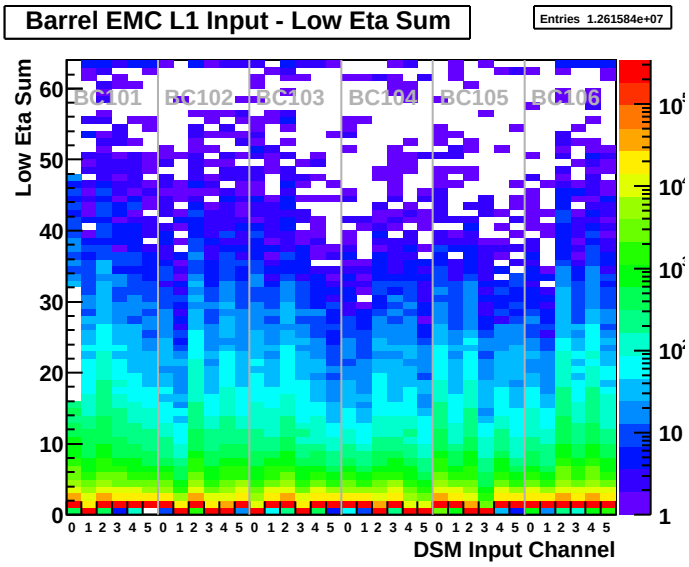
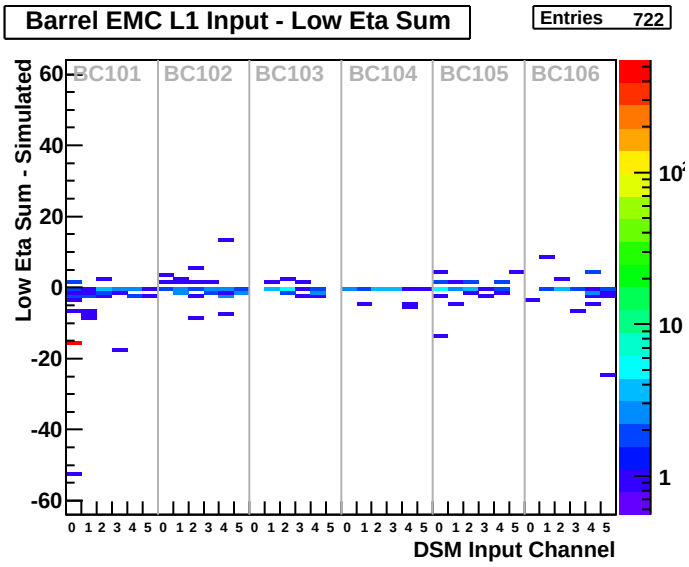
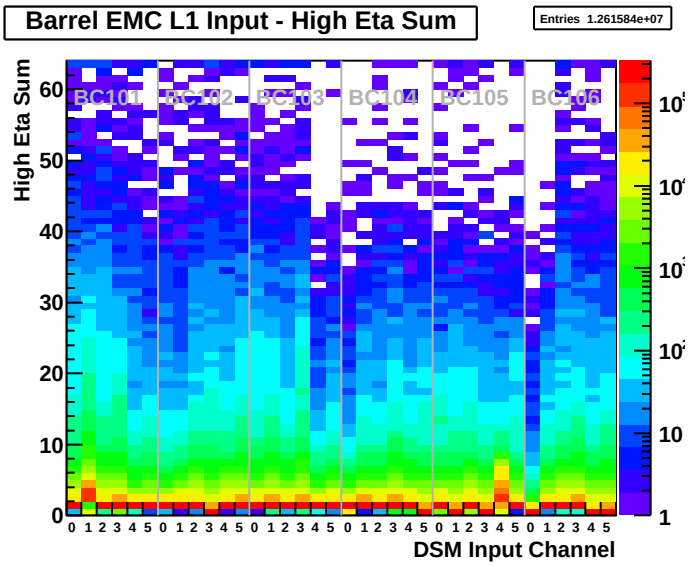
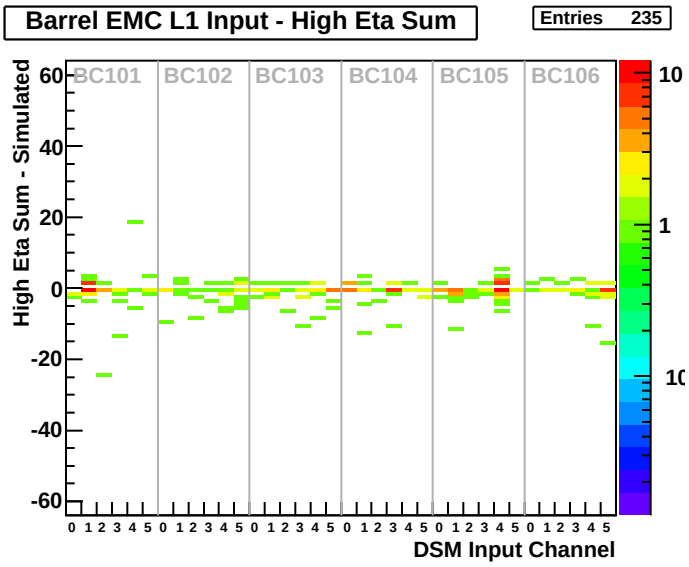
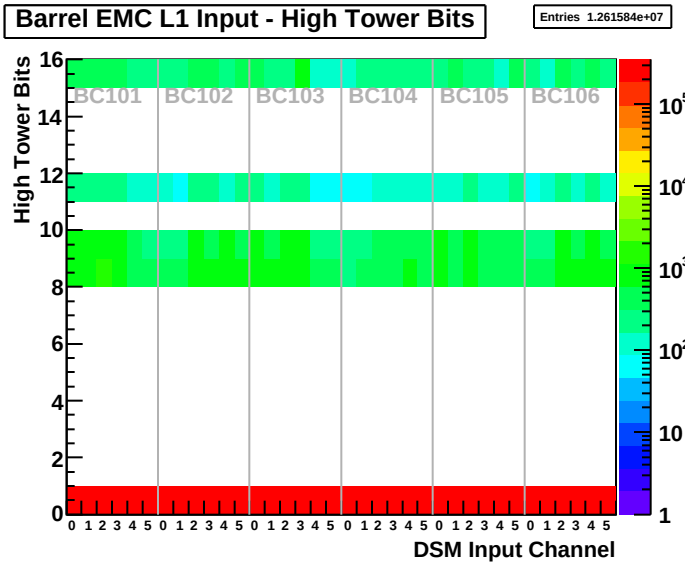
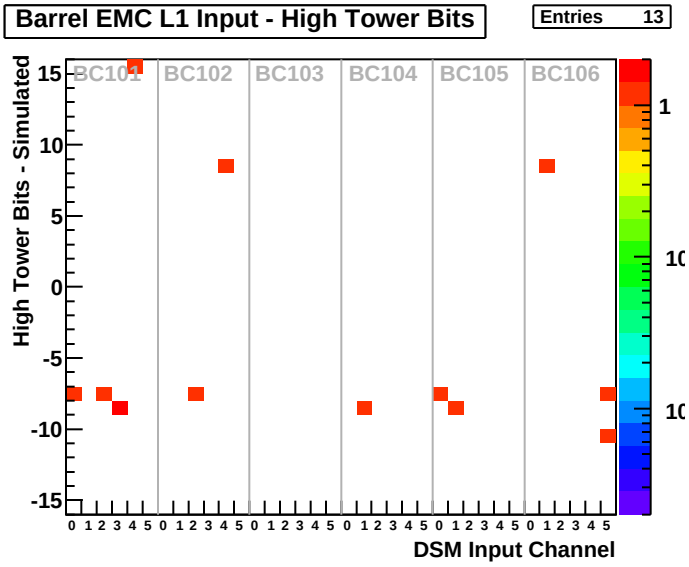

Barrel EMC L1 Input - Low Eta Sum
Entries 1.261584e+07
Low Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

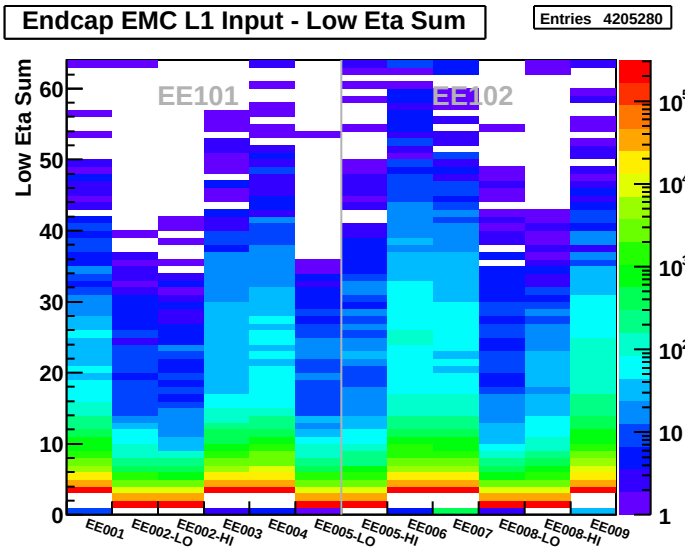

Barrel EMC L1 Input - Low Eta Sum
Entries 722
Low Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

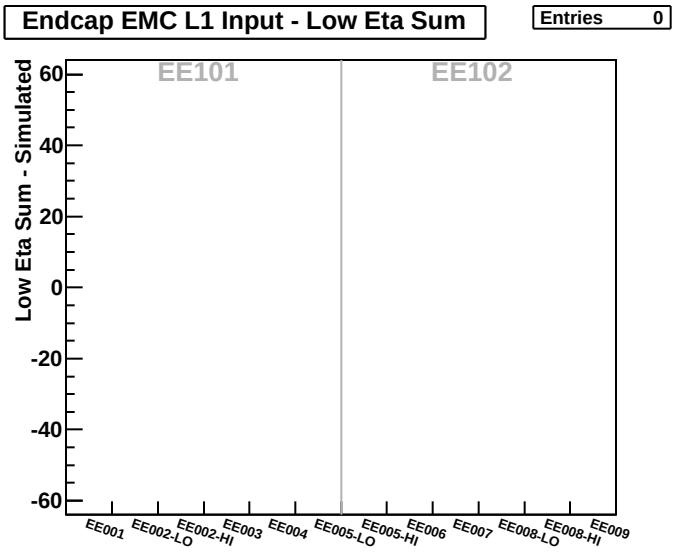

Barrel EMC L1 Input - High Eta Sum
Entries 1.261584e+07
High Eta Sum
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

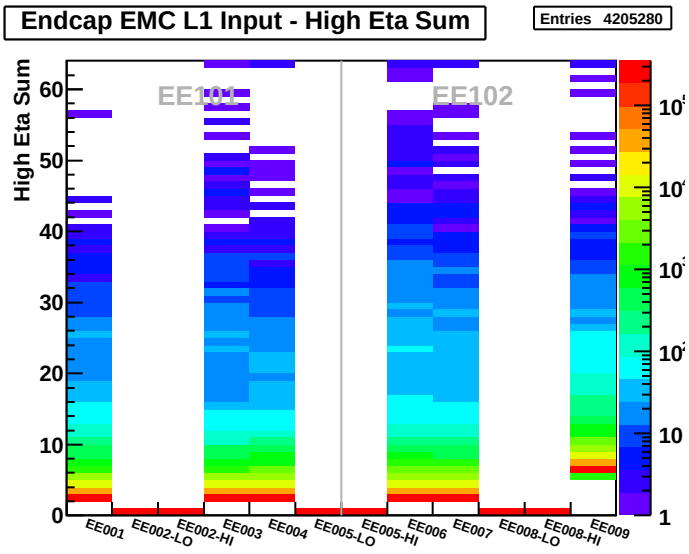

Barrel EMC L1 Input - High Eta Sum
Entries 235
High Eta Sum - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

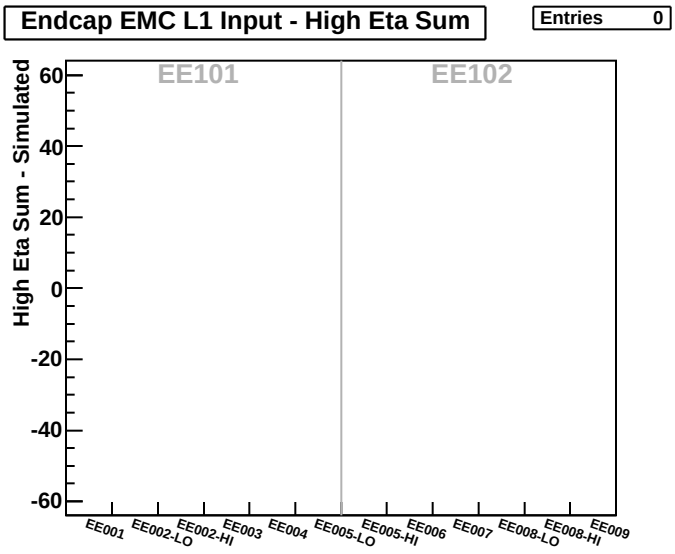

Barrel EMC L1 Input - High Tower Bits
Entries 1.261584e+07
High Tower Bits
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

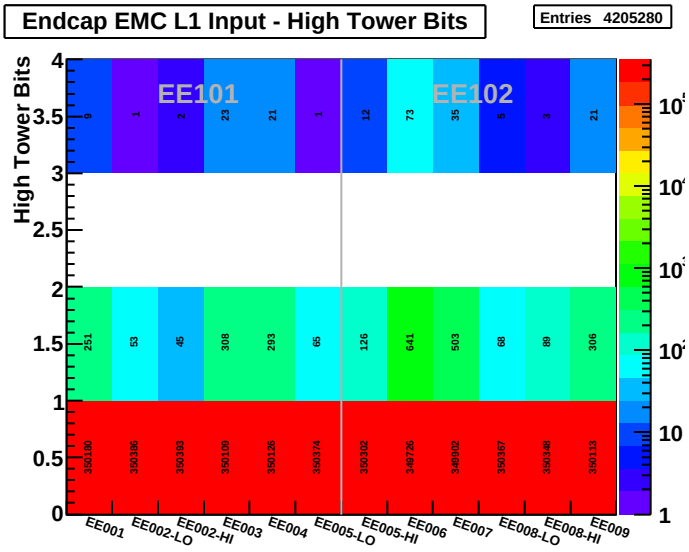

Barrel EMC L1 Input - High Tower Bits
Entries 13
High Tower Bits - Simulated
BC101 BC102 BC103 BC104 BC105 BC106
DSM Input Channel

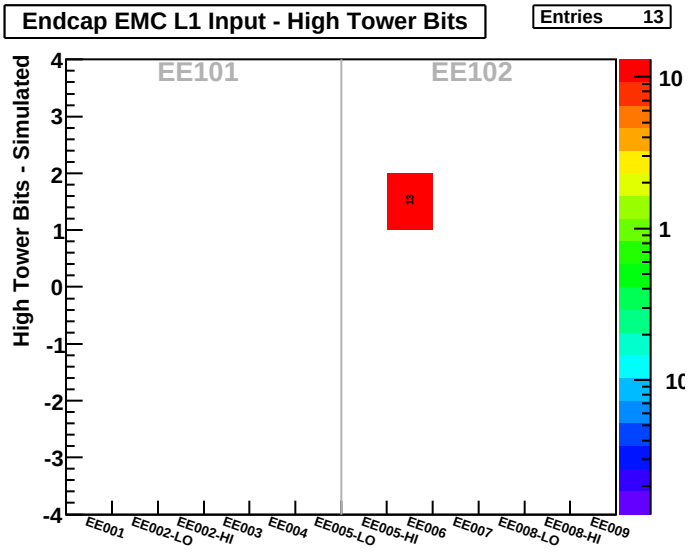

Endcap EMC L1 Input - Low Eta Sum
Entries 4205280
Low Eta Sum
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

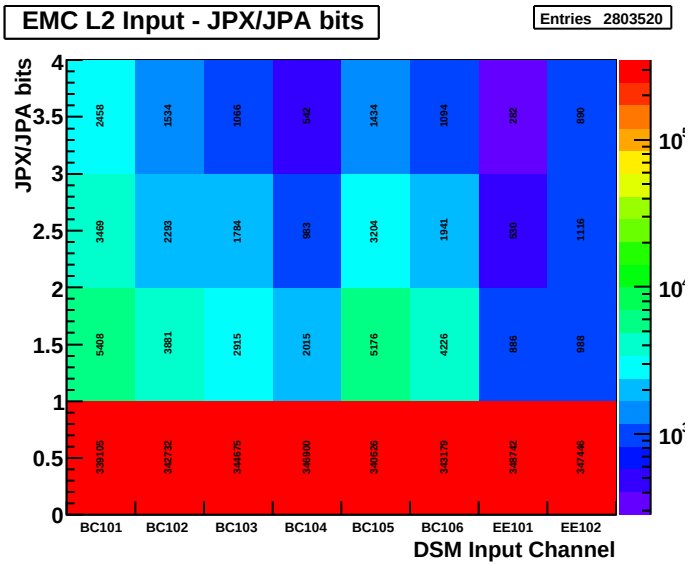

Endcap EMC L1 Input - Low Eta Sum
Entries 0
Low Eta Sum - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

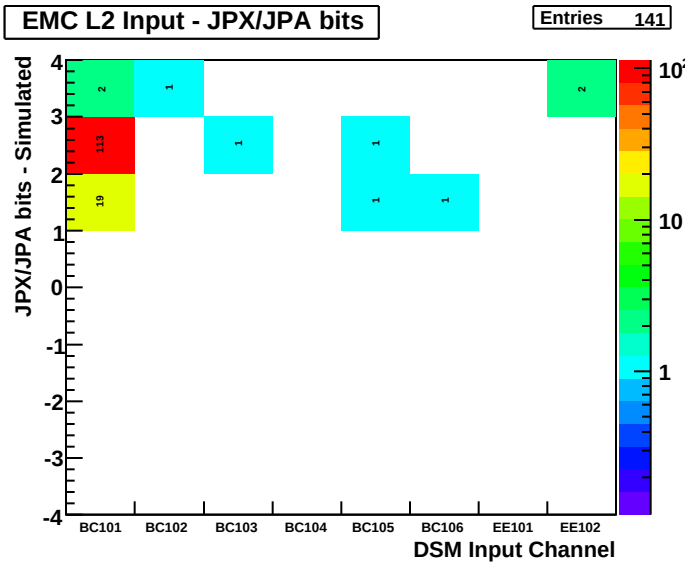

Endcap EMC L1 Input - High Eta Sum
Entries 4205280
High Eta Sum
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

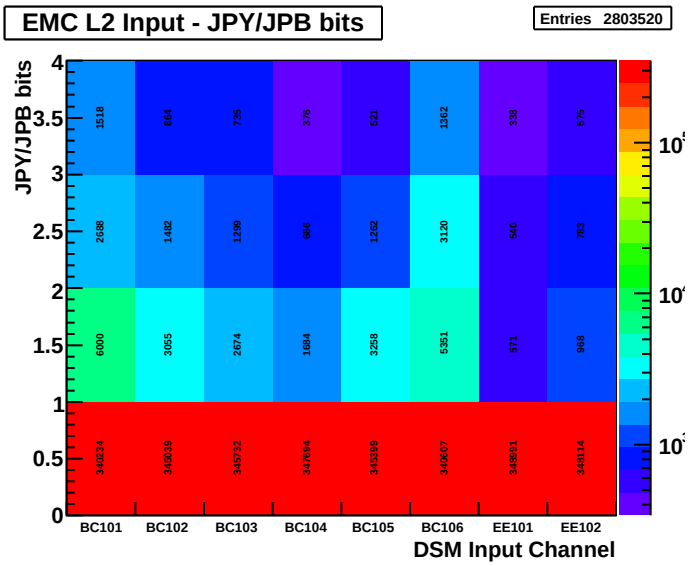

Endcap EMC L1 Input - High Eta Sum
Entries 0
High Eta Sum - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

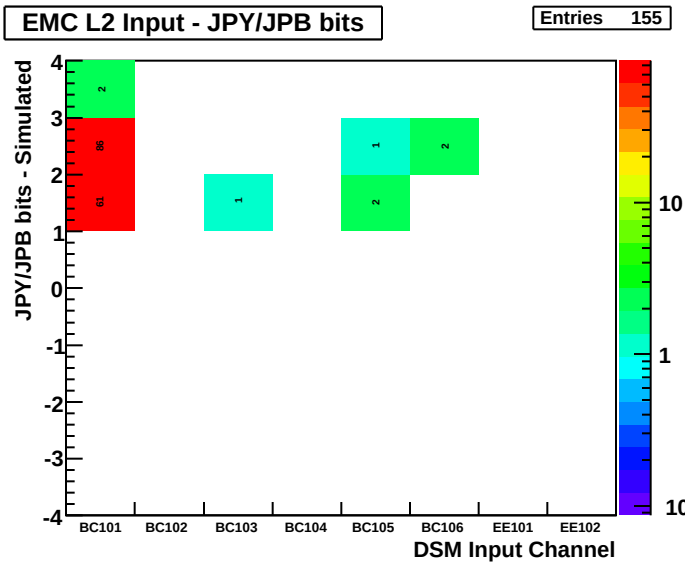

Endcap EMC L1 Input - High Tower Bits
Entries 4205280
High Tower Bits
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

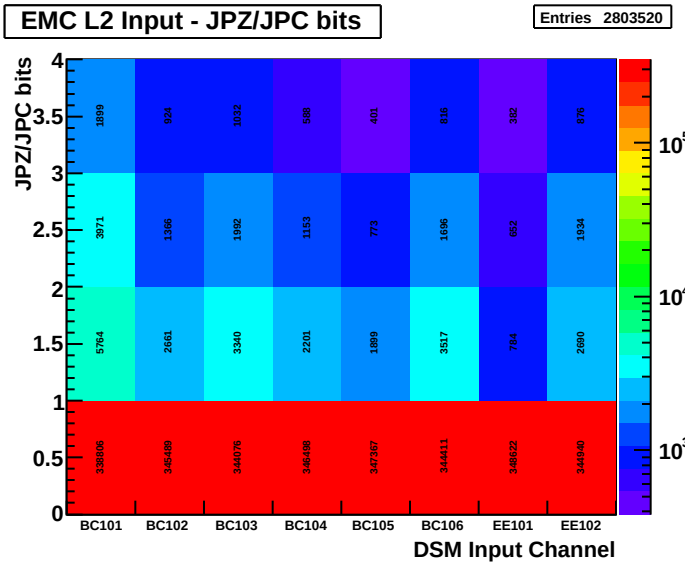

Endcap EMC L1 Input - High Tower Bits
Entries 13
High Tower Bits - Simulated
EE101
EE102
EE001
EE002-LO
EE002-HI
EE003
EE004
EE005-LO
EE005-HI
EE006
EE007
EE008-LO
EE008-HI
EE009

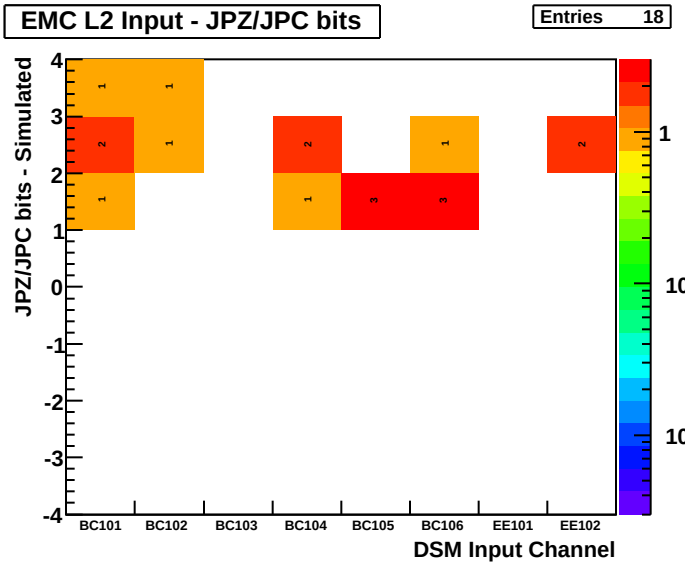

EMC L2 Input - JPX/JPA bits
Entries 2803520
JPX/JPA bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2458 1534 1066 542 1434 1094 282 890
3469 2293 1784 983 3204 1941 530 1116
5408 3881 2915 2015 5176 4226 886 988
339105 342732 344675 346900 340626 343179 348742 347446

