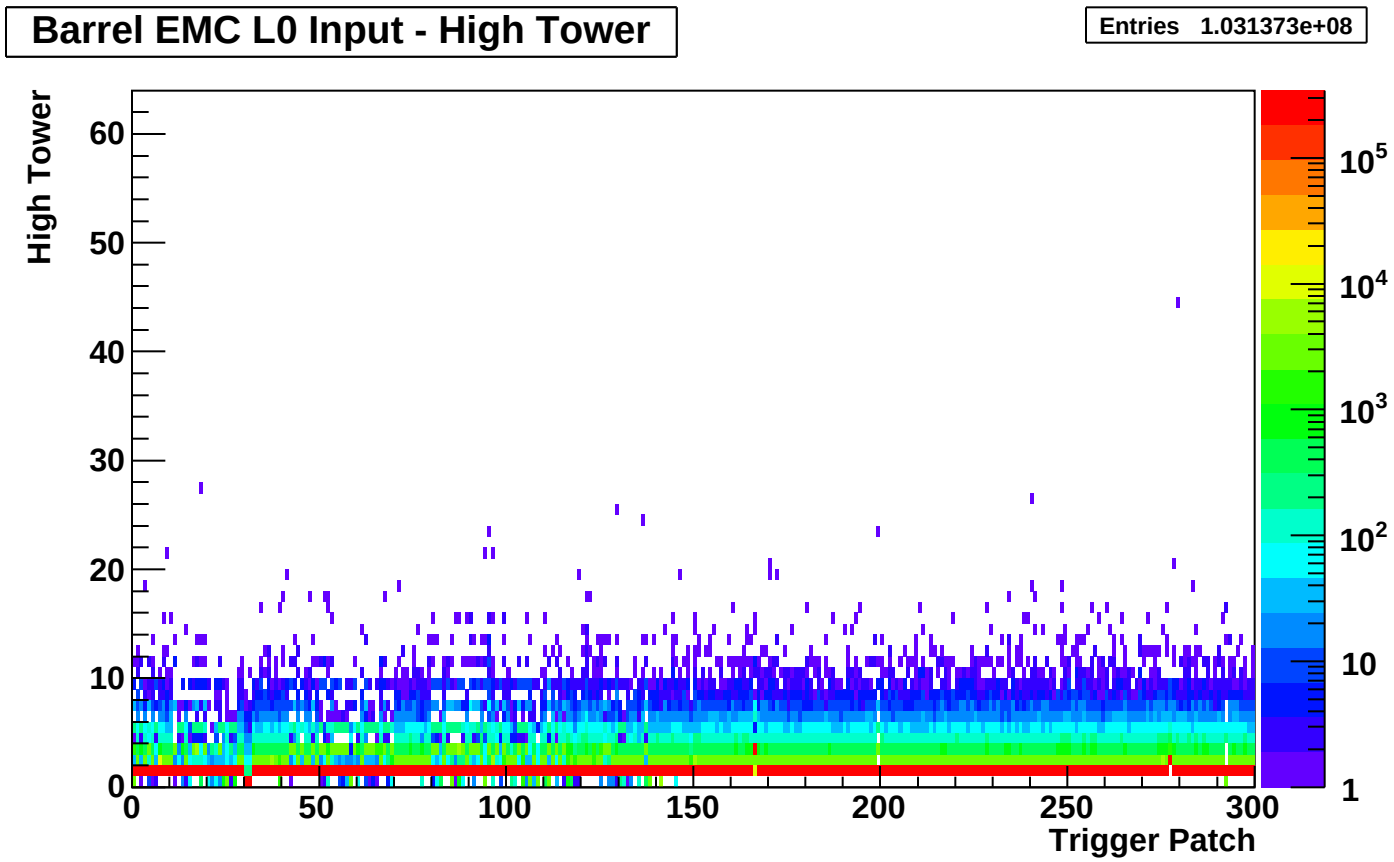
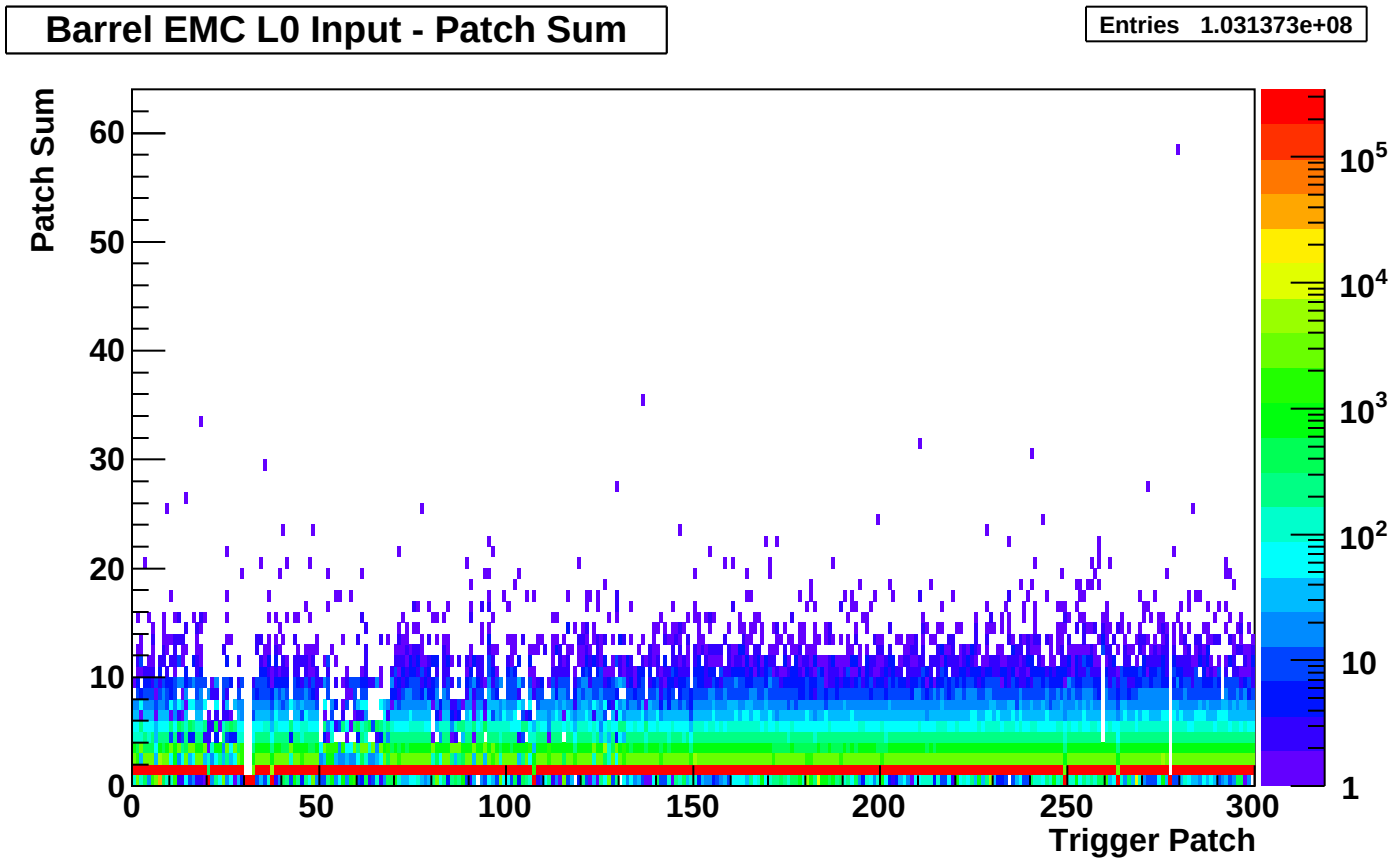
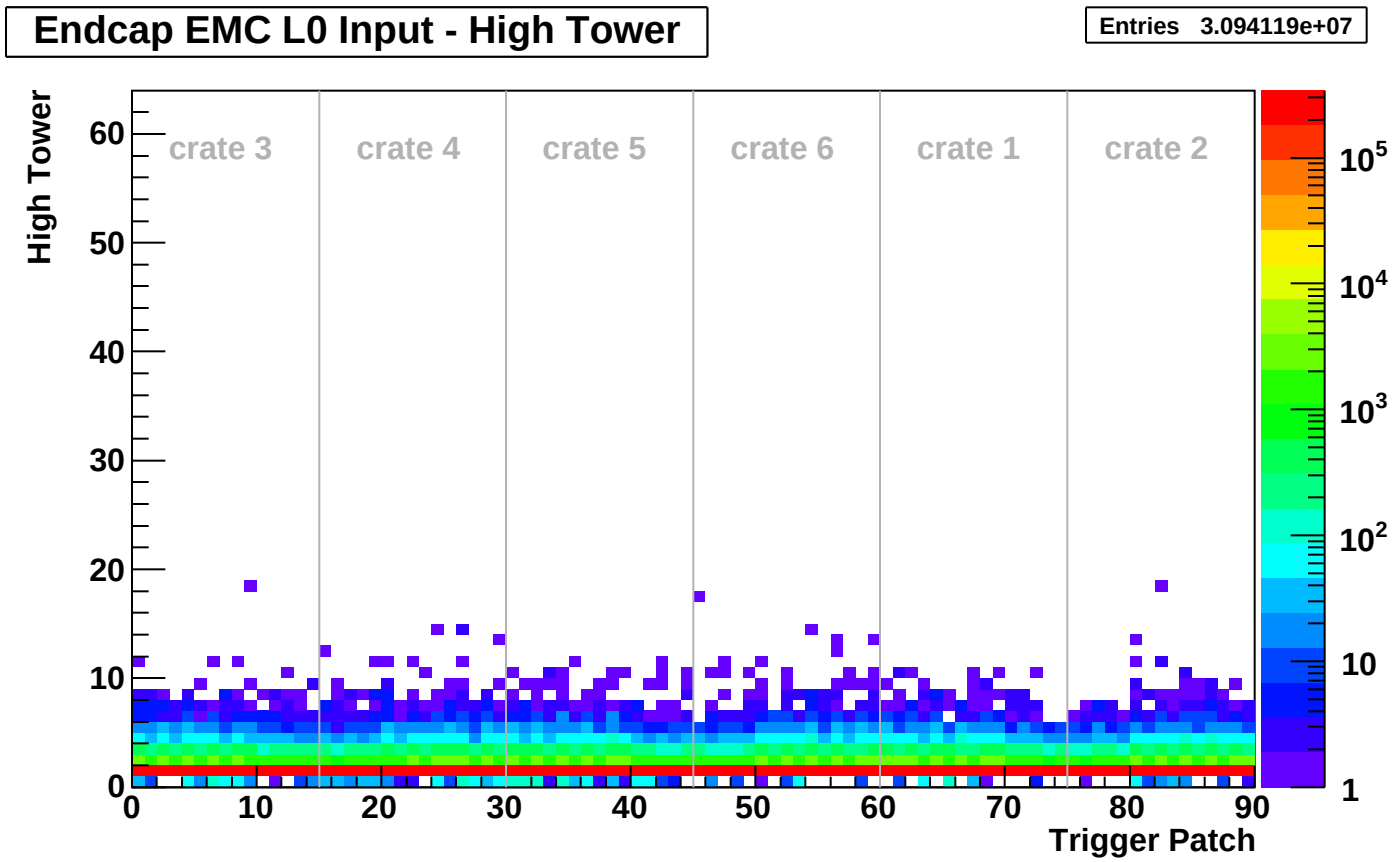
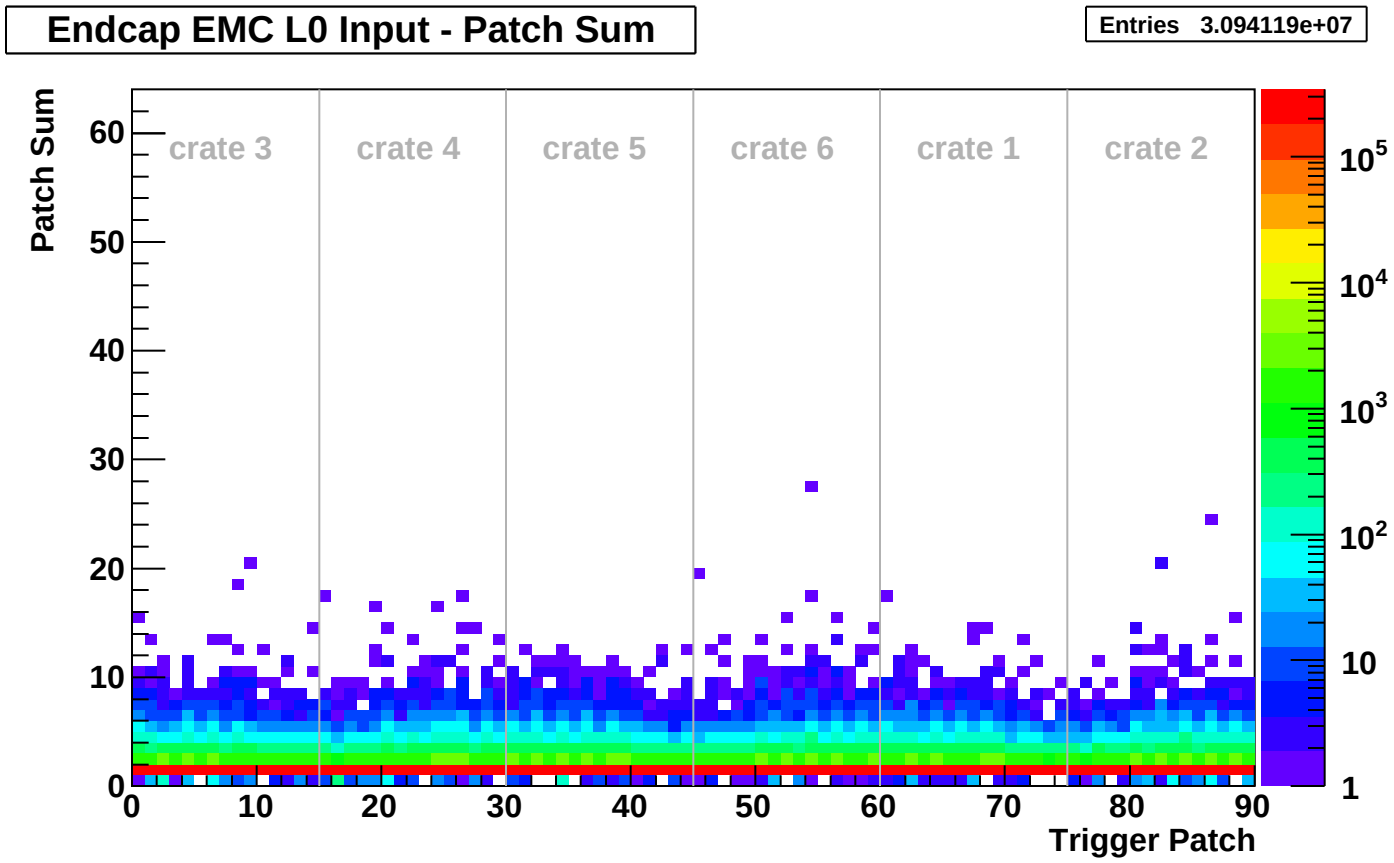
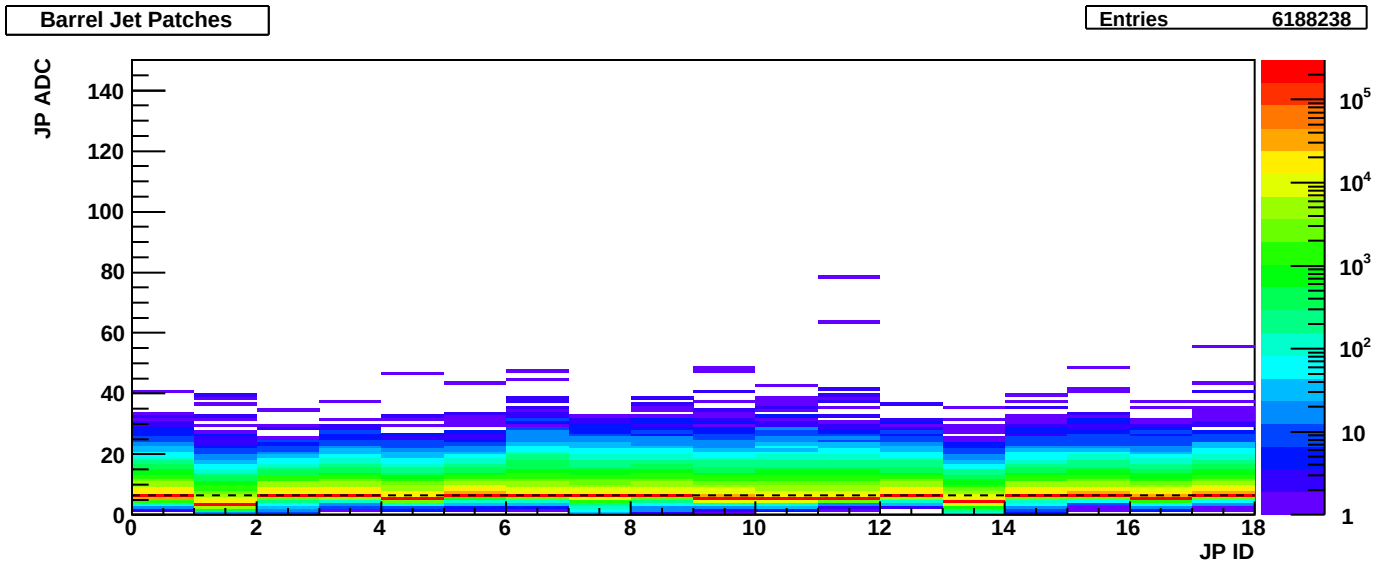
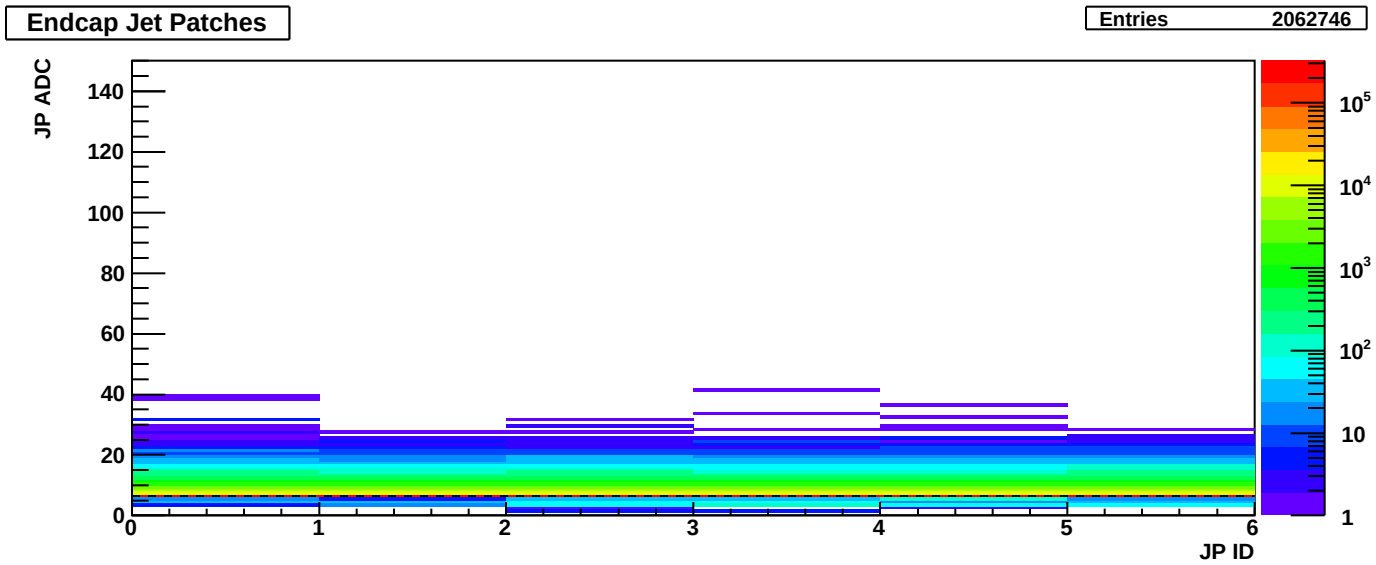

Barrel EMC L0 Input - High Tower
Entries 1.031373e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

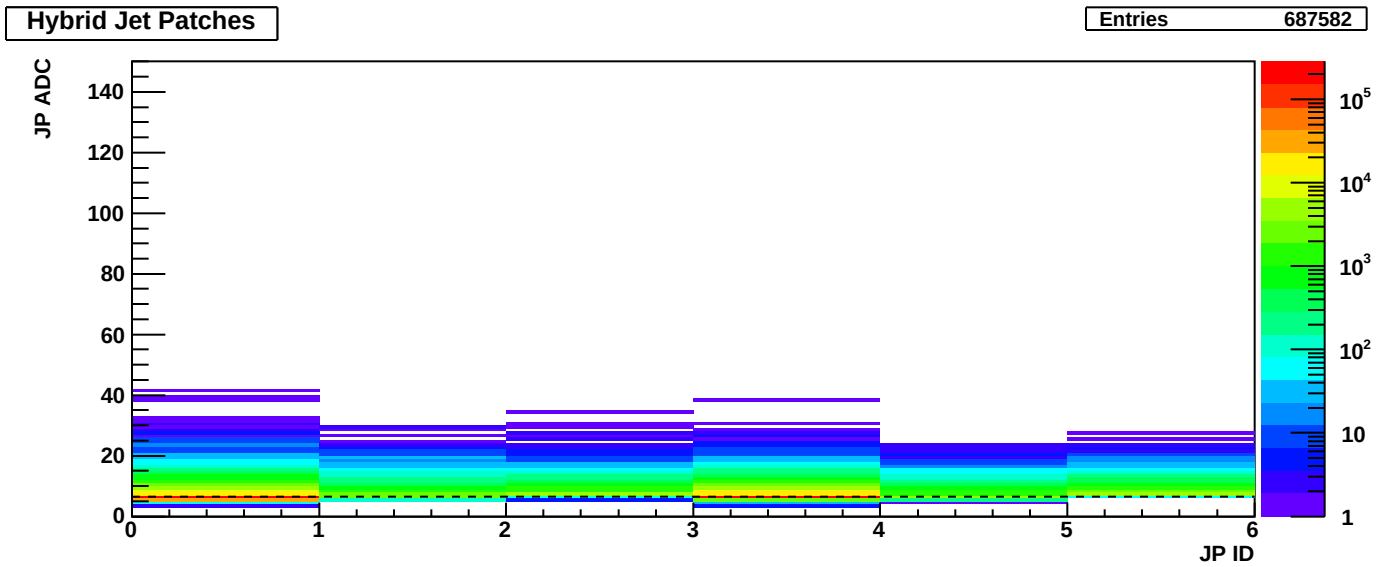

Barrel EMC L0 Input - Patch Sum
Entries 1.031373e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

