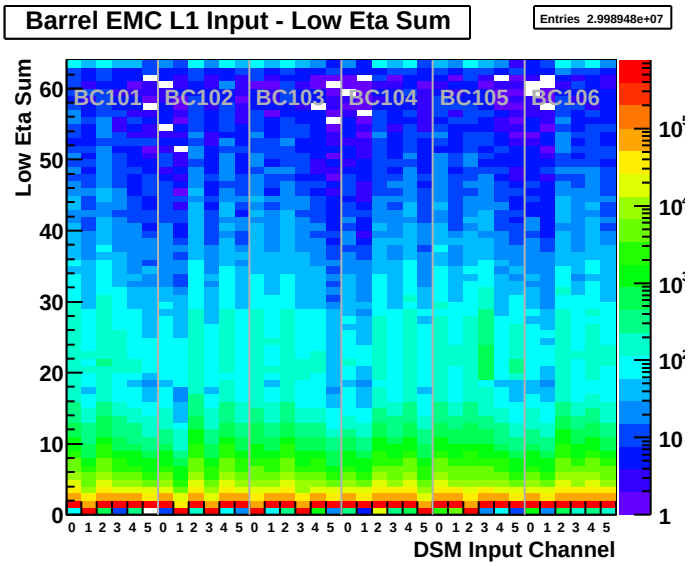
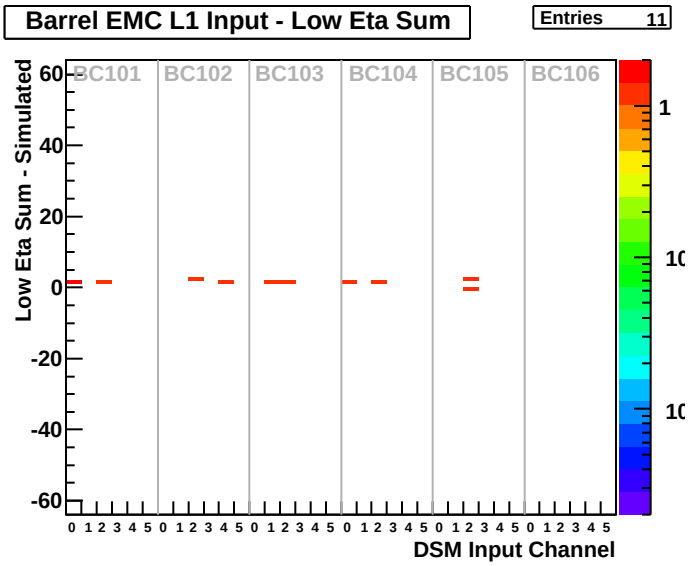
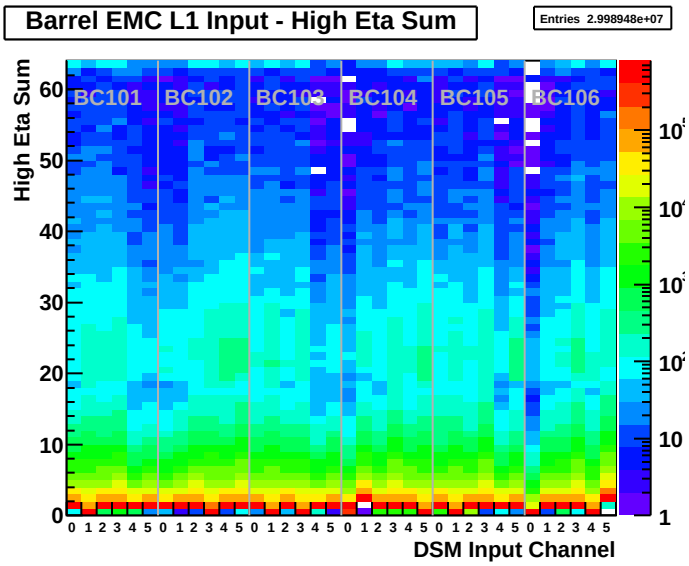
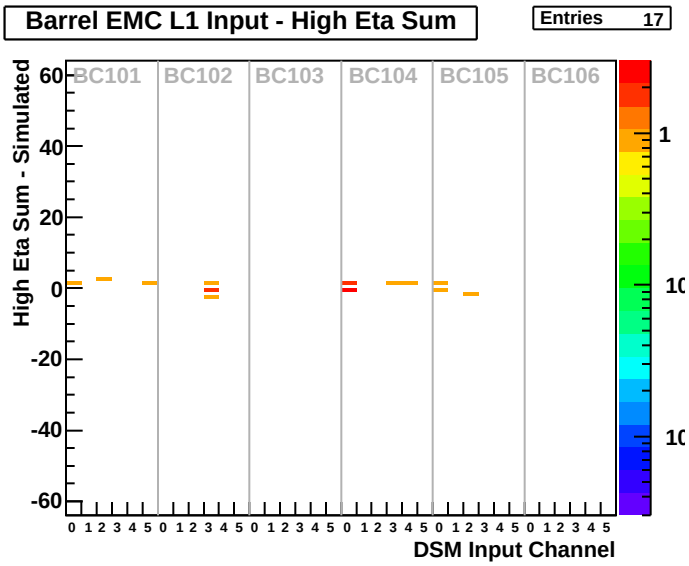
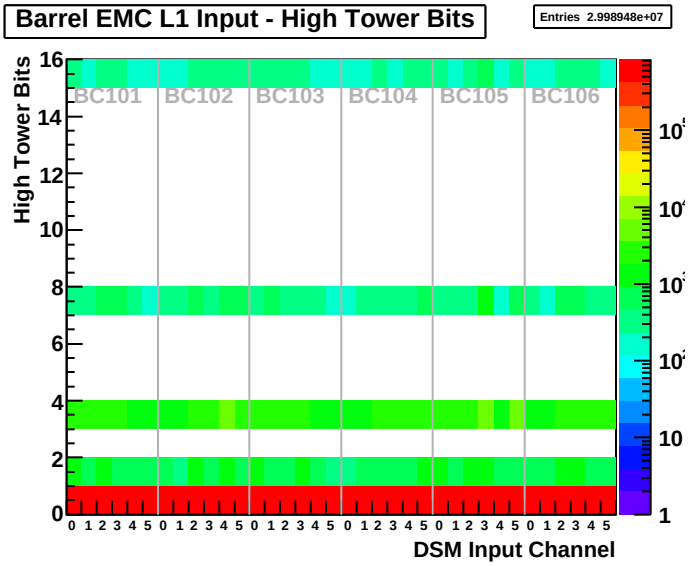
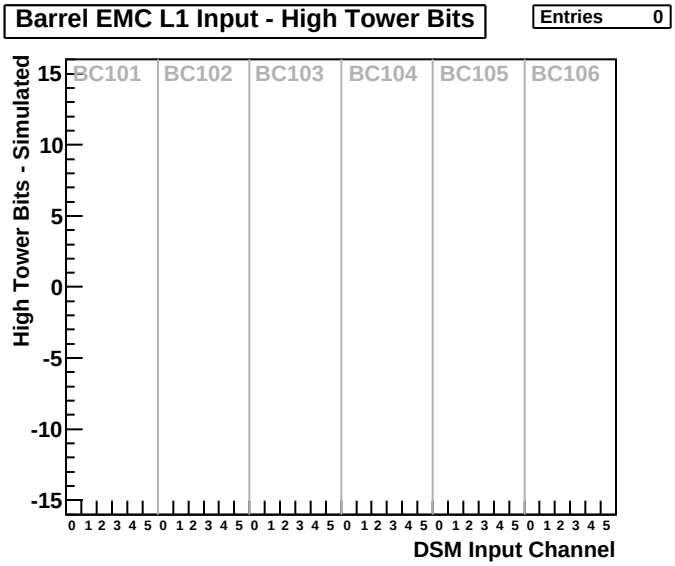

Barrel EMC L1 Input - Low Eta Sum
Entries 2.998948e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

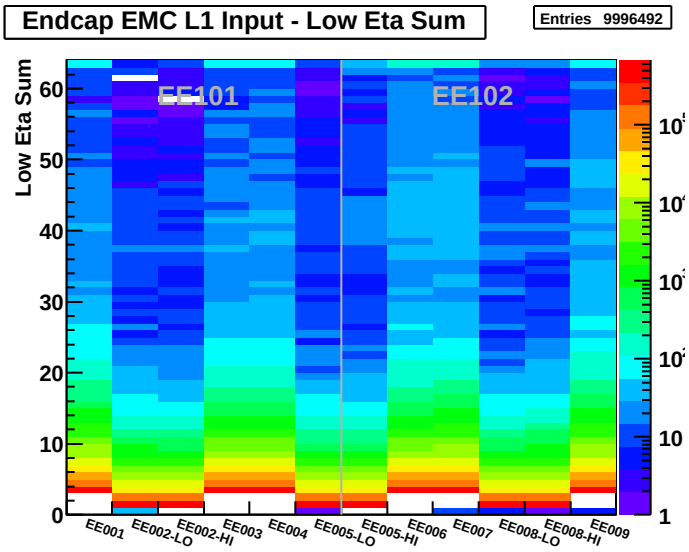

Barrel EMC L1 Input - Low Eta Sum
Entries 11
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

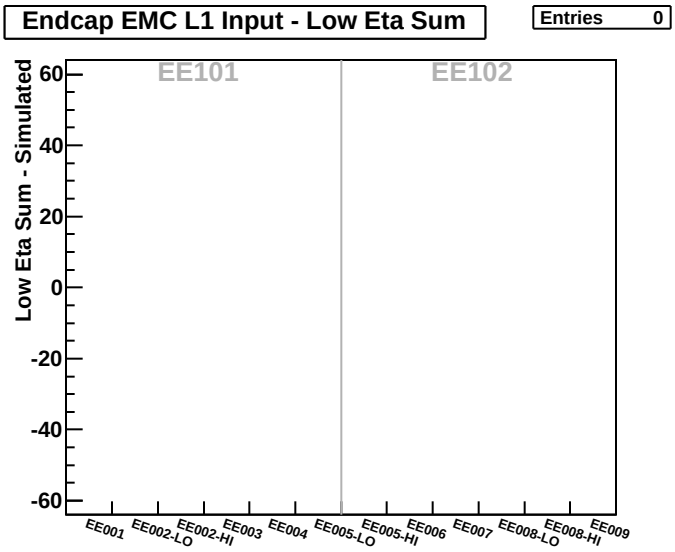

Barrel EMC L1 Input - High Eta Sum
Entries 2.998948e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

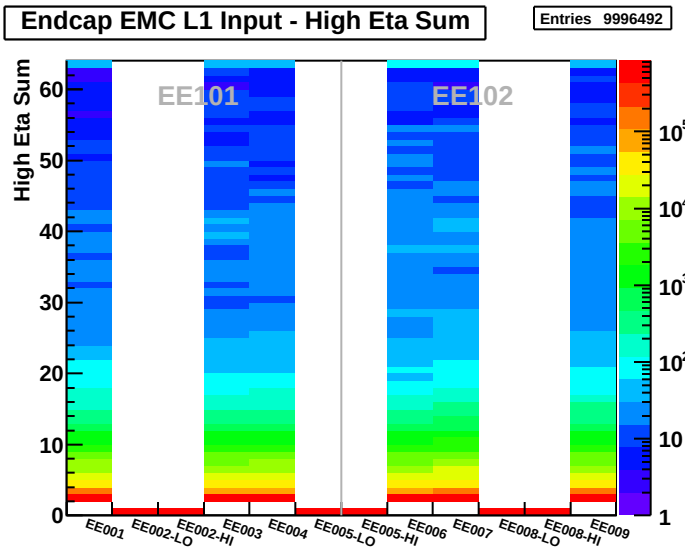

Barrel EMC L1 Input - High Eta Sum
Entries 17
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

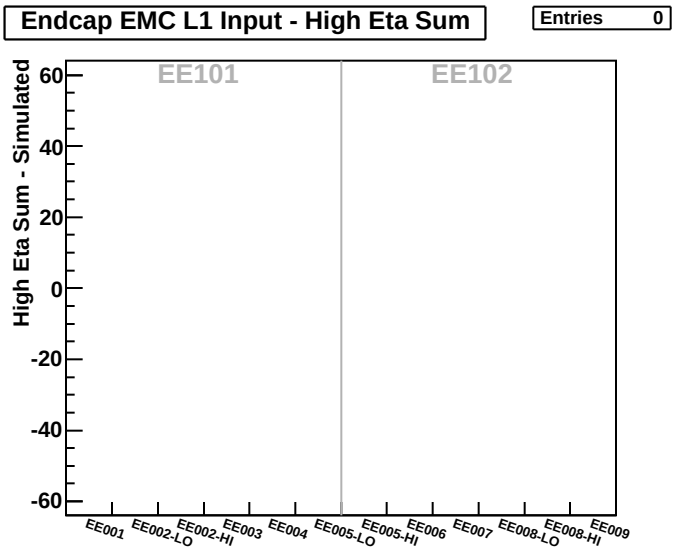

Barrel EMC L1 Input - High Tower Bits
Entries 2.998948e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

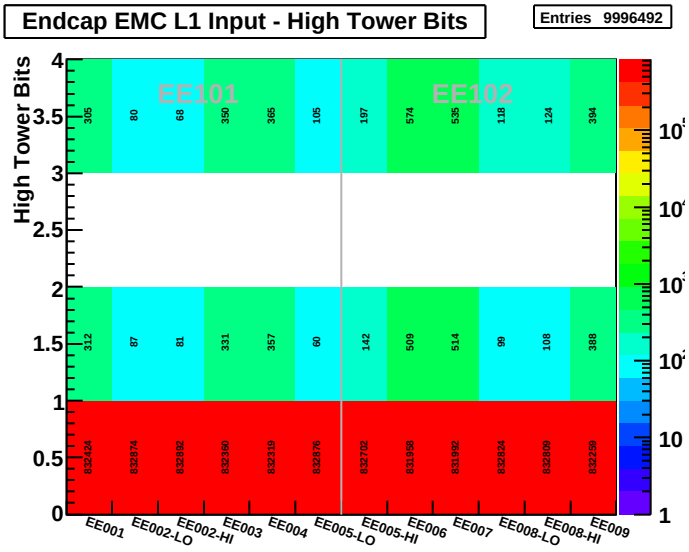

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

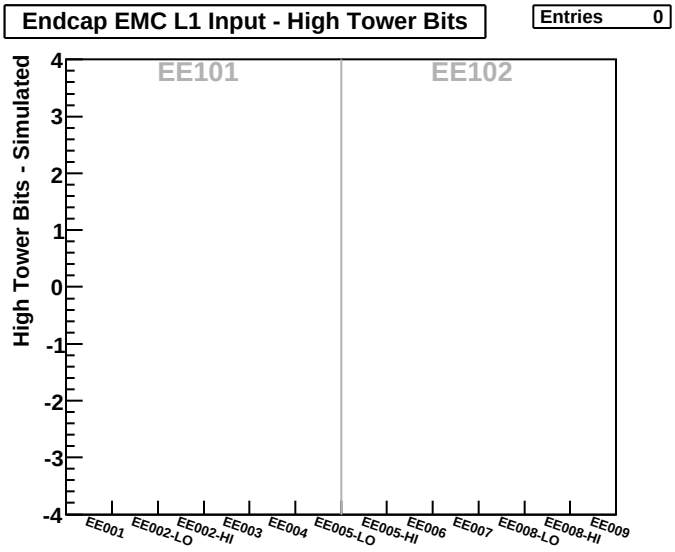

Endcap EMC L1 Input - Low Eta Sum
Entries 9996492
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

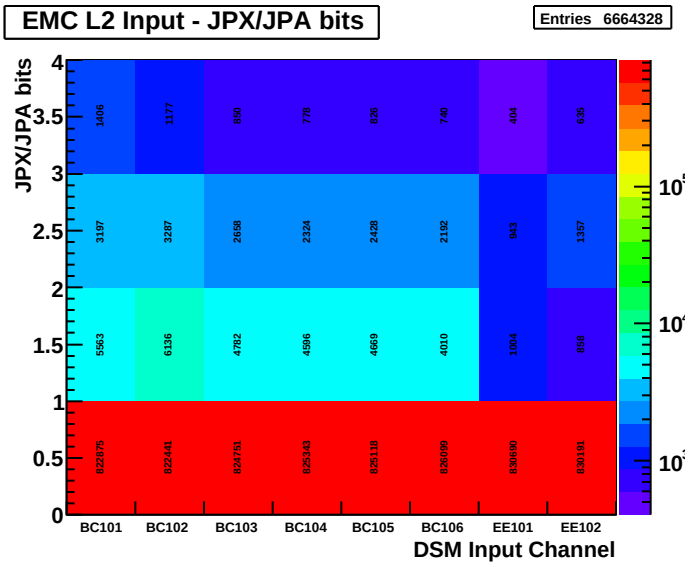

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

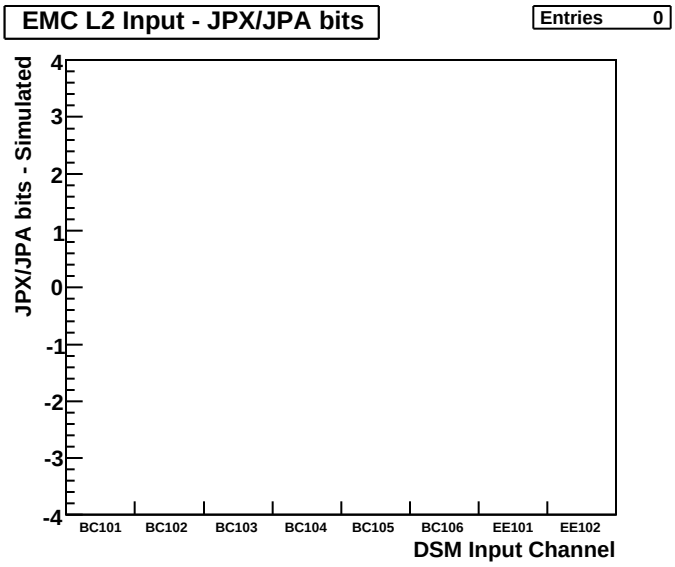

Endcap EMC L1 Input - High Eta Sum
Entries 9996492
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

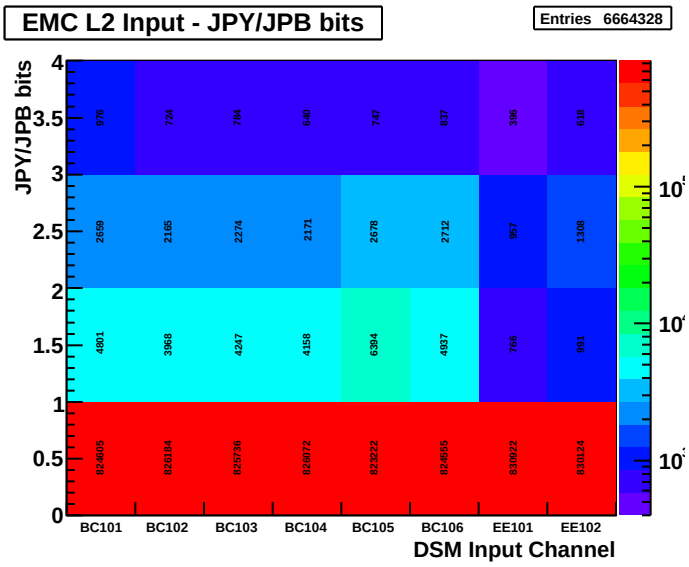

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

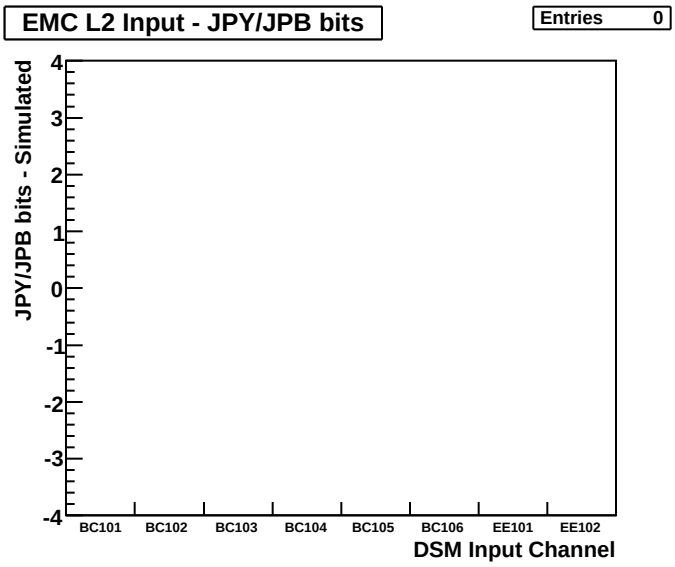

Endcap EMC L1 Input - High Tower Bits
Entries 9996492
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

