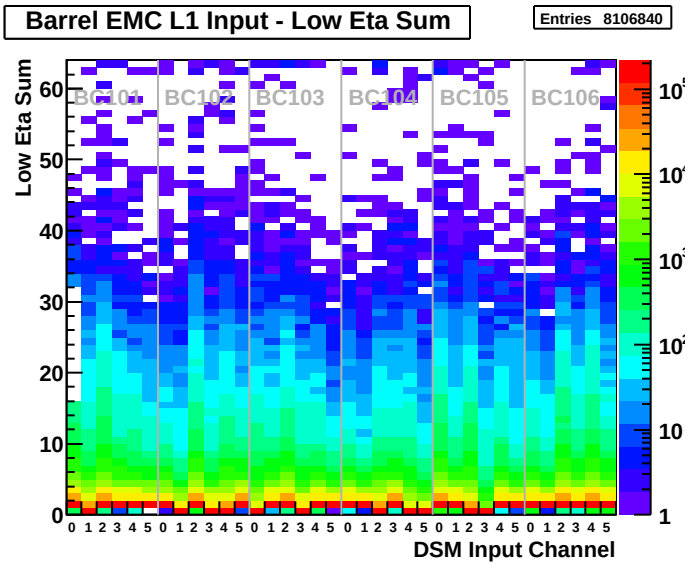
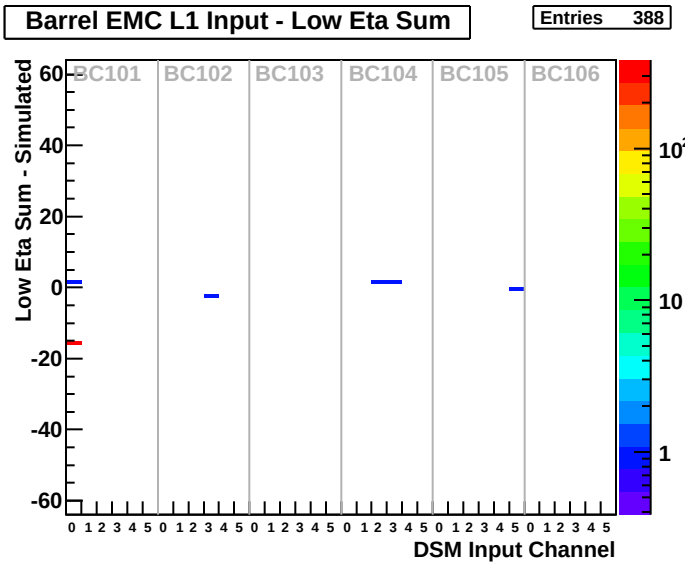
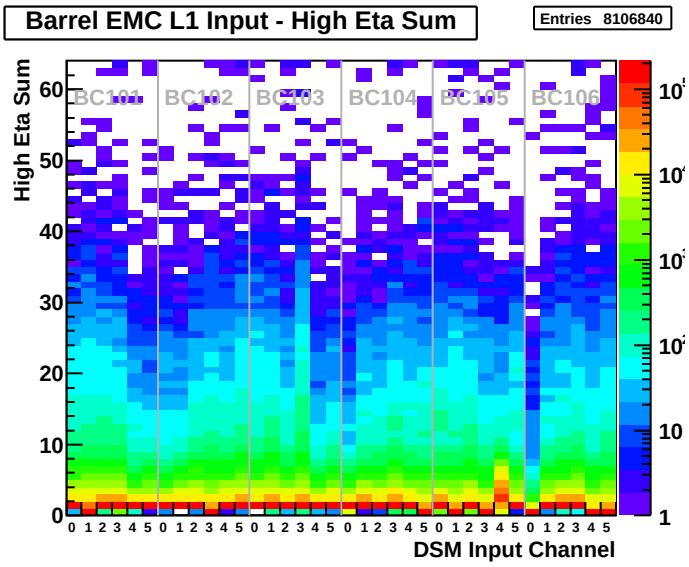
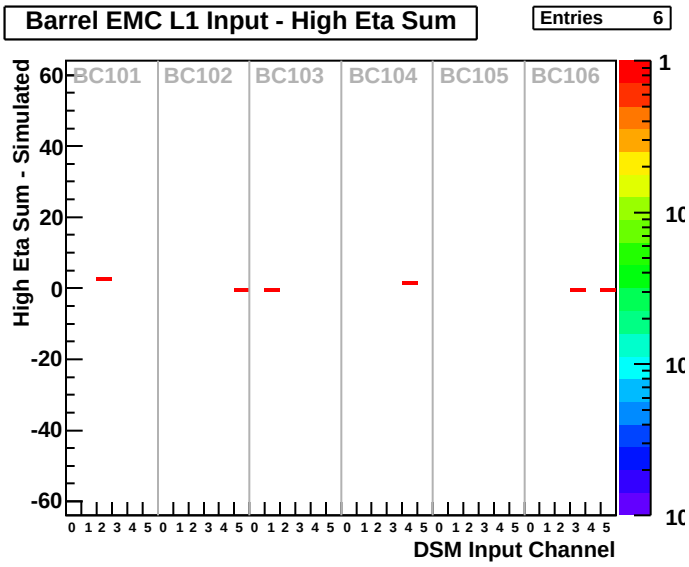
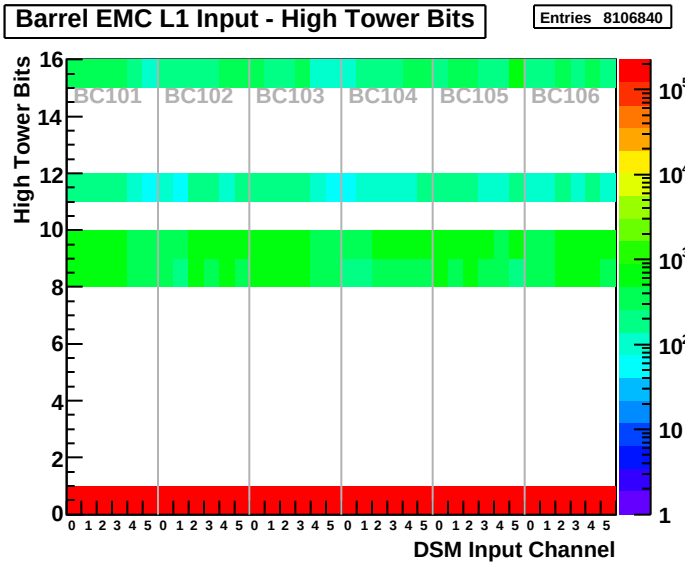
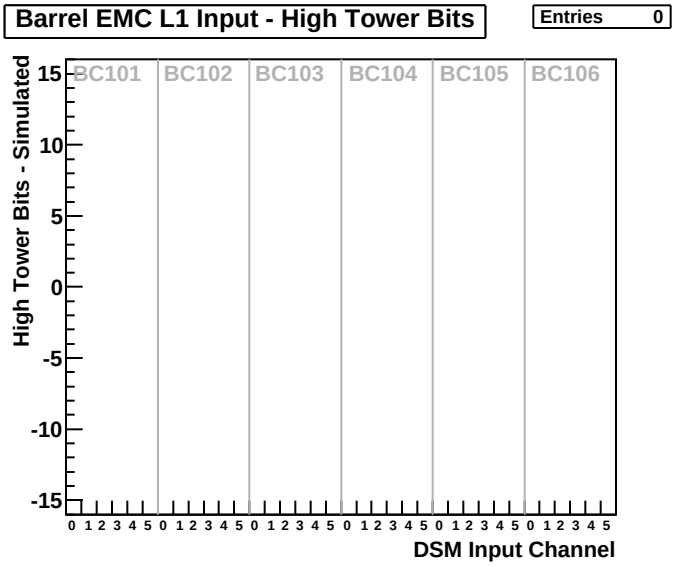

Barrel EMC L1 Input - Low Eta Sum
Entries 8106840
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

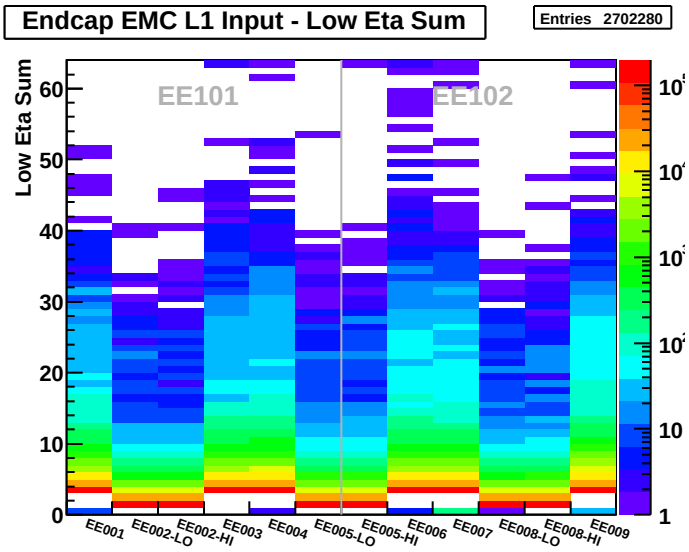

Barrel EMC L1 Input - Low Eta Sum
Entries 388
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

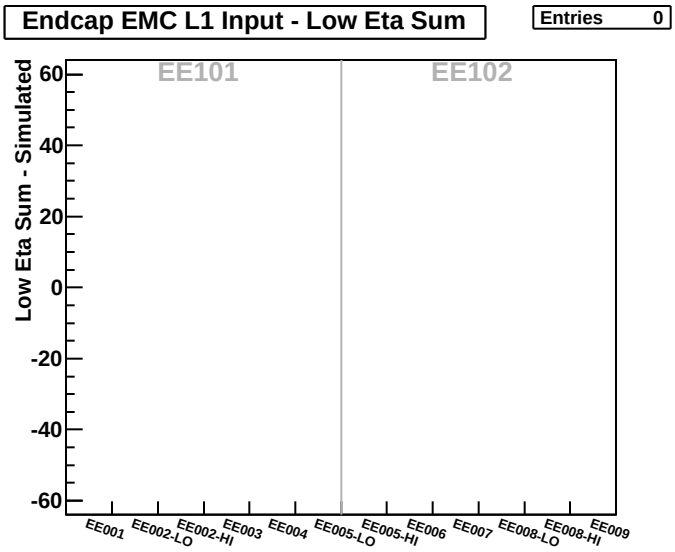

Barrel EMC L1 Input - High Eta Sum
Entries 8106840
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

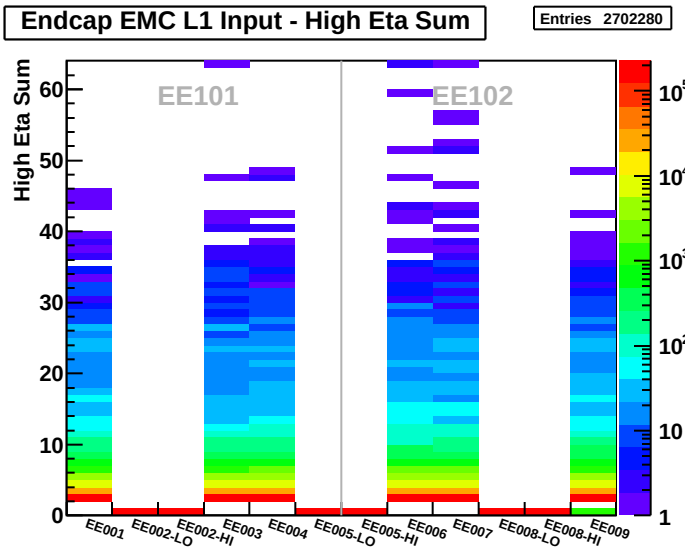

Barrel EMC L1 Input - High Eta Sum
Entries 6
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

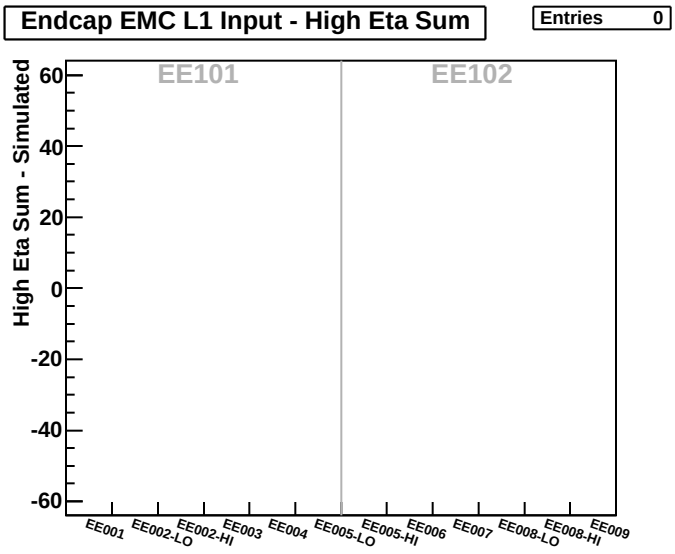

Barrel EMC L1 Input - High Tower Bits
Entries 8106840
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

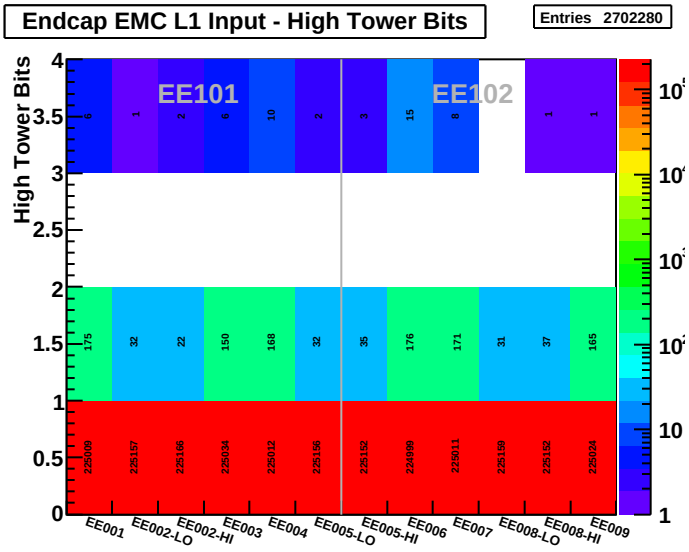

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

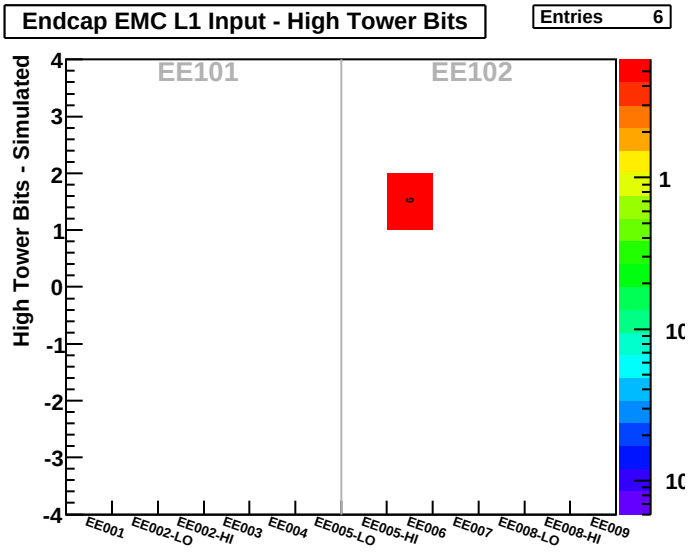

Endcap EMC L1 Input - Low Eta Sum
Entries 2702280
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

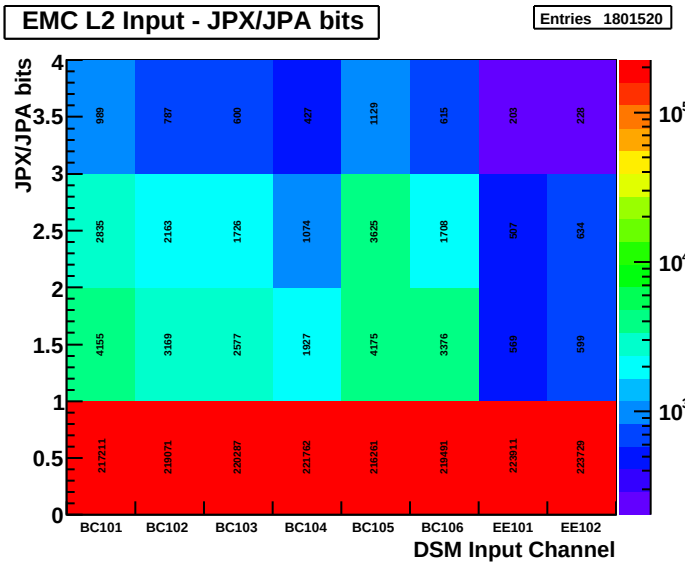

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

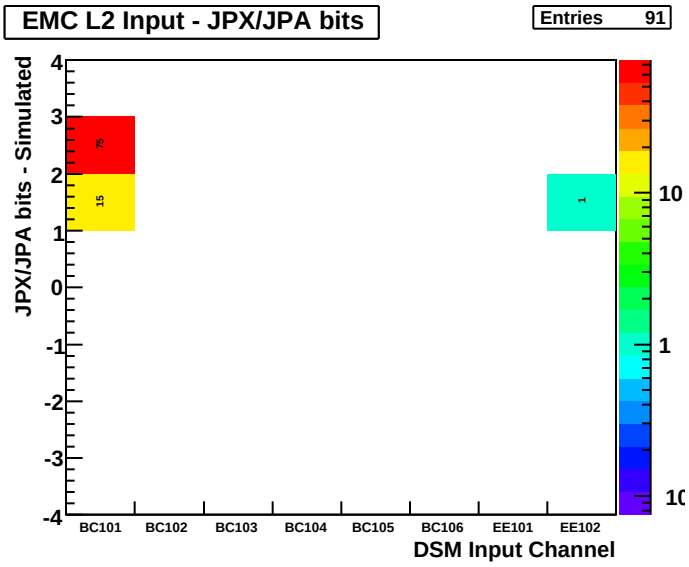

Endcap EMC L1 Input - High Eta Sum
Entries 2702280
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

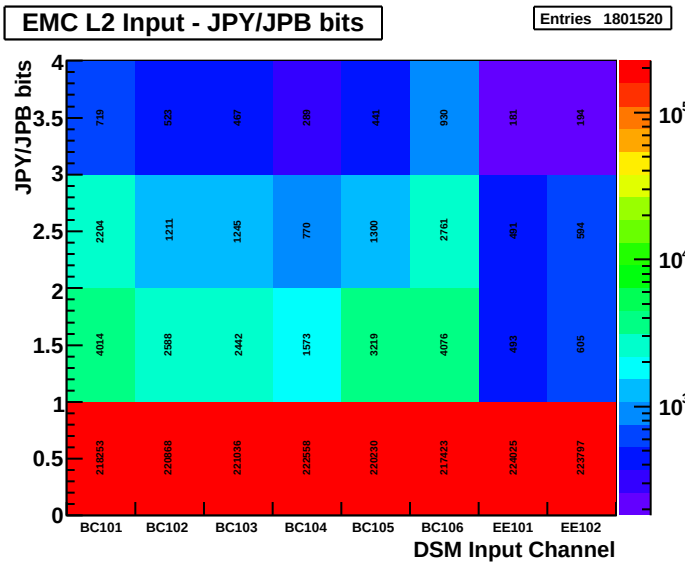

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

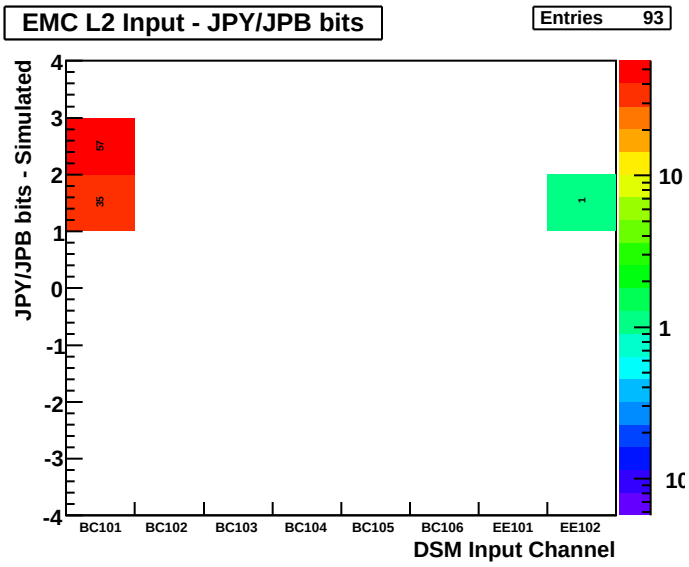

Endcap EMC L1 Input - High Tower Bits
Entries 2702280
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

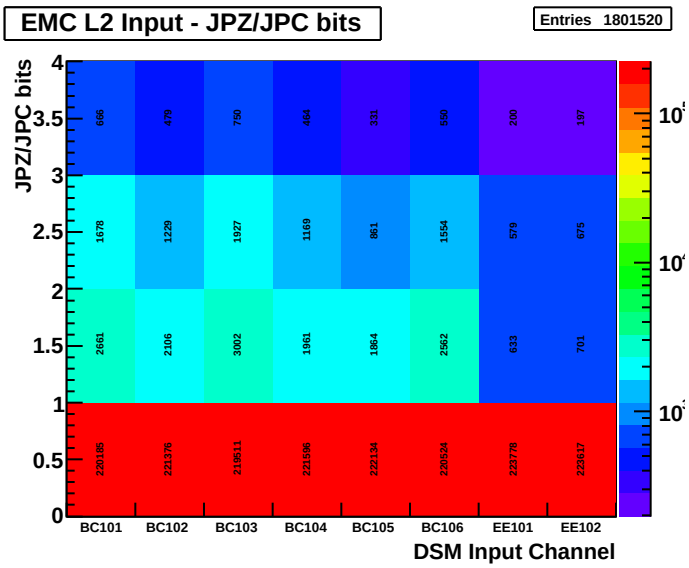

Endcap EMC L1 Input - High Tower Bits
Entries 6
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

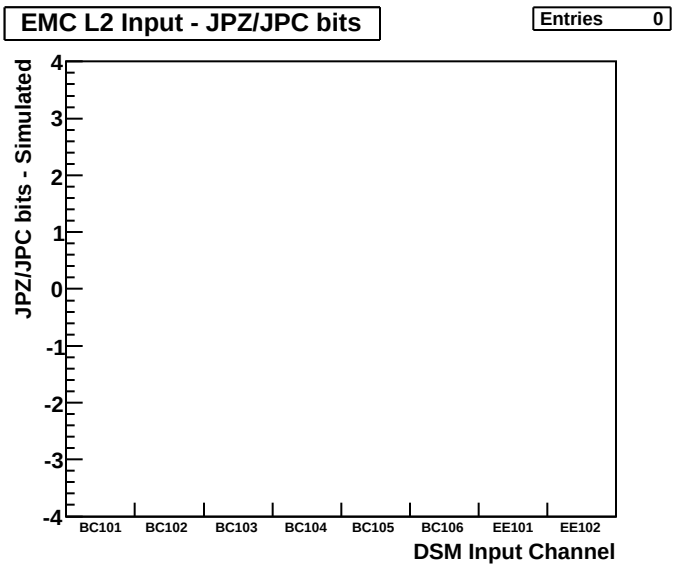

EMC L2 Input - JPX/JPA bits
Entries 1801520
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
989 787 600 427 1129 615 203 228
2835 2163 1736 1074 3625 1708 507 634
4155 3169 2577 1927 4175 3376 569 599
217211 219071 220287 221762 216261 219491 223911 223729

