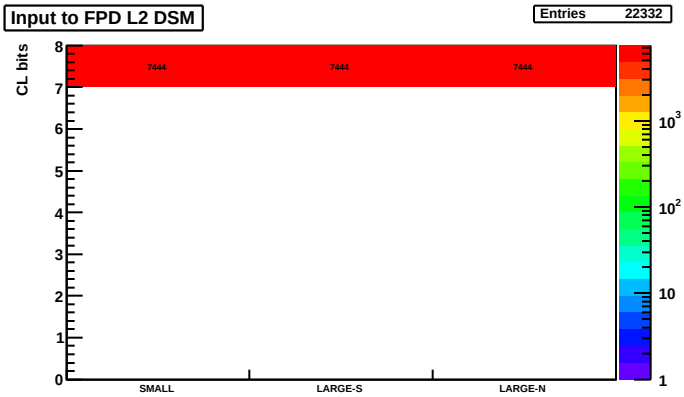

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

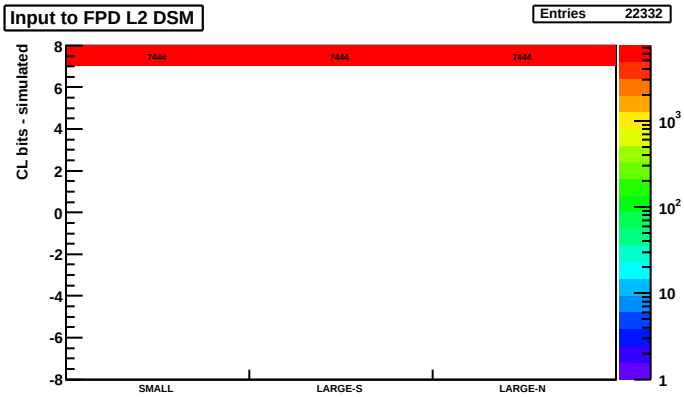

Input to FMS L1 DSM
Entries 89328
FMS L1 HT bits
DSM board

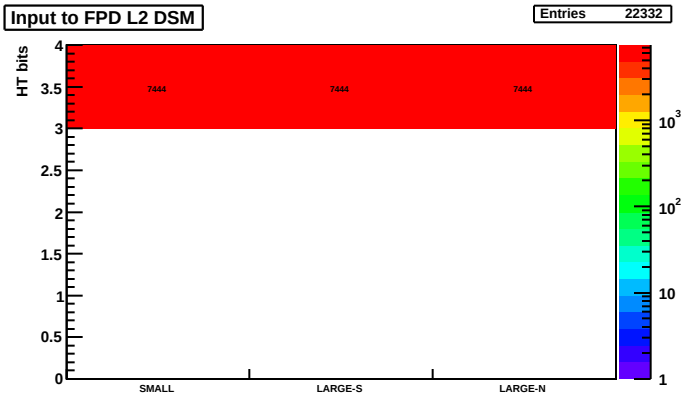

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

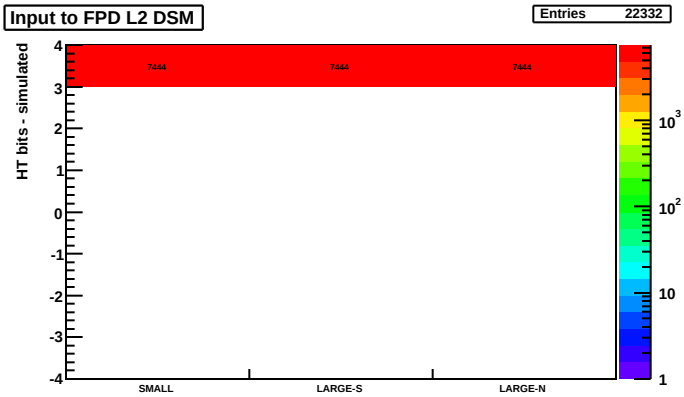

Input to FPD L2 DSM
Entries 59552
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

