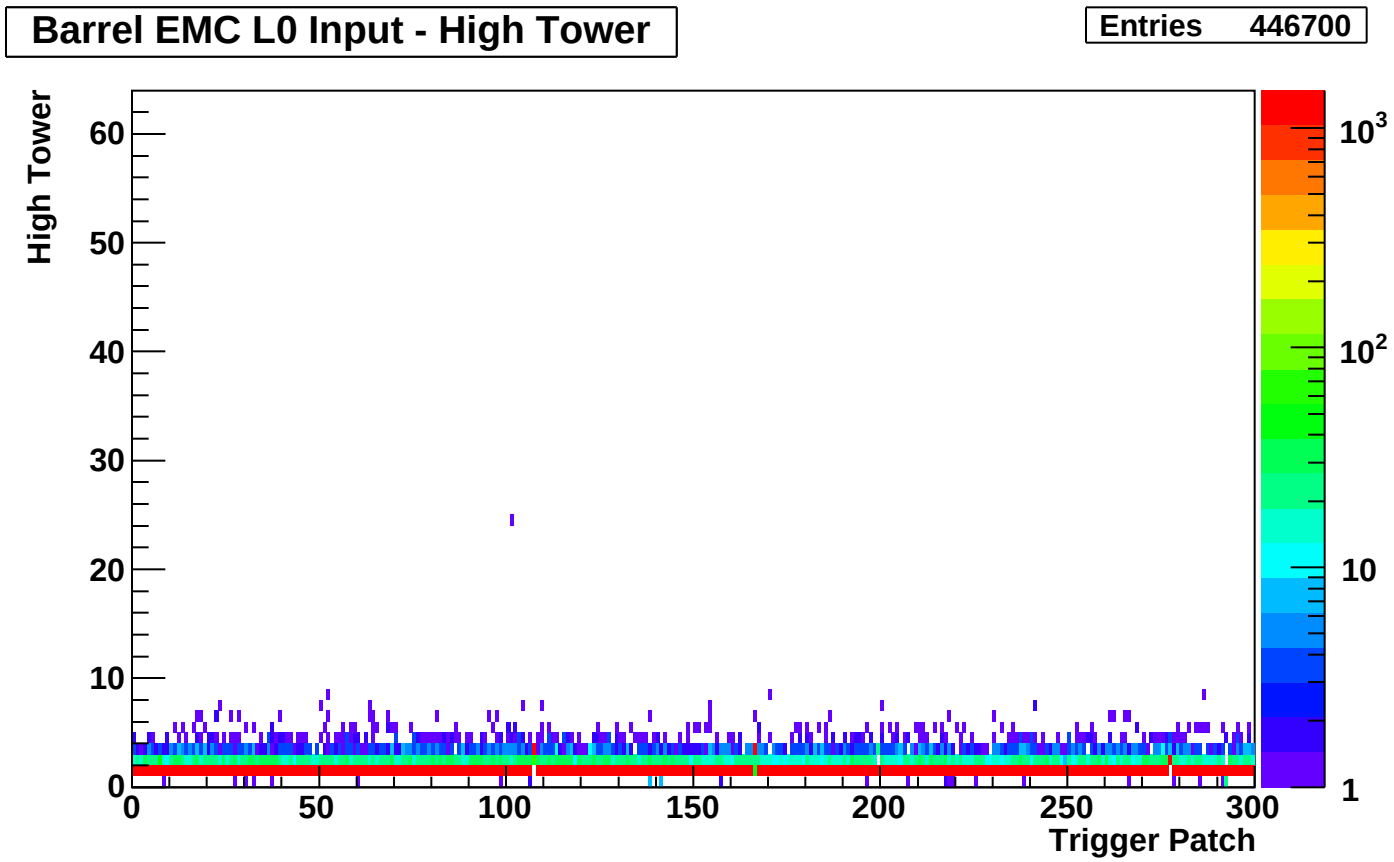
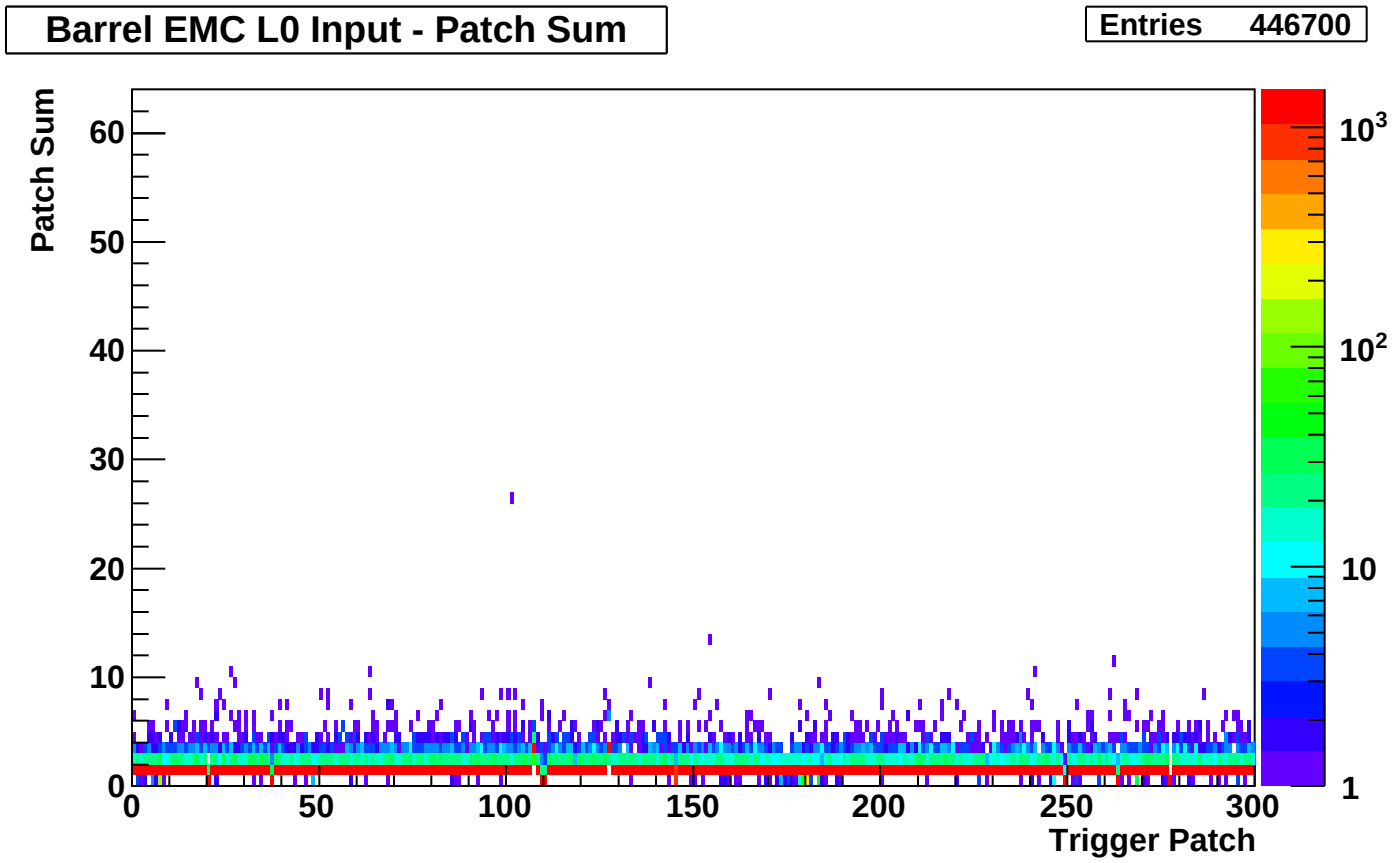
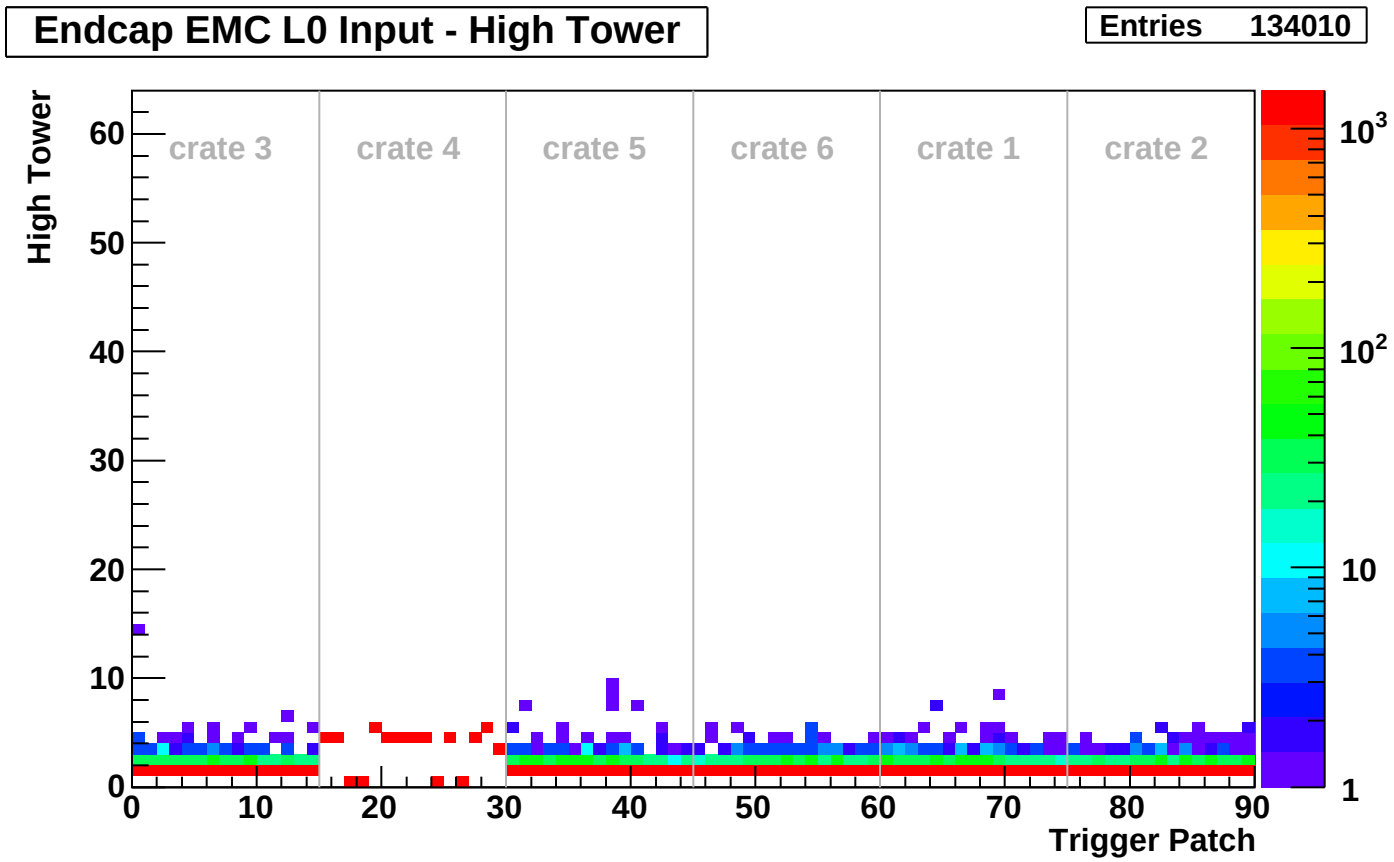
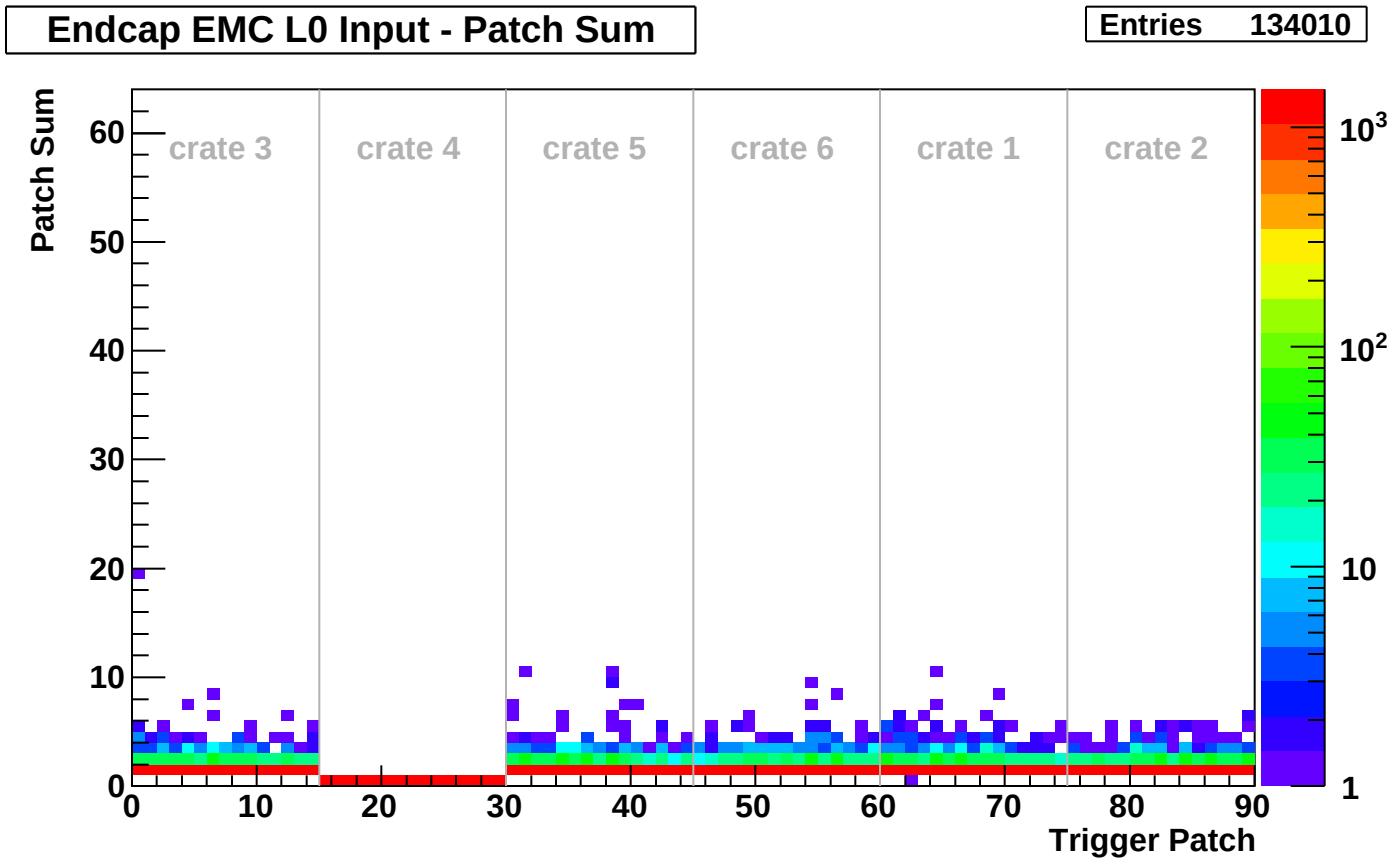
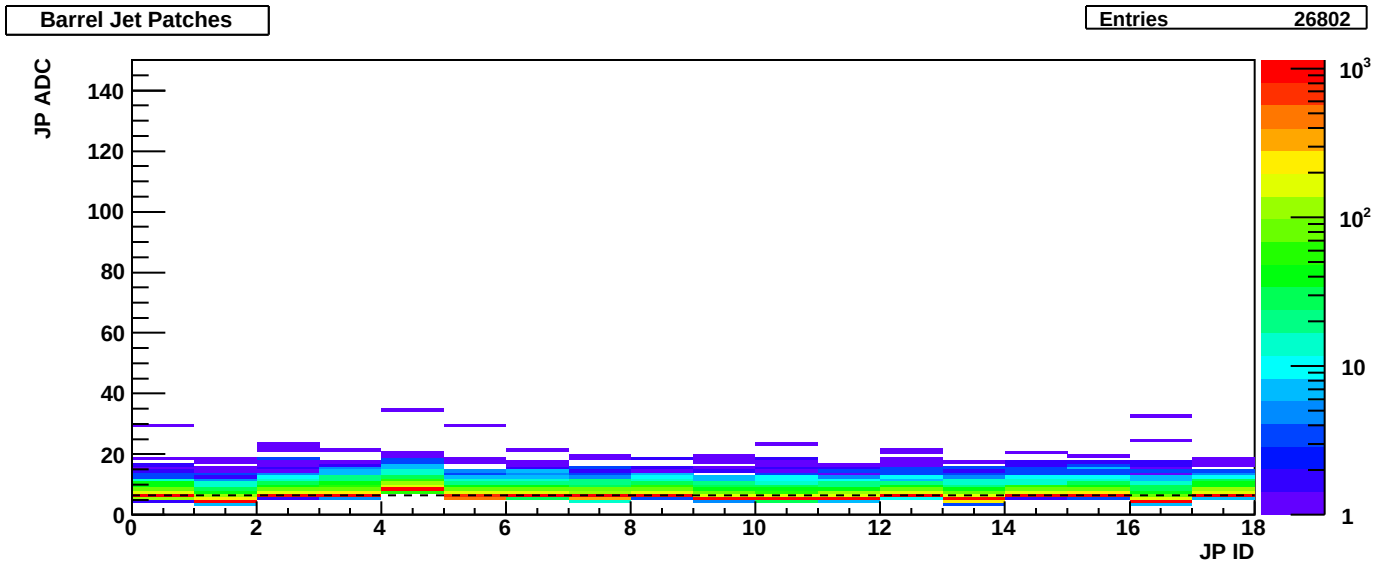
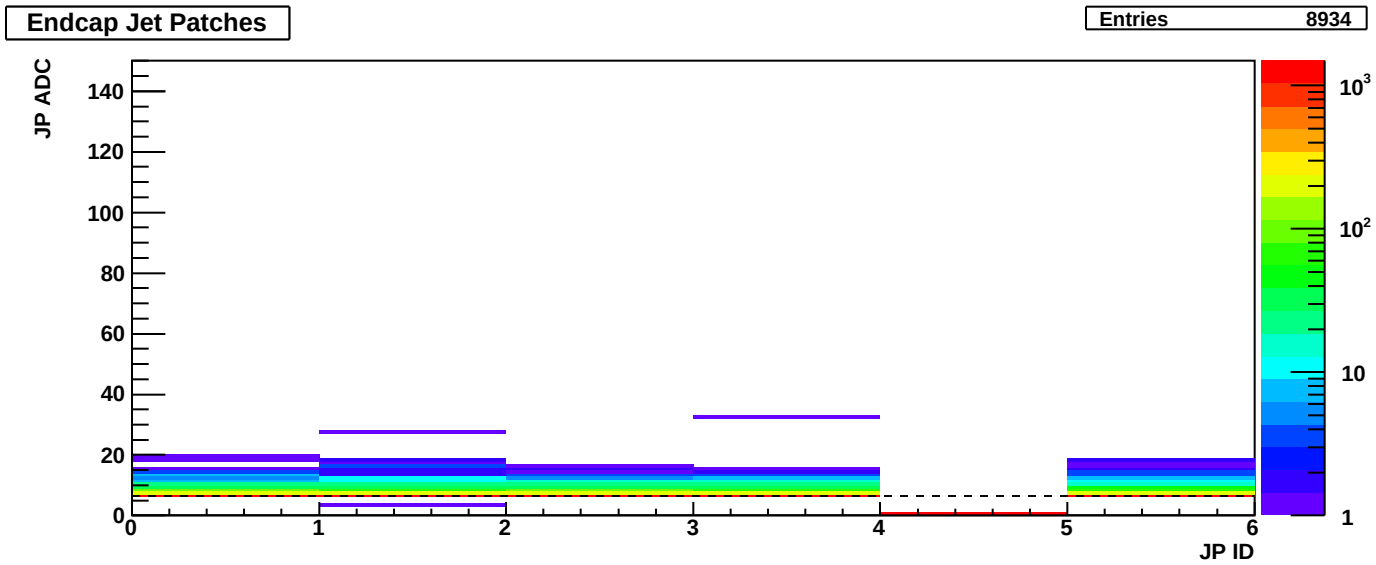

Barrel EMC L0 Input - High Tower
Entries 446700
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

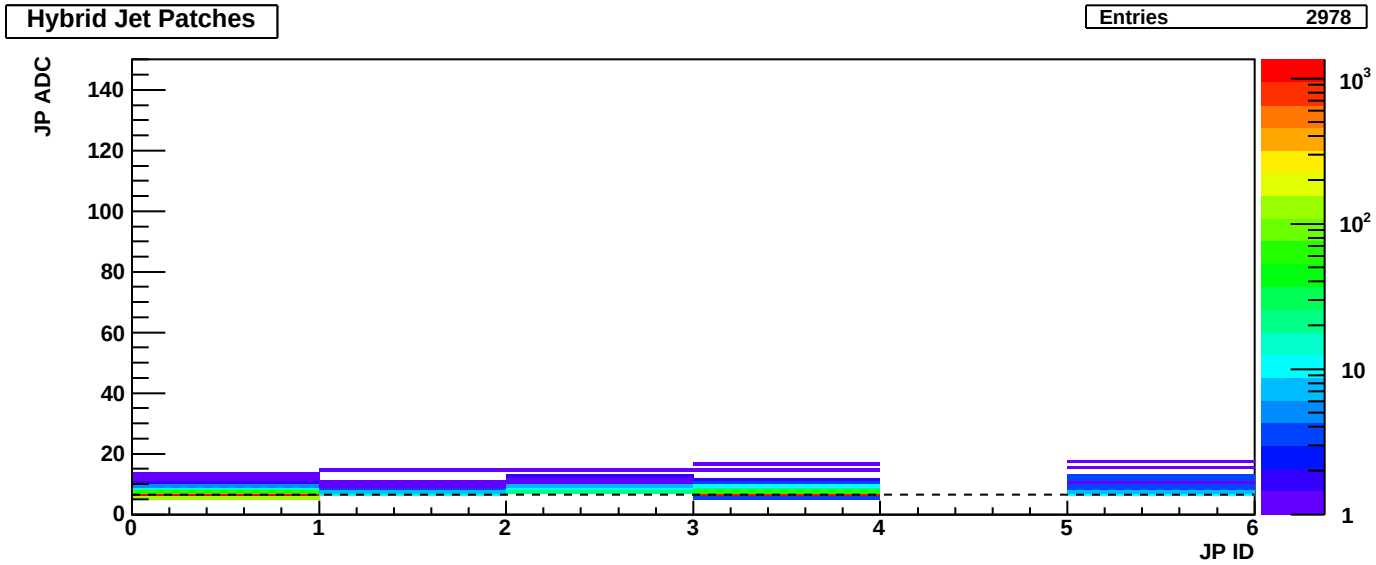

Barrel EMC L0 Input - Patch Sum
Entries 446700
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

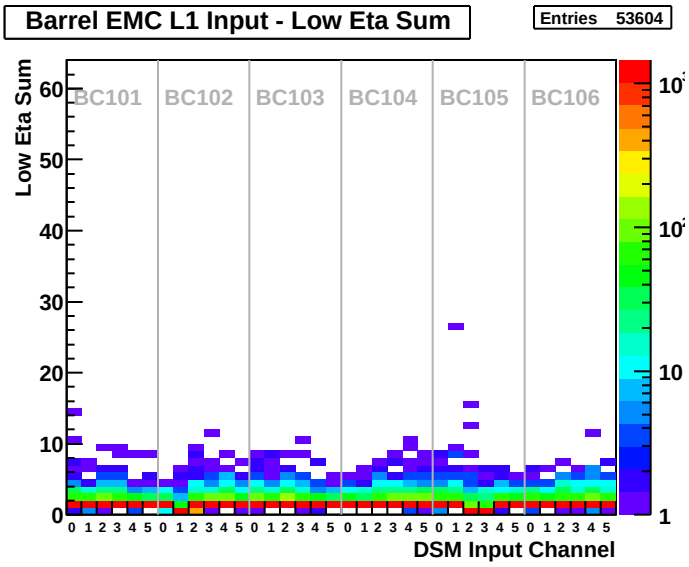

Endcap EMC L0 Input - High Tower
Entries 134010
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

