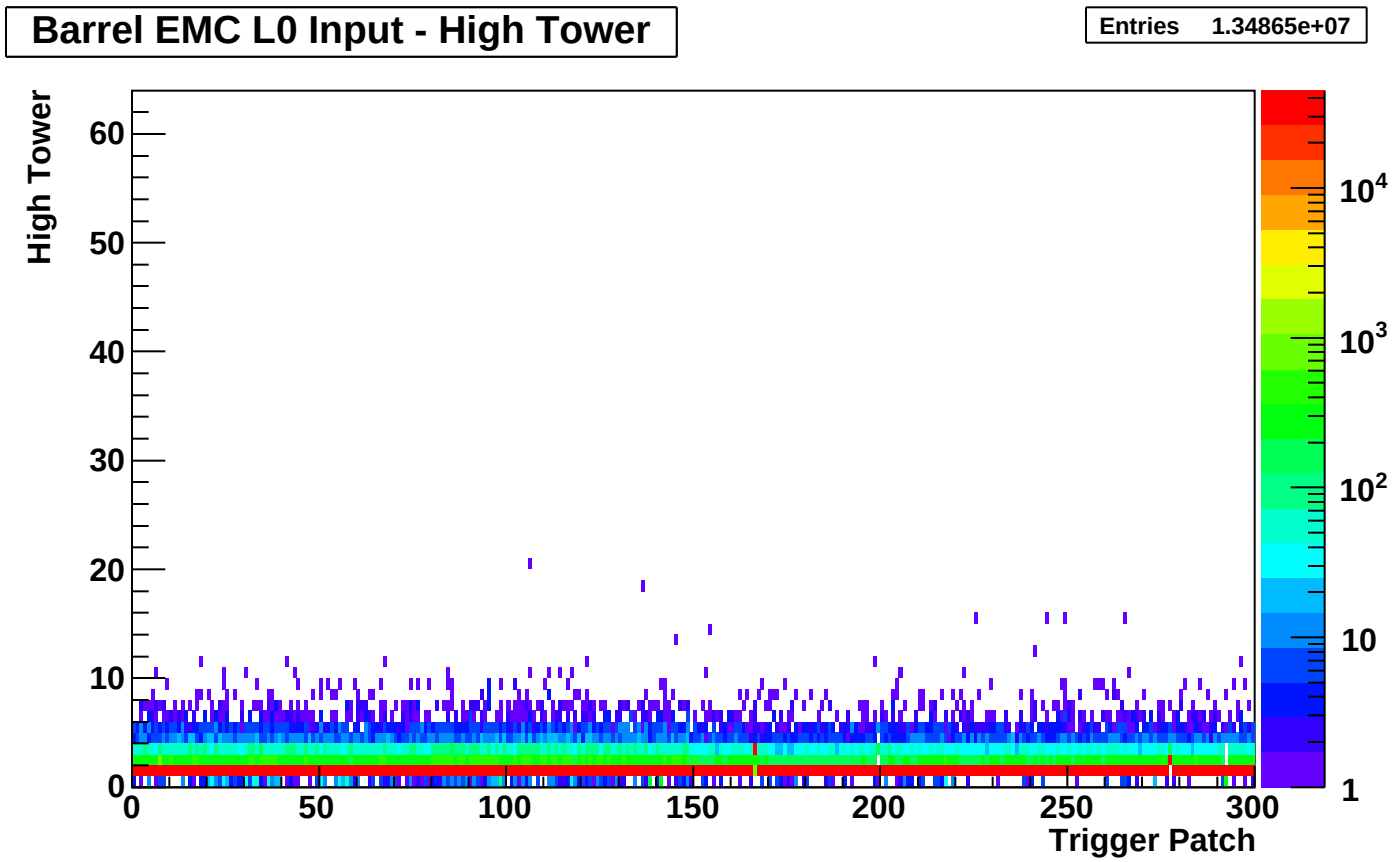
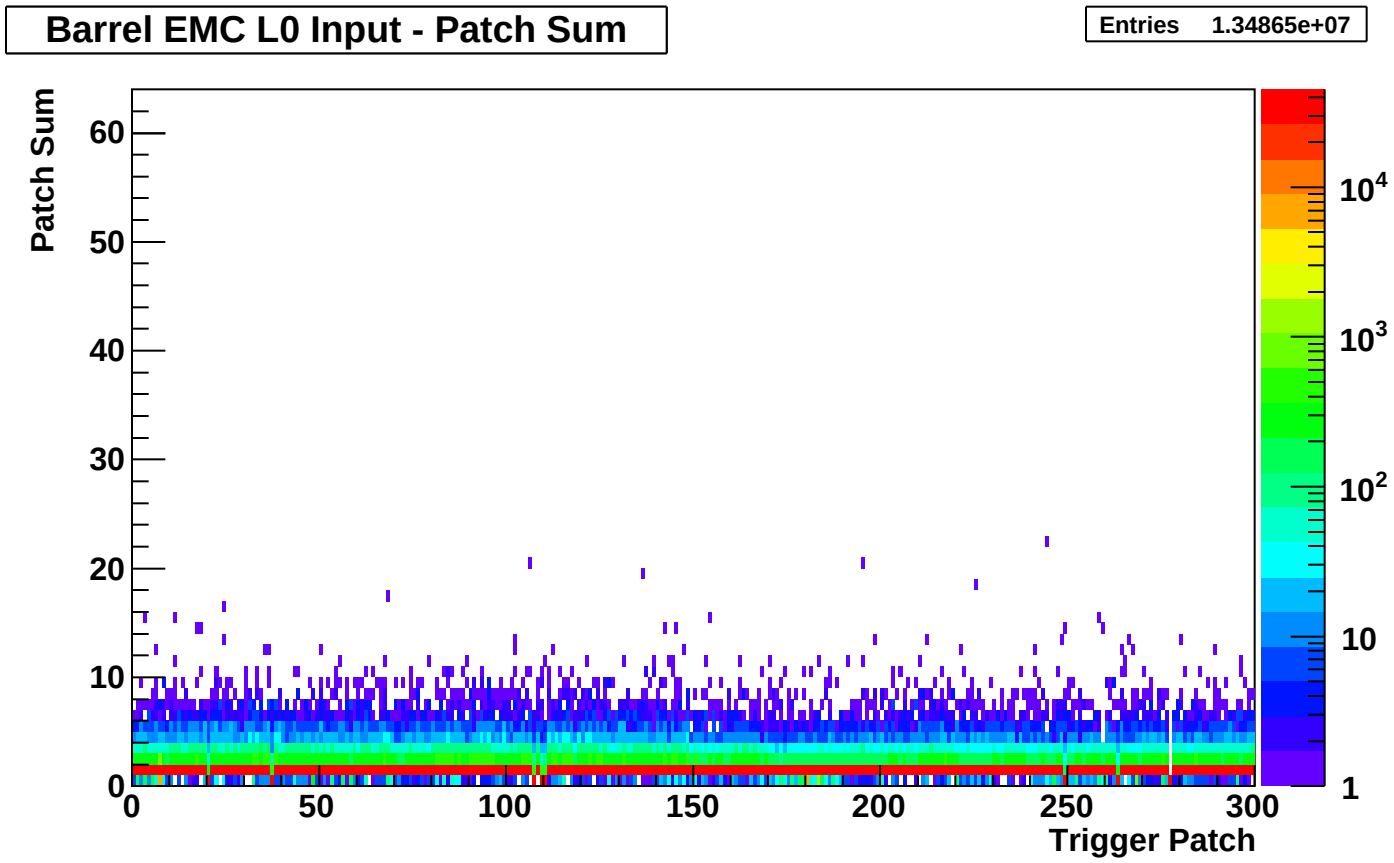
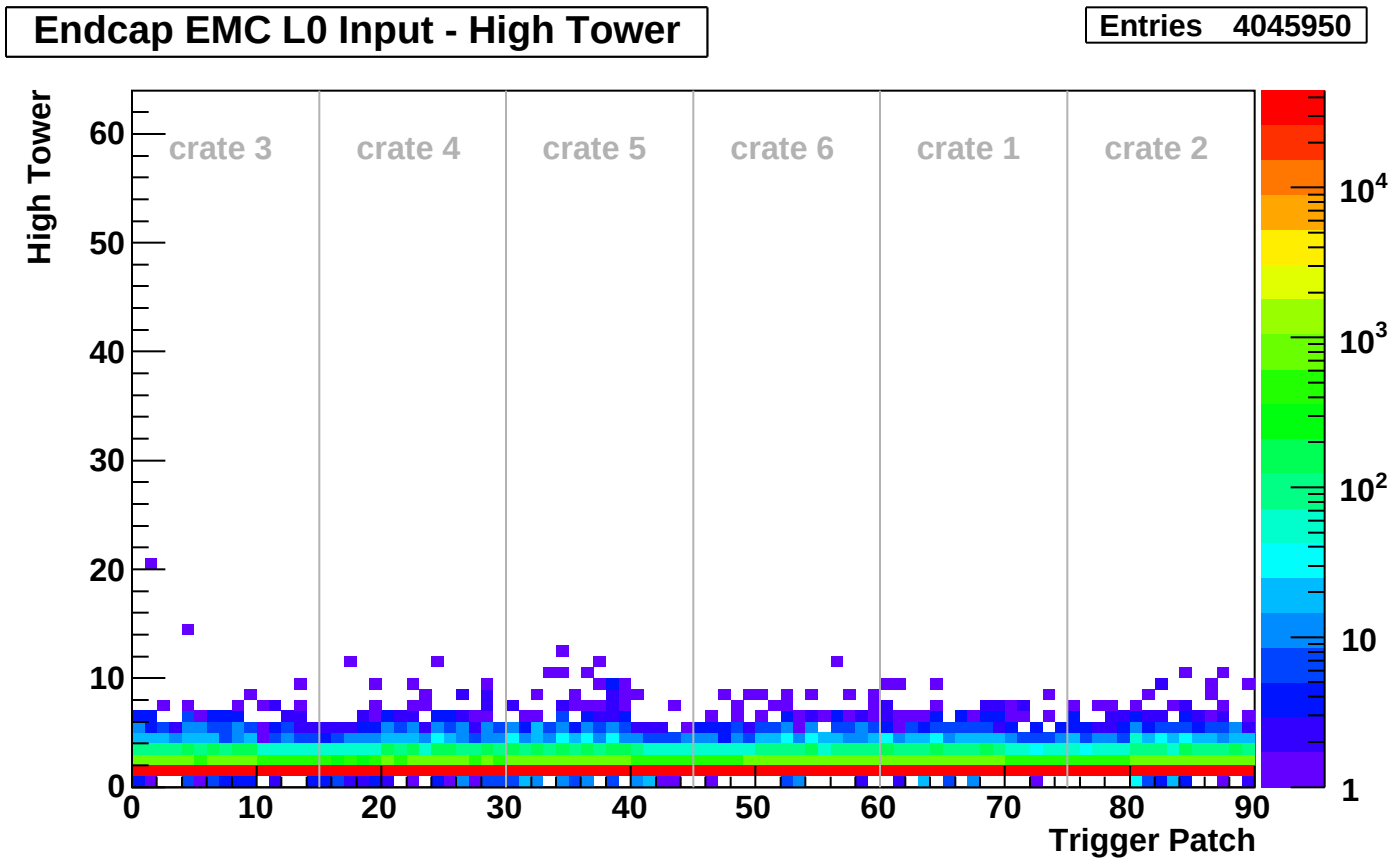
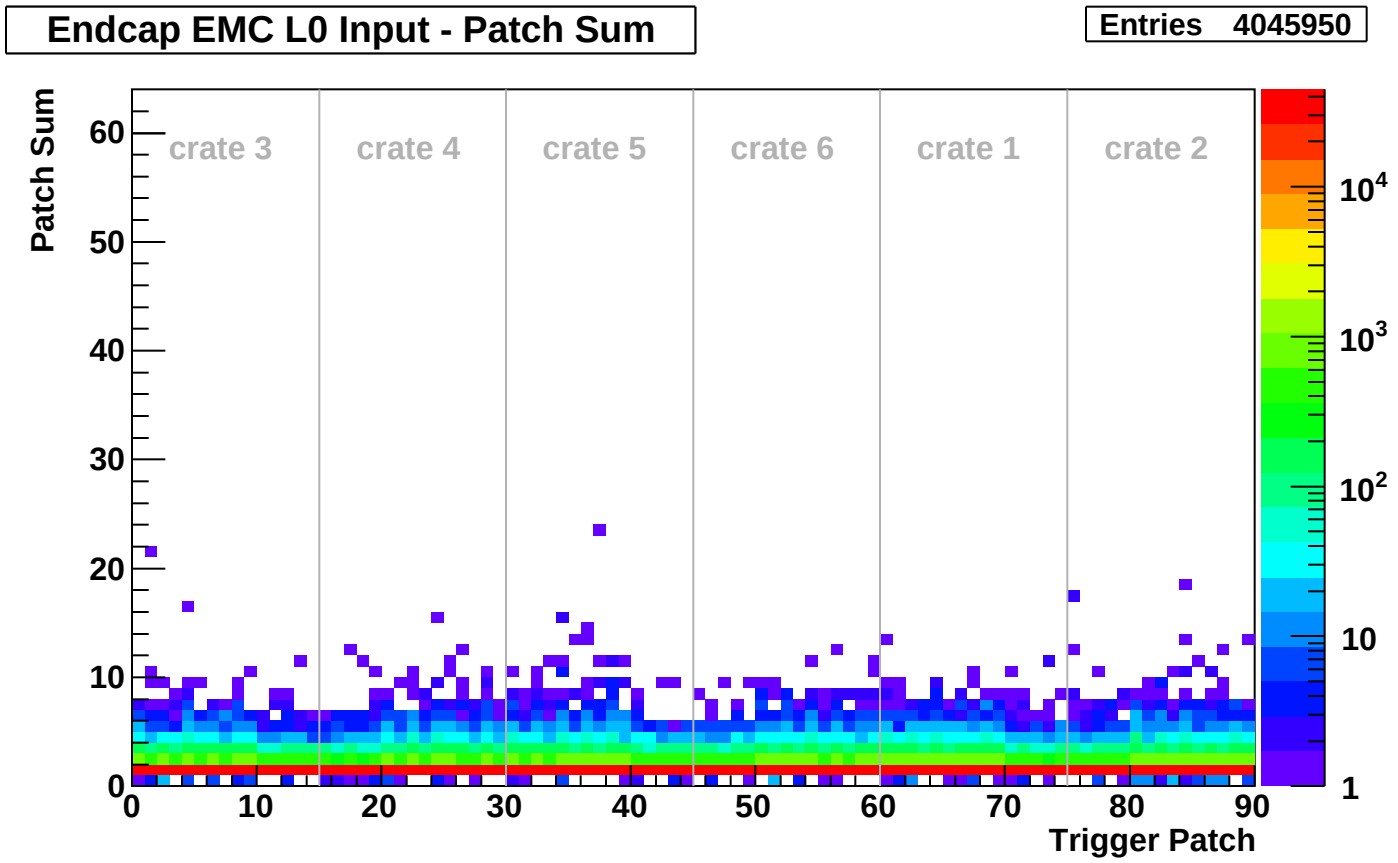
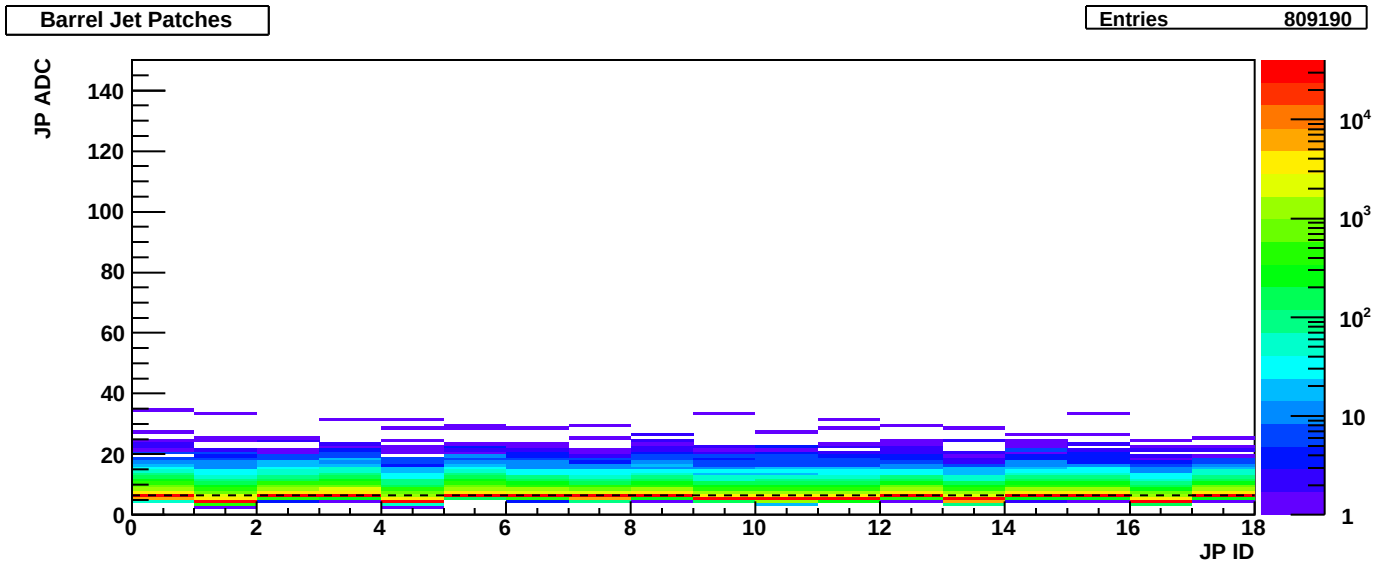
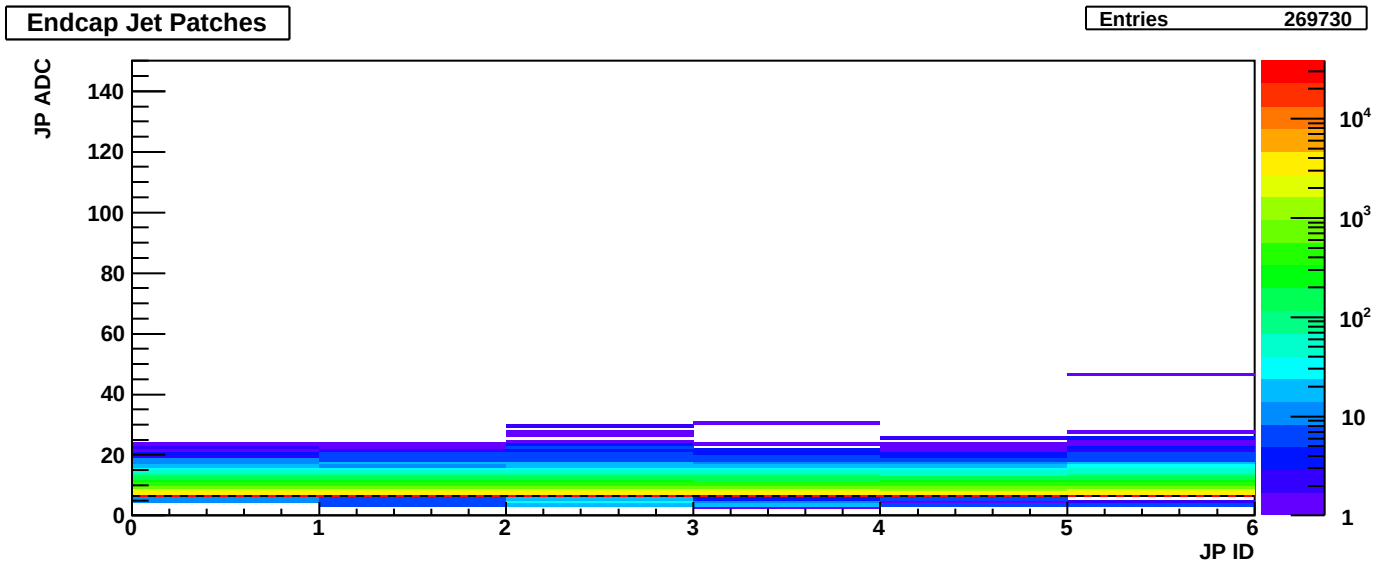

Barrel EMC L0 Input - High Tower
Entries 1.34865e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

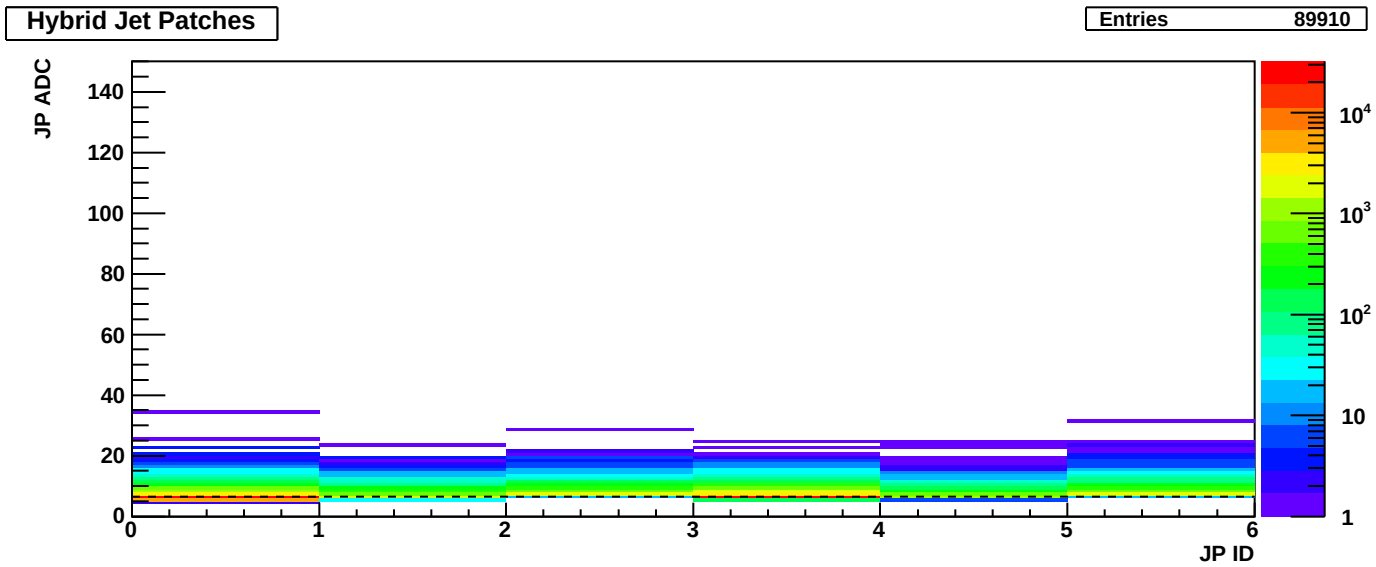

Barrel EMC L0 Input - Patch Sum
Entries 1.34865e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

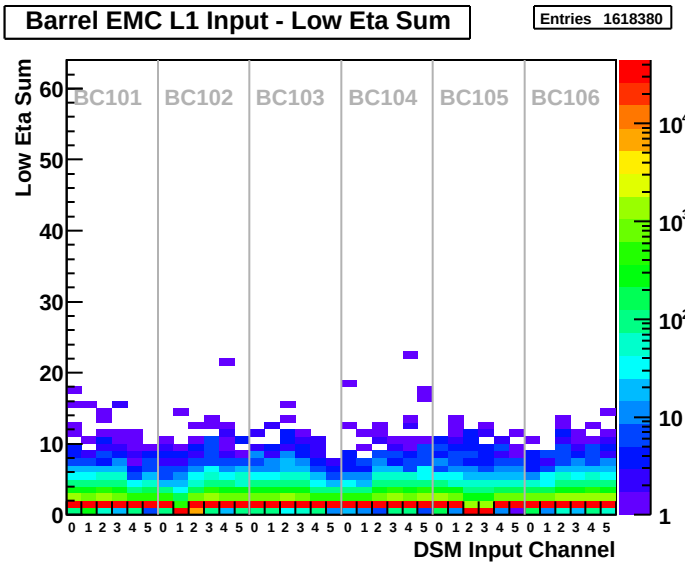

Endcap EMC L0 Input - High Tower
Entries 4045950
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

