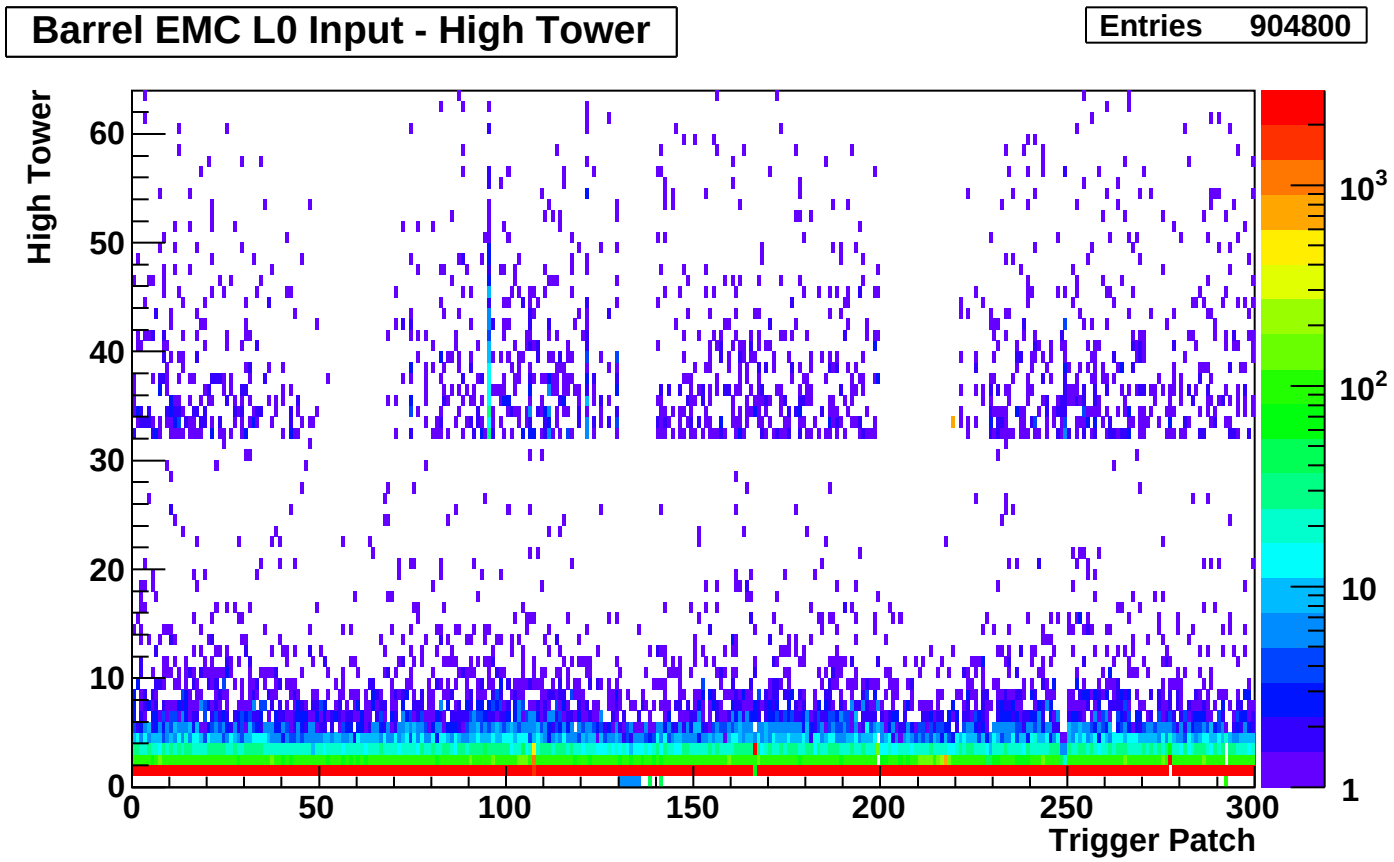
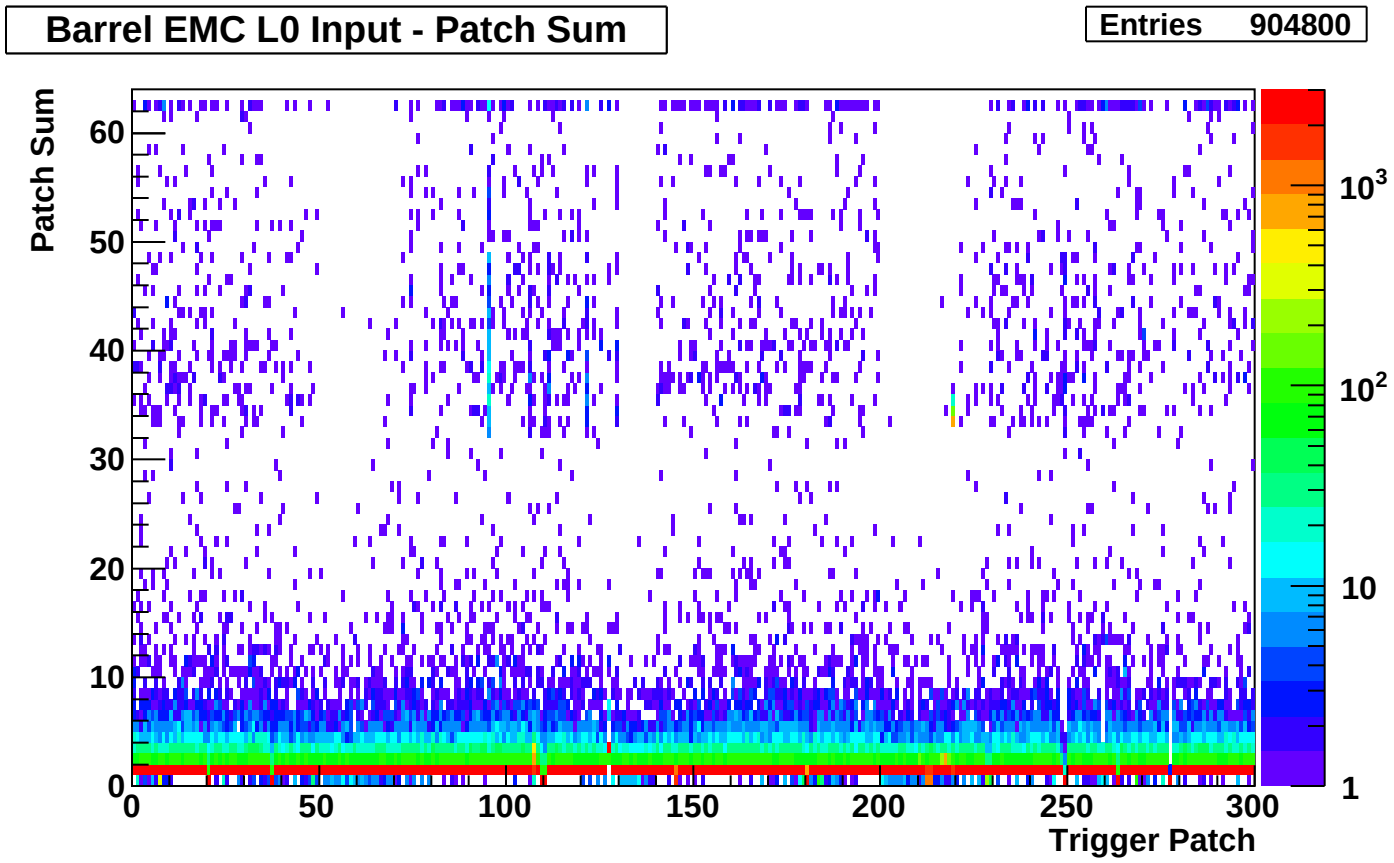
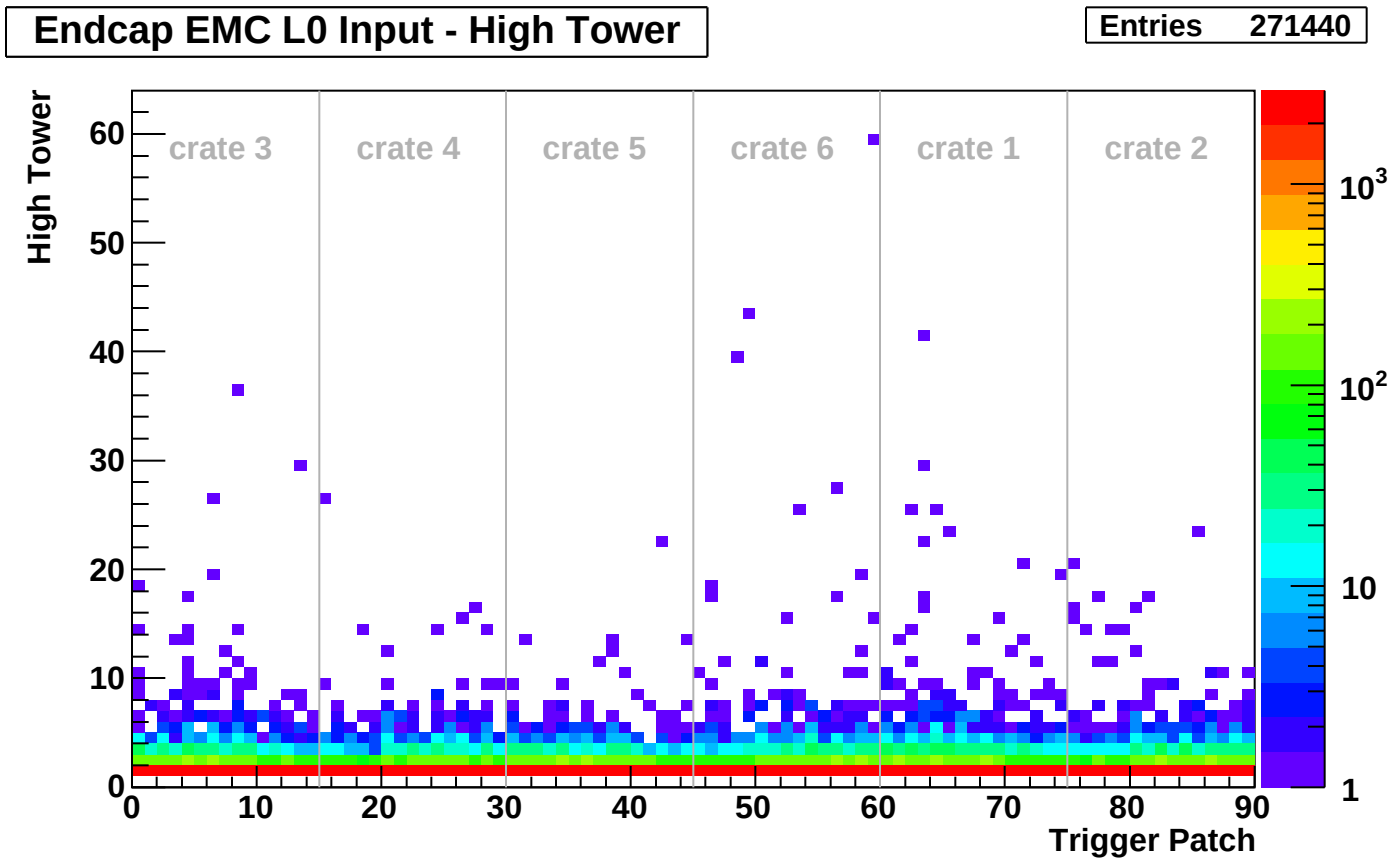
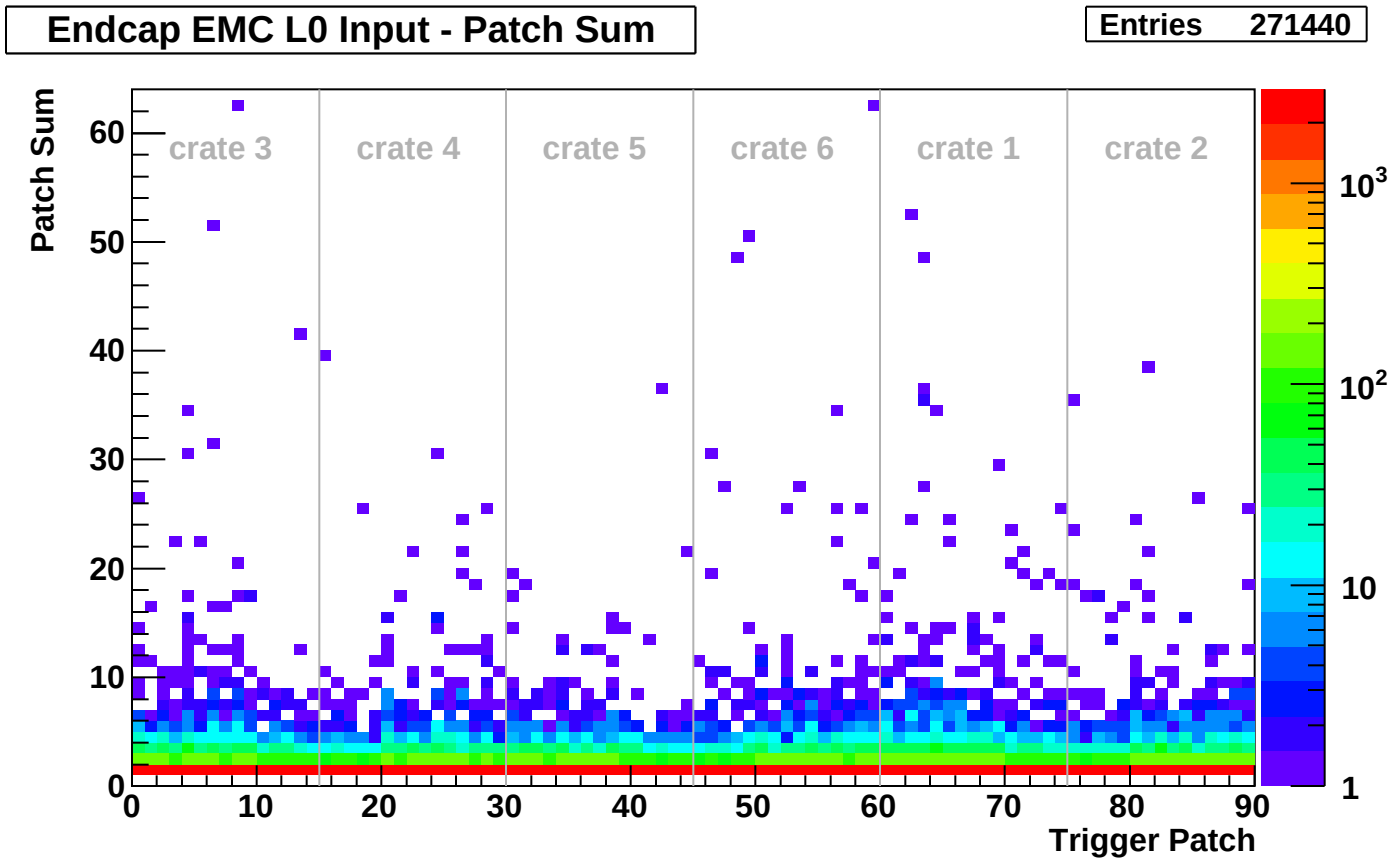
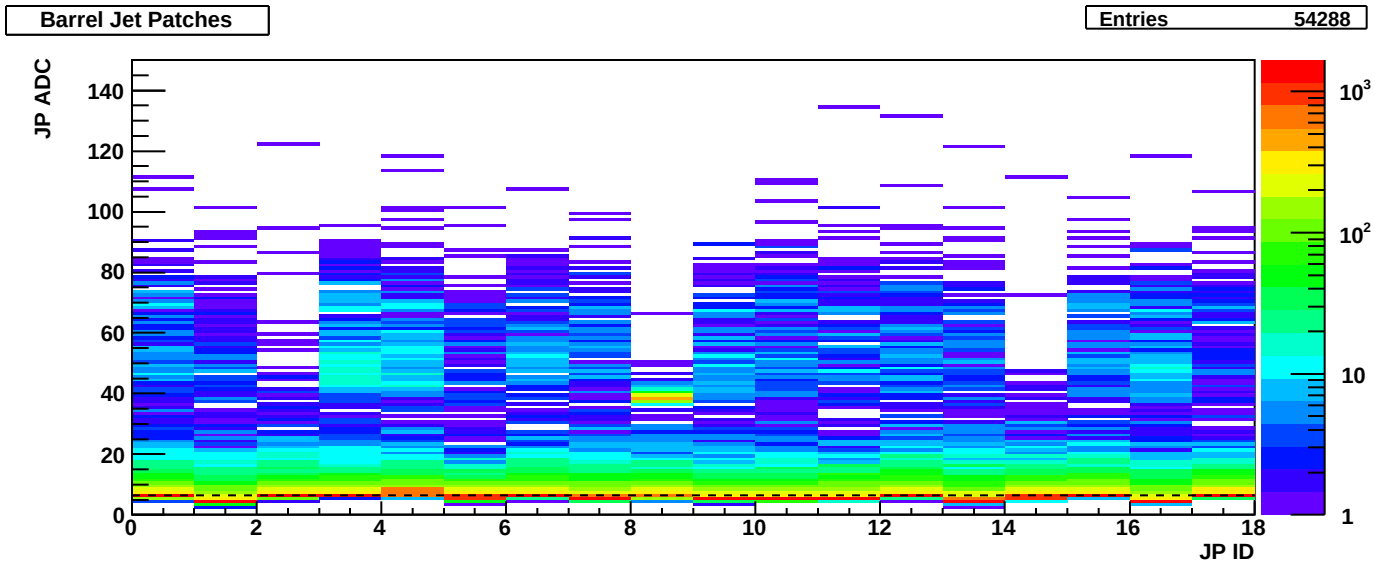
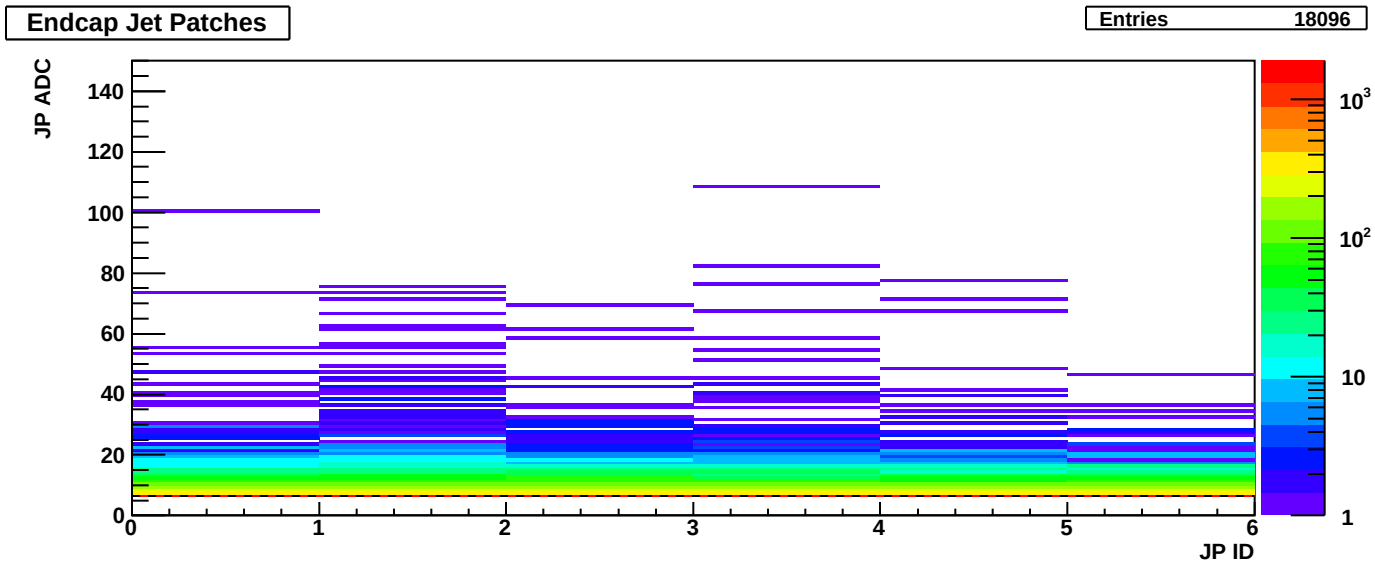

Barrel EMC L0 Input - High Tower
Entries 904800
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

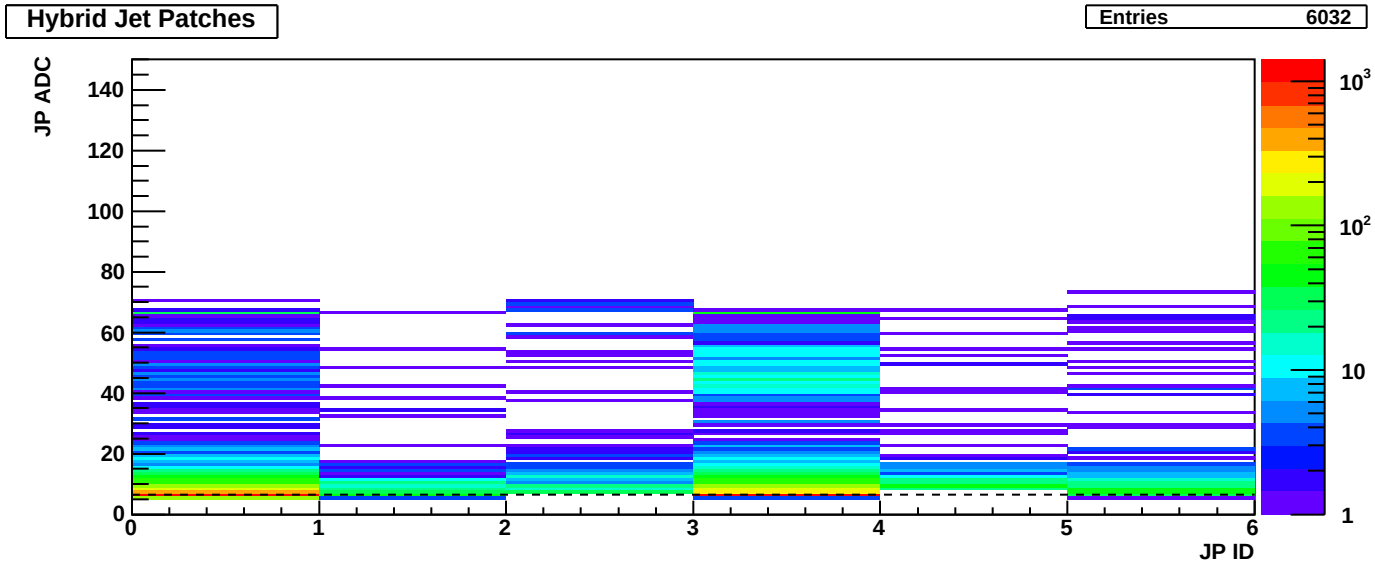

Barrel EMC L0 Input - Patch Sum
Entries 904800
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3

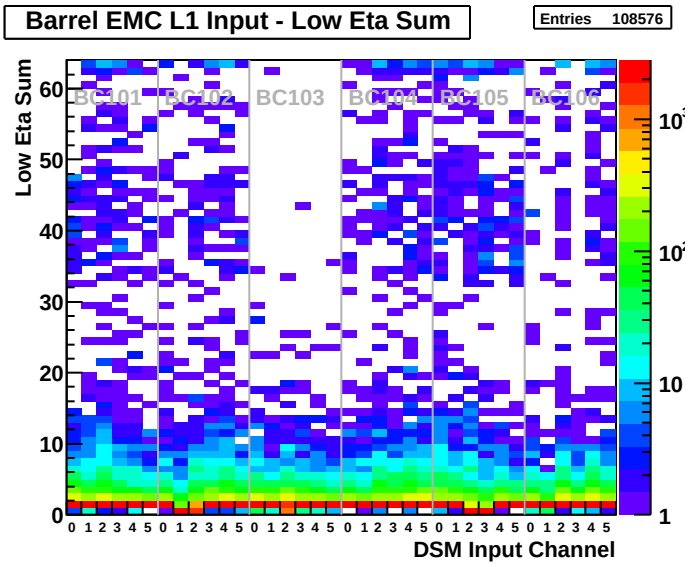

Endcap EMC L0 Input - High Tower
Entries 271440
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