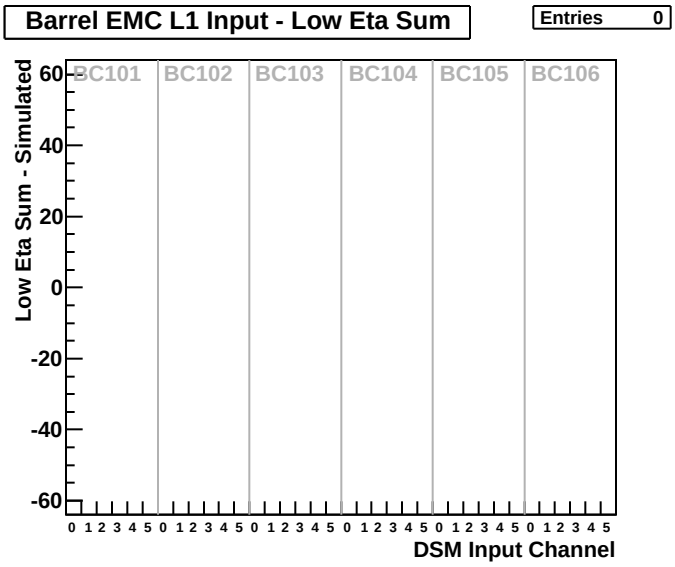

Endcap EMC L0 Input - Patch Sum
Entries 134010
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

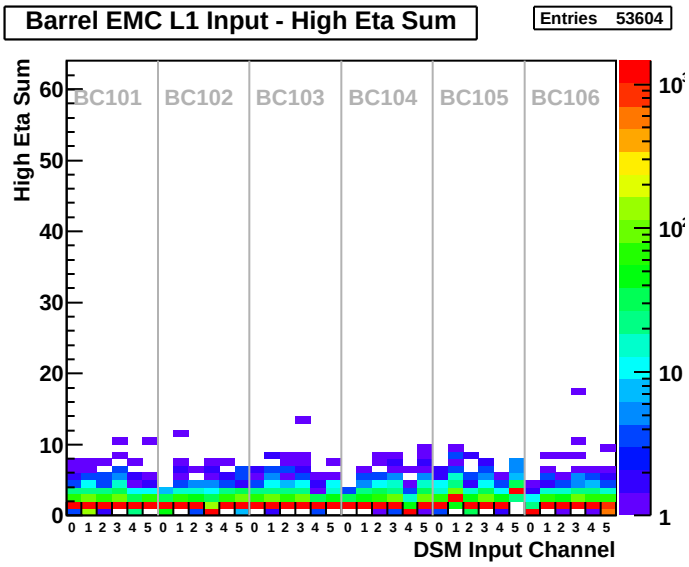

Barrel Jet Patches
Entries 26802
JP ADC
JP ID

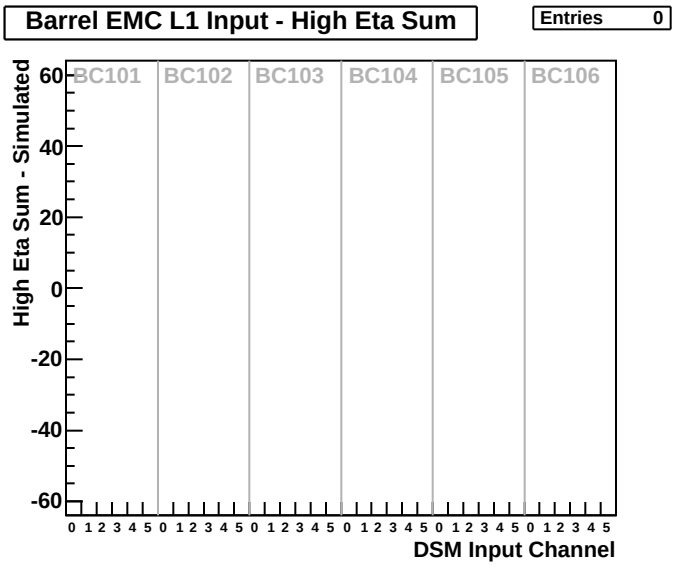

Endcap Jet Patches
Entries 8934
JP ADC
JP ID

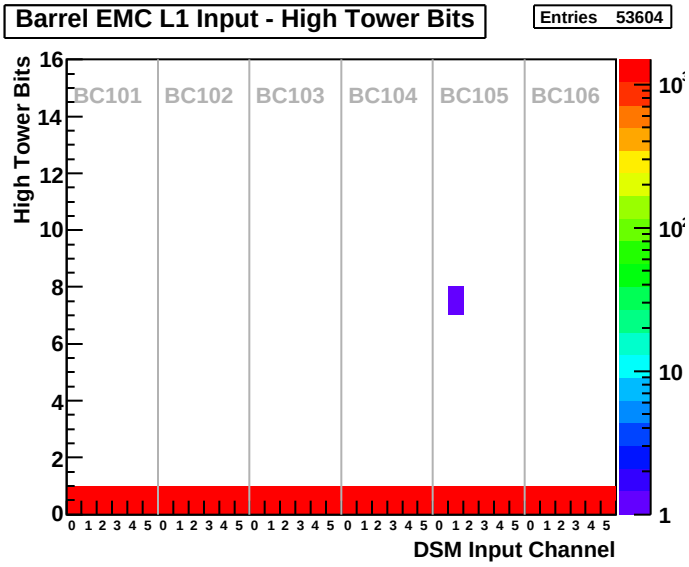

Hybrid Jet Patches
Entries 2978
JP ADC
JP ID

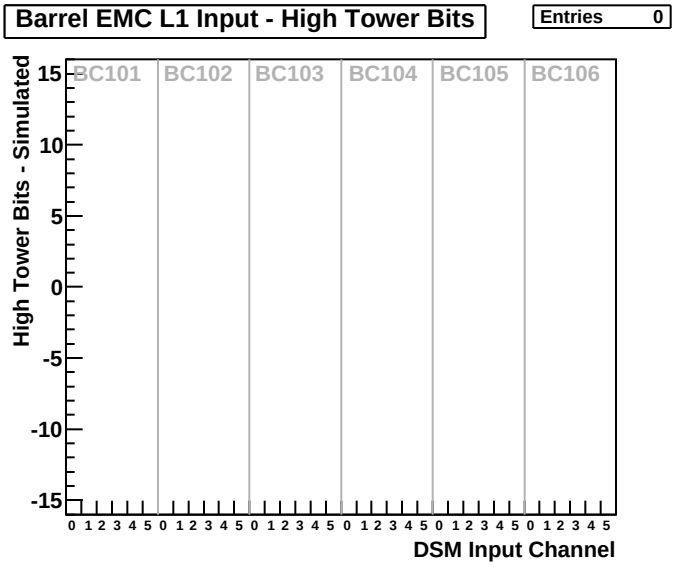

Barrel EMC L1 Input - Low Eta Sum
Entries 53604
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

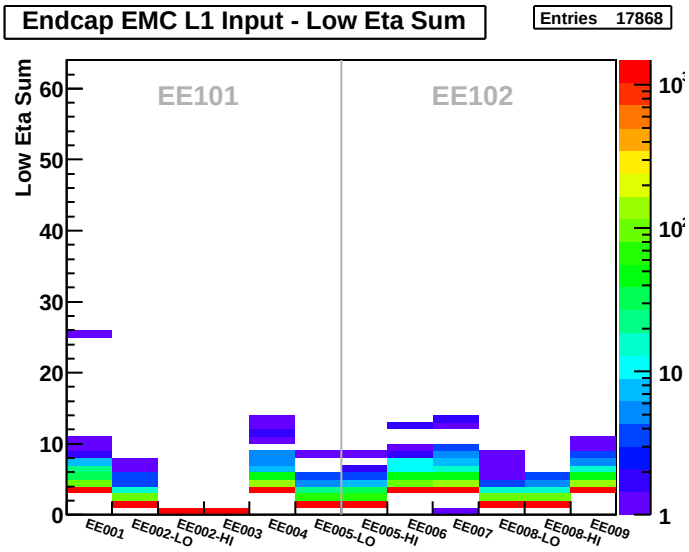

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

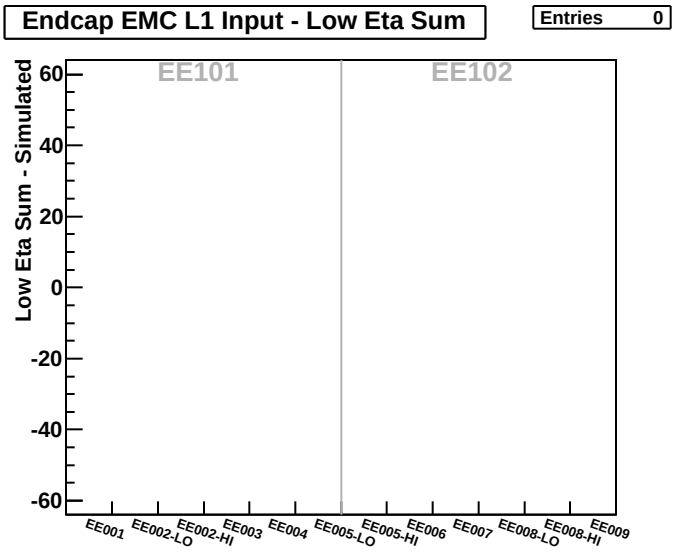

Barrel EMC L1 Input - High Eta Sum
Entries 53604
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

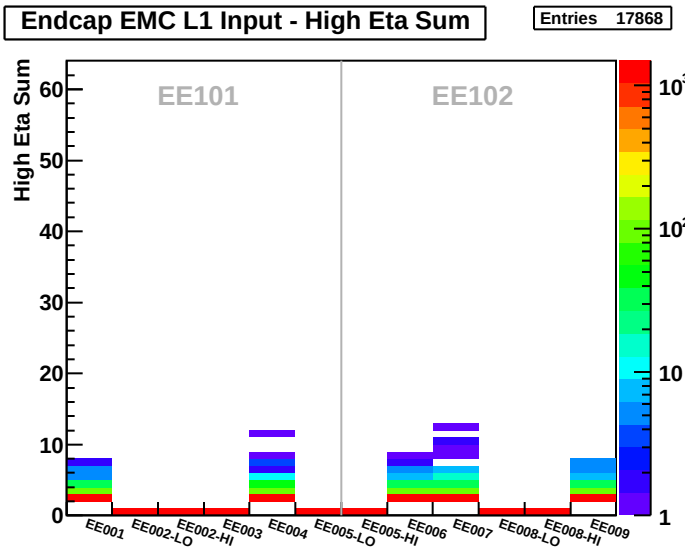

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

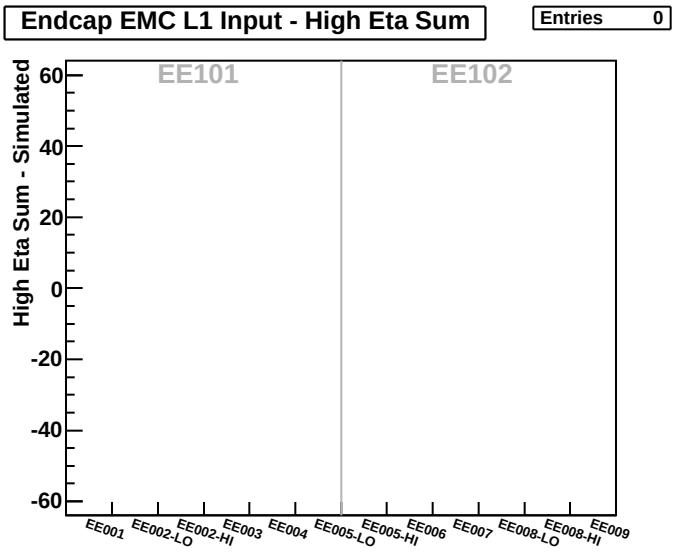

Barrel EMC L1 Input - High Tower Bits
Entries 53604
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

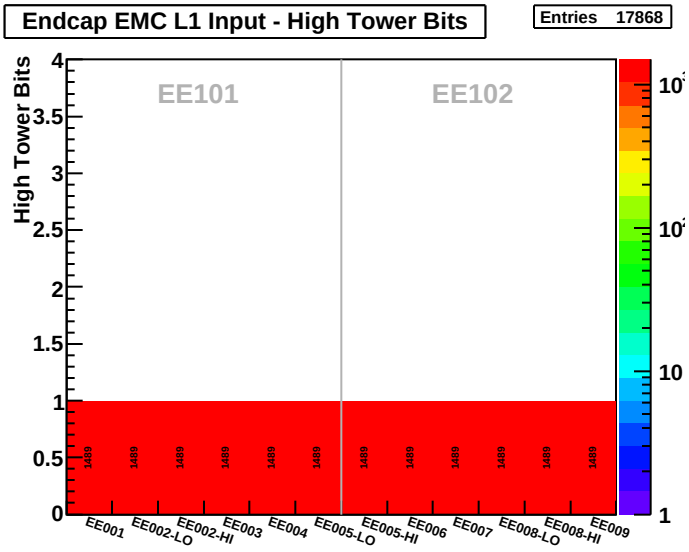

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

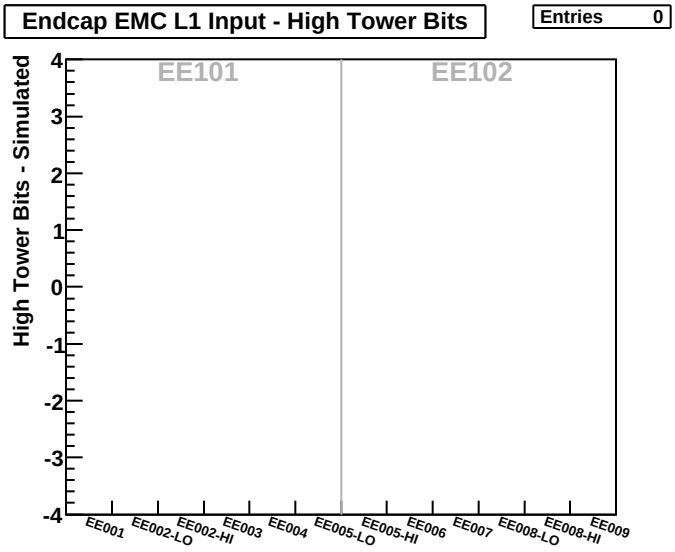

Endcap EMC L1 Input - Low Eta Sum
Entries 17868
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

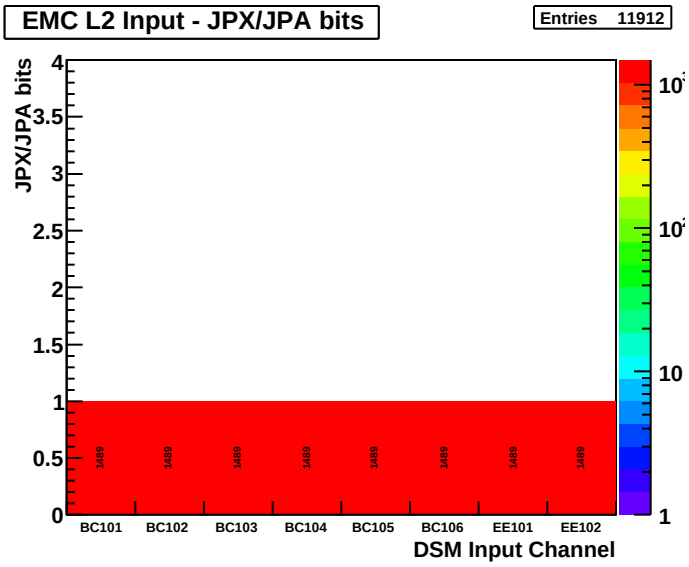

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

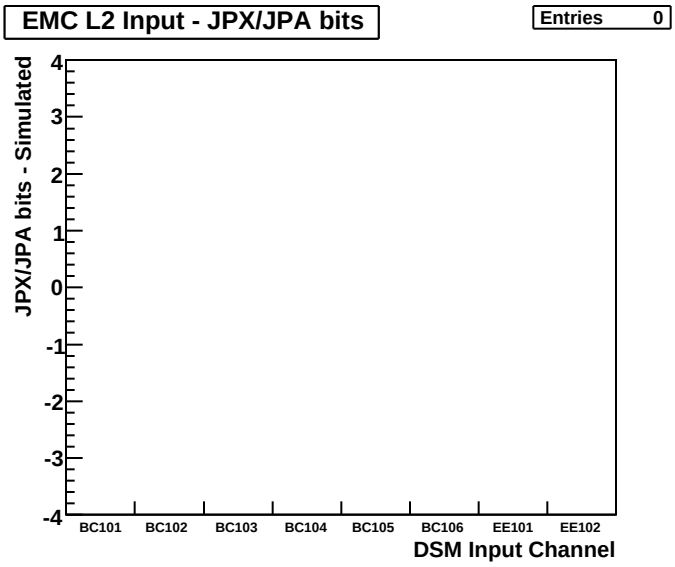

Endcap EMC L1 Input - High Eta Sum
Entries 17868
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

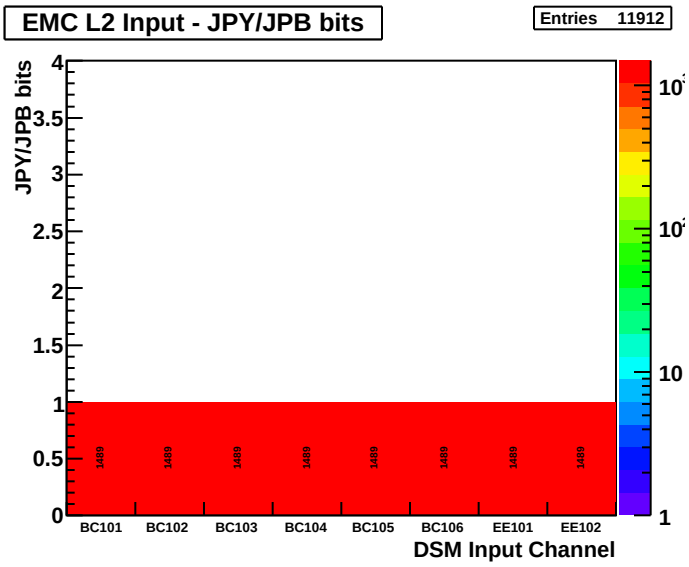

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

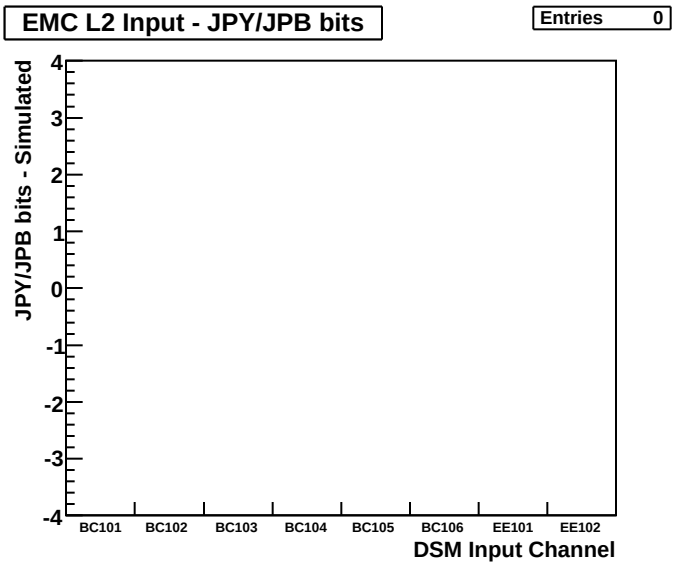

Endcap EMC L1 Input - High Tower Bits
Entries 17868
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

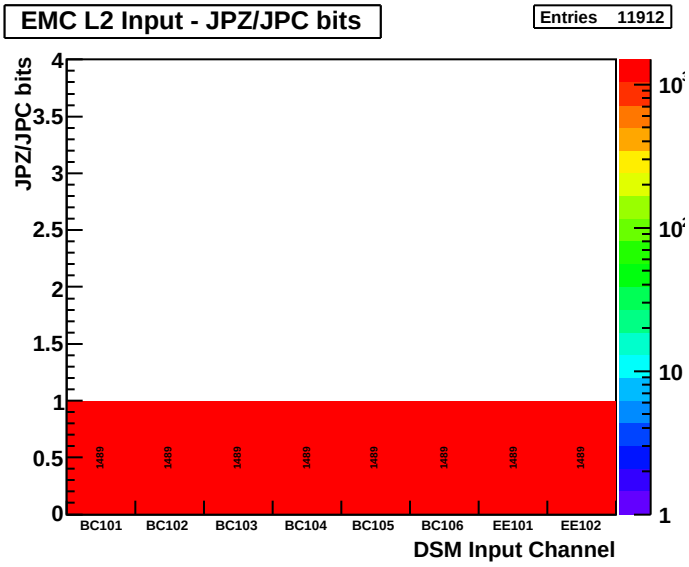

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

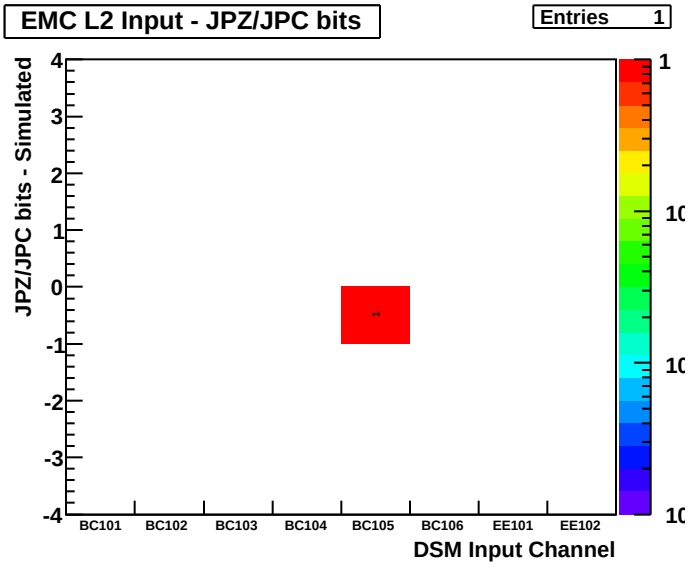

EMC L2 Input - JPX/JPA bits
Entries 11912
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1489

