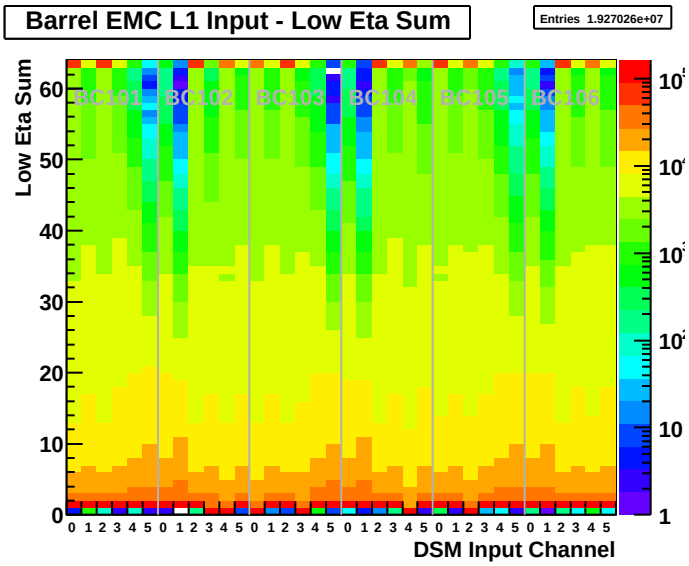
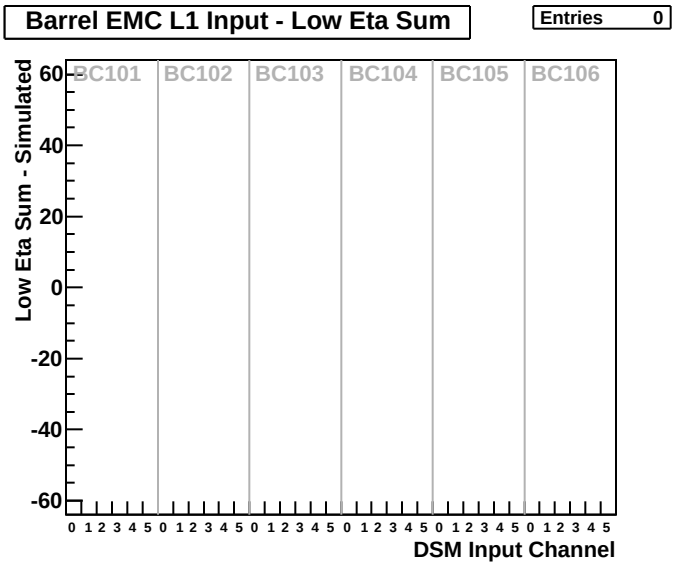
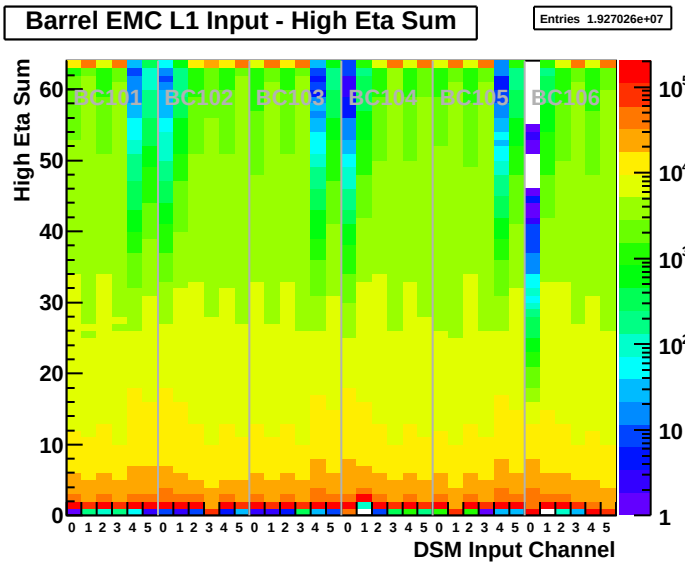
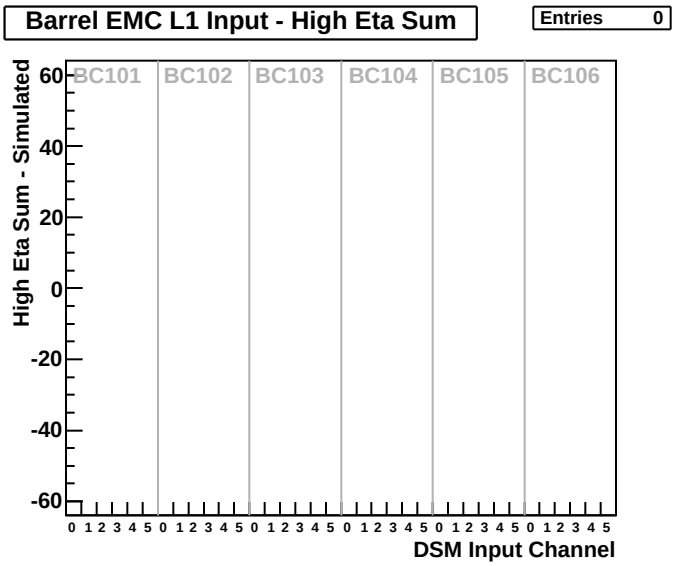
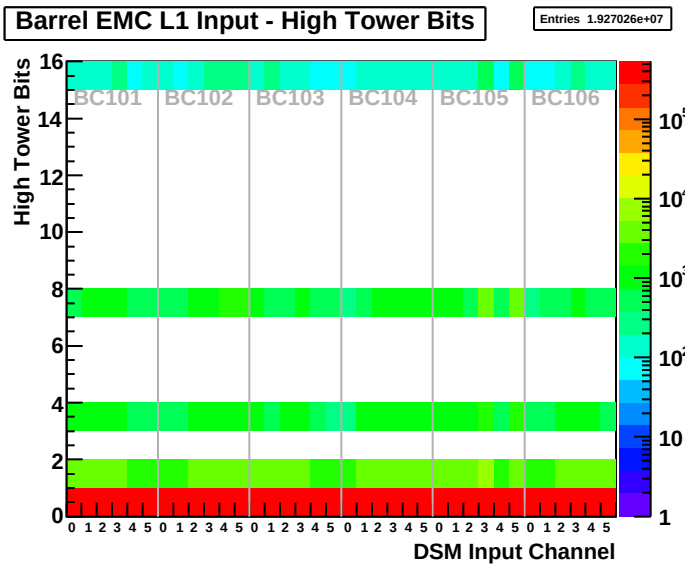
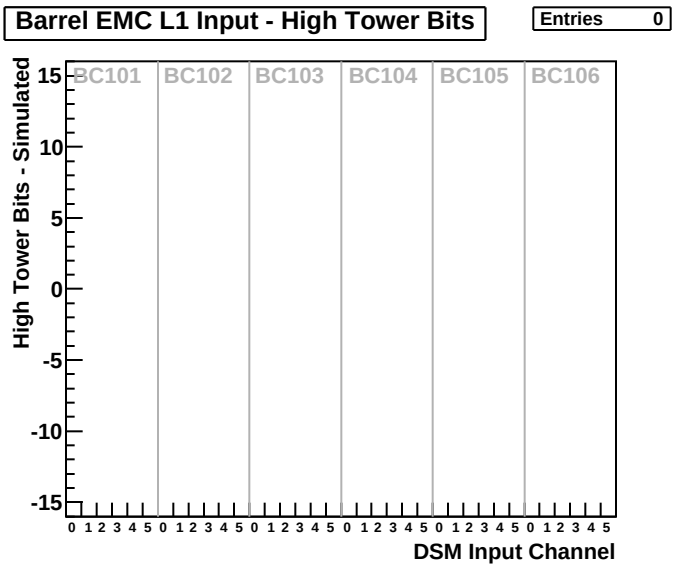

Barrel EMC L1 Input - Low Eta Sum
Entries 1.927026e+07
Low Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

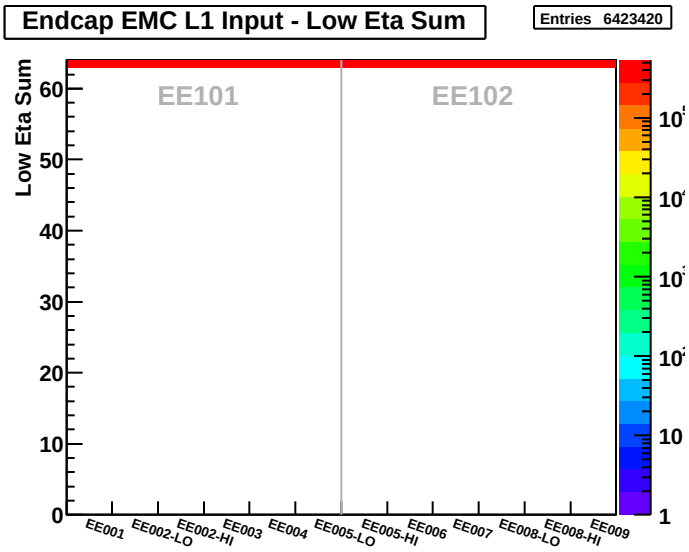

Barrel EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

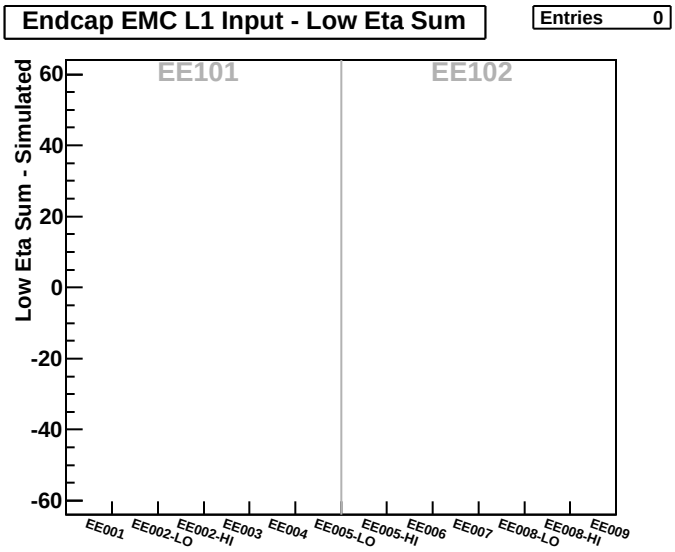

Barrel EMC L1 Input - High Eta Sum
Entries 1.927026e+07
High Eta Sum
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

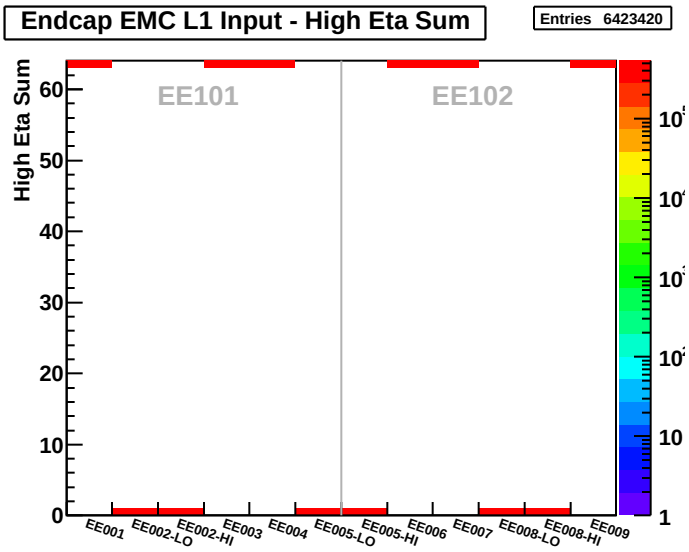

Barrel EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

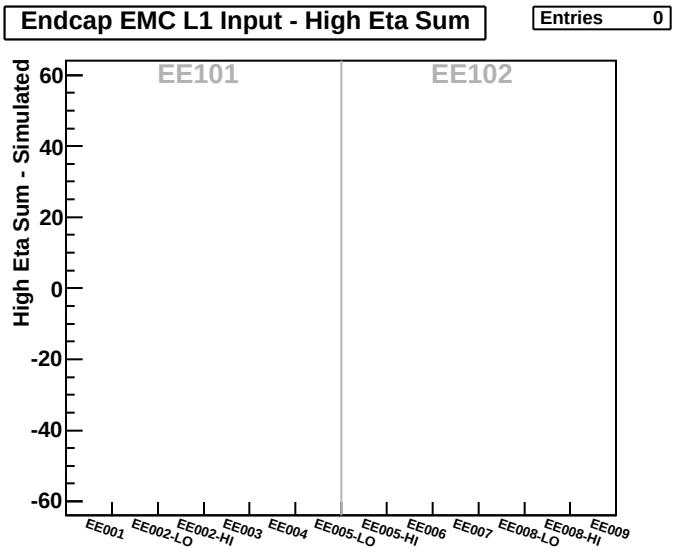

Barrel EMC L1 Input - High Tower Bits
Entries 1.927026e+07
High Tower Bits
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

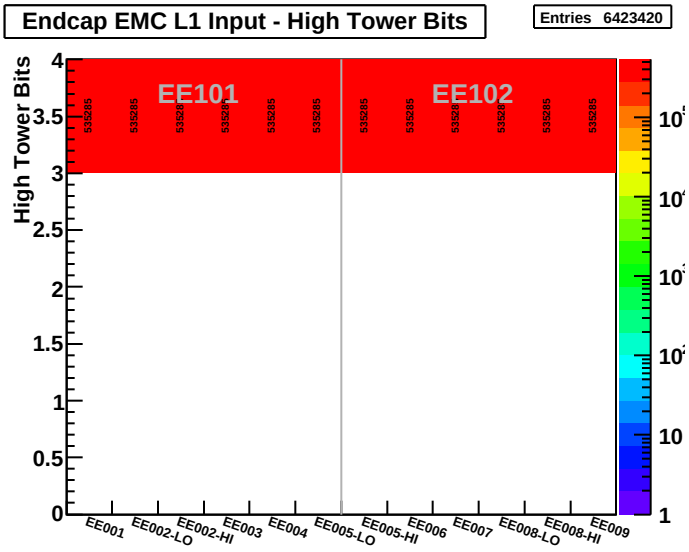

Barrel EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
BC101
BC102
BC103
BC104
BC105
BC106
DSM Input Channel

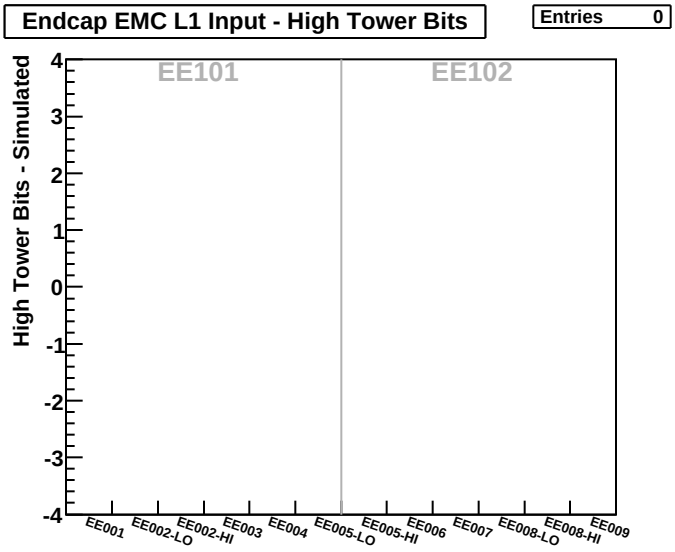

Endcap EMC L1 Input - Low Eta Sum
Entries 6423420
Low Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

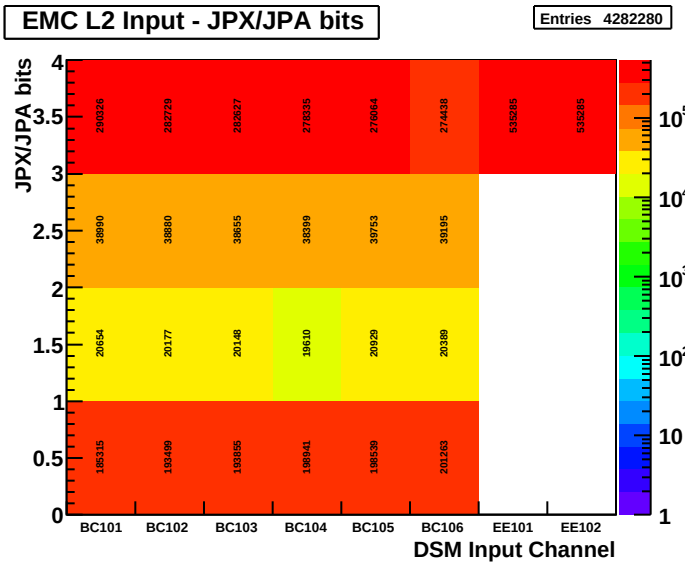

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

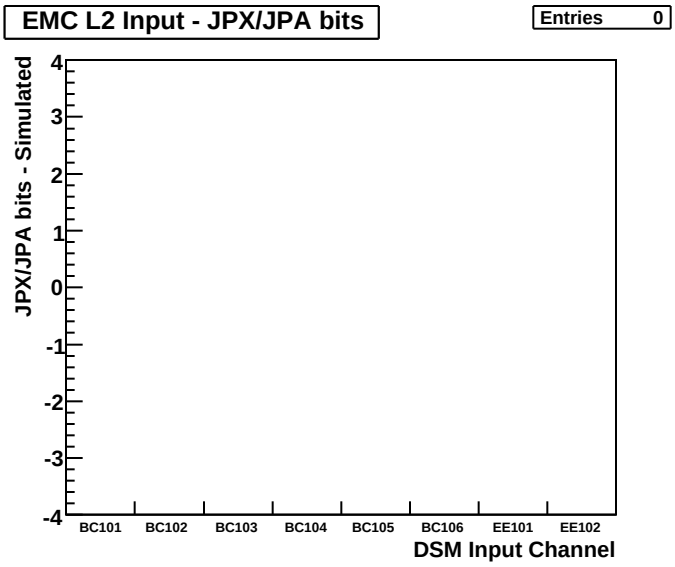

Endcap EMC L1 Input - High Eta Sum
Entries 6423420
High Eta Sum
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

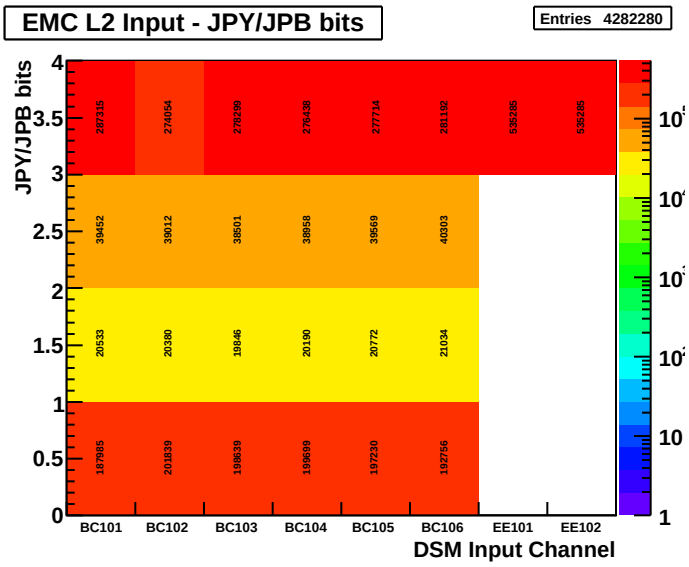

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

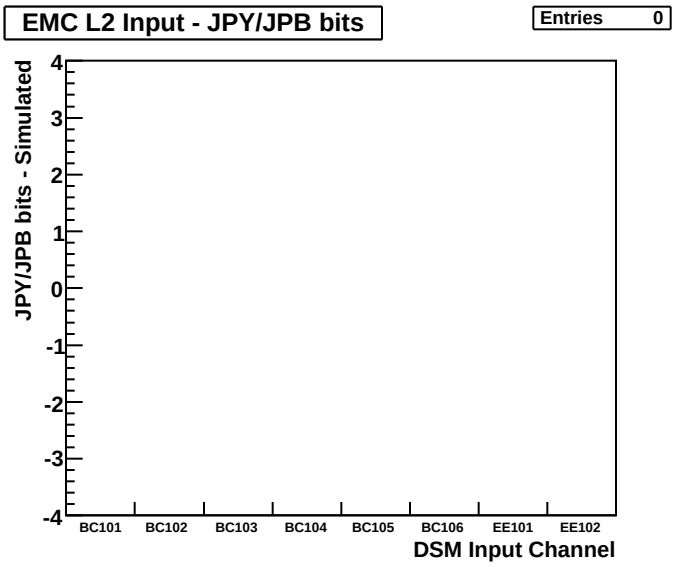

Endcap EMC L1 Input - High Tower Bits
Entries 6423420
High Tower Bits
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

