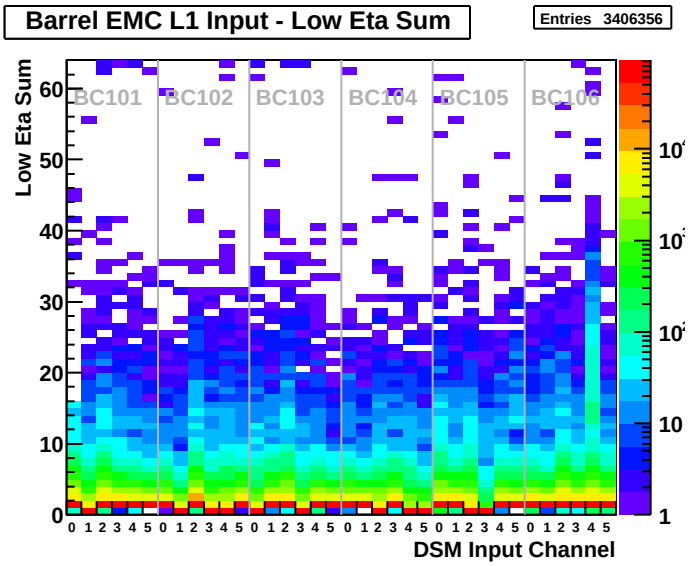
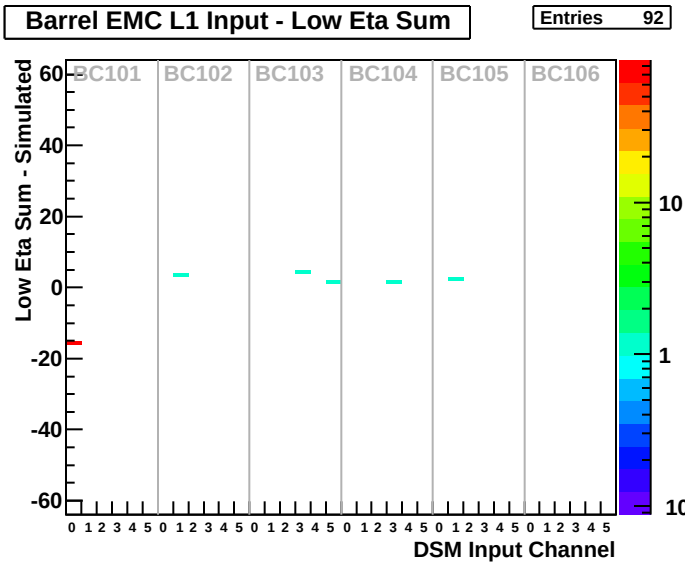
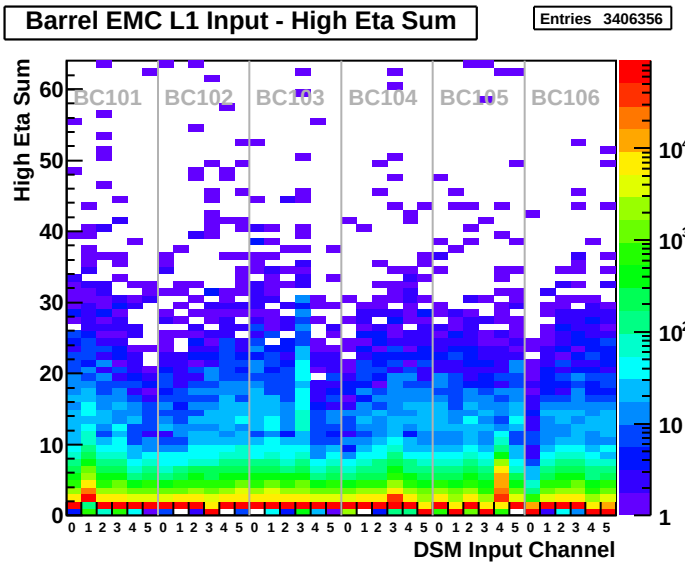
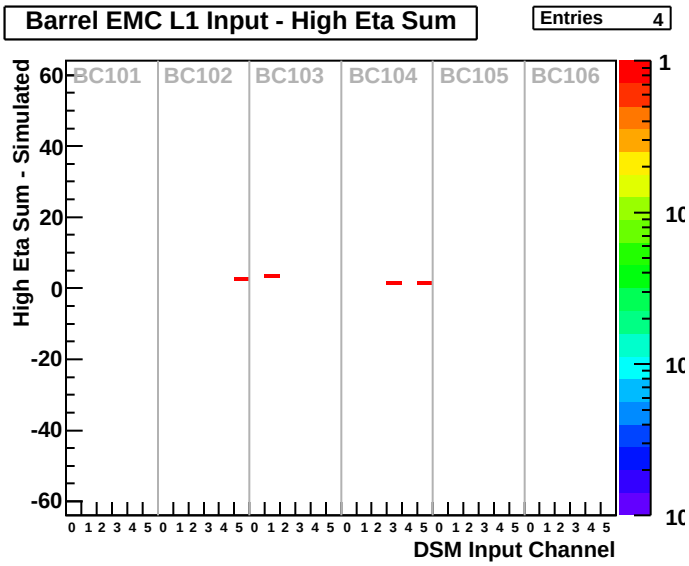
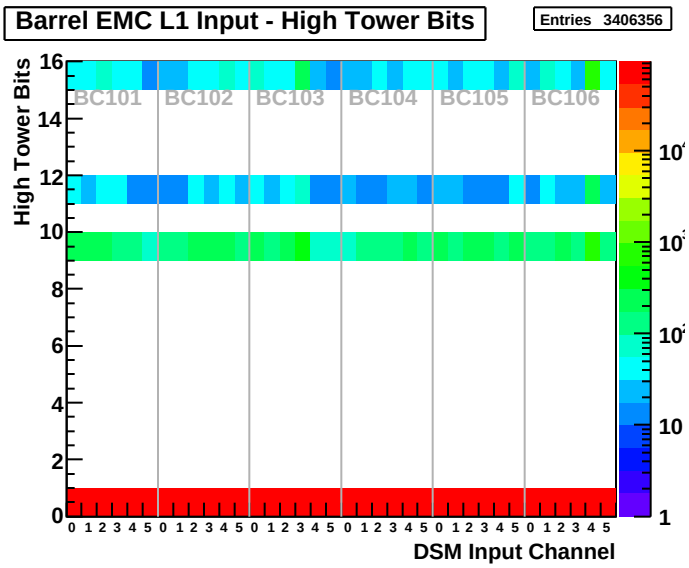
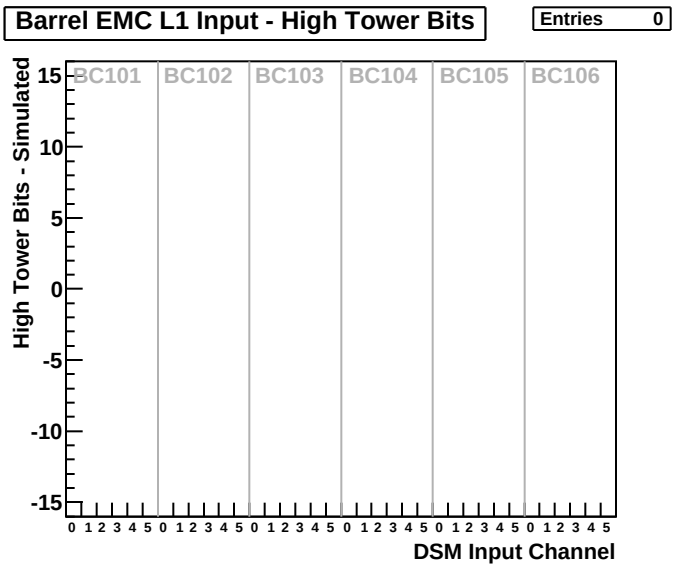

Barrel EMC L1 Input - Low Eta Sum
Entries 3406356
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

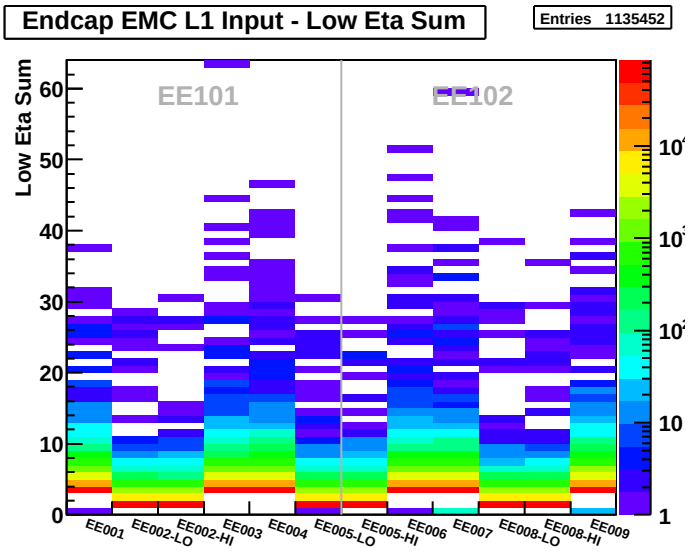

Barrel EMC L1 Input - Low Eta Sum
Entries 92
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

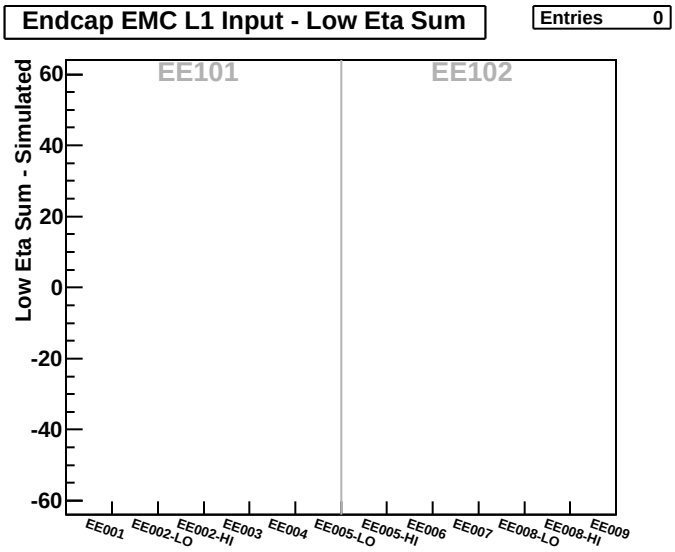

Barrel EMC L1 Input - High Eta Sum
Entries 3406356
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

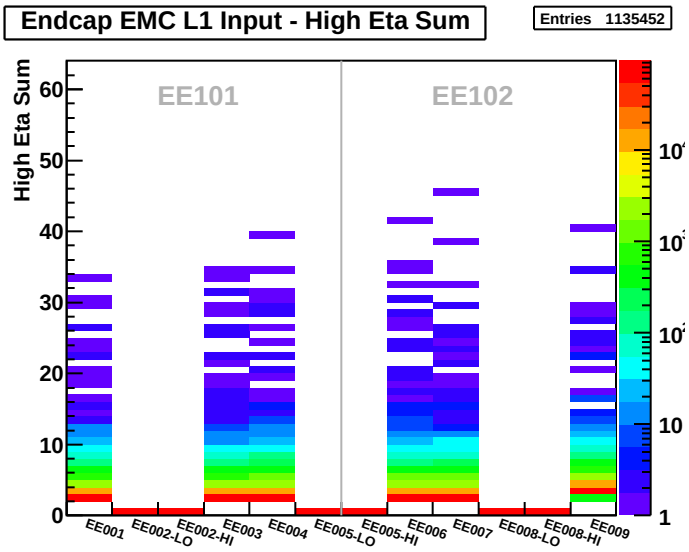

Barrel EMC L1 Input - High Eta Sum
Entries 4
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

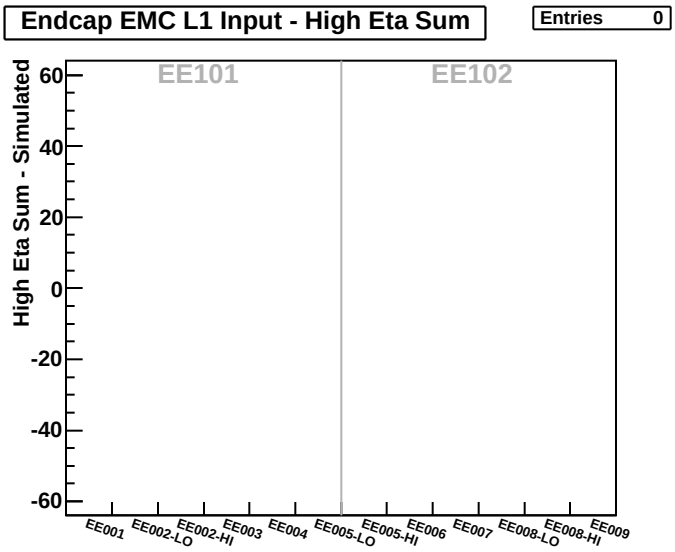

Barrel EMC L1 Input - High Tower Bits
Entries 3406356
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

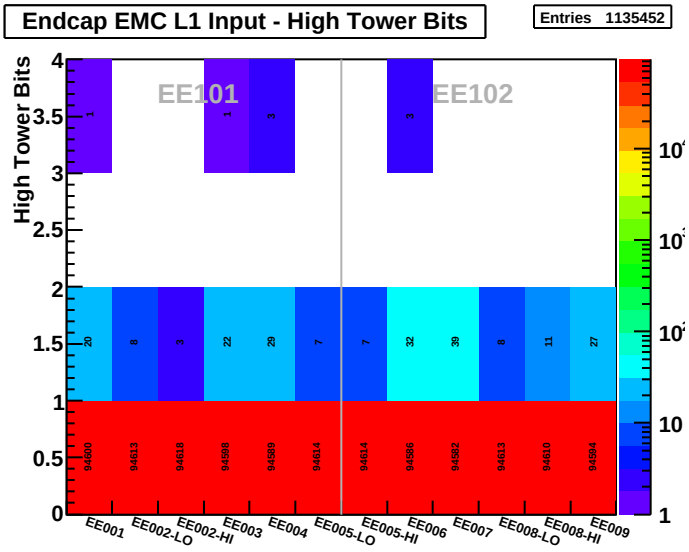

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

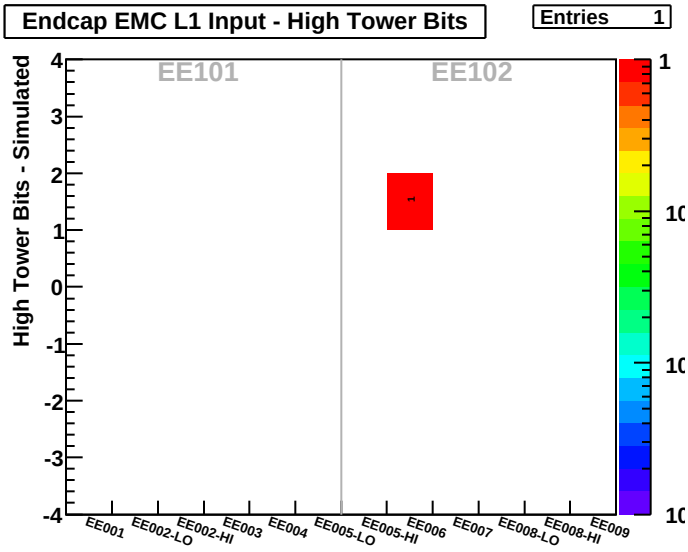

Endcap EMC L1 Input - Low Eta Sum
Entries 1135452
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

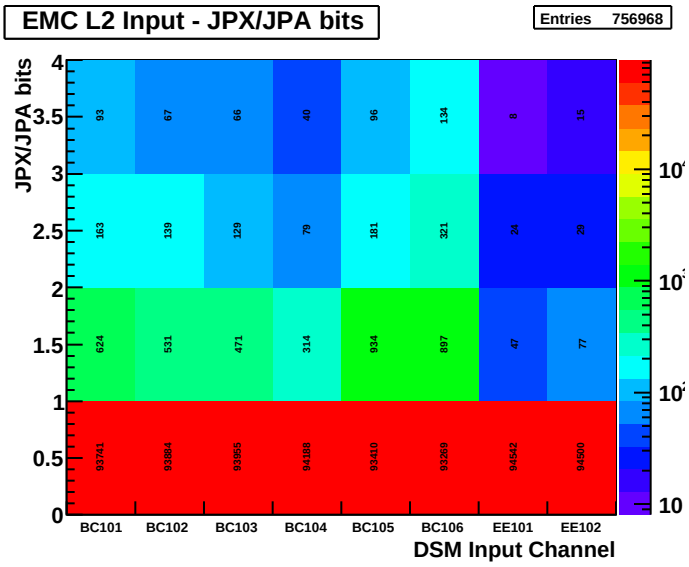

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

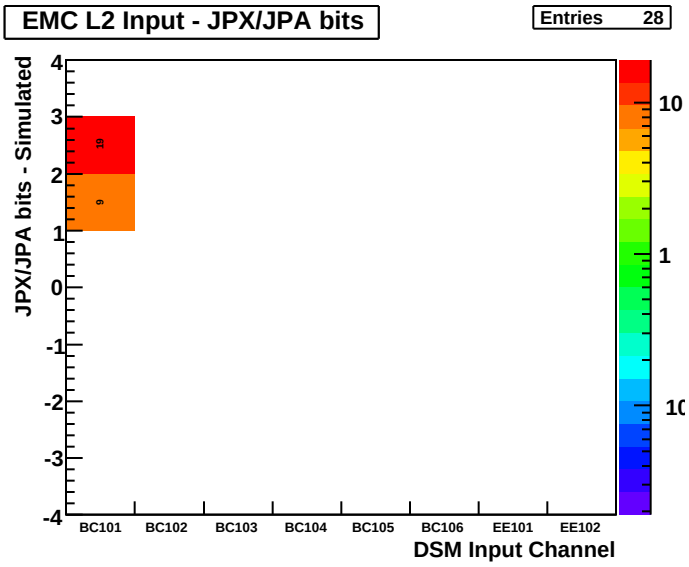

Endcap EMC L1 Input - High Eta Sum
Entries 1135452
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

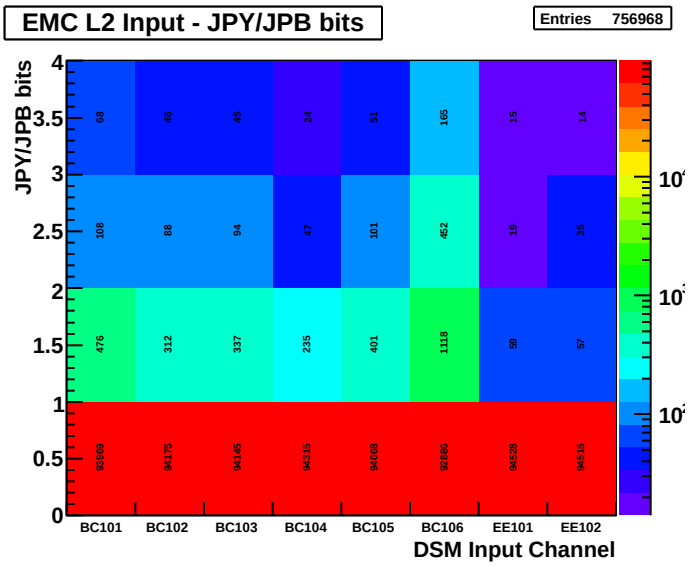

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

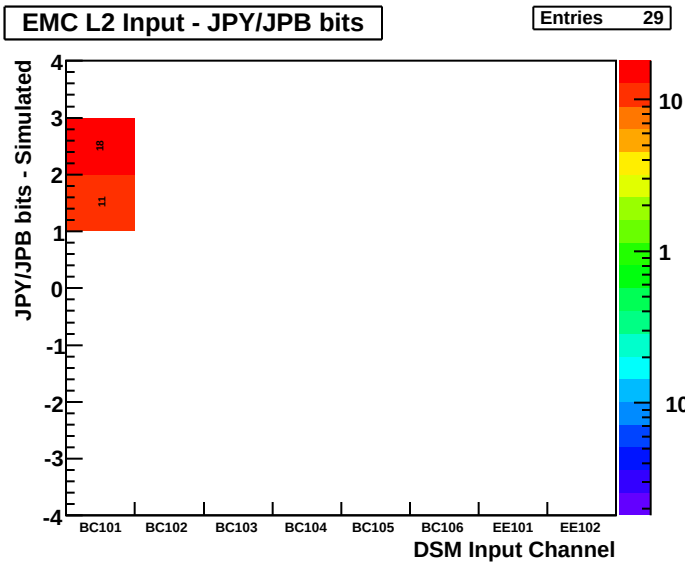

Endcap EMC L1 Input - High Tower Bits
Entries 1135452
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

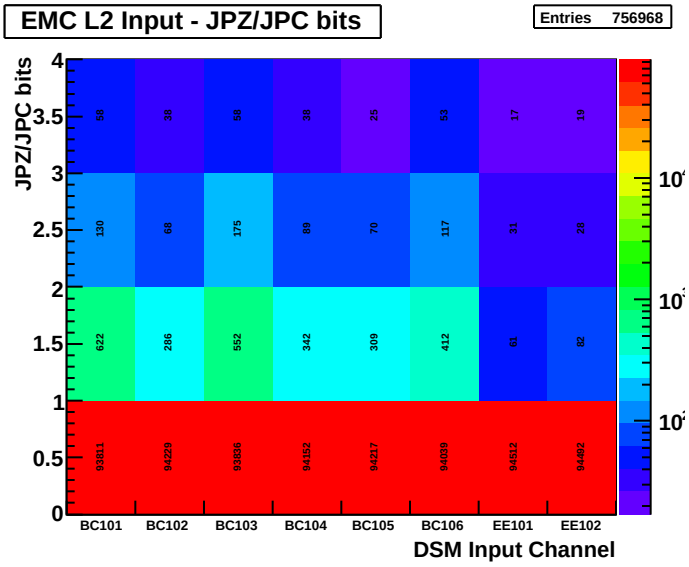

Endcap EMC L1 Input - High Tower Bits
Entries 1
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

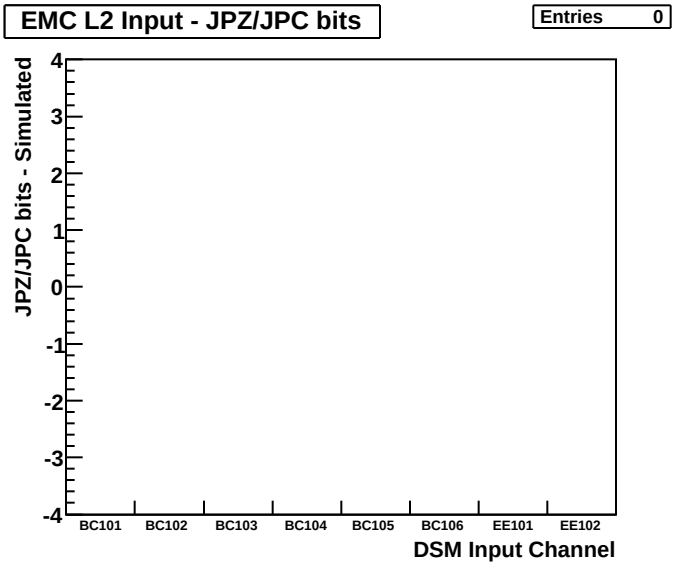

EMC L2 Input - JPX/JPA bits
Entries 756968
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
93 67 66 40 96 134 8 15
163 139 129 79 181 321 24 29
624 531 471 314 934 897 47 77
93741 93884 93855 94188 93410 93269 94542 94500