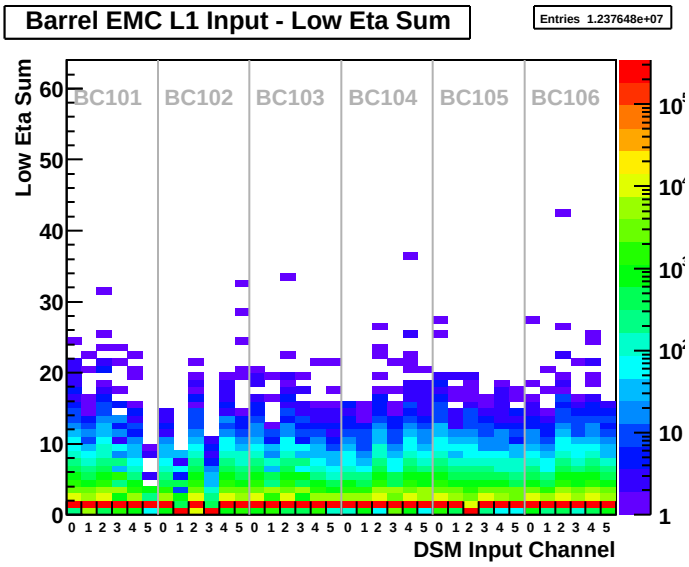

Endcap EMC L0 Input - High Tower
Entries 3.094119e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

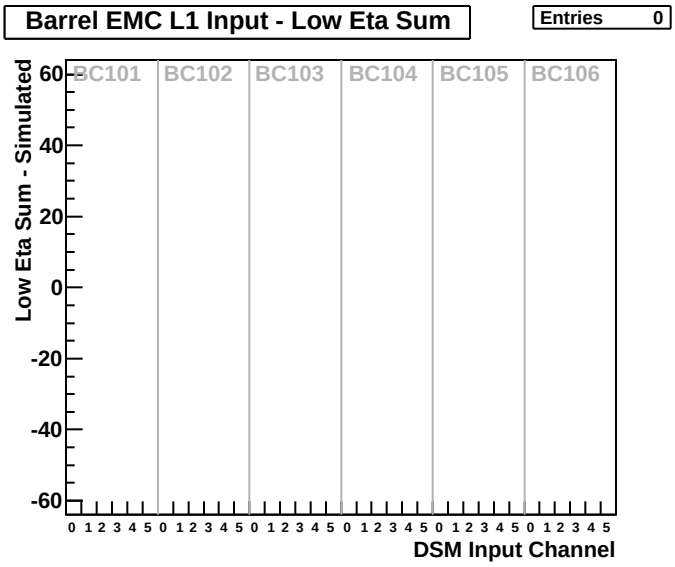

Endcap EMC L0 Input - Patch Sum
Entries 3.094119e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

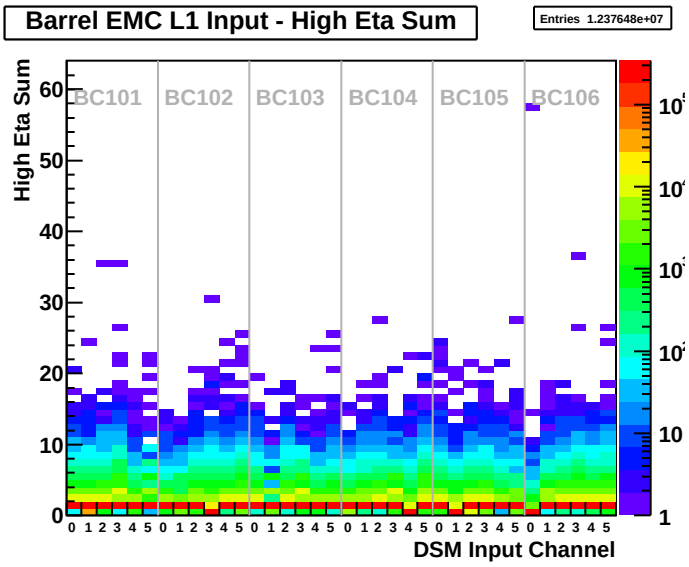

Barrel Jet Patches
Entries 6188238
JP ADC
JP ID

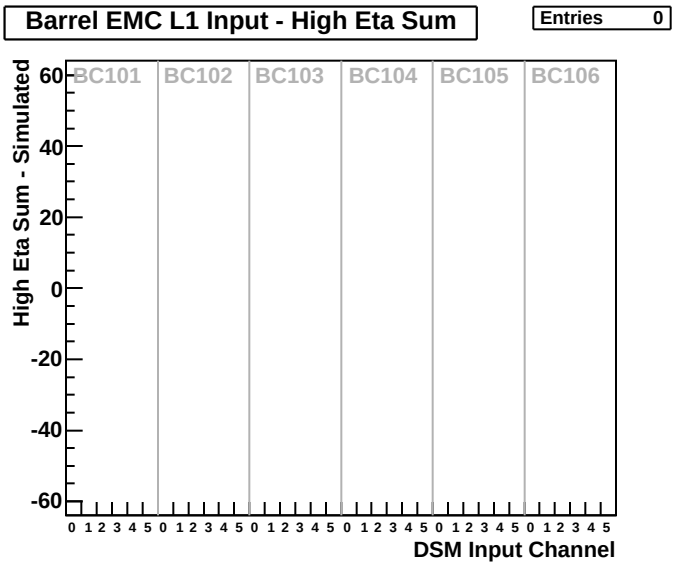

Endcap Jet Patches
Entries 2062746
JP ADC
JP ID

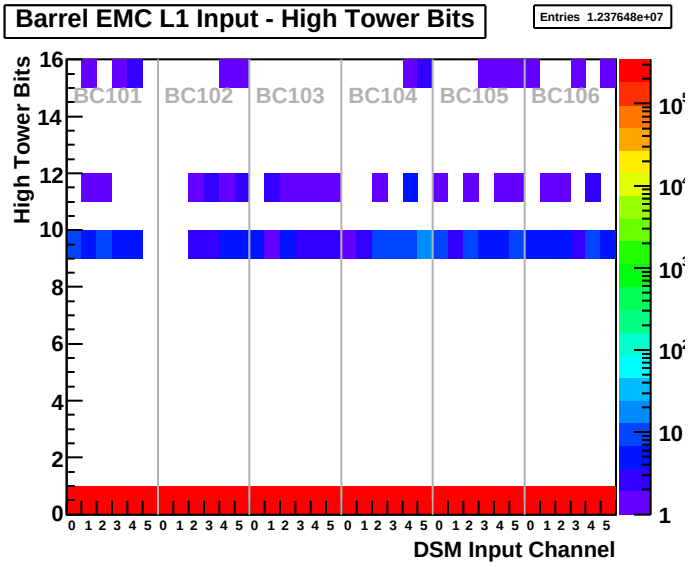

Hybrid Jet Patches
Entries 687582
JP ADC
JP ID

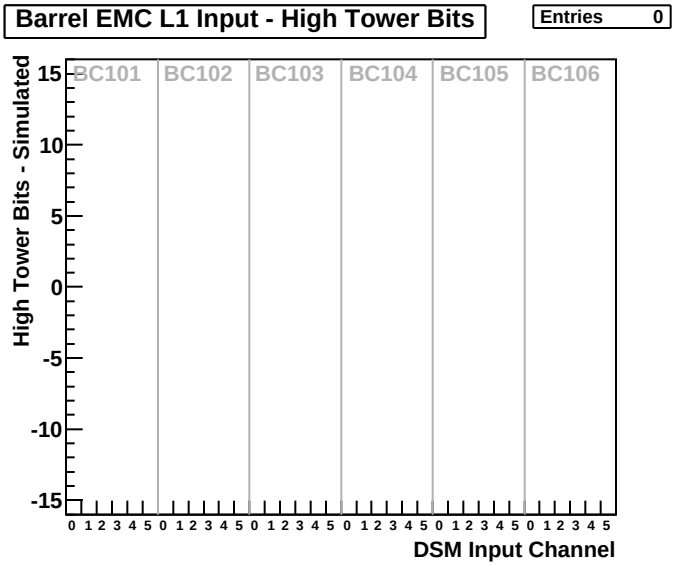

Barrel EMC L1 Input - Low Eta Sum
Entries 1.237648e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

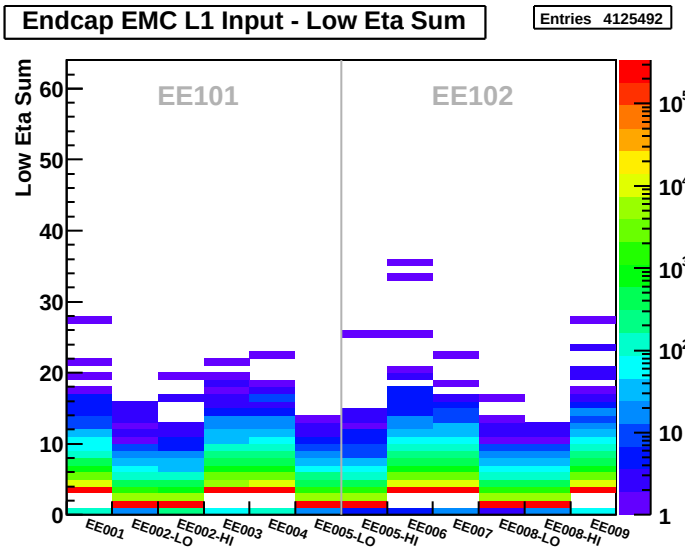

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

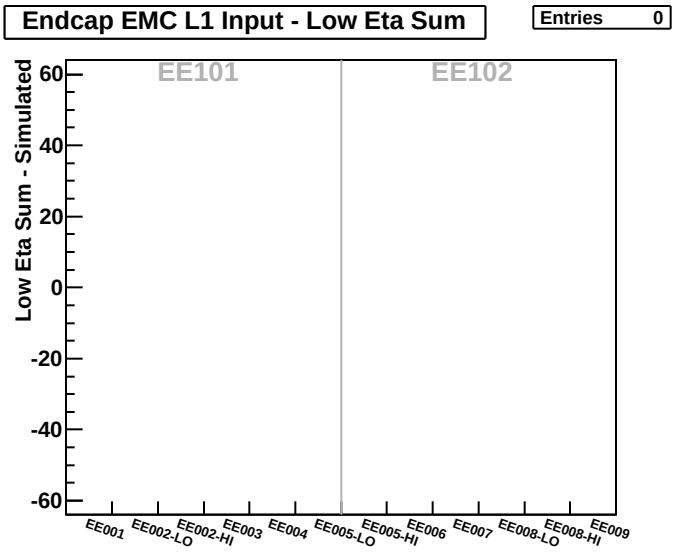

Barrel EMC L1 Input - High Eta Sum
Entries 1.237648e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

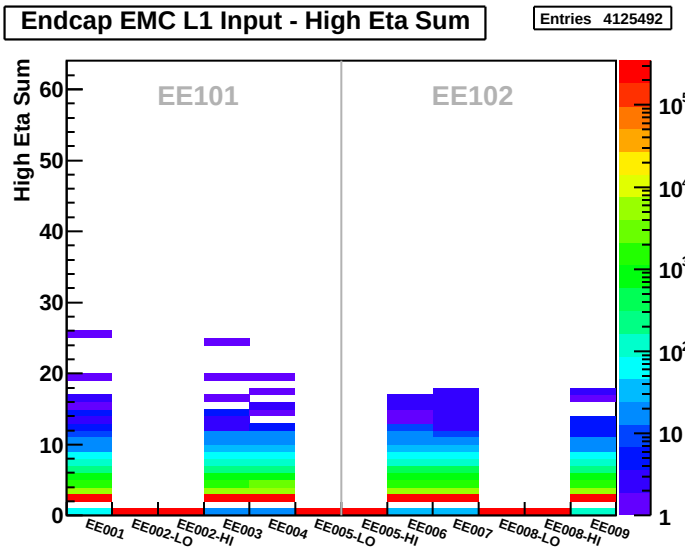

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

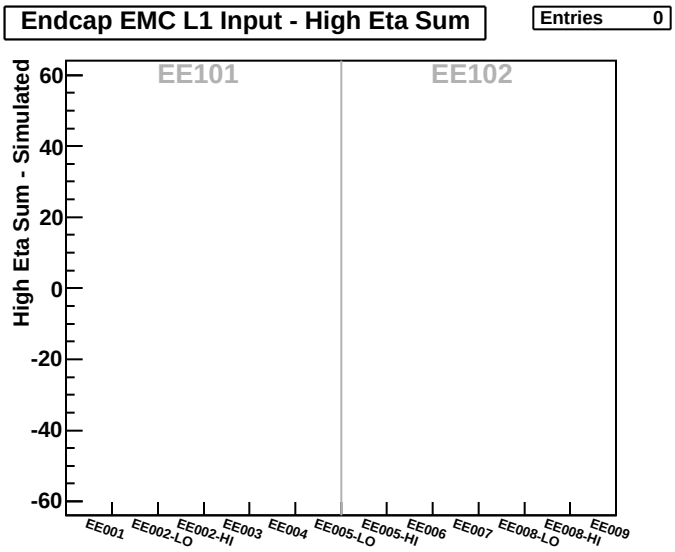

Barrel EMC L1 Input - High Tower Bits
Entries 1.237648e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

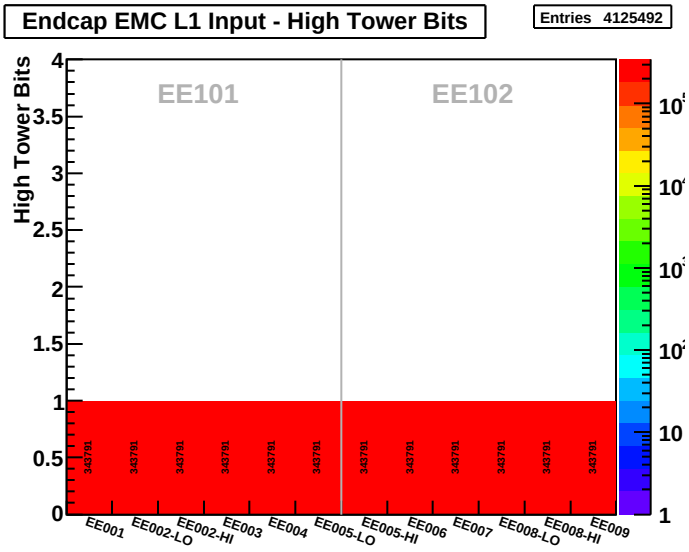

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

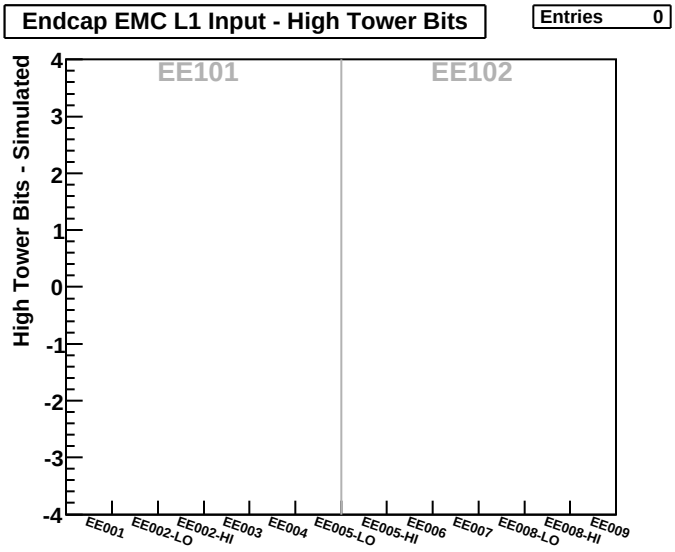

Endcap EMC L1 Input - Low Eta Sum
Entries 4125492
Low Eta Sum
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

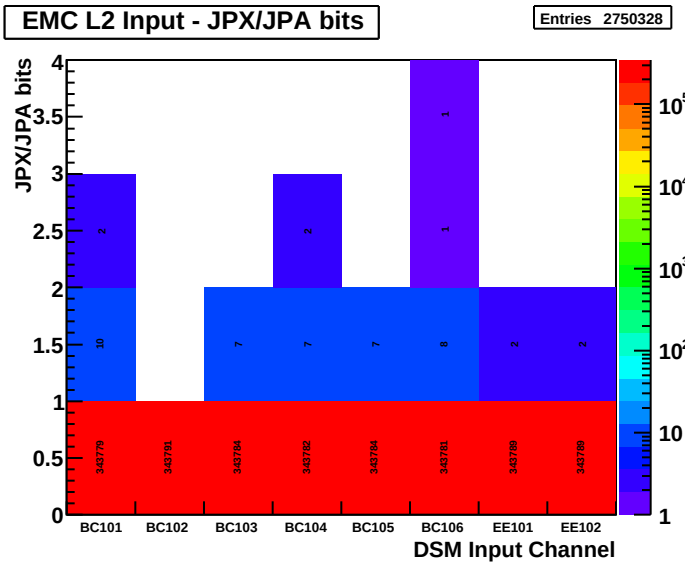

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

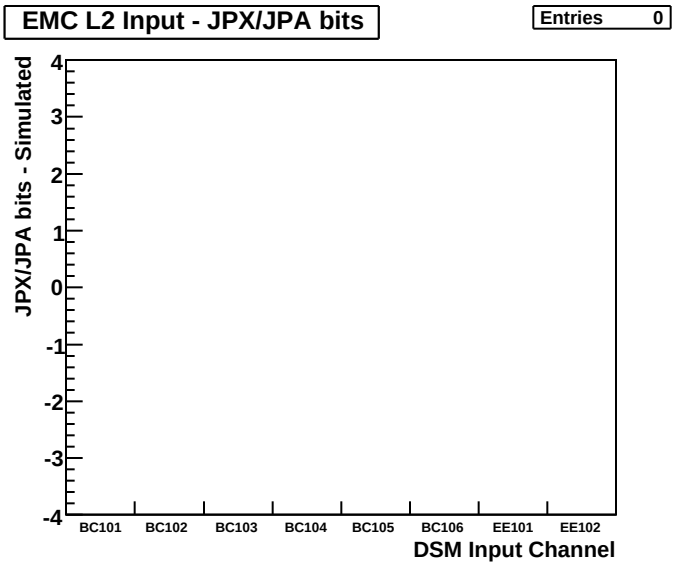

Endcap EMC L1 Input - High Eta Sum
Entries 4125492
High Eta Sum
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

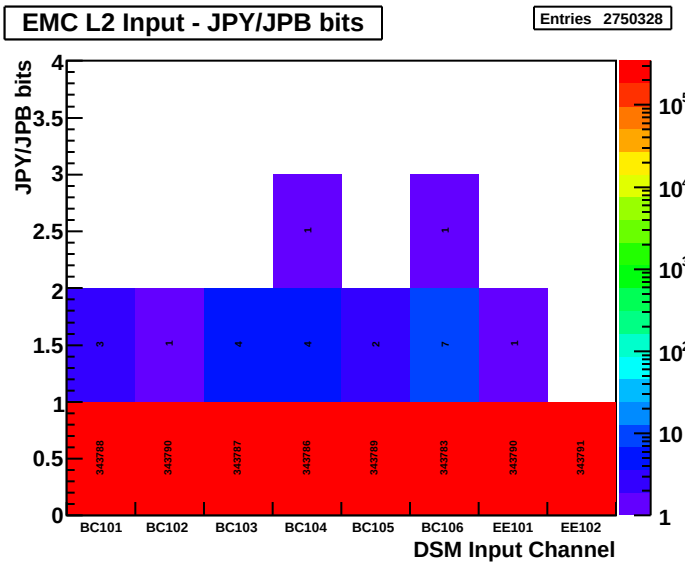

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

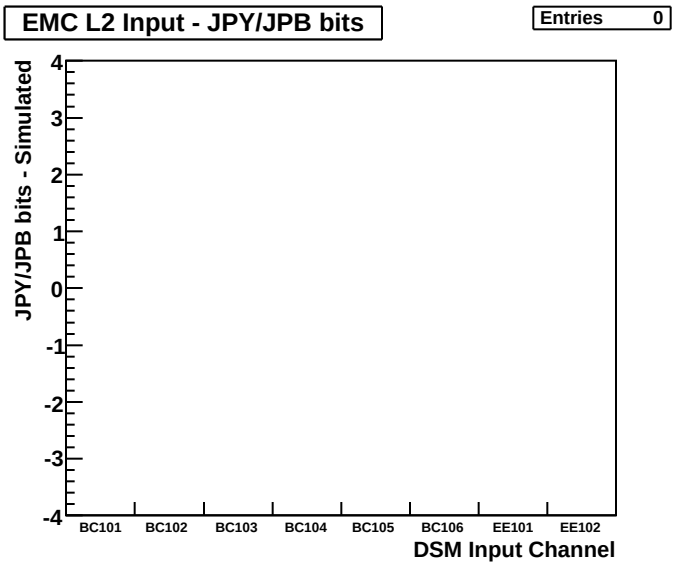

Endcap EMC L1 Input - High Tower Bits
Entries 4125492
High Tower Bits
EE101
EE102
343791
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

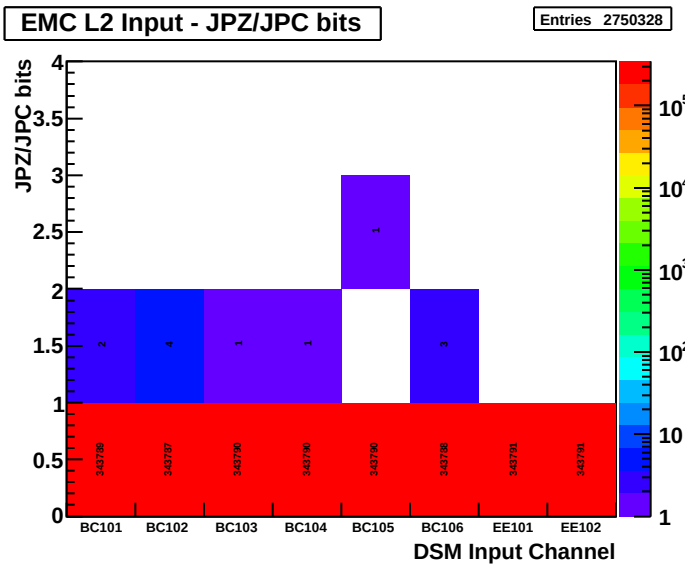

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

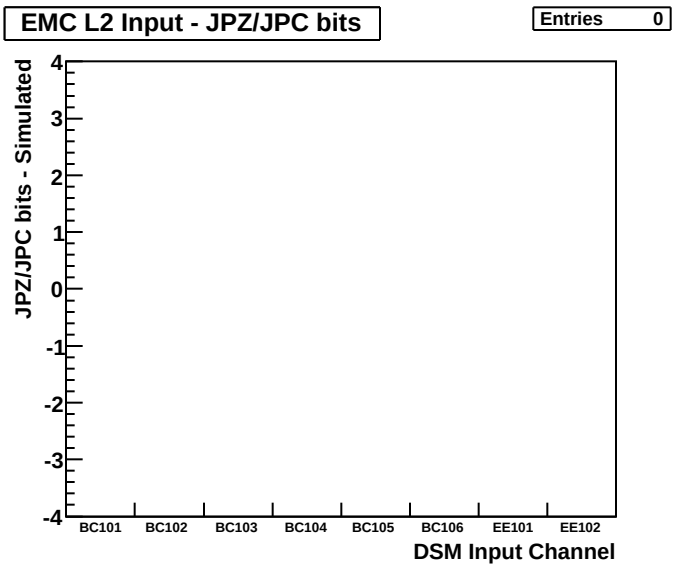

EMC L2 Input - JPX/JPA bits
Entries 2750328
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