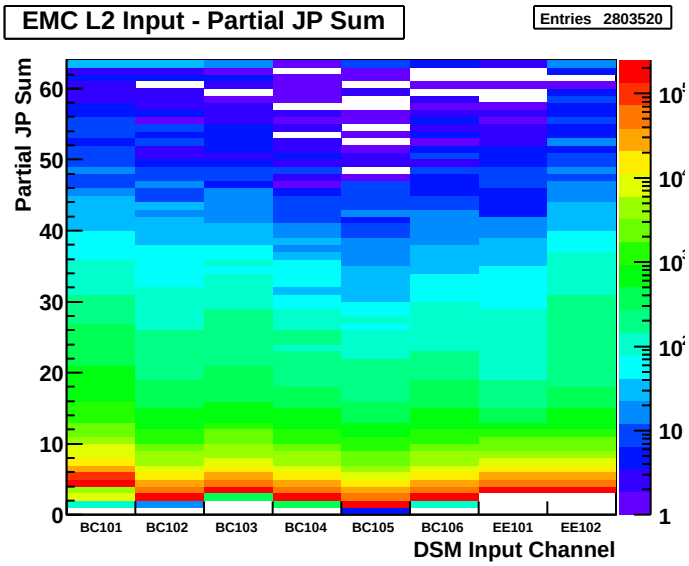

EMC L2 Input - JPX/JPA bits
Entries 141
JPX/JPA bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2 1 2
113 1
19 1 1 1

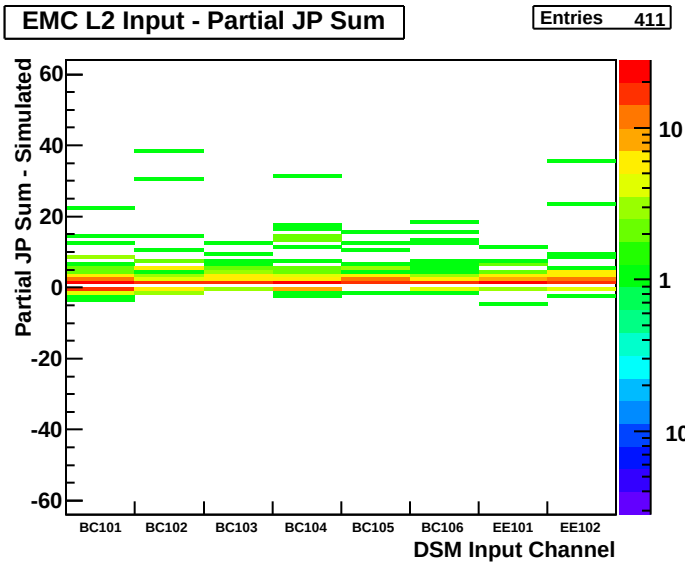

EMC L2 Input - JPY/JPB bits
Entries 2803520
JPY/JPB bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1518 864 735 376 521 1362 338 575
2688 1482 1299 686 1262 3120 540 783
6000 3055 2674 1684 3258 5351 571 968
340234 343039 345732 347694 345399 340607 348991 348114

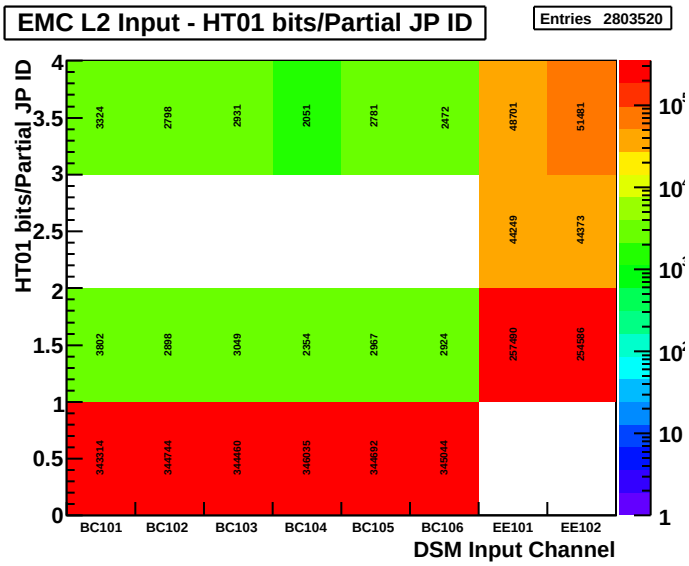

EMC L2 Input - JPY/JPB bits
Entries 155
JPY/JPB bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
2
86 1 2
61 1 2

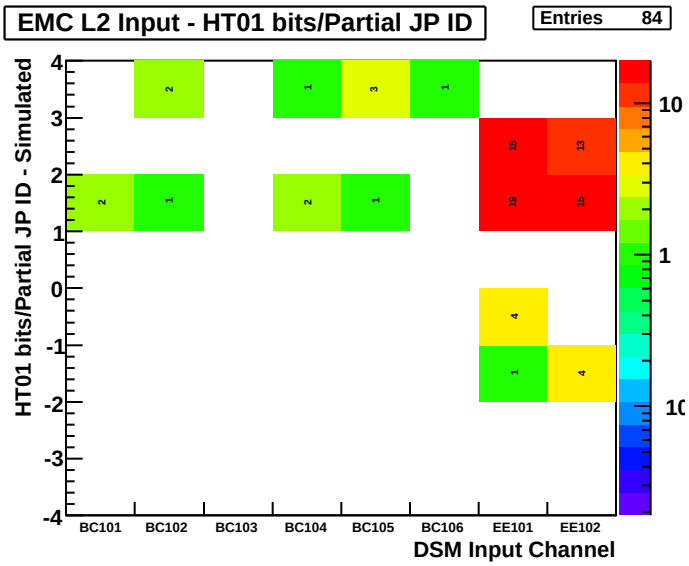

EMC L2 Input - JPZ/JPC bits
Entries 2803520
JPZ/JPC bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1899 924 1032 588 401 816 382 876
3971 1366 1992 1153 773 1696 652 1934
5764 2661 3340 2201 1899 3517 784 2680
338806 345489 344076 346498 347367 344411 348522 344940

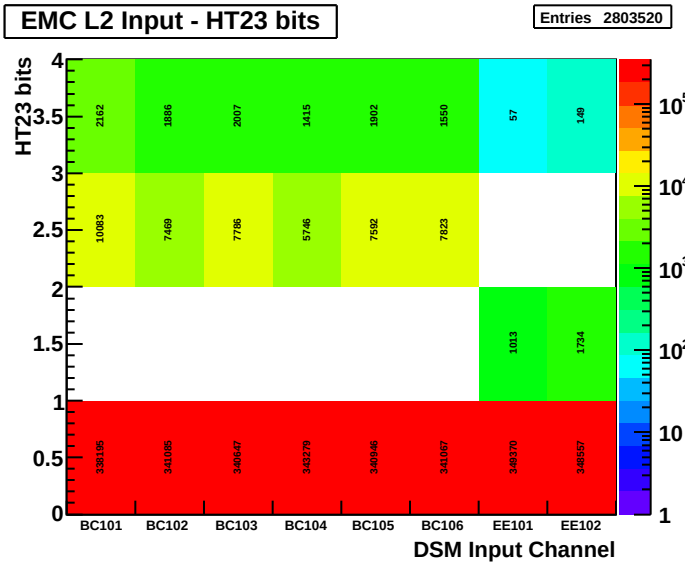

EMC L2 Input - JPZ/JPC bits
Entries 18
JPZ/JPC bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102
1 1
2 1 2 1 2
1 1 3 3

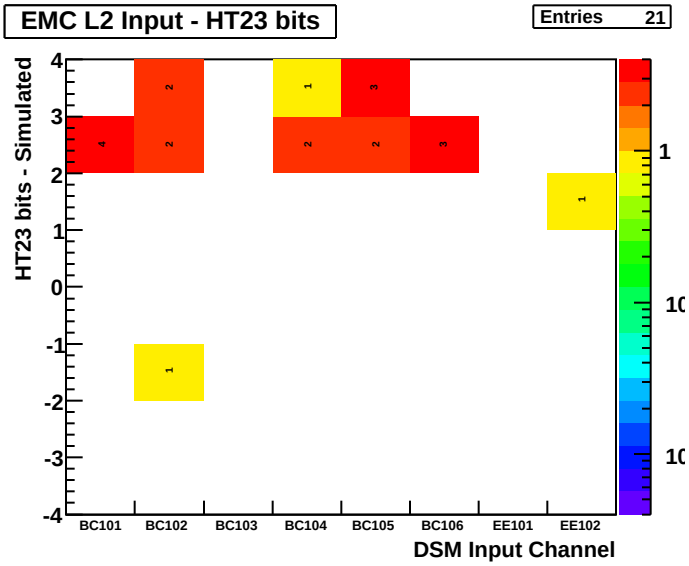

EMC L2 Input - Partial JP Sum
Entries 2803520
Partial JP Sum
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

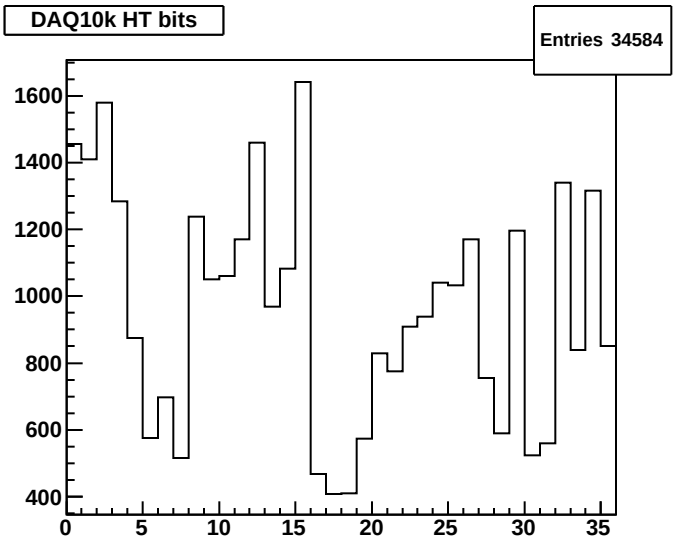

EMC L2 Input - Partial JP Sum
Entries 411
Partial JP Sum - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

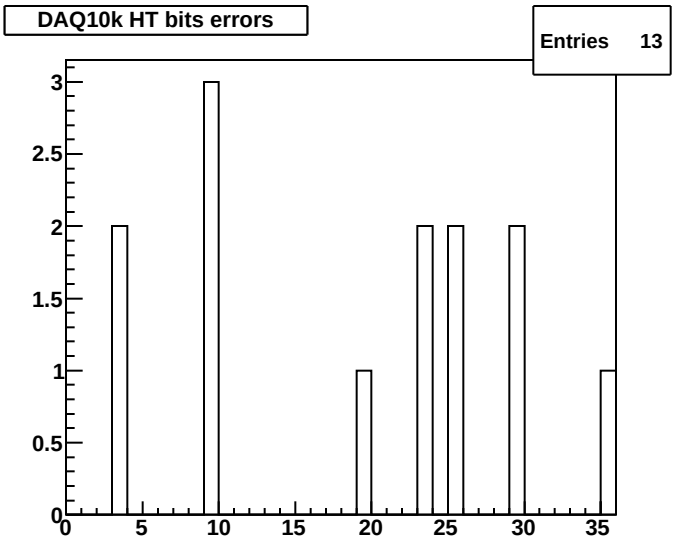

EMC L2 Input - HT01 bits/Partial JP ID
Entries 2803520
HT01 bits/Partial JP ID
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

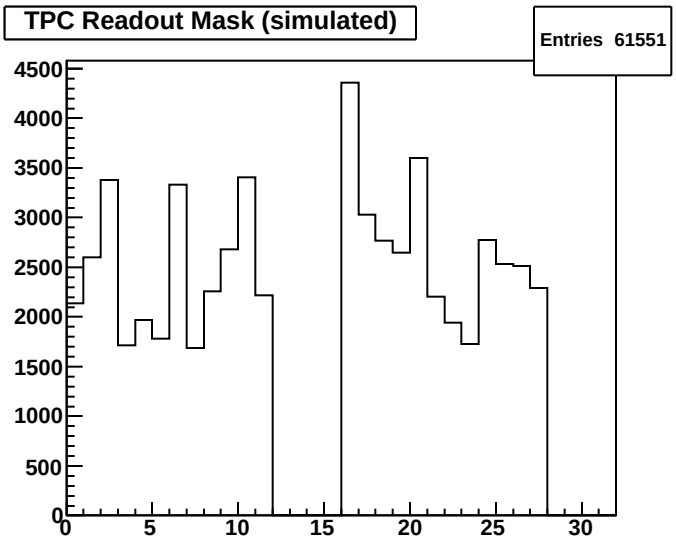

EMC L2 Input - HT01 bits/Partial JP ID
Entries 84
HT01 bits/Partial JP ID - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

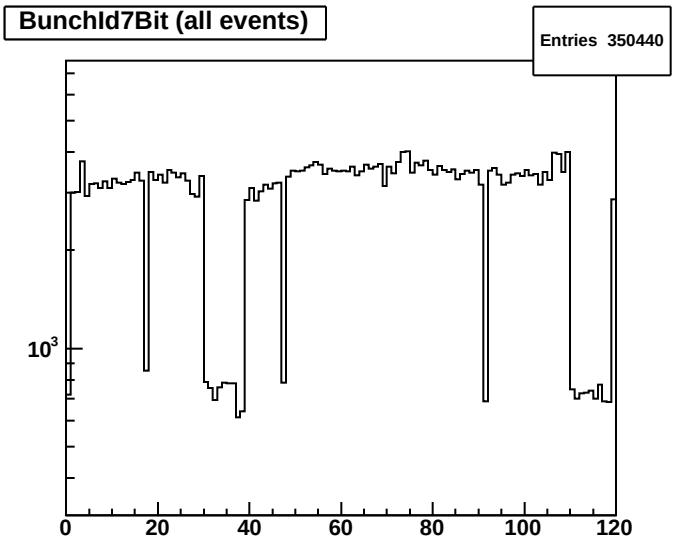

EMC L2 Input - HT23 bits
Entries 2803520
HT23 bits
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

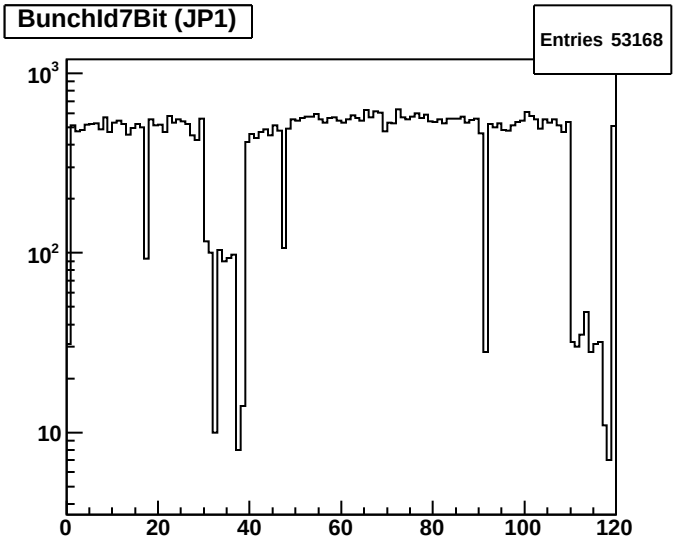

EMC L2 Input - HT23 bits
Entries 21
HT23 bits - Simulated
DSM Input Channel
BC101 BC102 BC103 BC104 BC105 BC106 EE101 EE102