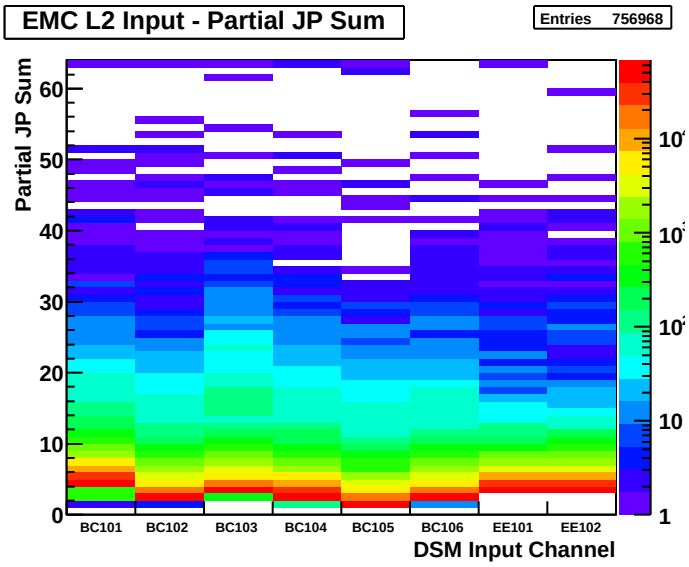

EMC L2 Input - JPX/JPA bits
Entries 28
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
19
9

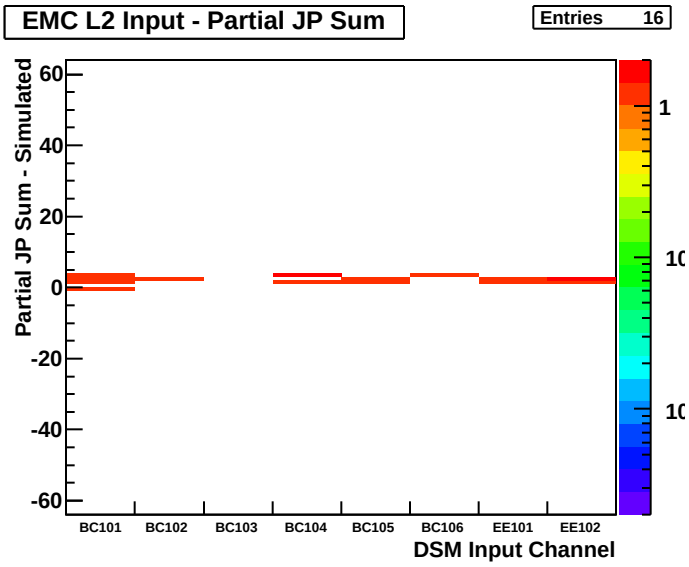

EMC L2 Input - JPY/JPB bits
Entries 756968
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
68 46 45 24 51 165 15 14
108 88 94 47 101 452 19 35
476 312 337 235 401 1118 59 57
93969 94175 94146 94315 94068 92886 94528 94515

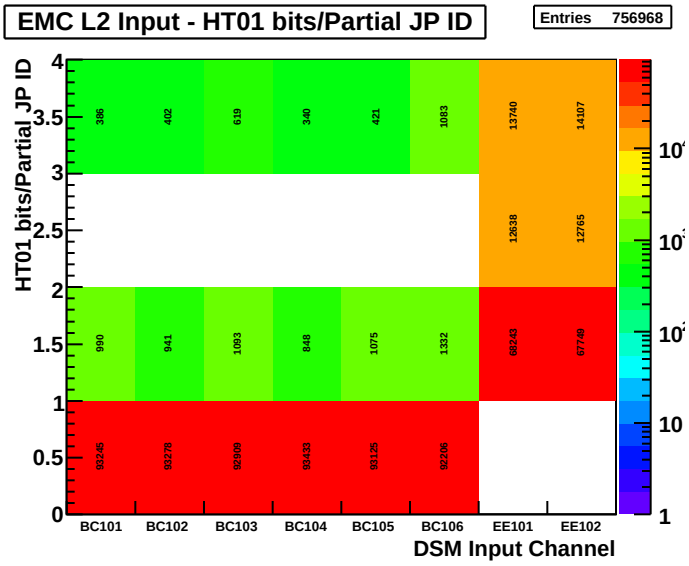

EMC L2 Input - JPY/JPB bits
Entries 29
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
18
11

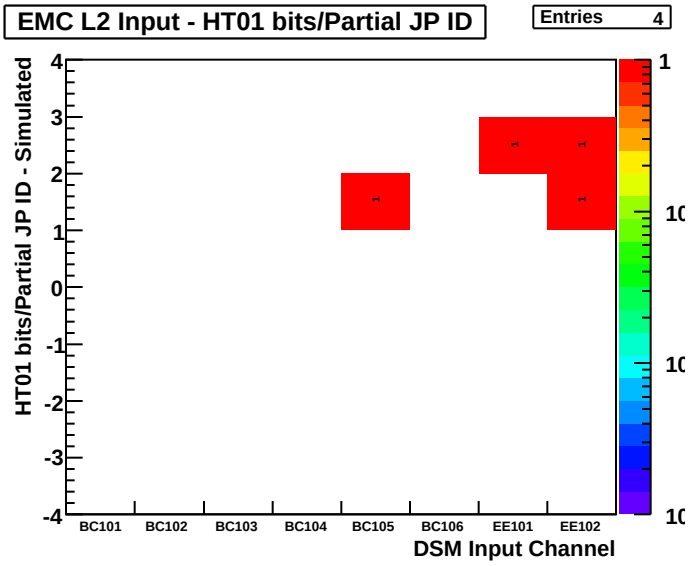

EMC L2 Input - JPZ/JPC bits
Entries 756968
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
58 38 58 38 25 53 17 19
130 68 175 89 70 117 31 28
622 286 552 342 309 412 61 82
93811 94229 93826 94152 94217 94039 94512 94492

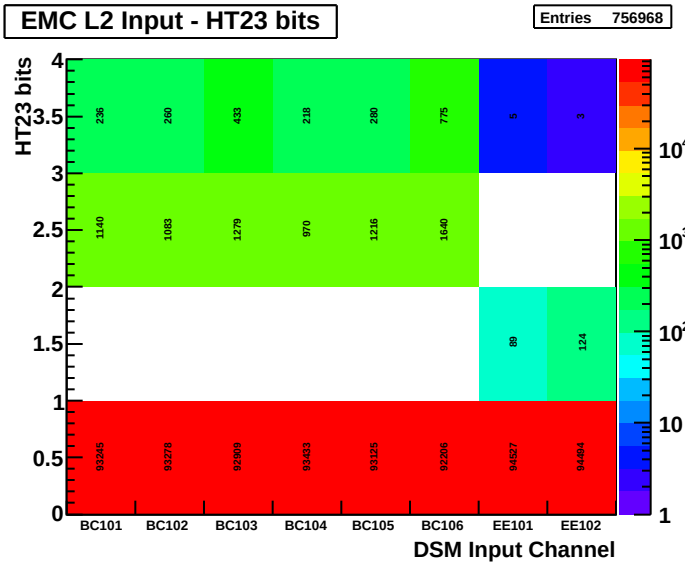

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

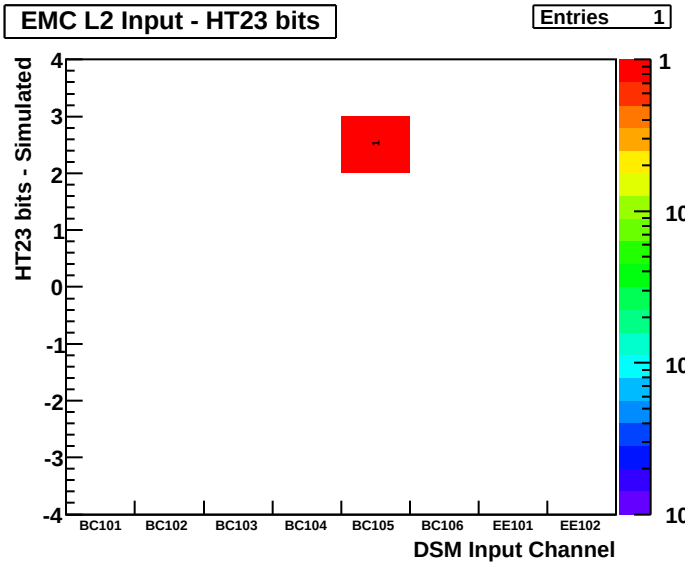

EMC L2 Input - Partial JP Sum
Entries 756968
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

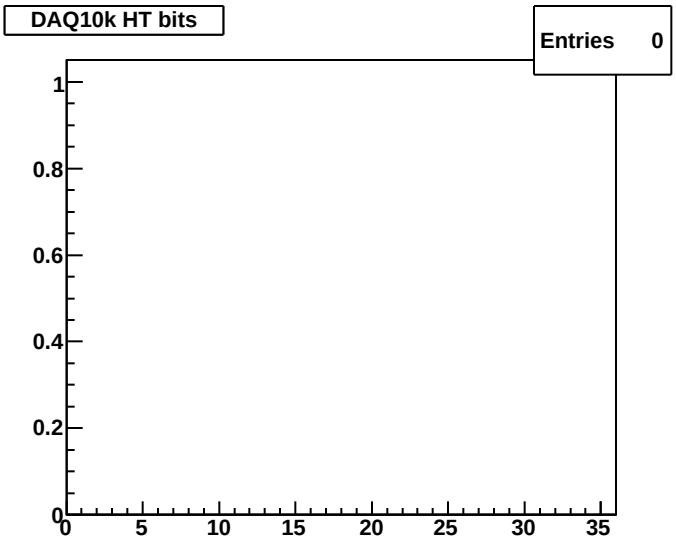

EMC L2 Input - Partial JP Sum
Entries 16
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

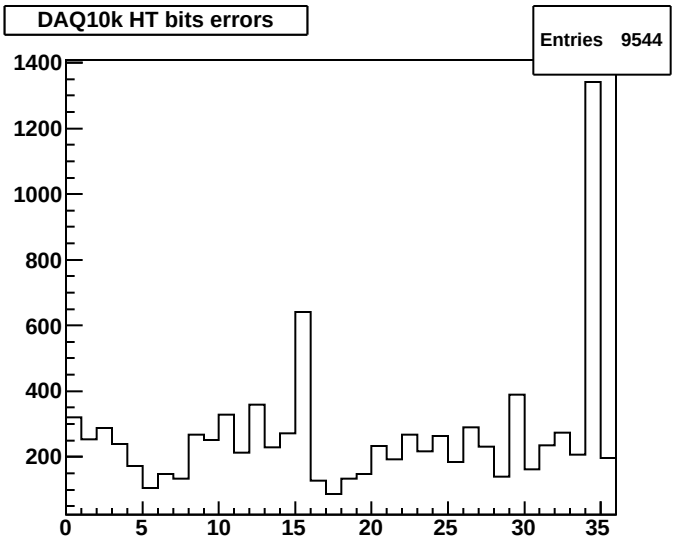

EMC L2 Input - HT01 bits/Partial JP ID
Entries 756968
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

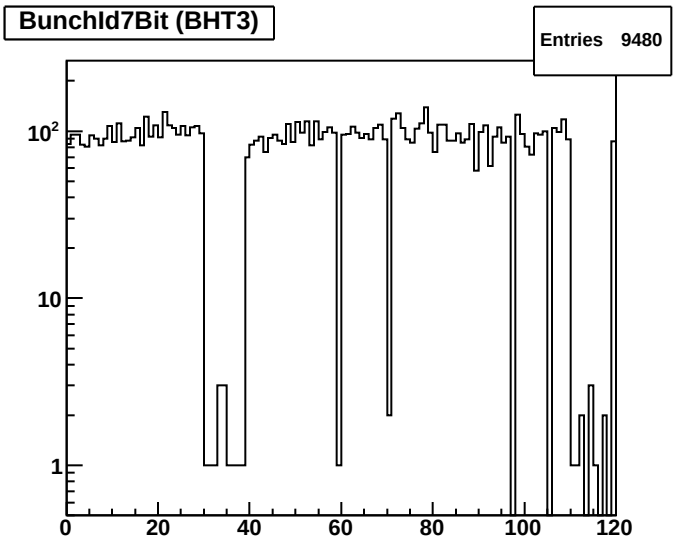

EMC L2 Input - HT01 bits/Partial JP ID
Entries 4
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

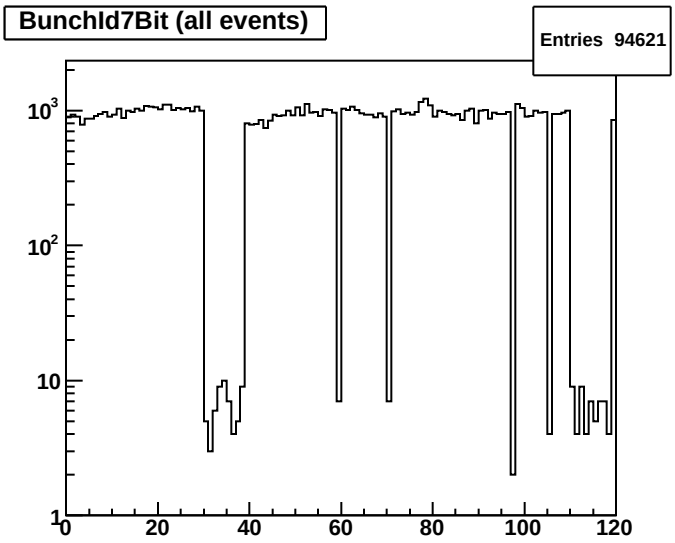

EMC L2 Input - HT23 bits
Entries 756968
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

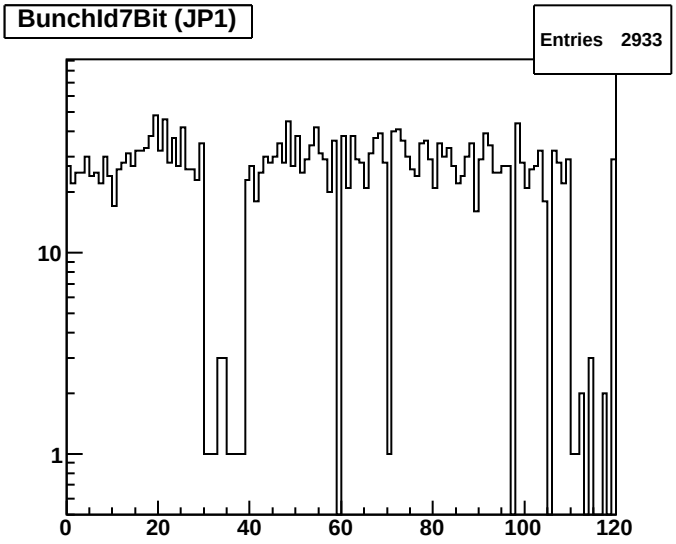

EMC L2 Input - HT23 bits
Entries 1
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