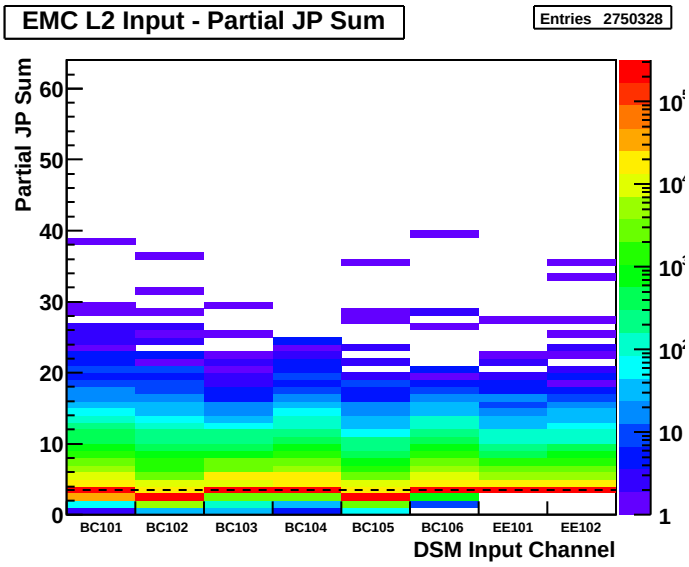

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

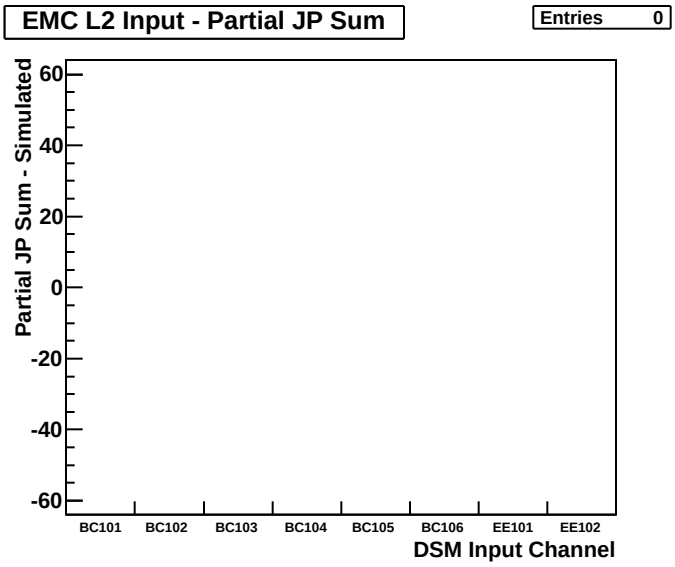

EMC L2 Input - JPY/JPB bits
Entries 2750328
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

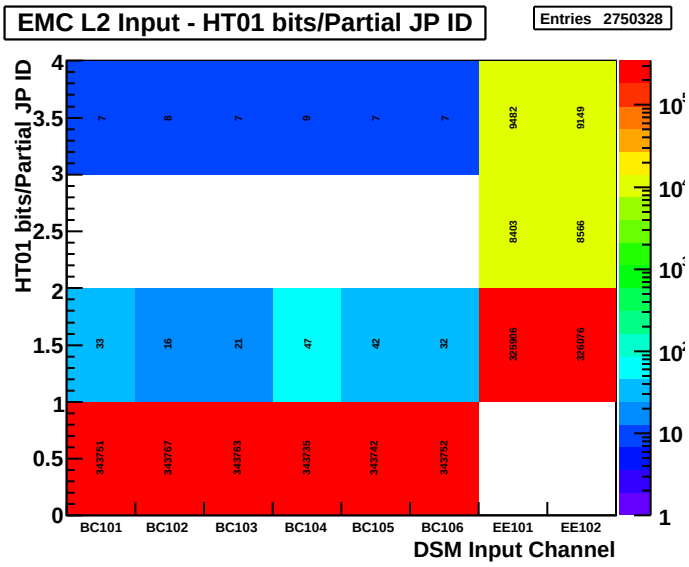

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

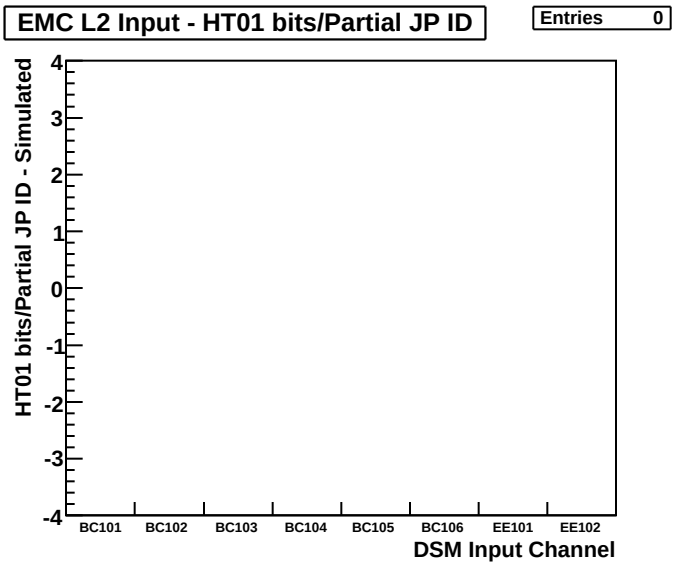

EMC L2 Input - JPZ/JPC bits
Entries 2750328
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

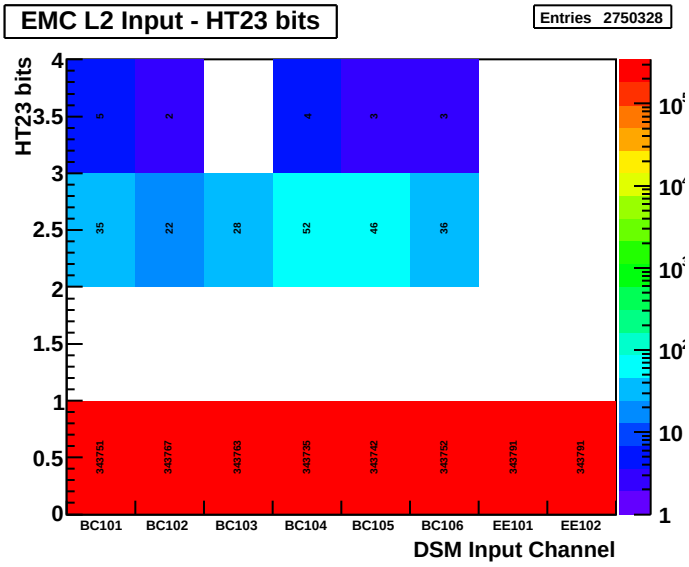

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

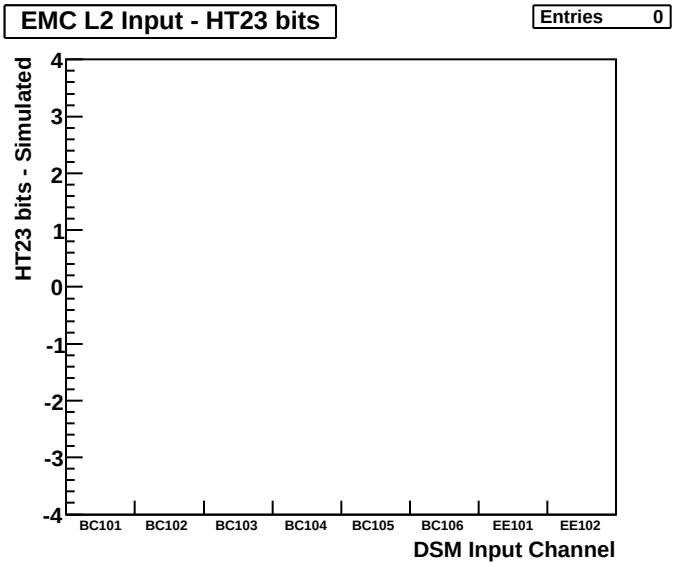

EMC L2 Input - Partial JP Sum
Entries 2750328
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

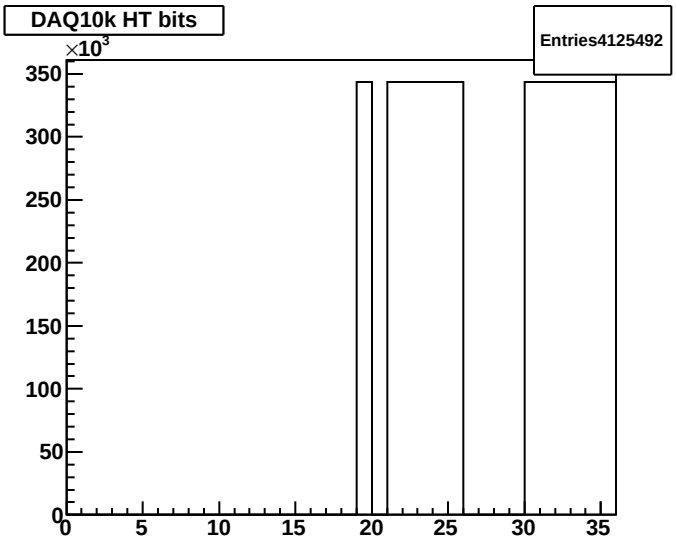

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

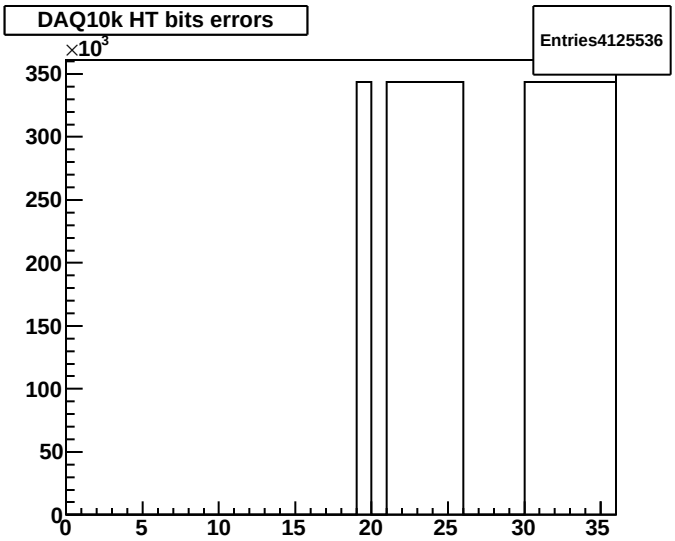

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2750328
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

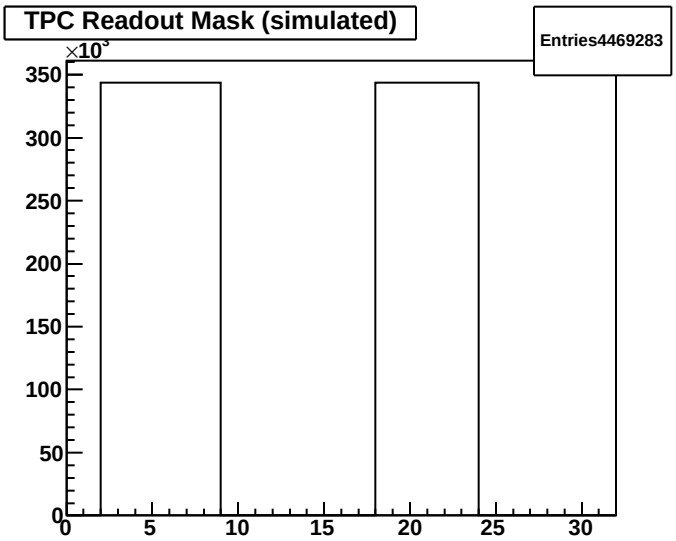

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

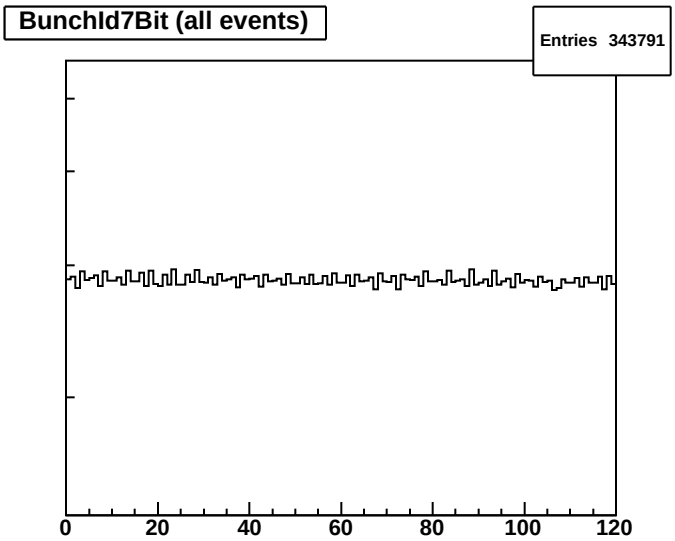

EMC L2 Input - HT23 bits
Entries 2750328
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

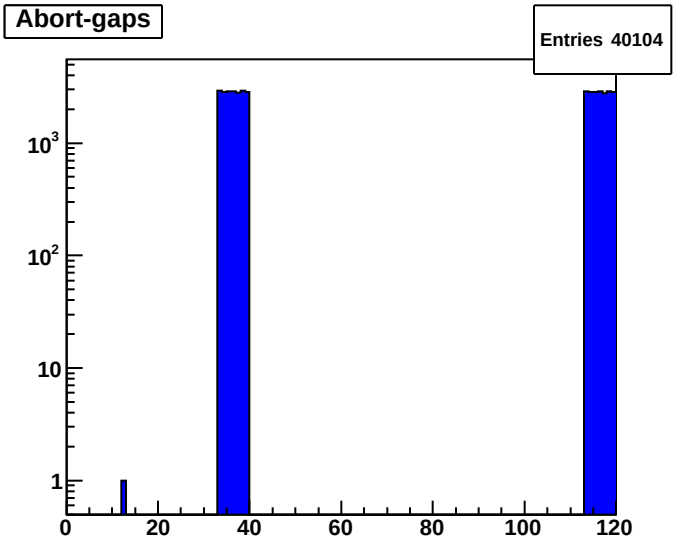

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

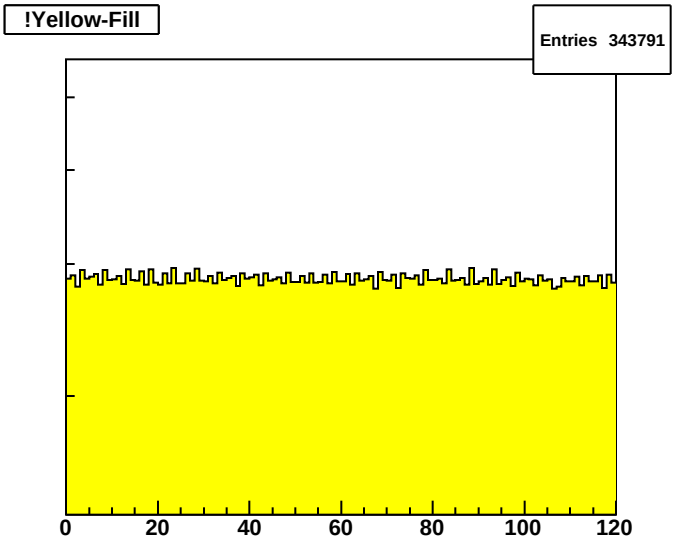

DAQ10k HT bits
Entries4125492
×10^3
350
300
250
200
150
100
50
0
0 5 10 15 20 25 30 35

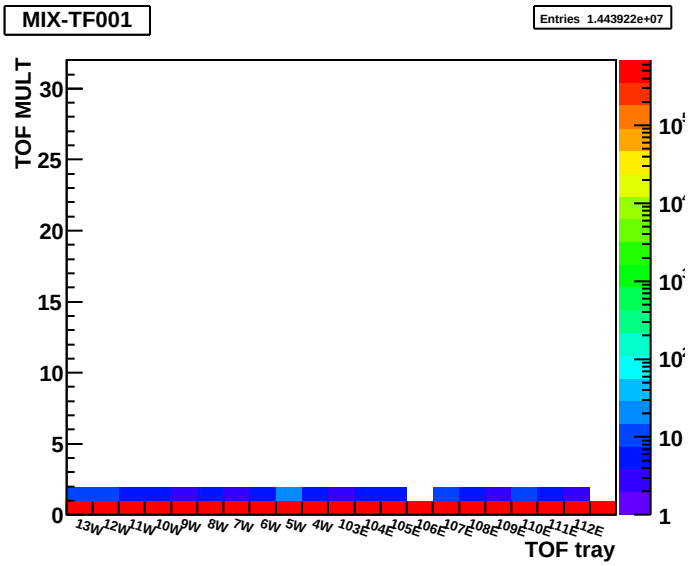

DAQ10k HT bits errors
Entries4125536
×10^3
350
300
250
200
150
100
50
0
0 5 10 15 20 25 30 35

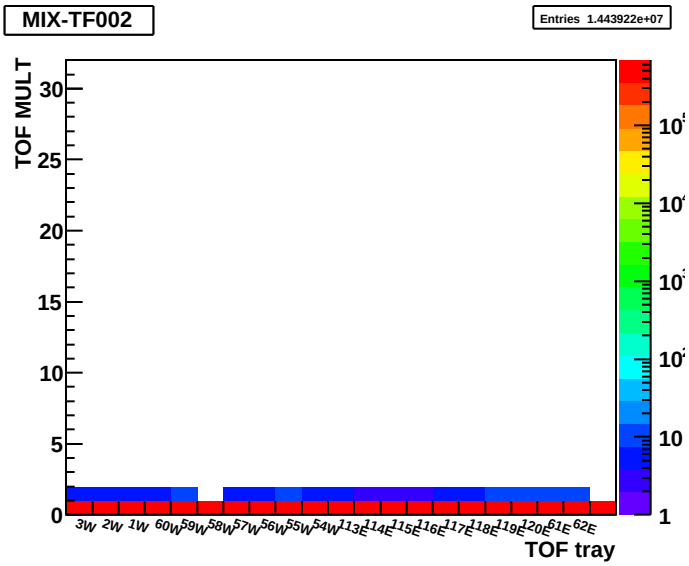

TPC Readout Mask (simulated)
Entries4469283
×10^3
350
300
250
200
150
100
50
0
0 5 10 15 20 25 30

