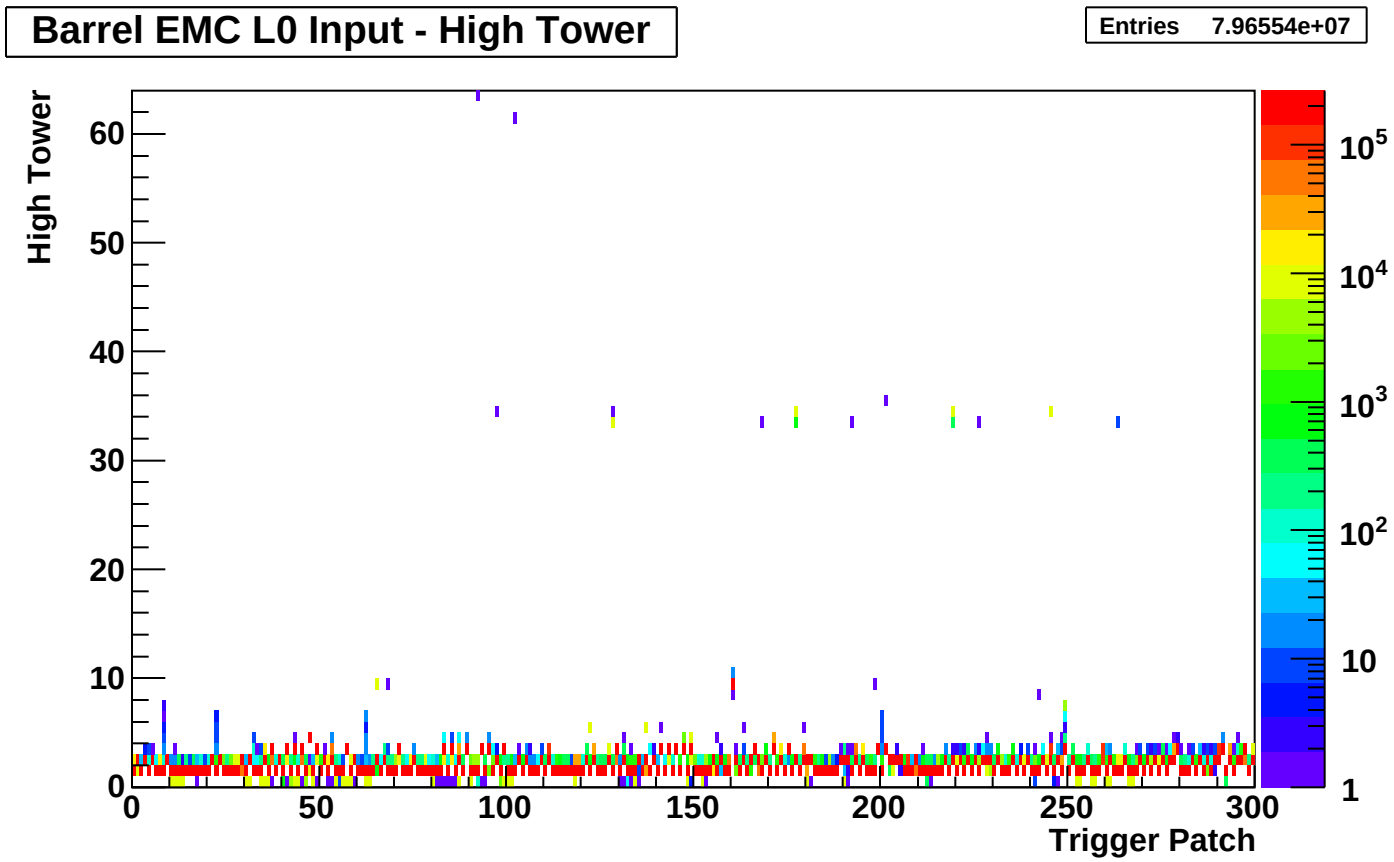
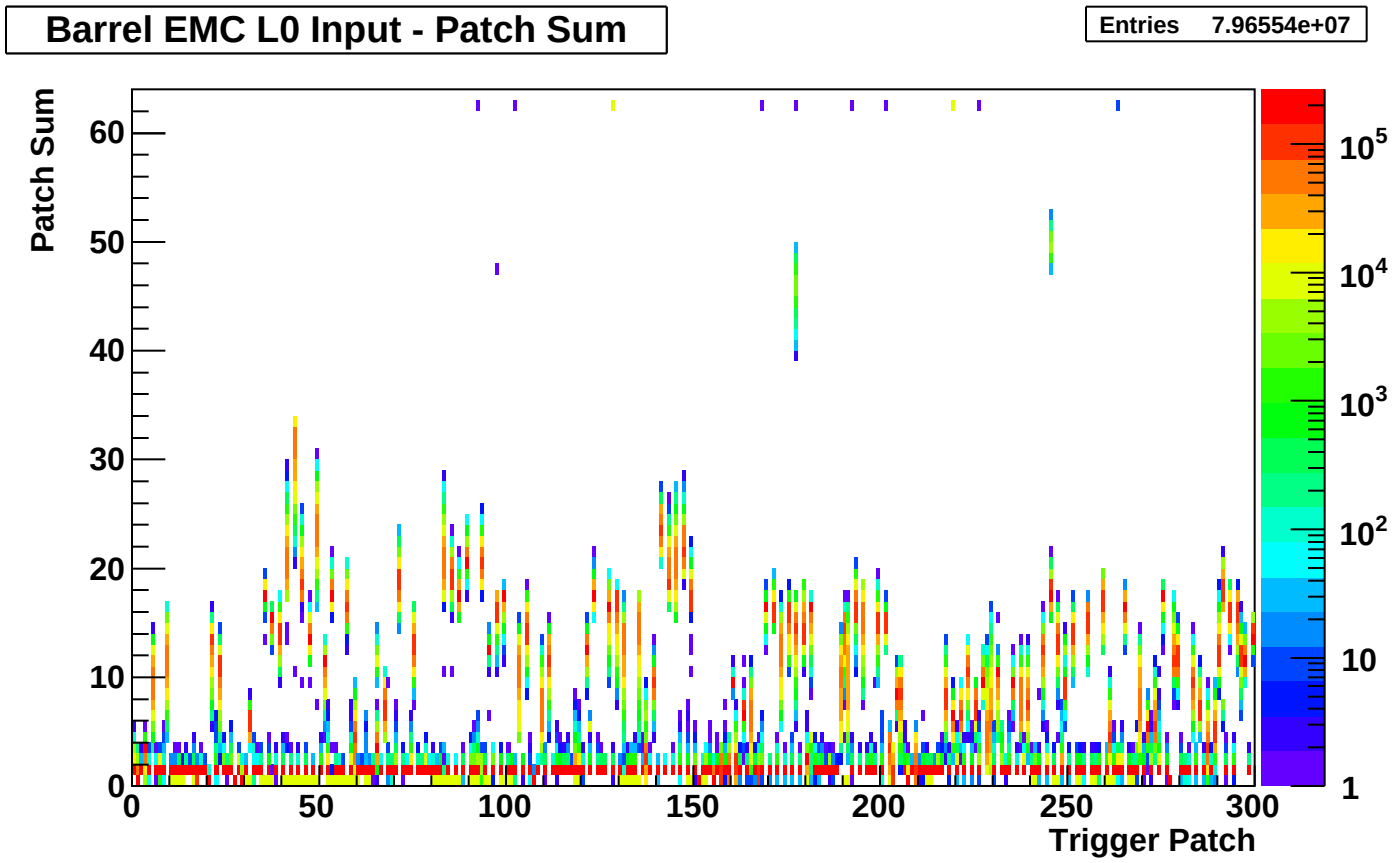
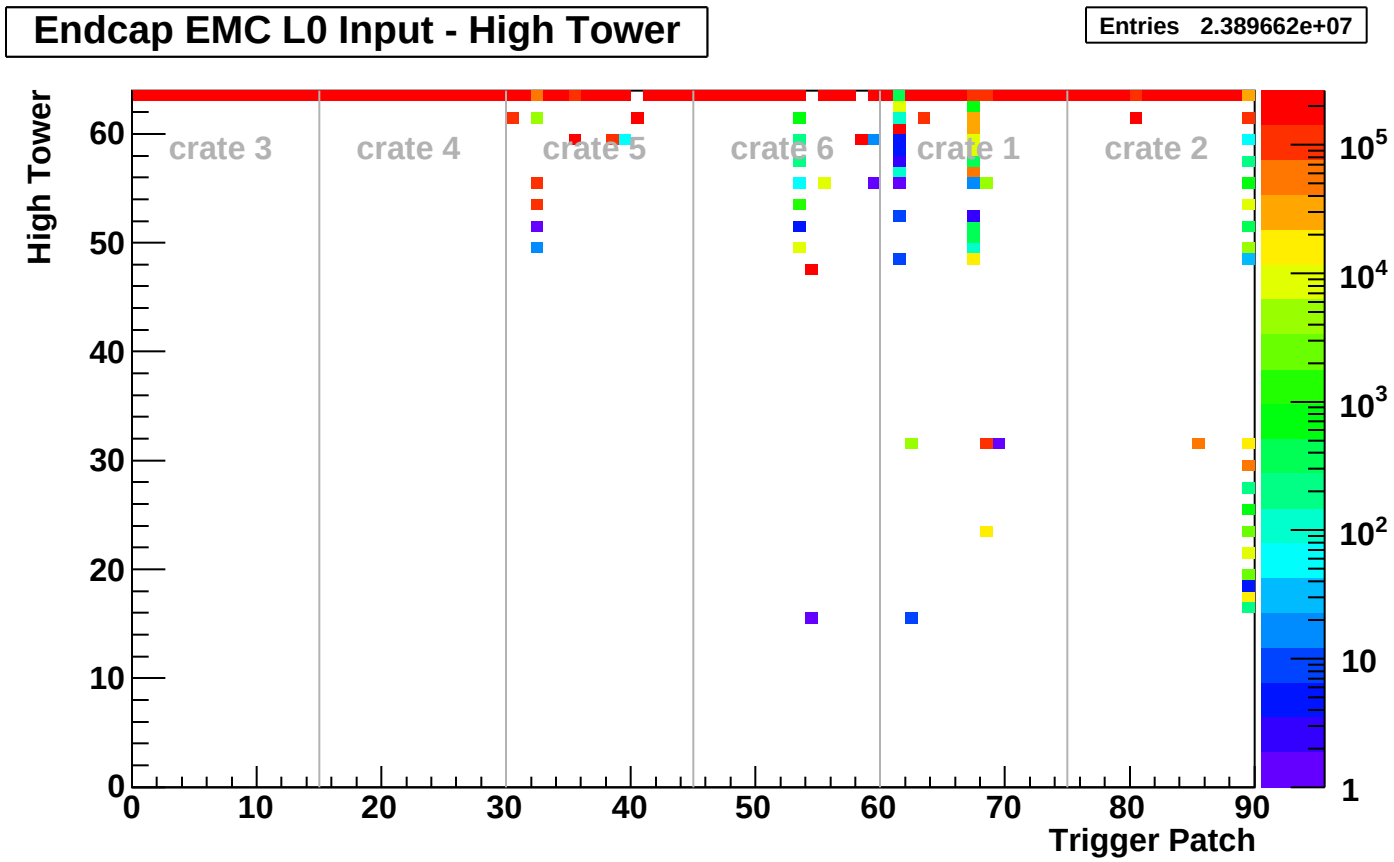
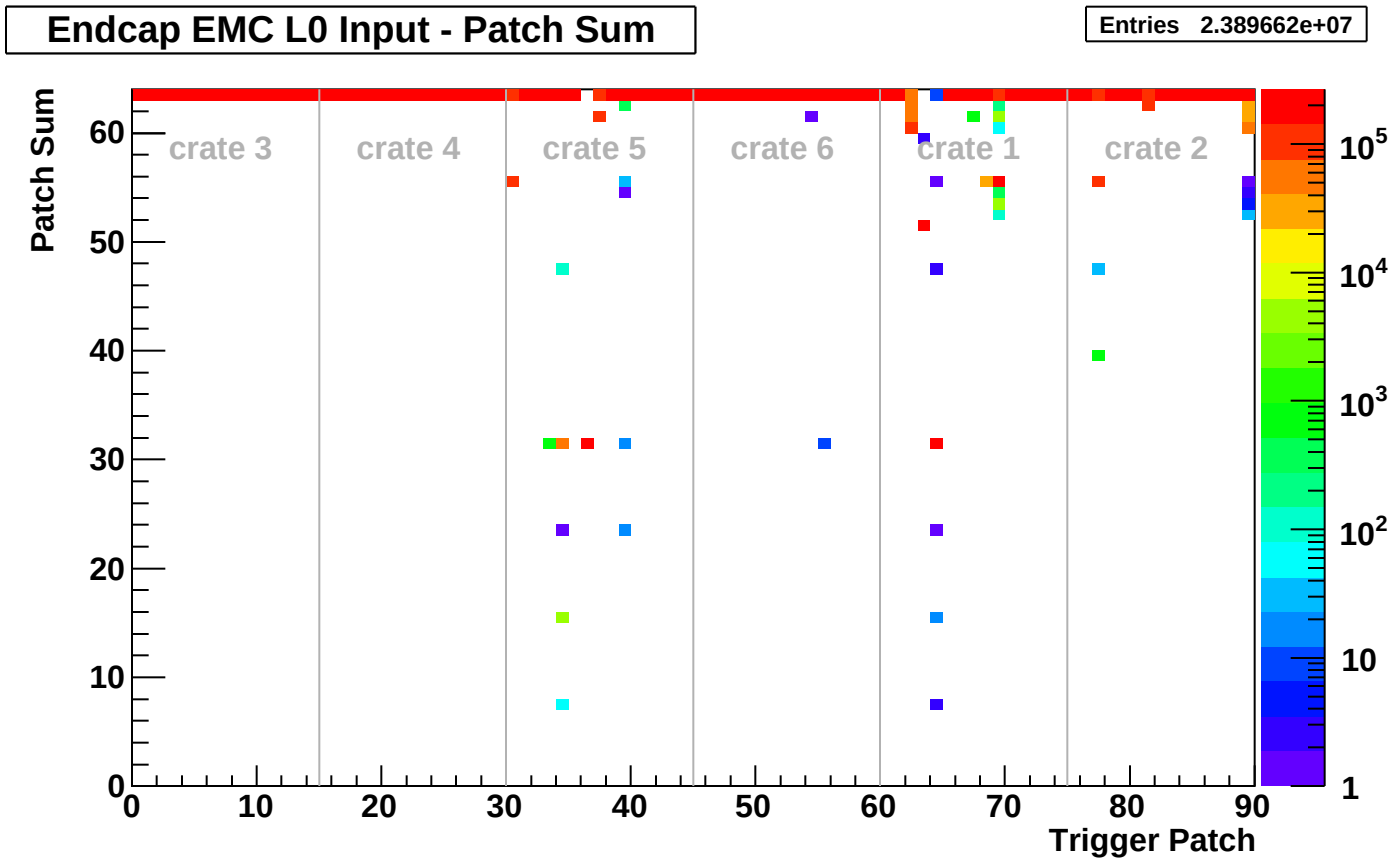
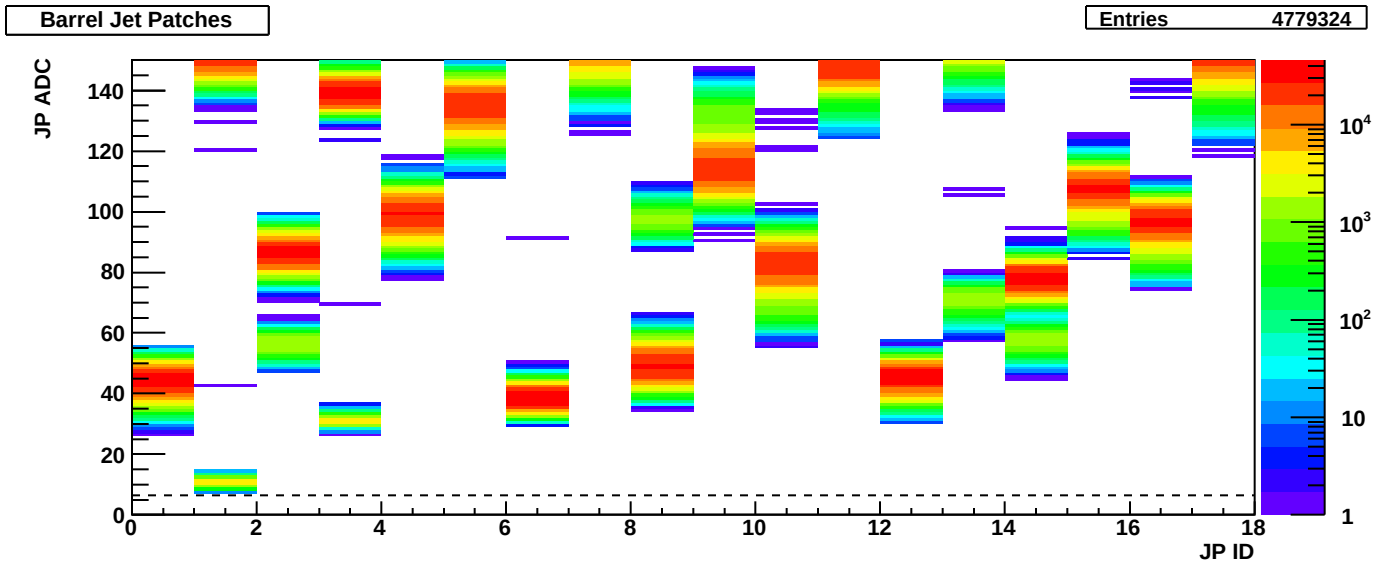
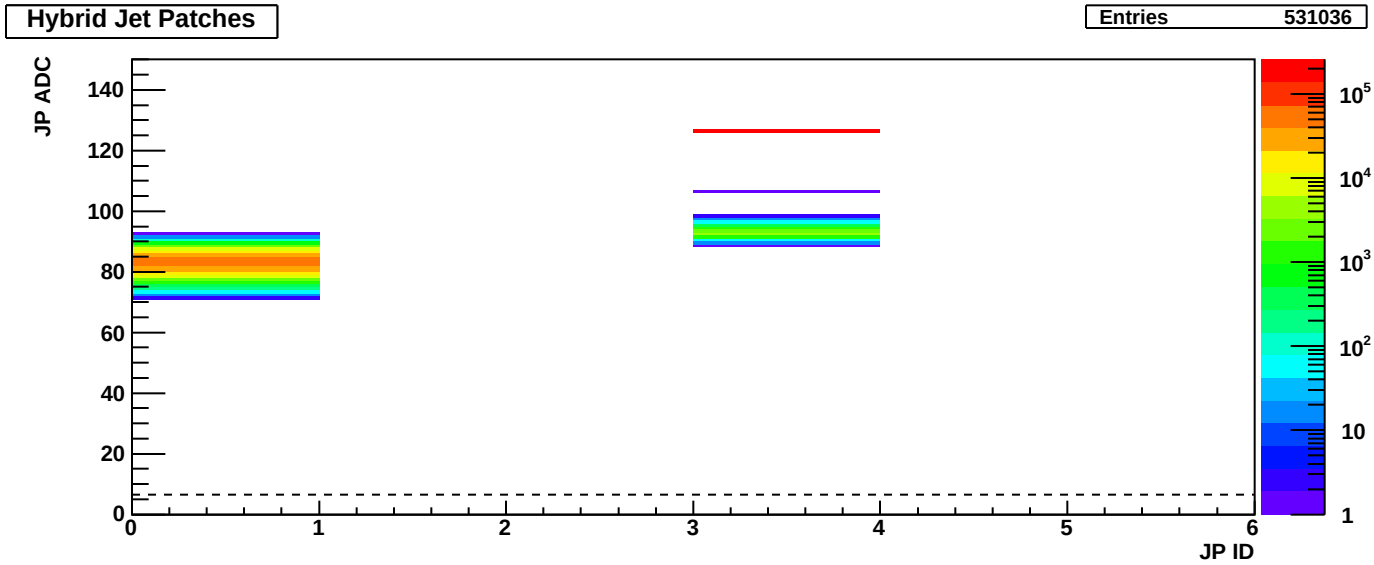

Barrel EMC L0 Input - High Tower
Entries 7.96554e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

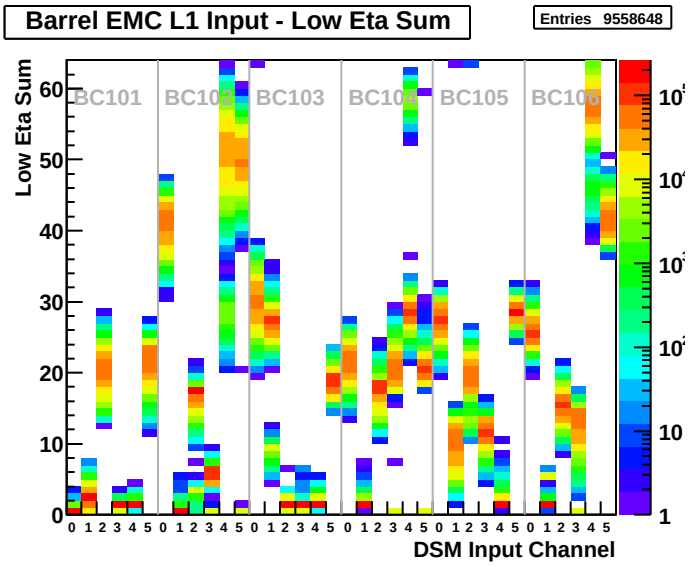

Barrel EMC L0 Input - Patch Sum
Entries 7.96554e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

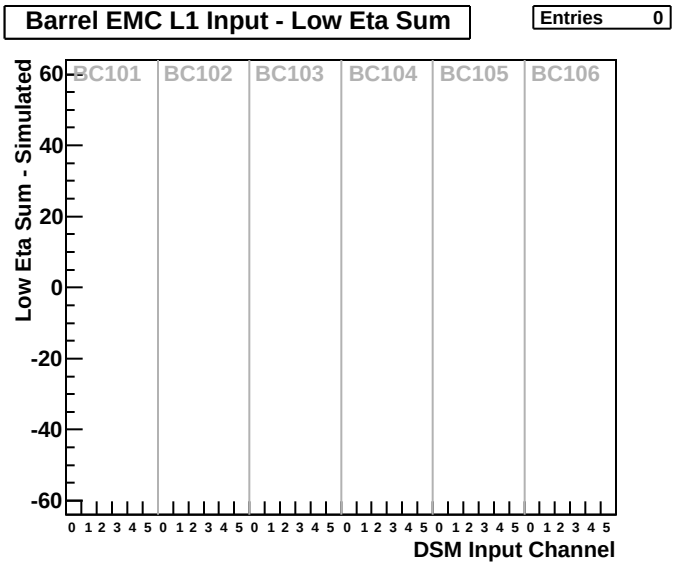

Endcap EMC L0 Input - High Tower
Entries 2.389662e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