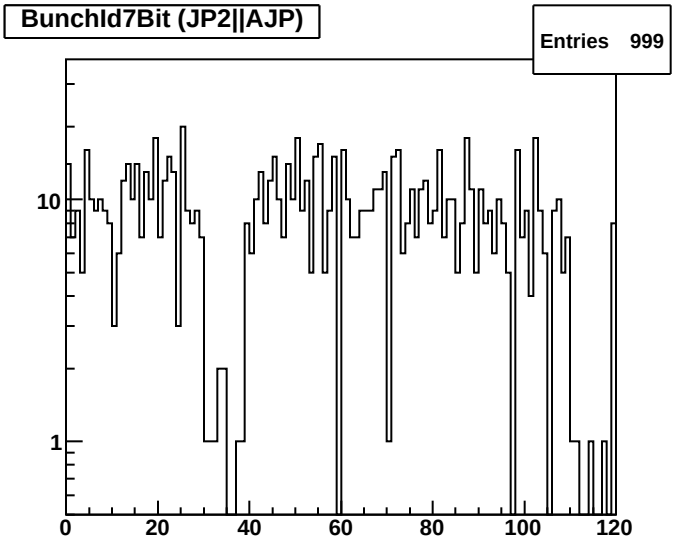

DAQ10k HT bits
Entries 0

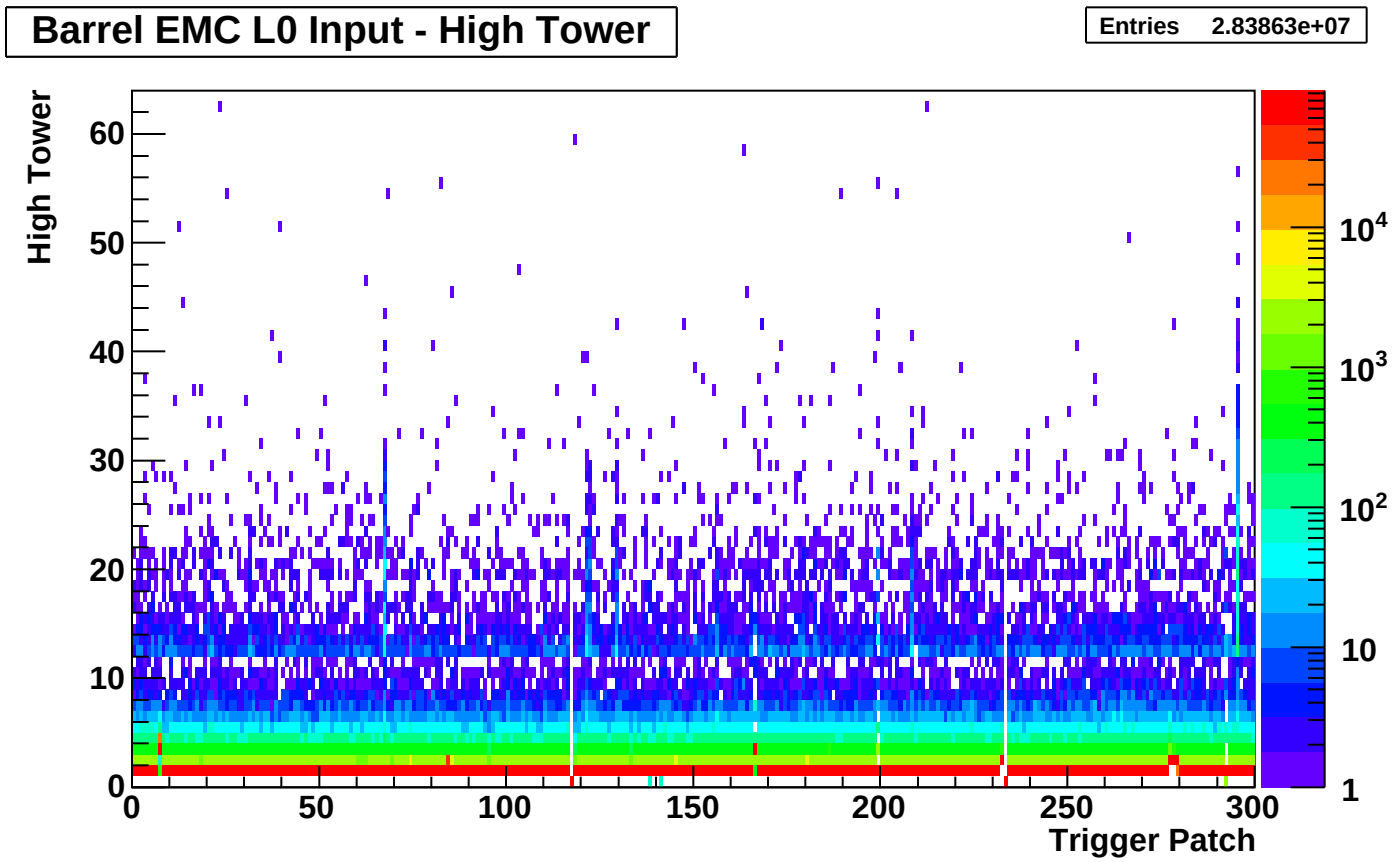

DAQ10k HT bits errors
Entries 9544

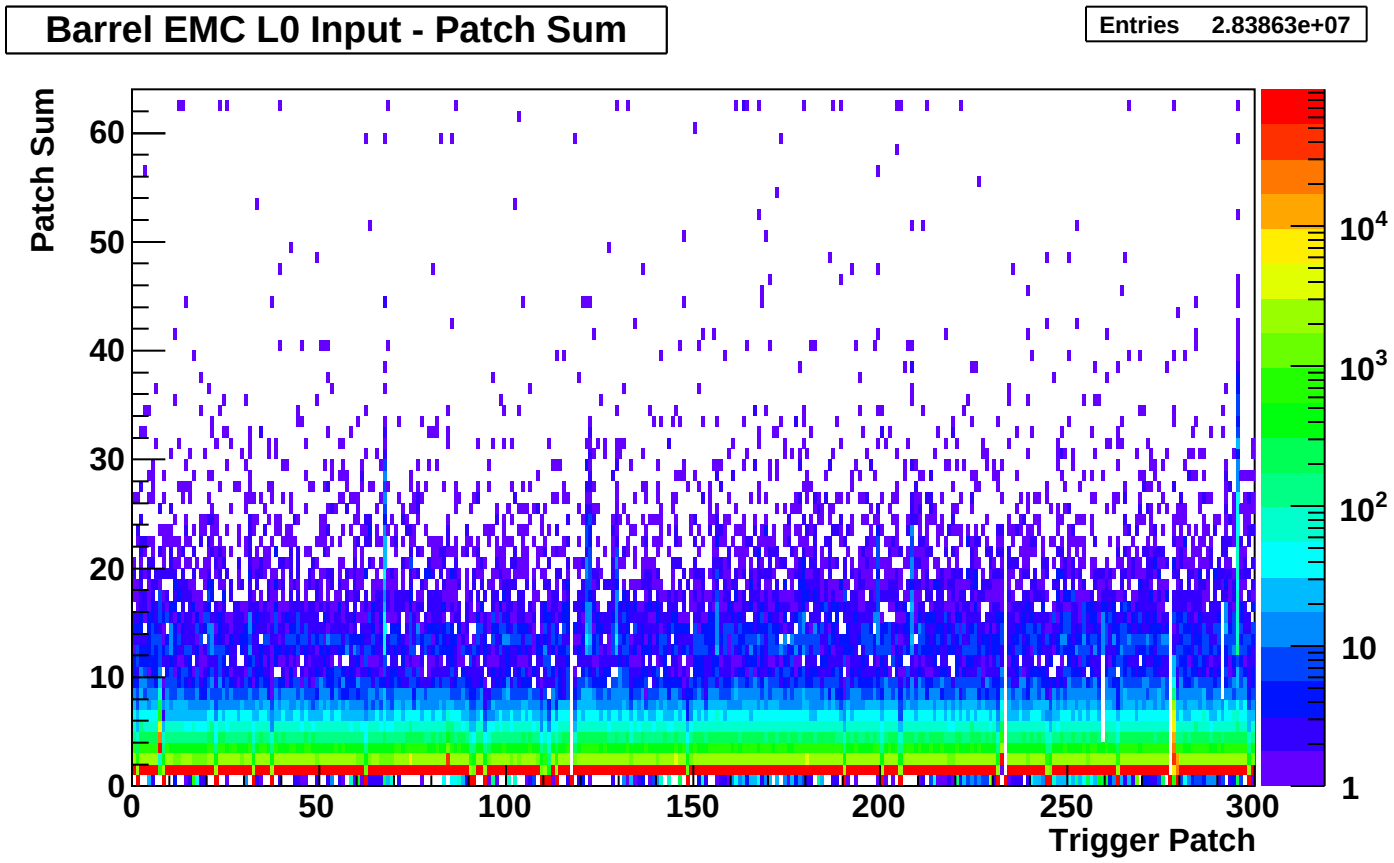

BunchId7Bit (BHT3)
Entries 9480

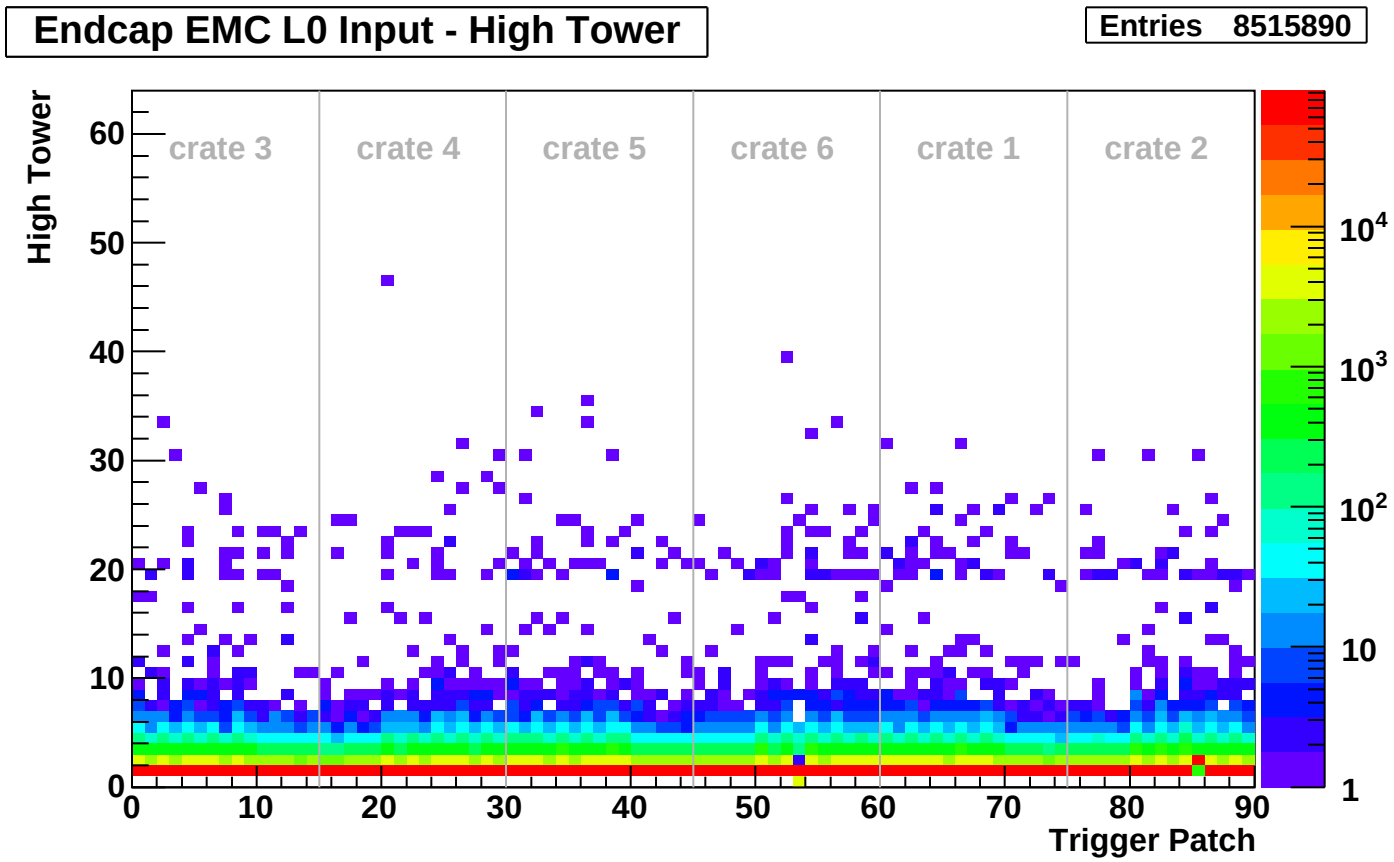

BunchId7Bit (all events)
Entries 94621

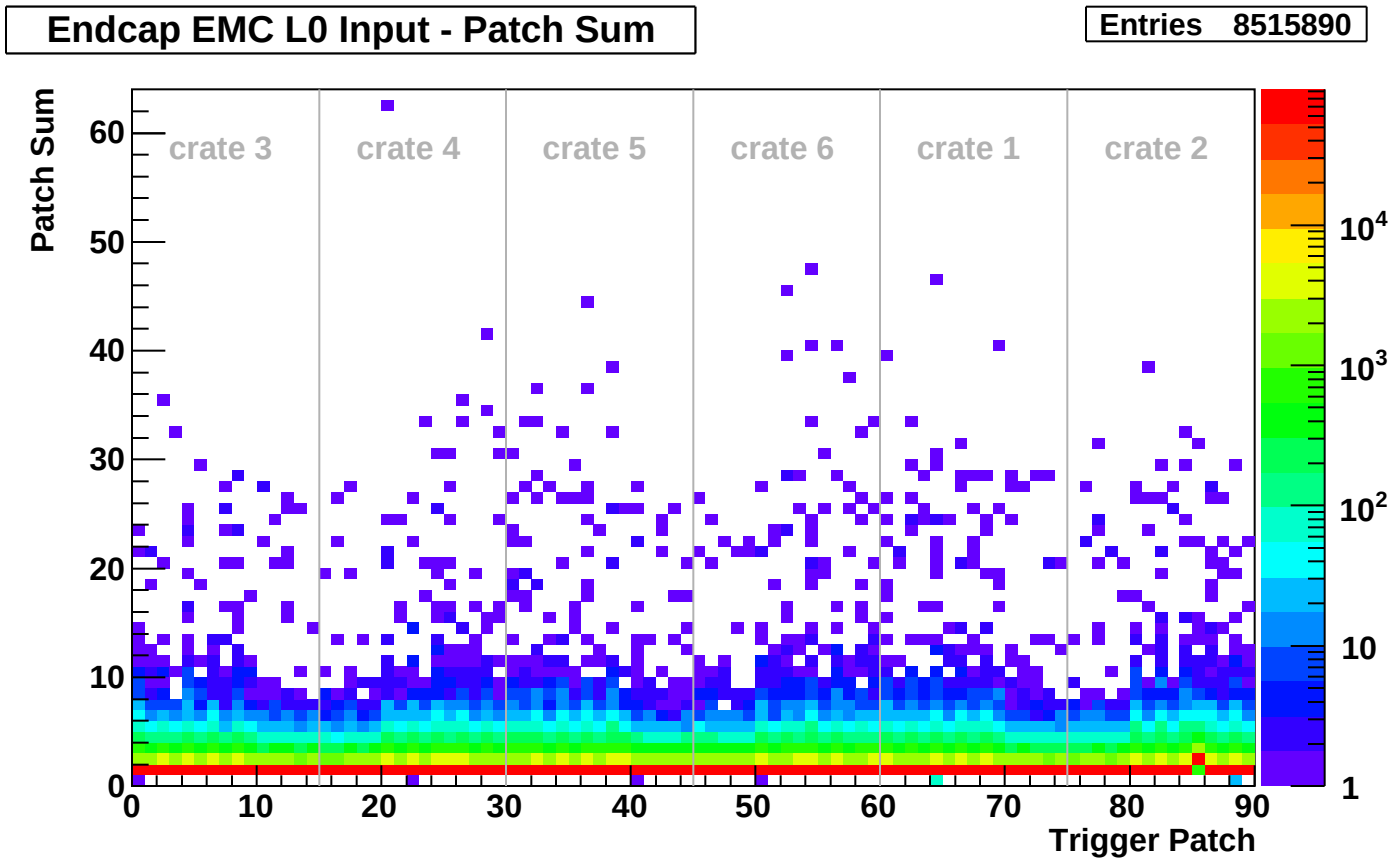

BunchId7Bit (JP1)
Entries 2933

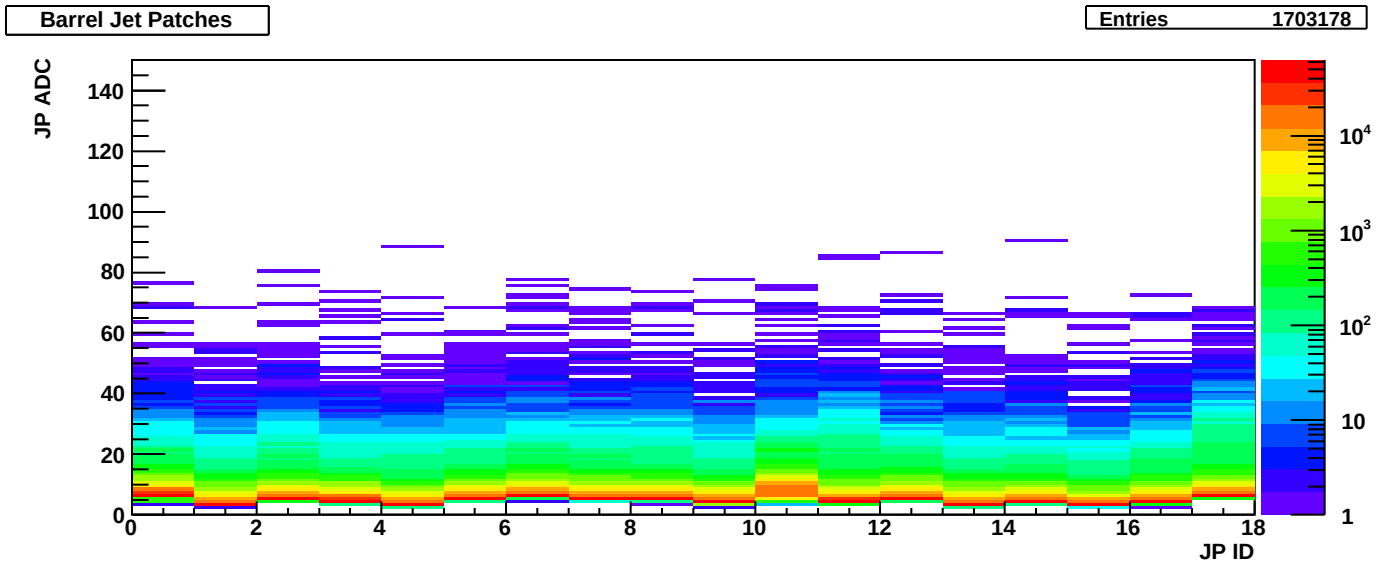

BunchId7Bit (JP2||AJP)
Entries 999

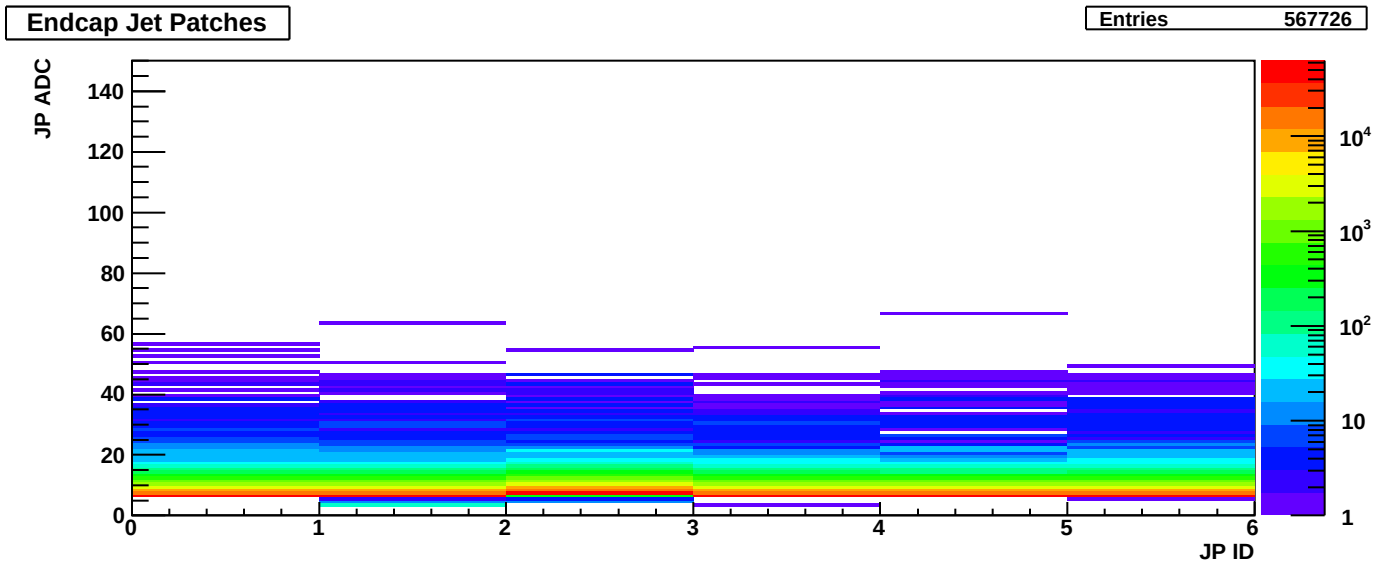

Barrel EMC L0 Input - High Tower
Entries 2.83863e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

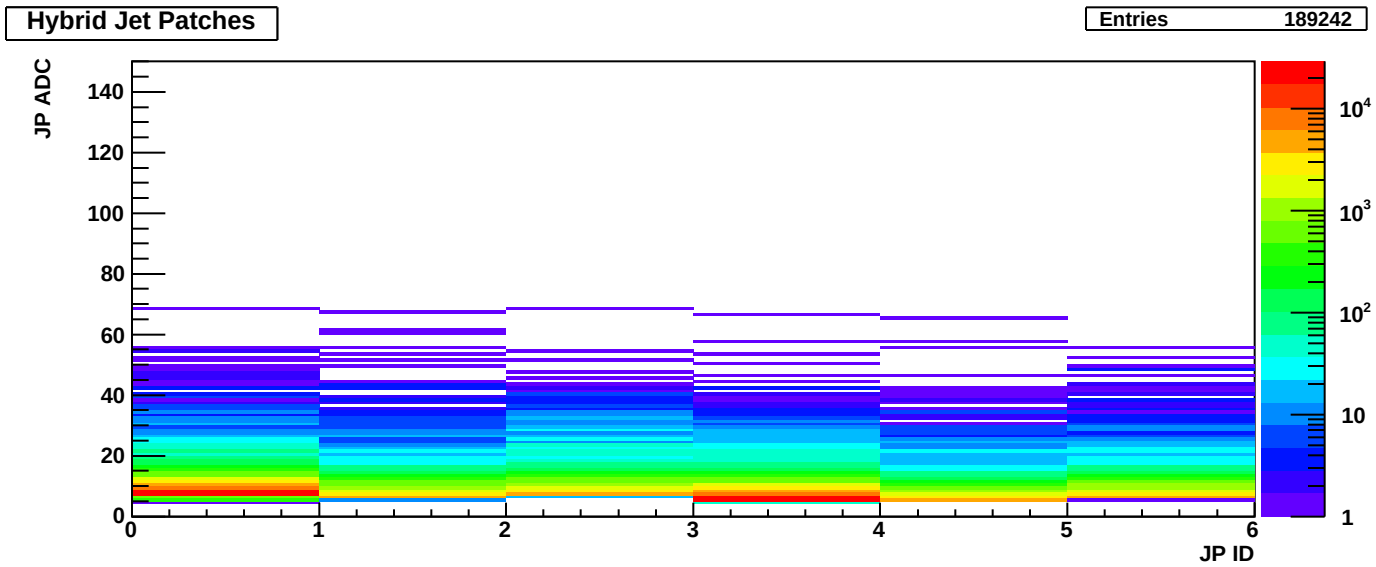

Barrel EMC L0 Input - Patch Sum
Entries 2.83863e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4

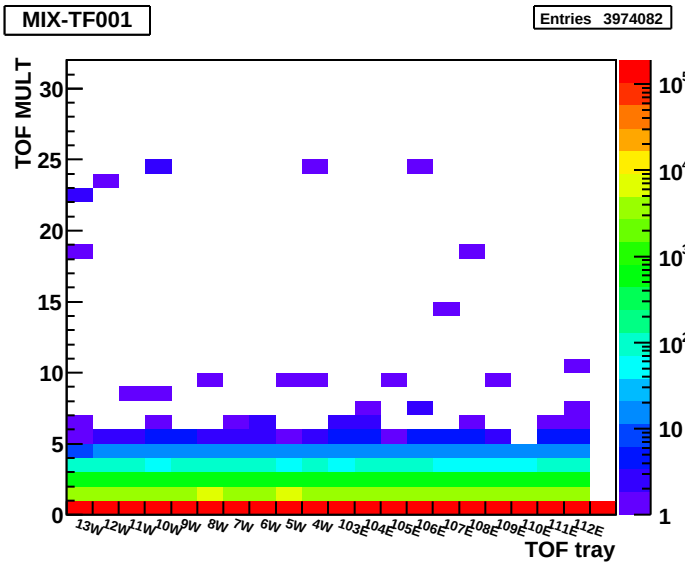

Endcap EMC L0 Input - High Tower
Entries 8515890
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

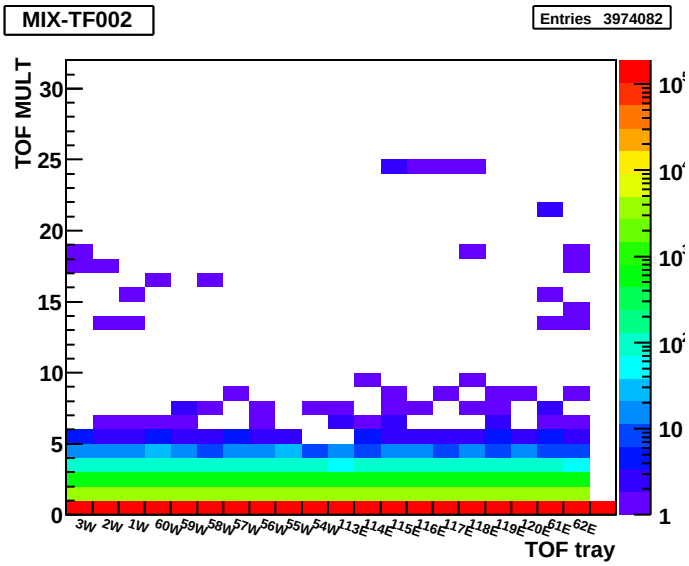

Endcap EMC L0 Input - Patch Sum
Entries 8515890
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

