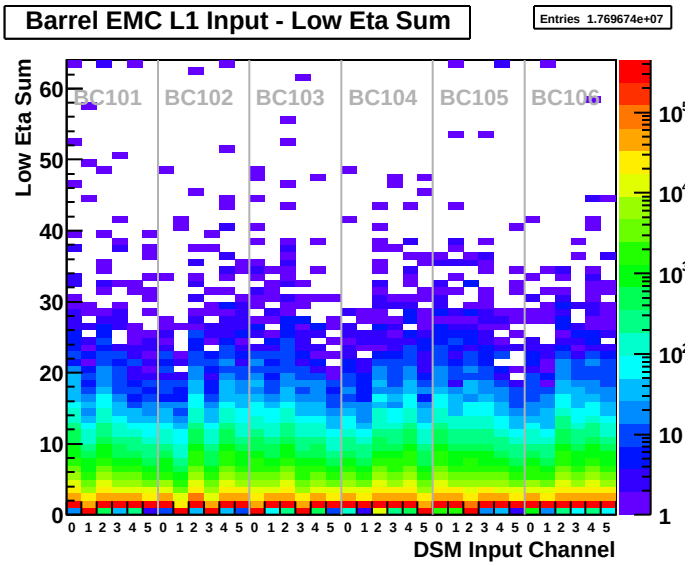
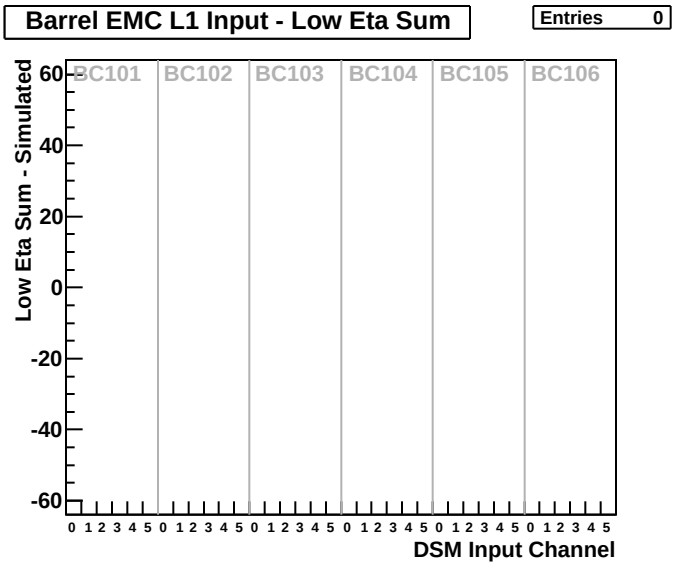
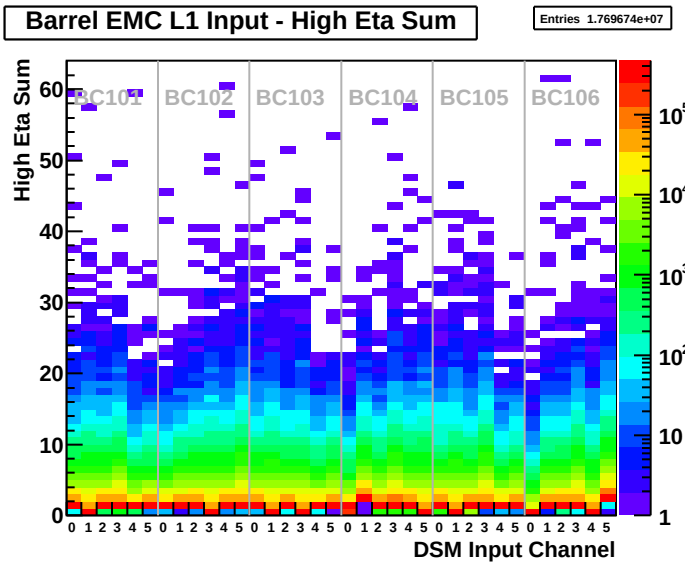
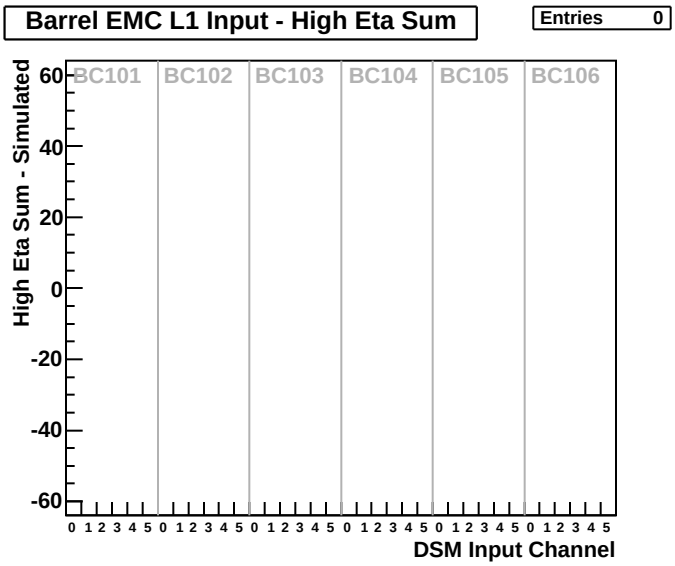
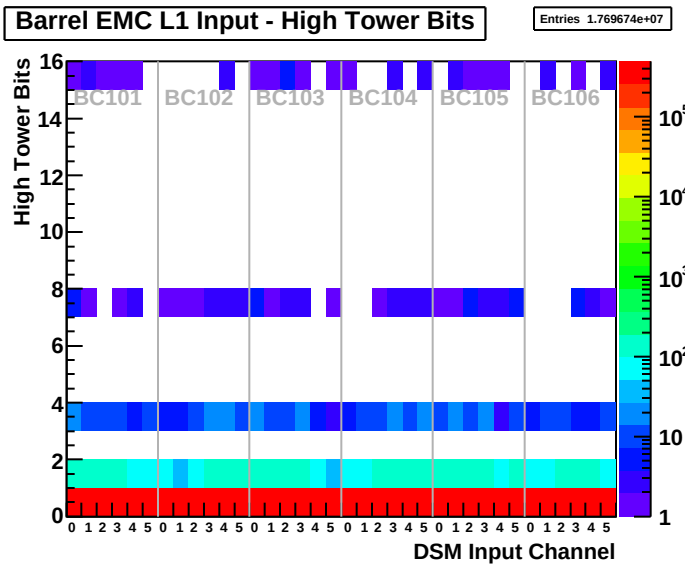
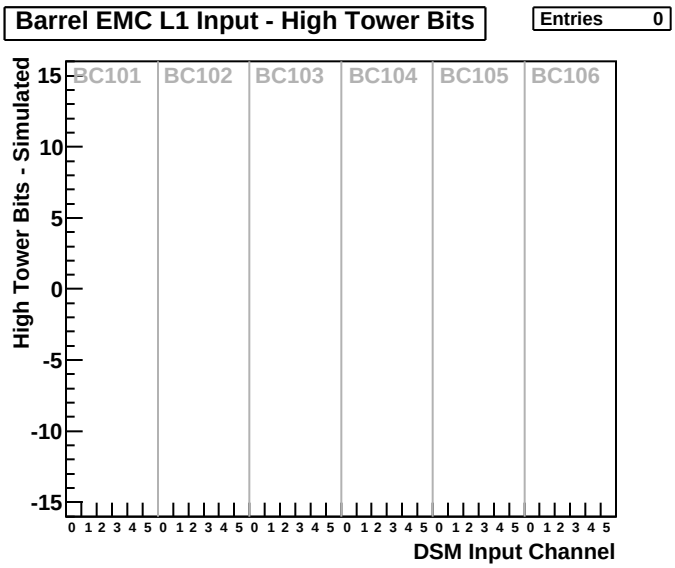

Barrel EMC L1 Input - Low Eta Sum
Entries 1.769674e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

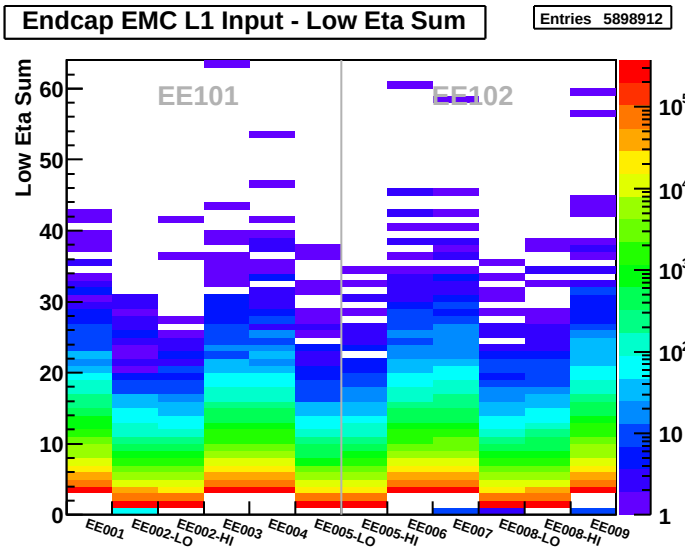

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

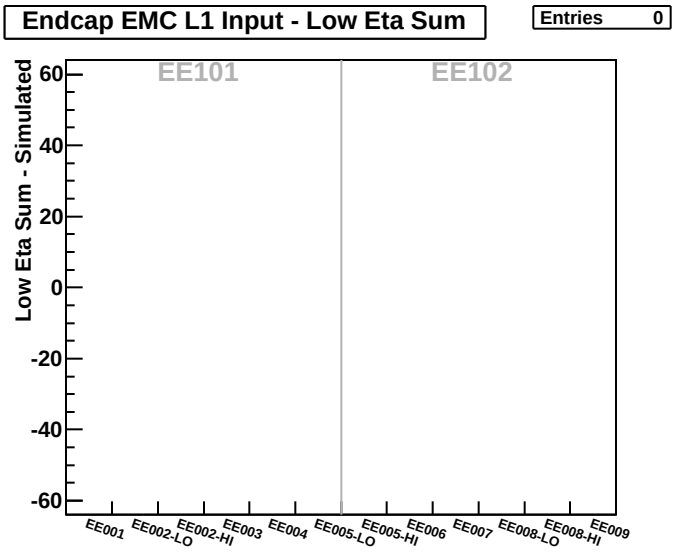

Barrel EMC L1 Input - High Eta Sum
Entries 1.769674e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

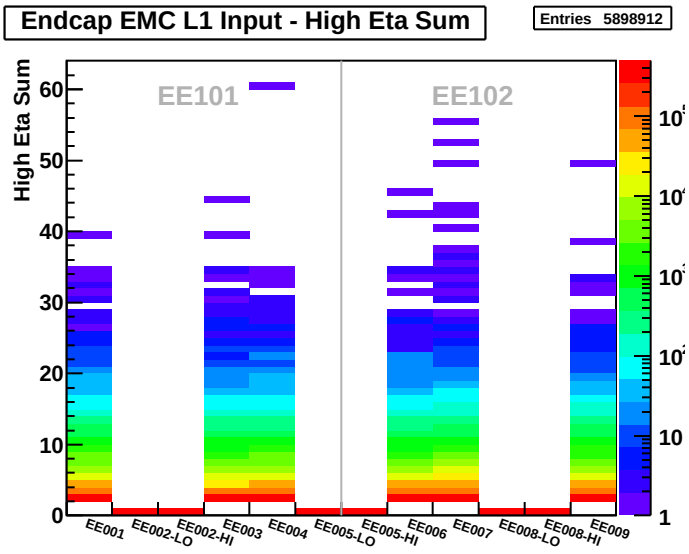

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

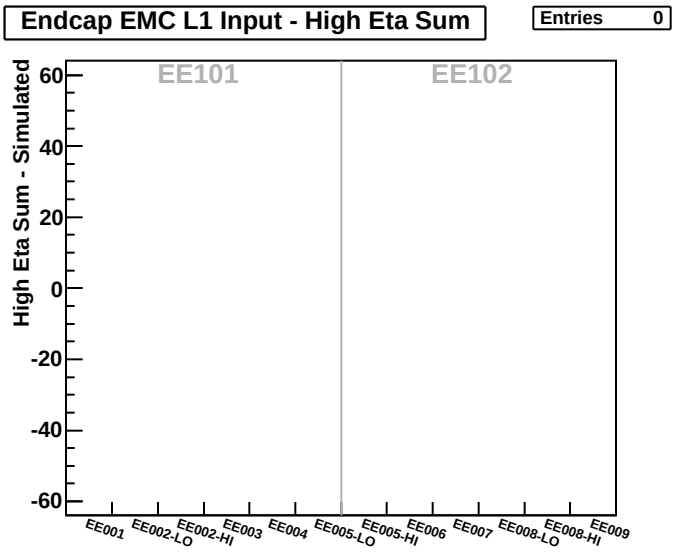

Barrel EMC L1 Input - High Tower Bits
Entries 1.769674e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

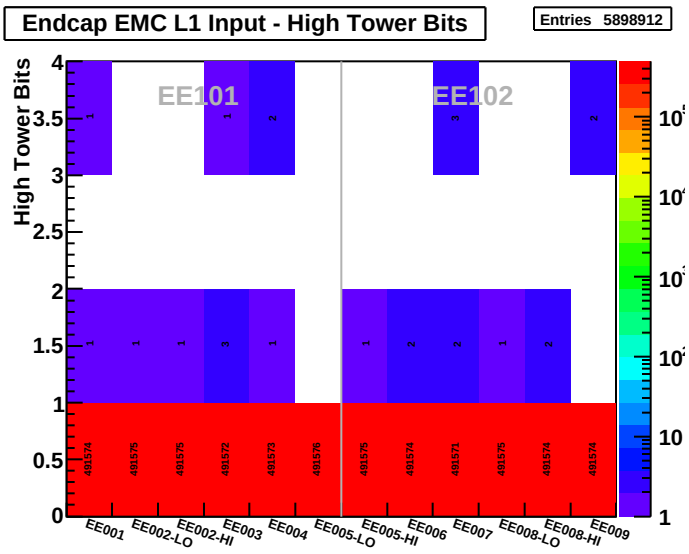

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

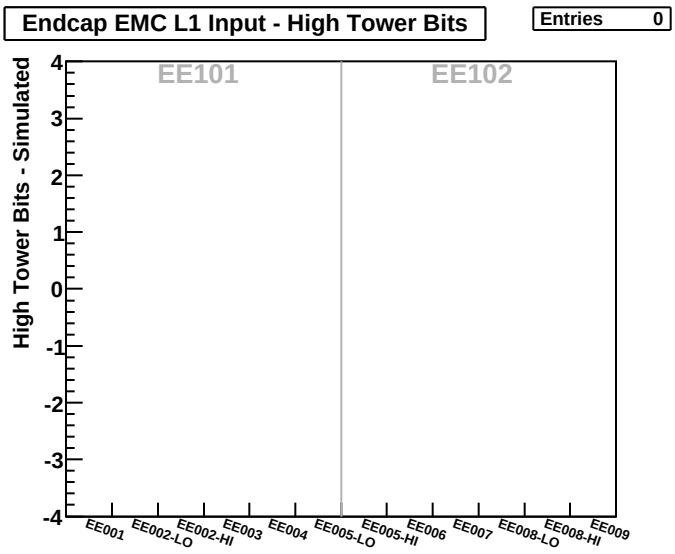

Endcap EMC L1 Input - Low Eta Sum
Entries 5898912
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

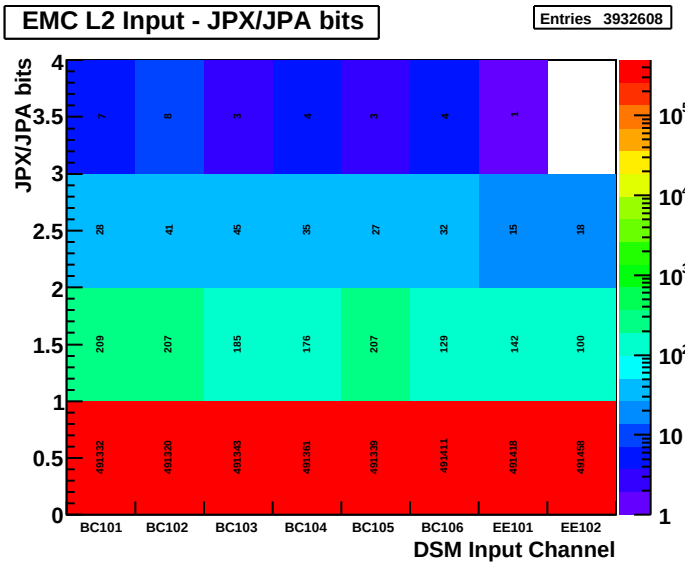

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

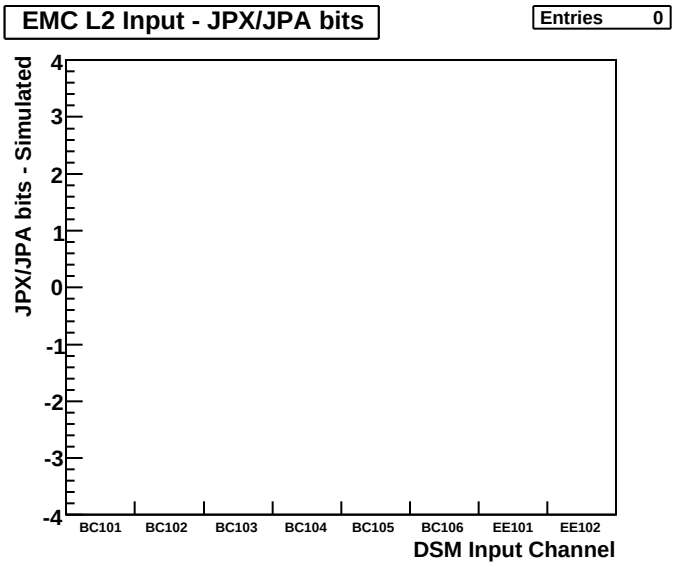

Endcap EMC L1 Input - High Eta Sum
Entries 5898912
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

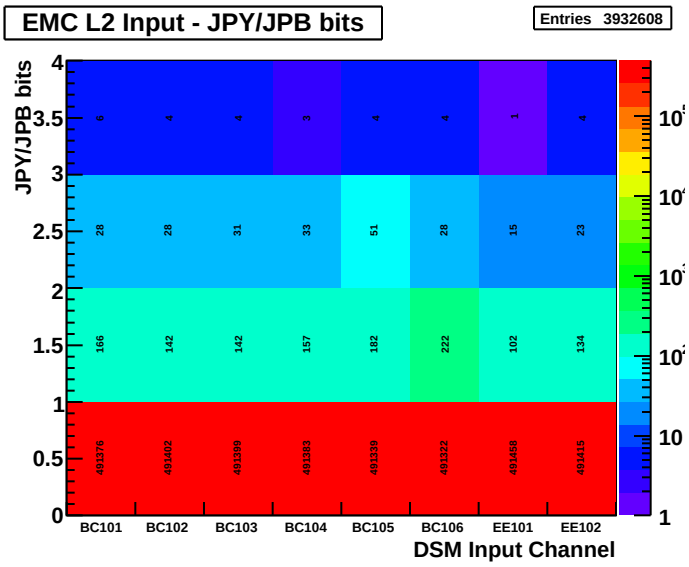

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

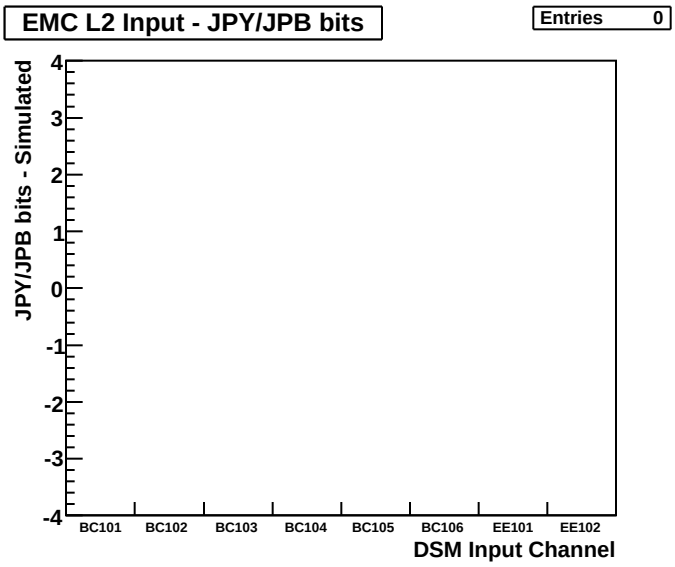

Endcap EMC L1 Input - High Tower Bits
Entries 5898912
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