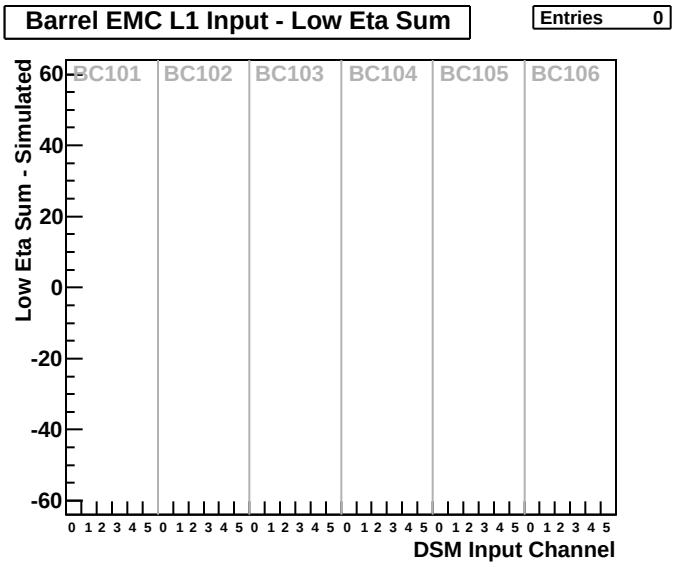

Endcap EMC L0 Input - Patch Sum
Entries 4045950
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

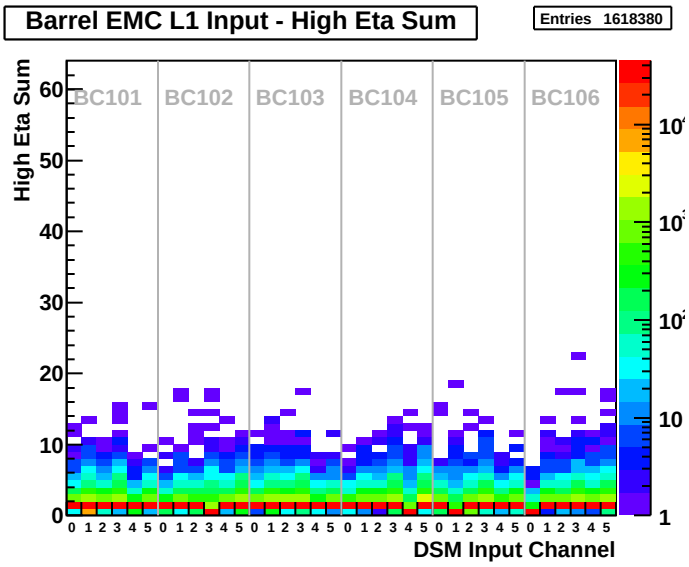

Barrel Jet Patches
Entries 809190
JP ADC
JP ID

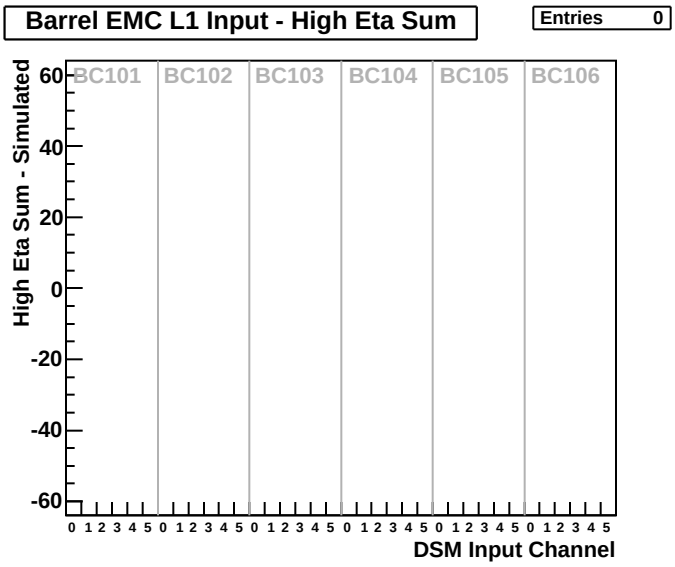

Endcap Jet Patches
Entries 269730
JP ADC
JP ID

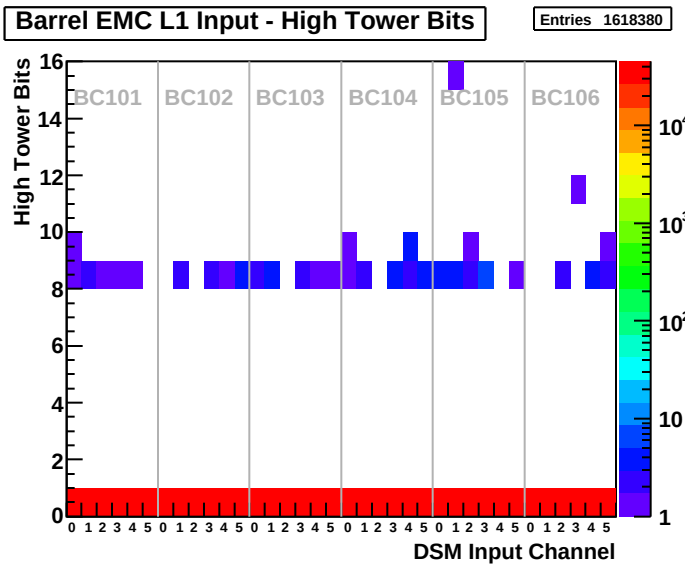

Hybrid Jet Patches
Entries 89910
JP ADC
JP ID

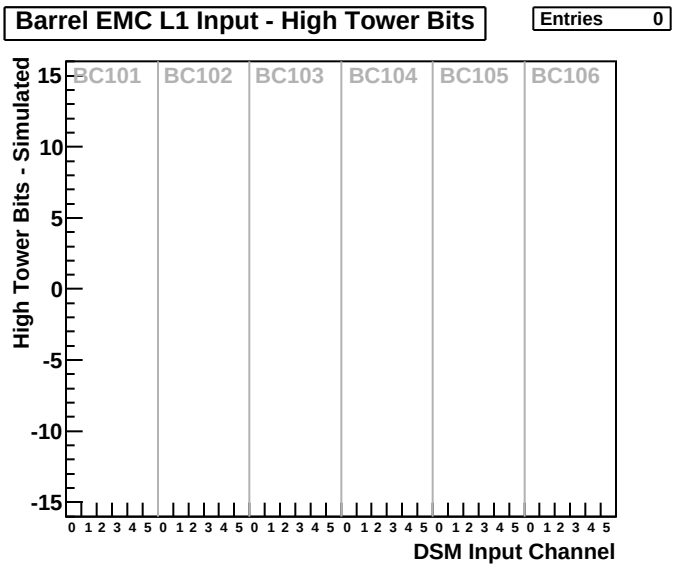

Barrel EMC L1 Input - Low Eta Sum
Entries 1618380
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

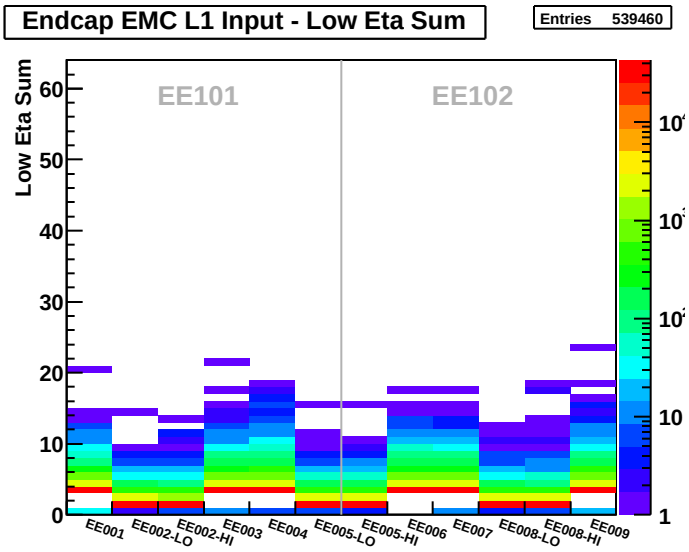

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

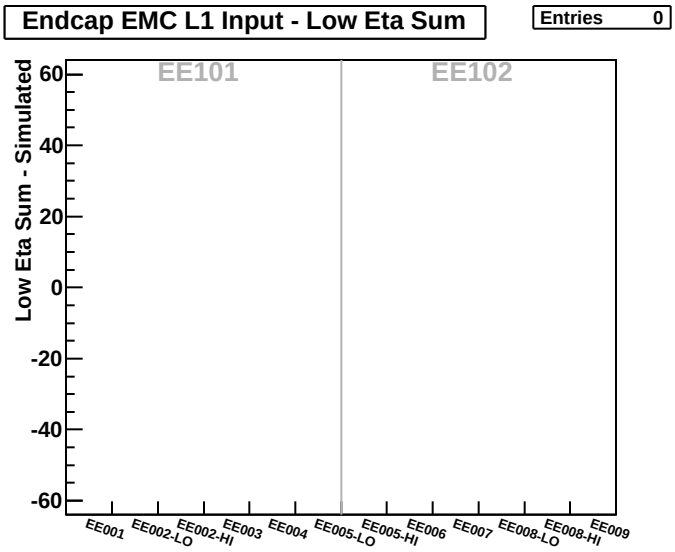

Barrel EMC L1 Input - High Eta Sum
Entries 1618380
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

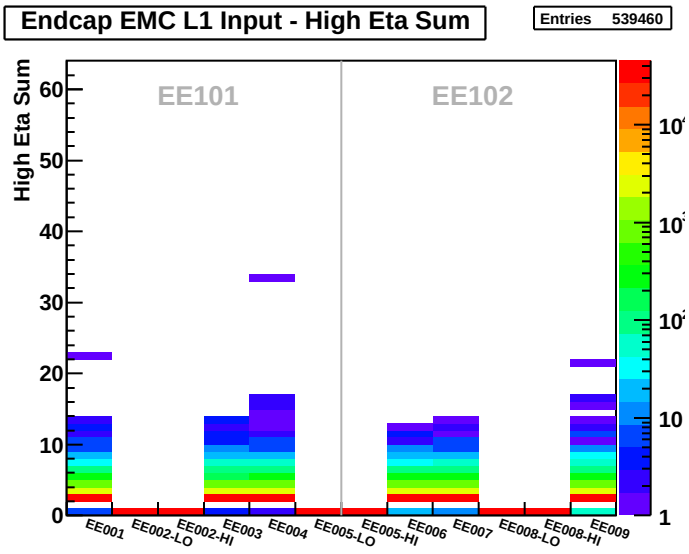

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

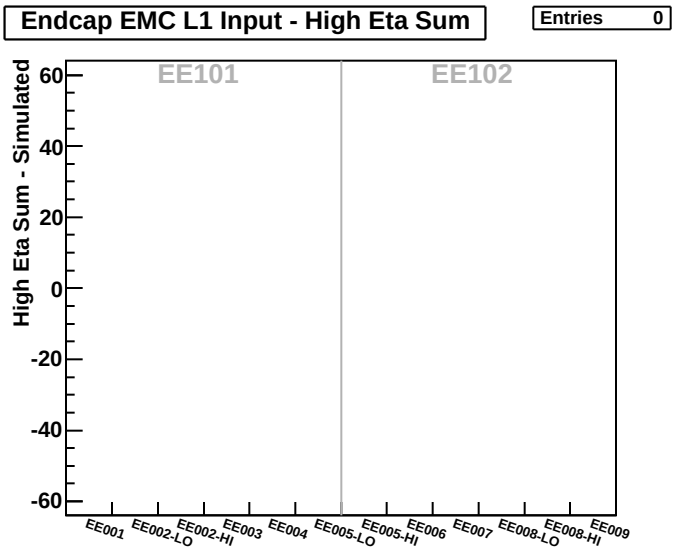

Barrel EMC L1 Input - High Tower Bits
Entries 1618380
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

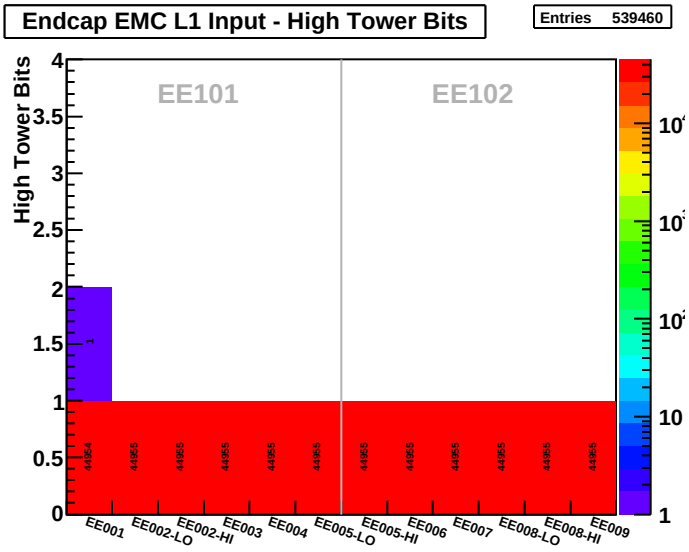

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

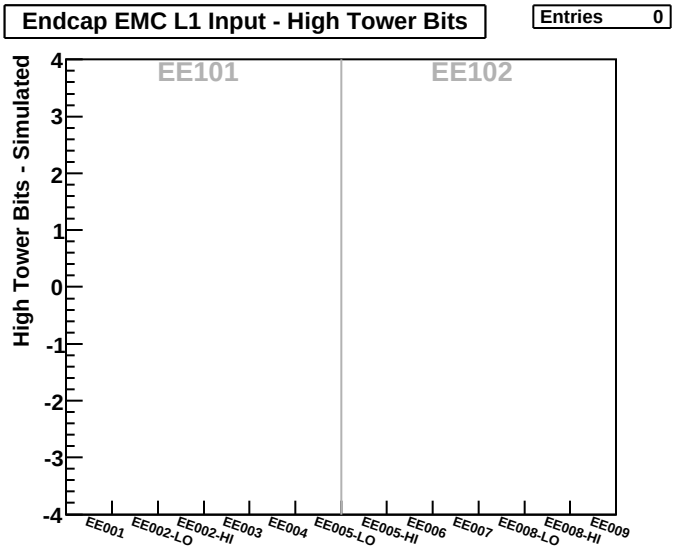

Endcap EMC L1 Input - Low Eta Sum
Entries 539460
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

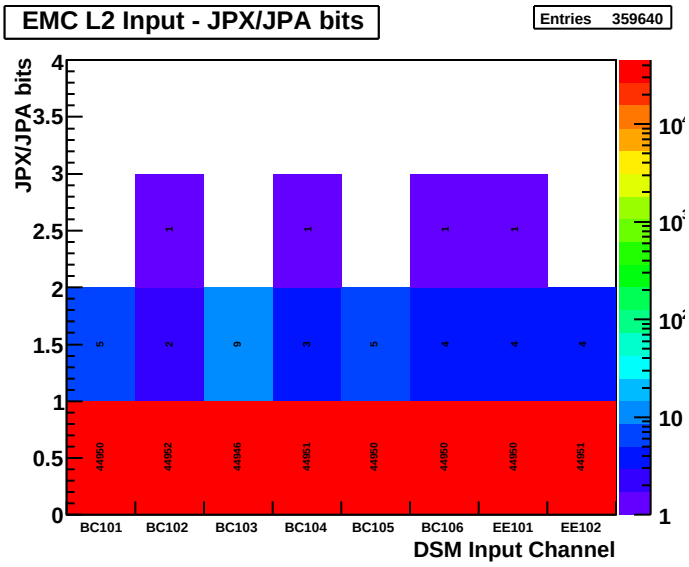

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

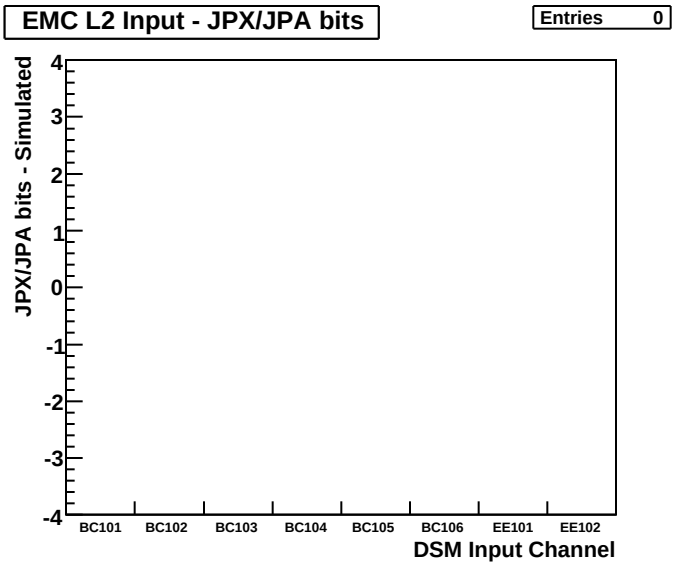

Endcap EMC L1 Input - High Eta Sum
Entries 539460
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

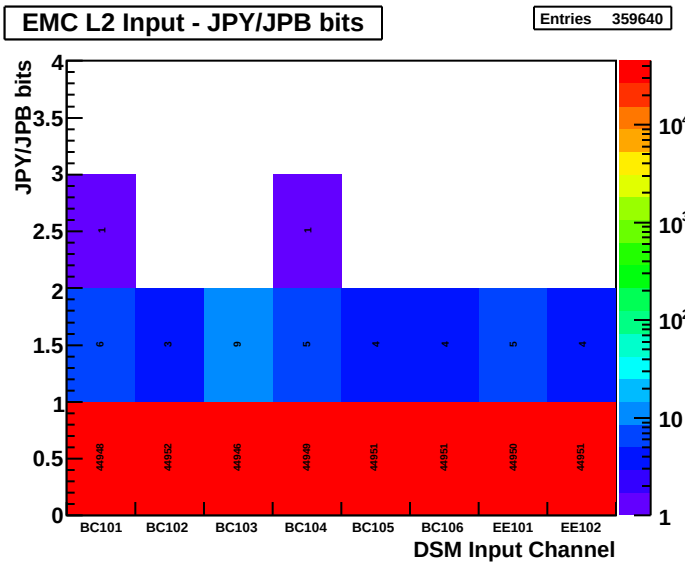

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

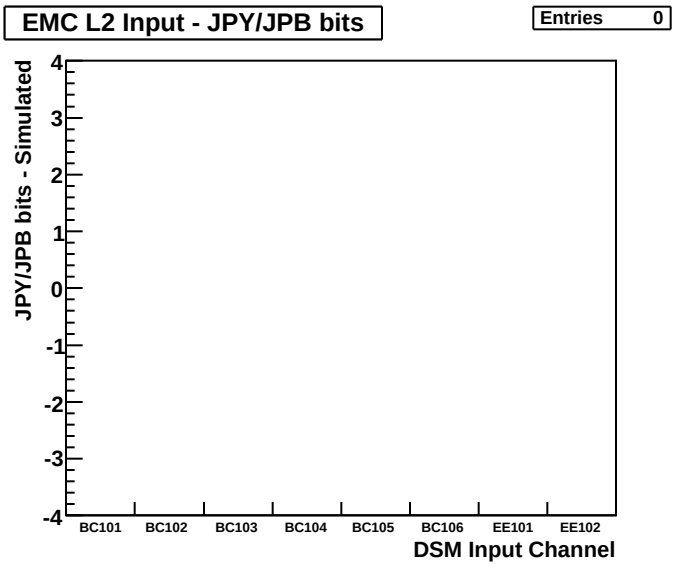

Endcap EMC L1 Input - High Tower Bits
Entries 539460
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

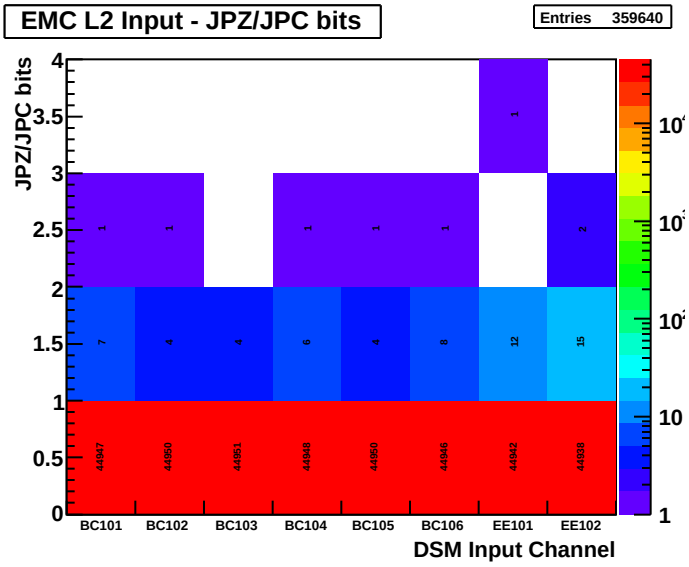

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

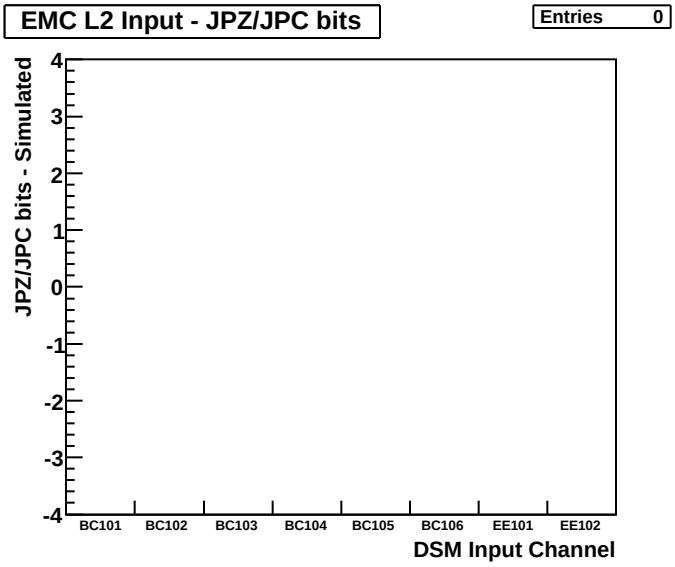

EMC L2 Input - JPX/JPA bits
Entries 359640
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

