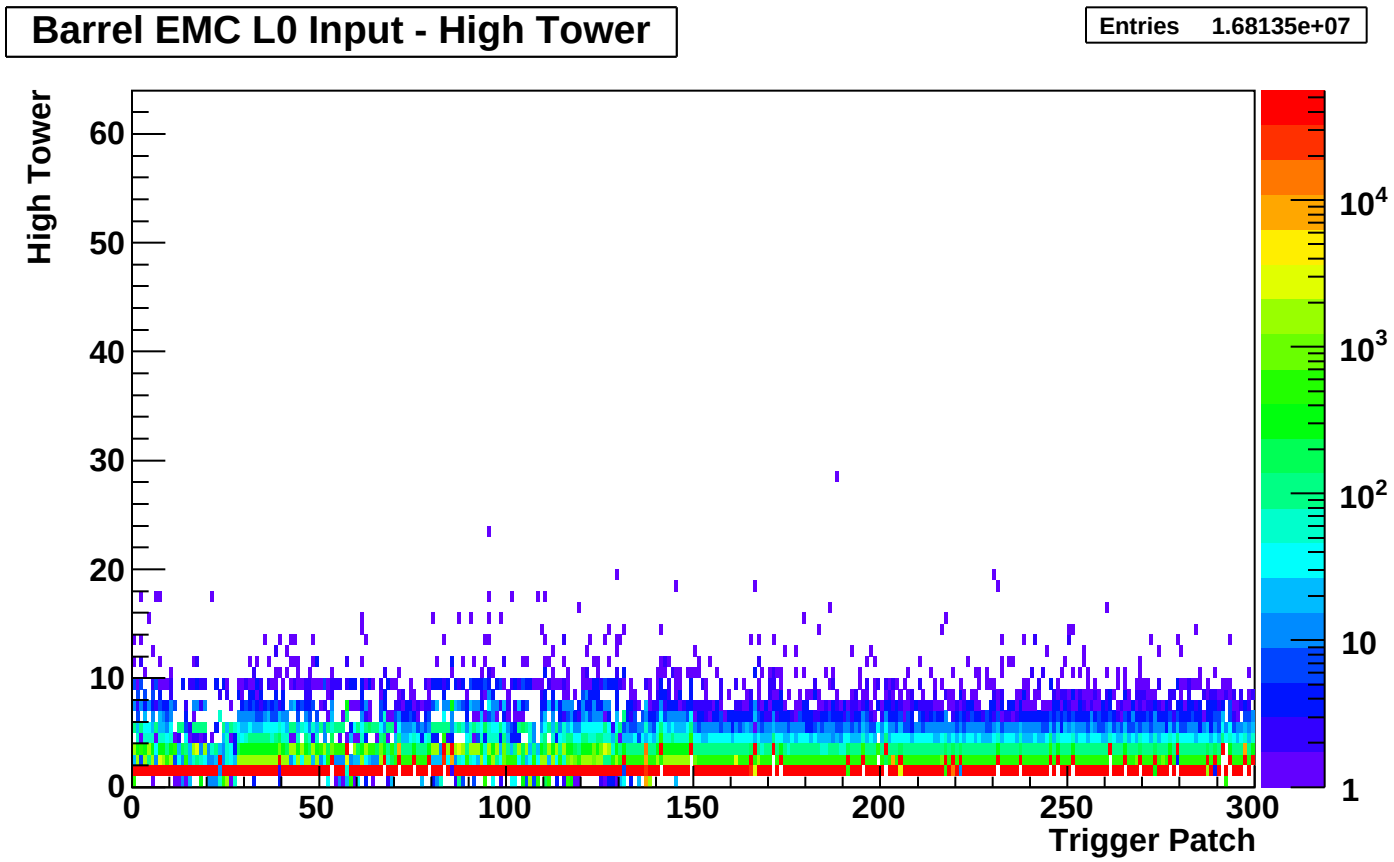
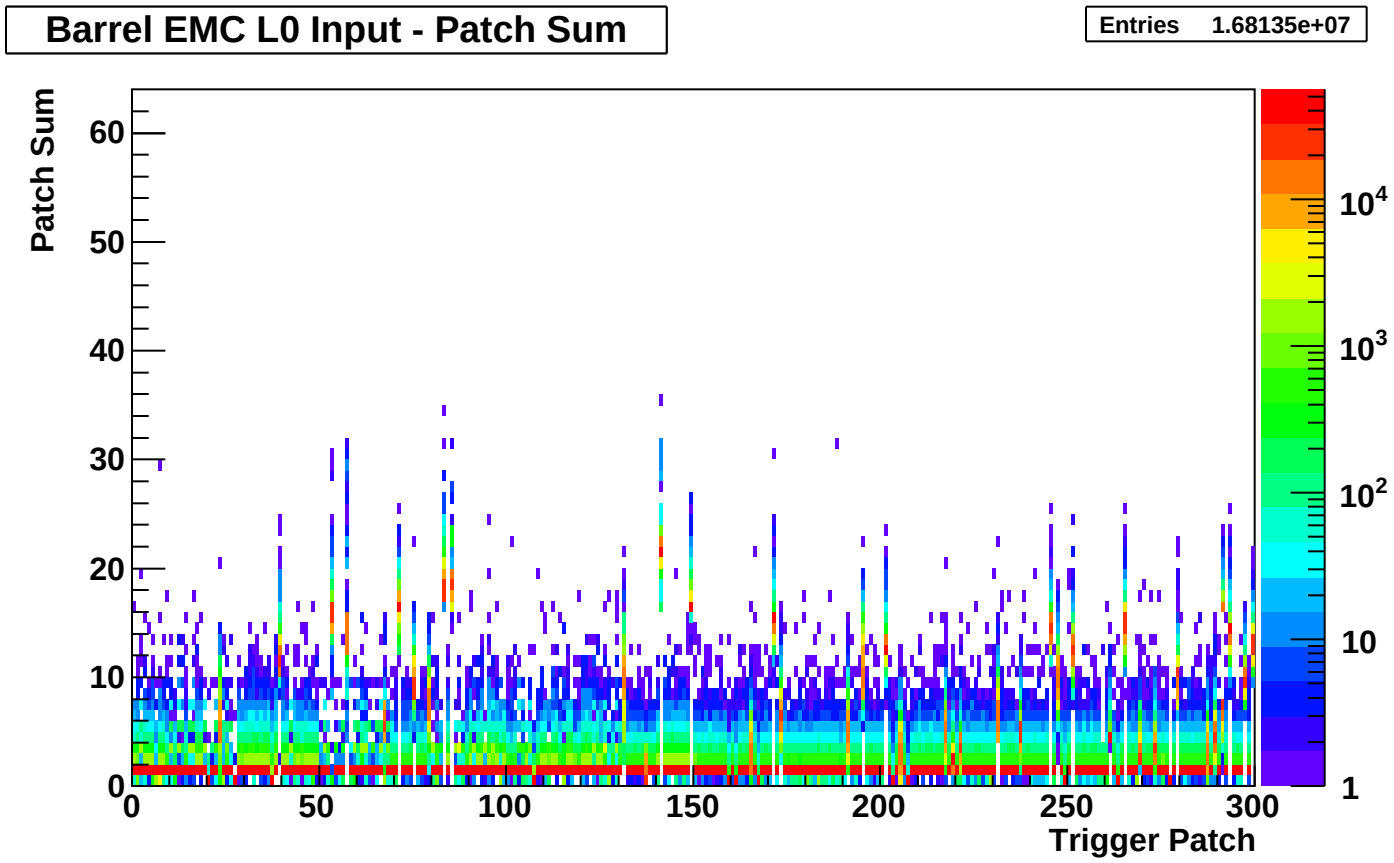
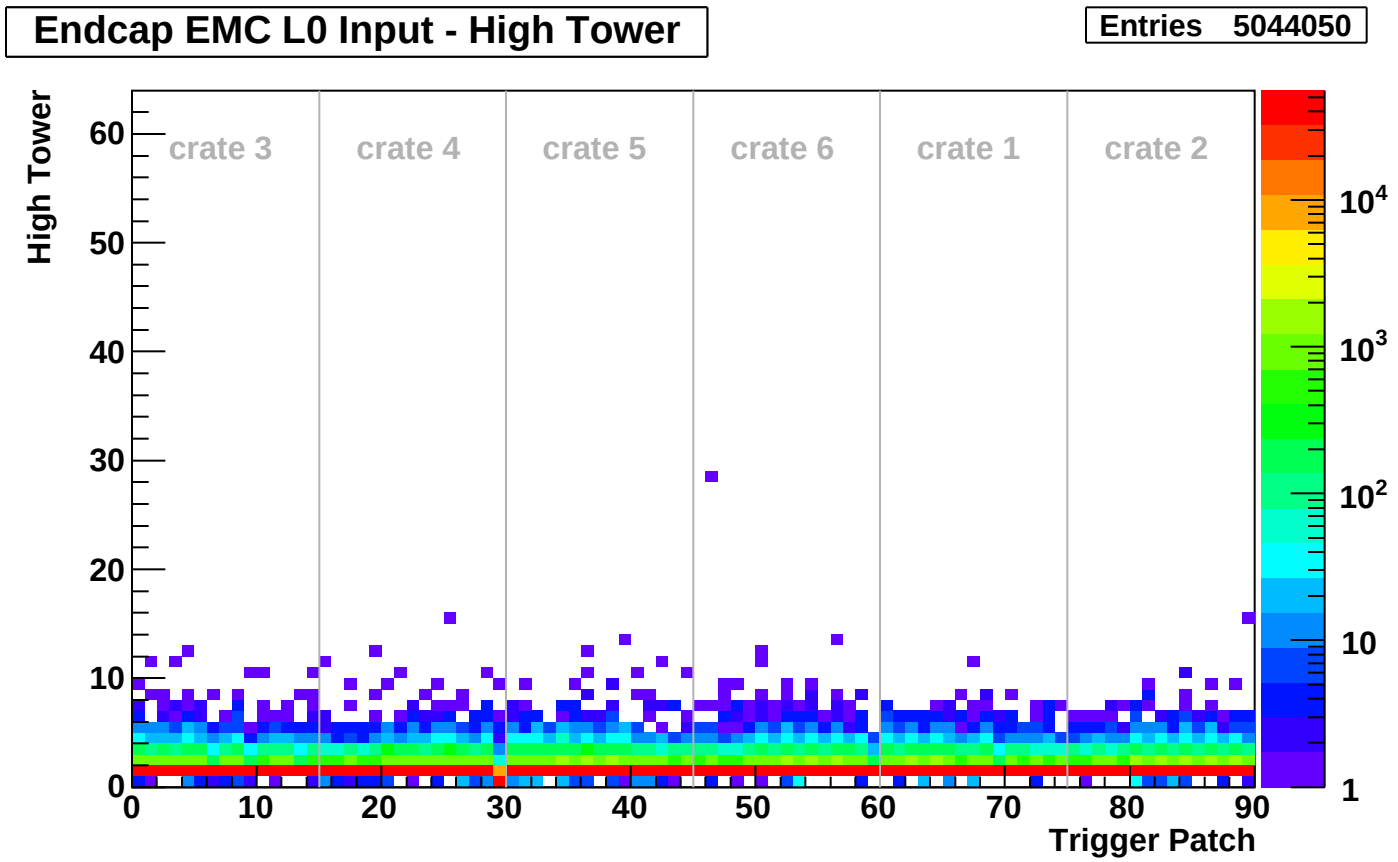
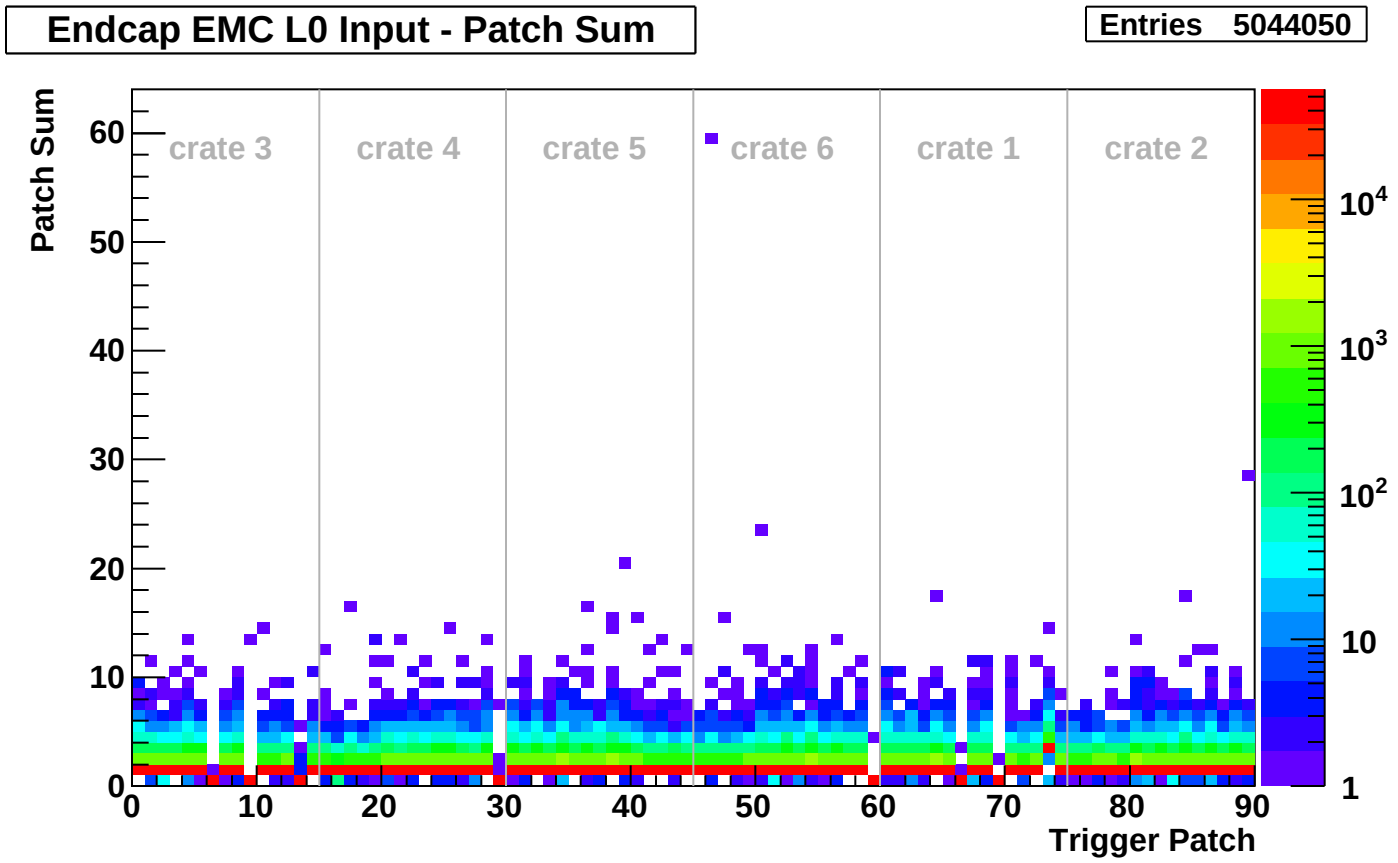
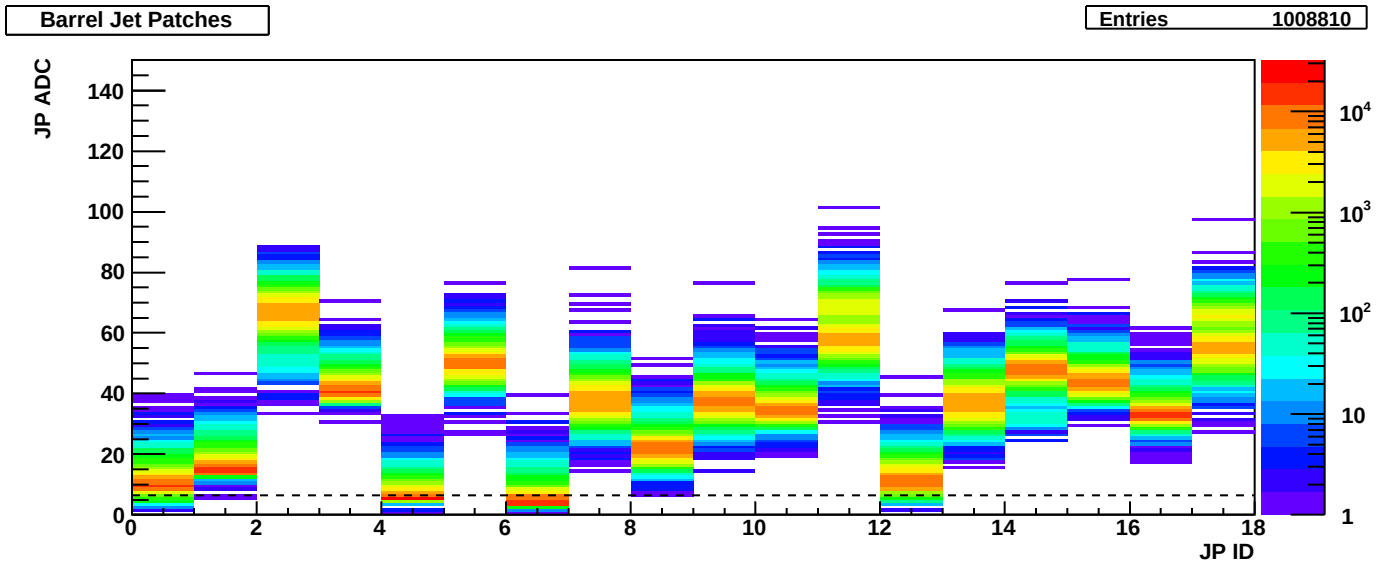
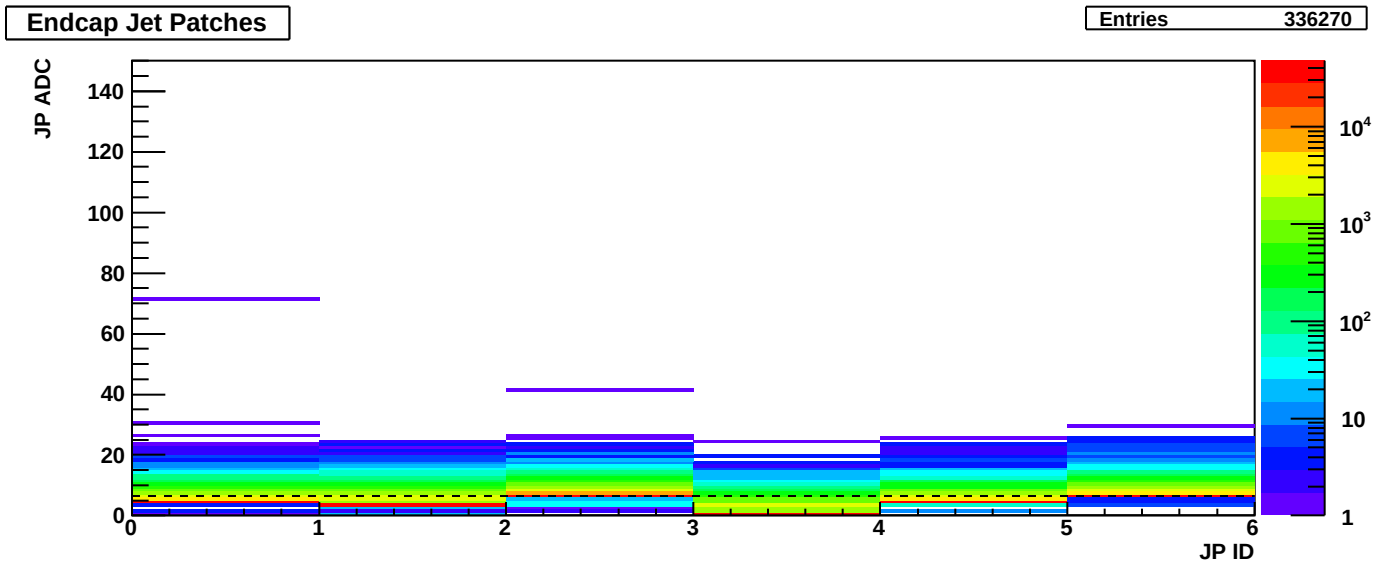

Barrel EMC L0 Input - High Tower
Entries 1.68135e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

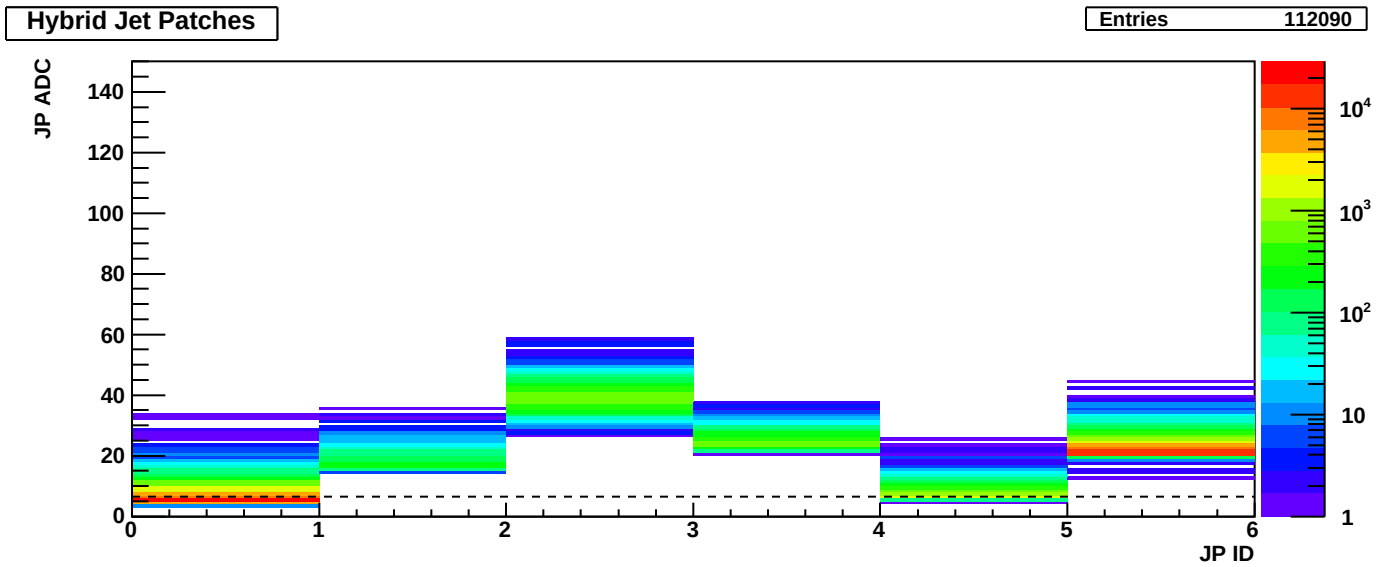

Barrel EMC L0 Input - Patch Sum
Entries 1.68135e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