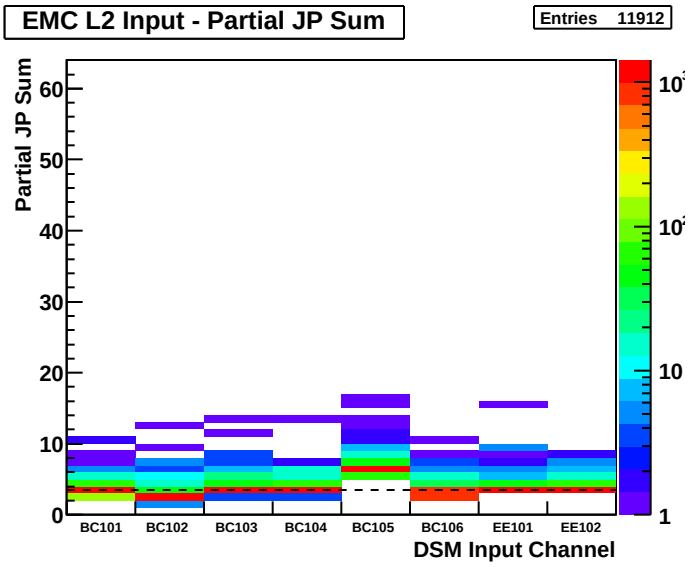

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

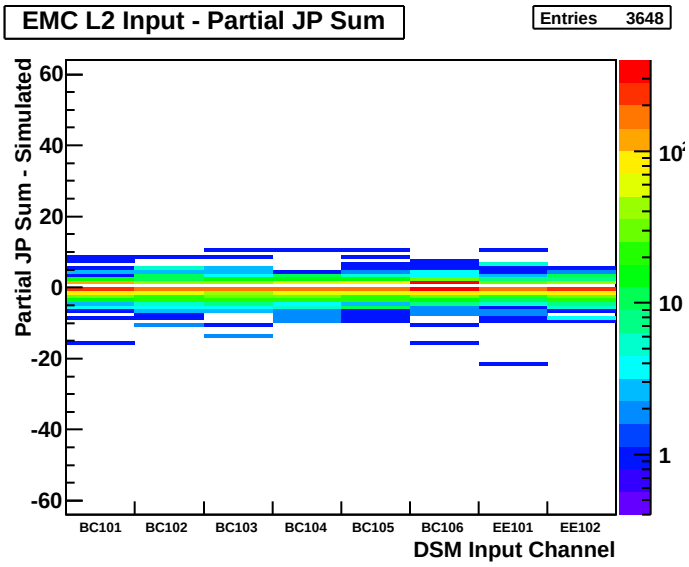

EMC L2 Input - JPY/JPB bits
Entries 11912
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1489

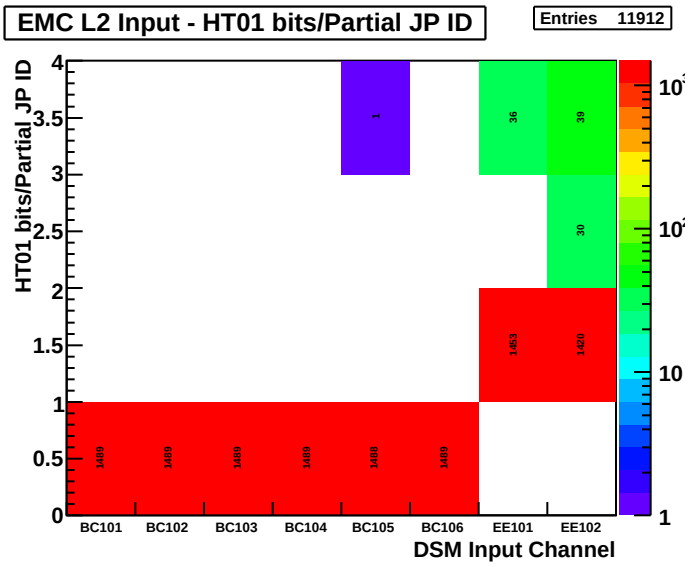

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

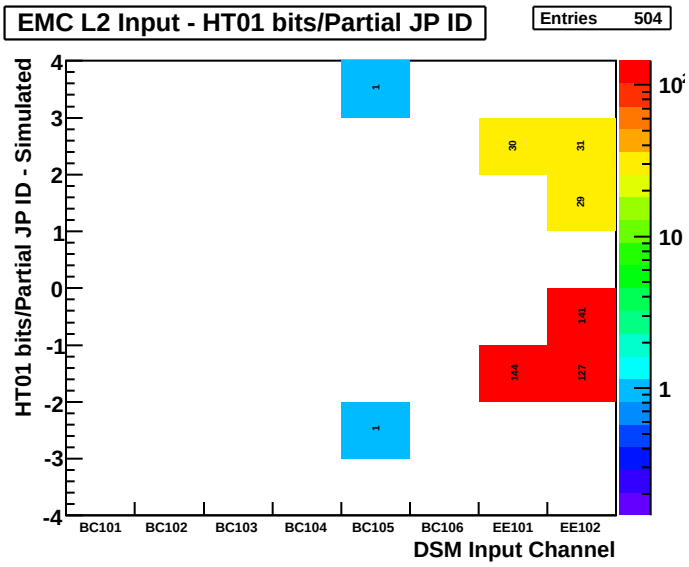

EMC L2 Input - JPZ/JPC bits
Entries 11912
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1489

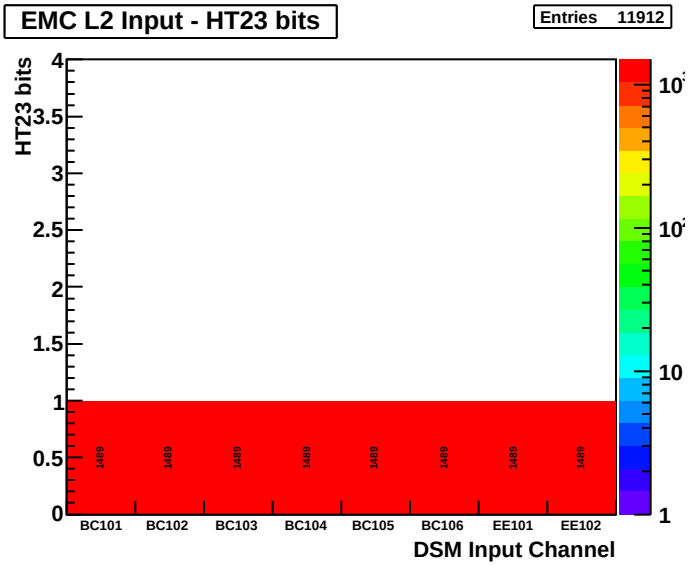

EMC L2 Input - JPZ/JPC bits
Entries 1
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1

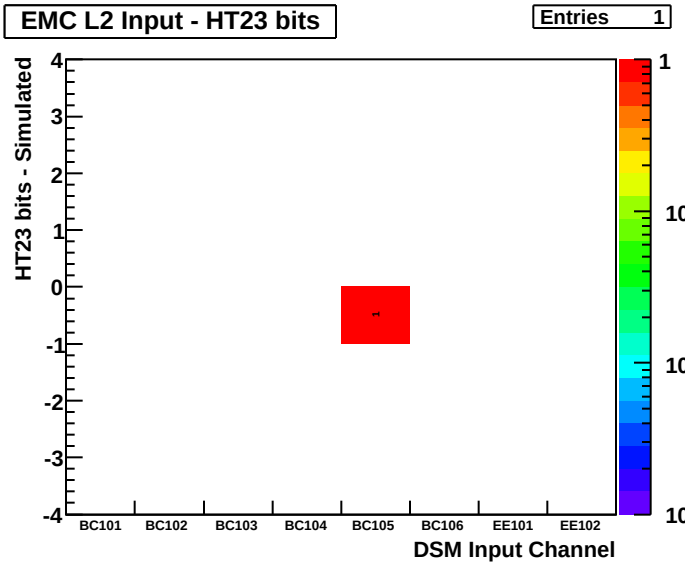

EMC L2 Input - Partial JP Sum
Entries 11912
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

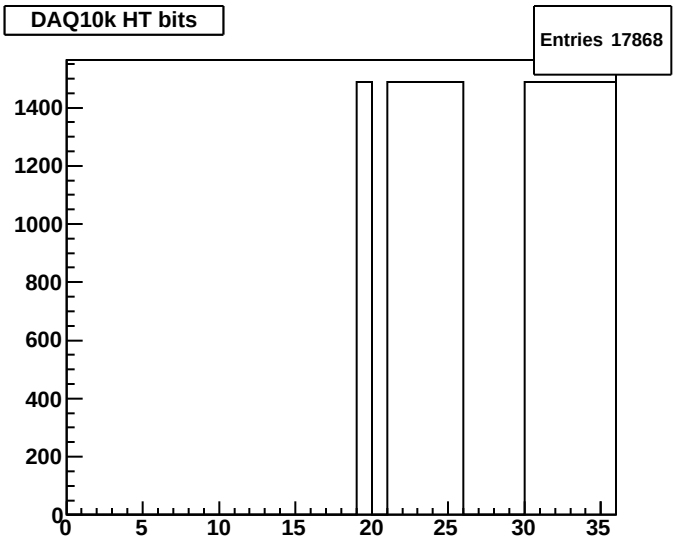

EMC L2 Input - Partial JP Sum
Entries 3648
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

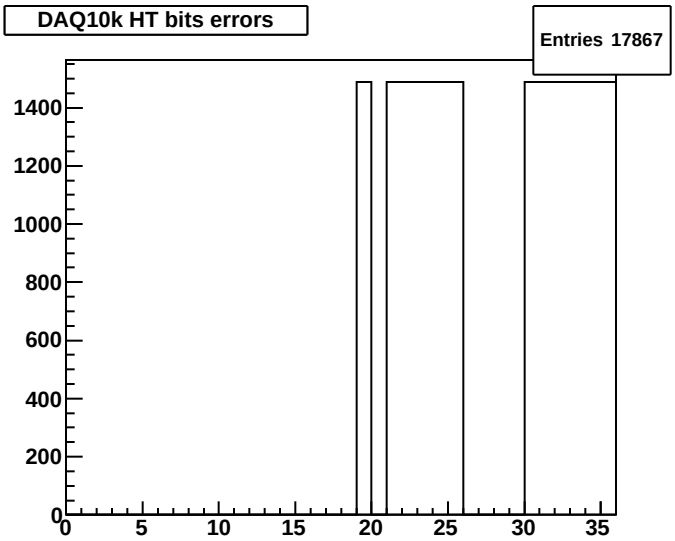

EMC L2 Input - HT01 bits/Partial JP ID
Entries 11912
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

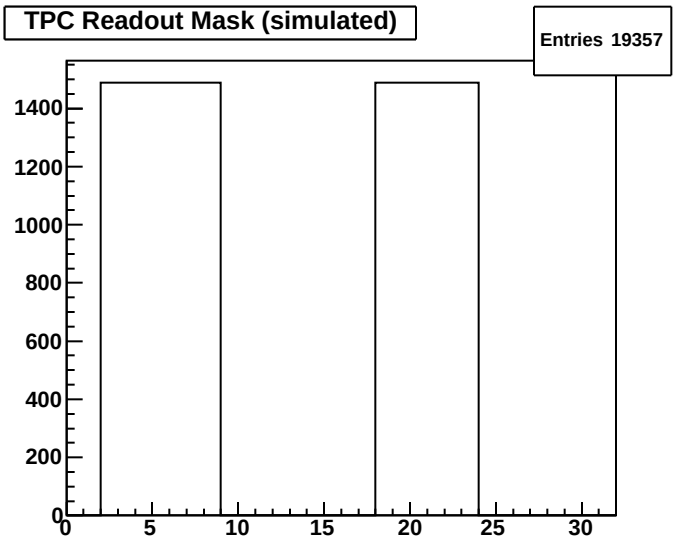

EMC L2 Input - HT01 bits/Partial JP ID
Entries 504
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

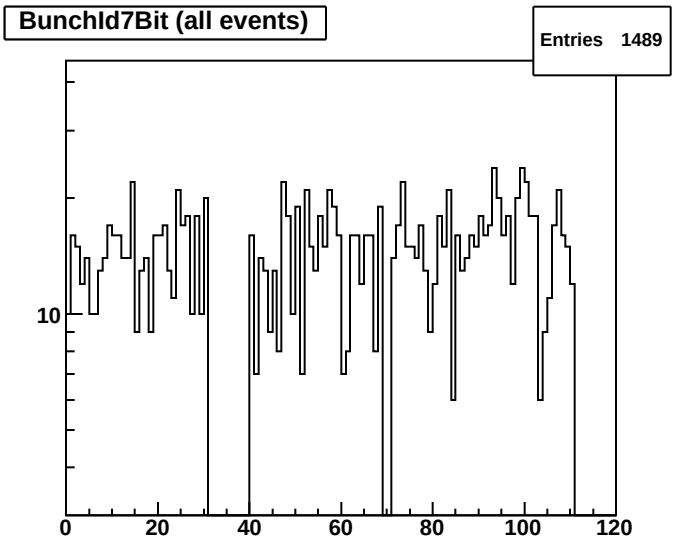

EMC L2 Input - HT23 bits
Entries 11912
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

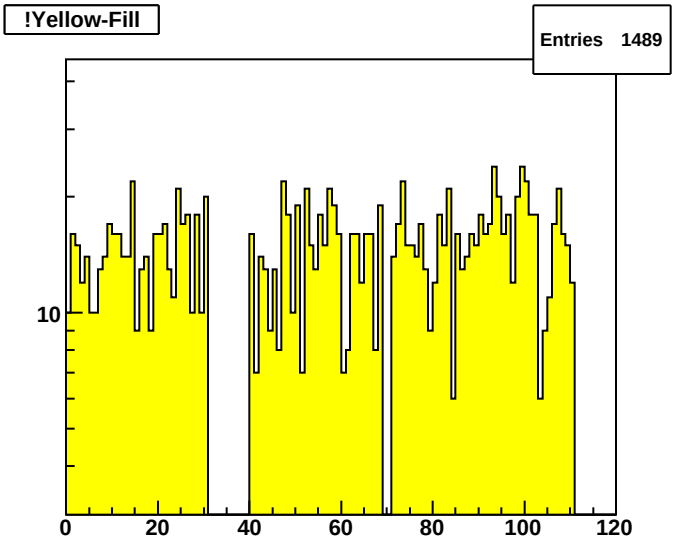

EMC L2 Input - HT23 bits
Entries 1
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

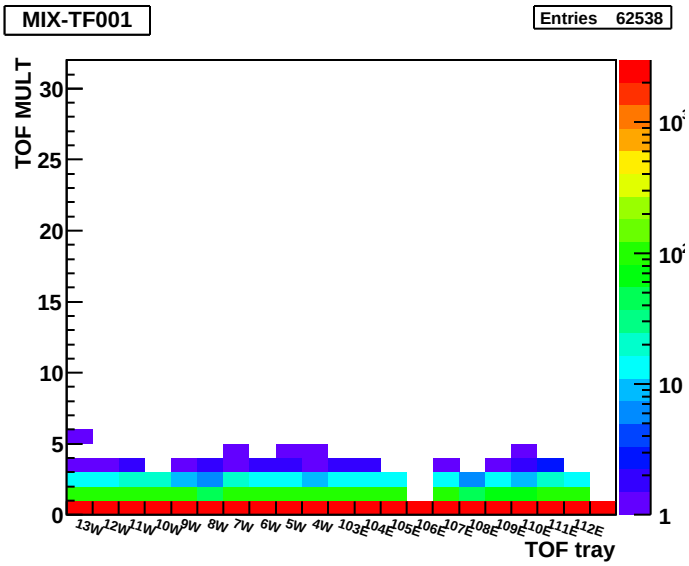

DAQ10k HT bits
Entries 17868
0
200
400
600
800
1000
1200
1400
0
5
10
15
20
25
30
35

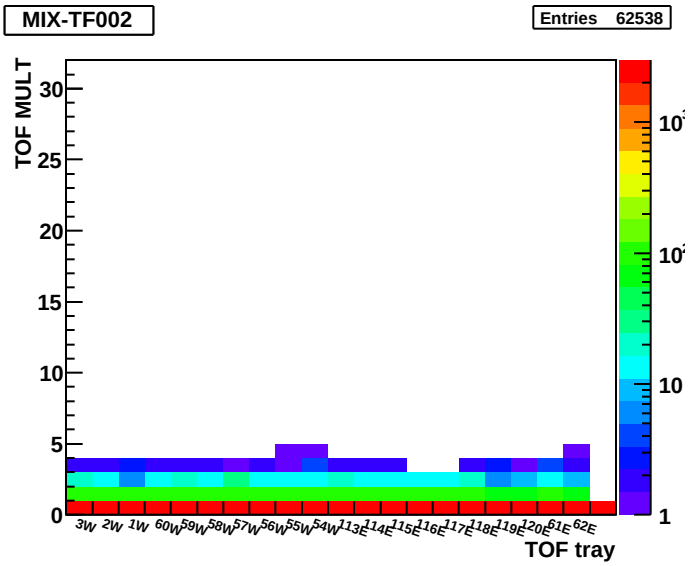

DAQ10k HT bits errors
Entries 17867
0
200
400
600
800
1000
1200
1400
0
5
10
15
20
25
30
35

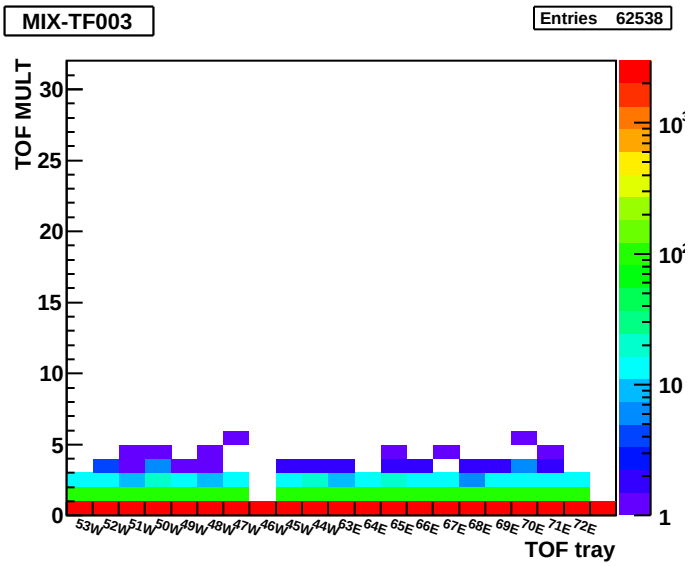

TPC Readout Mask (simulated)
Entries 19357
0
200
400
600
800
1000
1200
1400
0
5
10
15
20
25
30

