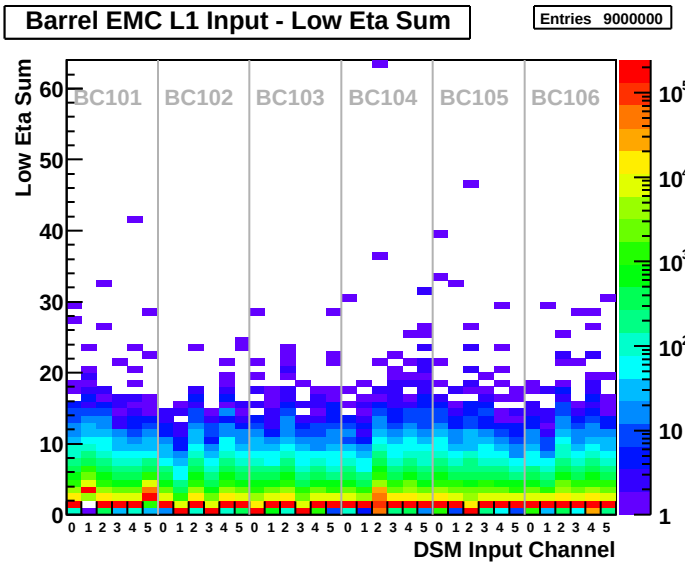
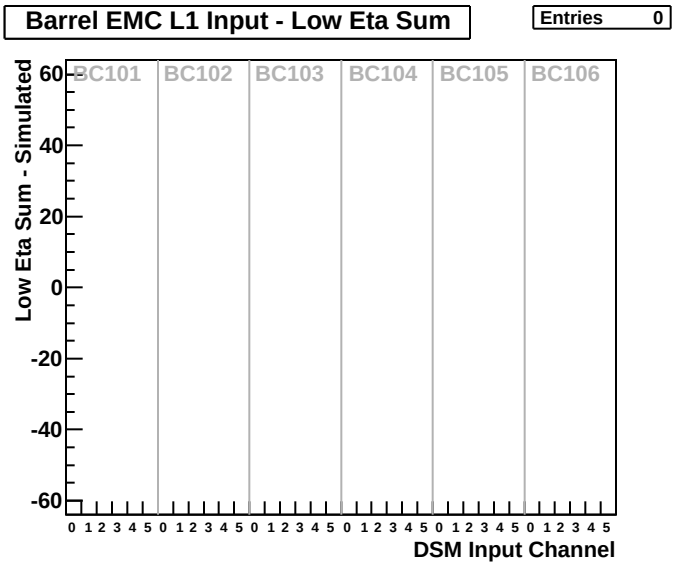
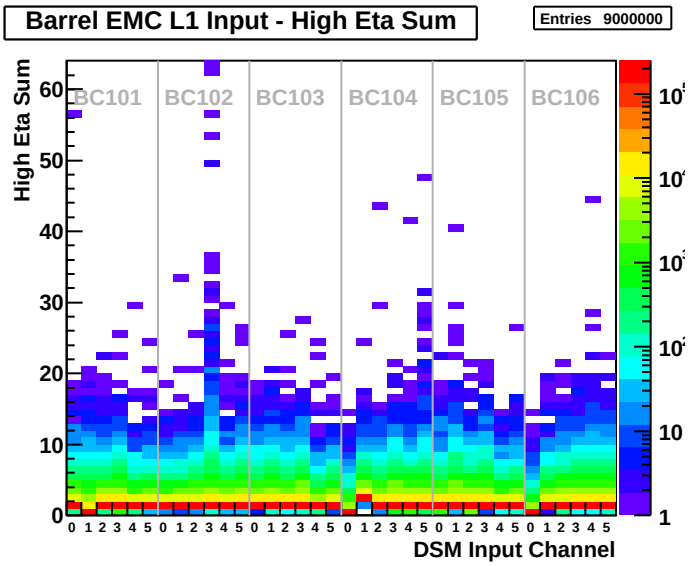
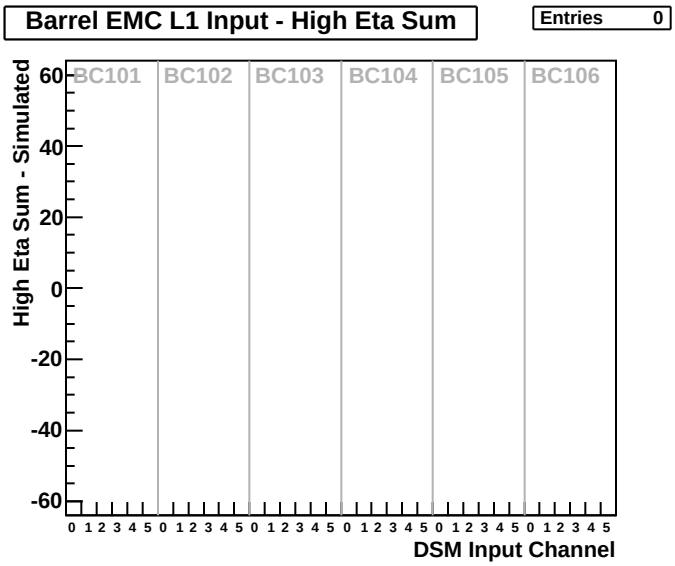
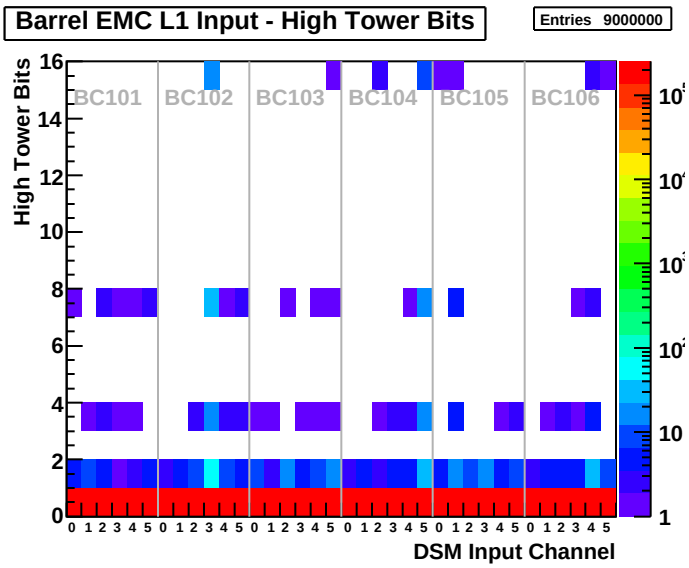
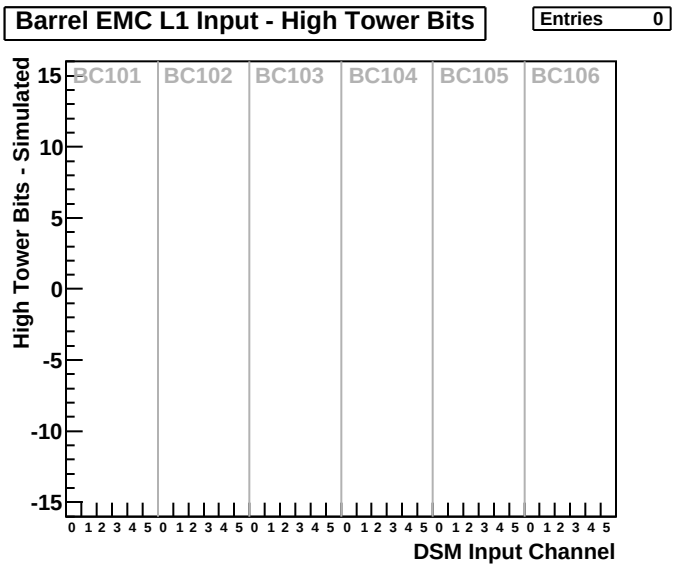

Barrel EMC L1 Input - Low Eta Sum
Entries 9000000
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

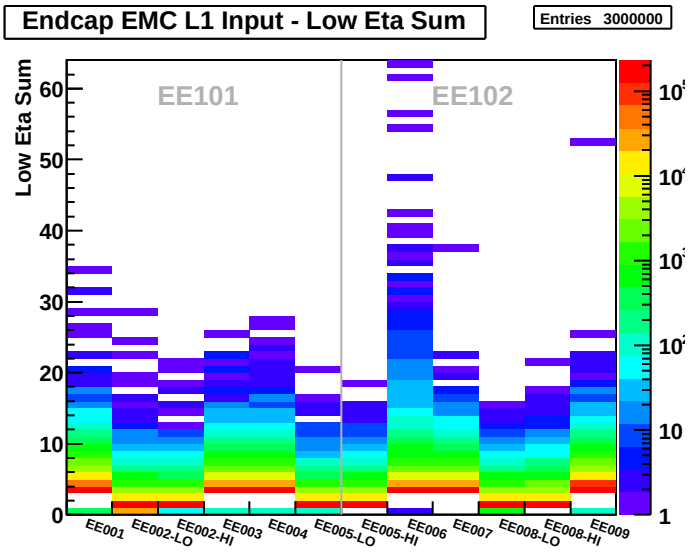

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

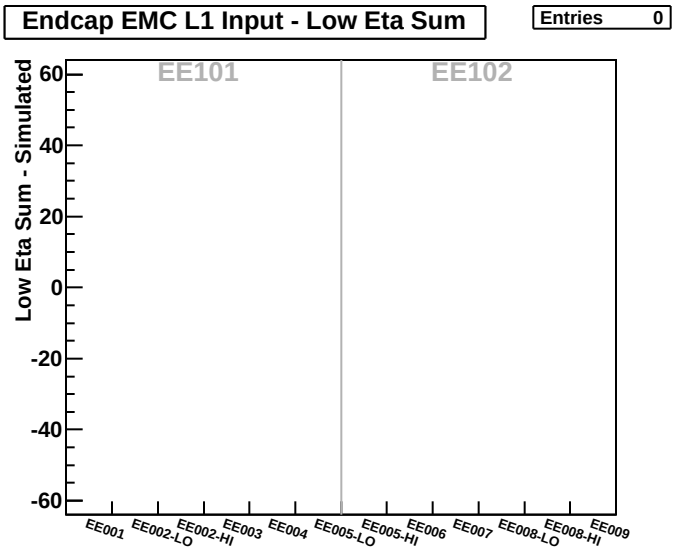

Barrel EMC L1 Input - High Eta Sum
Entries 9000000
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

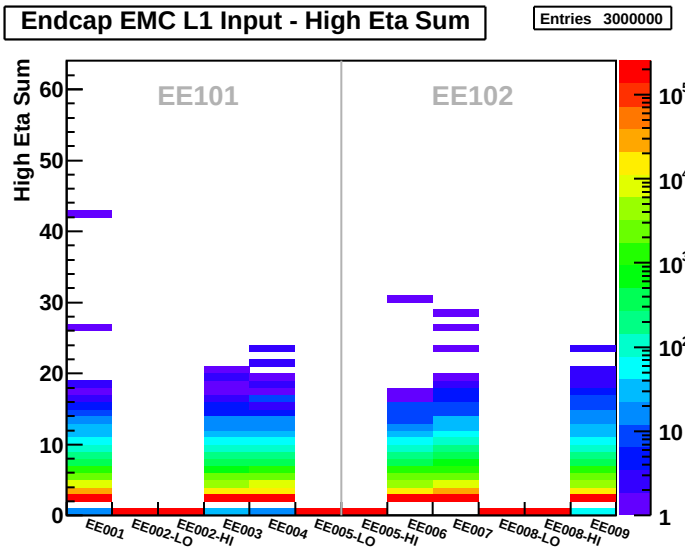

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

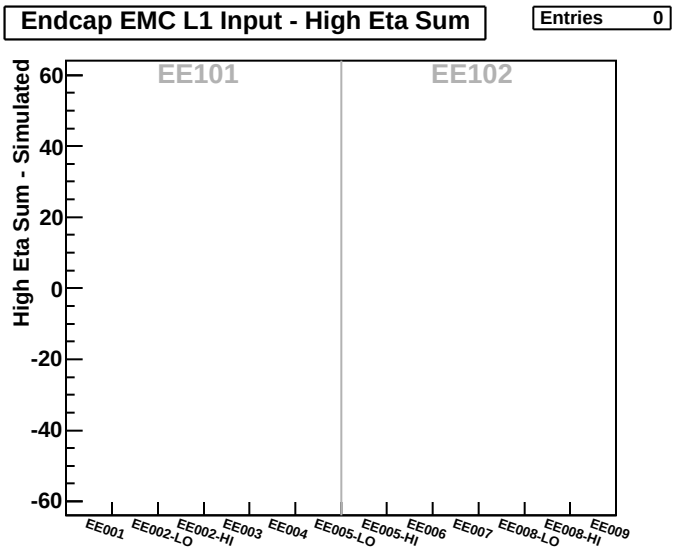

Barrel EMC L1 Input - High Tower Bits
Entries 9000000
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

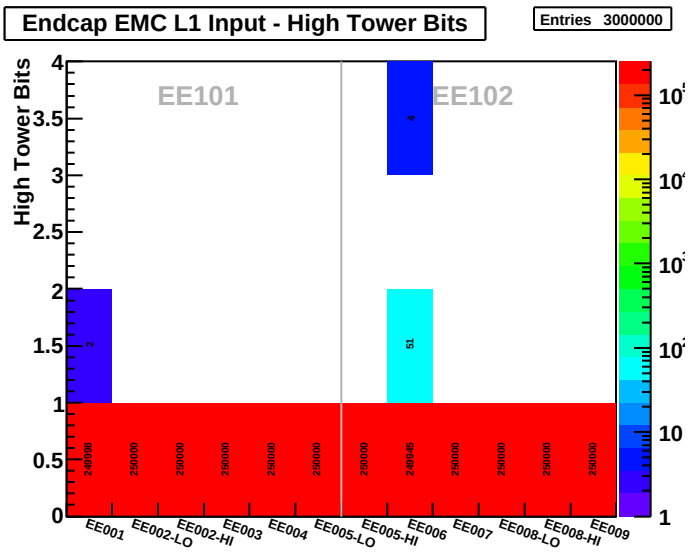

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

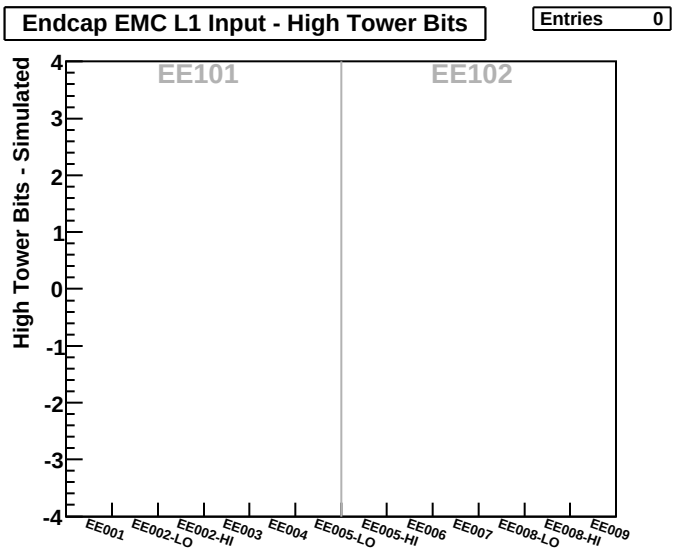

Endcap EMC L1 Input - Low Eta Sum
Entries 3000000
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

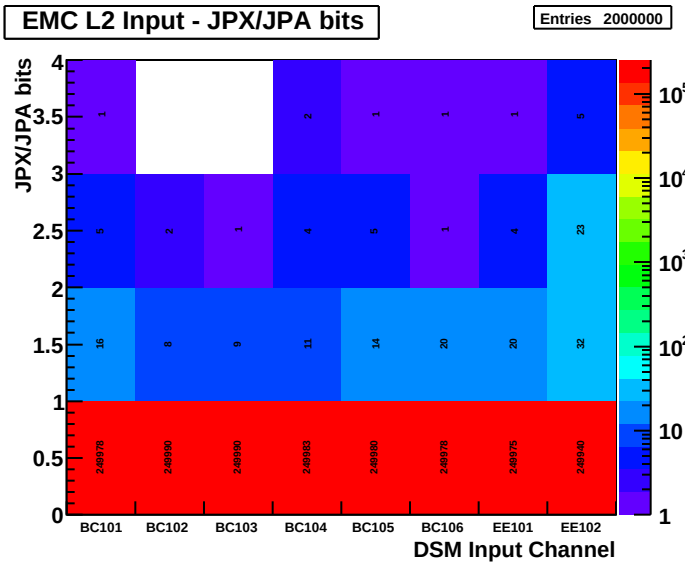

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

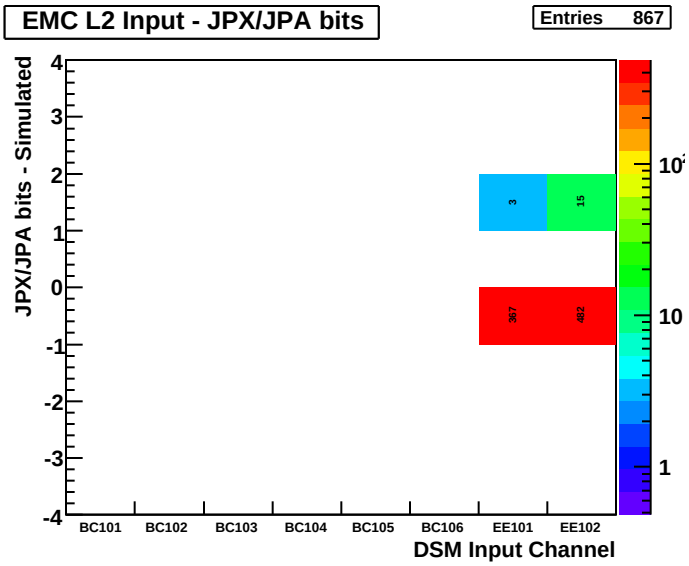

Endcap EMC L1 Input - High Eta Sum
Entries 3000000
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

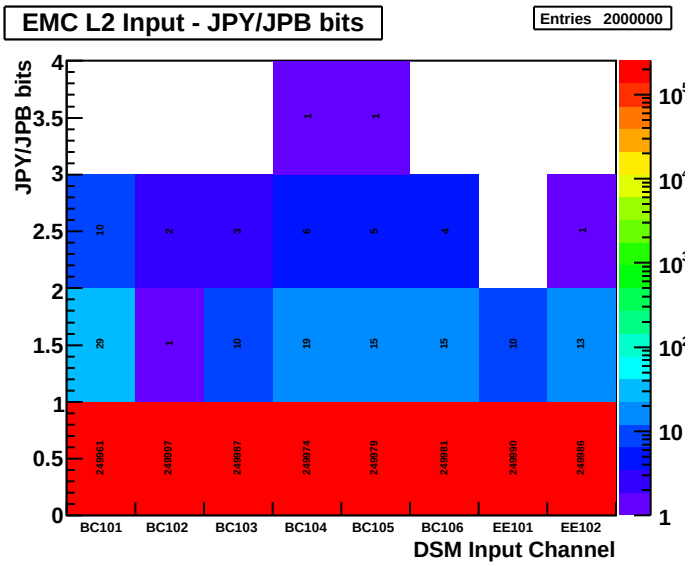

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

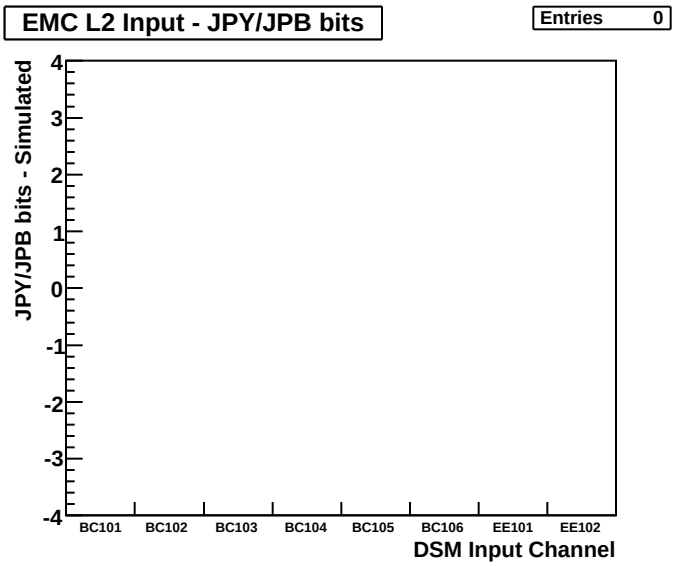

Endcap EMC L1 Input - High Tower Bits
Entries 3000000
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

