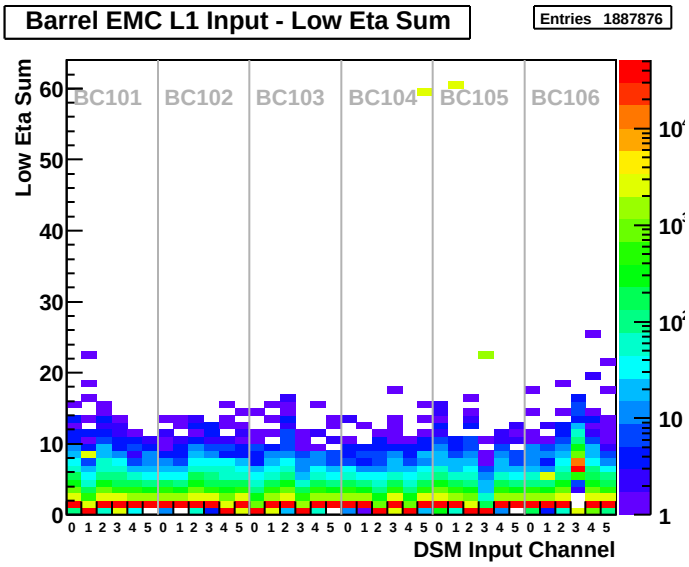
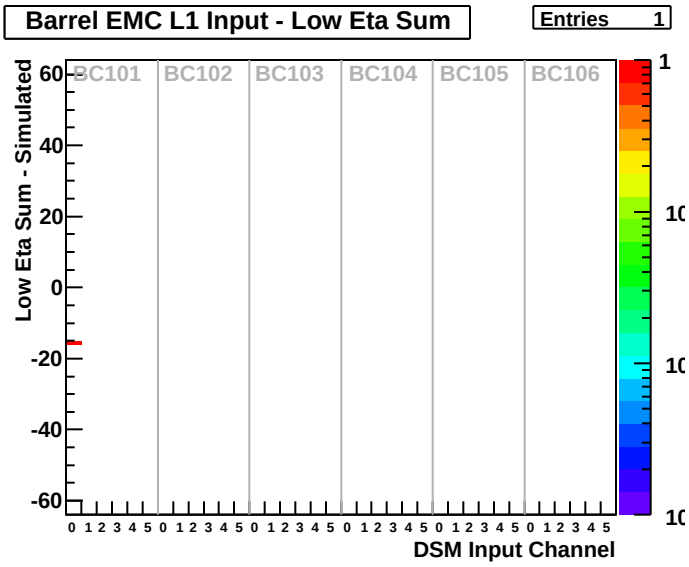
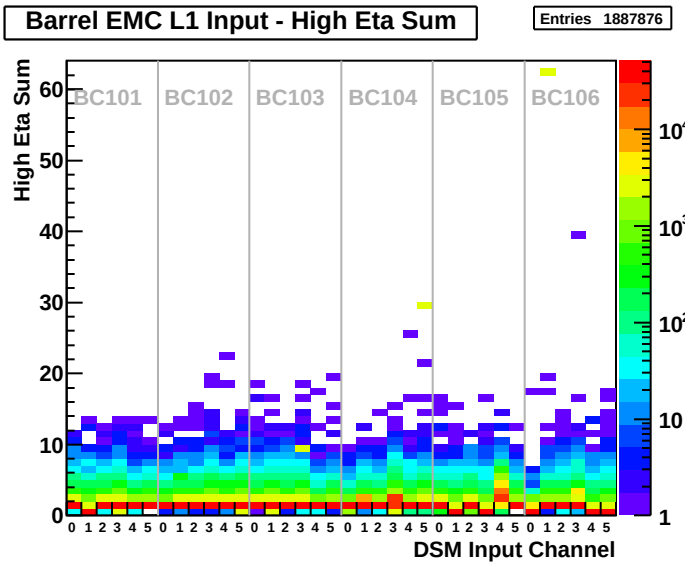
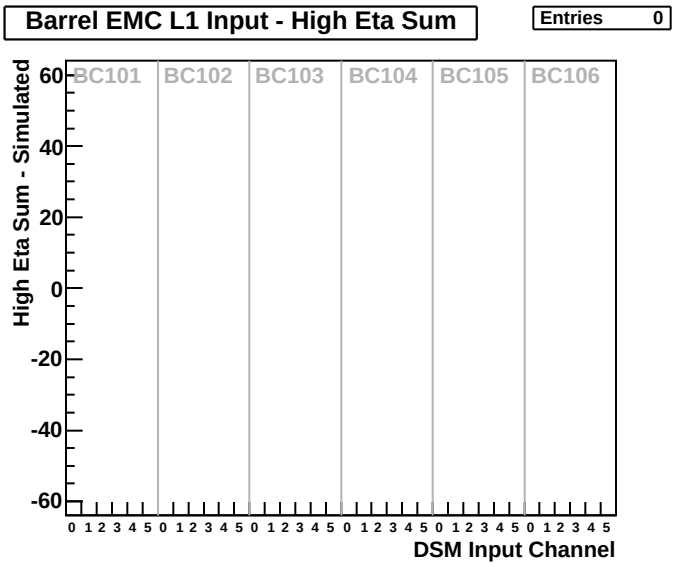
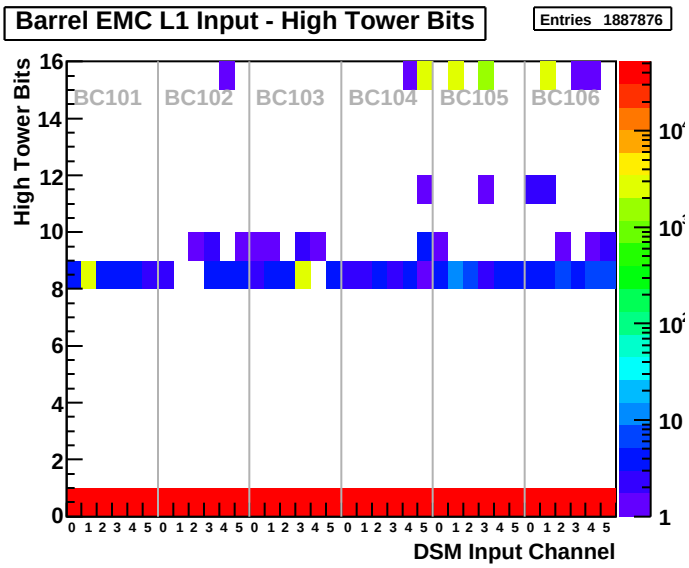
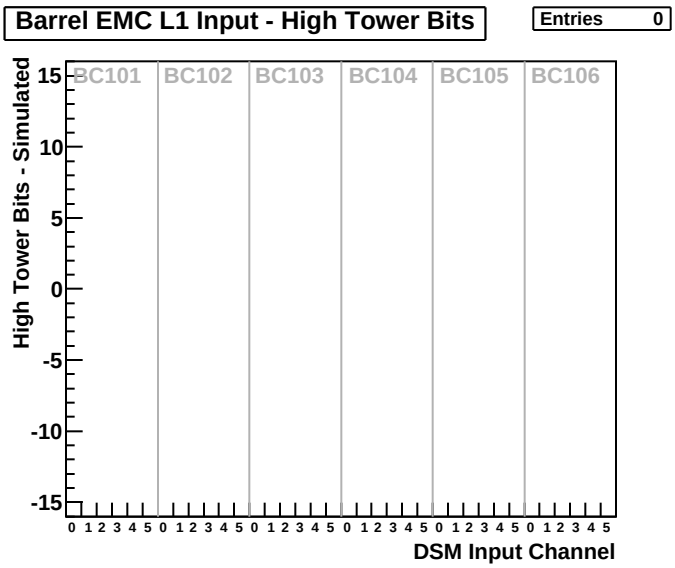

Barrel EMC L1 Input - Low Eta Sum
Entries 1887876
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

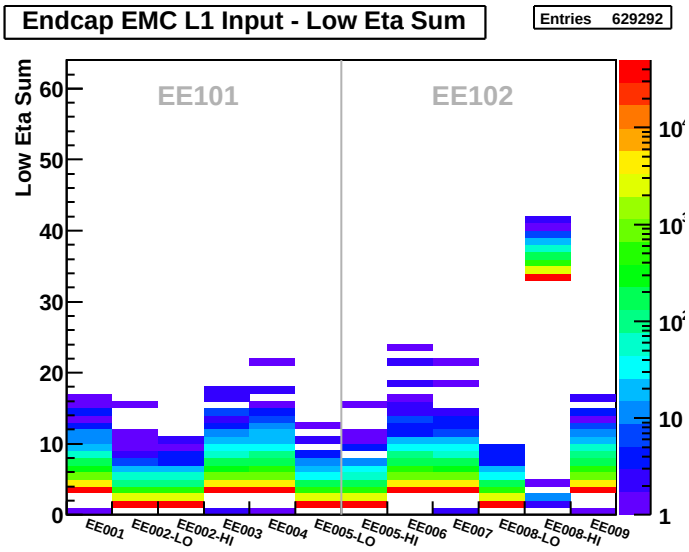

Barrel EMC L1 Input - Low Eta Sum
Entries 1
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

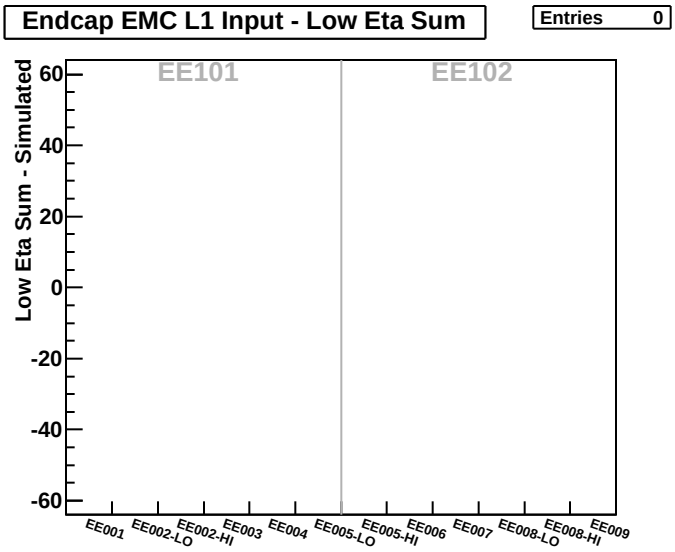

Barrel EMC L1 Input - High Eta Sum
Entries 1887876
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

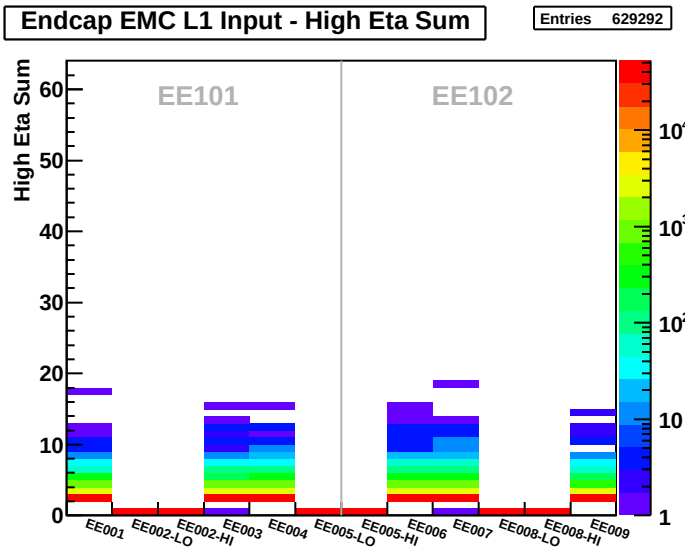

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

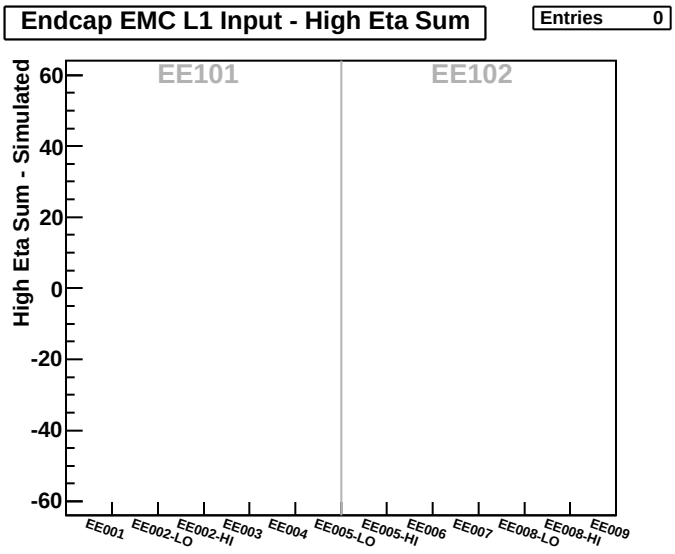

Barrel EMC L1 Input - High Tower Bits
Entries 1887876
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

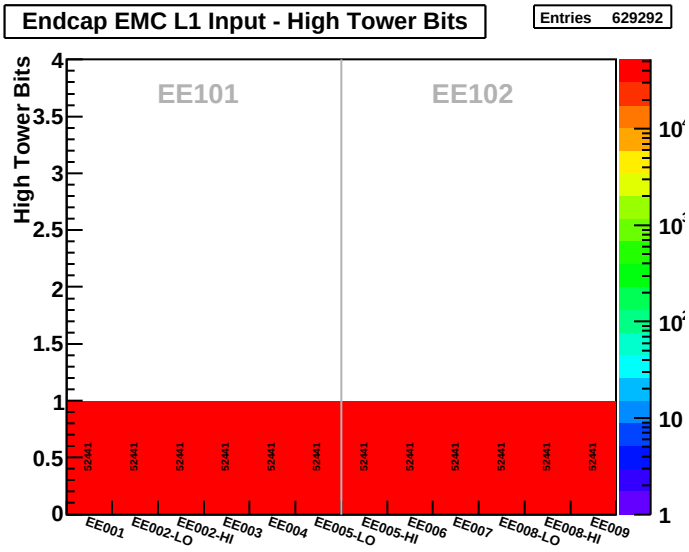

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

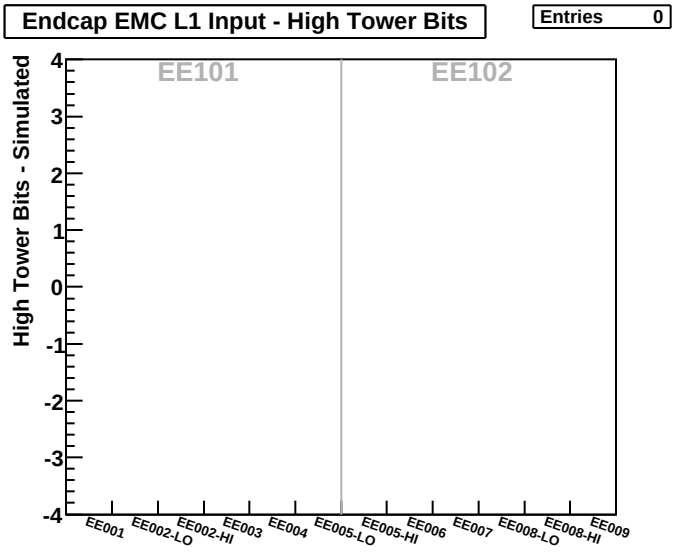

Endcap EMC L1 Input - Low Eta Sum
Entries 629292
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

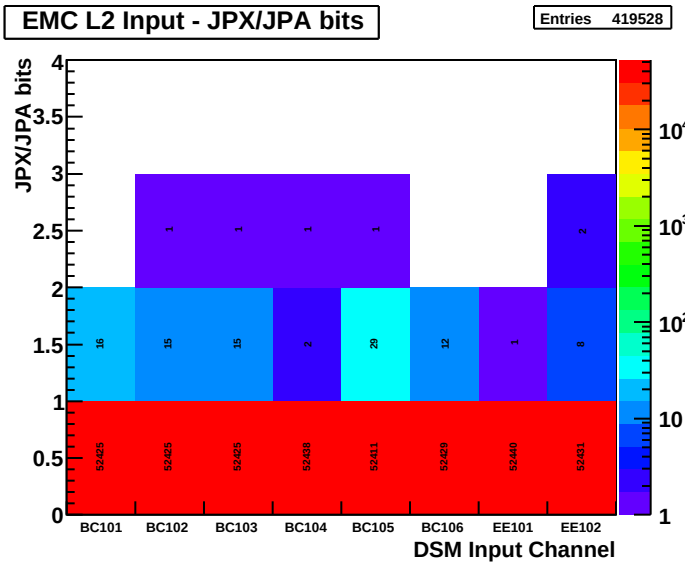

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

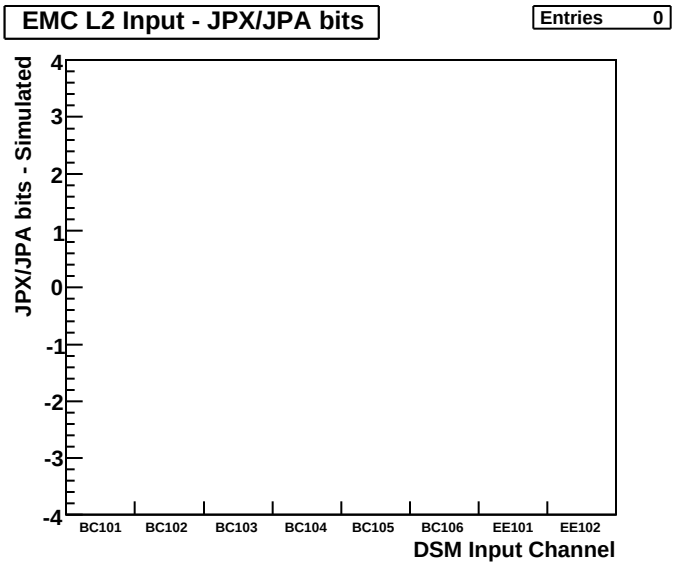

Endcap EMC L1 Input - High Eta Sum
Entries 629292
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

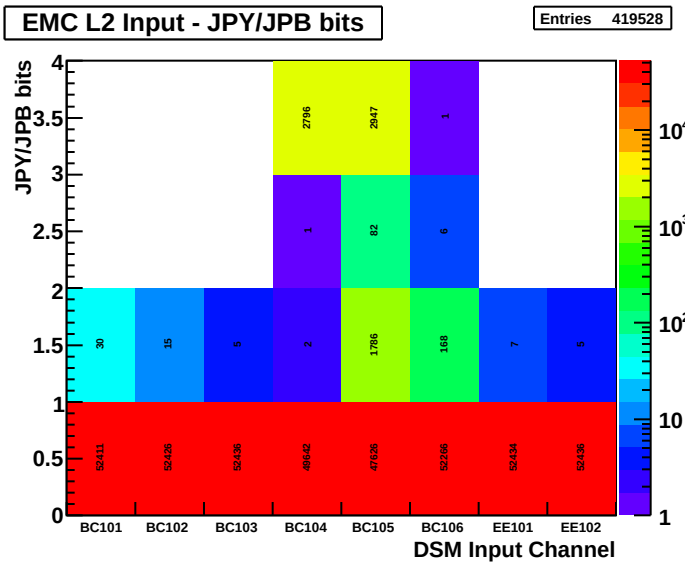

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

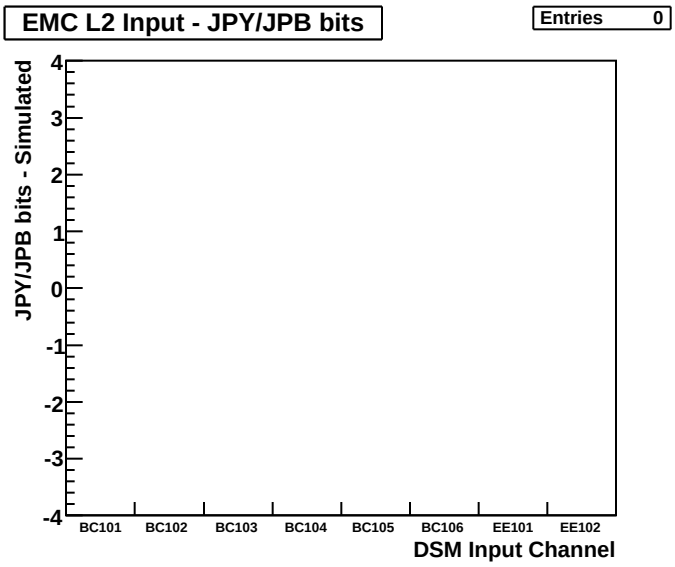

Endcap EMC L1 Input - High Tower Bits
Entries 629292
High Tower Bits
EE101
EE102
52441
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

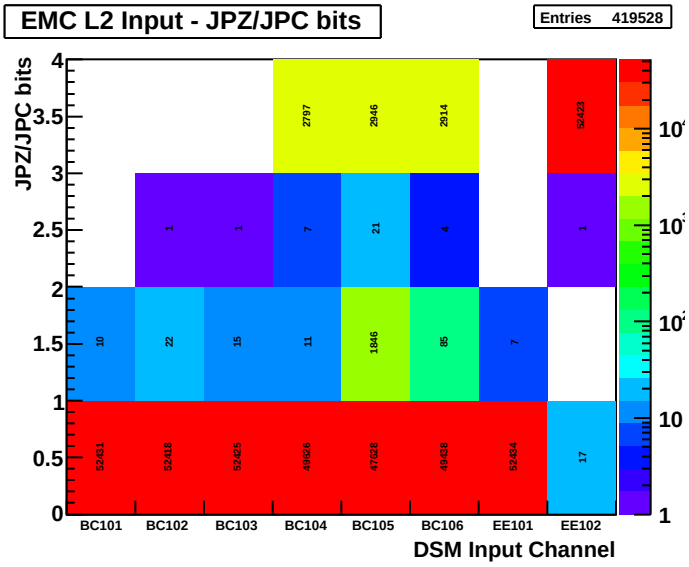

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

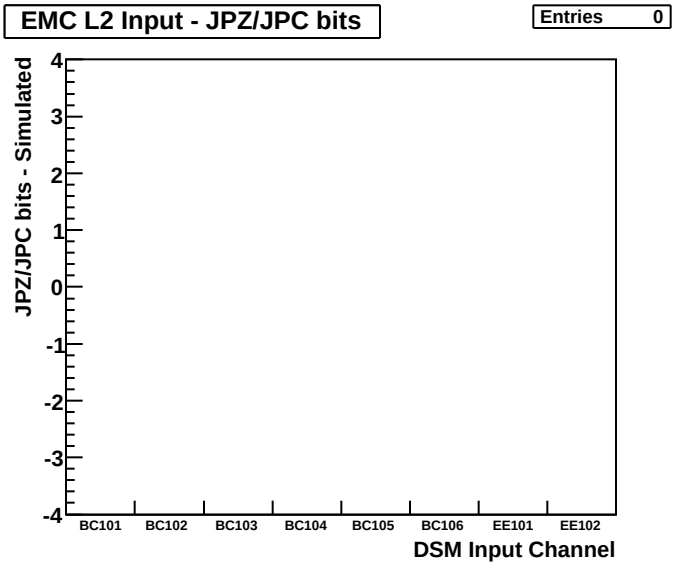

EMC L2 Input - JPX/JPA bits
Entries 419528
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

