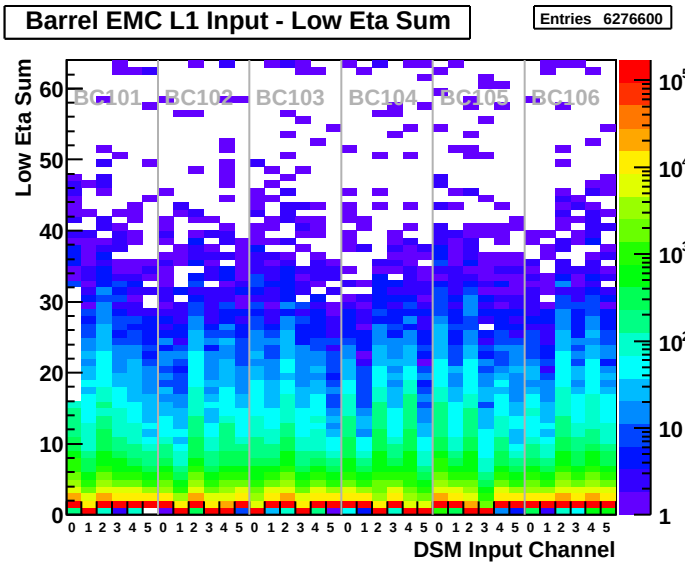
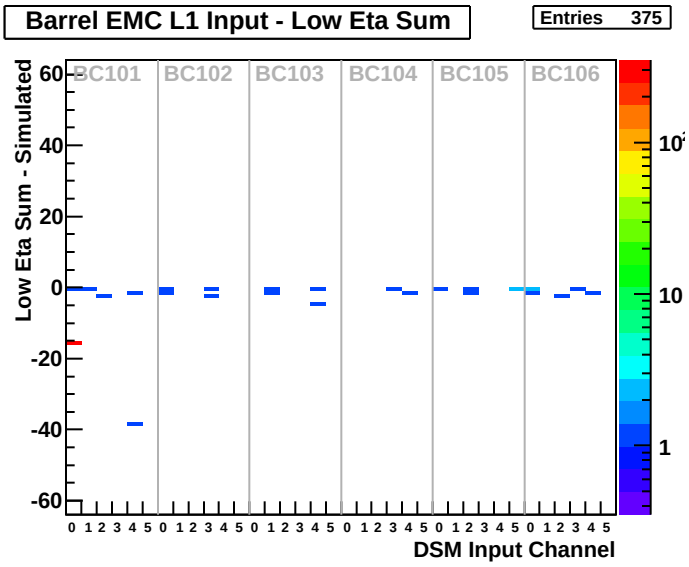
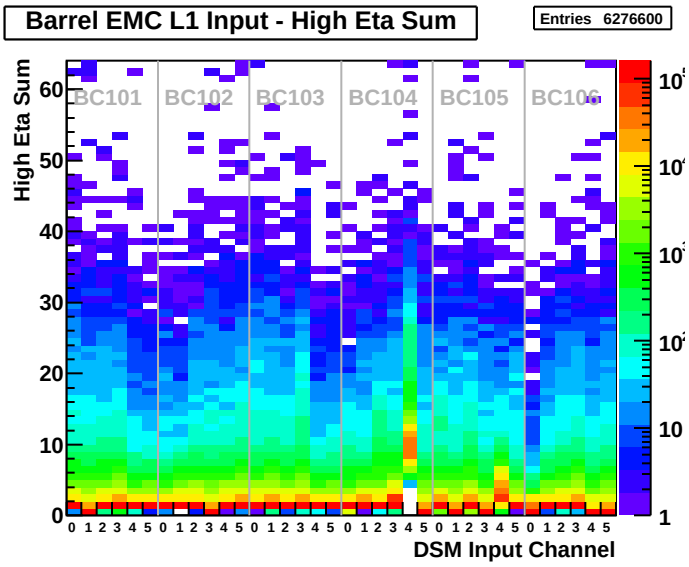
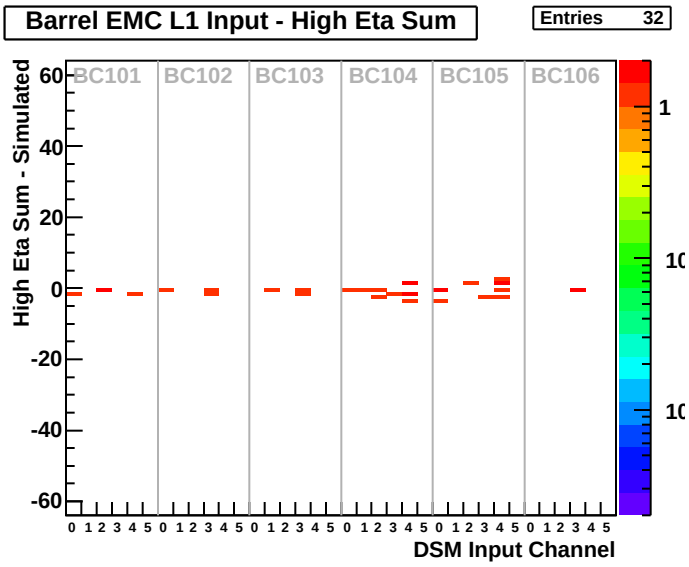
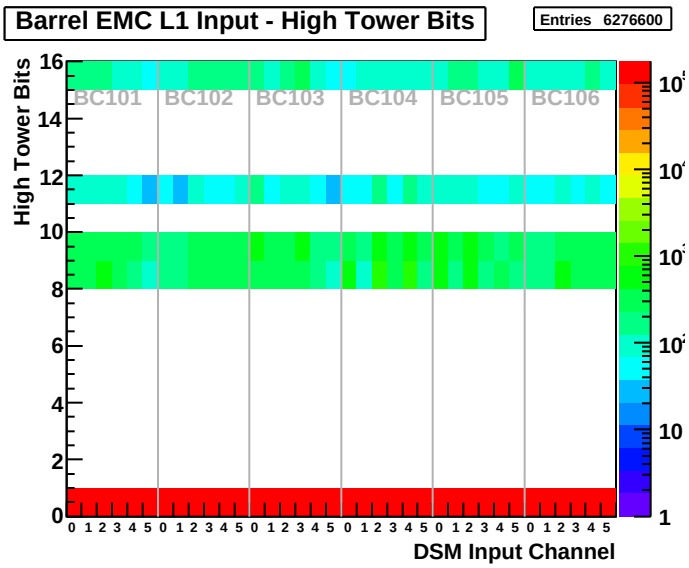
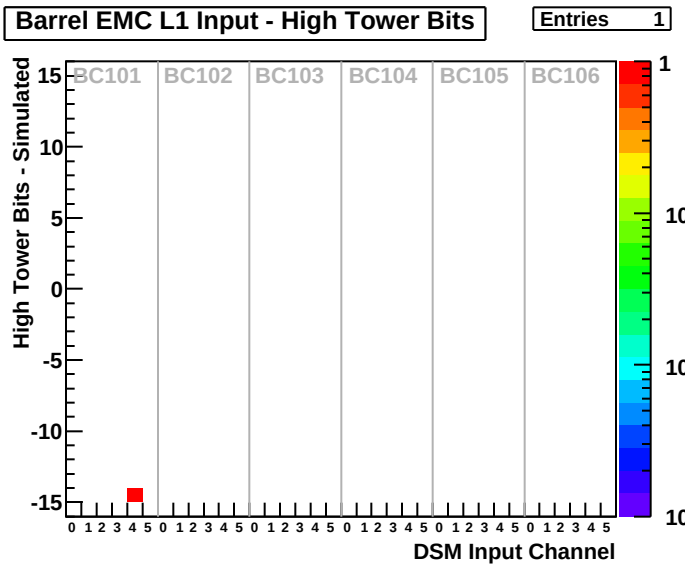

Barrel EMC L1 Input - Low Eta Sum
Entries 6276600
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

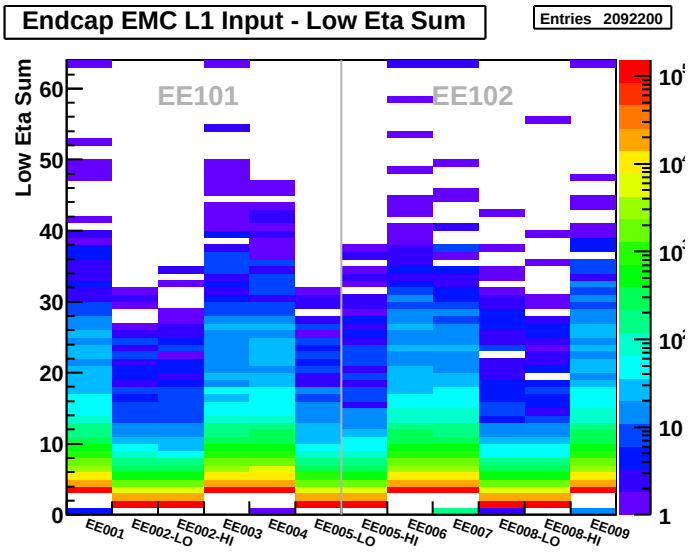

Barrel EMC L1 Input - Low Eta Sum
Entries 375
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

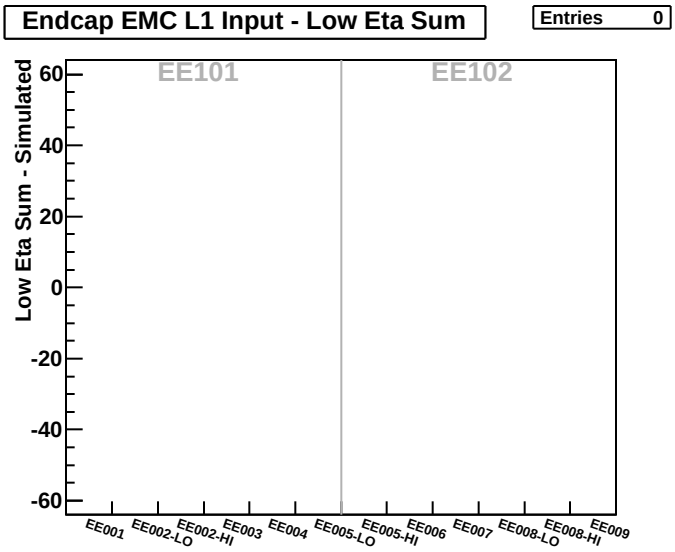

Barrel EMC L1 Input - High Eta Sum
Entries 6276600
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

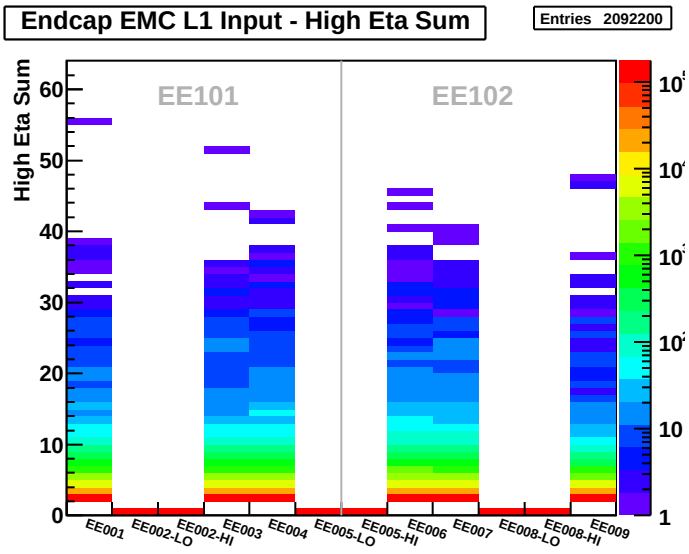

Barrel EMC L1 Input - High Eta Sum
Entries 32
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

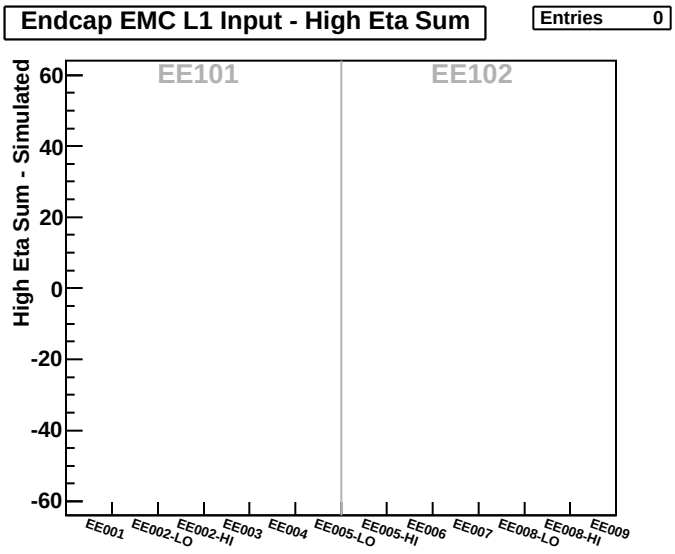

Barrel EMC L1 Input - High Tower Bits
Entries 6276600
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

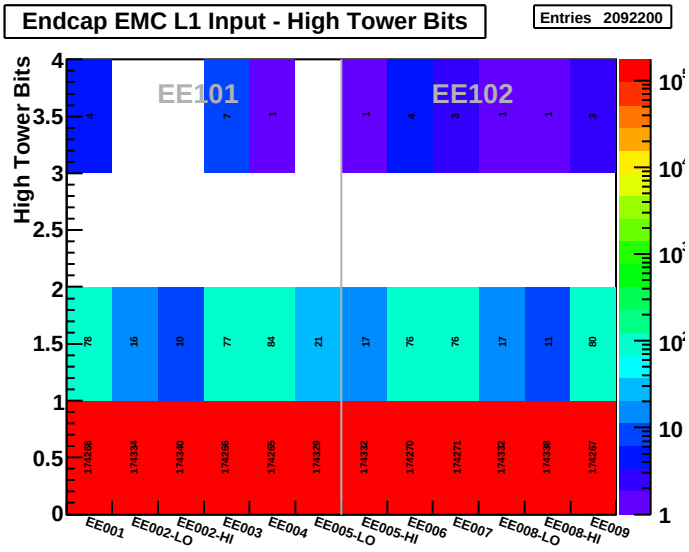

Barrel EMC L1 Input - High Tower Bits
Entries 1
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

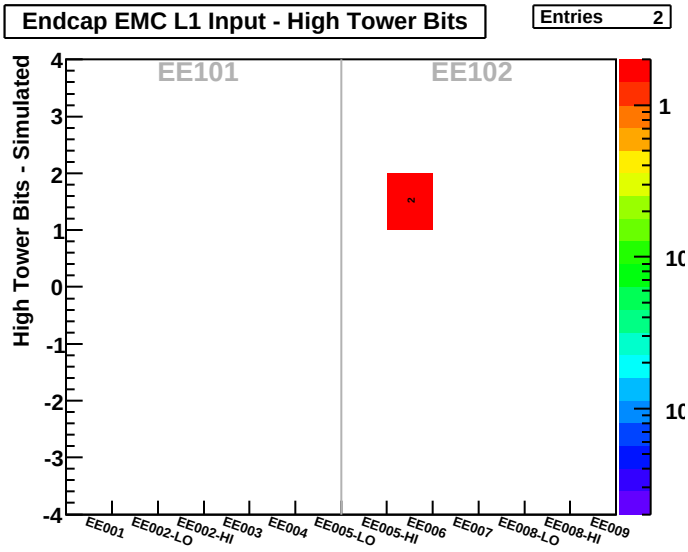

Endcap EMC L1 Input - Low Eta Sum
Entries 2092200
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

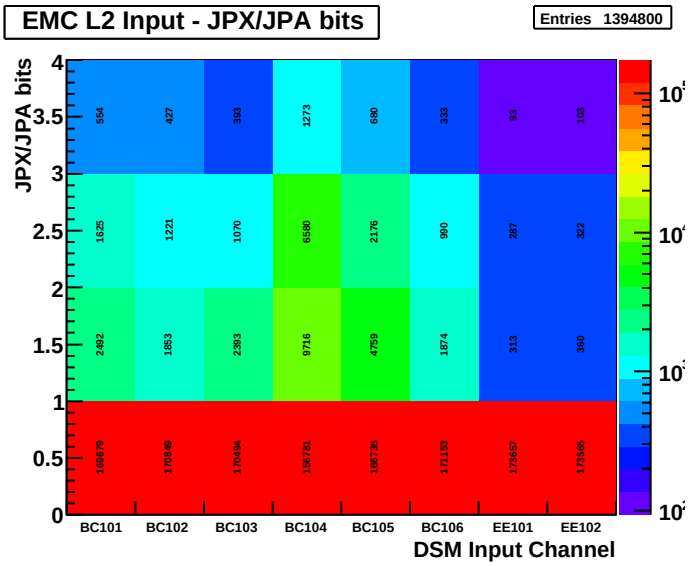

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

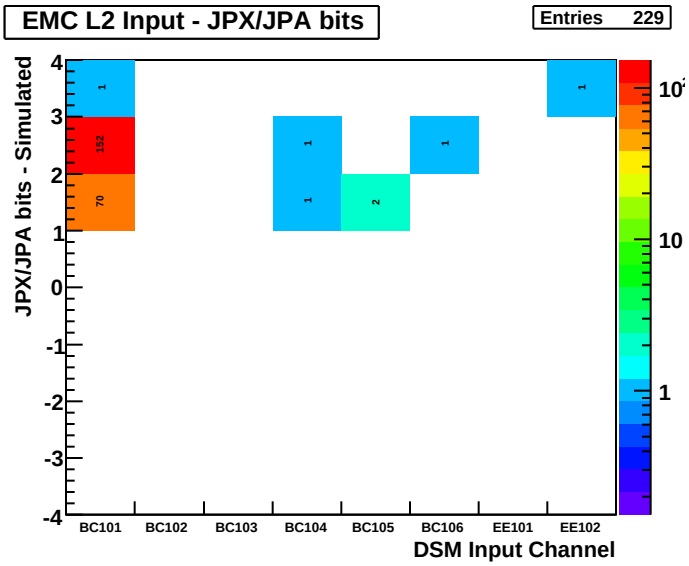

Endcap EMC L1 Input - High Eta Sum
Entries 2092200
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

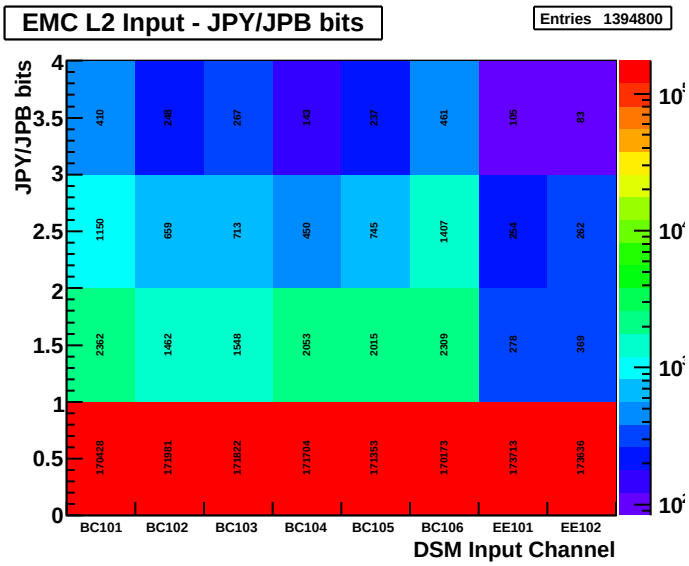

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

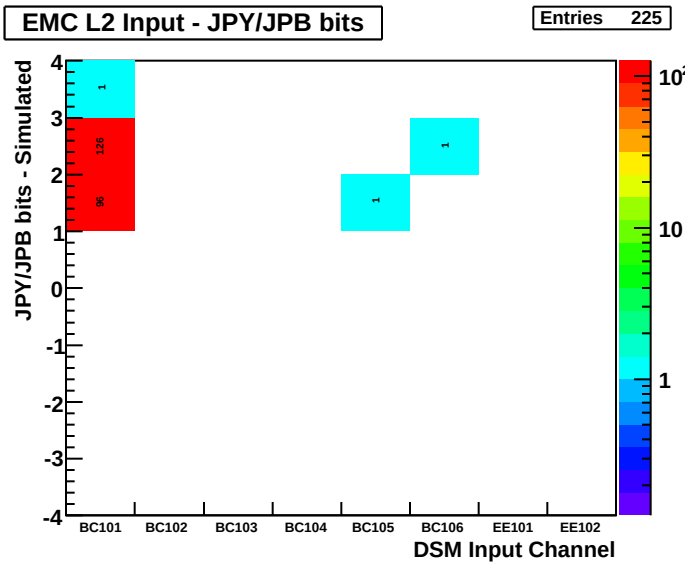

Endcap EMC L1 Input - High Tower Bits
Entries 2092200
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

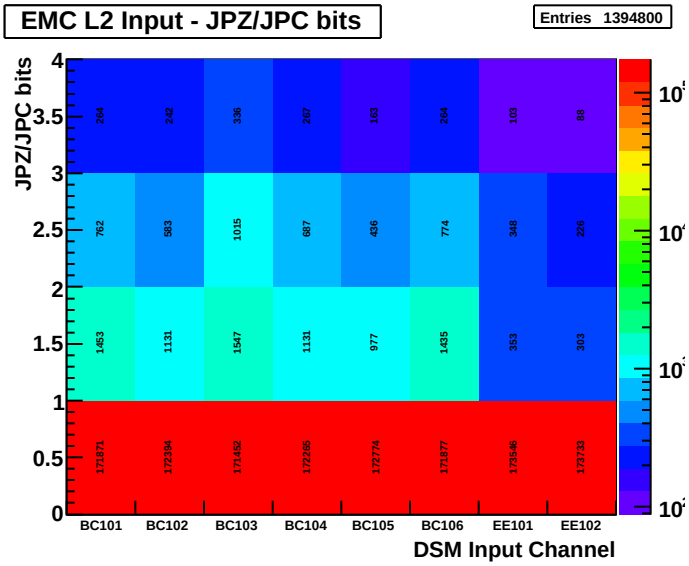

Endcap EMC L1 Input - High Tower Bits
Entries 2
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

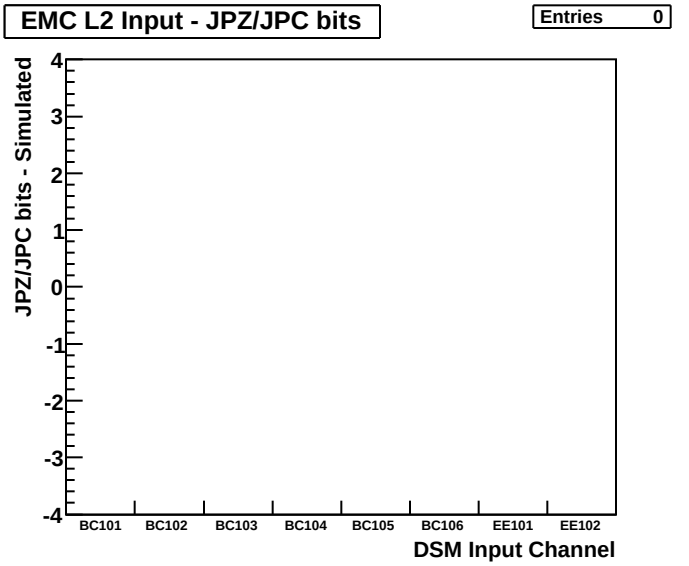

EMC L2 Input - JPX/JPA bits
Entries 1394800
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
554 427 393 1273 680 333 93 103
1625 1221 1070 6580 2176 990 287 322
2492 1853 2393 9716 4759 1674 313 360
169679 170849 170494 158781 166735 171153 173657 173565

