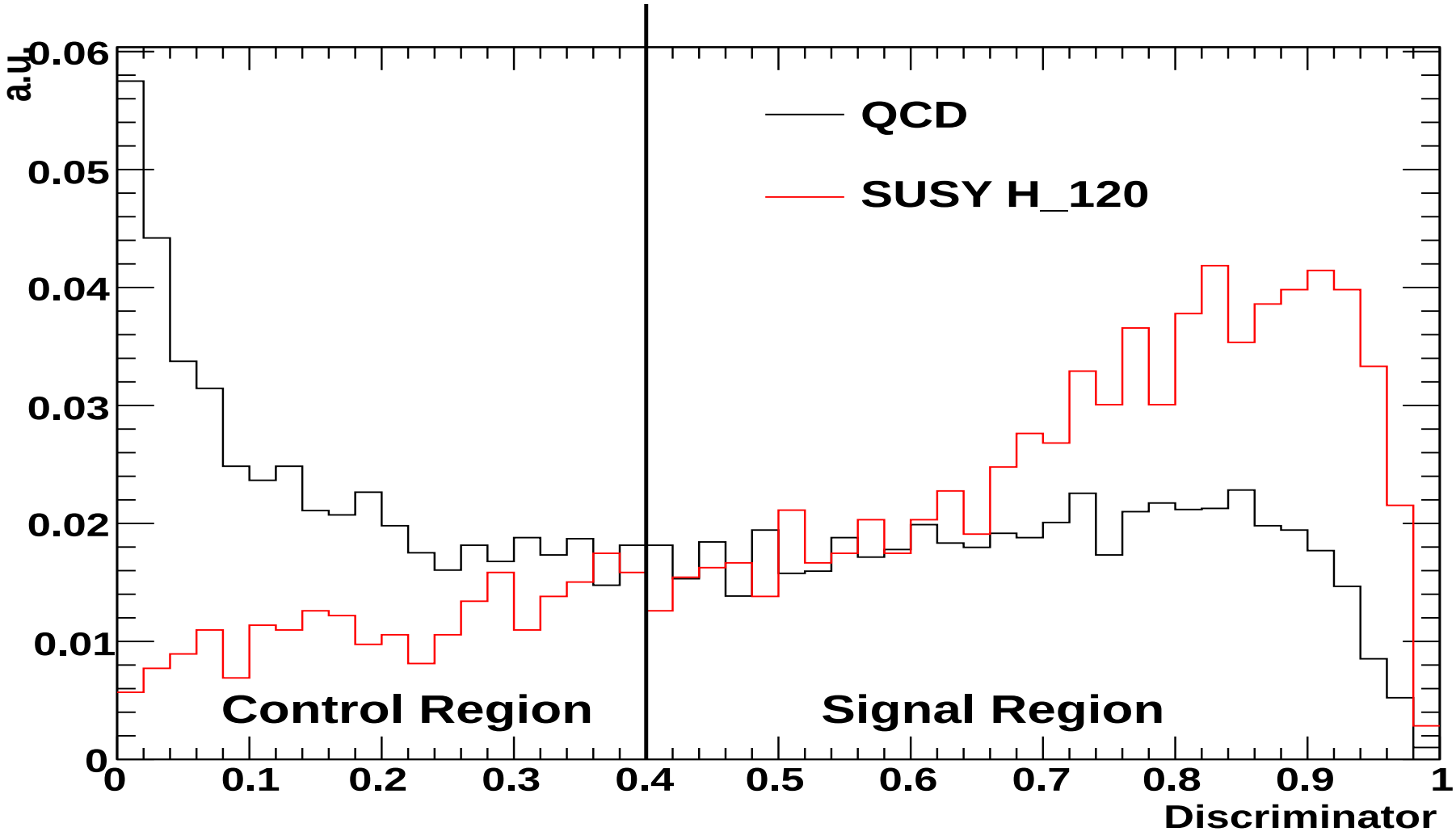
Status report on $H \to b\bar{b}$ analysis on pure hadronic channel