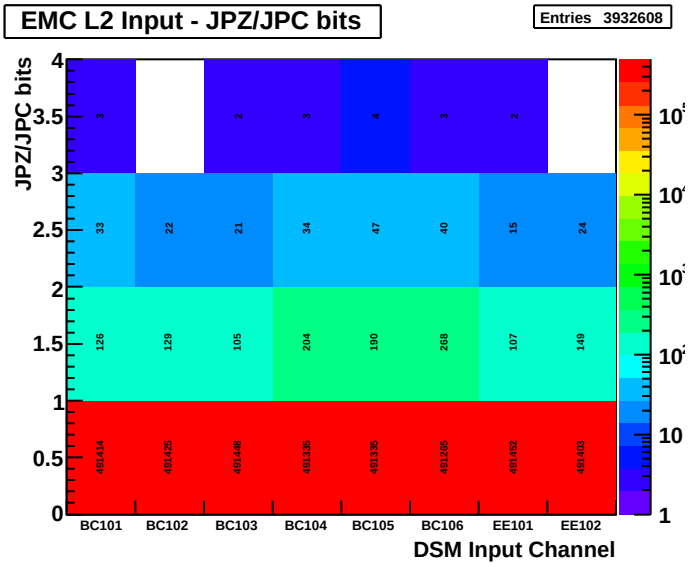

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

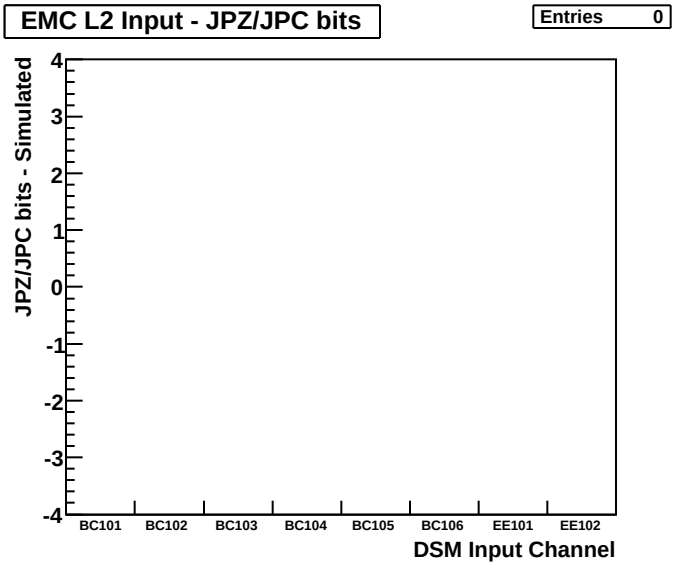

EMC L2 Input - JPX/JPA bits
Entries 3932608
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
7 8 3 4 3 4 1
28 41 45 35 27 32 15 18
209 207 185 176 207 129 142 100
491332 491320 491343 491361 491339 491411 491418 491458

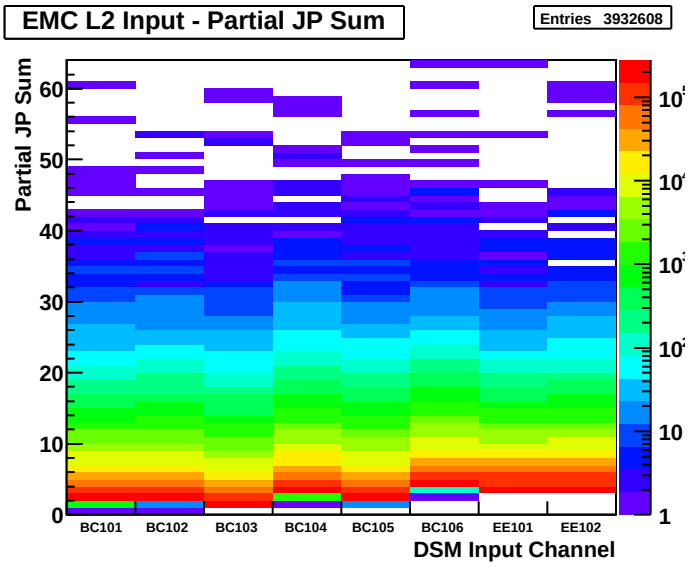

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

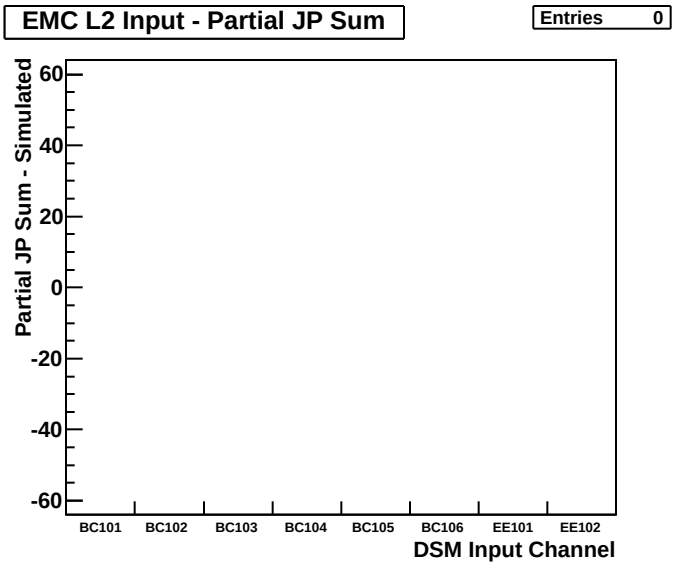

EMC L2 Input - JPY/JPB bits
Entries 3932608
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
6 4 4 3 4 4 1 4
28 28 31 33 51 28 15 23
166 142 142 157 182 222 102 134
491376 491402 491399 491383 491339 491322 491458 491415

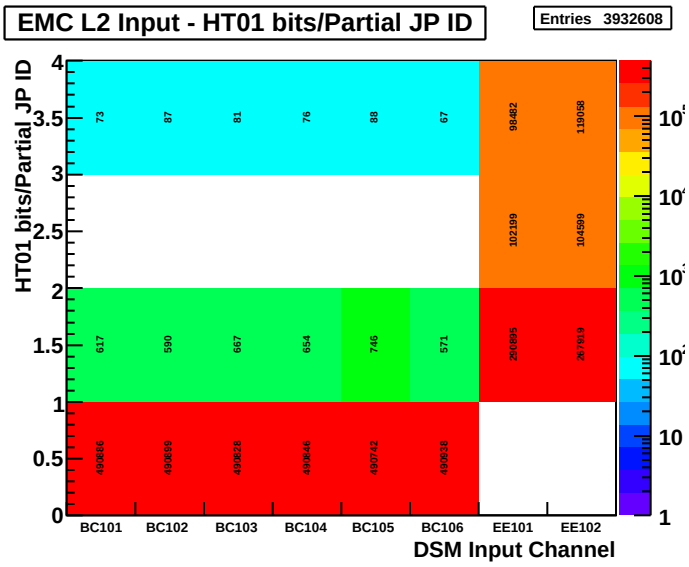

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

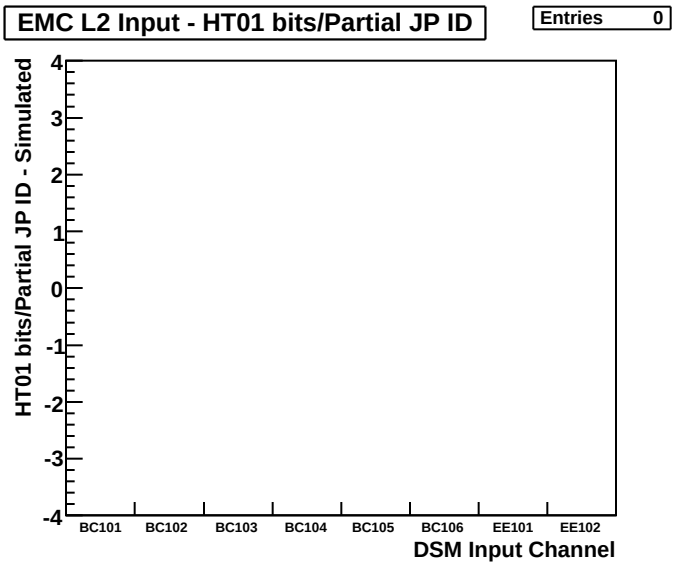

EMC L2 Input - JPZ/JPC bits
Entries 3932608
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
3 2 3 4 3 2
33 22 21 34 47 40 15 24
126 129 105 204 190 268 107 149
491414 491425 491448 491335 491338 491265 491452 491403

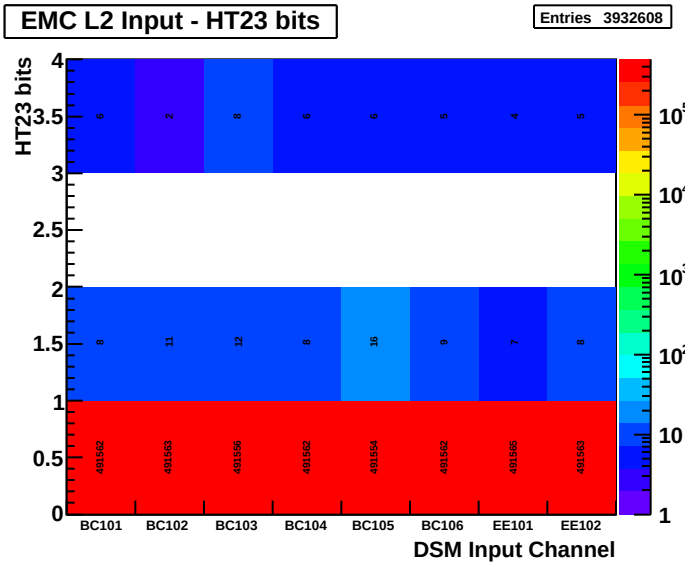

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

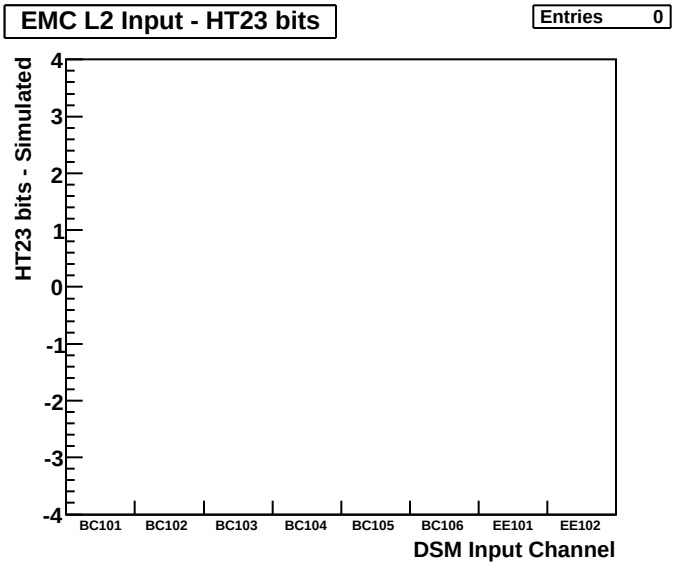

EMC L2 Input - Partial JP Sum
Entries 3932608
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

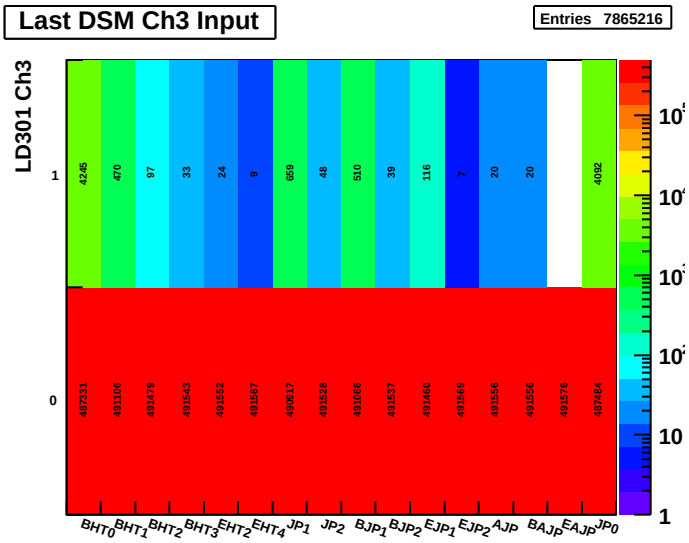

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

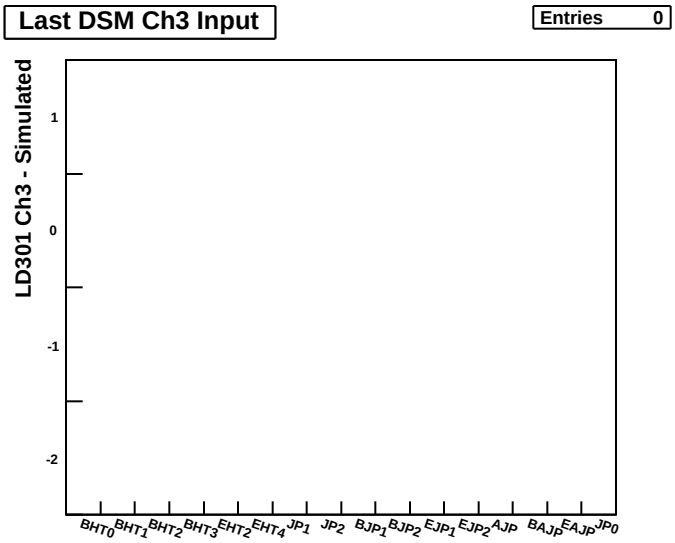

EMC L2 Input - HT01 bits/Partial JP ID
Entries 3932608
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

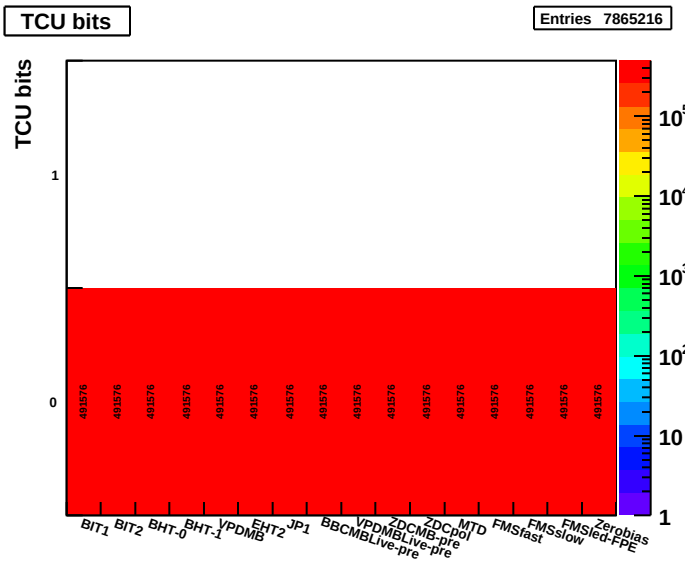

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

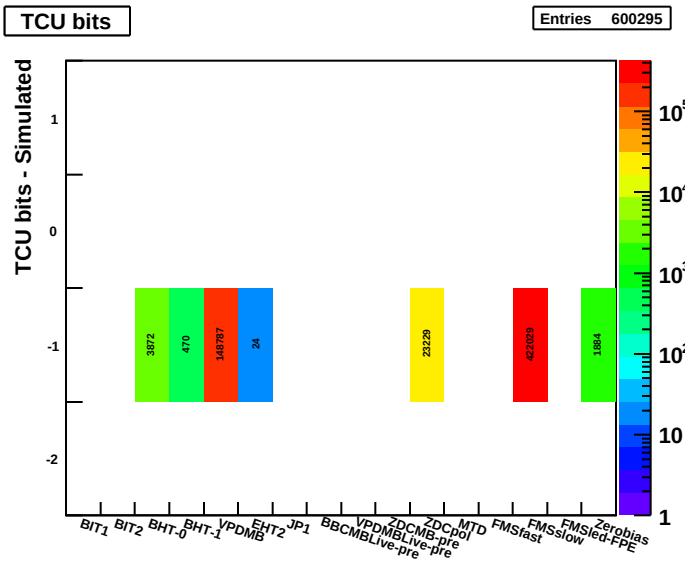

EMC L2 Input - HT23 bits
Entries 3932608
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

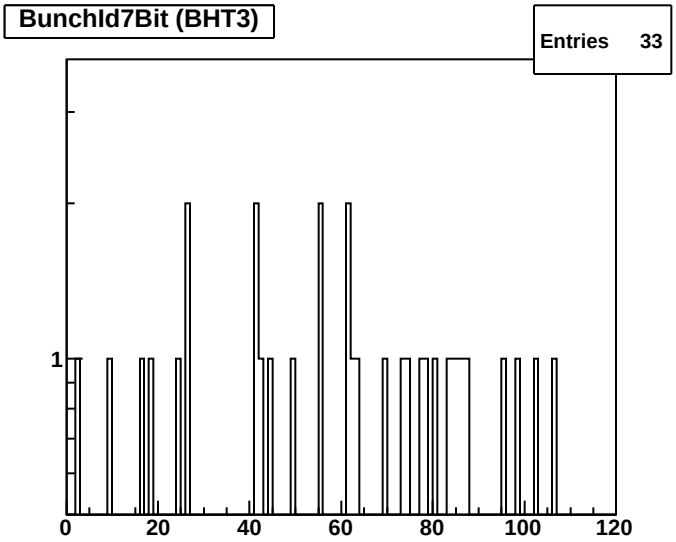

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

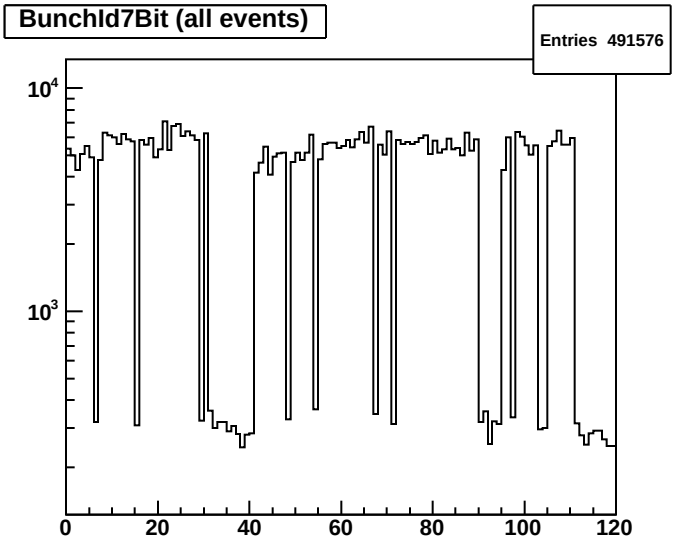

Last DSM Ch3 Input
Entries 7865216
LD301 Ch3
4246 470 97 33 24 9 659 48 510 39 116 7 20 20 4092
487331 491106 491479 491543 491552 491567 490917 491528 491066 491537 491460 491569 491556 491556 491576 487484
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

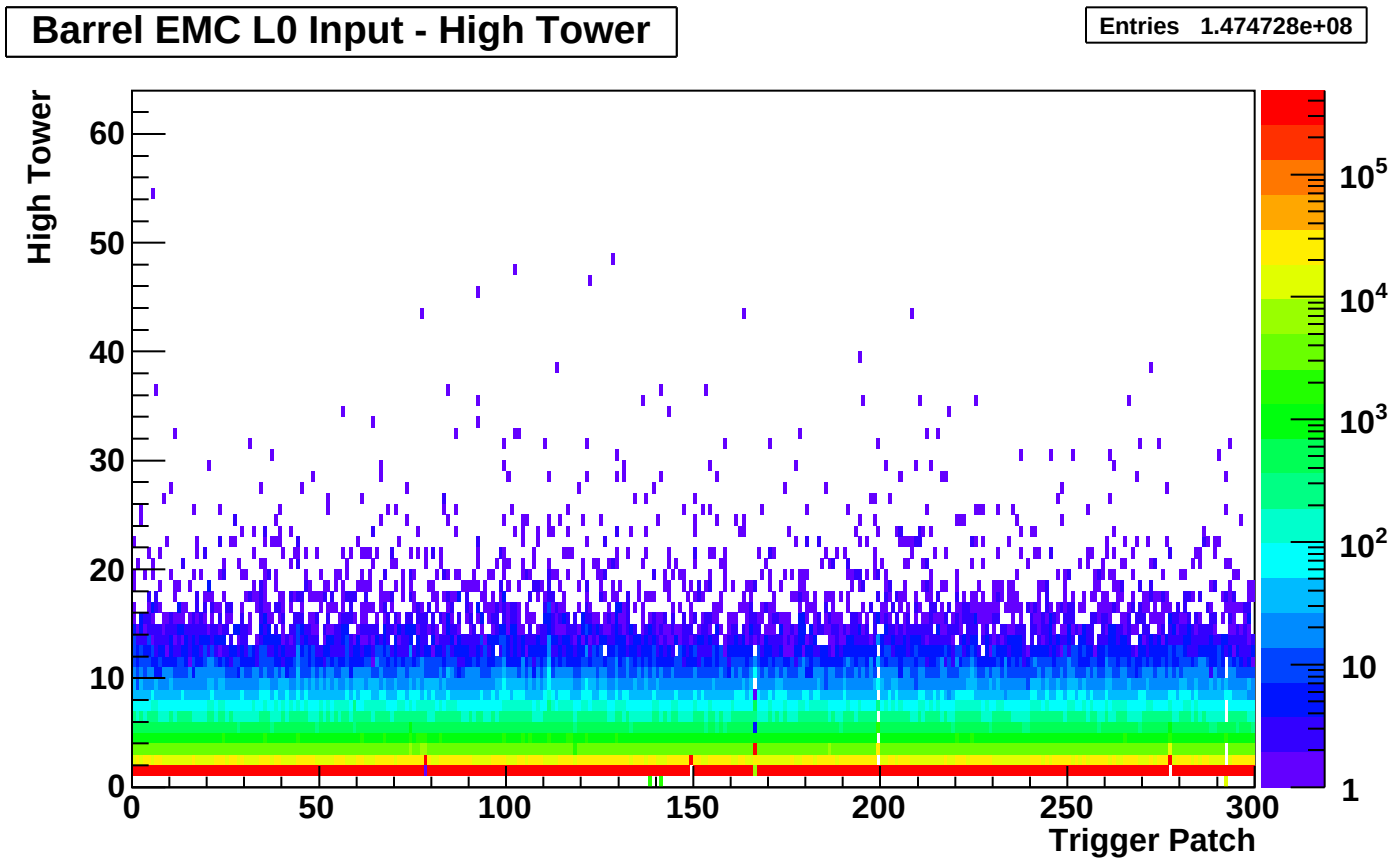

Last DSM Ch3 Input
Entries 0
LD301 Ch3 - Simulated
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