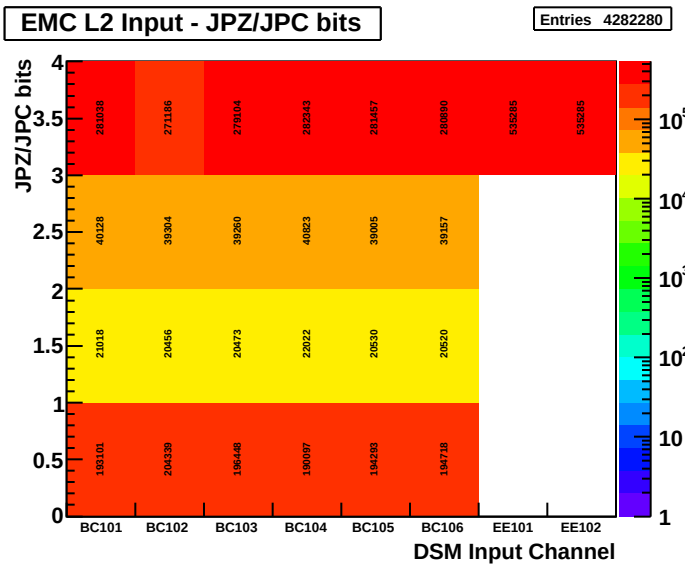

Endcap EMC L1 Input - High Tower Bits
Entries 0
High Tower Bits - Simulated
EE101
EE102
EE001 EE002-LO EE002-HI EE003 EE004 EE005-LO EE005-HI EE006 EE007 EE008-LO EE008-HI EE009

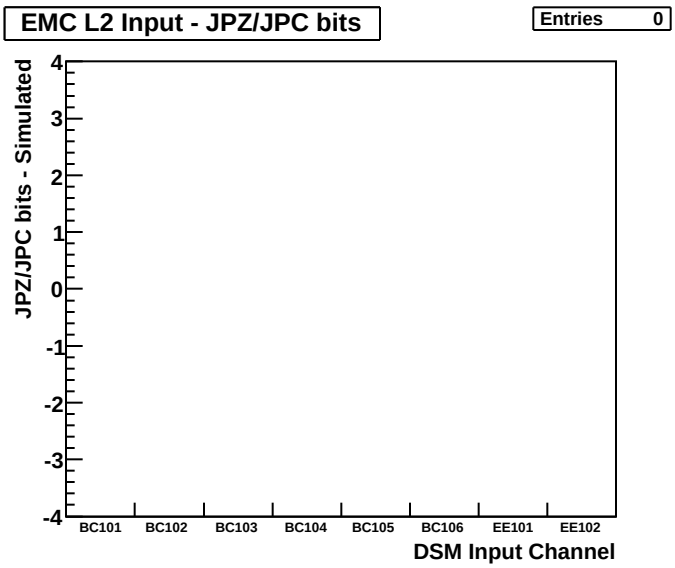

EMC L2 Input - JPX/JPA bits
Entries 4282280
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
290026 282729 282627 278335 276064 274438 535285 535285
38990 38880 38655 38399 39753 39195
20654 20177 20148 19610 20929 20389
185315 193499 193855 198941 198539 201263

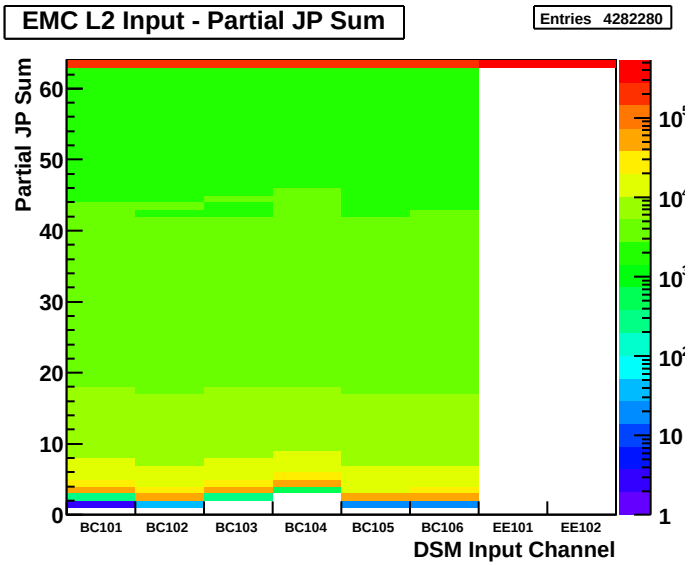

EMC L2 Input - JPX/JPA bits
Entries 0
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

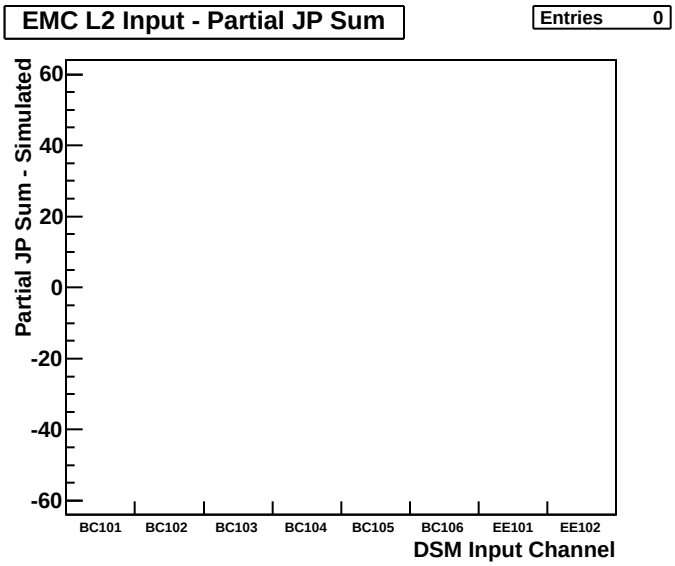

EMC L2 Input - JPY/JPB bits
Entries 4282280
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
287315 274054 278299 276438 277714 281192 535285 535285
39452 39012 38501 38958 39569 40303
20533 20380 19846 20190 20772 21034
187985 201839 198639 198699 197230 192756

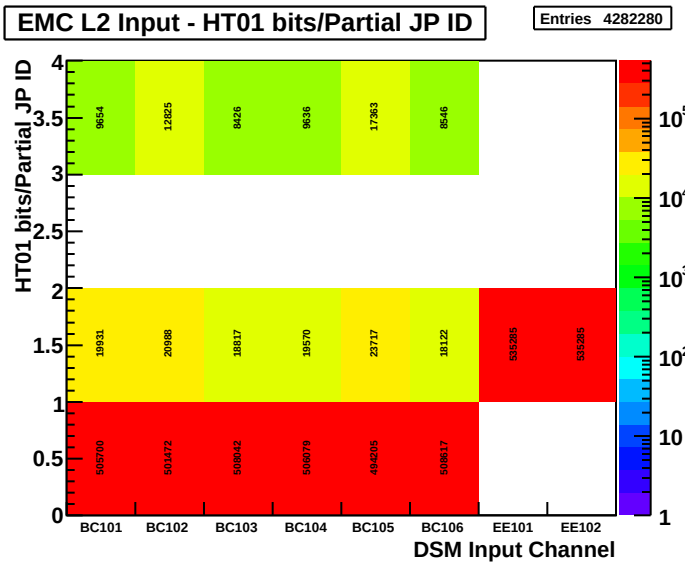

EMC L2 Input - JPY/JPB bits
Entries 0
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

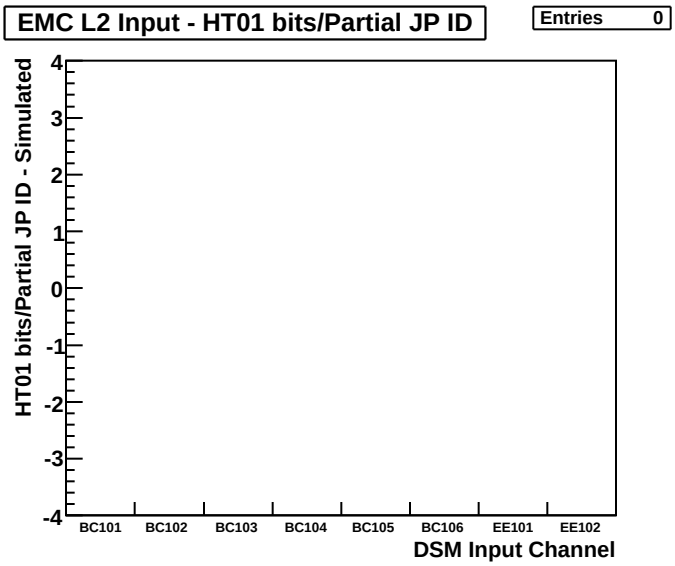

EMC L2 Input - JPZ/JPC bits
Entries 4282280
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
281038 271186 278104 282343 281457 280990 535285 535285
40128 39304 39260 40823 39005 39157
21018 20456 20473 22022 20530 20520
193101 204339 196448 190097 194293 194718

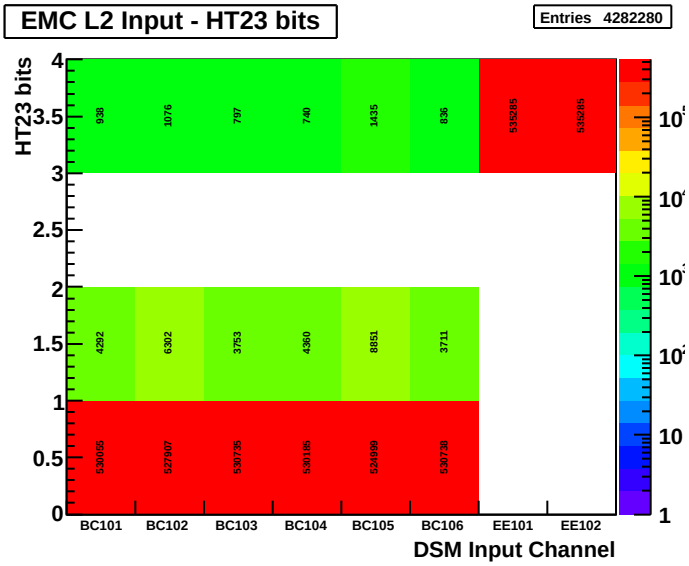

EMC L2 Input - JPZ/JPC bits
Entries 0
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

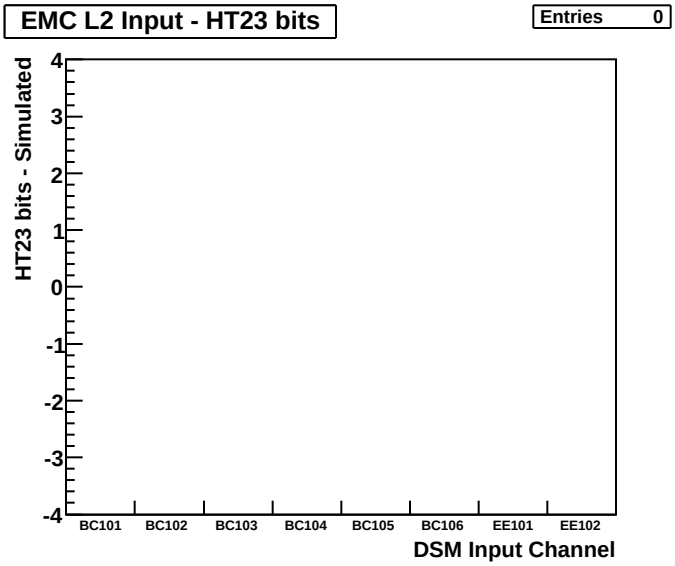

EMC L2 Input - Partial JP Sum
Entries 4282280
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

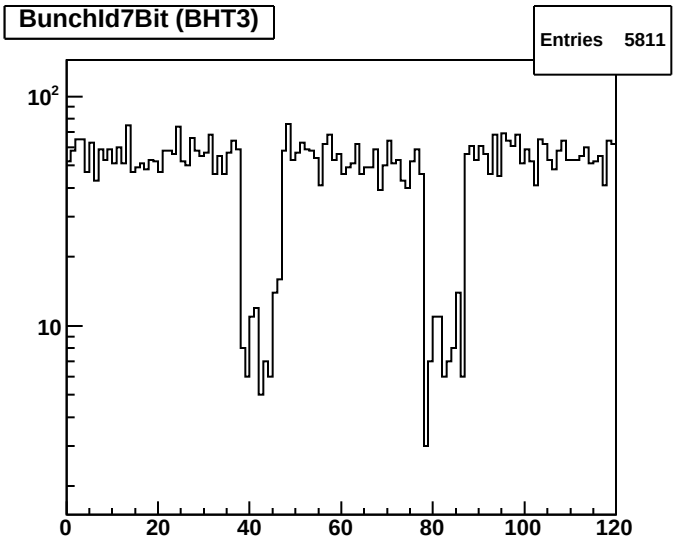

EMC L2 Input - Partial JP Sum
Entries 0
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

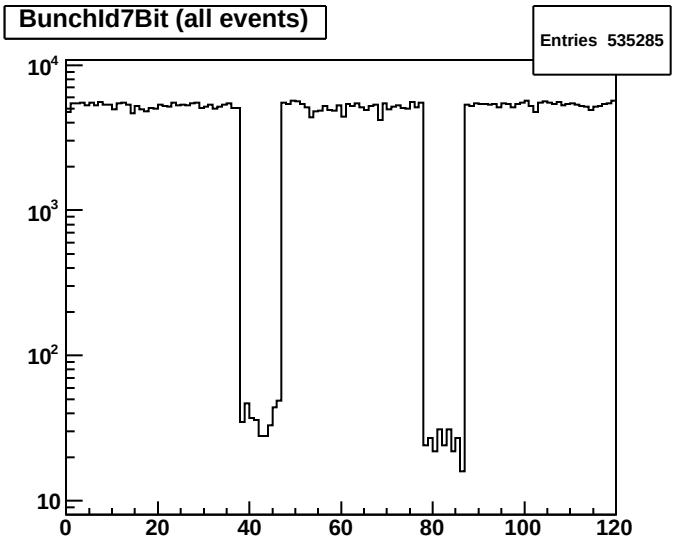

EMC L2 Input - HT01 bits/Partial JP ID
Entries 4282280
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

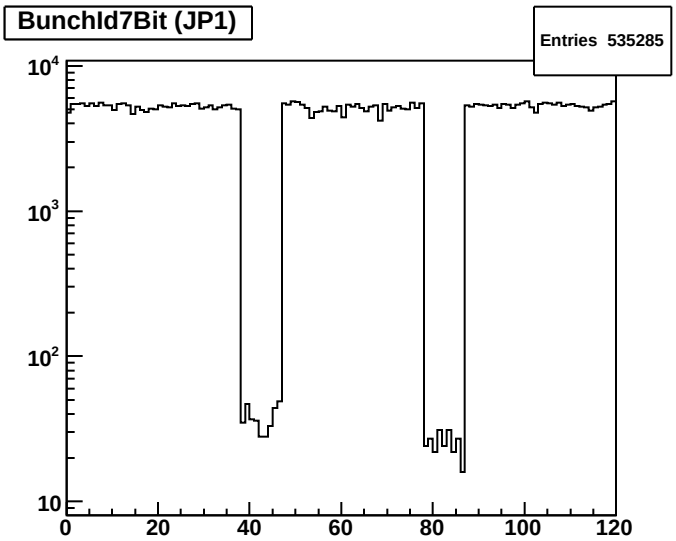

EMC L2 Input - HT01 bits/Partial JP ID
Entries 0
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

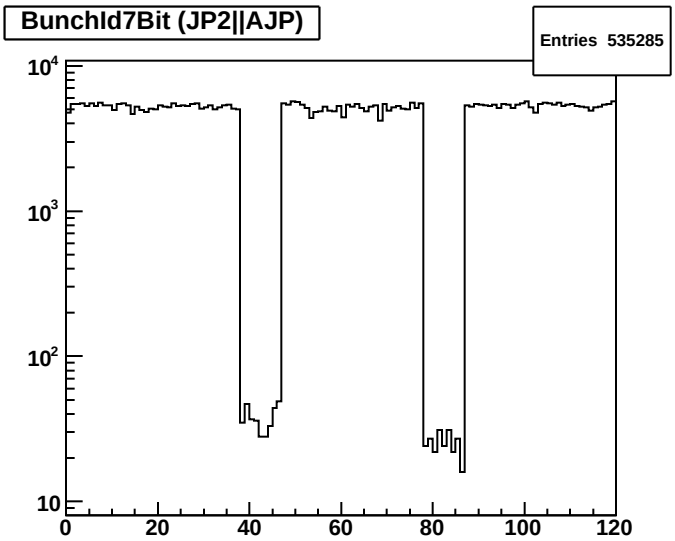

EMC L2 Input - HT23 bits
Entries 4282280
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

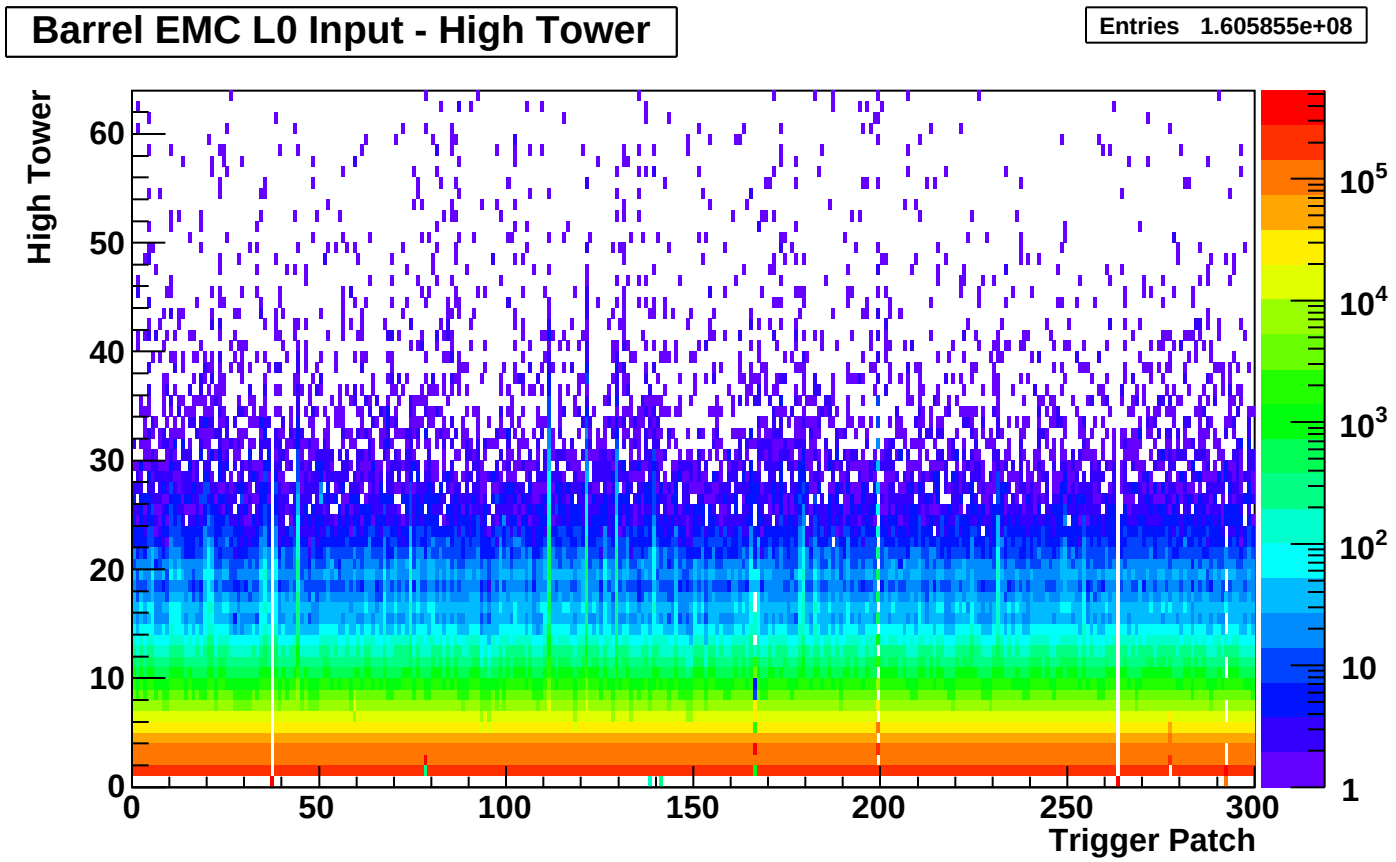

EMC L2 Input - HT23 bits
Entries 0
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