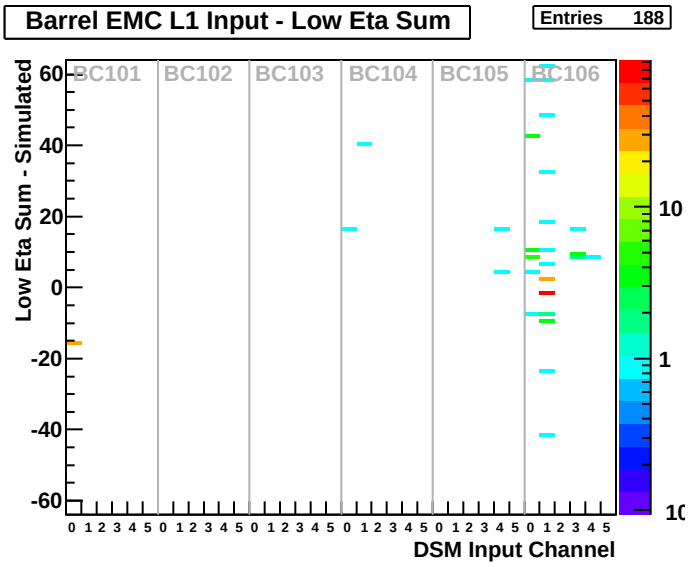

Endcap EMC L0 Input - Patch Sum
Entries 271440
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

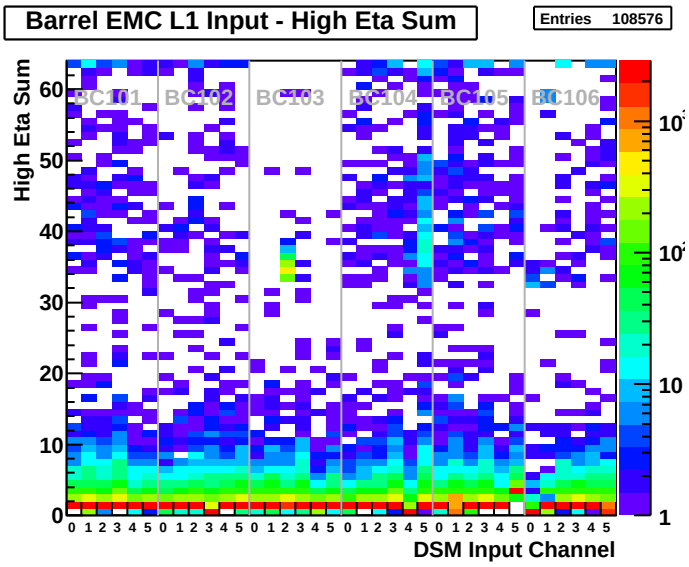

Barrel Jet Patches
Entries 54288
JP ADC
JP ID

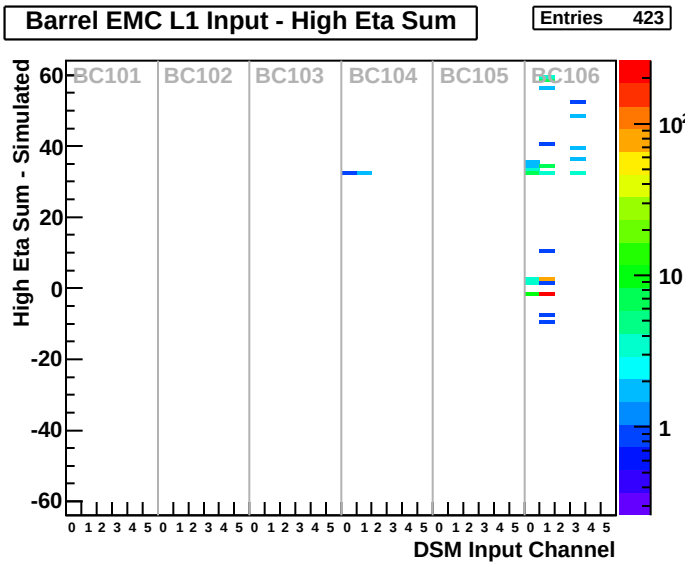

Endcap Jet Patches
Entries 18096
JP ADC
JP ID

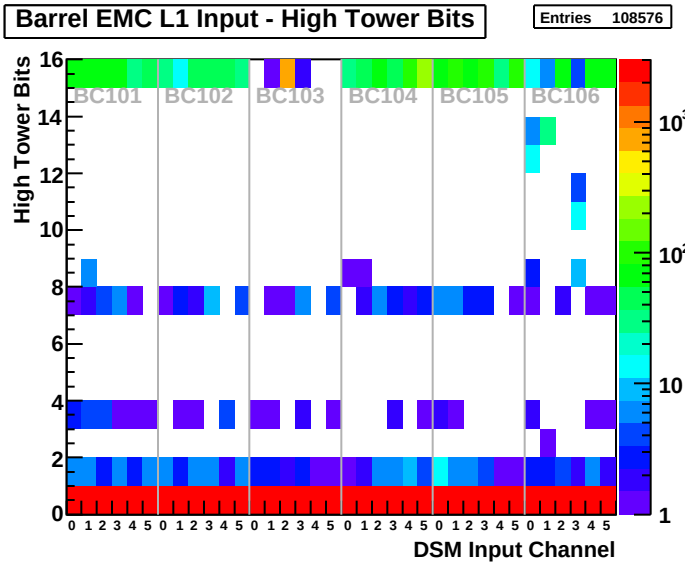

Hybrid Jet Patches
Entries 6032
JP ADC
JP ID

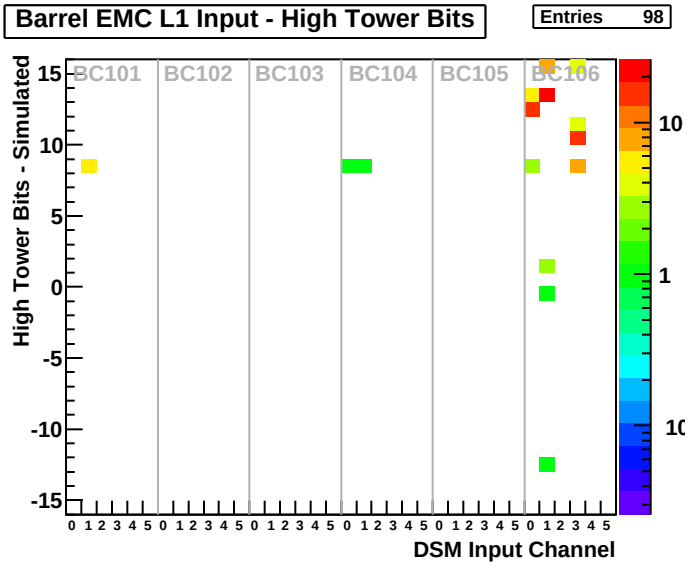

Barrel EMC L1 Input - Low Eta Sum
Entries 108576
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

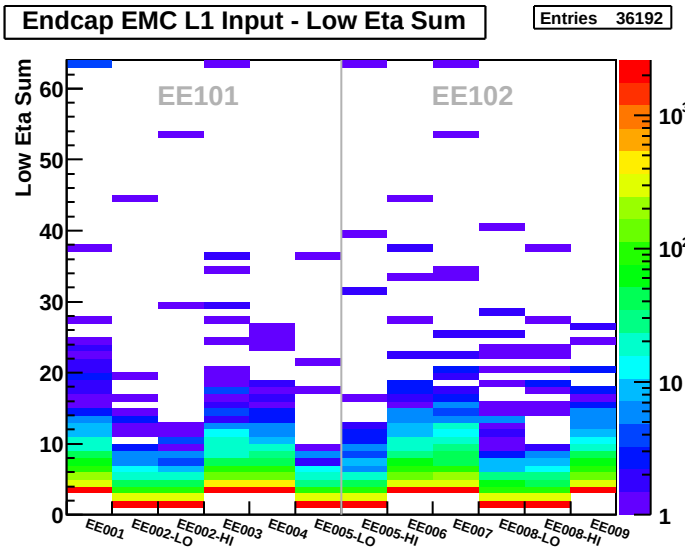

Barrel EMC L1 Input - Low Eta Sum
Entries 188
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

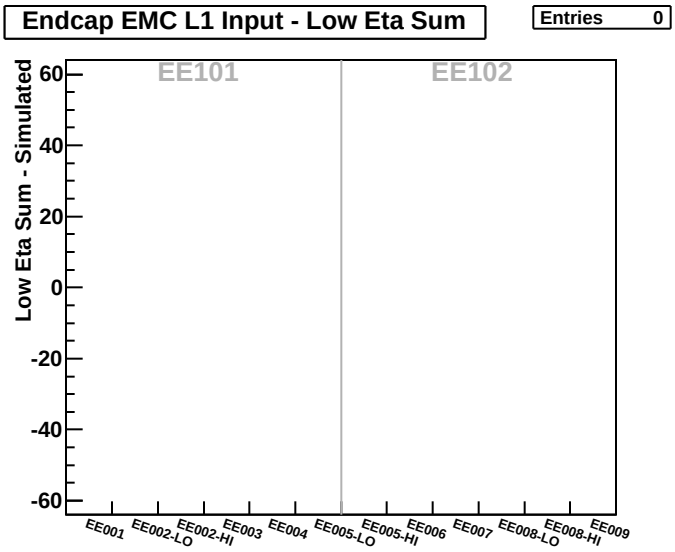

Barrel EMC L1 Input - High Eta Sum
Entries 108576
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

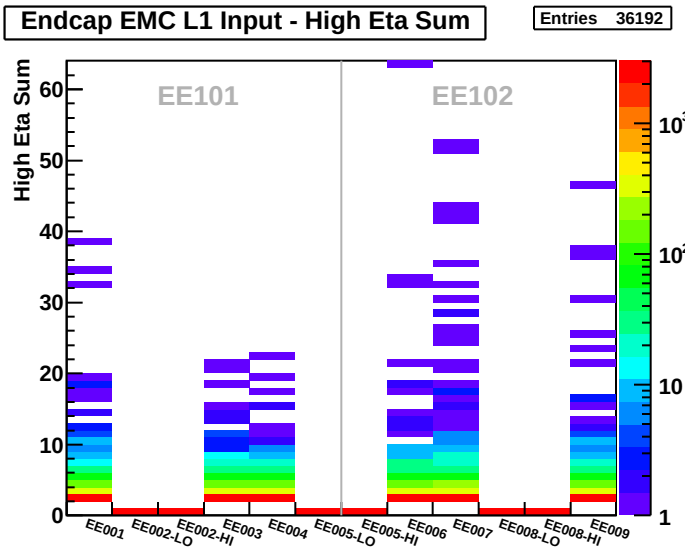

Barrel EMC L1 Input - High Eta Sum
Entries 423
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

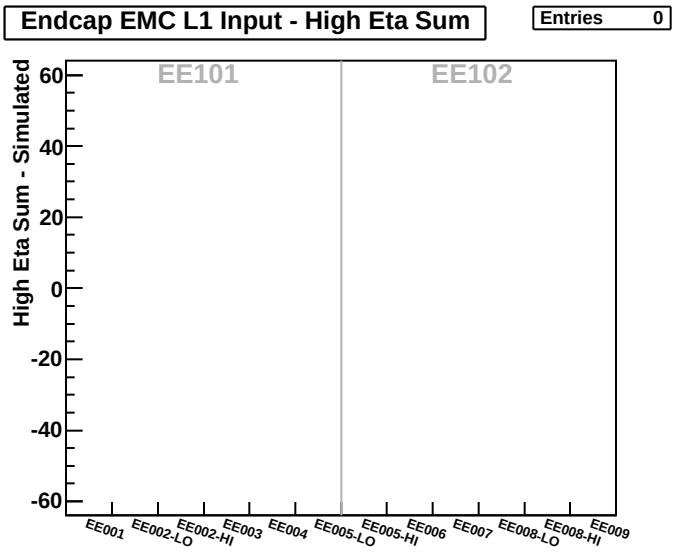

Barrel EMC L1 Input - High Tower Bits
Entries 108576
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

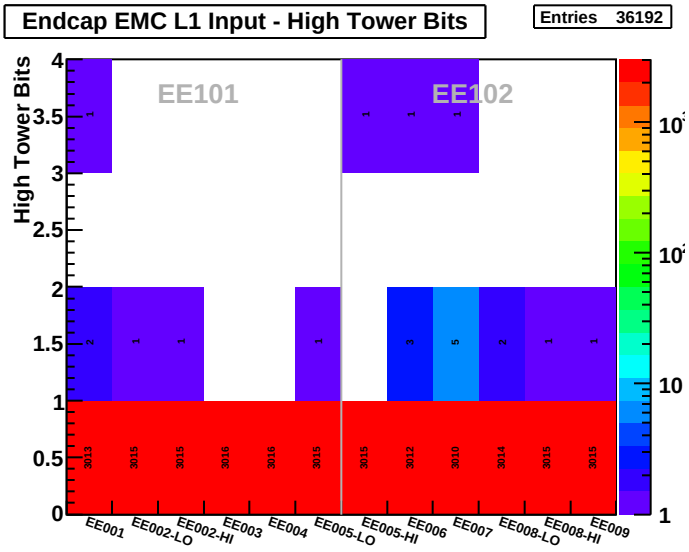

Barrel EMC L1 Input - High Tower Bits
Entries 98
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

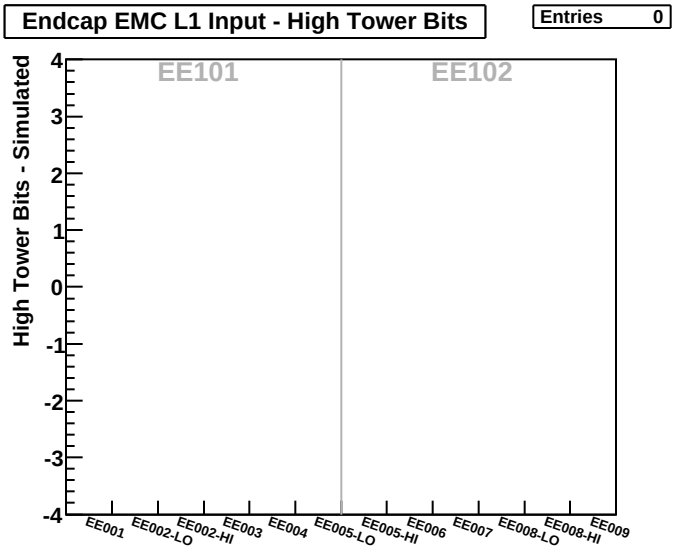

Endcap EMC L1 Input - Low Eta Sum
Entries 36192
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

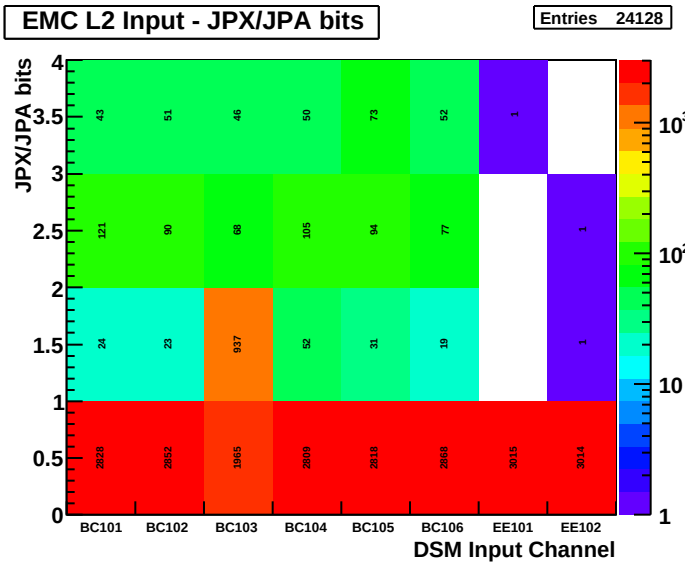

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

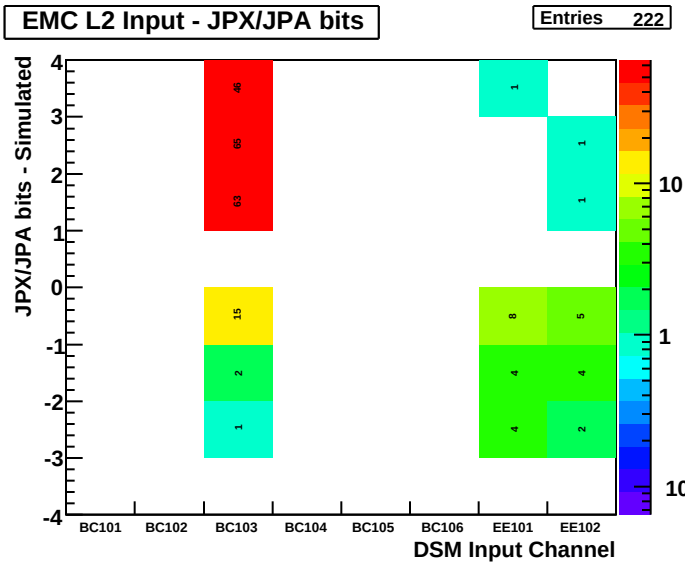

Endcap EMC L1 Input - High Eta Sum
Entries 36192
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

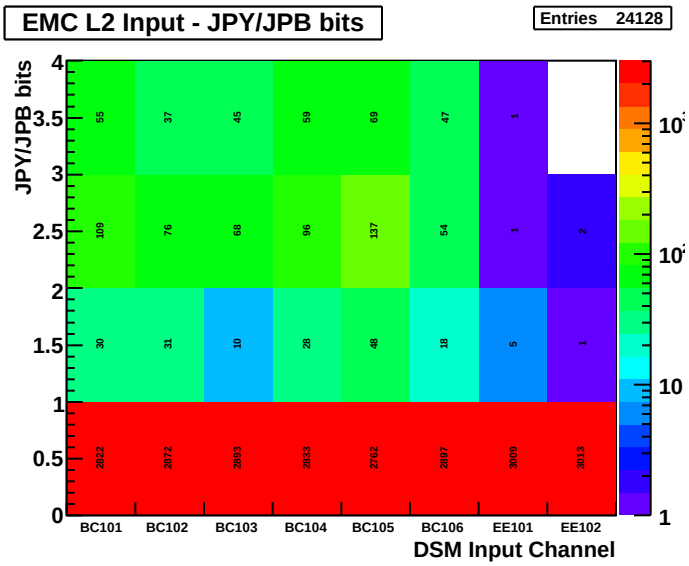

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

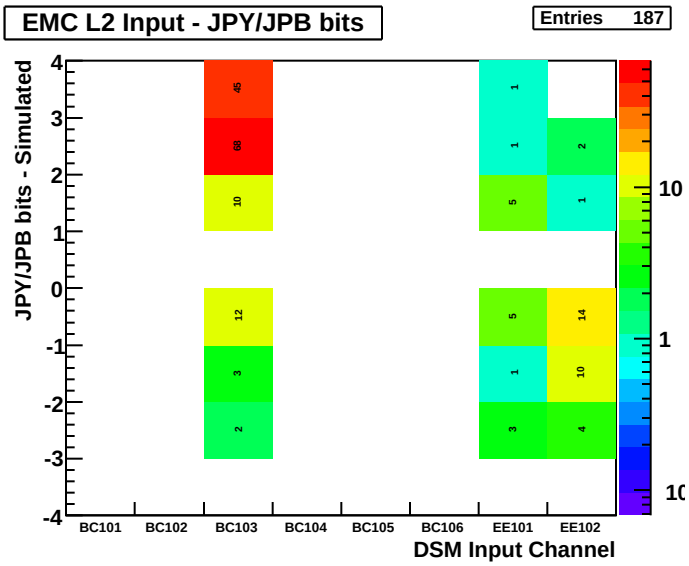

Endcap EMC L1 Input - High Tower Bits
Entries 36192
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

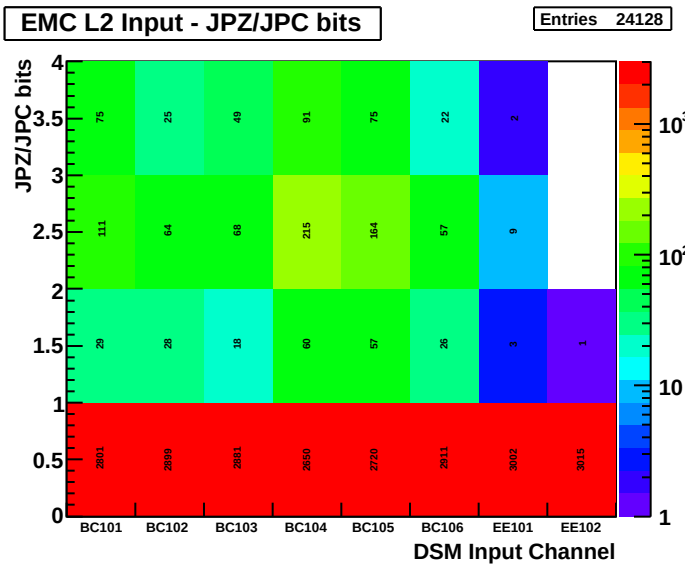

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

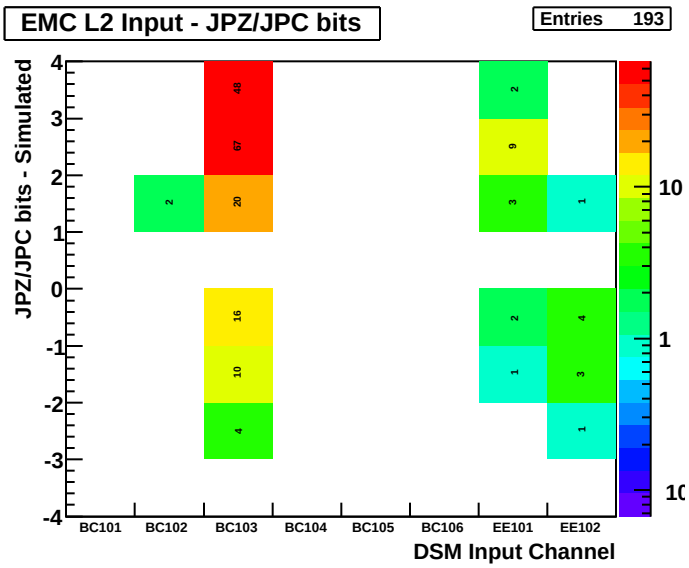

EMC L2 Input - JPX/JPA bits
Entries 24128
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

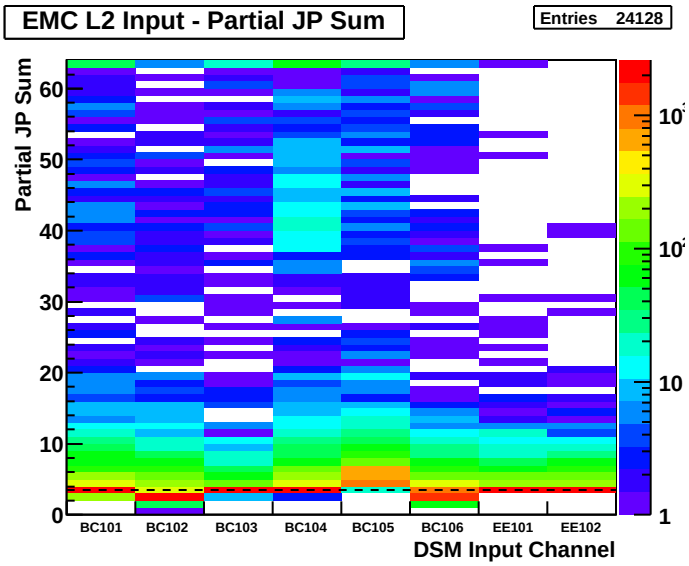

EMC L2 Input - JPX/JPA bits
Entries 222
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