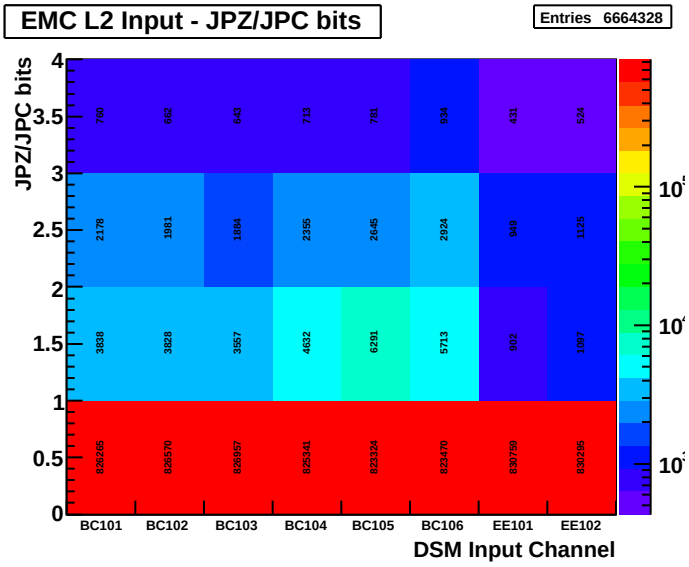

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

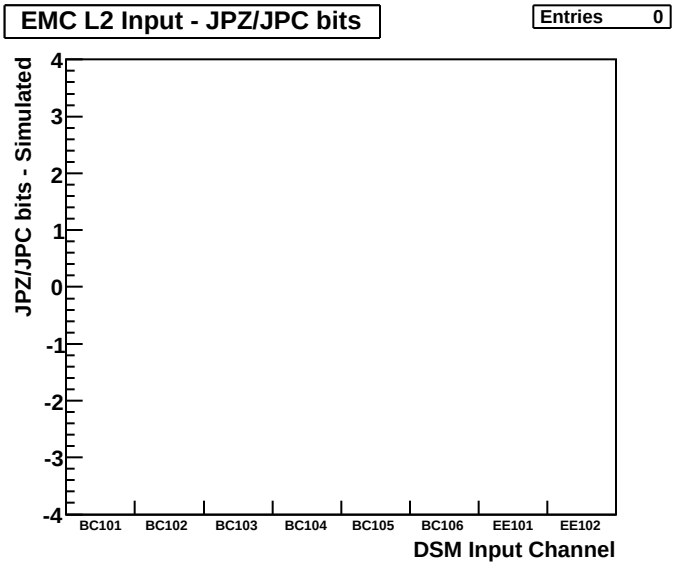

EMC L2 Input - JPX/JPA bits
Entries 6664328
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1466 1177 850 778 826 740 404 635
3197 3287 2658 2324 2428 2192 943 1357
5563 6136 4782 4596 4669 4010 1004 858
822875 822441 824751 825343 825118 825099 830690 830101

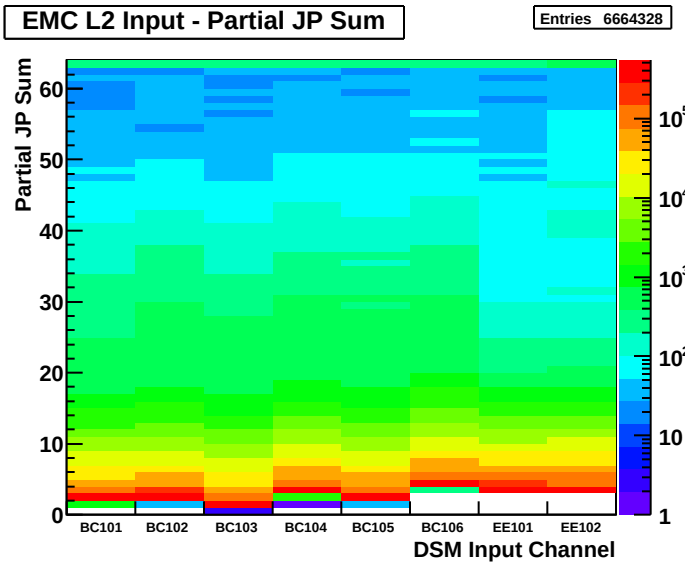

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

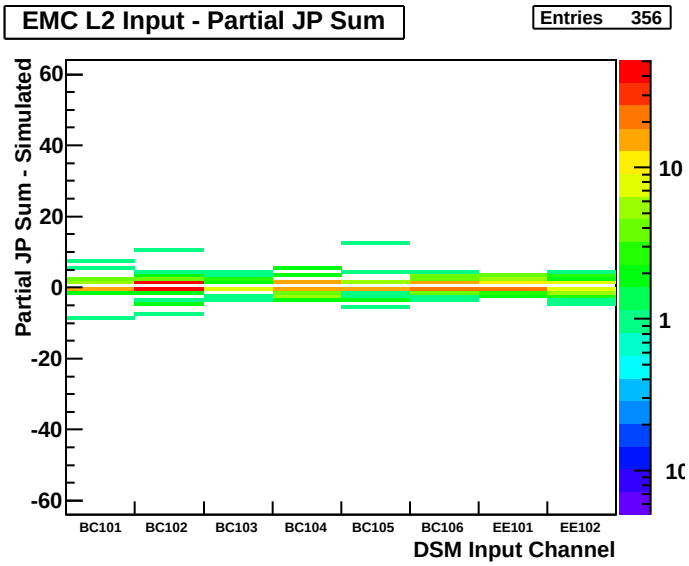

EMC L2 Input - JPY/JPB bits
Entries 6664328
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
976 724 704 640 747 837 396 618
2659 2165 2274 2171 2678 2712 957 1308
4801 3968 4247 4158 6394 4937 766 991
824605 826184 825736 826072 823222 824555 830922 830124

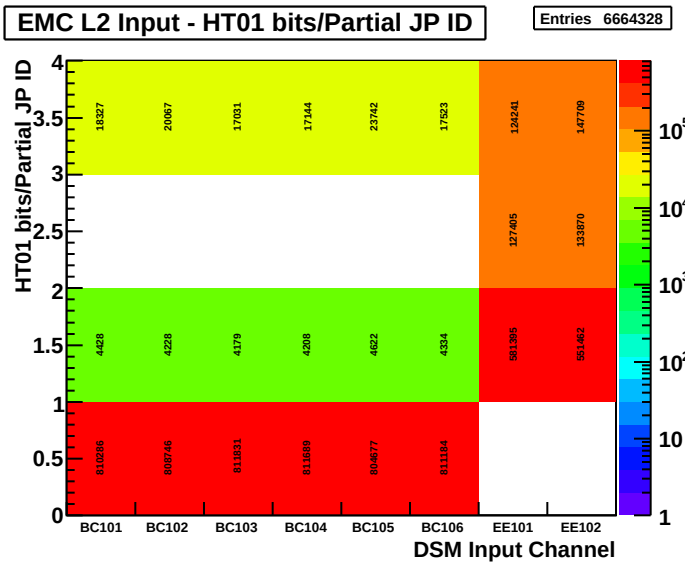

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

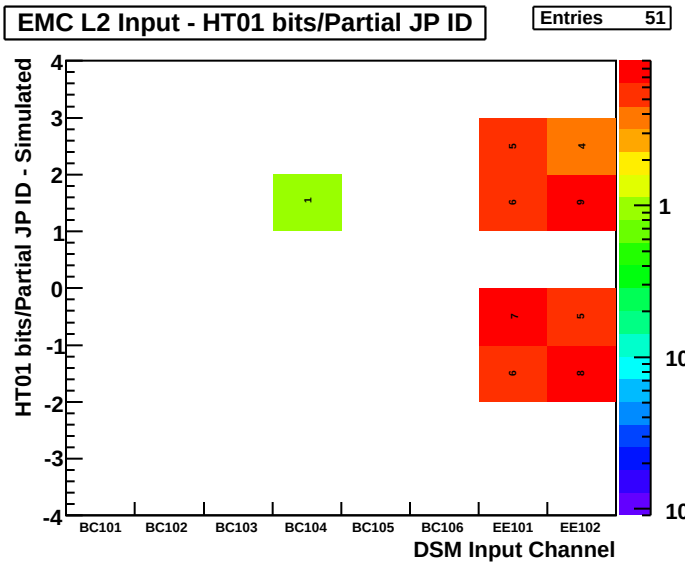

EMC L2 Input - JPZ/JPC bits
Entries 6664328
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
760 662 643 713 781 934 431 524
2178 1981 1804 2355 2645 2924 949 1125
3838 3828 3557 4632 6291 5713 902 1097
826265 826570 826957 825341 823324 823470 830759 830295

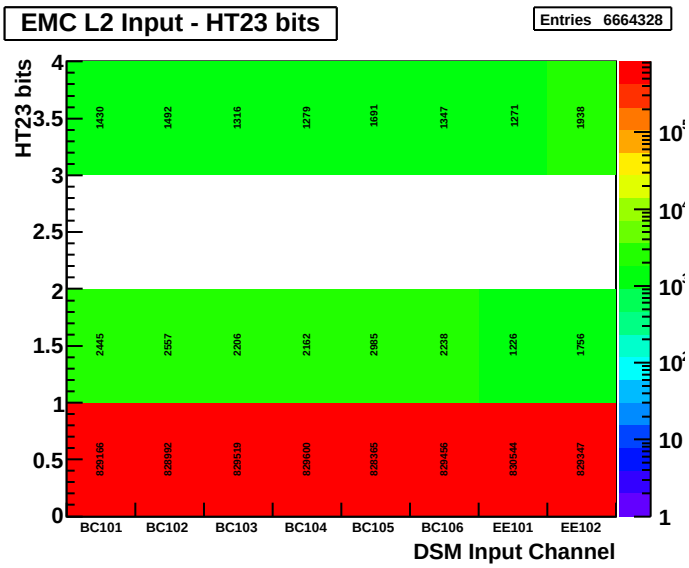

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

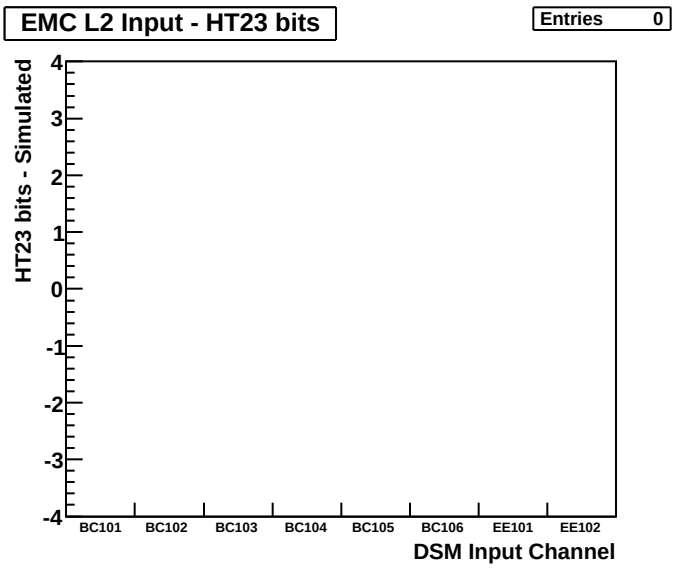

EMC L2 Input - Partial JP Sum
Entries 6664328
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

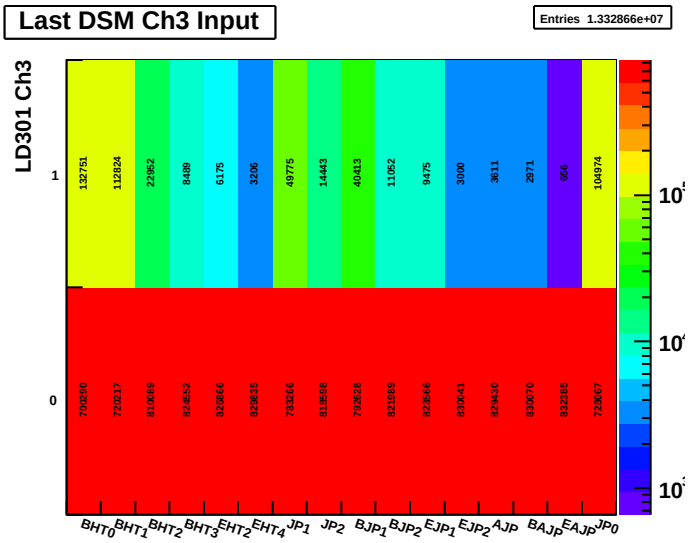

EMC L2 Input - Partial JP Sum
Entries 356
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

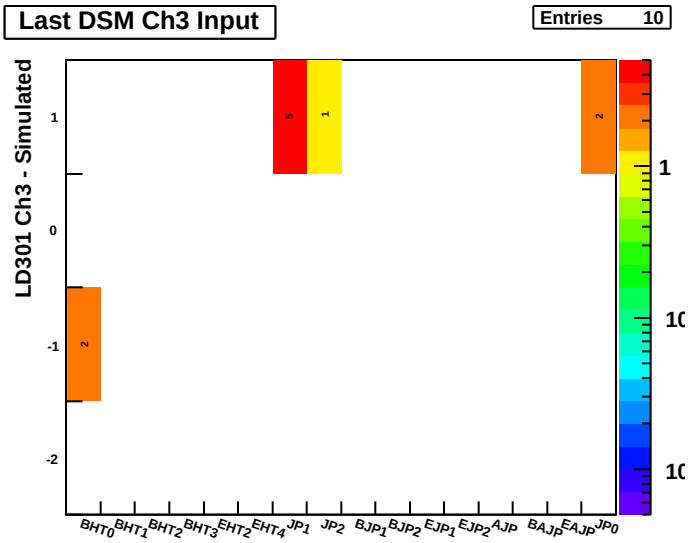

EMC L2 Input - HT01 bits/Partial JP ID
Entries 6664328
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

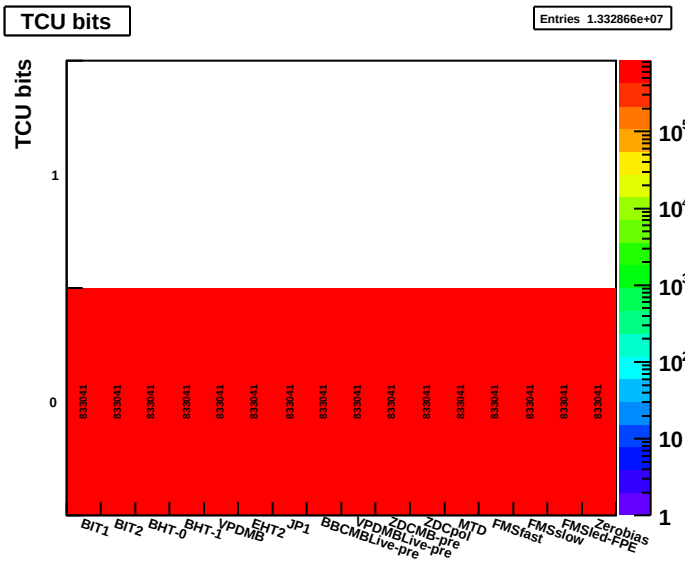

EMC L2 Input - HT01 bits/Partial JP ID
Entries 51
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

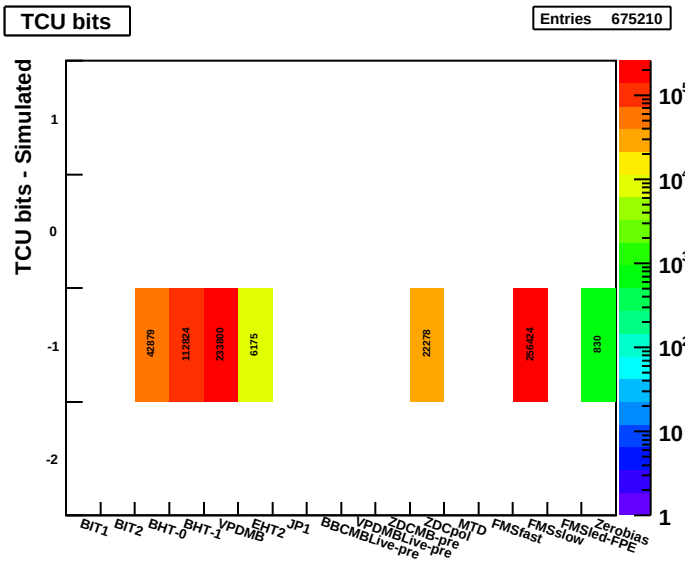

EMC L2 Input - HT23 bits
Entries 6664328
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

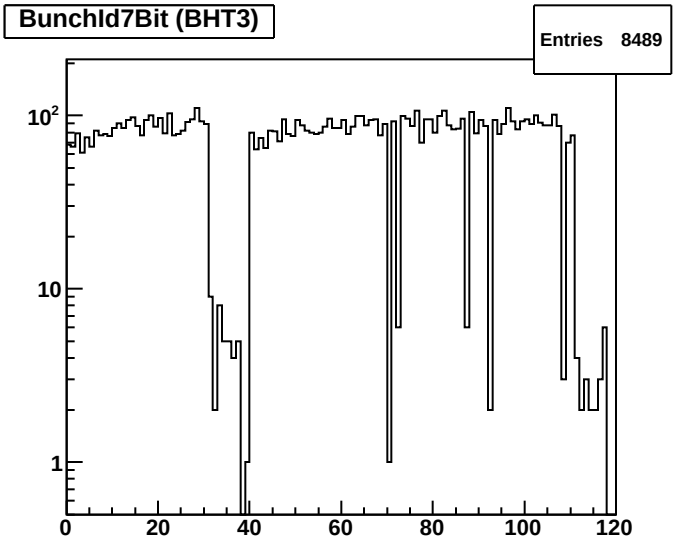

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

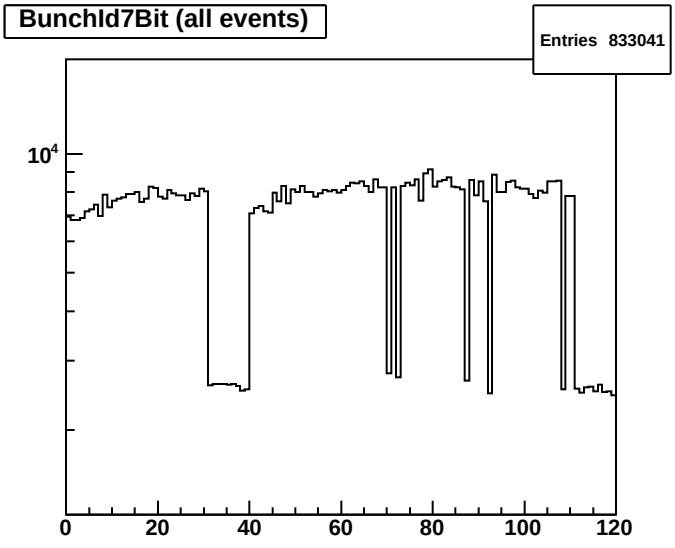

Last DSM Ch3 Input
Entries 1.332866e+07
LD301 Ch3
132751 112824 22952 8489 6175 3206 49775 14443 40413 11052 9475 3000 3611 2971 656 104974
700280 720217 810189 824552 826866 828835 783266 818598 792628 821989 822566 830041 829430 830070 832385 728067
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

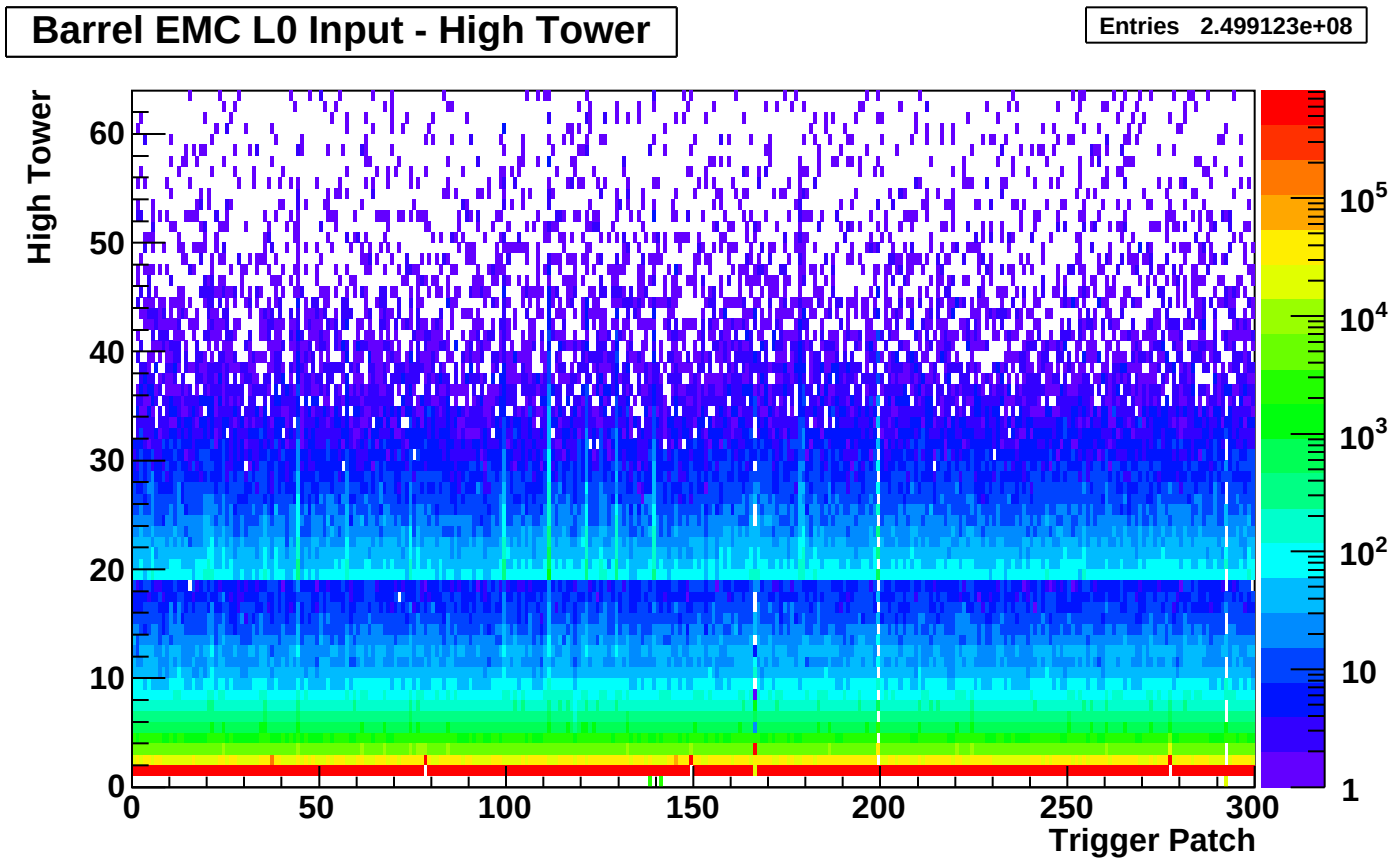

Last DSM Ch3 Input
Entries 10
LD301 Ch3 - Simulated
5 1 2 2
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