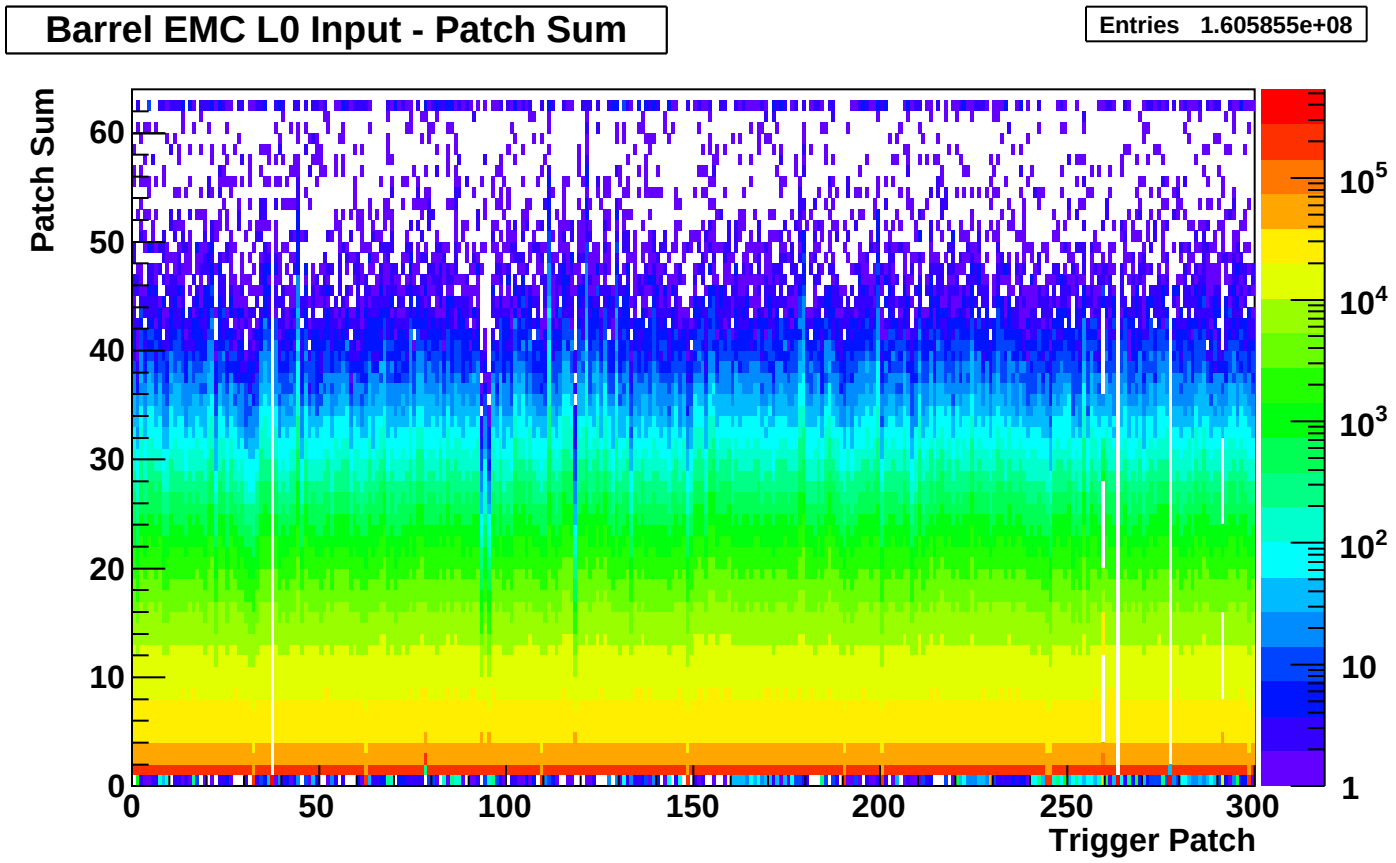

BunchId7Bit (BHT3)
Entries 5811
10^2
10
0
20
40
60
80
100
120

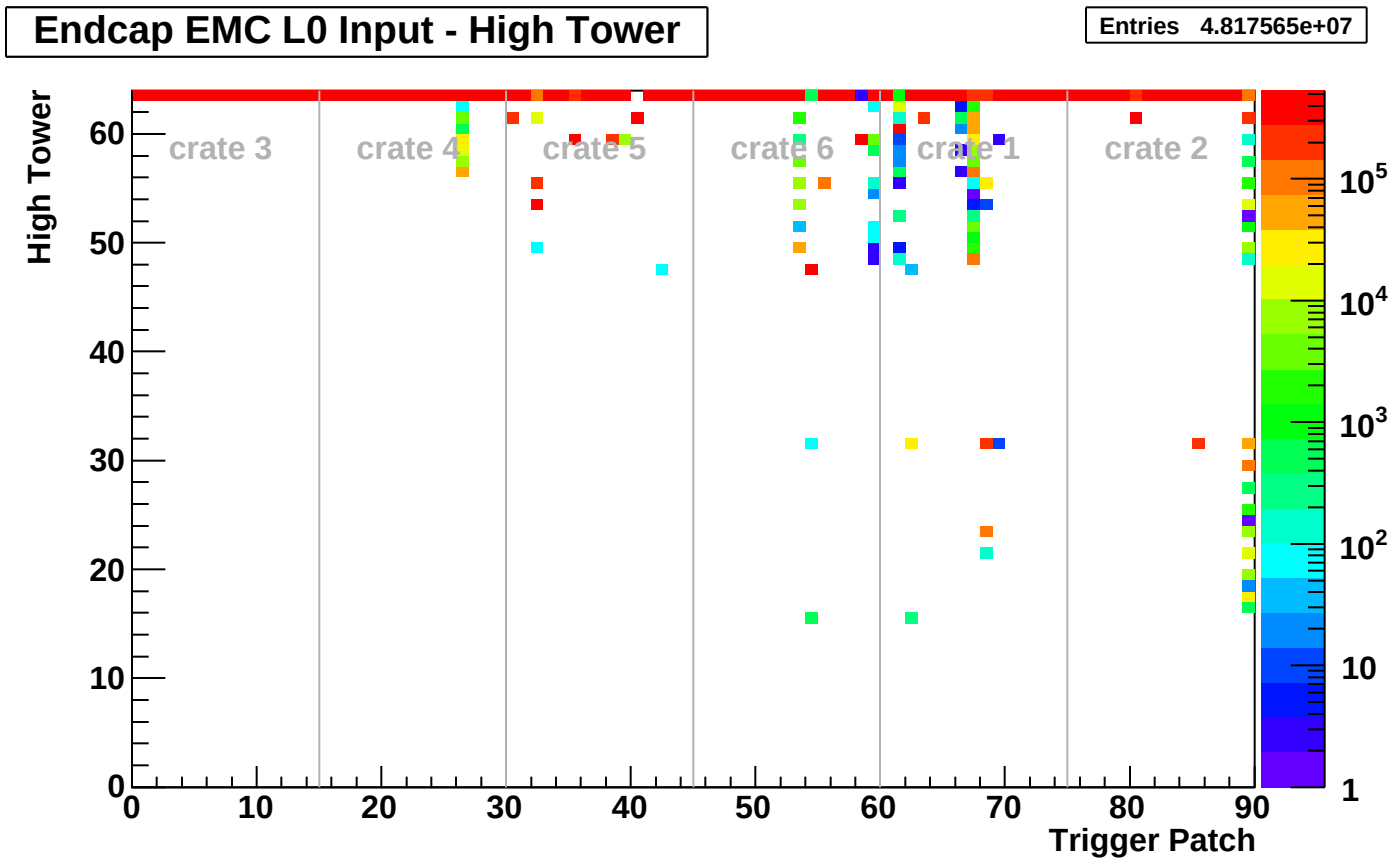

BunchId7Bit (all events)
Entries 535285
10^4
10^3
10^2
10
0
20
40
60
80
100
120

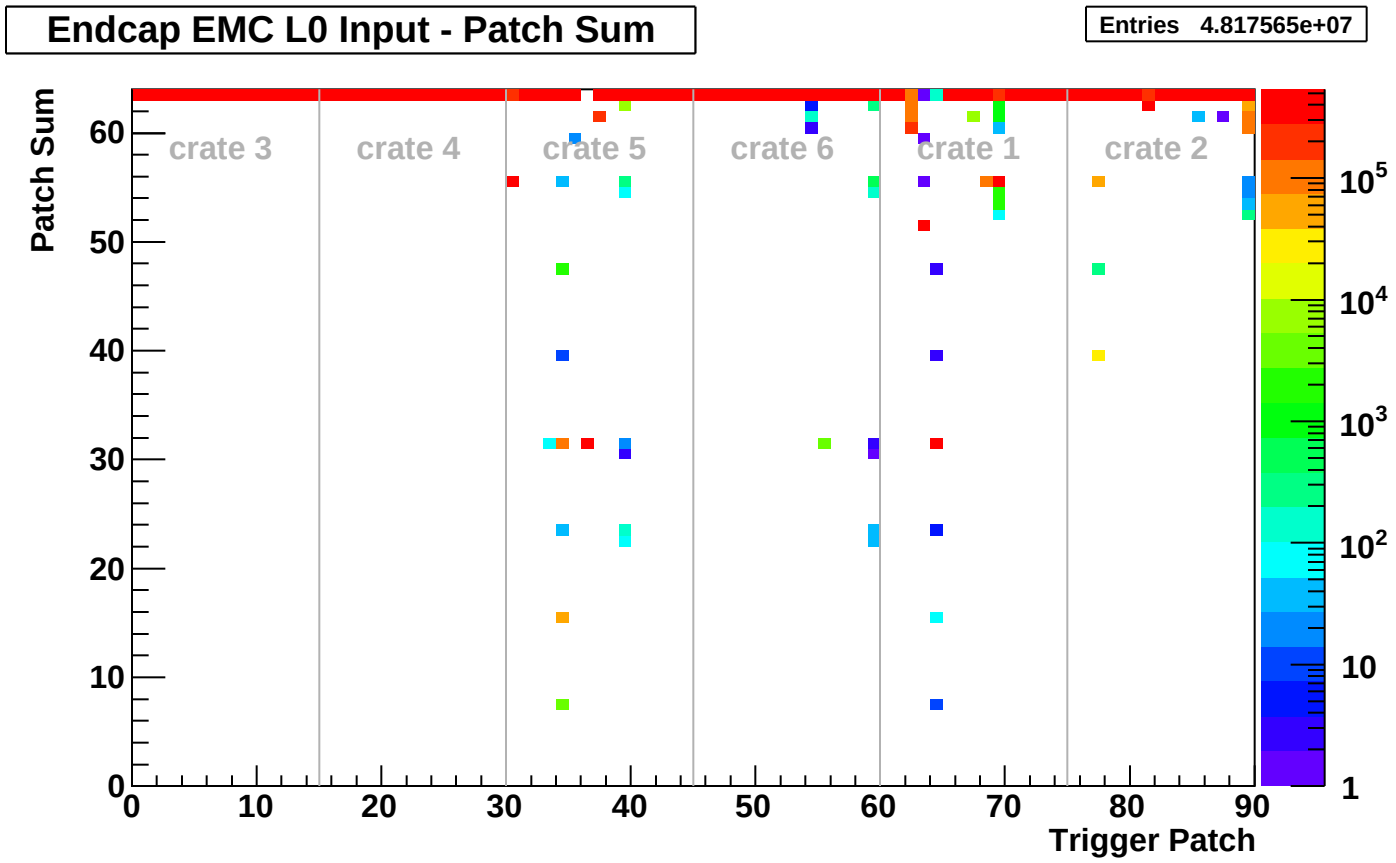

BunchId7Bit (JP1)
Entries 535285
10^4
10^3
10^2
10
0
20
40
60
80
100
120

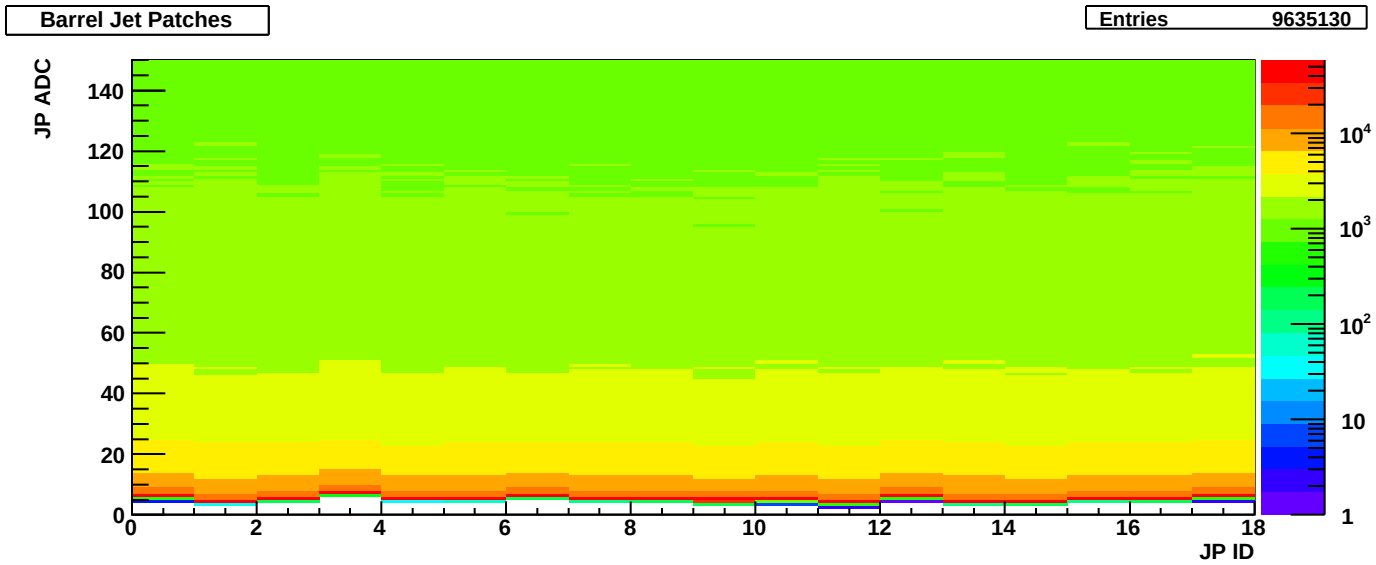

BunchId7Bit (JP2||AJP)
Entries 535285
10^4
10^3
10^2
10
0
20
40
60
80
100
120

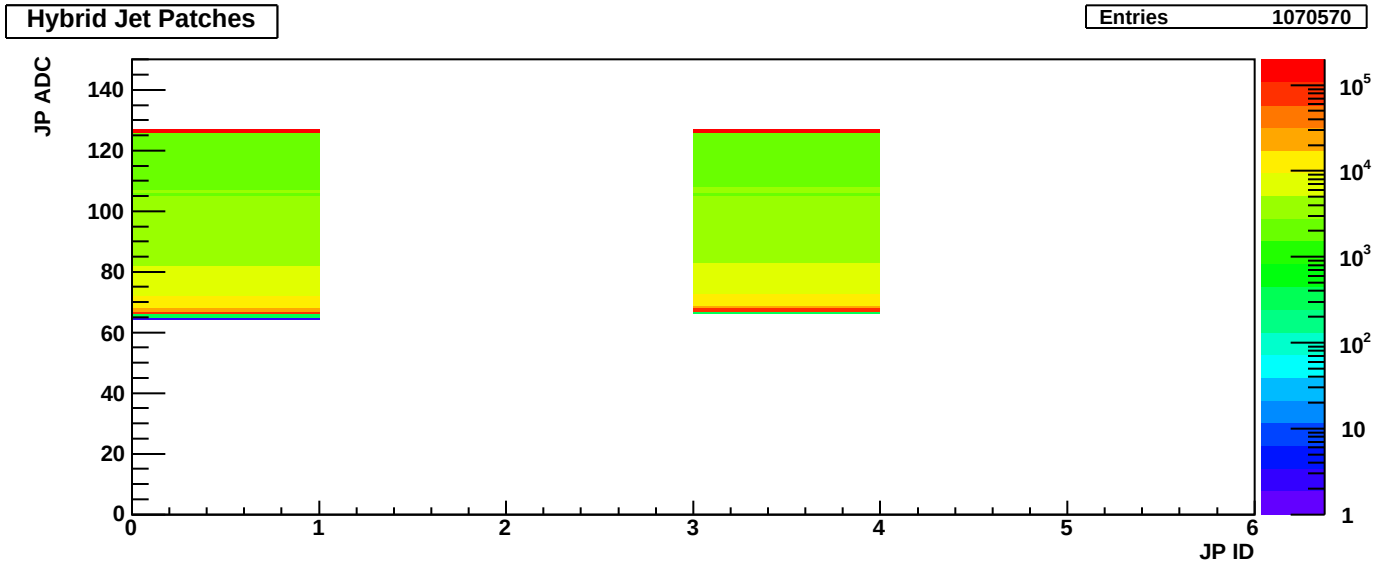

Barrel EMC L0 Input - High Tower
Entries 1.605855e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

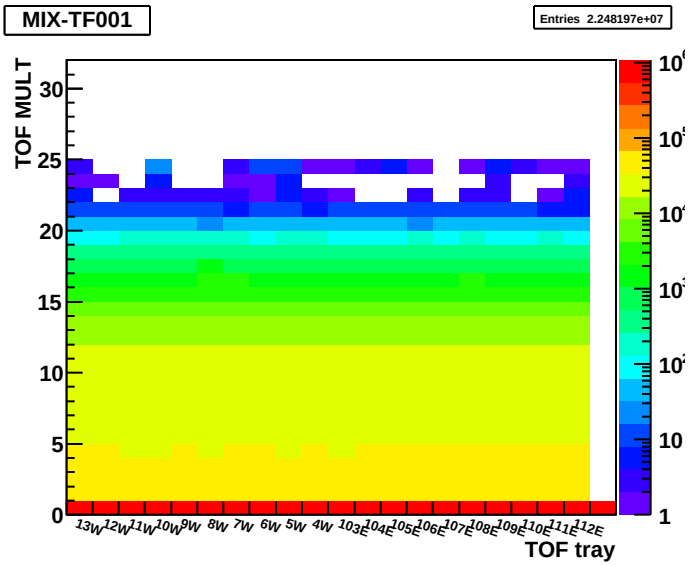

Barrel EMC L0 Input - Patch Sum
Entries 1.605855e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

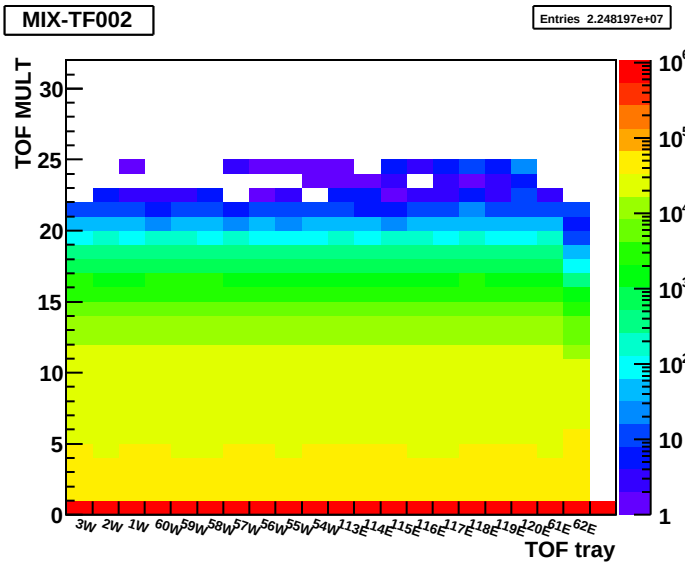

Endcap EMC L0 Input - High Tower
Entries 4.817565e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

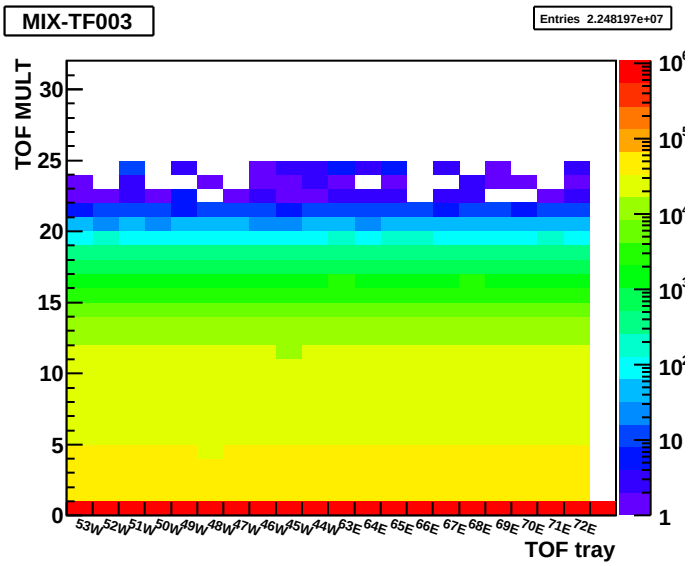

Endcap EMC L0 Input - Patch Sum
Entries 4.817565e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