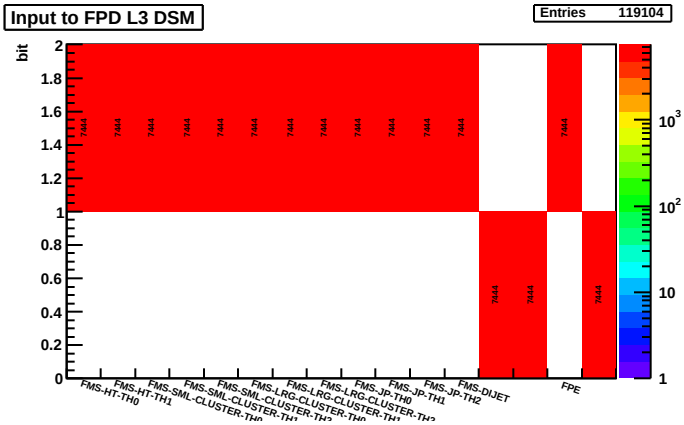

Input to FPD L2 DSM
Entries 44777
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

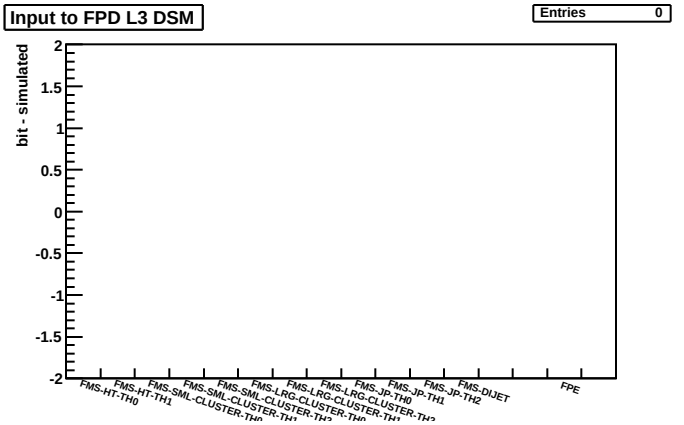

Input to FPD L2 DSM
Entries 22332
CL bits
7444
SMALL
LARGE-S
LARGE-N