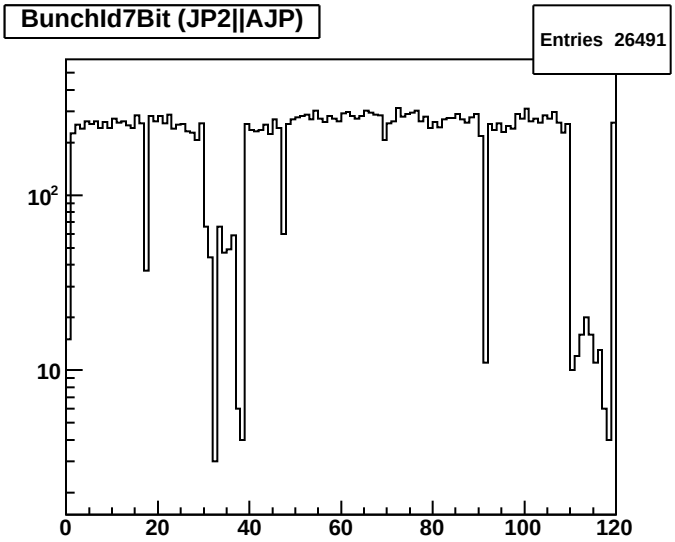

DAQ10k HT bits
Entries 34584

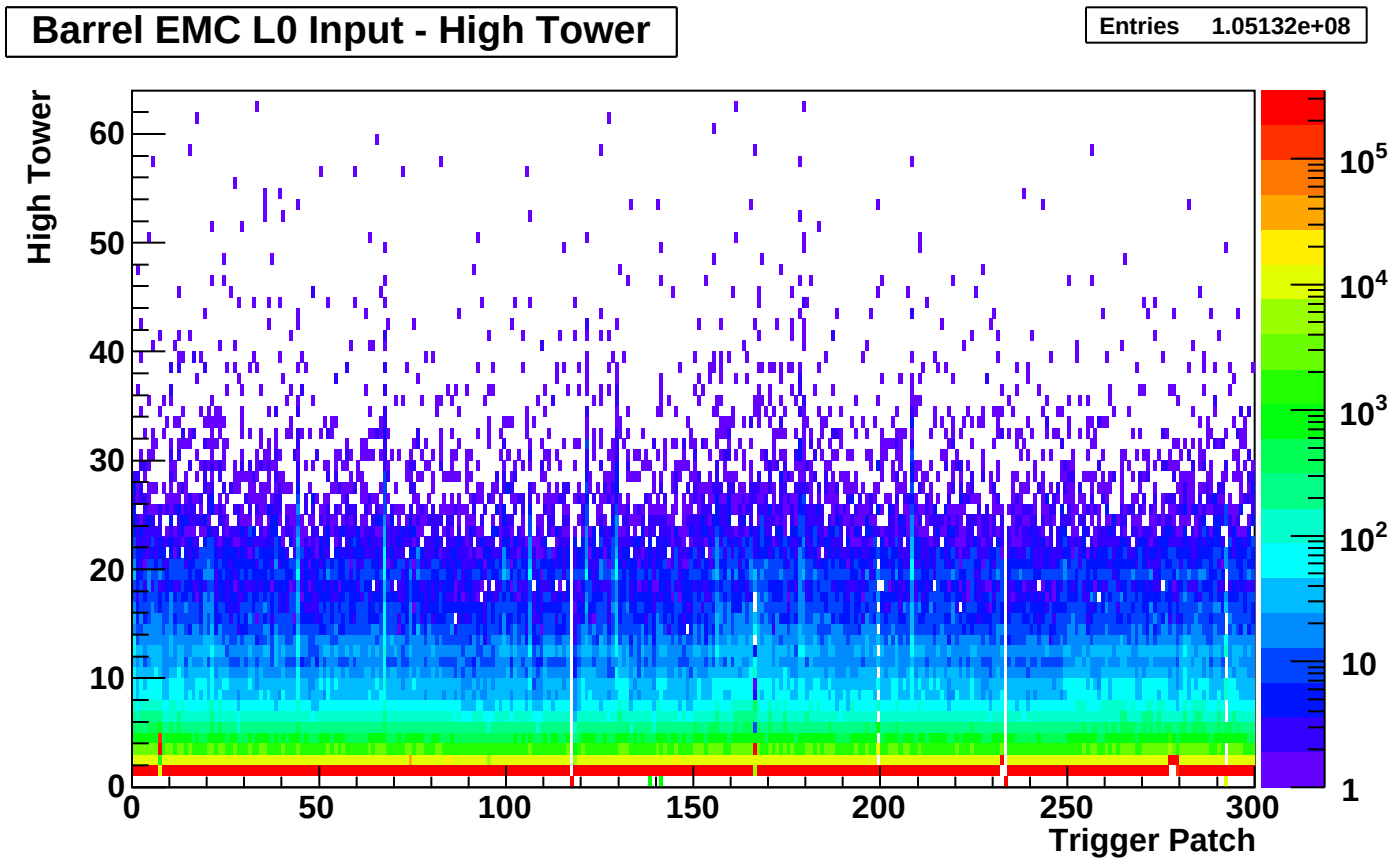

DAQ10k HT bits errors
Entries 13

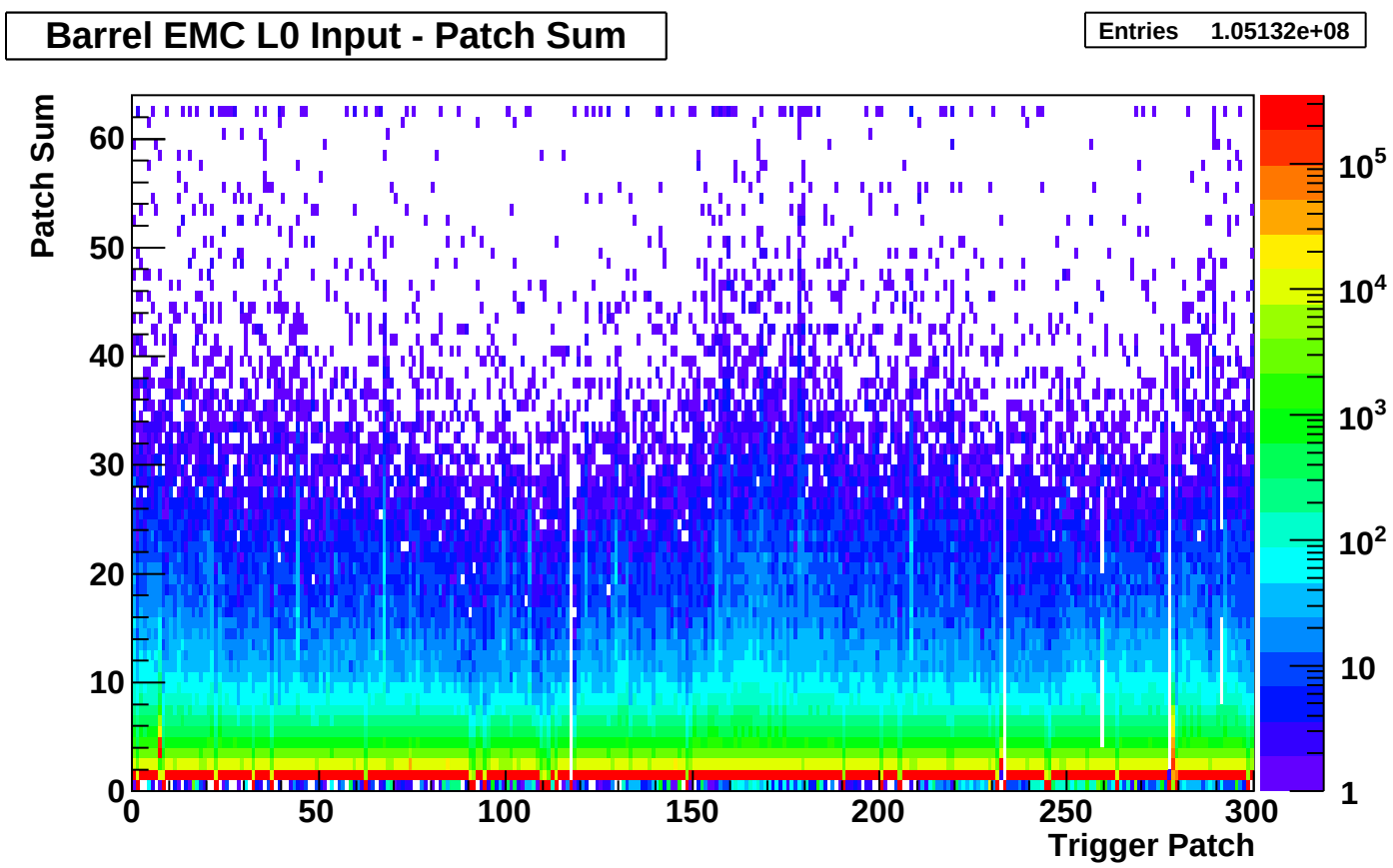

TPC Readout Mask (simulated)
Entries 61551

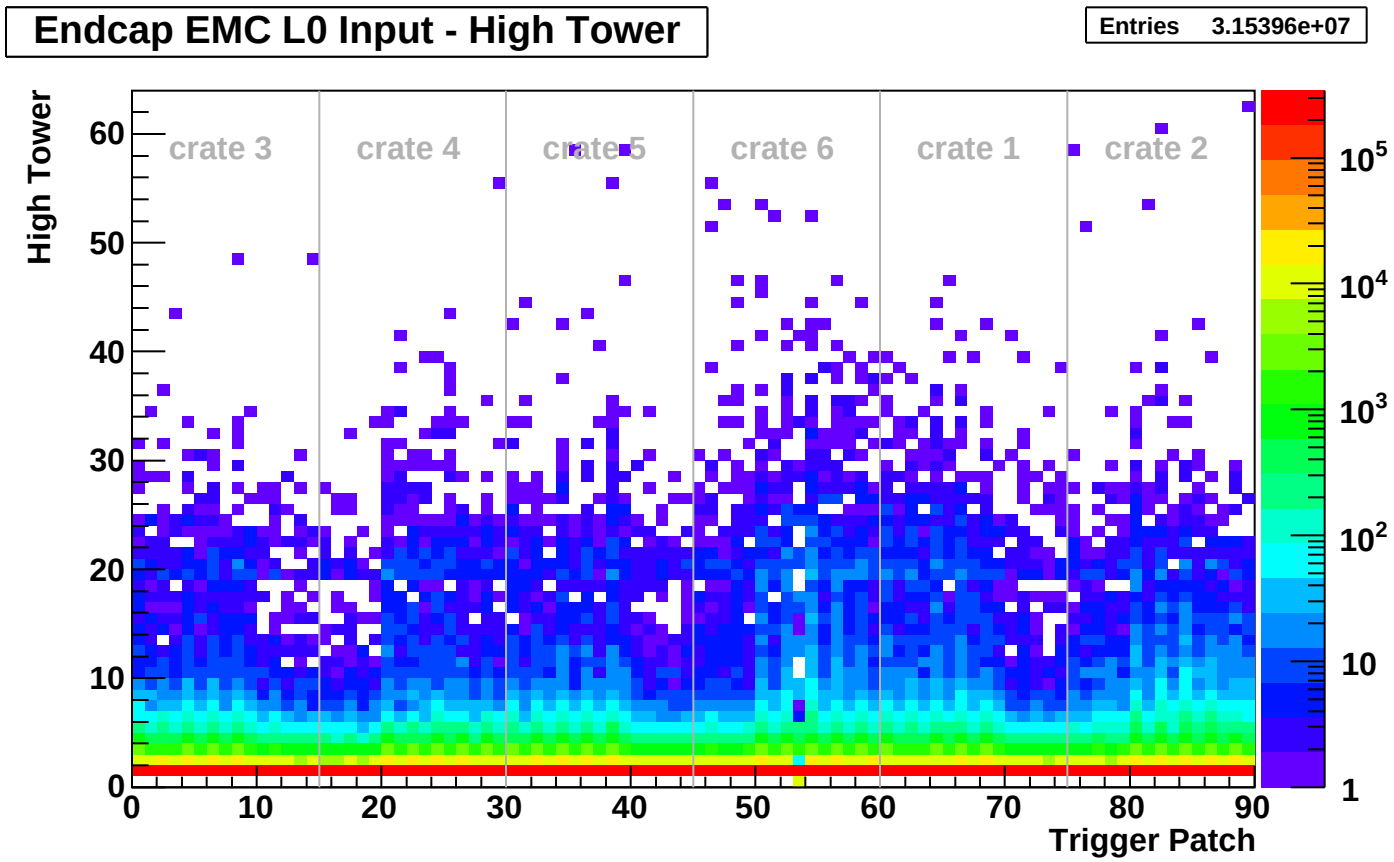

BunchId7Bit (all events)
Entries 350440

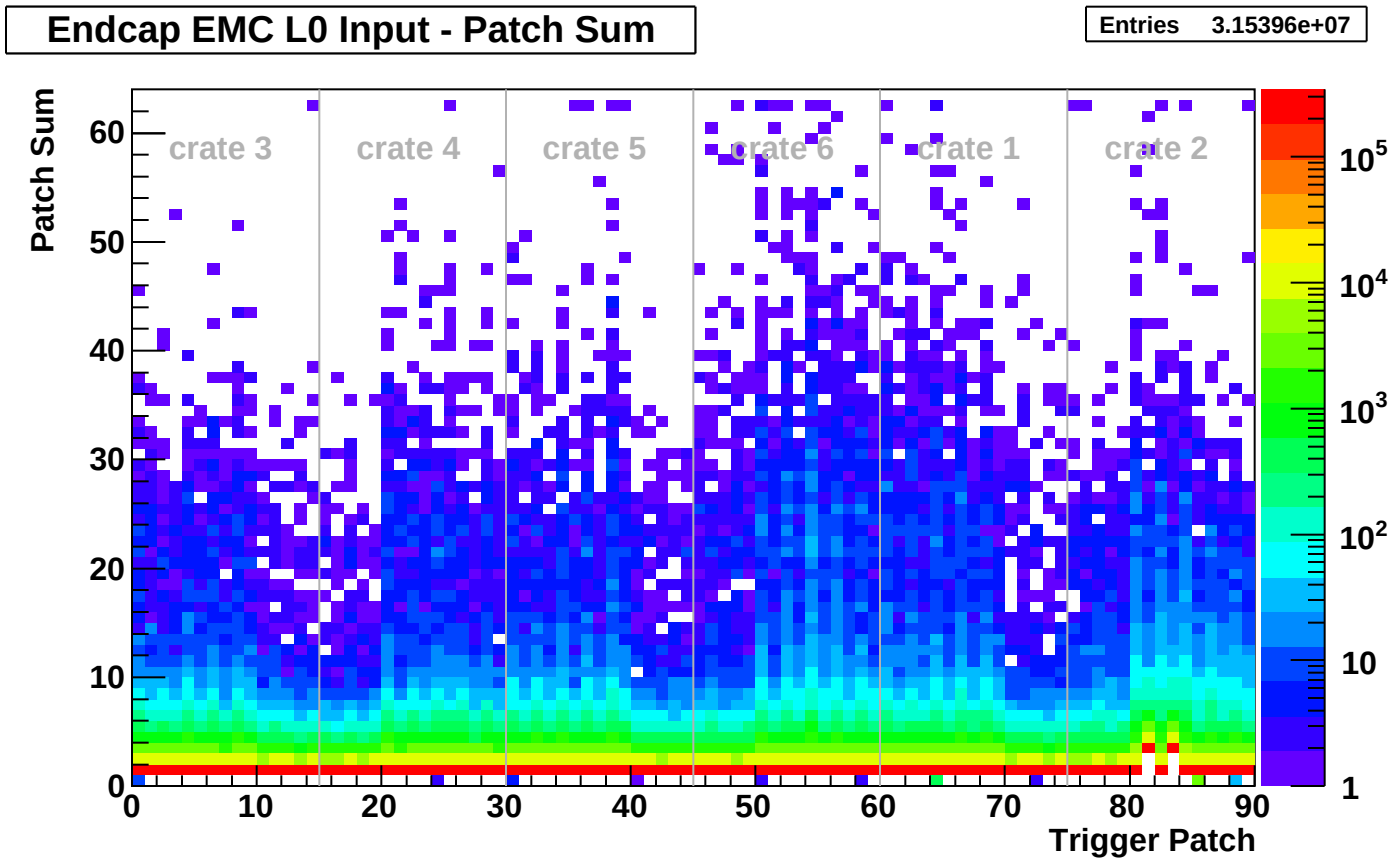

BunchId7Bit (JP1)
Entries 53168

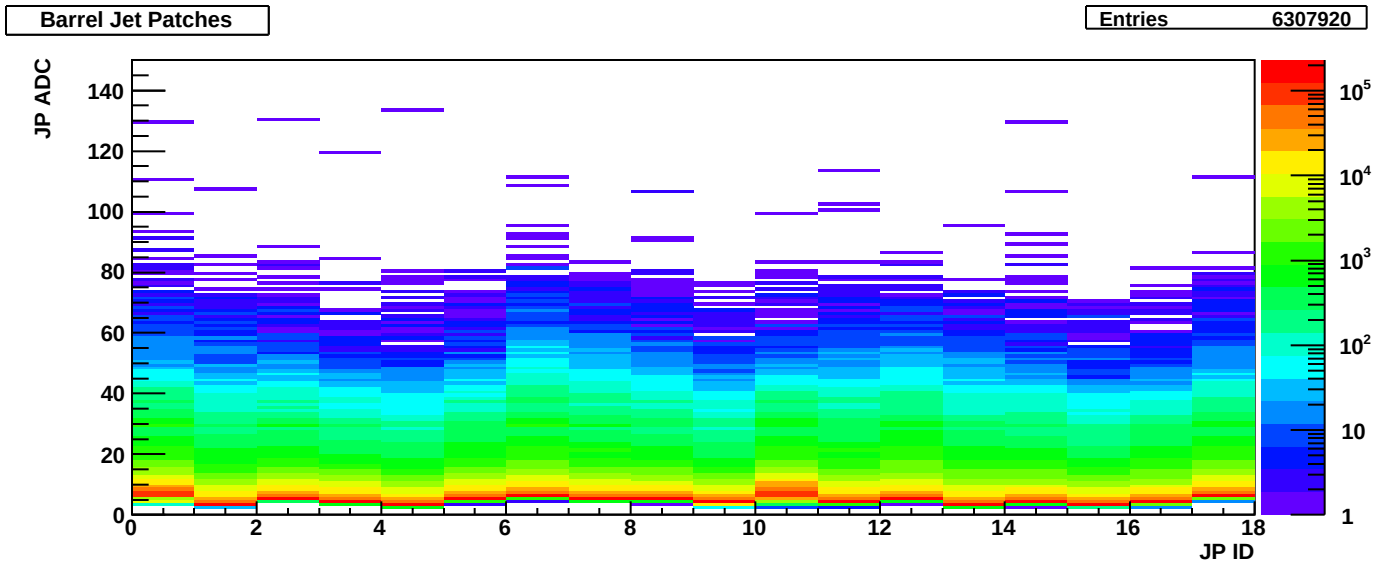

BunchId7Bit (JP2||AJP)
Entries 26491

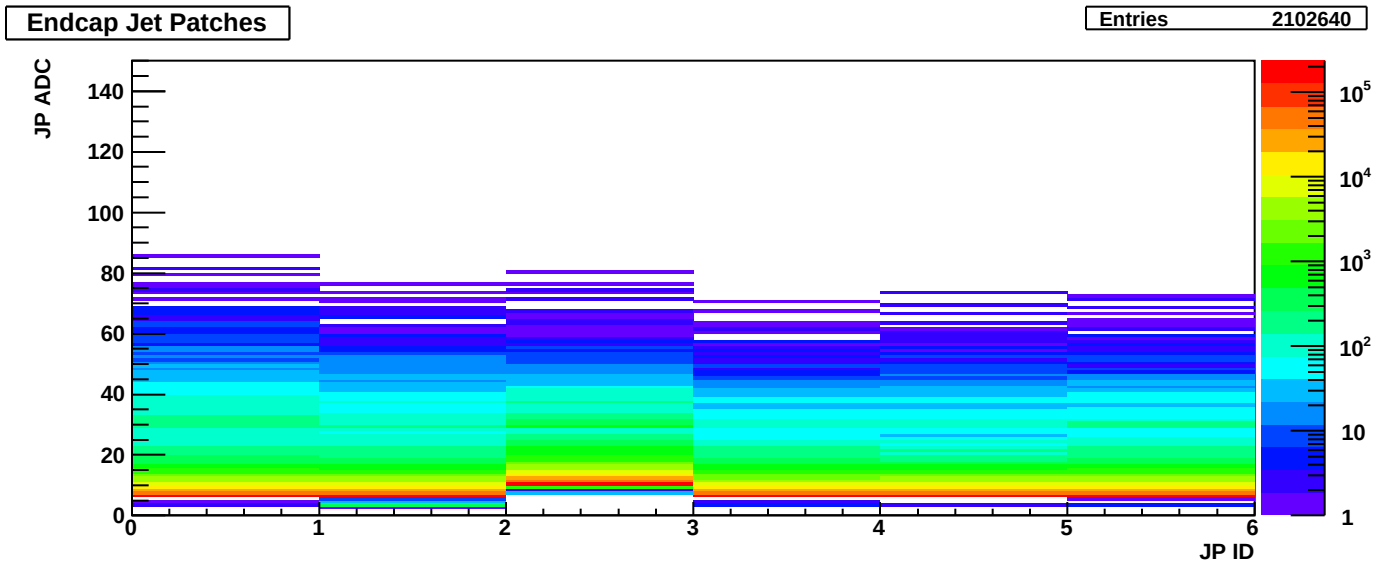

Barrel EMC L0 Input - High Tower
Entries 1.05132e+08
High Tower
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

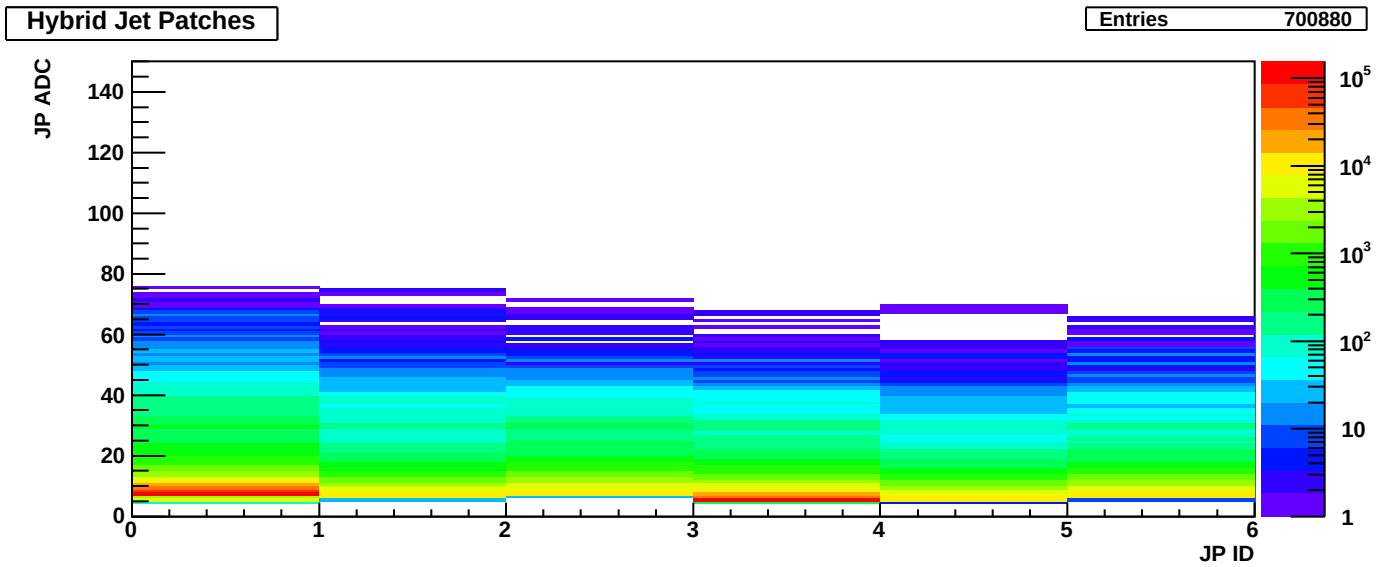

Barrel EMC L0 Input - Patch Sum
Entries 1.05132e+08
Patch Sum
Trigger Patch
0
10
20
30
40
50
60
0
50
100
150
200
250
300
1
10
10^2
10^3
10^4
10^5

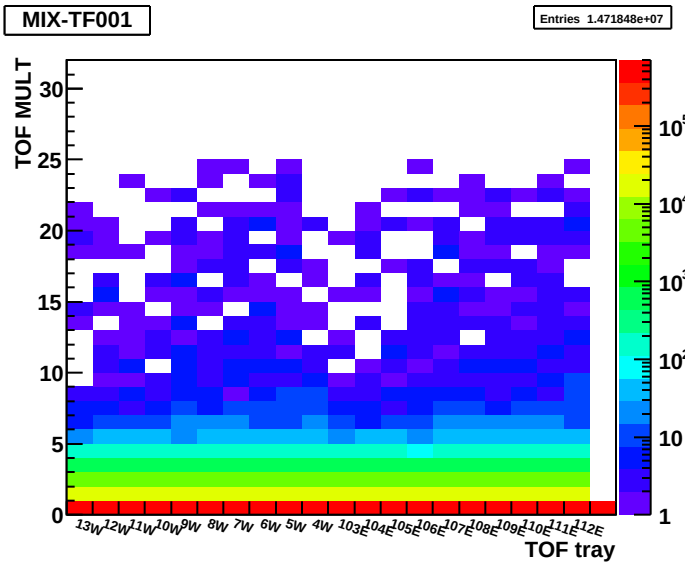

Endcap EMC L0 Input - High Tower
Entries 3.15396e+07
High Tower
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

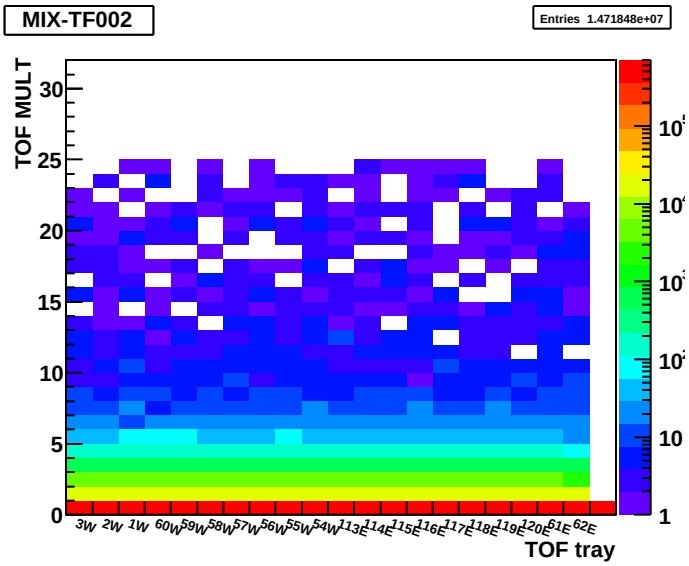

Endcap EMC L0 Input - Patch Sum
Entries 3.15396e+07
Patch Sum
crate 3
crate 4
crate 5
crate 6
crate 1
crate 2
Trigger Patch