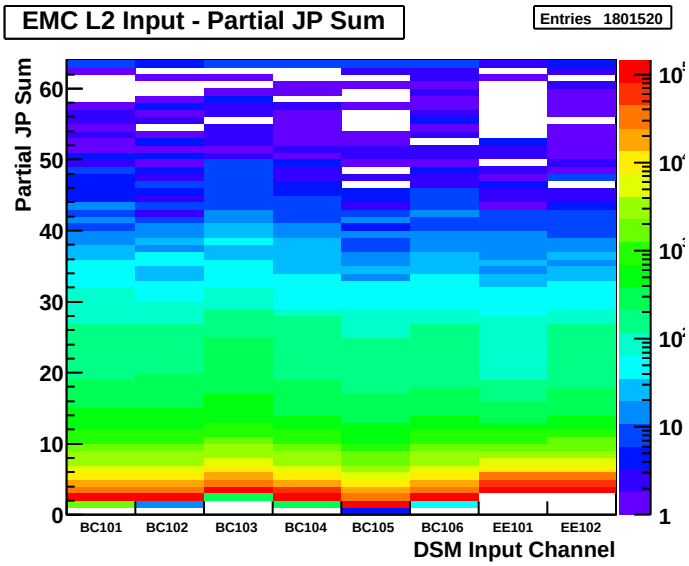

EMC L2 Input - JPX/JPA bits
Entries 91
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
75
15
1

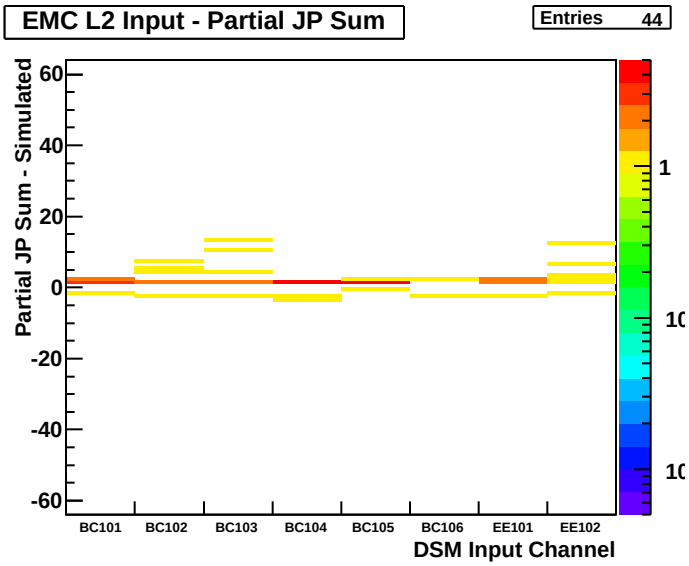

EMC L2 Input - JPY/JPB bits
Entries 1801520
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
719 522 467 288 441 930 181 194
2204 1211 1245 770 1300 2761 491 594
4014 2588 2442 1573 3219 4076 493 605
218253 220868 221036 222558 220230 217423 224025 223797

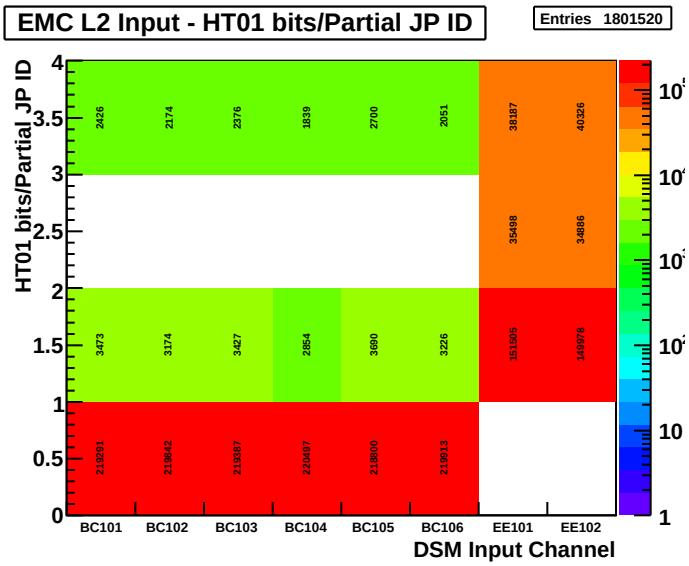

EMC L2 Input - JPY/JPB bits
Entries 93
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
57
35
1

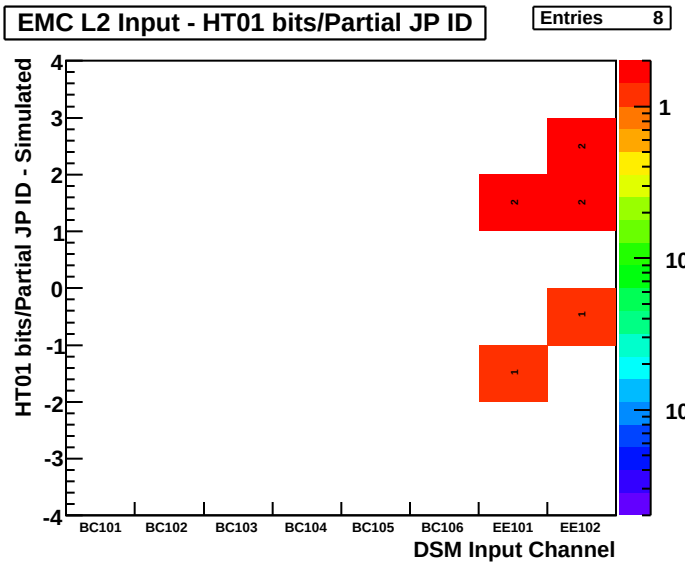

EMC L2 Input - JPZ/JPC bits
Entries 1801520
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
686 479 750 464 331 550 200 197
1678 1229 1927 1169 861 1554 579 675
2661 2106 3002 1961 1864 2562 633 701
220185 221376 219511 221596 222134 220524 223778 223617

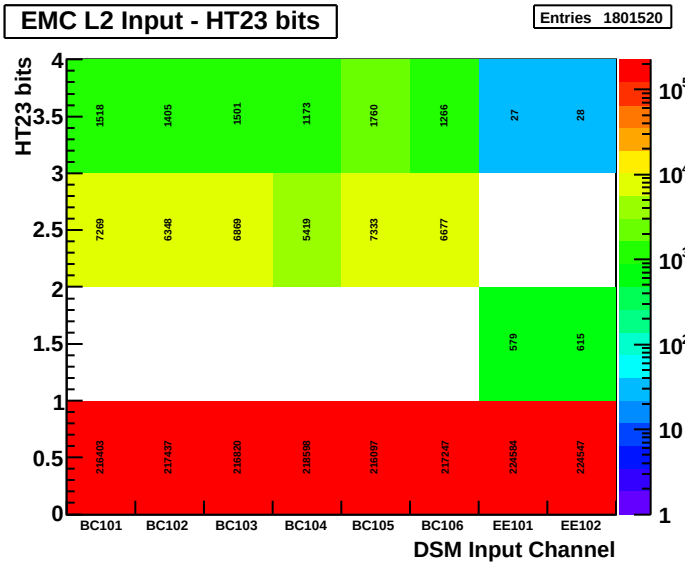

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

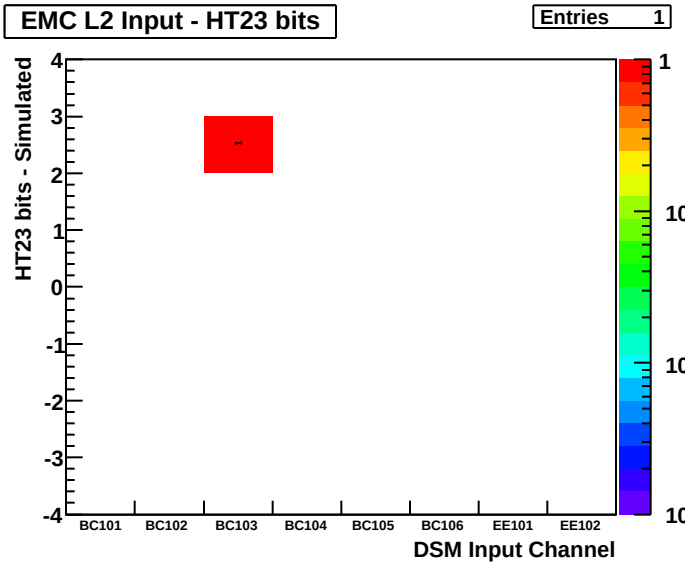

EMC L2 Input - Partial JP Sum
Entries 1801520
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

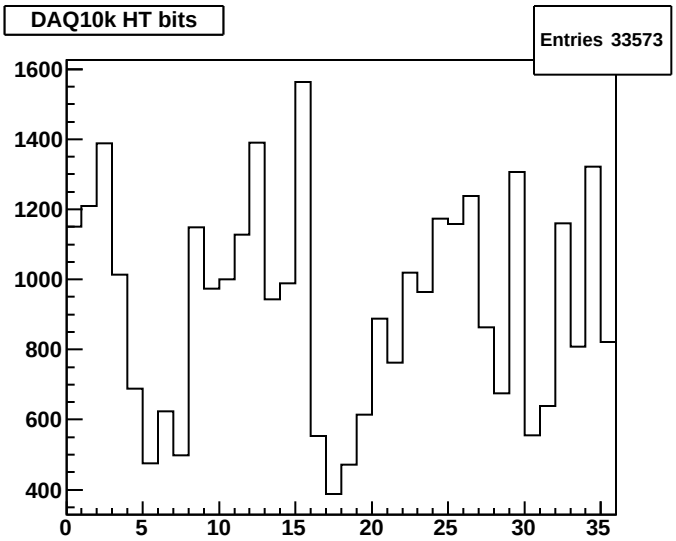

EMC L2 Input - Partial JP Sum
Entries 44
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

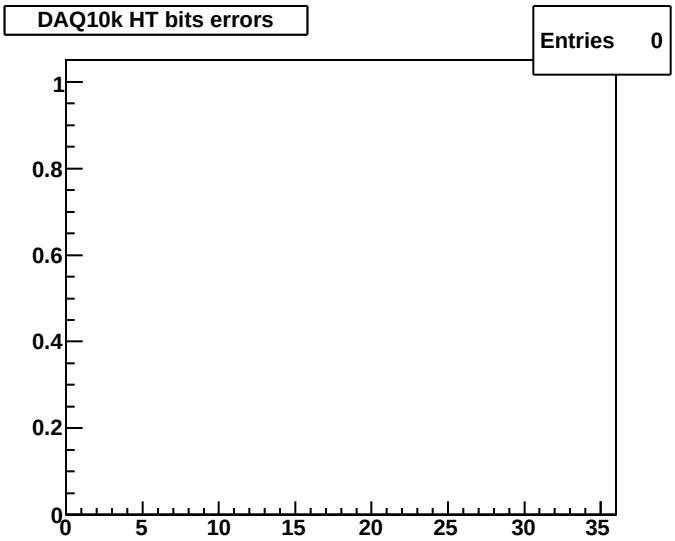

EMC L2 Input - HT01 bits/Partial JP ID
Entries 1801520
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

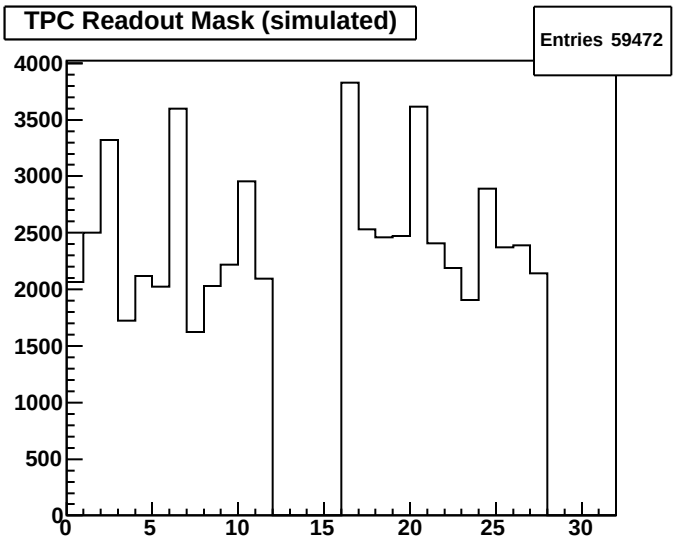

EMC L2 Input - HT01 bits/Partial JP ID
Entries 8
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

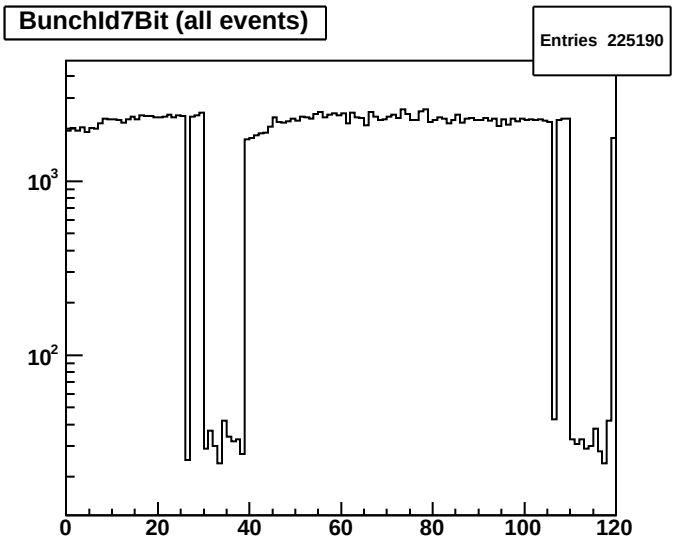

EMC L2 Input - HT23 bits
Entries 1801520
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

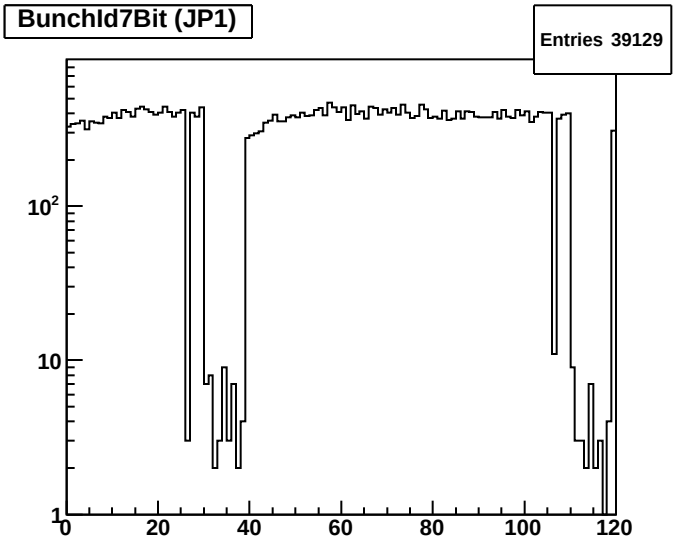

EMC L2 Input - HT23 bits
Entries 1
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

