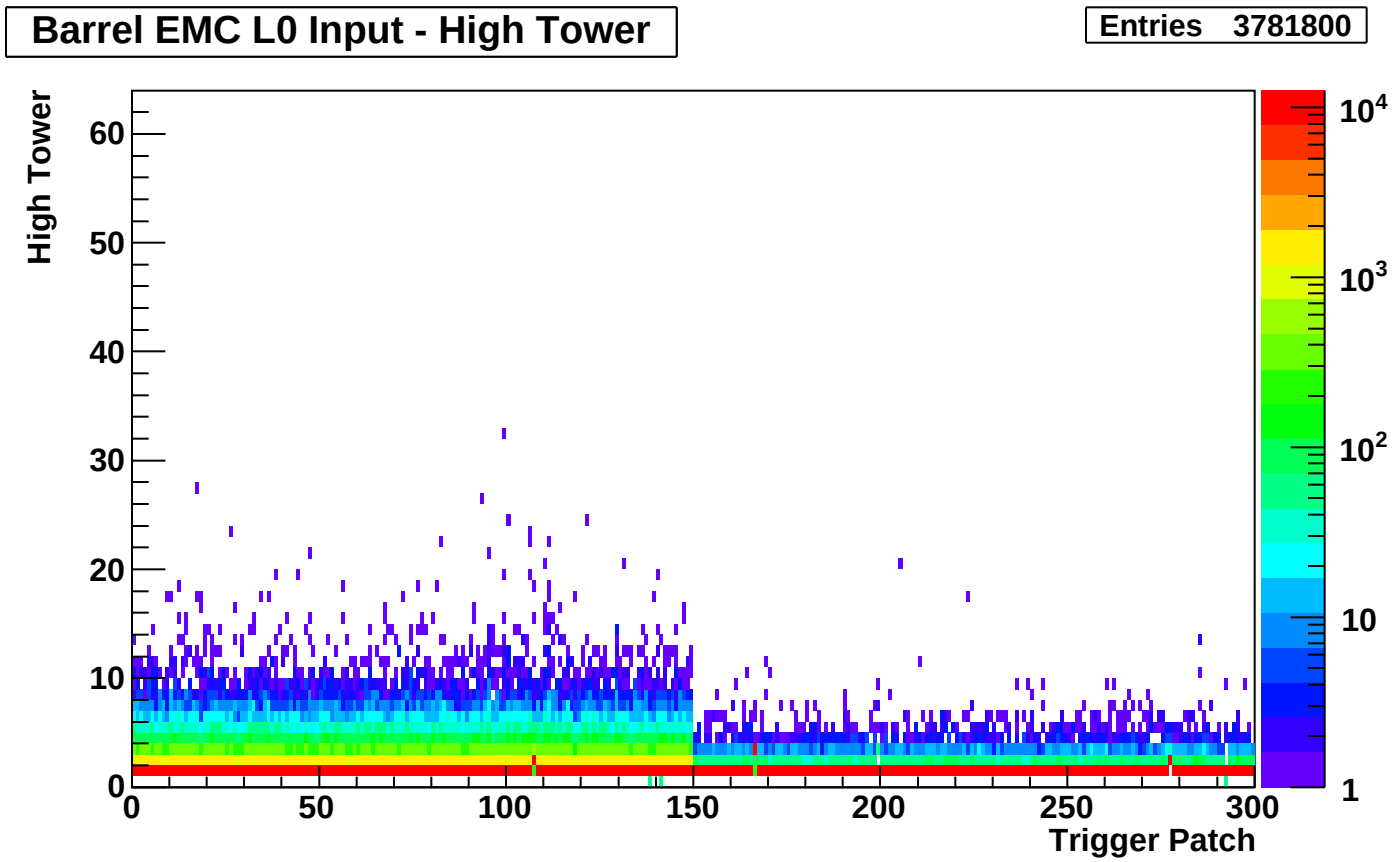
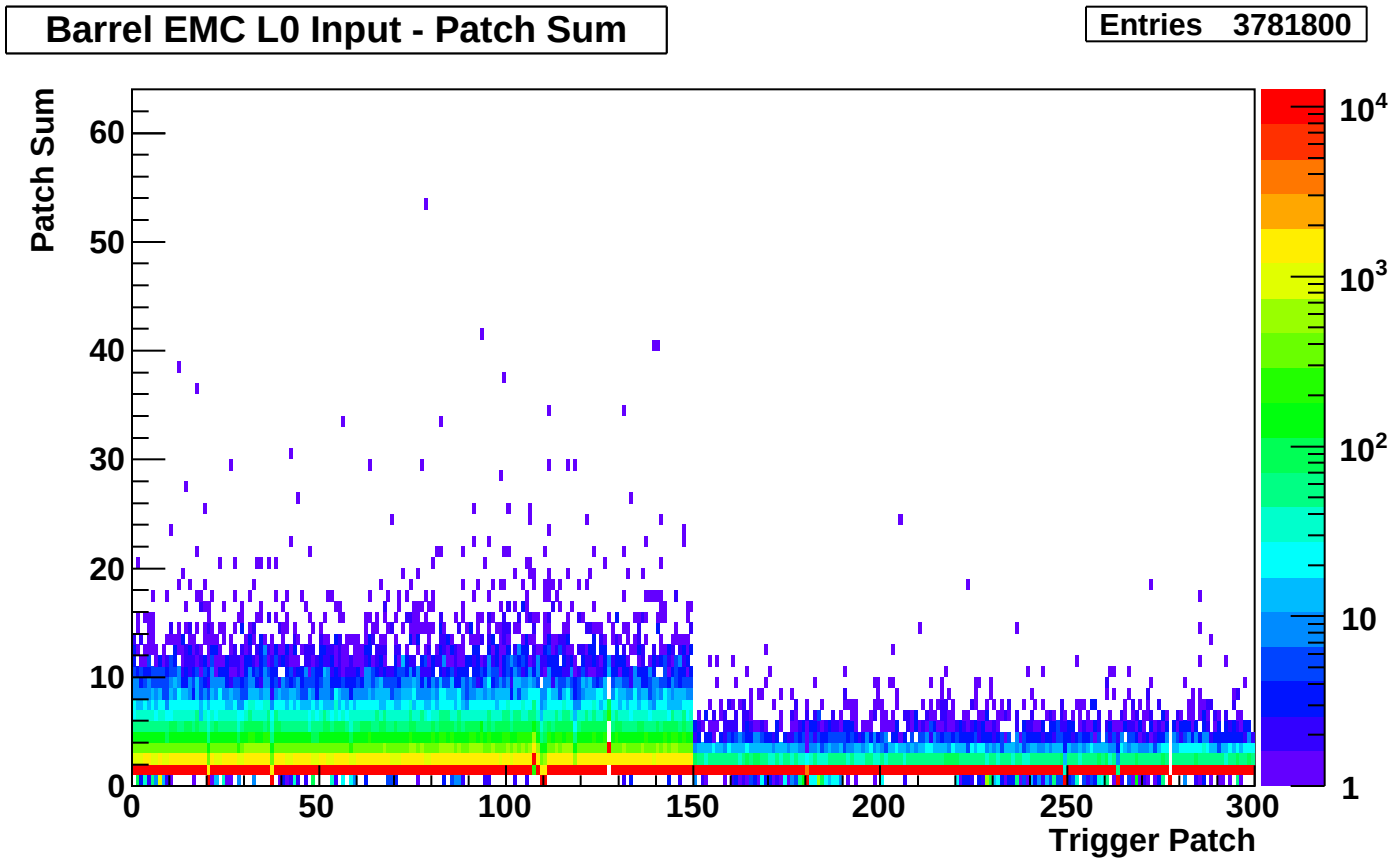
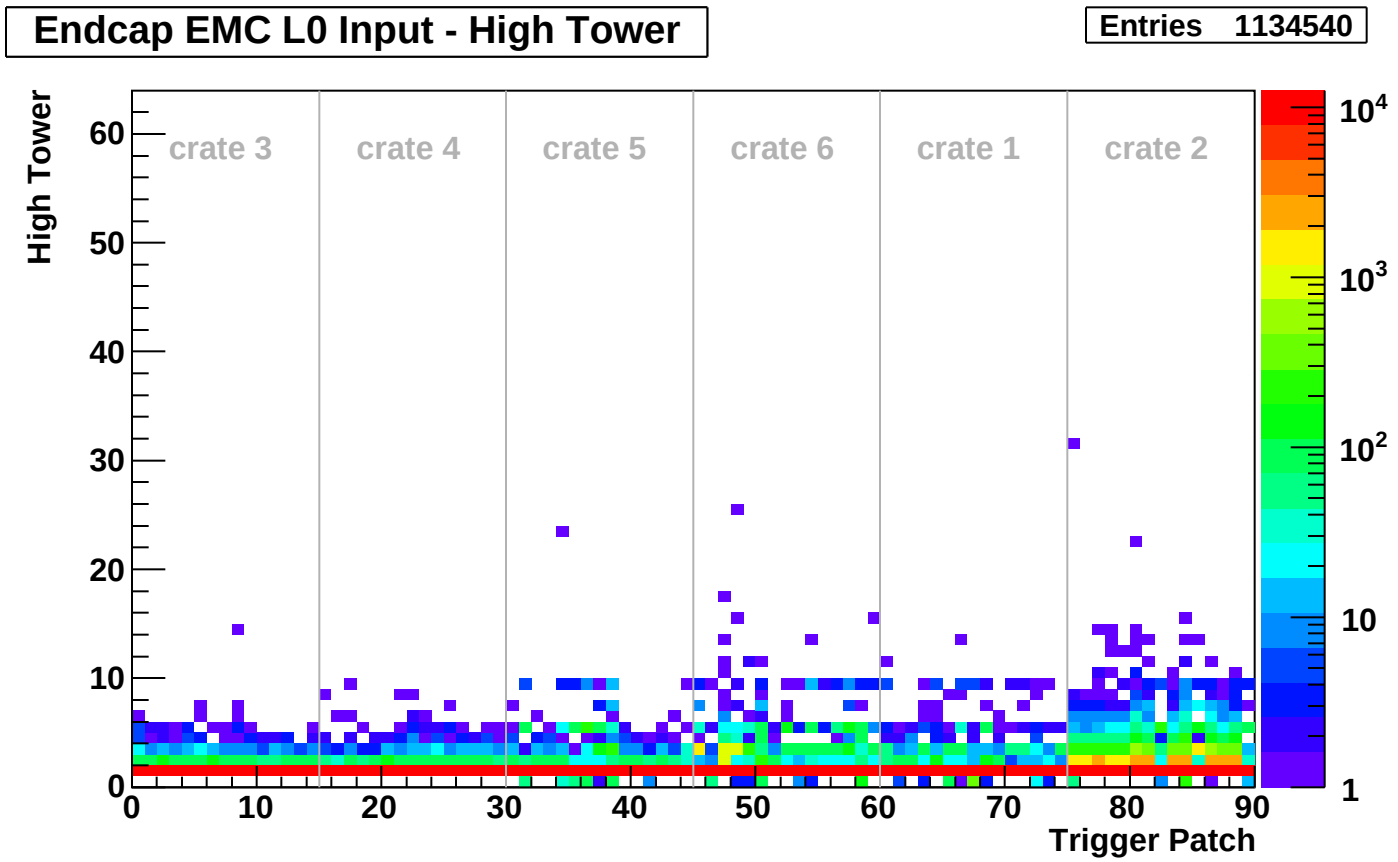
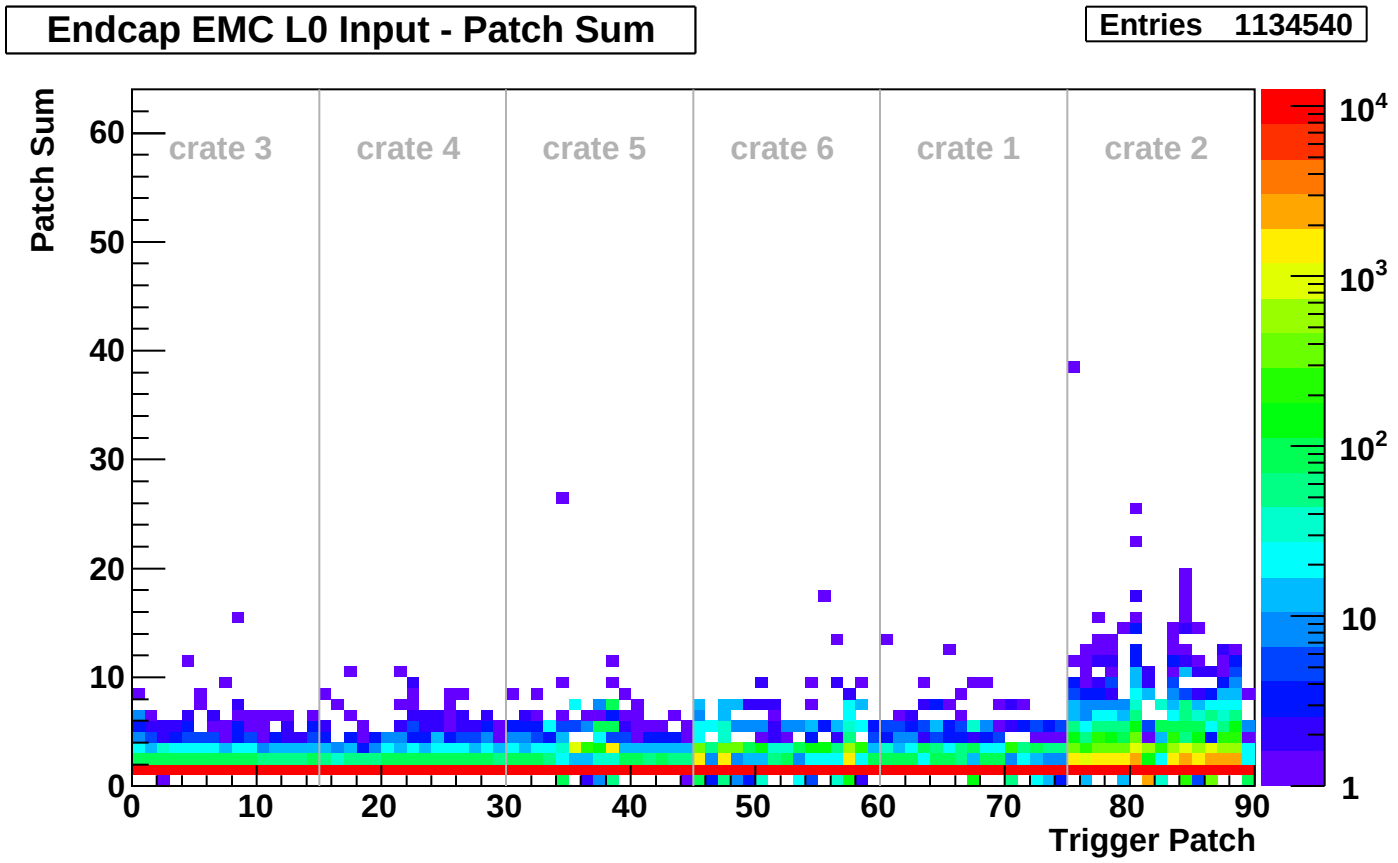
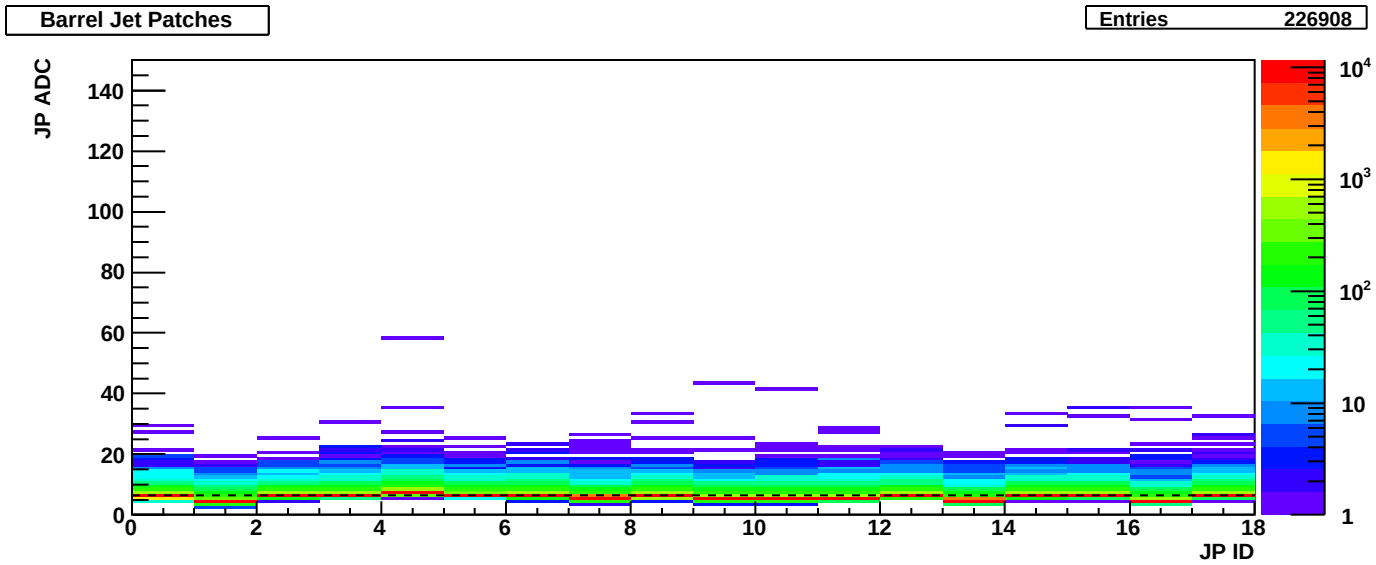
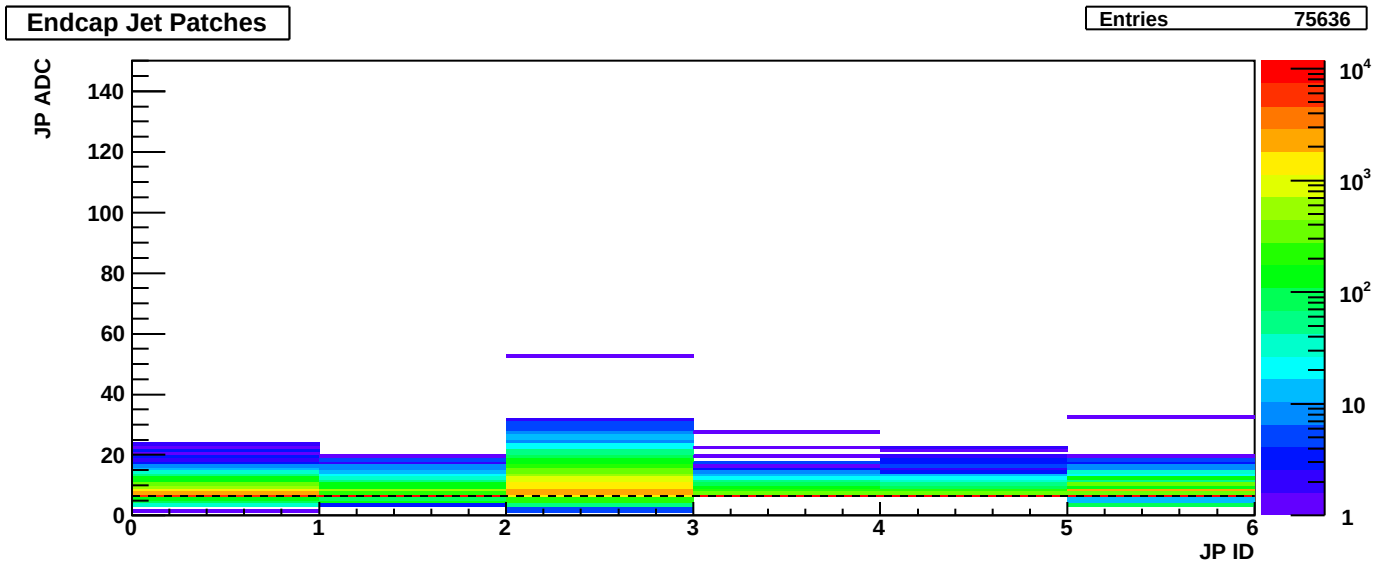

Barrel EMC L0 Input - High Tower
Entries 3781800
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

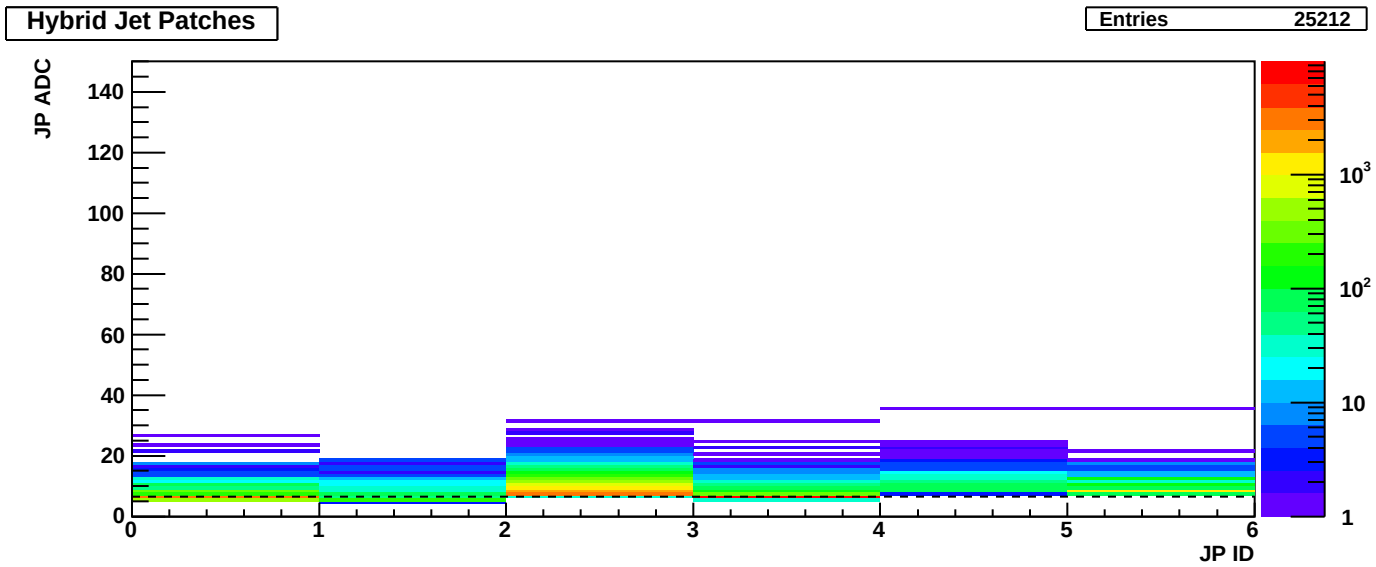

Barrel EMC L0 Input - Patch Sum
Entries 3781800
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

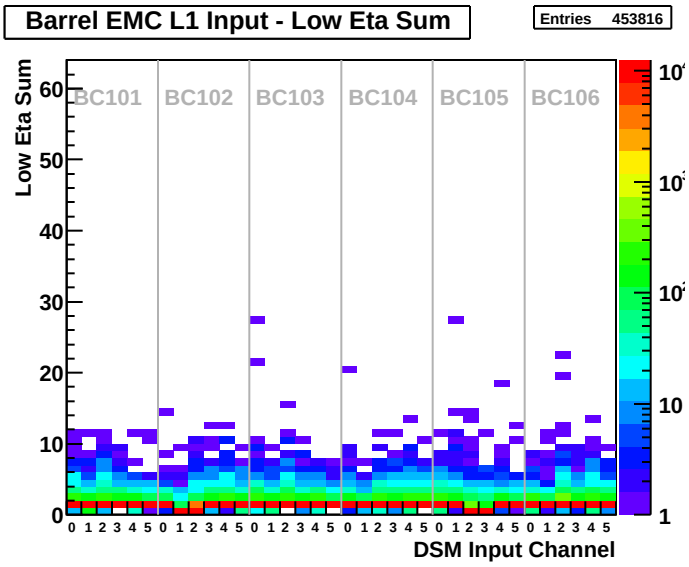

Endcap EMC L0 Input - High Tower
Entries 1134540
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