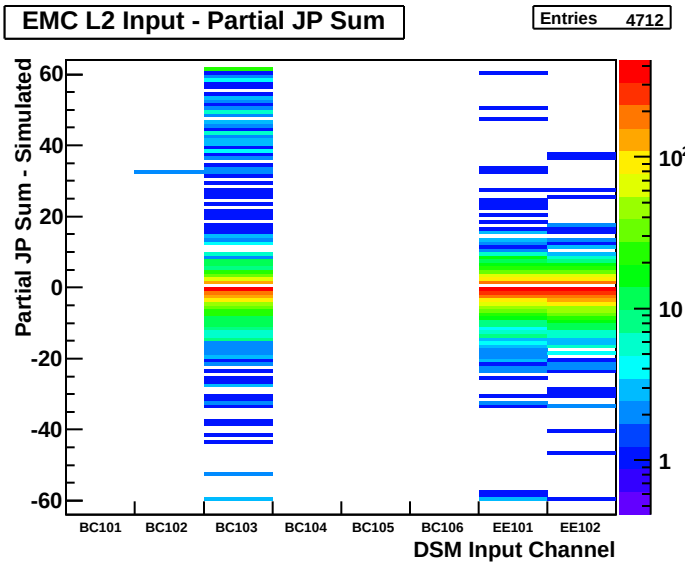

EMC L2 Input - JPY/JPB bits
Entries 24128
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

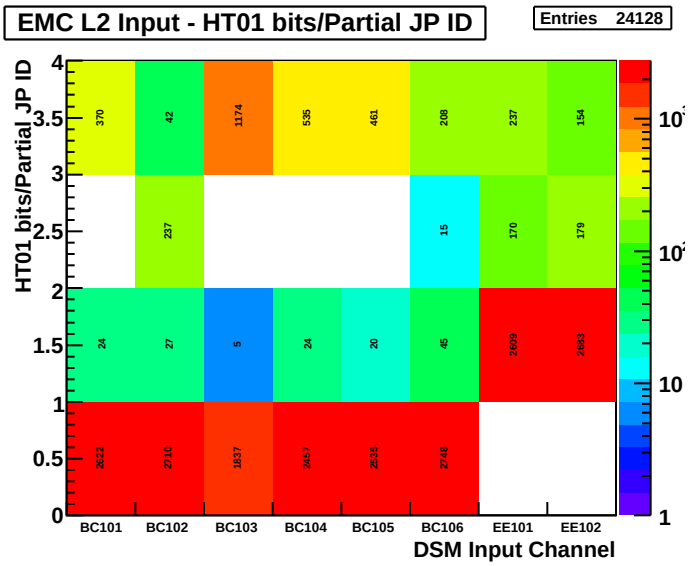

EMC L2 Input - JPY/JPB bits
Entries 187
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

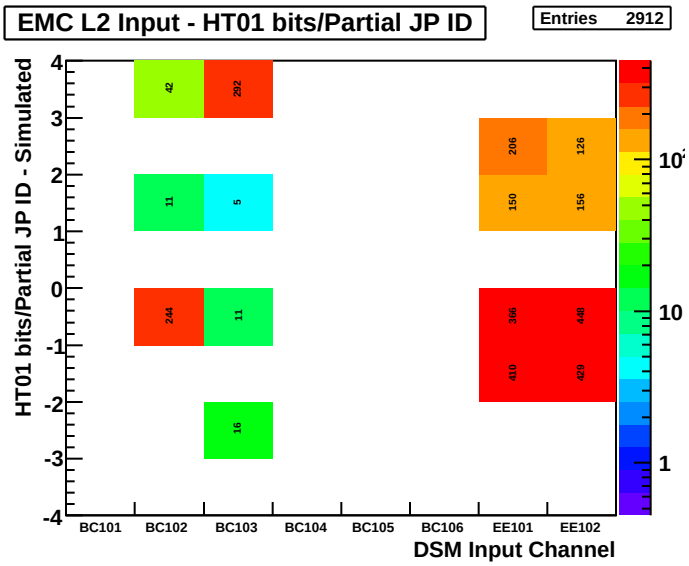

EMC L2 Input - JPZ/JPC bits
Entries 24128
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

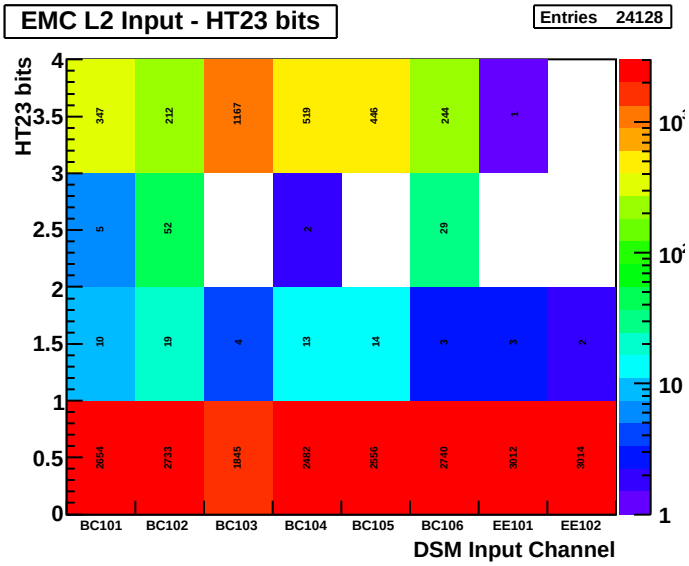

EMC L2 Input - JPZ/JPC bits
Entries 193
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

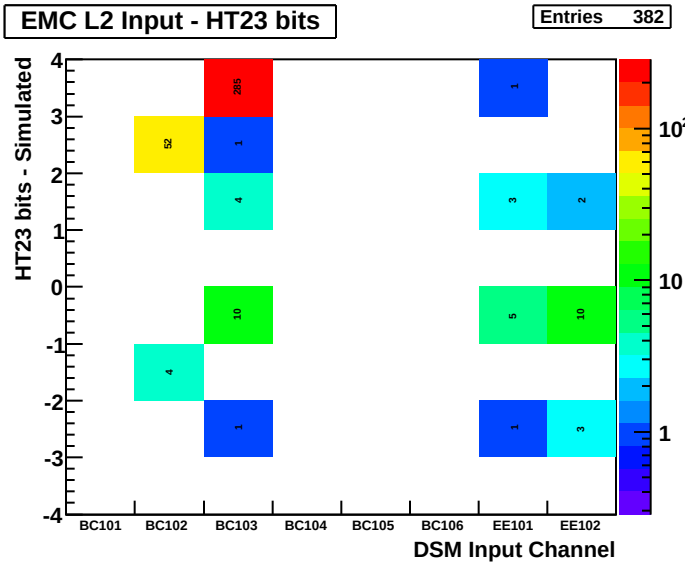

EMC L2 Input - Partial JP Sum
Entries 24128
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

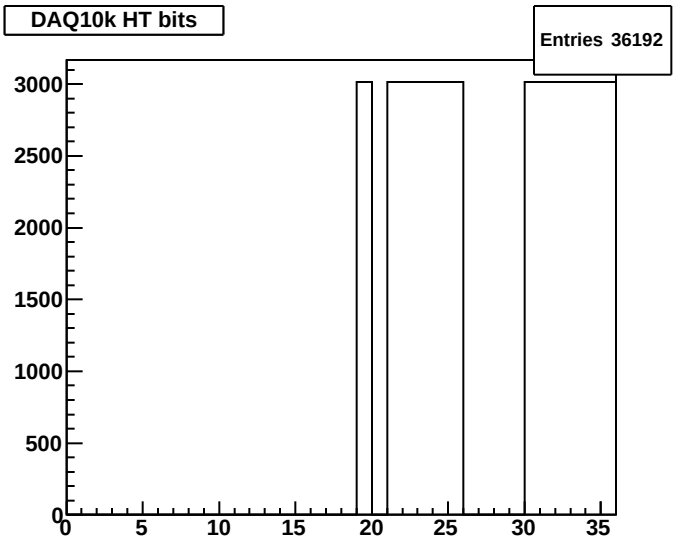

EMC L2 Input - Partial JP Sum
Entries 4712
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

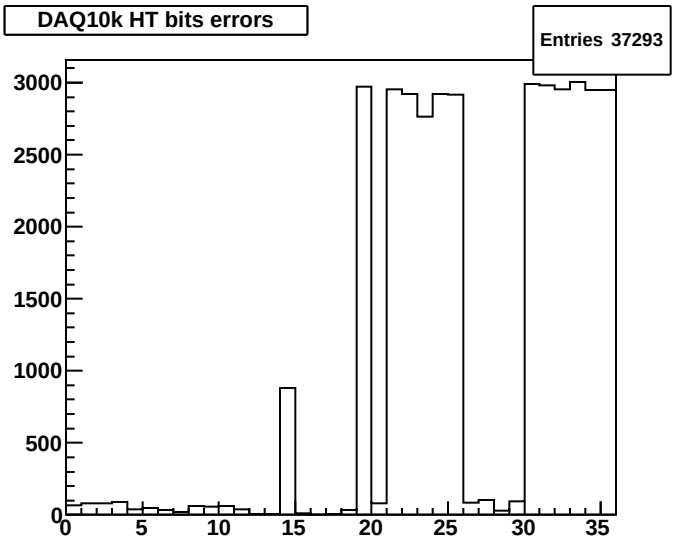

EMC L2 Input - HT01 bits/Partial JP ID
Entries 24128
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

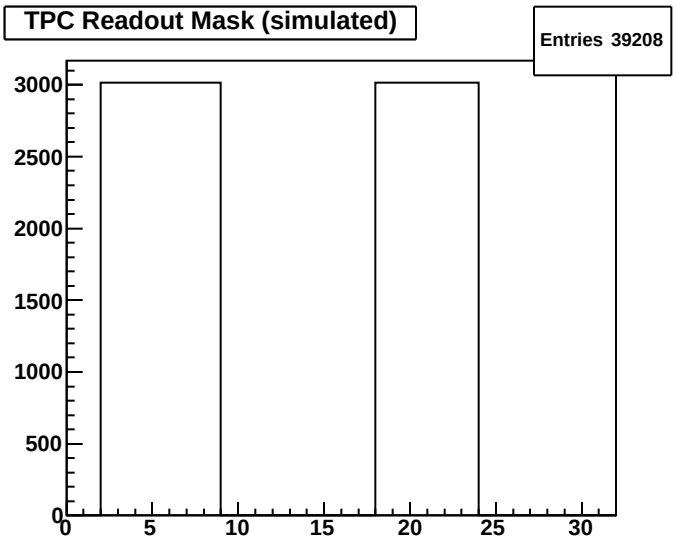

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2912
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

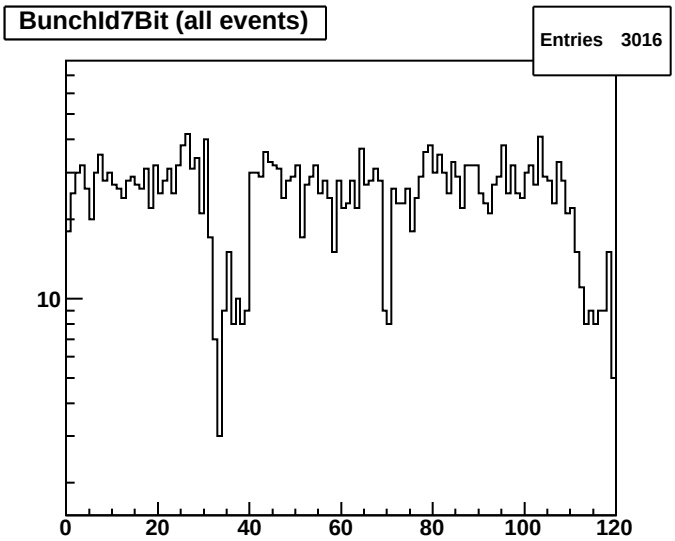

EMC L2 Input - HT23 bits
Entries 24128
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

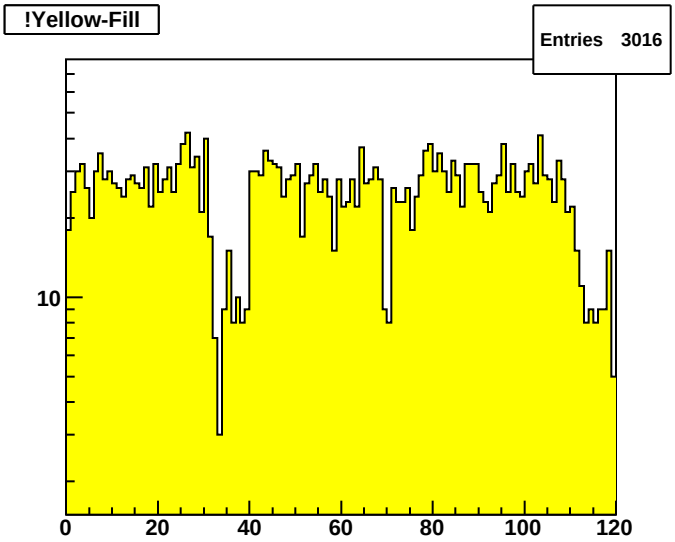

EMC L2 Input - HT23 bits
Entries 382
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

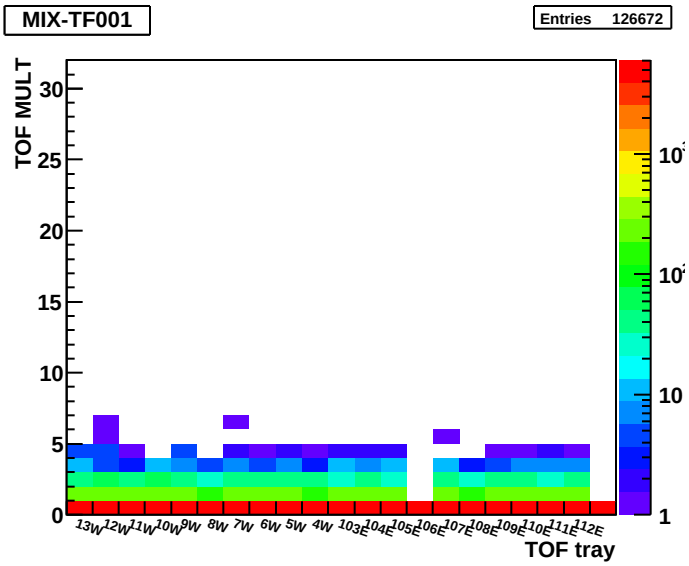

DAQ10k HT bits
Entries 36192
3000
2500
2000
1500
1000
500
0
0 5 10 15 20 25 30 35

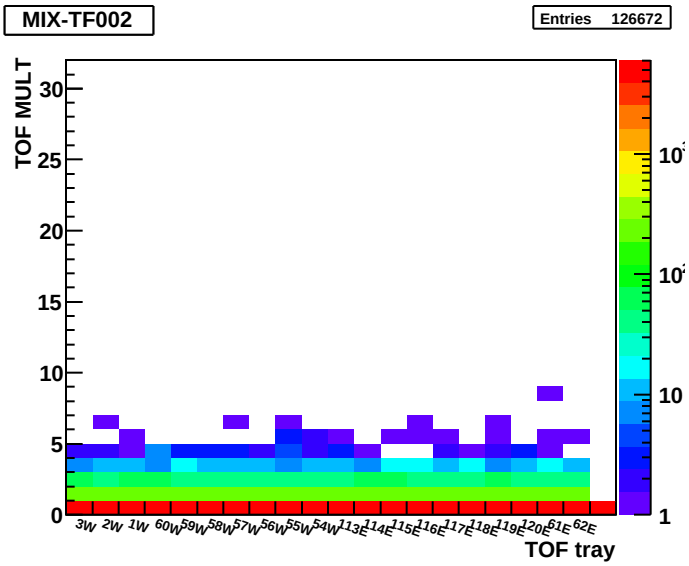

DAQ10k HT bits errors
Entries 37293
3000
2500
2000
1500
1000
500
0
0 5 10 15 20 25 30 35

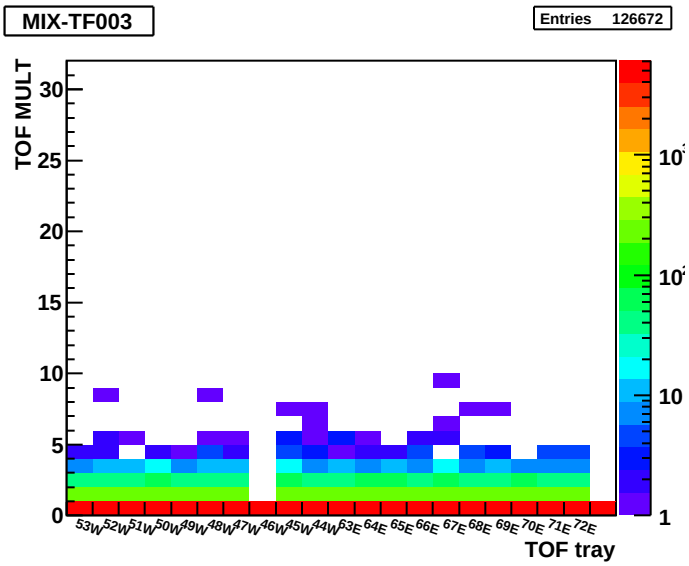

TPC Readout Mask (simulated)
Entries 39208
3000
2500
2000
1500
1000
500
0
0 5 10 15 20 25 30