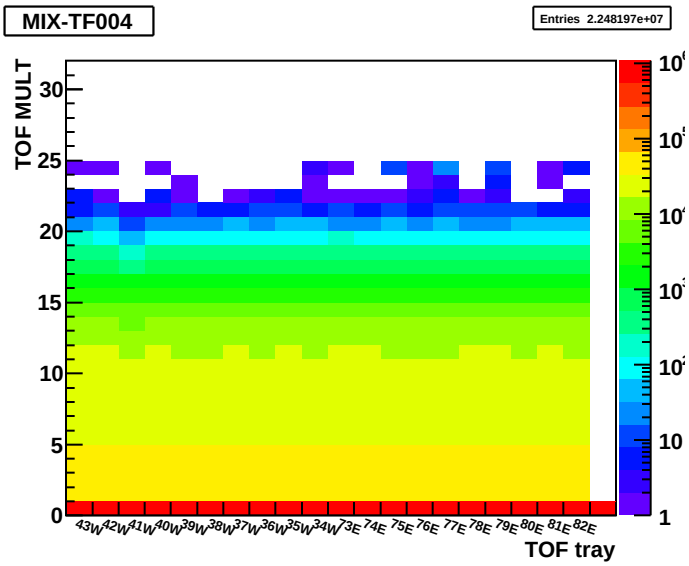

Barrel Jet Patches
Entries 9635130
JP ADC
JP ID

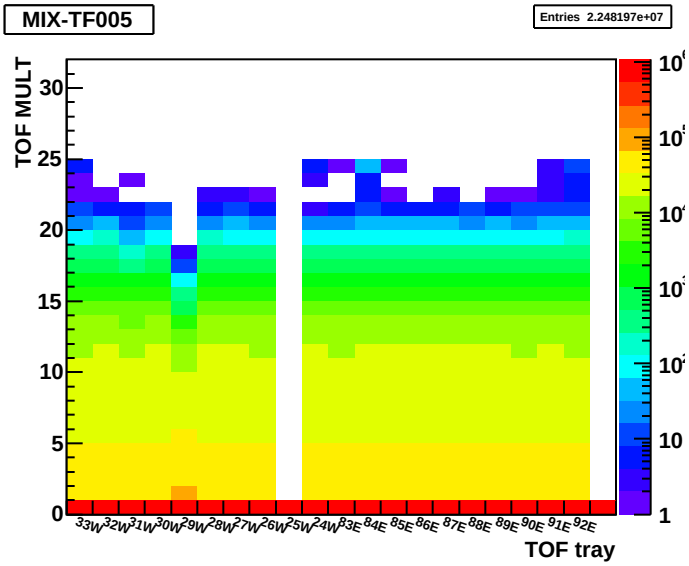

Hybrid Jet Patches
Entries 1070570
JP ADC
JP ID

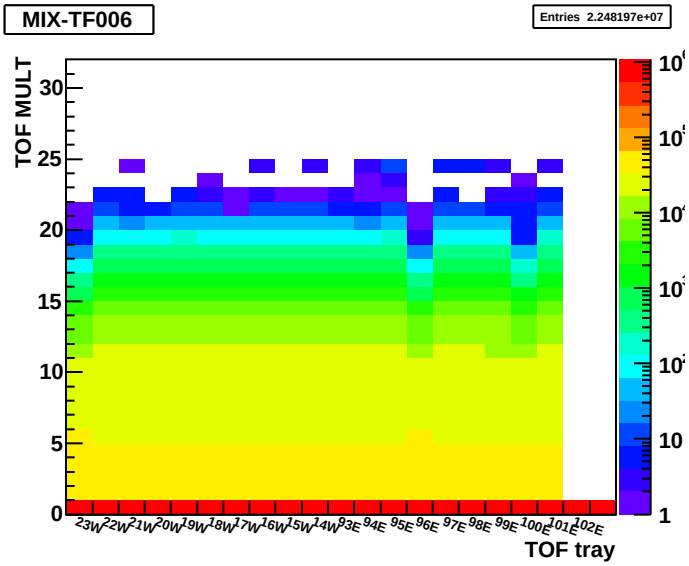

MIX-TF001
Entries 2.248197e+07
TOF MULT
TOF tray

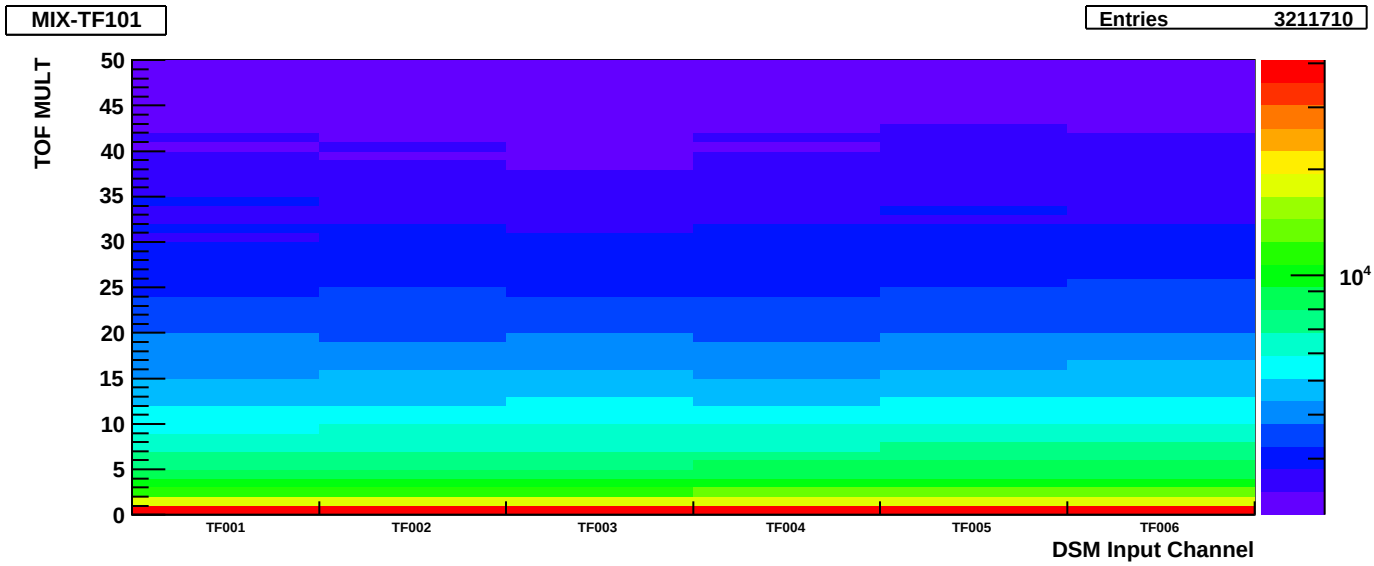

MIX-TF002
Entries 2.248197e+07
TOF MULT
TOF tray

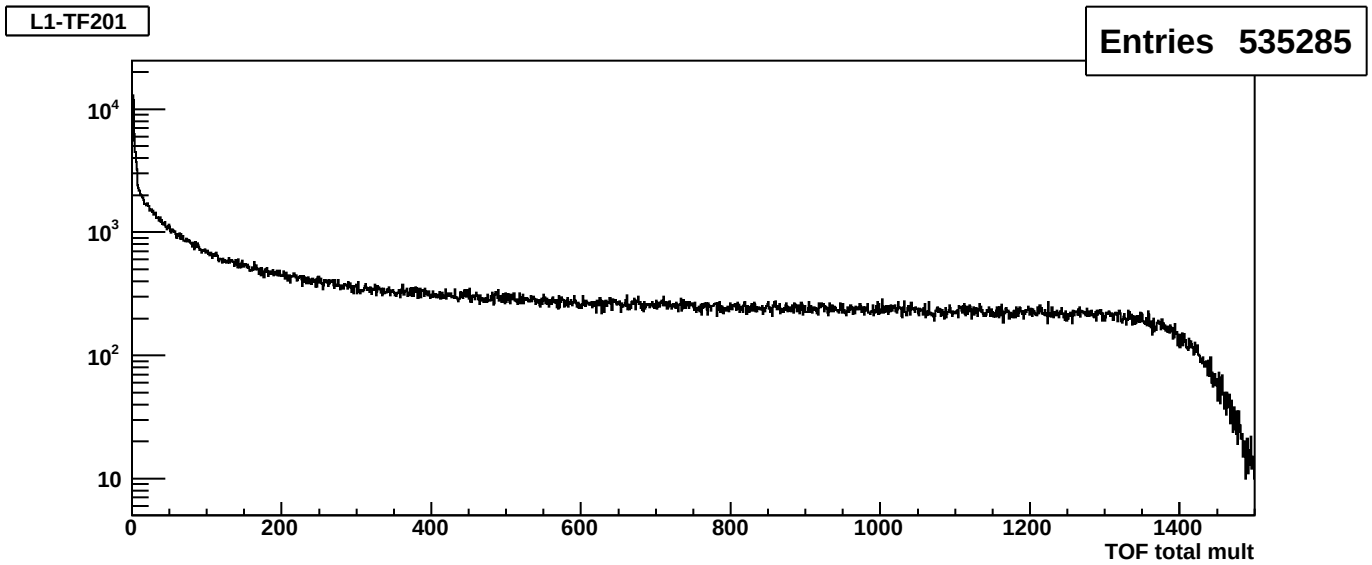

MIX-TF003
Entries 2.248197e+07
TOF MULT
TOF tray

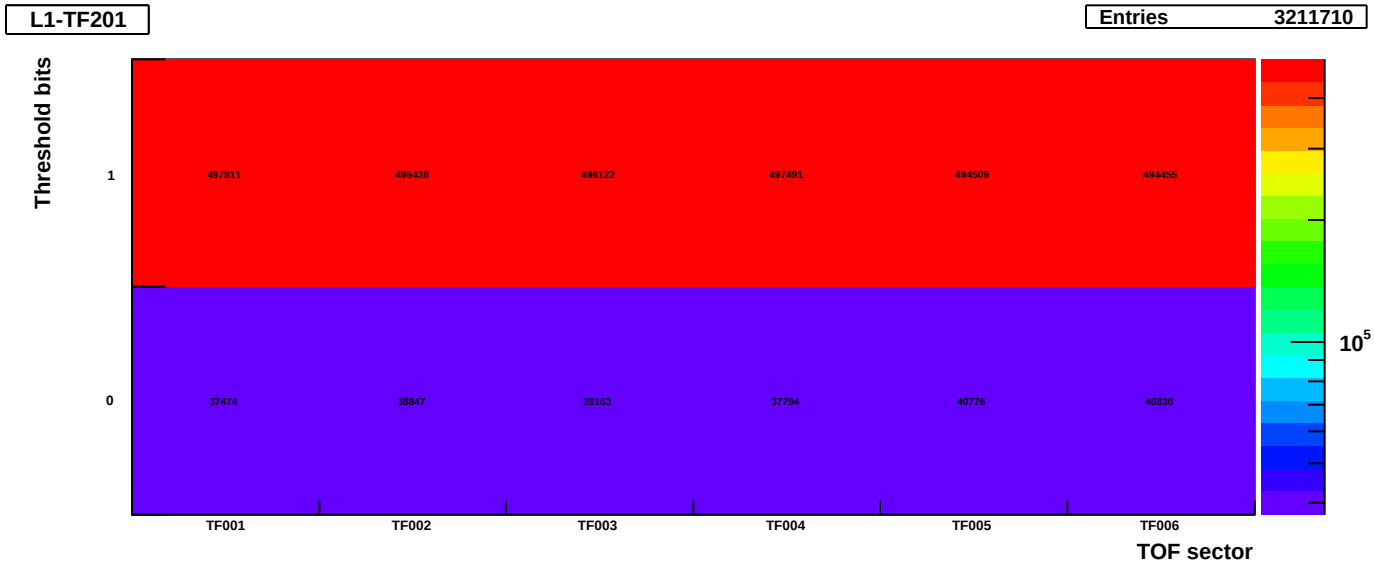

MIX-TF004
Entries 2.248197e+07
TOF MULT
TOF tray

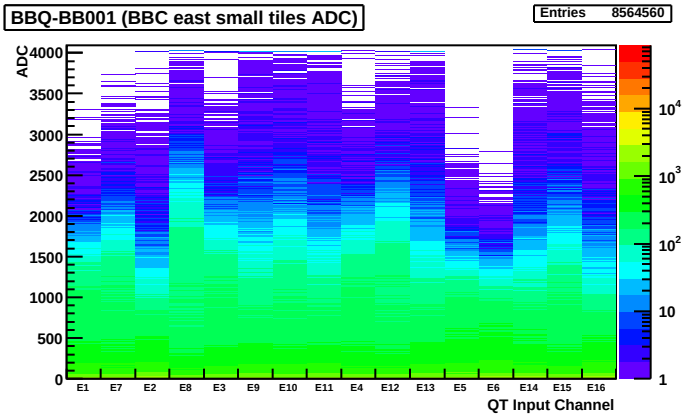

MIX-TF005
Entries 2.248197e+07
TOF MULT
TOF tray

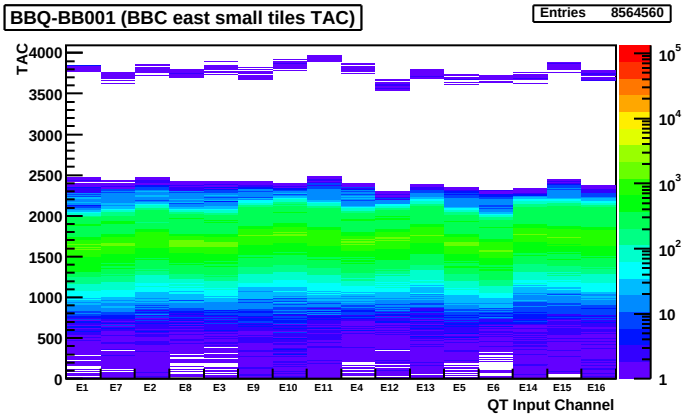

MIX-TF006
Entries 2.248197e+07
TOF MULT
TOF tray

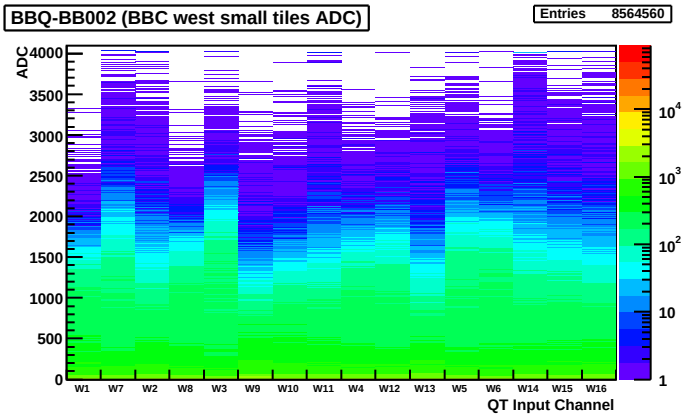

MIX-TF101
Entries 3211710
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^4

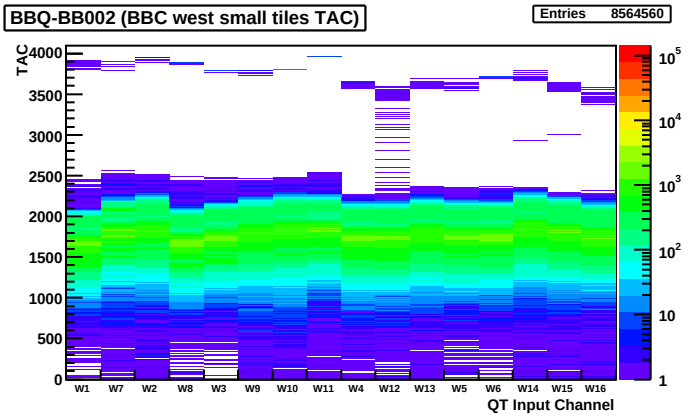

L1-TF201
Entries 535285
10^4
10^3
10^2
10
0
200
400
600
800
1000
1200
1400
TOF total mult

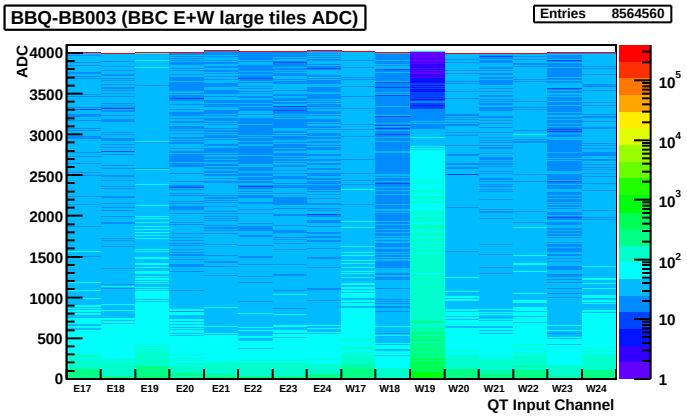

L1-TF201
Entries 3211710
Threshold bits
1
0
497811
496438
496122
497491
494509
494455
37474
38847
39163
37794
40776
40830
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector
10^5

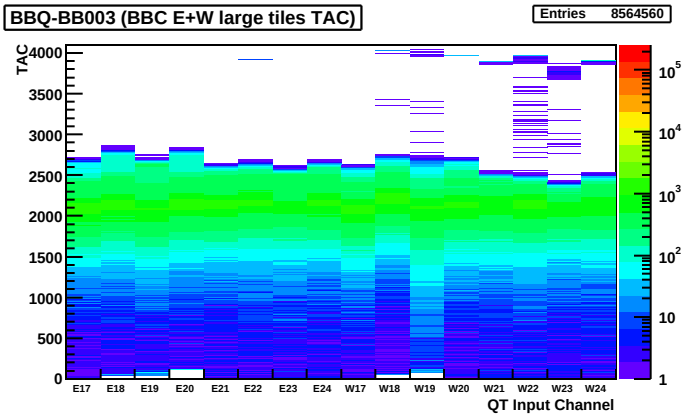

BBQ-BB001 (BBC east small tiles ADC)
Entries 8564560
ADC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

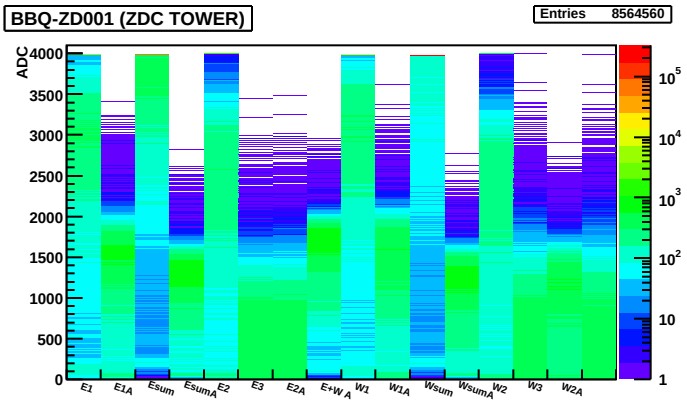

BBQ-BB001 (BBC east small tiles TAC)
Entries 8564560
TAC
QT Input Channel
E1 E7 E2 E8 E3 E9 E10 E11 E4 E12 E13 E5 E6 E14 E15 E16

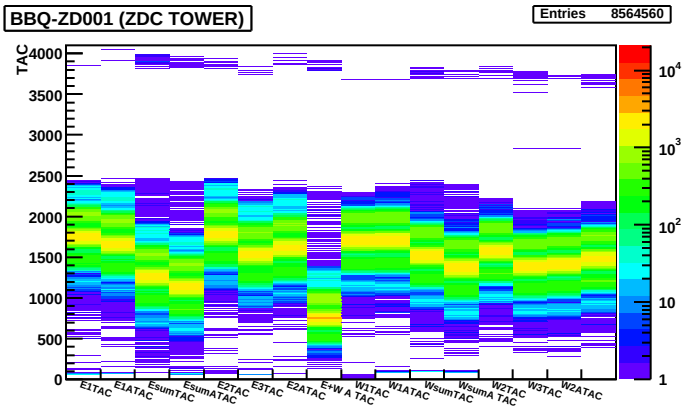

BBQ-BB002 (BBC west small tiles ADC)
Entries 8564560
ADC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

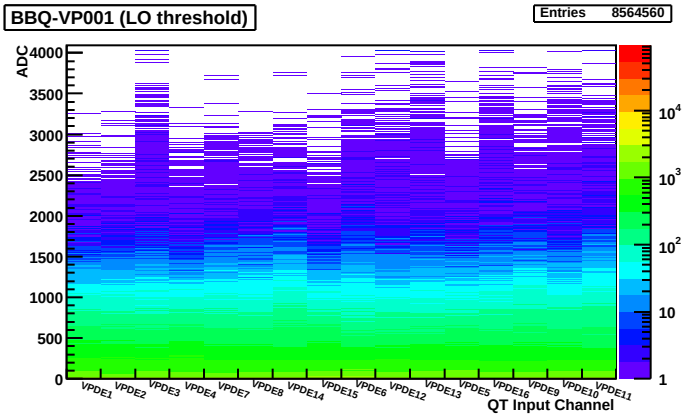

BBQ-BB002 (BBC west small tiles TAC)
Entries 8564560
TAC
QT Input Channel
W1 W7 W2 W8 W3 W9 W10 W11 W4 W12 W13 W5 W6 W14 W15 W16