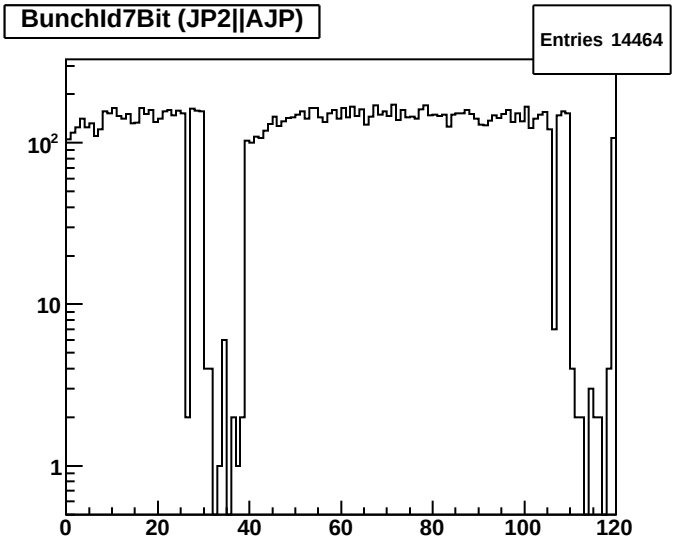

DAQ10k HT bits
Entries 33573

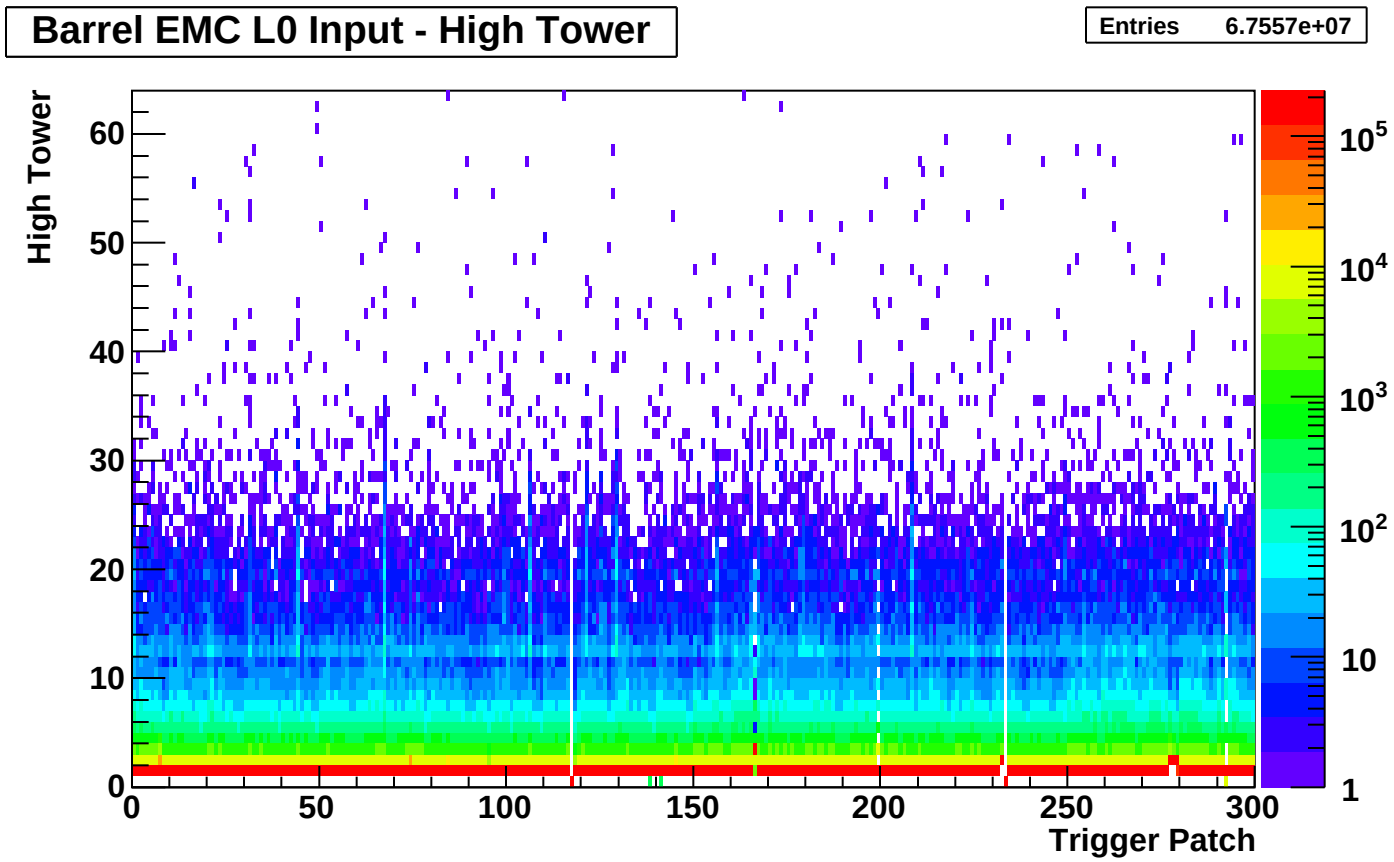

DAQ10k HT bits errors
Entries 0

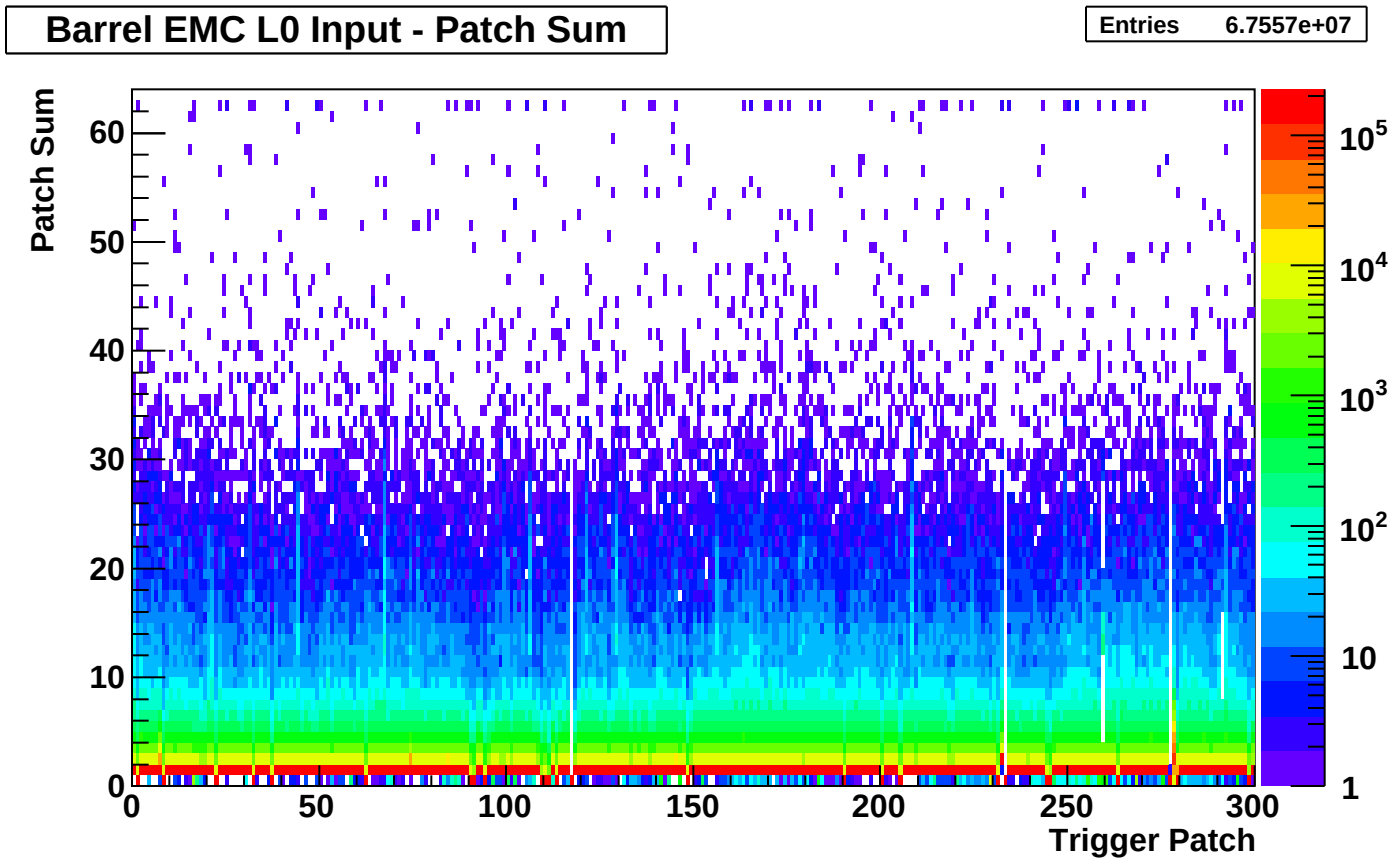

TPC Readout Mask (simulated)
Entries 59472

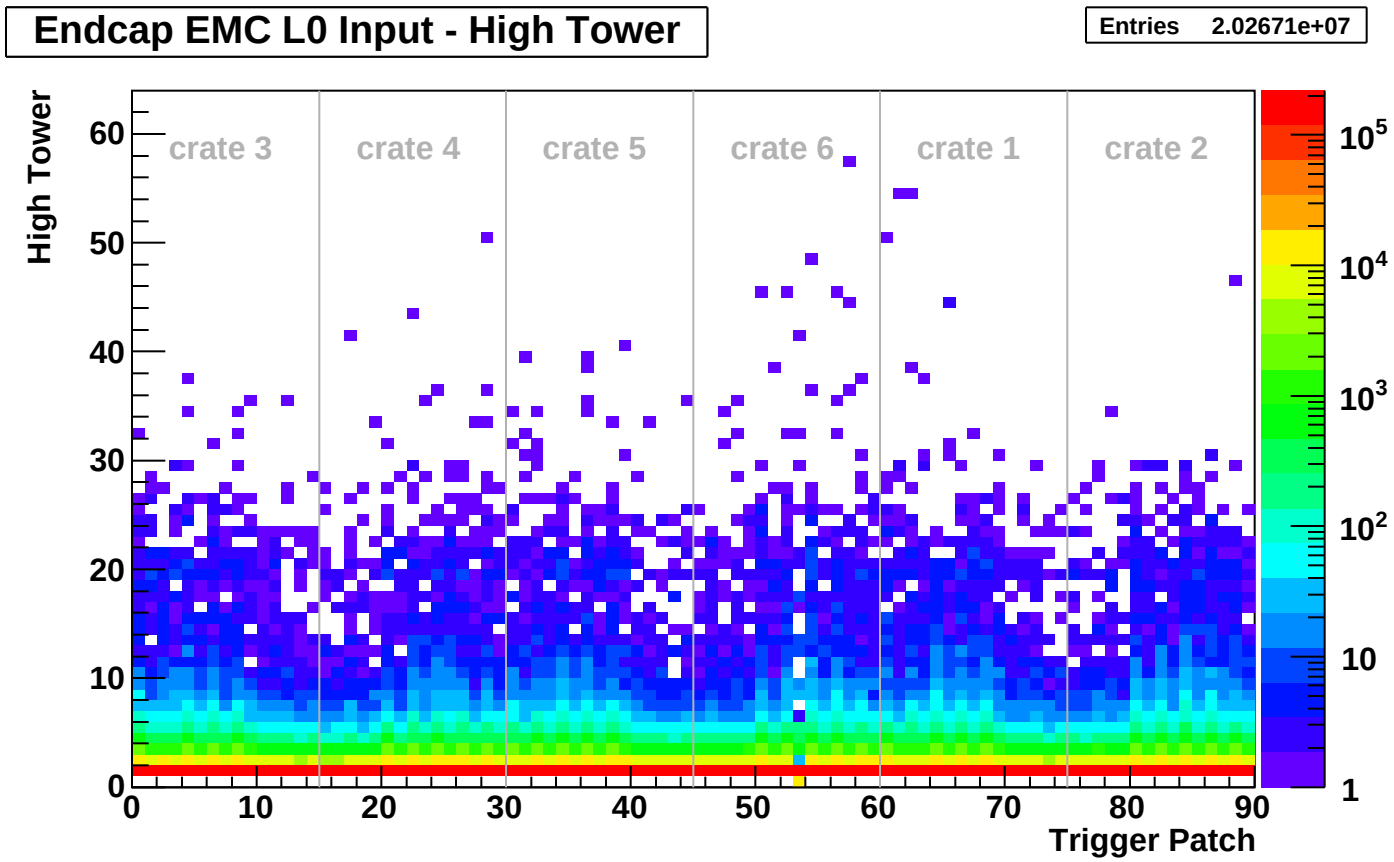

BunchId7Bit (all events)
Entries 225190

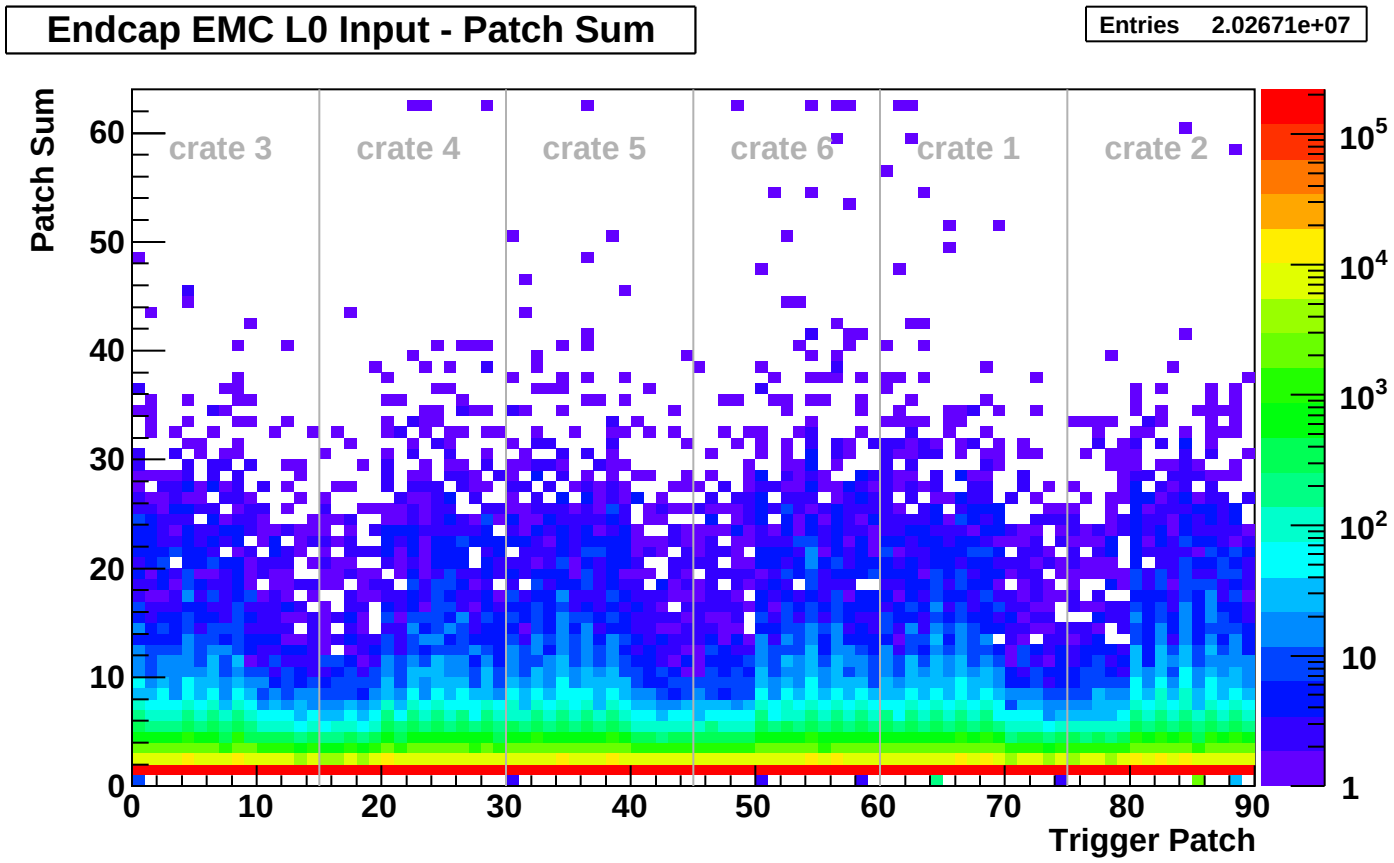

BunchId7Bit (JP1)
Entries 39129

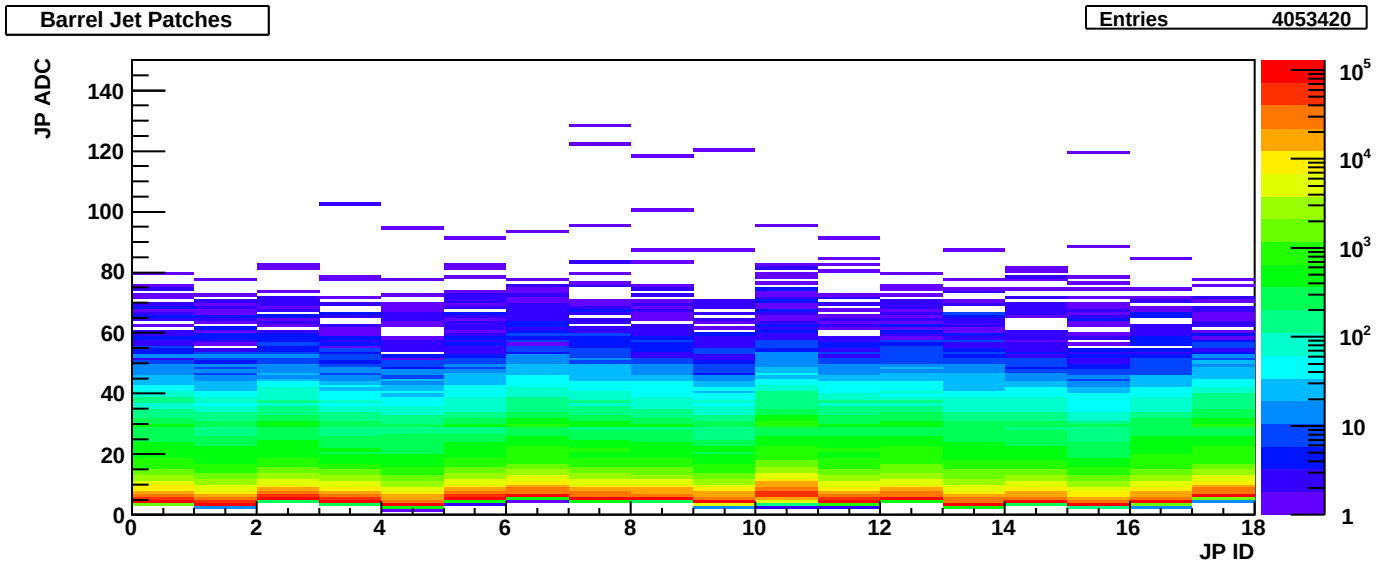

BunchId7Bit (JP2||AJP)
Entries 14464

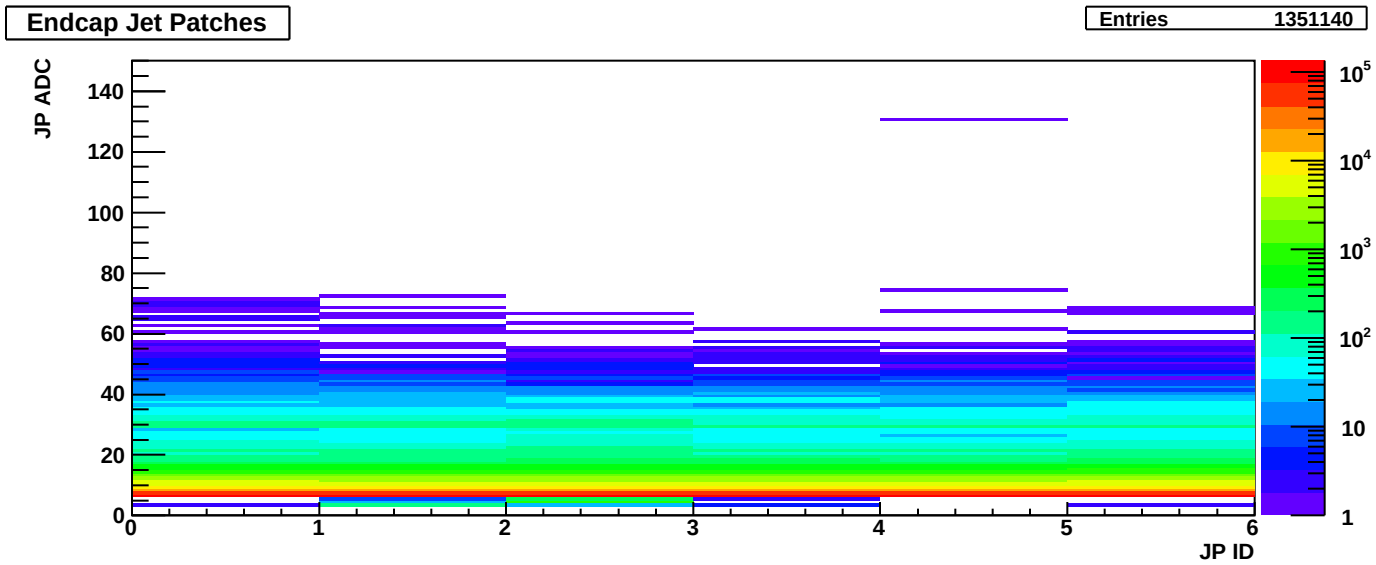

Barrel EMC L0 Input - High Tower
Entries 6.7557e+07
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

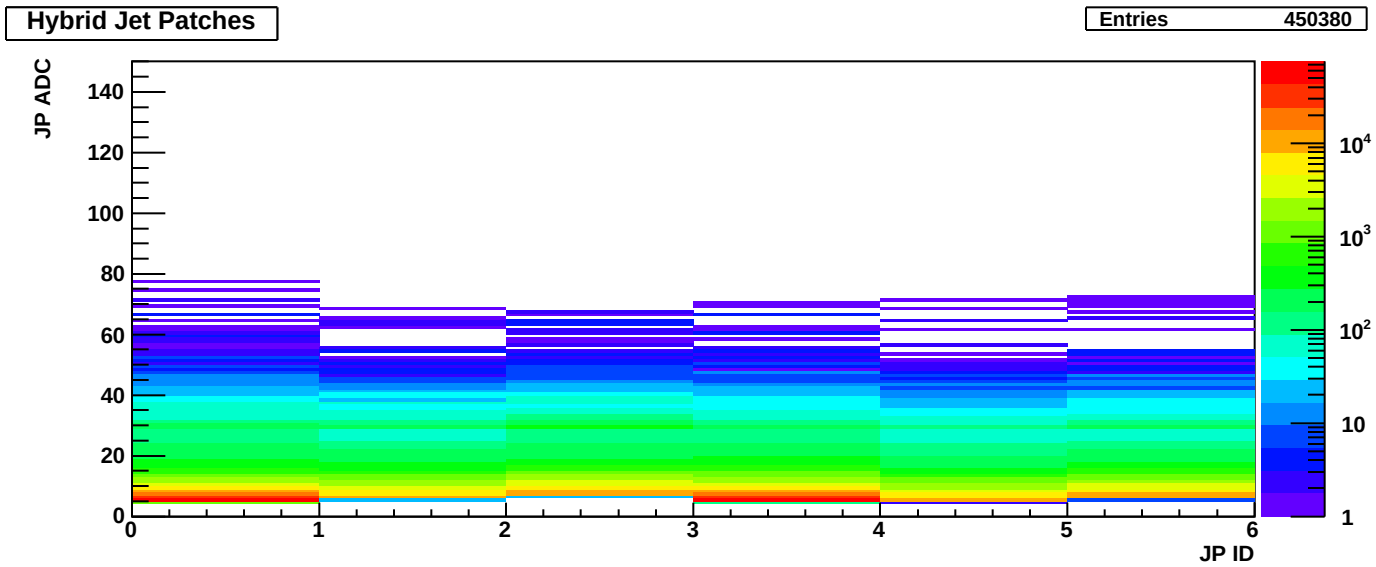

Barrel EMC L0 Input - Patch Sum
Entries 6.7557e+07
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
$10^2$
$10^3$
$10^4$
$10^5$

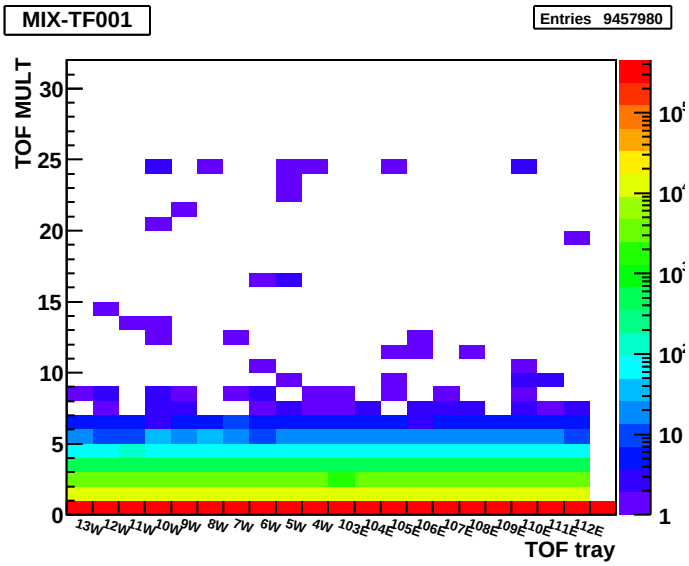

Endcap EMC L0 Input - High Tower
Entries 2.02671e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

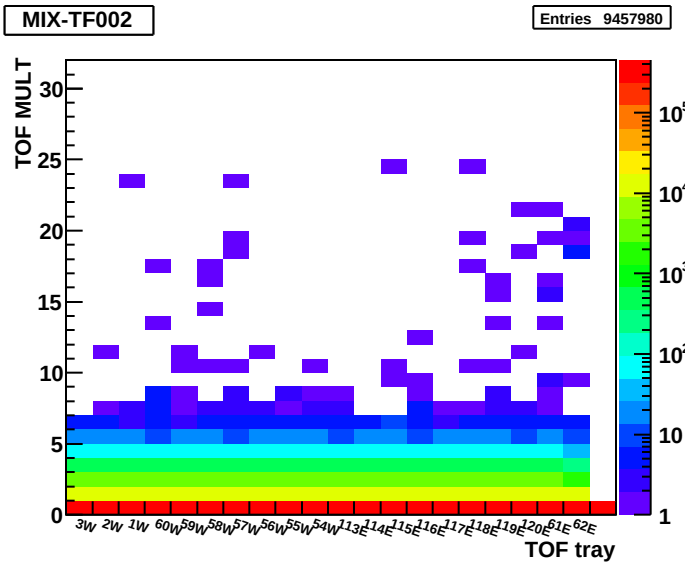

Endcap EMC L0 Input - Patch Sum
Entries 2.02671e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