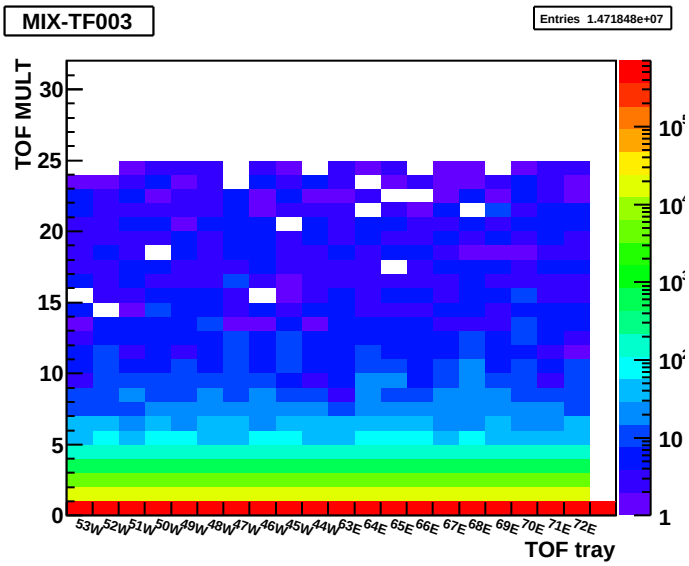

Barrel Jet Patches
Entries 6307920
JP ADC
JP ID

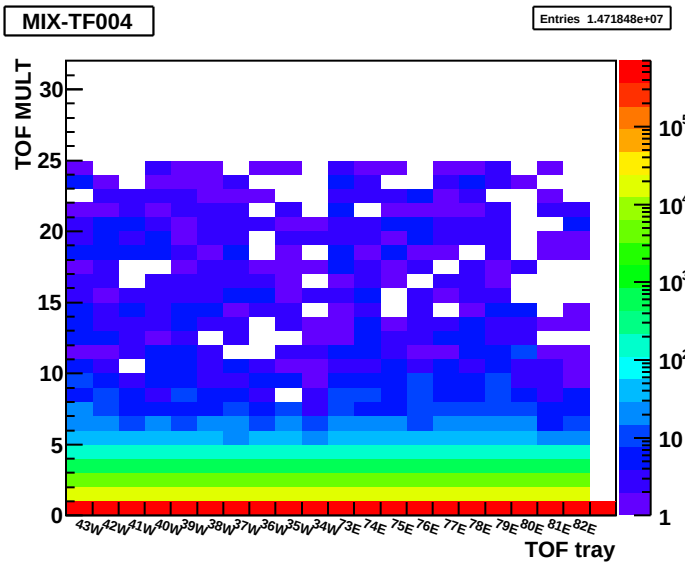

Endcap Jet Patches
Entries 2102640
JP ADC
JP ID

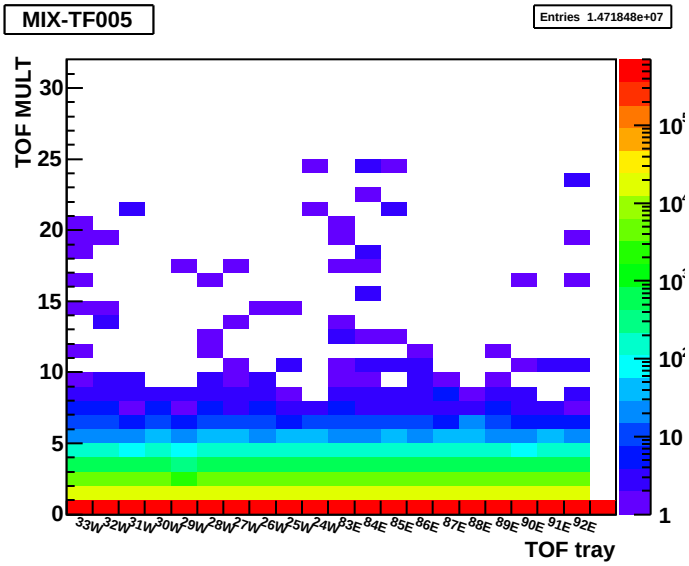

Hybrid Jet Patches
Entries 700880
JP ADC
JP ID

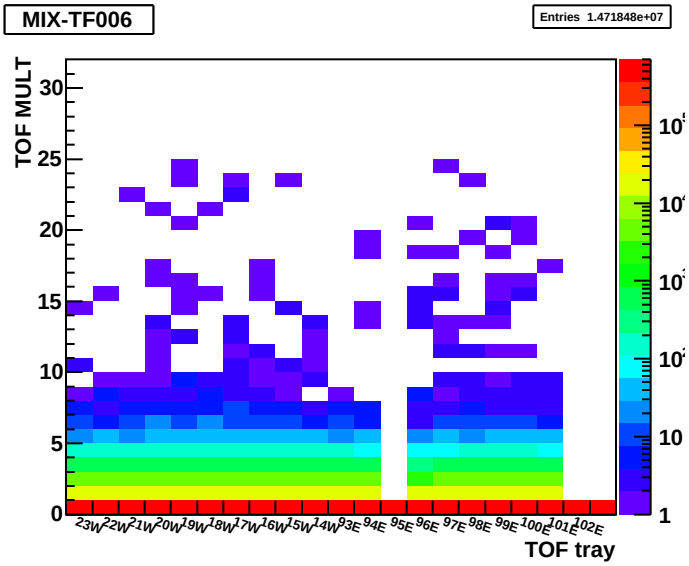

MIX-TF001
Entries 1.471848e+07
TOF MULT
TOF tray

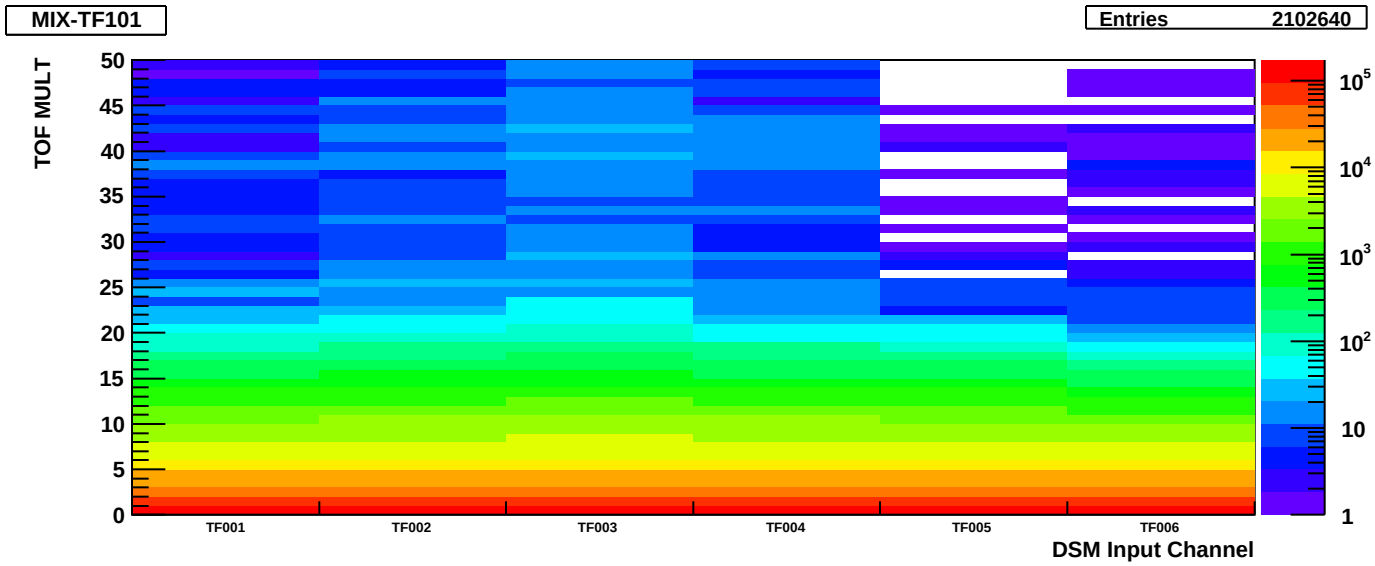

MIX-TF002
Entries 1.471848e+07
TOF MULT
TOF tray

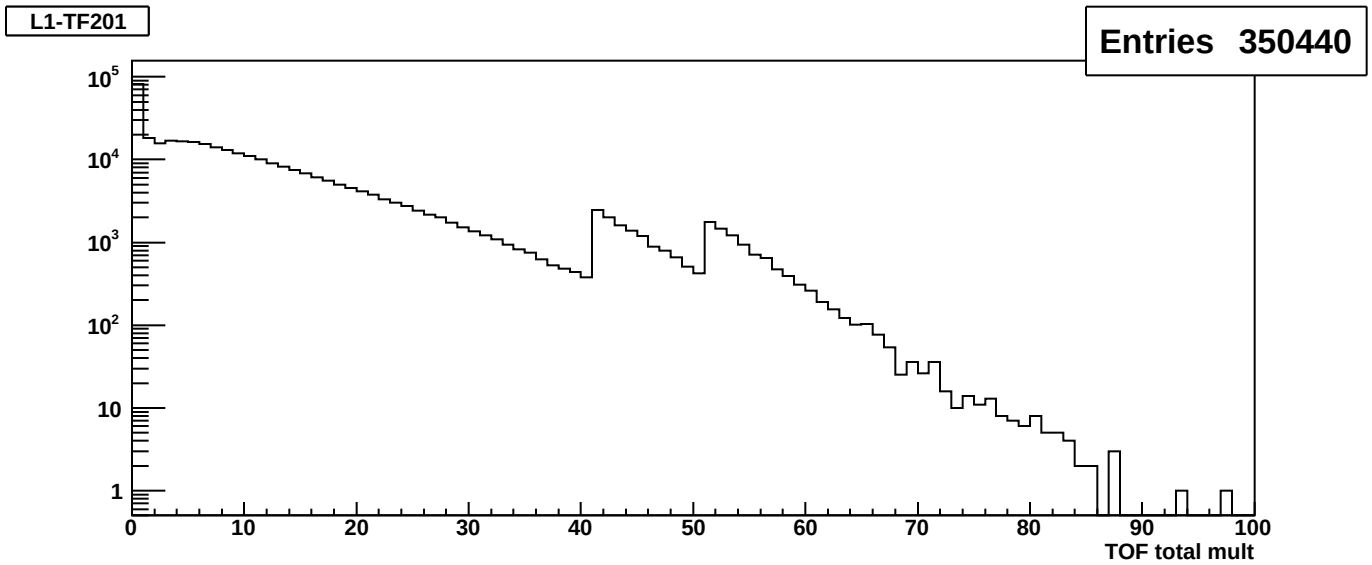

MIX-TF003
Entries 1.471848e+07
TOF MULT
TOF tray

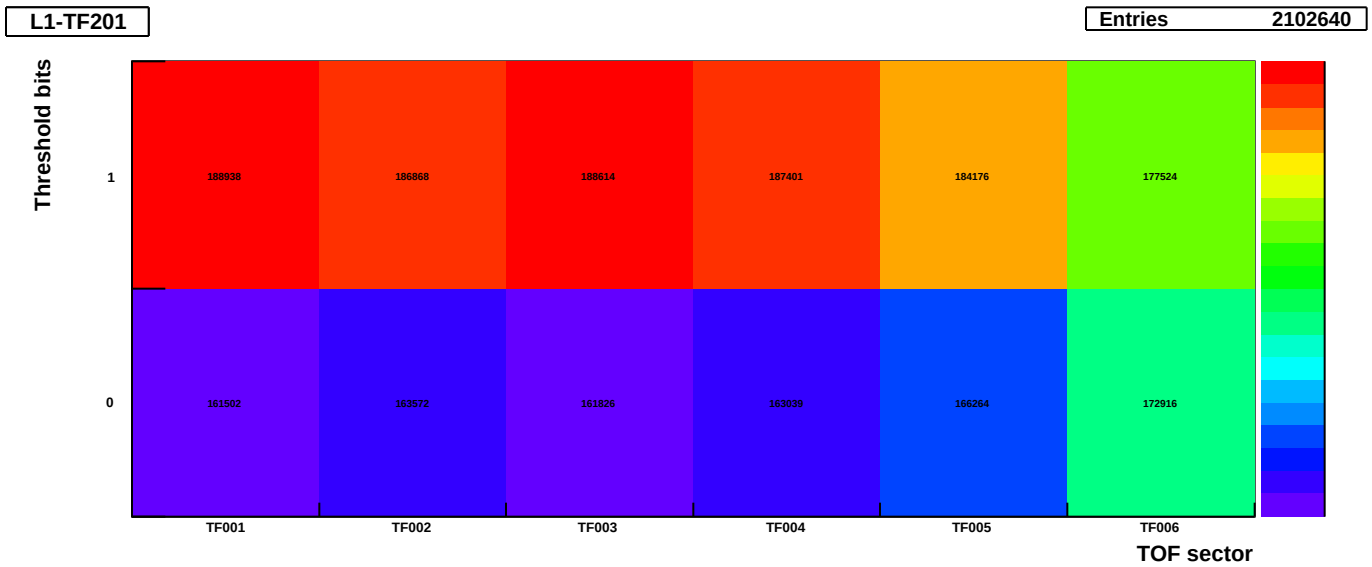

MIX-TF004
Entries 1.471848e+07
TOF MULT
TOF tray

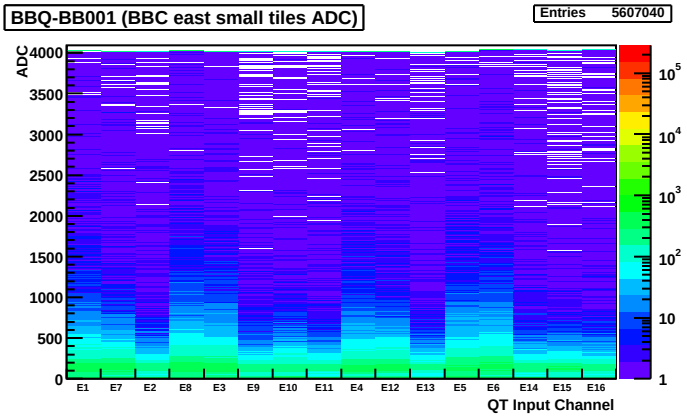

MIX-TF005
Entries 1.471848e+07
TOF MULT
TOF tray

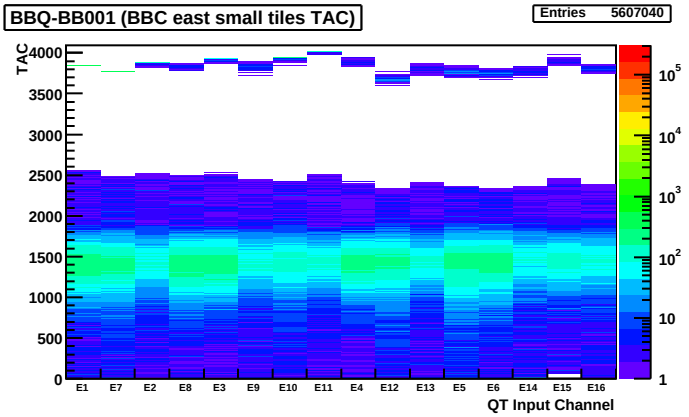

MIX-TF006
Entries 1.471848e+07
TOF MULT
TOF tray

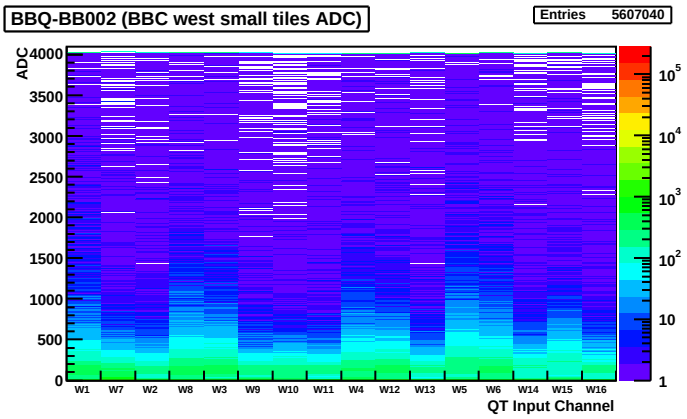

MIX-TF101
Entries 2102640
TOF MULT
50
45
40
35
30
25
20
15
10
5
0
TF001
TF002
TF003
TF004
TF005
TF006
DSM Input Channel
10^5
10^4
10^3
10^2
10
1

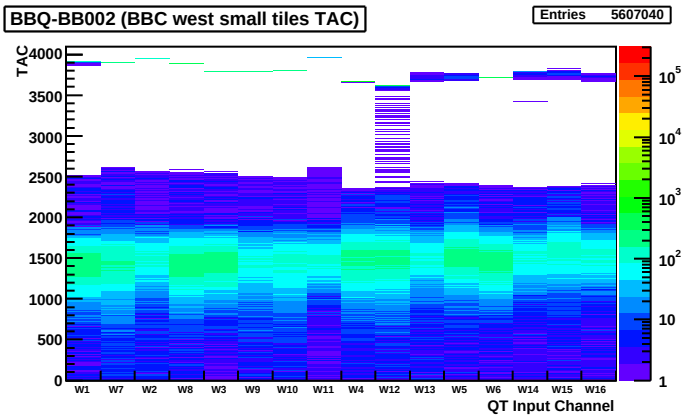

L1-TF201
Entries 350440
10^5
10^4
10^3
10^2
10
1
0
10
20
30
40
50
60
70
80
90
100
TOF total mult

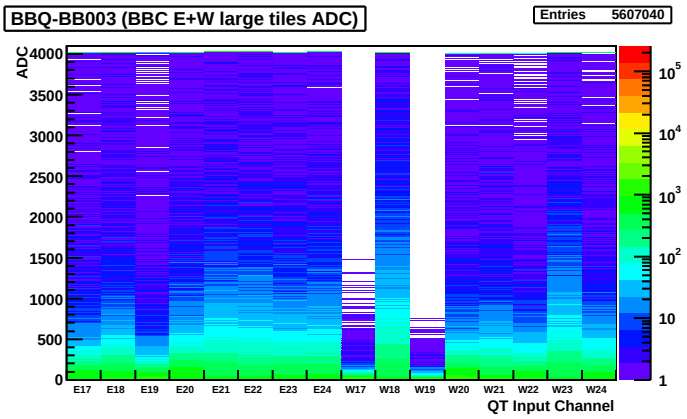

L1-TF201
Entries 2102640
Threshold bits
1
0
188938
186868
188614
187401
184176
177524
161502
163572
161826
163039
166264
172916
TF001
TF002
TF003
TF004
TF005
TF006
TOF sector