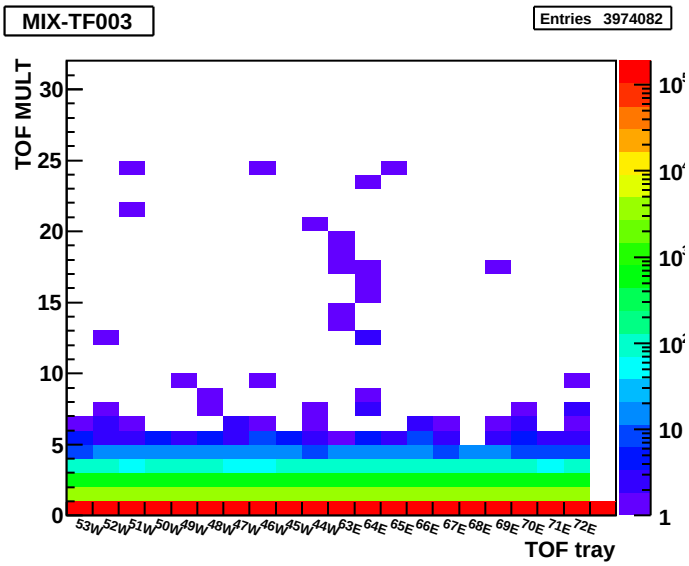

Barrel Jet Patches
Entries 1703178
JP ADC
JP ID

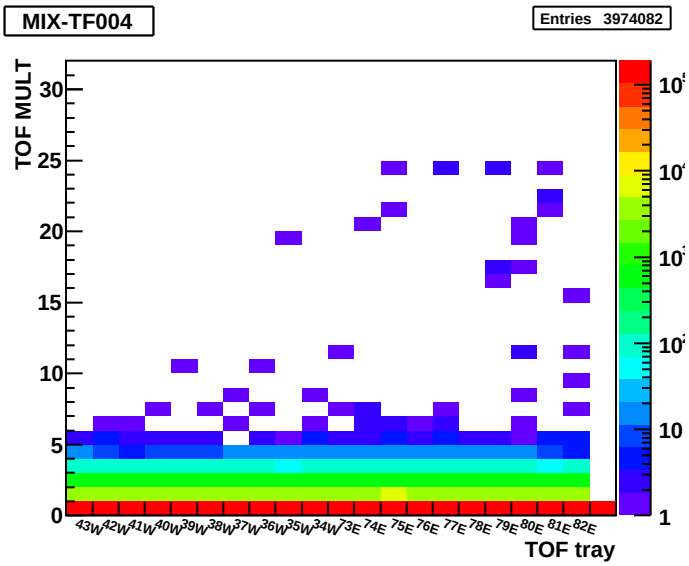

Endcap Jet Patches
Entries 567726
JP ADC
JP ID

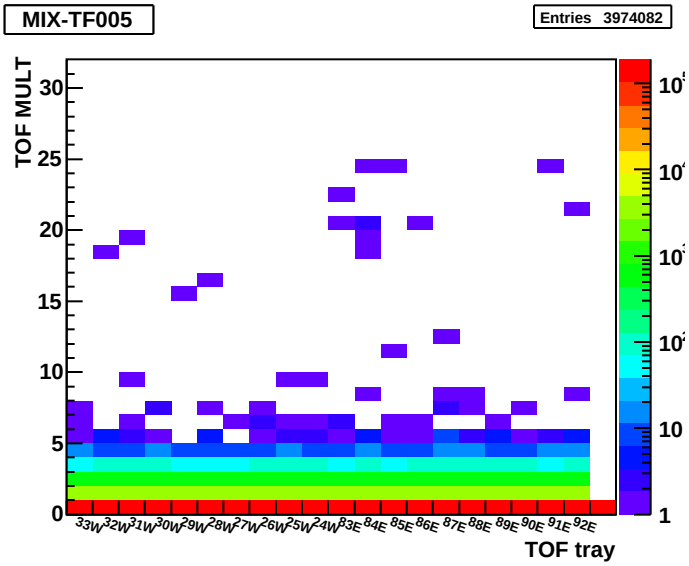

Hybrid Jet Patches
Entries 189242
JP ADC
JP ID

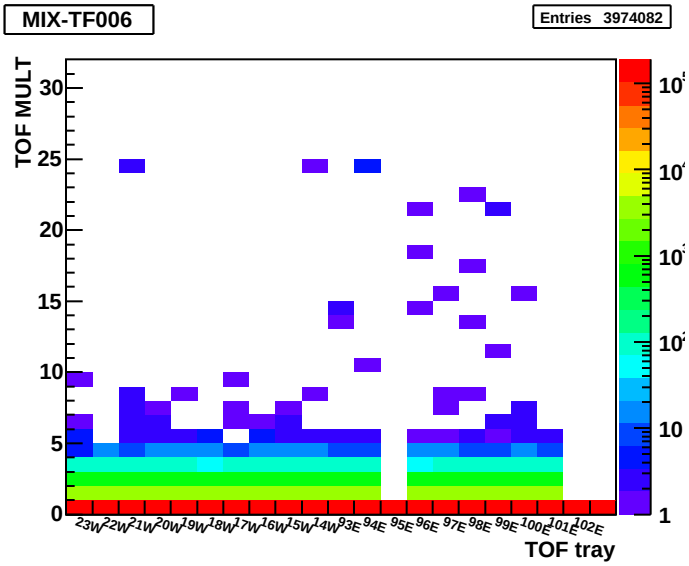

MIX-TF001
Entries 3974082
TOF MULT
TOF tray

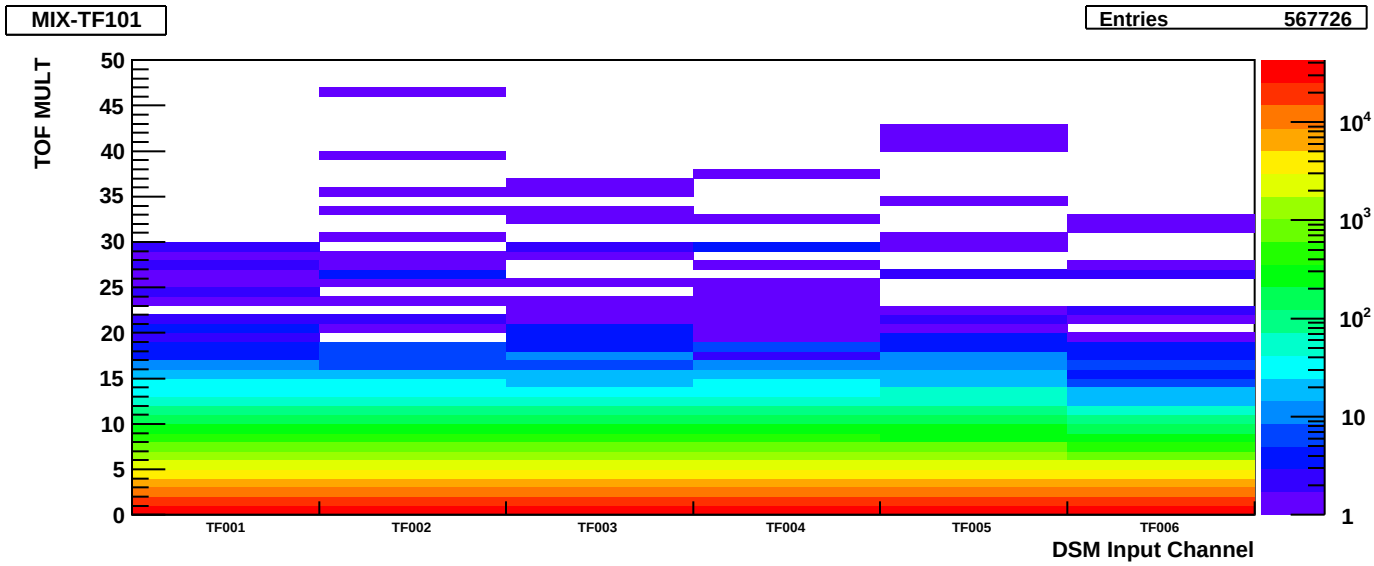

MIX-TF002
Entries 3974082
TOF MULT
TOF tray

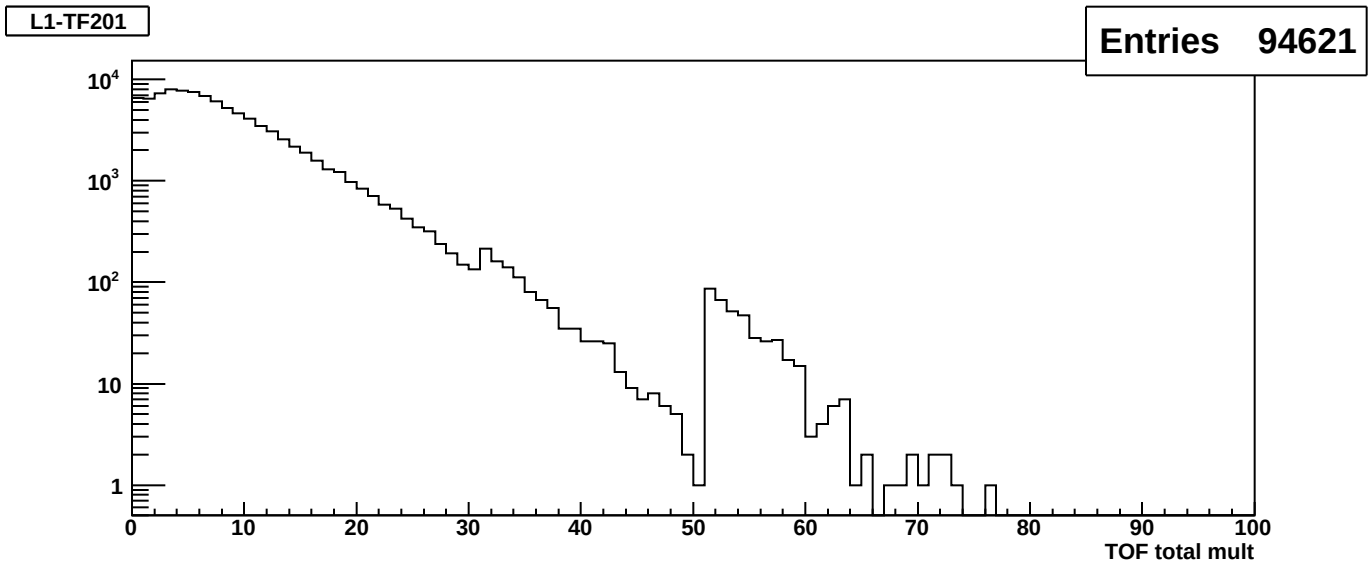

MIX-TF003
Entries 3974082
TOF MULT
TOF tray

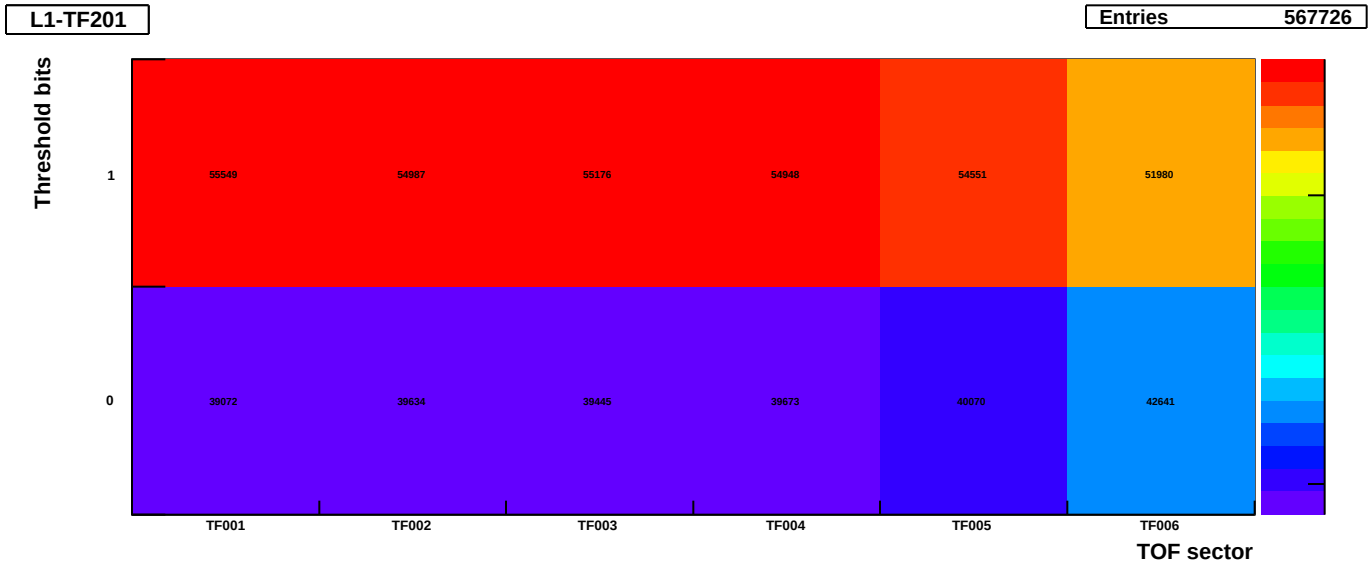

MIX-TF004
Entries 3974082
TOF MULT
TOF tray

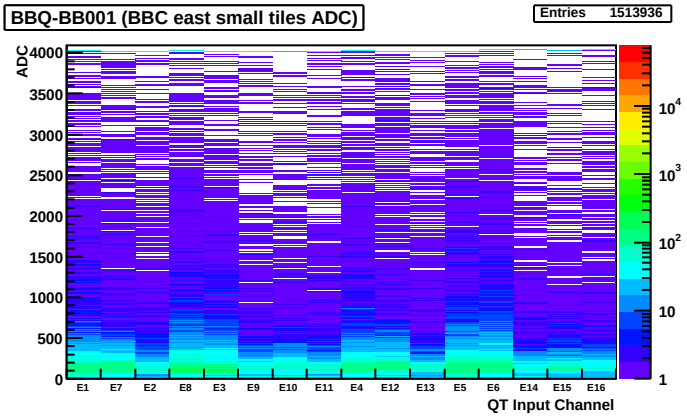

MIX-TF005
Entries 3974082
TOF MULT
TOF tray

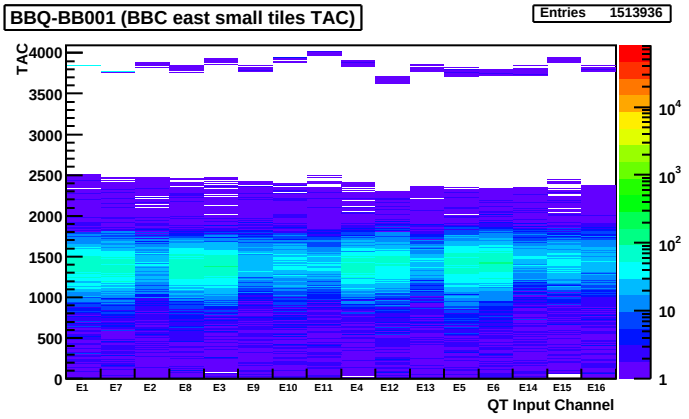

MIX-TF006
Entries 3974082
TOF MULT
TOF tray

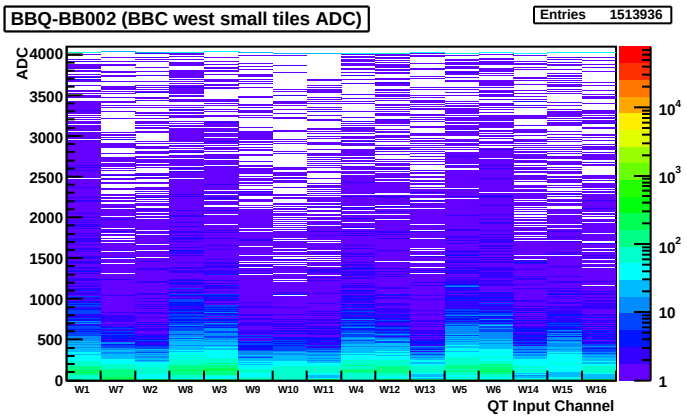

MIX-TF101
Entries 567726
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

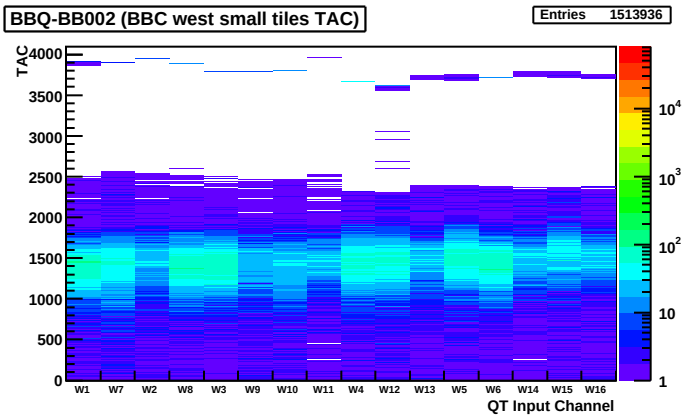

L1-TF201
Entries 94621
TOF total mult

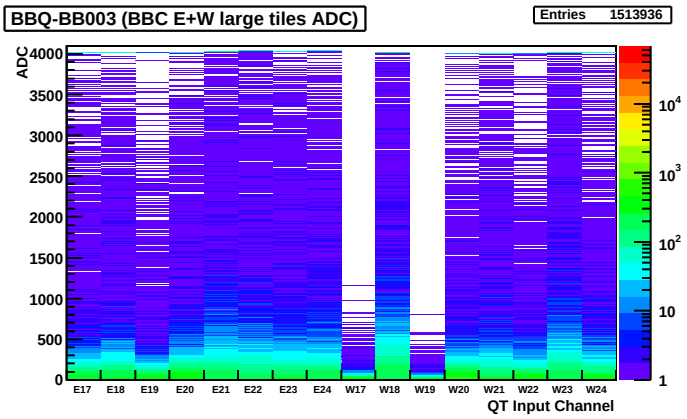

L1-TF201
Entries 567726
Threshold bits
55549
54987
55176
54948
54551
51980
39072
39634
39445
39673
40070
42641
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

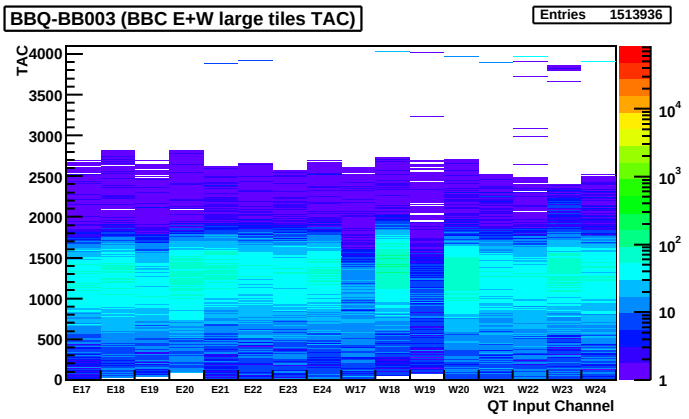

BBQ-BB001 (BBC east small tiles ADC)
Entries 1513936
ADC
QT Input Channel

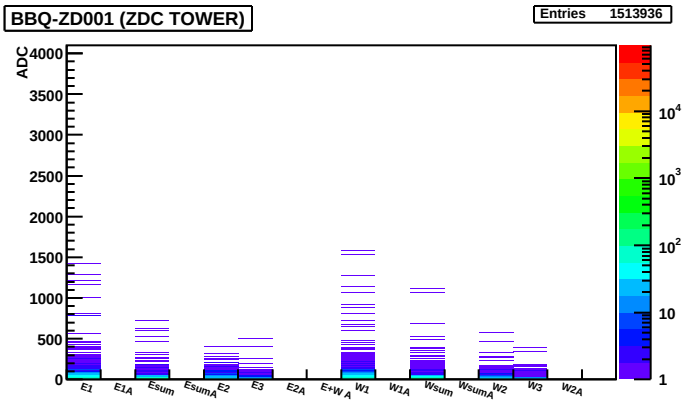

BBQ-BB001 (BBC east small tiles TAC)
Entries 1513936
TAC
QT Input Channel

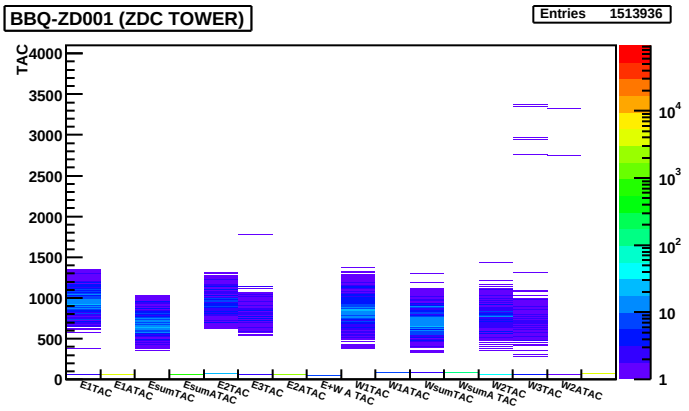

BBQ-BB002 (BBC west small tiles ADC)
Entries 1513936
ADC
QT Input Channel

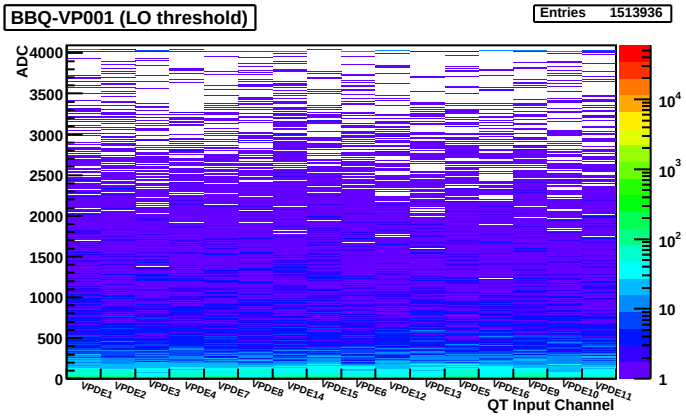

BBQ-BB002 (BBC west small tiles TAC)
Entries 1513936
TAC
QT Input Channel

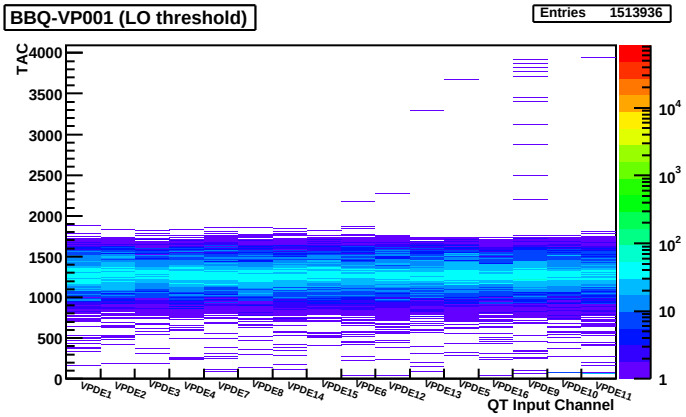

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1513936
ADC
QT Input Channel

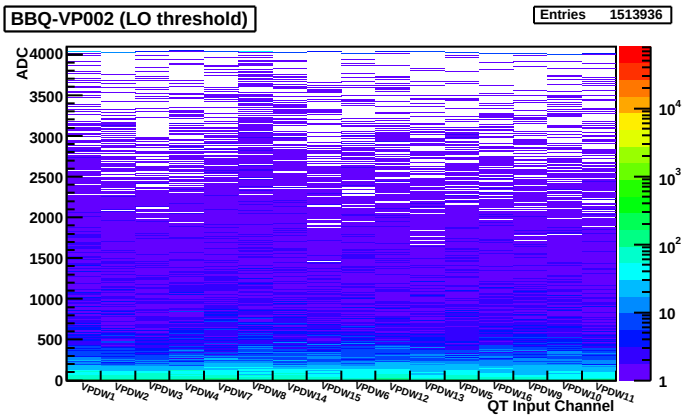

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1513936
TAC
QT Input Channel