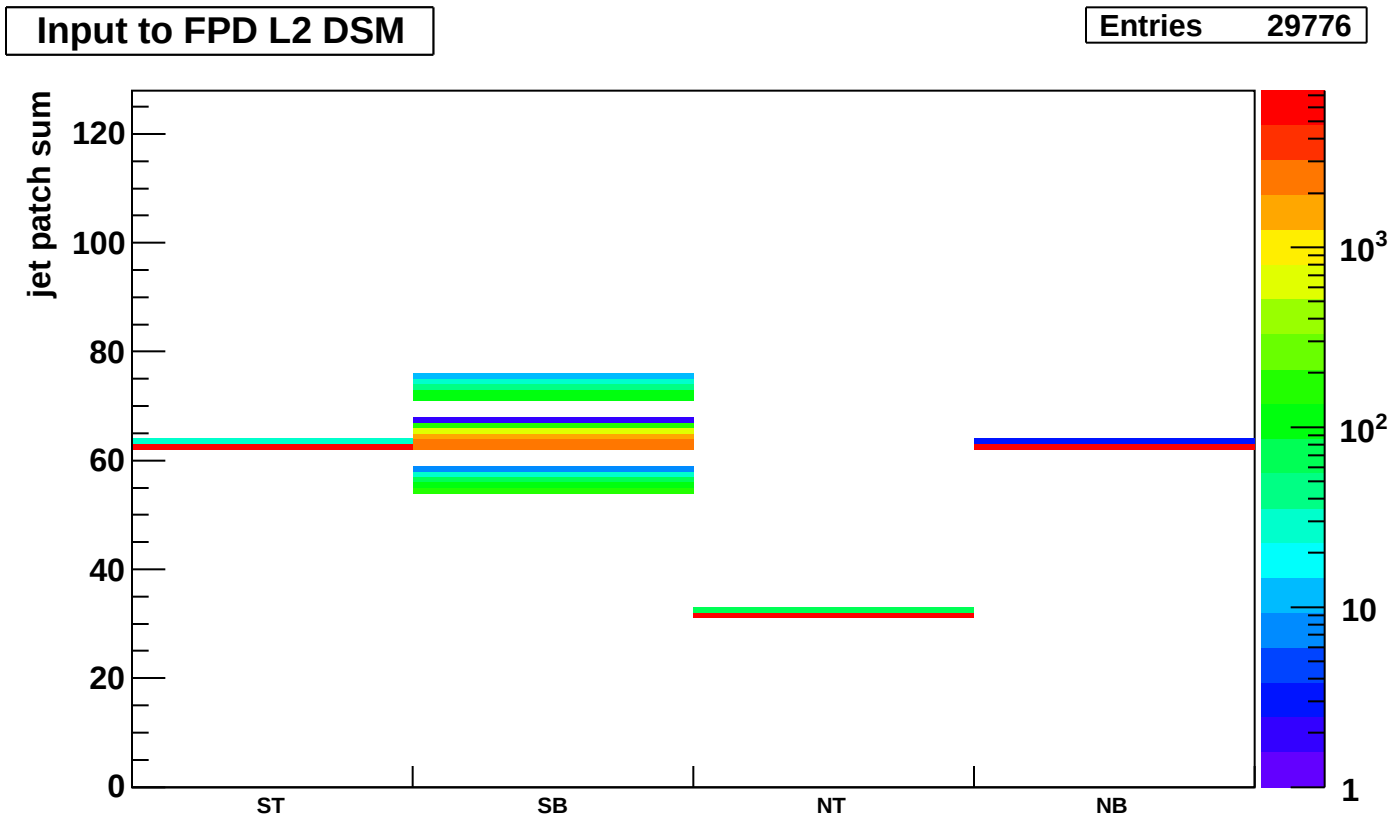

Input to FPD L2 DSM
Entries 22332
CL bits - simulated
7444
SMALL
LARGE-S
LARGE-N

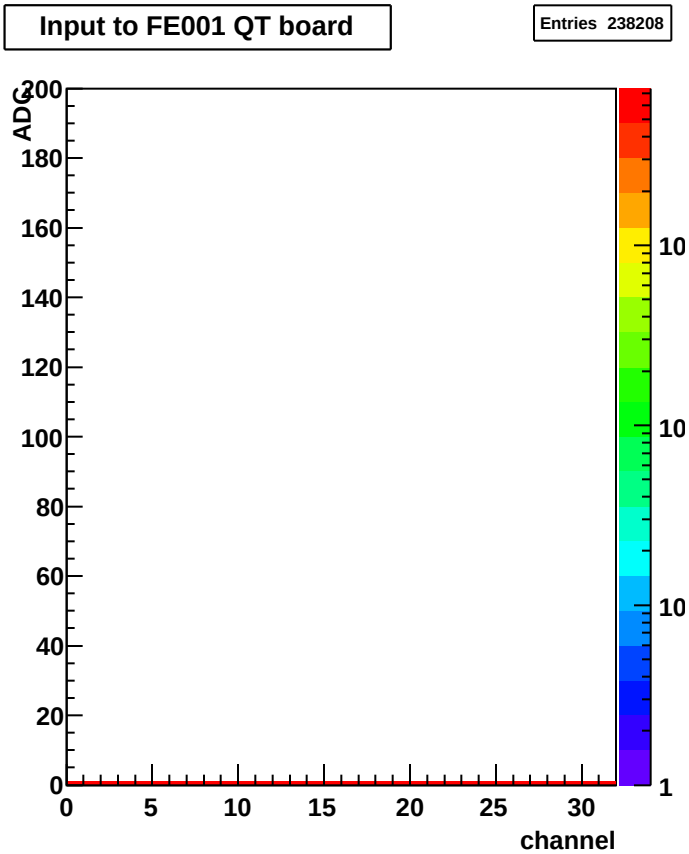

Input to FPD L2 DSM
Entries 22332
HT bits
7444
SMALL
LARGE-S
LARGE-N