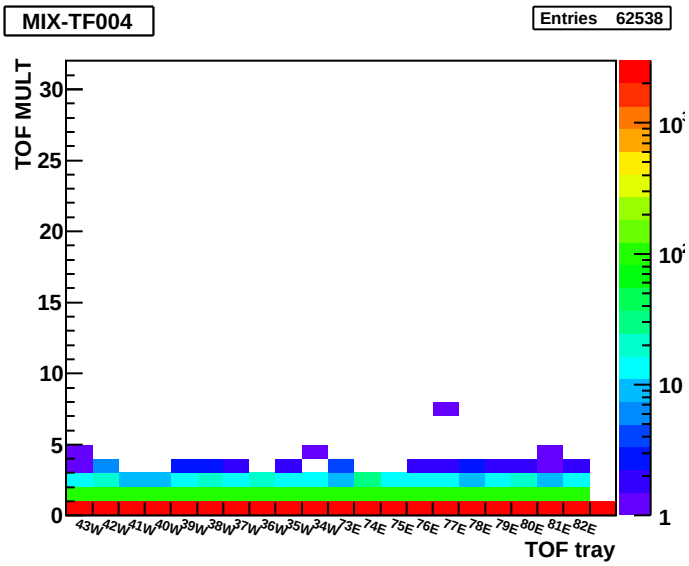

BunchId7Bit (all events)
Entries 1489
10
0
20
40
60
80
100
120

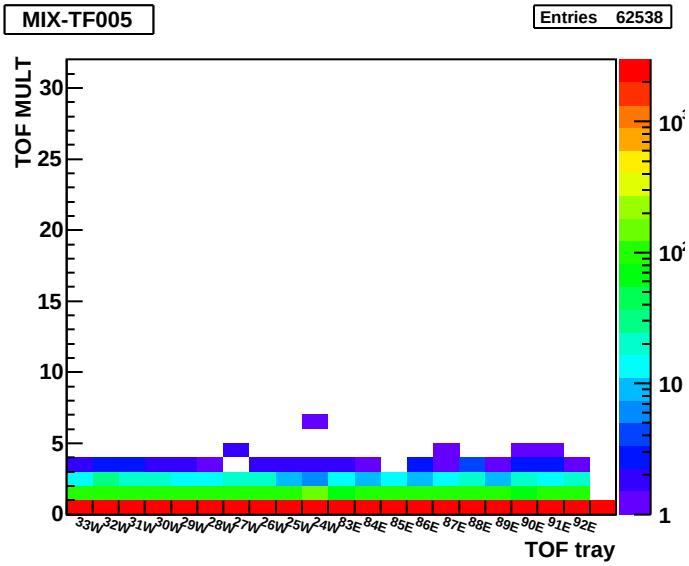

!Yellow-Fill
Entries 1489
10
0
20
40
60
80
100
120

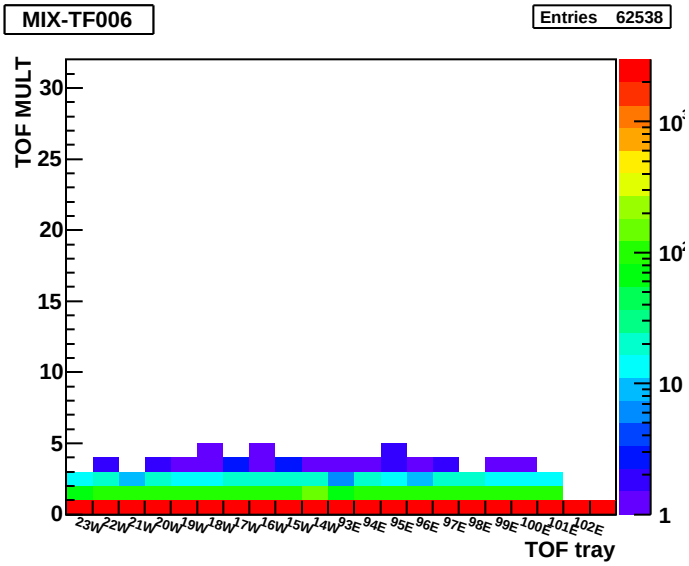

MIX-TF001
Entries 62538
TOF MULT
TOF tray

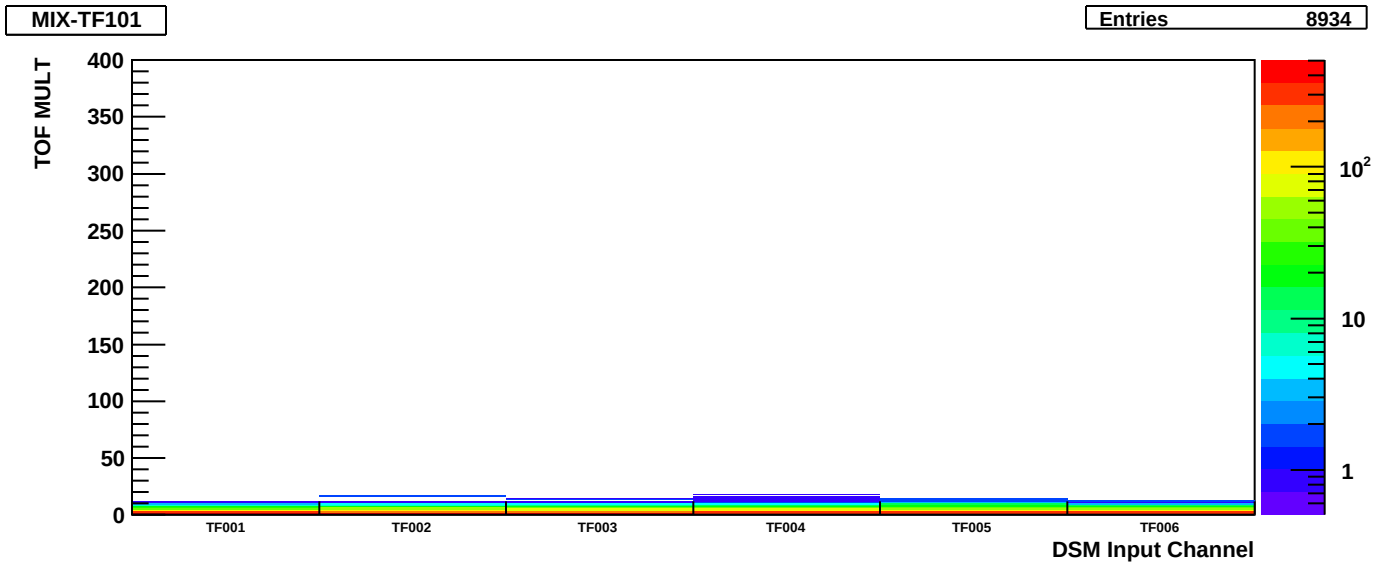

MIX-TF002
Entries 62538
TOF MULT
TOF tray

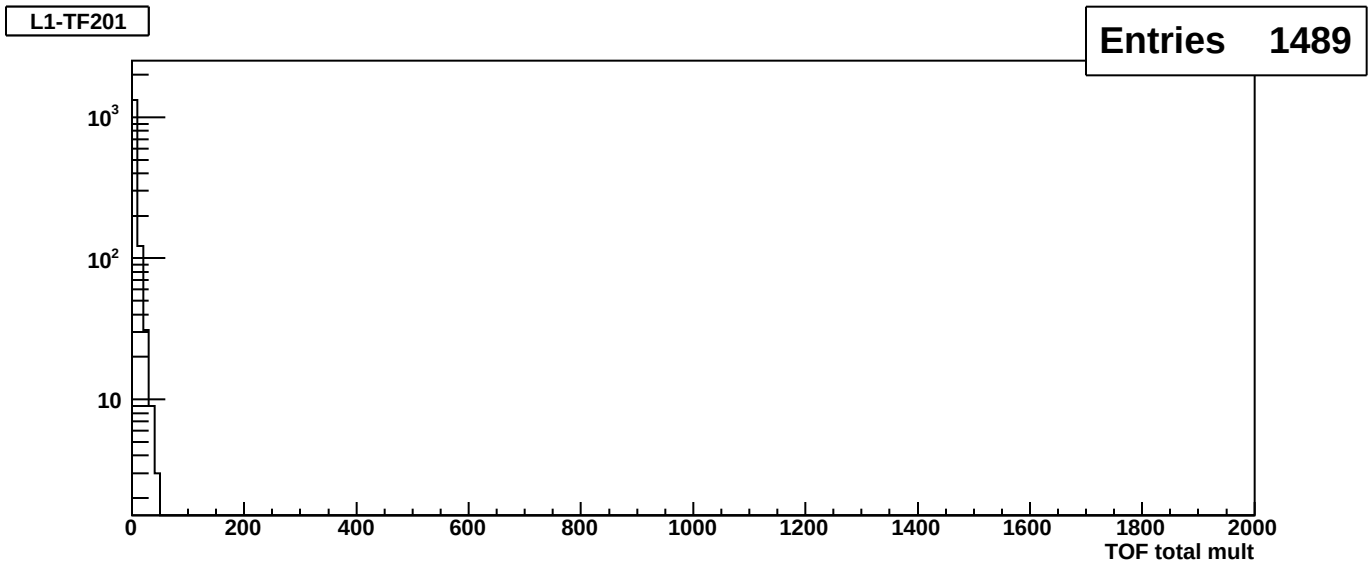

MIX-TF003
Entries 62538
TOF MULT
TOF tray

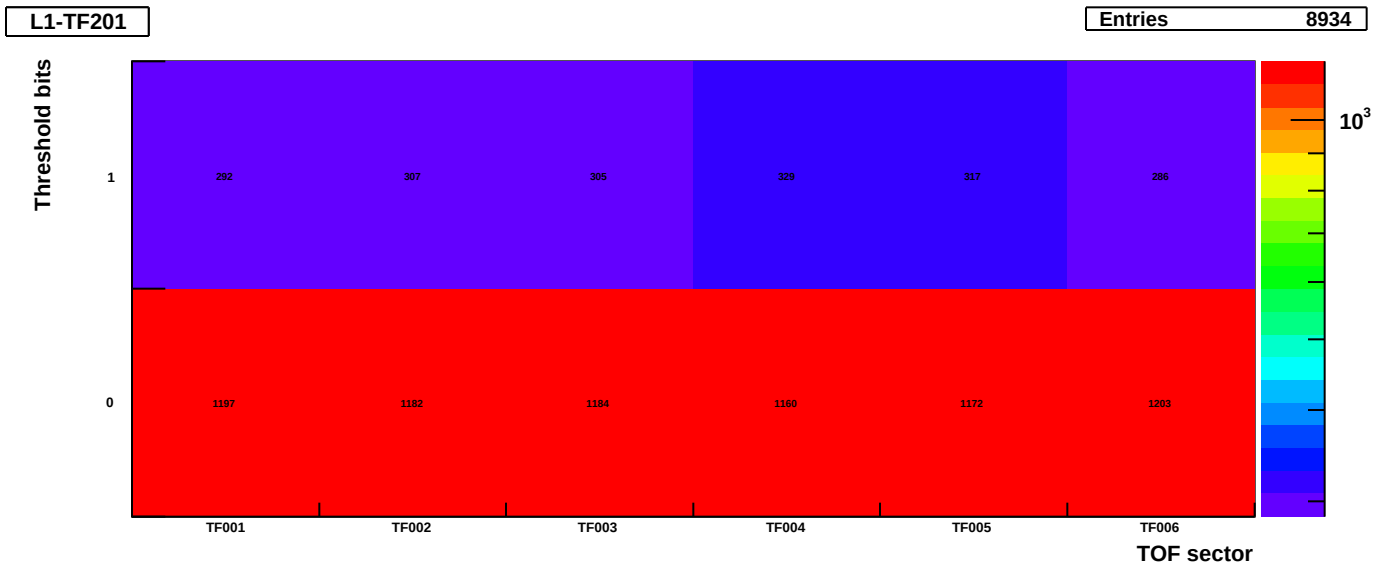

MIX-TF004
Entries 62538
TOF MULT
TOF tray

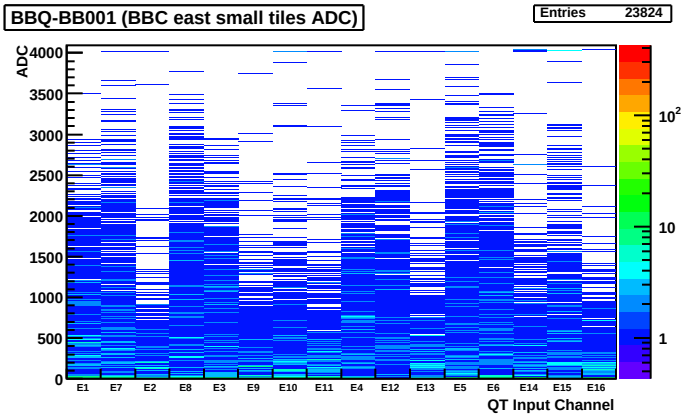

MIX-TF005
Entries 62538
TOF MULT
TOF tray

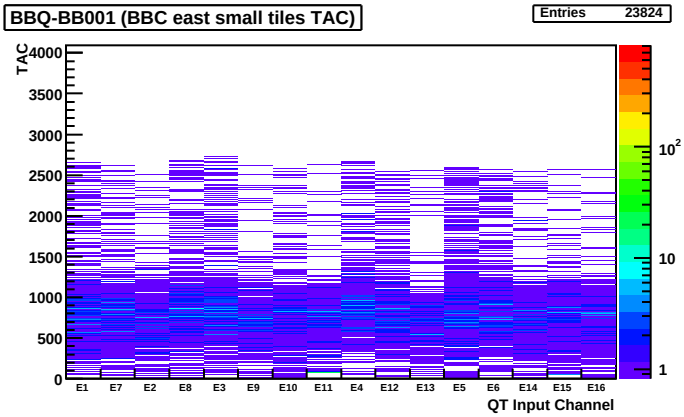

MIX-TF006
Entries 62538
TOF MULT
TOF tray

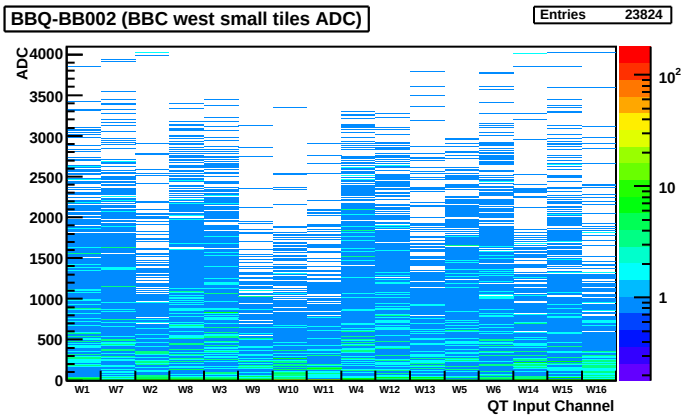

MIX-TF101
Entries 8934
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^2
10
1

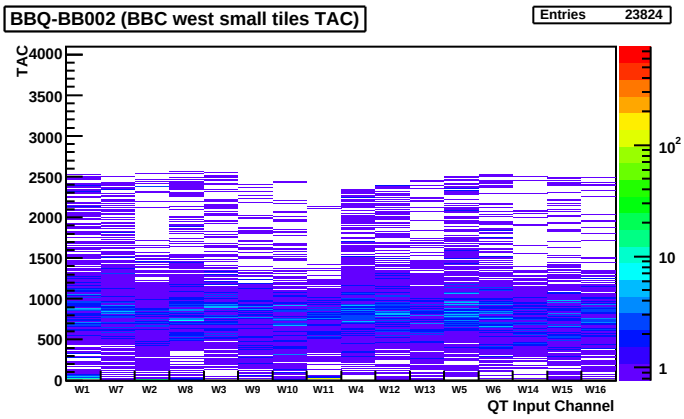

L1-TF201
Entries 1489
10^3
10^2
10
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

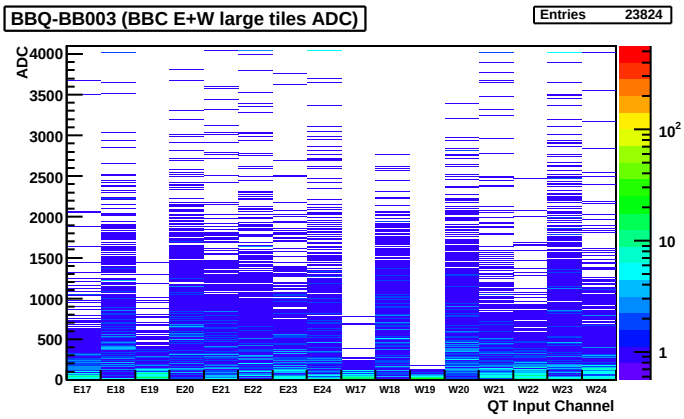

L1-TF201
Entries 8934
Threshold bits
1
0
292
307
305
329
317
286
1197
1182
1184
1160
1172
1203
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^3