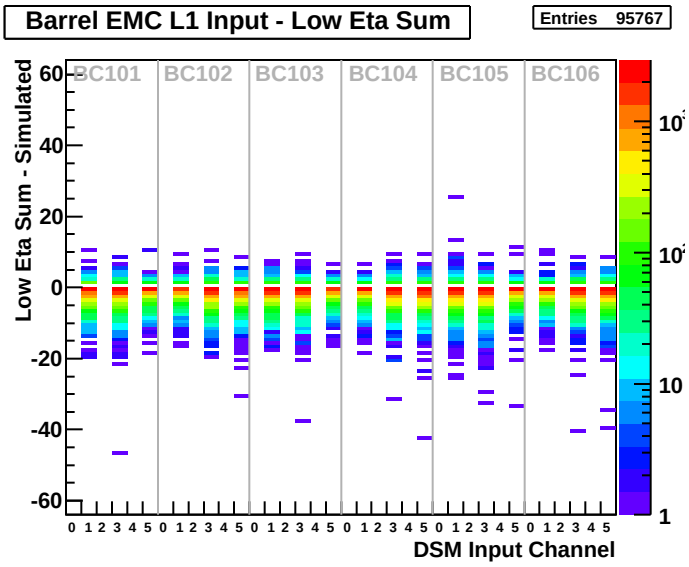

Endcap EMC L0 Input - Patch Sum
Entries 1134540
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

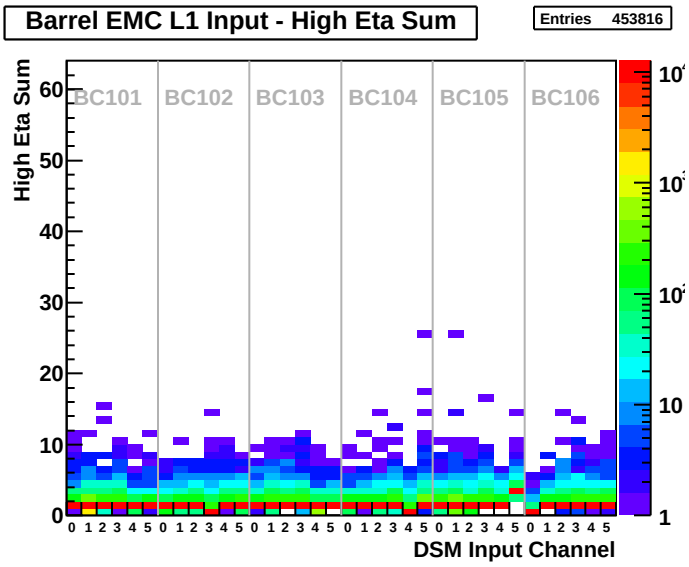

Barrel Jet Patches
Entries 226908
JP ADC
JP ID

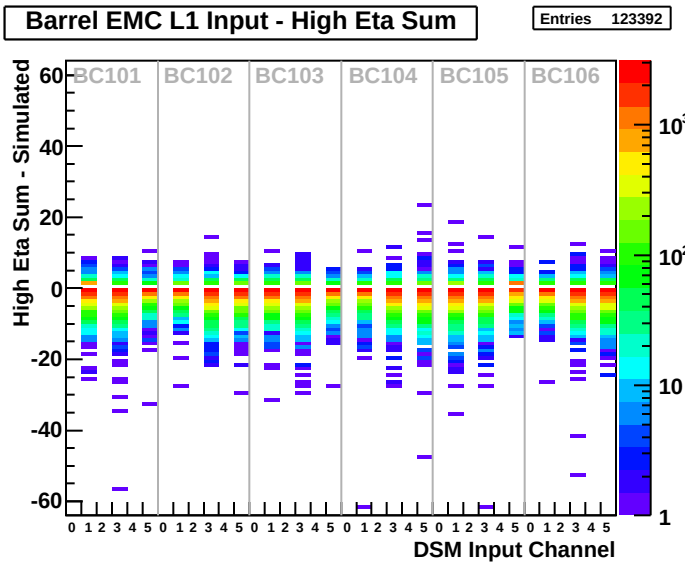

Endcap Jet Patches
Entries 75636
JP ADC
JP ID

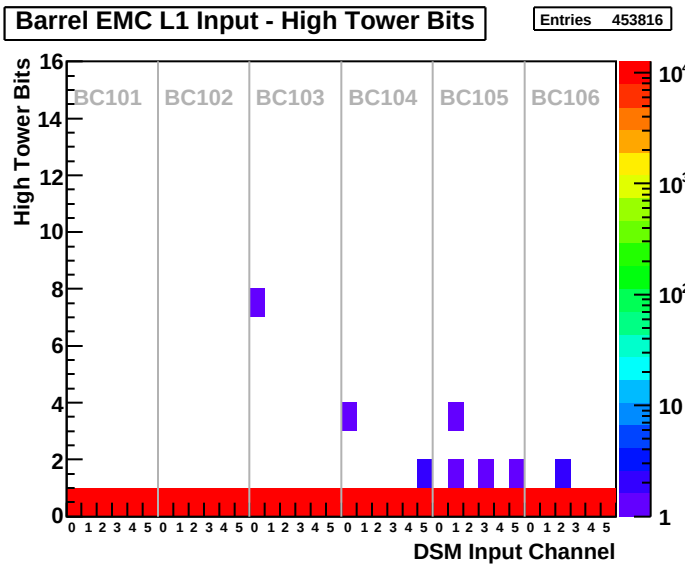

Hybrid Jet Patches
Entries 25212
JP ADC
JP ID

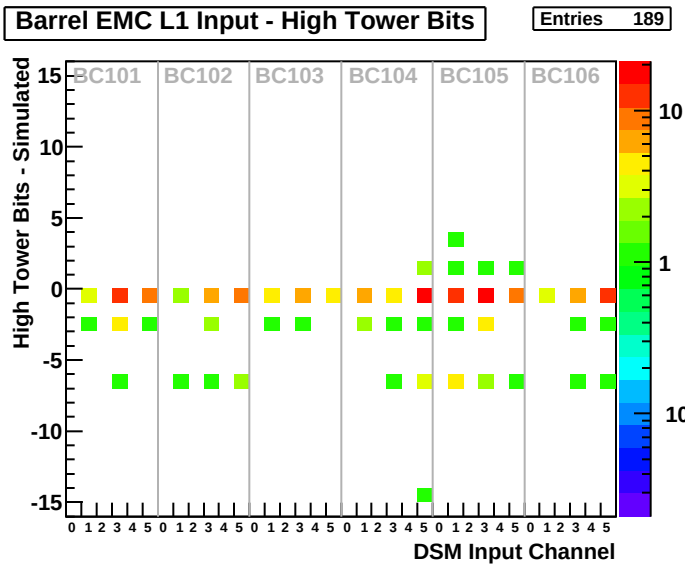

Barrel EMC L1 Input - Low Eta Sum
Entries 453816
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

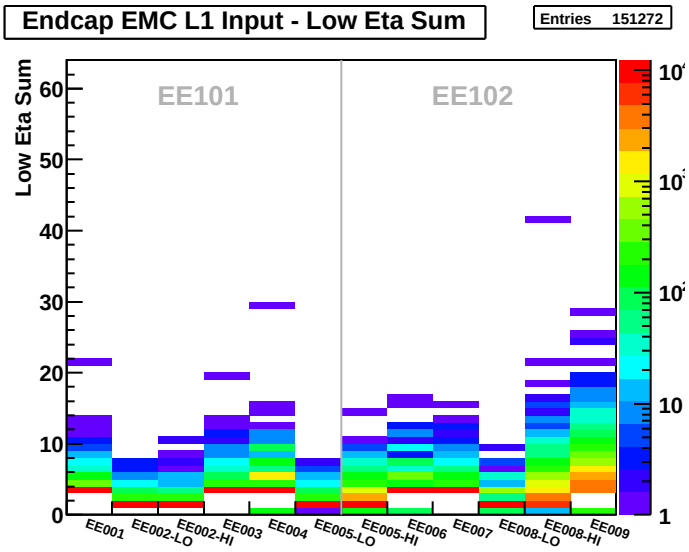

Barrel EMC L1 Input - Low Eta Sum
Entries 95767
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

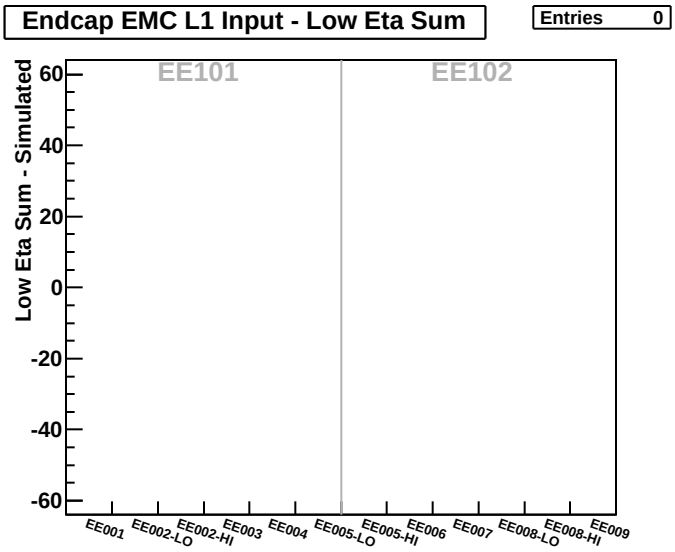

Barrel EMC L1 Input - High Eta Sum
Entries 453816
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

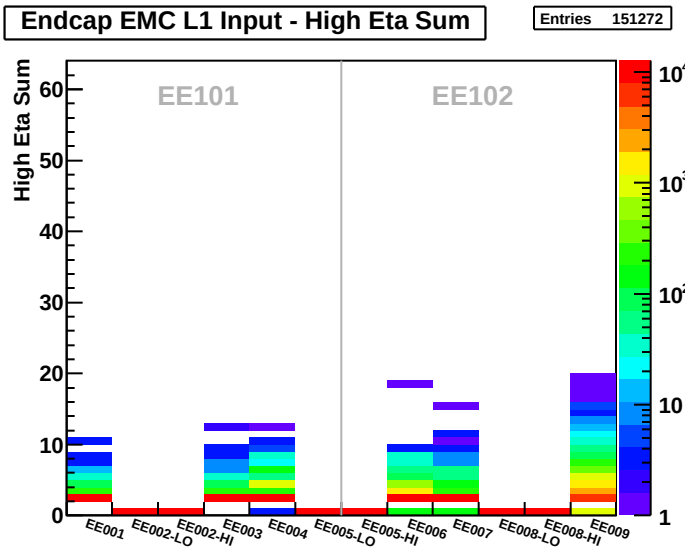

Barrel EMC L1 Input - High Eta Sum
Entries 123392
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

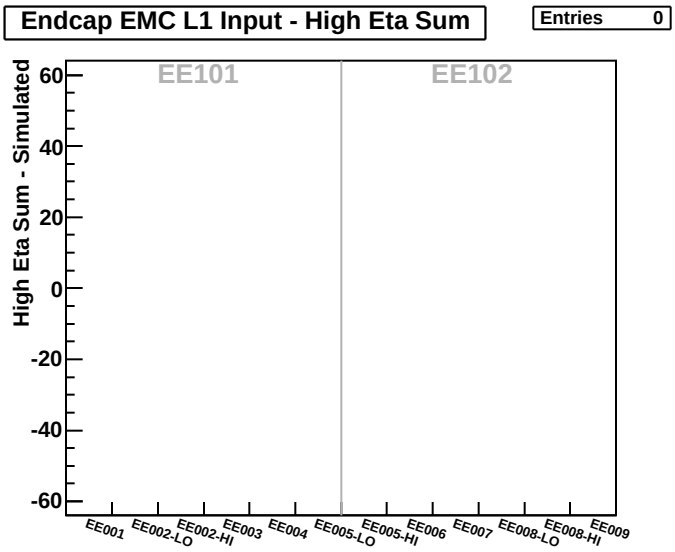

Barrel EMC L1 Input - High Tower Bits
Entries 453816
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

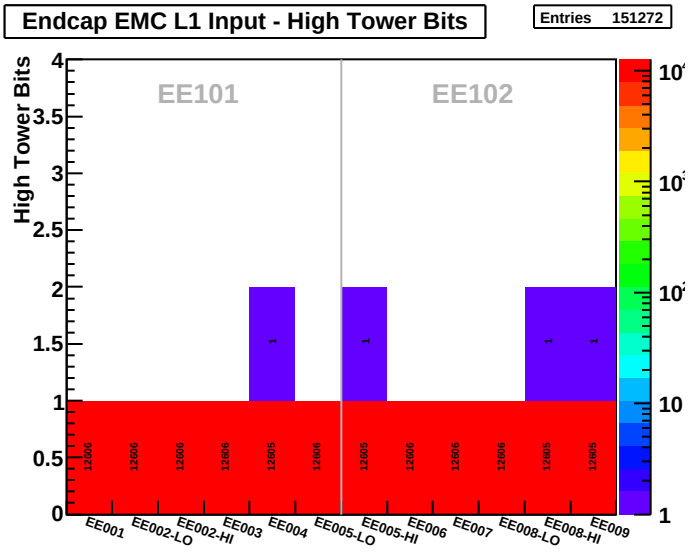

Barrel EMC L1 Input - High Tower Bits
Entries 189
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

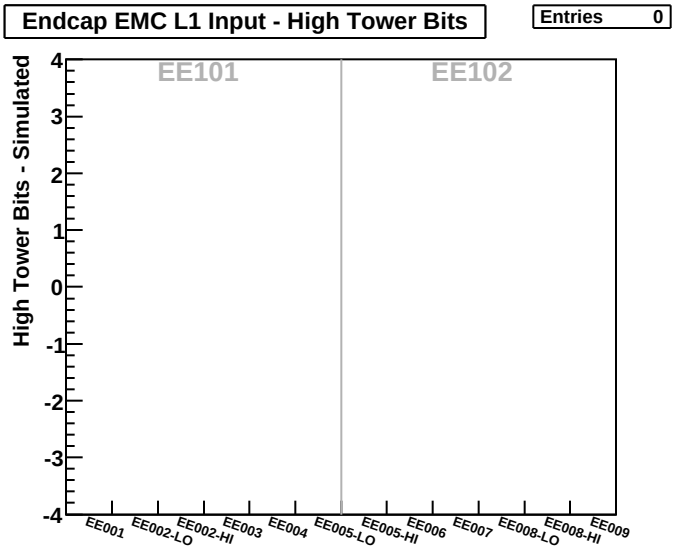

Endcap EMC L1 Input - Low Eta Sum
Entries 151272
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

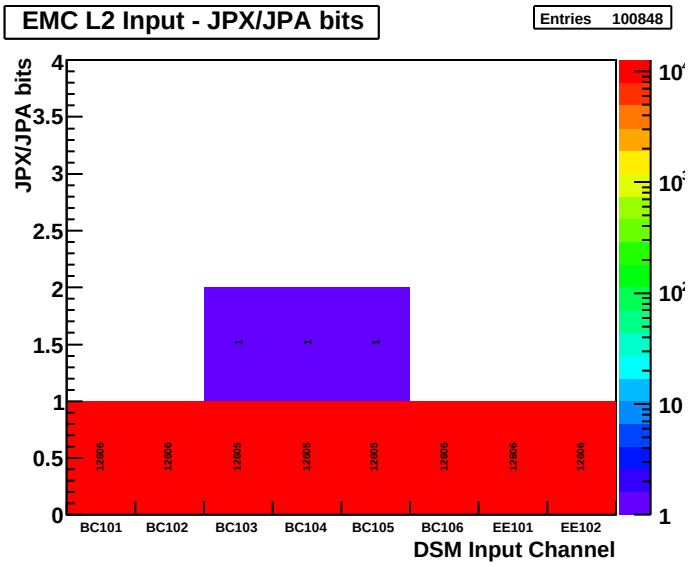

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

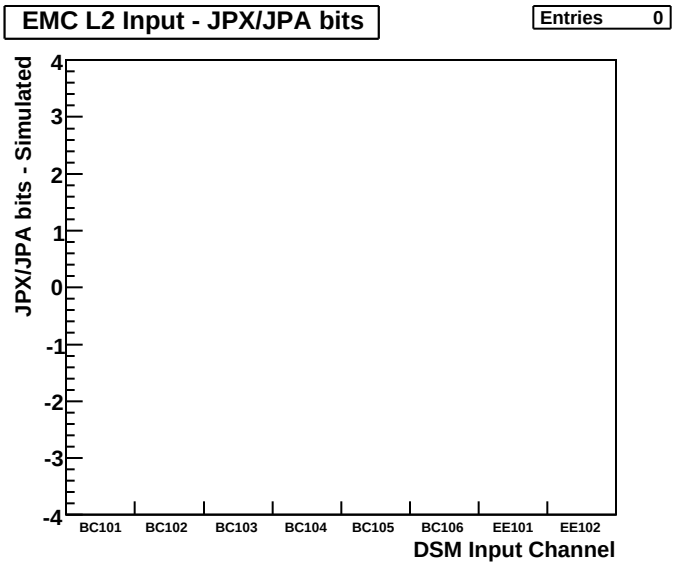

Endcap EMC L1 Input - High Eta Sum
Entries 151272
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

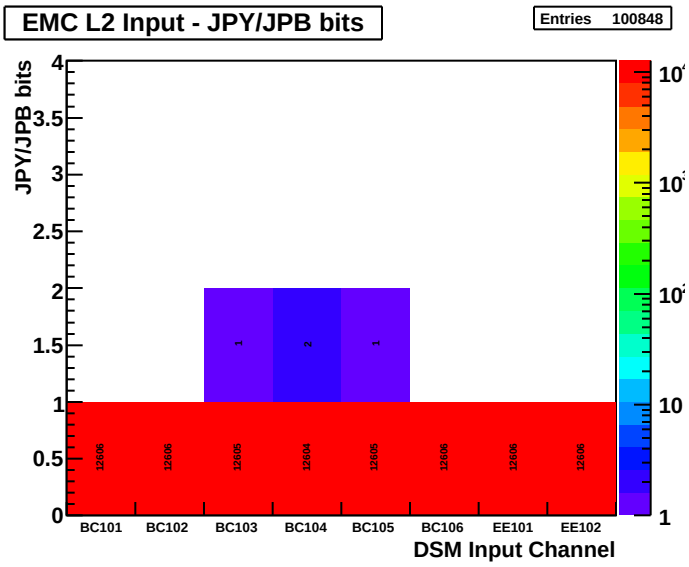

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

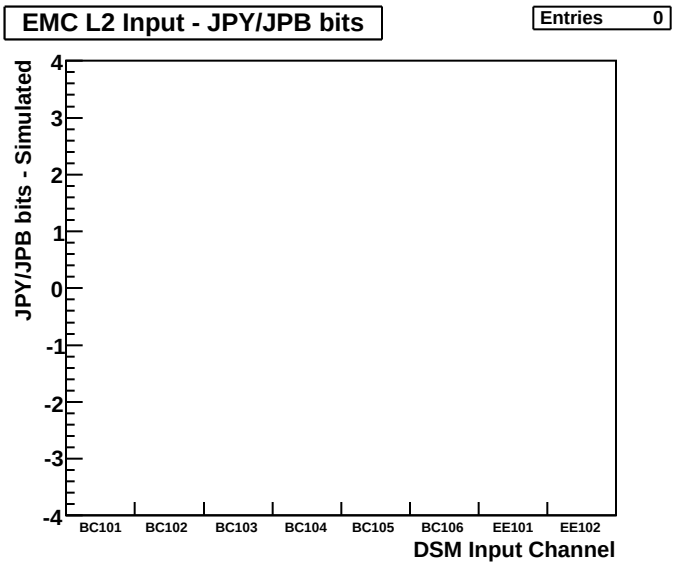

Endcap EMC L1 Input - High Tower Bits
Entries 151272
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

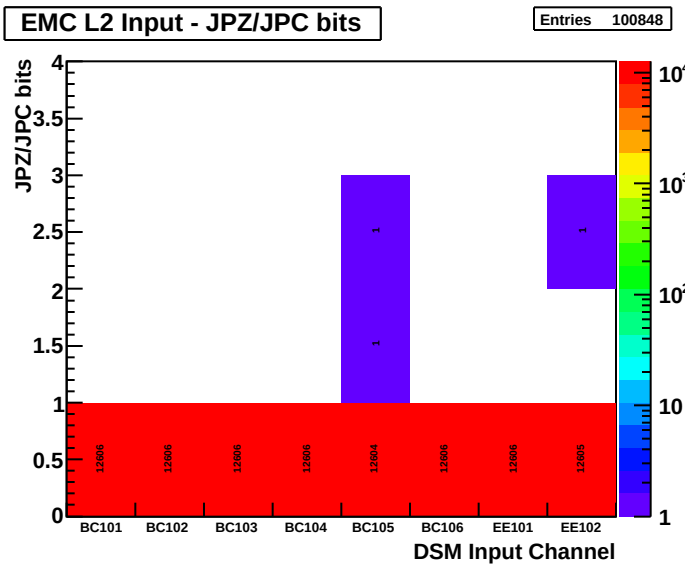

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

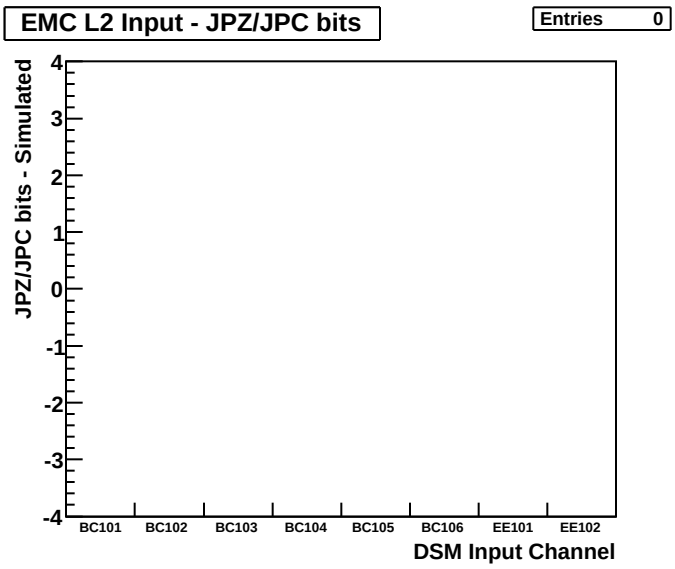

EMC L2 Input - JPX/JPA bits
Entries 100848
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