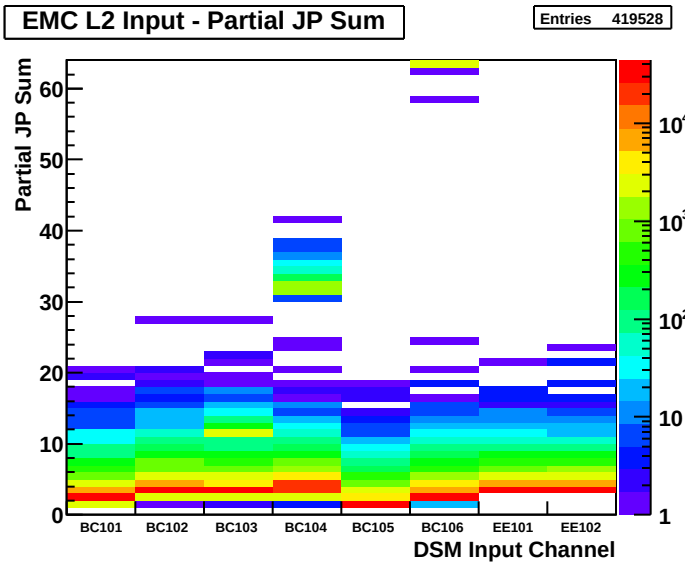

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

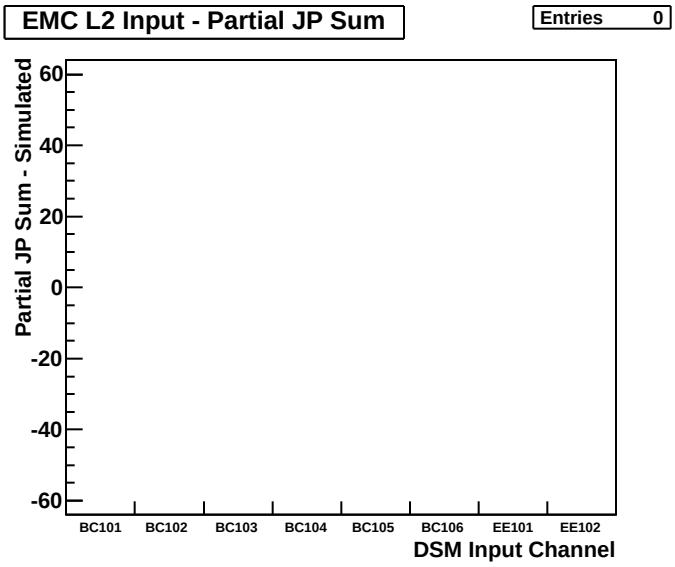

EMC L2 Input - JPY/JPB bits
Entries 419528
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

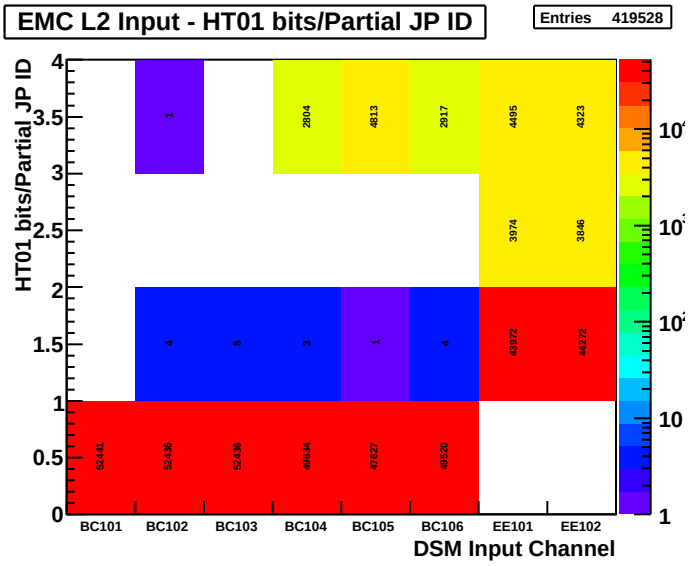

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

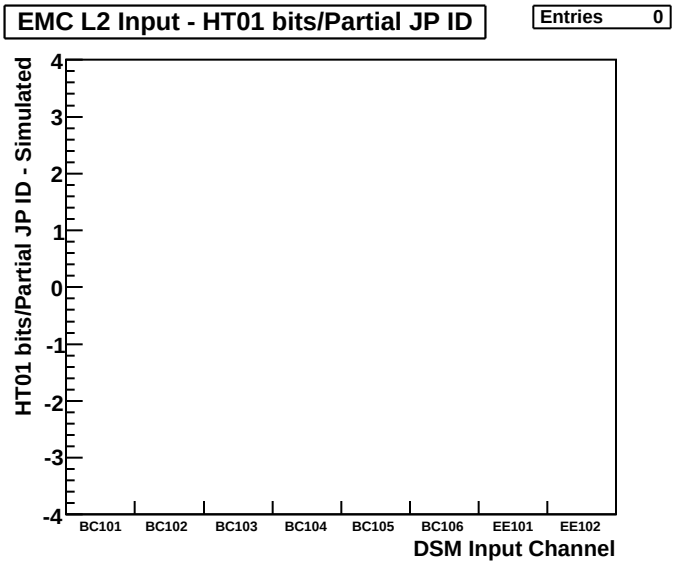

EMC L2 Input - JPZ/JPC bits
Entries 419528
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

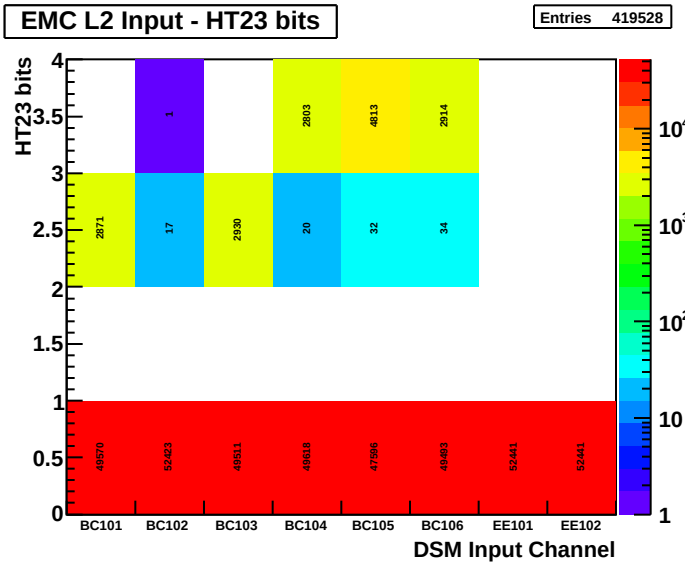

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

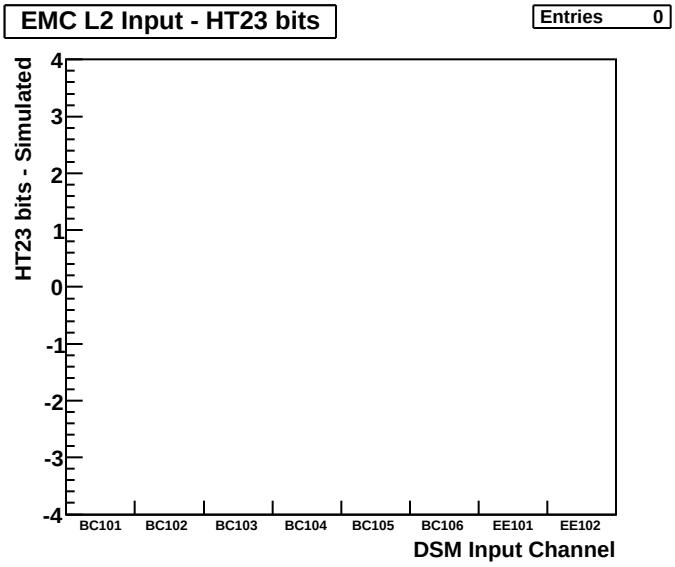

EMC L2 Input - Partial JP Sum
Entries 419528
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

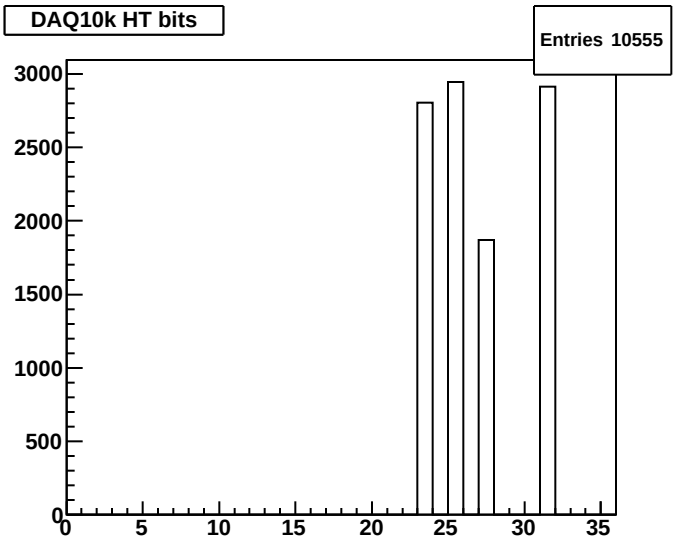

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

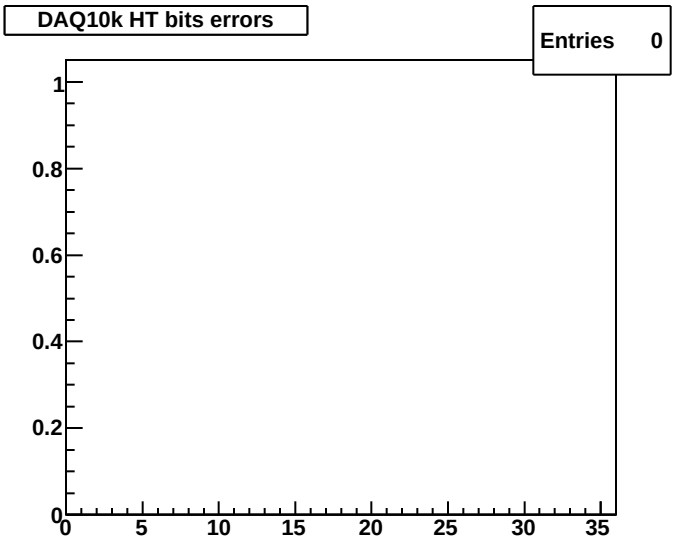

EMC L2 Input - HT01 bits/Partial JP ID
Entries 419528
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

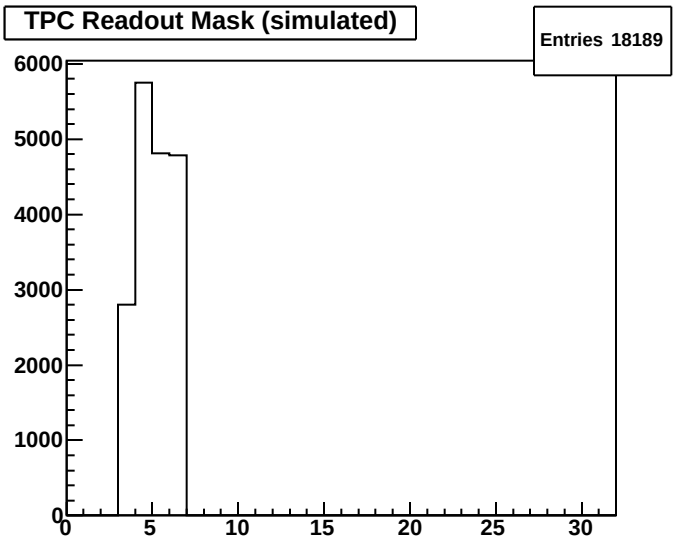

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

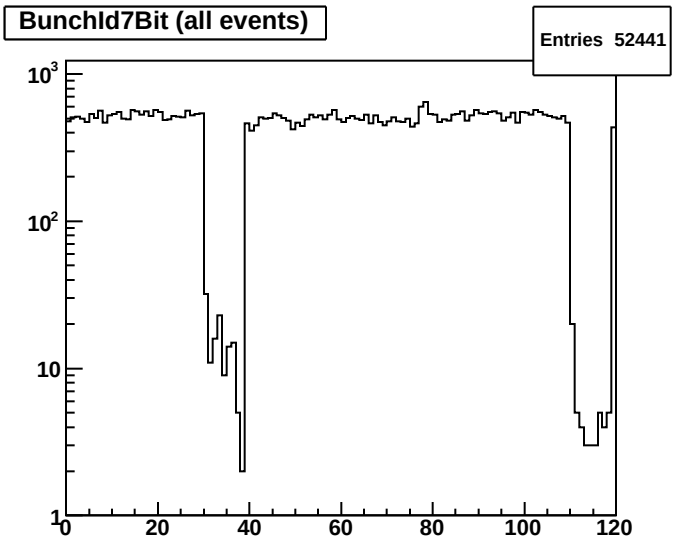

EMC L2 Input - HT23 bits
Entries 419528
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

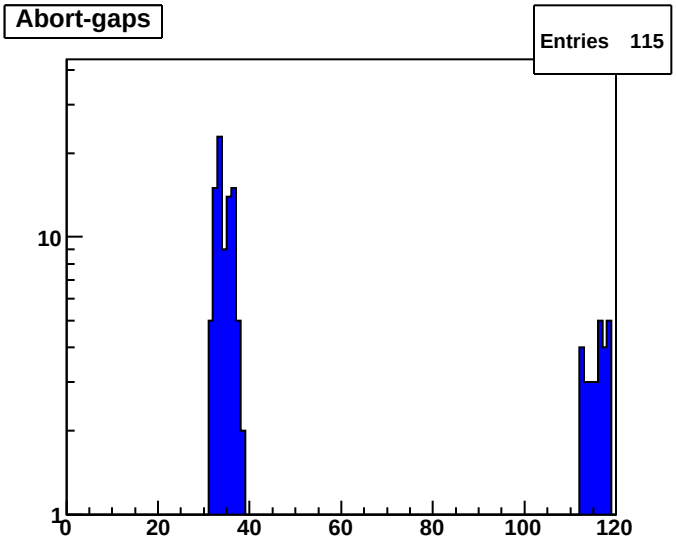

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

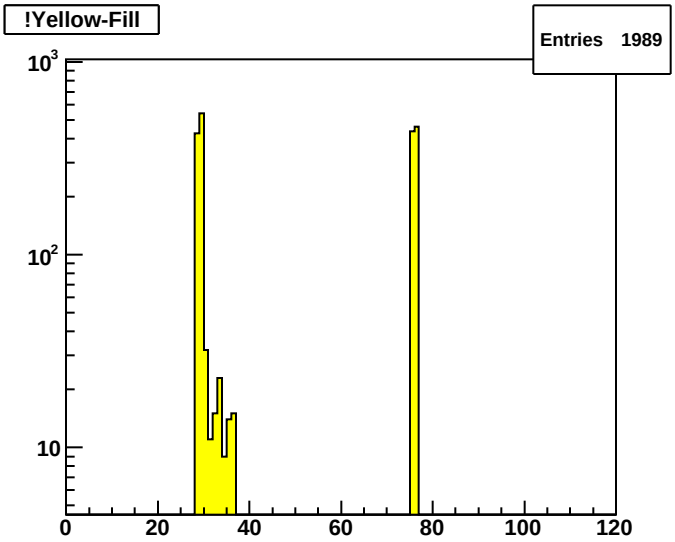

DAQ10k HT bits
Entries 10555
3000
2500
2000
1500
1000
500
0
0 5 10 15 20 25 30 35

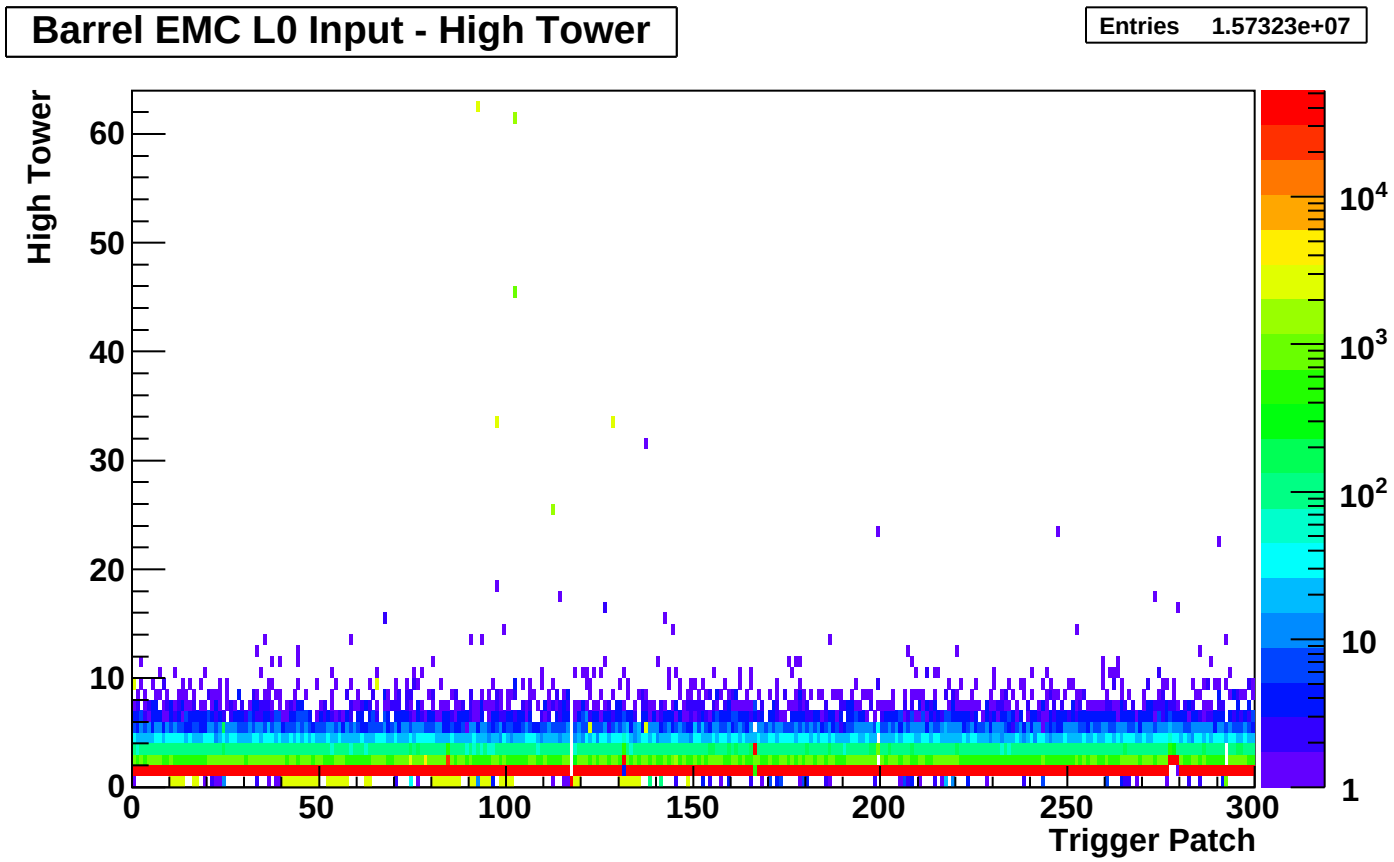

DAQ10k HT bits errors
Entries 0
1
0.8
0.6
0.4
0.2
0
0 5 10 15 20 25 30 35

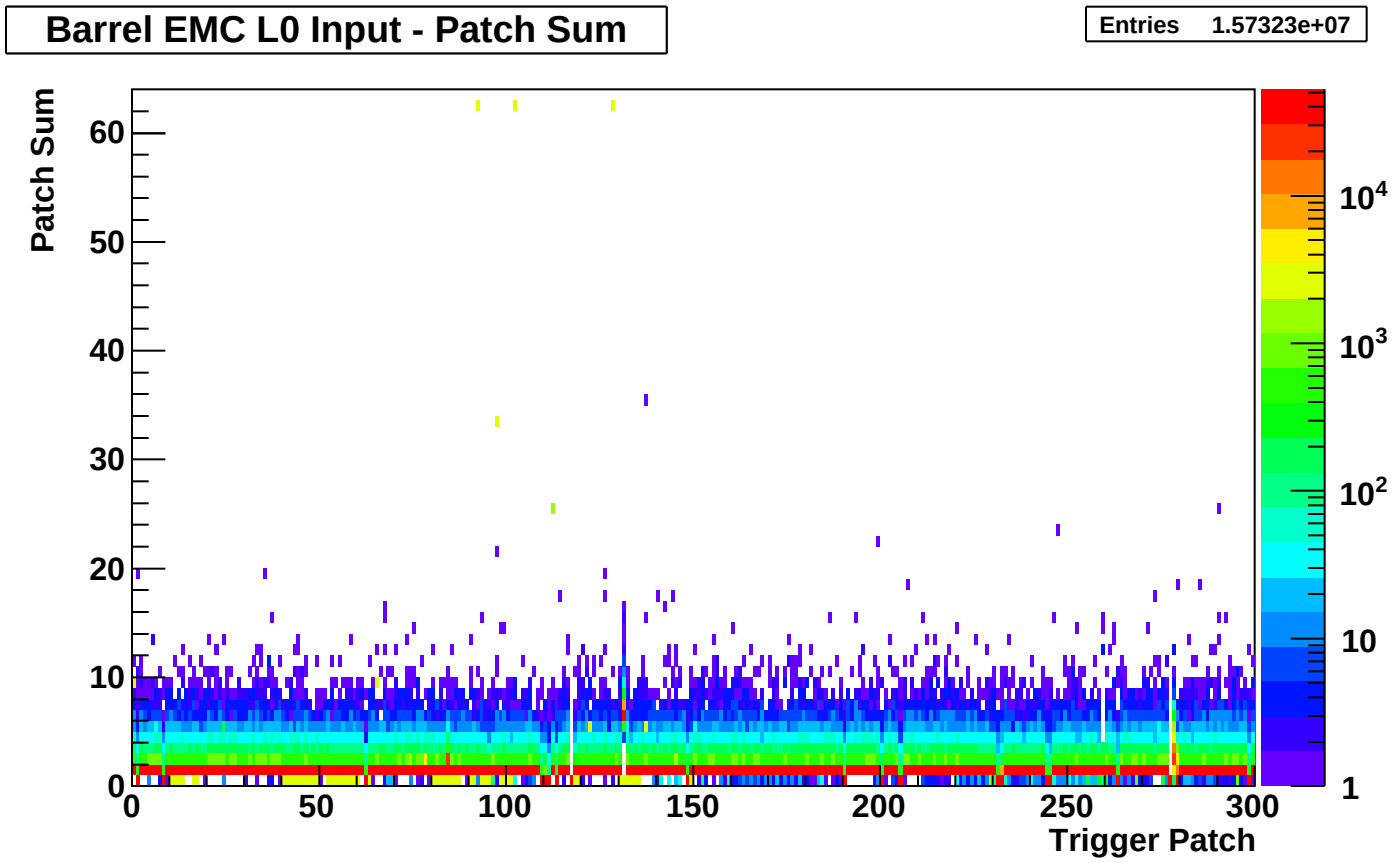

TPC Readout Mask (simulated)
Entries 18189
6000
5000
4000
3000
2000
1000
0
0 5 10 15 20 25 30