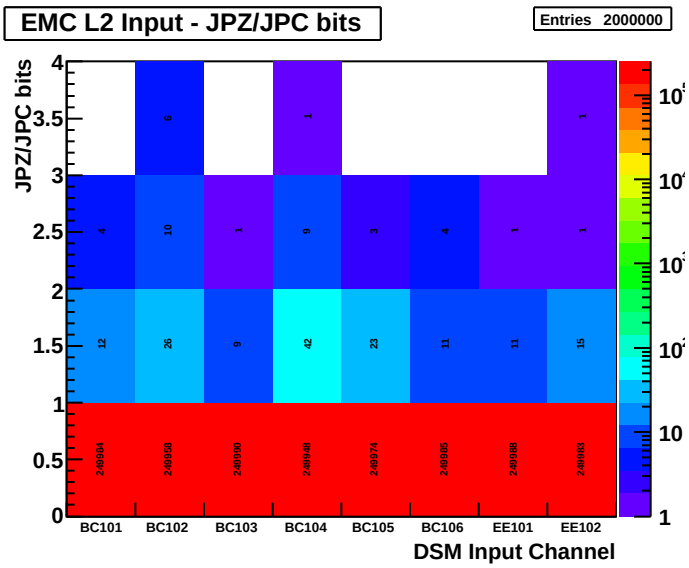

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

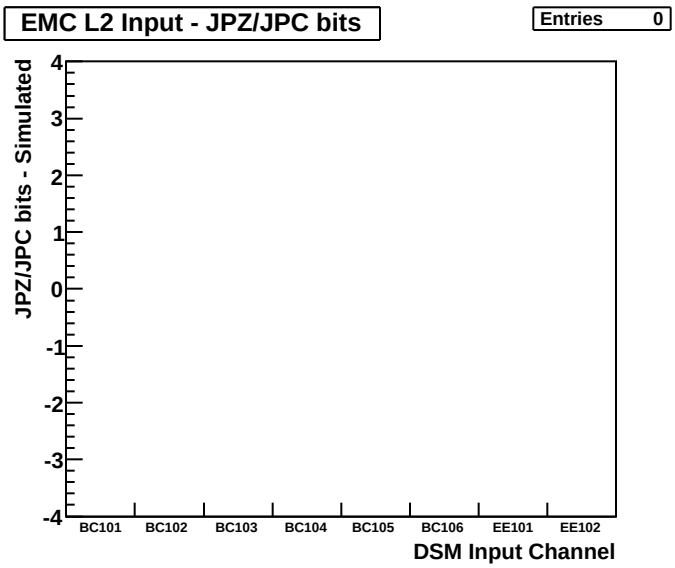

EMC L2 Input - JPX/JPA bits
Entries 2000000
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

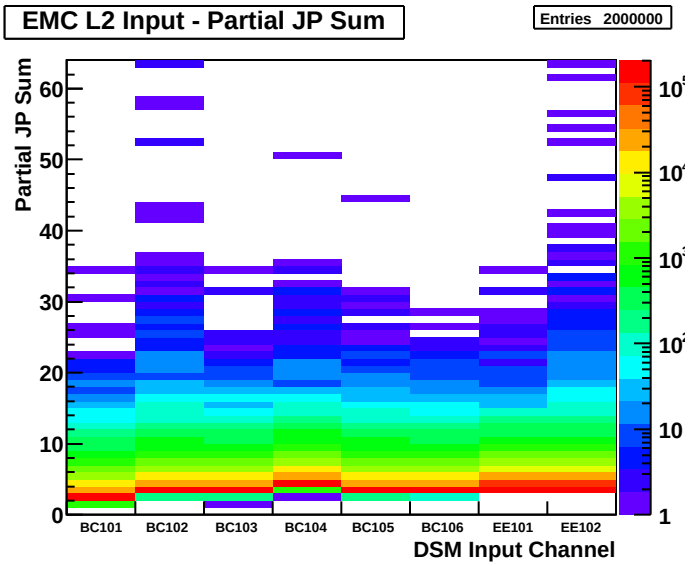

EMC L2 Input - JPX/JPA bits
Entries 867
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

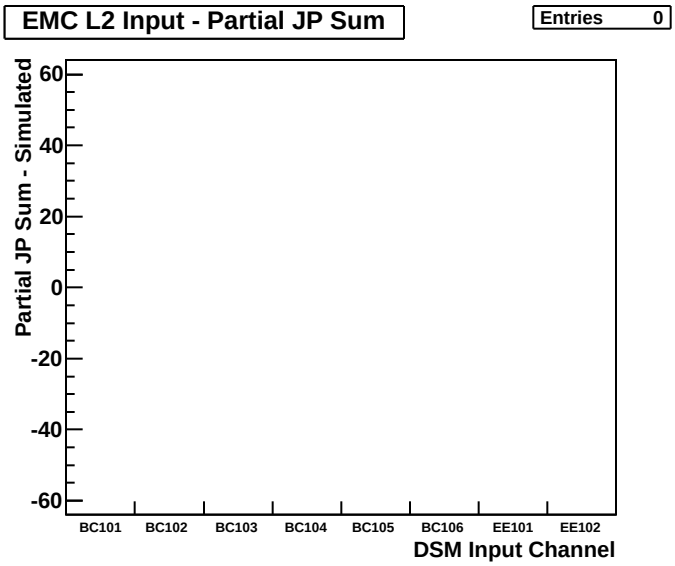

EMC L2 Input - JPY/JPB bits
Entries 2000000
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

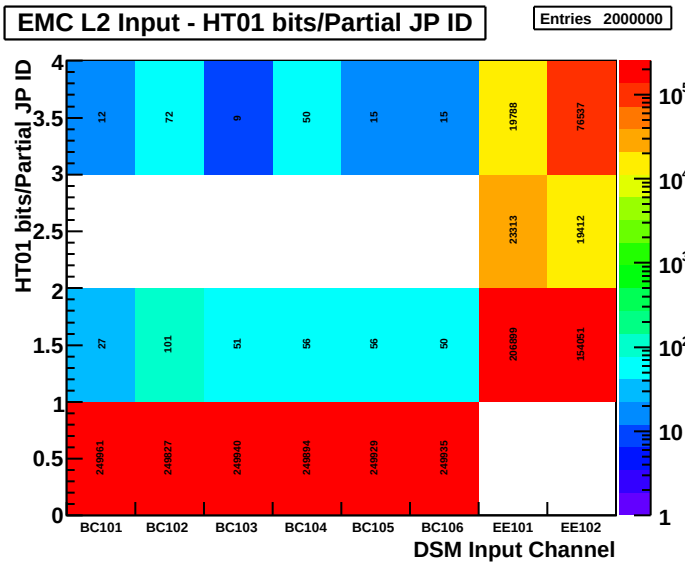

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

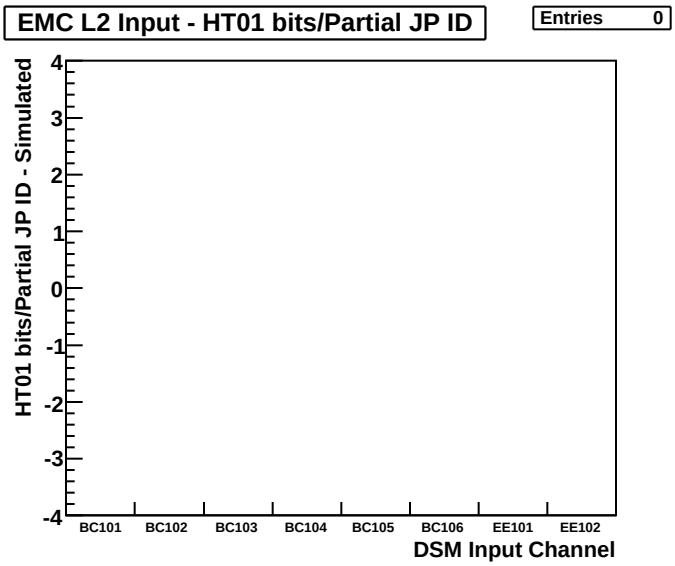

EMC L2 Input - JPZ/JPC bits
Entries 2000000
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

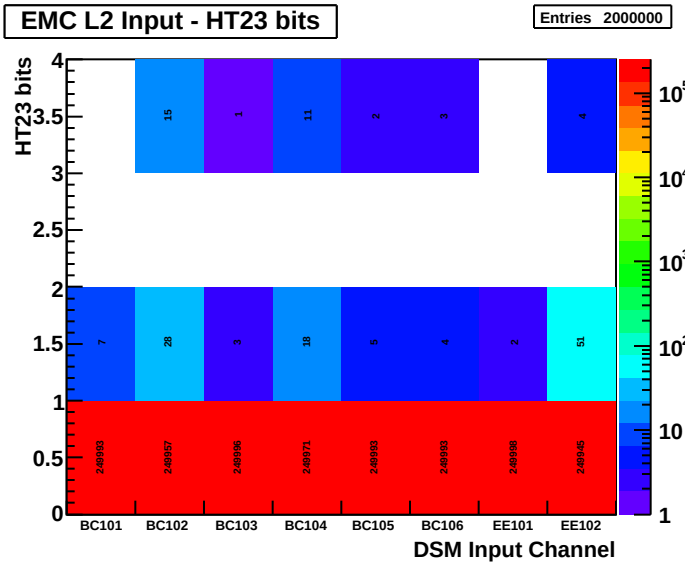

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

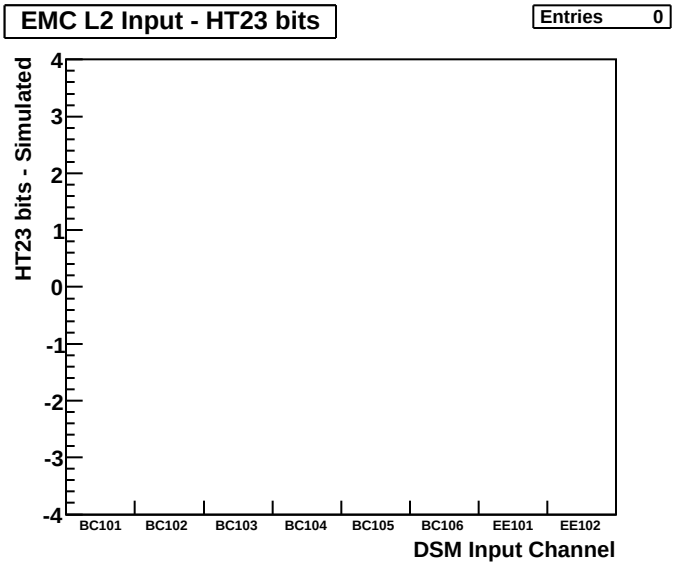

EMC L2 Input - Partial JP Sum
Entries 2000000
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

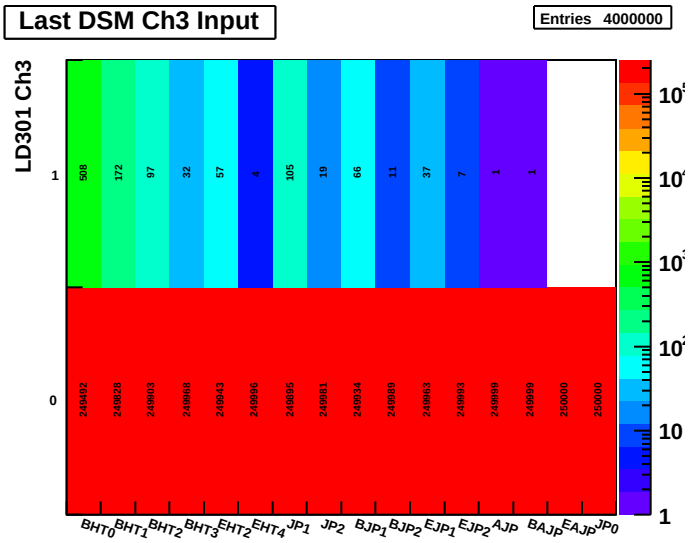

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

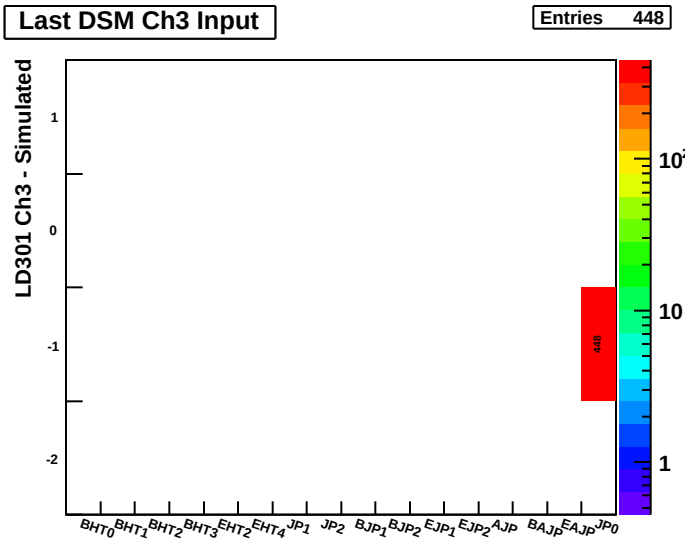

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2000000
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

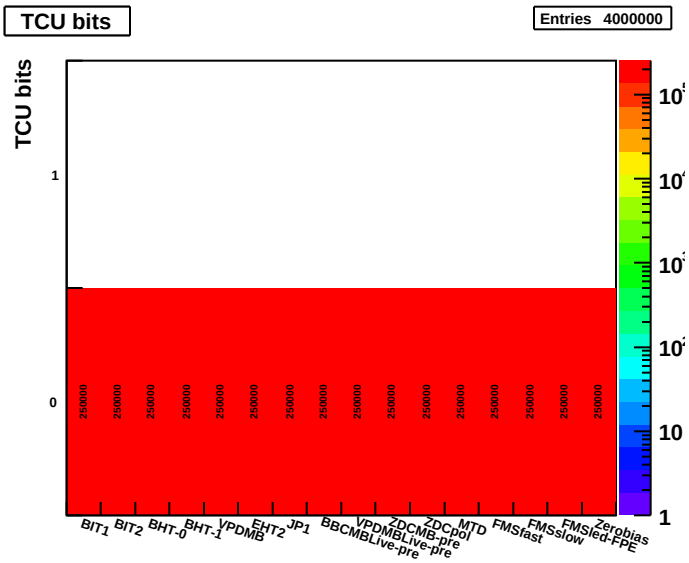

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

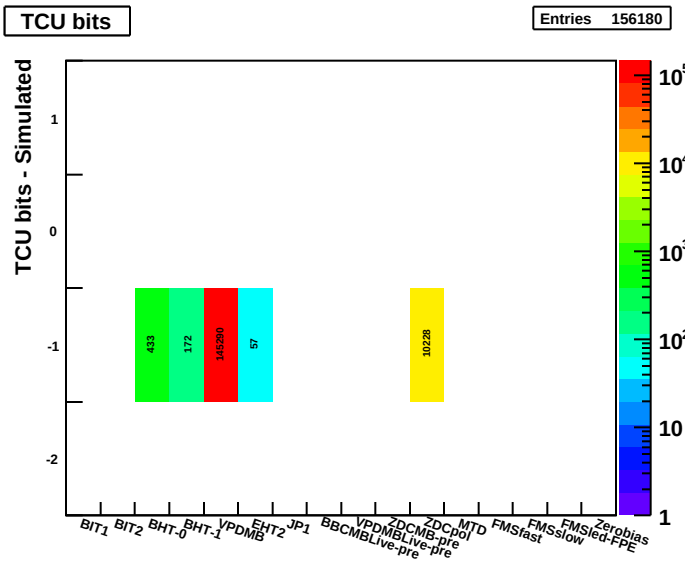

EMC L2 Input - HT23 bits
Entries 2000000
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

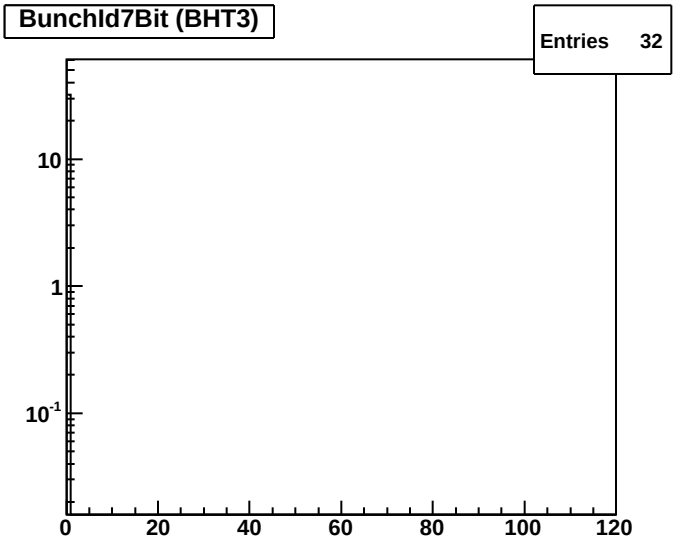

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

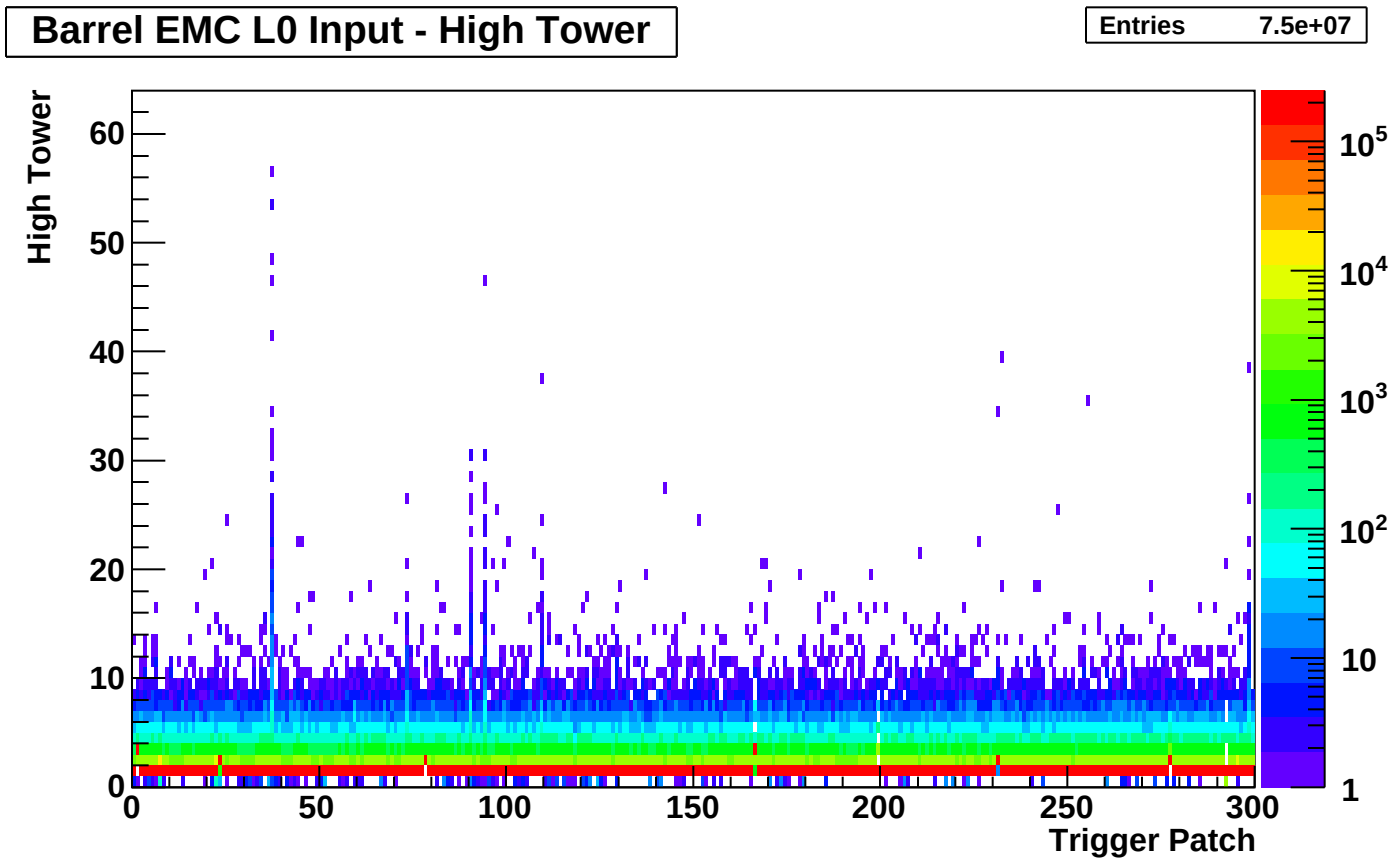

Last DSM Ch3 Input
Entries 4000000
LD301 Ch3
508 172 97 32 57 4 105 19 66 11 37 7 1 1
249432 249828 249903 249968 249943 249996 249895 249981 249934 249989 249963 249993 249999 249999 250000 250000
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