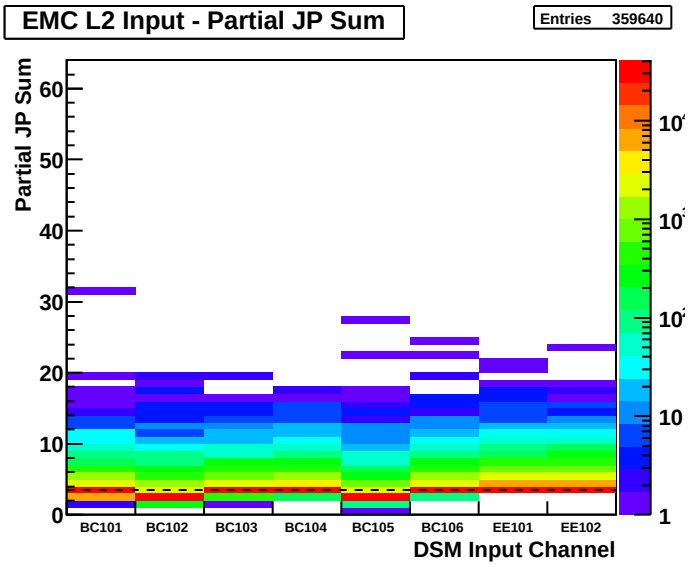

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

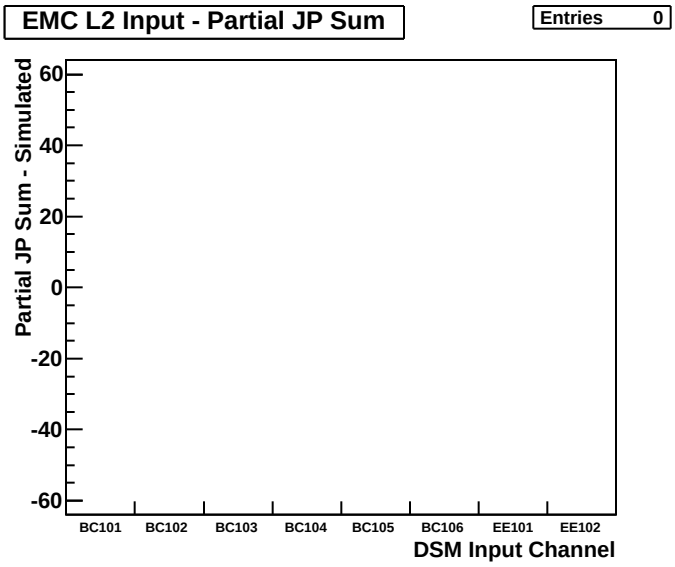

EMC L2 Input - JPY/JPB bits
Entries 359640
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

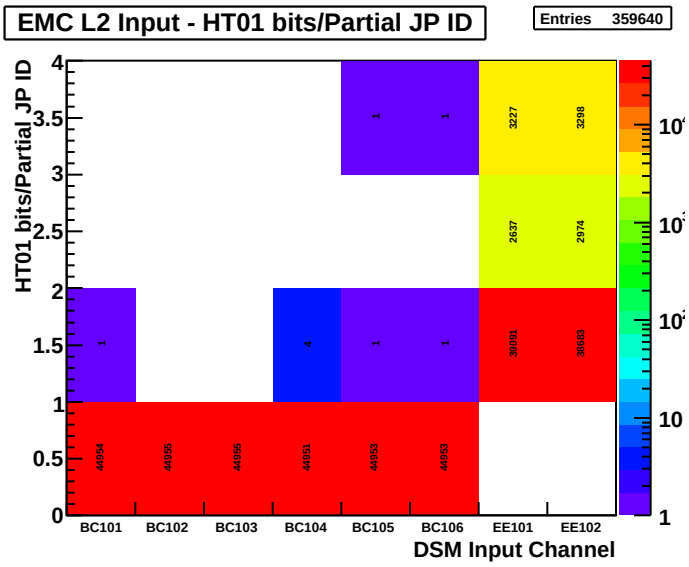

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

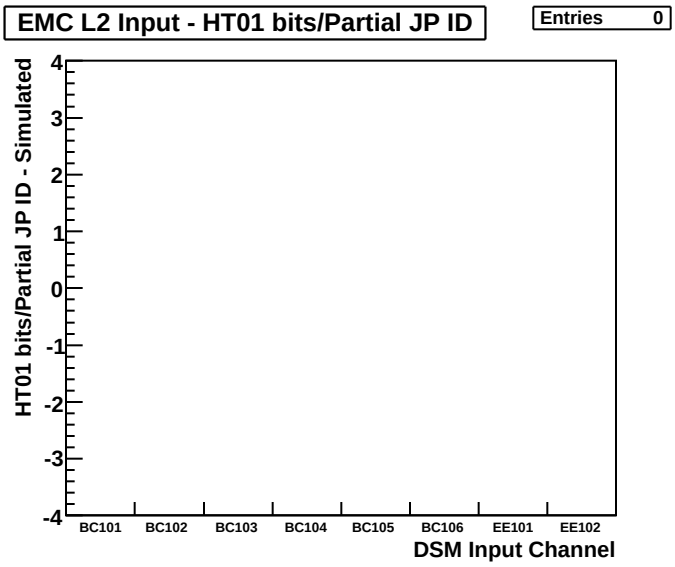

EMC L2 Input - JPZ/JPC bits
Entries 359640
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

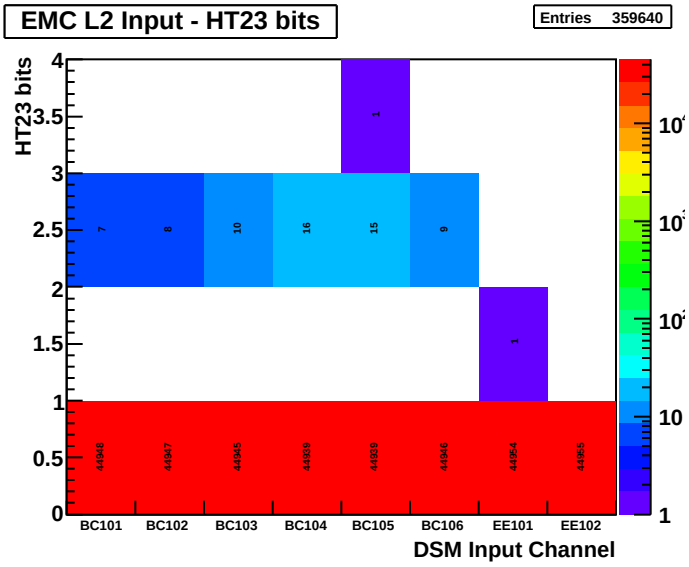

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

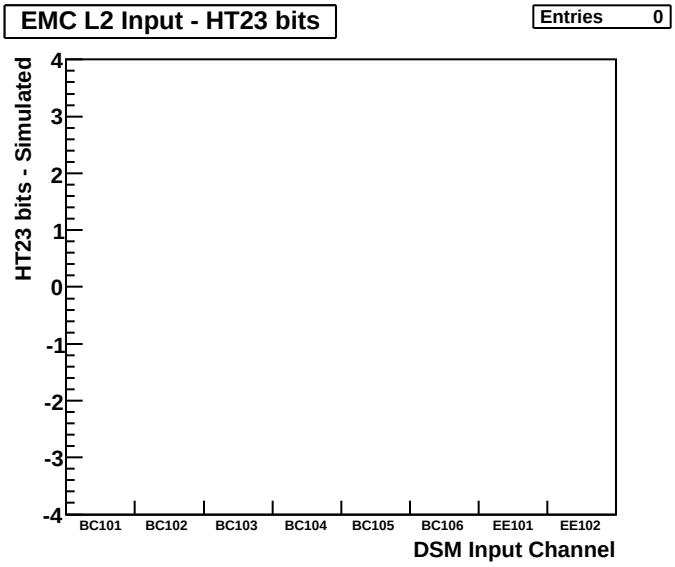

EMC L2 Input - Partial JP Sum
Entries 359640
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

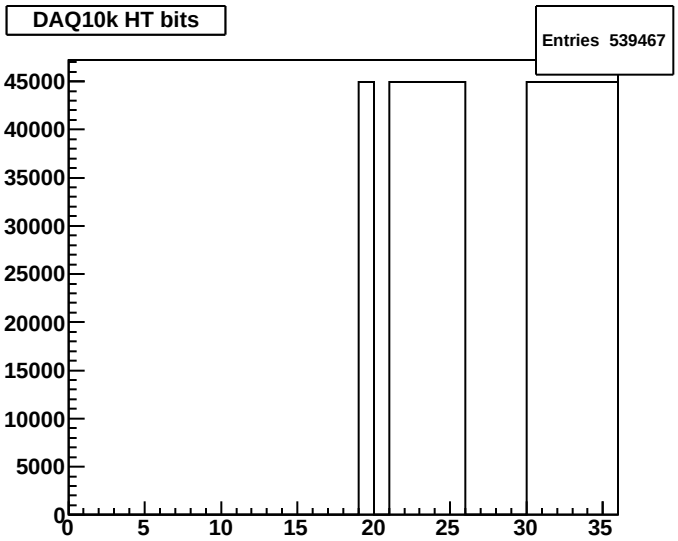

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

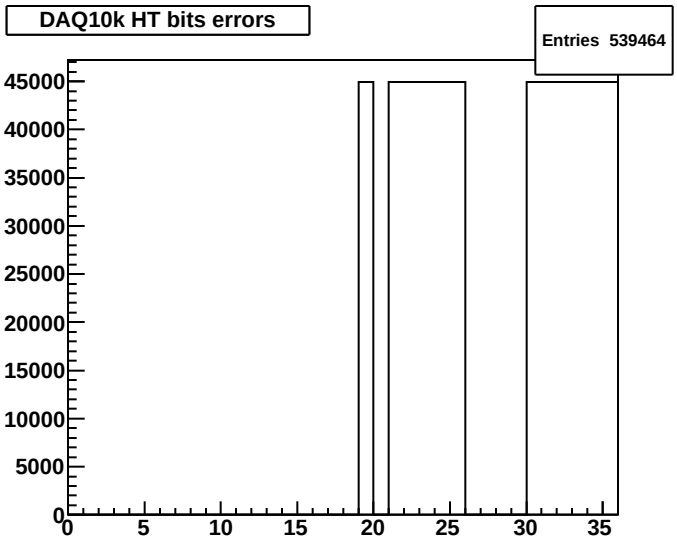

EMC L2 Input - HT01 bits/Partial JP ID
Entries 359640
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

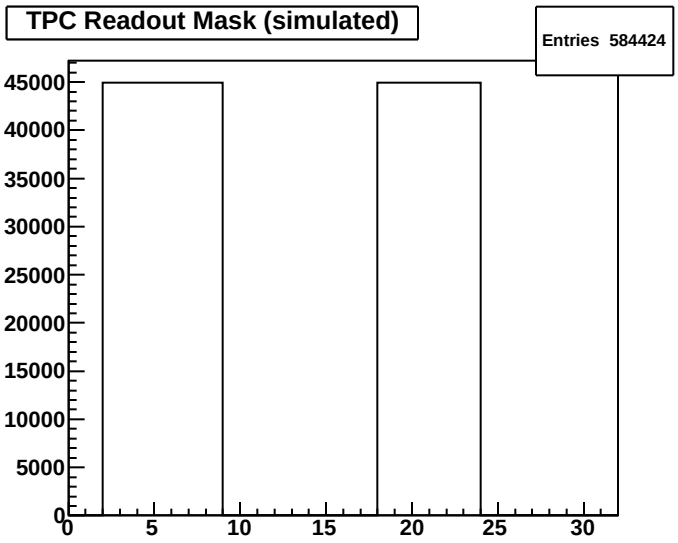

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

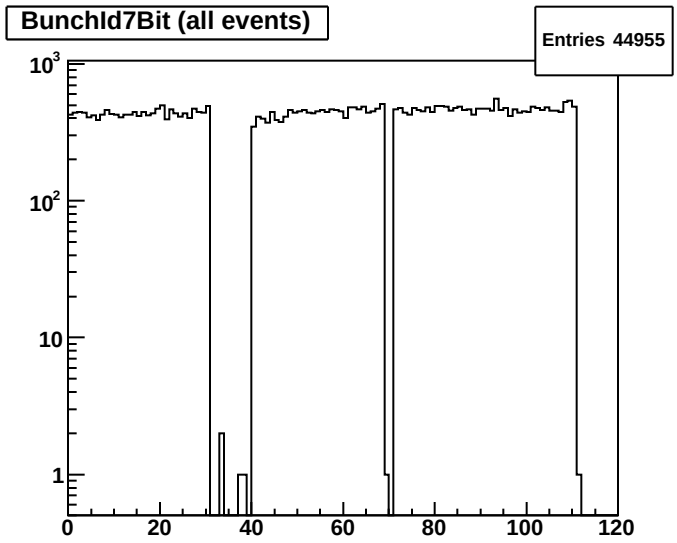

EMC L2 Input - HT23 bits
Entries 359640
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

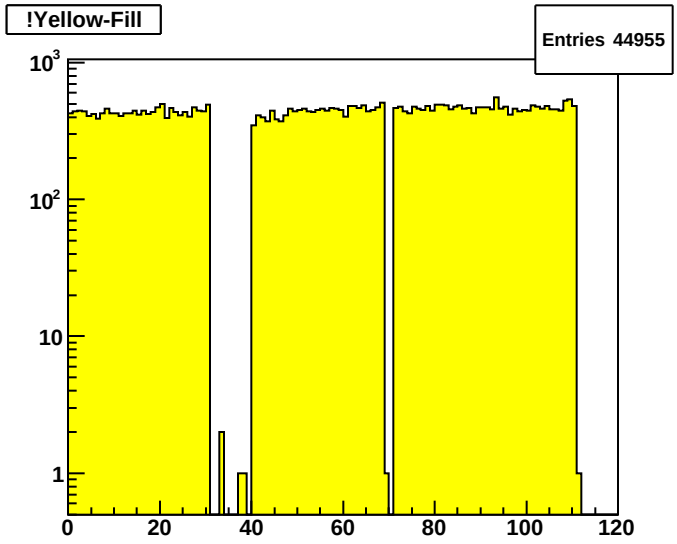

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

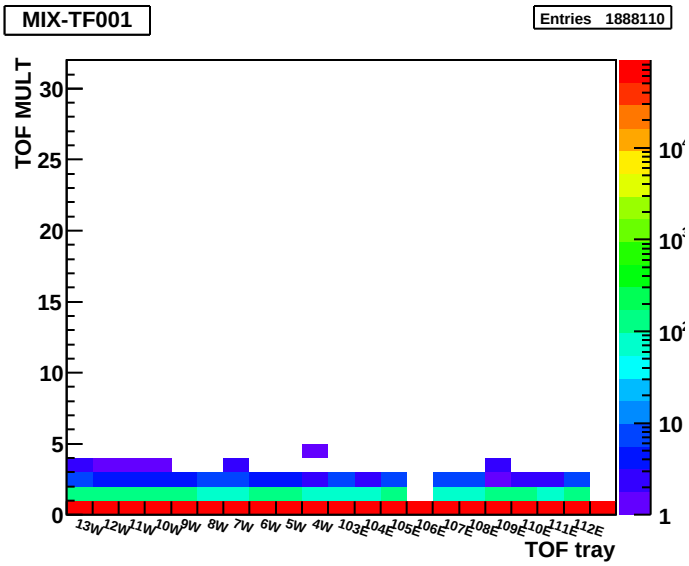

DAQ10k HT bits
Entries 539467
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30 35

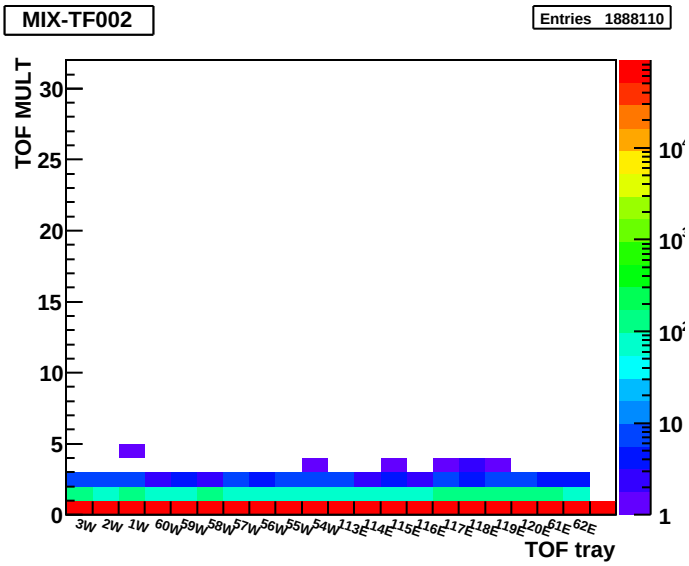

DAQ10k HT bits errors
Entries 539464
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30 35

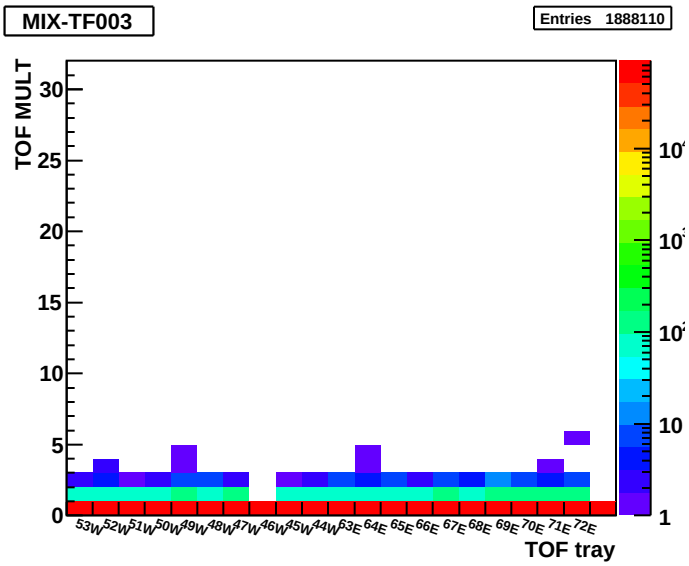

TPC Readout Mask (simulated)
Entries 584424
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
0 5 10 15 20 25 30

