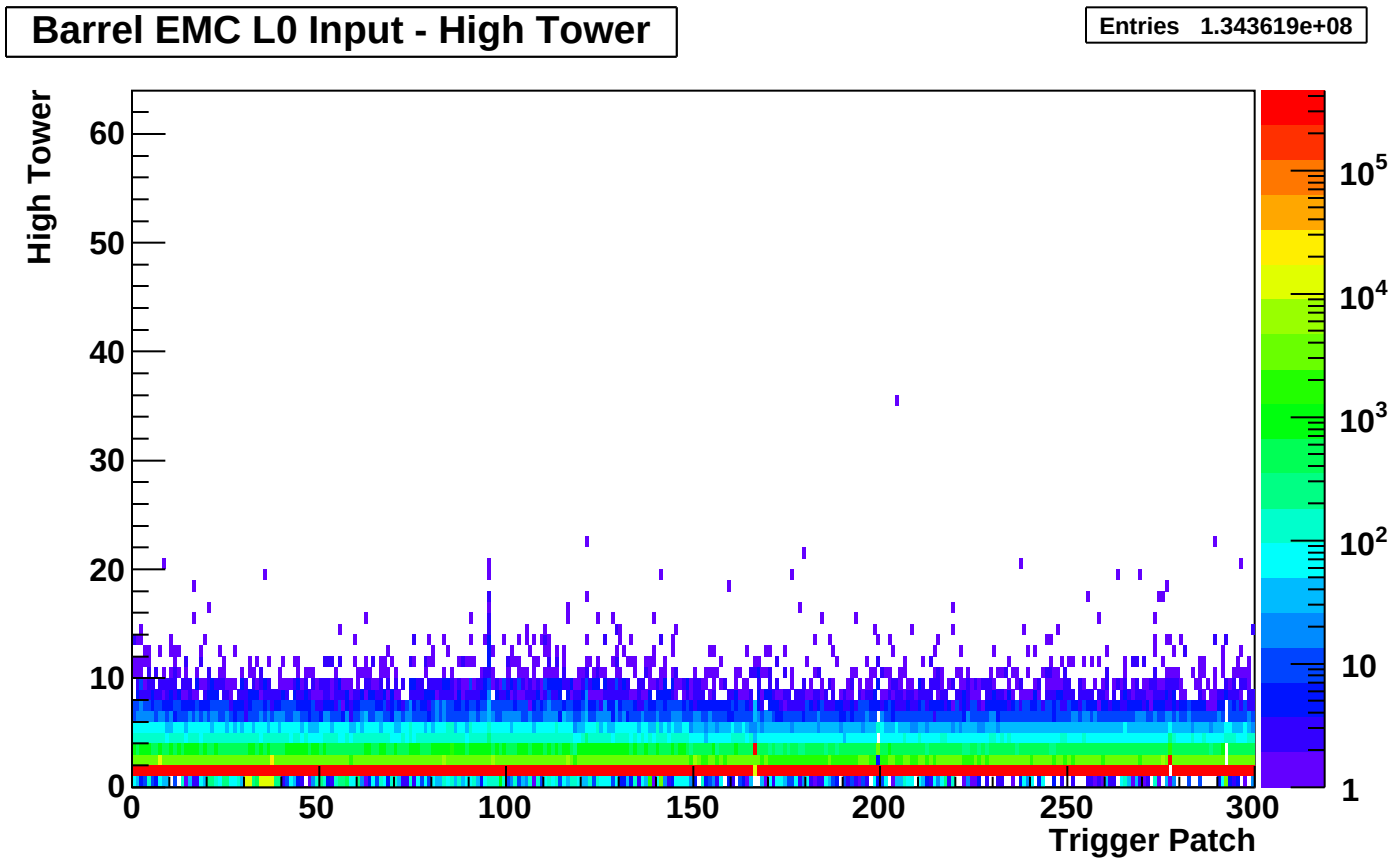
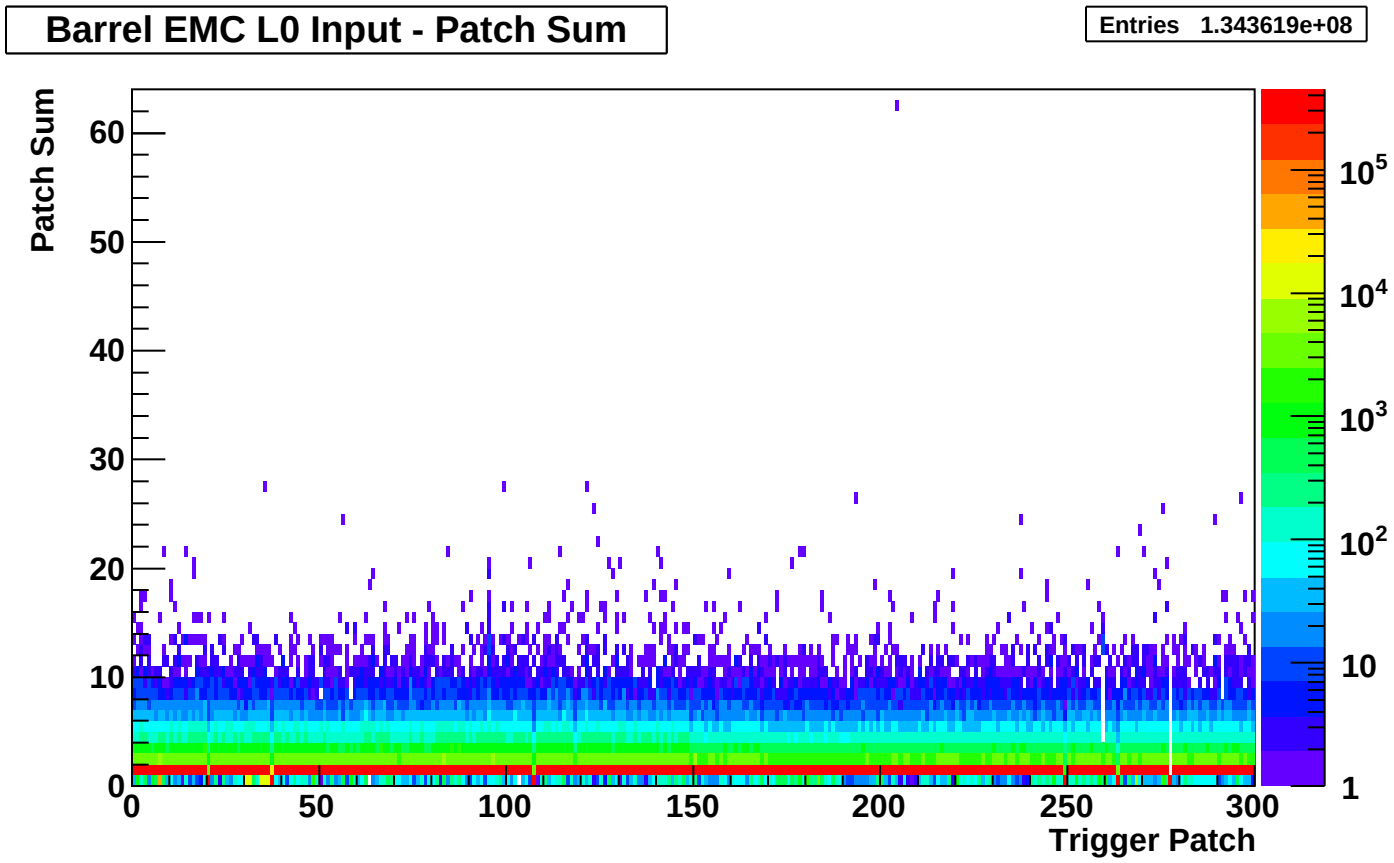
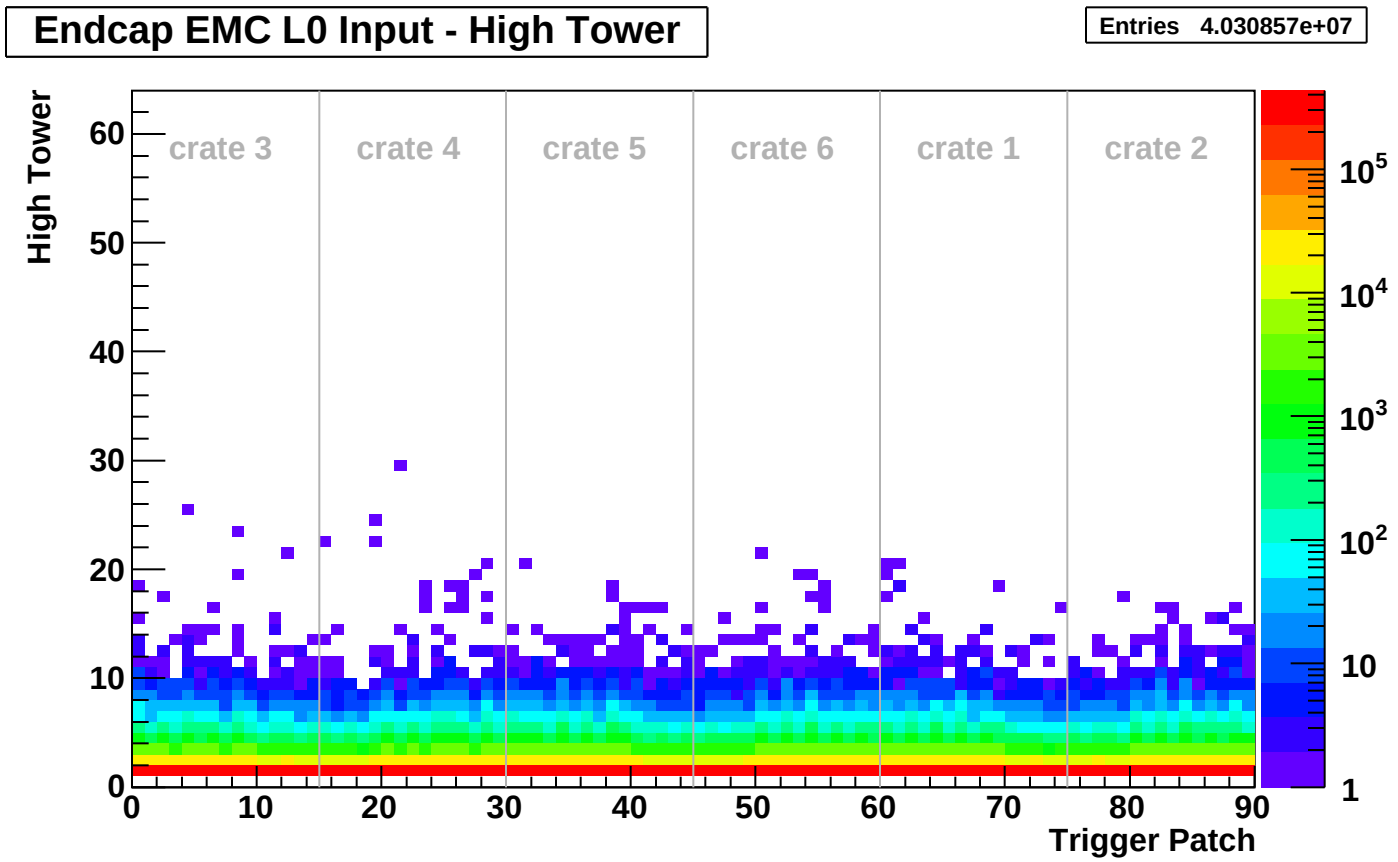
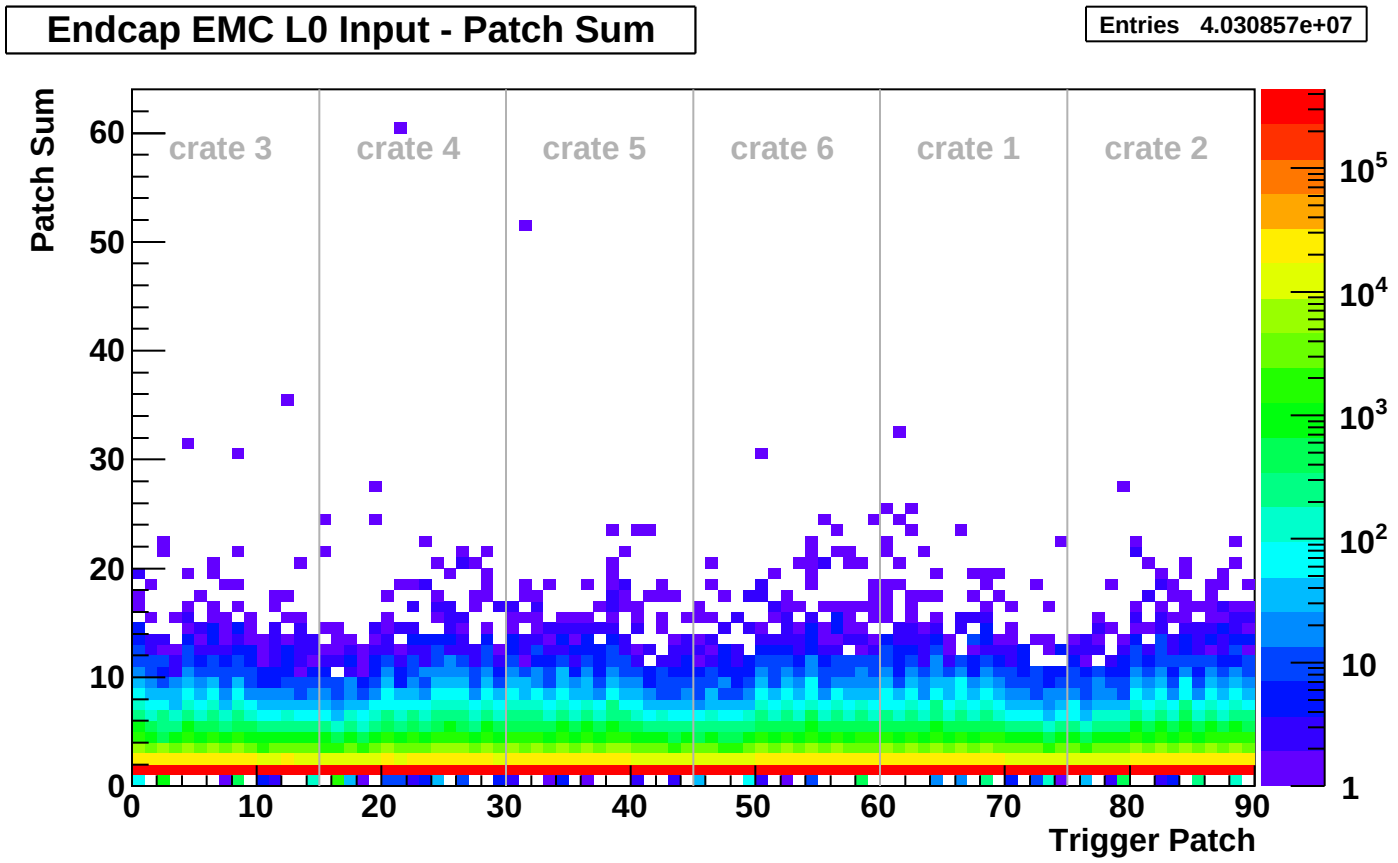
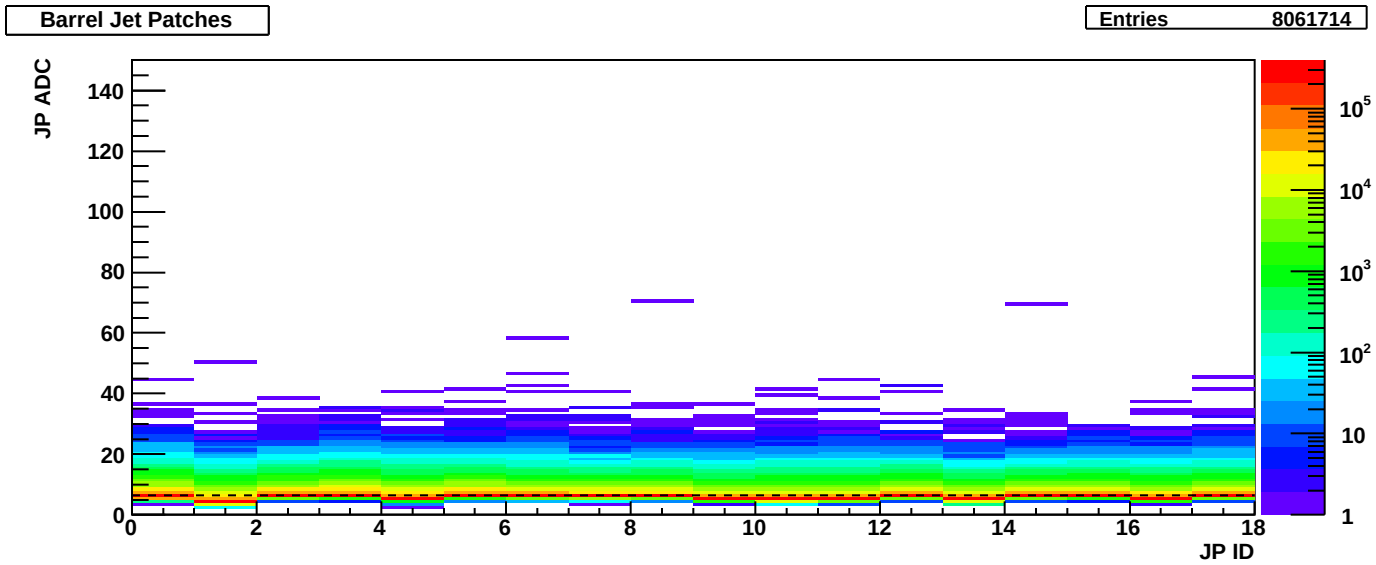
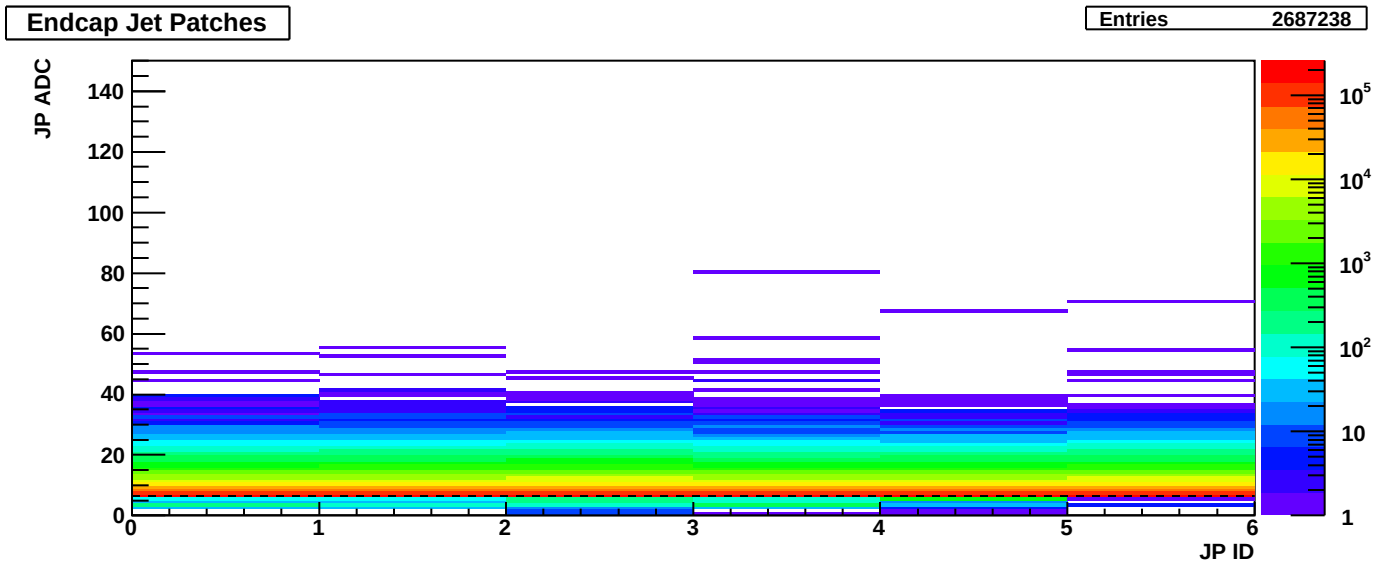

Barrel EMC L0 Input - High Tower
Entries 1.343619e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

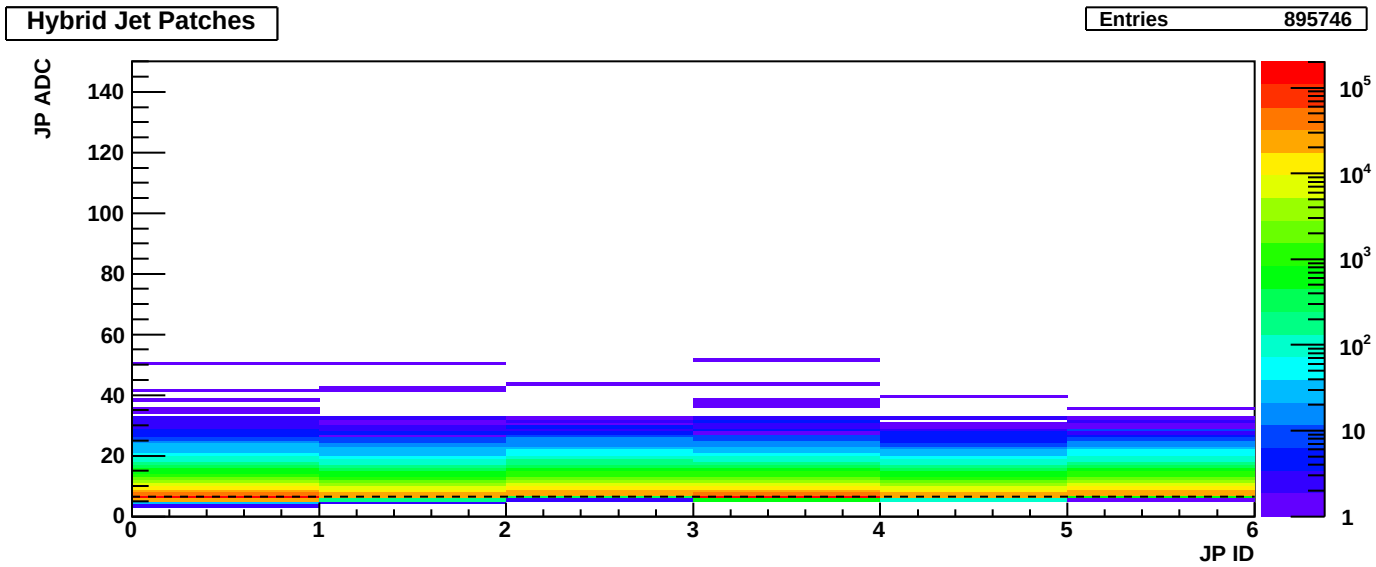

Barrel EMC L0 Input - Patch Sum
Entries 1.343619e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