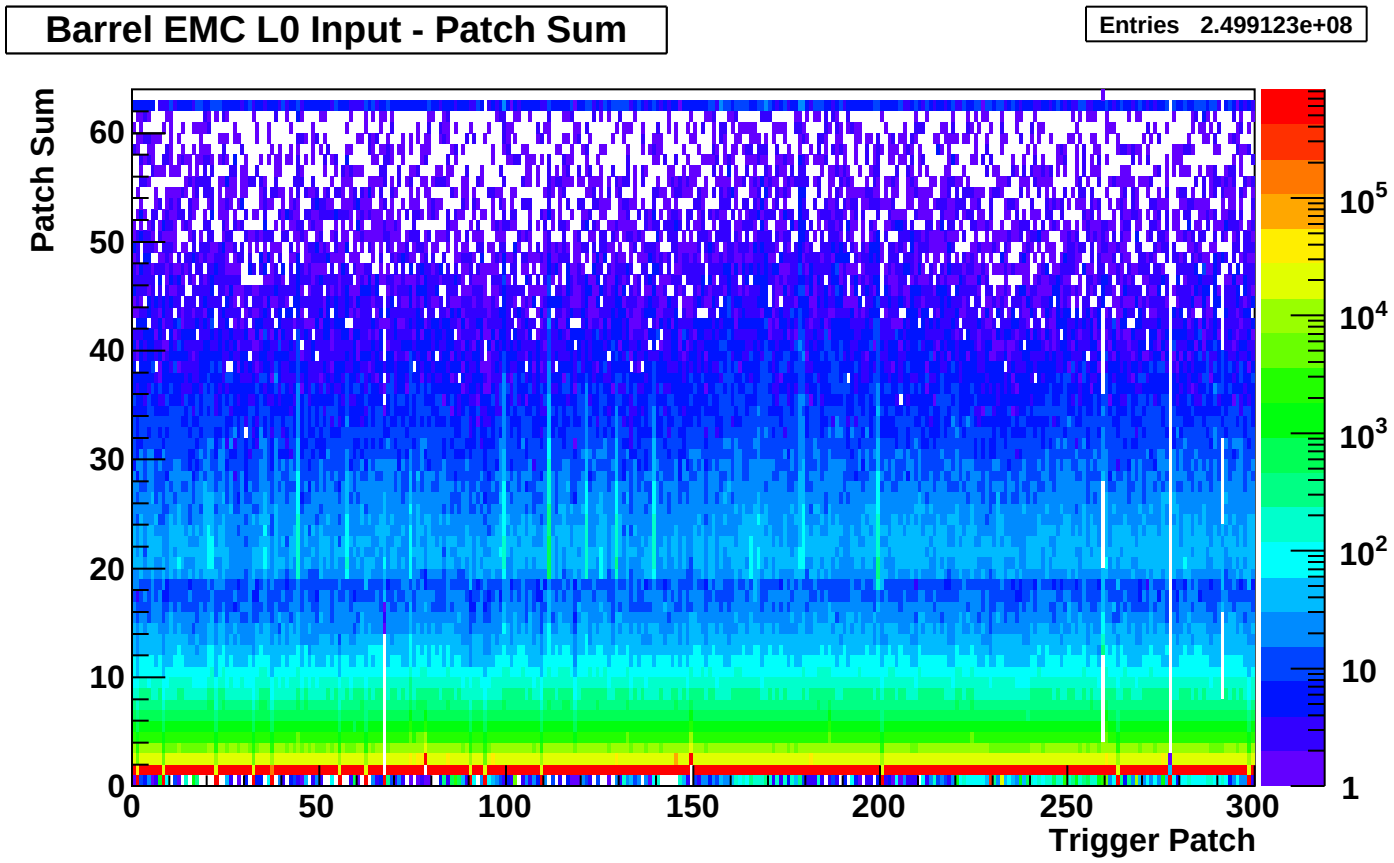

TCU bits
Entries 1.332866e+07
TCU bits
833041 833041 833041 833041 833041 833041 833041 833041 833041 833041 833041 833041 833041 833041 833041 833041
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

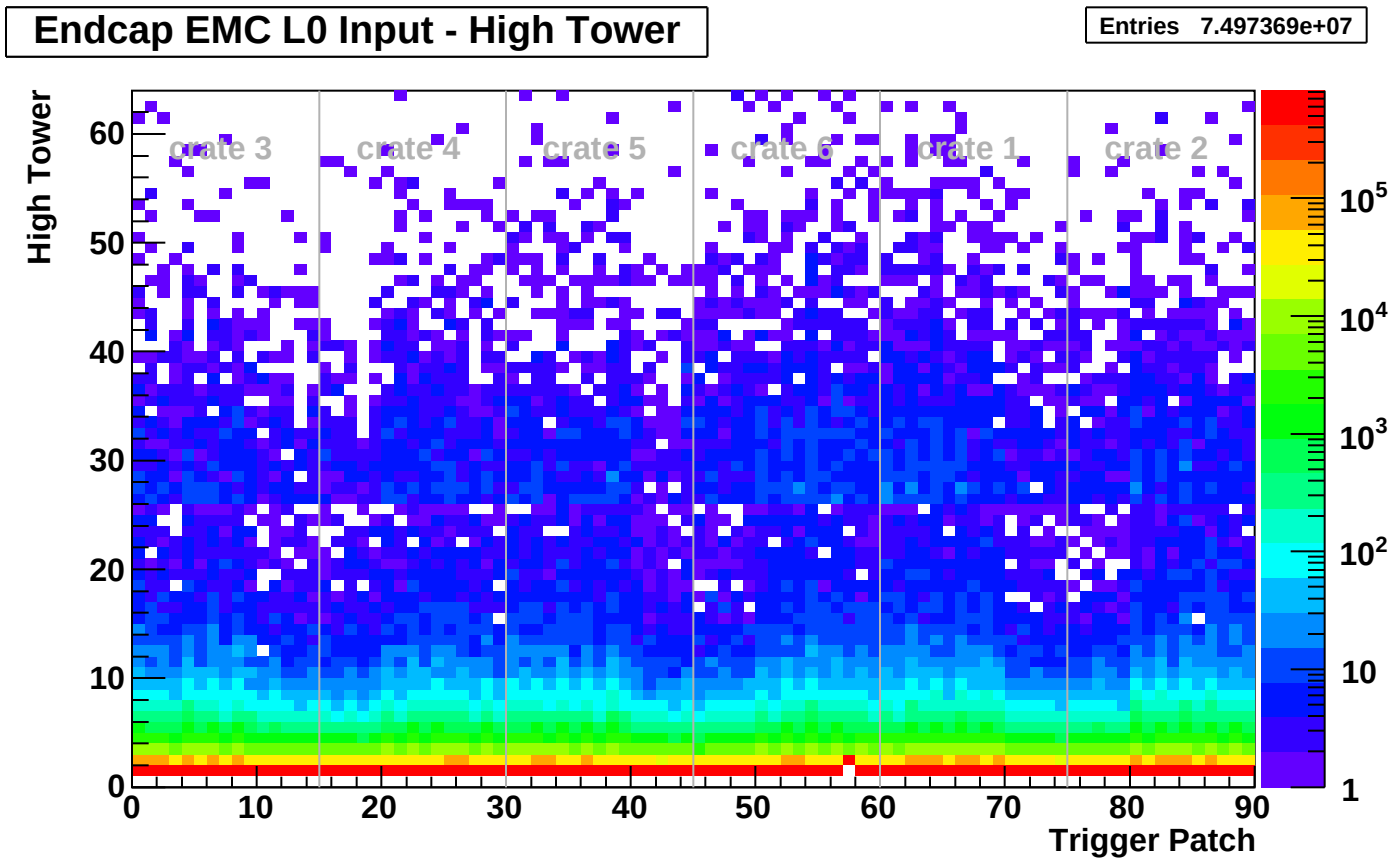

TCU bits
Entries 675210
TCU bits - Simulated
42879 112824 233800 6175 22278 256424 830
BIT1 BIT2 BHT-0 BHT-1 VPDMB EHT2 JP1 BBCMBLive-pre VPDMBLive-pre ZDCMB-pre ZDCpol MTD FMSfast FMSslow FMSled-FPE Zerobias

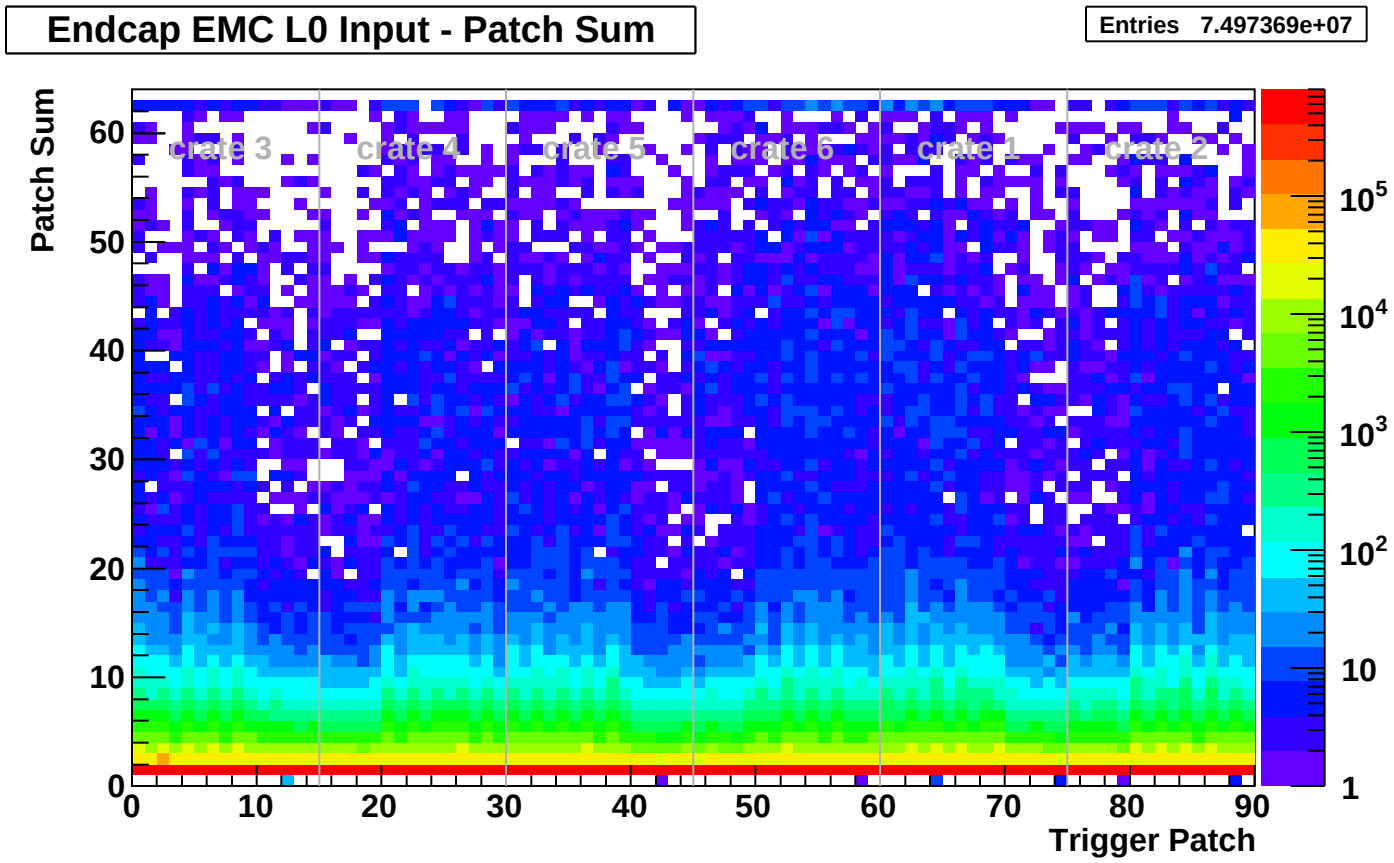

BunchId7Bit (BHT3)
Entries 8489
0 20 40 60 80 100 120

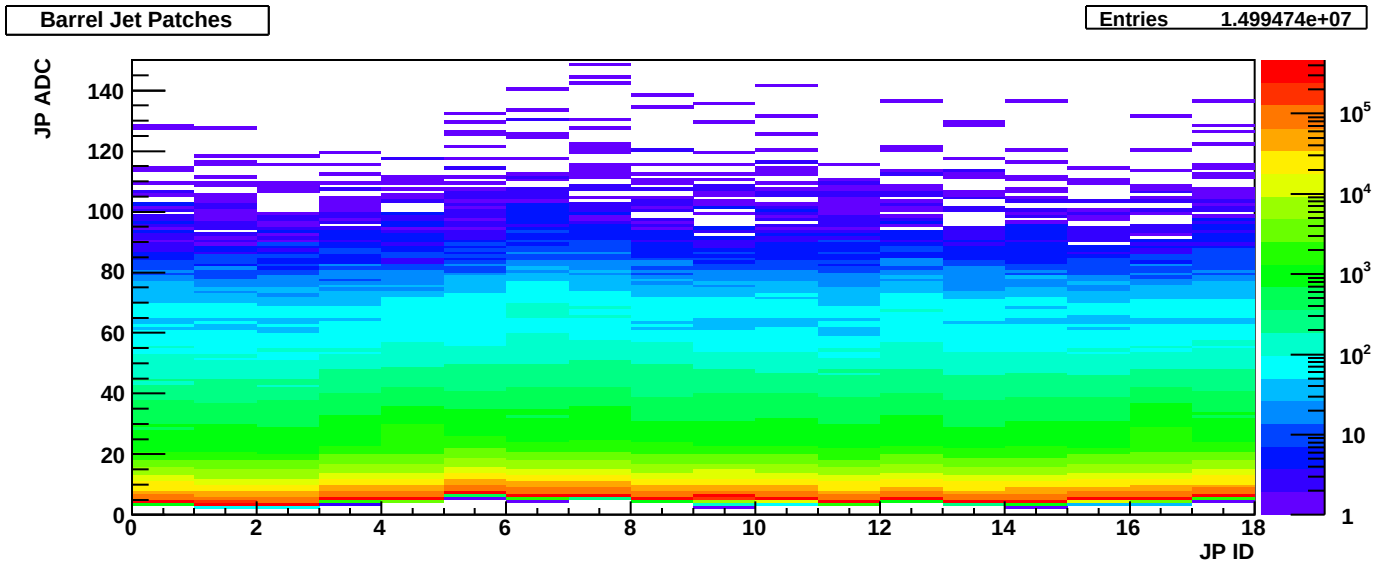

BunchId7Bit (all events)
Entries 833041
0 20 40 60 80 100 120

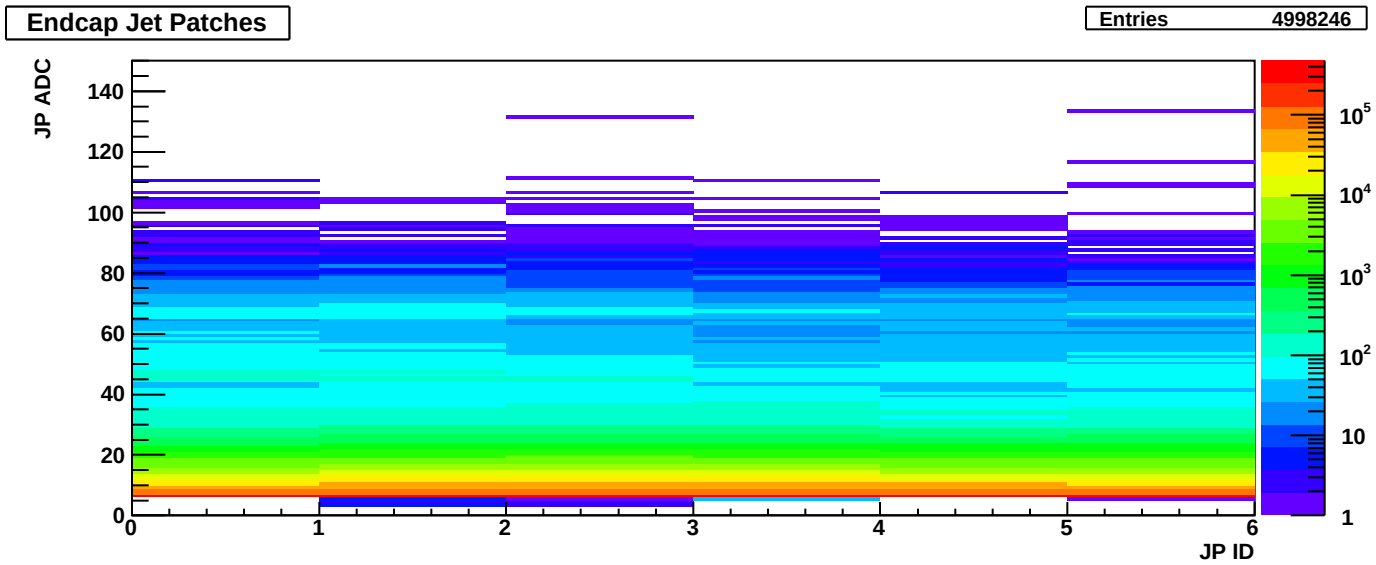

Barrel EMC L0 Input - High Tower
Entries 2.499123e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

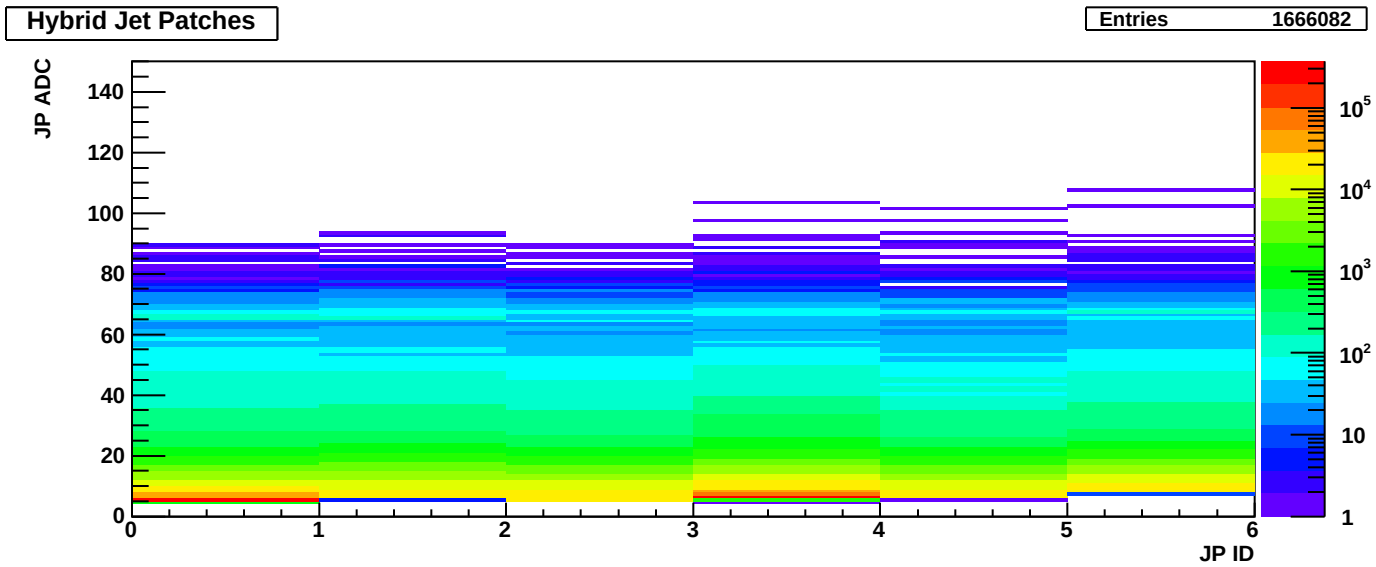

Barrel EMC L0 Input - Patch Sum
Entries 2.499123e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

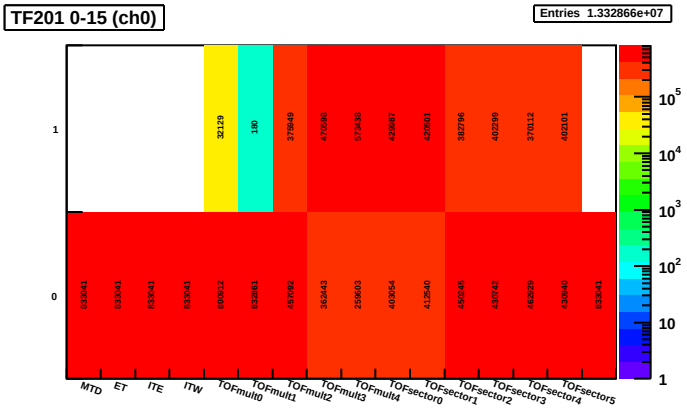

Endcap EMC L0 Input - High Tower
Entries 7.497369e+07
High Tower
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

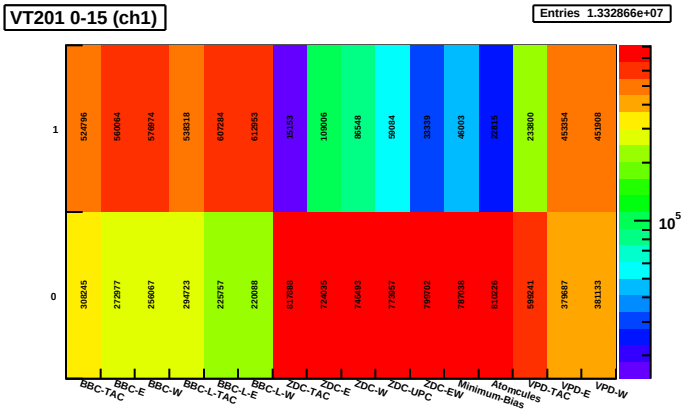

Endcap EMC L0 Input - Patch Sum
Entries 7.497369e+07
Patch Sum
Trigger Patch
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2