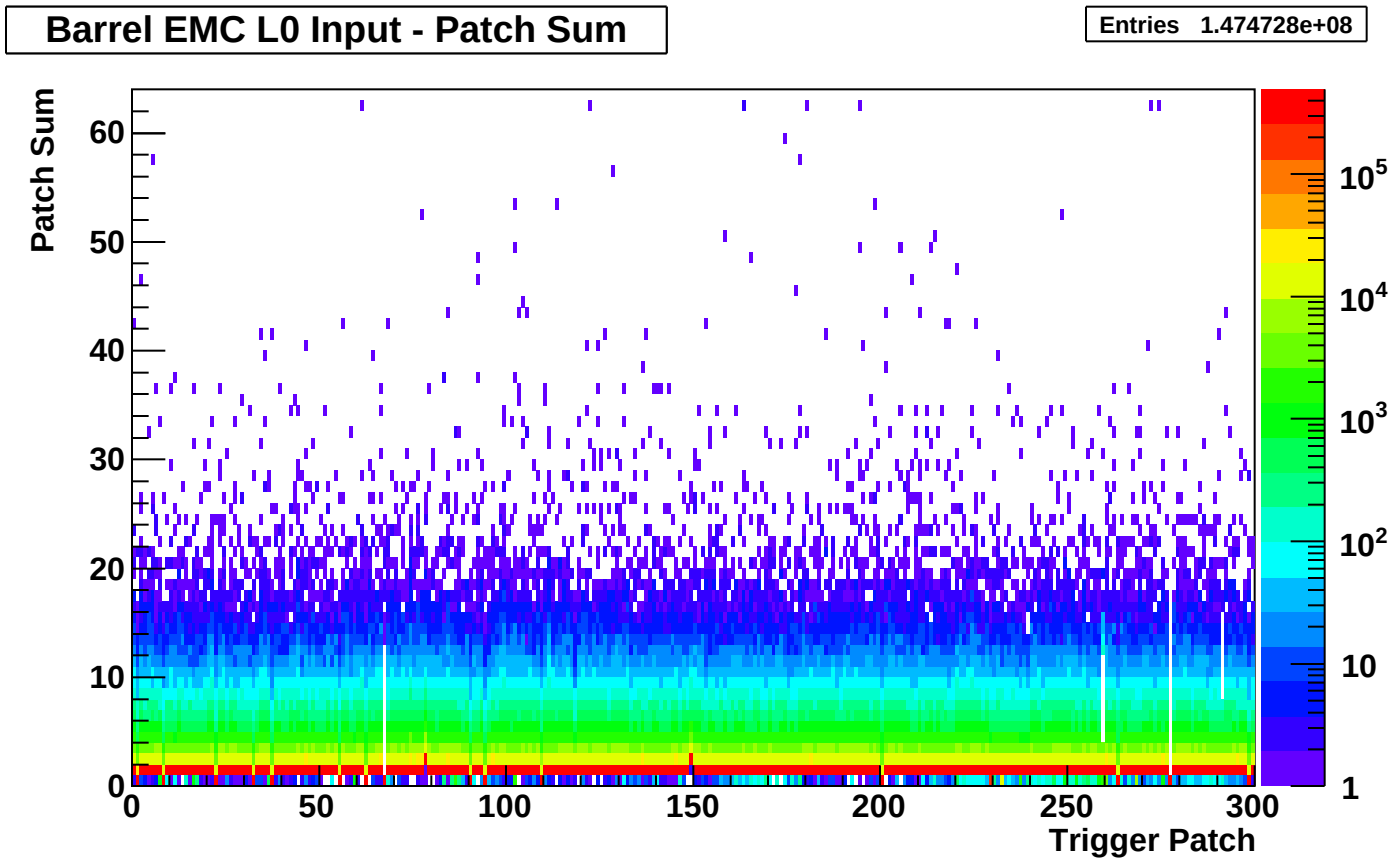

TCU bits
Entries 7865216
TCU bits
491576 491576 491576 491576 491576 491576 491576 491576 491576 491576 491576 491576 491576 491576 491576 491576
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

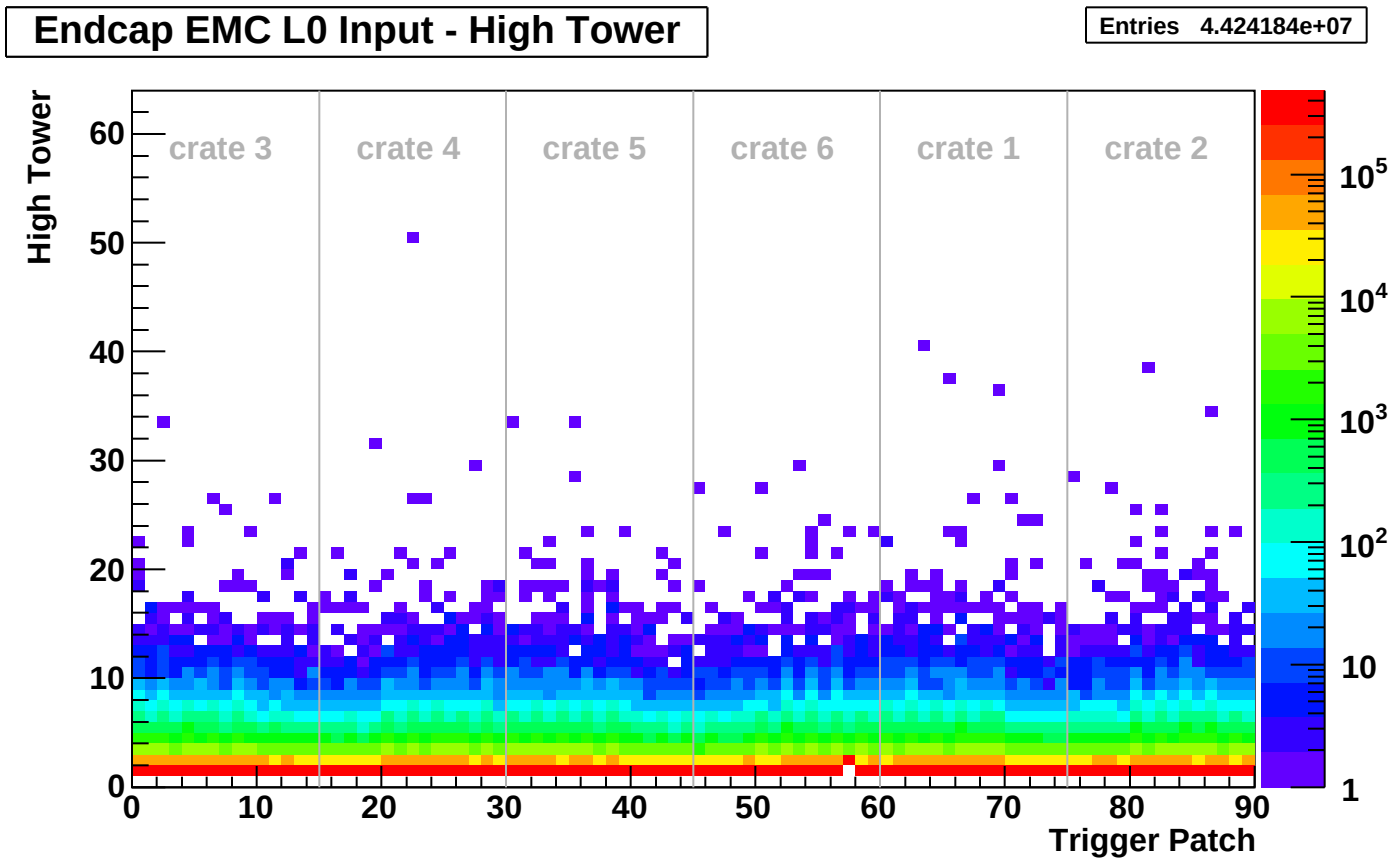

TCU bits
Entries 600295
TCU bits - Simulated
3872 470 148787 24 23229 422029 1984
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

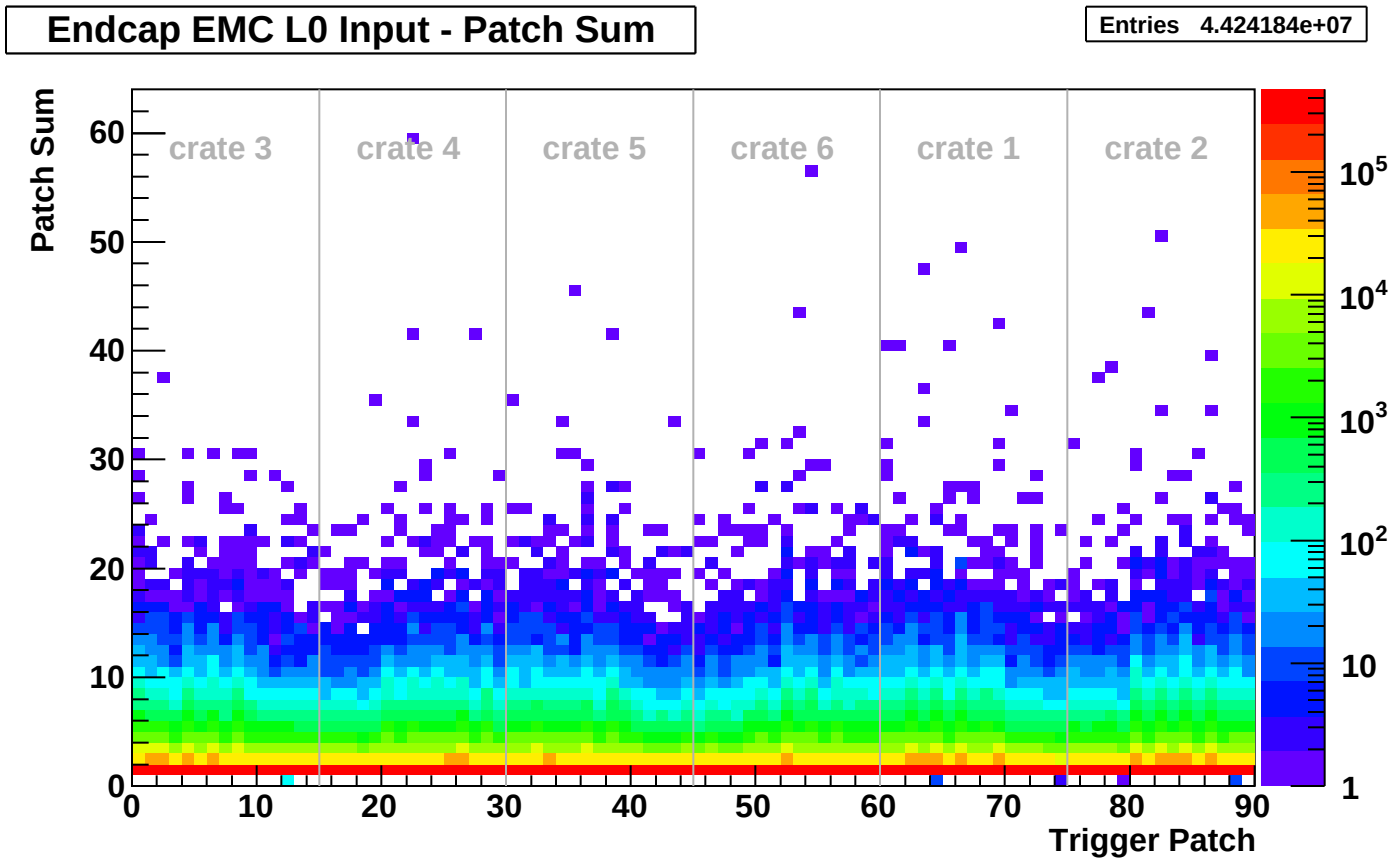

BunchId7Bit (BHT3)
Entries 33

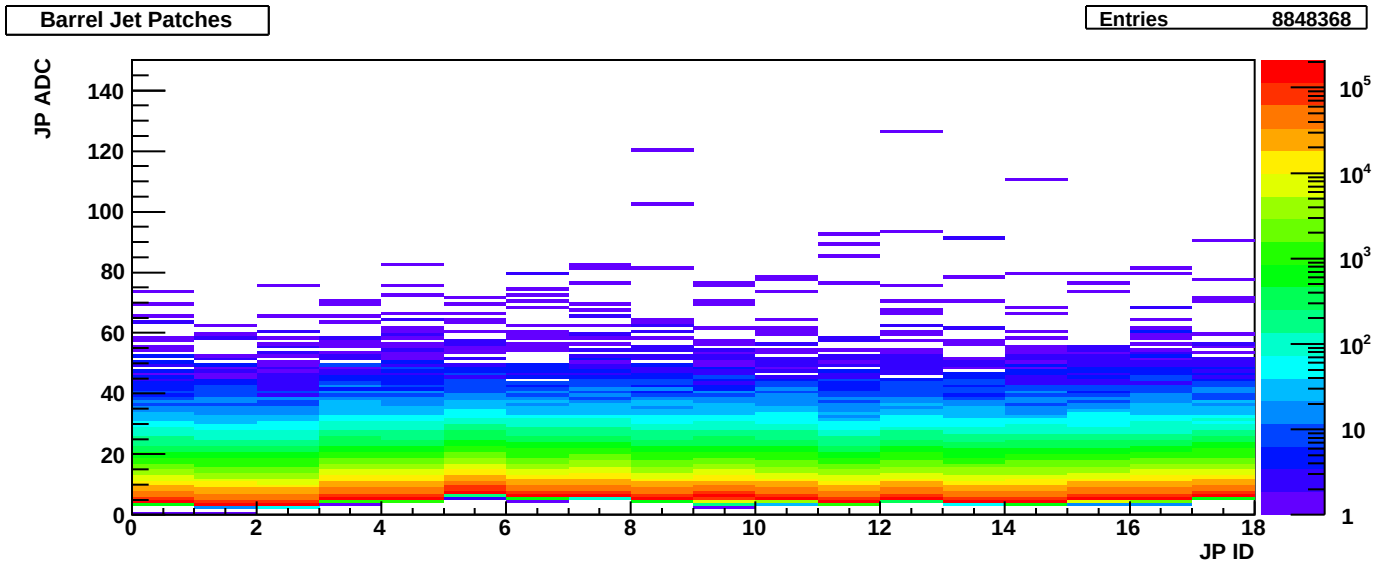

BunchId7Bit (all events)
Entries 491576

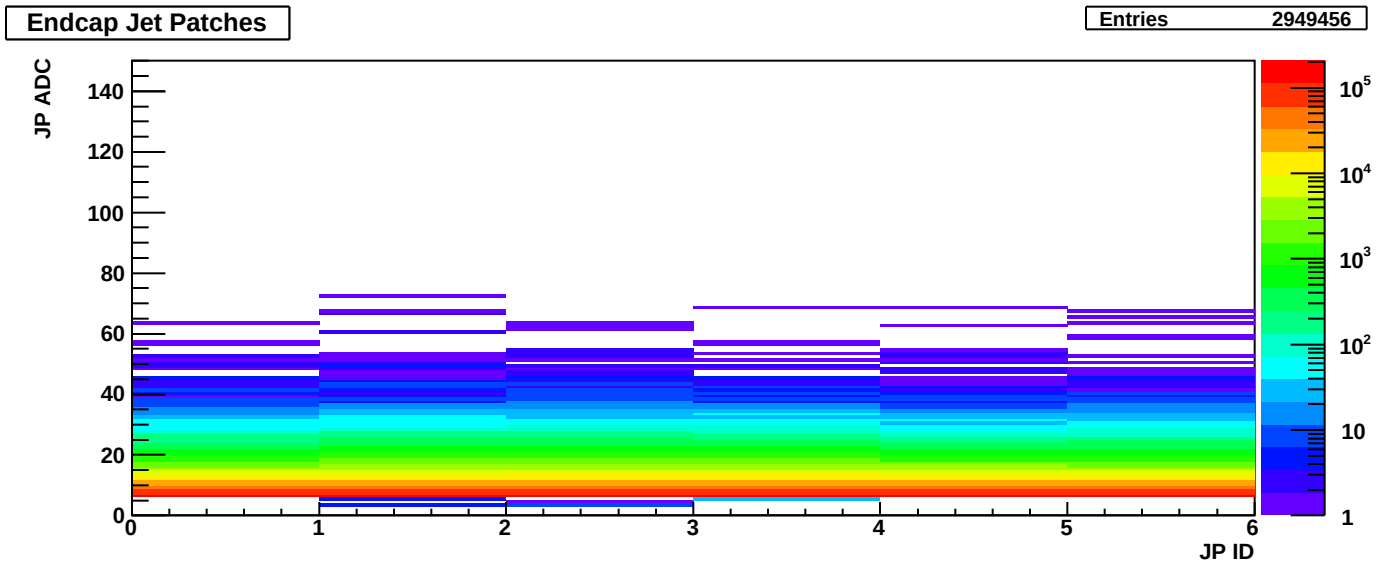

Barrel EMC L0 Input - High Tower
Entries 1.474728e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

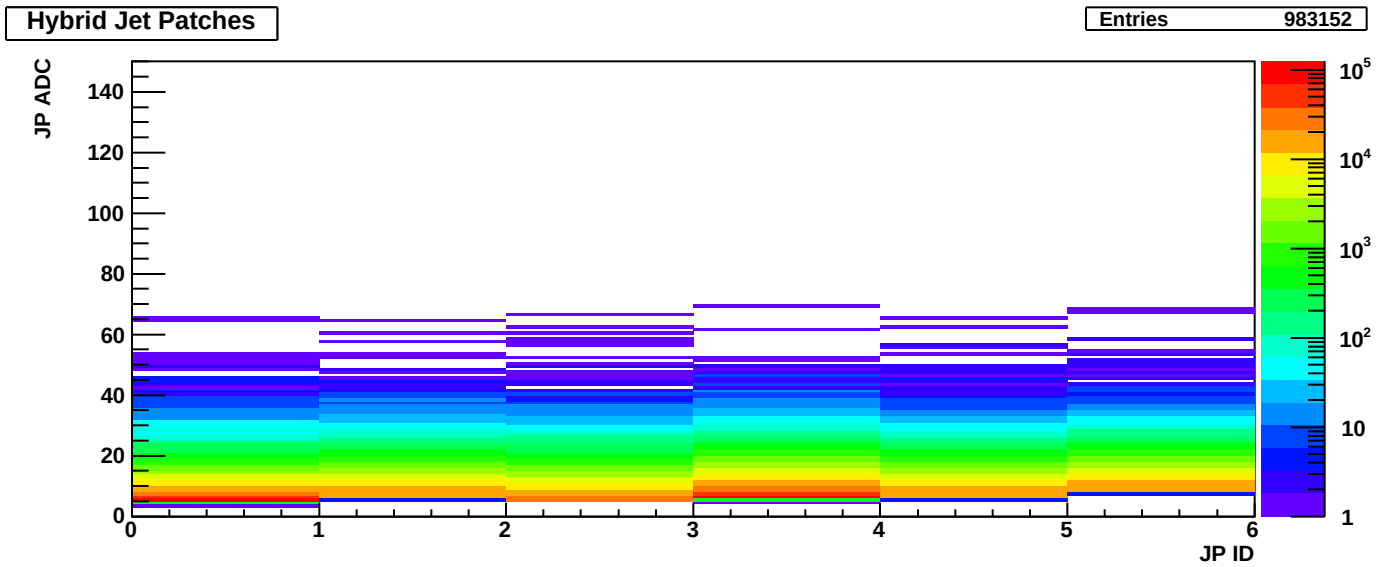

Barrel EMC L0 Input - Patch Sum
Entries 1.474728e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

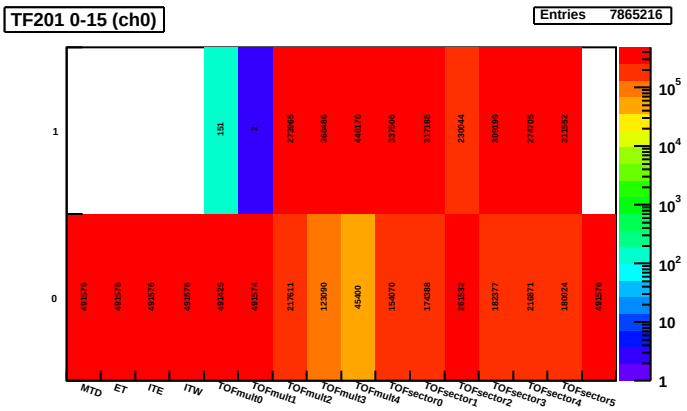

Endcap EMC L0 Input - High Tower
Entries 4.424184e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

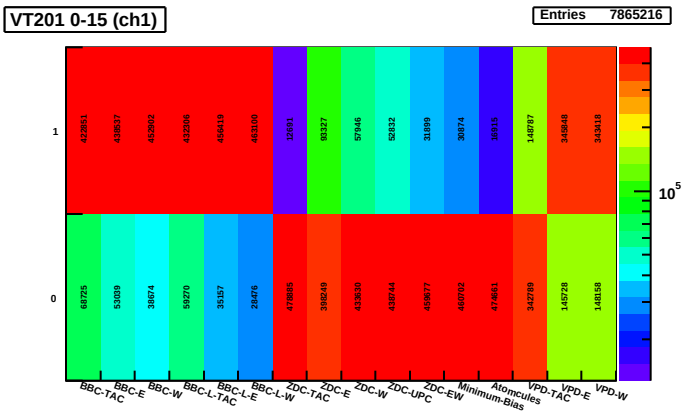

Endcap EMC L0 Input - Patch Sum
Entries 4.424184e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