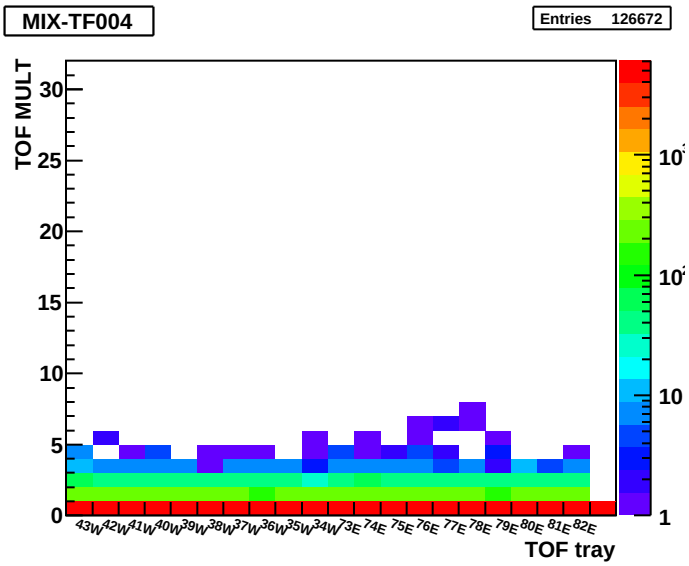

BunchId7Bit (all events)
Entries 3016
10
0 20 40 60 80 100 120

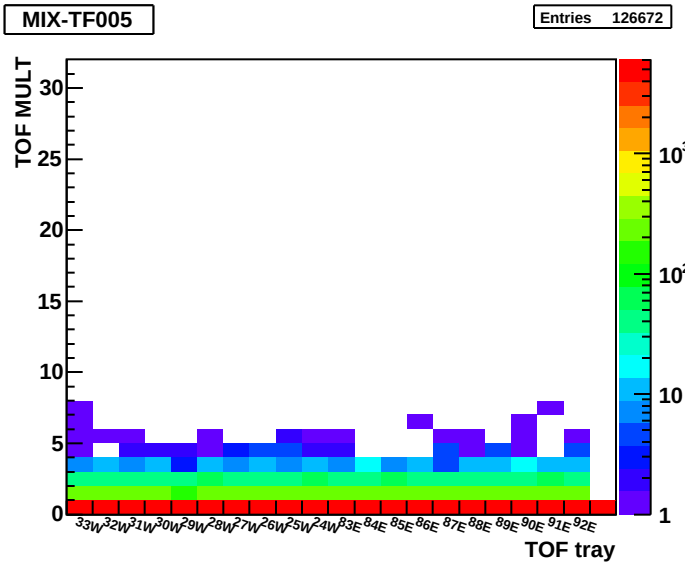

!Yellow-Fill
Entries 3016
10
0 20 40 60 80 100 120

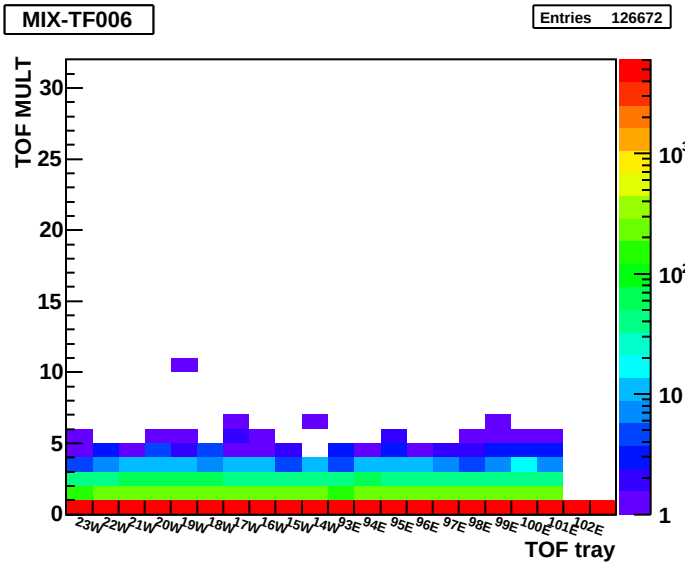

MIX-TF001
Entries 126672
TOF MULT
TOF tray

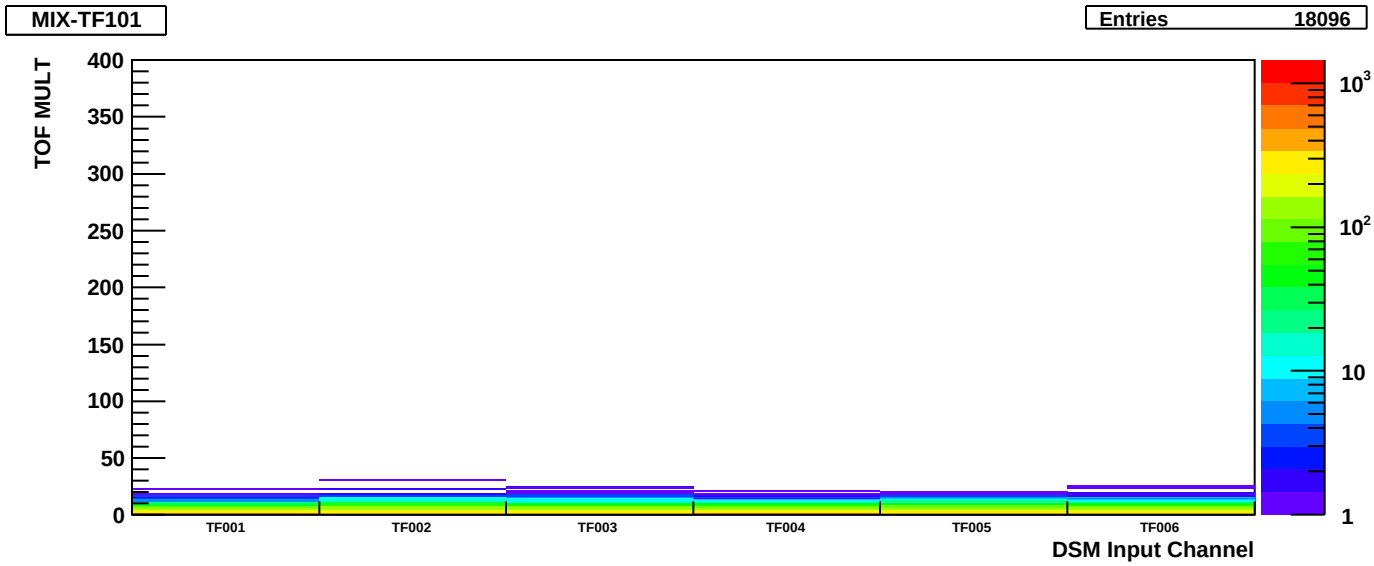

MIX-TF002
Entries 126672
TOF MULT
TOF tray

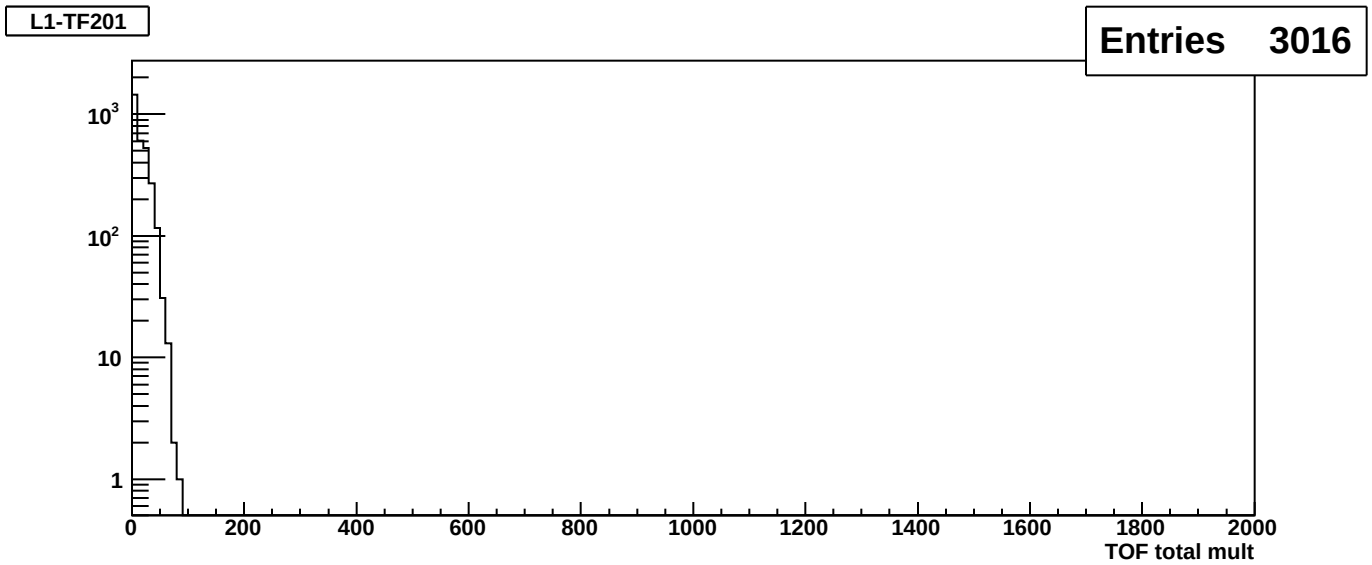

MIX-TF003
Entries 126672
TOF MULT
TOF tray

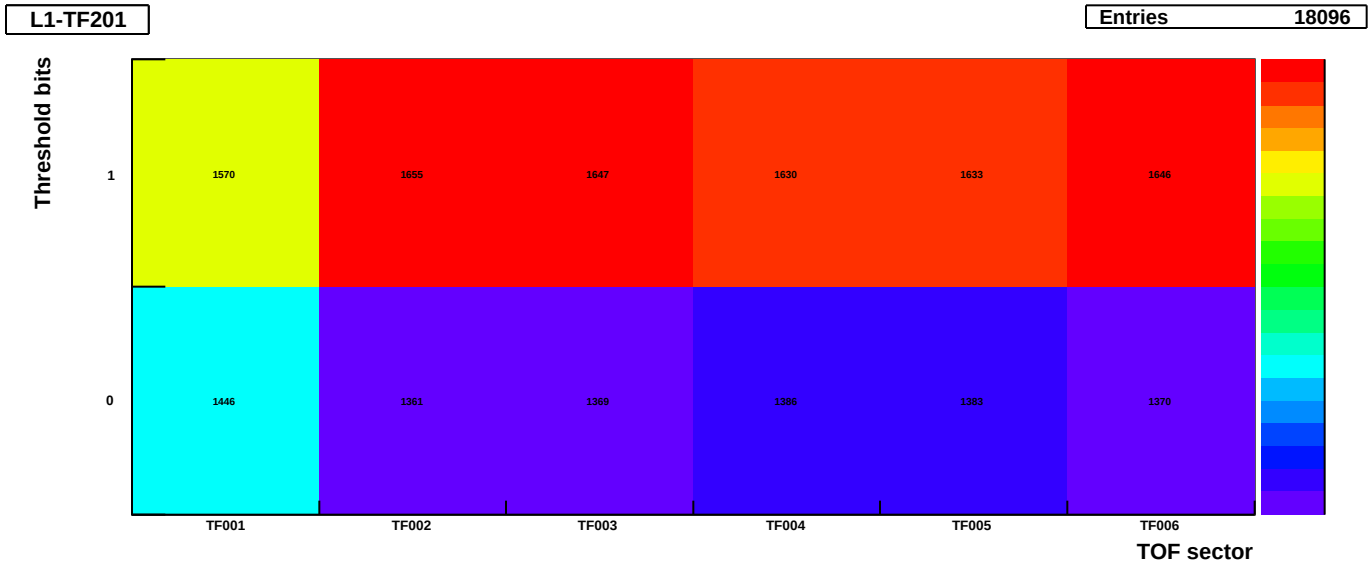

MIX-TF004
Entries 126672
TOF MULT
TOF tray

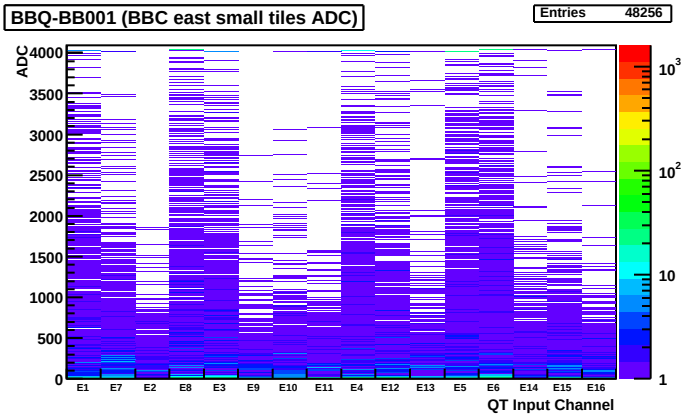

MIX-TF005
Entries 126672
TOF MULT
TOF tray

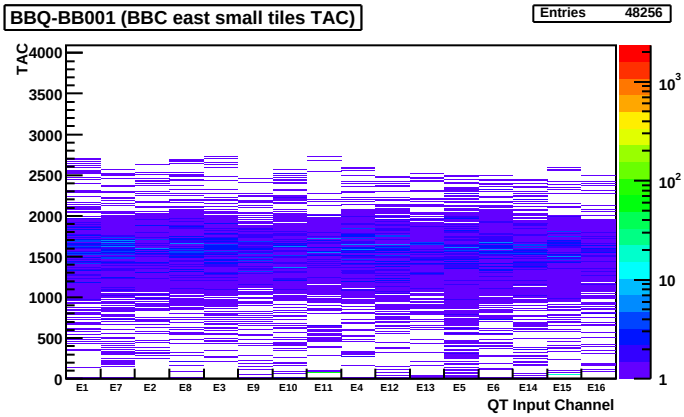

MIX-TF006
Entries 126672
TOF MULT
TOF tray

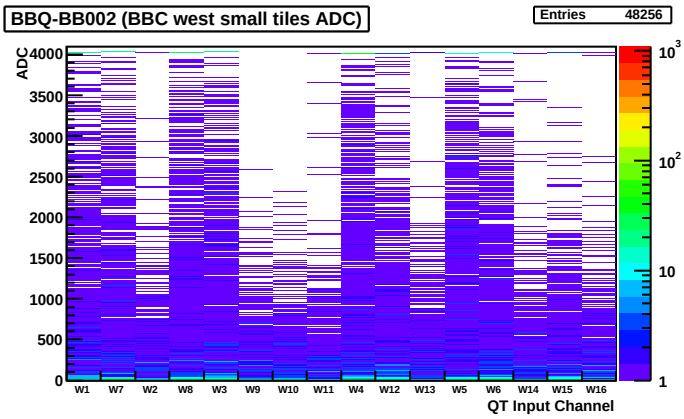

MIX-TF101
Entries 18096
TOF MULT
400
350
300
250
200
150
100
50
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^3
10^2
10
1

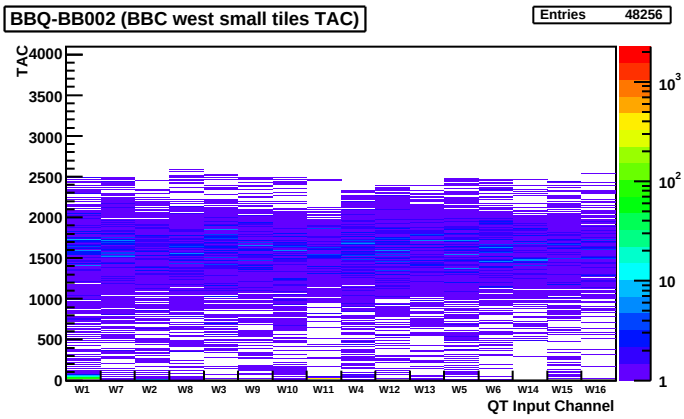

L1-TF201
Entries 3016
10^3
10^2
10
1
0
200
400
600
800
1000
1200
1400
1600
1800
2000
TOF total mult

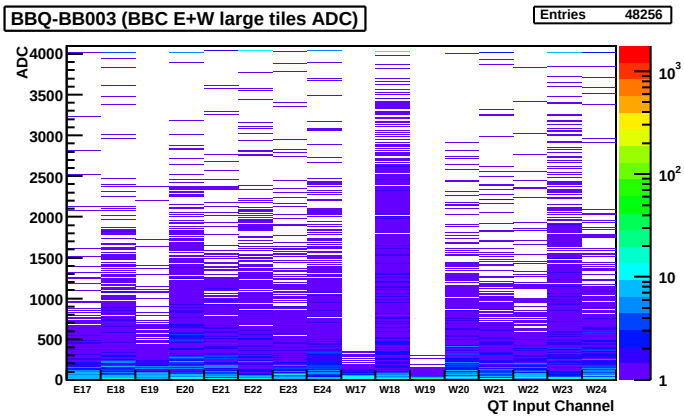

L1-TF201
Entries 18096
Threshold bits
1
0
1570
1655
1647
1630
1633
1646
1446
1361
1369
1386
1383
1370
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