Stefano Lacaprara

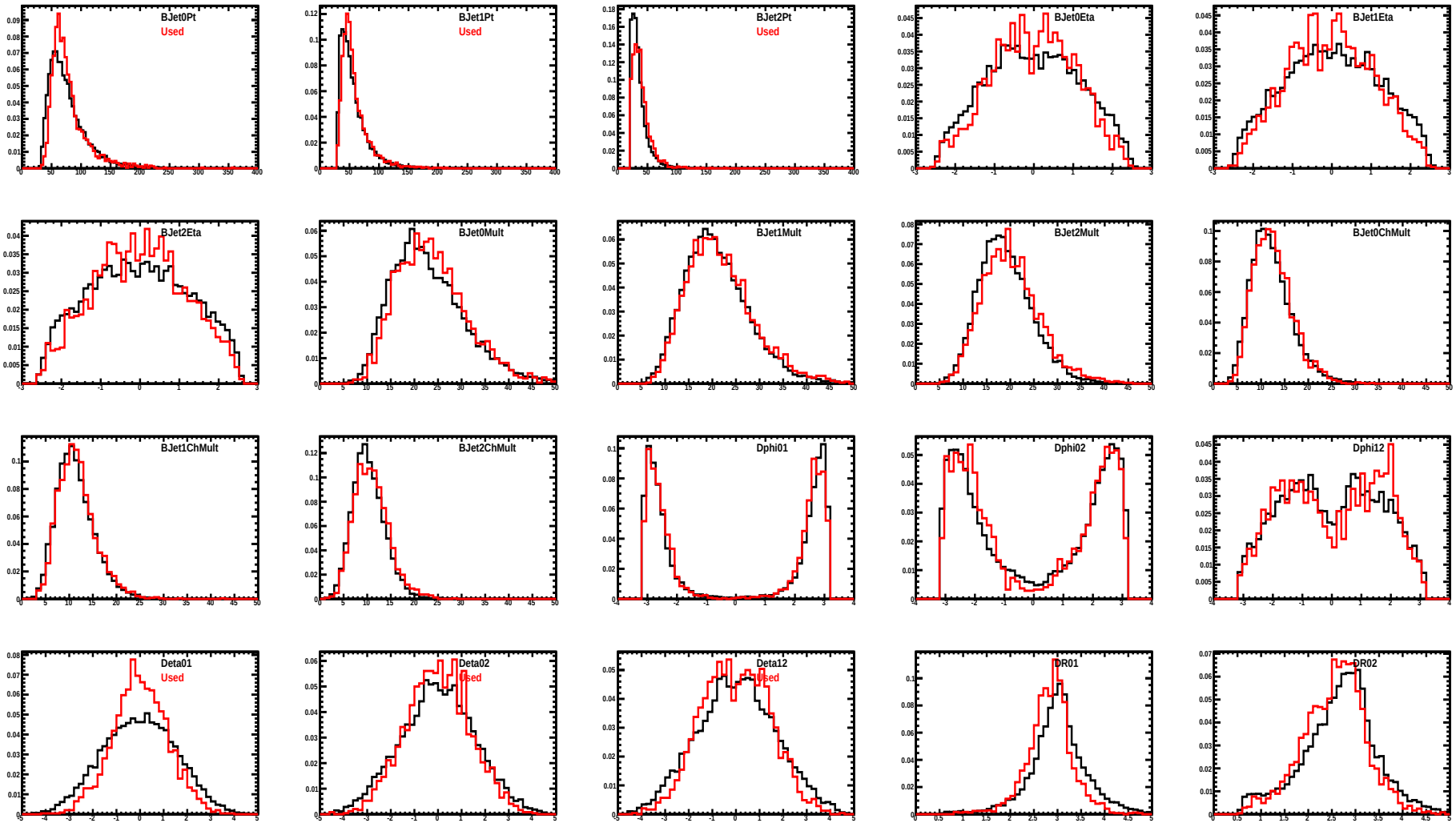
INFN Padova

PD meeting,
PD, 10 January 2012

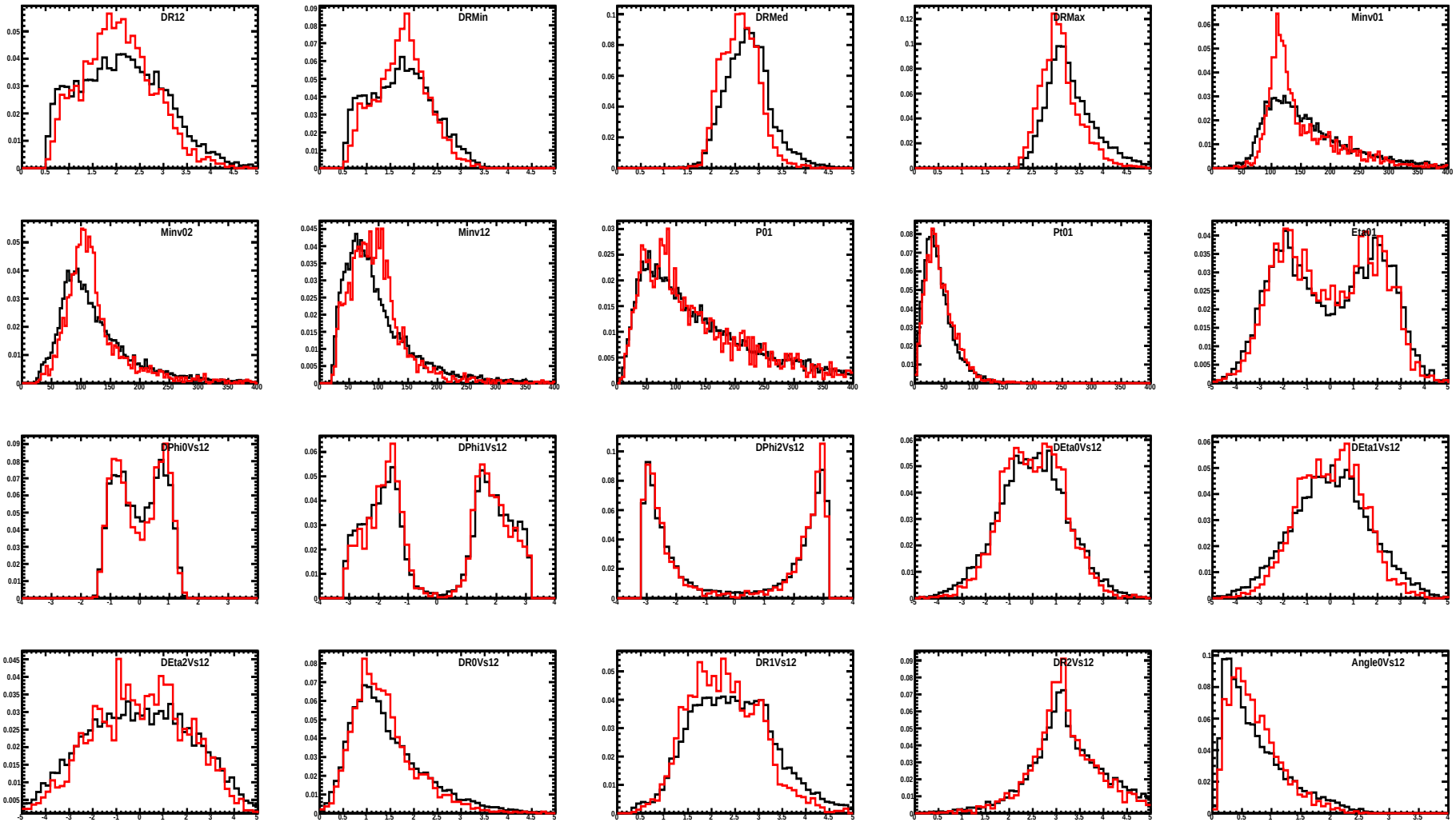
Discriminator for QCD vs SUSY $m_H = 120\ GeV$



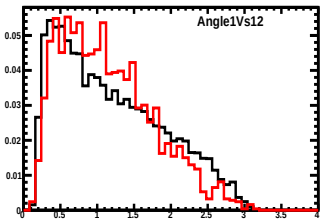
Discr. variables for QCD vs SUSY $m_H = 120\ GeV$

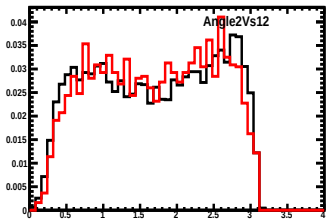


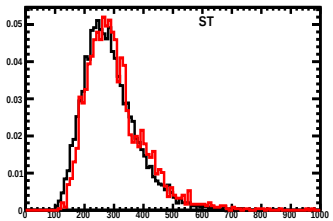
Discr. variables for QCD vs SUSY $m_H = 120\ GeV$

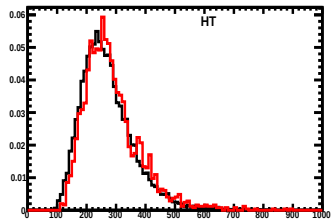


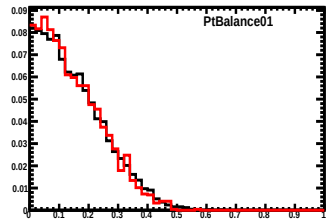
Discr. variables for QCD vs SUSY $m_H = 120\ GeV$