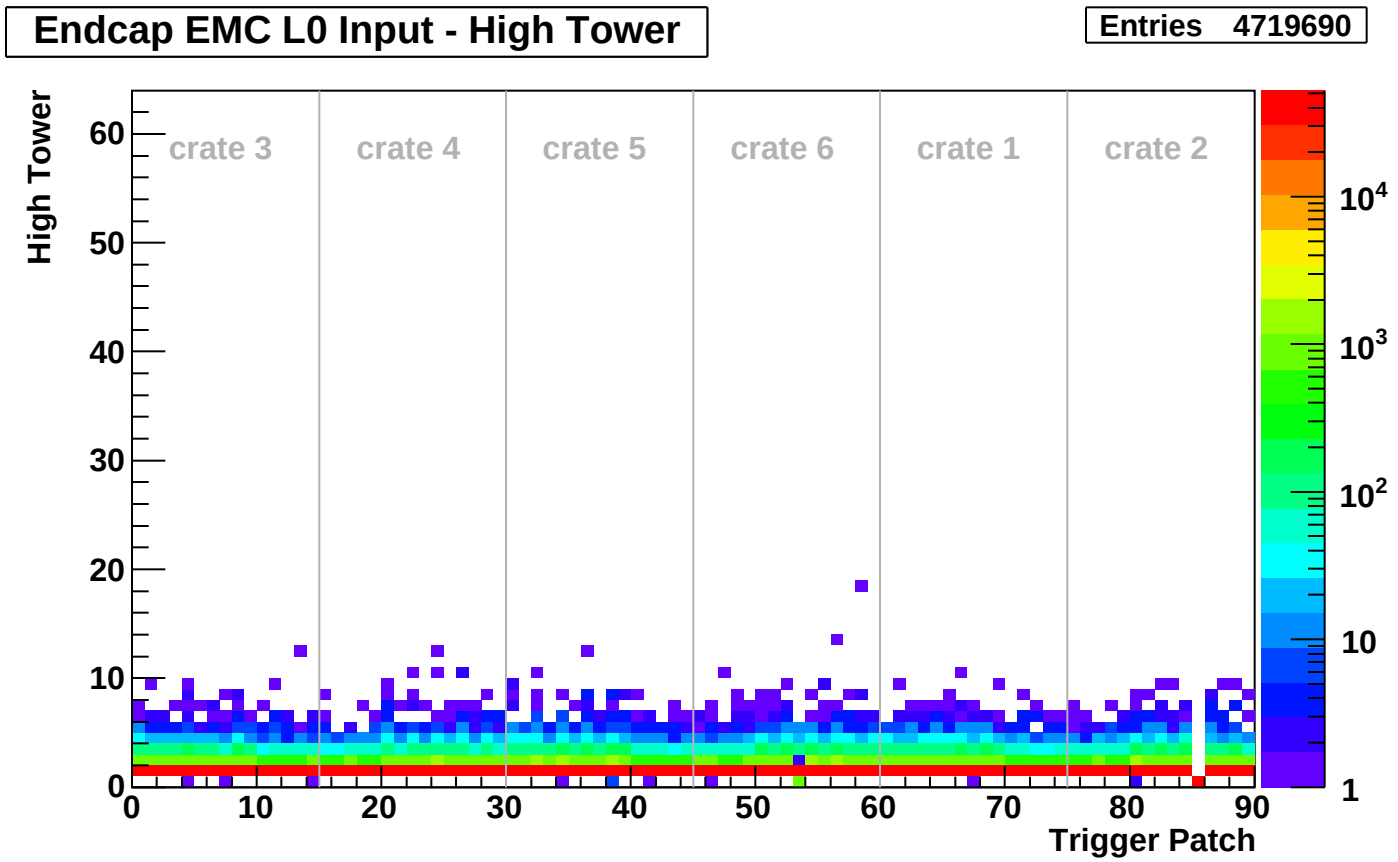

BunchId7Bit (all events)
Entries 52441
10^3
10^2
10
1
0 20 40 60 80 100 120

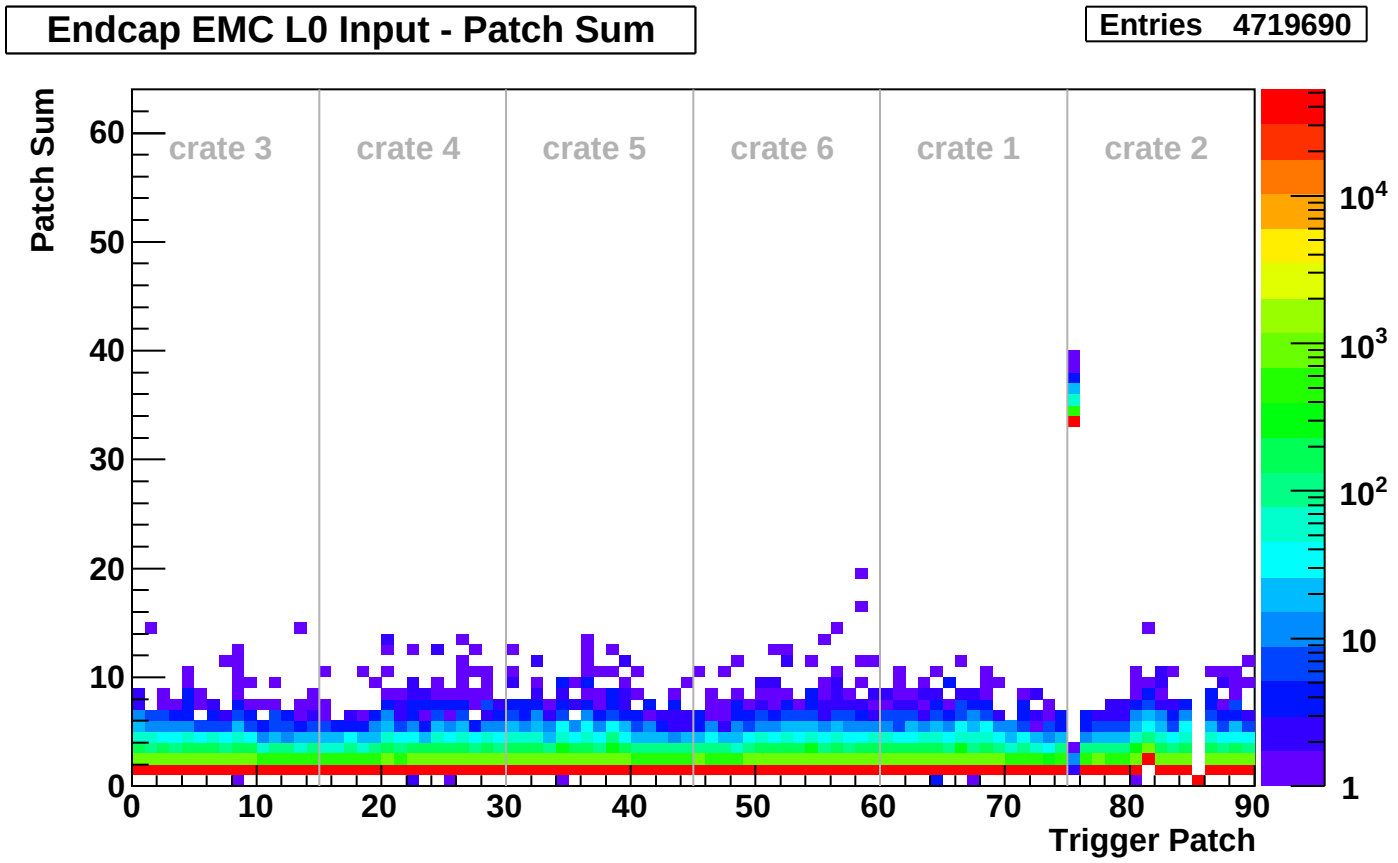

Abort-gaps
Entries 115
10
1
0 20 40 60 80 100 120

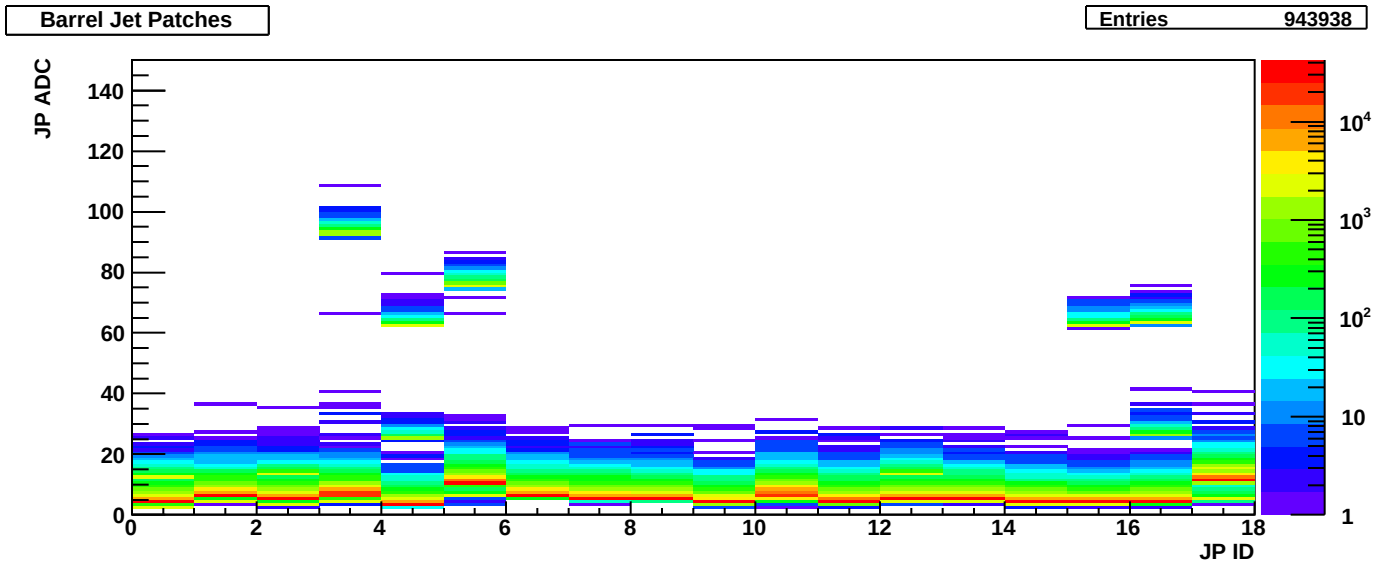

!Yellow-Fill
Entries 1989
10^3
10^2
10
0 20 40 60 80 100 120

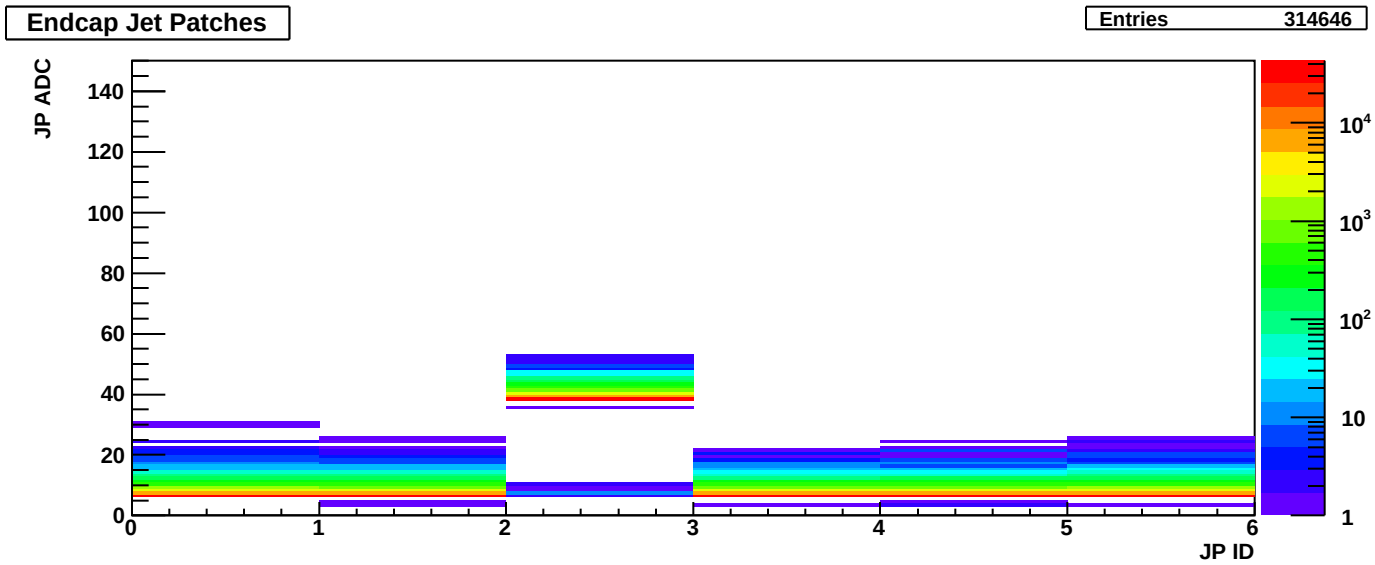

Barrel EMC L0 Input - High Tower
Entries 1.57323e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

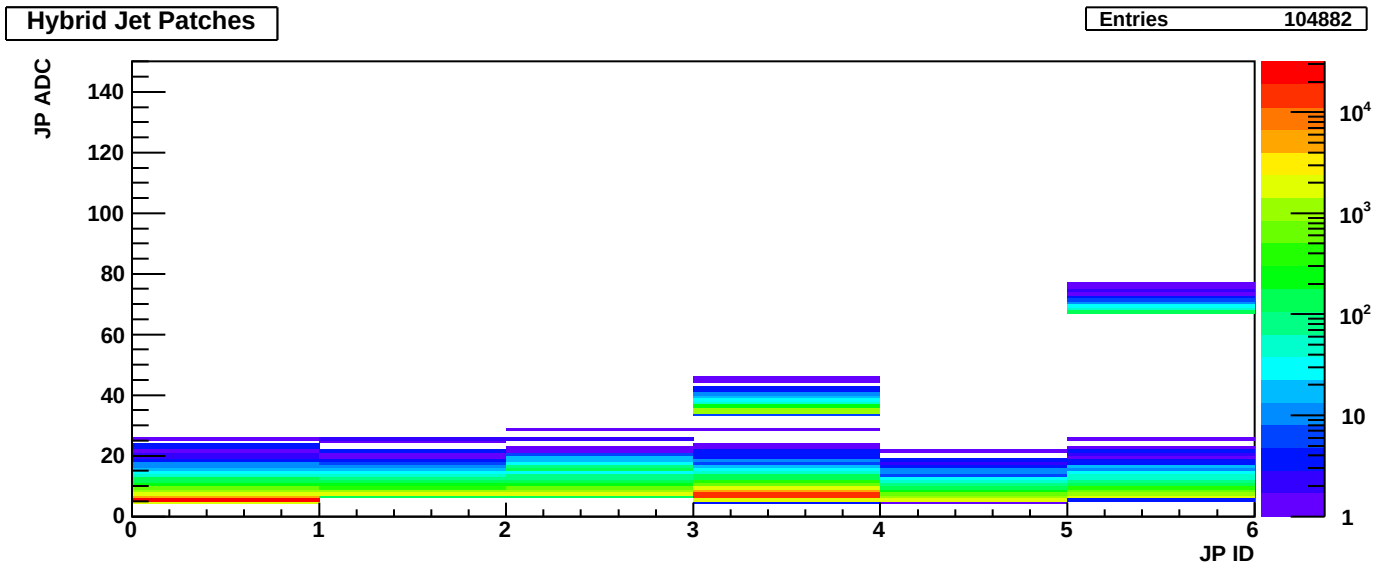

Barrel EMC L0 Input - Patch Sum
Entries 1.57323e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

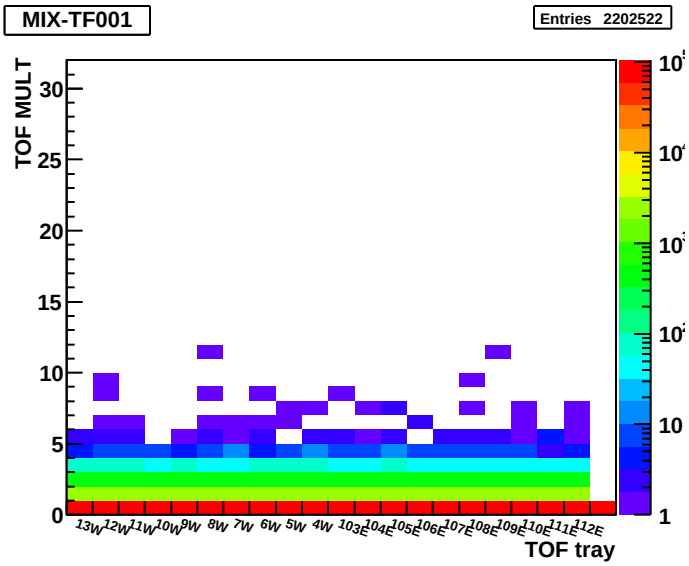

Endcap EMC L0 Input - High Tower
Entries 4719690
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

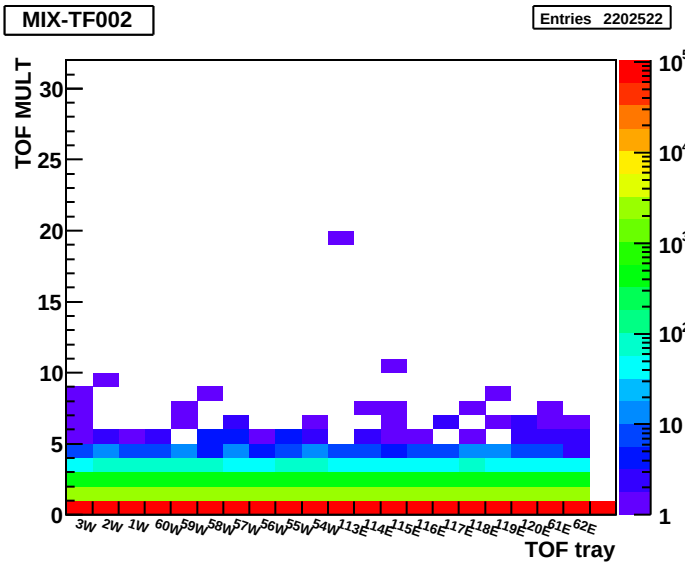

Endcap EMC L0 Input - Patch Sum
Entries 4719690
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