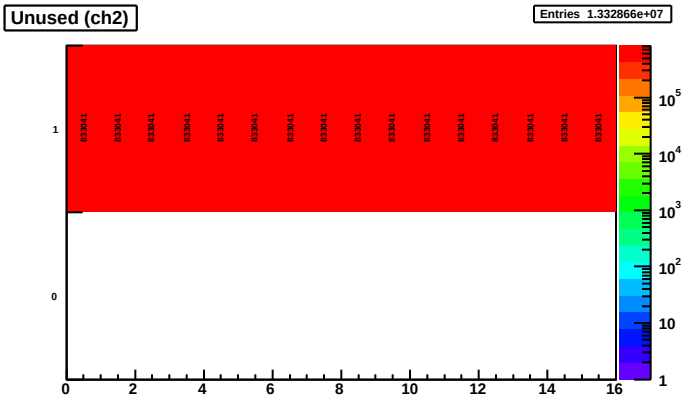

Barrel Jet Patches
Entries 1.499474e+07
JP ADC
JP ID

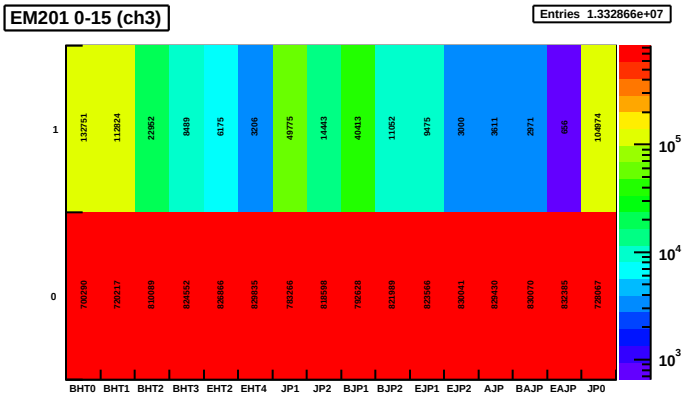

Endcap Jet Patches
Entries 4998246
JP ADC
JP ID

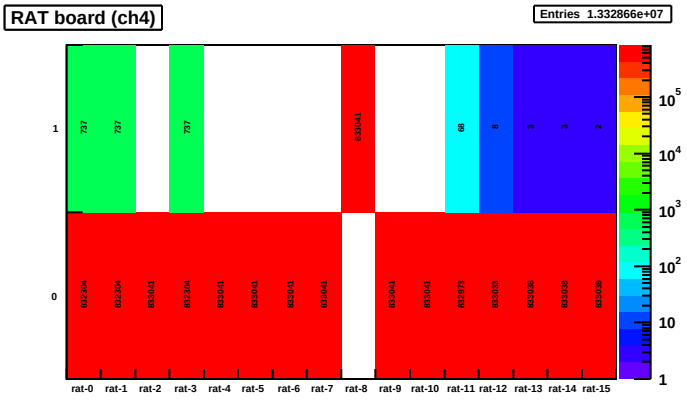

Hybrid Jet Patches
Entries 1666082
JP ADC
JP ID

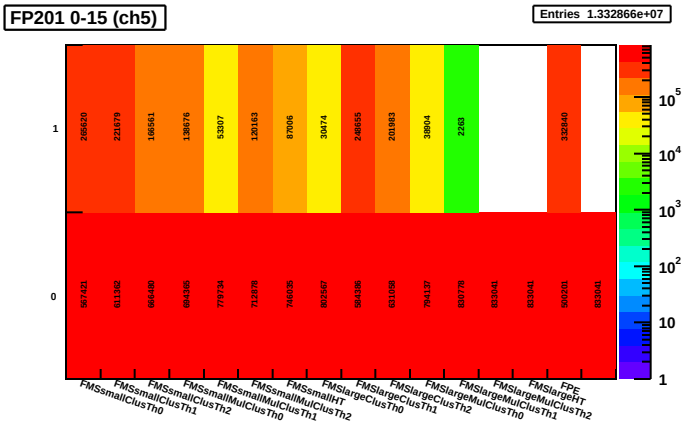

TF201 0-15 (ch0)
Entries 1.332866e+07
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5

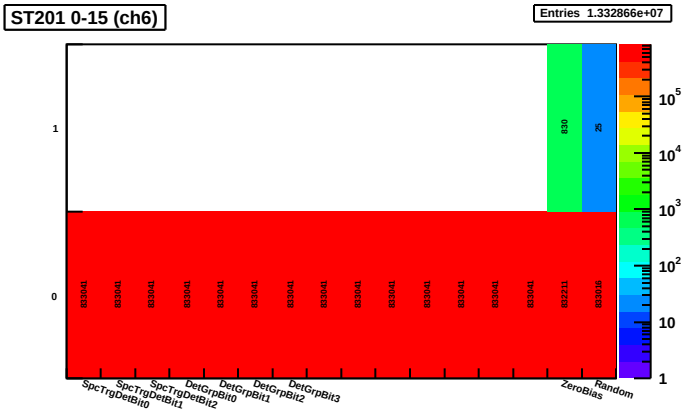

VT201 0-15 (ch1)
Entries 1.332866e+07
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-UPC ZDC-EW Minimum-Bias Atomcules VPD-TAC VPD-E VPD-W

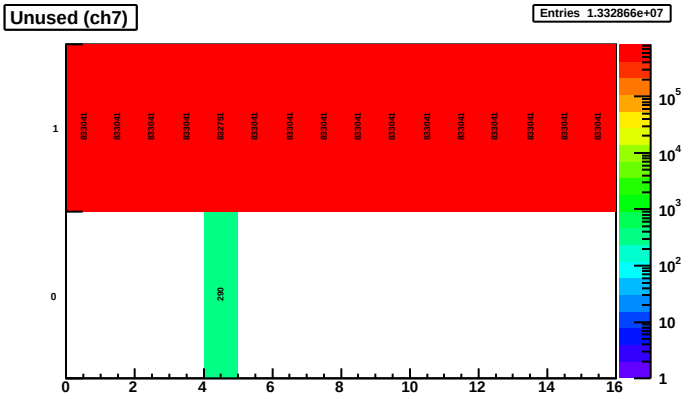

Unused (ch2)
Entries 1.332866e+07

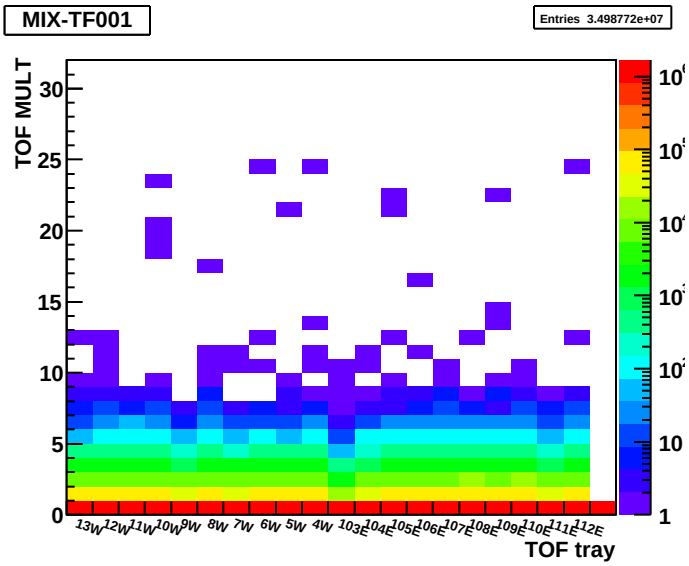

EM201 0-15 (ch3)
Entries 1.332866e+07
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

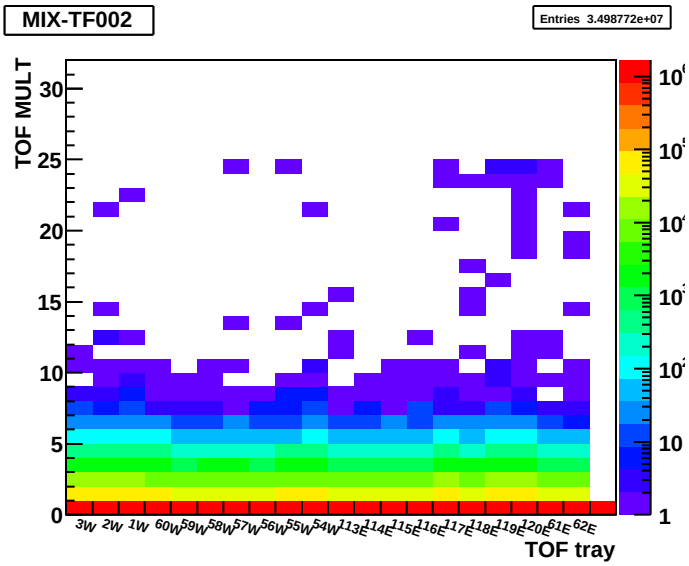

RAT board (ch4)
Entries 1.332866e+07
rat-0 rat-1 rat-2 rat-3 rat-4 rat-5 rat-6 rat-7 rat-8 rat-9 rat-10 rat-11 rat-12 rat-13 rat-14 rat-15

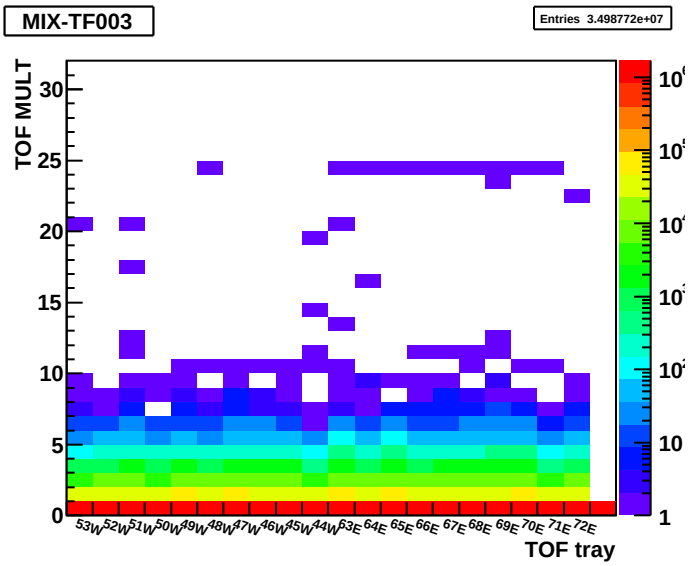

FP201 0-15 (ch5)
Entries 1.332866e+07
FMSsmallClusTh0 FMSsmallClusTh1 FMSsmallClusTh2 FMSsmallMulClusTh0 FMSsmallMulClusTh1 FMSsmallMulClusTh2 FMSsmallHT FMSlargeClusTh0 FMSlargeClusTh1 FMSlargeClusTh2 FMSlargeMulClusTh0 FMSlargeMulClusTh1 FMSlargeMulClusTh2 FMSlargeHT FPE

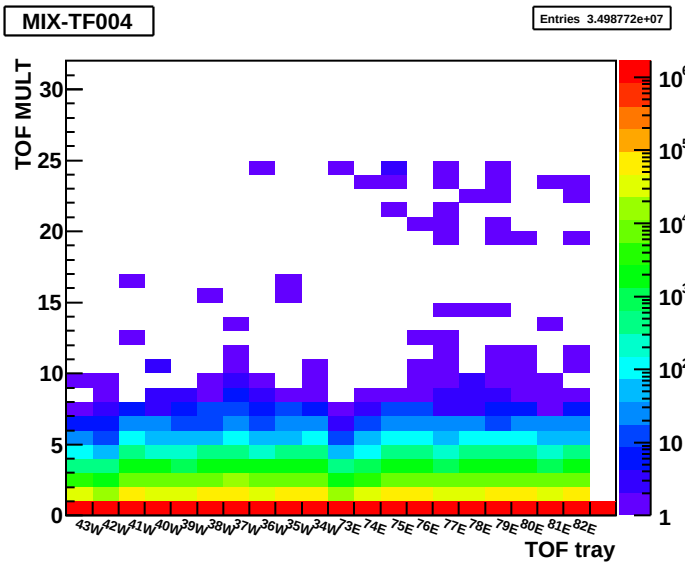

ST201 0-15 (ch6)
Entries 1.332866e+07
SpcTrgDetBit0 SpcTrgDetBit1 SpcTrgDetBit2 DetCrpBit0 DetCrpBit1 DetCrpBit2 DetCrpBit3 ZeroBias Random

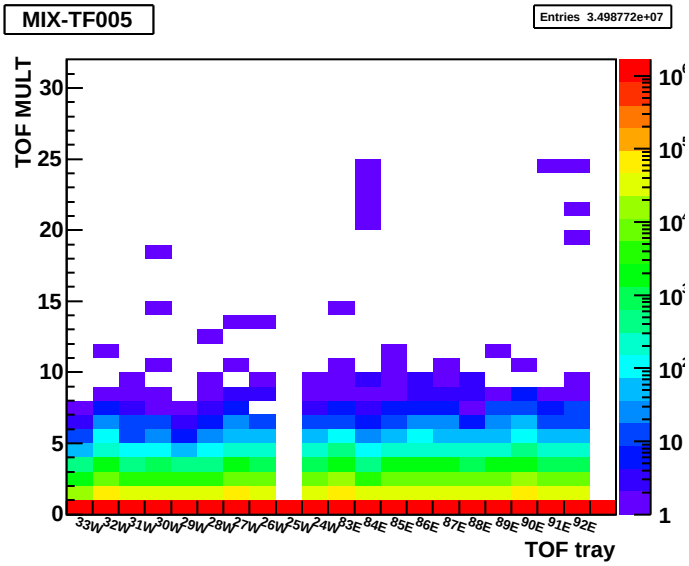

Unused (ch7)
Entries 1.332866e+07

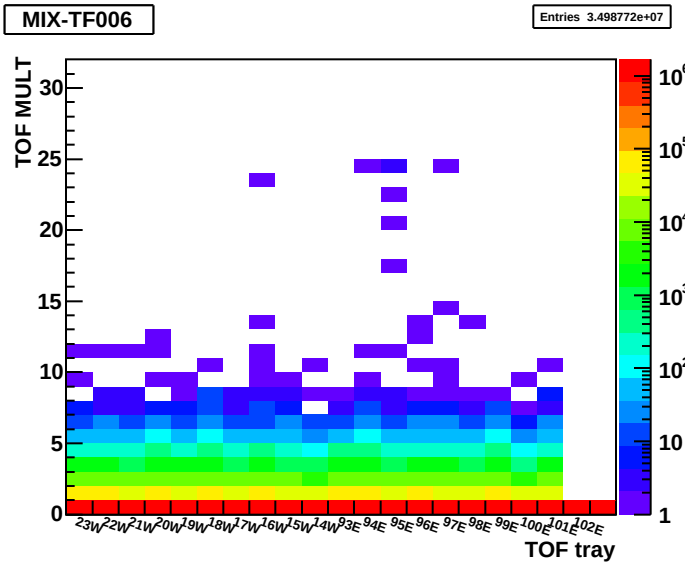

MIX-TF001
Entries 3.498772e+07
TOF MULT
TOF tray

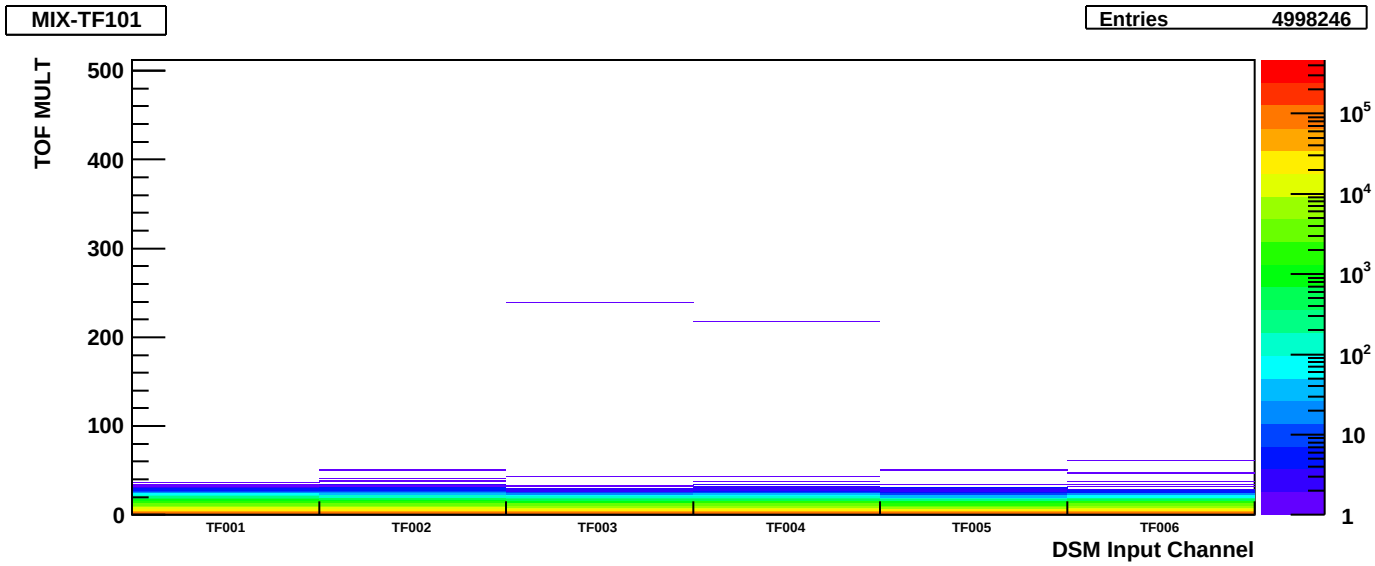

MIX-TF002
Entries 3.498772e+07
TOF MULT
TOF tray

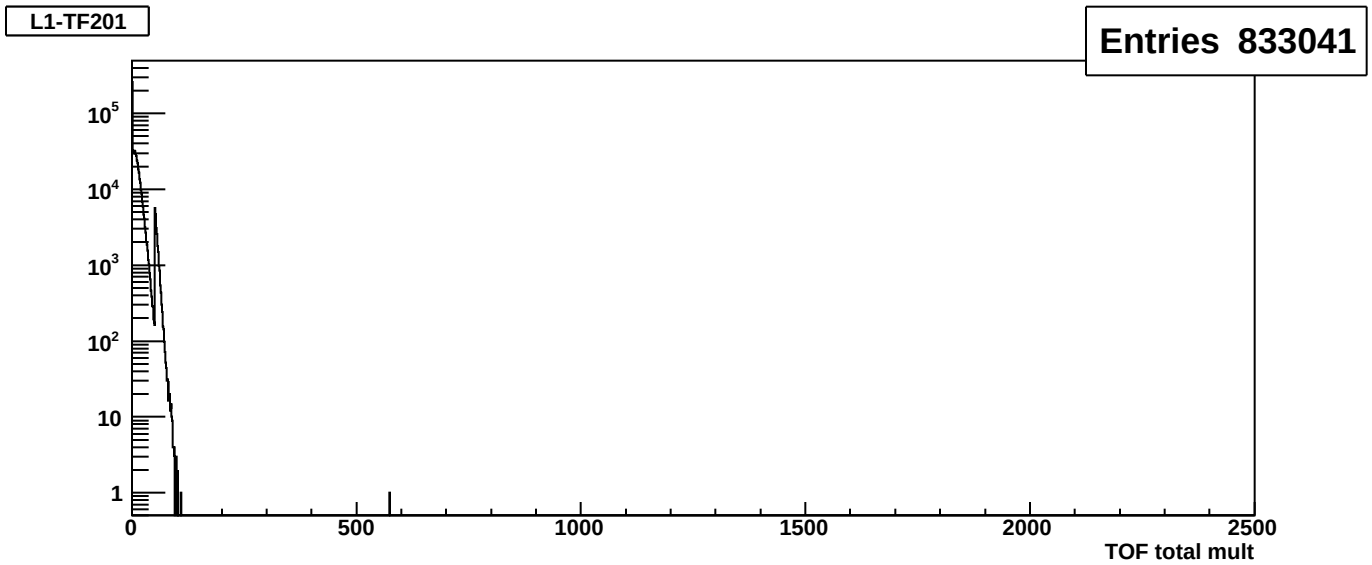

MIX-TF003
Entries 3.498772e+07
TOF MULT
TOF tray

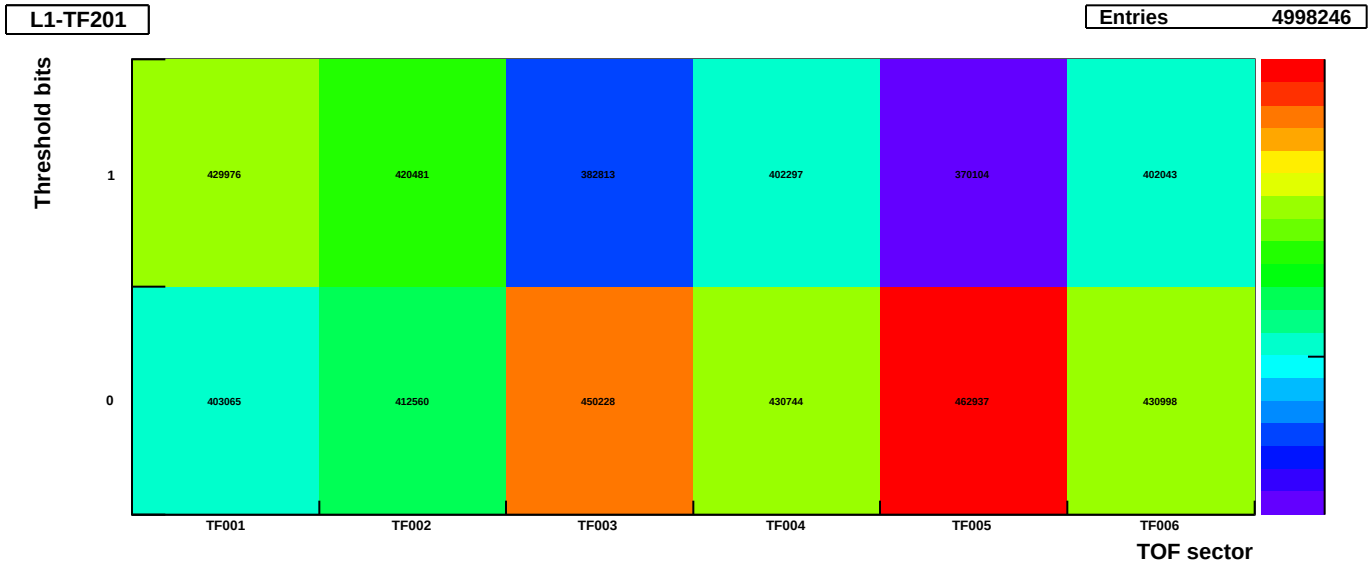

MIX-TF004
Entries 3.498772e+07
TOF MULT
TOF tray

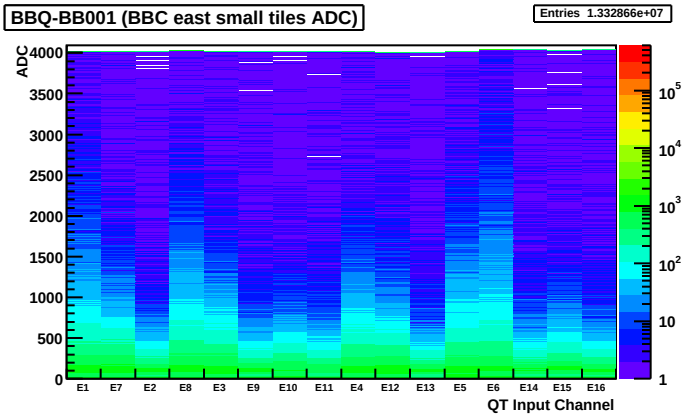

MIX-TF005
Entries 3.498772e+07
TOF MULT
TOF tray

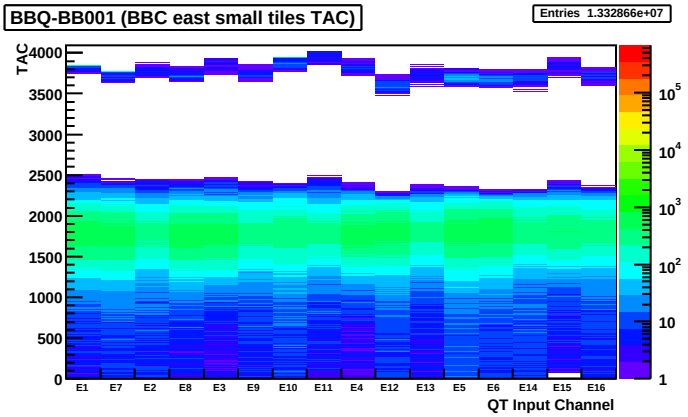

MIX-TF006
Entries 3.498772e+07
TOF MULT
TOF tray

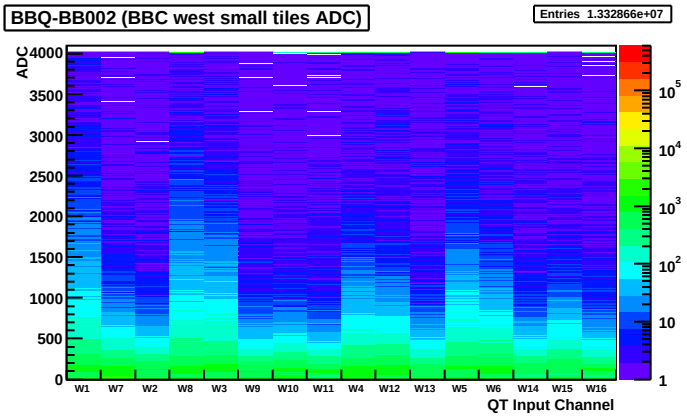

MIX-TF101
Entries 4998246
TOF MULT
500
400
300
200
100
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