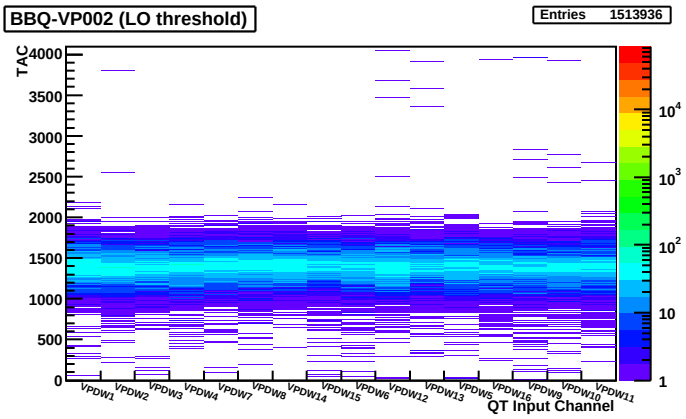

BBQ-ZD001 (ZDC TOWER)
Entries 1513936
ADC

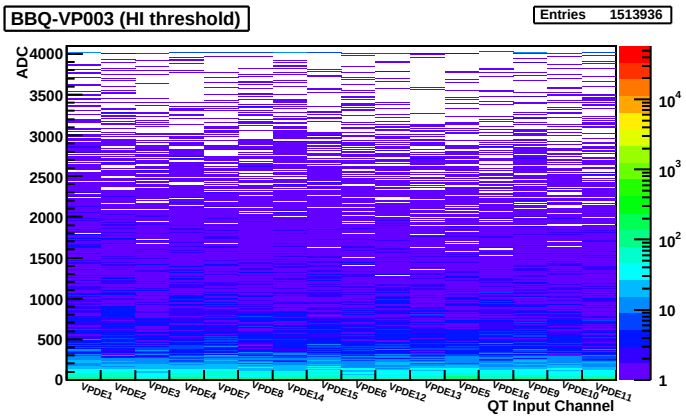

BBQ-ZD001 (ZDC TOWER)
Entries 1513936
TAC

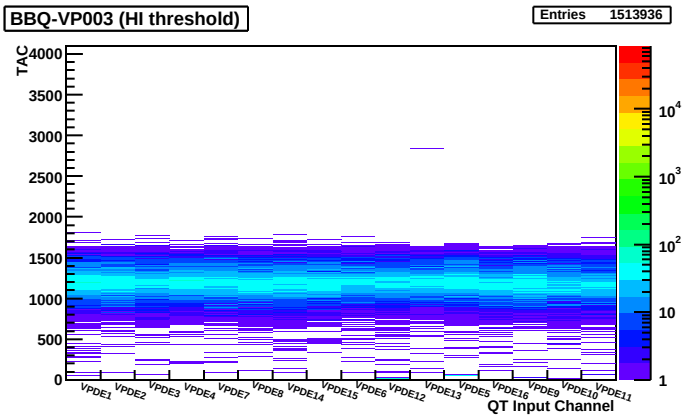

BBQ-VP001 (LO threshold)
Entries 1513936
ADC
QT Input Channel

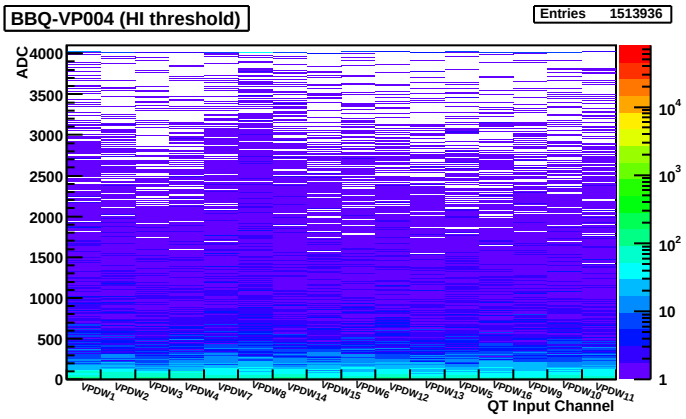

BBQ-VP001 (LO threshold)
Entries 1513936
TAC
QT Input Channel

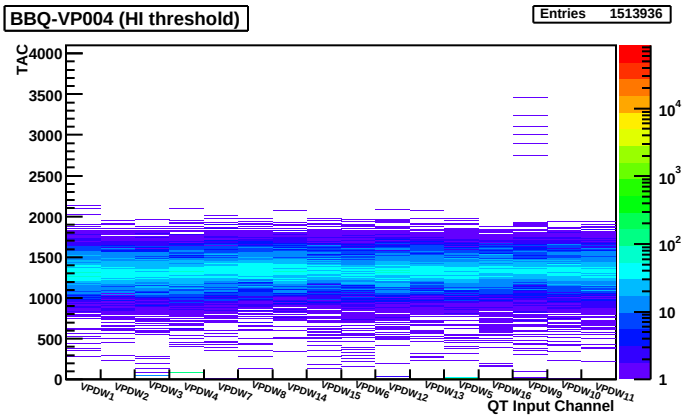

BBQ-VP002 (LO threshold)
Entries 1513936
ADC
QT Input Channel

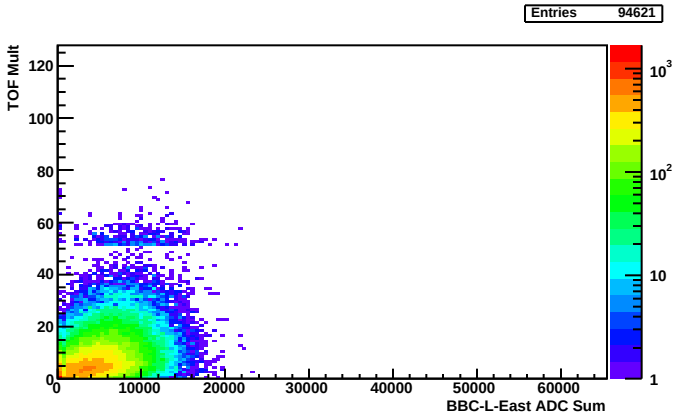

BBQ-VP002 (LO threshold)
Entries 1513936
TAC
QT Input Channel

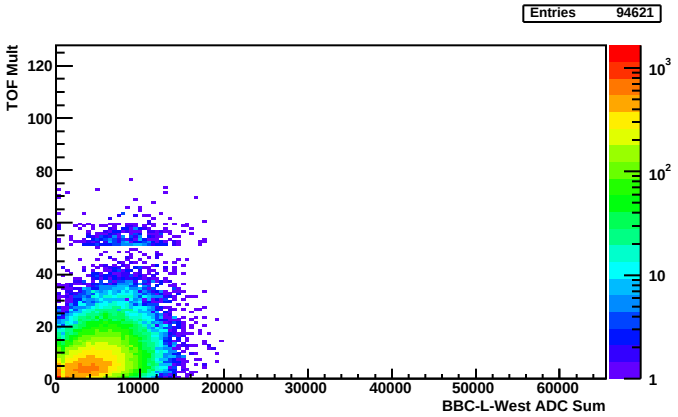

BBQ-VP003 (HI threshold)
Entries 1513936
ADC
QT Input Channel

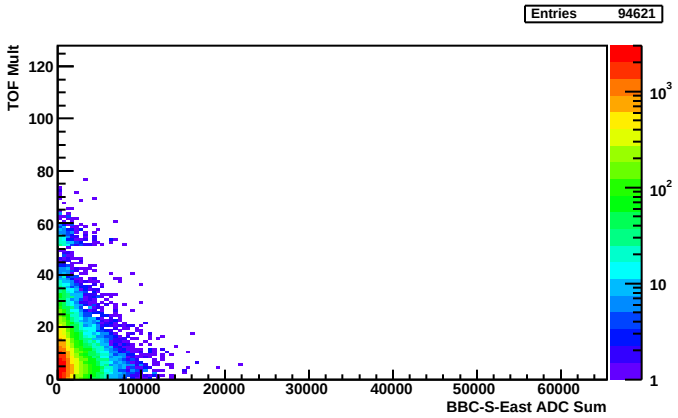

BBQ-VP003 (HI threshold)
Entries 1513936
TAC
QT Input Channel

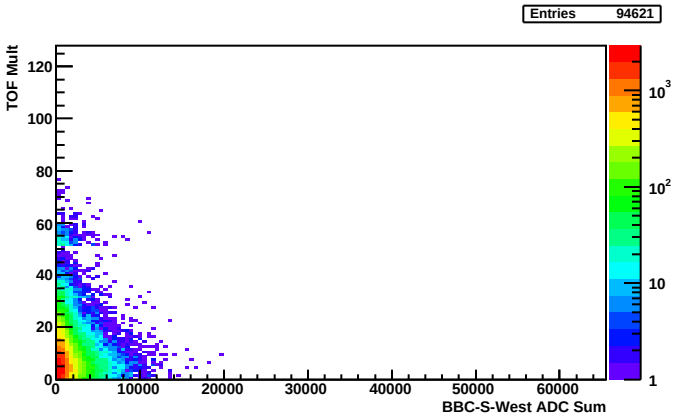

BBQ-VP004 (HI threshold)
Entries 1513936
ADC
QT Input Channel

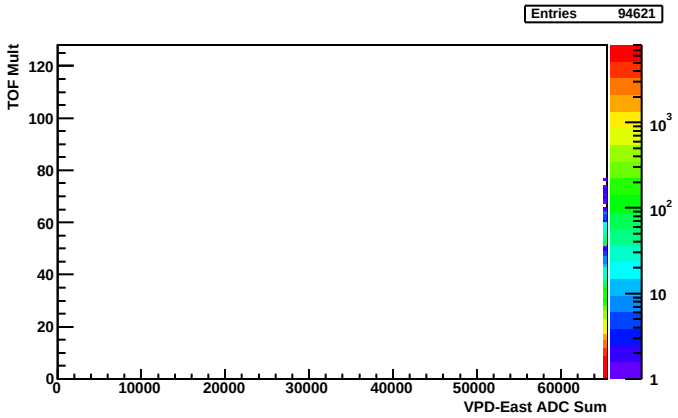

BBQ-VP004 (HI threshold)
Entries 1513936
TAC
QT Input Channel

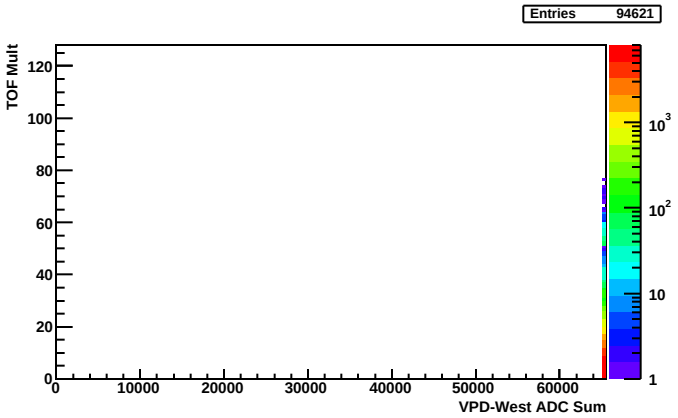

Entries 94621
TOF Mult
BBC-L-East ADC Sum

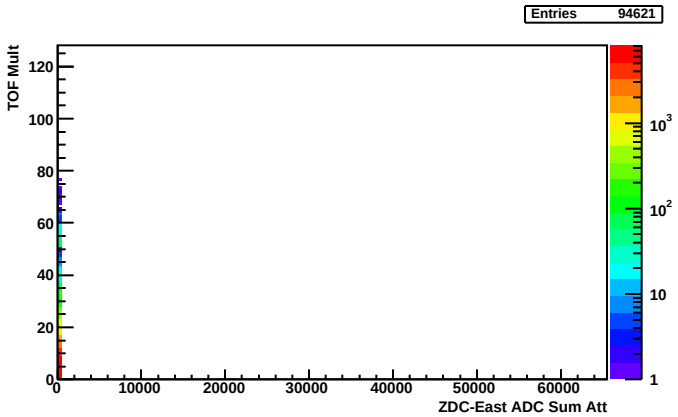

Entries 94621
TOF Mult
BBC-L-West ADC Sum

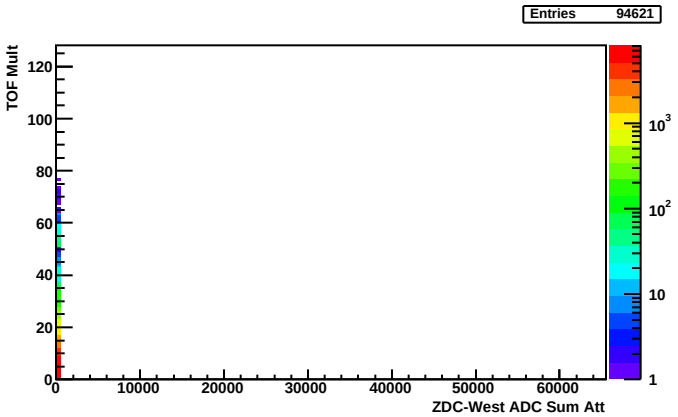

Entries 94621
TOF Mult
BBC-S-East ADC Sum

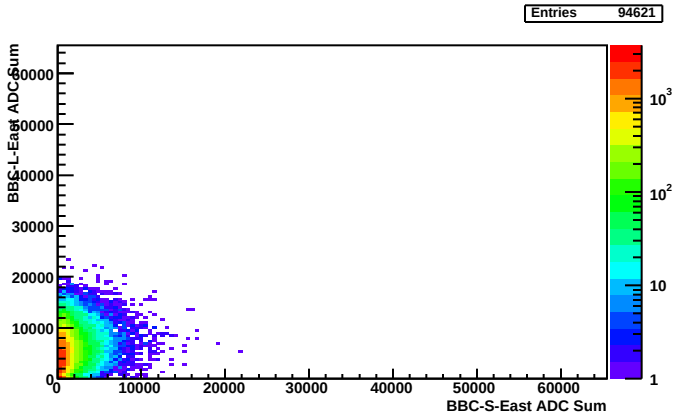

Entries 94621
TOF Mult
BBC-S-West ADC Sum

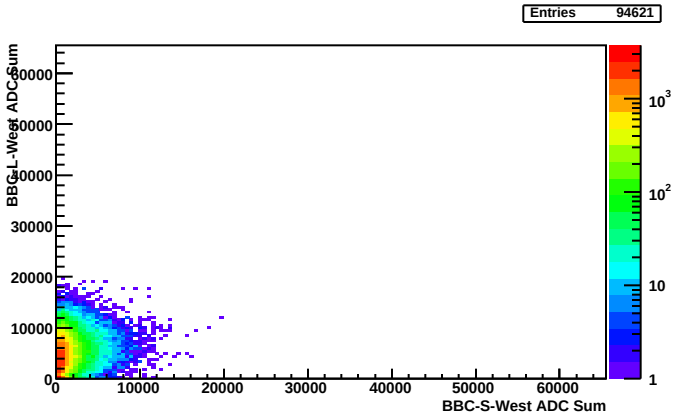

Entries 94621
TOF Mult
VPD-East ADC Sum

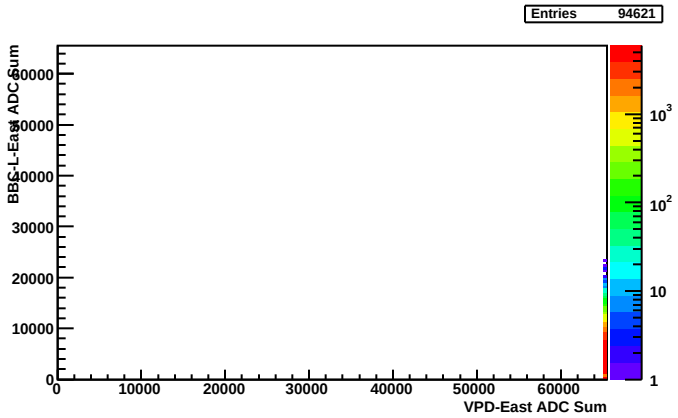

Entries 94621
TOF Mult
VPD-West ADC Sum

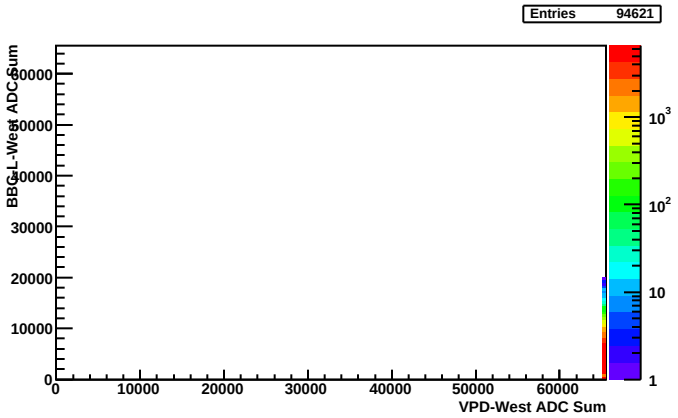

Entries 94621
TOF Mult
ZDC-East ADC Sum Att

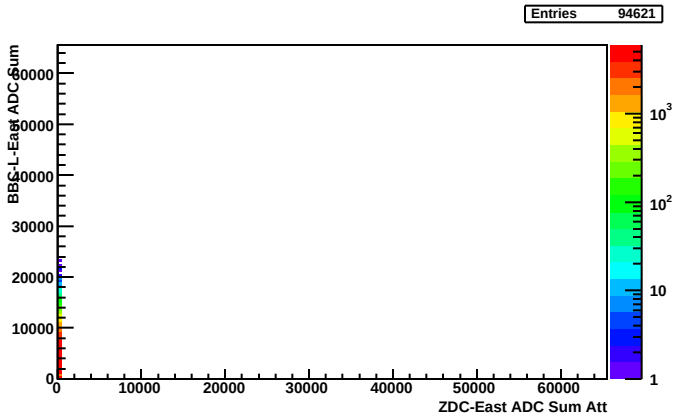

Entries 94621
TOF Mult
ZDC-West ADC Sum Att

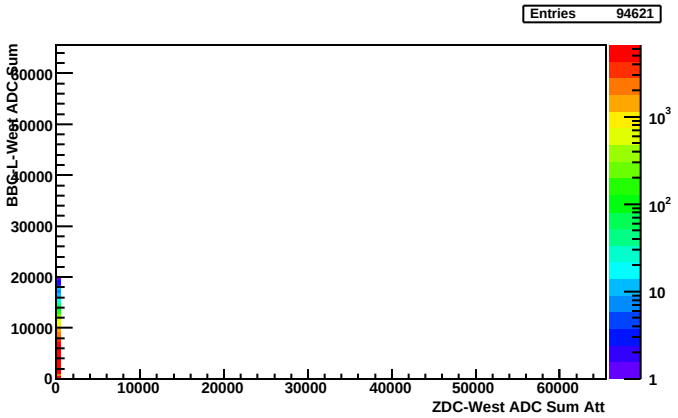

Entries 94621
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 94621
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 94621
BBC-L-East ADC Sum
VPD-East ADC Sum


Entries 94621
BBC-L-West ADC Sum
VPD-West ADC Sum


Entries 94621
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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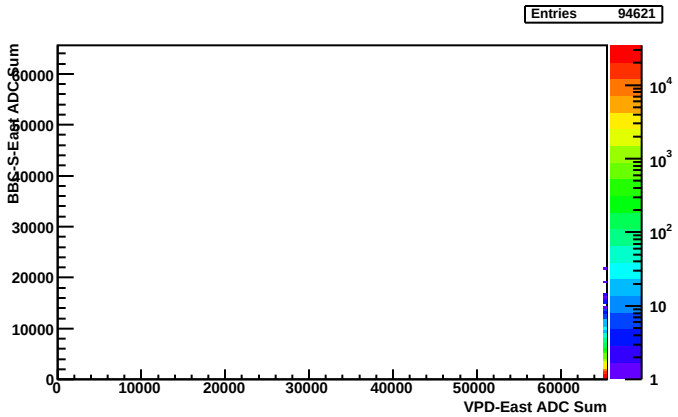
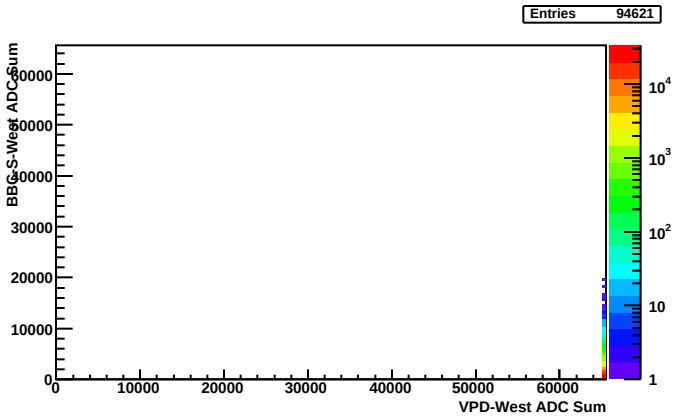
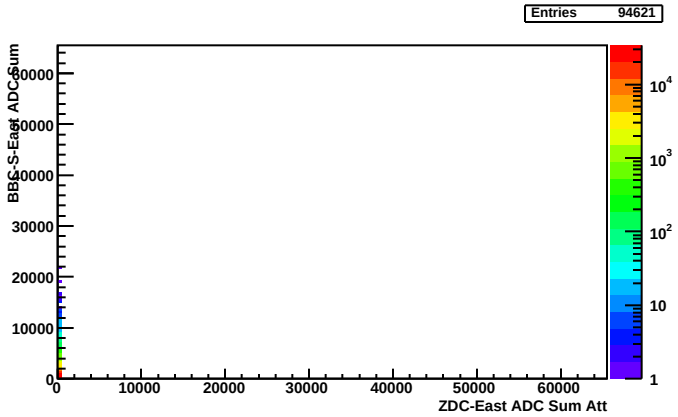
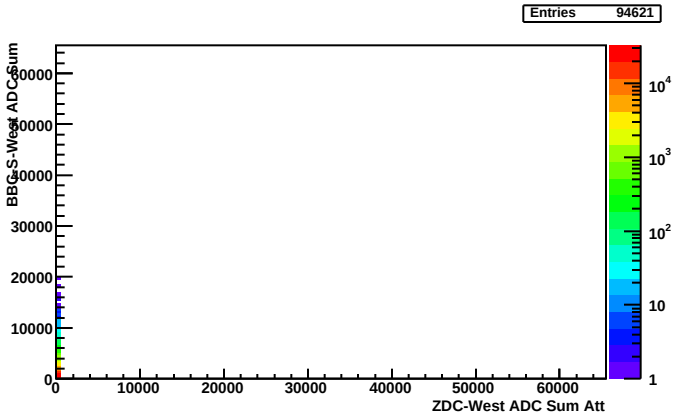
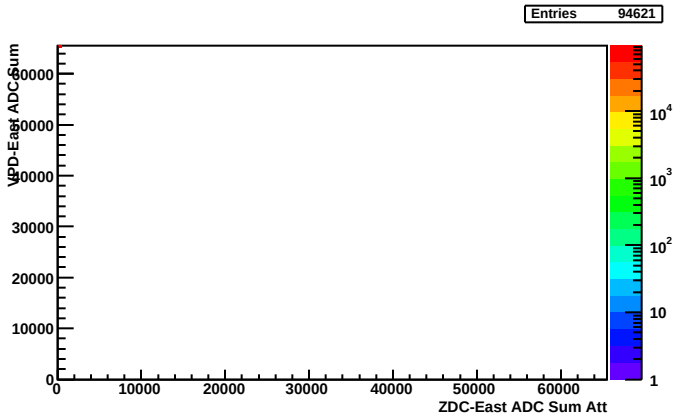
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

