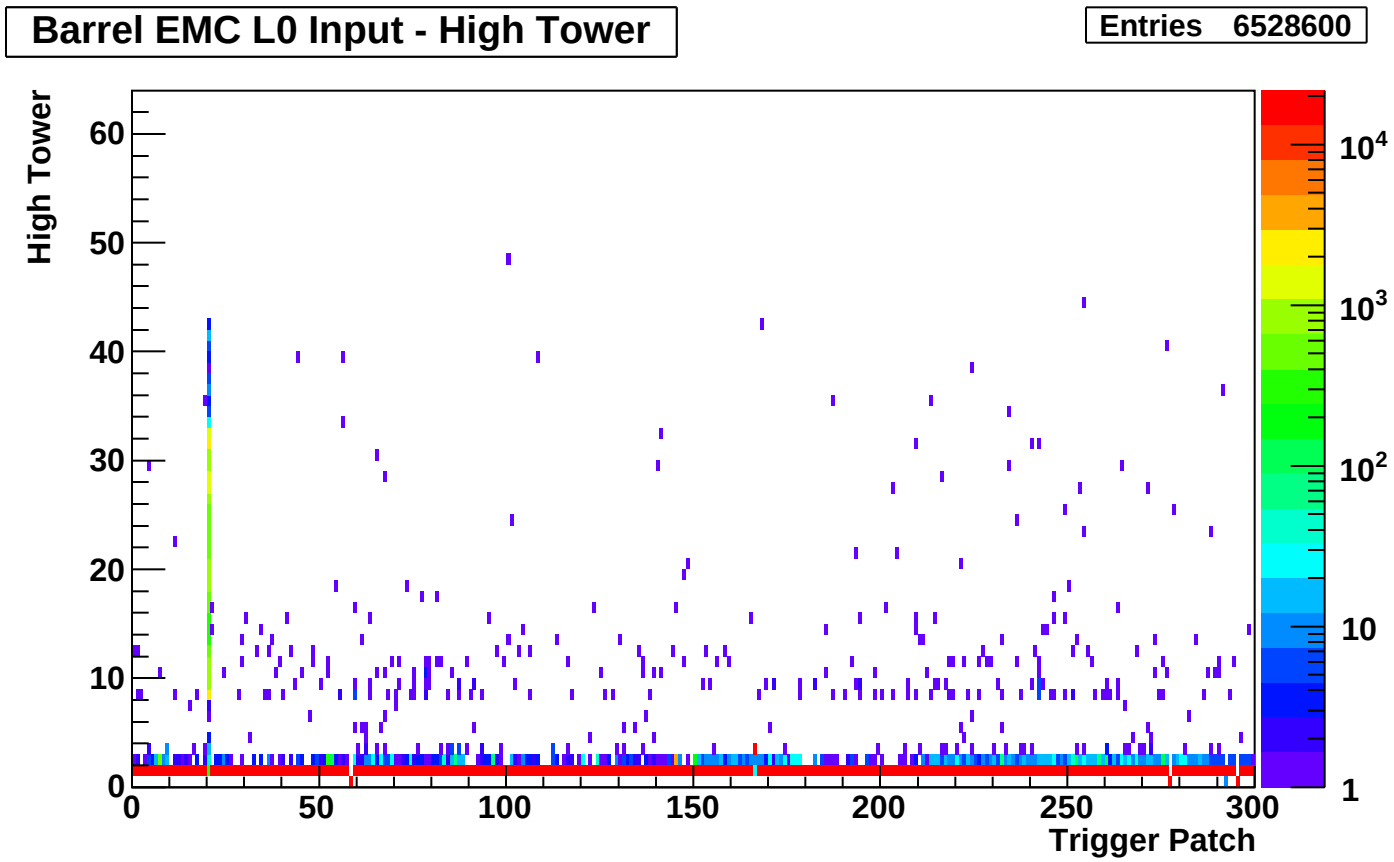
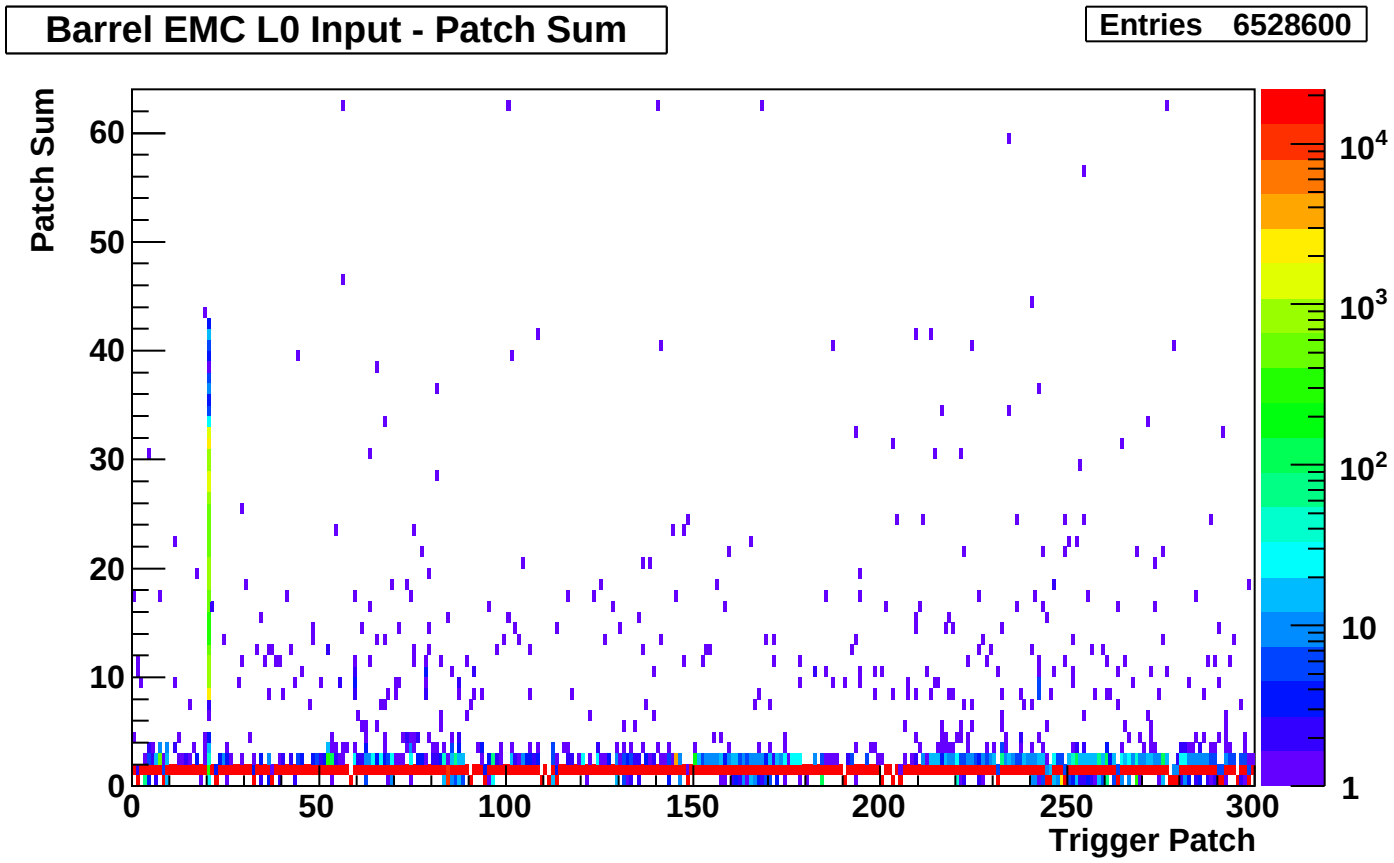
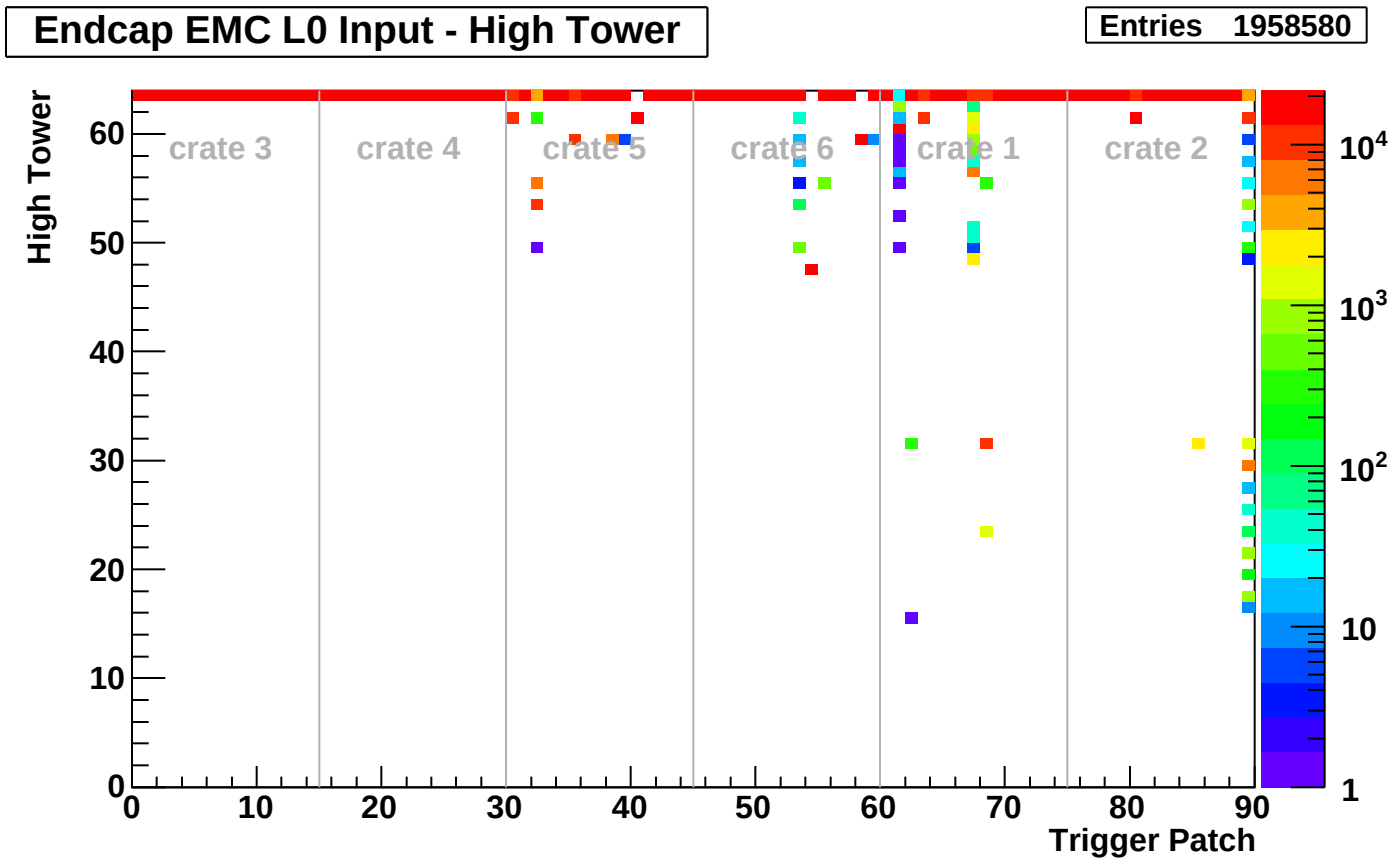
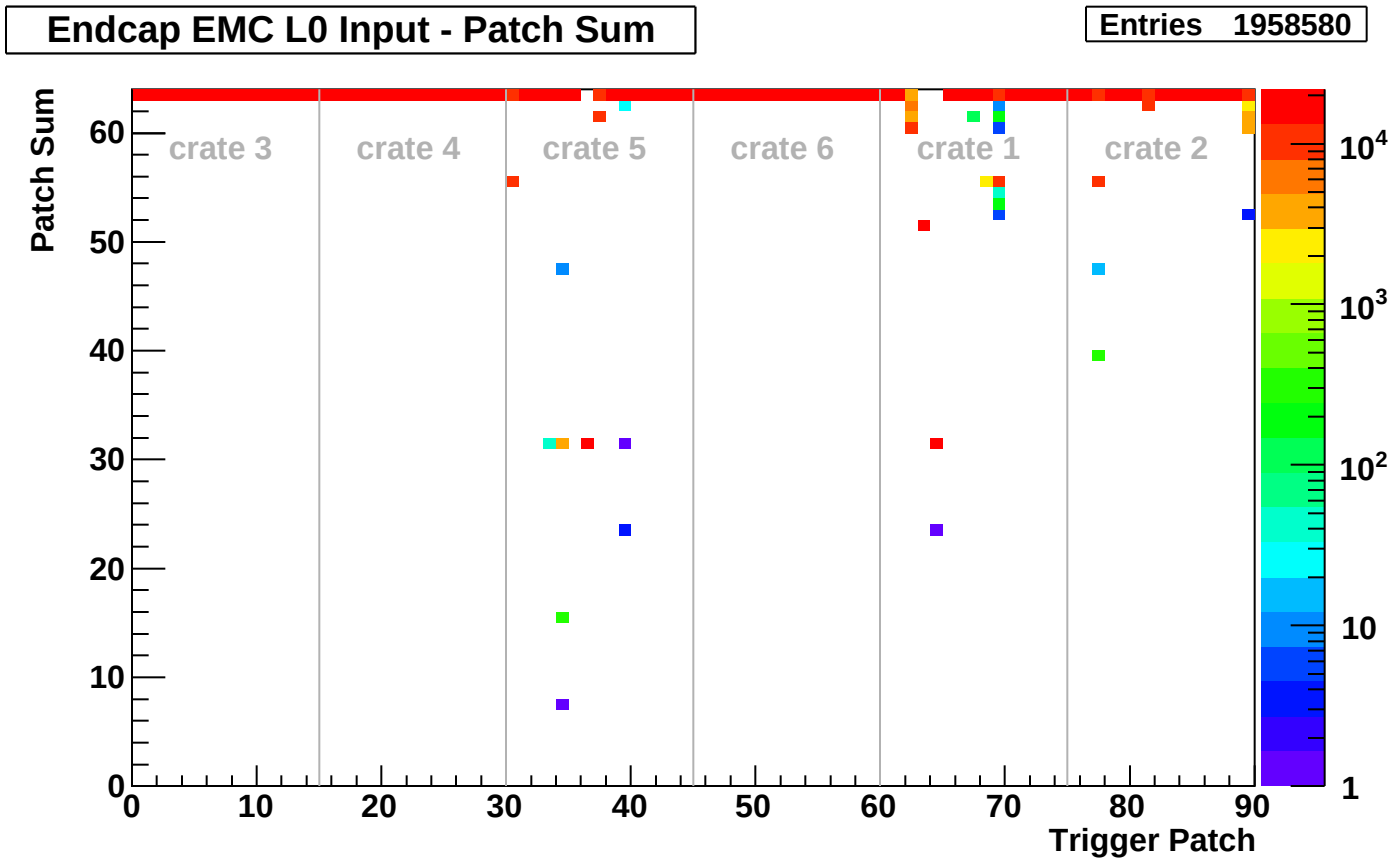
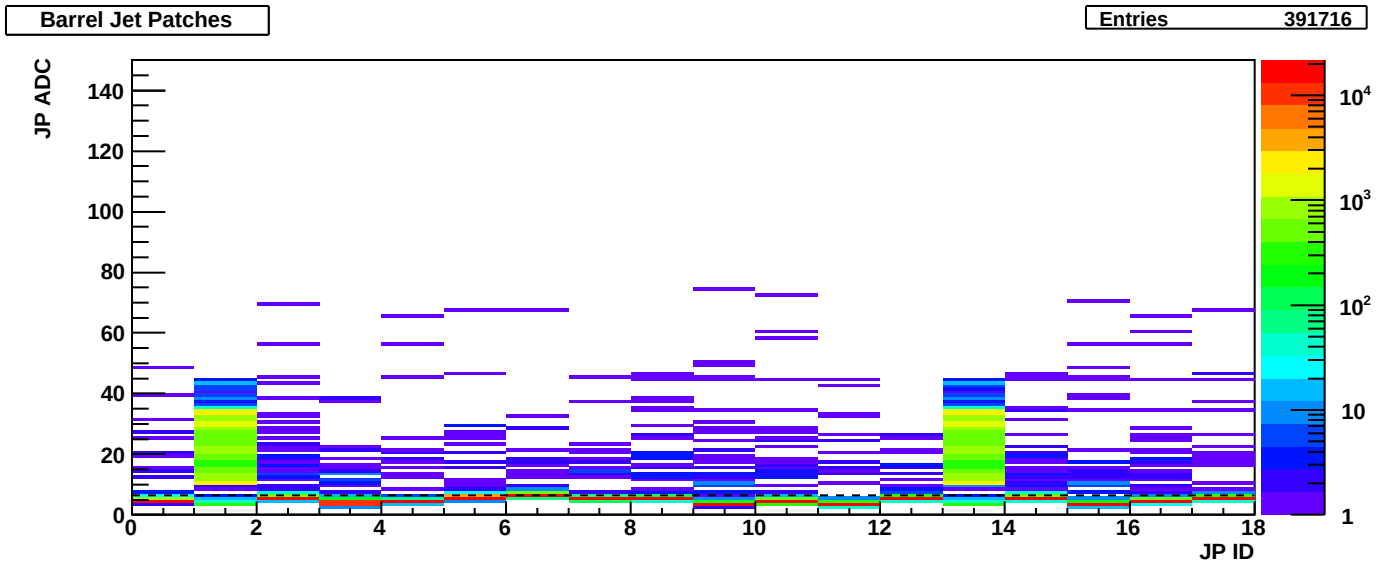
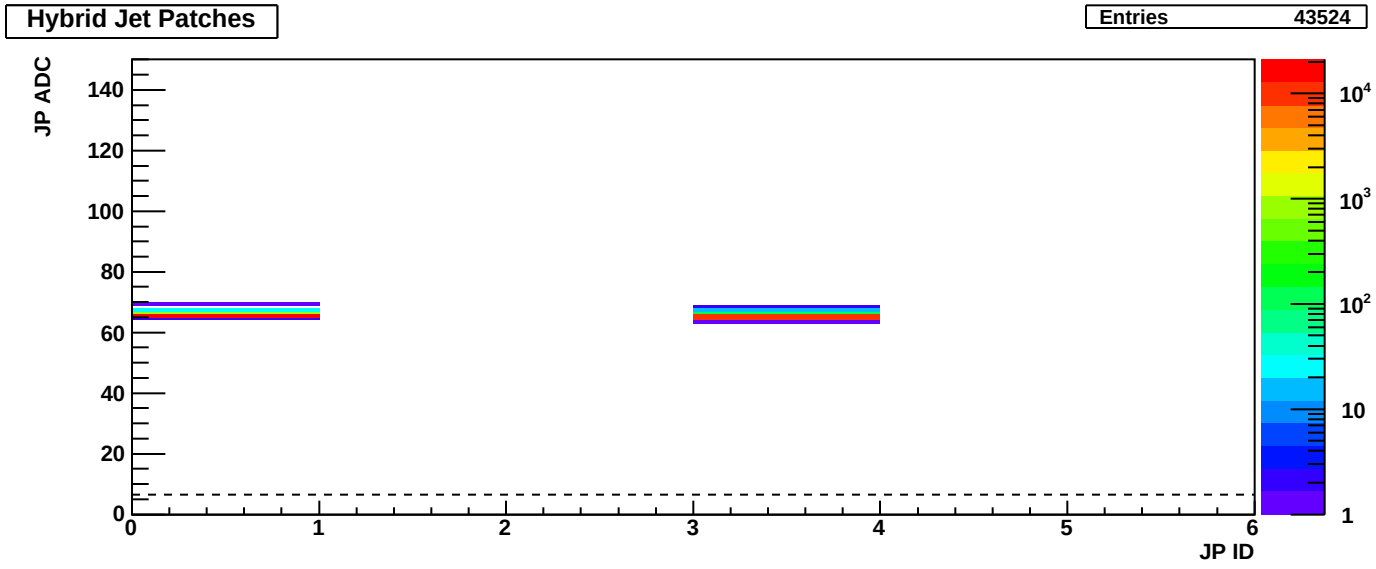

Barrel EMC L0 Input - High Tower
Entries 6528600
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$

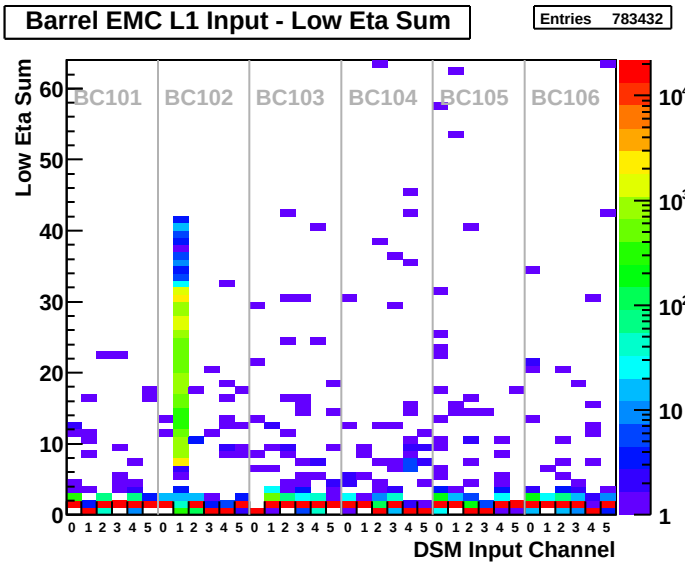

Barrel EMC L0 Input - Patch Sum
Entries 6528600
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$

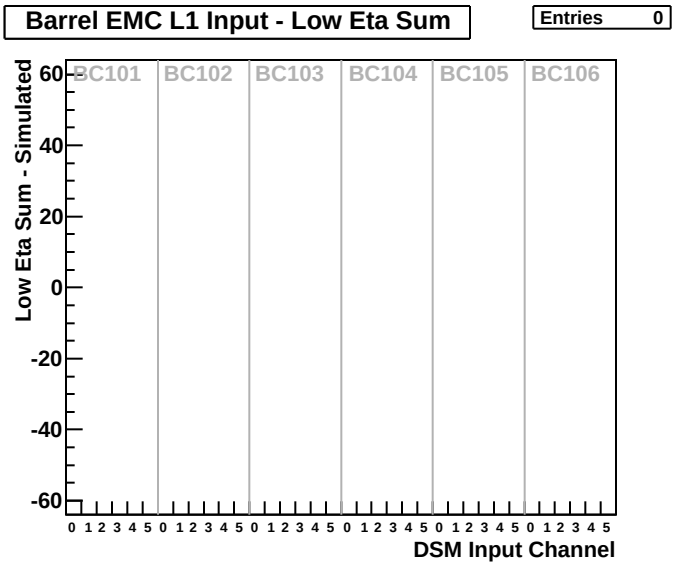

Endcap EMC L0 Input - High Tower
Entries 1958580
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