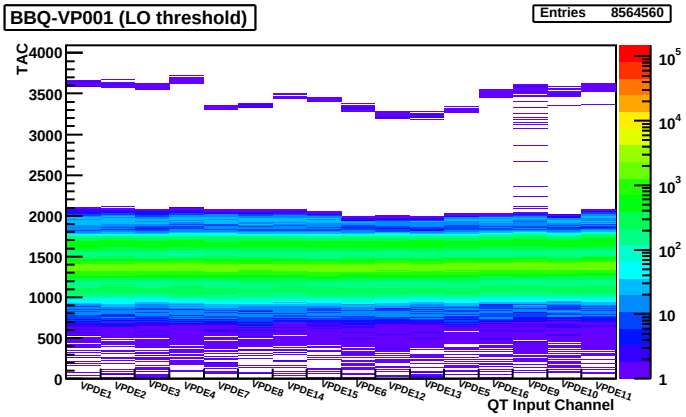

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 8564560
ADC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

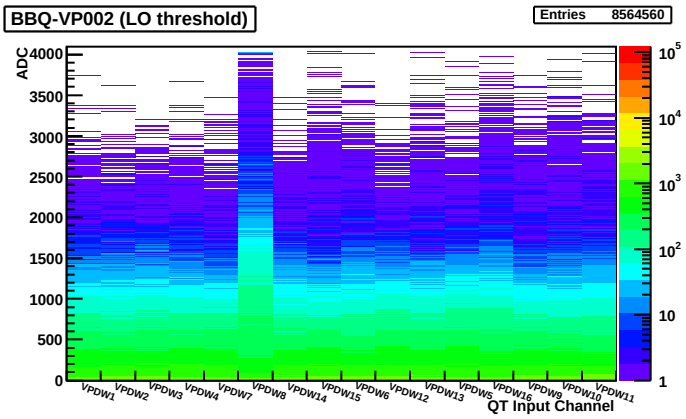

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 8564560
TAC
QT Input Channel
E17 E18 E19 E20 E21 E22 E23 E24 W17 W18 W19 W20 W21 W22 W23 W24

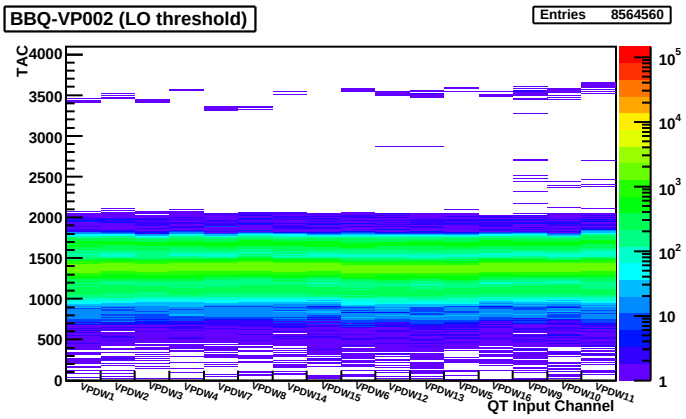

BBQ-ZD001 (ZDC TOWER)
Entries 8564560
ADC
E1 E1A Esum EsumA E2 E3 E2A E+W A W1 W1A Wsum WsumA W2 W3 W2A

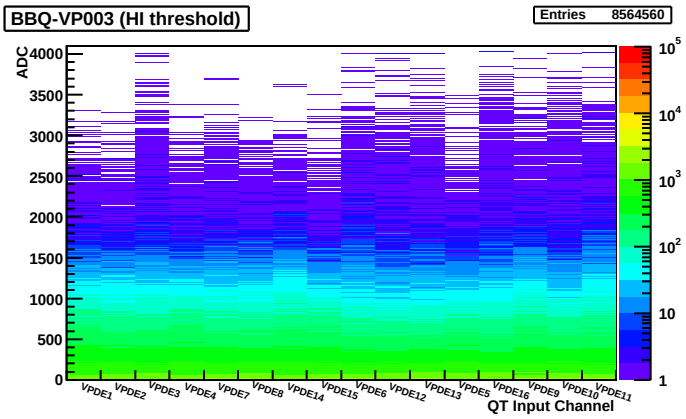

BBQ-ZD001 (ZDC TOWER)
Entries 8564560
TAC
E1TAC E1ATAC EsumTAC EsumATAC E2TAC E3TAC E2ATAC E+W A TAC W1TAC W1ATAC WsumTAC WsumA TAC W2TAC W3TAC W2ATAC