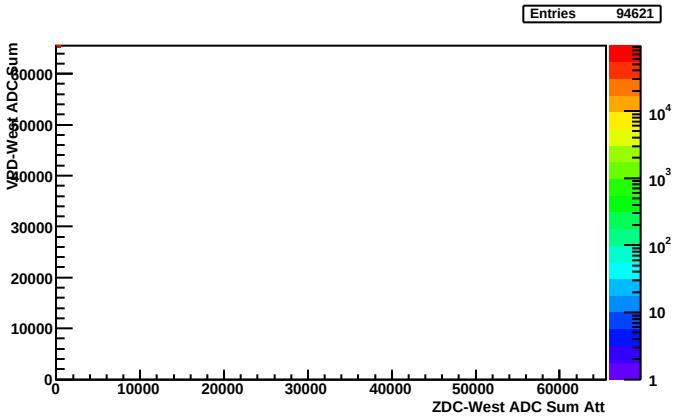

Entries 94621
BBC-S-East ADC Sum
VPD-East ADC Sum

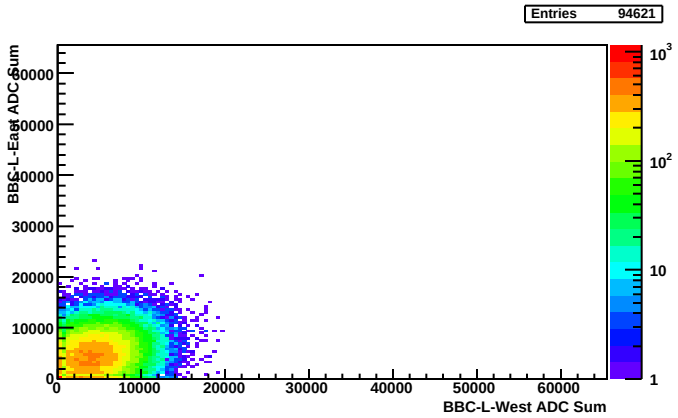

Entries 94621
BBC-S-West ADC Sum
VPD-West ADC Sum

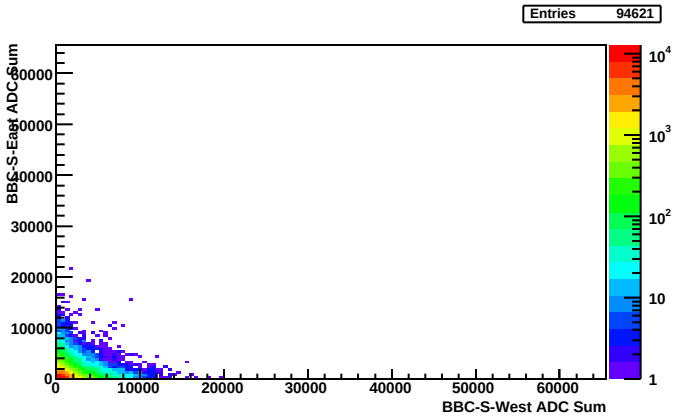

Entries 94621
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

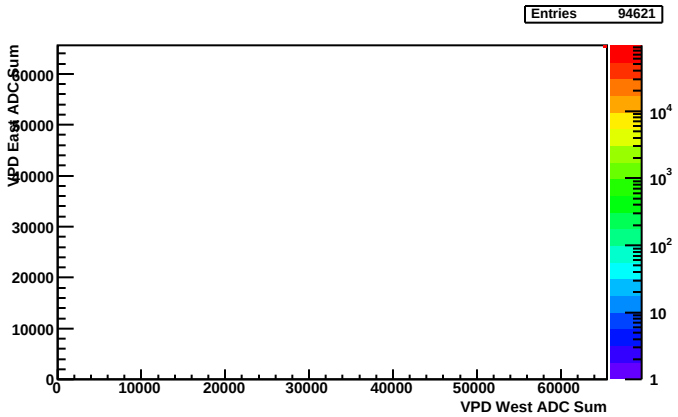

Entries 94621
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

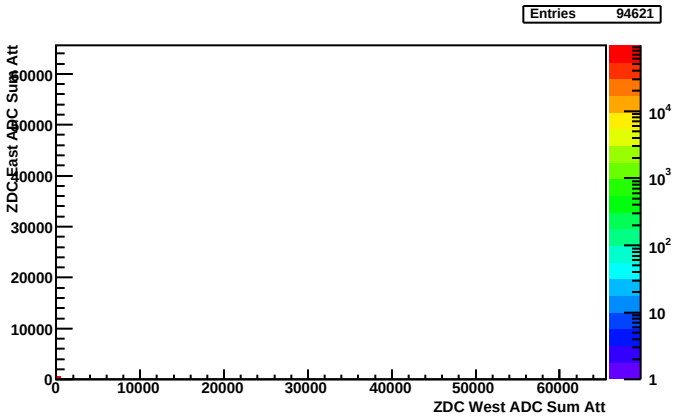

Entries 94621
VPD-East ADC Sum
ZDC-East ADC Sum Att

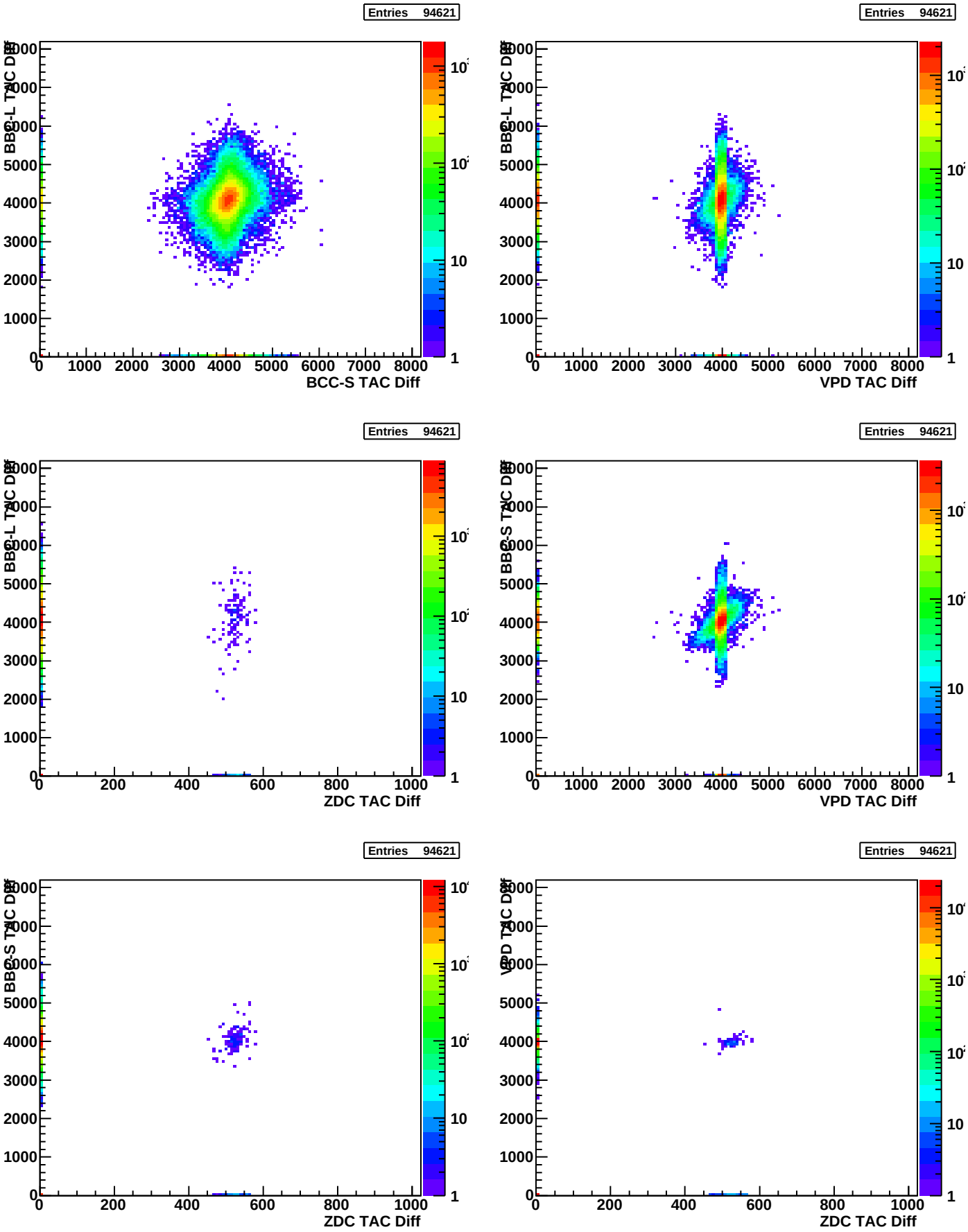

Entries 94621
VPD-West ADC Sum
ZDC-West ADC Sum Att

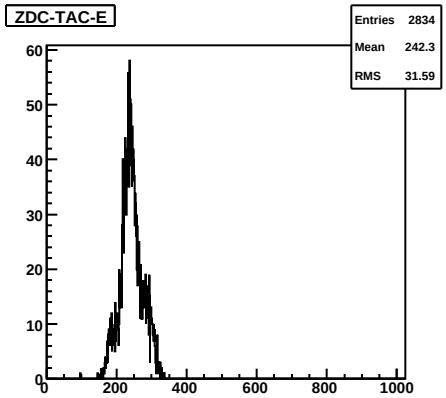

Entries 94621
BBC-L-East ADC Sum
BBC-L-West ADC Sum

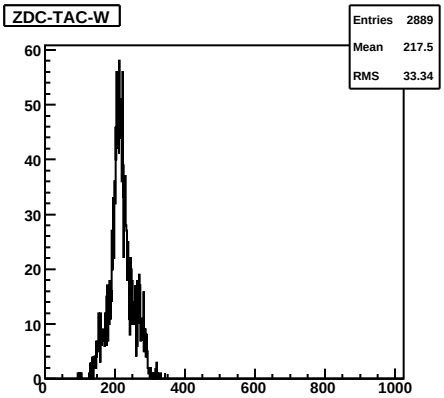

Entries 94621
BBC-S-East ADC Sum
BBC-S-West ADC Sum

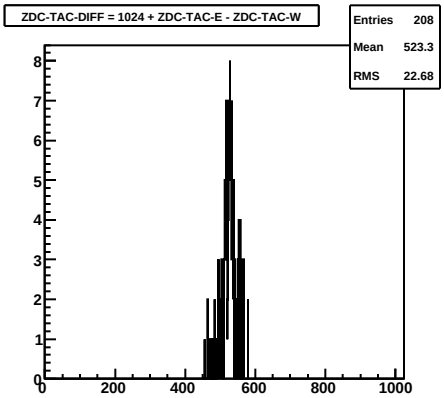

Entries 94621
VPD East ADC Sum
VPD West ADC Sum

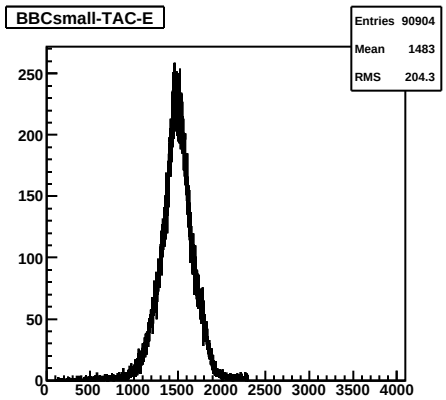

Entries 94621
ZDC East ADC Sum Att
ZDC West ADC Sum Att

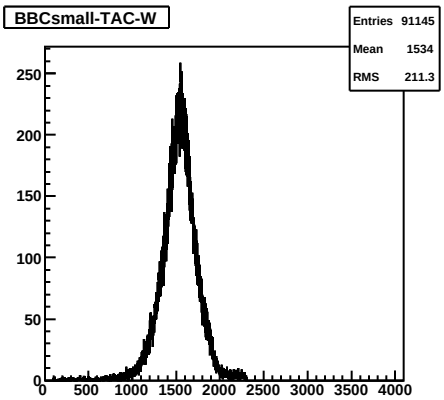

Entries 94621
BBC-L TAC Diff
BCC-S TAC Diff
Entries 94621
BBC-L TAC Diff
VPD TAC Diff
Entries 94621
BBC-L TAC Diff
ZDC TAC Diff
Entries 94621
BBC-S TAC Diff
VPD TAC Diff
Entries 94621
BBC-S TAC Diff
ZDC TAC Diff
Entries 94621
VPD TAC Diff
ZDC TAC Diff