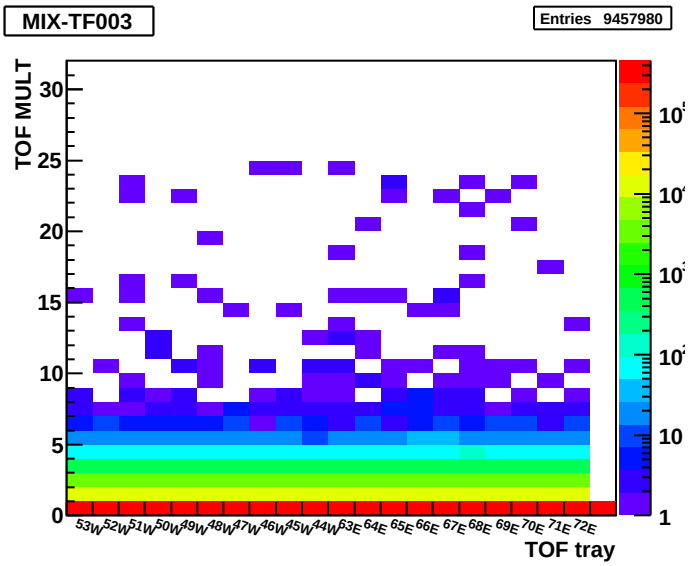

Barrel Jet Patches
Entries 4053420
JP ADC
JP ID

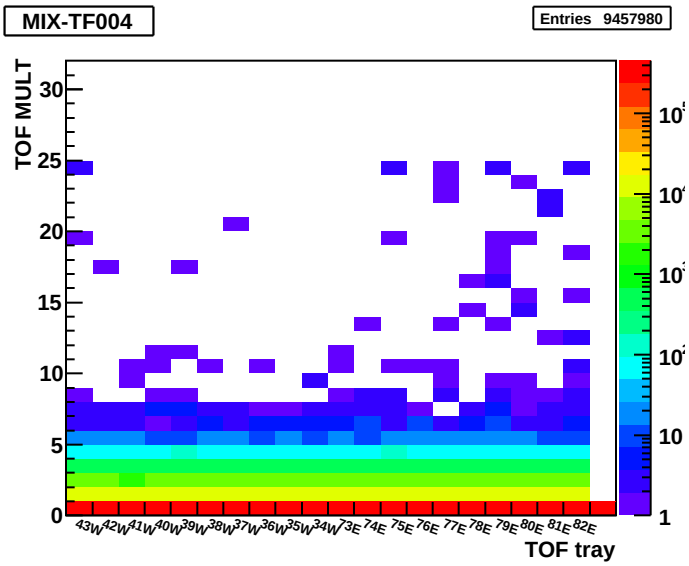

Endcap Jet Patches
Entries 1351140
JP ADC
JP ID

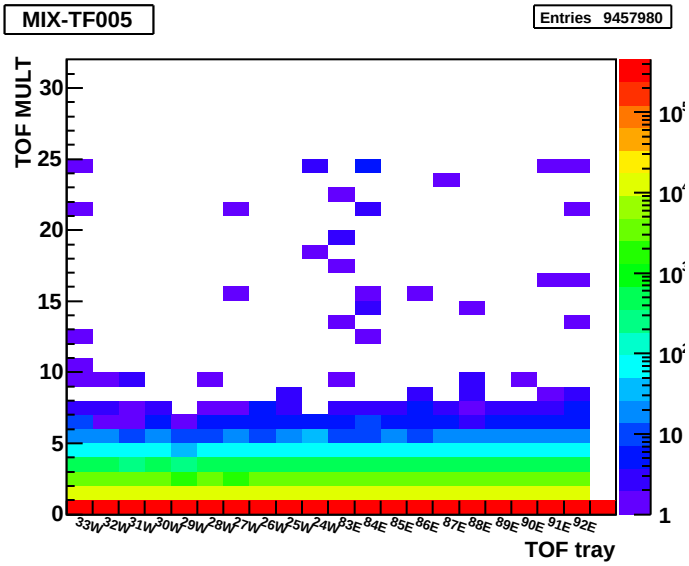

Hybrid Jet Patches
Entries 450380
JP ADC
JP ID

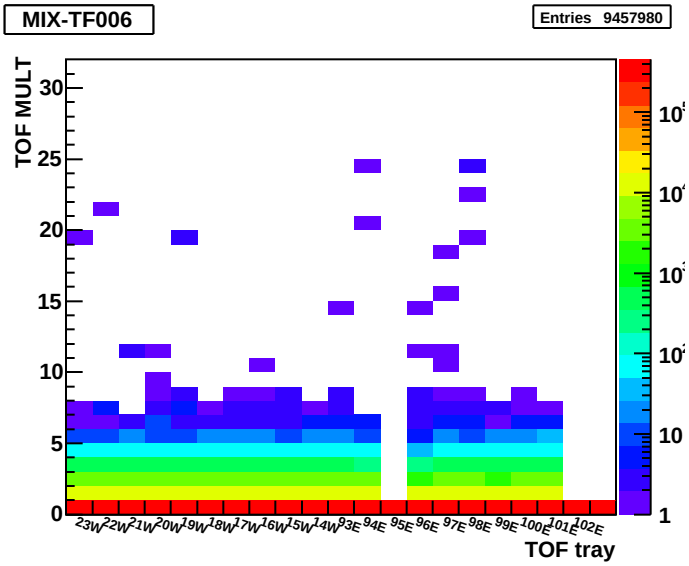

MIX-TF001
Entries 9457980
TOF MULT
TOF tray

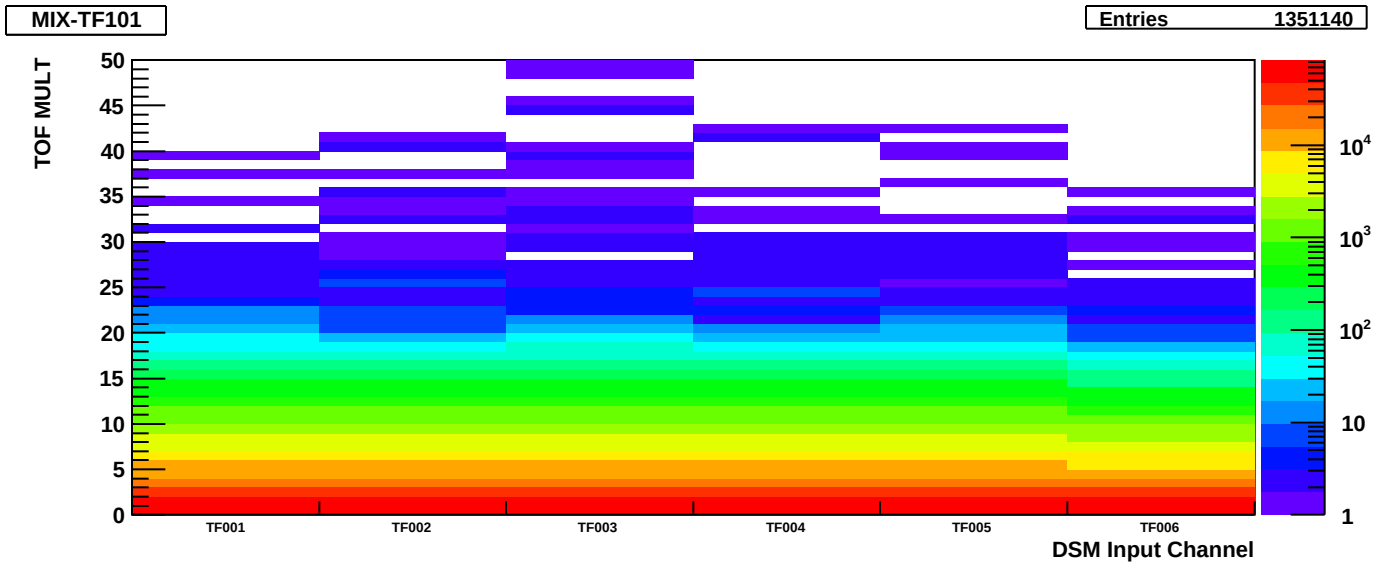

MIX-TF002
Entries 9457980
TOF MULT
TOF tray

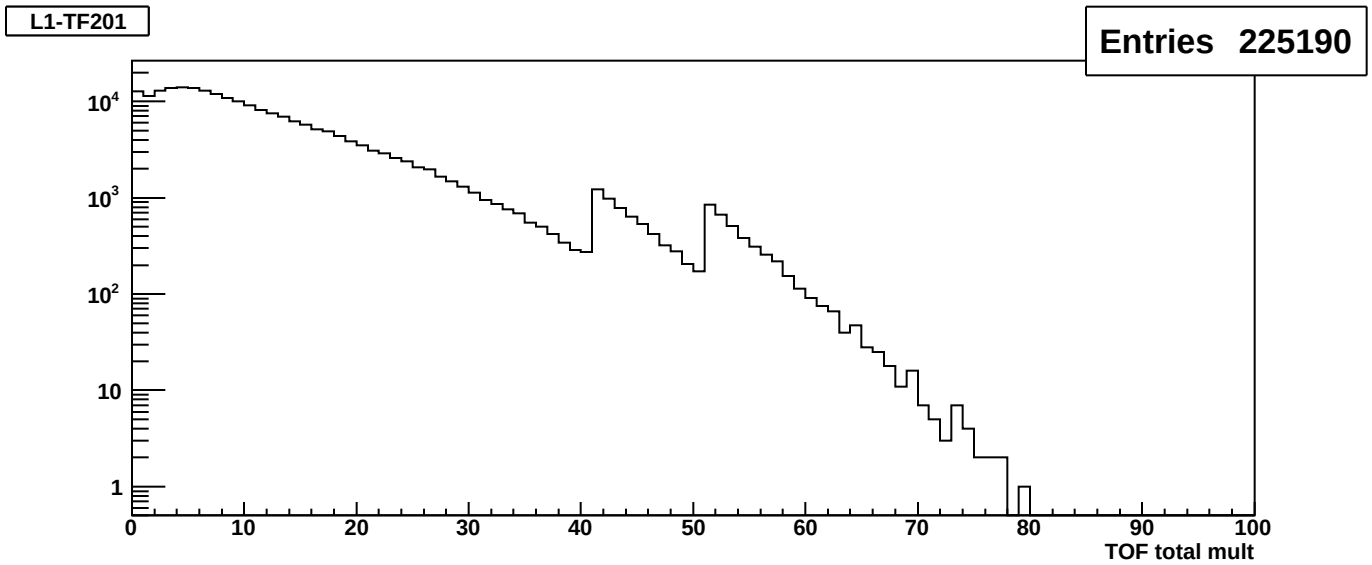

MIX-TF003
Entries 9457980
TOF MULT
TOF tray

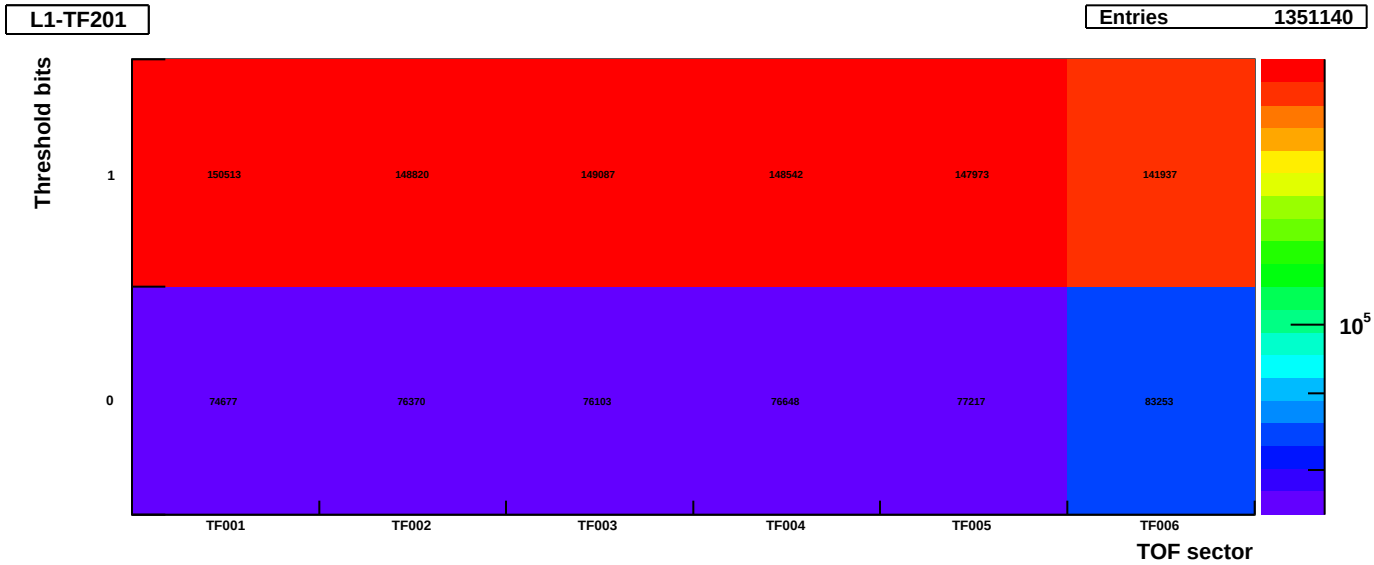

MIX-TF004
Entries 9457980
TOF MULT
TOF tray

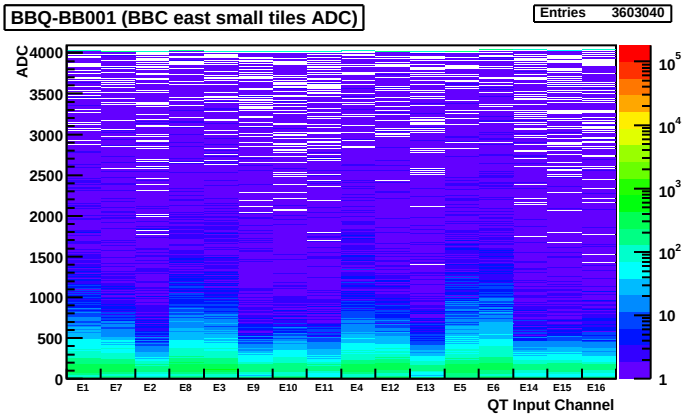

MIX-TF005
Entries 9457980
TOF MULT
TOF tray

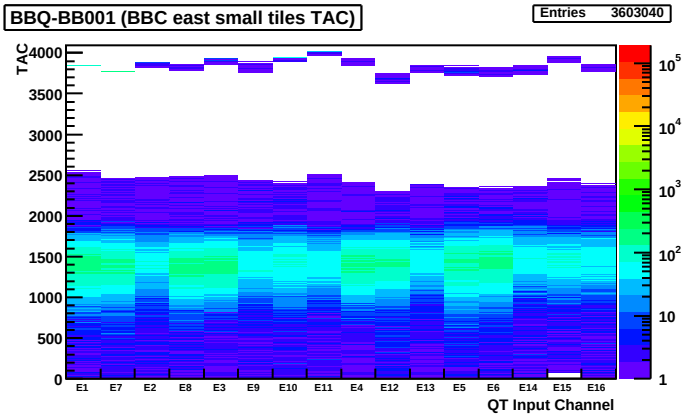

MIX-TF006
Entries 9457980
TOF MULT
TOF tray

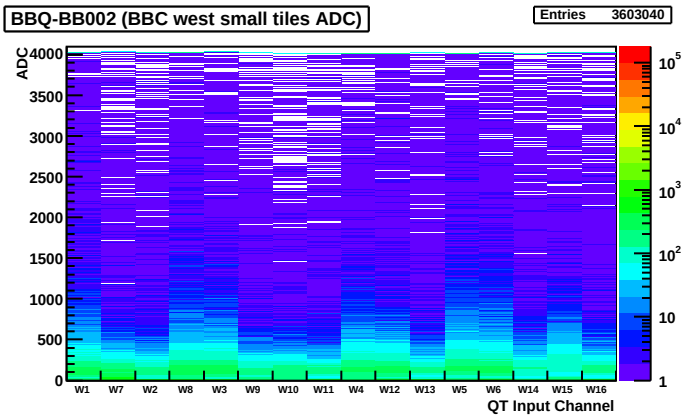

MIX-TF101
Entries 1351140
TOF MULT
DSM Input Channel
TF001
TF002
TF003
TF004
TF005
TF006

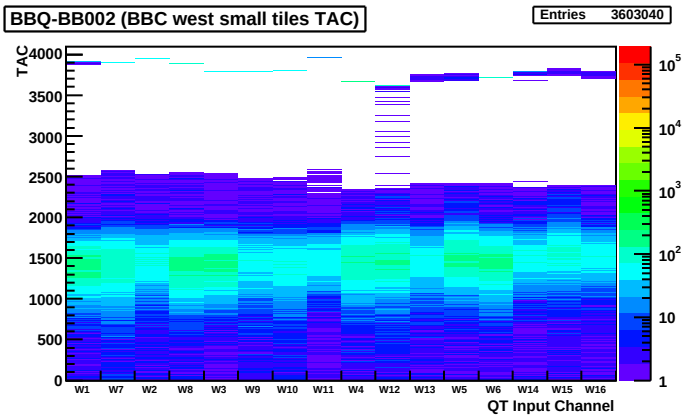

L1-TF201
Entries 225190
TOF total mult

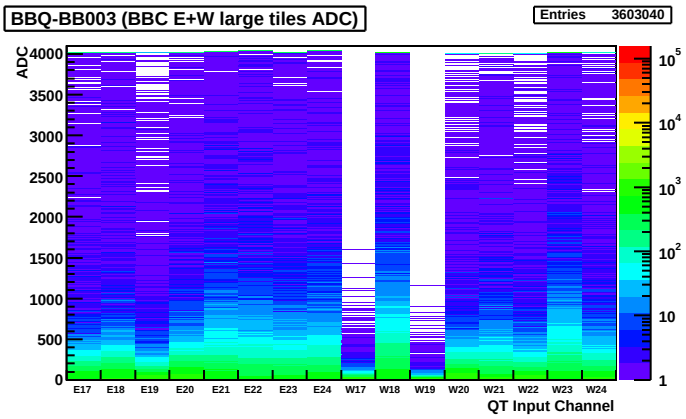

L1-TF201
Entries 1351140
Threshold bits
150513
148820
149087
148542
147973
141937
74677
76370
76103
76648
77217
83253
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

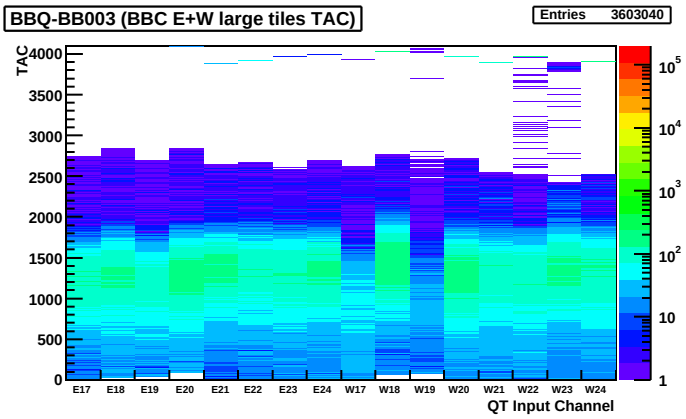

BBQ-BB001 (BBC east small tiles ADC)
Entries 3603040
ADC
QT Input Channel

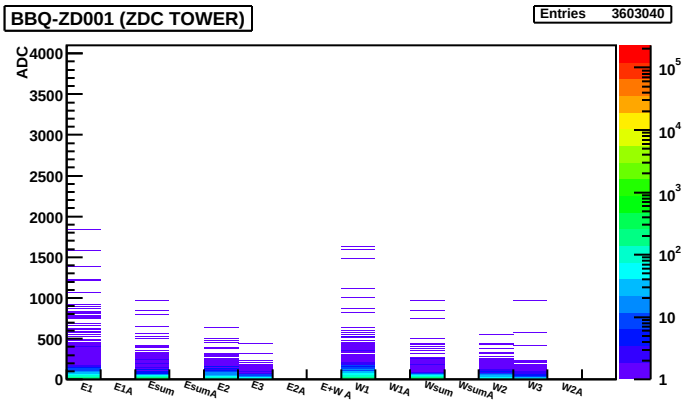

BBQ-BB001 (BBC east small tiles TAC)
Entries 3603040
TAC
QT Input Channel

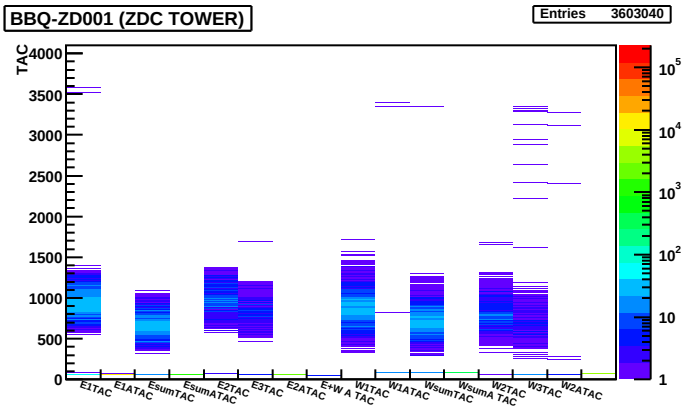

BBQ-BB002 (BBC west small tiles ADC)
Entries 3603040
ADC
QT Input Channel

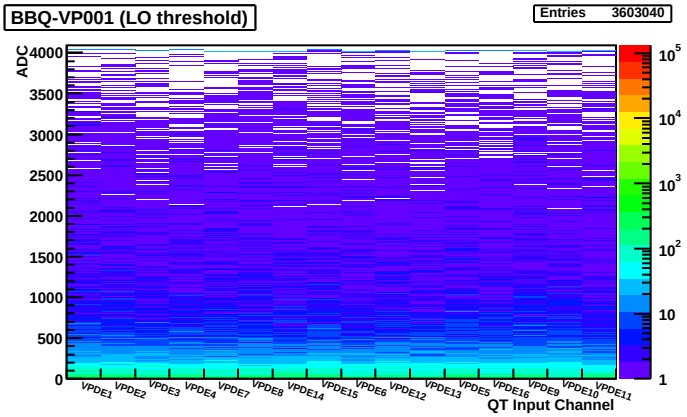

BBQ-BB002 (BBC west small tiles TAC)
Entries 3603040
TAC
QT Input Channel

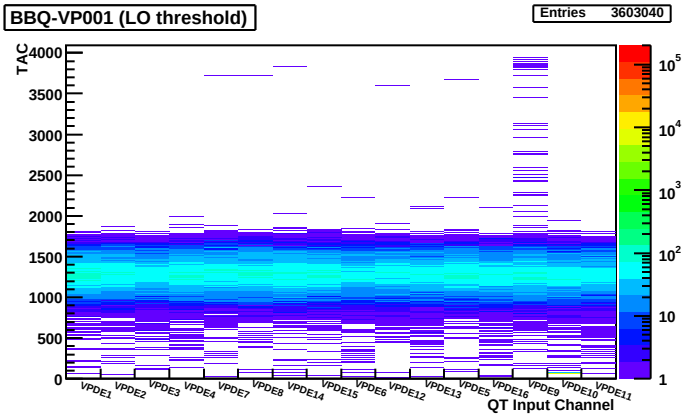

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 3603040
ADC
QT Input Channel

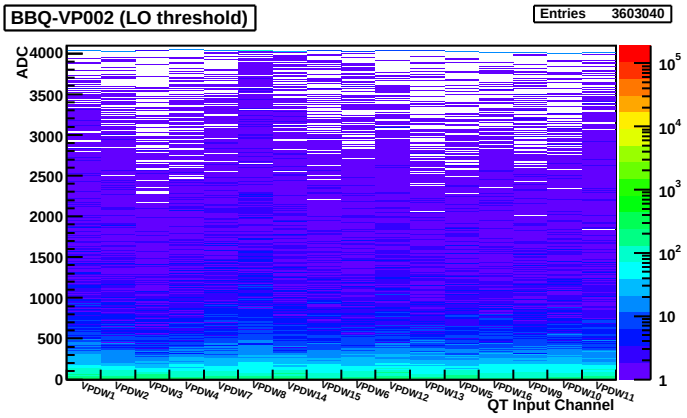

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 3603040
TAC
QT Input Channel