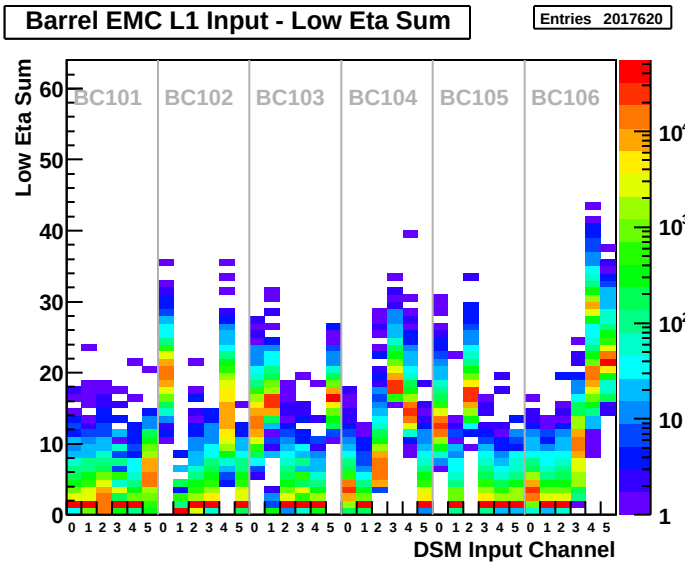

Endcap EMC L0 Input - High Tower
Entries 5044050
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

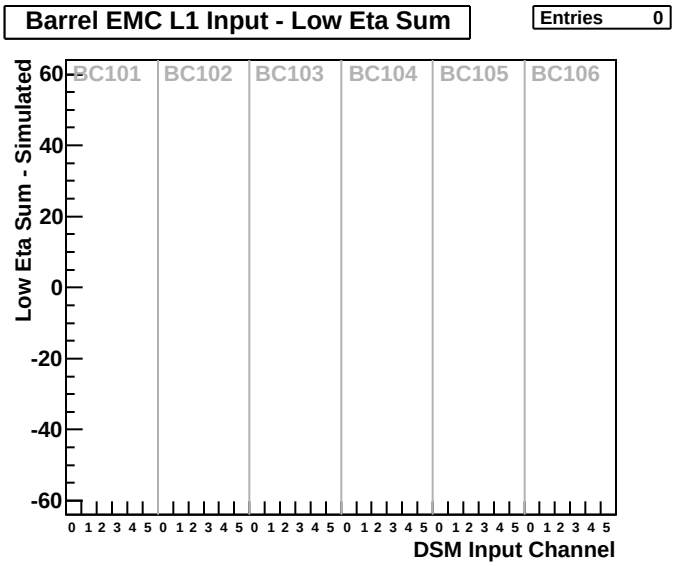

Endcap EMC L0 Input - Patch Sum
Entries 5044050
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

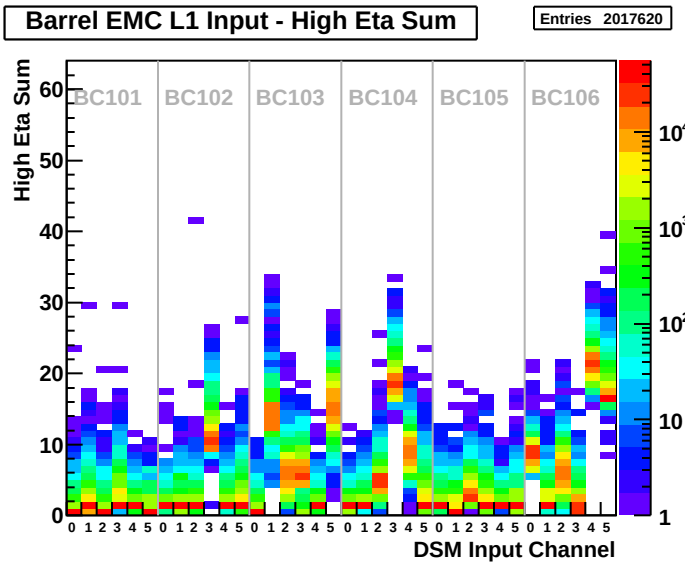

Barrel Jet Patches
Entries 1008810
JP ADC
JP ID

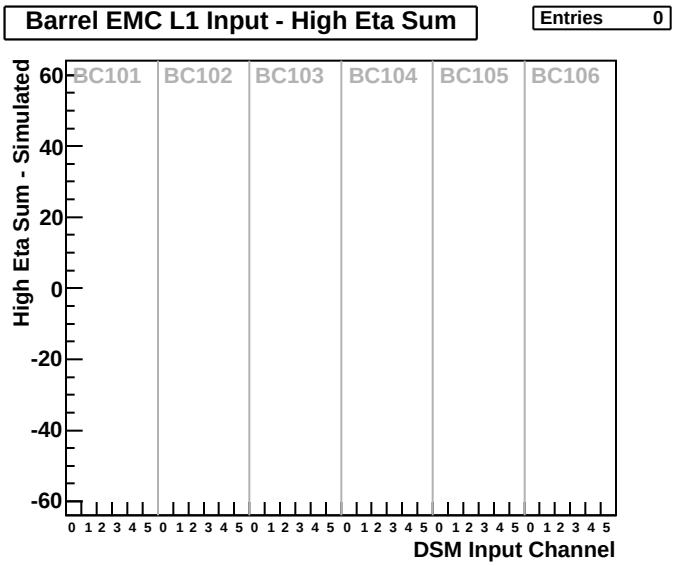

Endcap Jet Patches
Entries 336270
JP ADC
JP ID

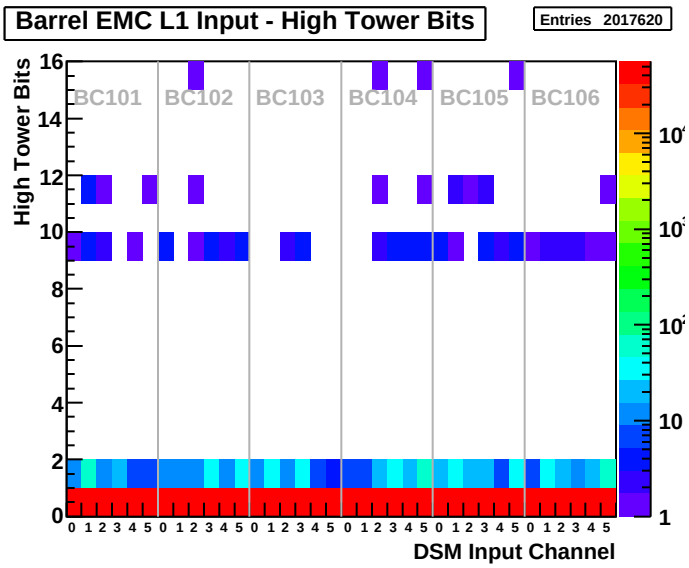

Hybrid Jet Patches
Entries 112090
JP ADC
JP ID

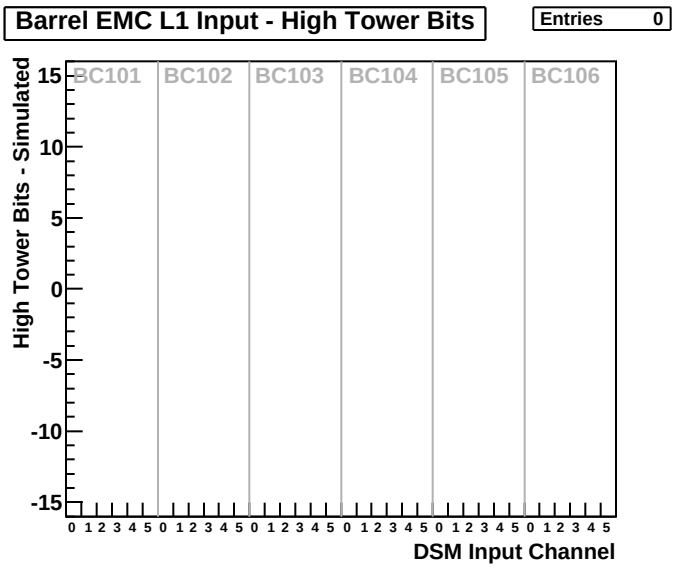

Barrel EMC L1 Input - Low Eta Sum
Entries 2017620
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

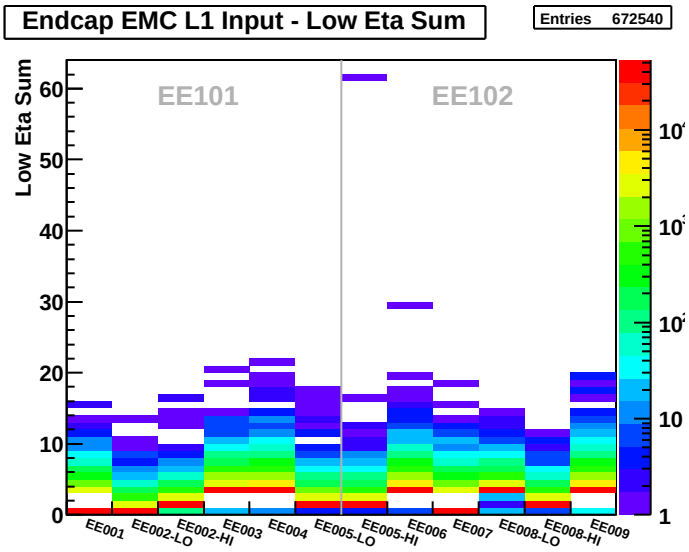

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

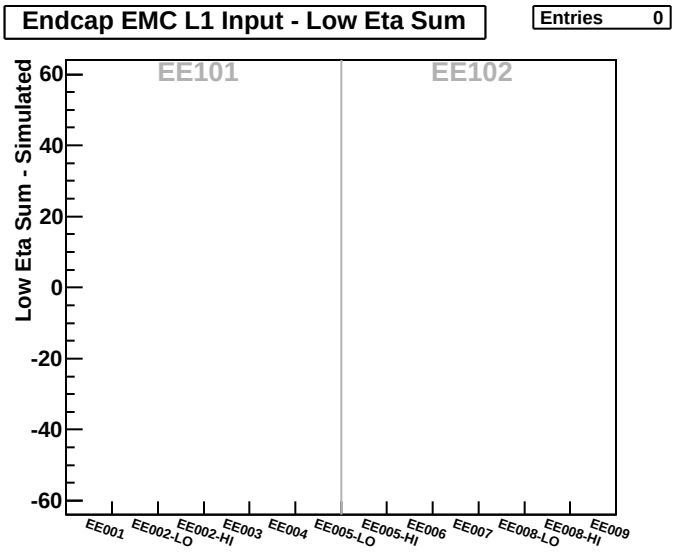

Barrel EMC L1 Input - High Eta Sum
Entries 2017620
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

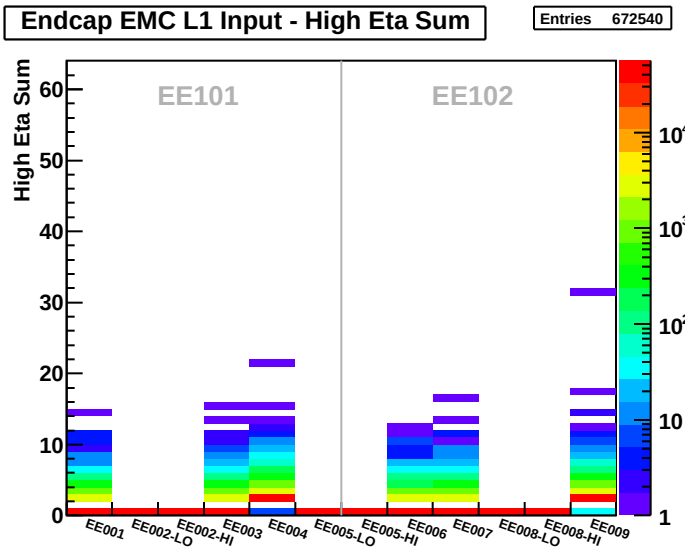

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

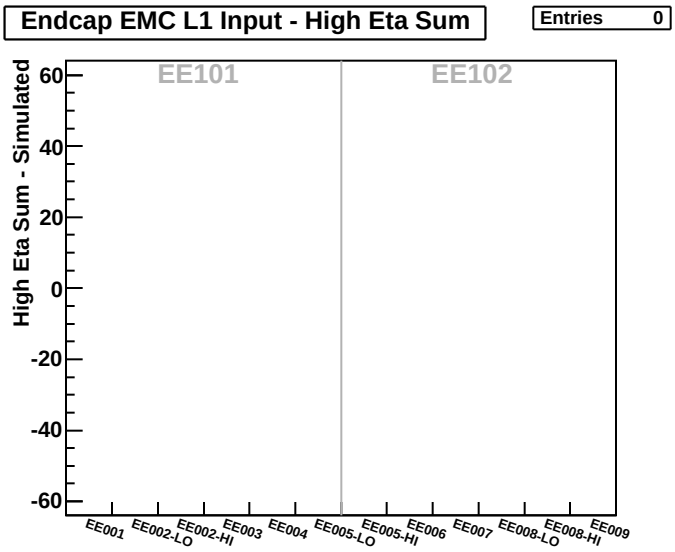

Barrel EMC L1 Input - High Tower Bits
Entries 2017620
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

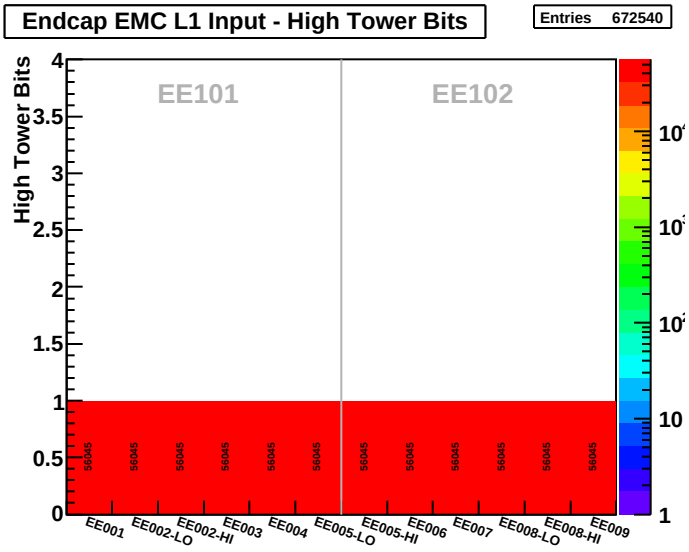

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

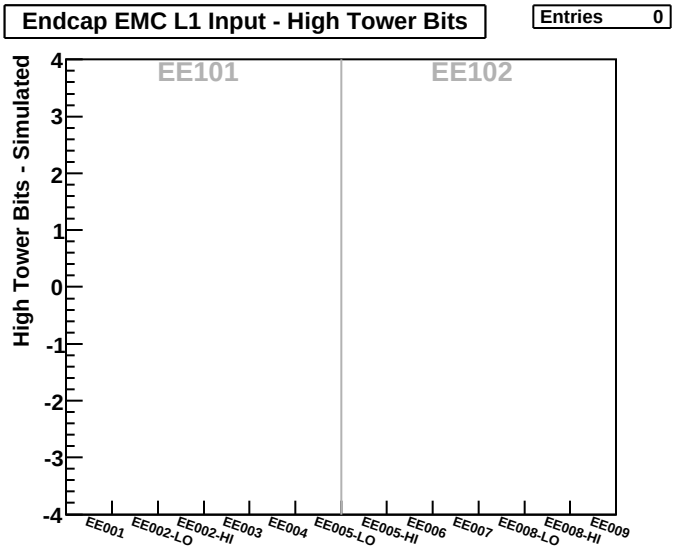

Endcap EMC L1 Input - Low Eta Sum
Entries 672540
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

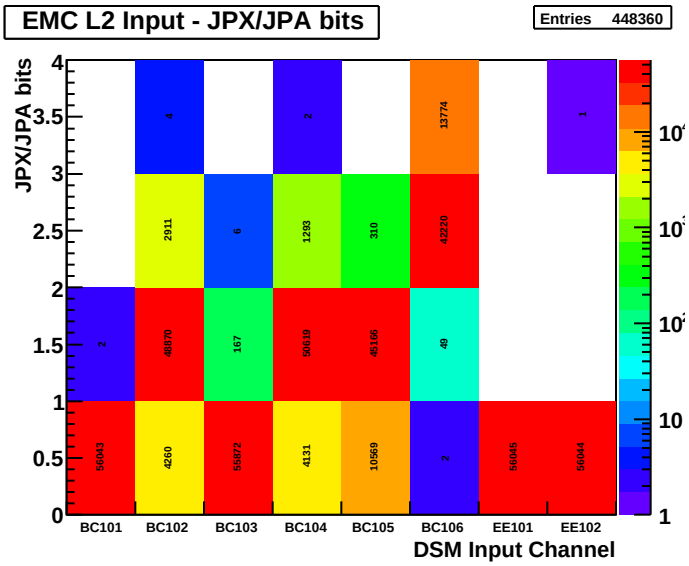

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

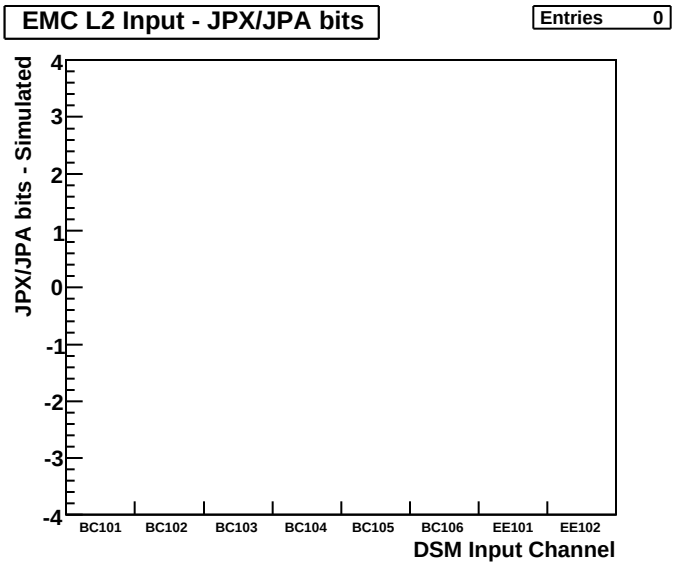

Endcap EMC L1 Input - High Eta Sum
Entries 672540
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

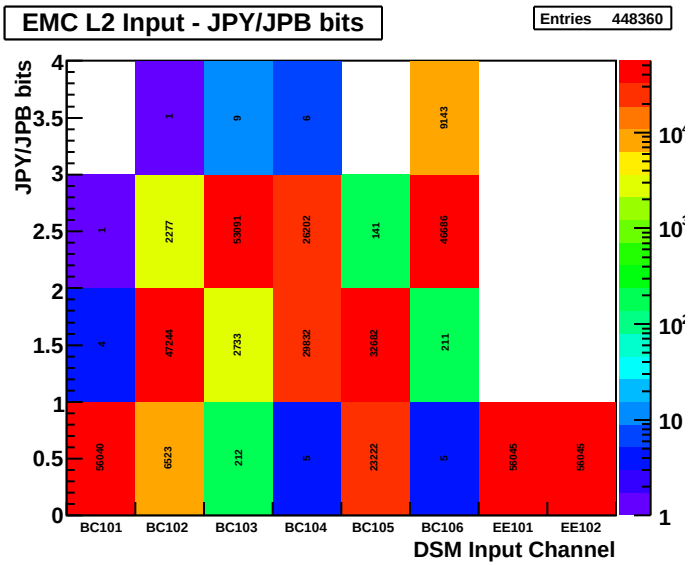

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

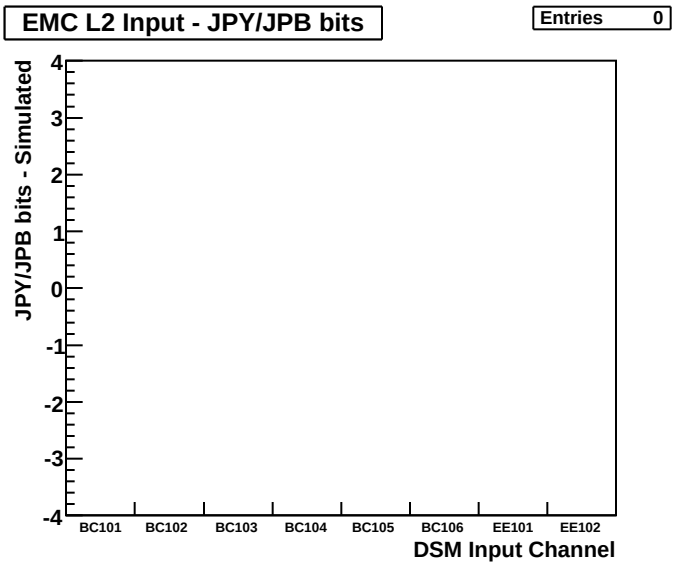

Endcap EMC L1 Input - High Tower Bits
Entries 672540
High Tower Bits
EE101
EE102
56045
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

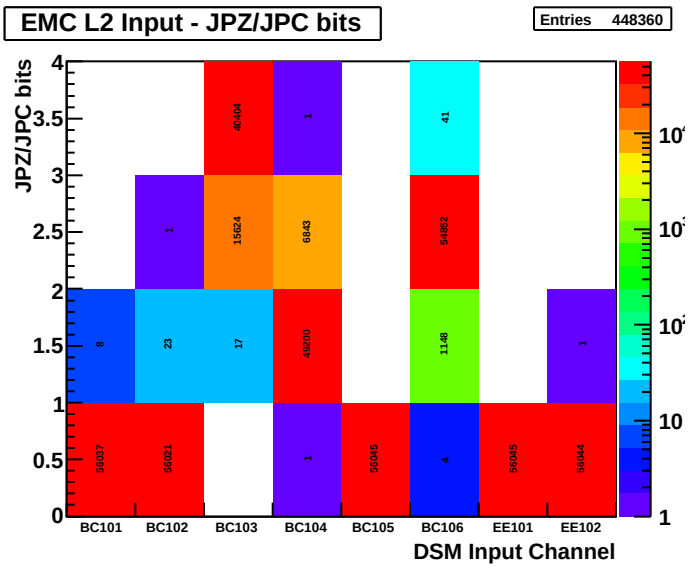

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

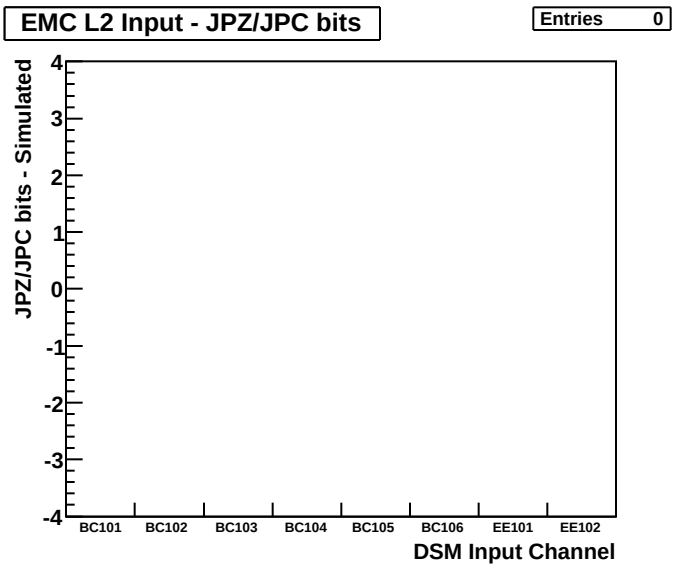

EMC L2 Input - JPX/JPA bits
Entries 448360
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