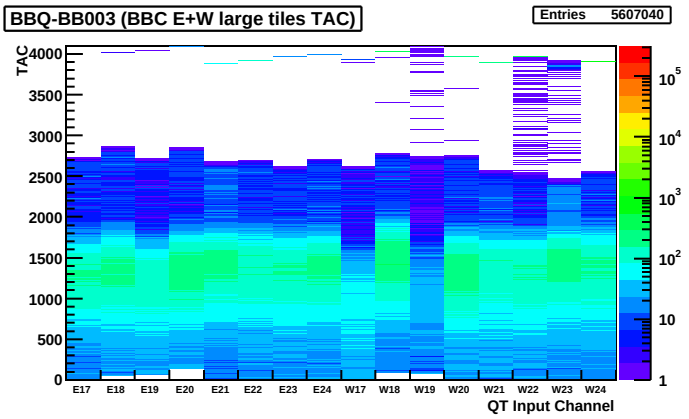

BBQ-BB001 (BBC east small tiles ADC)
Entries 5607040
ADC
QT Input Channel

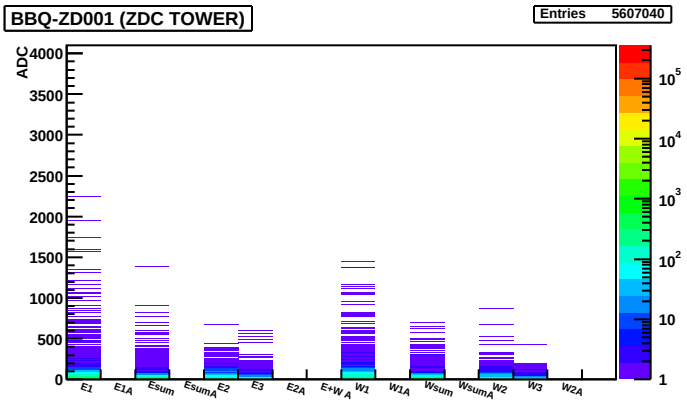

BBQ-BB001 (BBC east small tiles TAC)
Entries 5607040
TAC
QT Input Channel

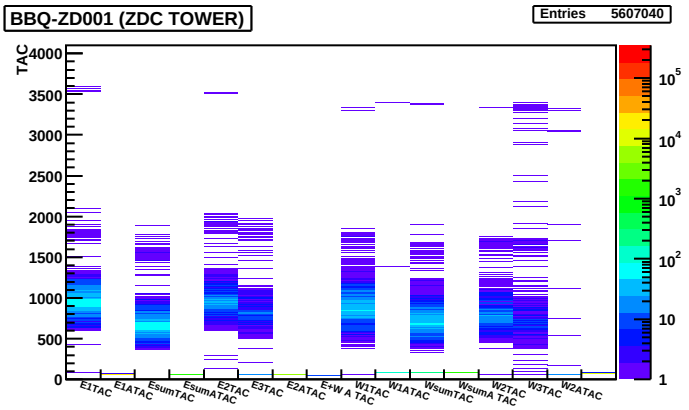

BBQ-BB002 (BBC west small tiles ADC)
Entries 5607040
ADC
QT Input Channel

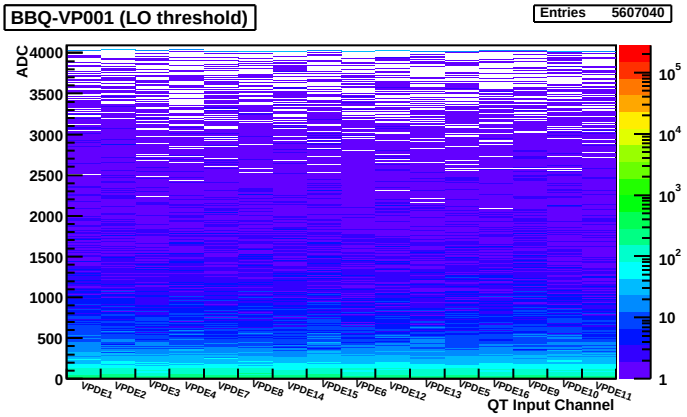

BBQ-BB002 (BBC west small tiles TAC)
Entries 5607040
TAC
QT Input Channel

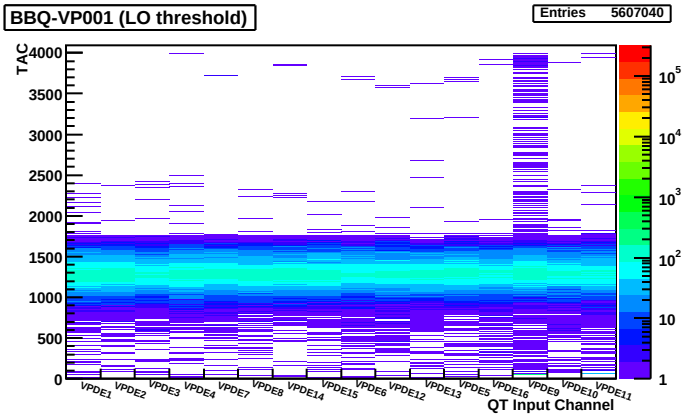

BBQ-BB003 (BBC E+W large tiles ADC)
Entries 5607040
ADC
QT Input Channel

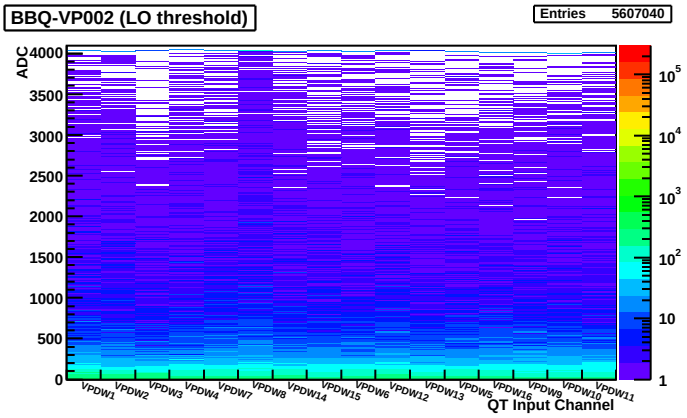

BBQ-BB003 (BBC E+W large tiles TAC)
Entries 5607040
TAC
QT Input Channel

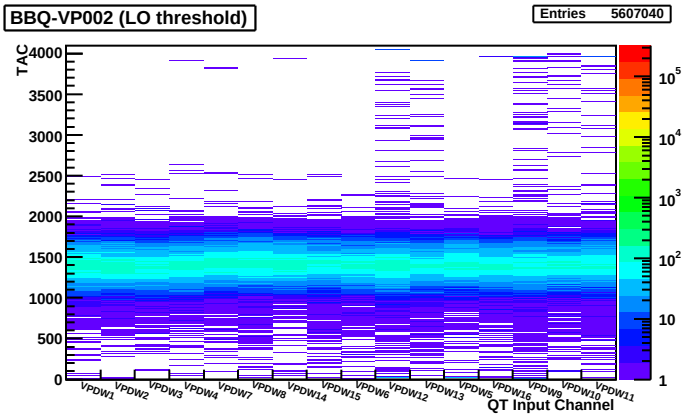

BBQ-ZD001 (ZDC TOWER)
Entries 5607040
ADC

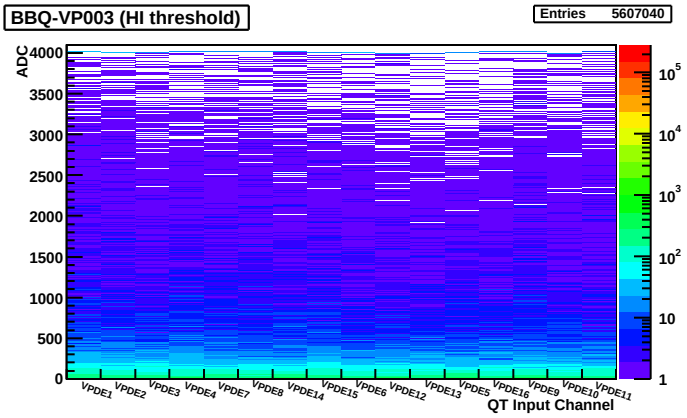

BBQ-ZD001 (ZDC TOWER)
Entries 5607040
TAC

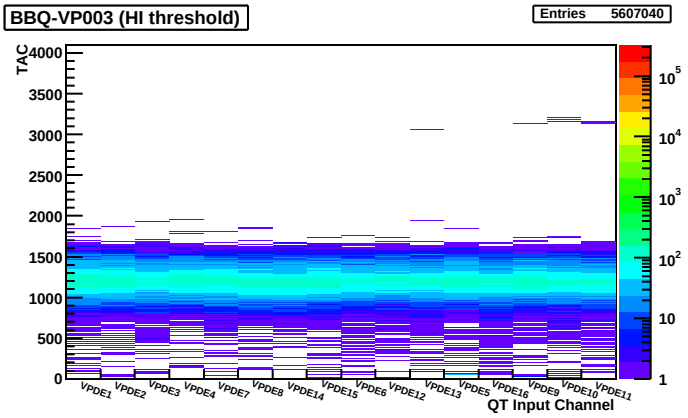

BBQ-VP001 (LO threshold)
Entries 5607040
ADC
QT Input Channel

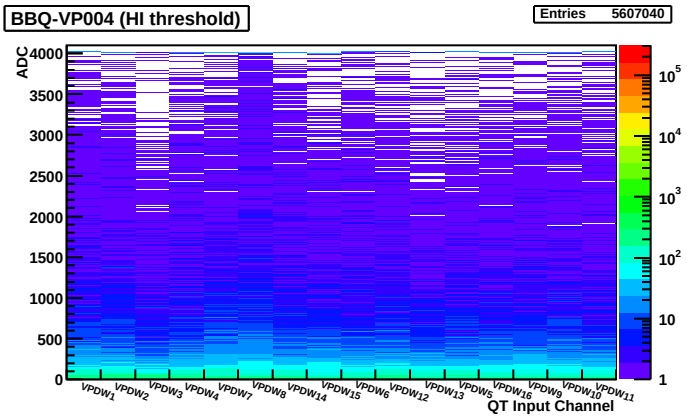

BBQ-VP001 (LO threshold)
Entries 5607040
TAC
QT Input Channel

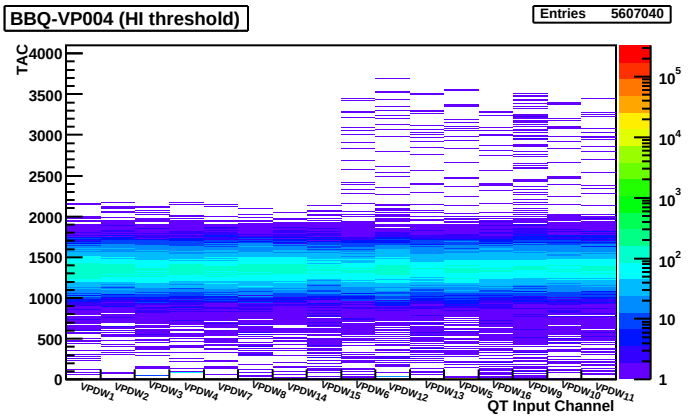

BBQ-VP002 (LO threshold)
Entries 5607040
ADC
QT Input Channel

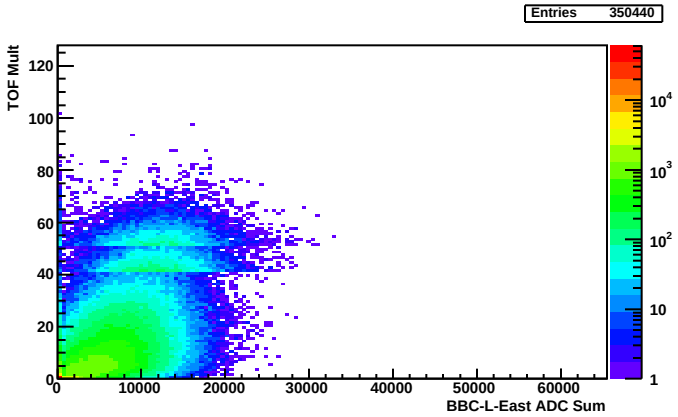

BBQ-VP002 (LO threshold)
Entries 5607040
TAC
QT Input Channel

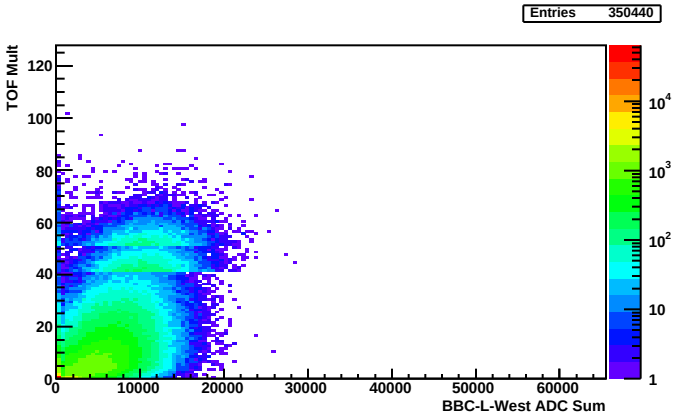

BBQ-VP003 (HI threshold)
Entries 5607040
ADC
QT Input Channel

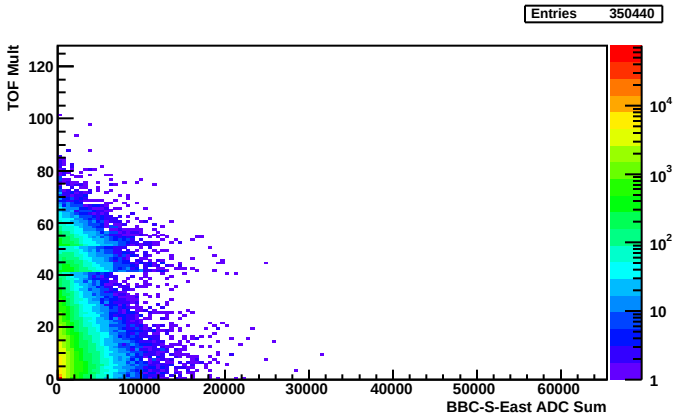

BBQ-VP003 (HI threshold)
Entries 5607040
TAC
QT Input Channel

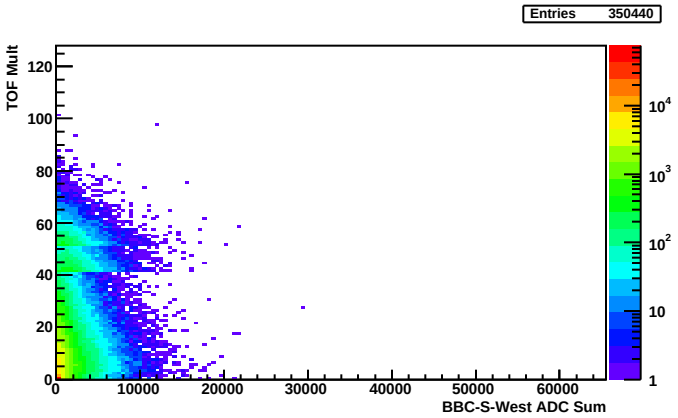

BBQ-VP004 (HI threshold)
Entries 5607040
ADC
QT Input Channel

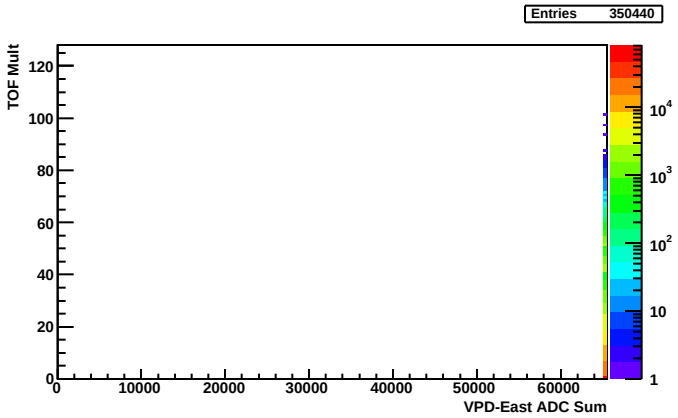

BBQ-VP004 (HI threshold)
Entries 5607040
TAC
QT Input Channel

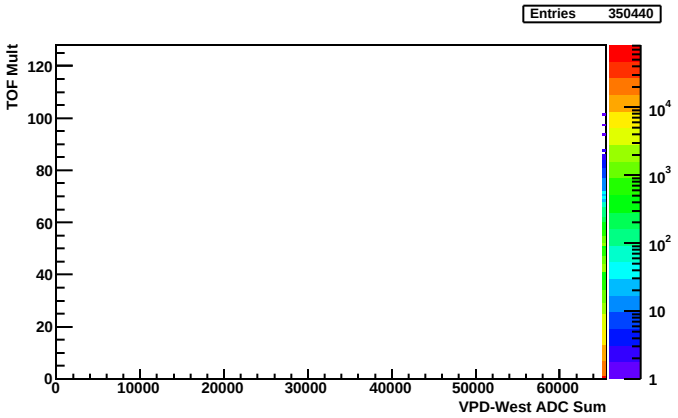

Entries 350440
TOF Mult
BBC-L-East ADC Sum

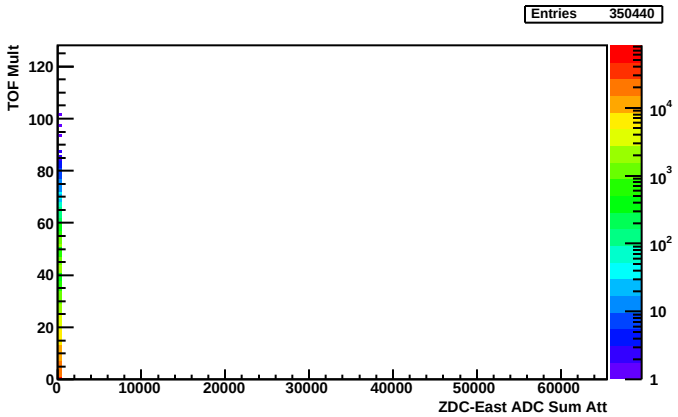

Entries 350440
TOF Mult
BBC-L-West ADC Sum

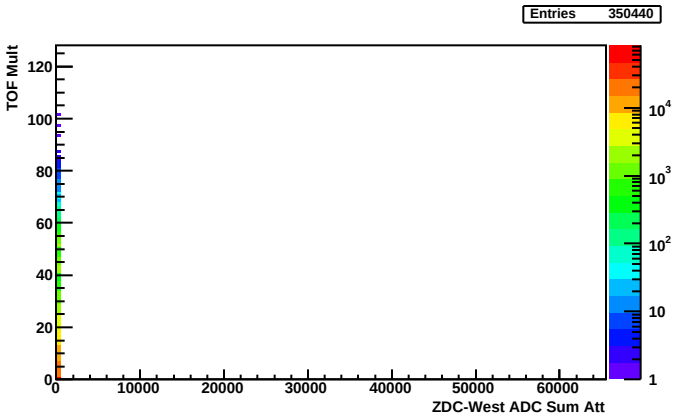

Entries 350440
TOF Mult
BBC-S-East ADC Sum

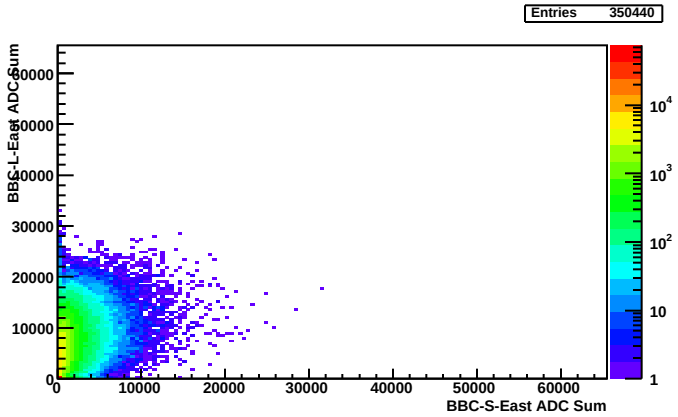

Entries 350440
TOF Mult
BBC-S-West ADC Sum

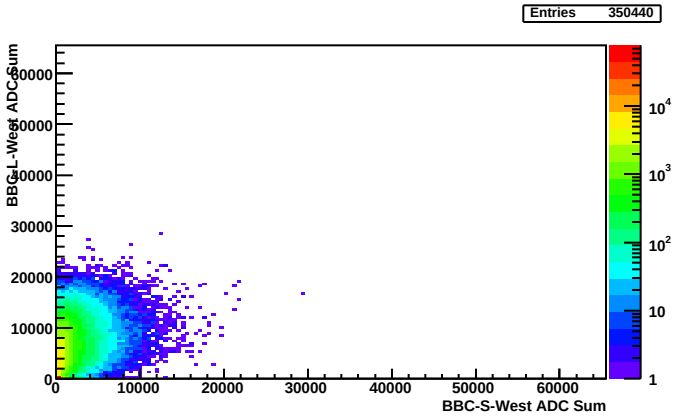

Entries 350440
TOF Mult
VPD-East ADC Sum

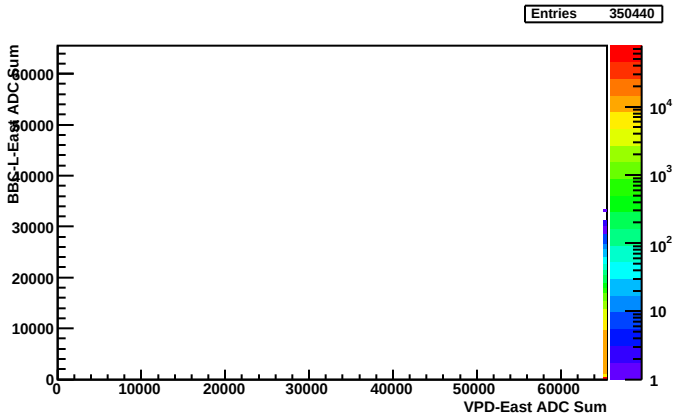

Entries 350440
TOF Mult
VPD-West ADC Sum

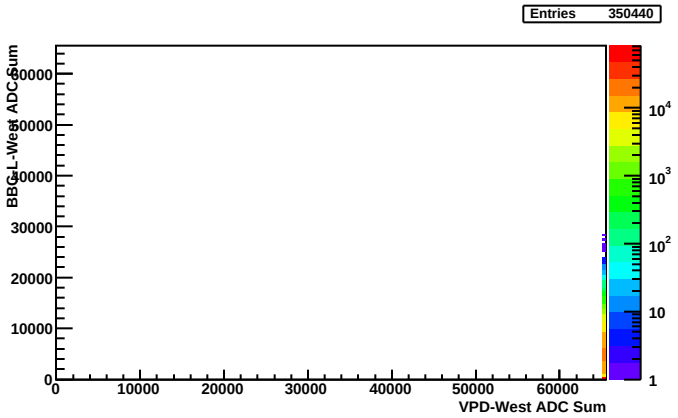

Entries 350440
TOF Mult
ZDC-East ADC Sum Att

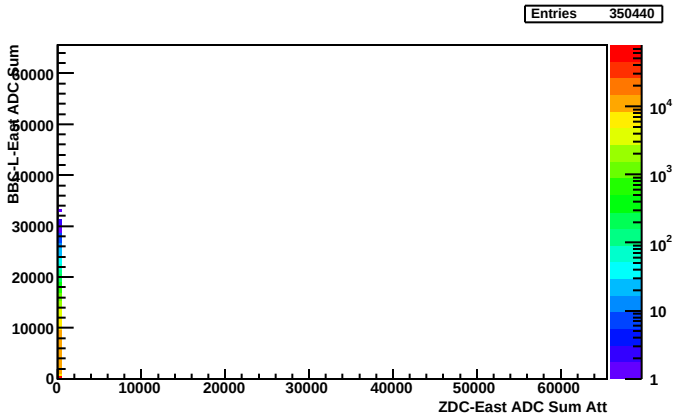

Entries 350440
TOF Mult
ZDC-West ADC Sum Att

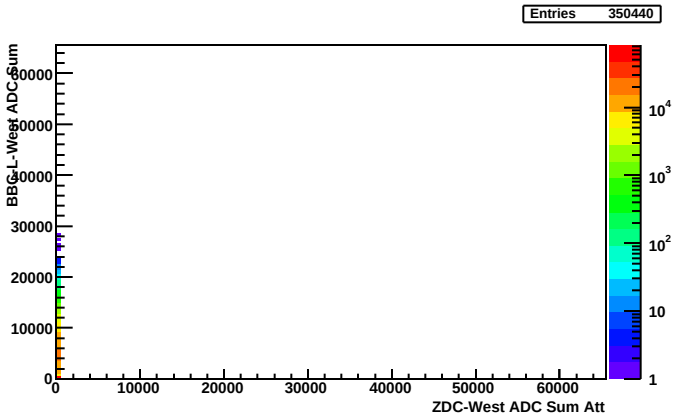

Entries 350440
BBC-L-East ADC Sum
BBC-S-East ADC Sum

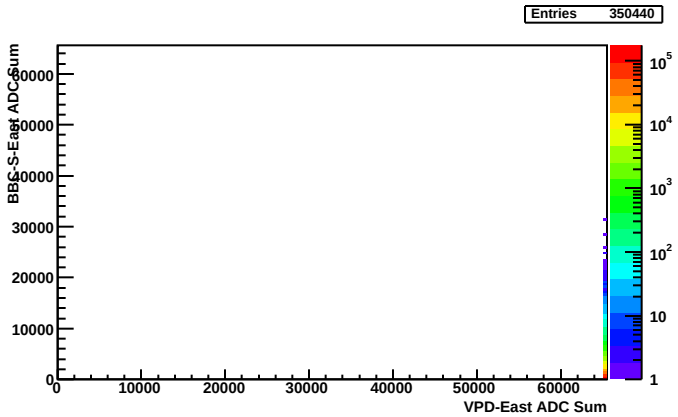

Entries 350440
BBC-L-West ADC Sum
BBC-S-West ADC Sum

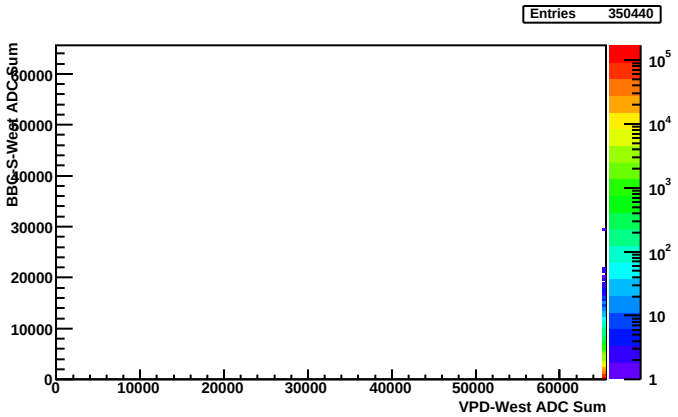

Entries 350440
BBC-L-East ADC Sum
VPD-East ADC Sum

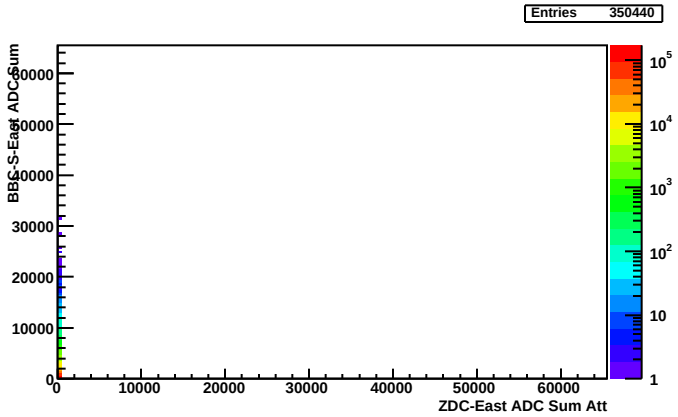

Entries 350440
BBC-L-West ADC Sum
VPD-West ADC Sum

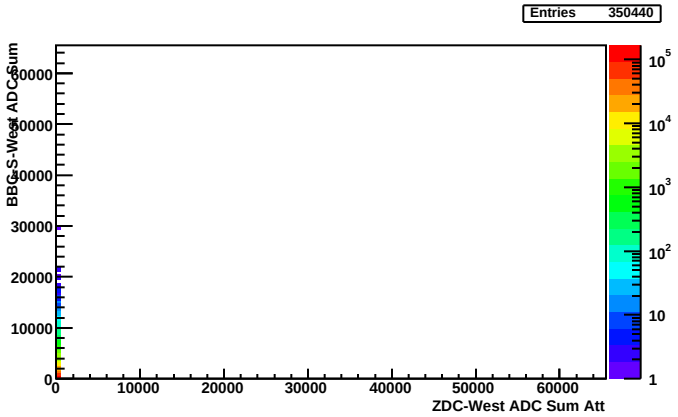

Entries 350440
BBC-L-East ADC Sum
ZDC-East ADC Sum Att

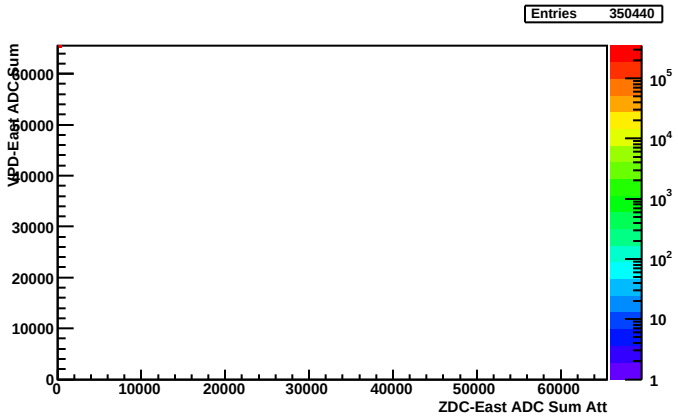

Entries 350440
BBC-L-West ADC Sum
ZDC-West ADC Sum Att

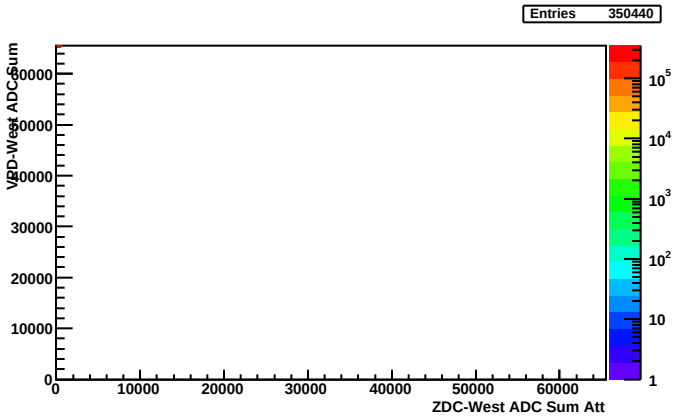

Entries 350440
BBC-S-East ADC Sum
VPD-East ADC Sum


Entries 350440
BBC-S-West ADC Sum
VPD-West ADC Sum


Entries 350440
BBC-S-East ADC Sum
ZDC-East ADC Sum Att


Entries 350440
BBC-S-West ADC Sum
ZDC-West ADC Sum Att


Entries 350440
VPD-East ADC Sum
ZDC-East ADC Sum Att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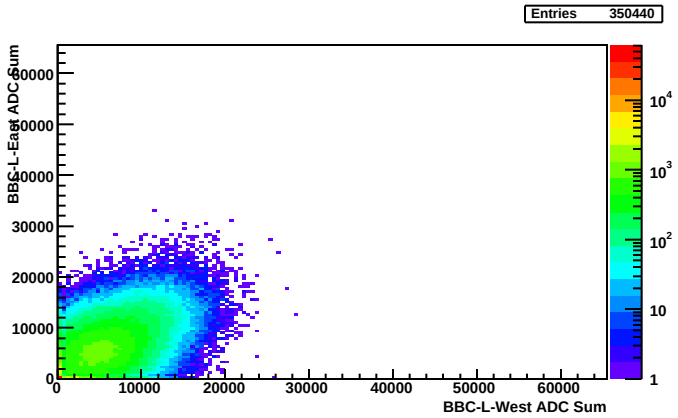
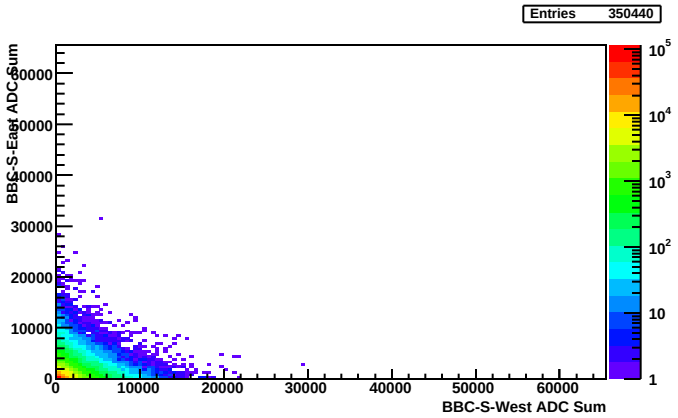
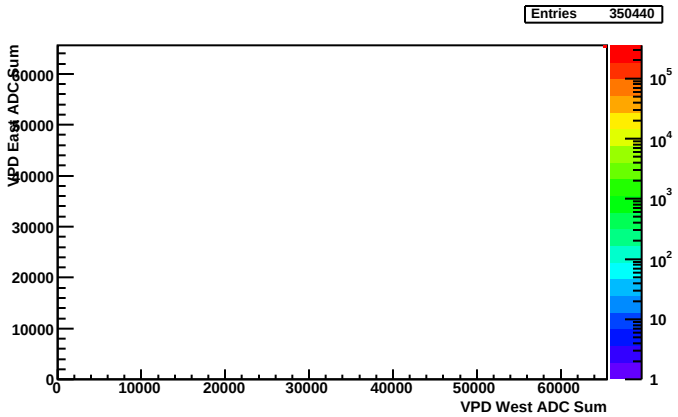
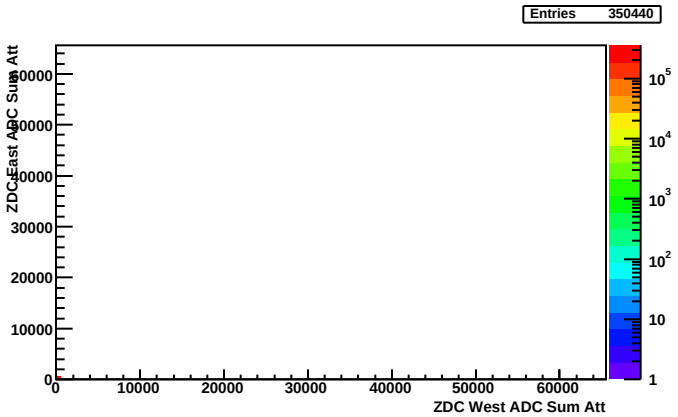
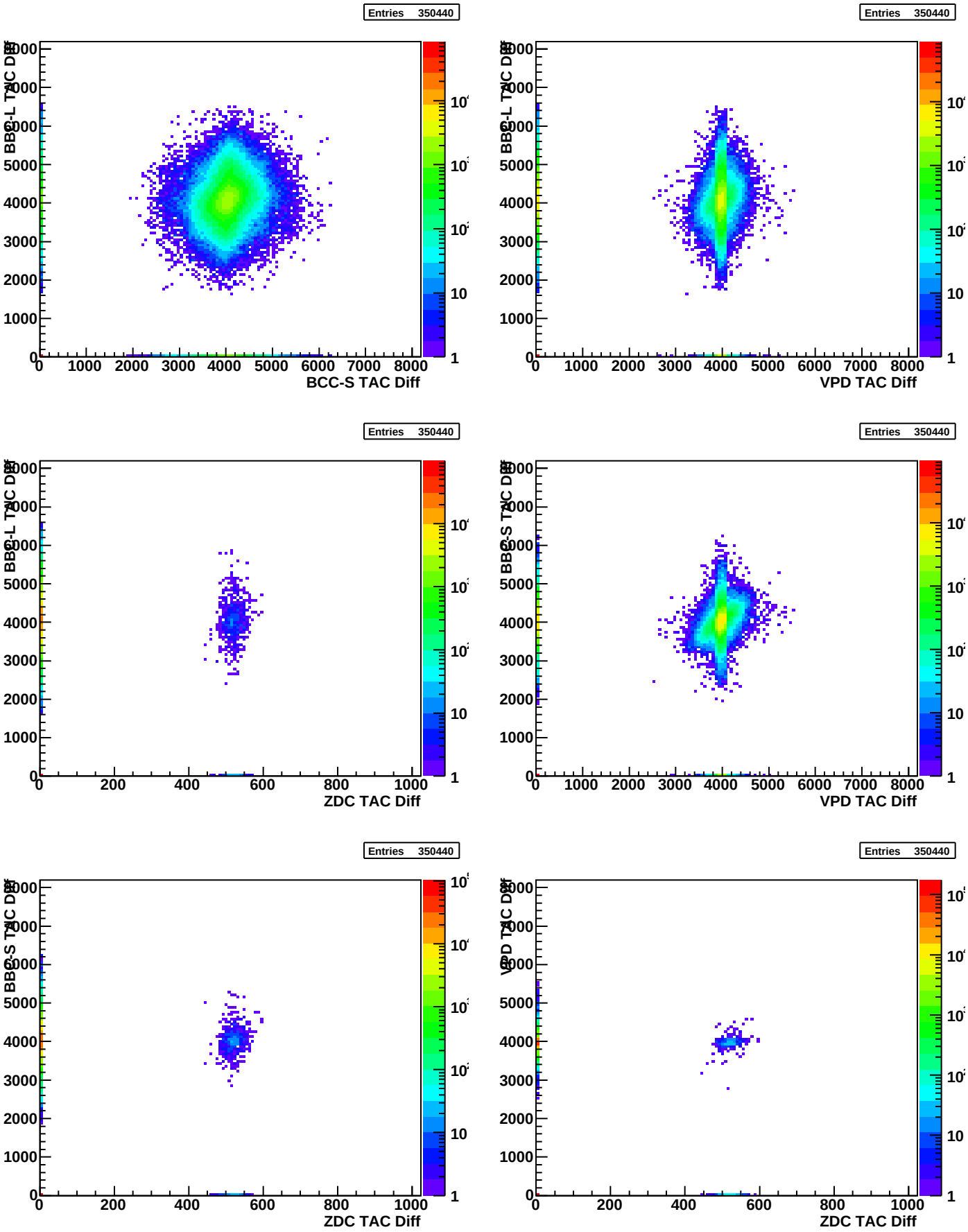
VPD-West ADC Sum
ZDC-West ADC Sum Att