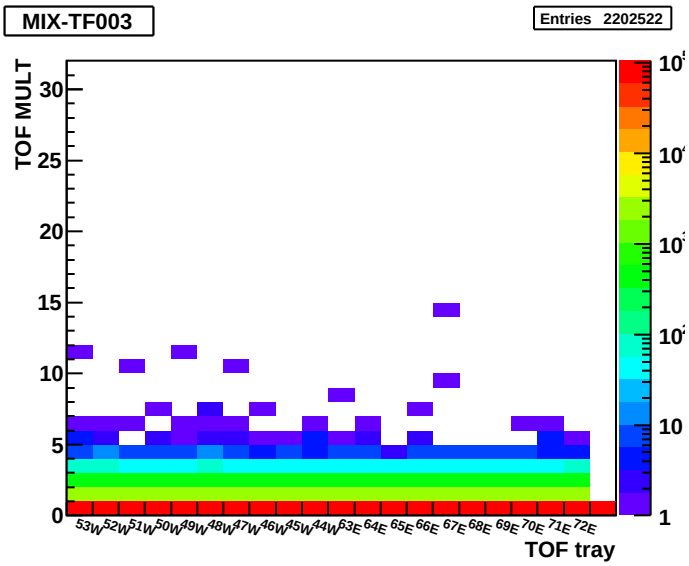

Barrel Jet Patches
Entries 943938
JP ADC
JP ID

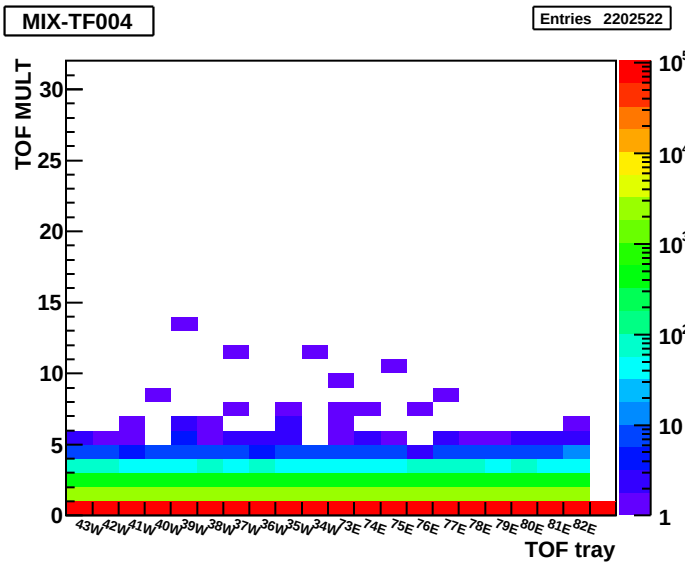

Endcap Jet Patches
Entries 314646
JP ADC
JP ID

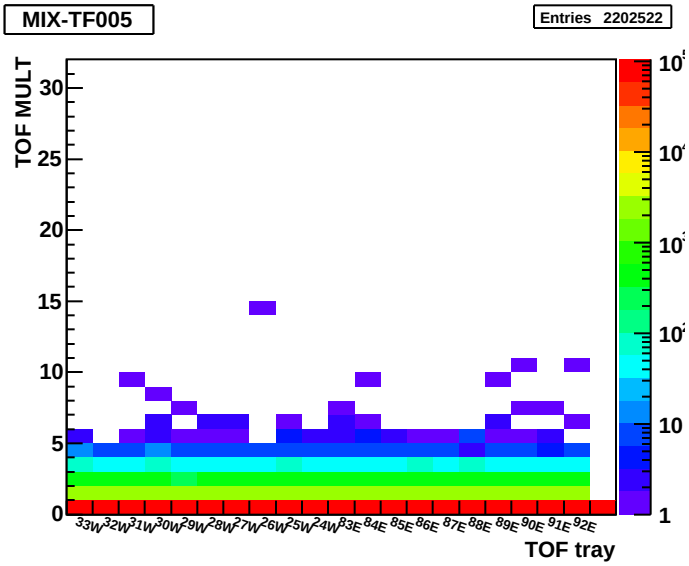

Hybrid Jet Patches
Entries 104882
JP ADC
JP ID

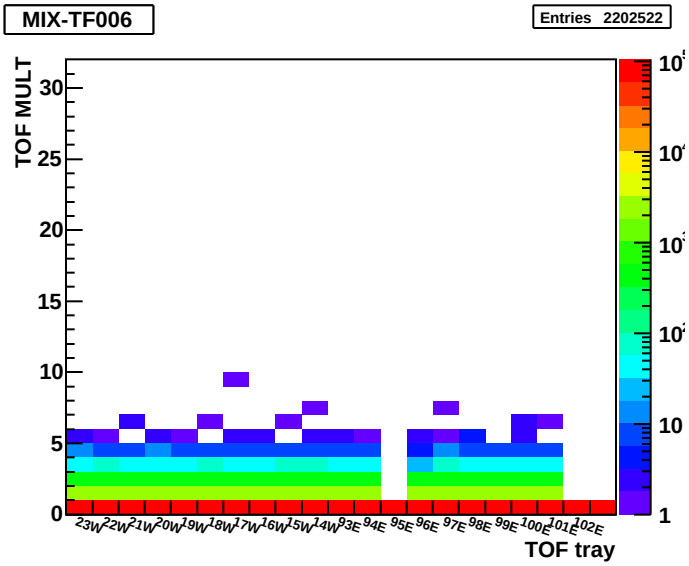

MIX-TF001
Entries 2202522
TOF MULT
TOF tray

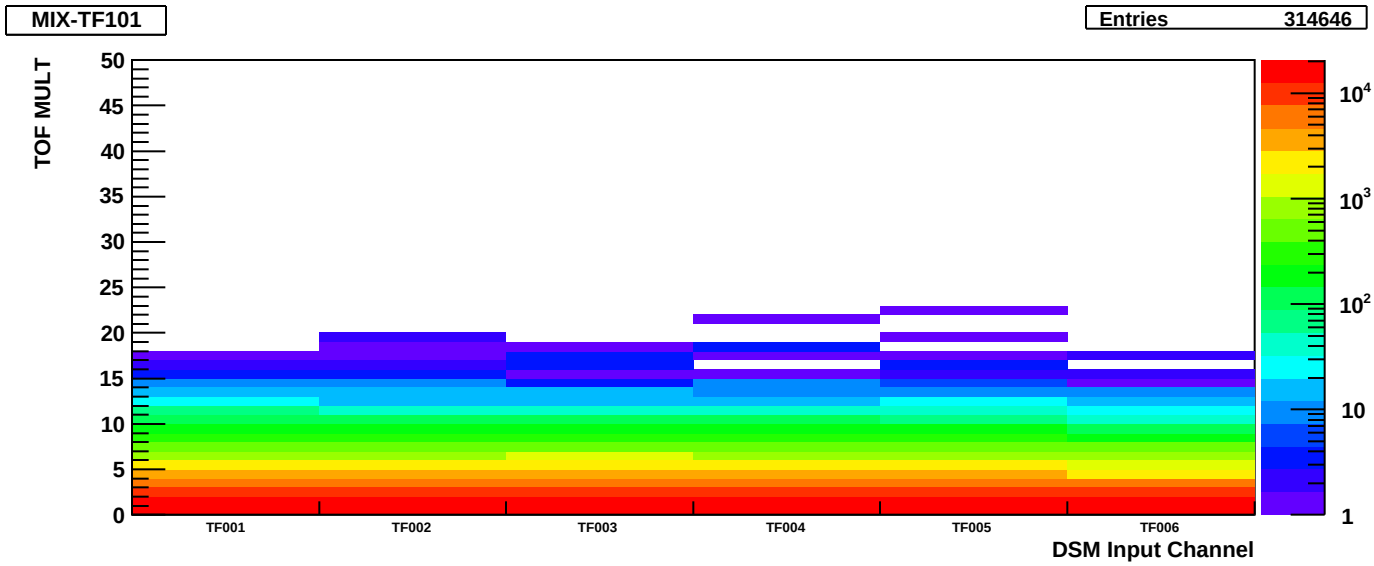

MIX-TF002
Entries 2202522
TOF MULT
TOF tray

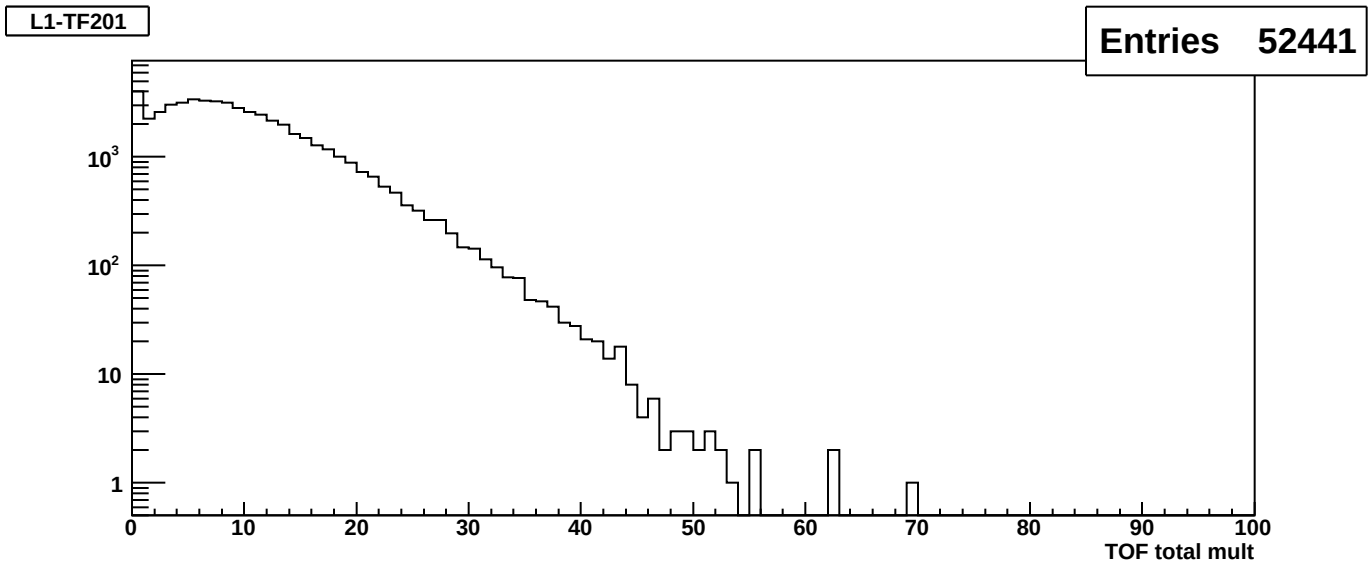

MIX-TF003
Entries 2202522
TOF MULT
TOF tray

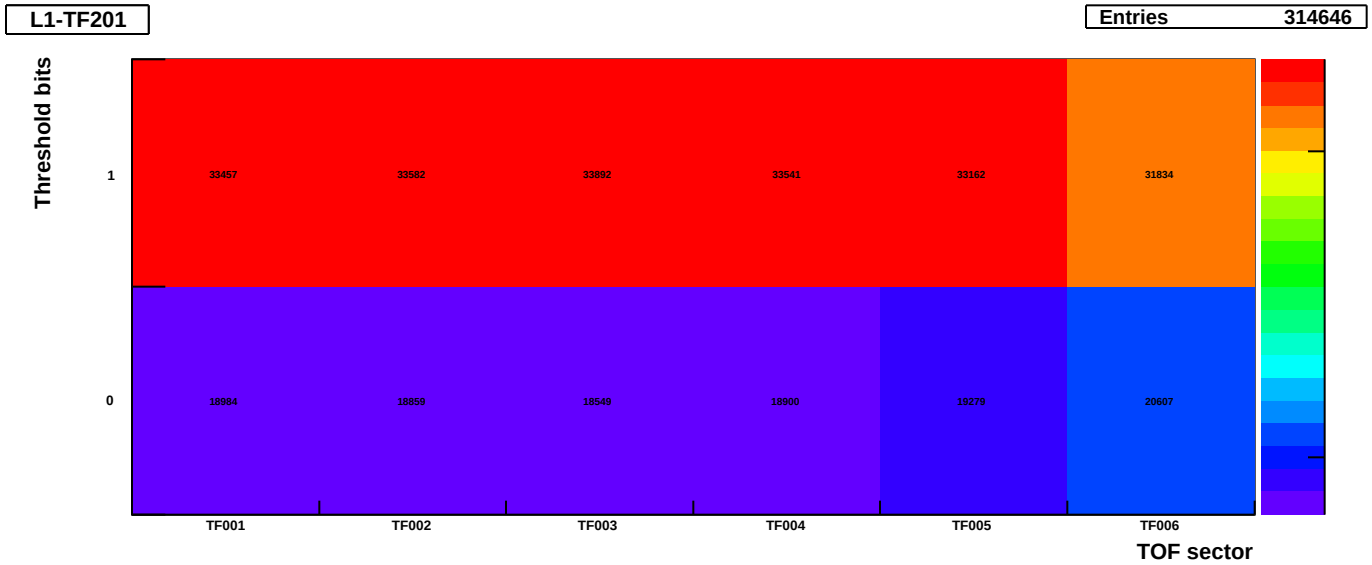

MIX-TF004
Entries 2202522
TOF MULT
TOF tray

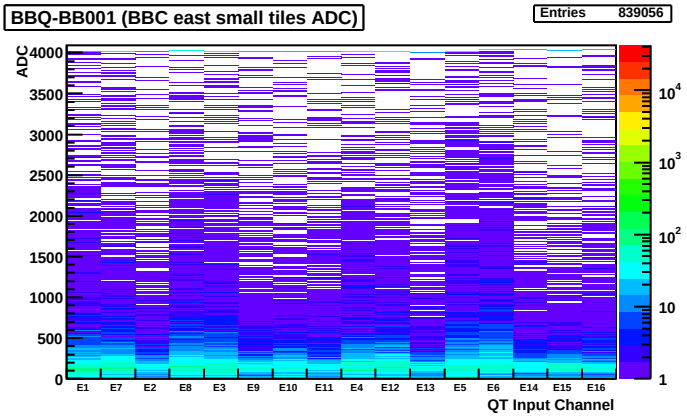

MIX-TF005
Entries 2202522
TOF MULT
TOF tray

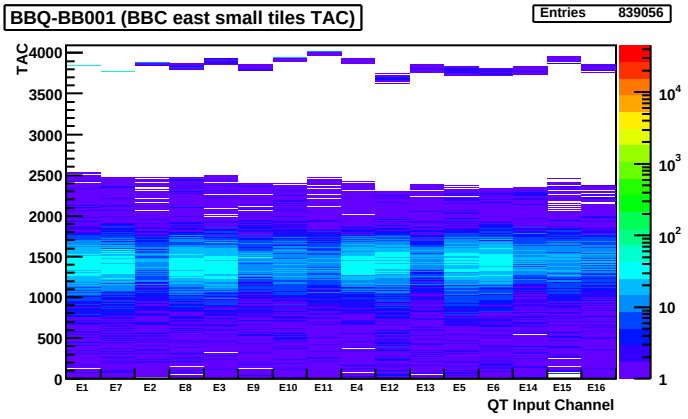

MIX-TF006
Entries 2202522
TOF MULT
TOF tray

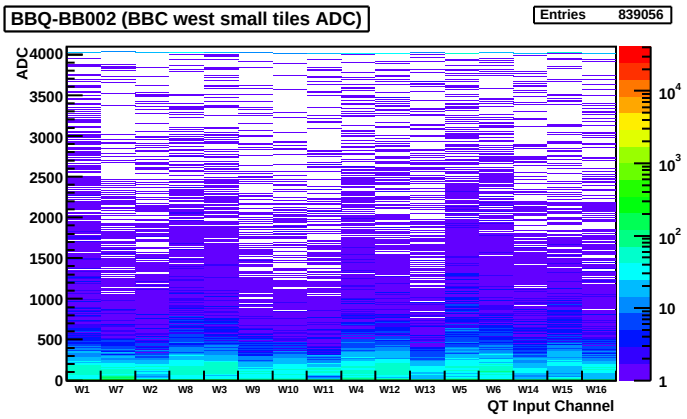

MIX-TF101
Entries 314646
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

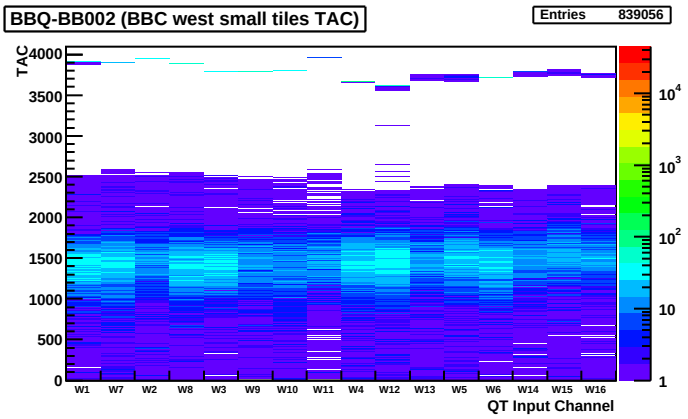

L1-TF201
Entries 52441
TOF total mult

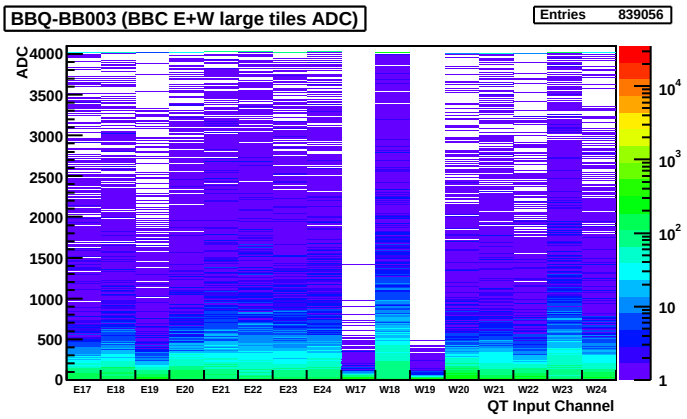

L1-TF201
Entries 314646
Threshold bits
33457
33582
33892
33541
33162
31834
18984
18859
18549
18900
19279
20607
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

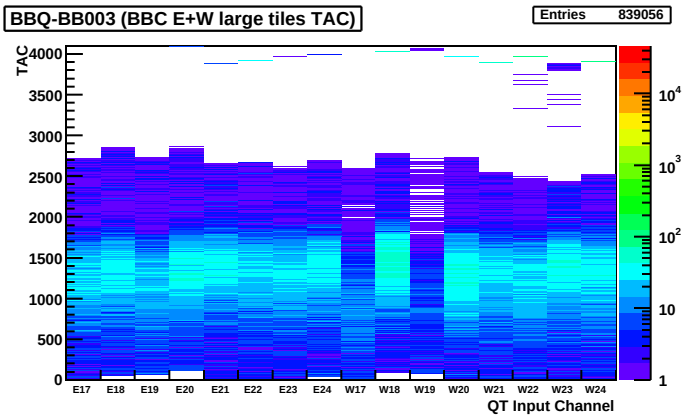

BBQ-BB001 (BBC east small tiles ADC)
Entries 839056
ADC
QT Input Channel

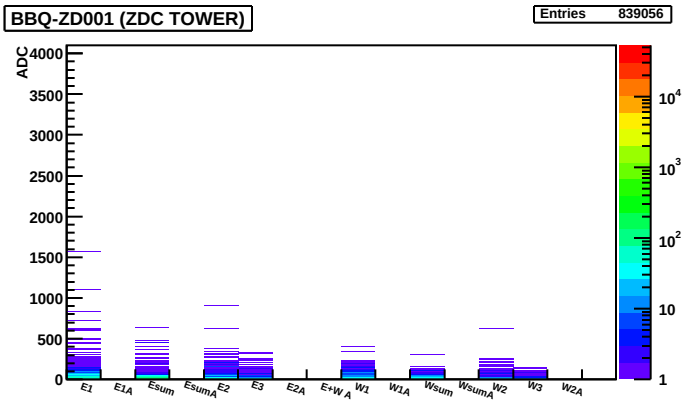

BBQ-BB001 (BBC east small tiles TAC)
Entries 839056
TAC
QT Input Channel

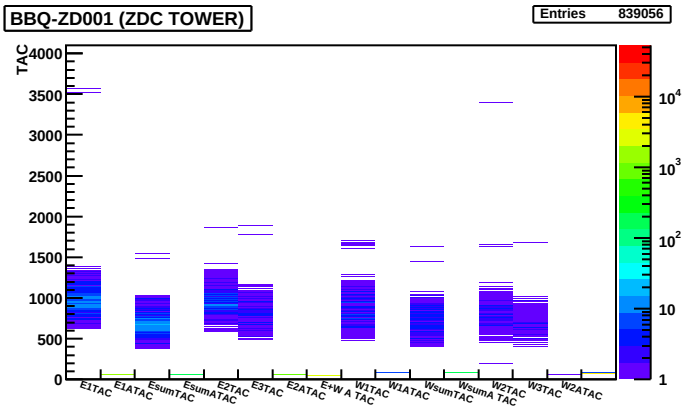

BBQ-BB002 (BBC west small tiles ADC)
Entries 839056
ADC
QT Input Channel

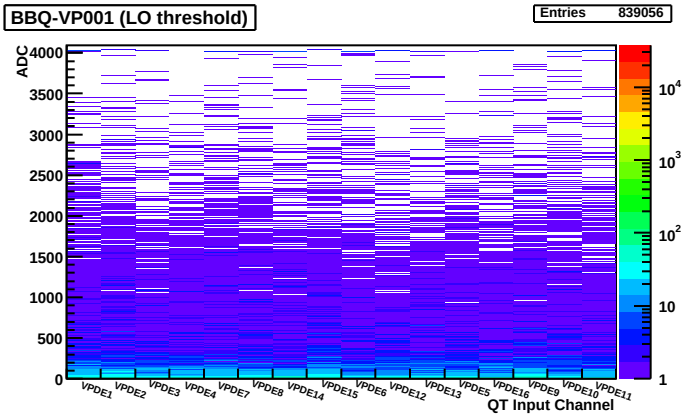

BBQ-BB002 (BBC west small tiles TAC)
Entries 839056
TAC
QT Input Channel

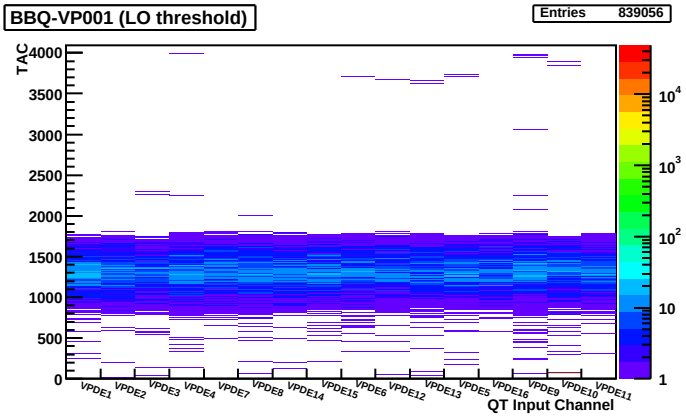

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 839056
ADC
QT Input Channel

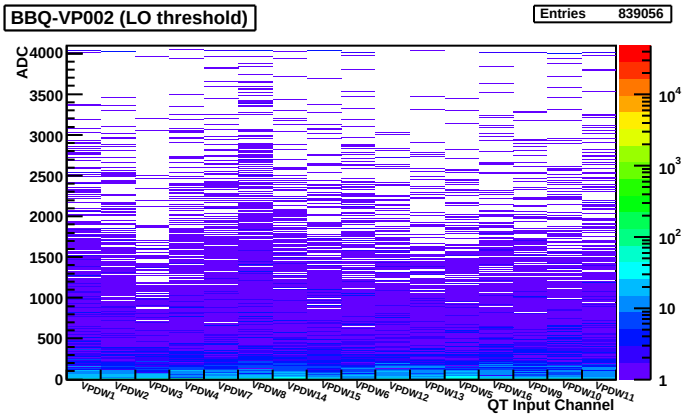

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 839056
TAC
QT Input Channel