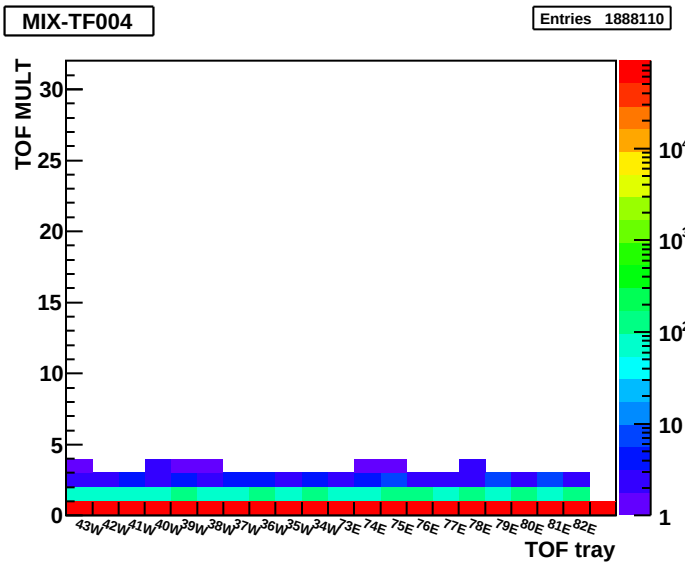

BunchId7Bit (all events)
Entries 44955
10^3
10^2
10
1
0 20 40 60 80 100 120

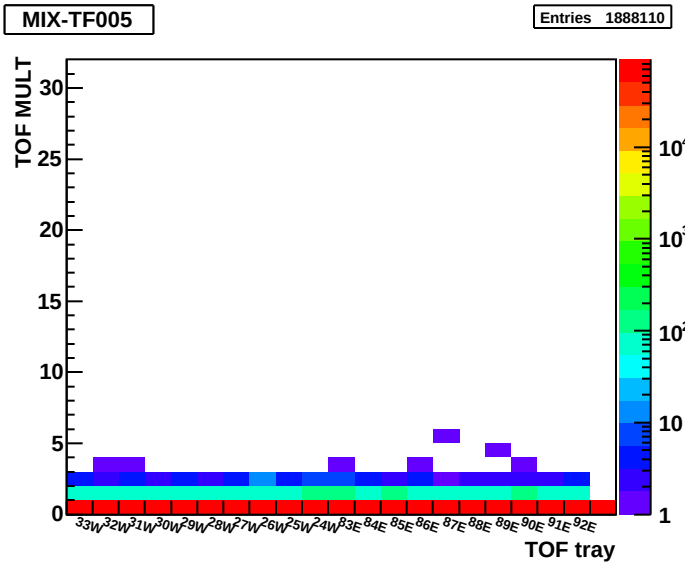

!Yellow-Fill
Entries 44955
10^3
10^2
10
1
0 20 40 60 80 100 120

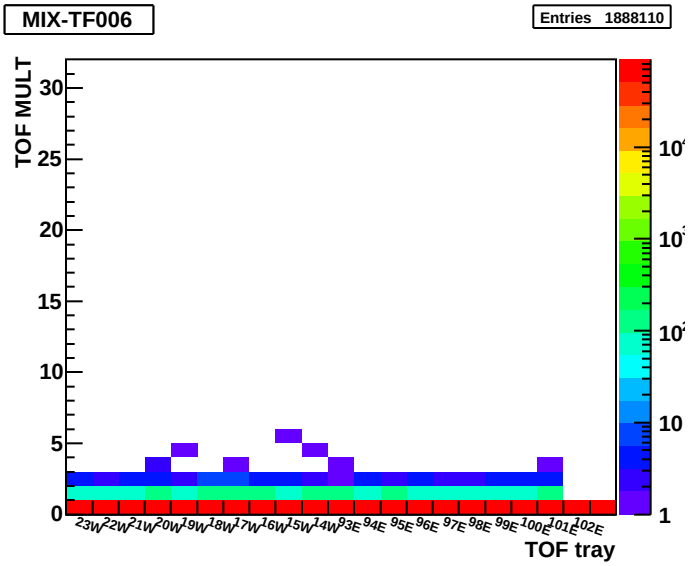

MIX-TF001
Entries 1888110
TOF MULT
TOF tray

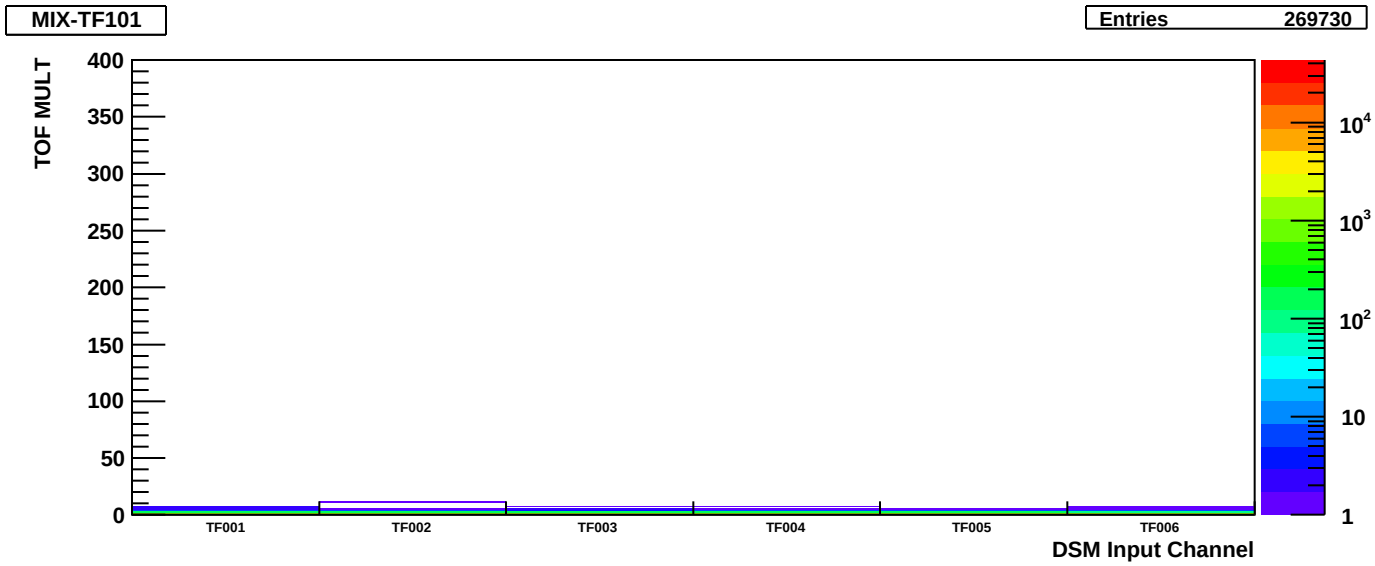

MIX-TF002
Entries 1888110
TOF MULT
TOF tray

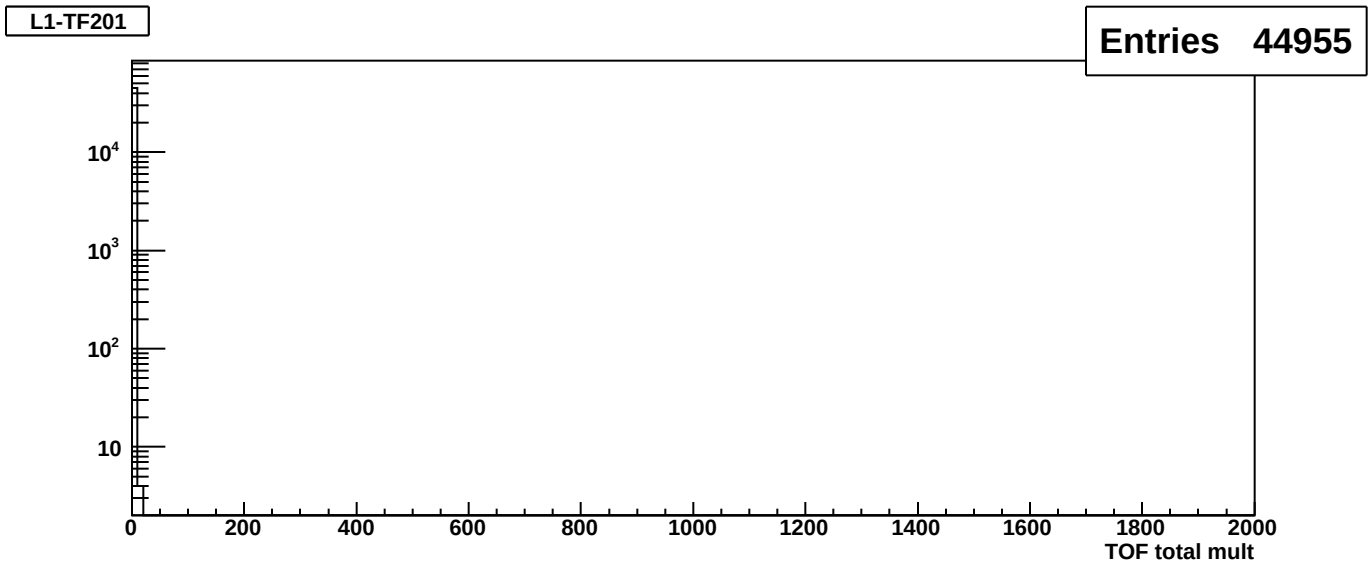

MIX-TF003
Entries 1888110
TOF MULT
TOF tray

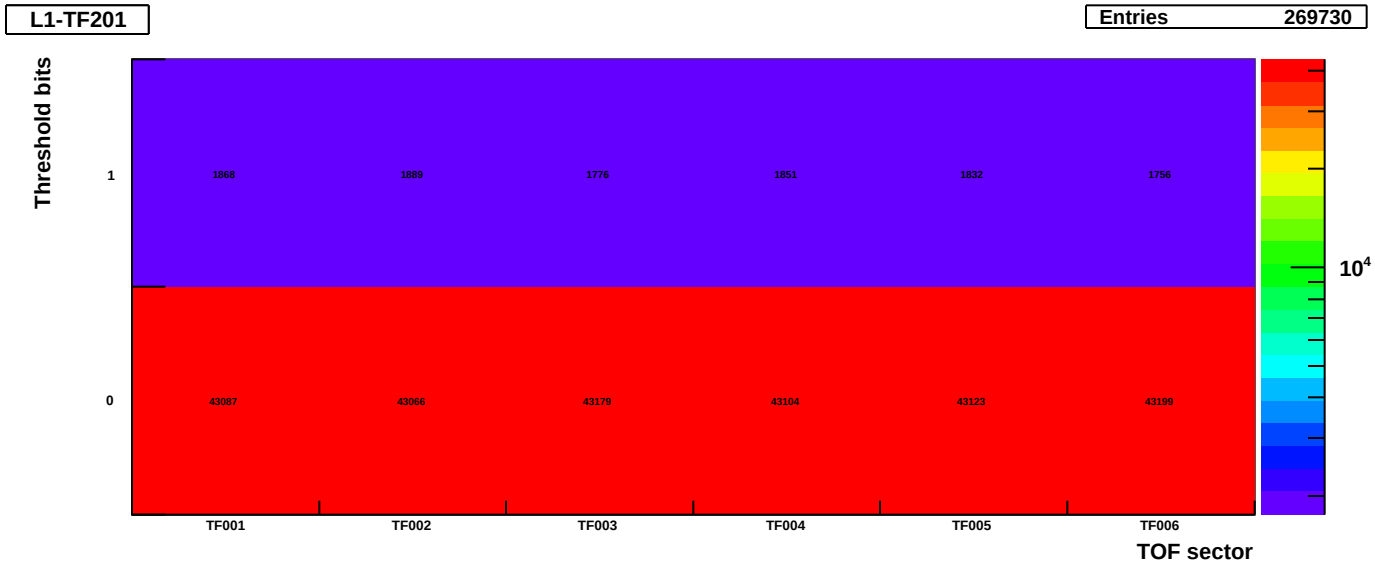

MIX-TF004
Entries 1888110
TOF MULT
TOF tray

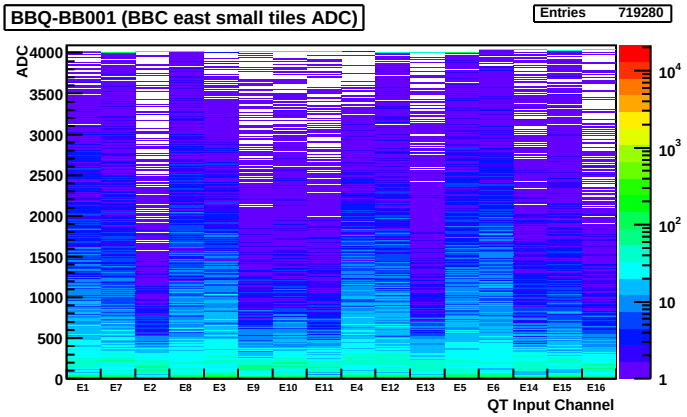

MIX-TF005
Entries 1888110
TOF MULT
TOF tray

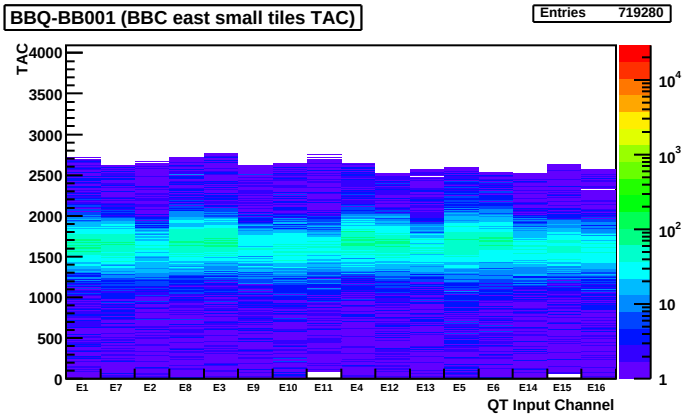

MIX-TF006
Entries 1888110
TOF MULT
TOF tray

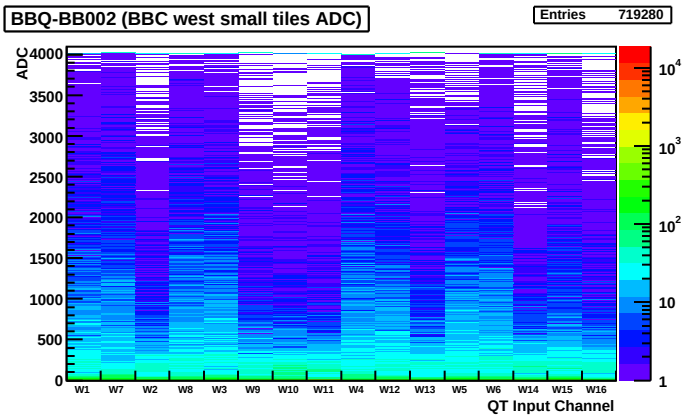

MIX-TF101
Entries 269730
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

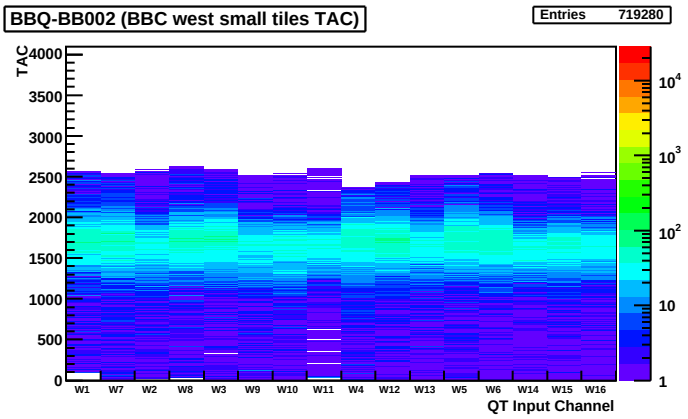

L1-TF201
Entries 44955
10^4
10^3
10^2
10
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

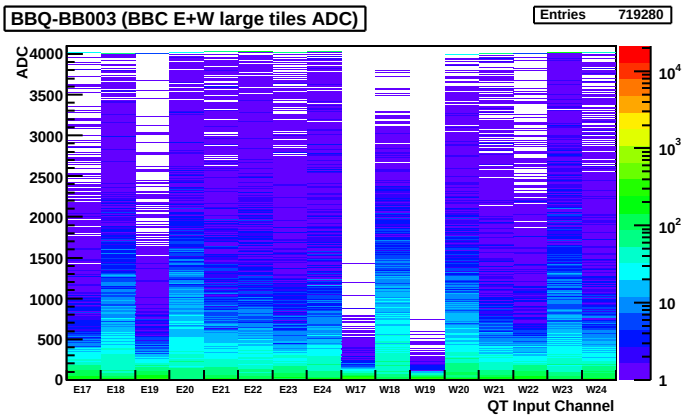

L1-TF201
Entries 269730
Threshold bits
1
0
1868
1889
1776
1851
1832
1756
43087
43066
43179
43104
43123
43199
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4

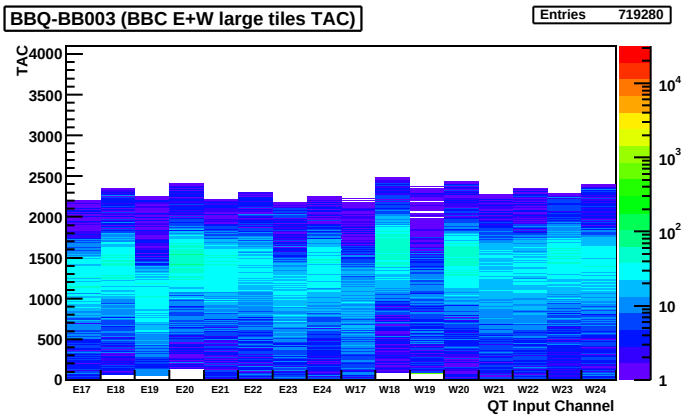

BBQ-BB001 (BBC east small tiles ADC)
Entries 719280
ADC
QT Input Channel

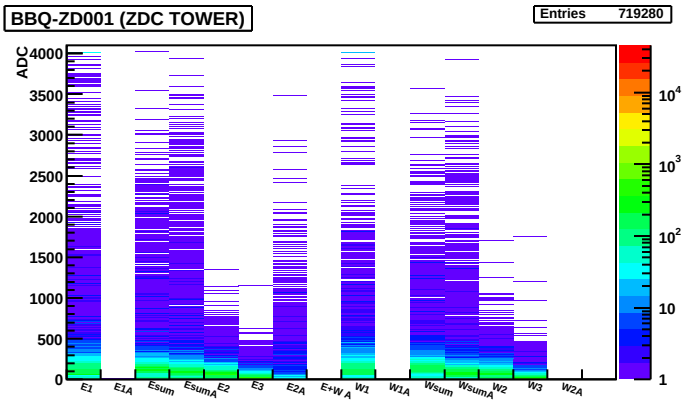

BBQ-BB001 (BBC east small tiles TAC)
Entries 719280
TAC
QT Input Channel

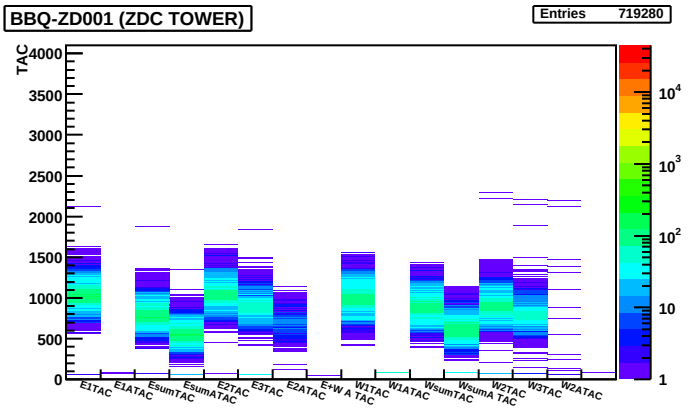

BBQ-BB002 (BBC west small tiles ADC)
Entries 719280
ADC
QT Input Channel

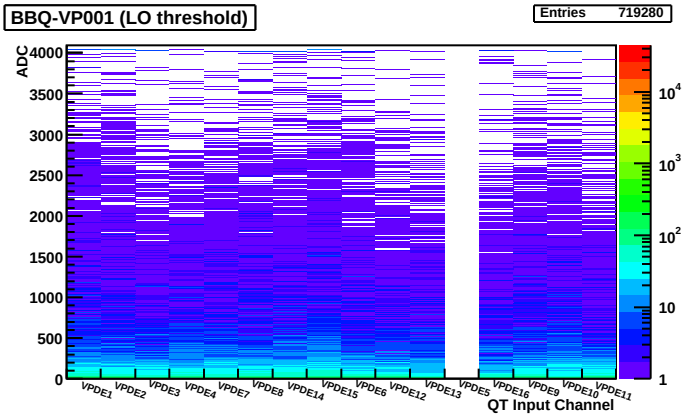

BBQ-BB002 (BBC west small tiles TAC)
Entries 719280
TAC
QT Input Channel

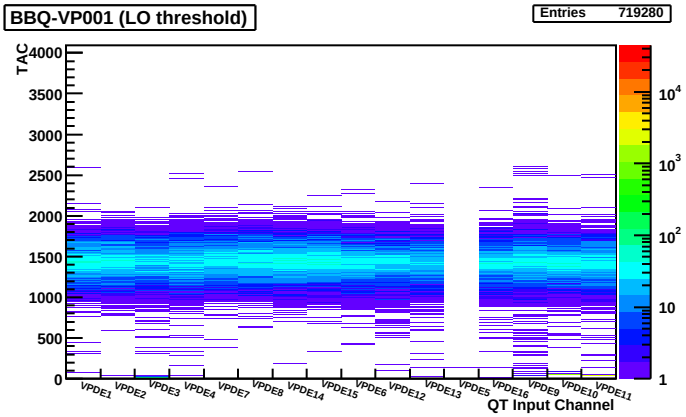

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 719280
ADC
QT Input Channel

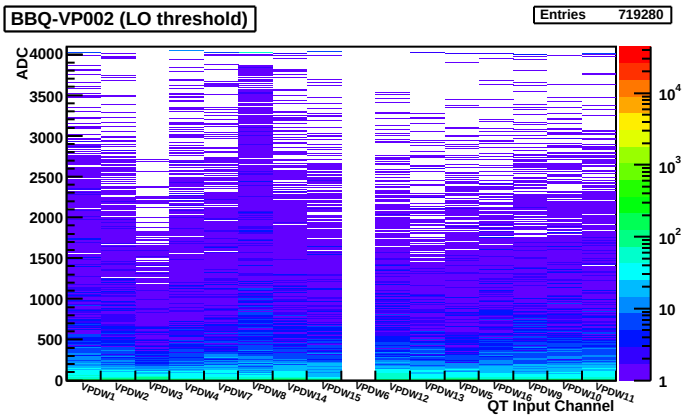

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 719280
TAC
QT Input Channel