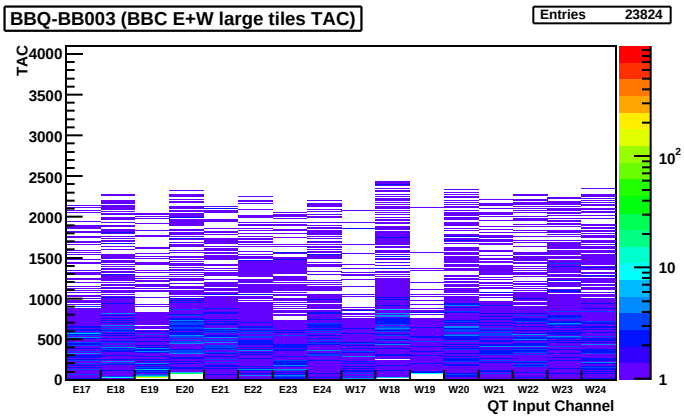

BBQ-BB001 (BBC east small tiles ADC)
Entries 23824
ADC
QT Input Channel

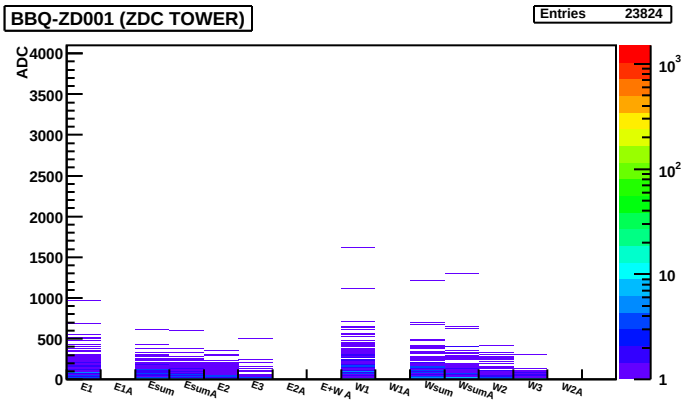

BBQ-BB001 (BBC east small tiles TAC)
Entries 23824
TAC
QT Input Channel

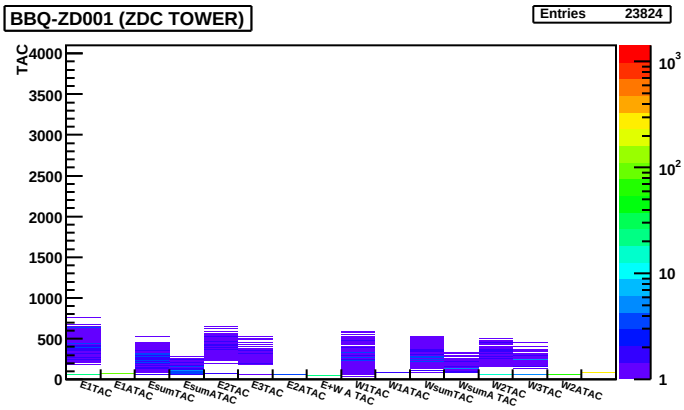

BBQ-BB002 (BBC west small tiles ADC)
Entries 23824
ADC
QT Input Channel

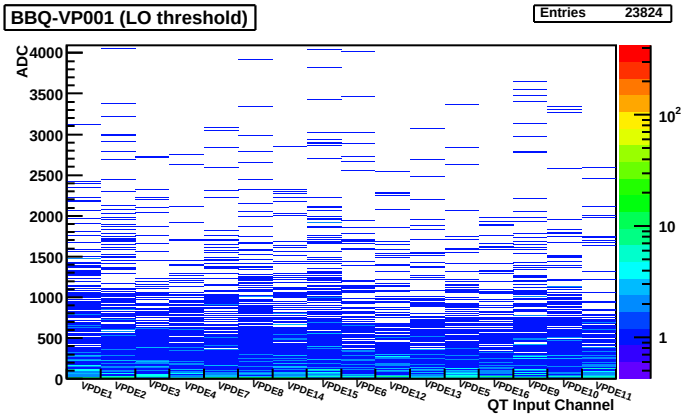

BBQ-BB002 (BBC west small tiles TAC)
Entries 23824
TAC
QT Input Channel

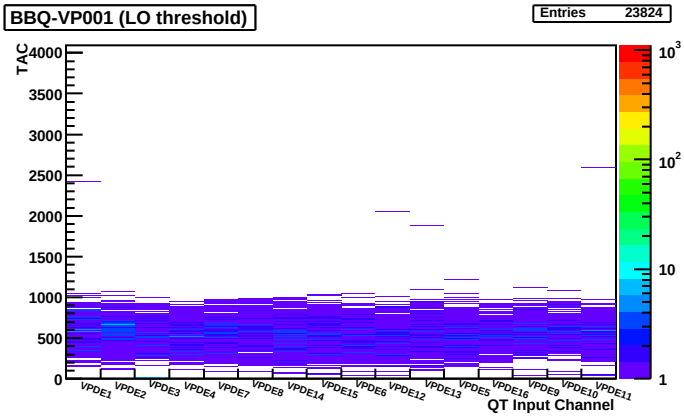

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 23824
ADC
QT Input Channel

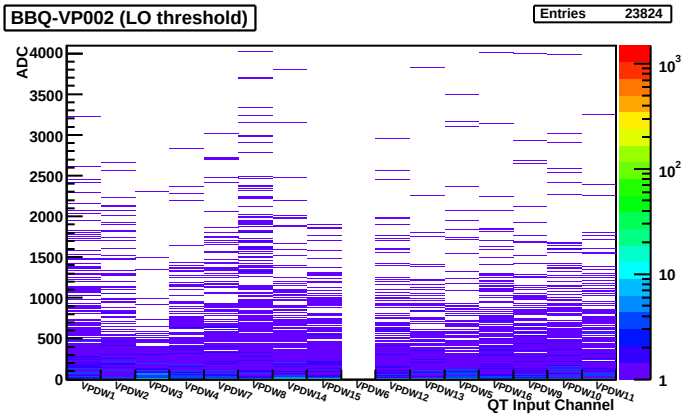

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 23824
TAC
QT Input Channel

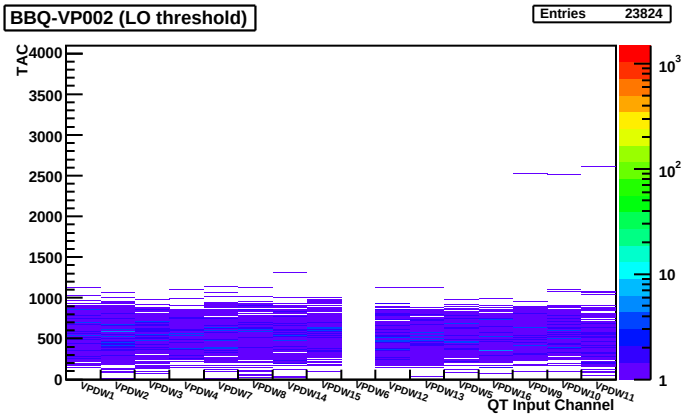

BBQ-ZD001 (ZDC TOWER)
Entries 23824
ADC

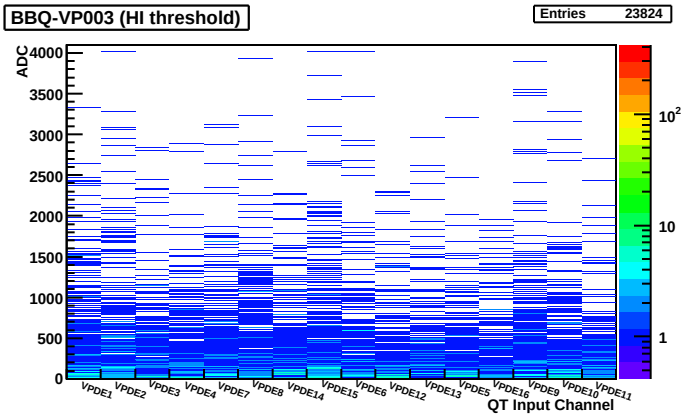

BBQ-ZD001 (ZDC TOWER)
Entries 23824
TAC

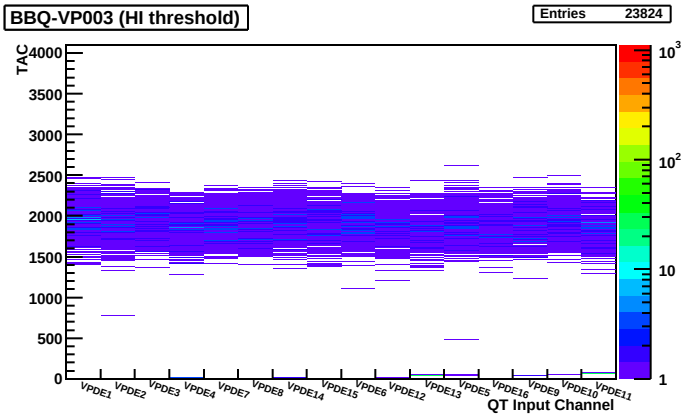

BBQ-VP001 (LO threshold)
Entries 23824
ADC
QT Input Channel

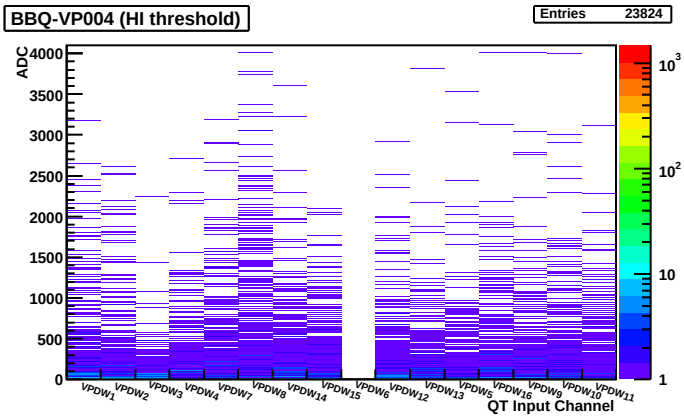

BBQ-VP001 (LO threshold)
Entries 23824
TAC
QT Input Channel

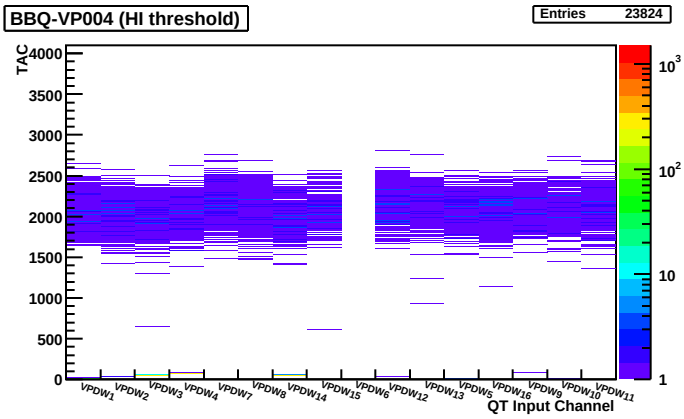

BBQ-VP002 (LO threshold)
Entries 23824
ADC
QT Input Channel

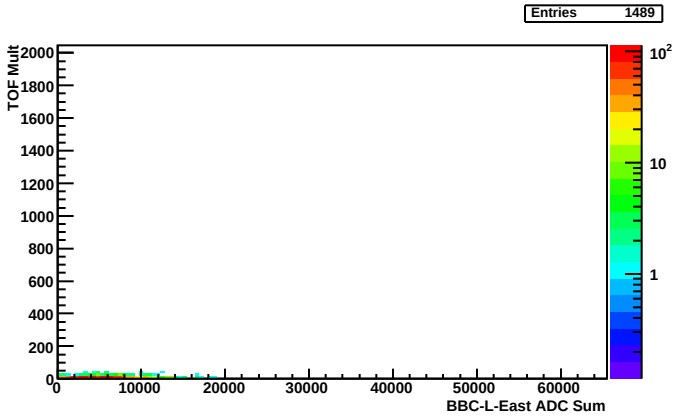

BBQ-VP002 (LO threshold)
Entries 23824
TAC
QT Input Channel

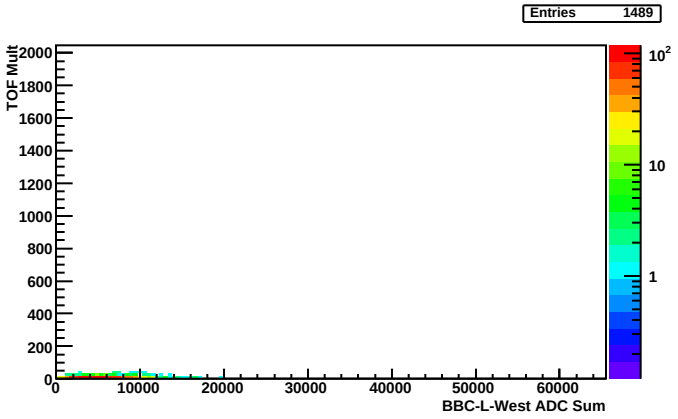

BBQ-VP003 (HI threshold)
Entries 23824
ADC
QT Input Channel

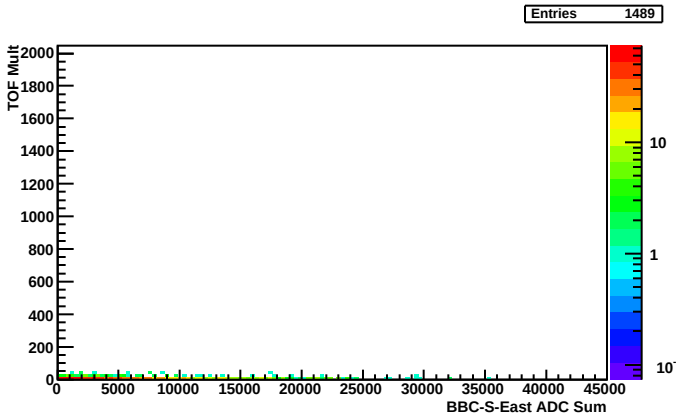

BBQ-VP003 (HI threshold)
Entries 23824
TAC
QT Input Channel

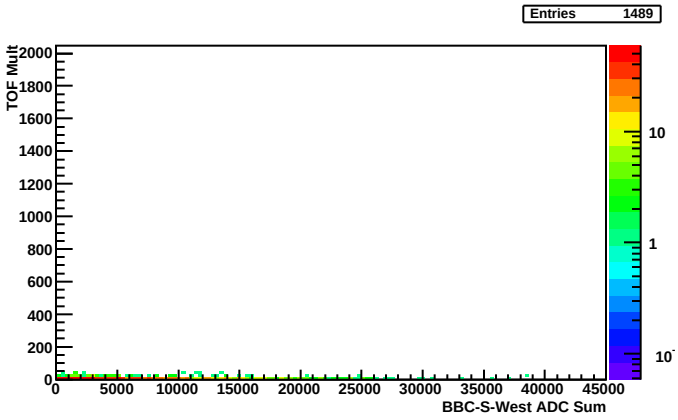

BBQ-VP004 (HI threshold)
Entries 23824
ADC
QT Input Channel

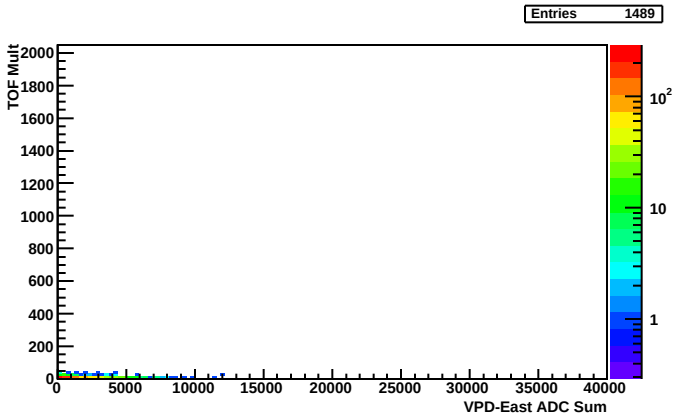

BBQ-VP004 (HI threshold)
Entries 23824
TAC
QT Input Channel

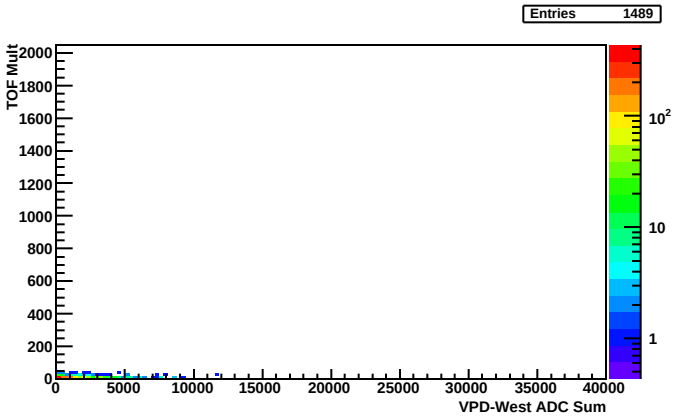

Entries 1489
TOF Mult
BBC-L-East ADC Sum

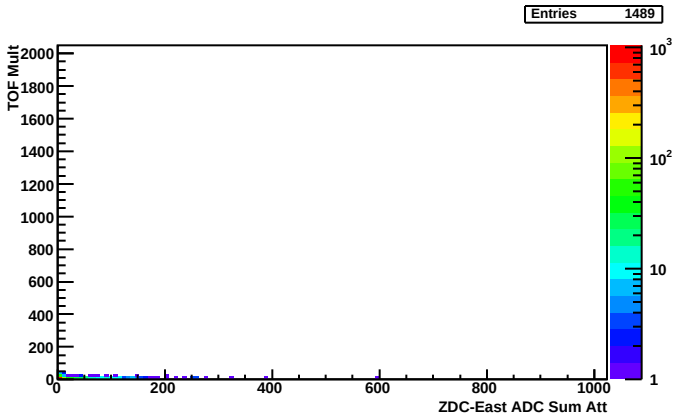

Entries 1489
TOF Mult
BBC-L-West ADC Sum

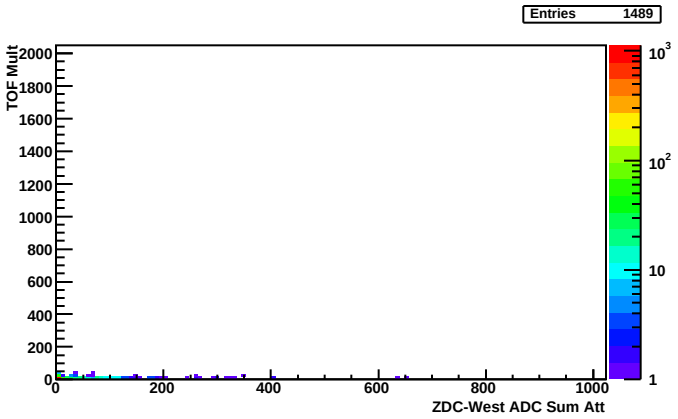

Entries 1489
TOF Mult
BBC-S-East ADC Sum

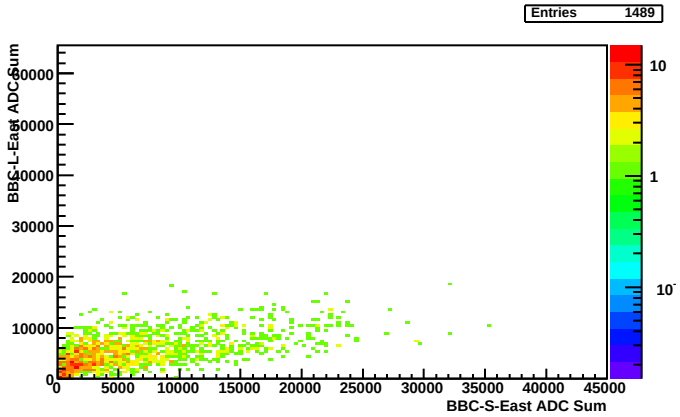

Entries 1489
TOF Mult
BBC-S-West ADC Sum

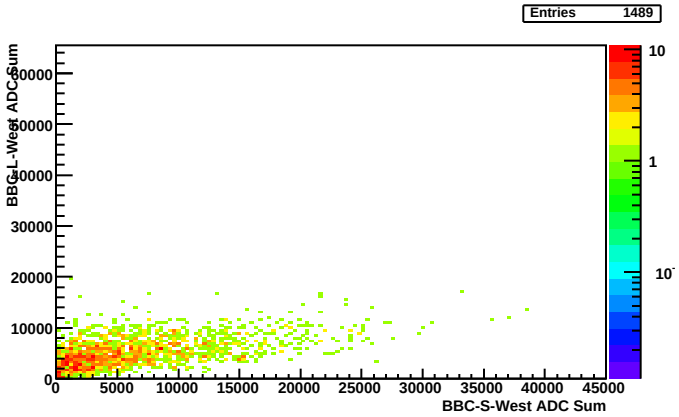

Entries 1489
TOF Mult
VPD-East ADC Sum

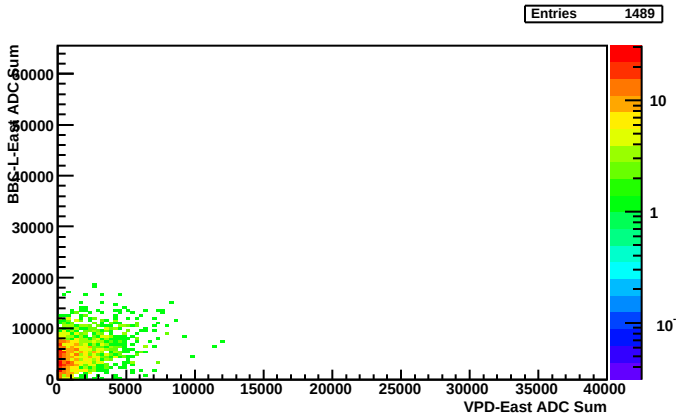

Entries 1489
TOF Mult
VPD-West ADC Sum

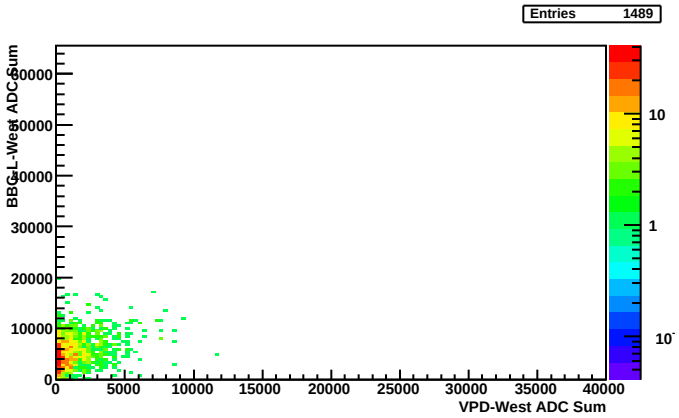

Entries 1489
TOF Mult
ZDC-East ADC Sum Att

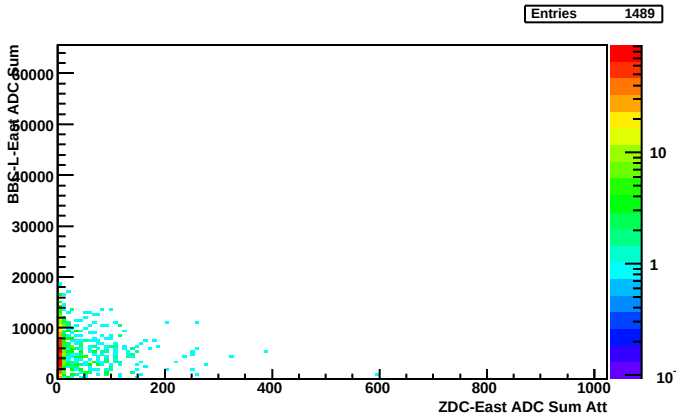

Entries 1489
TOF Mult
ZDC-West ADC Sum Att

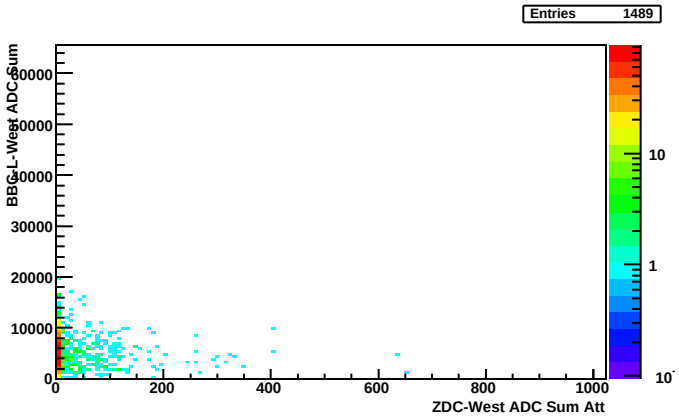

Entries 1489
BBC-L-East ADC Sum
BBC-S-East ADC Sum

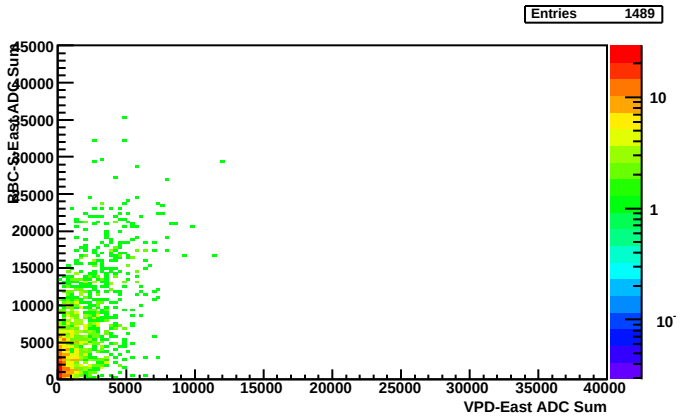

Entries 1489
BBC-L-West ADC Sum
BBC-S-West ADC Sum

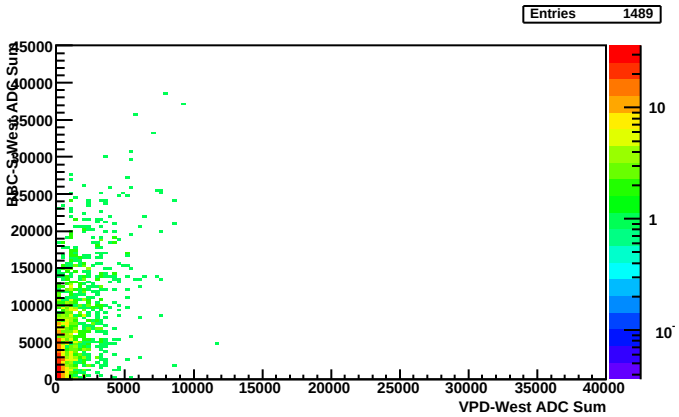

Entries 1489
BBC-L-East ADC Sum
VPD-East ADC Sum

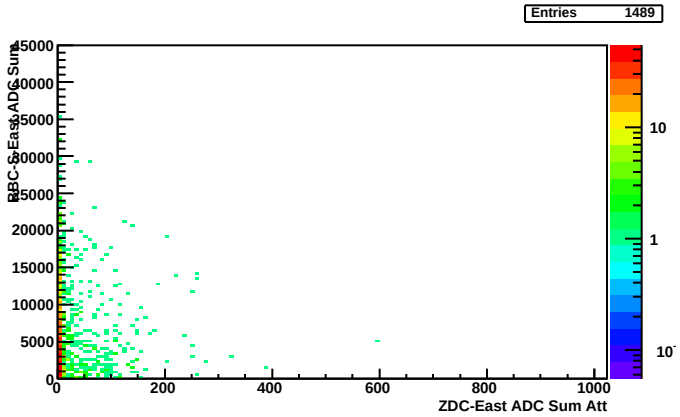

Entries 1489
BBC-L-West ADC Sum
VPD-West ADC Sum

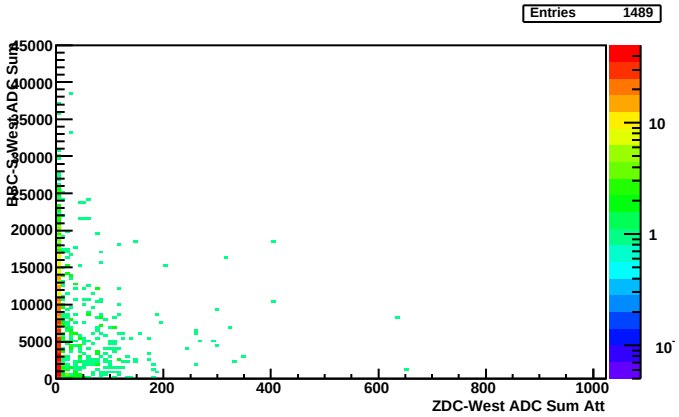

Entries 1489
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

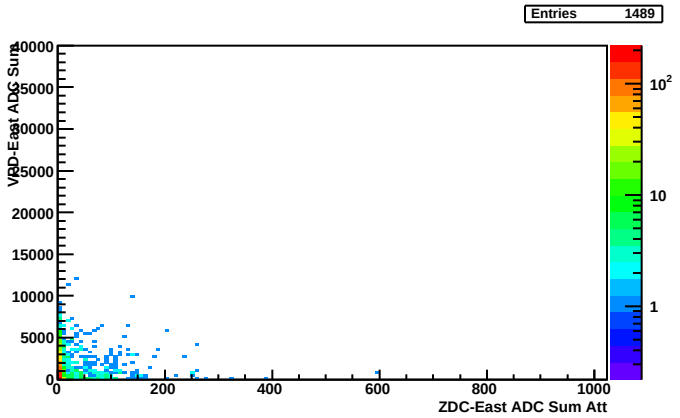

Entries 1489
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

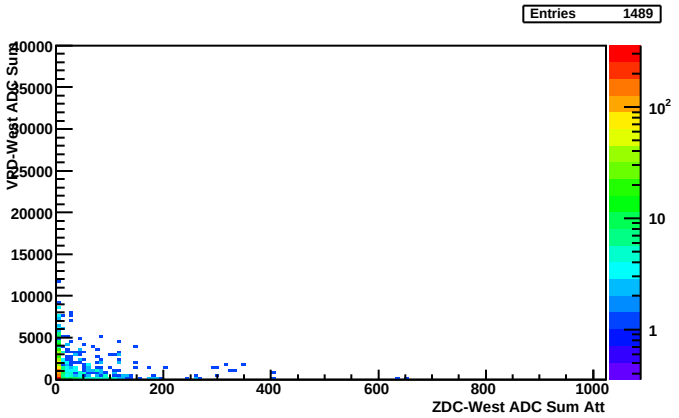

Entries 1489
BBC-S-East ADC Sum
VPD-East ADC Sum

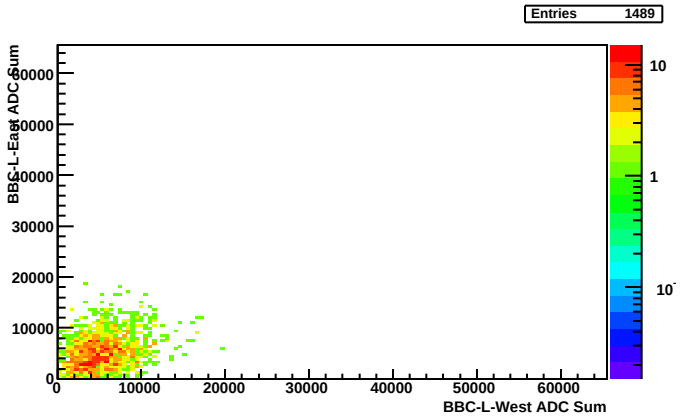

Entries 1489
BBC-S-West ADC Sum
VPD-West ADC Sum

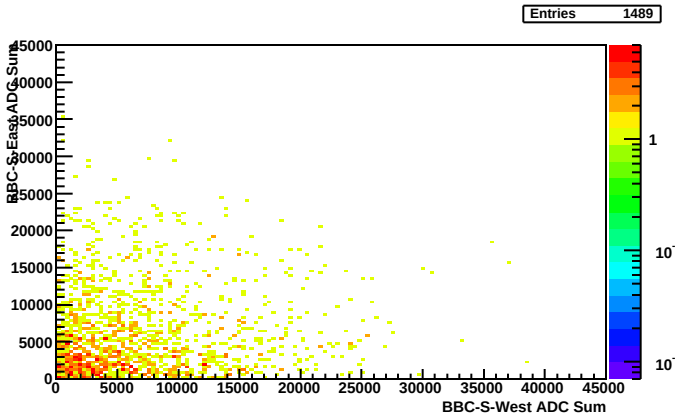

Entries 1489
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

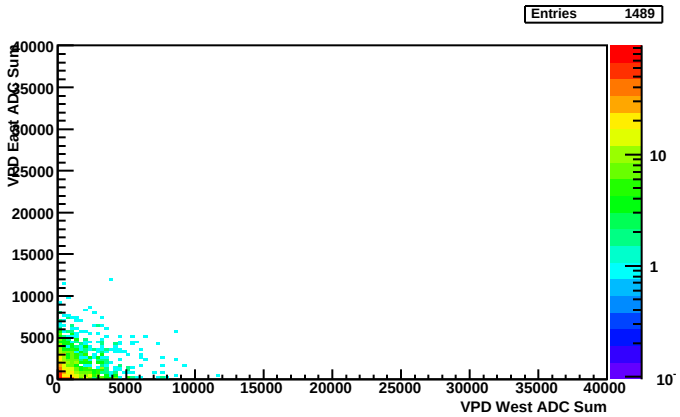

Entries 1489
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

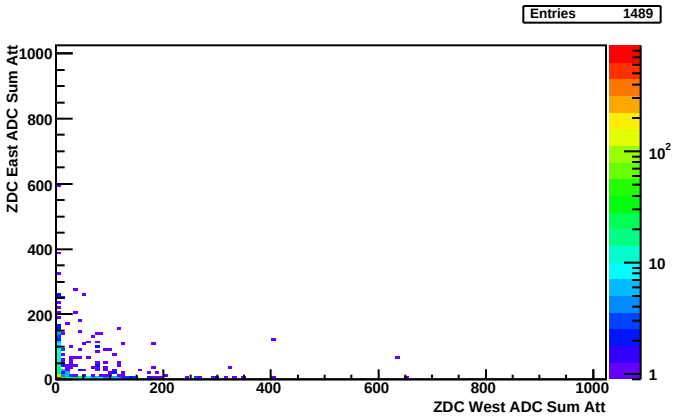

Entries 1489
VPD-East ADC Sum
ZDC-East ADC Sum Att

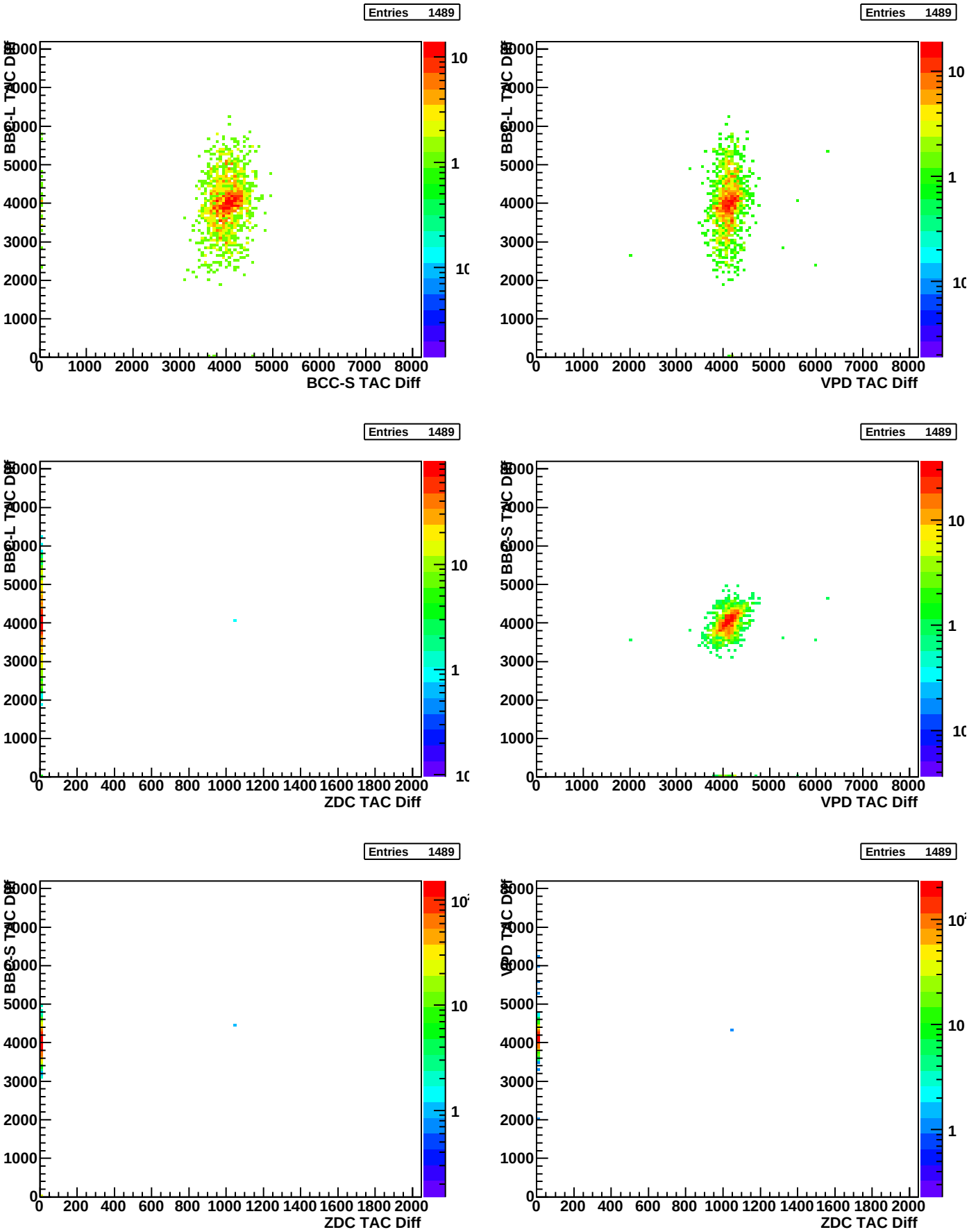

Entries 1489
VPD-West ADC Sum
ZDC-West ADC Sum Att

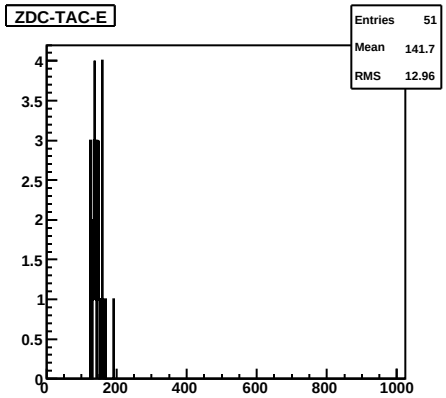

Entries 1489
BBC-L-East ADC Sum
BBC-L-West ADC Sum

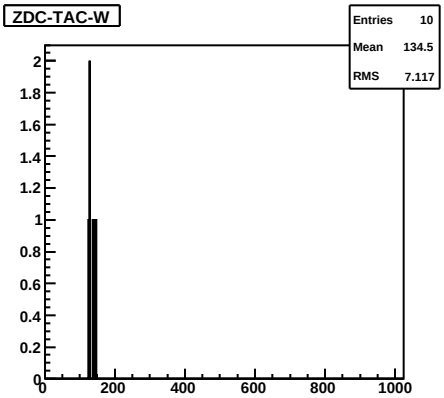

Entries 1489
BBC-S-East ADC Sum
BBC-S-West ADC Sum

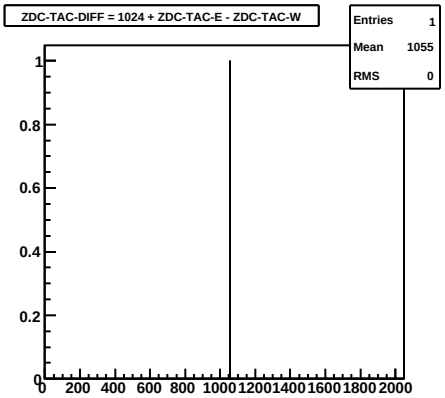

Entries 1489
VPD East ADC Sum
VPD West ADC Sum

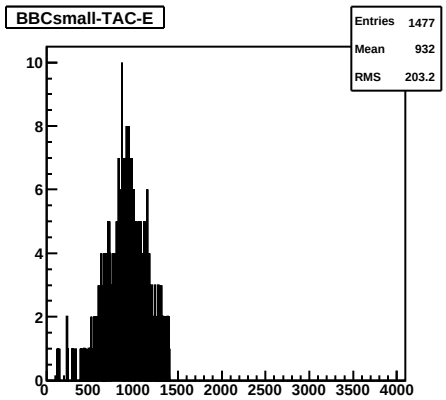

Entries 1489
ZDC East ADC Sum Att
ZDC West ADC Sum Att

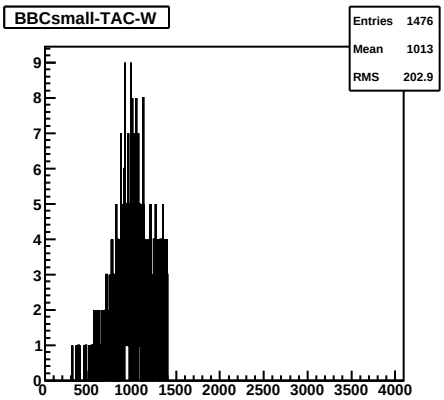

Entries 1489
BBC-L TAC Diff
BCC-S TAC Diff
Entries 1489
BBC-L TAC Diff
VPD TAC Diff
Entries 1489
BBC-L TAC Diff
ZDC TAC Diff
Entries 1489
BBC-S TAC Diff
VPD TAC Diff
Entries 1489
BBC-S TAC Diff
ZDC TAC Diff
Entries 1489
VPD TAC Diff
ZDC TAC Diff