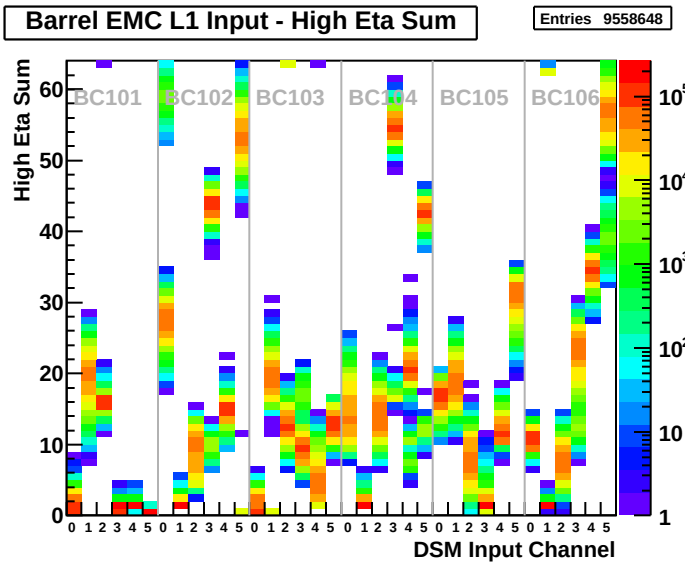

Endcap EMC L0 Input - Patch Sum
Entries 2.389662e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

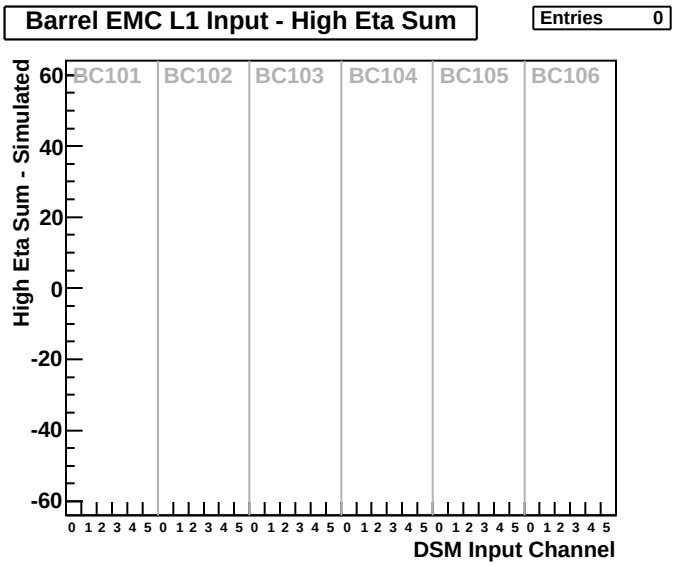

Barrel Jet Patches
Entries 4779324
JP ADC
JP ID

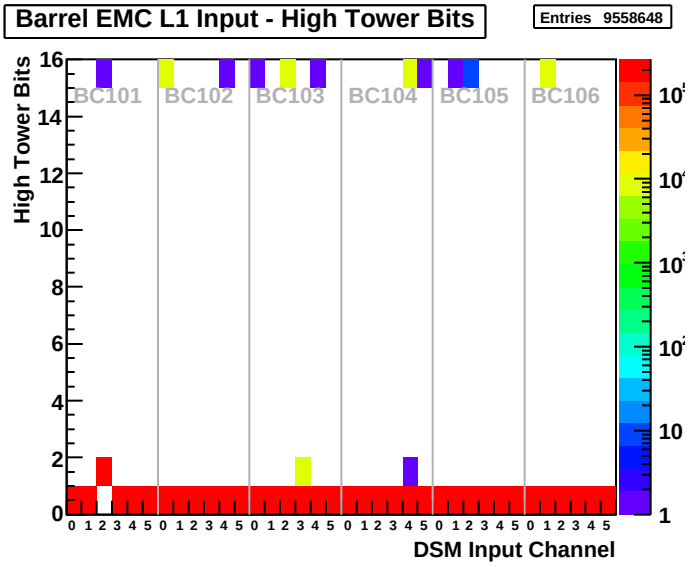

Hybrid Jet Patches
Entries 531036
JP ADC
JP ID

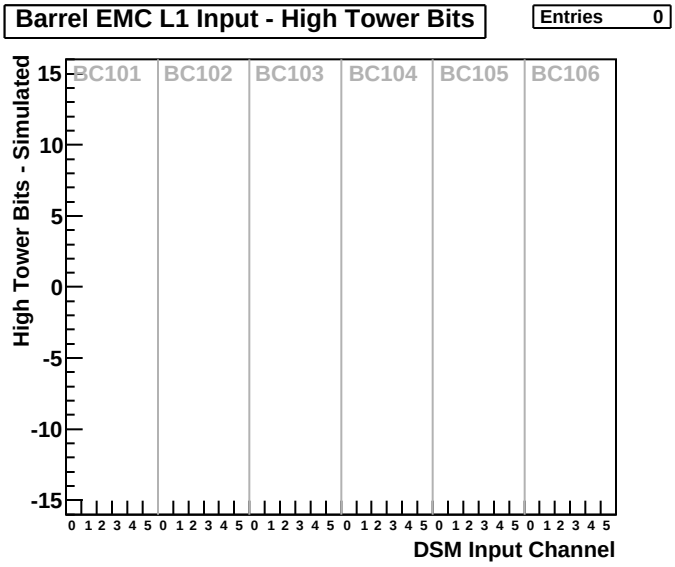

Barrel EMC L1 Input - Low Eta Sum
Entries 9558648
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

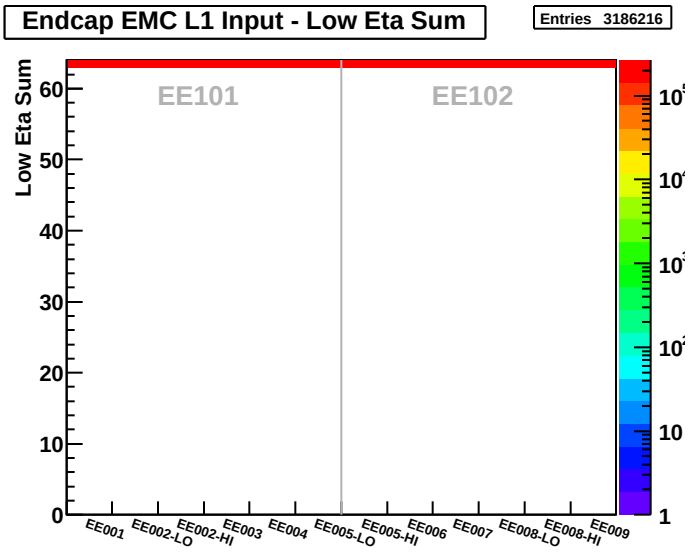

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

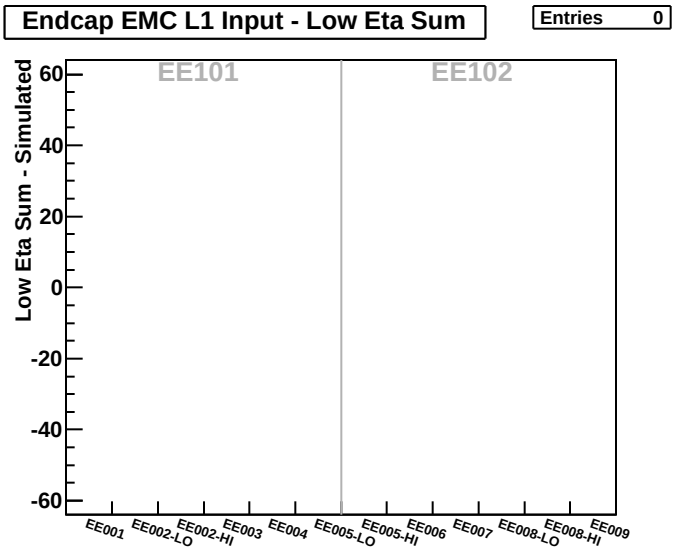

Barrel EMC L1 Input - High Eta Sum
Entries 9558648
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

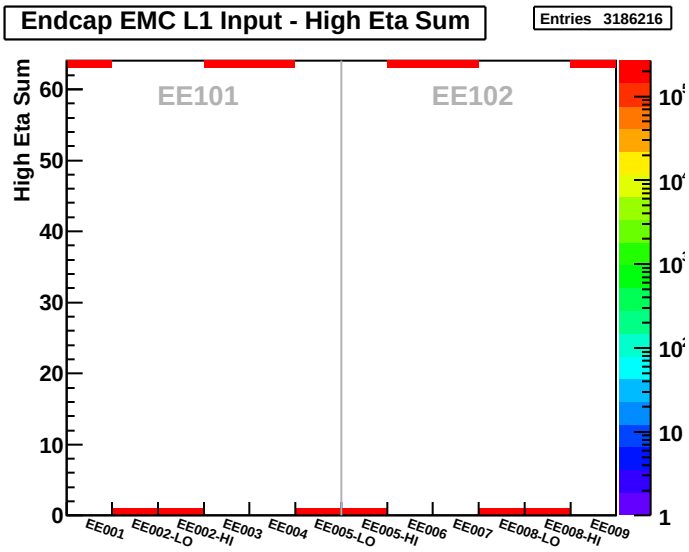

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

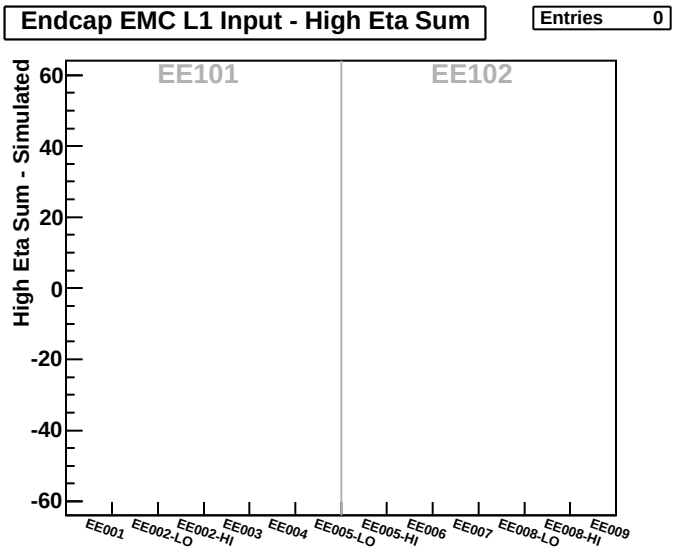

Barrel EMC L1 Input - High Tower Bits
Entries 9558648
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

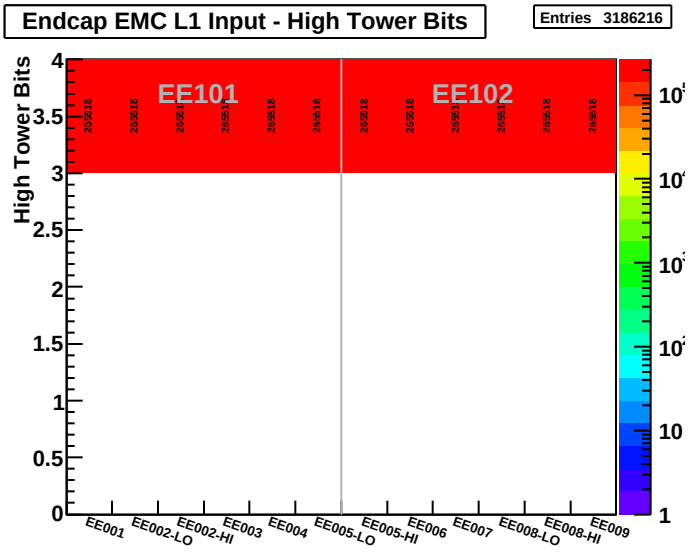

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

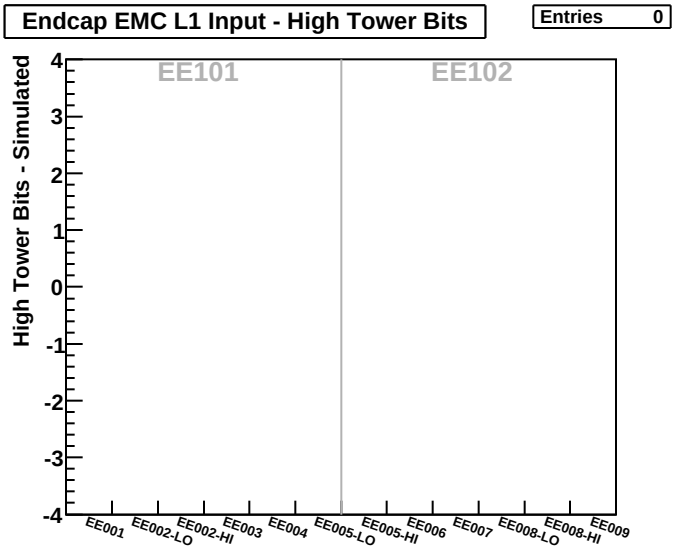

Endcap EMC L1 Input - Low Eta Sum
Entries 3186216
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

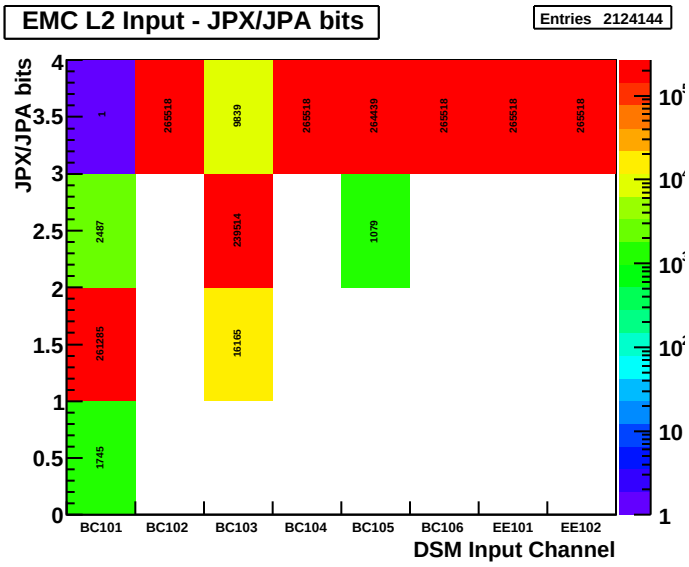

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

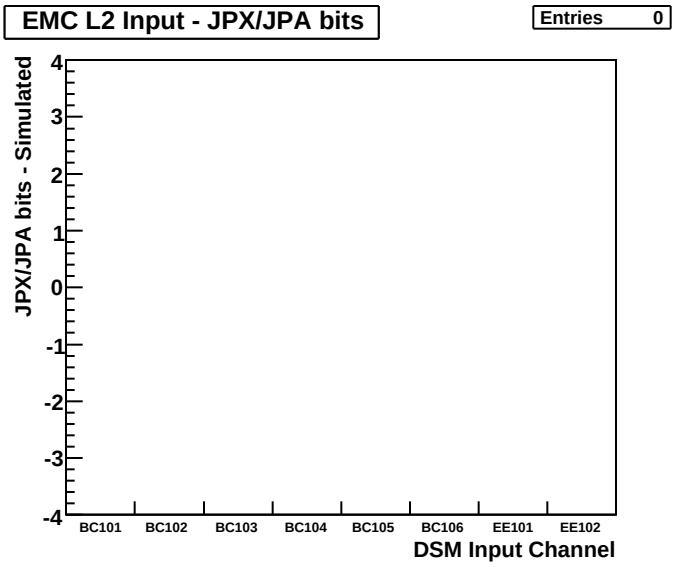

Endcap EMC L1 Input - High Eta Sum
Entries 3186216
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

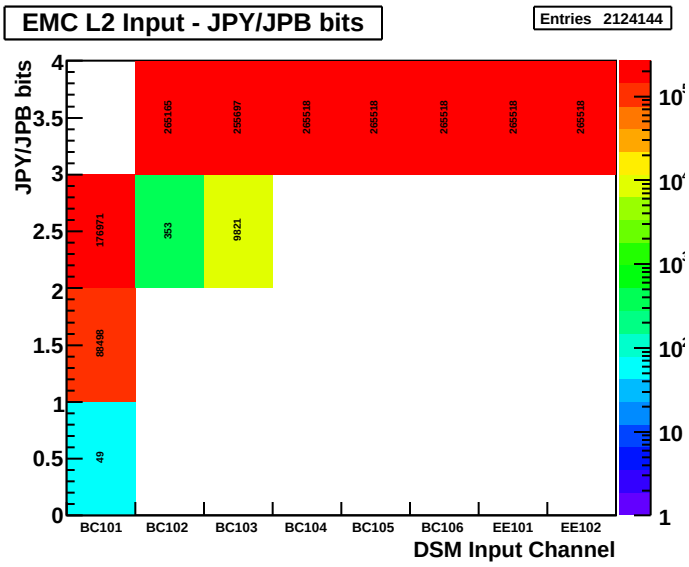

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

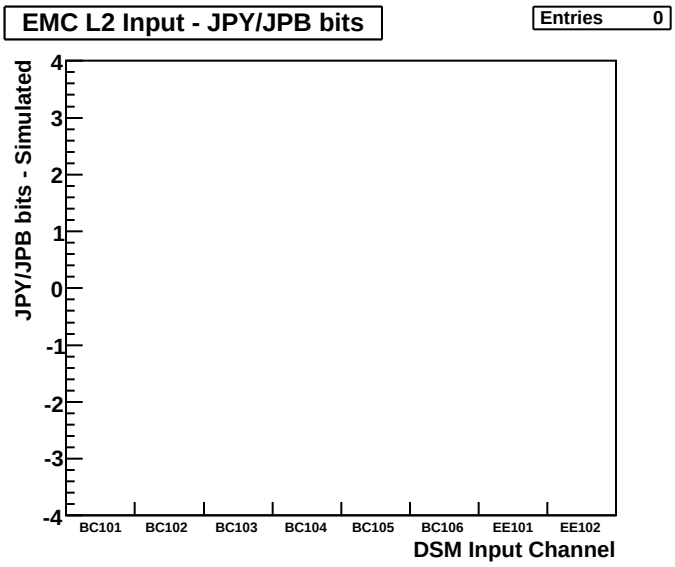

Endcap EMC L1 Input - High Tower Bits
Entries 3186216
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

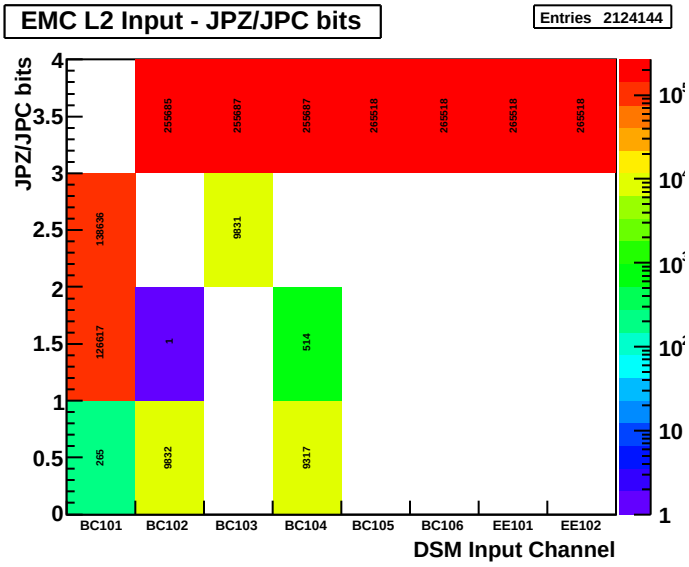

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

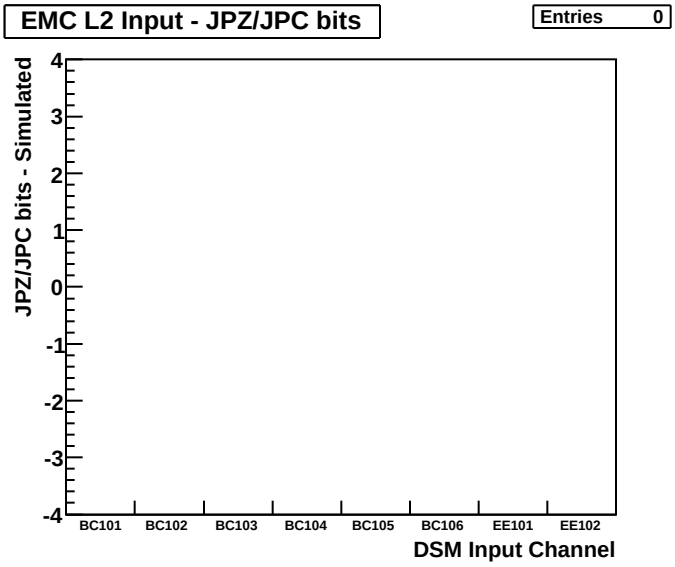

EMC L2 Input - JPX/JPA bits
Entries 2124144
JPX/JPA bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
EE101
EE102

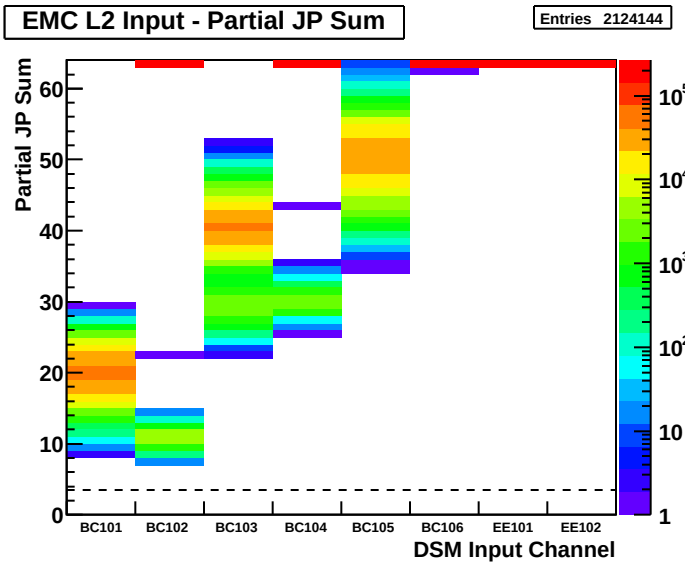

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
EE101
EE102

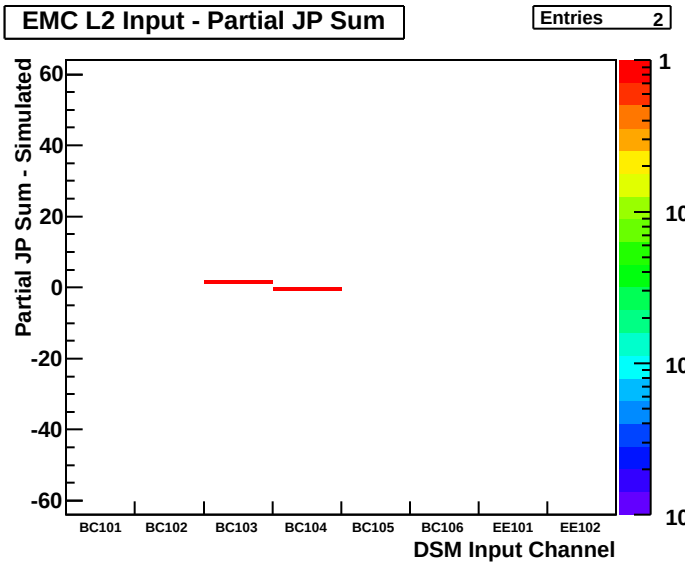

EMC L2 Input - JPY/JPB bits
Entries 2124144
JPY/JPB bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
EE101
EE102