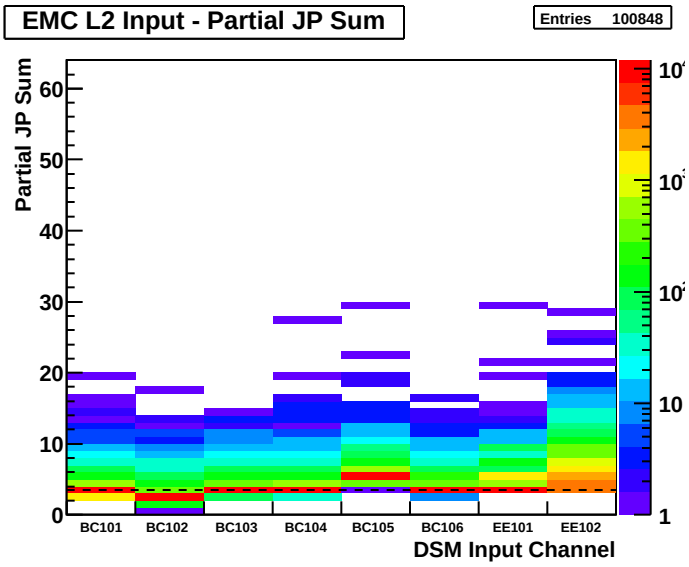

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

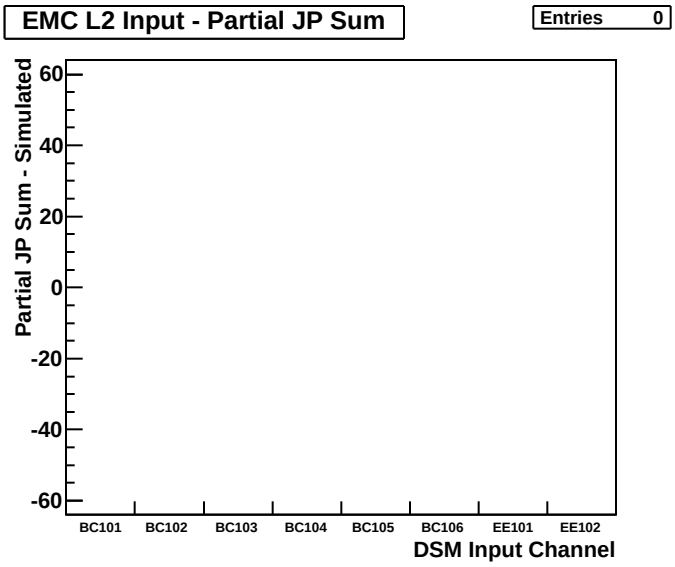

EMC L2 Input - JPY/JPB bits
Entries 100848
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

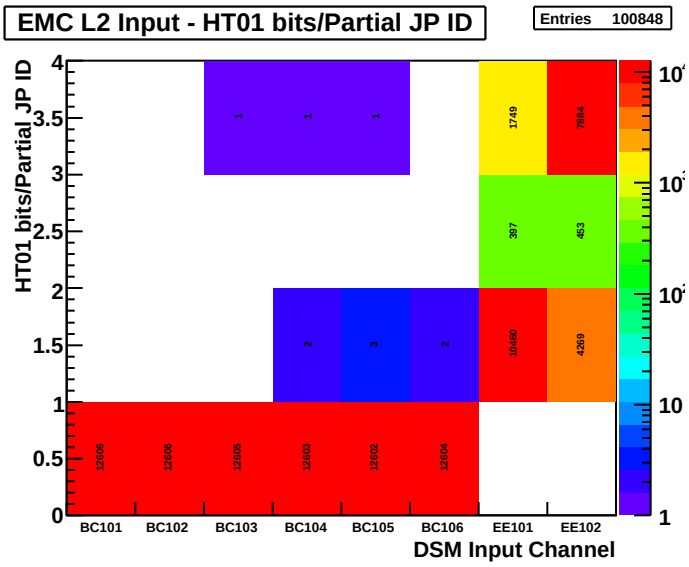

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

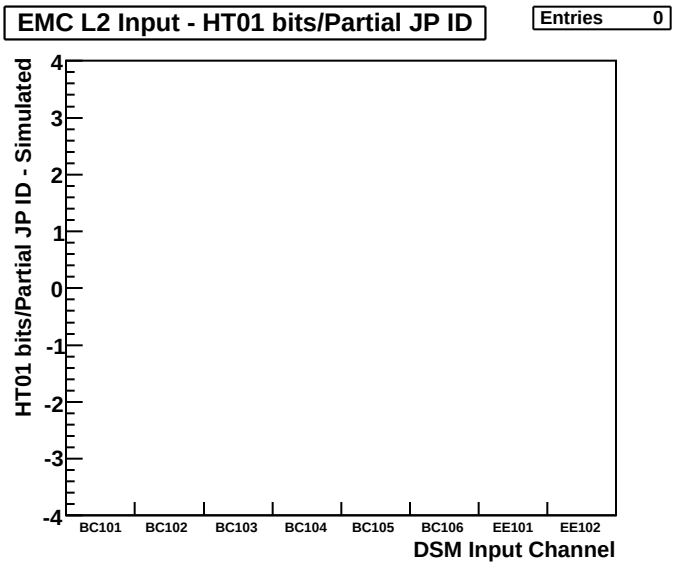

EMC L2 Input - JPZ/JPC bits
Entries 100848
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

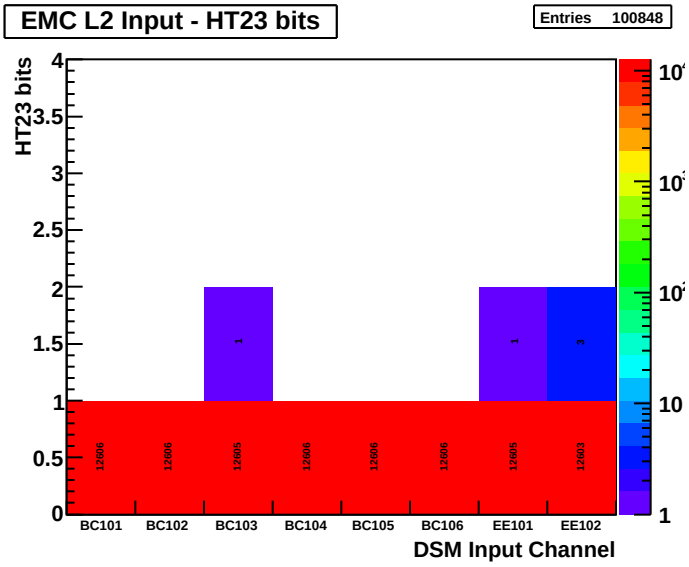

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

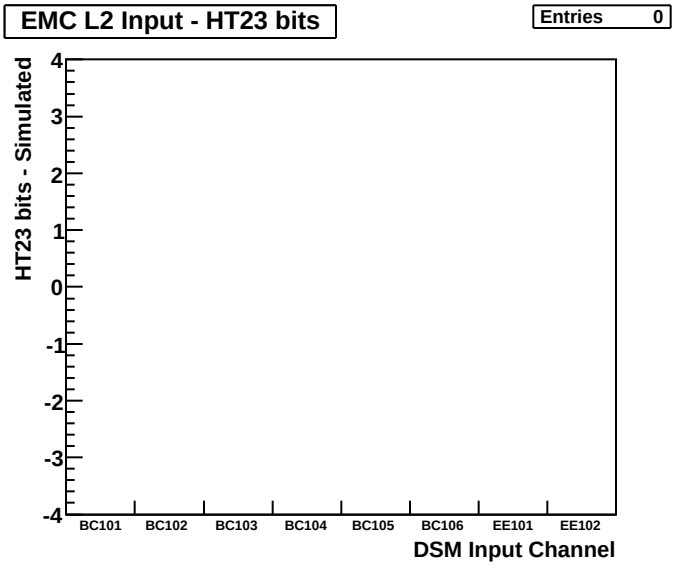

EMC L2 Input - Partial JP Sum
Entries 100848
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

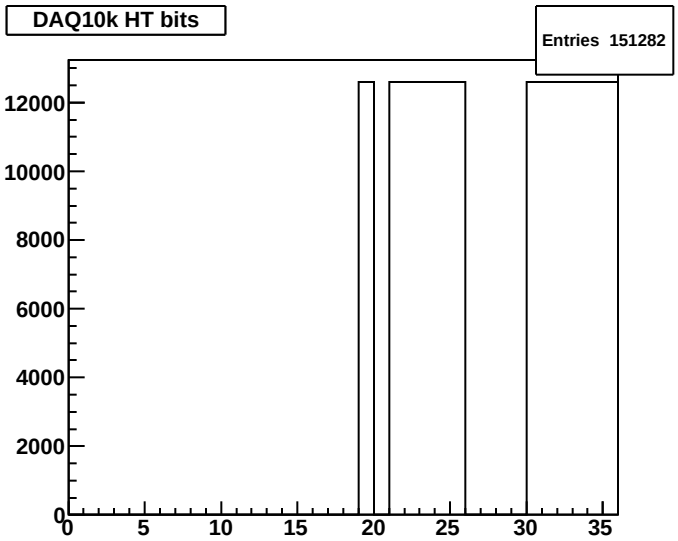

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

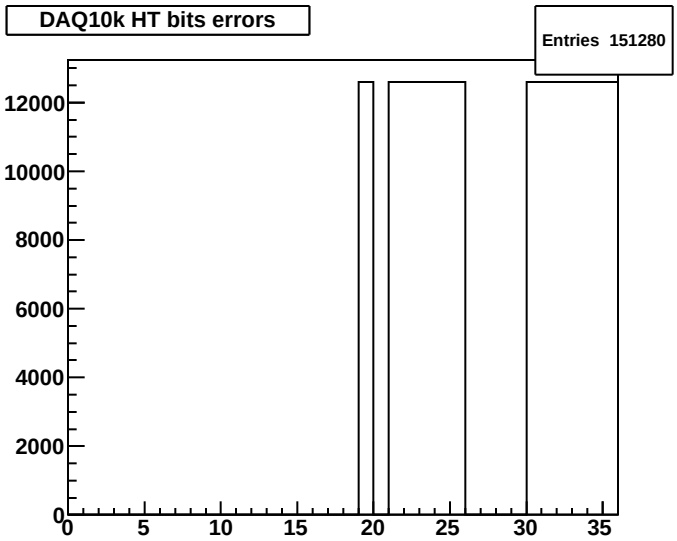

EMC L2 Input - HT01 bits/Partial JP ID
Entries 100848
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

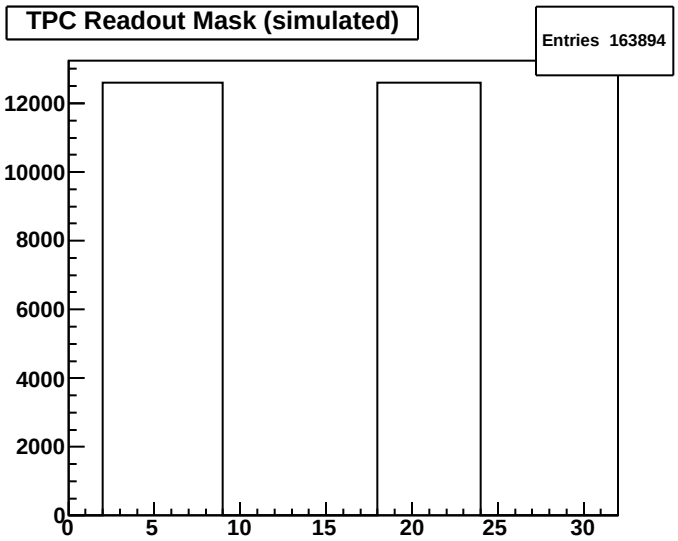

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

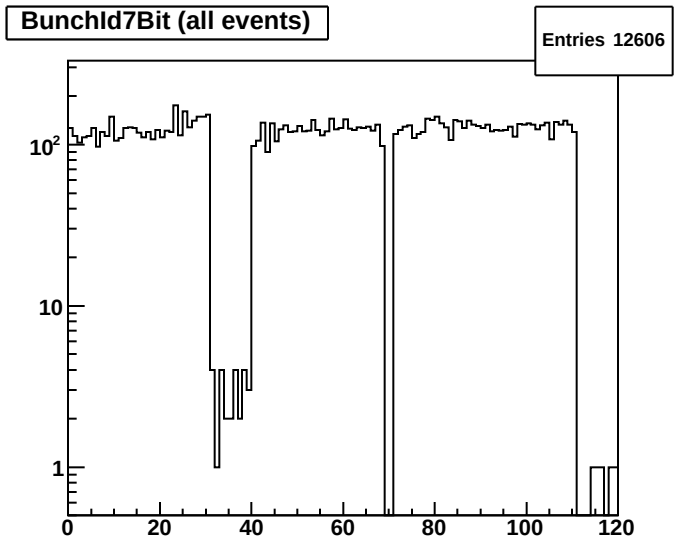

EMC L2 Input - HT23 bits
Entries 100848
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

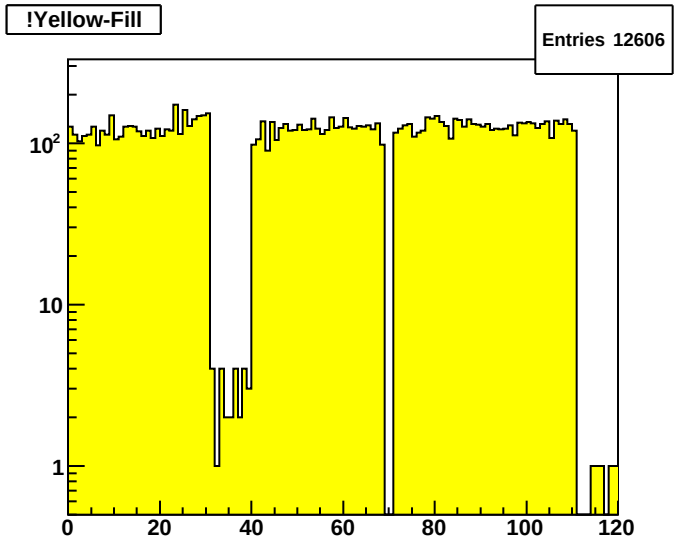

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

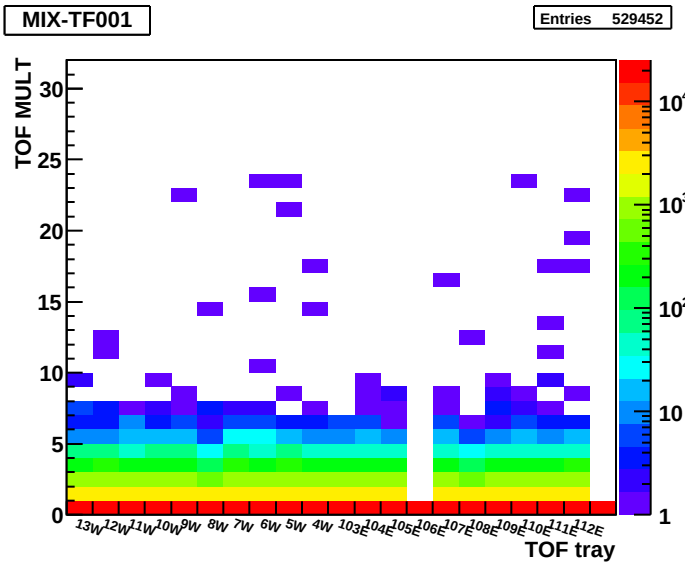

DAQ10k HT bits
Entries 151282
12000
10000
8000
6000
4000
2000
0
0
5
10
15
20
25
30
35

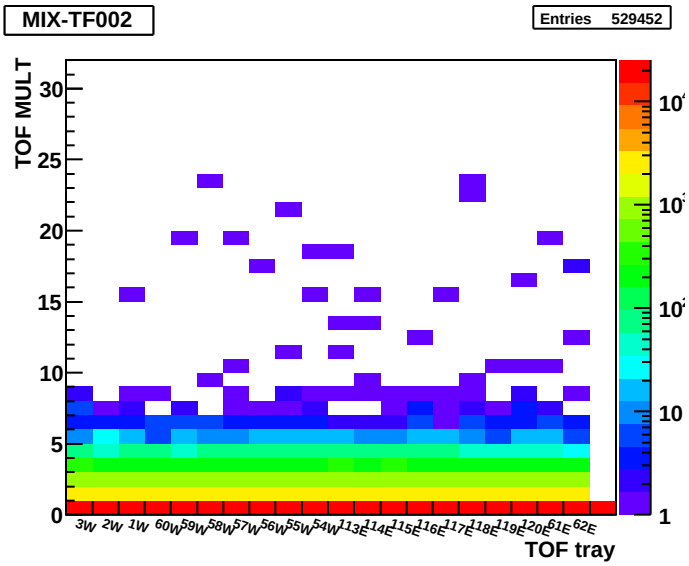

DAQ10k HT bits errors
Entries 151280
12000
10000
8000
6000
4000
2000
0
0
5
10
15
20
25
30
35

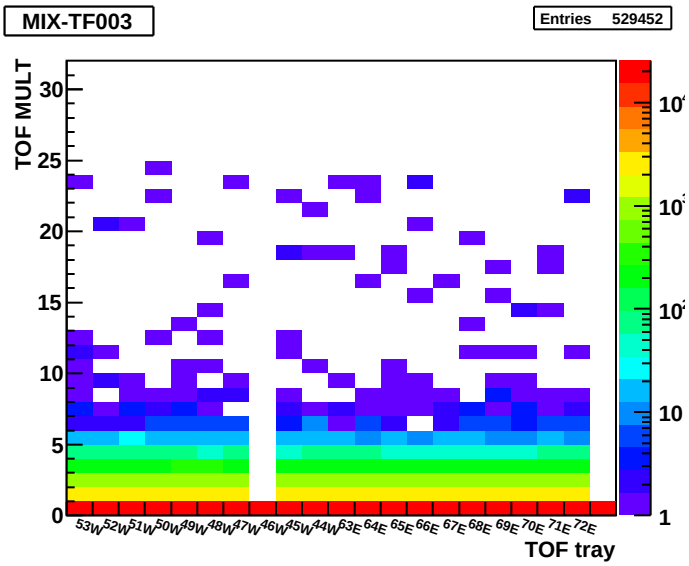

TPC Readout Mask (simulated)
Entries 163894
12000
10000
8000
6000
4000
2000
0
0
5
10
15
20
25
30