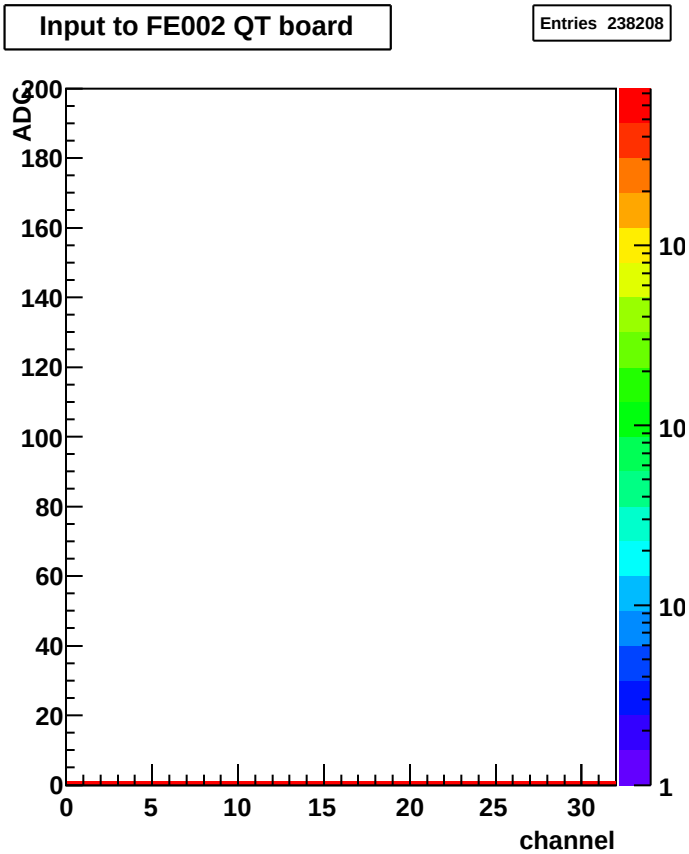

Input to FPD L2 DSM
Entries 22332
HT bits - simulated
7444
SMALL
LARGE-S
LARGE-N

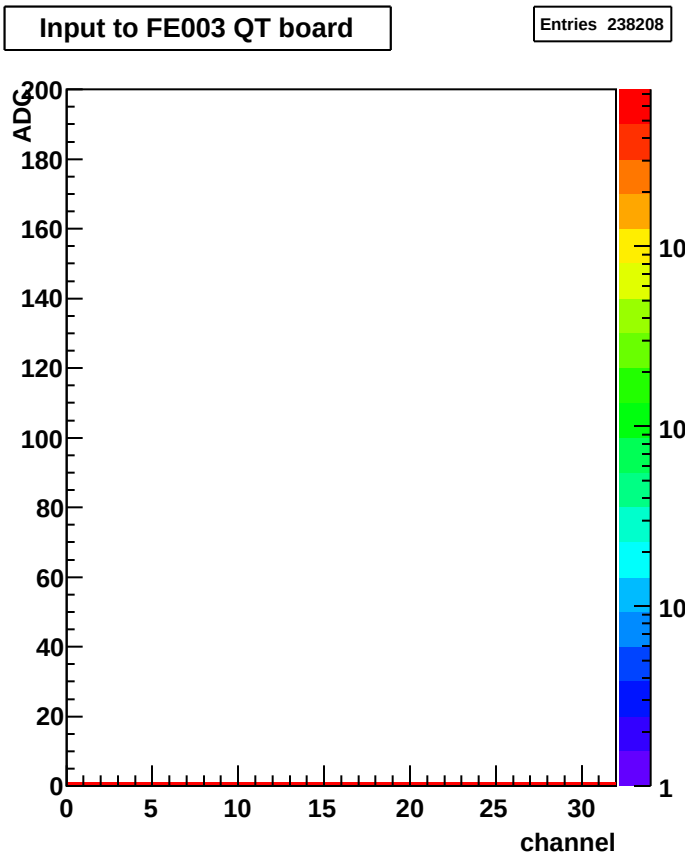

Input to FPD L3 DSM
Entries 119104
bit
7444
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