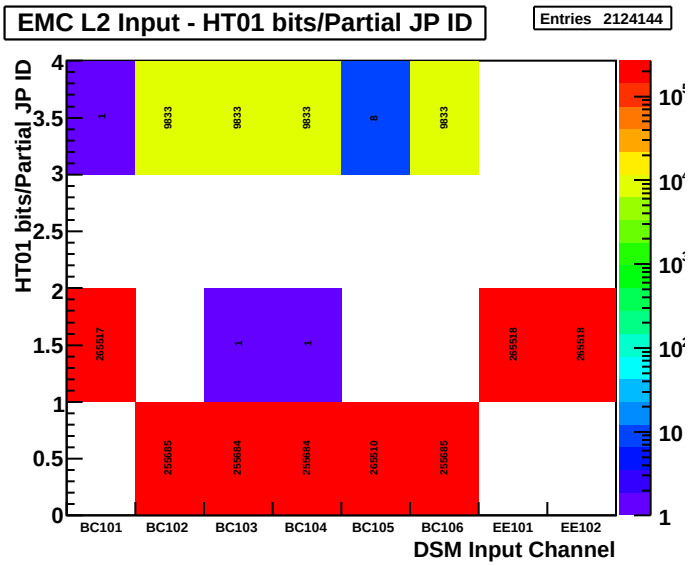

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
EE101
EE102

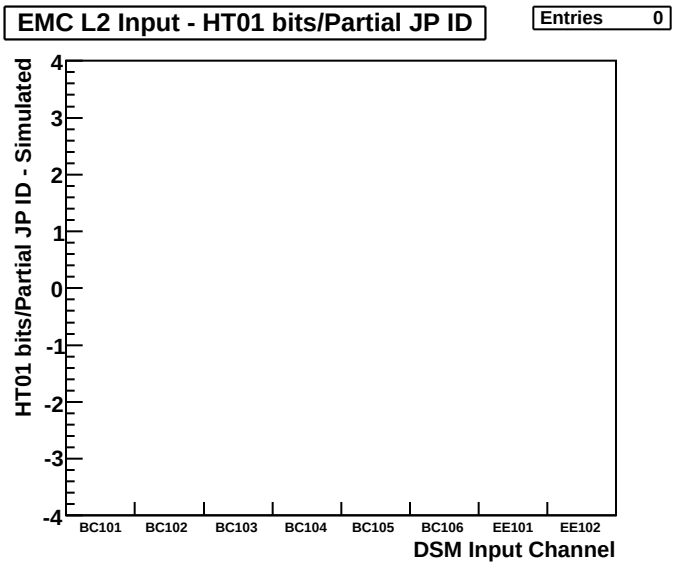

EMC L2 Input - JPZ/JPC bits
Entries 2124144
JPZ/JPC bits
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
EE101
EE102

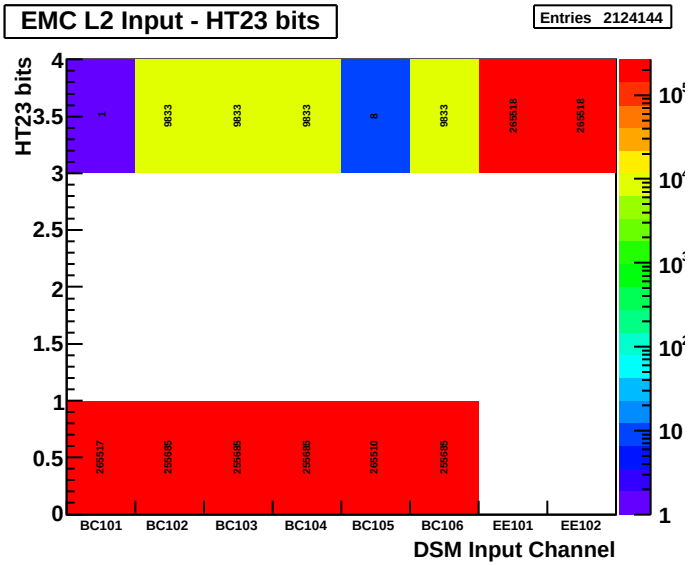

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101
BC102
BC103
BC104
BC105
BC106
EE101
EE102

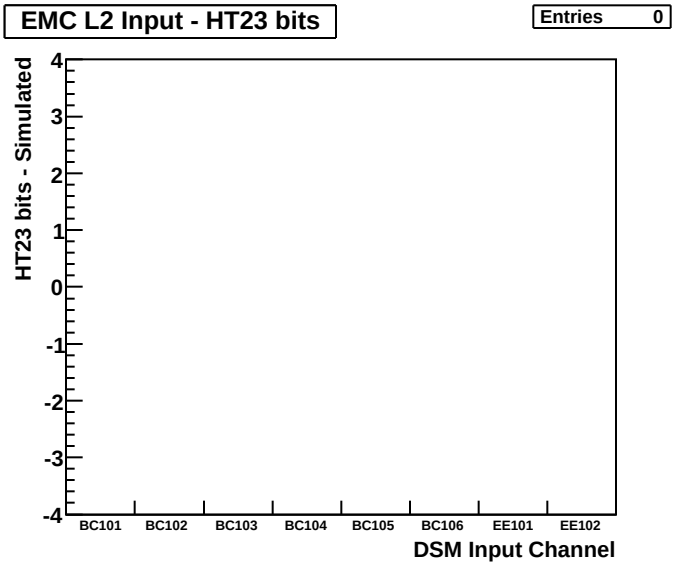

EMC L2 Input - Partial JP Sum
Entries 2124144
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

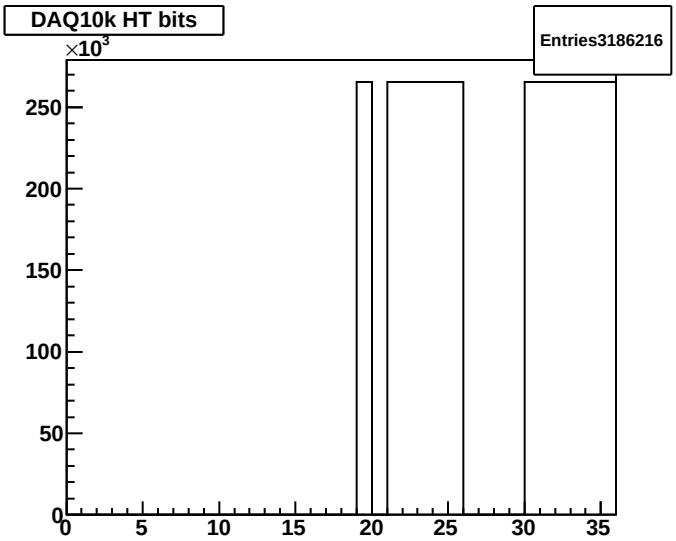

EMC L2 Input - Partial JP Sum
Entries 2
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

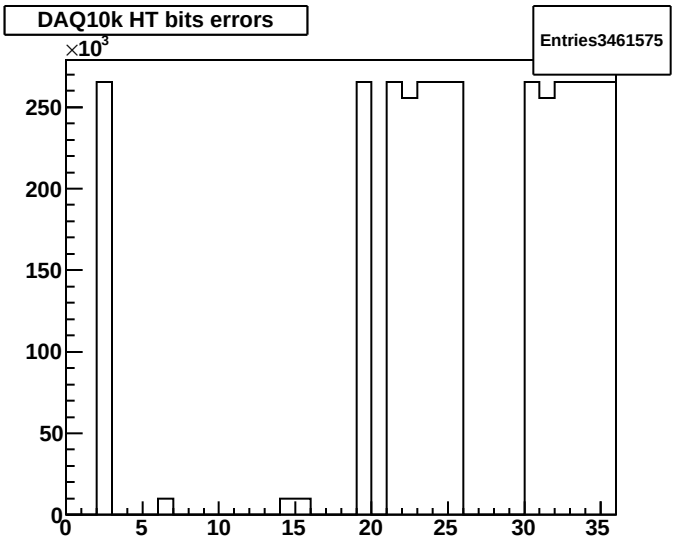

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2124144
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

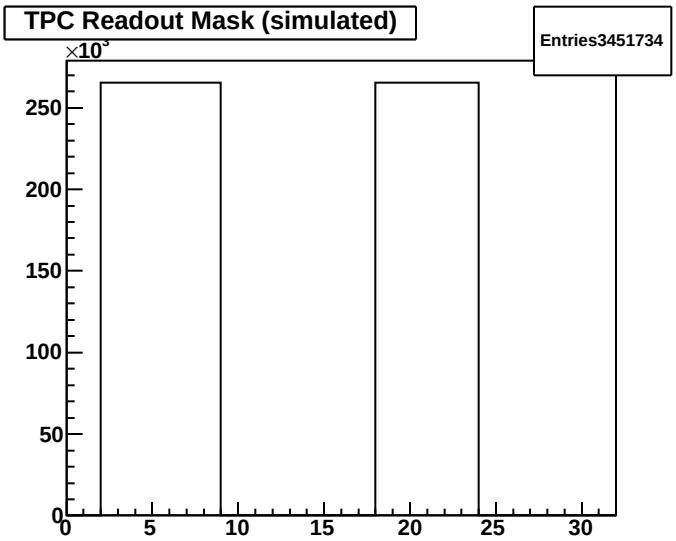

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

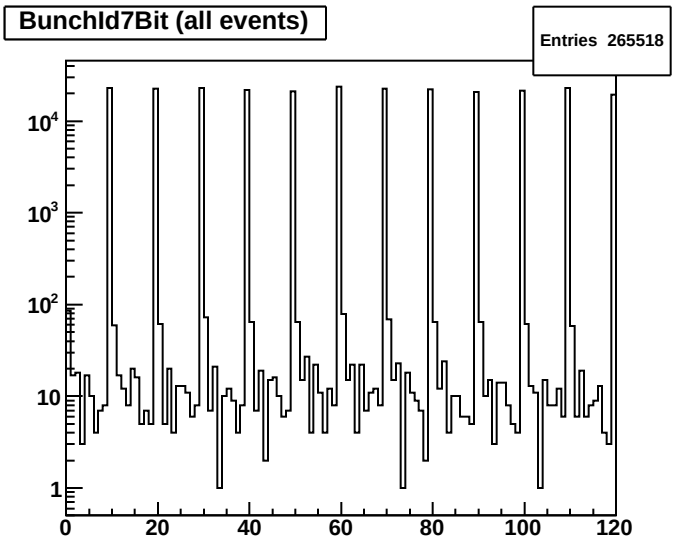

EMC L2 Input - HT23 bits
Entries 2124144
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

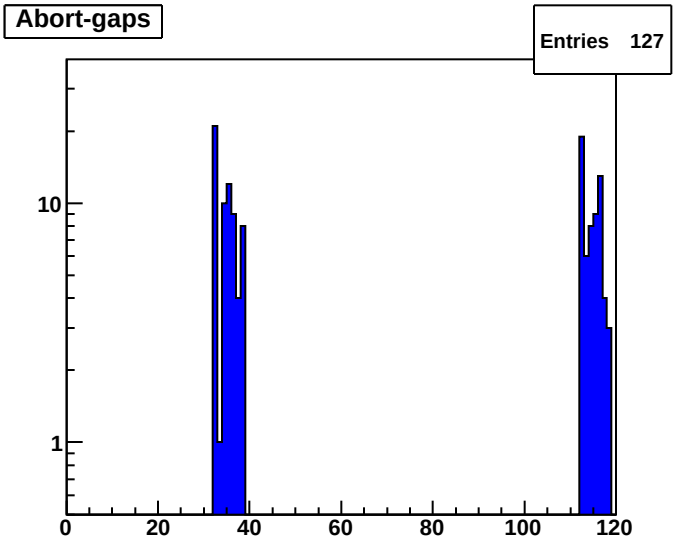

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

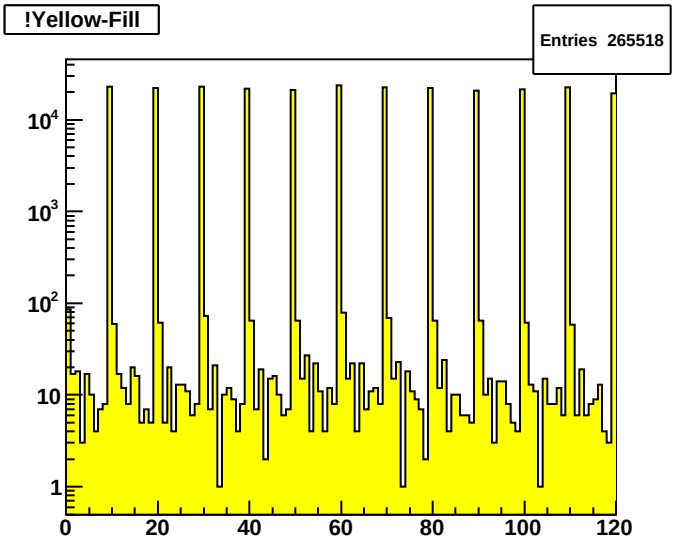

DAQ10k HT bits
Entries3186216
×10^3
250
200
150
100
50
0
0 5 10 15 20 25 30 35

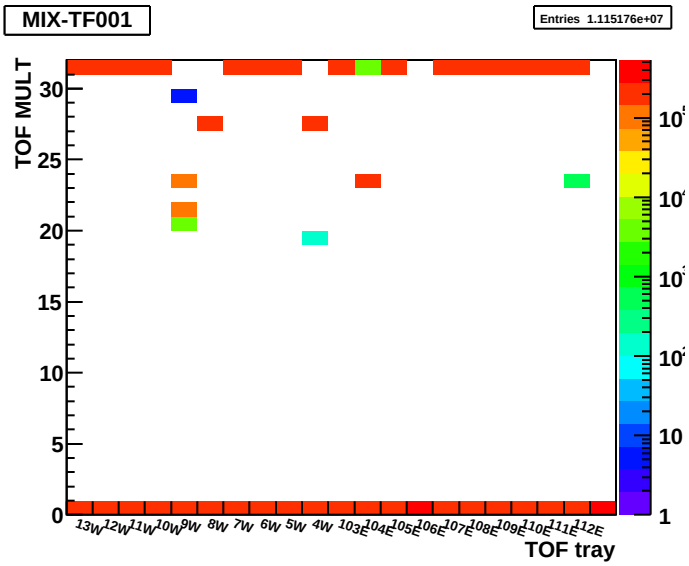

DAQ10k HT bits errors
Entries3461575
×10^3
250
200
150
100
50
0
0 5 10 15 20 25 30 35

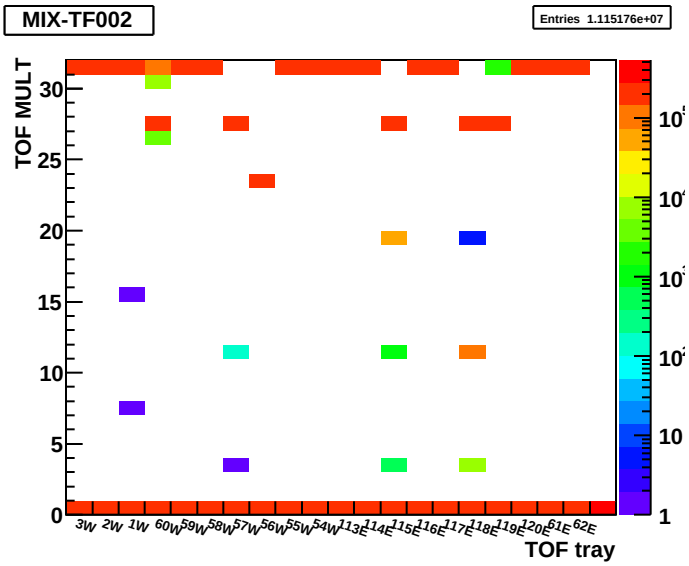

TPC Readout Mask (simulated)
Entries3451734
×10^3
250
200
150
100
50
0
0 5 10 15 20 25 30

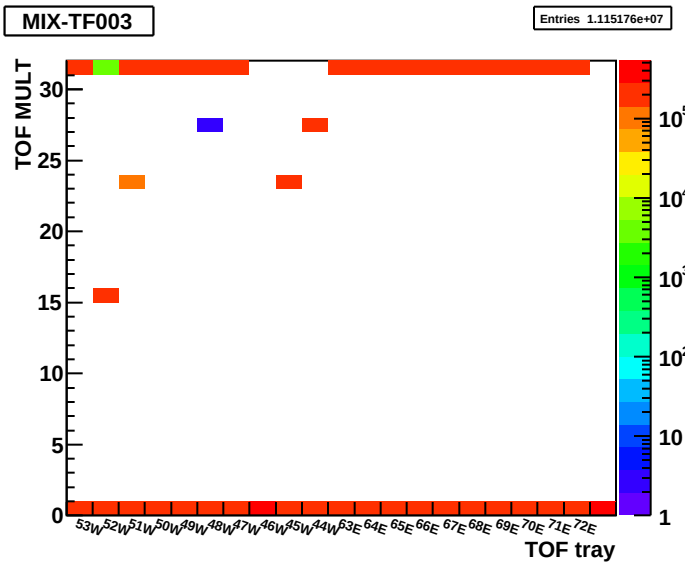

BunchId7Bit (all events)
Entries 265518
10^4
10^3
10^2
10
1
0 20 40 60 80 100 120