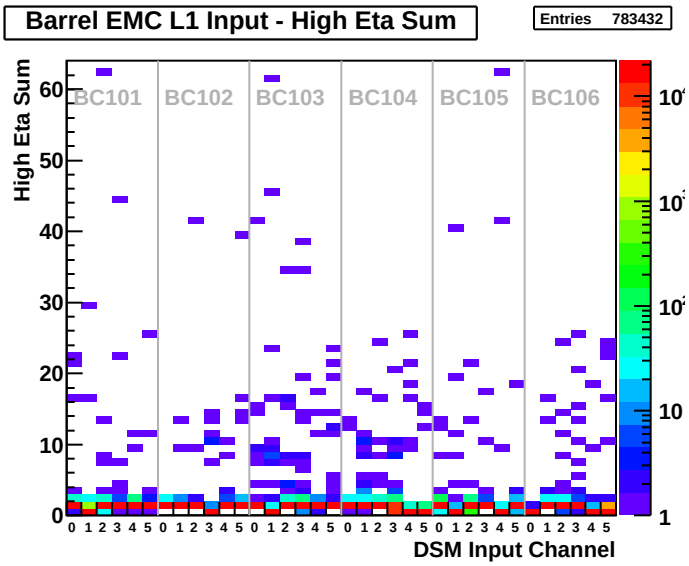

Endcap EMC L0 Input - Patch Sum
Entries 1958580
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

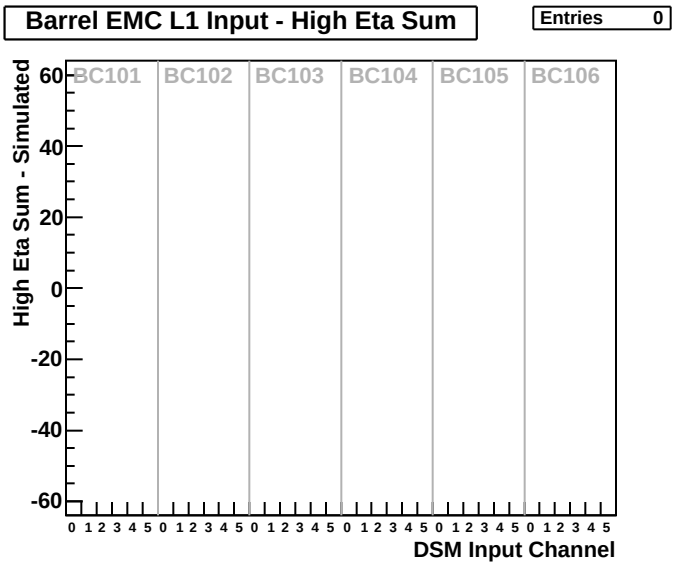

Barrel Jet Patches
Entries 391716
JP ADC
JP ID

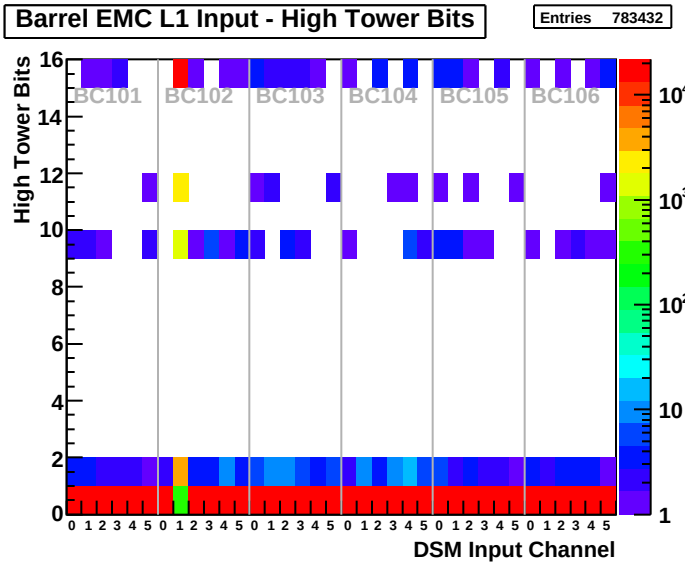

Hybrid Jet Patches
Entries 43524
JP ADC
JP ID

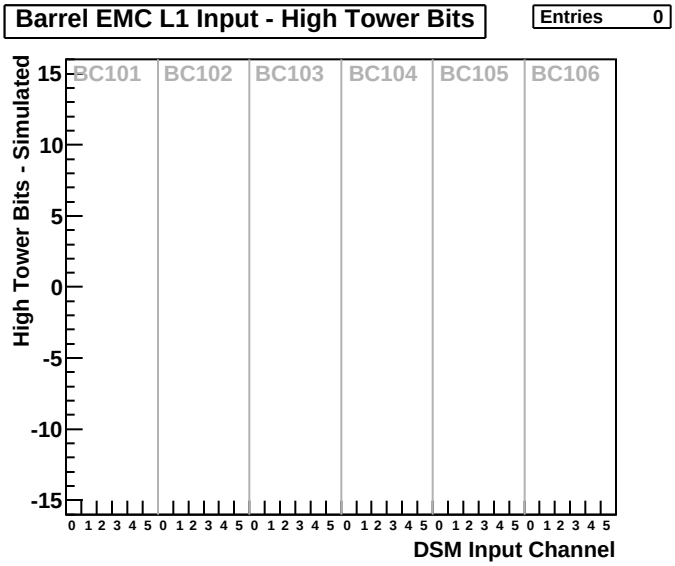

Barrel EMC L1 Input - Low Eta Sum
Entries 783432
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

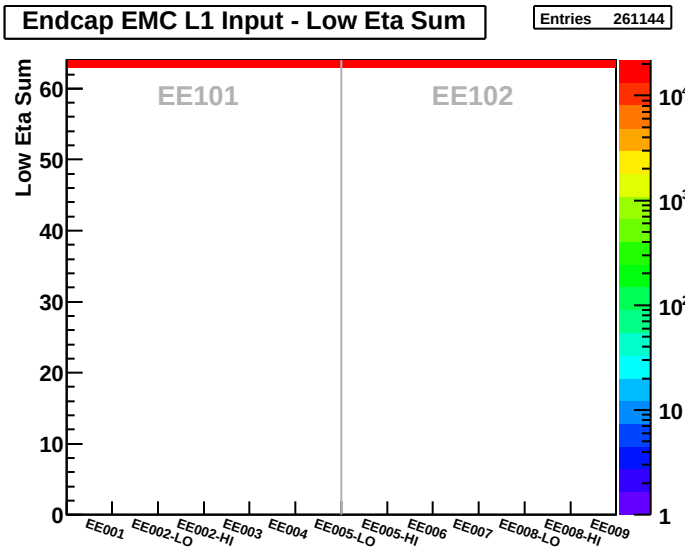

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

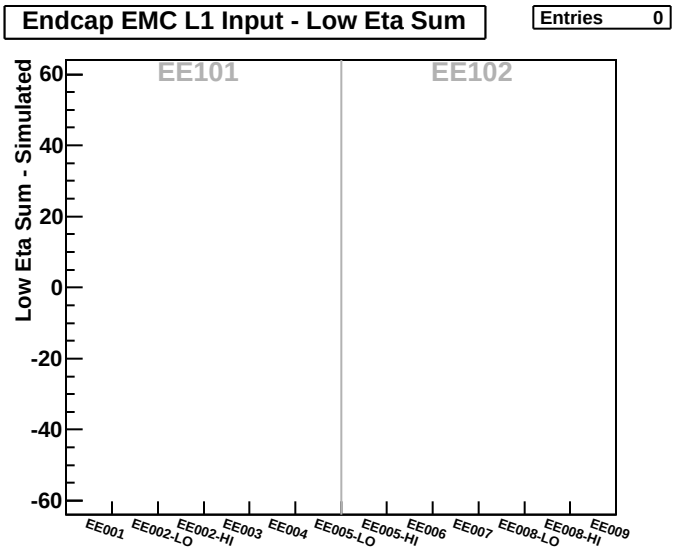

Barrel EMC L1 Input - High Eta Sum
Entries 783432
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

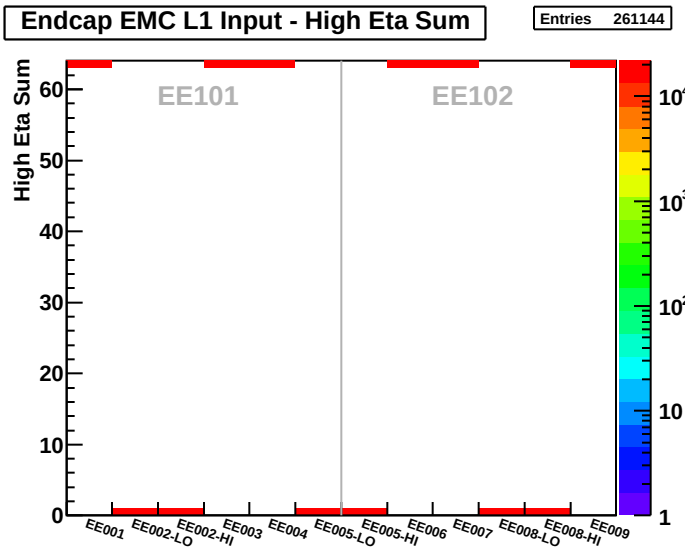

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

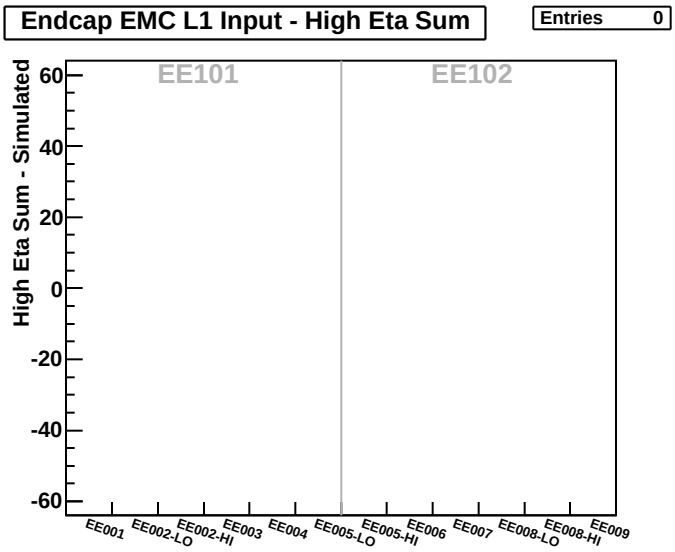

Barrel EMC L1 Input - High Tower Bits
Entries 783432
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

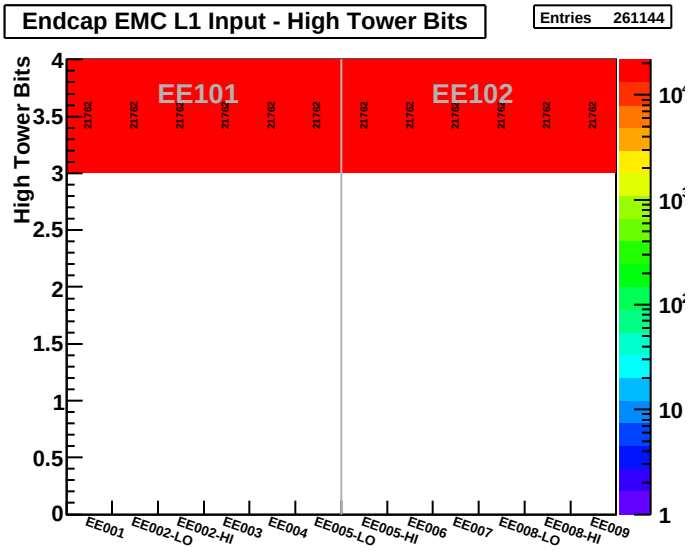

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

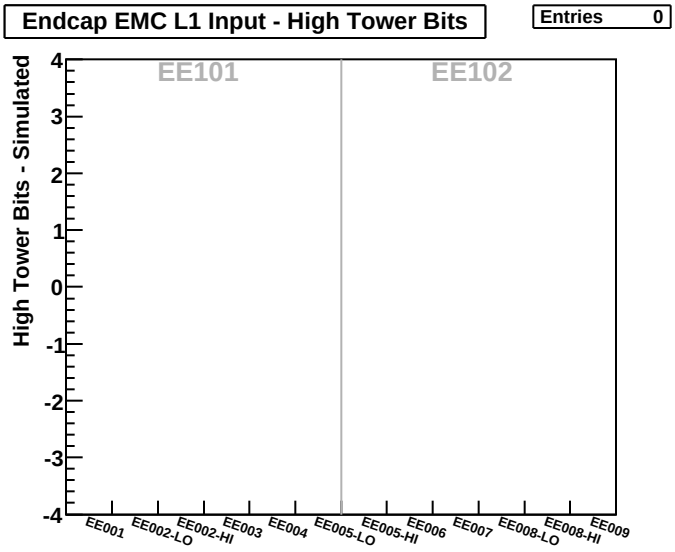

Endcap EMC L1 Input - Low Eta Sum
Entries 261144
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

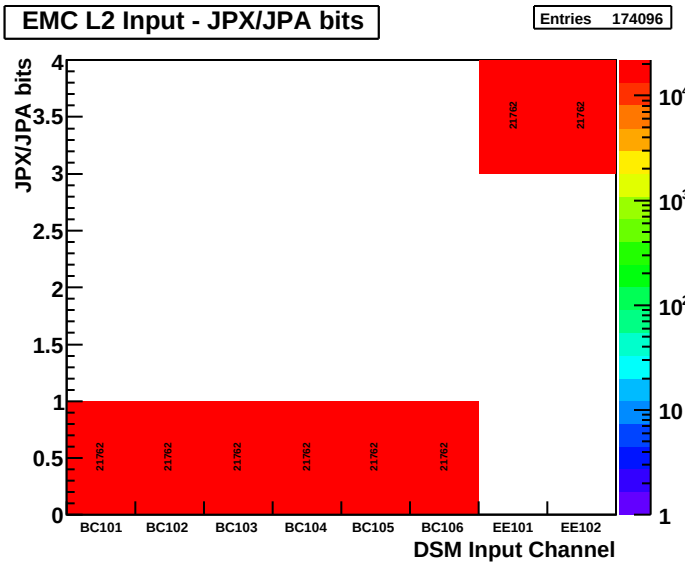

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

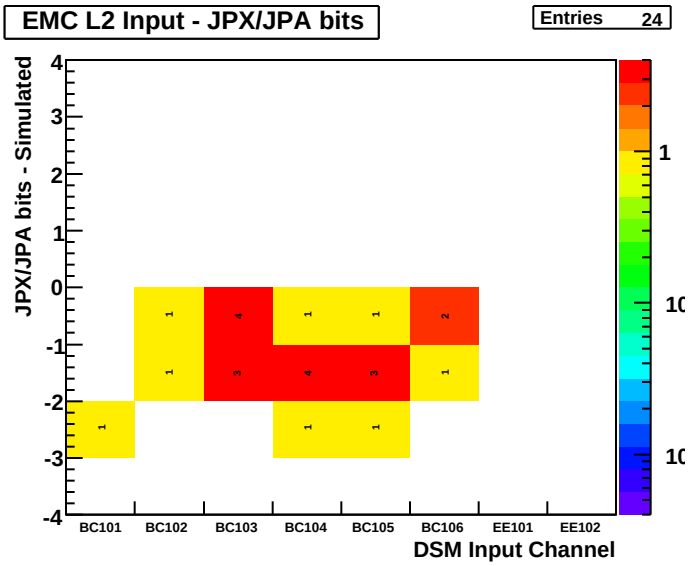

Endcap EMC L1 Input - High Eta Sum
Entries 261144
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

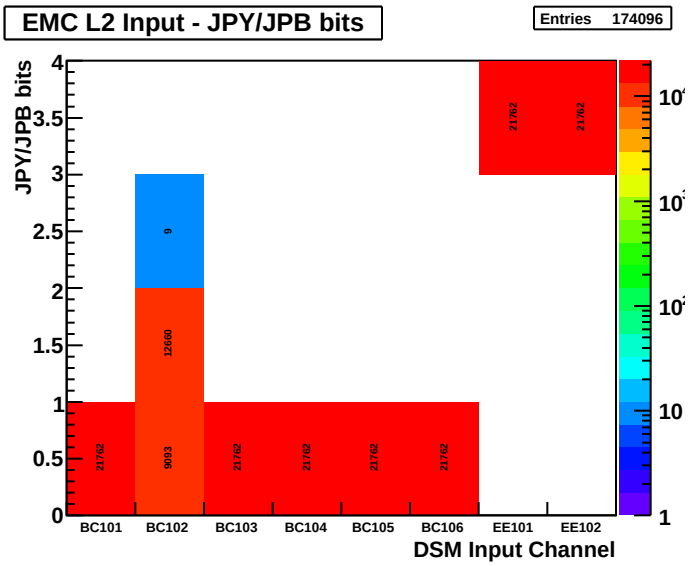

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

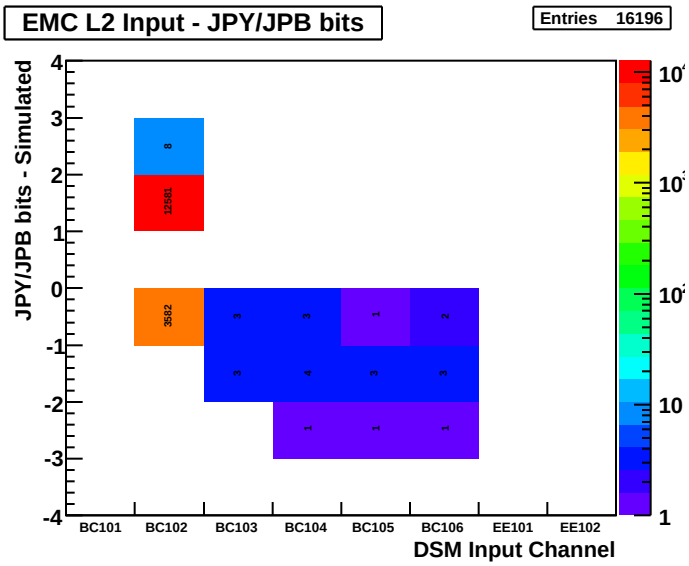

Endcap EMC L1 Input - High Tower Bits
Entries 261144
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

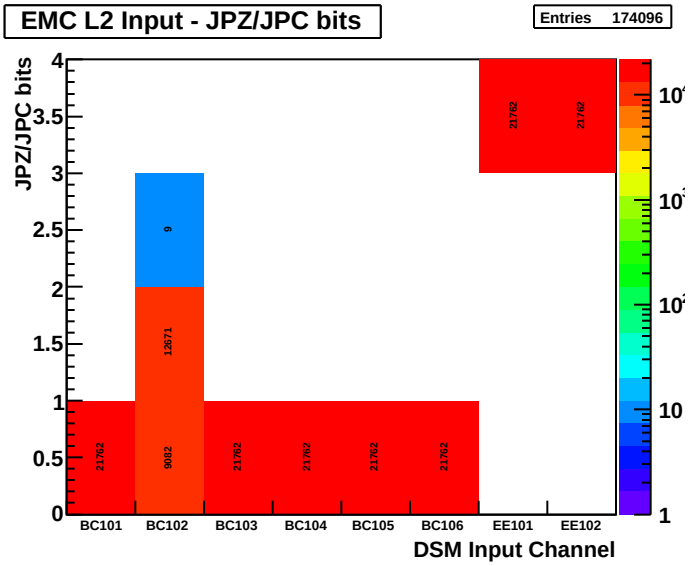

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

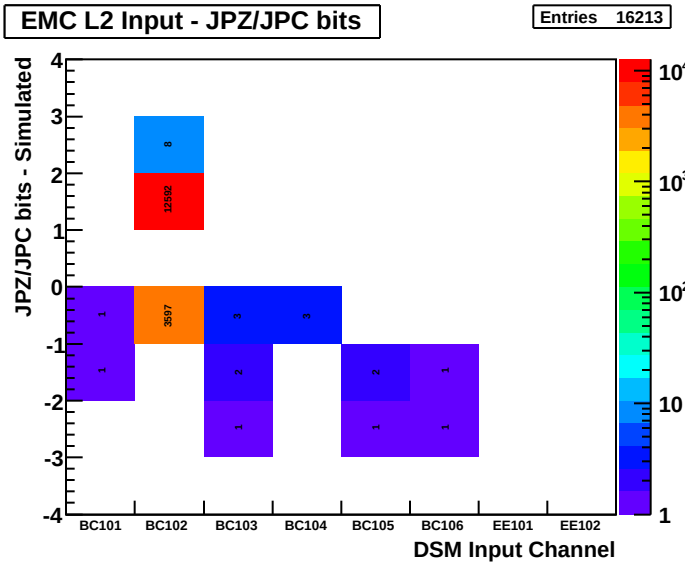

EMC L2 Input - JPX/JPA bits
Entries 174096
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

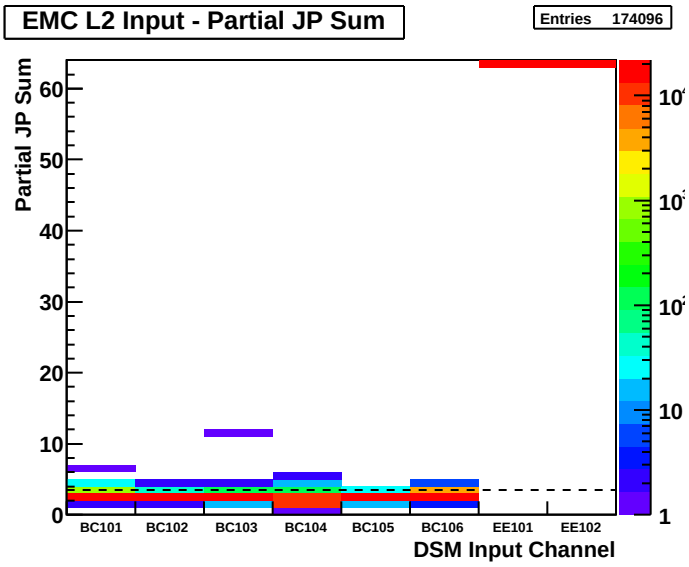

EMC L2 Input - JPX/JPA bits
Entries 24
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

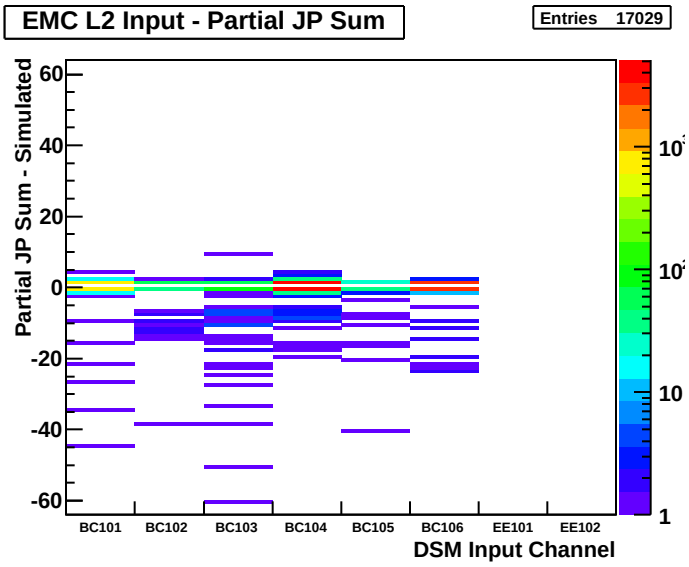

EMC L2 Input - JPY/JPB bits
Entries 174096
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