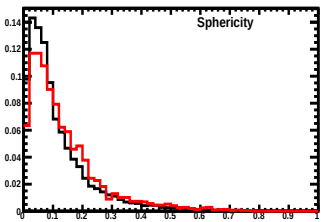


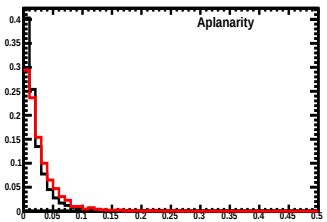


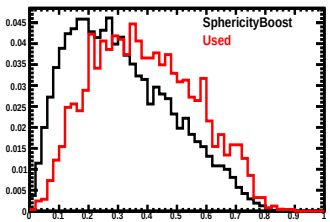


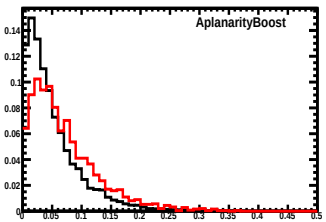


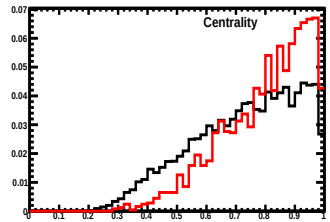


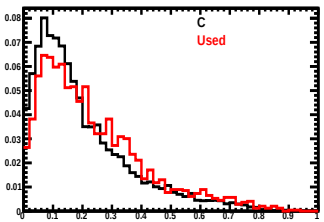


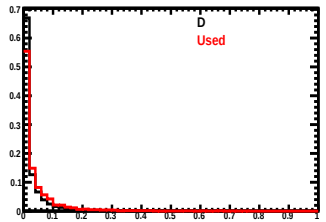


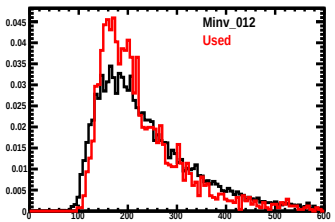


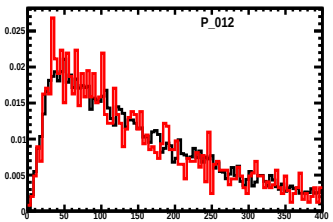


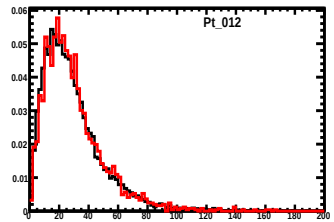


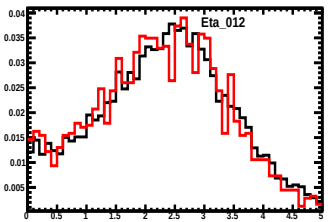


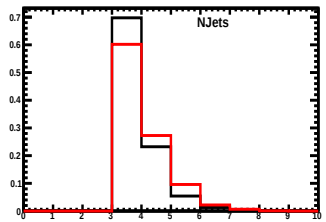


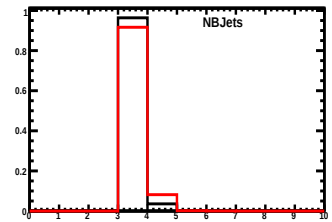


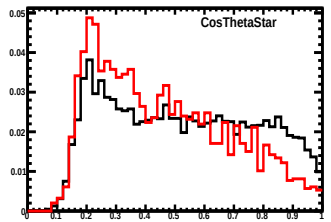




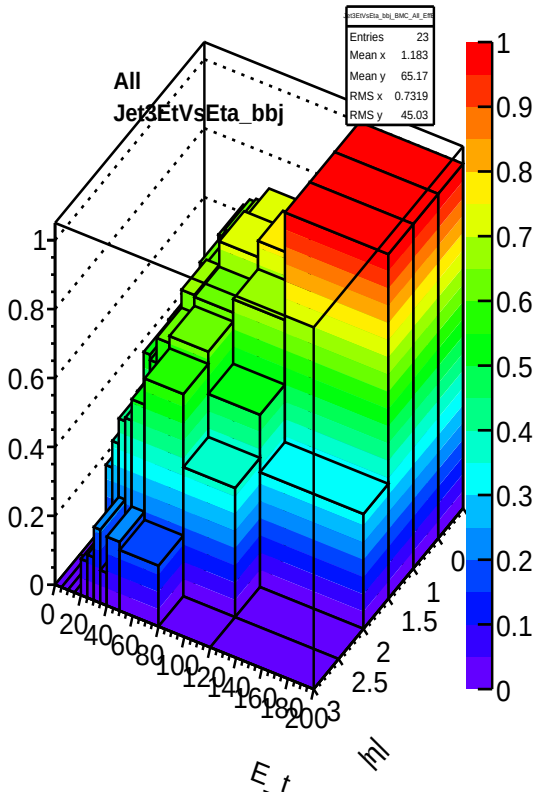


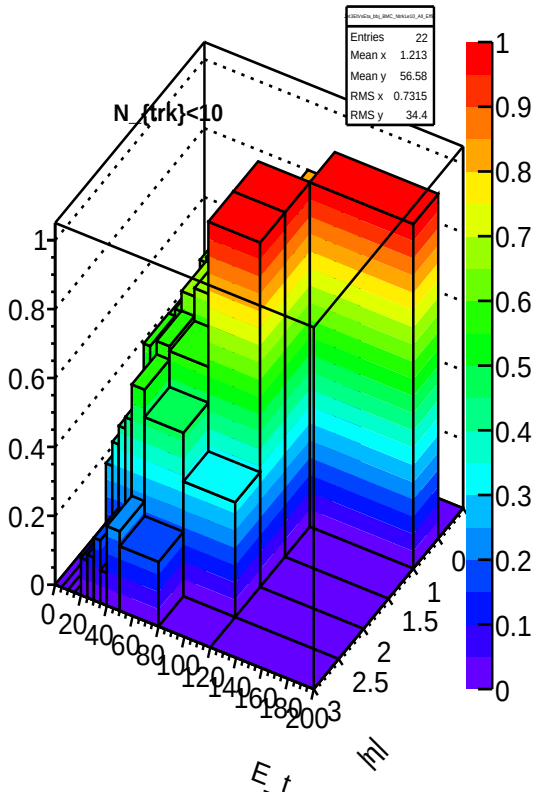


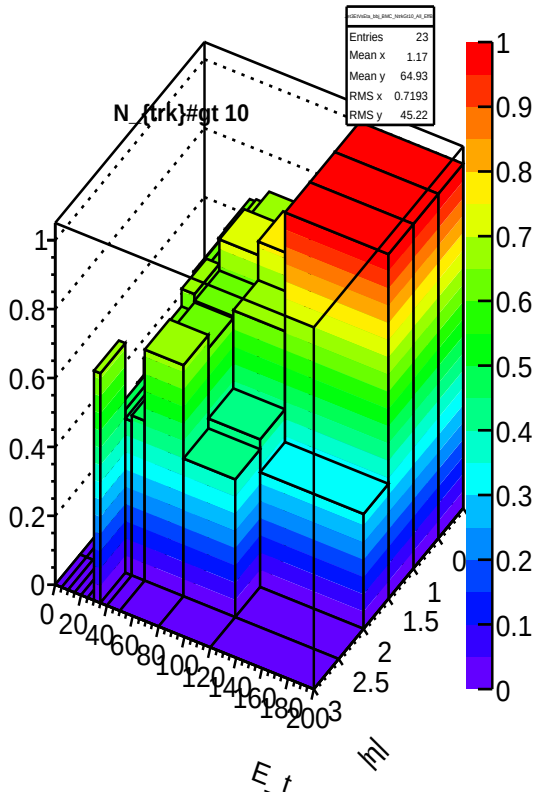




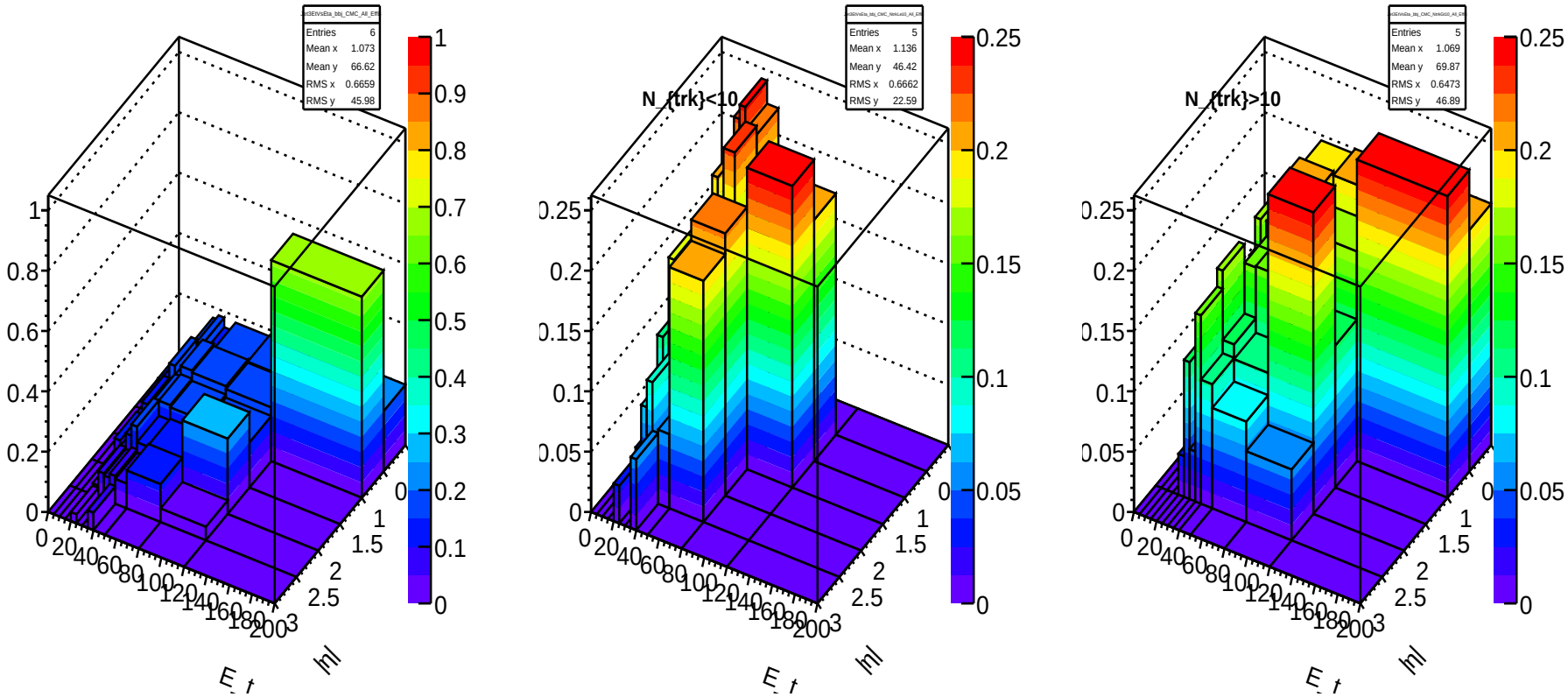
B-tag efficiency for *b* jets (from MC)