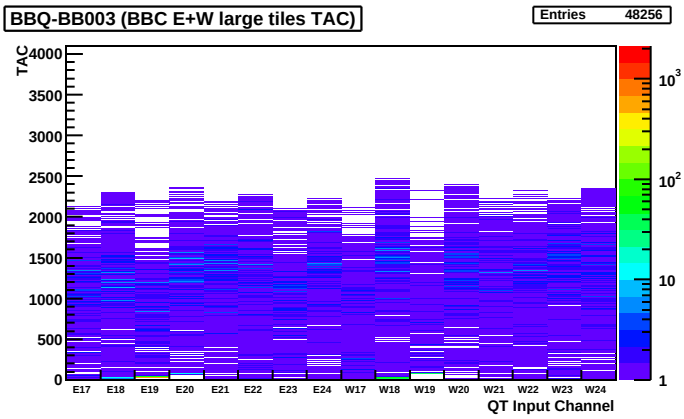

BBQ-BB001 (BBC east small tiles ADC)
Entries 48256
ADC
QT Input Channel

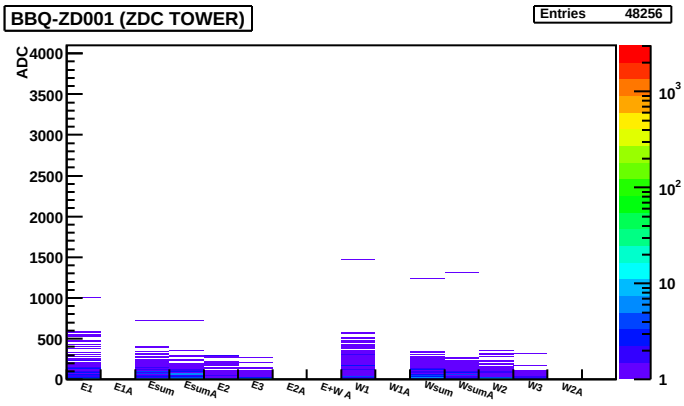

BBQ-BB001 (BBC east small tiles TAC)
Entries 48256
TAC
QT Input Channel

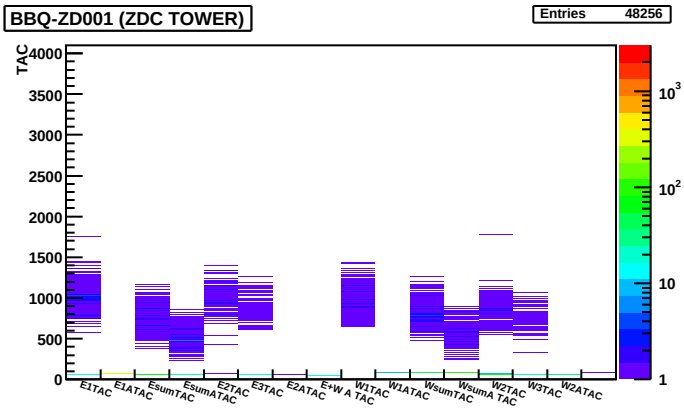

BBQ-BB002 (BBC west small tiles ADC)
Entries 48256
ADC
QT Input Channel

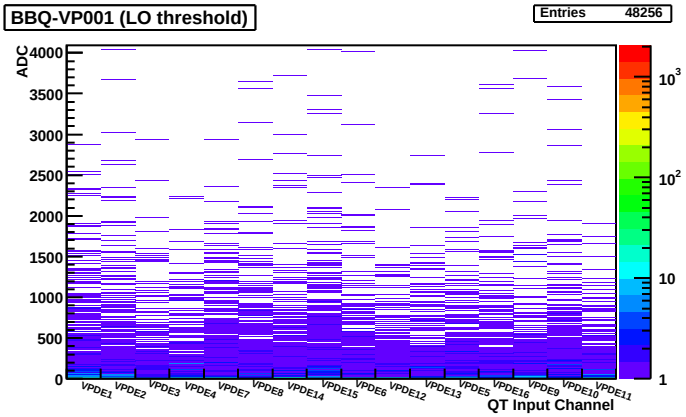

BBQ-BB002 (BBC west small tiles TAC)
Entries 48256
TAC
QT Input Channel

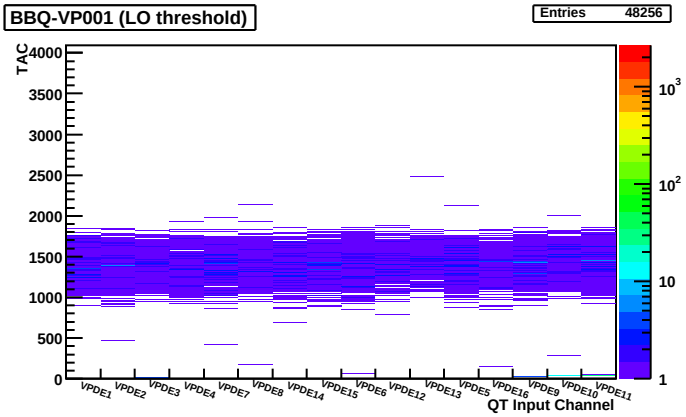

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 48256
ADC
QT Input Channel

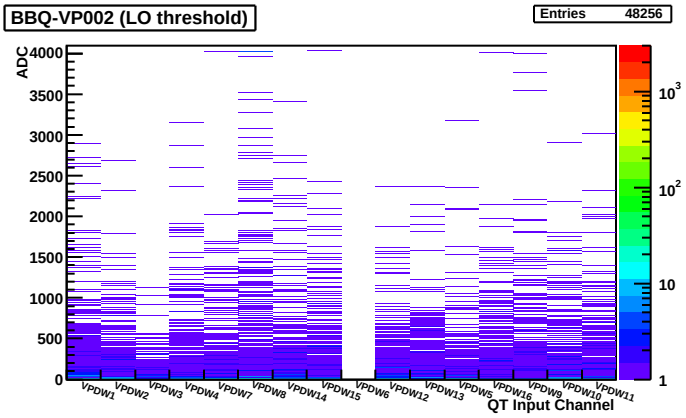

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 48256
TAC
QT Input Channel

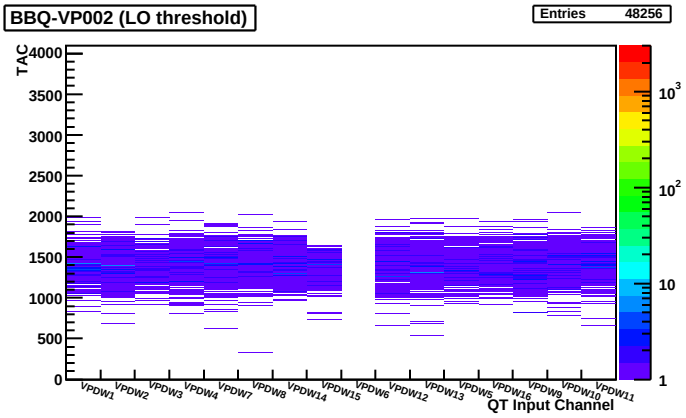

BBQ-ZD001 (ZDC TOWER)
Entries 48256
ADC

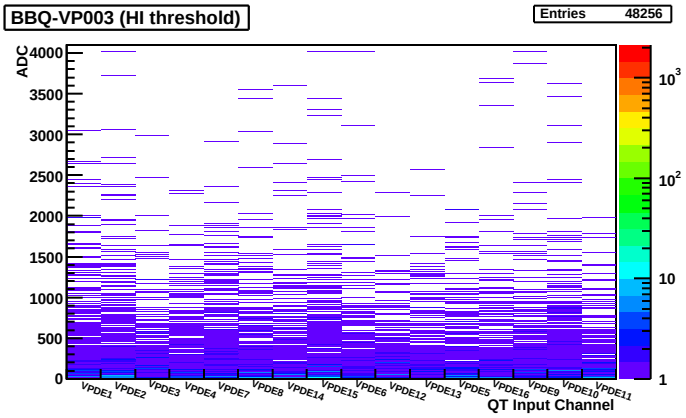

BBQ-ZD001 (ZDC TOWER)
Entries 48256
TAC

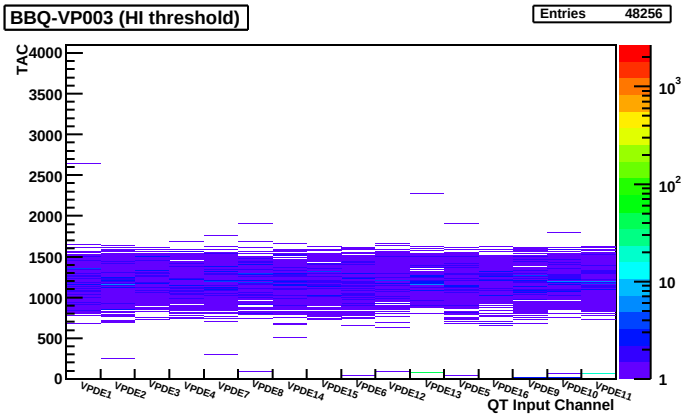

BBQ-VP001 (LO threshold)
Entries 48256
ADC
QT Input Channel

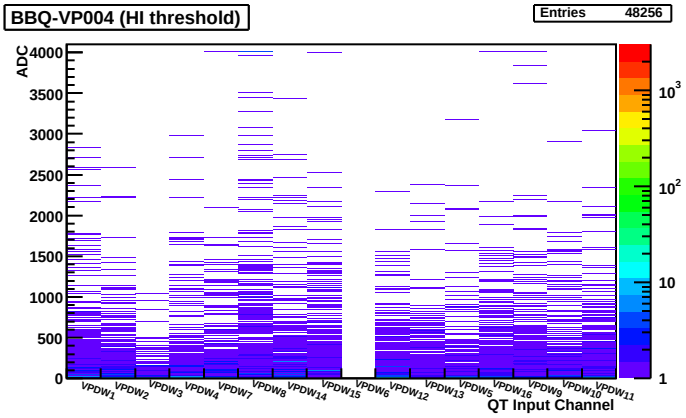

BBQ-VP001 (LO threshold)
Entries 48256
TAC
QT Input Channel

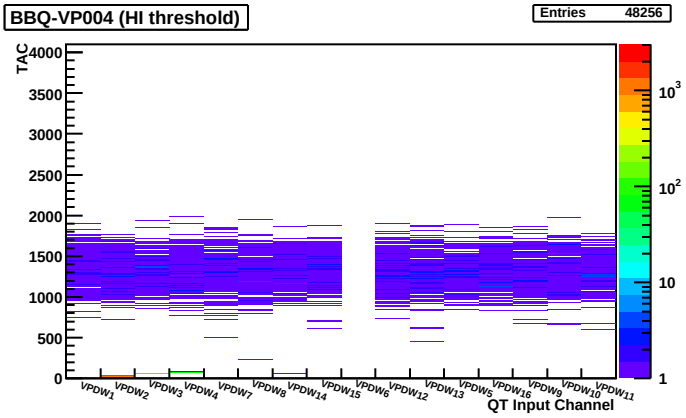

BBQ-VP002 (LO threshold)
Entries 48256
ADC
QT Input Channel

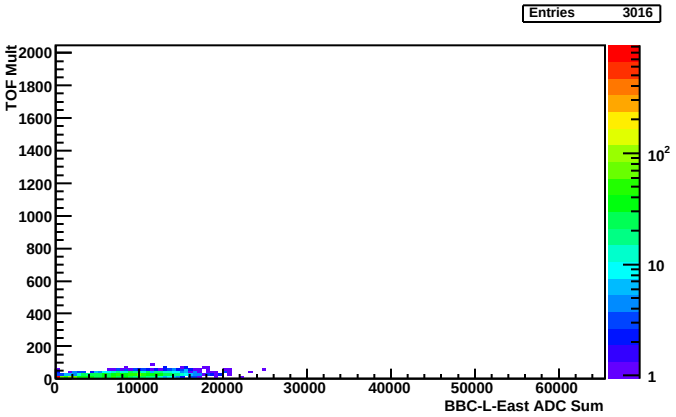

BBQ-VP002 (LO threshold)
Entries 48256
TAC
QT Input Channel

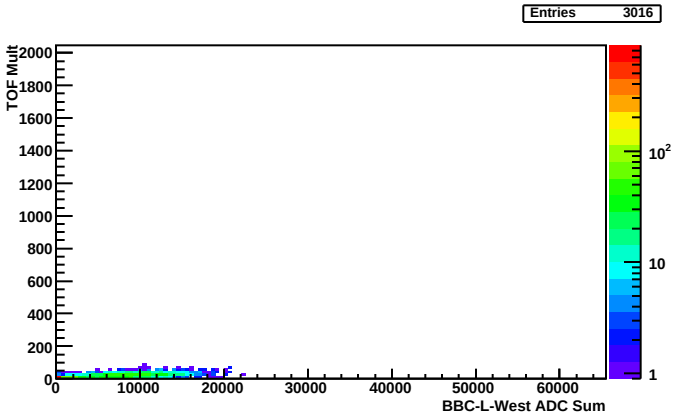

BBQ-VP003 (HI threshold)
Entries 48256
ADC
QT Input Channel

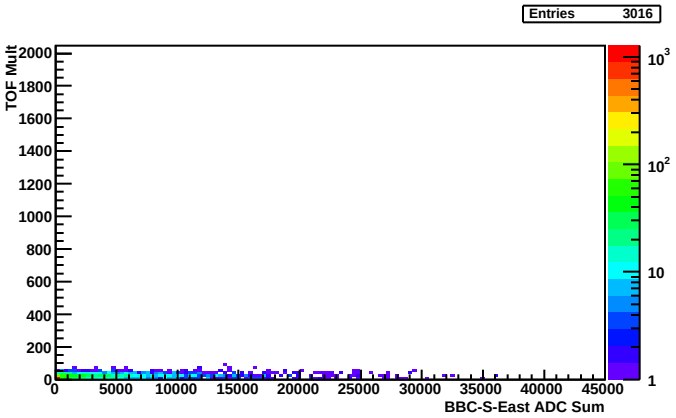

BBQ-VP003 (HI threshold)
Entries 48256
TAC
QT Input Channel

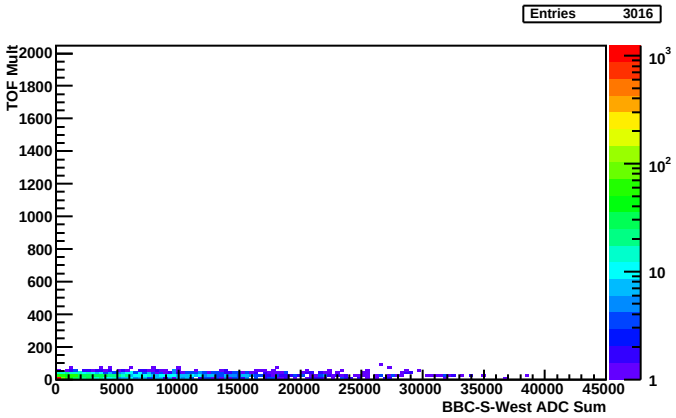

BBQ-VP004 (HI threshold)
Entries 48256
ADC
QT Input Channel

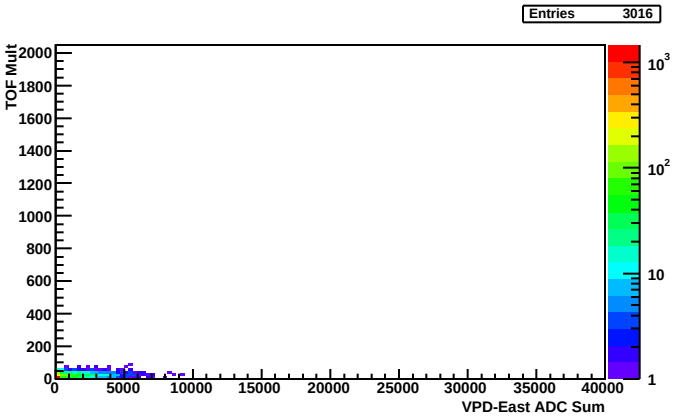

BBQ-VP004 (HI threshold)
Entries 48256
TAC
QT Input Channel

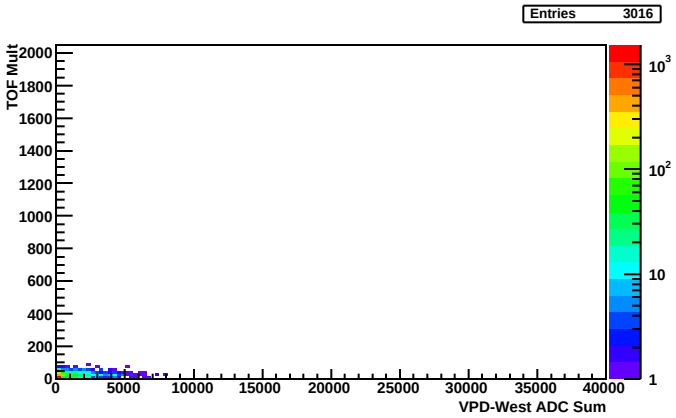

Entries 3016
TOF Mult
BBC-L-East ADC Sum

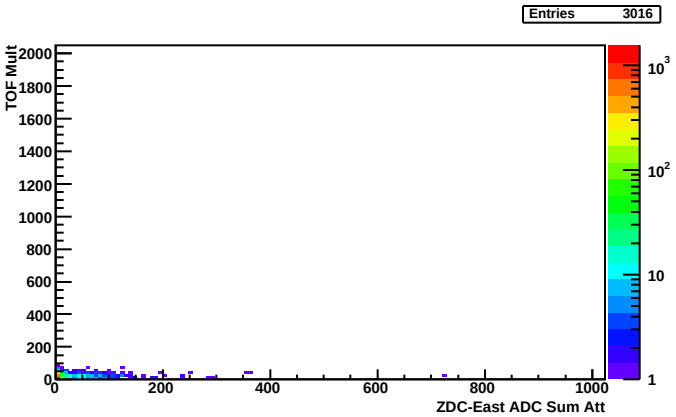

Entries 3016
TOF Mult
BBC-L-West ADC Sum

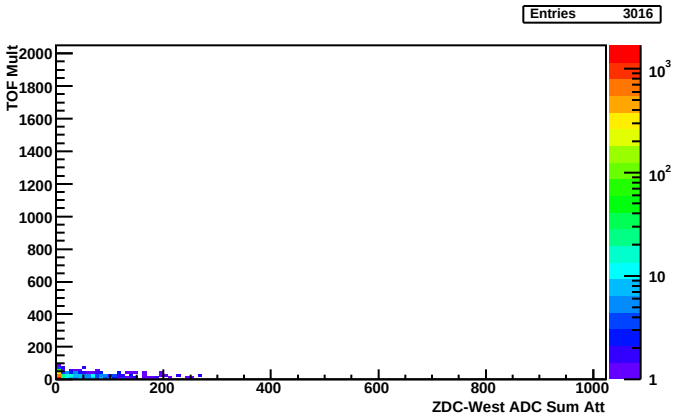

Entries 3016
TOF Mult
BBC-S-East ADC Sum

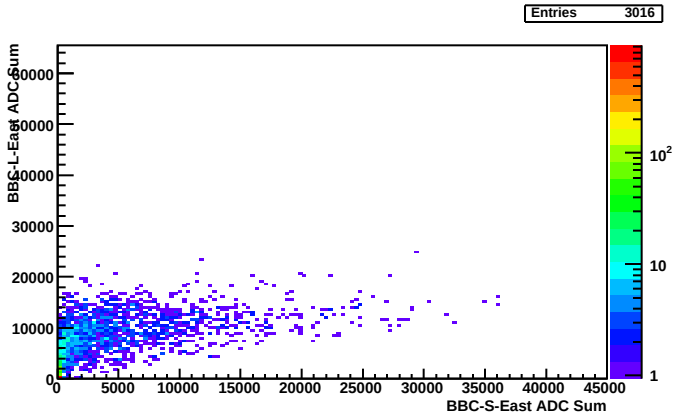

Entries 3016
TOF Mult
BBC-S-West ADC Sum

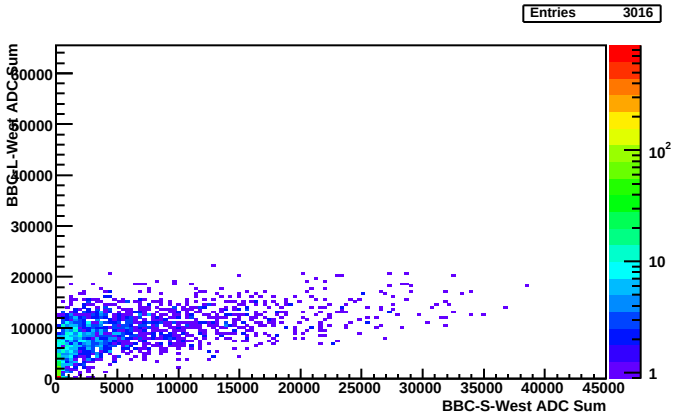

Entries 3016
TOF Mult
VPD-East ADC Sum

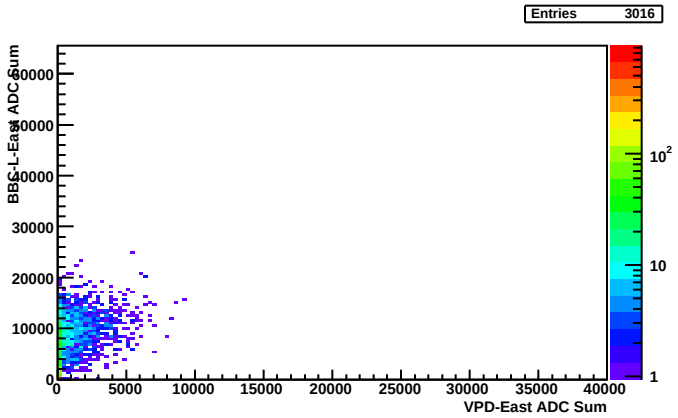

Entries 3016
TOF Mult
VPD-West ADC Sum

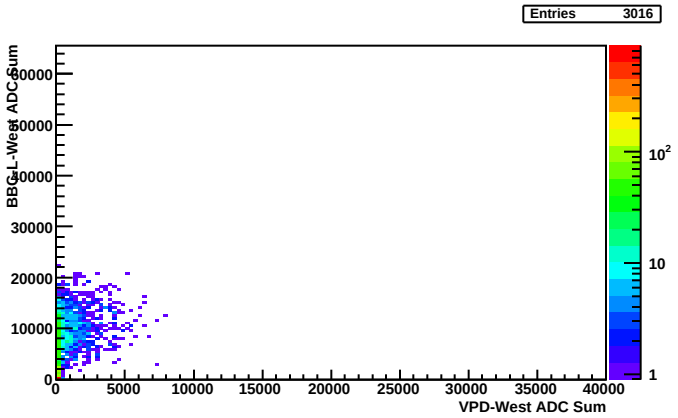

Entries 3016
TOF Mult
ZDC-East ADC Sum Att

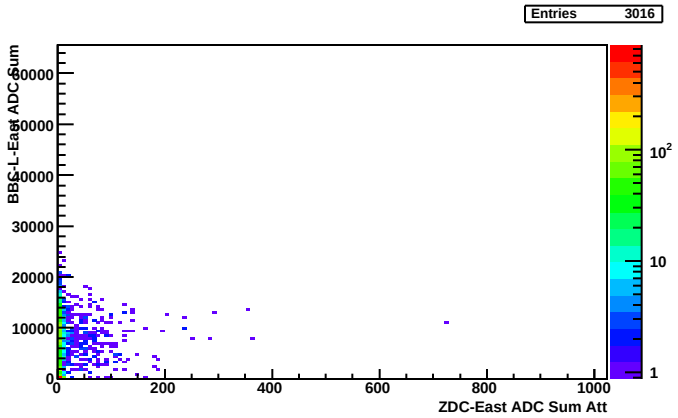

Entries 3016
TOF Mult
ZDC-West ADC Sum Att

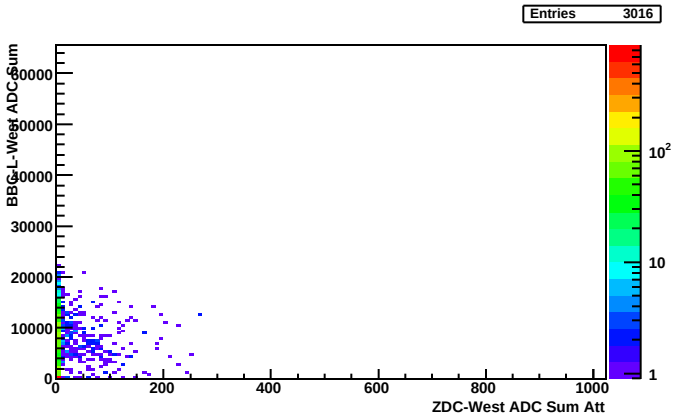

Entries 3016
BBC-L-East ADC Sum
BBC-S-East ADC Sum

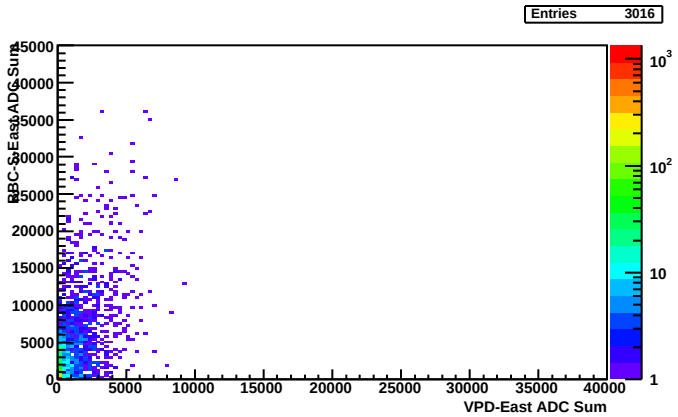

Entries 3016
BBC-L-West ADC Sum
BBC-S-West ADC Sum

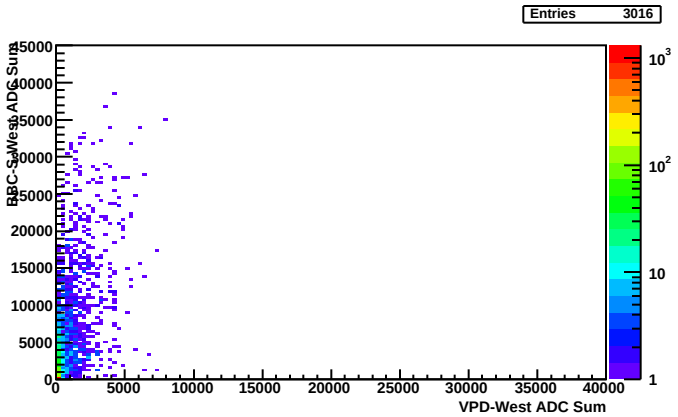

Entries 3016
BBC-L-East ADC Sum
VPD-East ADC Sum

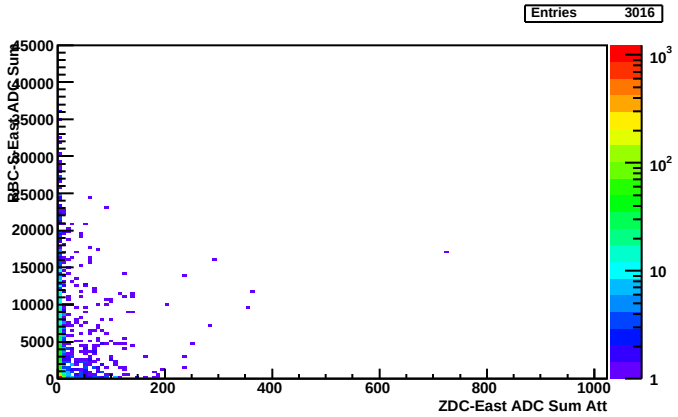

Entries 3016
BBC-L-West ADC Sum
VPD-West ADC Sum

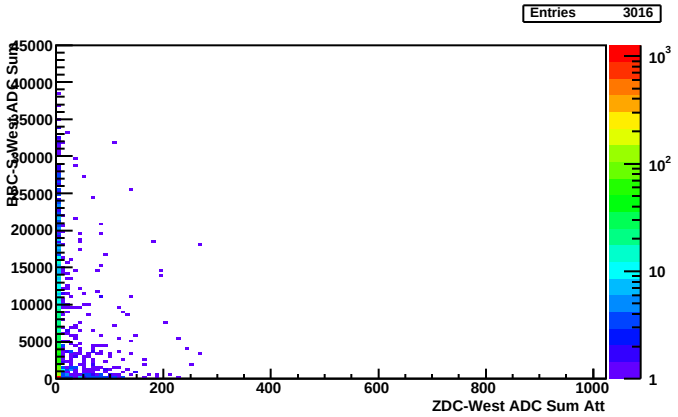

Entries 3016
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

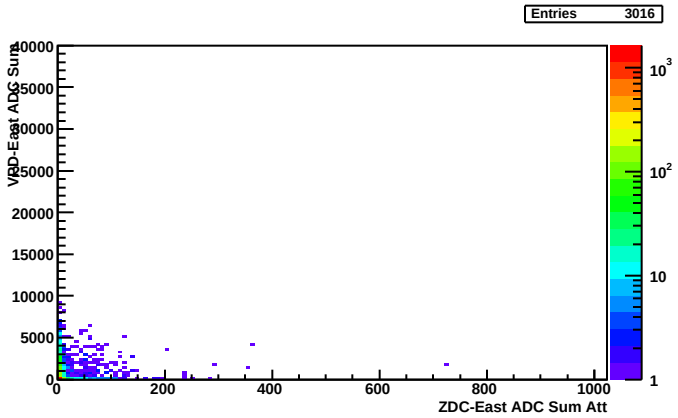

Entries 3016
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

