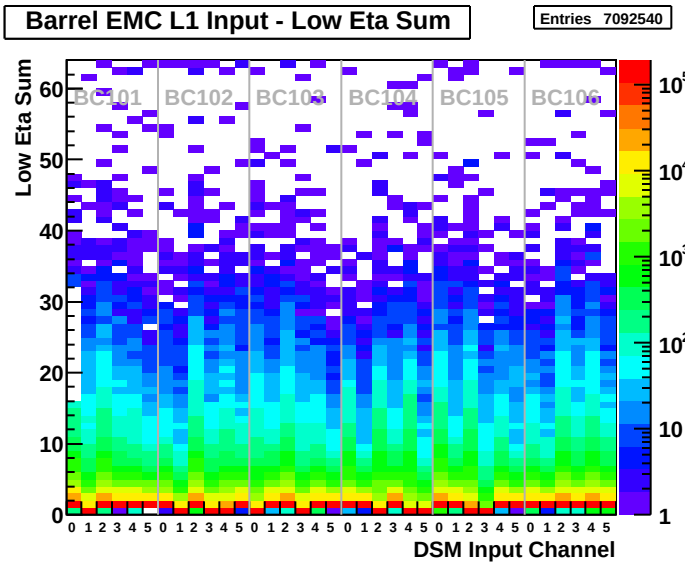
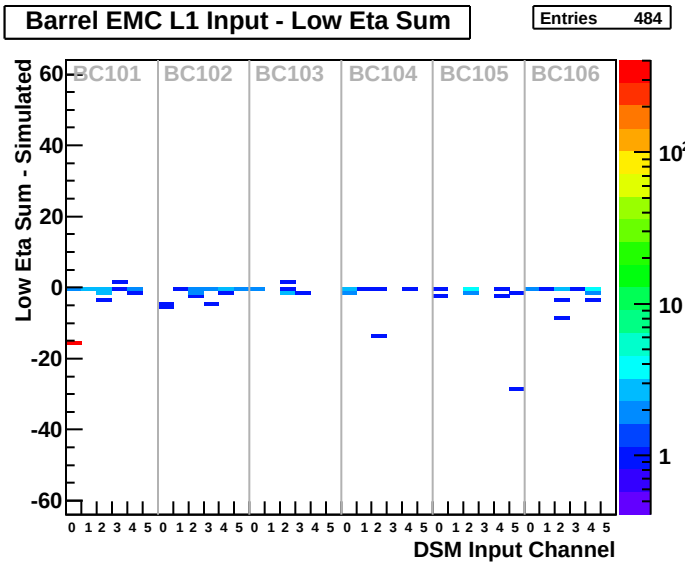
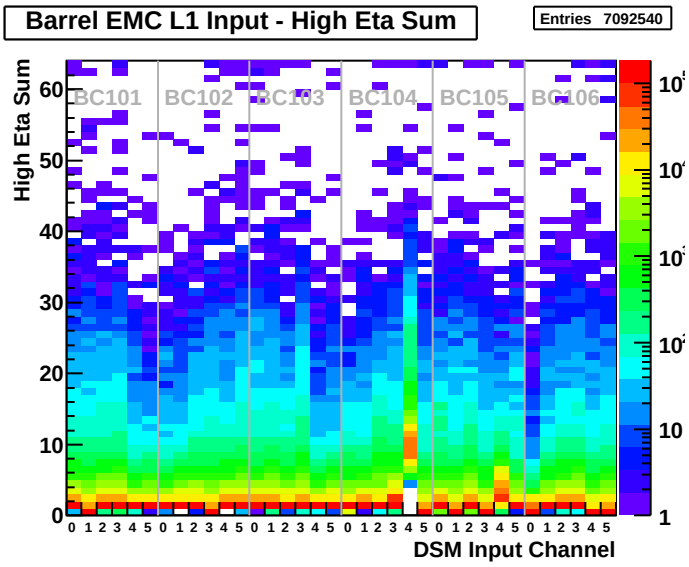
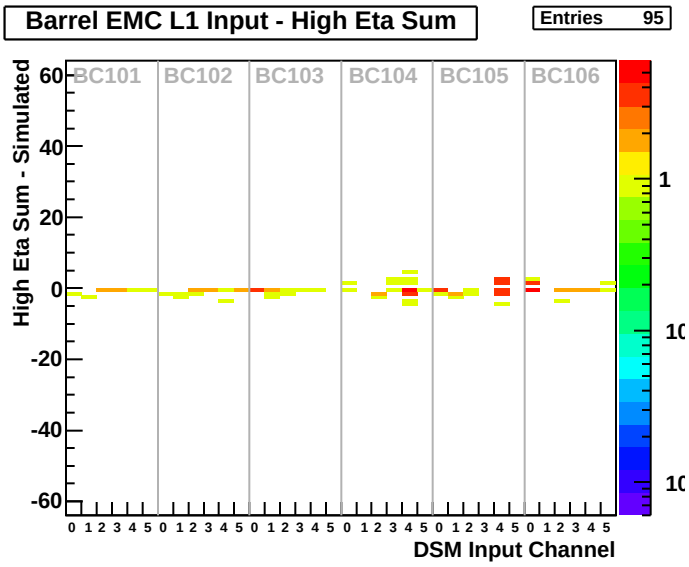
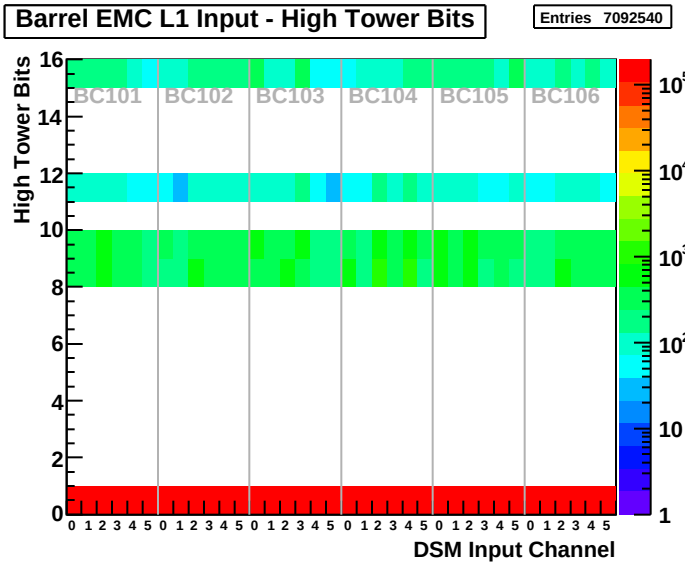
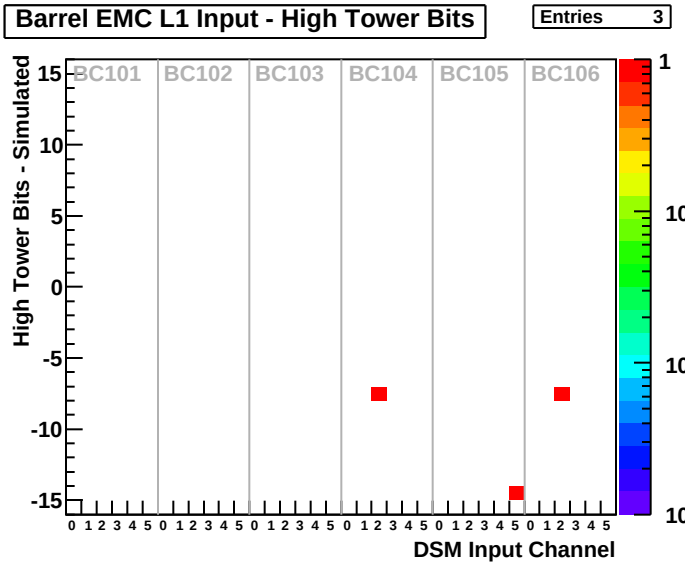

Barrel EMC L1 Input - Low Eta Sum
Entries 7092540
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

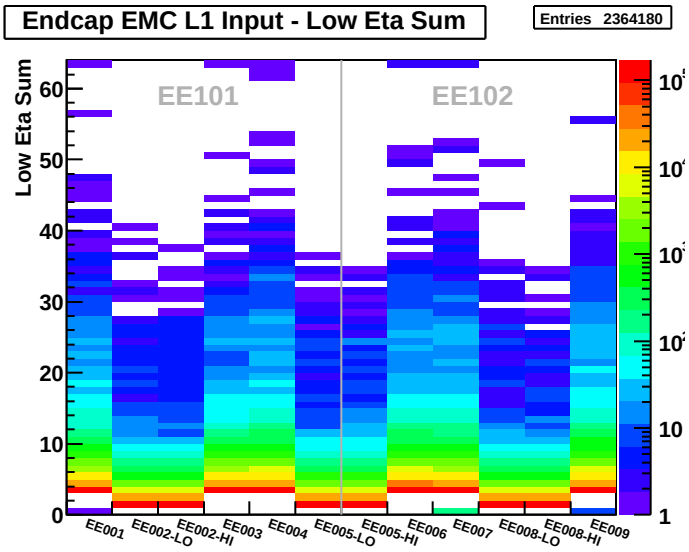

Barrel EMC L1 Input - Low Eta Sum
Entries 484
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

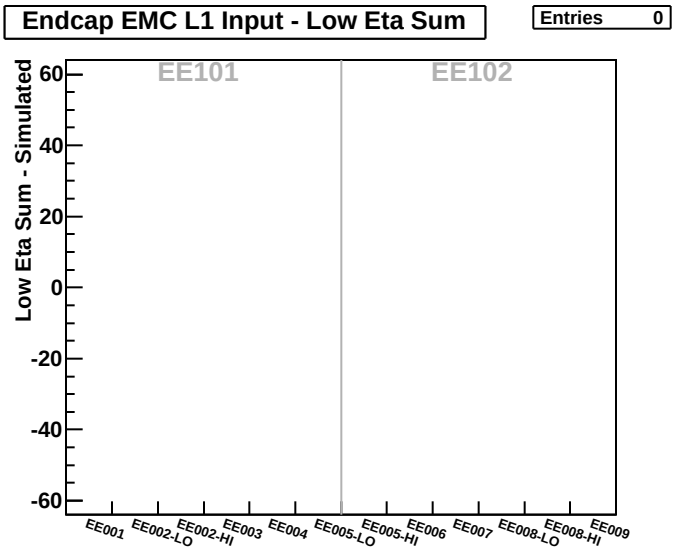

Barrel EMC L1 Input - High Eta Sum
Entries 7092540
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

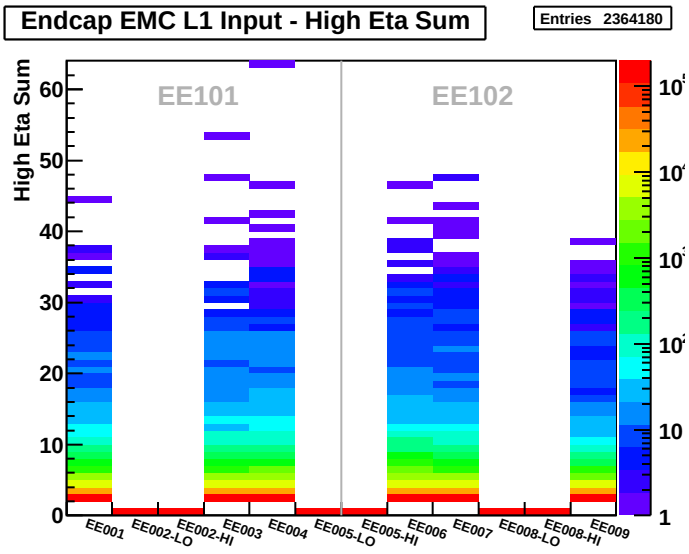

Barrel EMC L1 Input - High Eta Sum
Entries 95
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

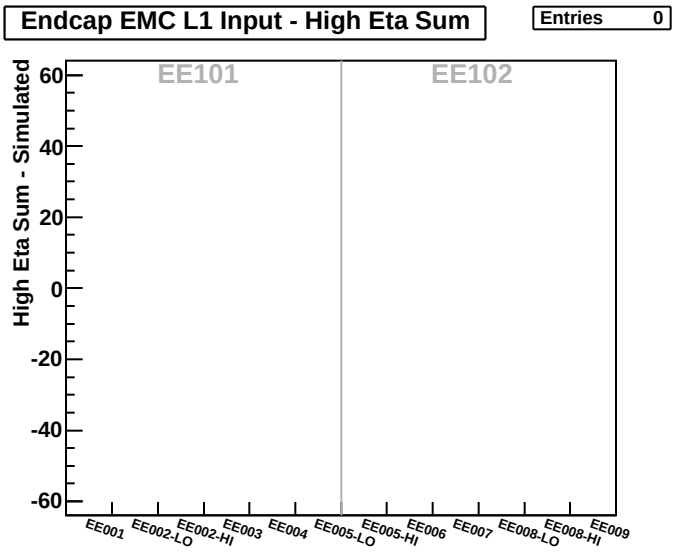

Barrel EMC L1 Input - High Tower Bits
Entries 7092540
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

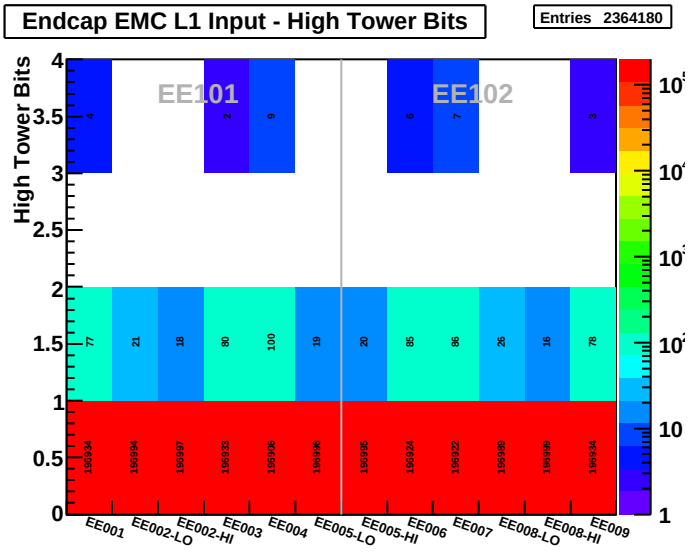

Barrel EMC L1 Input - High Tower Bits
Entries 3
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

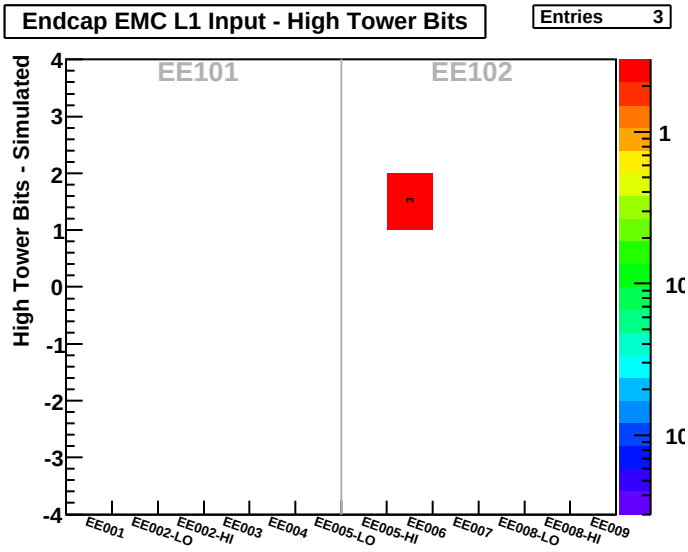

Endcap EMC L1 Input - Low Eta Sum
Entries 2364180
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

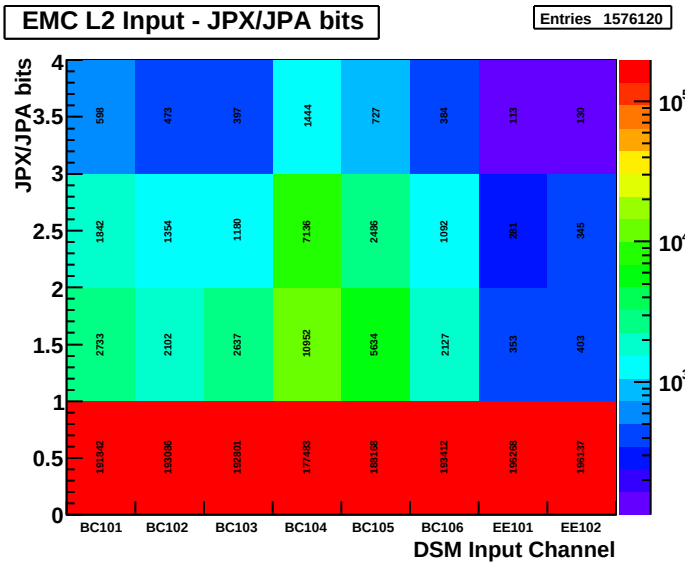

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

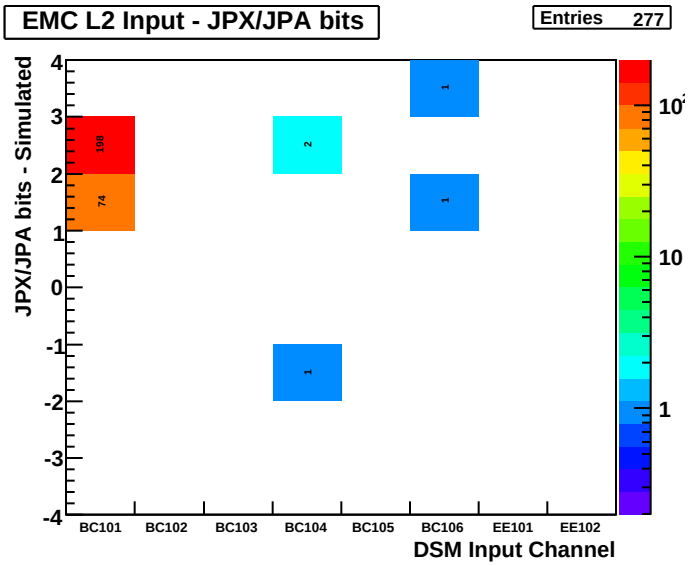

Endcap EMC L1 Input - High Eta Sum
Entries 2364180
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

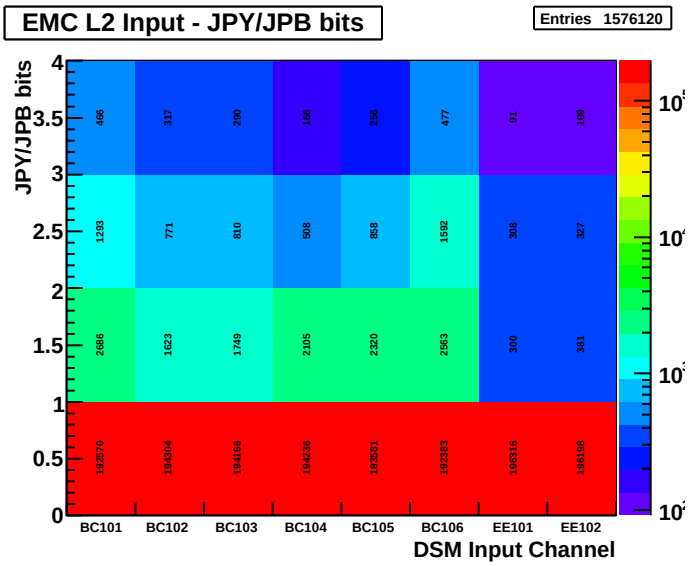

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

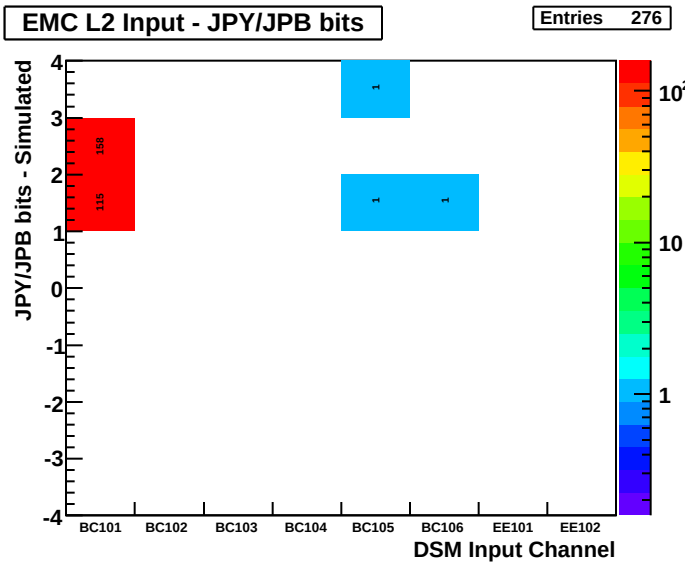

Endcap EMC L1 Input - High Tower Bits
Entries 2364180
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

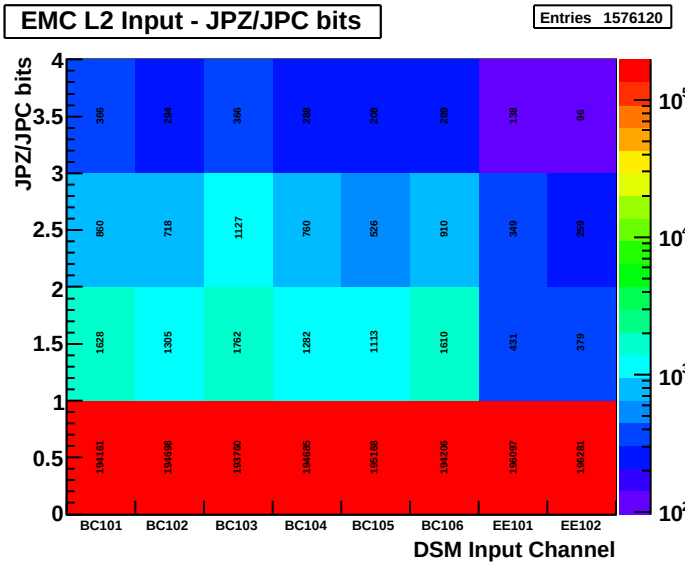

Endcap EMC L1 Input - High Tower Bits
Entries 3
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

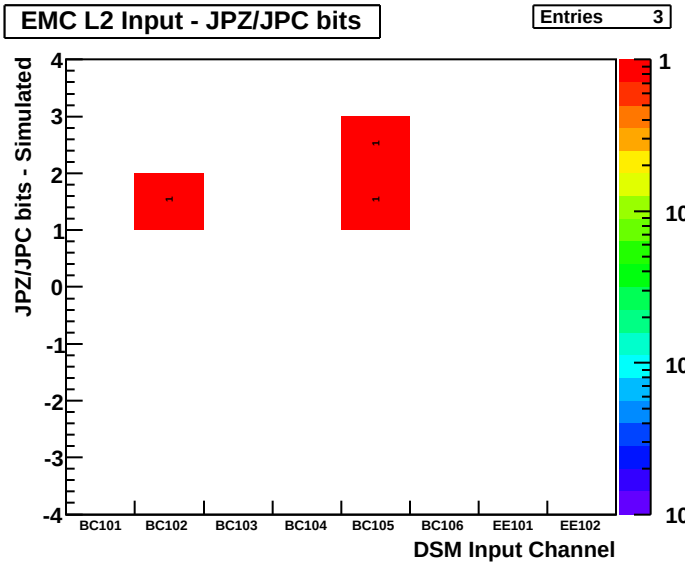

EMC L2 Input - JPX/JPA bits
Entries 1576120
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
598 473 397 1444 727 384 113 130
1842 1354 1180 7136 2486 1092 281 345
2733 2102 2637 10952 5634 2127 353 403
191642 193086 192801 177483 188168 193412 196268 196137