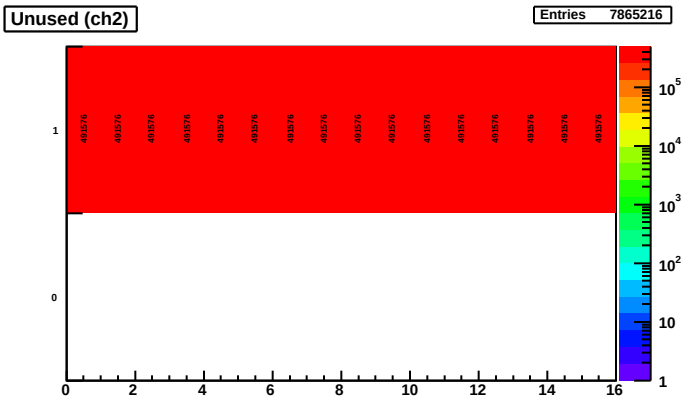

Barrel Jet Patches
Entries 8848368
JP ADC
JP ID

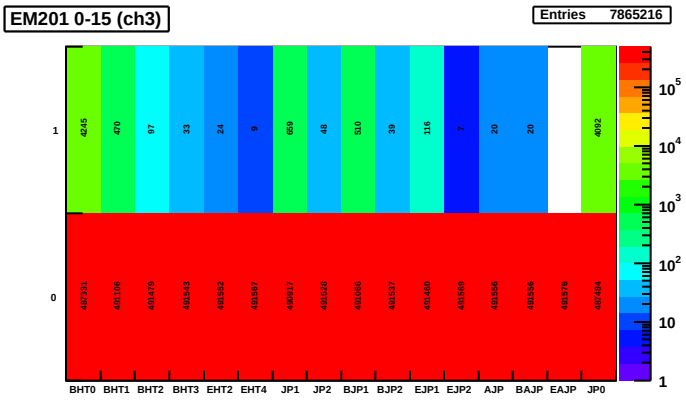

Endcap Jet Patches
Entries 2949456
JP ADC
JP ID

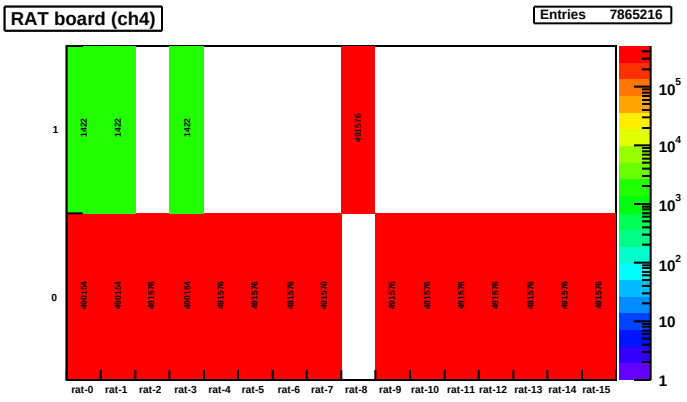

Hybrid Jet Patches
Entries 983152
JP ADC
JP ID

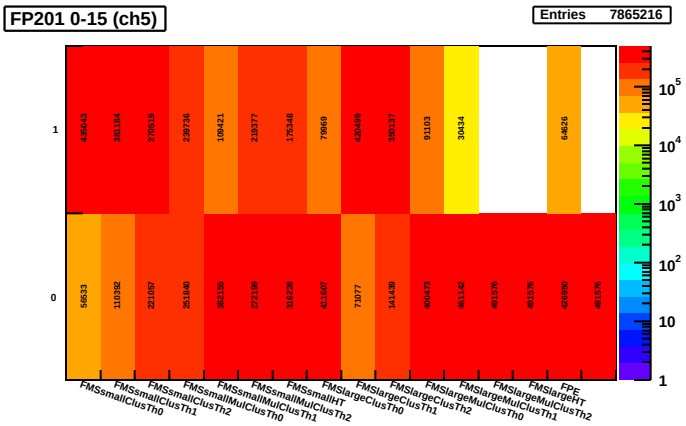

TF201 0-15 (ch0)
Entries 7865216
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

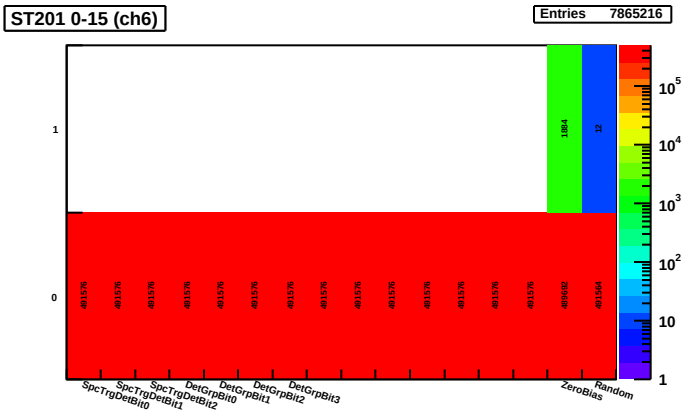

VT201 0-15 (ch1)
Entries 7865216
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

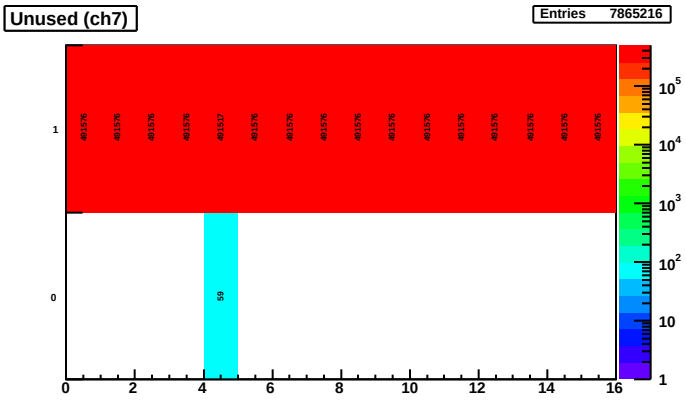

Unused (ch2)
Entries 7865216

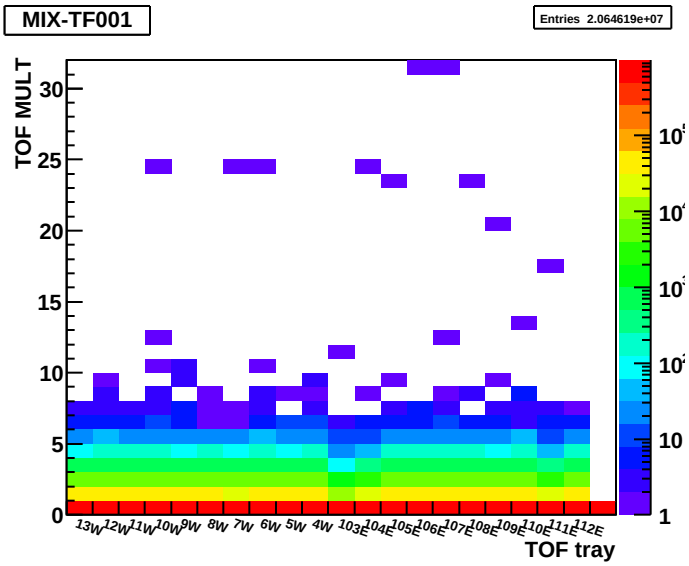

EM201 0-15 (ch3)
Entries 7865216
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

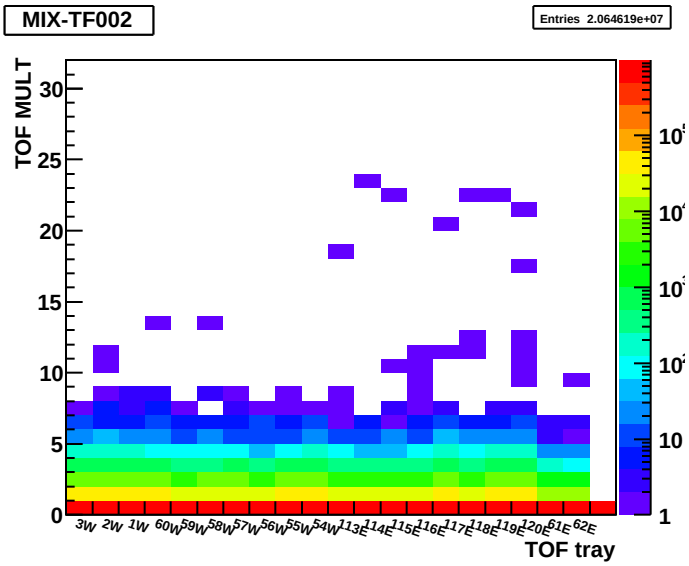

RAT board (ch4)
Entries 7865216
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

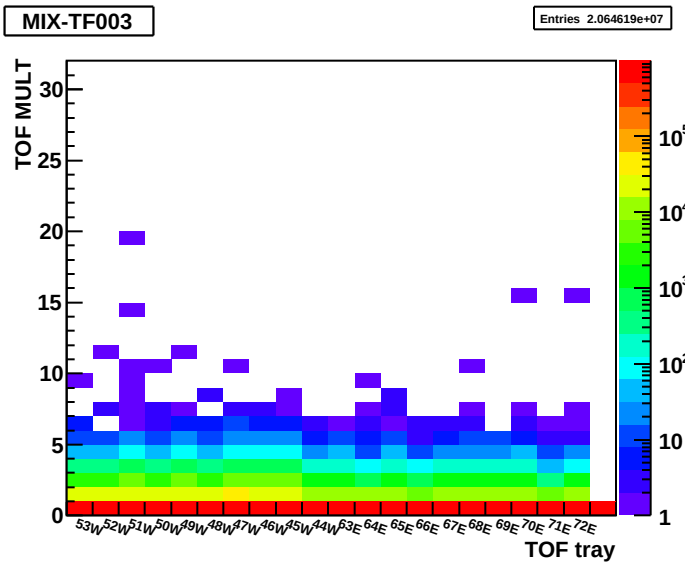

FP201 0-15 (ch5)
Entries 7865216
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

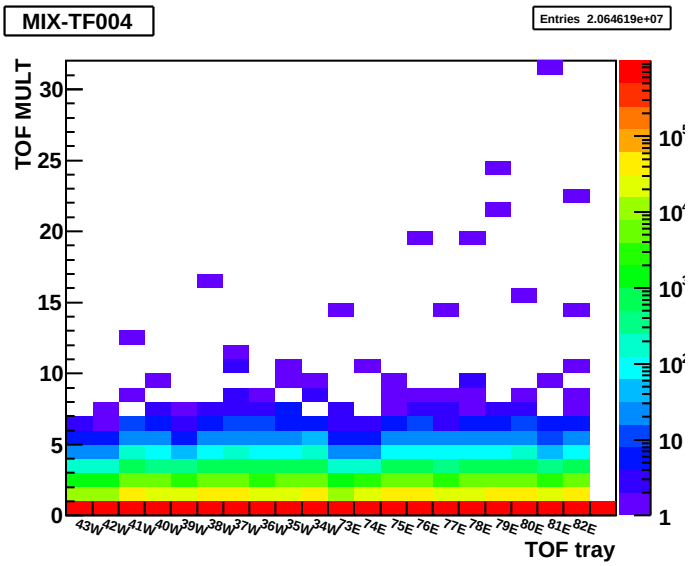

ST201 0-15 (ch6)
Entries 7865216
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