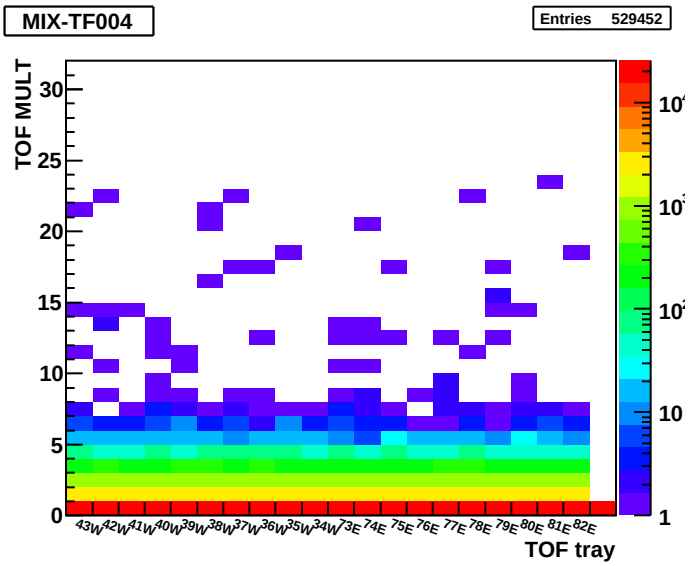

BunchId7Bit (all events)
Entries 12606
10^2
10
1
0
20
40
60
80
100
120

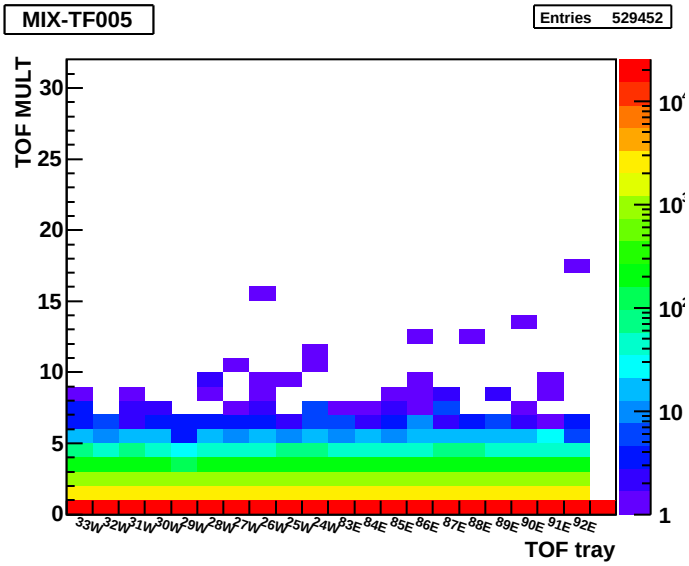

!Yellow-Fill
Entries 12606
10^2
10
1
0
20
40
60
80
100
120

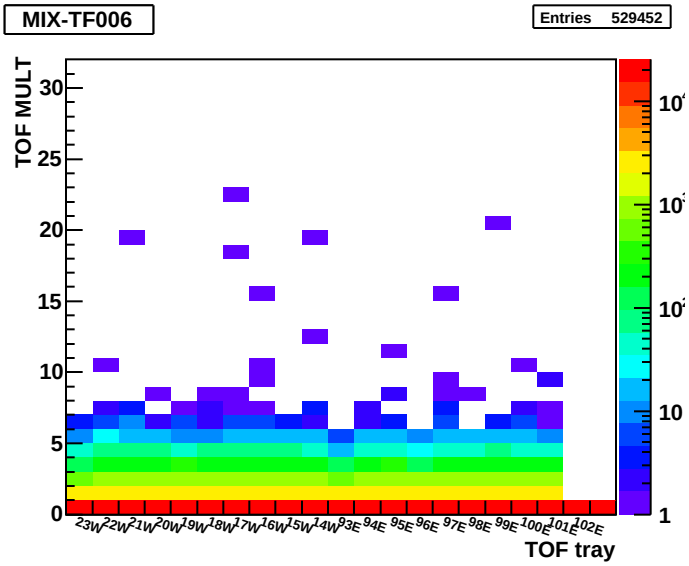

MIX-TF001
Entries 529452
TOF MULT
TOF tray

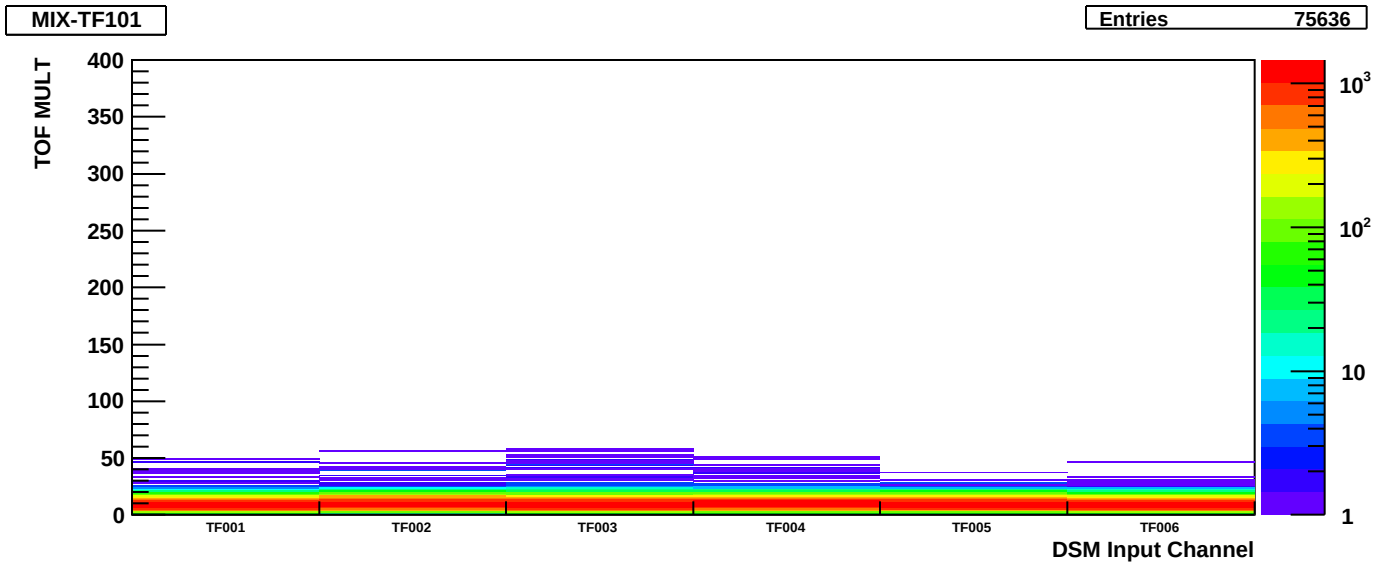

MIX-TF002
Entries 529452
TOF MULT
TOF tray

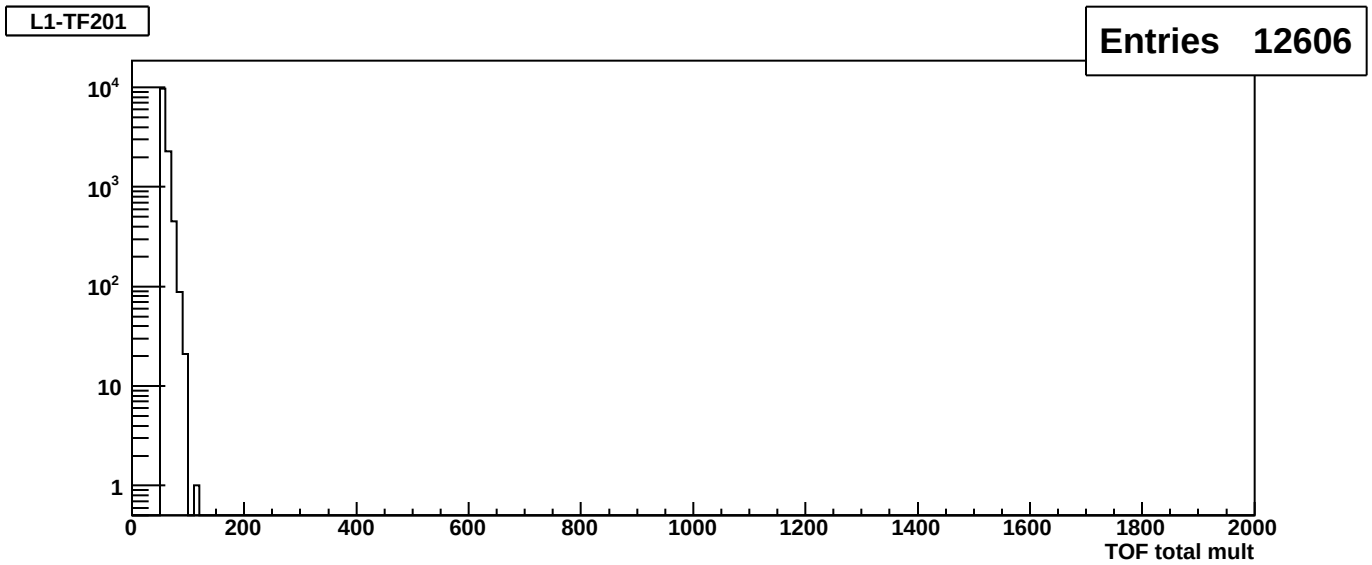

MIX-TF003
Entries 529452
TOF MULT
TOF tray

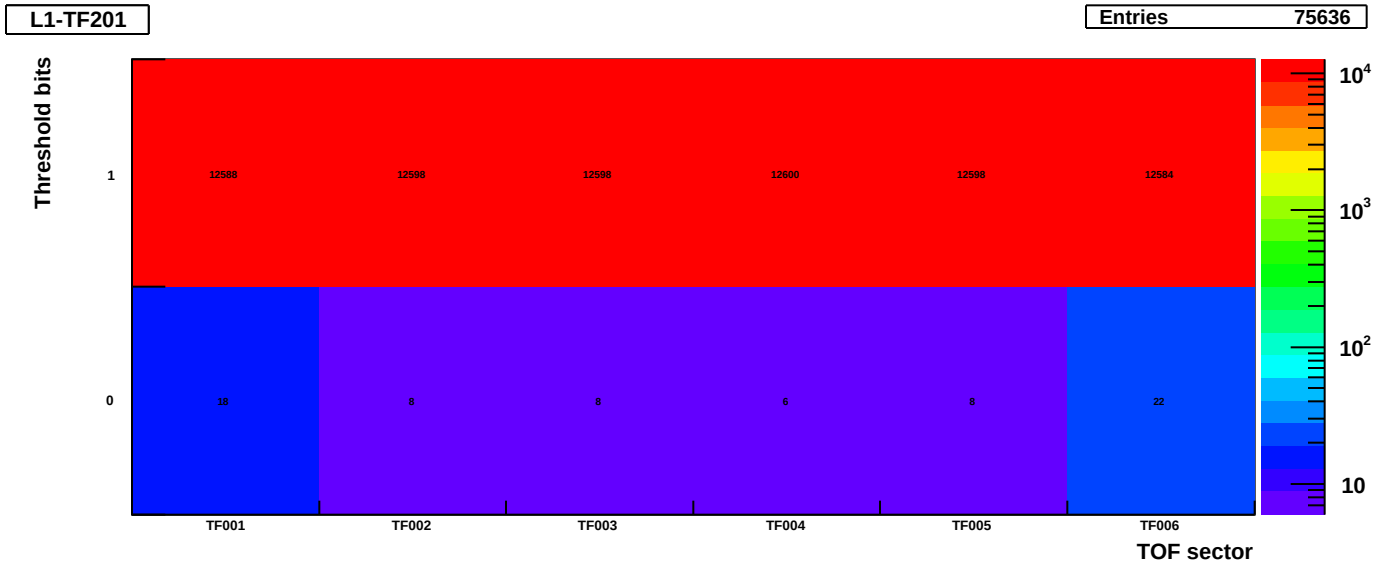

MIX-TF004
Entries 529452
TOF MULT
TOF tray

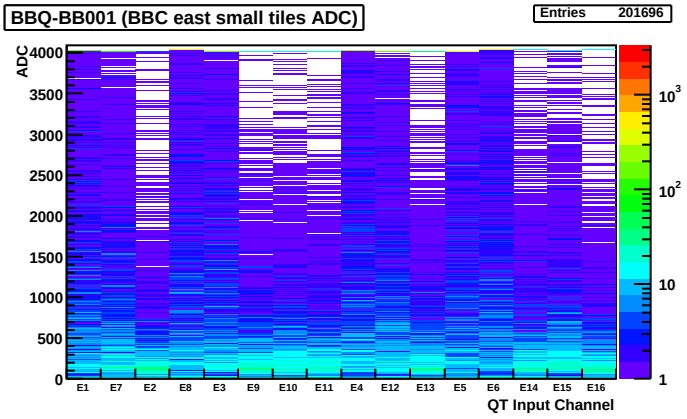

MIX-TF005
Entries 529452
TOF MULT
TOF tray

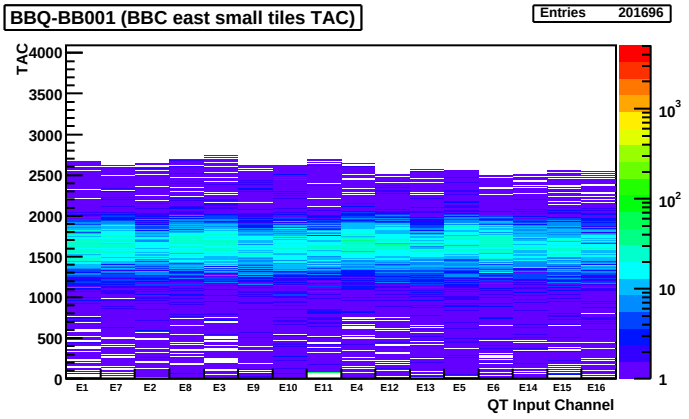

MIX-TF006
Entries 529452
TOF MULT
TOF tray

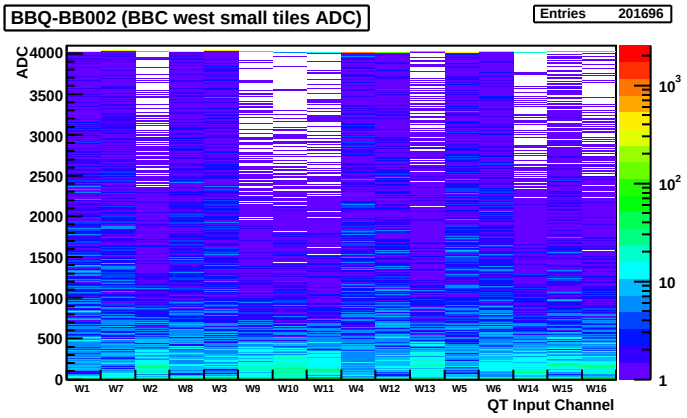

MIX-TF101
Entries 75636
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

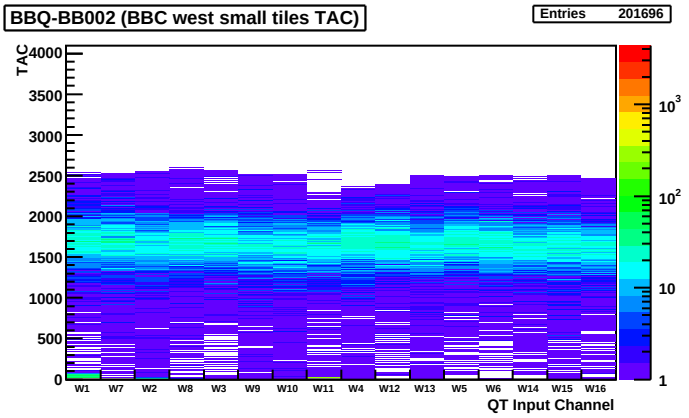

L1-TF201
Entries 12606
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

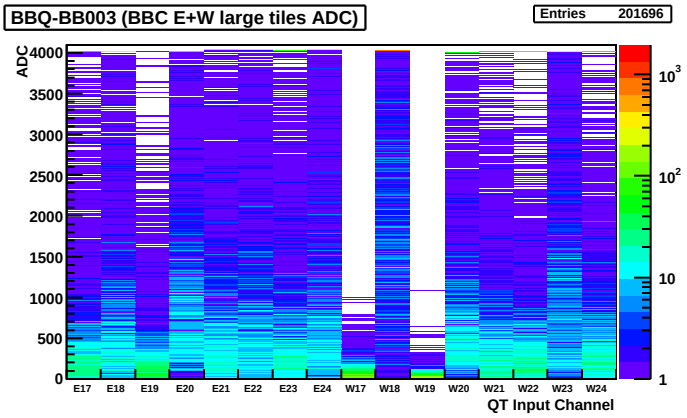

L1-TF201
Entries 75636
Threshold bits
1
0
12588
12598
12598
12600
12598
12584
18
8
8
6
8
22
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4
10^3
10^2
10

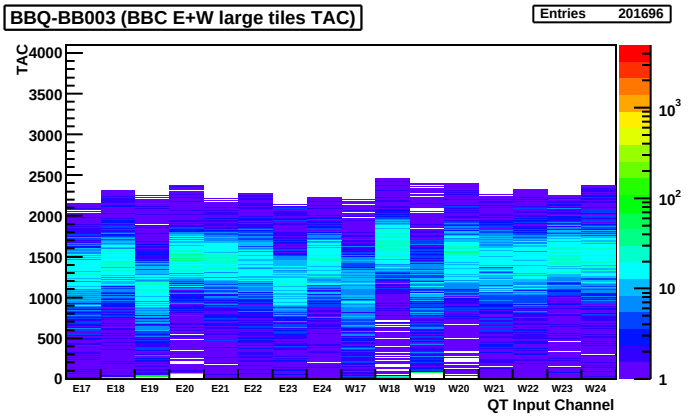

BBQ-BB001 (BBC east small tiles ADC)
Entries 201696
ADC
QT Input Channel

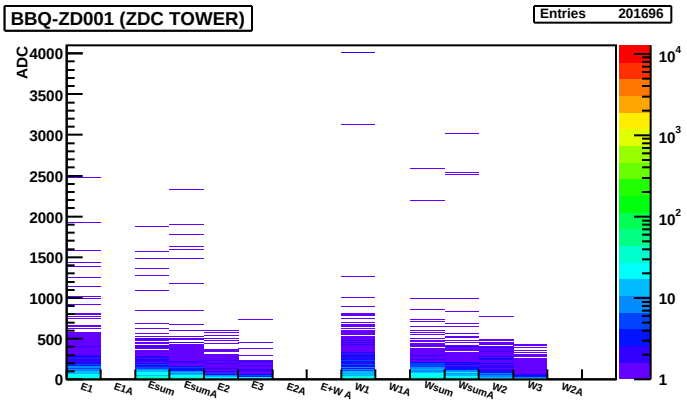

BBQ-BB001 (BBC east small tiles TAC)
Entries 201696
TAC
QT Input Channel

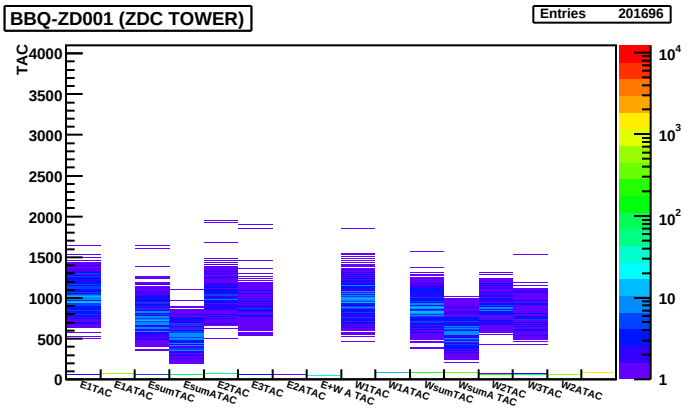

BBQ-BB002 (BBC west small tiles ADC)
Entries 201696
ADC
QT Input Channel

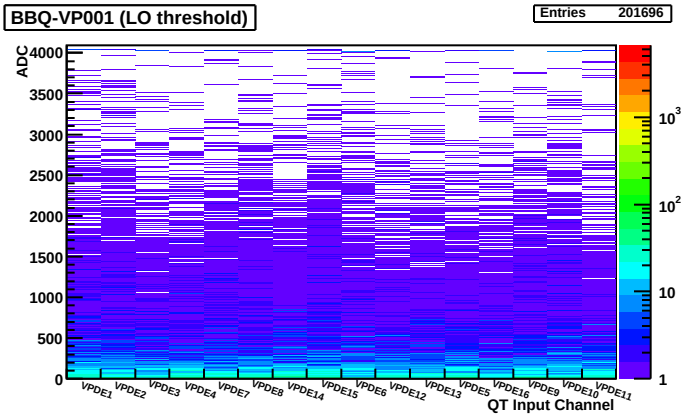

BBQ-BB002 (BBC west small tiles TAC)
Entries 201696
TAC
QT Input Channel

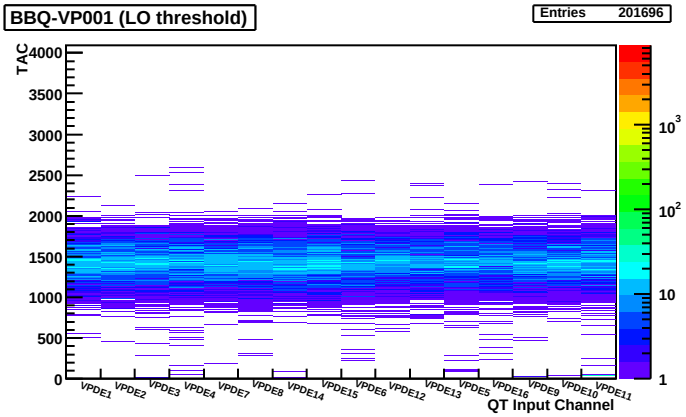

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 201696
ADC
QT Input Channel

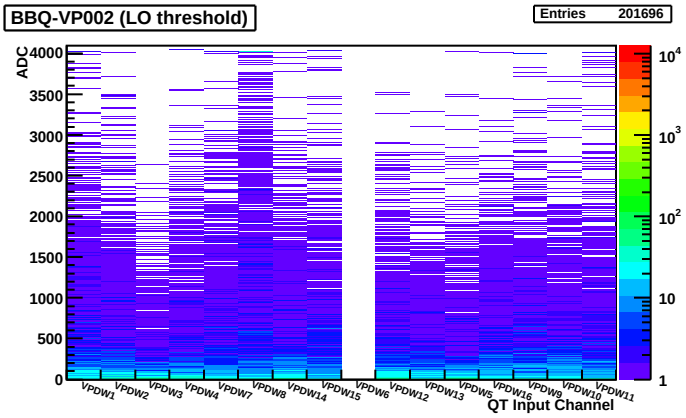

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 201696
TAC
QT Input Channel