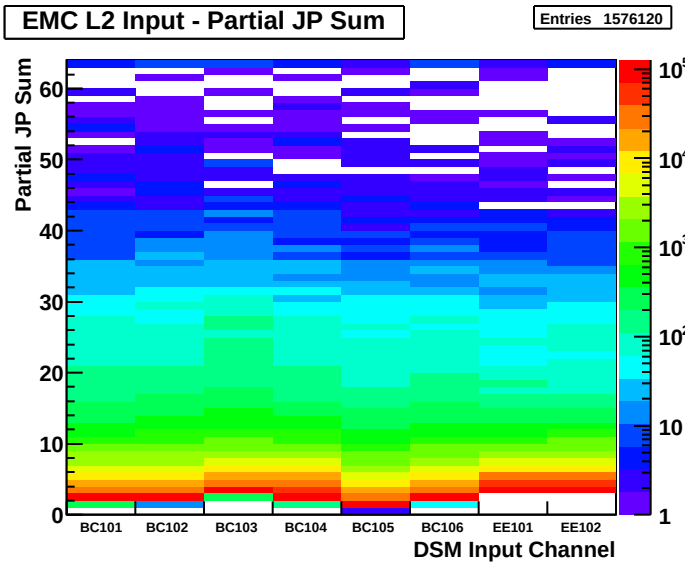

EMC L2 Input - JPX/JPA bits
Entries 277
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
198
74
2
1
1
1

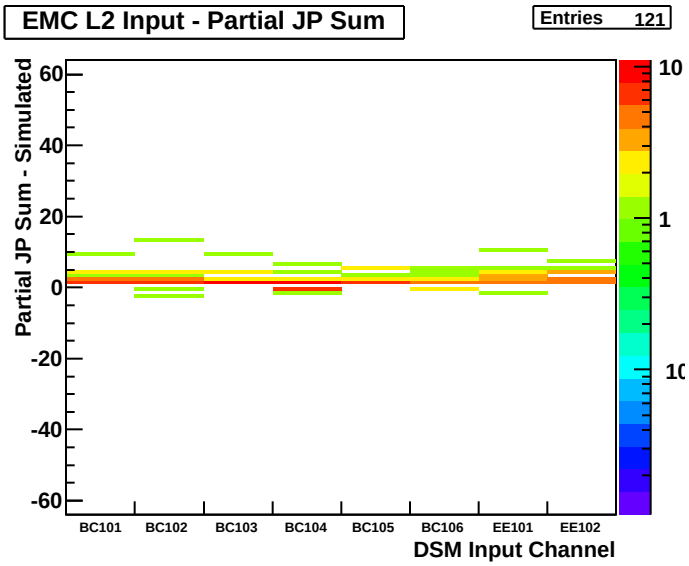

EMC L2 Input - JPY/JPB bits
Entries 1576120
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
466 317 290 166 256 477 91 109
1293 771 810 508 858 1592 308 327
2686 1623 1749 2105 2320 2563 300 381
192570 194304 194166 194236 193581 192383 196316 196198

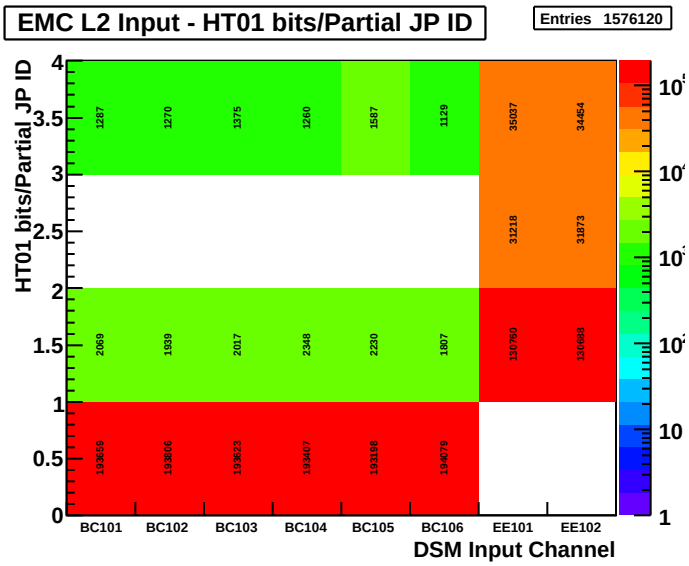

EMC L2 Input - JPY/JPB bits
Entries 276
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
158
115
1
1
1

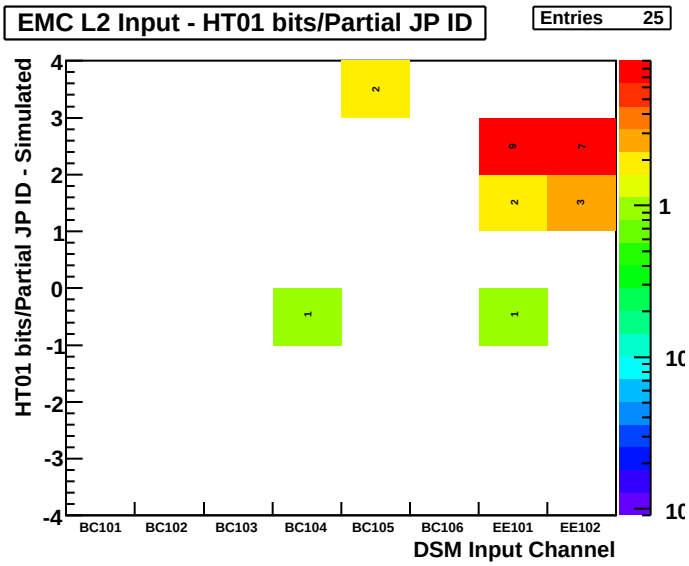

EMC L2 Input - JPZ/JPC bits
Entries 1576120
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
366 294 366 268 208 289 138 96
860 718 1127 760 526 910 349 259
1628 1305 1762 1282 1113 1610 431 379
194161 194598 193760 194685 195168 194206 196097 196281

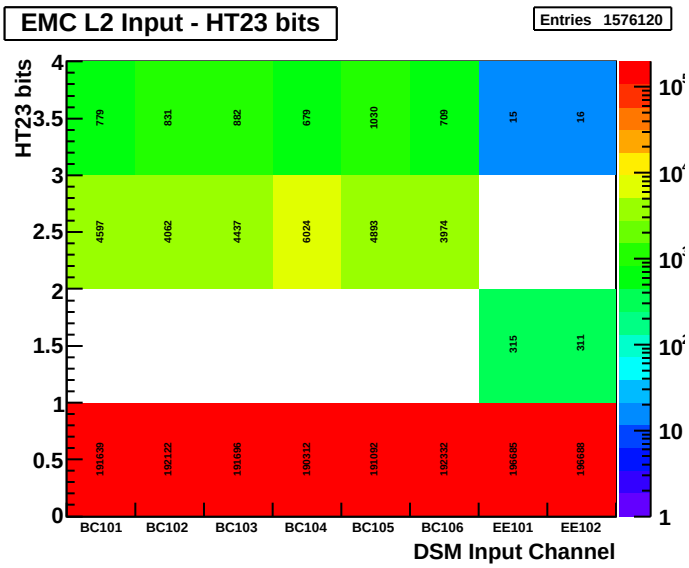

EMC L2 Input - JPZ/JPC bits
Entries 3
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1
1
1

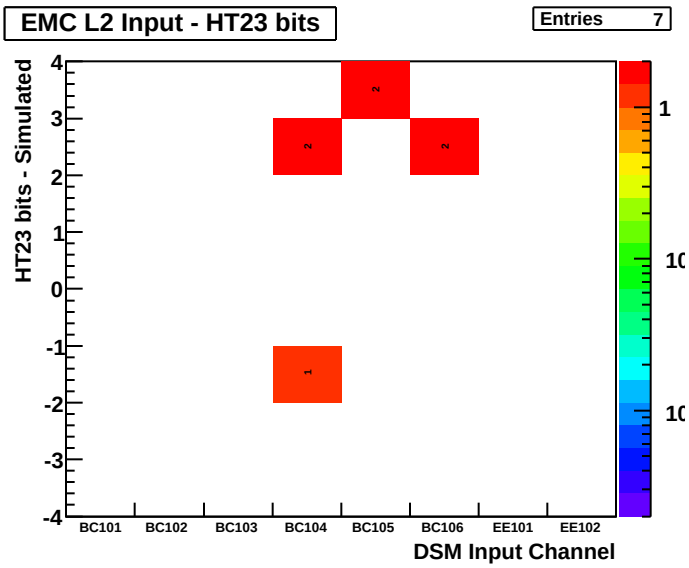

EMC L2 Input - Partial JP Sum
Entries 1576120
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

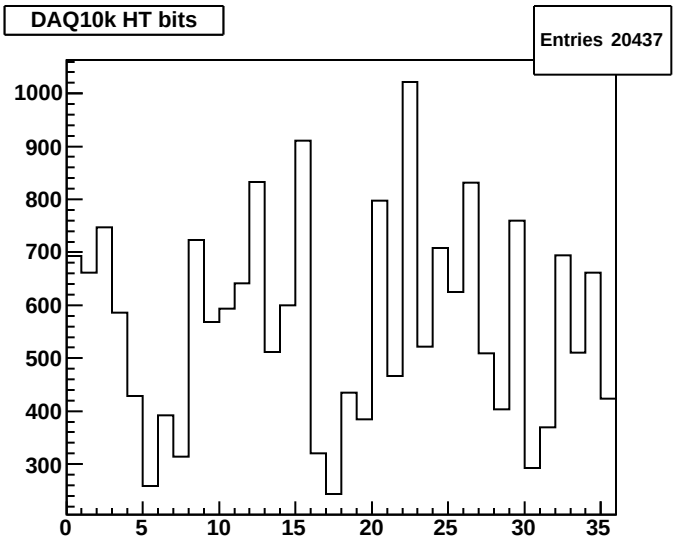

EMC L2 Input - Partial JP Sum
Entries 121
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

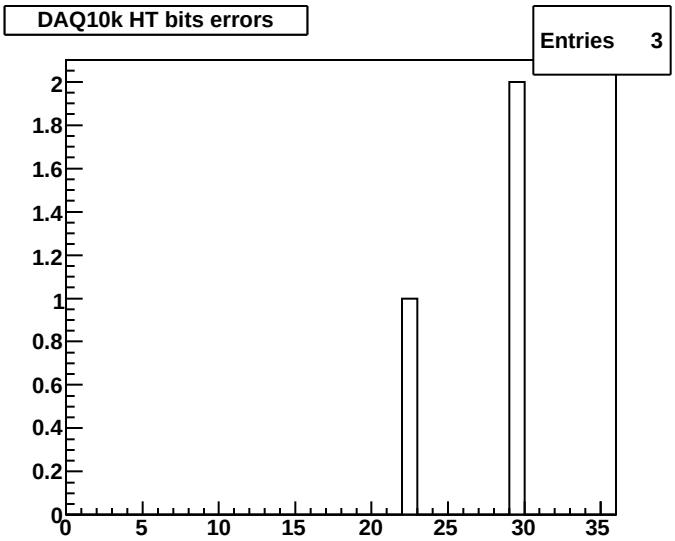

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1576120
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

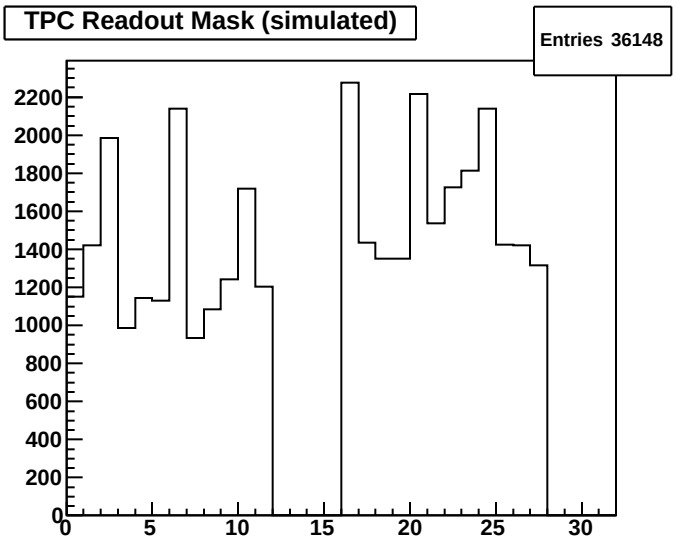

EMC L2 Input - HT01 bits/Partial JP ID
Entries 25
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

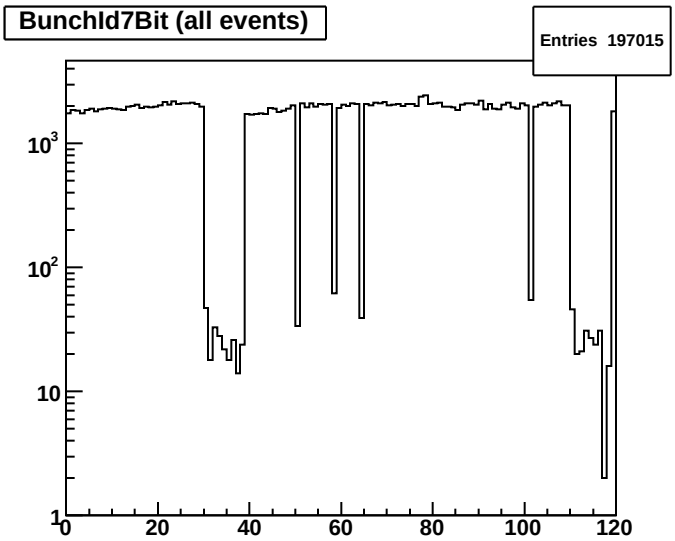

EMC L2 Input - HT23 bits
Entries 1576120
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

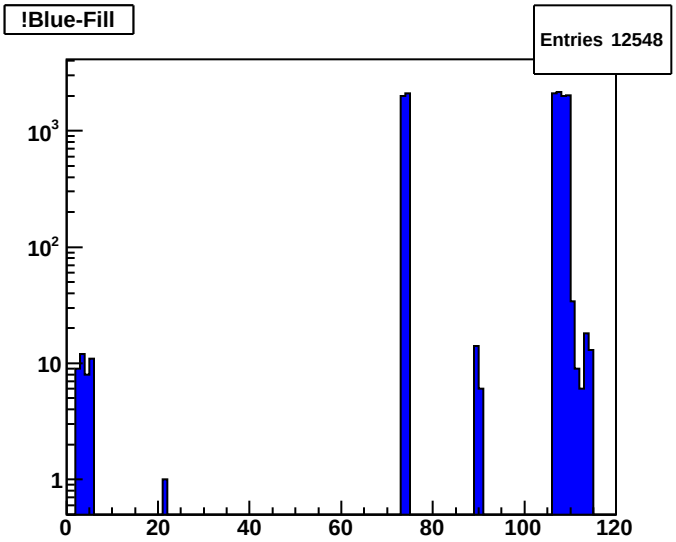

EMC L2 Input - HT23 bits
Entries 7
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