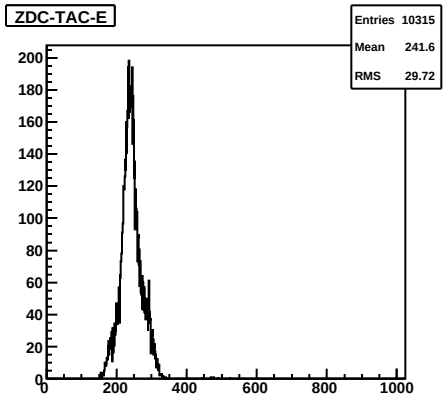

Entries 350440
BBC-L-East ADC Sum
BBC-L-West ADC Sum

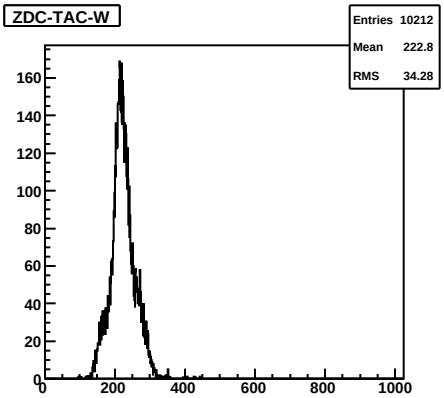

Entries 350440
BBC-S-East ADC Sum
BBC-S-West ADC Sum

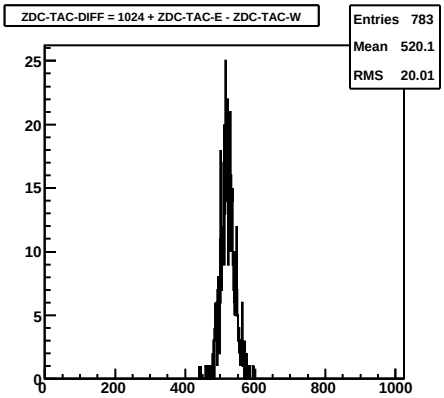

Entries 350440
VPD East ADC Sum
VPD West ADC Sum

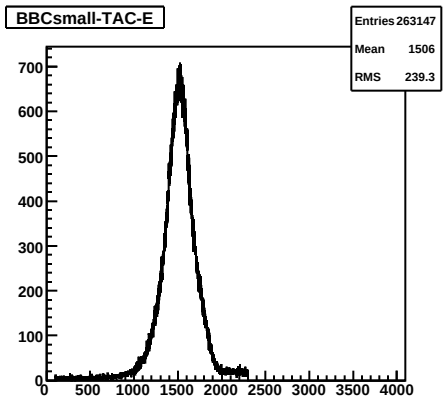

Entries 350440
ZDC East ADC Sum Att
ZDC West ADC Sum Att

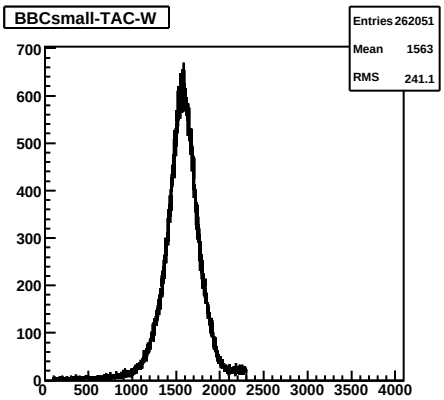

Entries 350440
BBC-L TAC Diff
BCC-S TAC Diff
Entries 350440
BBC-L TAC Diff
VPD TAC Diff
Entries 350440
BBC-L TAC Diff
ZDC TAC Diff
Entries 350440
BBC-S TAC Diff
VPD TAC Diff
Entries 350440
BBC-S TAC Diff
ZDC TAC Diff
Entries 350440
VPD TAC Diff
ZDC TAC Diff

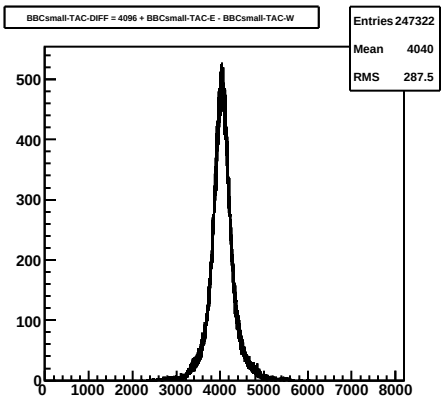

ZDC-TAC-E
Entries 10315
Mean 241.6
RMS 29.72

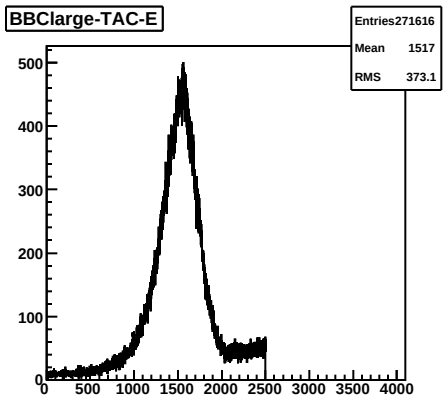

ZDC-TAC-W
Entries 10212
Mean 222.8
RMS 34.28

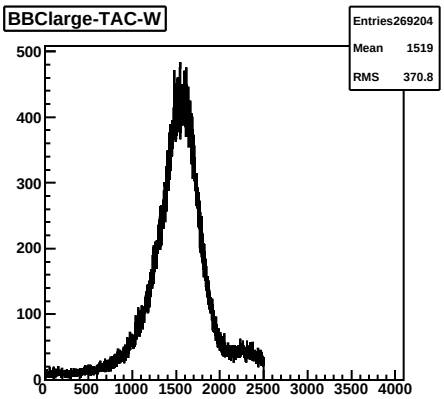

ZDC-TAC-DIFF = 1024 + ZDC-TAC-E - ZDC-TAC-W
Entries 783
Mean 520.1
RMS 20.01

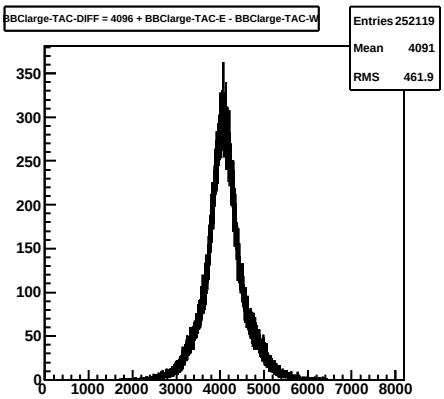

BBCsmall-TAC-E
Entries 263147
Mean 1506
RMS 239.3

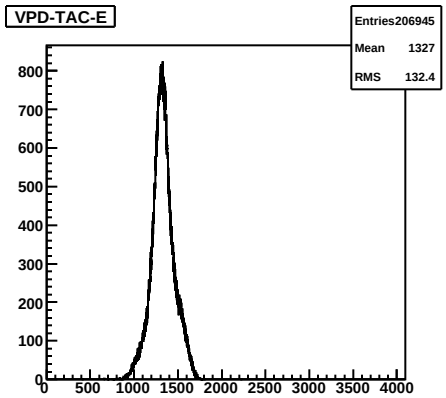

BBCsmall-TAC-W
Entries 262051
Mean 1563
RMS 241.1

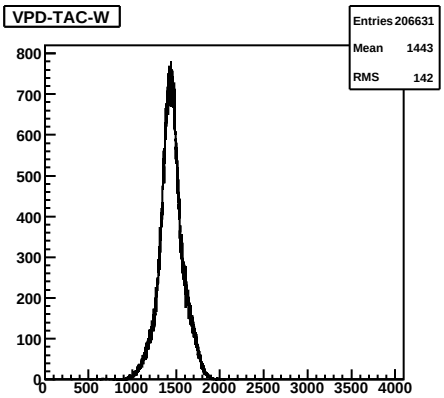

BBCsmall-TAC-DIFF = 4096 + BBCsmall-TAC-E - BBCsmall-TAC-W
Entries 247322
Mean 4040
RMS 287.5

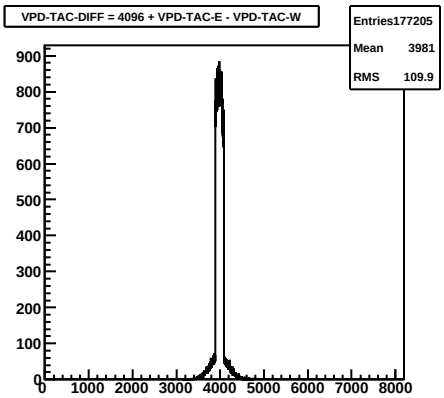

BBClarge-TAC-E
Entries 271616
Mean 1517
RMS 373.1

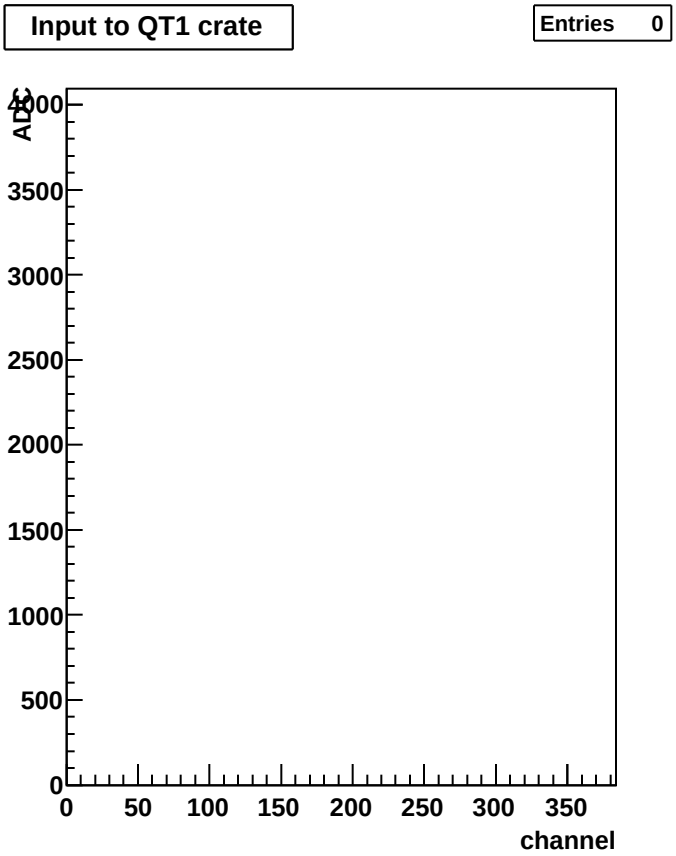

BBClarge-TAC-W
Entries 269204
Mean 1519
RMS 370.8

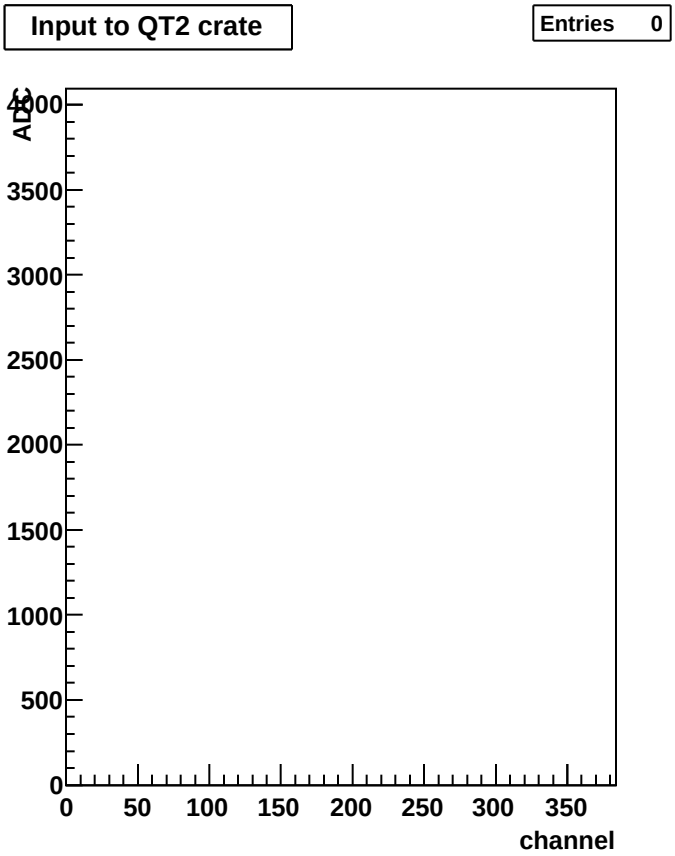

BBClarge-TAC-DIFF = 4096 + BBClarge-TAC-E - BBClarge-TAC-W
Entries 252119
Mean 4091
RMS 461.9

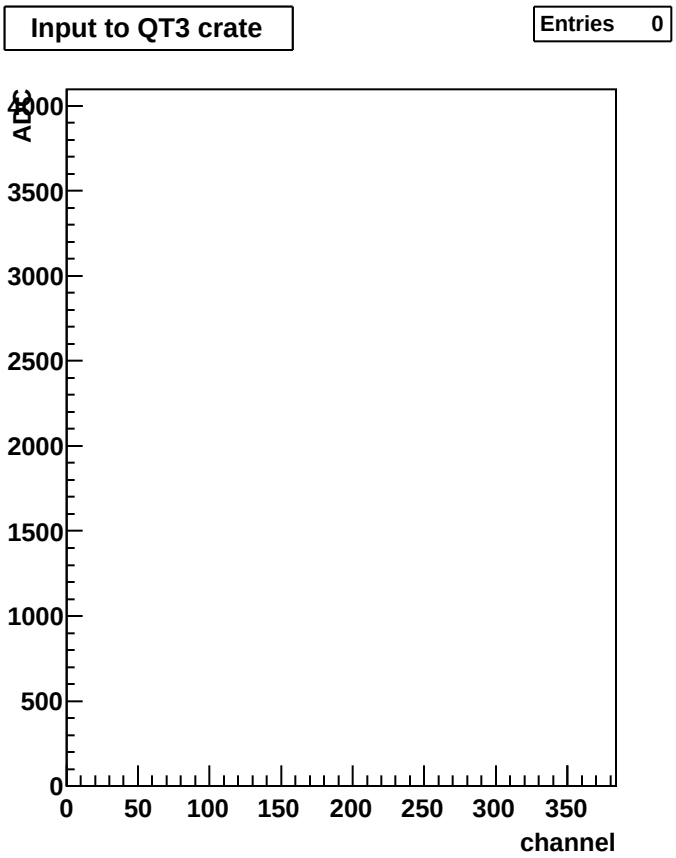

VPD-TAC-E
Entries 206945
Mean 1327
RMS 132.4

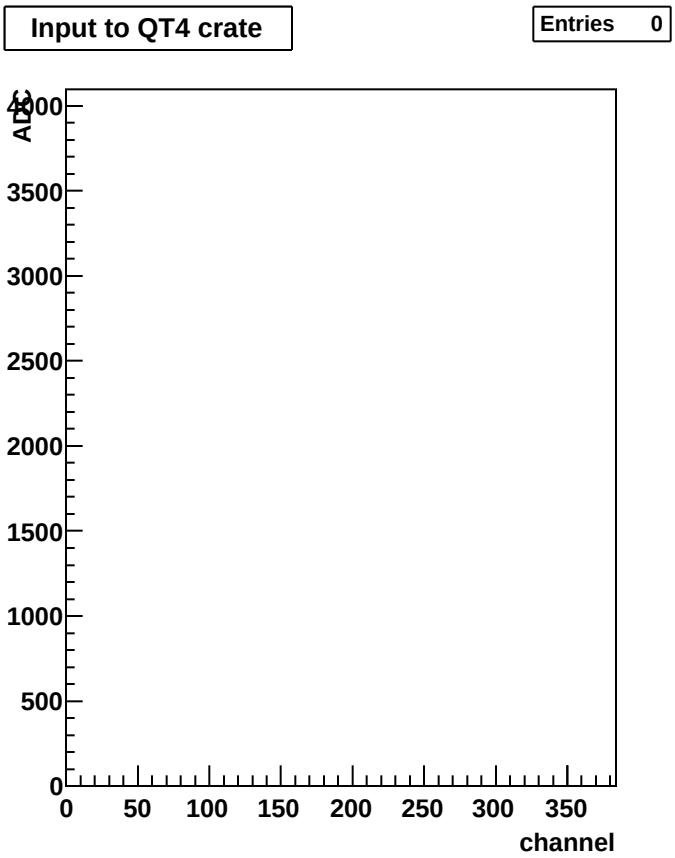

VPD-TAC-W
Entries 206631
Mean 1443
RMS 142

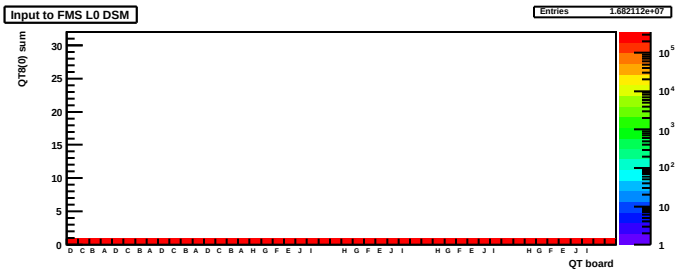

VPD-TAC-DIFF = 4096 + VPD-TAC-E - VPD-TAC-W
Entries 177205
Mean 3981
RMS 109.9

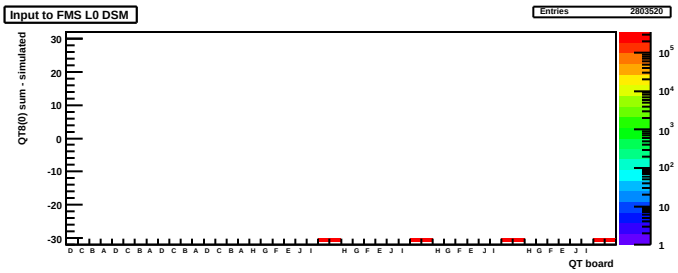

Input to QT1 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

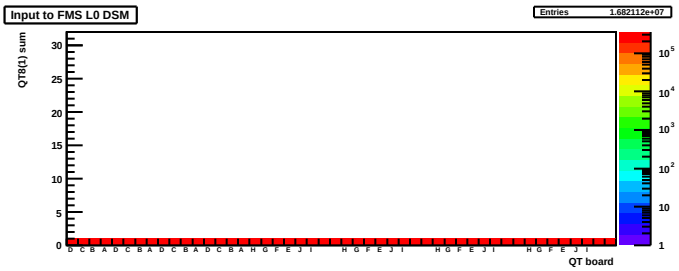

Input to QT2 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

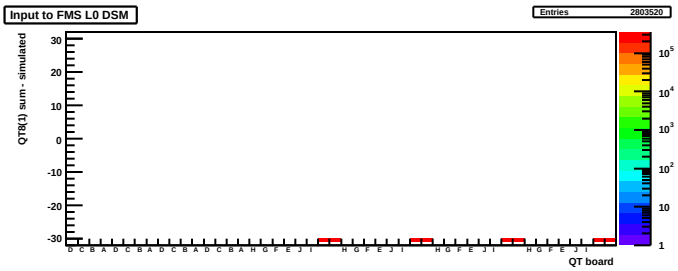

Input to QT3 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

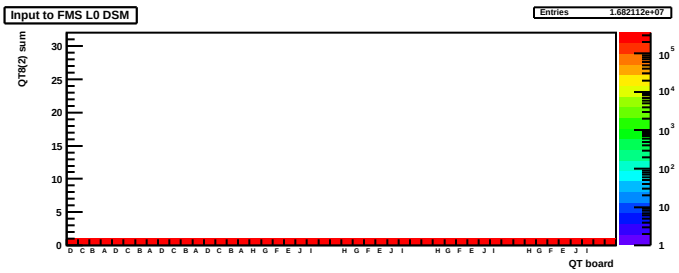

Input to QT4 crate
Entries 0
ADC
4000
3500
3000
2500
2000
1500
1000
500
0
0 50 100 150 200 250 300 350
channel