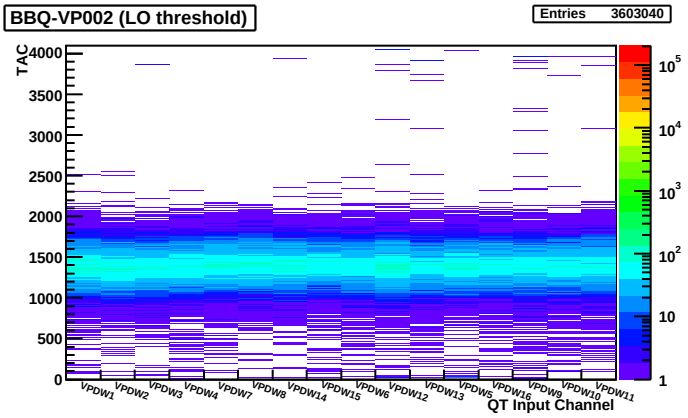

BBQ-ZD001 (ZDC TOWER)
Entries 3603040
ADC

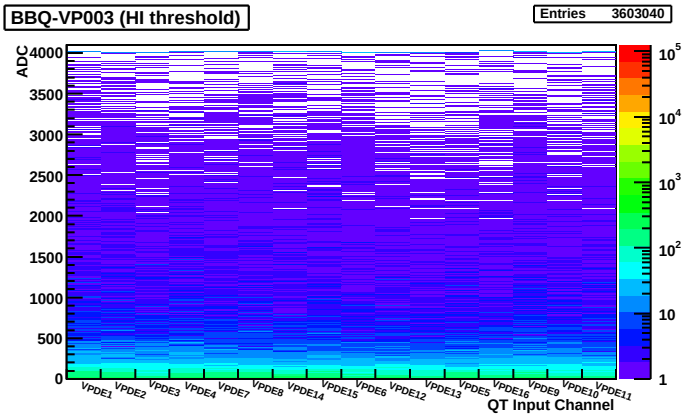

BBQ-ZD001 (ZDC TOWER)
Entries 3603040
TAC

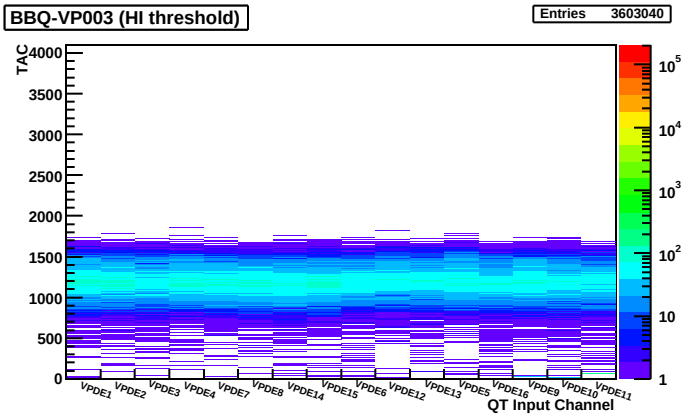

BBQ-VP001 (LO threshold)
Entries 3603040
ADC
QT Input Channel

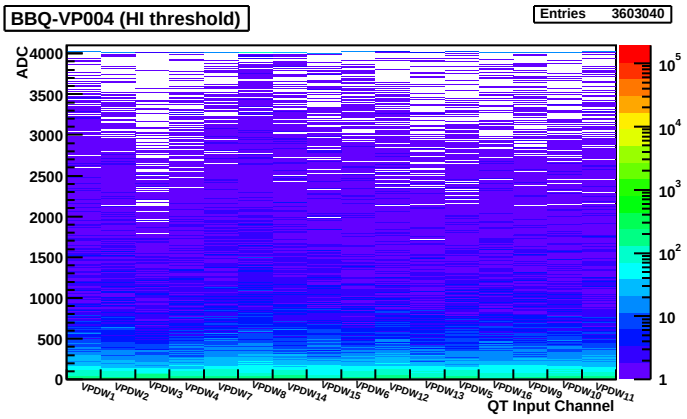

BBQ-VP001 (LO threshold)
Entries 3603040
TAC
QT Input Channel

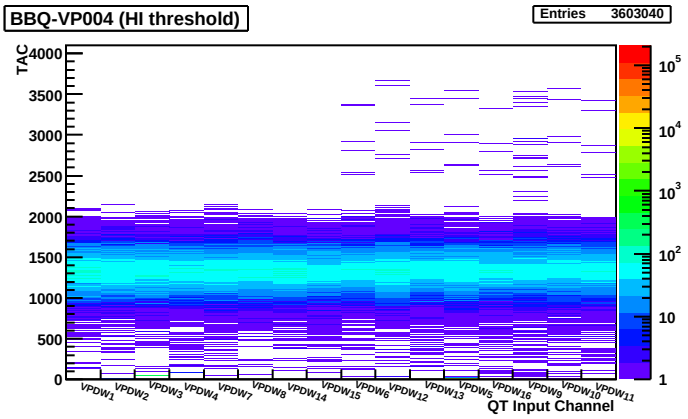

BBQ-VP002 (LO threshold)
Entries 3603040
ADC
QT Input Channel

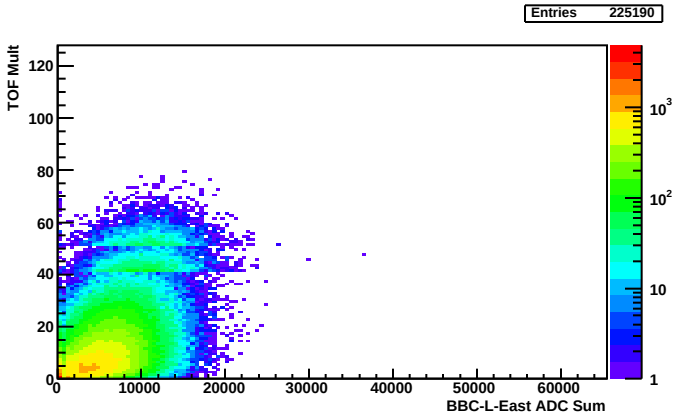

BBQ-VP002 (LO threshold)
Entries 3603040
TAC
QT Input Channel

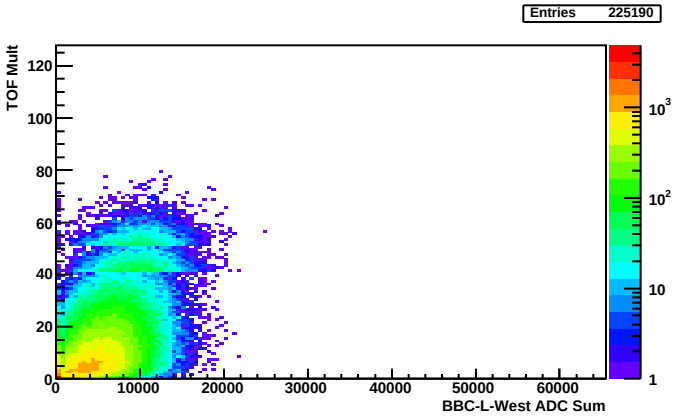

BBQ-VP003 (HI threshold)
Entries 3603040
ADC
QT Input Channel

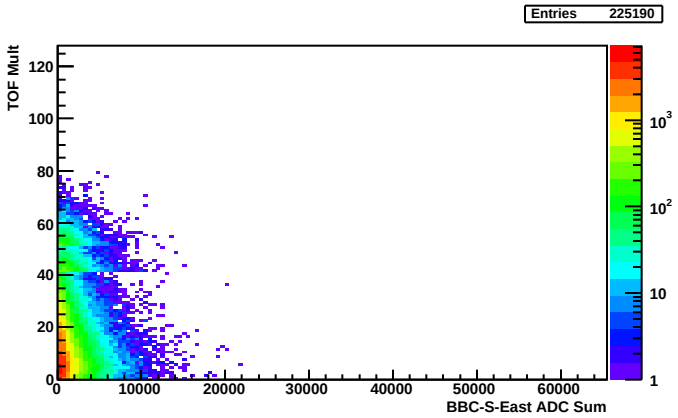

BBQ-VP003 (HI threshold)
Entries 3603040
TAC
QT Input Channel

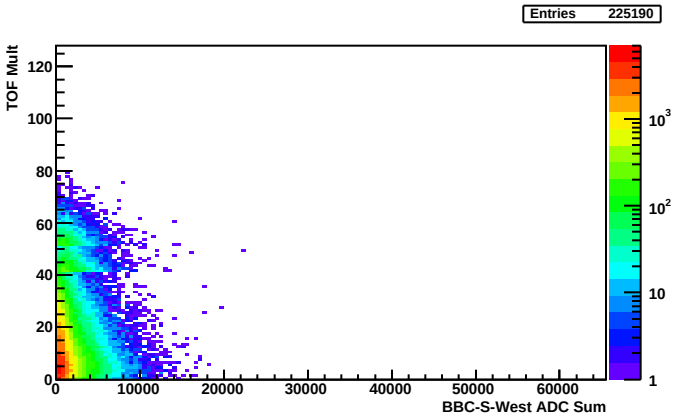

BBQ-VP004 (HI threshold)
Entries 3603040
ADC
QT Input Channel

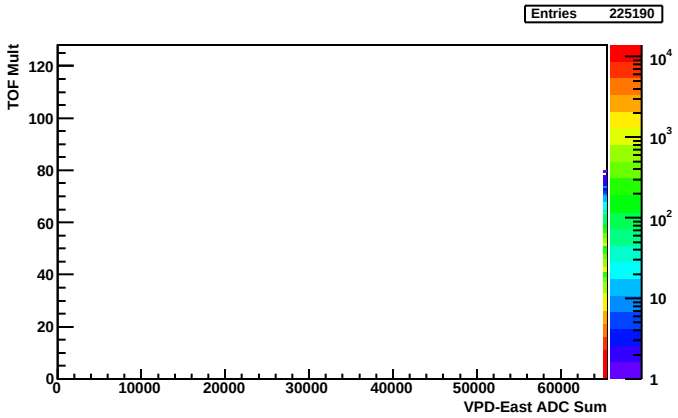

BBQ-VP004 (HI threshold)
Entries 3603040
TAC
QT Input Channel

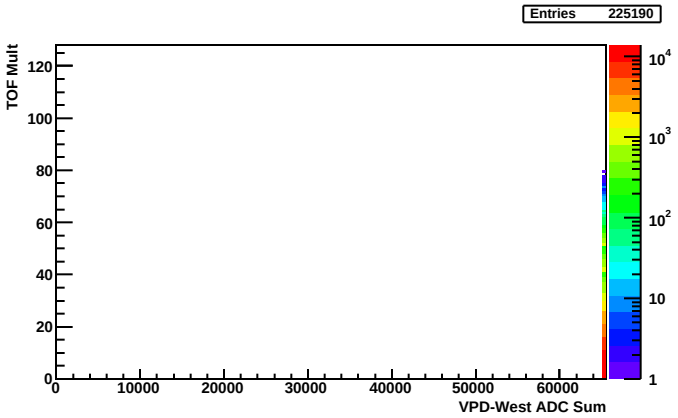

Entries 225190
TOF Mult
BBC-L-East ADC Sum

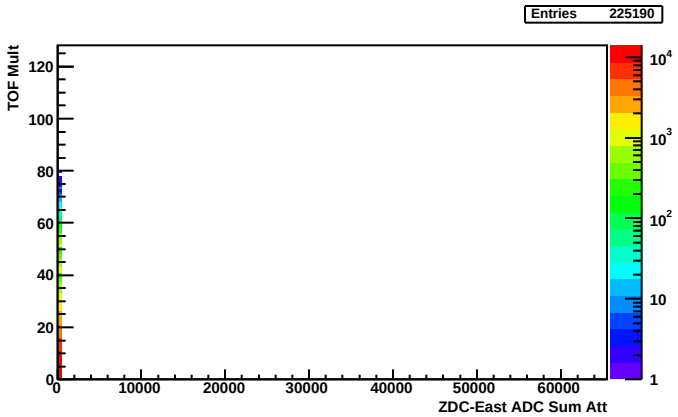

Entries 225190
TOF Mult
BBC-L-West ADC Sum

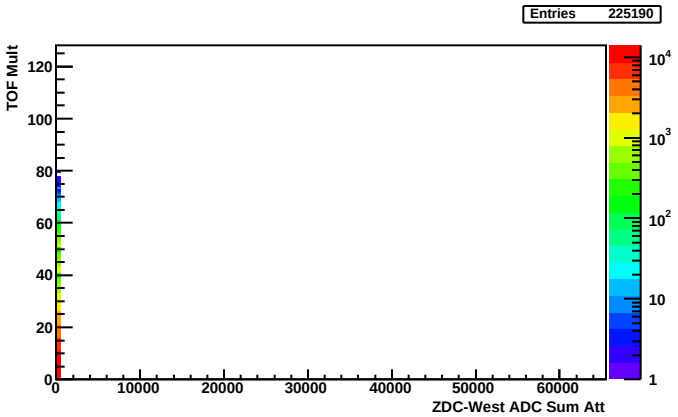

Entries 225190
TOF Mult
BBC-S-East ADC Sum

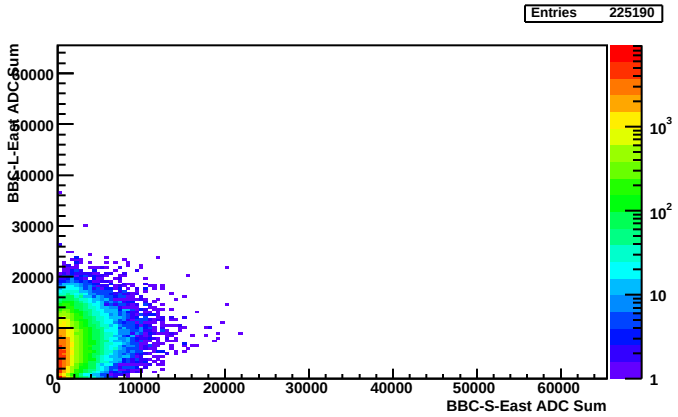

Entries 225190
TOF Mult
BBC-S-West ADC Sum

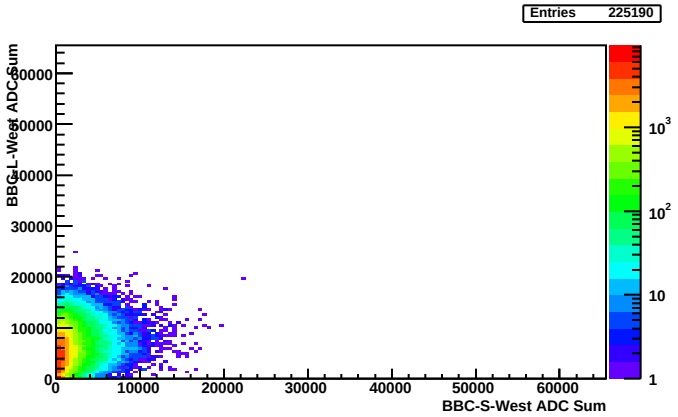

Entries 225190
TOF Mult
VPD-East ADC Sum

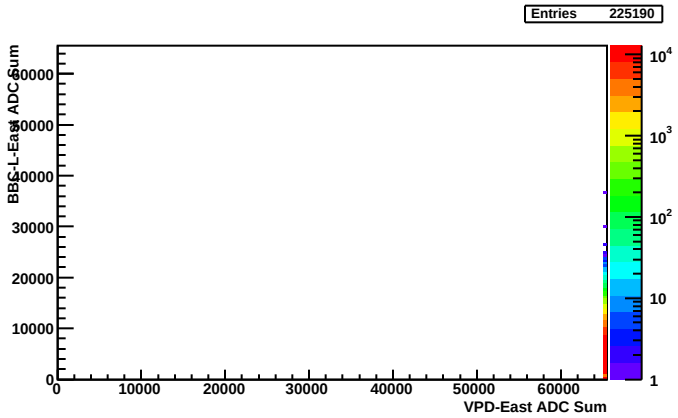

Entries 225190
TOF Mult
VPD-West ADC Sum

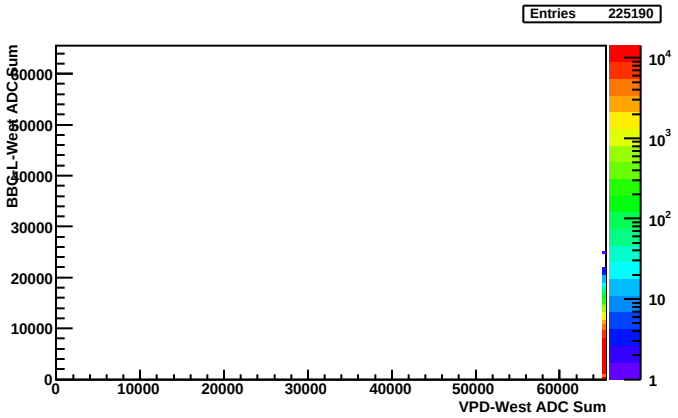

Entries 225190
TOF Mult
ZDC-East ADC Sum Att

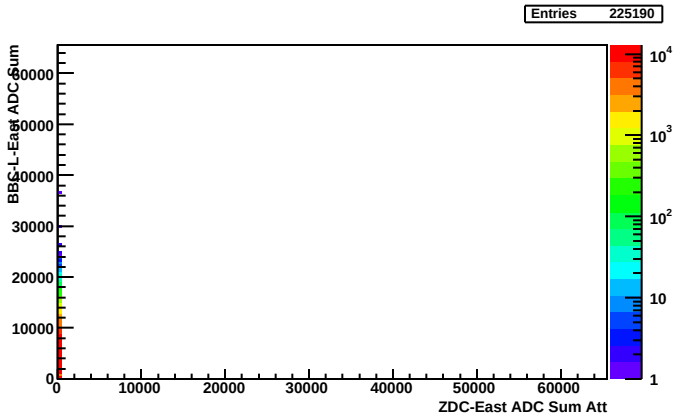

Entries 225190
TOF Mult
ZDC-West ADC Sum Att

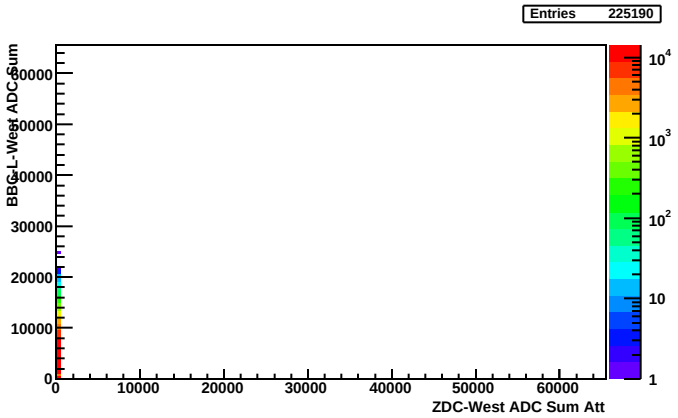

Entries 225190
BBC-L-East ADC Sum
BBC-S-East ADC Sum


Entries 225190
BBC-L-West ADC Sum
BBC-S-West ADC Sum


Entries 225190
BBC-L-East ADC Sum
VPD-East ADC Sum


Entries 225190
BBC-L-West ADC Sum
VPD-West ADC Sum


Entries 225190
BBC-L-East ADC Sum
ZDC-East ADC Sum Att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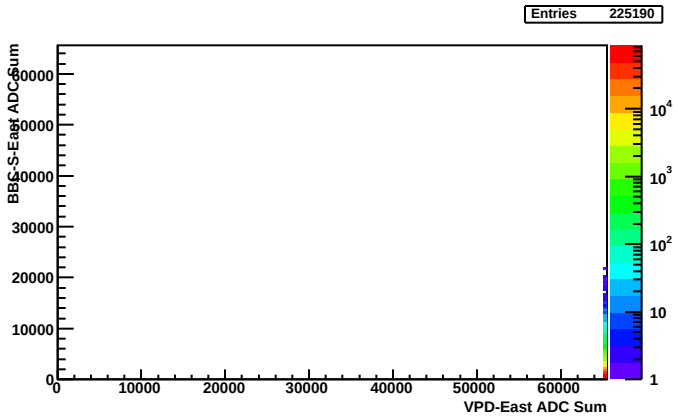
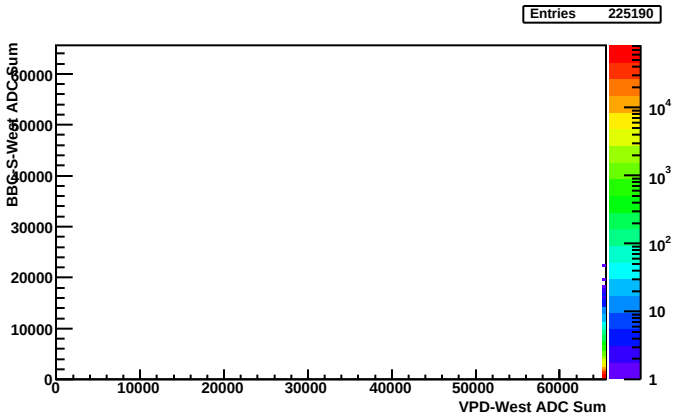
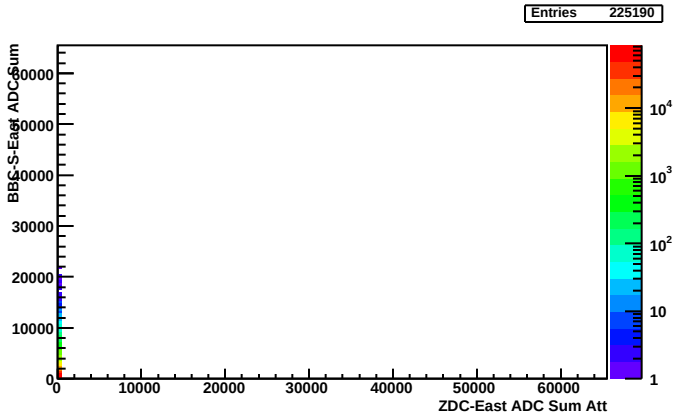
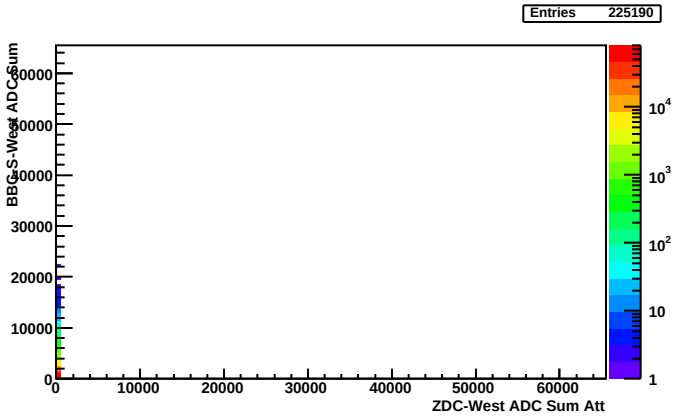
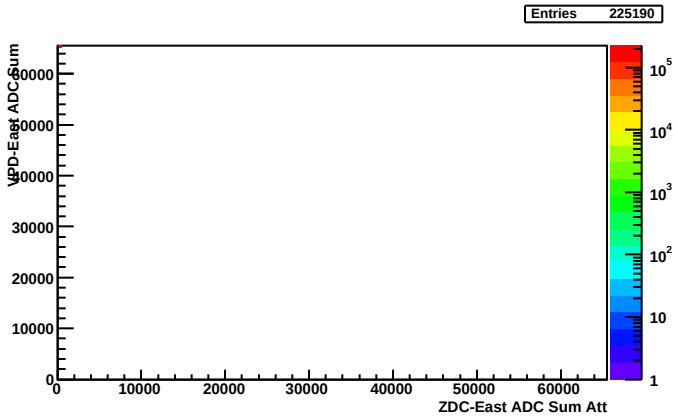
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

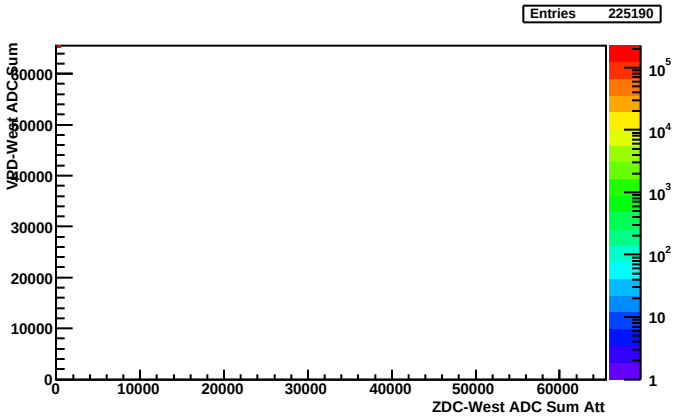

Entries 225190
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 225190
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 225190
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 225190
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 225190
VPD-East ADC Sum
ZDC-East ADC Sum Att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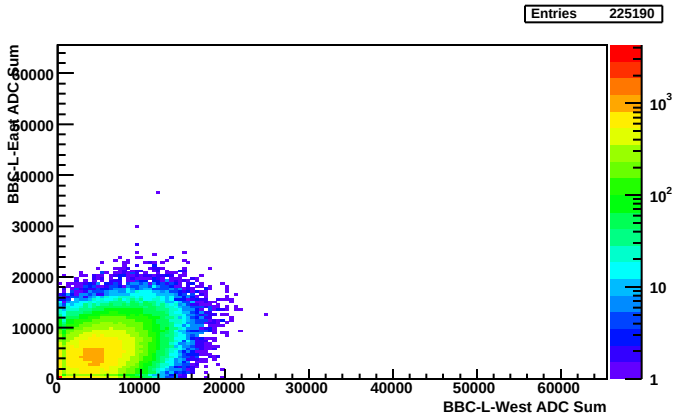
VPD-West ADC Sum
ZDC-West ADC Sum Att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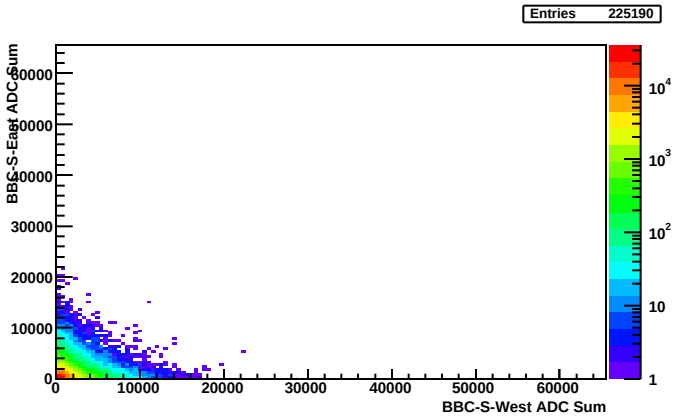
BBC-L-East ADC Sum
BBC-L-West ADC Sum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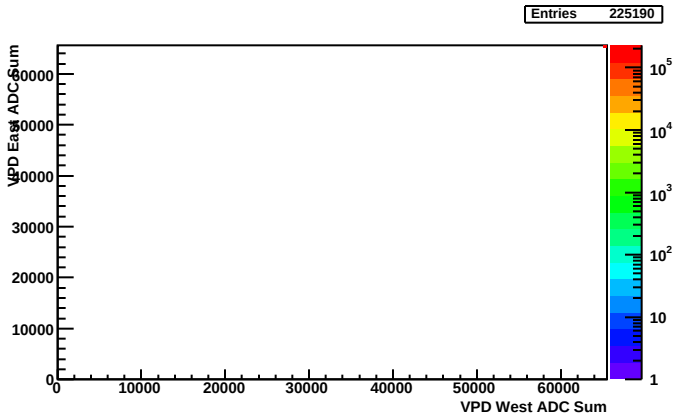
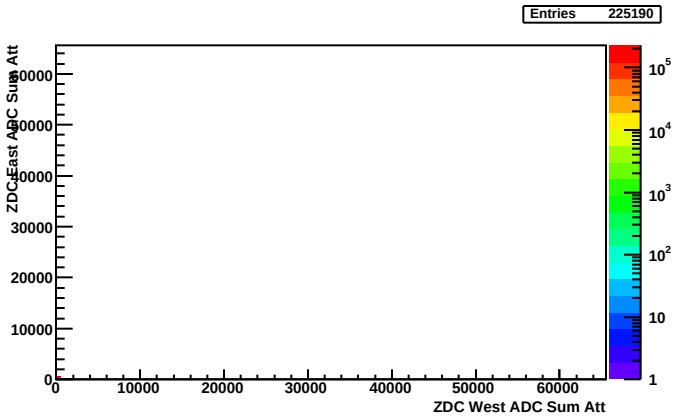
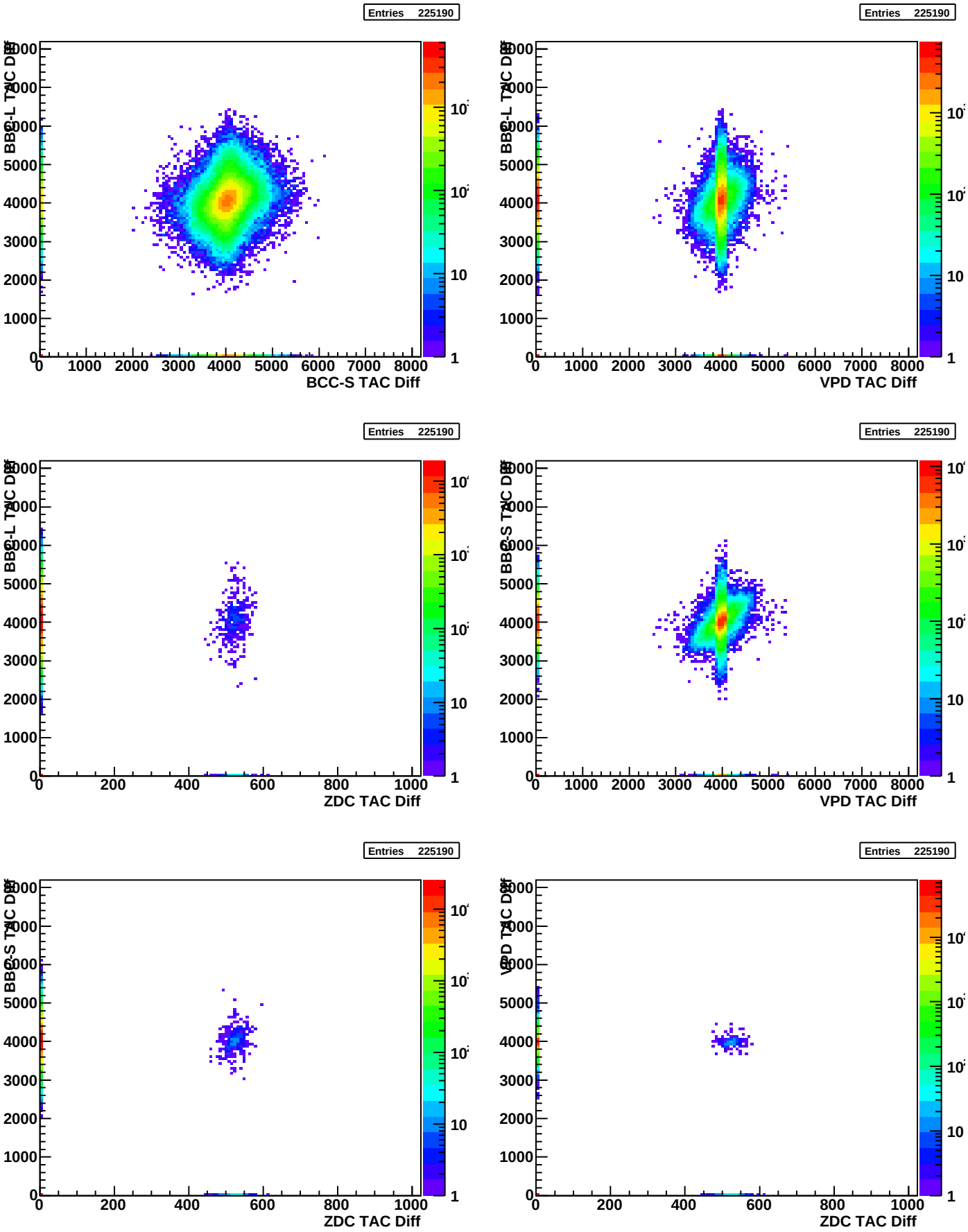
BBC-S-East ADC Sum
BBC-S-West ADC Sum