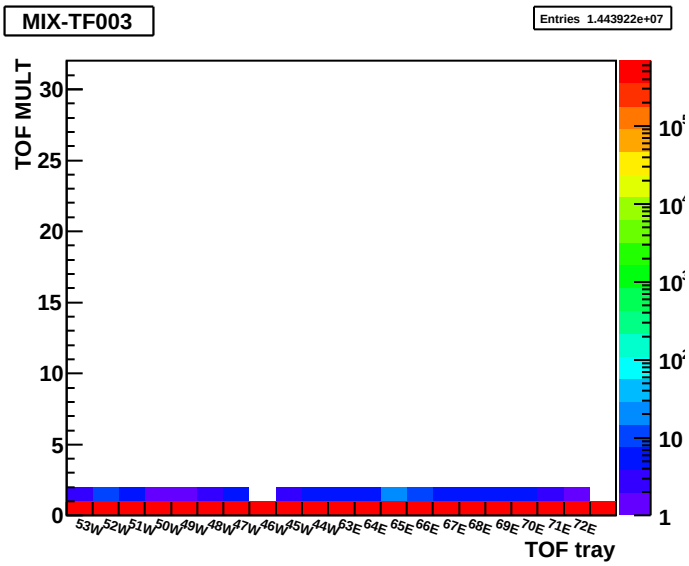

BunchId7Bit (all events)
Entries 343791
0 20 40 60 80 100 120

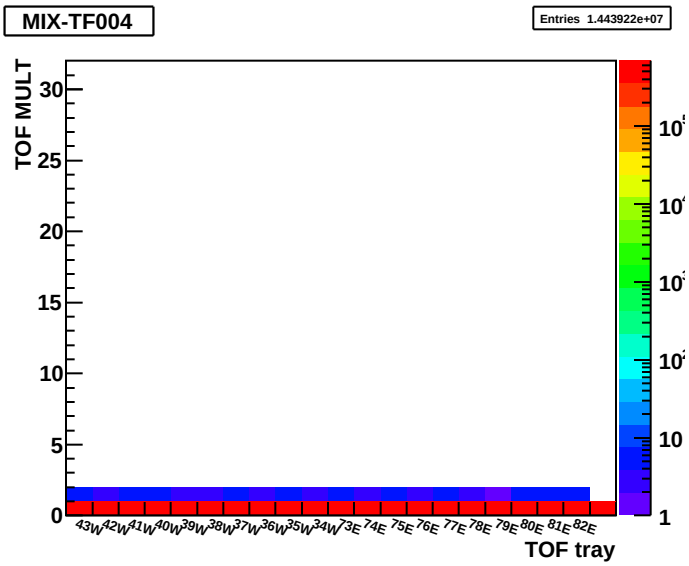

Abort-gaps
Entries 40104
10^3
10^2
10
1
0 20 40 60 80 100 120

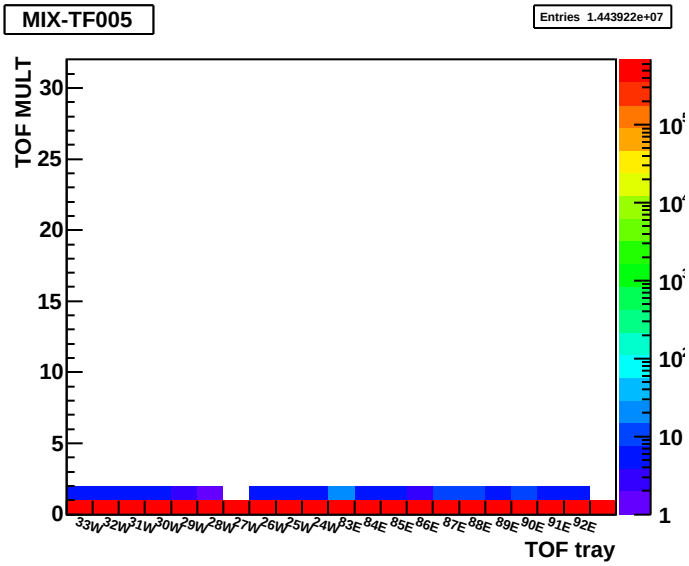

!Yellow-Fill
Entries 343791
0 20 40 60 80 100 120

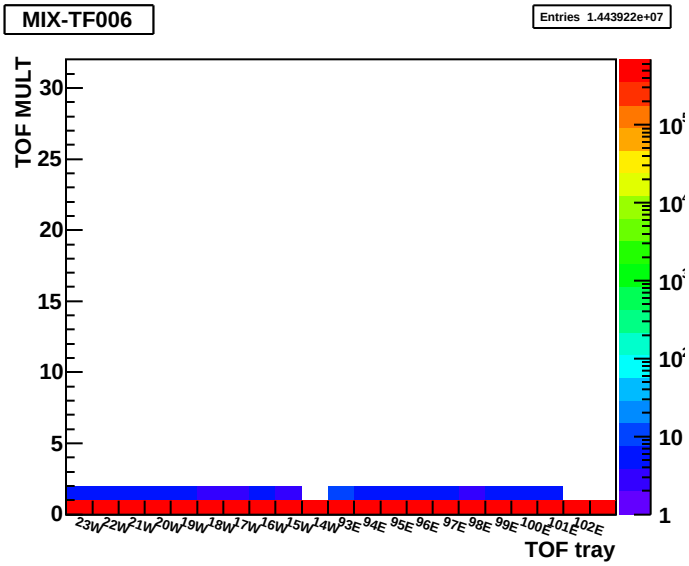

MIX-TF001
Entries 1.443922e+07
TOF MULT
TOF tray

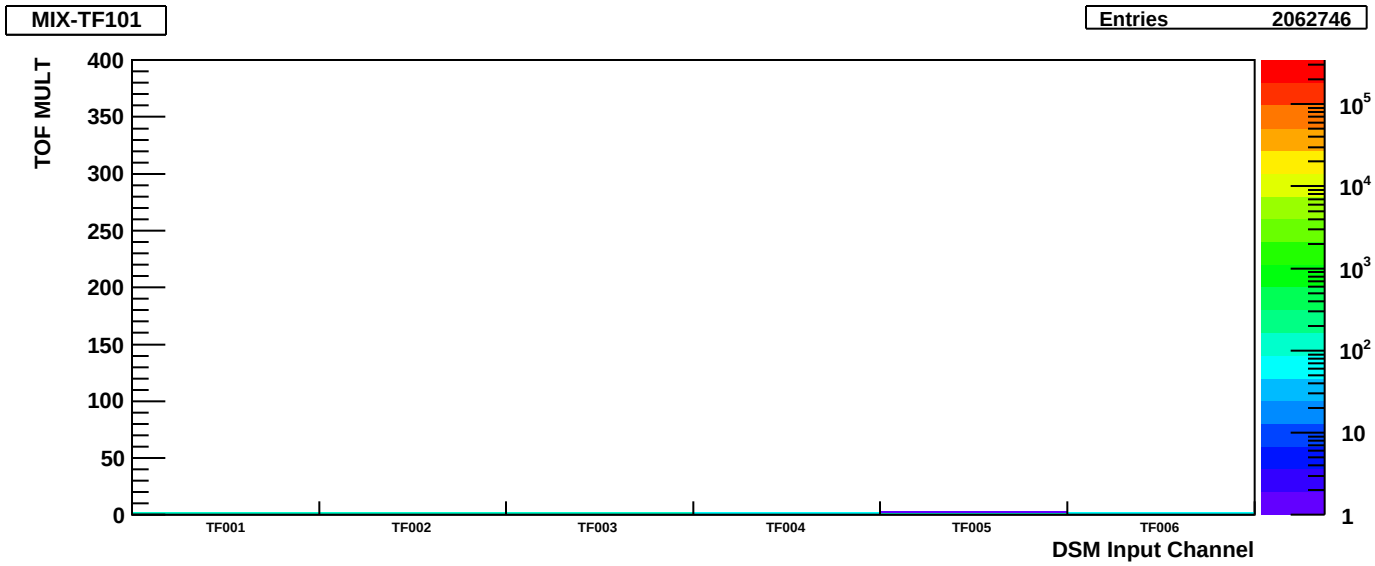

MIX-TF002
Entries 1.443922e+07
TOF MULT
TOF tray

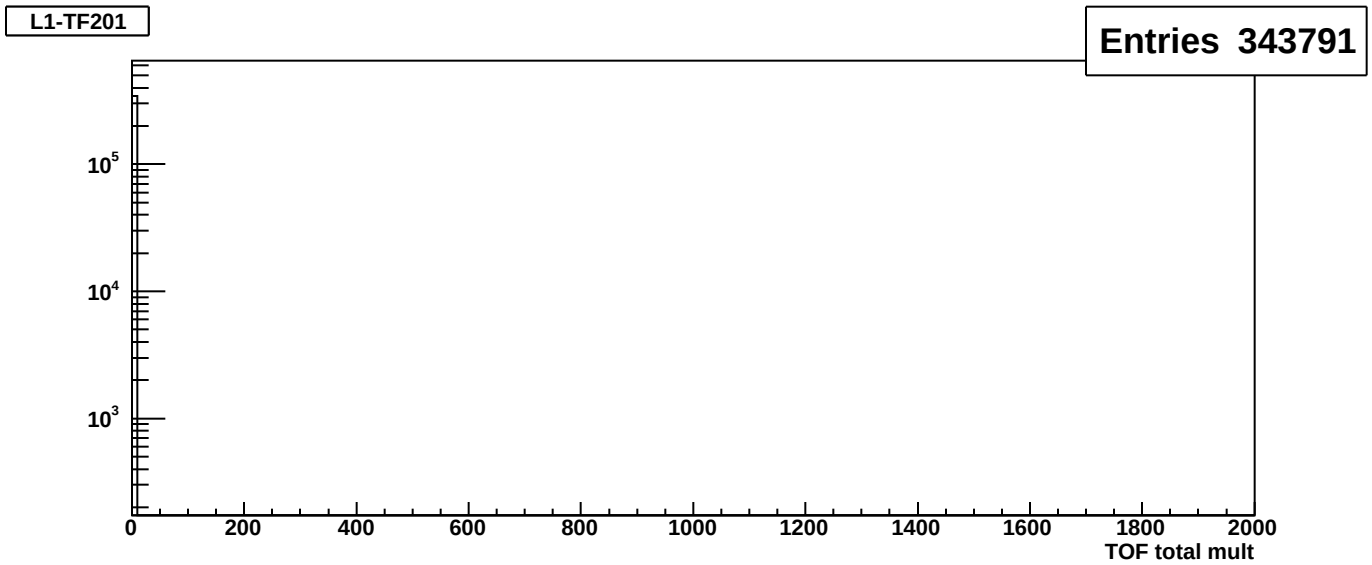

MIX-TF003
Entries 1.443922e+07
TOF MULT
TOF tray

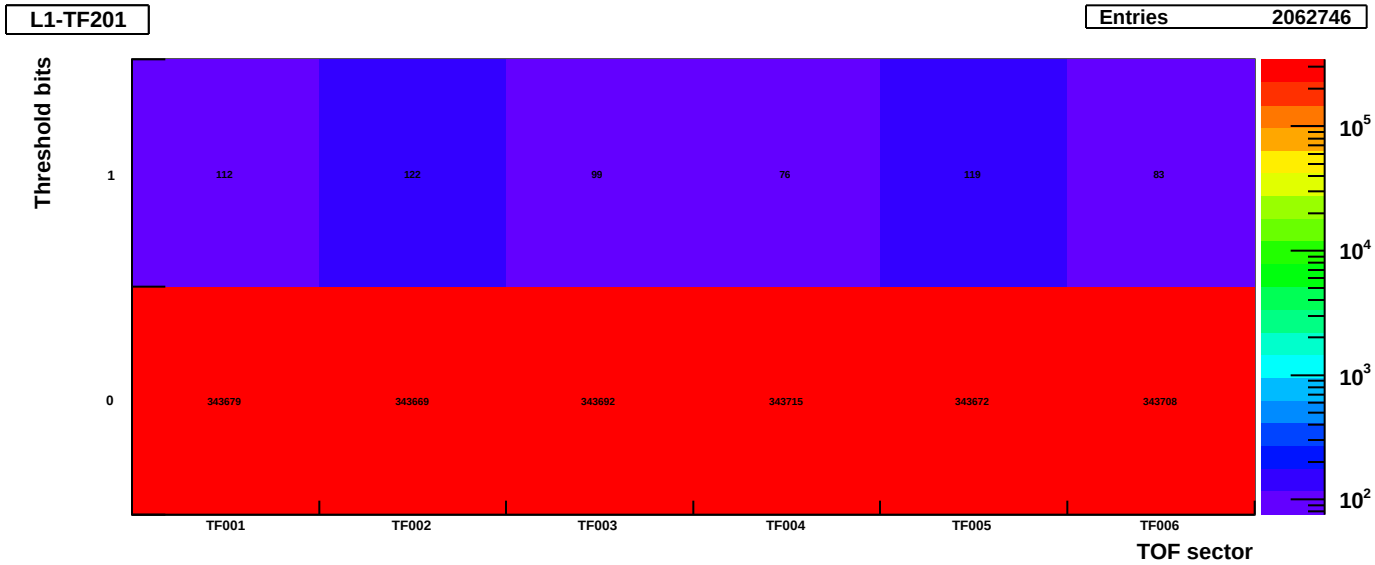

MIX-TF004
Entries 1.443922e+07
TOF MULT
TOF tray

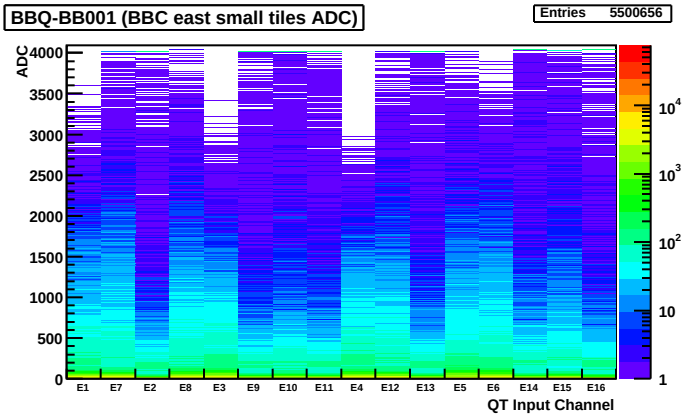

MIX-TF005
Entries 1.443922e+07
TOF MULT
TOF tray

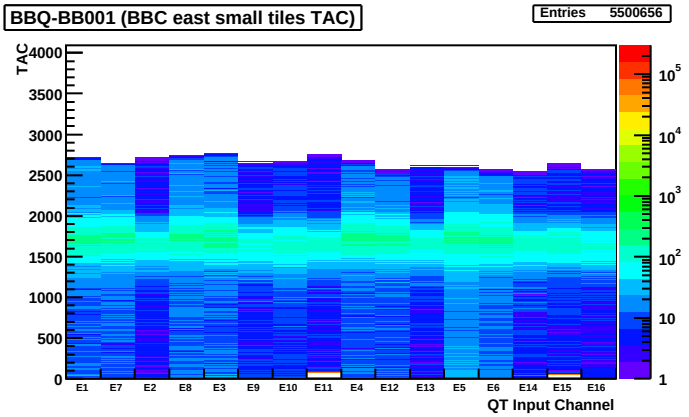

MIX-TF006
Entries 1.443922e+07
TOF MULT
TOF tray

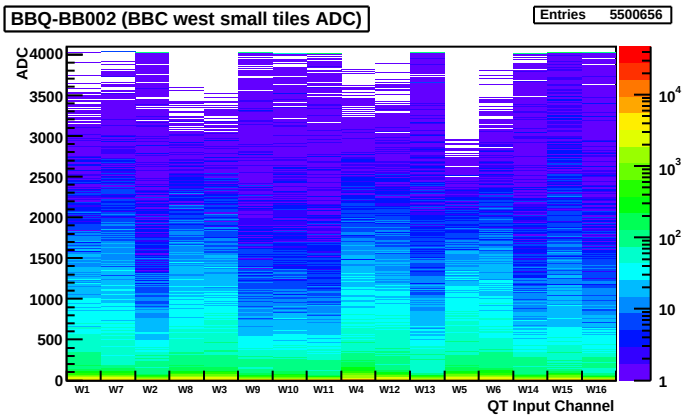

MIX-TF101
Entries 2062746
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
$10^5$
$10^4$
$10^3$
$10^2$
10
1

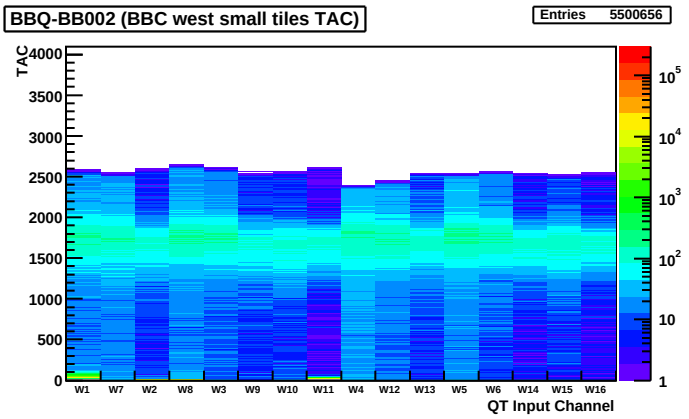

L1-TF201
Entries 343791
$10^5$
$10^4$
$10^3$
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

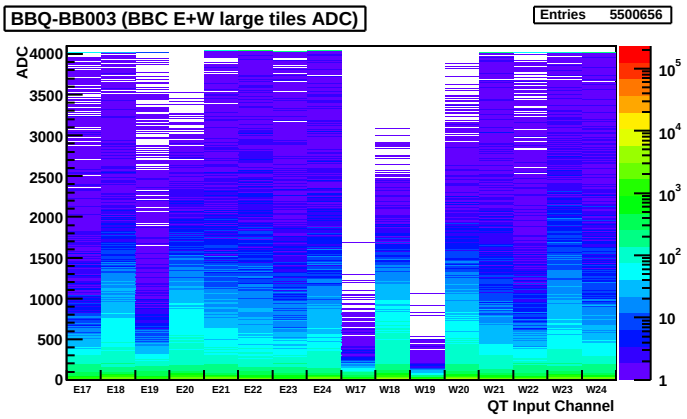

L1-TF201
Entries 2062746
Threshold bits
1
0
112
122
99
76
119
83
343679
343669
343692
343715
343672
343708
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
$10^5$
$10^4$
$10^3$
$10^2$

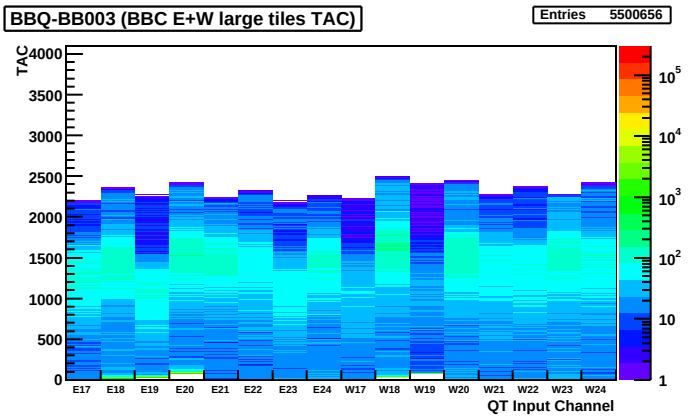

BBQ-BB001 (BBC east small tiles ADC)
Entries 5500656
ADC
QT Input Channel

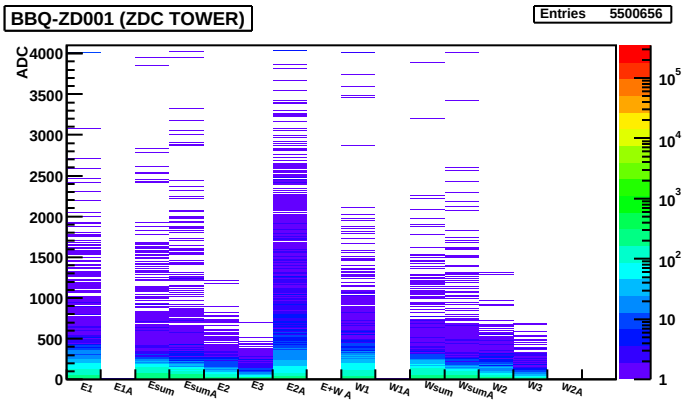

BBQ-BB001 (BBC east small tiles TAC)
Entries 5500656
TAC
QT Input Channel

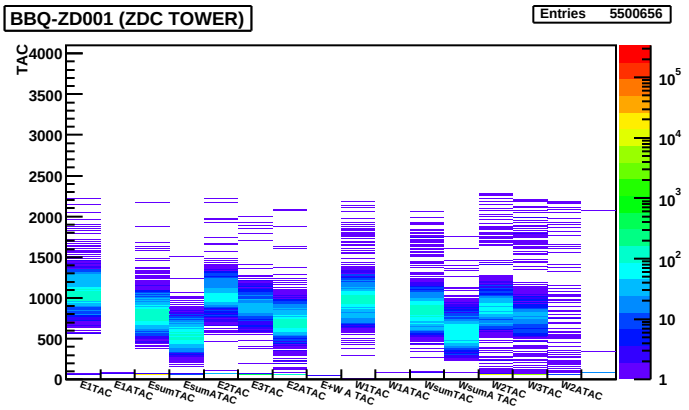

BBQ-BB002 (BBC west small tiles ADC)
Entries 5500656
ADC
QT Input Channel

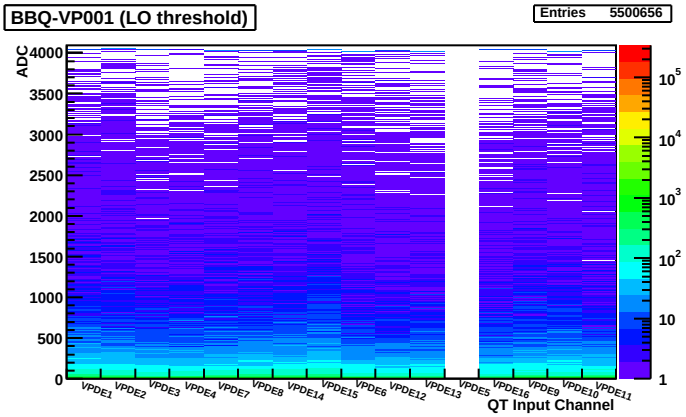

BBQ-BB002 (BBC west small tiles TAC)
Entries 5500656
TAC
QT Input Channel

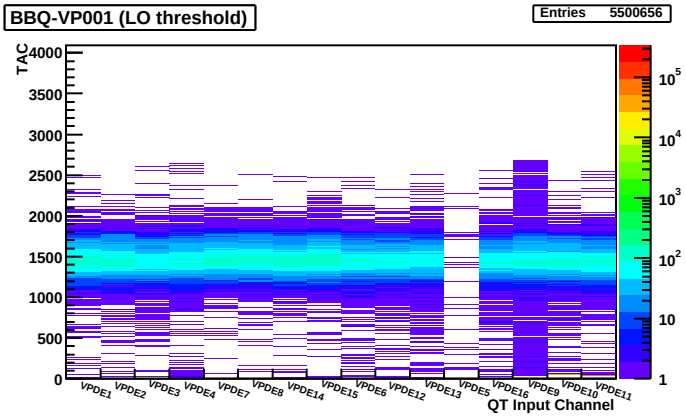

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 5500656
ADC
QT Input Channel

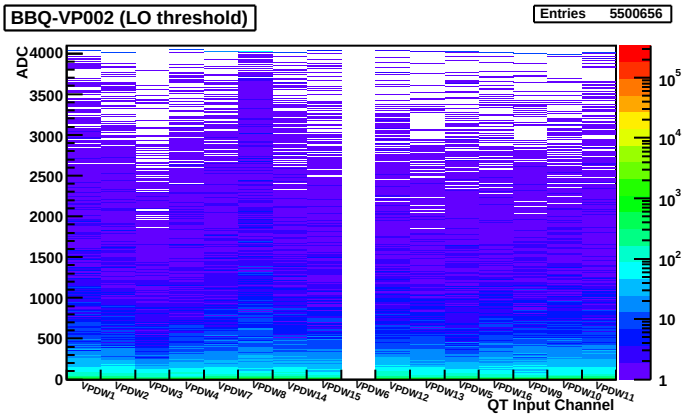

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 5500656
TAC
QT Input Channel