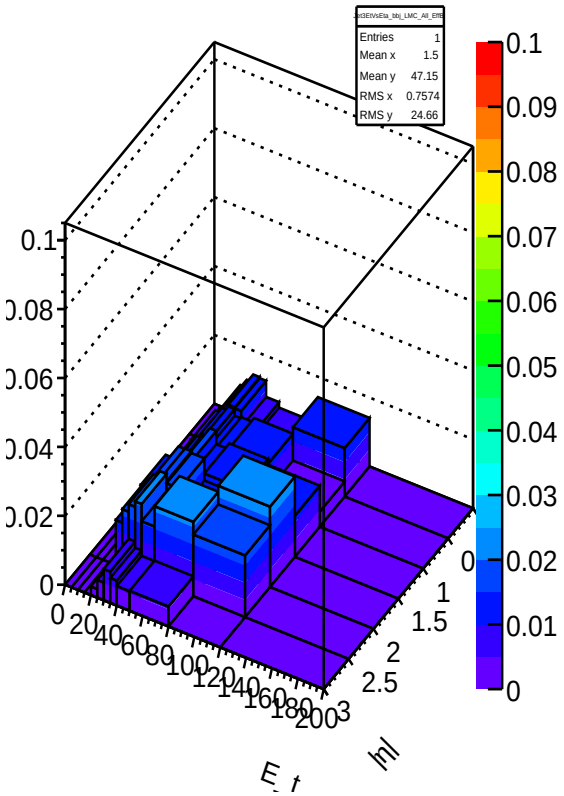


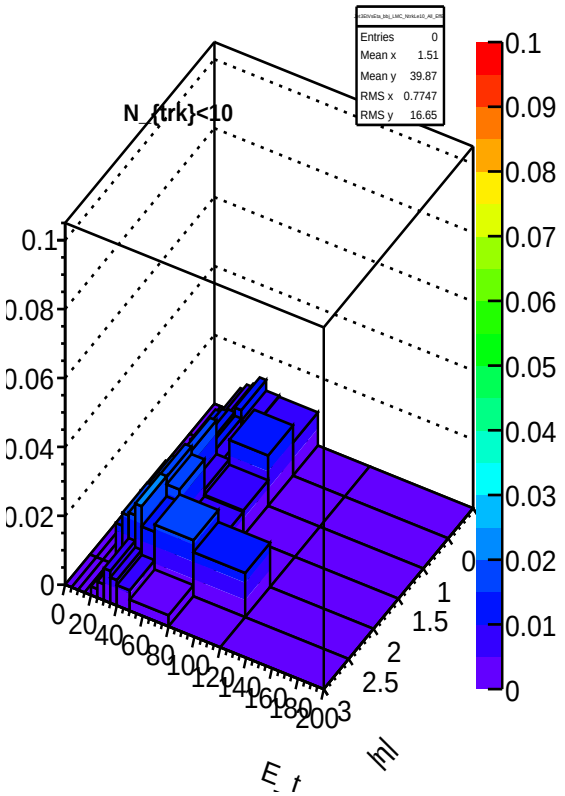


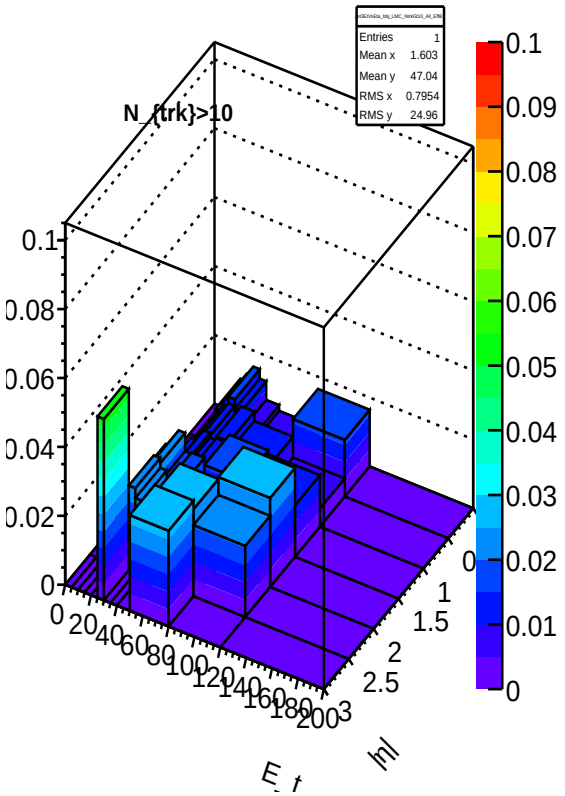
B-tag efficiency for c jets (from MC)



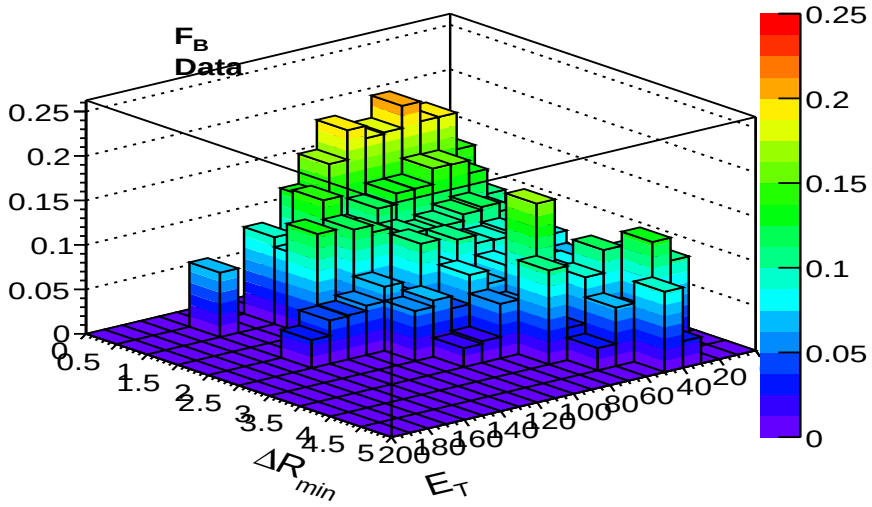
B-tag efficiency for *udsg* jets (from MC)