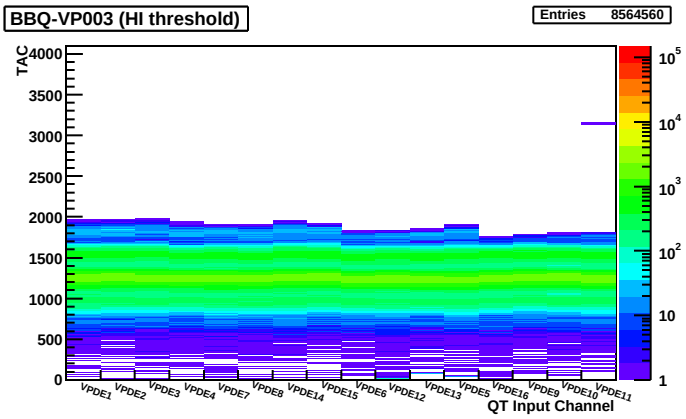

BBQ-VP001 (LO threshold)
Entries 8564560
ADC
QT Input Channel

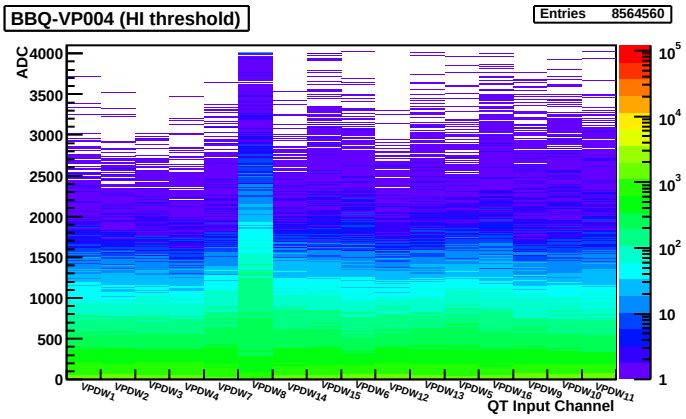

BBQ-VP001 (LO threshold)
Entries 8564560
TAC
QT Input Channel

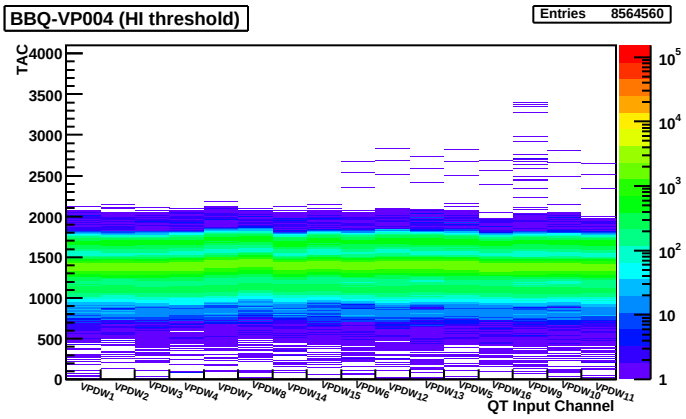

BBQ-VP002 (LO threshold)
Entries 8564560
ADC
QT Input Channel

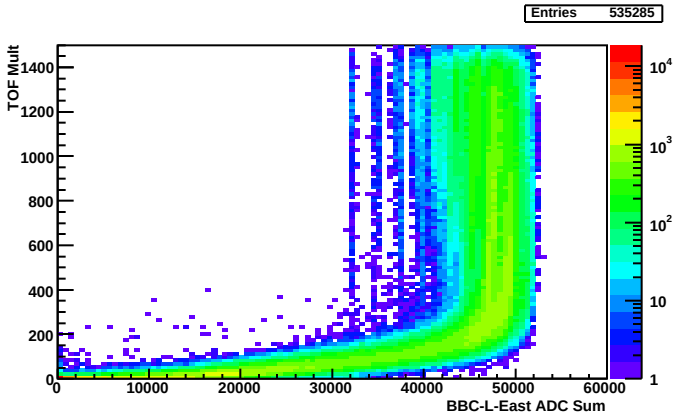

BBQ-VP002 (LO threshold)
Entries 8564560
TAC
QT Input Channel

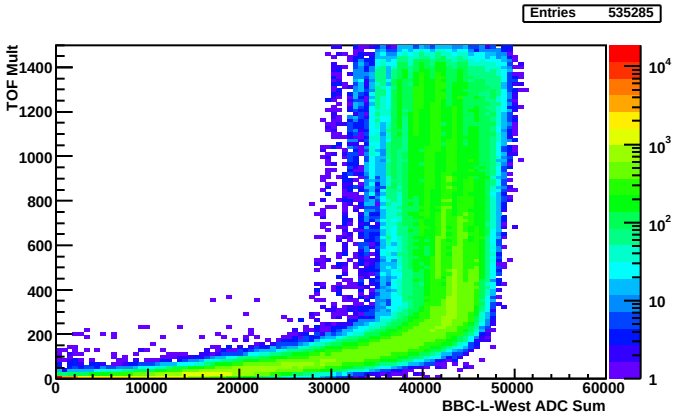

BBQ-VP003 (HI threshold)
Entries 8564560
ADC
QT Input Channel

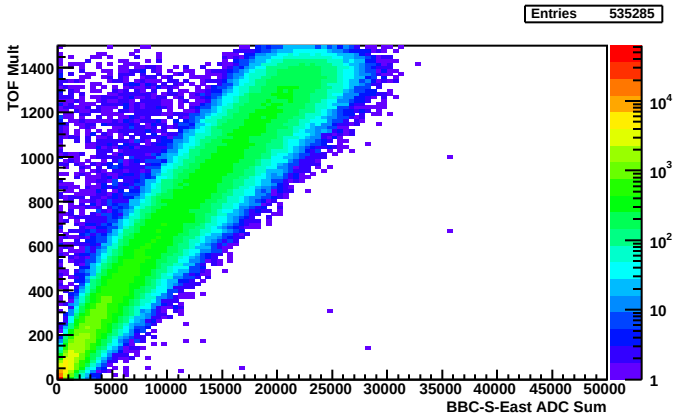

BBQ-VP003 (HI threshold)
Entries 8564560
TAC
QT Input Channel

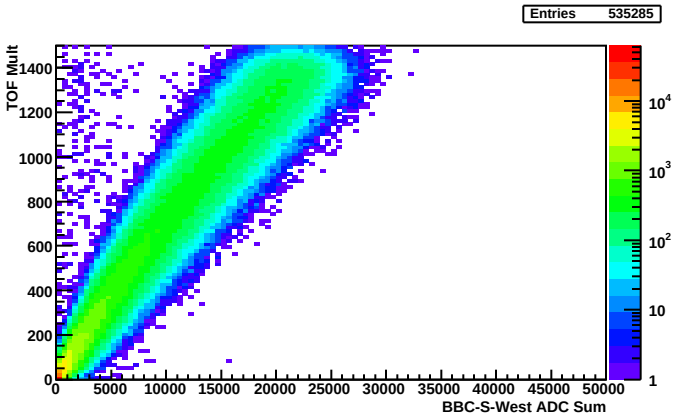

BBQ-VP004 (HI threshold)
Entries 8564560
ADC
QT Input Channel

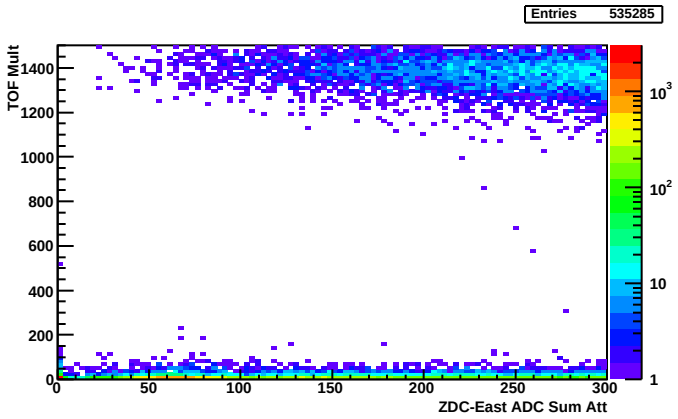

BBQ-VP004 (HI threshold)
Entries 8564560
TAC
QT Input Channel

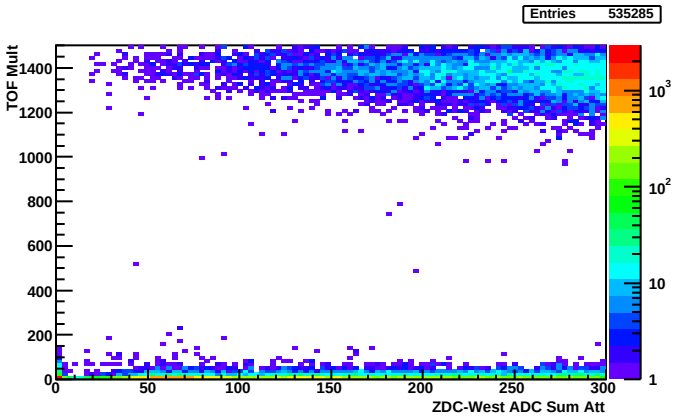

Entries 535285
TOF Mult
BBC-L-East ADC Sum

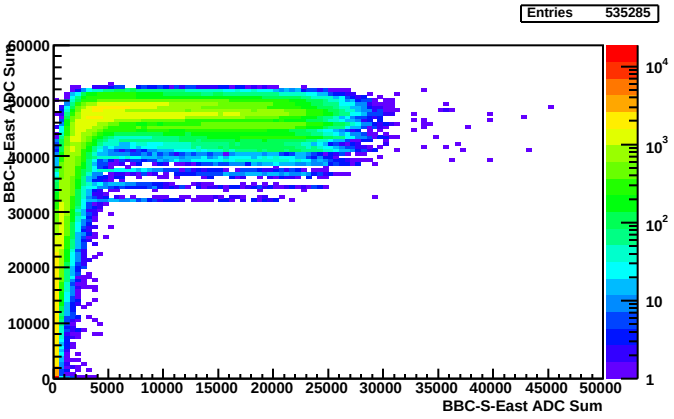

Entries 535285
TOF Mult
BBC-L-West ADC Sum

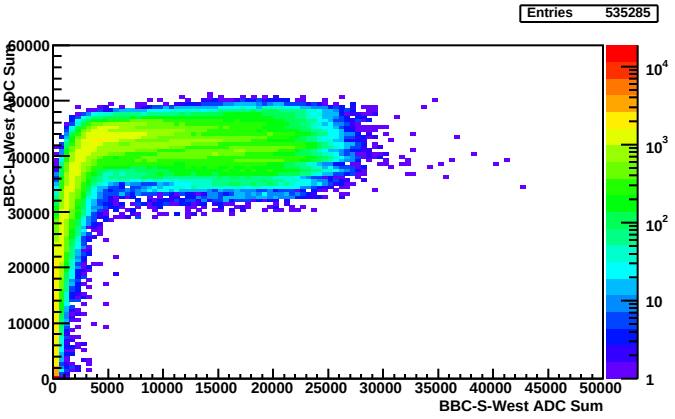

Entries 535285
TOF Mult
BBC-S-East ADC Sum

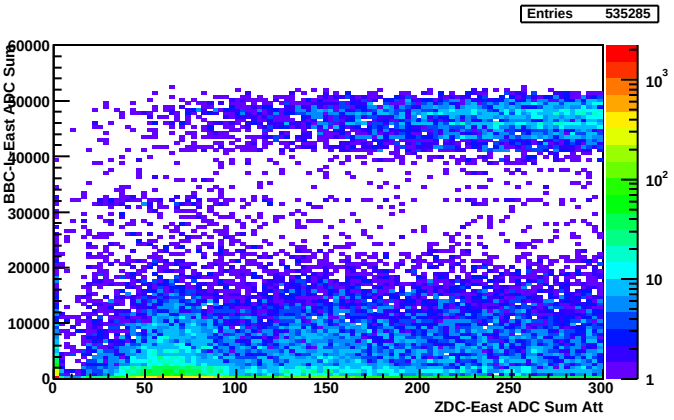

Entries 535285
TOF Mult
BBC-S-West ADC Sum

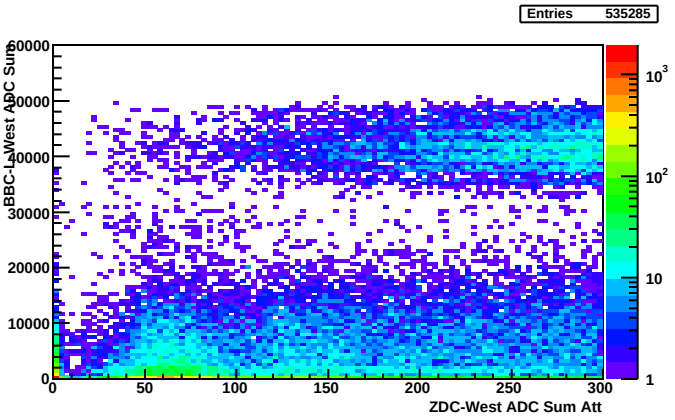

Entries 535285
TOF Mult
ZDC-East ADC Sum Att

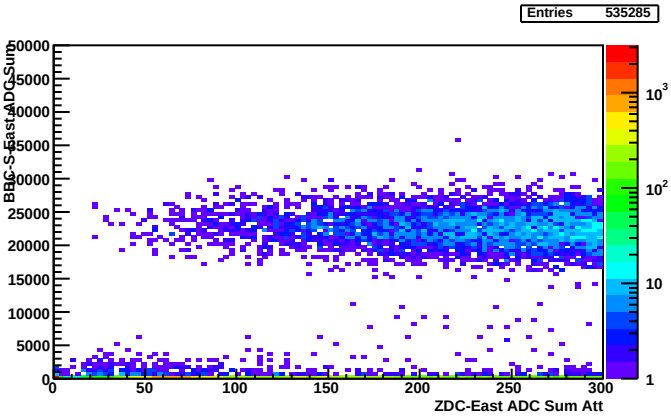

Entries 535285
TOF Mult
ZDC-West ADC Sum Att

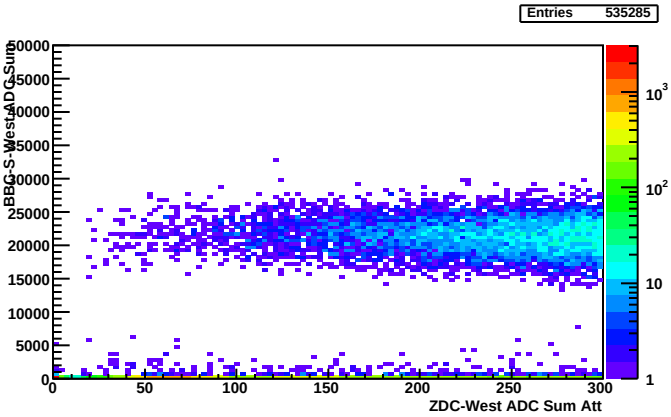

Entries 535285
BBC-L-East ADC Sum
BBC-S-East ADC Sum

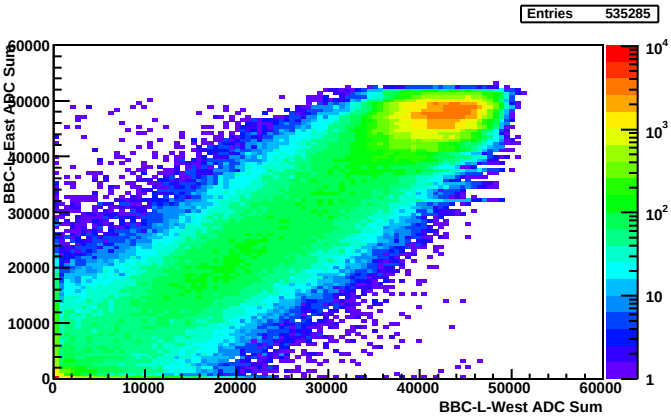

Entries 535285
BBC-L-West ADC Sum
BBC-S-West ADC Sum

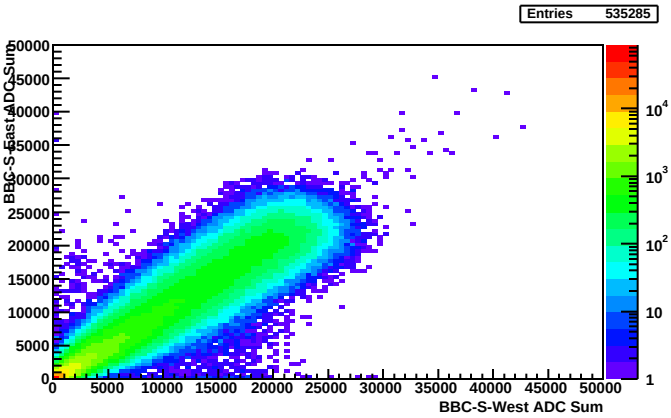

Entries 535285
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

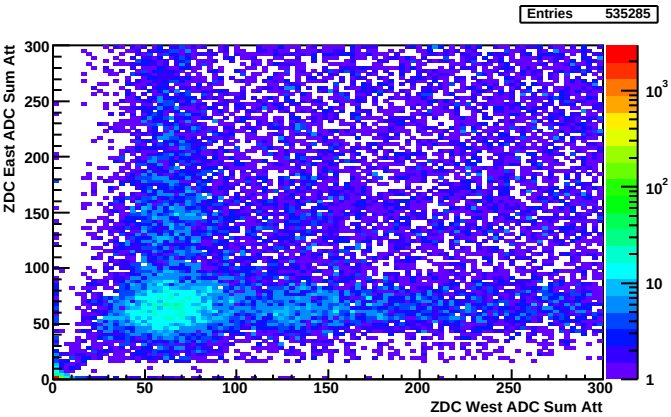

Entries 535285
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

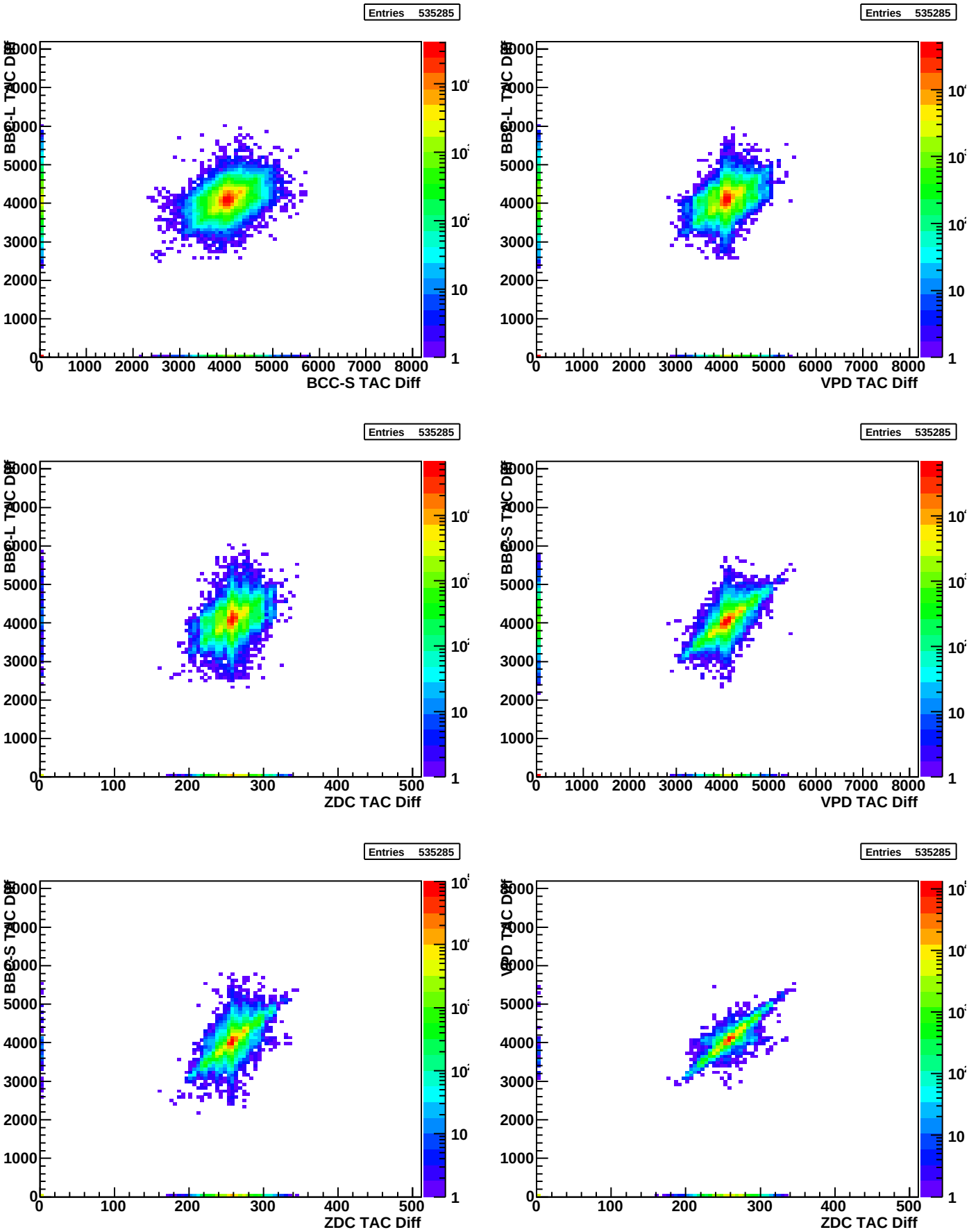

Entries 535285
BBC-S-East ADC Sum
ZDC-East ADC Sum Att

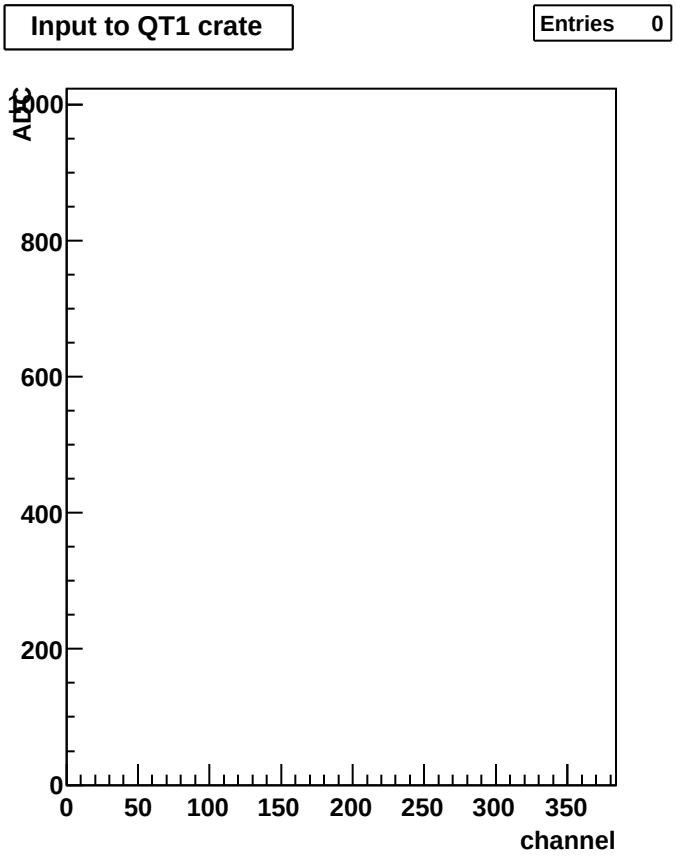

Entries 535285
BBC-S-West ADC Sum
ZDC-West ADC Sum Att

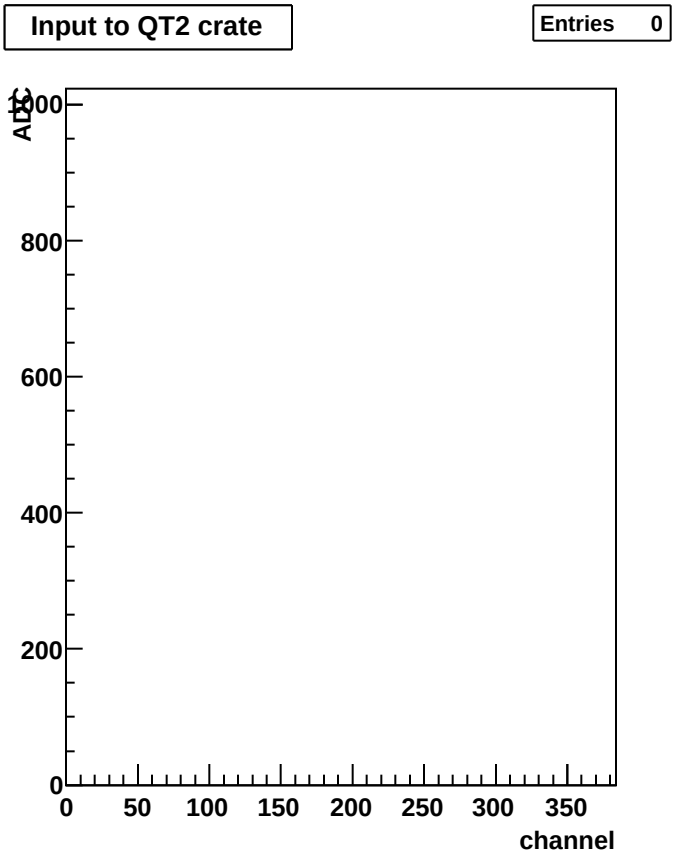

Entries 535285
BBC-L-East ADC Sum
BBC-L-West ADC Sum

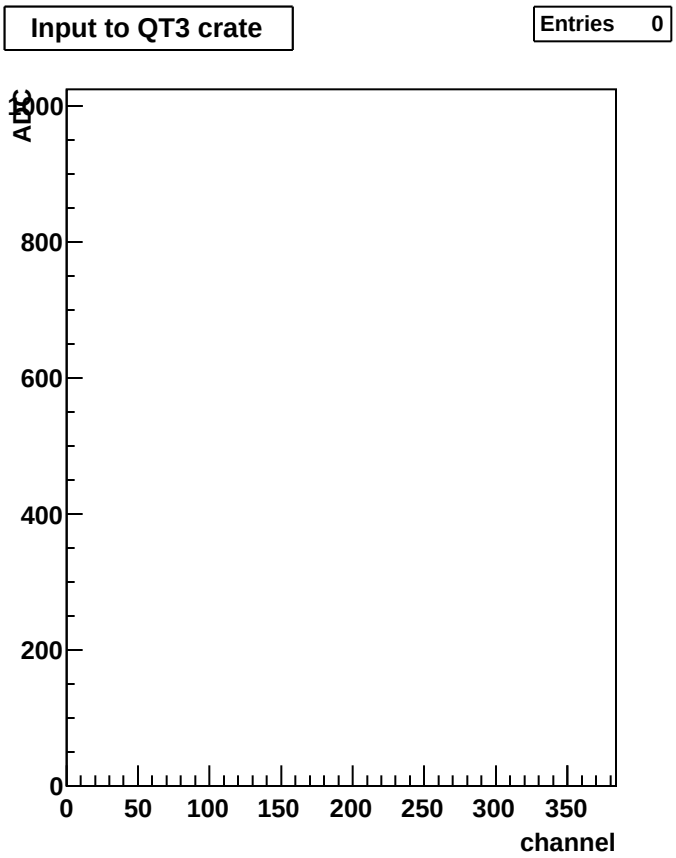

Entries 535285
BBC-S-East ADC Sum
BBC-S-West ADC Sum

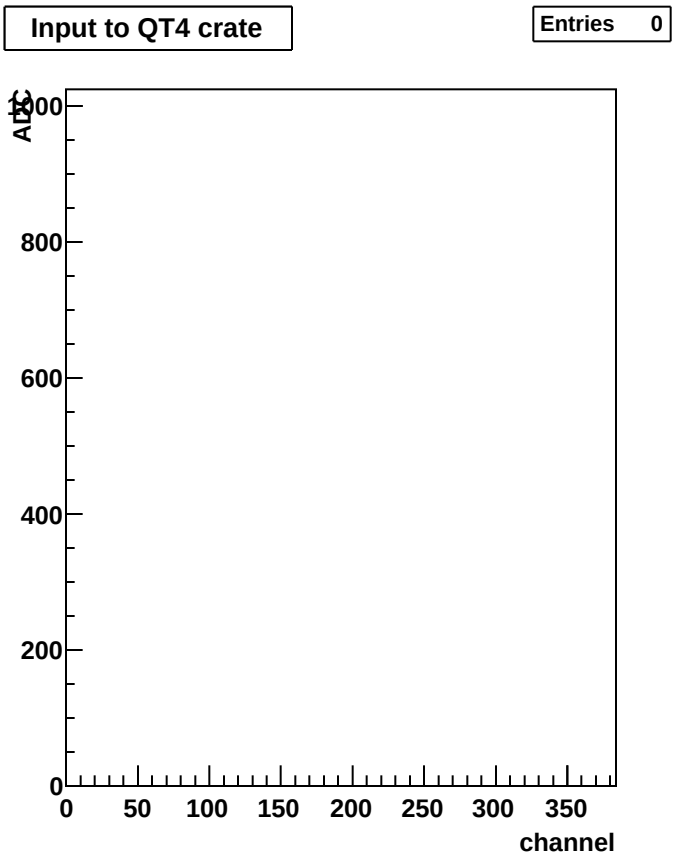

Entries 535285
ZDC East ADC Sum Att
ZDC West ADC Sum Att

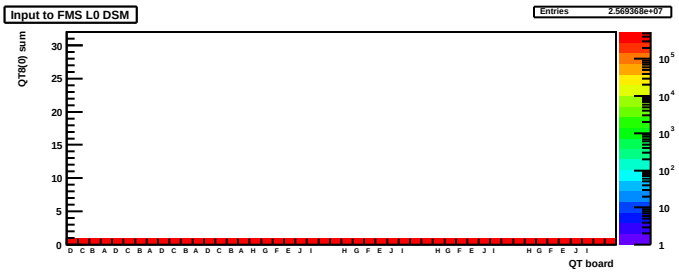

Entries 535285
BBC-L TAC Diff
BCC-S TAC Diff
Entries 535285
BBC-L TAC Diff
VPD TAC Diff
Entries 535285
BBC-L TAC Diff
ZDC TAC Diff
Entries 535285
BBC-S TAC Diff
VPD TAC Diff
Entries 535285
BBC-S TAC Diff
ZDC TAC Diff
Entries 535285
VPD TAC Diff
ZDC TAC Diff

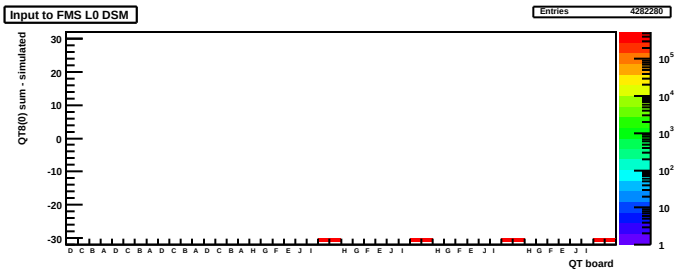

Input to QT1 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

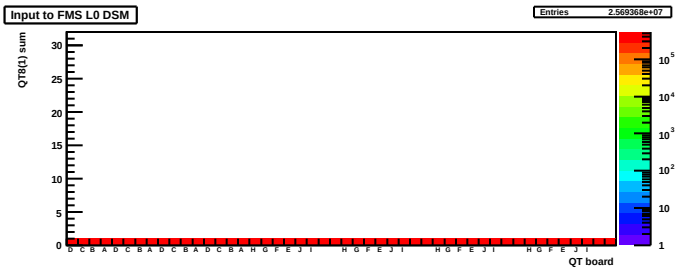

Input to QT2 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

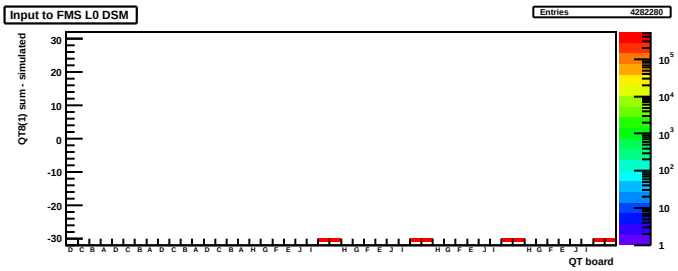

Input to QT3 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

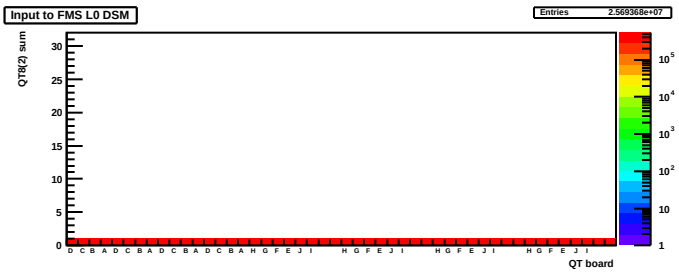

Input to QT4 crate
Entries 0
ADC
1000
800
600
400
200
0
0 50 100 150 200 250 300 350
channel