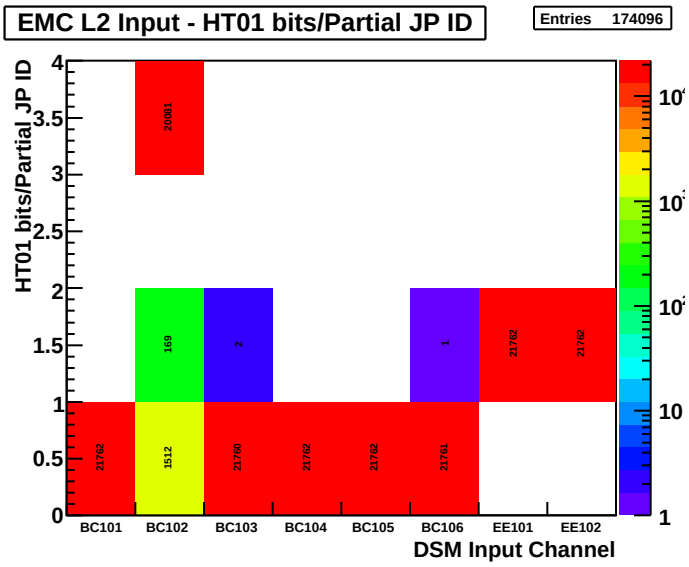

EMC L2 Input - JPY/JPB bits
Entries 16196
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

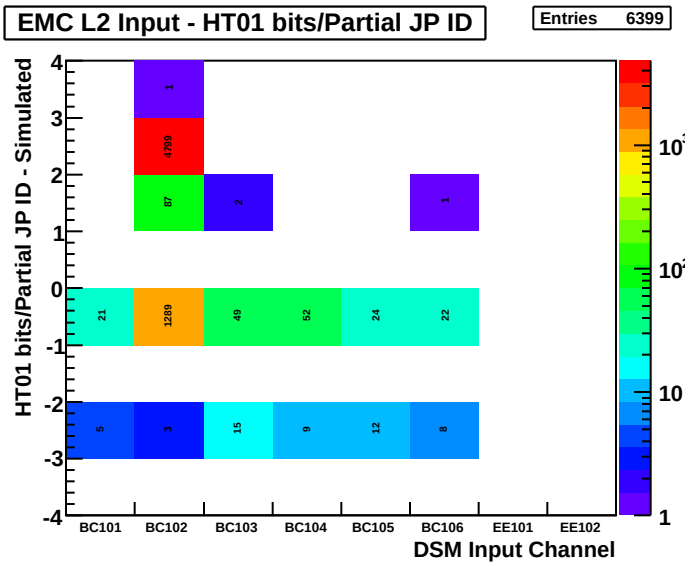

EMC L2 Input - JPZ/JPC bits
Entries 174096
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

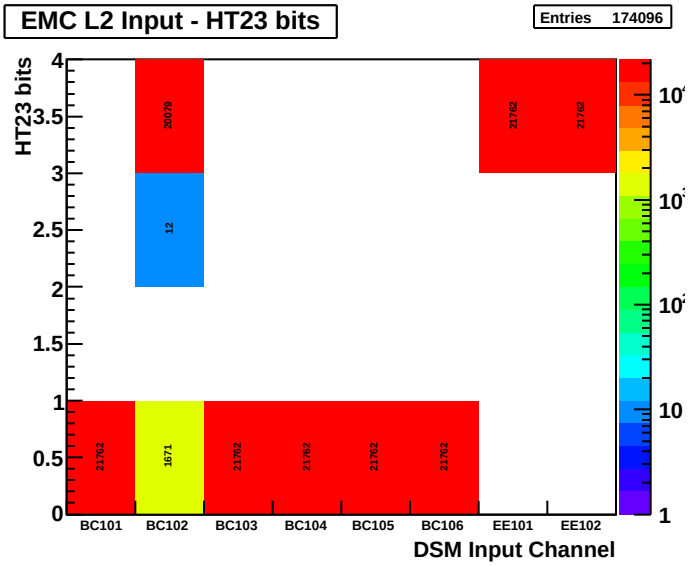

EMC L2 Input - JPZ/JPC bits
Entries 16213
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

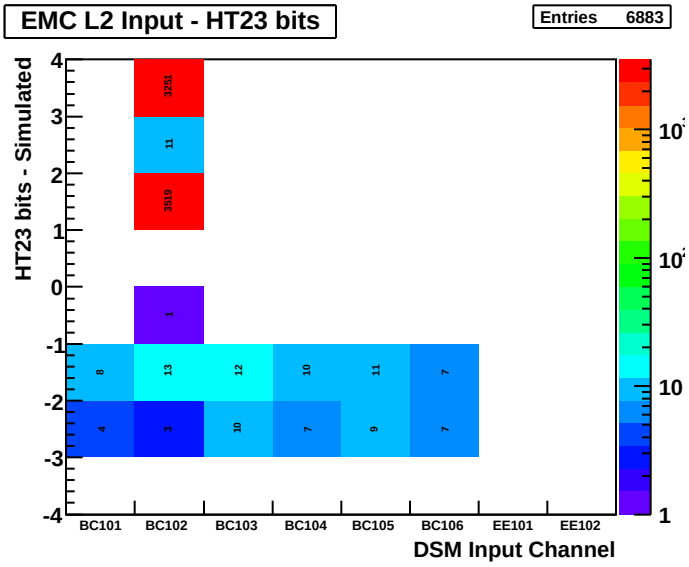

EMC L2 Input - Partial JP Sum
Entries 174096
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

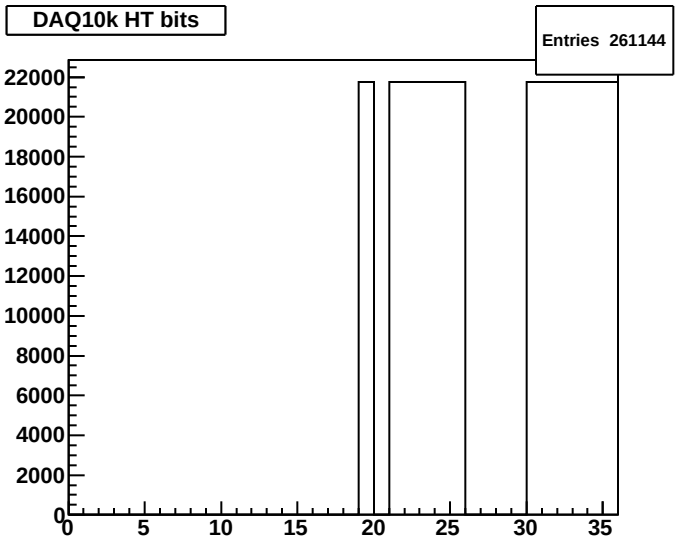

EMC L2 Input - Partial JP Sum
Entries 17029
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

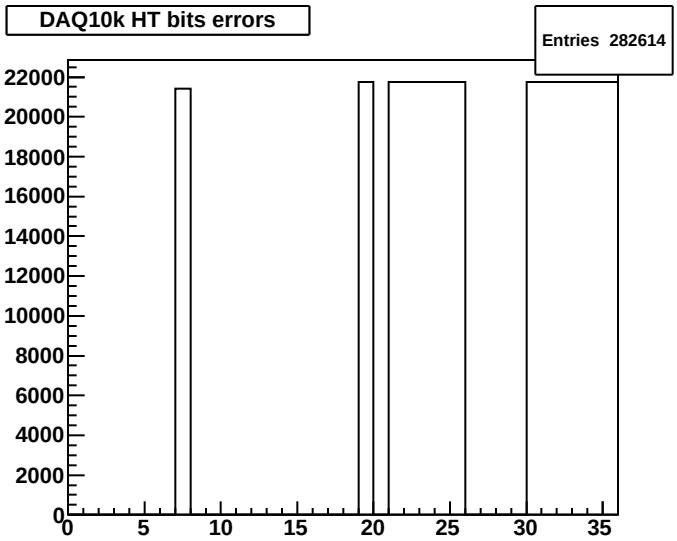

EMC L2 Input - HT01 bits/Partial JP ID
Entries 174096
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

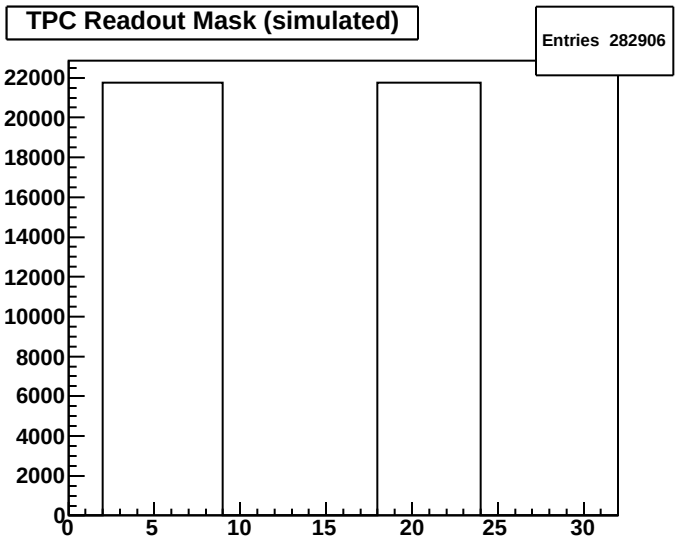

EMC L2 Input - HT01 bits/Partial JP ID
Entries 6399
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

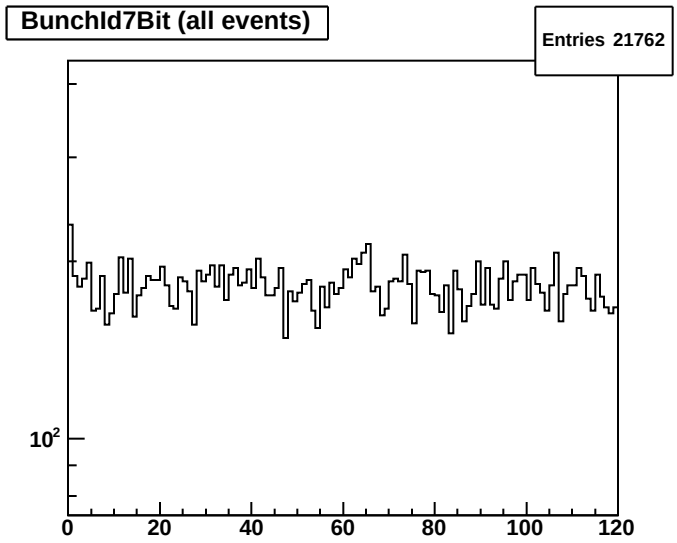

EMC L2 Input - HT23 bits
Entries 174096
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

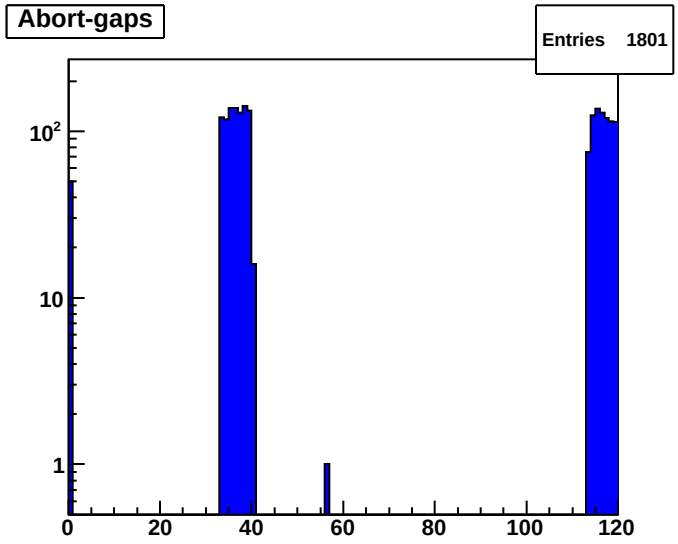

EMC L2 Input - HT23 bits
Entries 6883
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