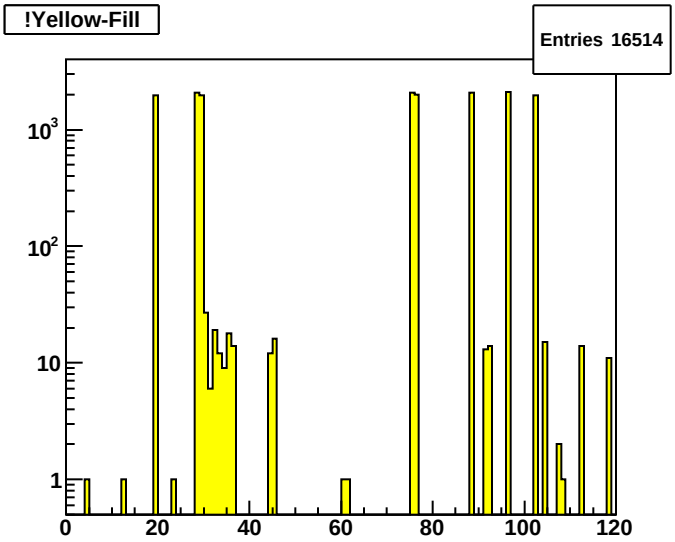

DAQ10k HT bits
Entries 20437

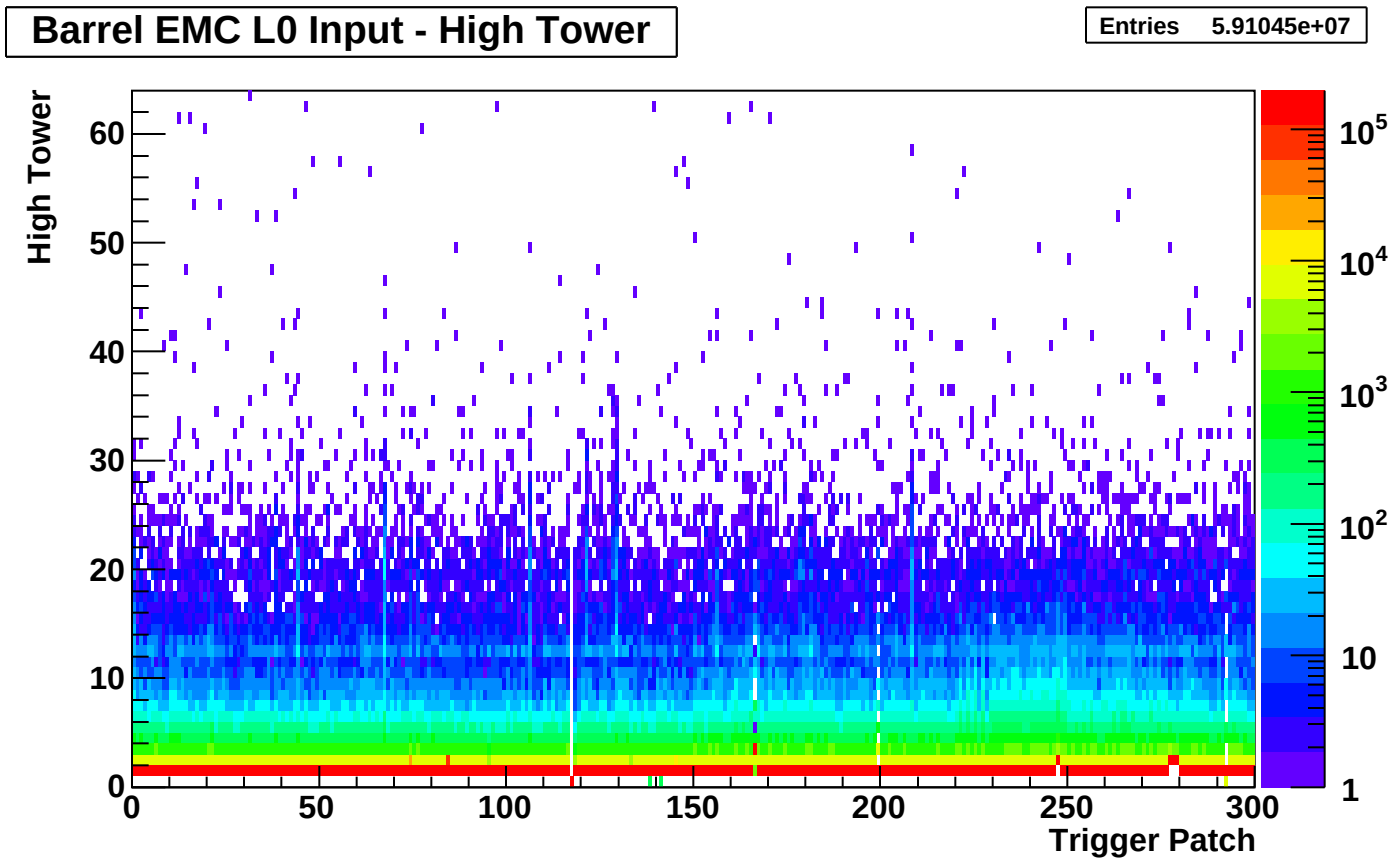

DAQ10k HT bits errors
Entries 3

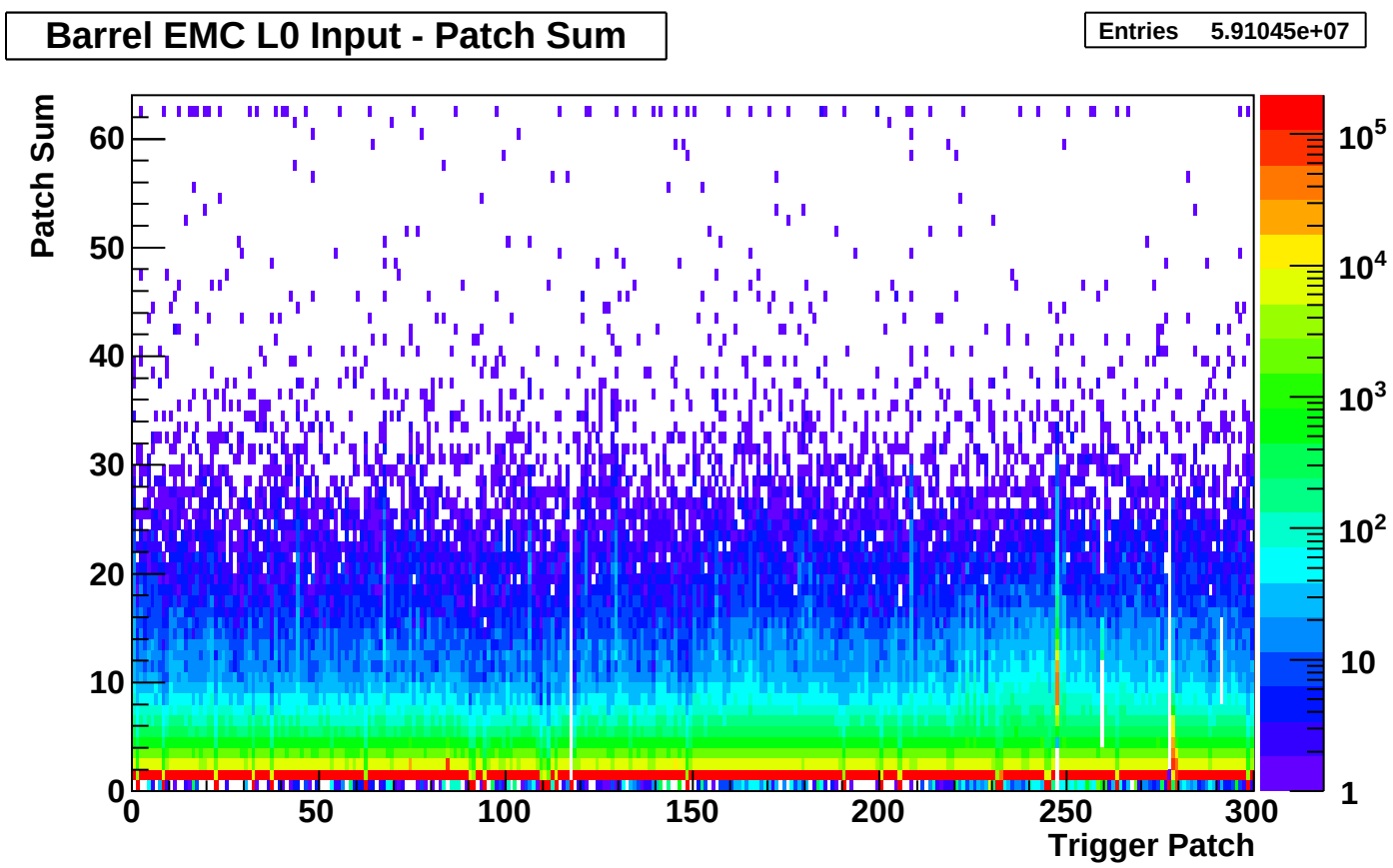

TPC Readout Mask (simulated)
Entries 36148

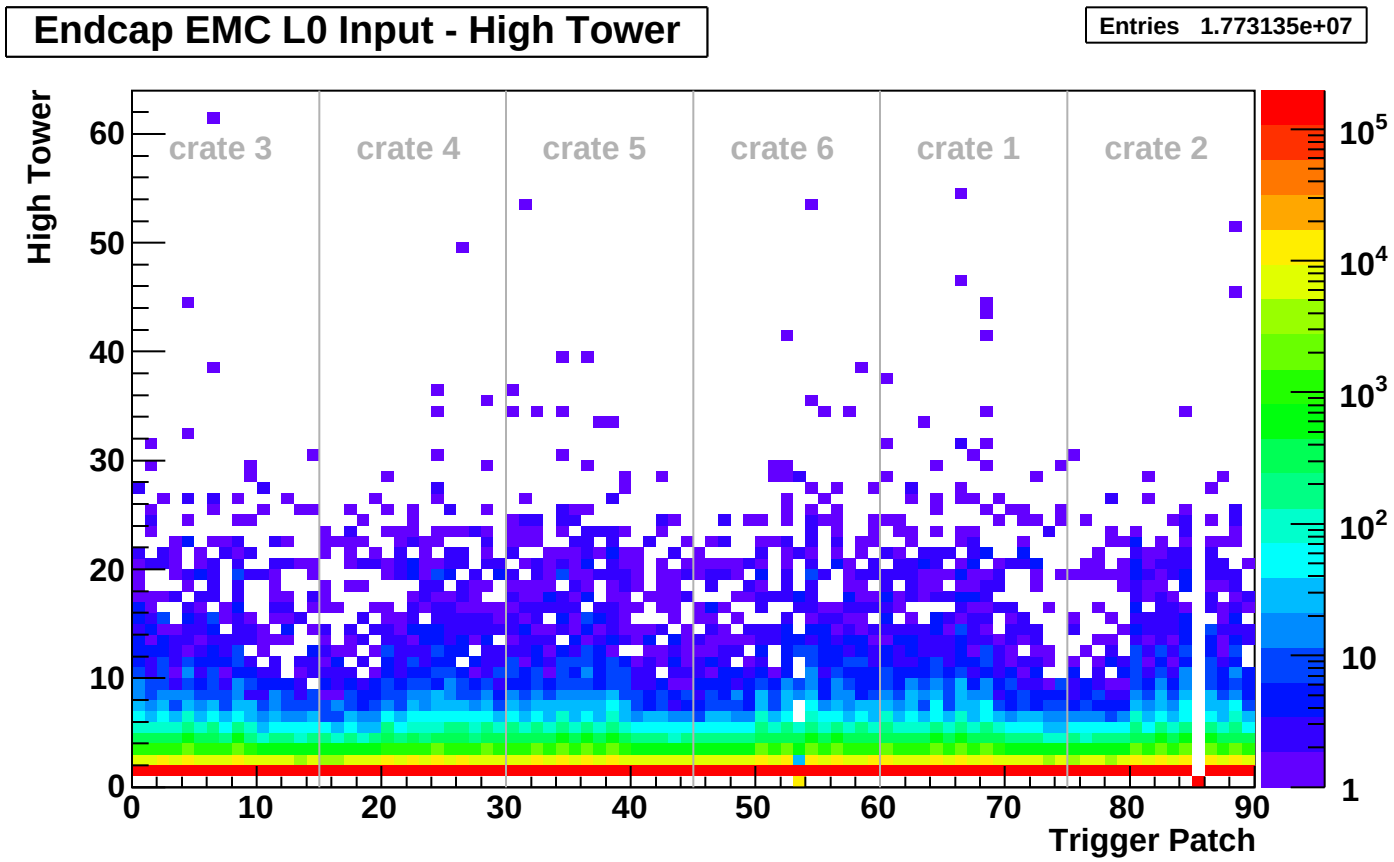

BunchId7Bit (all events)
Entries 197015

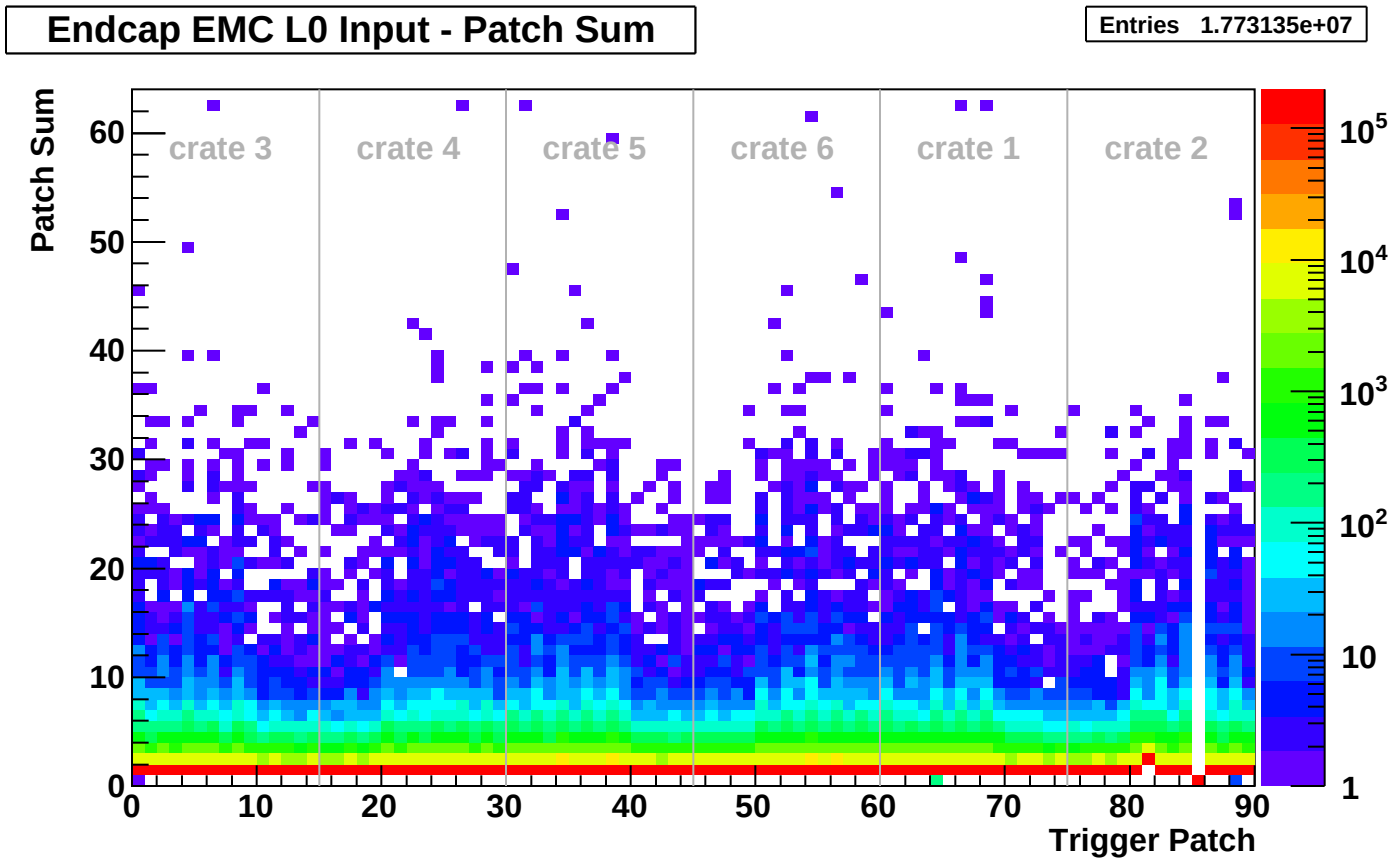

!Blue-Fill
Entries 12548

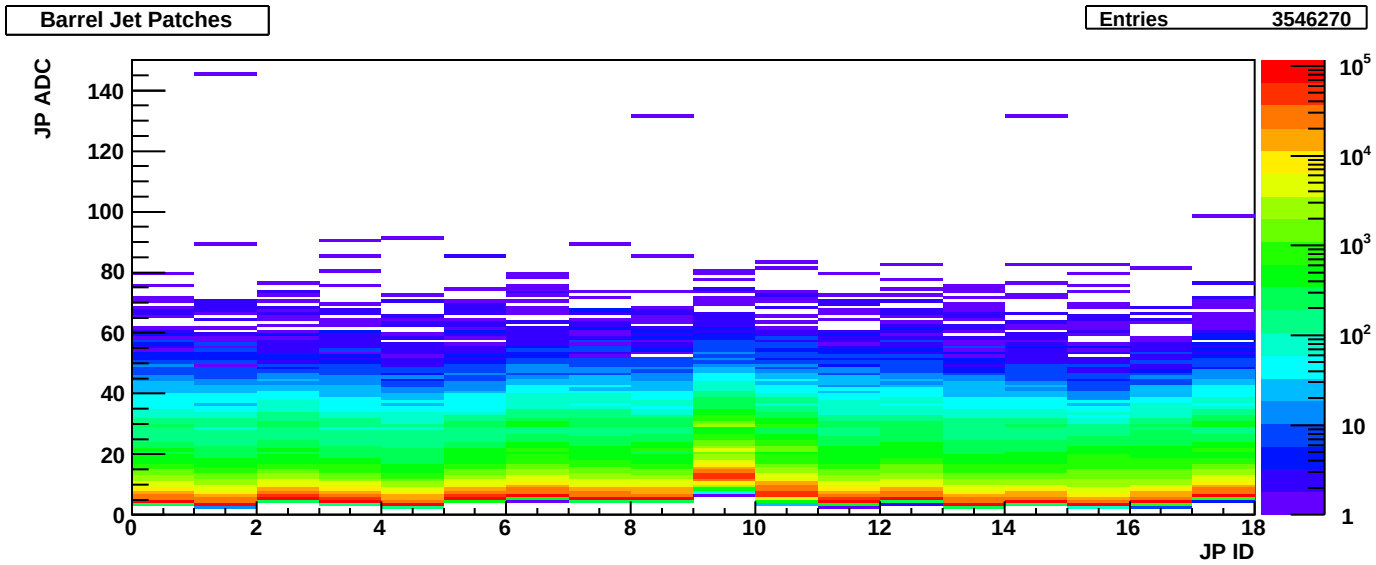

!Yellow-Fill
Entries 16514

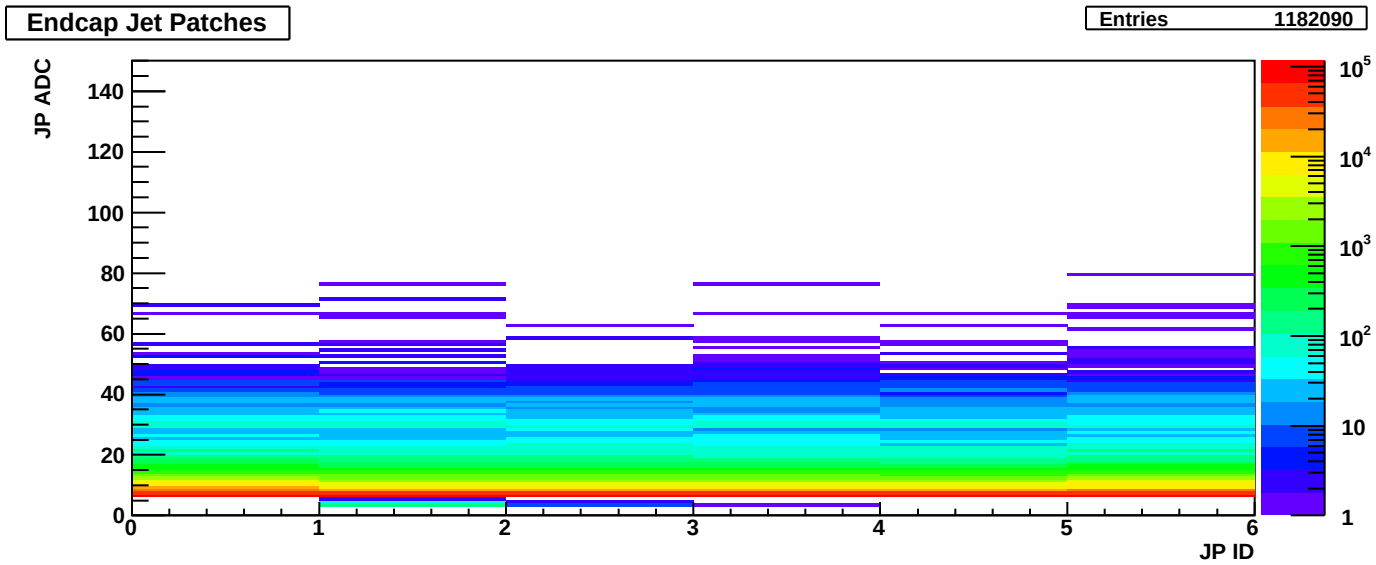

Barrel EMC L0 Input - High Tower
Entries 5.91045e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

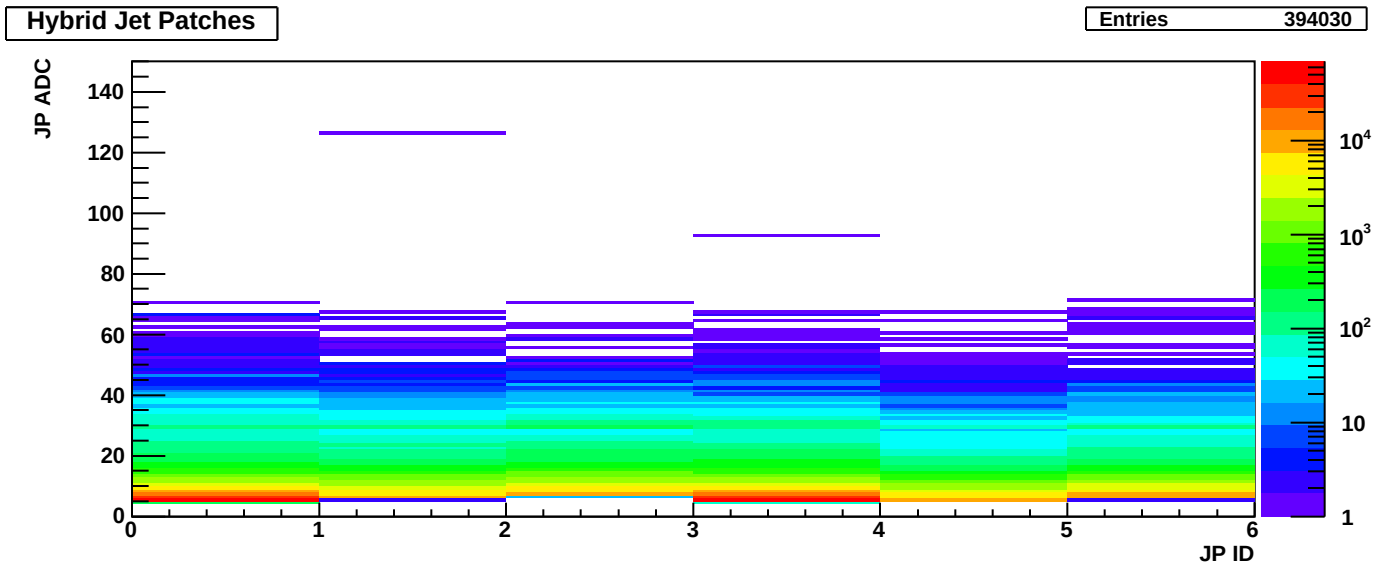

Barrel EMC L0 Input - Patch Sum
Entries 5.91045e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

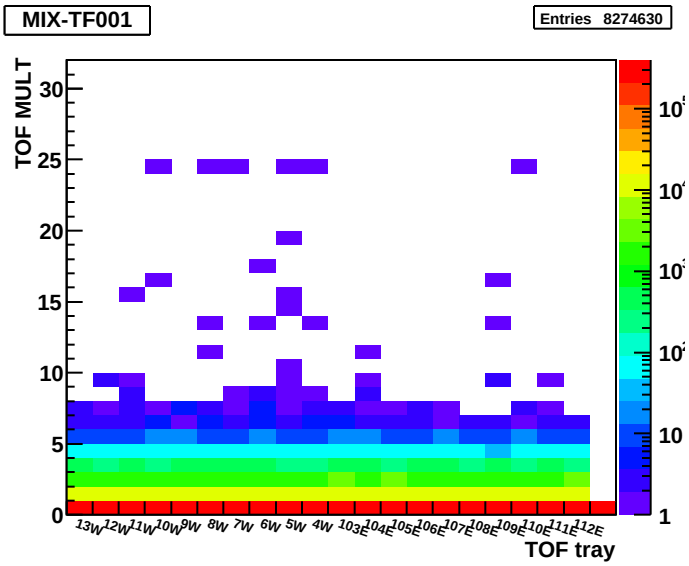

Endcap EMC L0 Input - High Tower
Entries 1.773135e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

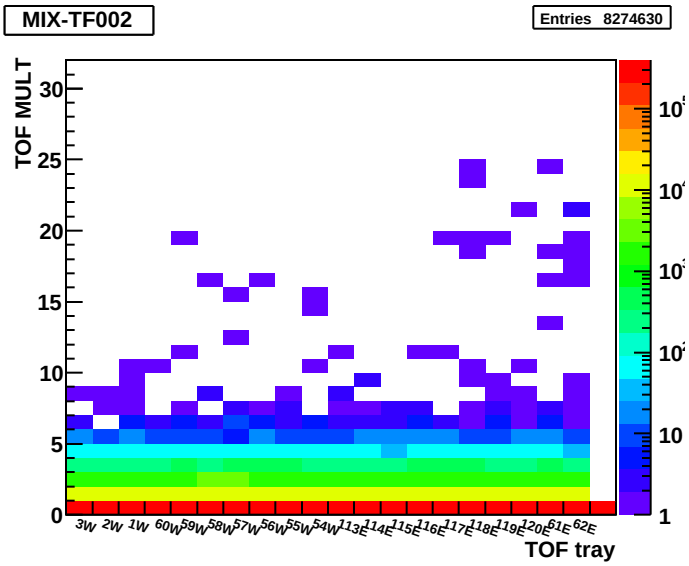

Endcap EMC L0 Input - Patch Sum
Entries 1.773135e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