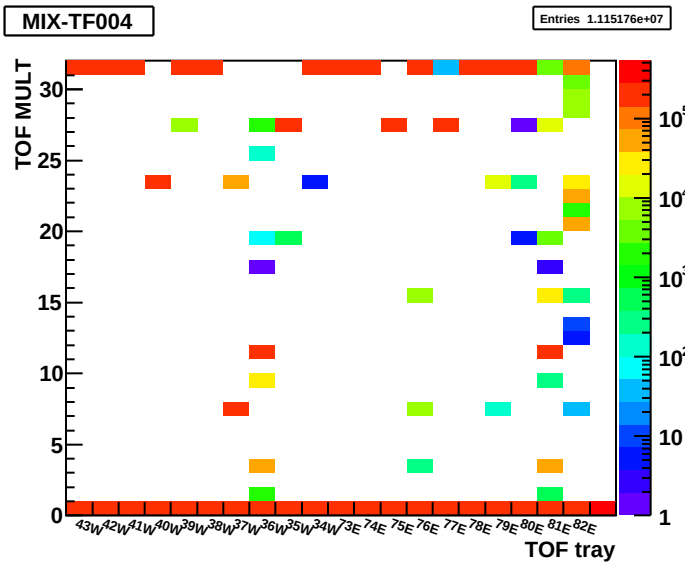

Abort-gaps
Entries 127
10
1
0 20 40 60 80 100 120

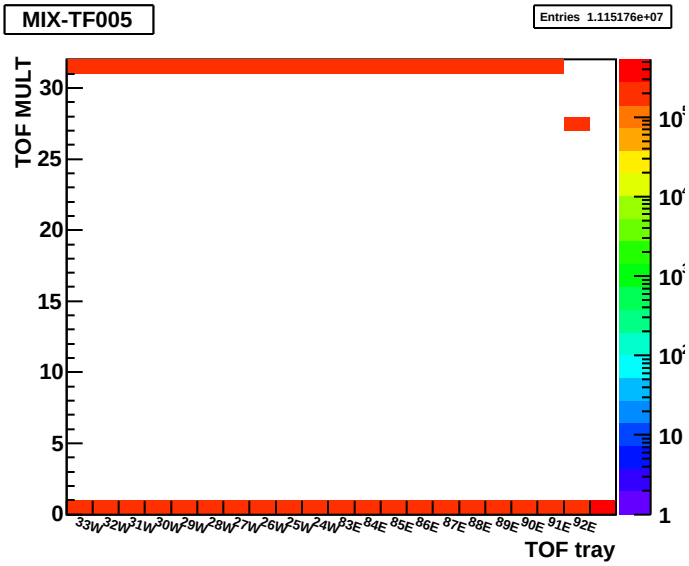

!Yellow-Fill
Entries 265518
10^4
10^3
10^2
10
1
0 20 40 60 80 100 120

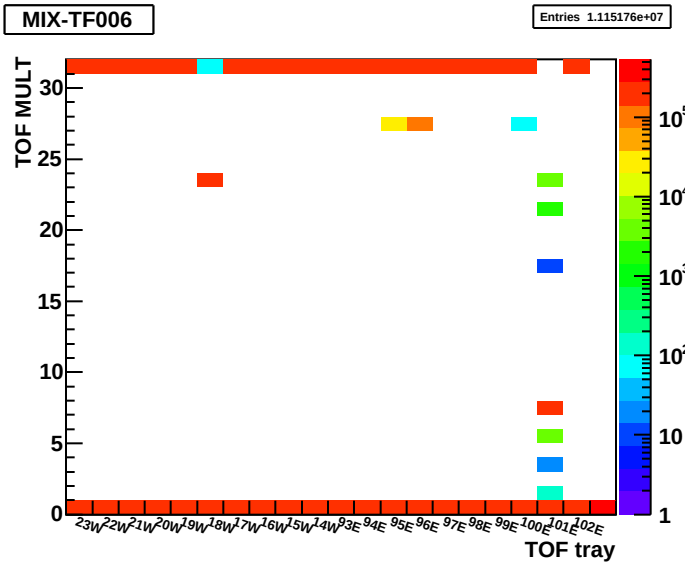

MIX-TF001
Entries 1.115176e+07
TOF MULT
TOF tray

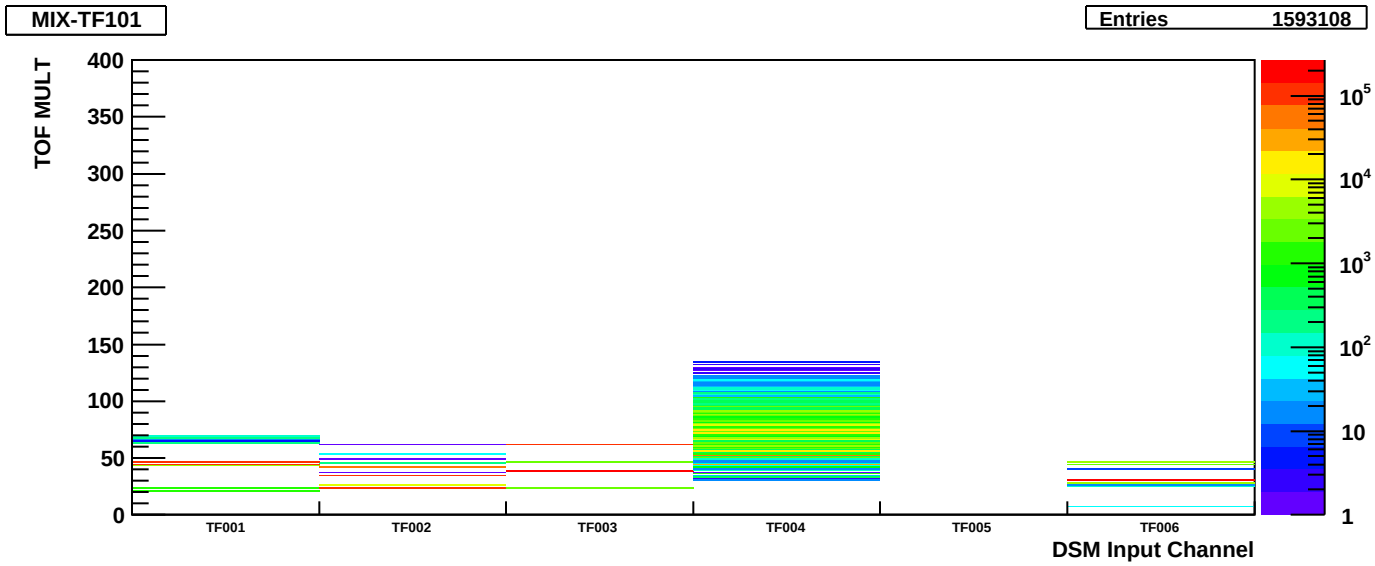

MIX-TF002
Entries 1.115176e+07
TOF MULT
TOF tray

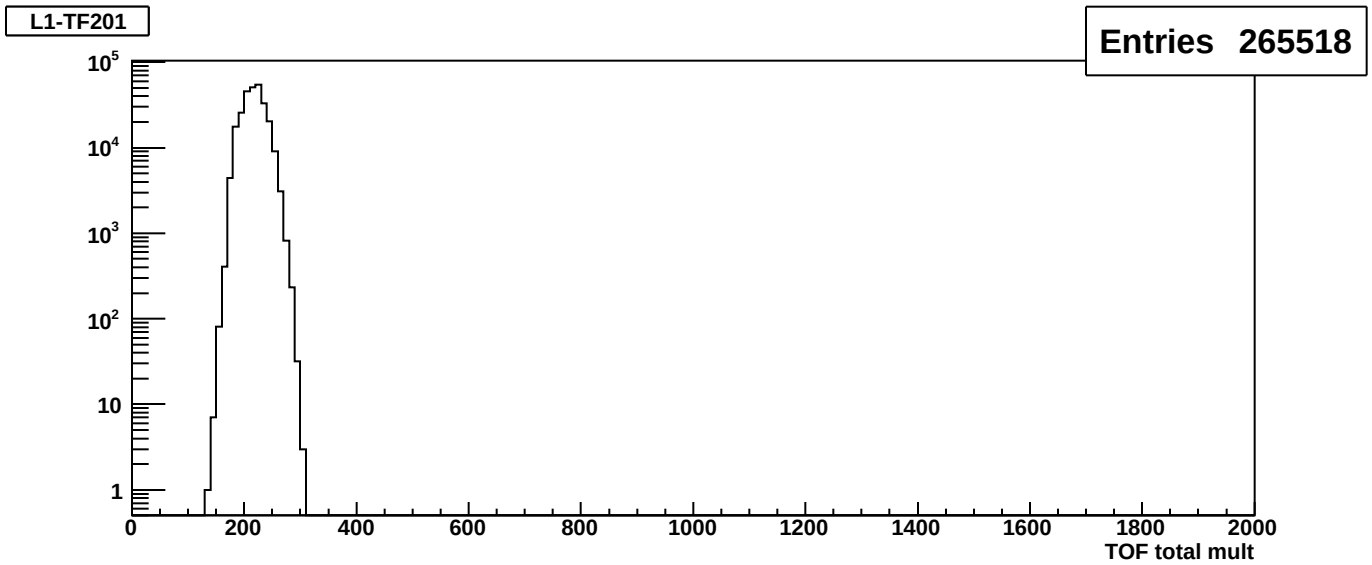

MIX-TF003
Entries 1.115176e+07
TOF MULT
TOF tray

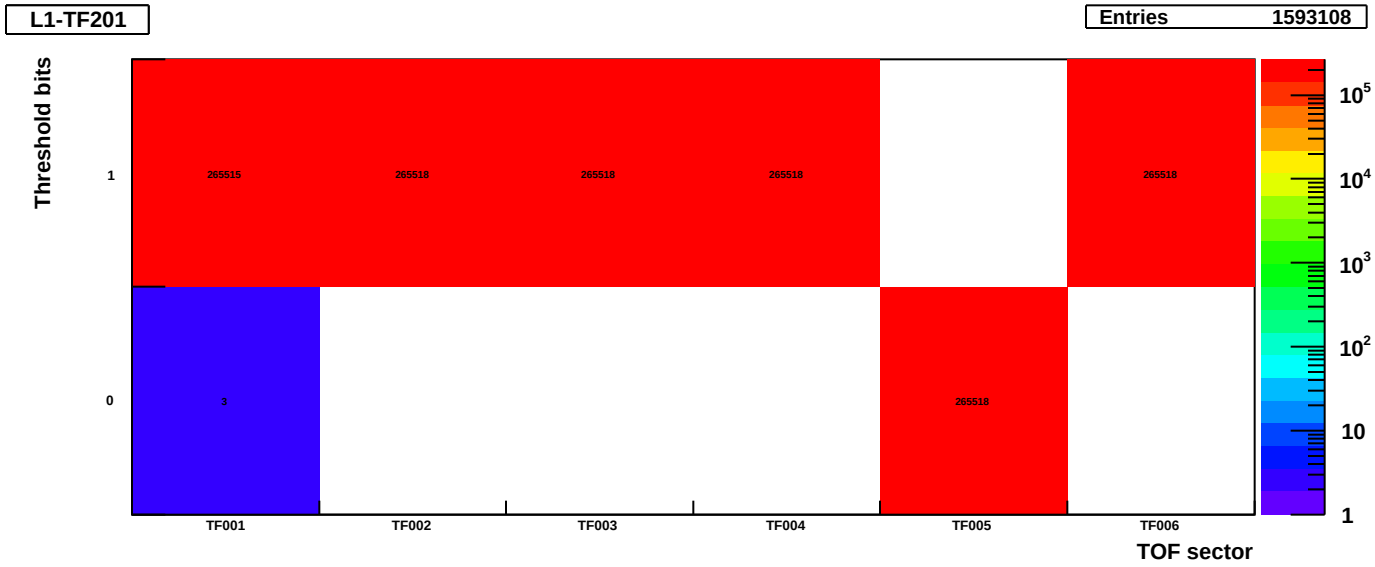

MIX-TF004
Entries 1.115176e+07
TOF MULT
TOF tray

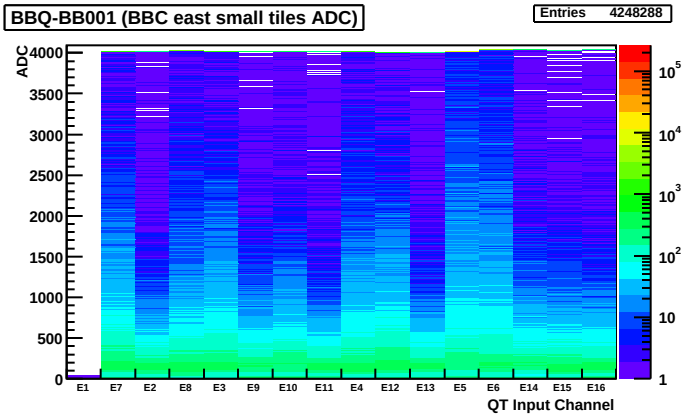

MIX-TF005
Entries 1.115176e+07
TOF MULT
TOF tray

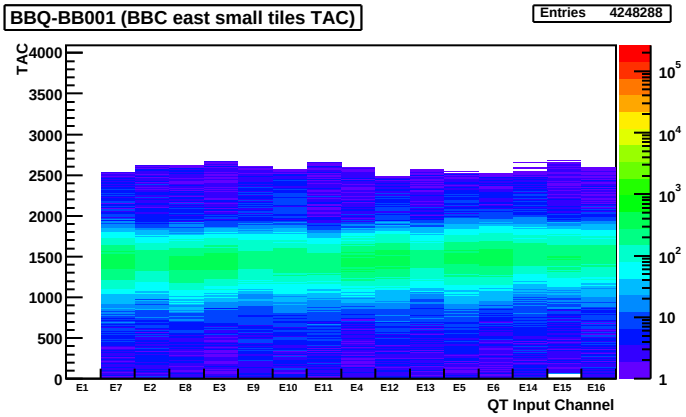

MIX-TF006
Entries 1.115176e+07
TOF MULT
TOF tray

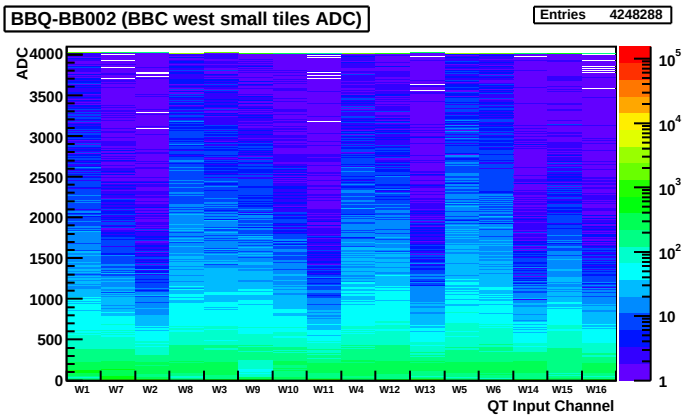

MIX-TF101
Entries 1593108
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

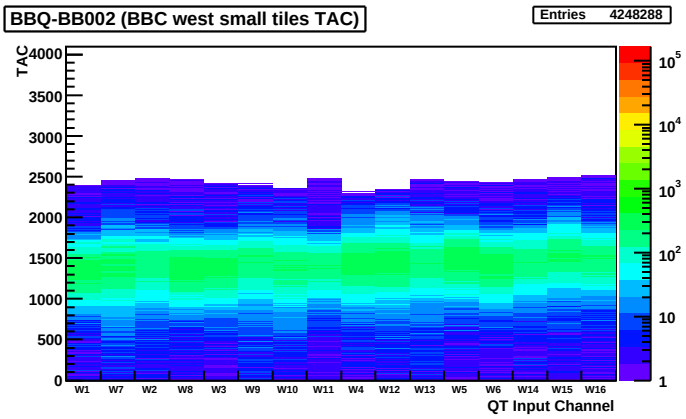

L1-TF201
Entries 265518
10^5
10^4
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

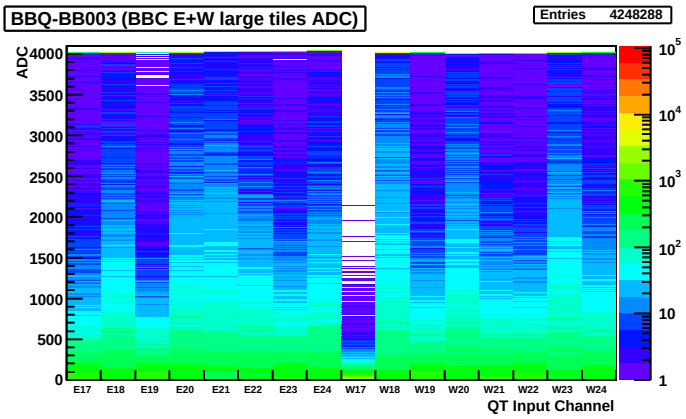

L1-TF201
Entries 1593108
Threshold bits
1
0
265515
265518
265518
265518
265518
3
265518
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5
10^4
10^3
10^2
10
1

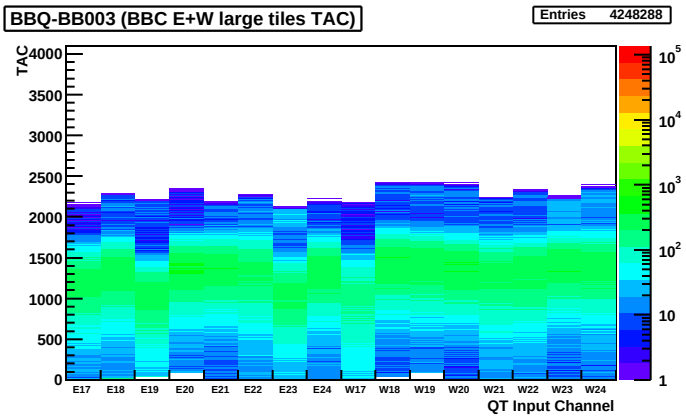

BBQ-BB001 (BBC east small tiles ADC)
Entries 4248288
ADC
QT Input Channel

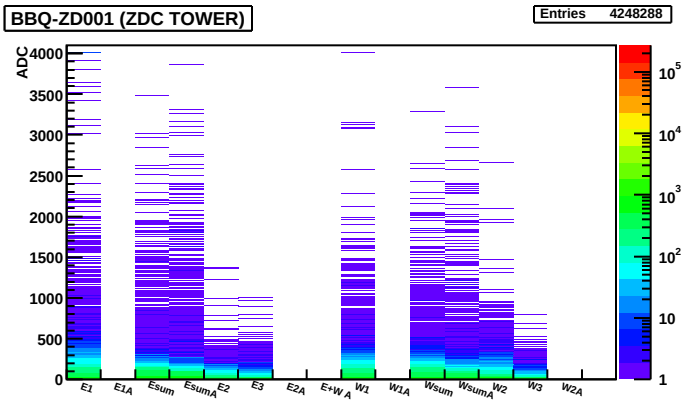

BBQ-BB001 (BBC east small tiles TAC)
Entries 4248288
TAC
QT Input Channel

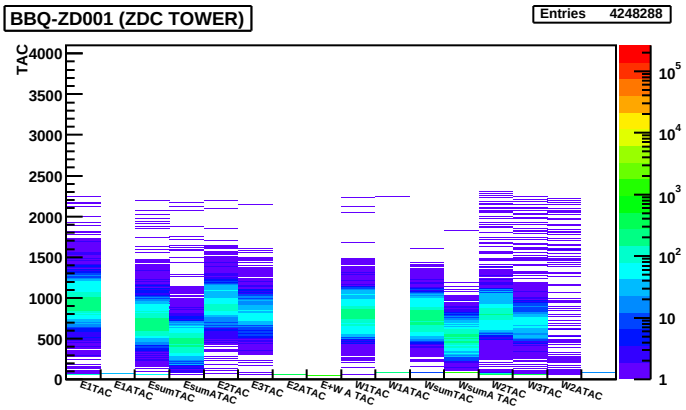

BBQ-BB002 (BBC west small tiles ADC)
Entries 4248288
ADC
QT Input Channel

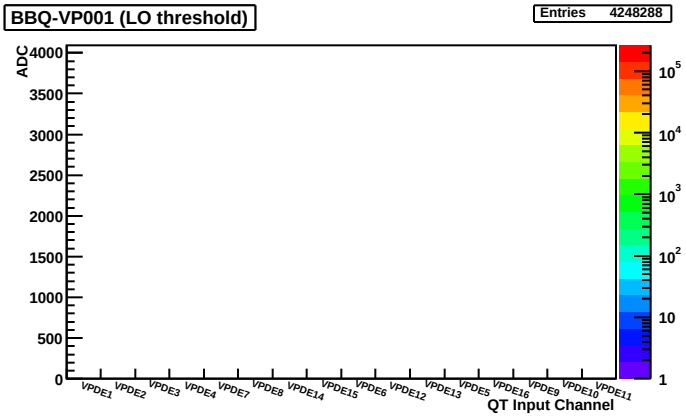

BBQ-BB002 (BBC west small tiles TAC)
Entries 4248288
TAC
QT Input Channel

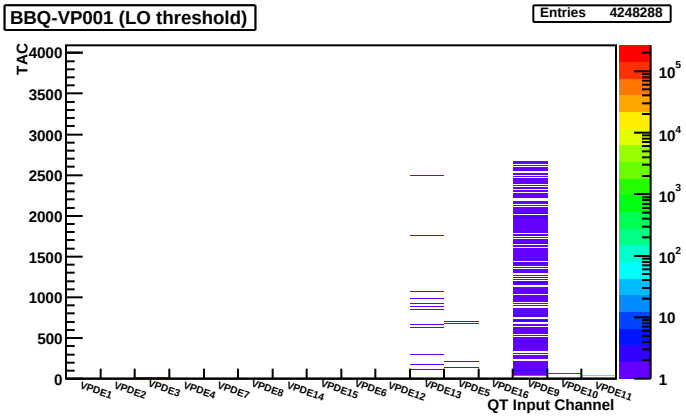

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 4248288
ADC
QT Input Channel

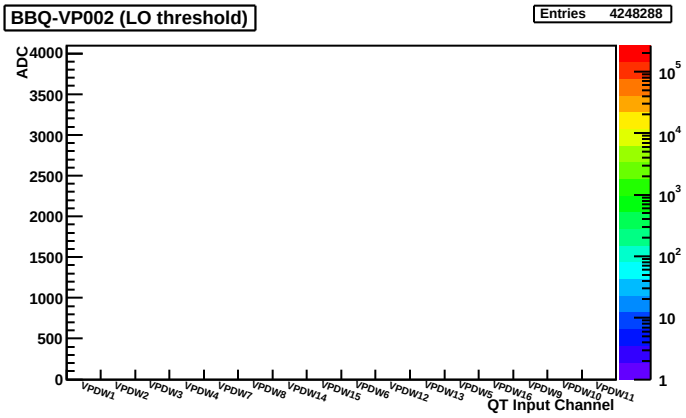

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 4248288
TAC
QT Input Channel