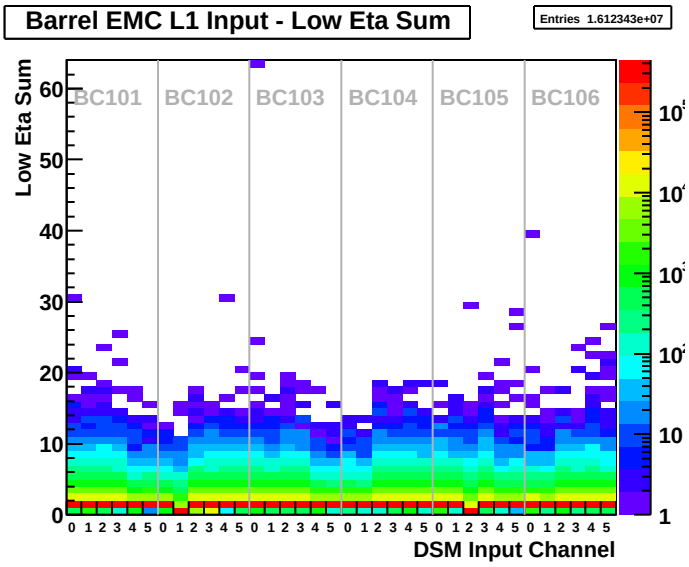

Endcap EMC L0 Input - High Tower
Entries 4.030857e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

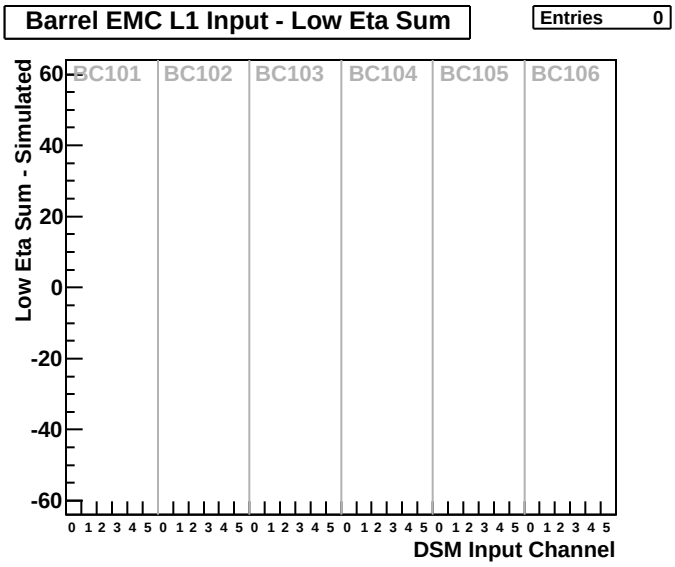

Endcap EMC L0 Input - Patch Sum
Entries 4.030857e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

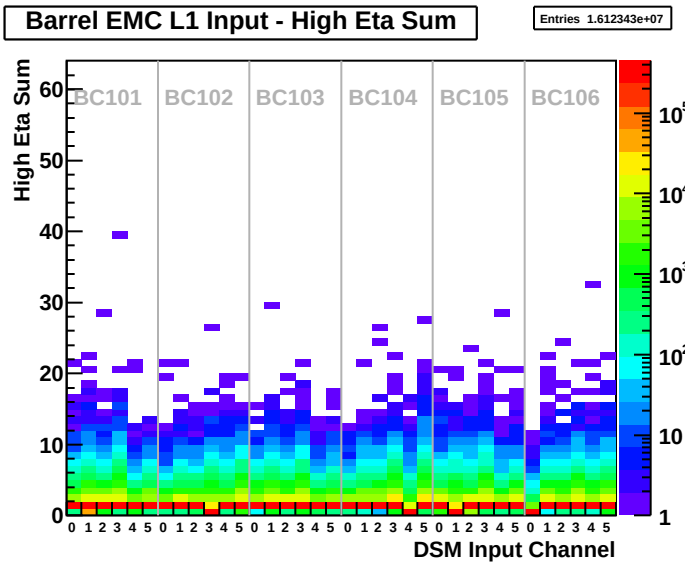

Barrel Jet Patches
Entries 8061714
JP ADC
JP ID

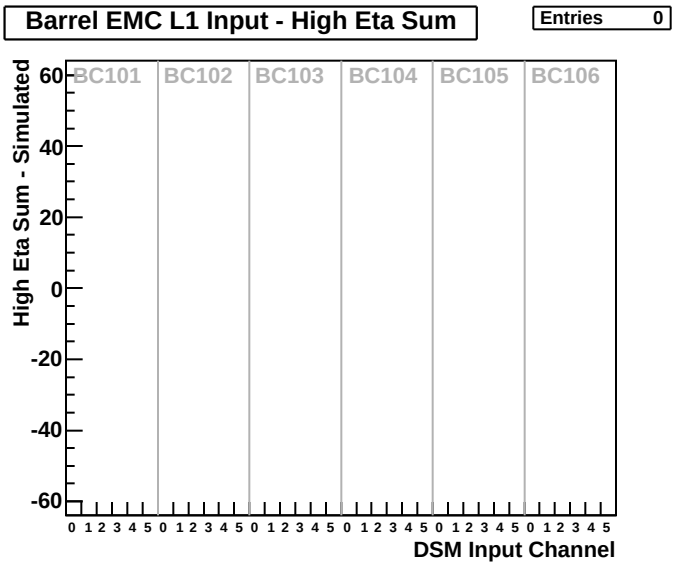

Endcap Jet Patches
Entries 2687238
JP ADC
JP ID

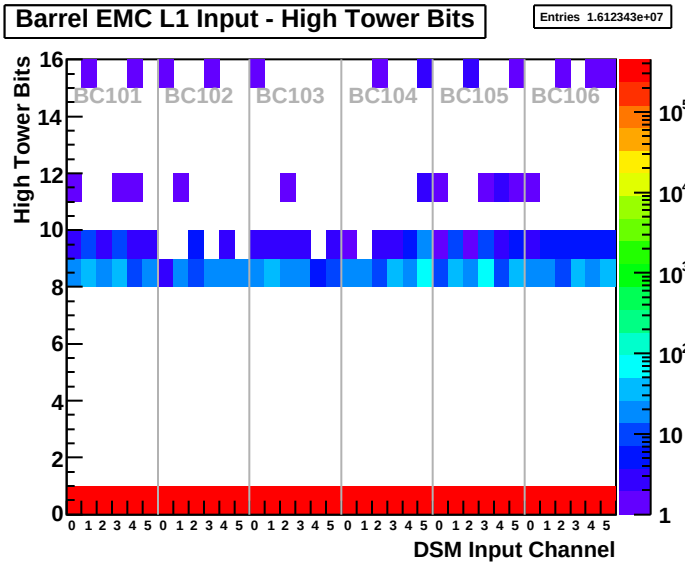

Hybrid Jet Patches
Entries 895746
JP ADC
JP ID

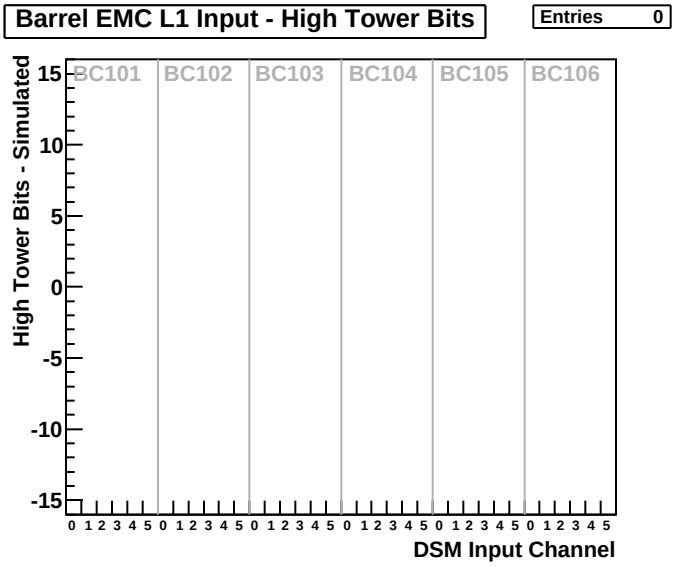

Barrel EMC L1 Input - Low Eta Sum
Entries 1.612343e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

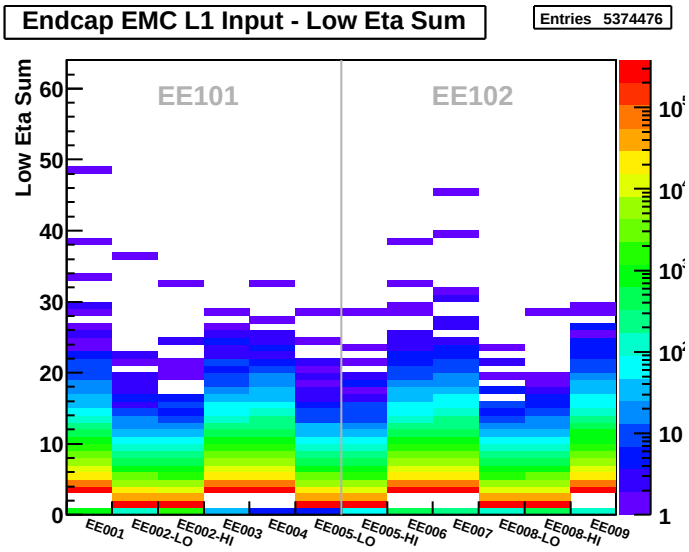

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

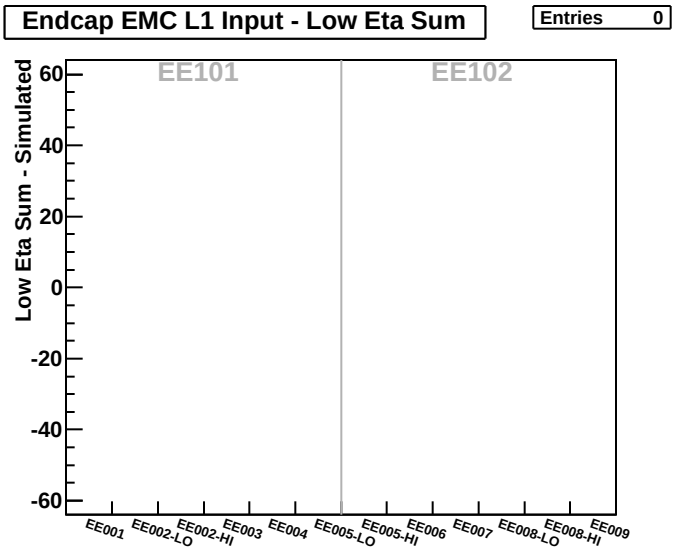

Barrel EMC L1 Input - High Eta Sum
Entries 1.612343e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

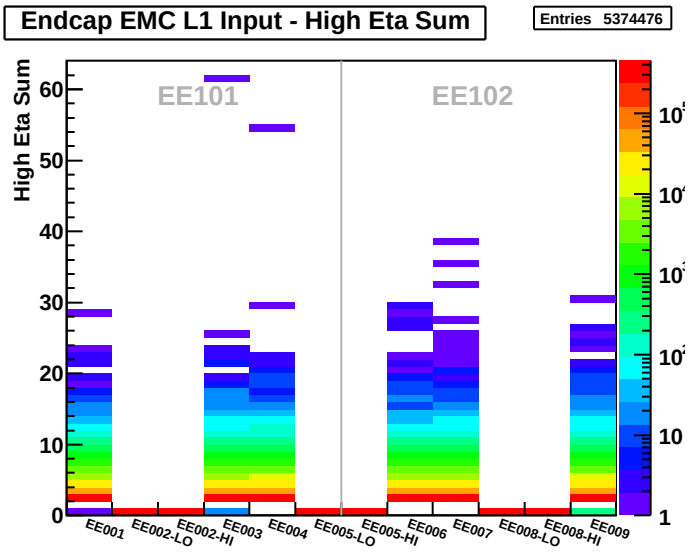

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

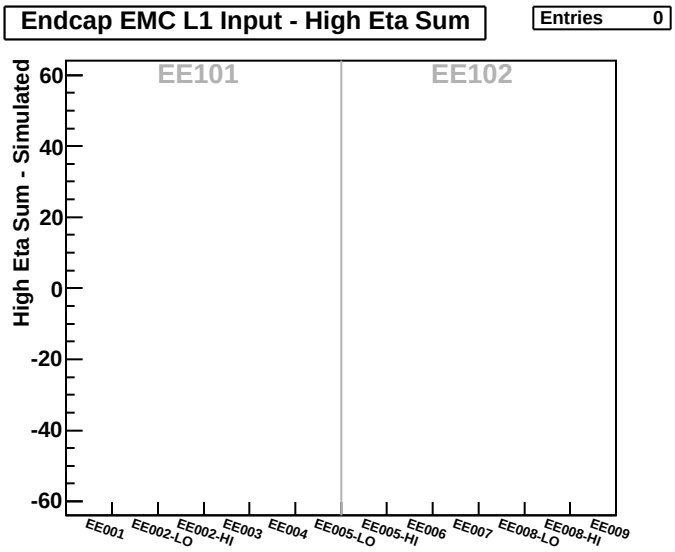

Barrel EMC L1 Input - High Tower Bits
Entries 1.612343e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

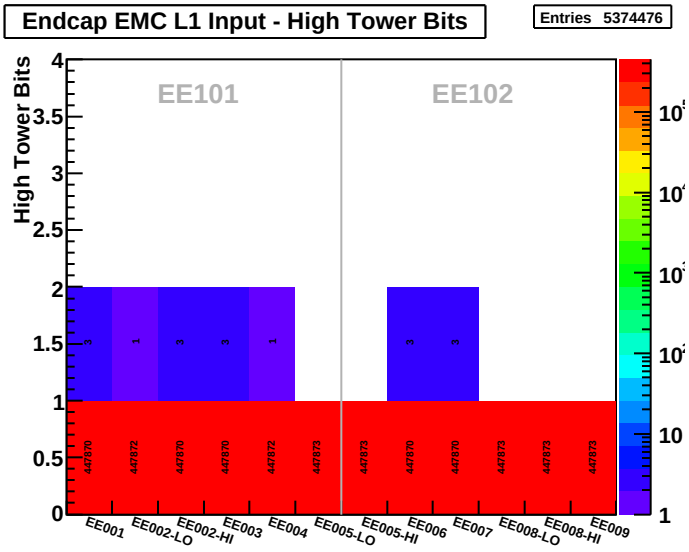

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

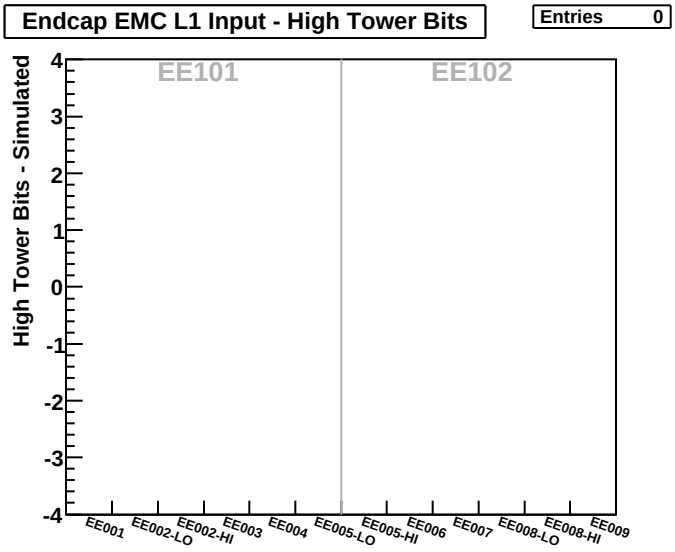

Endcap EMC L1 Input - Low Eta Sum
Entries 5374476
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

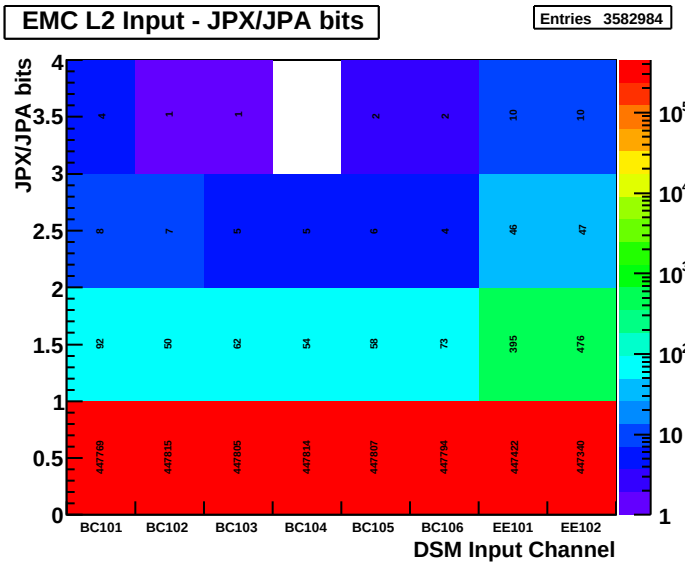

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

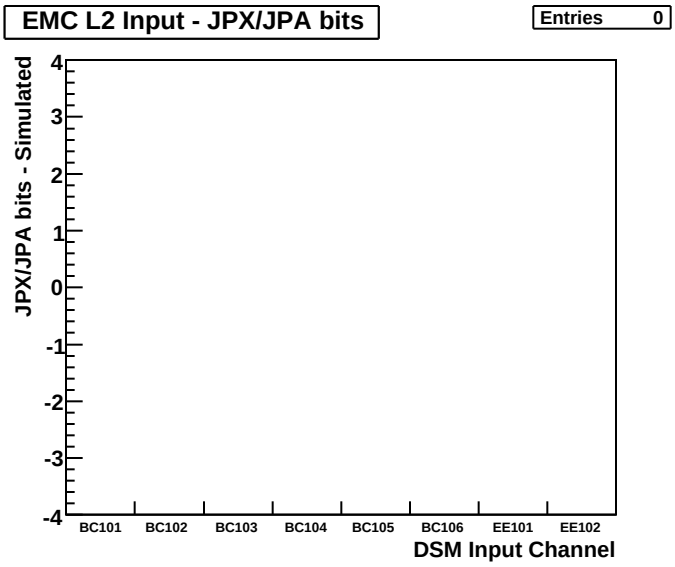

Endcap EMC L1 Input - High Eta Sum
Entries 5374476
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

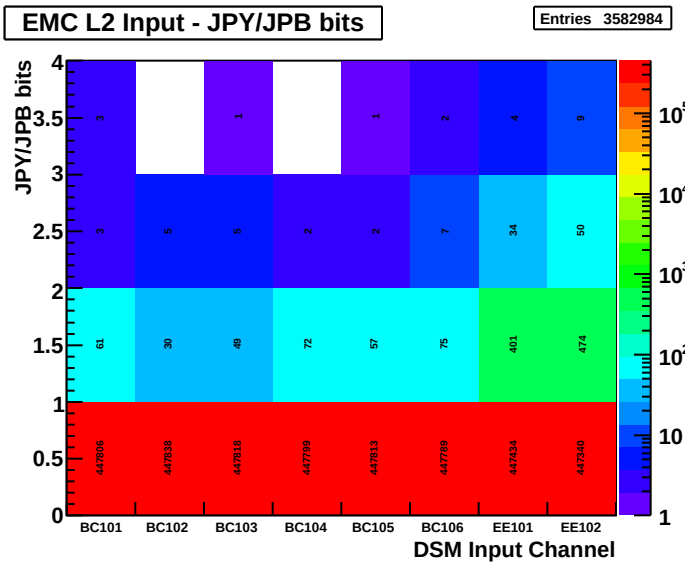

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

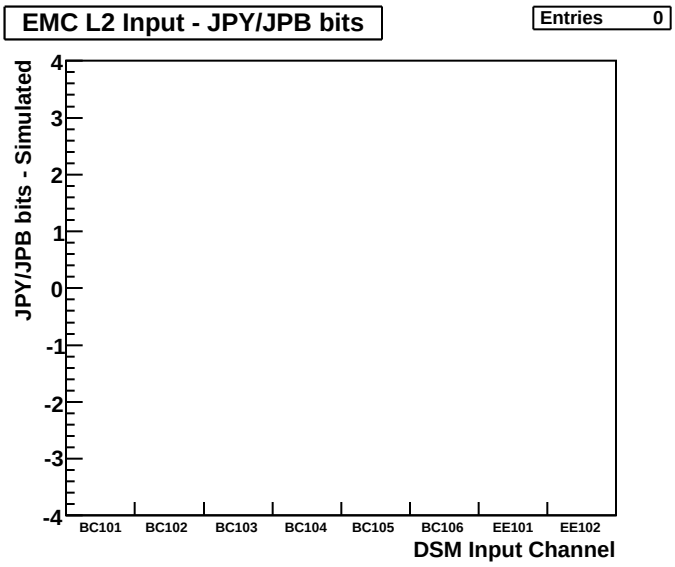

Endcap EMC L1 Input - High Tower Bits
Entries 5374476
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

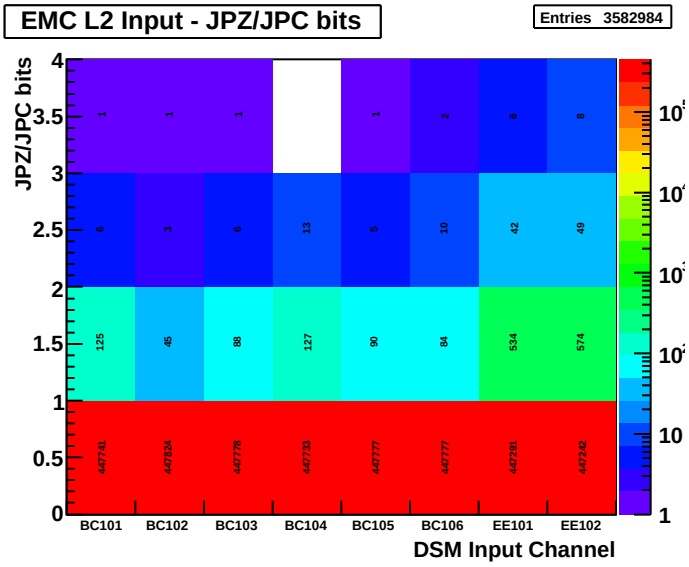

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

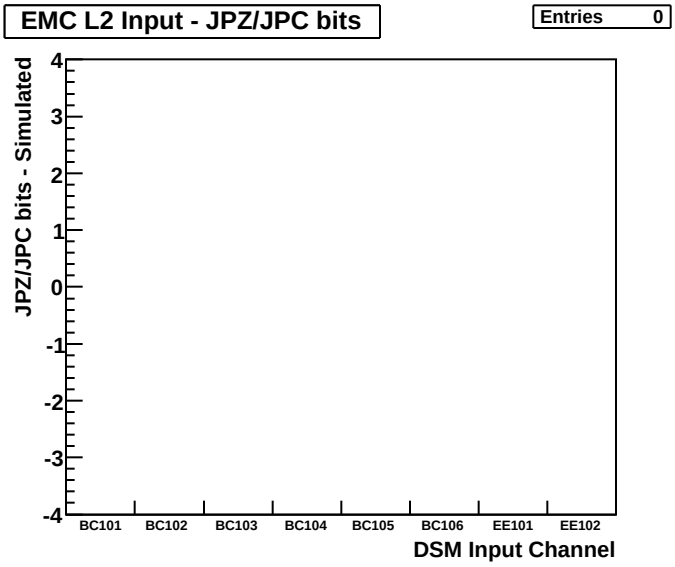

EMC L2 Input - JPX/JPA bits
Entries 3582984
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