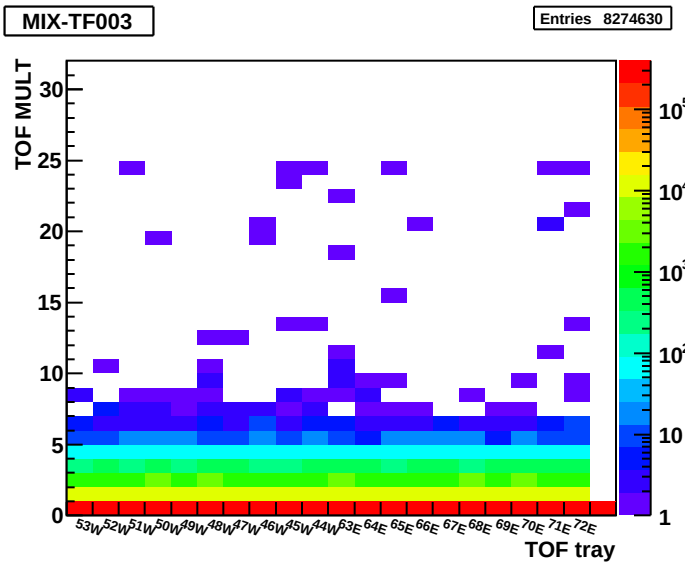

Barrel Jet Patches
Entries 3546270
JP ADC
JP ID

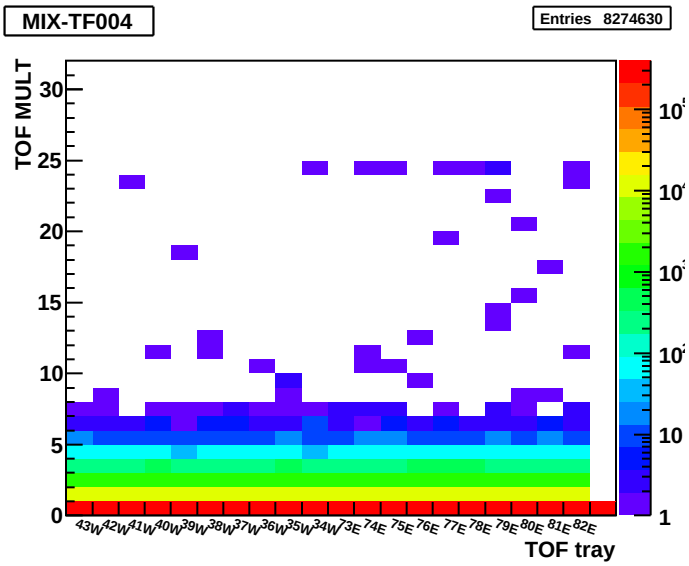

Endcap Jet Patches
Entries 1182090
JP ADC
JP ID

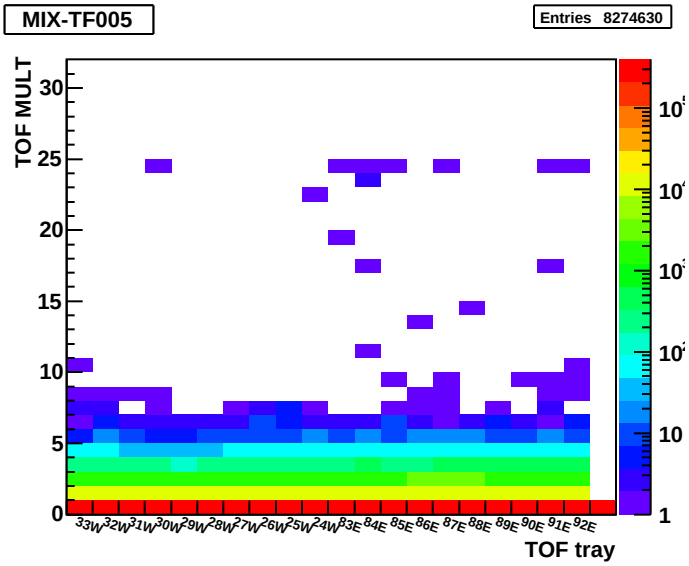

Hybrid Jet Patches
Entries 394030
JP ADC
JP ID

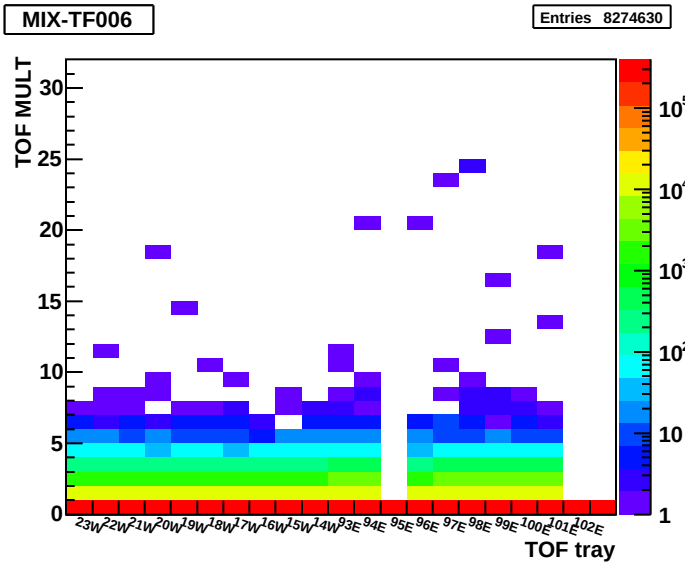

MIX-TF001
Entries 8274630
TOF MULT
TOF tray

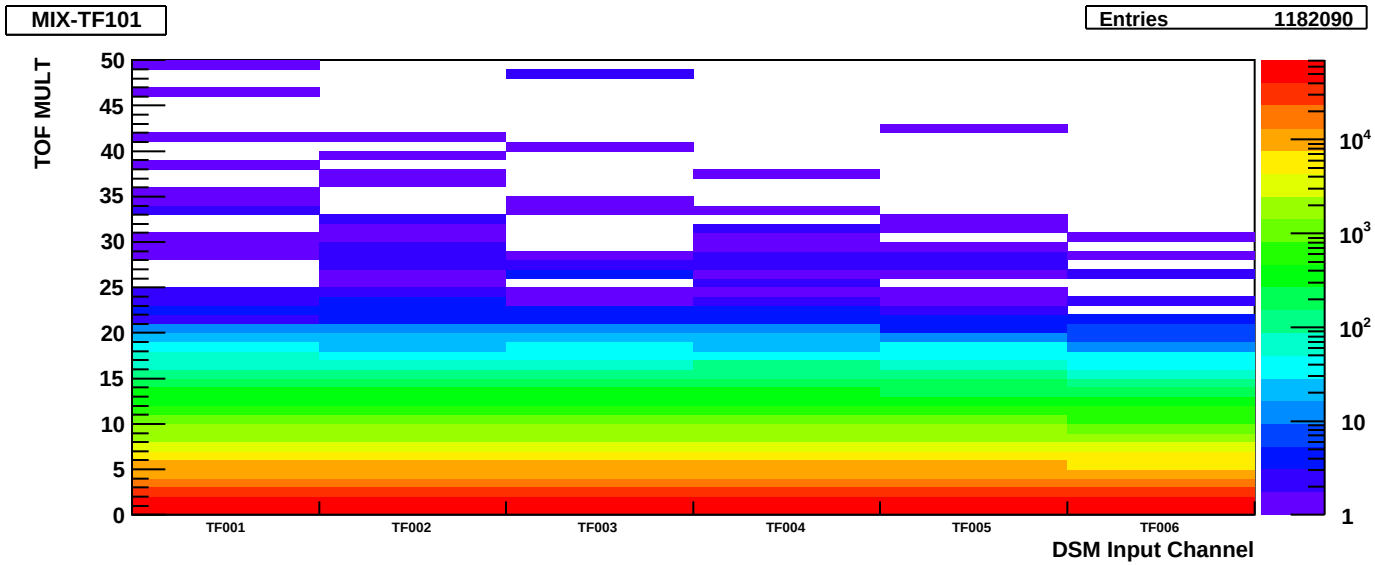

MIX-TF002
Entries 8274630
TOF MULT
TOF tray

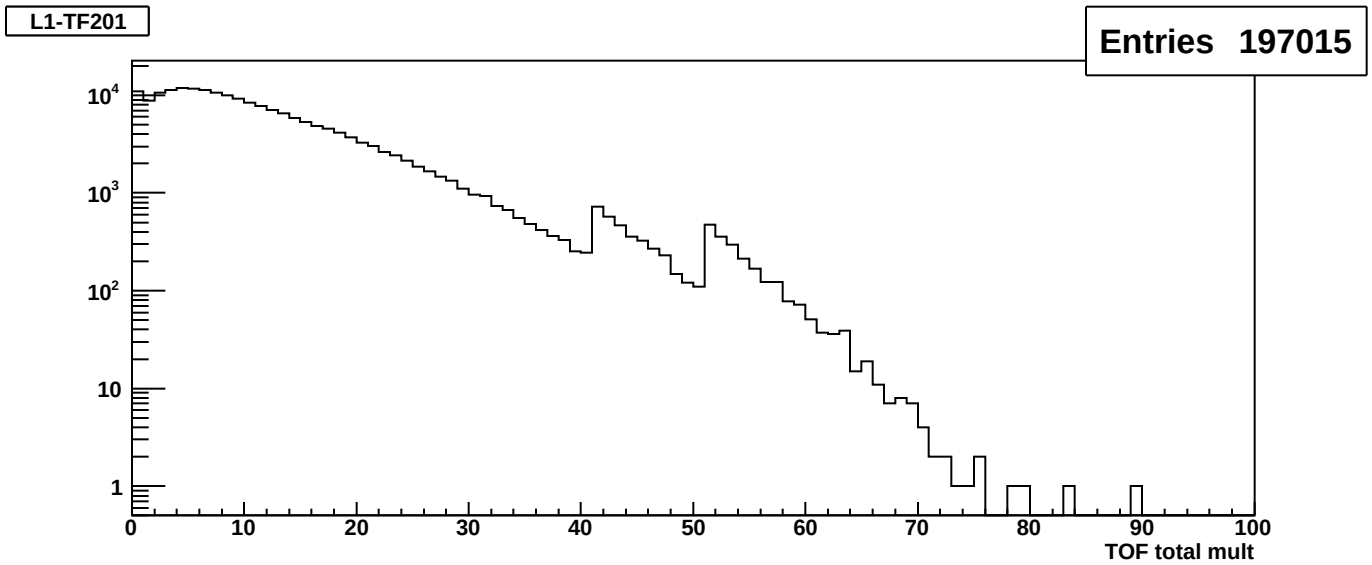

MIX-TF003
Entries 8274630
TOF MULT
TOF tray

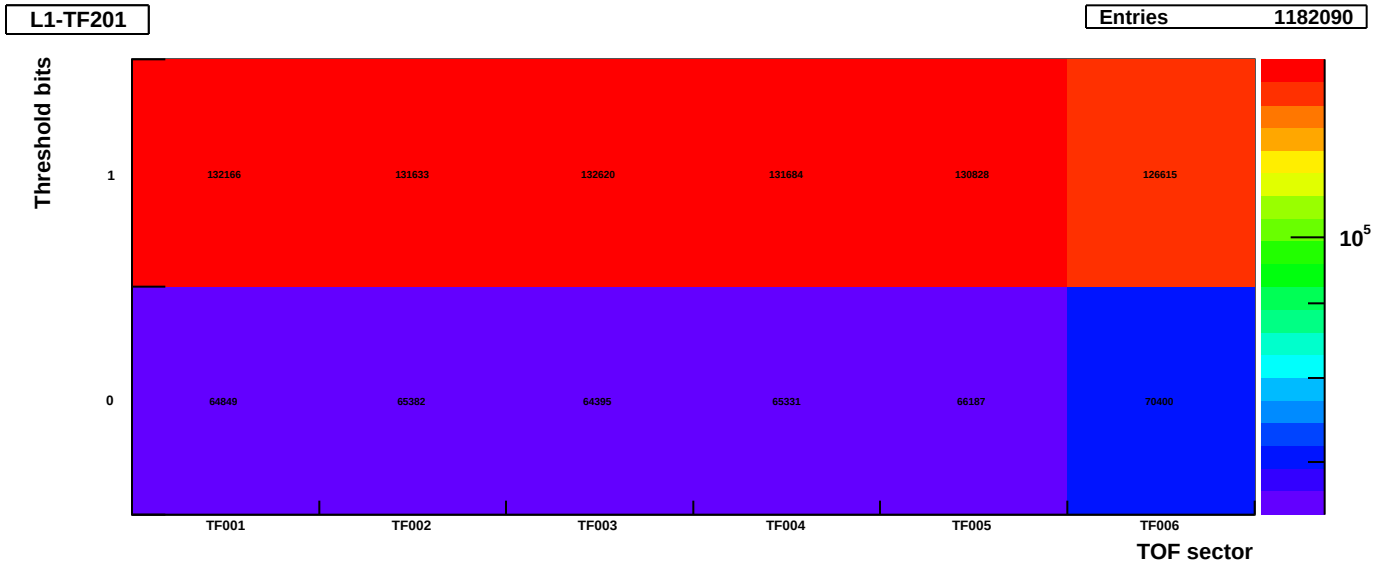

MIX-TF004
Entries 8274630
TOF MULT
TOF tray

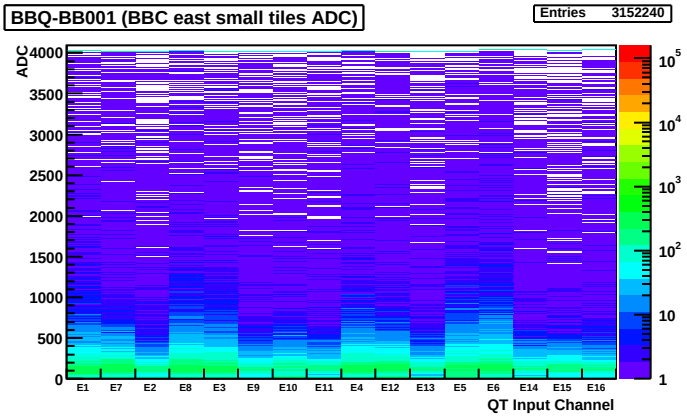

MIX-TF005
Entries 8274630
TOF MULT
TOF tray

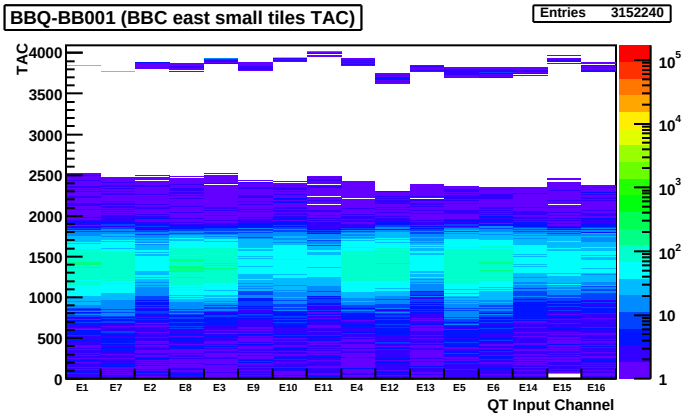

MIX-TF006
Entries 8274630
TOF MULT
TOF tray

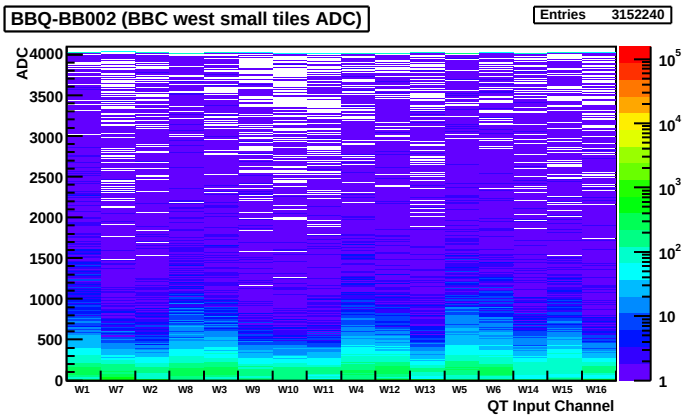

MIX-TF101
Entries 1182090
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

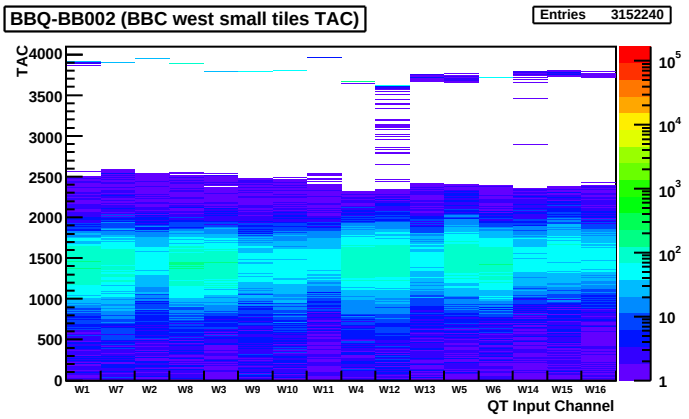

L1-TF201
Entries 197015
TOF total mult

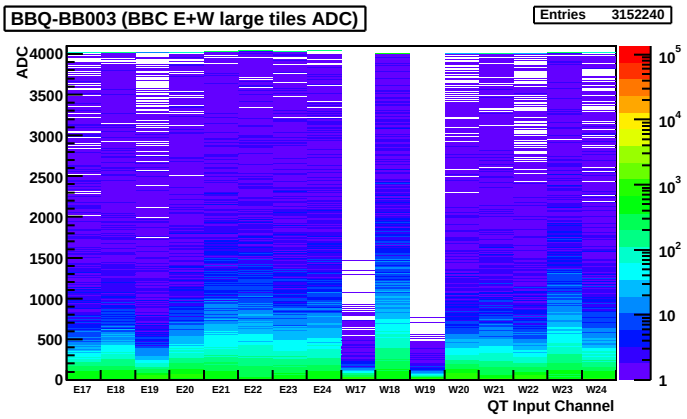

L1-TF201
Entries 1182090
Threshold bits
132166
131633
132620
131684
130828
126615
64849
65382
64395
65331
66187
70400
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

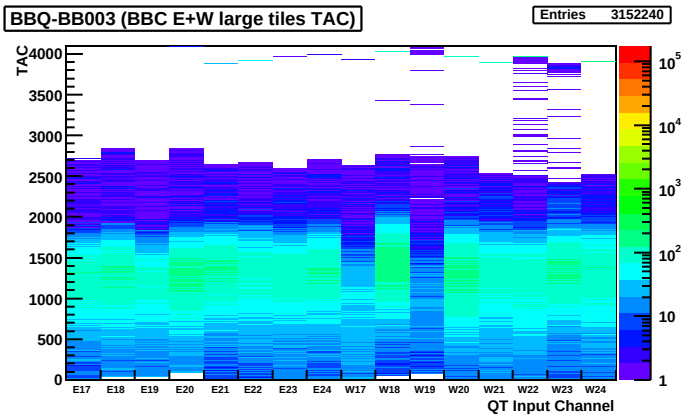

BBQ-BB001 (BBC east small tiles ADC)
Entries 3152240
ADC
QT Input Channel

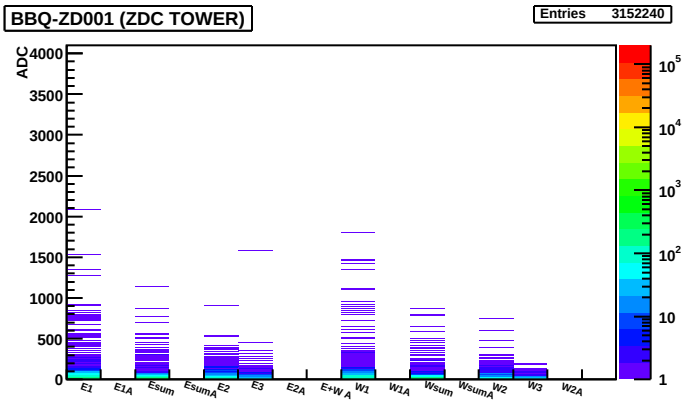

BBQ-BB001 (BBC east small tiles TAC)
Entries 3152240
TAC
QT Input Channel

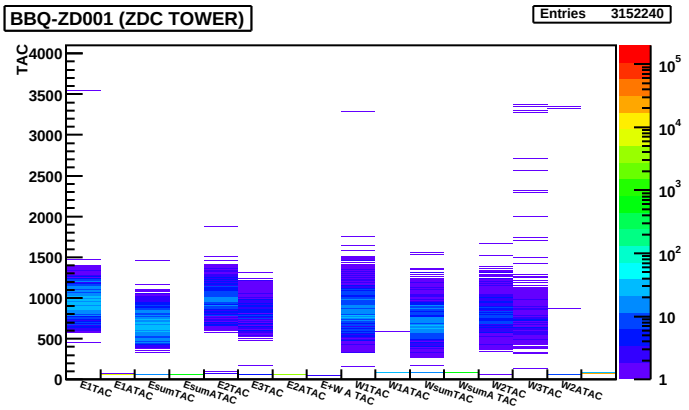

BBQ-BB002 (BBC west small tiles ADC)
Entries 3152240
ADC
QT Input Channel

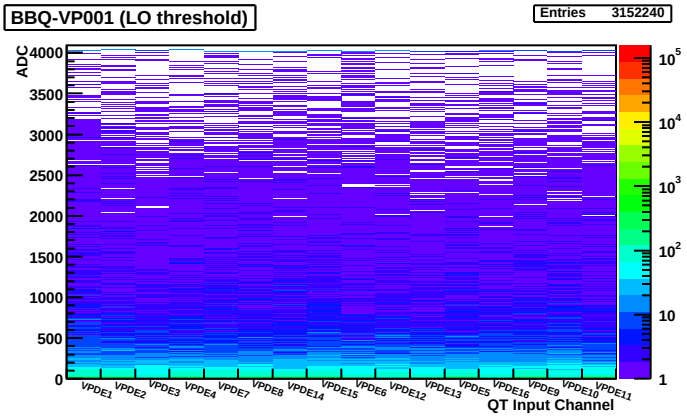

BBQ-BB002 (BBC west small tiles TAC)
Entries 3152240
TAC
QT Input Channel

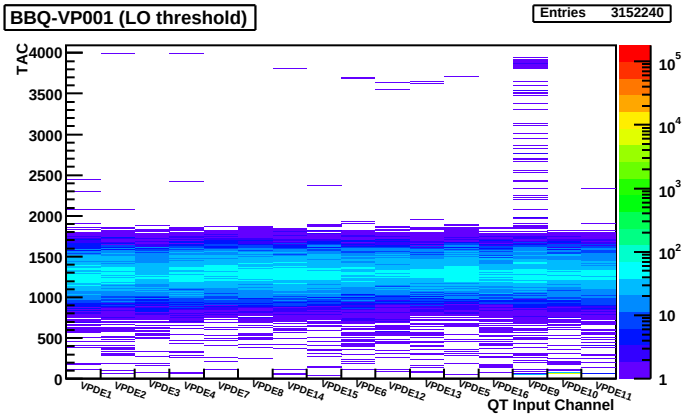

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3152240
ADC
QT Input Channel

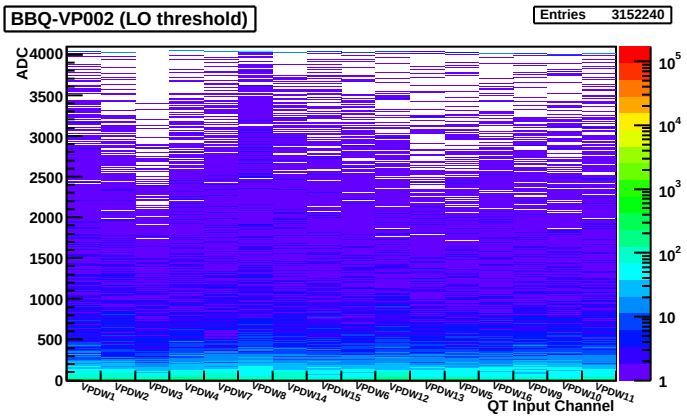

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3152240
TAC
QT Input Channel