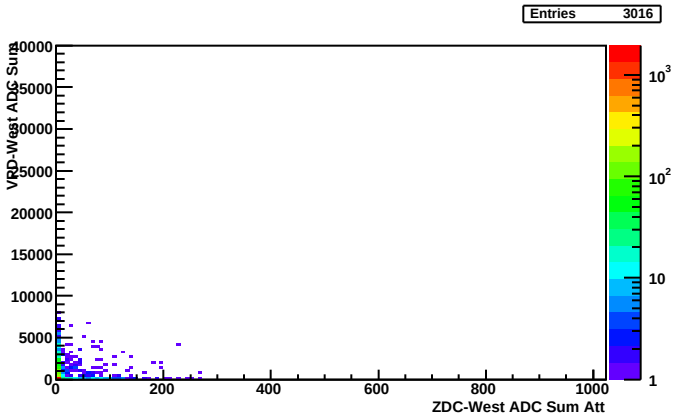

Entries 3016
BBC-S-East ADC Sum
VPD-East ADC Sum

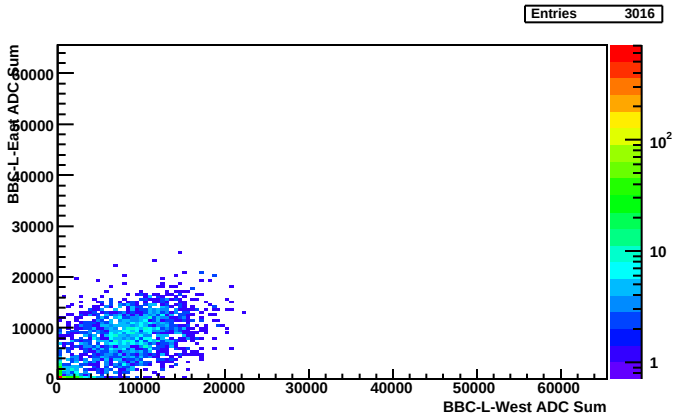

Entries 3016
BBC-S-West ADC Sum
VPD-West ADC Sum

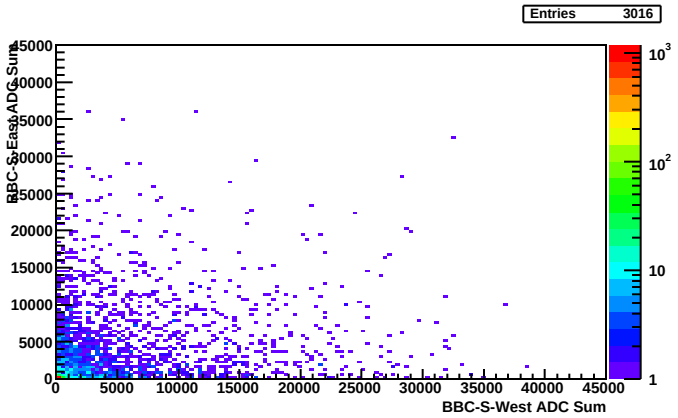

Entries 3016
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

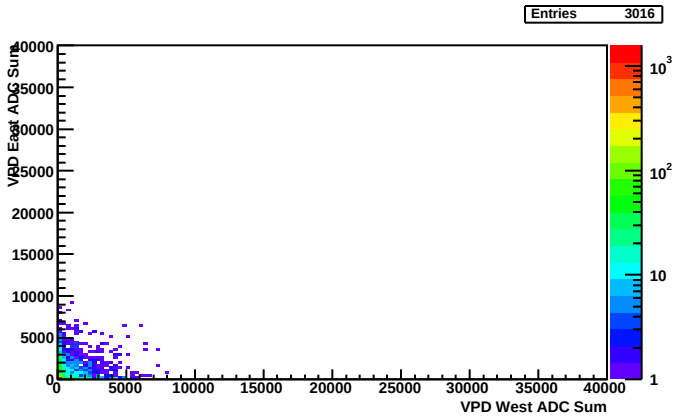

Entries 3016
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

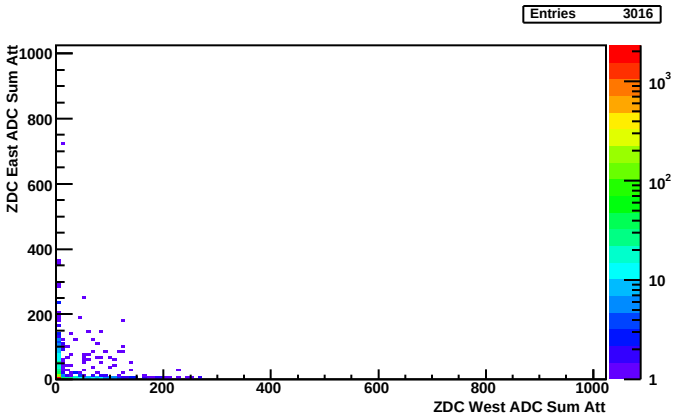

Entries 3016
VPD-East ADC Sum
ZDC-East ADC Sum Att

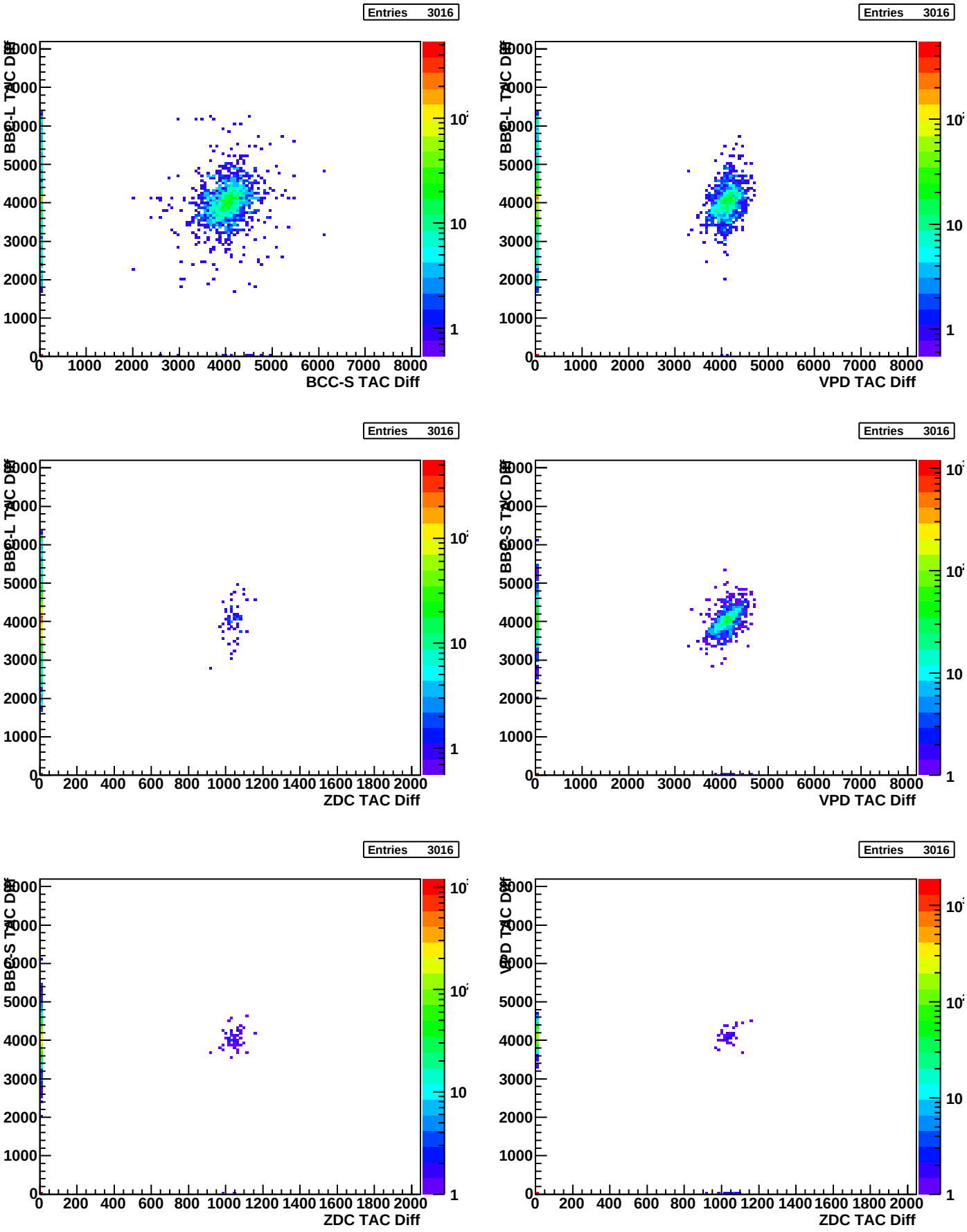

Entries 3016
VPD-West ADC Sum
ZDC-West ADC Sum Att

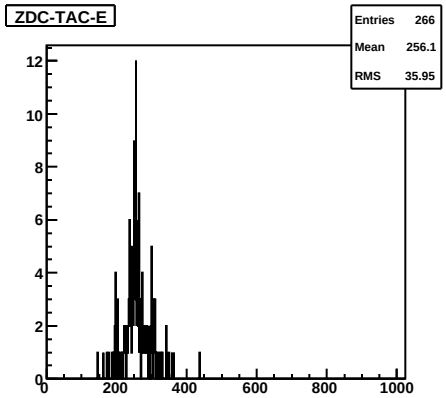

Entries 3016
BBC-L-East ADC Sum
BBC-L-West ADC Sum

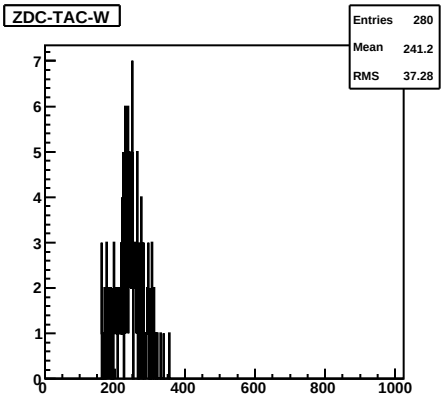

Entries 3016
BBC-S-East ADC Sum
BBC-S-West ADC Sum

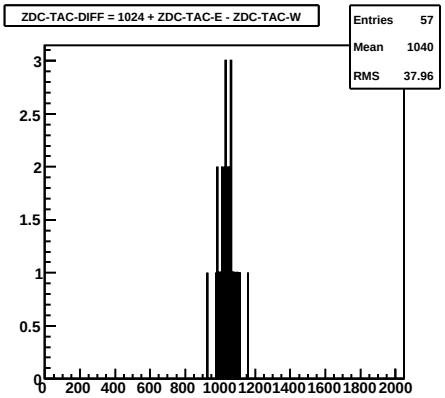

Entries 3016
VPD East ADC Sum
VPD West ADC Sum

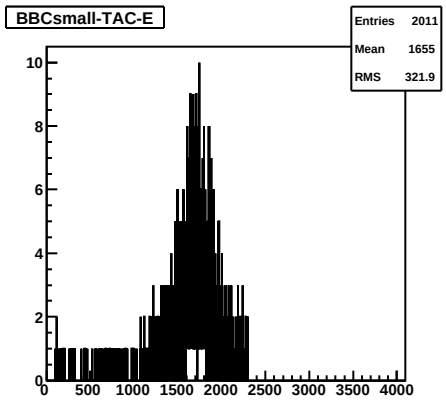

Entries 3016
ZDC East ADC Sum Att
ZDC West ADC Sum Att

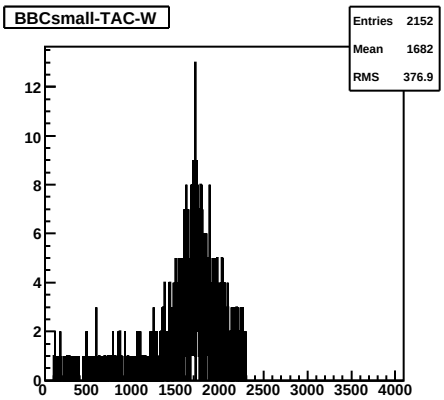

Entries 3016
BBC-L TAC Diff
BCC-S TAC Diff
Entries 3016
BBC-L TAC Diff
VPD TAC Diff
Entries 3016
BBC-L TAC Diff
ZDC TAC Diff
Entries 3016
BBC-S TAC Diff
VPD TAC Diff
Entries 3016
BBC-S TAC Diff
ZDC TAC Diff
Entries 3016
VPD TAC Diff
ZDC TAC Diff

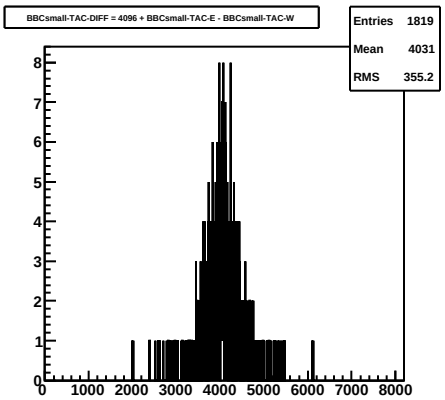

ZDC-TAC-E
Entries 266
Mean 256.1
RMS 35.95

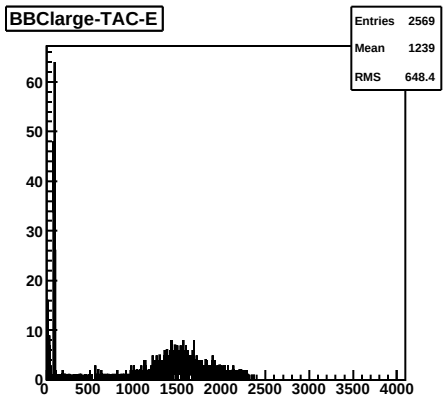

ZDC-TAC-W
Entries 280
Mean 241.2
RMS 37.28

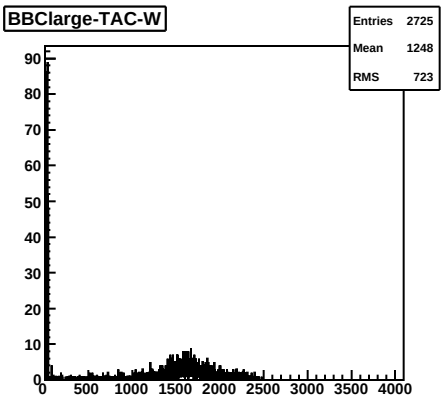

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 57
Mean 1040
RMS 37.96

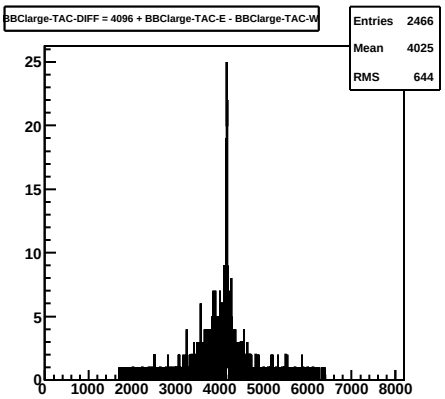

BBCsmall-TAC-E
Entries 2011
Mean 1655
RMS 321.9

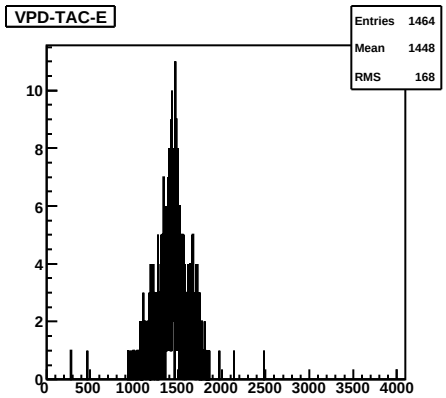

BBCsmall-TAC-W
Entries 2152
Mean 1682
RMS 376.9

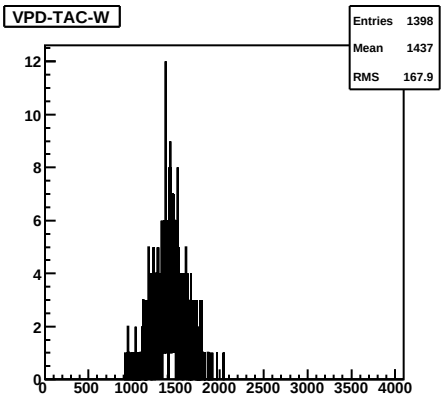

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 1819
Mean 4031
RMS 355.2

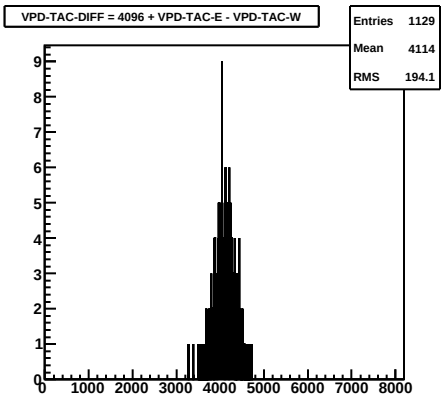

BBClarge-TAC-E
Entries 2569
Mean 1239
RMS 648.4

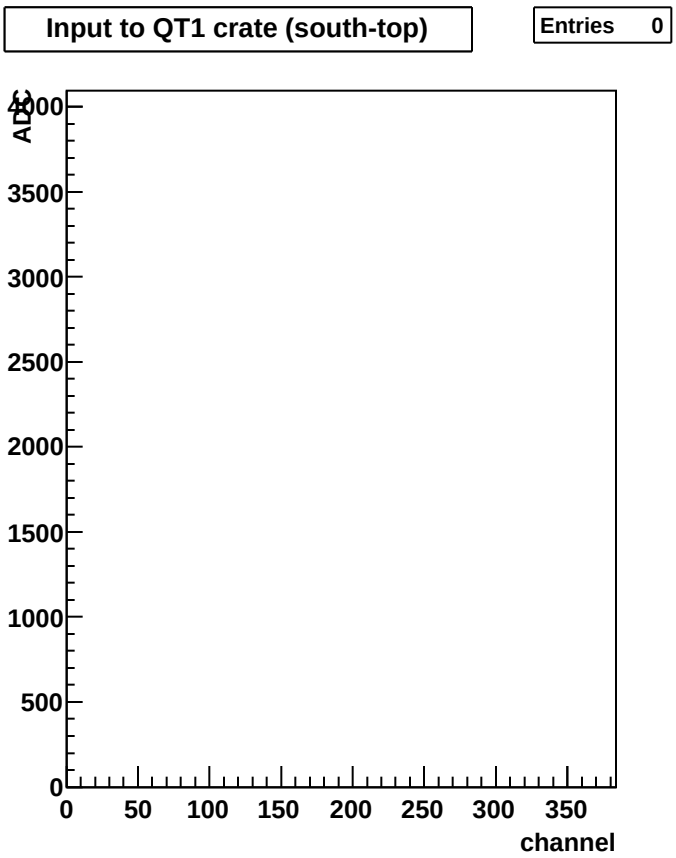

BBClarge-TAC-W
Entries 2725
Mean 1248
RMS 723

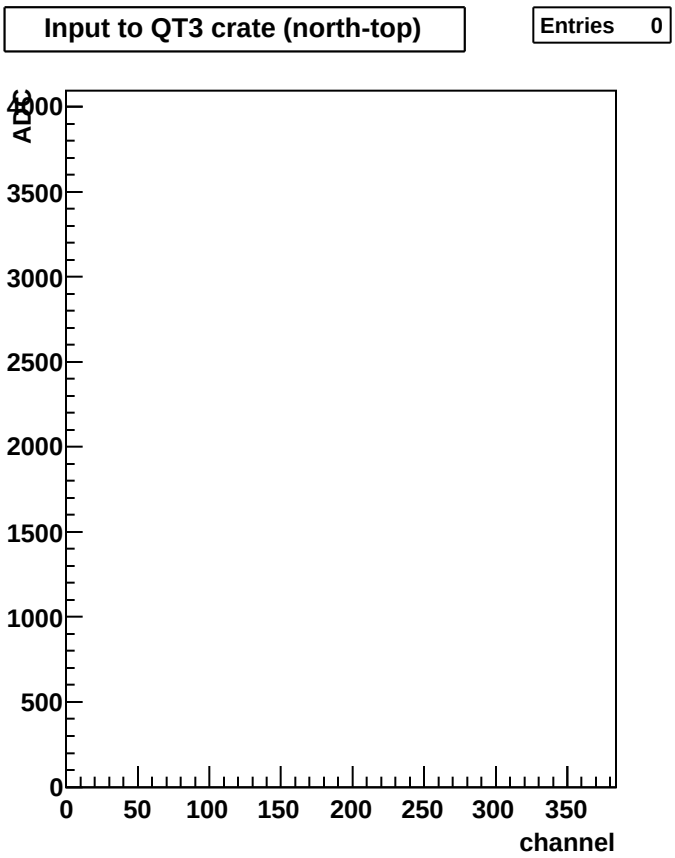

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 2466
Mean 4025
RMS 644

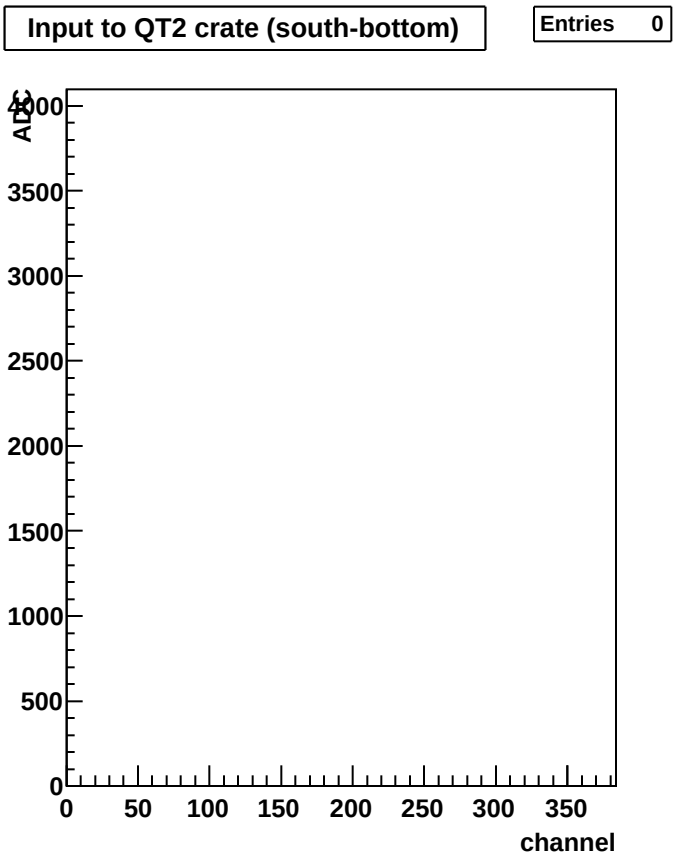

VPD-TAC-E
Entries 1464
Mean 1448
RMS 168

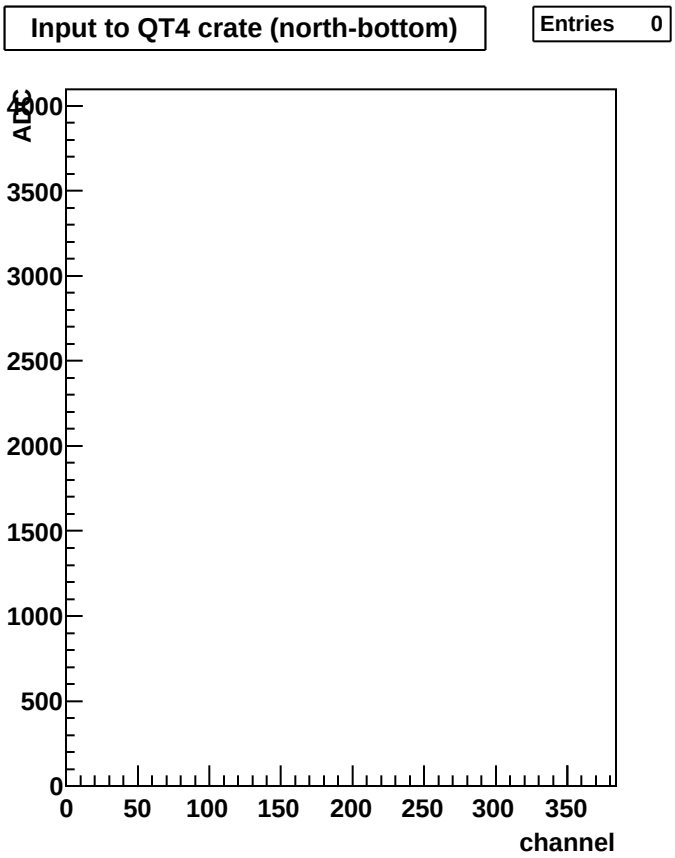

VPD-TAC-W
Entries 1398
Mean 1437
RMS 167.9

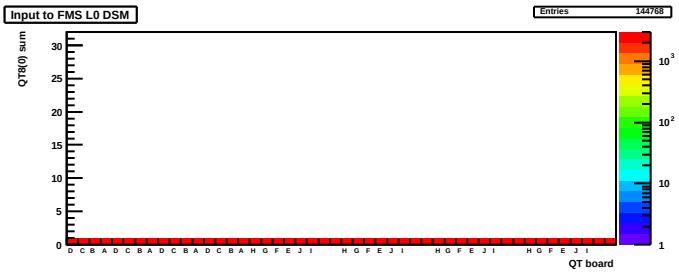

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 1129
Mean 4114
RMS 194.1

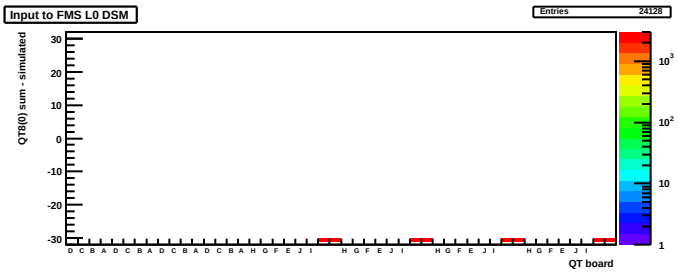

Input to QT1 crate (south-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

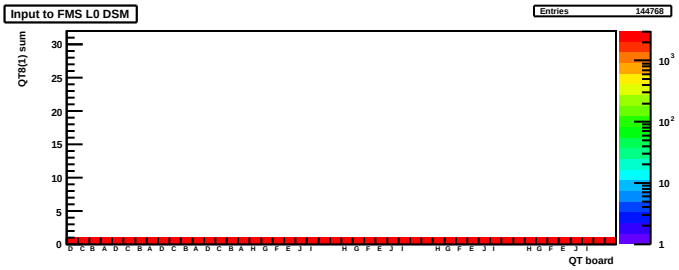

Input to QT3 crate (north-top)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

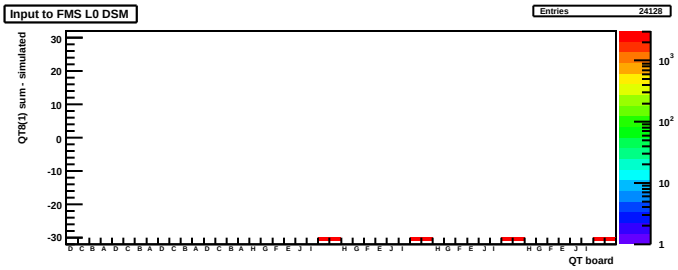

Input to QT2 crate (south-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

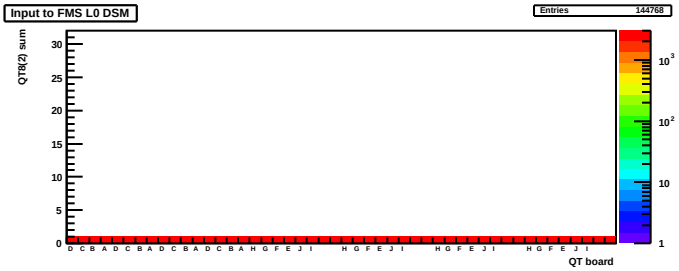

Input to QT4 crate (north-bottom)
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