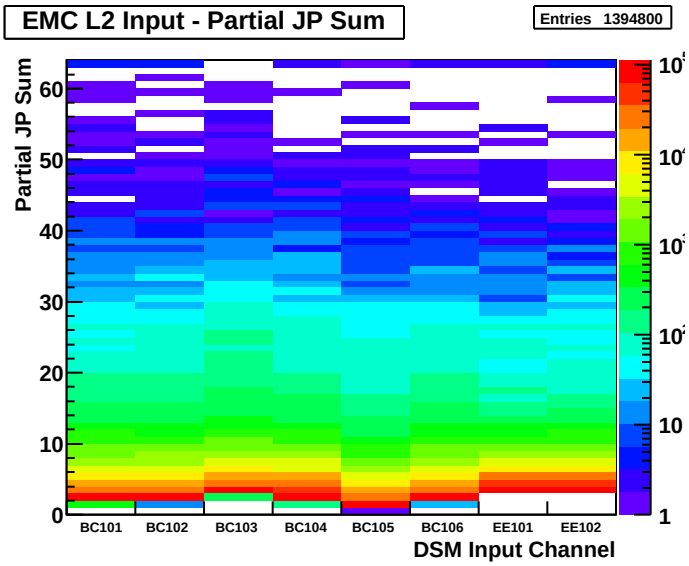

EMC L2 Input - JPX/JPA bits
Entries 229
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1
152
70
1 1
2
1
1

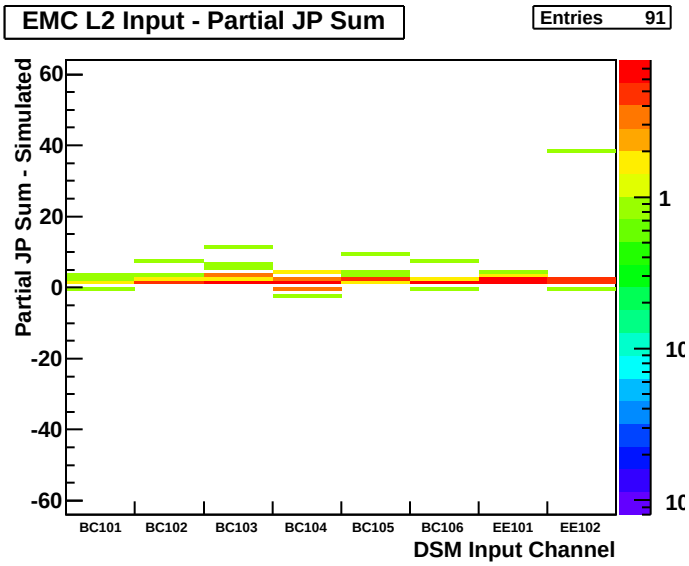

EMC L2 Input - JPY/JPB bits
Entries 1394800
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
410 248 267 143 237 461 105 83
1150 659 713 450 745 1407 254 262
2362 1462 1548 2053 2015 2309 278 369
170428 171981 171822 171704 171353 170173 173713 173636

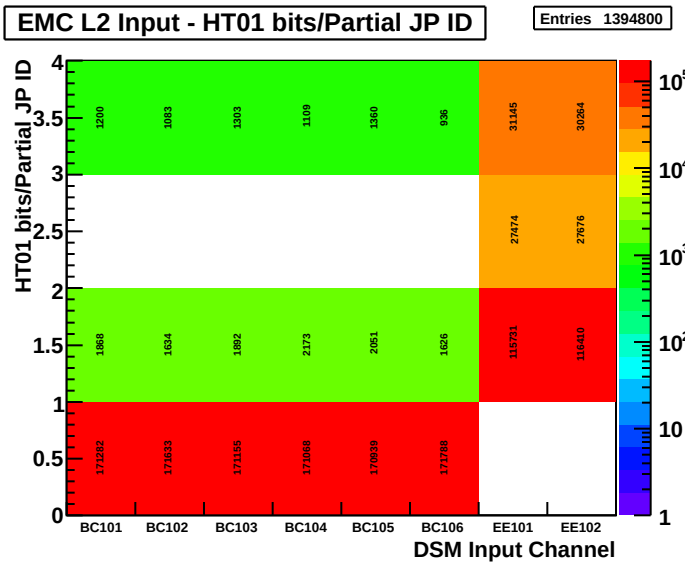

EMC L2 Input - JPY/JPB bits
Entries 225
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
126
96
1
1

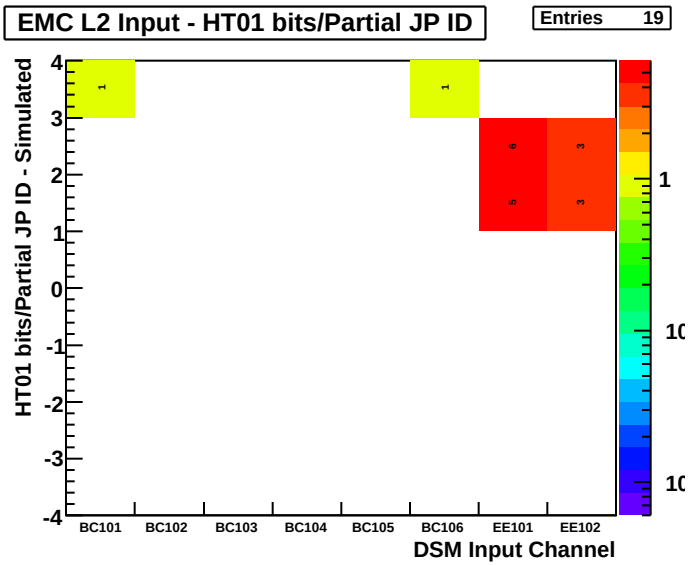

EMC L2 Input - JPZ/JPC bits
Entries 1394800
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
284 242 236 267 163 264 103 88
762 583 1015 687 436 774 348 226
1463 1131 1547 1131 977 1435 353 303
171871 172394 171452 172265 172774 171877 173546 173733

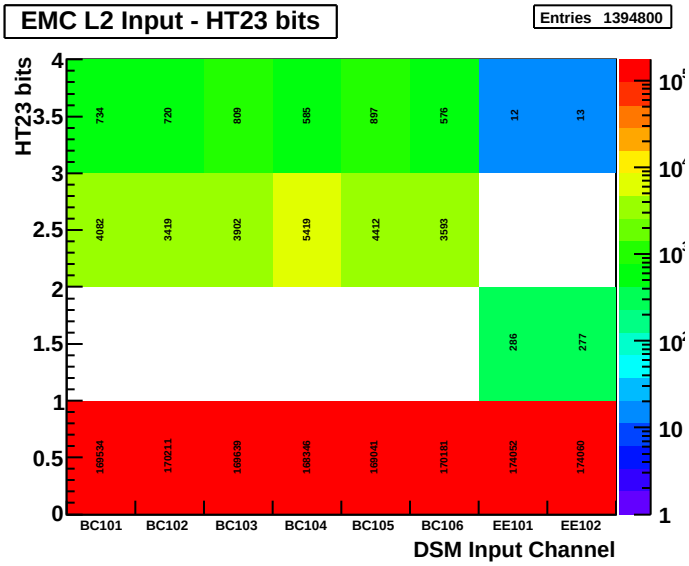

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

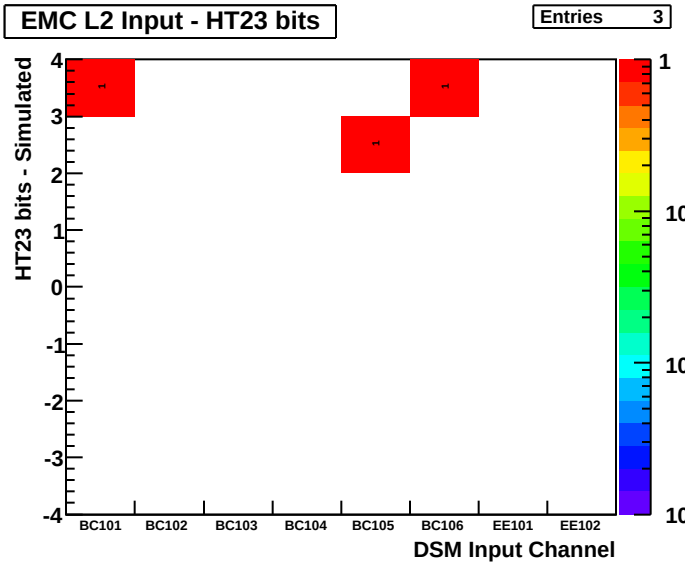

EMC L2 Input - Partial JP Sum
Entries 1394800
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

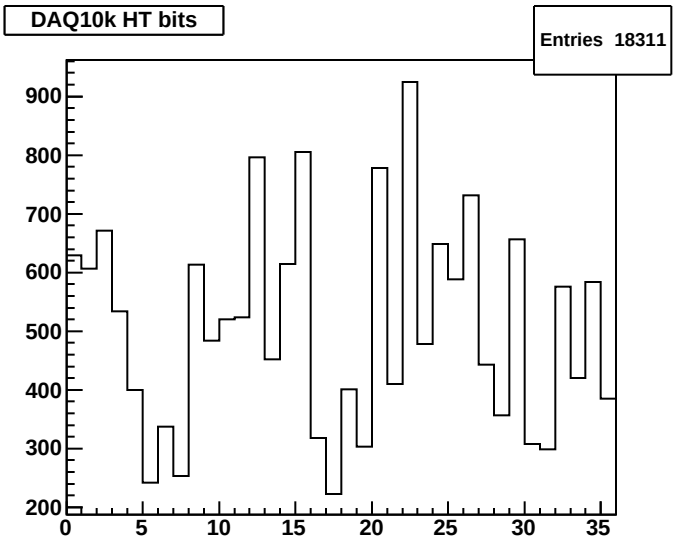

EMC L2 Input - Partial JP Sum
Entries 91
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

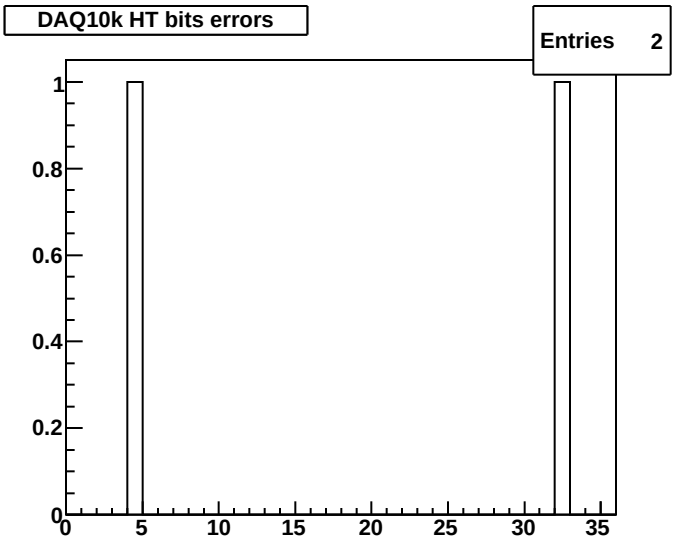

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1394800
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

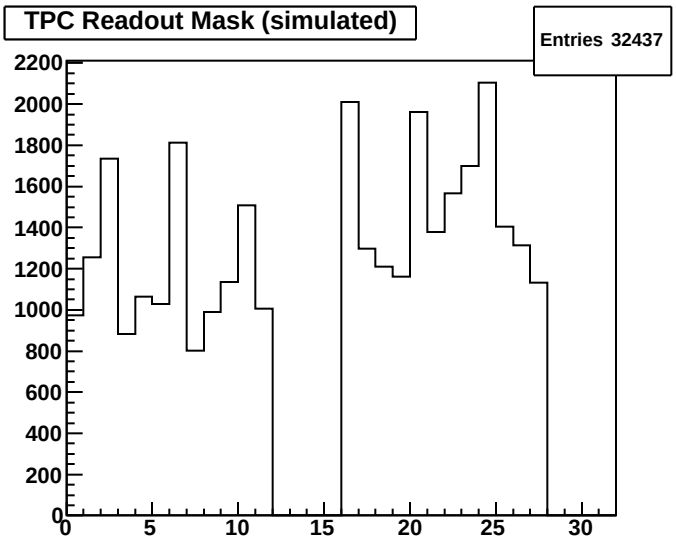

EMC L2 Input - HT01 bits/Partial JP ID
Entries 19
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

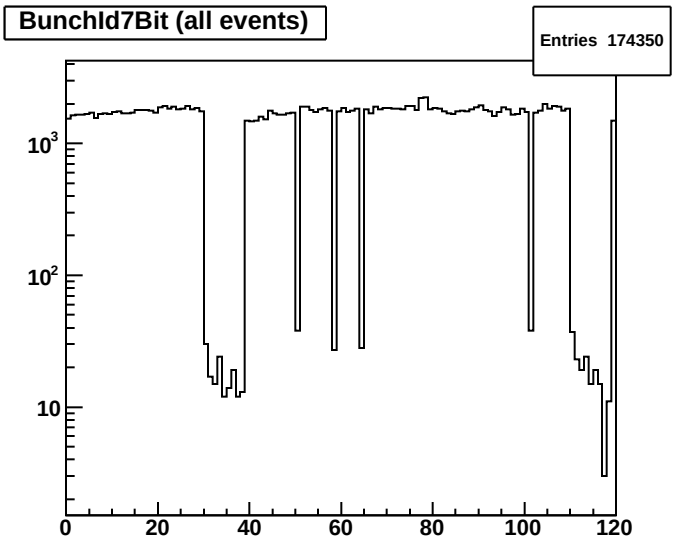

EMC L2 Input - HT23 bits
Entries 1394800
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

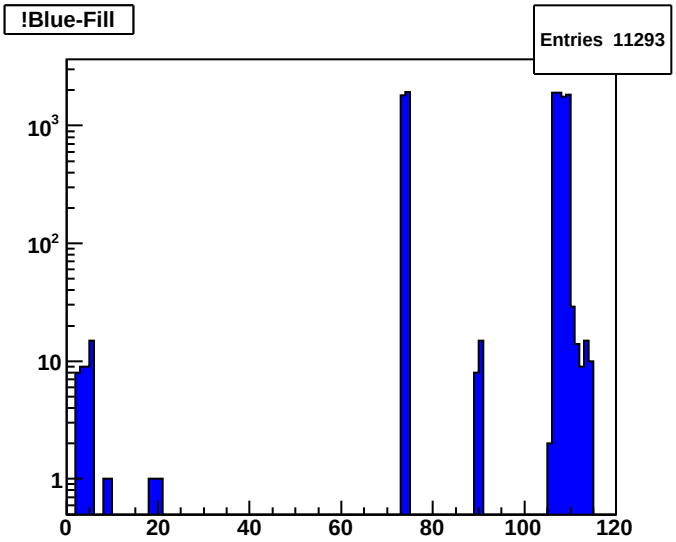

EMC L2 Input - HT23 bits
Entries 3
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