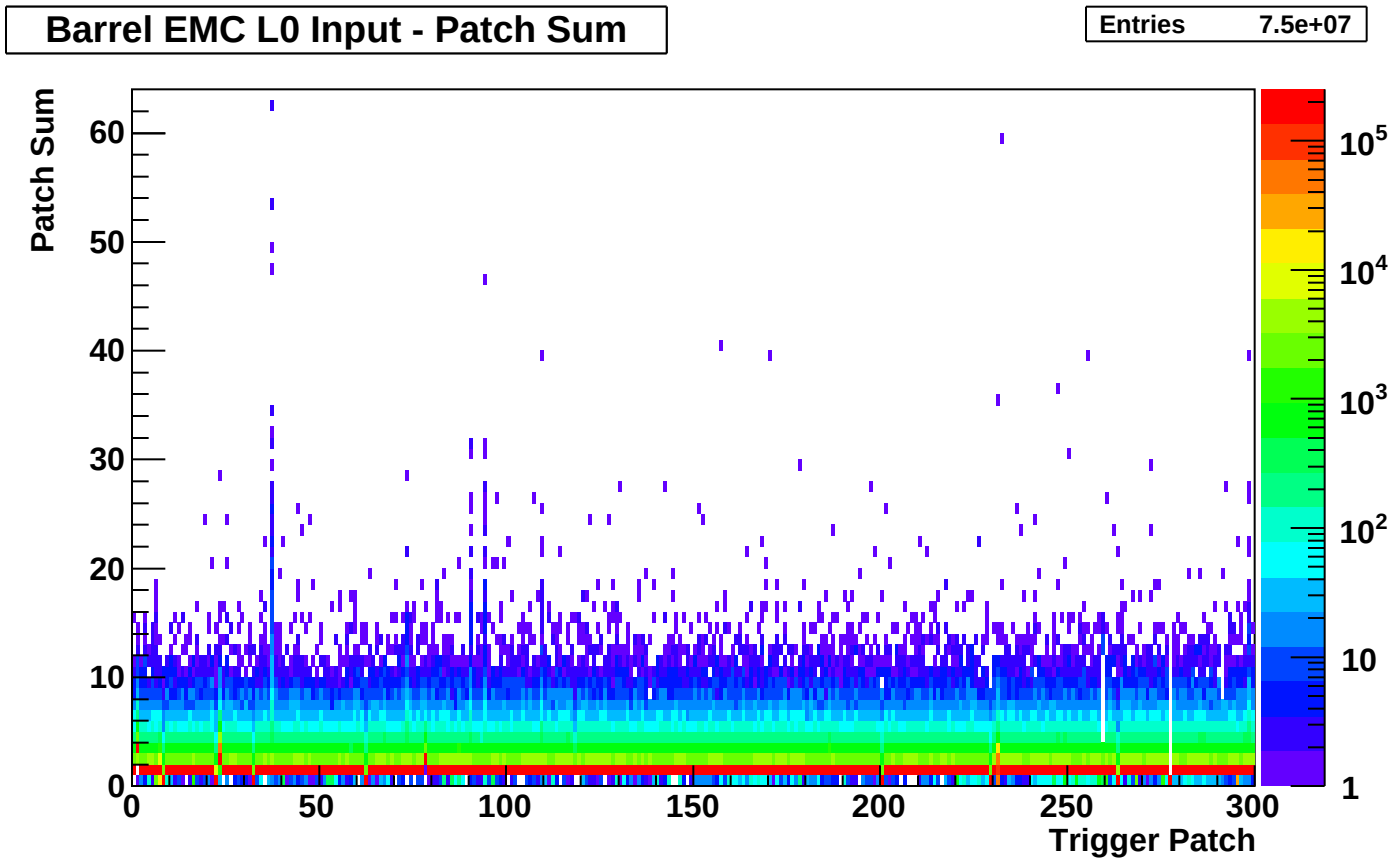

Last DSM Ch3 Input
Entries 448
LD301 Ch3 - Simulated
448
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

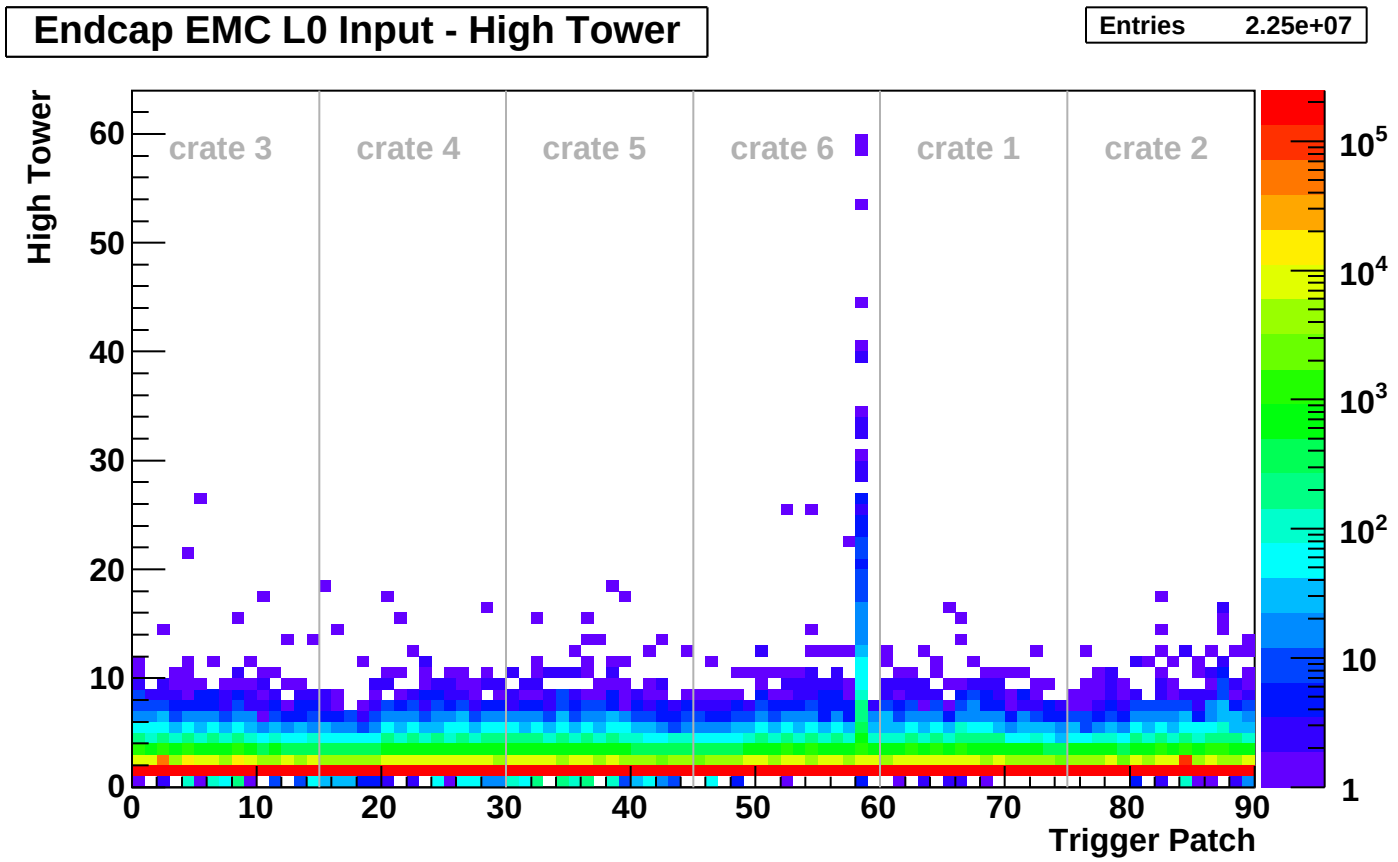

TCU bits
Entries 4000000
TCU bits
250000 250000 250000 250000 250000 250000 250000 250000 250000 250000 250000 250000 250000 250000 250000 250000
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

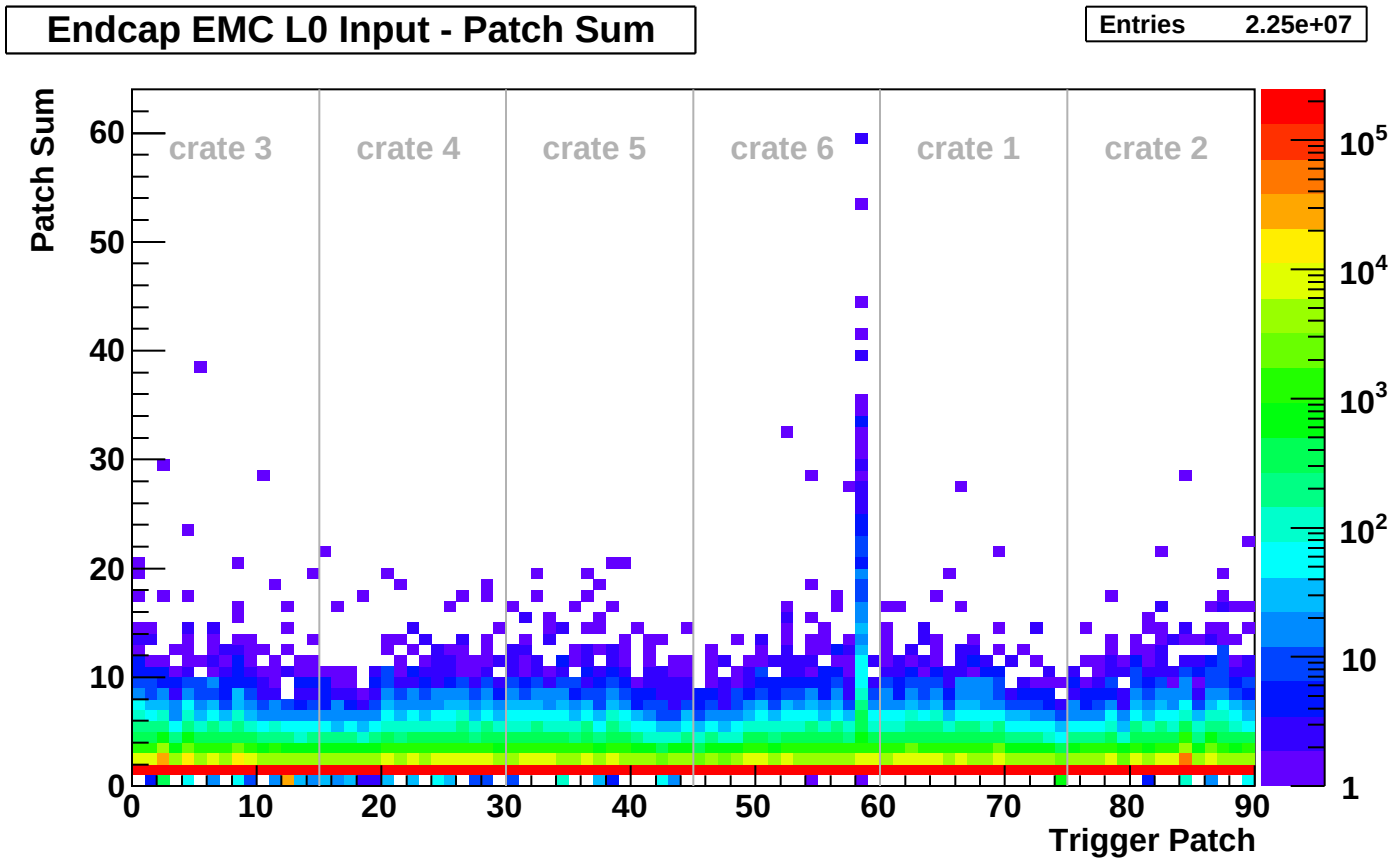

TCU bits
Entries 156180
TCU bits - Simulated
433 172 145290 57 10228
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

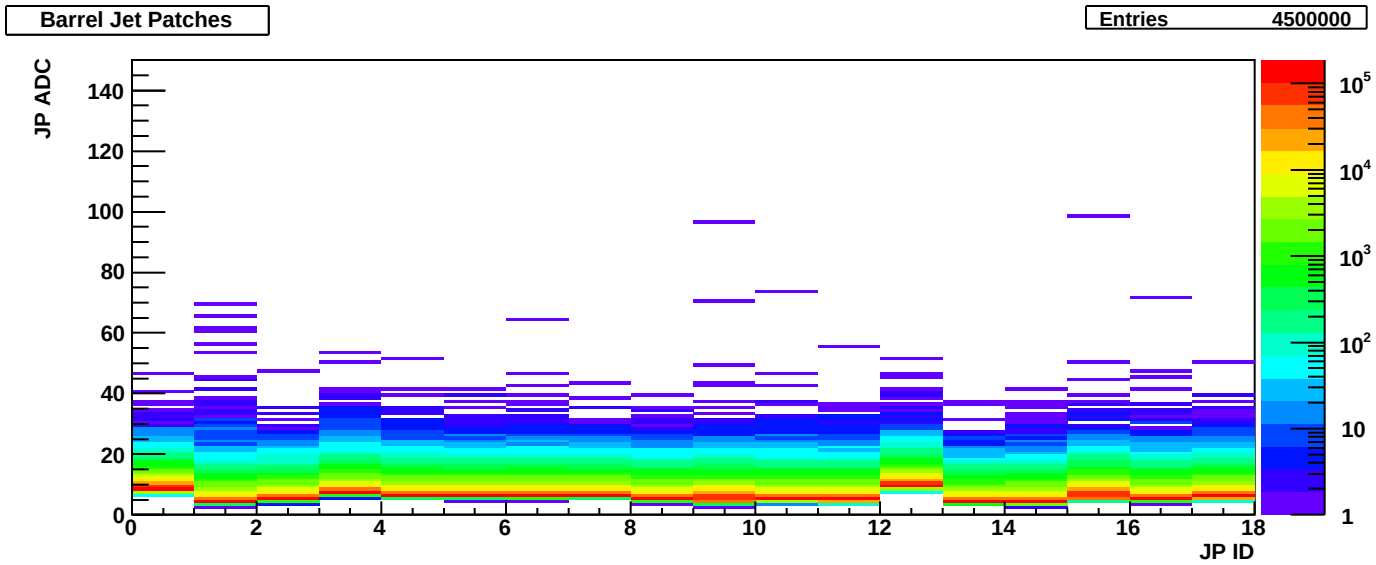

BunchId7Bit (BHT3)
Entries 32

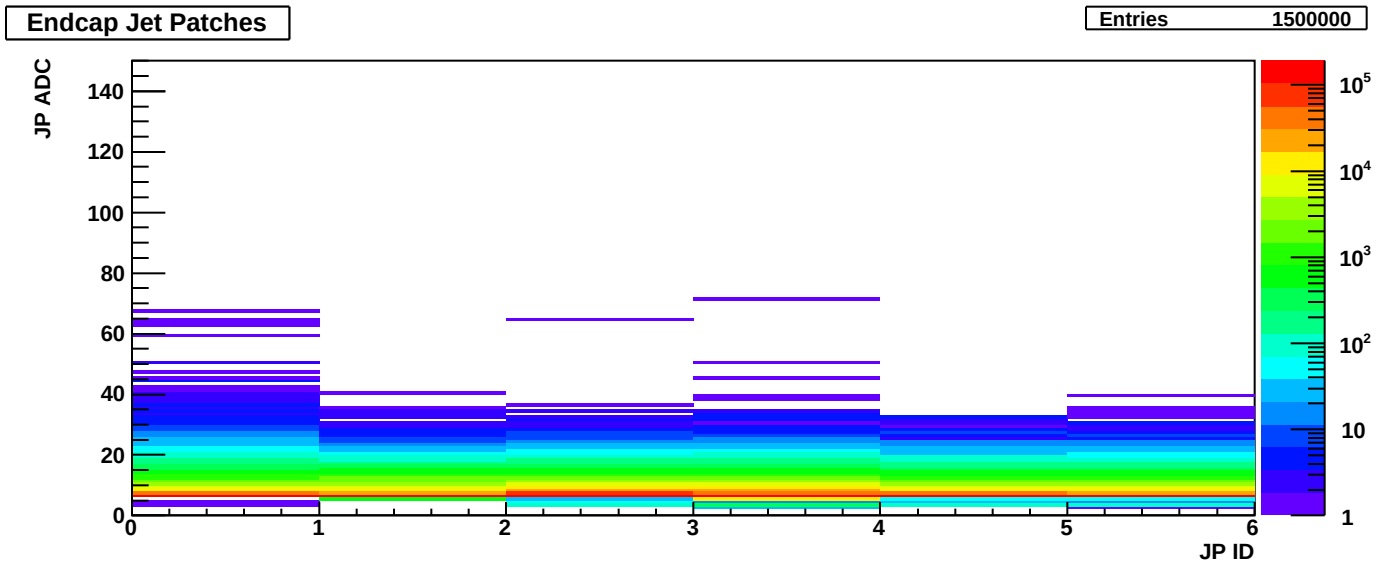

Barrel EMC L0 Input - High Tower
Entries 7.5e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

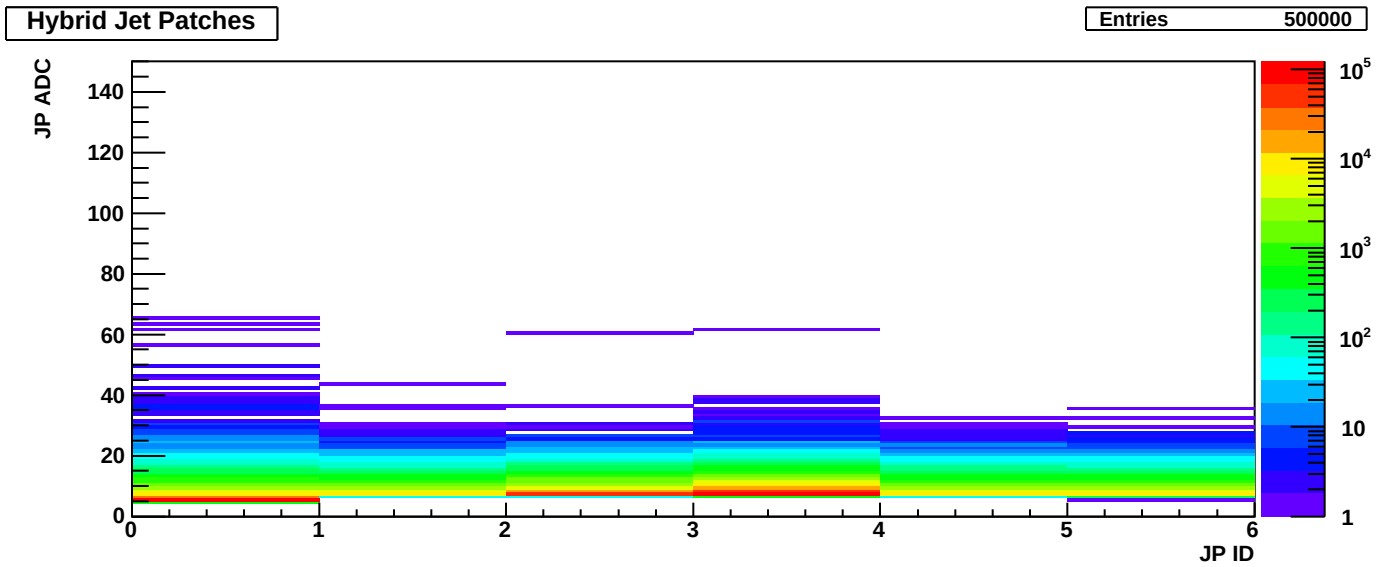

Barrel EMC L0 Input - Patch Sum
Entries 7.5e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

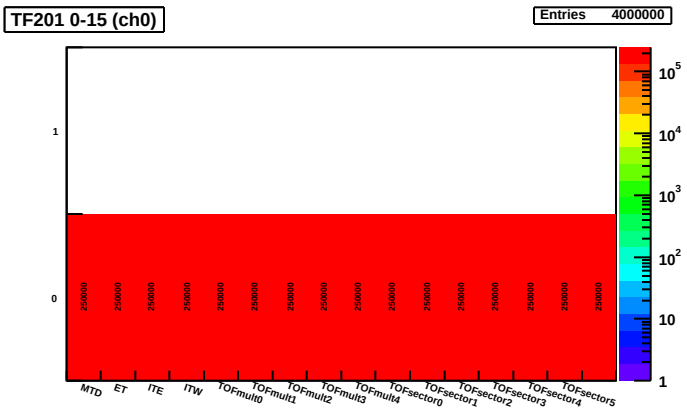

Endcap EMC L0 Input - High Tower
Entries 2.25e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

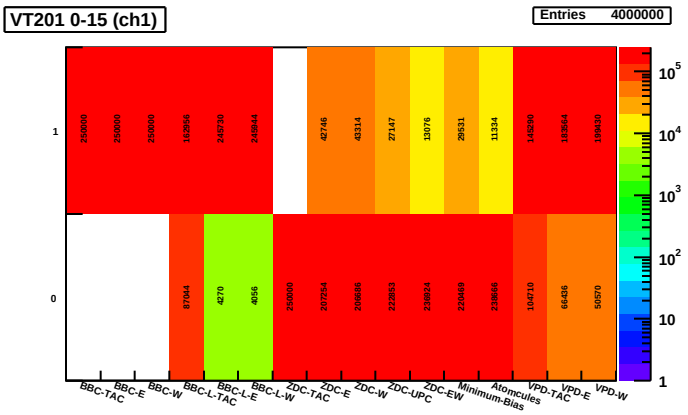

Endcap EMC L0 Input - Patch Sum
Entries 2.25e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

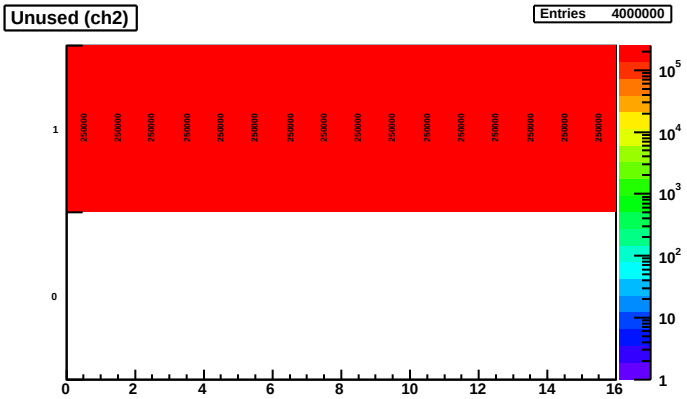

Barrel Jet Patches
Entries 4500000
JP ADC
JP ID

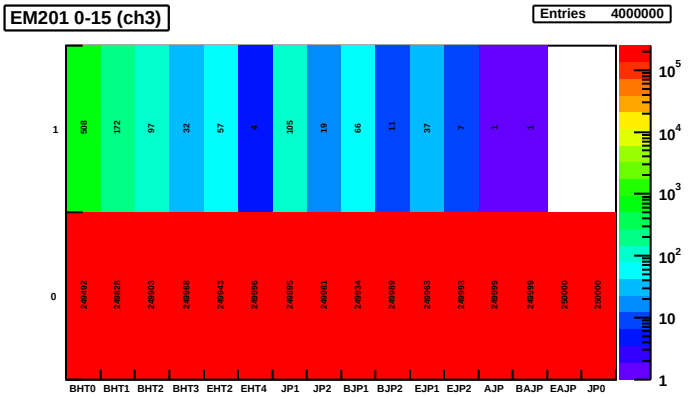

Endcap Jet Patches
Entries 1500000
JP ADC
JP ID

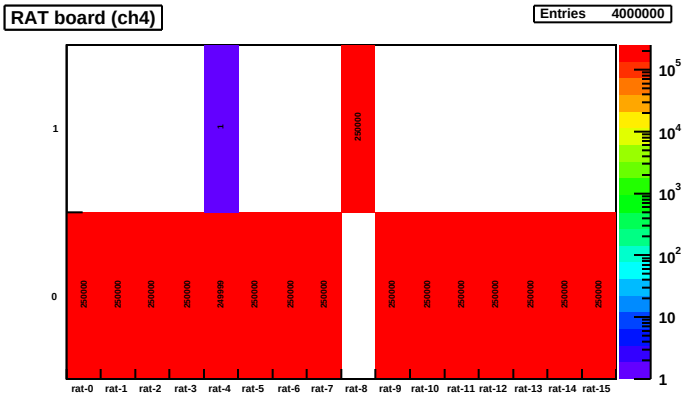

Hybrid Jet Patches
Entries 500000
JP ADC
JP ID

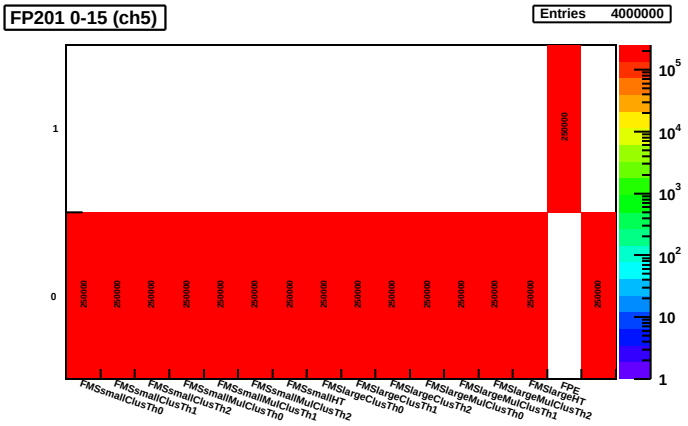

TF201 0-15 (ch0)
Entries 4000000
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