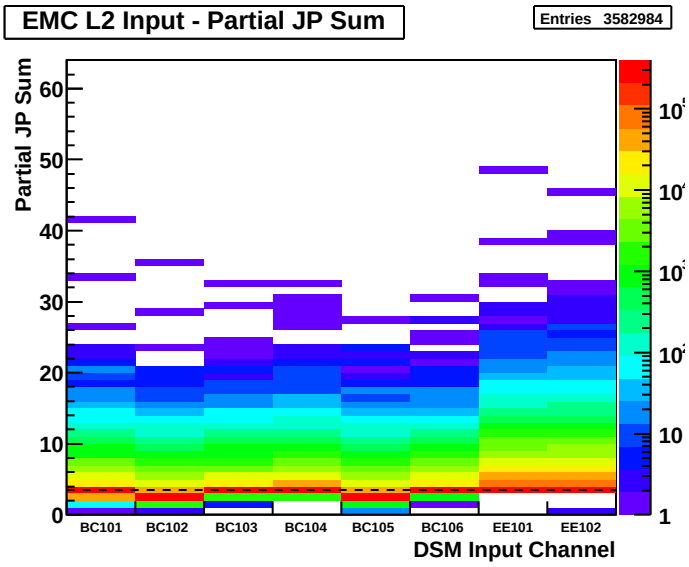

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

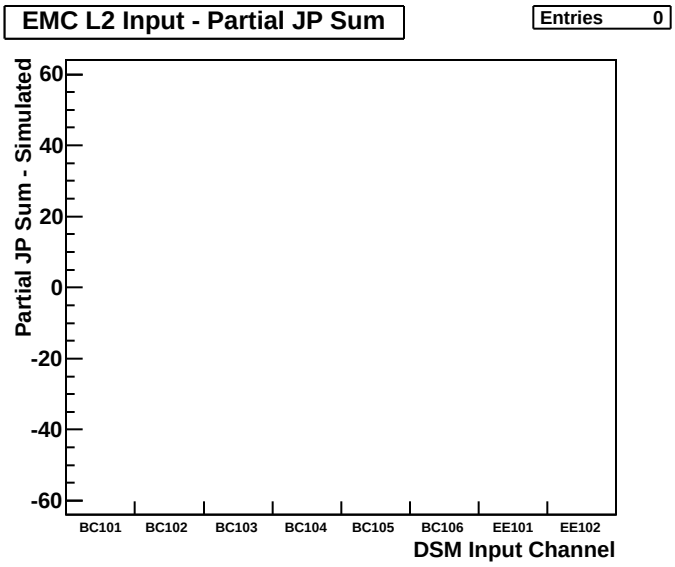

EMC L2 Input - JPY/JPB bits
Entries 3582984
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

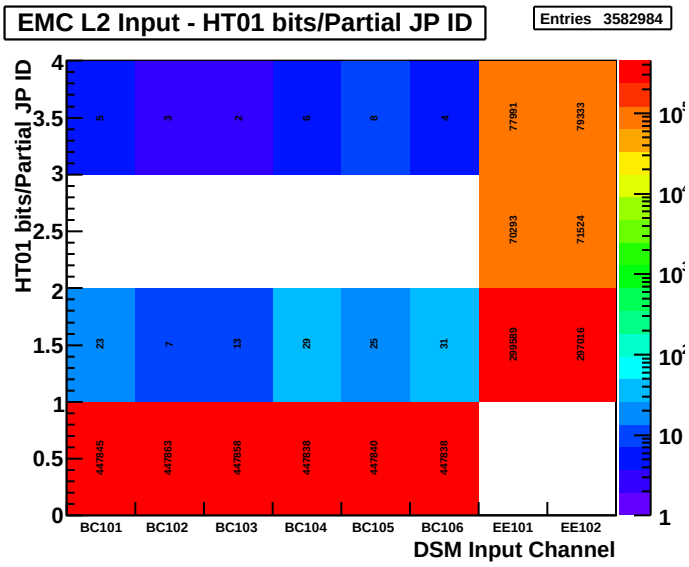

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

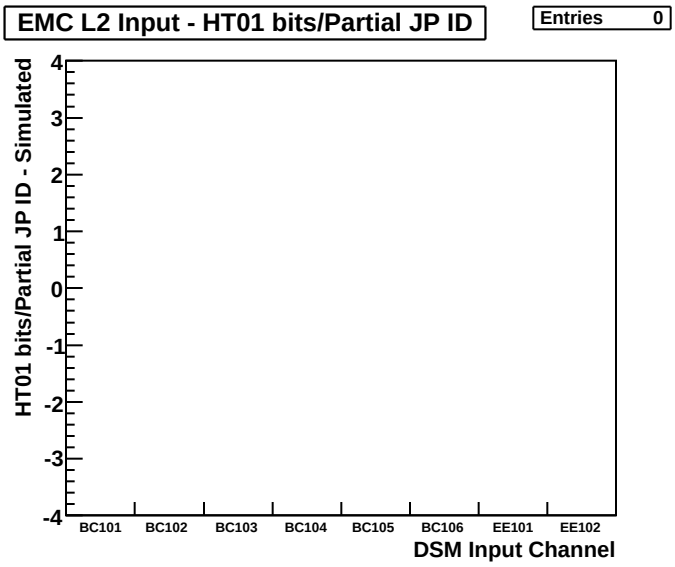

EMC L2 Input - JPZ/JPC bits
Entries 3582984
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

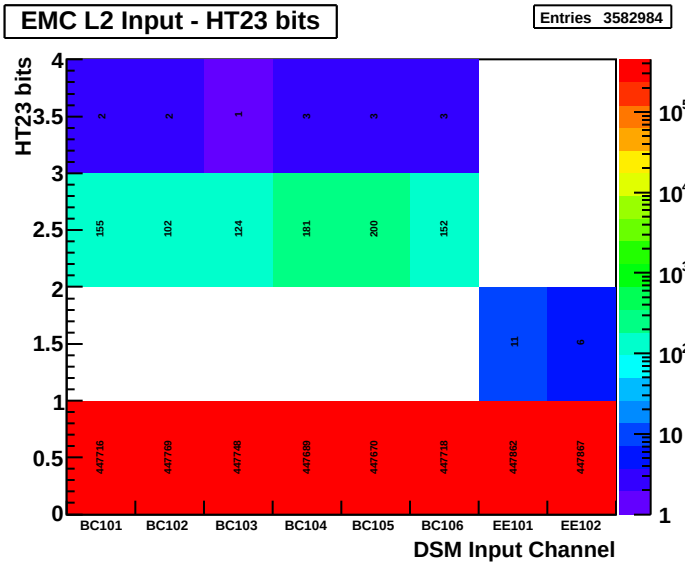

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

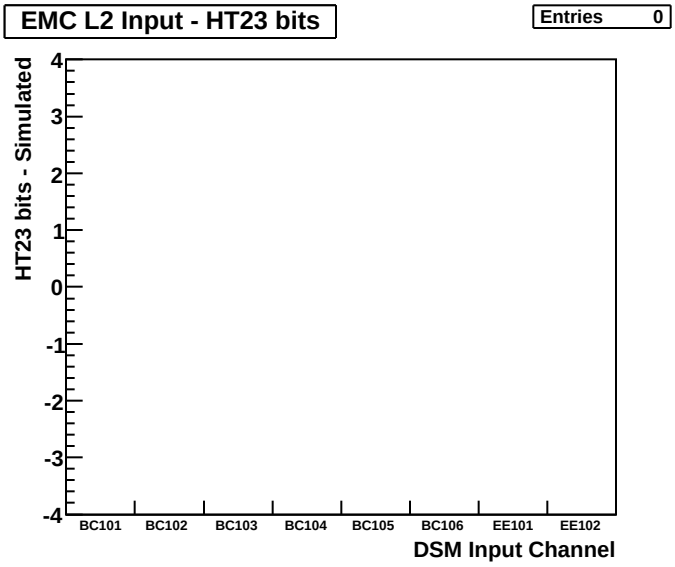

EMC L2 Input - Partial JP Sum
Entries 3582984
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

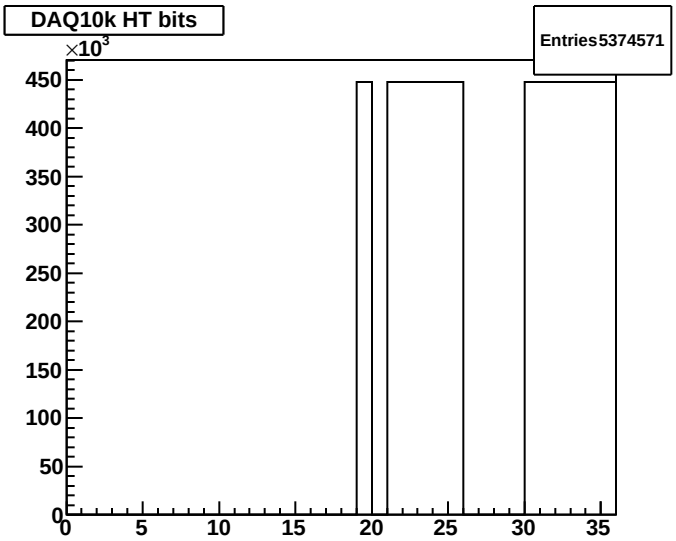

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

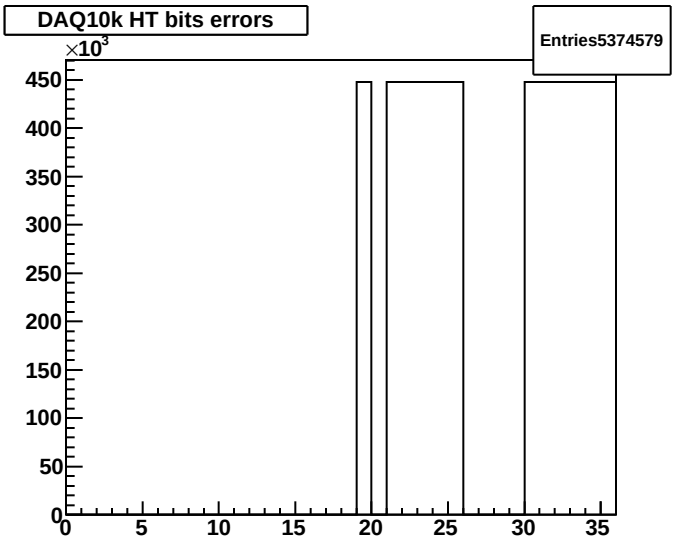

EMC L2 Input - HT01 bits/Partial JP ID
Entries 3582984
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

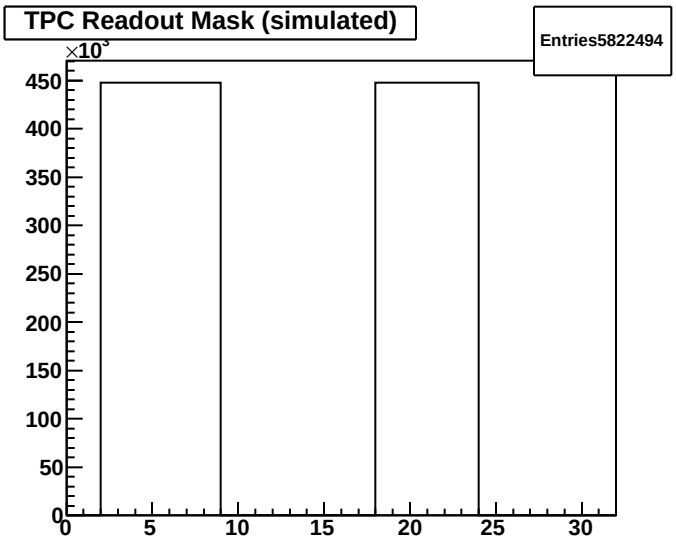

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

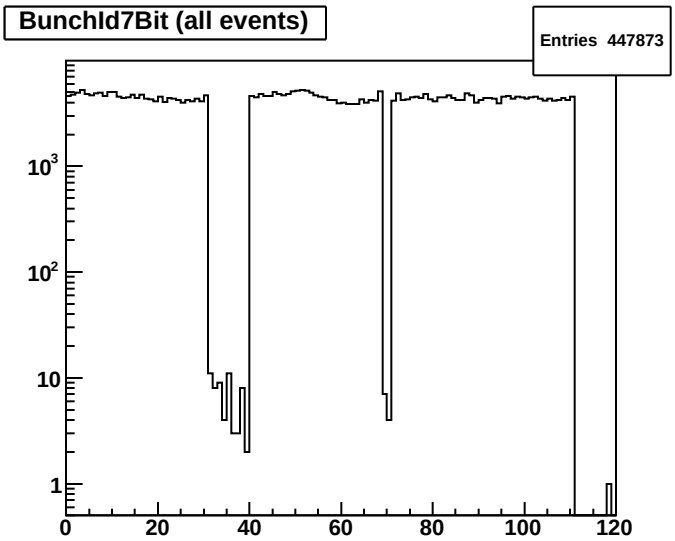

EMC L2 Input - HT23 bits
Entries 3582984
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

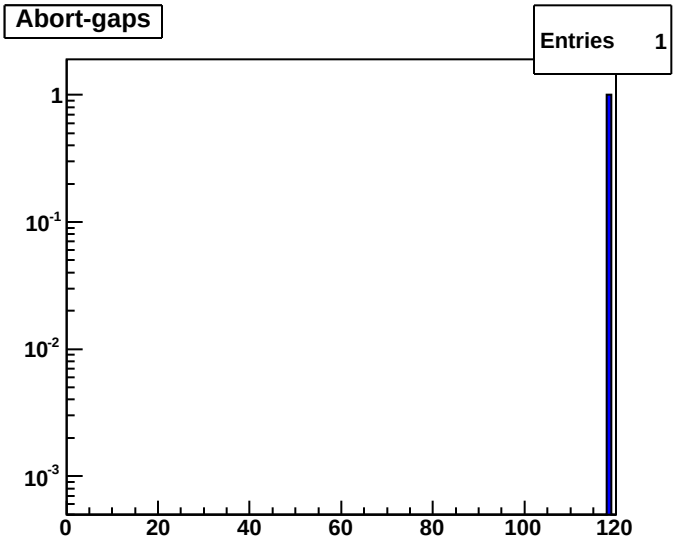

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

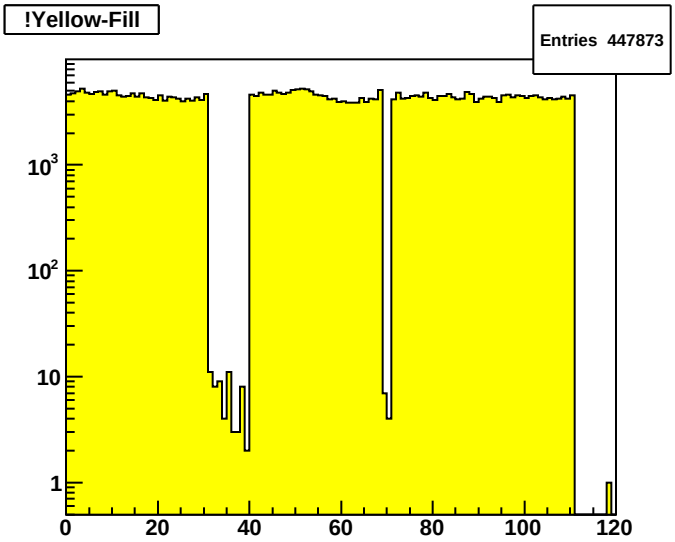

DAQ10k HT bits
Entries5374571
×10^3
450
400
350
300
250
200
150
100
50
0
0 5 10 15 20 25 30 35

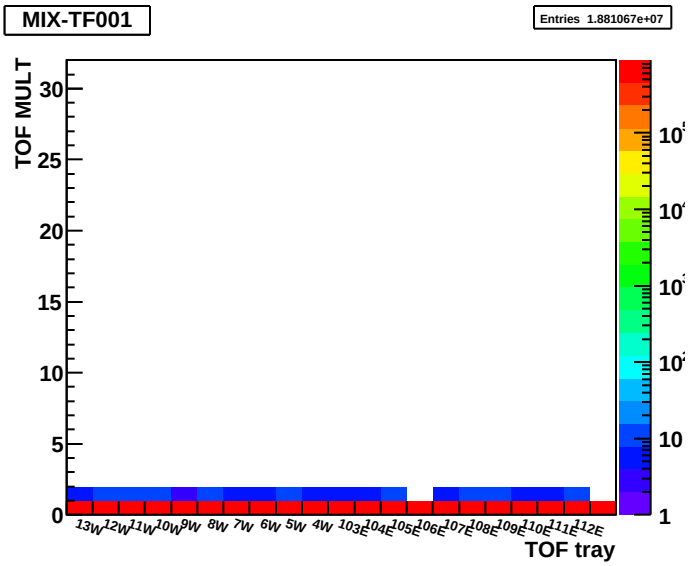

DAQ10k HT bits errors
Entries5374579
×10^3
450
400
350
300
250
200
150
100
50
0
0 5 10 15 20 25 30 35

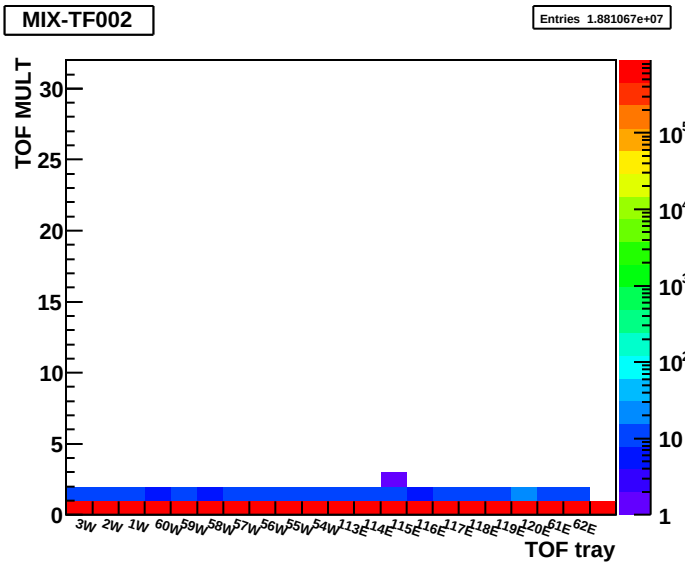

TPC Readout Mask (simulated)
Entries5822494
×10^3
450
400
350
300
250
200
150
100
50
0
0 5 10 15 20 25 30