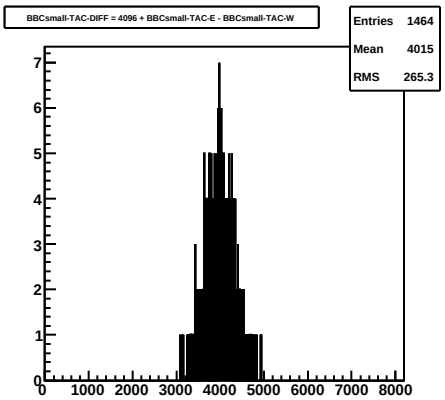

ZDC-TAC-E
Entries 51
Mean 141.7
RMS 12.96

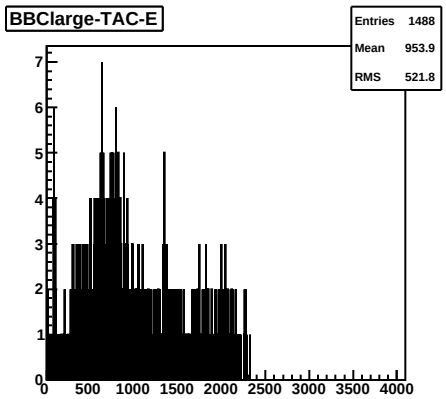

ZDC-TAC-W
Entries 10
Mean 134.5
RMS 7.117

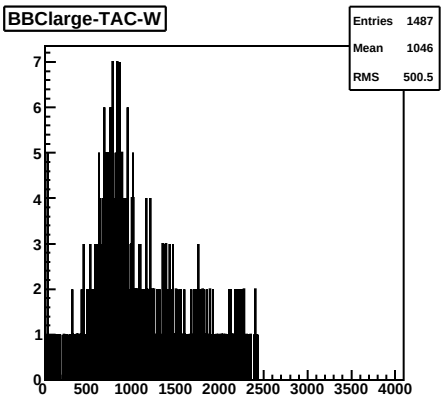

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 1
Mean 1055
RMS 0

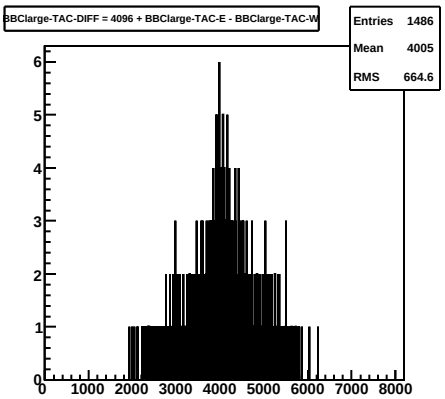

BBCsmall-TAC-E
Entries 1477
Mean 932
RMS 203.2

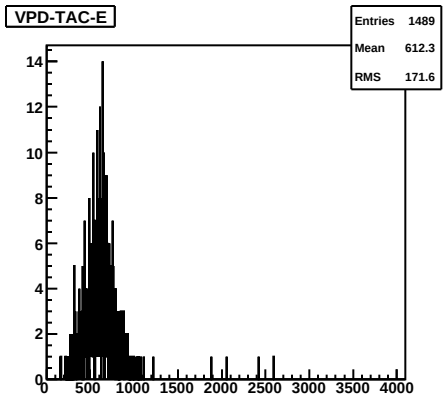

BBCsmall-TAC-W
Entries 1476
Mean 1013
RMS 202.9

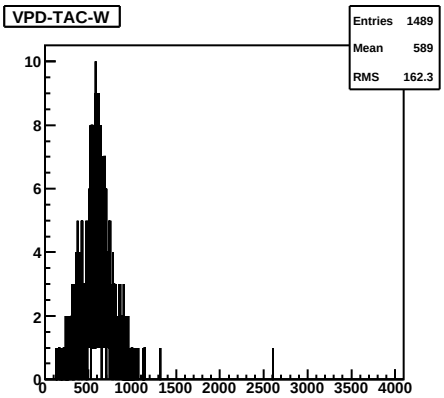

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 1464
Mean 4015
RMS 265.3

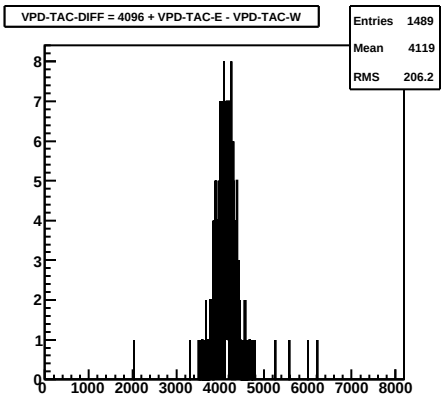

BBClarge-TAC-E
Entries 1488
Mean 953.9
RMS 521.8

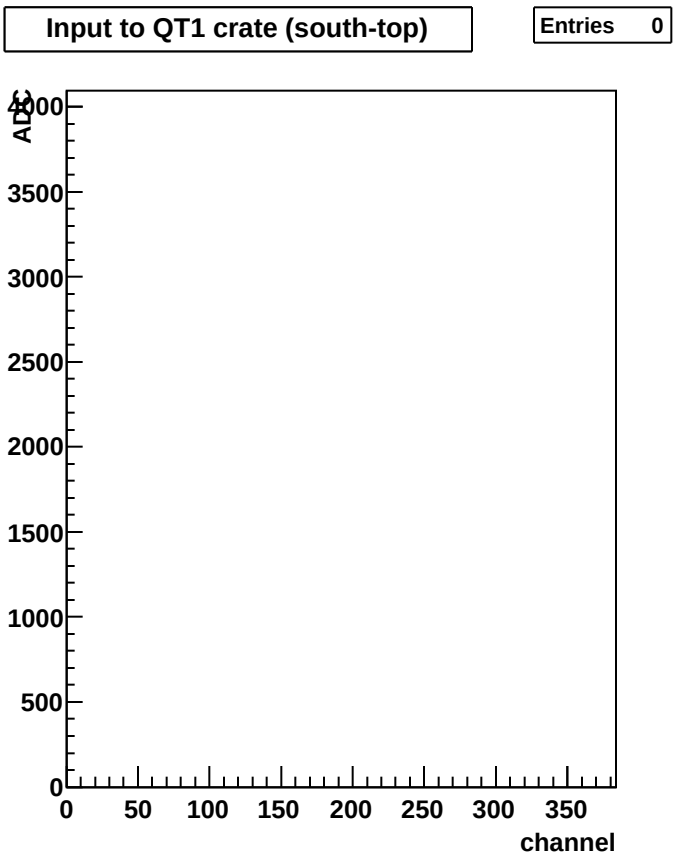

BBClarge-TAC-W
Entries 1487
Mean 1046
RMS 500.5

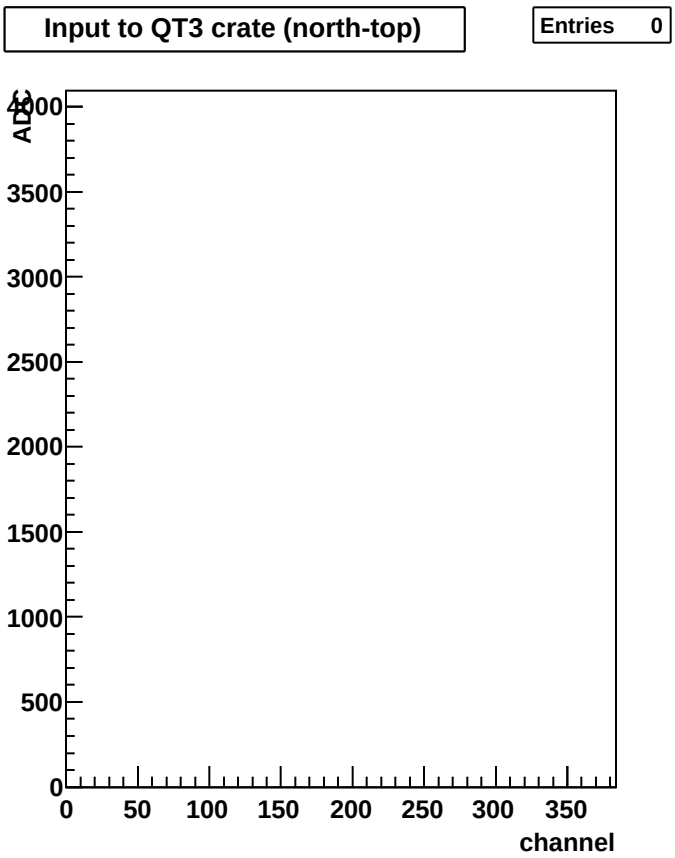

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 1486
Mean 4005
RMS 664.6

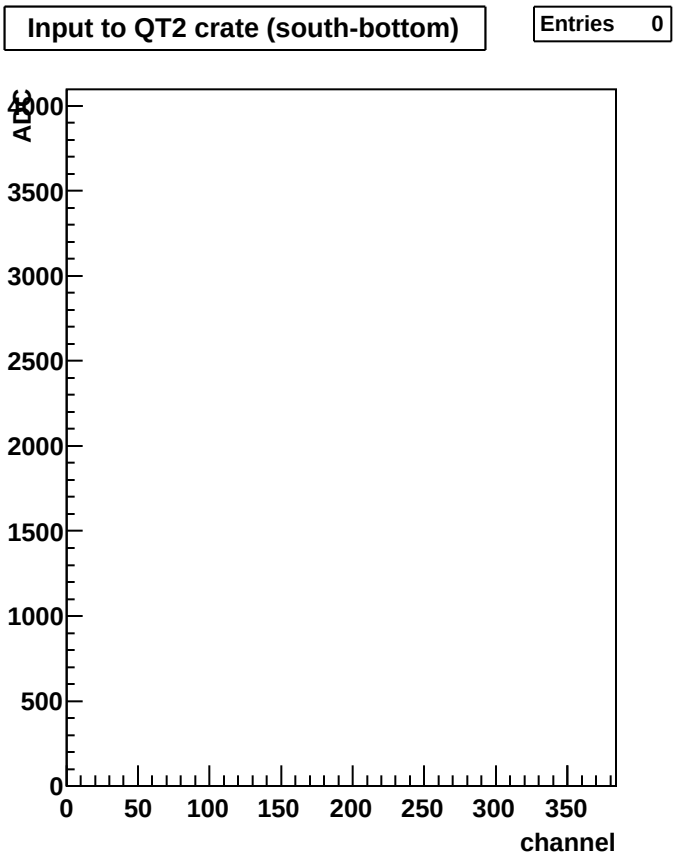

VPD-TAC-E
Entries 1489
Mean 612.3
RMS 171.6

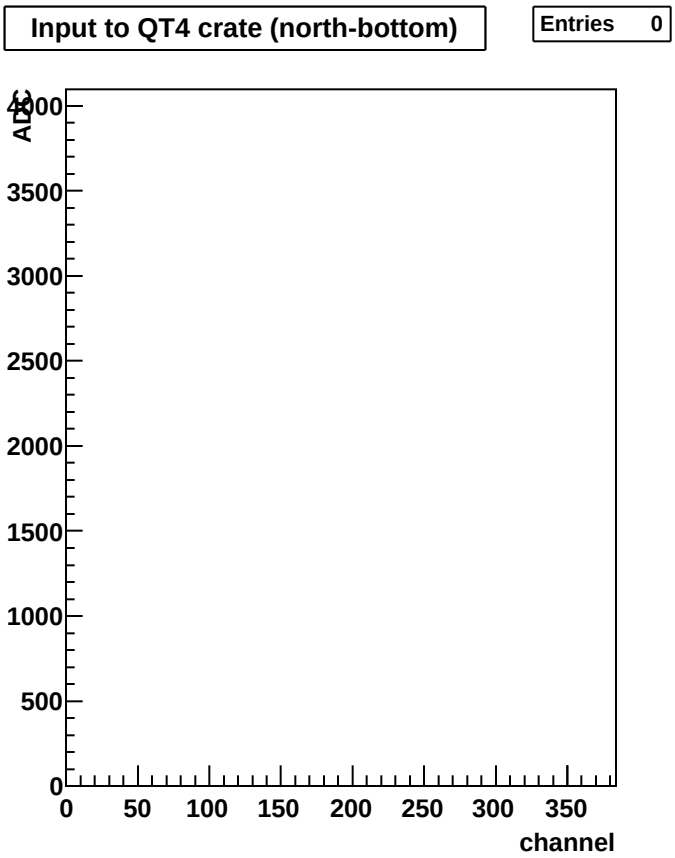

VPD-TAC-W
Entries 1489
Mean 589
RMS 162.3

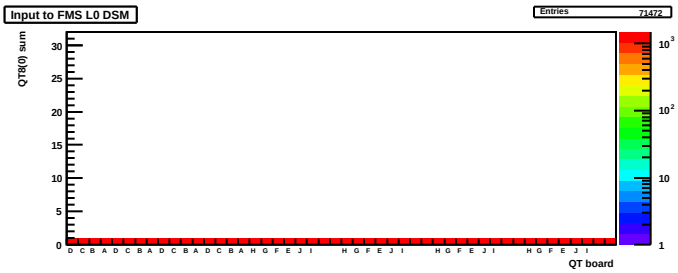

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 1489
Mean 4119
RMS 206.2

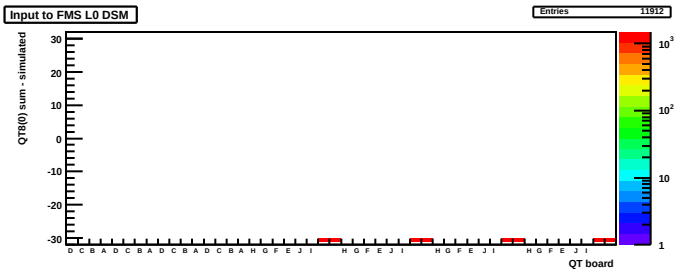

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

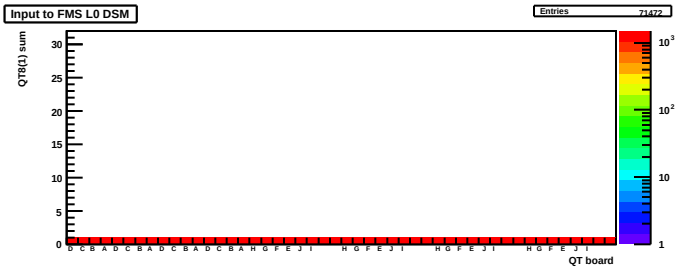

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

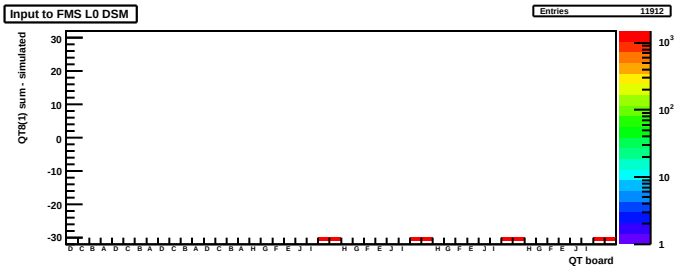

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

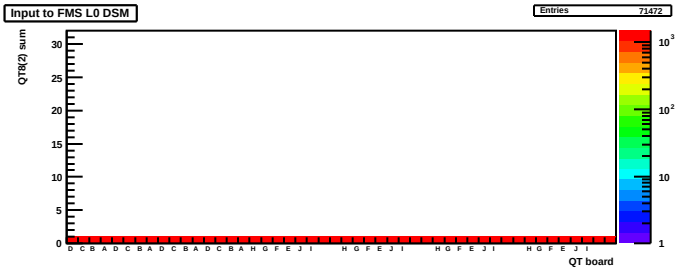

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

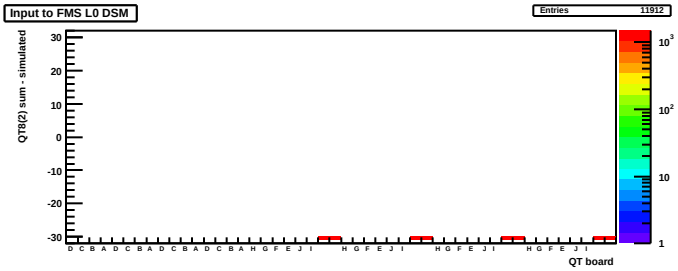

Input to FMS L0 DSM
Entries 71472
QT8(0) sum
QT board

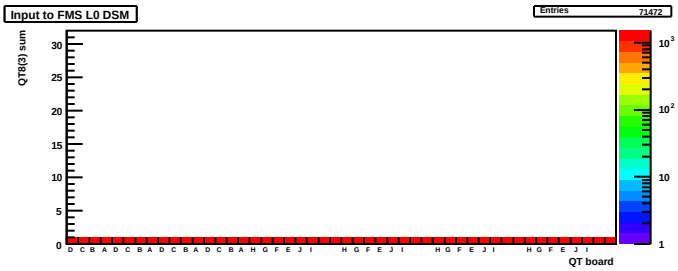

Input to FMS L0 DSM
Entries 11912
QT8(0) sum - simulated
QT board

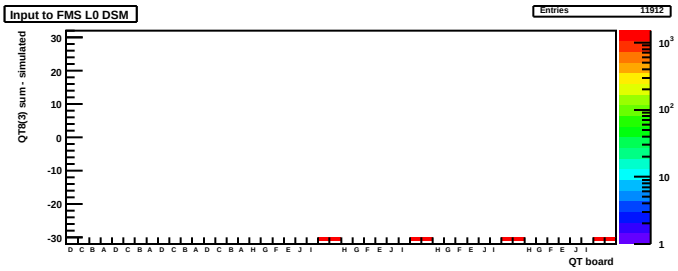

Input to FMS L0 DSM
Entries 71472
QT8(1) sum
QT board

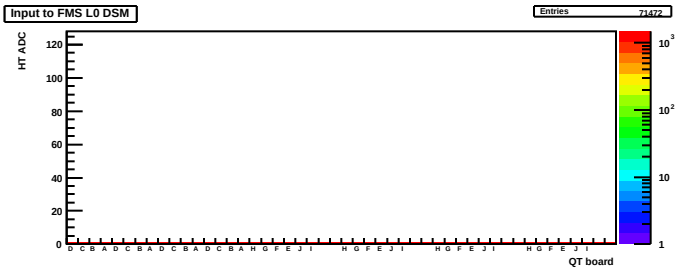

Input to FMS L0 DSM
Entries 11912
QT8(1) sum - simulated
QT board

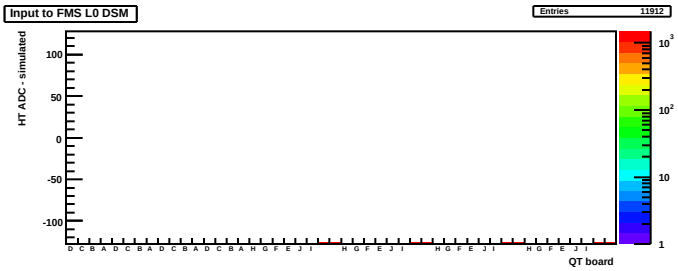

Input to FMS L0 DSM
Entries 71472
QT8(2) sum
QT board

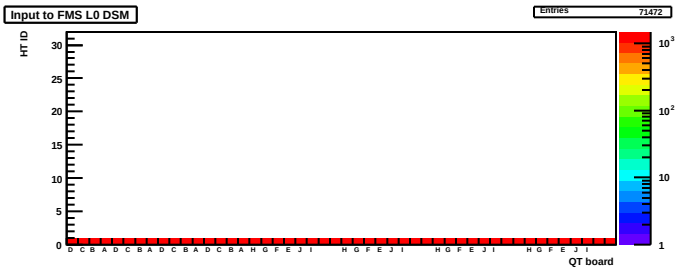

Input to FMS L0 DSM
Entries 11912
QT8(2) sum - simulated
QT board

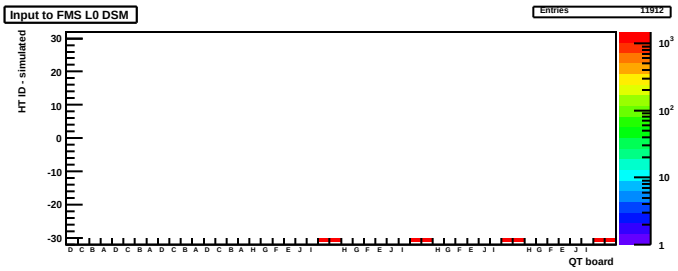

Input to FMS L0 DSM
Entries 71472
QT8(3) sum
QT board

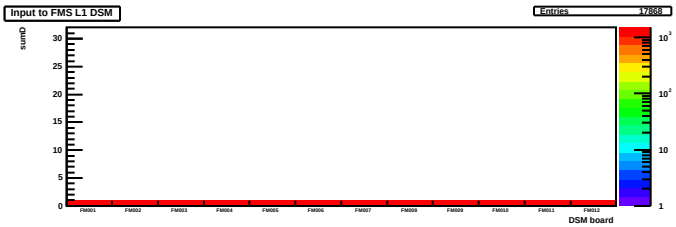