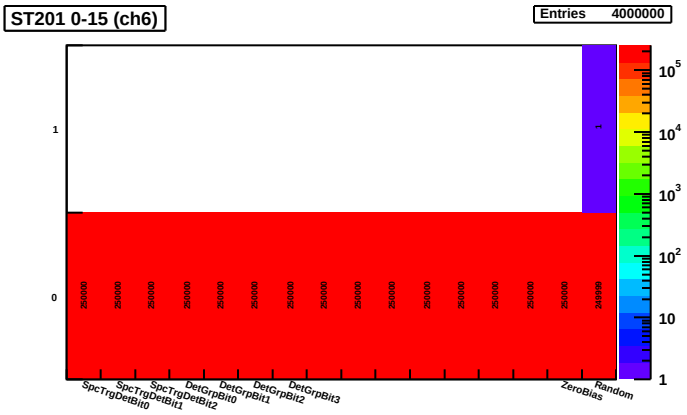

VT201 0-15 (ch1)
Entries 4000000
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

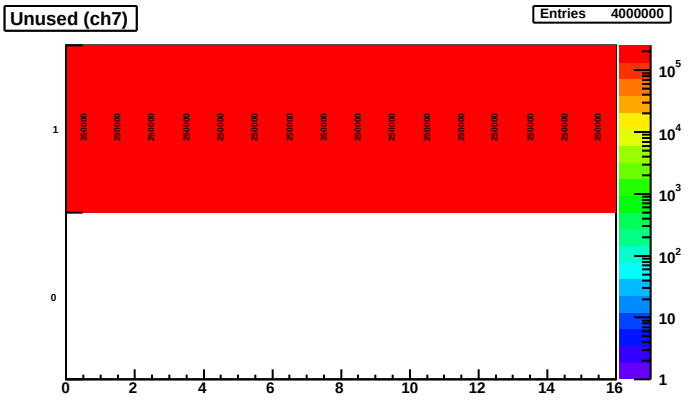

Unused (ch2)
Entries 4000000

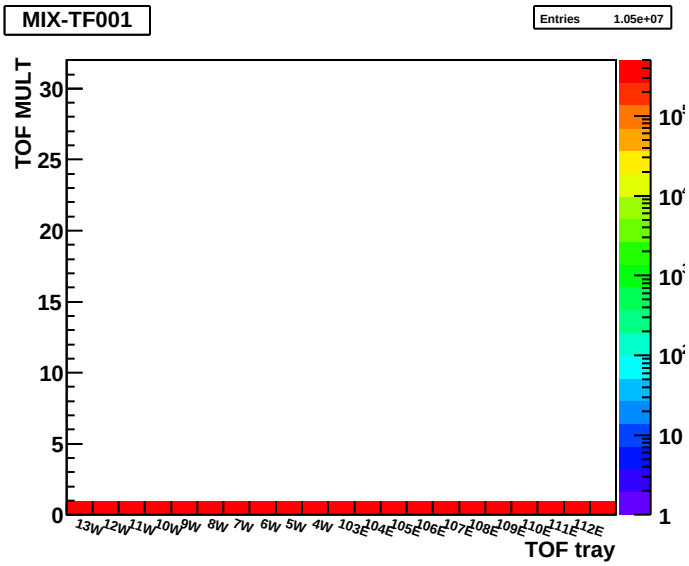

EM201 0-15 (ch3)
Entries 4000000
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

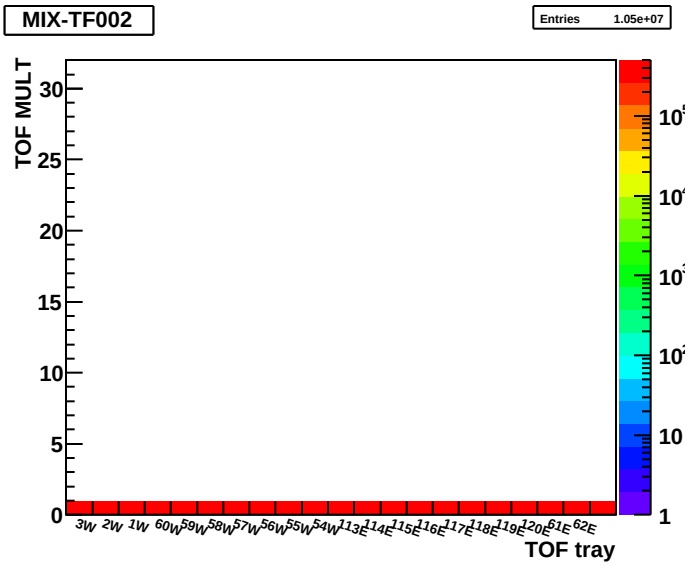

RAT board (ch4)
Entries 4000000
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

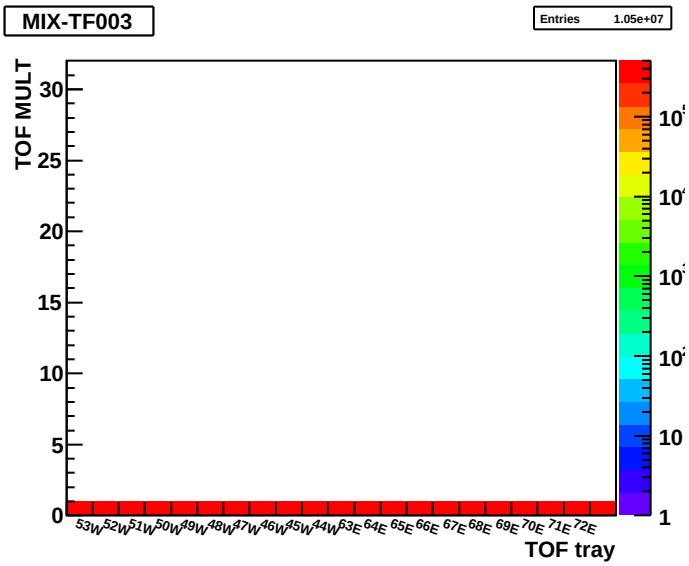

FP201 0-15 (ch5)
Entries 4000000
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

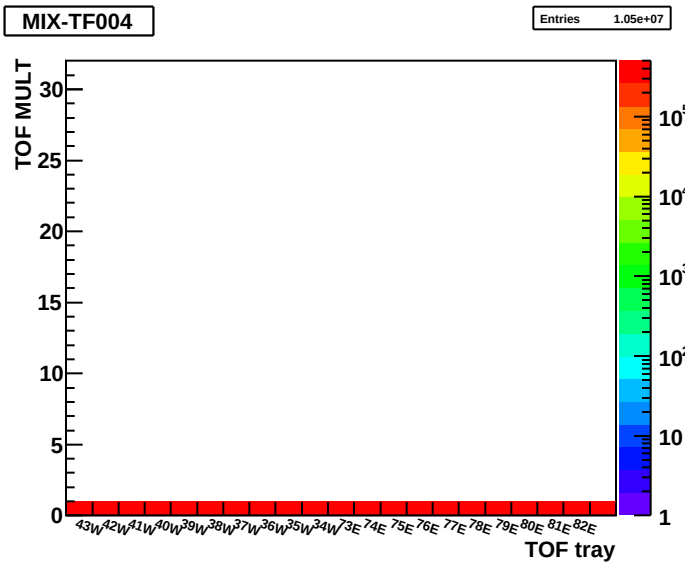

ST201 0-15 (ch6)
Entries 4000000
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

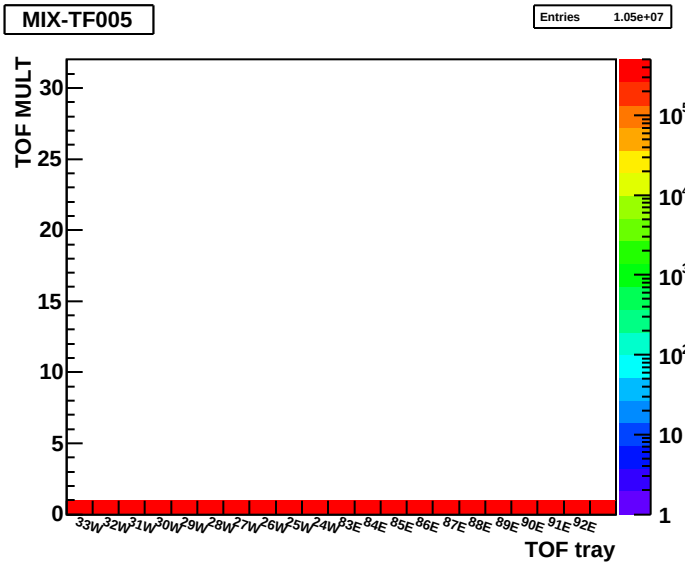

Unused (ch7)
Entries 4000000

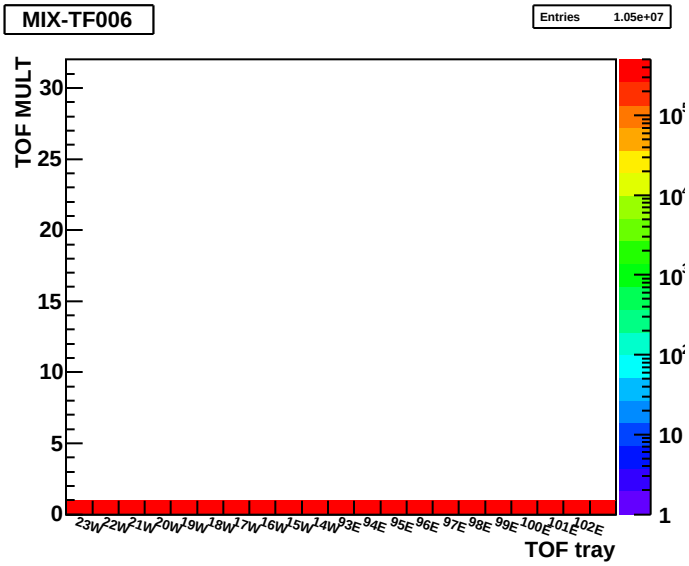

MIX-TF001
Entries 1.05e+07
TOF MULT
TOF tray

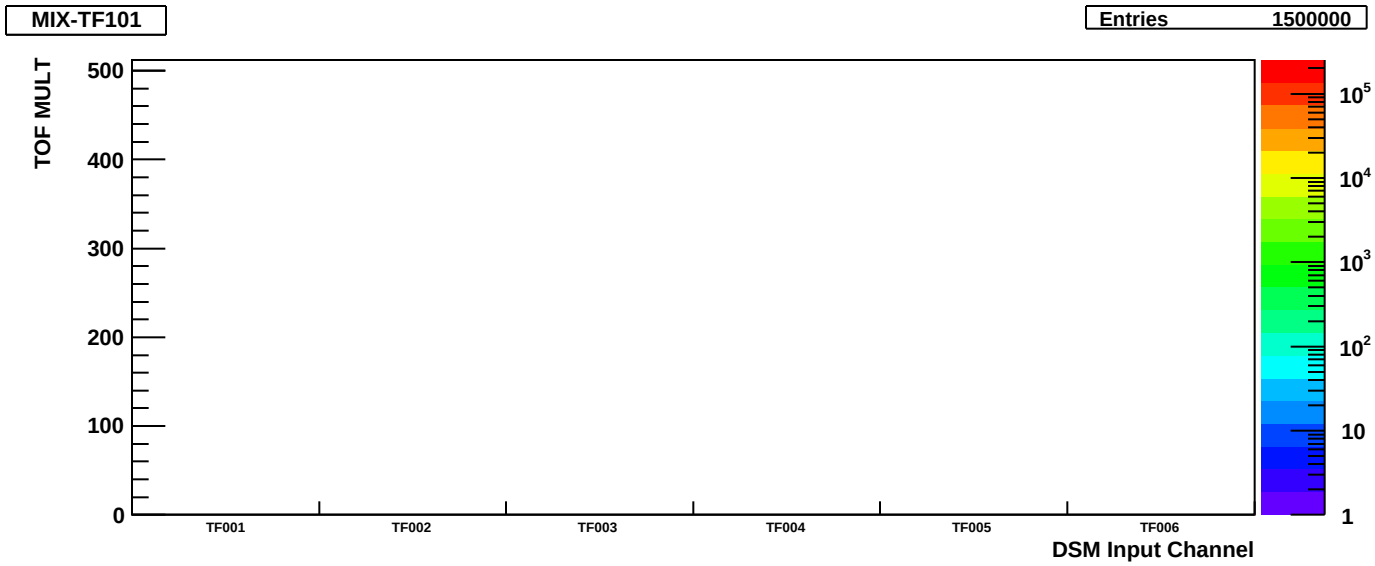

MIX-TF002
Entries 1.05e+07
TOF MULT
TOF tray

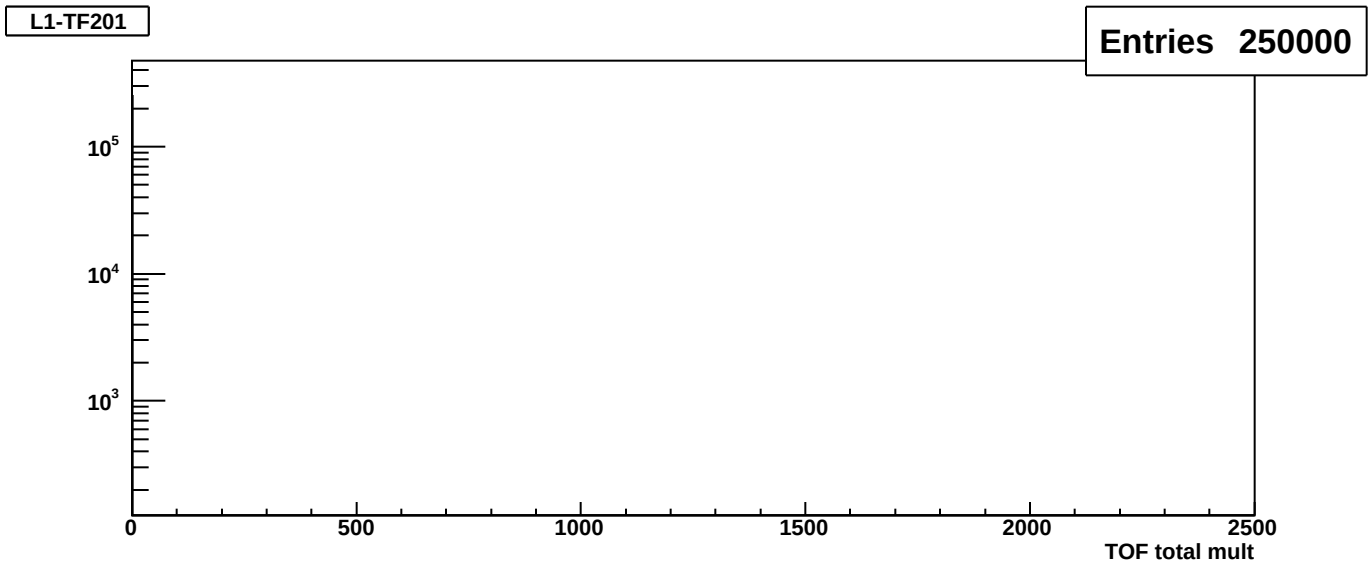

MIX-TF003
Entries 1.05e+07
TOF MULT
TOF tray

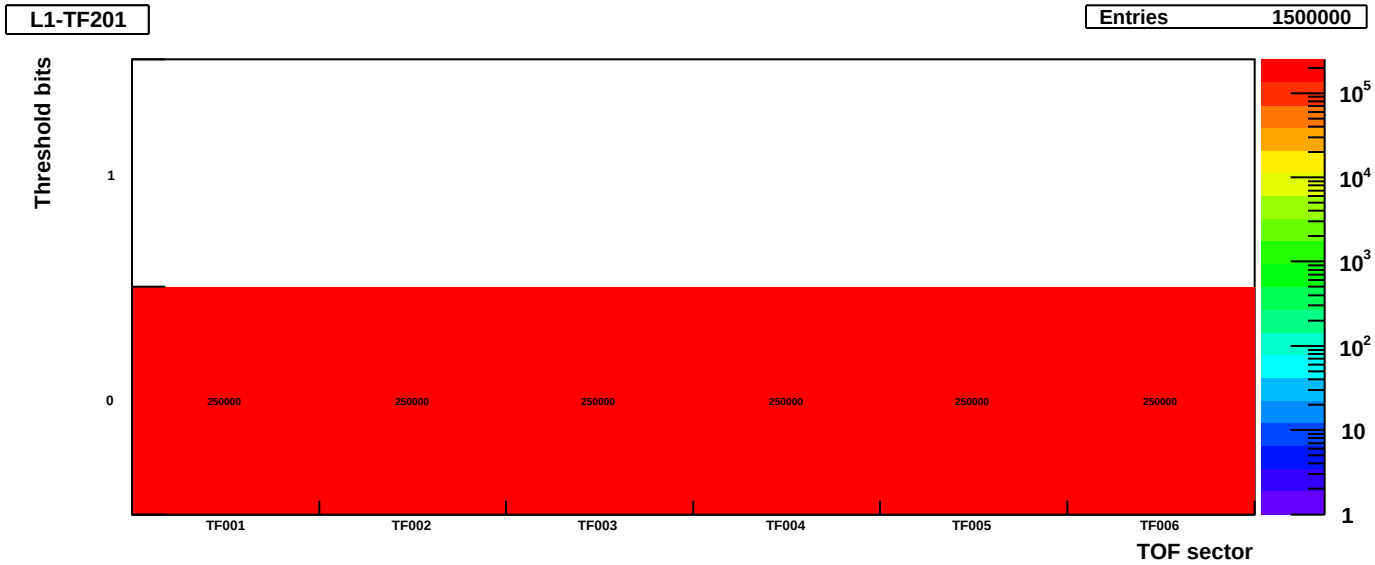

MIX-TF004
Entries 1.05e+07
TOF MULT
TOF tray

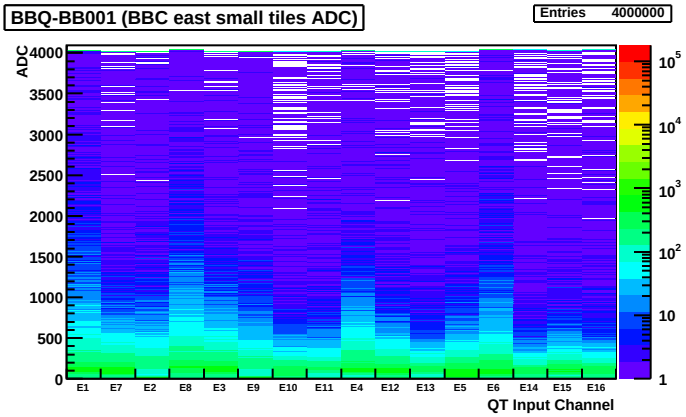

MIX-TF005
Entries 1.05e+07
TOF MULT
TOF tray

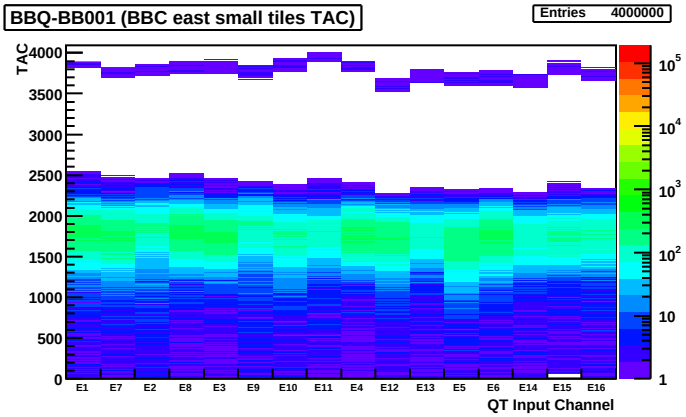

MIX-TF006
Entries 1.05e+07
TOF MULT
TOF tray

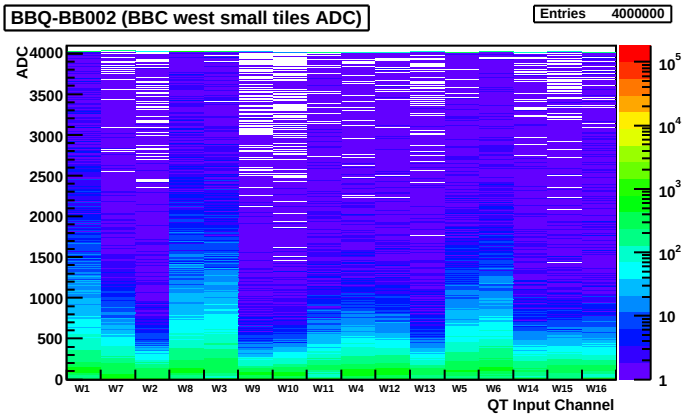

MIX-TF101
Entries 1500000
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

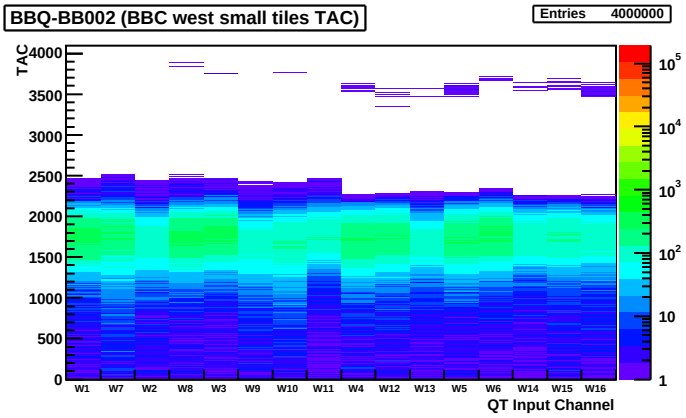

L1-TF201
Entries 250000
10^5
10^4
10^3
0
500
1000
1500
2000
2500
TOF total mult

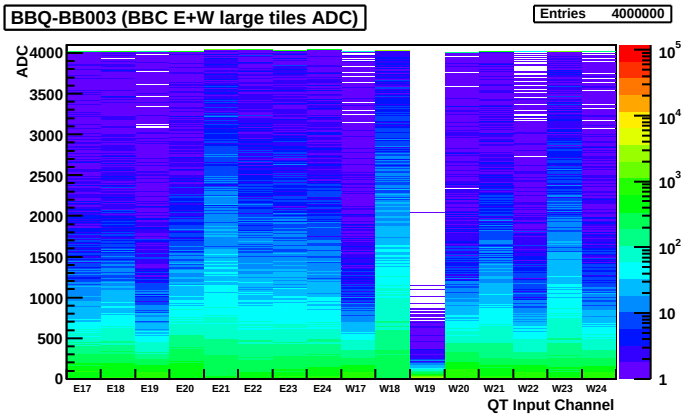

L1-TF201
Entries 1500000
Threshold bits
1
0
250000
250000
250000
250000
250000
250000
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5
10^4
10^3
10^2
10
1