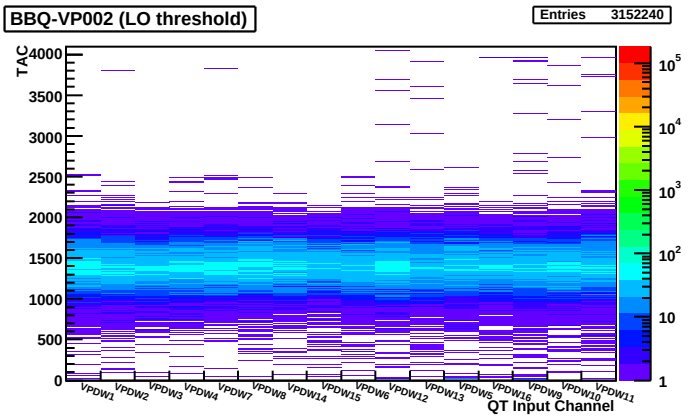

BBQ-ZD001 (ZDC TOWER)
Entries 3152240
ADC

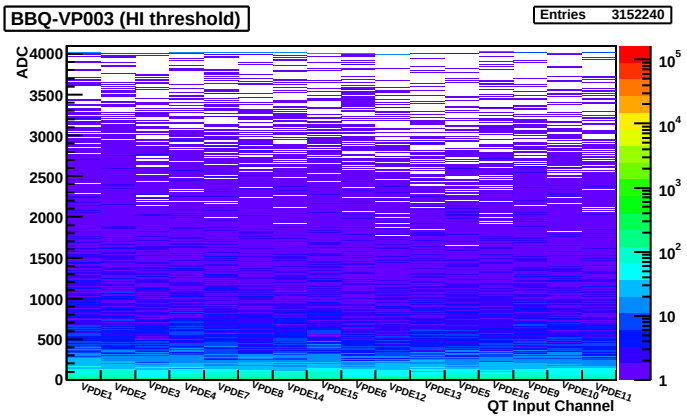

BBQ-ZD001 (ZDC TOWER)
Entries 3152240
TAC

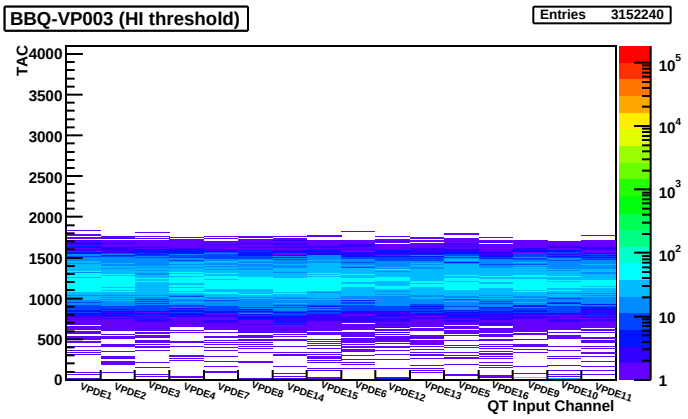

BBQ-VP001 (LO threshold)
Entries 3152240
ADC
QT Input Channel

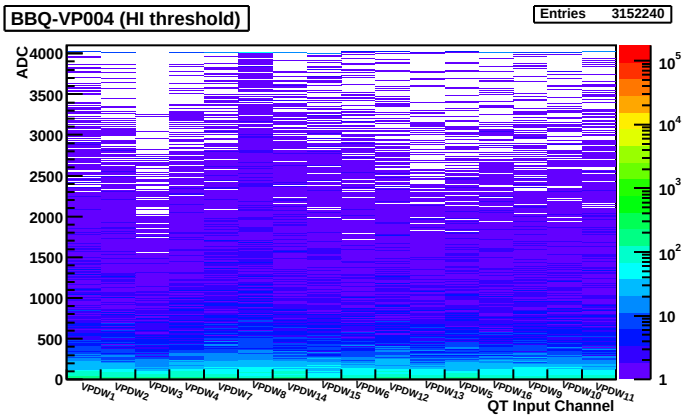

BBQ-VP001 (LO threshold)
Entries 3152240
TAC
QT Input Channel

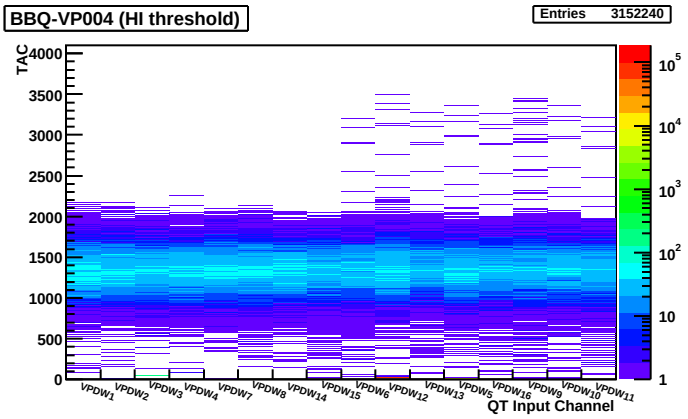

BBQ-VP002 (LO threshold)
Entries 3152240
ADC
QT Input Channel

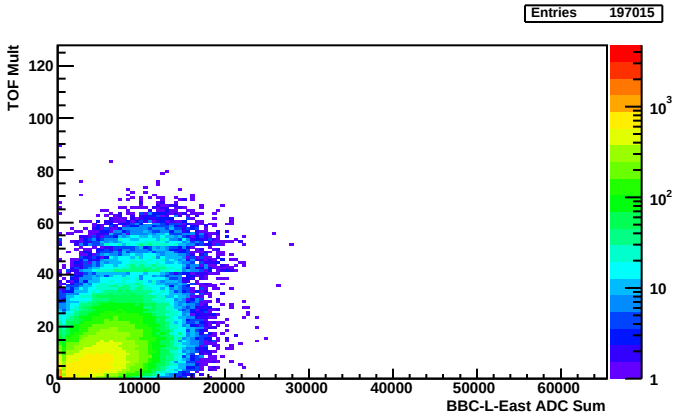

BBQ-VP002 (LO threshold)
Entries 3152240
TAC
QT Input Channel

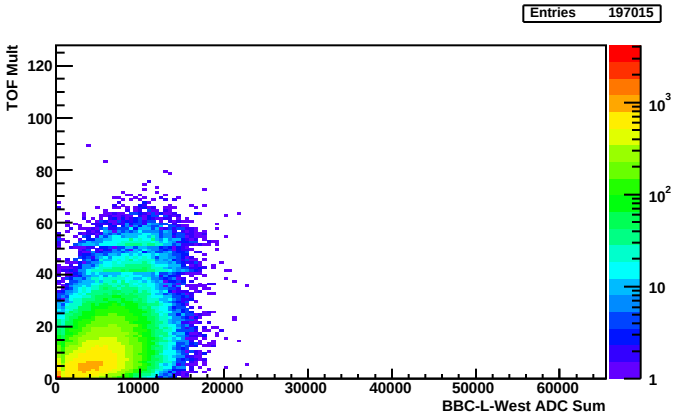

BBQ-VP003 (HI threshold)
Entries 3152240
ADC
QT Input Channel

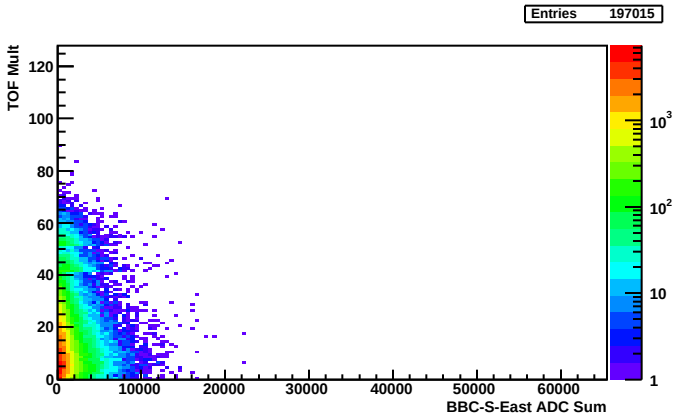

BBQ-VP003 (HI threshold)
Entries 3152240
TAC
QT Input Channel

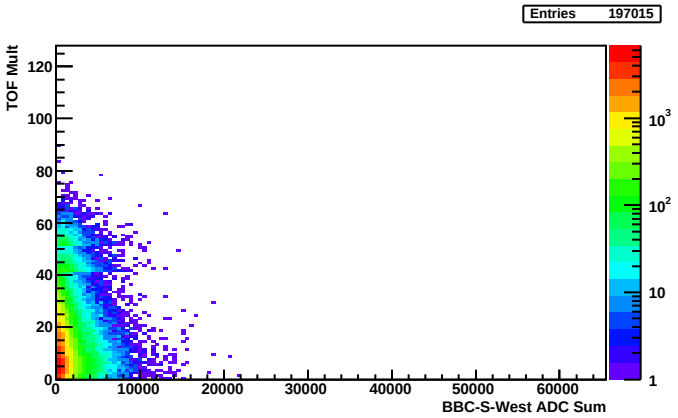

BBQ-VP004 (HI threshold)
Entries 3152240
ADC
QT Input Channel

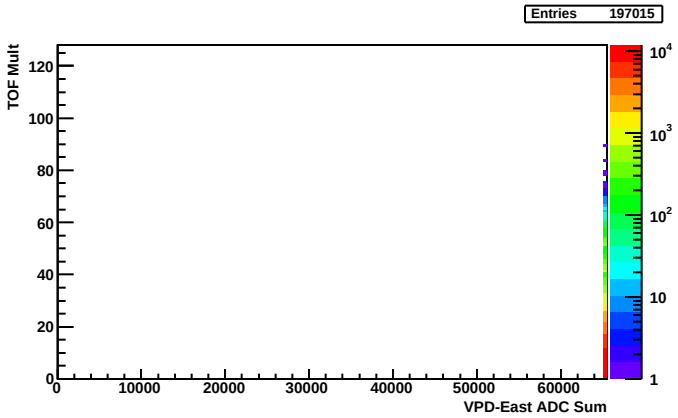

BBQ-VP004 (HI threshold)
Entries 3152240
TAC
QT Input Channel

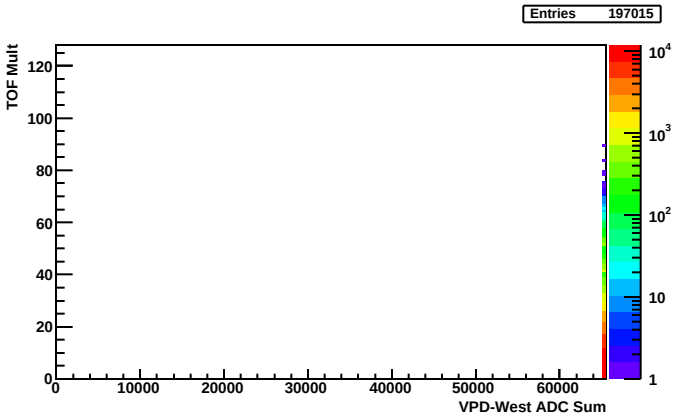

Entries 197015
TOF Mult
BBC-L-East ADC Sum

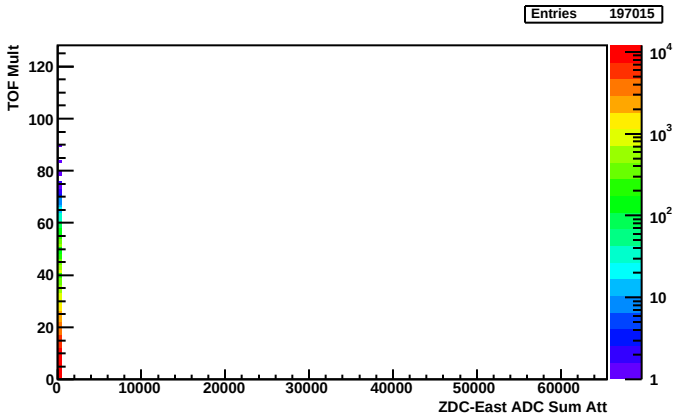

Entries 197015
TOF Mult
BBC-L-West ADC Sum

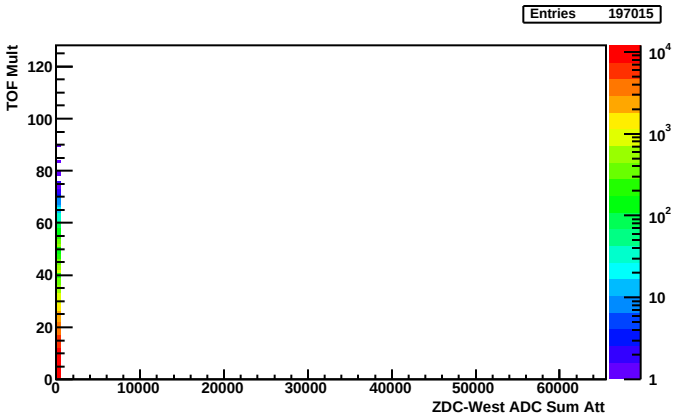

Entries 197015
TOF Mult
BBC-S-East ADC Sum

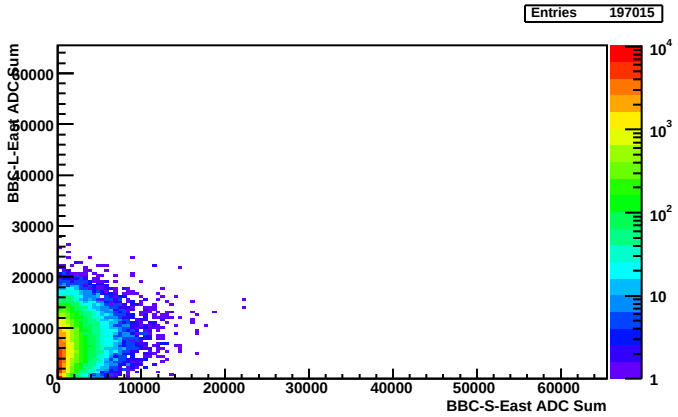

Entries 197015
TOF Mult
BBC-S-West ADC Sum

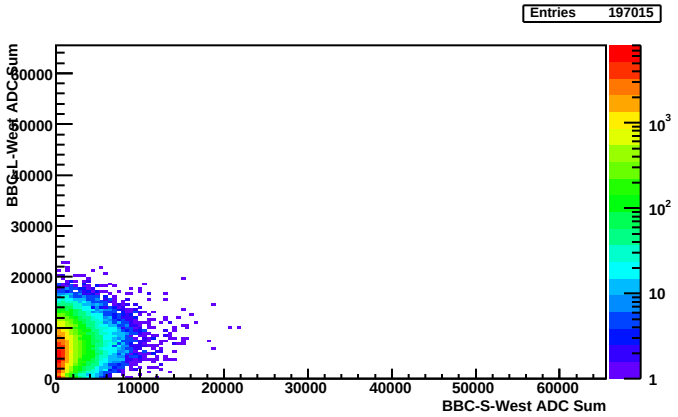

Entries 197015
TOF Mult
VPD-East ADC Sum

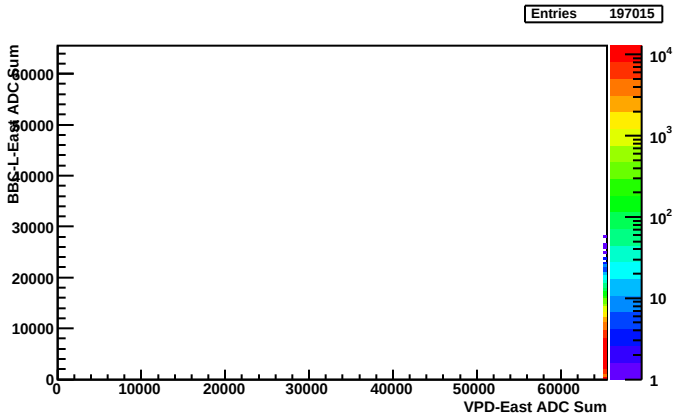

Entries 197015
TOF Mult
VPD-West ADC Sum


Entries 197015
TOF Mult
ZDC-East ADC Sum Att


Entries 197015
TOF Mult
ZDC-West ADC Sum Att


Entries 197015
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 197015
BBC-L-West ADC Sum
BBC-S-West ADC Sum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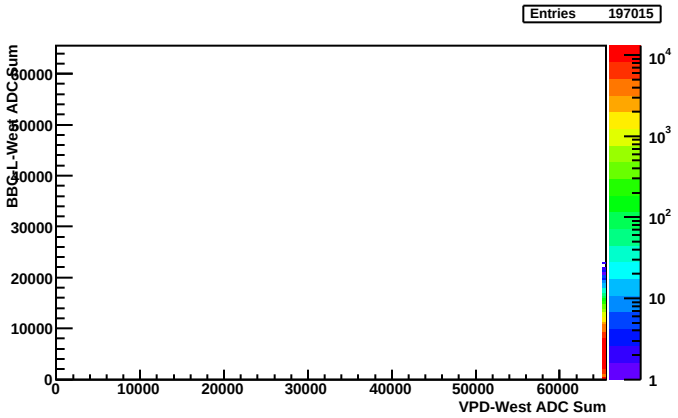
BBC-L-East ADC Sum
VPD-East ADC Sum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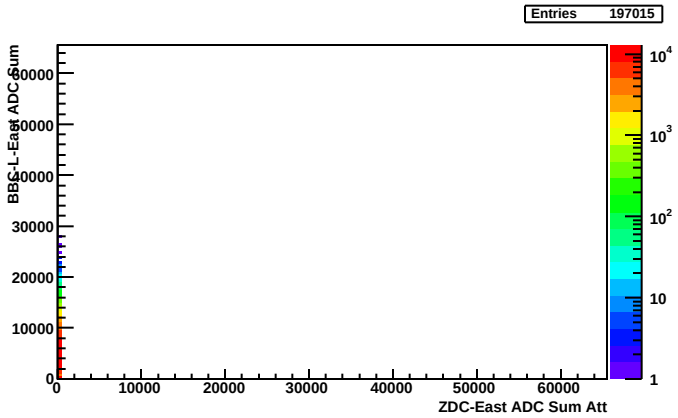
VPD-West ADC Sum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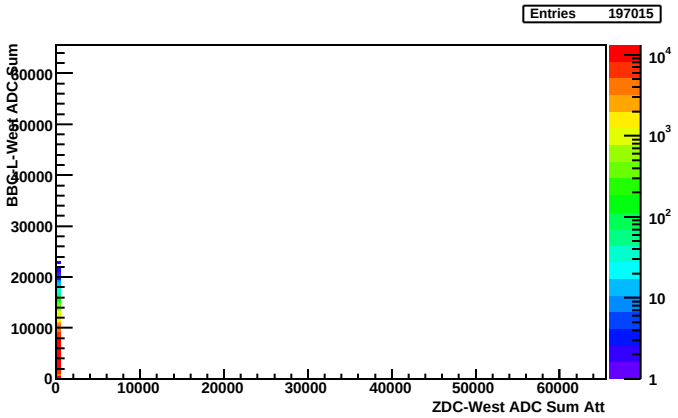
ZDC-East ADC Sum Att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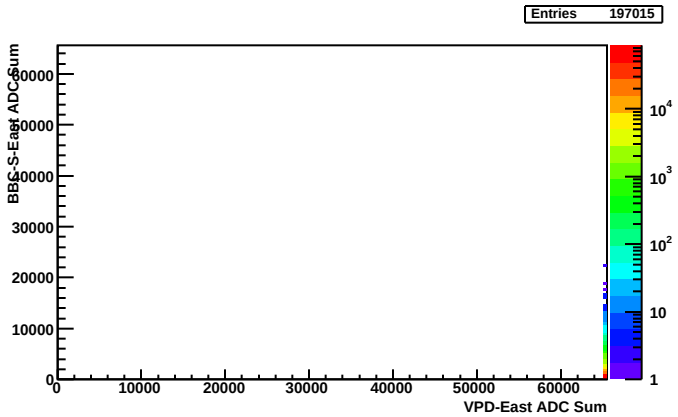
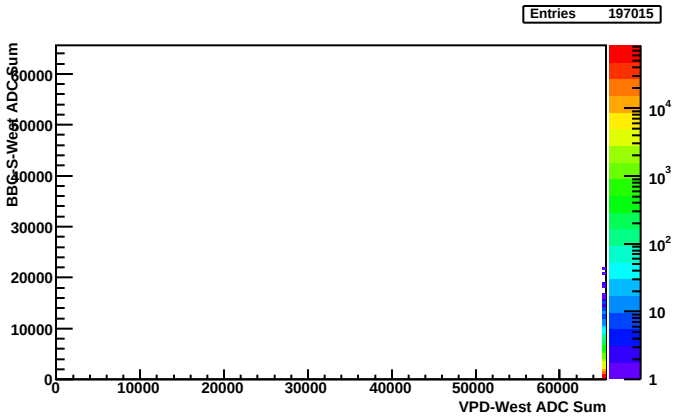
BBC-L-West ADC Sum
ZDC-West ADC Sum Att


Entries 197015
BBC-S-East ADC Sum
VPD-East ADC Sum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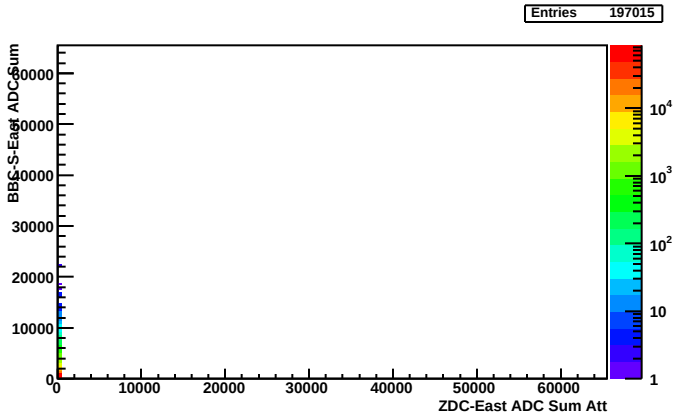
BBC-S-West ADC Sum
VPD-West ADC Sum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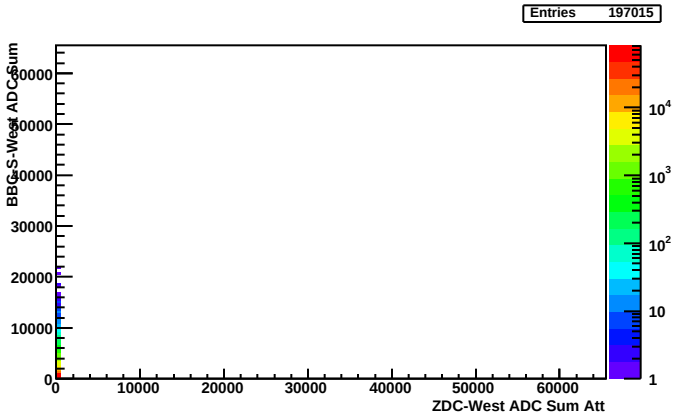
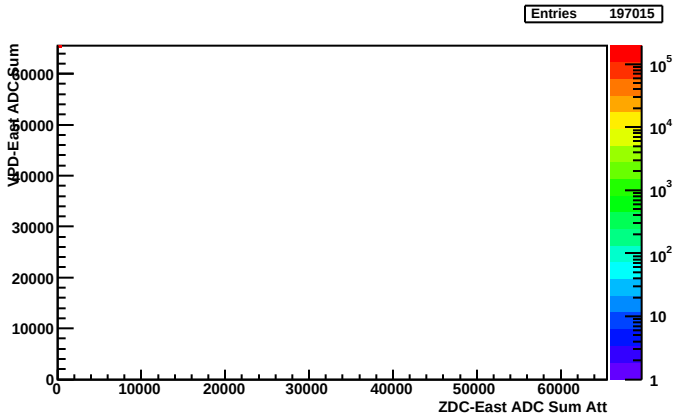
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 197015
BBC-S-West ADC Sum
ZDC-West ADC Sum Att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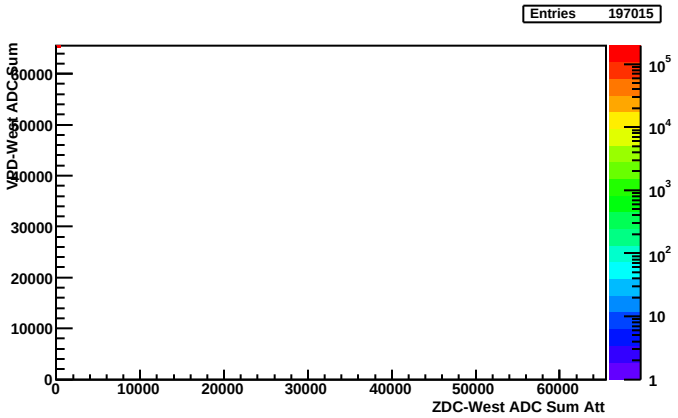
VPD-East ADC Sum
ZDC-East ADC Sum Att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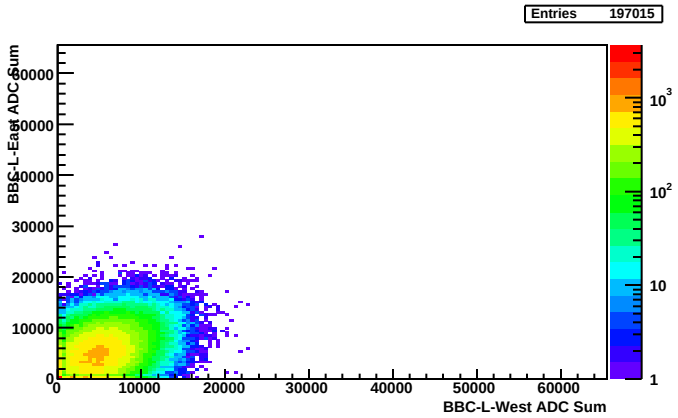
ZDC-West ADC Sum Att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BBC-L-East ADC Sum
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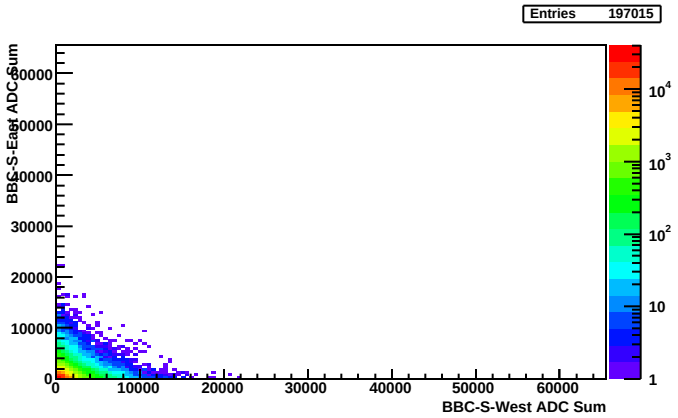
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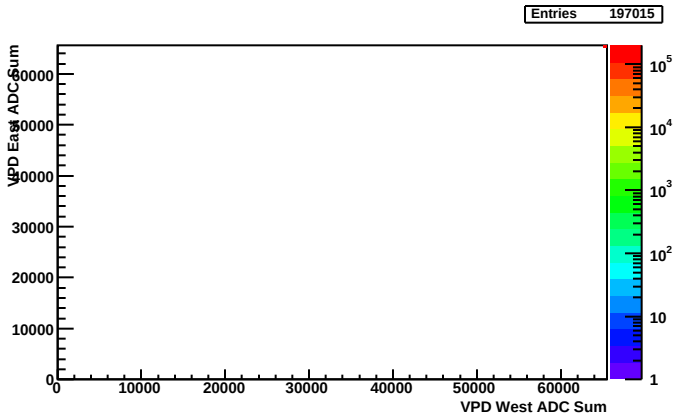
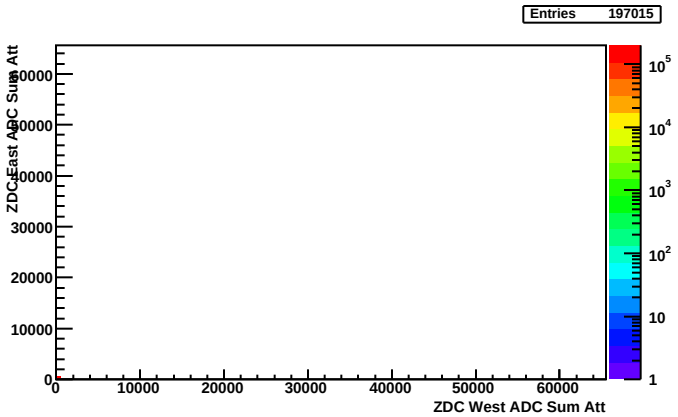
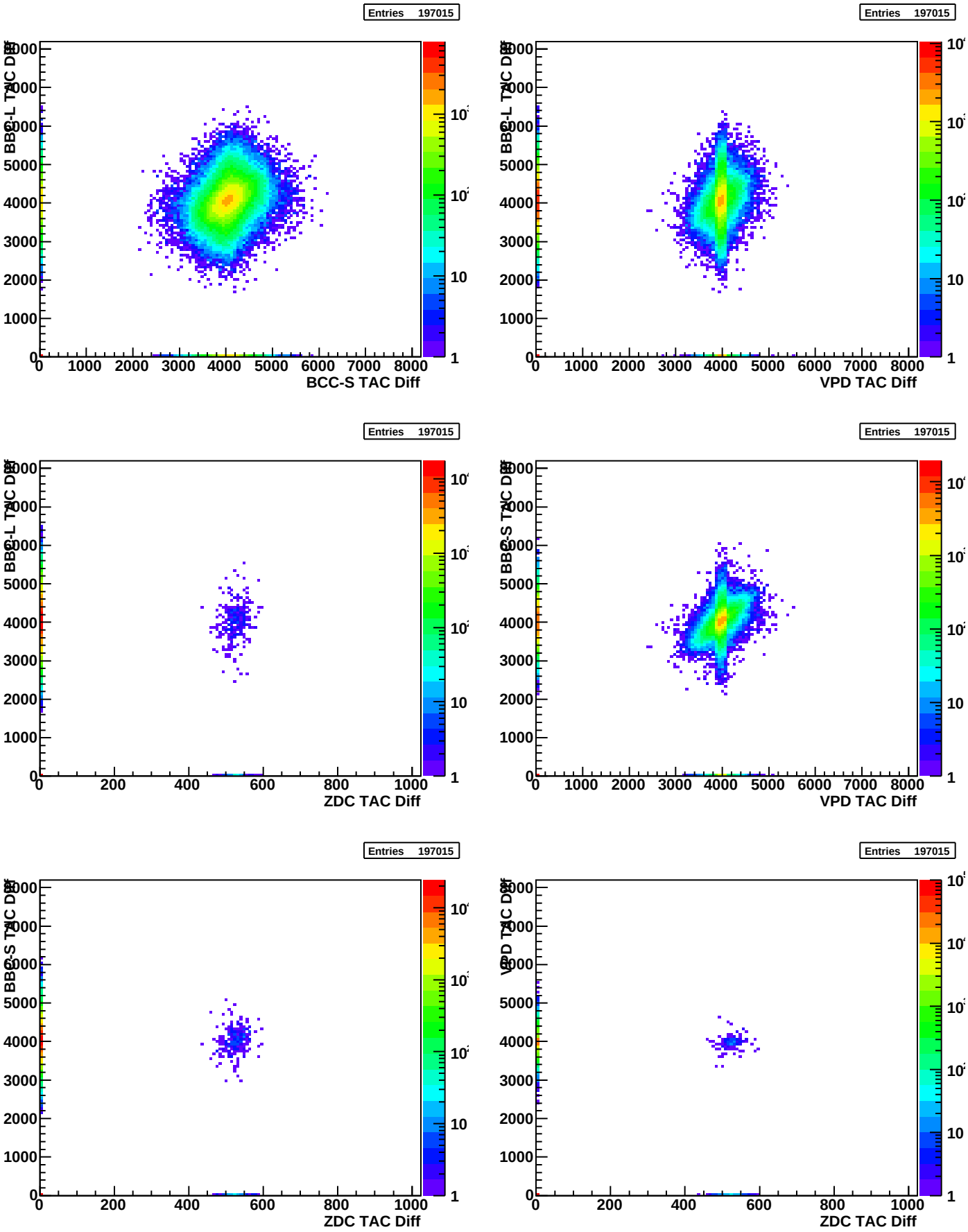
BBC-S-East ADC Sum
BBC-S-West ADC Sum