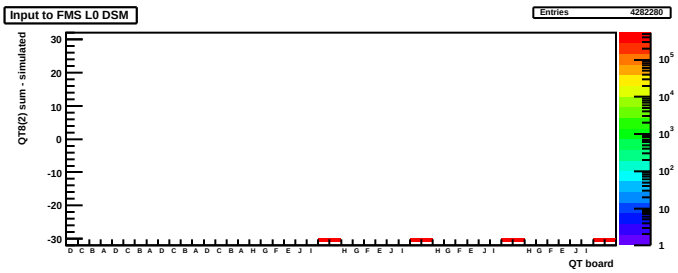

Input to FMS L0 DSM
Entries 2.569368e+07
QT8(0) sum
QT board

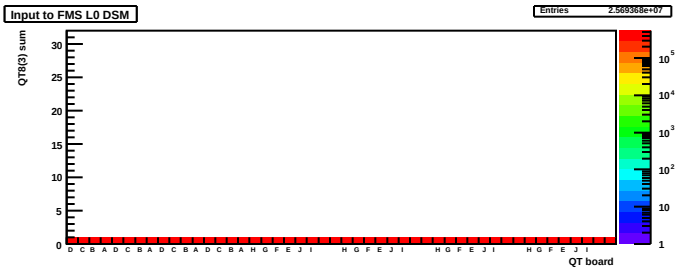

Input to FMS L0 DSM
Entries 4282280
QT8(0) sum - simulated
QT board

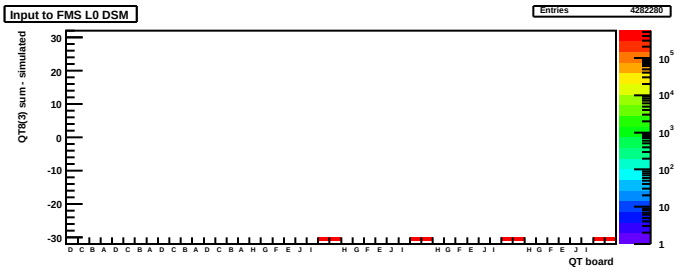

Input to FMS L0 DSM
Entries 2.569368e+07
QT8(1) sum
QT board

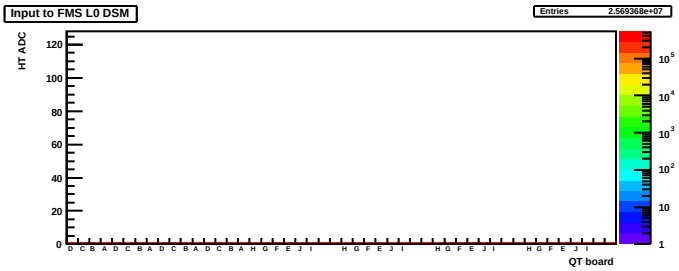

Input to FMS L0 DSM
Entries 4282280
QT8(1) sum - simulated
QT board

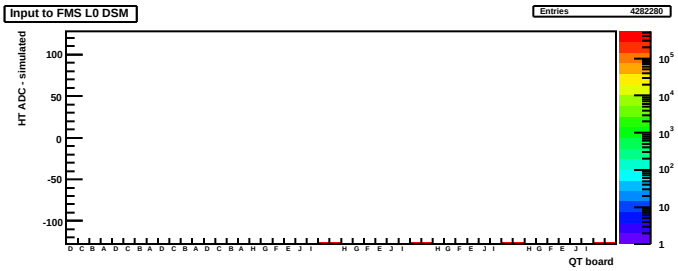

Input to FMS L0 DSM
Entries 2.569368e+07
QT8(2) sum
QT board

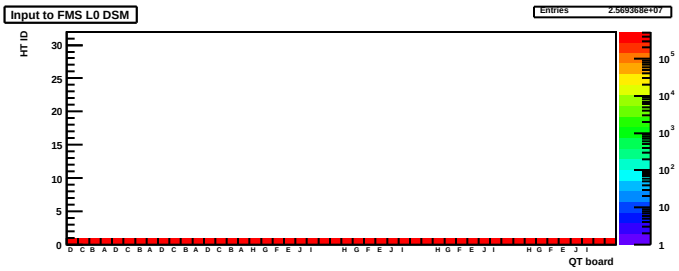

Input to FMS L0 DSM
Entries 4282280
QT8(2) sum - simulated
QT board

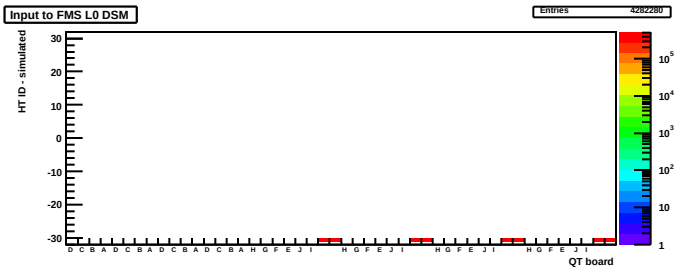

Input to FMS L0 DSM
Entries 2.569368e+07
QT8(3) sum
QT board

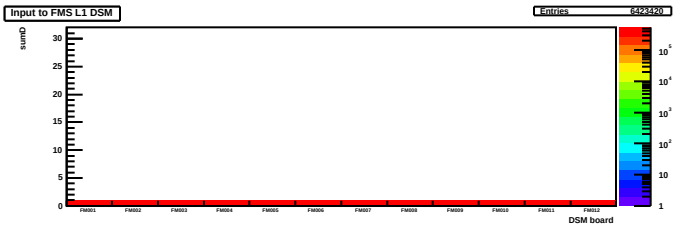

Input to FMS L0 DSM
Entries 4282280
QT8(3) sum - simulated
QT board

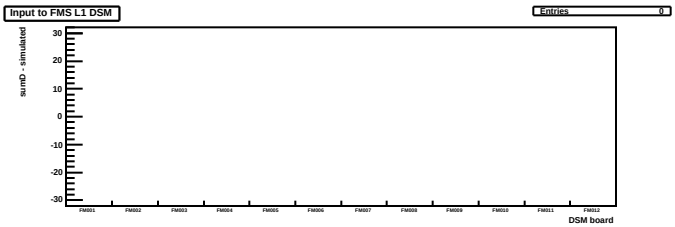

Input to FMS L0 DSM
Entries 2.569368e+07
HT ADC
QT board

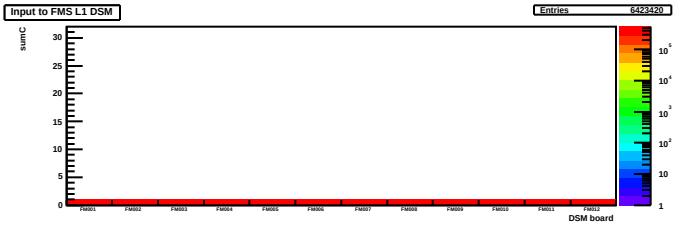

Input to FMS L0 DSM
Entries 4282280
HT ADC - simulated
QT board

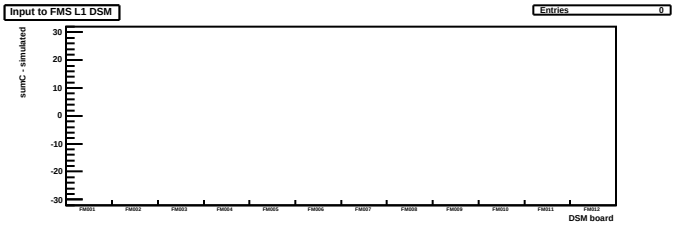

Input to FMS L0 DSM
Entries 2.569368e+07
HT ID
QT board

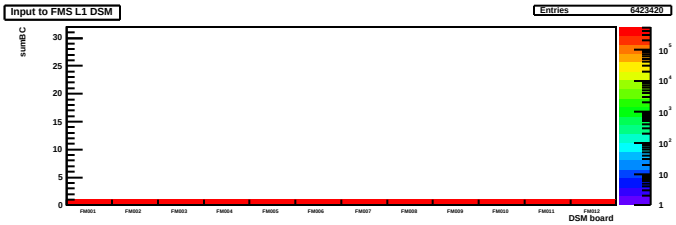

Input to FMS L0 DSM
Entries 4282280
HT ID - simulated
QT board

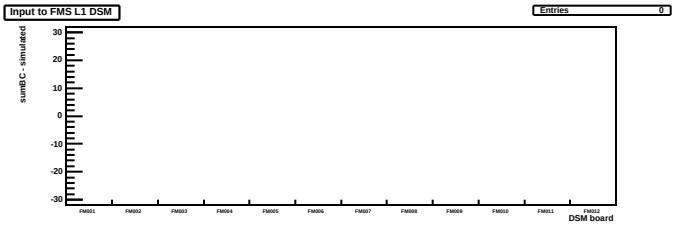

Input to FMS L1 DSM
Entries 6423420
sumD
DSM board

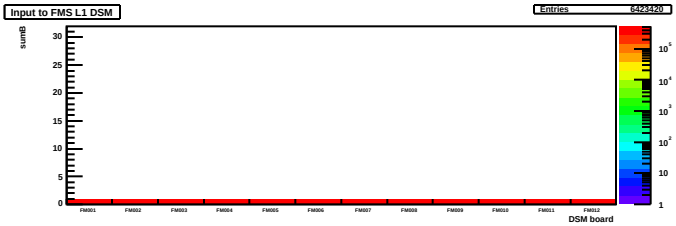

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

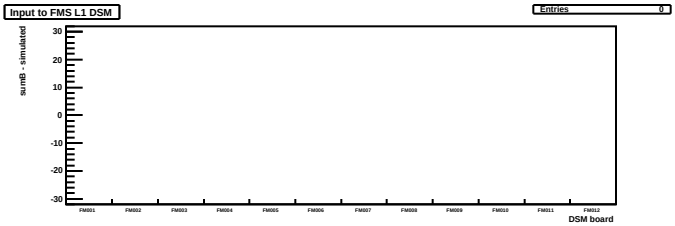

Input to FMS L1 DSM
Entries 6423420
sumC
DSM board

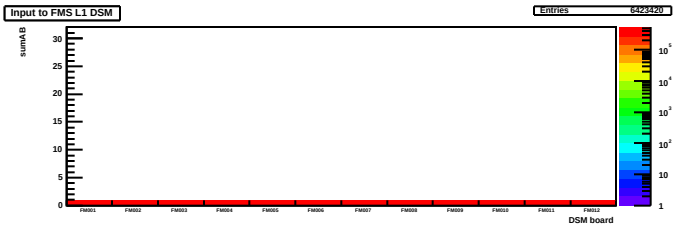

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

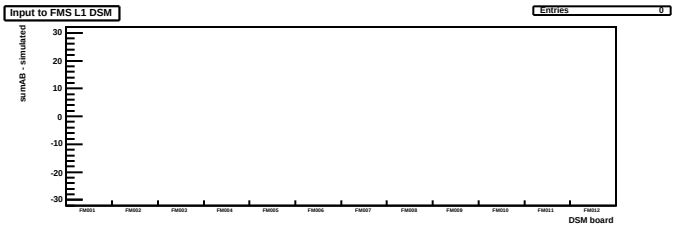

Input to FMS L1 DSM
Entries 6423420
sumBC
DSM board

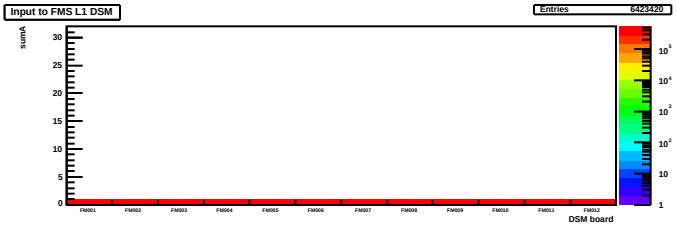

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

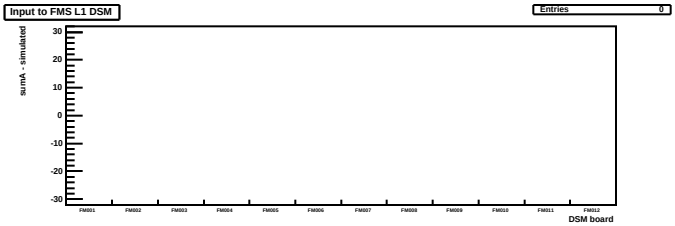

Input to FMS L1 DSM
Entries 6423420
sumB
DSM board

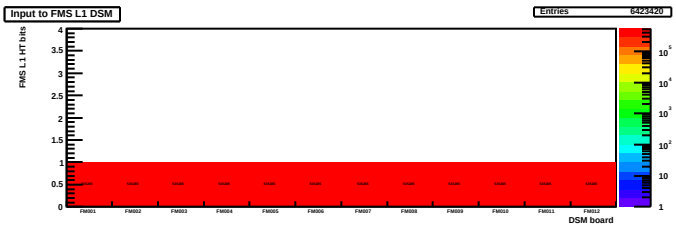

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

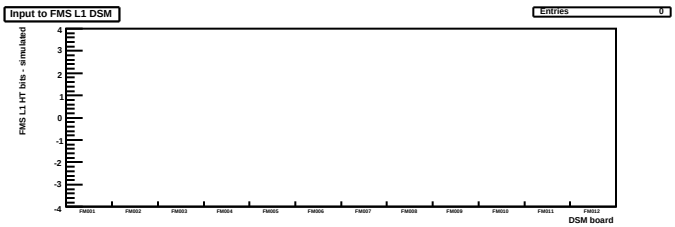

Input to FMS L1 DSM
Entries 6423420
sumAB
DSM board

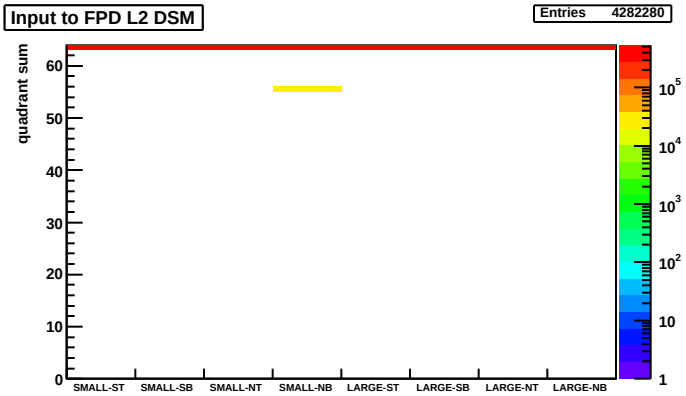

Input to FMS L1 DSM
Entries 0
sumAB - simulated
DSM board

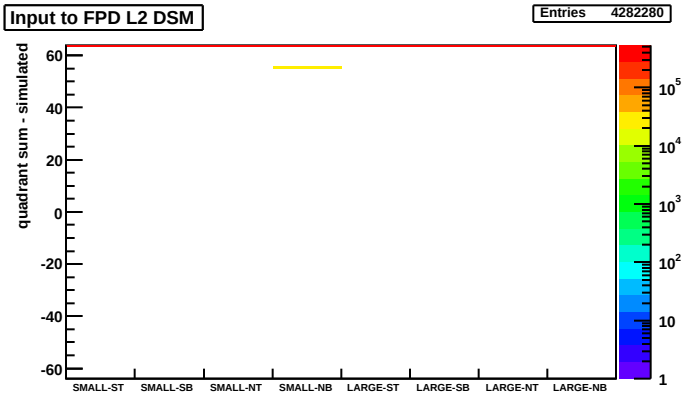

Input to FMS L1 DSM
Entries 6423420
sumA
DSM board

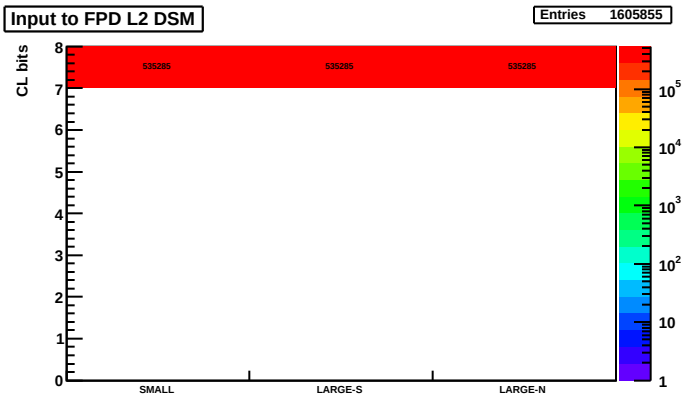

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

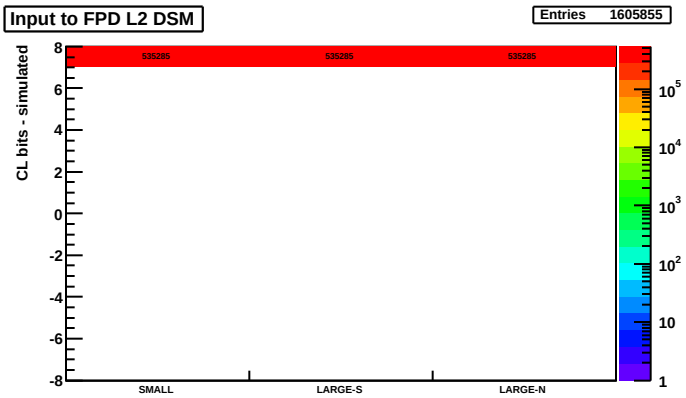

Input to FMS L1 DSM
Entries 6423420
FMS L1 HT bits
DSM board

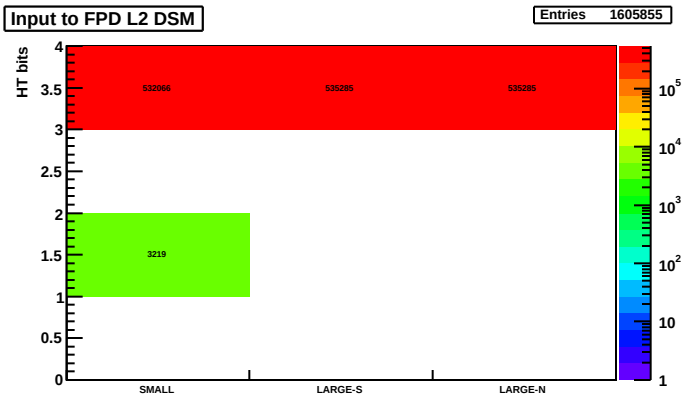

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

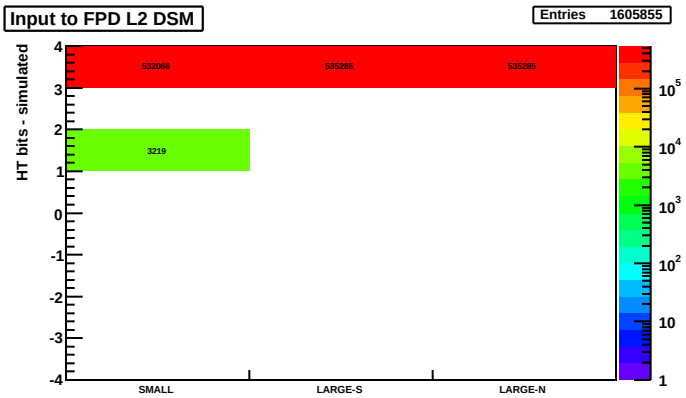

Input to FPD L2 DSM
Entries 4282280
quadrant sum
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

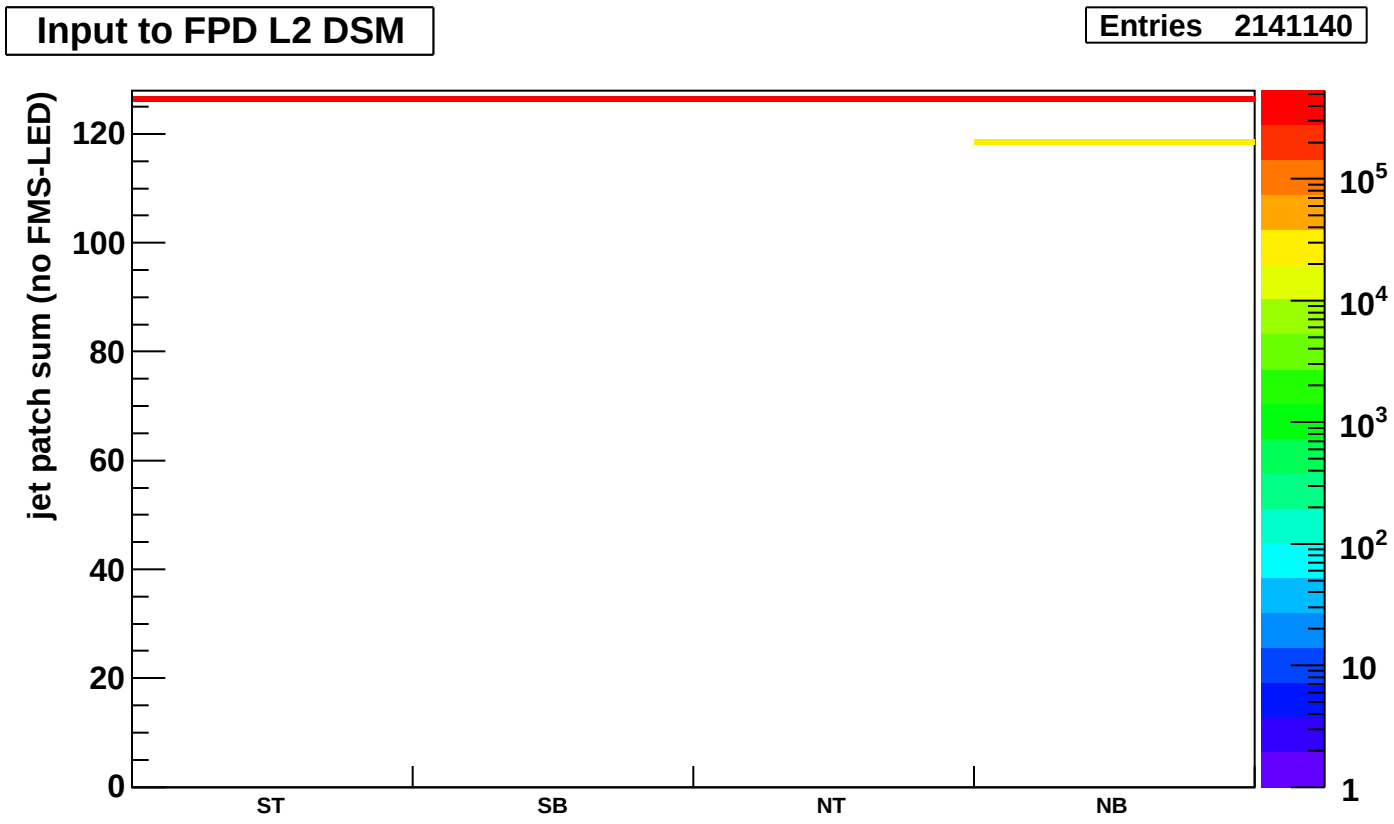

Input to FPD L2 DSM
Entries 4282280
quadrant sum - simulated
SMALL-ST
SMALL-SB
SMALL-NT
SMALL-NB
LARGE-ST
LARGE-SB
LARGE-NT
LARGE-NB

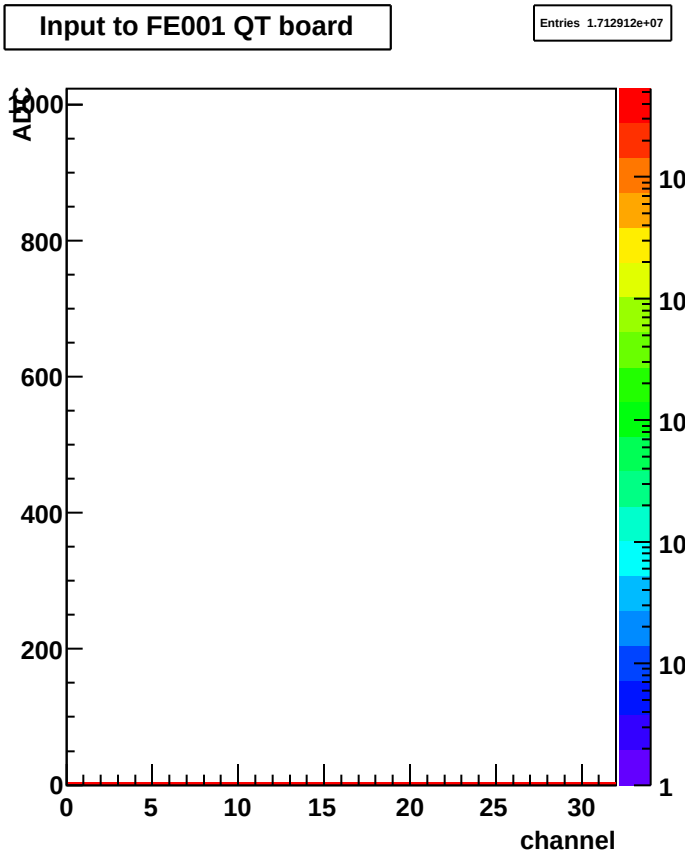

Input to FPD L2 DSM
Entries 1605855
CL bits
535285
535285
535285
SMALL
LARGE-S
LARGE-N