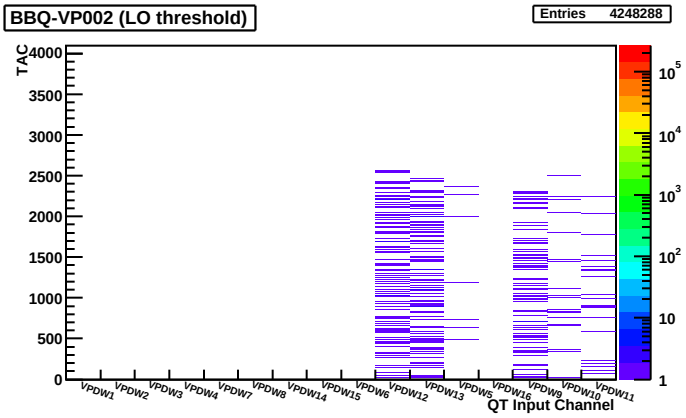

BBQ-ZD001 (ZDC TOWER)
Entries 4248288
ADC

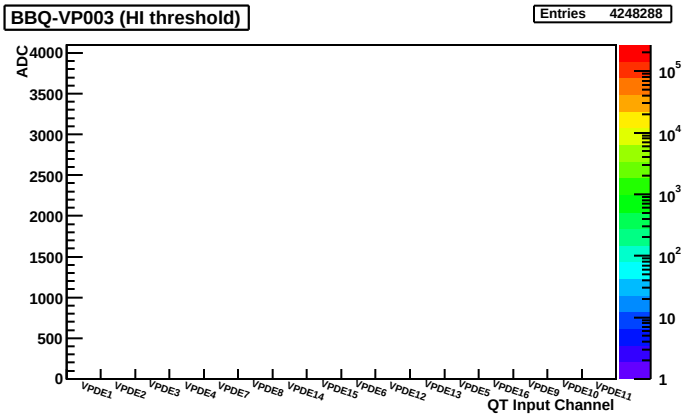

BBQ-ZD001 (ZDC TOWER)
Entries 4248288
TAC

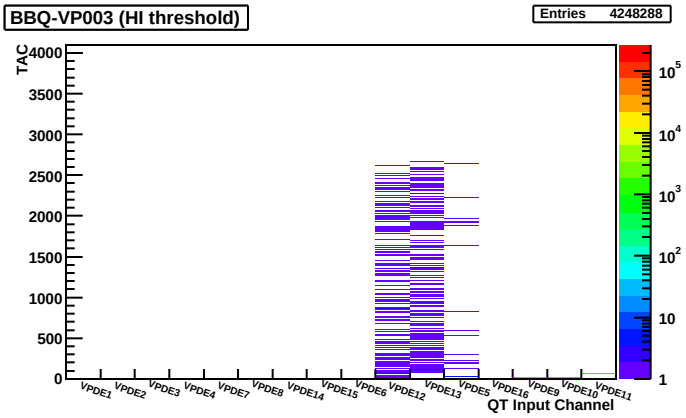

BBQ-VP001 (LO threshold)
Entries 4248288
ADC
QT Input Channel

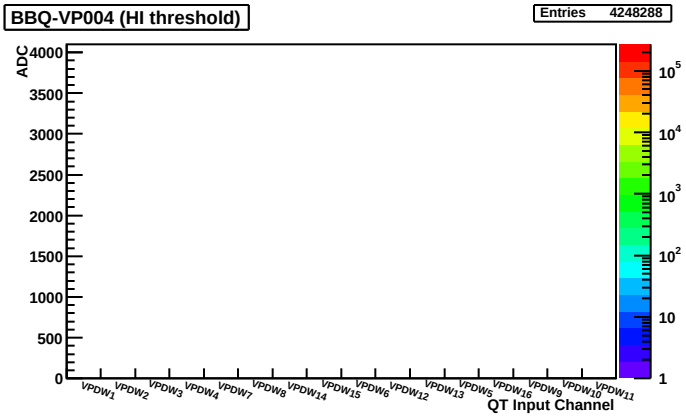

BBQ-VP001 (LO threshold)
Entries 4248288
TAC
QT Input Channel

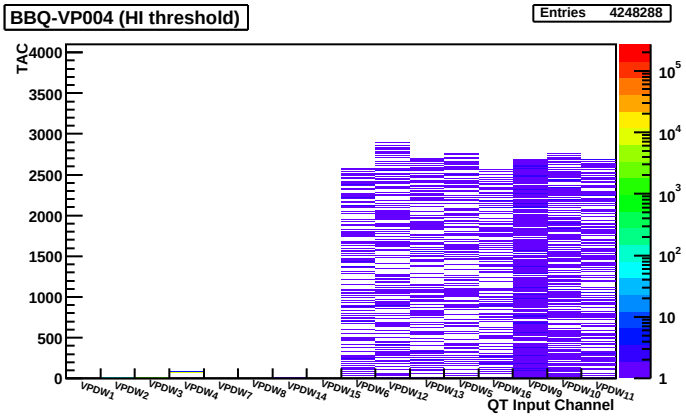

BBQ-VP002 (LO threshold)
Entries 4248288
ADC
QT Input Channel

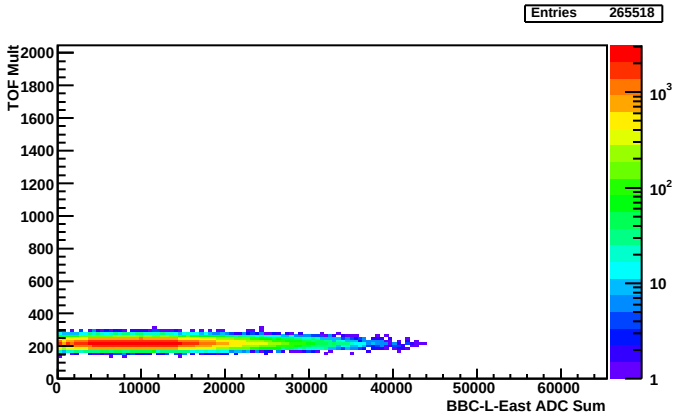

BBQ-VP002 (LO threshold)
Entries 4248288
TAC
QT Input Channel

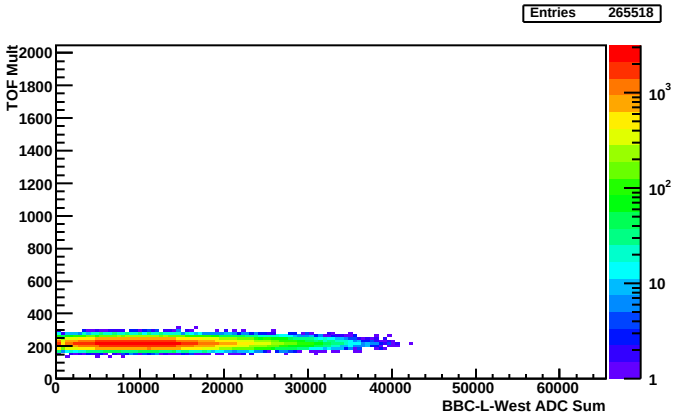

BBQ-VP003 (HI threshold)
Entries 4248288
ADC
QT Input Channel

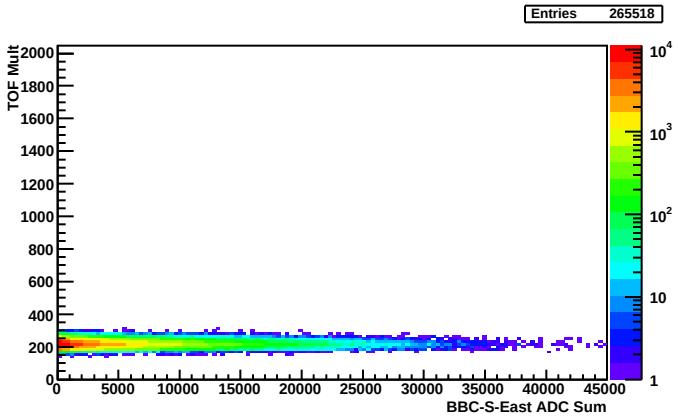

BBQ-VP003 (HI threshold)
Entries 4248288
TAC
QT Input Channel

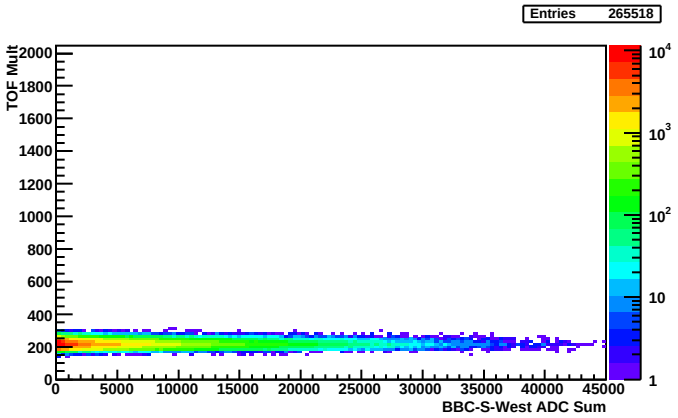

BBQ-VP004 (HI threshold)
Entries 4248288
ADC
QT Input Channel

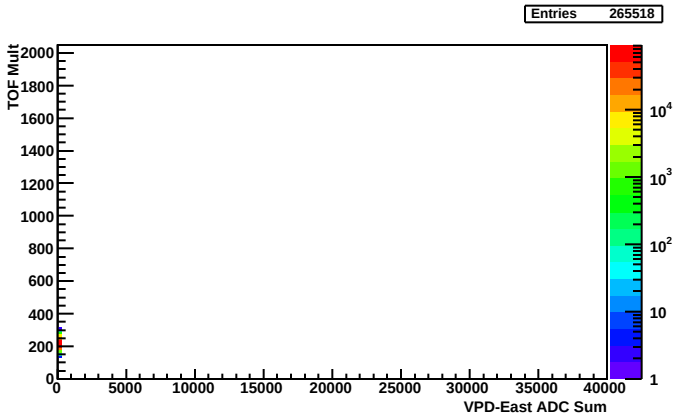

BBQ-VP004 (HI threshold)
Entries 4248288
TAC
QT Input Channel

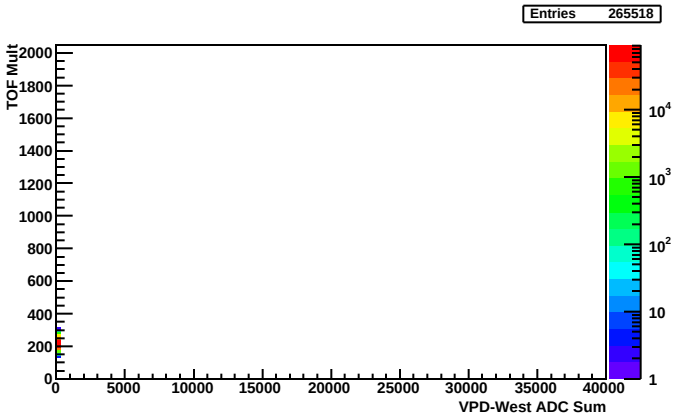

Entries 265518
TOF Mult
BBC-L-East ADC Sum

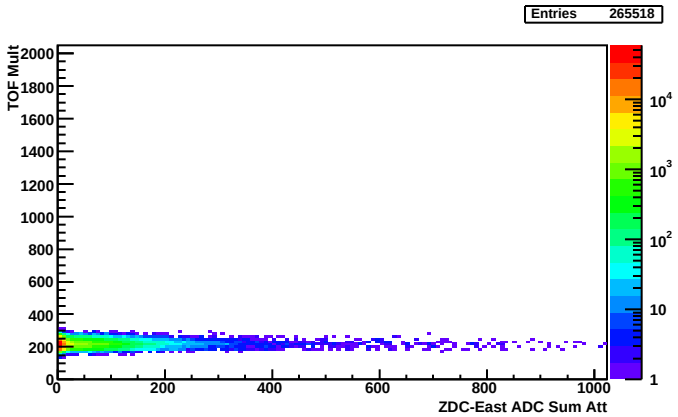

Entries 265518
TOF Mult
BBC-L-West ADC Sum

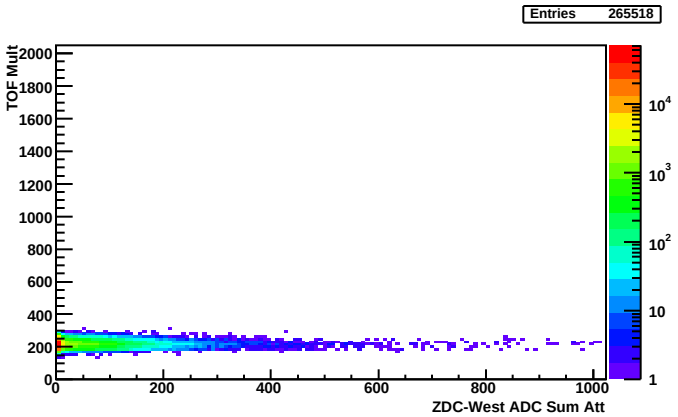

Entries 265518
TOF Mult
BBC-S-East ADC Sum

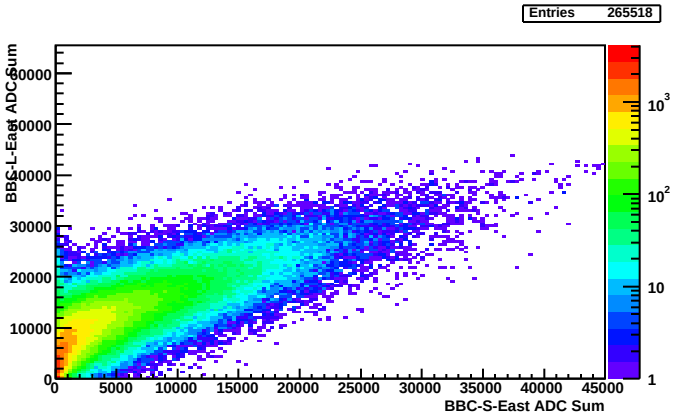

Entries 265518
TOF Mult
BBC-S-West ADC Sum

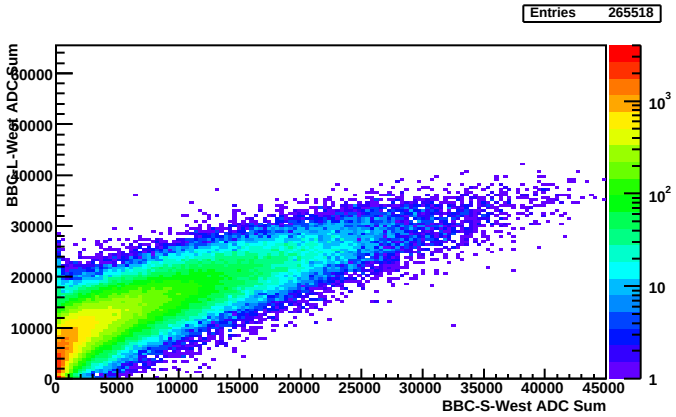

Entries 265518
TOF Mult
VPD-East ADC Sum

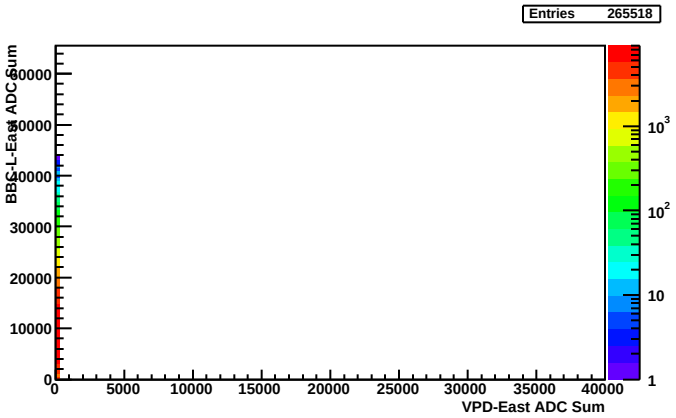

Entries 265518
TOF Mult
VPD-West ADC Sum

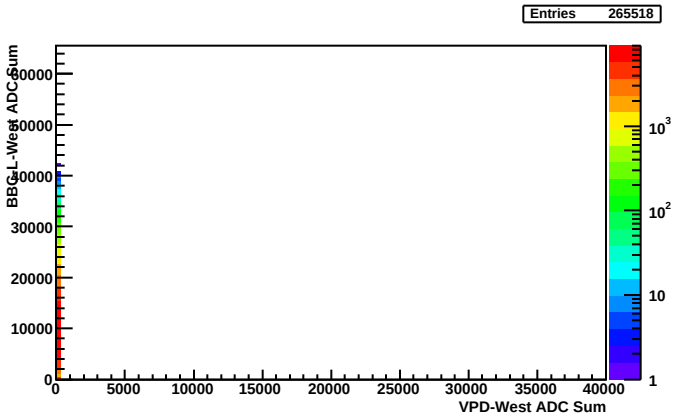

Entries 265518
TOF Mult
ZDC-East ADC Sum Att

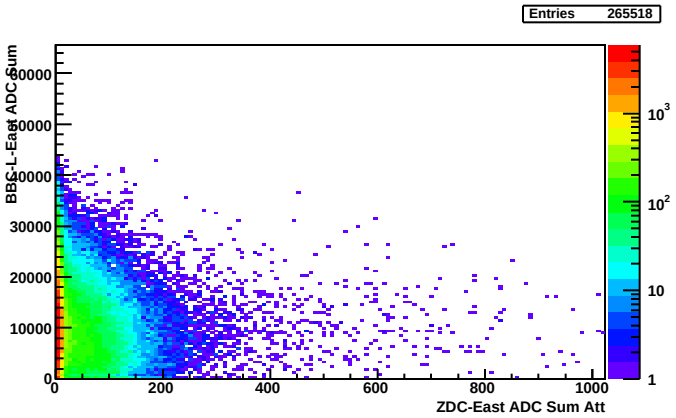

Entries 265518
TOF Mult
ZDC-West ADC Sum Att

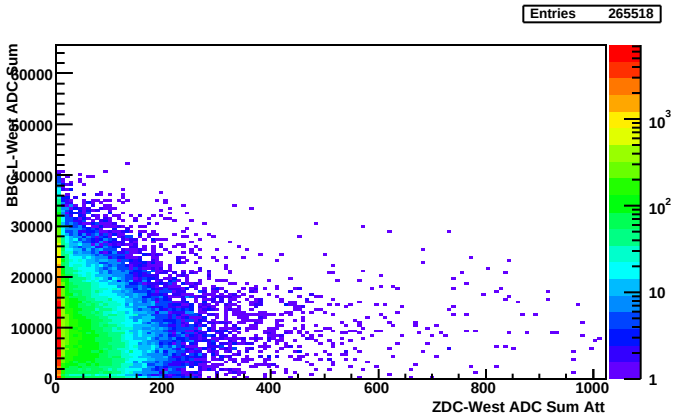

Entries 265518
BBC-L-East ADC Sum
BBC-S-East ADC Sum

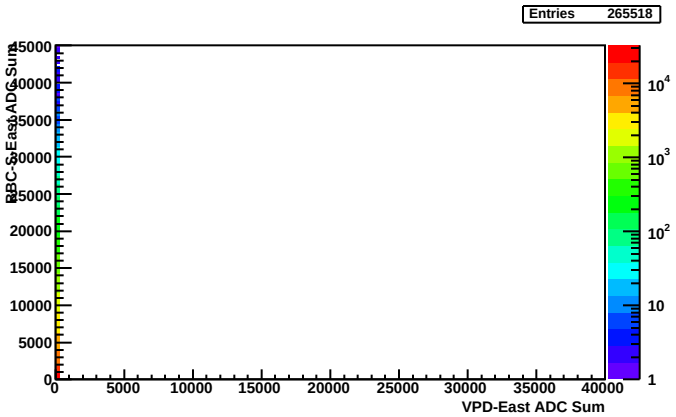

Entries 265518
BBC-L-West ADC Sum
BBC-S-West ADC Sum

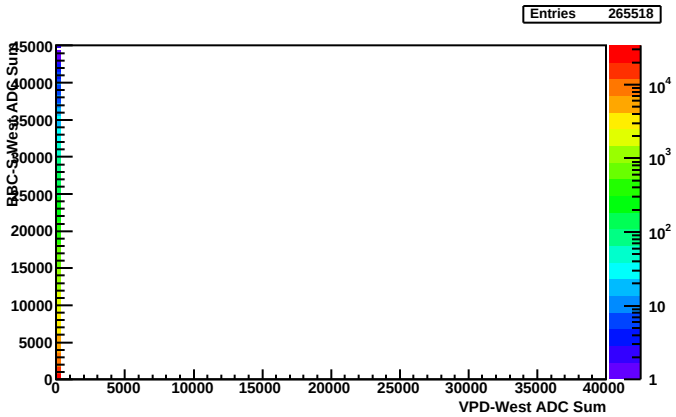

Entries 265518
BBC-L-East ADC Sum
VPD-East ADC Sum

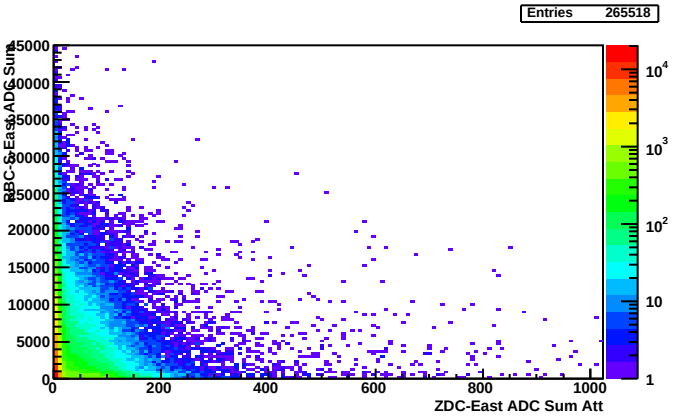

Entries 265518
BBC-L-West ADC Sum
VPD-West ADC Sum

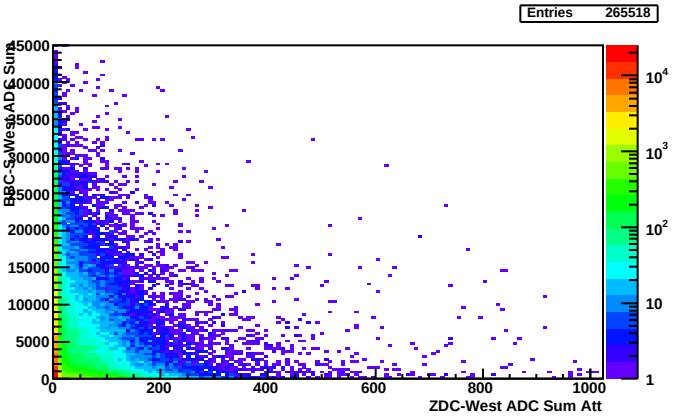

Entries 265518
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

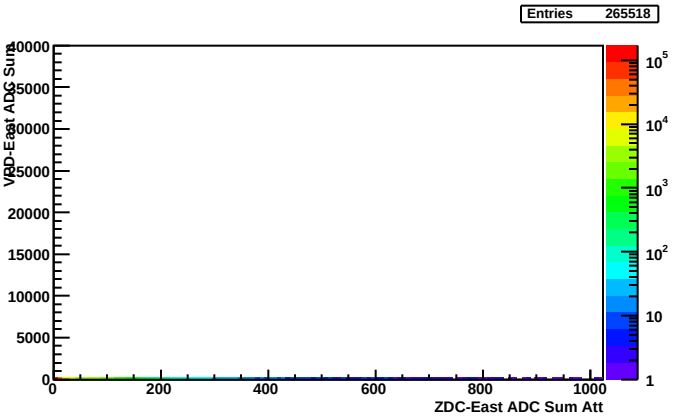

Entries 265518
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

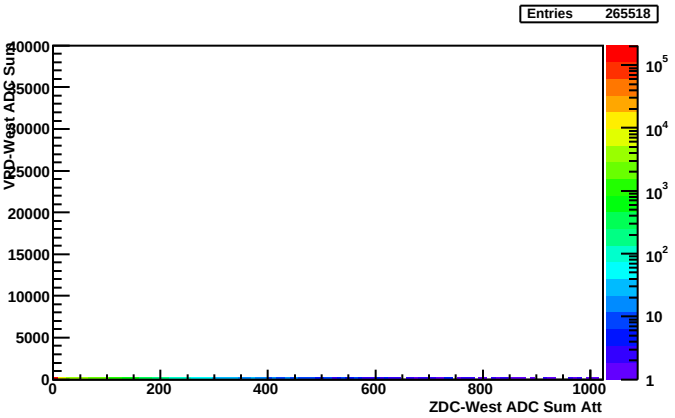

Entries 265518
BBC-S-East ADC Sum
VPD-East ADC Sum

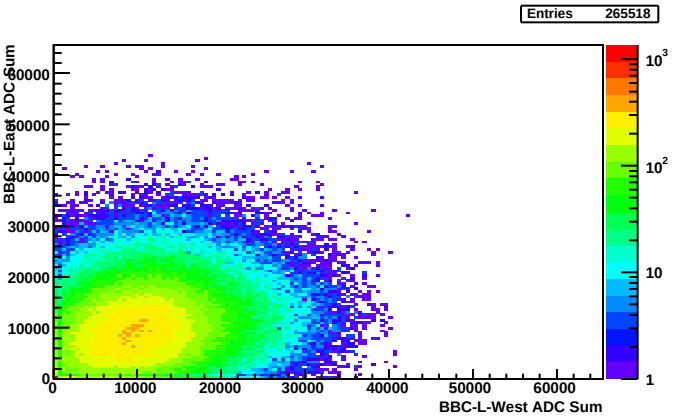

Entries 265518
BBC-S-West ADC Sum
VPD-West ADC Sum

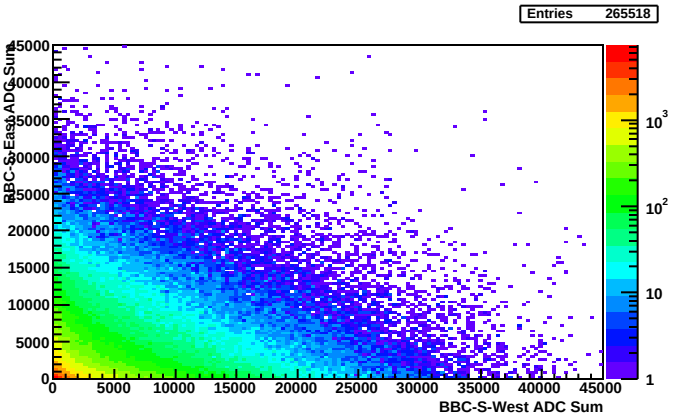

Entries 265518
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

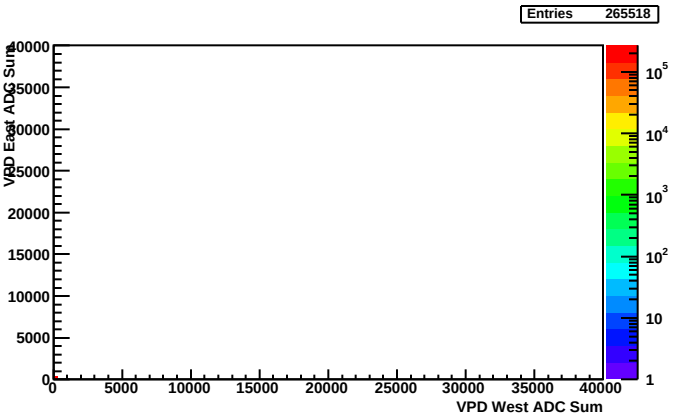

Entries 265518
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

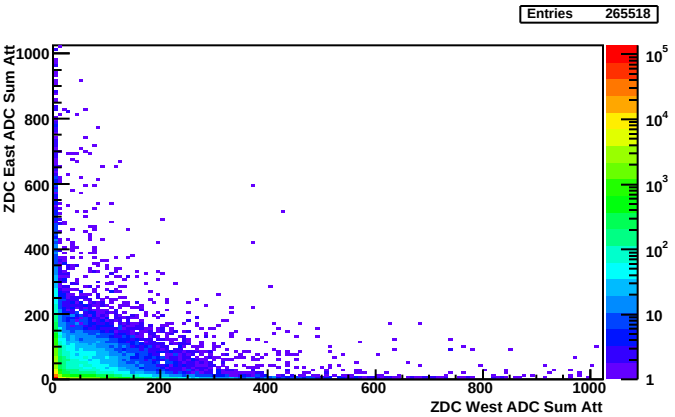

Entries 265518
VPD-East ADC Sum
ZDC-East ADC Sum Att

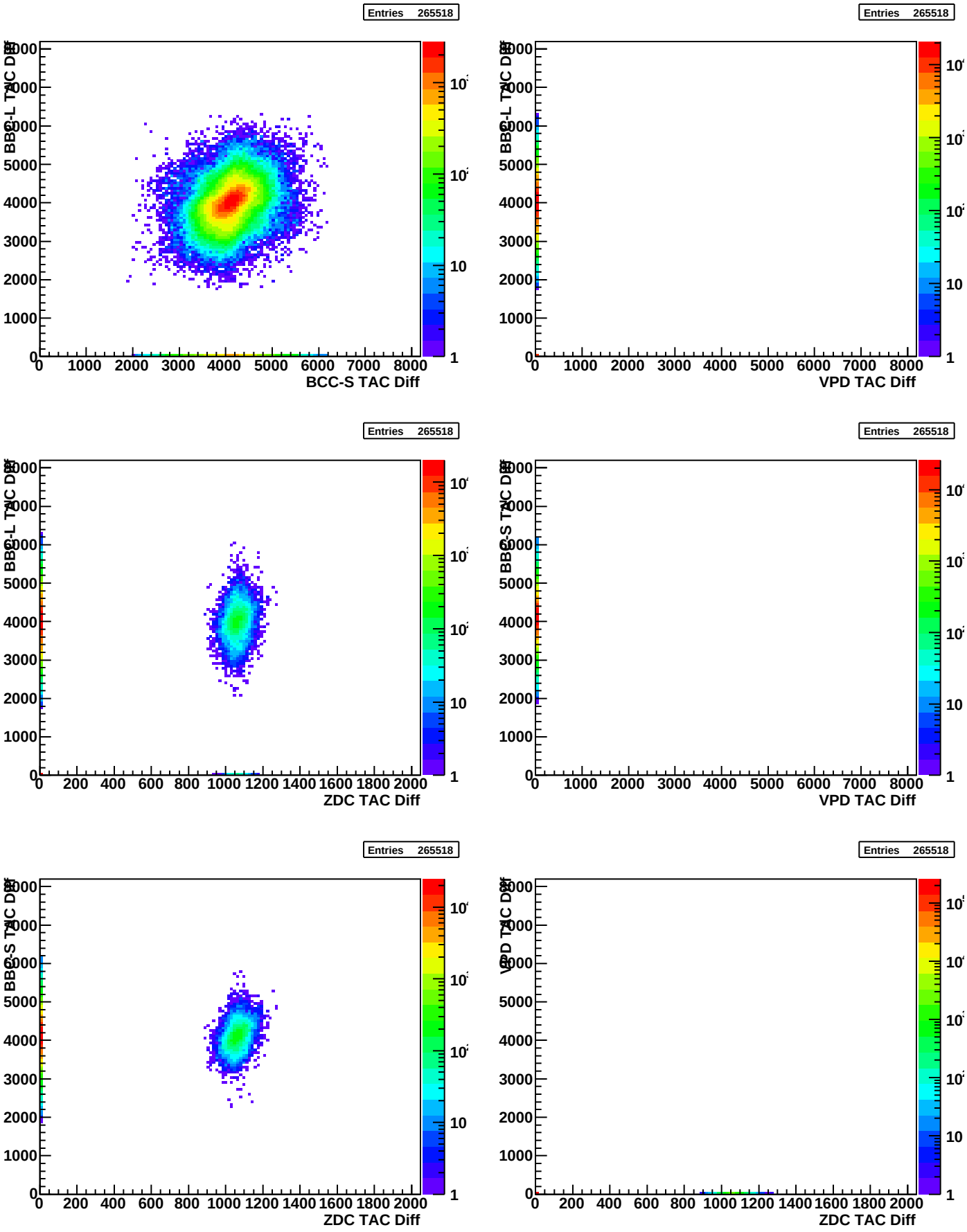

Entries 265518
VPD-West ADC Sum
ZDC-West ADC Sum Att

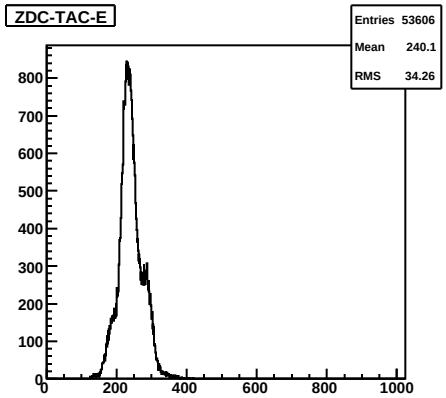

Entries 265518
BBC-L-East ADC Sum
BBC-L-West ADC Sum

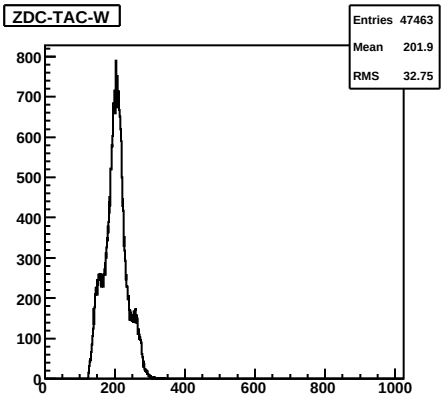

Entries 265518
BBC-S-East ADC Sum
BBC-S-West ADC Sum

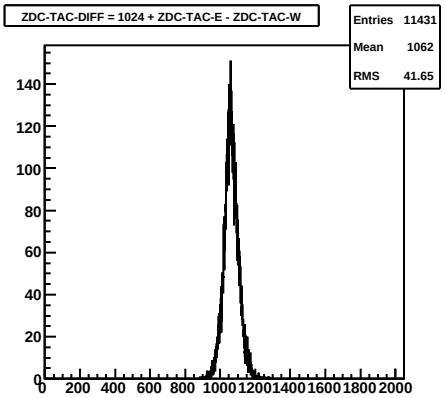

Entries 265518
VPD East ADC Sum
VPD West ADC Sum

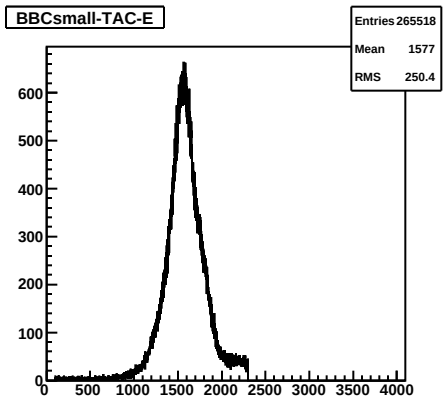

Entries 265518
ZDC East ADC Sum Att
ZDC West ADC Sum Att

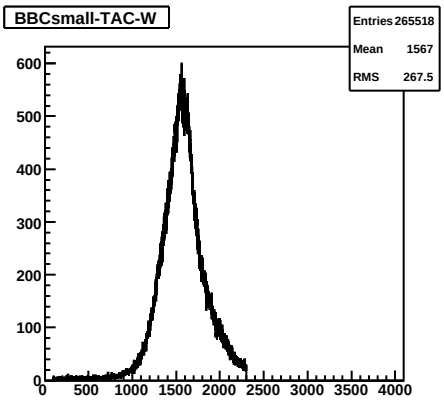

Entries 265518
BBC-L TAC Diff
BCC-S TAC Diff
VPD TAC Diff
ZDC TAC Diff
BBC-S TAC Diff