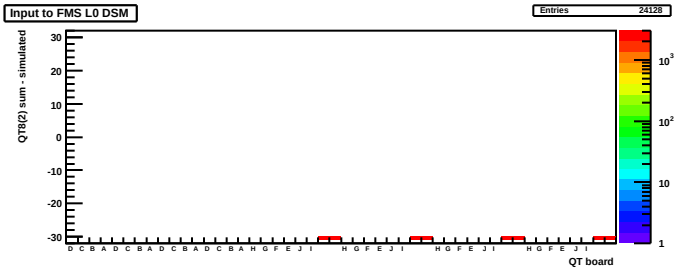

Input to FMS L0 DSM
Entries 144768
QT8(0) sum
QT board

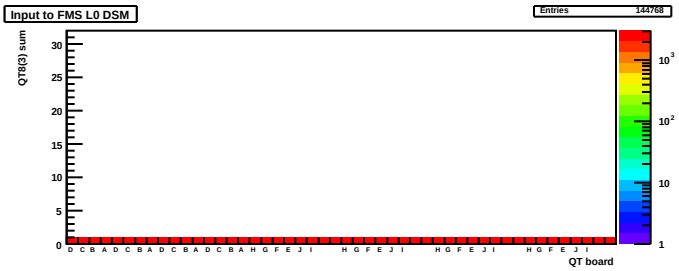

Input to FMS L0 DSM
Entries 24128
QT8(0) sum - simulated
QT board

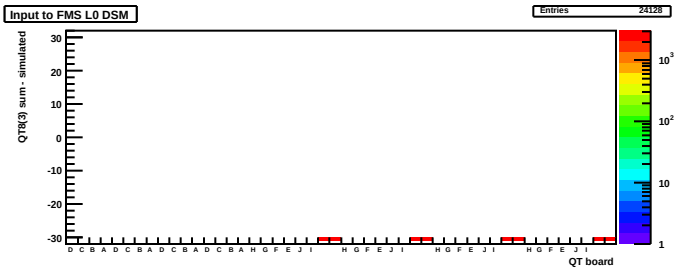

Input to FMS L0 DSM
Entries 144768
QT8(1) sum
QT board

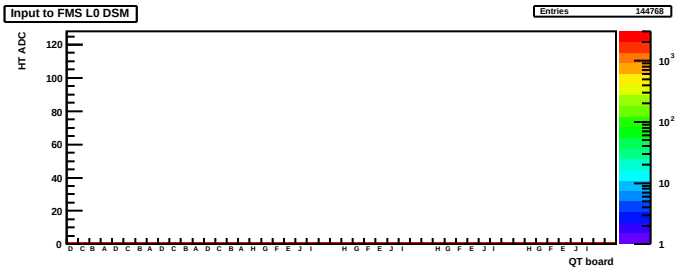

Input to FMS L0 DSM
Entries 24128
QT8(1) sum - simulated
QT board

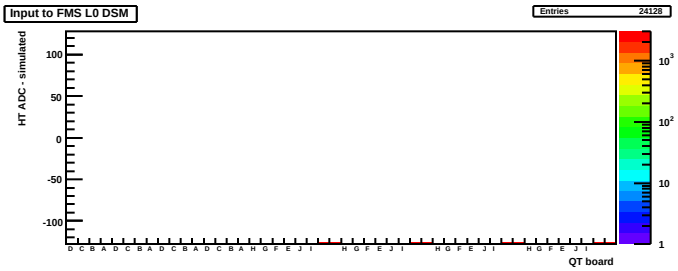

Input to FMS L0 DSM
Entries 144768
QT8(2) sum
QT board

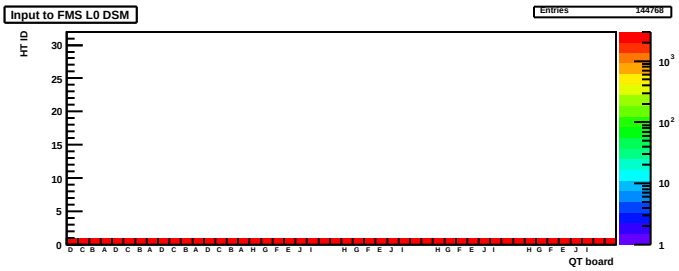

Input to FMS L0 DSM
Entries 24128
QT8(2) sum - simulated
QT board

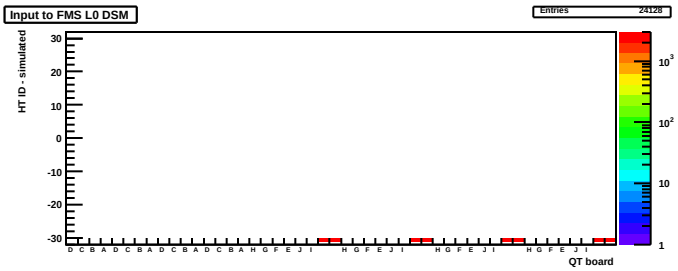

Input to FMS L0 DSM
Entries 144768
QT8(3) sum
QT board

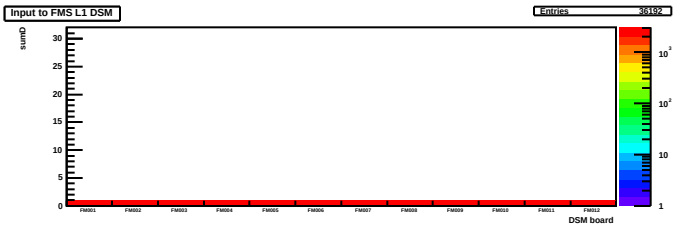

Input to FMS L0 DSM
Entries 24128
QT8(3) sum - simulated
QT board

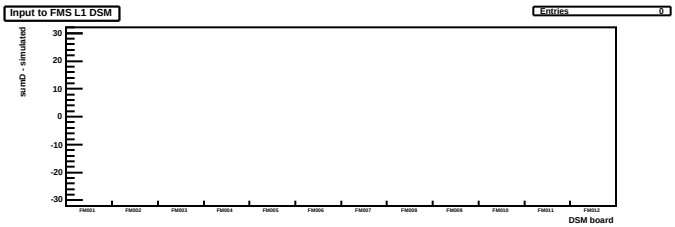

Input to FMS L0 DSM
Entries 144768
HT ADC
QT board

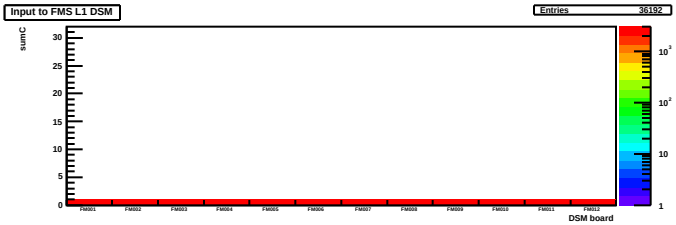

Input to FMS L0 DSM
Entries 24128
HT ADC - simulated
QT board

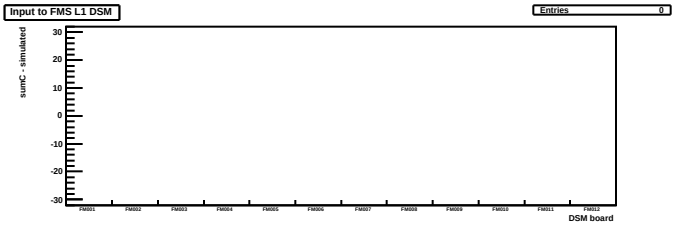

Input to FMS L0 DSM
Entries 144768
HT ID
QT board

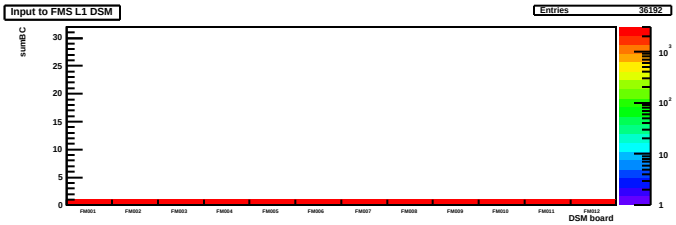

Input to FMS L0 DSM
Entries 24128
HT ID - simulated
QT board

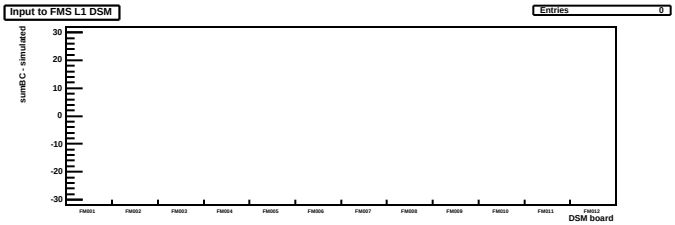

Input to FMS L1 DSM
Entries 36192
sumD
DSM board

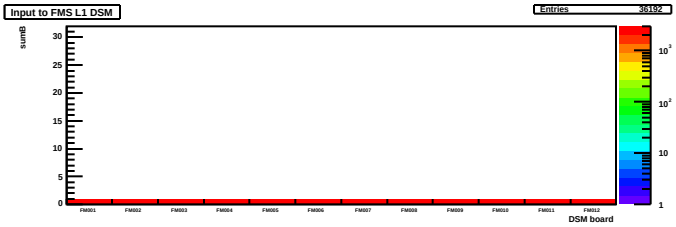

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

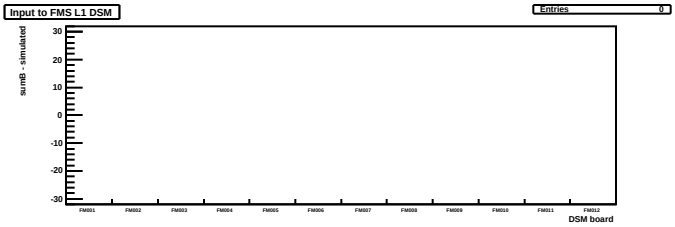

Input to FMS L1 DSM
Entries 36192
sumC
DSM board

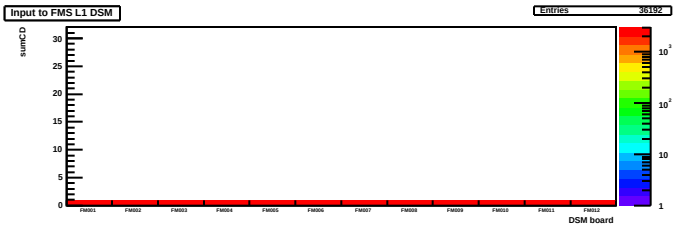

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

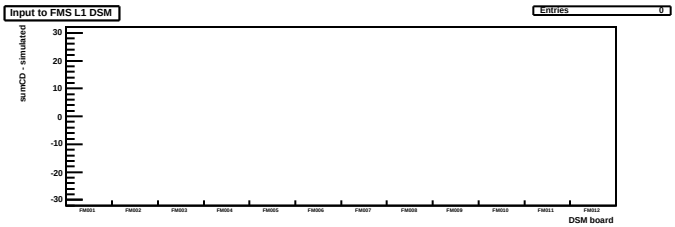

Input to FMS L1 DSM
Entries 36192
sumBC
DSM board

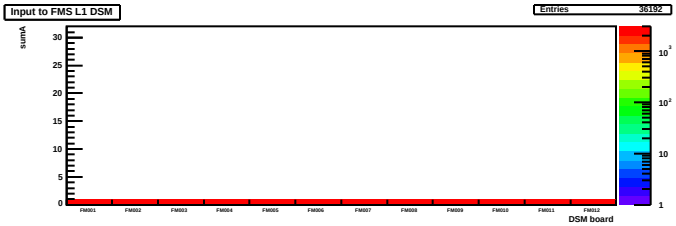

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

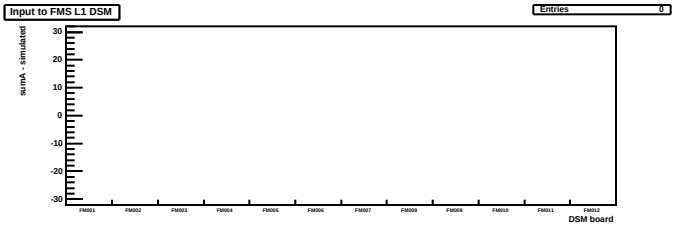

Input to FMS L1 DSM
Entries 36192
sumB
DSM board

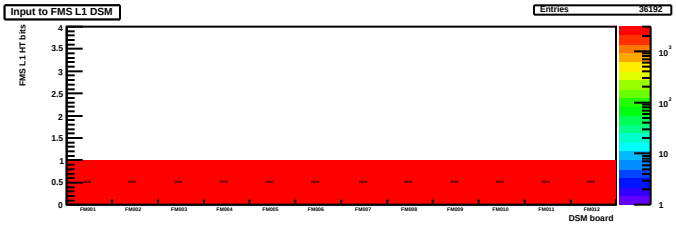

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

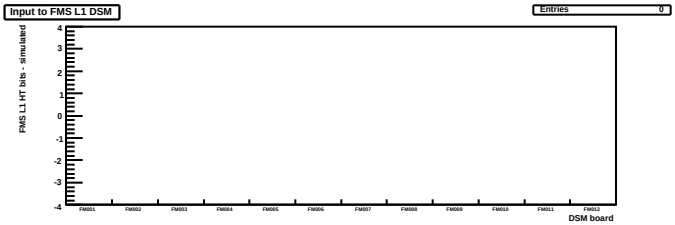

Input to FMS L1 DSM
Entries 36192
sumCD
DSM board

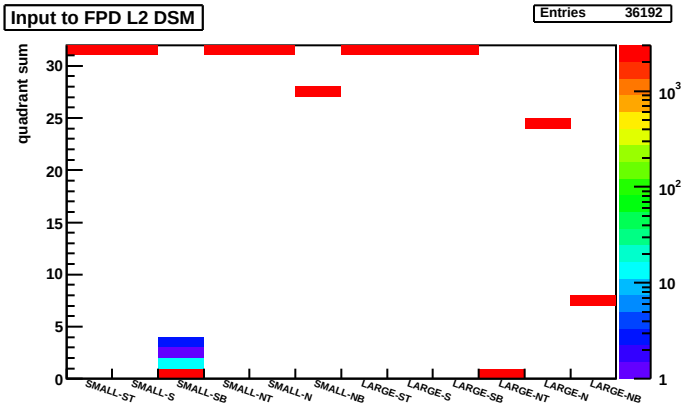

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

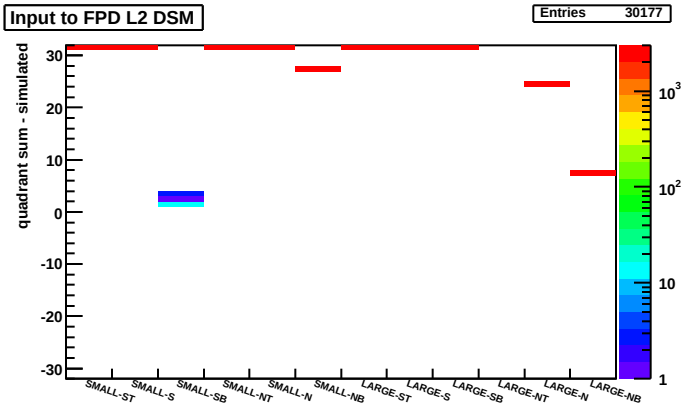

Input to FMS L1 DSM
Entries 36192
sumA
DSM board

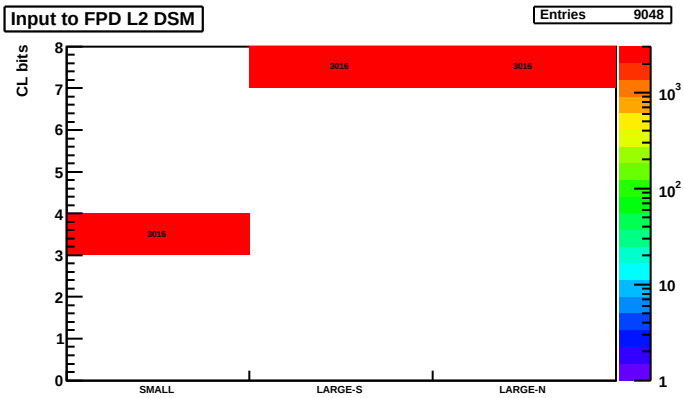

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

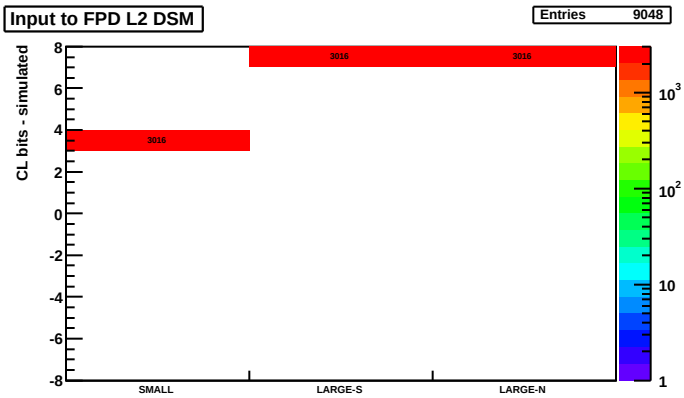

Input to FMS L1 DSM
Entries 36192
FMS L1 HT bits
DSM board

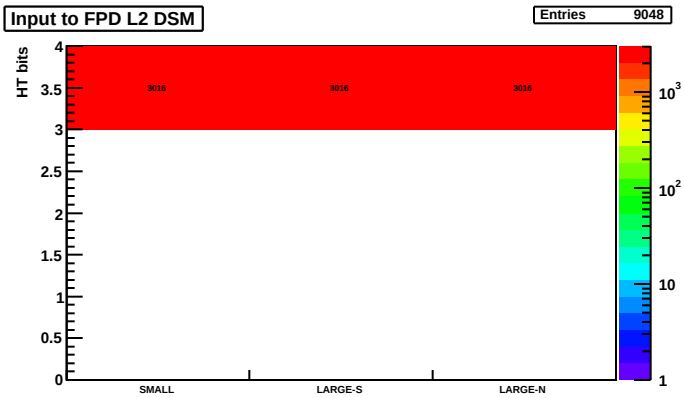

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

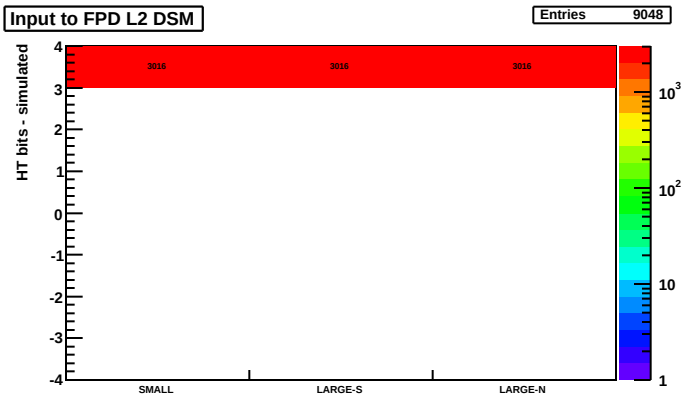

Input to FPD L2 DSM
Entries 36192
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

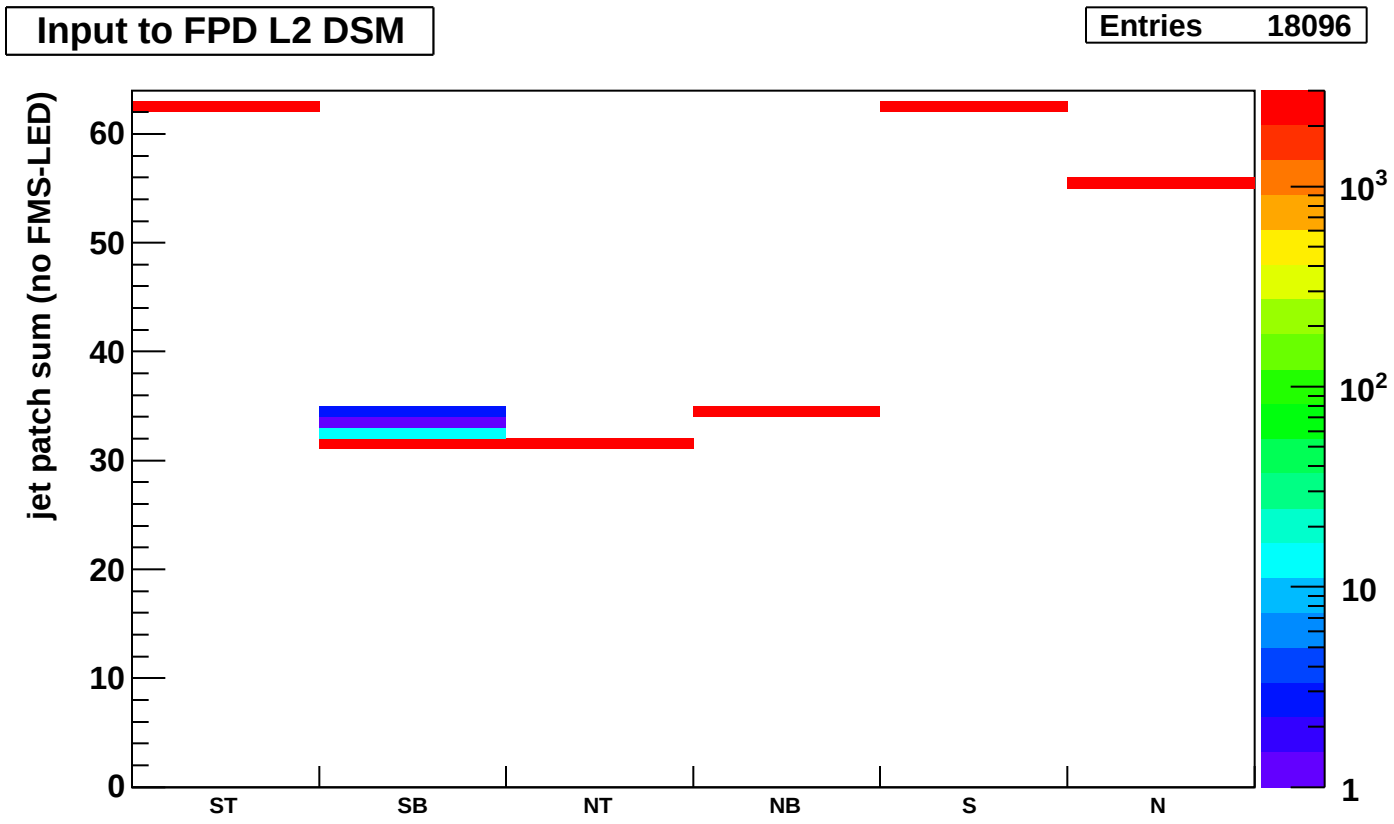

Input to FPD L2 DSM
Entries 30177
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

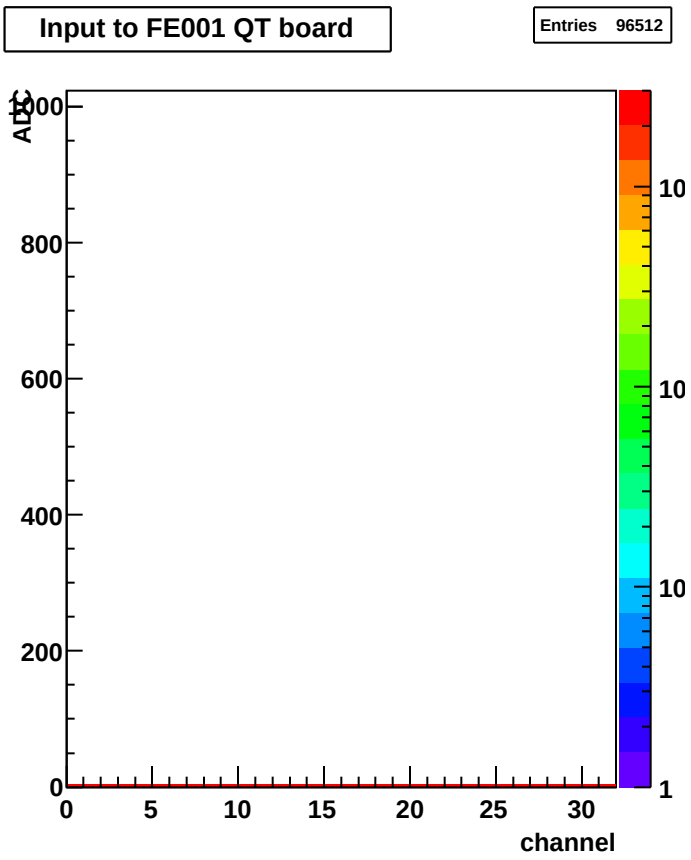

Input to FPD L2 DSM
Entries 9048
CL bits
3016
3016
3016
SMALL
LARGE-S
LARGE-N

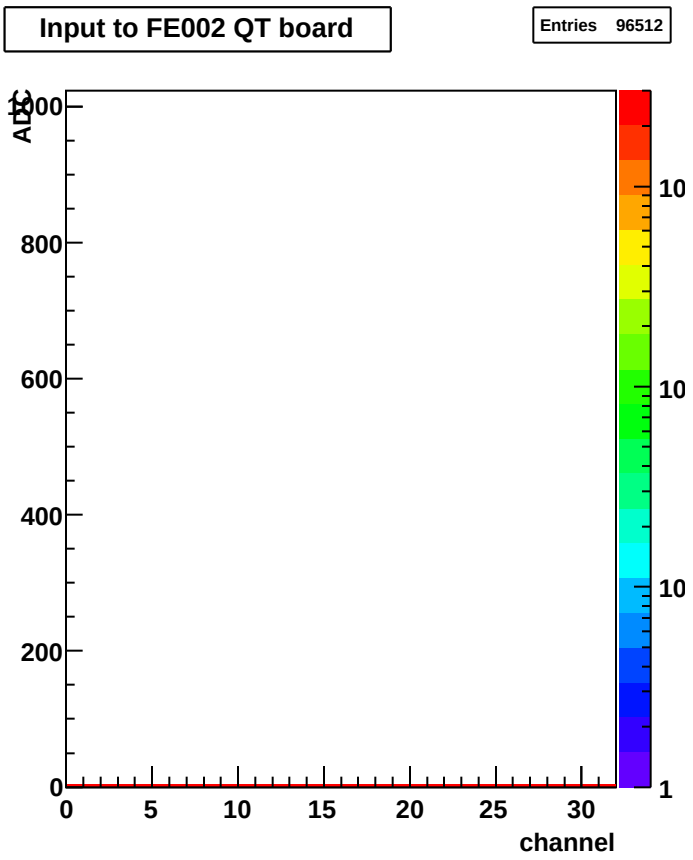

Input to FPD L2 DSM
Entries 9048
CL bits - simulated
3016
3016
3016
SMALL
LARGE-S
LARGE-N