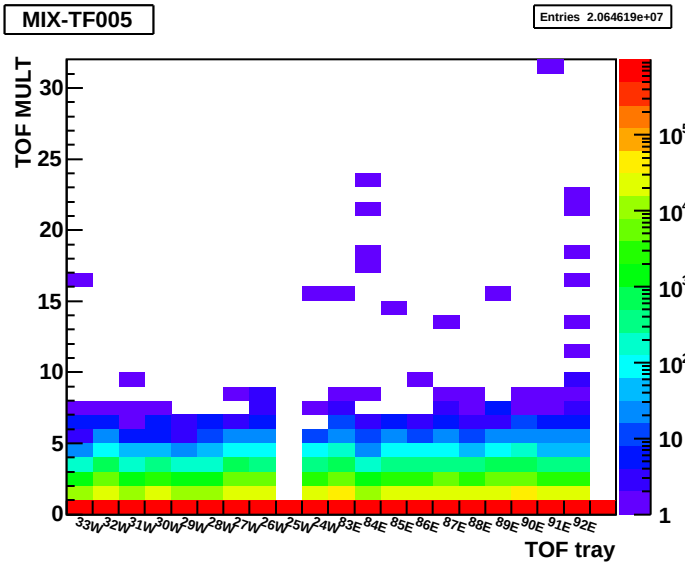

Unused (ch7)
Entries 7865216

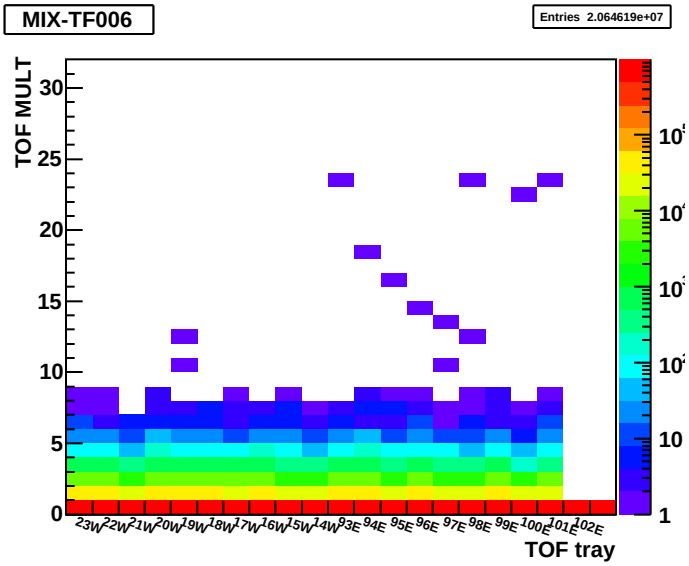

MIX-TF001
Entries 2.064619e+07
TOF MULT
TOF tray

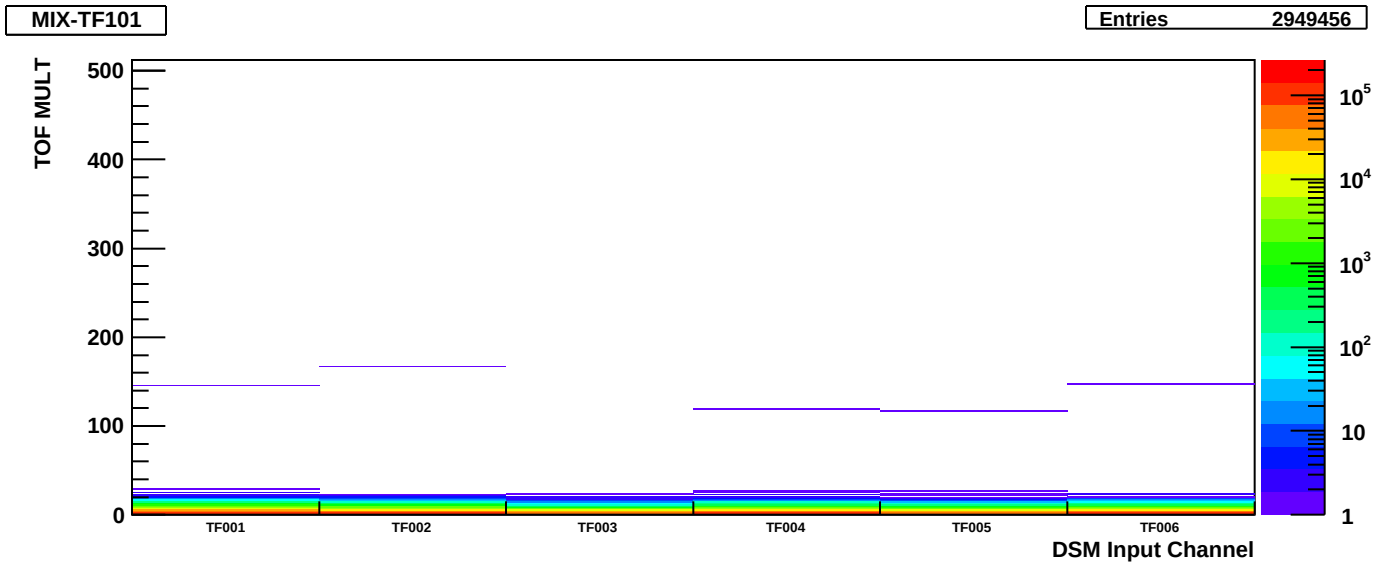

MIX-TF002
Entries 2.064619e+07
TOF MULT
TOF tray

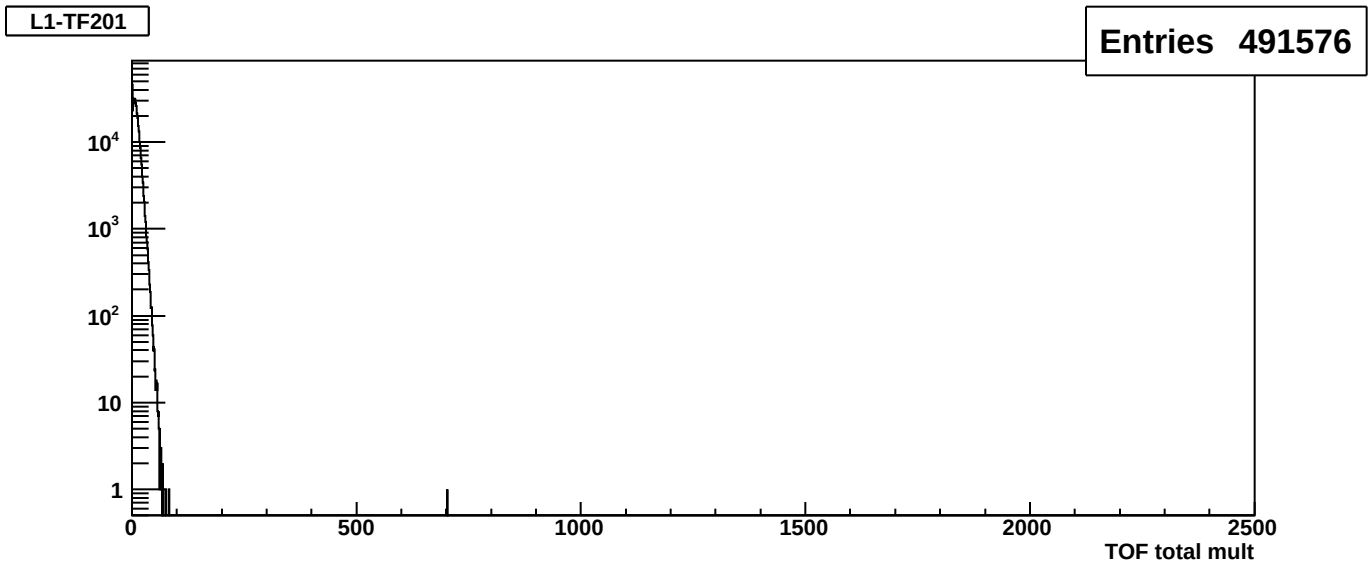

MIX-TF003
Entries 2.064619e+07
TOF MULT
TOF tray

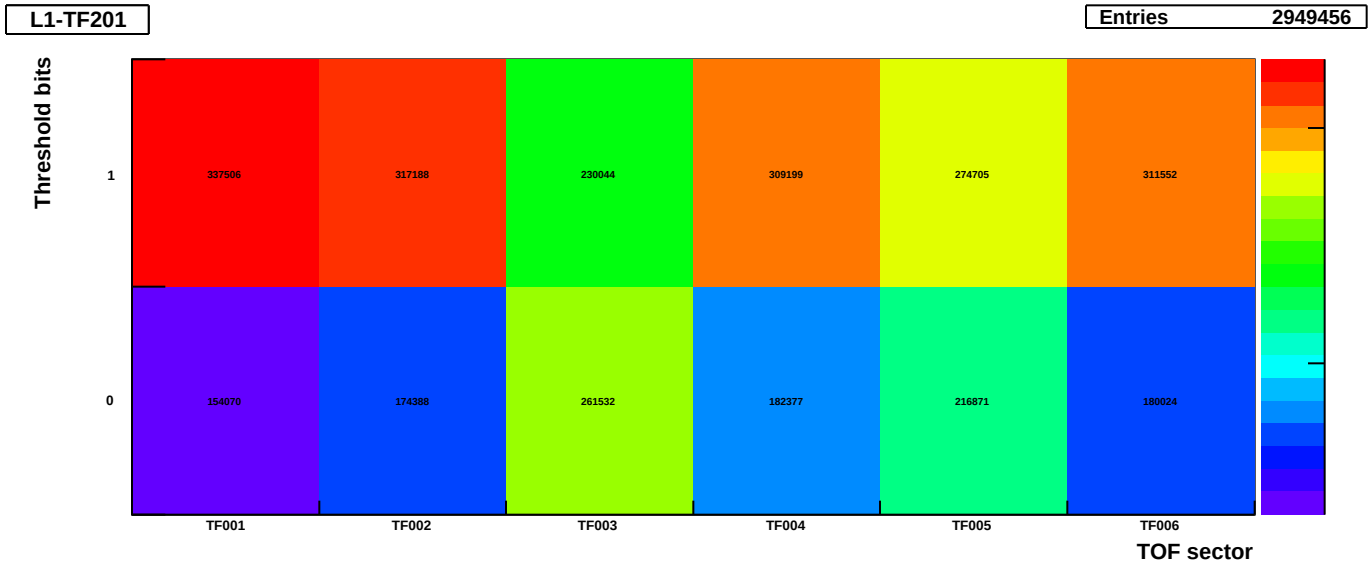

MIX-TF004
Entries 2.064619e+07
TOF MULT
TOF tray

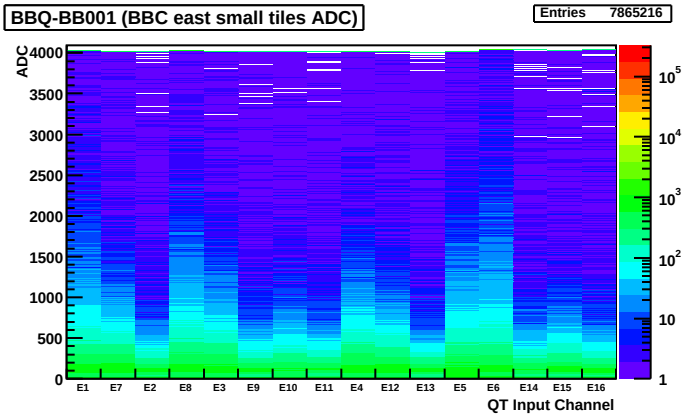

MIX-TF005
Entries 2.064619e+07
TOF MULT
TOF tray

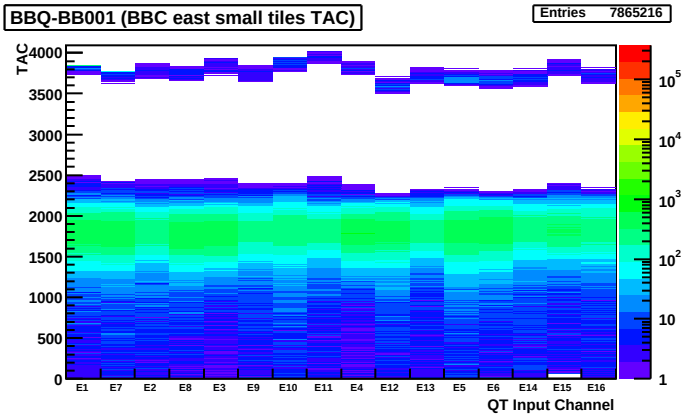

MIX-TF006
Entries 2.064619e+07
TOF MULT
TOF tray

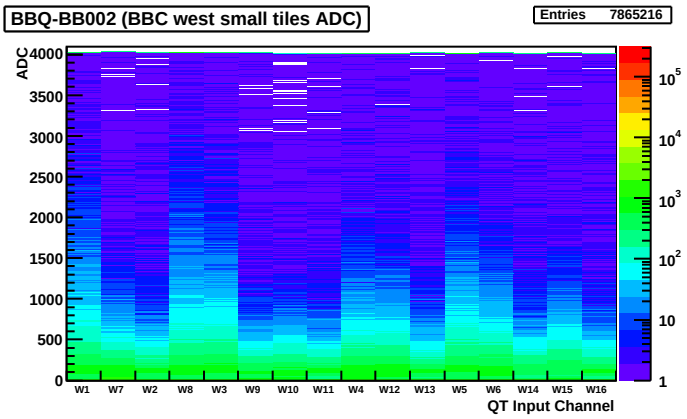

MIX-TF101
Entries 2949456
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

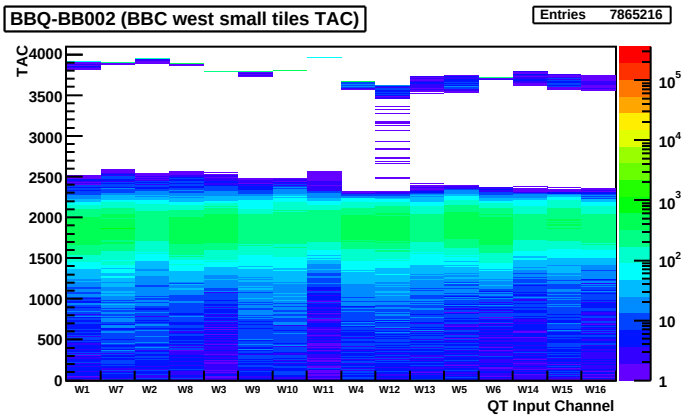

L1-TF201
Entries 491576
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

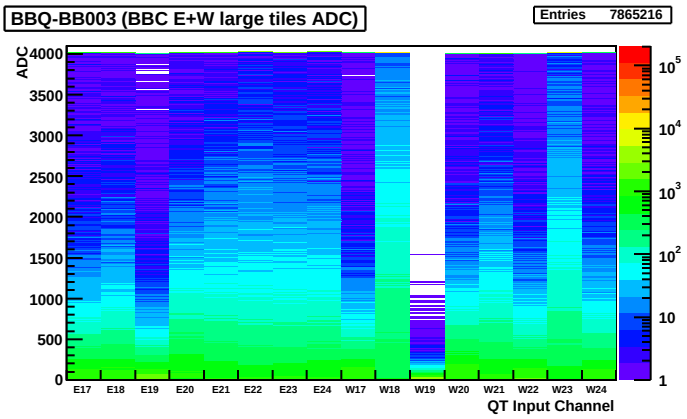

L1-TF201
Entries 2949456
Threshold bits
1
0
337506
317188
230044
309199
274705
311552
154070
174388
261532
182377
216871
180024
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

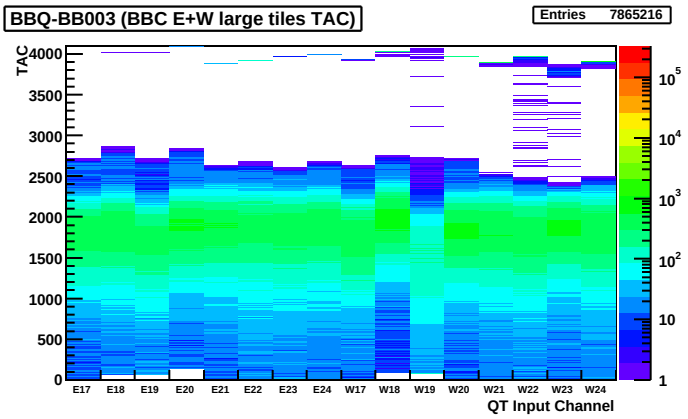

BBQ-BB001 (BBC east small tiles ADC)
Entries 7865216
ADC
QT Input Channel

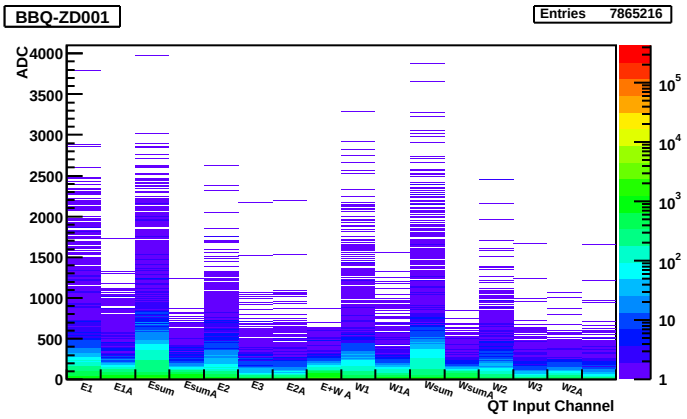

BBQ-BB001 (BBC east small tiles TAC)
Entries 7865216
TAC
QT Input Channel

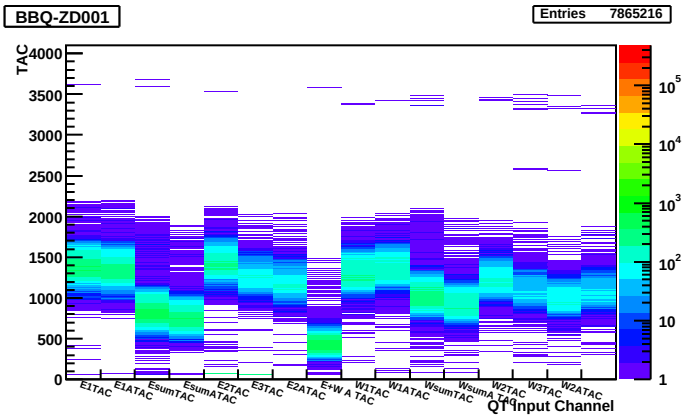

BBQ-BB002 (BBC west small tiles ADC)
Entries 7865216
ADC
QT Input Channel

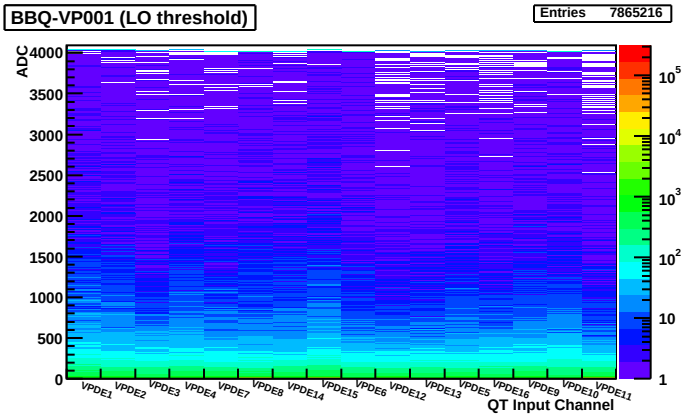

BBQ-BB002 (BBC west small tiles TAC)
Entries 7865216
TAC
QT Input Channel

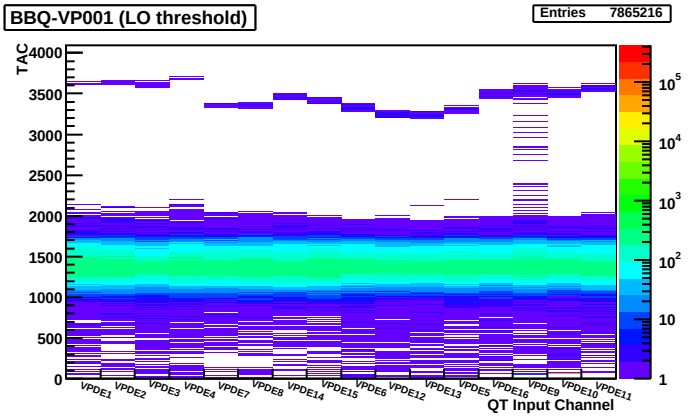

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 7865216
ADC
QT Input Channel

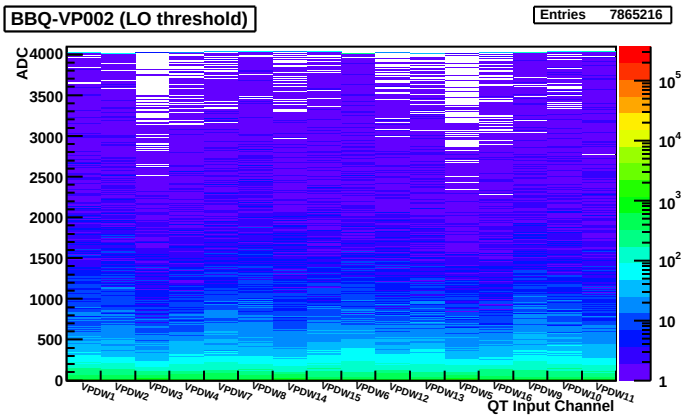

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 7865216
TAC
QT Input Channel