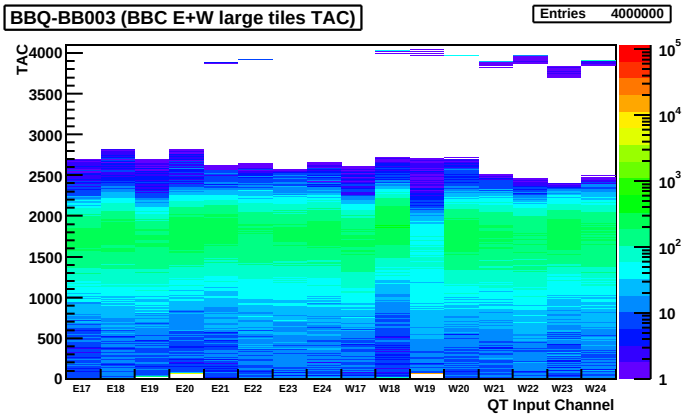

BBQ-BB001 (BBC east small tiles ADC)
Entries 4000000
ADC
QT Input Channel

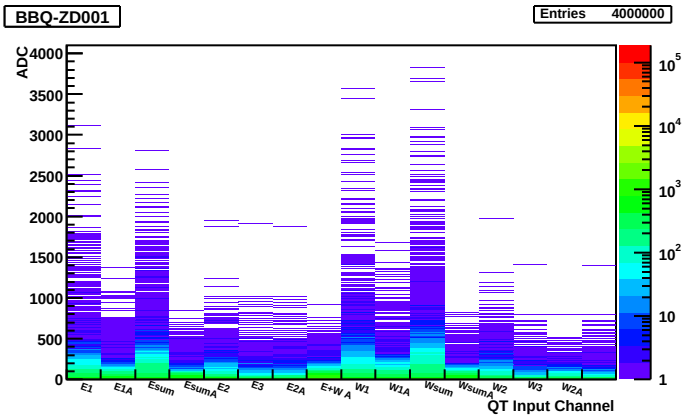

BBQ-BB001 (BBC east small tiles TAC)
Entries 4000000
TAC
QT Input Channel

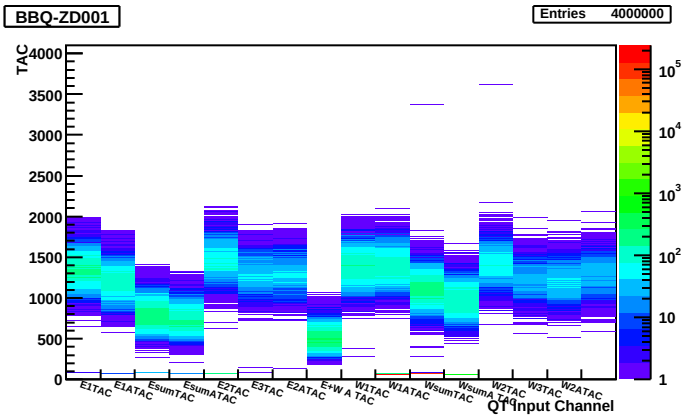

BBQ-BB002 (BBC west small tiles ADC)
Entries 4000000
ADC
QT Input Channel

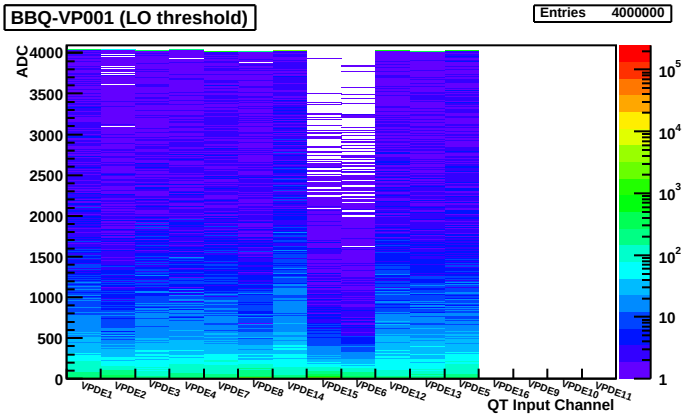

BBQ-BB002 (BBC west small tiles TAC)
Entries 4000000
TAC
QT Input Channel

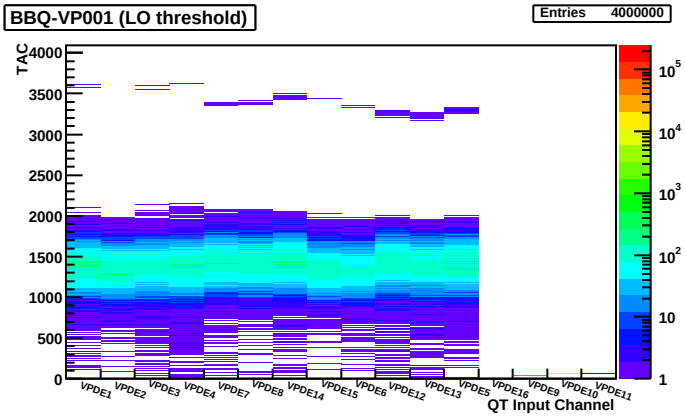

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4000000
ADC
QT Input Channel

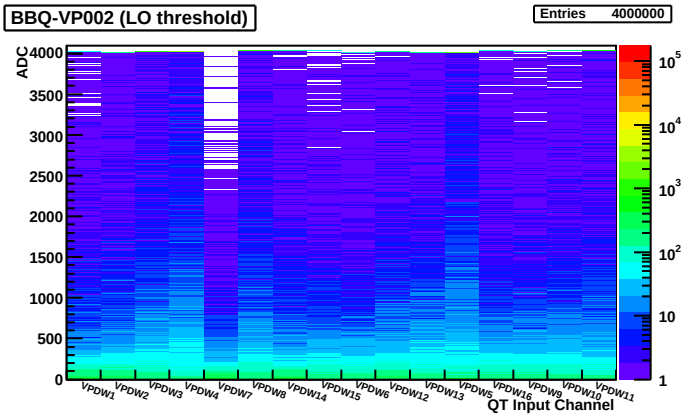

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4000000
TAC
QT Input Channel