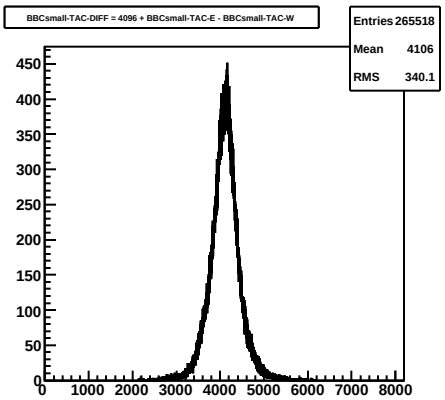

ZDC-TAC-E
Entries 53606
Mean 240.1
RMS 34.26

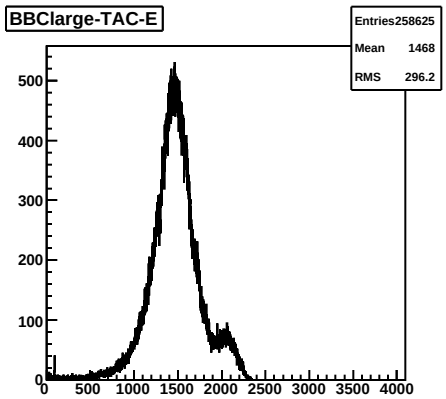

ZDC-TAC-W
Entries 47463
Mean 201.9
RMS 32.75

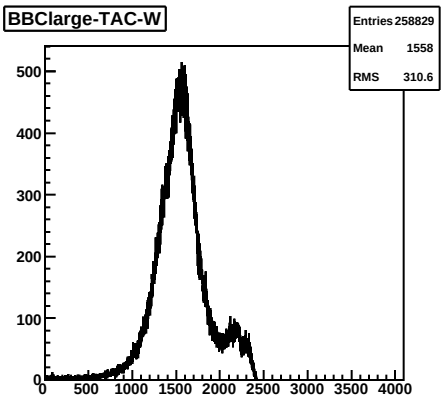

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 11431
Mean 1062
RMS 41.65

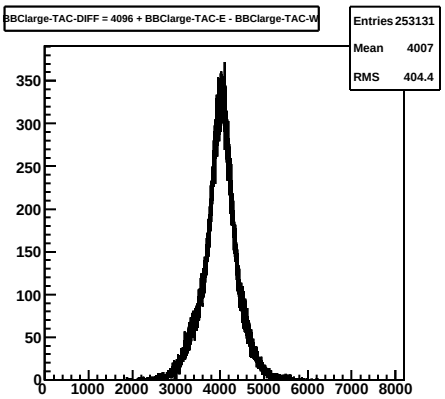

BBCsmall-TAC-E
Entries 265518
Mean 1577
RMS 250.4

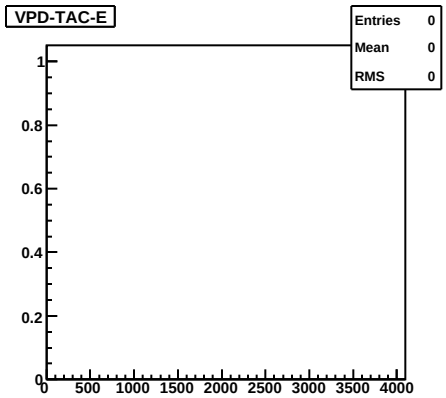

BBCsmall-TAC-W
Entries 265518
Mean 1567
RMS 267.5

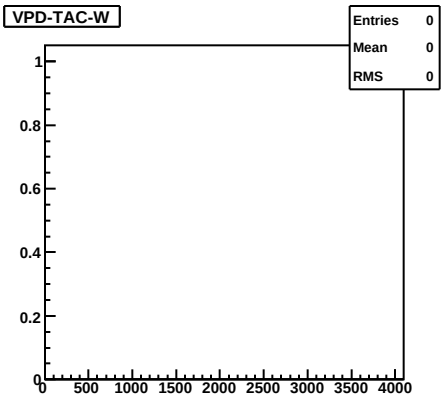

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 265518
Mean 4106
RMS 340.1

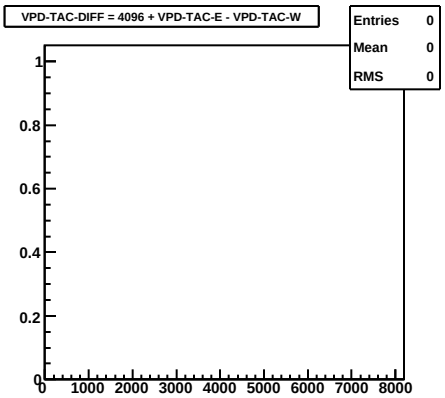

BBClarge-TAC-E
Entries 258625
Mean 1468
RMS 296.2

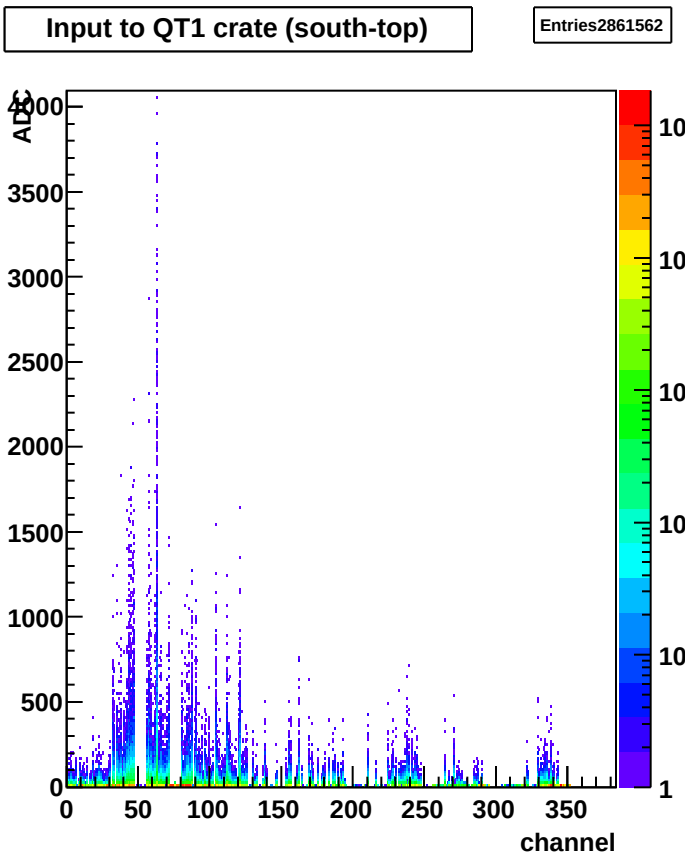

BBClarge-TAC-W
Entries 258829
Mean 1558
RMS 310.6

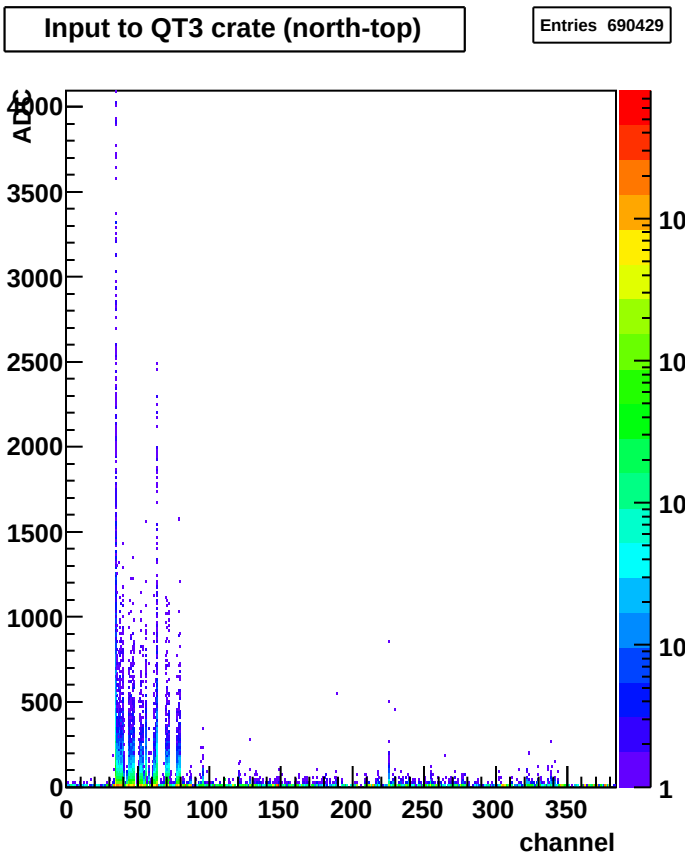

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 253131
Mean 4007
RMS 404.4

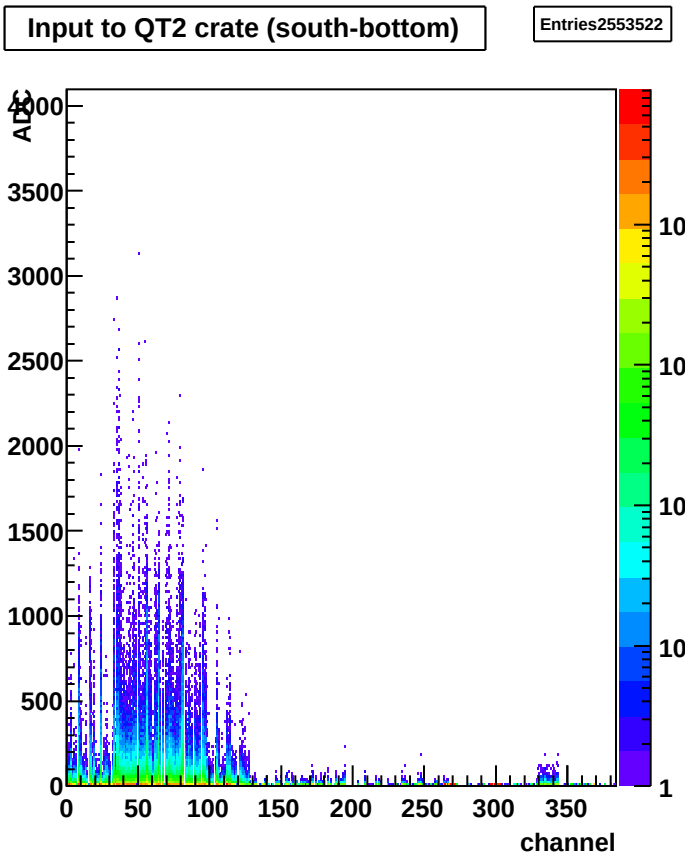

VPD-TAC-E
Entries 0
Mean 0
RMS 0

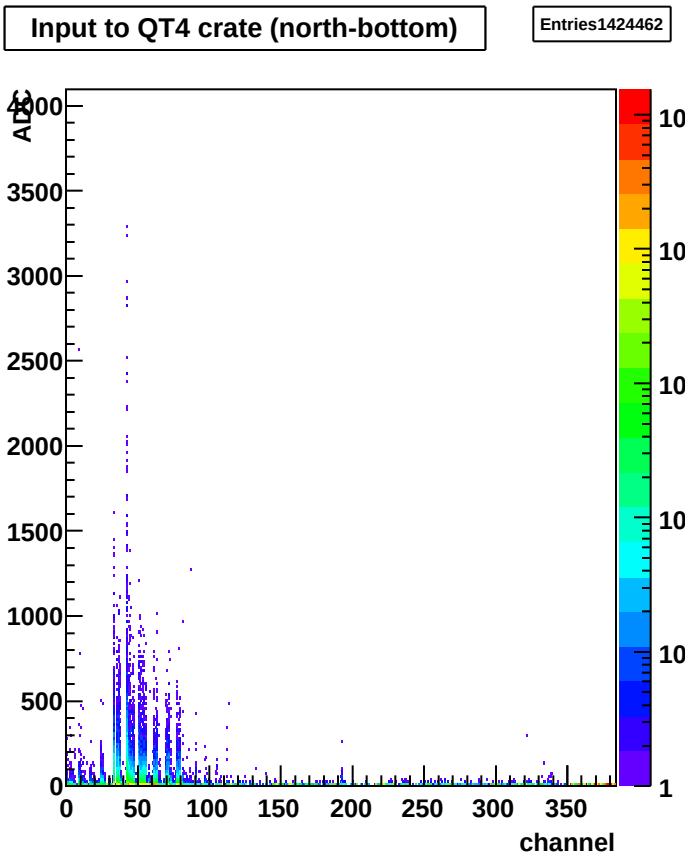

VPD-TAC-W
Entries 0
Mean 0
RMS 0

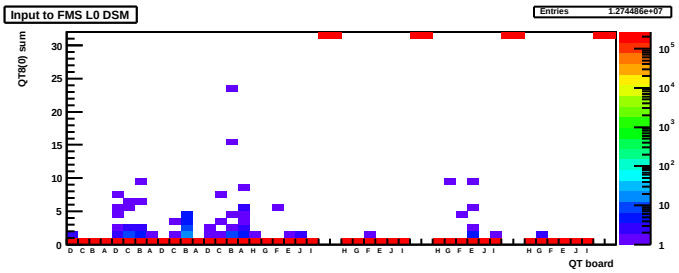

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 0
Mean 0
RMS 0

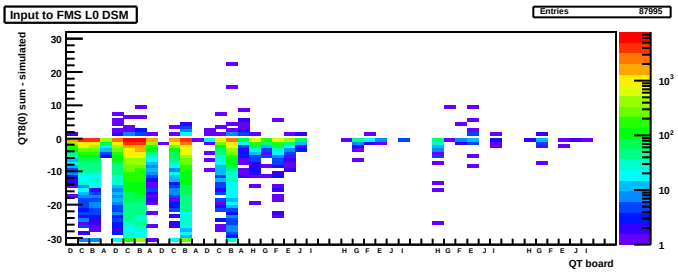

Input to QT1 crate (south-top)
Entries2861562
ADC
channel

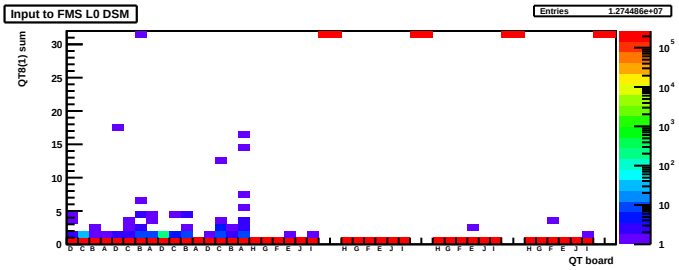

Input to QT3 crate (north-top)
Entries 690429
ADC
channel

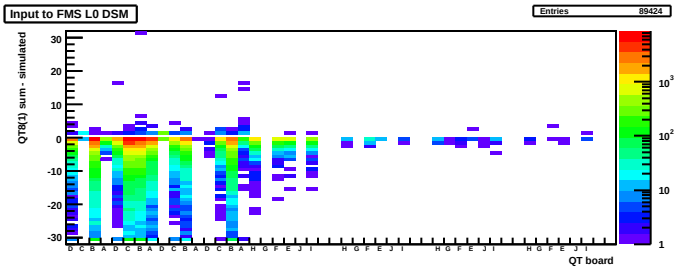

Input to QT2 crate (south-bottom)
Entries2553522
ADC
channel

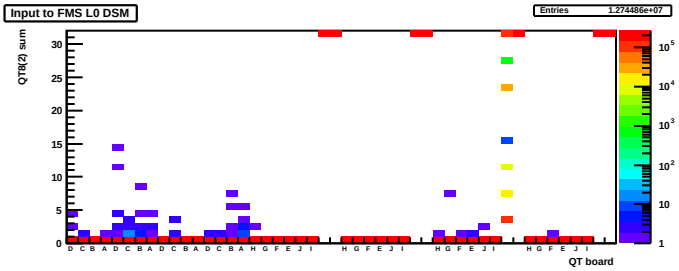

Input to QT4 crate (north-bottom)
Entries1424462
ADC
channel

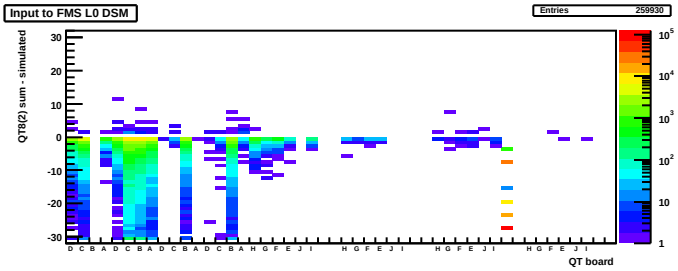

Input to FMS L0 DSM
Entries 1.274486e+07
QT8(0) sum
QT board

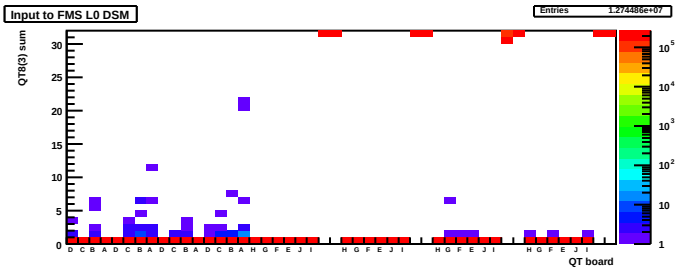

Input to FMS L0 DSM
Entries 87995
QT8(0) sum - simulated
QT board

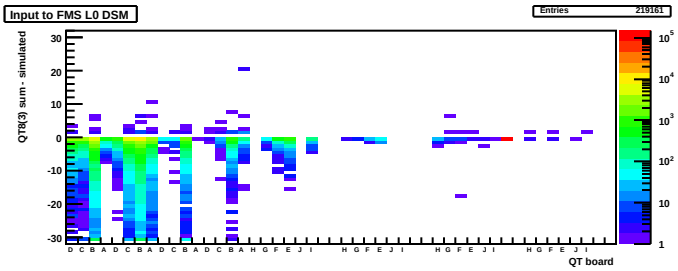

Input to FMS L0 DSM
Entries 1.274486e+07
QT8(1) sum
QT board

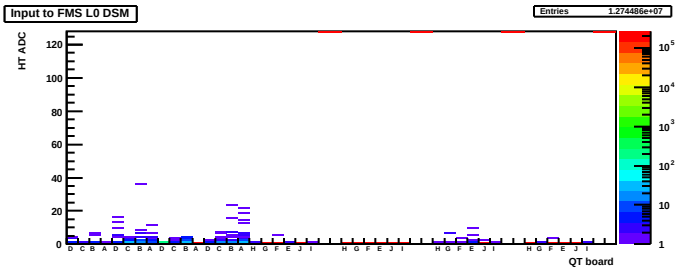

Input to FMS L0 DSM
Entries 89424
QT8(1) sum - simulated
QT board

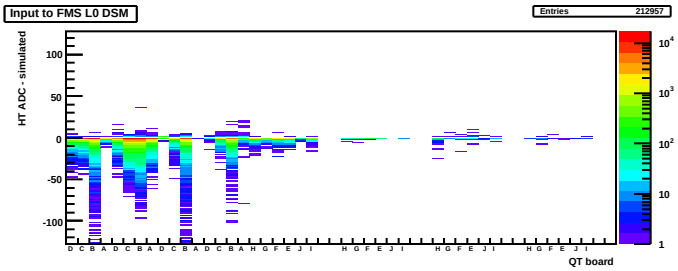

Input to FMS L0 DSM
Entries 1.274486e+07
QT8(2) sum
QT board

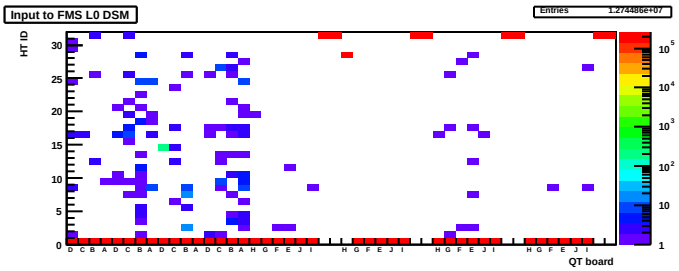

Input to FMS L0 DSM
Entries 259930
QT8(2) sum - simulated
QT board

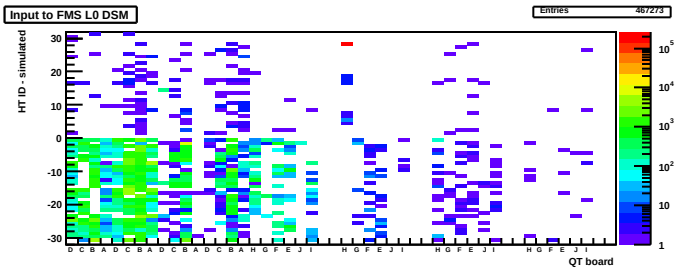

Input to FMS L0 DSM
Entries 1.274486e+07