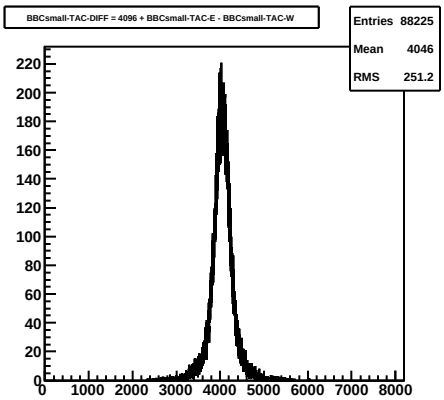

ZDC-TAC-E
Entries 2834
Mean 242.3
RMS 31.59

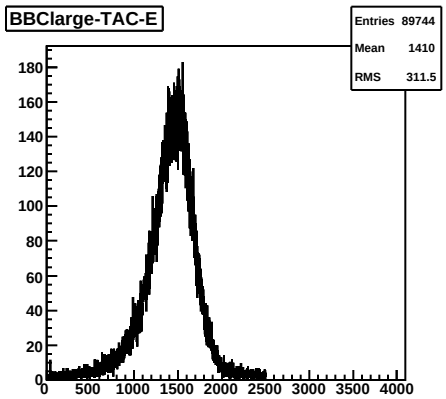

ZDC-TAC-W
Entries 2889
Mean 217.5
RMS 33.34

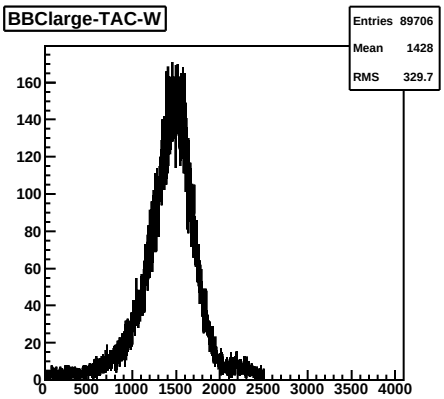

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 208
Mean 523.3
RMS 22.68

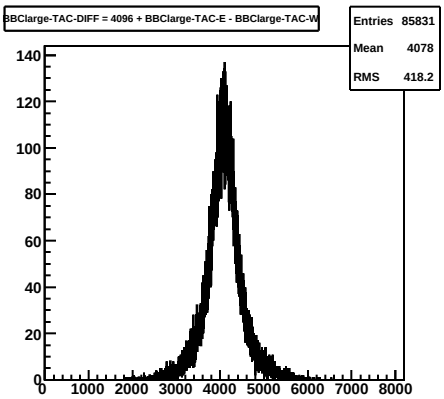

BBCsmall-TAC-E
Entries 90904
Mean 1483
RMS 204.3

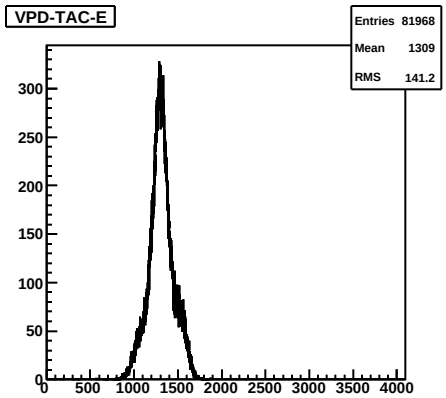

BBCsmall-TAC-W
Entries 91145
Mean 1534
RMS 211.3

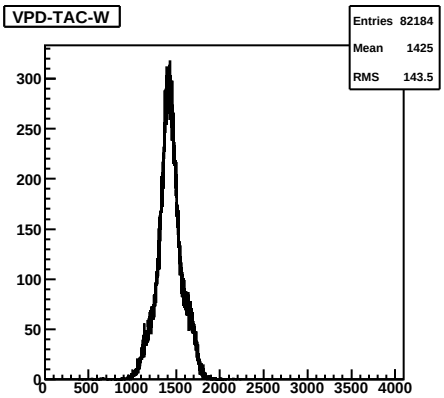

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 88225
Mean 4046
RMS 251.2

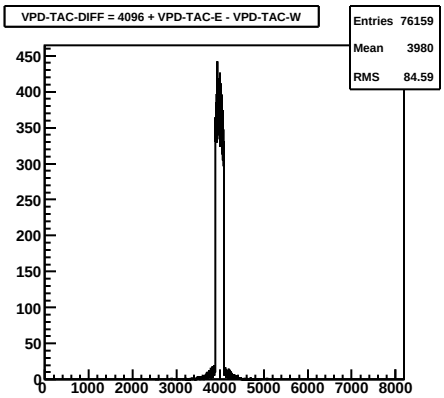

BBClarge-TAC-E
Entries 89744
Mean 1410
RMS 311.5

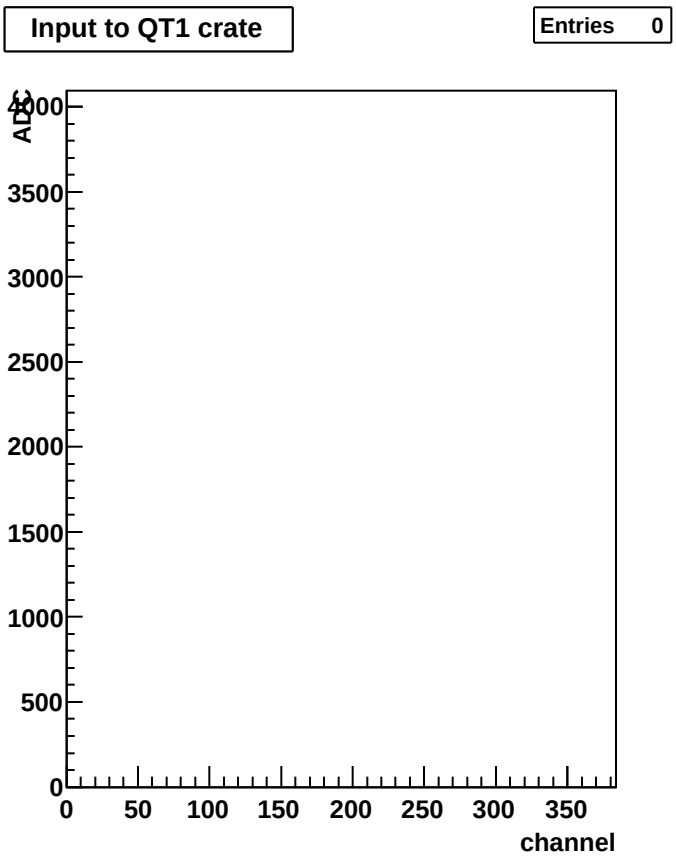

BBClarge-TAC-W
Entries 89706
Mean 1428
RMS 329.7

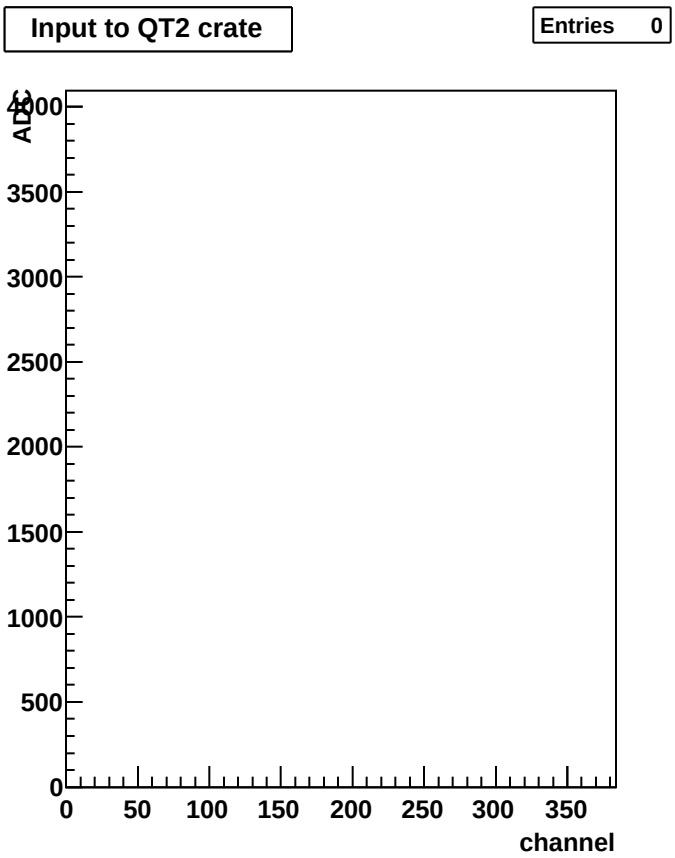

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 85831
Mean 4078
RMS 418.2

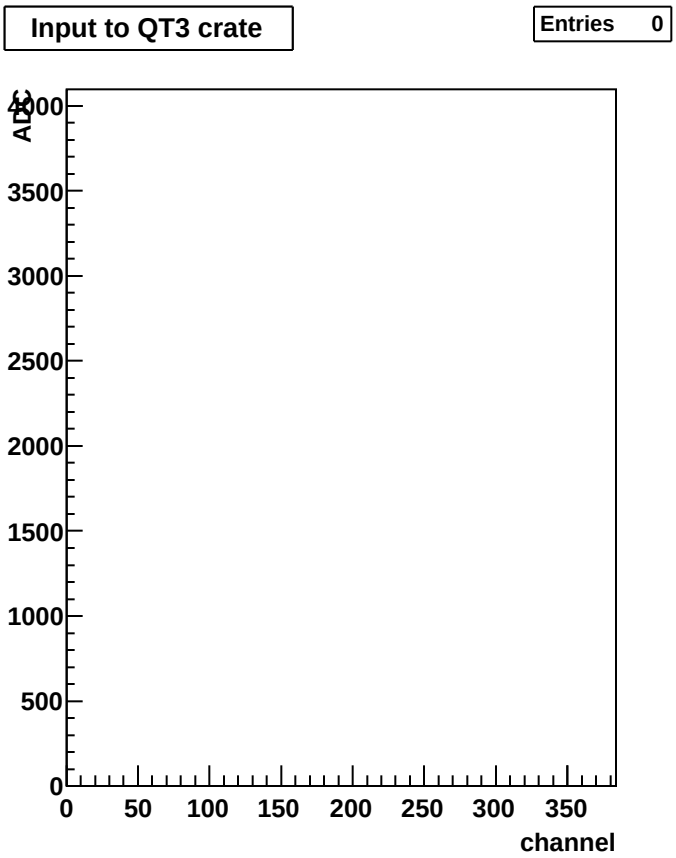

VPD-TAC-E
Entries 81968
Mean 1309
RMS 141.2

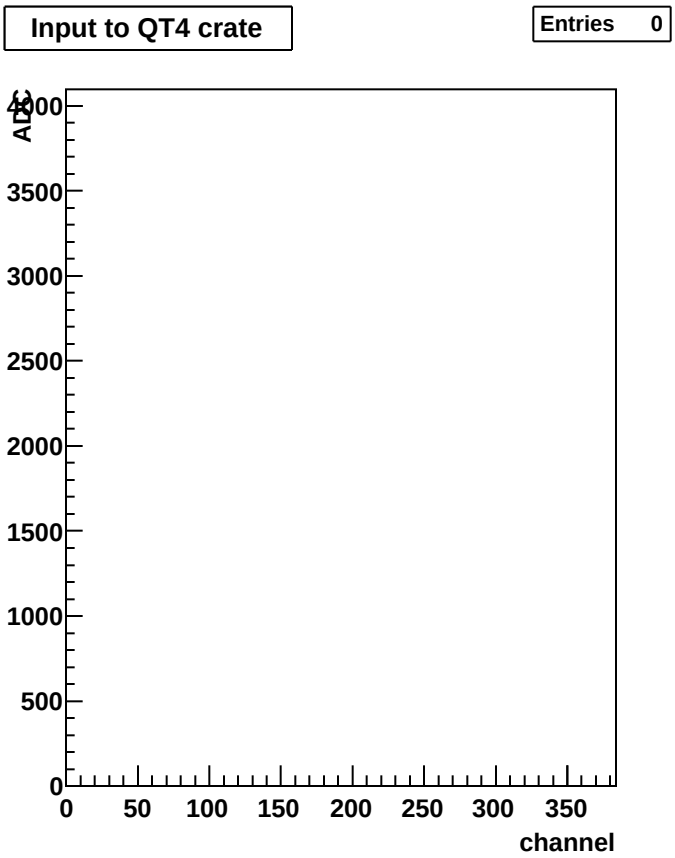

VPD-TAC-W
Entries 82184
Mean 1425
RMS 143.5

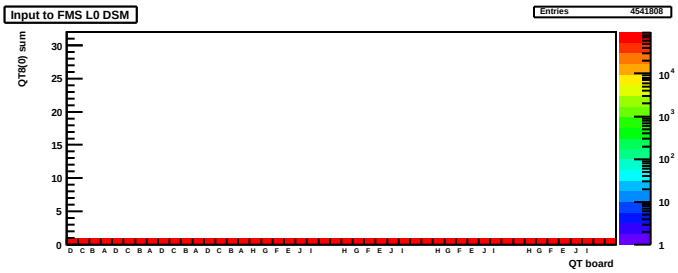

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 76159
Mean 3980
RMS 84.59

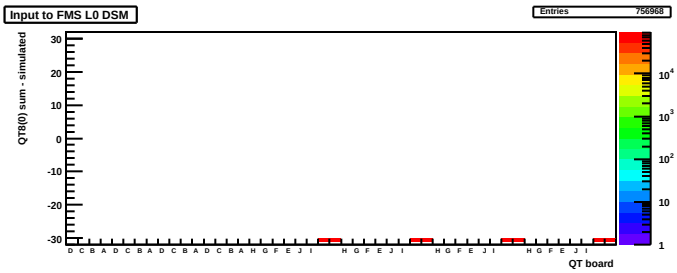

Input to QT1 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

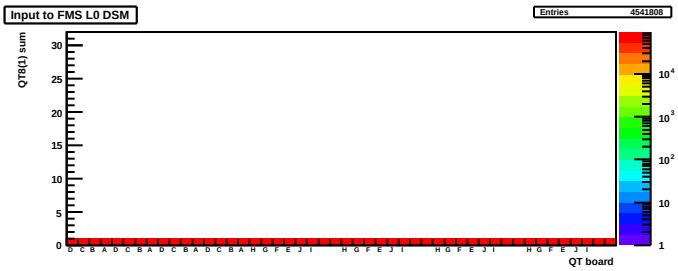

Input to QT2 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

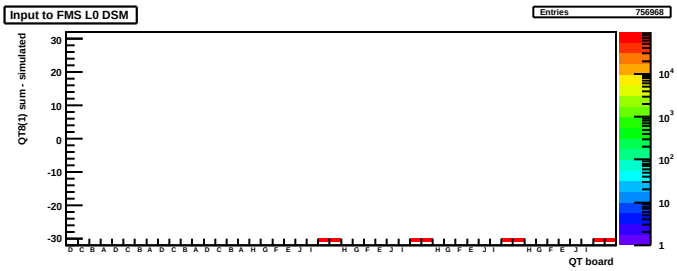

Input to QT3 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

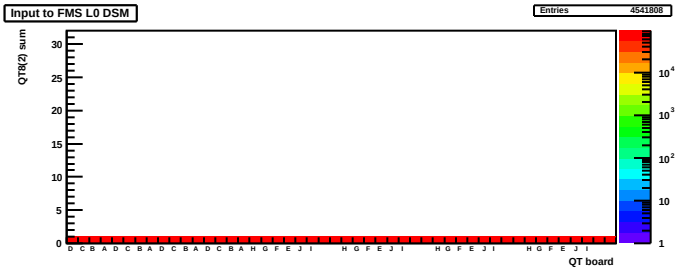

Input to QT4 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

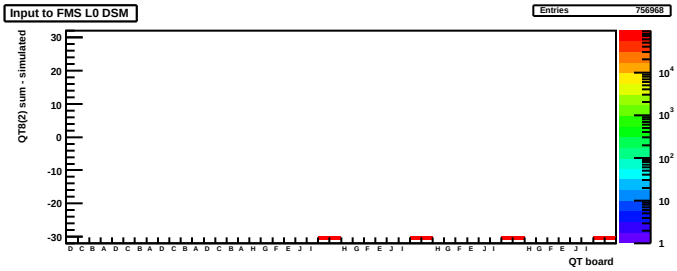

Input to FMS L0 DSM
Entries 4541808
QT8(0) sum
QT board

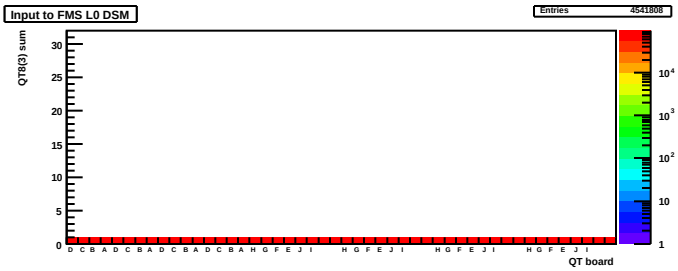

Input to FMS L0 DSM
Entries 756968
QT8(0) sum - simulated
QT board

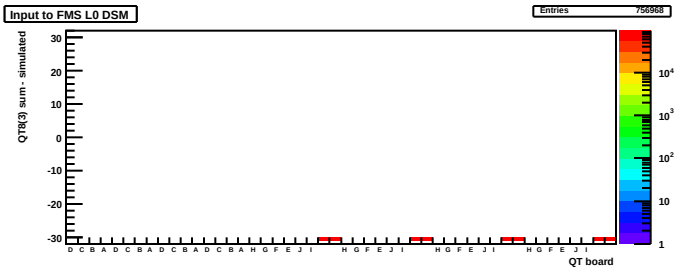

Input to FMS L0 DSM
Entries 4541808
QT8(1) sum
QT board

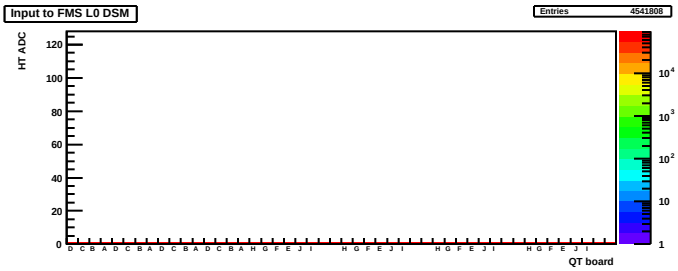

Input to FMS L0 DSM
Entries 756968
QT8(1) sum - simulated
QT board

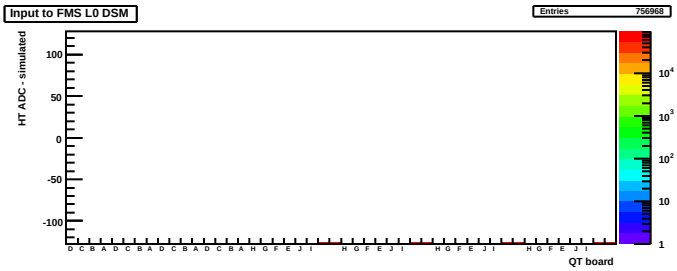

Input to FMS L0 DSM
Entries 4541808
QT8(2) sum
QT board

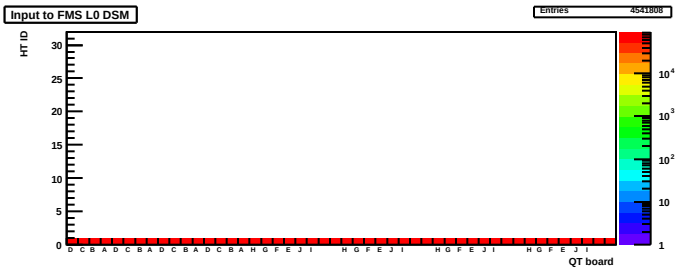

Input to FMS L0 DSM
Entries 756968
QT8(2) sum - simulated
QT board

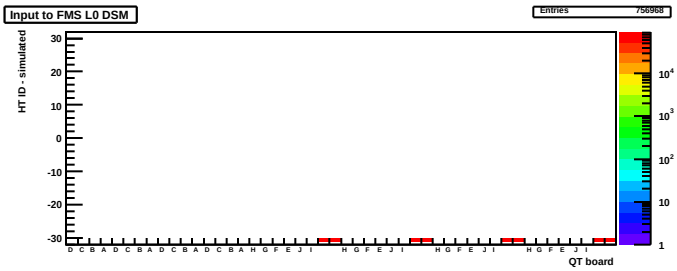

Input to FMS L0 DSM
Entries 4541808
QT8(3) sum
QT board

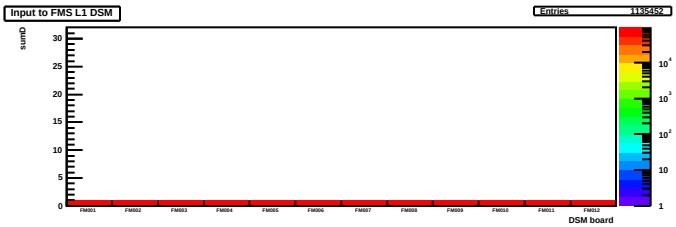

Input to FMS L0 DSM
Entries 756968
QT8(3) sum - simulated
QT board

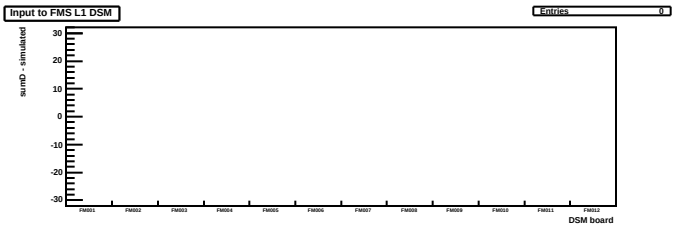

Input to FMS L0 DSM
Entries 4541808
HT ADC
QT board

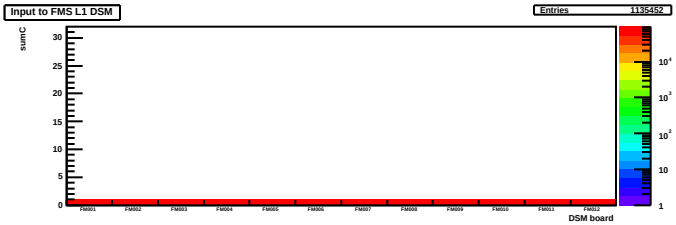

Input to FMS L0 DSM
Entries 756968
HT ADC - simulated
QT board

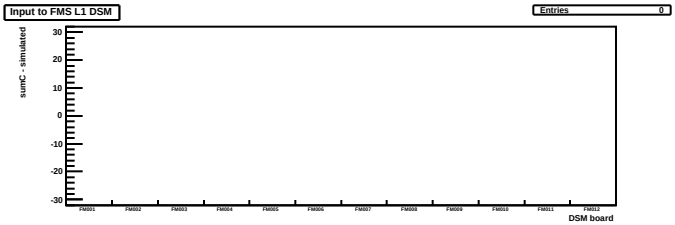

Input to FMS L0 DSM
Entries 4541808
HT ID
QT board

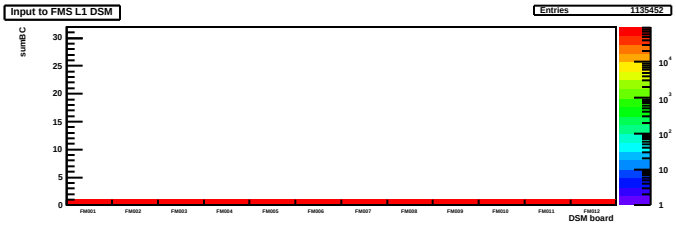

Input to FMS L0 DSM
Entries 756968
HT ID - simulated
QT board

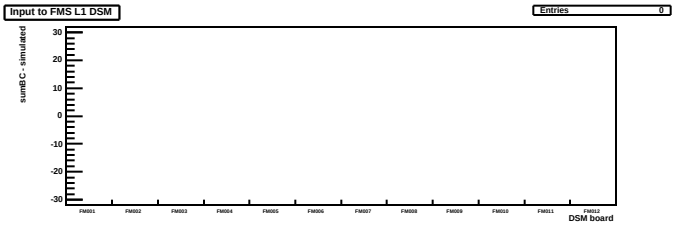

Input to FMS L1 DSM
Entries 1135452
sumD
DSM board

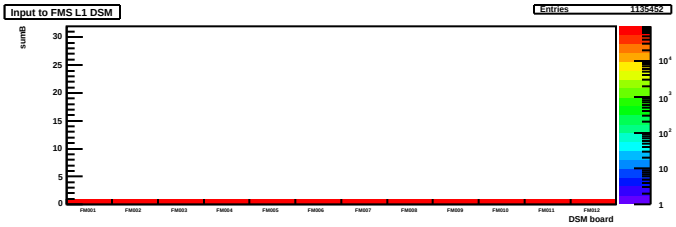

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

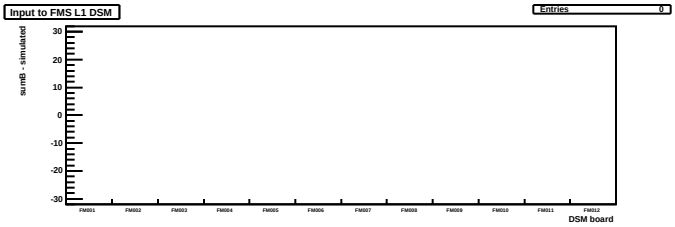

Input to FMS L1 DSM
Entries 1135452
sumC
DSM board

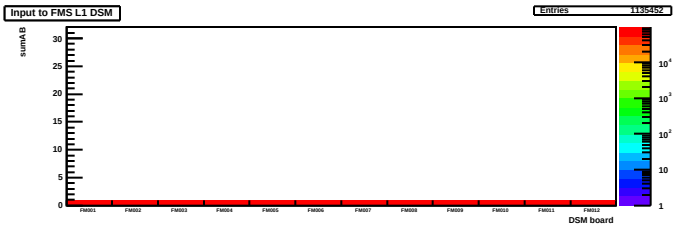

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

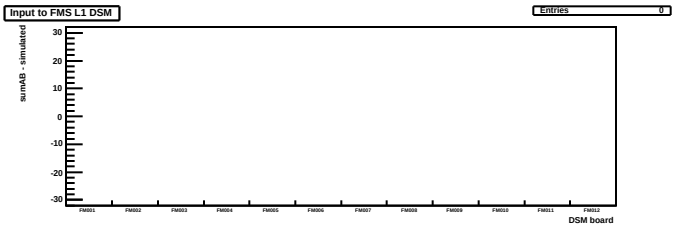

Input to FMS L1 DSM
Entries 1135452
sumBC
DSM board

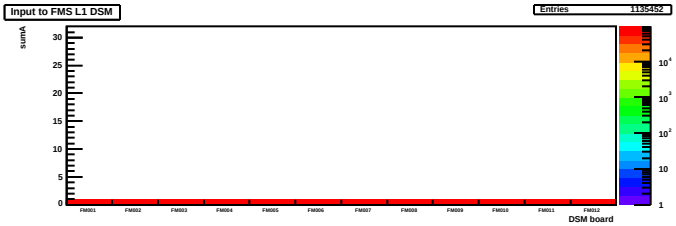

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

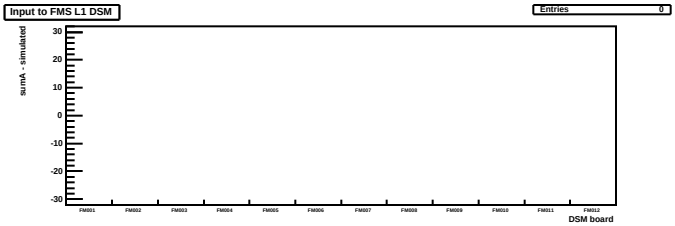

Input to FMS L1 DSM
Entries 1135452
sumB
DSM board

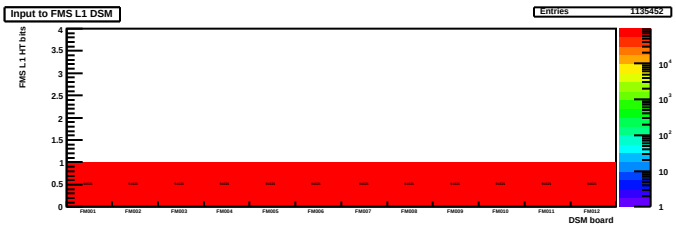

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

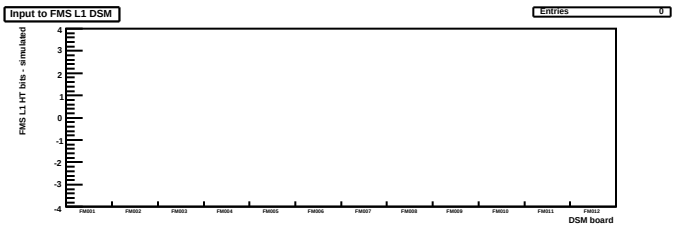

Input to FMS L1 DSM
Entries 1135452
sumAB
DSM board

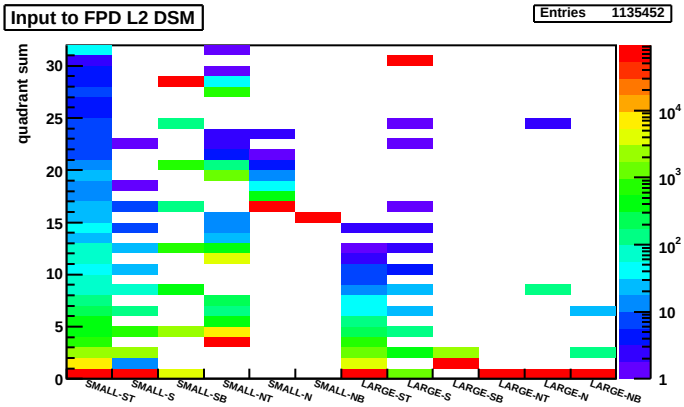

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

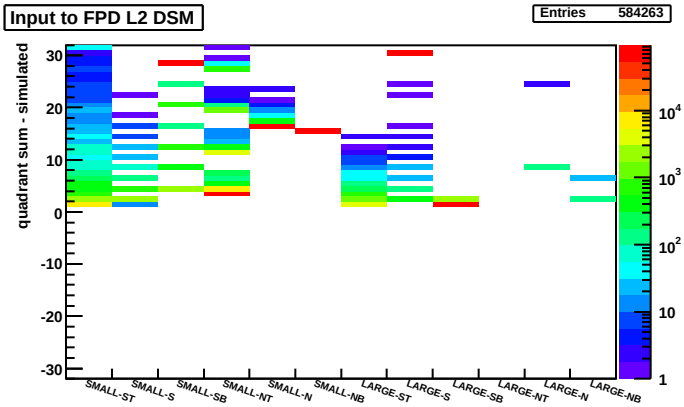

Input to FMS L1 DSM
Entries 1135452
sumA
DSM board

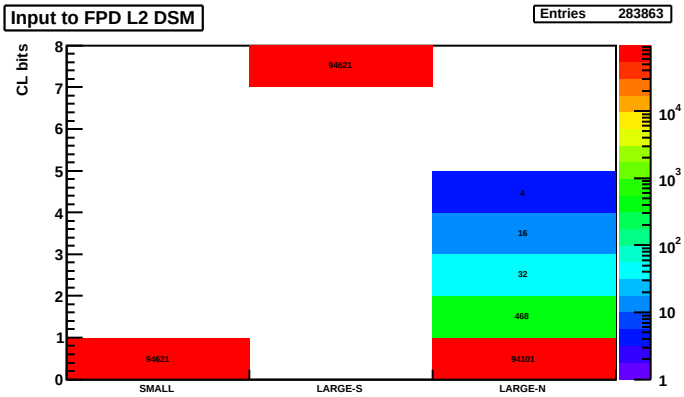

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

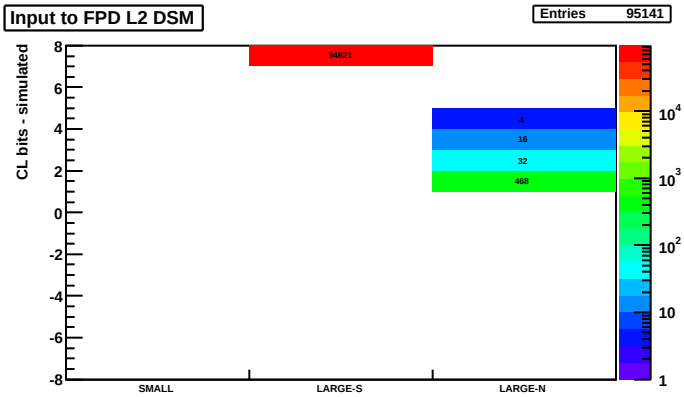

Input to FMS L1 DSM
Entries 1135452
FMS L1 HT bits
DSM board

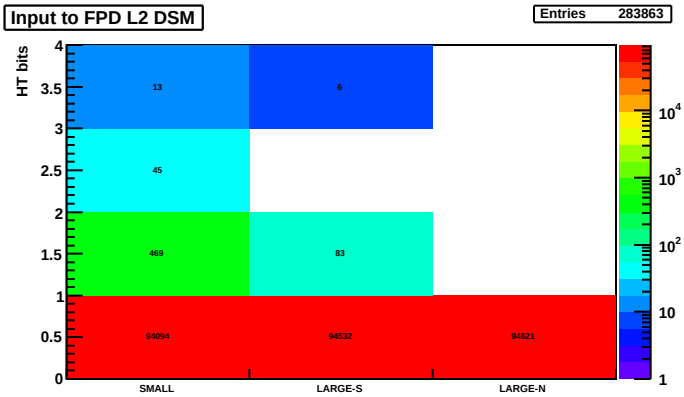

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

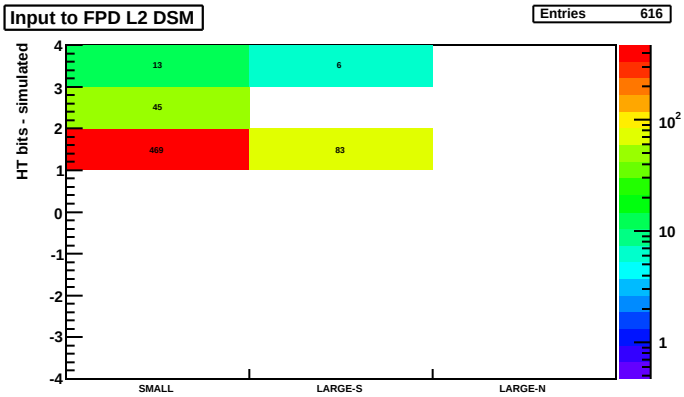

Input to FPD L2 DSM
Entries 1135452
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

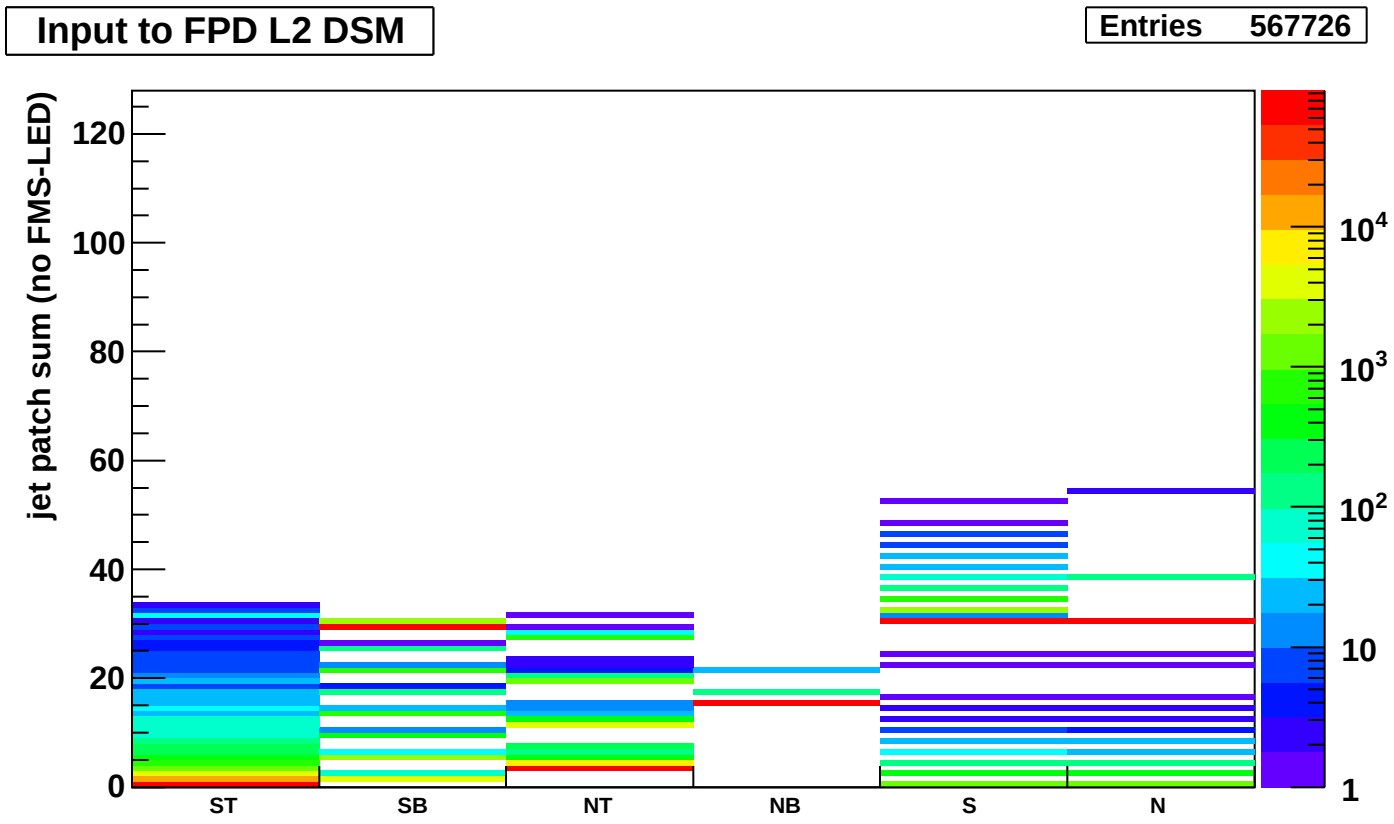

Input to FPD L2 DSM
Entries 584263
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