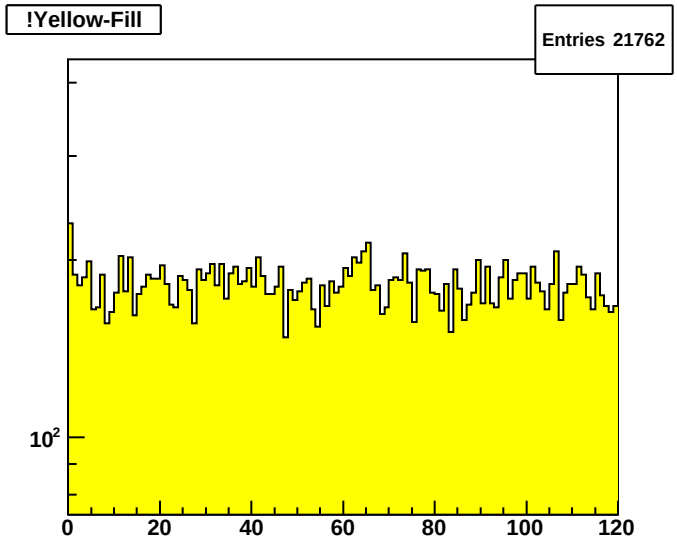

DAQ10k HT bits
Entries 261144

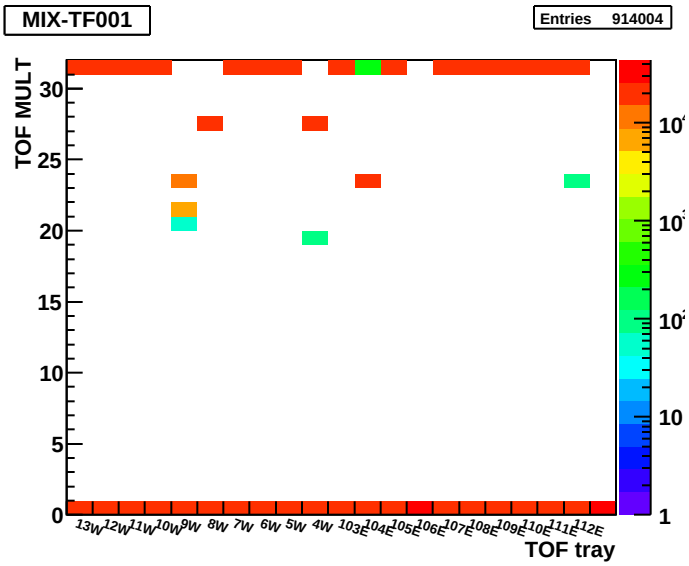

DAQ10k HT bits errors
Entries 282614

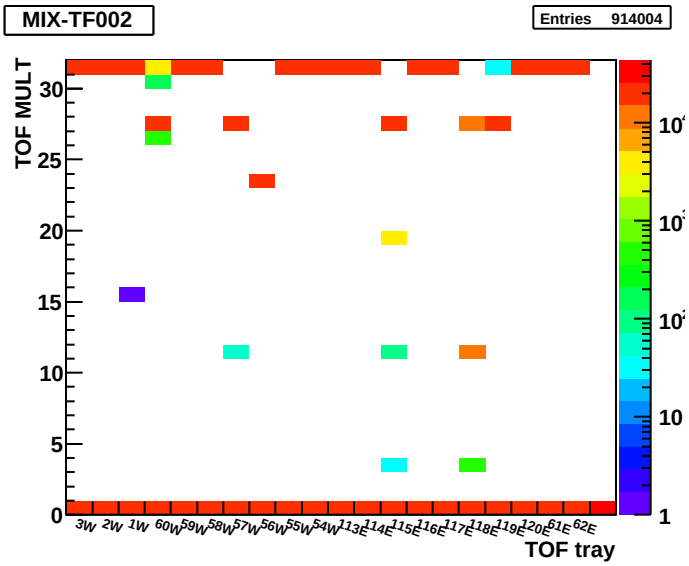

TPC Readout Mask (simulated)
Entries 282906

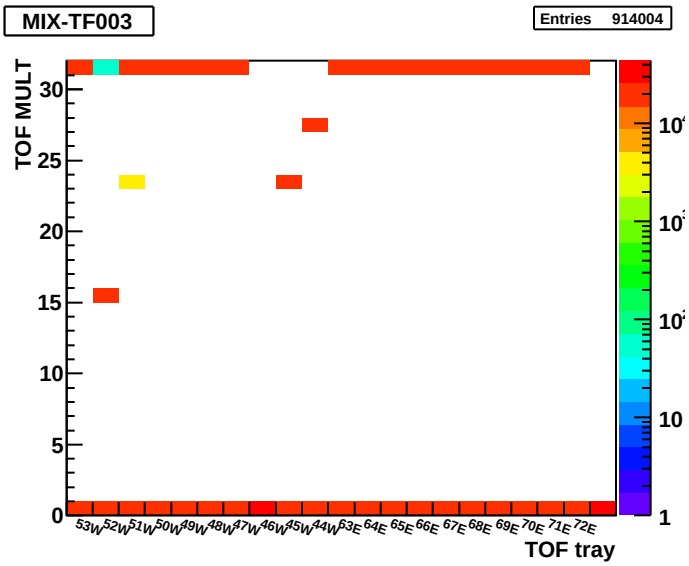

BunchId7Bit (all events)
Entries 21762

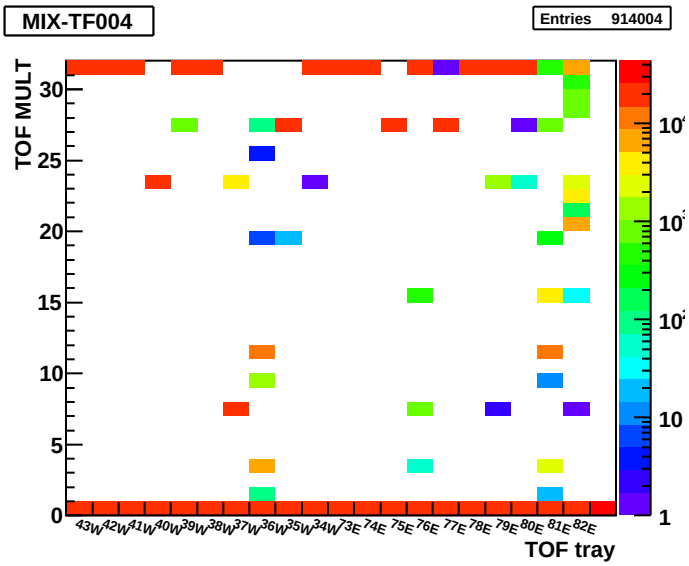

Abort-gaps
Entries 1801

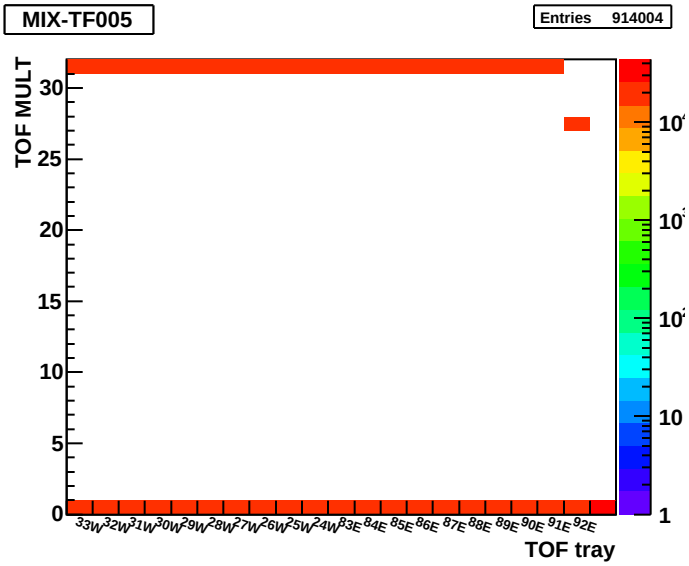

!Yellow-Fill
Entries 21762

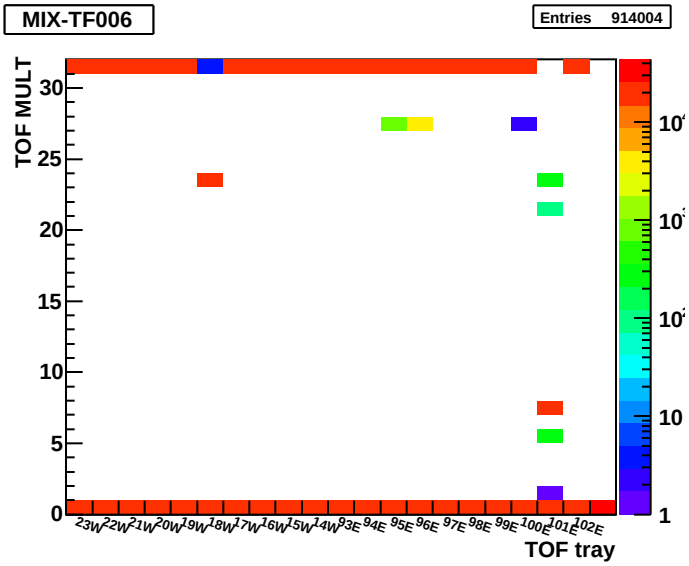

MIX-TF001
Entries 914004
TOF MULT
TOF tray

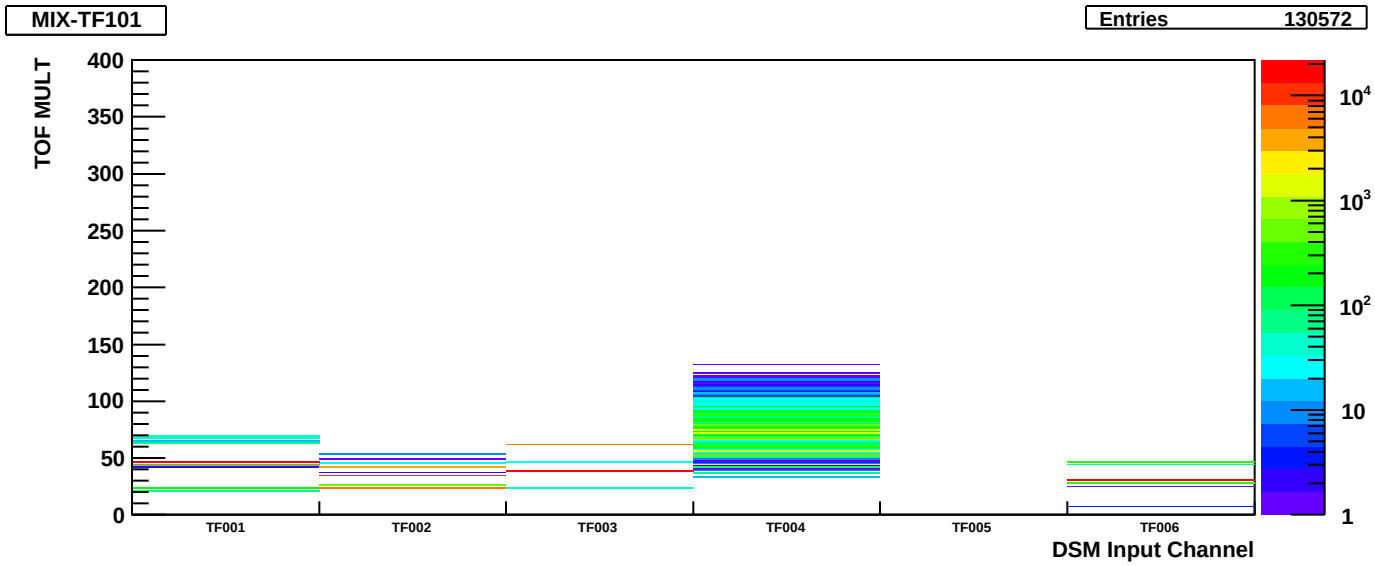

MIX-TF002
Entries 914004
TOF MULT
TOF tray

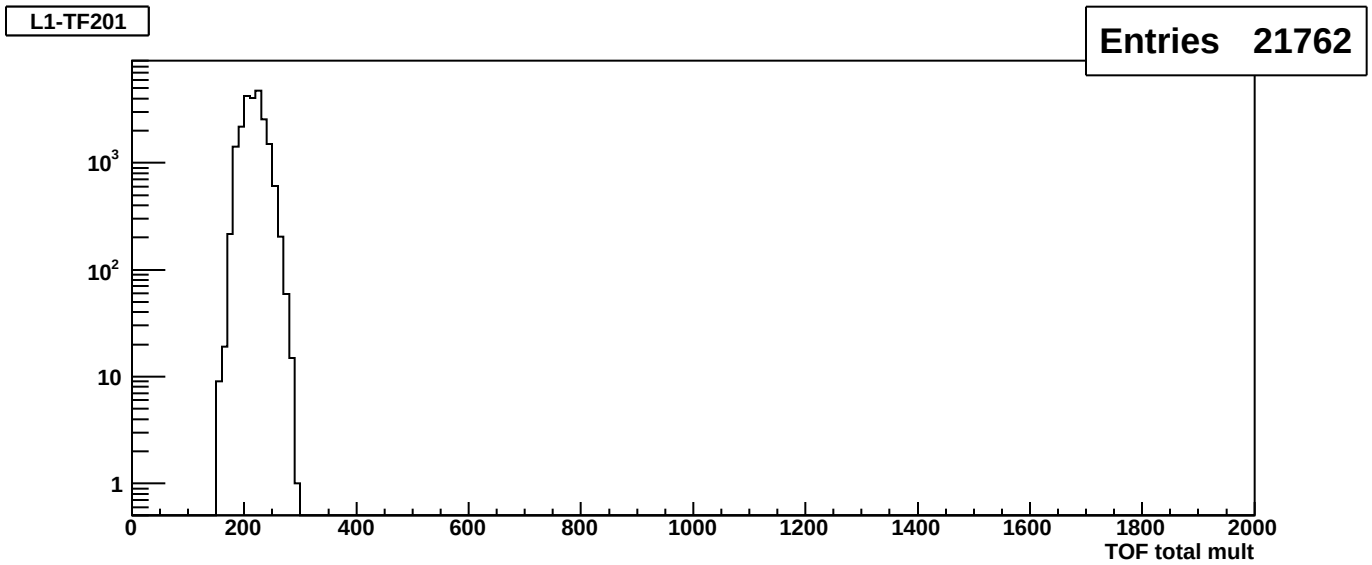

MIX-TF003
Entries 914004
TOF MULT
TOF tray

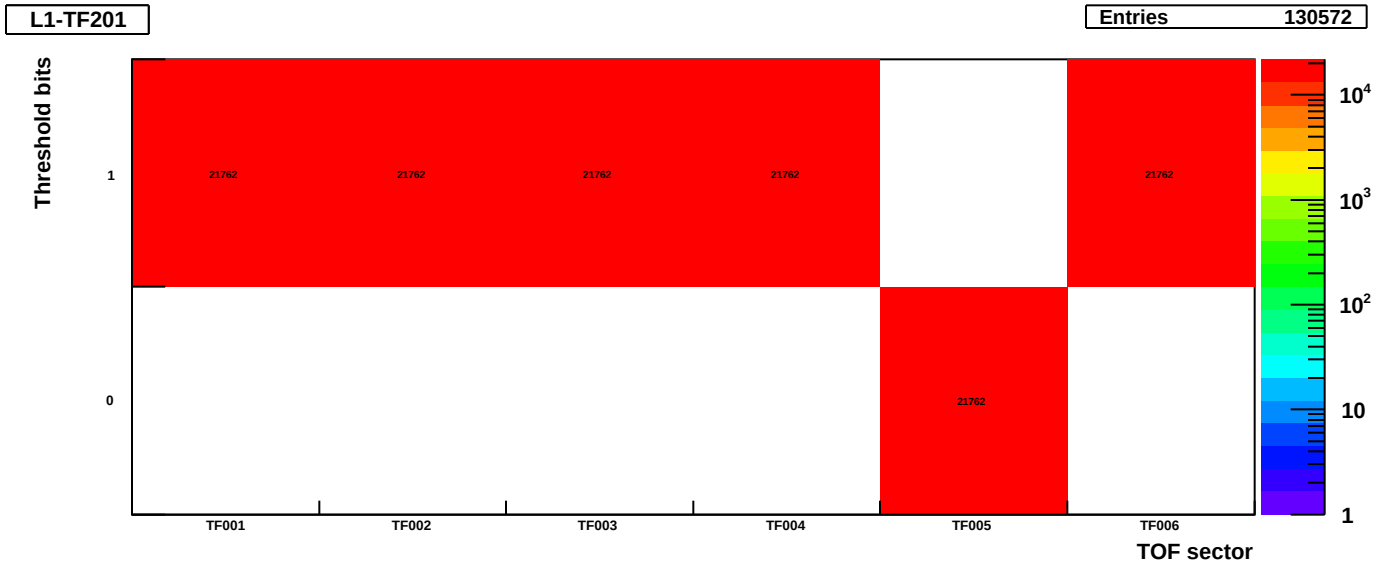

MIX-TF004
Entries 914004
TOF MULT
TOF tray

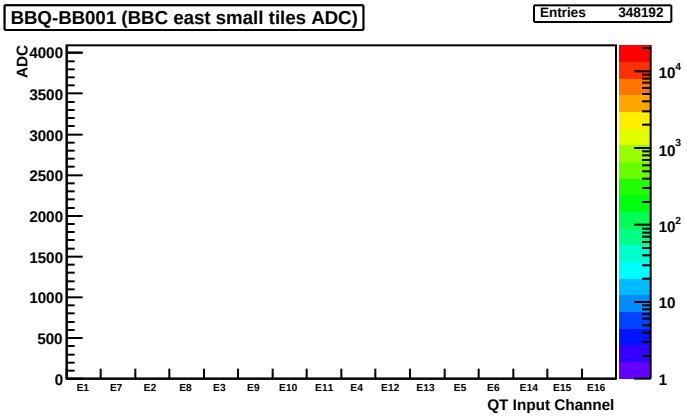

MIX-TF005
Entries 914004
TOF MULT
TOF tray

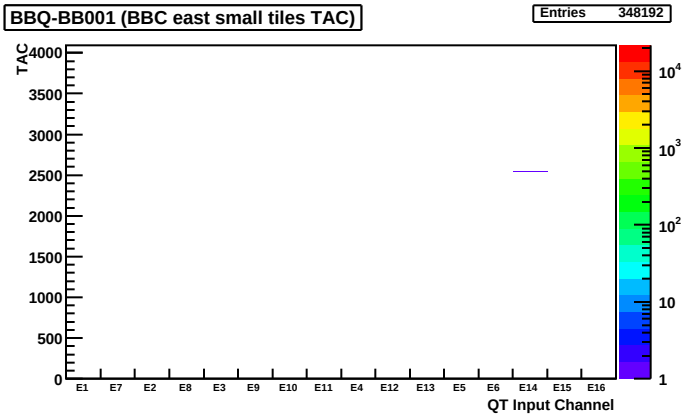

MIX-TF006
Entries 914004
TOF MULT
TOF tray

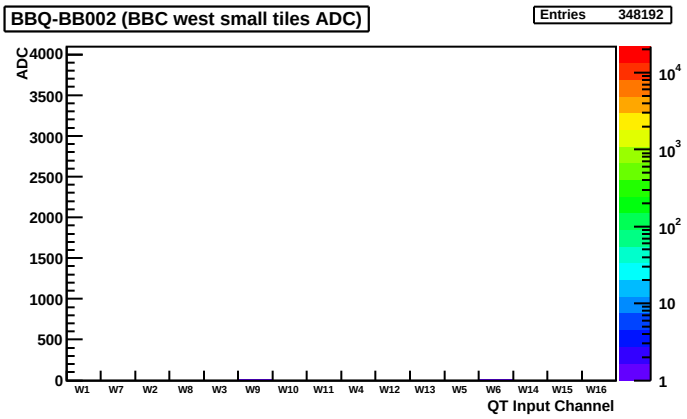

MIX-TF101
Entries 130572
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
$10^4$
$10^3$
$10^2$
10
1

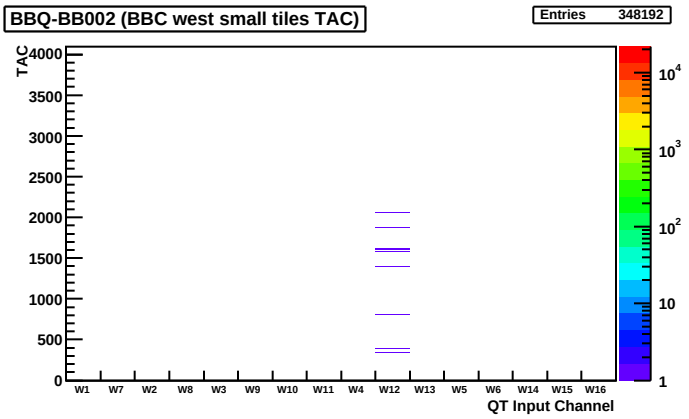

L1-TF201
Entries 21762
$10^3$
$10^2$
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

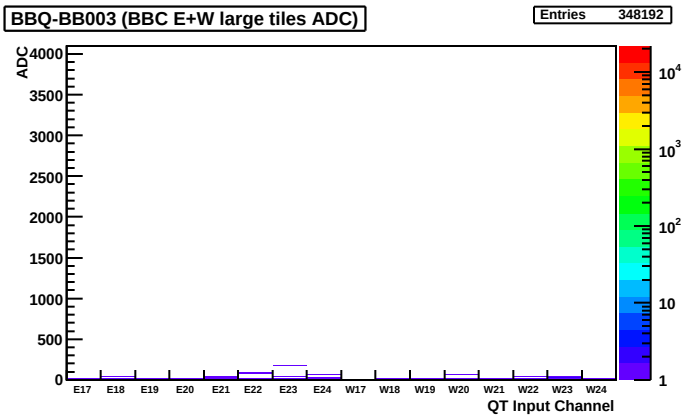

L1-TF201
Entries 130572
Threshold bits
1
0
21762
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
$10^4$
$10^3$
$10^2$
10
1

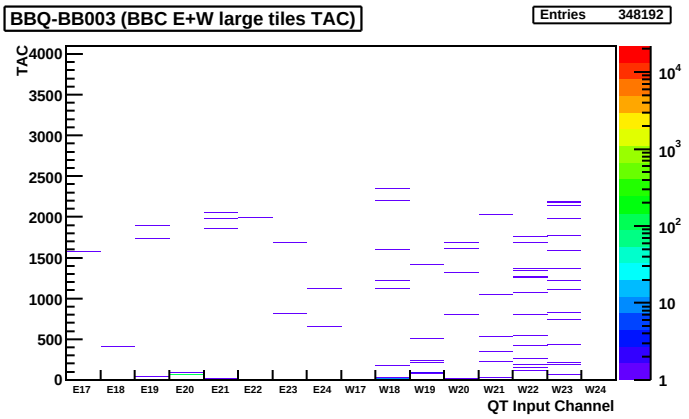

BBQ-BB001 (BBC east small tiles ADC)
Entries 348192
ADC
QT Input Channel

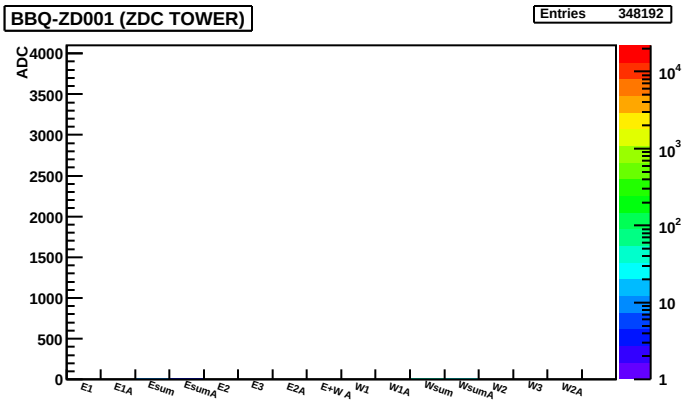

BBQ-BB001 (BBC east small tiles TAC)
Entries 348192
TAC
QT Input Channel

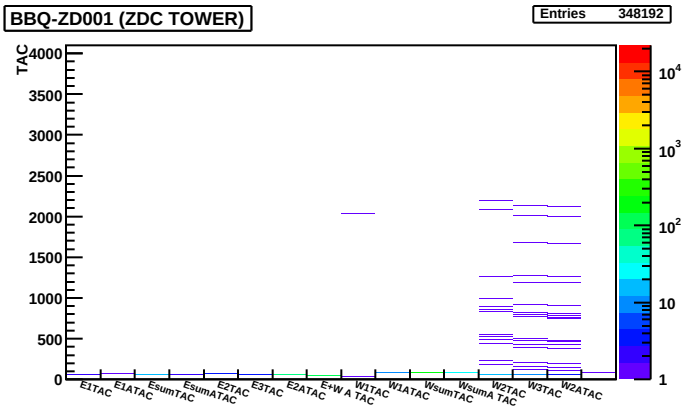

BBQ-BB002 (BBC west small tiles ADC)
Entries 348192
ADC
QT Input Channel

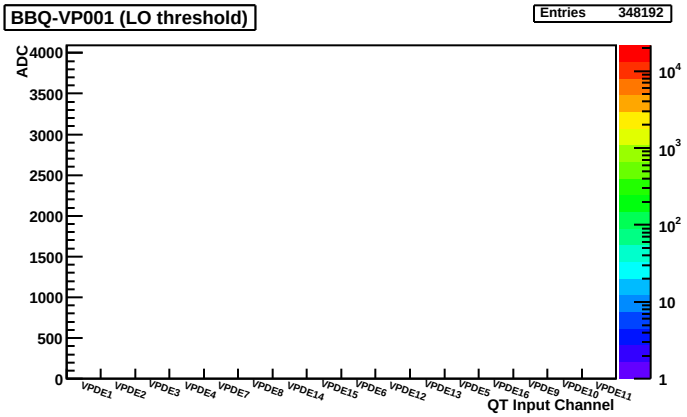

BBQ-BB002 (BBC west small tiles TAC)
Entries 348192
TAC
QT Input Channel

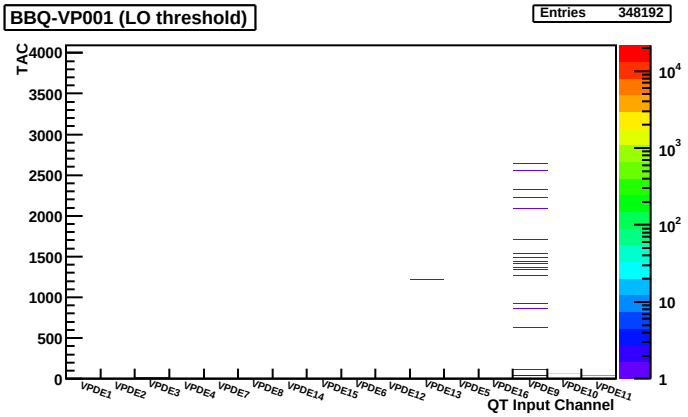

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 348192
ADC
QT Input Channel

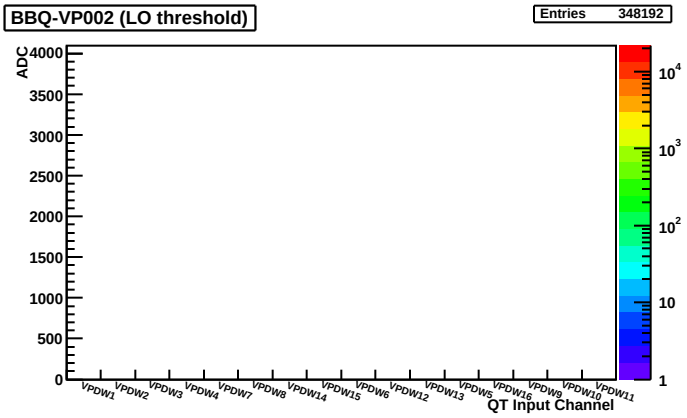

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 348192
TAC
QT Input Channel