Entries 225190
VPD East ADC Sum
VPD West ADC Sum


Entries 225190
ZDC East ADC Sum Att
ZDC West ADC Sum Att


Entries 225190
BBC-L TAC Diff
BCC-S TAC Diff
Entries 225190
BBC-L TAC Diff
VPD TAC Diff
Entries 225190
BBC-L TAC Diff
ZDC TAC Diff
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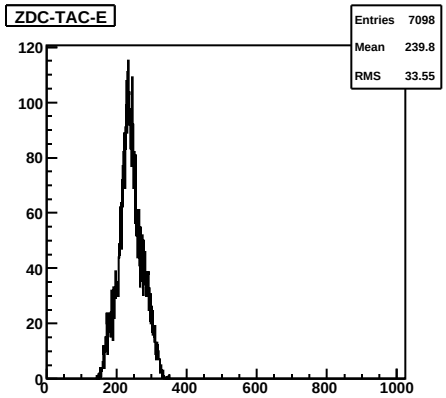
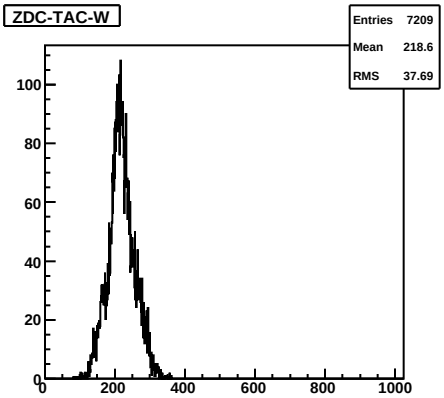
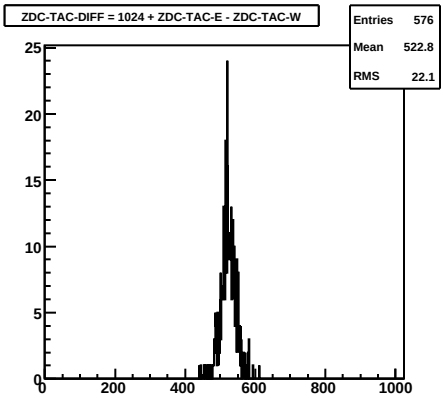
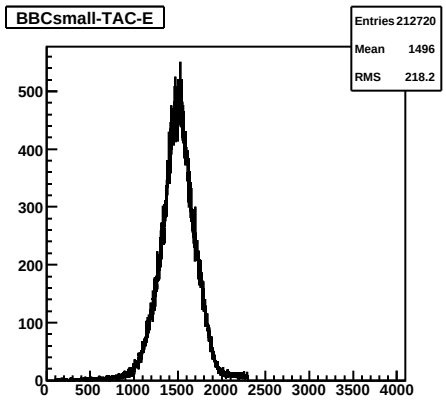
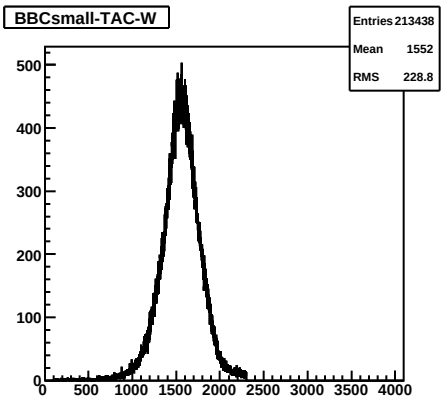
VPD TAC Diff
Entries 225190
BBC-S TAC Diff
ZDC TAC Diff
Entries 225190
VPD TAC Diff
ZDC TAC Diff