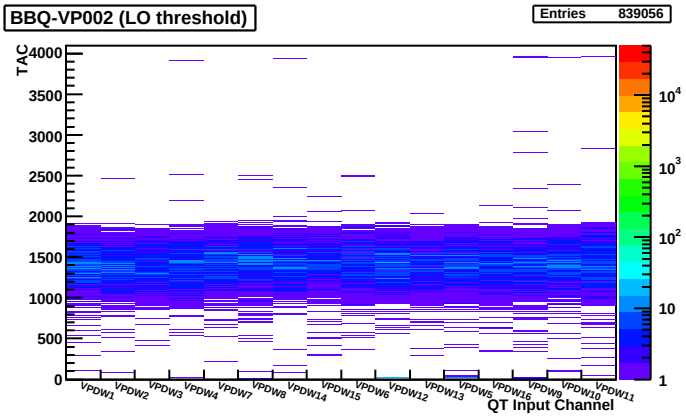

BBQ-ZD001 (ZDC TOWER)
Entries 839056
ADC

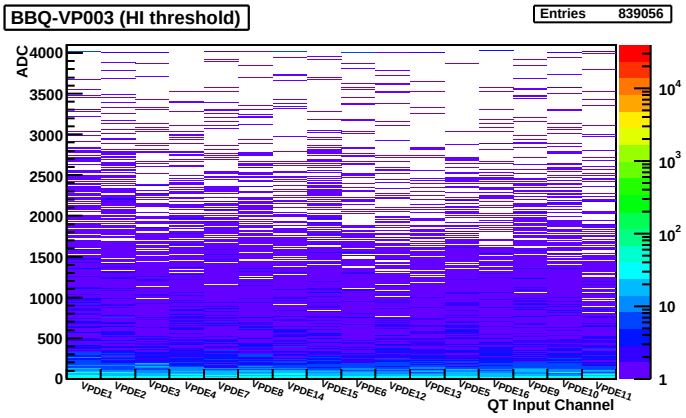

BBQ-ZD001 (ZDC TOWER)
Entries 839056
TAC

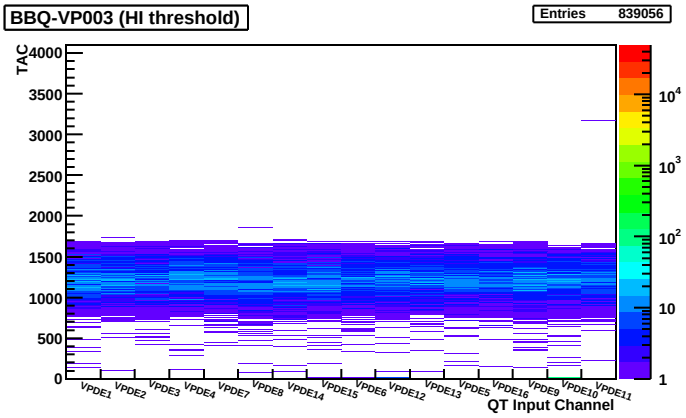

BBQ-VP001 (LO threshold)
Entries 839056
ADC
QT Input Channel

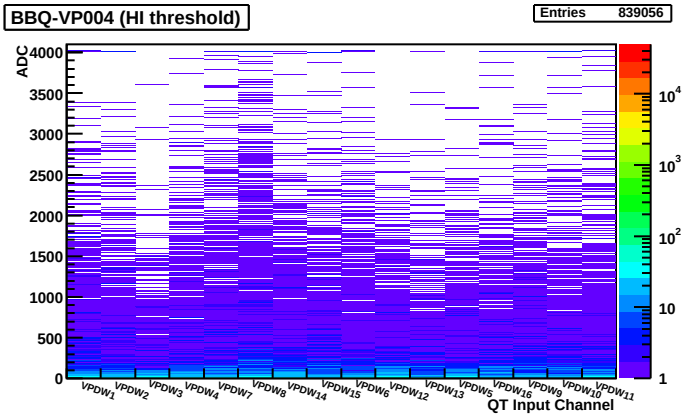

BBQ-VP001 (LO threshold)
Entries 839056
TAC
QT Input Channel

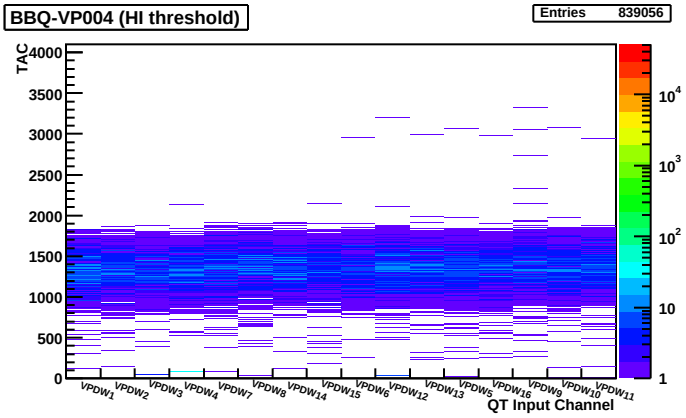

BBQ-VP002 (LO threshold)
Entries 839056
ADC
QT Input Channel

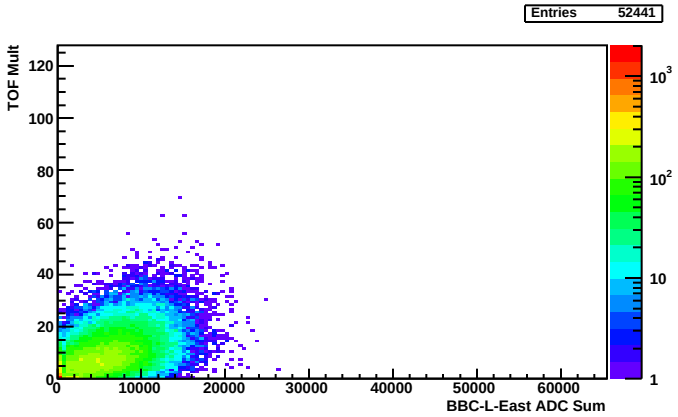

BBQ-VP002 (LO threshold)
Entries 839056
TAC
QT Input Channel

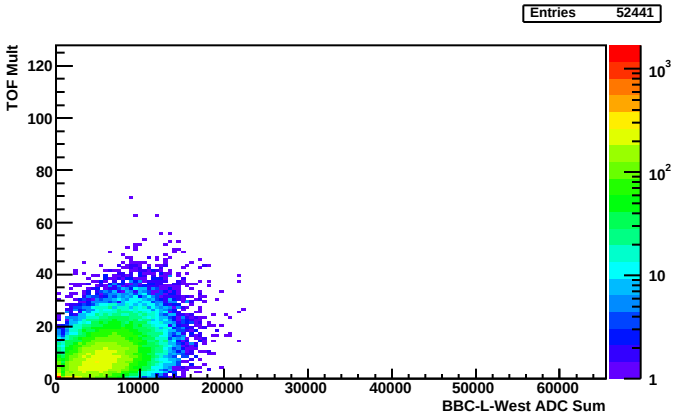

BBQ-VP003 (HI threshold)
Entries 839056
ADC
QT Input Channel

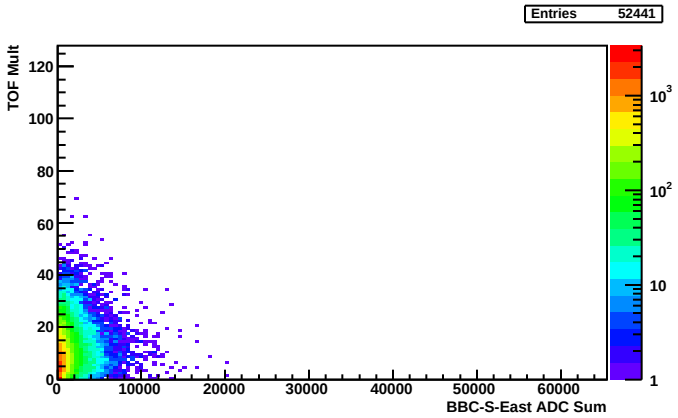

BBQ-VP003 (HI threshold)
Entries 839056
TAC
QT Input Channel

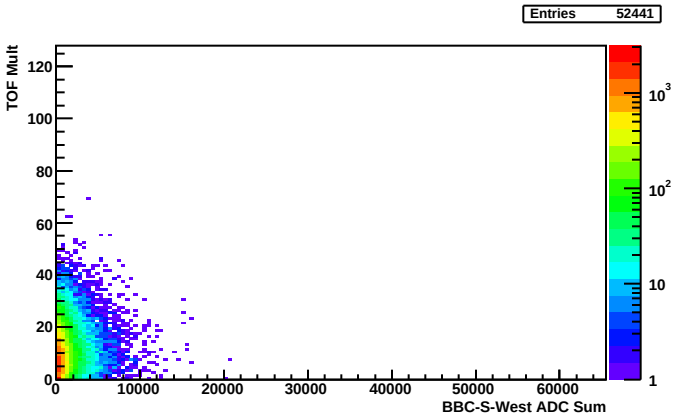

BBQ-VP004 (HI threshold)
Entries 839056
ADC
QT Input Channel

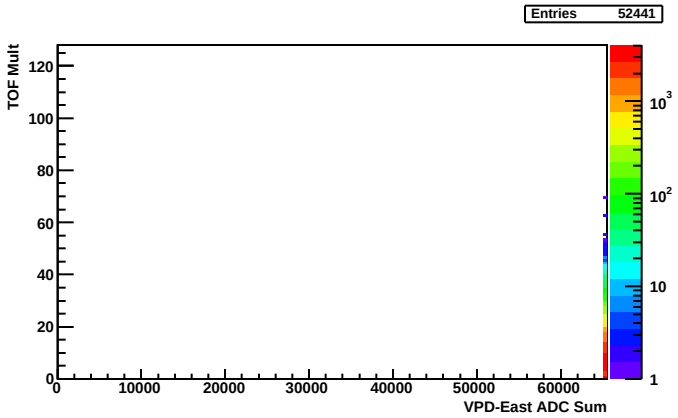

BBQ-VP004 (HI threshold)
Entries 839056
TAC
QT Input Channel

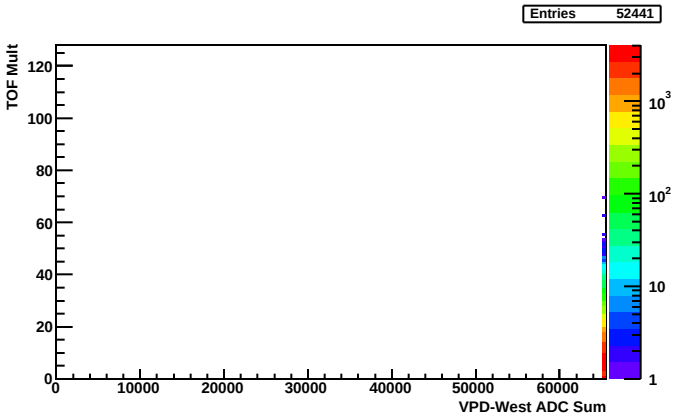

Entries 52441
TOF Mult
BBC-L-East ADC Sum

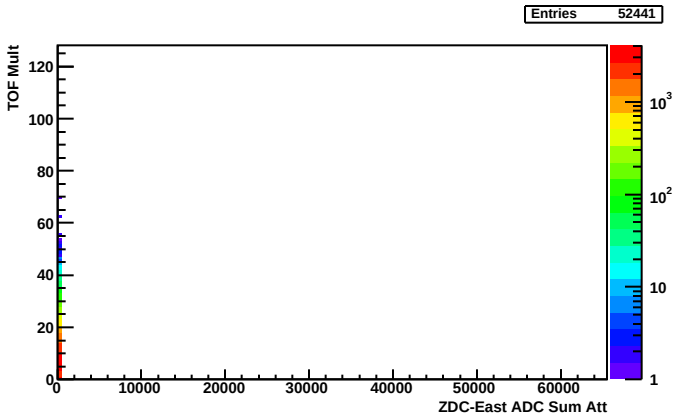

Entries 52441
TOF Mult
BBC-L-West ADC Sum

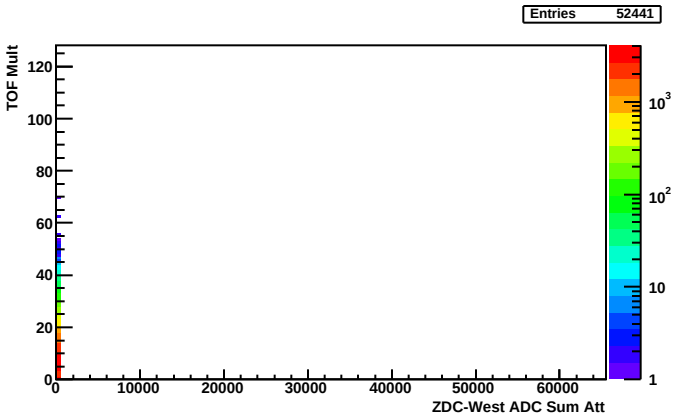

Entries 52441
TOF Mult
BBC-S-East ADC Sum

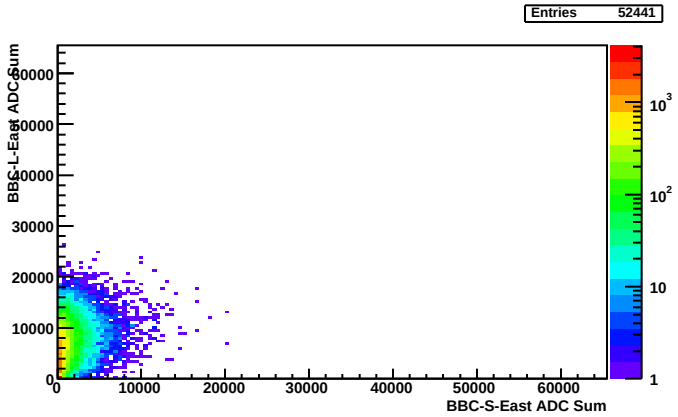

Entries 52441
TOF Mult
BBC-S-West ADC Sum

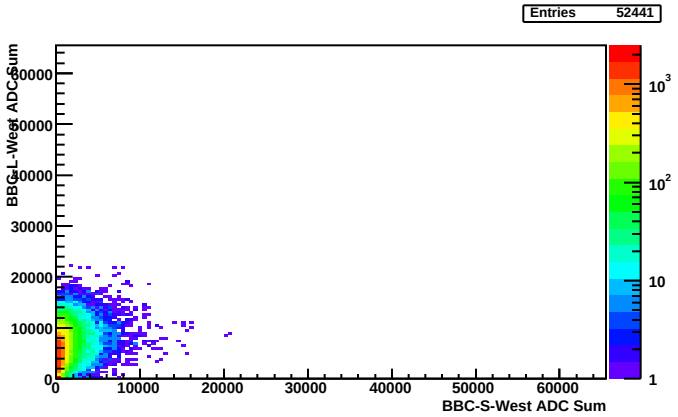

Entries 52441
TOF Mult
VPD-East ADC Sum

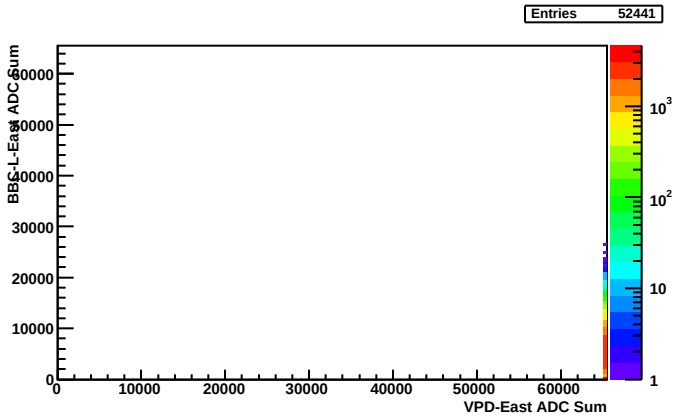

Entries 52441
TOF Mult
VPD-West ADC Sum

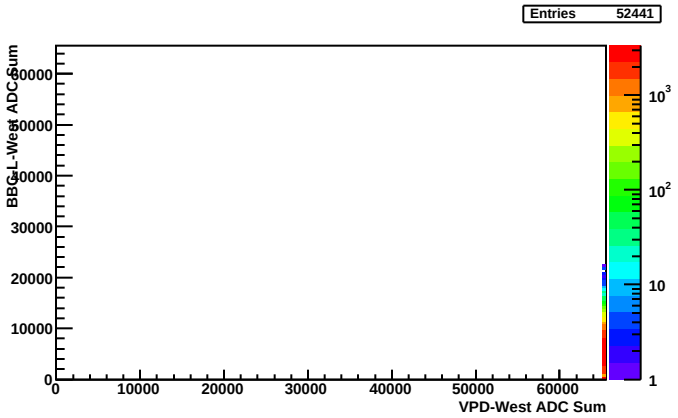

Entries 52441
TOF Mult
ZDC-East ADC Sum Att

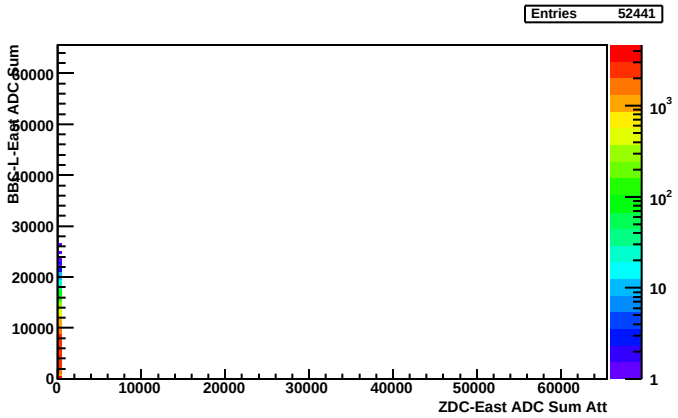

Entries 52441
TOF Mult
ZDC-West ADC Sum Att

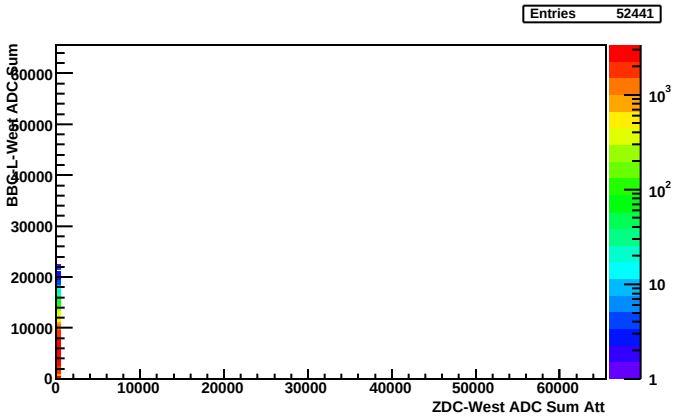

Entries 52441
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 52441
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 52441
BBC-L-East ADC Sum
VPD-East ADC Sum


Entries 52441
BBC-L-West ADC Sum
VPD-West ADC Sum


Entries 52441
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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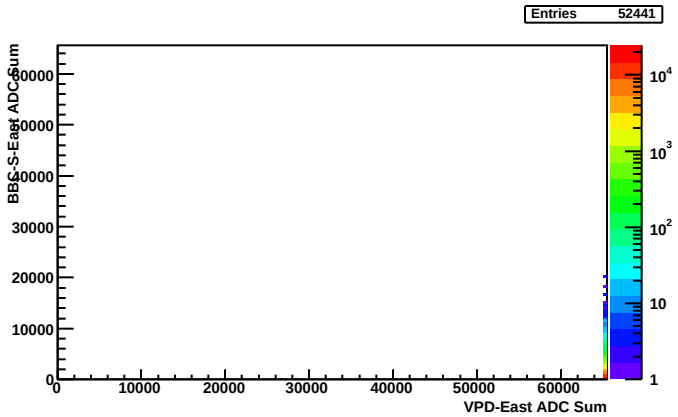
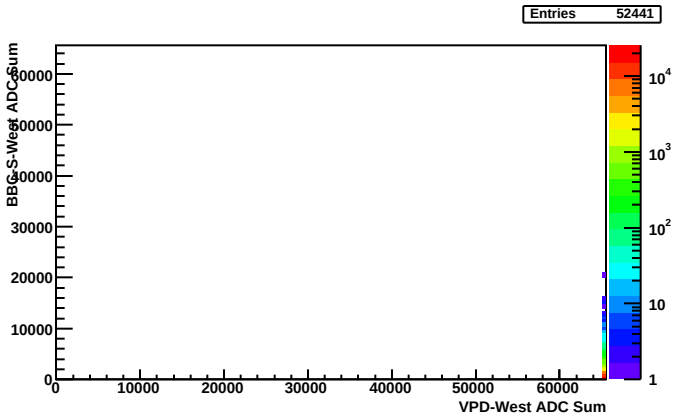
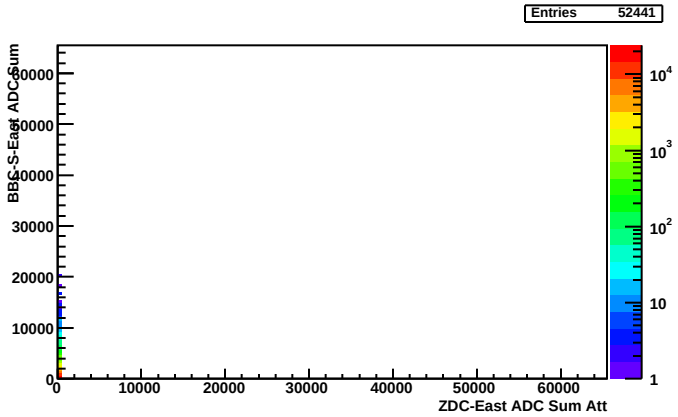
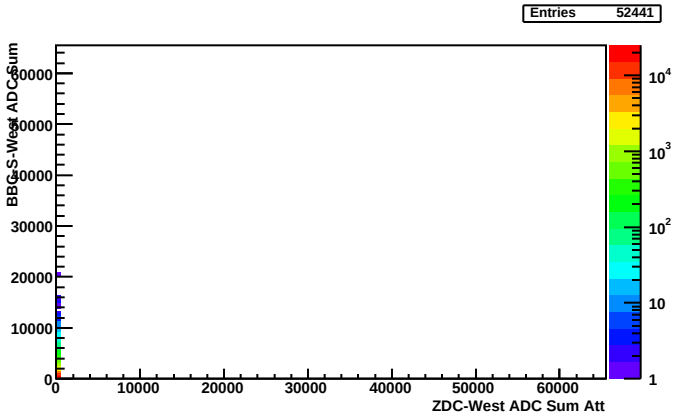
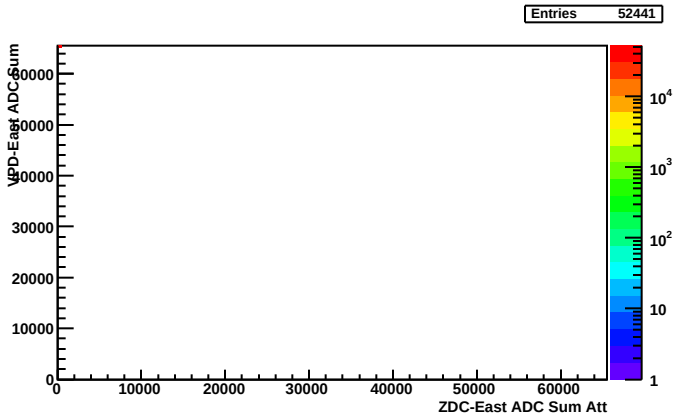
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

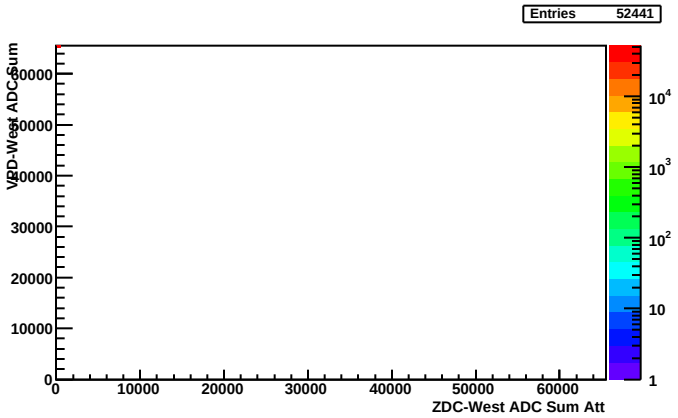

Entries 52441
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 52441
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 52441
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 52441
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 52441
VPD-East ADC Sum
ZDC-East ADC Sum Att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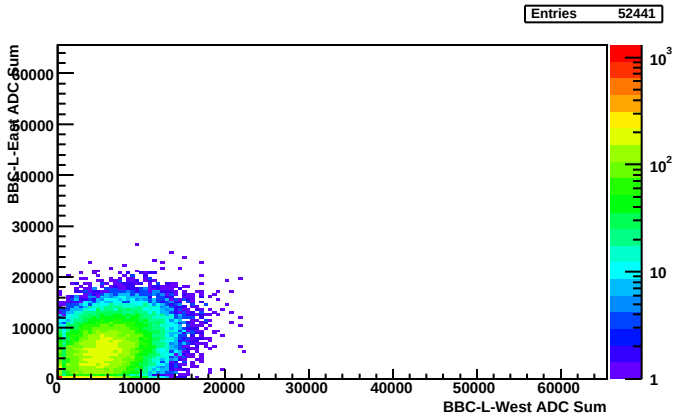
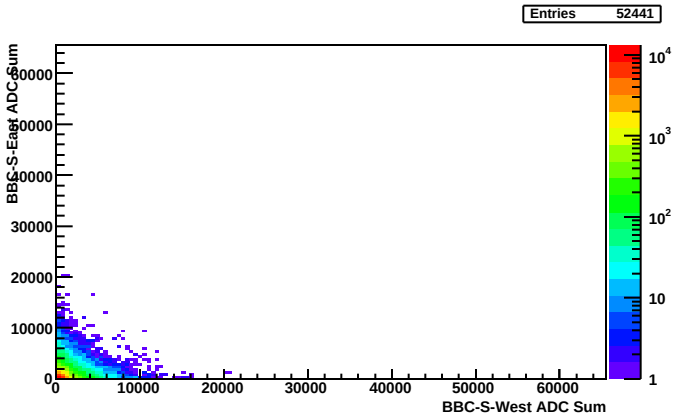
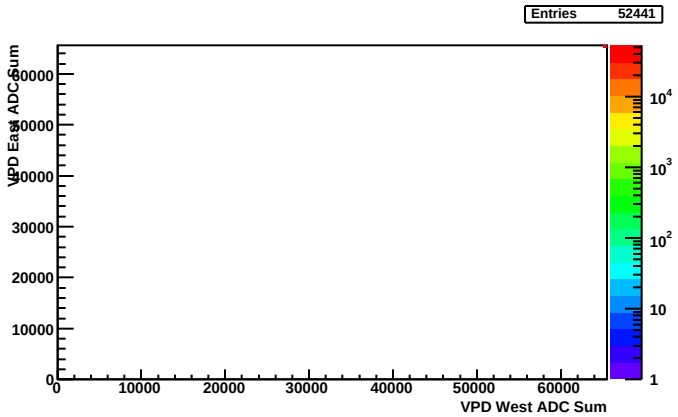
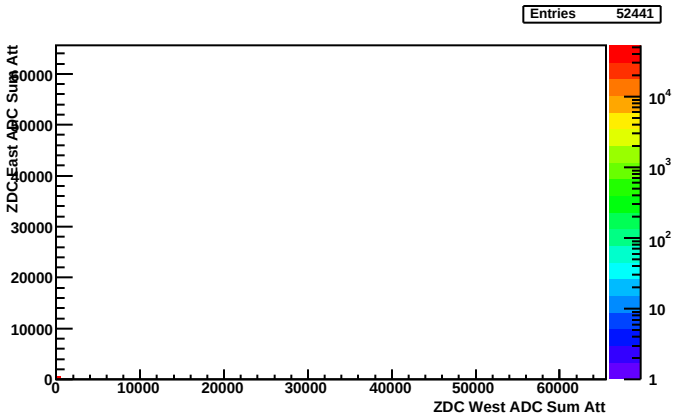
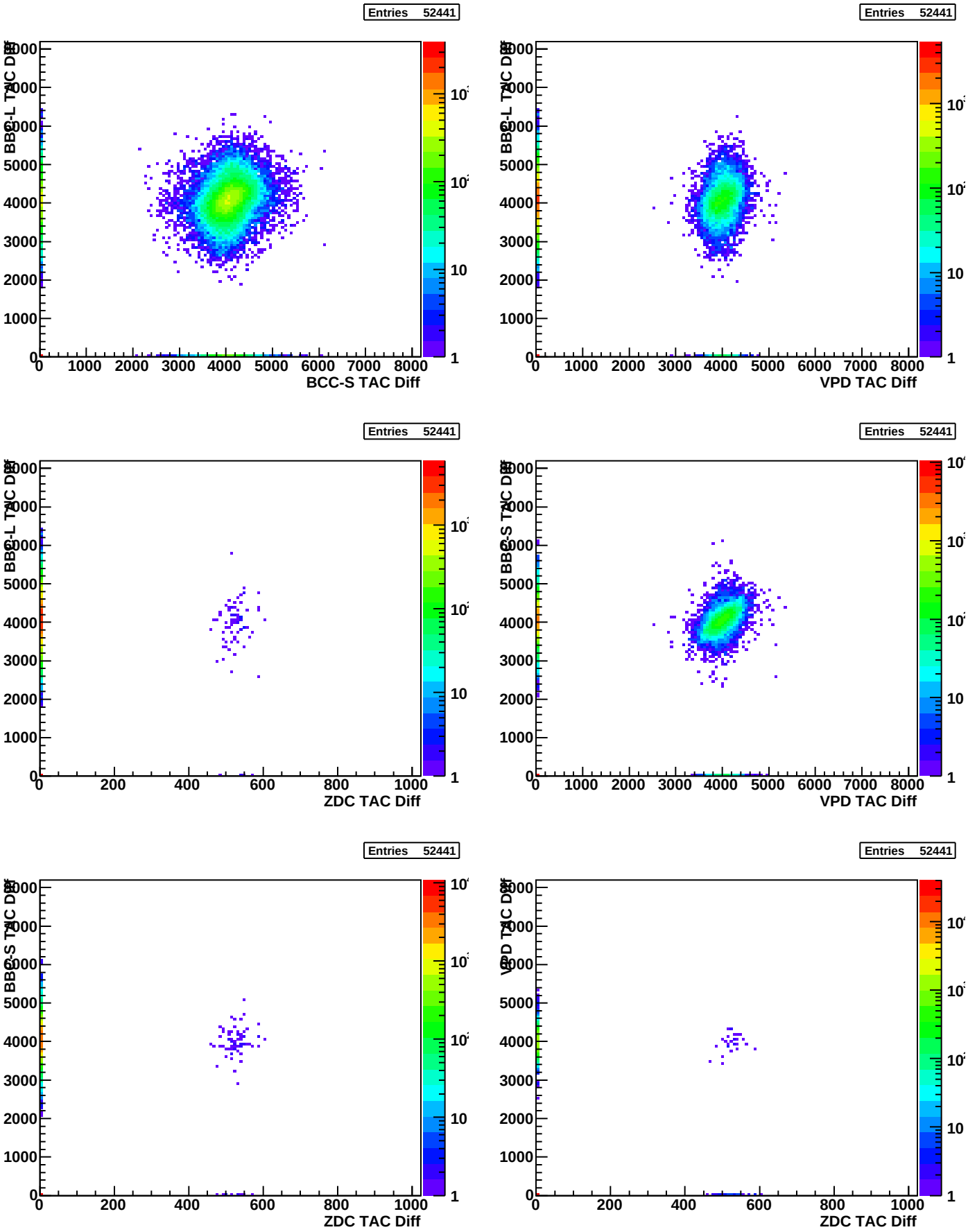
VPD-West ADC Sum
ZDC-West ADC Sum Att