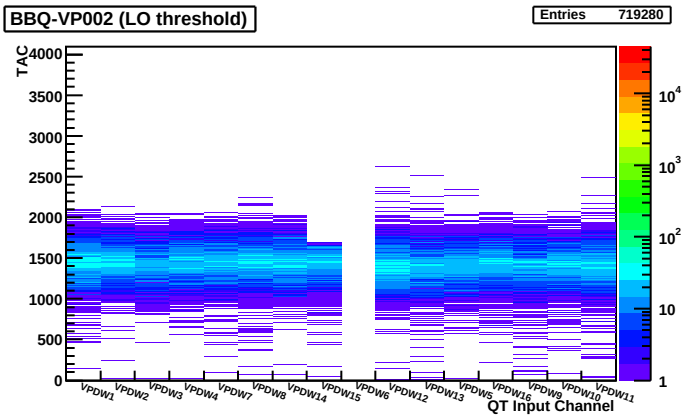

BBQ-ZD001 (ZDC TOWER)
Entries 719280
ADC

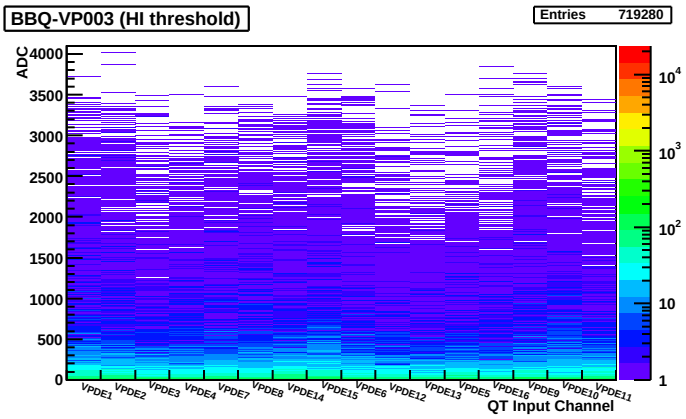

BBQ-ZD001 (ZDC TOWER)
Entries 719280
TAC

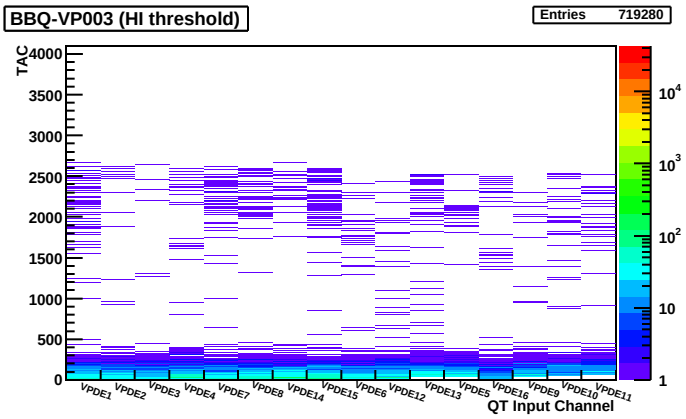

BBQ-VP001 (LO threshold)
Entries 719280
ADC
QT Input Channel

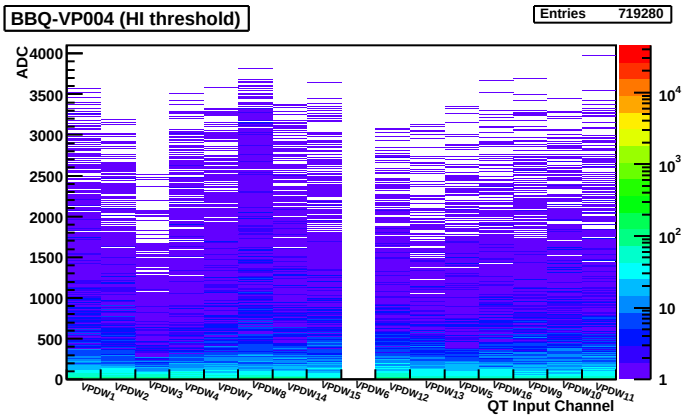

BBQ-VP001 (LO threshold)
Entries 719280
TAC
QT Input Channel

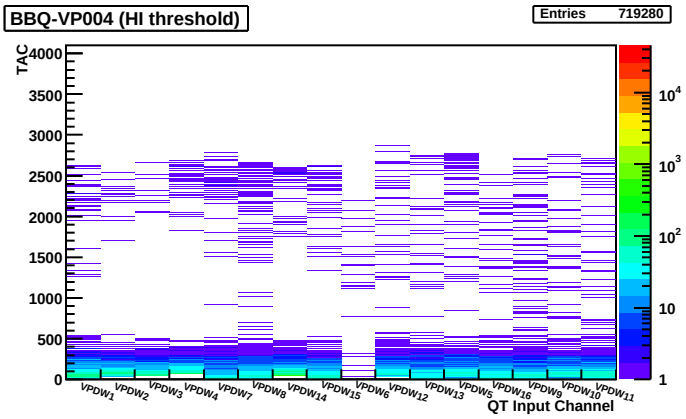

BBQ-VP002 (LO threshold)
Entries 719280
ADC
QT Input Channel

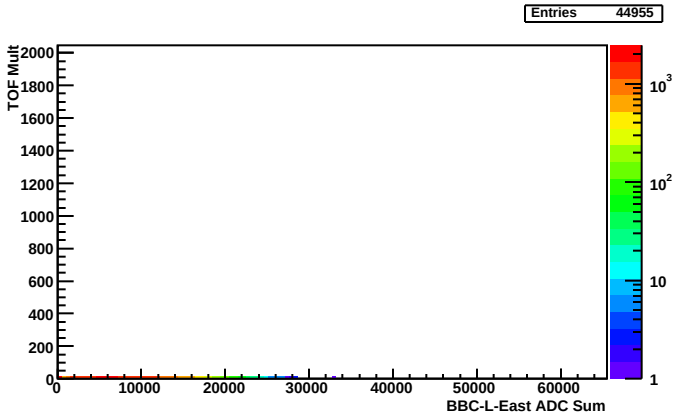

BBQ-VP002 (LO threshold)
Entries 719280
TAC
QT Input Channel

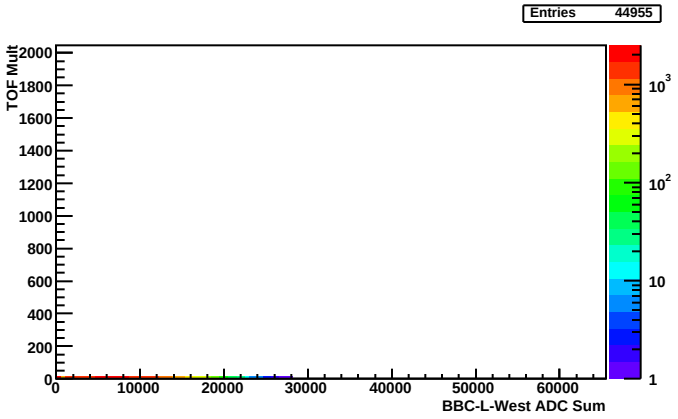

BBQ-VP003 (HI threshold)
Entries 719280
ADC
QT Input Channel

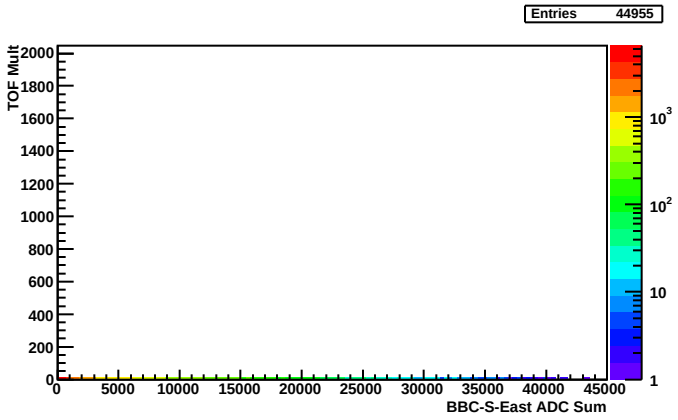

BBQ-VP003 (HI threshold)
Entries 719280
TAC
QT Input Channel

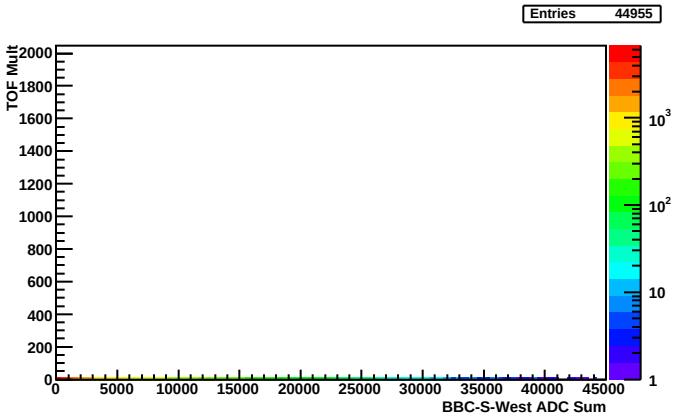

BBQ-VP004 (HI threshold)
Entries 719280
ADC
QT Input Channel

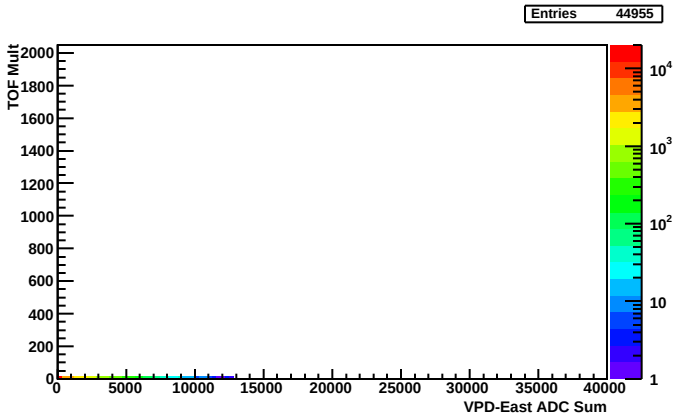

BBQ-VP004 (HI threshold)
Entries 719280
TAC
QT Input Channel

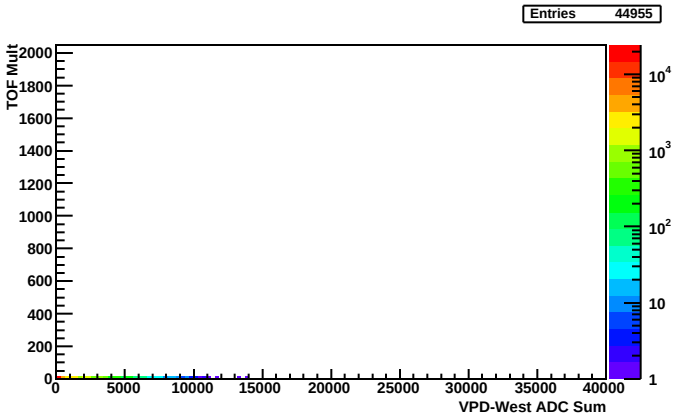

Entries 44955
TOF Mult
BBC-L-East ADC Sum

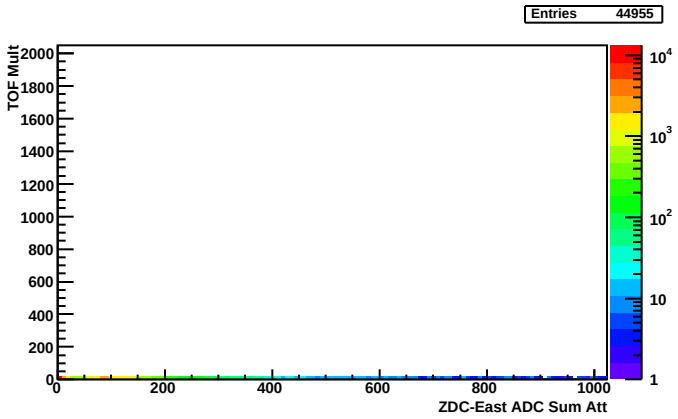

Entries 44955
TOF Mult
BBC-L-West ADC Sum

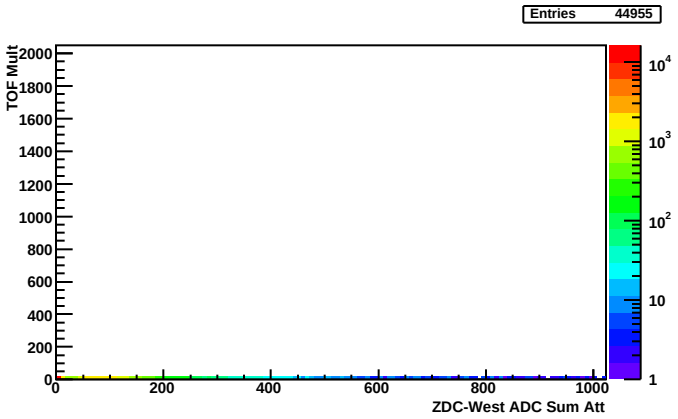

Entries 44955
TOF Mult
BBC-S-East ADC Sum

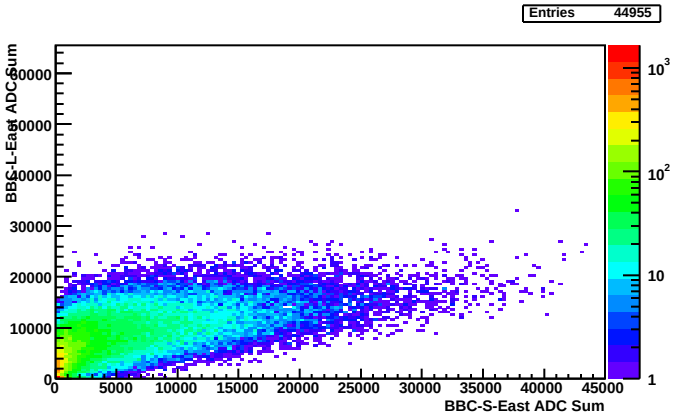

Entries 44955
TOF Mult
BBC-S-West ADC Sum

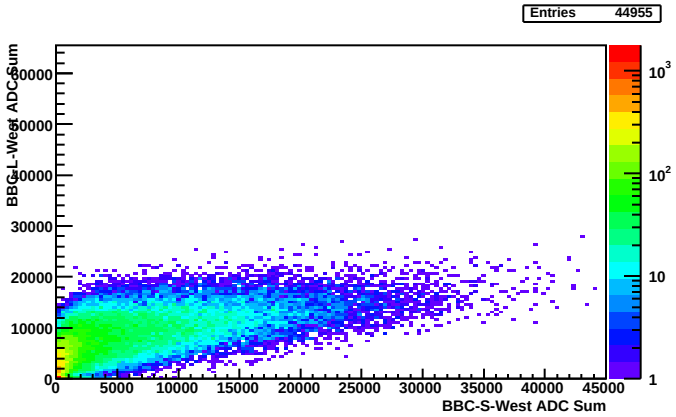

Entries 44955
TOF Mult
VPD-East ADC Sum

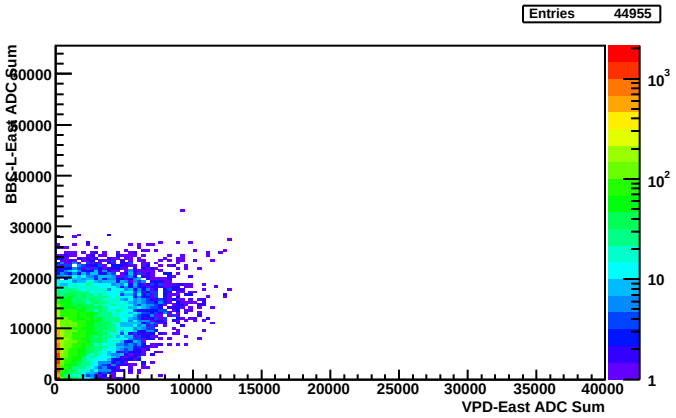

Entries 44955
TOF Mult
VPD-West ADC Sum

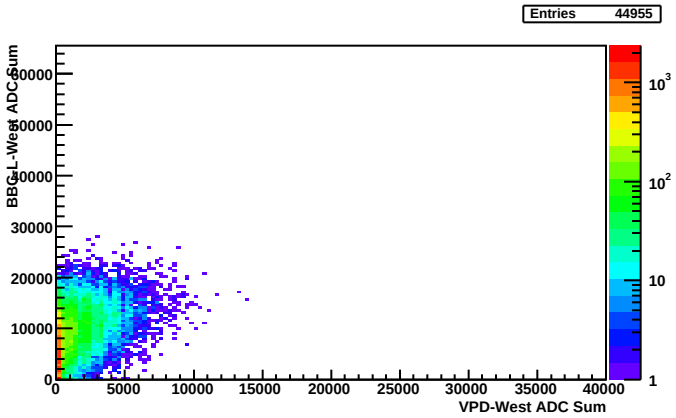

Entries 44955
TOF Mult
ZDC-East ADC Sum Att

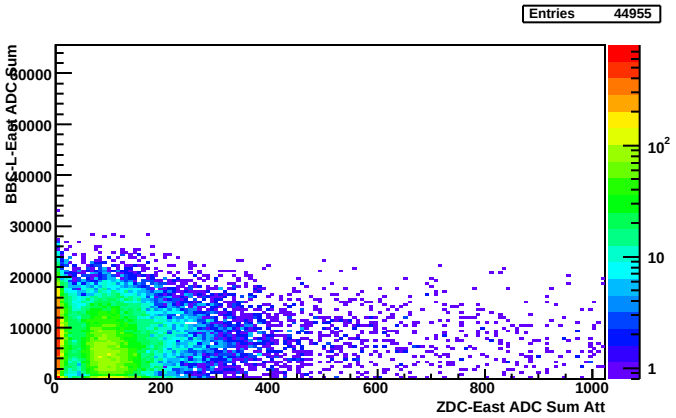

Entries 44955
TOF Mult
ZDC-West ADC Sum Att

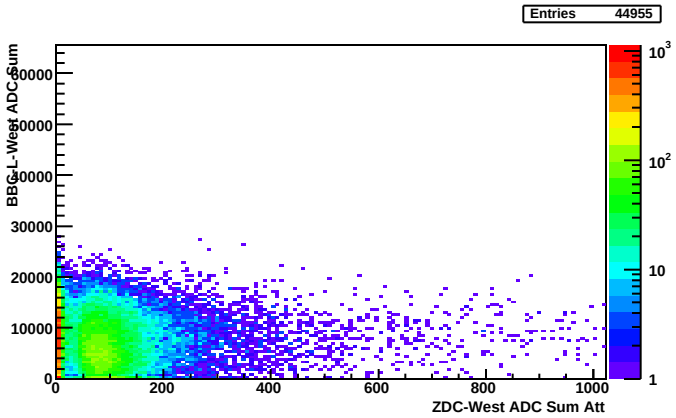

Entries 44955
BBC-L-East ADC Sum
BBC-S-East ADC Sum

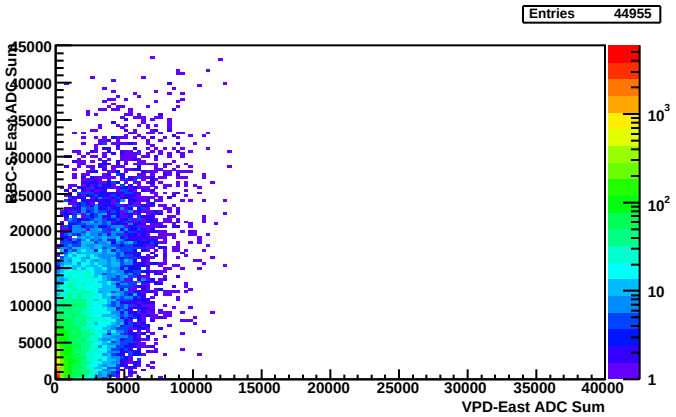

Entries 44955
BBC-L-West ADC Sum
BBC-S-West ADC Sum

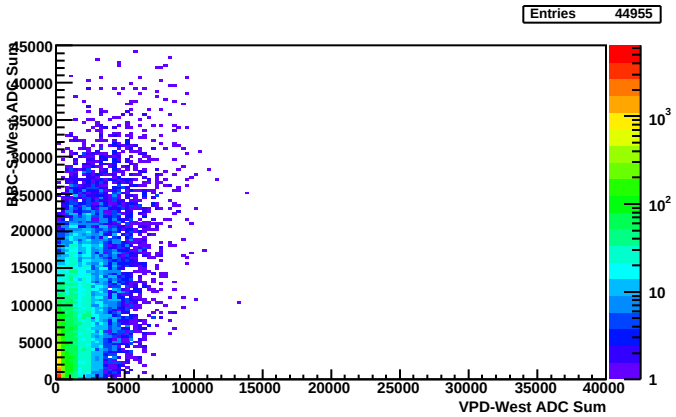

Entries 44955
BBC-L-East ADC Sum
VPD-East ADC Sum

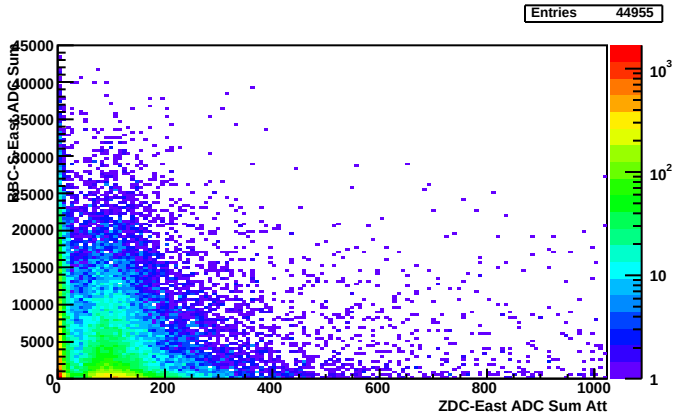

Entries 44955
BBC-L-West ADC Sum
VPD-West ADC Sum

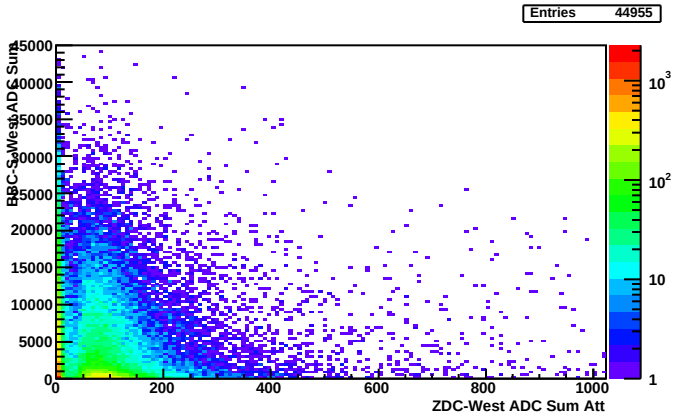

Entries 44955
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

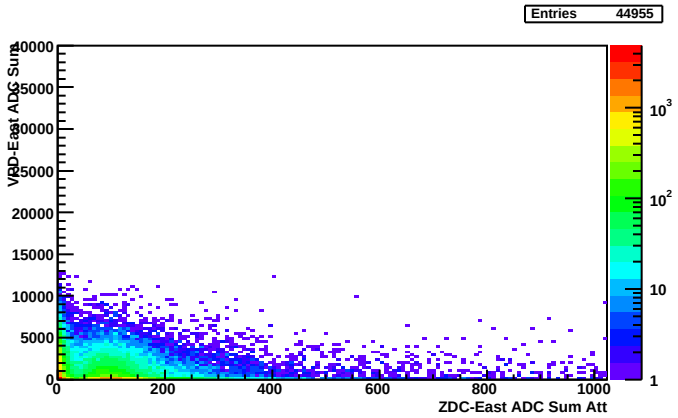

Entries 44955
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

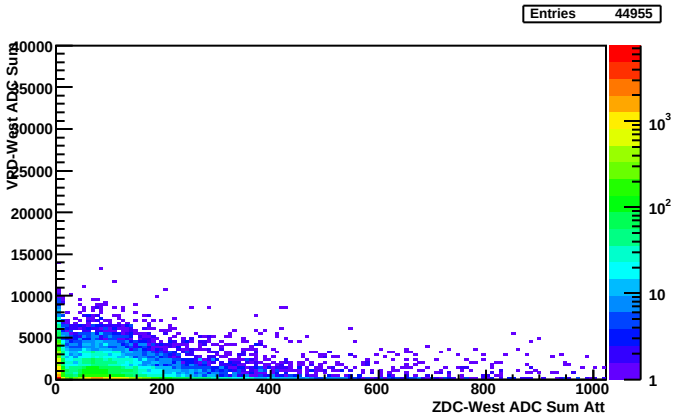

Entries 44955
BBC-S-East ADC Sum
VPD-East ADC Sum

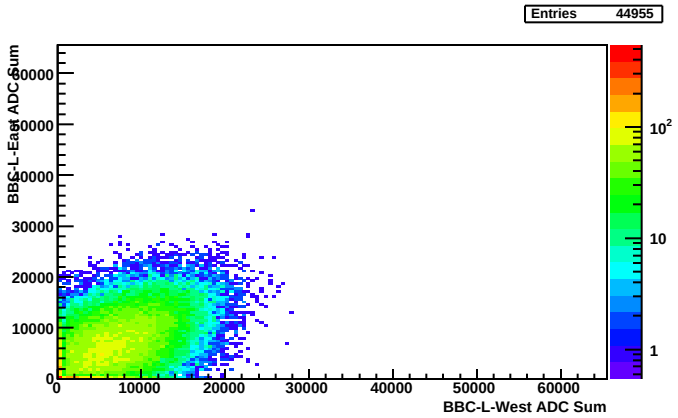

Entries 44955
BBC-S-West ADC Sum
VPD-West ADC Sum

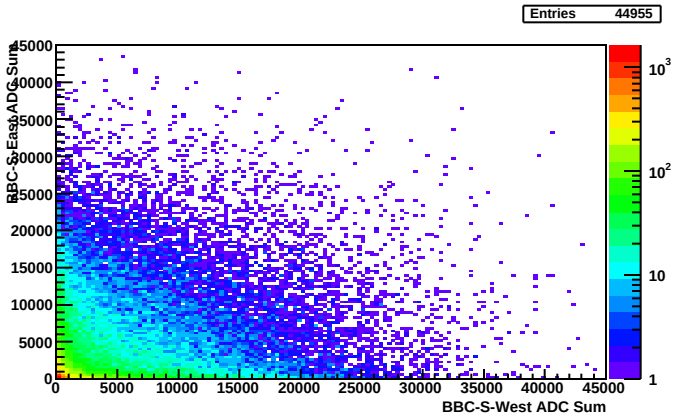

Entries 44955
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

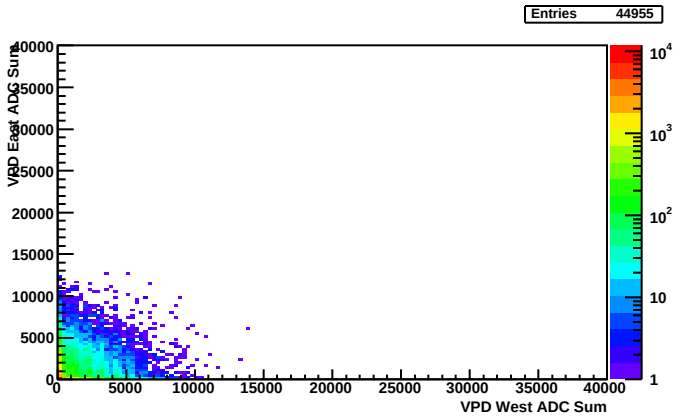

Entries 44955
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

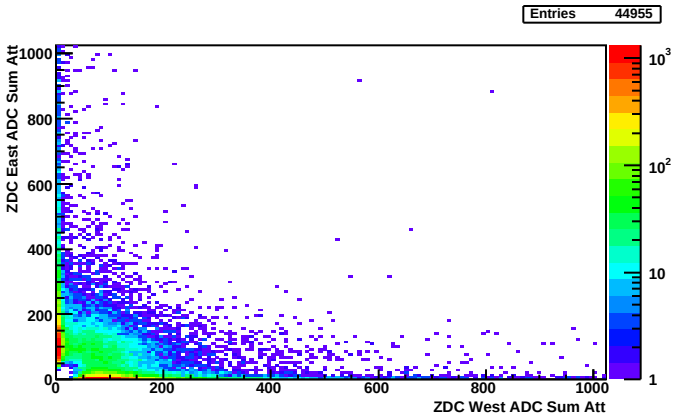

Entries 44955
VPD-East ADC Sum
ZDC-East ADC Sum Att

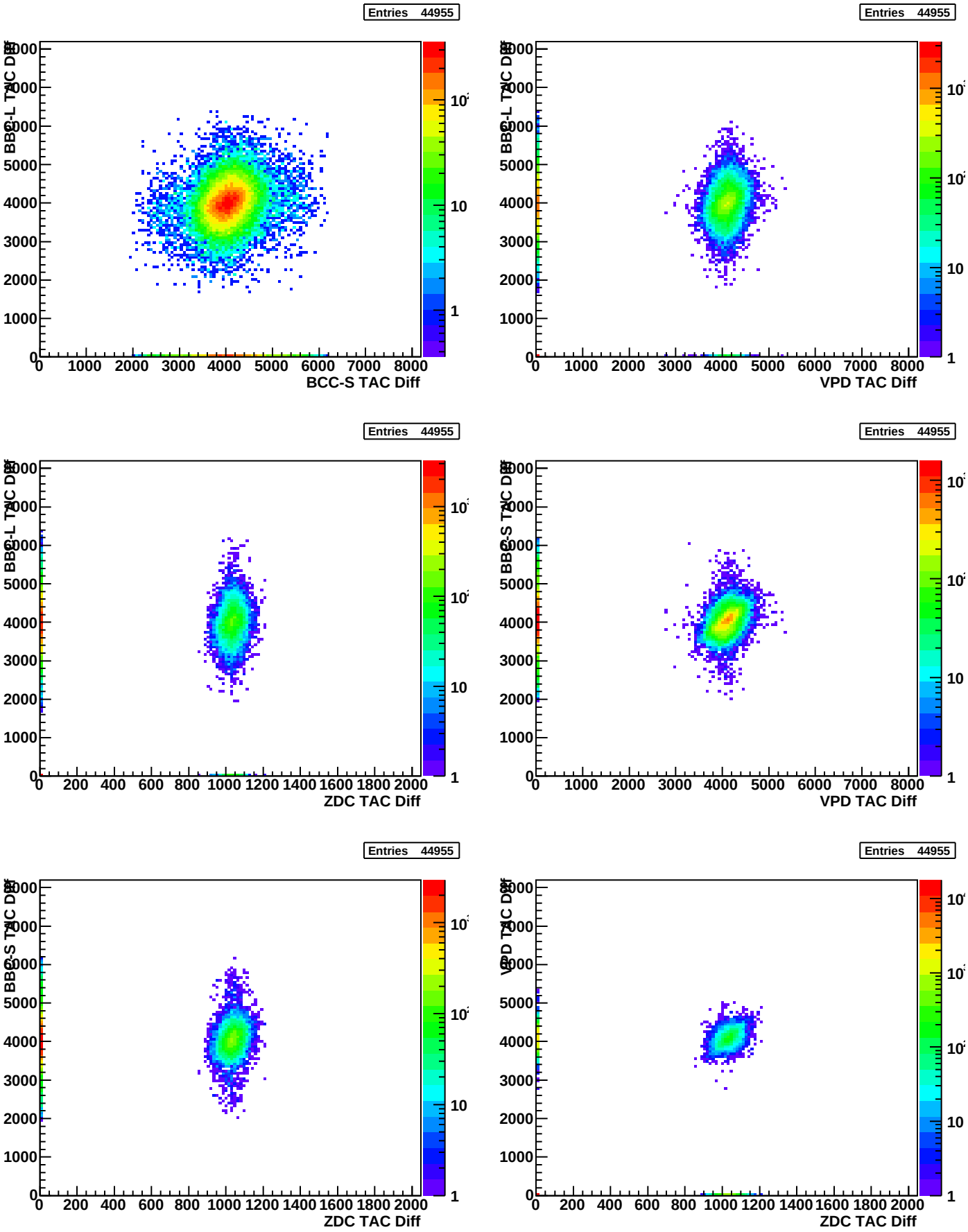

Entries 44955
VPD-West ADC Sum
ZDC-West ADC Sum Att

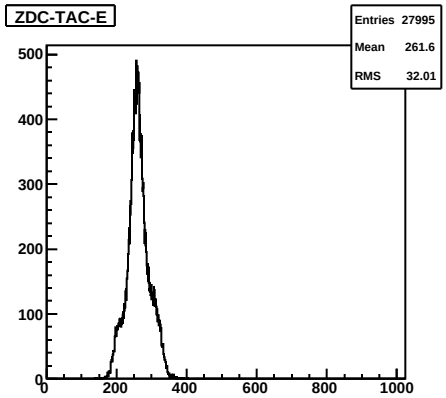

Entries 44955
BBC-L-East ADC Sum
BBC-L-West ADC Sum

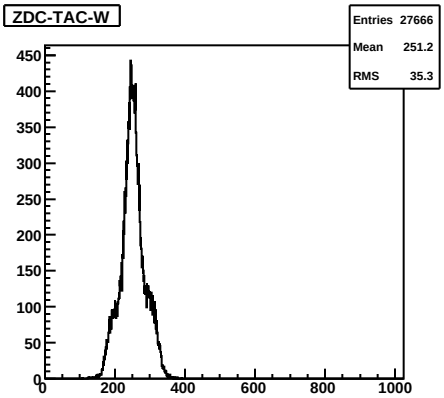

Entries 44955
BBC-S-East ADC Sum
BBC-S-West ADC Sum

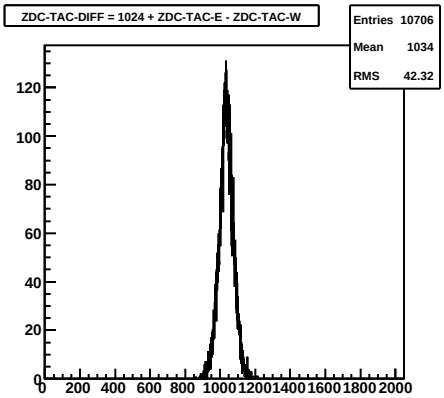

Entries 44955
VPD East ADC Sum
VPD West ADC Sum

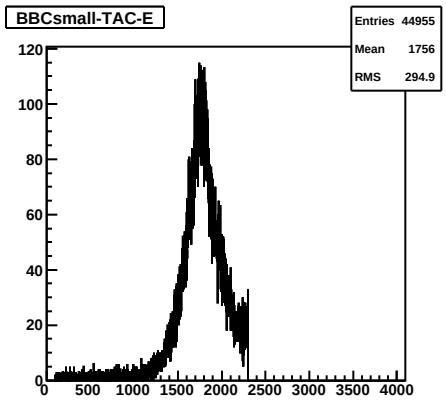

Entries 44955
ZDC East ADC Sum Att
ZDC West ADC Sum Att

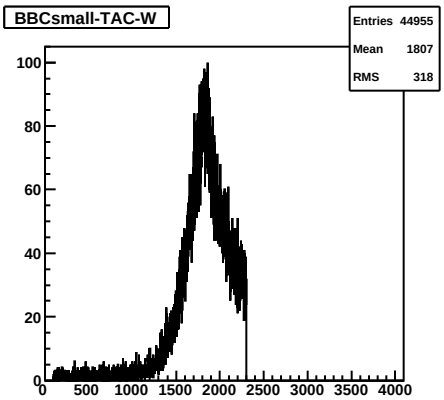

Entries 44955
BBC-L TAC Diff
BCC-S TAC Diff
Entries 44955
BBC-L TAC Diff
VPD TAC Diff
Entries 44955
BBC-L TAC Diff
ZDC TAC Diff
Entries 44955
BBC-S TAC Diff
VPD TAC Diff
Entries 44955
BBC-S TAC Diff
ZDC TAC Diff
Entries 44955
VPD TAC Diff
ZDC TAC Diff