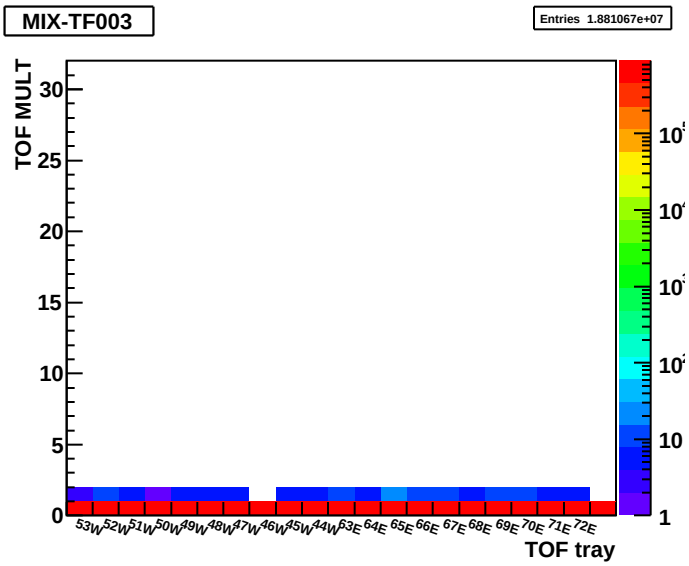

BunchId7Bit (all events)
Entries 447873
10^3
10^2
10
1
0 20 40 60 80 100 120

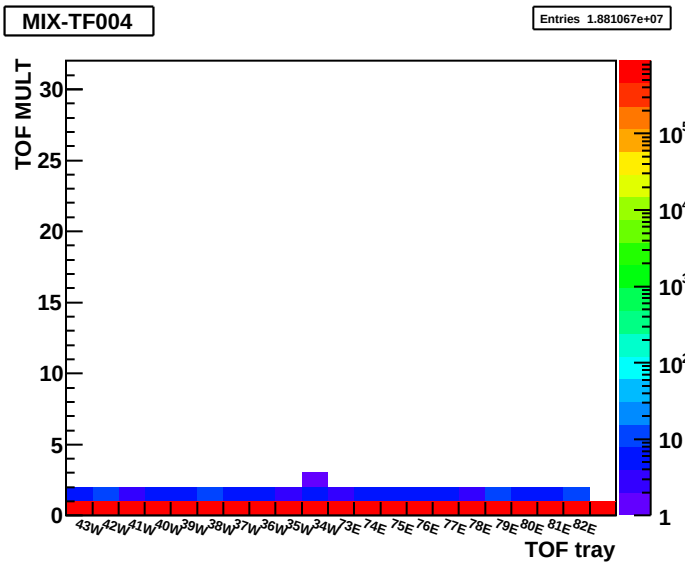

Abort-gaps
Entries 1
1
10^-1
10^-2
10^-3
0 20 40 60 80 100 120

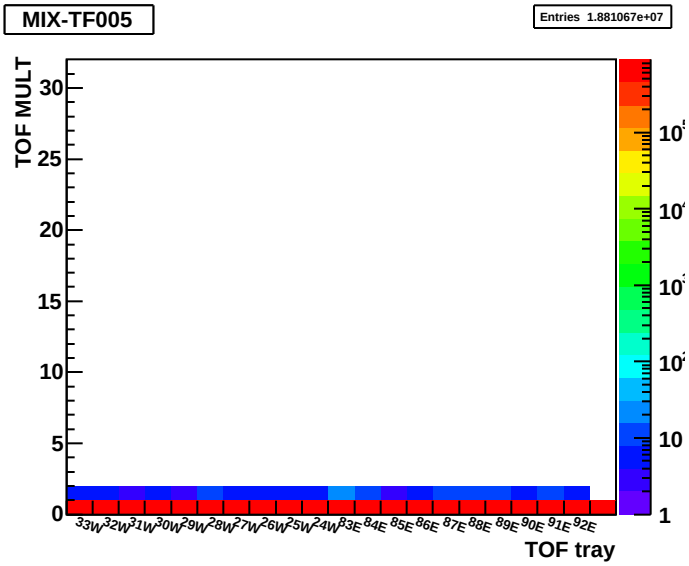

!Yellow-Fill
Entries 447873
10^3
10^2
10
1
0 20 40 60 80 100 120

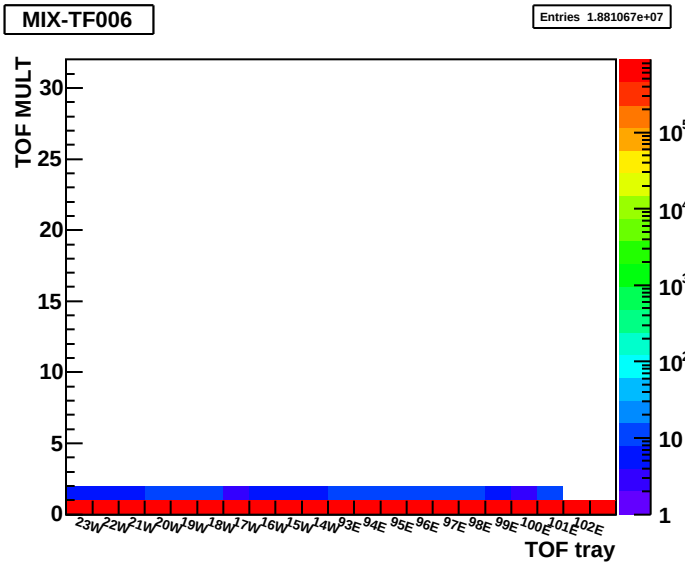

MIX-TF001
Entries 1.881067e+07
TOF MULT
TOF tray

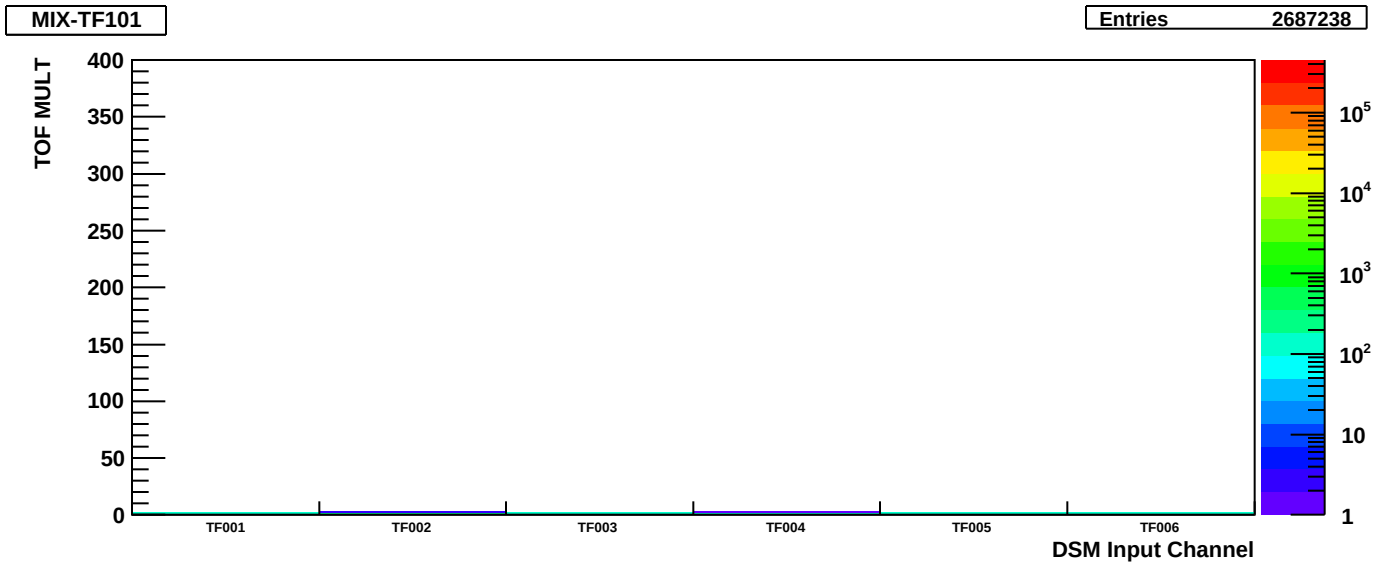

MIX-TF002
Entries 1.881067e+07
TOF MULT
TOF tray

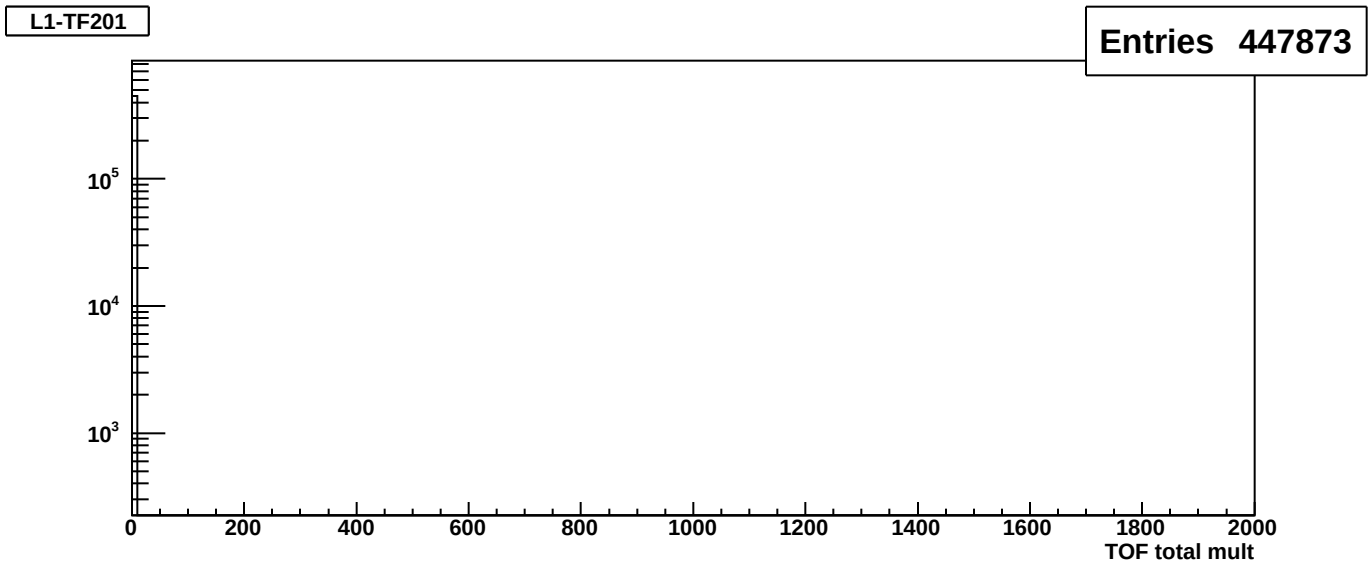

MIX-TF003
Entries 1.881067e+07
TOF MULT
TOF tray

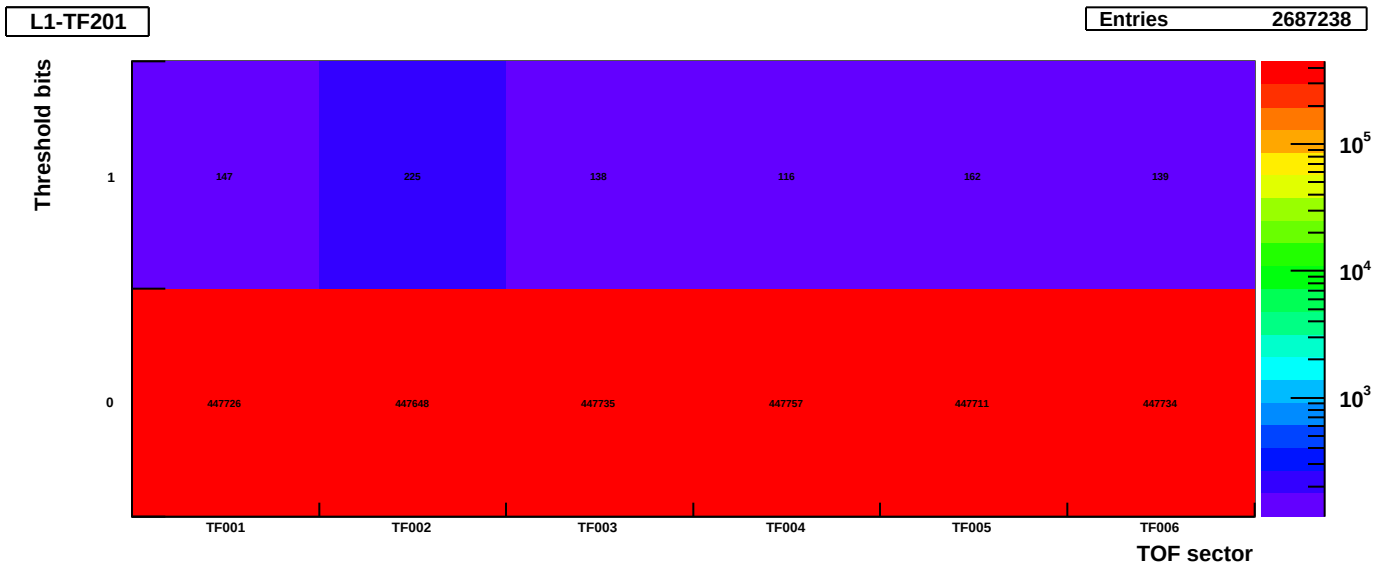

MIX-TF004
Entries 1.881067e+07
TOF MULT
TOF tray

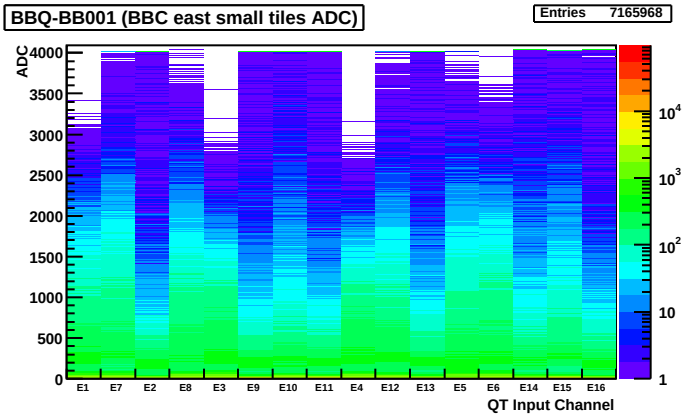

MIX-TF005
Entries 1.881067e+07
TOF MULT
TOF tray

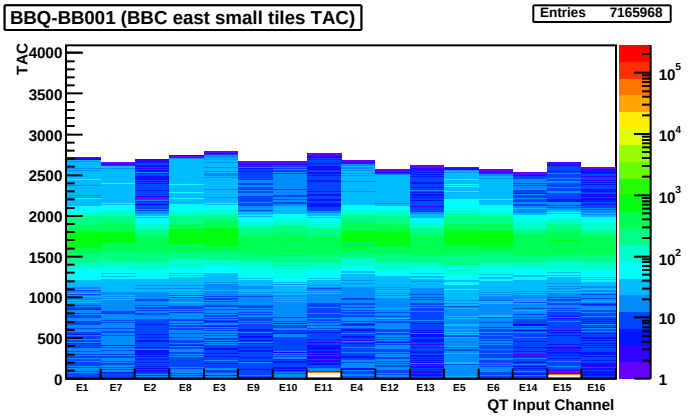

MIX-TF006
Entries 1.881067e+07
TOF MULT
TOF tray

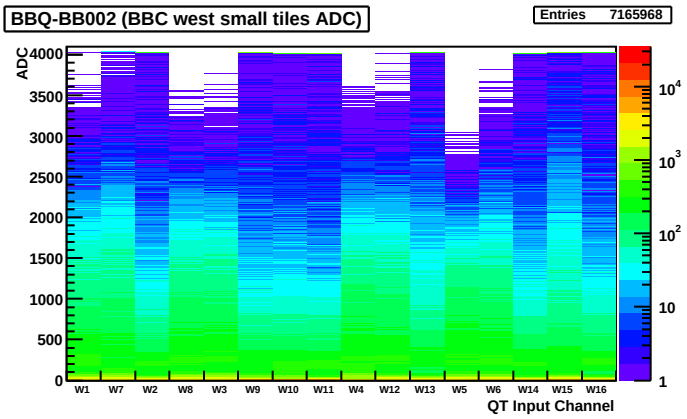

MIX-TF101
Entries 2687238
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

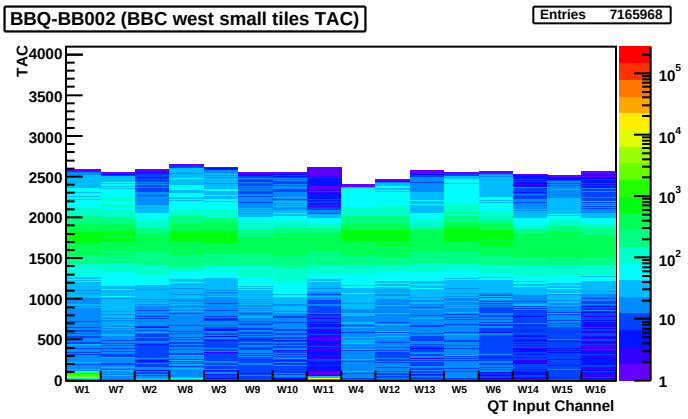

L1-TF201
Entries 447873
10^5
10^4
10^3
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

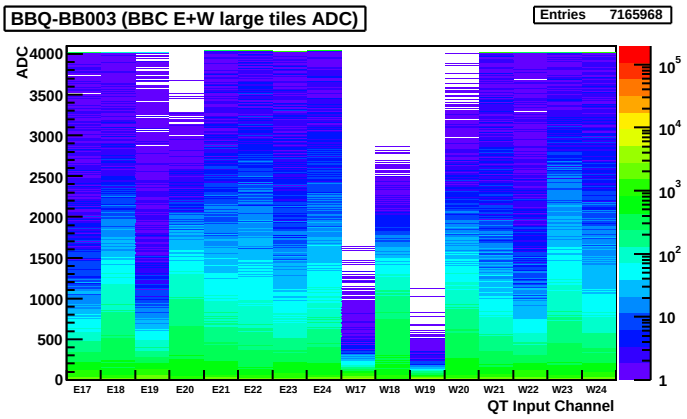

L1-TF201
Entries 2687238
Threshold bits
1
0
147
225
138
116
162
139
447726
447648
447735
447757
447711
447734
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5
10^4
10^3

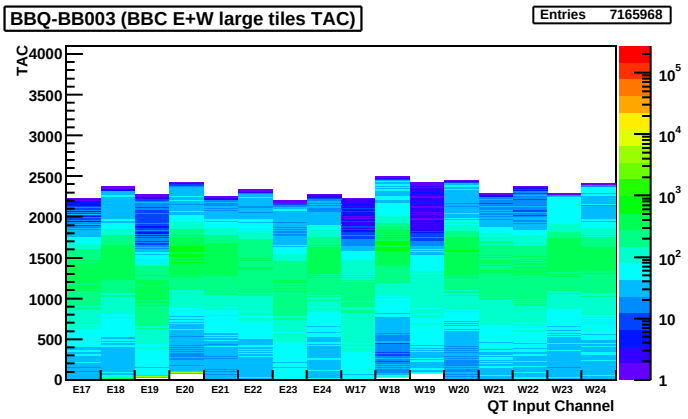

BBQ-BB001 (BBC east small tiles ADC)
Entries 7165968
ADC
QT Input Channel

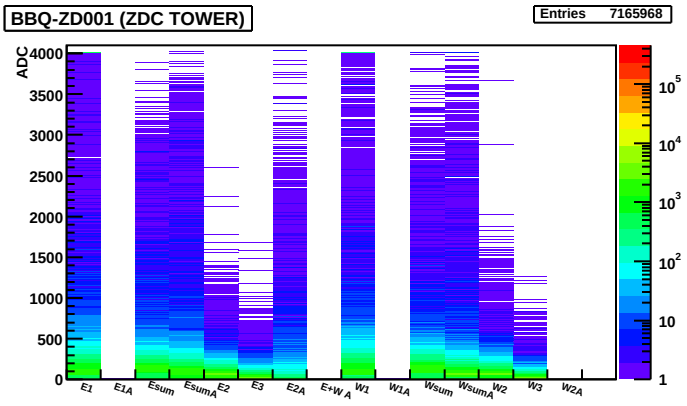

BBQ-BB001 (BBC east small tiles TAC)
Entries 7165968
TAC
QT Input Channel

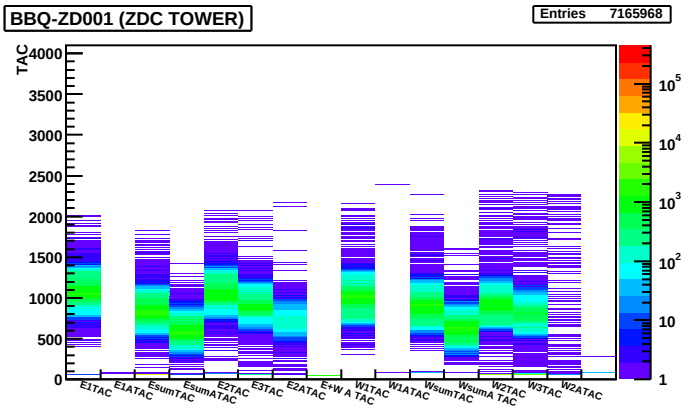

BBQ-BB002 (BBC west small tiles ADC)
Entries 7165968
ADC
QT Input Channel

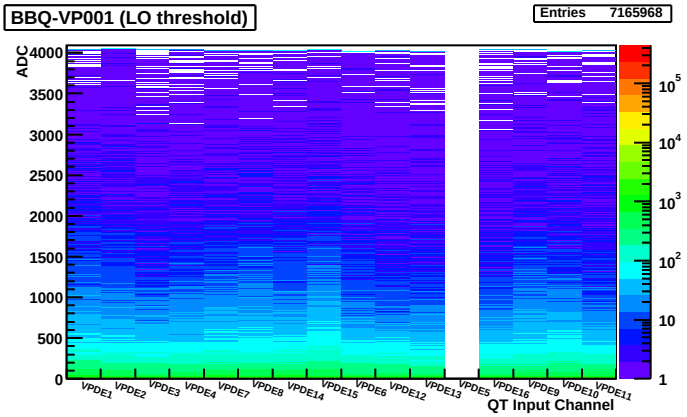

BBQ-BB002 (BBC west small tiles TAC)
Entries 7165968
TAC
QT Input Channel

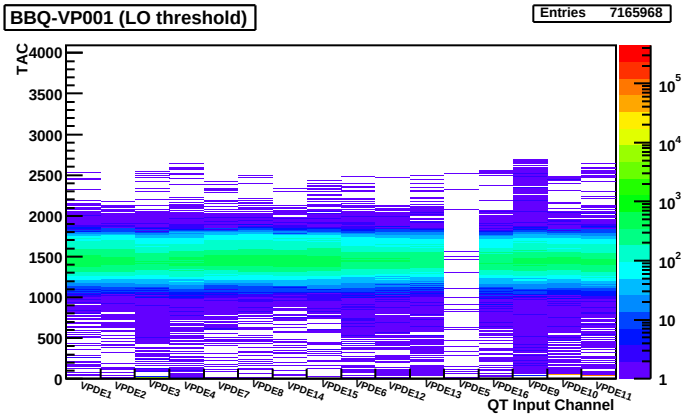

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 7165968
ADC
QT Input Channel

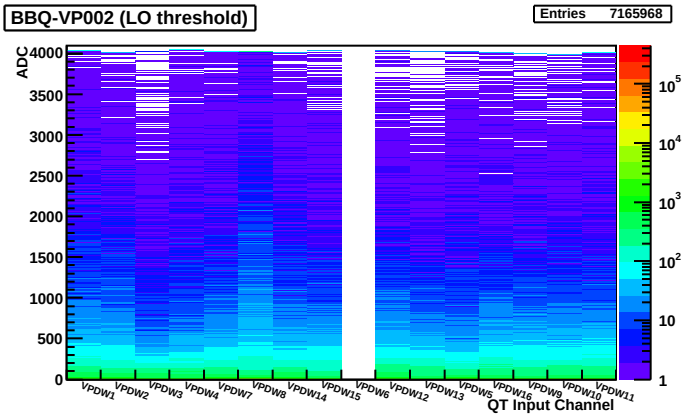

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 7165968
TAC
QT Input Channel