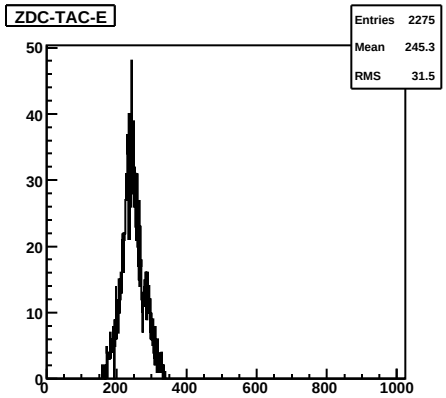

Entries 52441
BBC-L-East ADC Sum
BBC-L-West ADC Sum

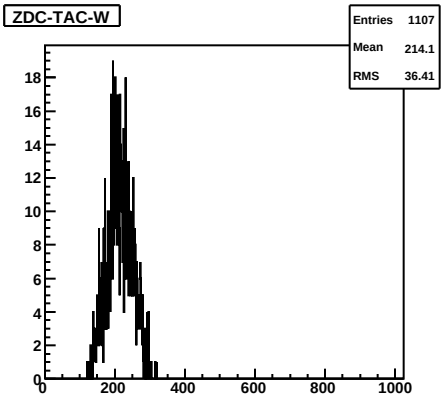

Entries 52441
BBC-S-East ADC Sum
BBC-S-West ADC Sum

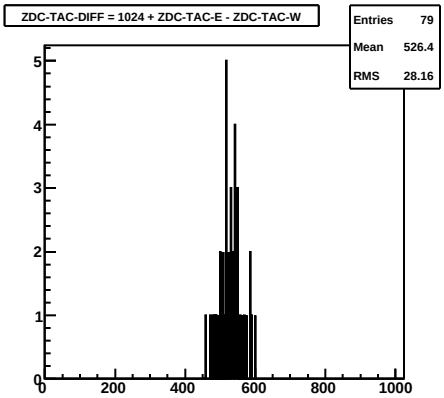

Entries 52441
VPD East ADC Sum
VPD West ADC Sum

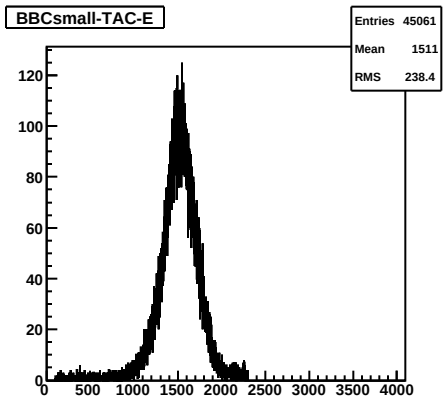

Entries 52441
ZDC East ADC Sum Att
ZDC West ADC Sum Att

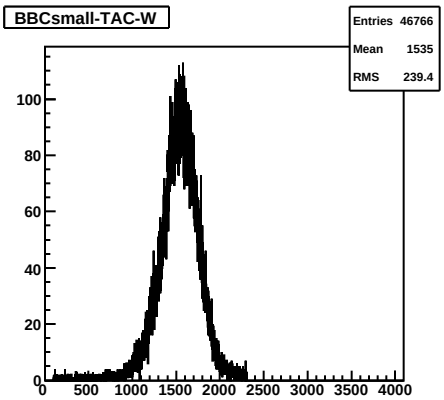

Entries 52441
BBC-L TAC Diff
BCC-S TAC Diff
Entries 52441
BBC-L TAC Diff
VPD TAC Diff
Entries 52441
BBC-L TAC Diff
ZDC TAC Diff
Entries 52441
BBC-S TAC Diff
VPD TAC Diff
Entries 52441
BBC-S TAC Diff
ZDC TAC Diff
Entries 52441
VPD TAC Diff
ZDC TAC Diff