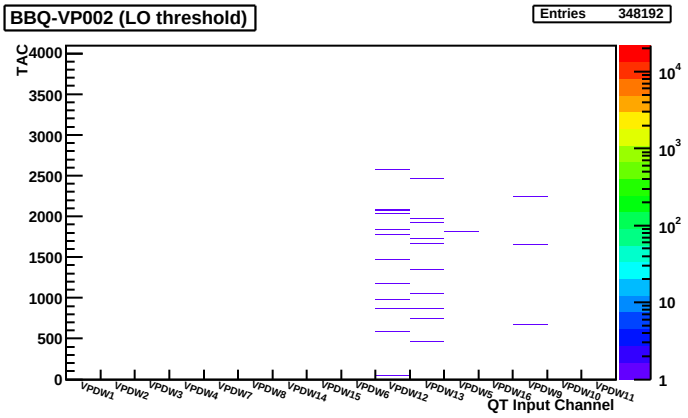

BBQ-ZD001 (ZDC TOWER)
Entries 348192
ADC

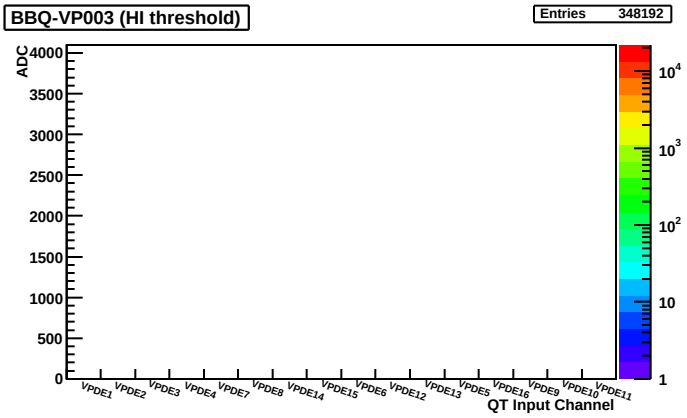

BBQ-ZD001 (ZDC TOWER)
Entries 348192
TAC

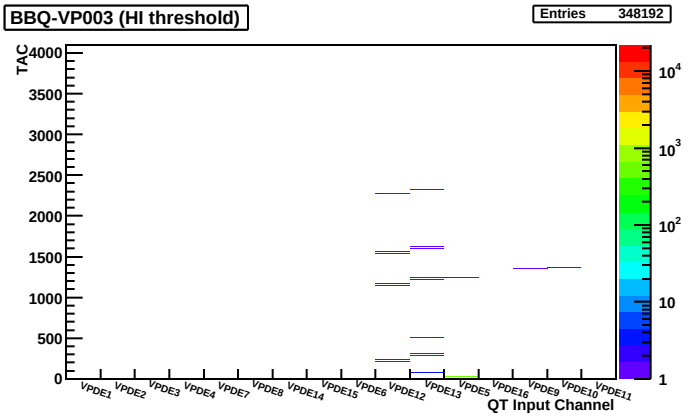

BBQ-VP001 (LO threshold)
Entries 348192
ADC
QT Input Channel

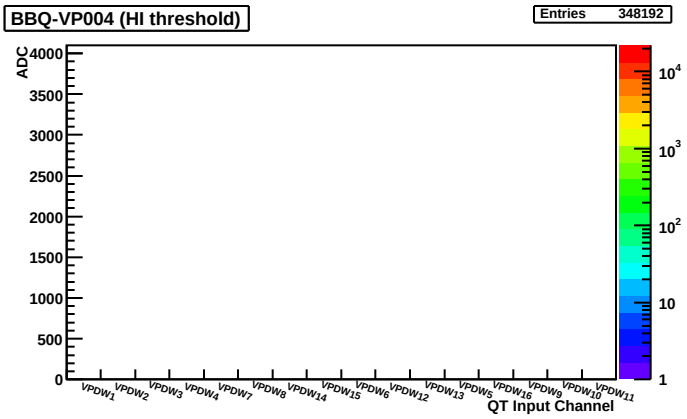

BBQ-VP001 (LO threshold)
Entries 348192
TAC
QT Input Channel

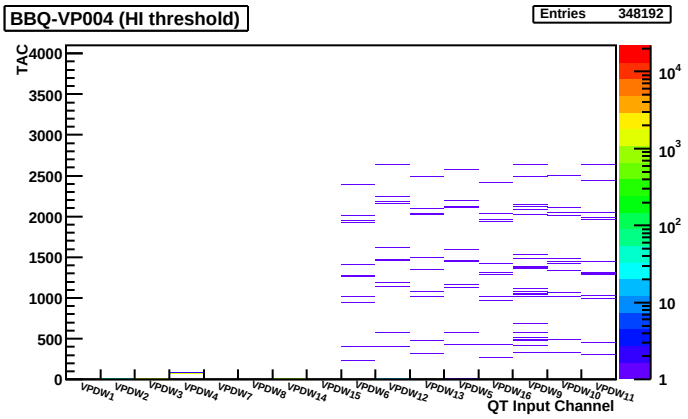

BBQ-VP002 (LO threshold)
Entries 348192
ADC
QT Input Channel

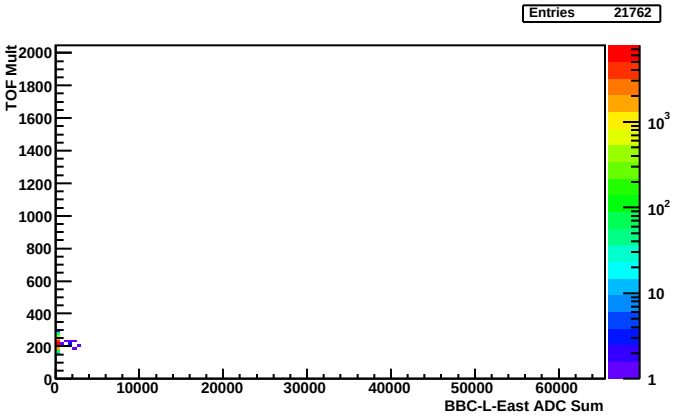

BBQ-VP002 (LO threshold)
Entries 348192
TAC
QT Input Channel

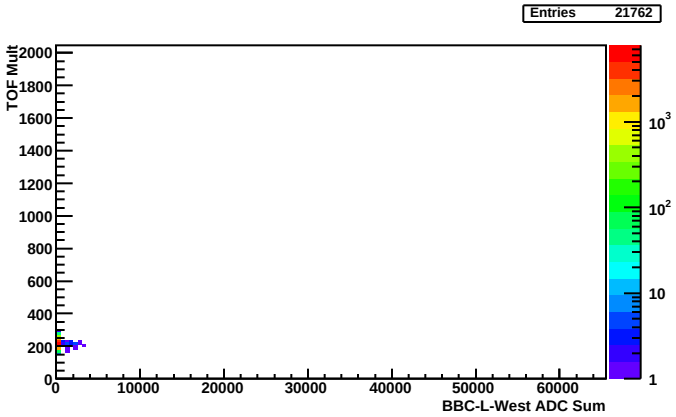

BBQ-VP003 (HI threshold)
Entries 348192
ADC
QT Input Channel

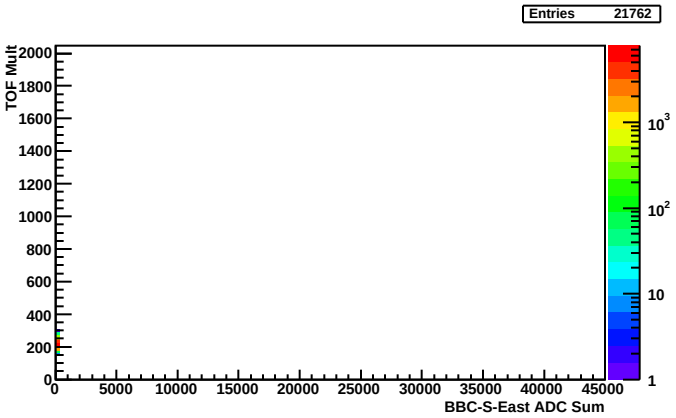

BBQ-VP003 (HI threshold)
Entries 348192
TAC
QT Input Channel

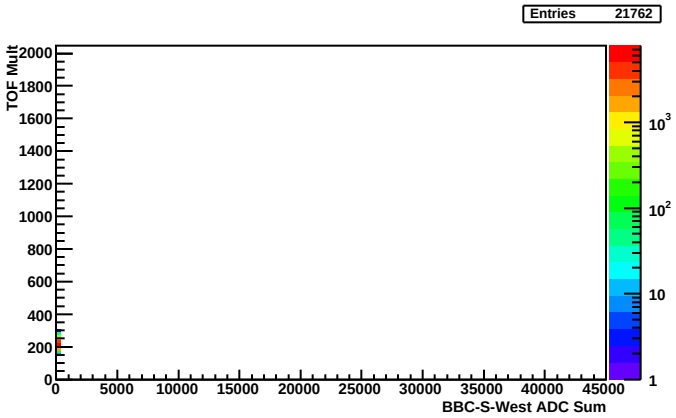

BBQ-VP004 (HI threshold)
Entries 348192
ADC
QT Input Channel

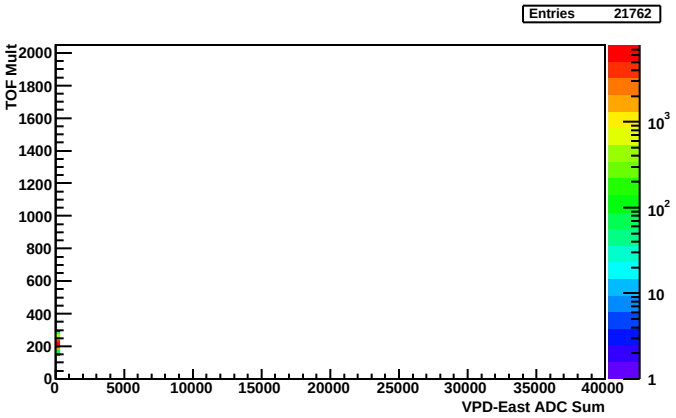

BBQ-VP004 (HI threshold)
Entries 348192
TAC
QT Input Channel

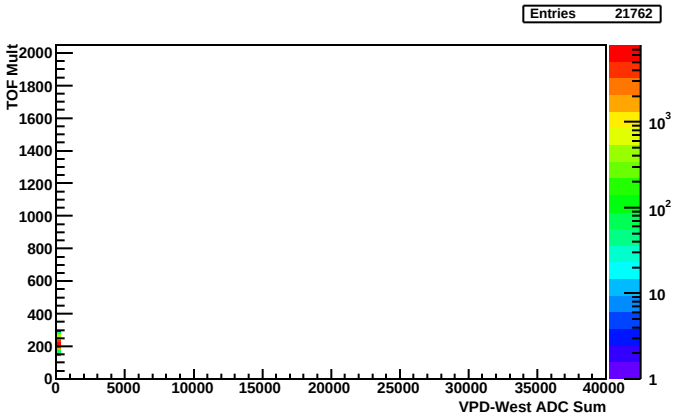

Entries 21762
TOF Mult
BBC-L-East ADC Sum

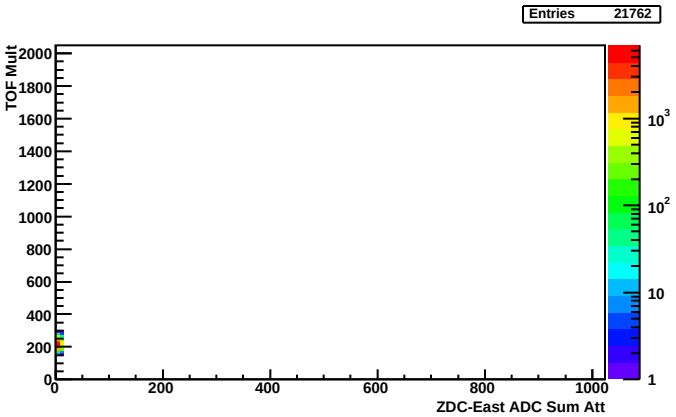

Entries 21762
TOF Mult
BBC-L-West ADC Sum

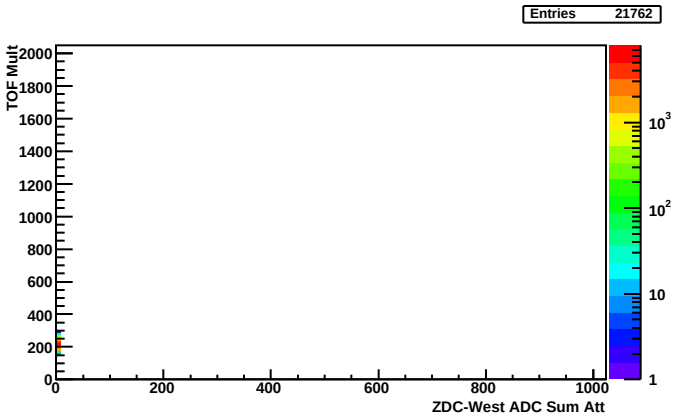

Entries 21762
TOF Mult
BBC-S-East ADC Sum

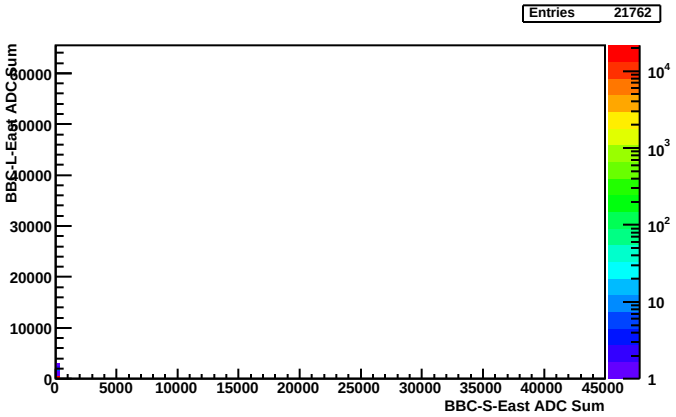

Entries 21762
TOF Mult
BBC-S-West ADC Sum

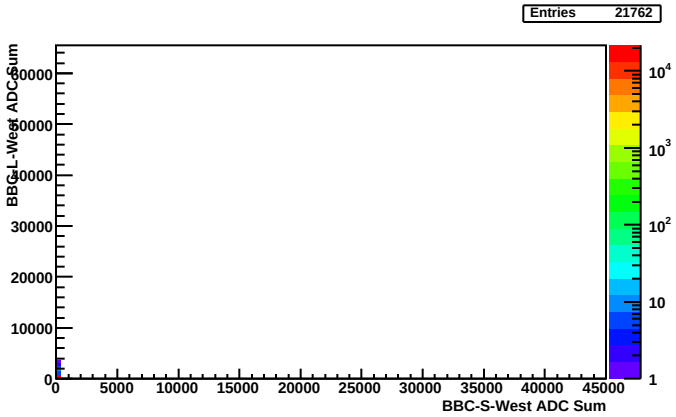

Entries 21762
TOF Mult
VPD-East ADC Sum

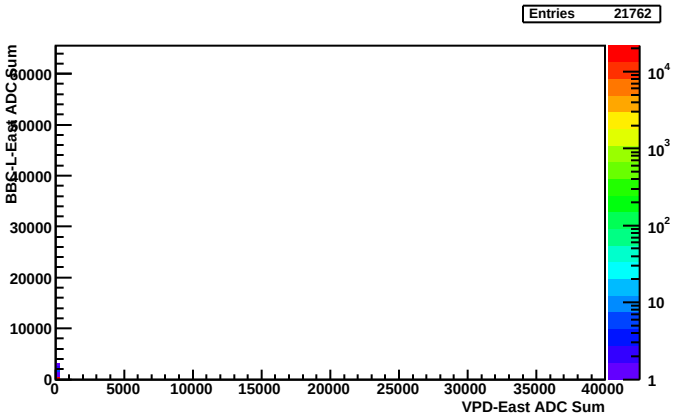

Entries 21762
TOF Mult
VPD-West ADC Sum

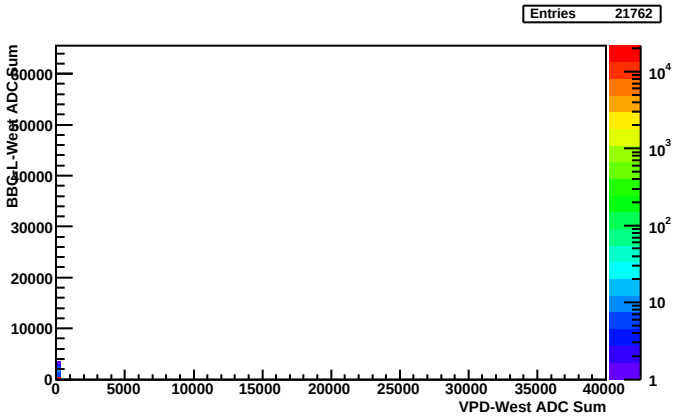

Entries 21762
TOF Mult
ZDC-East ADC Sum Att

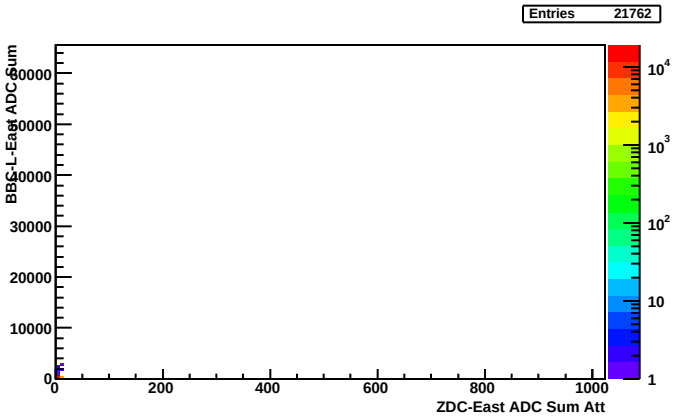

Entries 21762
TOF Mult
ZDC-West ADC Sum Att

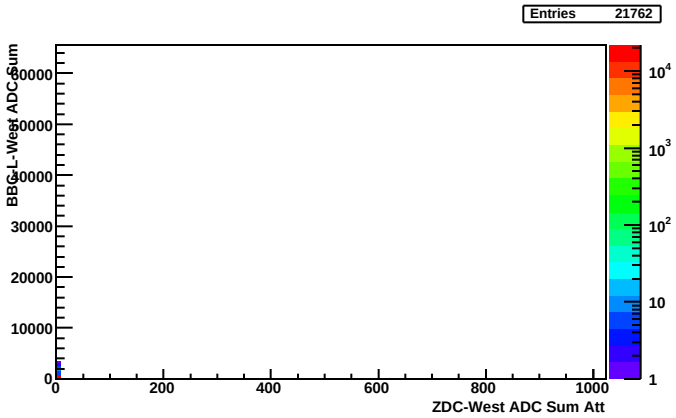

Entries 21762
BBC-L-East ADC Sum
BBC-S-East ADC Sum

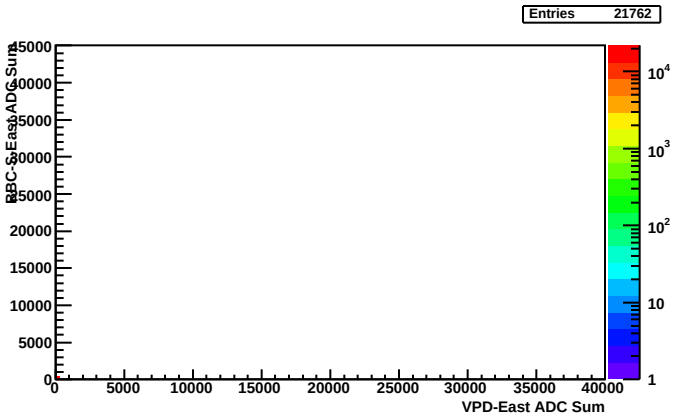

Entries 21762
BBC-L-West ADC Sum
BBC-S-West ADC Sum

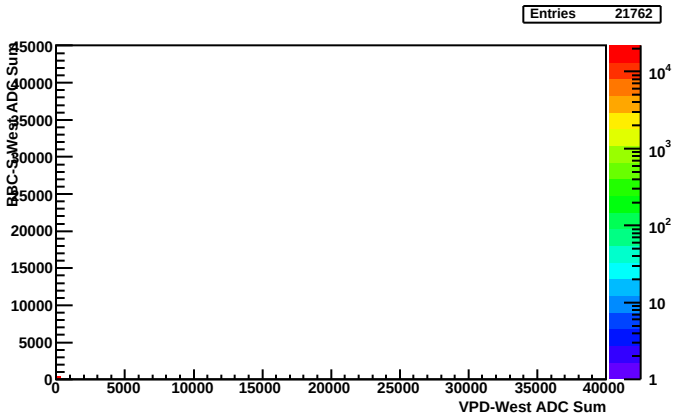

Entries 21762
BBC-L-East ADC Sum
VPD-East ADC Sum

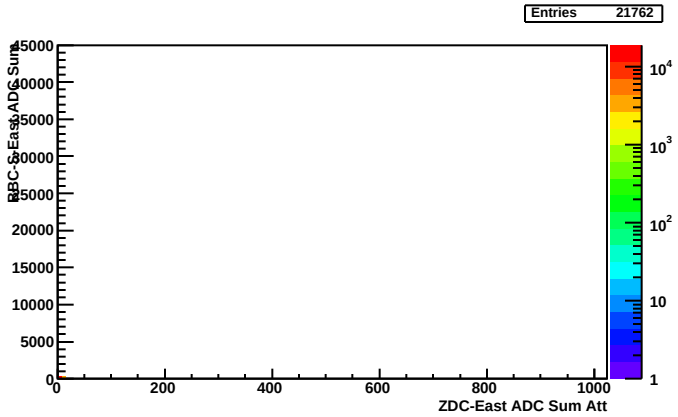

Entries 21762
BBC-L-West ADC Sum
VPD-West ADC Sum

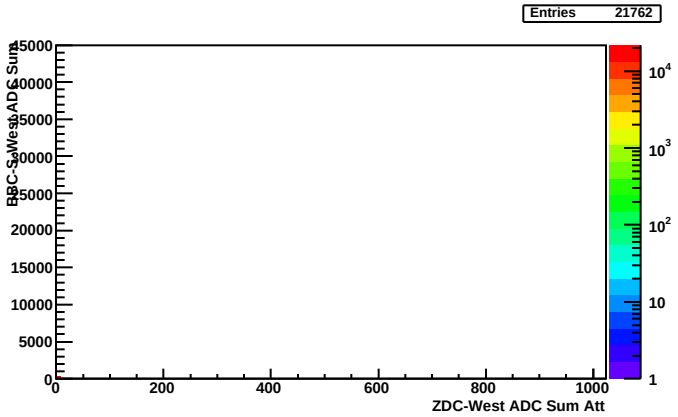

Entries 21762
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

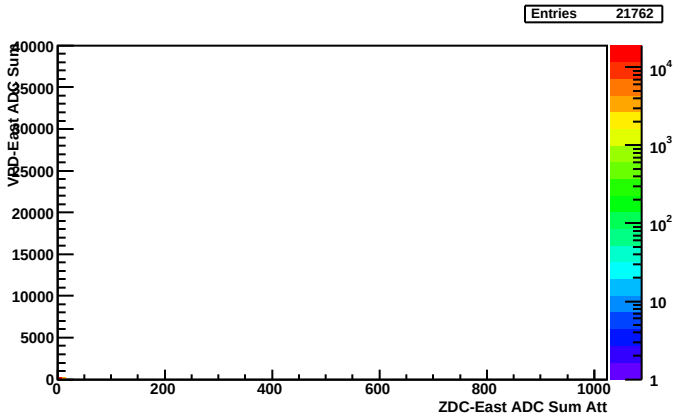

Entries 21762
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

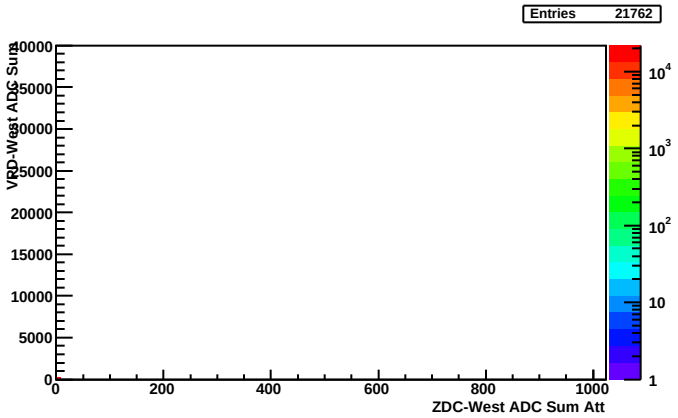

Entries 21762
BBC-S-East ADC Sum
VPD-East ADC Sum

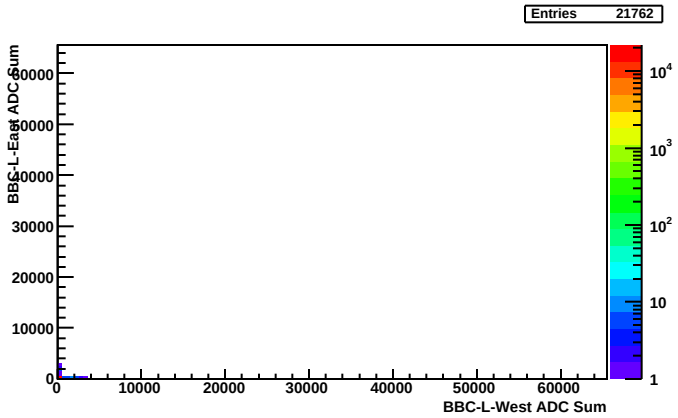

Entries 21762
BBC-S-West ADC Sum
VPD-West ADC Sum

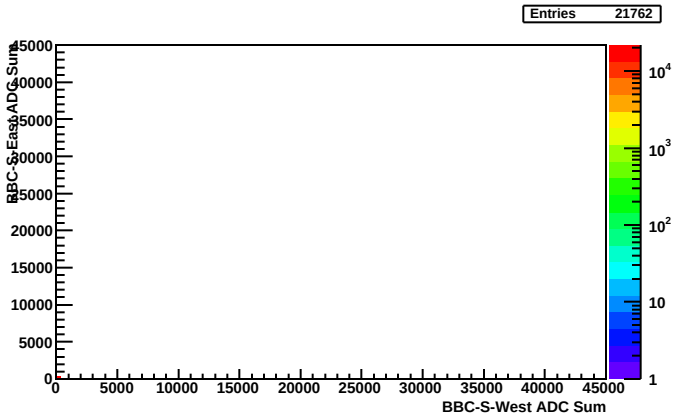

Entries 21762
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

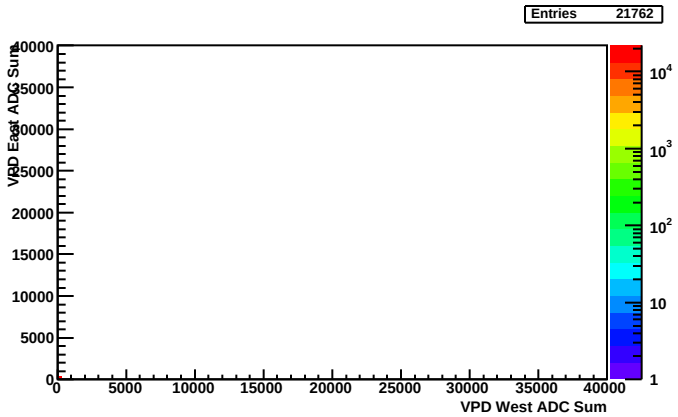

Entries 21762
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

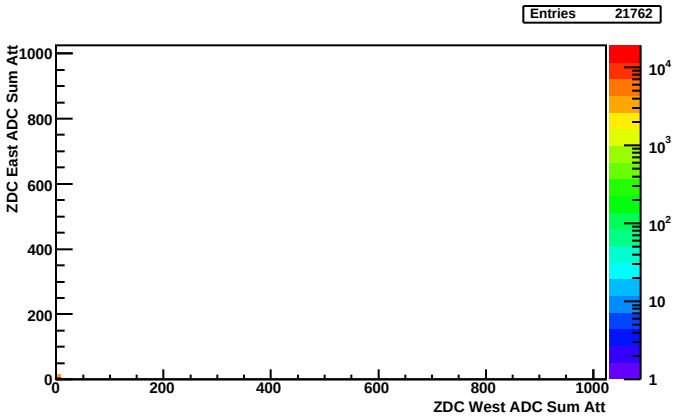

Entries 21762
VPD-East ADC Sum
ZDC-East ADC Sum Att

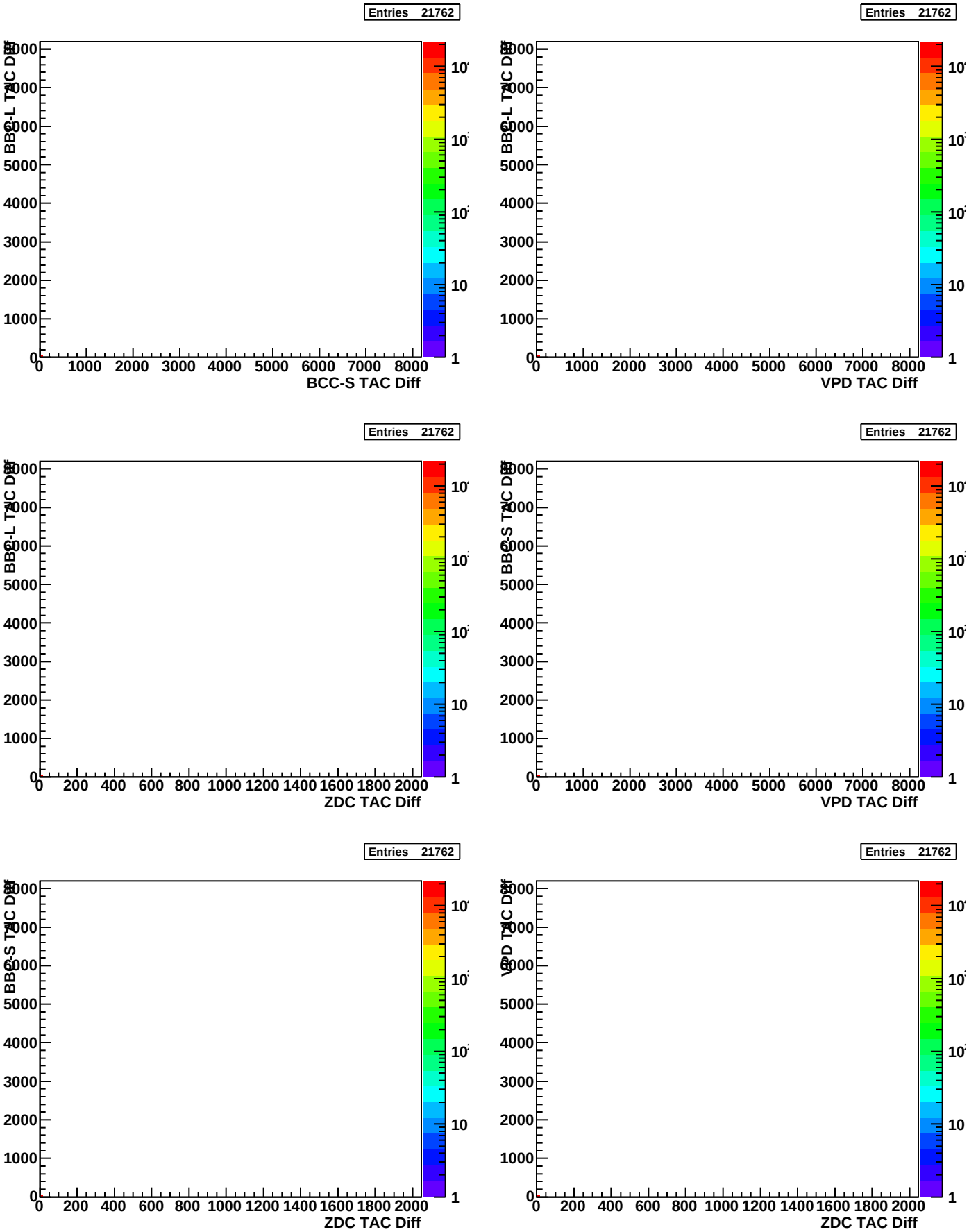

Entries 21762
VPD-West ADC Sum
ZDC-West ADC Sum Att

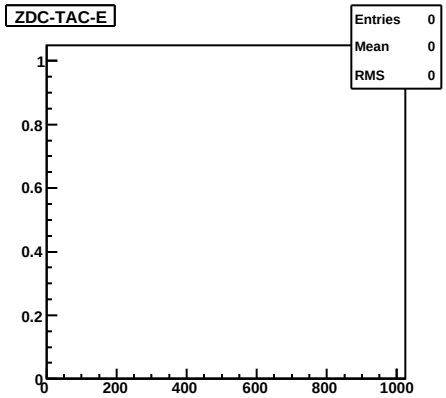

Entries 21762
BBC-L-East ADC Sum
BBC-L-West ADC Sum

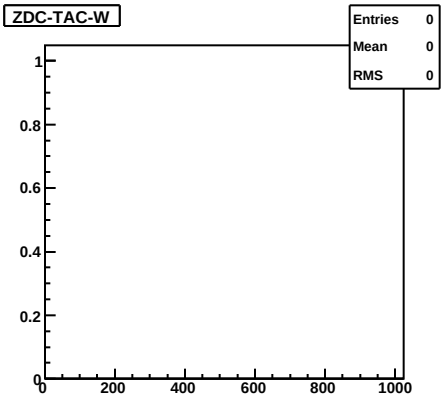

Entries 21762
BBC-S-East ADC Sum
BBC-S-West ADC Sum

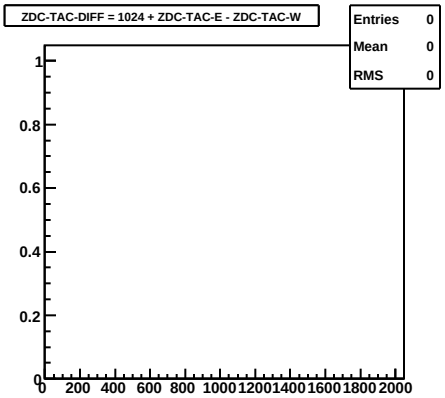

Entries 21762
VPD East ADC Sum
VPD West ADC Sum

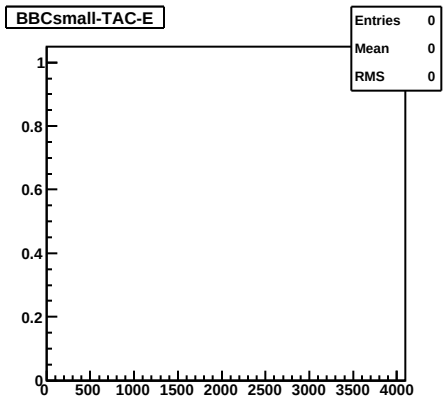

Entries 21762
ZDC East ADC Sum Att
ZDC West ADC Sum Att

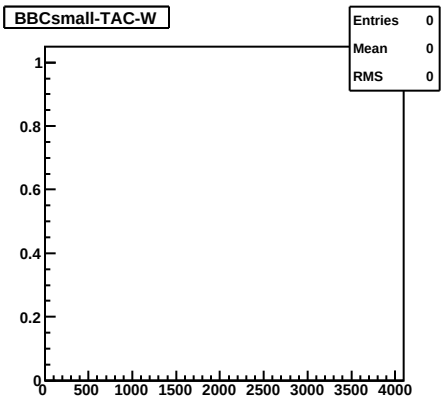

Entries 21762
BBC-L TAC Diff
BCC-S TAC Diff
Entries 21762
BBC-L TAC Diff
VPD TAC Diff
Entries 21762
BBC-L TAC Diff
ZDC TAC Diff
Entries 21762
BBC-S TAC Diff
VPD TAC Diff
Entries 21762
BBC-S TAC Diff
ZDC TAC Diff
Entries 21762
VPD TAC Diff
ZDC TAC Diff