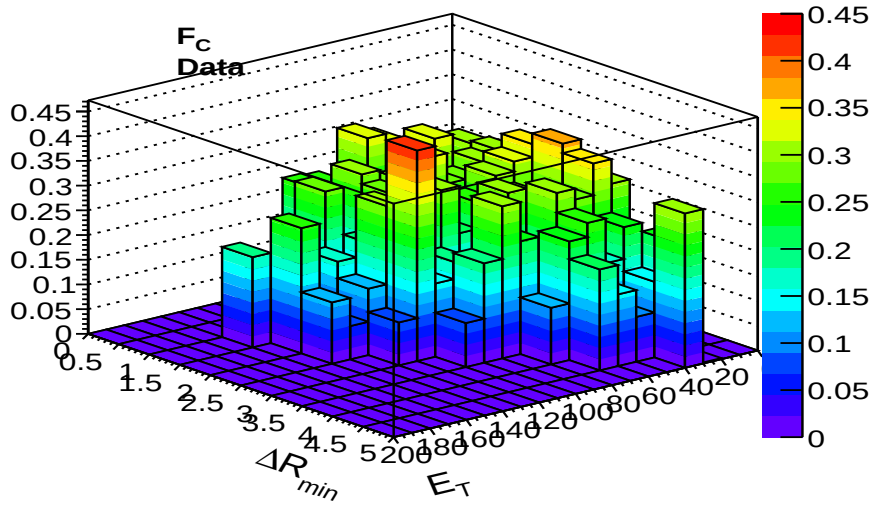


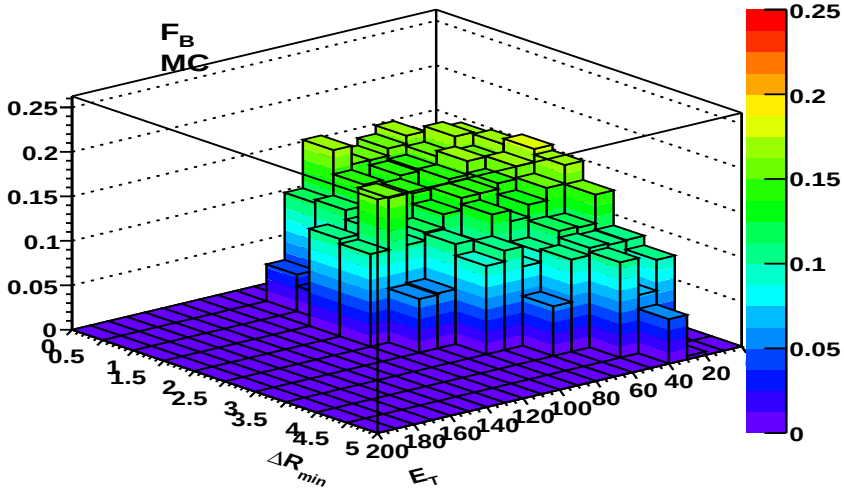


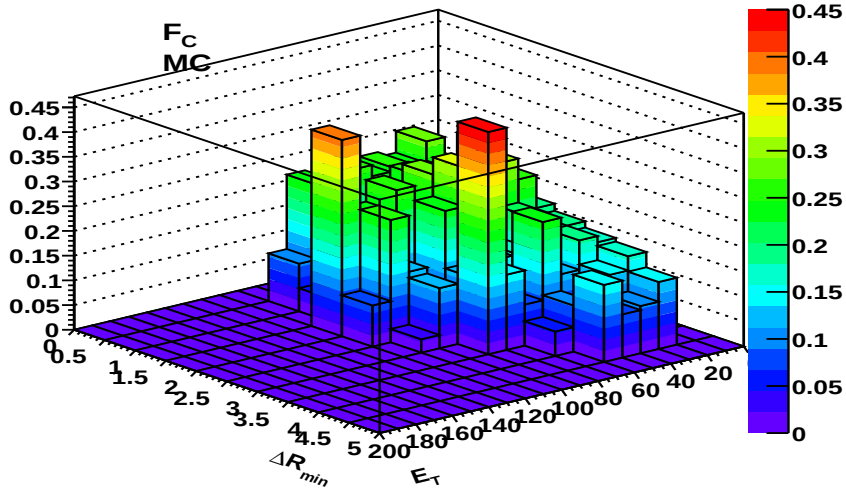


B and C fraction from Fit (Data and MC)

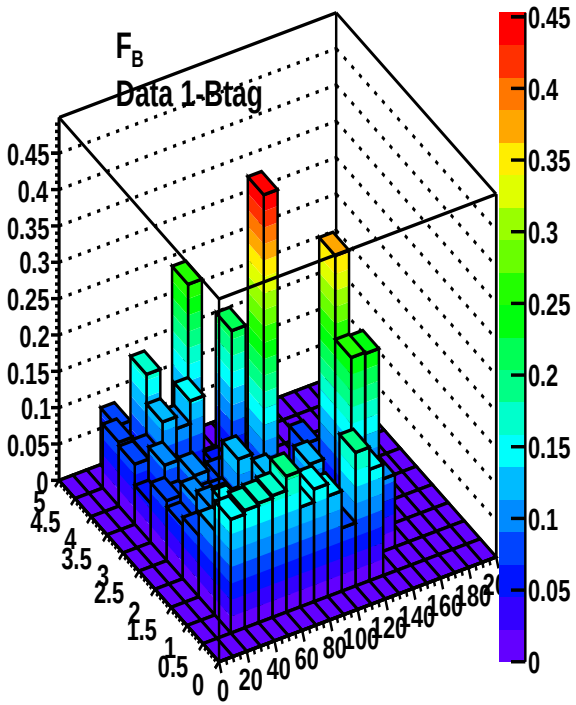


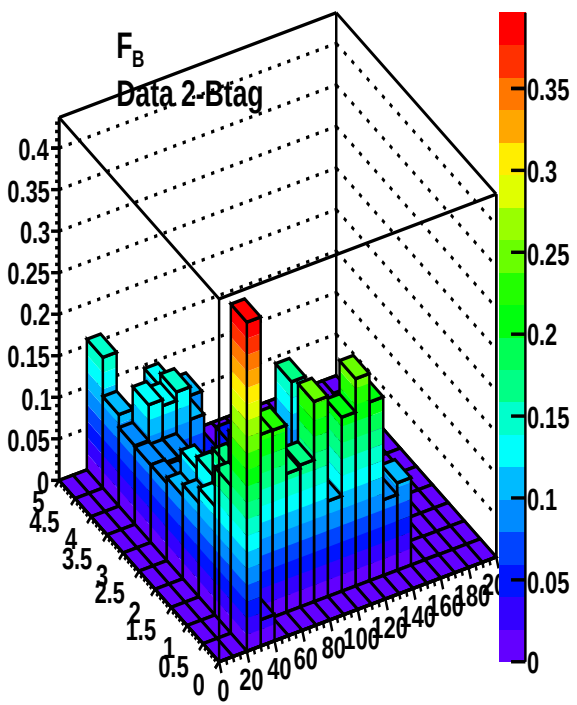


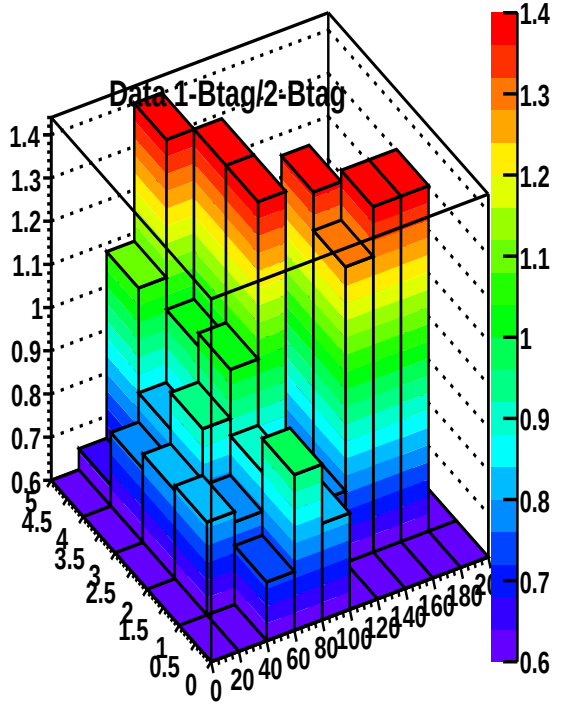




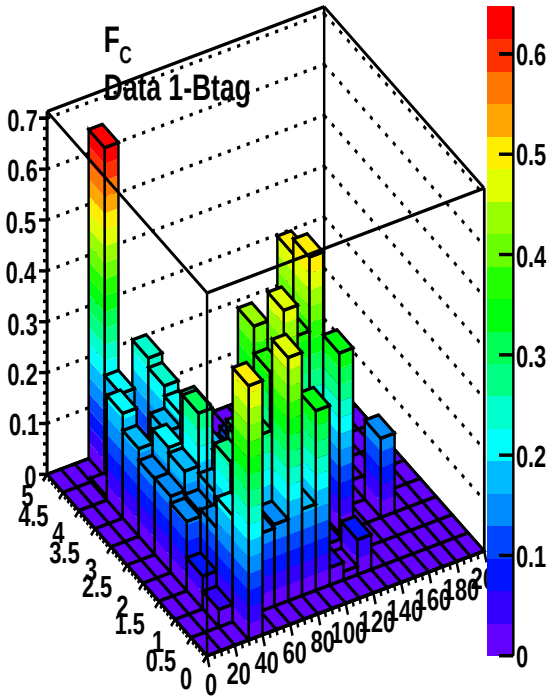
B fraction for 1-B and 2-B HLT (Data)

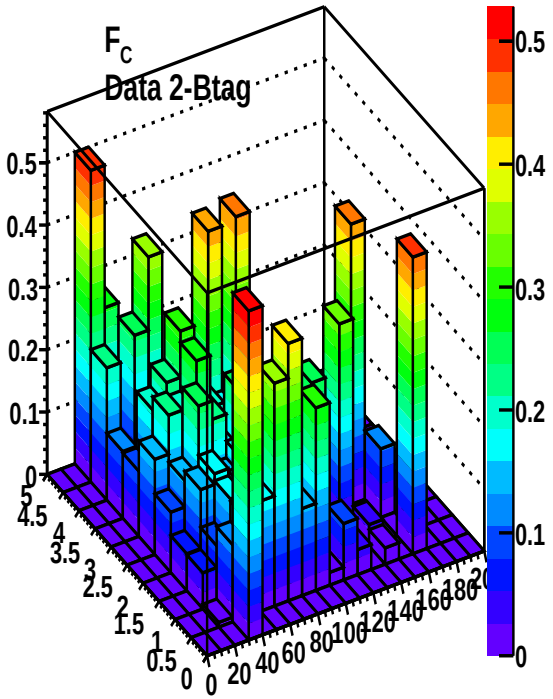


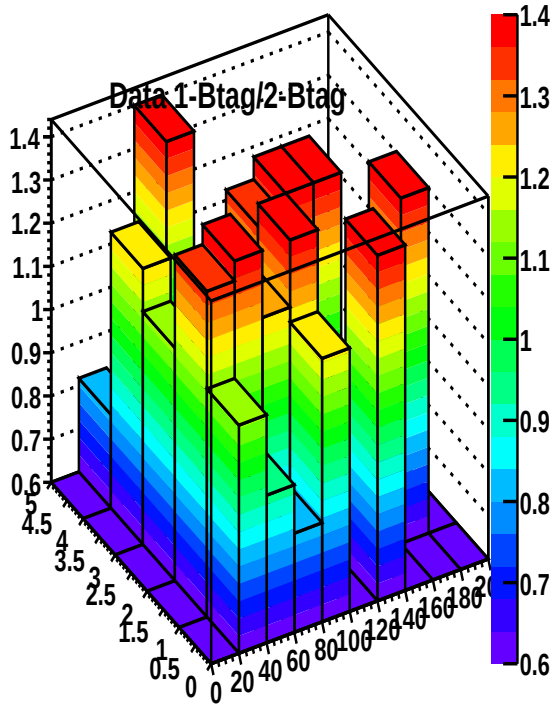




C fraction for 1-B and 2-B HLT (Data)