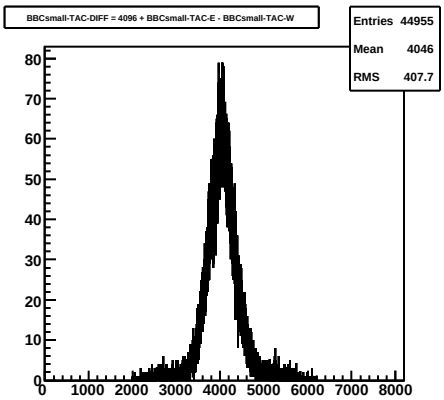

ZDC-TAC-E
Entries 27995
Mean 261.6
RMS 32.01

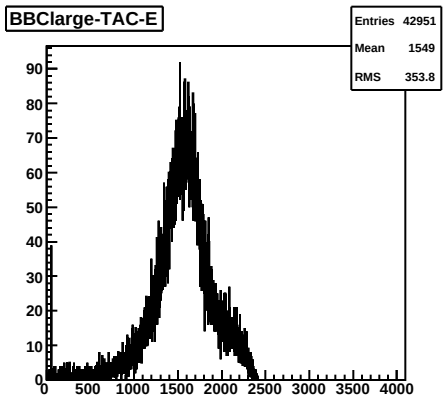

ZDC-TAC-W
Entries 27666
Mean 251.2
RMS 35.3

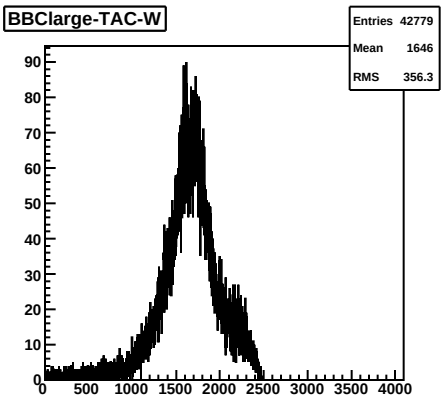

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 10706
Mean 1034
RMS 42.32

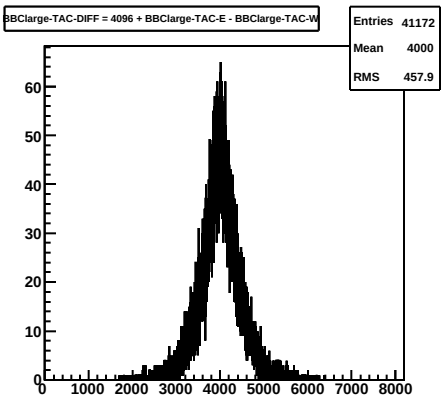

BBCsmall-TAC-E
Entries 44955
Mean 1756
RMS 294.9

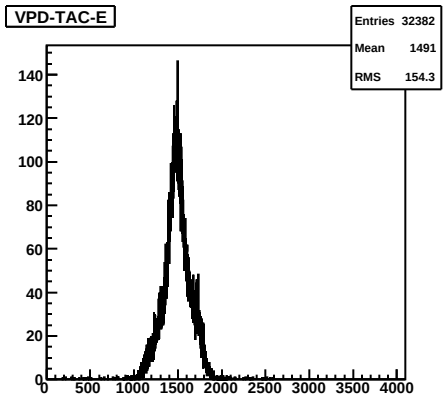

BBCsmall-TAC-W
Entries 44955
Mean 1807
RMS 318

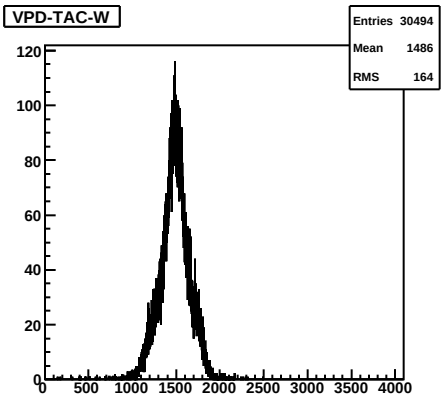

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 44955
Mean 4046
RMS 407.7

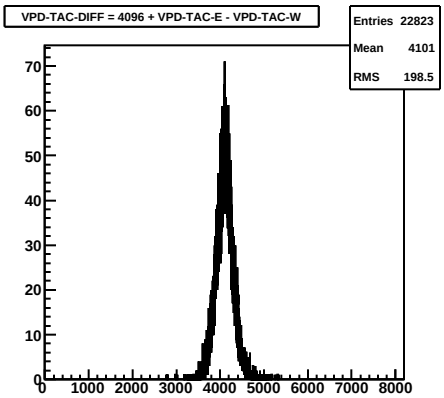

BBClarge-TAC-E
Entries 42951
Mean 1549
RMS 353.8

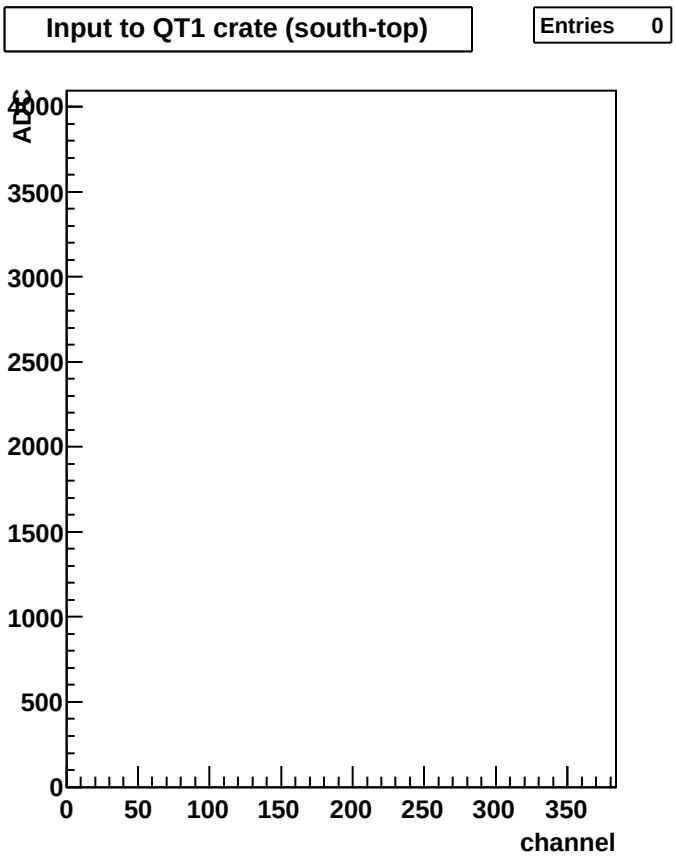

BBClarge-TAC-W
Entries 42779
Mean 1646
RMS 356.3

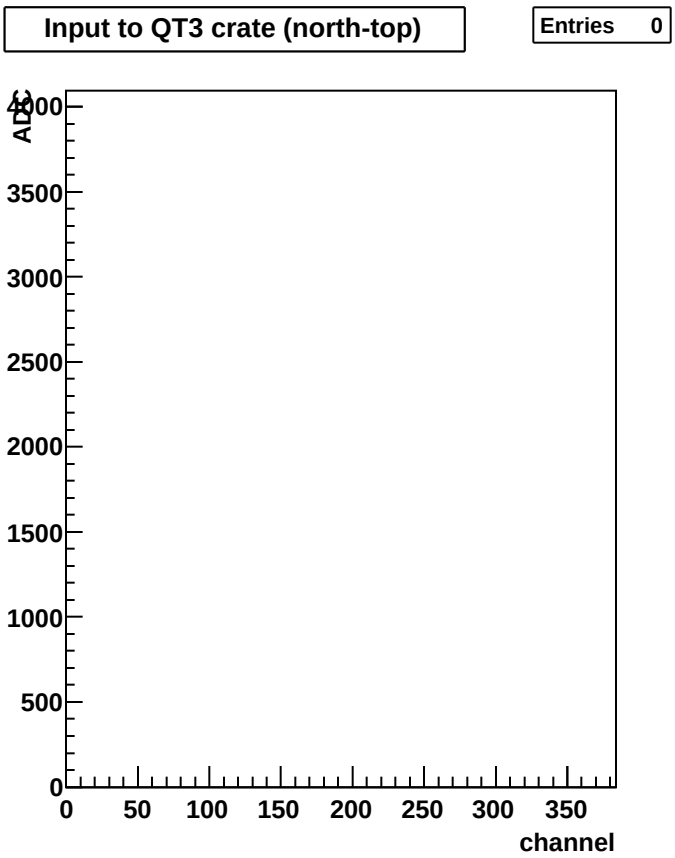

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 41172
Mean 4000
RMS 457.9

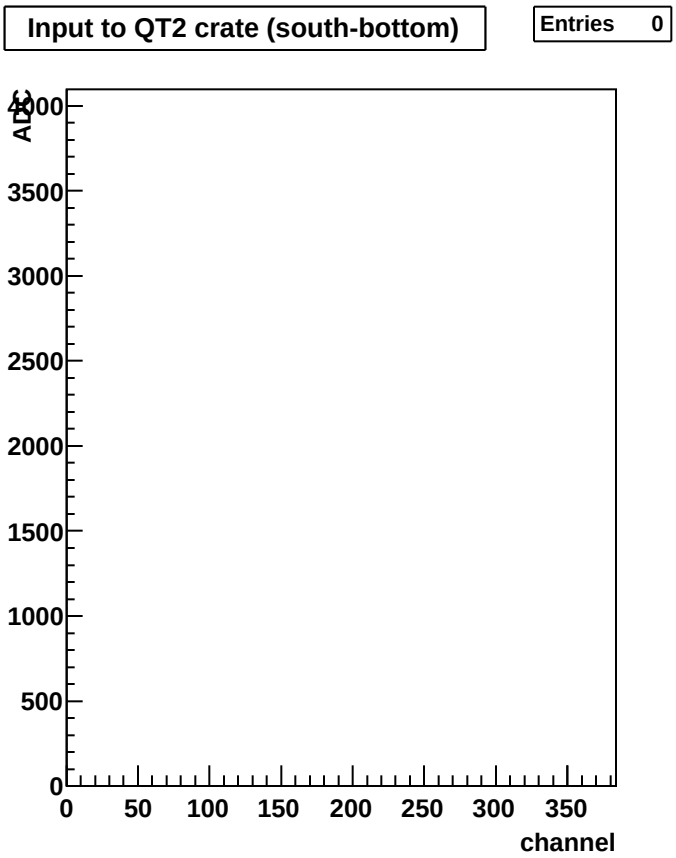

VPD-TAC-E
Entries 32382
Mean 1491
RMS 154.3

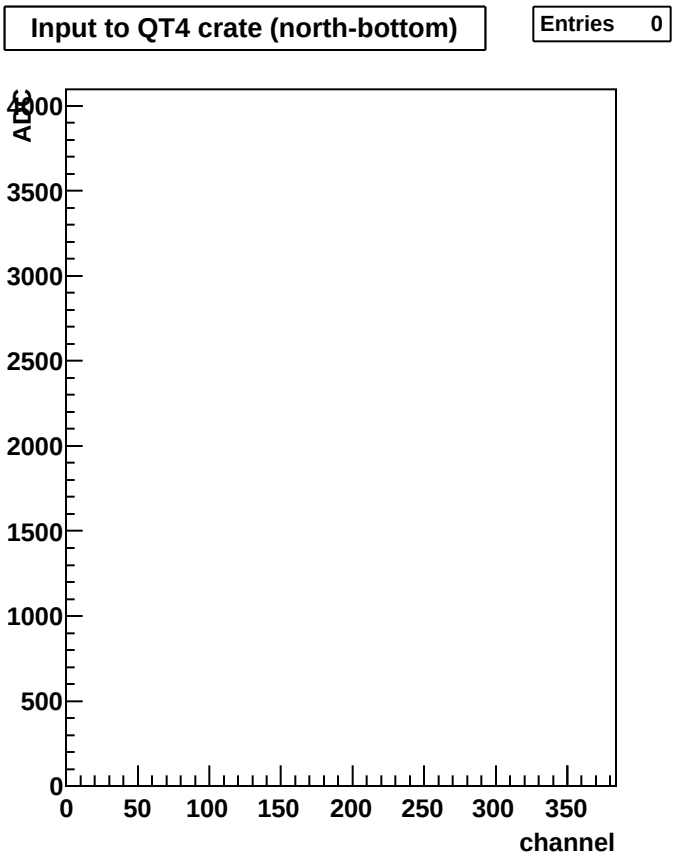

VPD-TAC-W
Entries 30494
Mean 1486
RMS 164

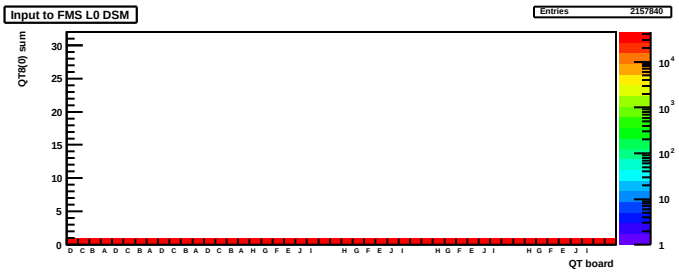

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 22823
Mean 4101
RMS 198.5

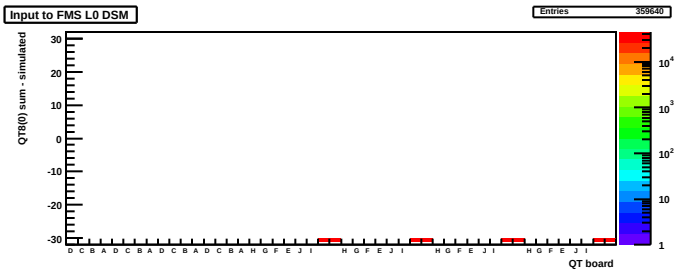

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

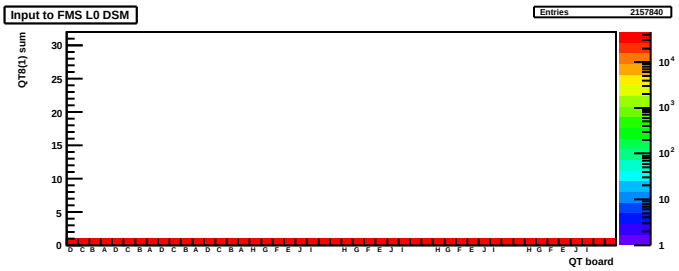

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

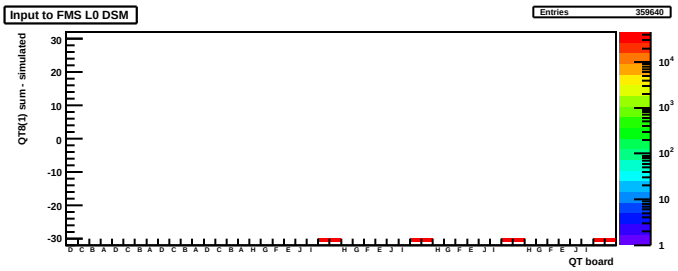

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

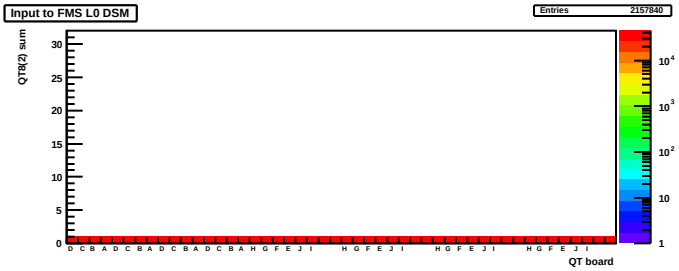

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

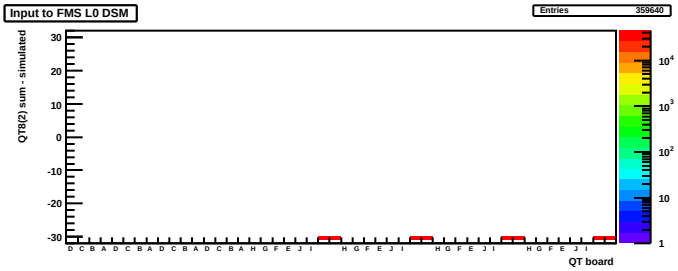

Input to FMS L0 DSM
Entries 2157840
QT8(0) sum
QT board

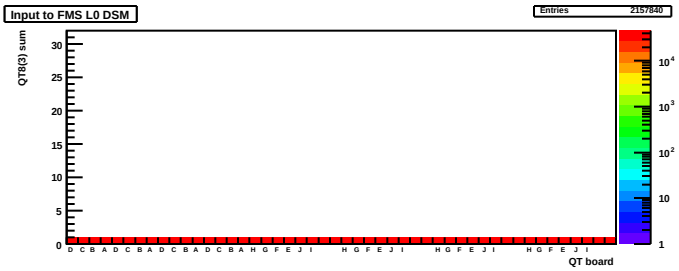

Input to FMS L0 DSM
Entries 359640
QT8(0) sum - simulated
QT board

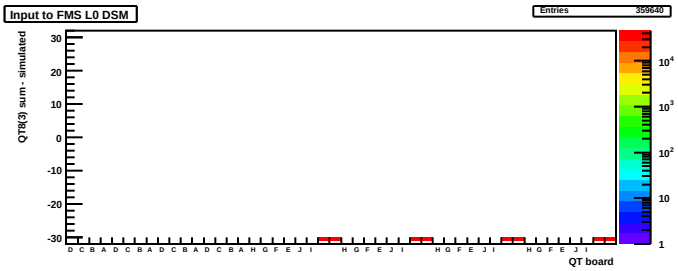

Input to FMS L0 DSM
Entries 2157840
QT8(1) sum
QT board

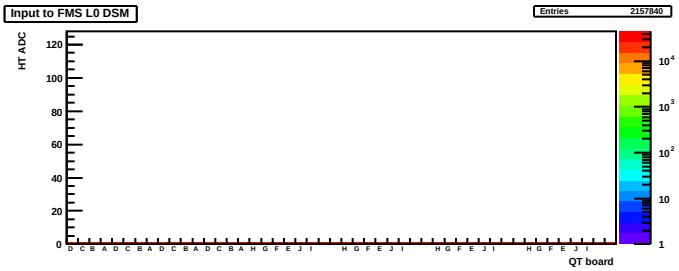

Input to FMS L0 DSM
Entries 359640
QT8(1) sum - simulated
QT board

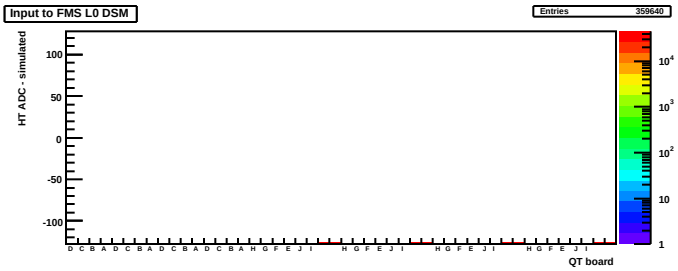

Input to FMS L0 DSM
Entries 2157840
QT8(2) sum
QT board

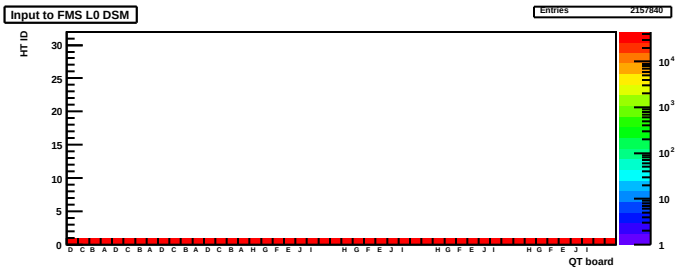

Input to FMS L0 DSM
Entries 359640
QT8(2) sum - simulated
QT board

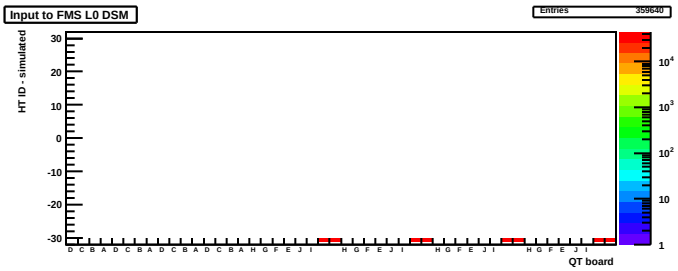

Input to FMS L0 DSM