Input to FMS L0 DSM
Entries 11912
QT8(3) sum - simulated
QT board

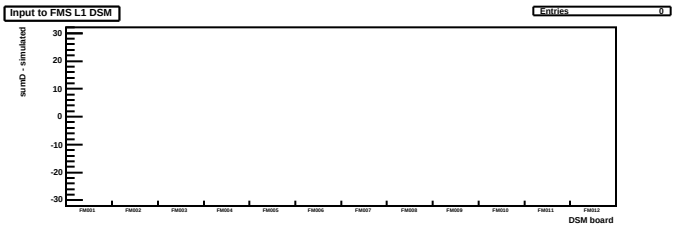

Input to FMS L0 DSM
Entries 71472
HT ADC
QT board

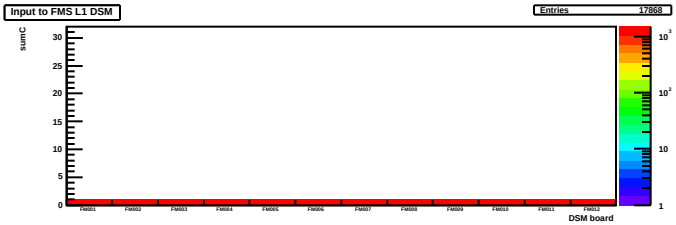

Input to FMS L0 DSM
Entries 11912
HT ADC - simulated
QT board

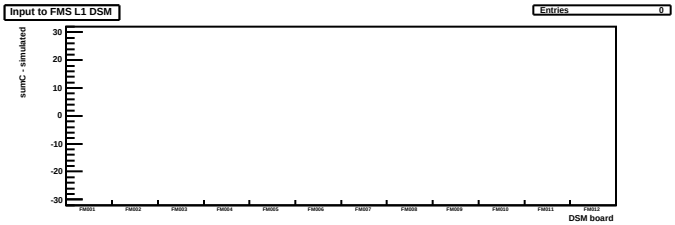

Input to FMS L0 DSM
Entries 71472
HT ID
QT board

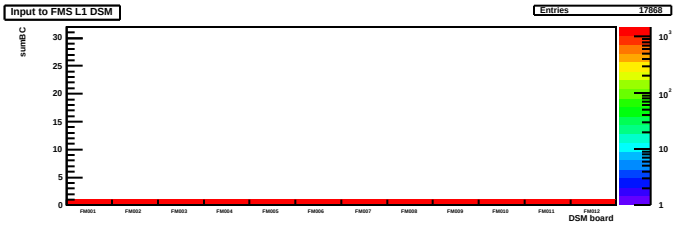

Input to FMS L0 DSM
Entries 11912
HT ID - simulated
QT board

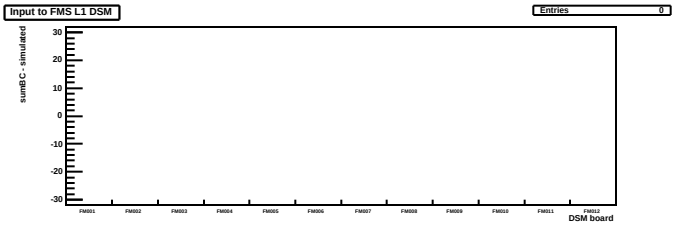

Input to FMS L1 DSM
Entries 17868
sumD
DSM board

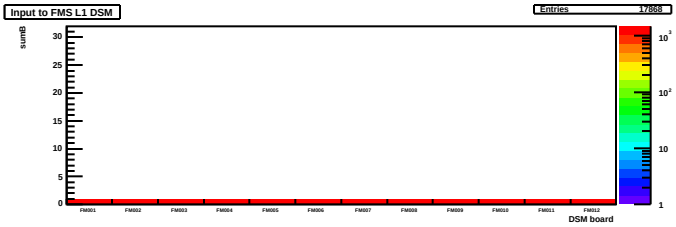

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

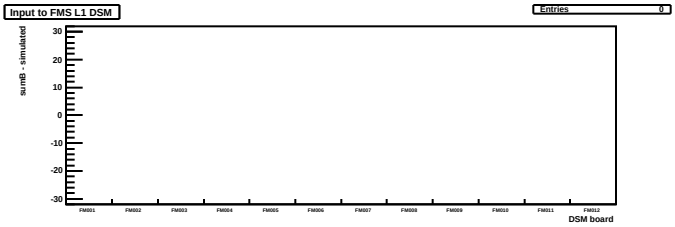

Input to FMS L1 DSM
Entries 17868
sumC
DSM board

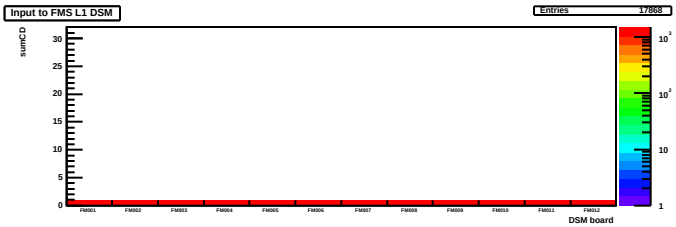

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

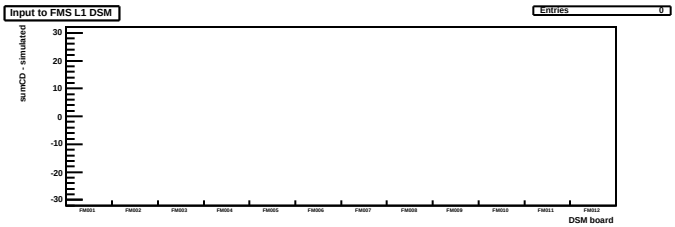

Input to FMS L1 DSM
Entries 17868
sumBC
DSM board

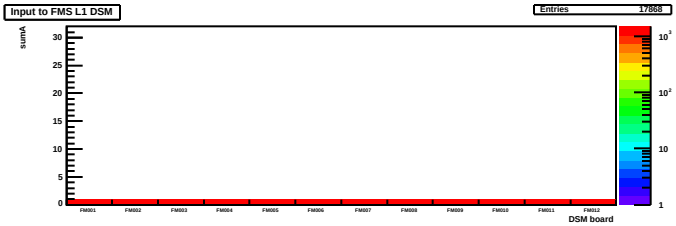

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

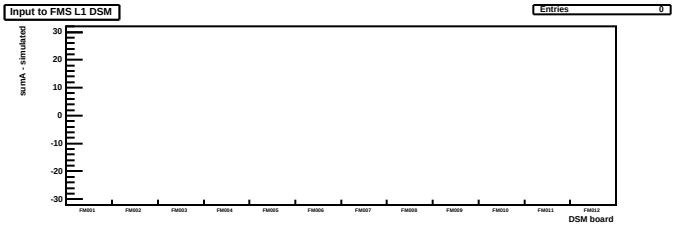

Input to FMS L1 DSM
Entries 17868
sumB
DSM board

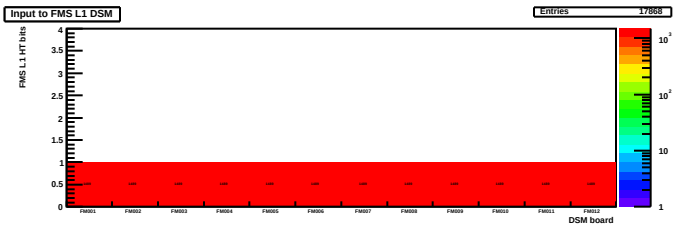

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

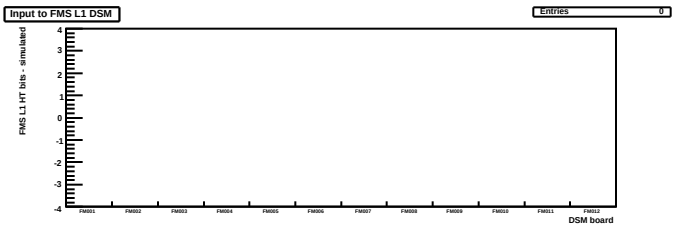

Input to FMS L1 DSM
Entries 17868
sumCD
DSM board

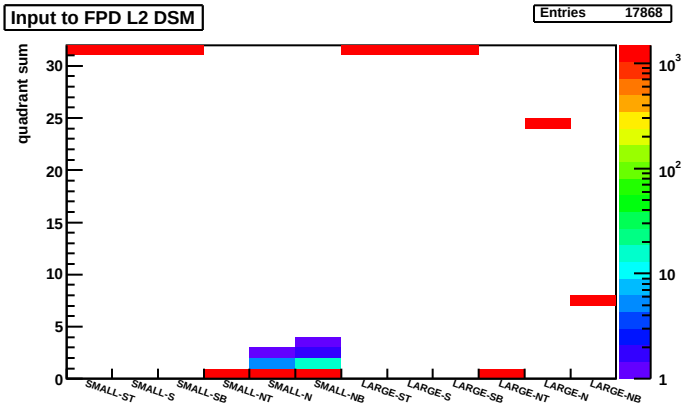

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

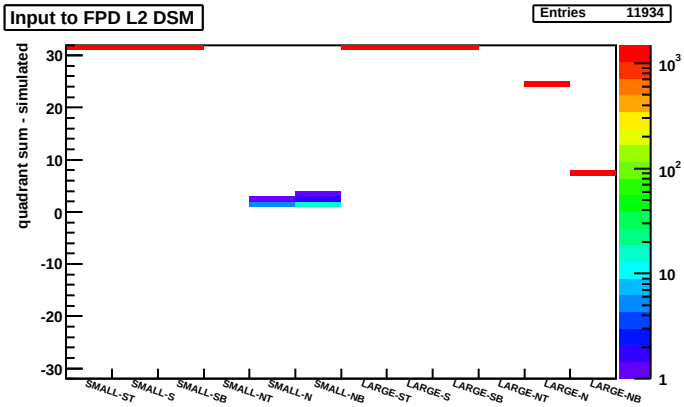

Input to FMS L1 DSM
Entries 17868
sumA
DSM board

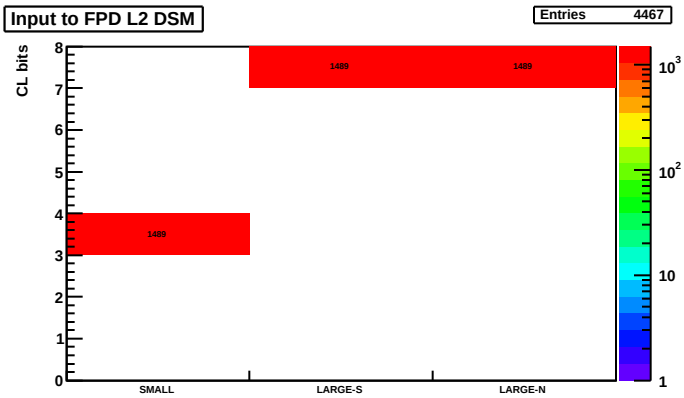

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

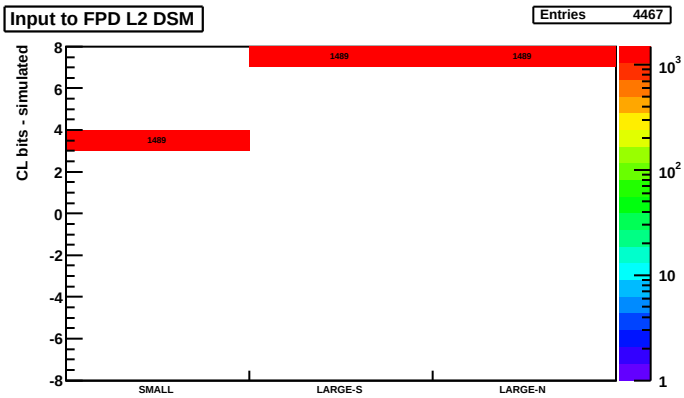

Input to FMS L1 DSM
Entries 17868
FMS L1 HT bits
DSM board

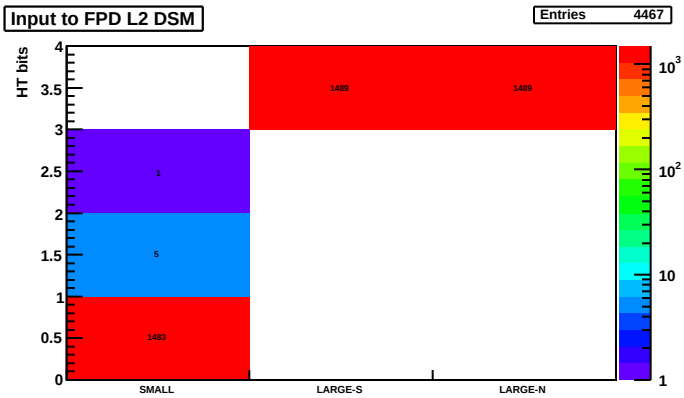

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

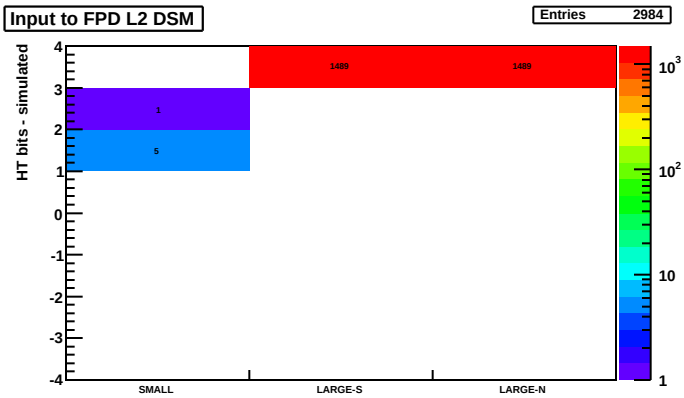

Input to FPD L2 DSM
Entries 17868
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

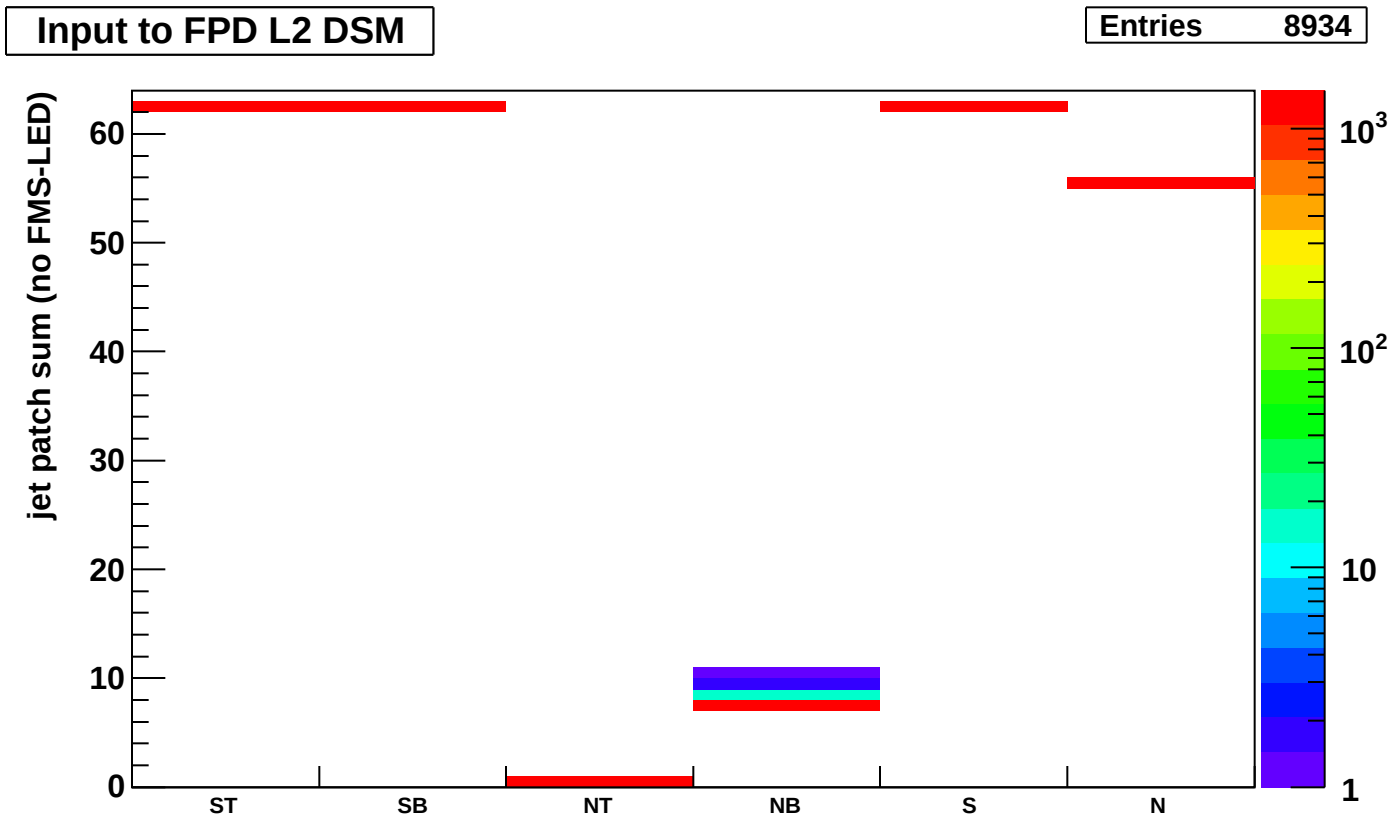

Input to FPD L2 DSM
Entries 11934
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

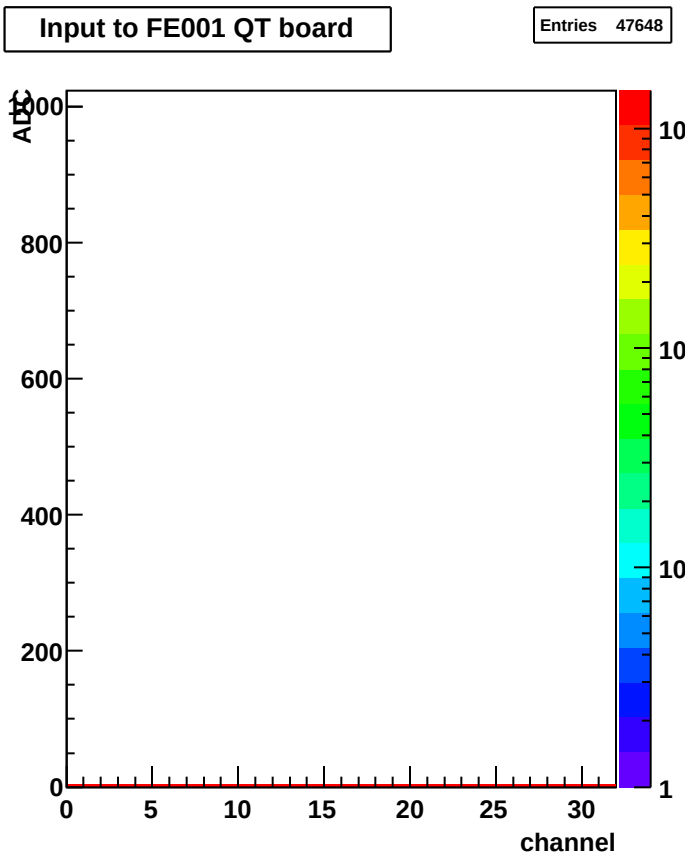

Input to FPD L2 DSM
Entries 4467
CL bits
1489
1489
1489
SMALL
LARGE-S
LARGE-N

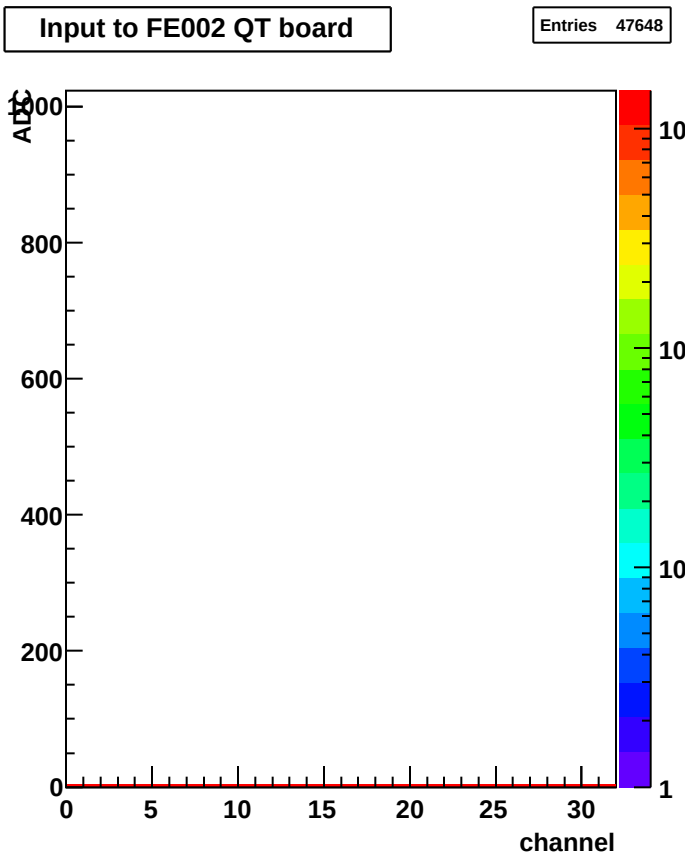

Input to FPD L2 DSM
Entries 4467
CL bits - simulated
1489
1489
1489
SMALL
LARGE-S
LARGE-N