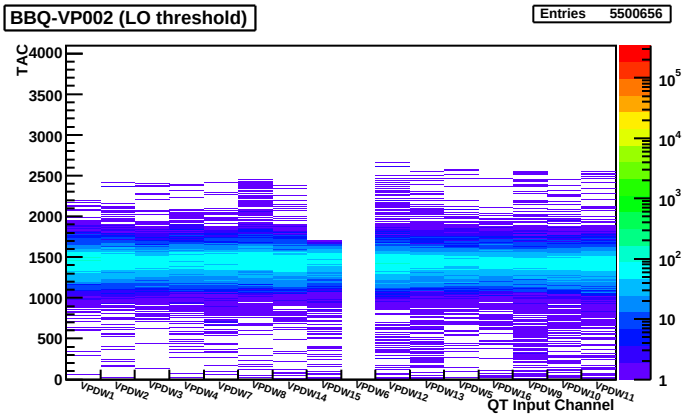

BBQ-ZD001 (ZDC TOWER)
Entries 5500656
ADC

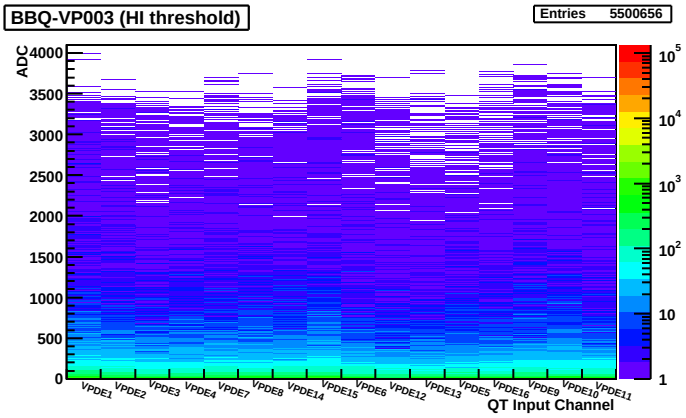

BBQ-ZD001 (ZDC TOWER)
Entries 5500656
TAC

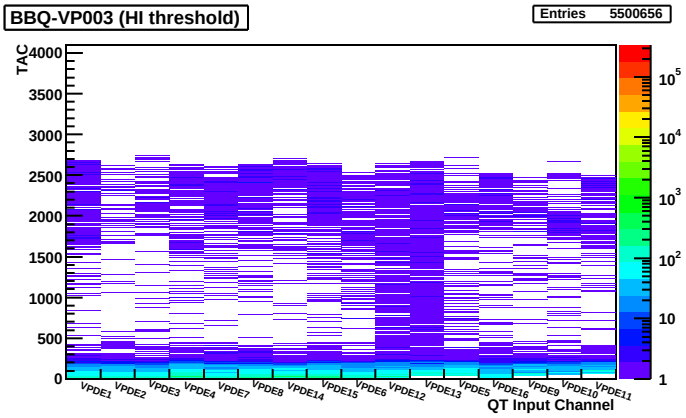

BBQ-VP001 (LO threshold)
Entries 5500656
ADC
QT Input Channel

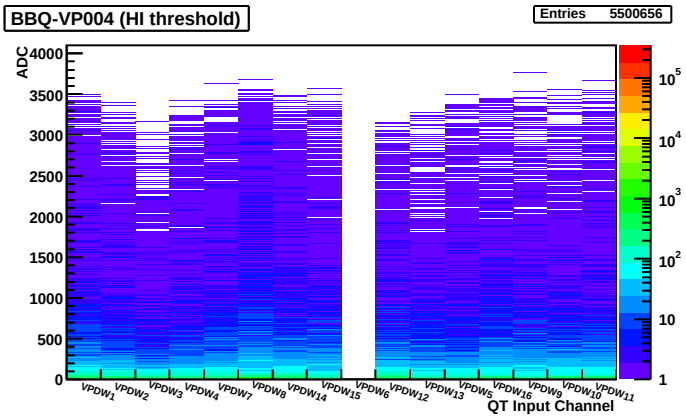

BBQ-VP001 (LO threshold)
Entries 5500656
TAC
QT Input Channel

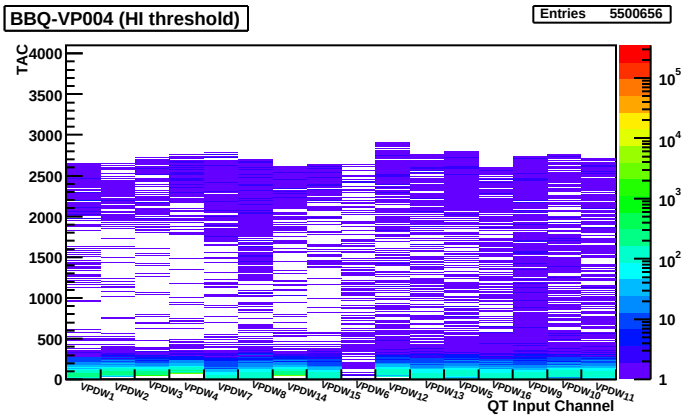

BBQ-VP002 (LO threshold)
Entries 5500656
ADC
QT Input Channel

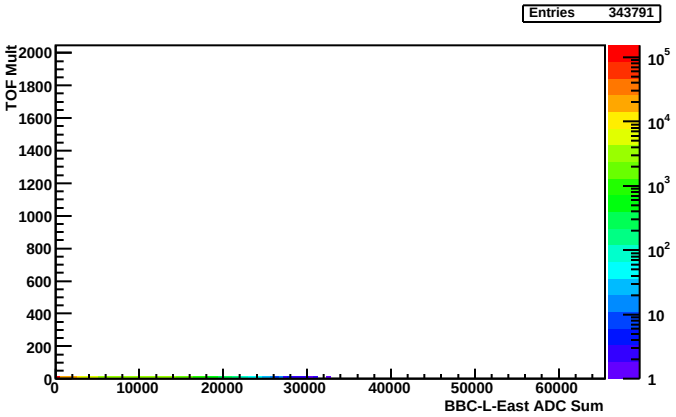

BBQ-VP002 (LO threshold)
Entries 5500656
TAC
QT Input Channel

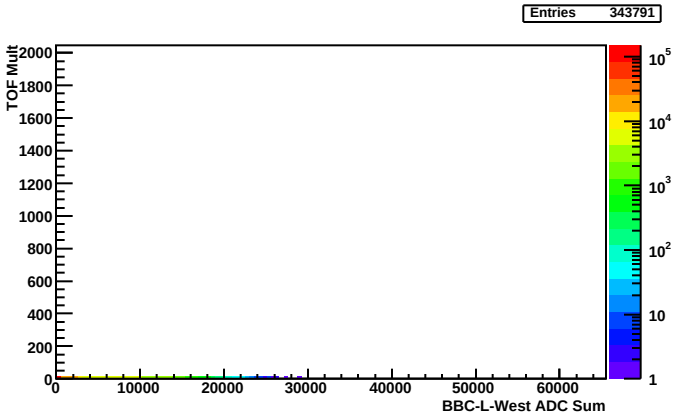

BBQ-VP003 (HI threshold)
Entries 5500656
ADC
QT Input Channel

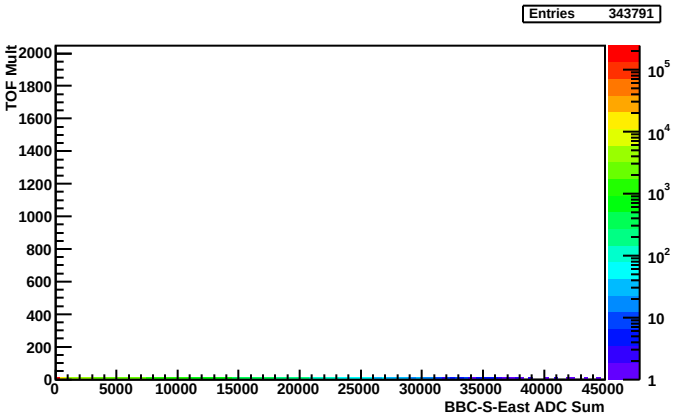

BBQ-VP003 (HI threshold)
Entries 5500656
TAC
QT Input Channel

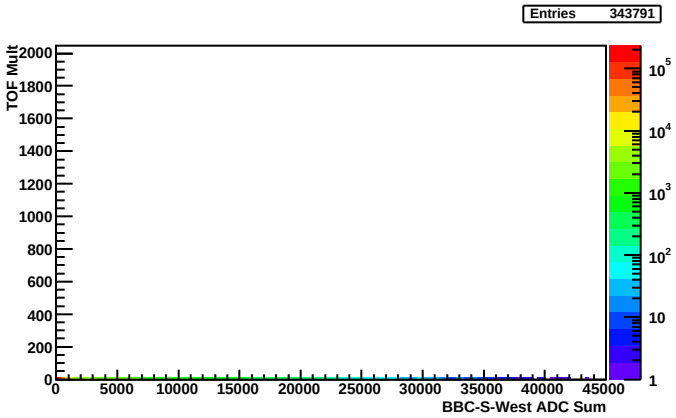

BBQ-VP004 (HI threshold)
Entries 5500656
ADC
QT Input Channel

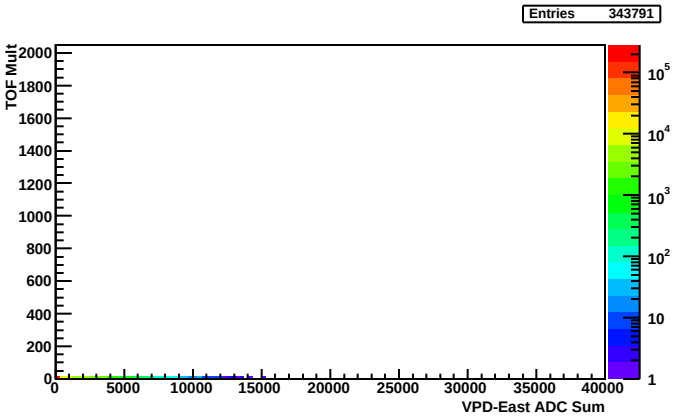

BBQ-VP004 (HI threshold)
Entries 5500656
TAC
QT Input Channel

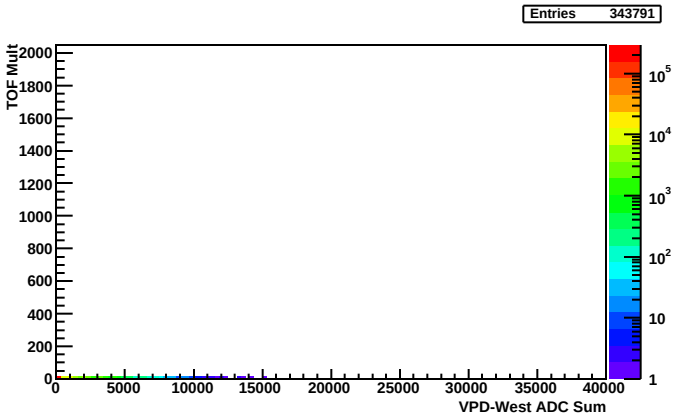

Entries 343791
TOF Mult
BBC-L-East ADC Sum

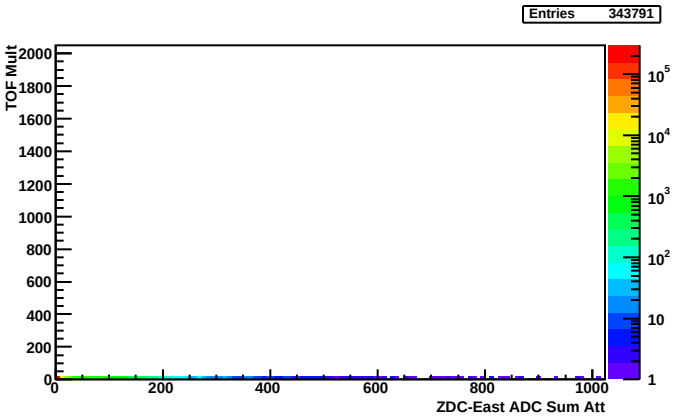

Entries 343791
TOF Mult
BBC-L-West ADC Sum

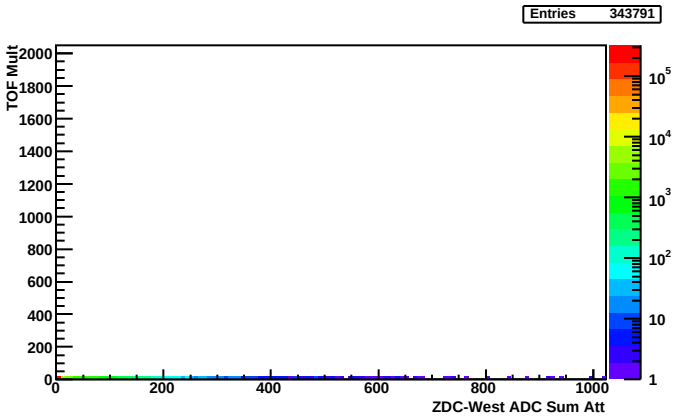

Entries 343791
TOF Mult
BBC-S-East ADC Sum

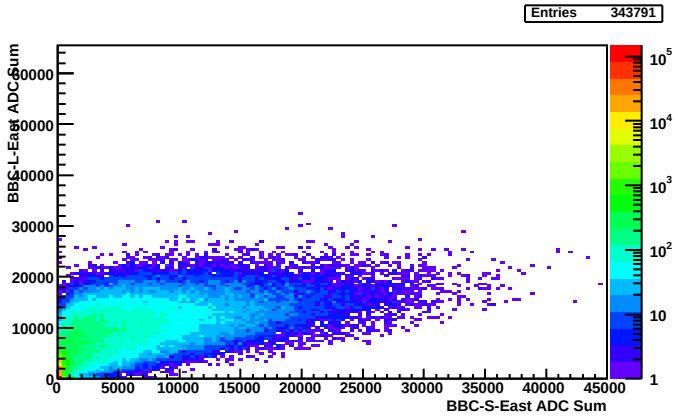

Entries 343791
TOF Mult
BBC-S-West ADC Sum

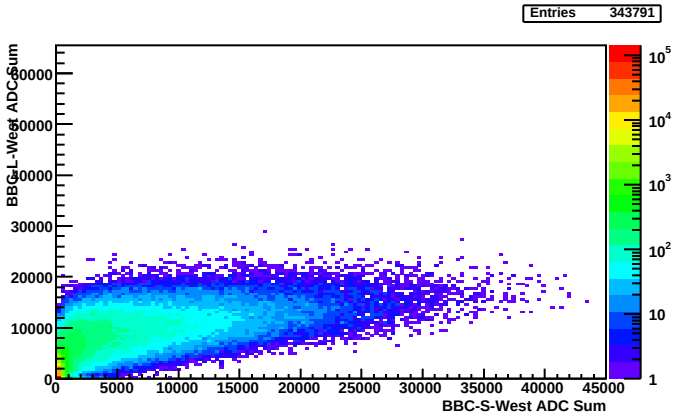

Entries 343791
TOF Mult
VPD-East ADC Sum

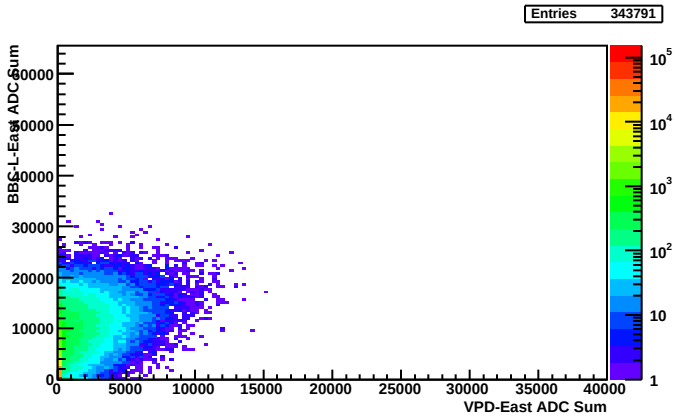

Entries 343791
TOF Mult
VPD-West ADC Sum

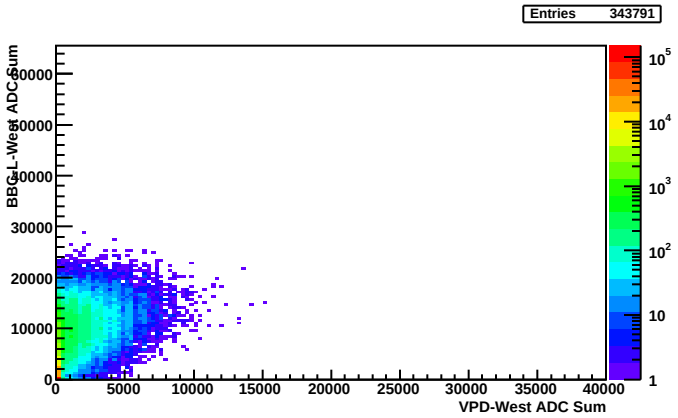

Entries 343791
TOF Mult
ZDC-East ADC Sum Att

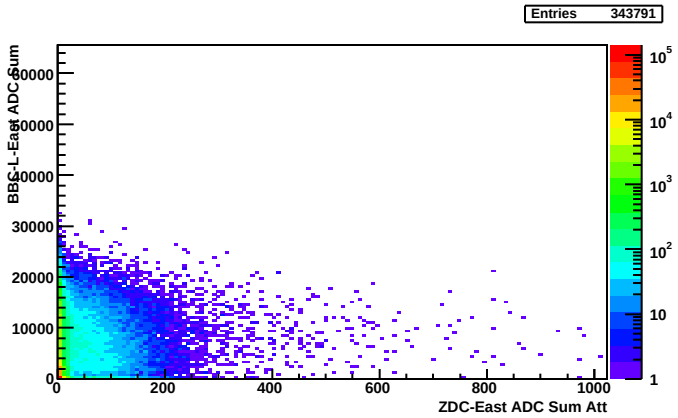

Entries 343791
TOF Mult
ZDC-West ADC Sum Att

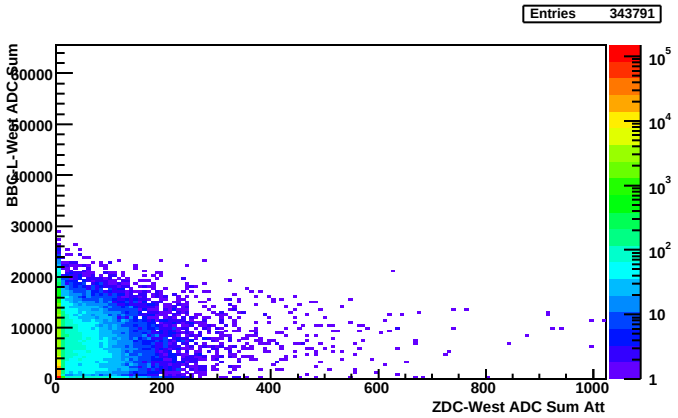

Entries 343791
BBC-L-East ADC Sum
BBC-S-East ADC Sum

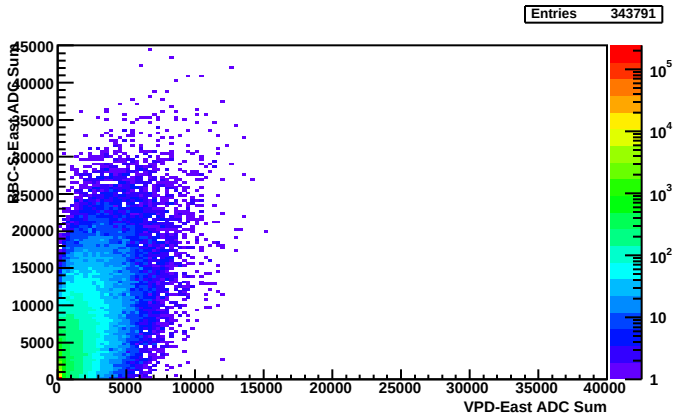

Entries 343791
BBC-L-West ADC Sum
BBC-S-West ADC Sum

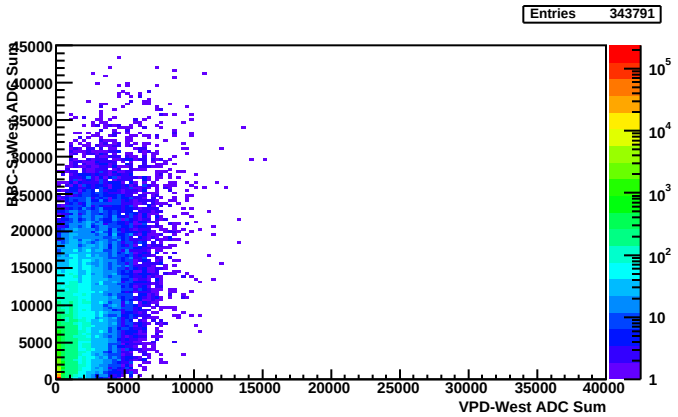

Entries 343791
BBC-L-East ADC Sum
VPD-East ADC Sum

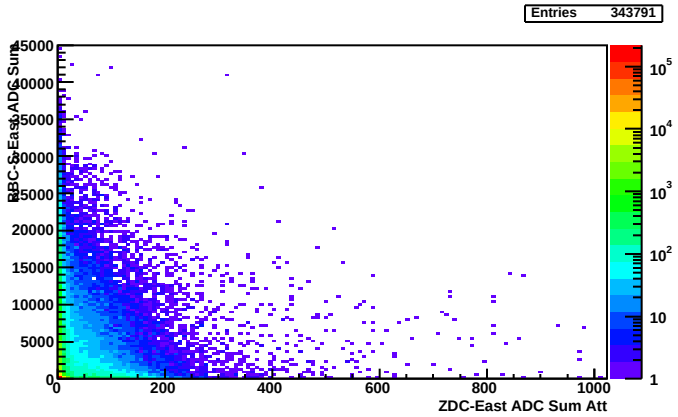

Entries 343791
BBC-L-West ADC Sum
VPD-West ADC Sum

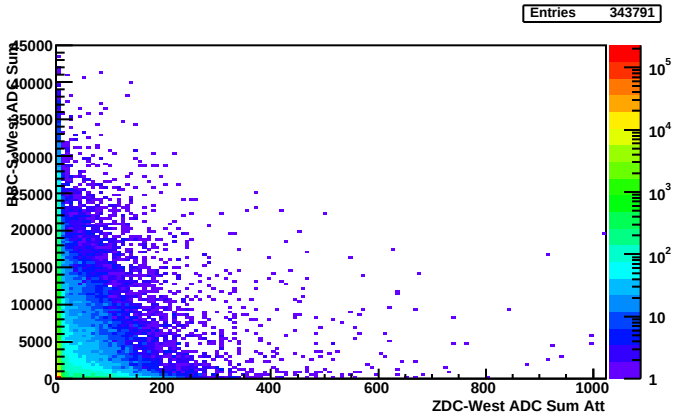

Entries 343791
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

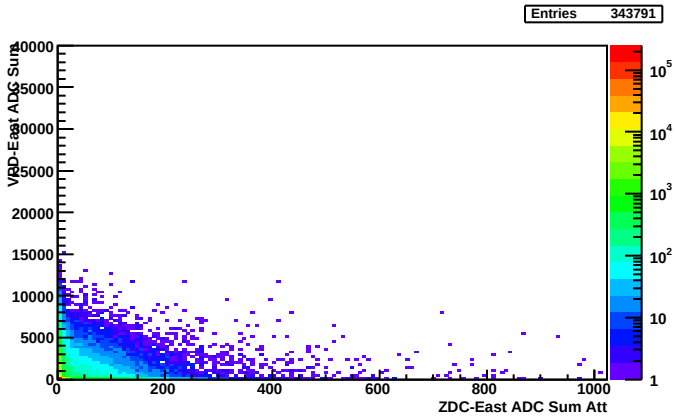

Entries 343791
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

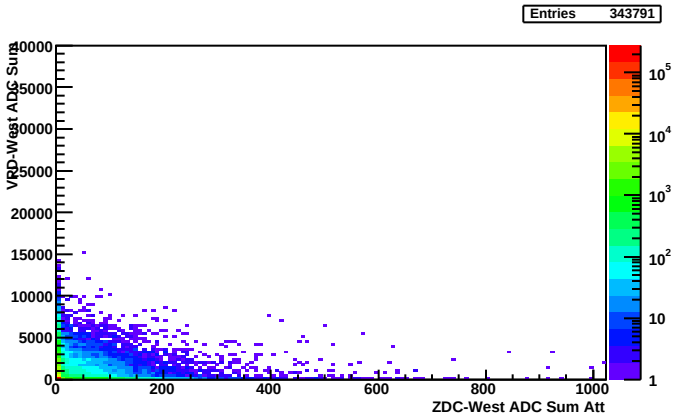

Entries 343791
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 343791
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 343791
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 343791
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 343791
VPD-East ADC Sum
ZDC-East ADC Sum Att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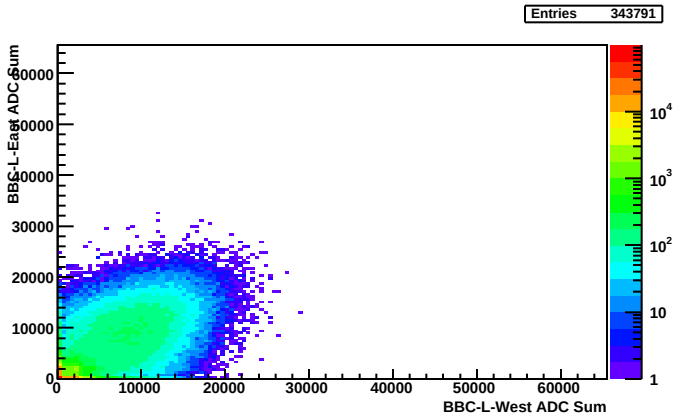
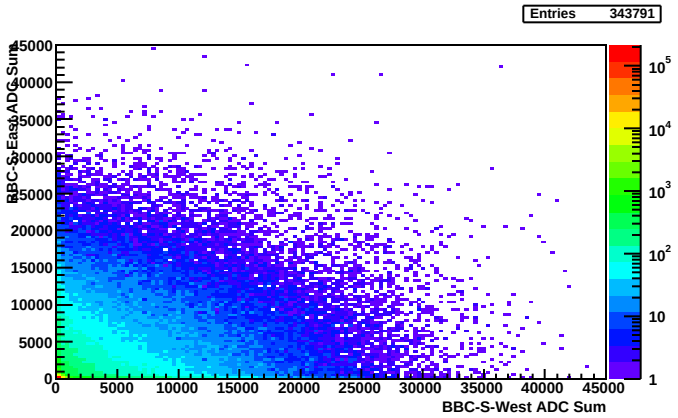
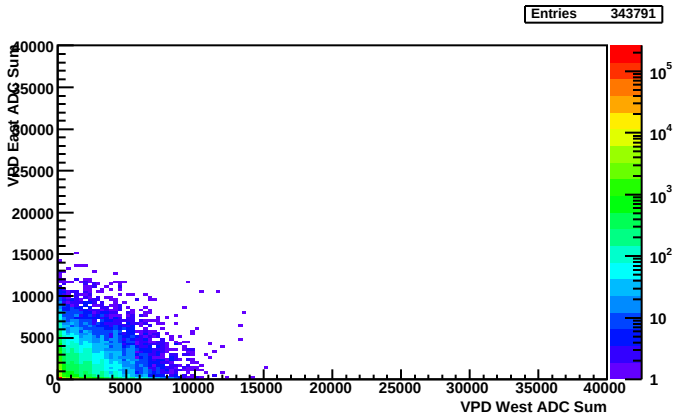
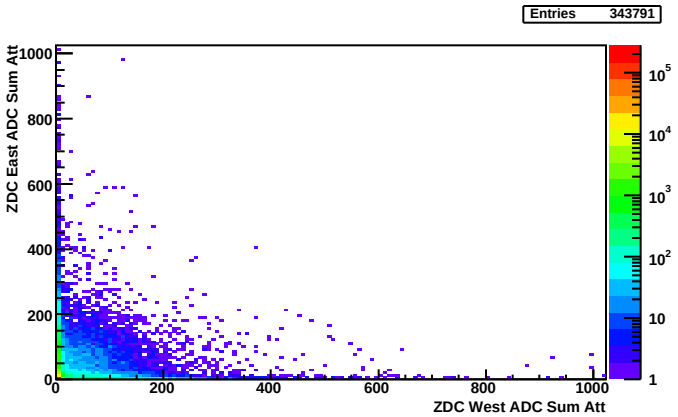
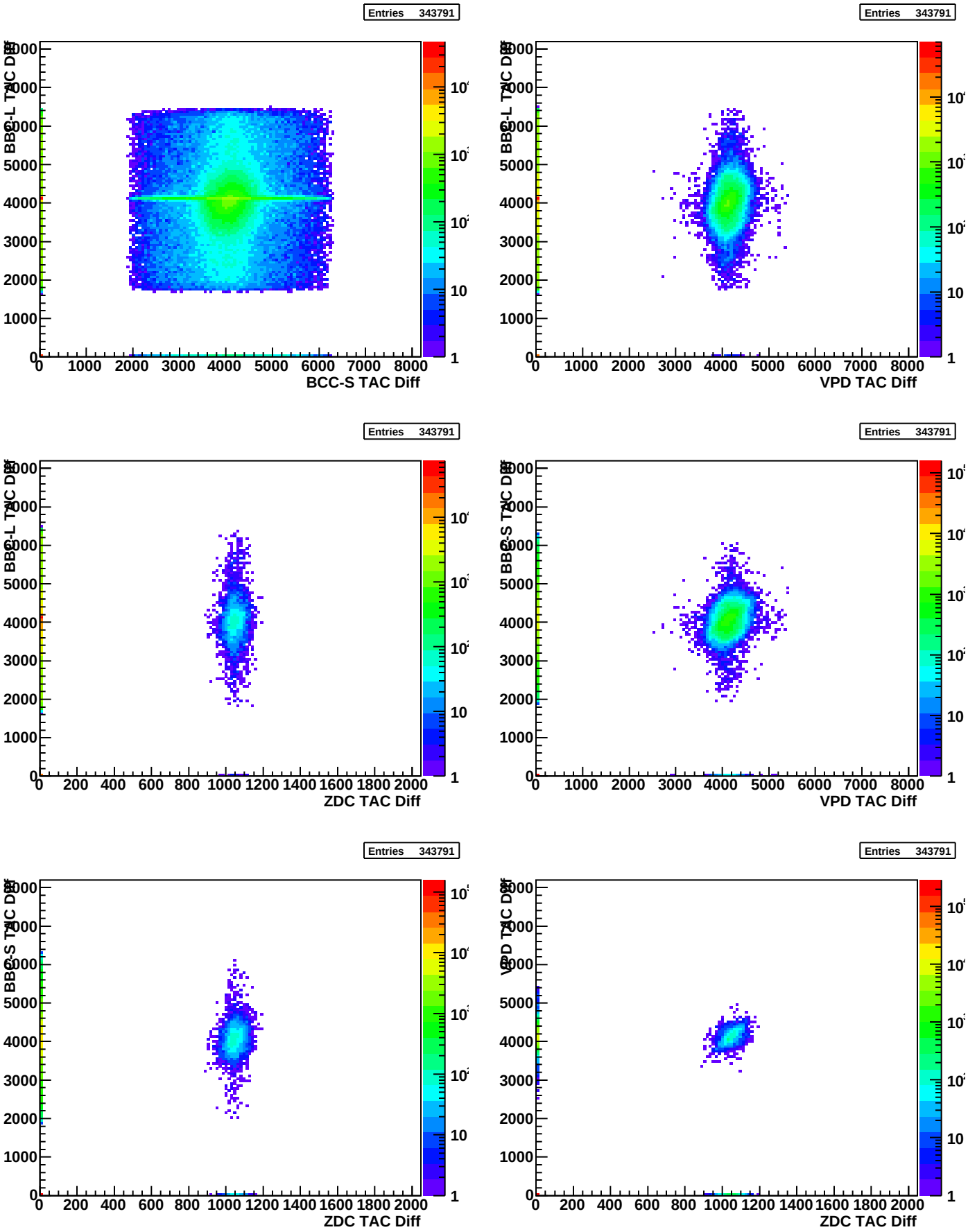
VPD-West ADC Sum
ZDC-West ADC Sum Att

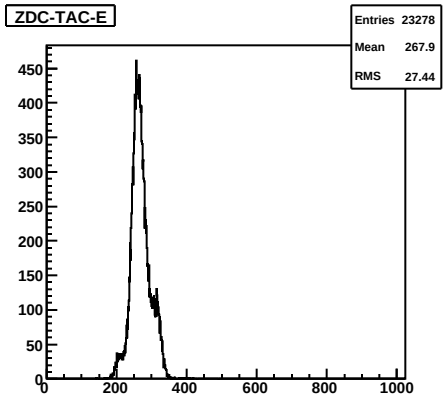

Entries 343791
BBC-L-East ADC Sum
BBC-L-West ADC Sum

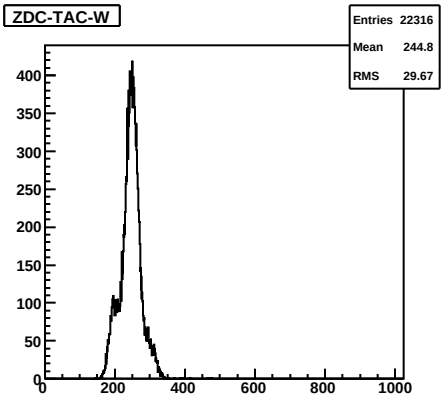

Entries 343791
BBC-S-East ADC Sum
BBC-S-West ADC Sum

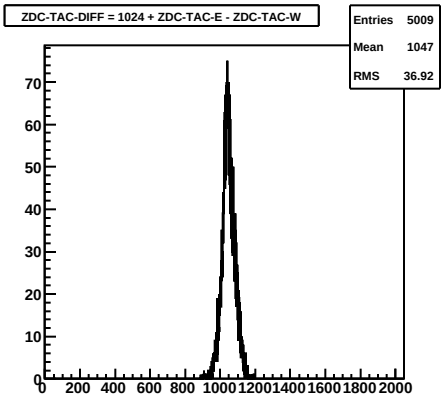

Entries 343791
VPD East ADC Sum
VPD West ADC Sum

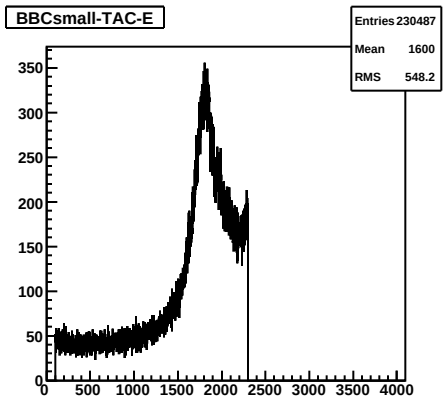

Entries 343791
ZDC East ADC Sum Att
ZDC West ADC Sum Att

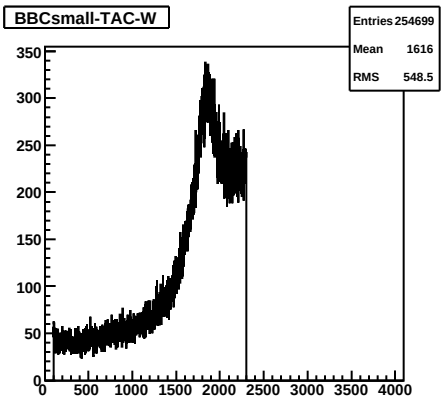

Entries 343791
BBC-L TAC Diff
BCC-S TAC Diff
Entries 343791
BBC-L TAC Diff
VPD TAC Diff
Entries 343791
BBC-L TAC Diff
ZDC TAC Diff
Entries 343791
BBC-S TAC Diff
VPD TAC Diff
Entries 343791
BBC-S TAC Diff
ZDC TAC Diff
Entries 343791
VPD TAC Diff
ZDC TAC Diff