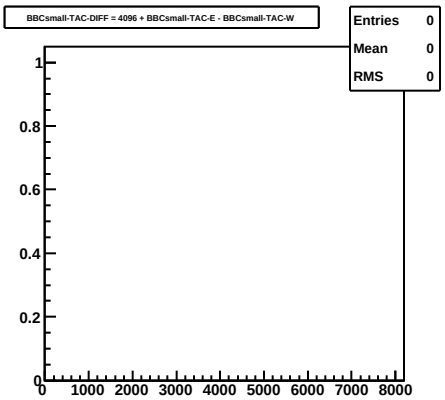

ZDC-TAC-E
Entries 0
Mean 0
RMS 0

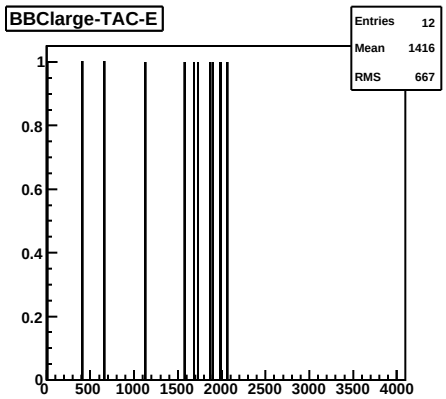

ZDC-TAC-W
Entries 0
Mean 0
RMS 0

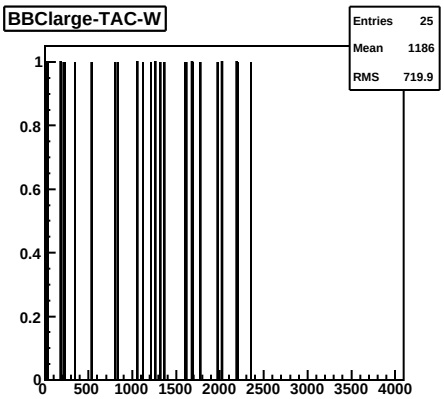

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 0
Mean 0
RMS 0

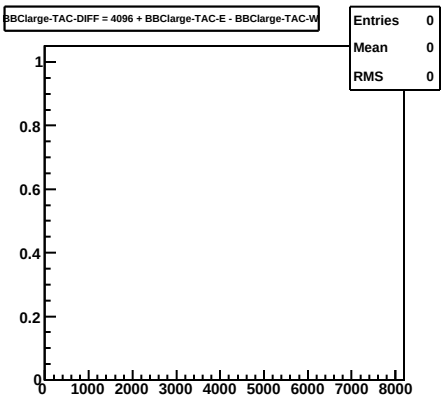

BBCsmall-TAC-E
Entries 0
Mean 0
RMS 0

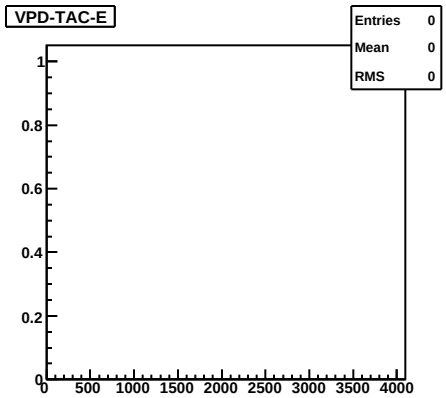

BBCsmall-TAC-W
Entries 0
Mean 0
RMS 0

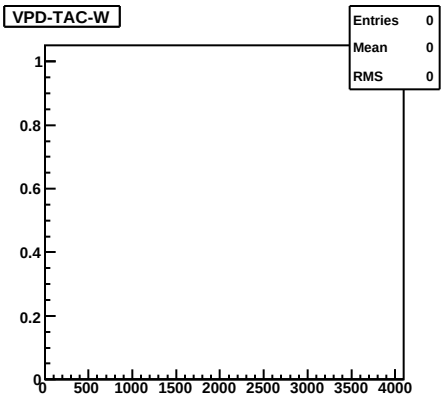

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 0
Mean 0
RMS 0

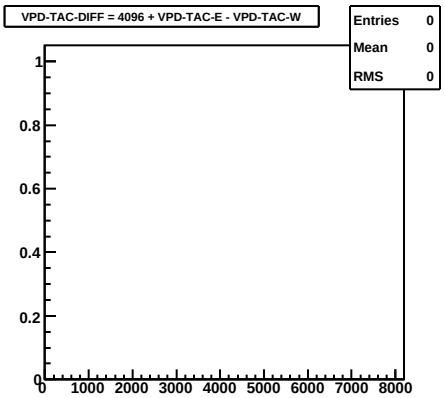

BBClarge-TAC-E
Entries 12
Mean 1416
RMS 667

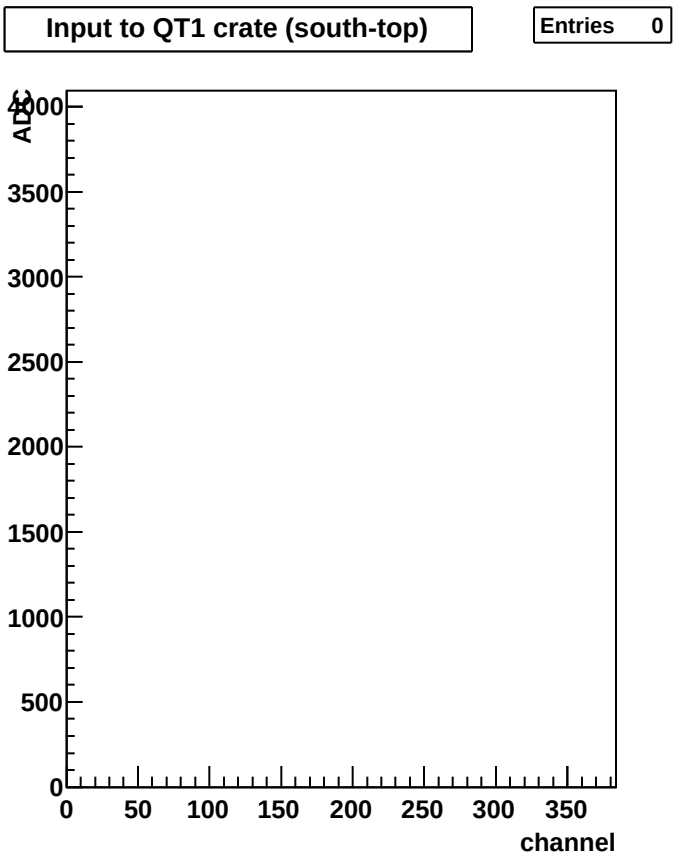

BBClarge-TAC-W
Entries 25
Mean 1186
RMS 719.9

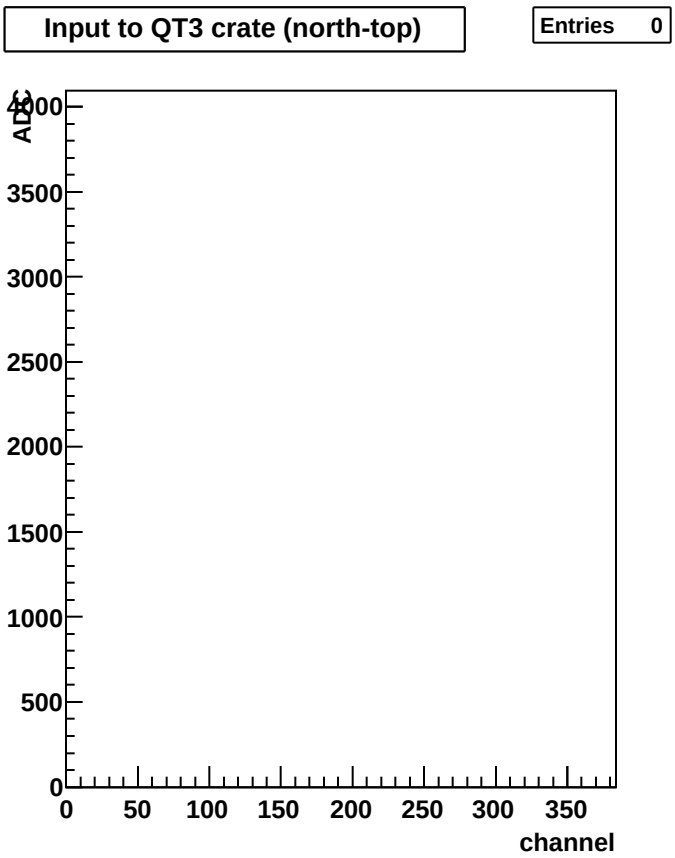

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 0
Mean 0
RMS 0

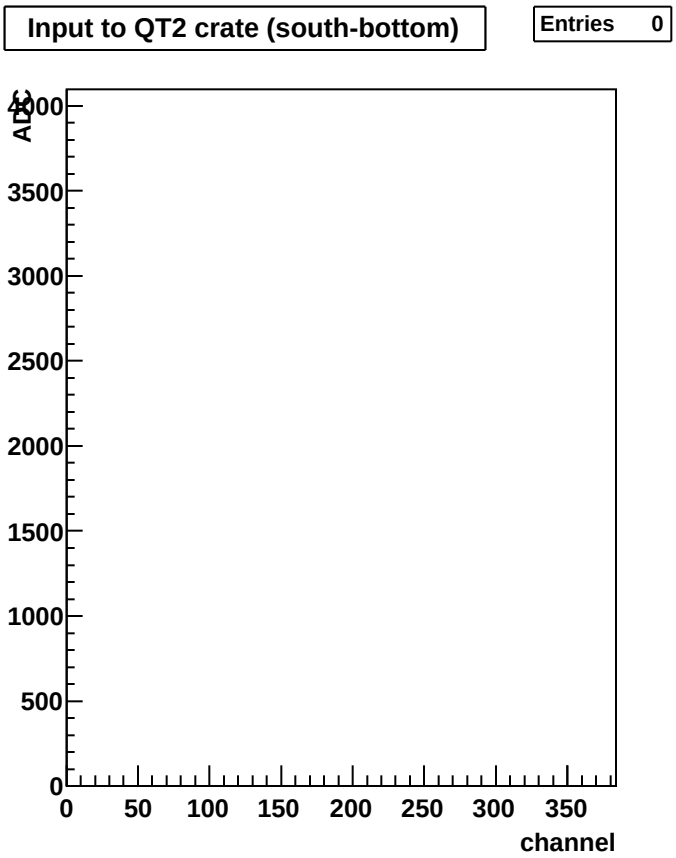

VPD-TAC-E
Entries 0
Mean 0
RMS 0

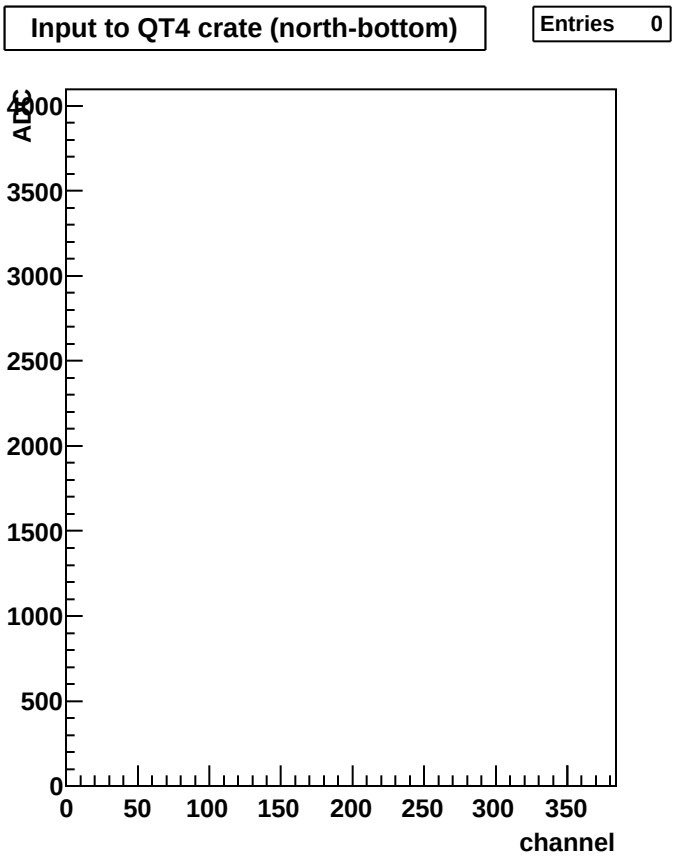

VPD-TAC-W
Entries 0
Mean 0
RMS 0

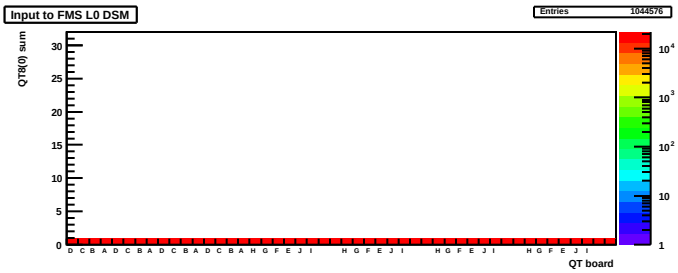

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 0
Mean 0
RMS 0

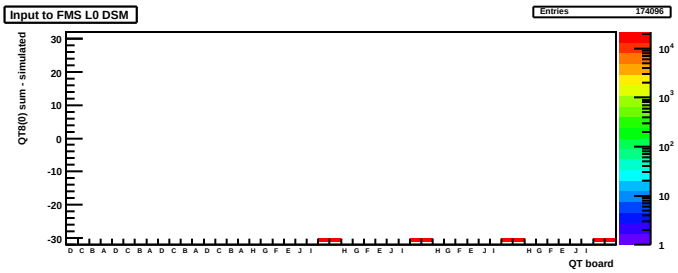

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

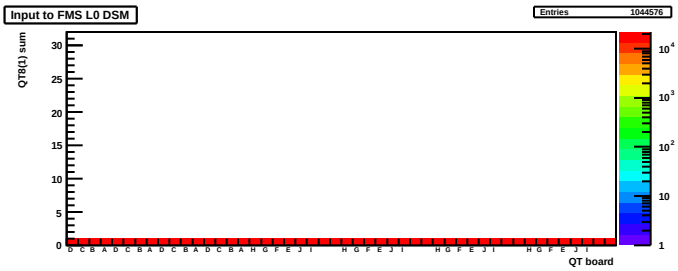

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

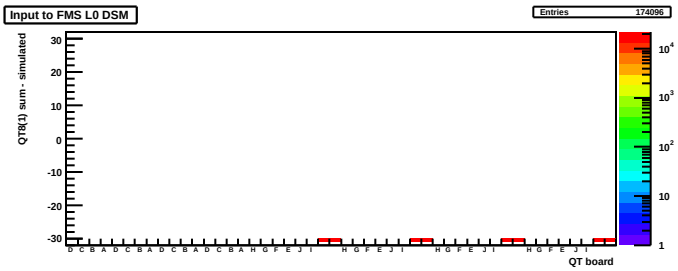

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

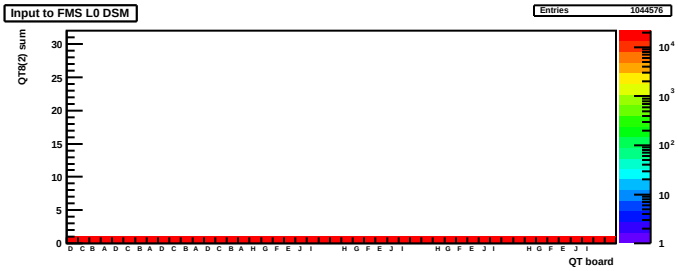

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

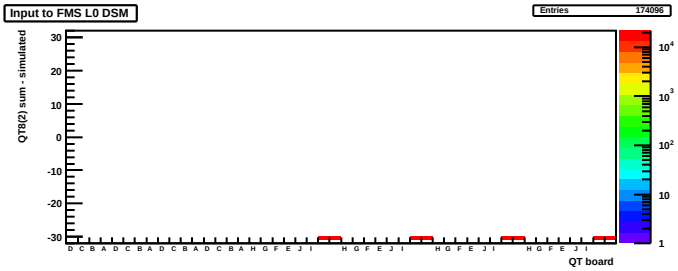

Input to FMS L0 DSM
Entries 1044576
QT8(0) sum
QT board

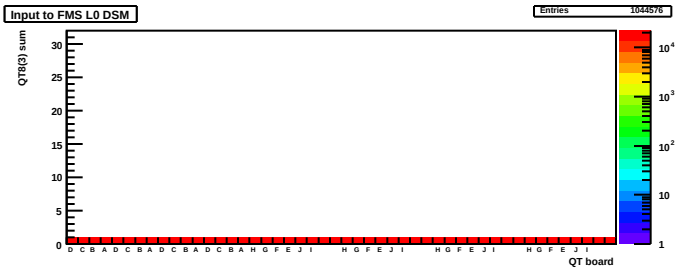

Input to FMS L0 DSM
Entries 174096
QT8(0) sum - simulated
QT board

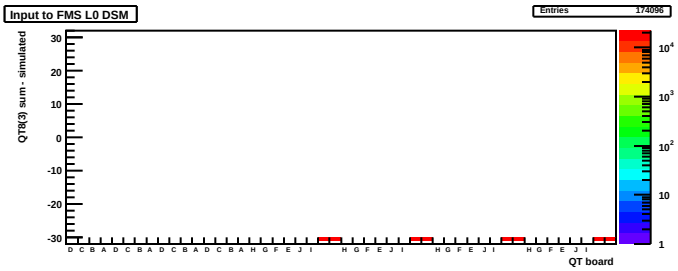

Input to FMS L0 DSM
Entries 1044576
QT8(1) sum
QT board

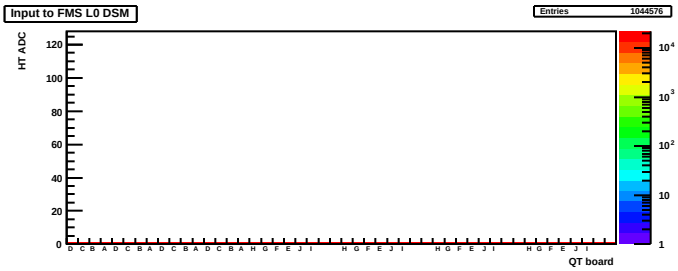

Input to FMS L0 DSM
Entries 174096
QT8(1) sum - simulated
QT board

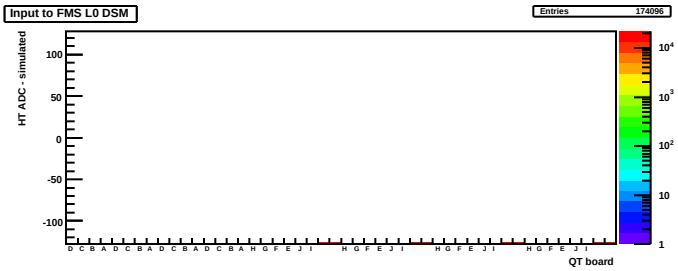

Input to FMS L0 DSM
Entries 1044576
QT8(2) sum
QT board

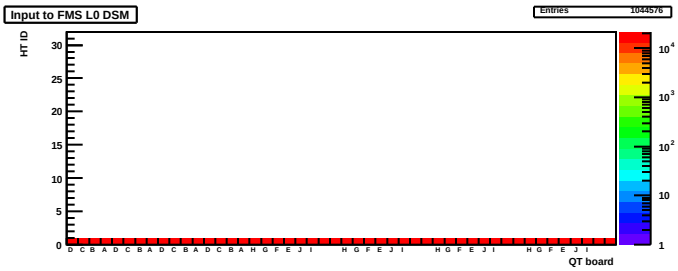

Input to FMS L0 DSM
Entries 174096
QT8(2) sum - simulated
QT board

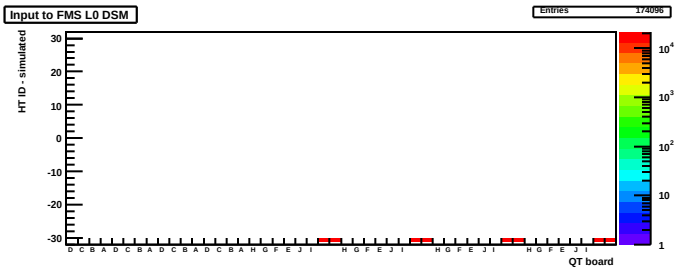

Input to FMS L0 DSM
Entries 1044576
QT8(3) sum
QT board

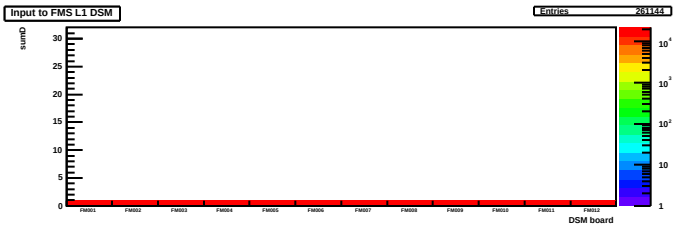

Input to FMS L0 DSM
Entries 174096