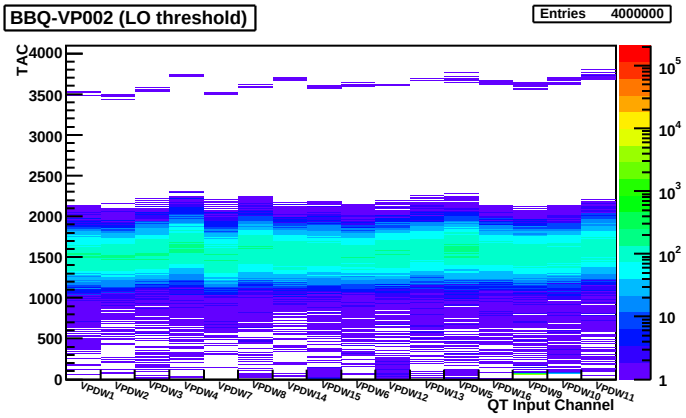

BBQ-ZD001
Entries 4000000
ADC
QT Input Channel

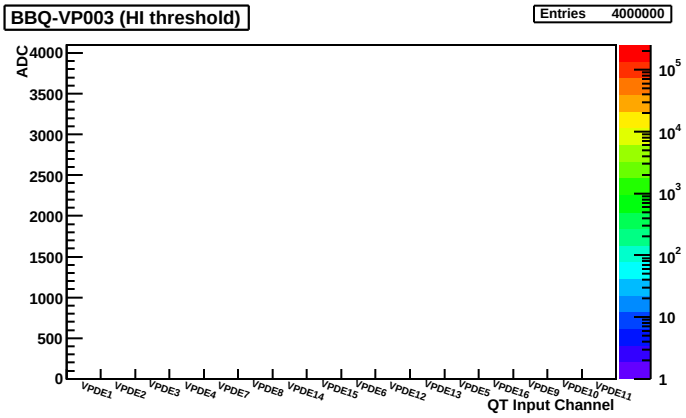

BBQ-ZD001
Entries 4000000
TAC
QT Input Channel

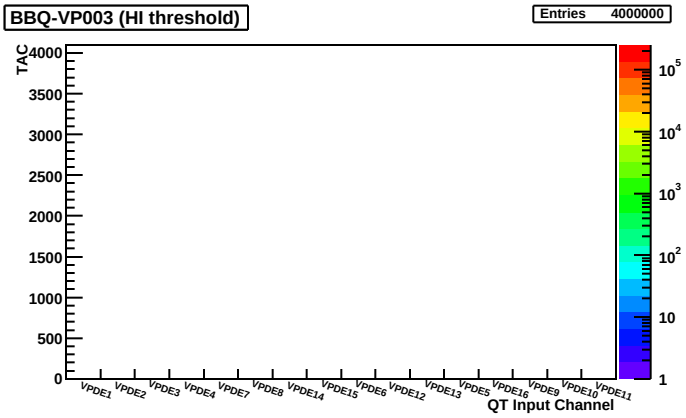

BBQ-VP001 (LO threshold)
Entries 4000000
ADC
QT Input Channel

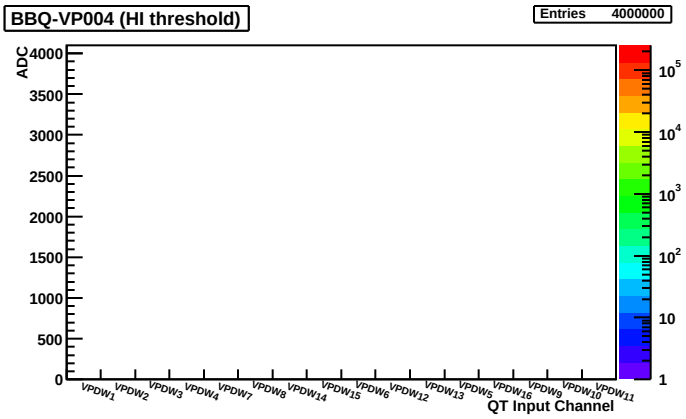

BBQ-VP001 (LO threshold)
Entries 4000000
TAC
QT Input Channel

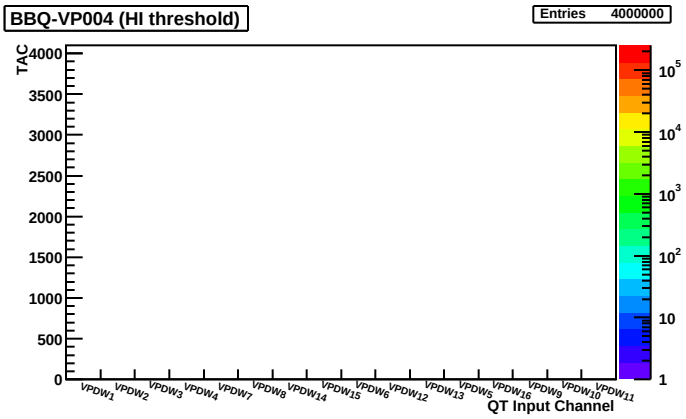

BBQ-VP002 (LO threshold)
Entries 4000000
ADC
QT Input Channel

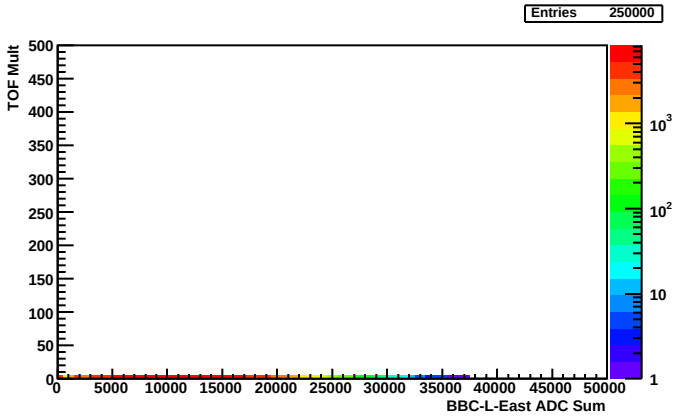

BBQ-VP002 (LO threshold)
Entries 4000000
TAC
QT Input Channel

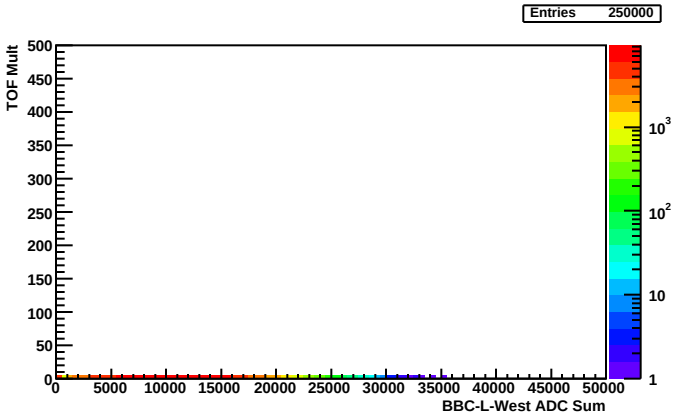

BBQ-VP003 (HI threshold)
Entries 4000000
ADC
QT Input Channel

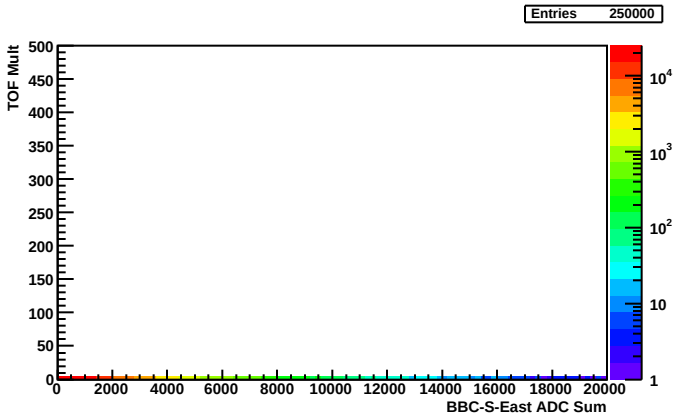

BBQ-VP003 (HI threshold)
Entries 4000000
TAC
QT Input Channel

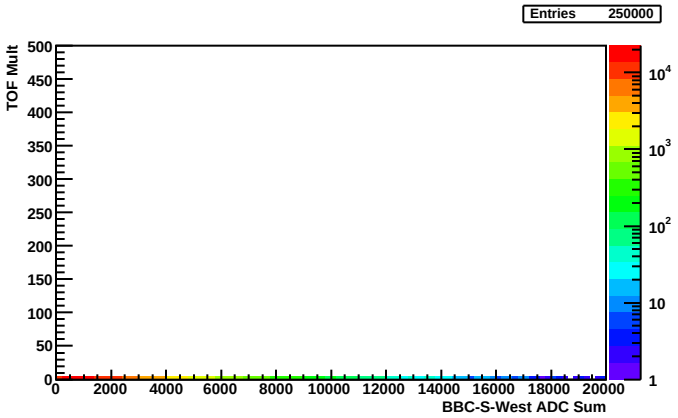

BBQ-VP004 (HI threshold)
Entries 4000000
ADC
QT Input Channel

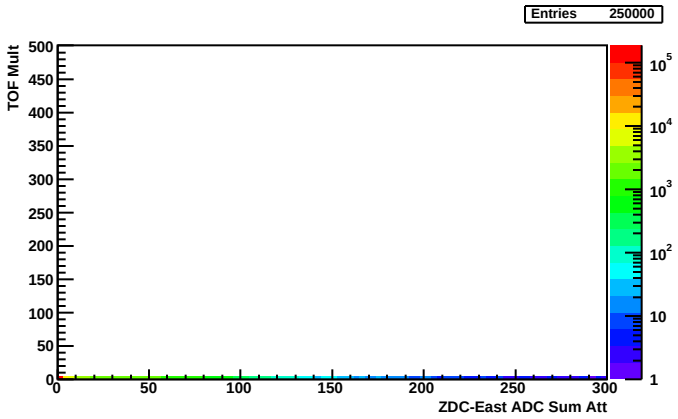

BBQ-VP004 (HI threshold)
Entries 4000000
TAC
QT Input Channel

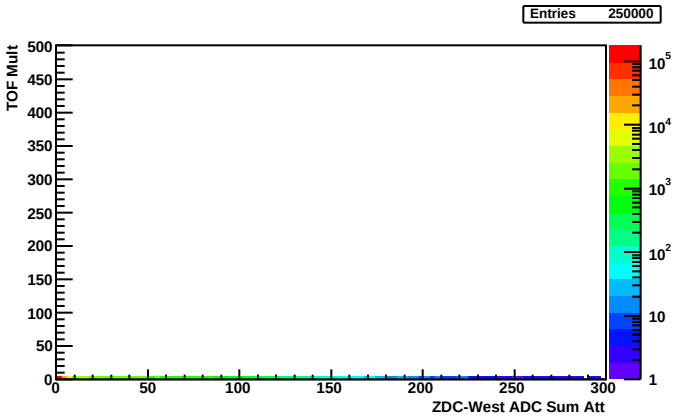

Entries 250000
TOF Mult
BBC-L-East ADC Sum

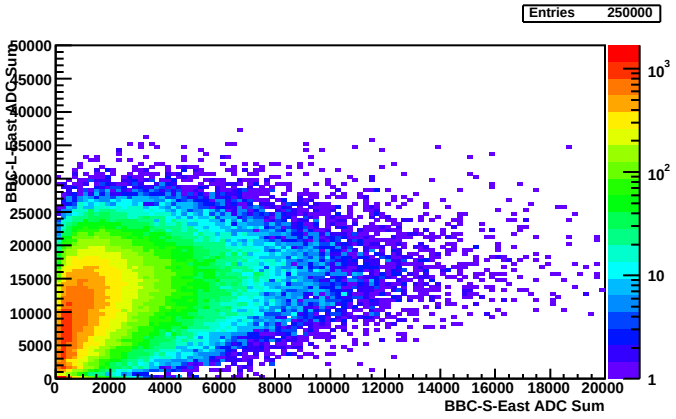

Entries 250000
TOF Mult
BBC-L-West ADC Sum

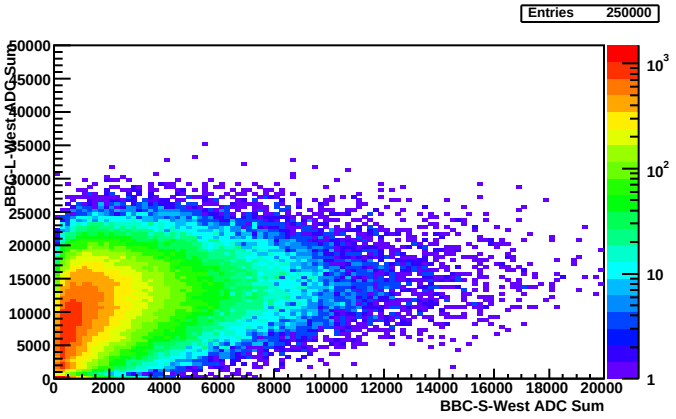

Entries 250000
TOF Mult
BBC-S-East ADC Sum

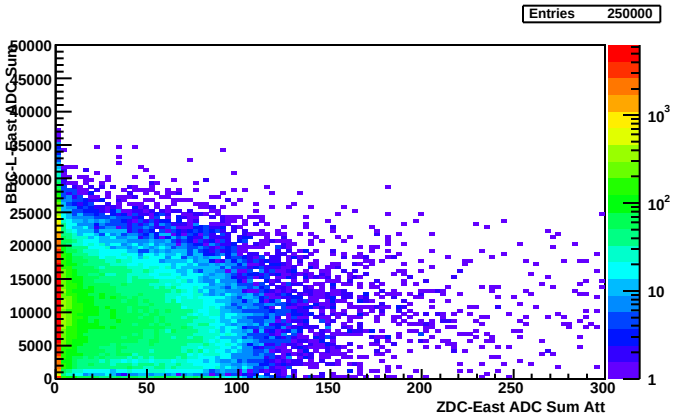

Entries 250000
TOF Mult
BBC-S-West ADC Sum

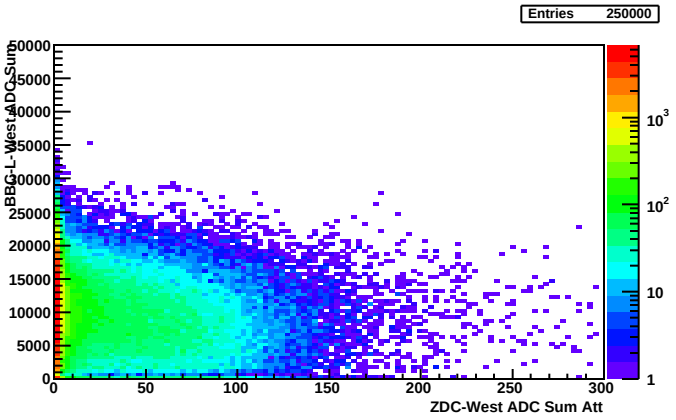

Entries 250000
TOF Mult
ZDC-East ADC Sum Att

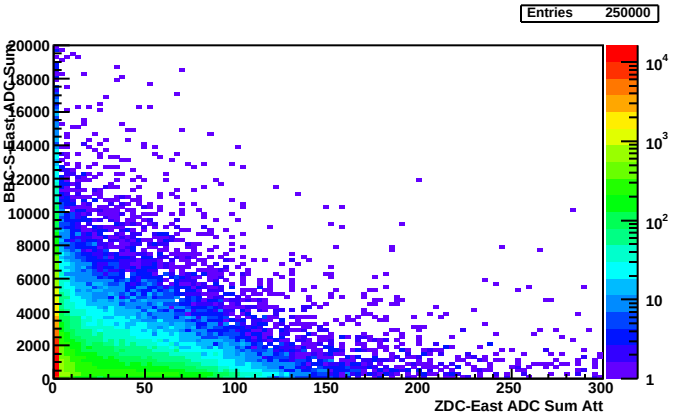

Entries 250000
TOF Mult
ZDC-West ADC Sum Att

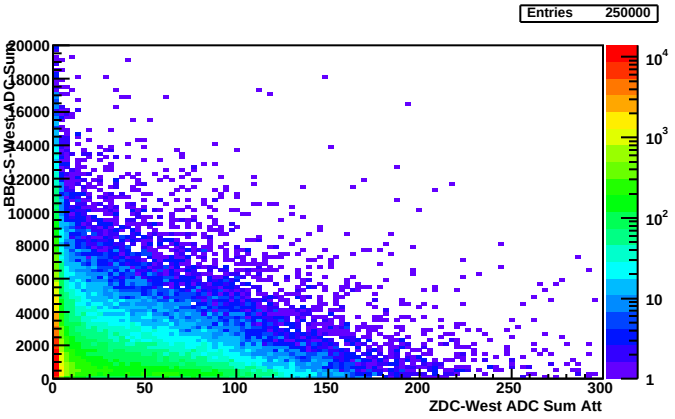

Entries 250000
BBC-L-East ADC Sum
BBC-S-East ADC Sum

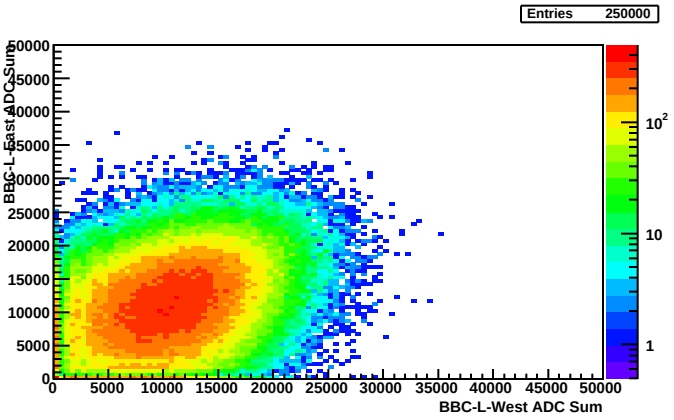

Entries 250000
BBC-L-West ADC Sum
BBC-S-West ADC Sum

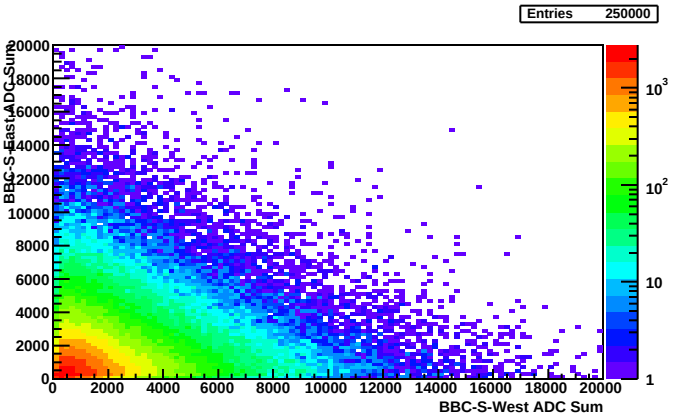

Entries 250000
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

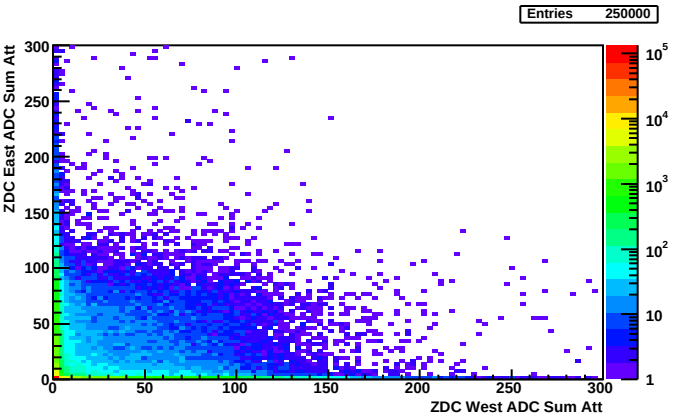

Entries 250000
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

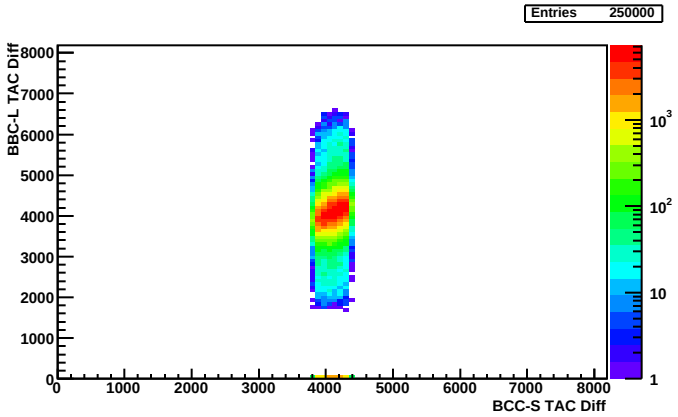

Entries 250000
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

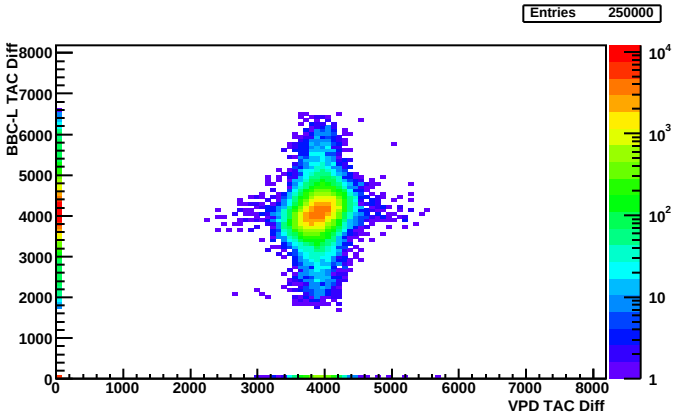

Entries 250000
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

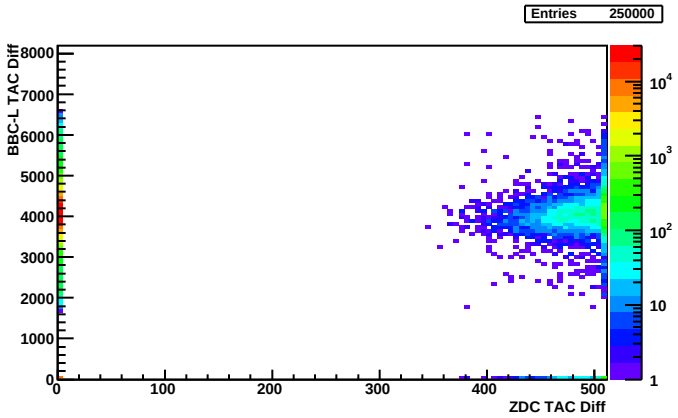

Entries 250000
BBC-L-East ADC Sum
BBC-L-West ADC Sum

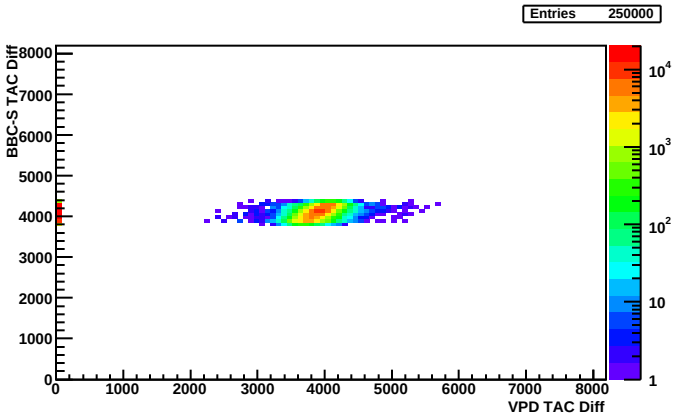

Entries 250000
BBC-S-East ADC Sum
BBC-S-West ADC Sum

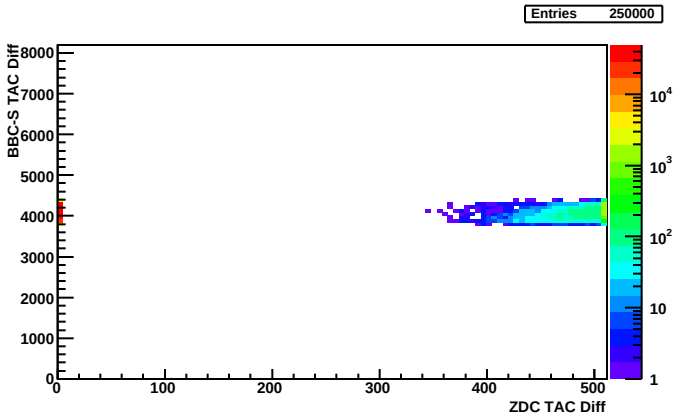

Entries 250000
ZDC East ADC Sum Att
ZDC West ADC Sum Att

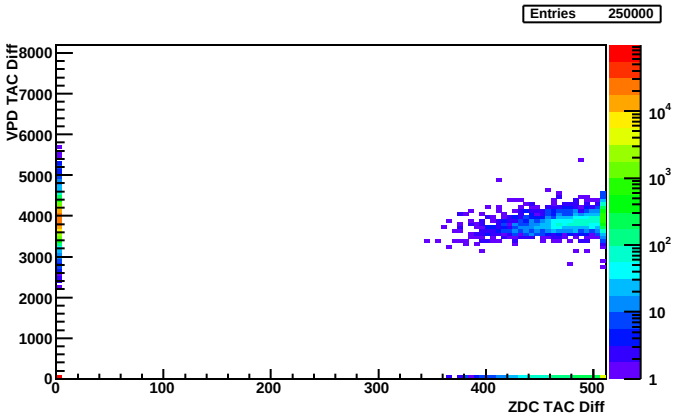

Entries 250000
BBC-L TAC Diff
BCC-S TAC Diff

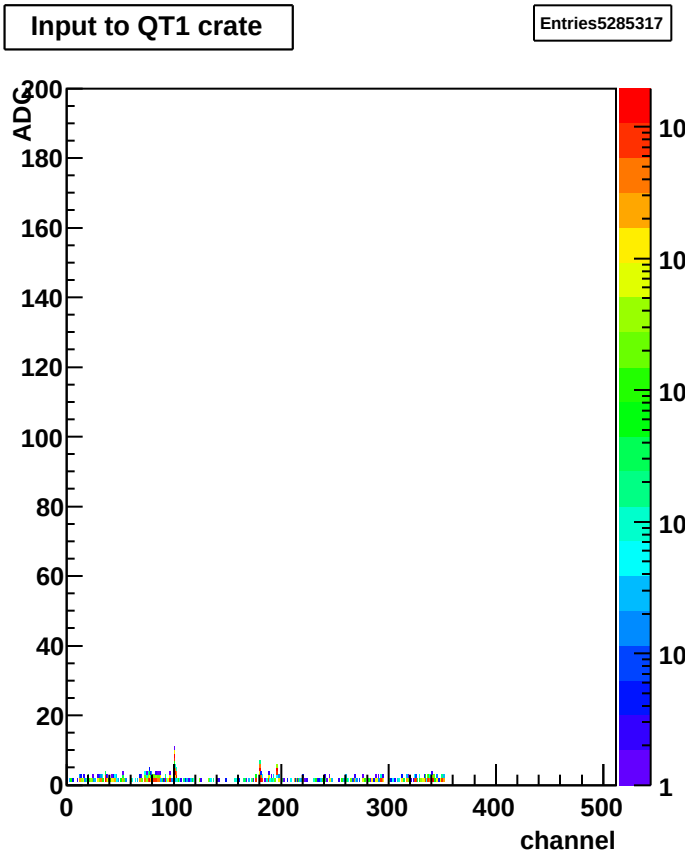

Entries 250000
BBC-L TAC Diff
VPD TAC Diff

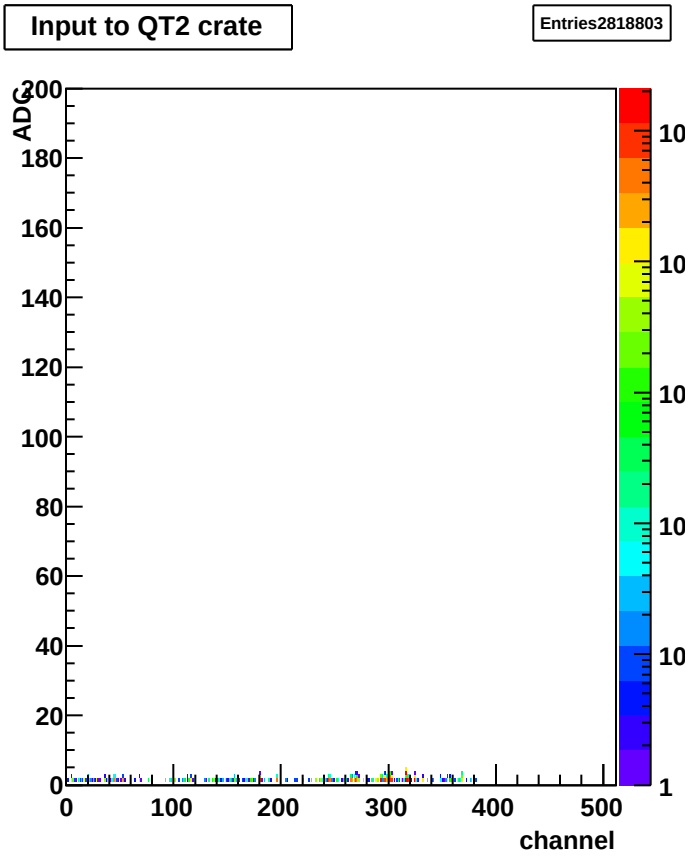

Entries 250000
BBC-L TAC Diff
ZDC TAC Diff

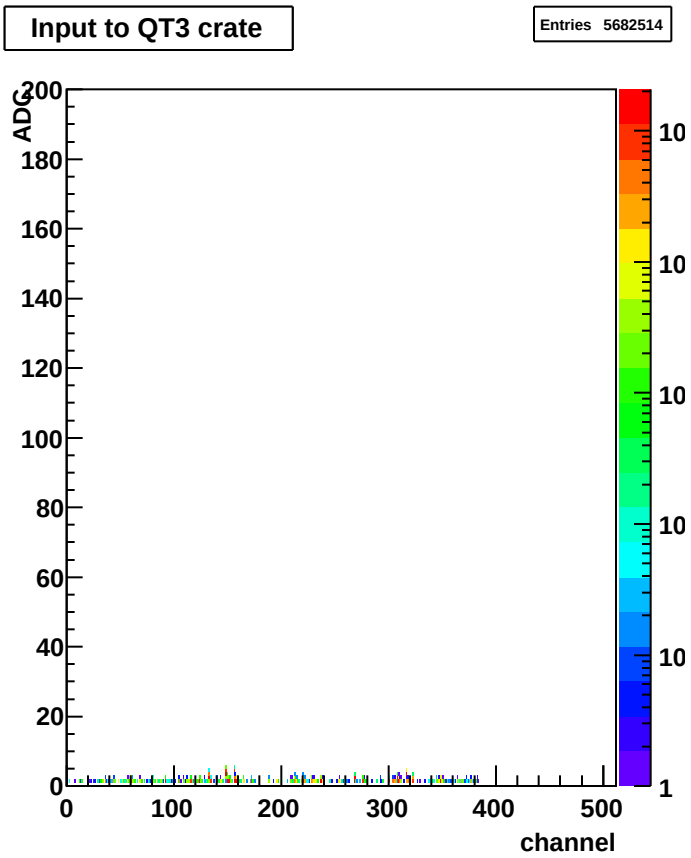

Entries 250000
BBC-S TAC Diff
VPD TAC Diff

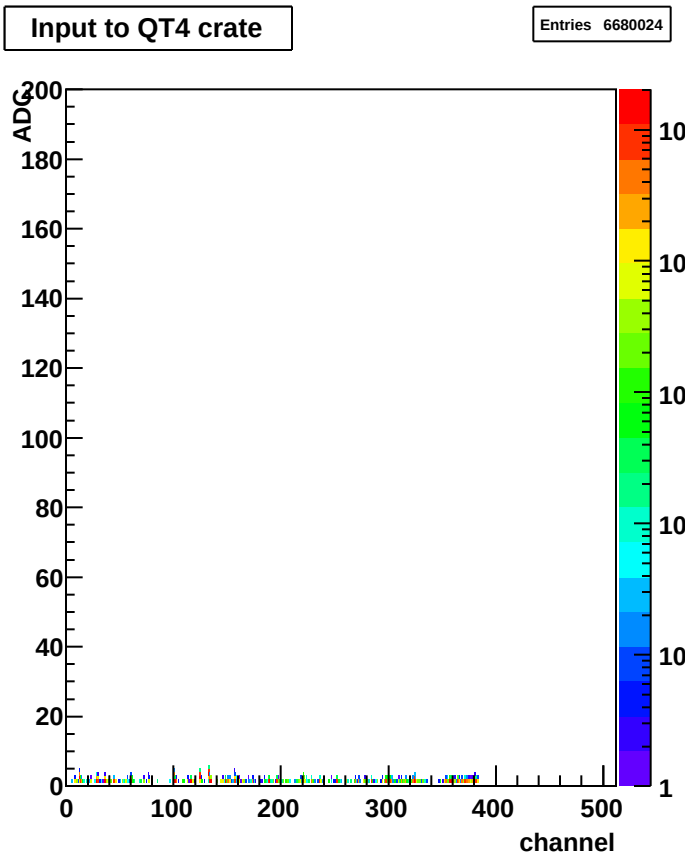

Entries 250000
BBC-S TAC Diff
ZDC TAC Diff

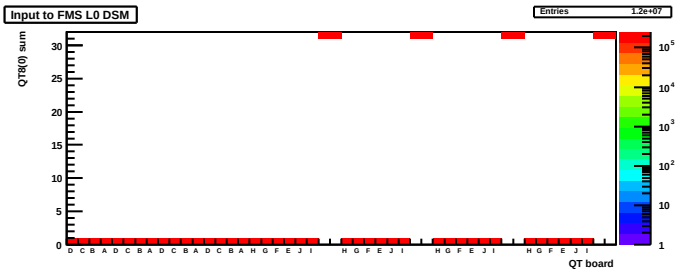

Entries 250000
VPD TAC Diff
ZDC TAC Diff

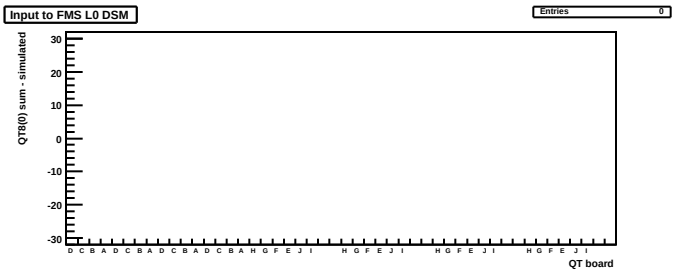