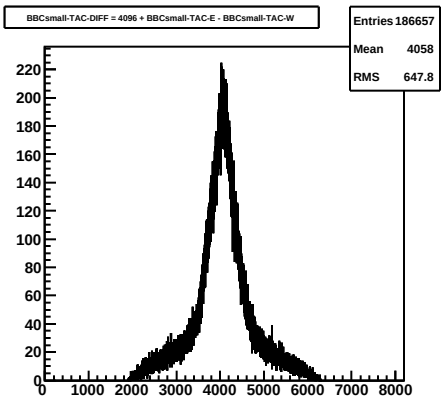

ZDC-TAC-E
Entries 23278
Mean 267.9
RMS 27.44

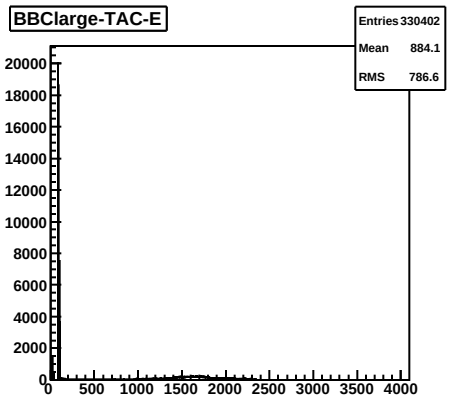

ZDC-TAC-W
Entries 22316
Mean 244.8
RMS 29.67

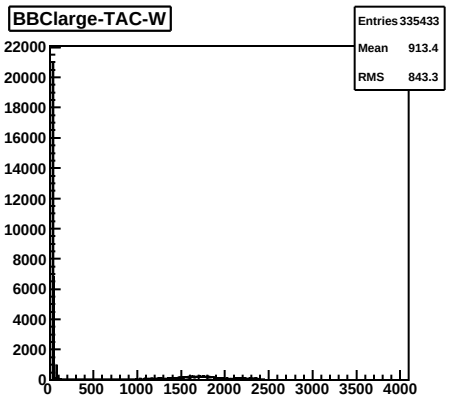

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 5009
Mean 1047
RMS 36.92

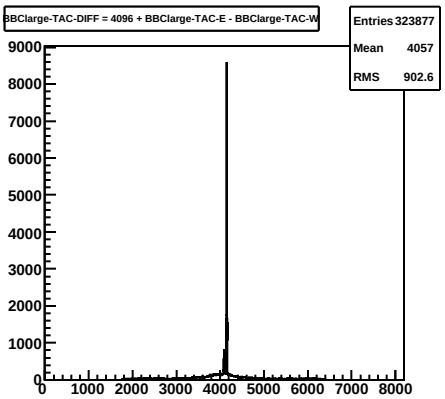

BBCsmall-TAC-E
Entries 230487
Mean 1600
RMS 548.2

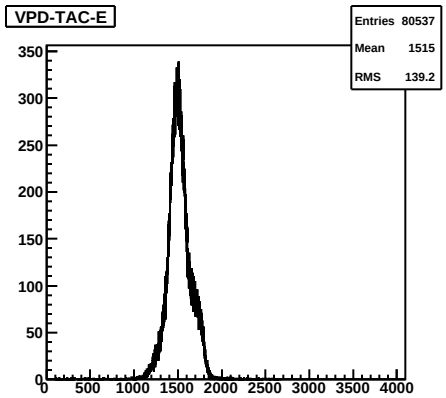

BBCsmall-TAC-W
Entries 254699
Mean 1616
RMS 548.5

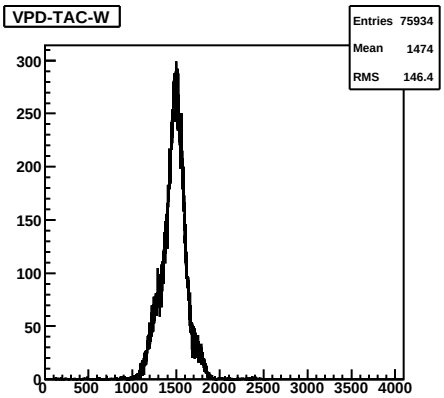

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 186657
Mean 4058
RMS 647.8

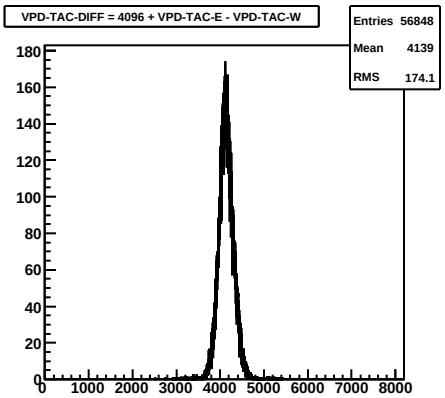

BBClarge-TAC-E
Entries 330402
Mean 884.1
RMS 786.6

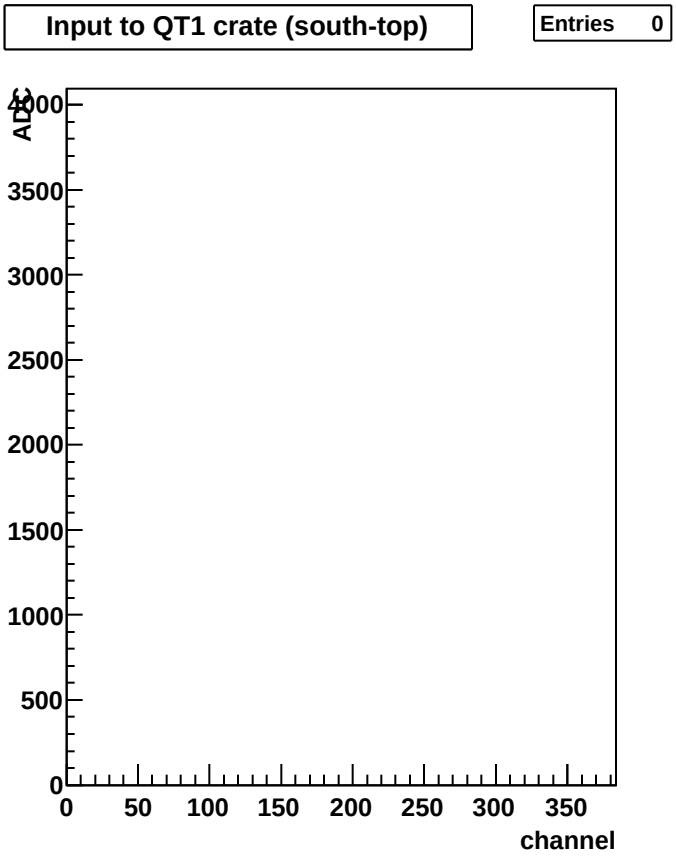

BBClarge-TAC-W
Entries 335433
Mean 913.4
RMS 843.3

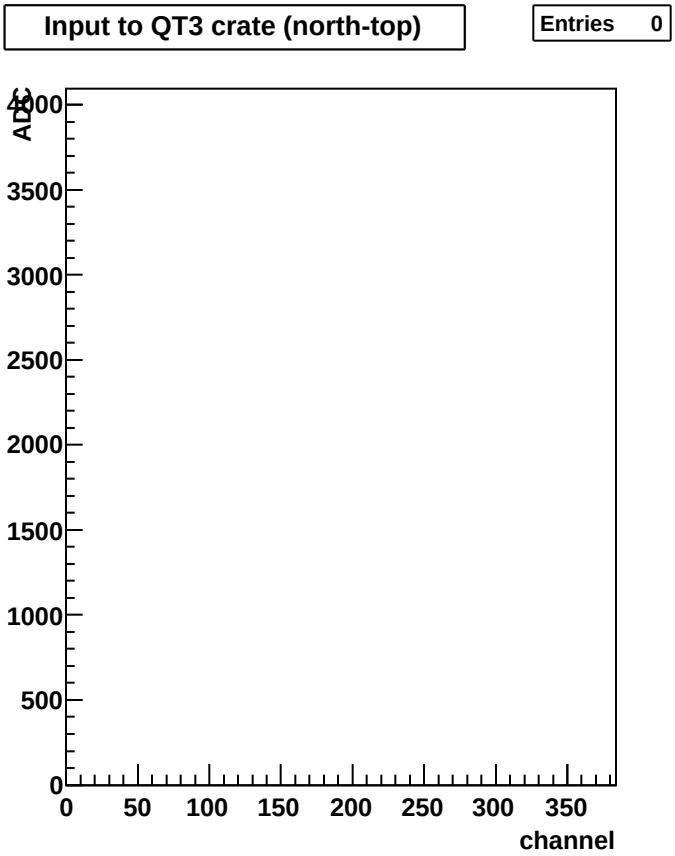

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 323877
Mean 4057
RMS 902.6

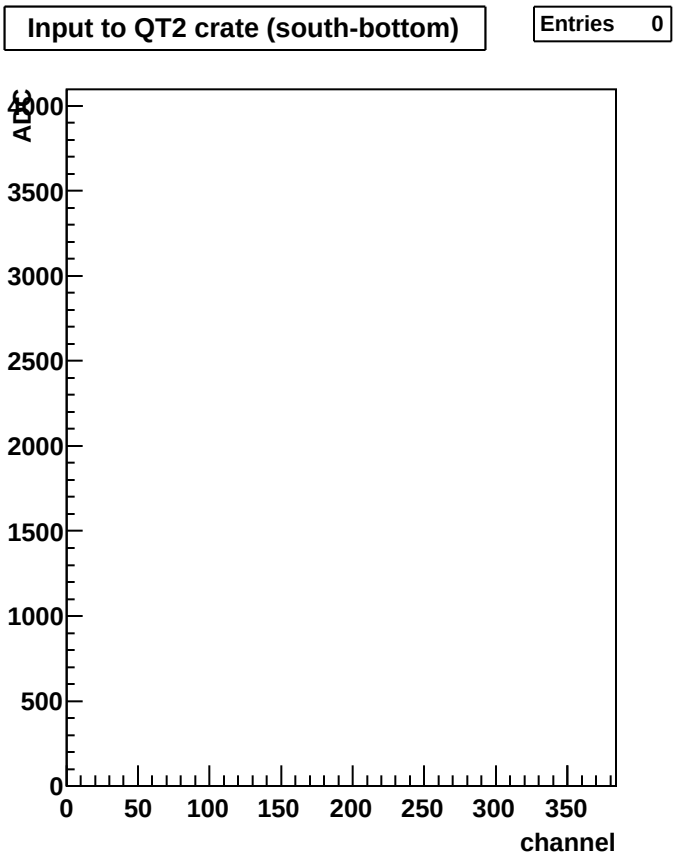

VPD-TAC-E
Entries 80537
Mean 1515
RMS 139.2

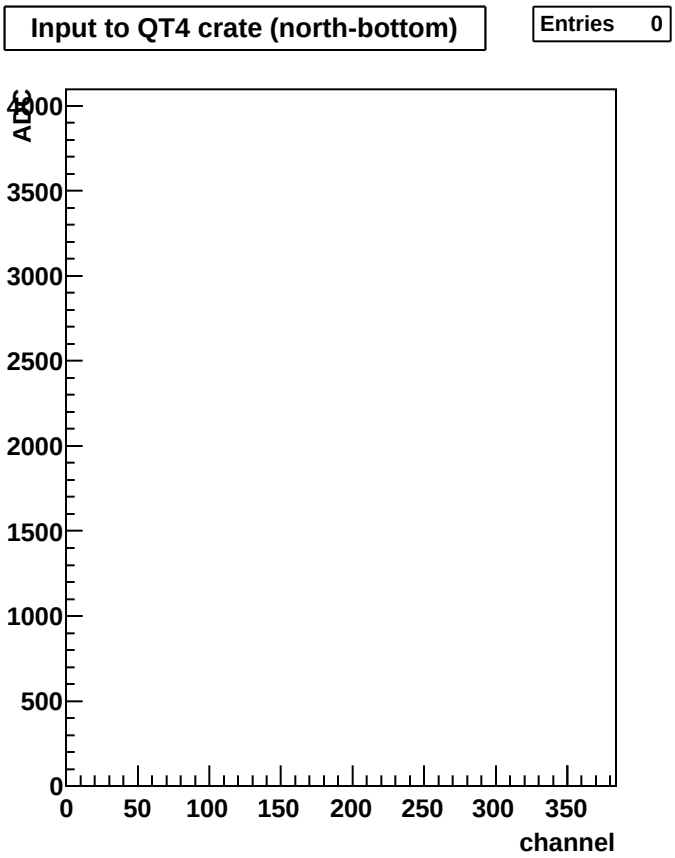

VPD-TAC-W
Entries 75934
Mean 1474
RMS 146.4

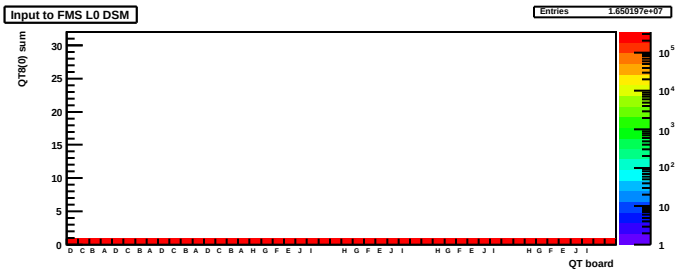

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 56848
Mean 4139
RMS 174.1

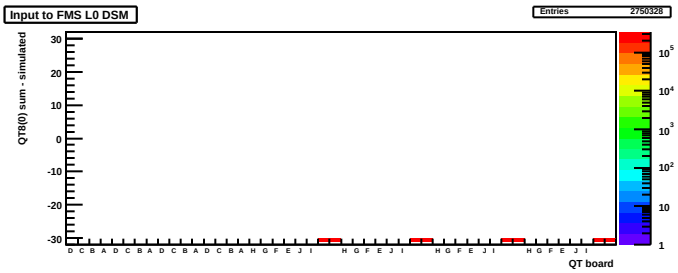

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

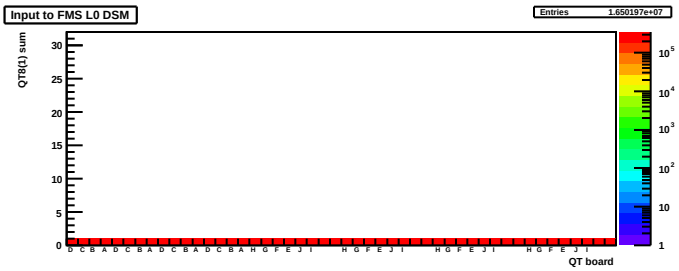

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

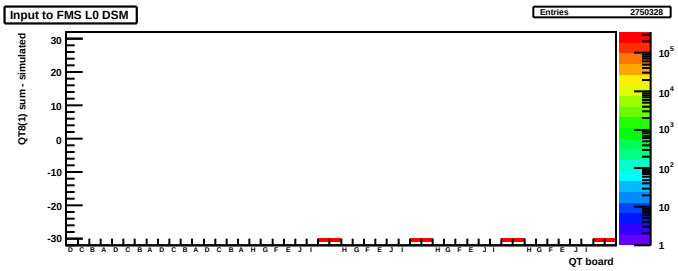

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

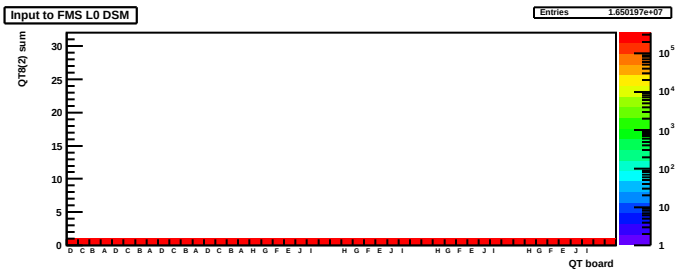

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

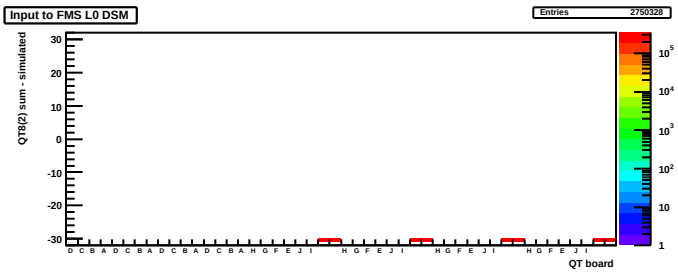

Input to FMS L0 DSM
Entries 1.650197e+07
QT8(0) sum
QT board

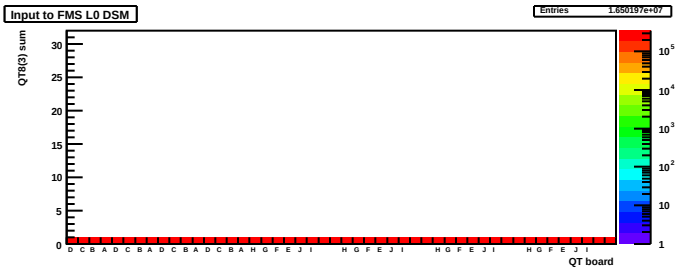

Input to FMS L0 DSM
Entries 2750328
QT8(0) sum - simulated
QT board

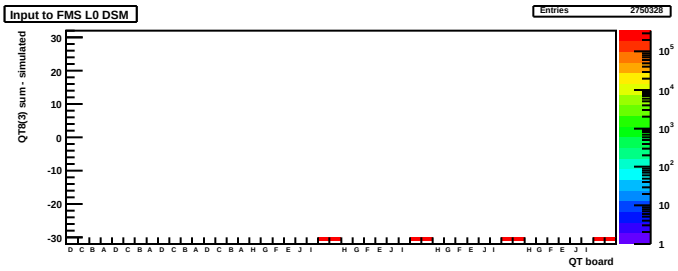

Input to FMS L0 DSM
Entries 1.650197e+07
QT8(1) sum
QT board

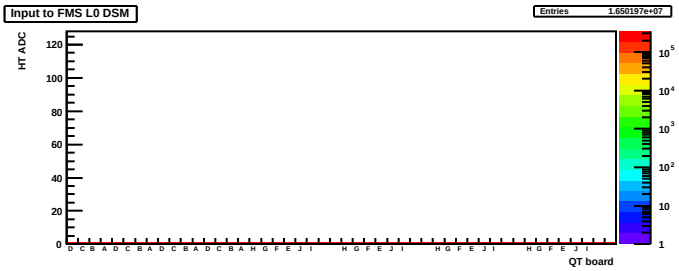

Input to FMS L0 DSM
Entries 2750328
QT8(1) sum - simulated
QT board

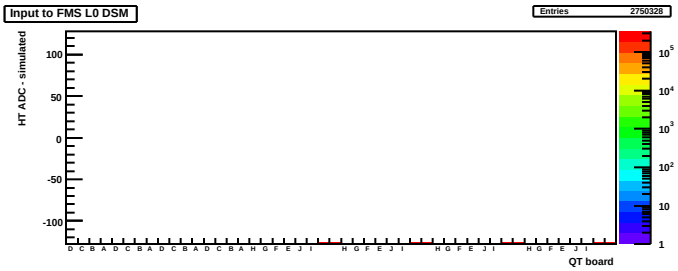

Input to FMS L0 DSM
Entries 1.650197e+07
QT8(2) sum
QT board

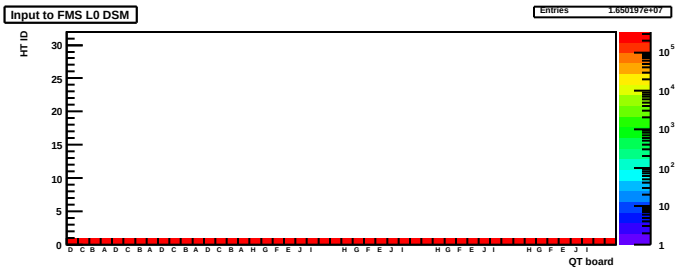

Input to FMS L0 DSM
Entries 2750328
QT8(2) sum - simulated
QT board