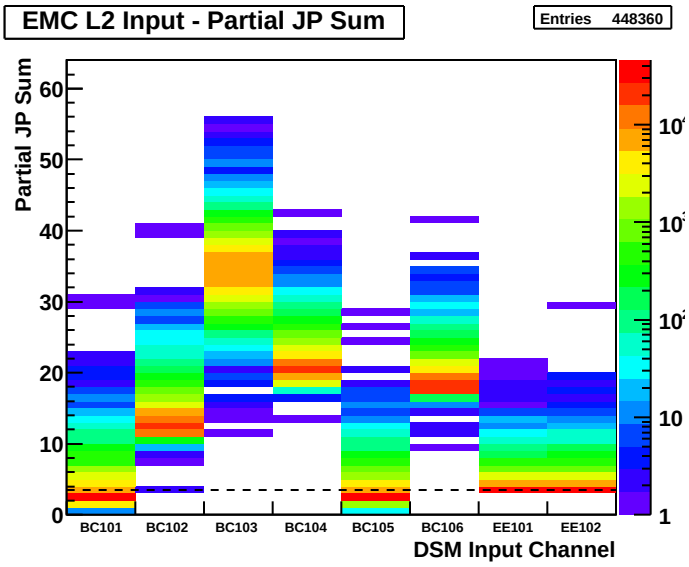

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

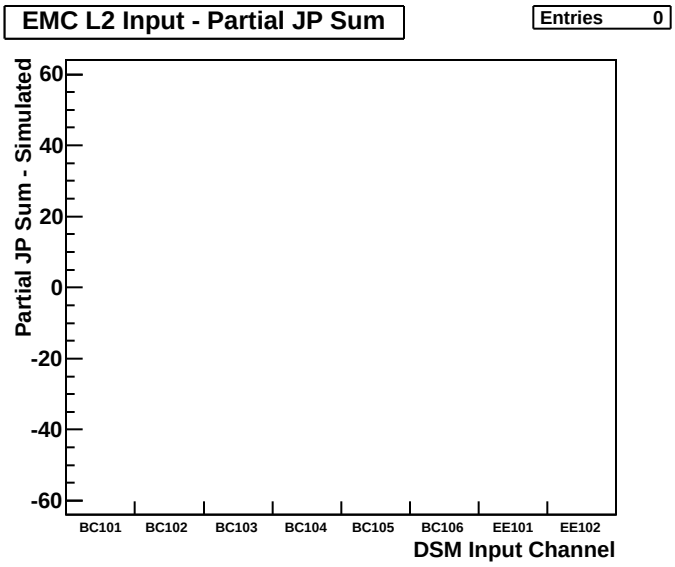

EMC L2 Input - JPY/JPB bits
Entries 448360
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

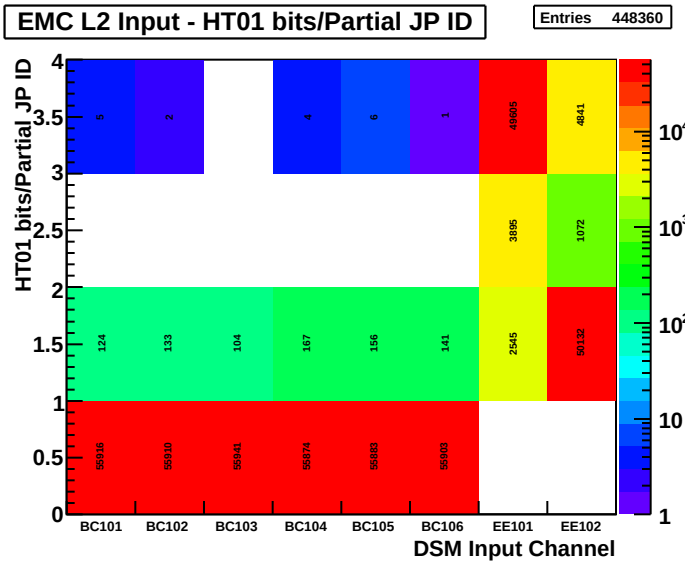

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

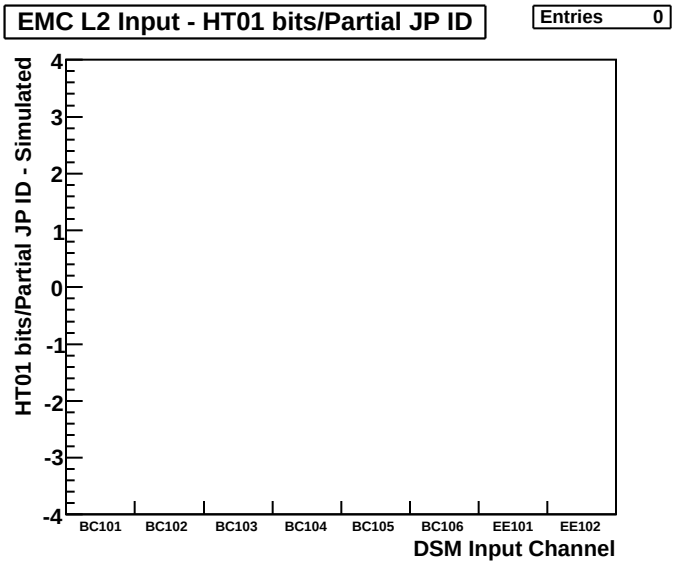

EMC L2 Input - JPZ/JPC bits
Entries 448360
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

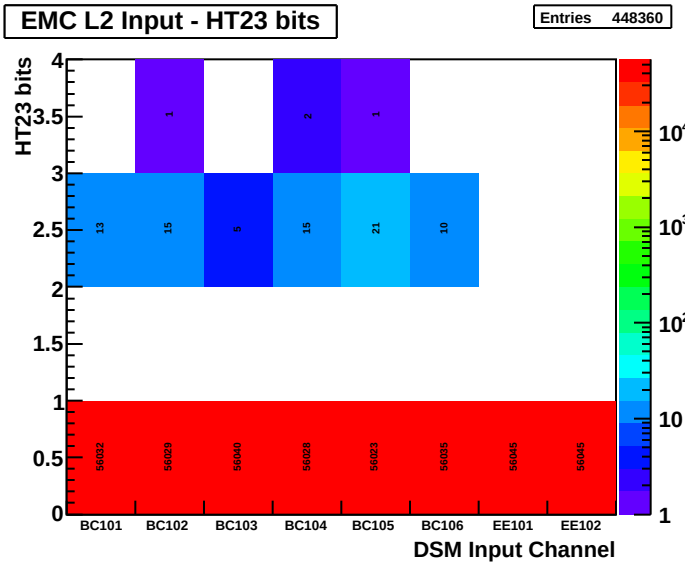

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

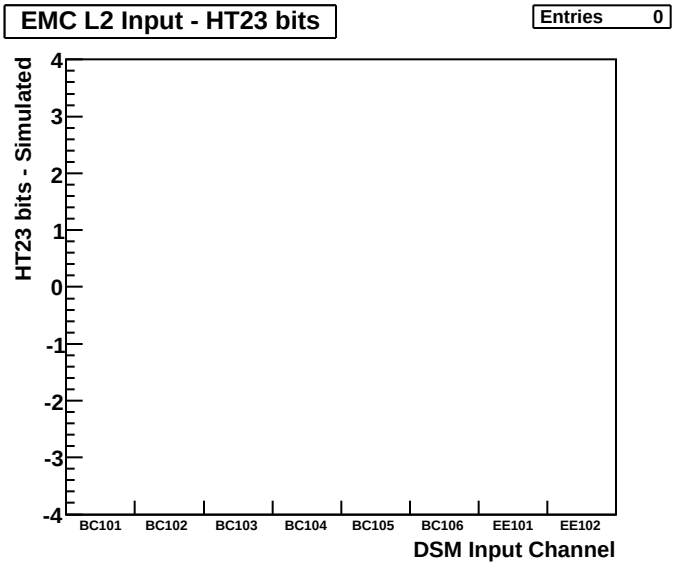

EMC L2 Input - Partial JP Sum
Entries 448360
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

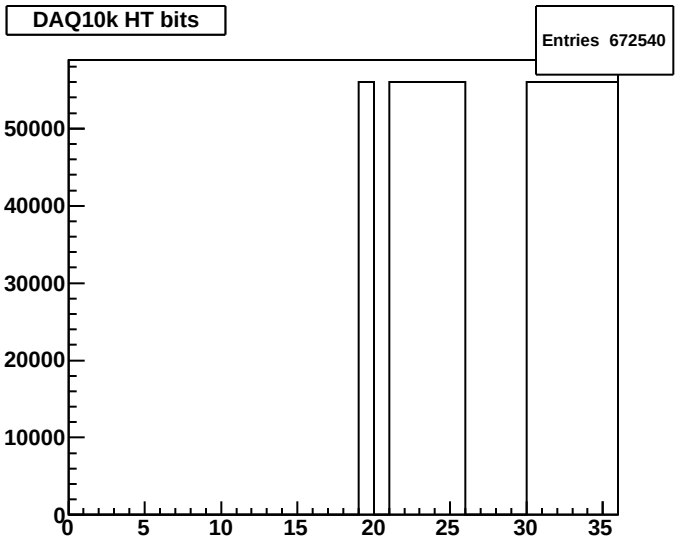

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

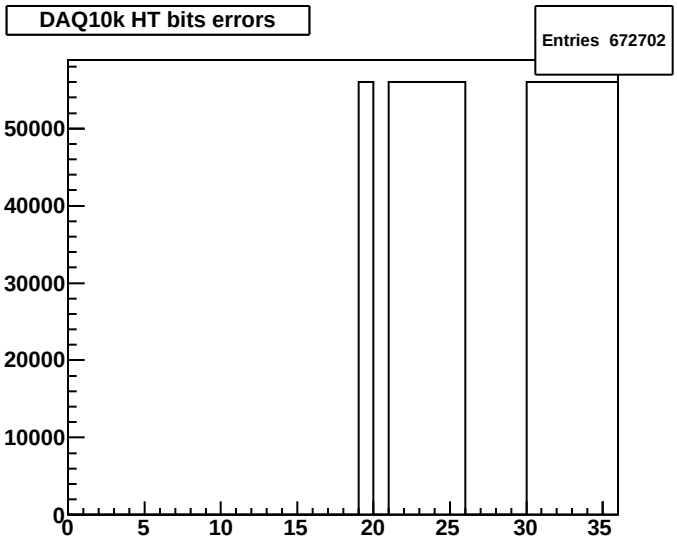

EMC L2 Input - HT01 bits/Partial JP ID
Entries 448360
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

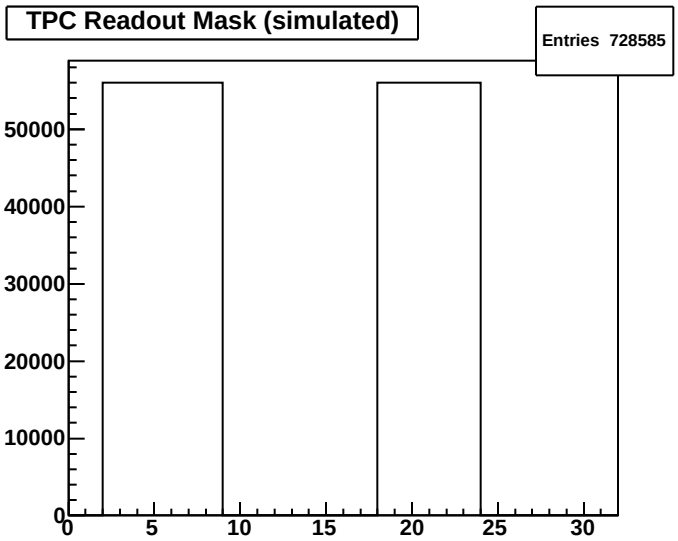

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

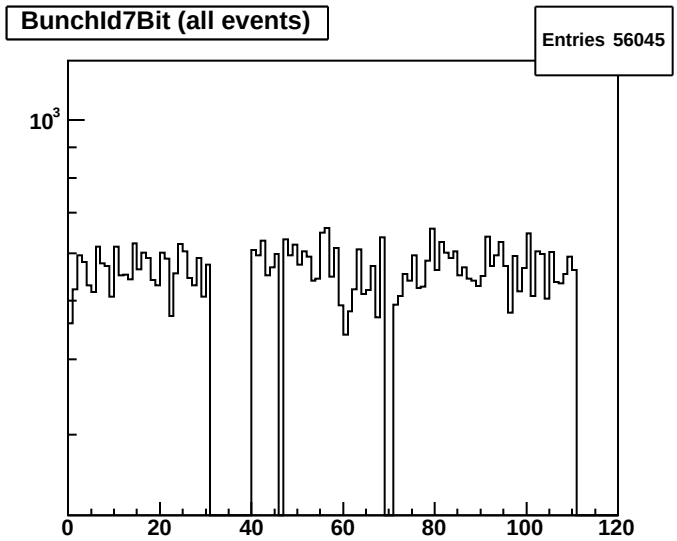

EMC L2 Input - HT23 bits
Entries 448360
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

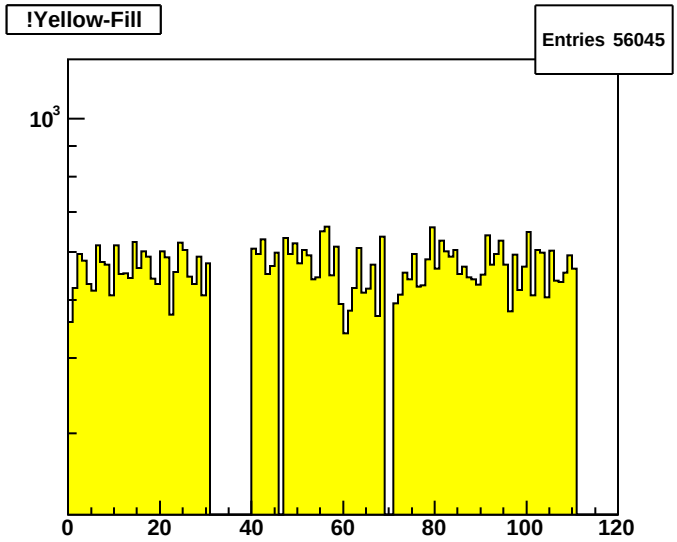

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

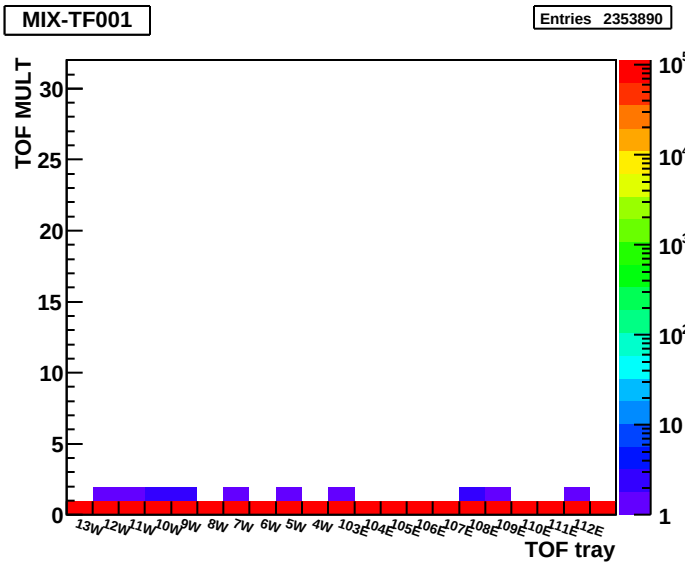

DAQ10k HT bits
Entries 672540
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30 35

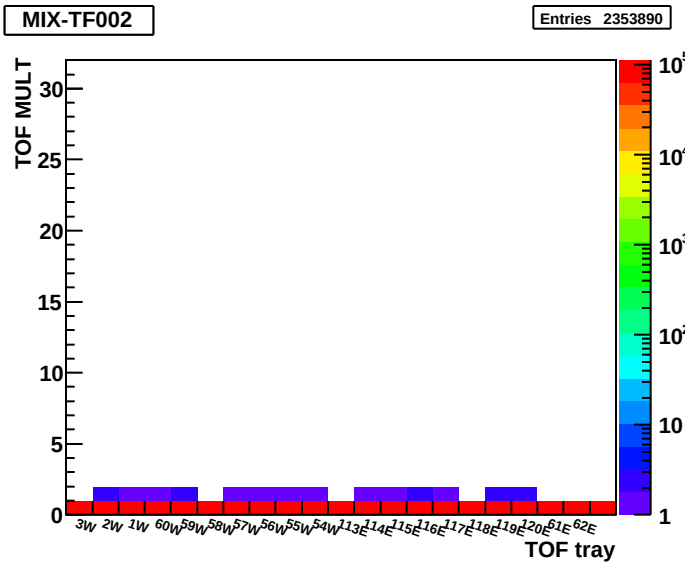

DAQ10k HT bits errors
Entries 672702
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30 35

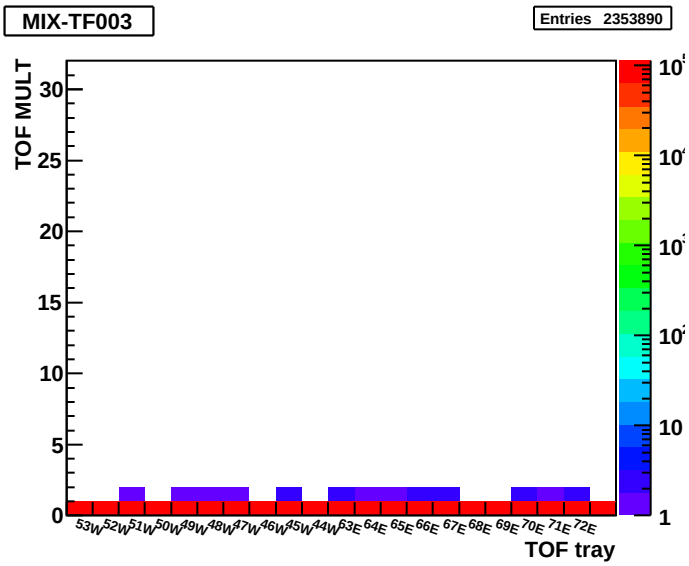

TPC Readout Mask (simulated)
Entries 728585
50000
40000
30000
20000
10000
0
0 5 10 15 20 25 30