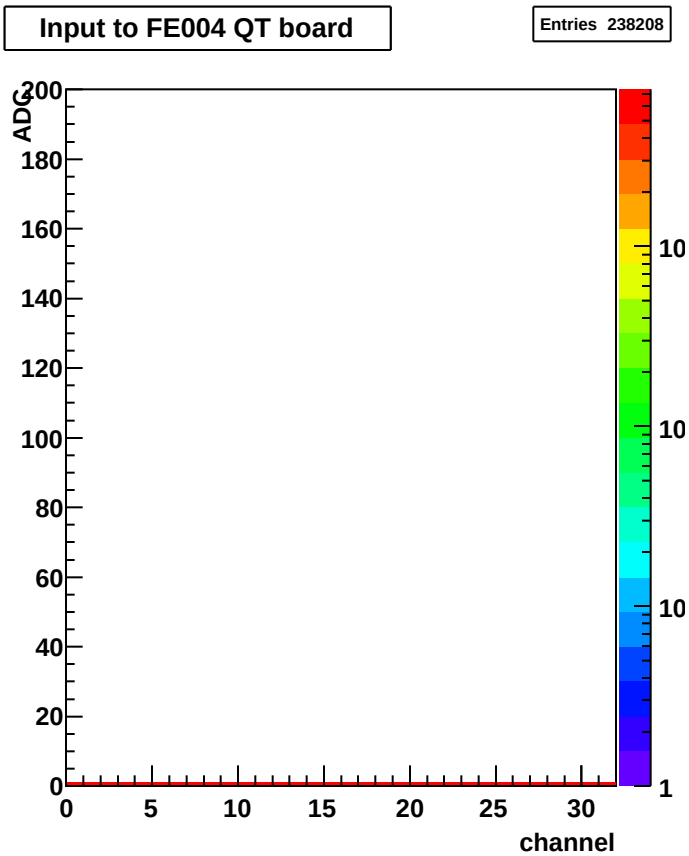

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

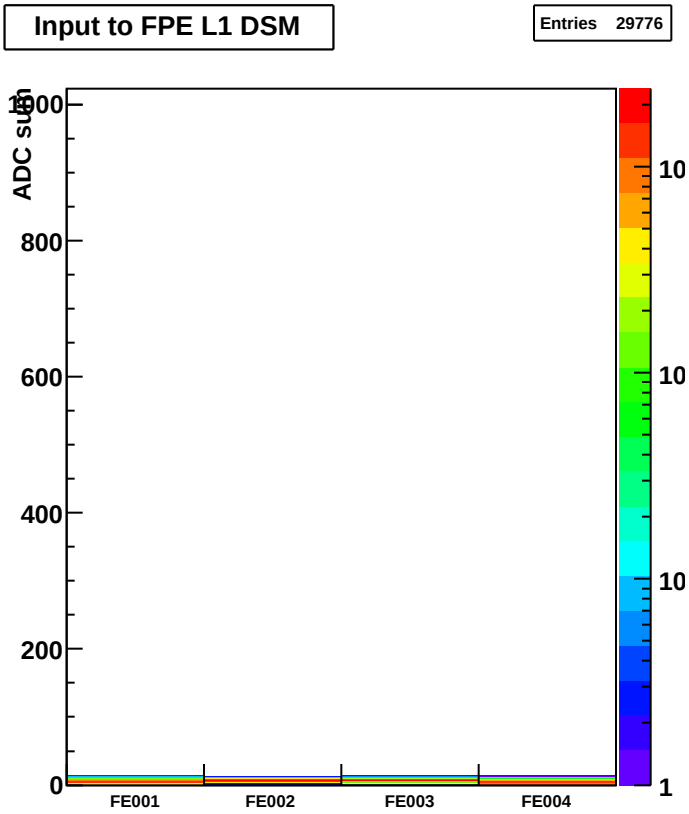

Input to FPD L2 DSM
Entries 29776
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^3
10^2
10
1