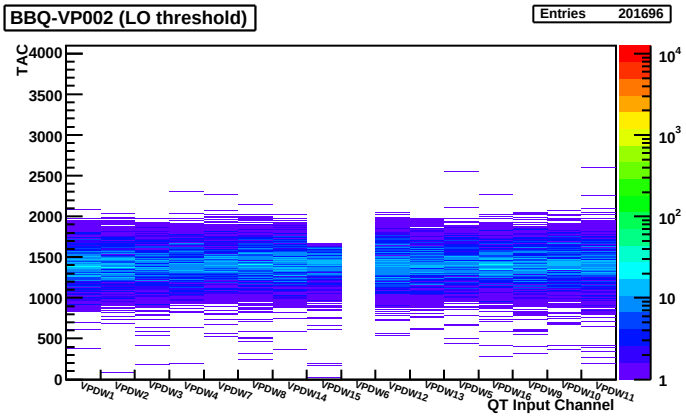

BBQ-ZD001 (ZDC TOWER)
Entries 201696
ADC

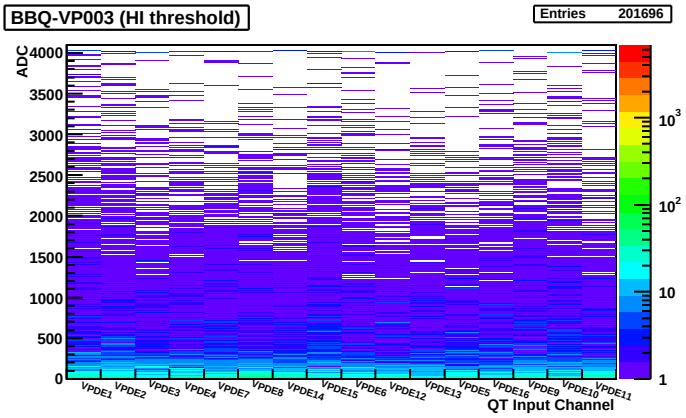

BBQ-ZD001 (ZDC TOWER)
Entries 201696
TAC

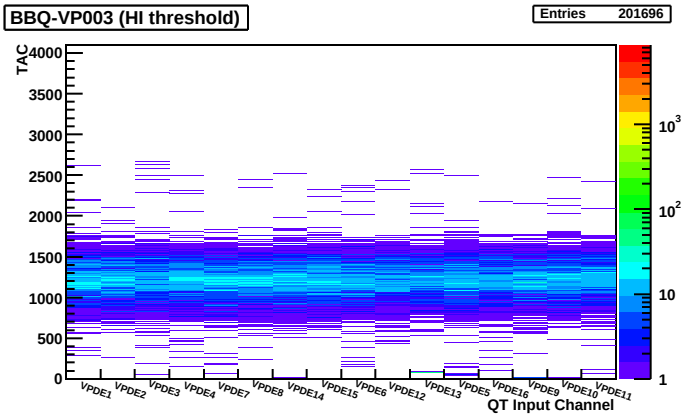

BBQ-VP001 (LO threshold)
Entries 201696
ADC
QT Input Channel

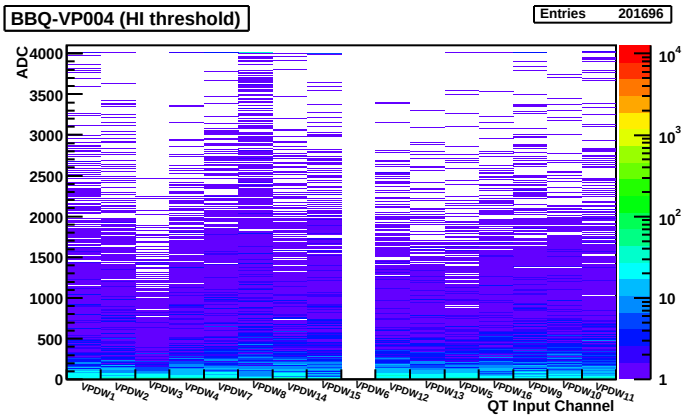

BBQ-VP001 (LO threshold)
Entries 201696
TAC
QT Input Channel

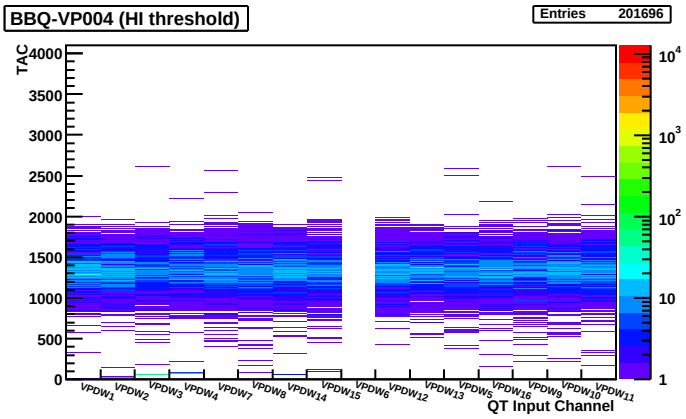

BBQ-VP002 (LO threshold)
Entries 201696
ADC
QT Input Channel

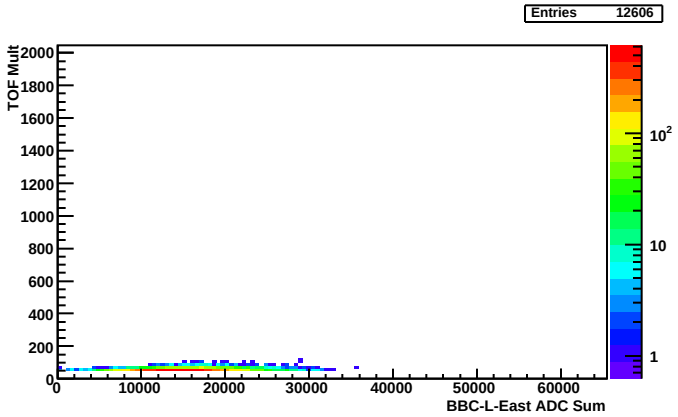

BBQ-VP002 (LO threshold)
Entries 201696
TAC
QT Input Channel

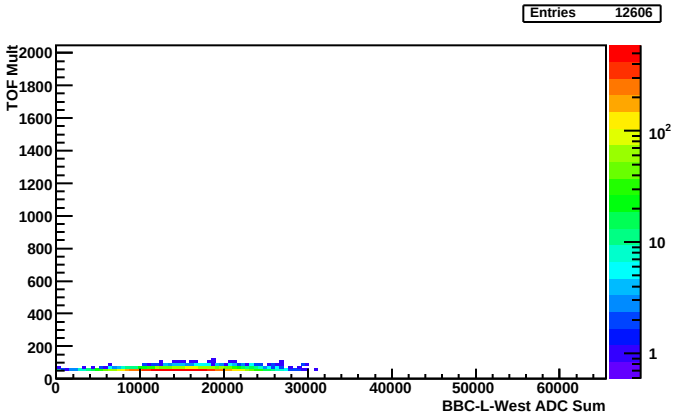

BBQ-VP003 (HI threshold)
Entries 201696
ADC
QT Input Channel

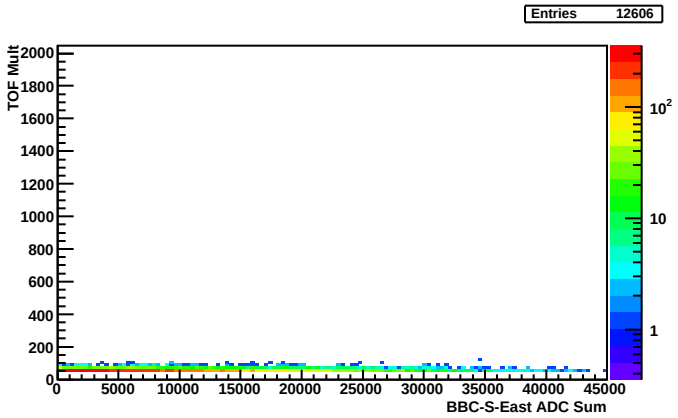

BBQ-VP003 (HI threshold)
Entries 201696
TAC
QT Input Channel

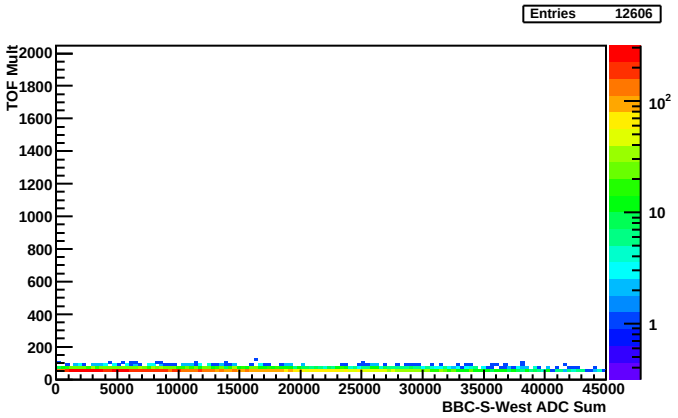

BBQ-VP004 (HI threshold)
Entries 201696
ADC
QT Input Channel

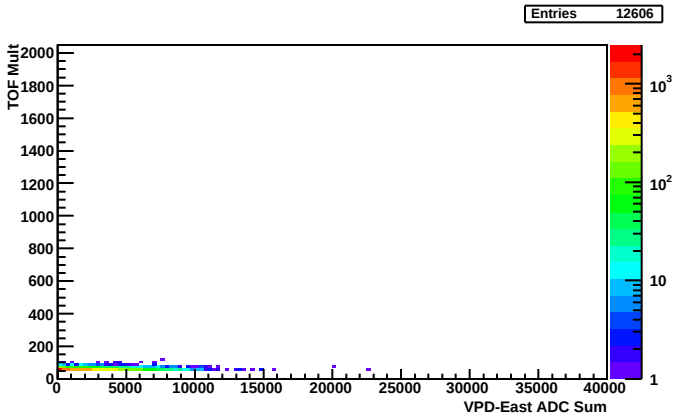

BBQ-VP004 (HI threshold)
Entries 201696
TAC
QT Input Channel

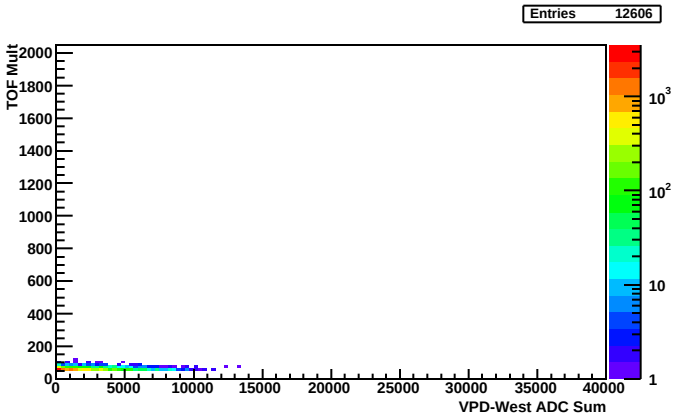

Entries 12606
TOF Mult
BBC-L-East ADC Sum

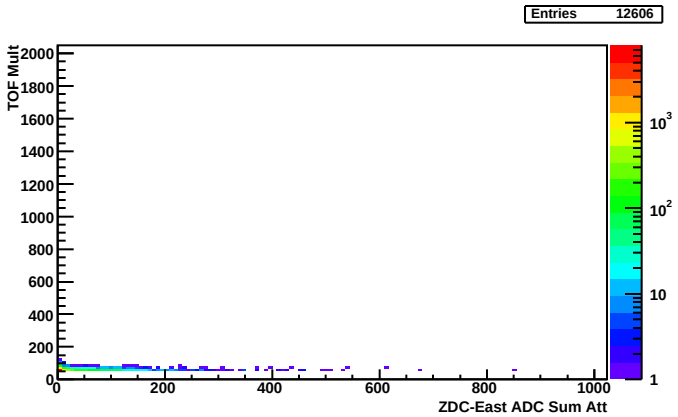

Entries 12606
TOF Mult
BBC-L-West ADC Sum

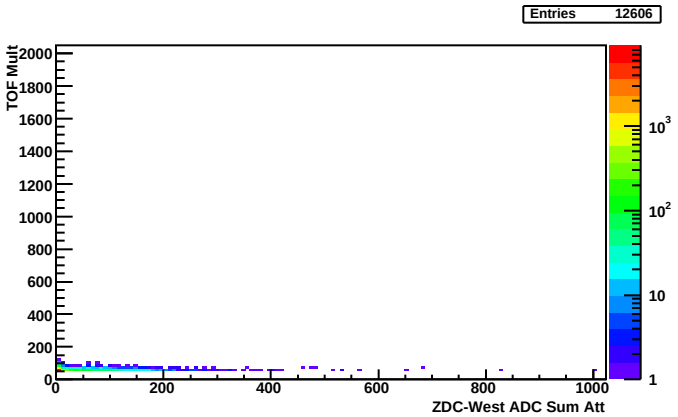

Entries 12606
TOF Mult
BBC-S-East ADC Sum

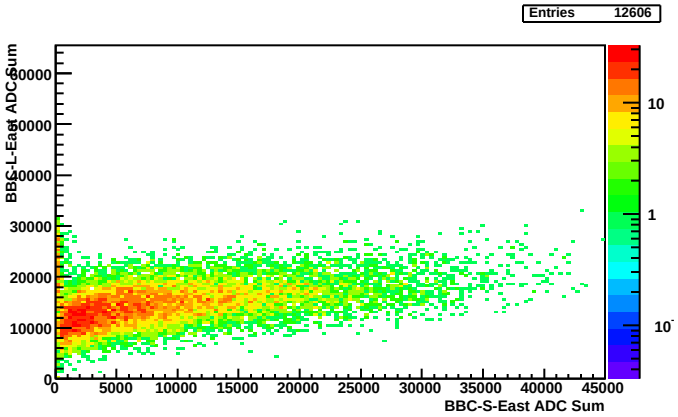

Entries 12606
TOF Mult
BBC-S-West ADC Sum

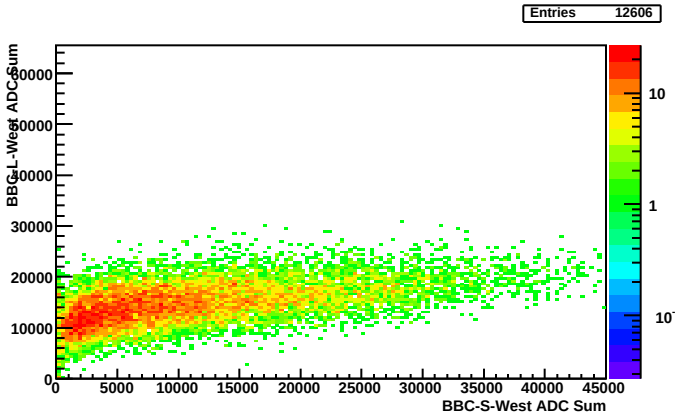

Entries 12606
TOF Mult
VPD-East ADC Sum

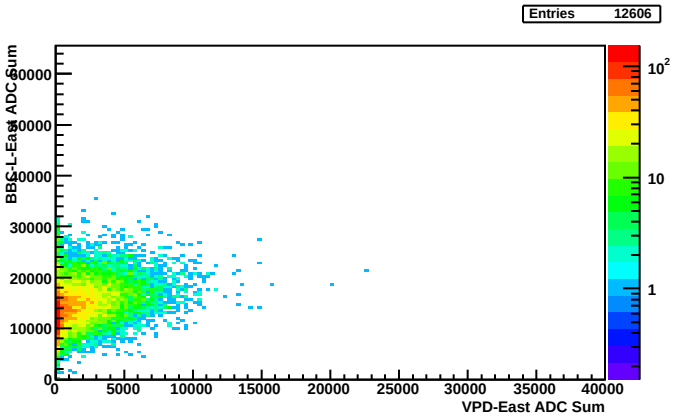

Entries 12606
TOF Mult
VPD-West ADC Sum

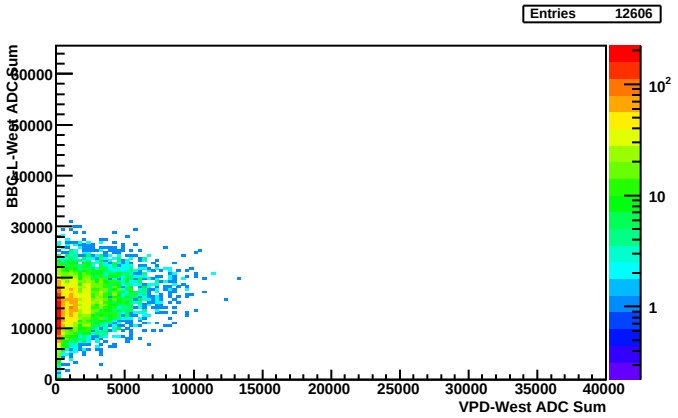

Entries 12606
TOF Mult
ZDC-East ADC Sum Att

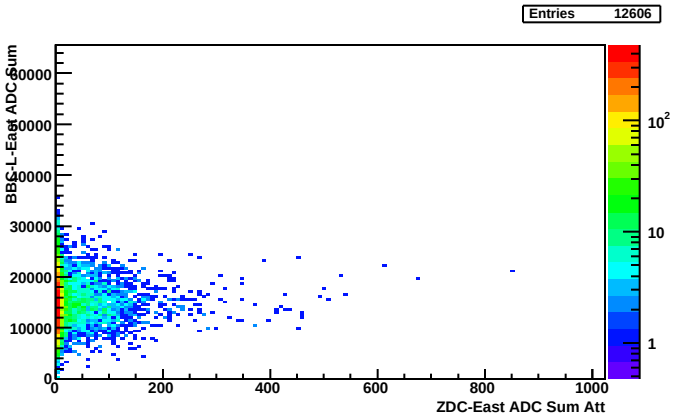

Entries 12606
TOF Mult
ZDC-West ADC Sum Att

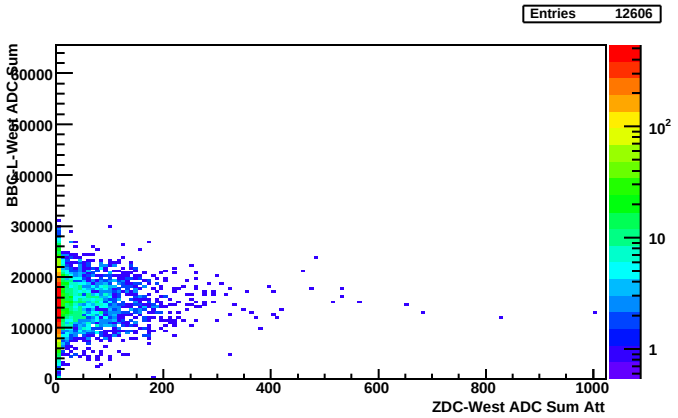

Entries 12606
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 12606
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 12606
BBC-L-East ADC Sum
VPD-East ADC Sum


Entries 12606
BBC-L-West ADC Sum
VPD-West ADC Sum


Entries 12606
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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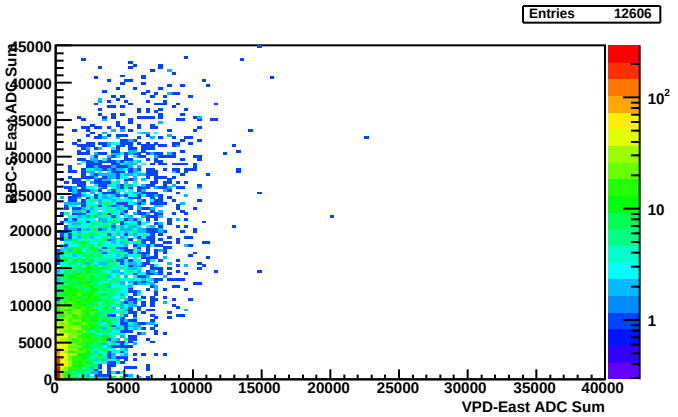
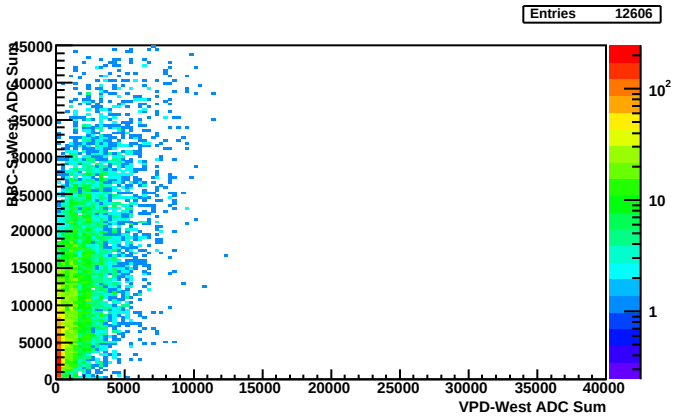
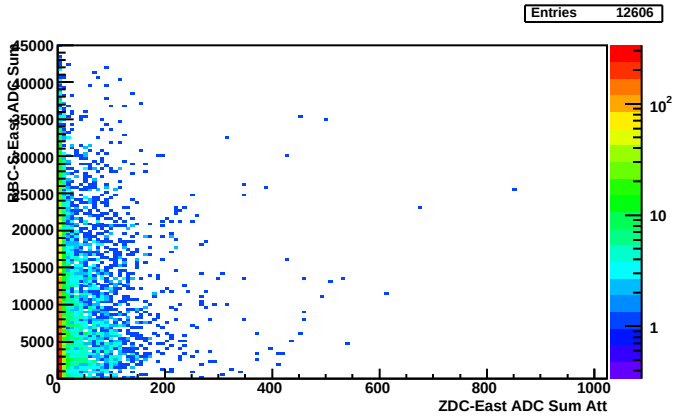
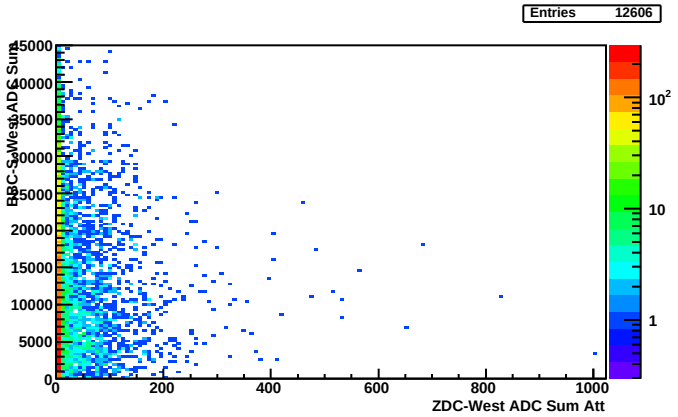
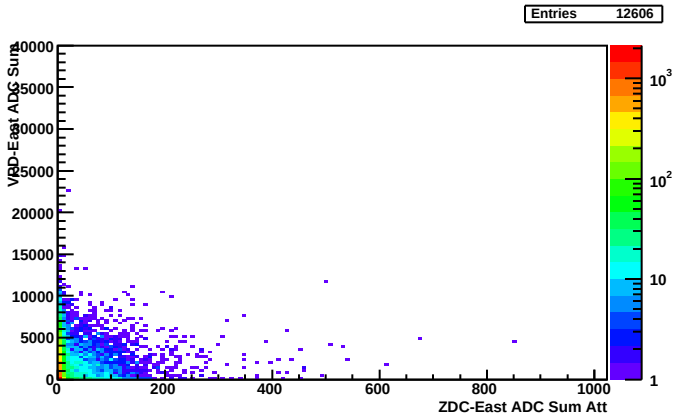
BBC-L-West ADC Sum
ZDC-West ADC Sum Att


Entries 12606
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 12606
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 12606
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 12606
BBC-S-West ADC Sum
ZDC-West ADC Sum Att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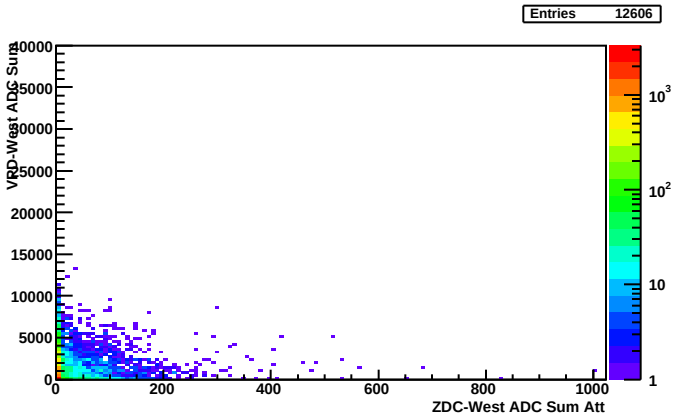
VPD-East ADC Sum
ZDC-East ADC Sum Att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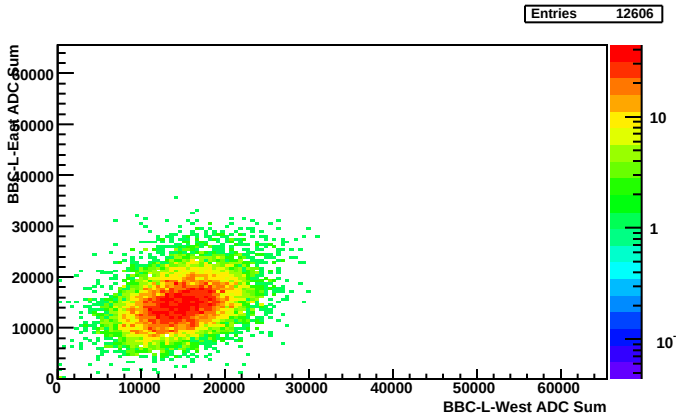
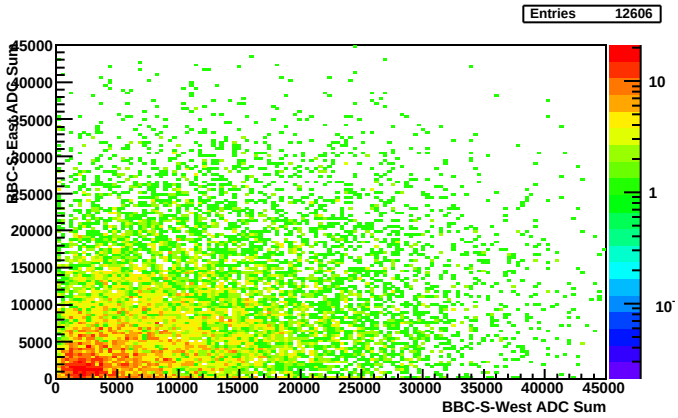
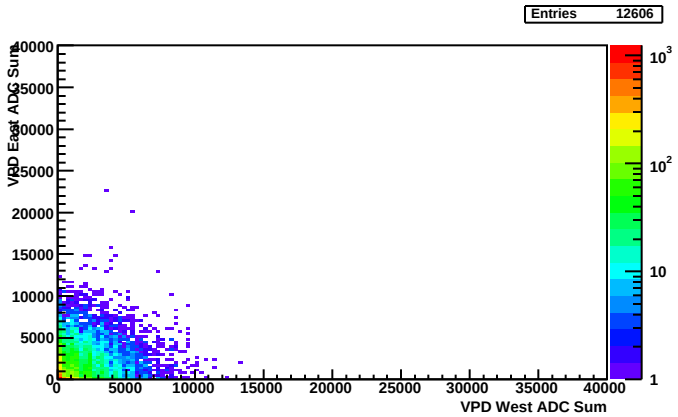
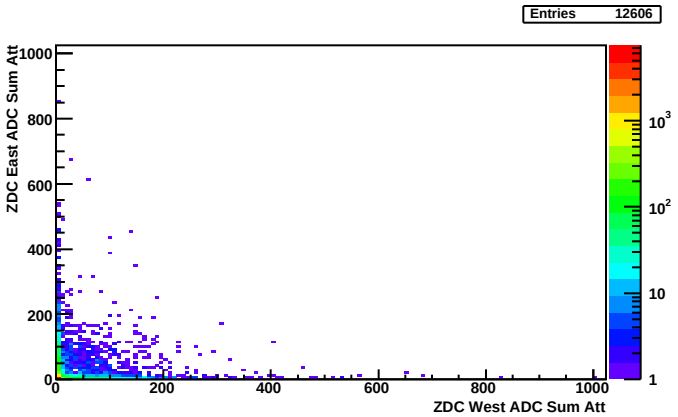
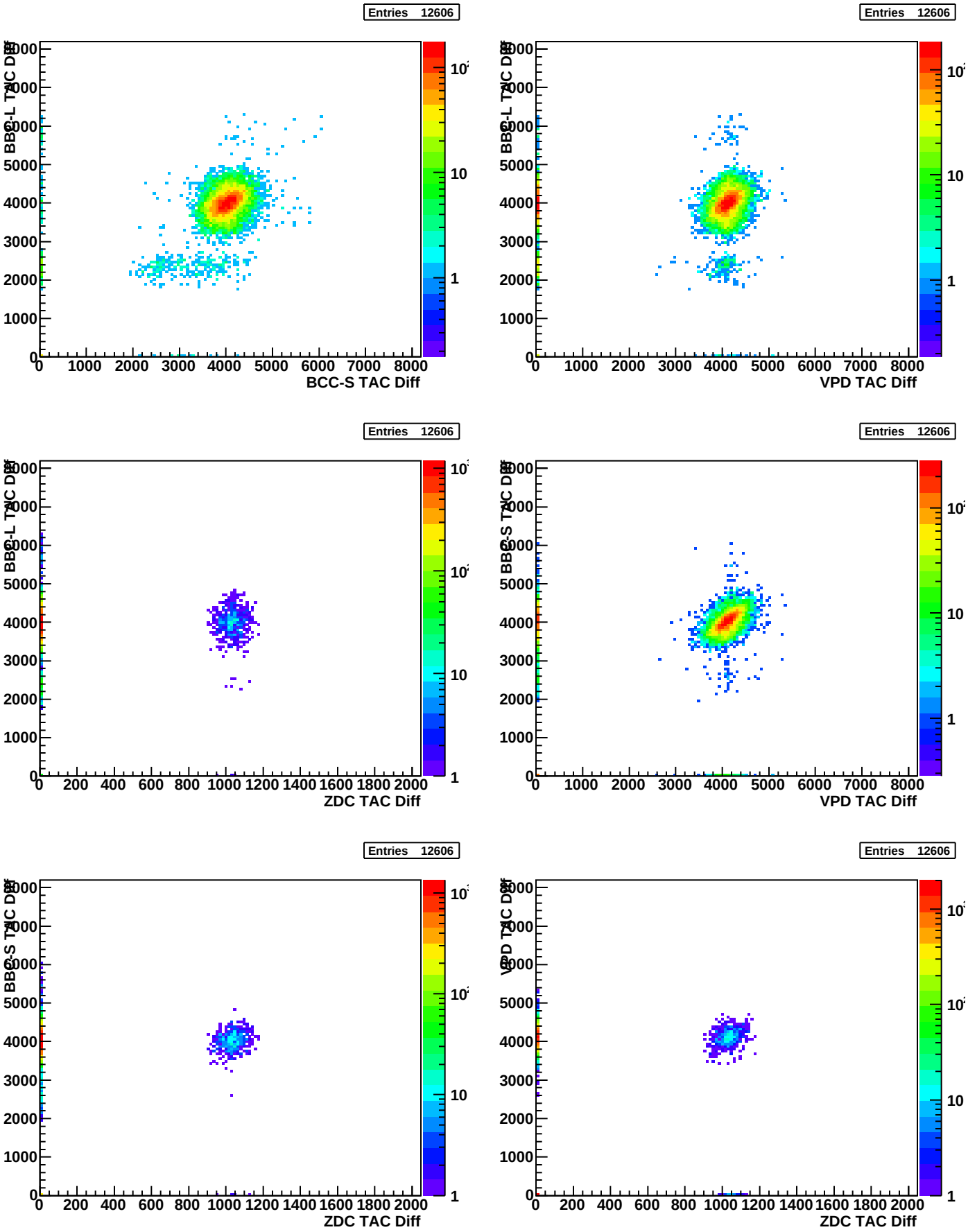
VPD-West ADC Sum
ZDC-West ADC Sum Att