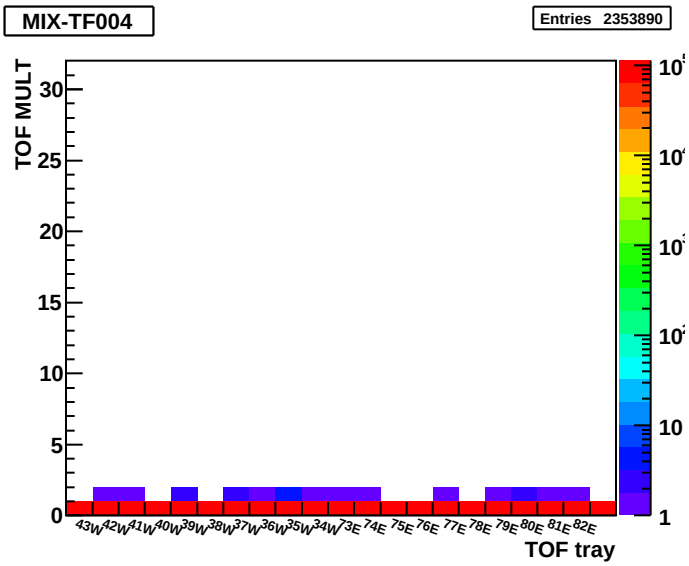

BunchId7Bit (all events)
Entries 56045
10^3
0 20 40 60 80 100 120

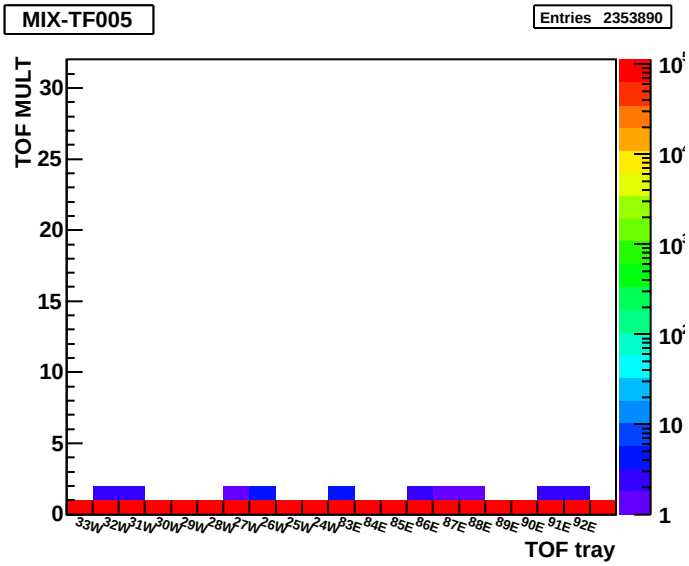

!Yellow-Fill
Entries 56045
10^3
0 20 40 60 80 100 120

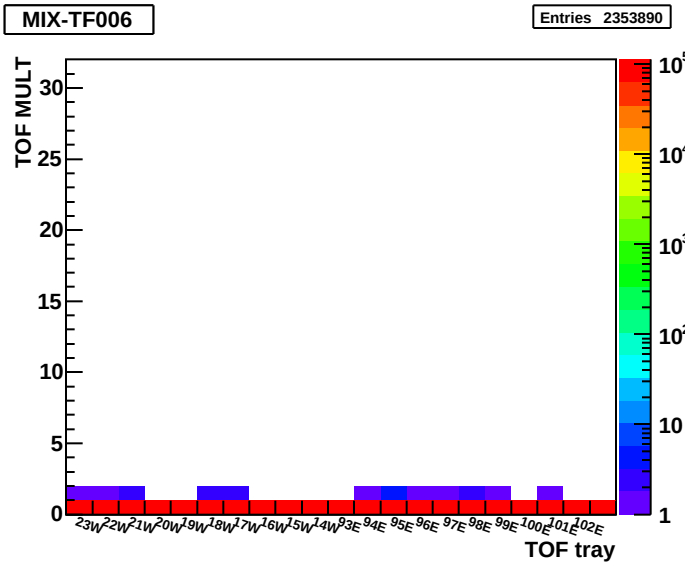

MIX-TF001
Entries 2353890
TOF MULT
TOF tray

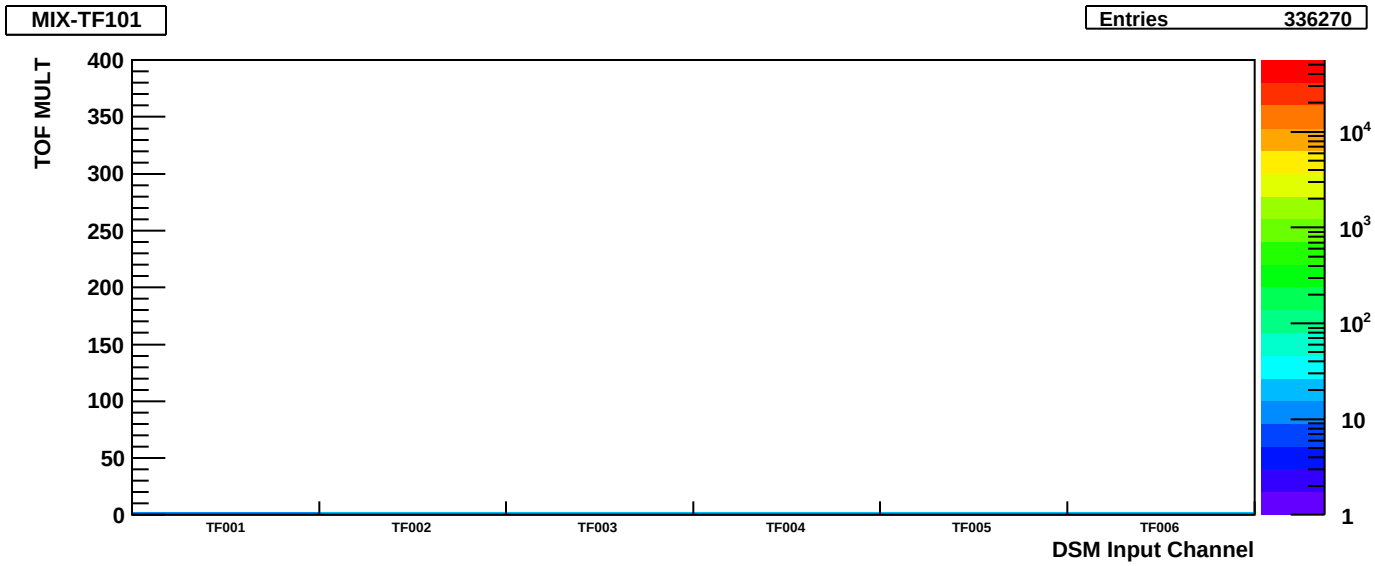

MIX-TF002
Entries 2353890
TOF MULT
TOF tray

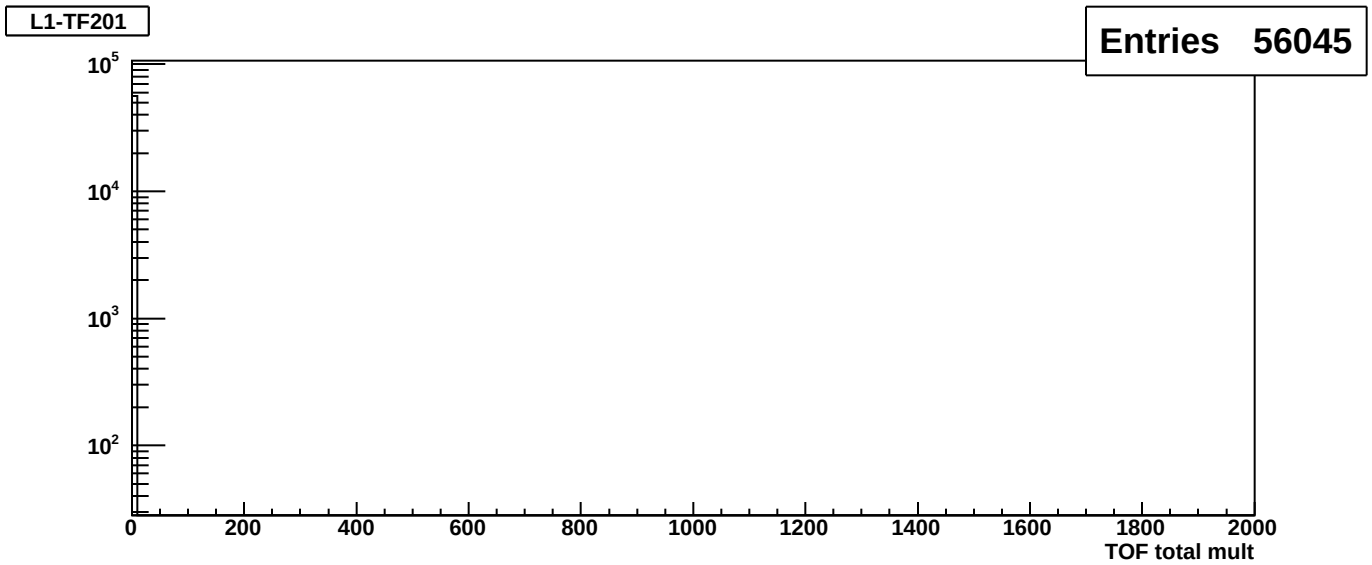

MIX-TF003
Entries 2353890
TOF MULT
TOF tray

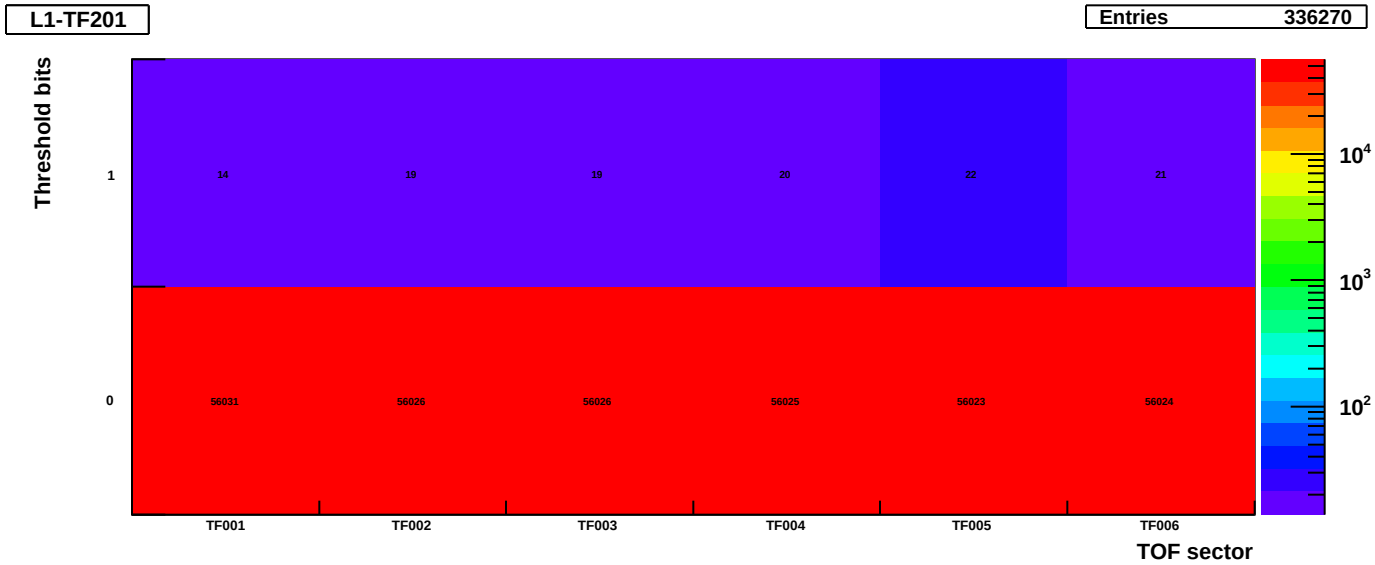

MIX-TF004
Entries 2353890
TOF MULT
TOF tray

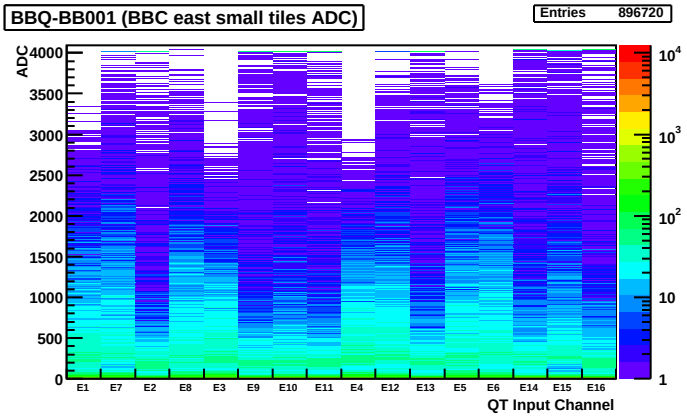

MIX-TF005
Entries 2353890
TOF MULT
TOF tray

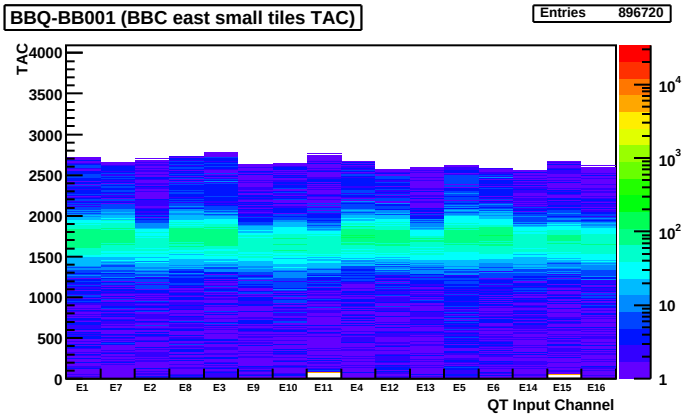

MIX-TF006
Entries 2353890
TOF MULT
TOF tray

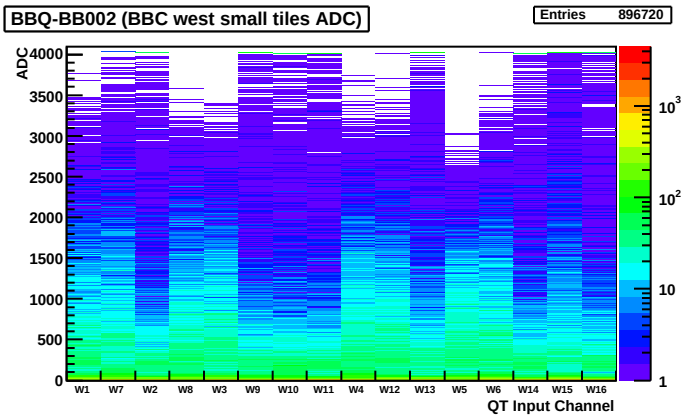

MIX-TF101
Entries 336270
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4
10^3
10^2
10
1

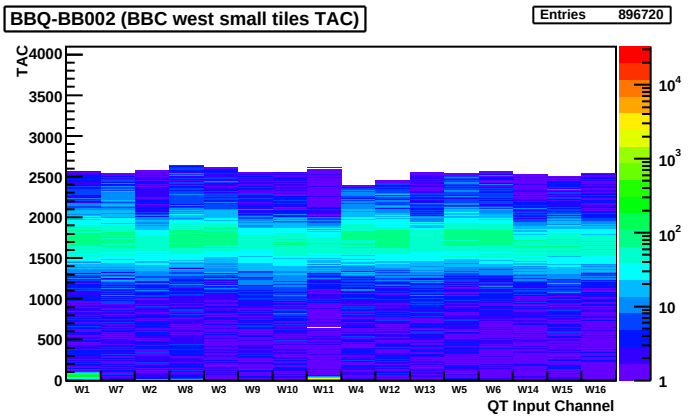

L1-TF201
Entries 56045
10^5
10^4
10^3
10^2
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

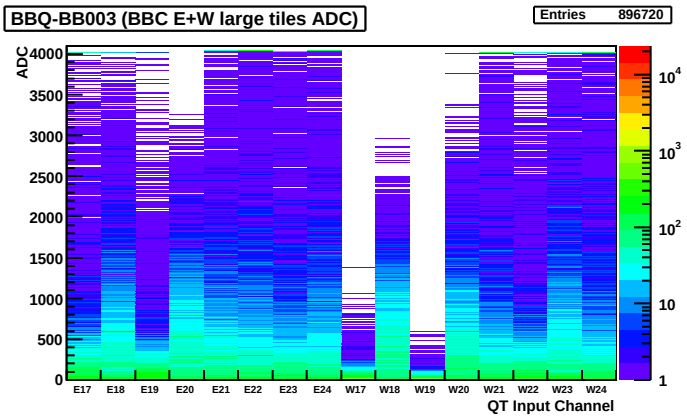

L1-TF201
Entries 336270
Threshold bits
1
0
14
19
19
20
22
21
56031
56026
56026
56025
56023
56024
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^4
10^3
10^2

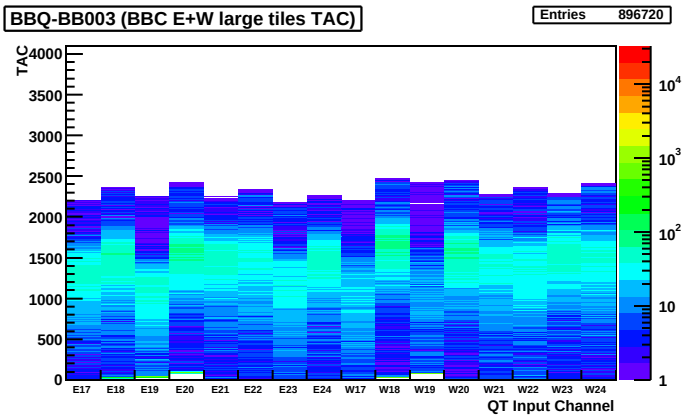

BBQ-BB001 (BBC east small tiles ADC)
Entries 896720
ADC
QT Input Channel

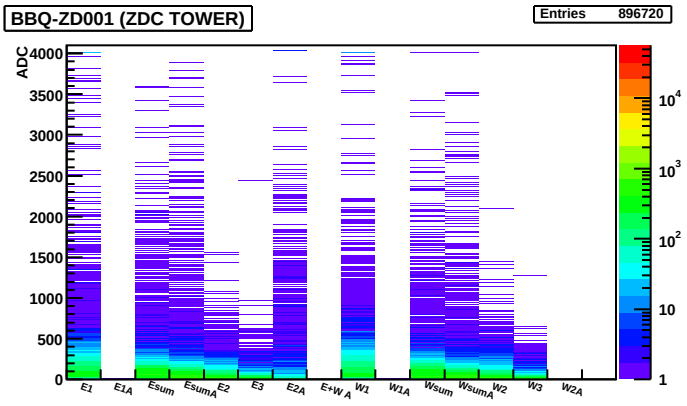

BBQ-BB001 (BBC east small tiles TAC)
Entries 896720
TAC
QT Input Channel

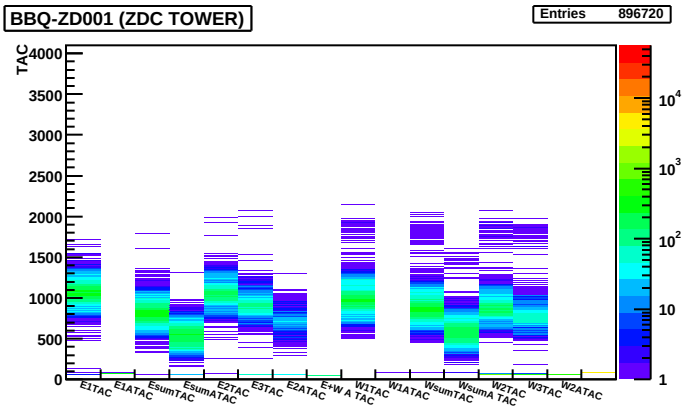

BBQ-BB002 (BBC west small tiles ADC)
Entries 896720
ADC
QT Input Channel

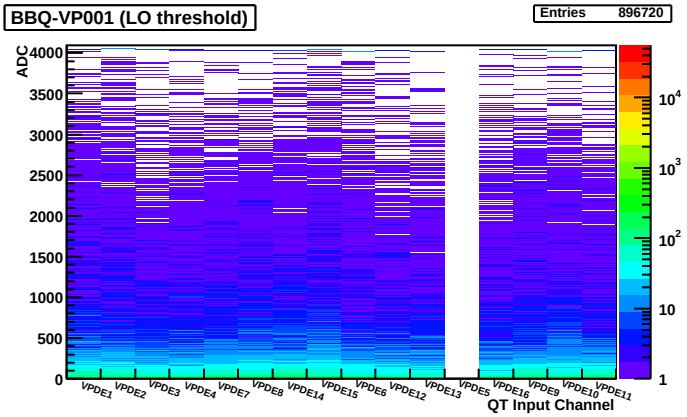

BBQ-BB002 (BBC west small tiles TAC)
Entries 896720
TAC
QT Input Channel

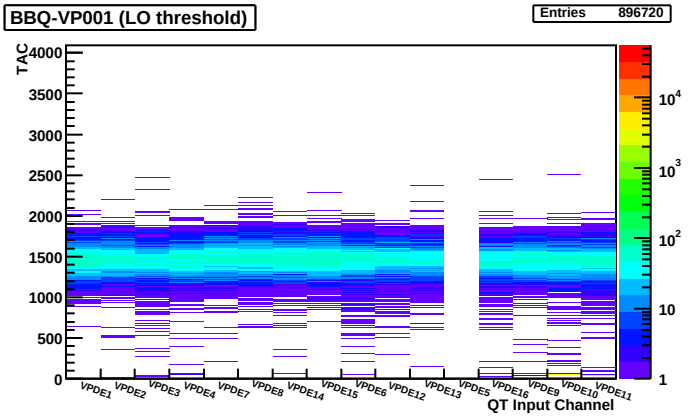

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 896720
ADC
QT Input Channel

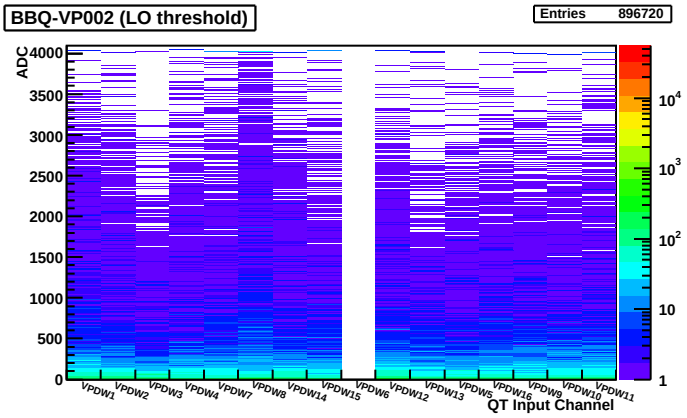

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 896720
TAC
QT Input Channel