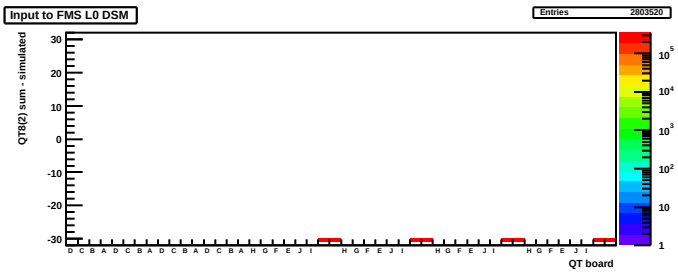

Input to FMS L0 DSM
Entries 1.682112e+07
QT8(0) sum
QT board

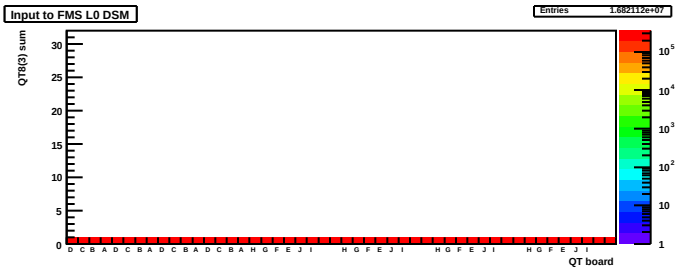

Input to FMS L0 DSM
Entries 2803520
QT8(0) sum - simulated
QT board

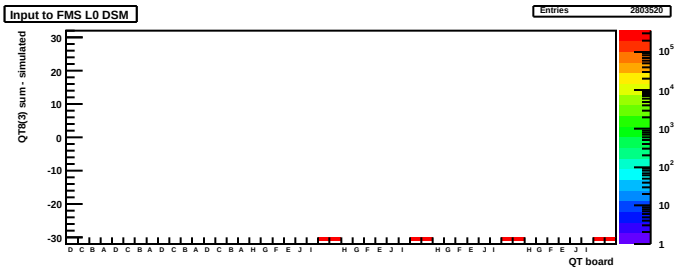

Input to FMS L0 DSM
Entries 1.682112e+07
QT8(1) sum
QT board

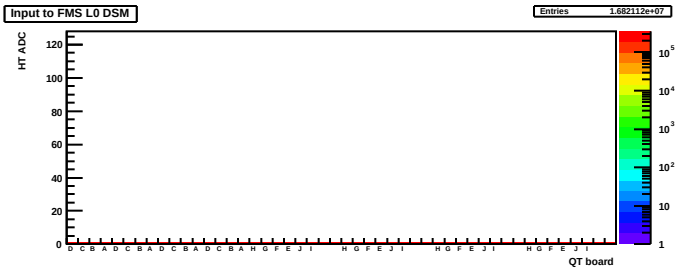

Input to FMS L0 DSM
Entries 2803520
QT8(1) sum - simulated
QT board

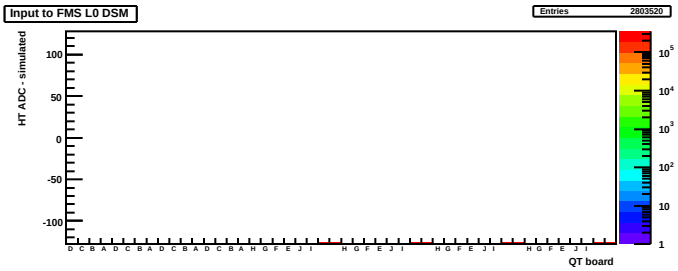

Input to FMS L0 DSM
Entries 1.682112e+07
QT8(2) sum
QT board

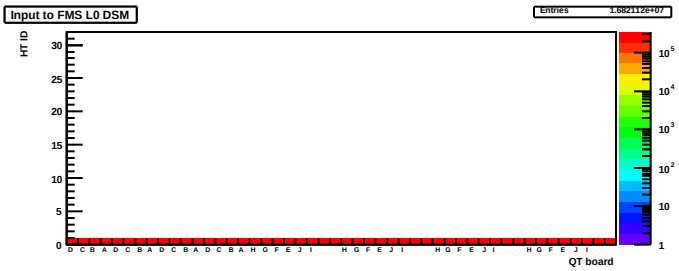

Input to FMS L0 DSM
Entries 2803520
QT8(2) sum - simulated
QT board

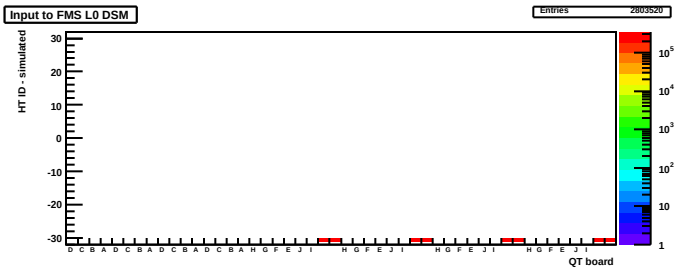

Input to FMS L0 DSM
Entries 1.682112e+07
QT8(3) sum
QT board

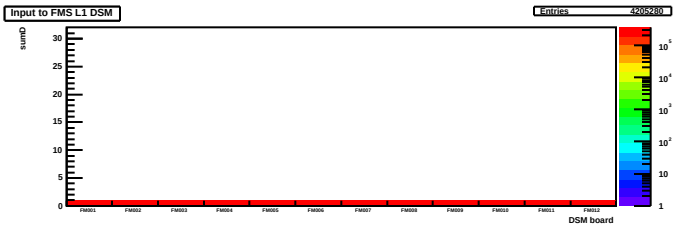

Input to FMS L0 DSM
Entries 2803520
QT8(3) sum - simulated
QT board

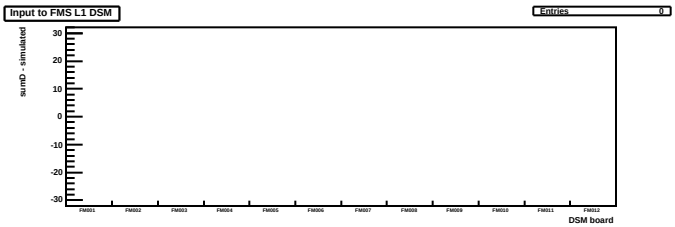

Input to FMS L0 DSM
Entries 1.682112e+07
HT ADC
QT board

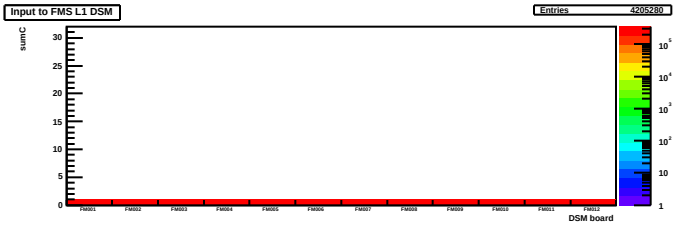

Input to FMS L0 DSM
Entries 2803520
HT ADC - simulated
QT board

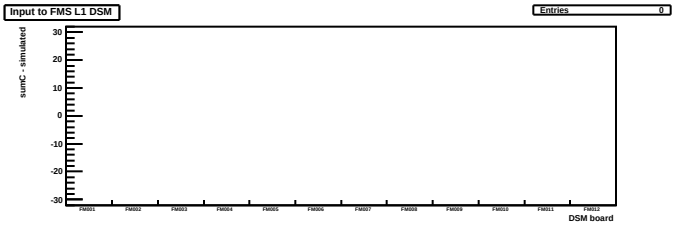

Input to FMS L0 DSM
Entries 1.682112e+07
HT ID
QT board

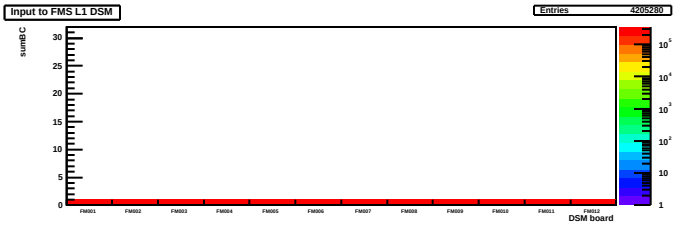

Input to FMS L0 DSM
Entries 2803520
HT ID - simulated
QT board

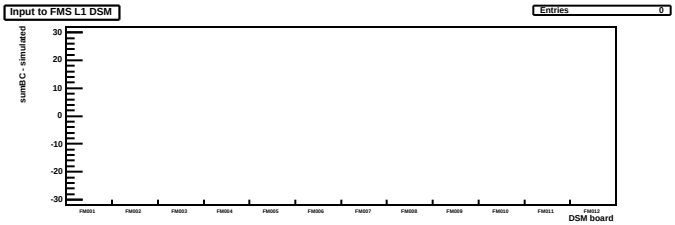

Input to FMS L1 DSM
Entries 4205280
sumD
DSM board

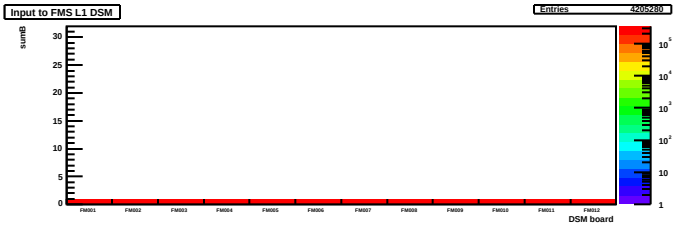

Input to FMS L1 DSM
Entries 0
sumD - simulated
DSM board

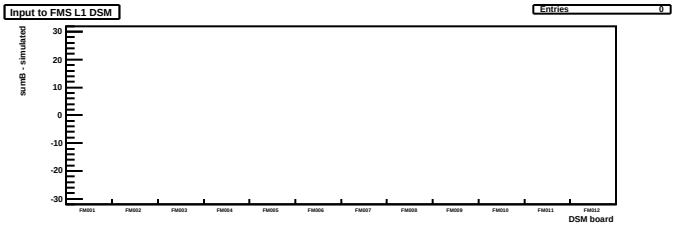

Input to FMS L1 DSM
Entries 4205280
sumC
DSM board

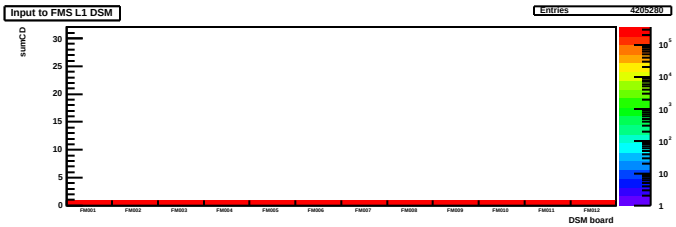

Input to FMS L1 DSM
Entries 0
sumC - simulated
DSM board

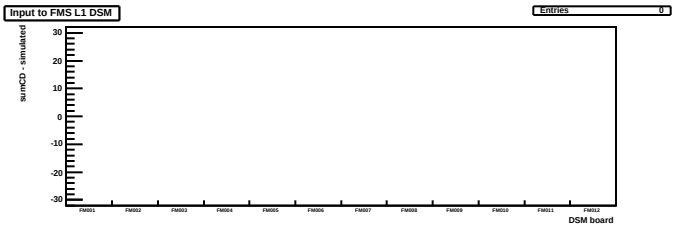

Input to FMS L1 DSM
Entries 4205280
sumBC
DSM board

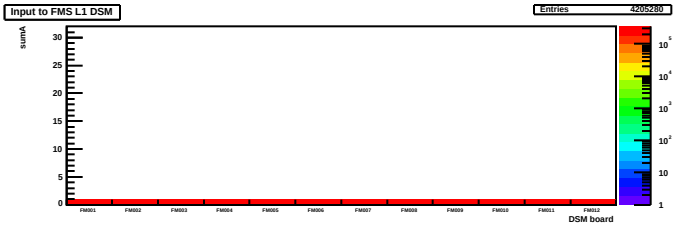

Input to FMS L1 DSM
Entries 0
sumBC - simulated
DSM board

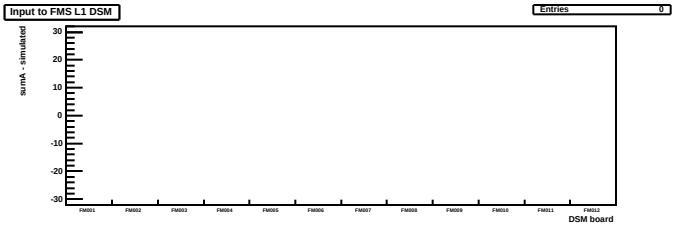

Input to FMS L1 DSM
Entries 4205280
sumB
DSM board

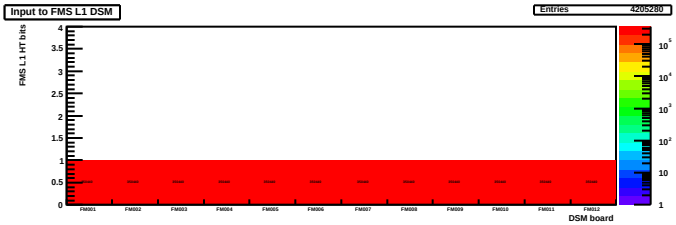

Input to FMS L1 DSM
Entries 0
sumB - simulated
DSM board

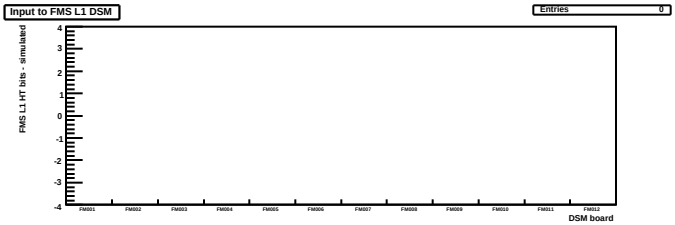

Input to FMS L1 DSM
Entries 4205280
sumCD
DSM board

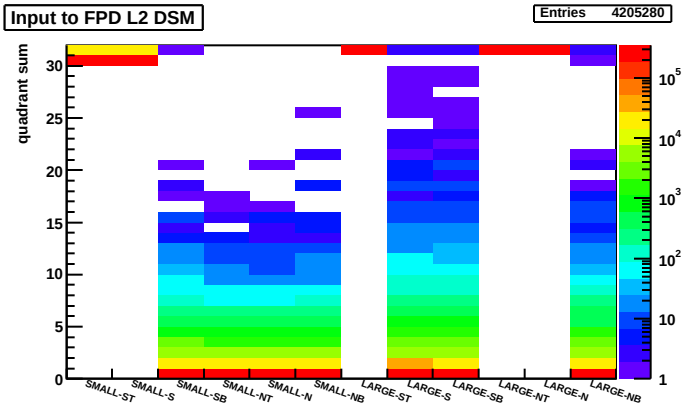

Input to FMS L1 DSM
Entries 0
sumCD - simulated
DSM board

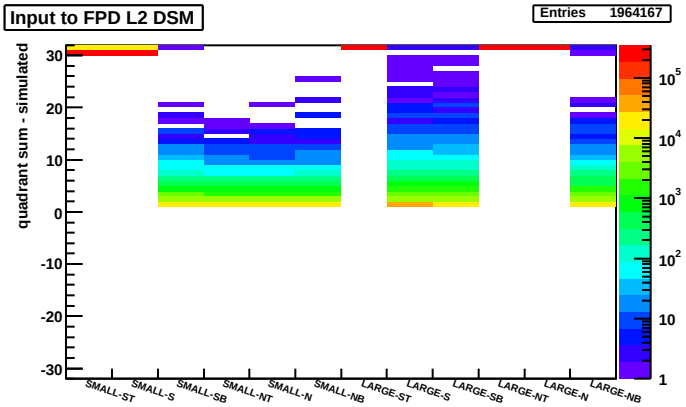

Input to FMS L1 DSM
Entries 4205280
sumA
DSM board

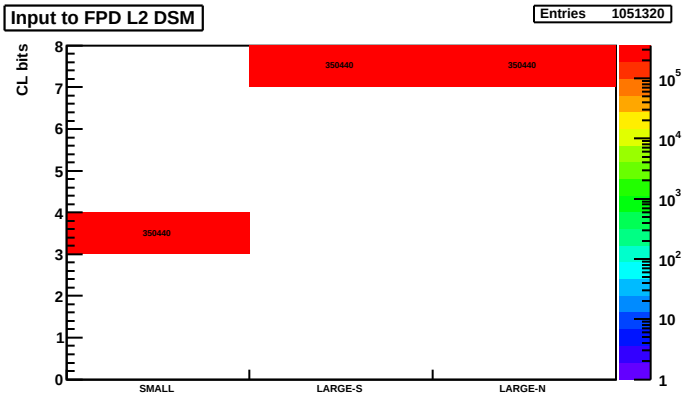

Input to FMS L1 DSM
Entries 0
sumA - simulated
DSM board

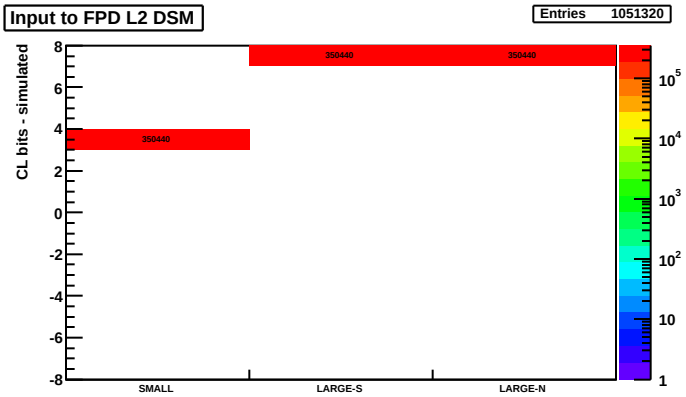

Input to FMS L1 DSM
Entries 4205280
FMS L1 HT bits
DSM board

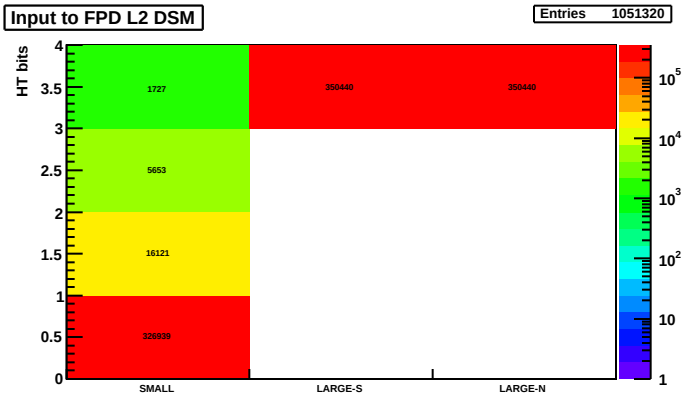

Input to FMS L1 DSM
Entries 0
FMS L1 HT bits - simulated
DSM board

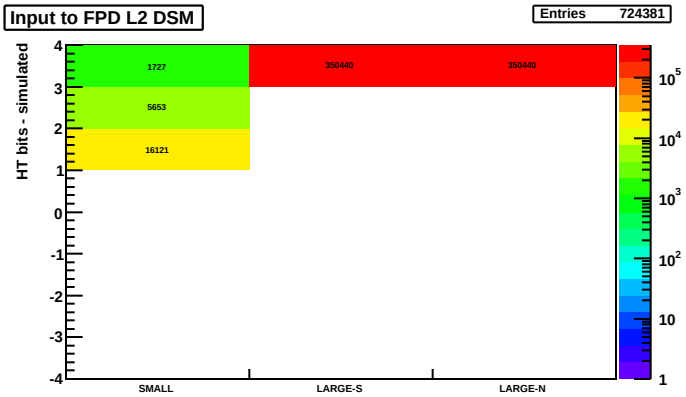

Input to FPD L2 DSM
Entries 4205280
quadrant sum
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

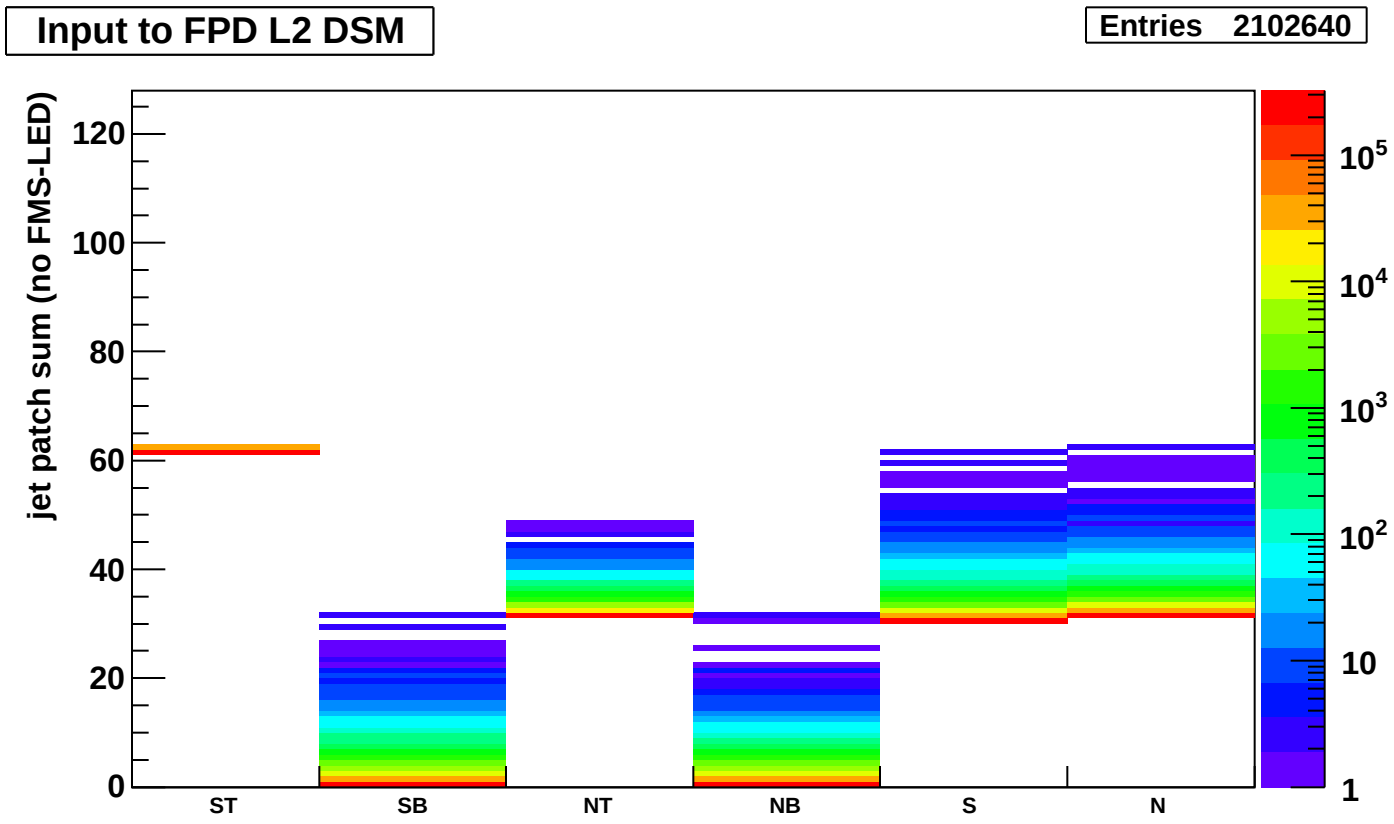

Input to FPD L2 DSM
Entries 1964167
quadrant sum - simulated
SMALL-ST
SMALL-S
SMALL-SB
SMALL-NT
SMALL-N
SMALL-NB
LARGE-ST
LARGE-S
LARGE-SB
LARGE-NT
LARGE-N
LARGE-NB

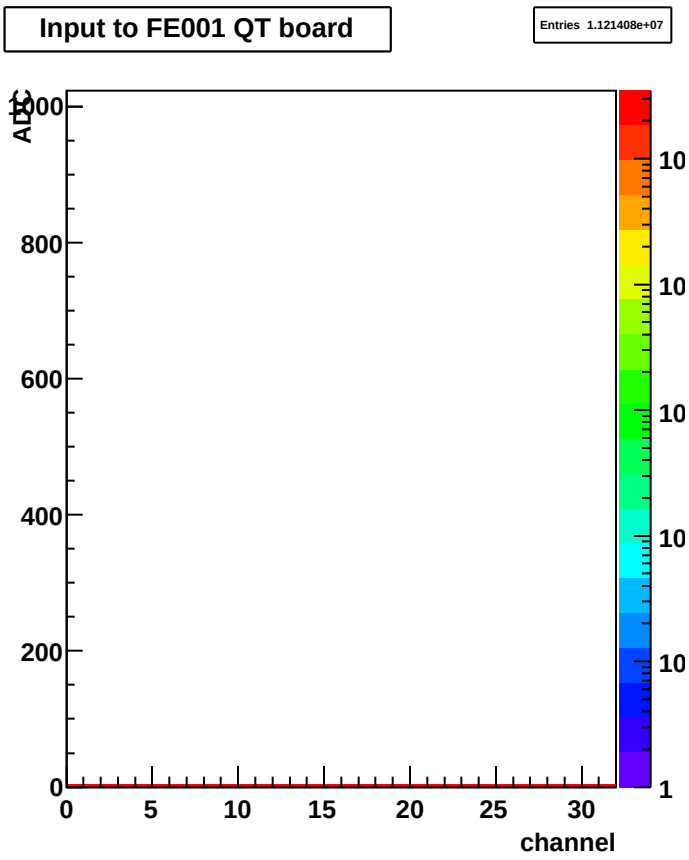

Input to FPD L2 DSM
Entries 1051320
CL bits
350440
350440
350440
SMALL
LARGE-S
LARGE-N