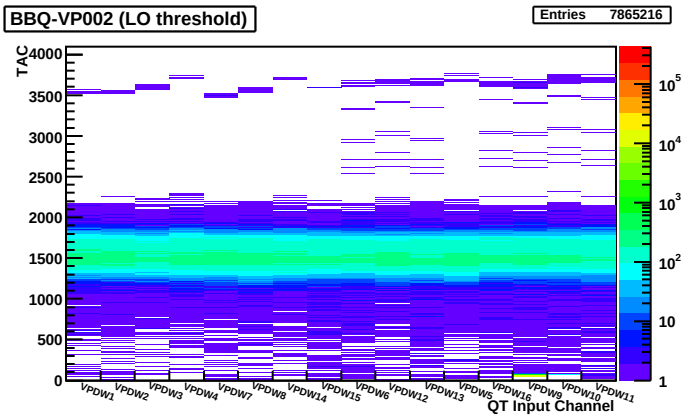

BBQ-ZD001
Entries 7865216
ADC
QT Input Channel

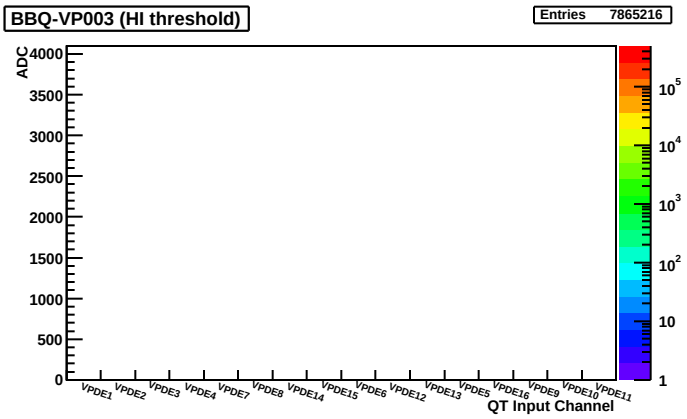

BBQ-ZD001
Entries 7865216
TAC
QT Input Channel

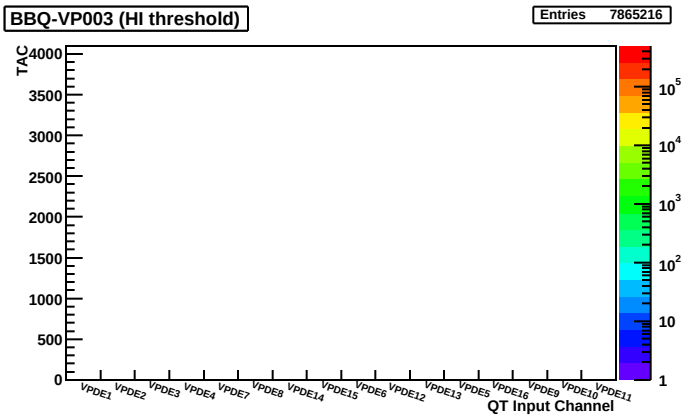

BBQ-VP001 (LO threshold)
Entries 7865216
ADC
QT Input Channel

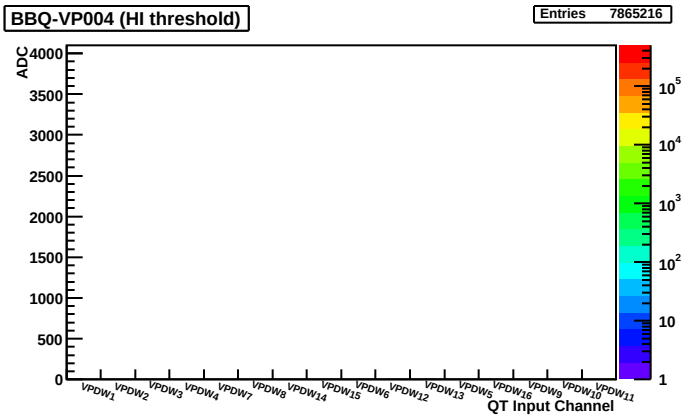

BBQ-VP001 (LO threshold)
Entries 7865216
TAC
QT Input Channel

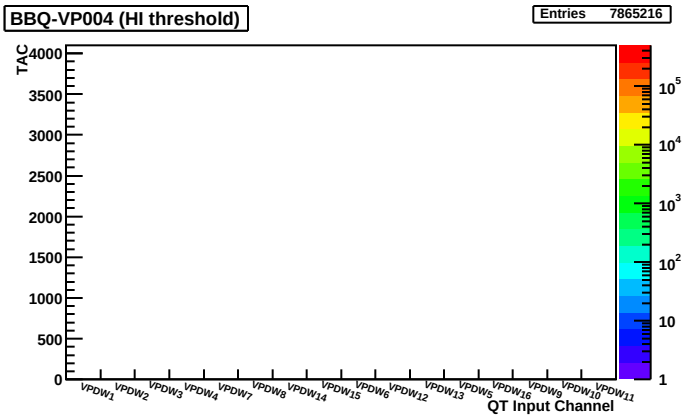

BBQ-VP002 (LO threshold)
Entries 7865216
ADC
QT Input Channel

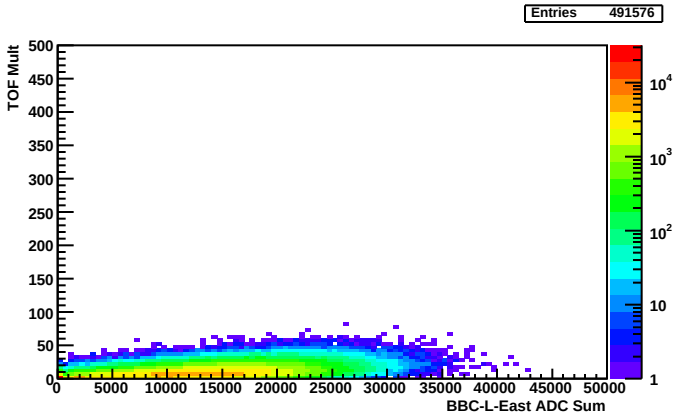

BBQ-VP002 (LO threshold)
Entries 7865216
TAC
QT Input Channel

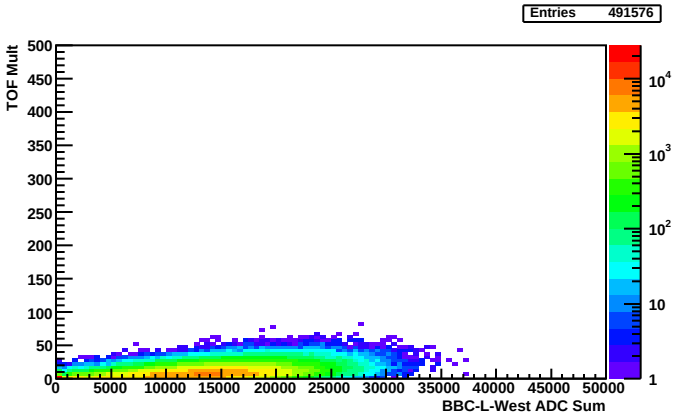

BBQ-VP003 (HI threshold)
Entries 7865216
ADC
QT Input Channel

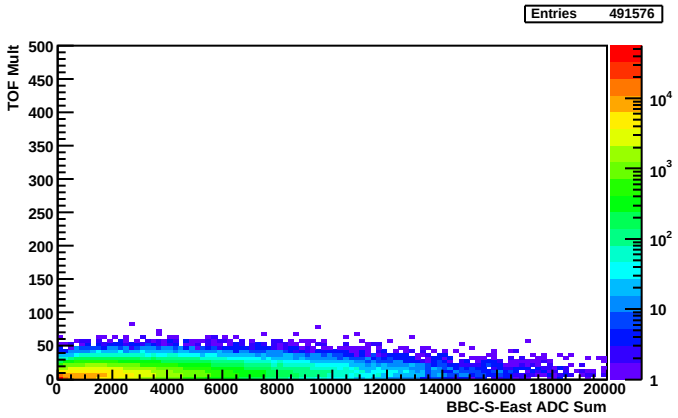

BBQ-VP003 (HI threshold)
Entries 7865216
TAC
QT Input Channel

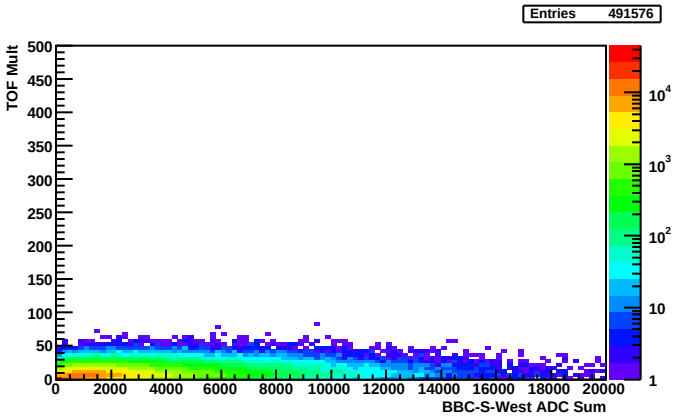

BBQ-VP004 (HI threshold)
Entries 7865216
ADC
QT Input Channel

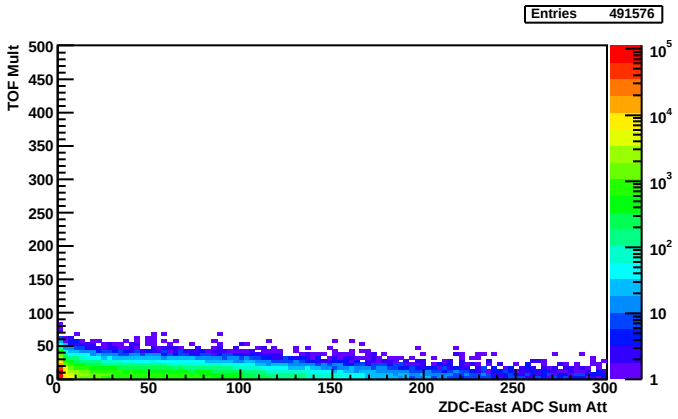

BBQ-VP004 (HI threshold)
Entries 7865216
TAC
QT Input Channel

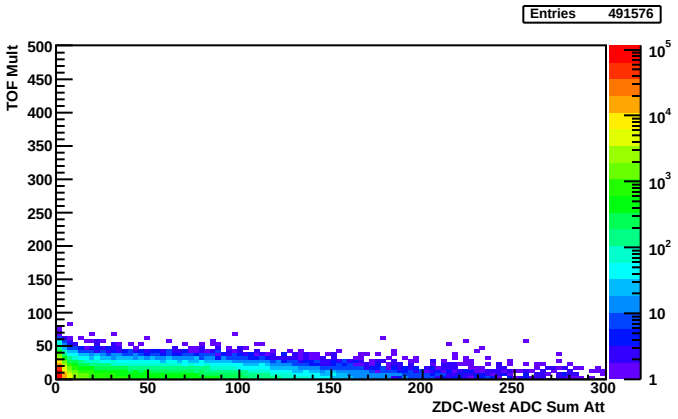

Entries 491576
TOF Mult
BBC-L-East ADC Sum

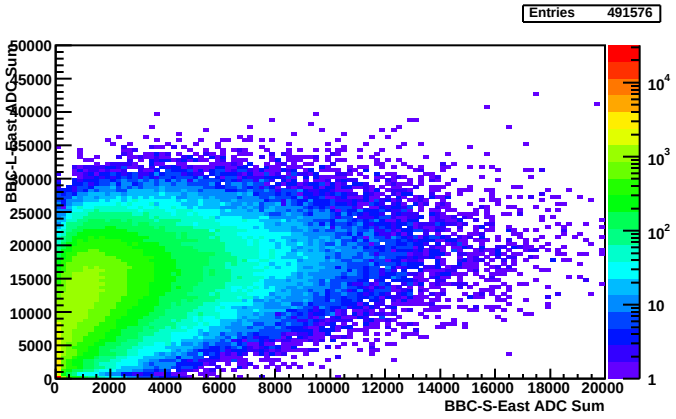

Entries 491576
TOF Mult
BBC-L-West ADC Sum

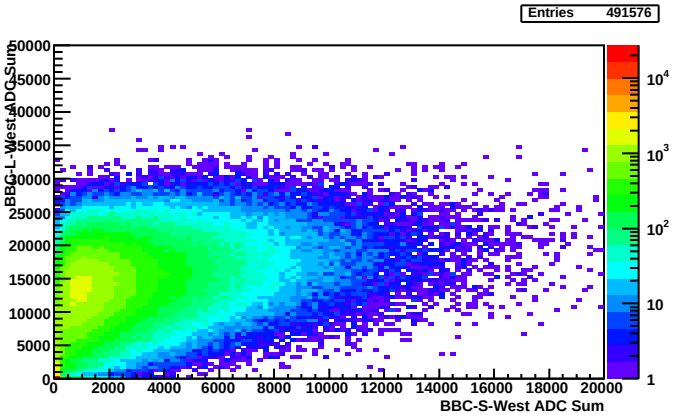

Entries 491576
TOF Mult
BBC-S-East ADC Sum

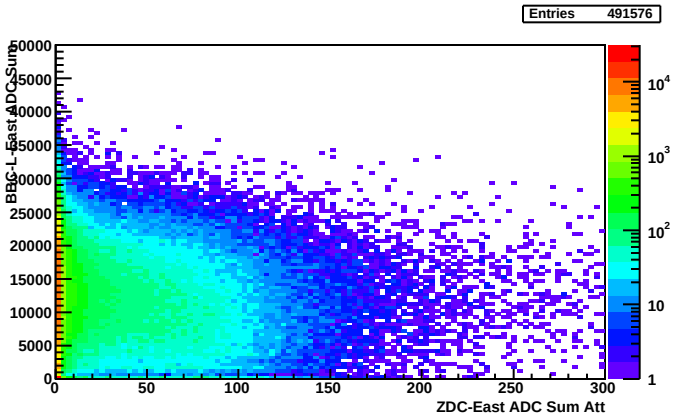

Entries 491576
TOF Mult
BBC-S-West ADC Sum

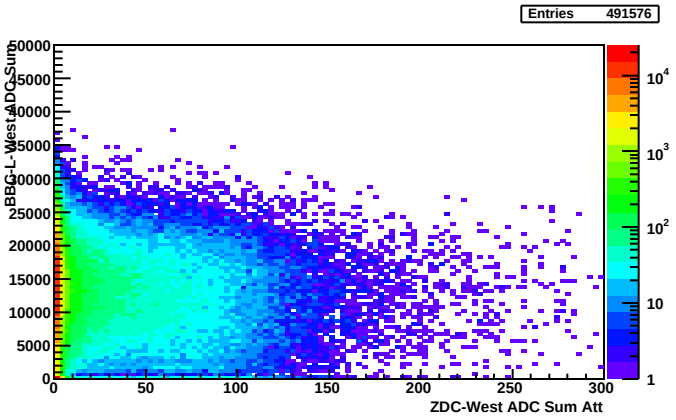

Entries 491576
TOF Mult
ZDC-East ADC Sum Att

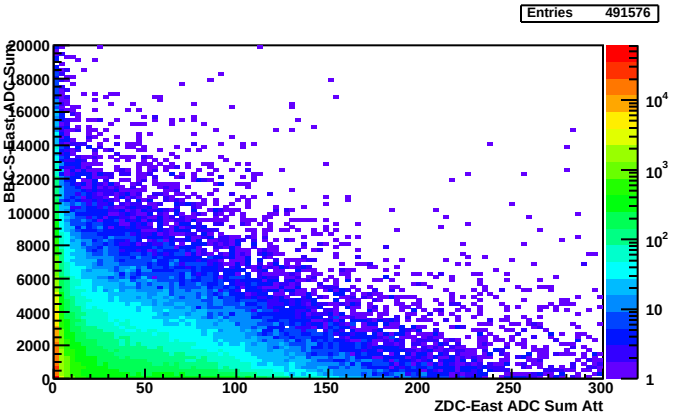

Entries 491576
TOF Mult
ZDC-West ADC Sum Att

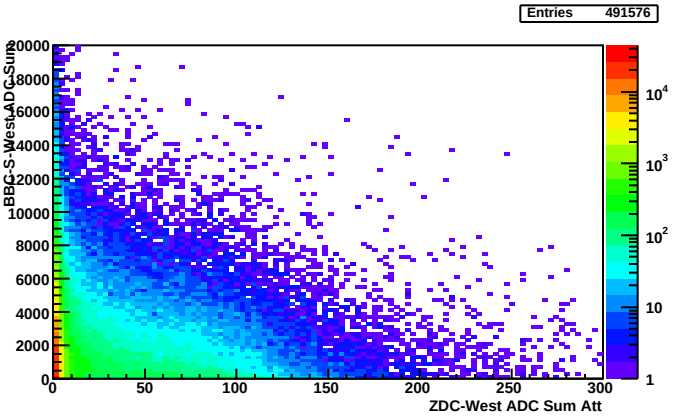

Entries 491576
BBC-L-East ADC Sum
BBC-S-East ADC Sum

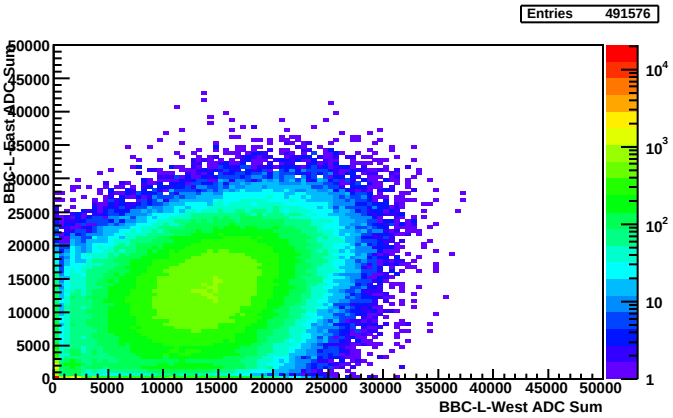

Entries 491576
BBC-L-West ADC Sum
BBC-S-West ADC Sum

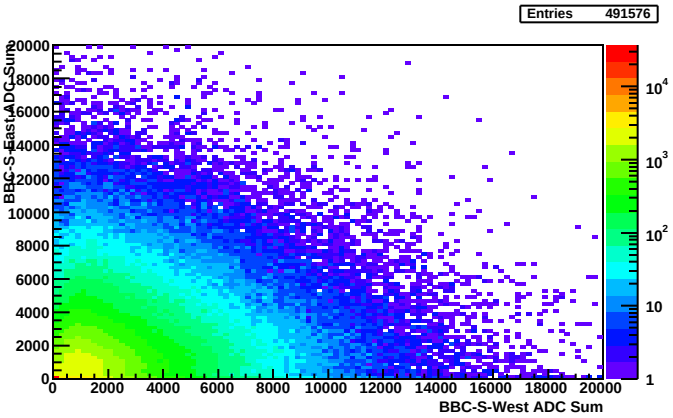

Entries 491576
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

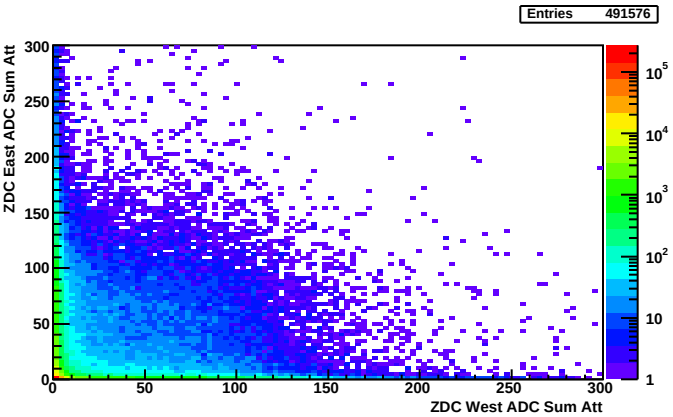

Entries 491576
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

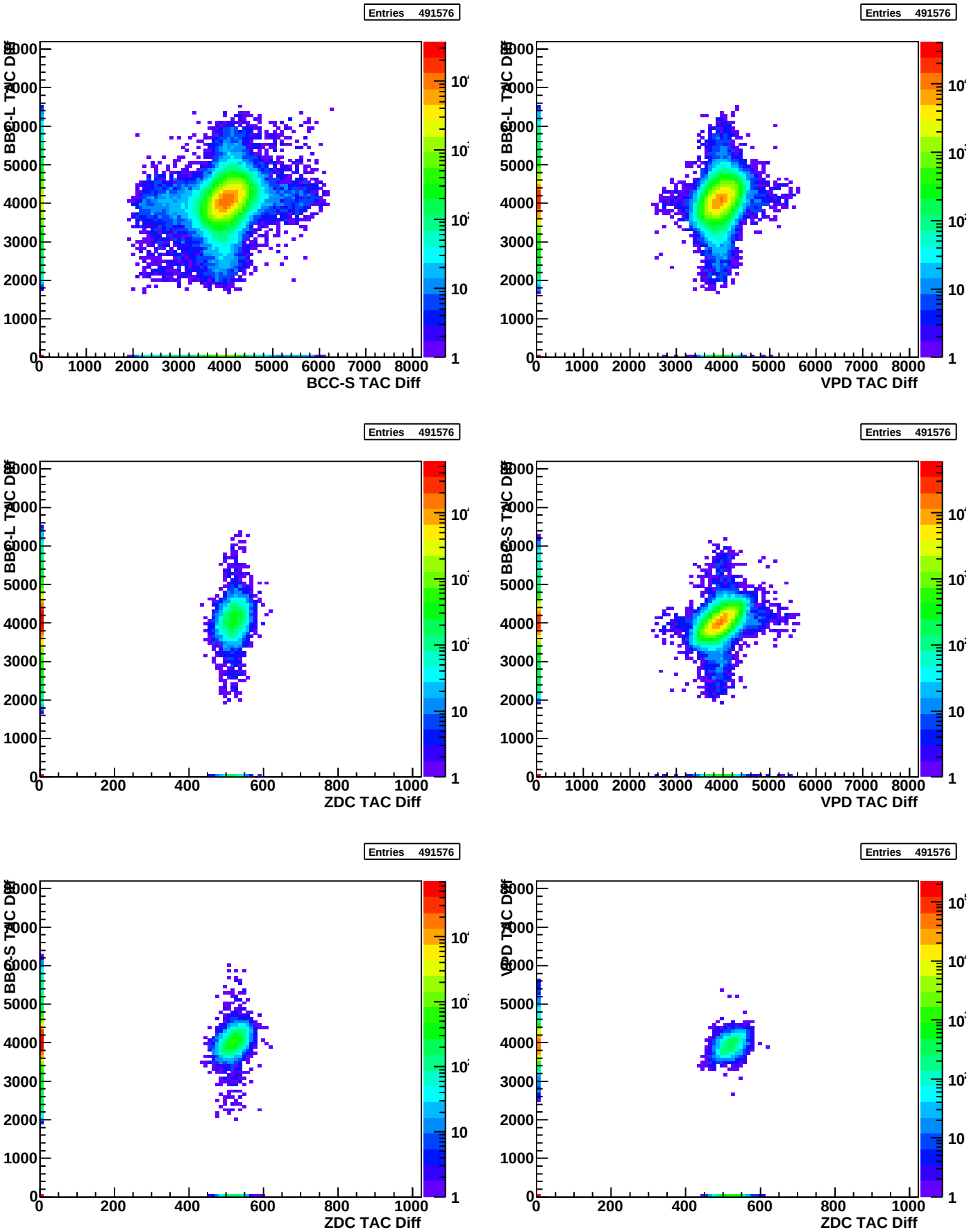

Entries 491576
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

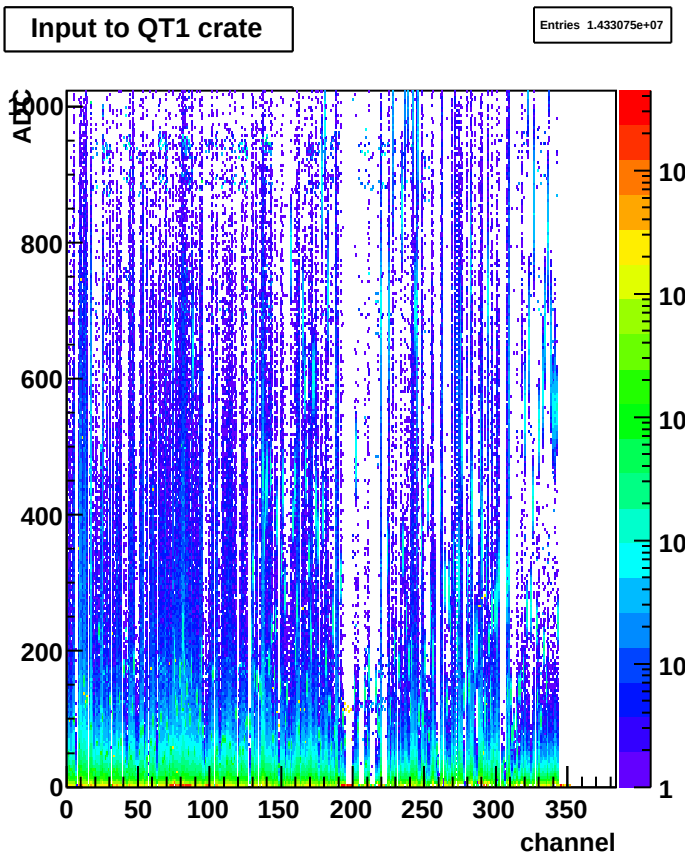

Entries 491576
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

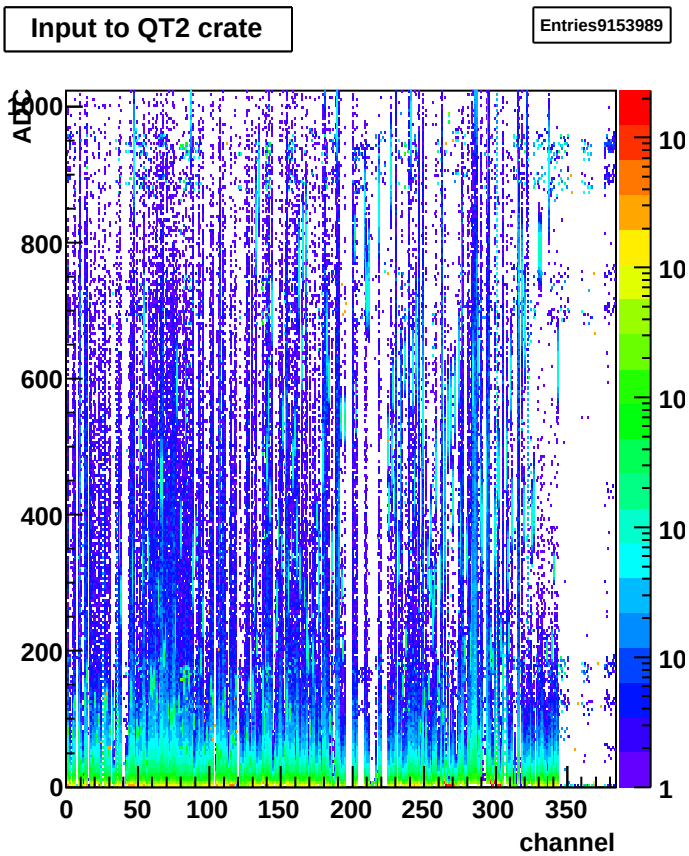

Entries 491576
BBC-L-East ADC Sum
BBC-L-West ADC Sum

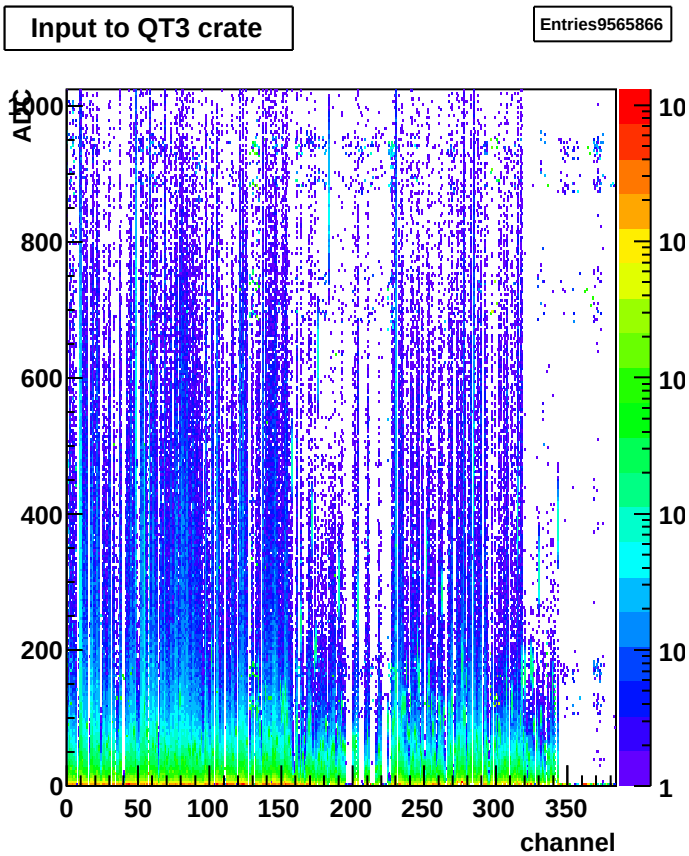

Entries 491576
BBC-S-East ADC Sum
BBC-S-West ADC Sum

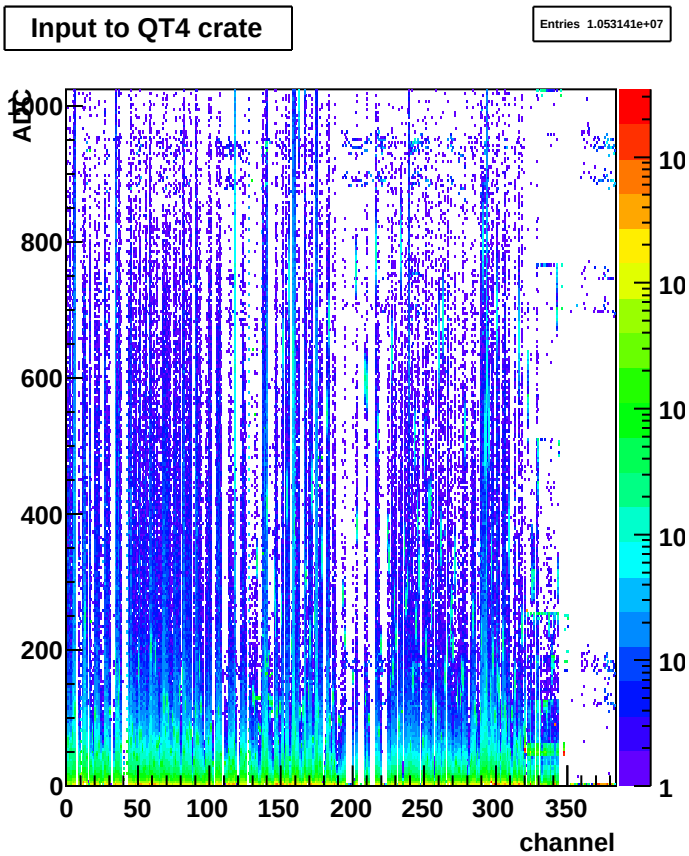

Entries 491576
ZDC East ADC Sum Att
ZDC West ADC Sum Att

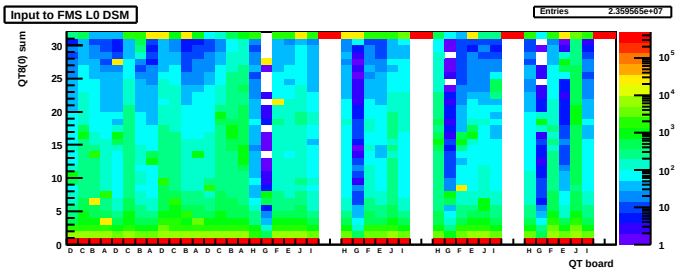

Entries 491576
BBC-L TAC Diff
BCC-S TAC Diff
Entries 491576
BBC-L TAC Diff
VPD TAC Diff
Entries 491576
BBC-L TAC Diff
ZDC TAC Diff
Entries 491576
BBC-S TAC Diff
VPD TAC Diff
Entries 491576
BBC-S TAC Diff
ZDC TAC Diff
Entries 491576
VPD TAC Diff
ZDC TAC Diff