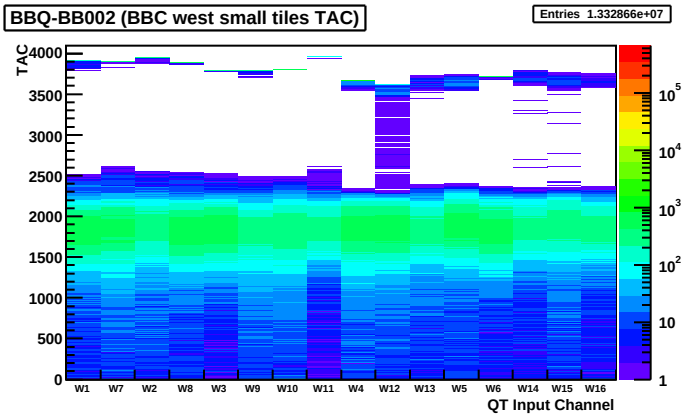

L1-TF201
Entries 833041
10^5
10^4
10^3
10^2
10
1
0
500
1000
1500
2000
2500
TOF total mult

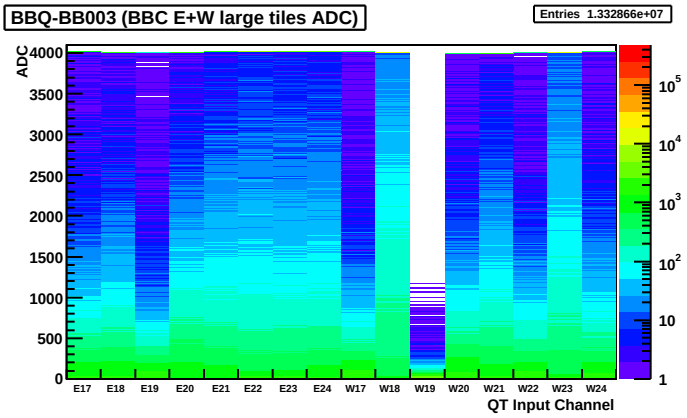

L1-TF201
Entries 4998246
Threshold bits
1
0
429976
420481
382813
402297
370104
402043
403065
412560
450228
430744
462937
430998
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

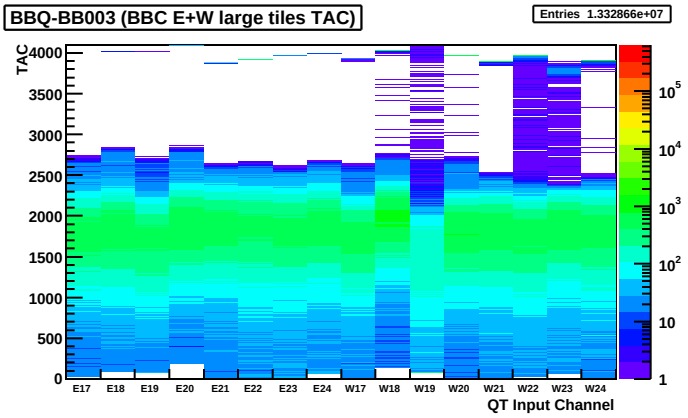

BBQ-BB001 (BBC east small tiles ADC)
Entries 1.332866e+07
ADC
QT Input Channel

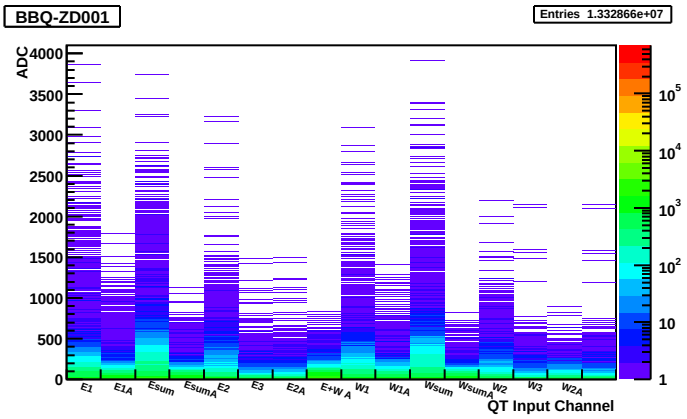

BBQ-BB001 (BBC east small tiles TAC)
Entries 1.332866e+07
TAC
QT Input Channel

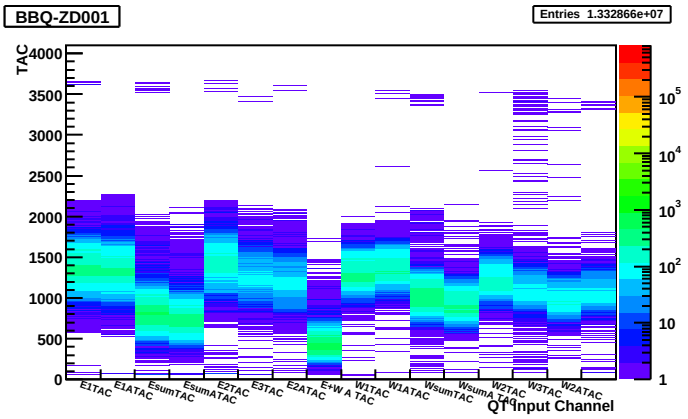

BBQ-BB002 (BBC west small tiles ADC)
Entries 1.332866e+07
ADC
QT Input Channel

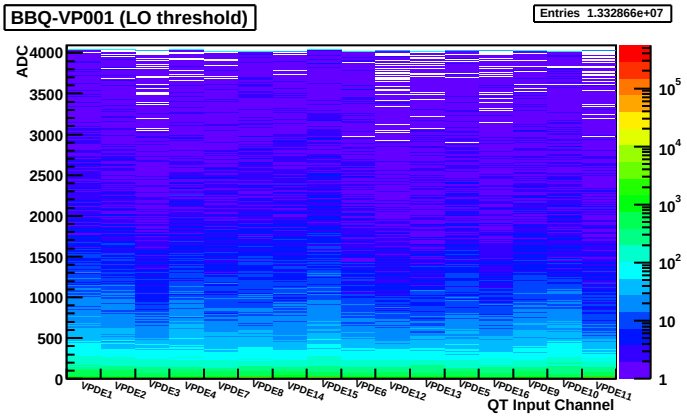

BBQ-BB002 (BBC west small tiles TAC)
Entries 1.332866e+07
TAC
QT Input Channel

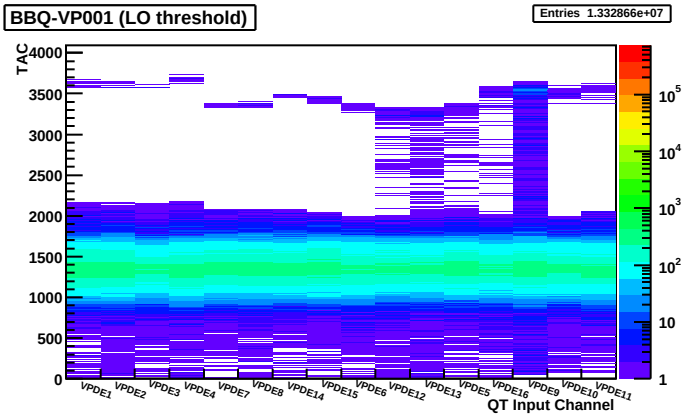

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 1.332866e+07
ADC
QT Input Channel

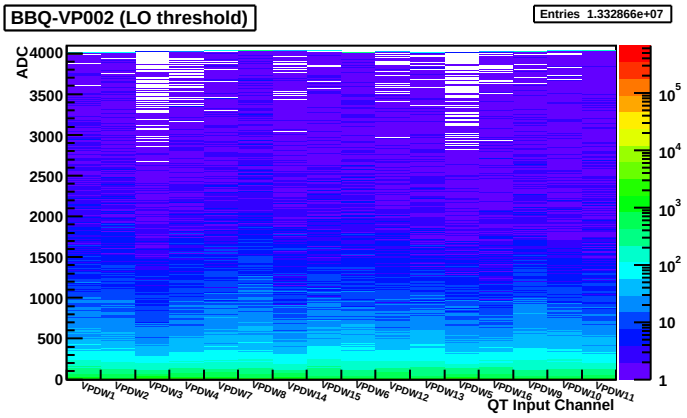

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 1.332866e+07
TAC
QT Input Channel