QT8(3) sum - simulated
QT board

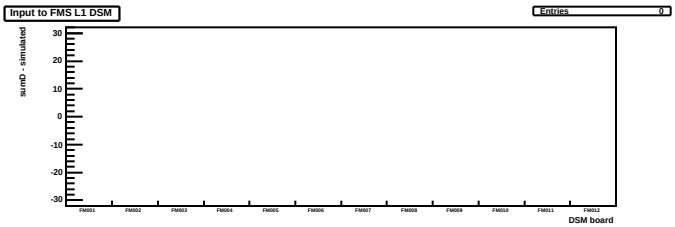

Input to FMS L0 DSM
Entries 1044576
HT ADC
QT board

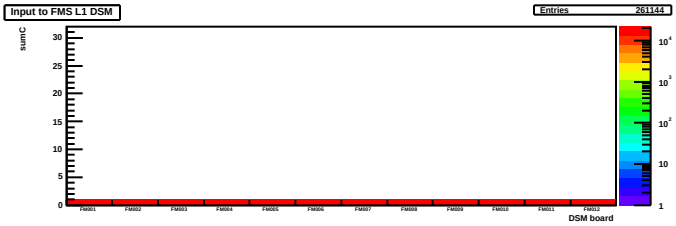

Input to FMS L0 DSM
Entries 174096
HT ADC - simulated
QT board

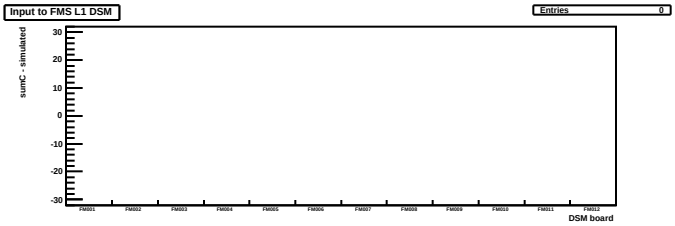

Input to FMS L0 DSM
Entries 1044576
HT ID
QT board

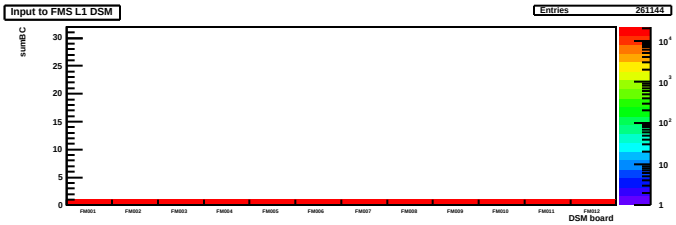

Input to FMS L0 DSM
Entries 174096
HT ID - simulated
QT board

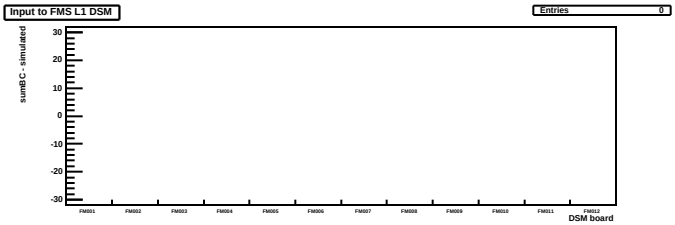

Input to FMS L1 DSM
Entries 261144
sumD
DSM board

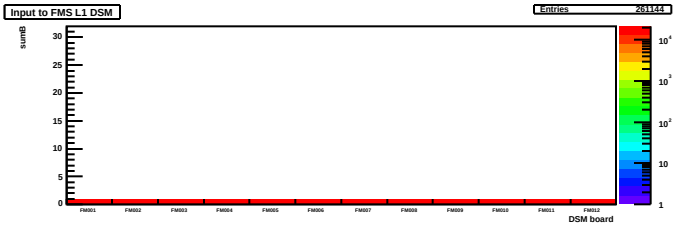

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

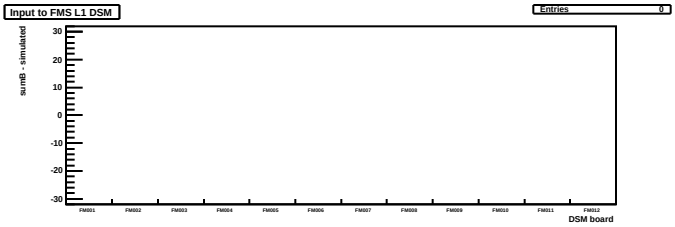

Input to FMS L1 DSM
Entries 261144
sumC
DSM board

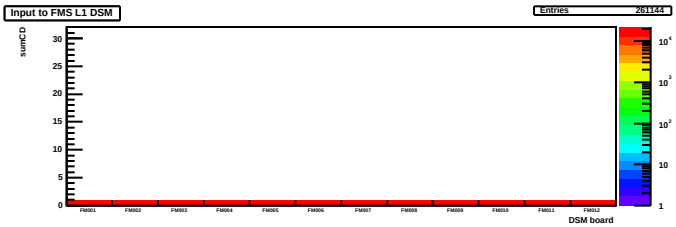

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

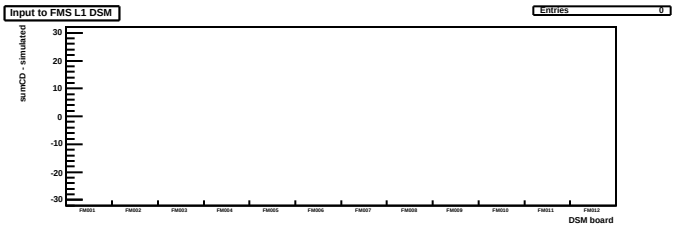

Input to FMS L1 DSM
Entries 261144
sumBC
DSM board

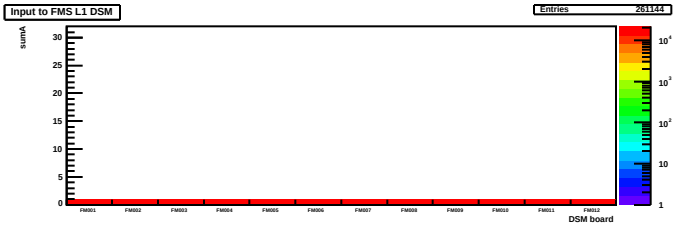

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

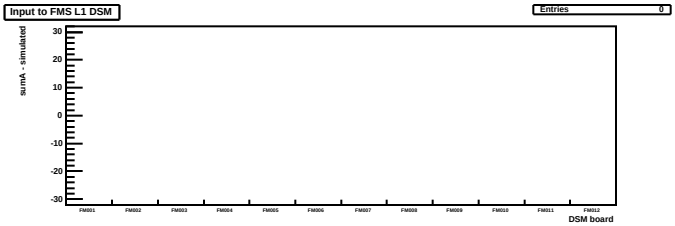

Input to FMS L1 DSM
Entries 261144
sumB
DSM board

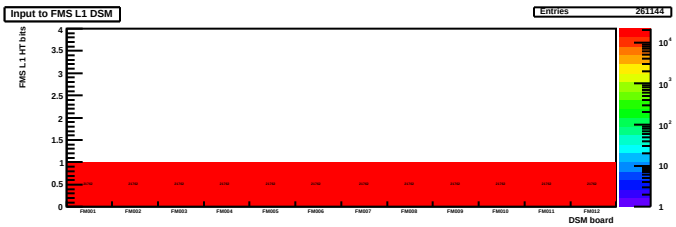

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

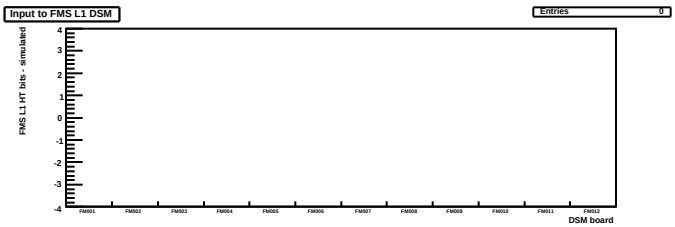

Input to FMS L1 DSM
Entries 261144
sumCD
DSM board

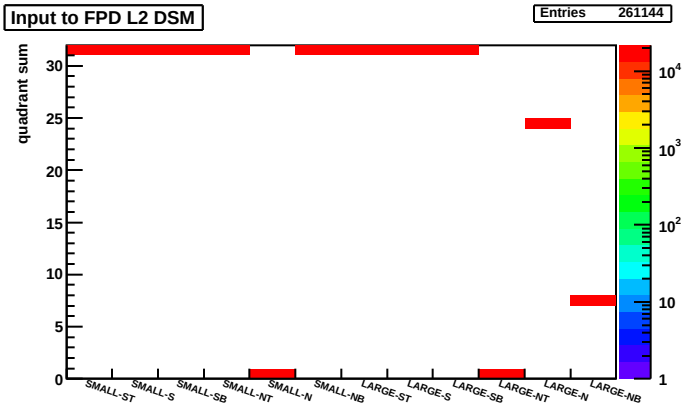

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

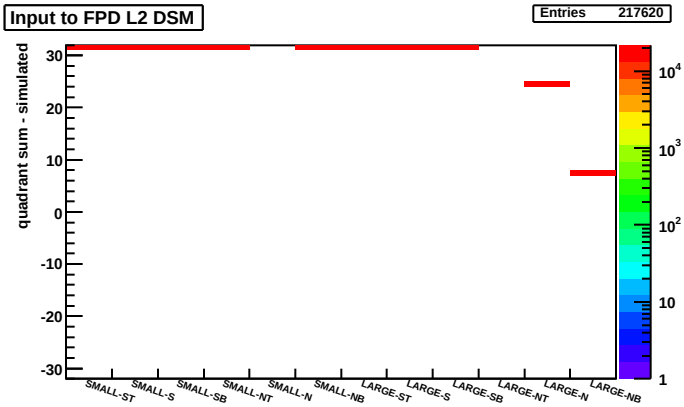

Input to FMS L1 DSM
Entries 261144
sumA
DSM board

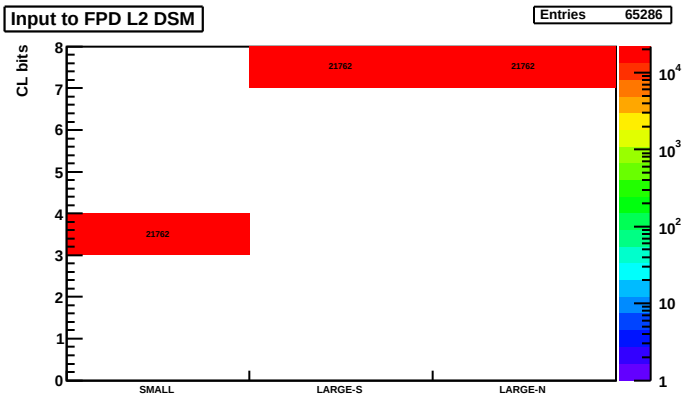

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

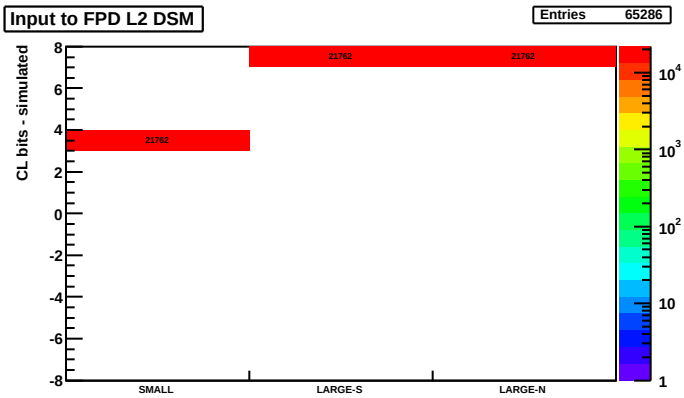

Input to FMS L1 DSM
Entries 261144
FMS L1 HT bits
DSM board

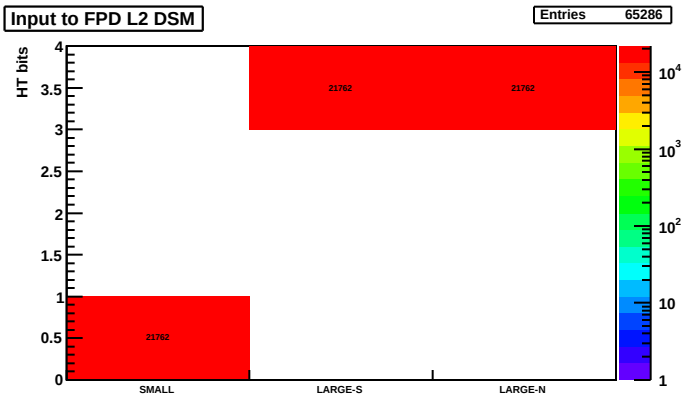

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

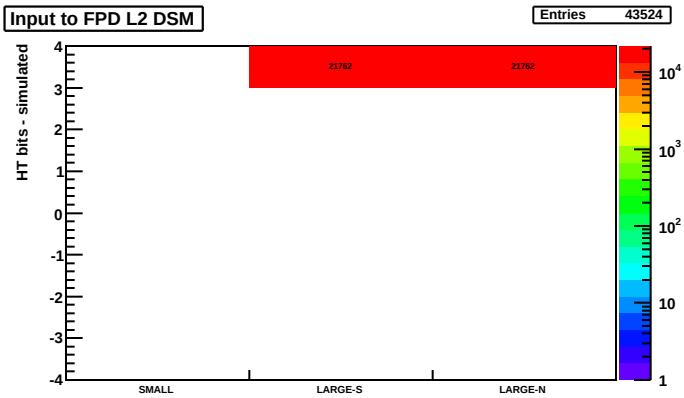

Input to FPD L2 DSM
Entries 261144
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

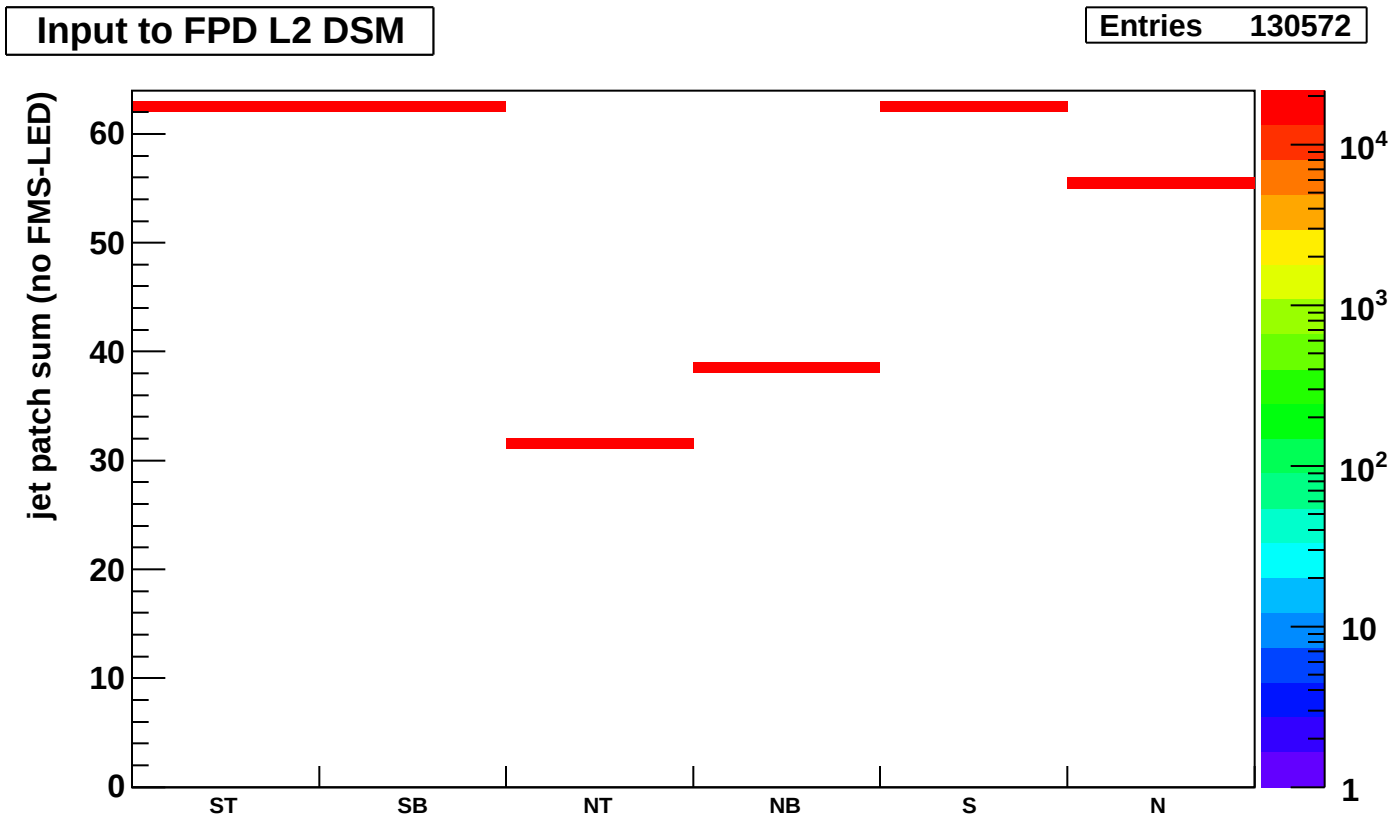

Input to FPD L2 DSM
Entries 217620
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

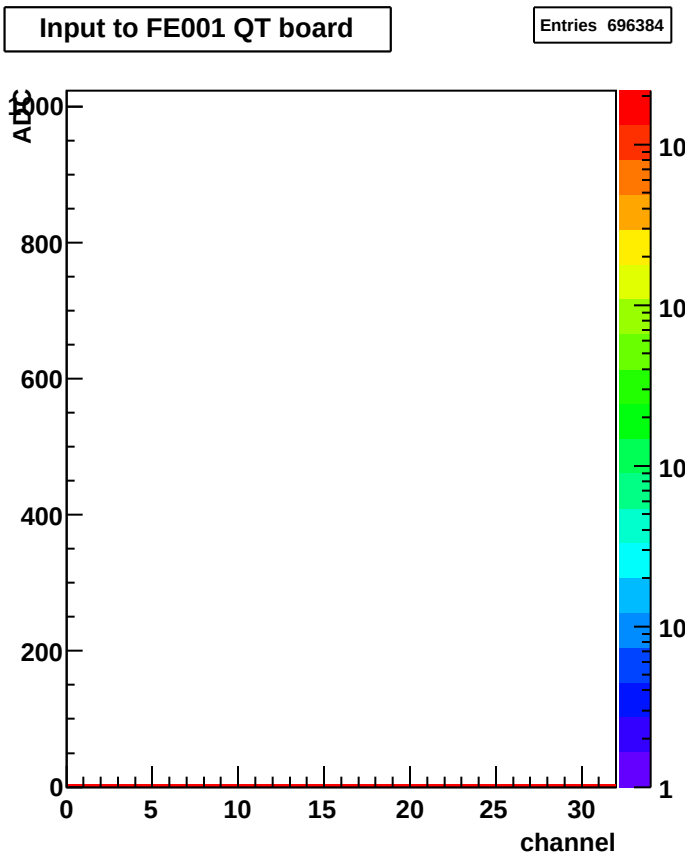

Input to FPD L2 DSM
Entries 65286
CL bits
21762
21762
21762
SMALL
LARGE-S
LARGE-N

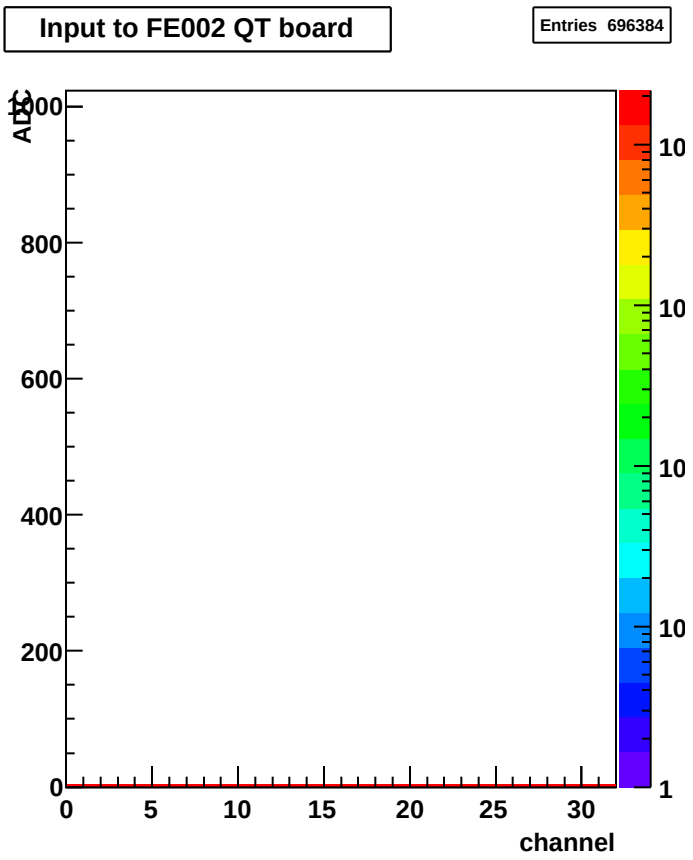

Input to FPD L2 DSM
Entries 65286
CL bits - simulated
21762
21762
21762
SMALL
LARGE-S
LARGE-N