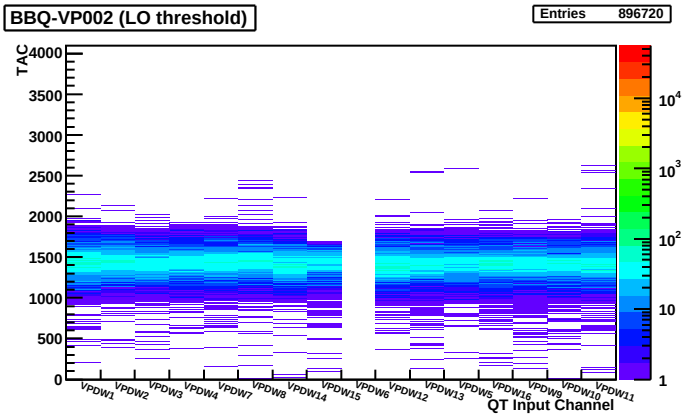

BBQ-ZD001 (ZDC TOWER)
Entries 896720
ADC

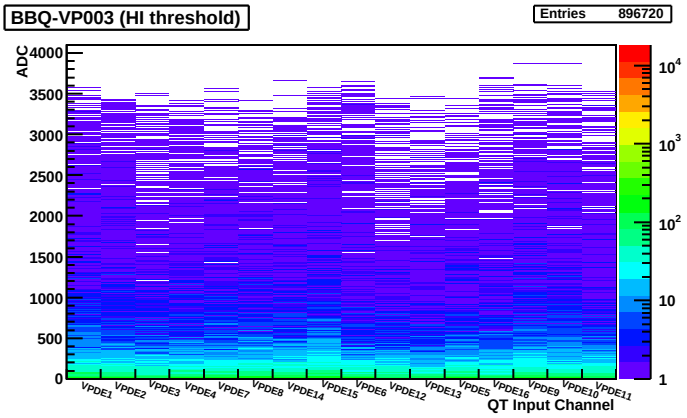

BBQ-ZD001 (ZDC TOWER)
Entries 896720
TAC

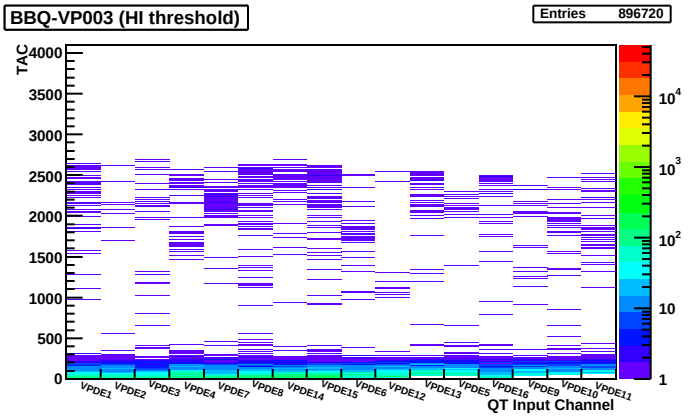

BBQ-VP001 (LO threshold)
Entries 896720
ADC
QT Input Channel

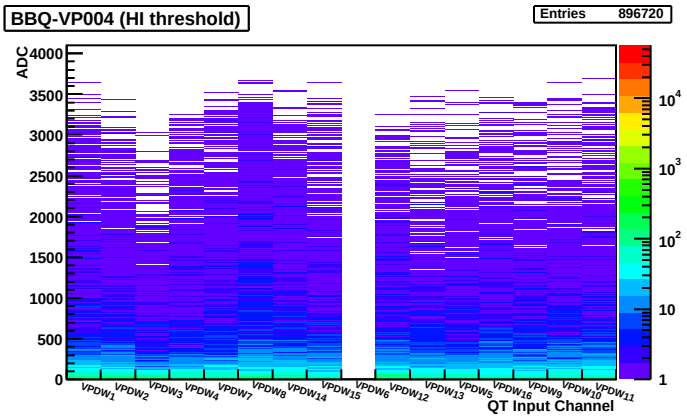

BBQ-VP001 (LO threshold)
Entries 896720
TAC
QT Input Channel

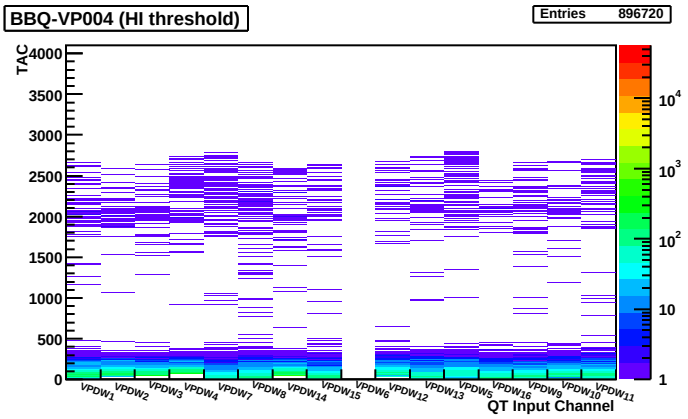

BBQ-VP002 (LO threshold)
Entries 896720
ADC
QT Input Channel

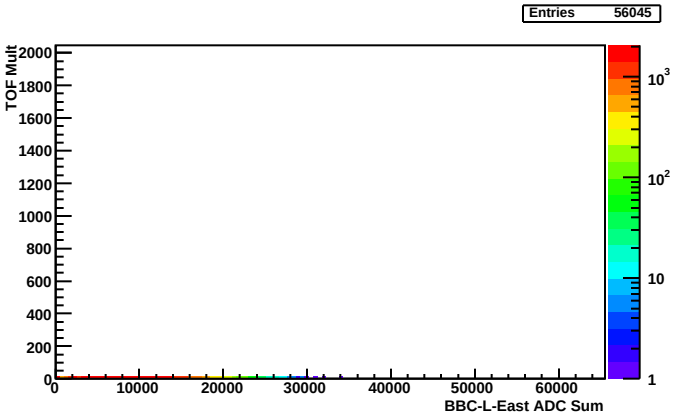

BBQ-VP002 (LO threshold)
Entries 896720
TAC
QT Input Channel

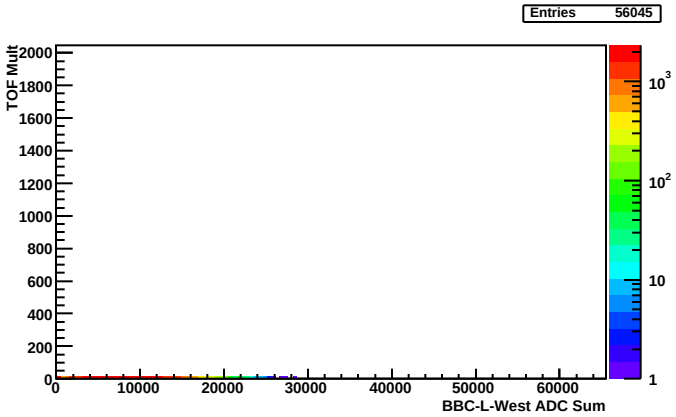

BBQ-VP003 (HI threshold)
Entries 896720
ADC
QT Input Channel

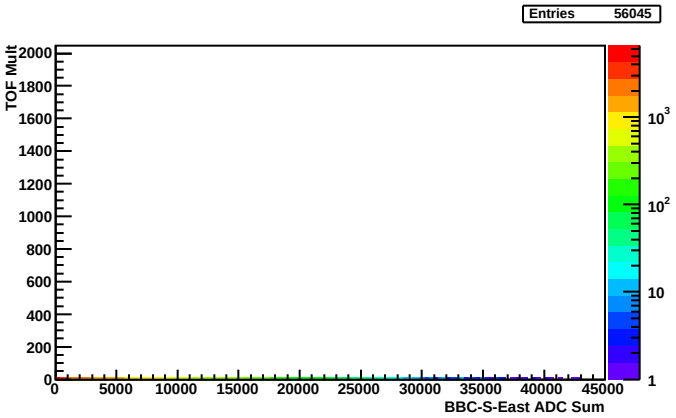

BBQ-VP003 (HI threshold)
Entries 896720
TAC
QT Input Channel

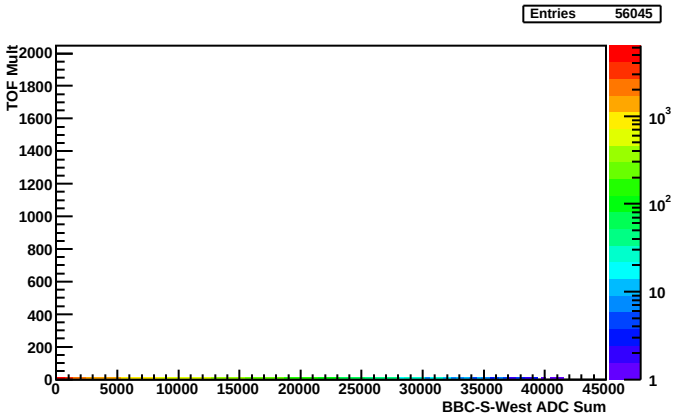

BBQ-VP004 (HI threshold)
Entries 896720
ADC
QT Input Channel

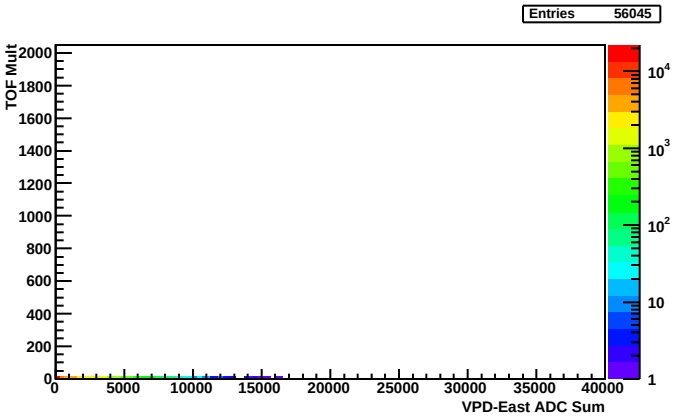

BBQ-VP004 (HI threshold)
Entries 896720
TAC
QT Input Channel

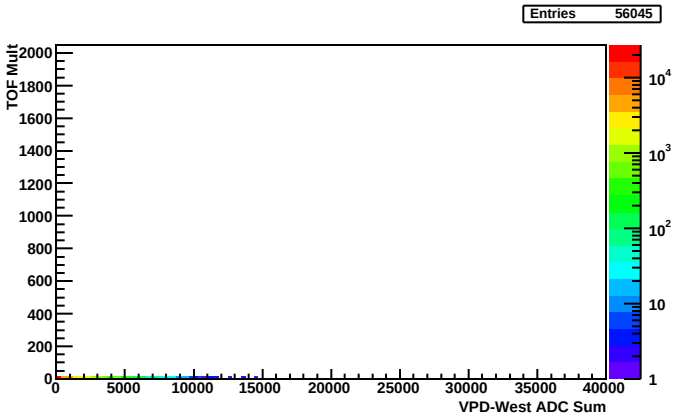

Entries 56045
TOF Mult
BBC-L-East ADC Sum

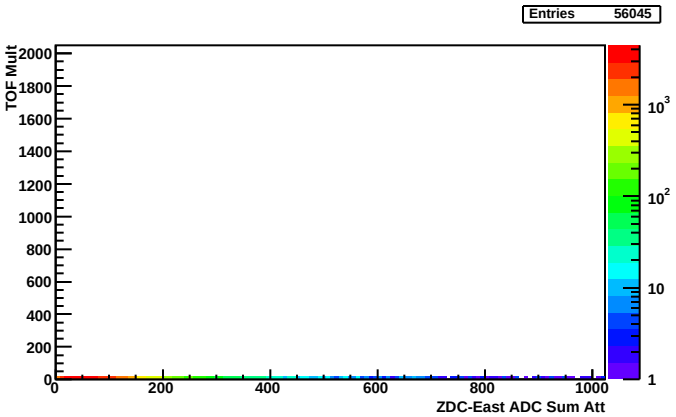

Entries 56045
TOF Mult
BBC-L-West ADC Sum

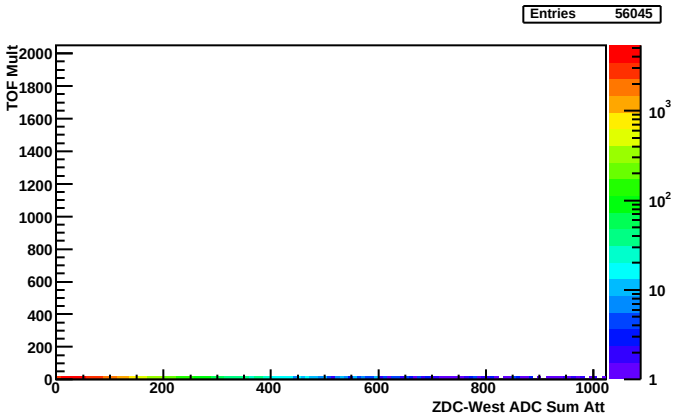

Entries 56045
TOF Mult
BBC-S-East ADC Sum

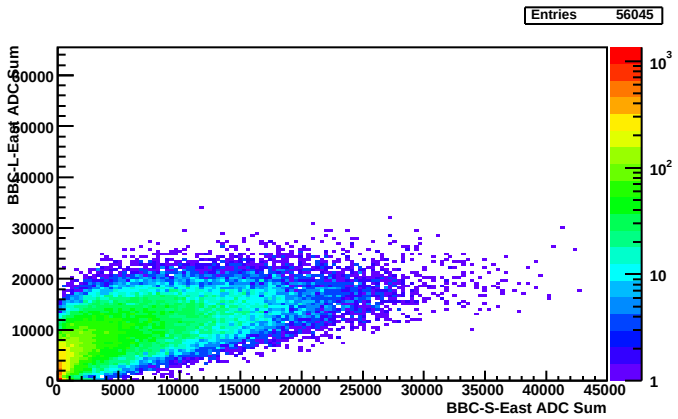

Entries 56045
TOF Mult
BBC-S-West ADC Sum

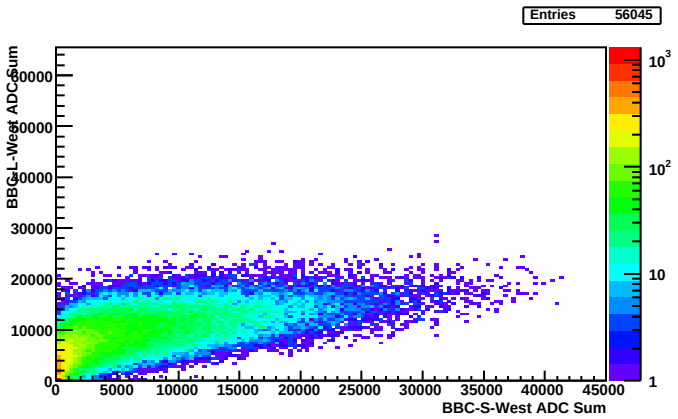

Entries 56045
TOF Mult
VPD-East ADC Sum

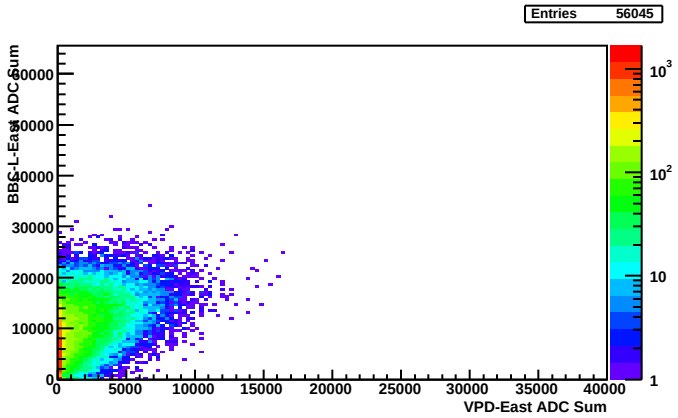

Entries 56045
TOF Mult
VPD-West ADC Sum

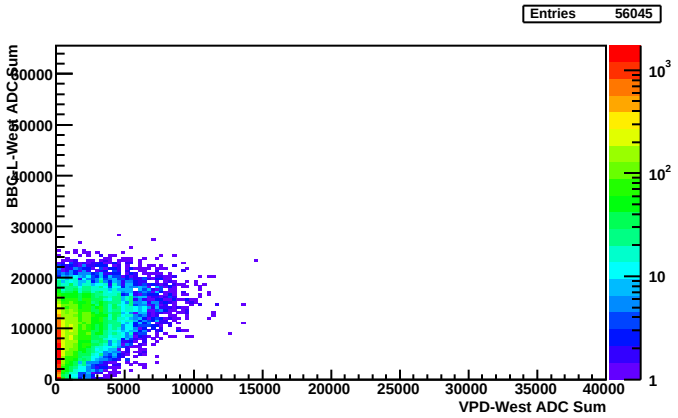

Entries 56045
TOF Mult
ZDC-East ADC Sum Att

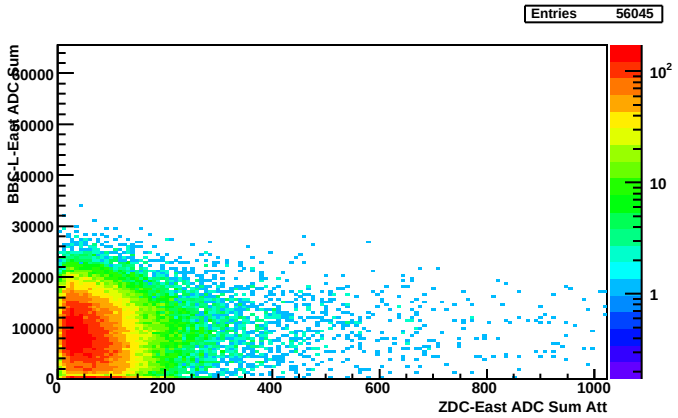

Entries 56045
TOF Mult
ZDC-West ADC Sum Att

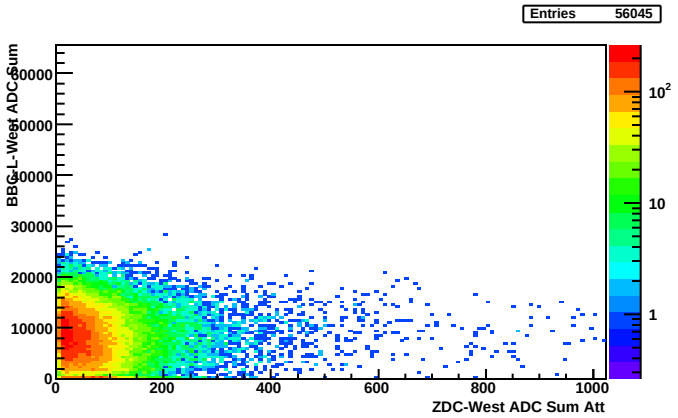

Entries 56045
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 56045
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 56045
BBC-L-East ADC Sum
VPD-East ADC Sum


Entries 56045
BBC-L-West ADC Sum
VPD-West ADC Sum


Entries 56045
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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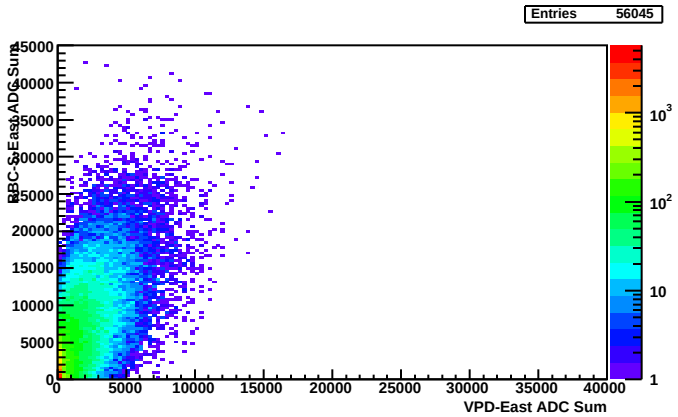
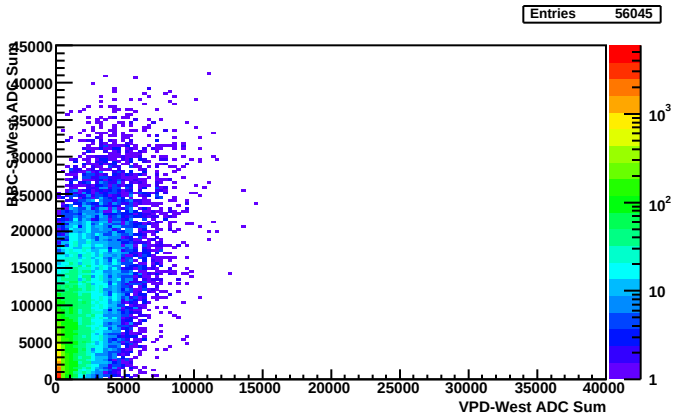
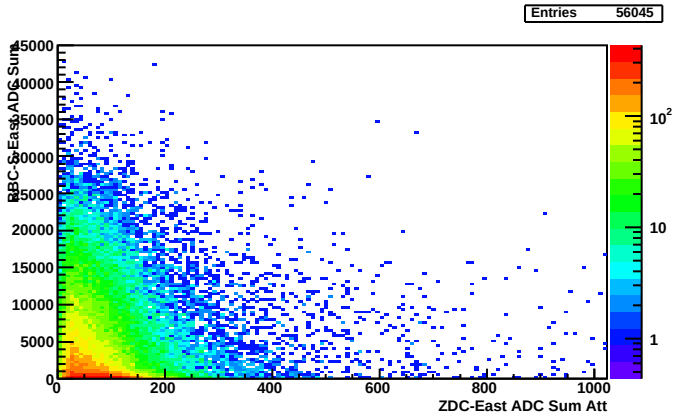
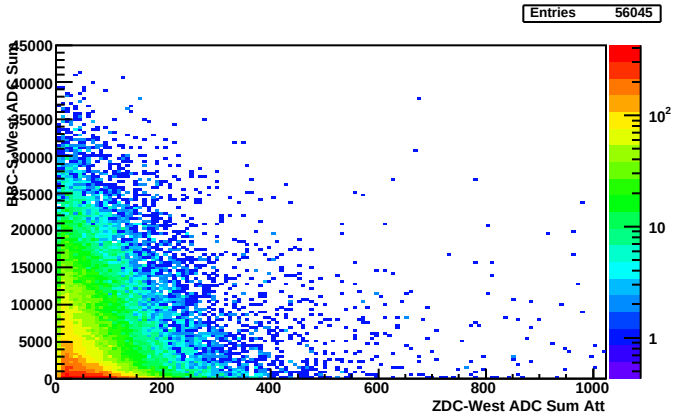
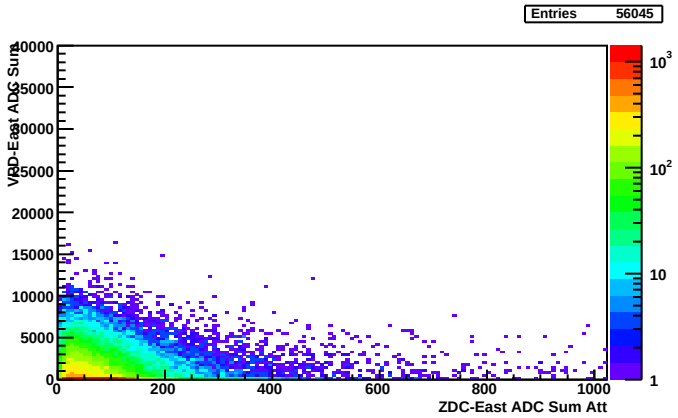
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

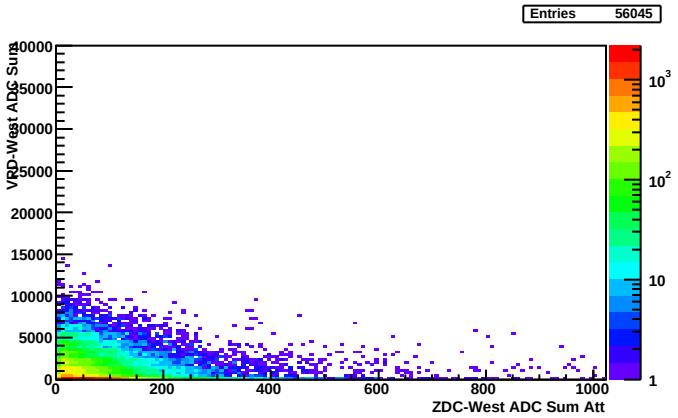

Entries 56045
BBC-S-East ADC Sum
VPD-East ADC Sum

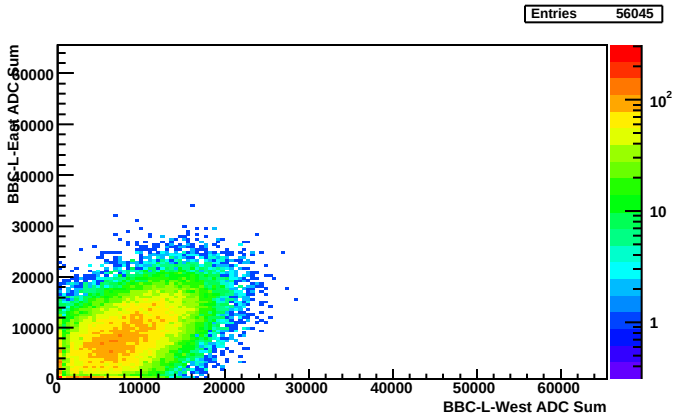

Entries 56045
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 56045
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 56045
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 56045
VPD-East ADC Sum
ZDC-East ADC Sum Att