Entries 2157840
QT8(3) sum
QT board

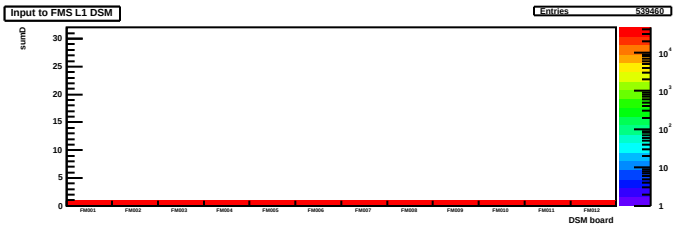

Input to FMS L0 DSM
Entries 359640
QT8(3) sum - simulated
QT board

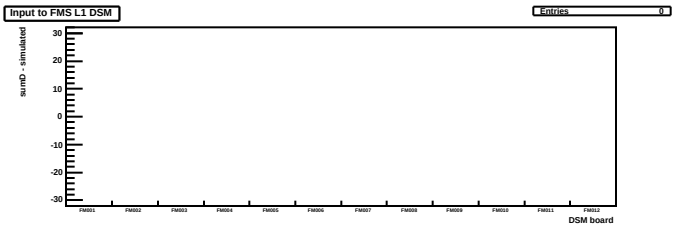

Input to FMS L0 DSM
Entries 2157840
HT ADC
QT board

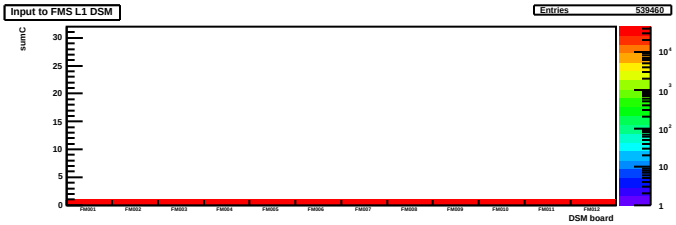

Input to FMS L0 DSM
Entries 359640
HT ADC - simulated
QT board

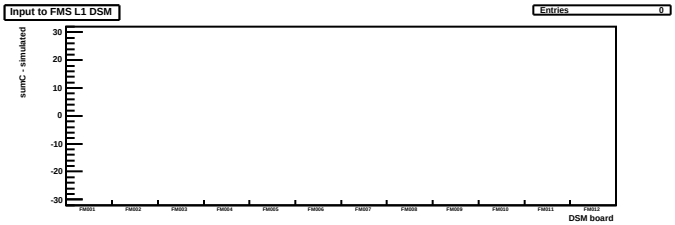

Input to FMS L0 DSM
Entries 2157840
HT ID
QT board

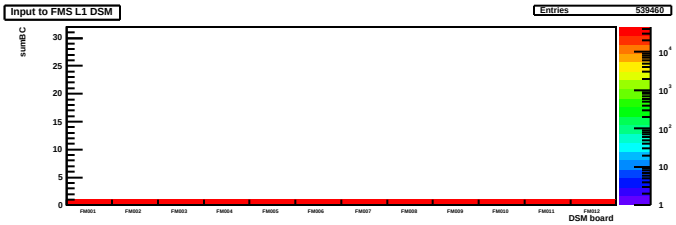

Input to FMS L0 DSM
Entries 359640
HT ID - simulated
QT board

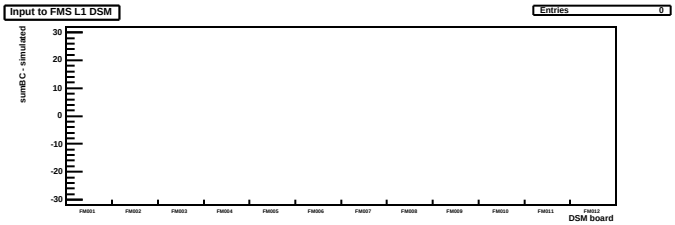

Input to FMS L1 DSM
Entries 539460
sumD
DSM board

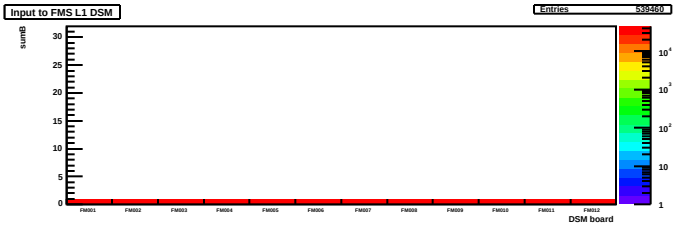

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

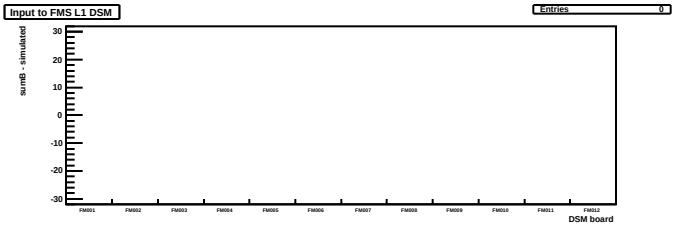

Input to FMS L1 DSM
Entries 539460
sumC
DSM board

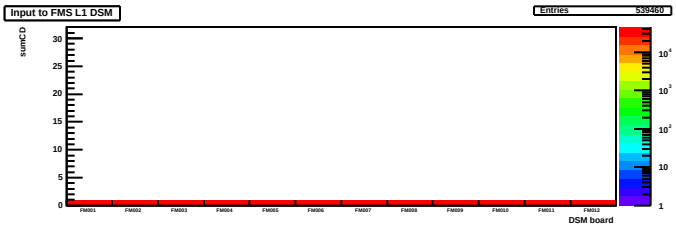

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

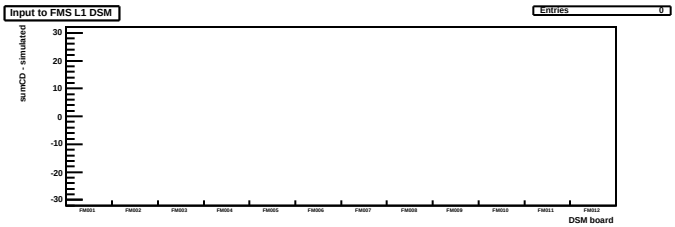

Input to FMS L1 DSM
Entries 539460
sumBC
DSM board

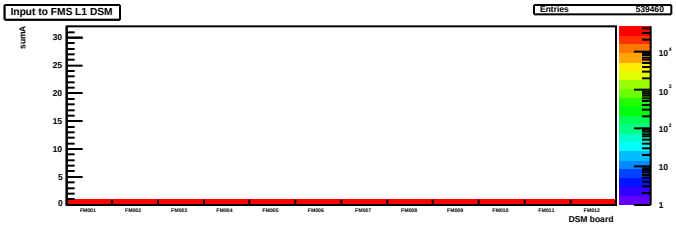

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

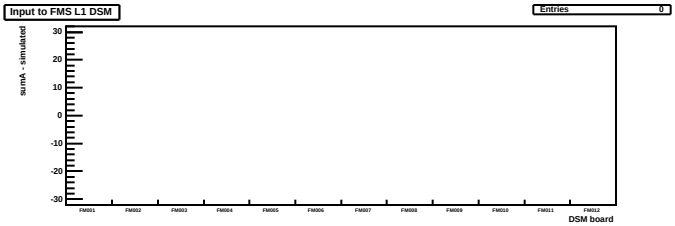

Input to FMS L1 DSM
Entries 539460
sumB
DSM board

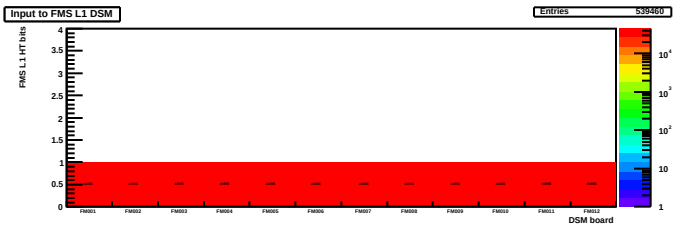

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

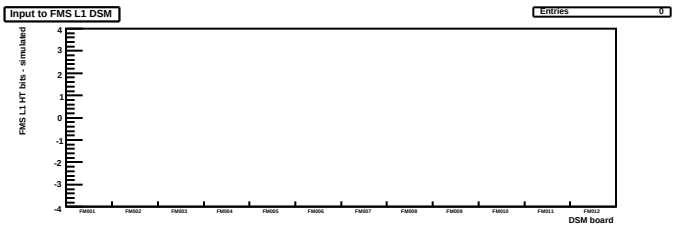

Input to FMS L1 DSM
Entries 539460
sumCD
DSM board

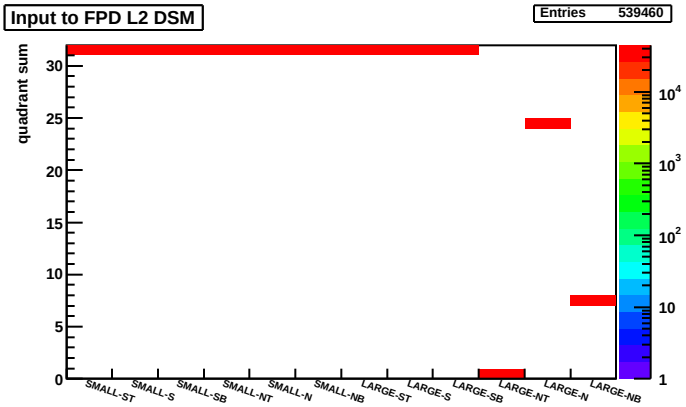

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

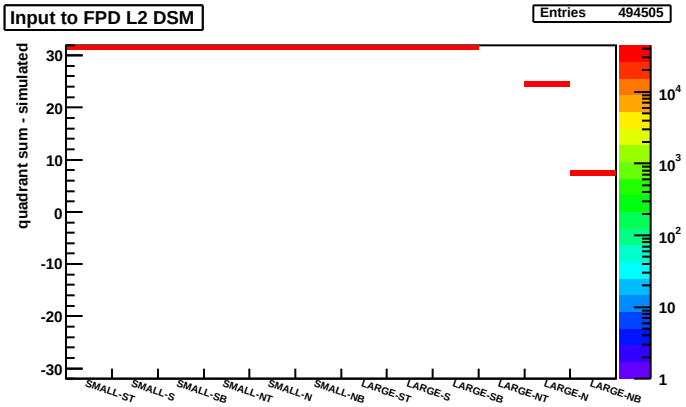

Input to FMS L1 DSM
Entries 539460
sumA
DSM board

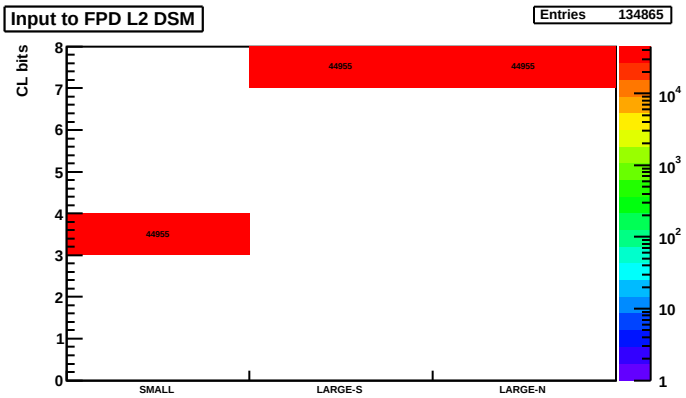

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

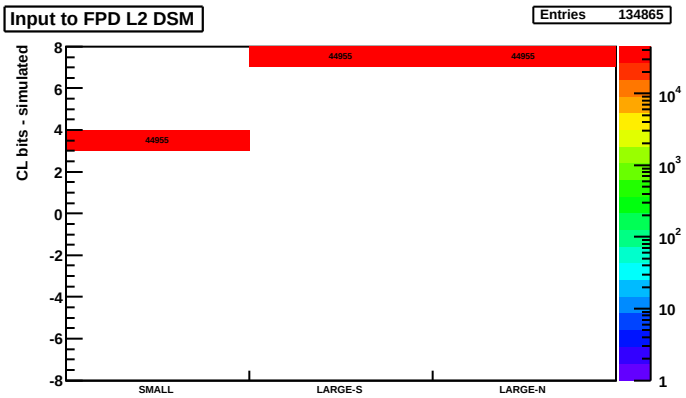

Input to FMS L1 DSM
Entries 539460
FMS L1 HT bits
DSM board

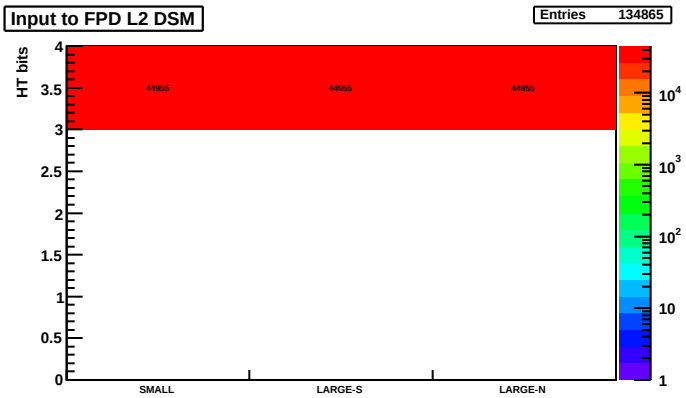

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

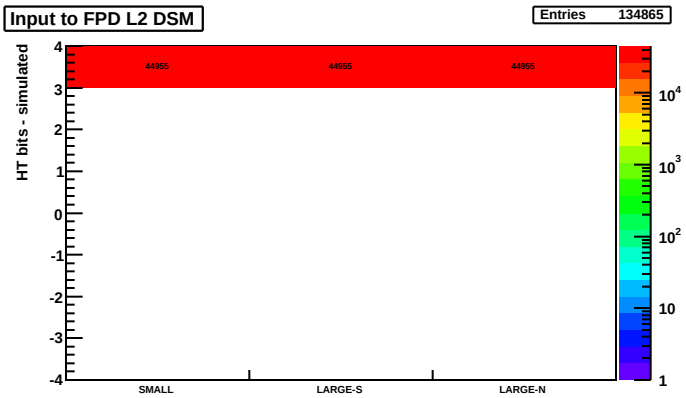

Input to FPD L2 DSM
Entries 539460
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

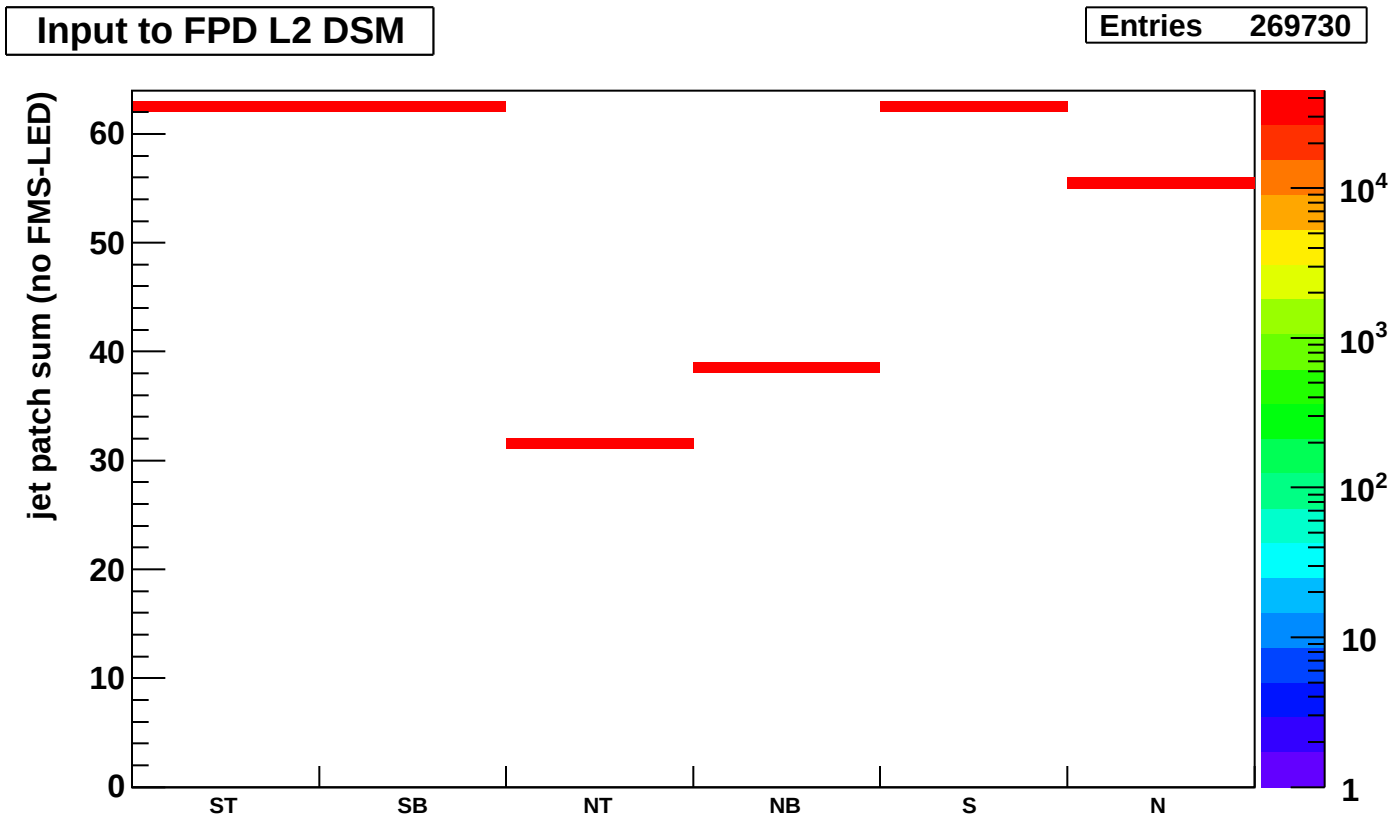

Input to FPD L2 DSM
Entries 494505
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

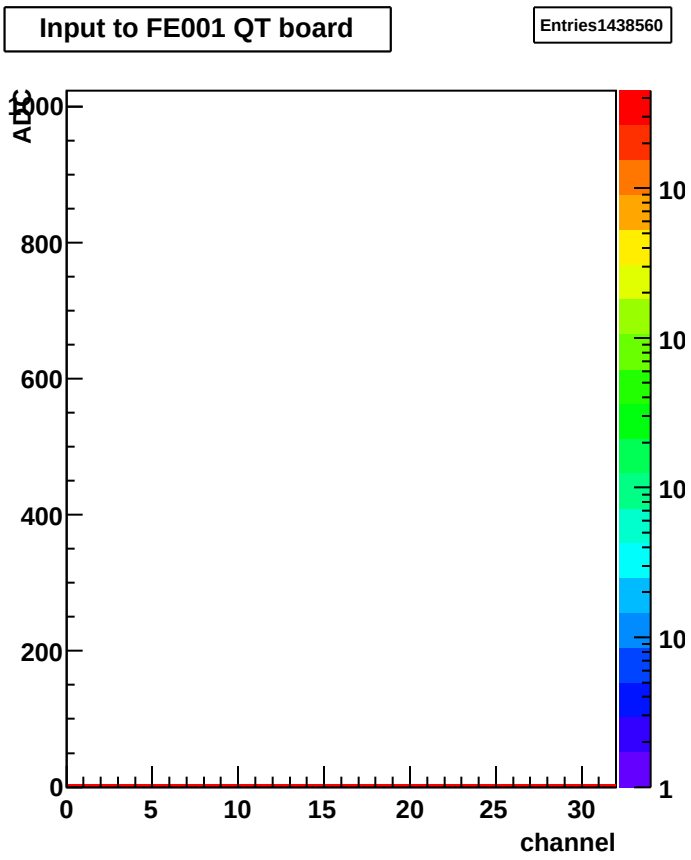

Input to FPD L2 DSM
Entries 134865
CL bits
44955
44955
44955
SMALL
LARGE-S
LARGE-N