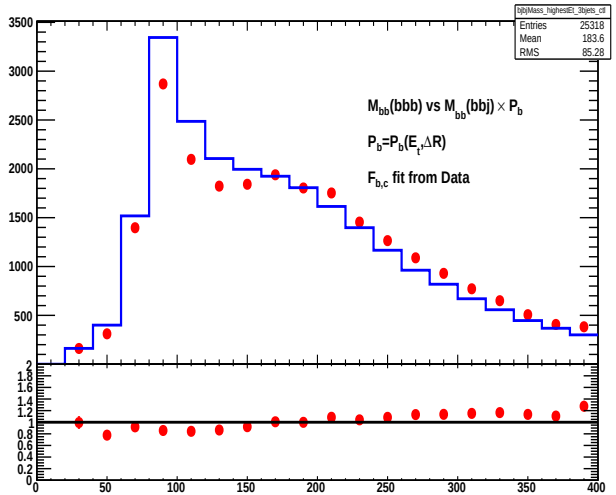


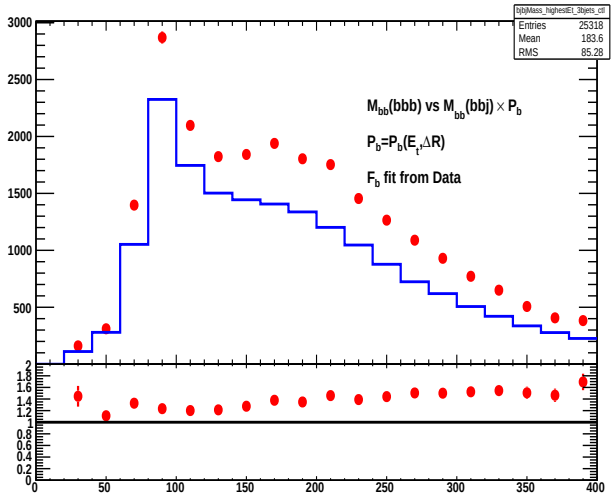


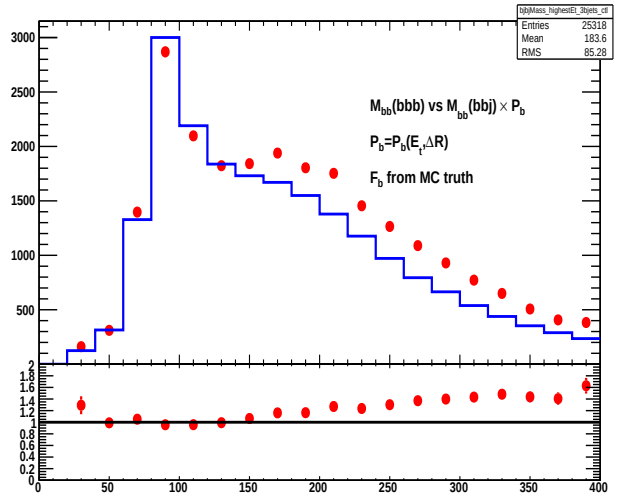


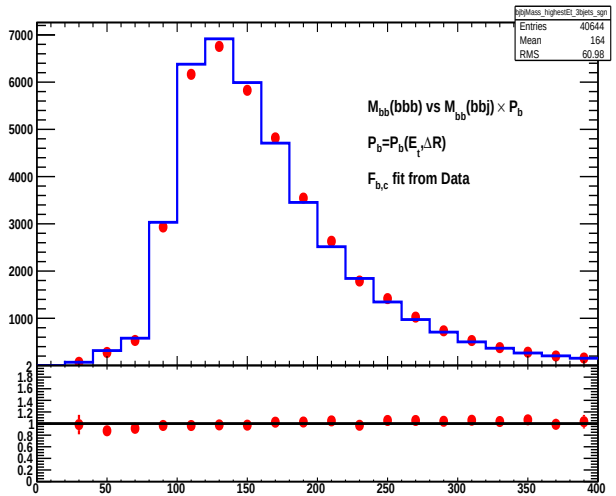
M_{jj} vs pred.: Data Control Region

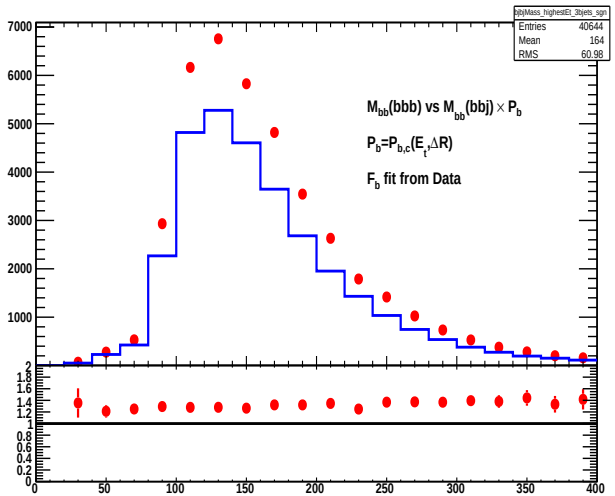
using both F_b and F_c – only F_b – and F_b^{MC}