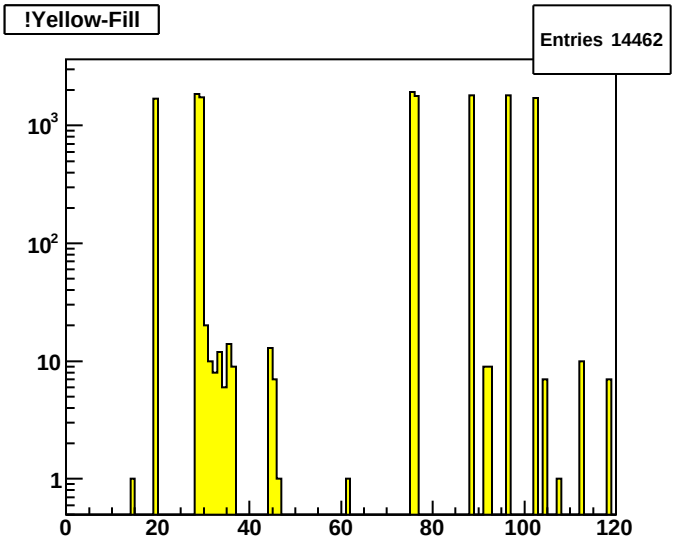

DAQ10k HT bits
Entries 18311

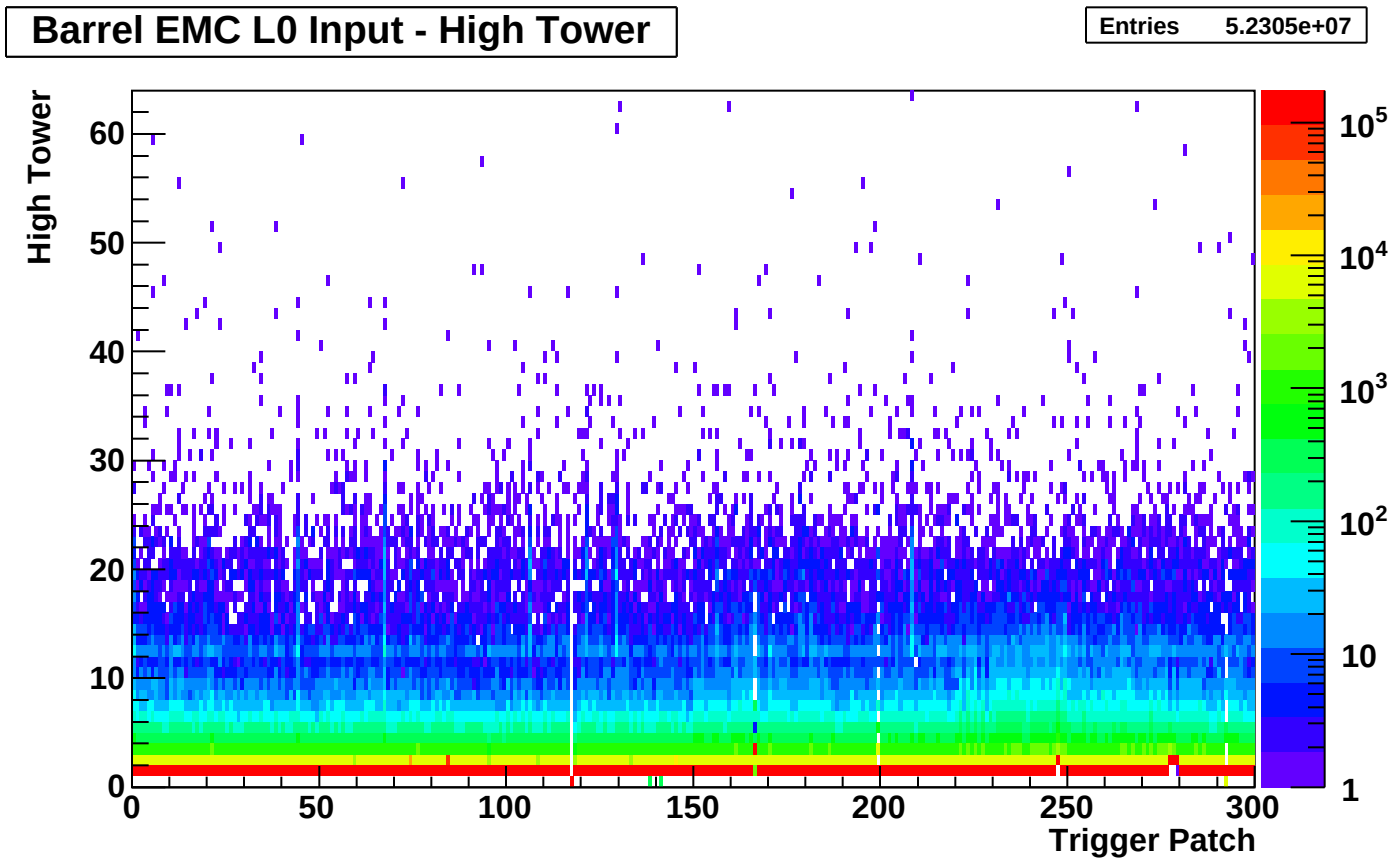

DAQ10k HT bits errors
Entries 2

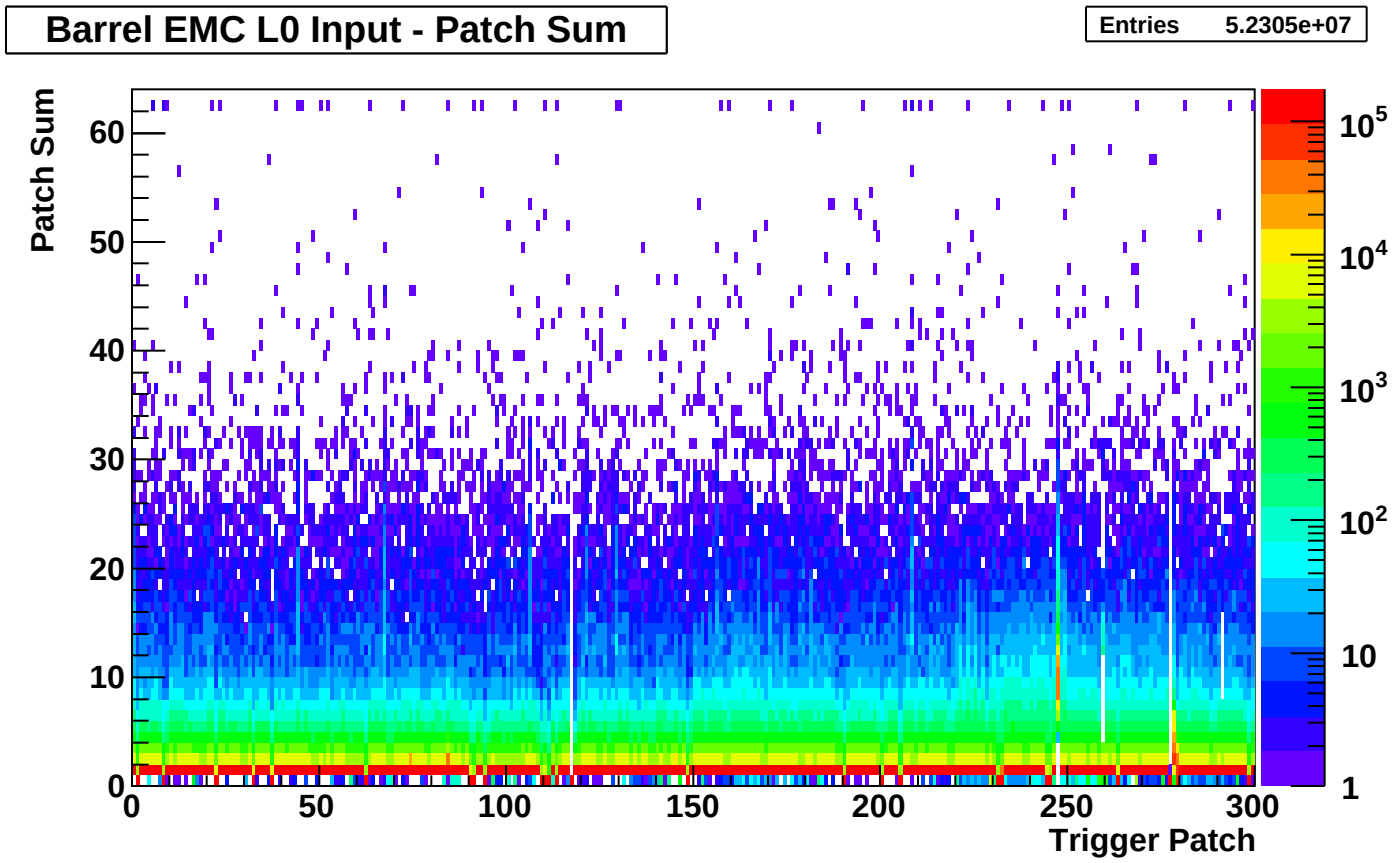

TPC Readout Mask (simulated)
Entries 32437

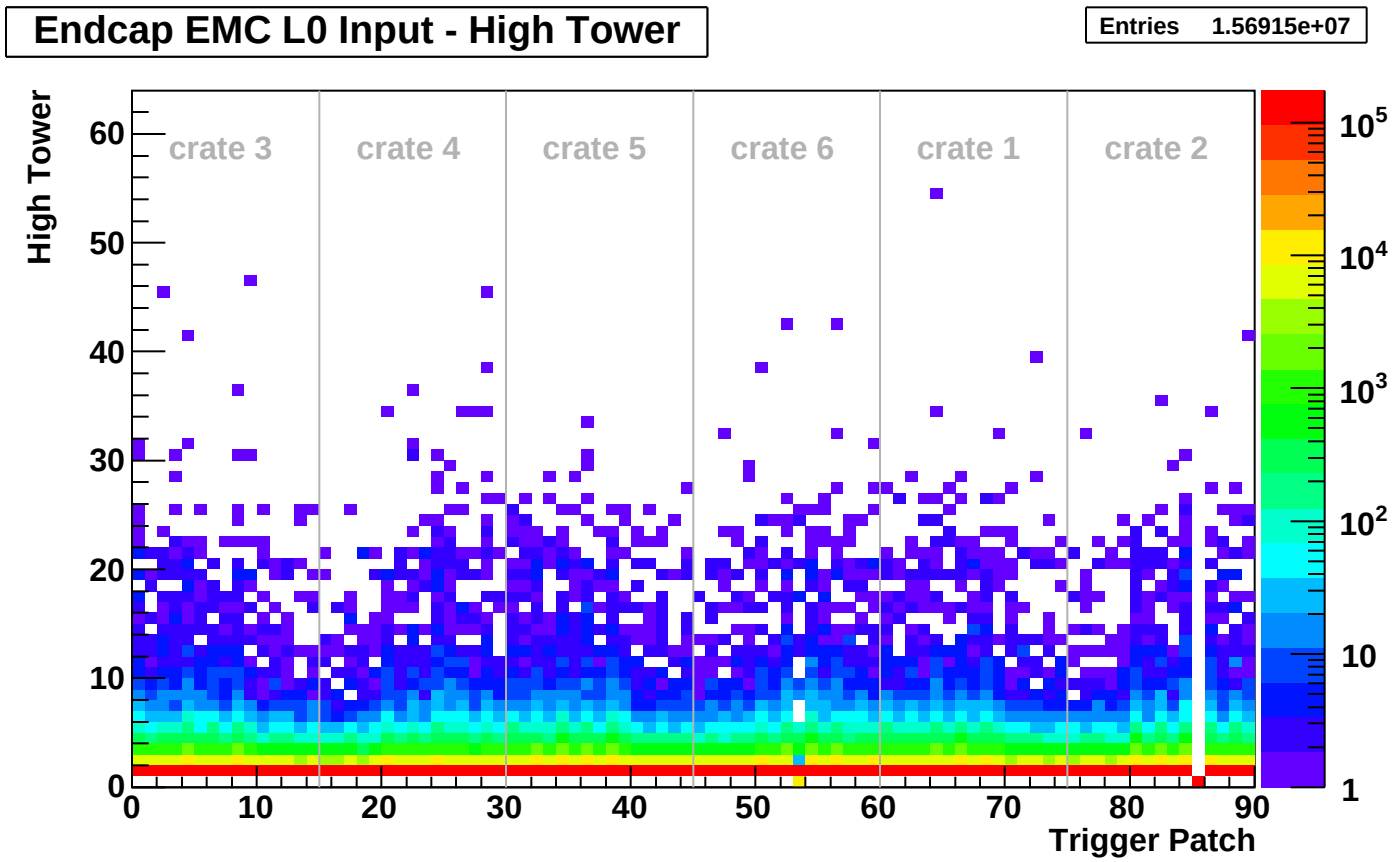

BunchId7Bit (all events)
Entries 174350

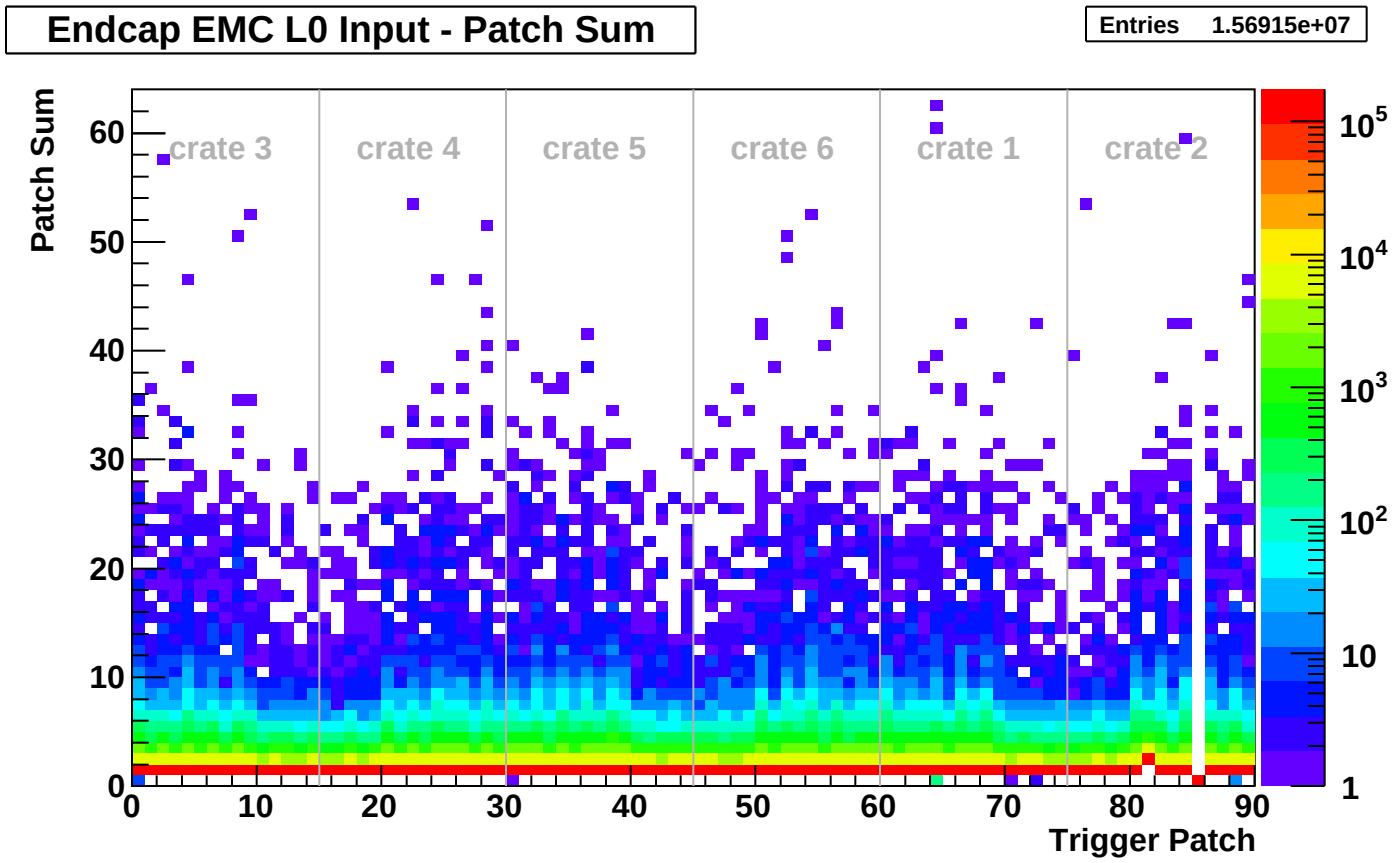

!Blue-Fill
Entries 11293

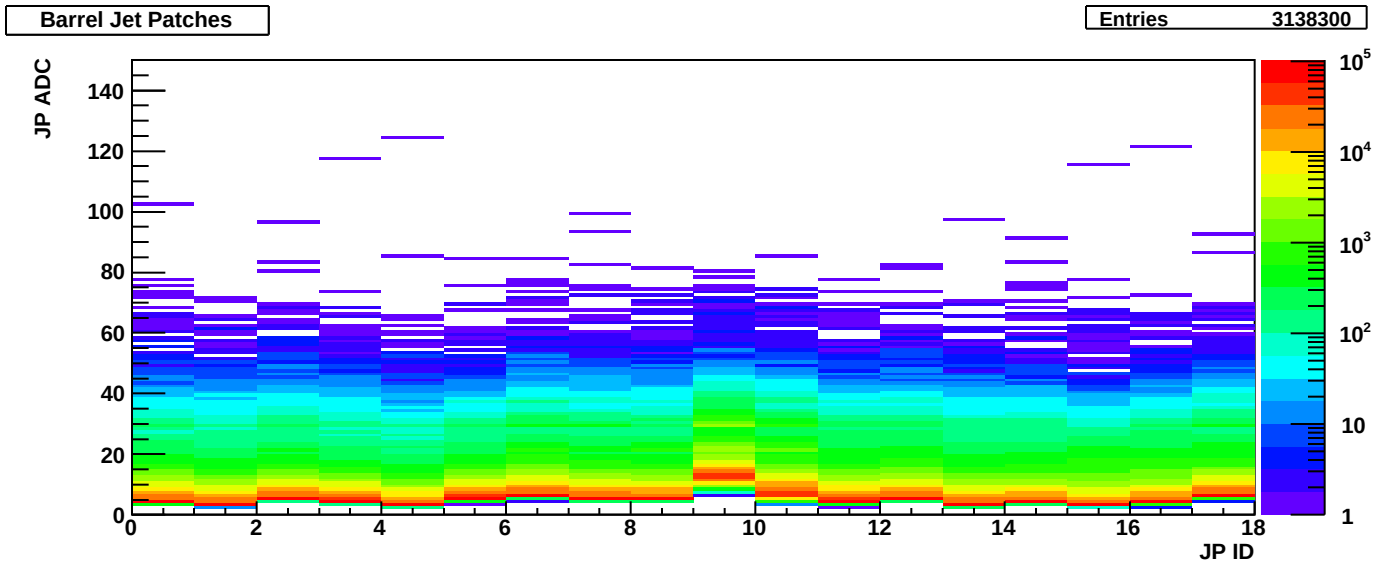

!Yellow-Fill
Entries 14462

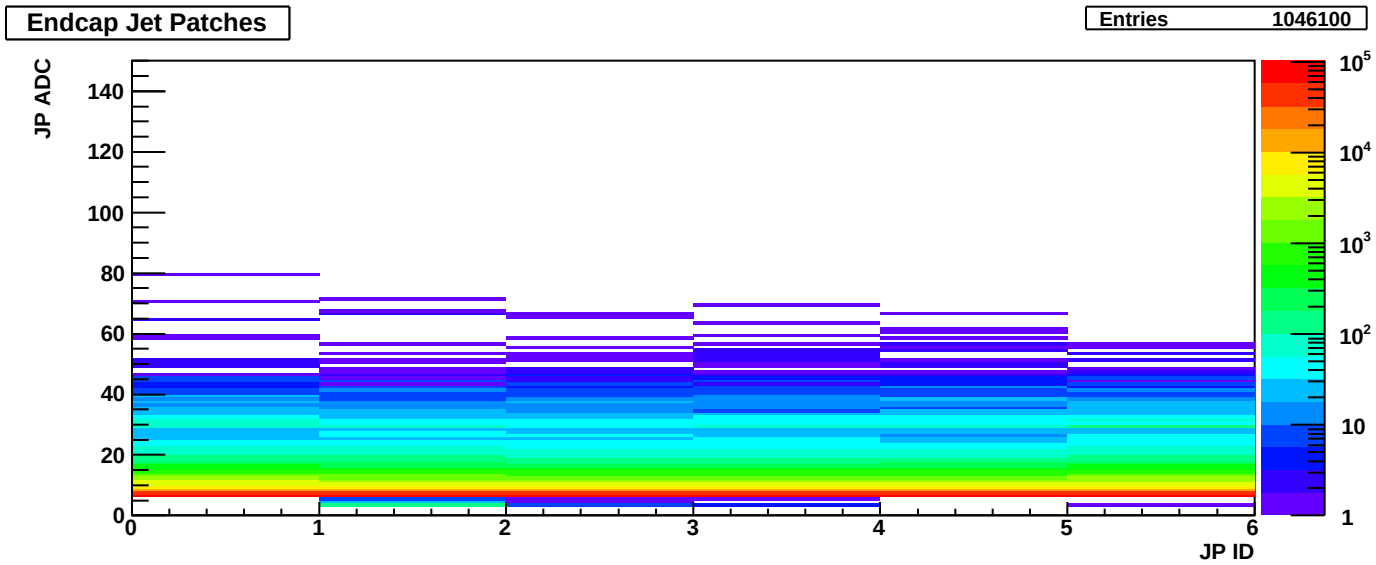

Barrel EMC L0 Input - High Tower
Entries 5.2305e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

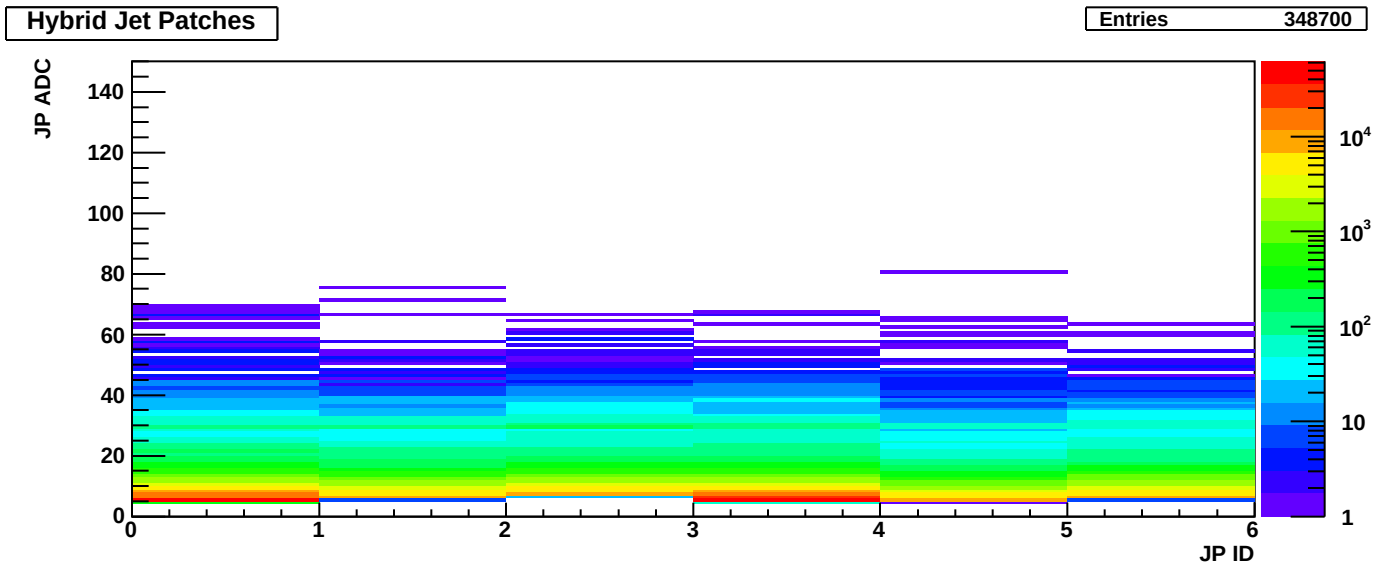

Barrel EMC L0 Input - Patch Sum
Entries 5.2305e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

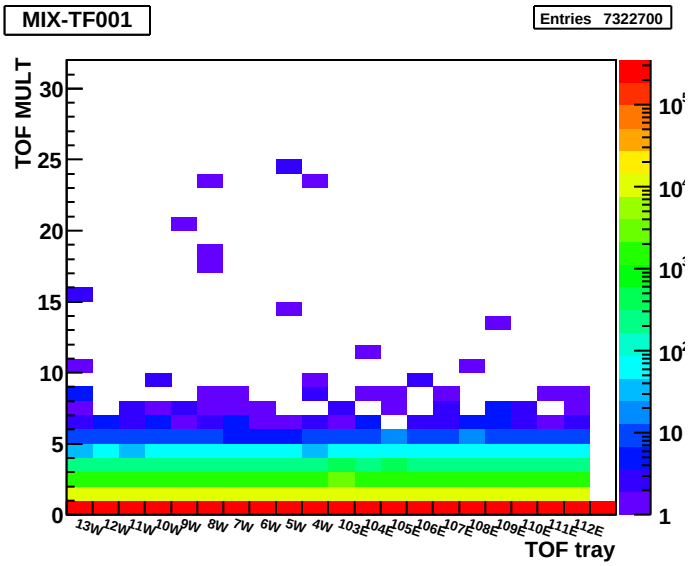

Endcap EMC L0 Input - High Tower
Entries 1.56915e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

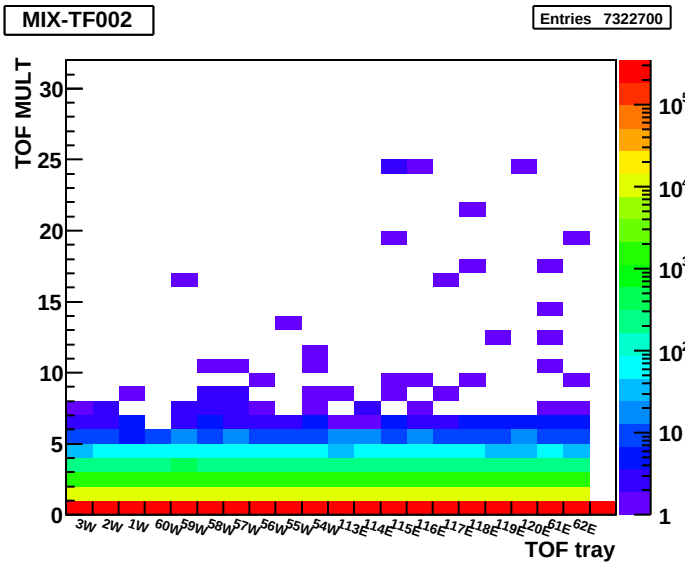

Endcap EMC L0 Input - Patch Sum
Entries 1.56915e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