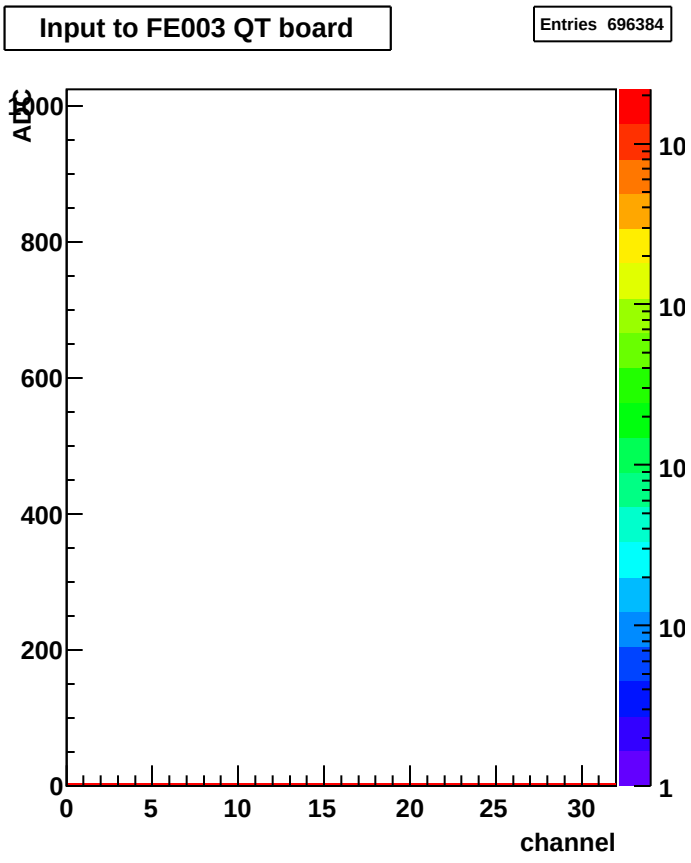

Input to FPD L2 DSM
Entries 65286
HT bits
21762
21762
21762
SMALL
LARGE-S
LARGE-N

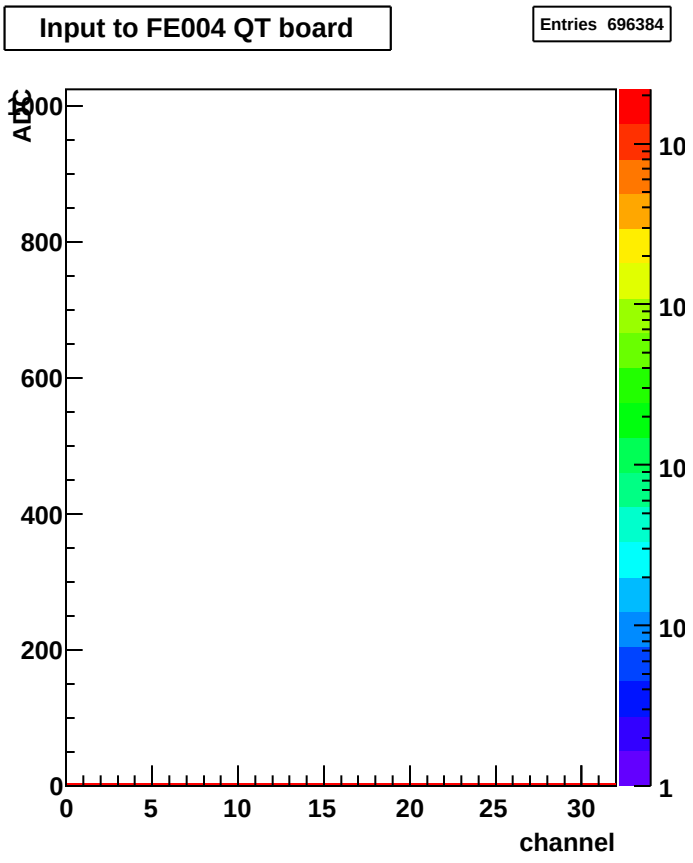

Input to FPD L2 DSM
Entries 43524
HT bits - simulated
21762
21762
SMALL
LARGE-S
LARGE-N

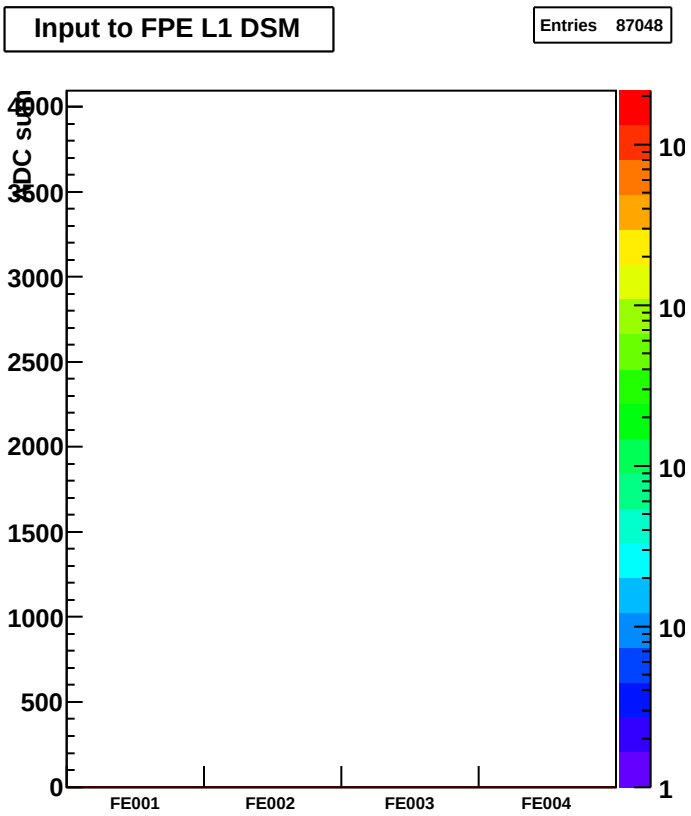

Input to FPD L2 DSM
Entries 130572
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
$10^2$
$10^3$
$10^4$

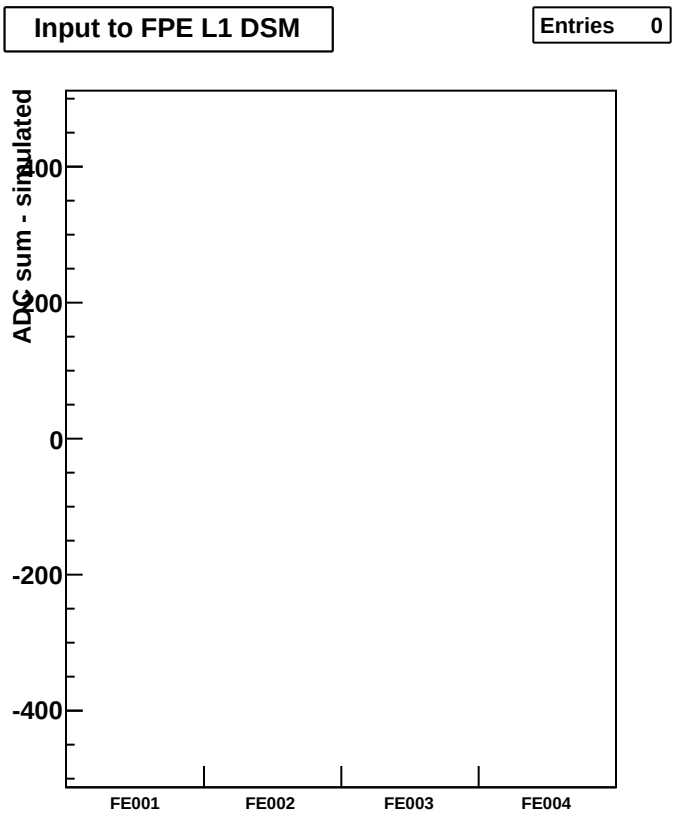

Input to FE001 QT board
Entries 696384
ADC
channel

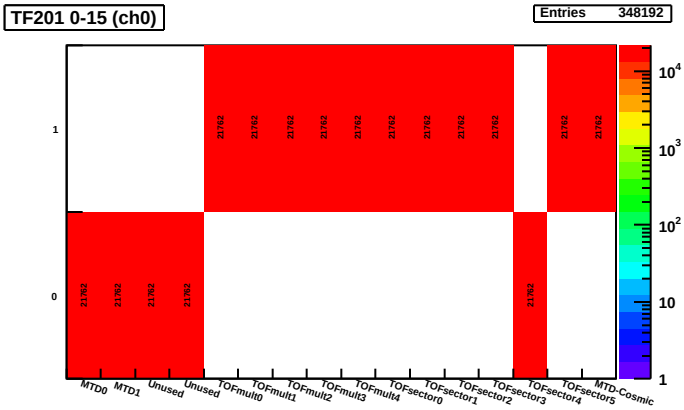

Input to FE002 QT board
Entries 696384
ADC
channel

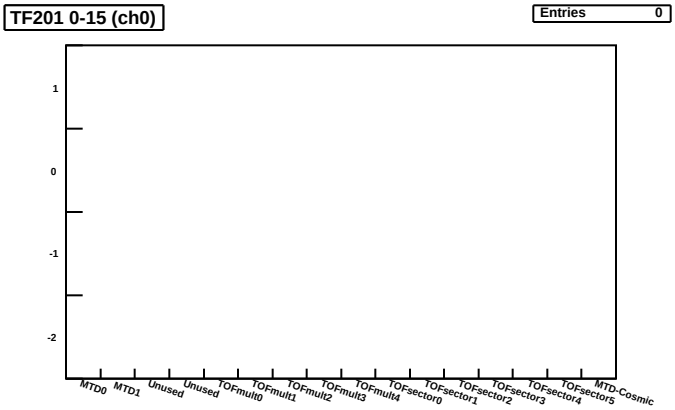

Input to FE003 QT board
Entries 696384
ADC
channel

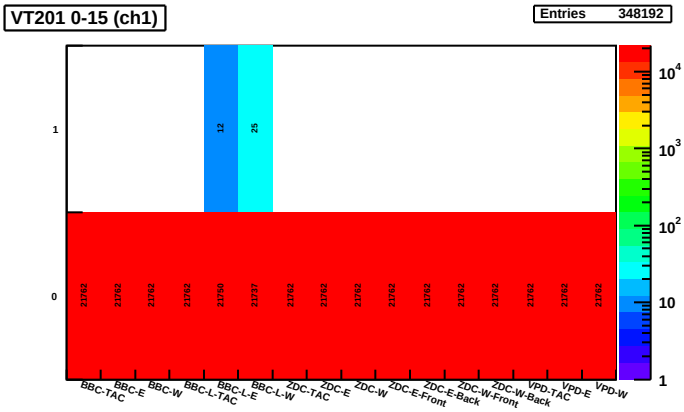

Input to FE004 QT board
Entries 696384
ADC
channel

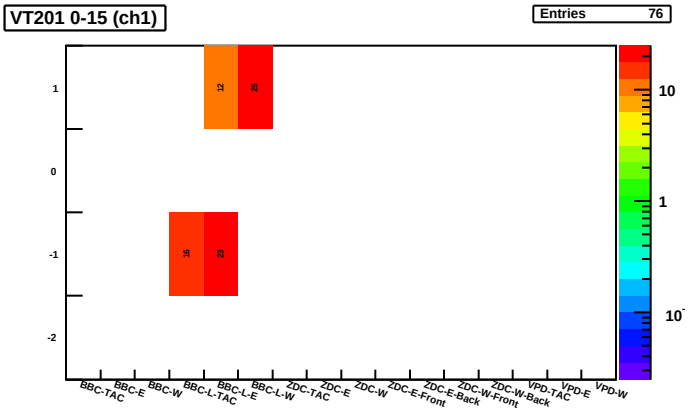

Input to FPE L1 DSM
Entries 87048
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

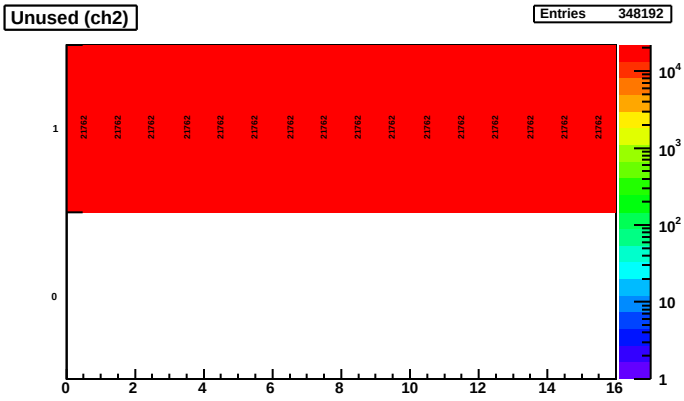

Input to FPE L1 DSM
Entries 0
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004

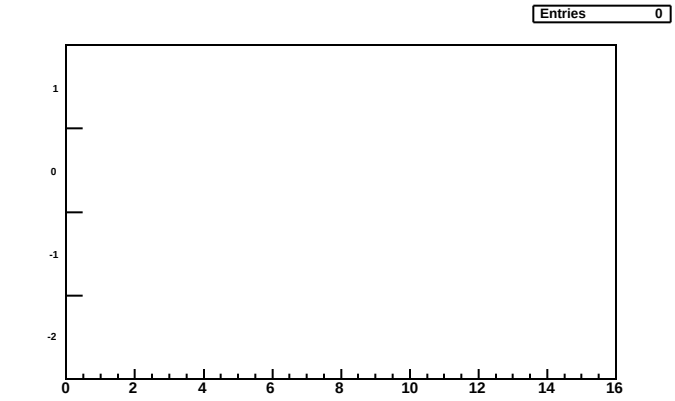

TF201 0-15 (ch0)
Entries 348192
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

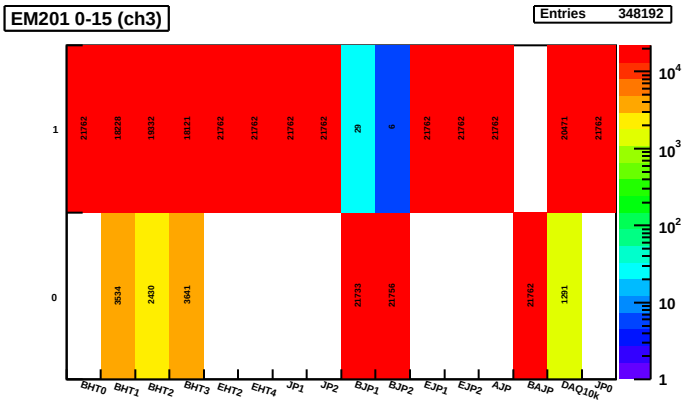

TF201 0-15 (ch0)
Entries 0
MTD0 MTD1 Unused Unused TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 348192
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 76
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 348192


Entries 0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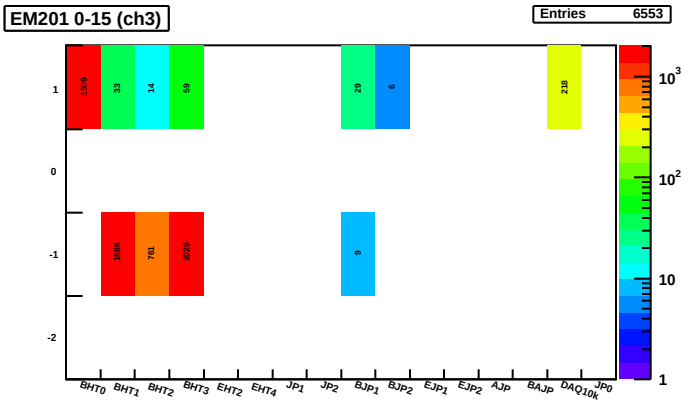
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Entries 6553
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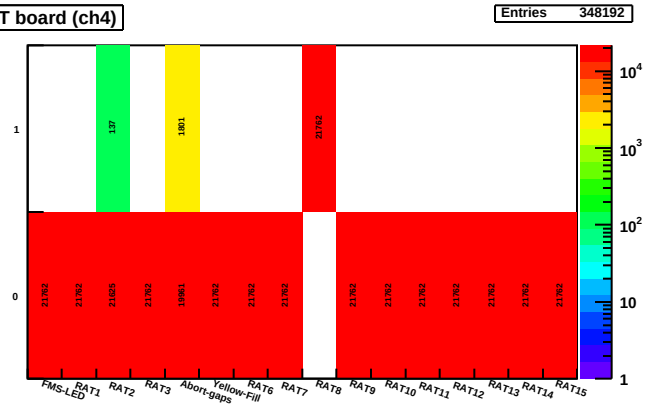
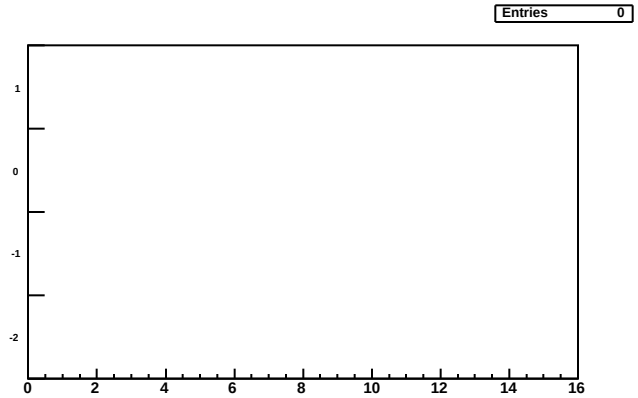
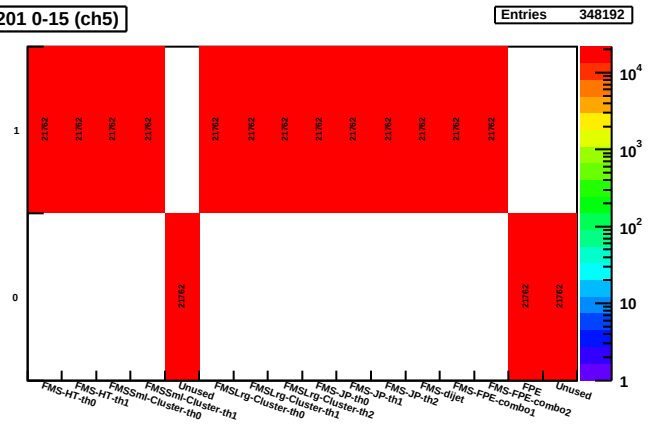
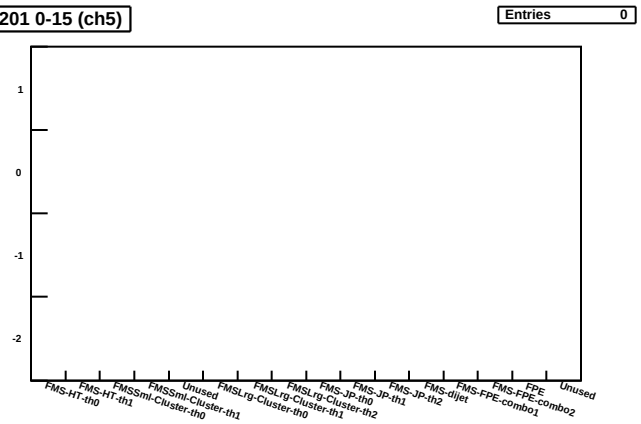
**RAT board (ch4)**



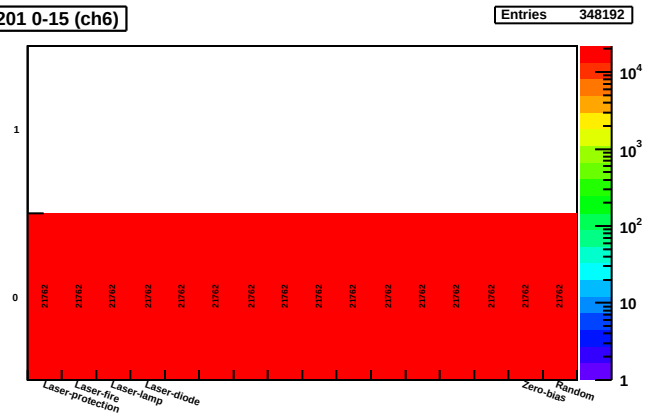



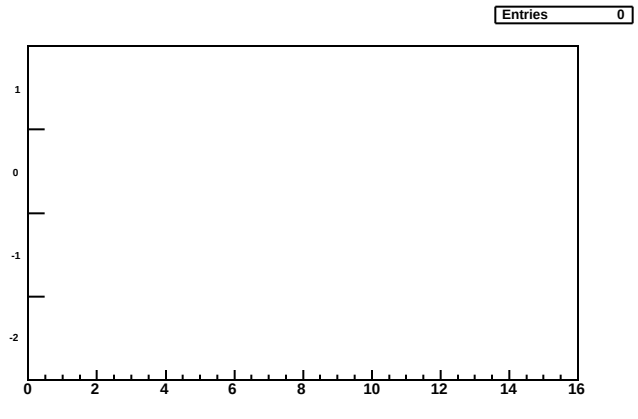

**FP201 0-15 (ch5)**

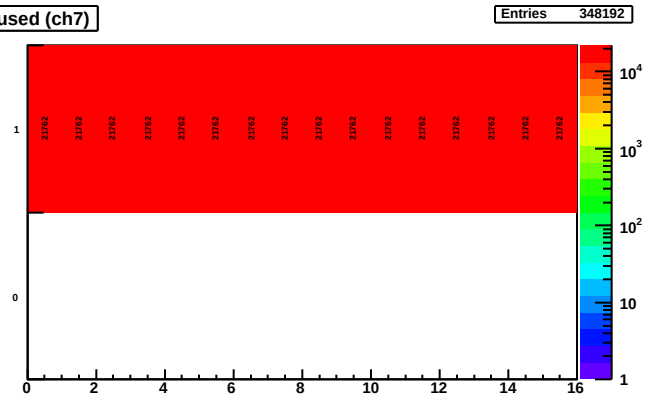
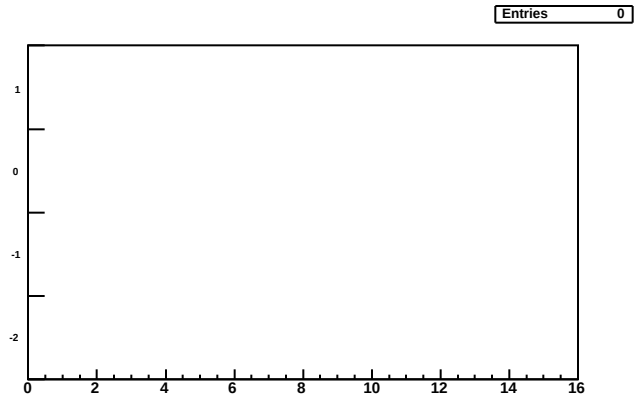



**ST201 0-15 (ch6)**




**Unused (ch7)**