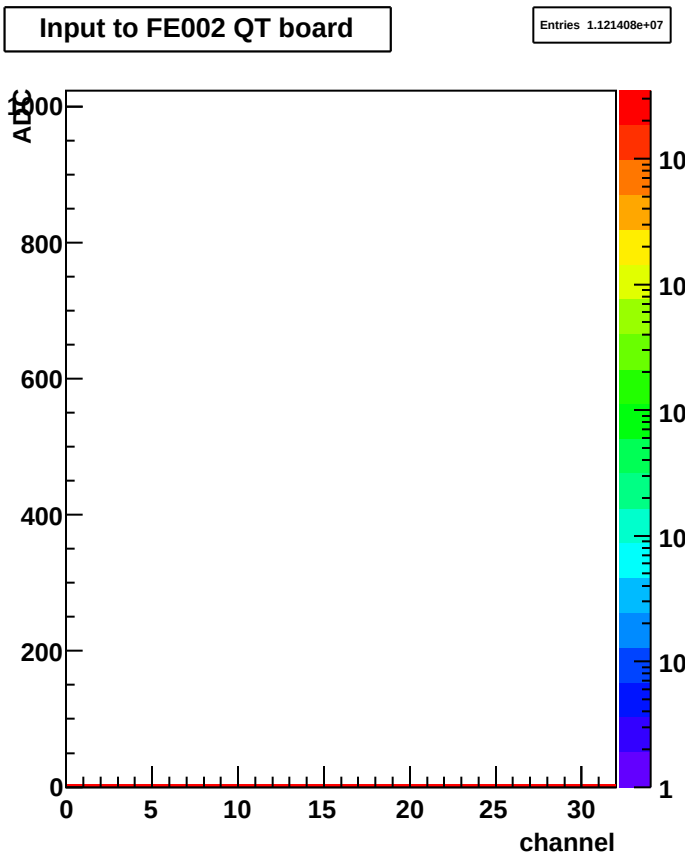

Input to FPD L2 DSM
Entries 1051320
CL bits - simulated
350440
350440
350440
SMALL
LARGE-S
LARGE-N

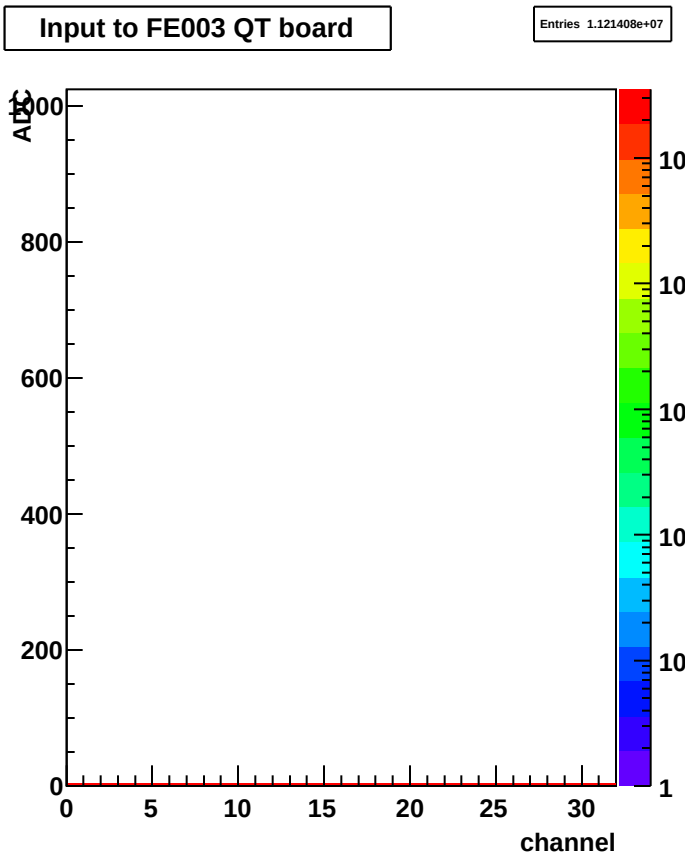

Input to FPD L2 DSM
Entries 1051320
HT bits
1727
5653
16121
326939
350440
350440
SMALL
LARGE-S
LARGE-N

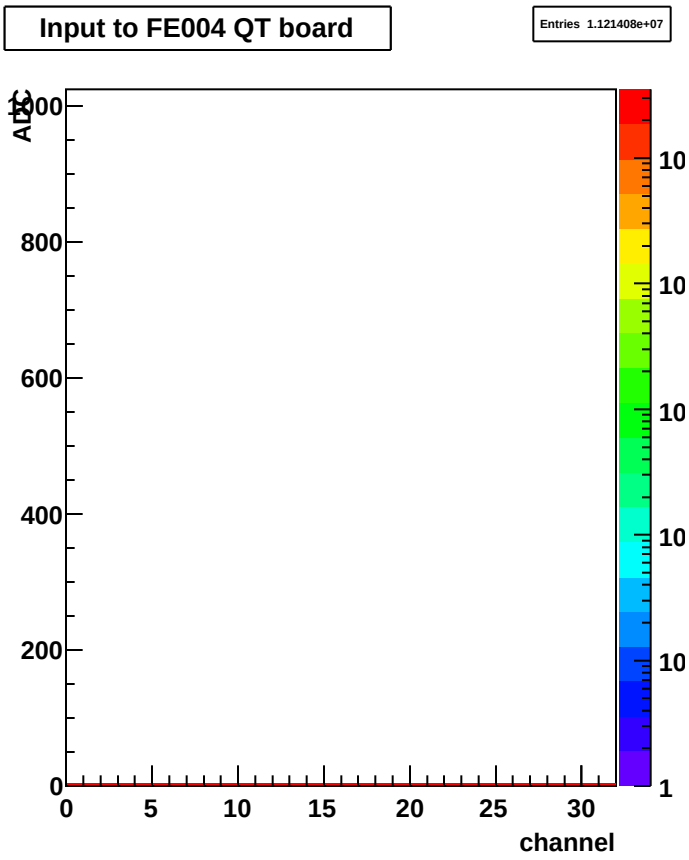

Input to FPD L2 DSM
Entries 724381
HT bits - simulated
1727
5653
16121
350440
350440
SMALL
LARGE-S
LARGE-N

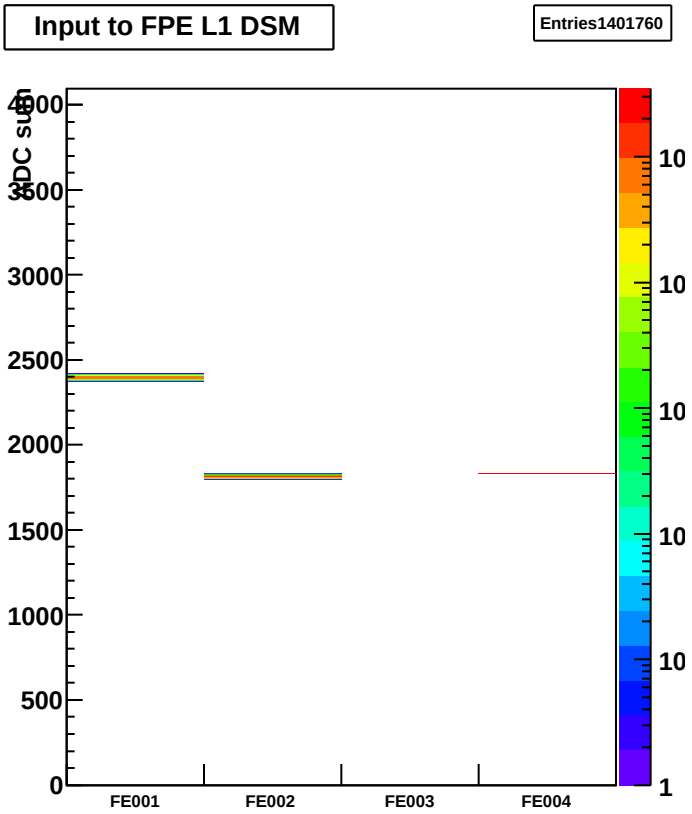

Input to FPD L2 DSM
Entries 2102640
jet patch sum (no FMS-LED)
0
20
40
60
80
100
120
ST
SB
NT
NB
S
N
1
10
10^2
10^3
10^4
10^5

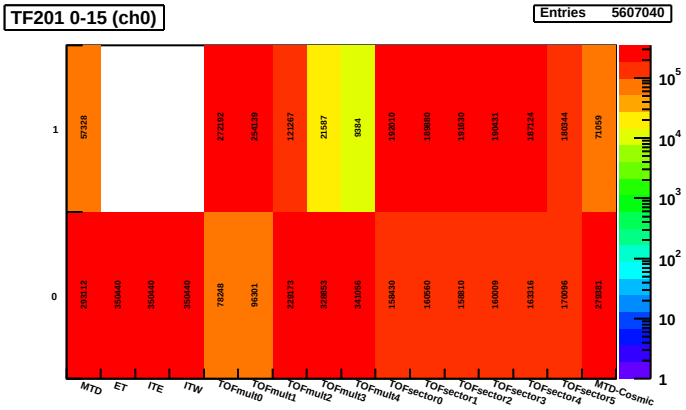

Input to FE001 QT board
Entries 1.121408e+07
ADC
channel

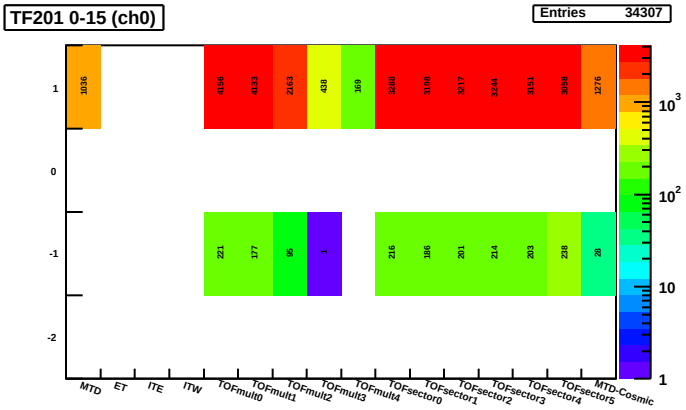

Input to FE002 QT board
Entries 1.121408e+07
ADC
channel

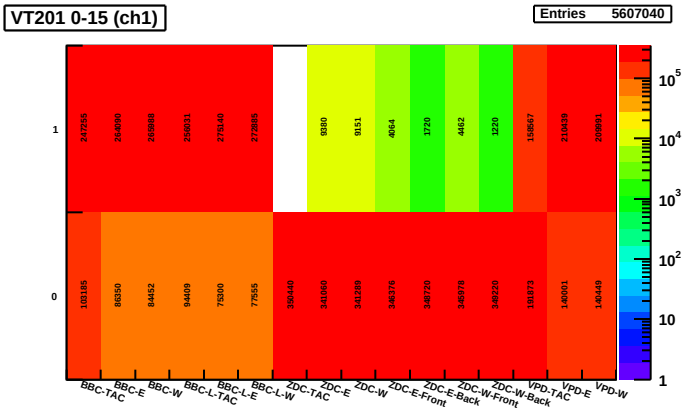

Input to FE003 QT board
Entries 1.121408e+07
ADC
channel


Input to FE004 QT board
Entries 1.121408e+07
ADC
channel


Input to FPE L1 DSM
Entries1401760
ADC sum
4000
3500
3000
2500
2000
1500
1000
500
0
FE001
FE002
FE003
FE004
10
10
10
10
10
1


TF201 0-15 (ch0)
Entries 5607040
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic


TF201 0-15 (ch0)
Entries 34307
MTD ET ITE ITW TOFmult0 TOFmult1 TOFmult2 TOFmult3 TOFmult4 TOFsector0 TOFsector1 TOFsector2 TOFsector3 TOFsector4 TOFsector5 MTD-Cosmic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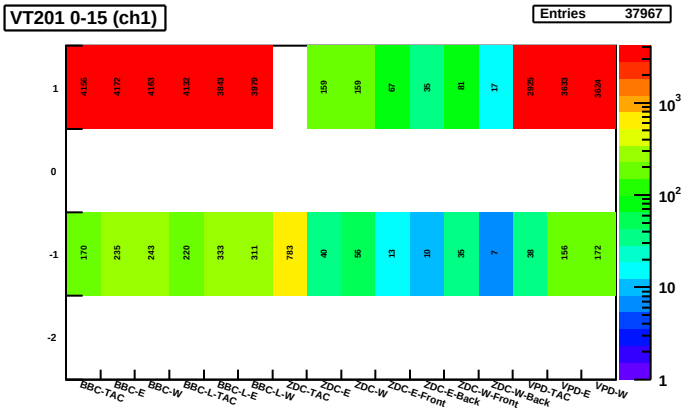
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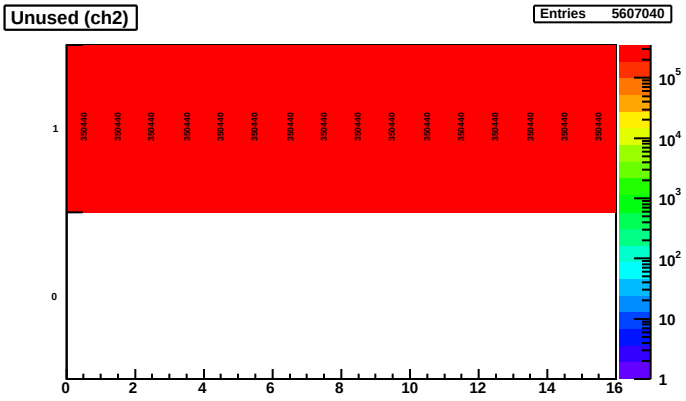
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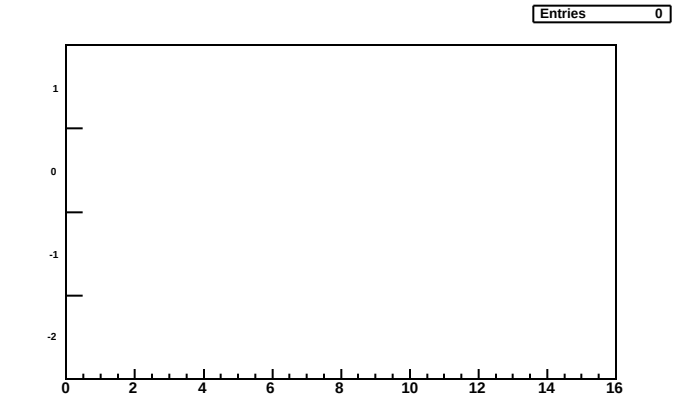
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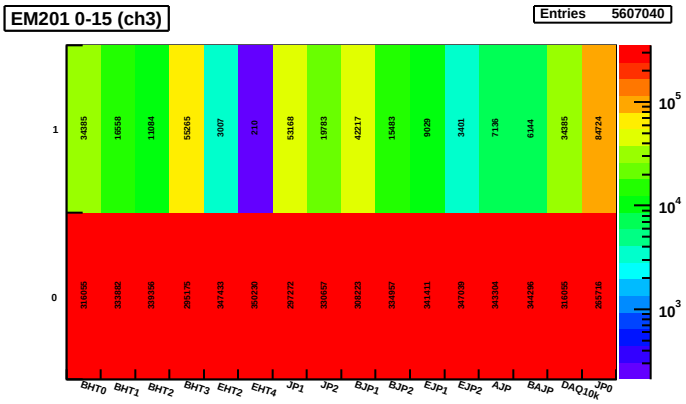
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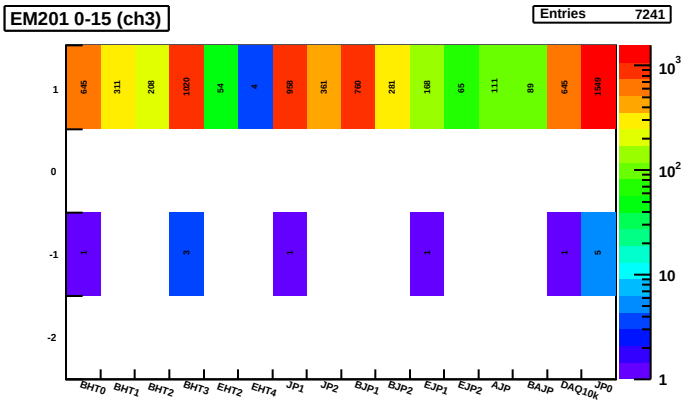
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Entries 7241
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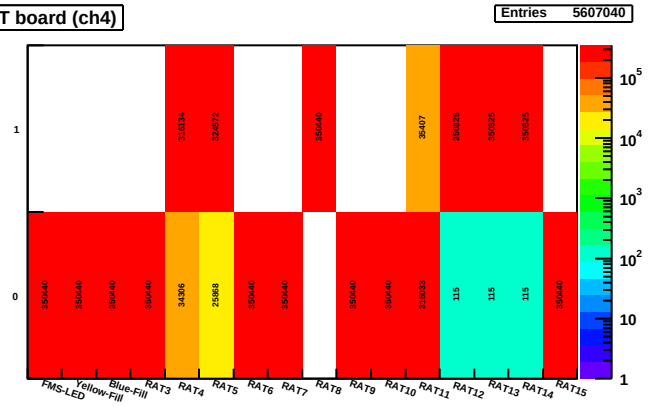
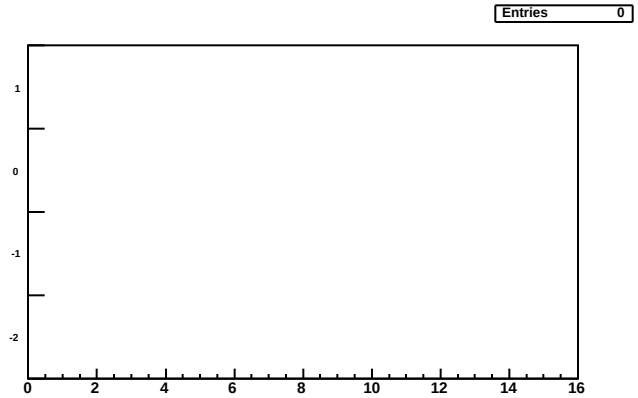
RAT board (ch4)





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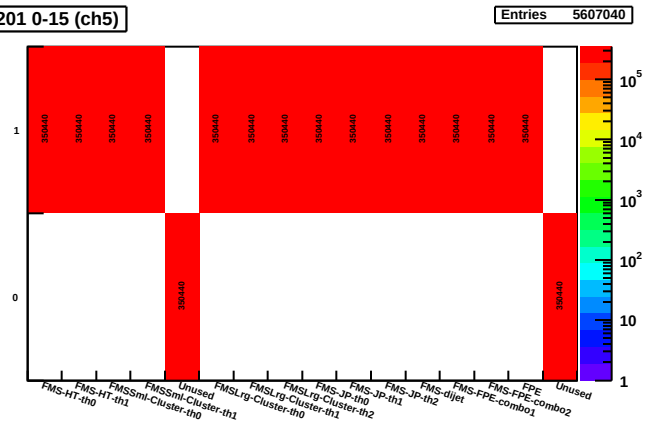

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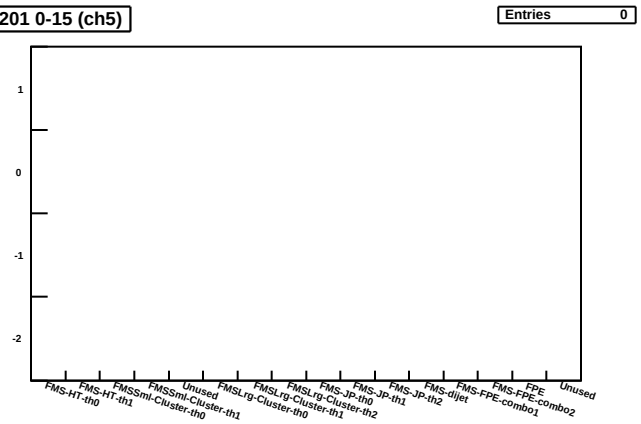
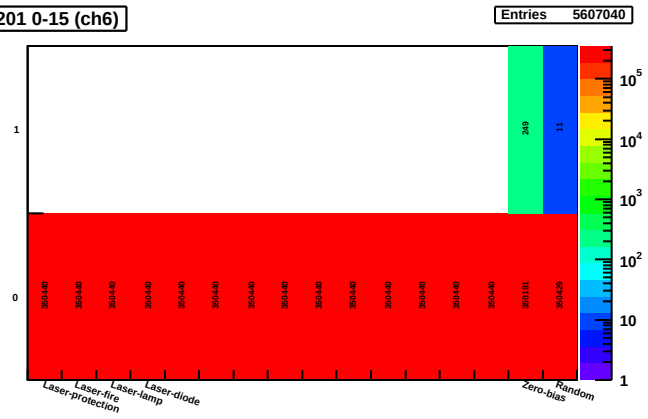
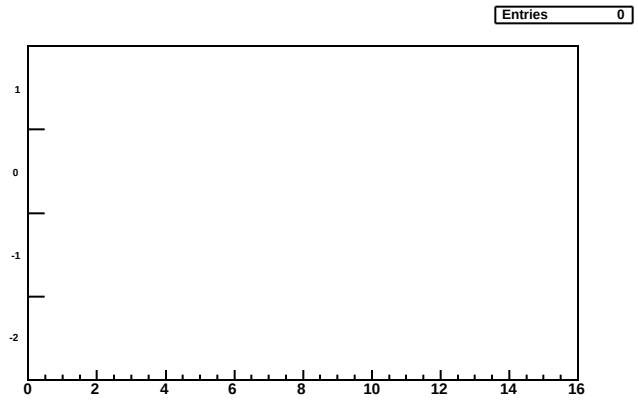
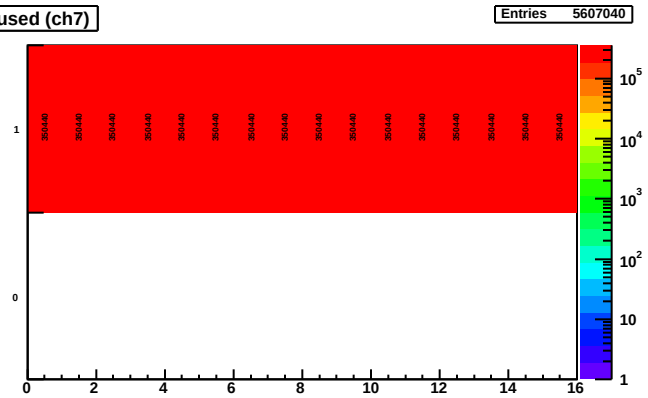
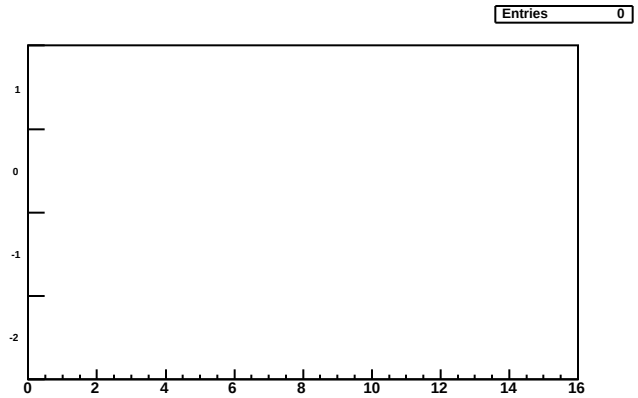


ST201 0-15 (ch6)





Unused (ch7)