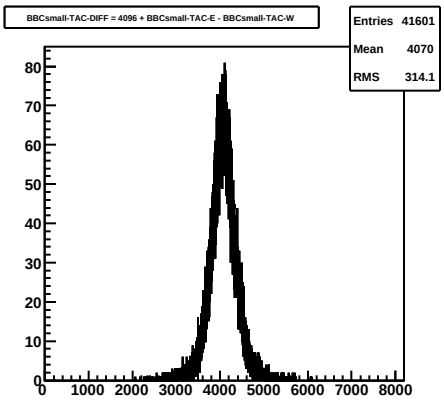

ZDC-TAC-E
Entries 2275
Mean 245.3
RMS 31.5

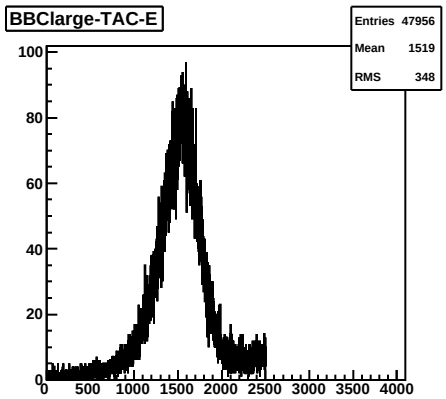

ZDC-TAC-W
Entries 1107
Mean 214.1
RMS 36.41

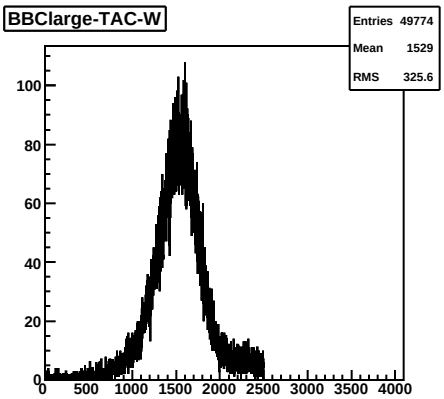

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 79
Mean 526.4
RMS 28.16

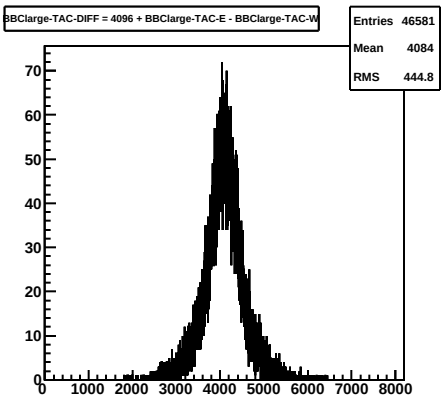

BBCsmall-TAC-E
Entries 45061
Mean 1511
RMS 238.4

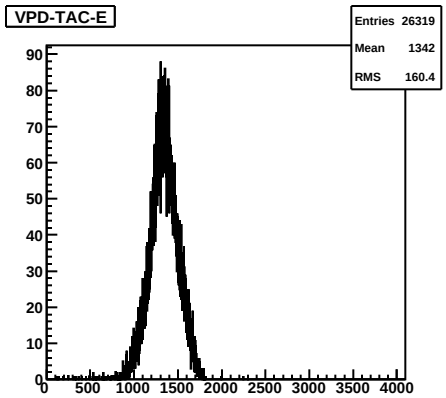

BBCsmall-TAC-W
Entries 46766
Mean 1535
RMS 239.4

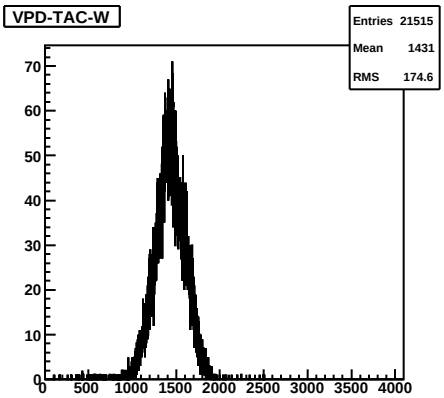

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 41601
Mean 4070
RMS 314.1

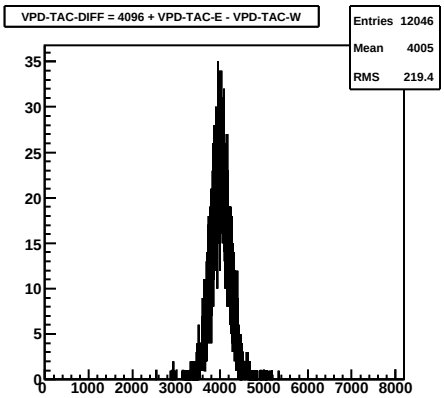

BBClarge-TAC-E
Entries 47956
Mean 1519
RMS 348

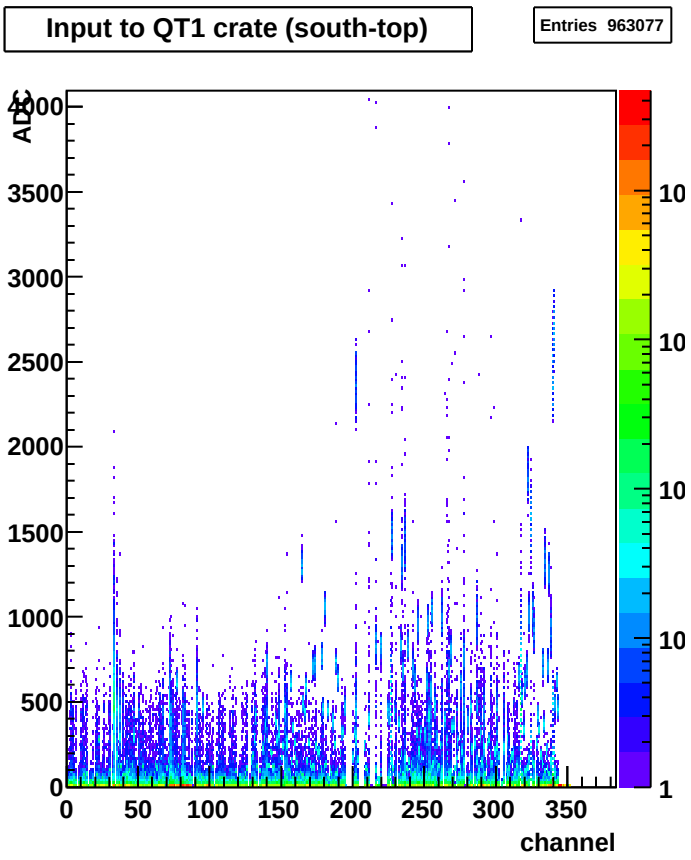

BBClarge-TAC-W
Entries 49774
Mean 1529
RMS 325.6

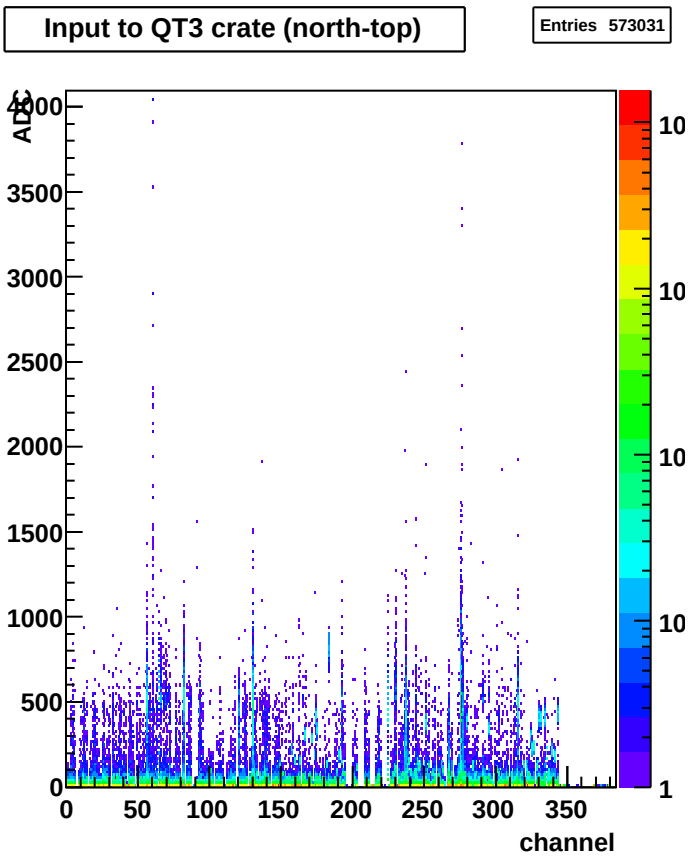

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 46581
Mean 4084
RMS 444.8

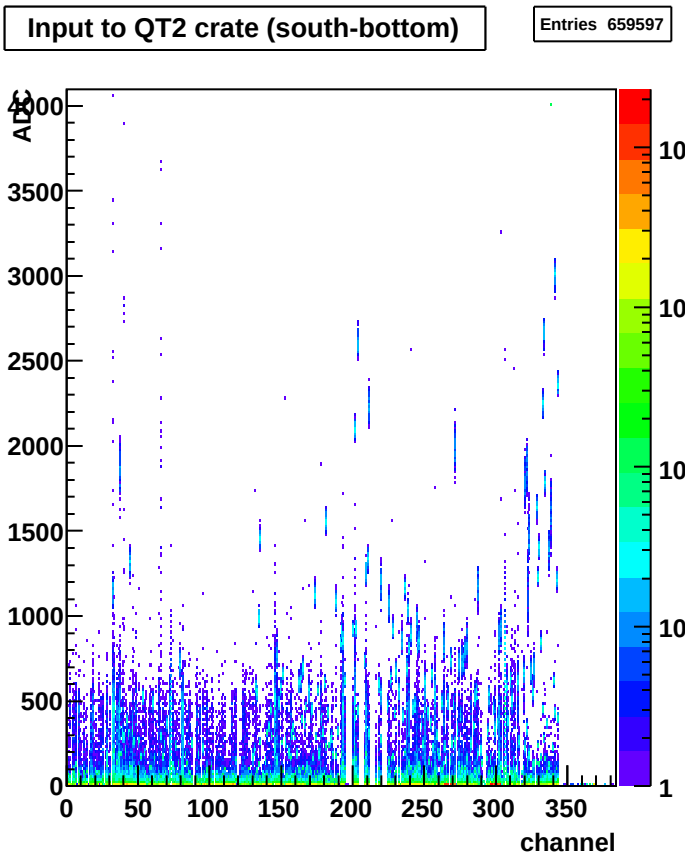

VPD-TAC-E
Entries 26319
Mean 1342
RMS 160.4

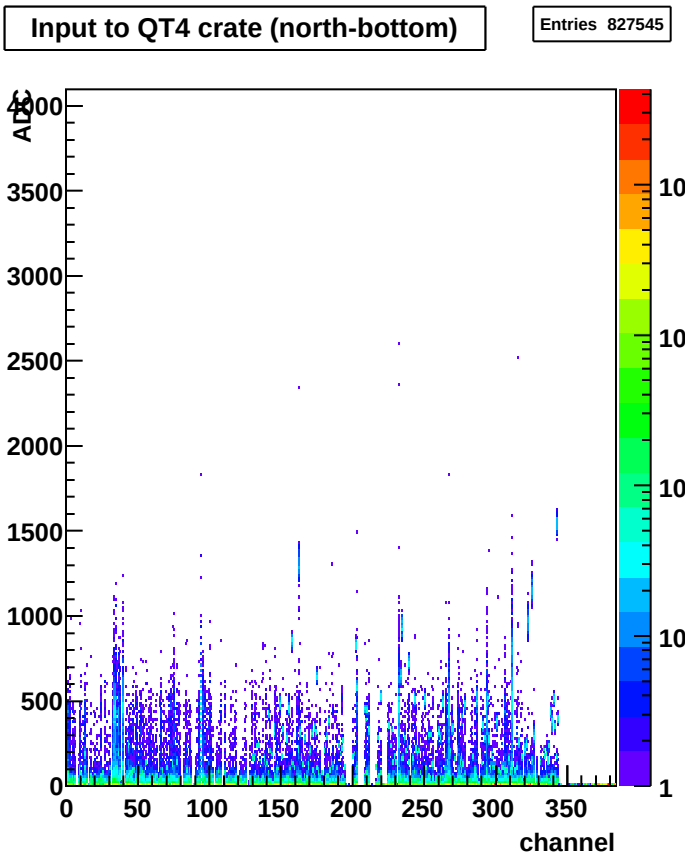

VPD-TAC-W
Entries 21515
Mean 1431
RMS 174.6

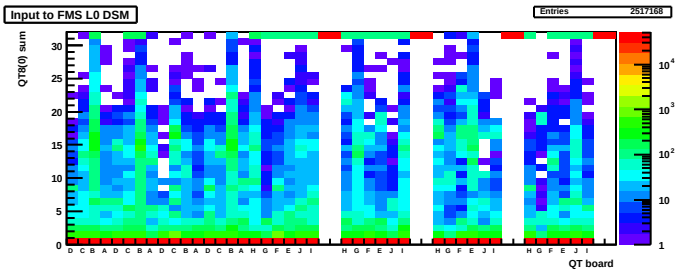

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 12046
Mean 4005
RMS 219.4

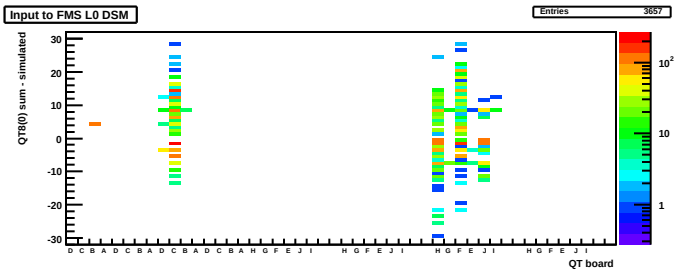

Input to QT1 crate (south-top)
Entries 963077
ADC
channel

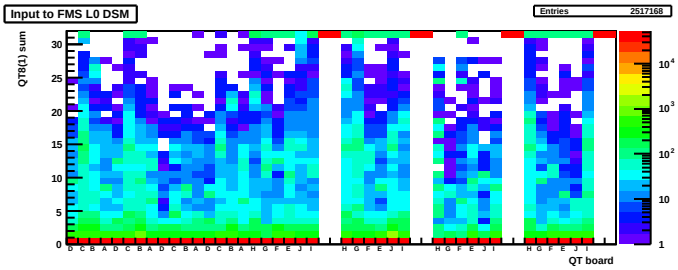

Input to QT3 crate (north-top)
Entries 573031
ADC
channel

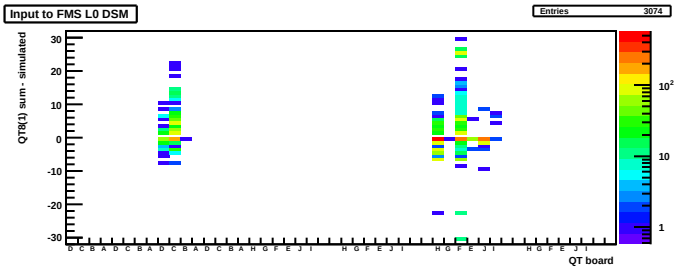

Input to QT2 crate (south-bottom)
Entries 659597
ADC
channel

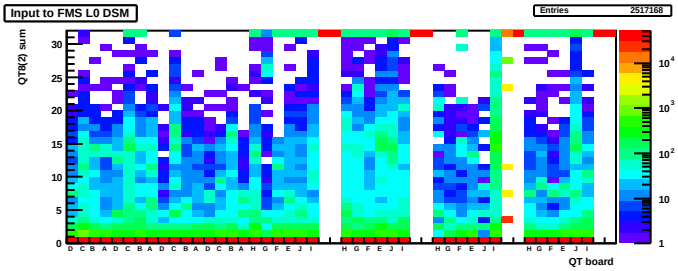

Input to QT4 crate (north-bottom)
Entries 827545
ADC
channel

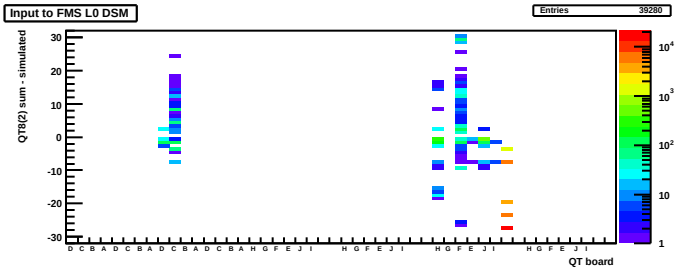

Input to FMS L0 DSM
Entries 2517168
QT8(0) sum
QT board

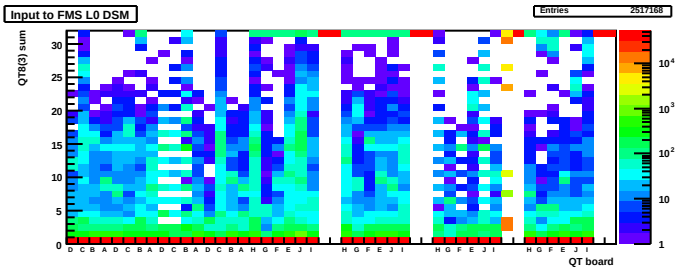

Input to FMS L0 DSM
Entries 3657
QT8(0) sum - simulated
QT board

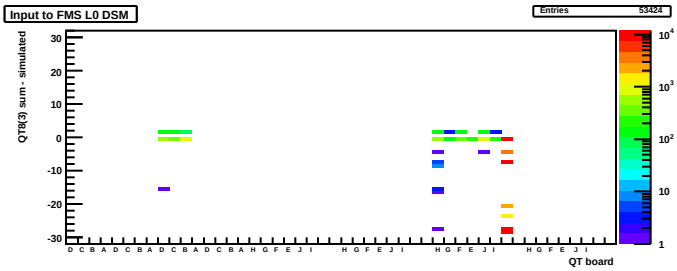

Input to FMS L0 DSM
Entries 2517168
QT8(1) sum
QT board

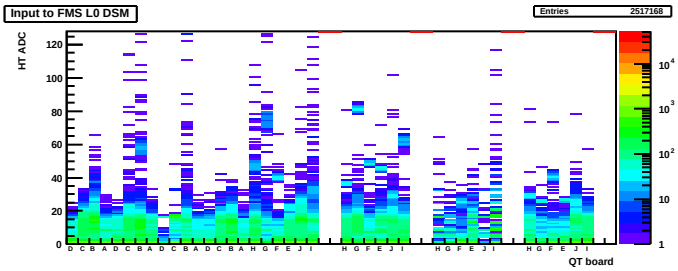

Input to FMS L0 DSM
Entries 3074
QT8(1) sum - simulated
QT board

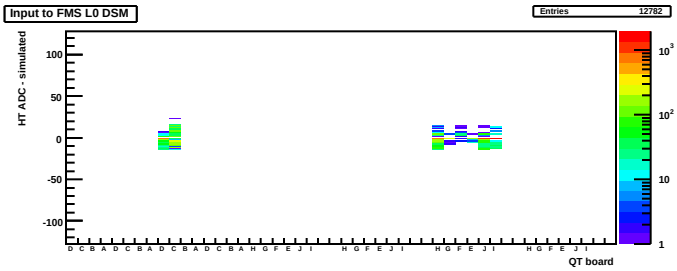

Input to FMS L0 DSM
Entries 2517168
QT8(2) sum
QT board

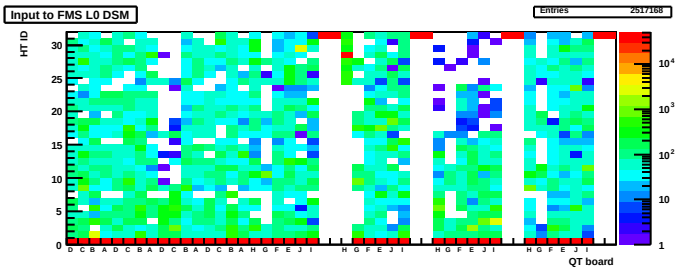

Input to FMS L0 DSM
Entries 39280
QT8(2) sum - simulated
QT board

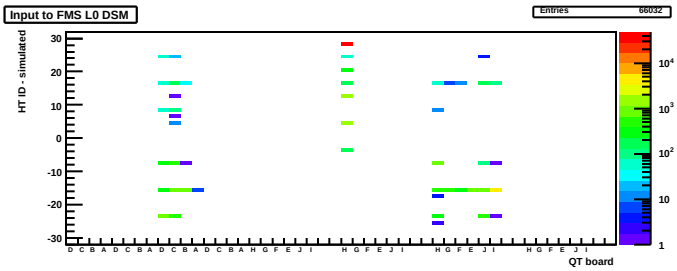

Input to FMS L0 DSM
Entries 2517168
QT8(3) sum
QT board

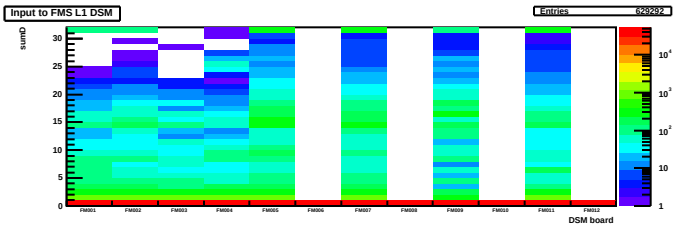

Input to FMS L0 DSM
Entries 53424
QT8(3) sum - simulated
QT board

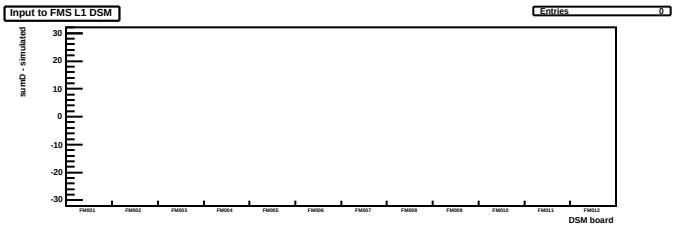

Input to FMS L0 DSM
Entries 2517168
HT ADC
QT board

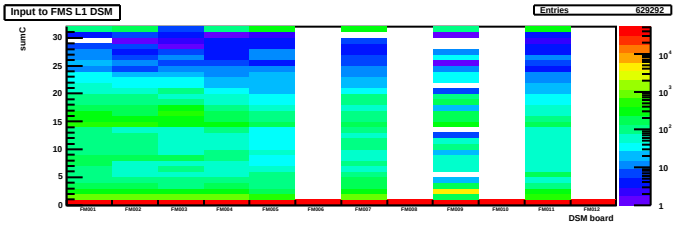

Input to FMS L0 DSM
Entries 12782
HT ADC - simulated
QT board

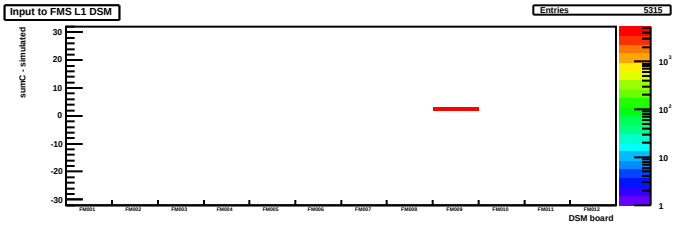

Input to FMS L0 DSM
Entries 2517168
HT ID
QT board

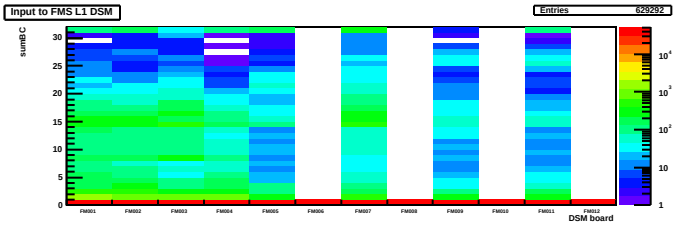

Input to FMS L0 DSM
Entries 66032
HT ID - simulated
QT board

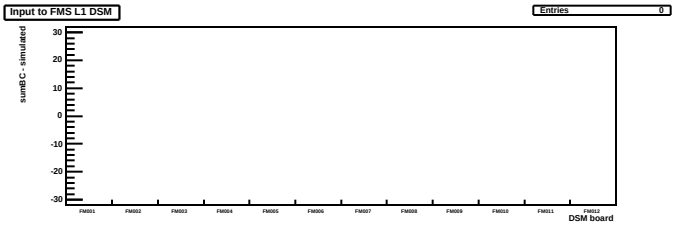

Input to FMS L1 DSM
Entries 629292
sumD
DSM board

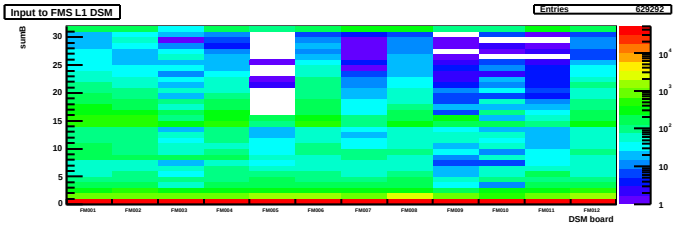

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

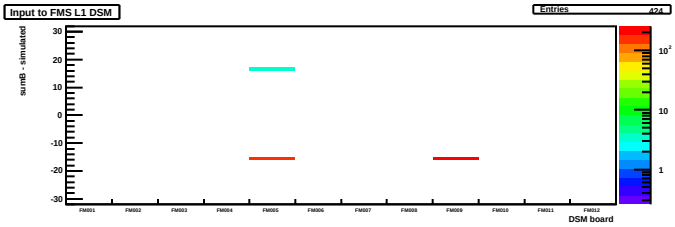

Input to FMS L1 DSM
Entries 629292
sumC
DSM board

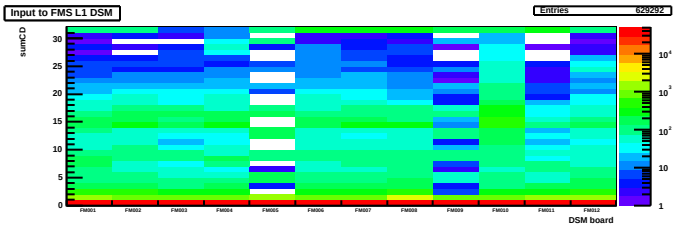

Input to FMS L1 DSM
Entries 5315
sumC - simulated
DSM board

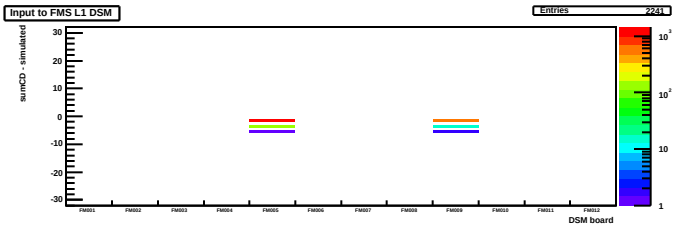

Input to FMS L1 DSM
Entries 629292
sumBC
DSM board

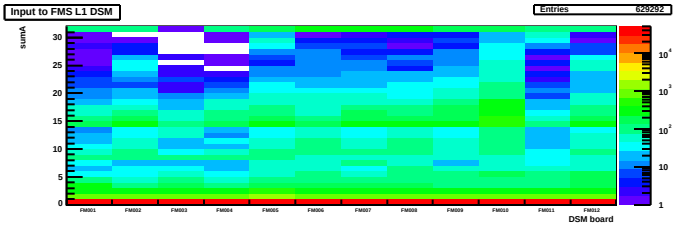

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

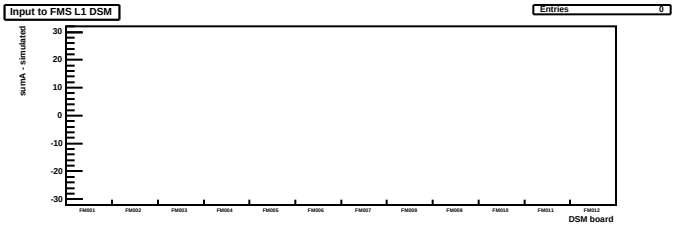

Input to FMS L1 DSM
Entries 629292
sumB
DSM board

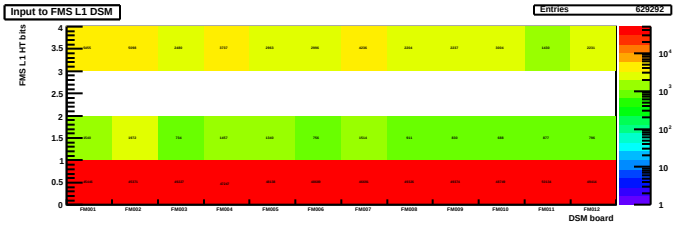

Input to FMS L1 DSM
Entries 424
sumB - simulated
DSM board

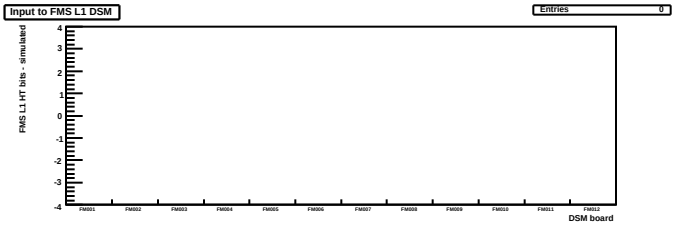

Input to FMS L1 DSM
Entries 629292
sumCD
DSM board

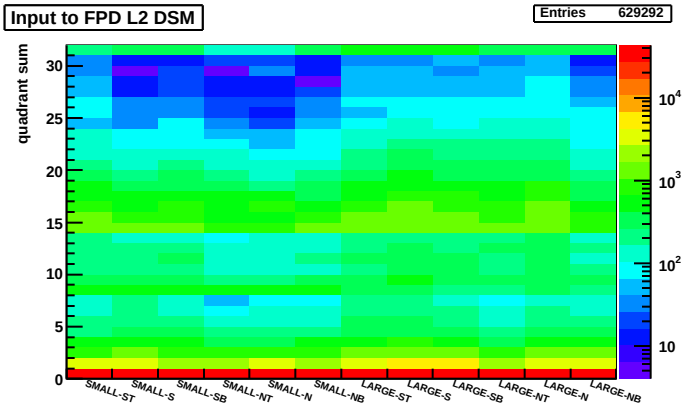

Input to FMS L1 DSM
Entries 2241
sumCD - simulated
DSM board

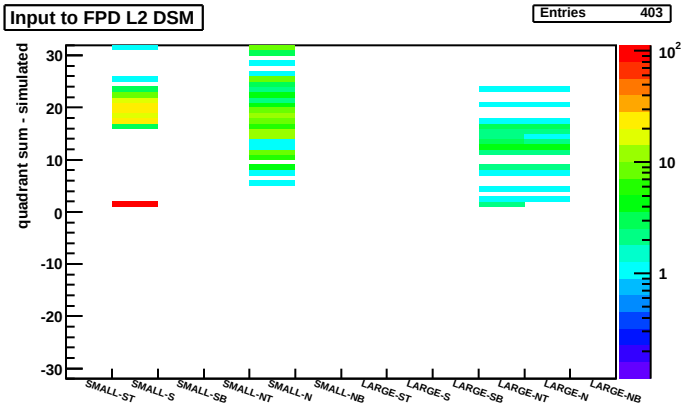

Input to FMS L1 DSM
Entries 629292
sumA
DSM board

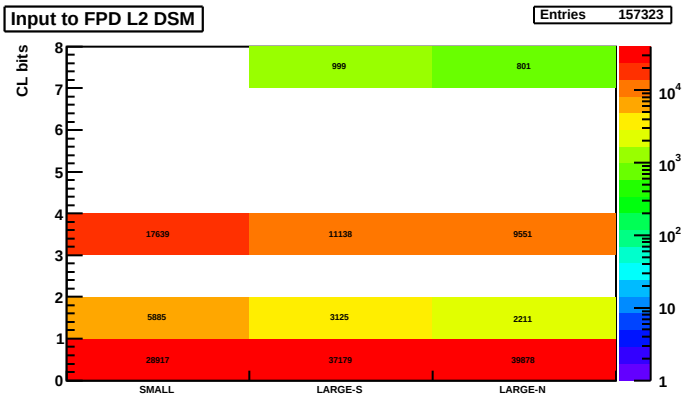

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

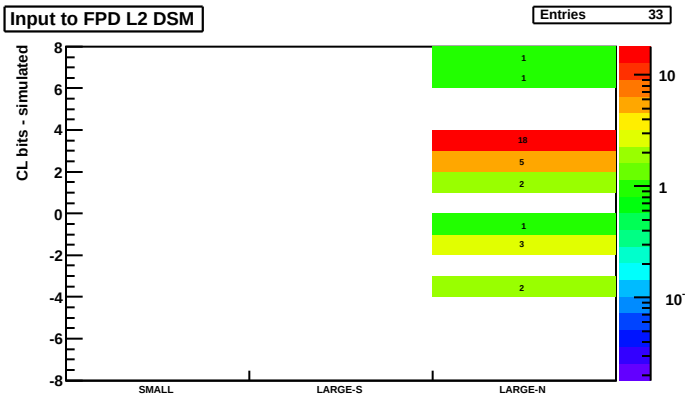

Input to FMS L1 DSM
Entries 629292
FMS L1 HT bits
DSM board

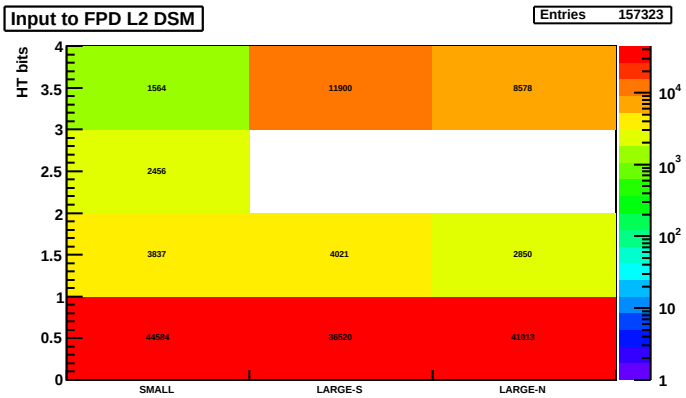

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

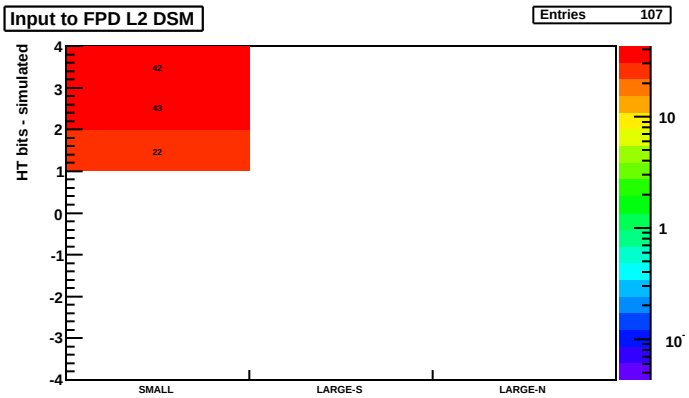

Input to FPD L2 DSM
Entries 629292
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

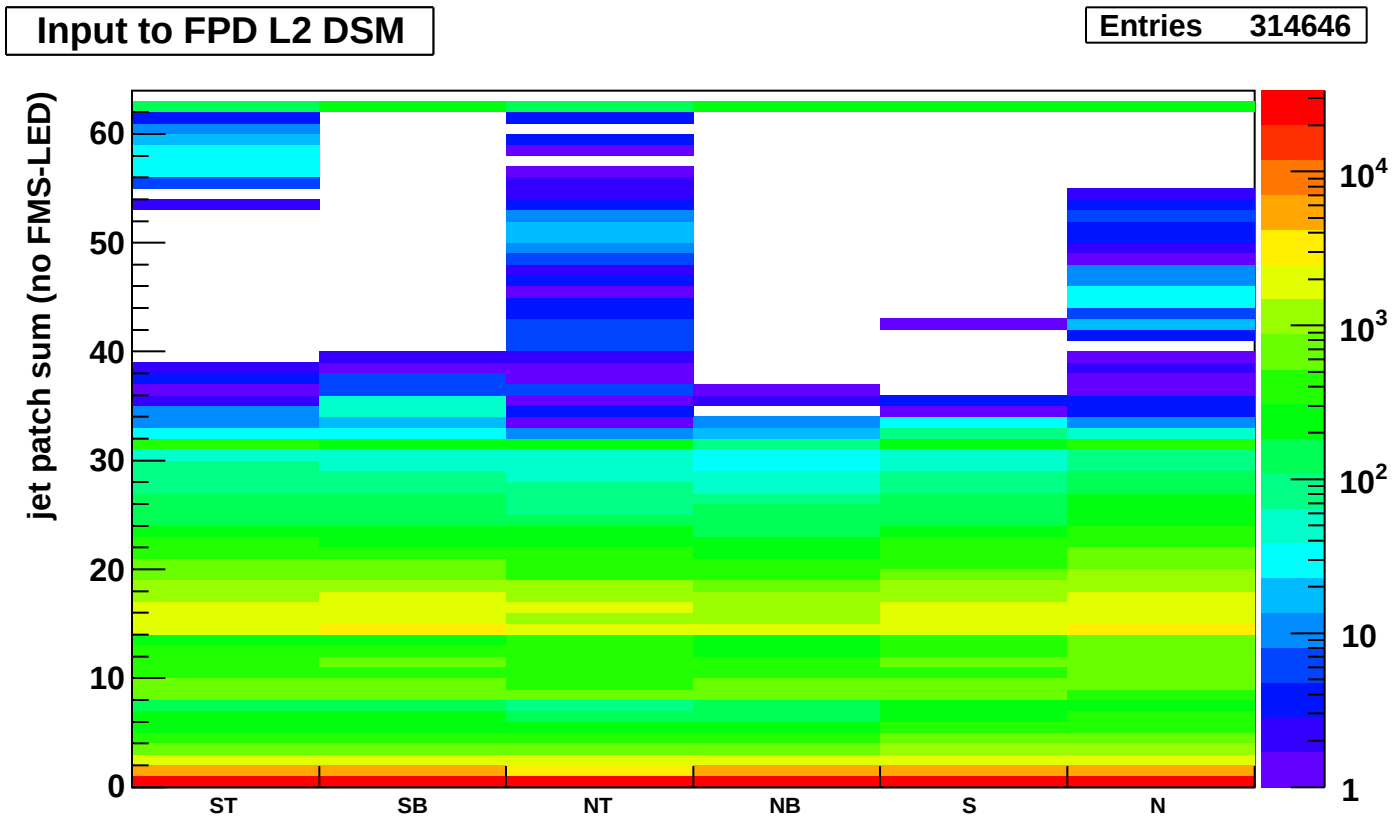

Input to FPD L2 DSM
Entries 403
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

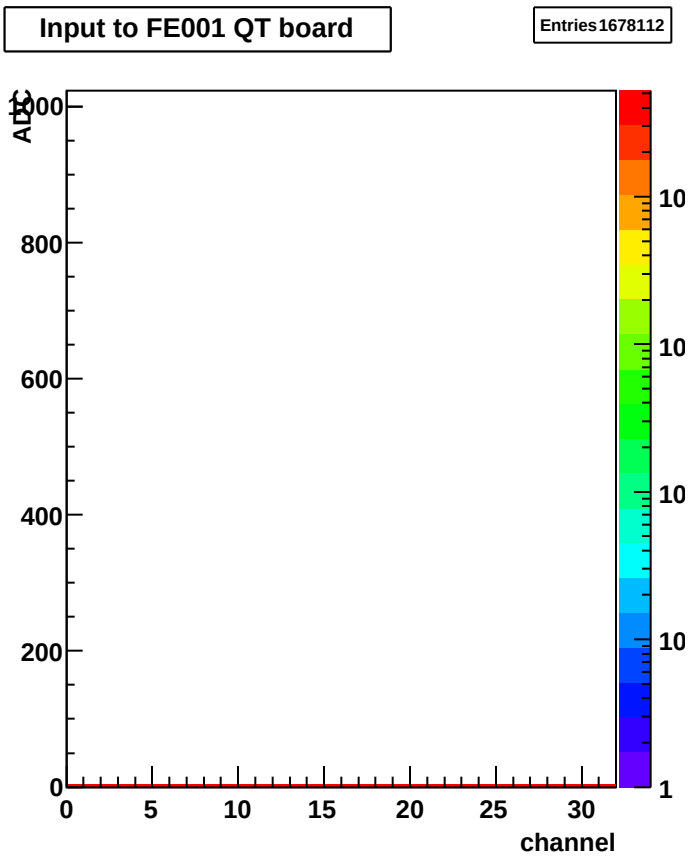

Input to FPD L2 DSM
Entries 157323
CL bits
999
801
17639
11138
9551
5885
3125
2211
28917
37179
39878
SMALL
LARGE-S
LARGE-N