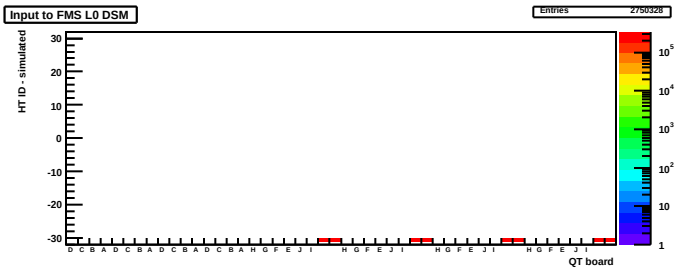

Input to FMS L0 DSM
Entries 1.650197e+07
QT8(3) sum
QT board

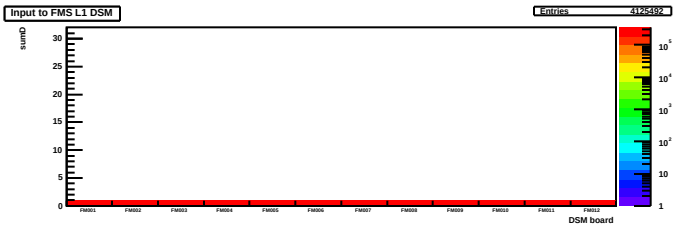

Input to FMS L0 DSM
Entries 2750328
QT8(3) sum - simulated
QT board

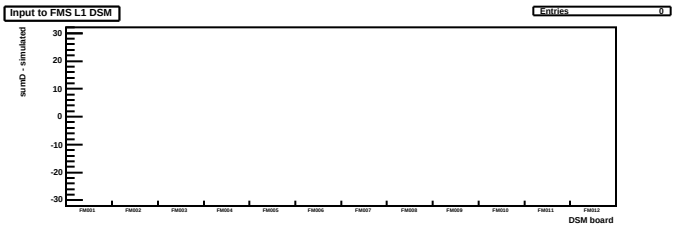

Input to FMS L0 DSM
Entries 1.650197e+07
HT ADC
QT board

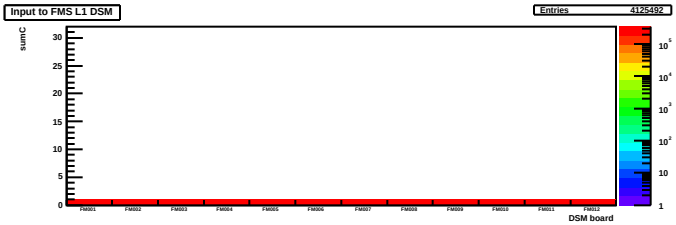

Input to FMS L0 DSM
Entries 2750328
HT ADC - simulated
QT board

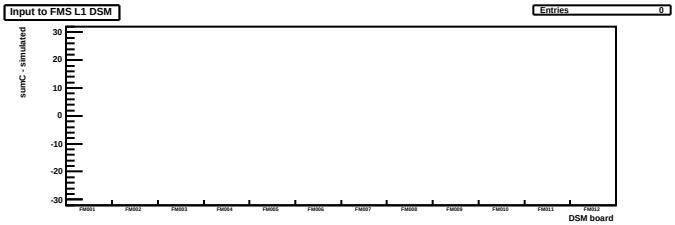

Input to FMS L0 DSM
Entries 1.650197e+07
HT ID
QT board

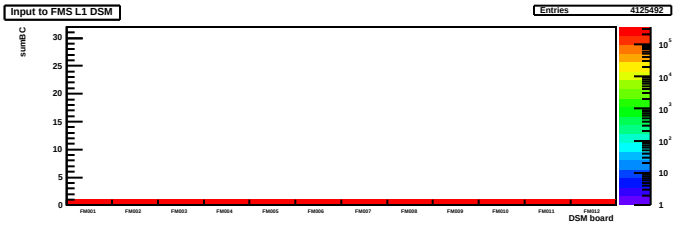

Input to FMS L0 DSM
Entries 2750328
HT ID - simulated
QT board

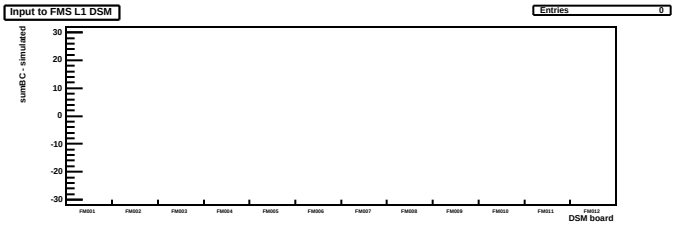

Input to FMS L1 DSM
Entries 4125492
sumD
DSM board

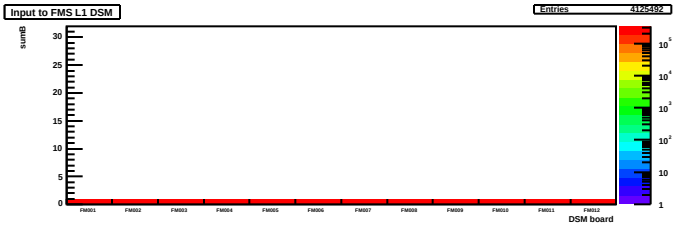

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

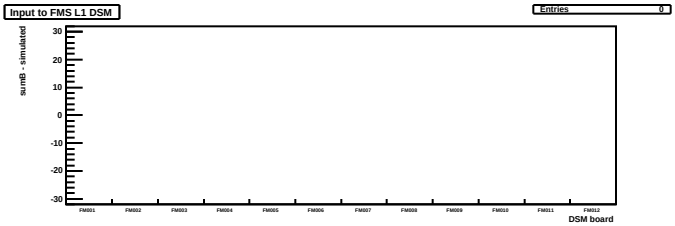

Input to FMS L1 DSM
Entries 4125492
sumC
DSM board

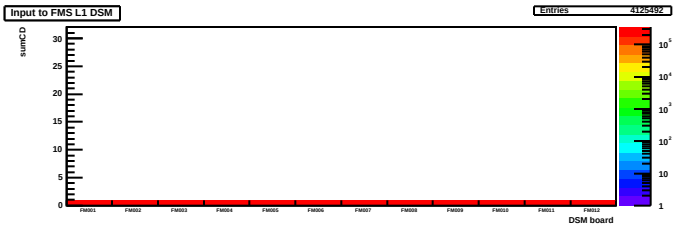

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

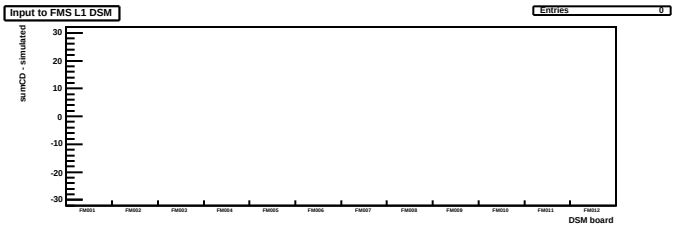

Input to FMS L1 DSM
Entries 4125492
sumBC
DSM board

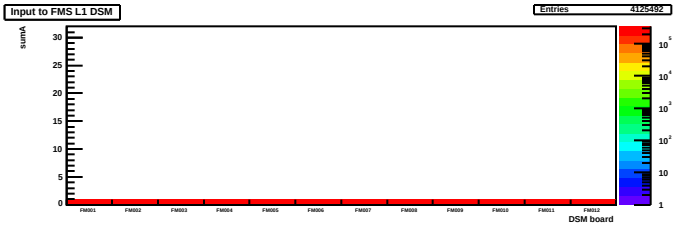

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

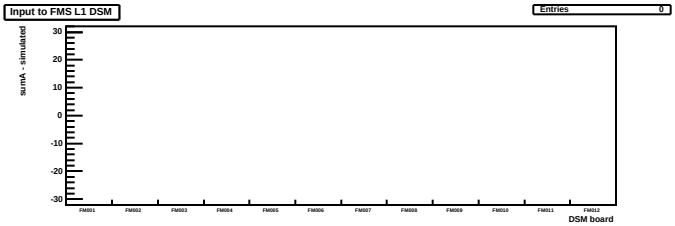

Input to FMS L1 DSM
Entries 4125492
sumB
DSM board

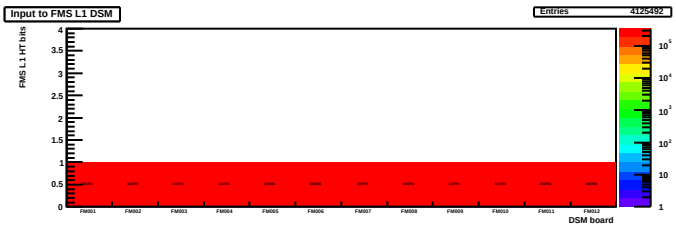

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

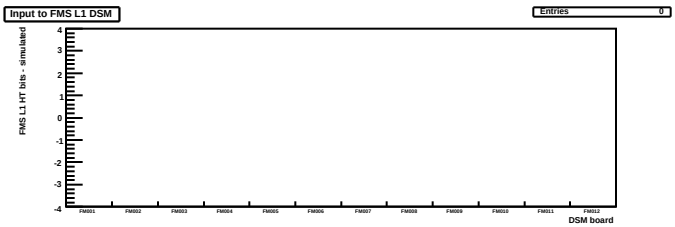

Input to FMS L1 DSM
Entries 4125492
sumCD
DSM board

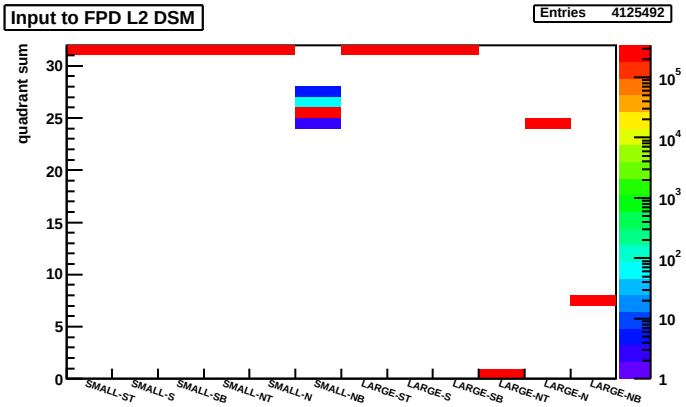

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

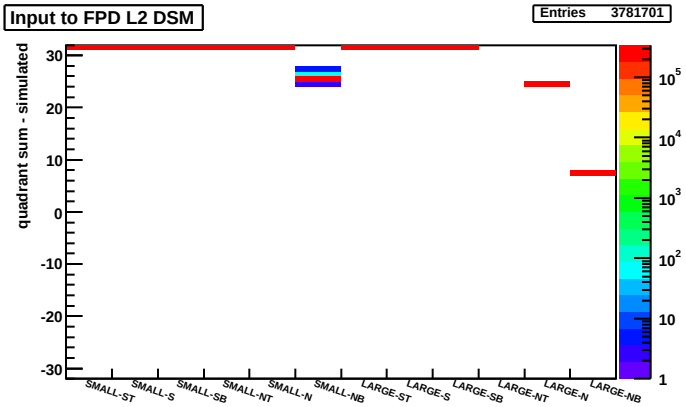

Input to FMS L1 DSM
Entries 4125492
sumA
DSM board

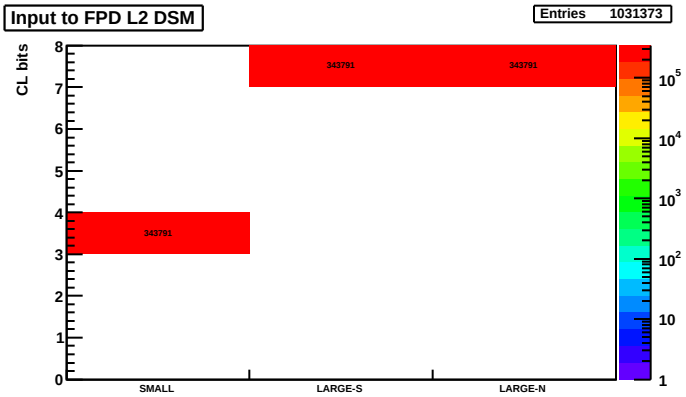

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

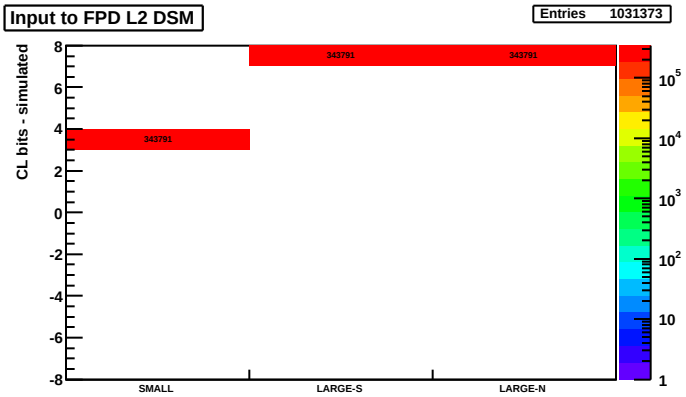

Input to FMS L1 DSM
Entries 4125492
FMS L1 HT bits
DSM board

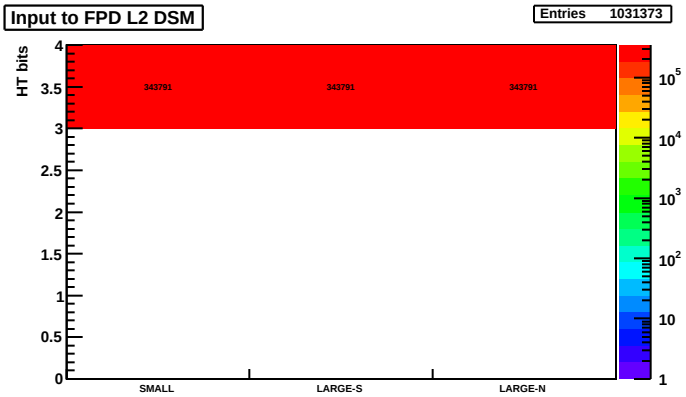

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

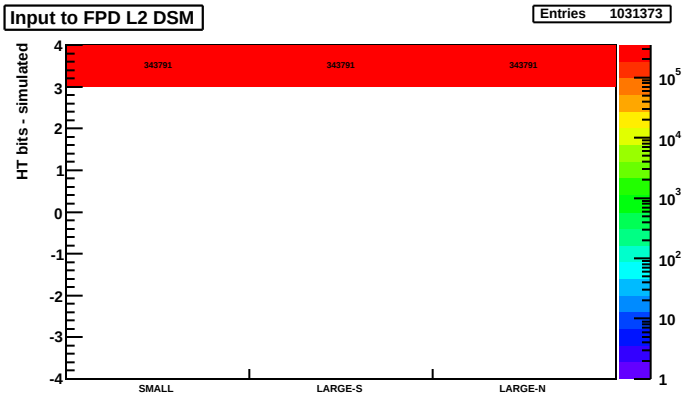

Input to FPD L2 DSM
Entries 4125492
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

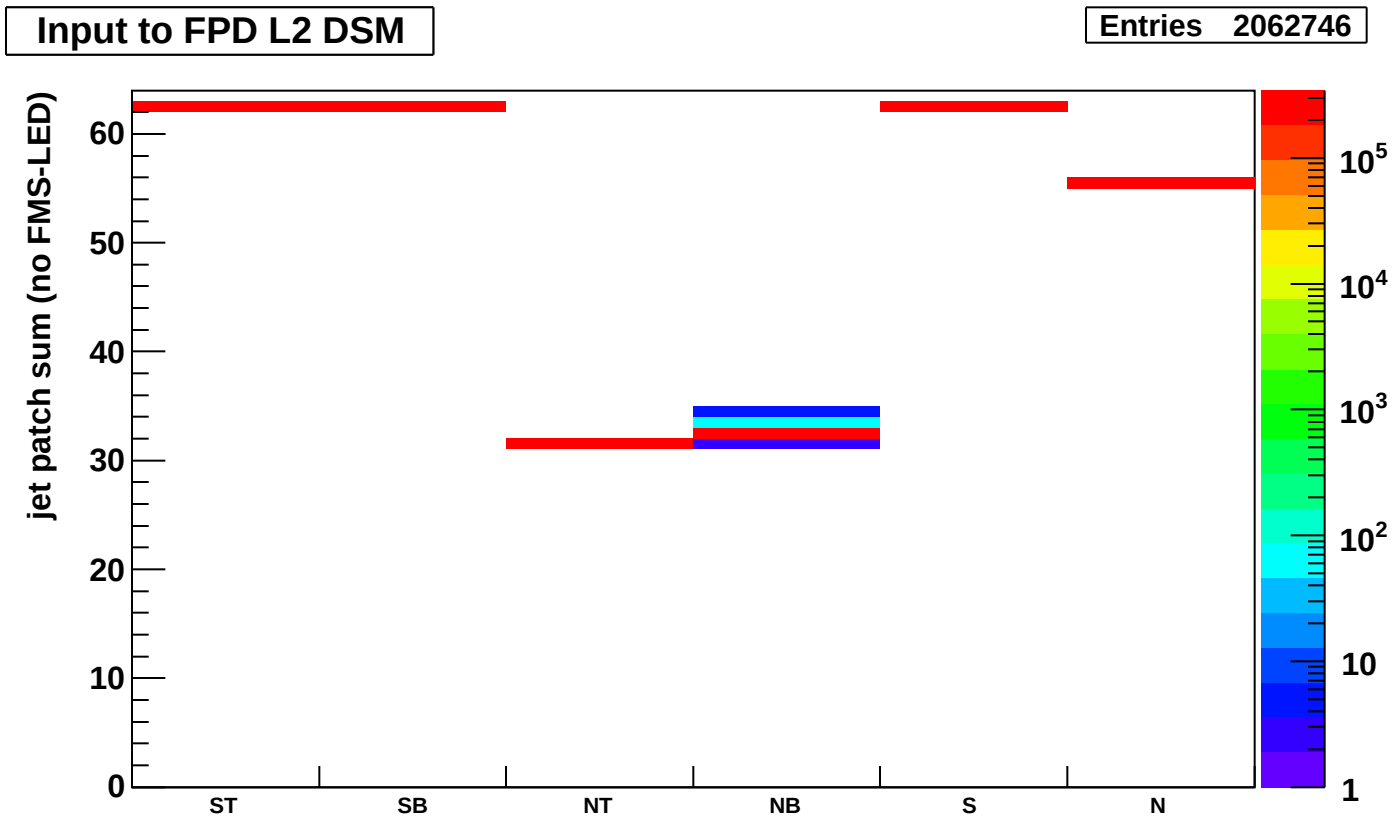

Input to FPD L2 DSM
Entries 3781701
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