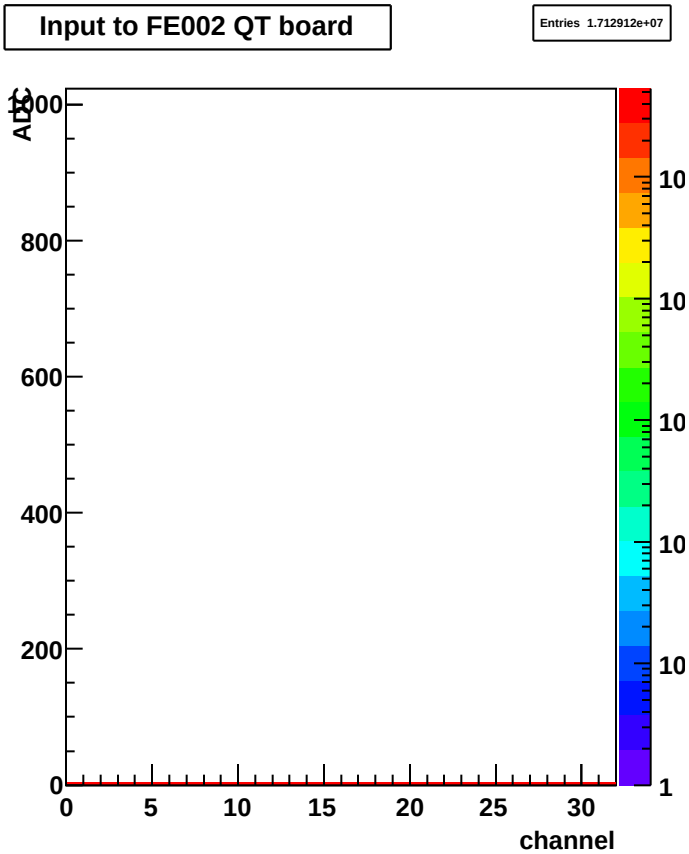

Input to FPD L2 DSM
Entries 1605855
CL bits - simulated
535285
535285
535285
SMALL
LARGE-S
LARGE-N

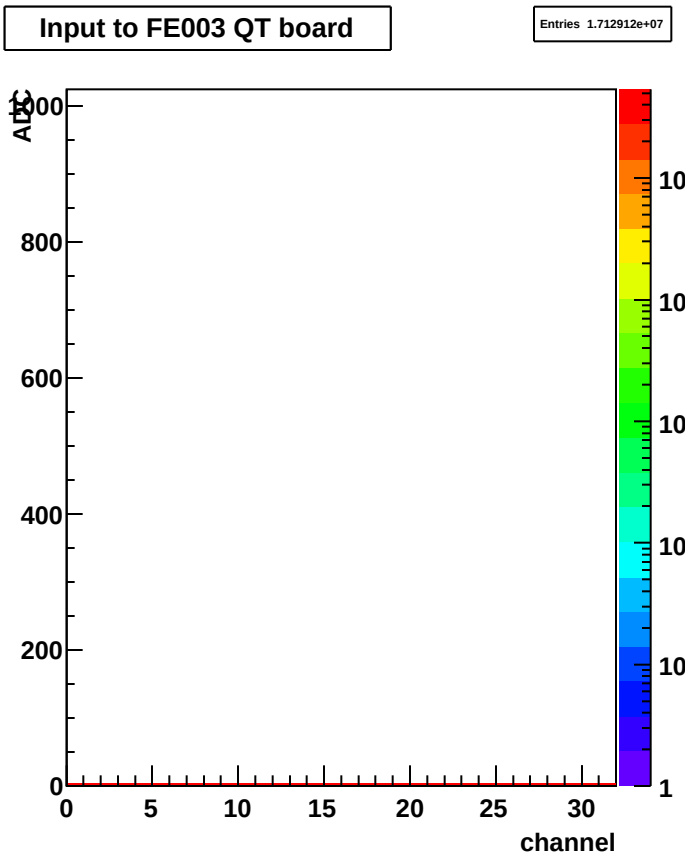

Input to FPD L2 DSM
Entries 1605855
HT bits
532066
535285
535285
3219
SMALL
LARGE-S
LARGE-N

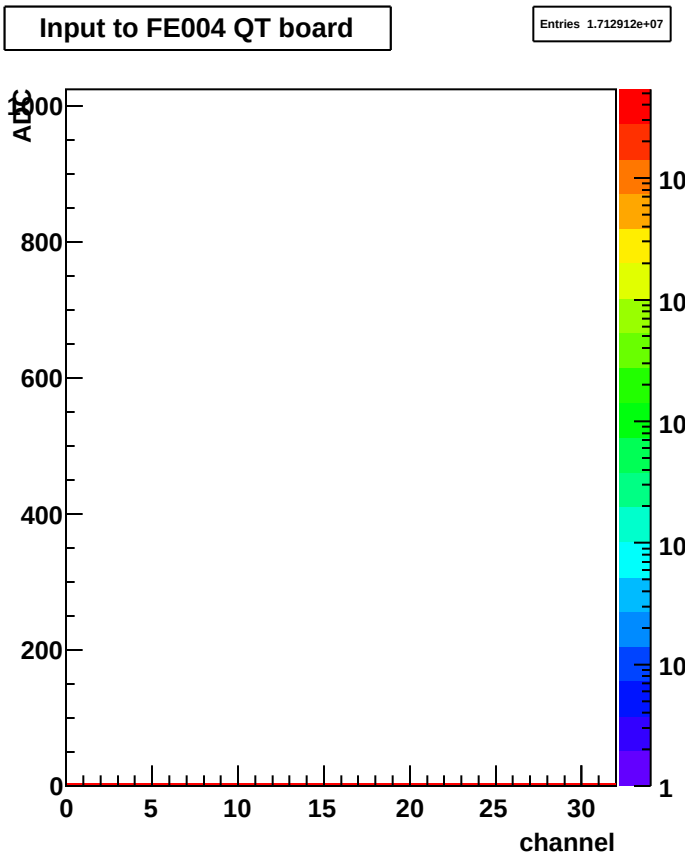

Input to FPD L2 DSM
Entries 1605855
HT bits - simulated
532066
535285
535285
3219
SMALL
LARGE-S
LARGE-N

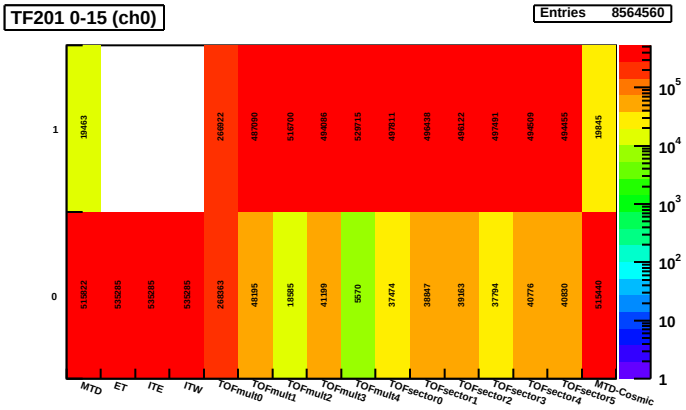

Input to FPD L2 DSM
Entries 2141140
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
1
10
10^2
10^3
10^4
10^5

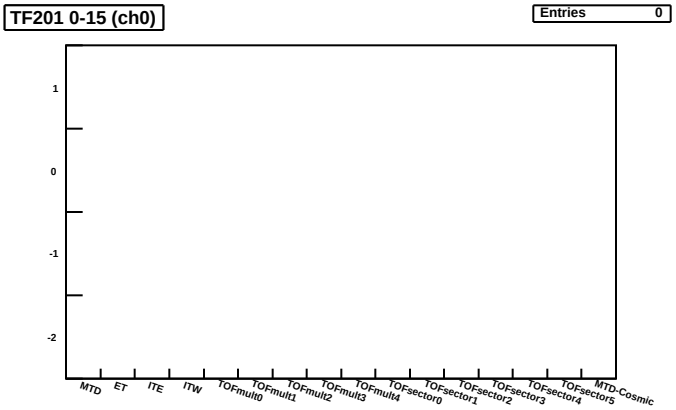

Input to FE001 QT board
Entries 1.712912e+07
ADC
channel

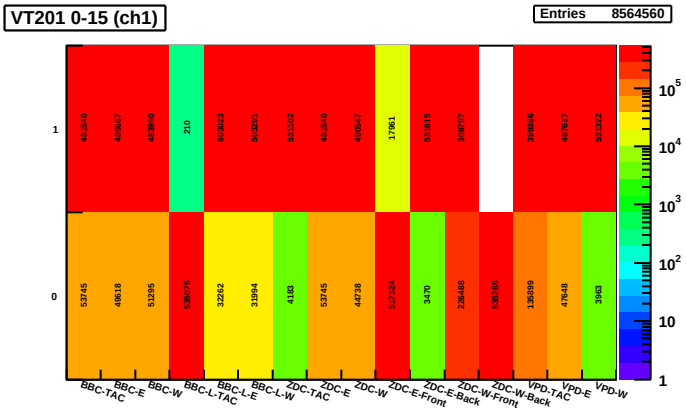

Input to FE002 QT board
Entries 1.712912e+07
ADC
channel

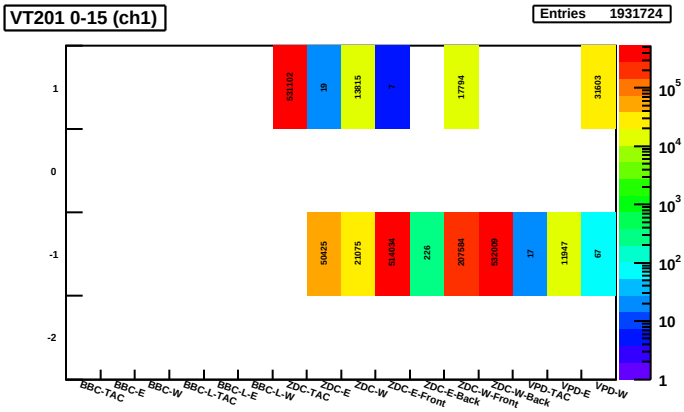

Input to FE003 QT board
Entries 1.712912e+07
ADC
channel

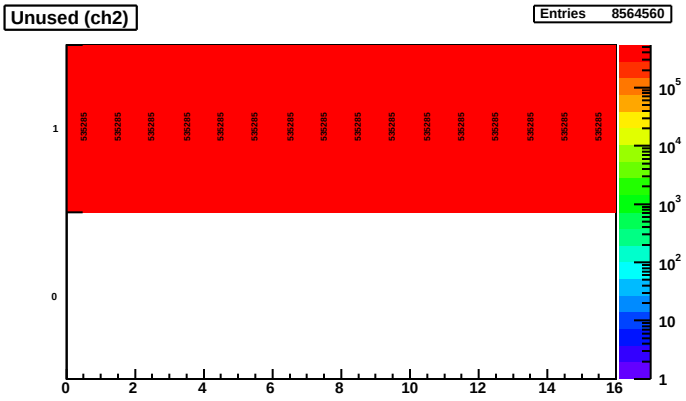

Input to FE004 QT board
Entries 1.712912e+07
ADC
channel

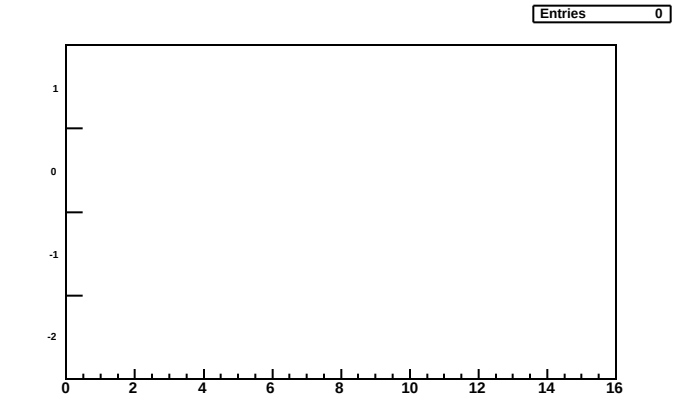

TF201 0-15 (ch0)
Entries 8564560
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

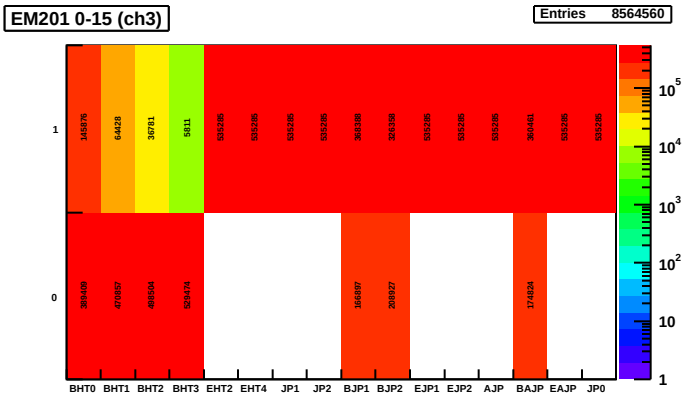

TF201 0-15 (ch0)
Entries 0
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic

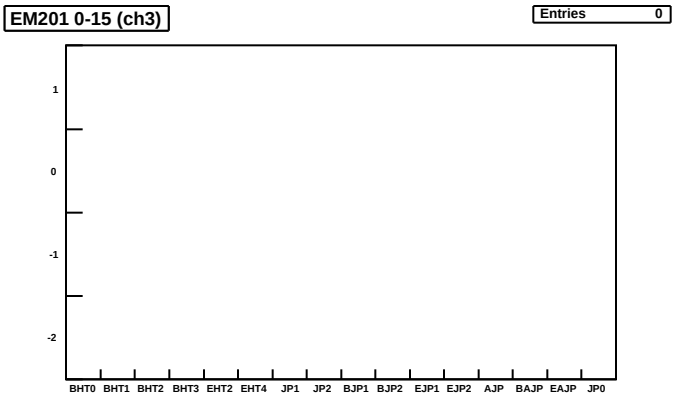

VT201 0-15 (ch1)
Entries 8564560
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W


VT201 0-15 (ch1)
Entries 1931724
BBC-TAC BBC-E BBC-W BBC-L-TAC BBC-L-E BBC-L-W ZDC-TAC ZDC-E ZDC-W ZDC-E-Front ZDC-E-Back ZDC-W-Front ZDC-W-Back VPD-TAC VPD-E VPD-W

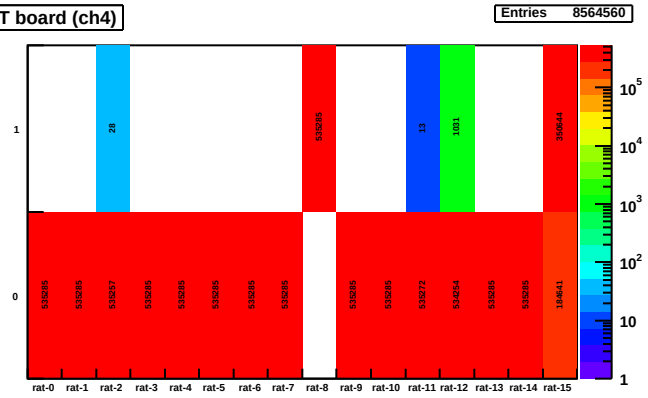

Unused (ch2)
Entries 8564560

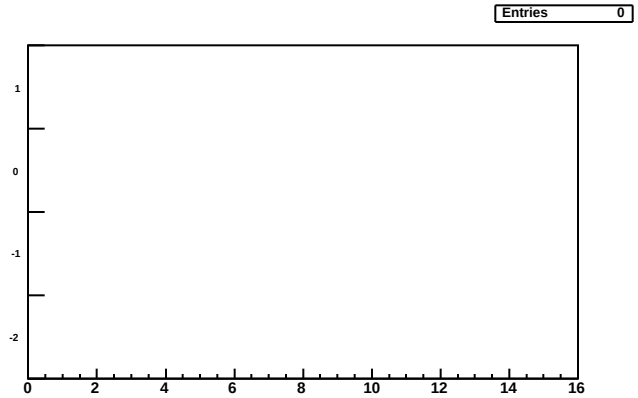

Entries 0


EM201 0-15 (ch3)
Entries 8564560
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

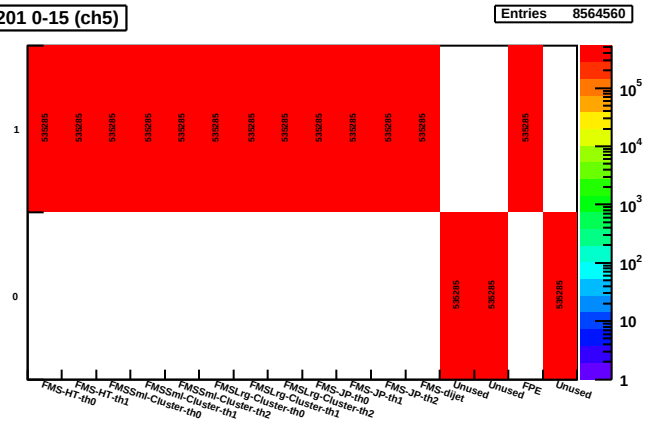

EM201 0-15 (ch3)
Entries 0
BHT0 BHT1 BHT2 BHT3 EHT2 EHT4 JP1 JP2 BJP1 BJP2 EJP1 EJP2 AJP BAJP EAJP JP0

RAT board (ch4)

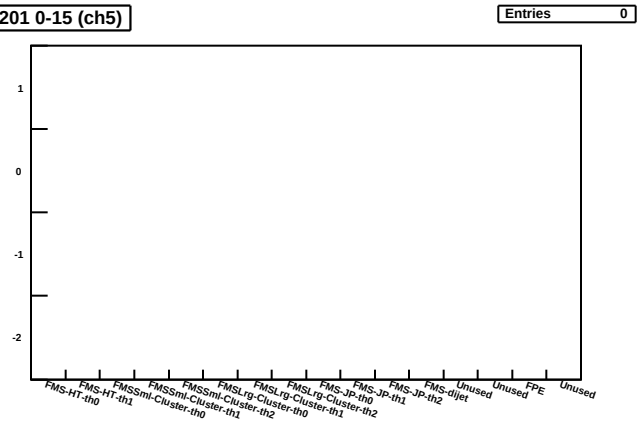




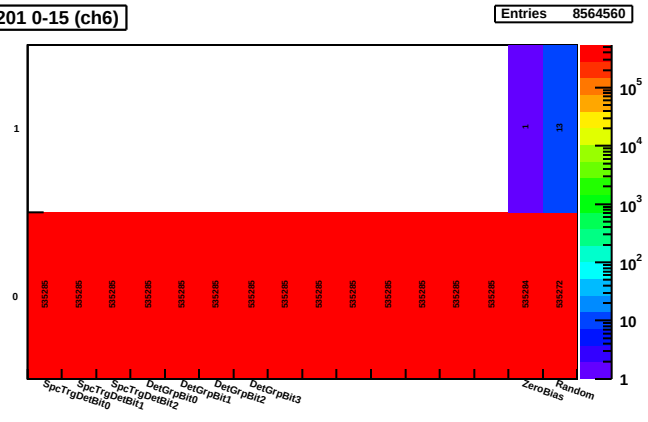
FP201 0-15 (ch5)

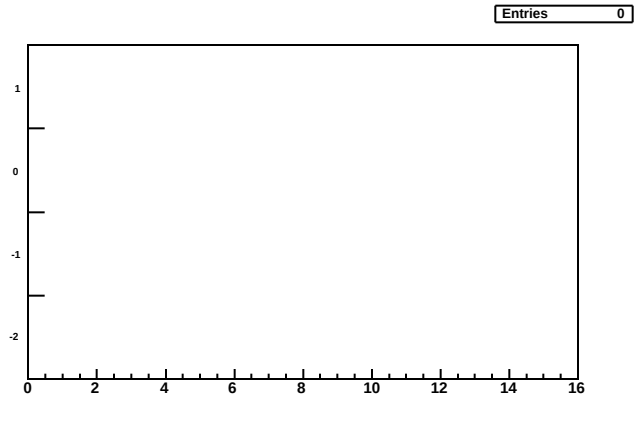
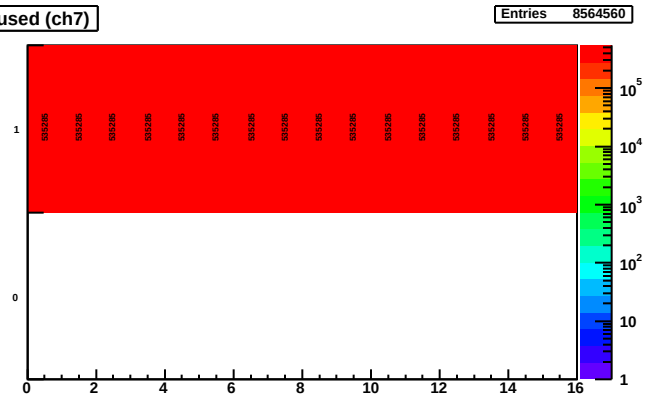
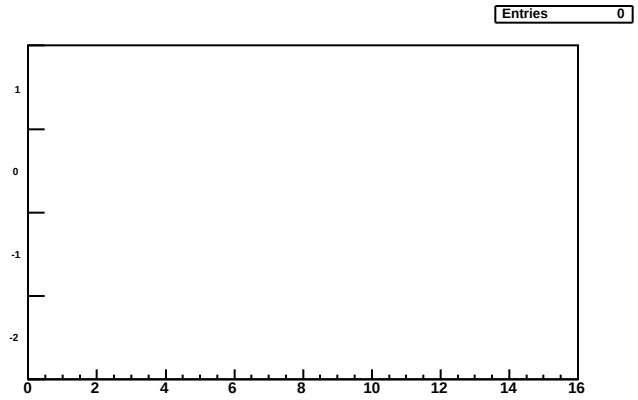


FP201 0-15 (ch5)



ST201 0-15 (ch6)





Unused (ch7)