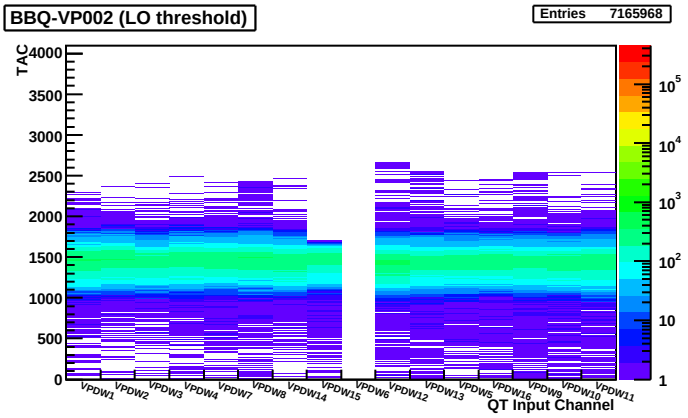

BBQ-ZD001 (ZDC TOWER)
Entries 7165968
ADC

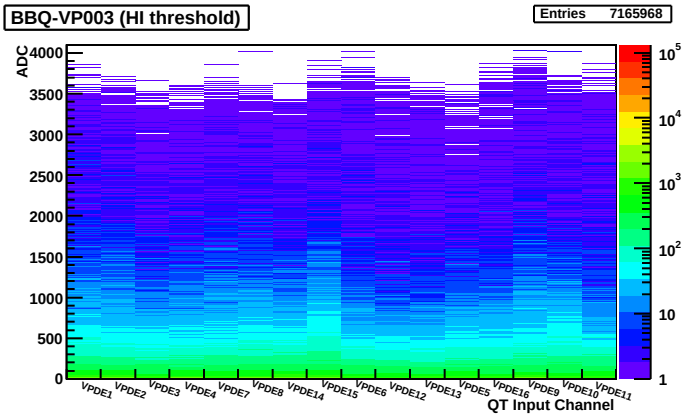

BBQ-ZD001 (ZDC TOWER)
Entries 7165968
TAC

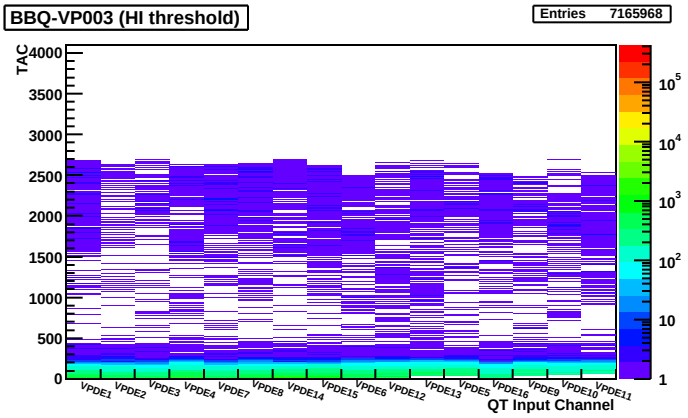

BBQ-VP001 (LO threshold)
Entries 7165968
ADC
QT Input Channel

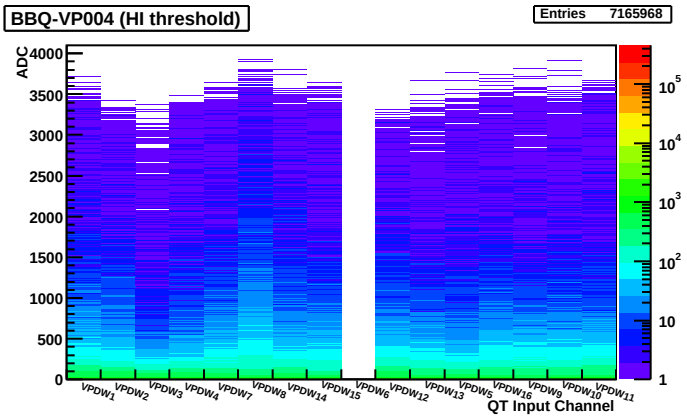

BBQ-VP001 (LO threshold)
Entries 7165968
TAC
QT Input Channel

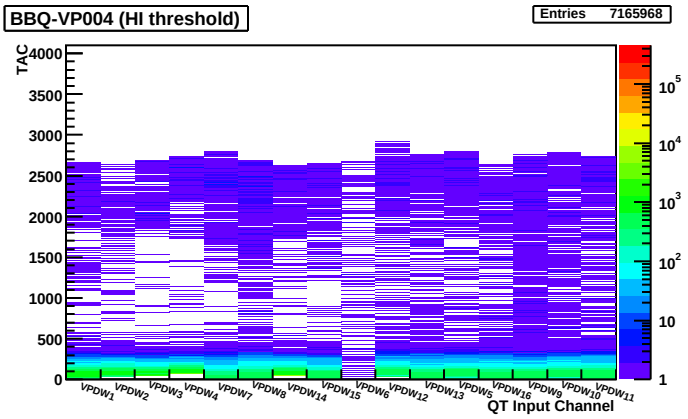

BBQ-VP002 (LO threshold)
Entries 7165968
ADC
QT Input Channel

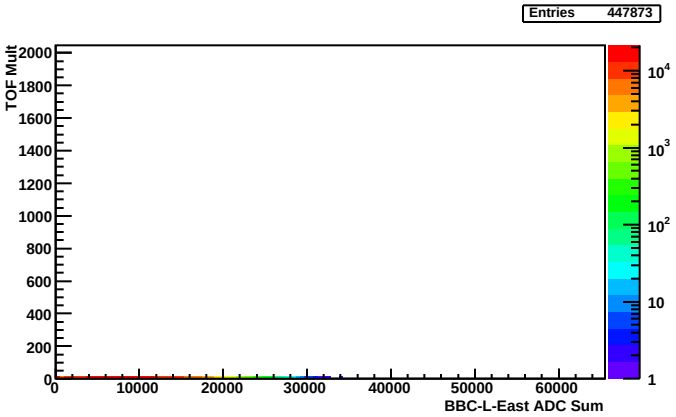

BBQ-VP002 (LO threshold)
Entries 7165968
TAC
QT Input Channel

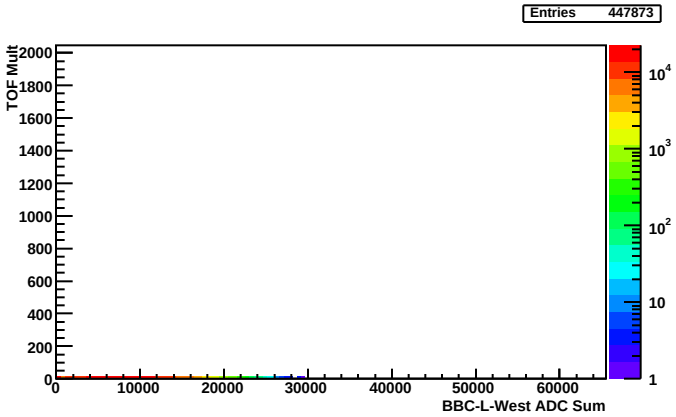

BBQ-VP003 (HI threshold)
Entries 7165968
ADC
QT Input Channel

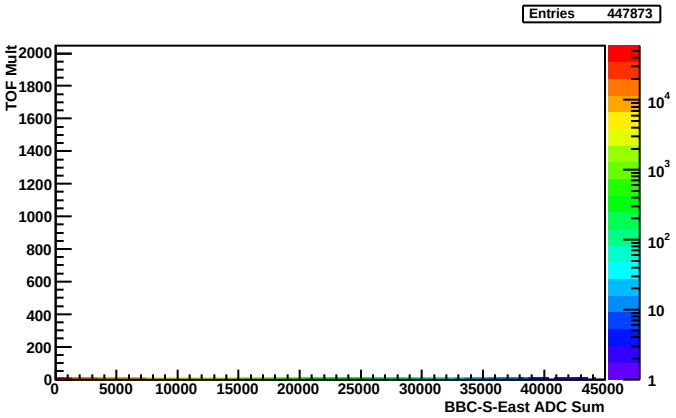

BBQ-VP003 (HI threshold)
Entries 7165968
TAC
QT Input Channel

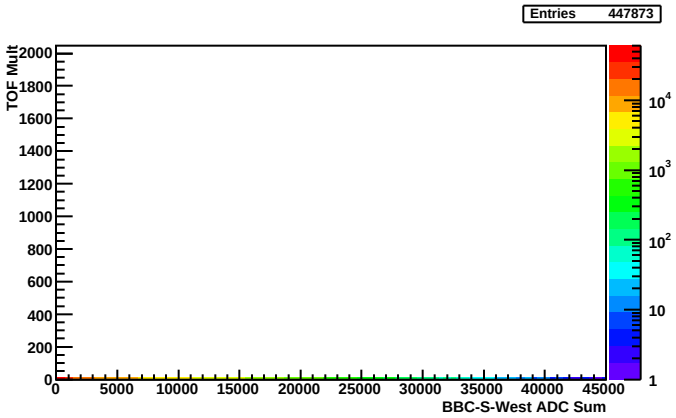

BBQ-VP004 (HI threshold)
Entries 7165968
ADC
QT Input Channel

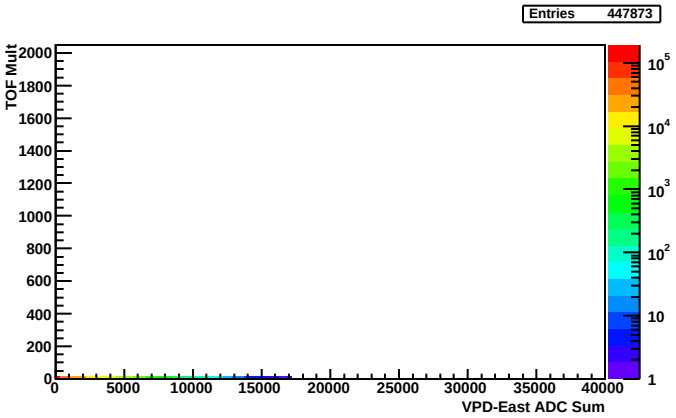

BBQ-VP004 (HI threshold)
Entries 7165968
TAC
QT Input Channel

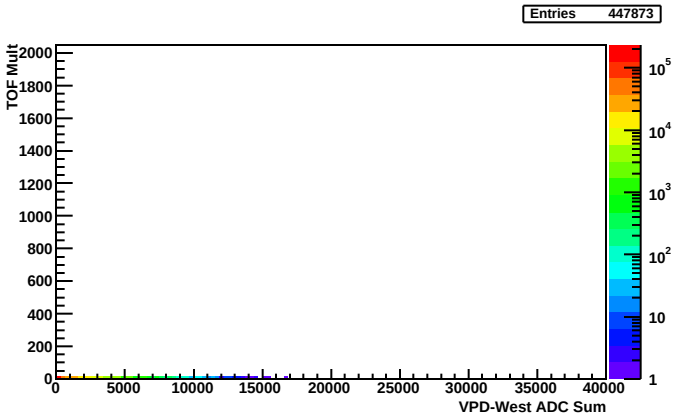

Entries 447873
TOF Mult
BBC-L-East ADC Sum

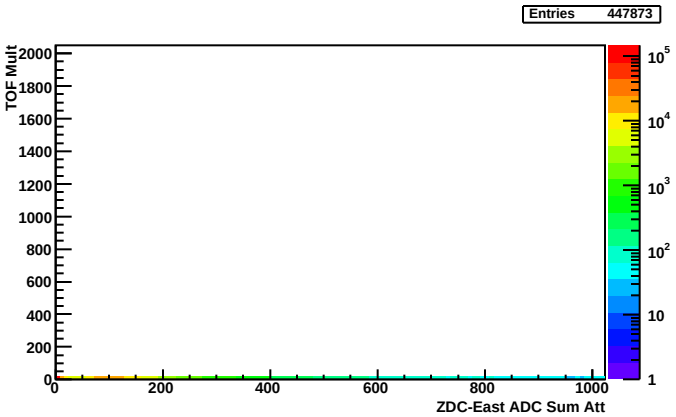

Entries 447873
TOF Mult
BBC-L-West ADC Sum

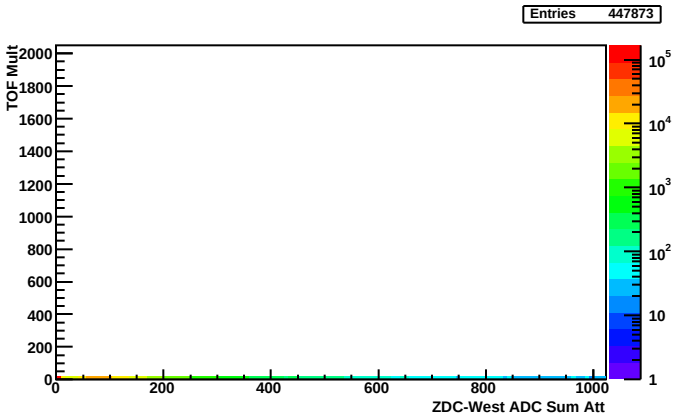

Entries 447873
TOF Mult
BBC-S-East ADC Sum

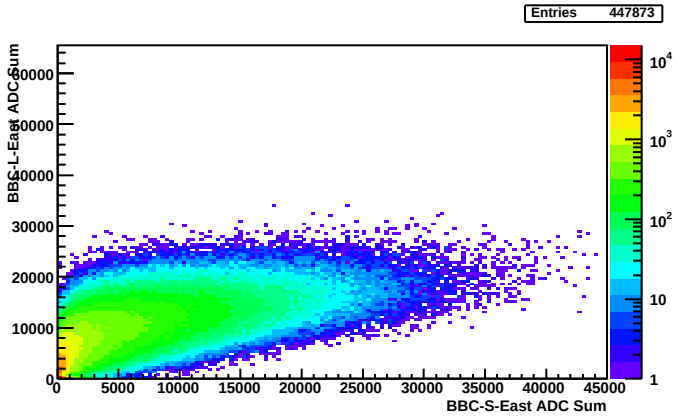

Entries 447873
TOF Mult
BBC-S-West ADC Sum

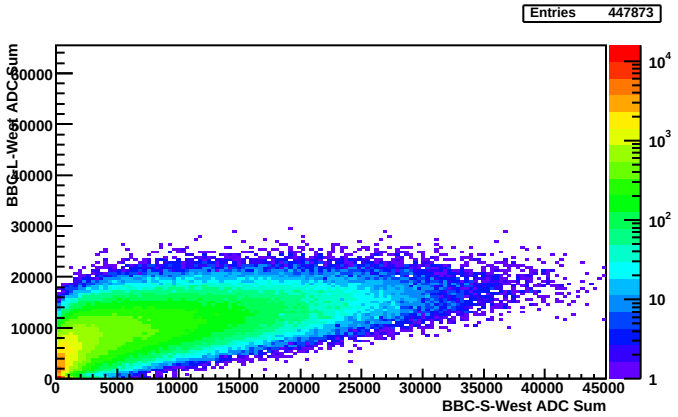

Entries 447873
TOF Mult
VPD-East ADC Sum

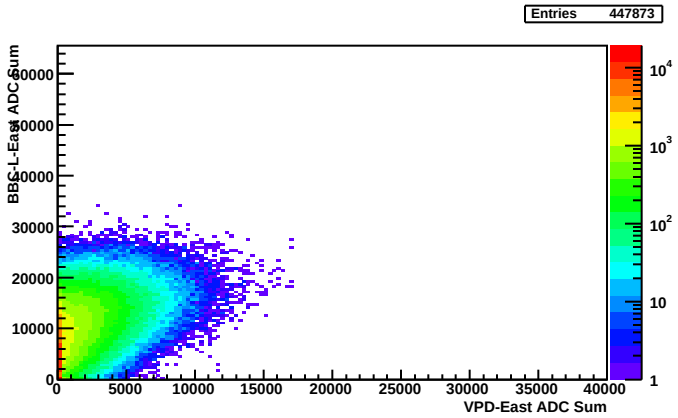

Entries 447873
TOF Mult
VPD-West ADC Sum

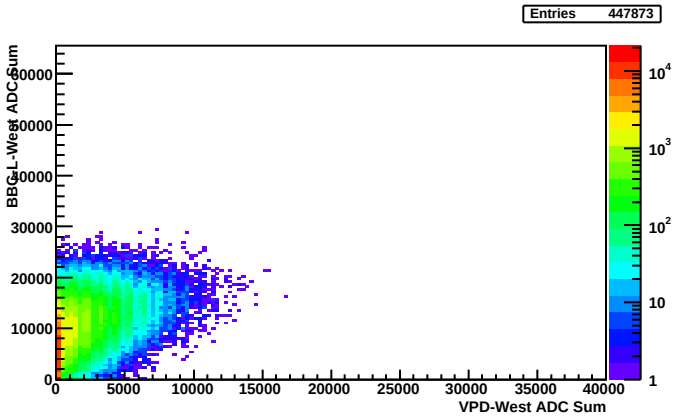

Entries 447873
TOF Mult
ZDC-East ADC Sum Att

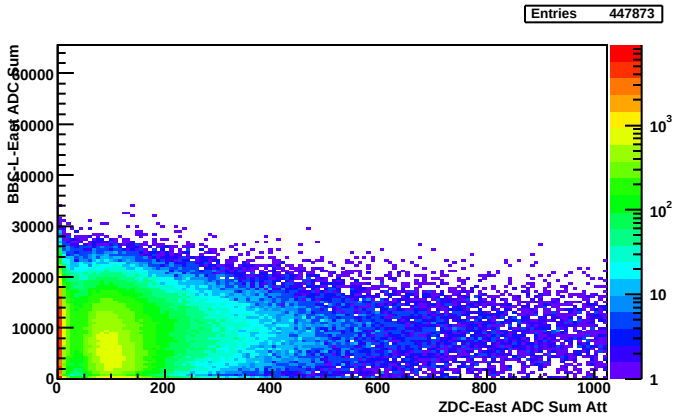

Entries 447873
TOF Mult
ZDC-West ADC Sum Att

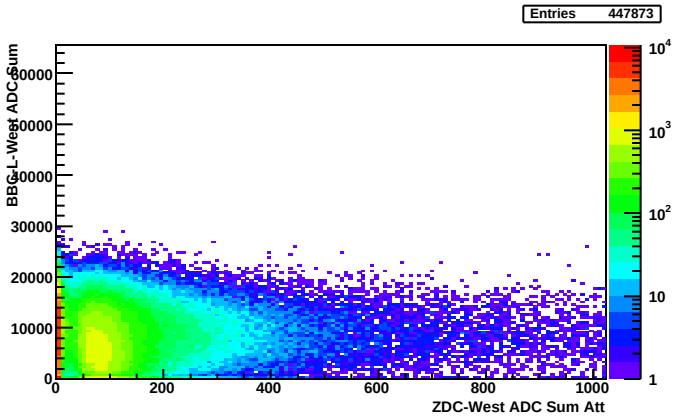

Entries 447873
BBC-L-East ADC Sum
BBC-S-East ADC Sum

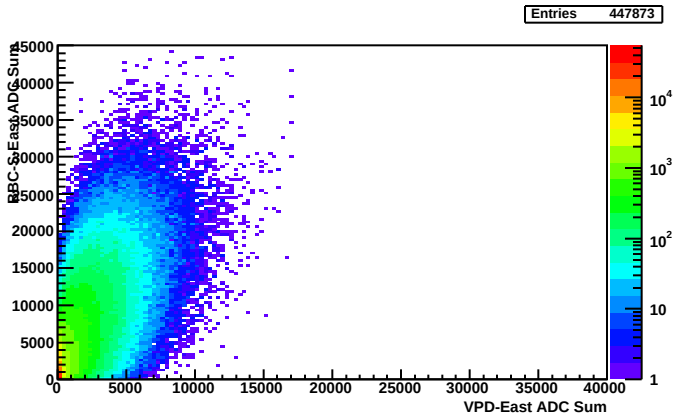

Entries 447873
BBC-L-West ADC Sum
BBC-S-West ADC Sum

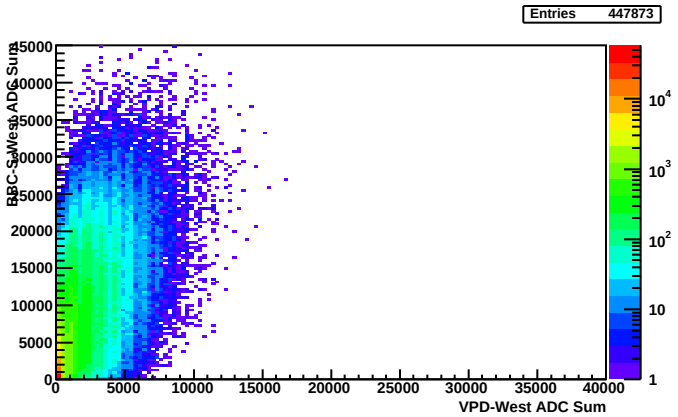

Entries 447873
BBC-L-East ADC Sum
VPD-East ADC Sum

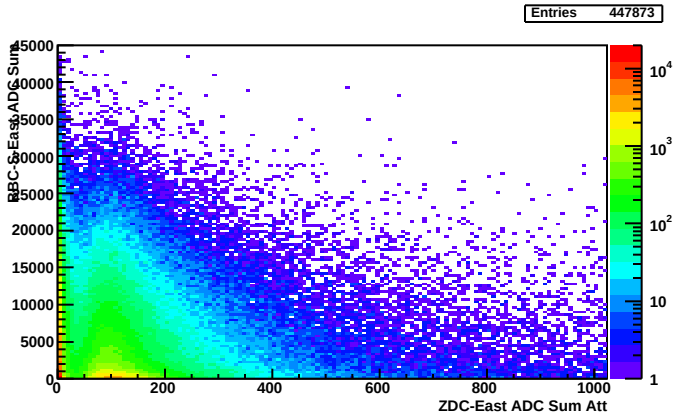

Entries 447873
BBC-L-West ADC Sum
VPD-West ADC Sum

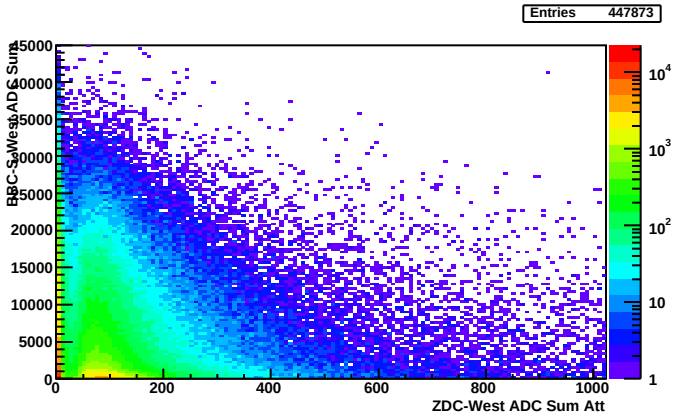

Entries 447873
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

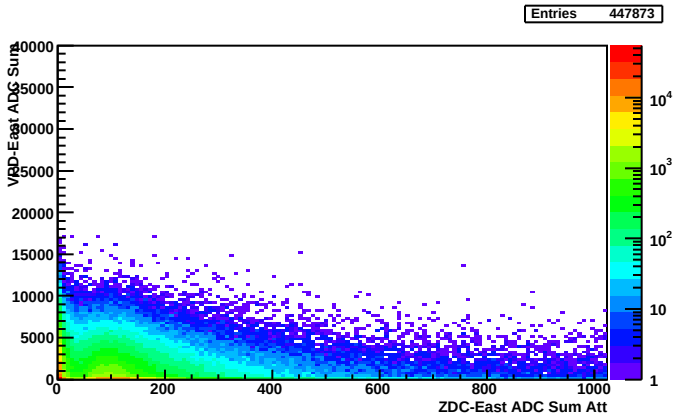

Entries 447873
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

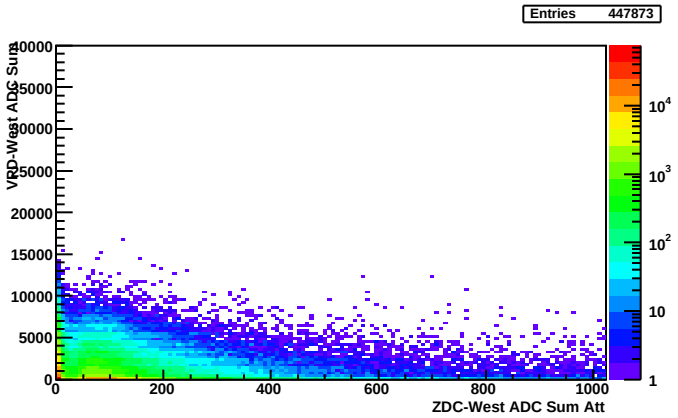

Entries 447873
BBC-S-East ADC Sum
VPD-East ADC Sum

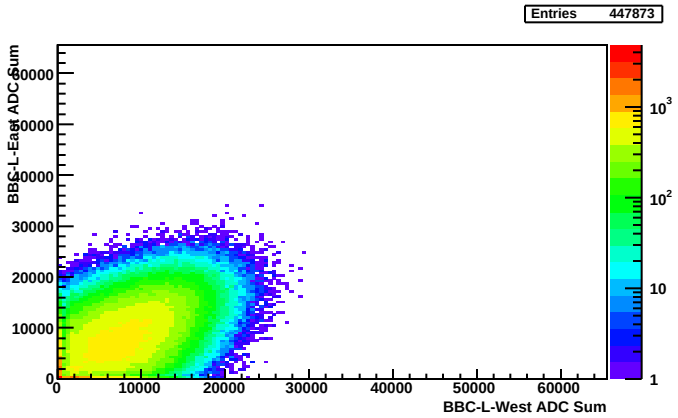

Entries 447873
BBC-S-West ADC Sum
VPD-West ADC Sum

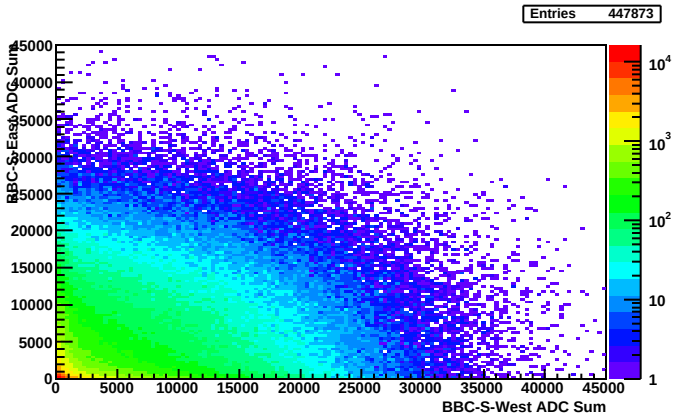

Entries 447873
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

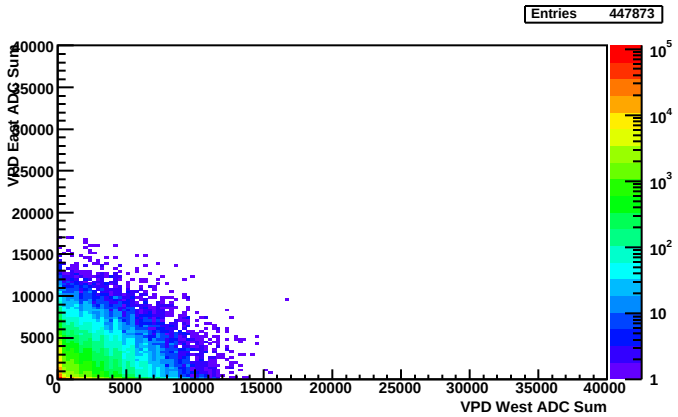

Entries 447873
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

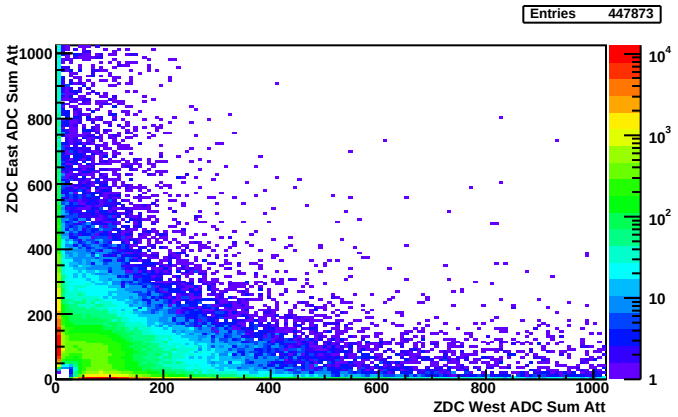

Entries 447873
VPD-East ADC Sum
ZDC-East ADC Sum Att

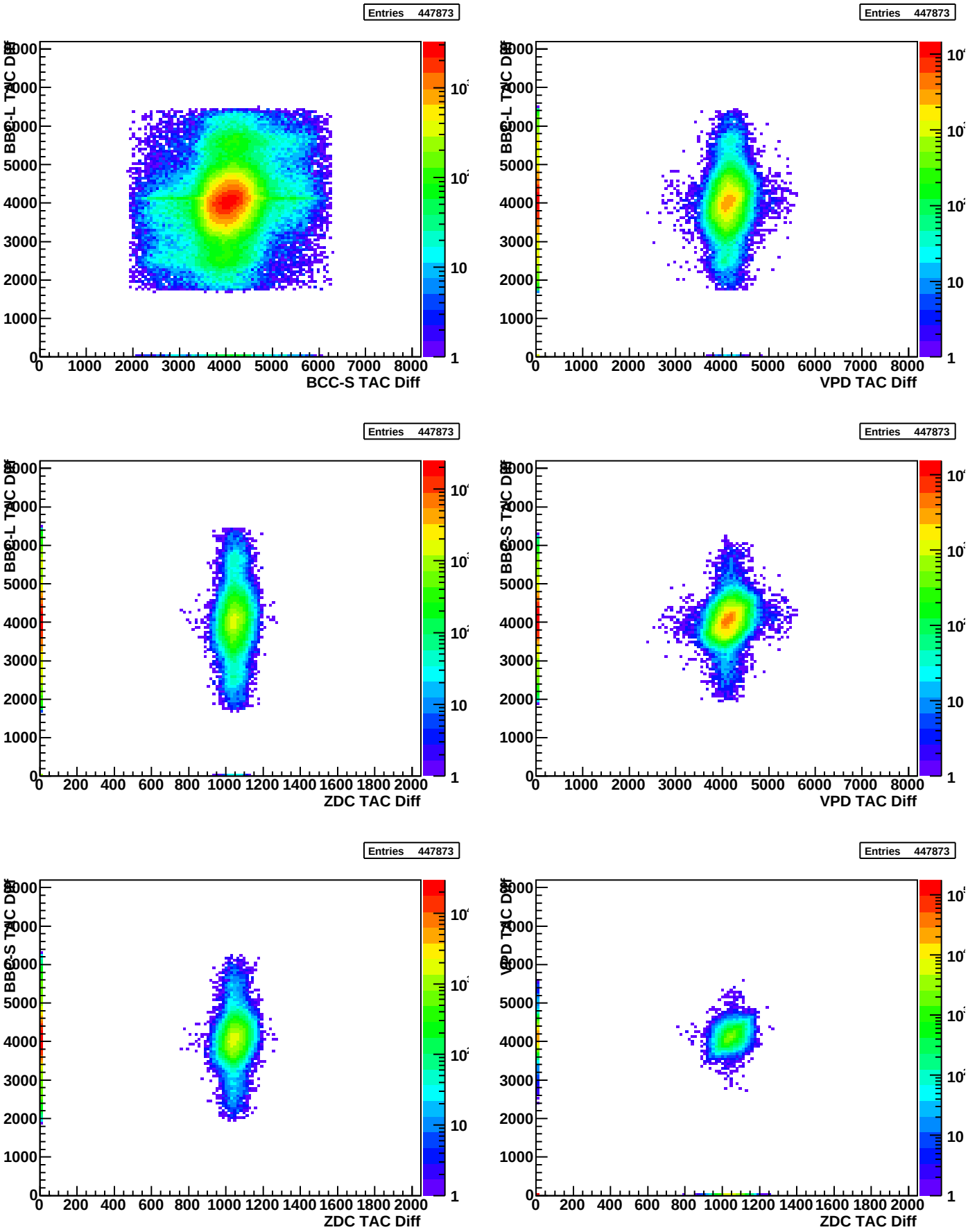

Entries 447873
VPD-West ADC Sum
ZDC-West ADC Sum Att


Entries 447873
BBC-L-East ADC Sum
BBC-L-West ADC Sum


Entries 447873
BBC-S-East ADC Sum
BBC-S-West ADC Sum


Entries 447873
VPD East ADC Sum
VPD West ADC Sum


Entries 447873
ZDC East ADC Sum Att
ZDC West ADC Sum Att


Entries 447873
BBC-L TAC Diff
BCC-S TAC Diff
Entries 447873
BBC-L TAC Diff
VPD TAC Diff
Entries 447873
BBC-L TAC Diff
ZDC TAC Diff
Entries 447873
BBC-S TAC Diff
VPD TAC Diff
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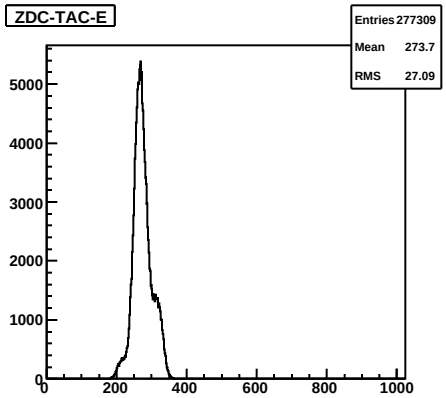
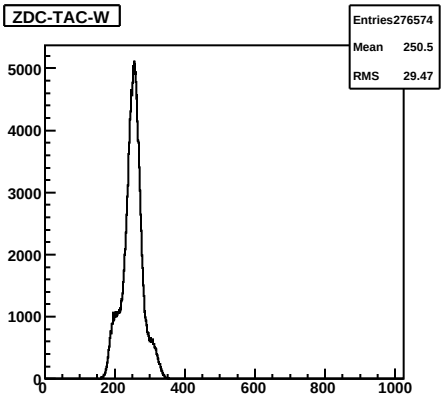
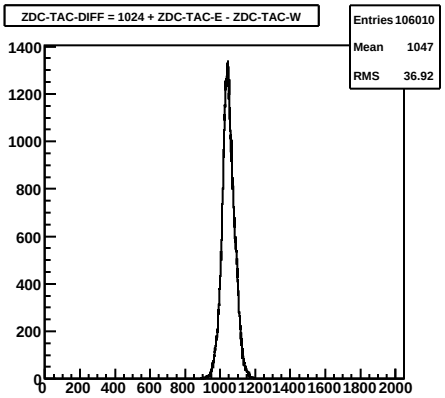
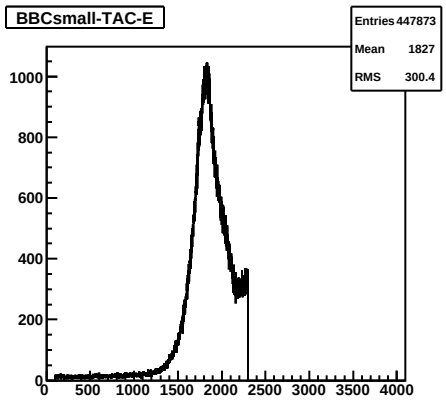
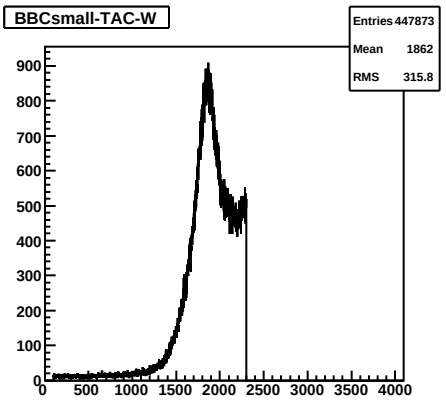
BBC-S TAC Diff
ZDC TAC Diff
Entries 447873
VPD TAC Diff
ZDC TAC Diff