QT8(3) sum
QT board

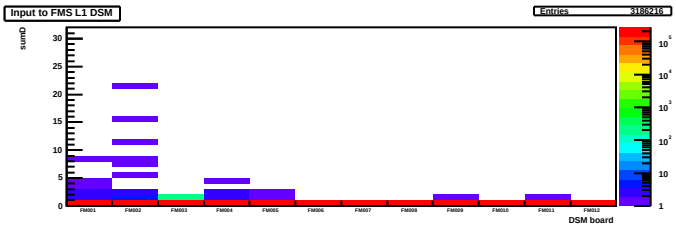

Input to FMS L0 DSM
Entries 219161
QT8(3) sum - simulated
QT board

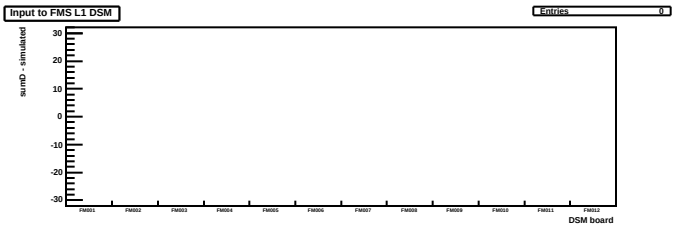

Input to FMS L0 DSM
Entries 1.274486e+07
HT ADC
QT board

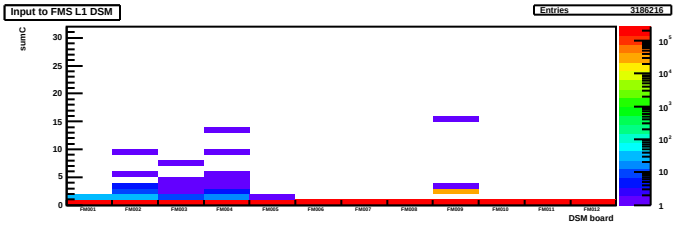

Input to FMS L0 DSM
Entries 212957
HT ADC - simulated
QT board

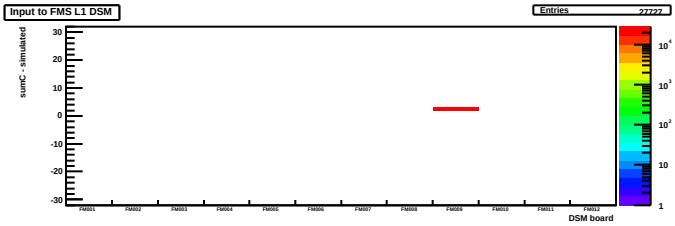

Input to FMS L0 DSM
Entries 1.274486e+07
HT ID
QT board

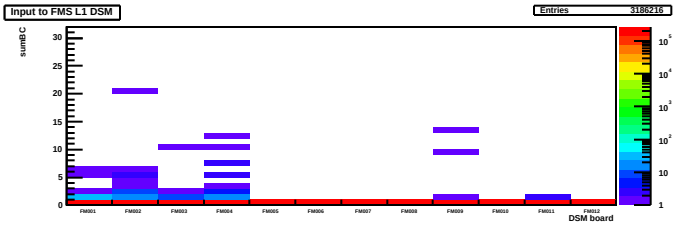

Input to FMS L0 DSM
Entries 467273
HT ID - simulated
QT board

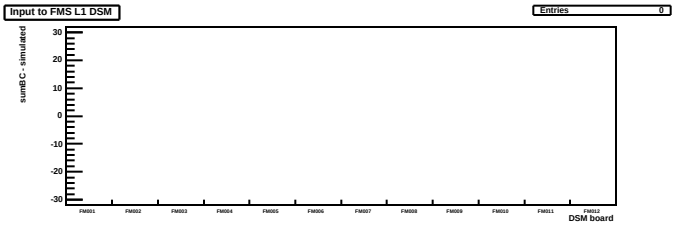

Input to FMS L1 DSM
Entries 3186216
sumD
DSM board

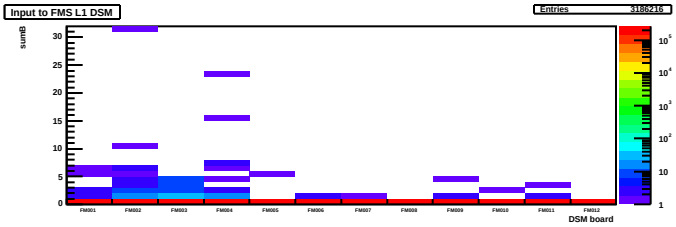

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

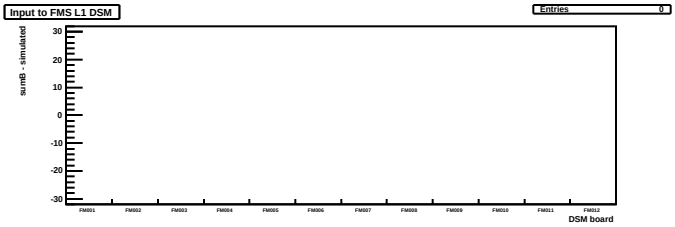

Input to FMS L1 DSM
Entries 3186216
sumC
DSM board

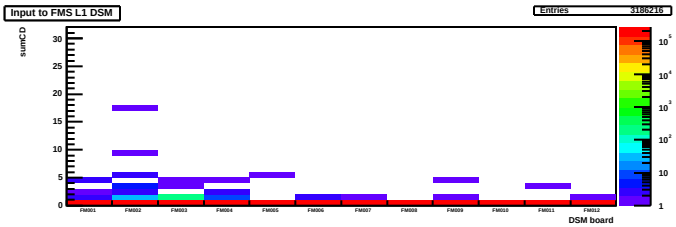

Input to FMS L1 DSM
Entries 27227
sumC - simulated
DSM board

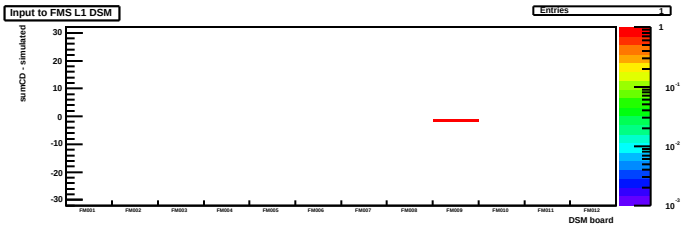

Input to FMS L1 DSM
Entries 3186216
sumBC
DSM board

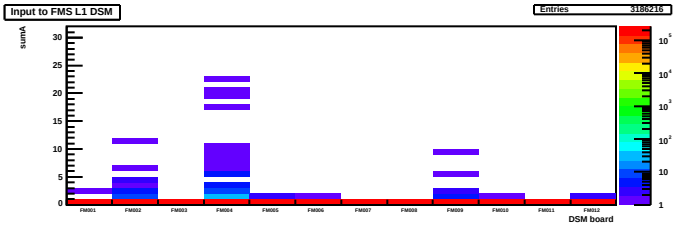

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

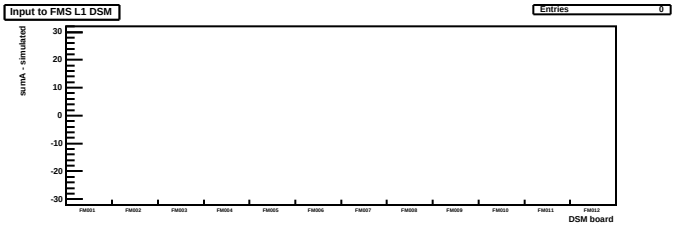

Input to FMS L1 DSM
Entries 3186216
sumB
DSM board

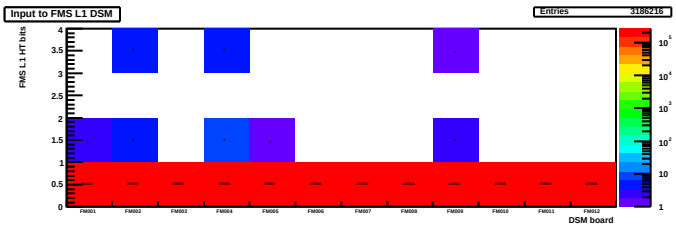

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

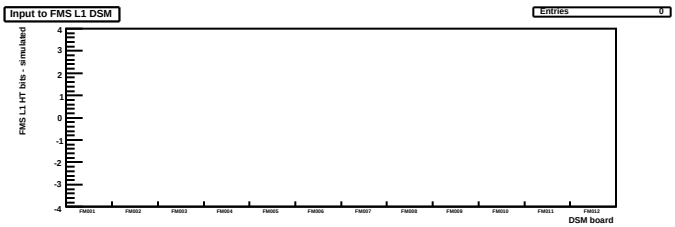

Input to FMS L1 DSM
Entries 3186216
sumCD
DSM board

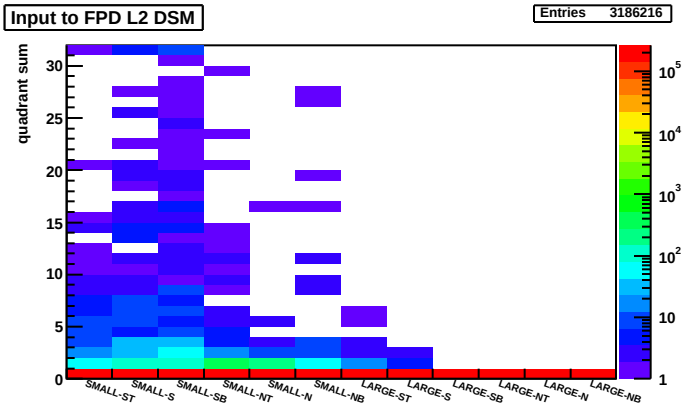

Input to FMS L1 DSM
Entries 1
sumCD - simulated
DSM board

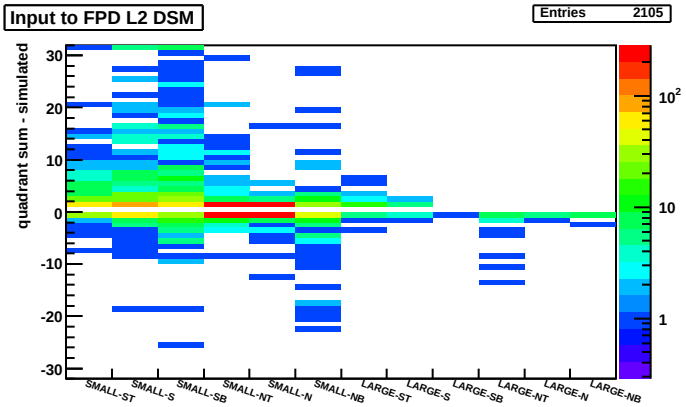

Input to FMS L1 DSM
Entries 3186216
sumA
DSM board

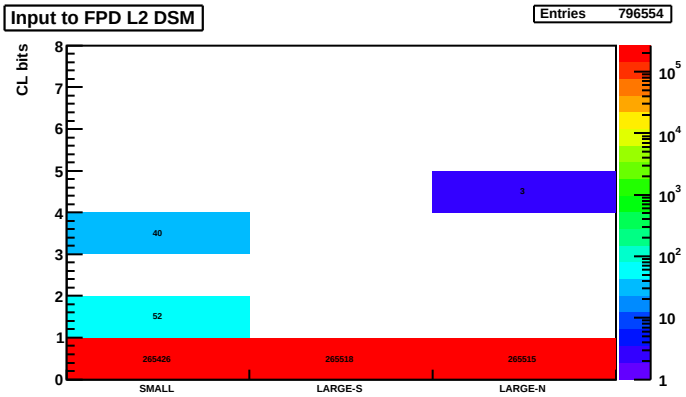

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

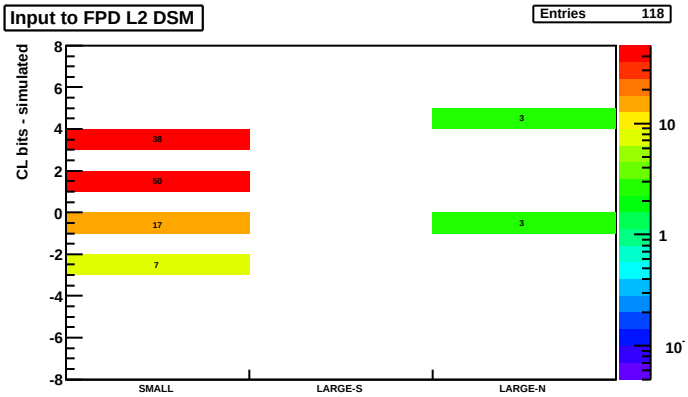

Input to FMS L1 DSM
Entries 3186216
FMS L1 HT bits
DSM board

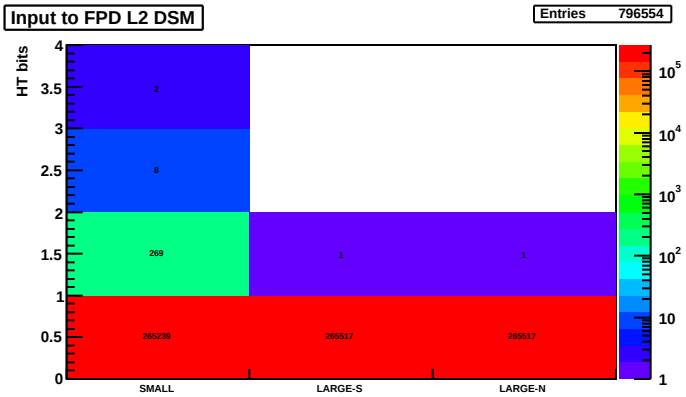

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

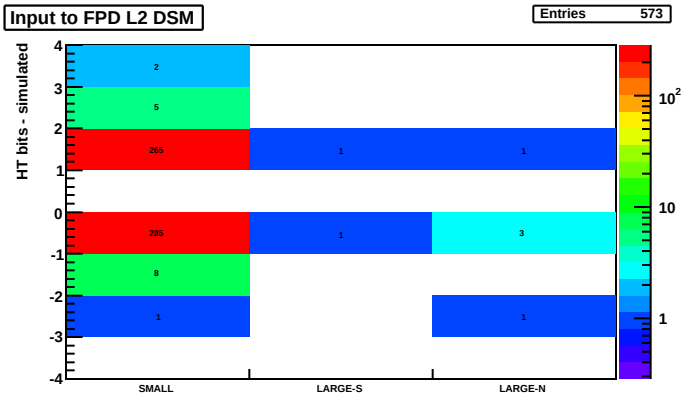

Input to FPD L2 DSM
Entries 3186216
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

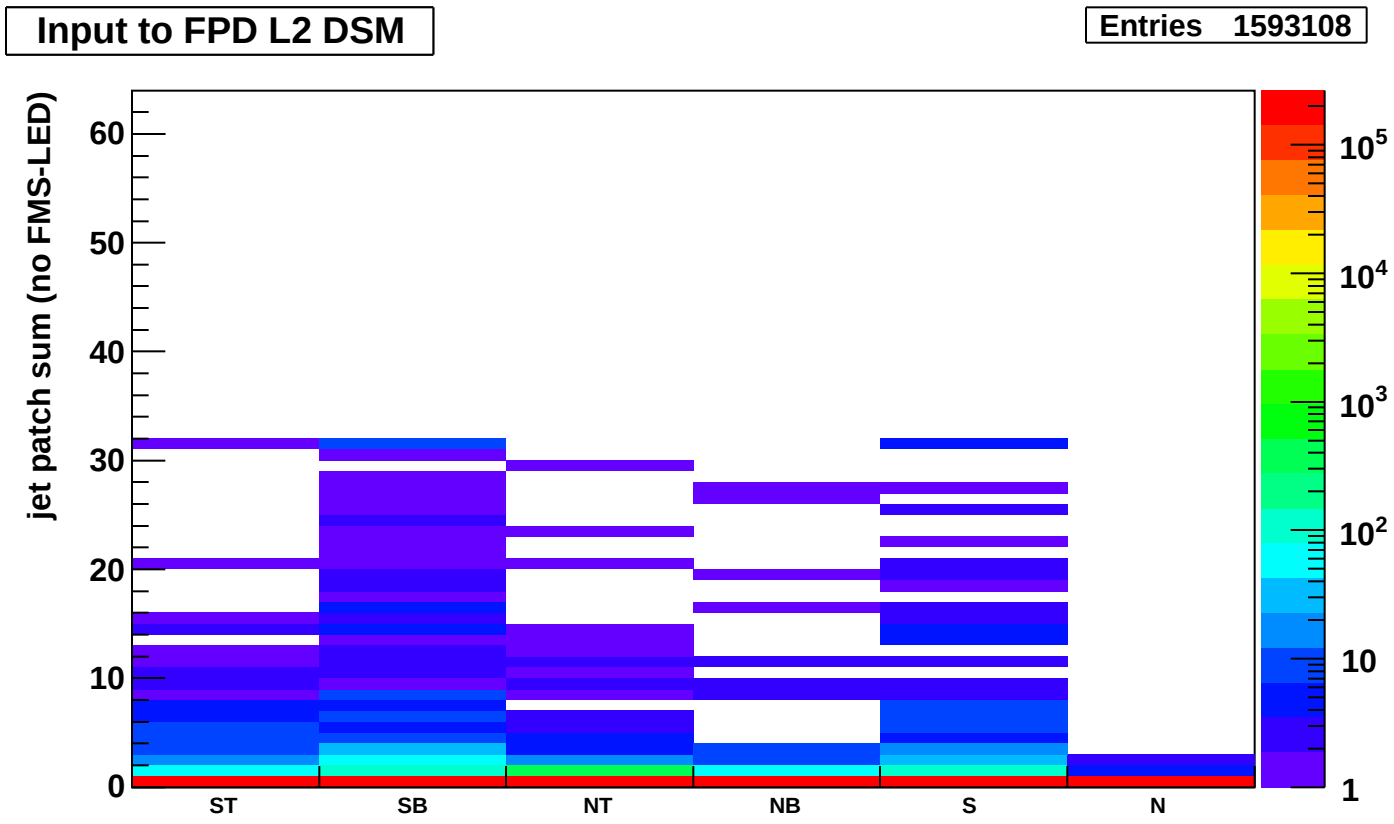

Input to FPD L2 DSM
Entries 2105
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

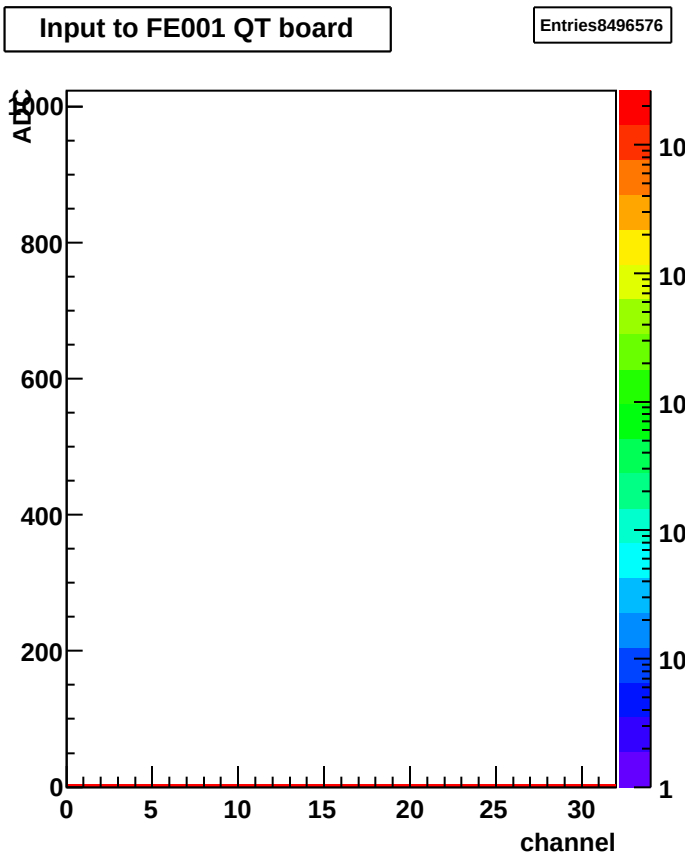

Input to FPD L2 DSM
Entries 796554
CL bits
40
52
265426
265518
265515
3
SMALL
LARGE-S
LARGE-N