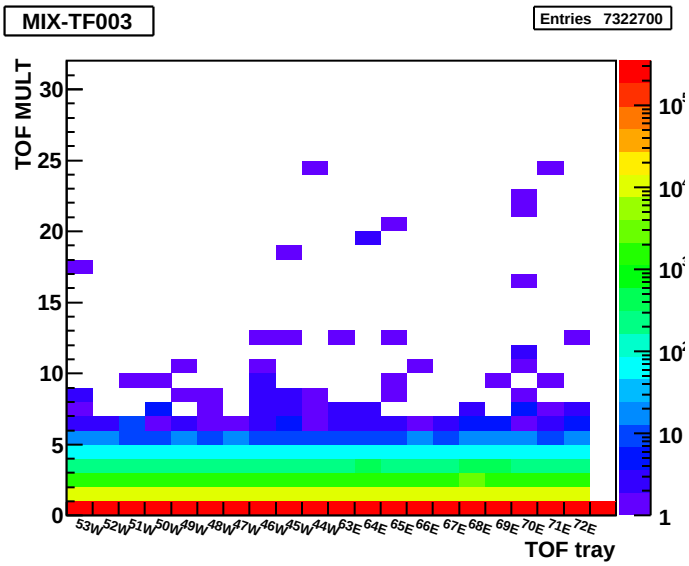

Barrel Jet Patches
Entries 3138300
JP ADC
JP ID

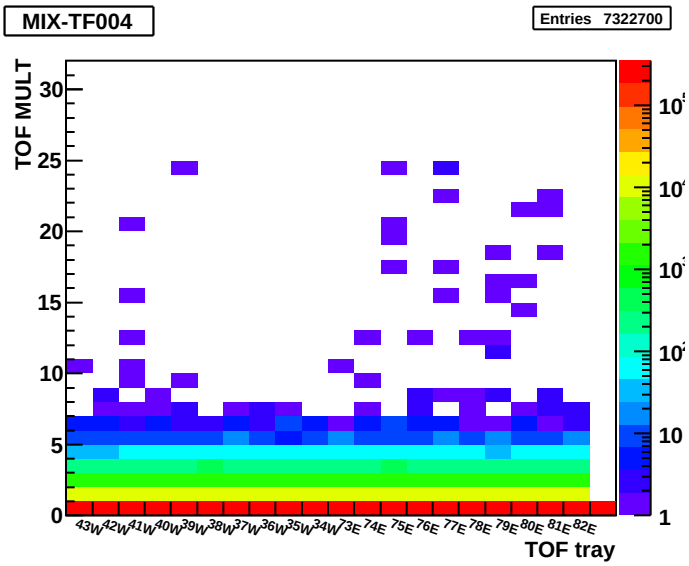

Endcap Jet Patches
Entries 1046100
JP ADC
JP ID

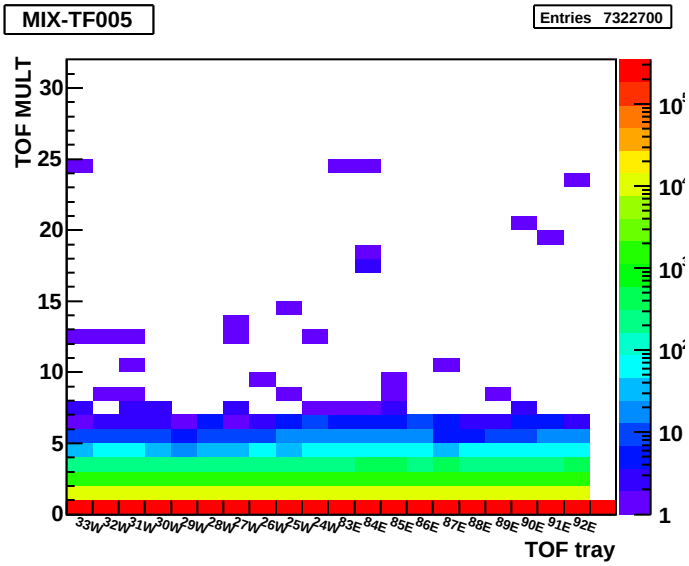

Hybrid Jet Patches
Entries 348700
JP ADC
JP ID

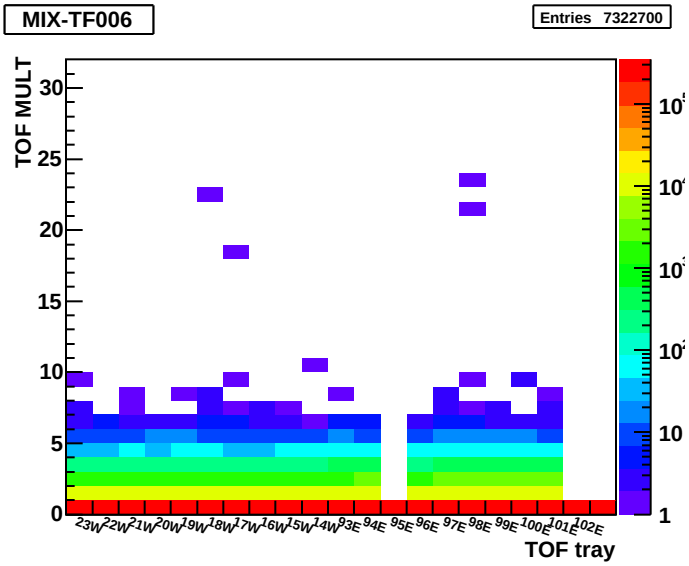

MIX-TF001
Entries 7322700
TOF MULT
TOF tray

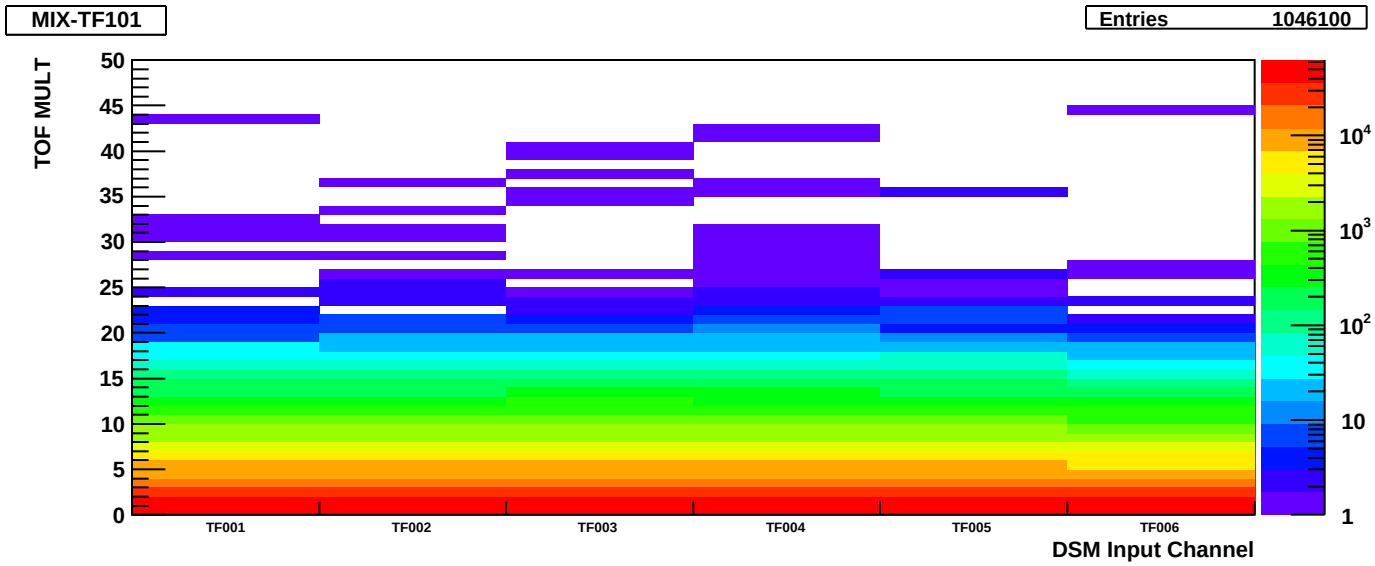

MIX-TF002
Entries 7322700
TOF MULT
TOF tray

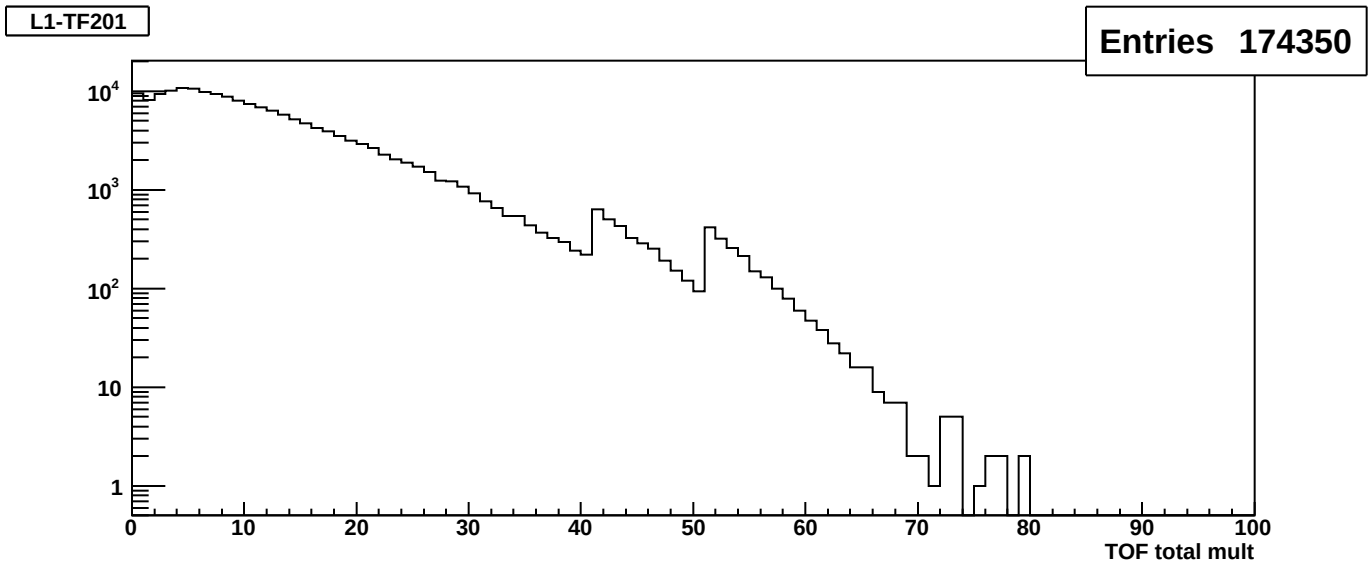

MIX-TF003
Entries 7322700
TOF MULT
TOF tray

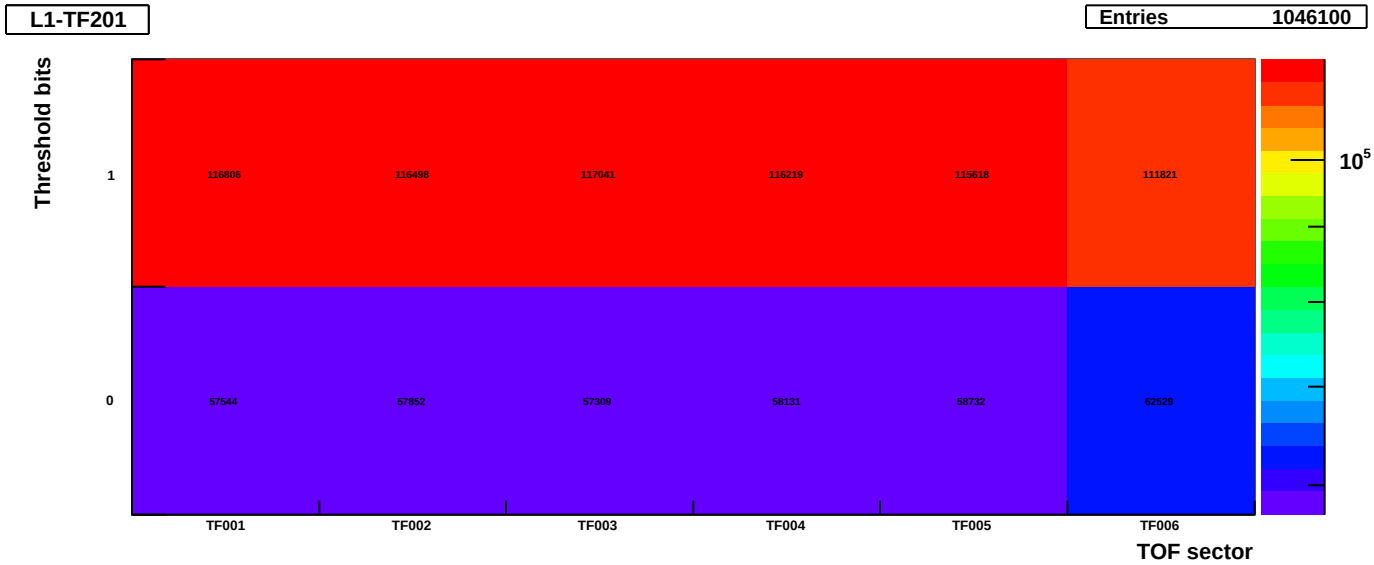

MIX-TF004
Entries 7322700
TOF MULT
TOF tray

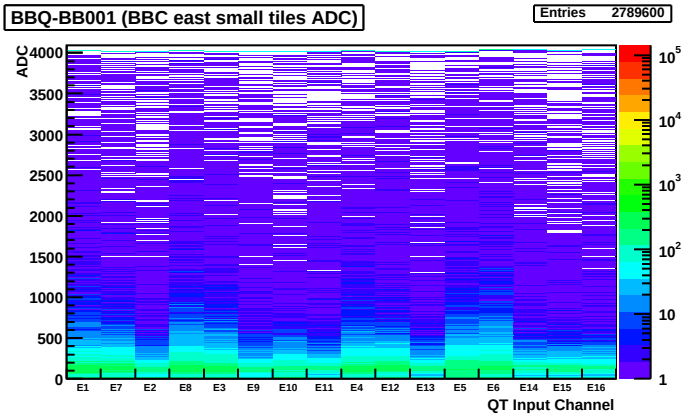

MIX-TF005
Entries 7322700
TOF MULT
TOF tray

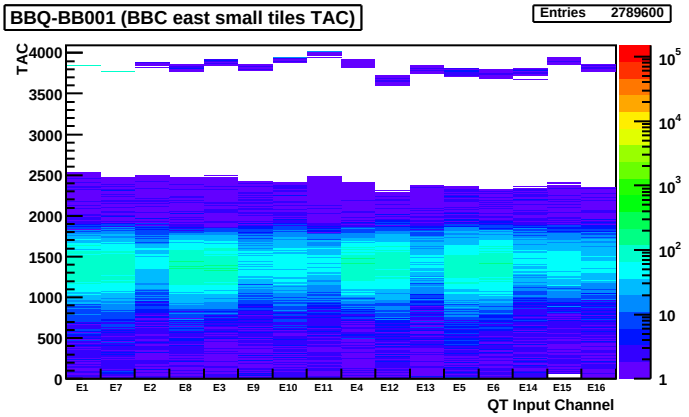

MIX-TF006
Entries 7322700
TOF MULT
TOF tray

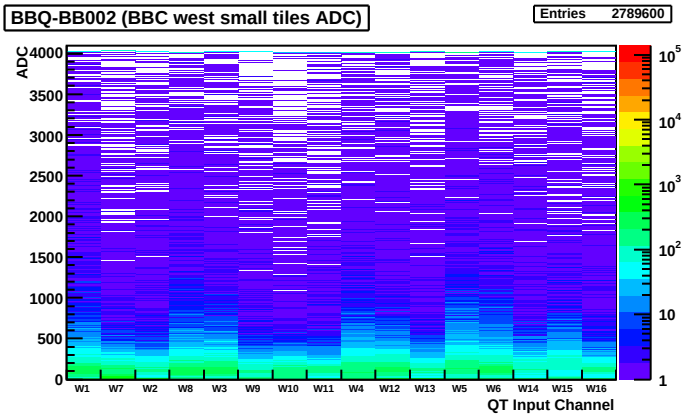

MIX-TF101
Entries 1046100
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

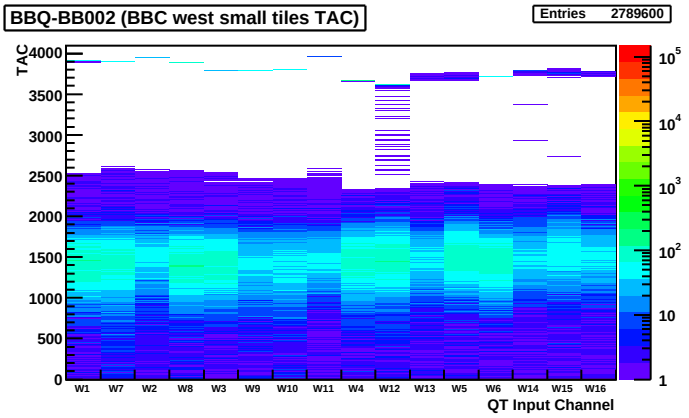

L1-TF201
Entries 174350
TOF total mult

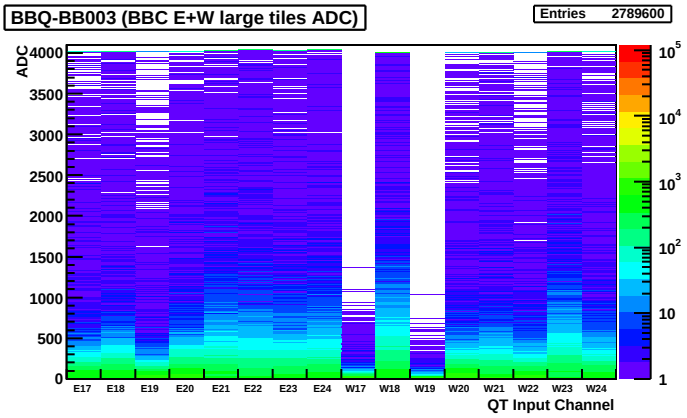

L1-TF201
Entries 1046100
Threshold bits
116806
116498
117041
116219
115618
111821
57544
57852
57309
58131
58732
62529
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

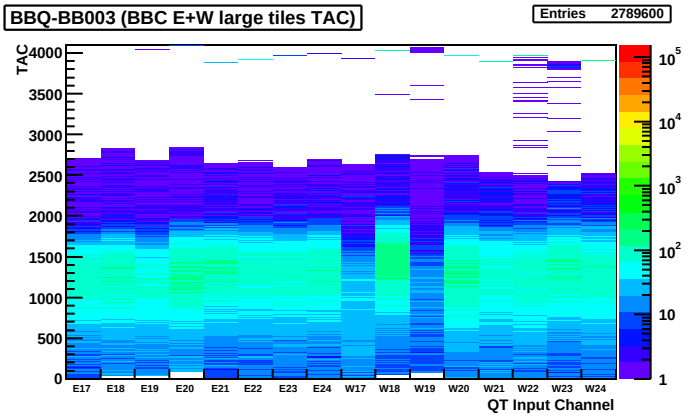

BBQ-BB001 (BBC east small tiles ADC)
Entries 2789600
ADC
QT Input Channel

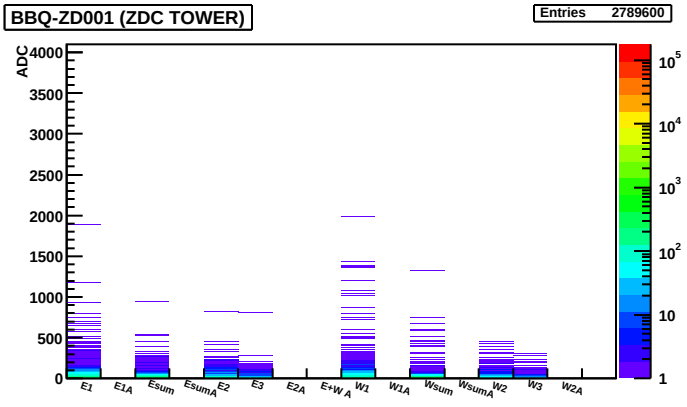

BBQ-BB001 (BBC east small tiles TAC)
Entries 2789600
TAC
QT Input Channel

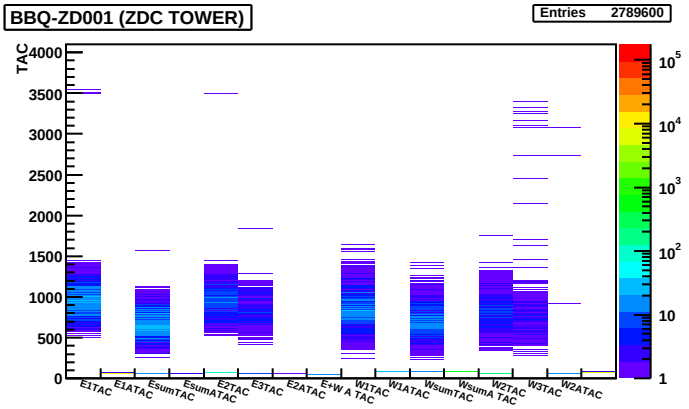

BBQ-BB002 (BBC west small tiles ADC)
Entries 2789600
ADC
QT Input Channel

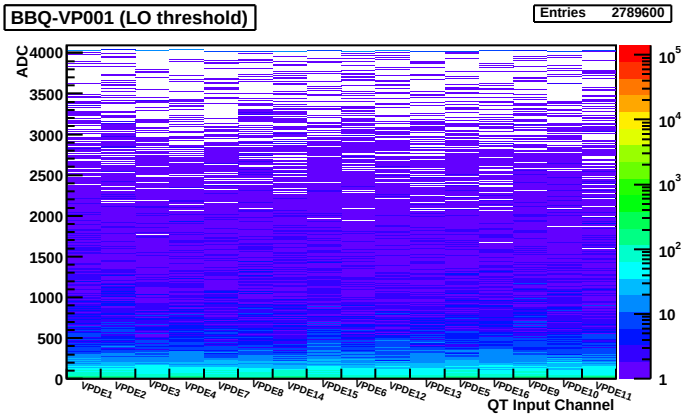

BBQ-BB002 (BBC west small tiles TAC)
Entries 2789600
TAC
QT Input Channel

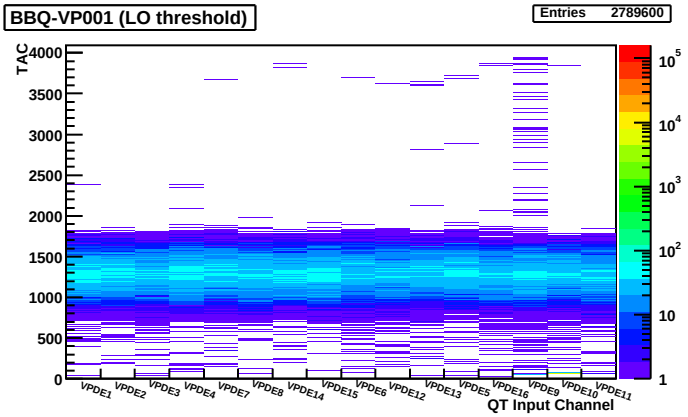

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 2789600
ADC
QT Input Channel

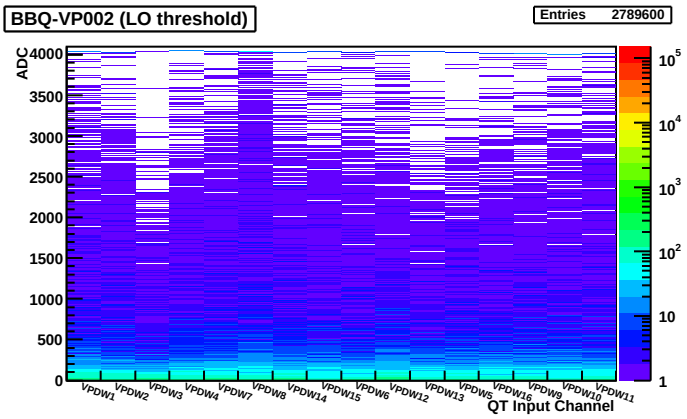

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 2789600
TAC
QT Input Channel