Entries 56045
VPD-West ADC Sum
ZDC-West ADC Sum Att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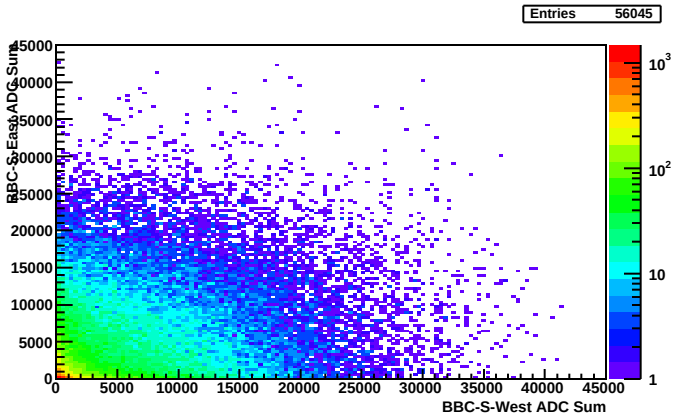
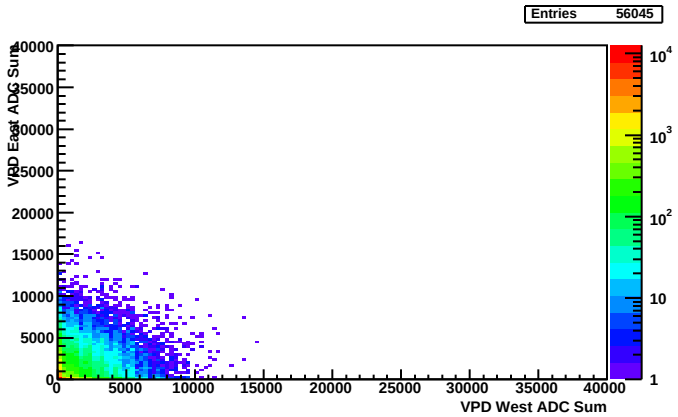
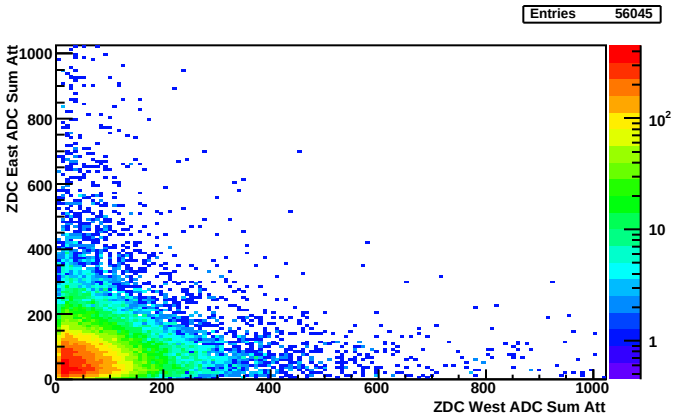
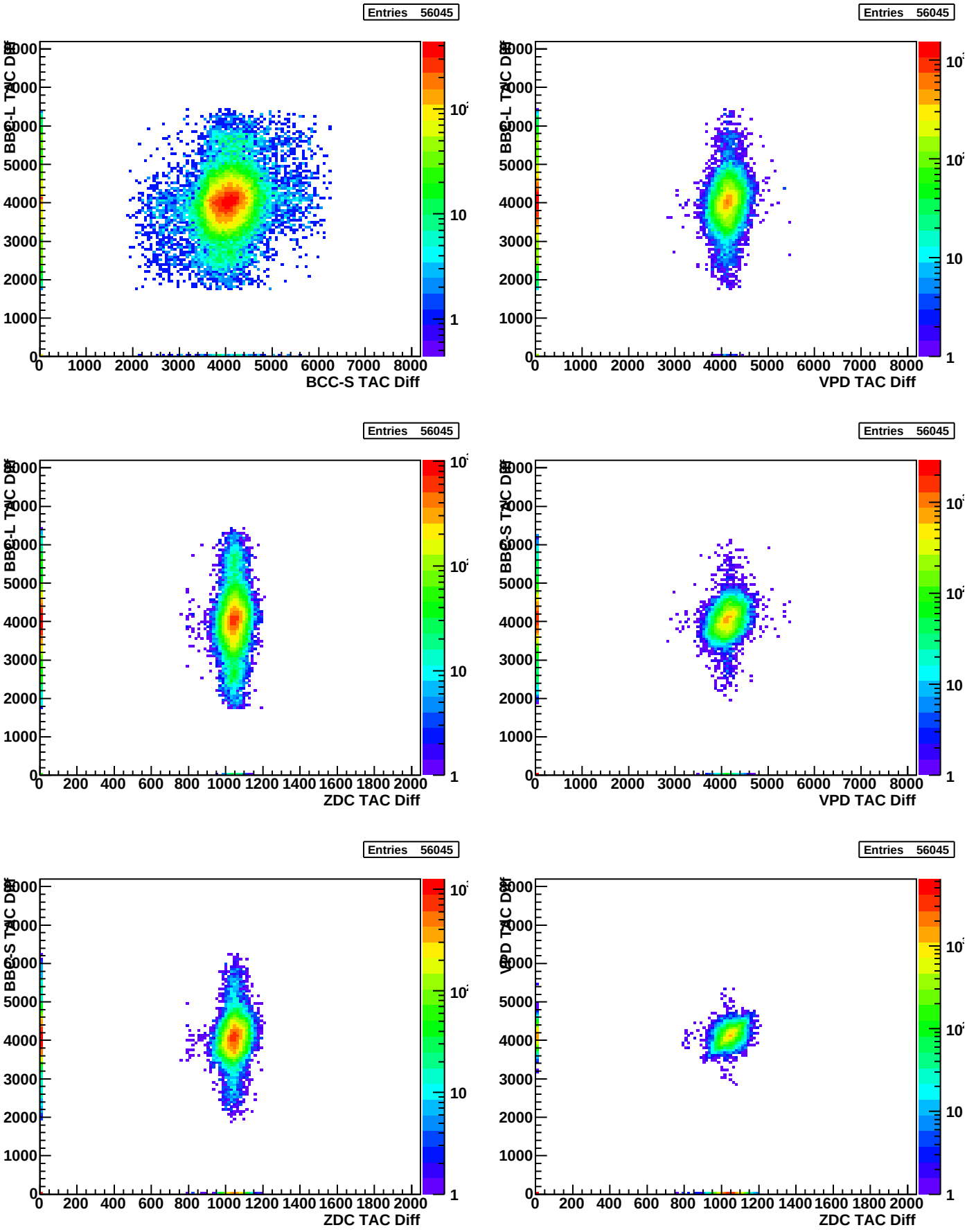
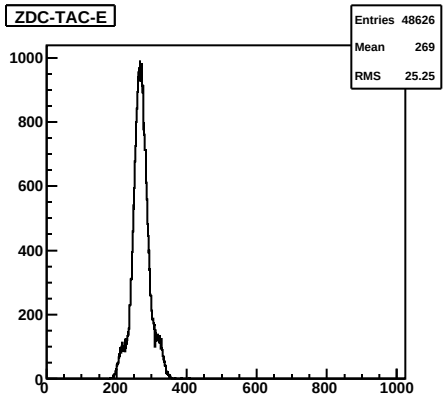
BBC-L-East ADC Sum
BBC-L-West ADC Sum

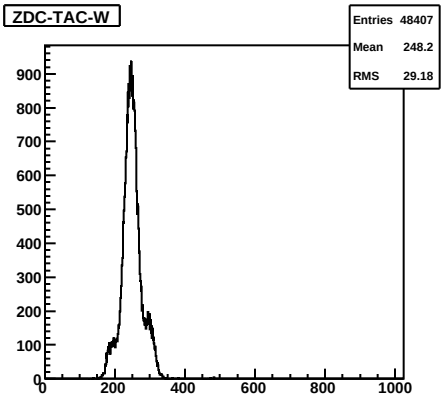

Entries 56045
BBC-S-East ADC Sum
BBC-S-West ADC Sum

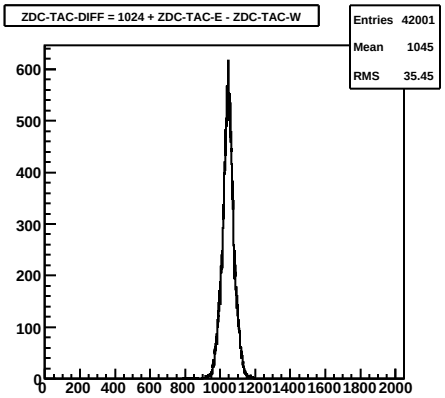

Entries 56045
VPD East ADC Sum
VPD West ADC Sum

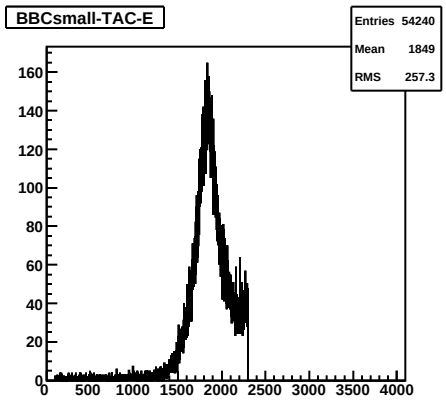

Entries 56045
ZDC East ADC Sum Att
ZDC West ADC Sum Att

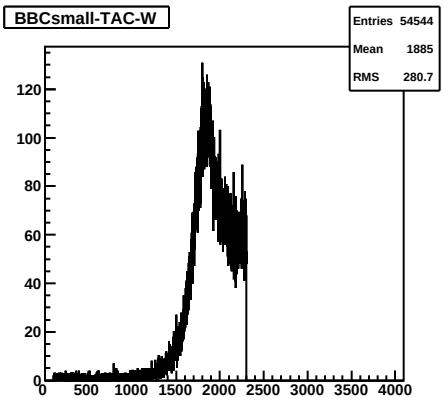

Entries 56045
BBC-L TAC Diff
BCC-S TAC Diff
Entries 56045
BBC-L TAC Diff
VPD TAC Diff
Entries 56045
BBC-L TAC Diff
ZDC TAC Diff
Entries 56045
BBC-S TAC Diff
VPD TAC Diff
Entries 56045
BBC-S TAC Diff
ZDC TAC Diff
Entries 56045
VPD TAC Diff
ZDC TAC Diff