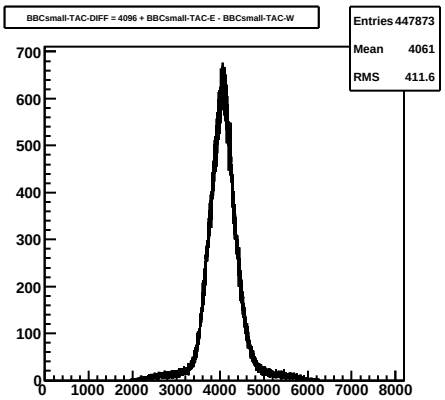

ZDC-TAC-E
Entries 277309
Mean 273.7
RMS 27.09

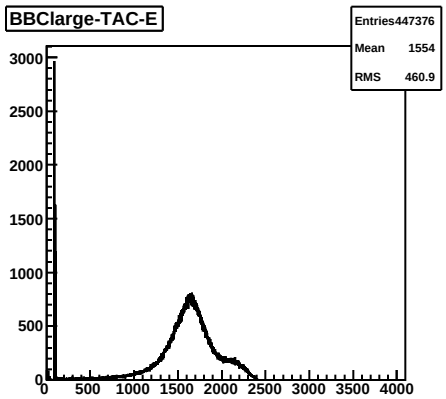

ZDC-TAC-W
Entries 276574
Mean 250.5
RMS 29.47

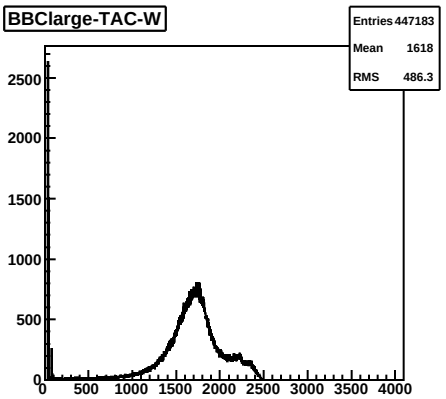

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 106010
Mean 1047
RMS 36.92

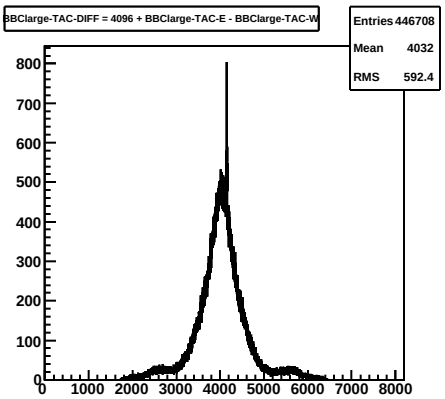

BBCsmall-TAC-E
Entries 447873
Mean 1827
RMS 300.4

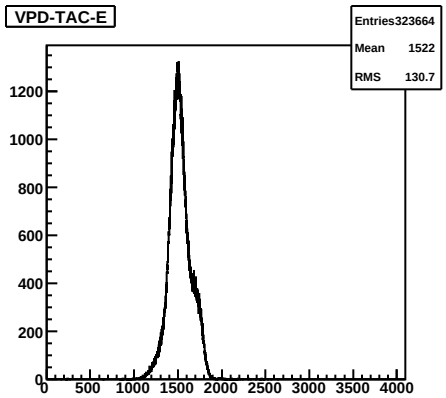

BBCsmall-TAC-W
Entries 447873
Mean 1862
RMS 315.8

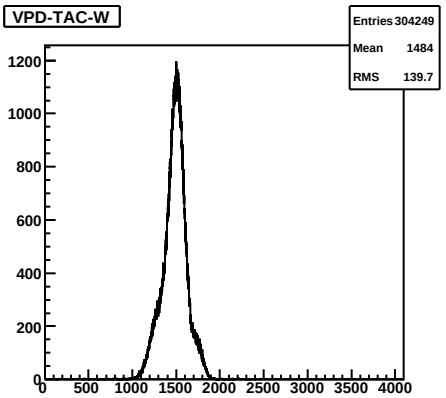

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 447873
Mean 4061
RMS 411.6

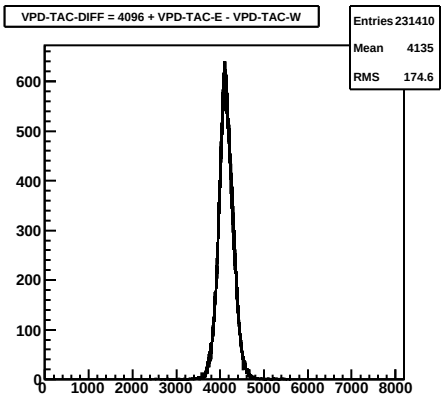

BBClarge-TAC-E
Entries 447376
Mean 1554
RMS 460.9

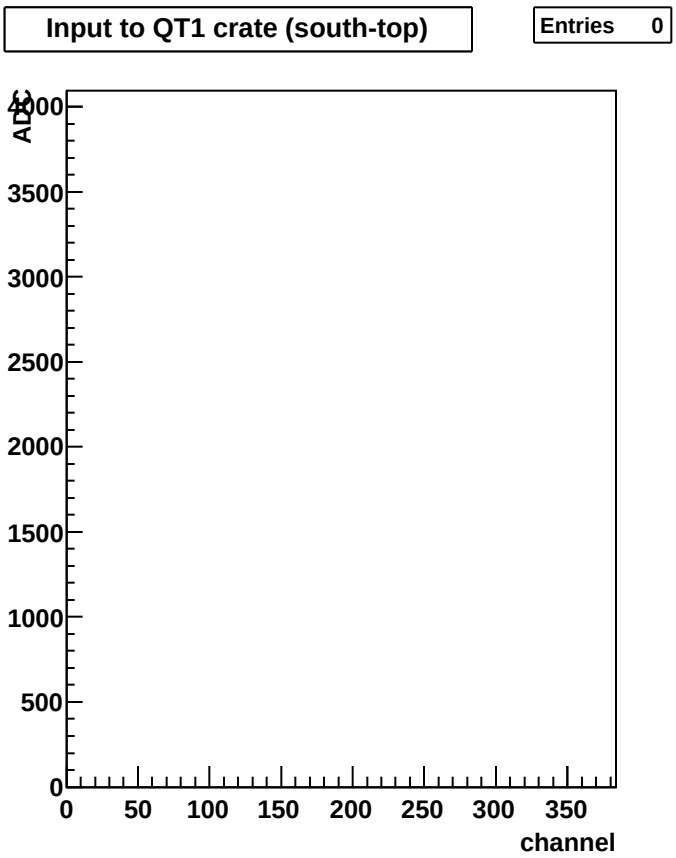

BBClarge-TAC-W
Entries 447183
Mean 1618
RMS 486.3

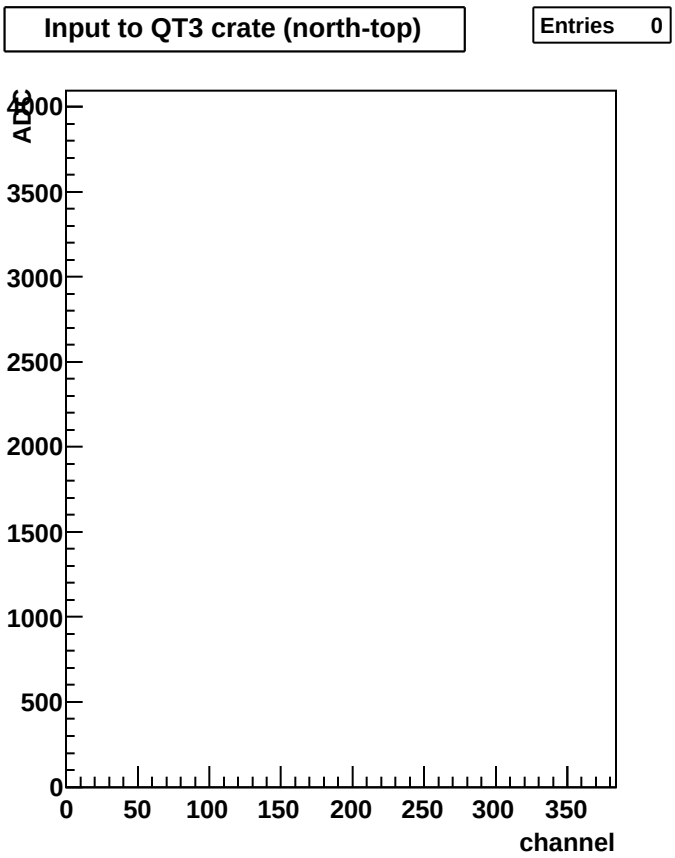

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 446708
Mean 4032
RMS 592.4

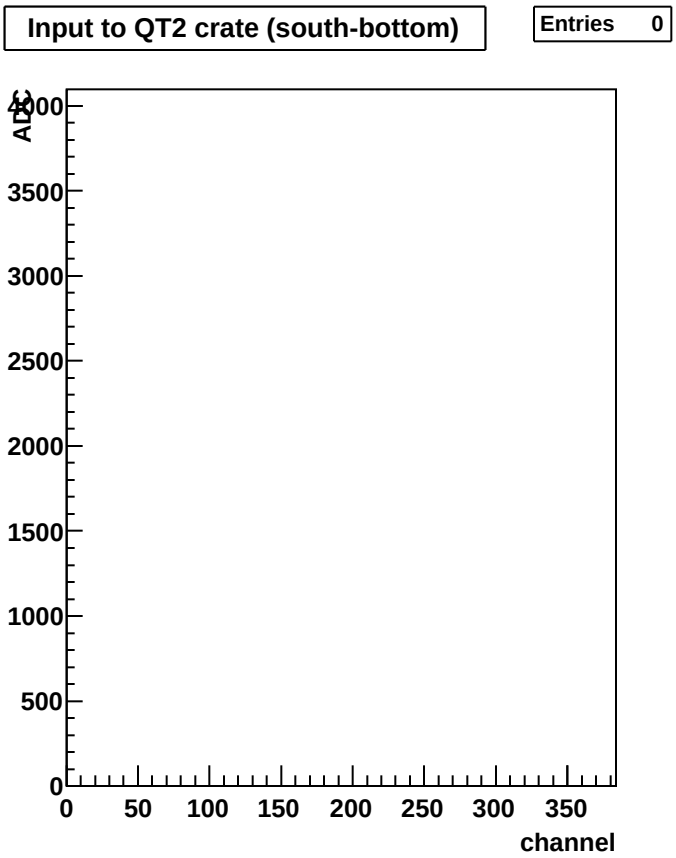

VPD-TAC-E
Entries 323664
Mean 1522
RMS 130.7

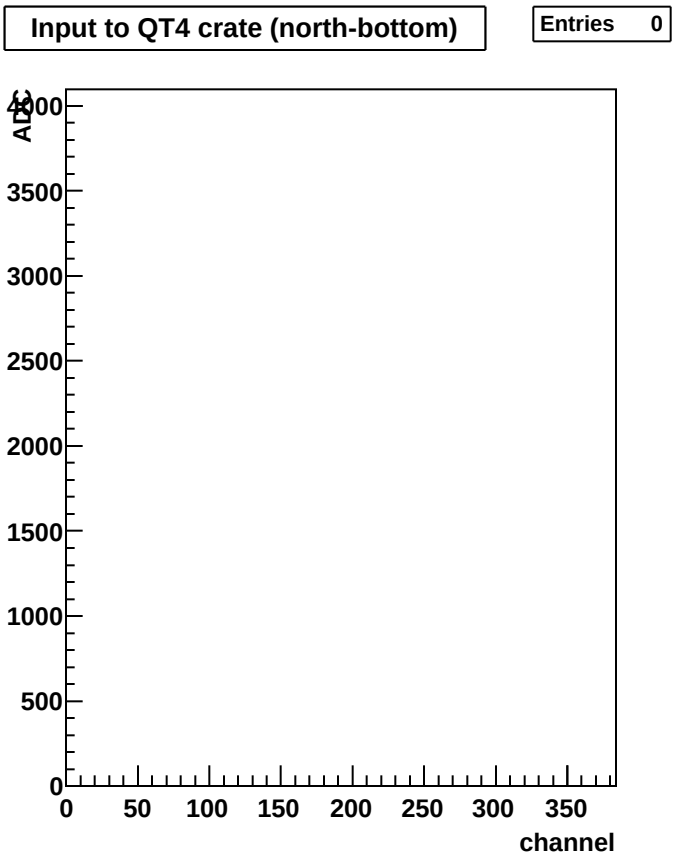

VPD-TAC-W
Entries 304249
Mean 1484
RMS 139.7

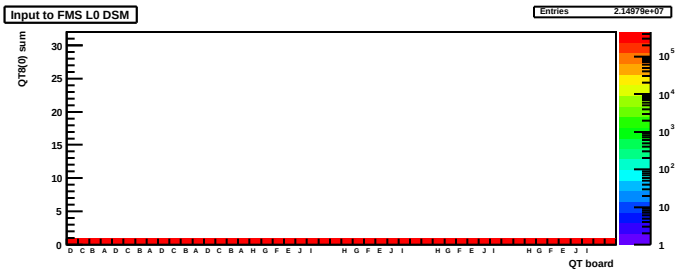

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 231410
Mean 4135
RMS 174.6

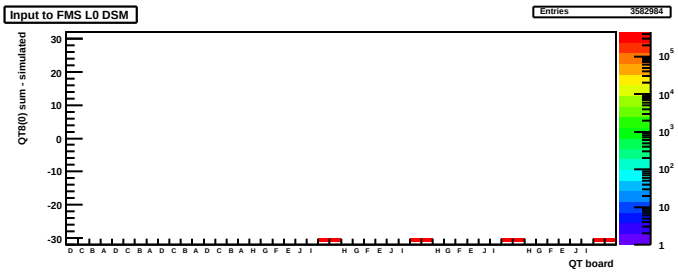

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

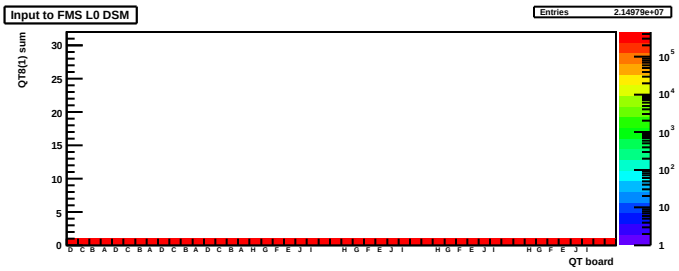

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

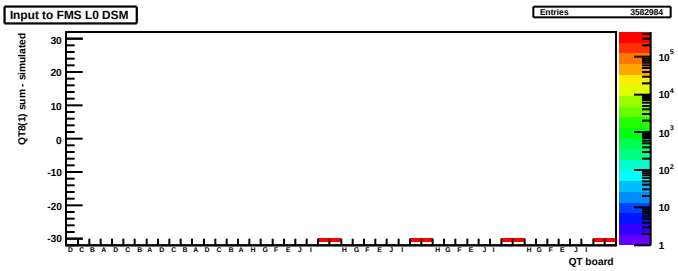

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

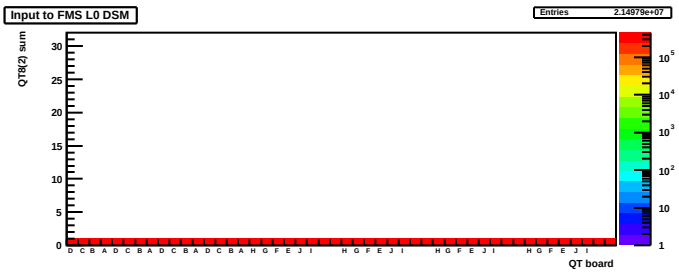

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

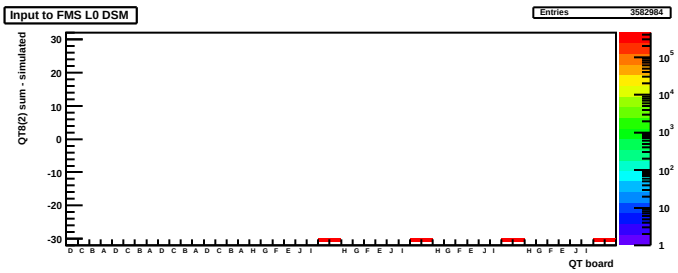

Input to FMS L0 DSM
Entries 2.14979e+07
QT8(0) sum
QT board

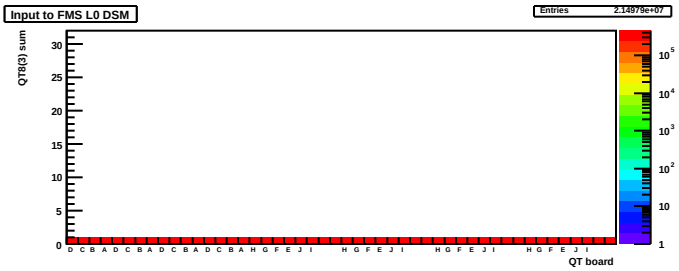

Input to FMS L0 DSM
Entries 3582984
QT8(0) sum - simulated
QT board

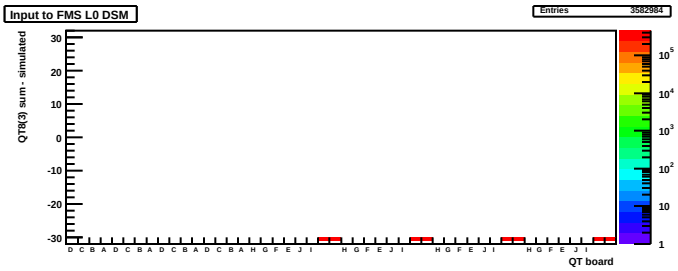

Input to FMS L0 DSM
Entries 2.14979e+07
QT8(1) sum
QT board

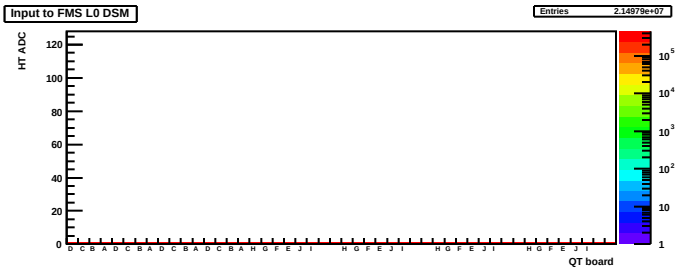

Input to FMS L0 DSM
Entries 3582984
QT8(1) sum - simulated
QT board

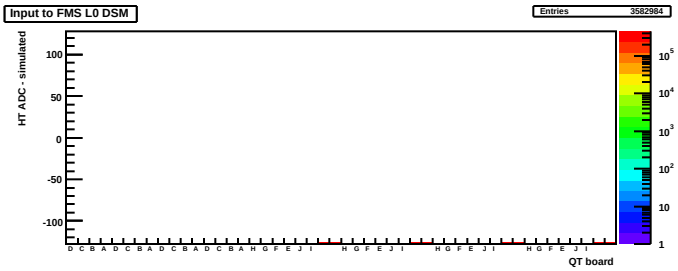

Input to FMS L0 DSM
Entries 2.14979e+07
QT8(2) sum
QT board

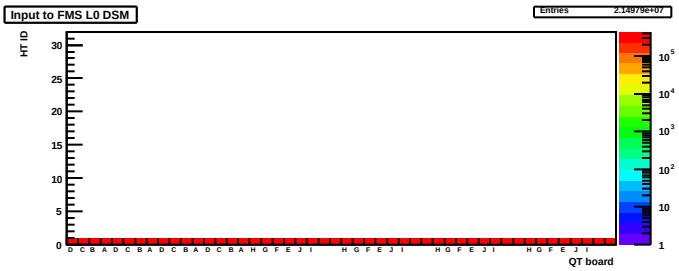

Input to FMS L0 DSM
Entries 3582984
QT8(2) sum - simulated