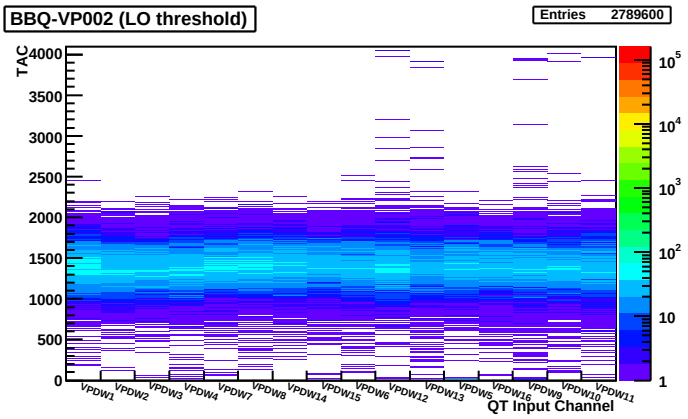

BBQ-ZD001 (ZDC TOWER)
Entries 2789600
ADC

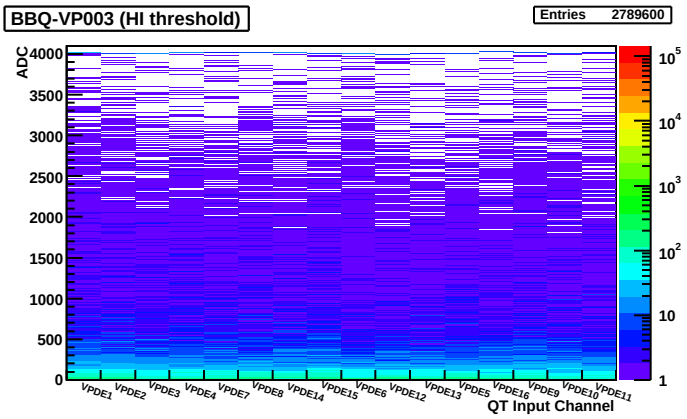

BBQ-ZD001 (ZDC TOWER)
Entries 2789600
TAC

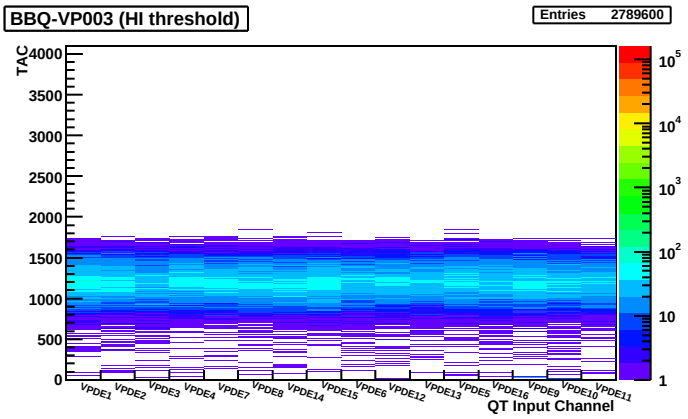

BBQ-VP001 (LO threshold)
Entries 2789600
ADC
QT Input Channel

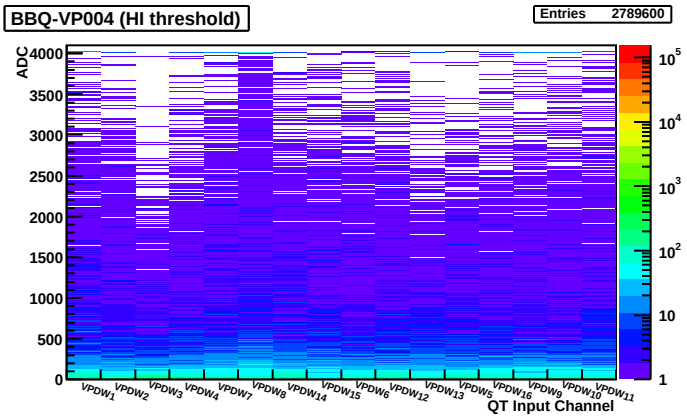

BBQ-VP001 (LO threshold)
Entries 2789600
TAC
QT Input Channel

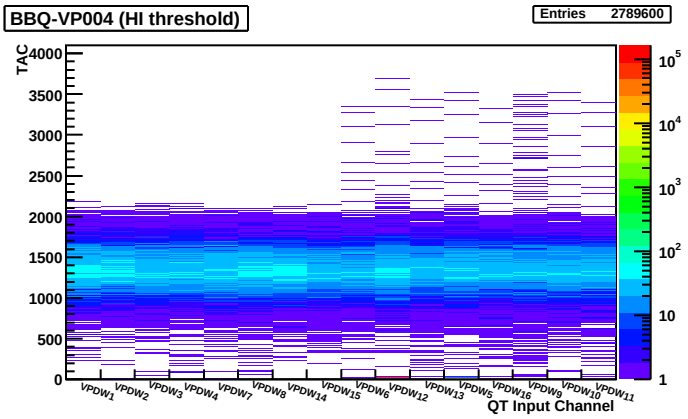

BBQ-VP002 (LO threshold)
Entries 2789600
ADC
QT Input Channel

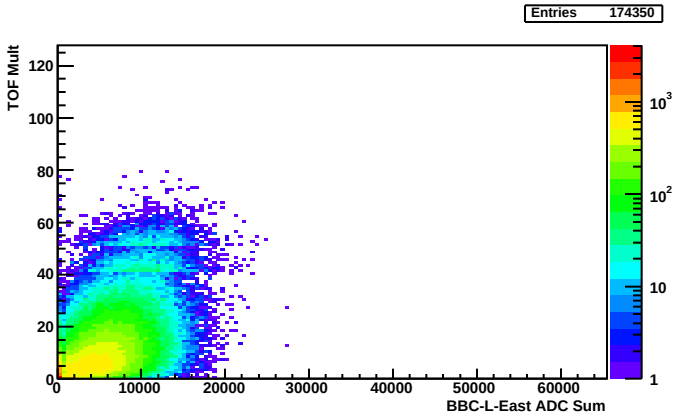

BBQ-VP002 (LO threshold)
Entries 2789600
TAC
QT Input Channel

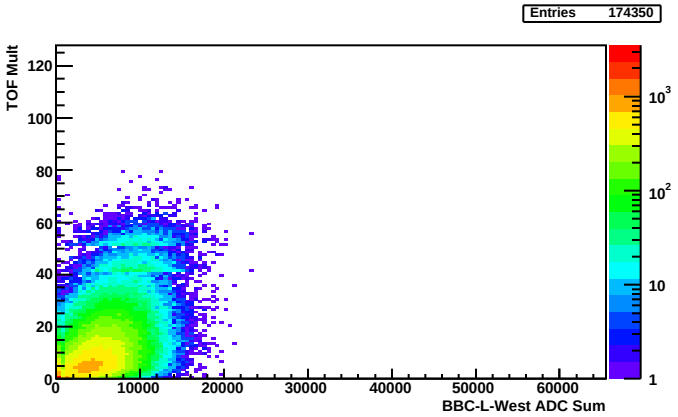

BBQ-VP003 (HI threshold)
Entries 2789600
ADC
QT Input Channel

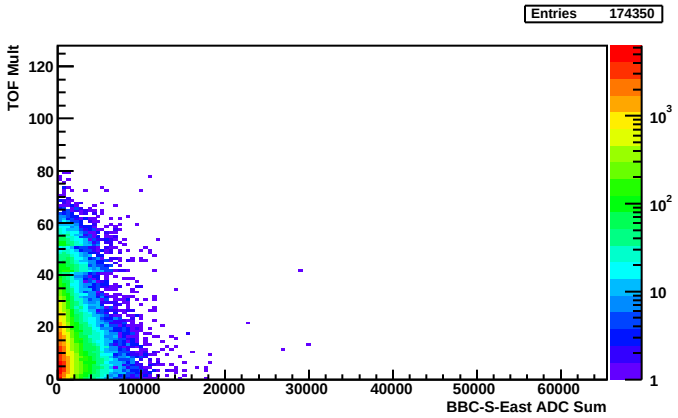

BBQ-VP003 (HI threshold)
Entries 2789600
TAC
QT Input Channel

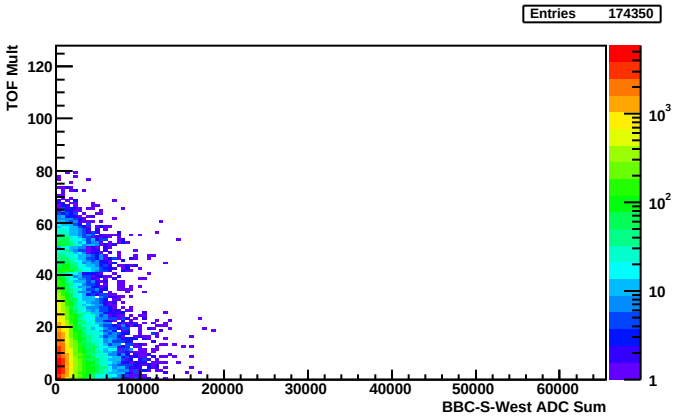

BBQ-VP004 (HI threshold)
Entries 2789600
ADC
QT Input Channel

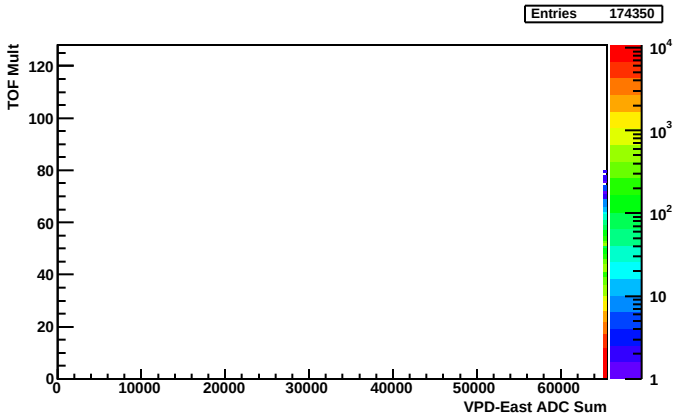

BBQ-VP004 (HI threshold)
Entries 2789600
TAC
QT Input Channel

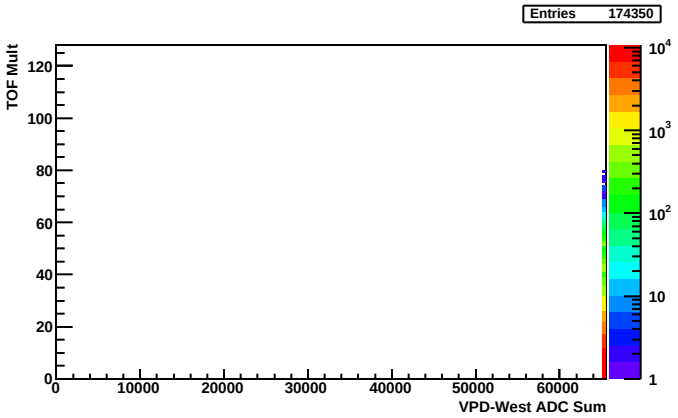

Entries 174350
TOF Mult
BBC-L-East ADC Sum

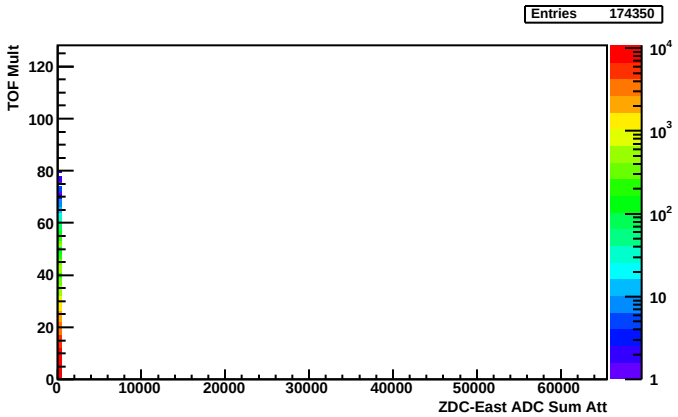

Entries 174350
TOF Mult
BBC-L-West ADC Sum

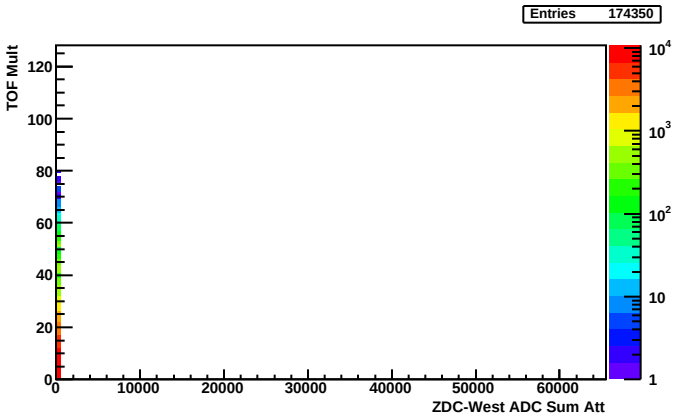

Entries 174350
TOF Mult
BBC-S-East ADC Sum

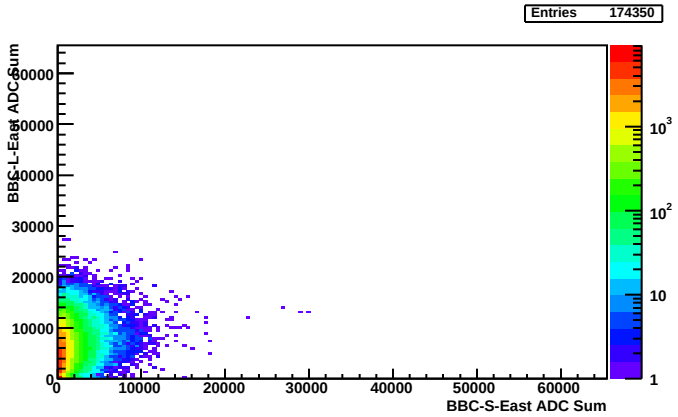

Entries 174350
TOF Mult
BBC-S-West ADC Sum

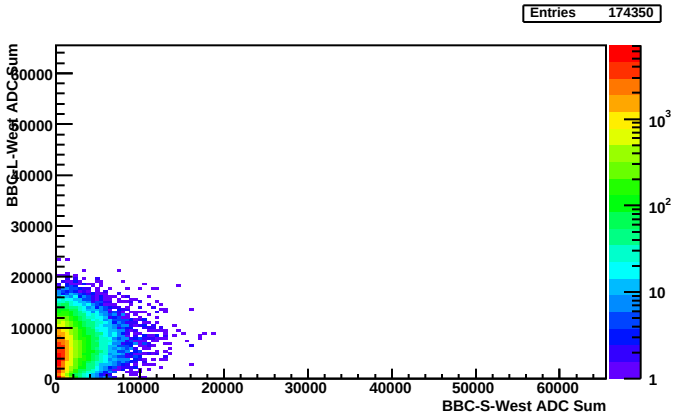

Entries 174350
TOF Mult
VPD-East ADC Sum

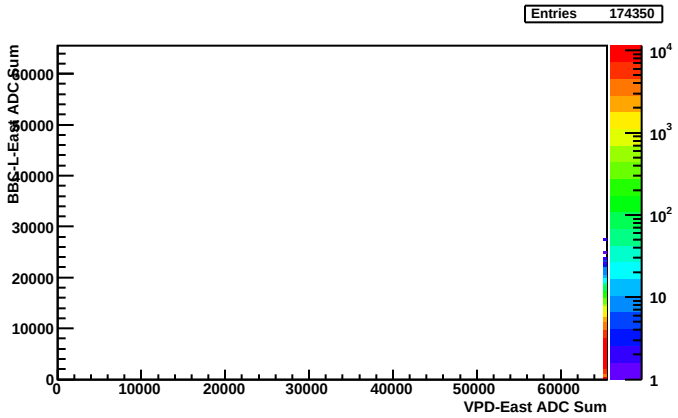

Entries 174350
TOF Mult
VPD-West ADC Sum

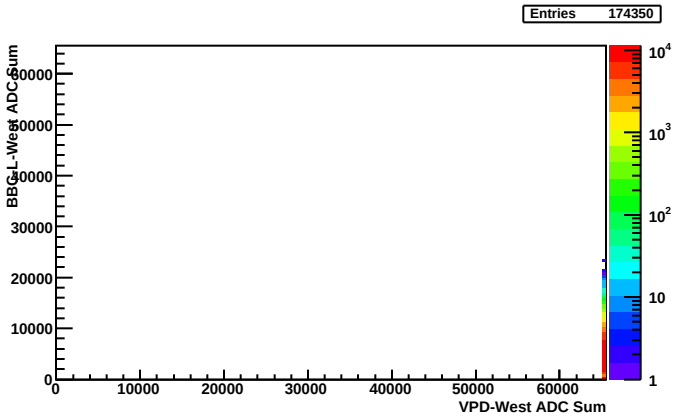

Entries 174350
TOF Mult
ZDC-East ADC Sum Att


Entries 174350
TOF Mult
ZDC-West ADC Sum Att


Entries 174350
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 174350
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 174350
BBC-L-East ADC Sum
VPD-East ADC Sum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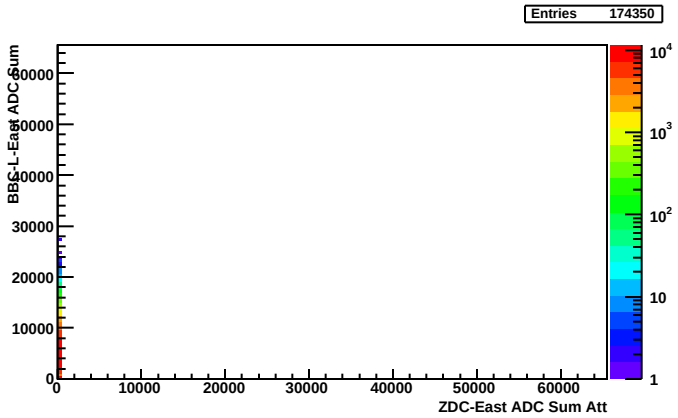
BBC-L-West ADC Sum
VPD-West ADC Sum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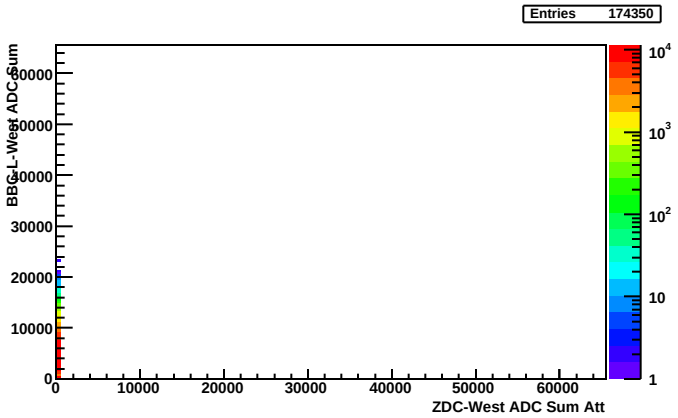
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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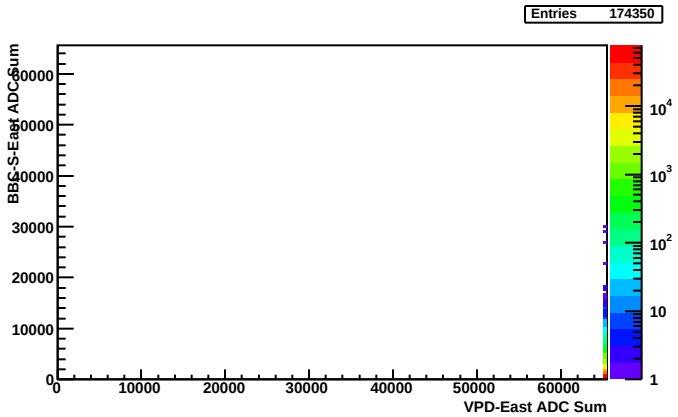
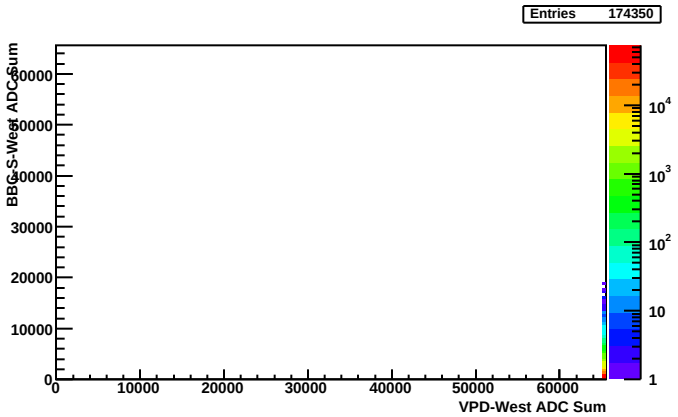
BBC-L-West ADC Sum
ZDC-West ADC Sum Att


Entries 174350
BBC-S-East ADC Sum
VPD-East ADC Sum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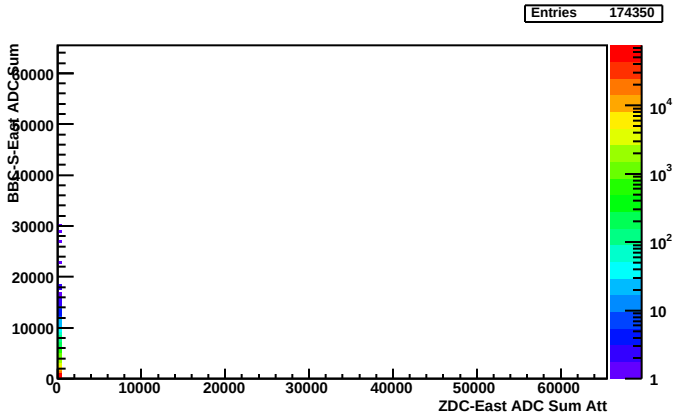
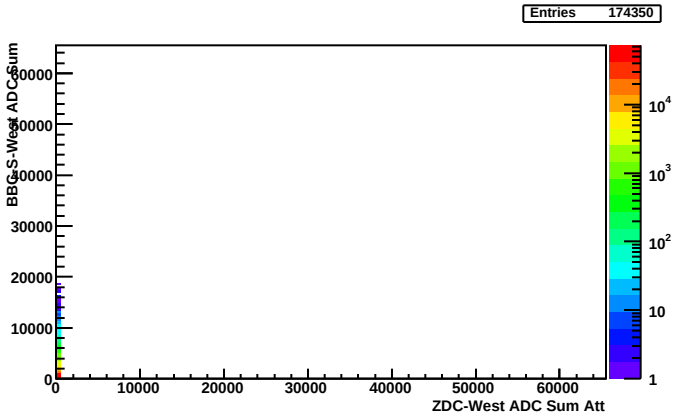
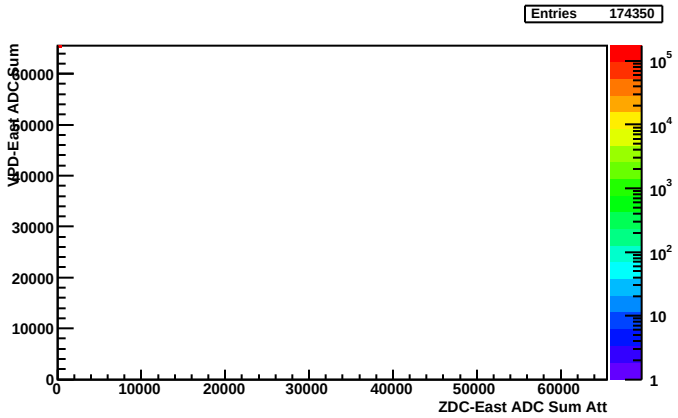
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 174350
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 174350
BBC-S-West ADC Sum
ZDC-West ADC Sum Att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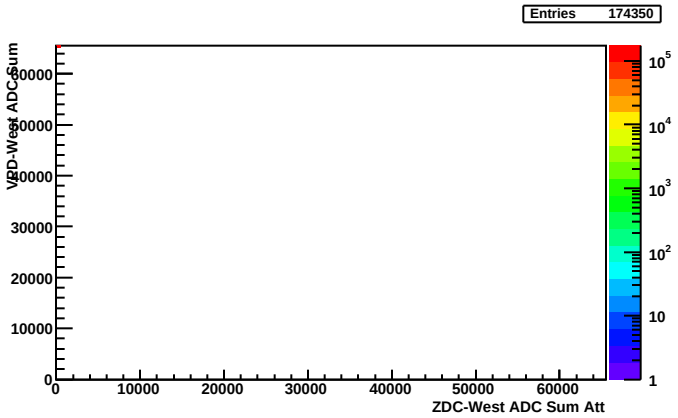
VPD-East ADC Sum
ZDC-East ADC Sum Att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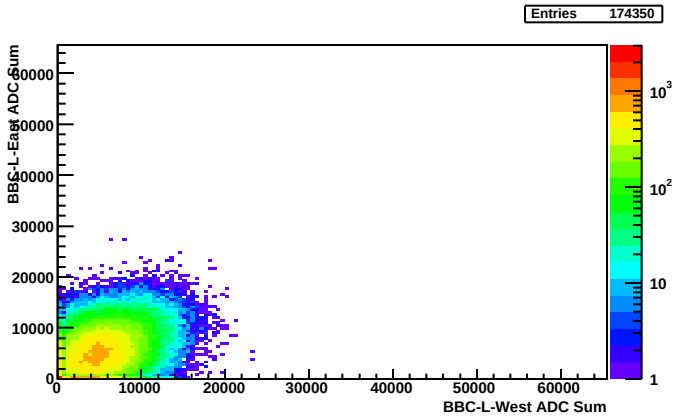
VPD-West ADC Sum
ZDC-West ADC Sum Att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BBC-L-East ADC Sum
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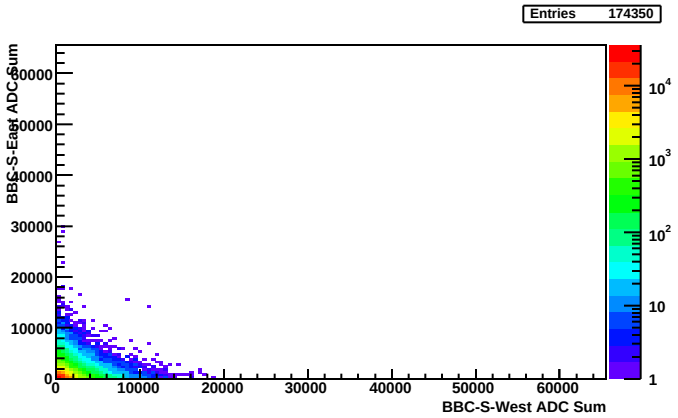
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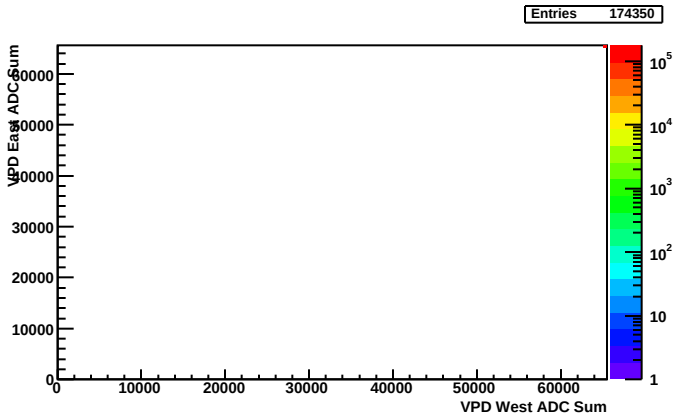
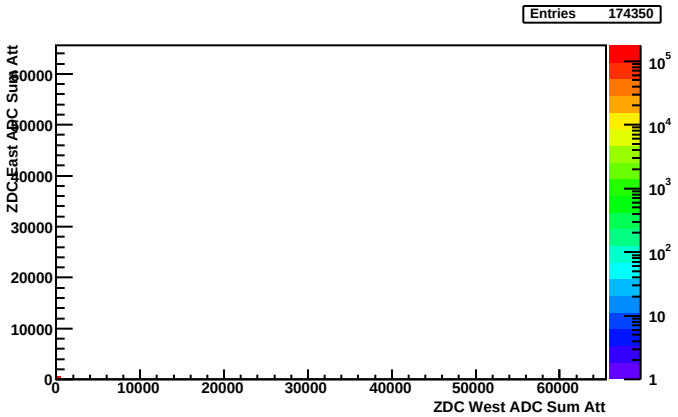
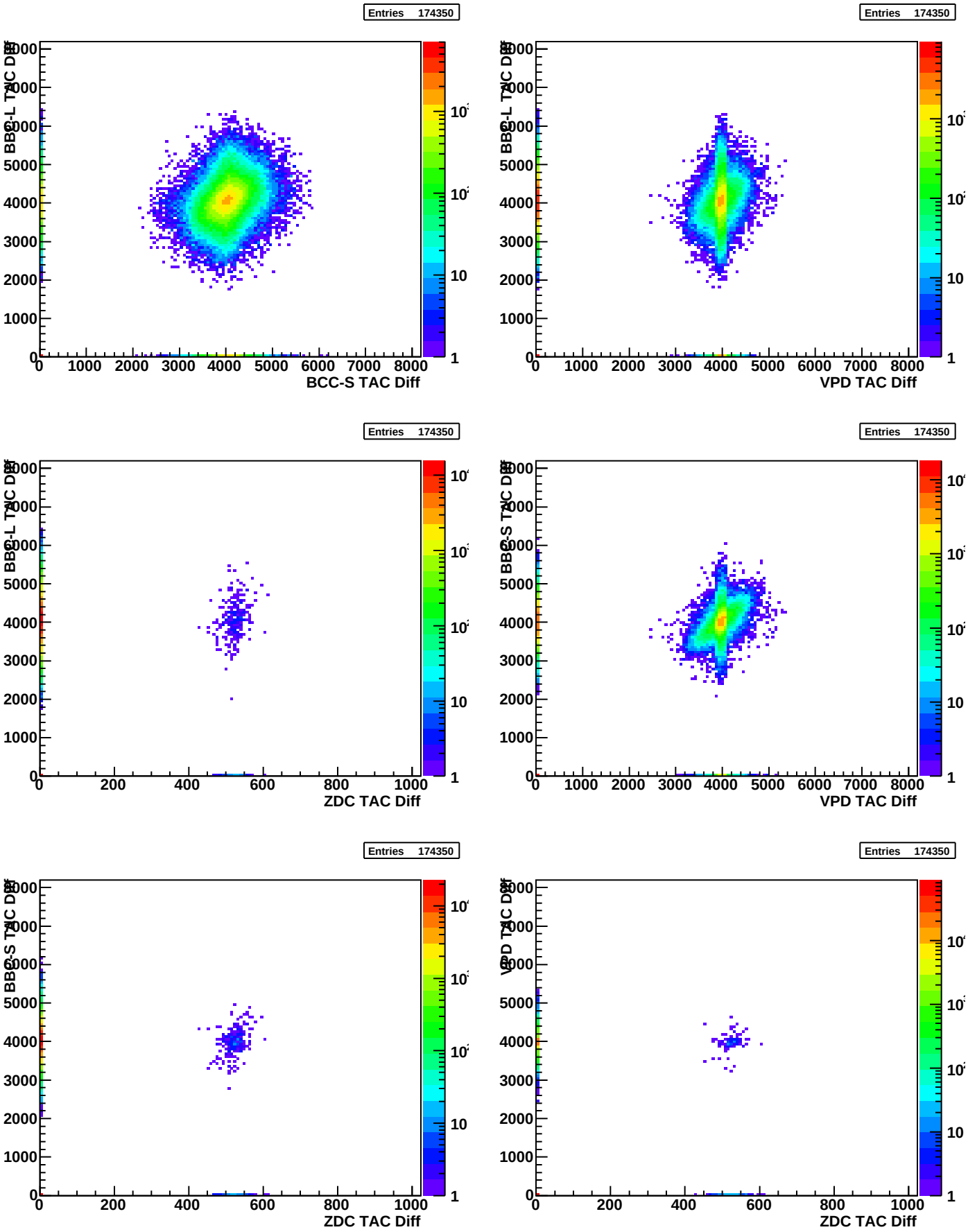
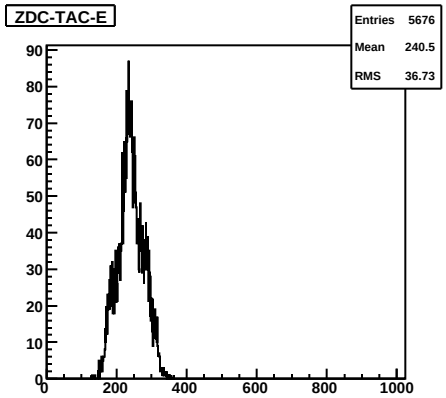
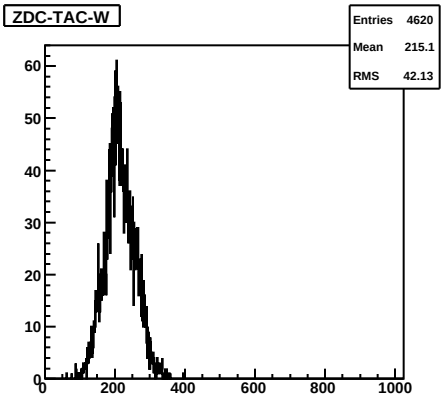
BBC-S-East ADC Sum
BBC-S-West ADC Sum