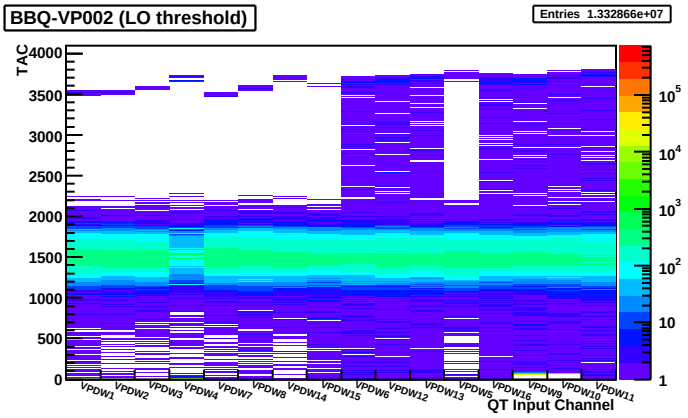

BBQ-ZD001
Entries 1.332866e+07
ADC
QT Input Channel

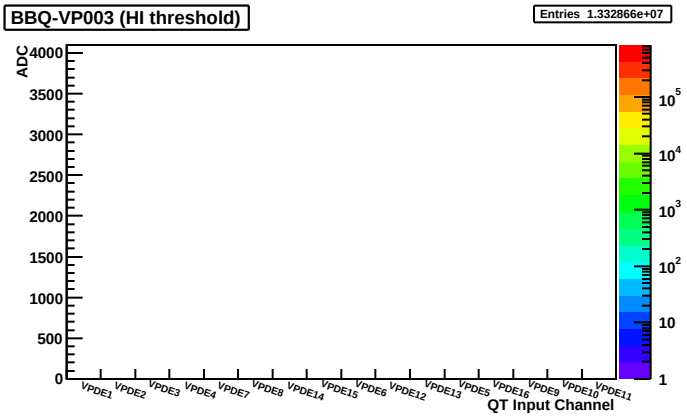

BBQ-ZD001
Entries 1.332866e+07
TAC
QT Input Channel

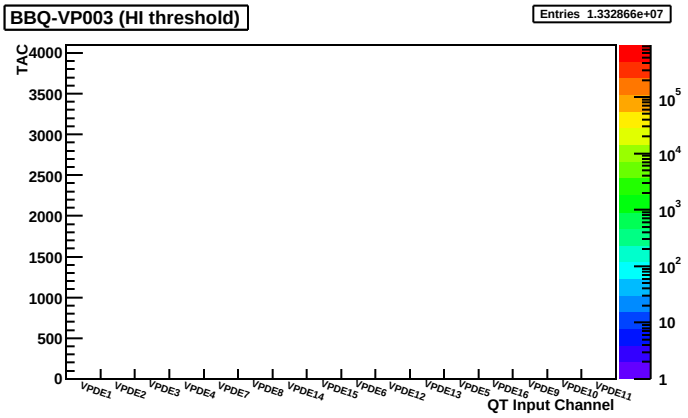

BBQ-VP001 (LO threshold)
Entries 1.332866e+07
ADC
QT Input Channel

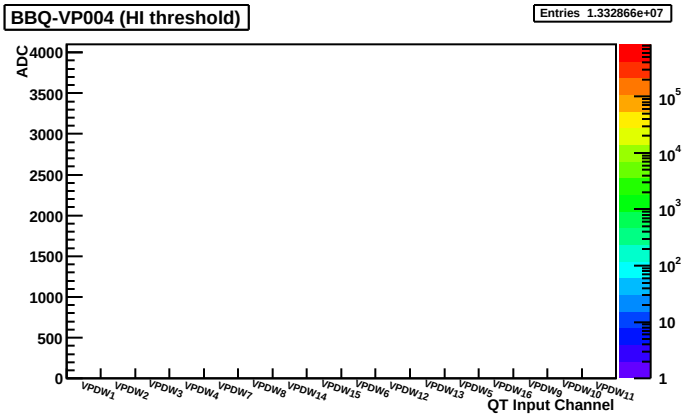

BBQ-VP001 (LO threshold)
Entries 1.332866e+07
TAC
QT Input Channel

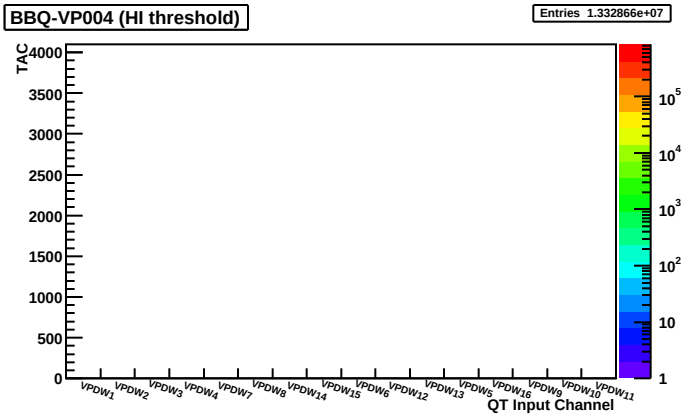

BBQ-VP002 (LO threshold)
Entries 1.332866e+07
ADC
QT Input Channel

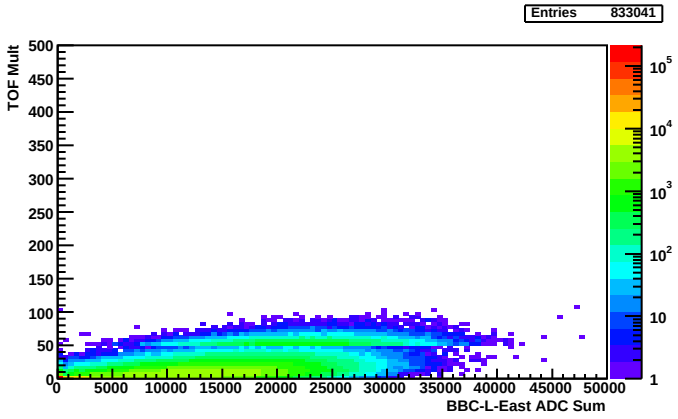

BBQ-VP002 (LO threshold)
Entries 1.332866e+07
TAC
QT Input Channel

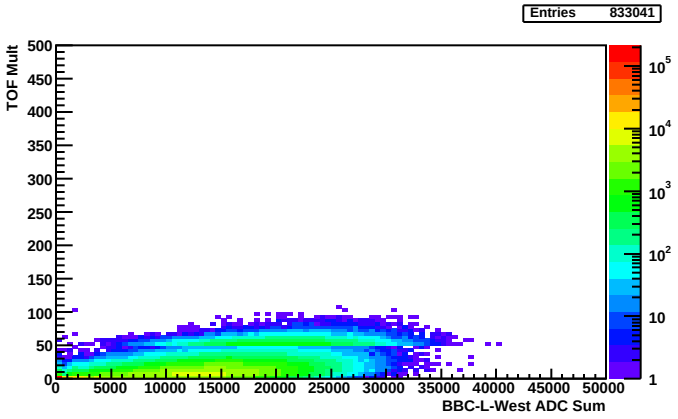

BBQ-VP003 (HI threshold)
Entries 1.332866e+07
ADC
QT Input Channel

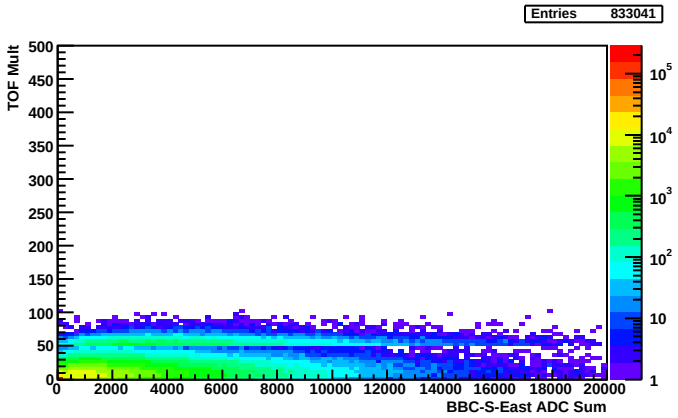

BBQ-VP003 (HI threshold)
Entries 1.332866e+07
TAC
QT Input Channel

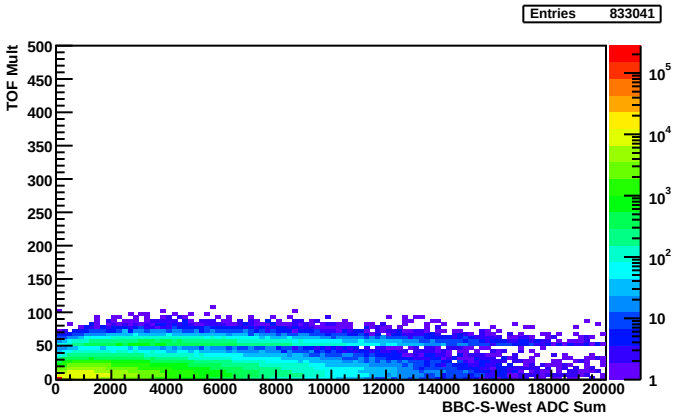

BBQ-VP004 (HI threshold)
Entries 1.332866e+07
ADC
QT Input Channel

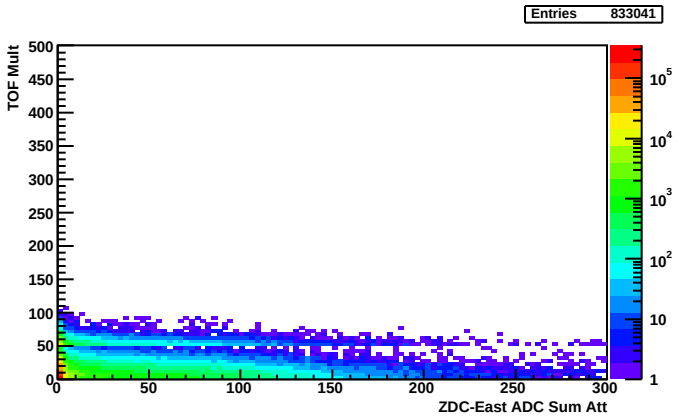

BBQ-VP004 (HI threshold)
Entries 1.332866e+07
TAC
QT Input Channel

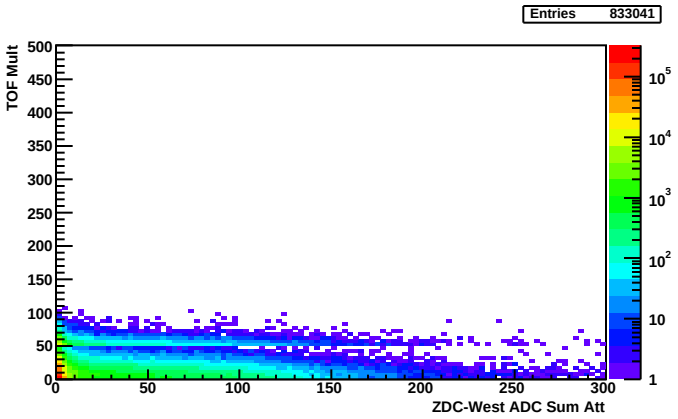

Entries 833041
TOF Mult
BBC-L-East ADC Sum

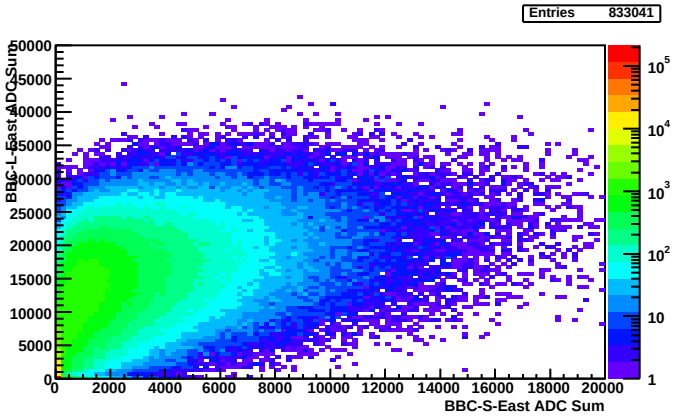

Entries 833041
TOF Mult
BBC-L-West ADC Sum

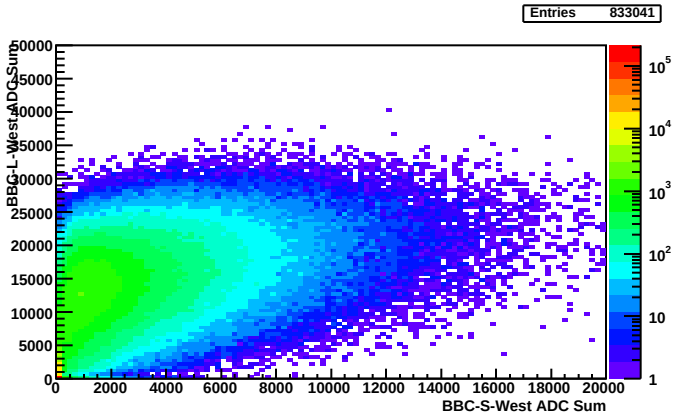

Entries 833041
TOF Mult
BBC-S-East ADC Sum

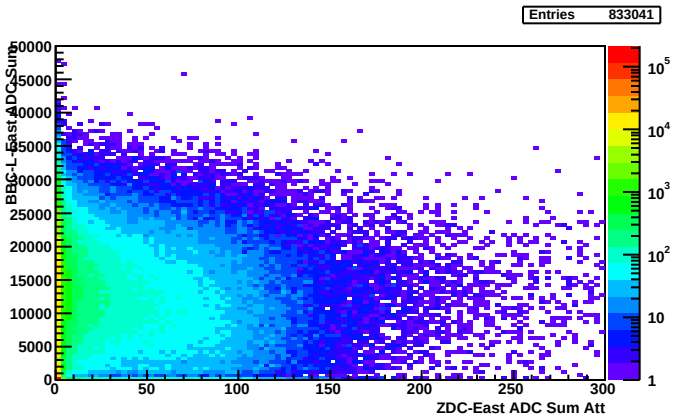

Entries 833041
TOF Mult
BBC-S-West ADC Sum

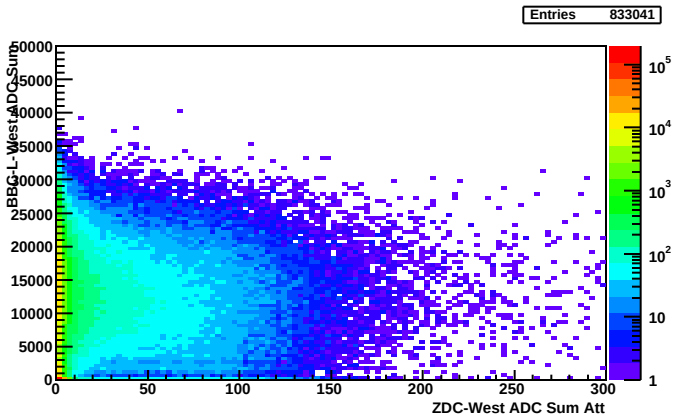

Entries 833041
TOF Mult
ZDC-East ADC Sum Att

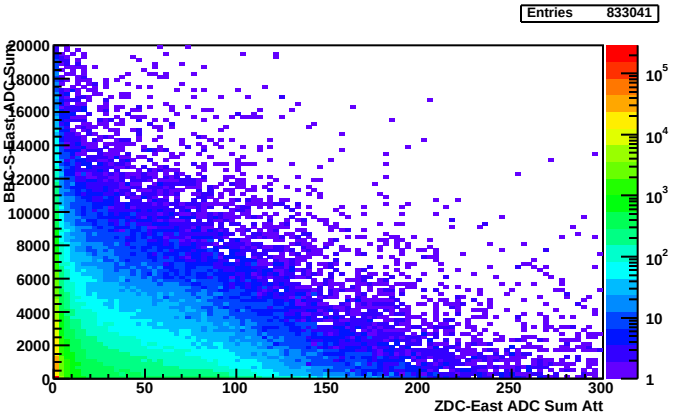

Entries 833041
TOF Mult
ZDC-West ADC Sum Att

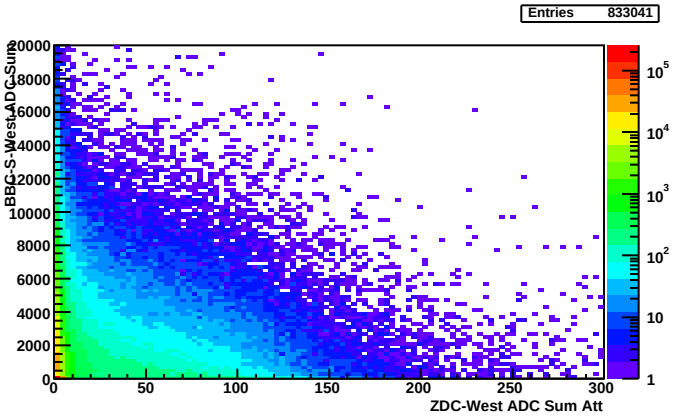

Entries 833041
BBC-L-East ADC Sum
BBC-S-East ADC Sum

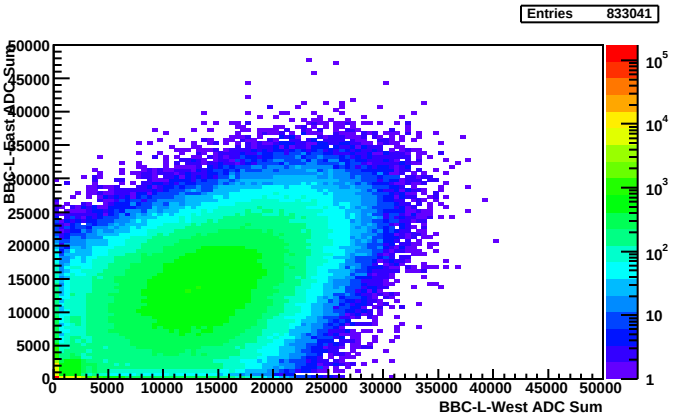

Entries 833041
BBC-L-West ADC Sum
BBC-S-West ADC Sum

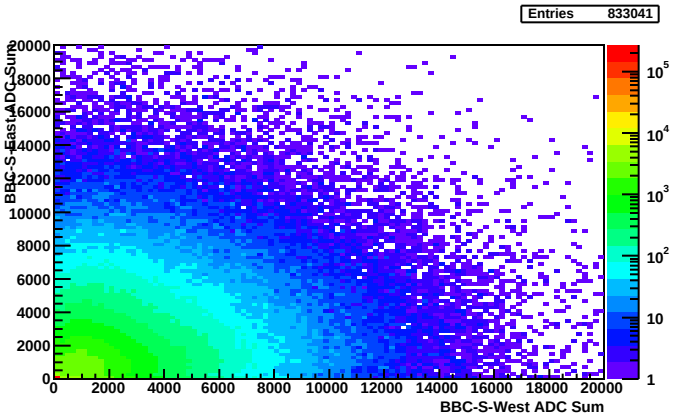

Entries 833041
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

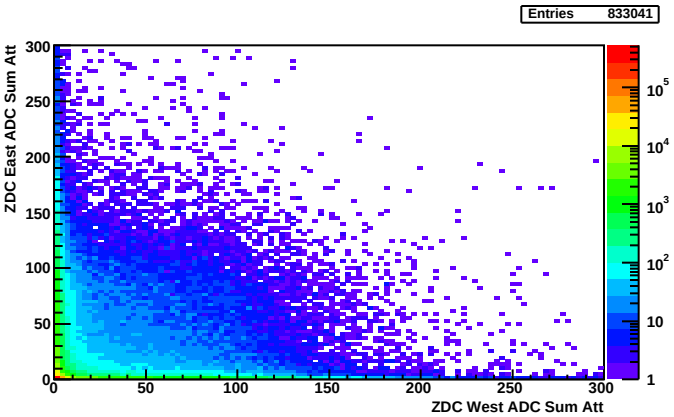

Entries 833041
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

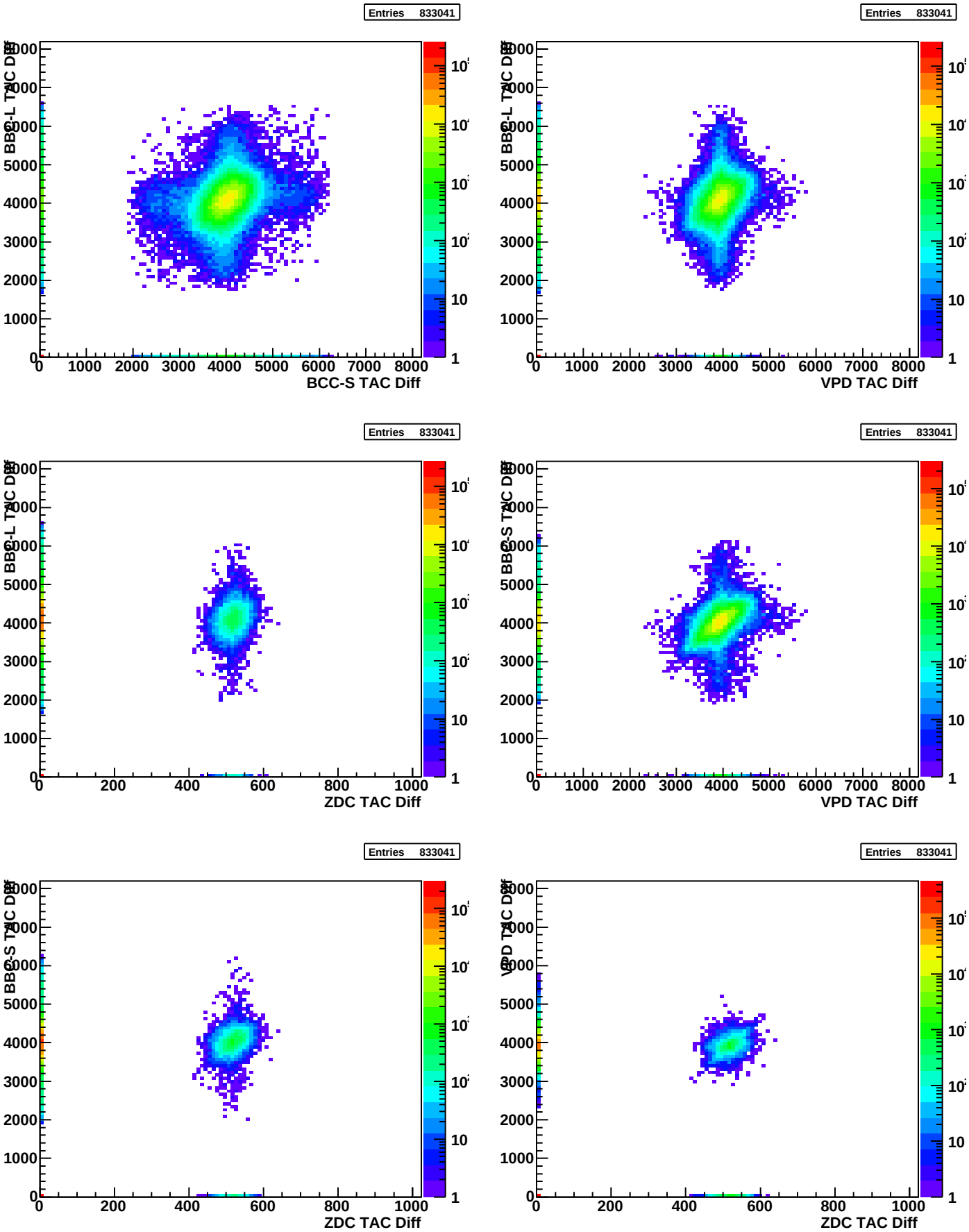

Entries 833041
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

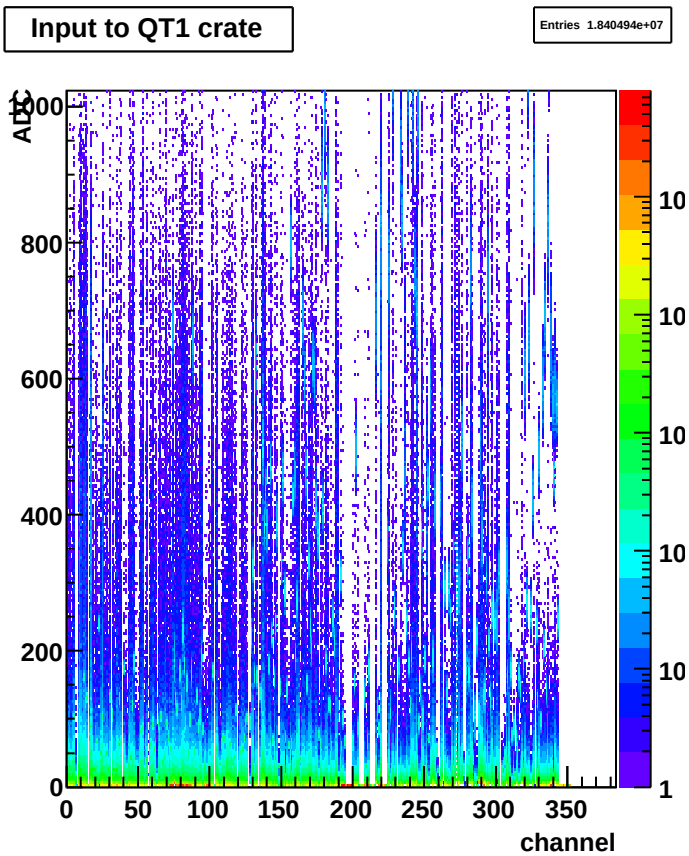

Entries 833041
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

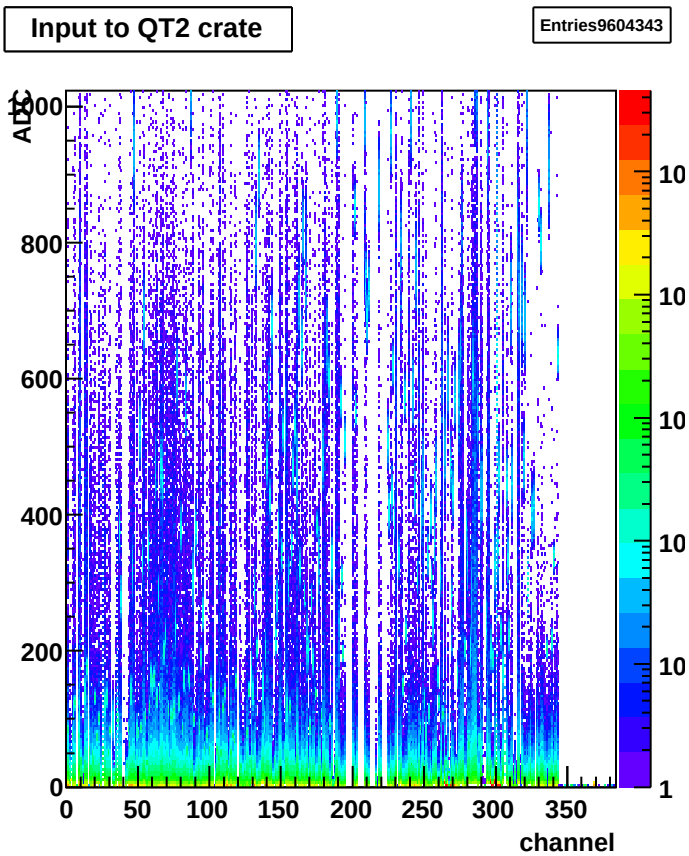

Entries 833041
BBC-L-East ADC Sum
BBC-L-West ADC Sum

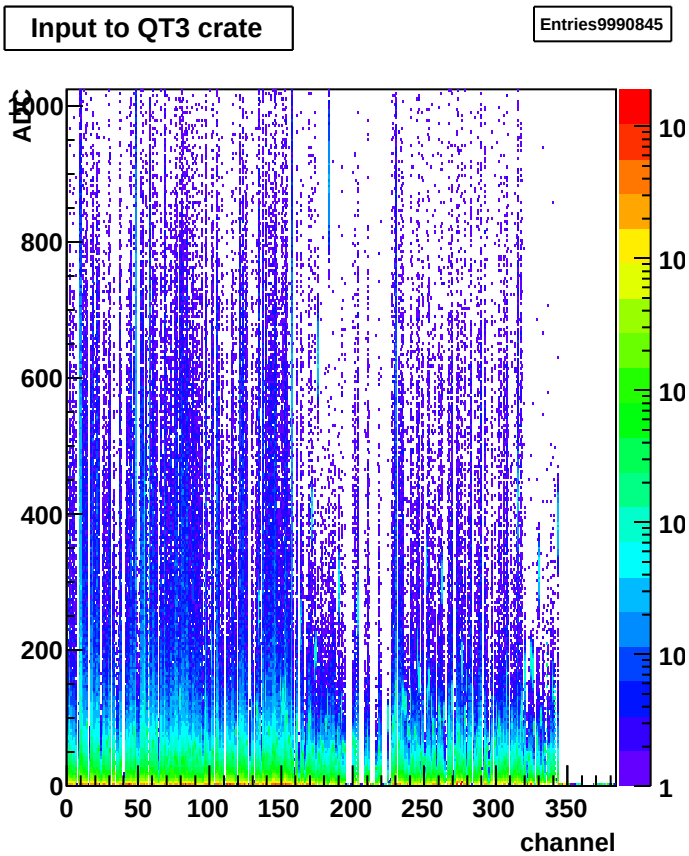

Entries 833041
BBC-S-East ADC Sum
BBC-S-West ADC Sum

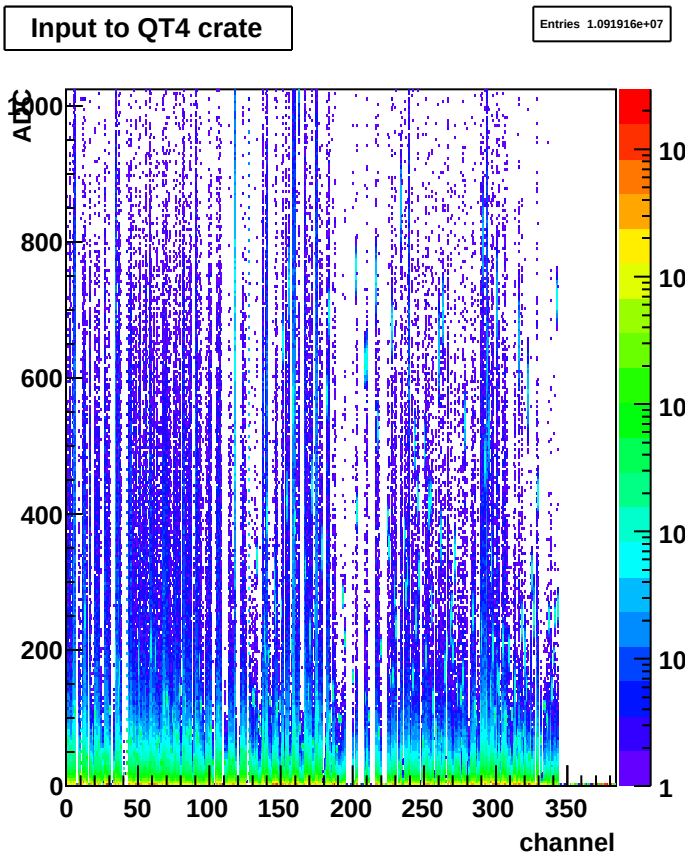

Entries 833041
ZDC East ADC Sum Att
ZDC West ADC Sum Att

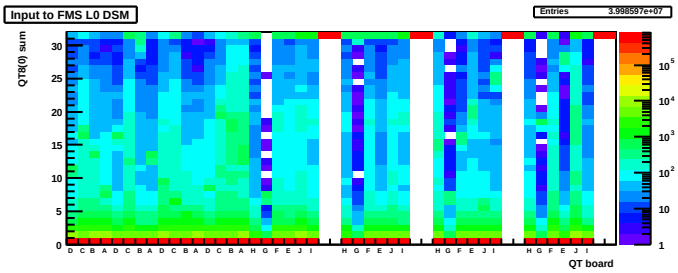

Entries 833041
BBC-L TAC Diff
BCC-S TAC Diff
Entries 833041
BBC-L TAC Diff
VPD TAC Diff
Entries 833041
BBC-L TAC Diff
ZDC TAC Diff
Entries 833041
BBC-S TAC Diff
VPD TAC Diff
Entries 833041
BBC-S TAC Diff
ZDC TAC Diff
Entries 833041
VPD TAC Diff
ZDC TAC Diff