QT board

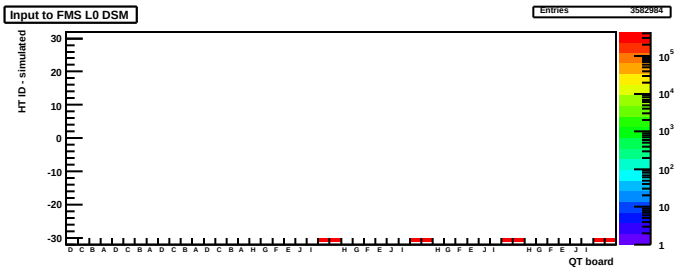

Input to FMS L0 DSM
Entries 2.14979e+07
QT8(3) sum
QT board

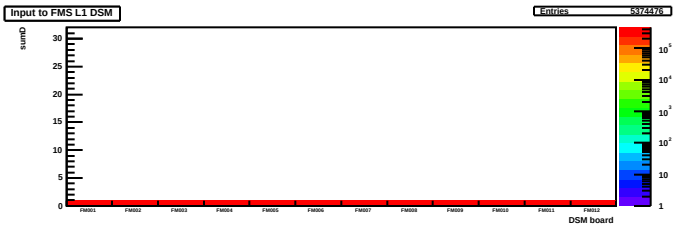

Input to FMS L0 DSM
Entries 3582984
QT8(3) sum - simulated
QT board

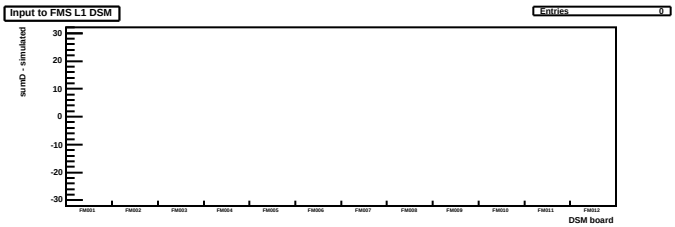

Input to FMS L0 DSM
Entries 2.14979e+07
HT ADC
QT board

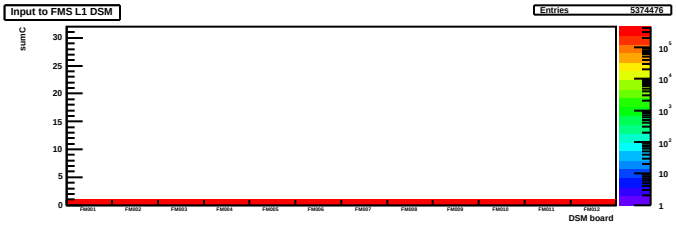

Input to FMS L0 DSM
Entries 3582984
HT ADC - simulated
QT board

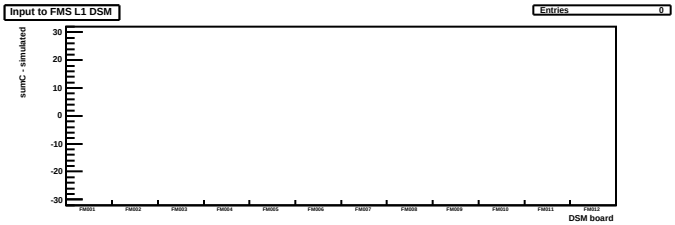

Input to FMS L0 DSM
Entries 2.14979e+07
HT ID
QT board

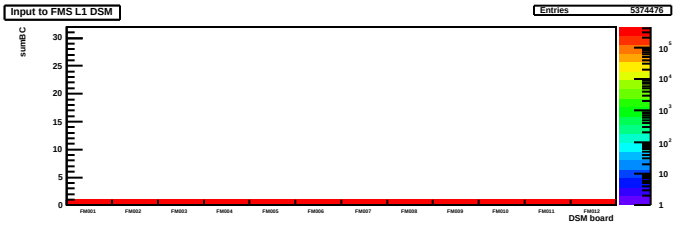

Input to FMS L0 DSM
Entries 3582984
HT ID - simulated
QT board

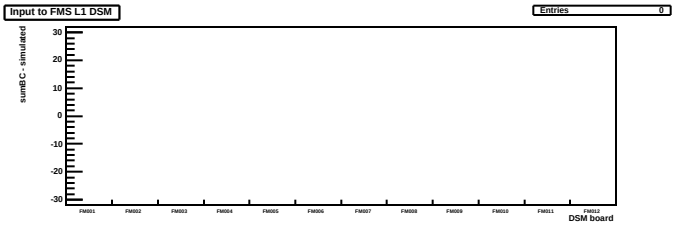

Input to FMS L1 DSM
Entries 5374476
sumD
DSM board

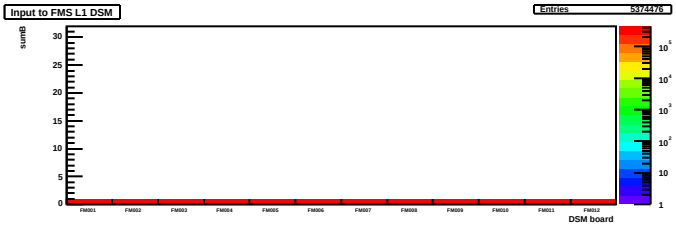

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

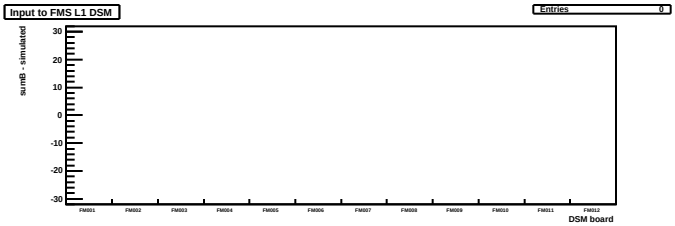

Input to FMS L1 DSM
Entries 5374476
sumC
DSM board

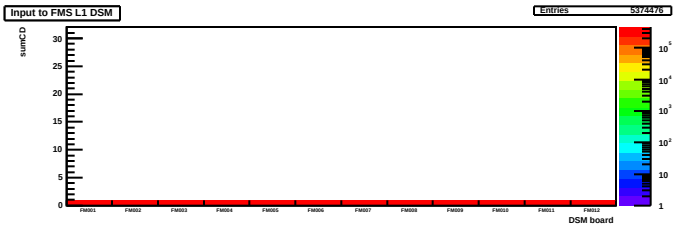

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

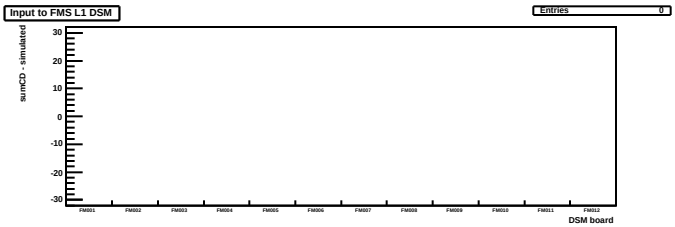

Input to FMS L1 DSM
Entries 5374476
sumBC
DSM board

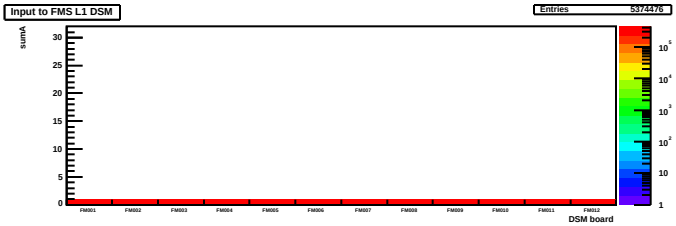

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

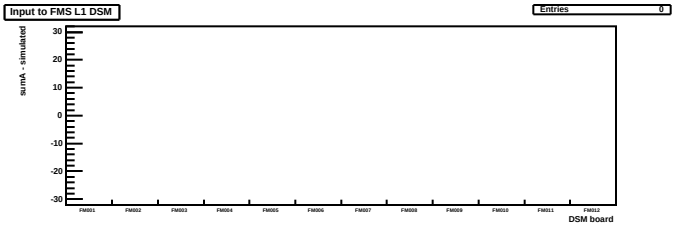

Input to FMS L1 DSM
Entries 5374476
sumB
DSM board

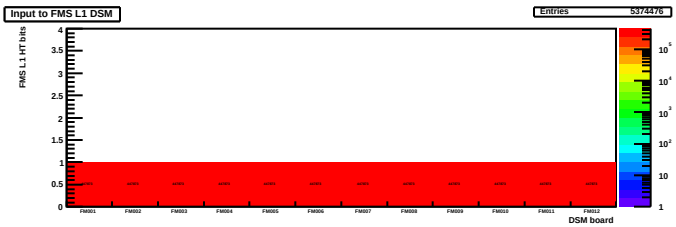

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

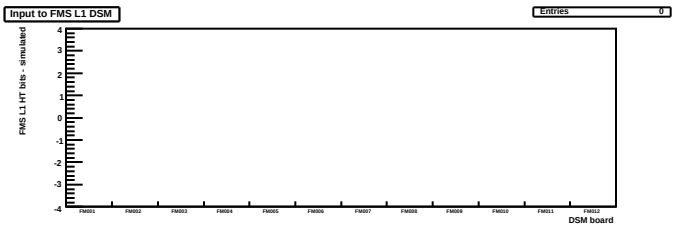

Input to FMS L1 DSM
Entries 5374476
sumCD
DSM board

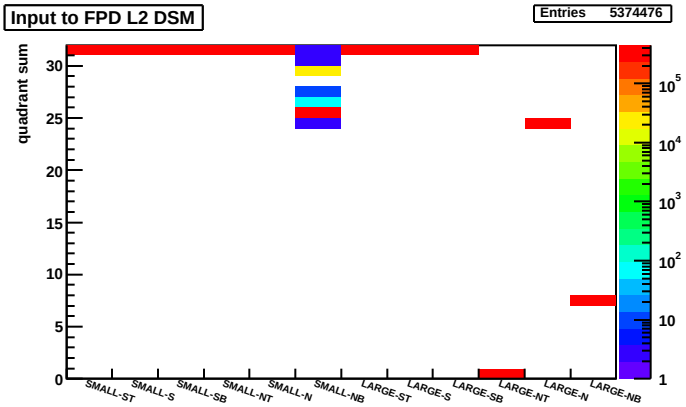

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

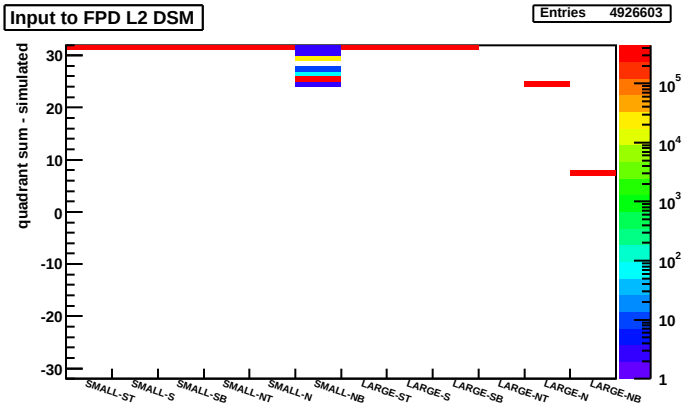

Input to FMS L1 DSM
Entries 5374476
sumA
DSM board

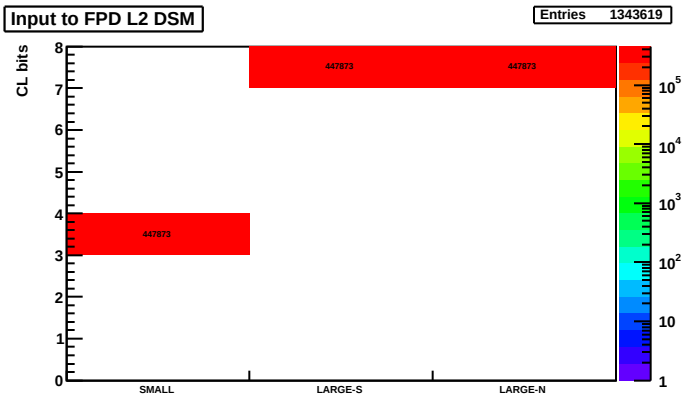

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

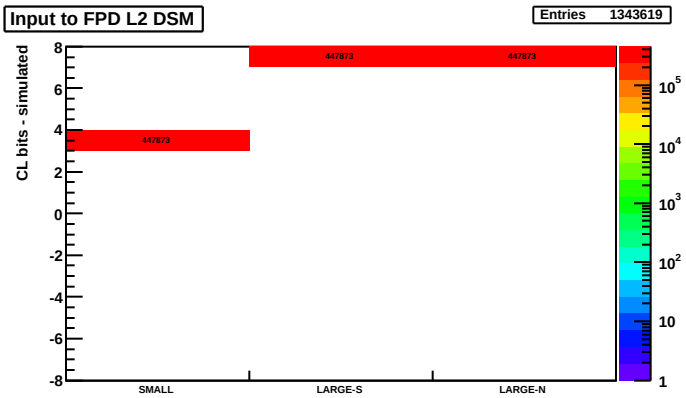

Input to FMS L1 DSM
Entries 5374476
FMS L1 HT bits
DSM board

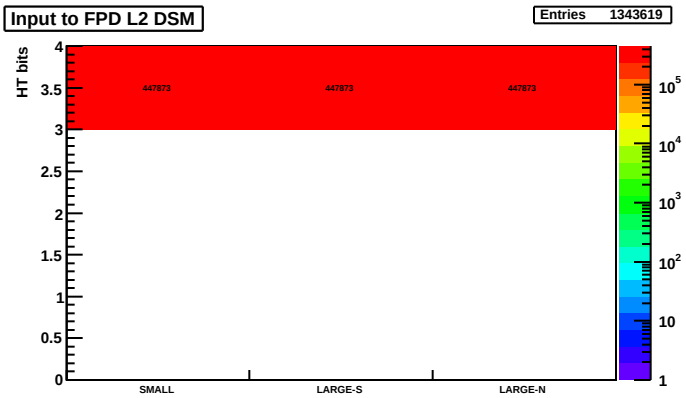

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

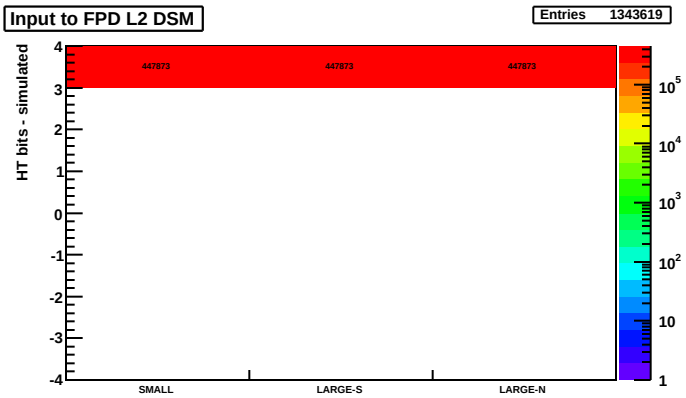

Input to FPD L2 DSM
Entries 5374476
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

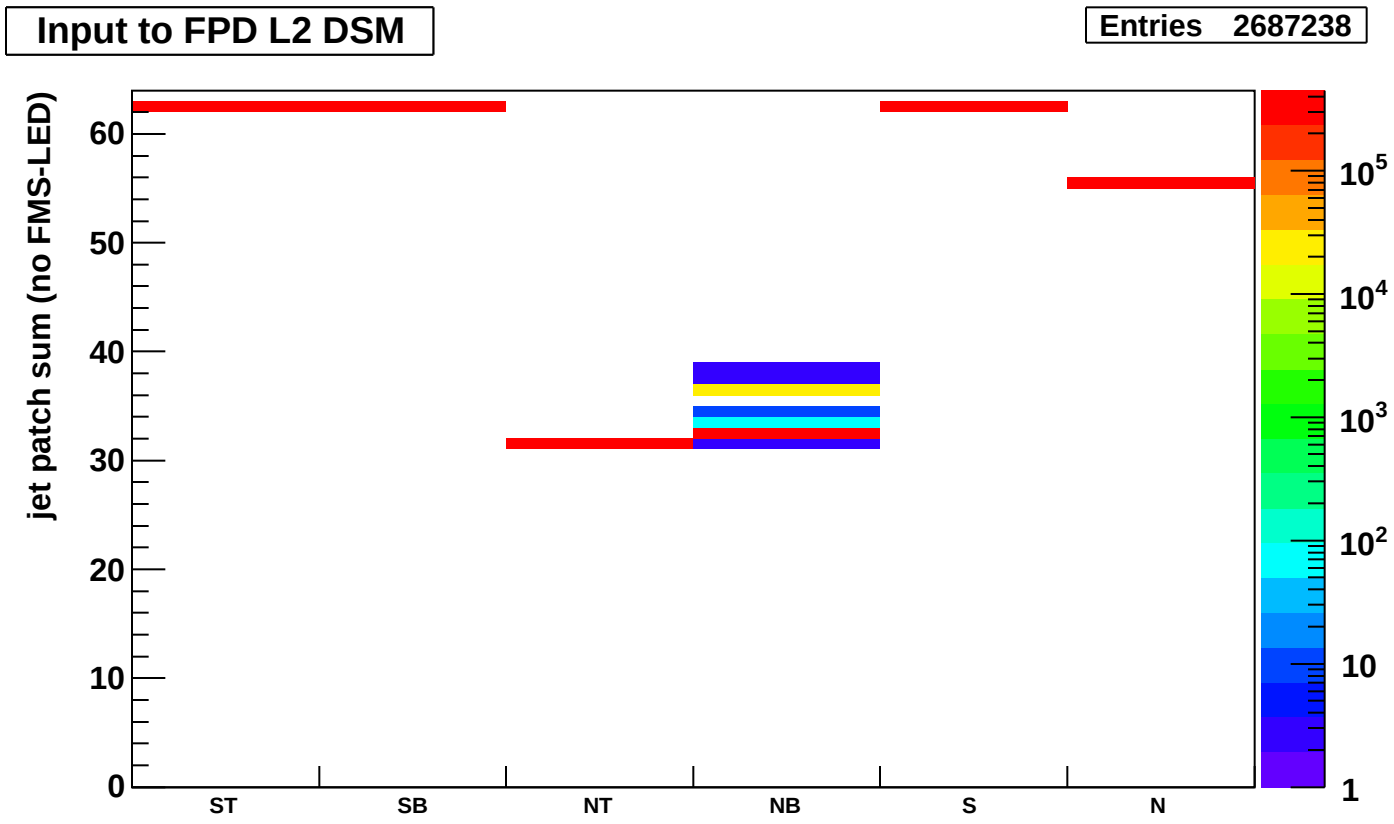

Input to FPD L2 DSM
Entries 4926603
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