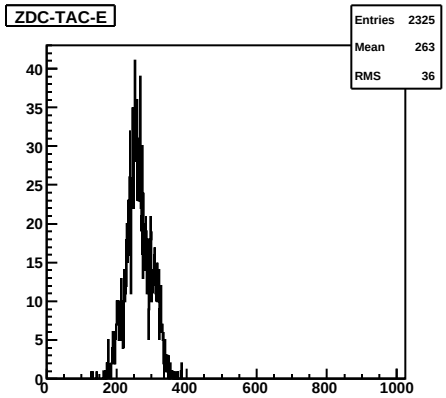

Entries 12606
BBC-L-East ADC Sum
BBC-L-West ADC Sum

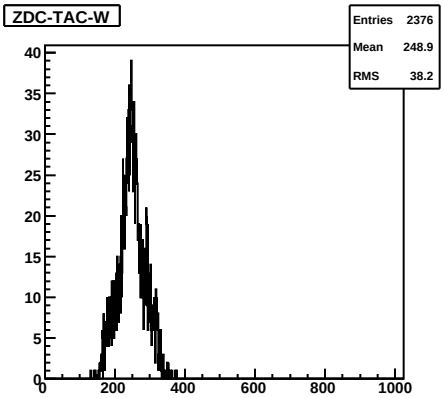

Entries 12606
BBC-S-East ADC Sum
BBC-S-West ADC Sum

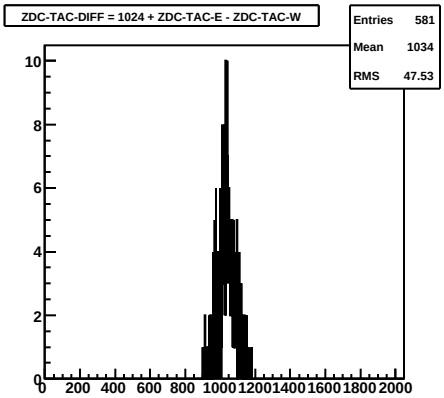

Entries 12606
VPD East ADC Sum
VPD West ADC Sum

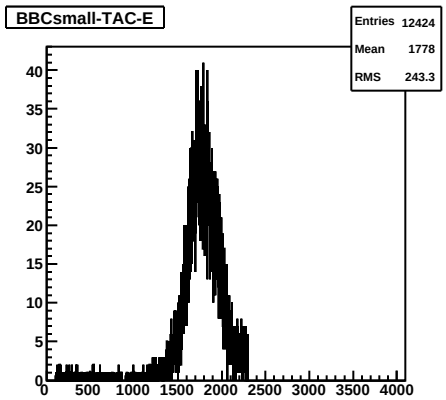

Entries 12606
ZDC East ADC Sum Att
ZDC West ADC Sum Att

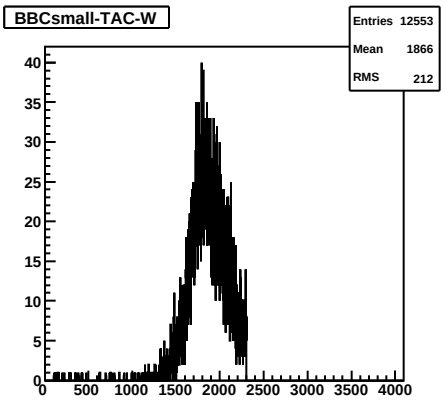

Entries 12606
BBC-L TAC Diff
BCC-S TAC Diff
Entries 12606
BBC-L TAC Diff
VPD TAC Diff
Entries 12606
BBC-L TAC Diff
ZDC TAC Diff
Entries 12606
BBC-S TAC Diff
VPD TAC Diff
Entries 12606
BBC-S TAC Diff
ZDC TAC Diff
Entries 12606
VPD TAC Diff
ZDC TAC Diff