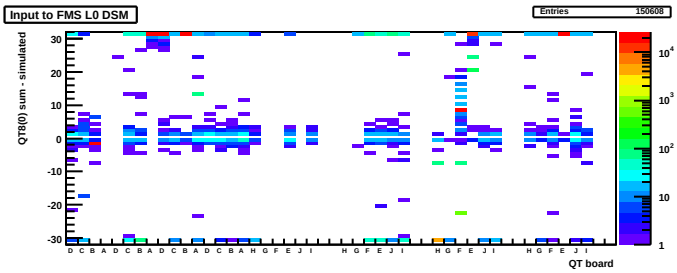

Input to QT1 crate
Entries 1.433075e+07
ADC
channel

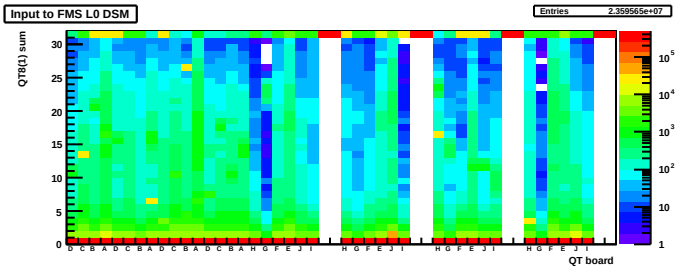

Input to QT2 crate
Entries9153989
ADC
channel

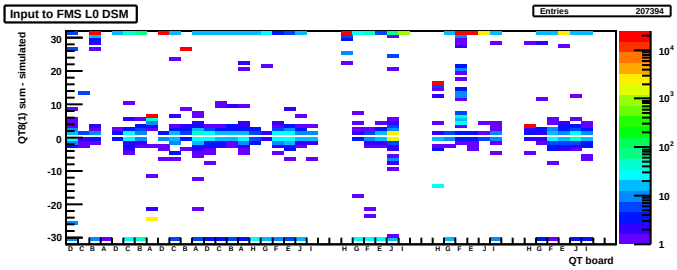

Input to QT3 crate
Entries9565866
ADC
channel

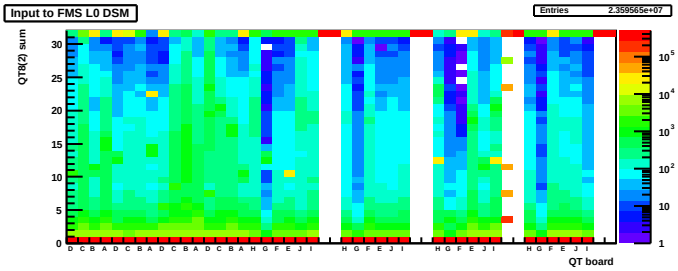

Input to QT4 crate
Entries 1.053141e+07
ADC
channel

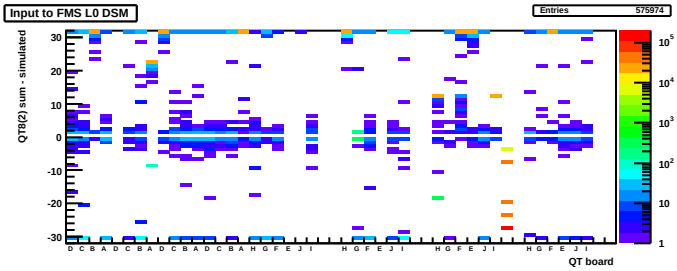

Input to FMS L0 DSM
Entries 2.359565e+07
QT8(0) sum
QT board

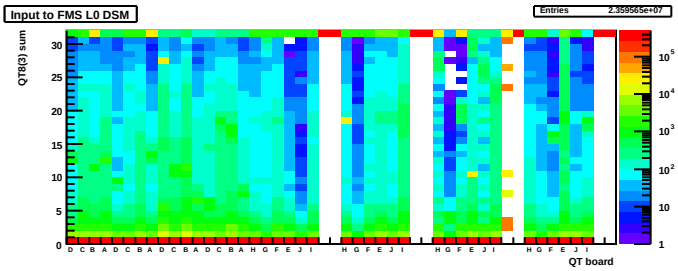

Input to FMS L0 DSM
Entries 150608
QT8(0) sum - simulated
QT board

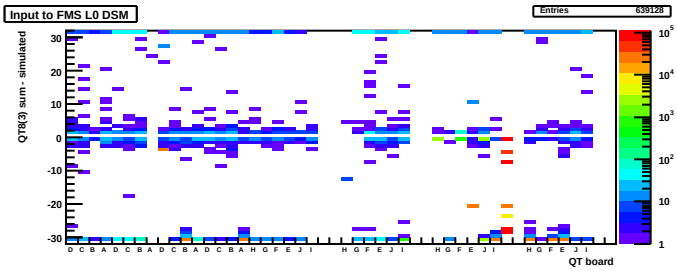

Input to FMS L0 DSM
Entries 2.359565e+07
QT8(1) sum
QT board

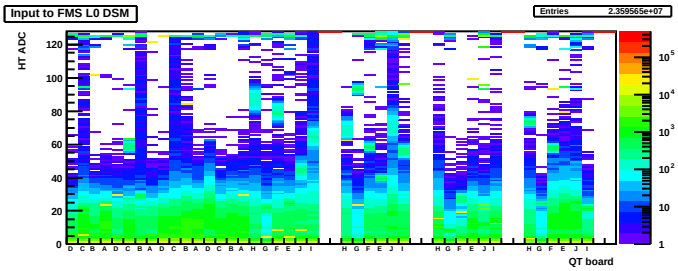

Input to FMS L0 DSM
Entries 207394
QT8(1) sum - simulated
QT board

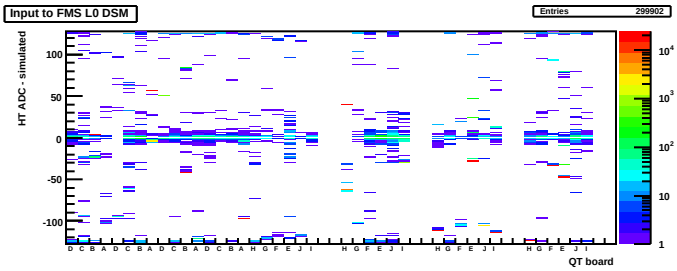

Input to FMS L0 DSM
Entries 2.359565e+07
QT8(2) sum
QT board

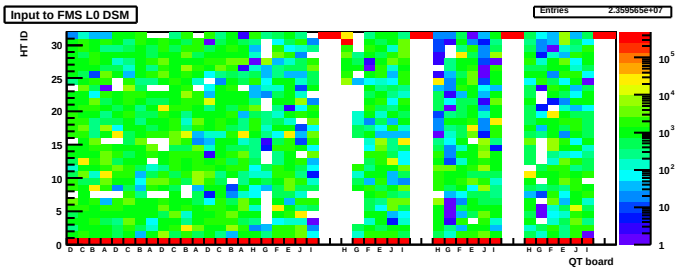

Input to FMS L0 DSM
Entries 575974
QT8(2) sum - simulated
QT board

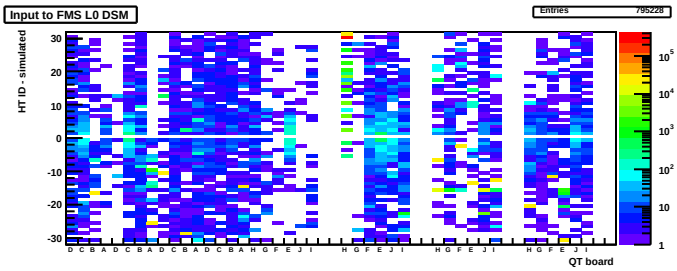

Input to FMS L0 DSM
Entries 2.359565e+07
QT8(3) sum
QT board

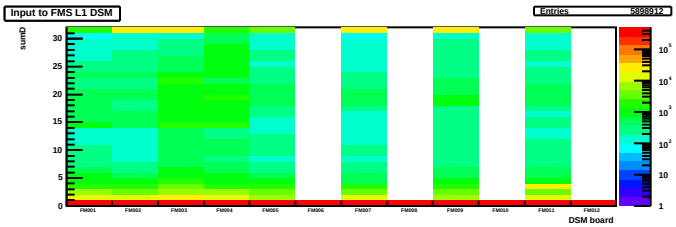

Input to FMS L0 DSM
Entries 639128
QT8(3) sum - simulated
QT board

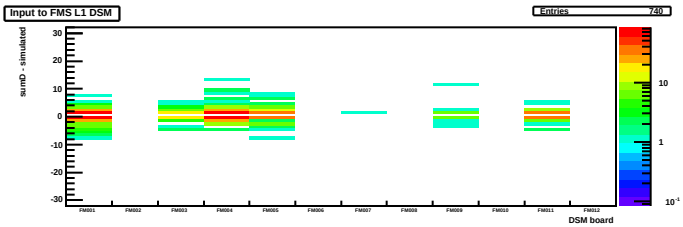

Input to FMS L0 DSM
Entries 2.359565e+07
HT ADC
QT board

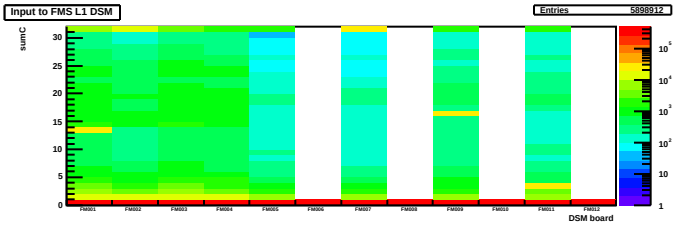

Input to FMS L0 DSM
Entries 299902
HT ADC - simulated
QT board

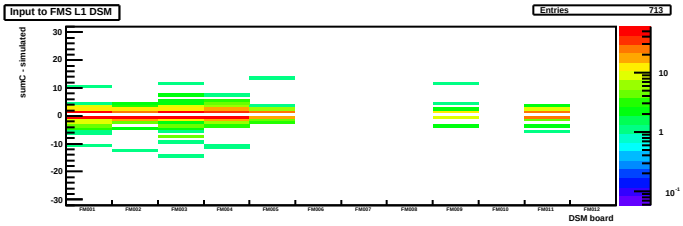

Input to FMS L0 DSM
Entries 2.359565e+07
HT ID
QT board

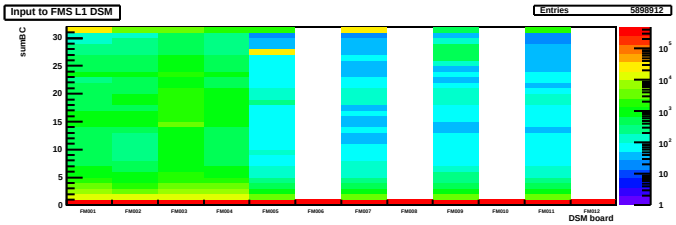

Input to FMS L0 DSM
Entries 795228
HT ID - simulated
QT board

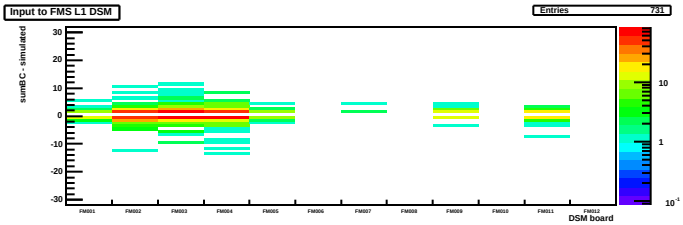

Input to FMS L1 DSM
Entries 5898912
sumD
DSM board

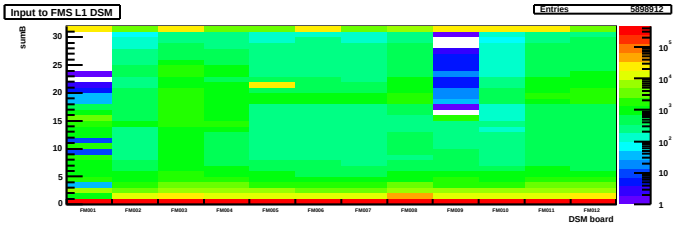

Input to FMS L1 DSM
Entries 740
sumD - simulated
DSM board

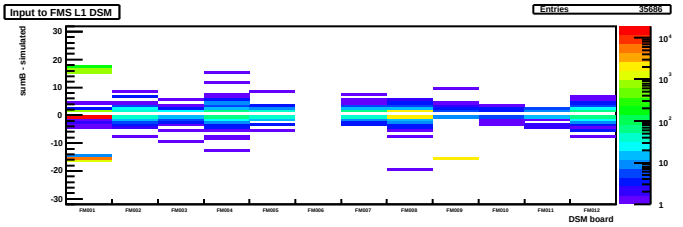

Input to FMS L1 DSM
Entries 5898912
sumC
DSM board

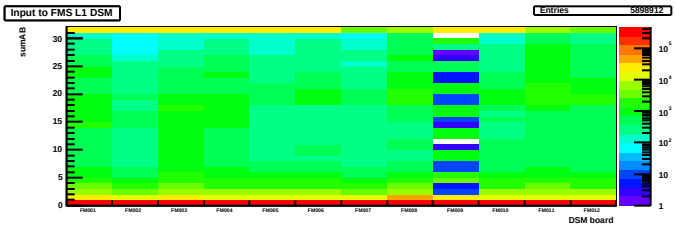

Input to FMS L1 DSM
Entries 713
sumC - simulated
DSM board

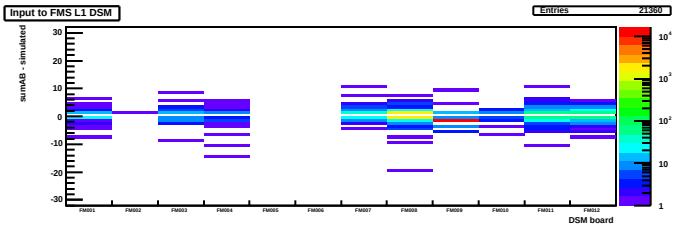

Input to FMS L1 DSM
Entries 5898912
sumBC
DSM board

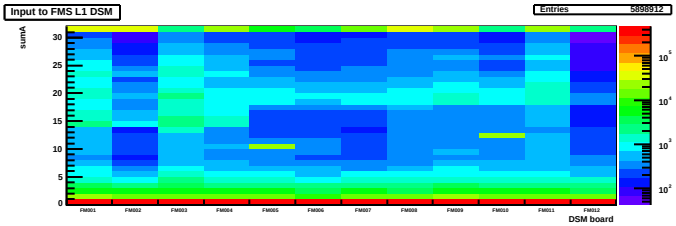

Input to FMS L1 DSM
Entries 731
sumBC - simulated
DSM board

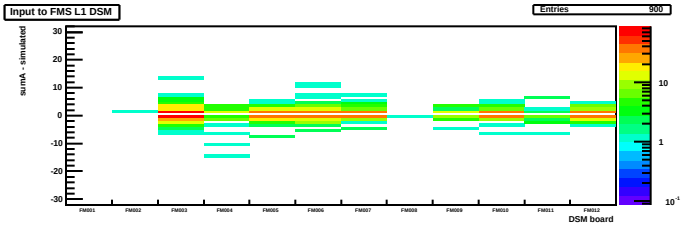

Input to FMS L1 DSM
Entries 5898912
sumB
DSM board

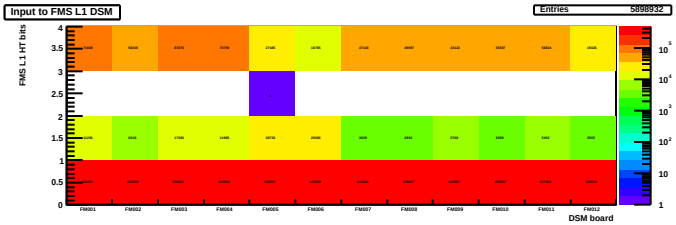

Input to FMS L1 DSM
Entries 35686
sumB - simulated
DSM board

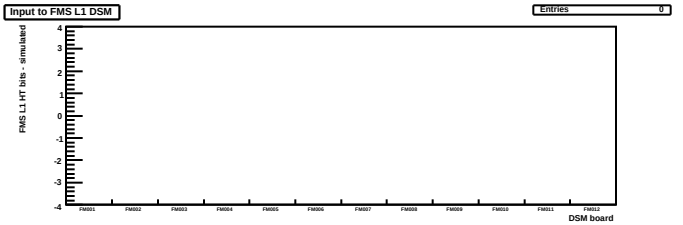

Input to FMS L1 DSM
Entries 5898912
sumAB
DSM board

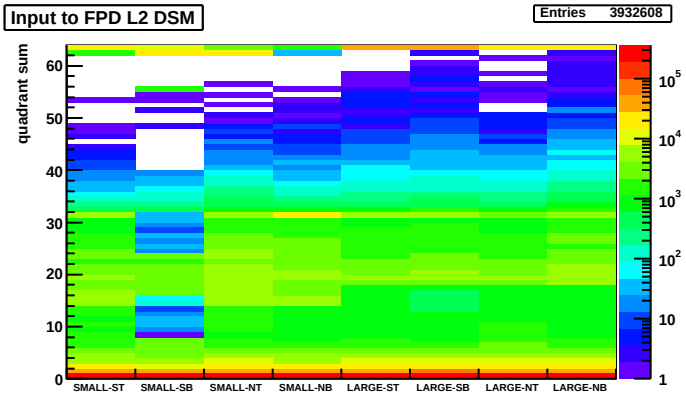

Input to FMS L1 DSM
Entries 21360
sumAB - simulated
DSM board

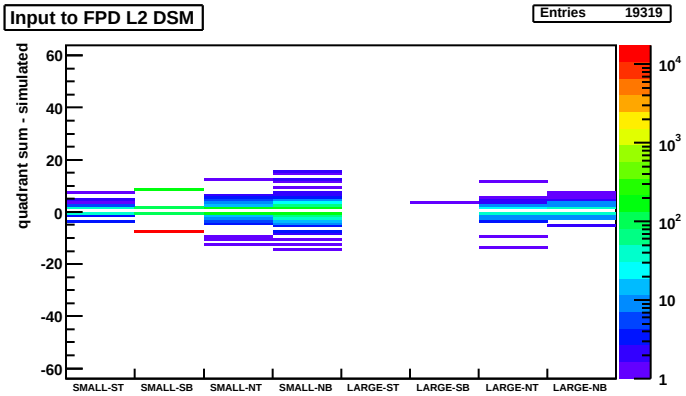

Input to FMS L1 DSM
Entries 5898912
sumA
DSM board

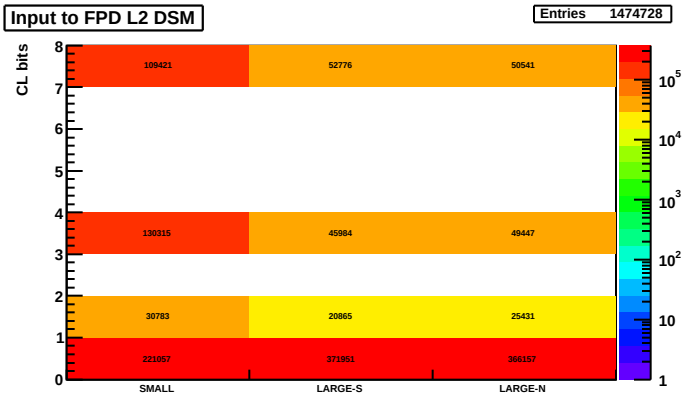

Input to FMS L1 DSM
Entries 900
sumA - simulated
DSM board

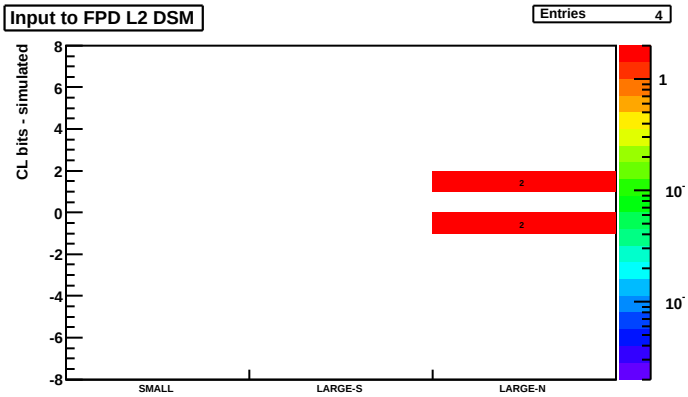

Input to FMS L1 DSM
Entries 5898932
FMS L1 HT bits
DSM board

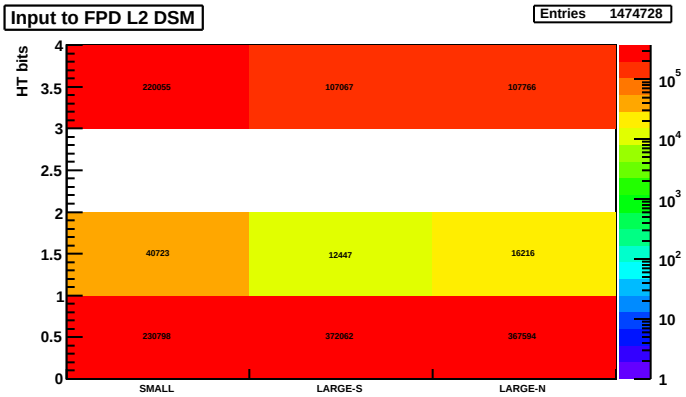

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

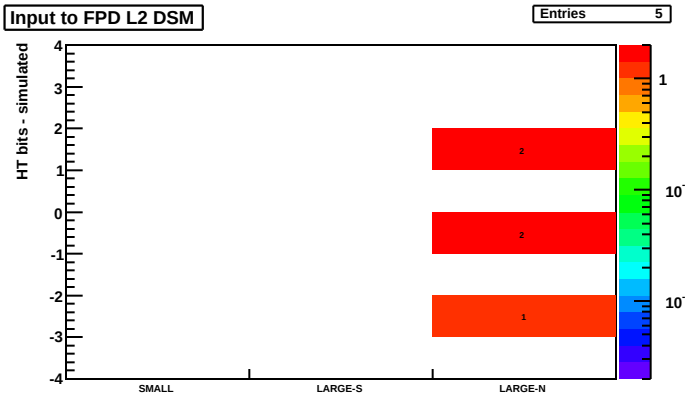

Input to FPD L2 DSM
Entries 3932608
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