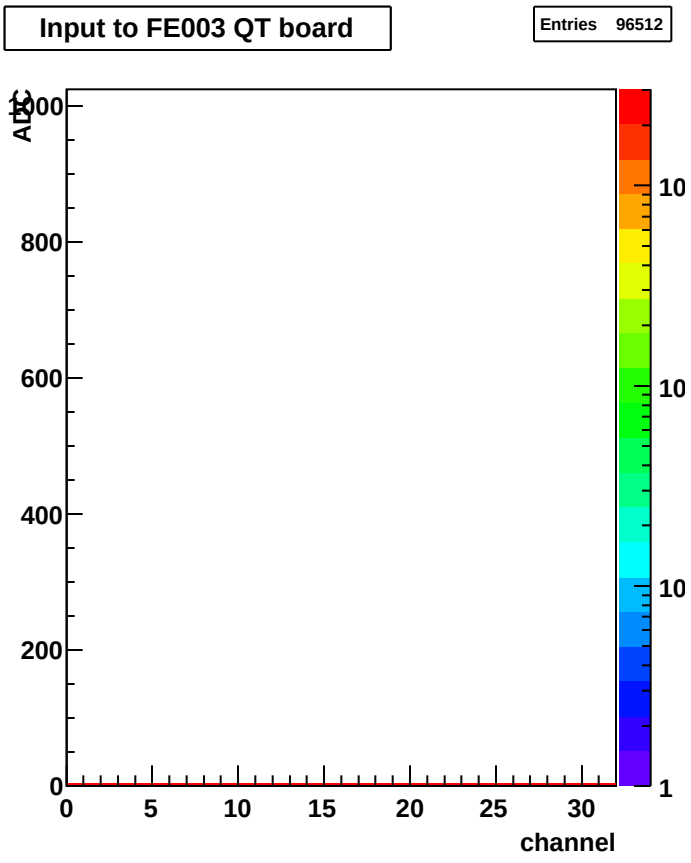

Input to FPD L2 DSM
Entries 9048
HT bits
3016
3016
3016
SMALL
LARGE-S
LARGE-N

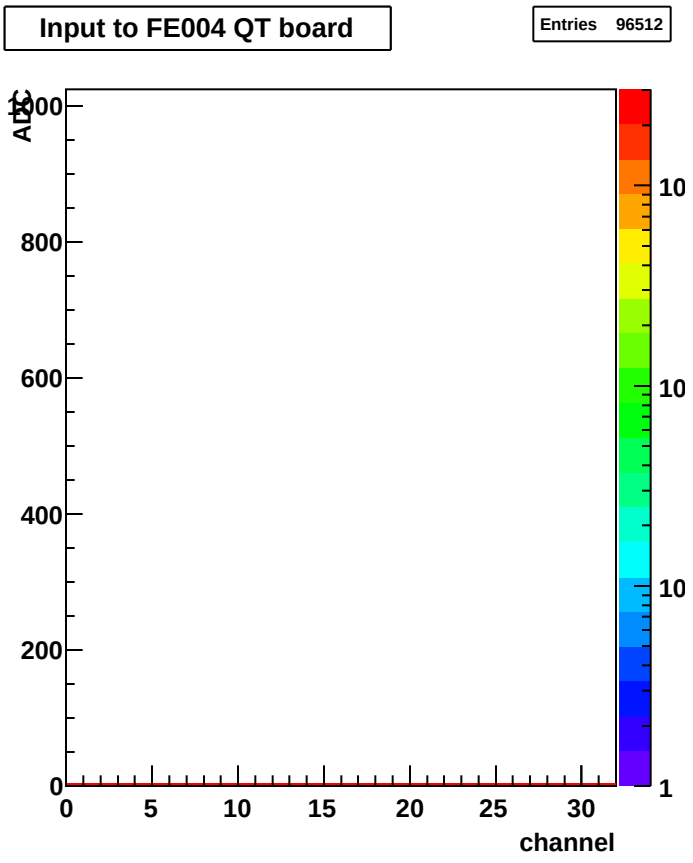

Input to FPD L2 DSM
Entries 9048
HT bits - simulated
3016
3016
3016
SMALL
LARGE-S
LARGE-N

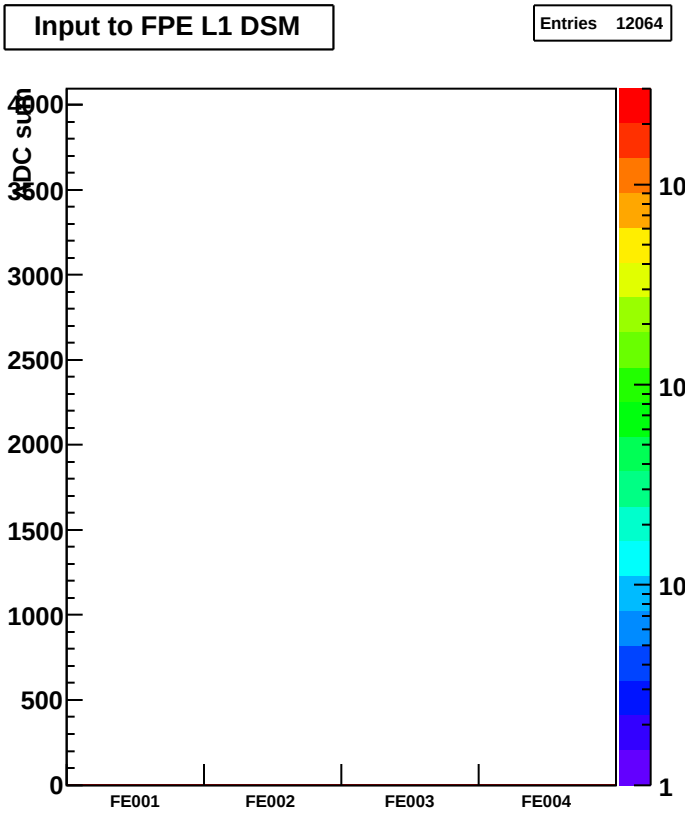

Input to FPD L2 DSM
Entries 18096
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3

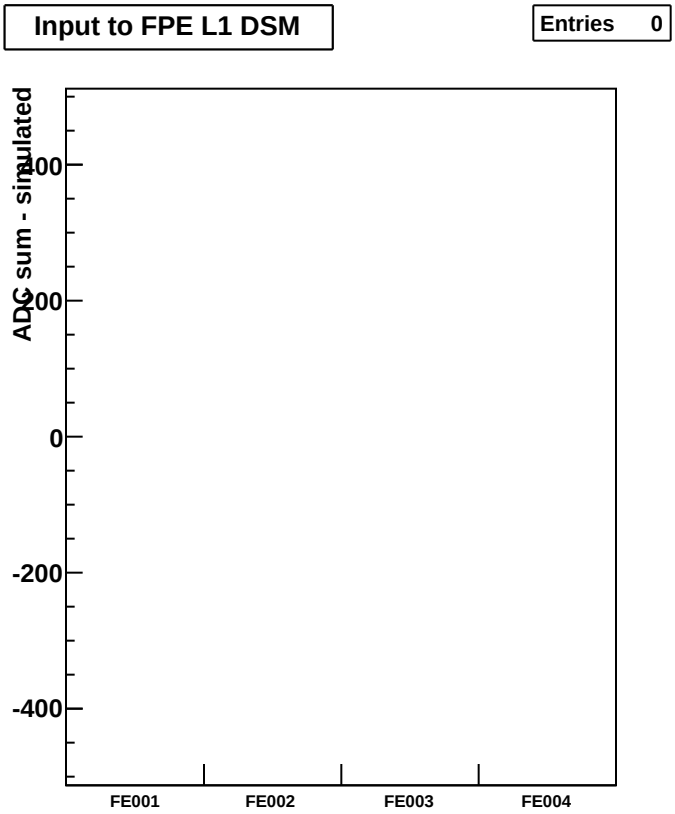

Input to FE001 QT board
Entries 96512
ADC
channel


Input to FE002 QT board
Entries 96512
ADC
channel

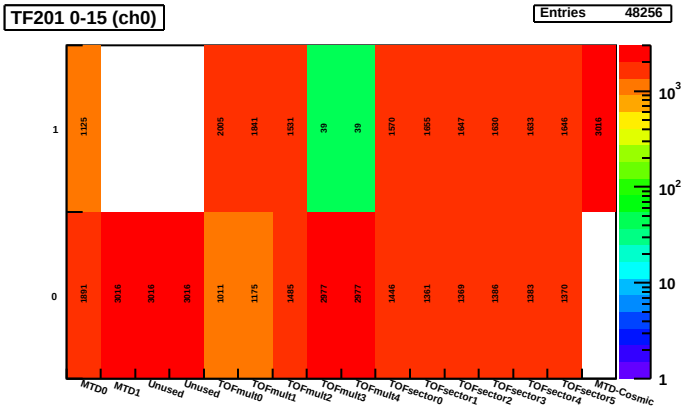

Input to FE003 QT board
Entries 96512
ADC
channel


Input to FE004 QT board
Entries 96512
ADC
channel

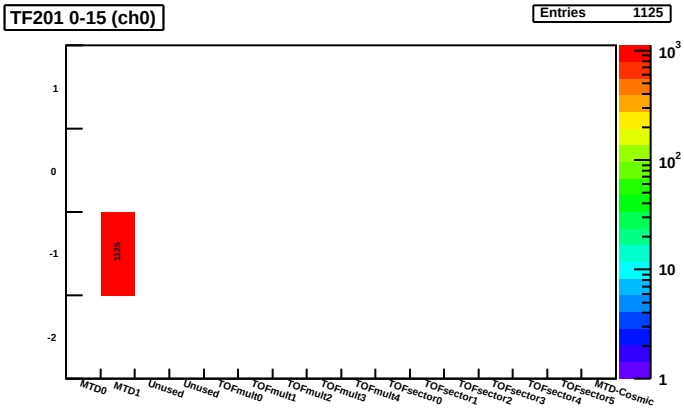

Input to FPE L1 DSM
Entries 12064
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
1


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

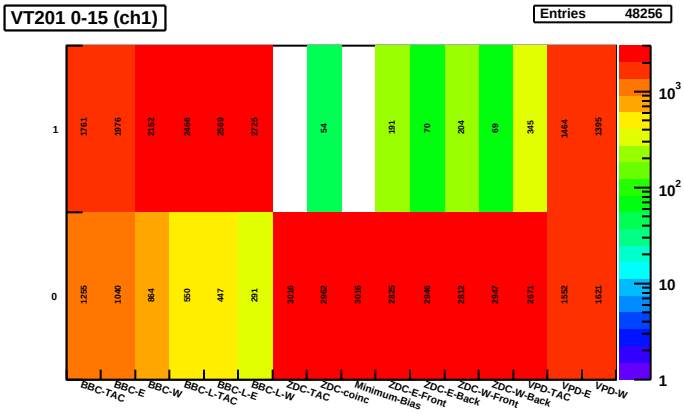
TF201 0-15 (ch0)



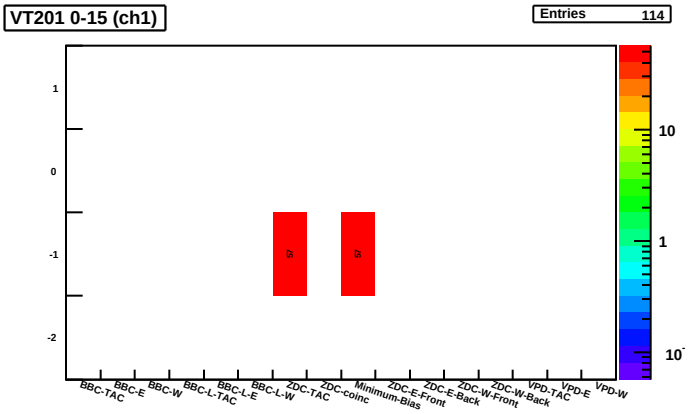
TF201 0-15 (ch0)



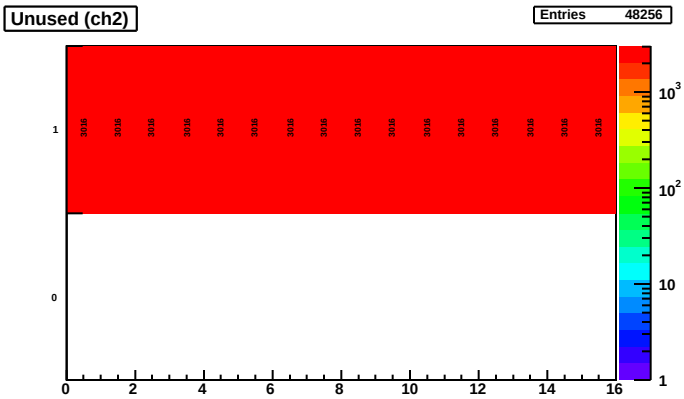
VT201 0-15 (ch1)

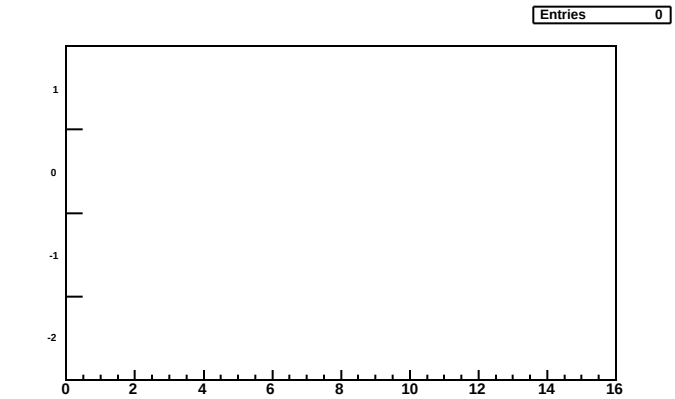


VT201 0-15 (ch1)

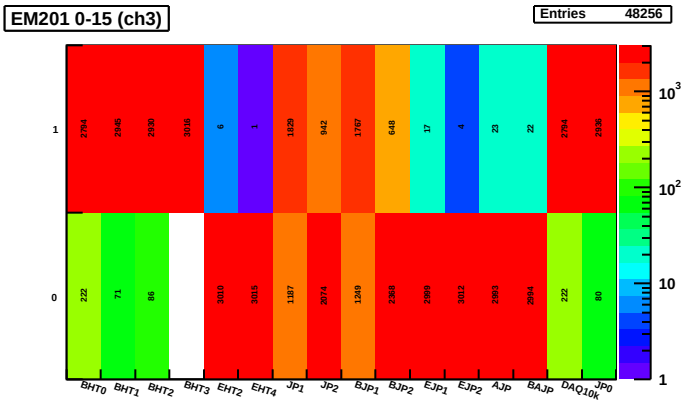


Unused (ch2)

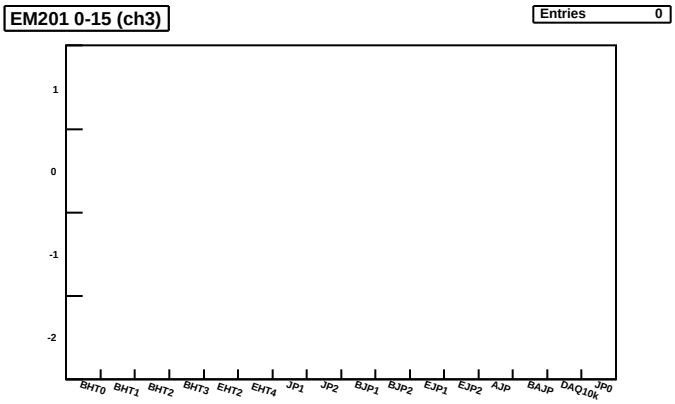




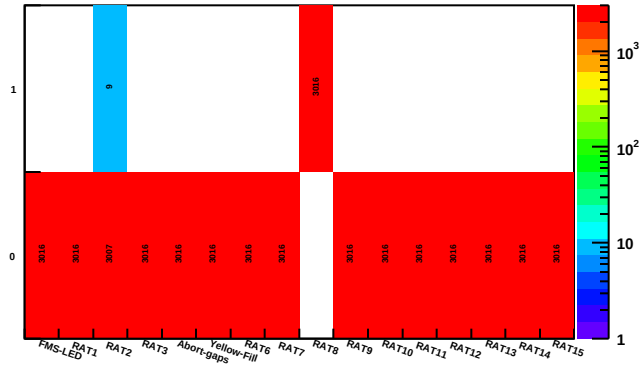
EM201 0-15 (ch3)

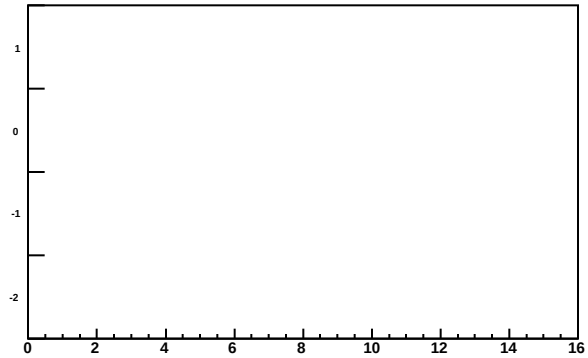


EM201 0-15 (ch3)

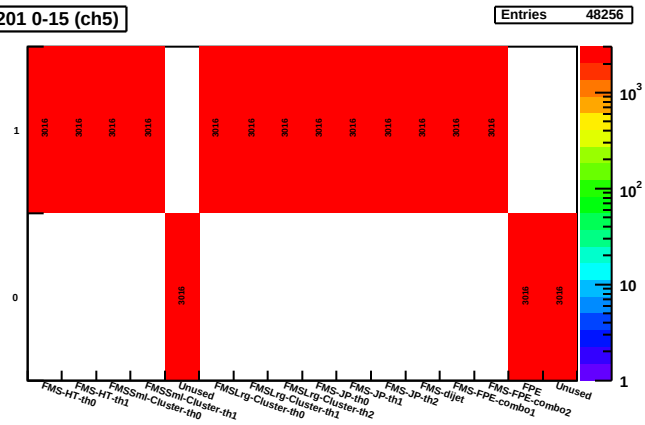


RAT board (ch4)

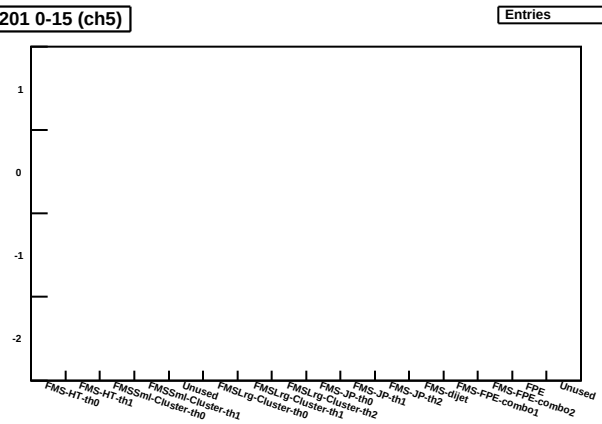




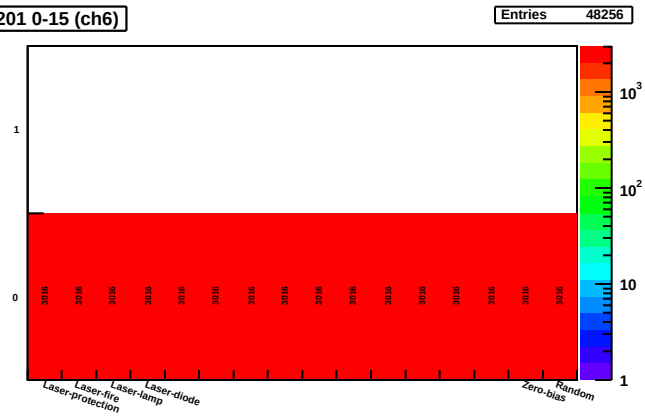
FP201 0-15 (ch5)

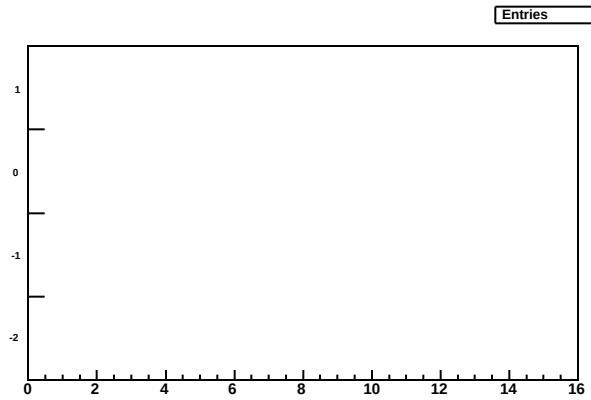
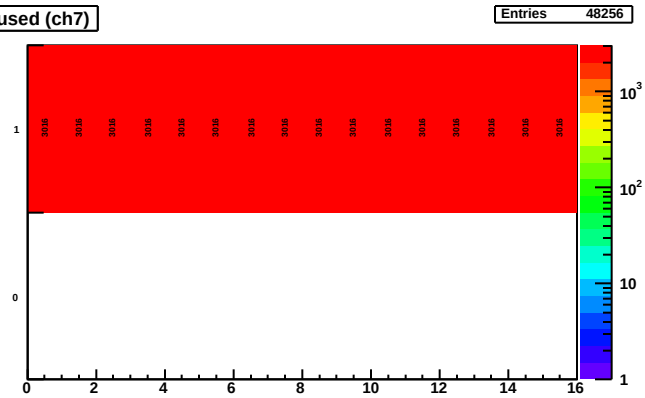
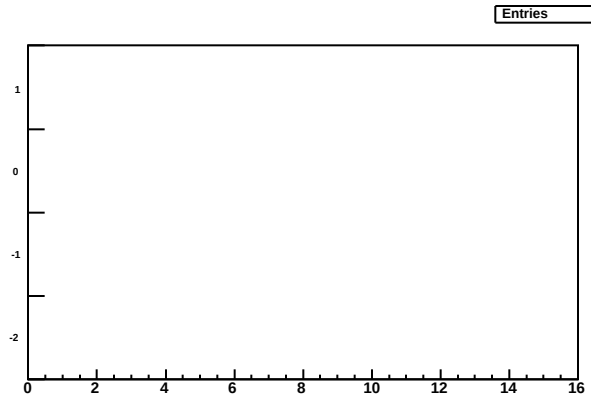


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)