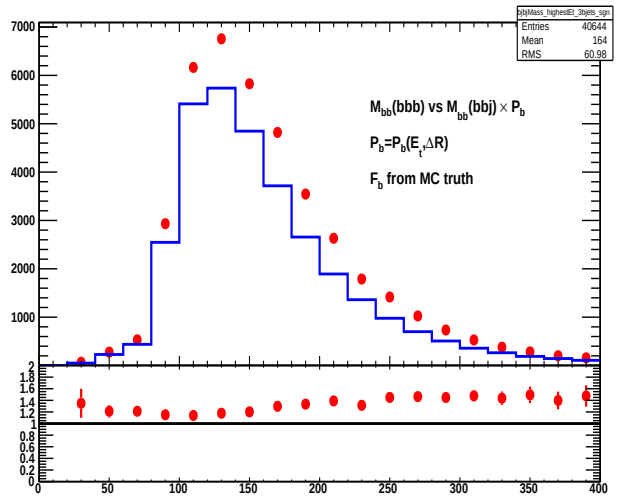


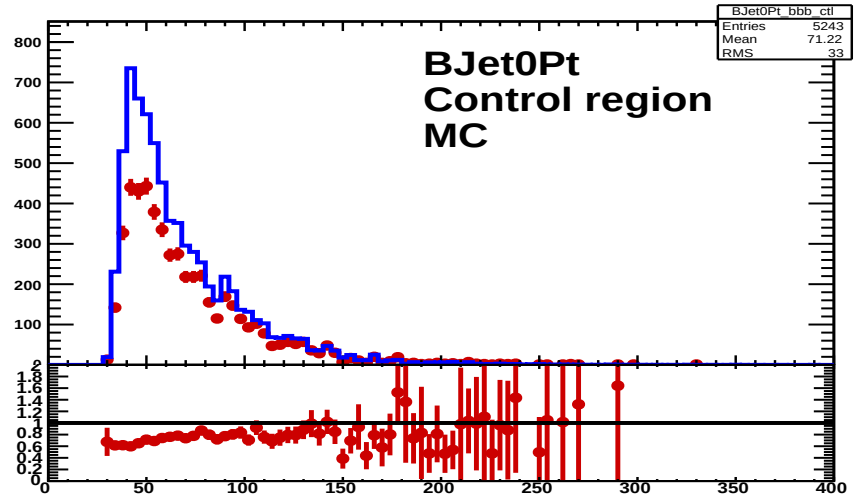








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RMS 33
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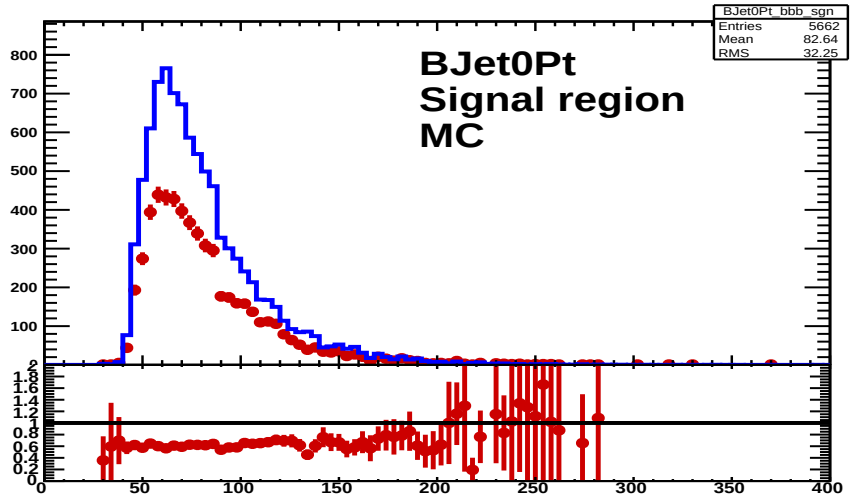
MC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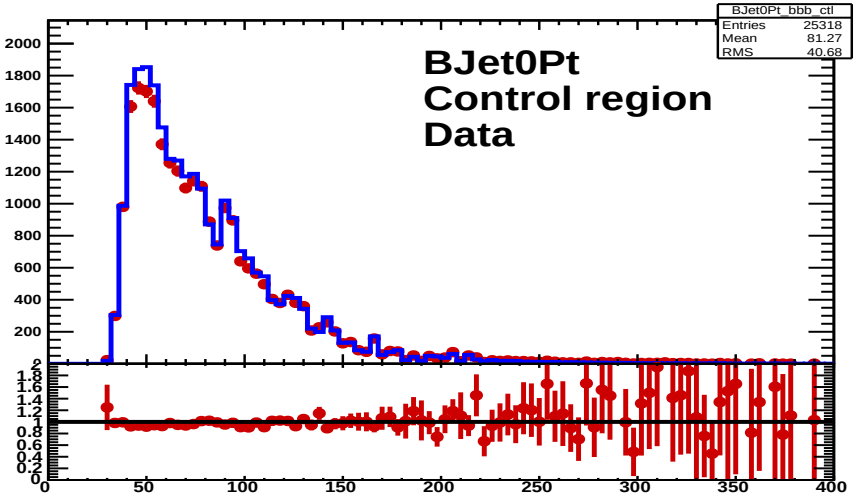
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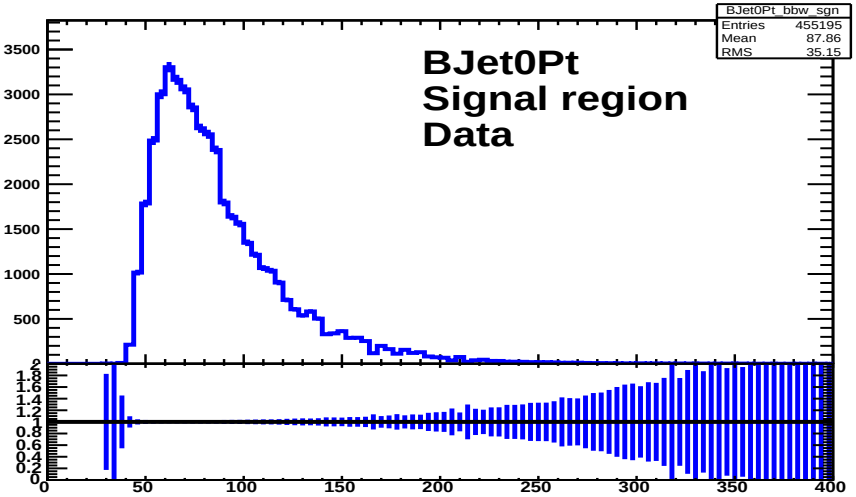
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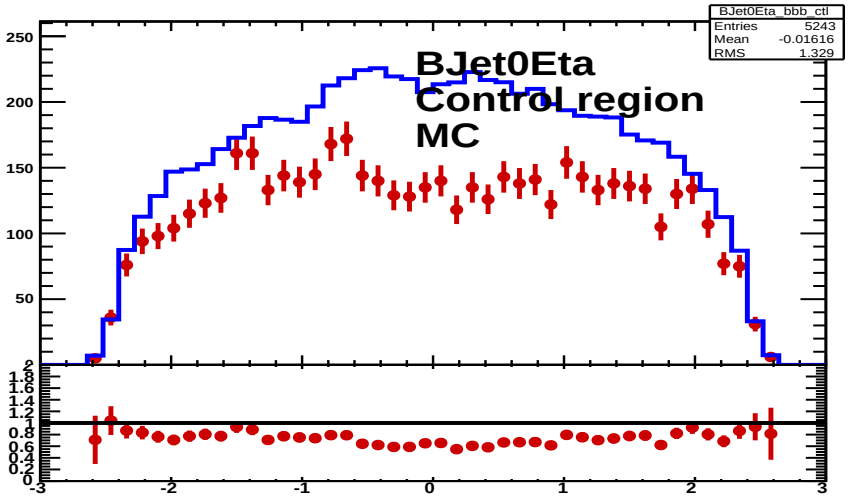
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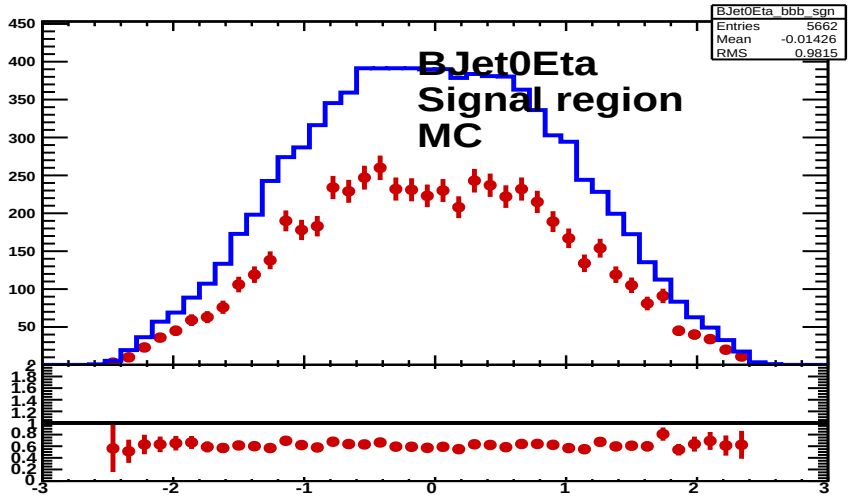