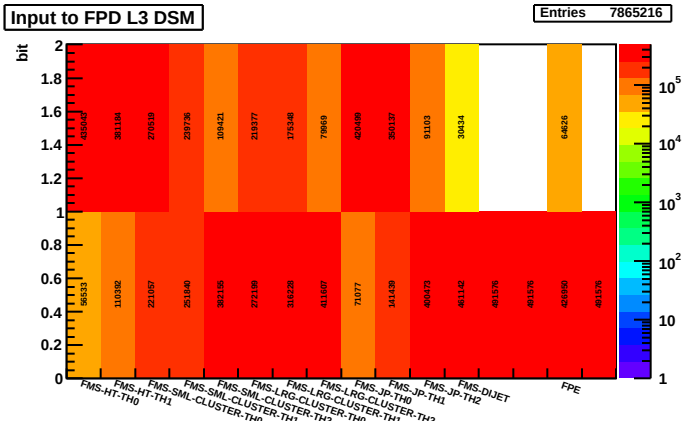

Input to FPD L2 DSM
Entries 19319
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

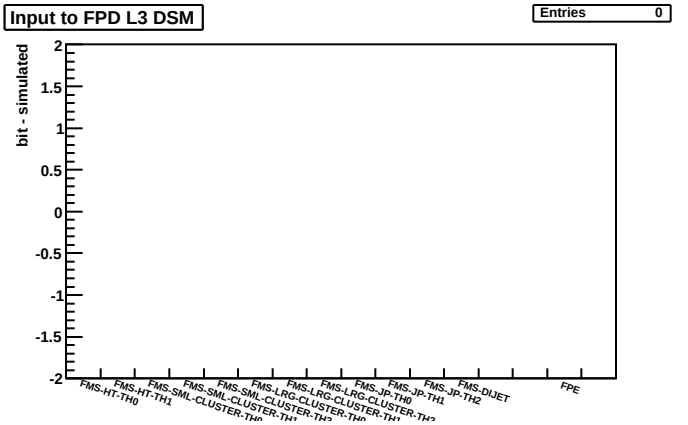

Input to FPD L2 DSM
Entries 1474728
CL bits
109421
52776
50541
130315
45984
49447
30783
20865
25431
221057
371951
366157
SMALL
LARGE-S
LARGE-N

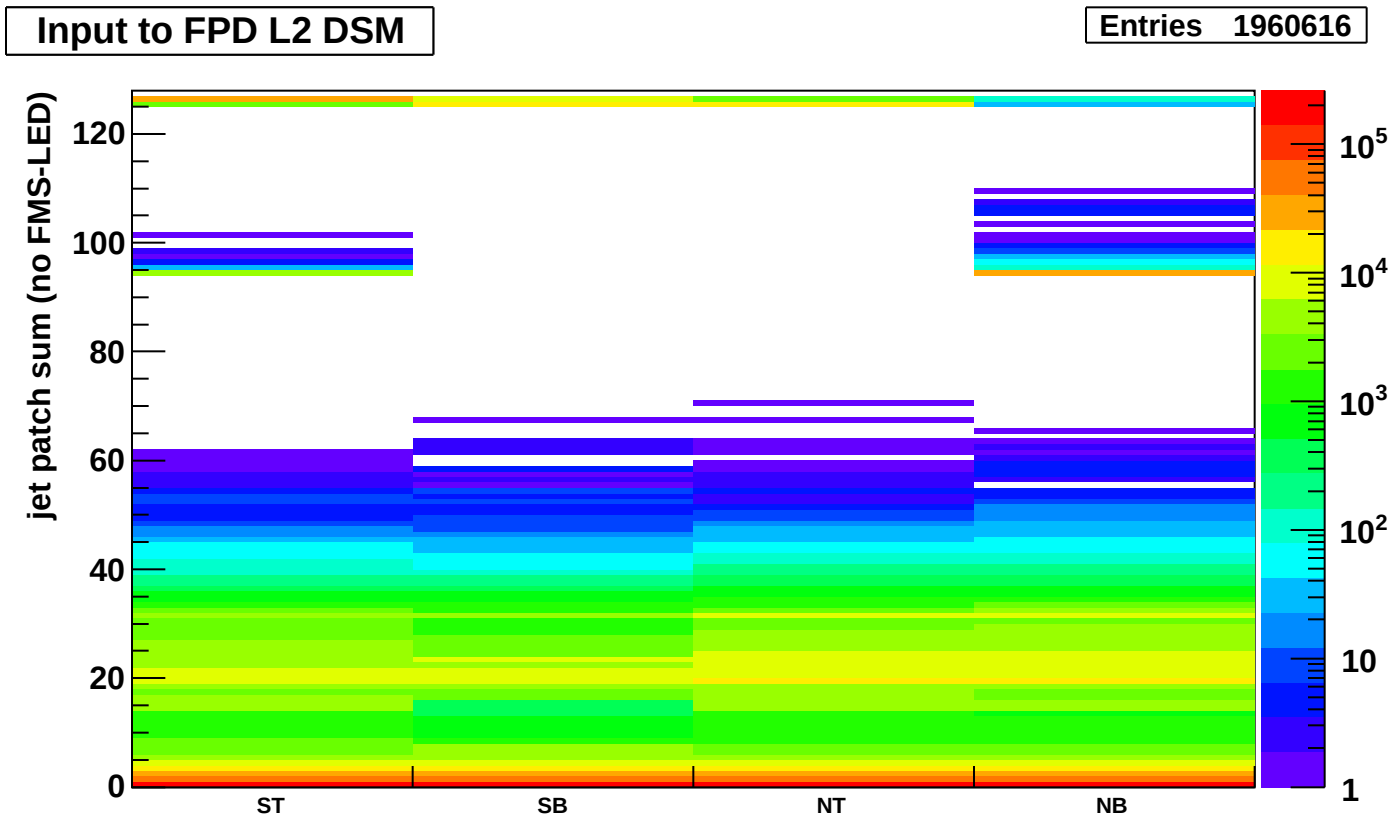

Input to FPD L2 DSM
Entries 4
CL bits - simulated
SMALL
LARGE-S
LARGE-N

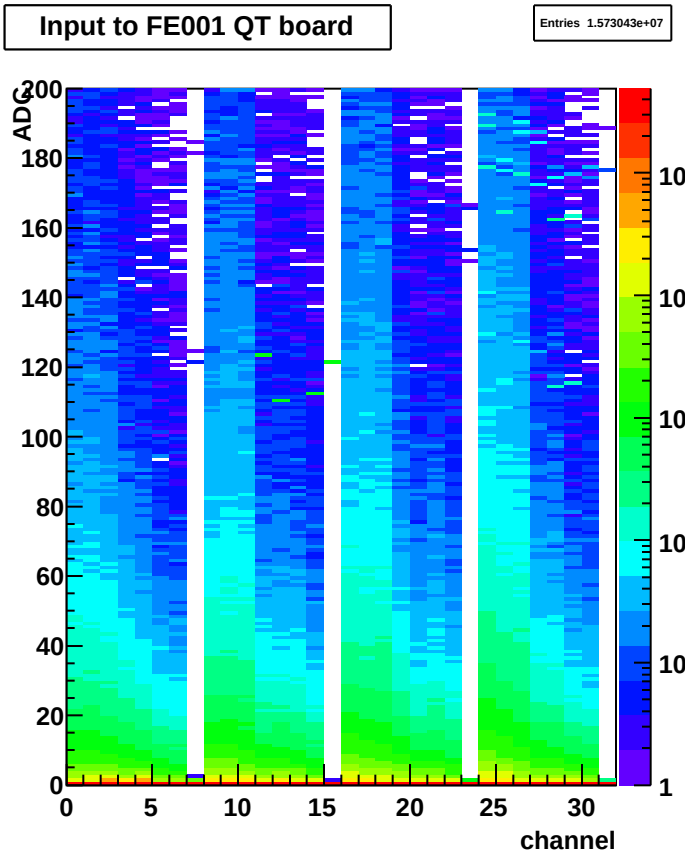

Input to FPD L2 DSM
Entries 1474728
HT bits
220055
107067
107766
40723
12447
16216
230798
372062
367594
SMALL
LARGE-S
LARGE-N

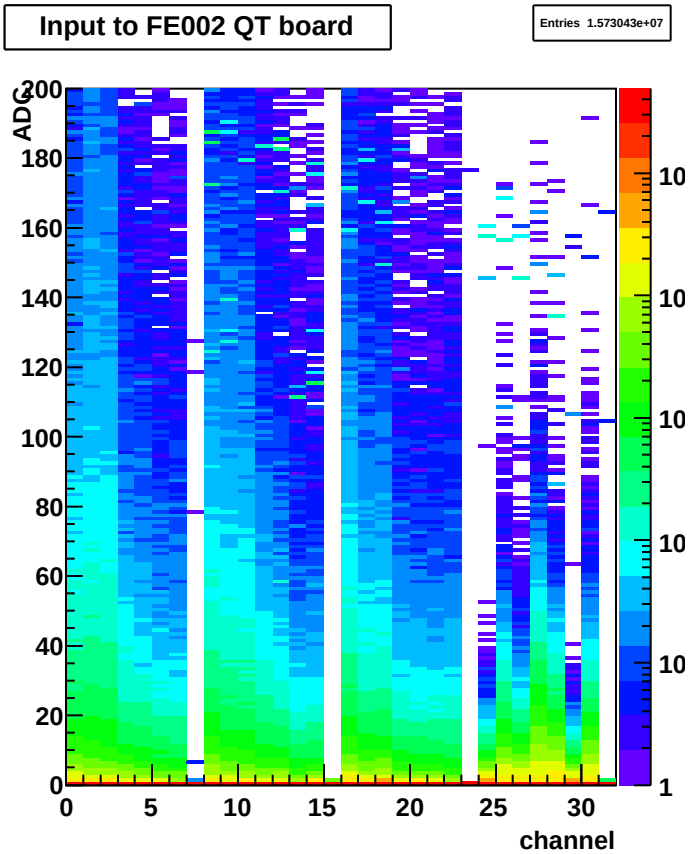

Input to FPD L2 DSM
Entries 5
HT bits - simulated
SMALL
LARGE-S
LARGE-N

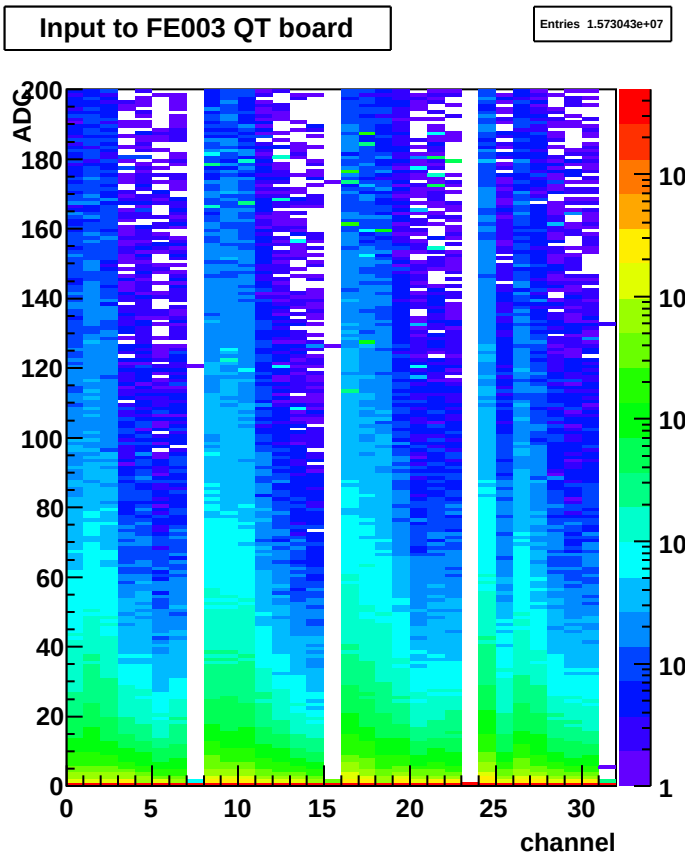

Input to FPD L3 DSM
Entries 7865216
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

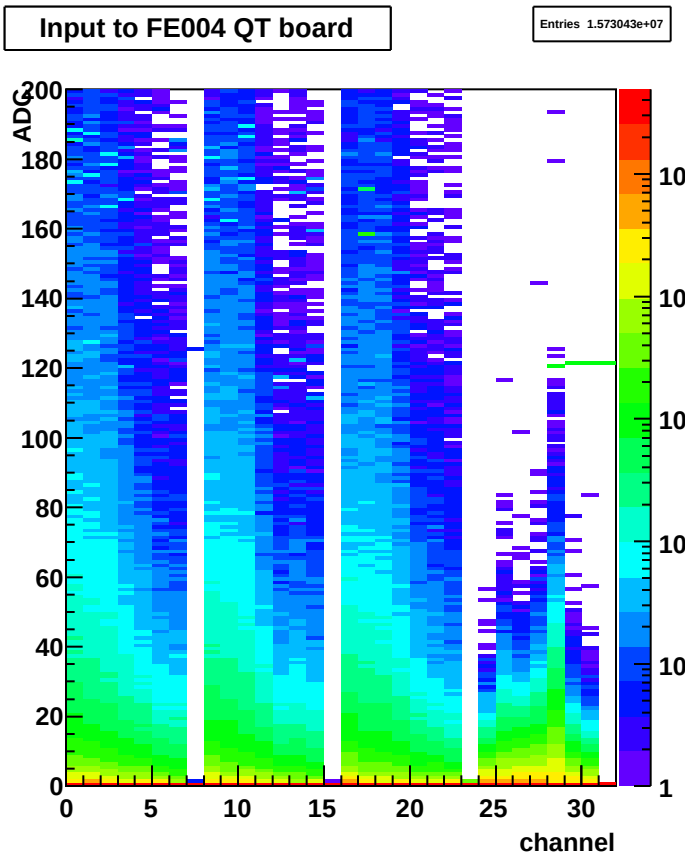

Input to FPD L3 DSM
Entries 0
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

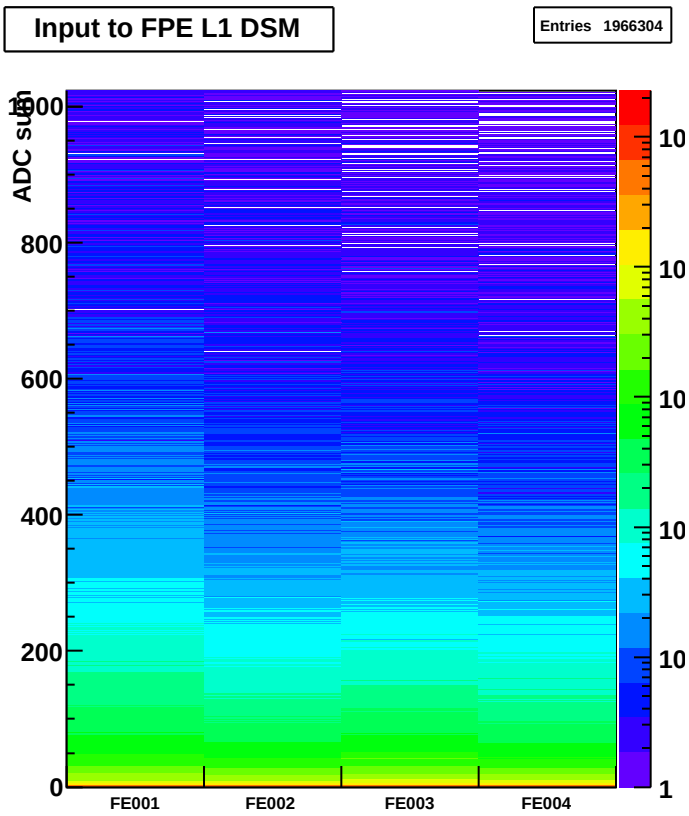

Input to FPD L2 DSM
Entries 1960616
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

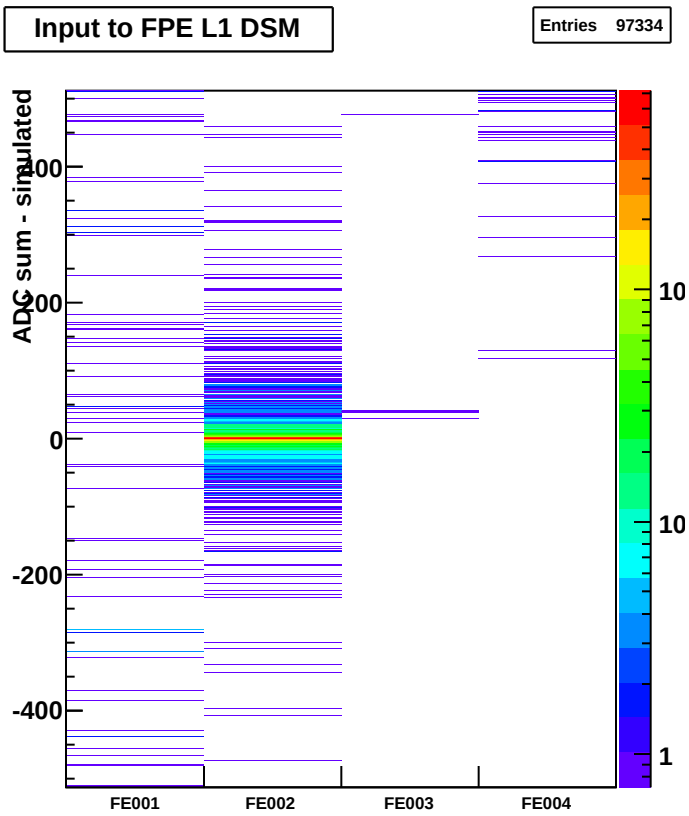

Input to FE001 QT board
Entries 1.573043e+07
ADC
channel

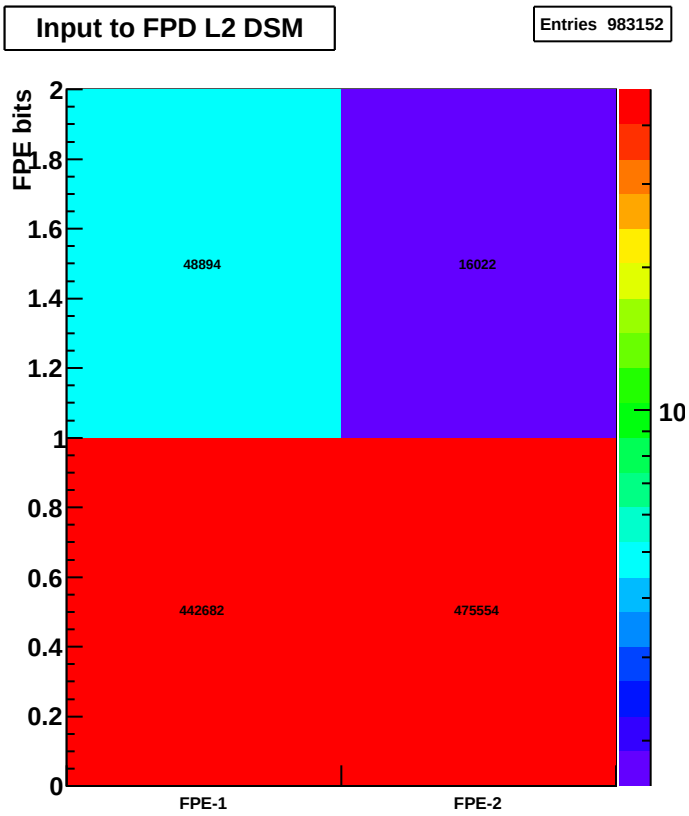

Input to FE002 QT board
Entries 1.573043e+07
ADC
channel

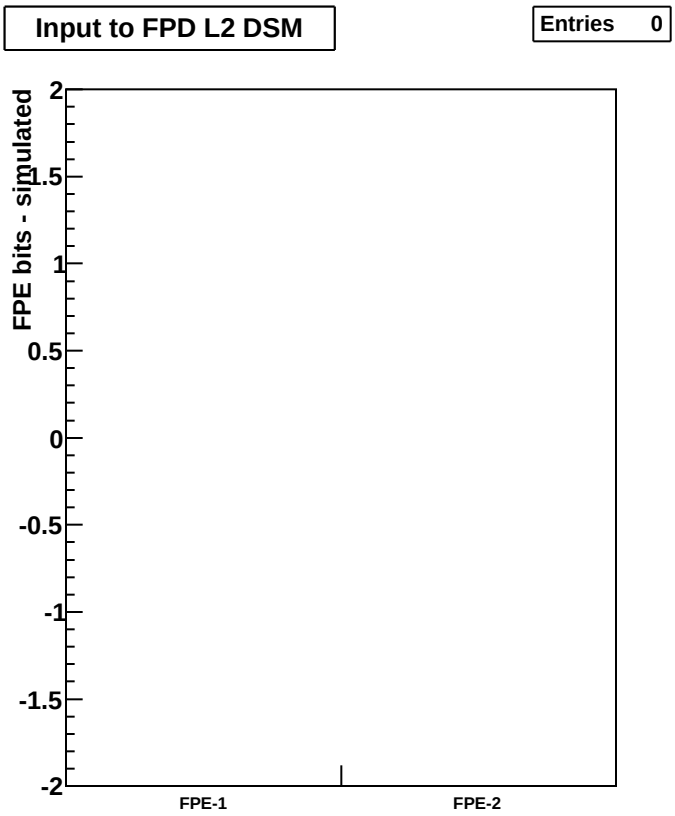

Input to FE003 QT board
Entries 1.573043e+07
ADC
channel


Input to FE004 QT board
Entries 1.573043e+07
ADC
channel


Input to FPE L1 DSM
Entries 1966304
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 97334
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
1


Input to FPD L2 DSM
Entries 983152
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
48894
16022
442682
475554
FPE-1
FPE-2
10


Input to FPD L2 DSM
Entries 0
FPE bits - simulated
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
FPE-1
FPE-2