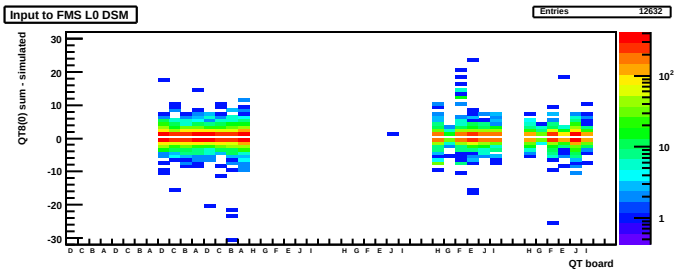

Input to QT1 crate
Entries 1.840494e+07
ADC
channel

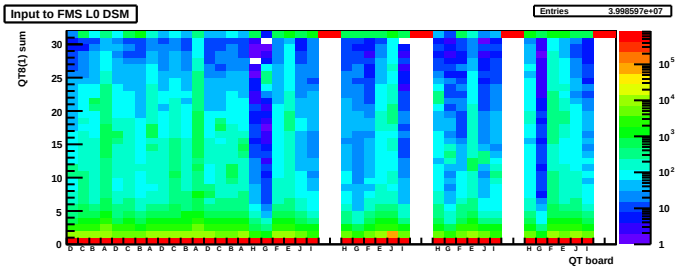

Input to QT2 crate
Entries9604343
ADC
channel

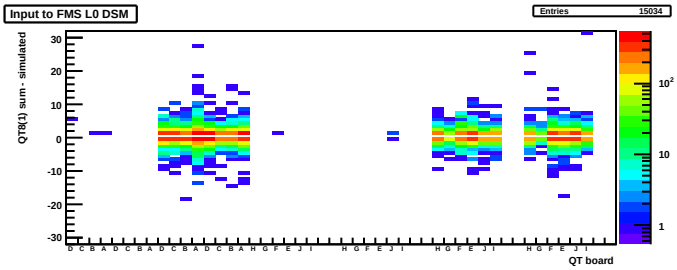

Input to QT3 crate
Entries9990845
ADC
channel

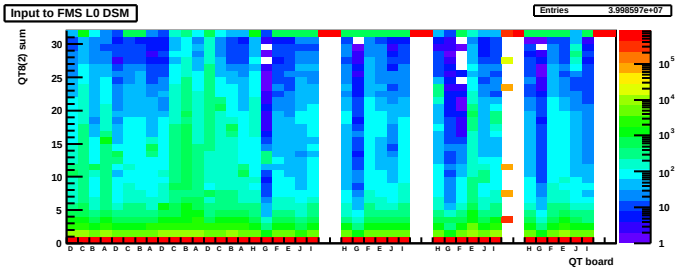

Input to QT4 crate
Entries 1.091916e+07
ADC
channel

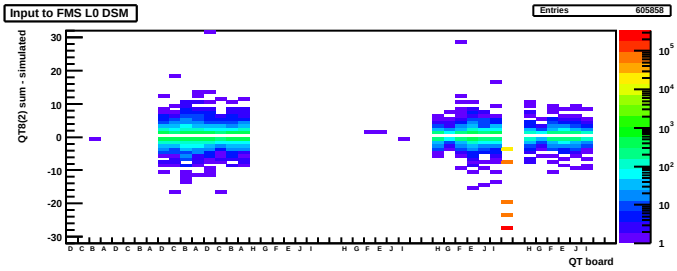

Input to FMS L0 DSM
Entries 3.998597e+07
QT8(0) sum
QT board

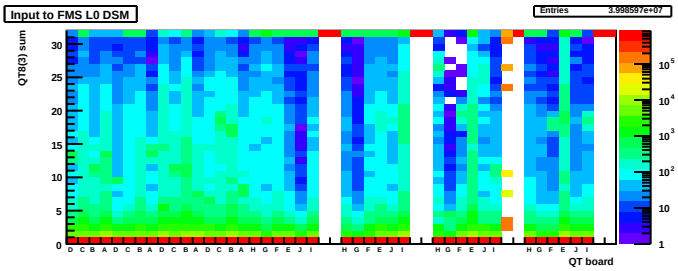

Input to FMS L0 DSM
Entries 12632
QT8(0) sum - simulated
QT board

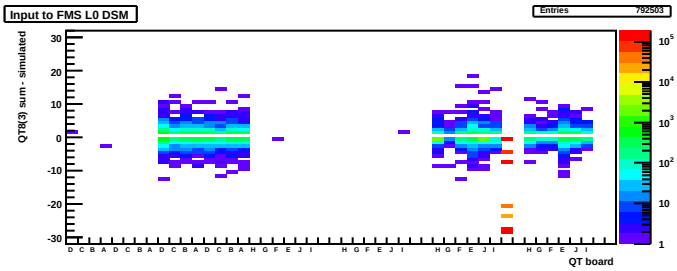

Input to FMS L0 DSM
Entries 3.998597e+07
QT8(1) sum
QT board

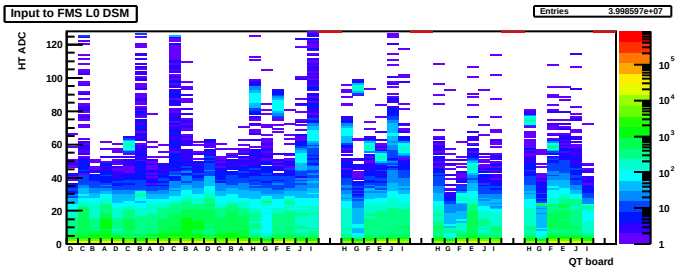

Input to FMS L0 DSM
Entries 15034
QT8(1) sum - simulated
QT board

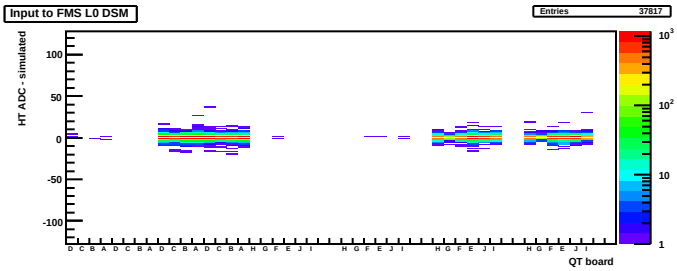

Input to FMS L0 DSM
Entries 3.998597e+07
QT8(2) sum
QT board

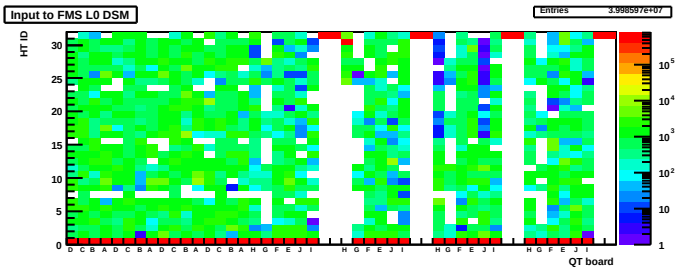

Input to FMS L0 DSM
Entries 605858
QT8(2) sum - simulated
QT board

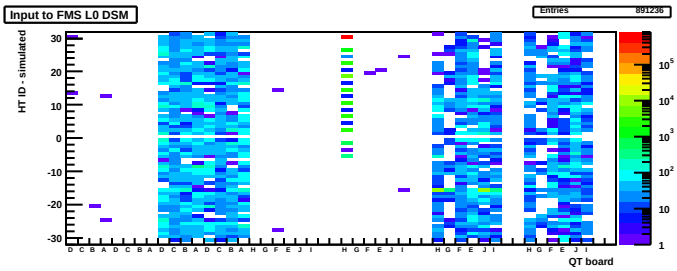

Input to FMS L0 DSM
Entries 3.998597e+07
QT8(3) sum
QT board

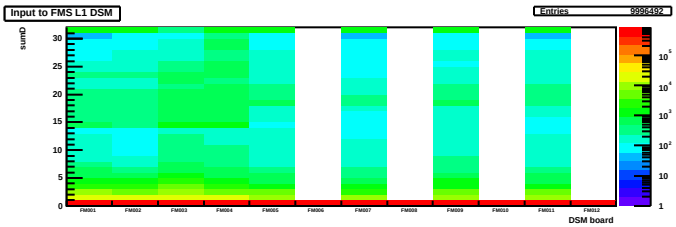

Input to FMS L0 DSM
Entries 792503
QT8(3) sum - simulated
QT board

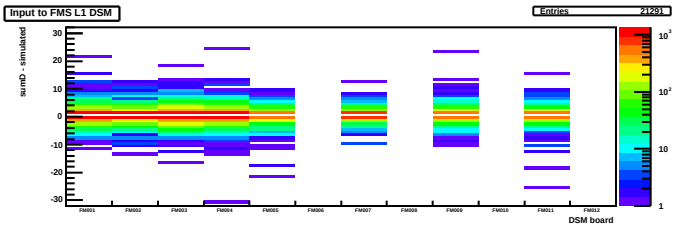

Input to FMS L0 DSM
Entries 3.998597e+07
HT ADC
QT board

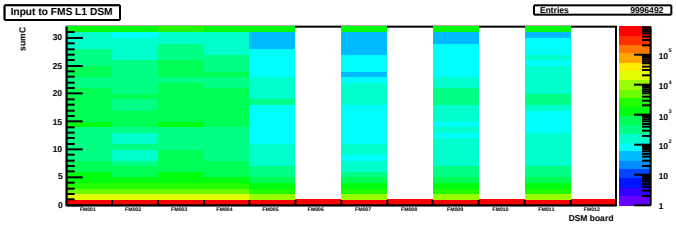

Input to FMS L0 DSM
Entries 37817
HT ADC - simulated
QT board

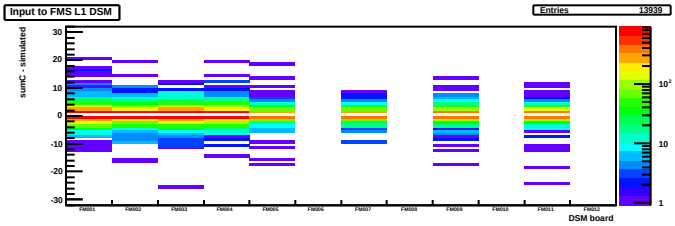

Input to FMS L0 DSM
Entries 3.998597e+07
HT ID
QT board

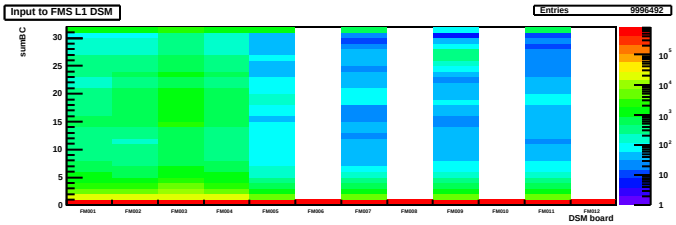

Input to FMS L0 DSM
Entries 891236
HT ID - simulated
QT board

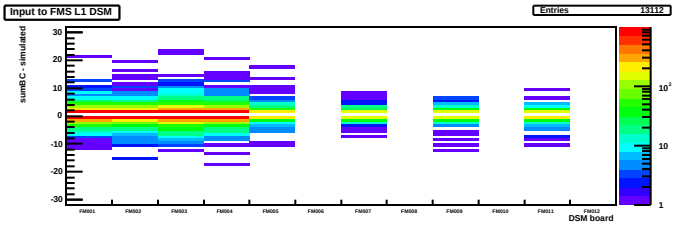

Input to FMS L1 DSM
Entries 9996492
sumD
DSM board

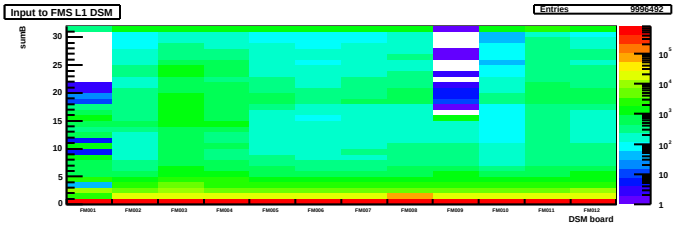

Input to FMS L1 DSM
Entries 21281
sumD - simulated
DSM board

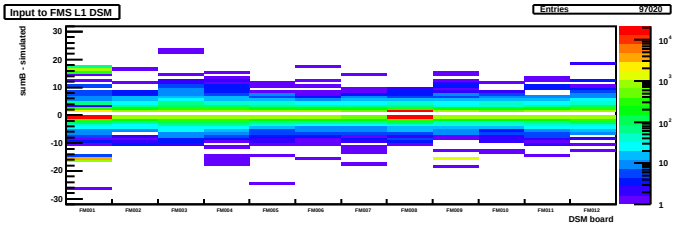

Input to FMS L1 DSM
Entries 9996492
sumC
DSM board

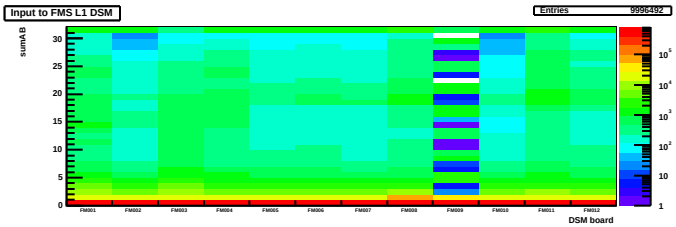

Input to FMS L1 DSM
Entries 13939
sumC - simulated
DSM board

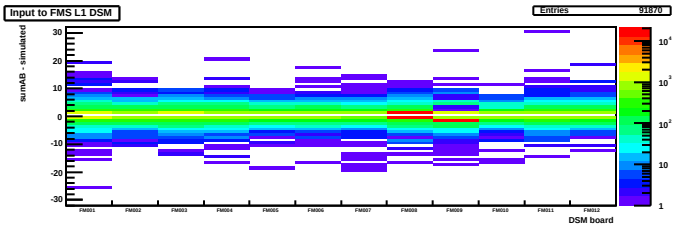

Input to FMS L1 DSM
Entries 9996492
sumBC
DSM board

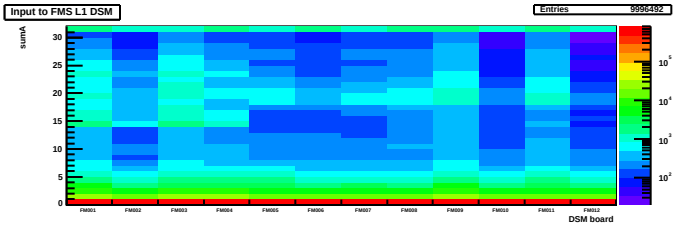

Input to FMS L1 DSM
Entries 13112
sumBC - simulated
DSM board

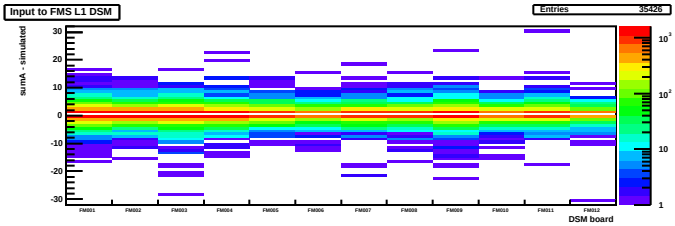

Input to FMS L1 DSM
Entries 9996492
sumB
DSM board

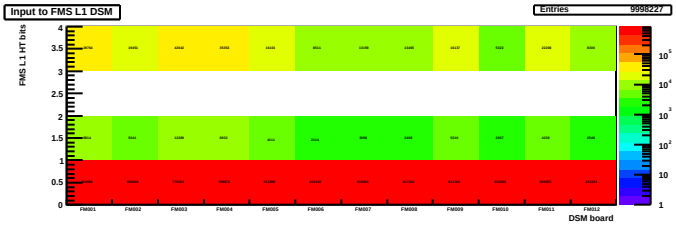

Input to FMS L1 DSM
Entries 97020
sumB - simulated
DSM board

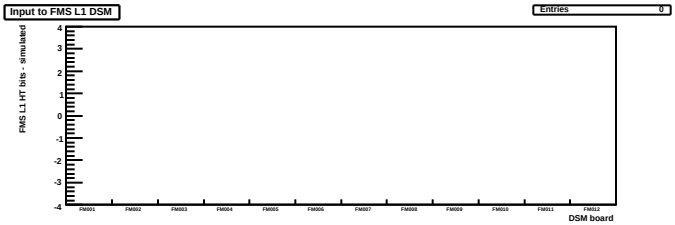

Input to FMS L1 DSM
Entries 9996492
sumAB
DSM board

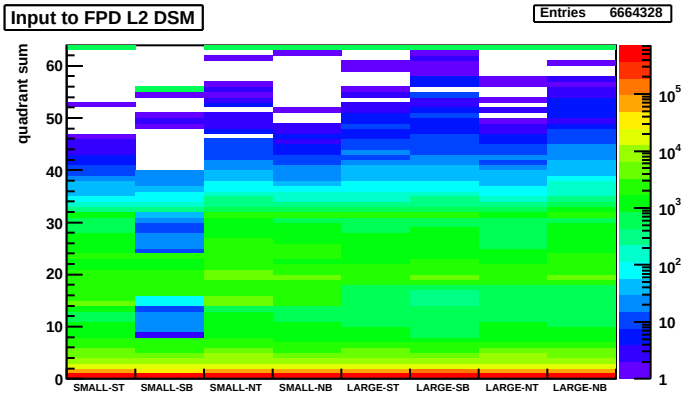

Input to FMS L1 DSM
Entries 91870
sumAB - simulated
DSM board

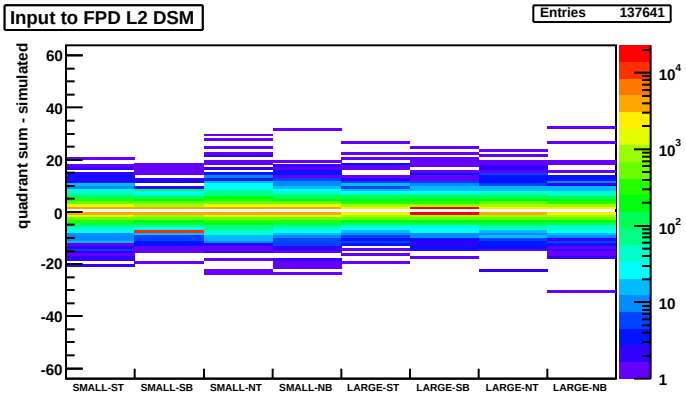

Input to FMS L1 DSM
Entries 9996492
sumA
DSM board

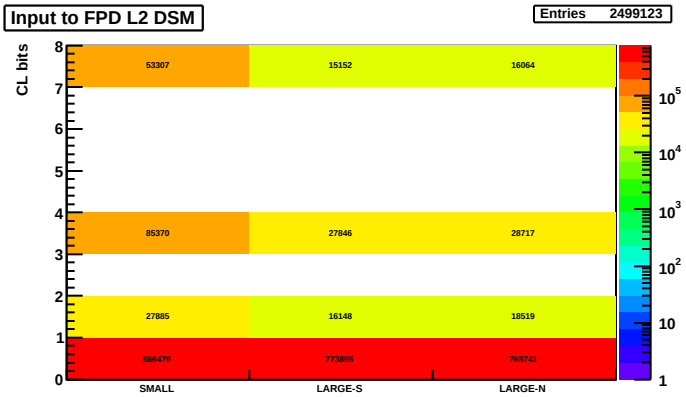

Input to FMS L1 DSM
Entries 35426
sumA - simulated
DSM board

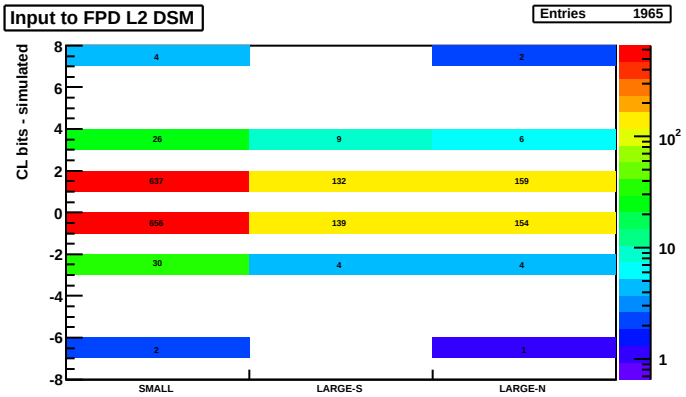

Input to FMS L1 DSM
Entries 9998227
FMS L1 HT bits
DSM board

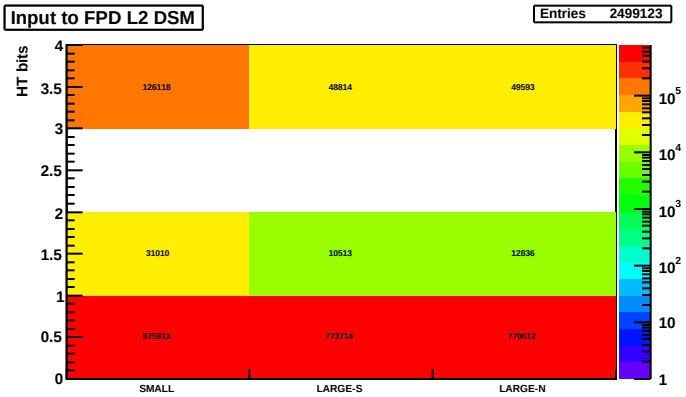

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

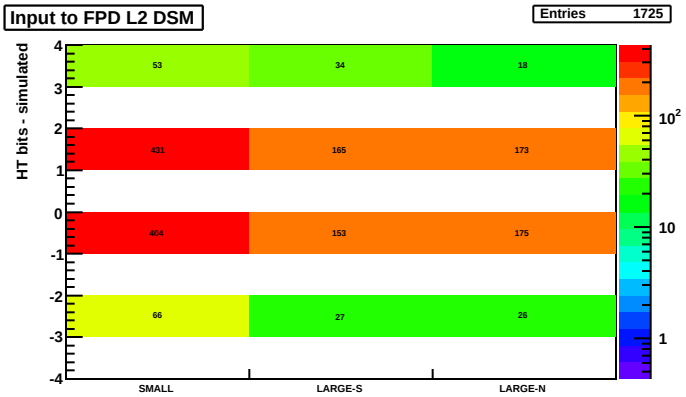

Input to FPD L2 DSM
Entries 6664328
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