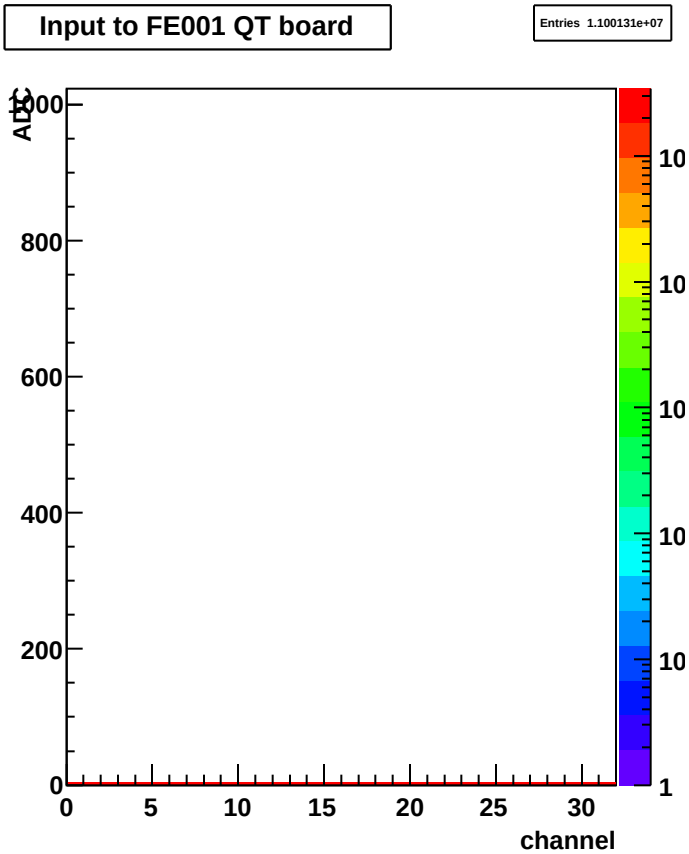

Input to FPD L2 DSM
Entries 1031373
CL bits
343791
343791
343791
SMALL
LARGE-S
LARGE-N

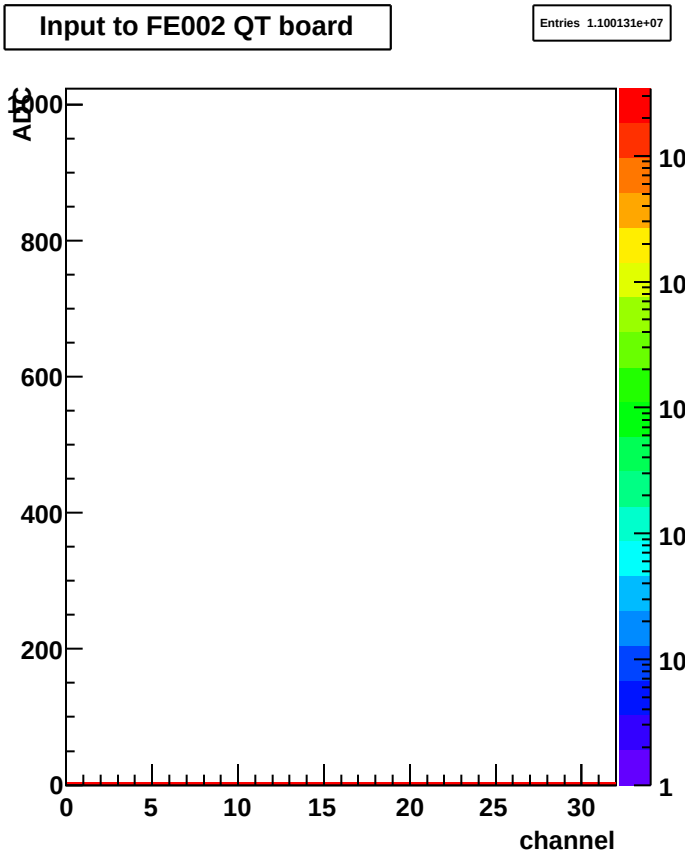

Input to FPD L2 DSM
Entries 1031373
CL bits - simulated
343791
343791
343791
SMALL
LARGE-S
LARGE-N

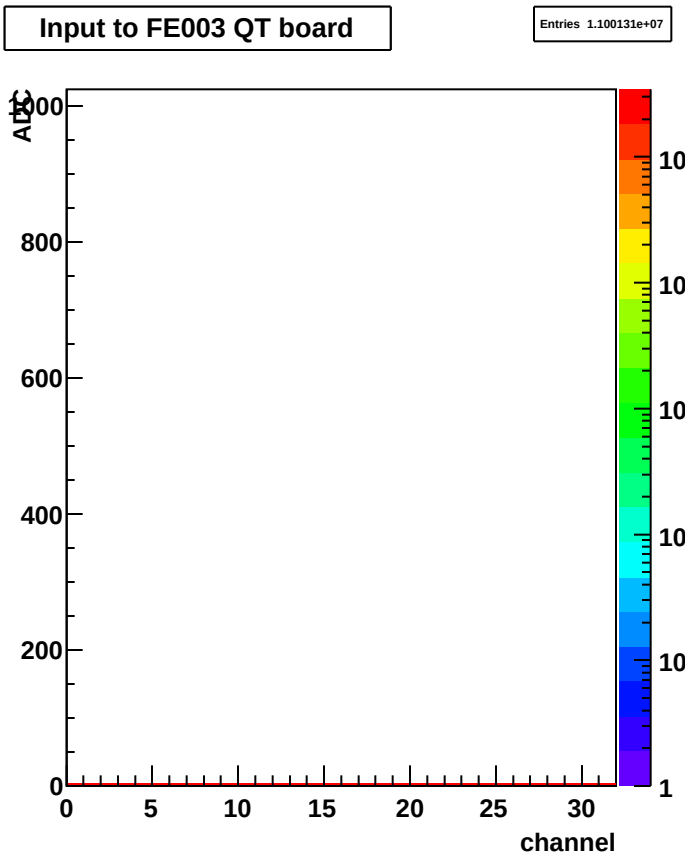

Input to FPD L2 DSM
Entries 1031373
HT bits
343791
343791
343791
SMALL
LARGE-S
LARGE-N

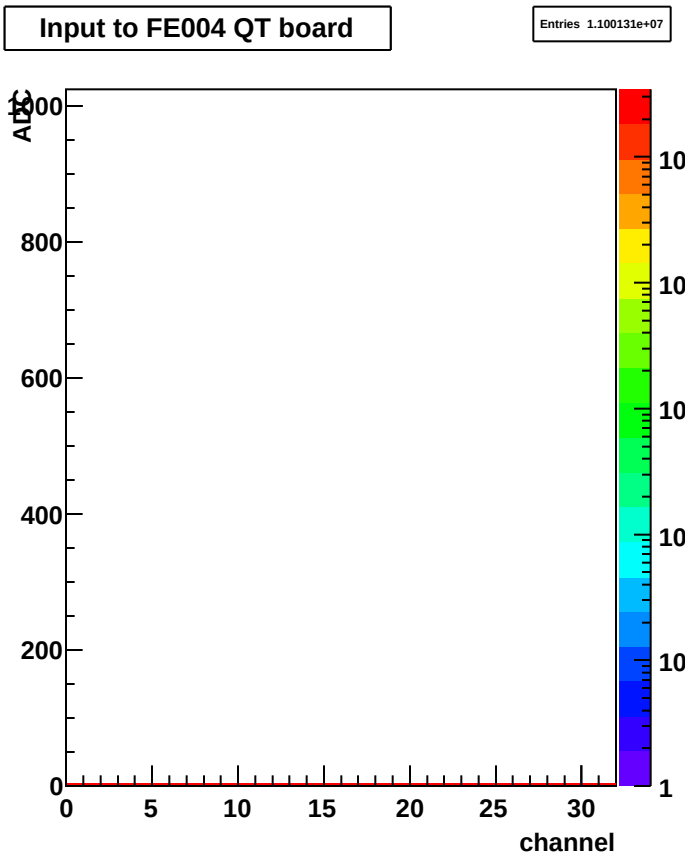

Input to FPD L2 DSM
Entries 1031373
HT bits - simulated
343791
343791
343791
SMALL
LARGE-S
LARGE-N

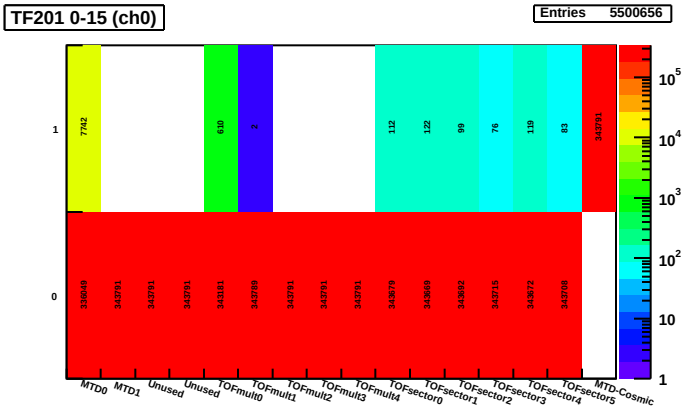

Input to FPD L2 DSM
Entries 2062746
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
$10^2$
$10^3$
$10^4$
$10^5$

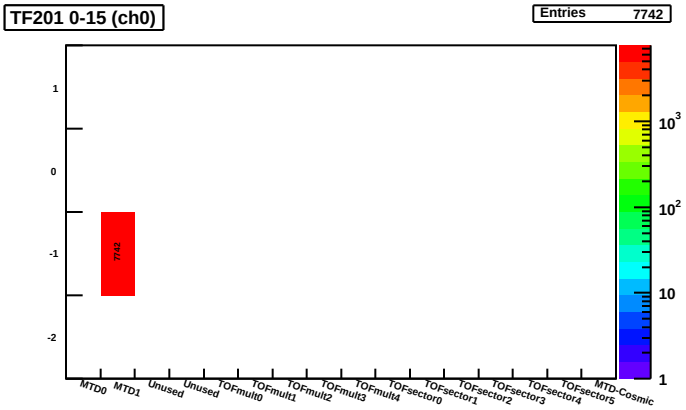

Input to FE001 QT board
Entries 1.100131e+07
ADC
channel

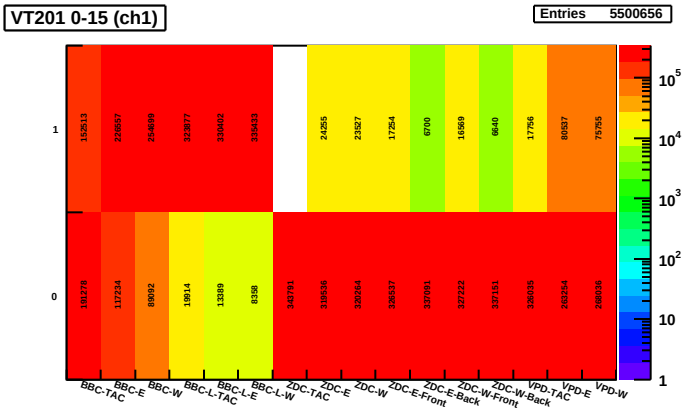

Input to FE002 QT board
Entries 1.100131e+07
ADC
channel

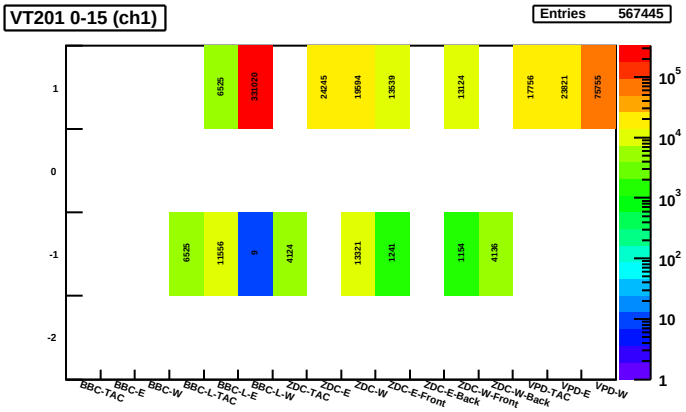

Input to FE003 QT board
Entries 1.100131e+07
ADC
channel


Input to FE004 QT board
Entries 1.100131e+07
ADC
channel


TF201 0-15 (ch0)
Entries 5500656
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 7742
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 5500656
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 567445
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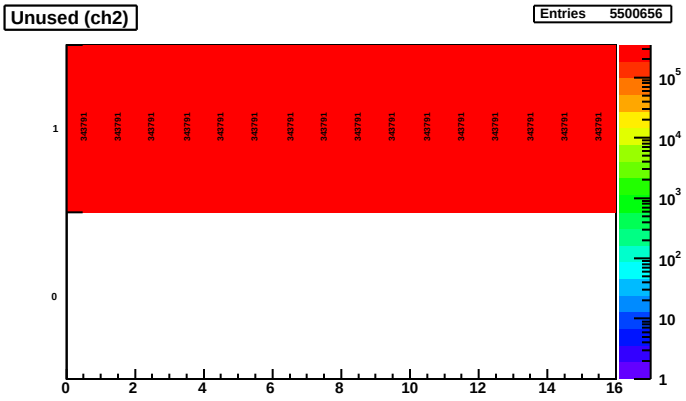
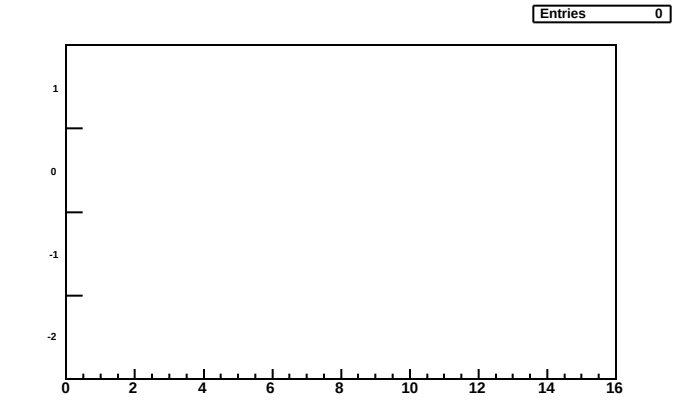

Unused (ch2)
Entries 5500656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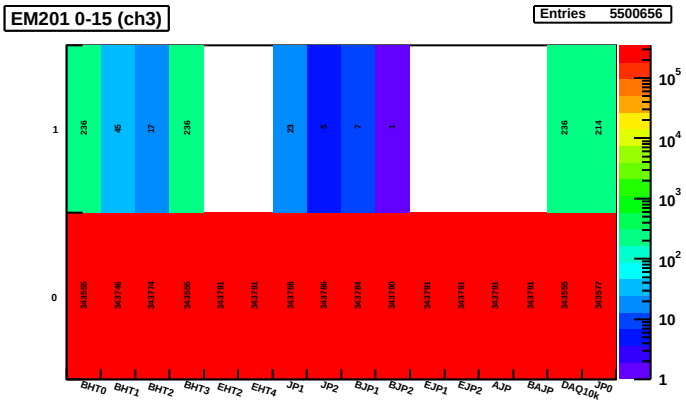
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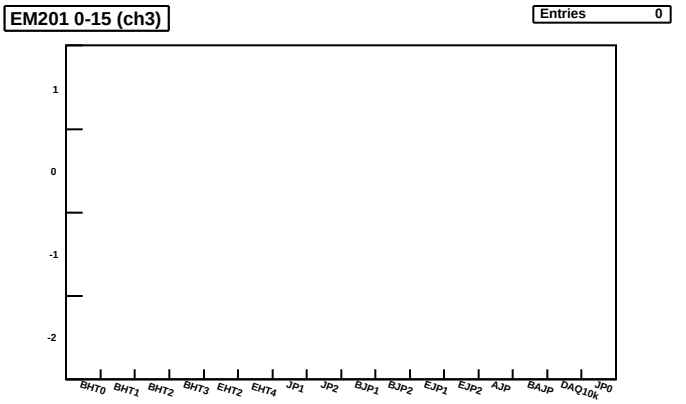
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP DAQ10k JP0


EM201 0-15 (ch3)
Entries 0
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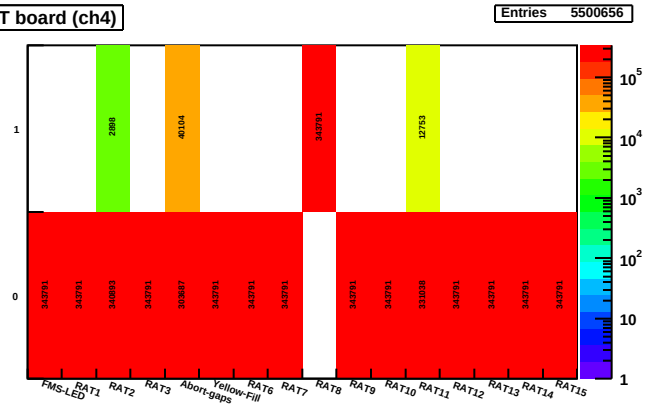
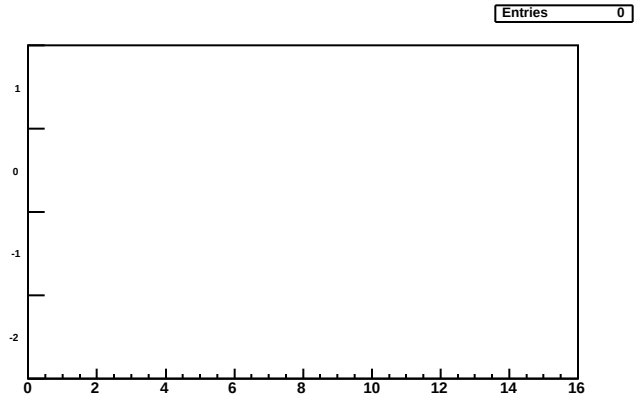
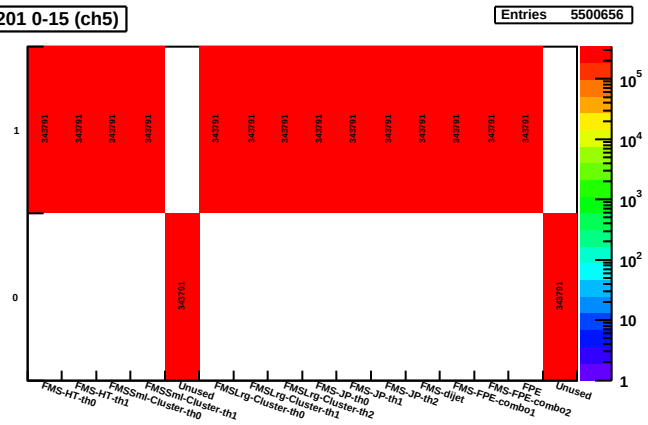
**RAT board (ch4)**

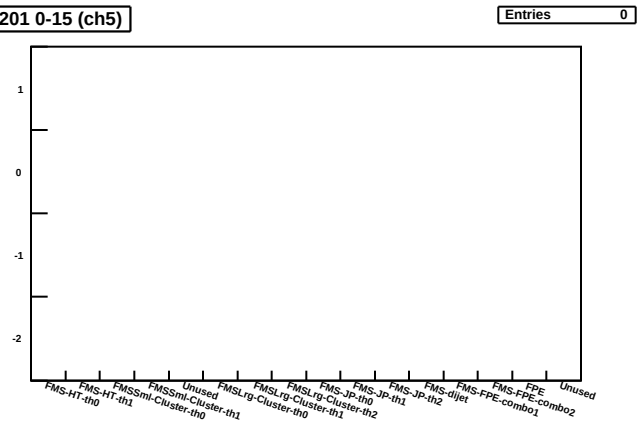


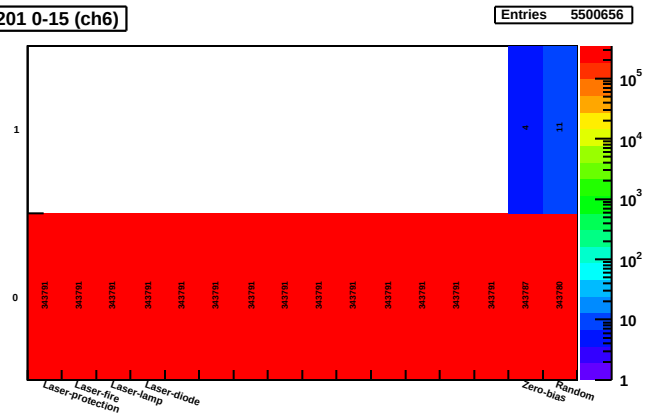

**FP201 0-15 (ch5)**

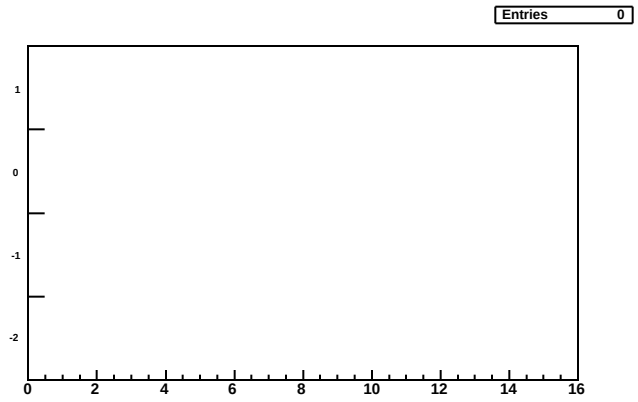


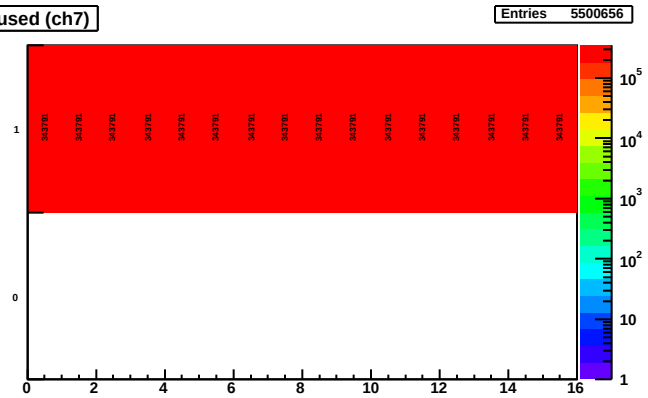
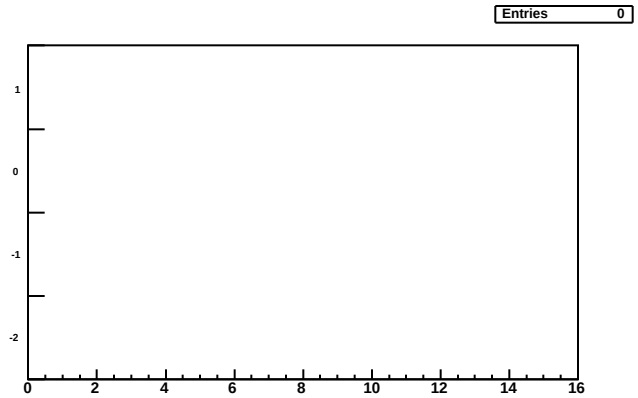

**FP201 0-15 (ch5)**




**ST201 0-15 (ch6)**




**Unused (ch7)**