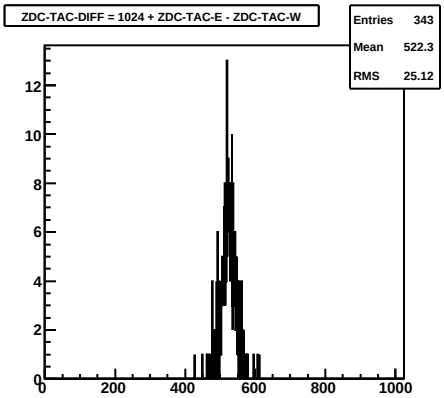

Entries 174350
VPD East ADC Sum
VPD West ADC Sum

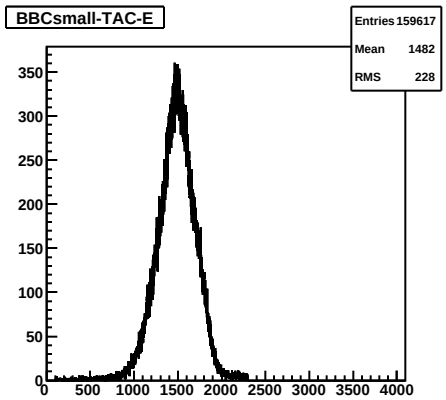

Entries 174350
ZDC East ADC Sum Att
ZDC West ADC Sum Att

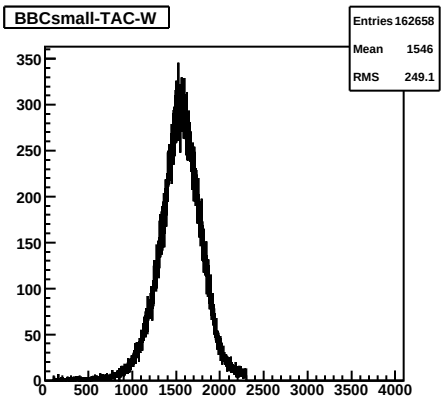

Entries 174350
BBC-L TAC Diff
BCC-S TAC Diff
Entries 174350
BBC-L TAC Diff
VPD TAC Diff
Entries 174350
BBC-L TAC Diff
ZDC TAC Diff
Entries 174350
BBC-S TAC Diff
VPD TAC Diff
Entries 174350
BBC-S TAC Diff
ZDC TAC Diff
Entries 174350
VPD TAC Diff
ZDC TAC Diff