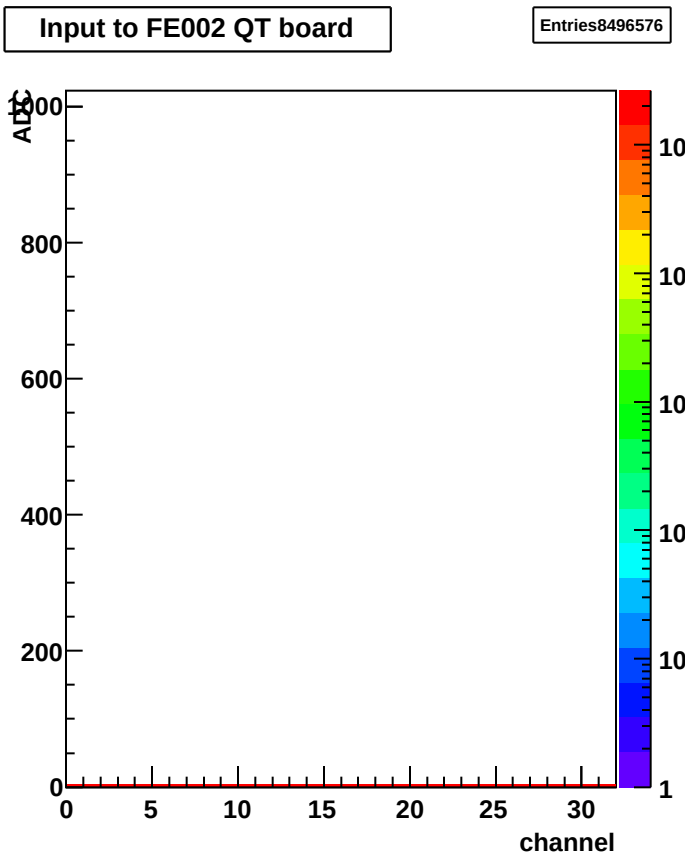

Input to FPD L2 DSM
Entries 118
CL bits - simulated
38
50
17
7
3
3
SMALL
LARGE-S
LARGE-N

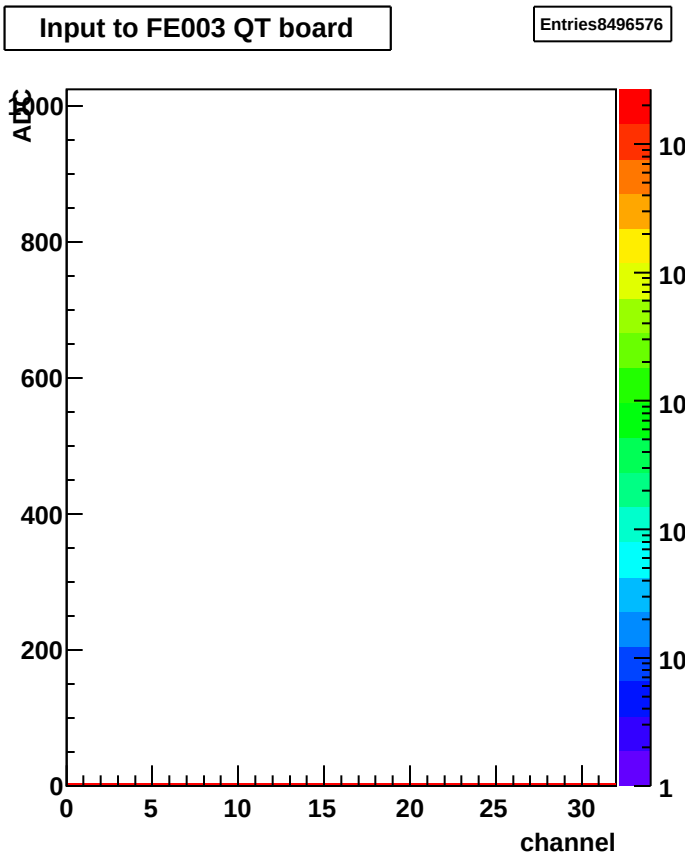

Input to FPD L2 DSM
Entries 796554
HT bits
2
8
269
1
1
265239
265517
265517
SMALL
LARGE-S
LARGE-N

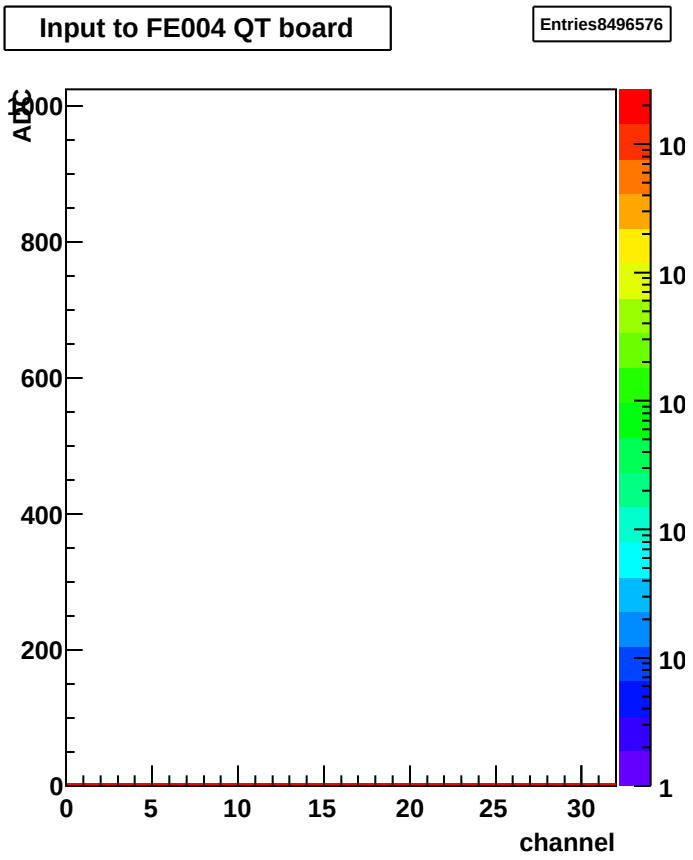

Input to FPD L2 DSM
Entries 573
HT bits - simulated
2
5
265
1
1
285
1
3
8
1
1
SMALL
LARGE-S
LARGE-N

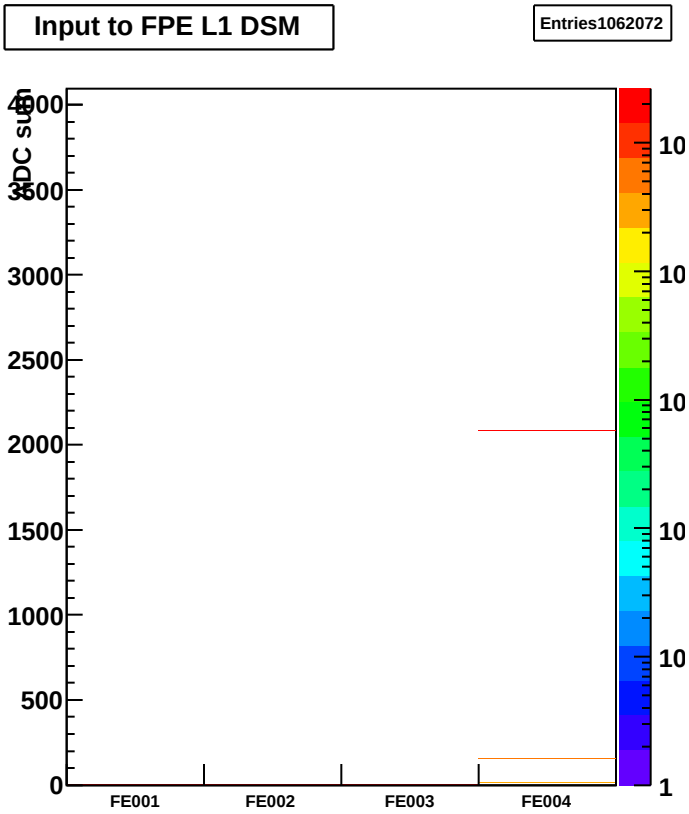

Input to FPD L2 DSM
Entries 1593108
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

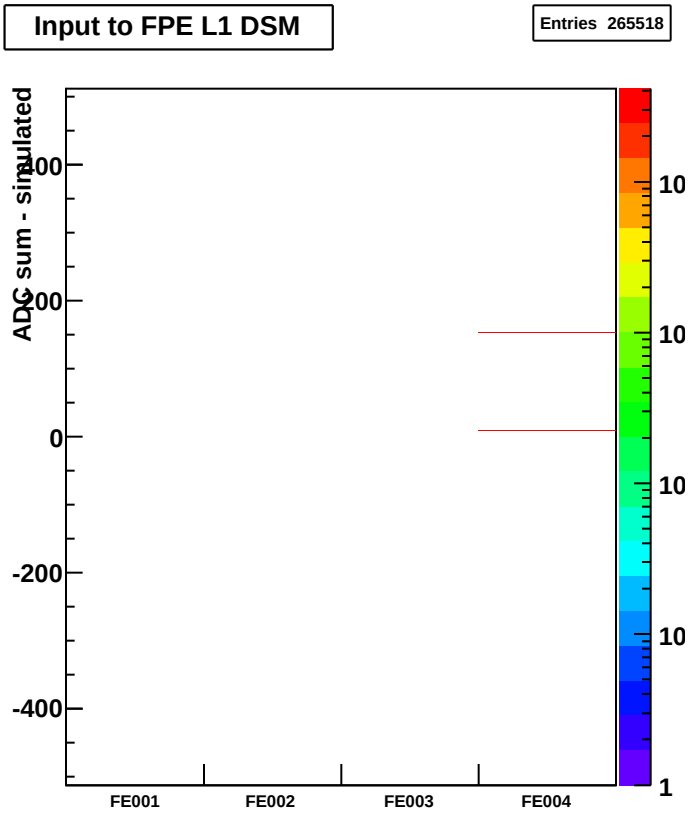

Input to FE001 QT board
Entries8496576
ADC
channel

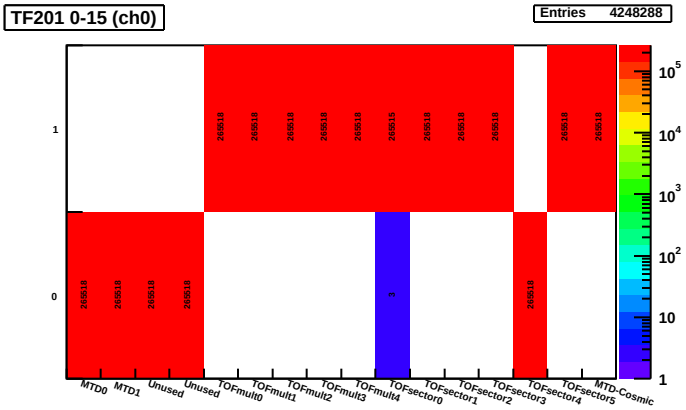

Input to FE002 QT board
Entries8496576
ADC
channel

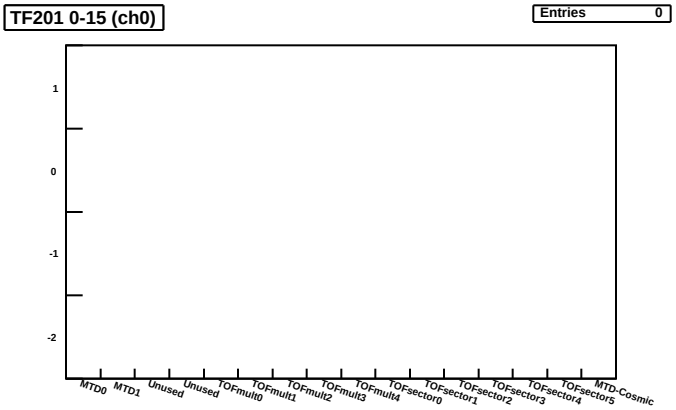

Input to FE003 QT board
Entries8496576
ADC
channel

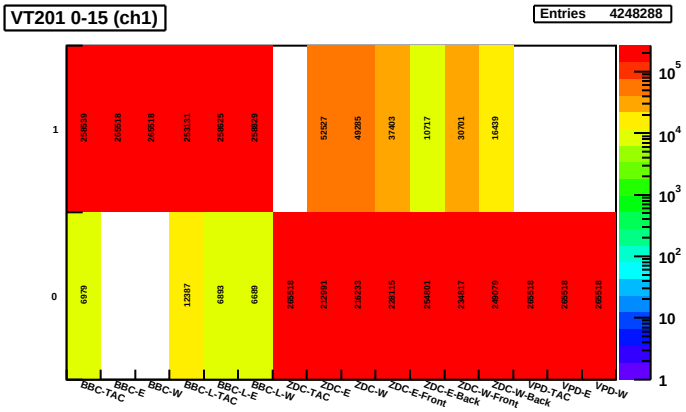

Input to FE004 QT board
Entries8496576
ADC
channel

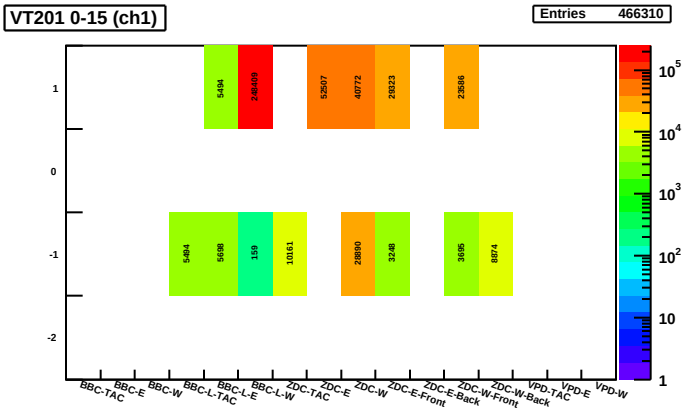

Input to FPE L1 DSM
Entries1062072
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 265518
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1


TF201 0-15 (ch0)
Entries 4248288
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 4248288
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 466310
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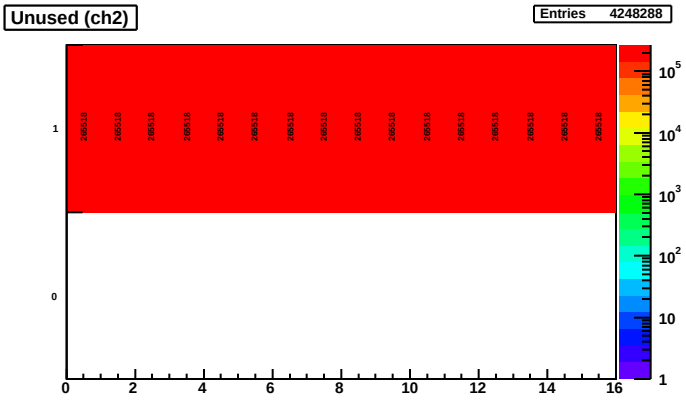
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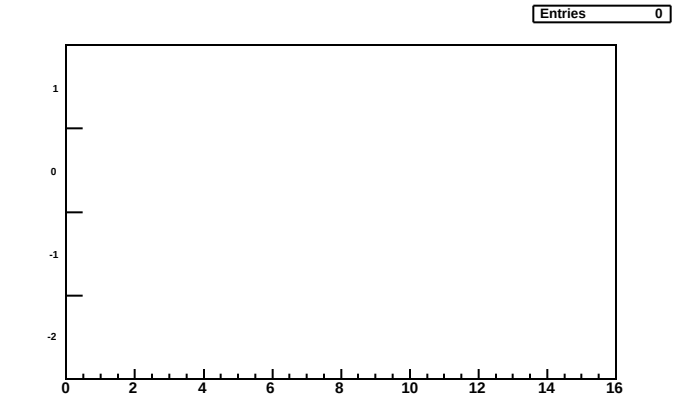
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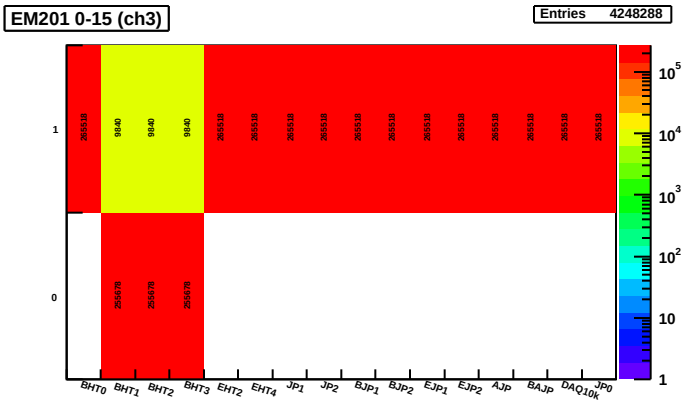
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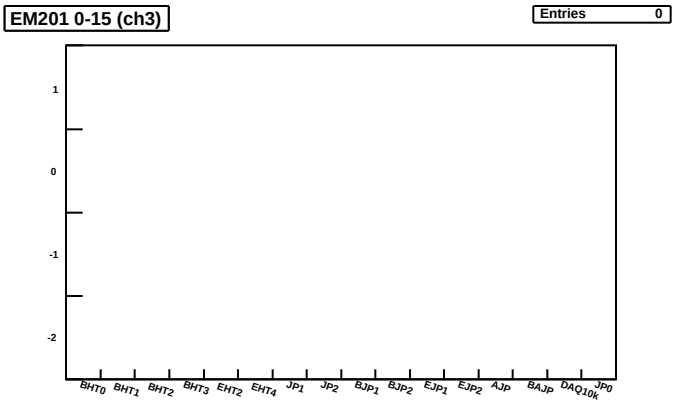
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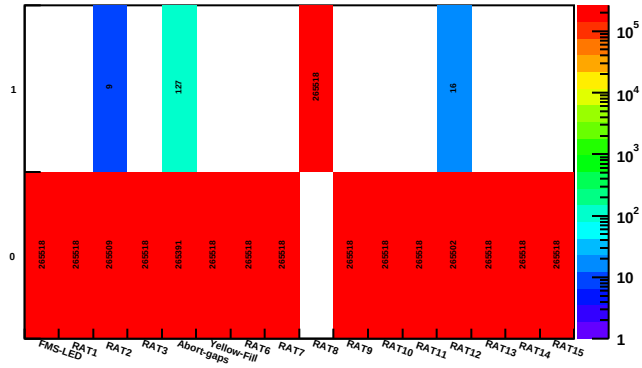
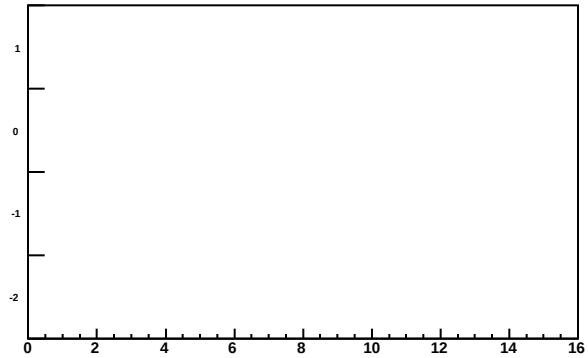
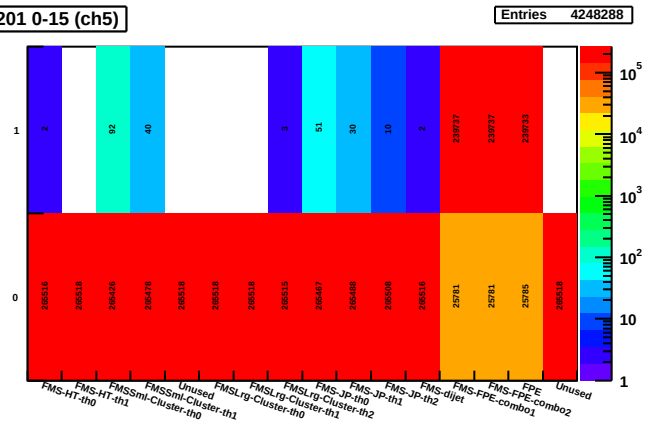
RAT board (ch4)

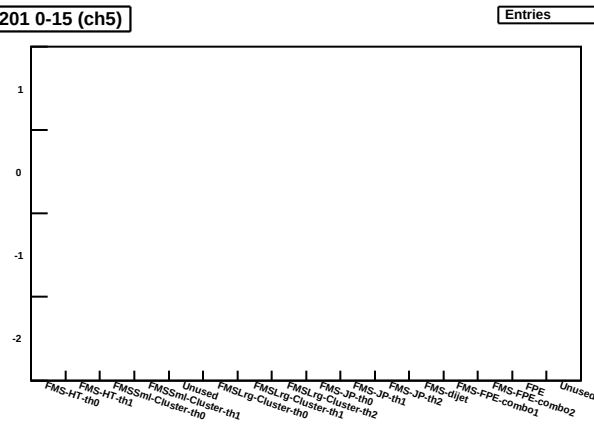




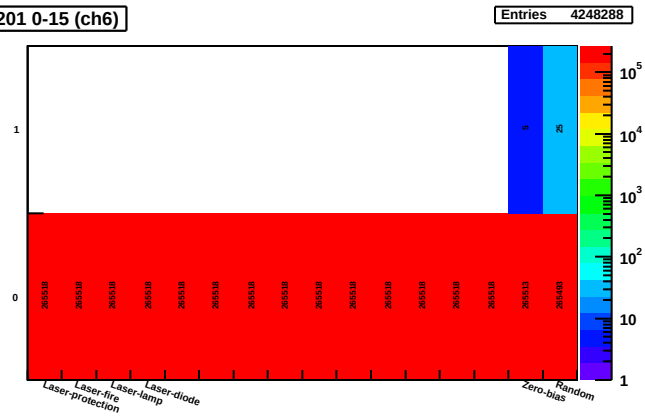
FP201 0-15 (ch5)

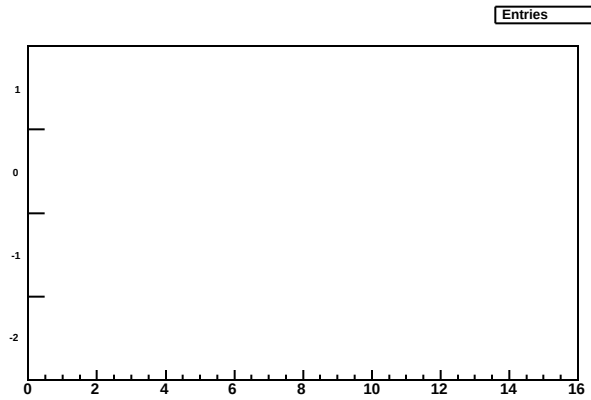
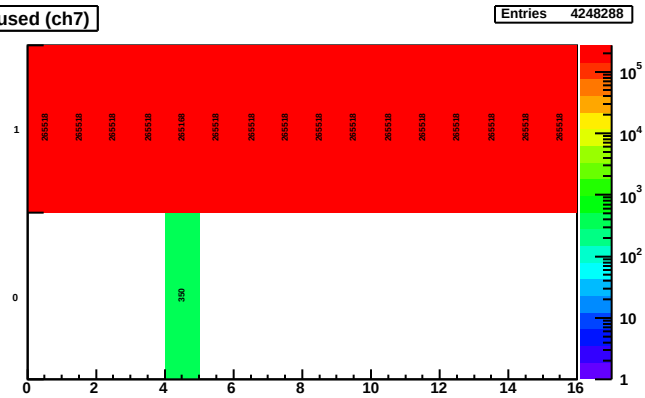
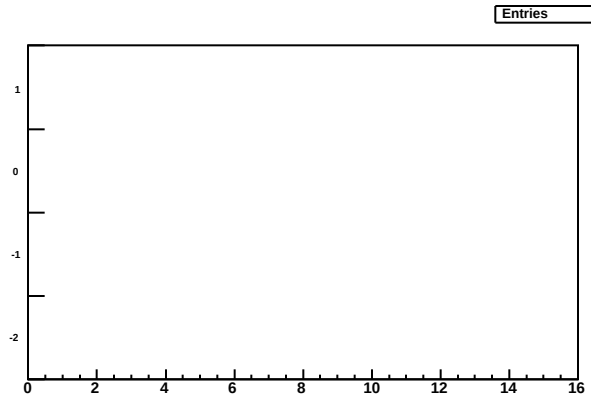


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)