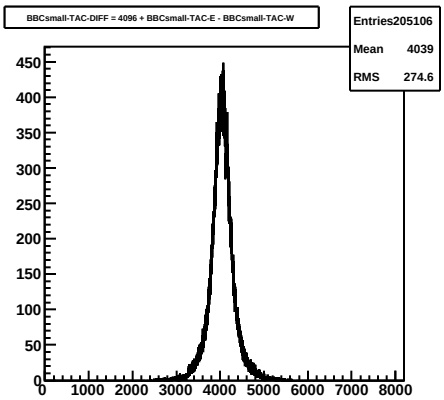

ZDC-TAC-E
Entries 7098
Mean 239.8
RMS 33.55

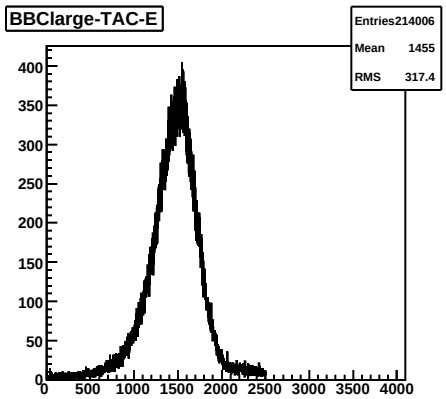

ZDC-TAC-W
Entries 7209
Mean 218.6
RMS 37.69

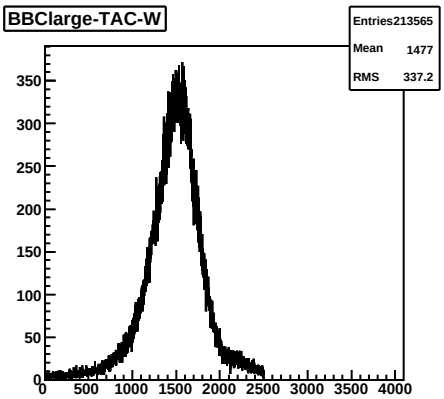

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 576
Mean 522.8
RMS 22.1

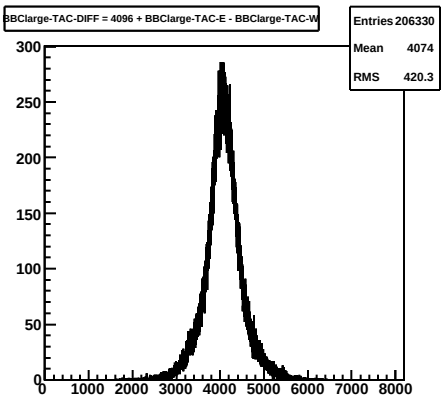

BBCsmall-TAC-E
Entries 212720
Mean 1496
RMS 218.2

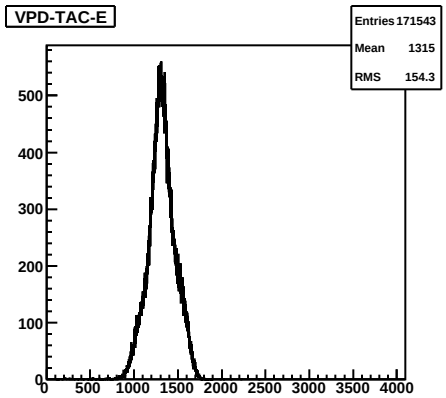

BBCsmall-TAC-W
Entries 213438
Mean 1552
RMS 228.8

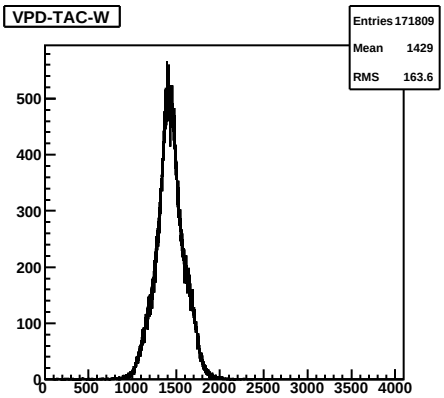

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 205106
Mean 4039
RMS 274.6

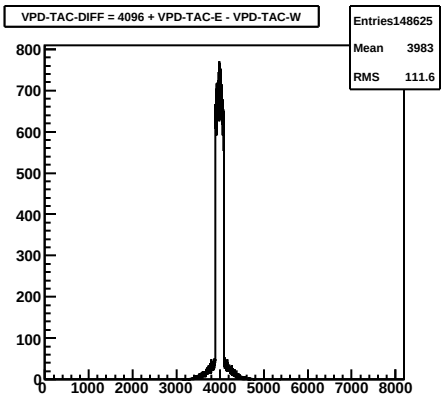

BBClarge-TAC-E
Entries 214006
Mean 1455
RMS 317.4

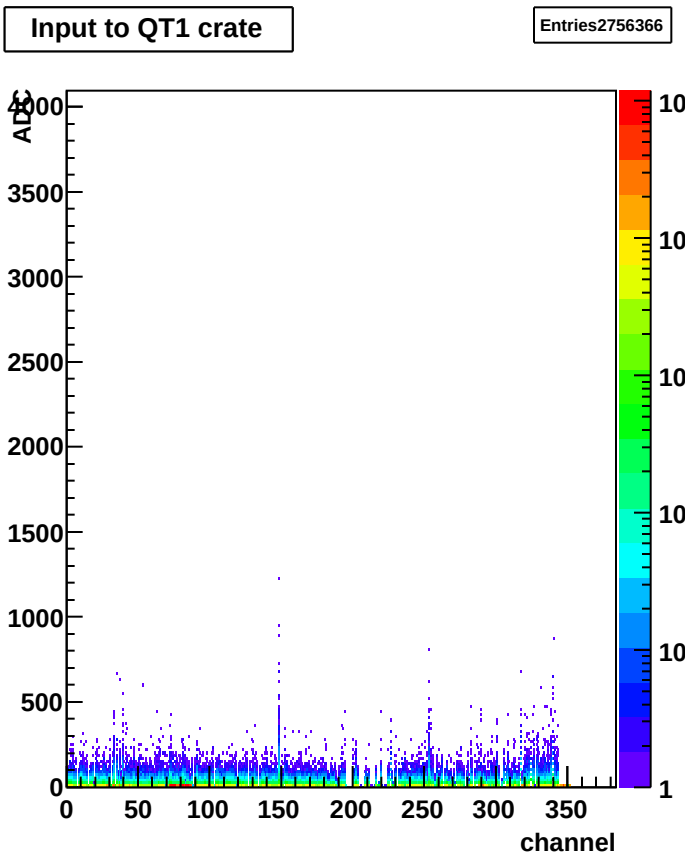

BBClarge-TAC-W
Entries 213565
Mean 1477
RMS 337.2

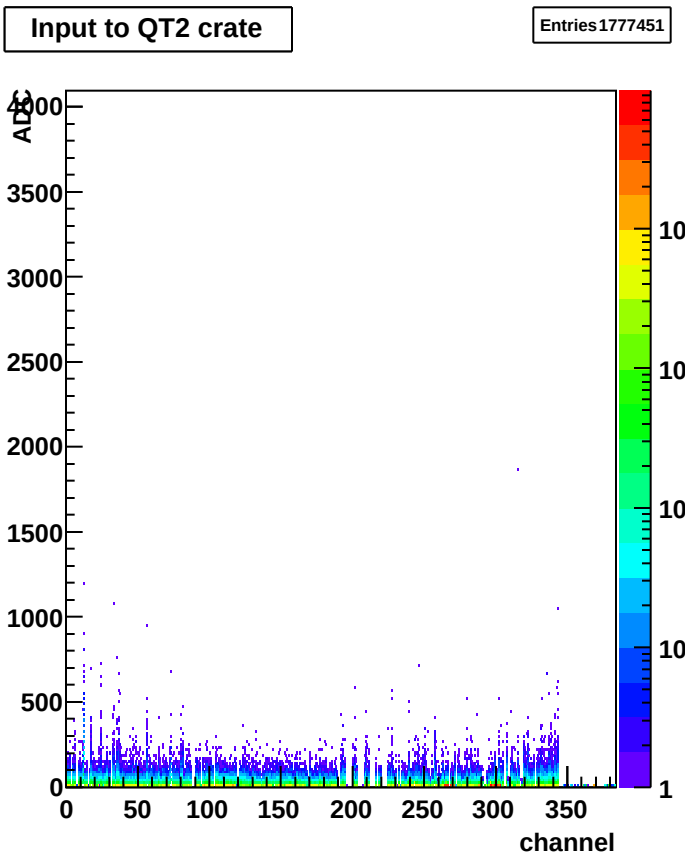

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 206330
Mean 4074
RMS 420.3

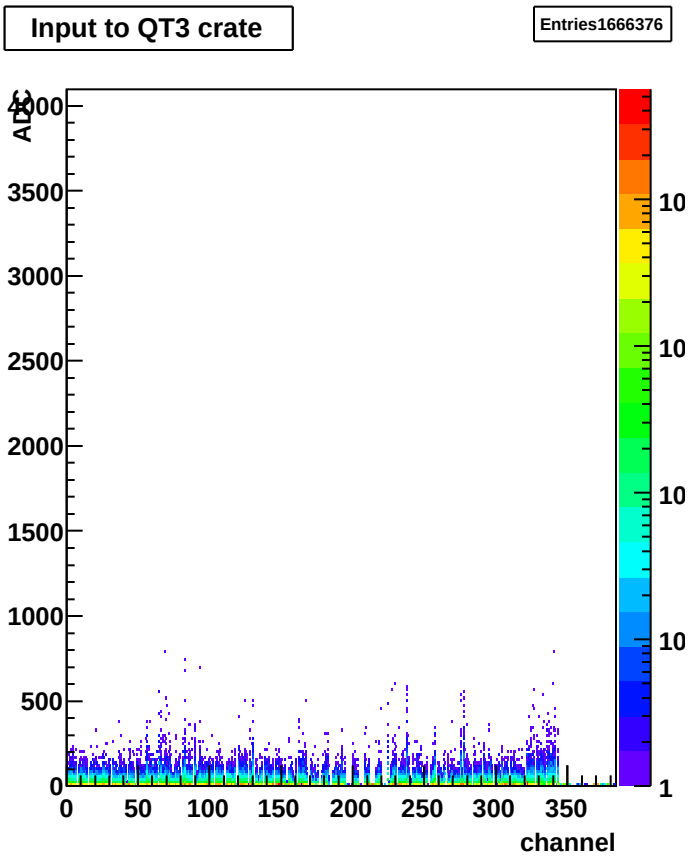

VPD-TAC-E
Entries 171543
Mean 1315
RMS 154.3

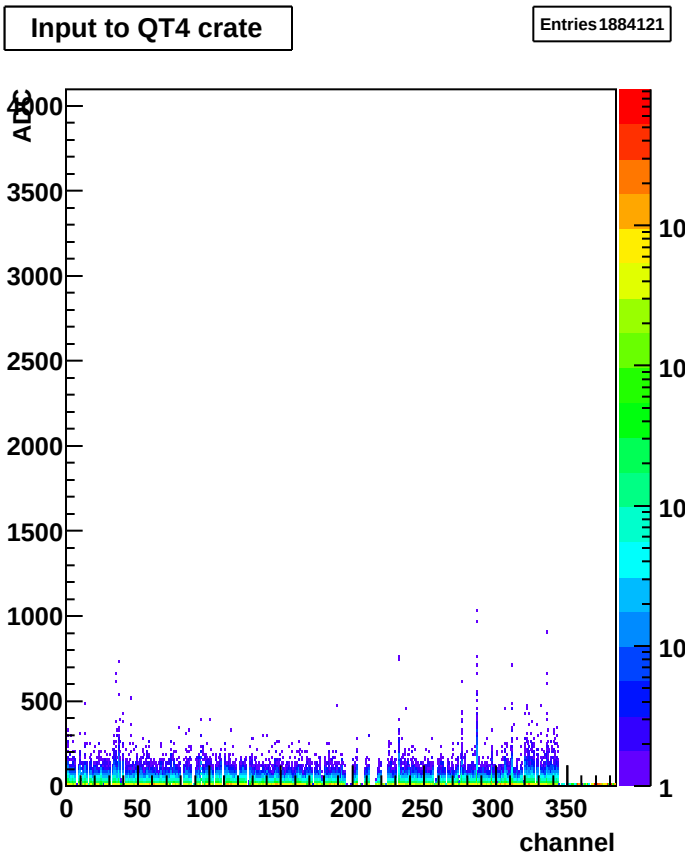

VPD-TAC-W
Entries 171809
Mean 1429
RMS 163.6

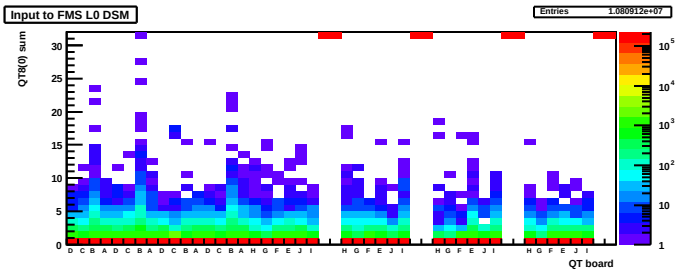

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 148625
Mean 3983
RMS 111.6

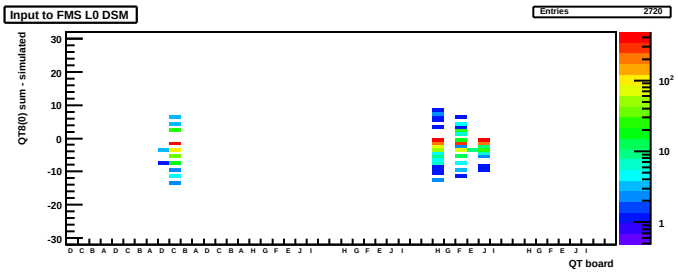

Input to QT1 crate
Entries2756366
ADC
channel

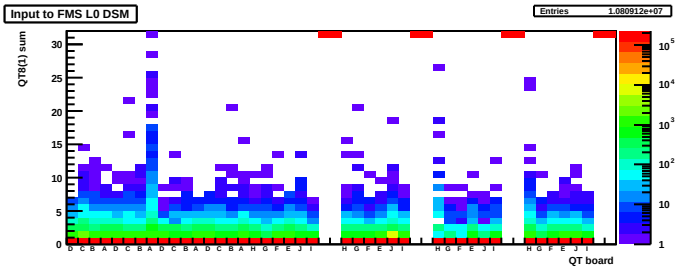

Input to QT2 crate
Entries1777451
ADC
channel

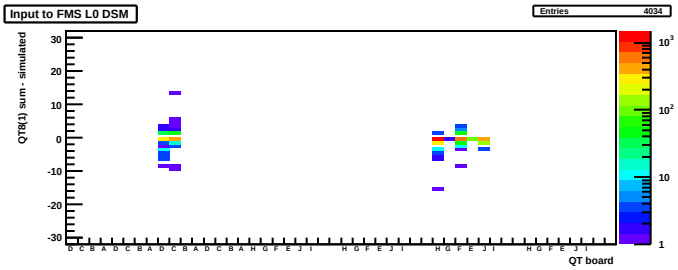

Input to QT3 crate
Entries1666376
ADC
channel

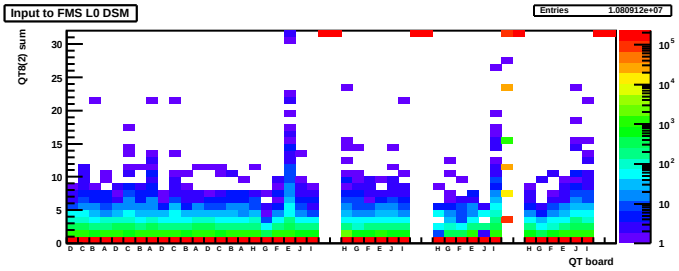

Input to QT4 crate
Entries1884121
ADC
channel

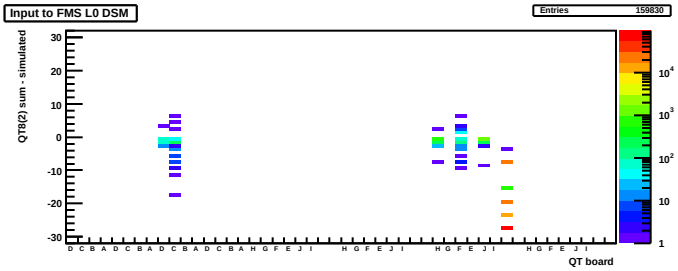

Input to FMS L0 DSM
Entries 1.080912e+07
QT8(0) sum
QT board

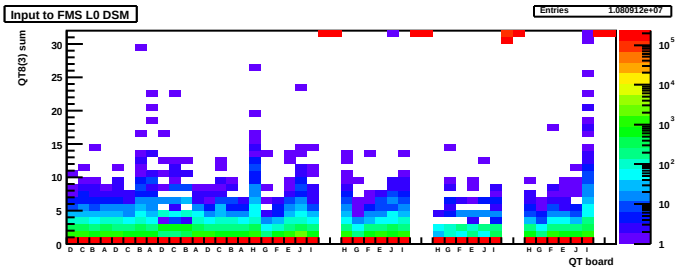

Input to FMS L0 DSM
Entries 2720
QT8(0) sum - simulated
QT board

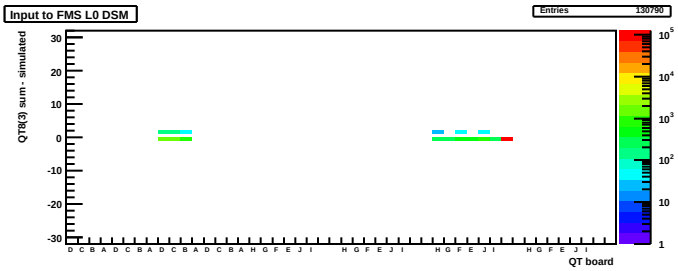

Input to FMS L0 DSM
Entries 1.080912e+07
QT8(1) sum
QT board

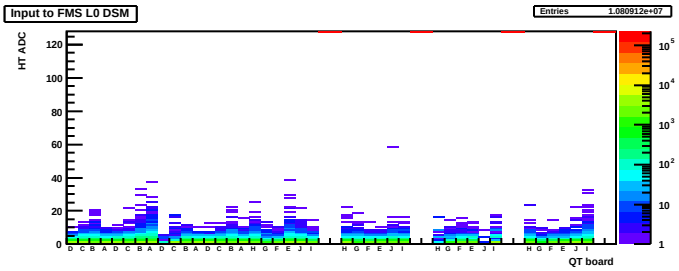

Input to FMS L0 DSM
Entries 4034
QT8(1) sum - simulated
QT board

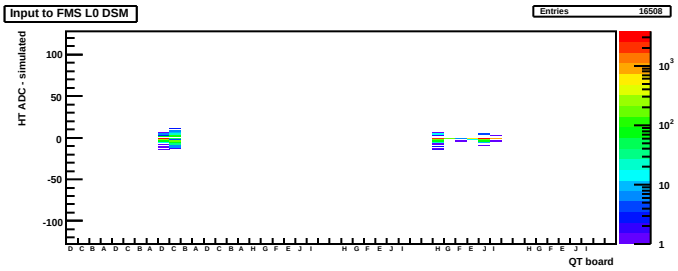

Input to FMS L0 DSM
Entries 1.080912e+07
QT8(2) sum
QT board

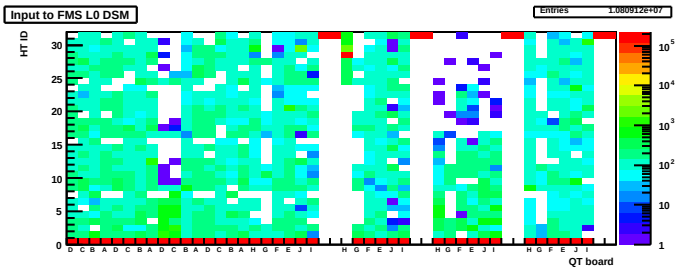

Input to FMS L0 DSM
Entries 159830
QT8(2) sum - simulated
QT board

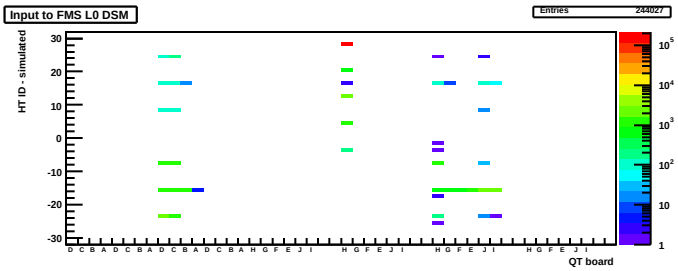

Input to FMS L0 DSM
Entries 1.080912e+07
QT8(3) sum
QT board

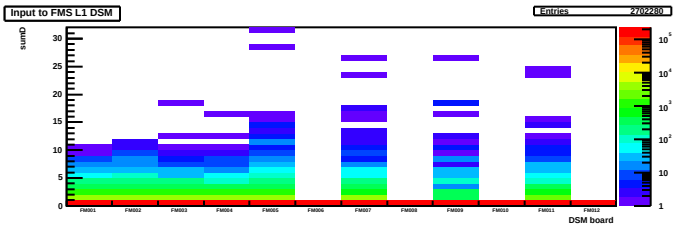

Input to FMS L0 DSM
Entries 130790
QT8(3) sum - simulated
QT board

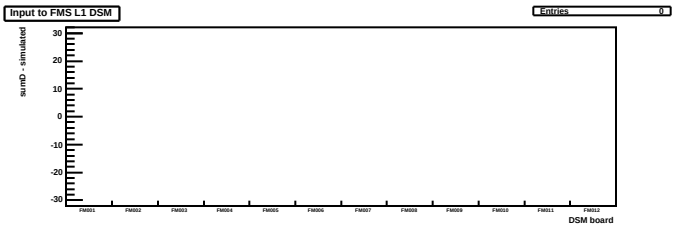

Input to FMS L0 DSM
Entries 1.080912e+07
HT ADC
QT board

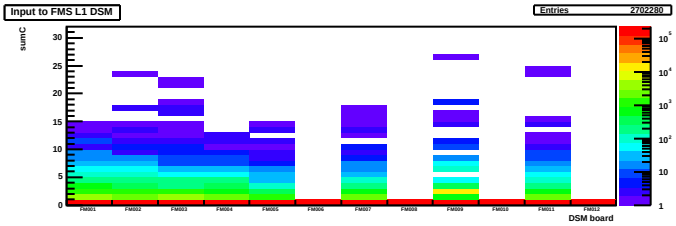

Input to FMS L0 DSM
Entries 16508
HT ADC - simulated
QT board

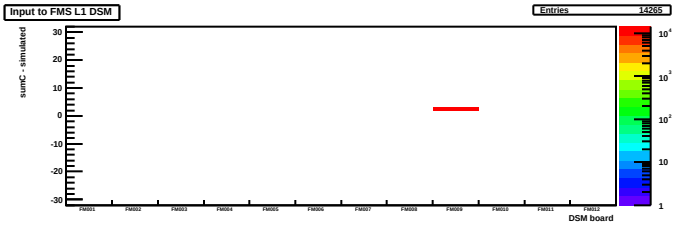

Input to FMS L0 DSM
Entries 1.080912e+07
HT ID
QT board

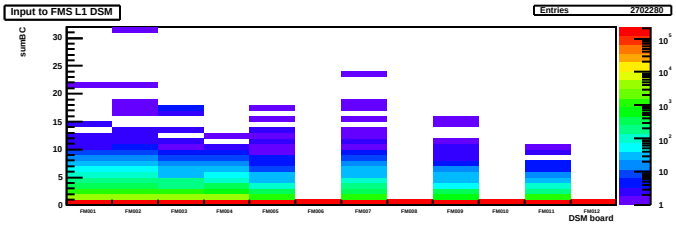

Input to FMS L0 DSM
Entries 244027
HT ID - simulated
QT board

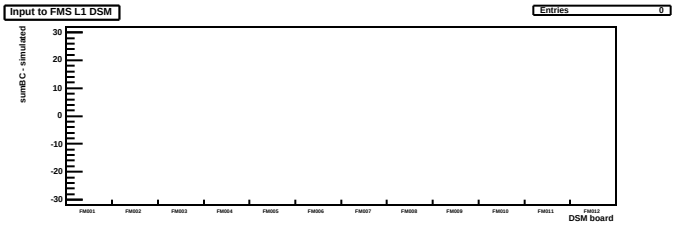

Input to FMS L1 DSM
Entries 2702280
sumD
DSM board

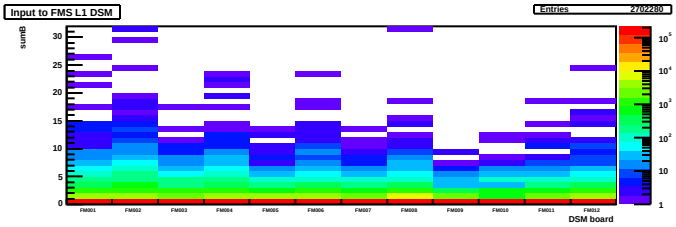

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

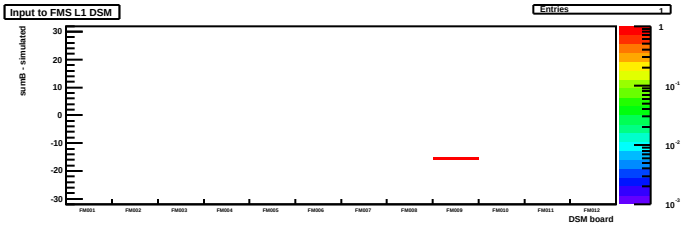

Input to FMS L1 DSM
Entries 2702280
sumC
DSM board

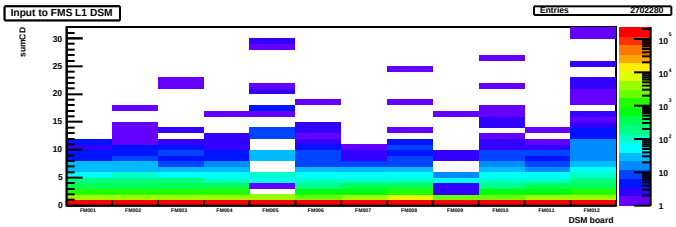

Input to FMS L1 DSM
Entries 14265
sumC - simulated
DSM board

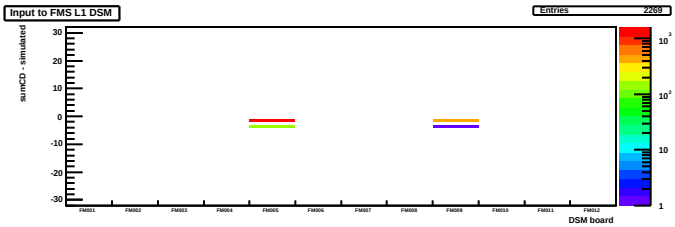

Input to FMS L1 DSM
Entries 2702280
sumBC
DSM board

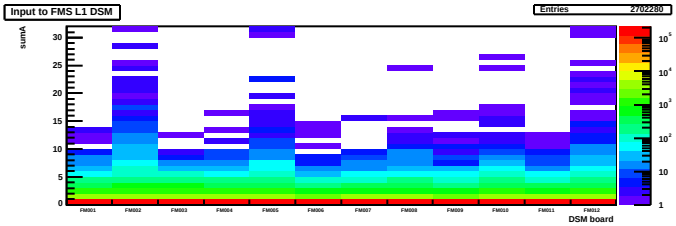

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

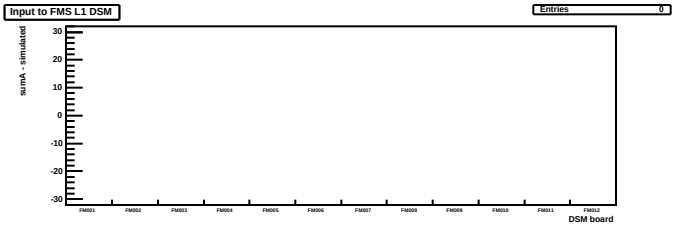

Input to FMS L1 DSM
Entries 2702280
sumB
DSM board

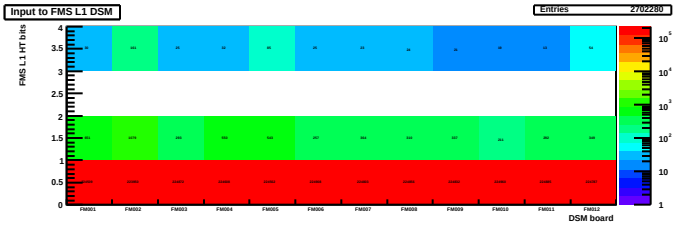

Input to FMS L1 DSM
Entries 1
sumB - simulated
DSM board

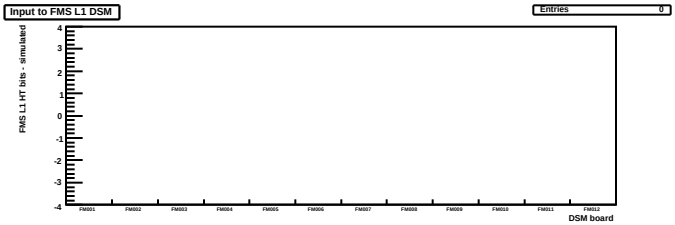

Input to FMS L1 DSM
Entries 2702280
sumCD
DSM board

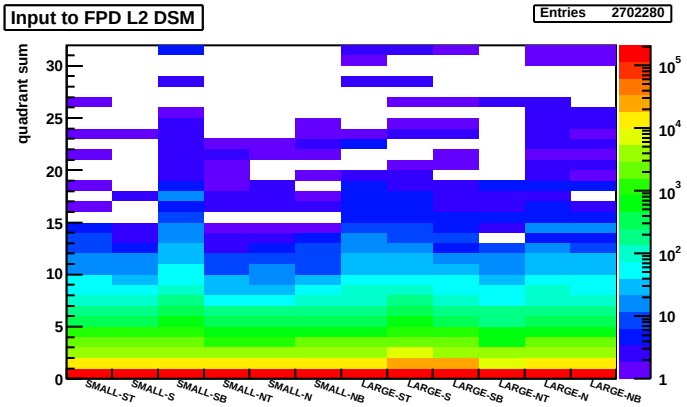

Input to FMS L1 DSM
Entries 2269
sumCD - simulated
DSM board

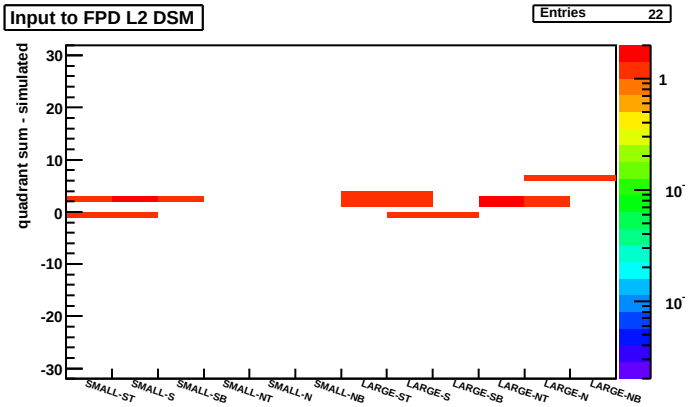

Input to FMS L1 DSM
Entries 2702280
sumA
DSM board

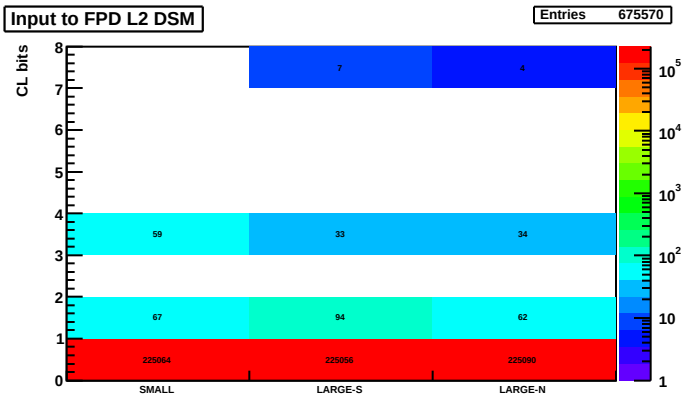

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

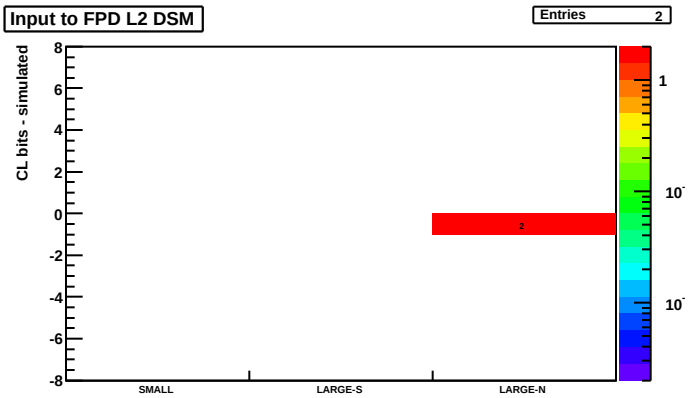

Input to FMS L1 DSM
Entries 2702280
FMS L1 HT bits
DSM board

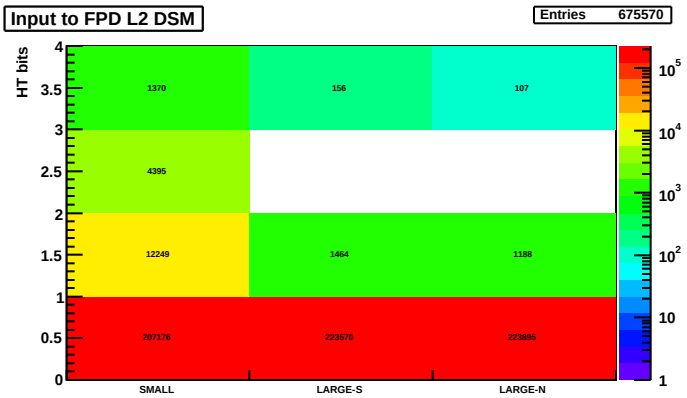

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

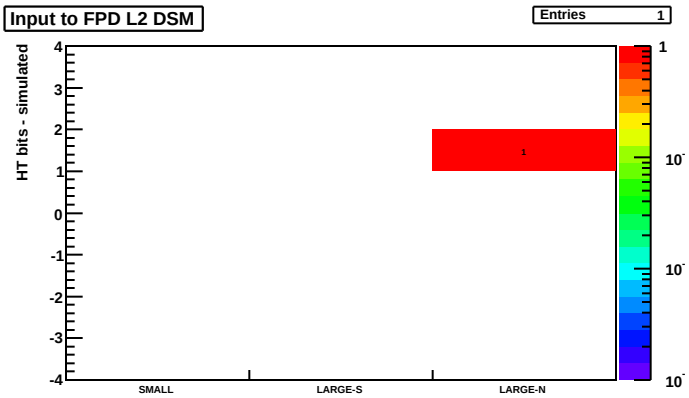

Input to FPD L2 DSM
Entries 2702280
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

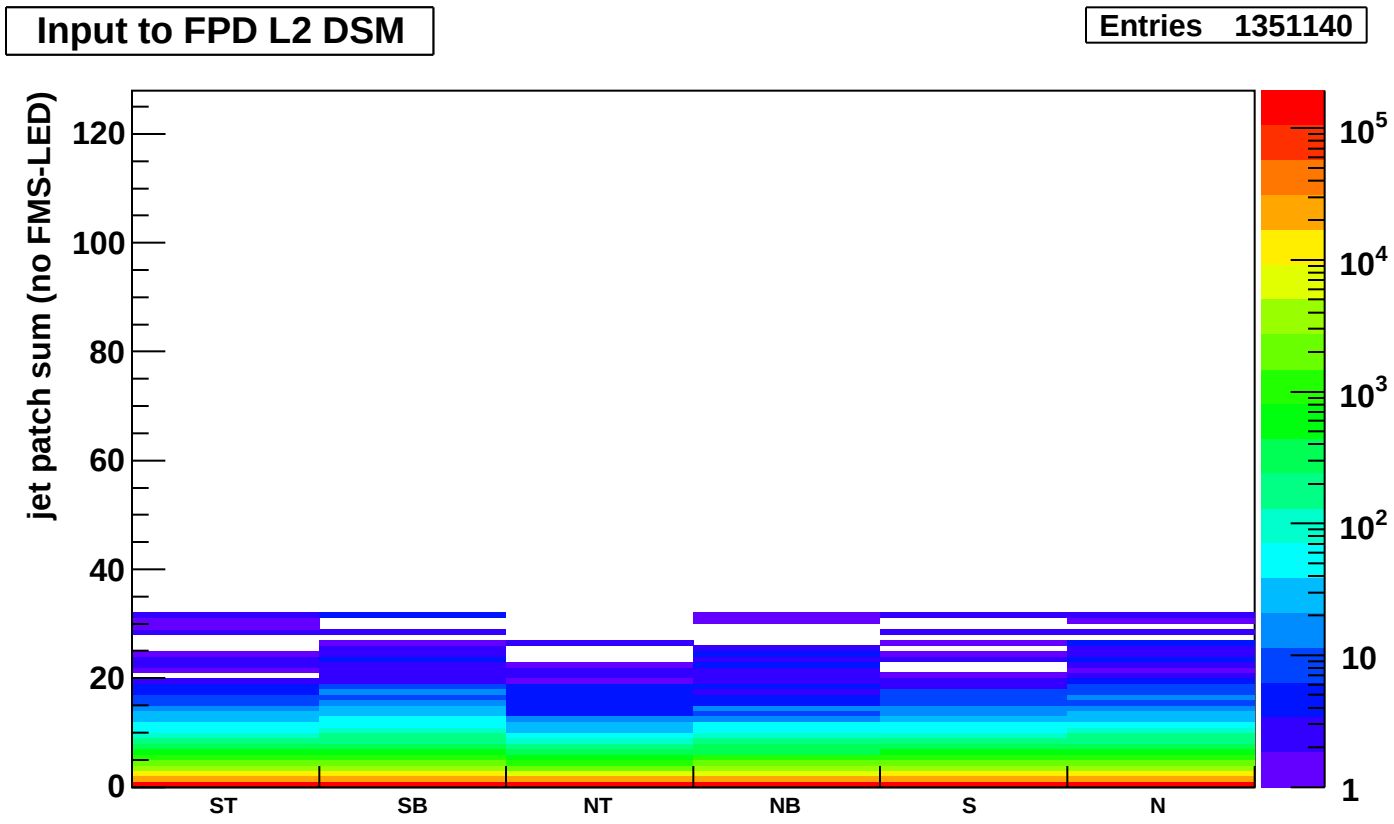

Input to FPD L2 DSM
Entries 22
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

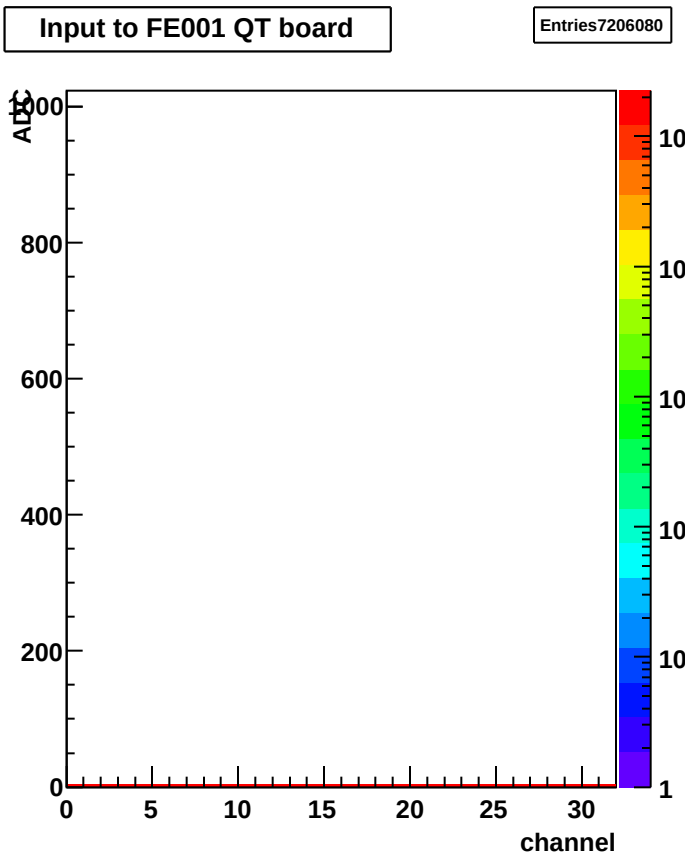

Input to FPD L2 DSM
Entries 675570
CL bits
7
4
59
33
34
67
94
62
225064
225056
225090
SMALL
LARGE-S
LARGE-N