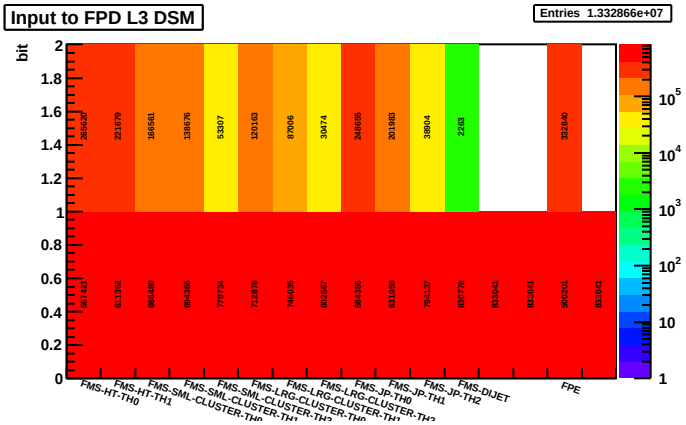

Input to FPD L2 DSM
Entries 137641
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

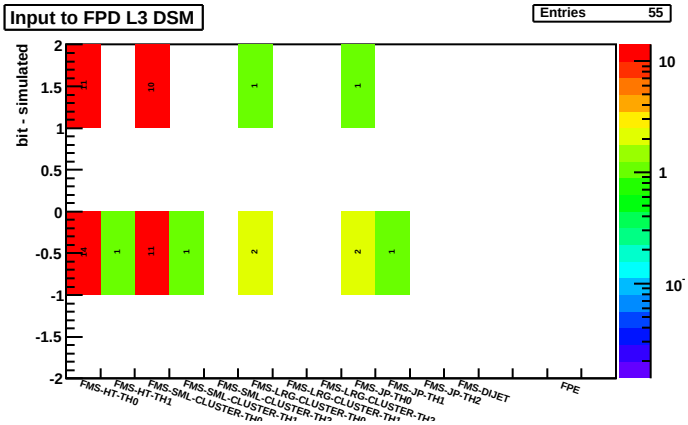

Input to FPD L2 DSM
Entries 2499123
CL bits
53307
15152
16064
85370
27846
28717
27885
16148
18519
666479
773895
769741
SMALL
LARGE-S
LARGE-N

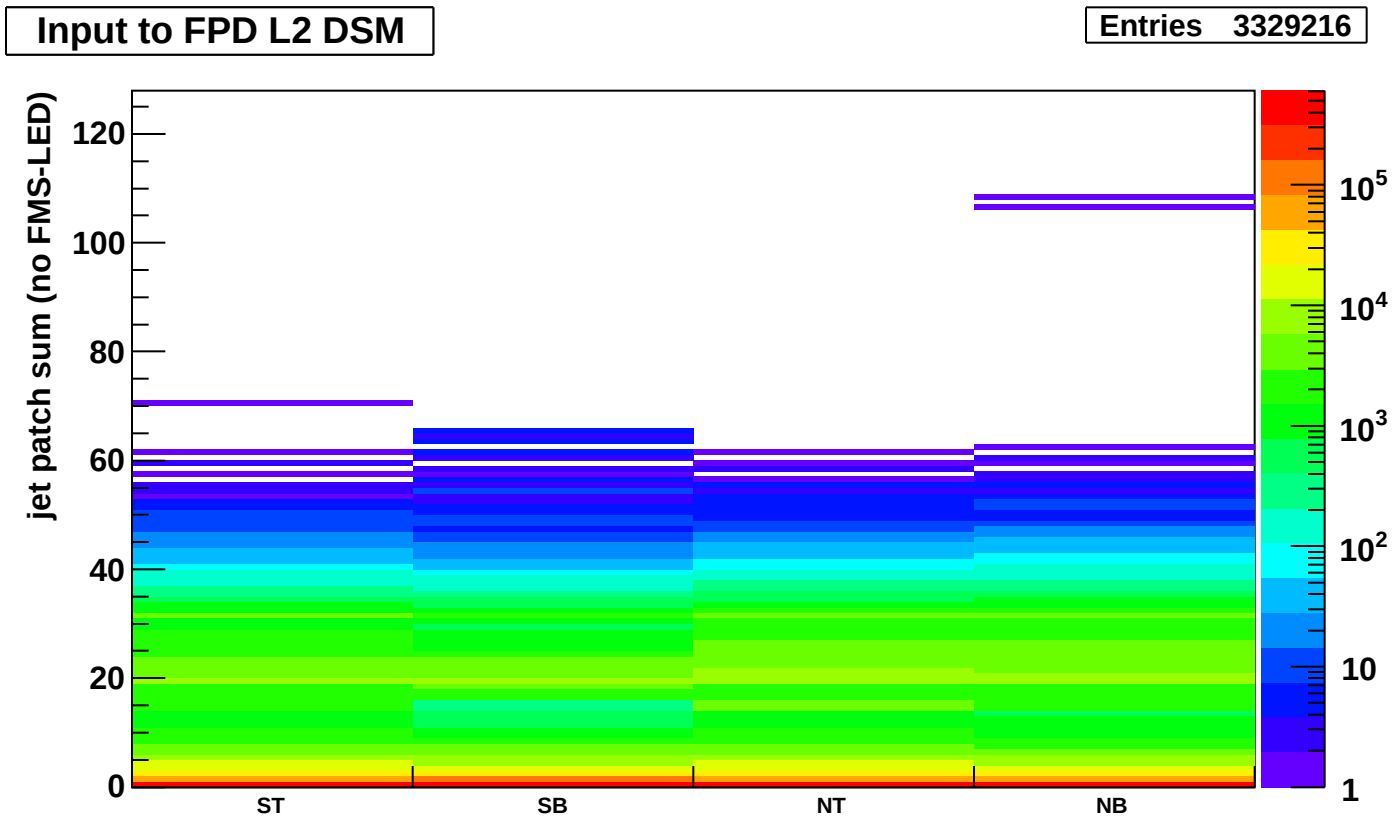

Input to FPD L2 DSM
Entries 1965
CL bits - simulated
4
2
26
9
6
637
132
159
656
139
154
30
4
4
2
1
SMALL
LARGE-S
LARGE-N

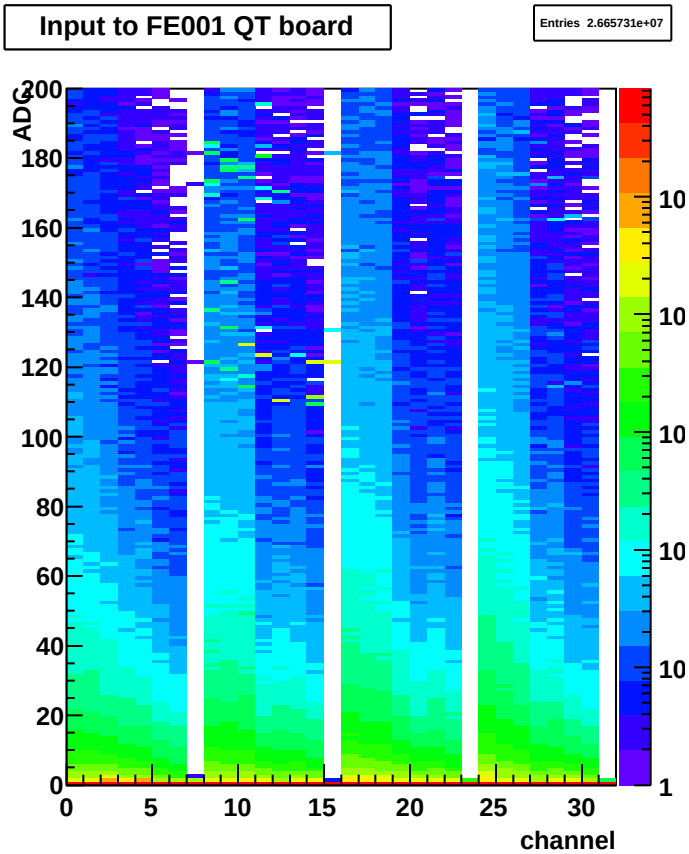

Input to FPD L2 DSM
Entries 2499123
HT bits
126118
48814
49593
31010
10513
12836
675913
773714
770612
SMALL
LARGE-S
LARGE-N

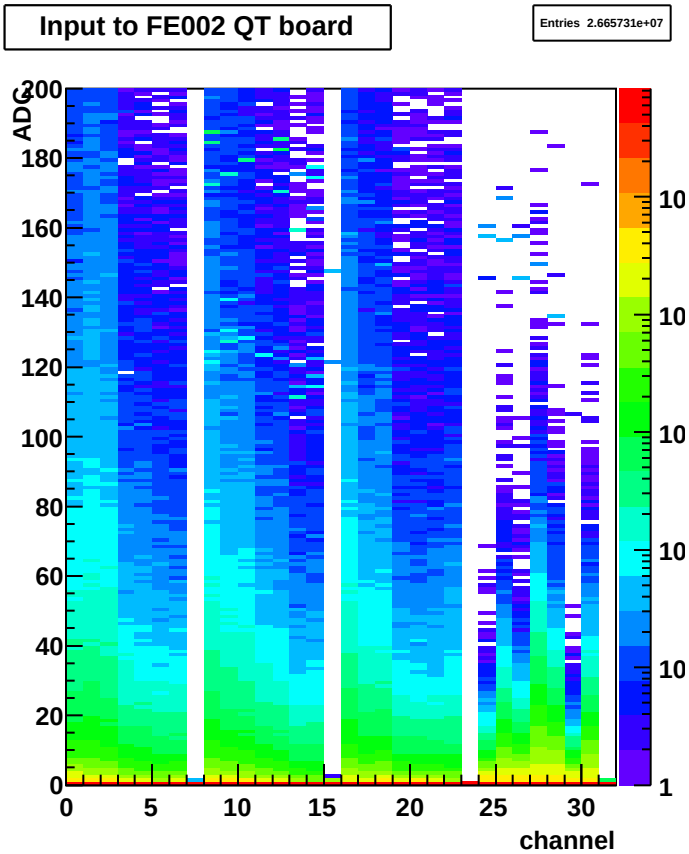

Input to FPD L2 DSM
Entries 1725
HT bits - simulated
53
34
18
431
165
173
404
153
175
66
27
26
SMALL
LARGE-S
LARGE-N

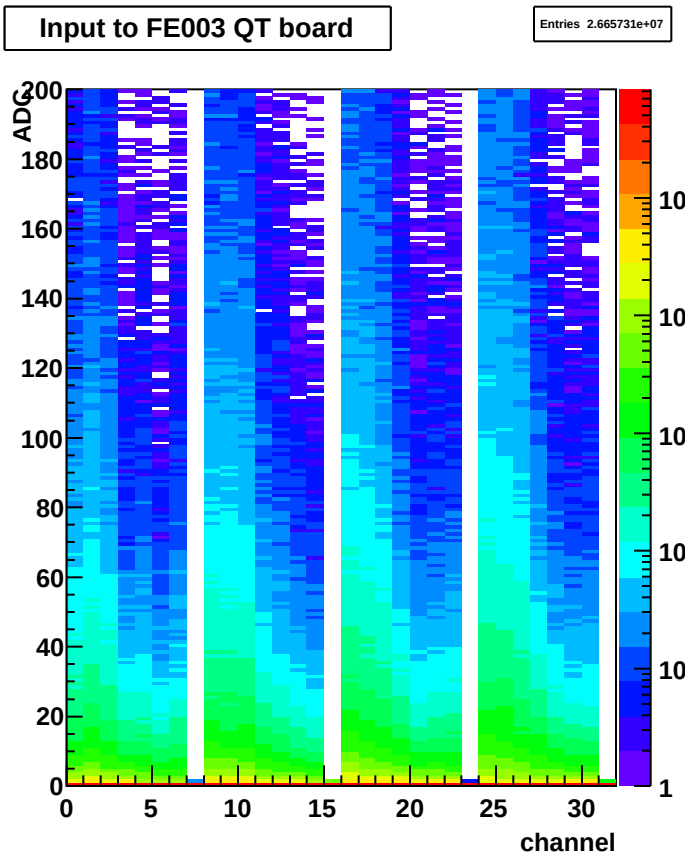

Input to FPD L3 DSM
Entries 1.332866e+07
bit
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

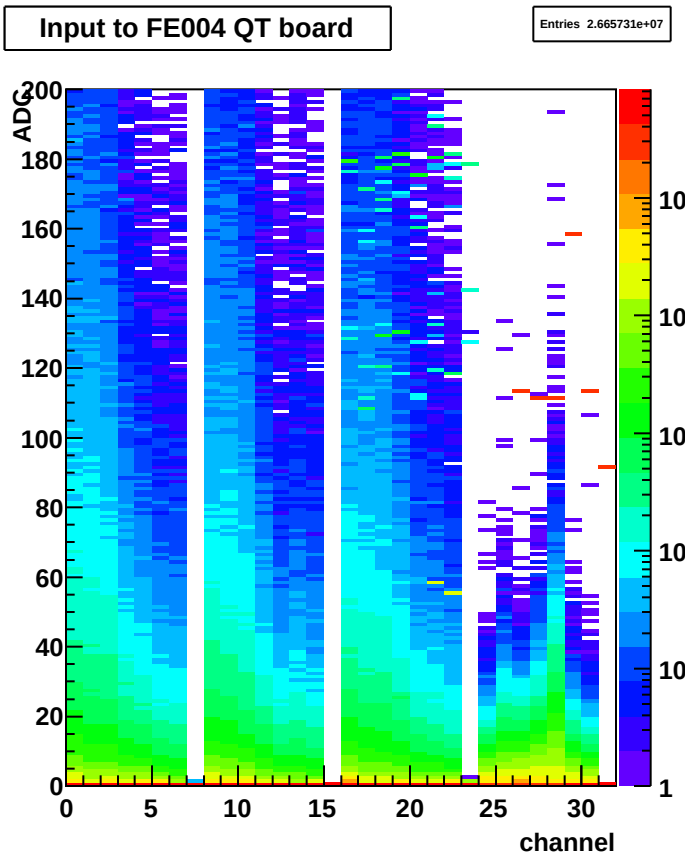

Input to FPD L3 DSM
Entries 55
bit - simulated
FMS-HT-TH0
FMS-HT-TH1
FMS-SML-CLUSTER-TH0
FMS-SML-CLUSTER-TH1
FMS-SML-CLUSTER-TH2
FMS-LRG-CLUSTER-TH0
FMS-LRG-CLUSTER-TH1
FMS-LRG-CLUSTER-TH2
FMS-JP-TH0
FMS-JP-TH1
FMS-JP-TH2
FMS-DIJET
FPE

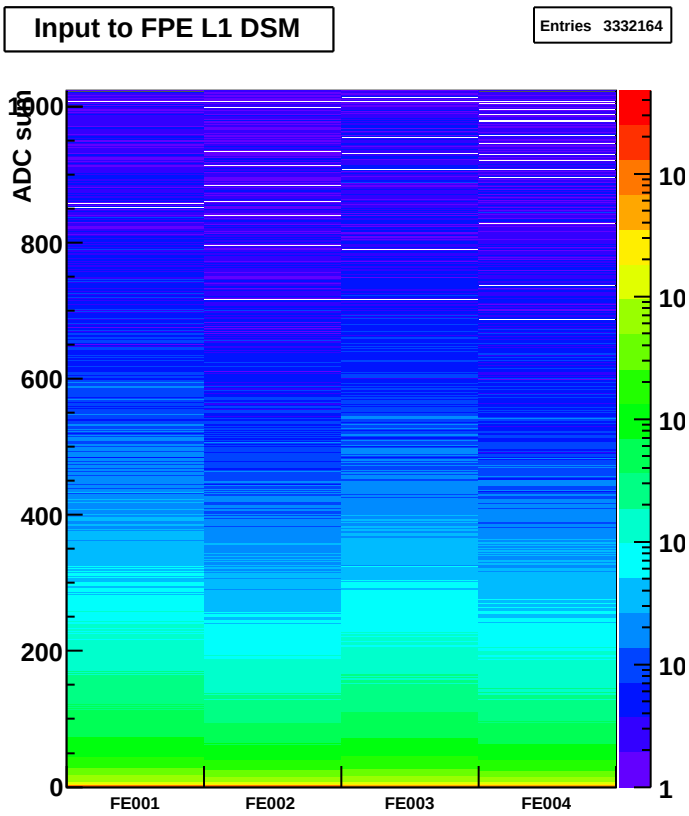

Input to FPD L2 DSM
Entries 3329216
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

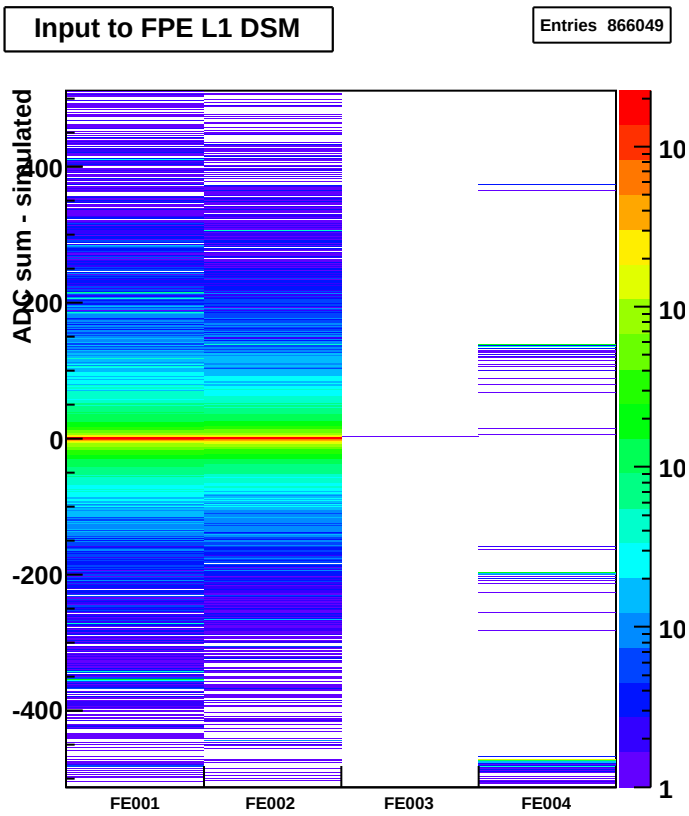

Input to FE001 QT board
Entries 2.665731e+07
ADC
channel

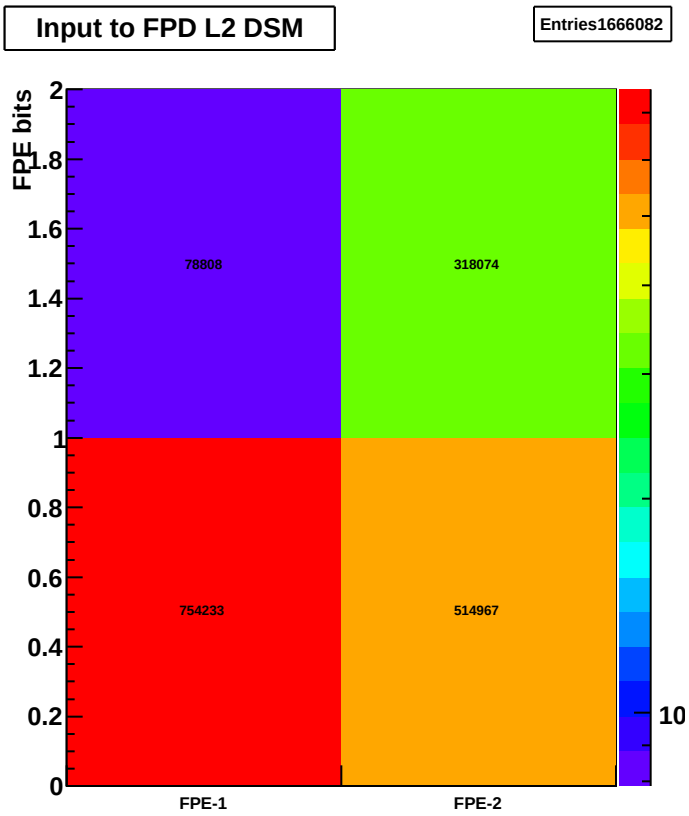

Input to FE002 QT board
Entries 2.665731e+07
ADC
channel

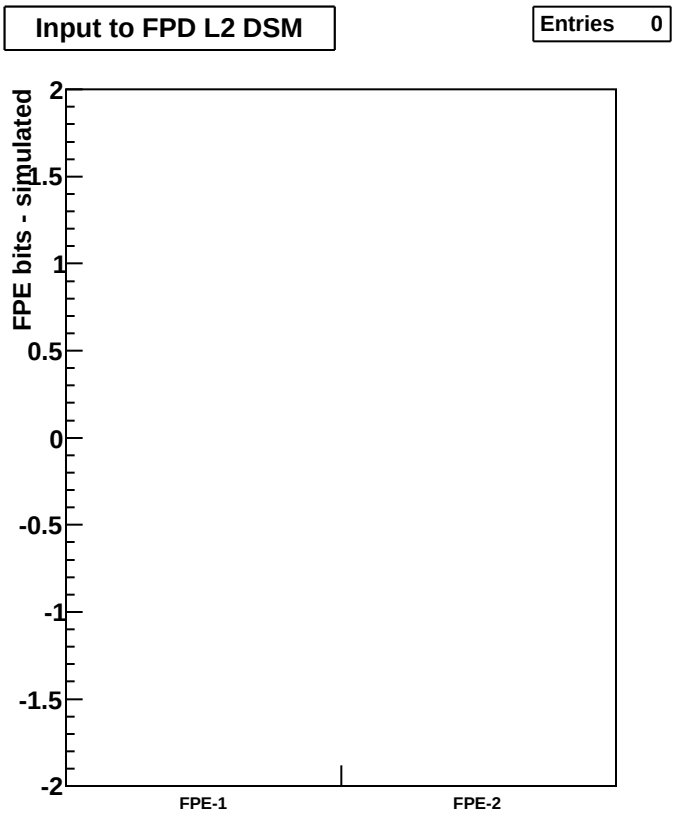

Input to FE003 QT board
Entries 2.665731e+07
ADC
channel


Input to FE004 QT board
Entries 2.665731e+07
ADC
channel


Input to FPE L1 DSM
Entries 3332164
ADC sum
1000
800
600
400
200
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


Input to FPE L1 DSM
Entries 866049
ADC sum - simulated
400
200
0
-200
-400
FE001
FE002
FE003
FE004
10
10
10
10
1


Input to FPD L2 DSM
Entries1666082
FPE bits
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
78808
318074
754233
514967
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