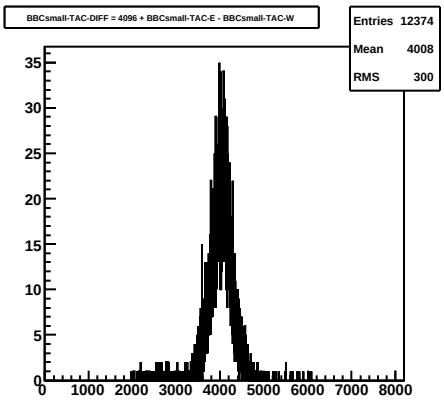

ZDC-TAC-E
Entries 2325
Mean 263
RMS 36

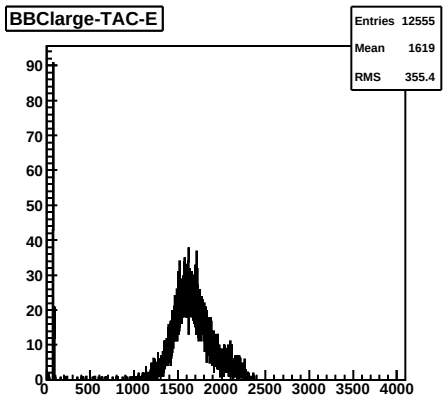

ZDC-TAC-W
Entries 2376
Mean 248.9
RMS 38.2

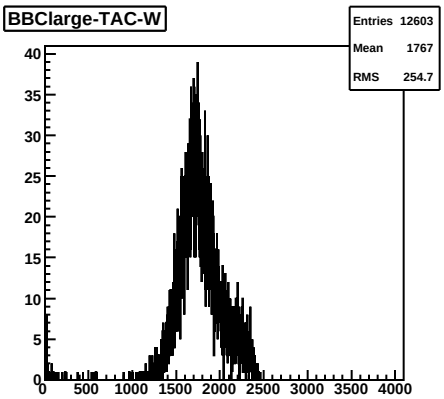

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 581
Mean 1034
RMS 47.53

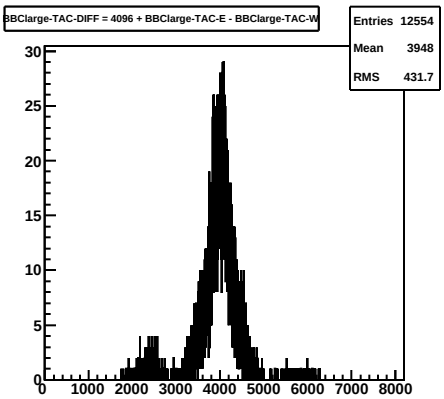

BBCsmall-TAC-E
Entries 12424
Mean 1778
RMS 243.3

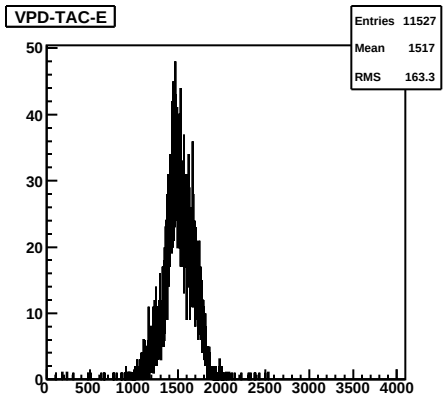

BBCsmall-TAC-W
Entries 12553
Mean 1866
RMS 212

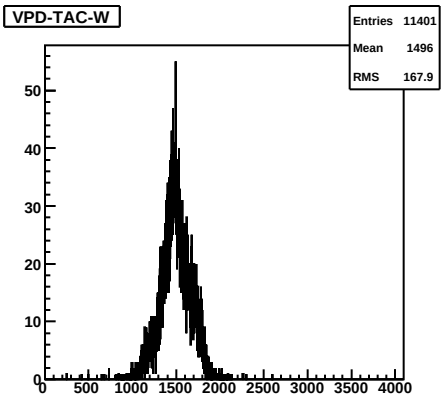

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 12374
Mean 4008
RMS 300

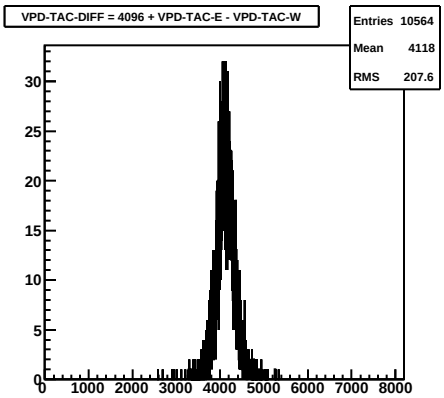

BBClarge-TAC-E
Entries 12555
Mean 1619
RMS 355.4

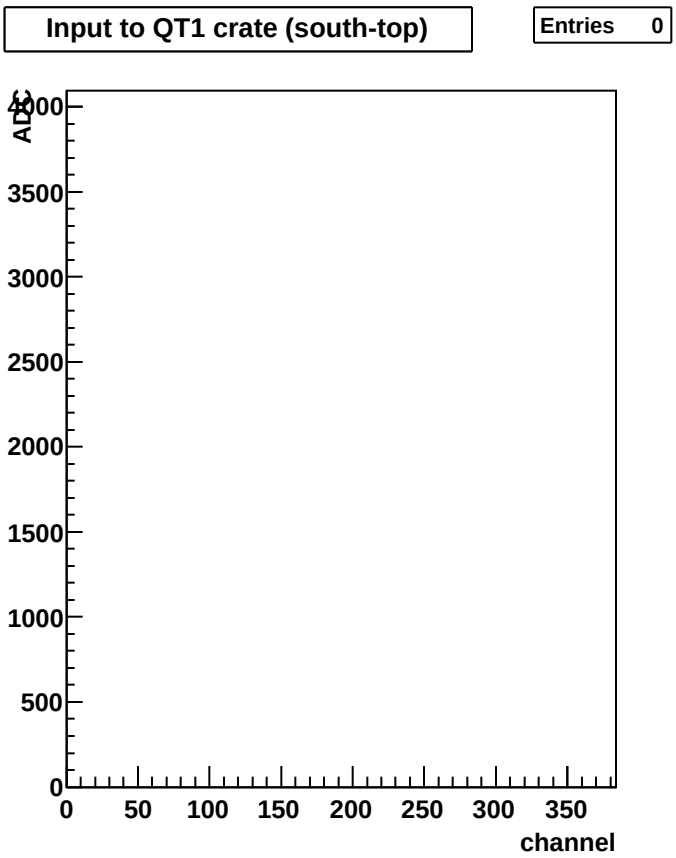

BBClarge-TAC-W
Entries 12603
Mean 1767
RMS 254.7

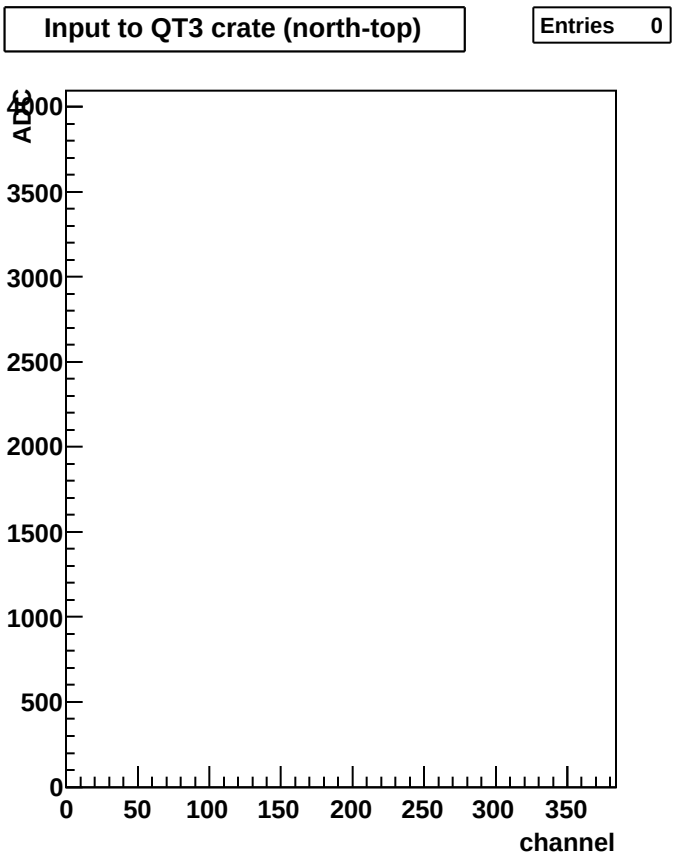

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 12554
Mean 3948
RMS 431.7

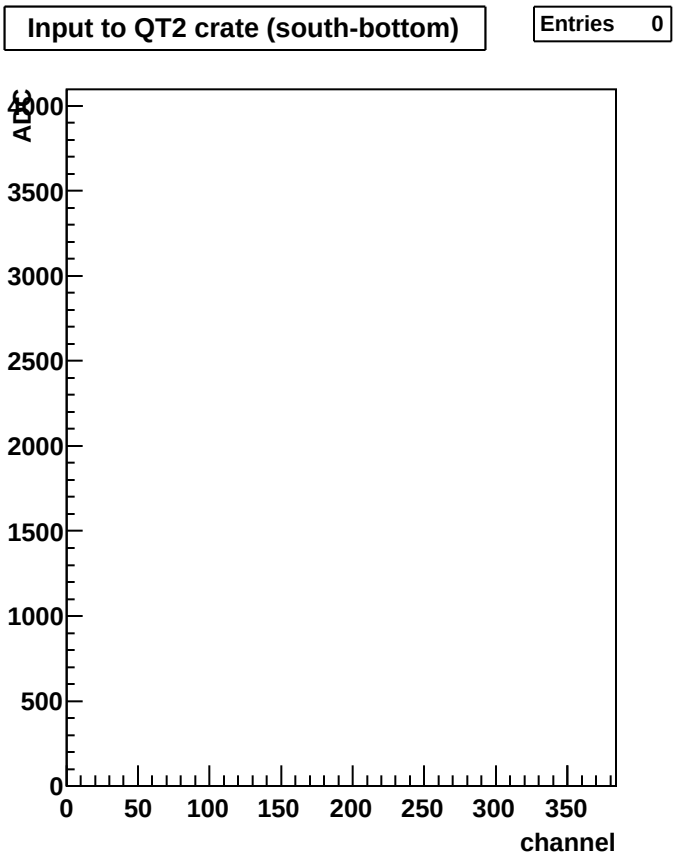

VPD-TAC-E
Entries 11527
Mean 1517
RMS 163.3

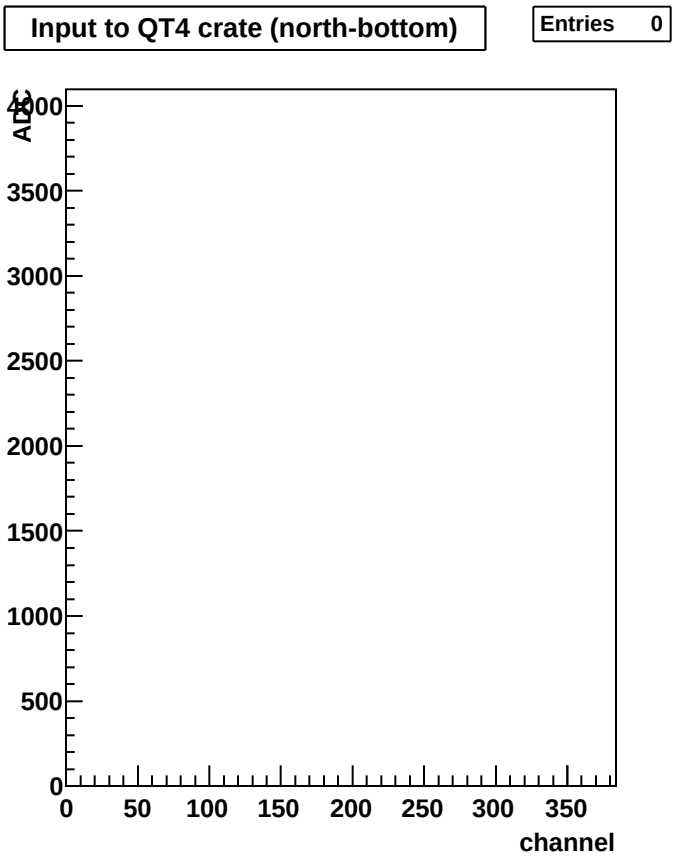

VPD-TAC-W
Entries 11401
Mean 1496
RMS 167.9

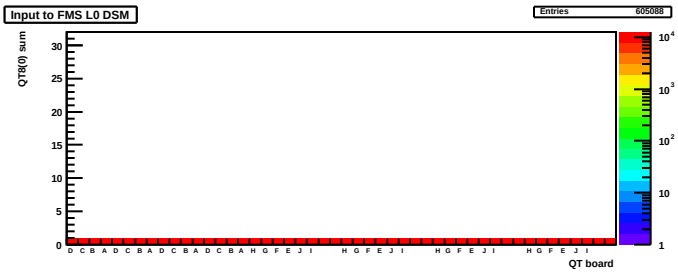

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 10564
Mean 4118
RMS 207.6

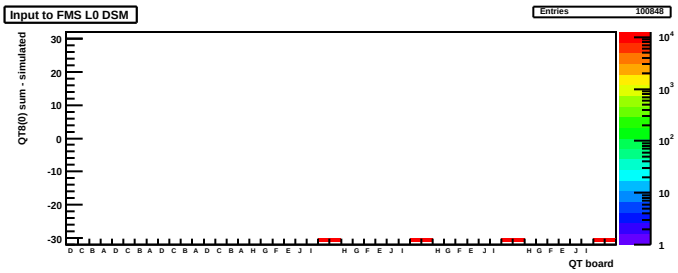

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

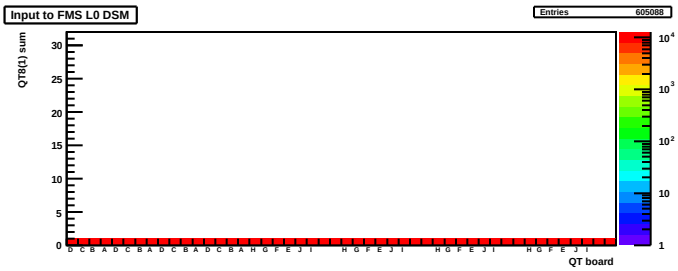

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

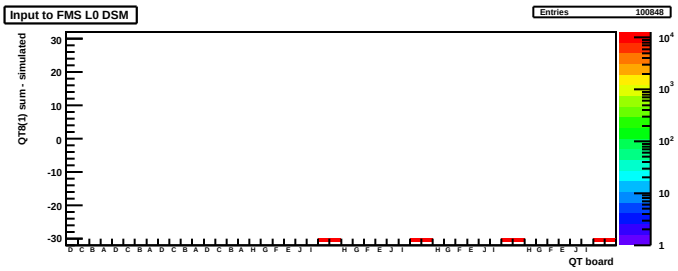

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

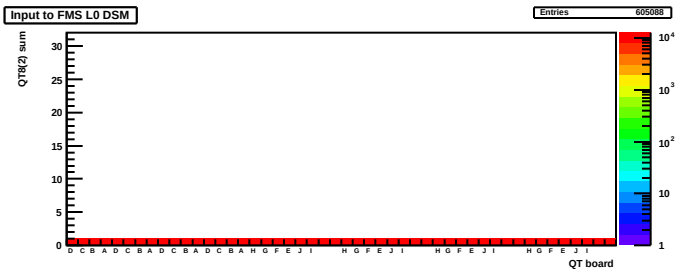

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

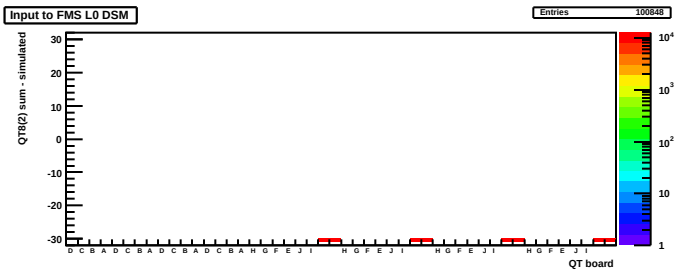

Input to FMS L0 DSM
Entries 605088
QT8(0) sum
QT board

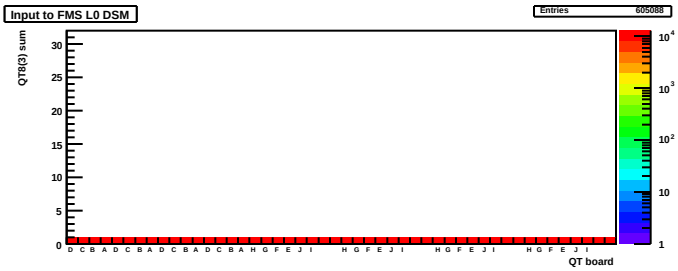

Input to FMS L0 DSM
Entries 100848
QT8(0) sum - simulated
QT board

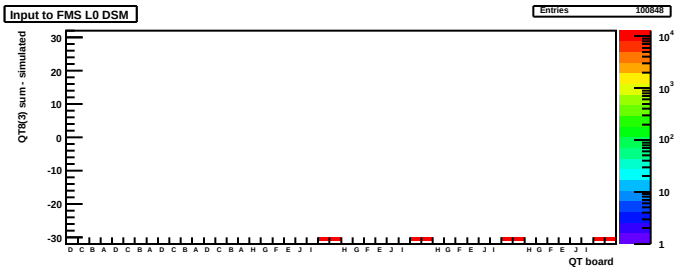

Input to FMS L0 DSM
Entries 605088
QT8(1) sum
QT board

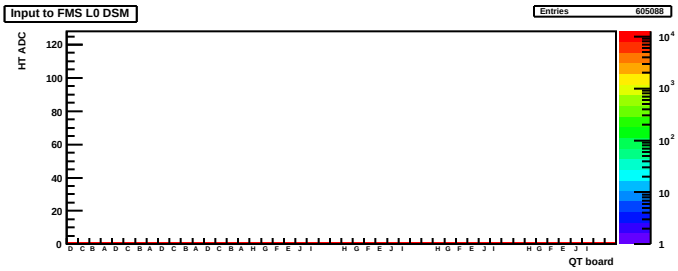

Input to FMS L0 DSM
Entries 100848
QT8(1) sum - simulated
QT board

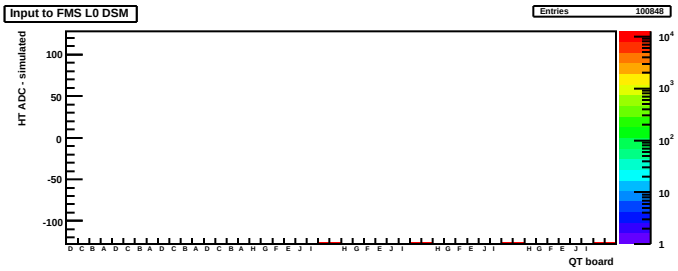

Input to FMS L0 DSM
Entries 605088
QT8(2) sum
QT board

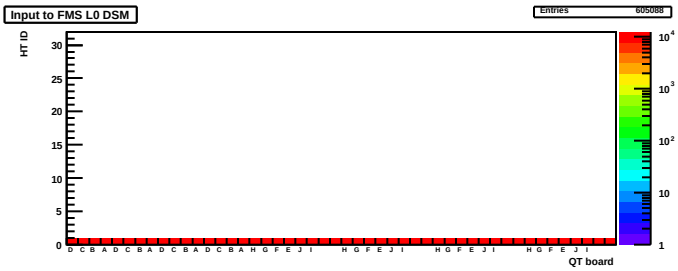

Input to FMS L0 DSM
Entries 100848
QT8(2) sum - simulated
QT board

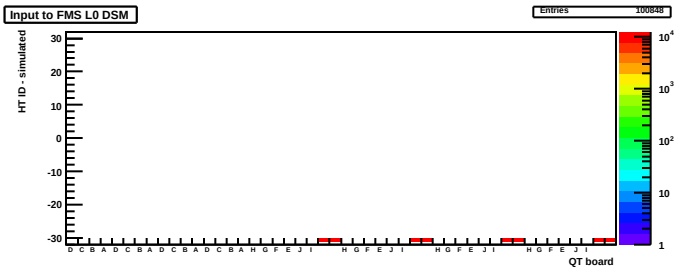

Input to FMS L0 DSM
Entries 605088
QT8(3) sum
QT board

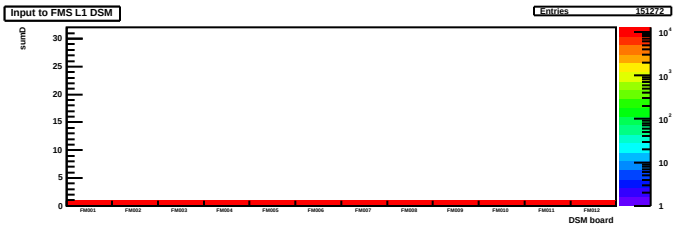

Input to FMS L0 DSM
Entries 100848
QT8(3) sum - simulated
QT board

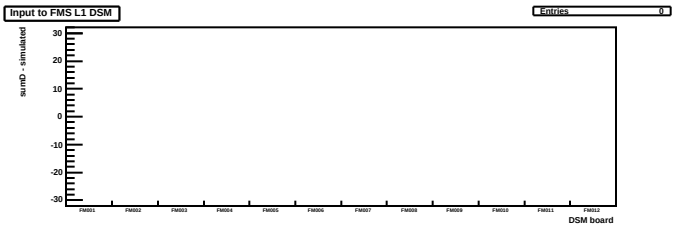

Input to FMS L0 DSM
Entries 605088
HT ADC
QT board

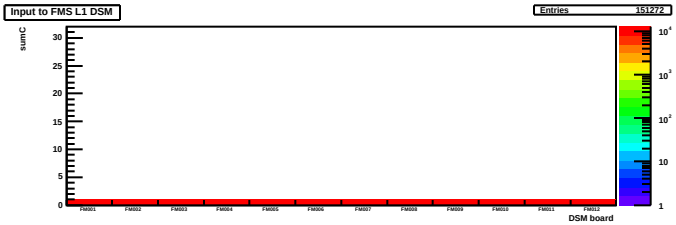

Input to FMS L0 DSM
Entries 100848
HT ADC - simulated
QT board

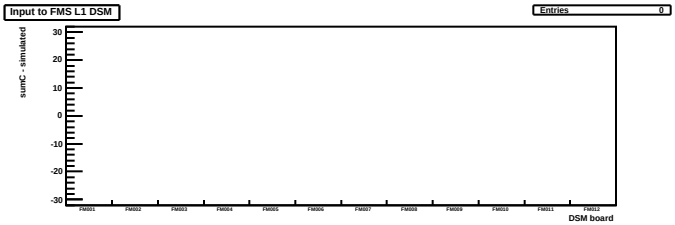

Input to FMS L0 DSM
Entries 605088
HT ID
QT board

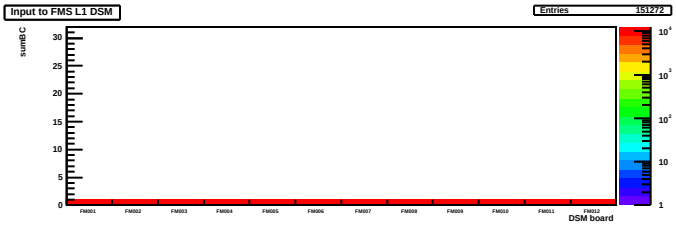

Input to FMS L0 DSM
Entries 100848
HT ID - simulated
QT board

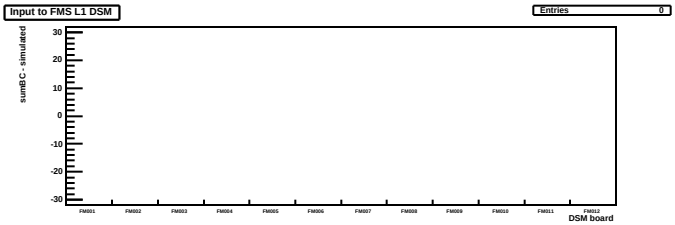

Input to FMS L1 DSM
Entries 151272
sumD
DSM board

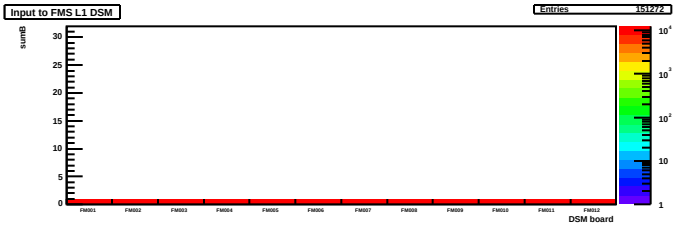

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

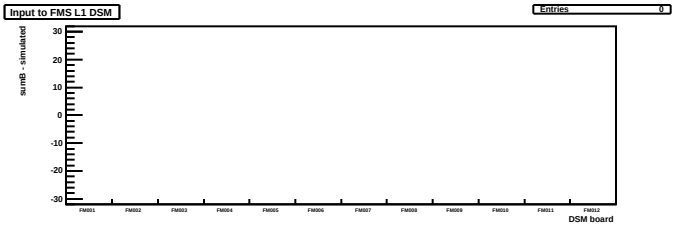

Input to FMS L1 DSM
Entries 151272
sumC
DSM board

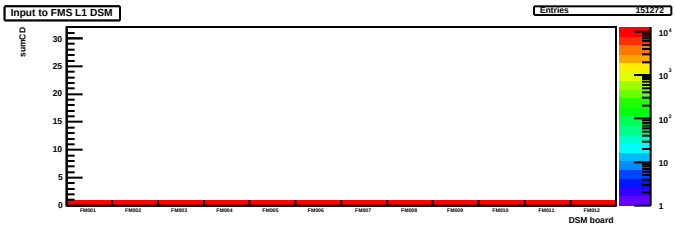

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

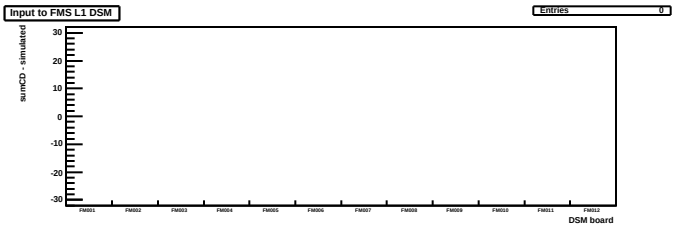

Input to FMS L1 DSM
Entries 151272
sumBC
DSM board

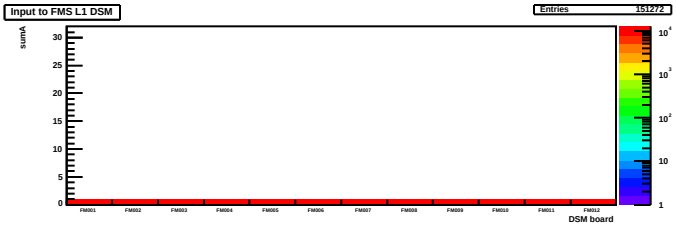

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

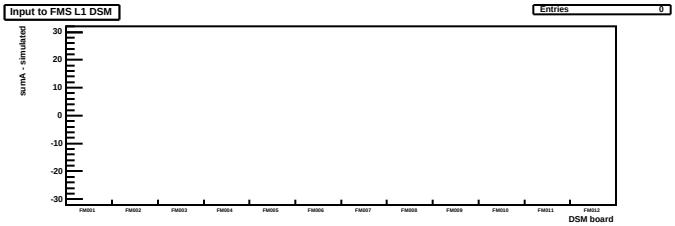

Input to FMS L1 DSM
Entries 151272
sumB
DSM board

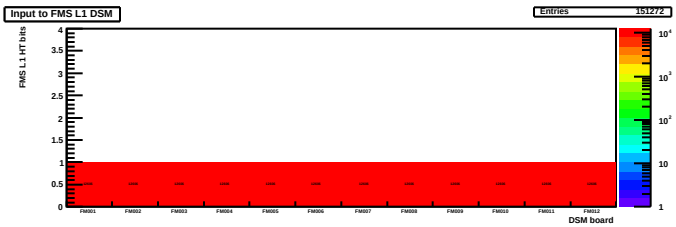

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

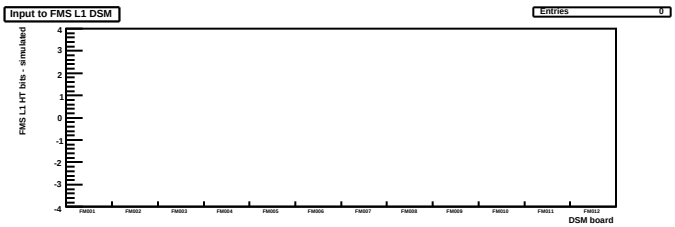

Input to FMS L1 DSM
Entries 151272
sumCD
DSM board

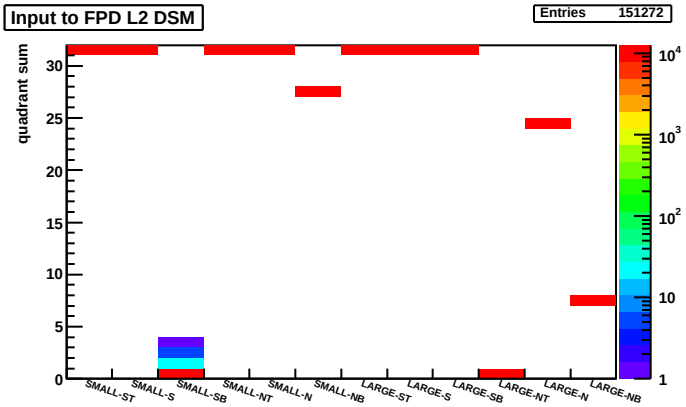

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

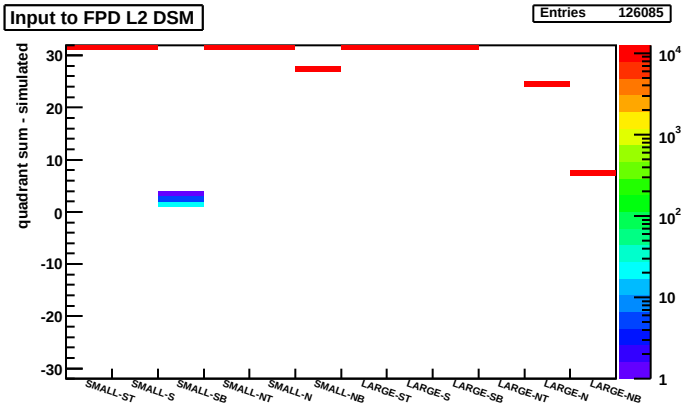

Input to FMS L1 DSM
Entries 151272
sumA
DSM board

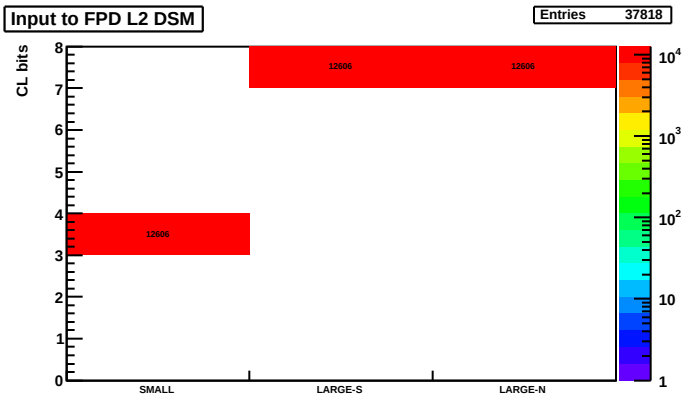

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

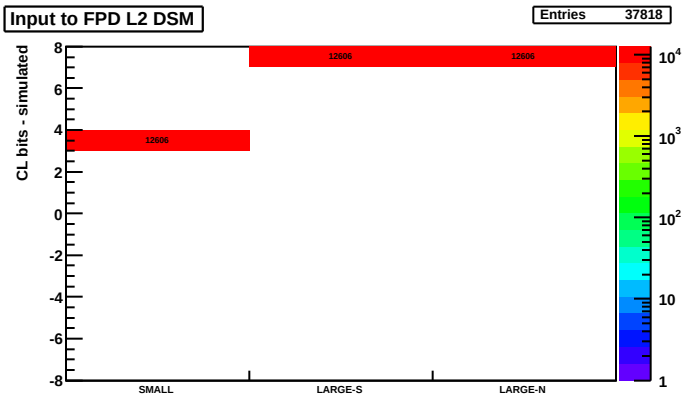

Input to FMS L1 DSM
Entries 151272
FMS L1 HT bits
DSM board

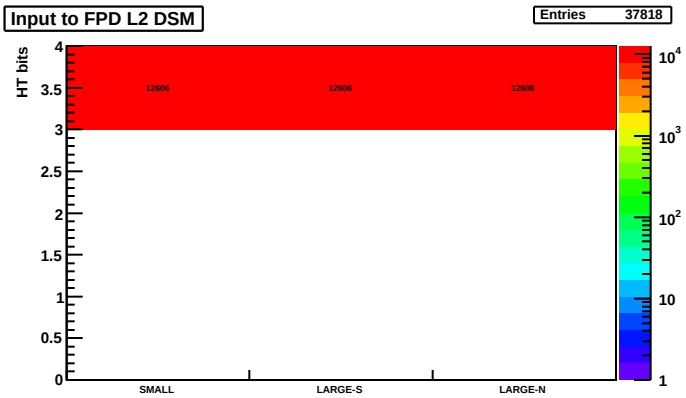

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

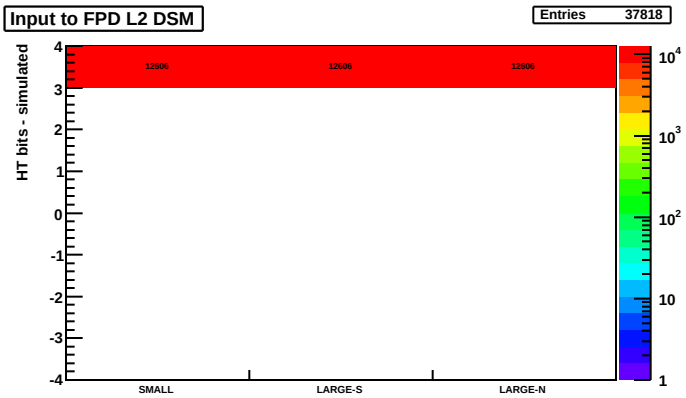

Input to FPD L2 DSM
Entries 151272
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

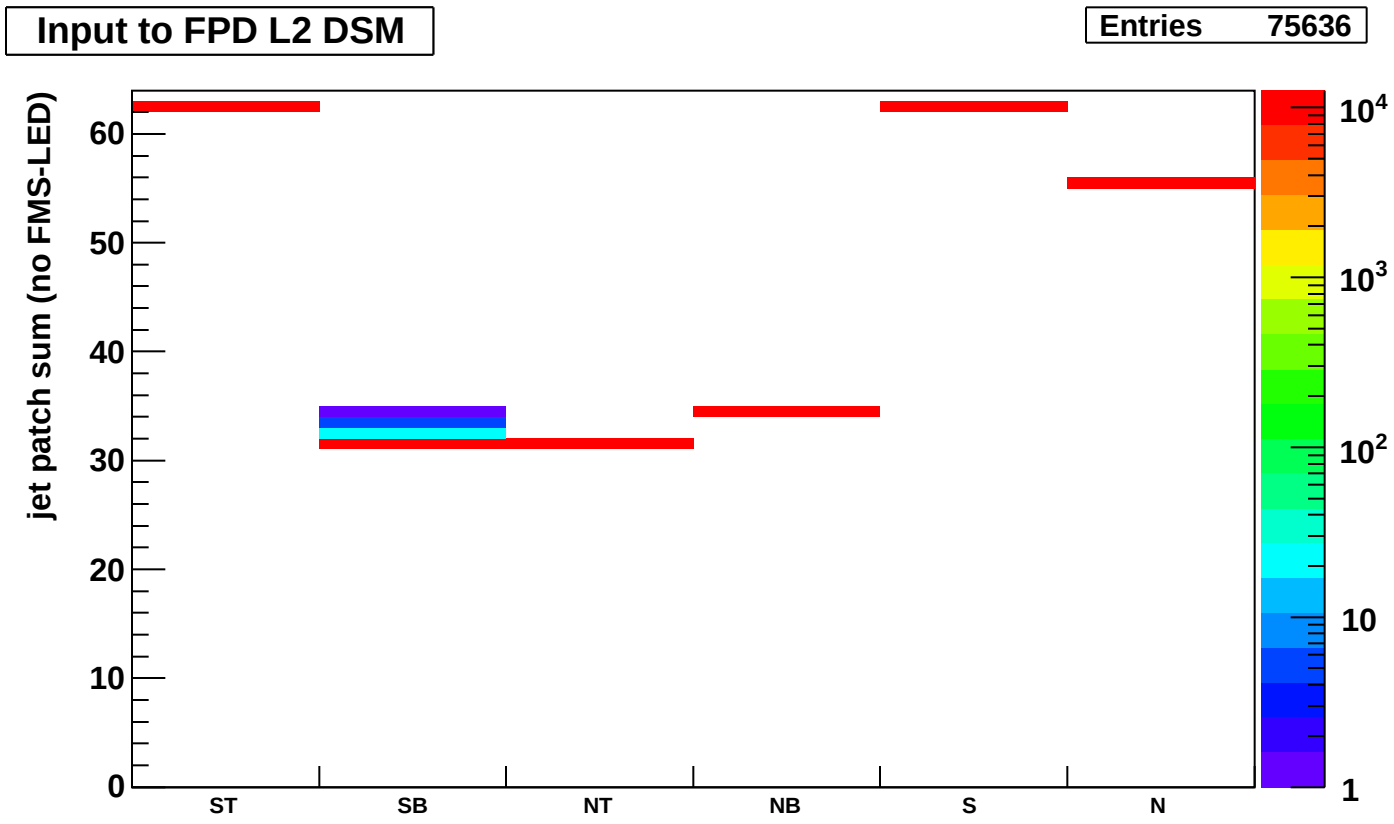

Input to FPD L2 DSM
Entries 126085
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

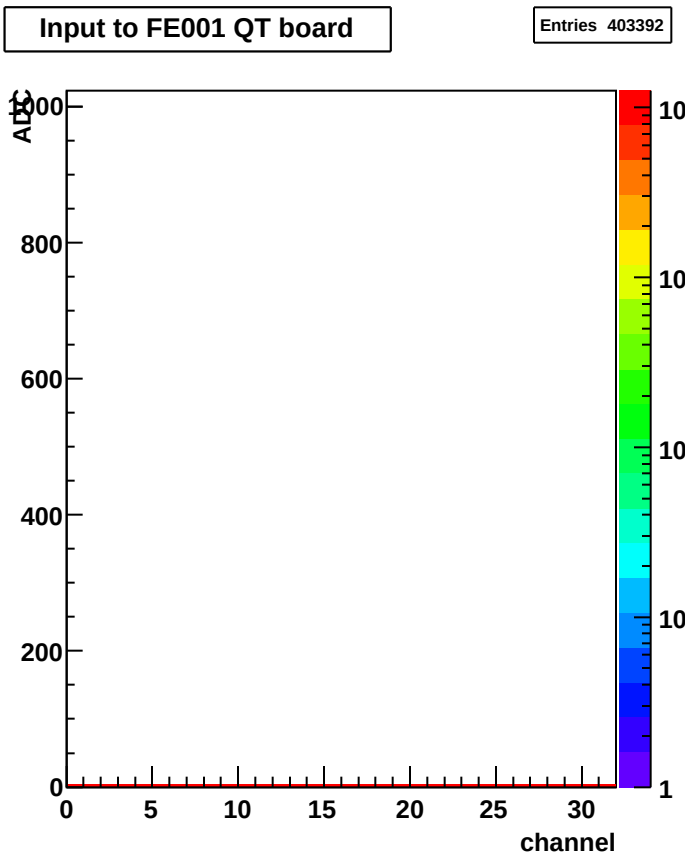

Input to FPD L2 DSM
Entries 37818
CL bits
12606
12606
12606
SMALL
LARGE-S
LARGE-N

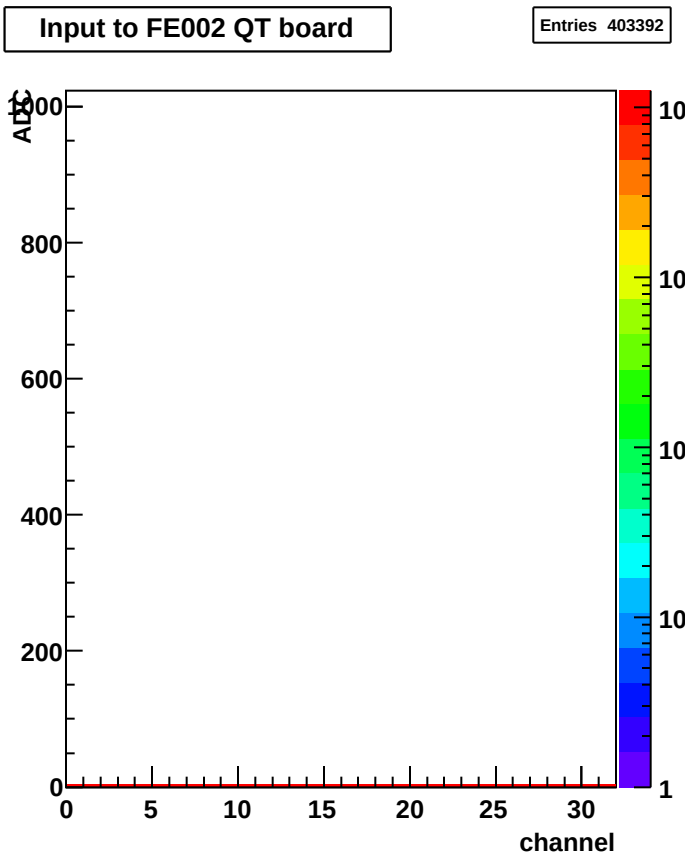

Input to FPD L2 DSM
Entries 37818
CL bits - simulated
12606
12606
12606
SMALL
LARGE-S
LARGE-N