Input to QT1 crate
Entries5285317
ADC
channel

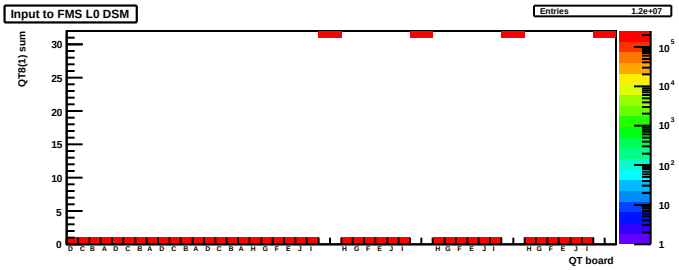

Input to QT2 crate
Entries2818803
ADC
channel

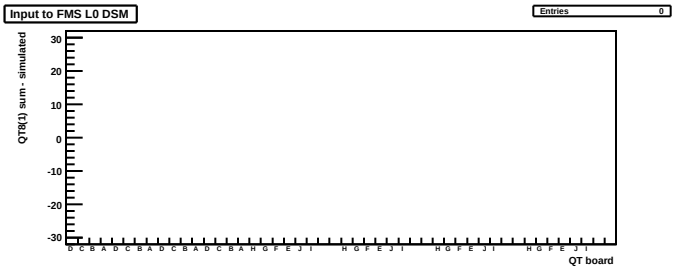

Input to QT3 crate
Entries 5682514
ADC
channel

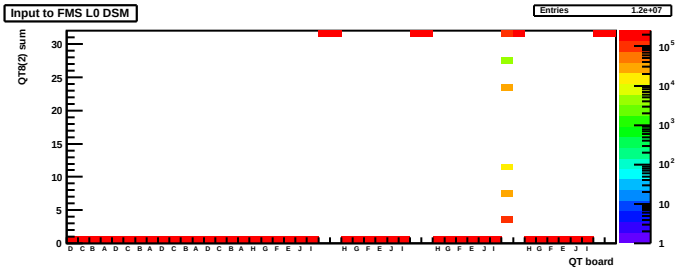

Input to QT4 crate
Entries 6680024
ADC
channel

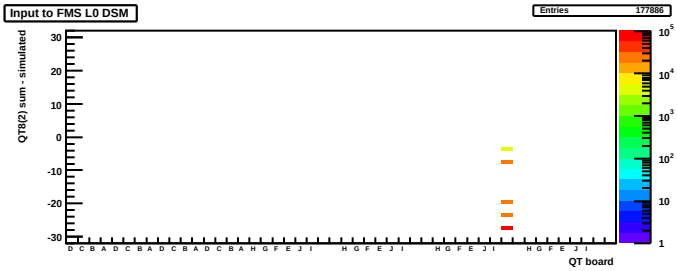

Input to FMS L0 DSM
Entries 1.2e+07
QT8(0) sum
QT board

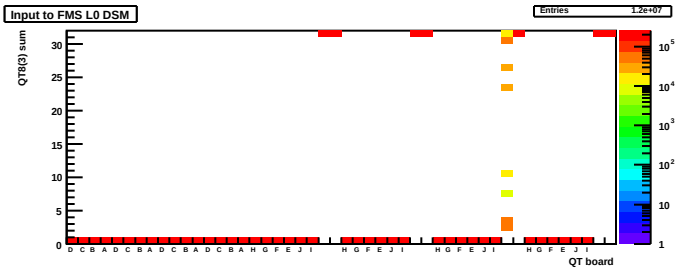

Input to FMS L0 DSM
Entries 0
QT8(0) sum - simulated
QT board

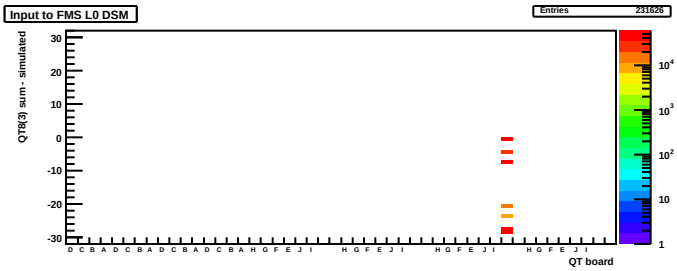

Input to FMS L0 DSM
Entries 1.2e+07
QT8(1) sum
QT board

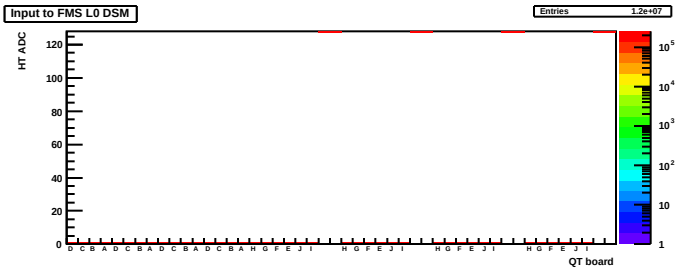

Input to FMS L0 DSM
Entries 0
QT8(1) sum - simulated
QT board

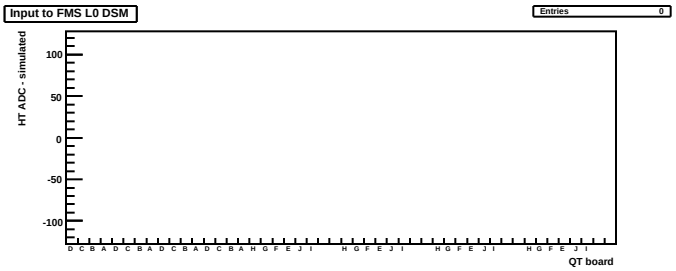

Input to FMS L0 DSM
Entries 1.2e+07
QT8(2) sum
QT board

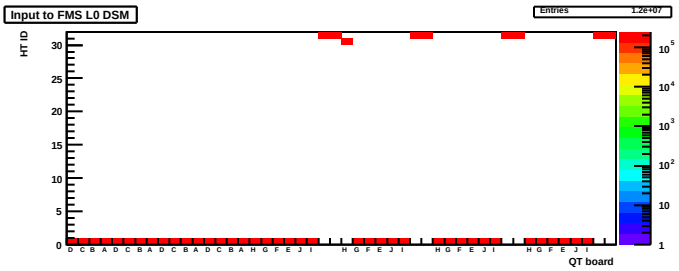

Input to FMS L0 DSM
Entries 177886
QT8(2) sum - simulated
QT board

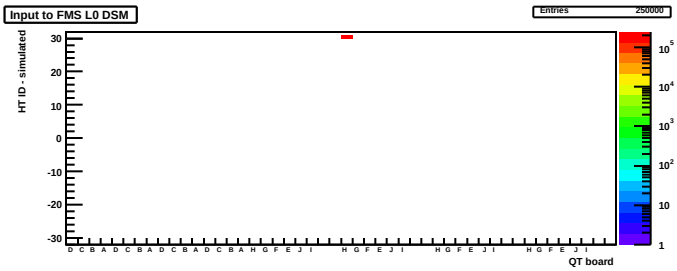

Input to FMS L0 DSM
Entries 1.2e+07
QT8(3) sum
QT board

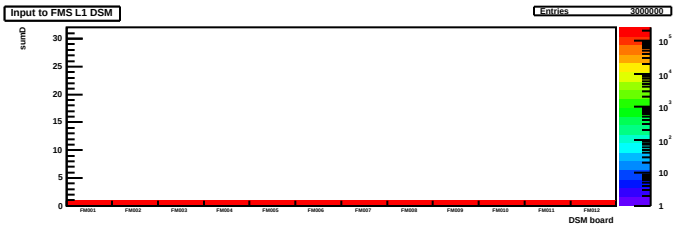

Input to FMS L0 DSM
Entries 231626
QT8(3) sum - simulated
QT board

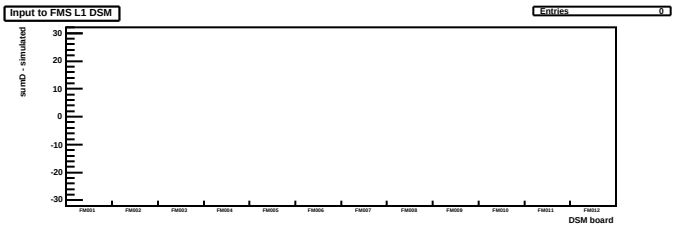

Input to FMS L0 DSM
Entries 1.2e+07
HT ADC
QT board

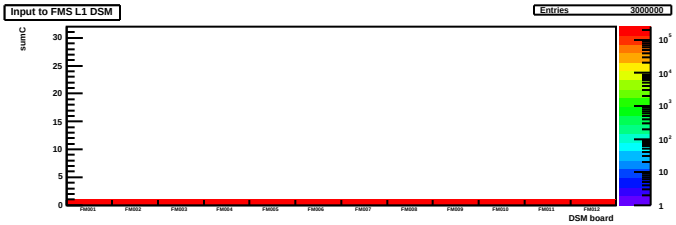

Input to FMS L0 DSM
Entries 0
HT ADC - simulated
QT board

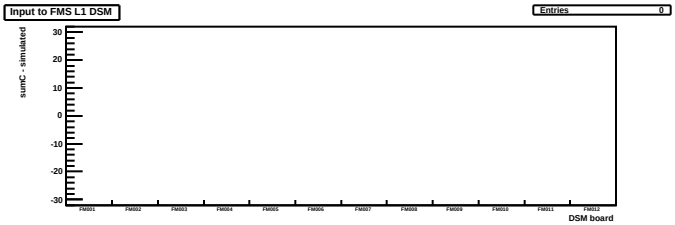

Input to FMS L0 DSM
Entries 1.2e+07
HT ID
QT board

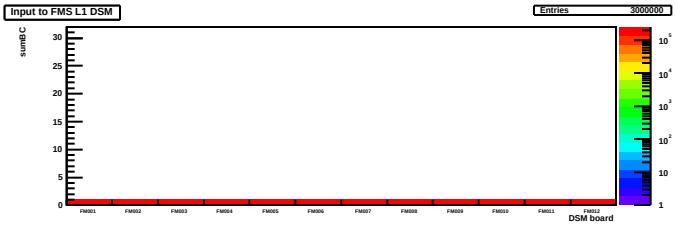

Input to FMS L0 DSM
Entries 250000
HT ID - simulated
QT board

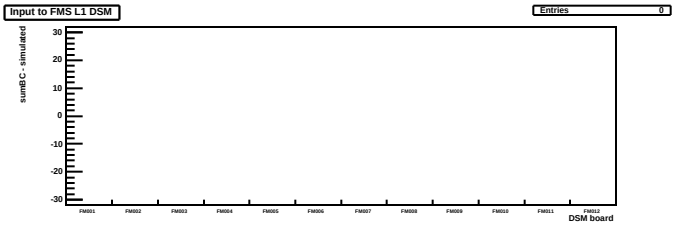

Input to FMS L1 DSM
Entries 3000000
sumD
DSM board

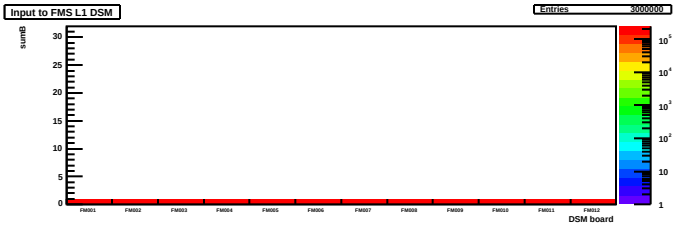

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

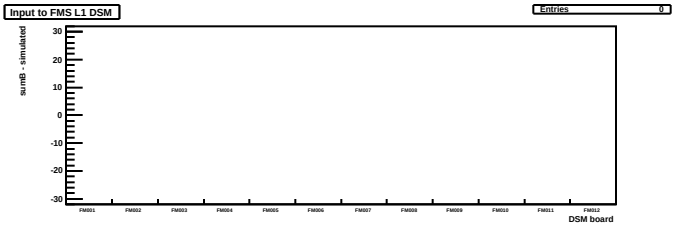

Input to FMS L1 DSM
Entries 3000000
sumC
DSM board

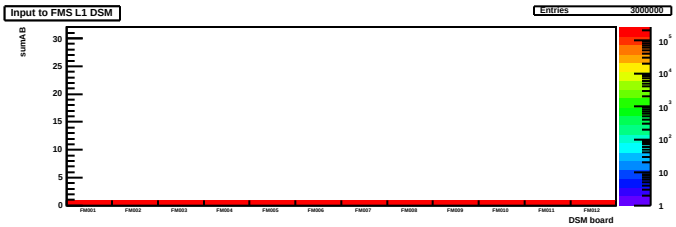

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

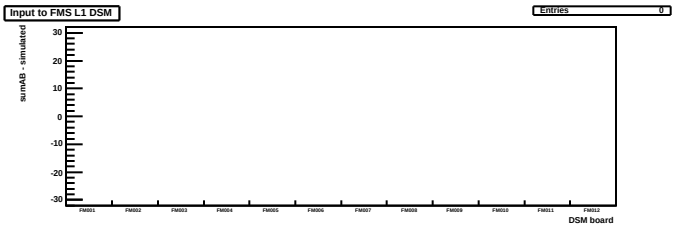

Input to FMS L1 DSM
Entries 3000000
sumBC
DSM board

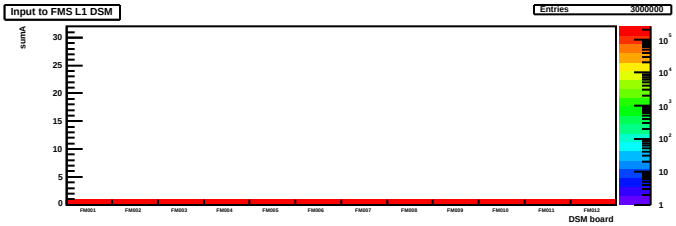

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

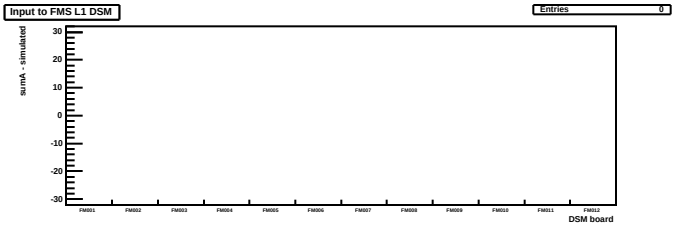

Input to FMS L1 DSM
Entries 3000000
sumB
DSM board

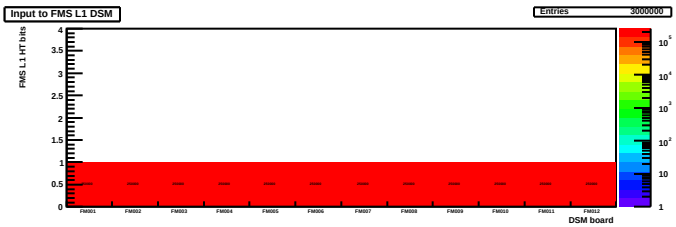

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

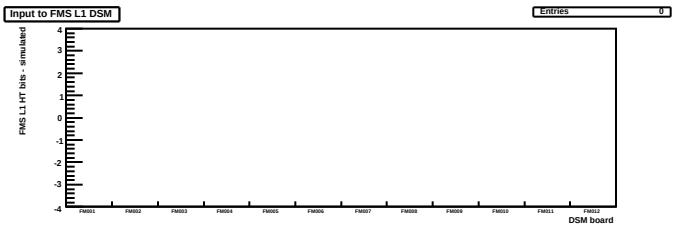

Input to FMS L1 DSM
Entries 3000000
sumAB
DSM board

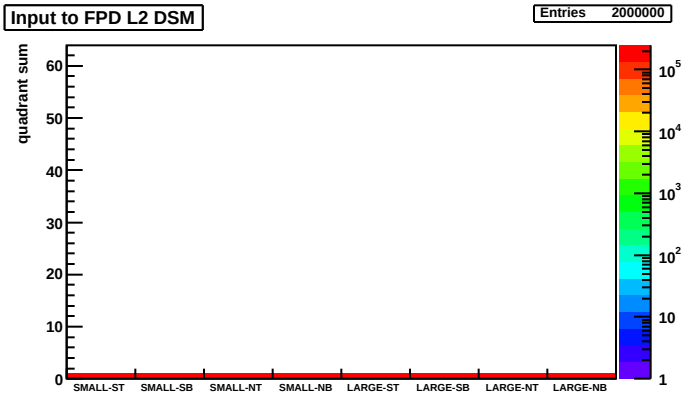

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

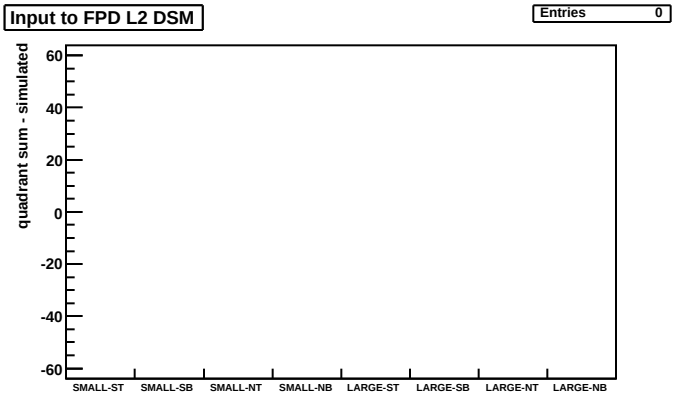

Input to FMS L1 DSM
Entries 3000000
sumA
DSM board

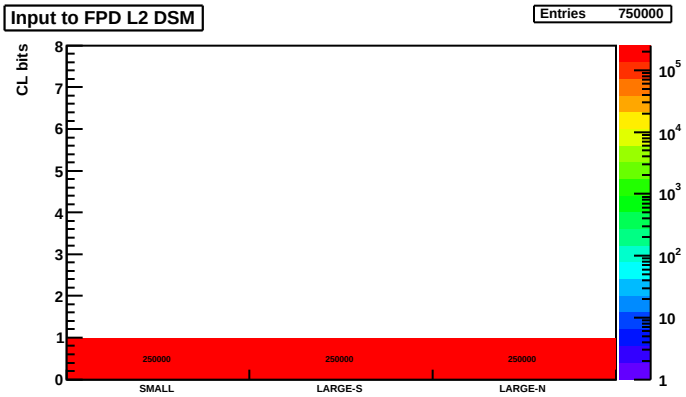

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

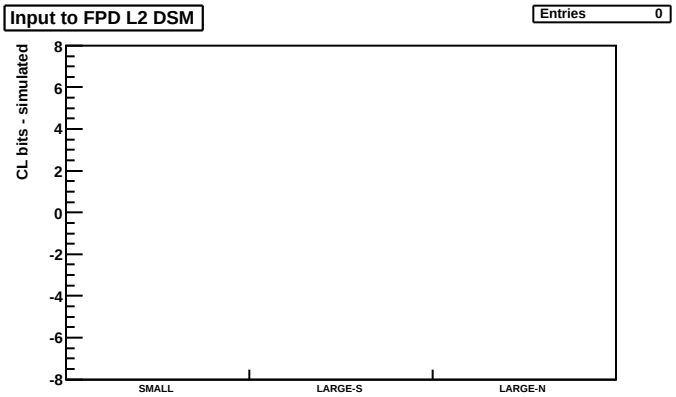

Input to FMS L1 DSM
Entries 3000000
FMS L1 HT bits
DSM board

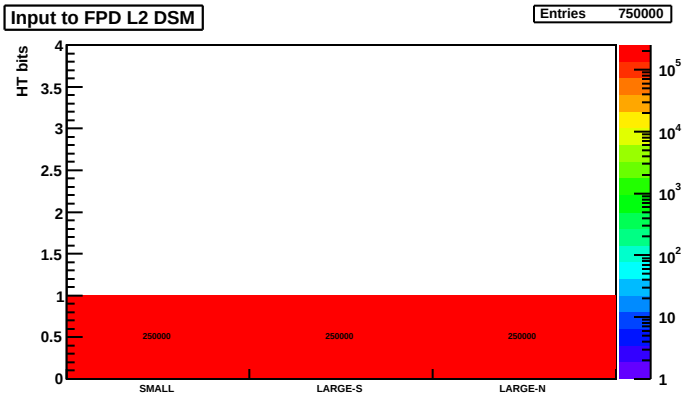

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

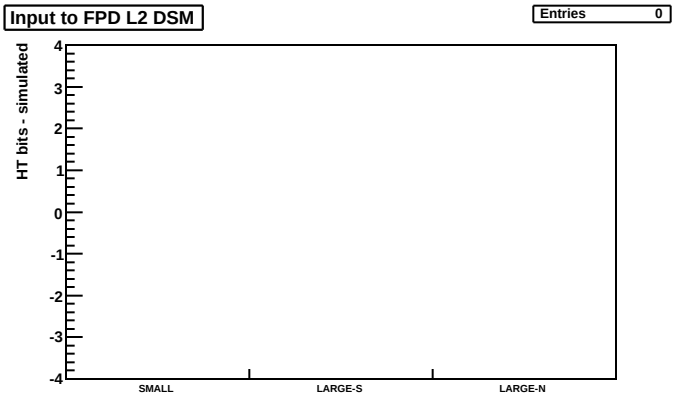

Input to FPD L2 DSM
Entries 2000000
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