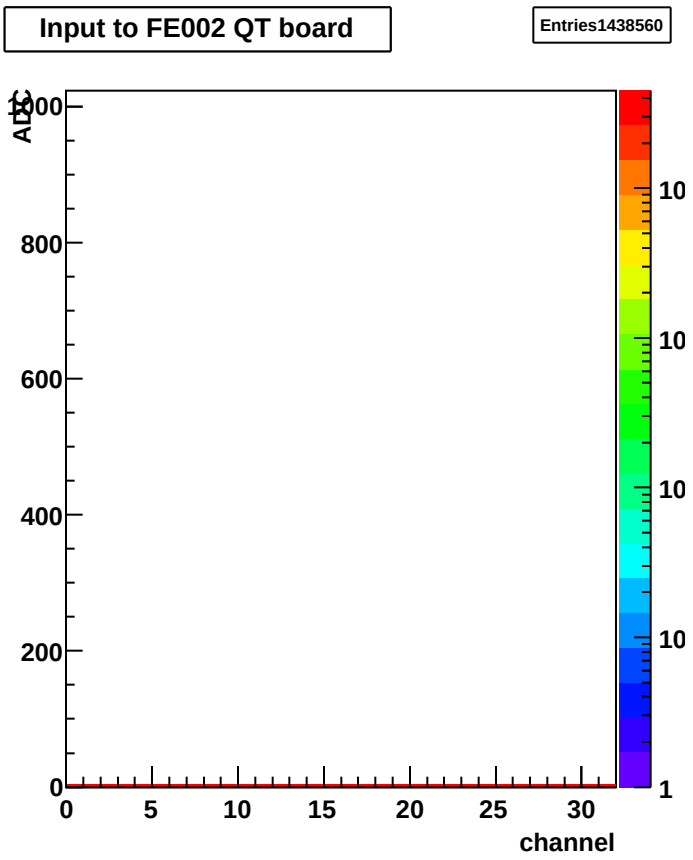

Input to FPD L2 DSM
Entries 134865
CL bits - simulated
44955
44955
44955
SMALL
LARGE-S
LARGE-N

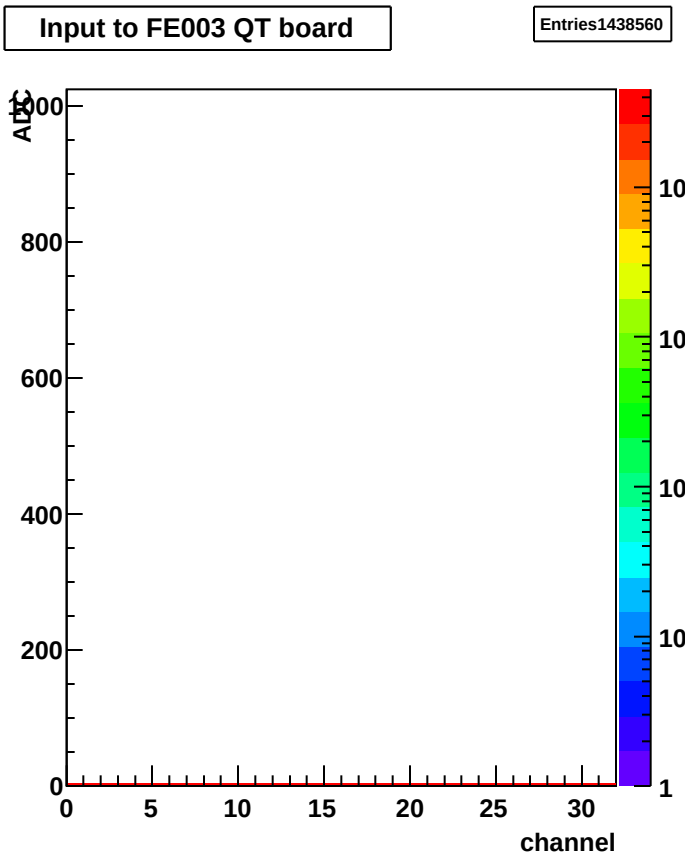

Input to FPD L2 DSM
Entries 134865
HT bits
44955
44955
44955
SMALL
LARGE-S
LARGE-N

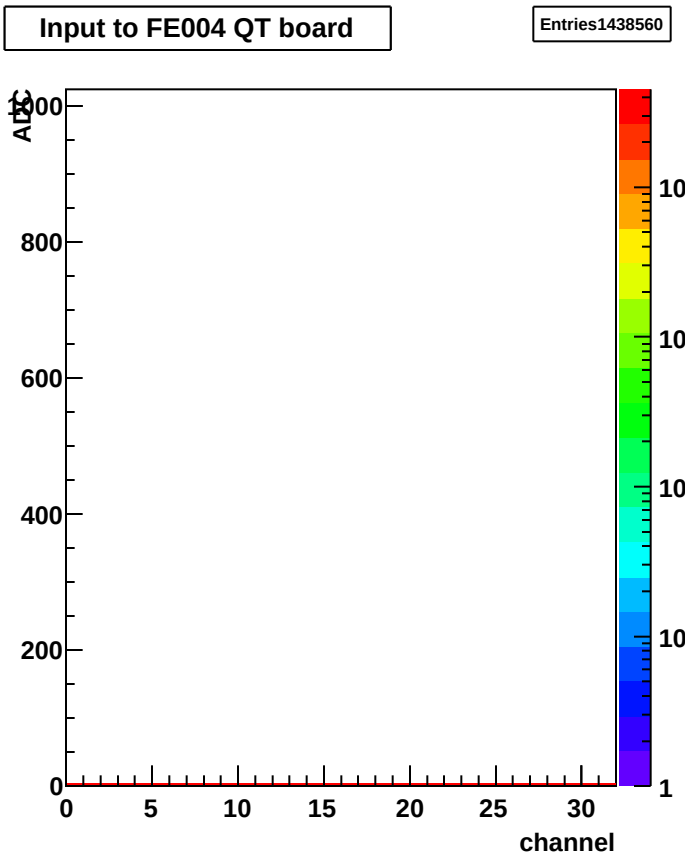

Input to FPD L2 DSM
Entries 134865
HT bits - simulated
44955
44955
44955
SMALL
LARGE-S
LARGE-N

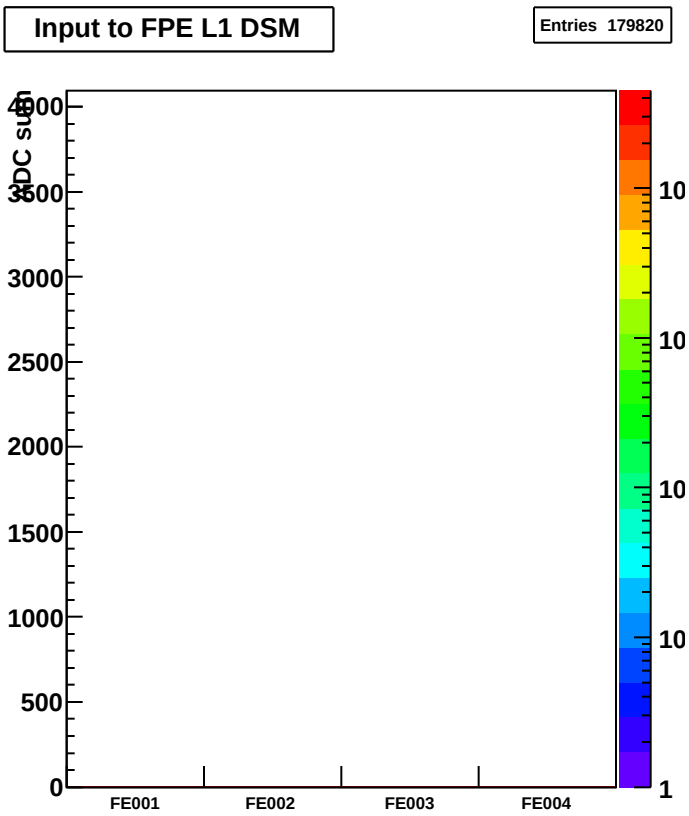

Input to FPD L2 DSM
Entries 269730
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

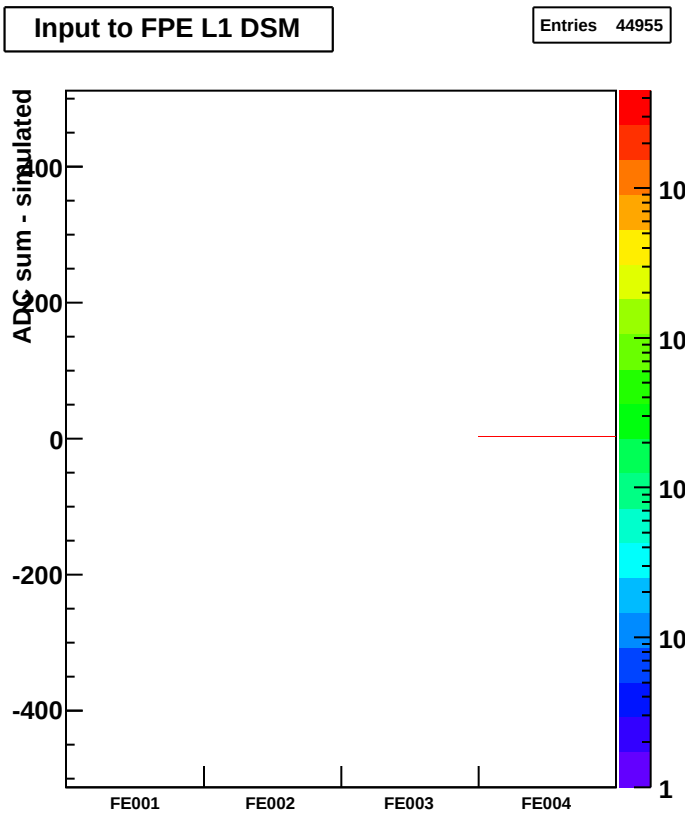

Input to FE001 QT board
Entries1438560
ADC
channel

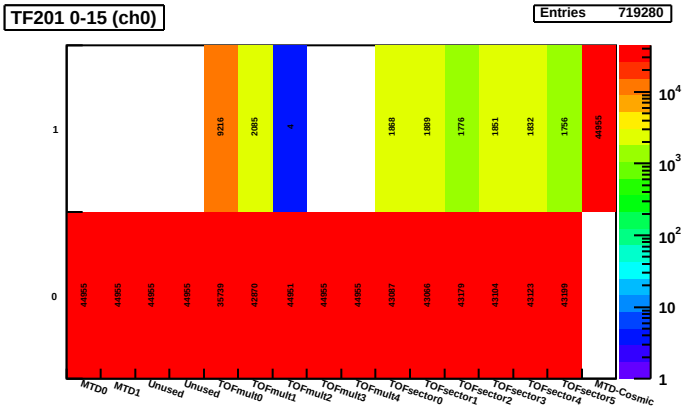

Input to FE002 QT board
Entries1438560
ADC
channel

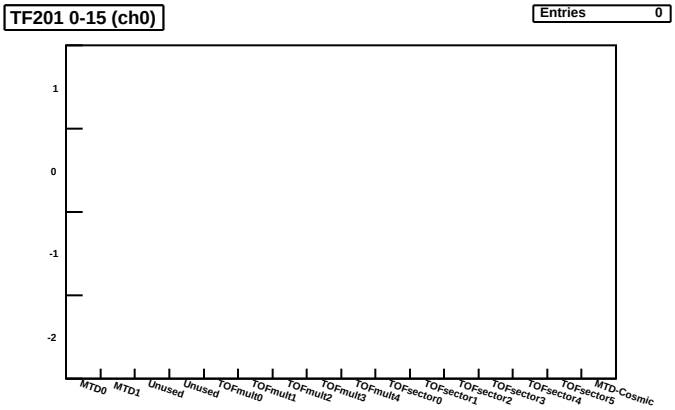

Input to FE003 QT board
Entries1438560
ADC
channel

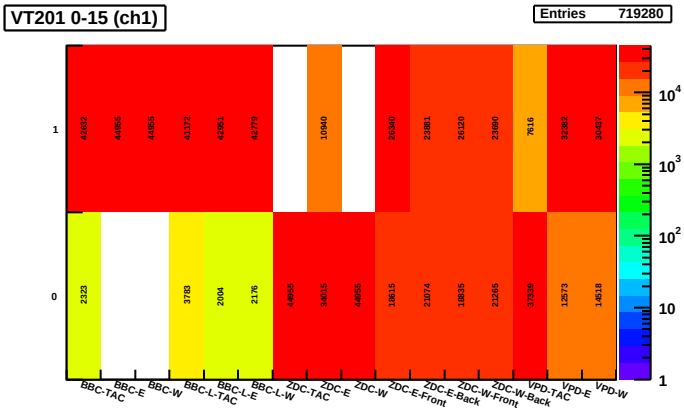

Input to FE004 QT board
Entries1438560
ADC
channel

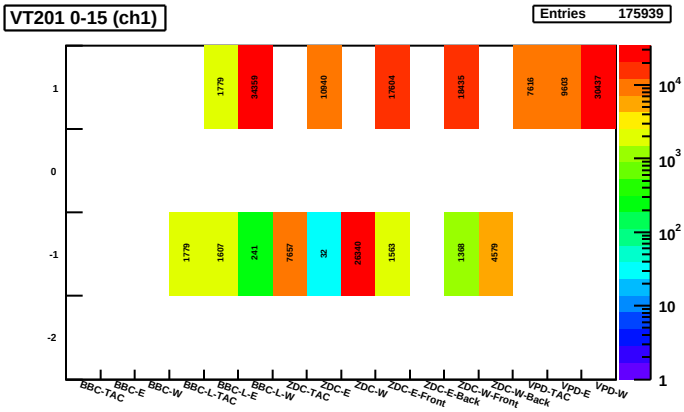

Input to FPE L1 DSM
Entries 179820
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

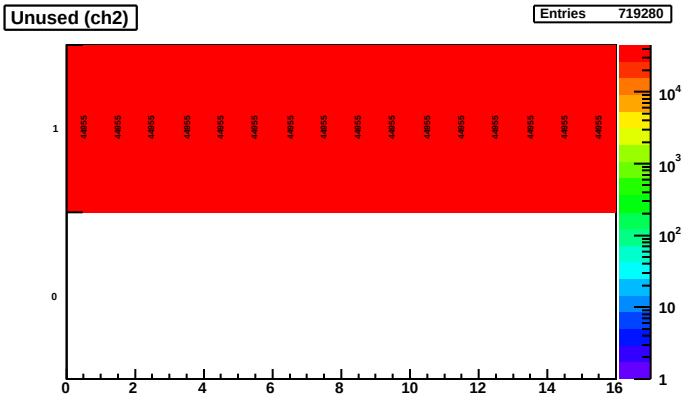

Input to FPE L1 DSM
Entries 44955
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1

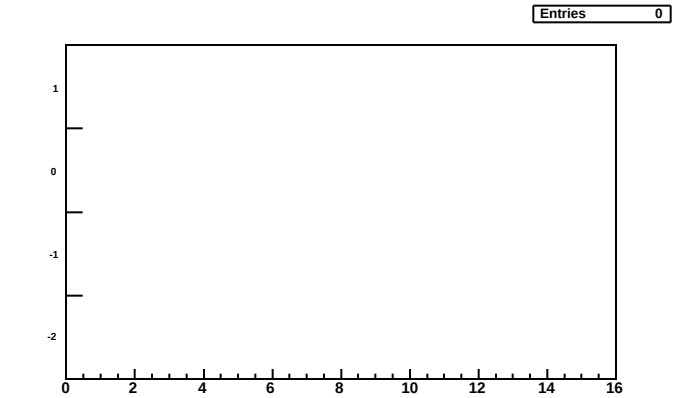

TF201 0-15 (ch0)
Entries 719280
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

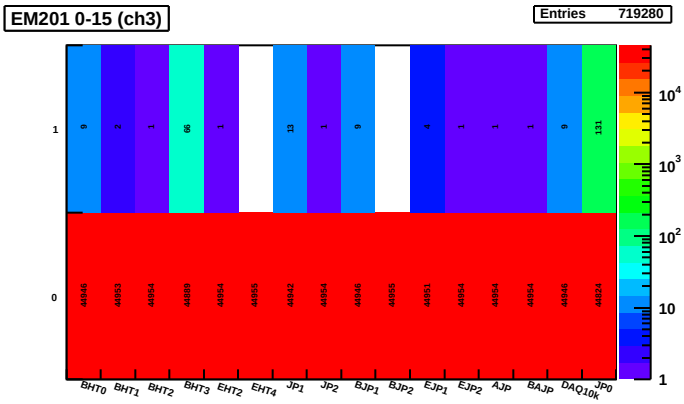

TF201 0-15 (ch0)
Entries 0
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

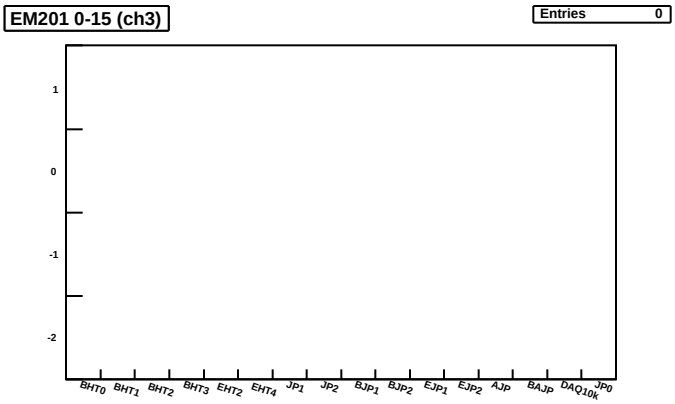

VT201 0-15 (ch1)
Entries 719280
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 175939
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W

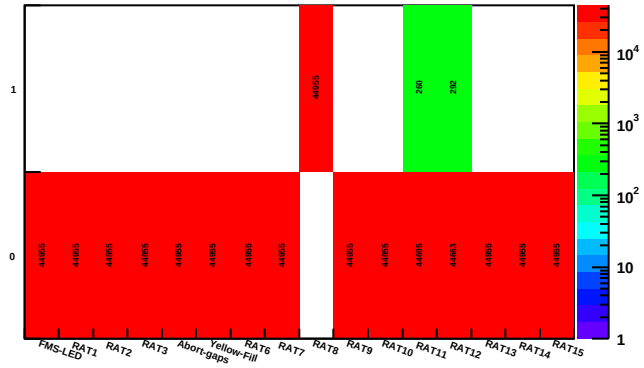

Unused (ch2)
Entries 719280

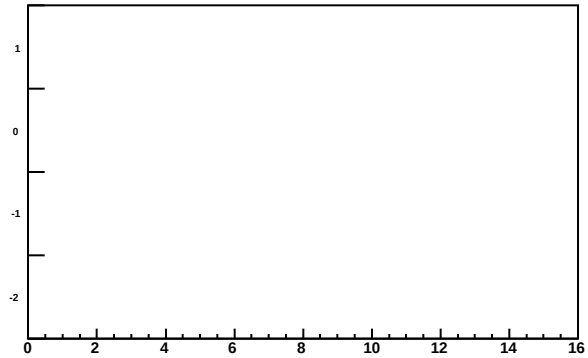

Entries 0


EM201 0-15 (ch3)
Entries 719280
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

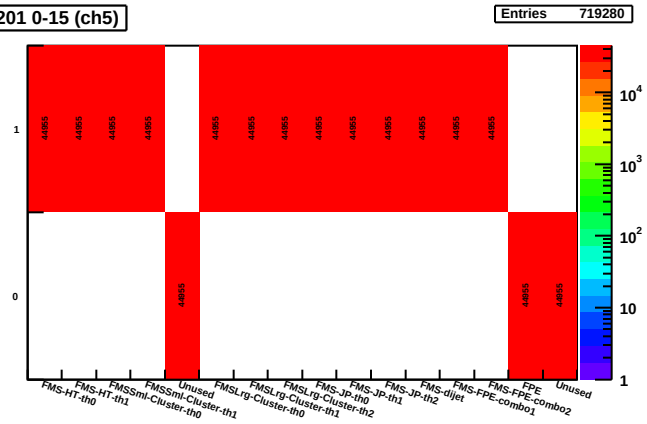

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

RAT board (ch4)

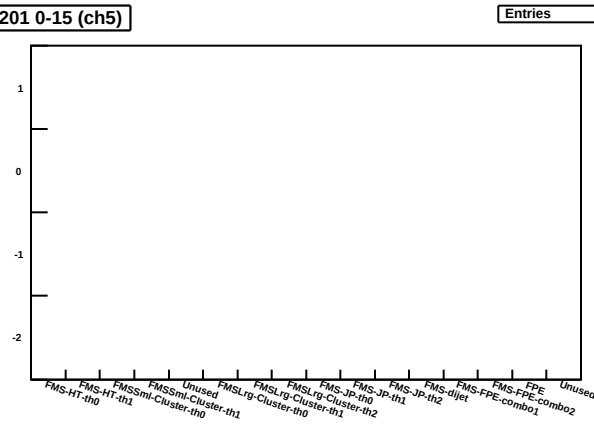




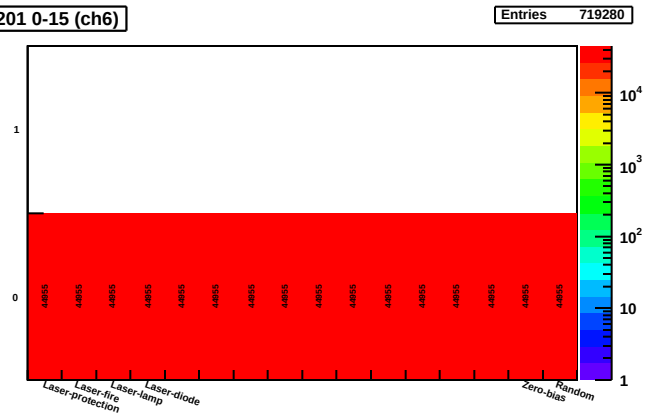
FP201 0-15 (ch5)

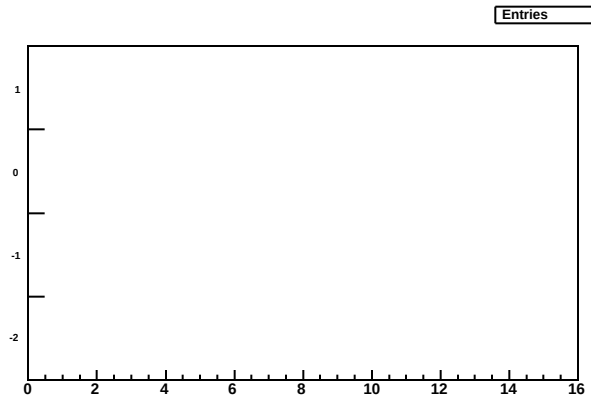
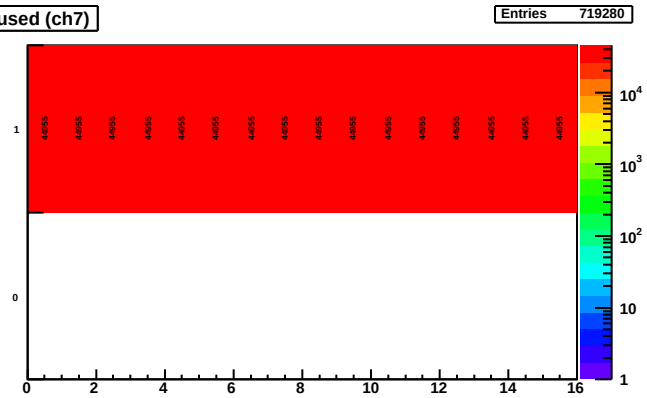
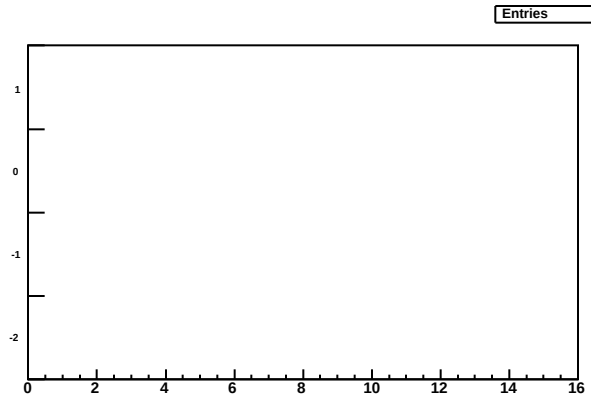


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)