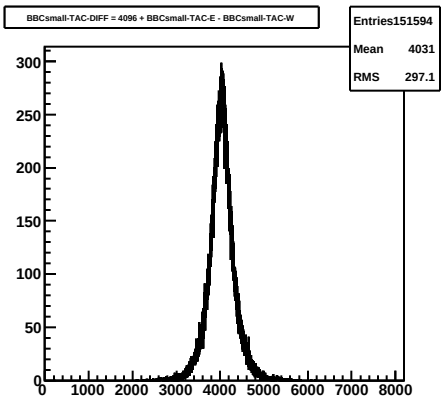

ZDC-TAC-E
Entries 5676
Mean 240.5
RMS 36.73

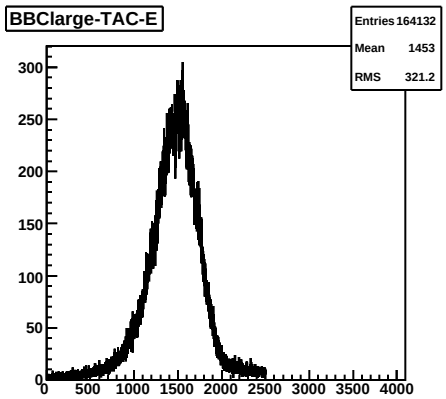

ZDC-TAC-W
Entries 4620
Mean 215.1
RMS 42.13

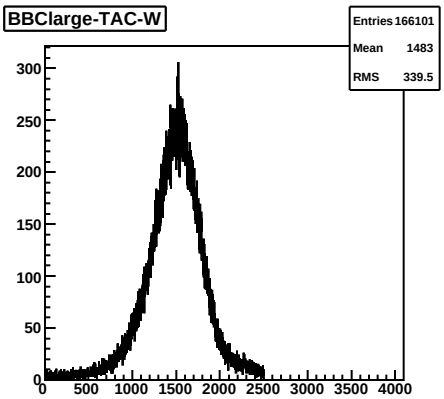

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 343
Mean 522.3
RMS 25.12

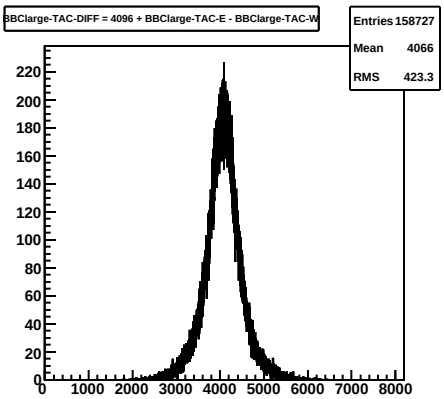

BBCsmall-TAC-E
Entries 159617
Mean 1482
RMS 228

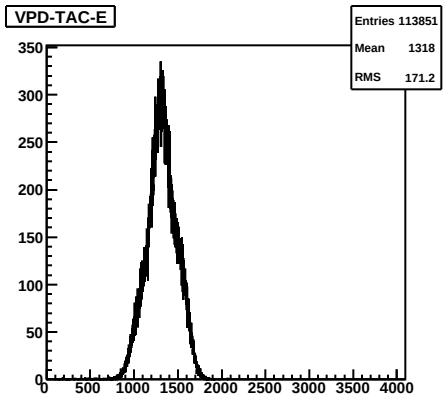

BBCsmall-TAC-W
Entries 162658
Mean 1546
RMS 249.1

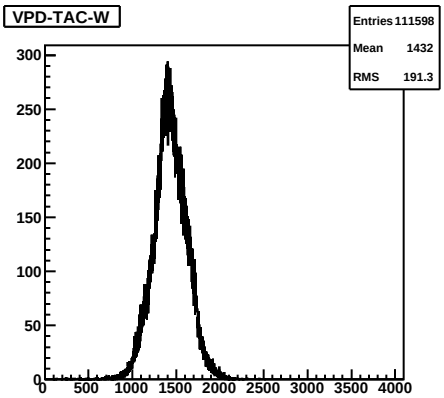

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 151594
Mean 4031
RMS 297.1

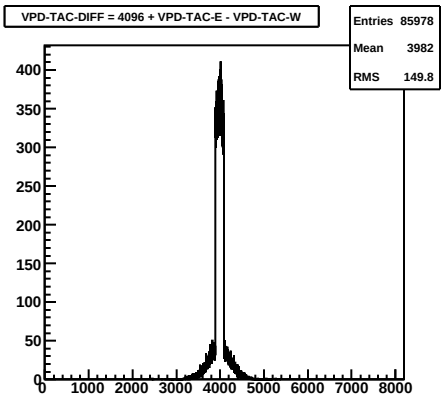

BBClarge-TAC-E
Entries 164132
Mean 1453
RMS 321.2

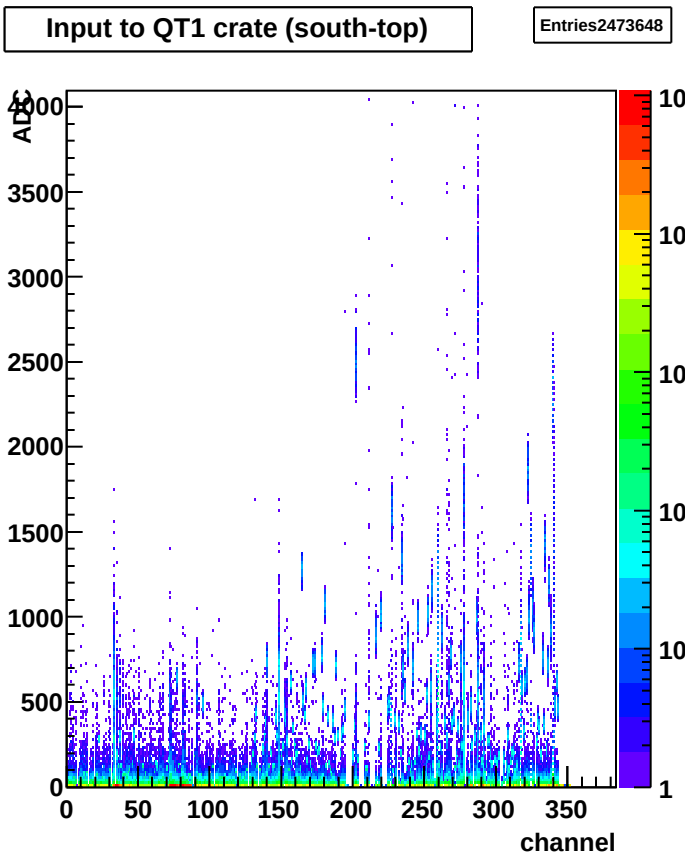

BBClarge-TAC-W
Entries 166101
Mean 1483
RMS 339.5

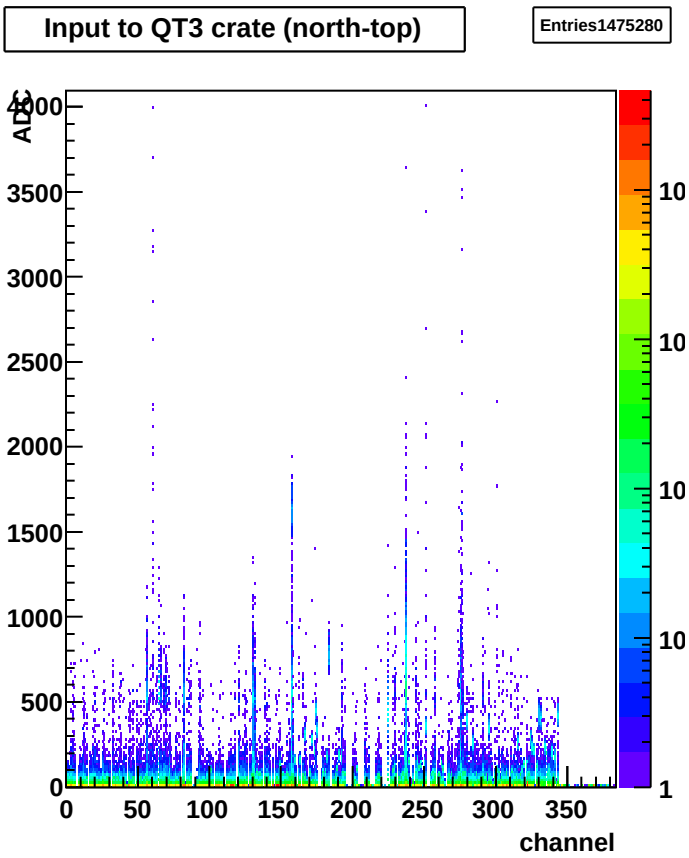

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 158727
Mean 4066
RMS 423.3

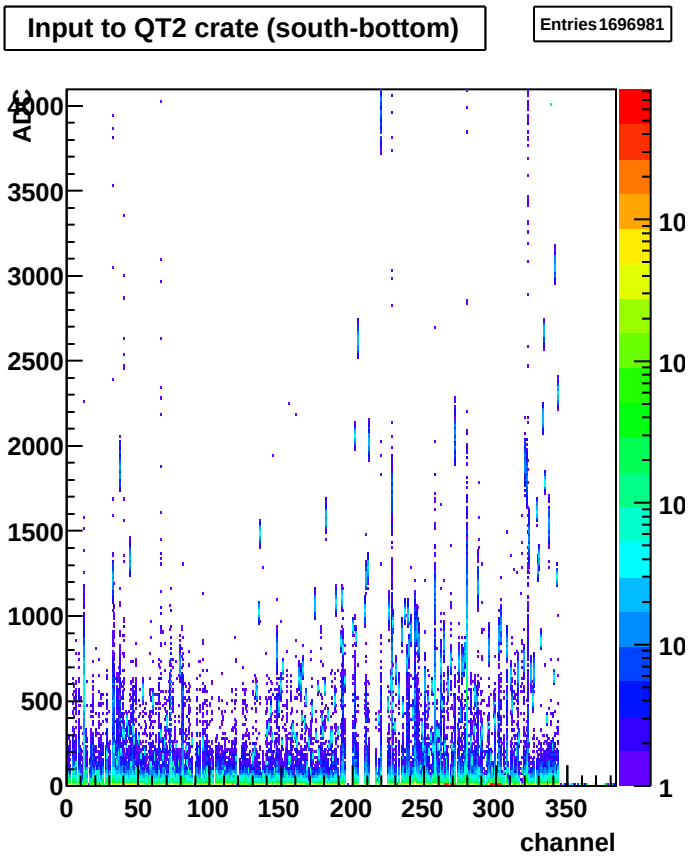

VPD-TAC-E
Entries 113851
Mean 1318
RMS 171.2

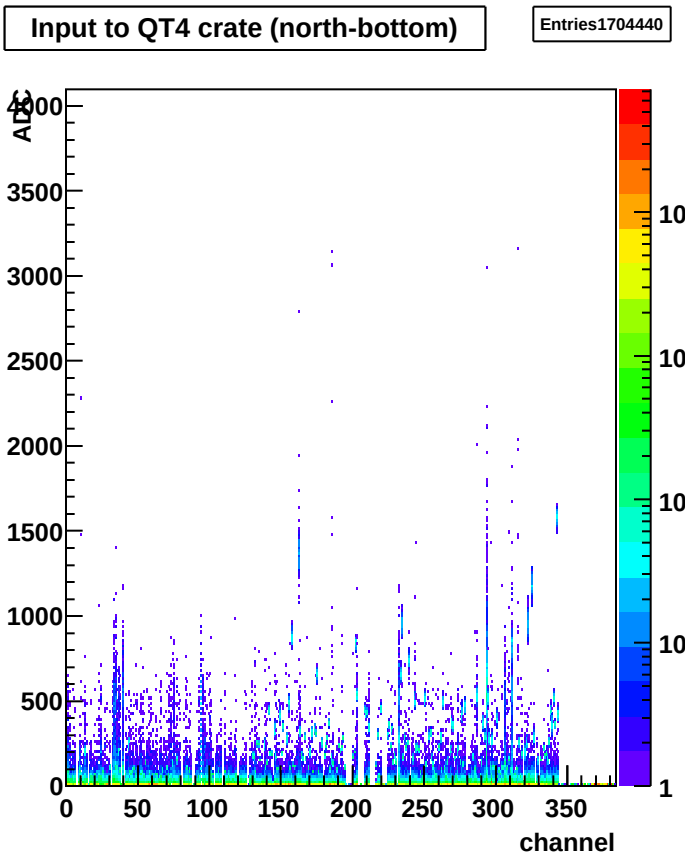

VPD-TAC-W
Entries 111598
Mean 1432
RMS 191.3

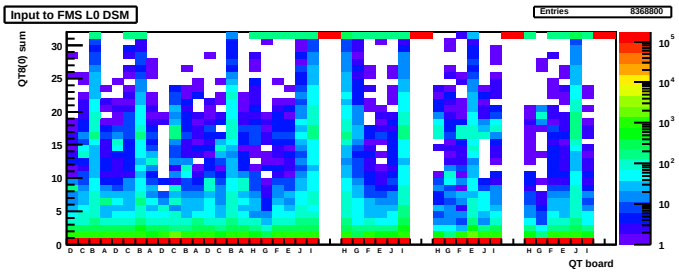

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 85978
Mean 3982
RMS 149.8

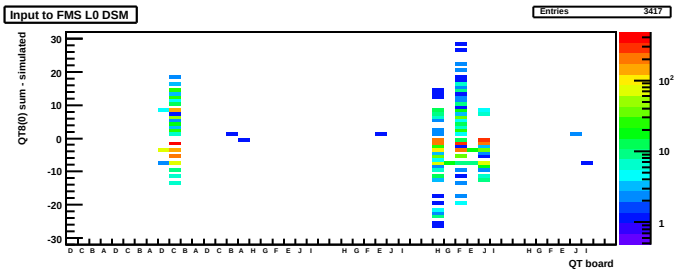

Input to QT1 crate (south-top)
Entries2473648
ADC
channel

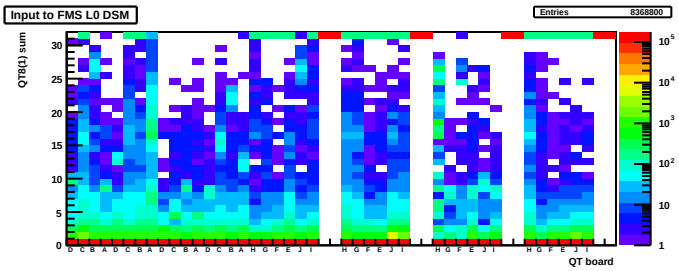

Input to QT3 crate (north-top)
Entries1475280
ADC
channel

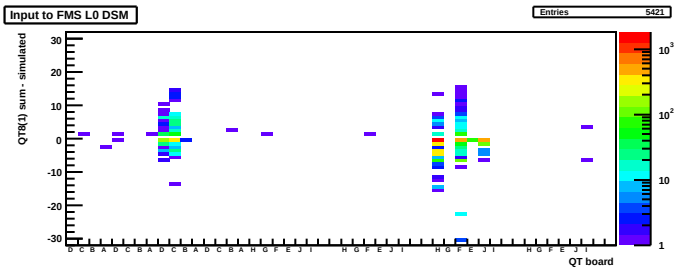

Input to QT2 crate (south-bottom)
Entries1696981
ADC
channel

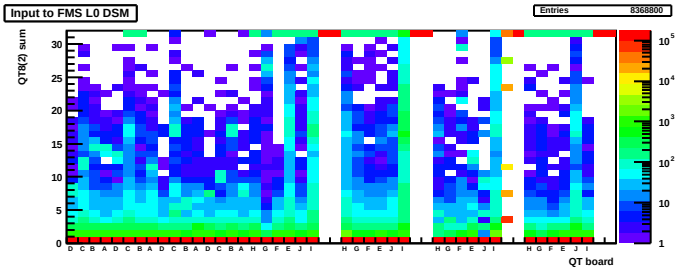

Input to QT4 crate (north-bottom)
Entries1704440
ADC
channel

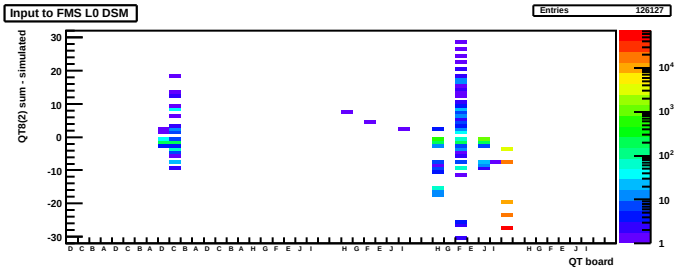

Input to FMS L0 DSM
Entries 8368800
QT8(0) sum
QT board

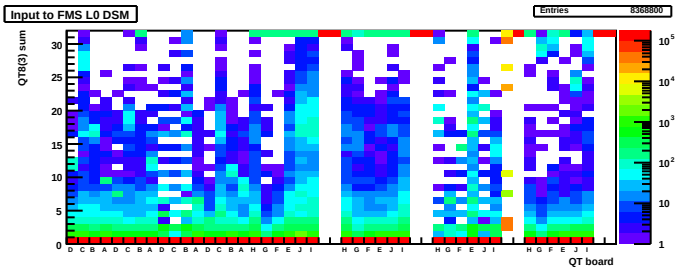

Input to FMS L0 DSM
Entries 3417
QT8(0) sum - simulated
QT board

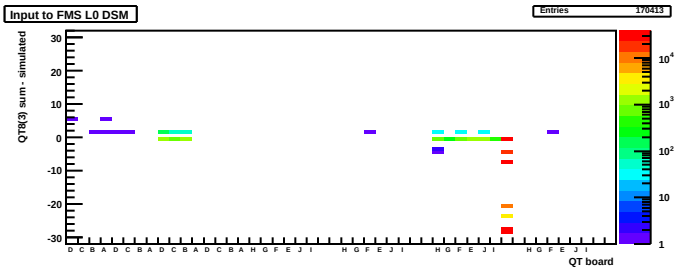

Input to FMS L0 DSM
Entries 8368800
QT8(1) sum
QT board

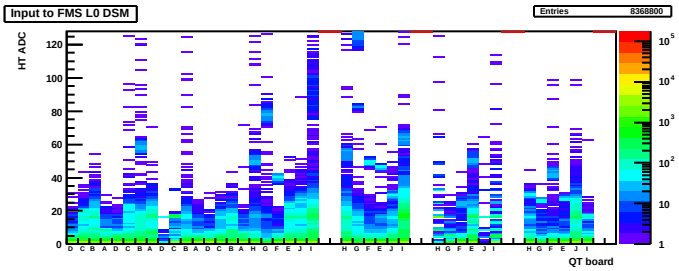

Input to FMS L0 DSM
Entries 5421
QT8(1) sum - simulated
QT board

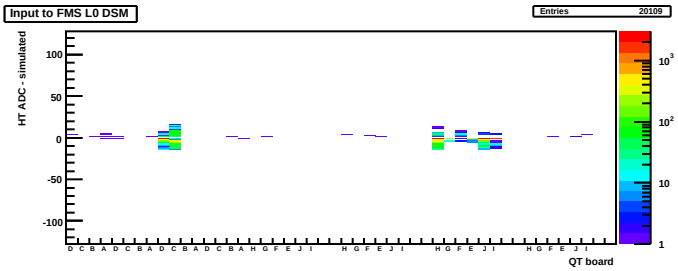

Input to FMS L0 DSM
Entries 8368800
QT8(2) sum
QT board

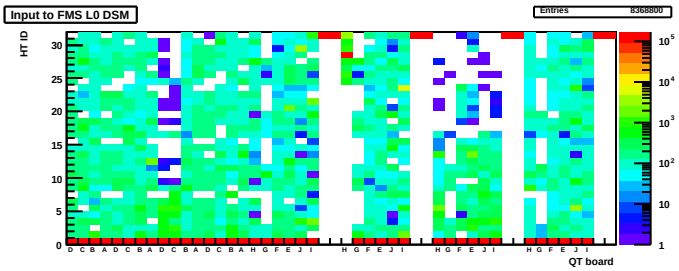

Input to FMS L0 DSM
Entries 126127
QT8(2) sum - simulated
QT board

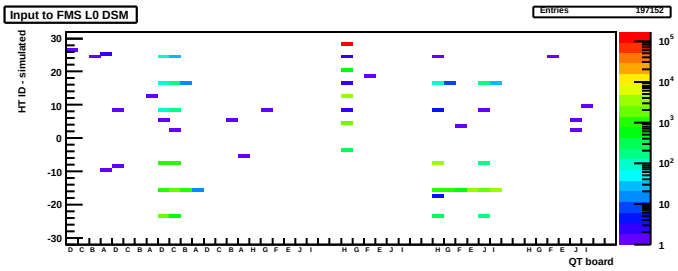

Input to FMS L0 DSM
Entries 8368800
QT8(3) sum
QT board

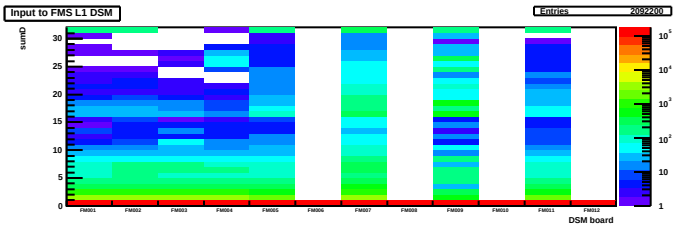

Input to FMS L0 DSM
Entries 170413
QT8(3) sum - simulated
QT board

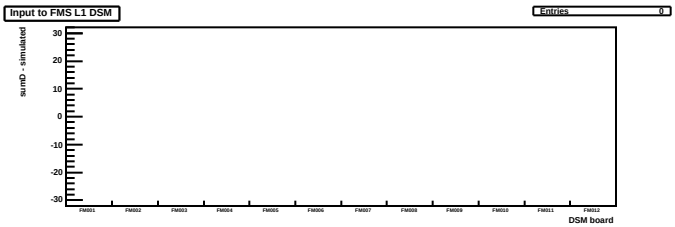

Input to FMS L0 DSM
Entries 8368800
HT ADC
QT board

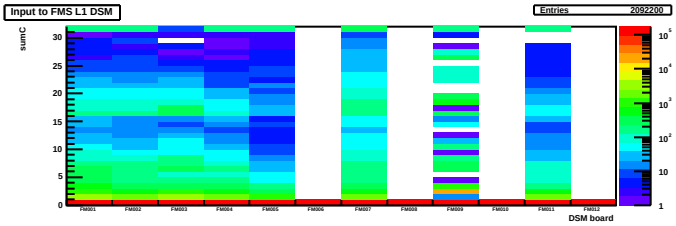

Input to FMS L0 DSM
Entries 20109
HT ADC - simulated
QT board

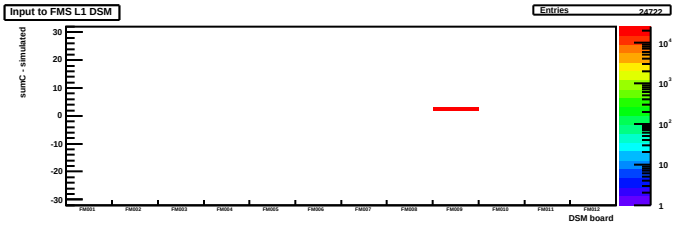

Input to FMS L0 DSM
Entries 8368800
HT ID
QT board

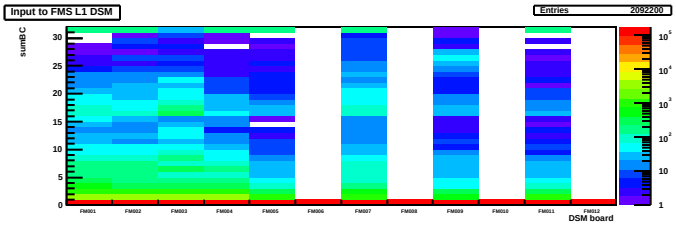

Input to FMS L0 DSM
Entries 197152
HT ID - simulated
QT board

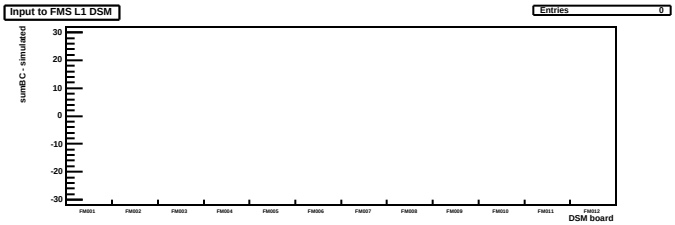

Input to FMS L1 DSM
Entries 2092200
sumD
DSM board

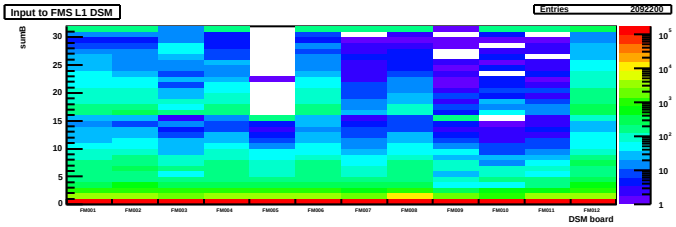

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

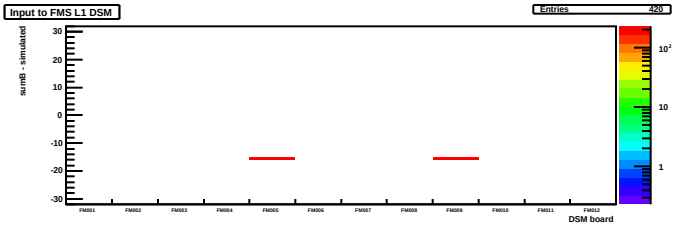

Input to FMS L1 DSM
Entries 2092200
sumC
DSM board

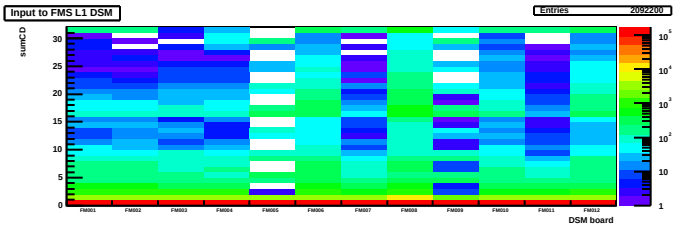

Input to FMS L1 DSM
Entries 24722
sumC - simulated
DSM board

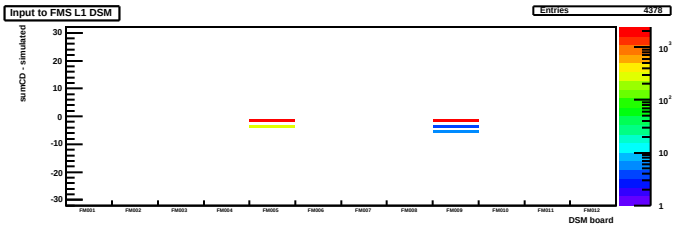

Input to FMS L1 DSM
Entries 2092200
sumBC
DSM board

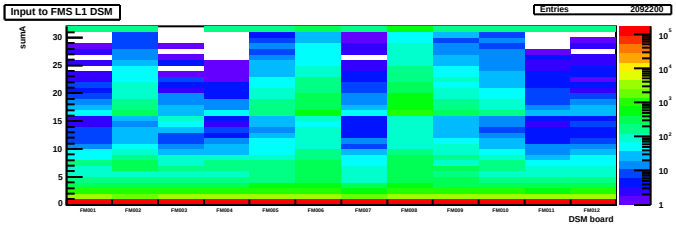

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

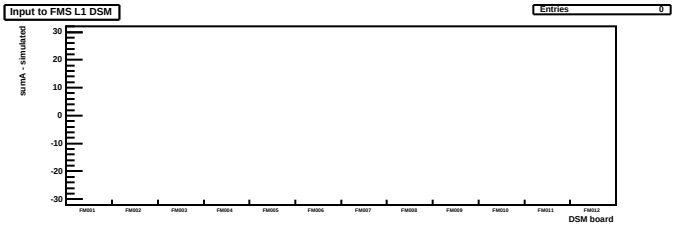

Input to FMS L1 DSM
Entries 2092200
sumB
DSM board

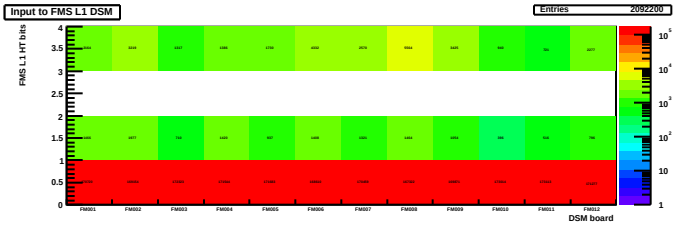

Input to FMS L1 DSM
Entries 420
sumB - simulated
DSM board

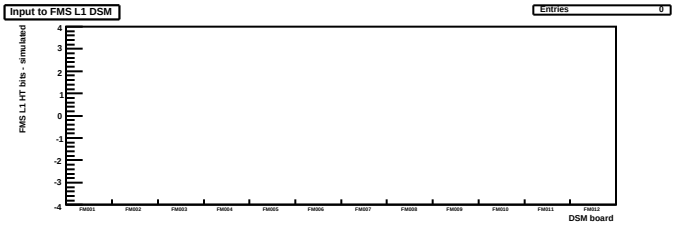

Input to FMS L1 DSM
Entries 2092200
sumCD
DSM board

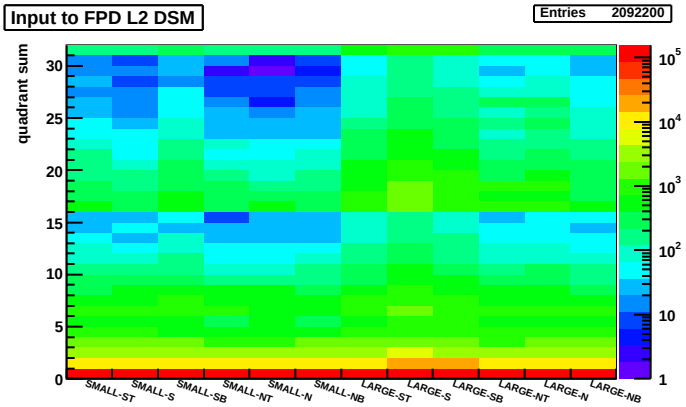

Input to FMS L1 DSM
Entries 4378
sumCD - simulated
DSM board

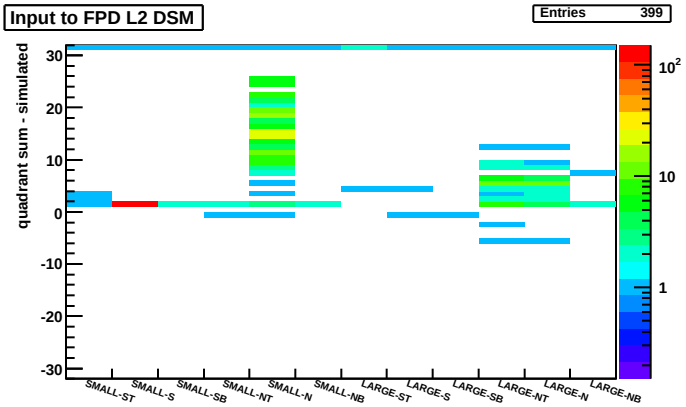

Input to FMS L1 DSM
Entries 2092200
sumA
DSM board

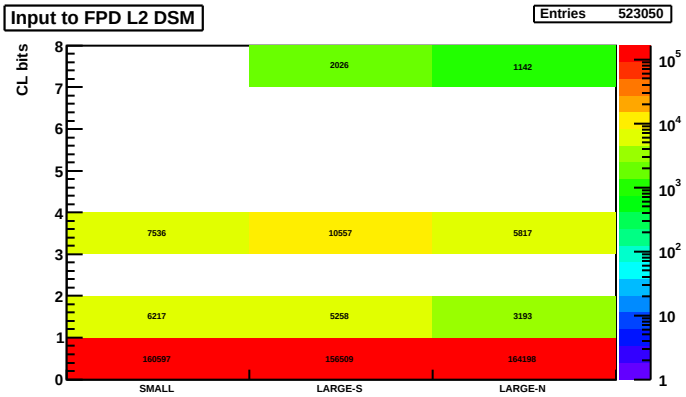

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

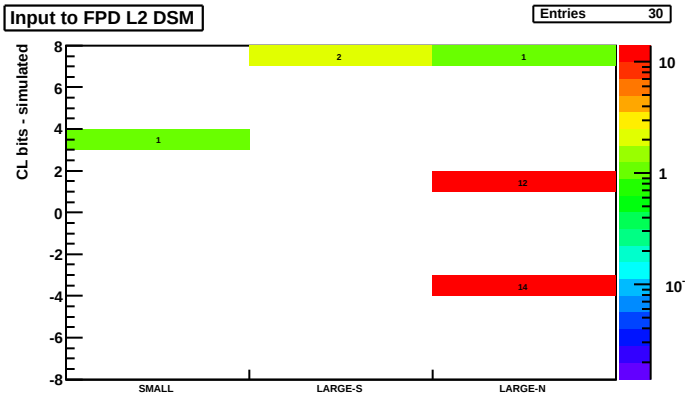

Input to FMS L1 DSM
Entries 2092200
FMS L1 HT bits
DSM board

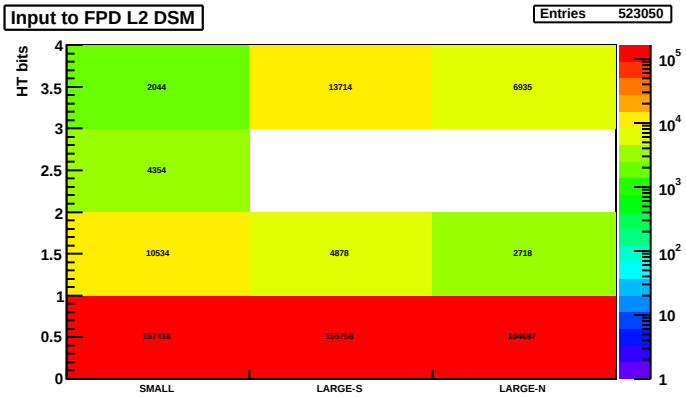

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

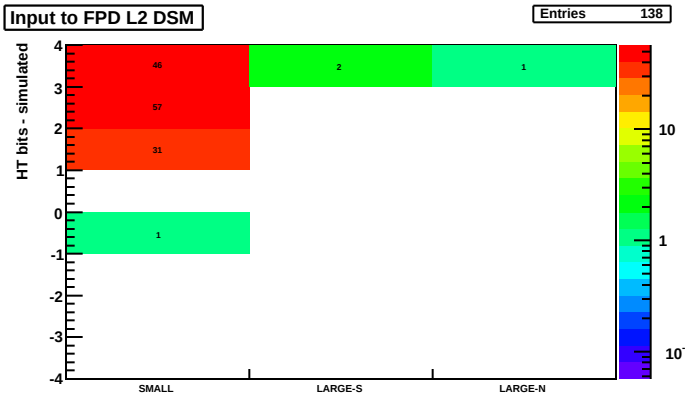

Input to FPD L2 DSM
Entries 2092200
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

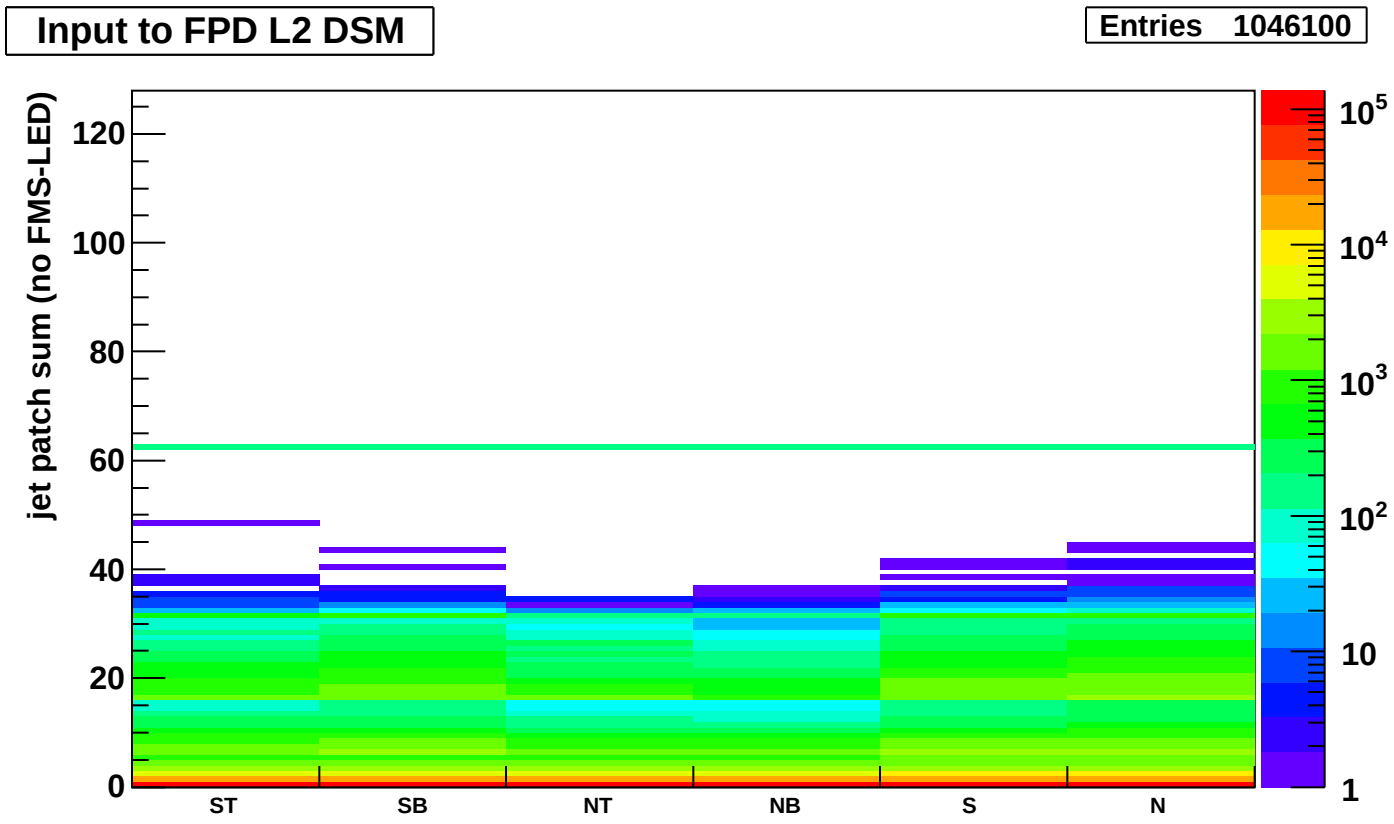

Input to FPD L2 DSM
Entries 399
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

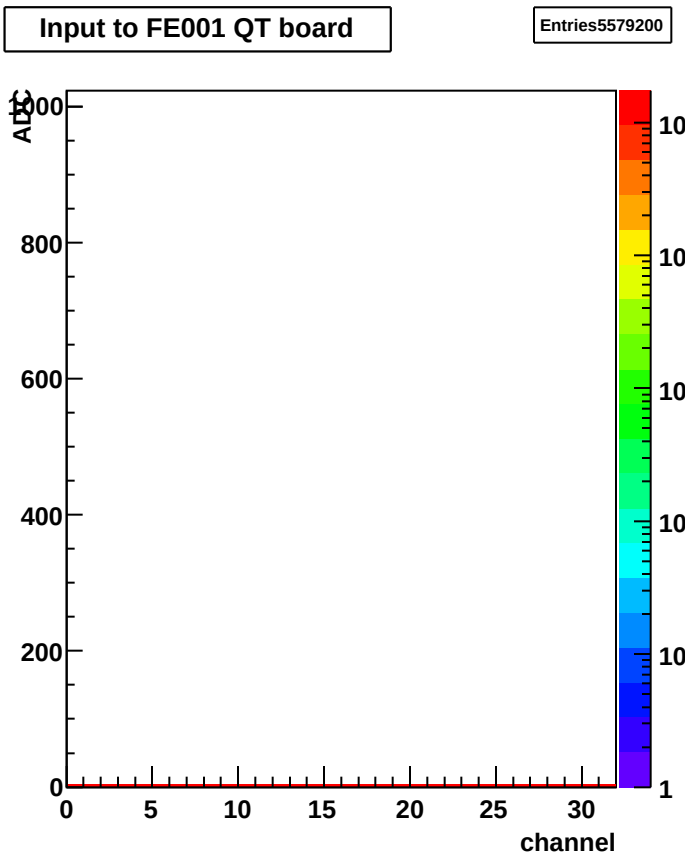

Input to FPD L2 DSM
Entries 523050
CL bits
2026
1142
7536
10557
5817
6217
5258
3193
160597
156509
164198
SMALL
LARGE-S
LARGE-N