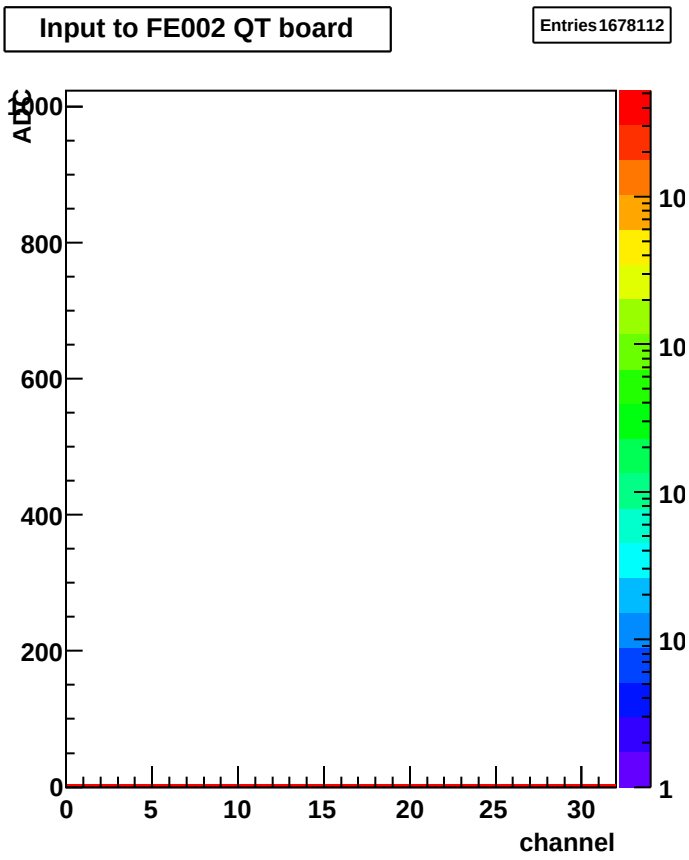

Input to FPD L2 DSM
Entries 33
CL bits - simulated
1
1
18
5
2
1
3
2
SMALL
LARGE-S
LARGE-N

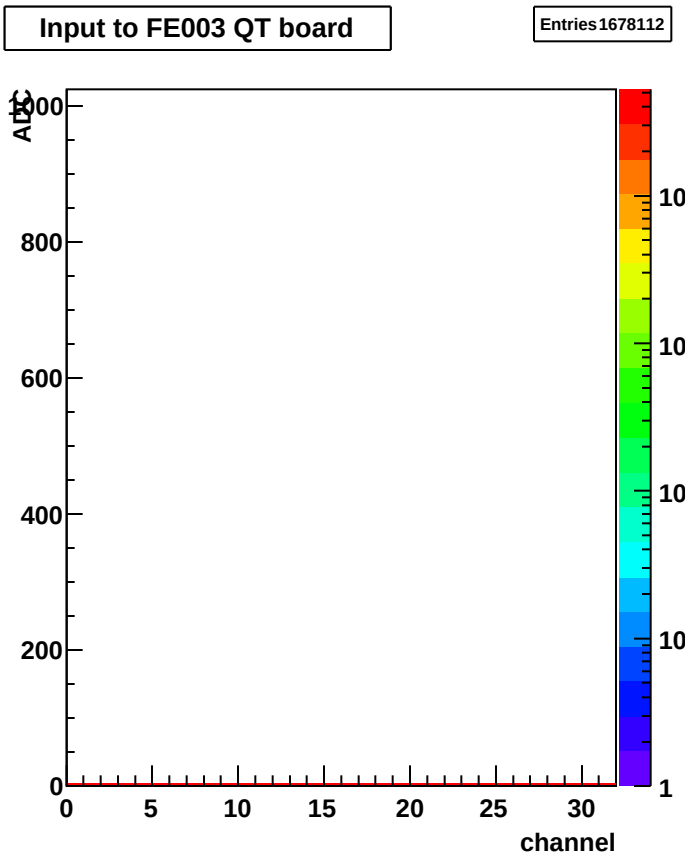

Input to FPD L2 DSM
Entries 157323
HT bits
1564
11900
8578
2456
3837
4021
2850
44584
36520
41013
SMALL
LARGE-S
LARGE-N

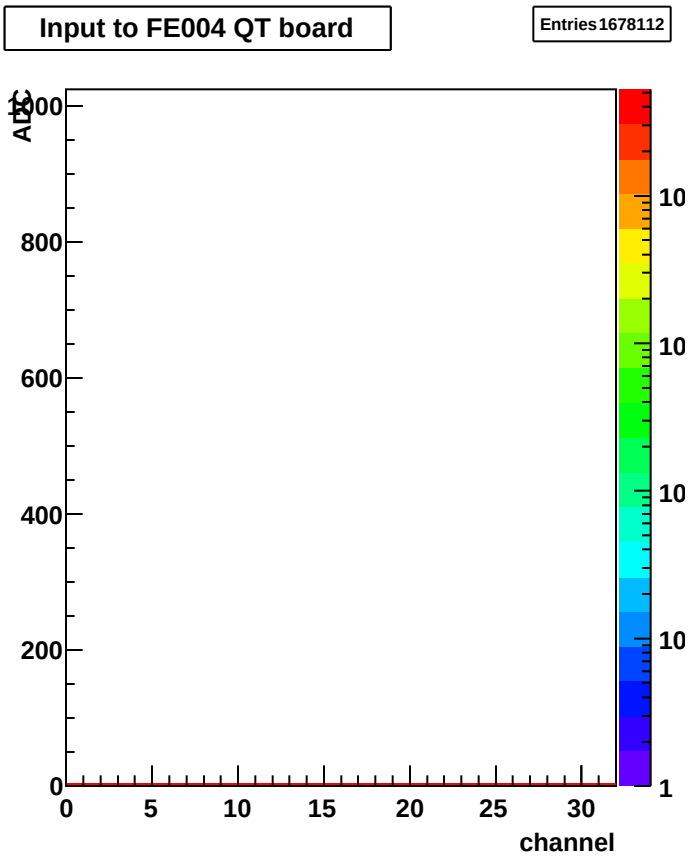

Input to FPD L2 DSM
Entries 107
HT bits - simulated
42
43
22
SMALL
LARGE-S
LARGE-N

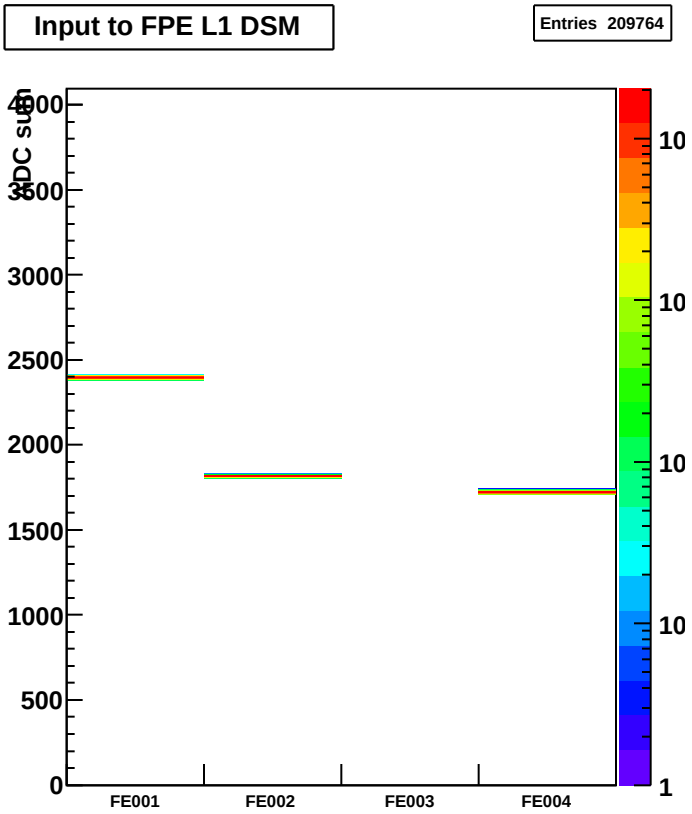

Input to FPD L2 DSM
Entries 314646
jet patch sum (no FMS-LED)
0
10
20
30
40
50
60
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

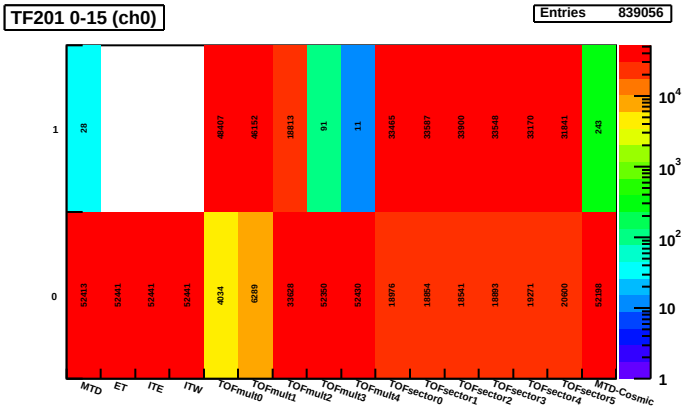

Input to FE001 QT board
Entries 1678112
ADC
channel

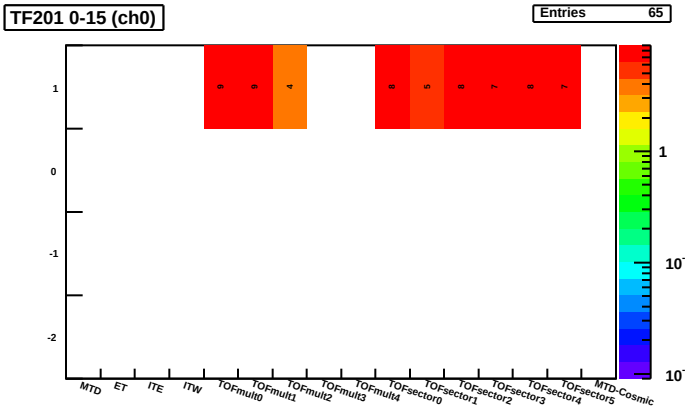

Input to FE002 QT board
Entries 1678112
ADC
channel

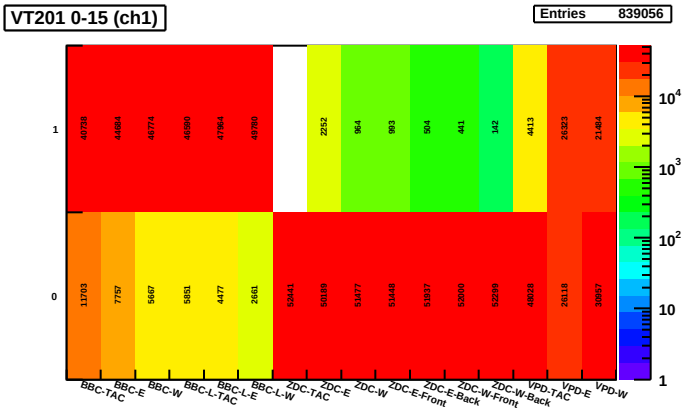

Input to FE003 QT board
Entries 1678112
ADC
channel

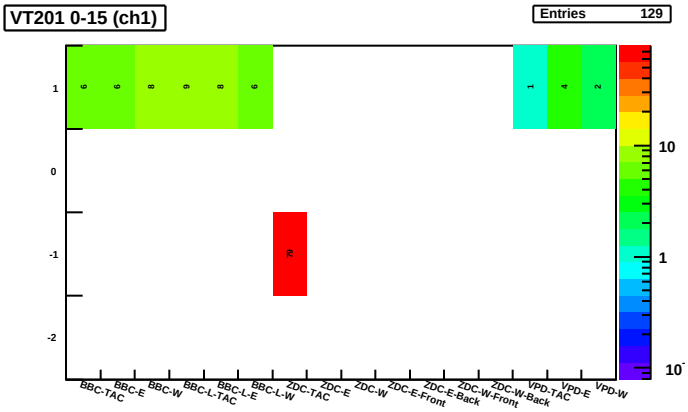

Input to FE004 QT board
Entries 1678112
ADC
channel

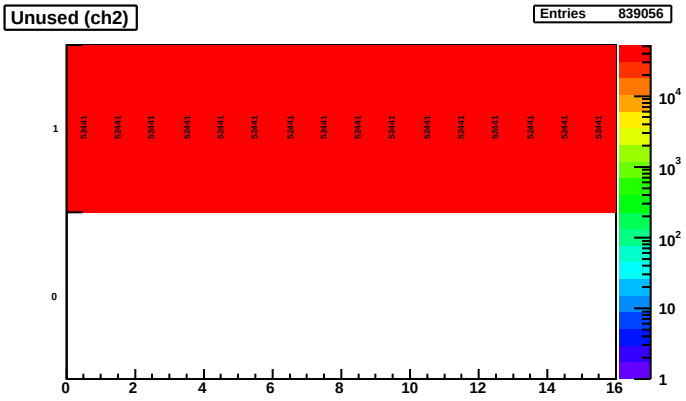

Input to FPE L1 DSM
Entries 209764
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

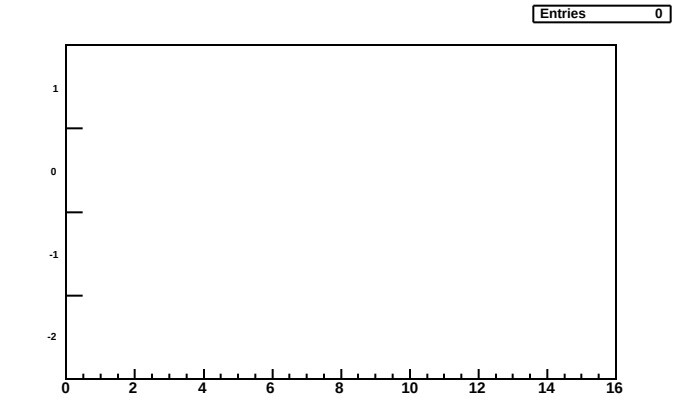

TF201 0-15 (ch0)
Entries 839056
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

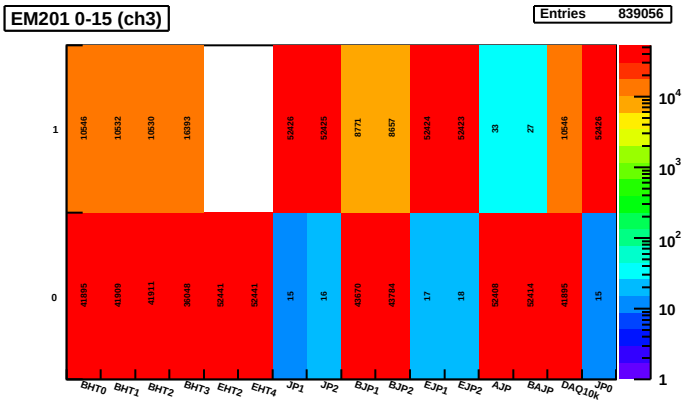

TF201 0-15 (ch0)
Entries 65
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 839056
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 129
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


Unused (ch2)
Entries 839056


Entries 0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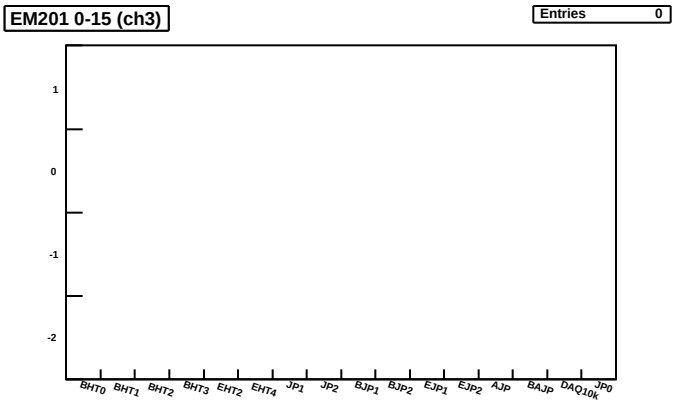
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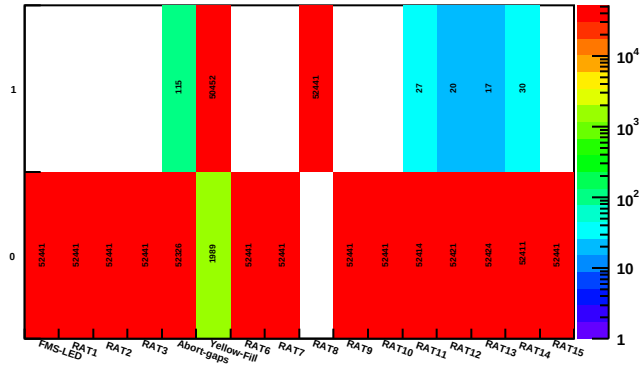
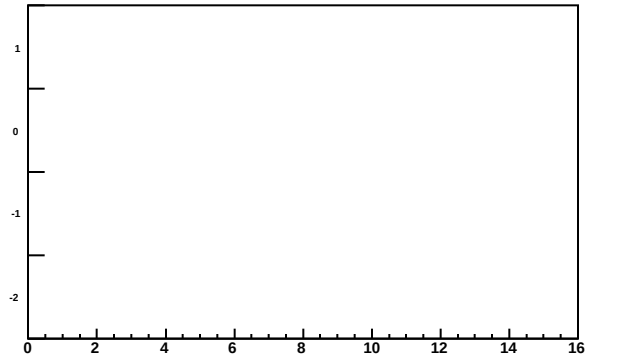
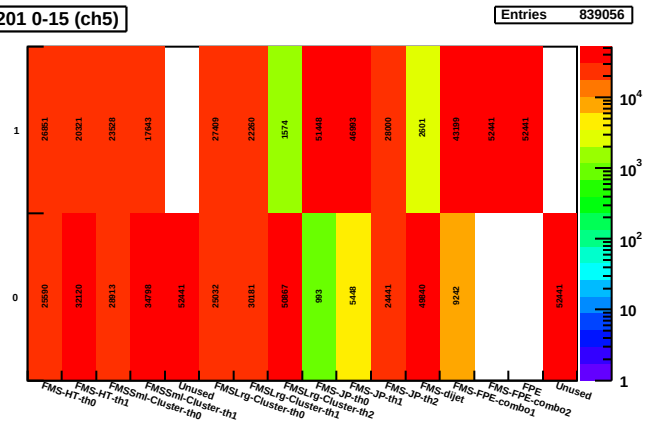
RAT board (ch4)





FP201 0-15 (ch5)



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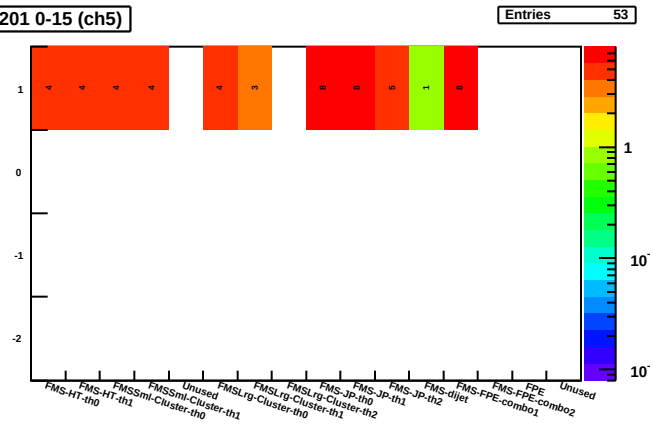
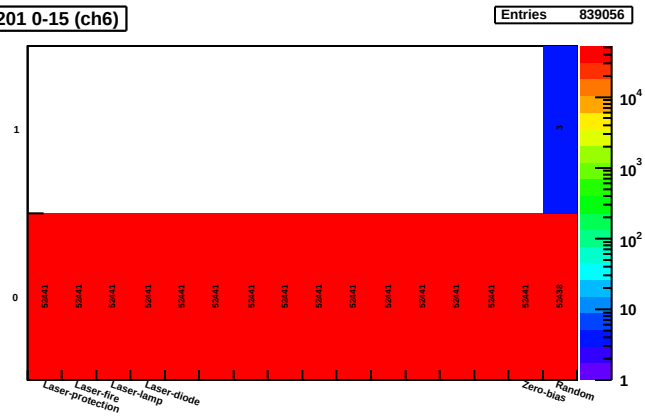
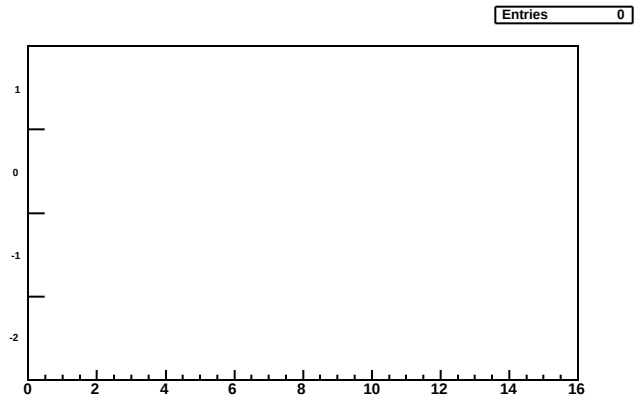
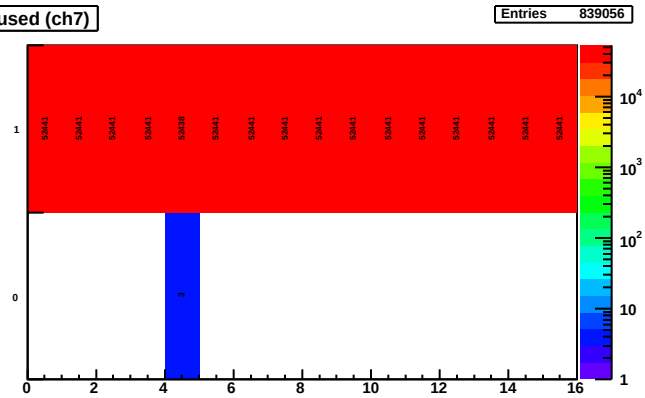
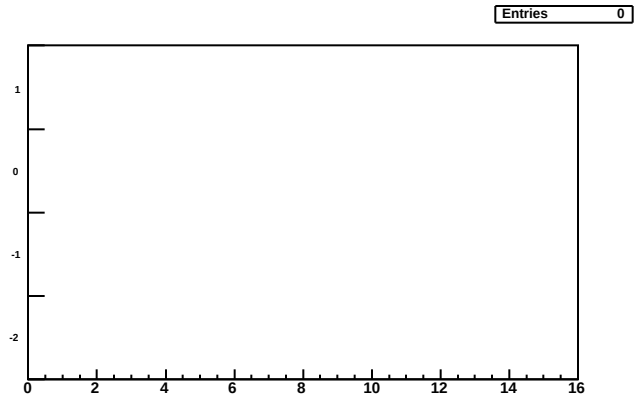


ST201 0-15 (ch6)





Unused (ch7)