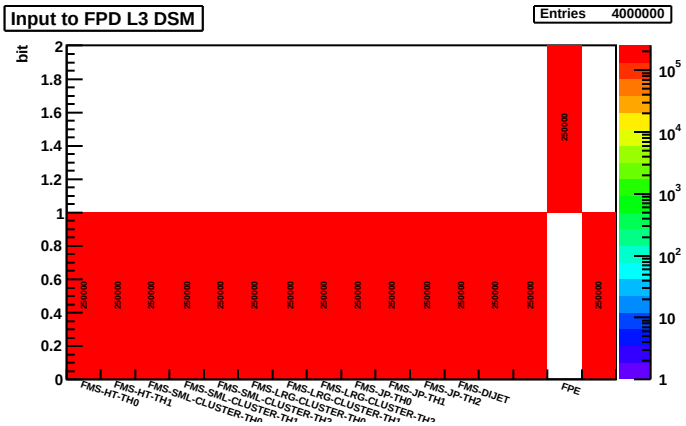

Input to FPD L2 DSM
Entries 0
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

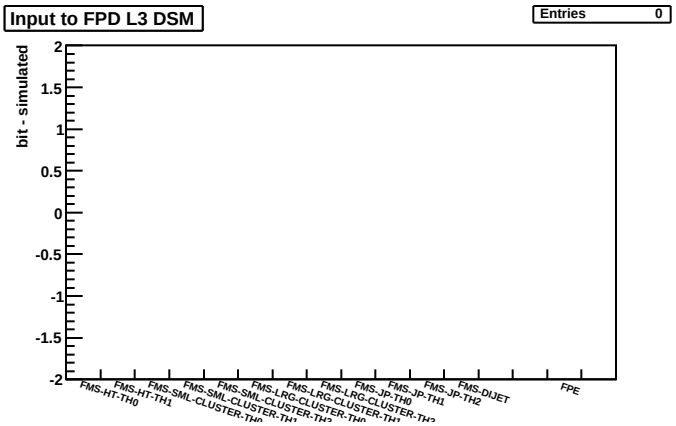

Input to FPD L2 DSM
Entries 750000
CL bits
250000
250000
250000
SMALL
LARGE-S
LARGE-N

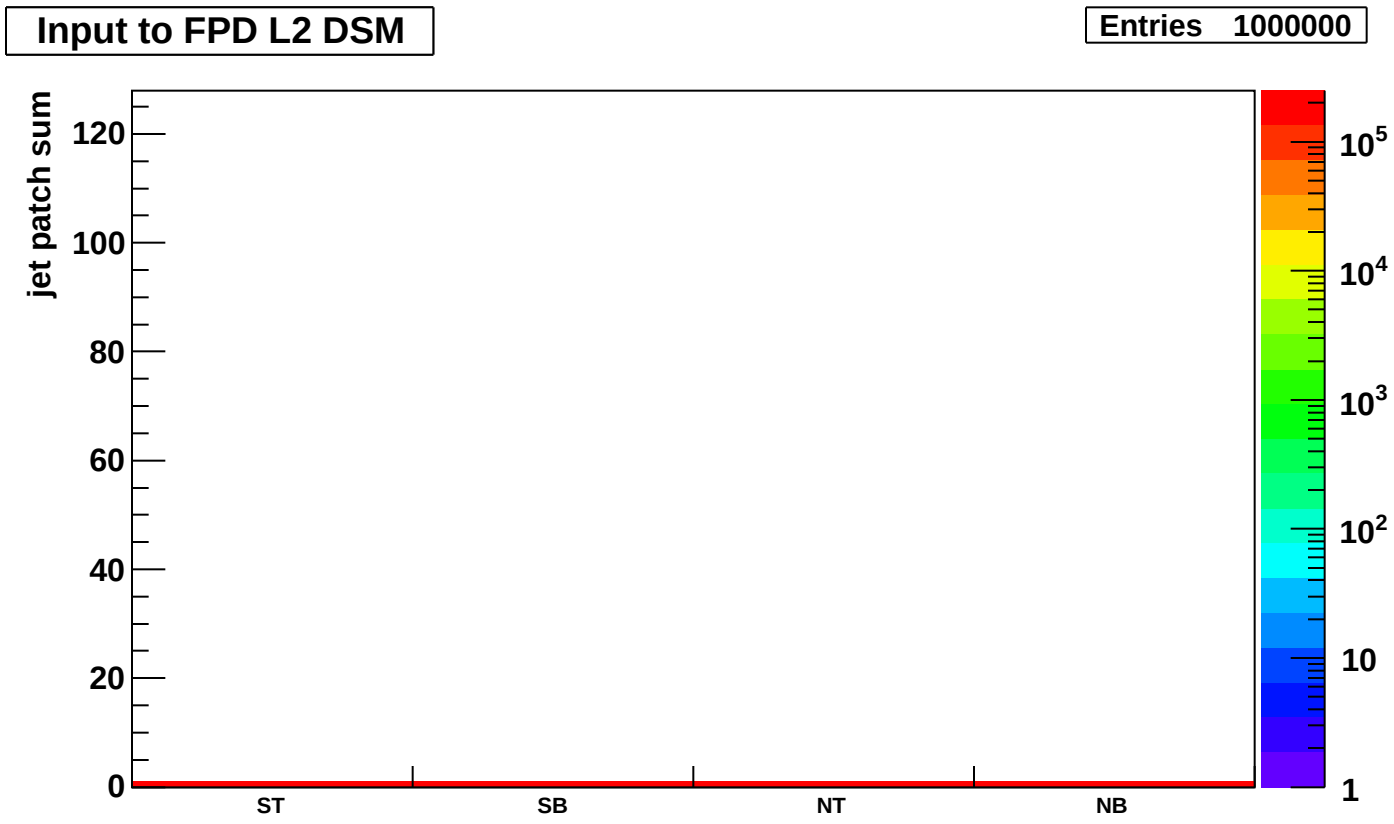

Input to FPD L2 DSM
Entries 0
CL bits - simulated
SMALL
LARGE-S
LARGE-N

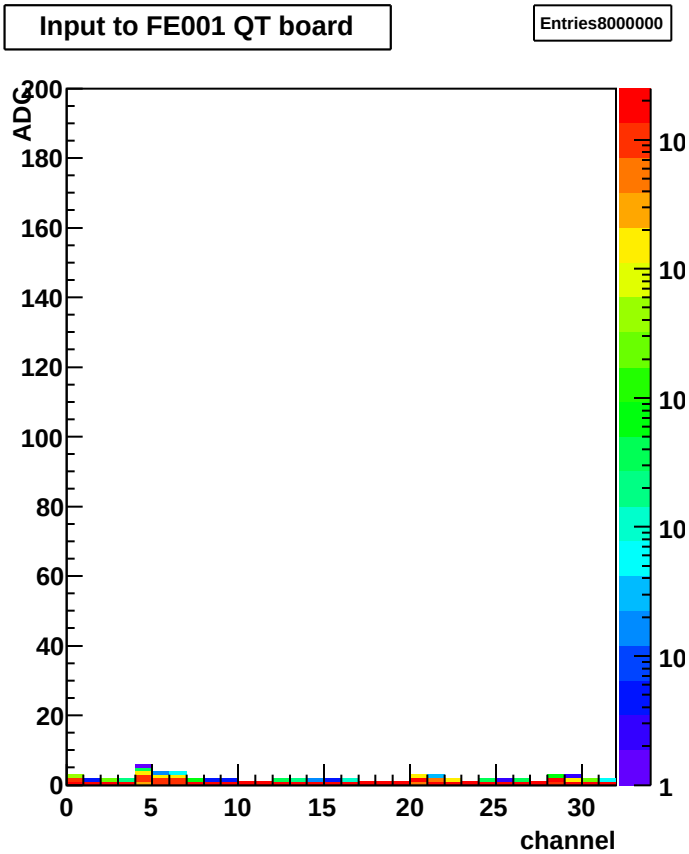

Input to FPD L2 DSM
Entries 750000
HT bits
250000
250000
250000
SMALL
LARGE-S
LARGE-N

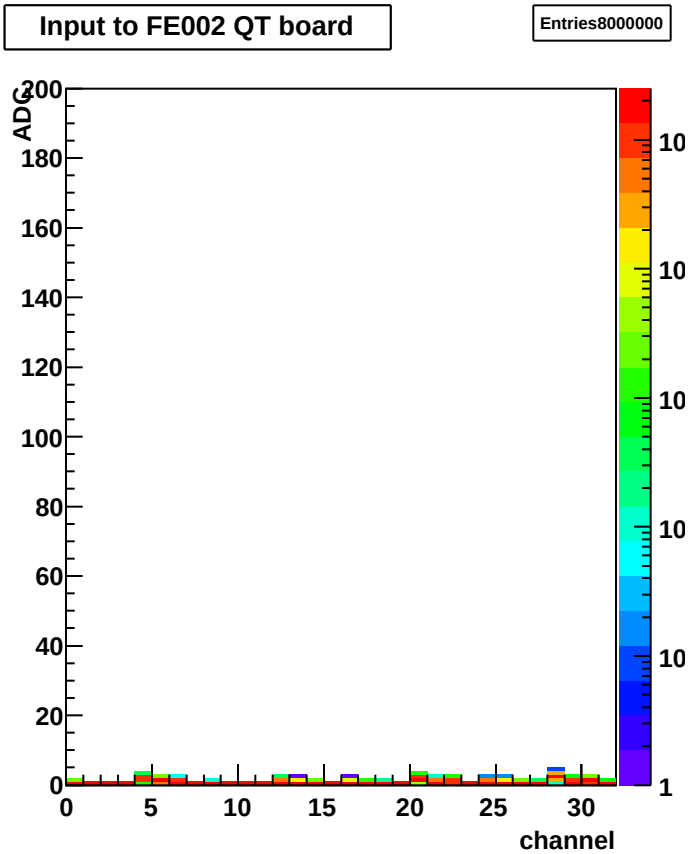

Input to FPD L2 DSM
Entries 0
HT bits - simulated
SMALL
LARGE-S
LARGE-N

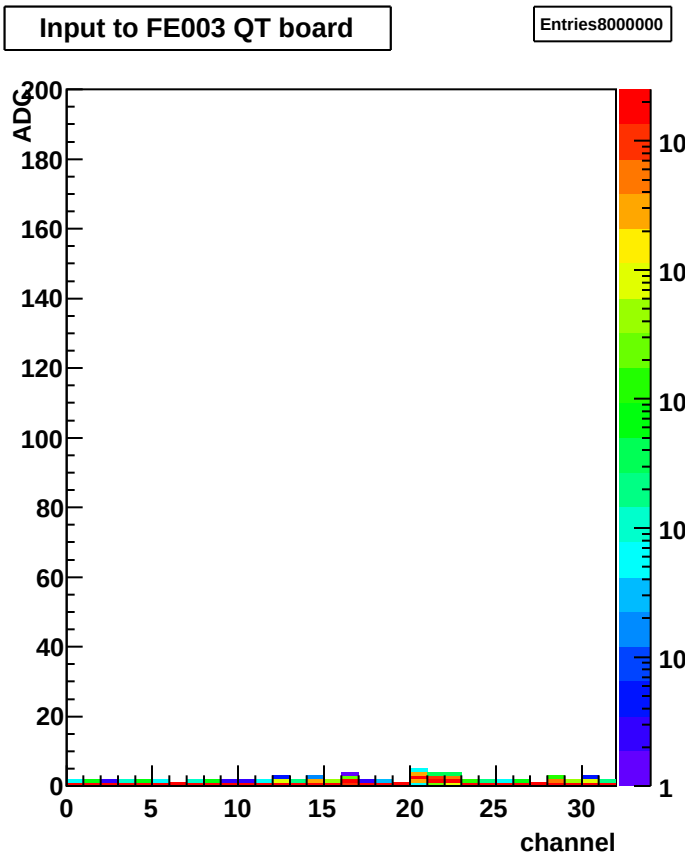

Input to FPD L3 DSM
Entries 4000000
bit
25000
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

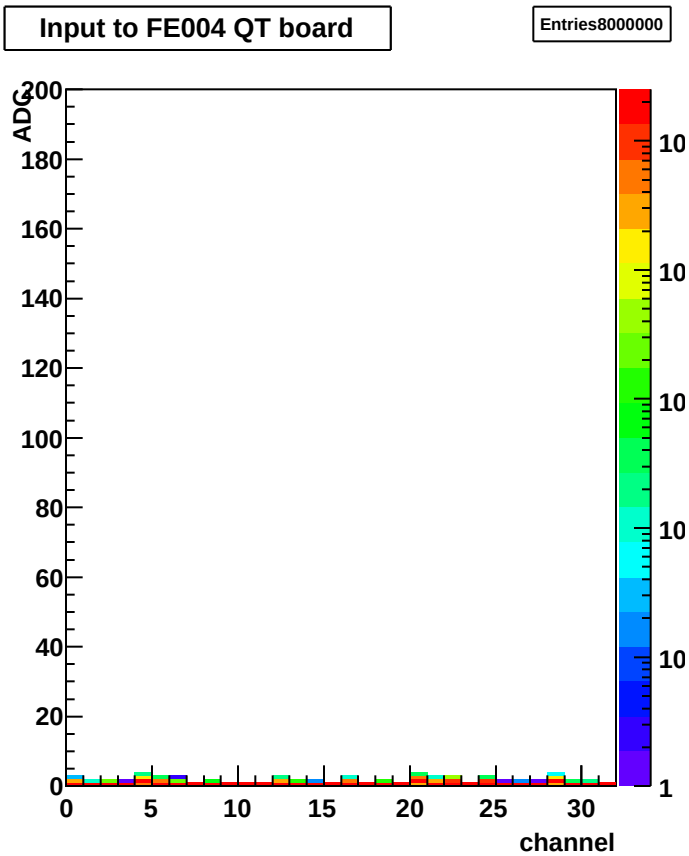

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

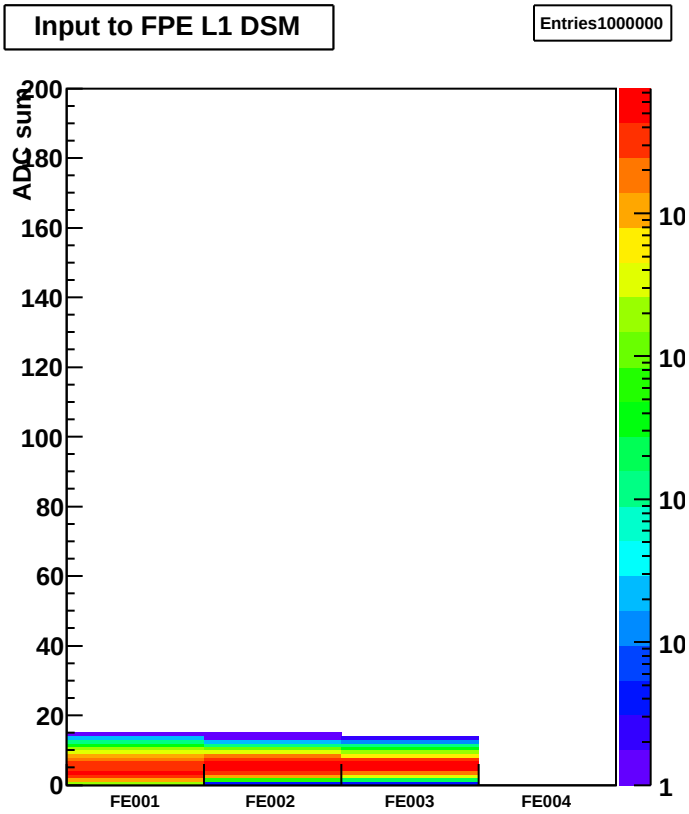

Input to FPD L2 DSM
Entries 1000000
jet patch sum
120
100
80
60
40
20
0
ST
SB
NT
NB
10^5
10^4
10^3
10^2
10
1

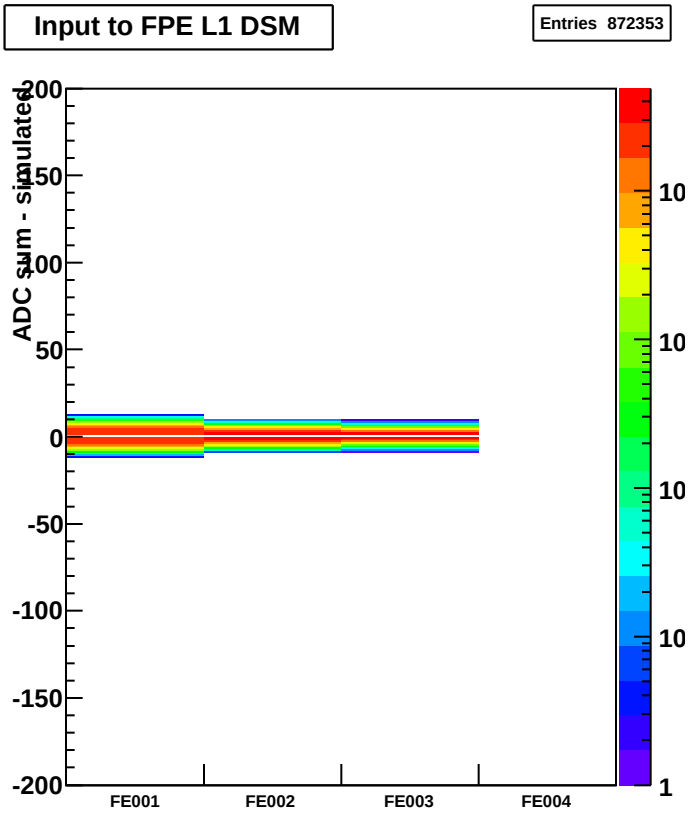

Input to FE001 QT board
Entries8000000
ADC
channel

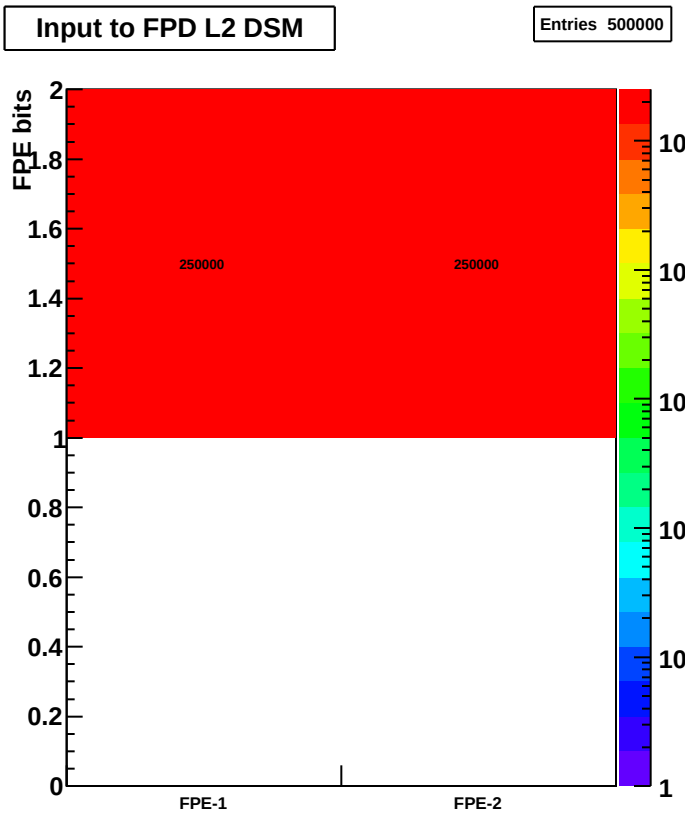

Input to FE002 QT board
Entries8000000
ADC
channel

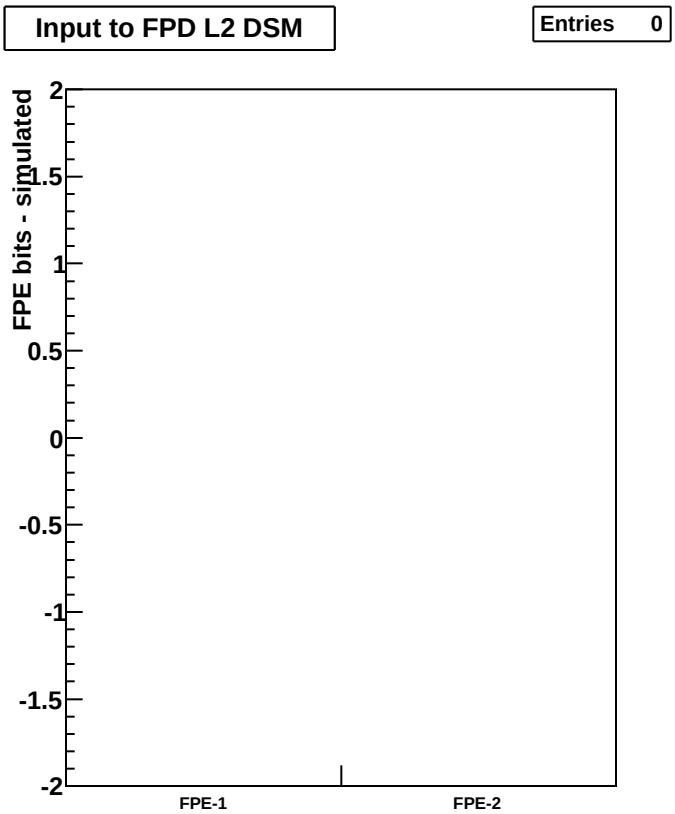

Input to FE003 QT board
Entries8000000
ADC
channel


Input to FE004 QT board
Entries8000000
ADC
channel


Input to FPE L1 DSM
Entries1000000
ADC sum
200
180
160
140
120
100
80
60
40
20
0
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPE L1 DSM
Entries 872353
ADC sum - simulated
200
150
100
50
0
-50
-100
-150
-200
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPD L2 DSM
Entries 500000
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
250000
250000
FPE-1
FPE-2
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