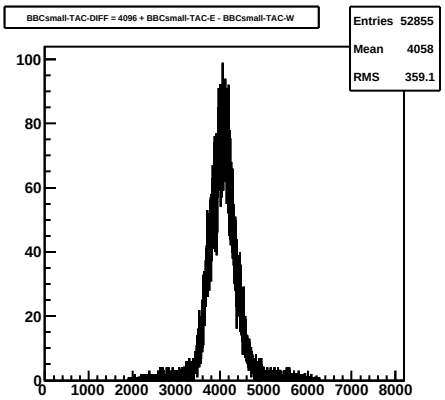

ZDC-TAC-E
Entries 48626
Mean 269
RMS 25.25

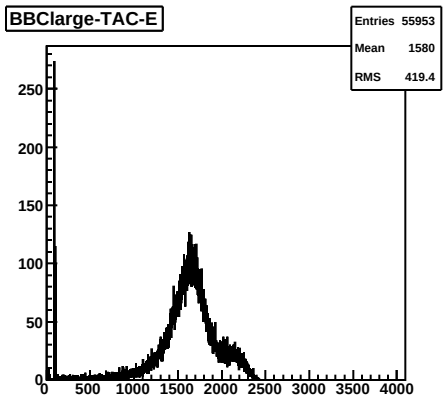

ZDC-TAC-W
Entries 48407
Mean 248.2
RMS 29.18

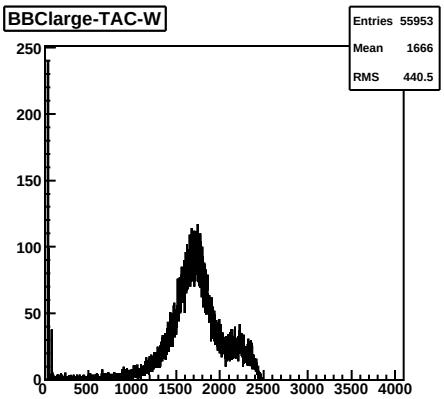

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 42001
Mean 1045
RMS 35.45

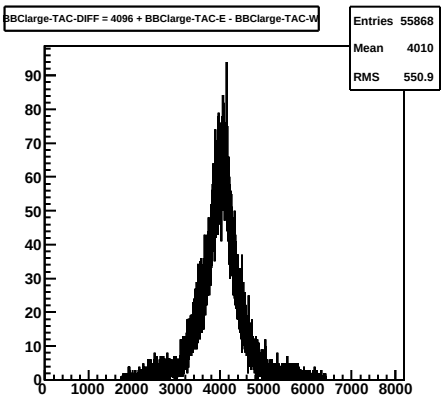

BBCsmall-TAC-E
Entries 54240
Mean 1849
RMS 257.3

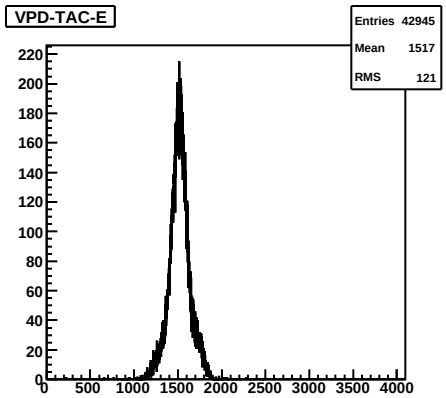

BBCsmall-TAC-W
Entries 54544
Mean 1885
RMS 280.7

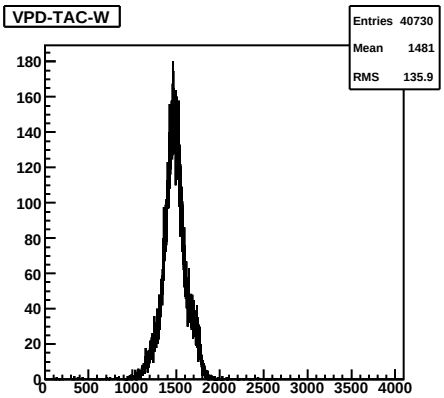

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 52855
Mean 4058
RMS 359.1

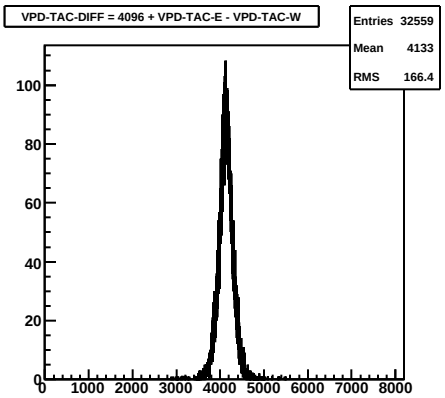

BBClarge-TAC-E
Entries 55953
Mean 1580
RMS 419.4

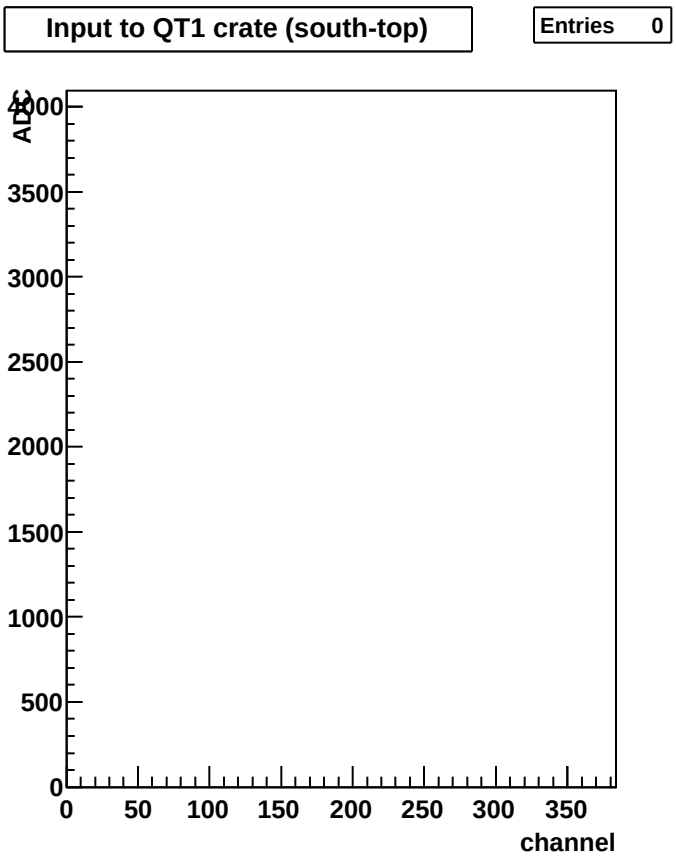

BBClarge-TAC-W
Entries 55953
Mean 1666
RMS 440.5

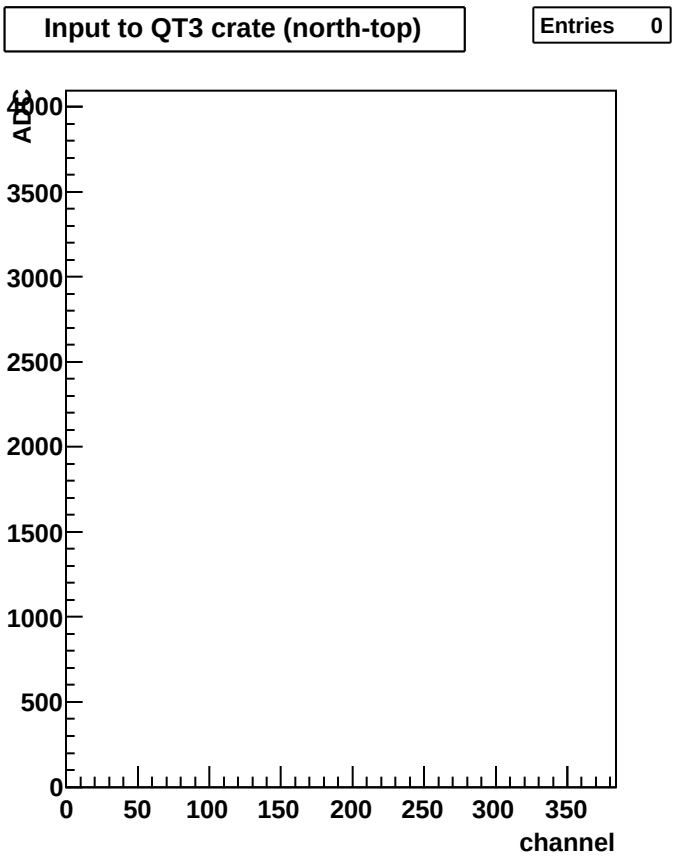

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 55868
Mean 4010
RMS 550.9

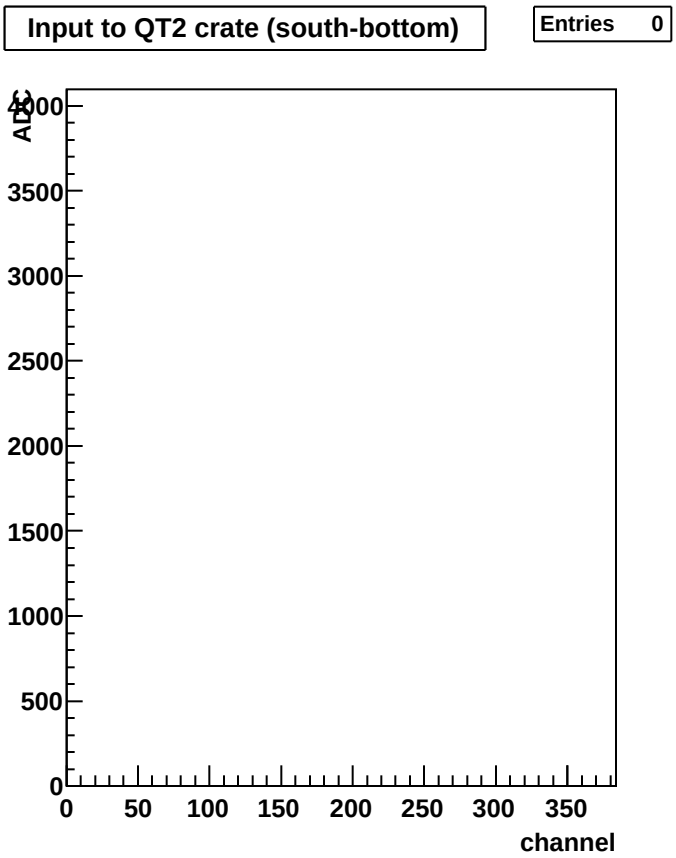

VPD-TAC-E
Entries 42945
Mean 1517
RMS 121

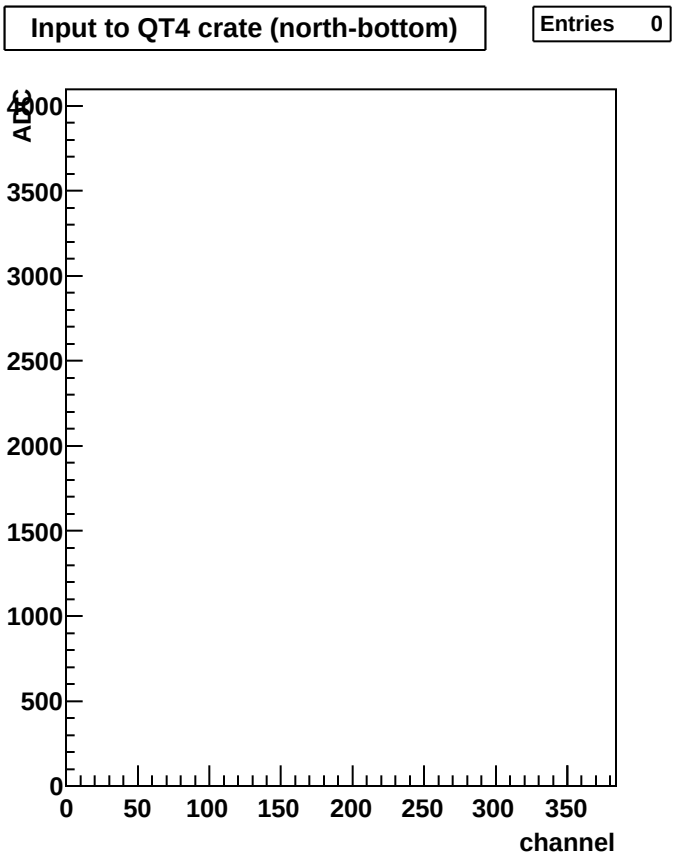

VPD-TAC-W
Entries 40730
Mean 1481
RMS 135.9

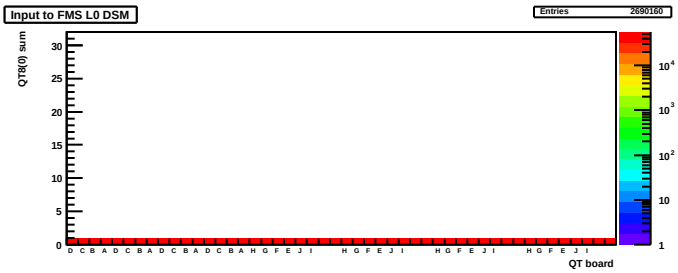

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 32559
Mean 4133
RMS 166.4

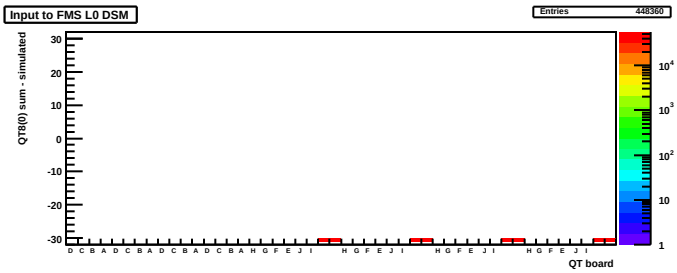

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

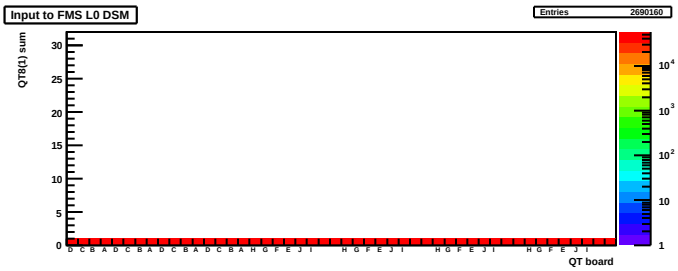

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

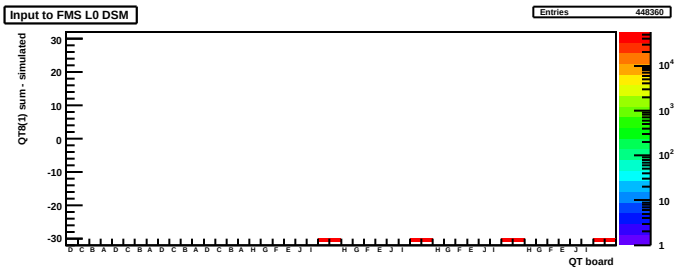

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

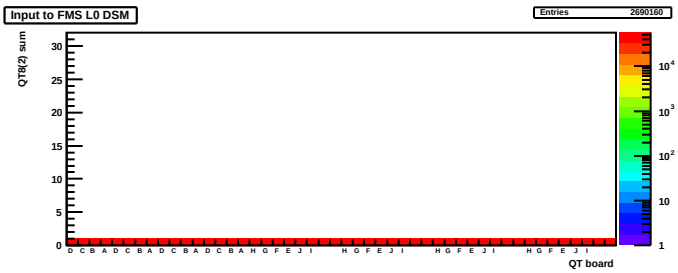

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

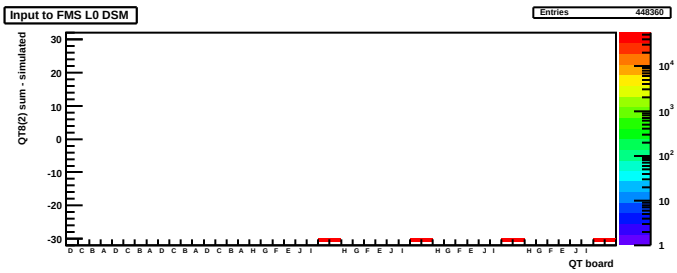

Input to FMS L0 DSM
Entries 2690160
QT8(0) sum
QT board

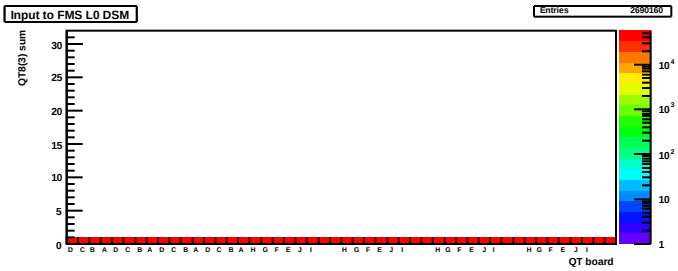

Input to FMS L0 DSM
Entries 448360
QT8(0) sum - simulated
QT board

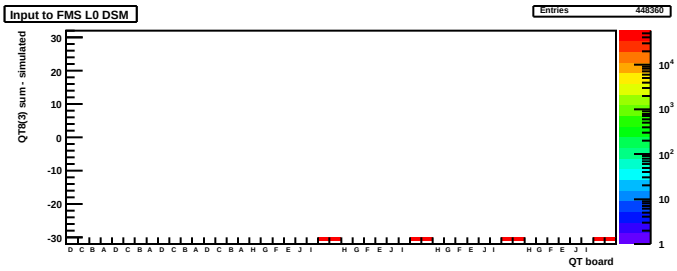

Input to FMS L0 DSM
Entries 2690160
QT8(1) sum
QT board

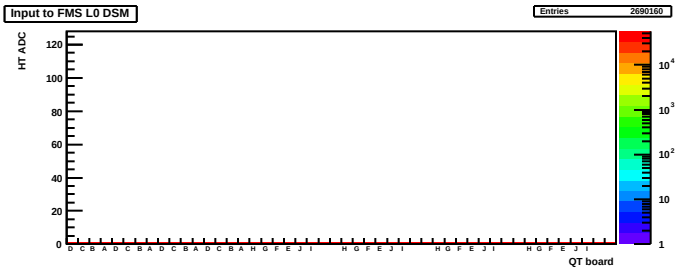

Input to FMS L0 DSM
Entries 448360
QT8(1) sum - simulated
QT board

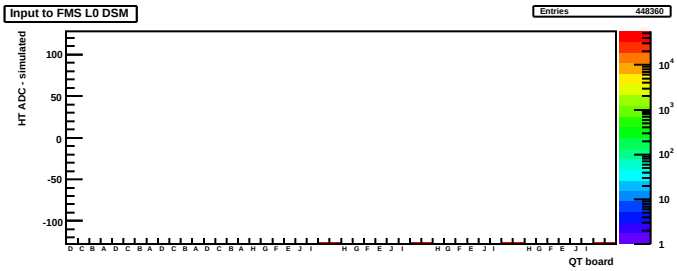

Input to FMS L0 DSM
Entries 2690160
QT8(2) sum
QT board

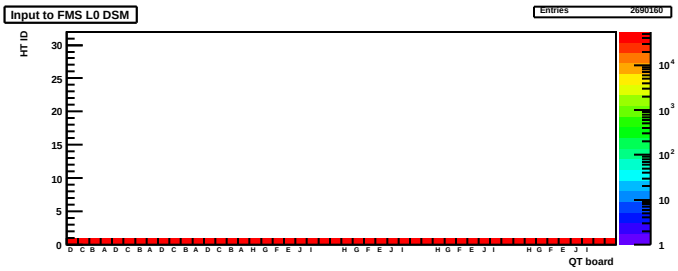

Input to FMS L0 DSM
Entries 448360
QT8(2) sum - simulated
QT board

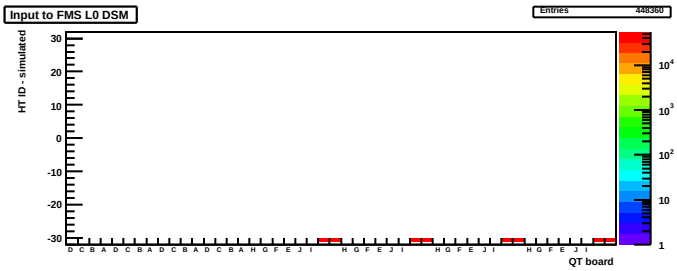

Input to FMS L0 DSM
Entries 2690160
QT8(3) sum
QT board

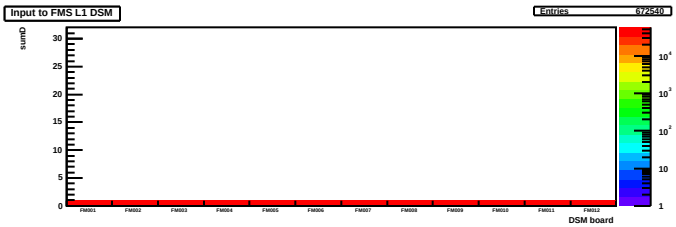

Input to FMS L0 DSM
Entries 448360
QT8(3) sum - simulated
QT board

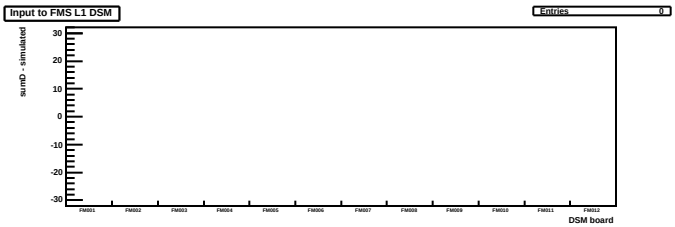

Input to FMS L0 DSM
Entries 2690160
HT ADC
QT board

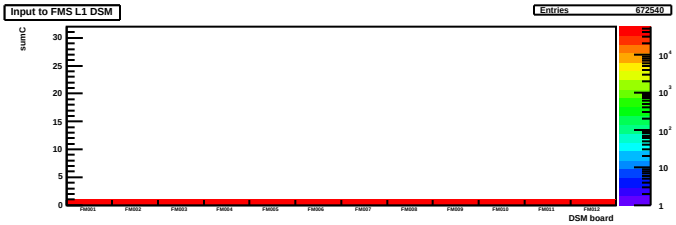

Input to FMS L0 DSM
Entries 448360
HT ADC - simulated
QT board

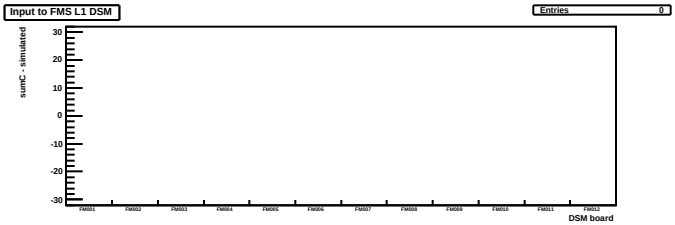

Input to FMS L0 DSM
Entries 2690160
HT ID
QT board

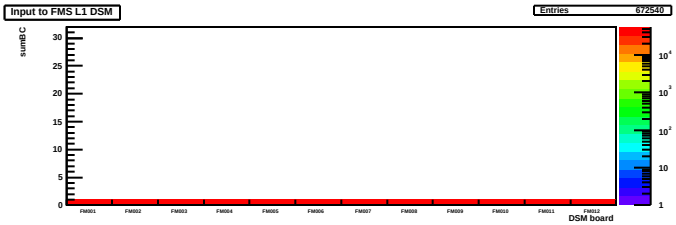

Input to FMS L0 DSM
Entries 448360
HT ID - simulated
QT board

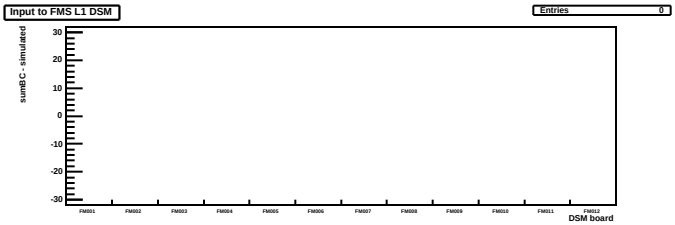

Input to FMS L1 DSM
Entries 672540
sumD
DSM board

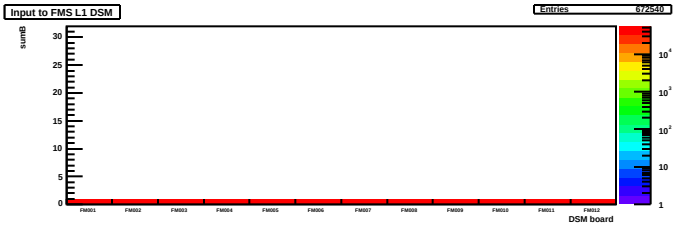

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

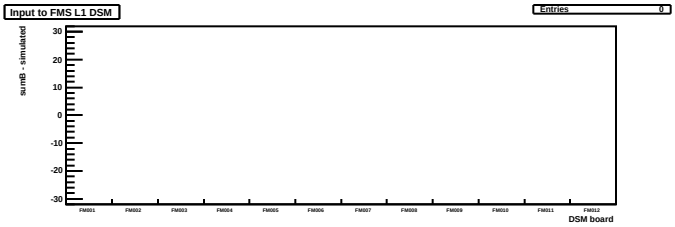

Input to FMS L1 DSM
Entries 672540
sumC
DSM board

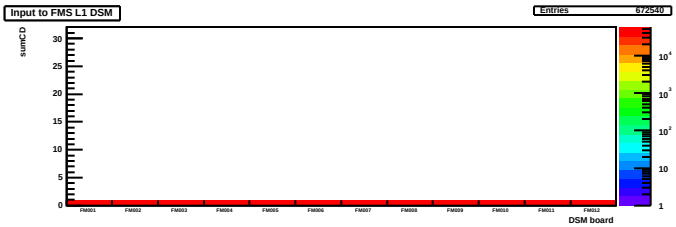

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

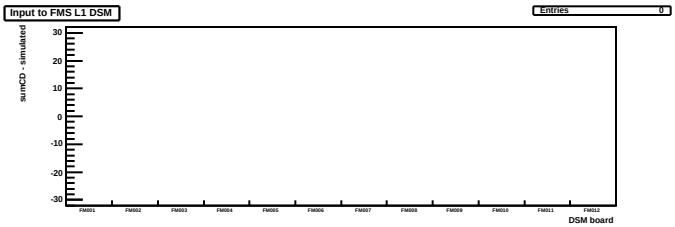

Input to FMS L1 DSM
Entries 672540
sumBC
DSM board

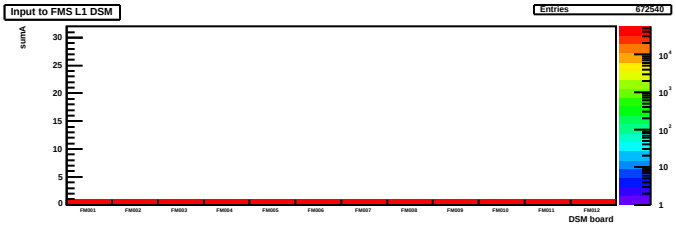

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

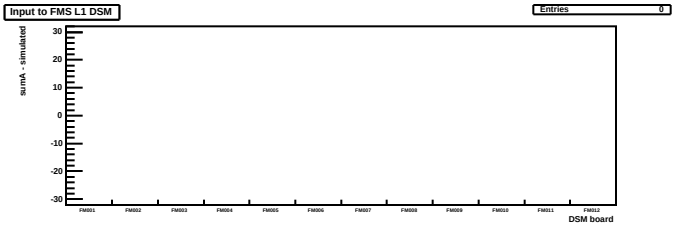

Input to FMS L1 DSM
Entries 672540
sumB
DSM board

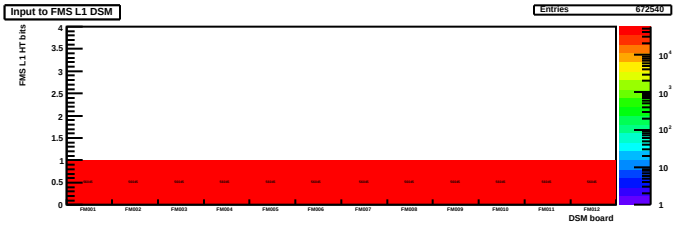

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

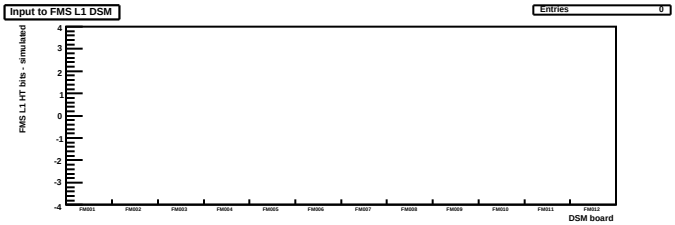

Input to FMS L1 DSM
Entries 672540
sumCD
DSM board

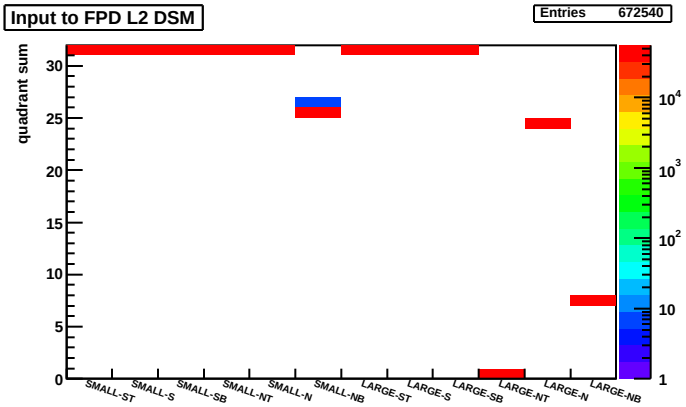

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

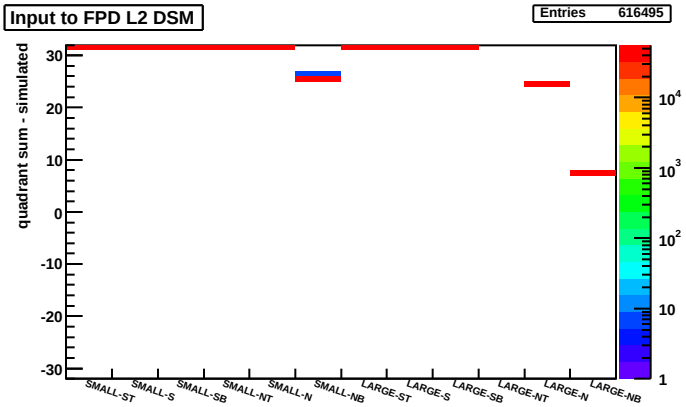

Input to FMS L1 DSM
Entries 672540
sumA
DSM board

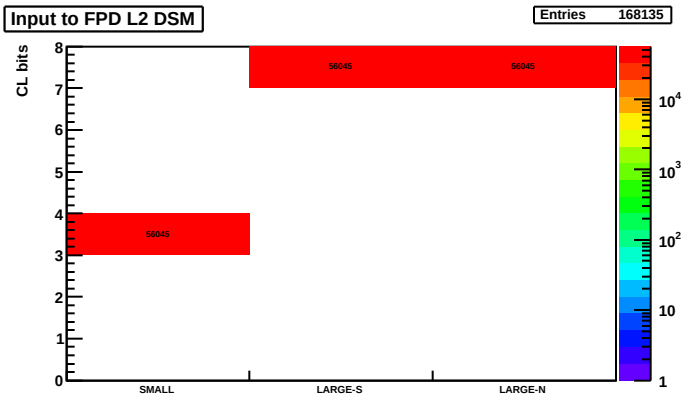

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

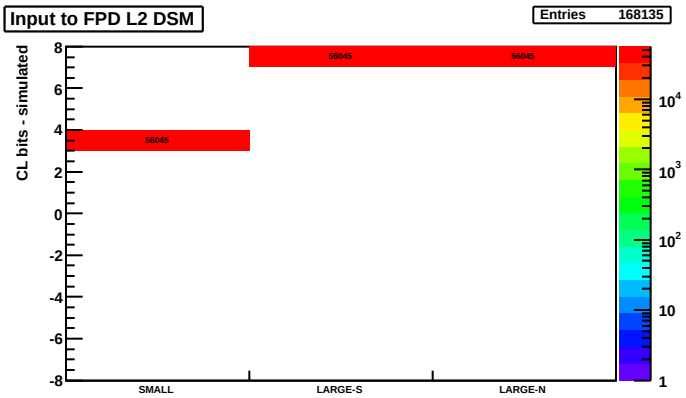

Input to FMS L1 DSM
Entries 672540
FMS L1 HT bits
DSM board

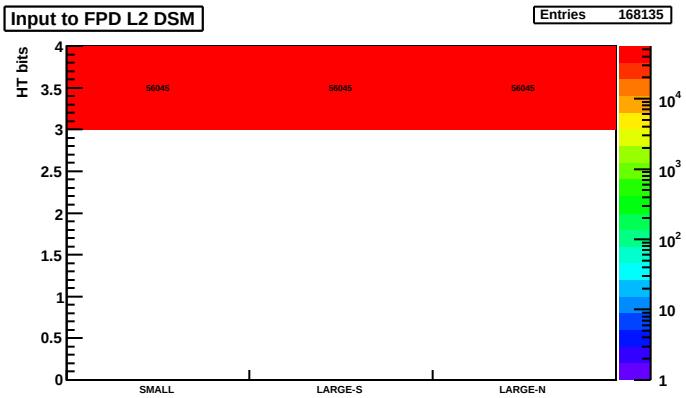

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

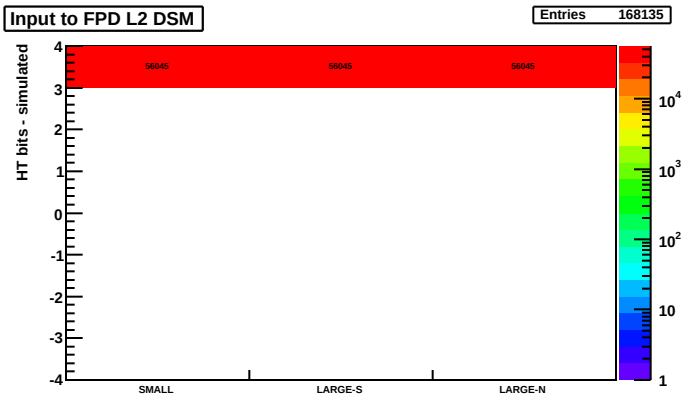

Input to FPD L2 DSM
Entries 672540
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

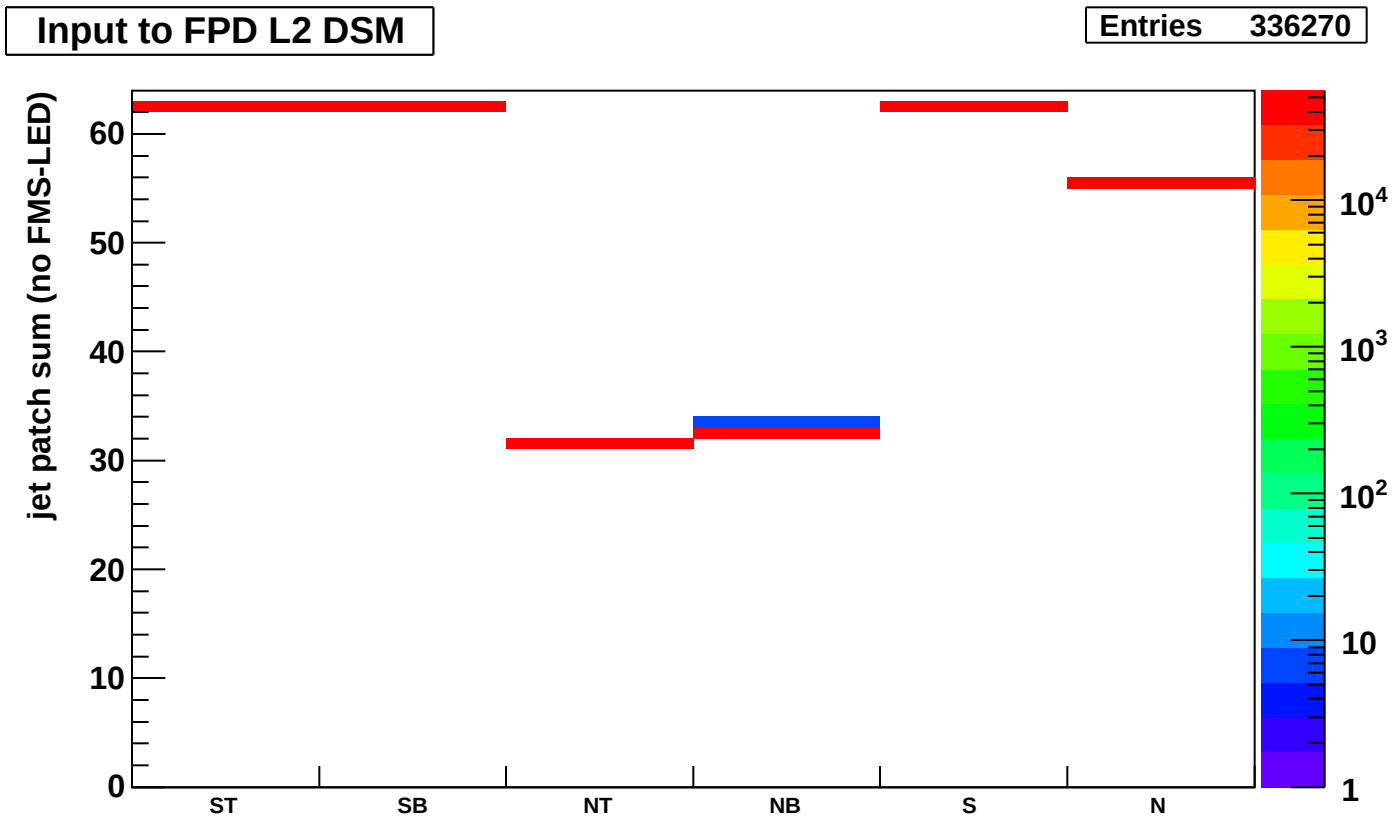

Input to FPD L2 DSM
Entries 616495
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