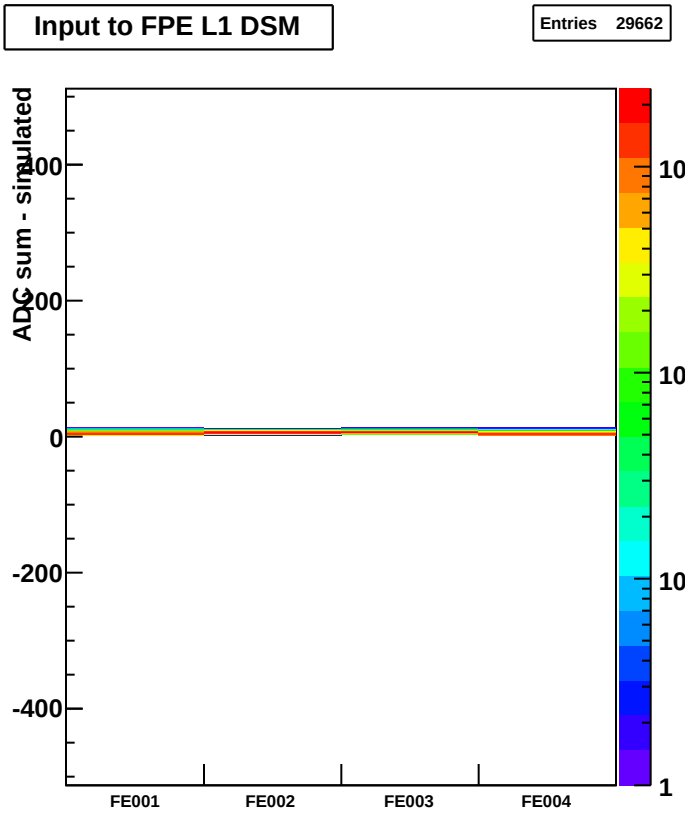

Input to FE001 QT board
Entries 238208
ADC
channel

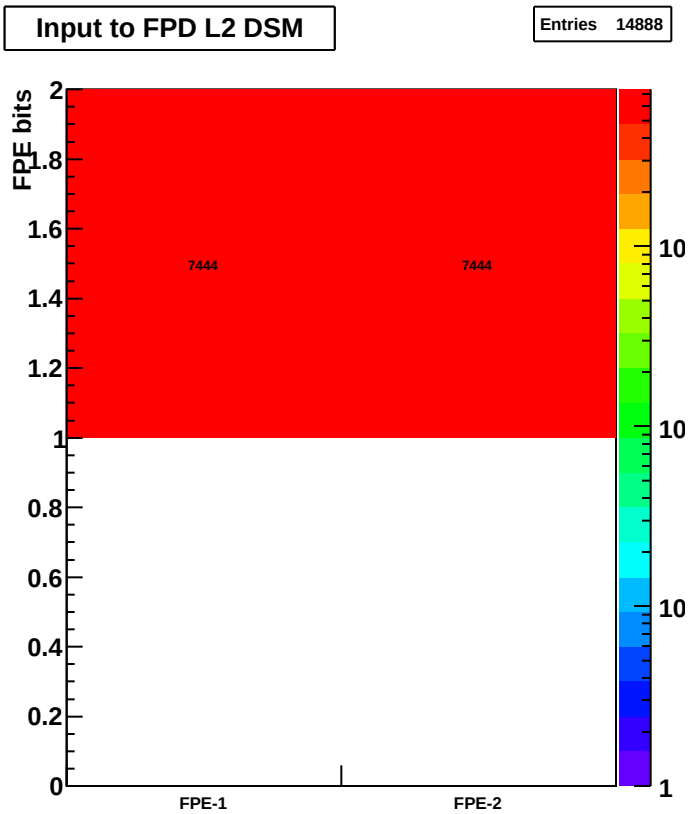

Input to FE002 QT board
Entries 238208
ADC
channel

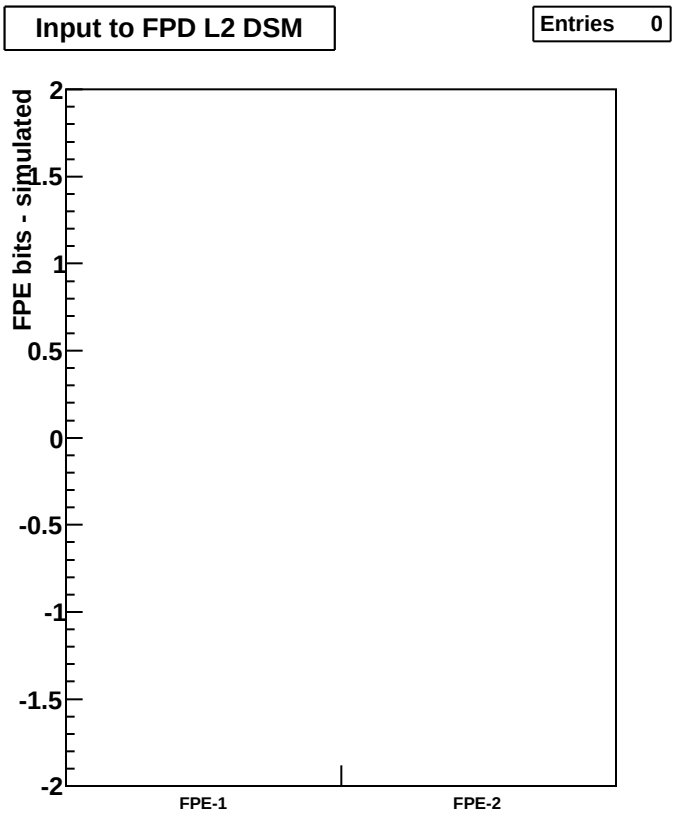

Input to FE003 QT board
Entries 238208
ADC
channel


Input to FE004 QT board
Entries 238208
ADC
channel


Input to FPE L1 DSM
Entries 29776
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
1


Input to FPE L1 DSM
Entries 29662
ADC sum - simulated
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
1


Input to FPD L2 DSM
Entries 14888
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
7444
7444
FPE-1
FPE-2
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