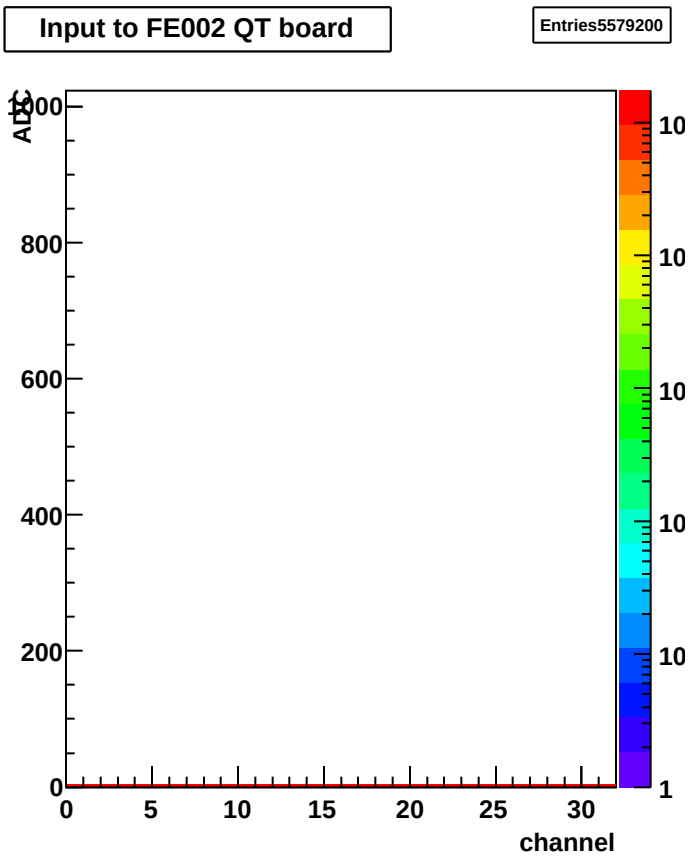

Input to FPD L2 DSM
Entries 30
CL bits - simulated
2
1
1
12
14
SMALL
LARGE-S
LARGE-N

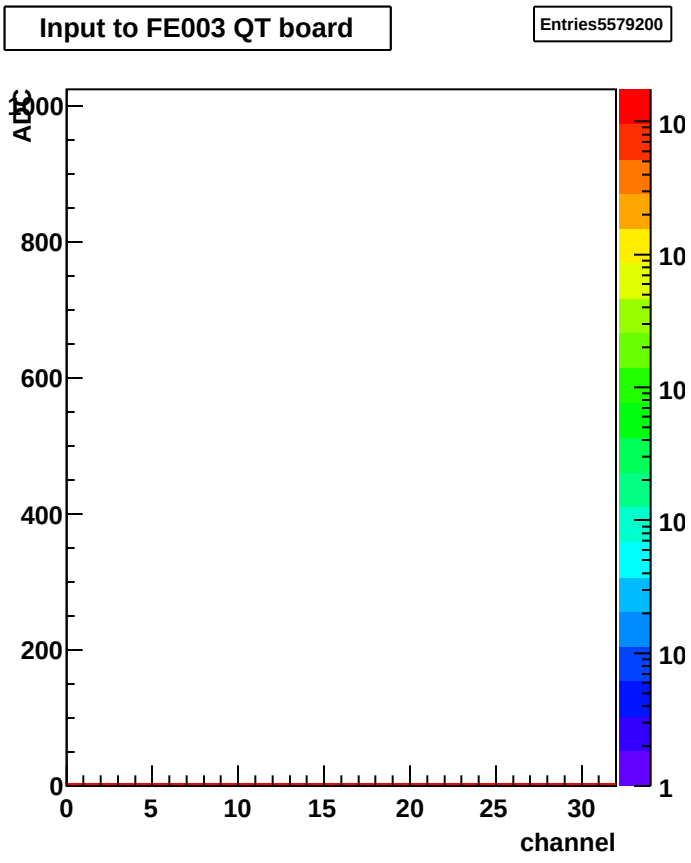

Input to FPD L2 DSM
Entries 523050
HT bits
2044
13714
6935
4354
10534
4878
2718
157418
155758
164697
SMALL
LARGE-S
LARGE-N

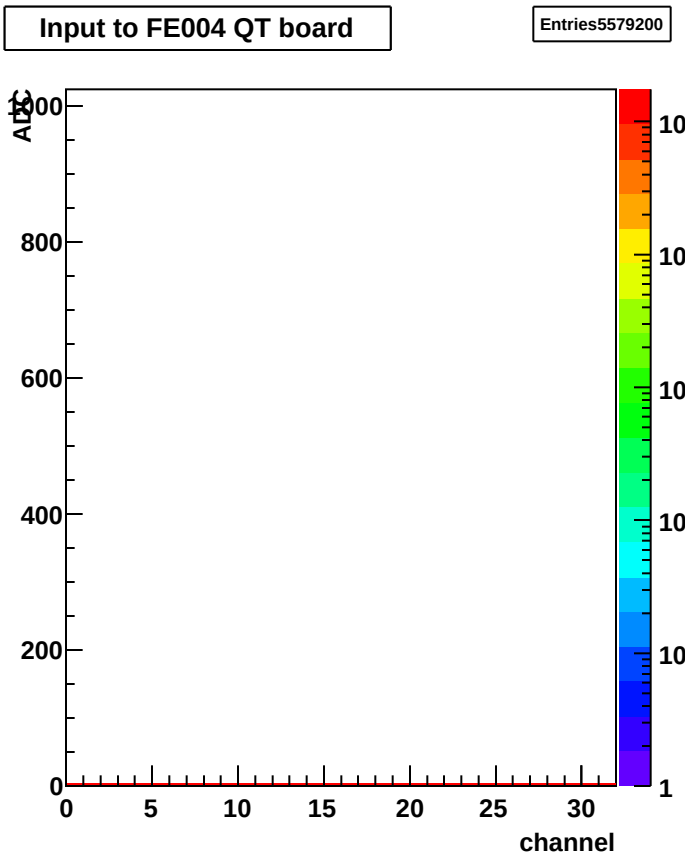

Input to FPD L2 DSM
Entries 138
HT bits - simulated
46
2
1
57
31
1
SMALL
LARGE-S
LARGE-N

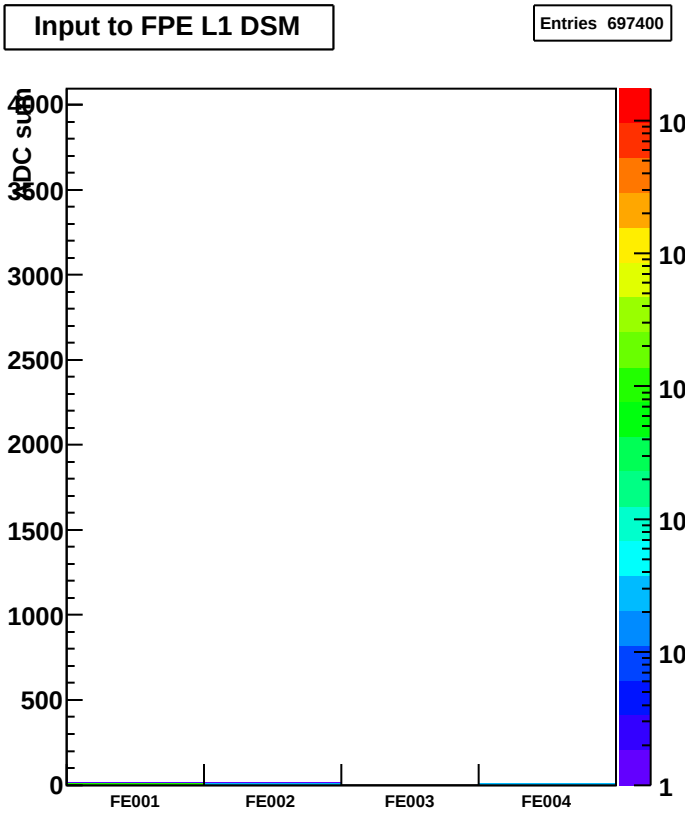

Input to FPD L2 DSM
Entries 1046100
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

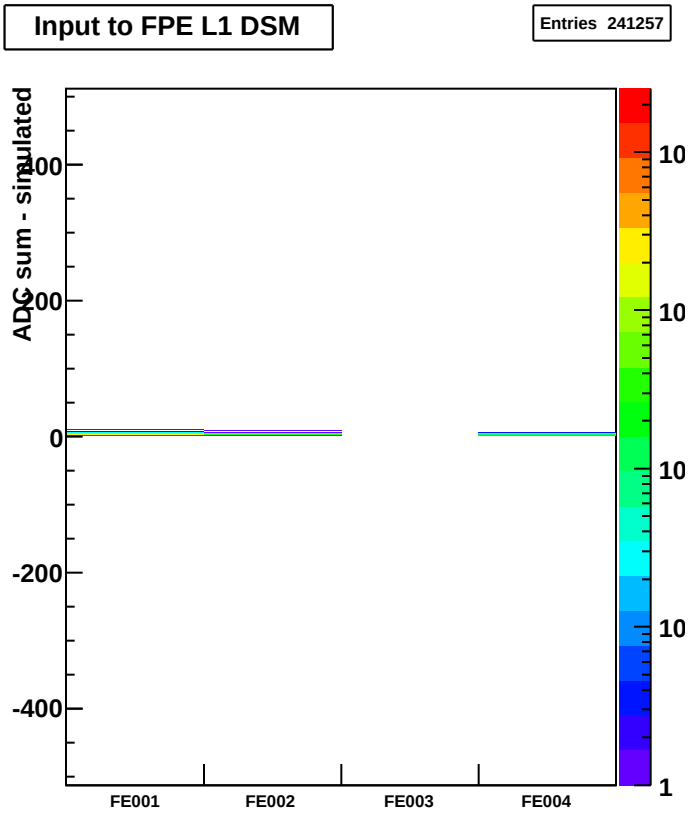

Input to FE001 QT board
Entries5579200
ADC
channel

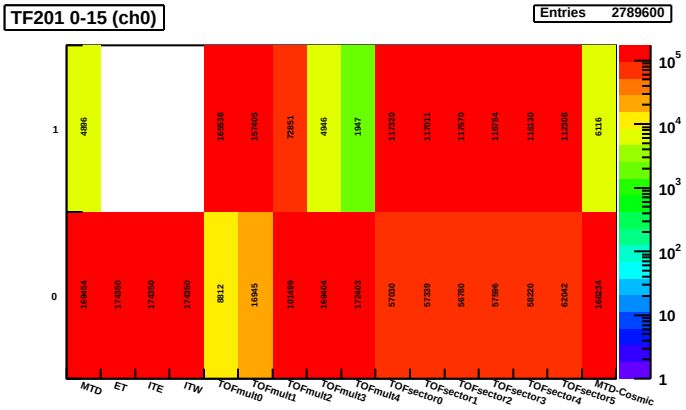

Input to FE002 QT board
Entries5579200
ADC
channel

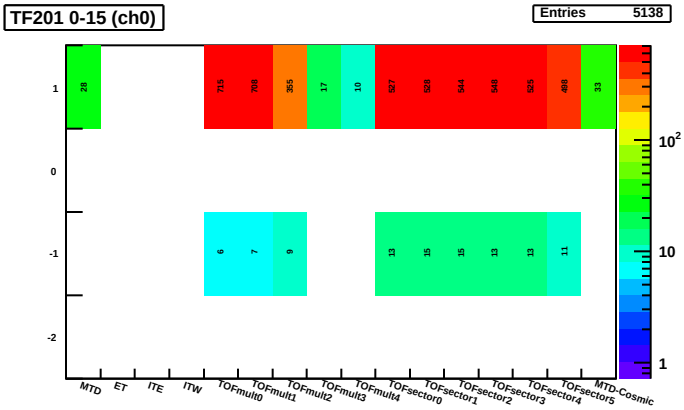

Input to FE003 QT board
Entries5579200
ADC
channel

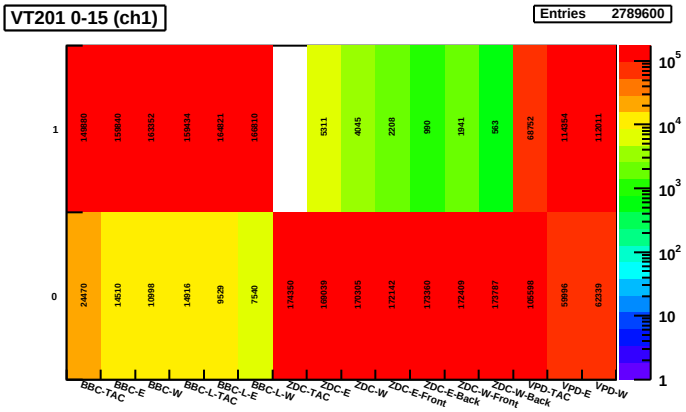

Input to FE004 QT board
Entries5579200
ADC
channel

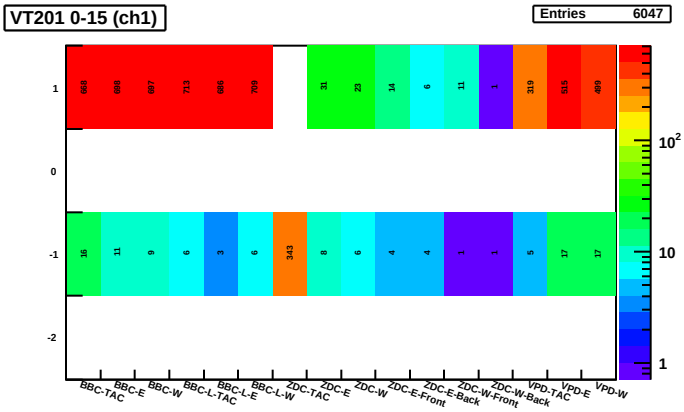

Input to FPE L1 DSM
Entries 697400
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1

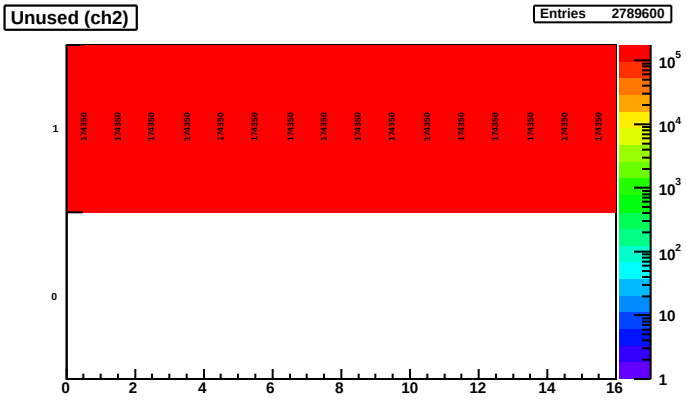

Input to FPE L1 DSM
Entries 241257
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
10
1

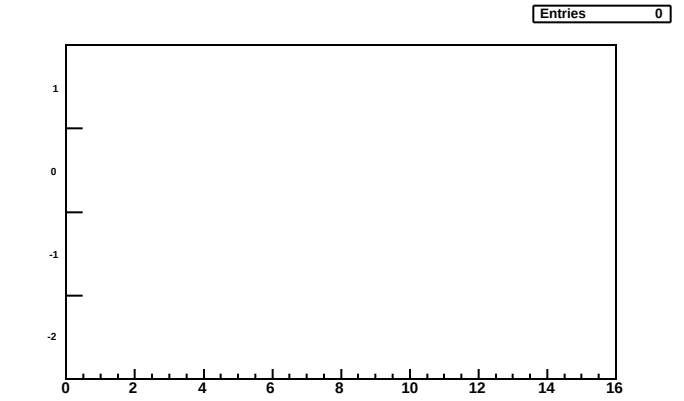

TF201 0-15 (ch0)
Entries 2789600
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

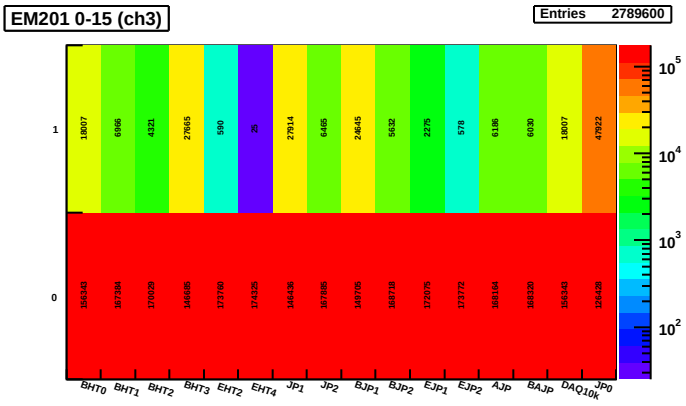

TF201 0-15 (ch0)
Entries 5138
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 2789600
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 6047
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 2789600


Entries 0


EM201 0-15 (ch3)
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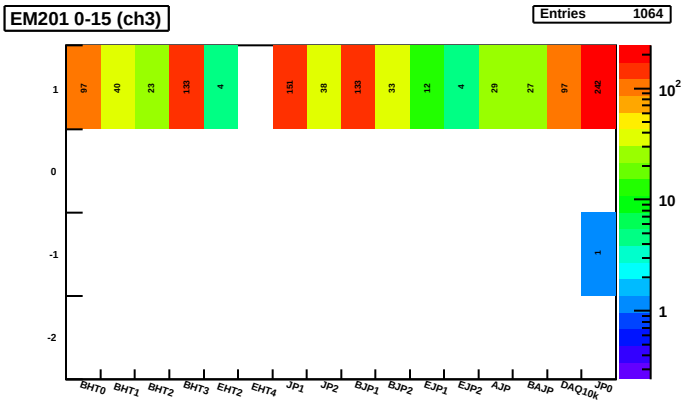
EM201 0-15 (ch3)
Entries 1064
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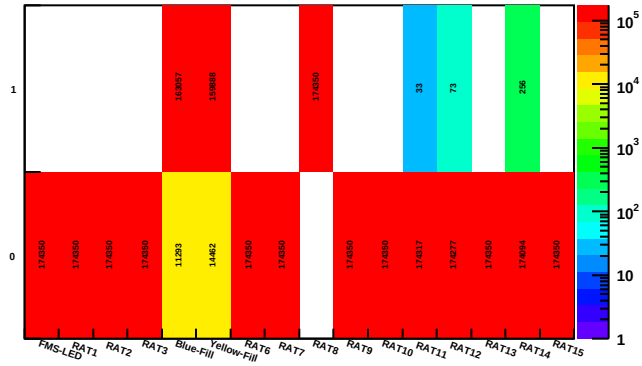
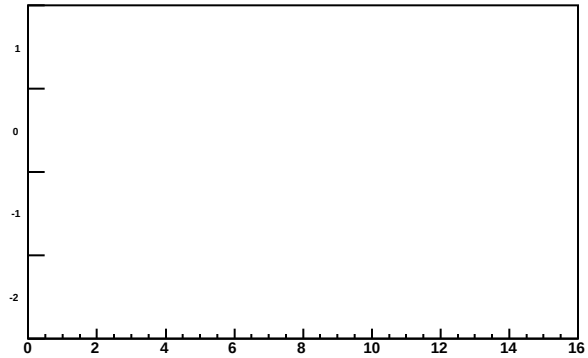
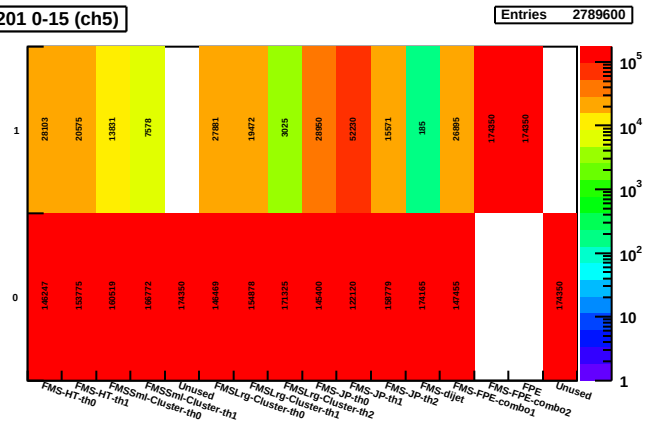
RAT board (ch4)

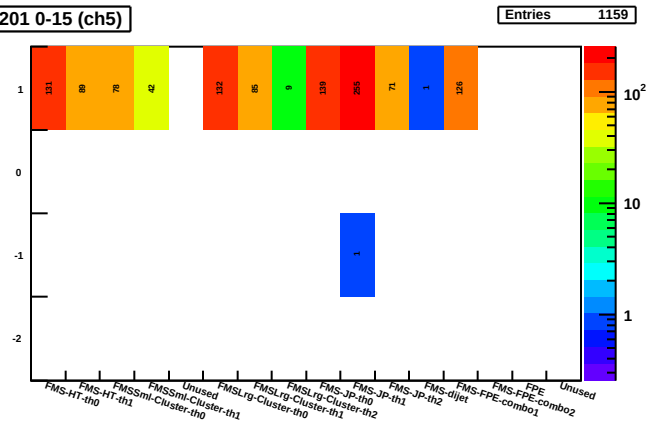




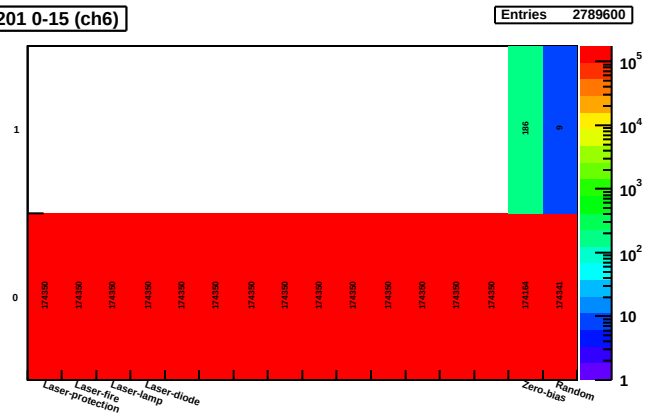
FP201 0-15 (ch5)

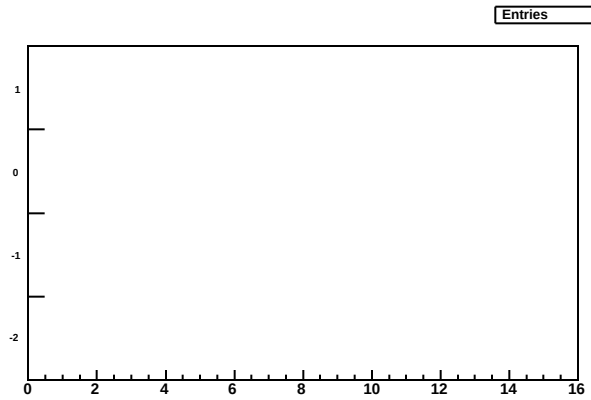
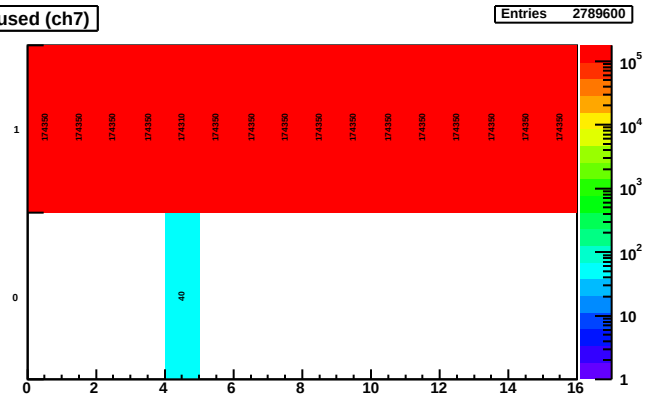
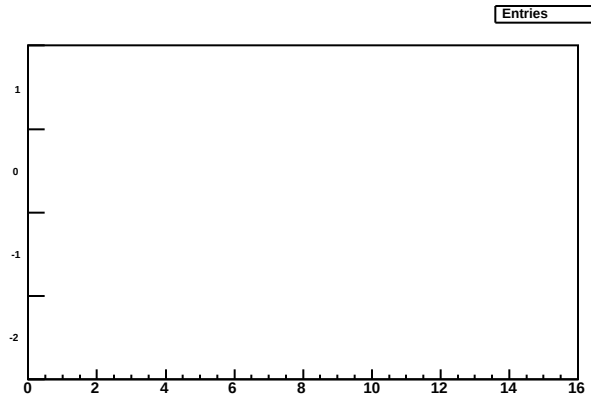


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)