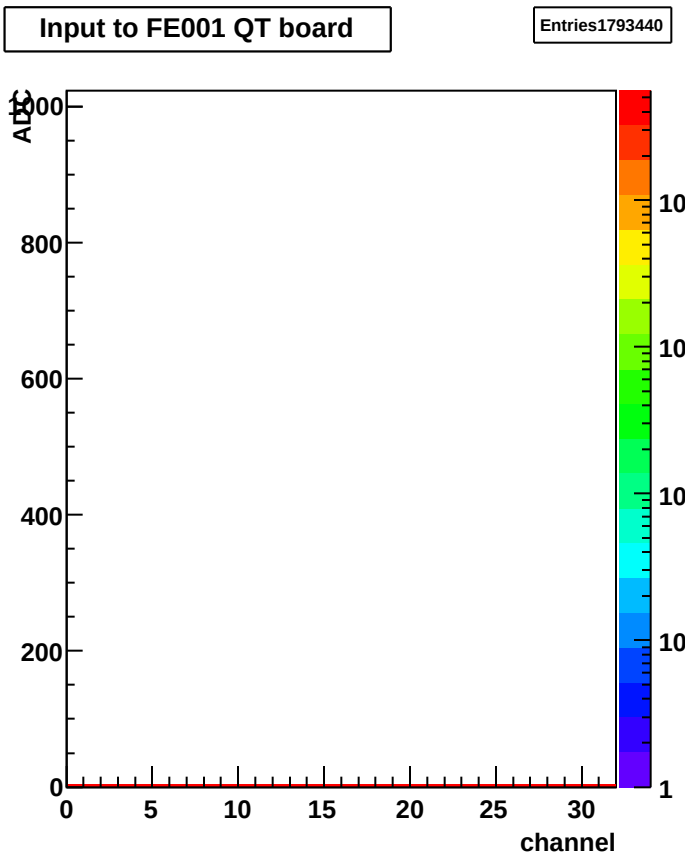

Input to FPD L2 DSM
Entries 168135
CL bits
56045
56045
56045
SMALL
LARGE-S
LARGE-N

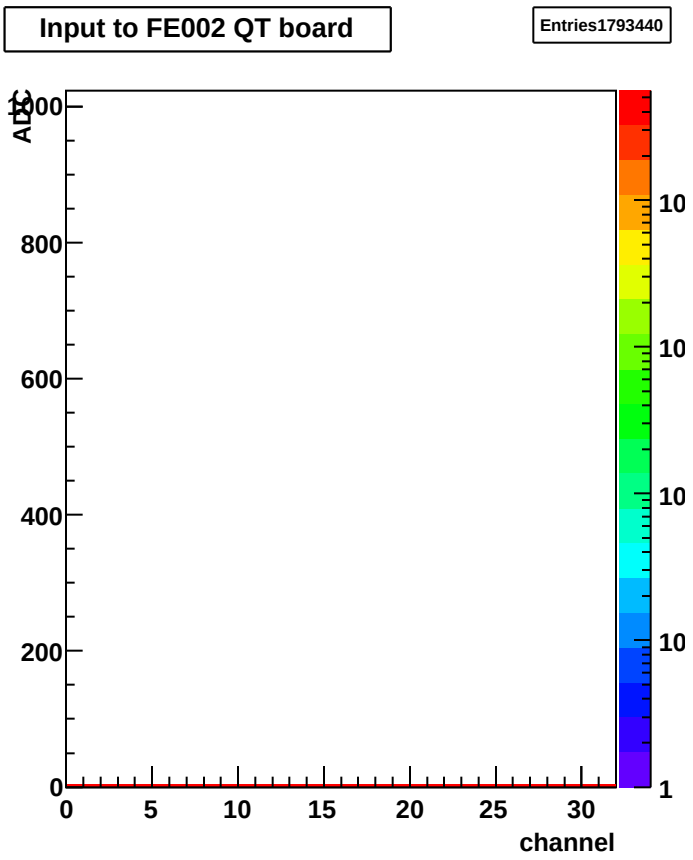

Input to FPD L2 DSM
Entries 168135
CL bits - simulated
56045
56045
56045
SMALL
LARGE-S
LARGE-N

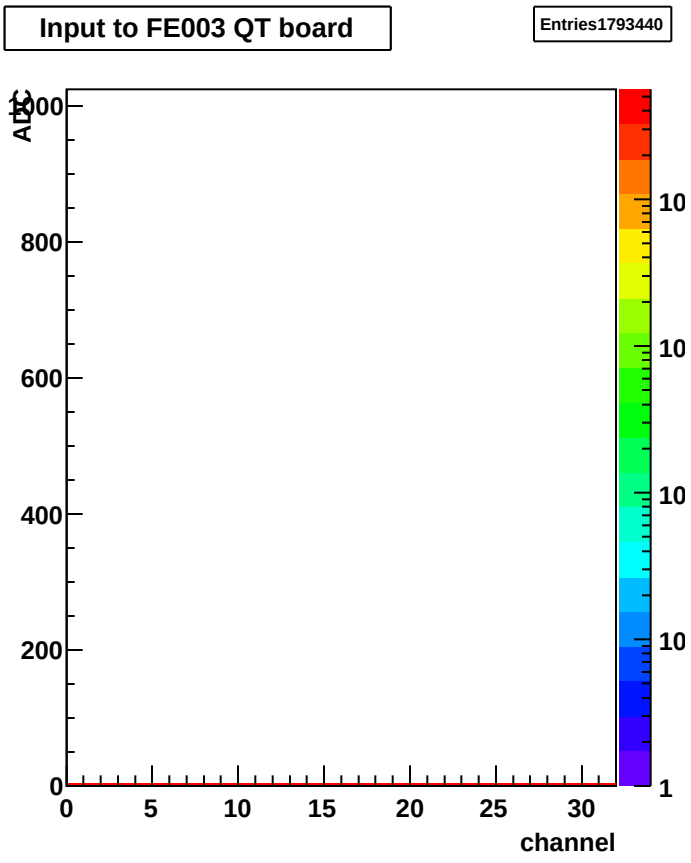

Input to FPD L2 DSM
Entries 168135
HT bits
56045
56045
56045
SMALL
LARGE-S
LARGE-N

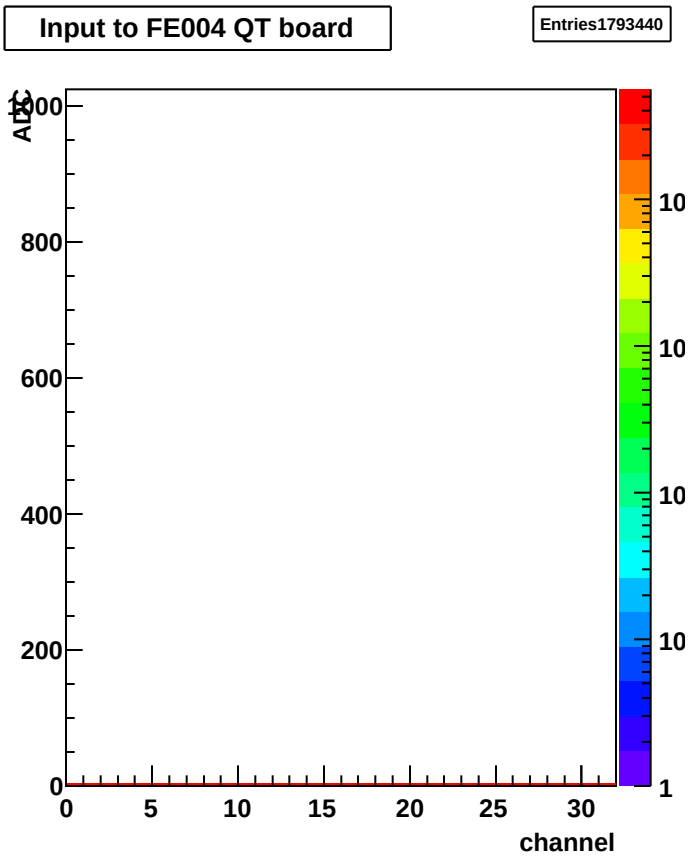

Input to FPD L2 DSM
Entries 168135
HT bits - simulated
56045
56045
56045
SMALL
LARGE-S
LARGE-N

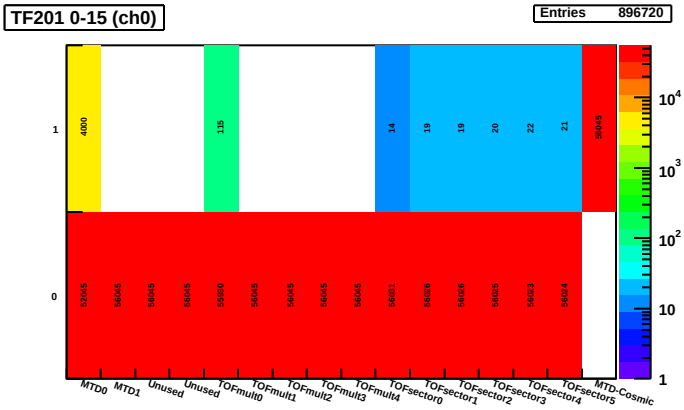

Input to FPD L2 DSM
Entries 336270
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

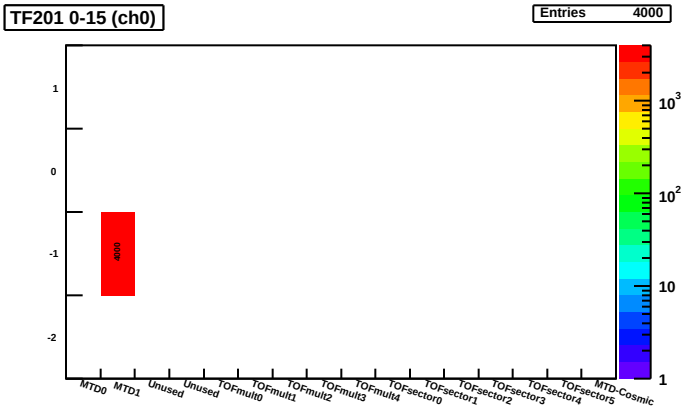

Input to FE001 QT board
Entries1793440
ADC
channel

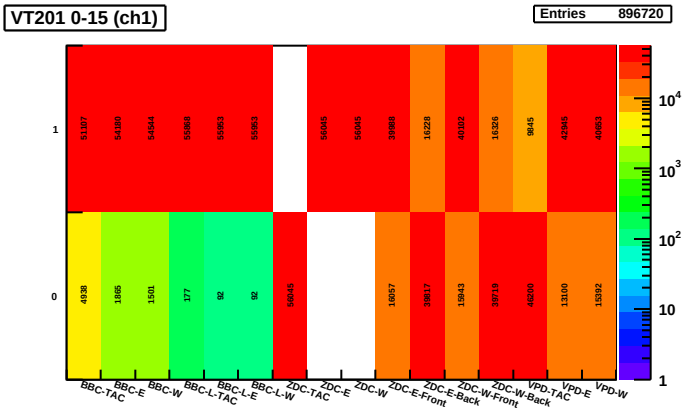

Input to FE002 QT board
Entries1793440
ADC
channel

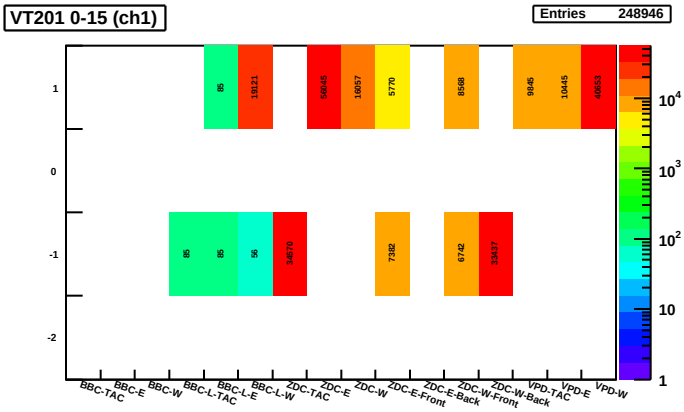

Input to FE003 QT board
Entries1793440
ADC
channel

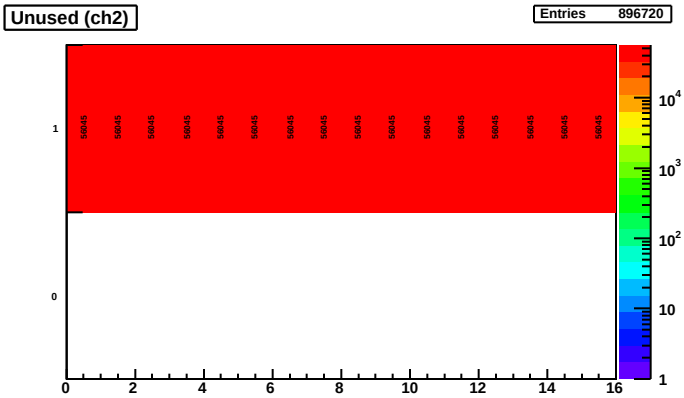

Input to FE004 QT board
Entries1793440
ADC
channel

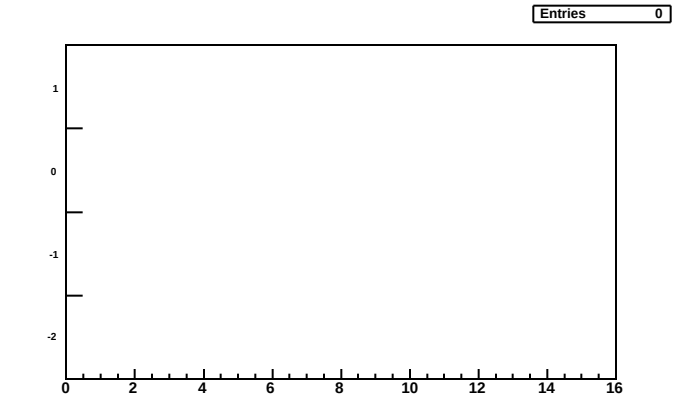

TF201 0-15 (ch0)
Entries 896720
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

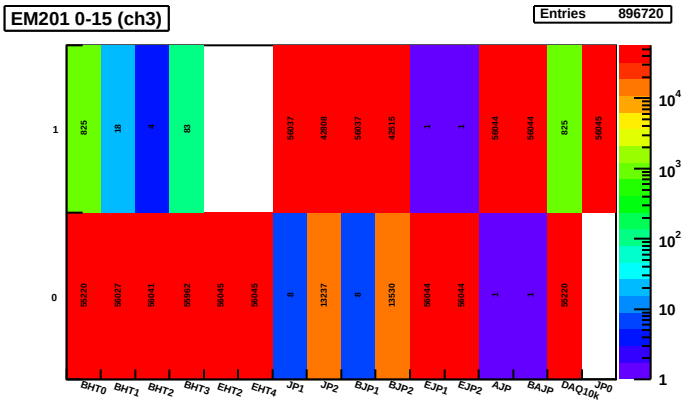

TF201 0-15 (ch0)
Entries 4000
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 896720
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 248946
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


Unused (ch2)
Entries 896720


Entries 0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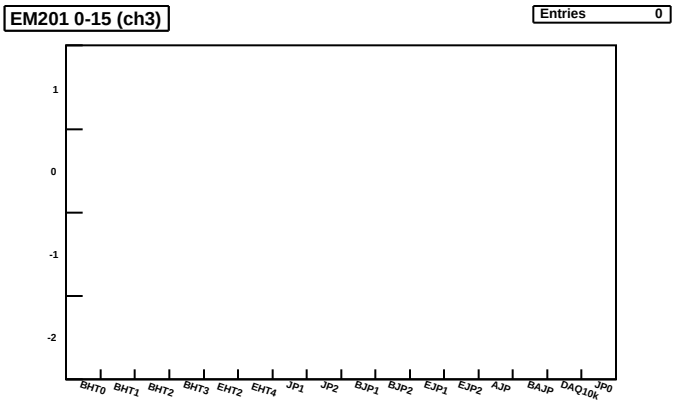
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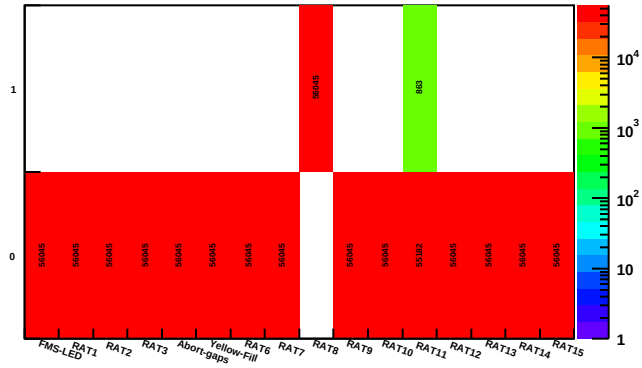
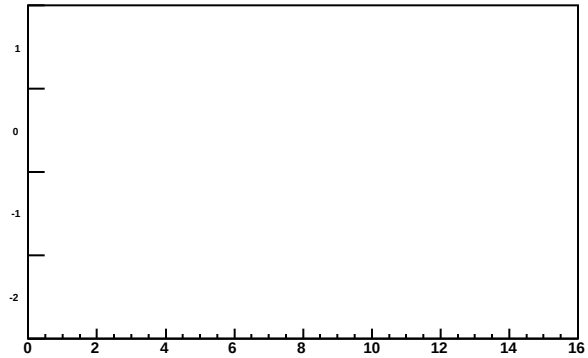
RAT board (ch4)





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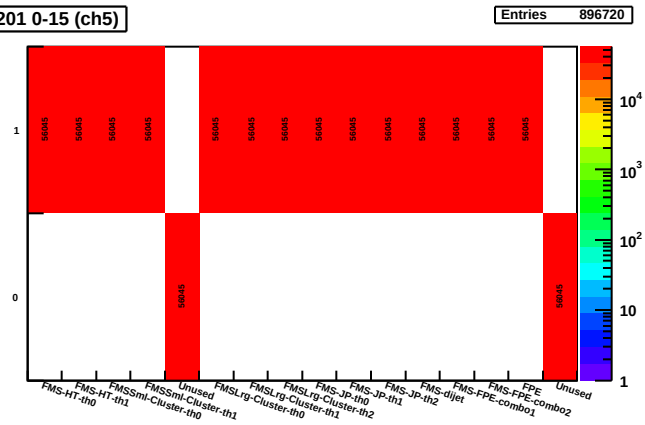

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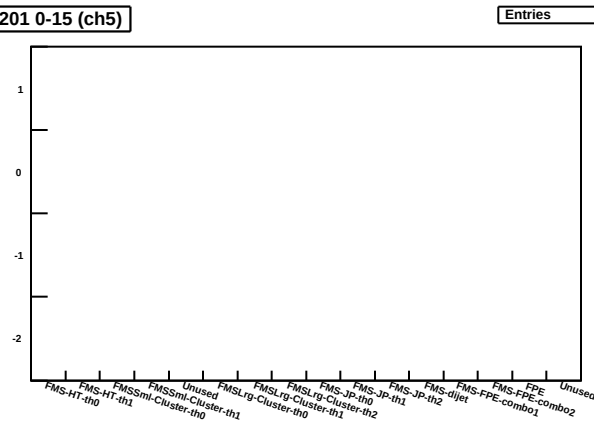

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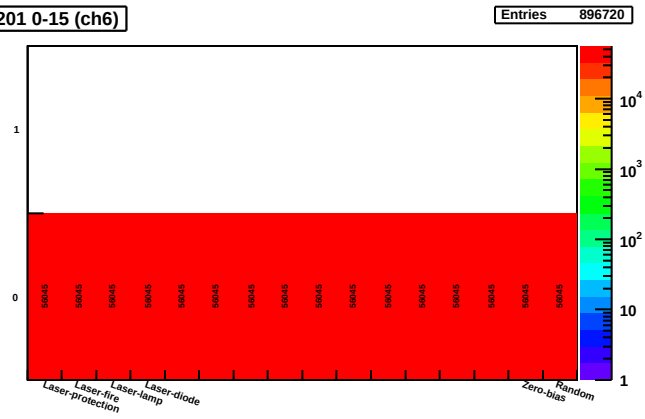

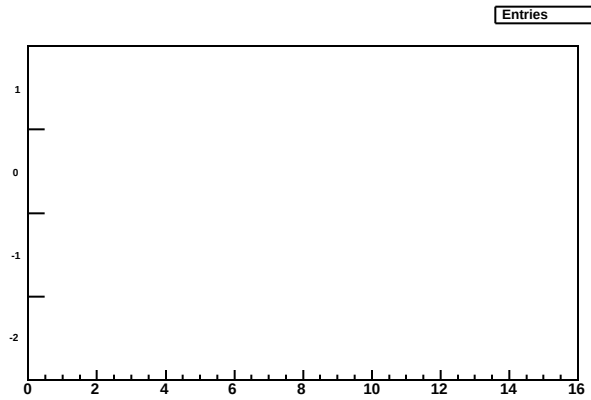
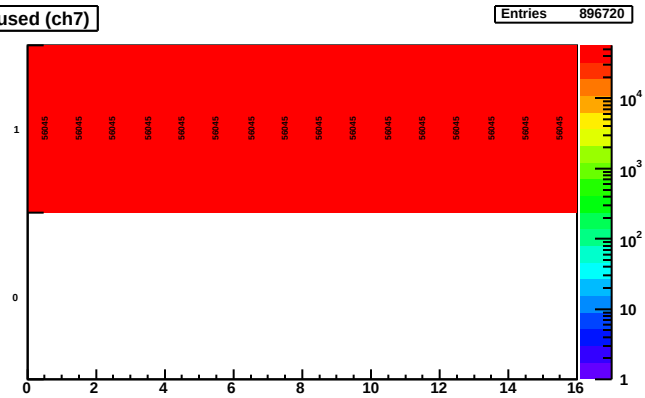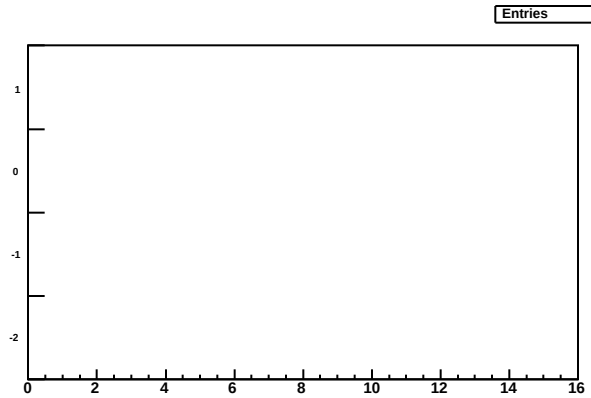
Unused (ch7)