Entries 197015
VPD East ADC Sum
VPD West ADC Sum


Entries 197015
ZDC East ADC Sum Att
ZDC West ADC Sum Att


Entries 197015
BBC-L TAC Diff
BCC-S TAC Diff
Entries 197015
BBC-L TAC Diff
VPD TAC Diff
Entries 197015
BBC-L TAC Diff
ZDC TAC Diff
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Entries 197015
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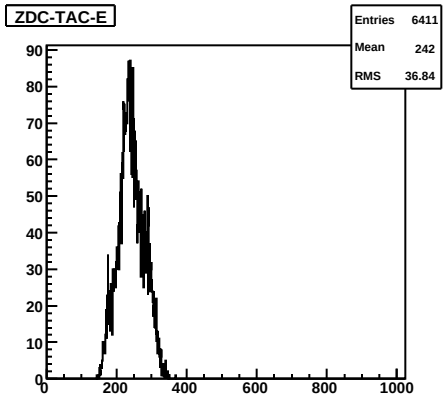
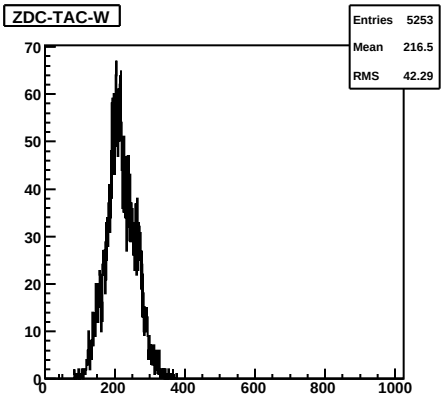
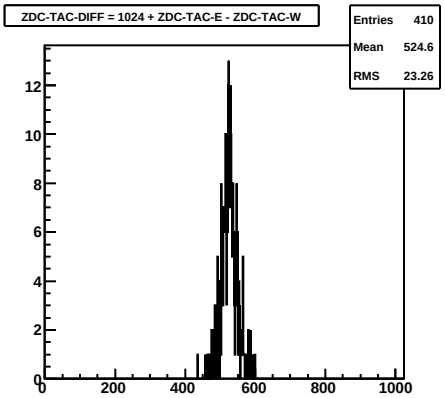
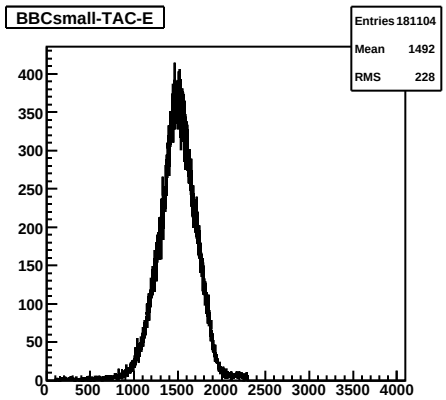
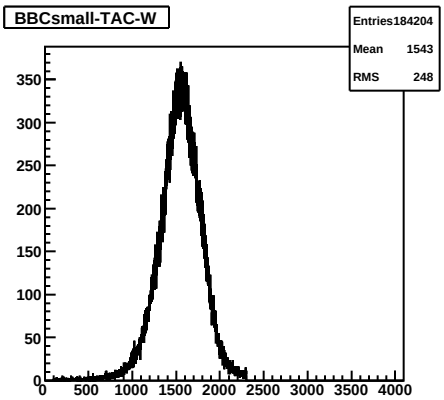
ZDC TAC Diff
Entries 197015
VPD TAC Diff
ZDC TAC Diff