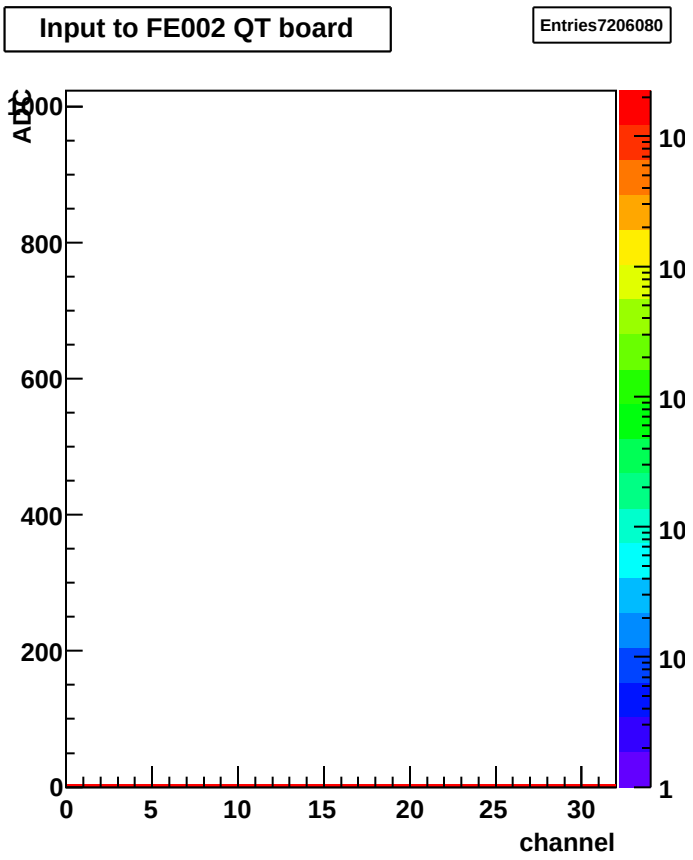

Input to FPD L2 DSM
Entries 2
CL bits - simulated
2
SMALL
LARGE-S
LARGE-N

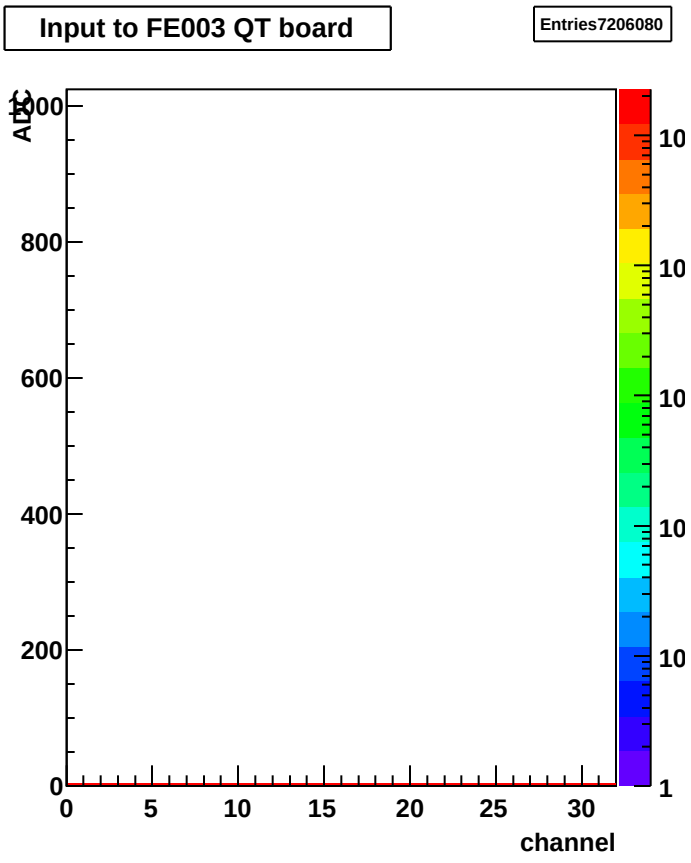

Input to FPD L2 DSM
Entries 675570
HT bits
1370
156
107
4395
12249
1464
1188
207176
223570
223895
SMALL
LARGE-S
LARGE-N

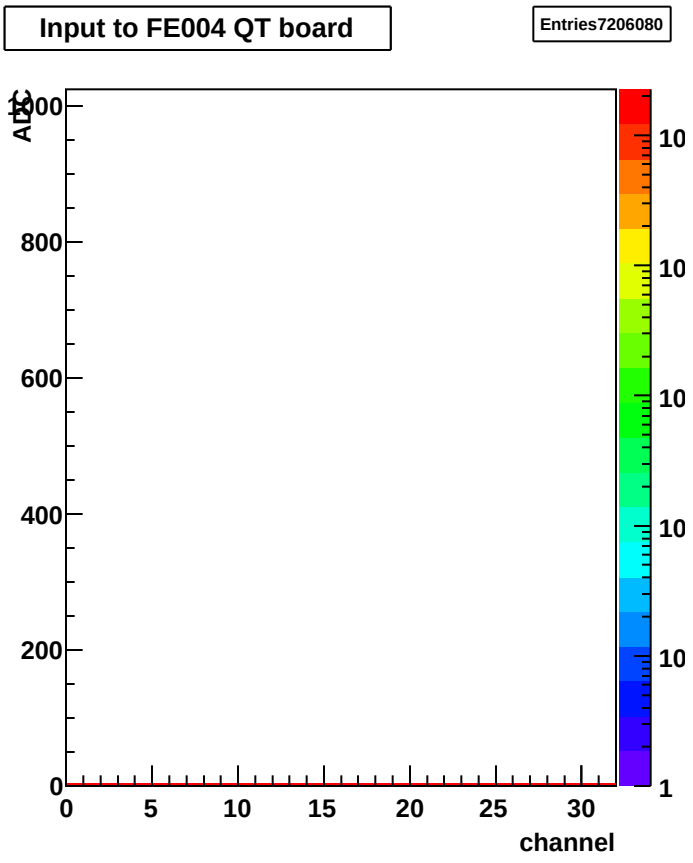

Input to FPD L2 DSM
Entries 1
HT bits - simulated
1
SMALL
LARGE-S
LARGE-N

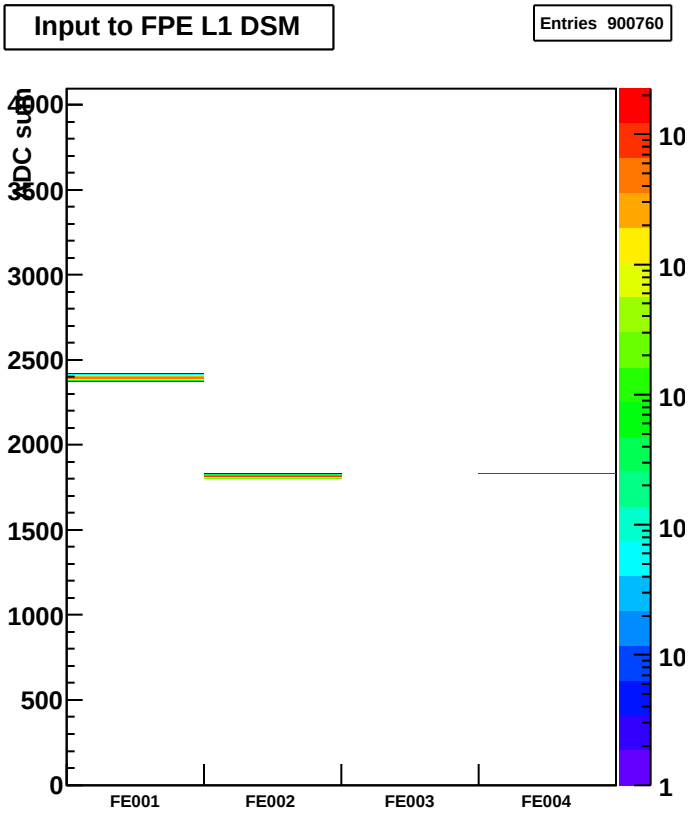

Input to FPD L2 DSM
Entries 1351140
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
$10^2$
$10^3$
$10^4$
$10^5$

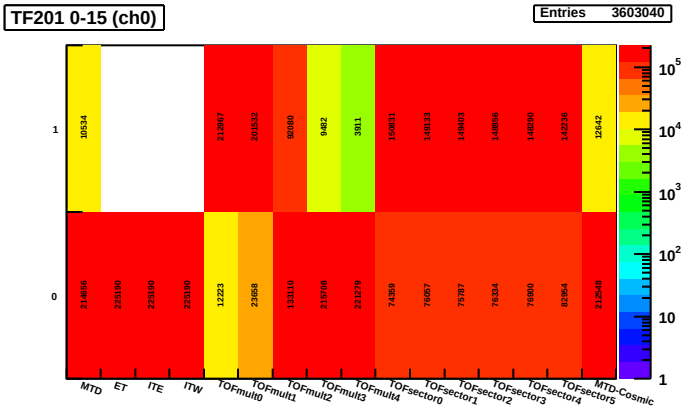

Input to FE001 QT board
Entries7206080
ADC
channel

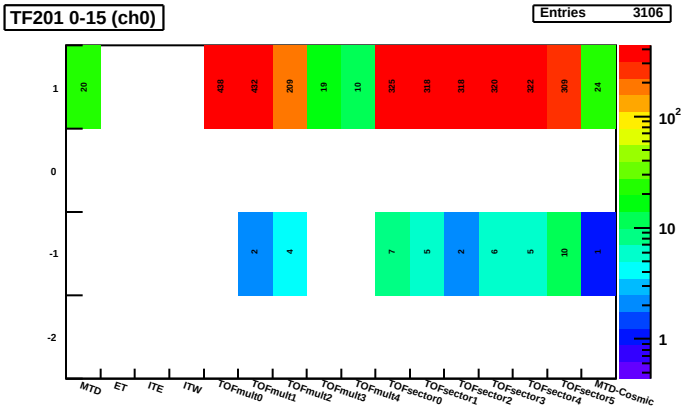

Input to FE002 QT board
Entries7206080
ADC
channel

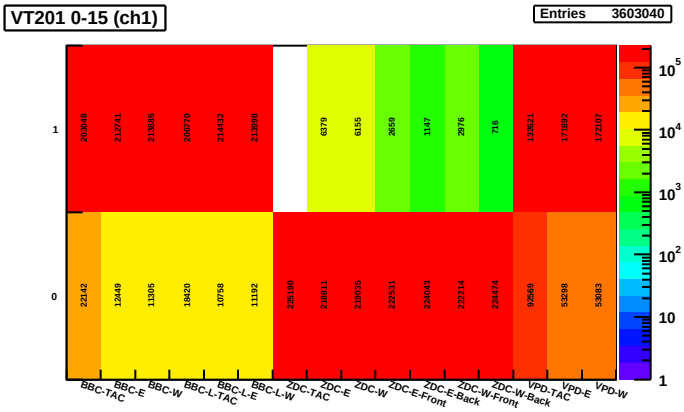

Input to FE003 QT board
Entries7206080
ADC
channel

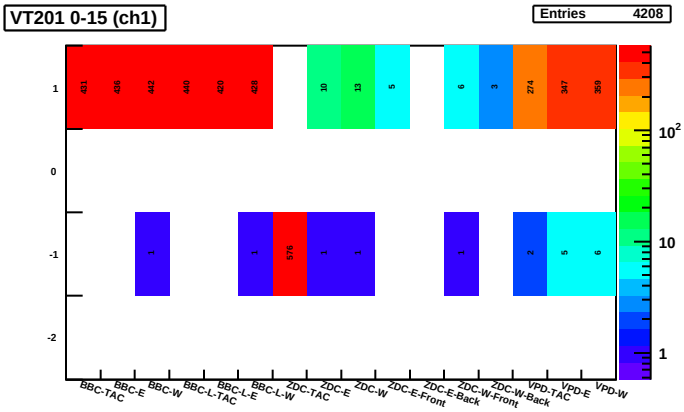

Input to FE004 QT board
Entries7206080
ADC
channel

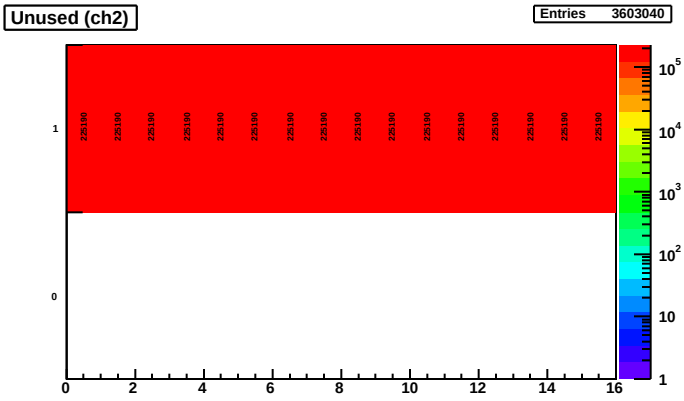

Input to FPE L1 DSM
Entries 900760
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1

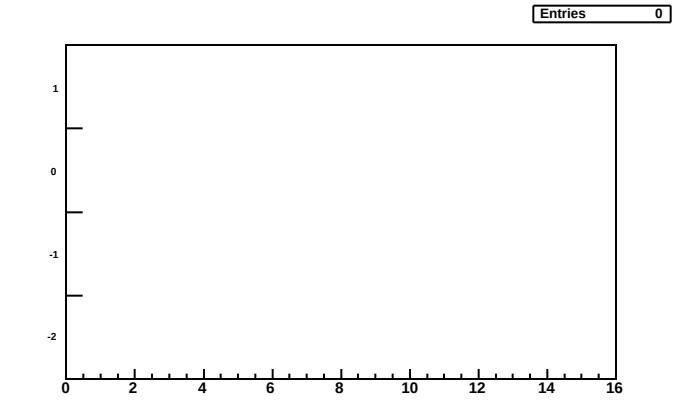

TF201 0-15 (ch0)
Entries 3603040
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

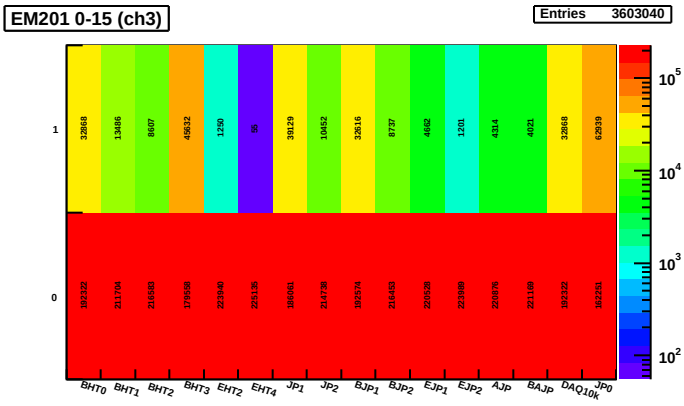

TF201 0-15 (ch0)
Entries 3106
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


VT201 0-15 (ch1)
Entries 3603040
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 4208
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 3603040


Entries 0


EM201 0-15 (ch3)
Entries 3603040
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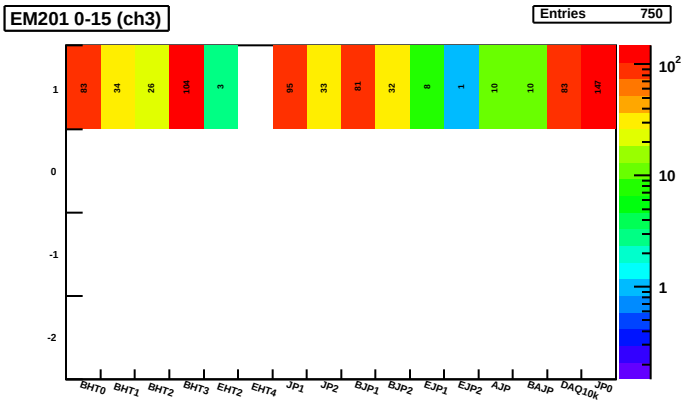
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Entries 750
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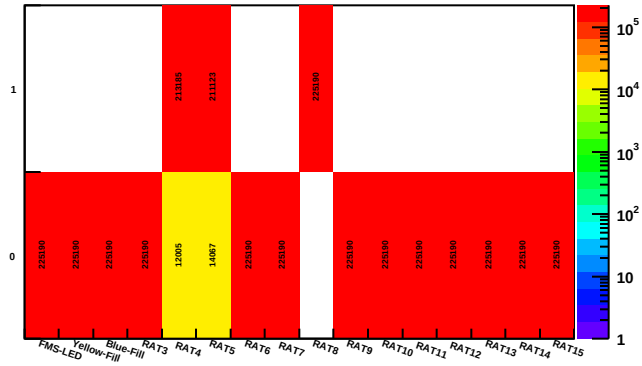
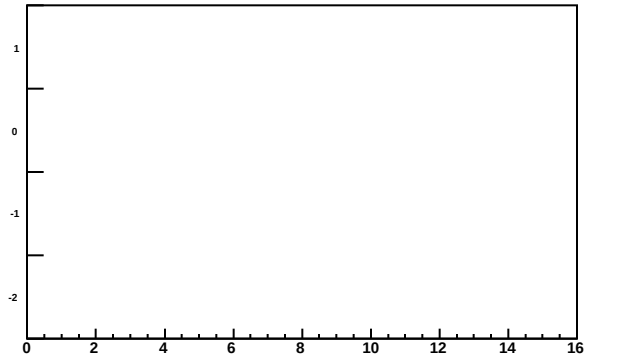
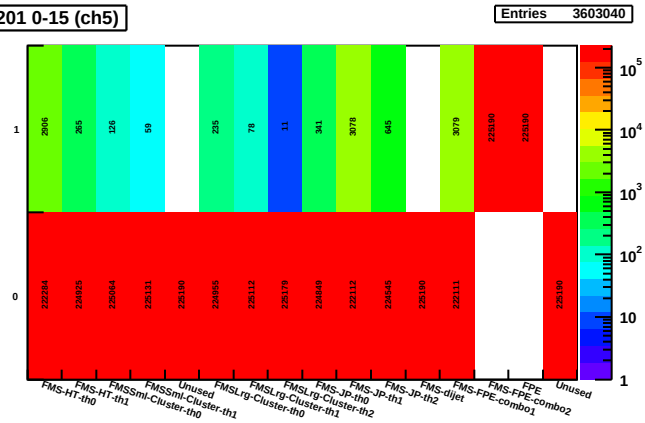
**RAT board (ch4)**

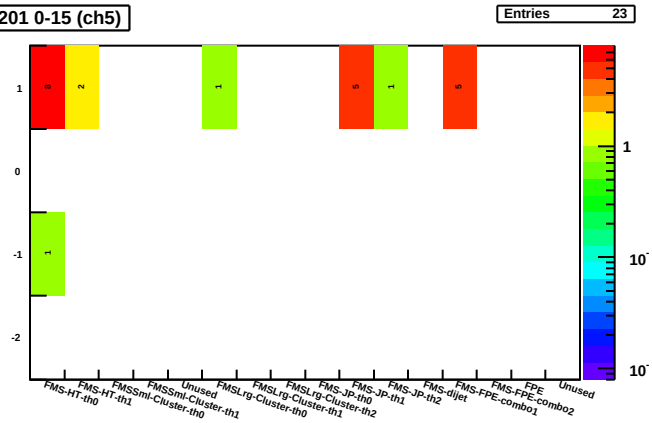


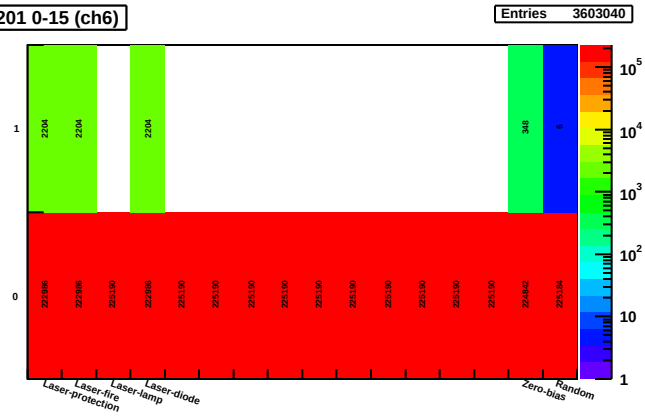

**FP201 0-15 (ch5)**

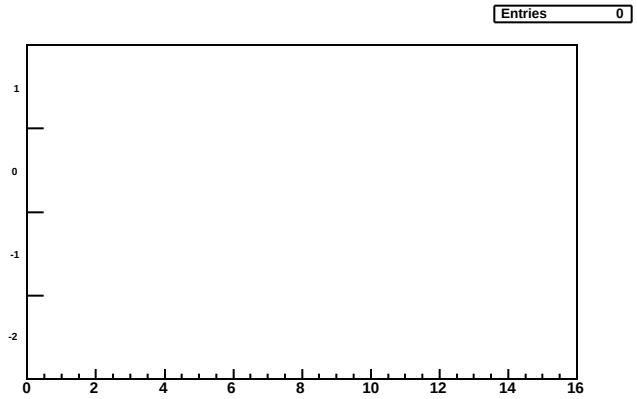


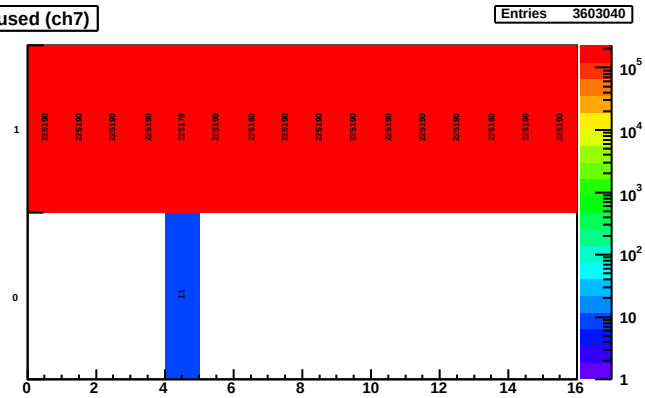
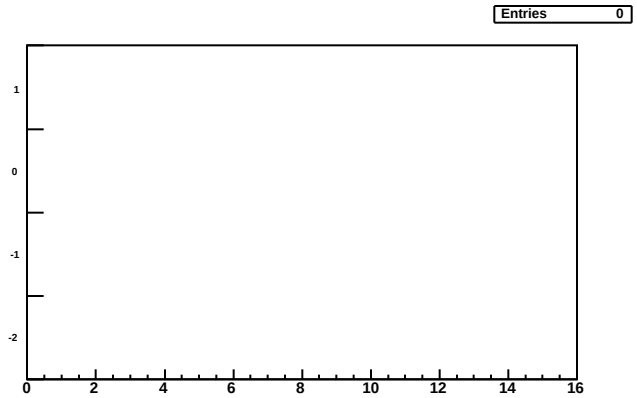

**FP201 0-15 (ch5)**




**ST201 0-15 (ch6)**




**Unused (ch7)**