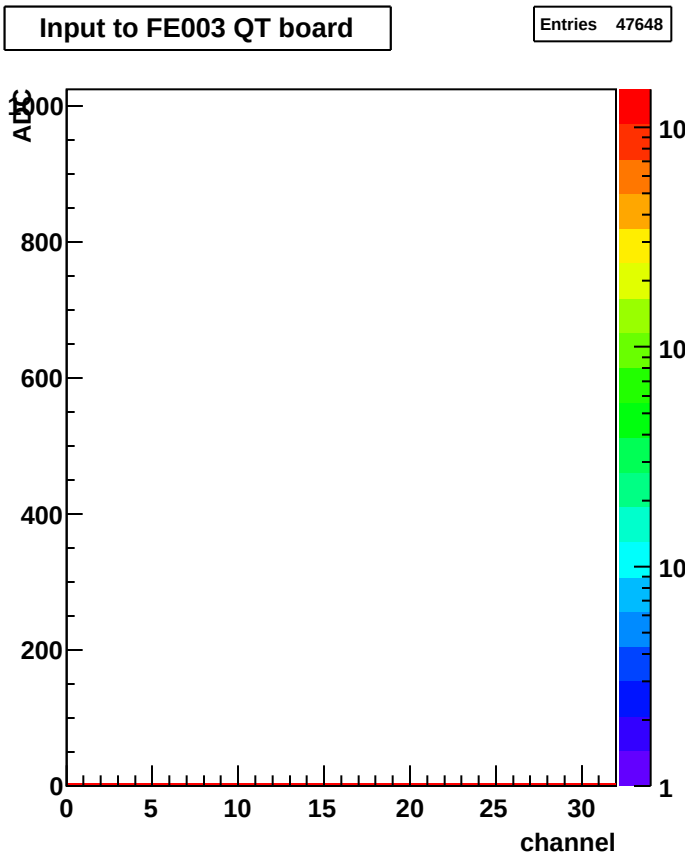

Input to FPD L2 DSM
Entries 4467
HT bits
1489
1489
1
5
1483
SMALL
LARGE-S
LARGE-N

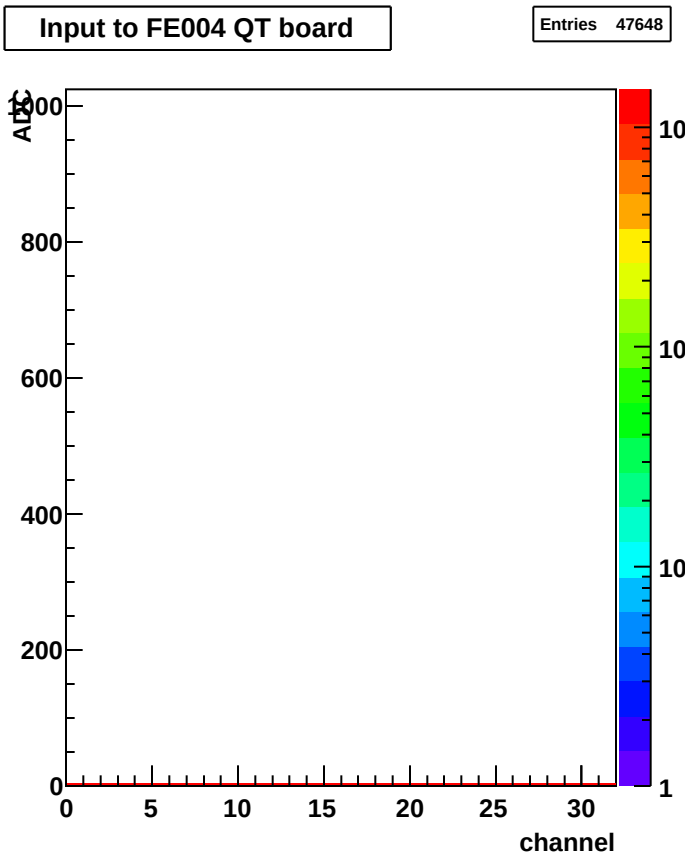

Input to FPD L2 DSM
Entries 2984
HT bits - simulated
1489
1489
1
5
SMALL
LARGE-S
LARGE-N

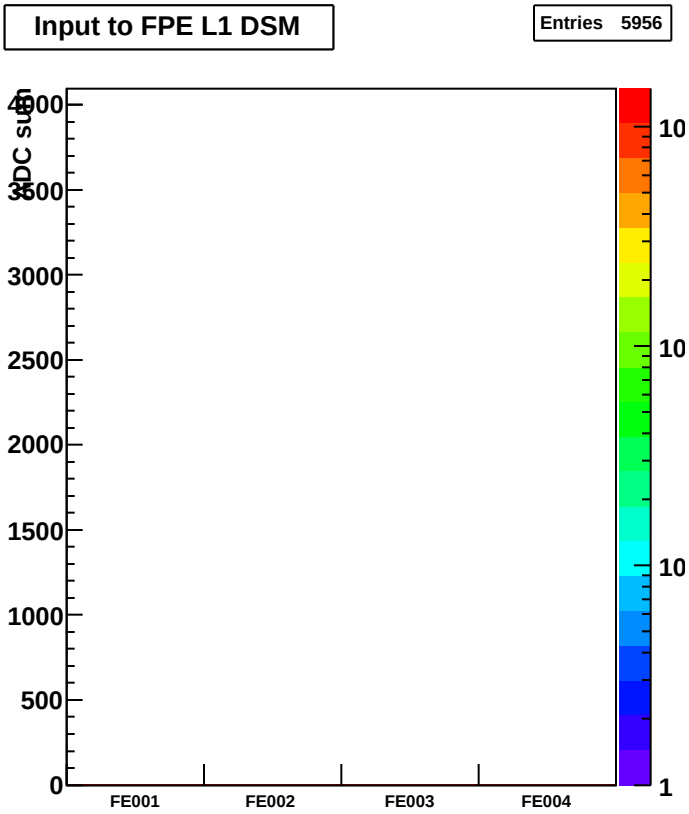

Input to FPD L2 DSM
Entries 8934
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3

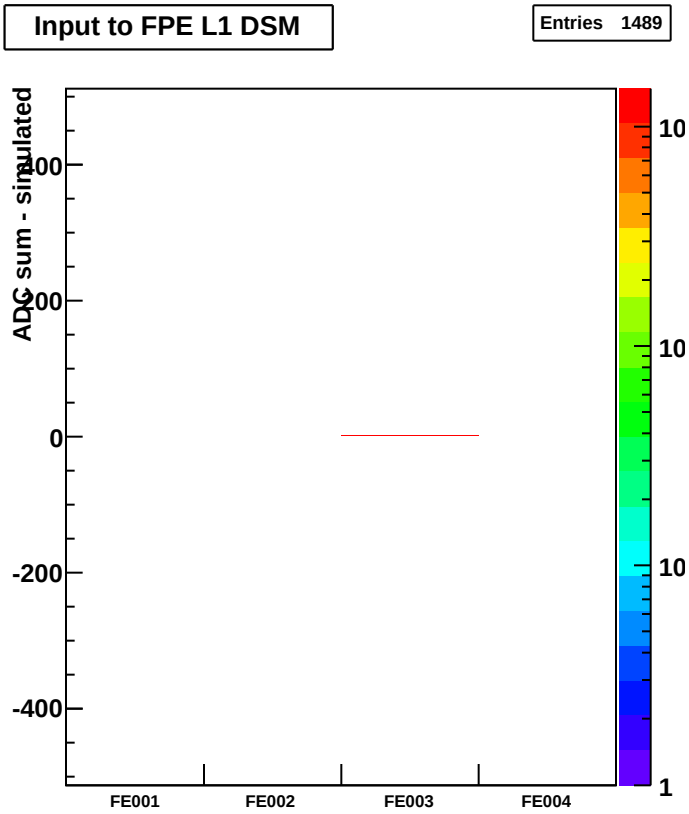

Input to FE001 QT board
Entries 47648
ADC
channel

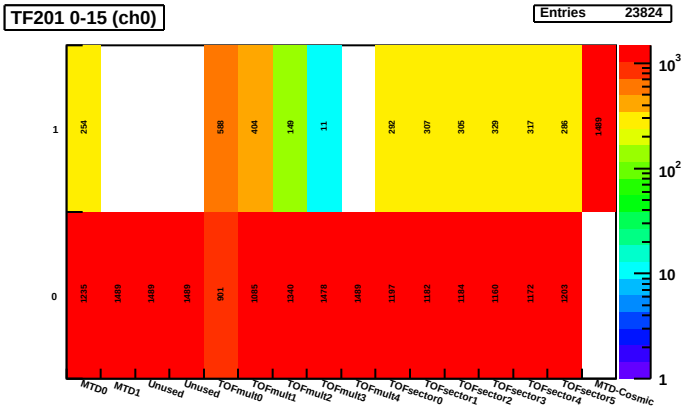

Input to FE002 QT board
Entries 47648
ADC
channel

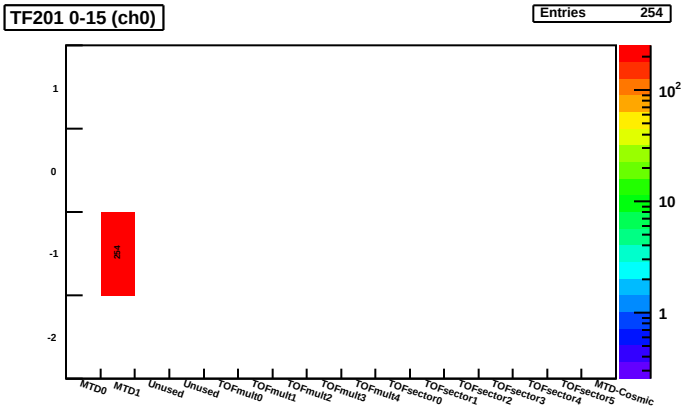

Input to FE003 QT board
Entries 47648
ADC
channel

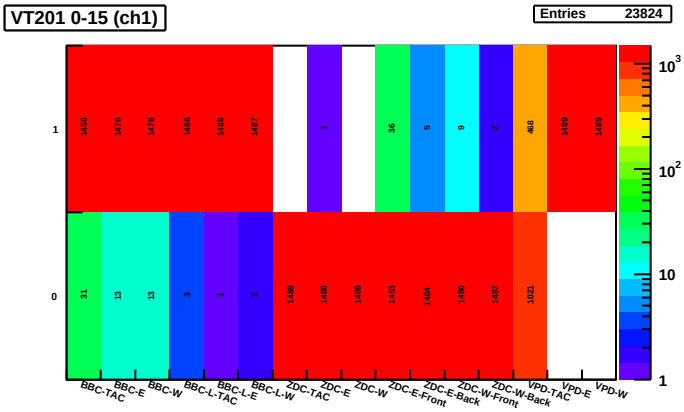

Input to FE004 QT board
Entries 47648
ADC
channel

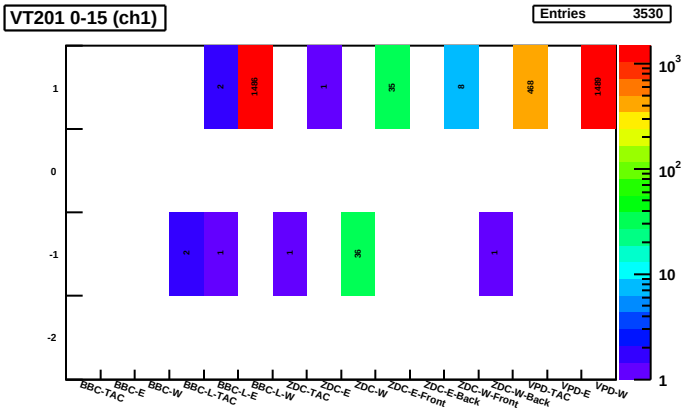

Input to FPE L1 DSM
Entries 5956
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
1

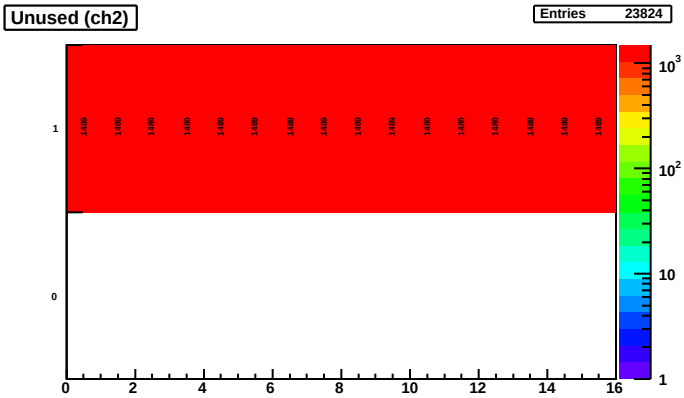

Input to FPE L1 DSM
Entries 1489
ADC sum - simulated
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
1

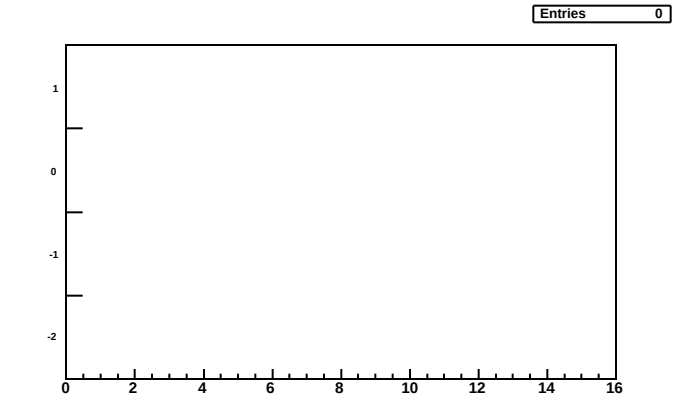

TF201 0-15 (ch0)
Entries 23824
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

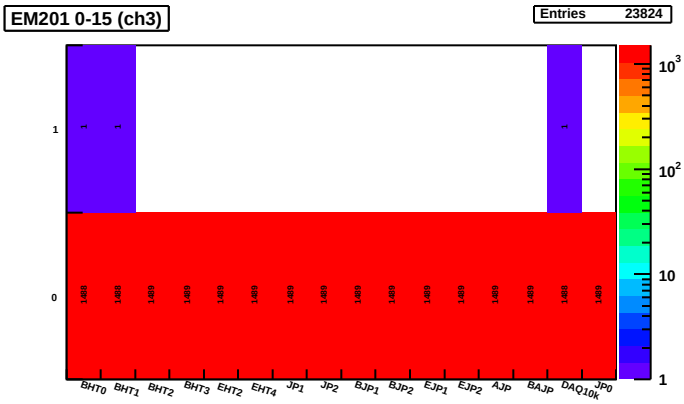

TF201 0-15 (ch0)
Entries 254
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

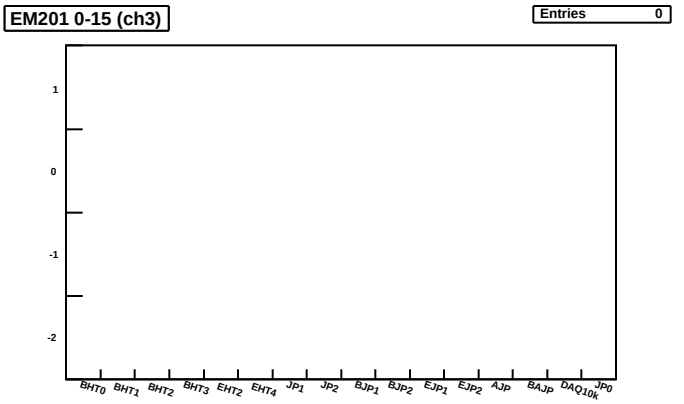

VT201 0-15 (ch1)
Entries 23824
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 3530
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

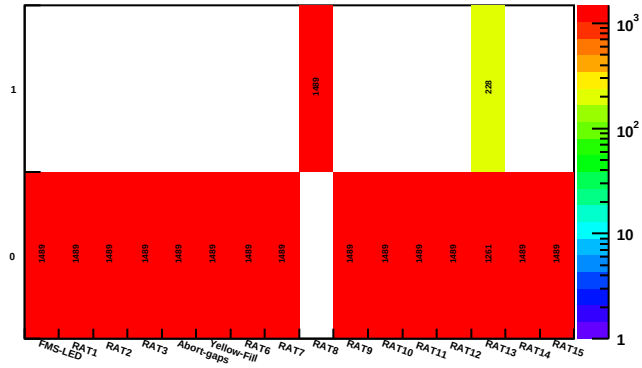

Unused (ch2)
Entries 23824

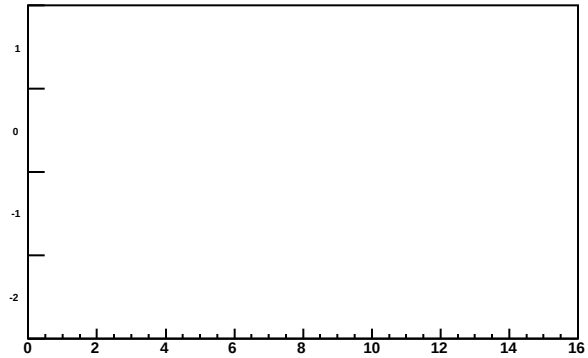

Entries 0


EM201 0-15 (ch3)
Entries 23824
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

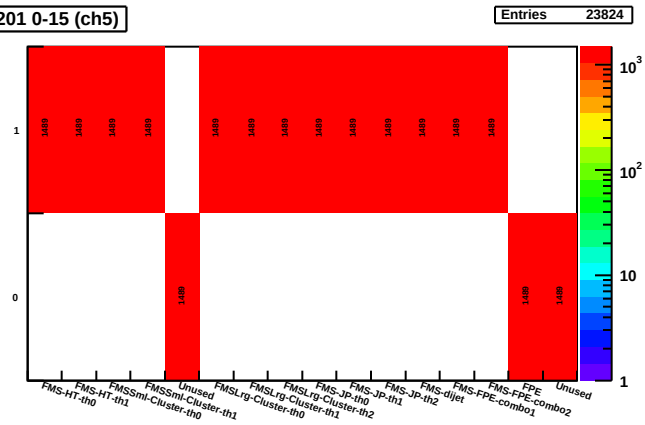

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

RAT board (ch4)

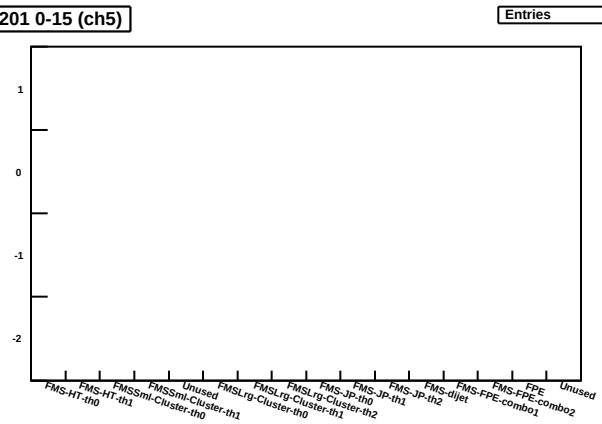




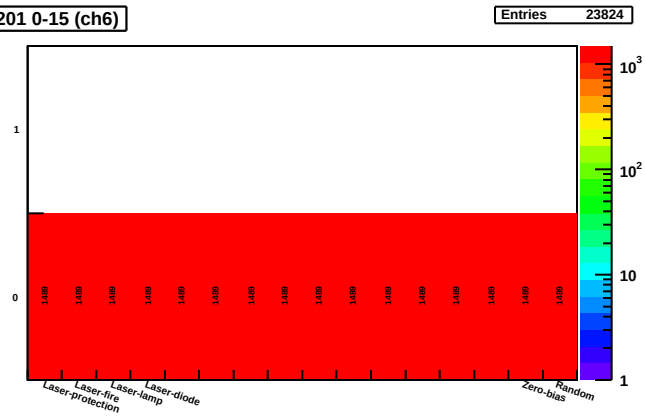
FP201 0-15 (ch5)

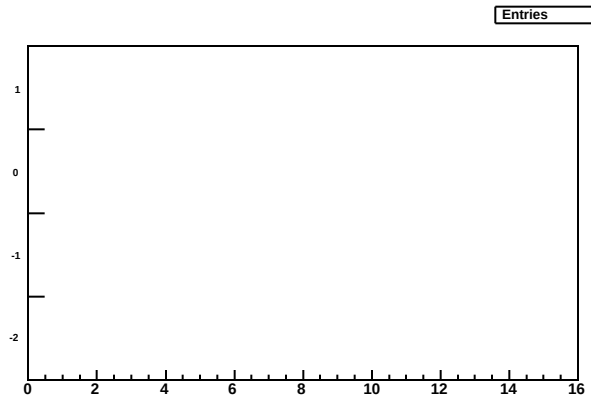
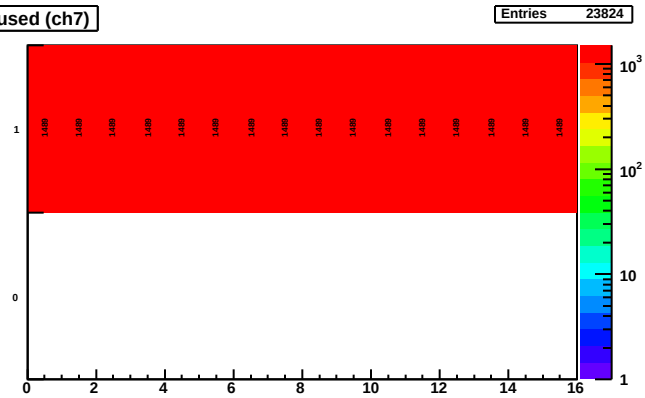
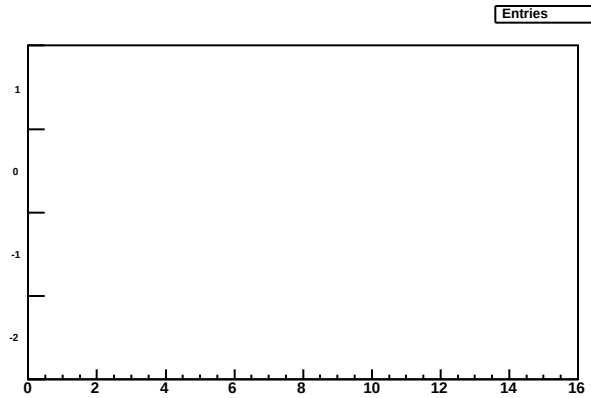


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)