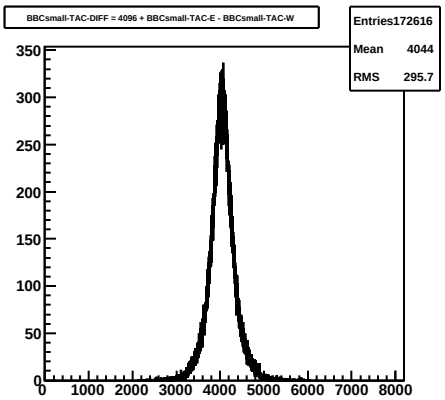

ZDC-TAC-E
Entries 6411
Mean 242
RMS 36.84

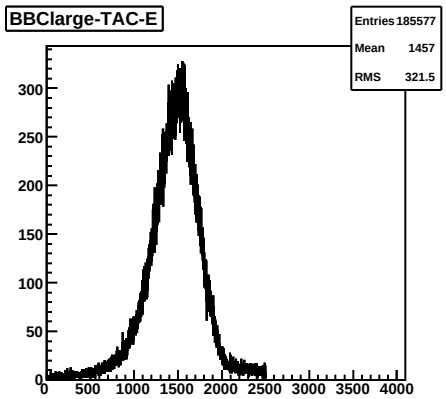

ZDC-TAC-W
Entries 5253
Mean 216.5
RMS 42.29

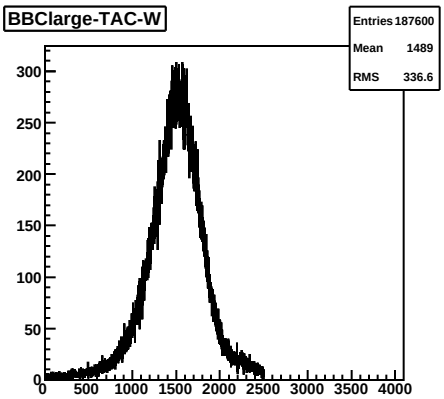

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 410
Mean 524.6
RMS 23.26

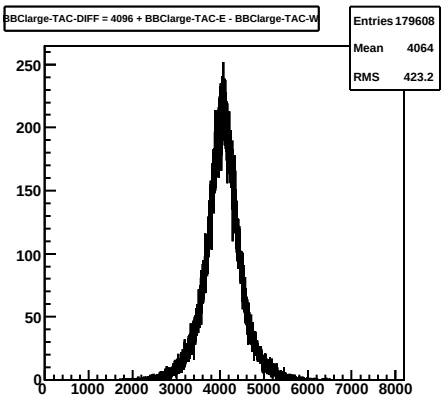

BBCsmall-TAC-E
Entries 181104
Mean 1492
RMS 228

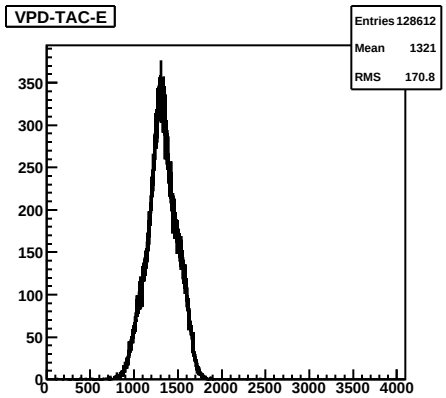

BBCsmall-TAC-W
Entries 184204
Mean 1543
RMS 248

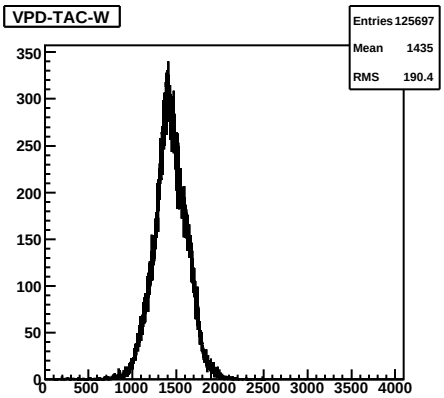

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 172616
Mean 4044
RMS 295.7

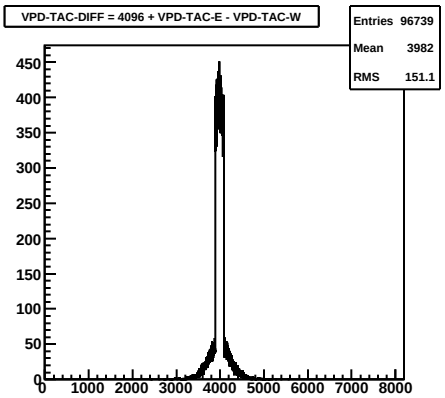

BBClarge-TAC-E
Entries 185577
Mean 1457
RMS 321.5

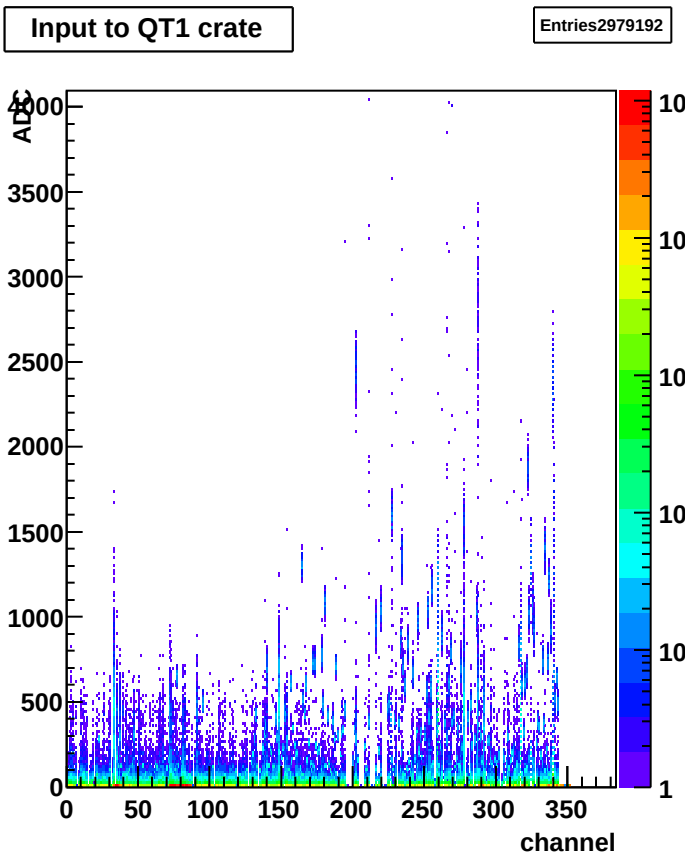

BBClarge-TAC-W
Entries 187600
Mean 1489
RMS 336.6

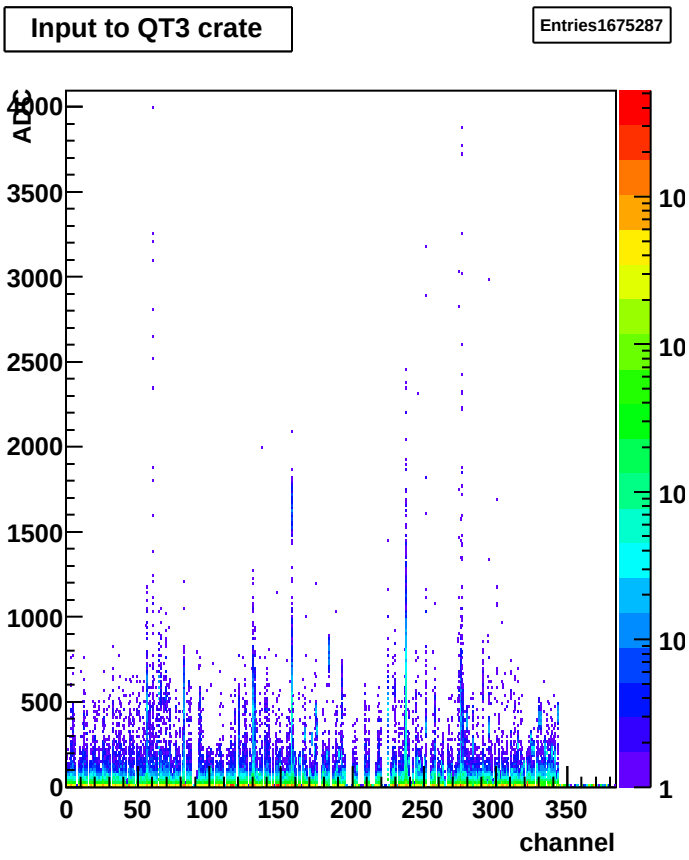

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 179608
Mean 4064
RMS 423.2

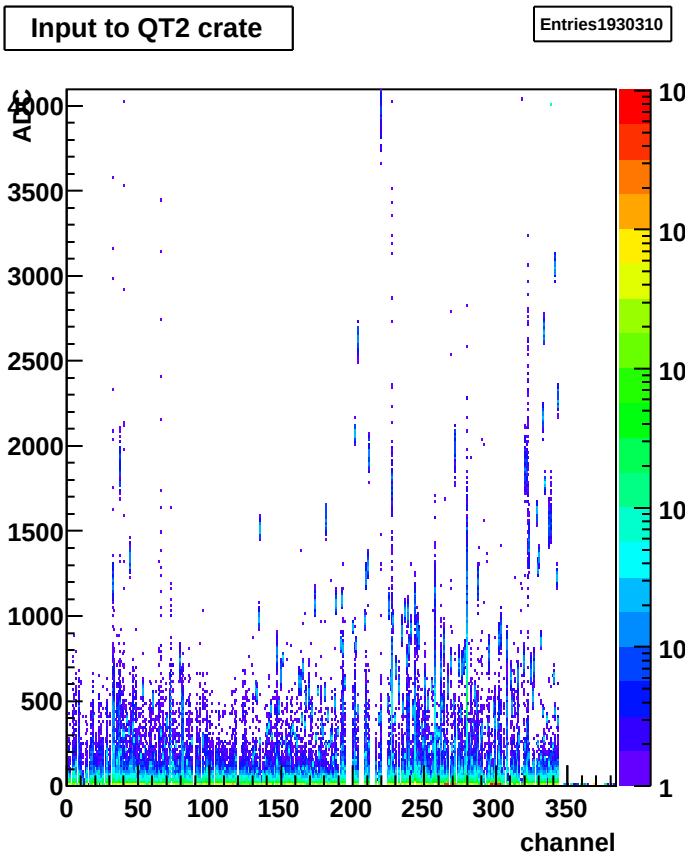

VPD-TAC-E
Entries 128612
Mean 1321
RMS 170.8

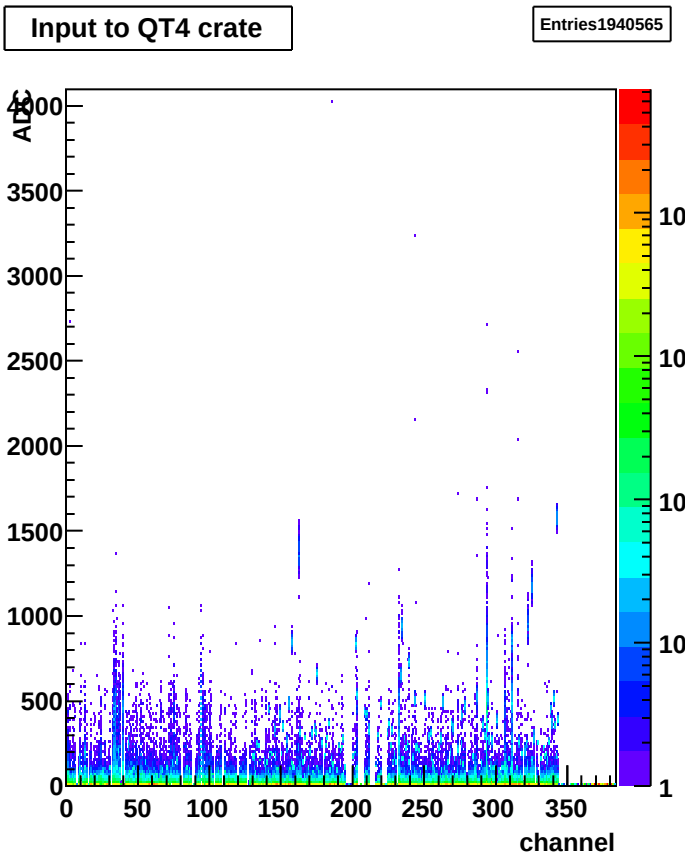

VPD-TAC-W
Entries 125697
Mean 1435
RMS 190.4

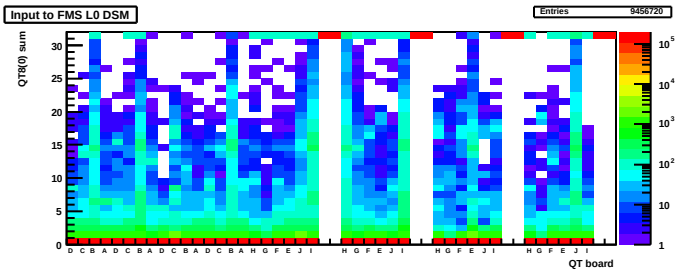

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 96739
Mean 3982
RMS 151.1

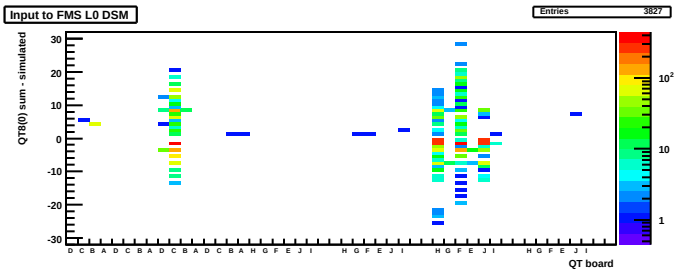

Input to QT1 crate
Entries2979192
ADC
channel

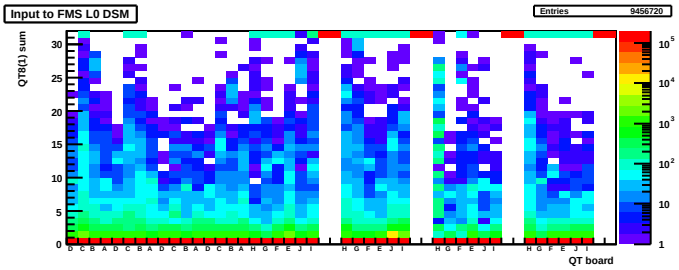

Input to QT3 crate
Entries1675287
ADC
channel

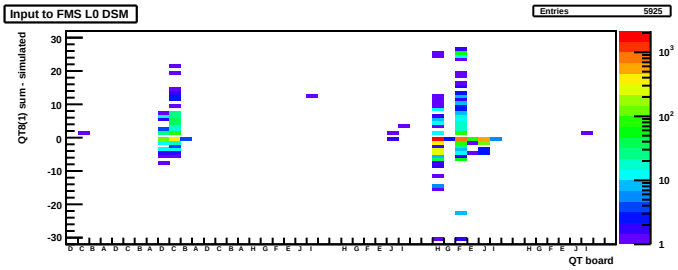

Input to QT2 crate
Entries1930310
ADC
channel

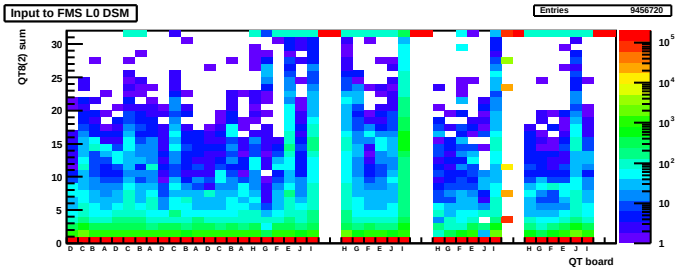

Input to QT4 crate
Entries1940565
ADC
channel

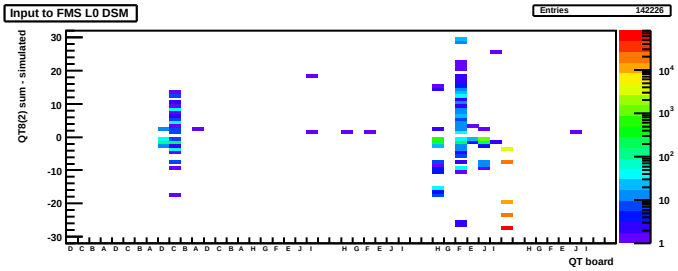

Input to FMS L0 DSM
Entries 9456720
QT8(0) sum
QT board

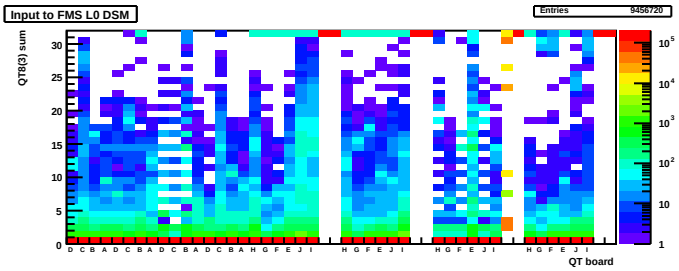

Input to FMS L0 DSM
Entries 3827
QT8(0) sum - simulated
QT board

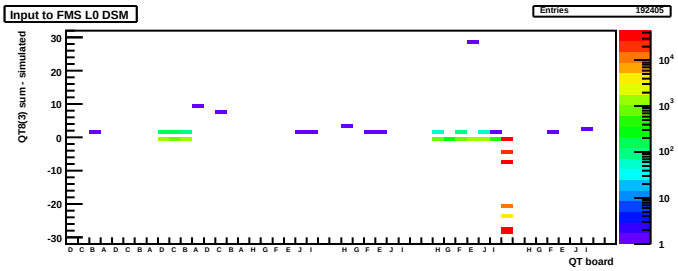

Input to FMS L0 DSM
Entries 9456720
QT8(1) sum
QT board

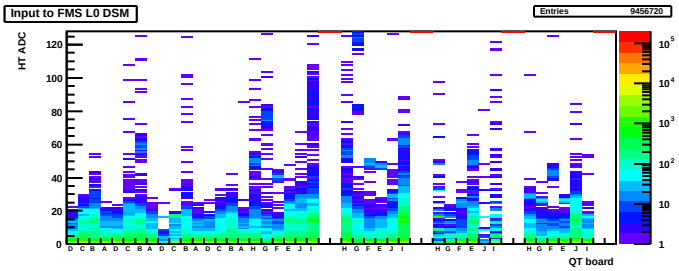

Input to FMS L0 DSM
Entries 5925
QT8(1) sum - simulated
QT board

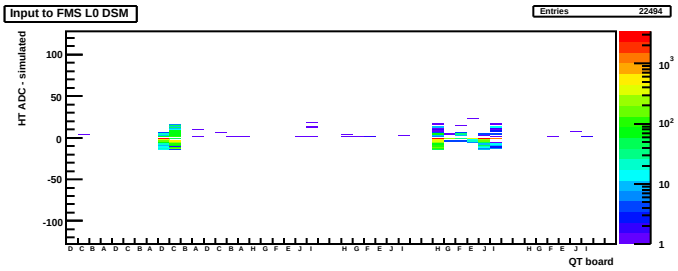

Input to FMS L0 DSM
Entries 9456720
QT8(2) sum
QT board

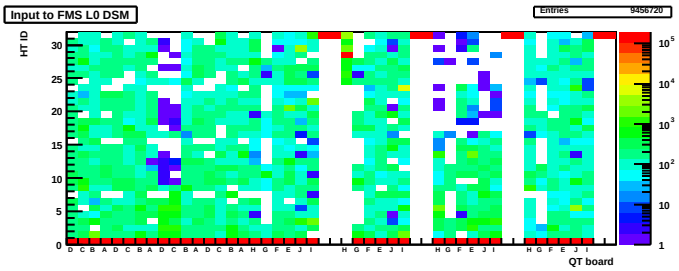

Input to FMS L0 DSM
Entries 142226
QT8(2) sum - simulated
QT board

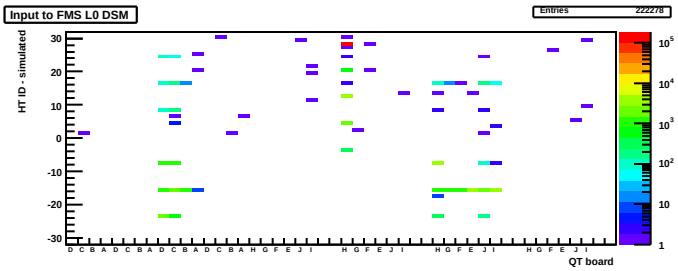

Input to FMS L0 DSM
Entries 9456720
QT8(3) sum
QT board

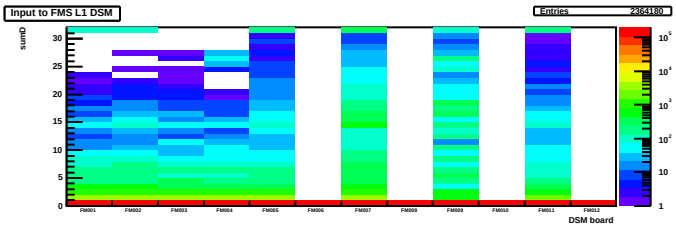

Input to FMS L0 DSM
Entries 192405
QT8(3) sum - simulated
QT board

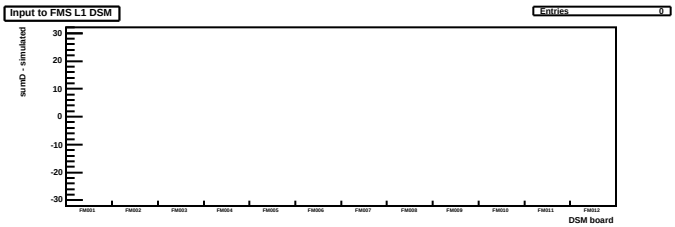

Input to FMS L0 DSM
Entries 9456720
HT ADC
QT board

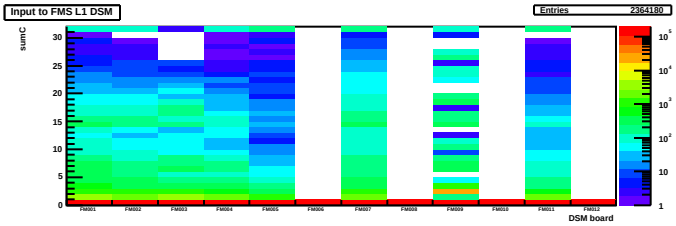

Input to FMS L0 DSM
Entries 22494
HT ADC - simulated
QT board

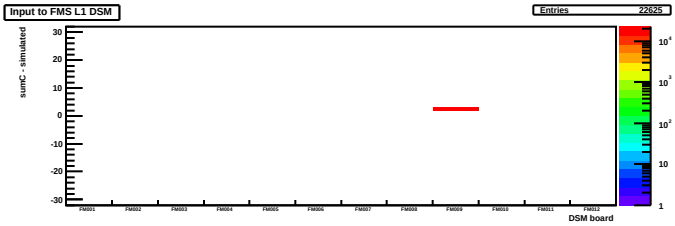

Input to FMS L0 DSM
Entries 9456720
HT ID
QT board

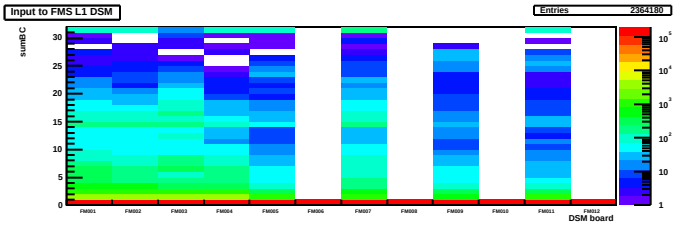

Input to FMS L0 DSM
Entries 222278
HT ID - simulated
QT board

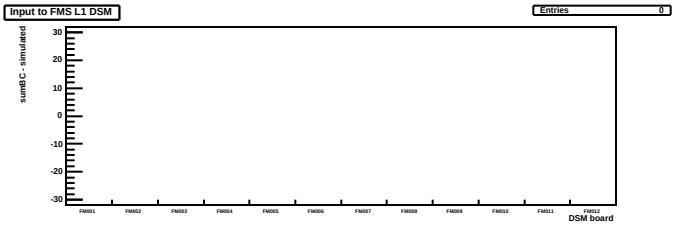

Input to FMS L1 DSM
Entries 2364180
sumD
DSM board

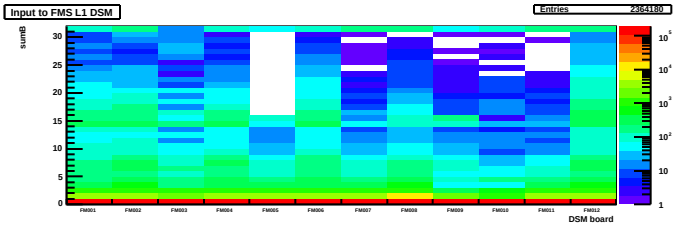

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

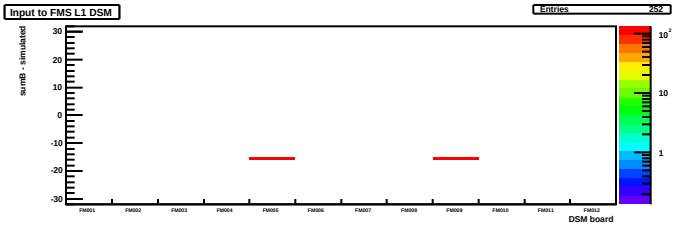

Input to FMS L1 DSM
Entries 2364180
sumC
DSM board

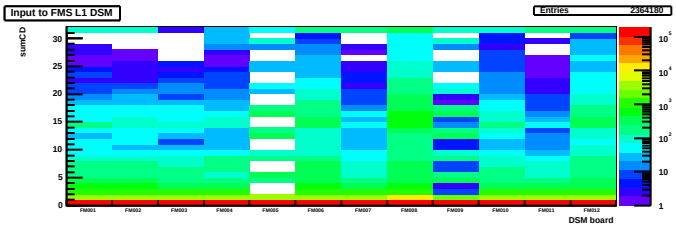

Input to FMS L1 DSM
Entries 22625
sumC - simulated
DSM board

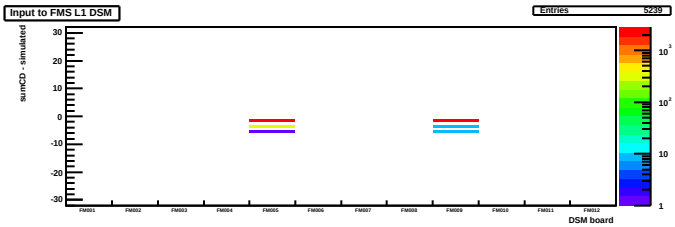

Input to FMS L1 DSM
Entries 2364180
sumBC
DSM board

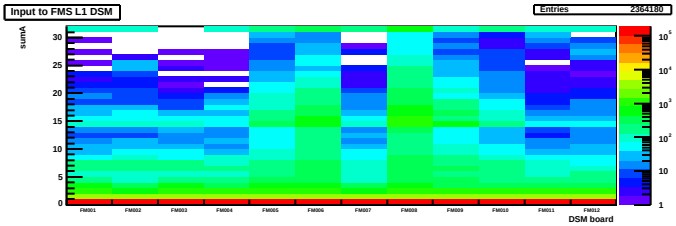

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

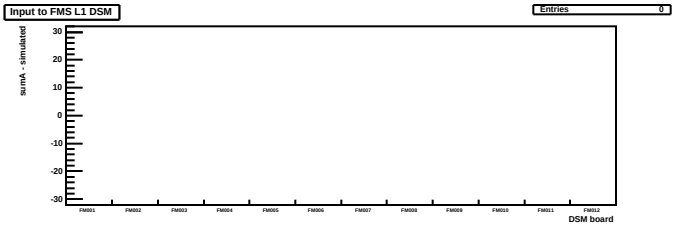

Input to FMS L1 DSM
Entries 2364180
sumB
DSM board

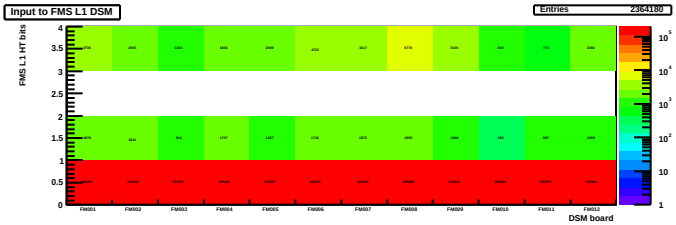

Input to FMS L1 DSM
Entries 252
sumB - simulated
DSM board

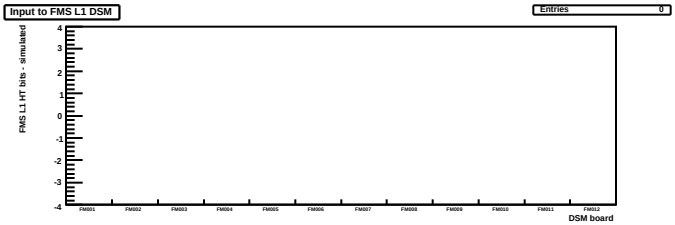

Input to FMS L1 DSM
Entries 2364180
sumCD
DSM board

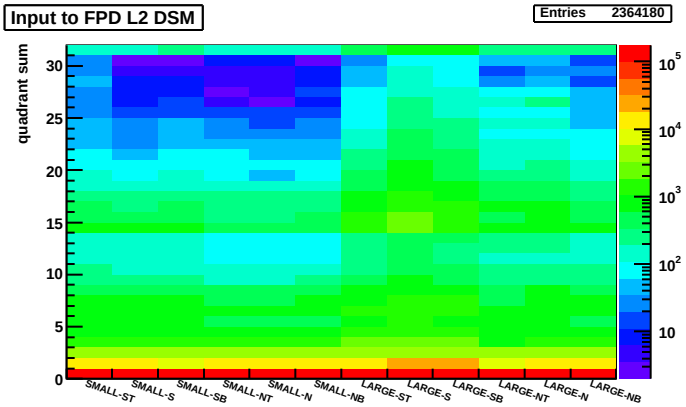

Input to FMS L1 DSM
Entries 5239
sumCD - simulated
DSM board

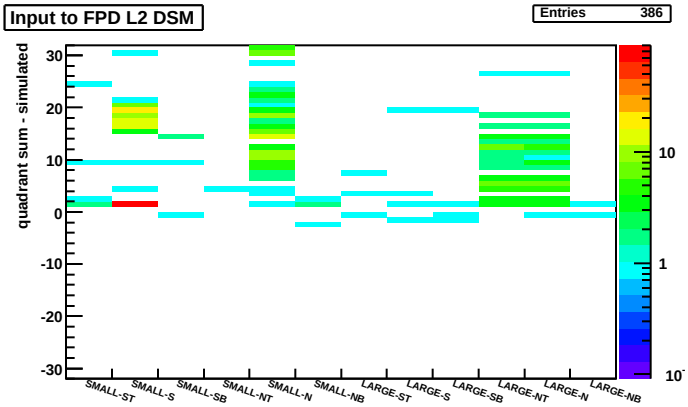

Input to FMS L1 DSM
Entries 2364180
sumA
DSM board

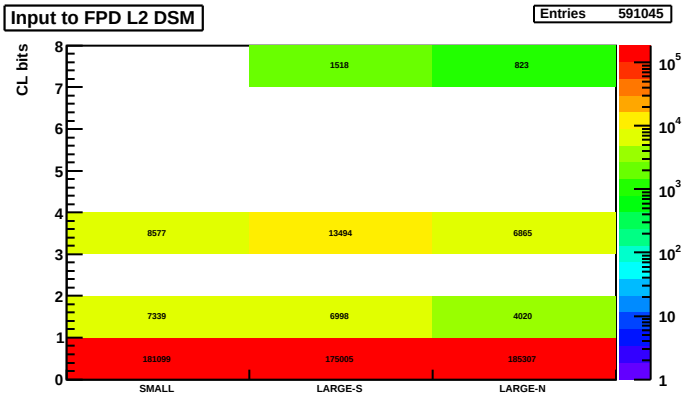

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

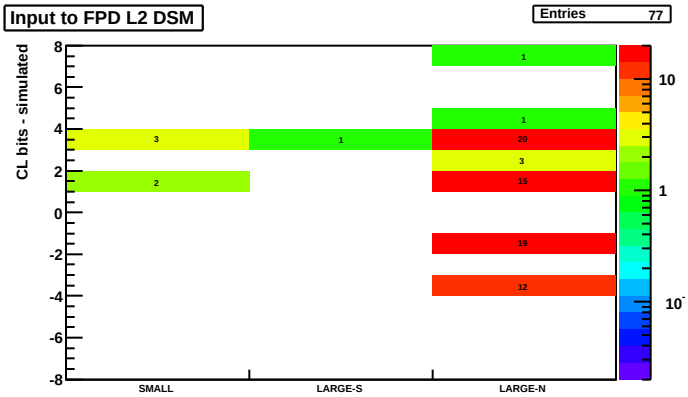

Input to FMS L1 DSM
Entries 2364180
FMS L1 HT bits
DSM board

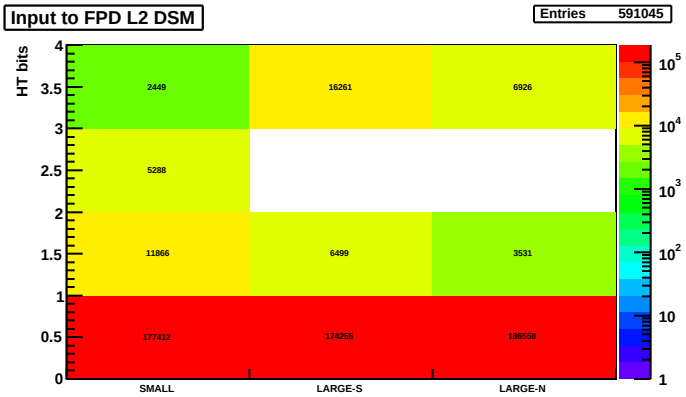

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

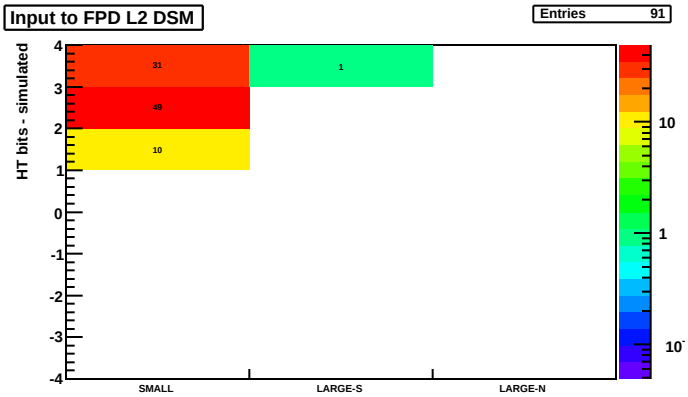

Input to FPD L2 DSM
Entries 2364180
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

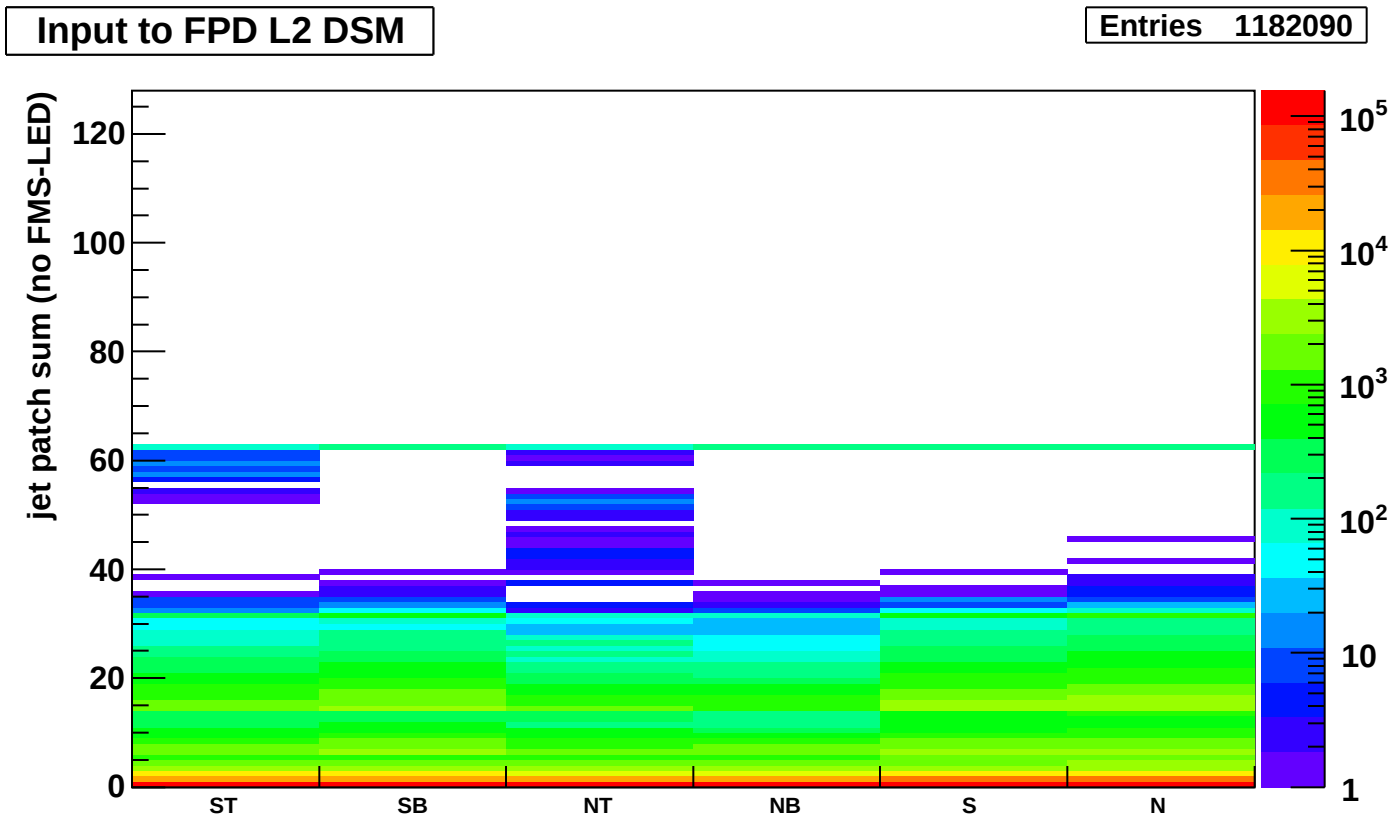

Input to FPD L2 DSM
Entries 386
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

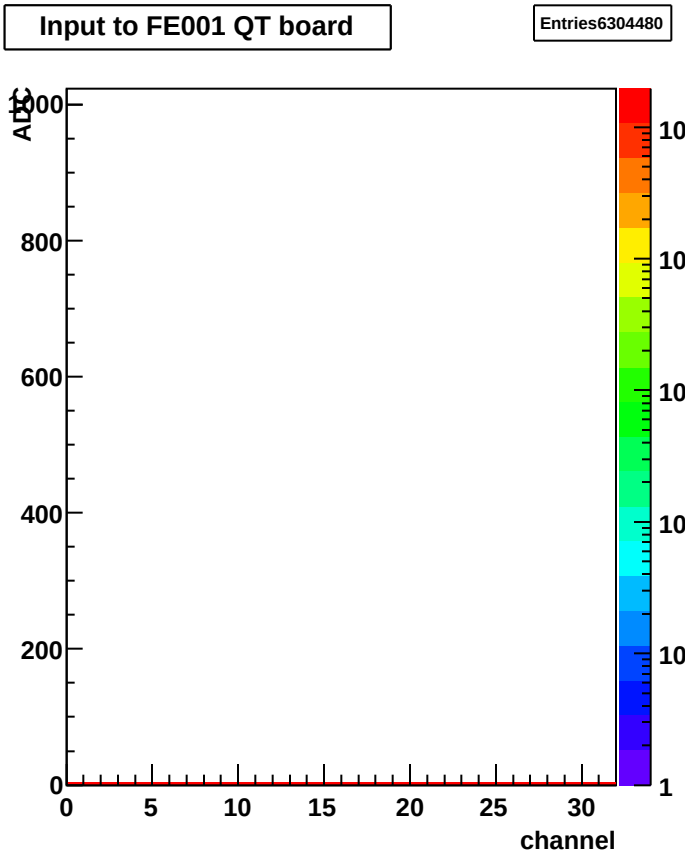

Input to FPD L2 DSM
Entries 591045
CL bits
1518
823
8577
13494
6865
7339
6998
4020
181099
175005
185307
SMALL
LARGE-S
LARGE-N