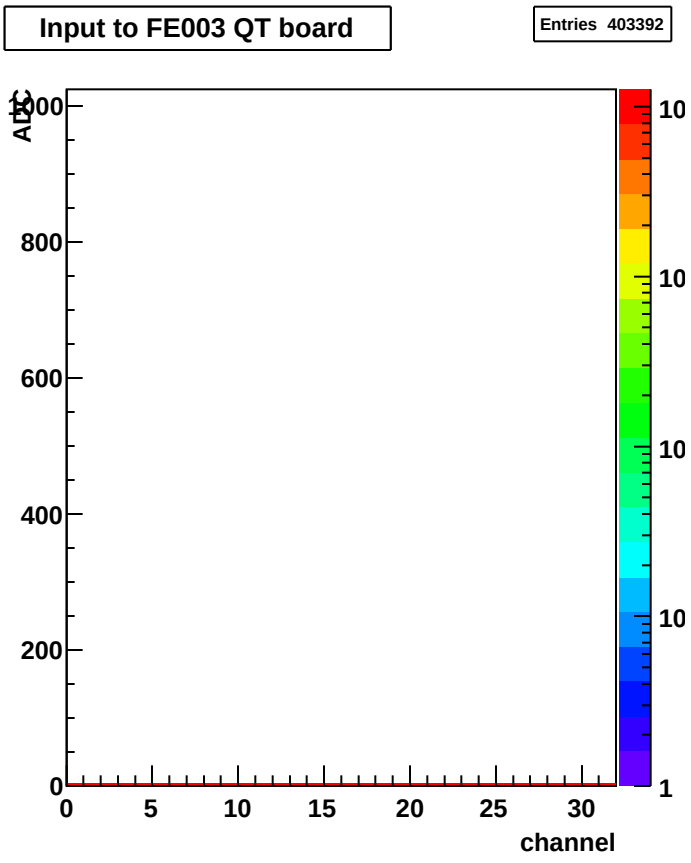

Input to FPD L2 DSM
Entries 37818
HT bits
12606
12606
12606
SMALL
LARGE-S
LARGE-N

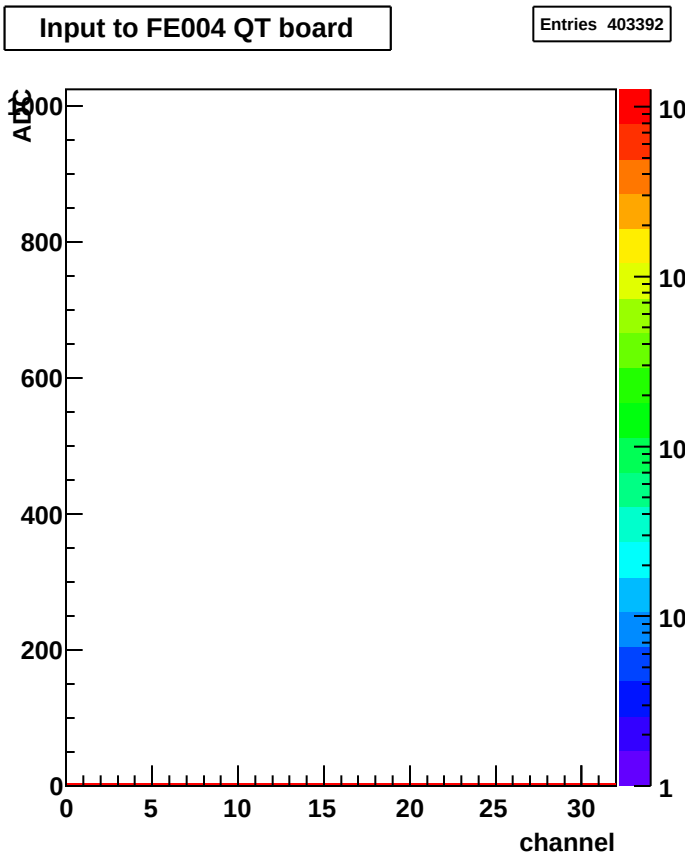

Input to FPD L2 DSM
Entries 37818
HT bits - simulated
12606
12606
12606
SMALL
LARGE-S
LARGE-N

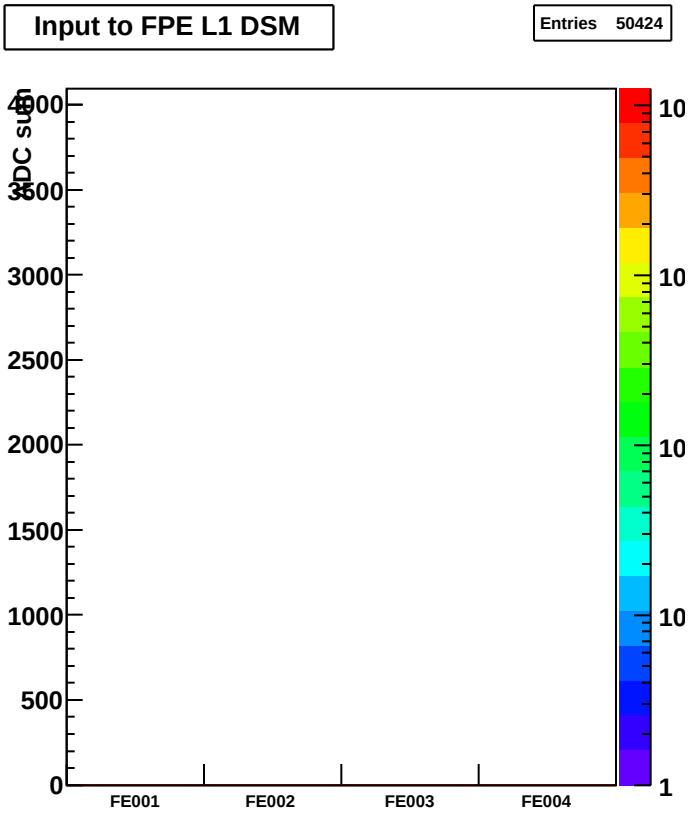

Input to FPD L2 DSM
Entries 75636
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

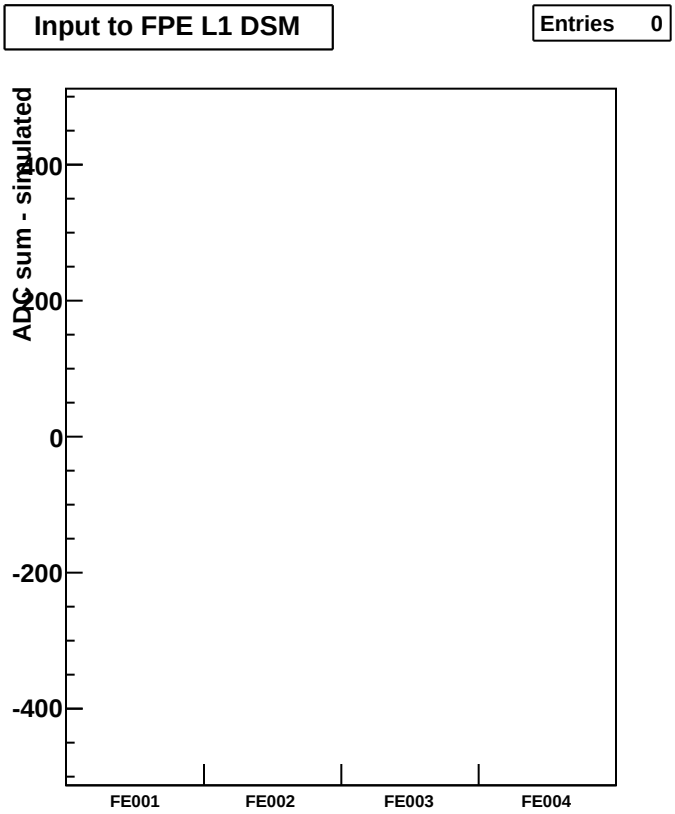

Input to FE001 QT board
Entries 403392
ADC
channel

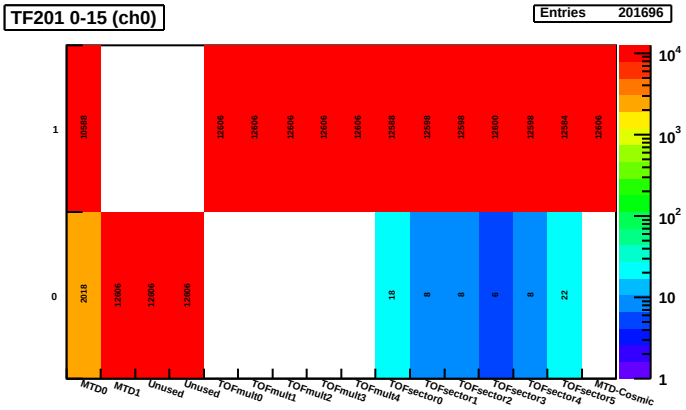

Input to FE002 QT board
Entries 403392
ADC
channel

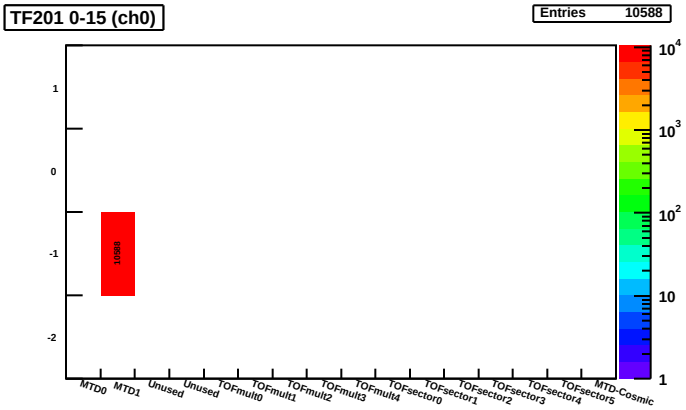

Input to FE003 QT board
Entries 403392
ADC
channel

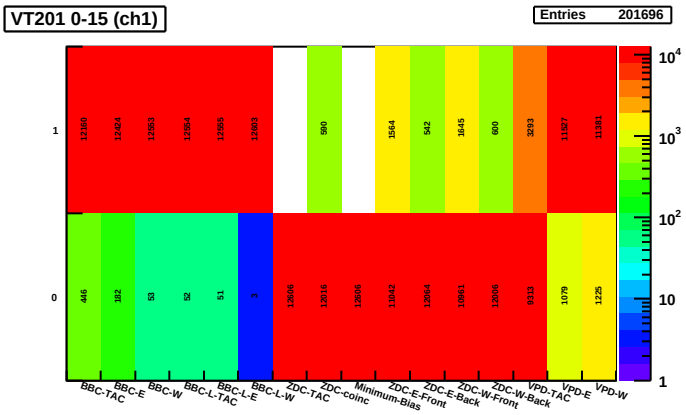

Input to FE004 QT board
Entries 403392
ADC
channel

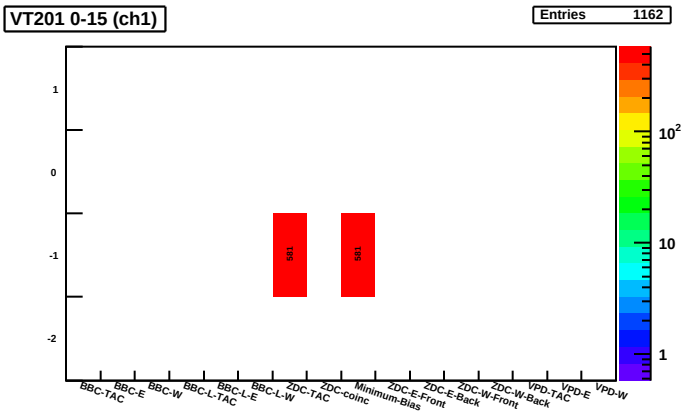

Input to FPE L1 DSM
Entries 50424
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

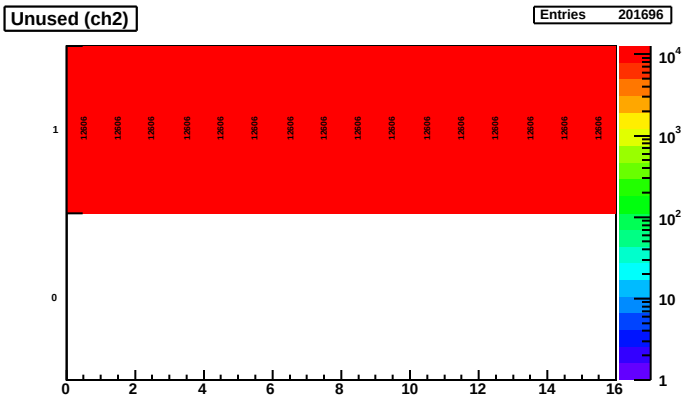

Input to FPE L1 DSM
Entries 0
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004

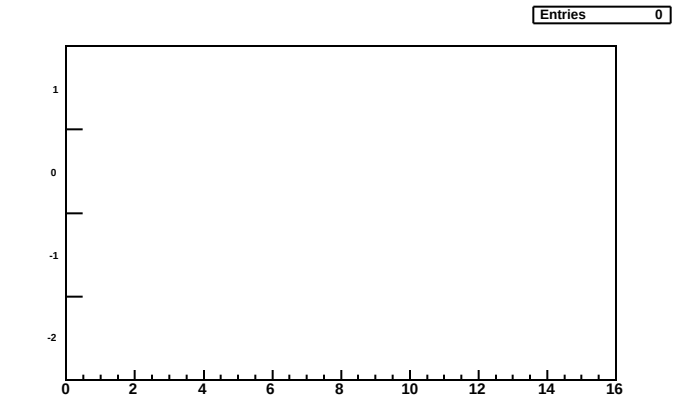

TF201 0-15 (ch0)
Entries 201696
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

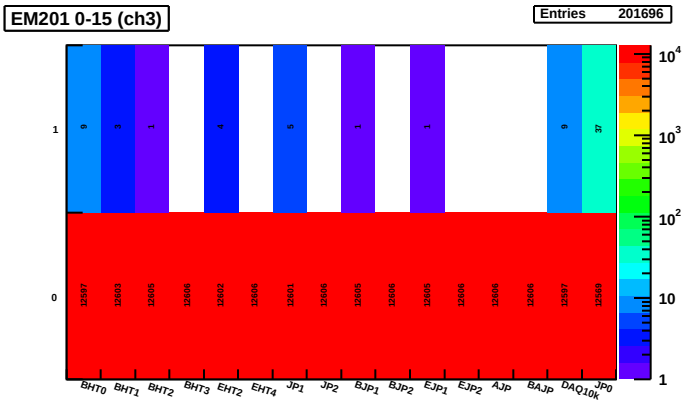

TF201 0-15 (ch0)
Entries 10588
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

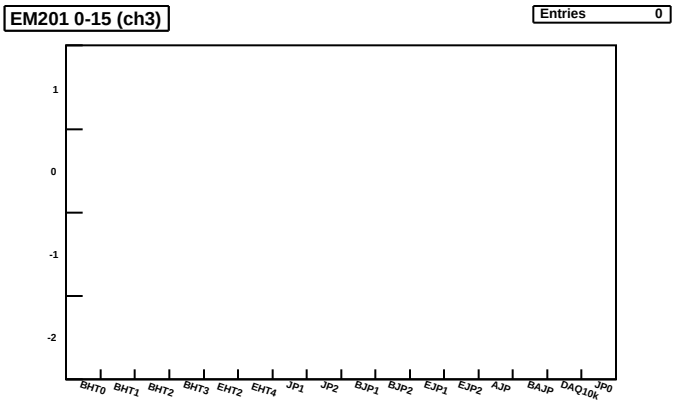

VT201 0-15 (ch1)
Entries 201696
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-coinc Minimum-Bias ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W

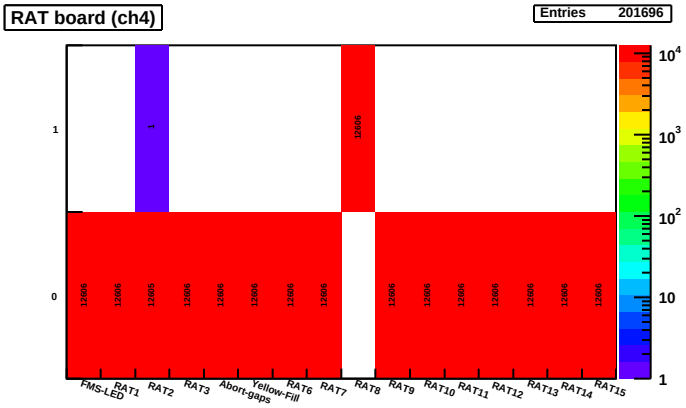

VT201 0-15 (ch1)
Entries 1162
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-coinc Minimum-Bias ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W

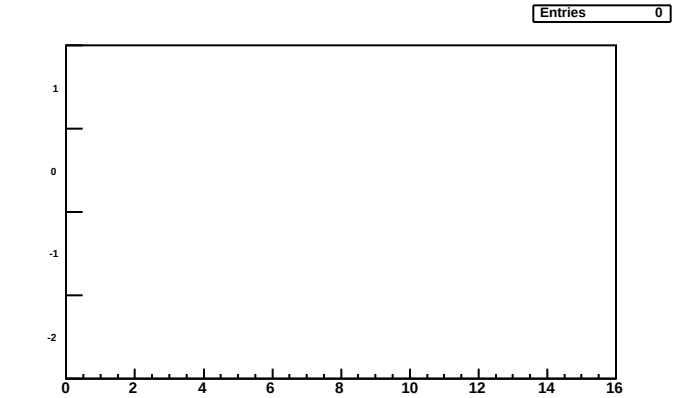

Unused (ch2)
Entries 201696

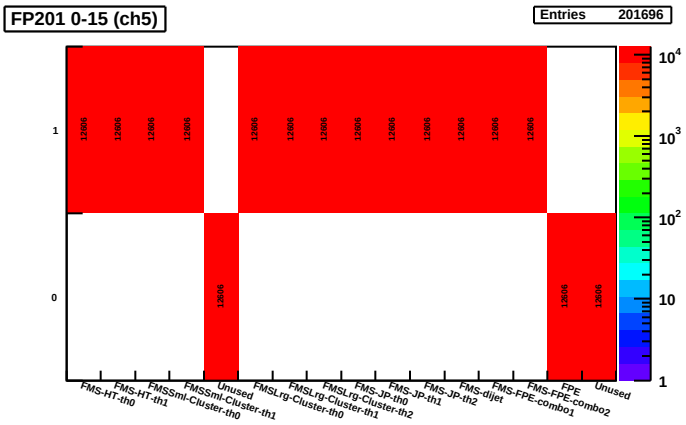

Entries 0

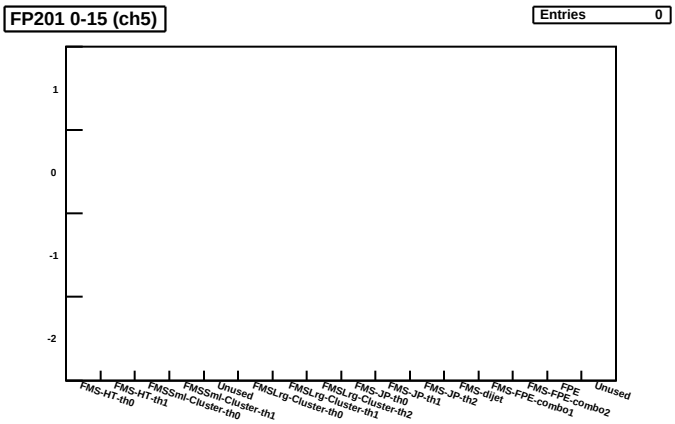

EM201 0-15 (ch3)
Entries 201696
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

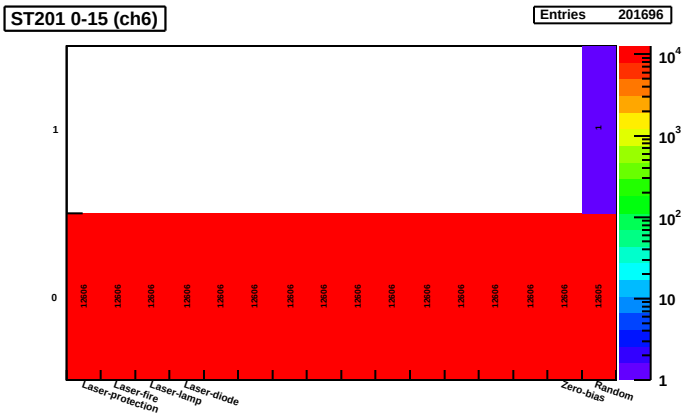

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0

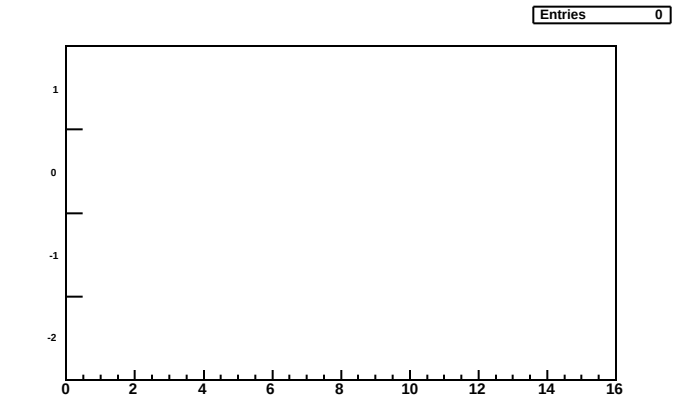

RAT board (ch4)
Entries 201696
FMS-LED
RAT1
RAT2
RAT3
Abort-gaps
Yellow-Fill
RAT6
RAT7
RAT8
RAT9
RAT10
RAT11
RAT12
RAT13
RAT14
RAT15

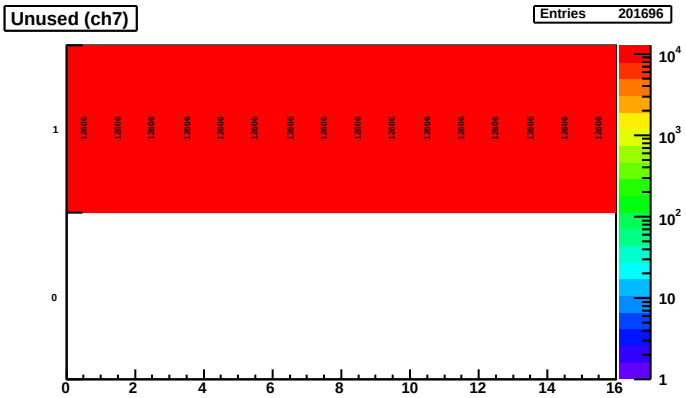

Entries 0

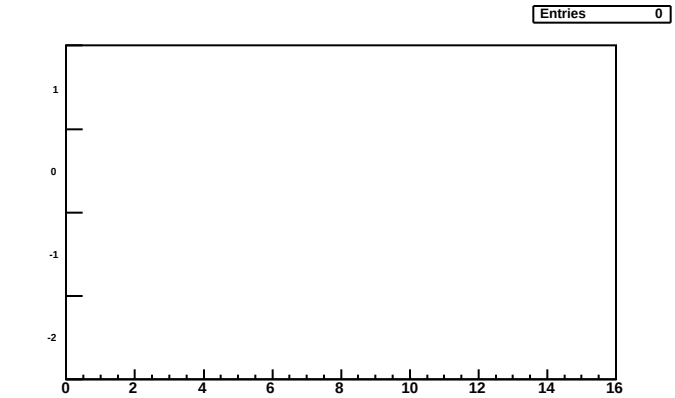

FP201 0-15 (ch5)
Entries 201696
FMS-HT-th0
FMS-HT-th1
FMSSml-Cluster-th0
FMSSml-Cluster-th1
Unused
FMSLrg-Cluster-th0
FMSLrg-Cluster-th1
FMS-JP-th0
FMS-JP-th1
FMS-JP-th2
FMS-dijet
FMS-FPE-combo1
FPE
FMS-FPE-combo2
Unused


FP201 0-15 (ch5)
Entries 0


ST201 0-15 (ch6)
Entries 201696
Laser-protection
Laser-fire
Laser-lamp
Laser-diode
Zero-bias
Random


Entries 0


Unused (ch7)
Entries 201696


Entries 0