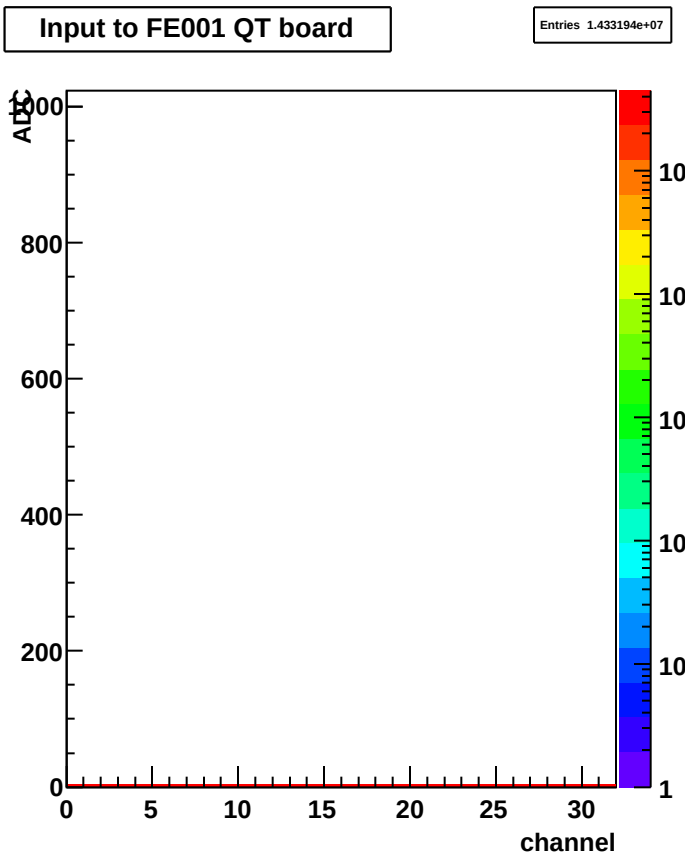

Input to FPD L2 DSM
Entries 1343619
CL bits
447873
447873
447873
SMALL
LARGE-S
LARGE-N

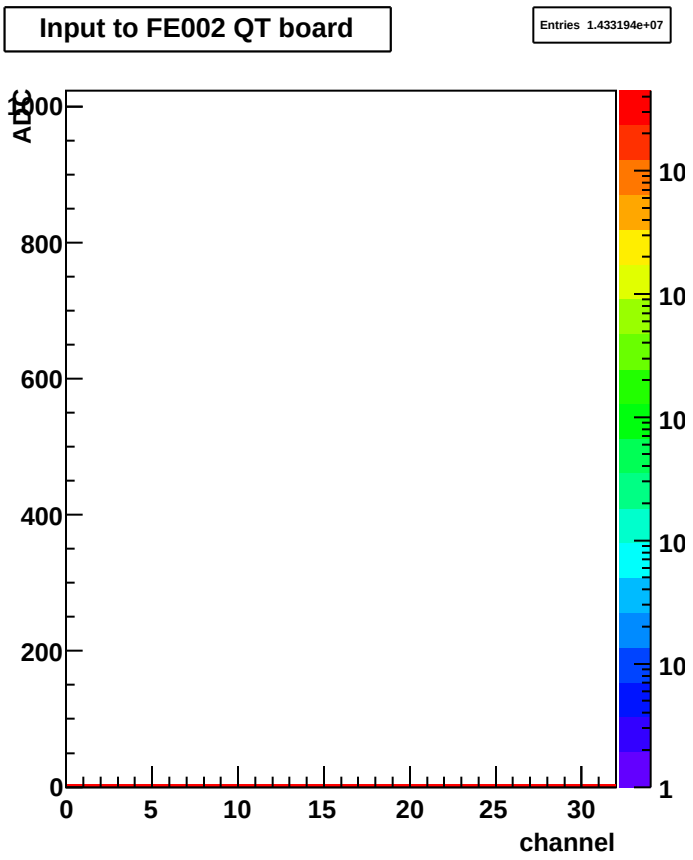

Input to FPD L2 DSM
Entries 1343619
CL bits - simulated
447873
447873
447873
SMALL
LARGE-S
LARGE-N

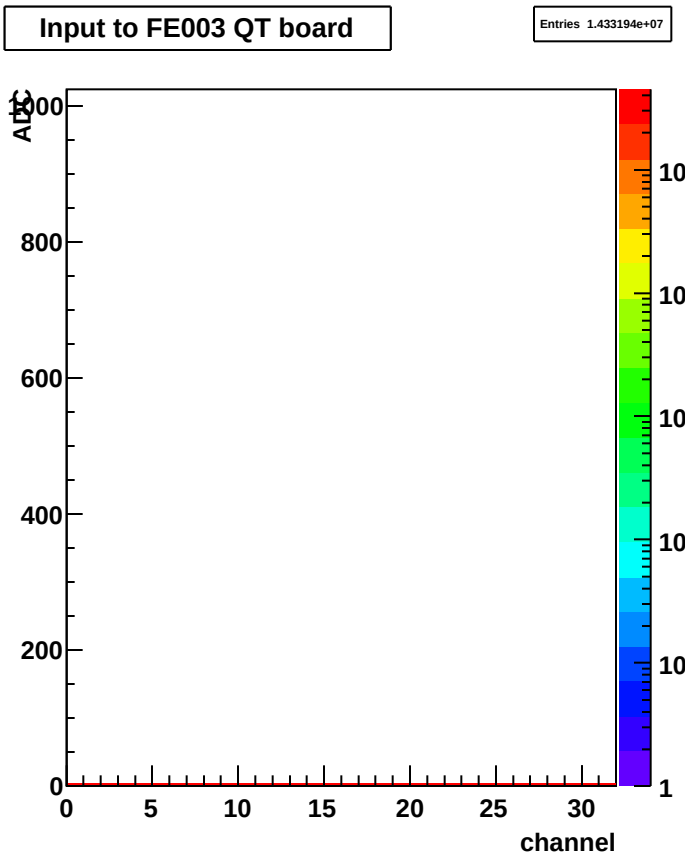

Input to FPD L2 DSM
Entries 1343619
HT bits
447873
447873
447873
SMALL
LARGE-S
LARGE-N

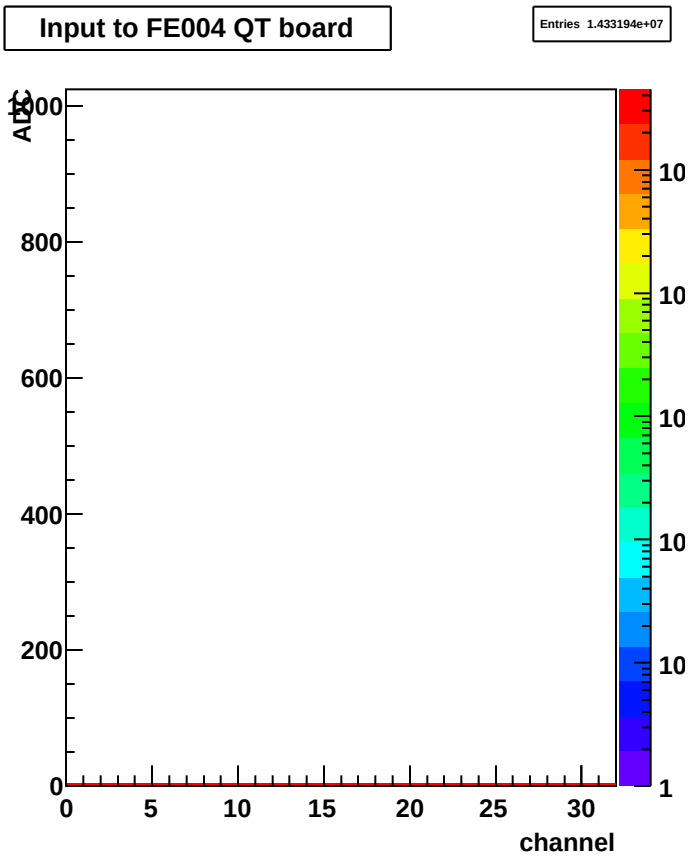

Input to FPD L2 DSM
Entries 1343619
HT bits - simulated
447873
447873
447873
SMALL
LARGE-S
LARGE-N

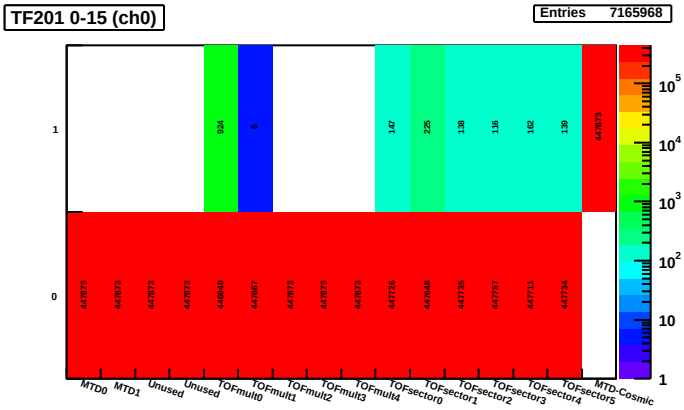

Input to FPD L2 DSM
Entries 2687238
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

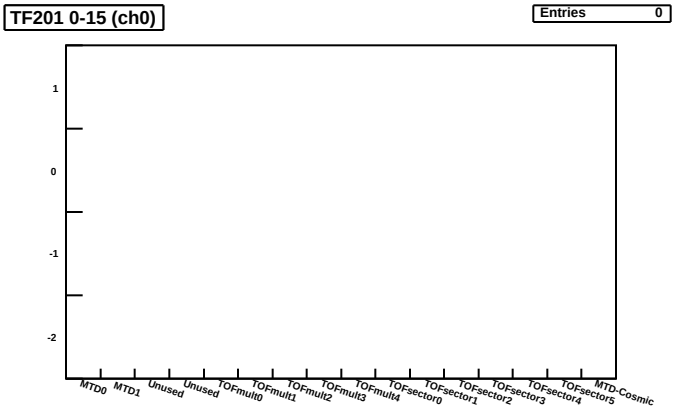

Input to FE001 QT board
Entries 1.433194e+07
ADC
channel

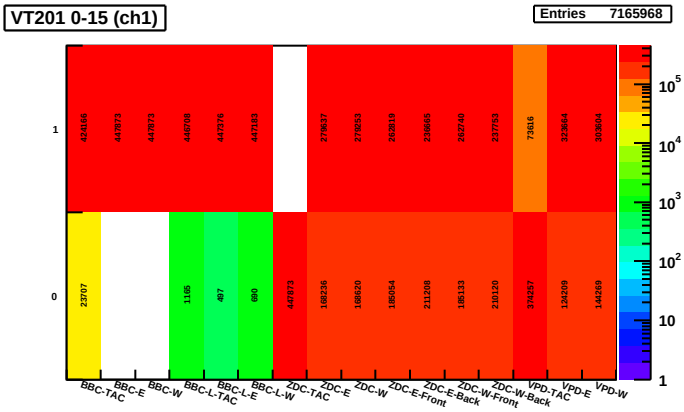

Input to FE002 QT board
Entries 1.433194e+07
ADC
channel

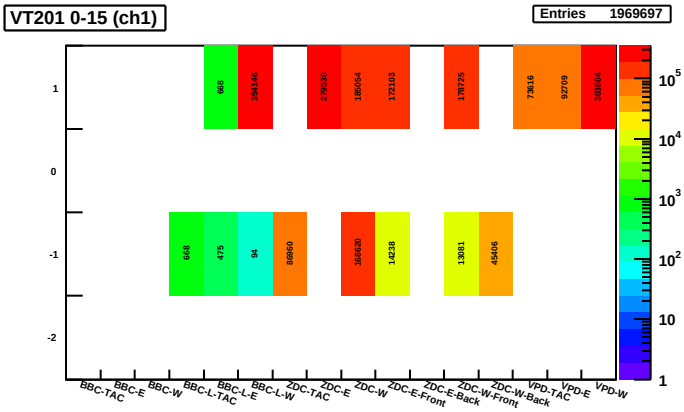

Input to FE003 QT board
Entries 1.433194e+07
ADC
channel

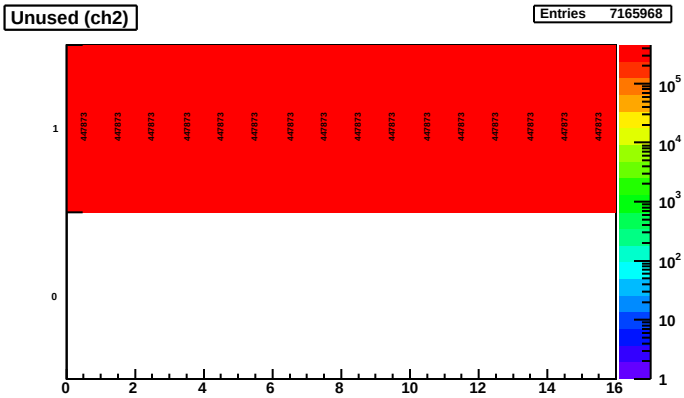

Input to FE004 QT board
Entries 1.433194e+07
ADC
channel


TF201 0-15 (ch0)
Entries 7165968
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


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


VT201 0-15 (ch1)
Entries 7165968
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 1969697
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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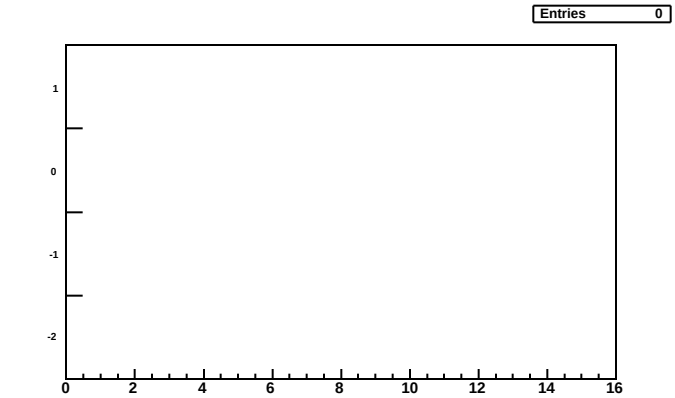
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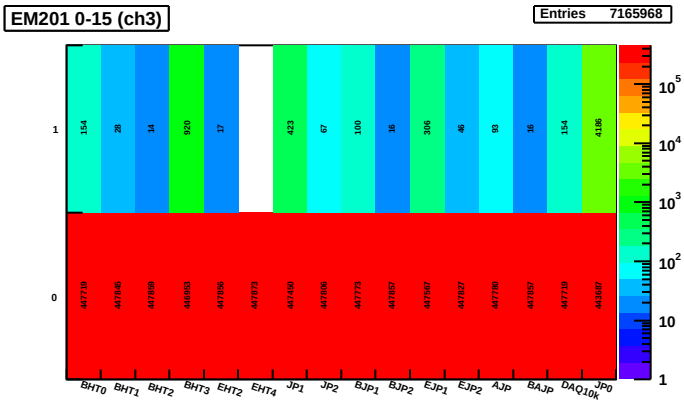
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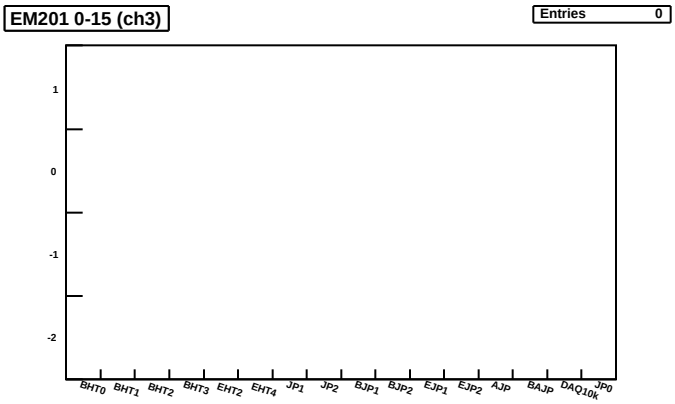
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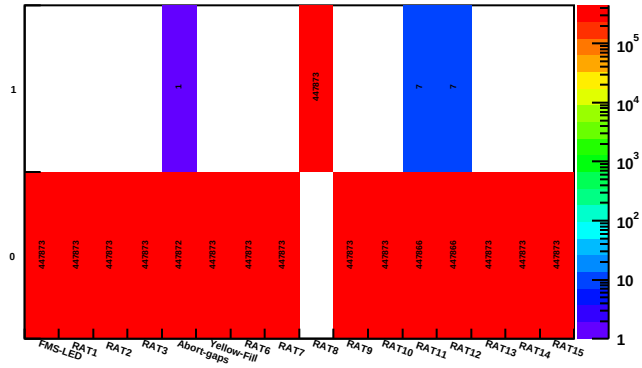
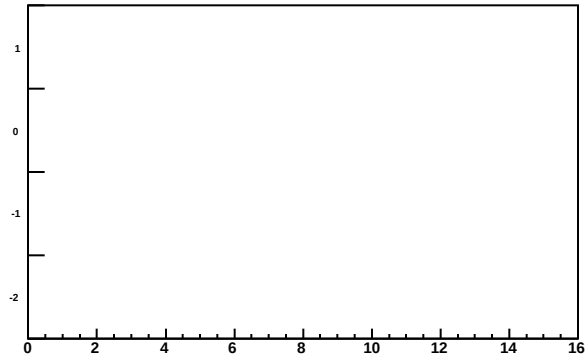
RAT board (ch4)





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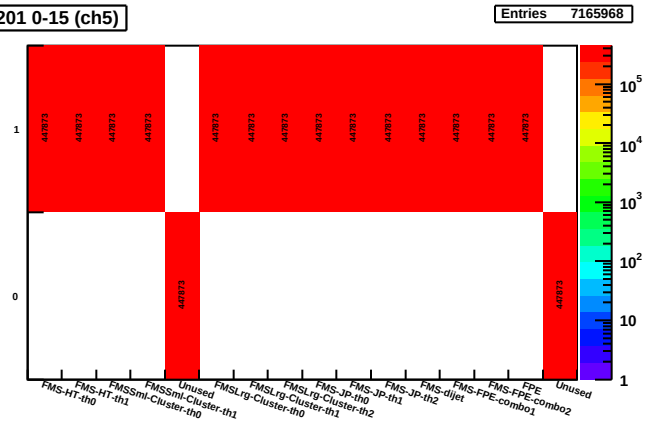

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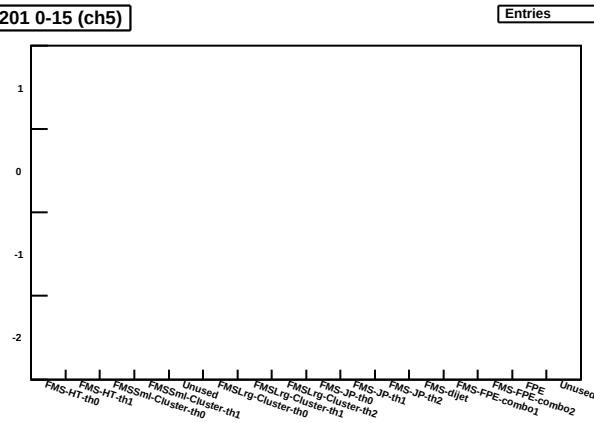

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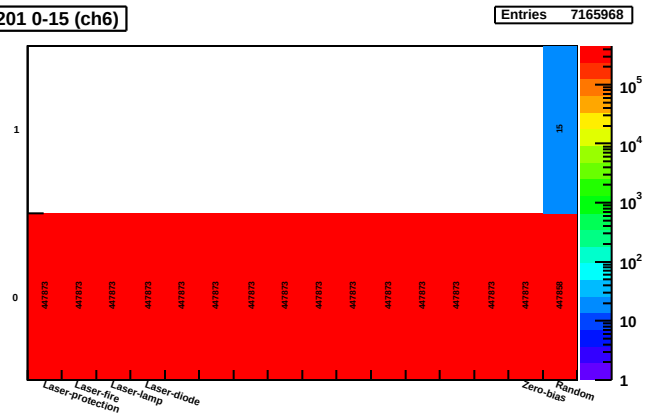

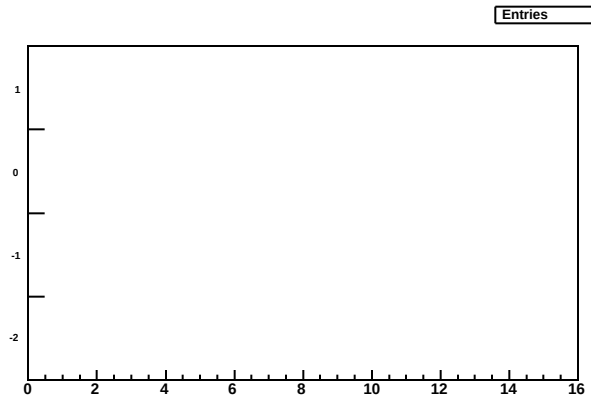
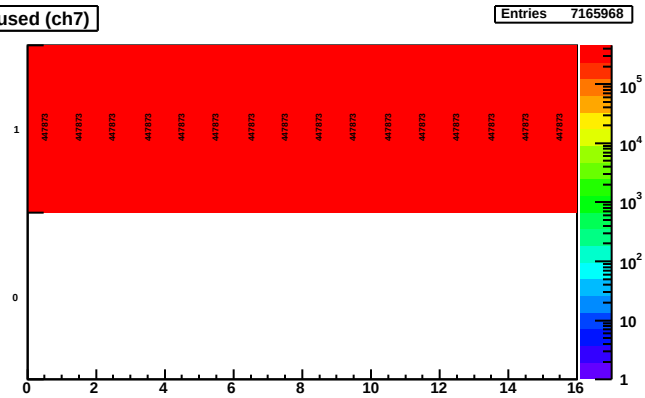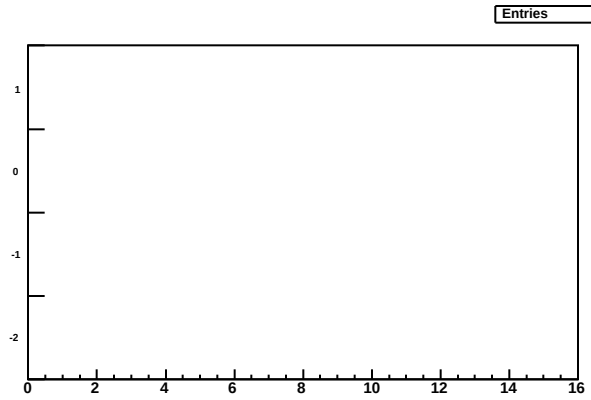
Unused (ch7)