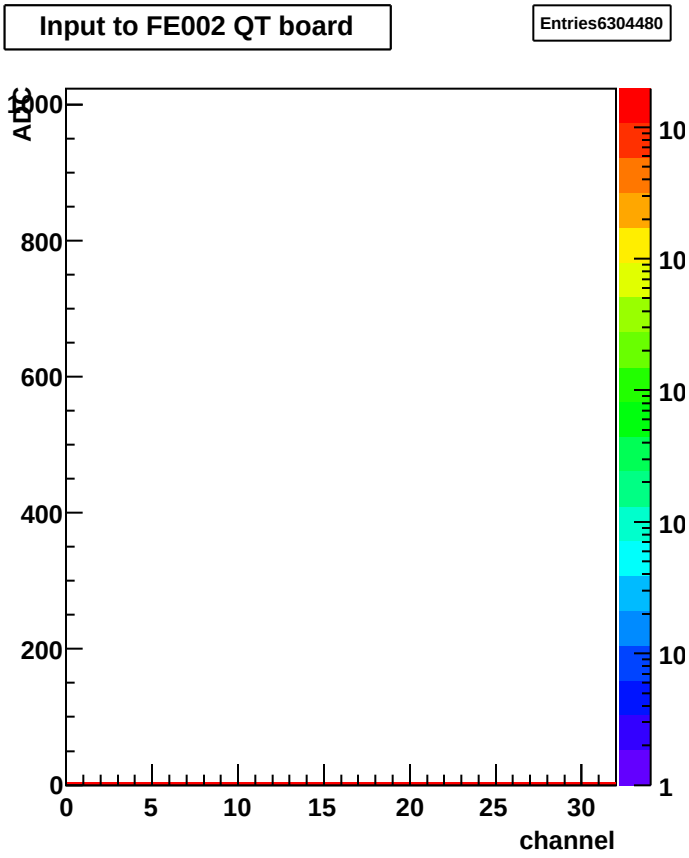

Input to FPD L2 DSM
Entries 77
CL bits - simulated
1
1
3
1
20
3
2
15
19
12
SMALL
LARGE-S
LARGE-N

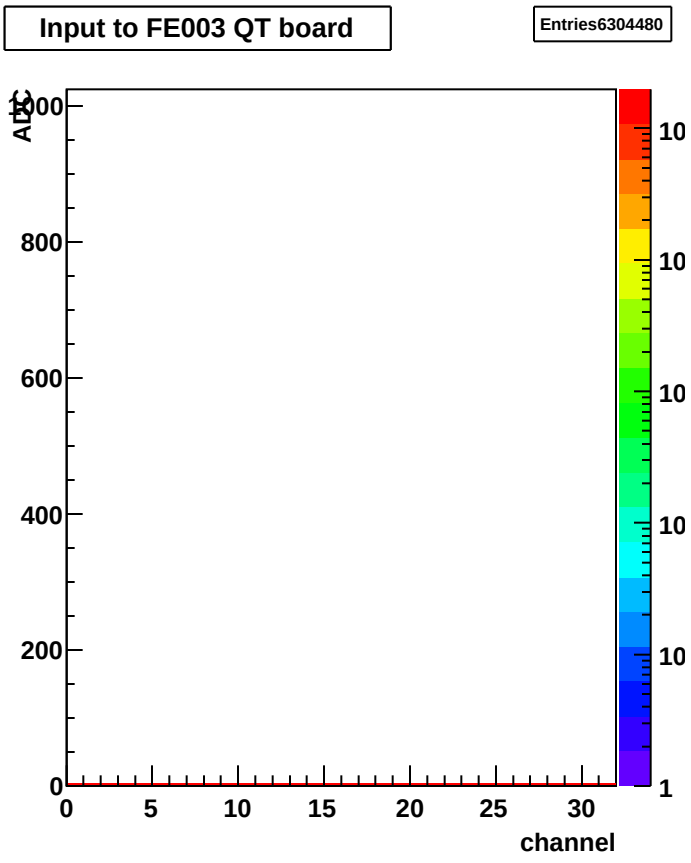

Input to FPD L2 DSM
Entries 591045
HT bits
2449
16261
6926
5288
11866
6499
3531
177412
174255
186558
SMALL
LARGE-S
LARGE-N

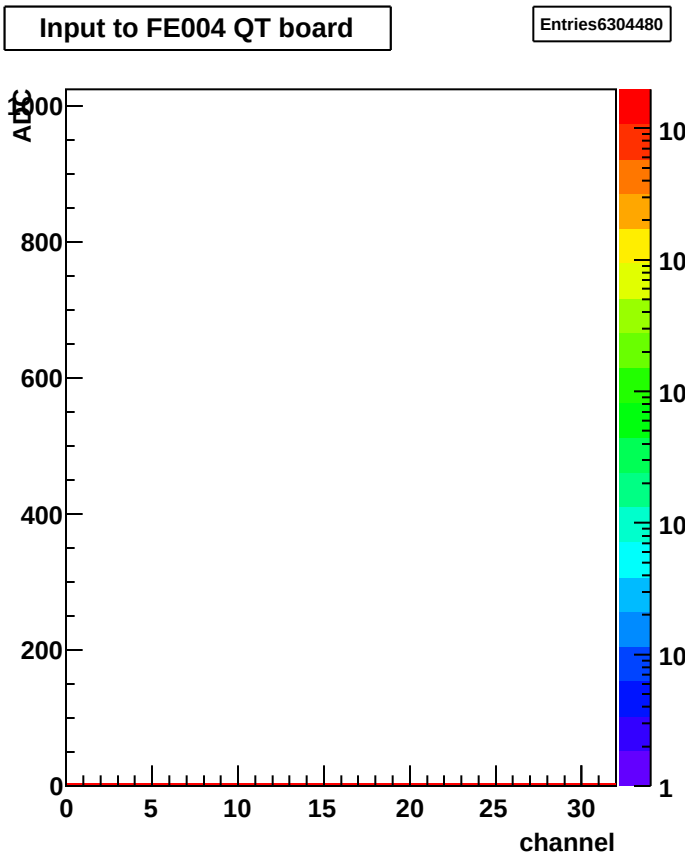

Input to FPD L2 DSM
Entries 91
HT bits - simulated
31
1
49
10
SMALL
LARGE-S
LARGE-N

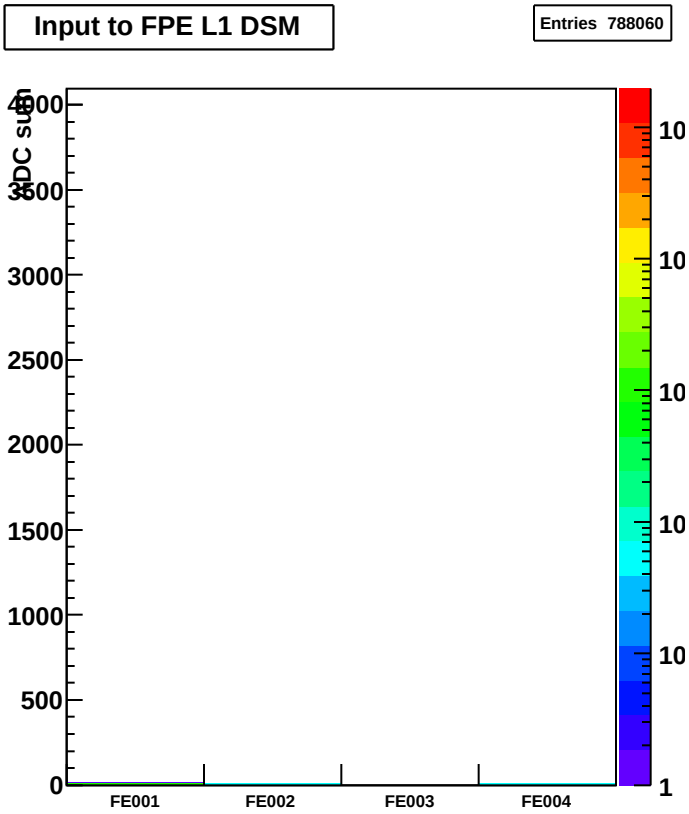

Input to FPD L2 DSM
Entries 1182090
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

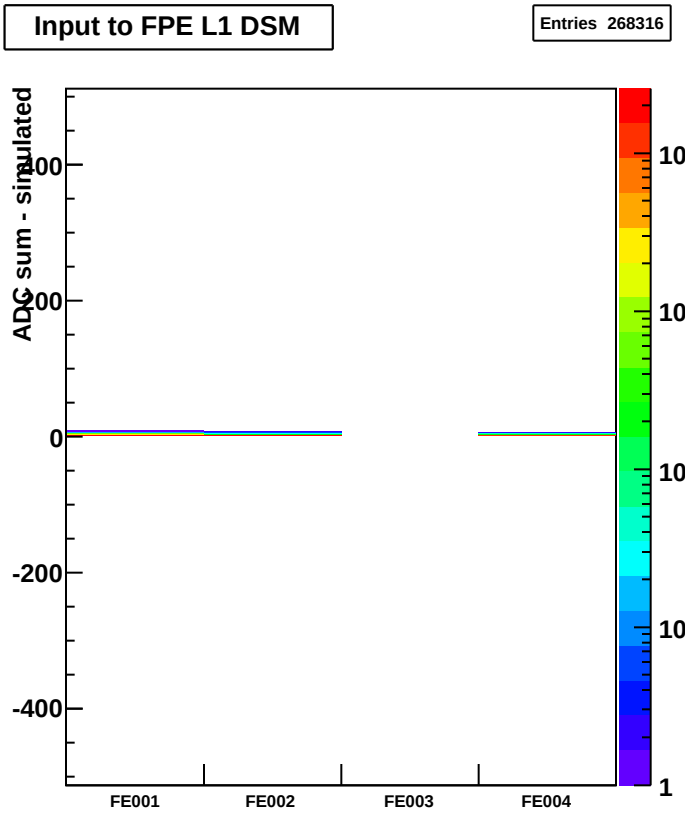

Input to FE001 QT board
Entries6304480
ADC
channel


Input to FE002 QT board
Entries6304480
ADC
channel

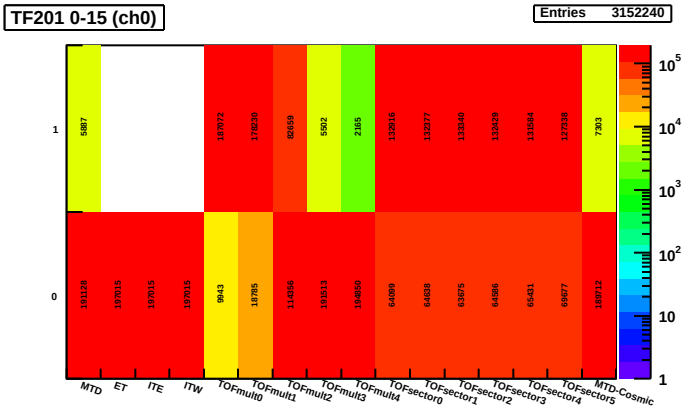

Input to FE003 QT board
Entries6304480
ADC
channel


Input to FE004 QT board
Entries6304480
ADC
channel

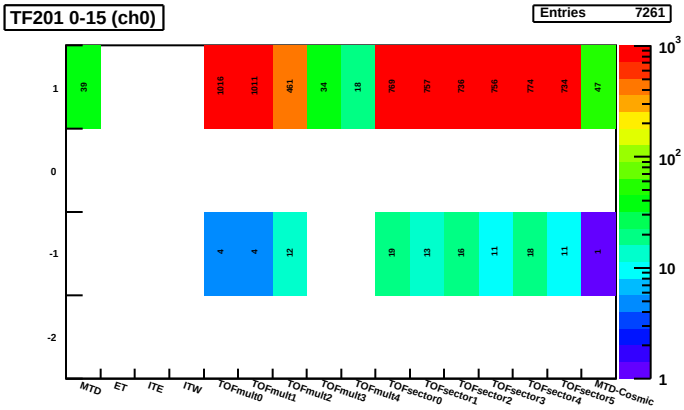

Input to FPE L1 DSM
Entries 788060
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 268316
ADC sum - simulated
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1

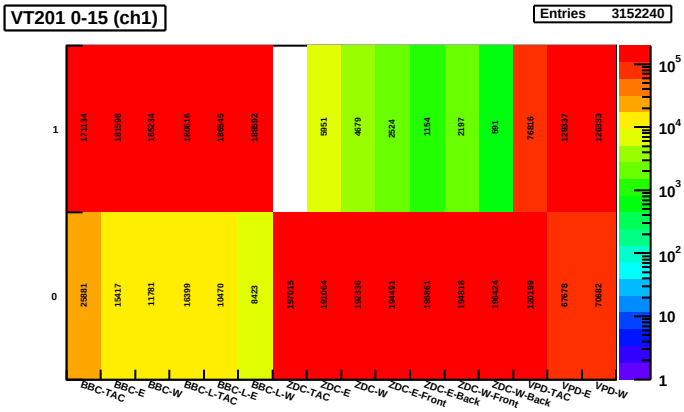
TF201 0-15 (ch0)



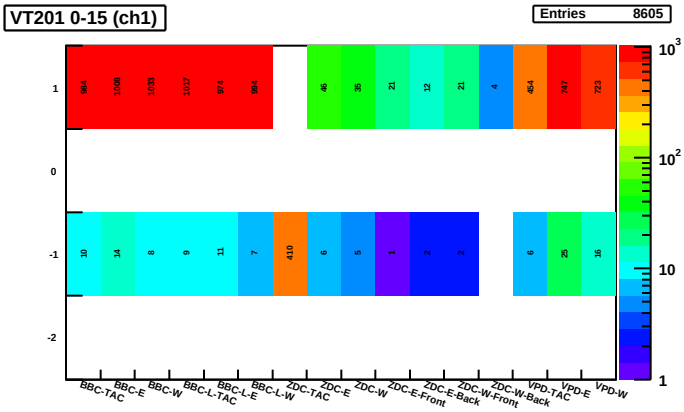
TF201 0-15 (ch0)



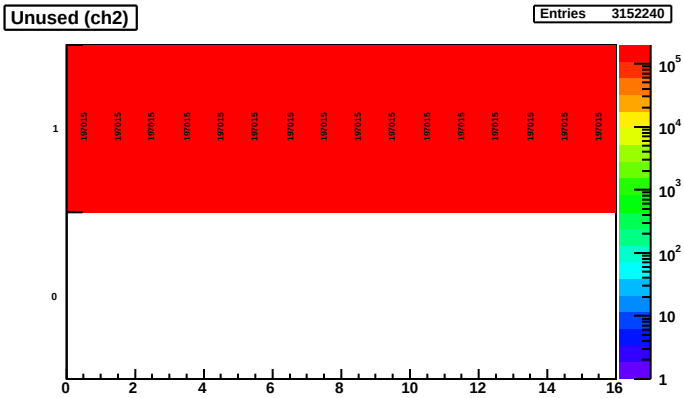
VT201 0-15 (ch1)

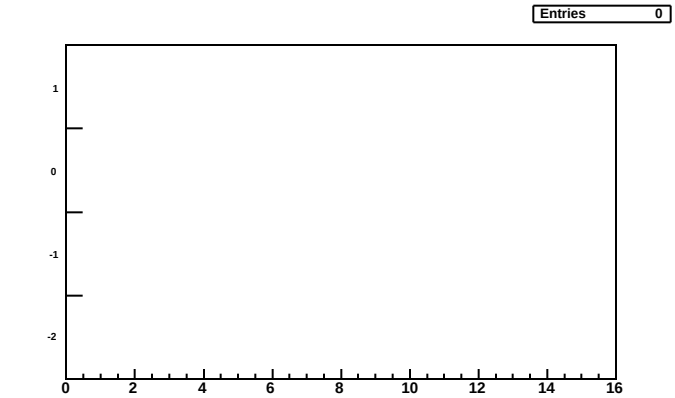


VT201 0-15 (ch1)

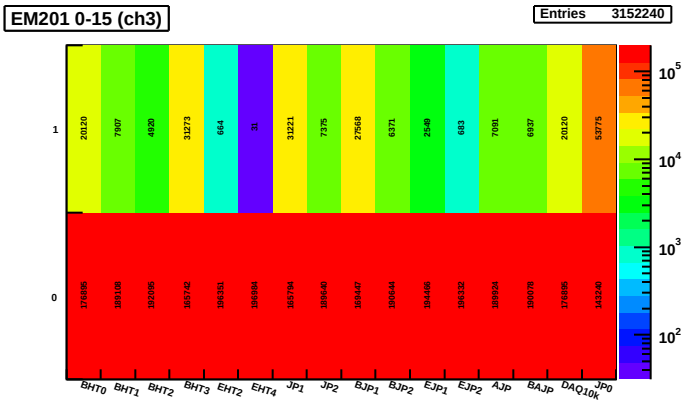


Unused (ch2)





EM201 0-15 (ch3)



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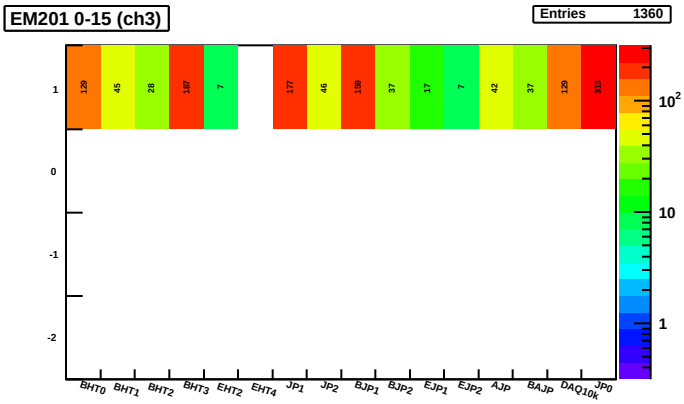
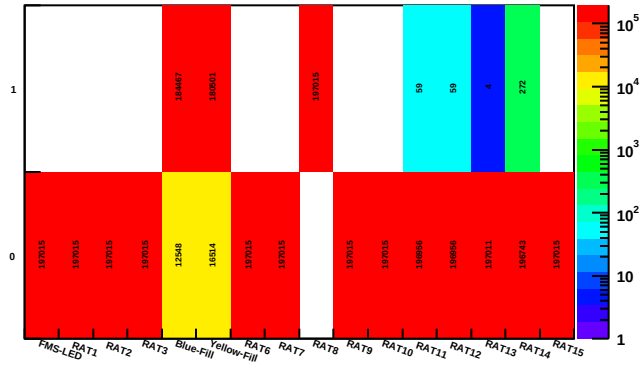
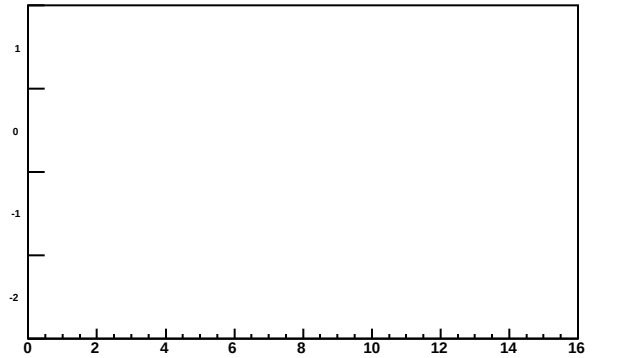


RAT board (ch4)





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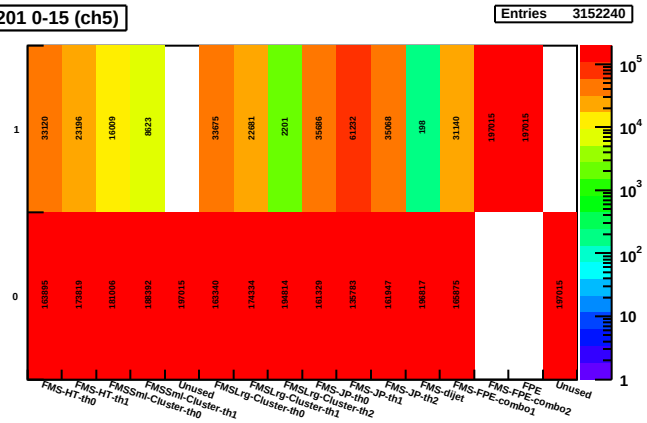

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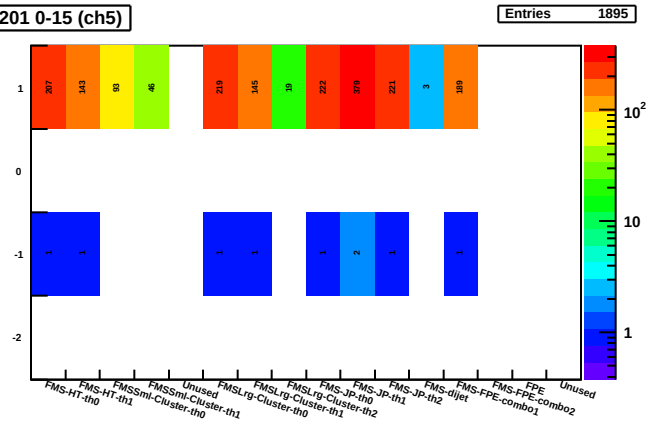

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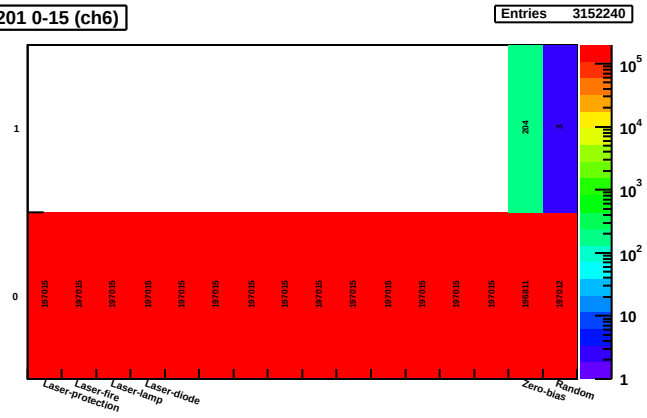

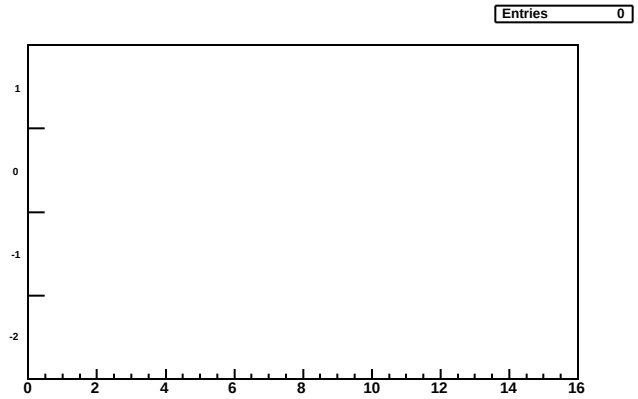
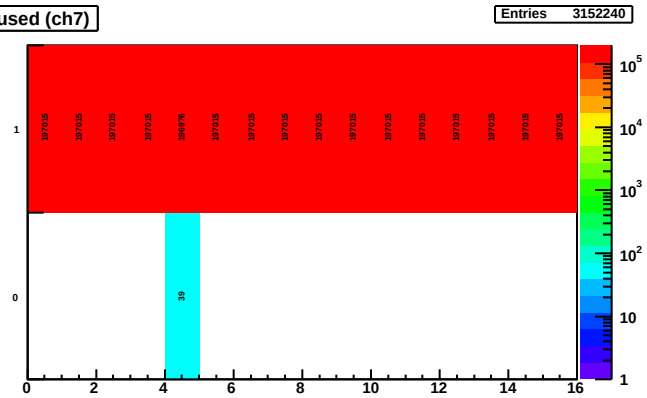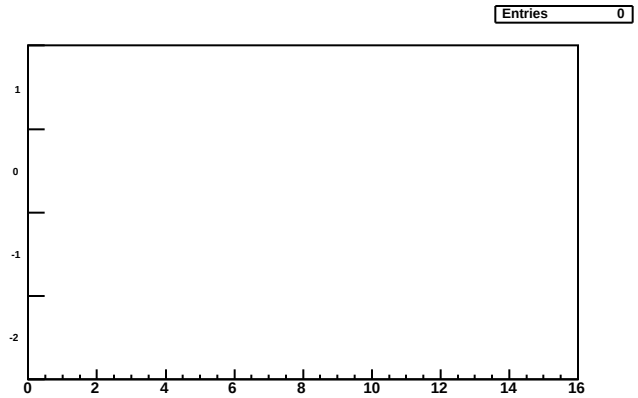
Unused (ch7)