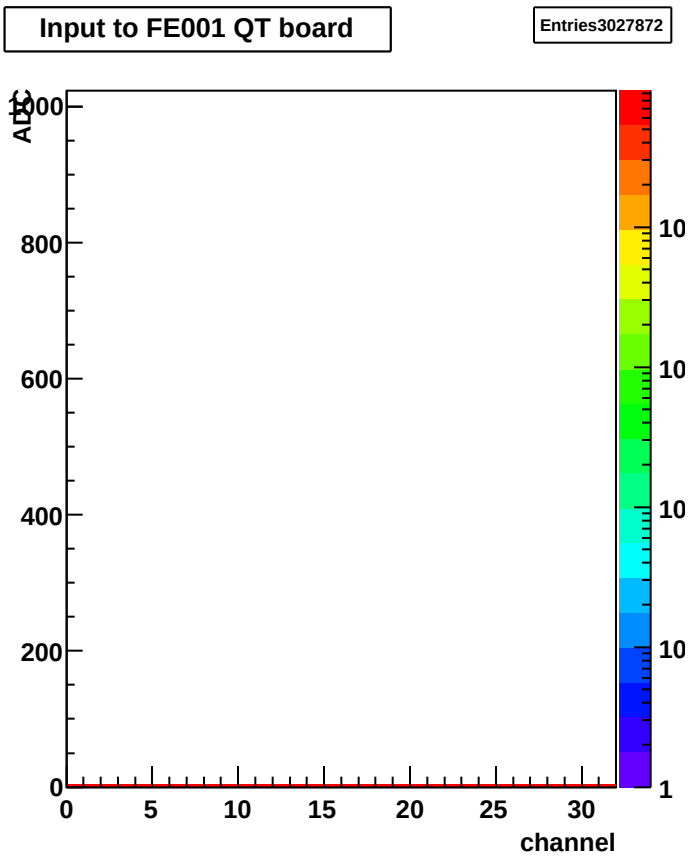

Input to FPD L2 DSM
Entries 283863
CL bits
94621
4
16
32
468
94621
94101
SMALL
LARGE-S
LARGE-N

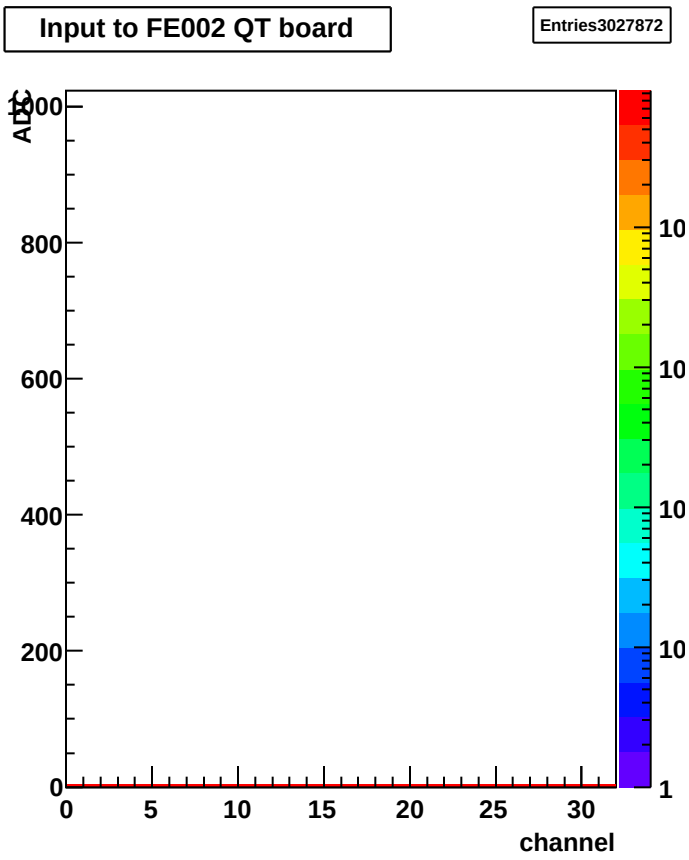

Input to FPD L2 DSM
Entries 95141
CL bits - simulated
94621
4
16
32
468
SMALL
LARGE-S
LARGE-N

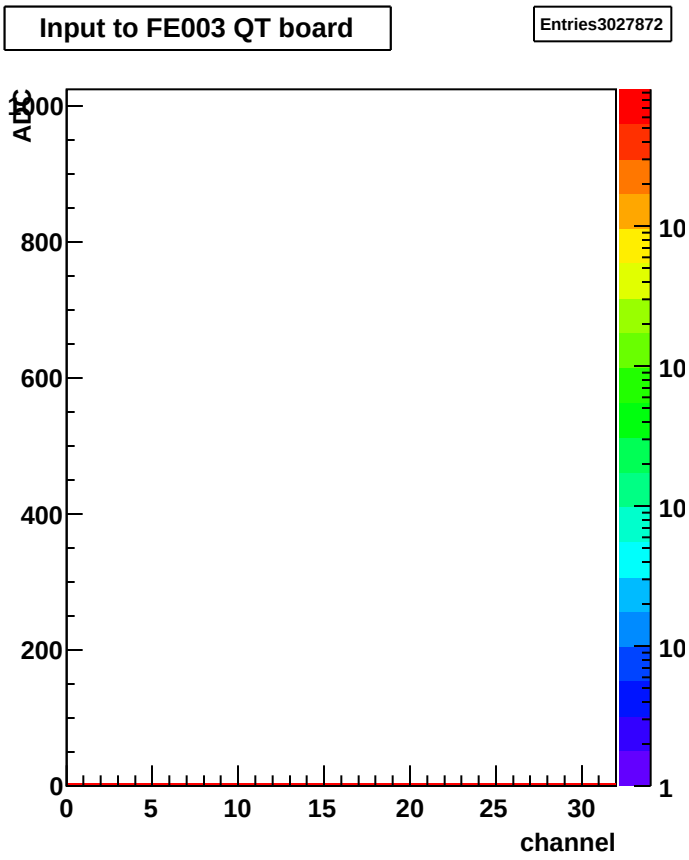

Input to FPD L2 DSM
Entries 283863
HT bits
13
6
45
469
83
94094
94532
94621
SMALL
LARGE-S
LARGE-N

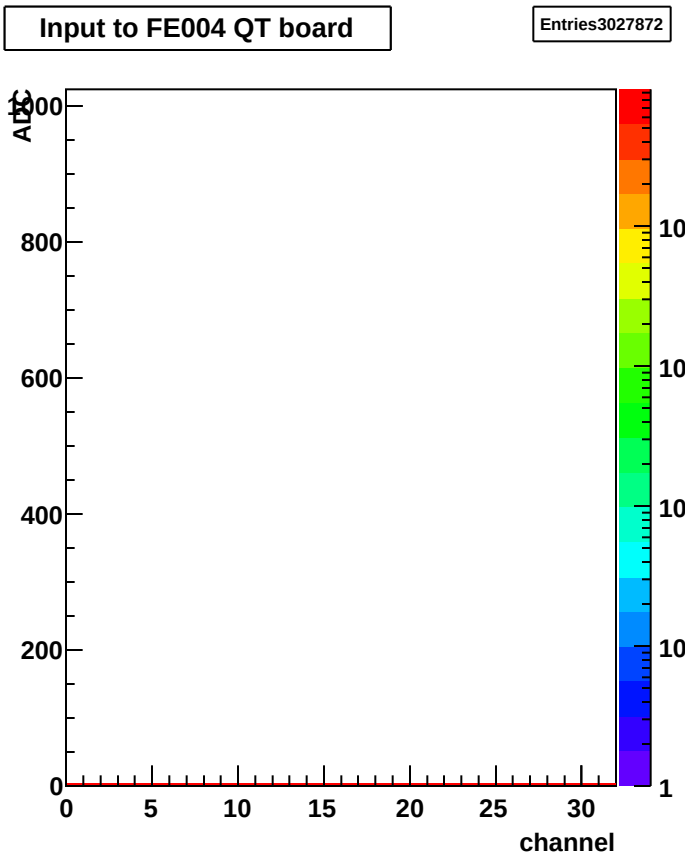

Input to FPD L2 DSM
Entries 616
HT bits - simulated
13
6
45
469
83
SMALL
LARGE-S
LARGE-N

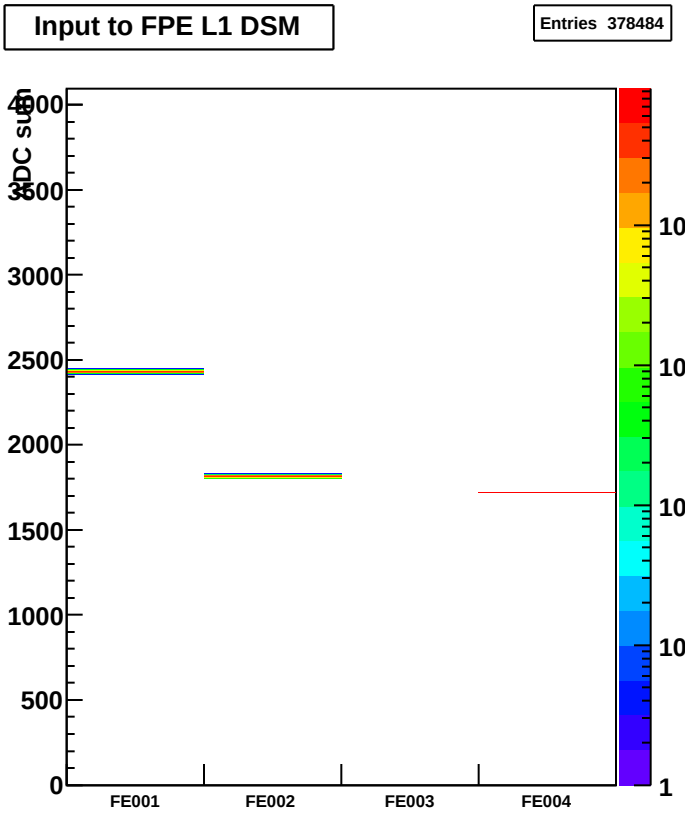

Input to FPD L2 DSM
Entries 567726
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4

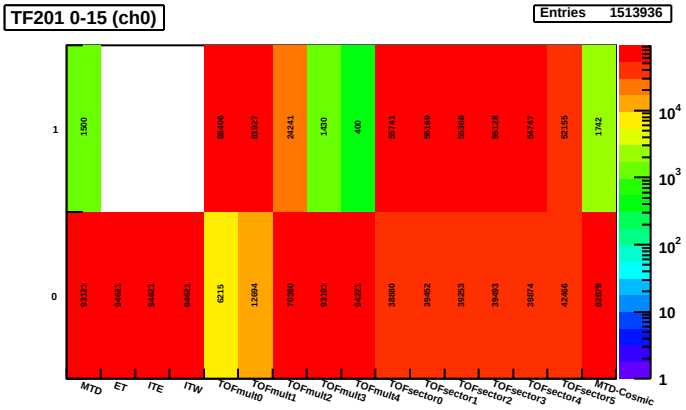

Input to FE001 QT board
Entries3027872
ADC
channel

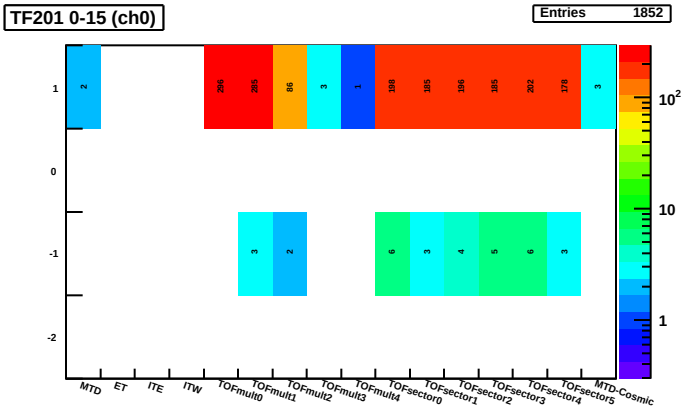

Input to FE002 QT board
Entries3027872
ADC
channel

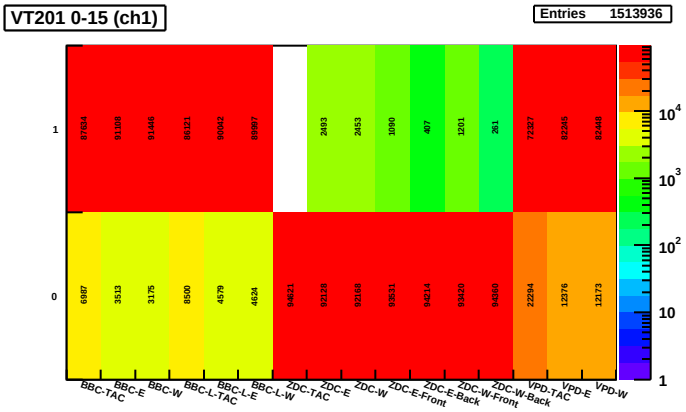

Input to FE003 QT board
Entries3027872
ADC
channel

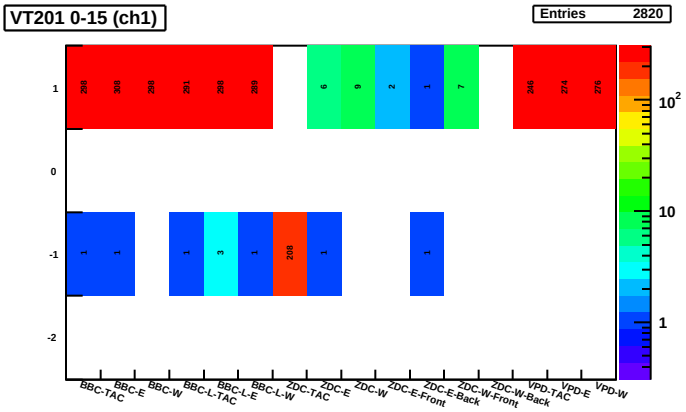

Input to FE004 QT board
Entries3027872
ADC
channel

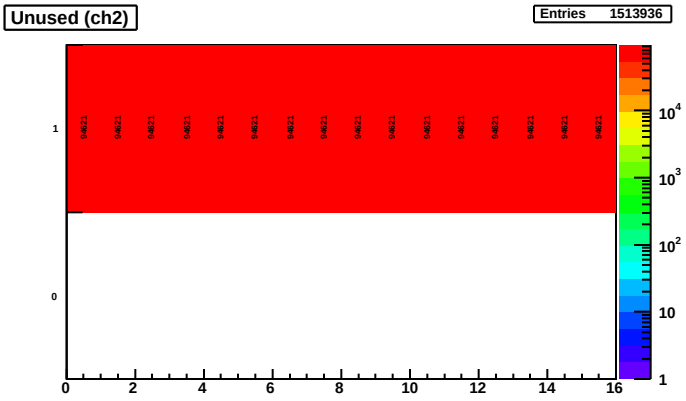

Input to FPE L1 DSM
Entries 378484
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
1

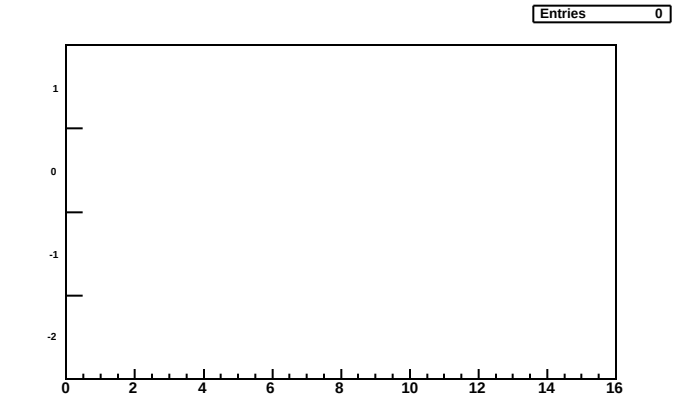

TF201 0-15 (ch0)
Entries 1513936
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 1852
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 1513936
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 2820
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 1513936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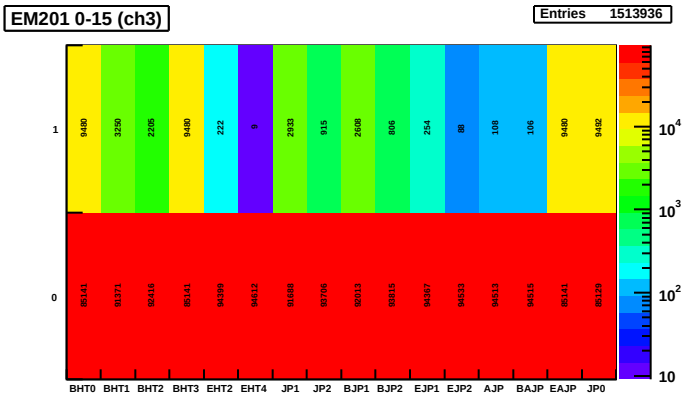
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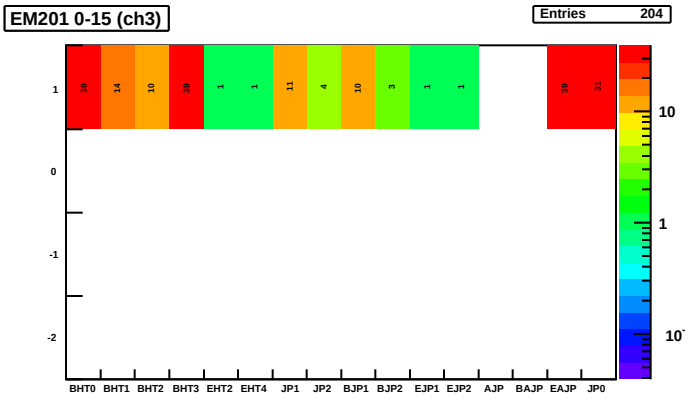
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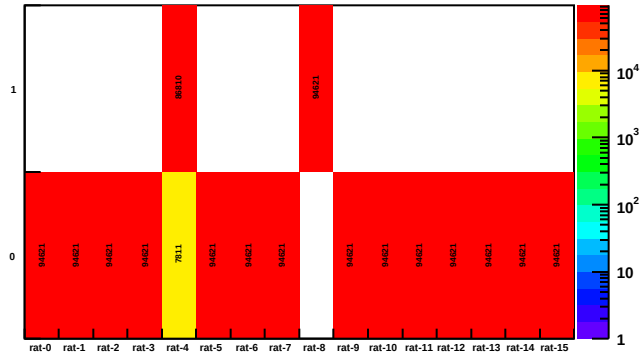
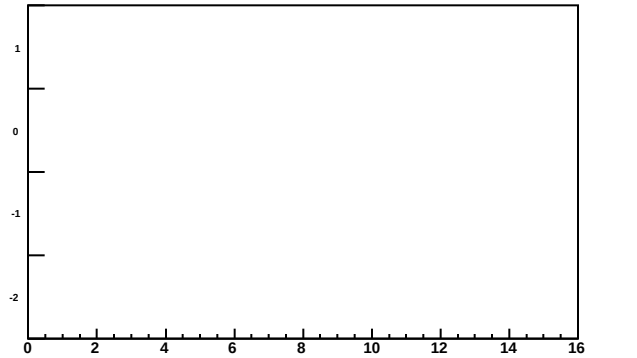
RAT board (ch4)





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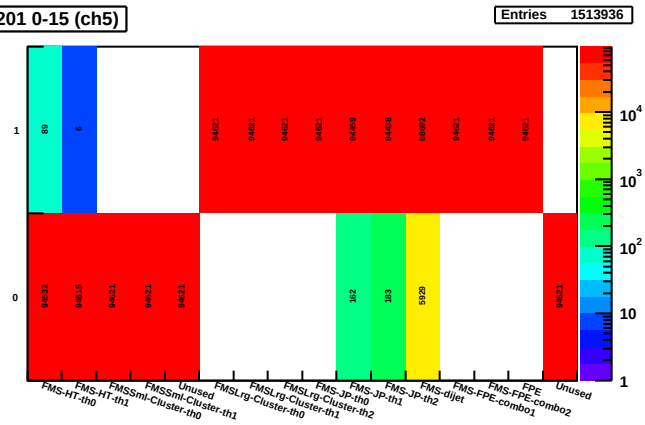

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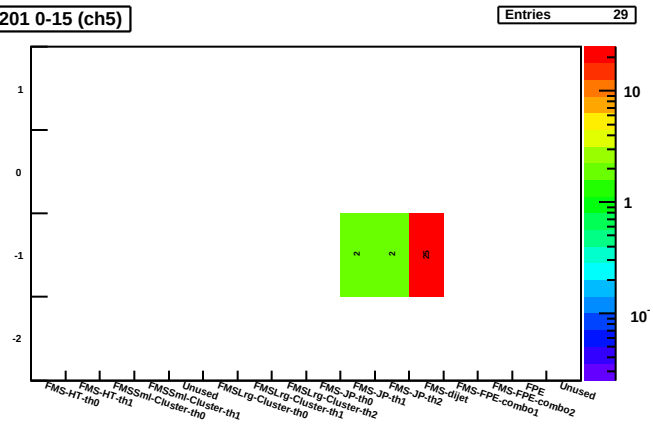

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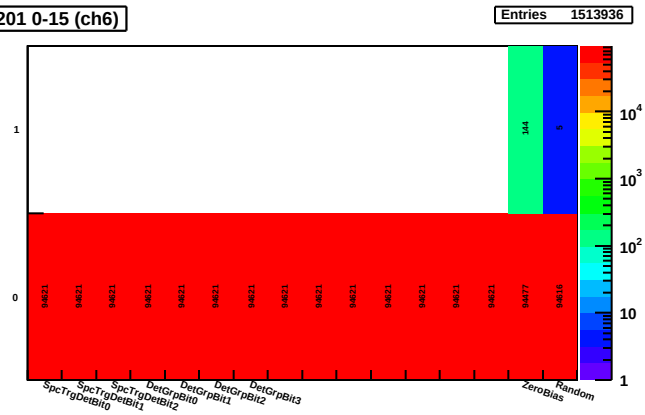

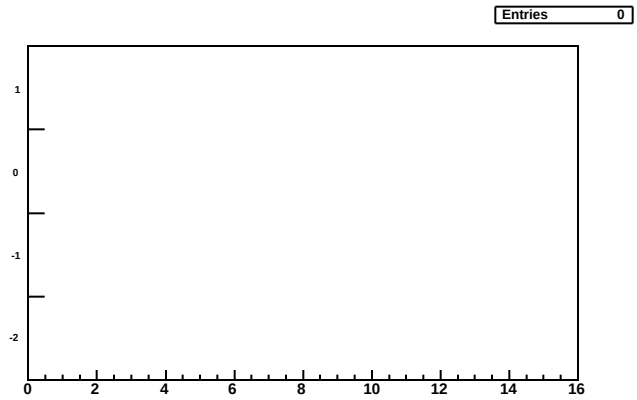
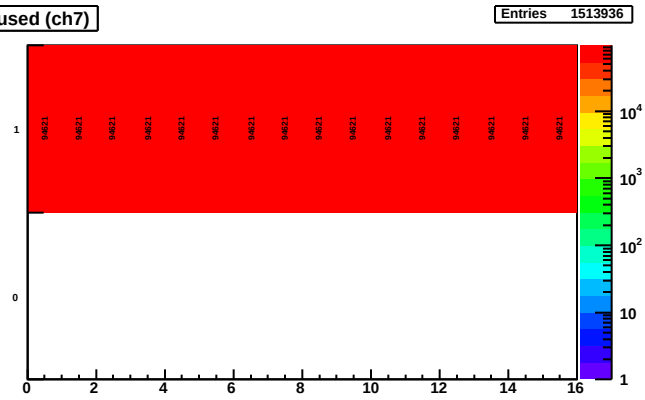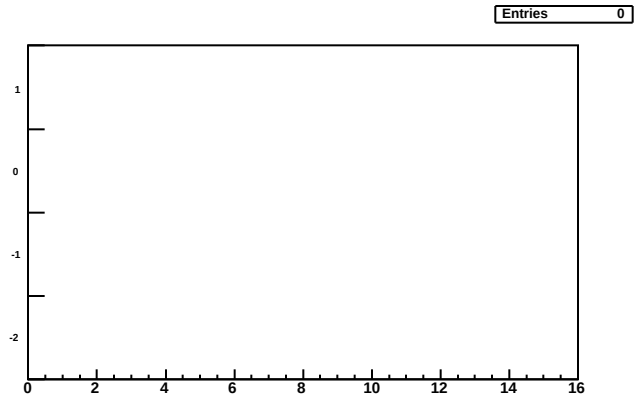
Unused (ch7)