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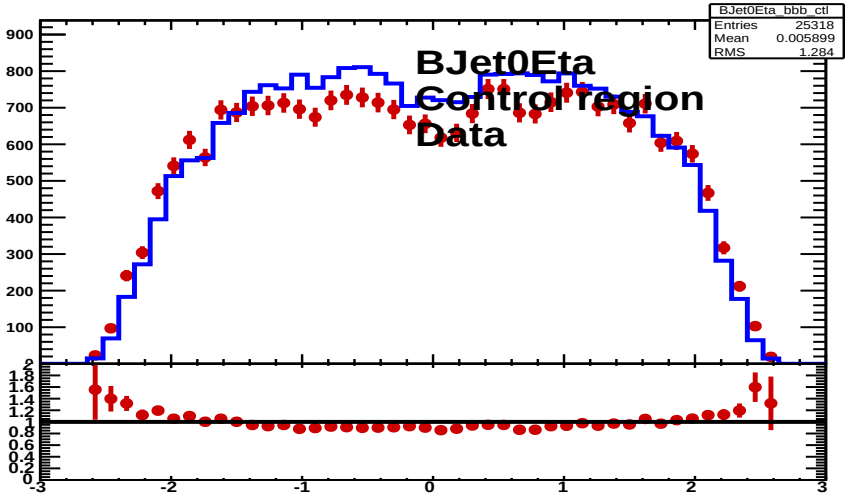
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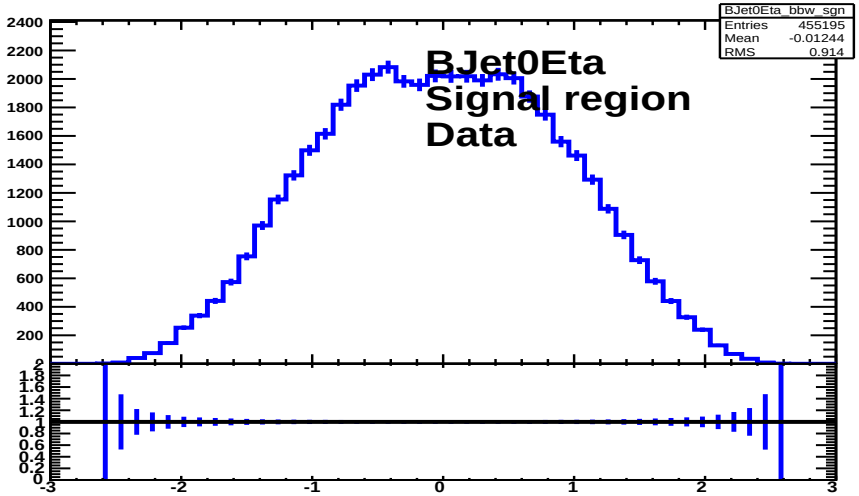
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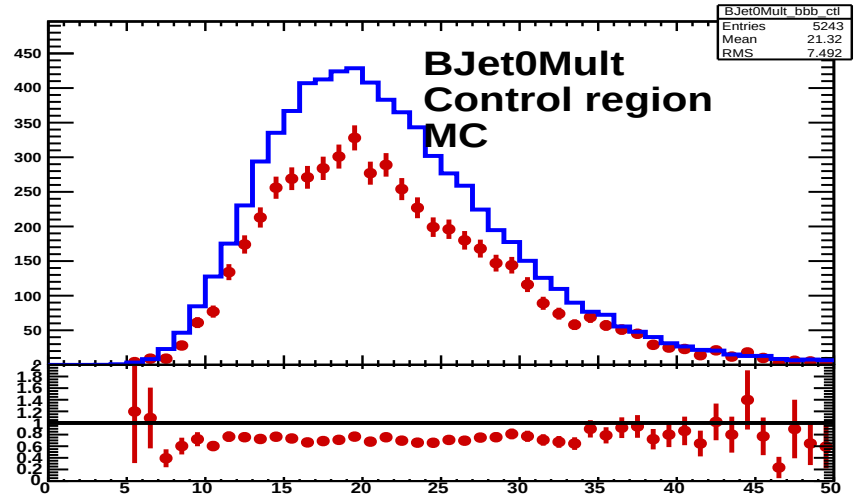
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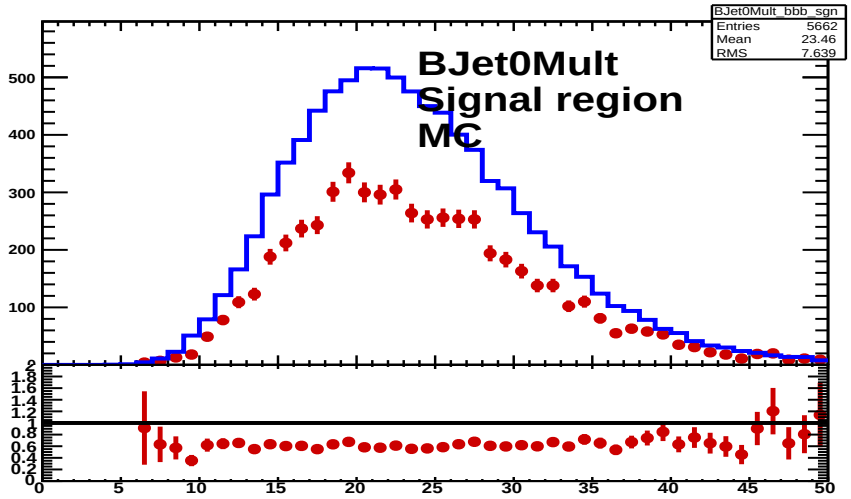
MC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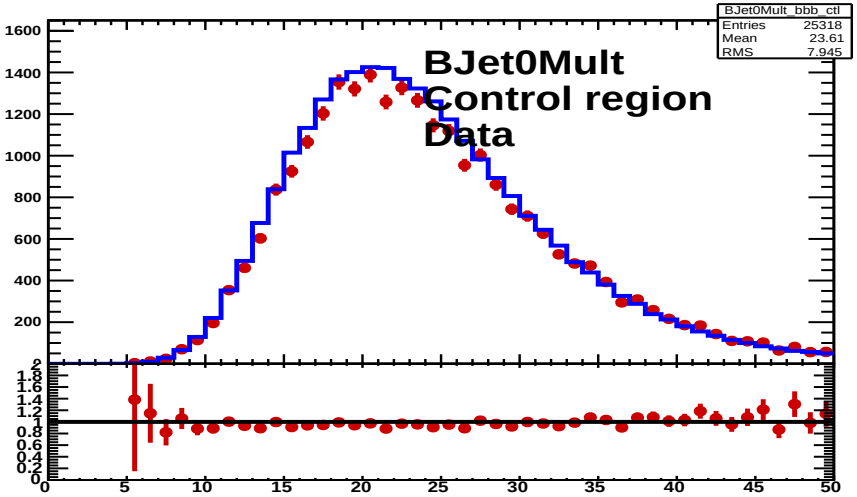
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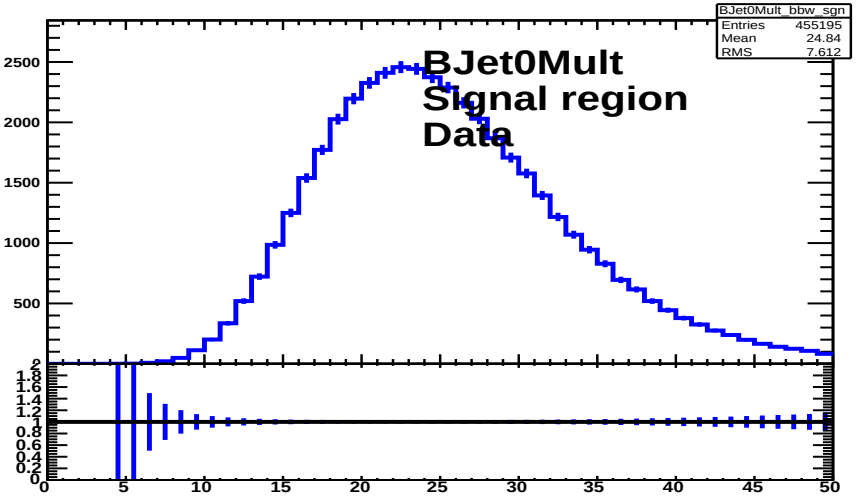
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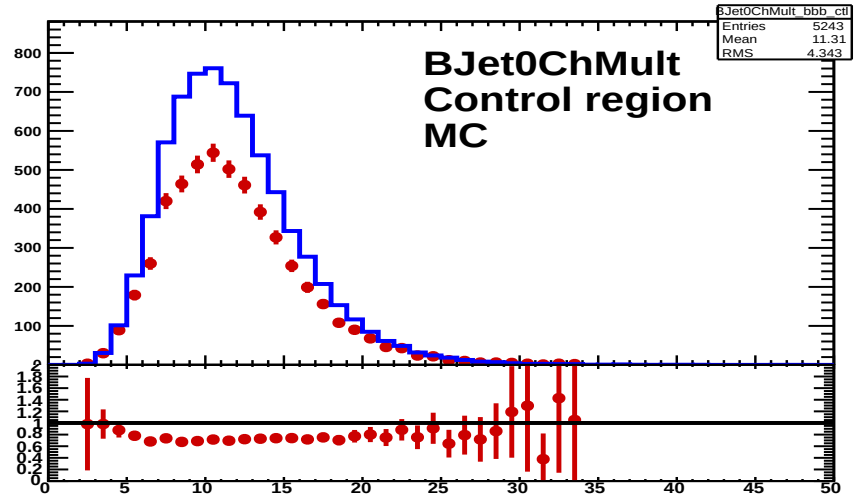
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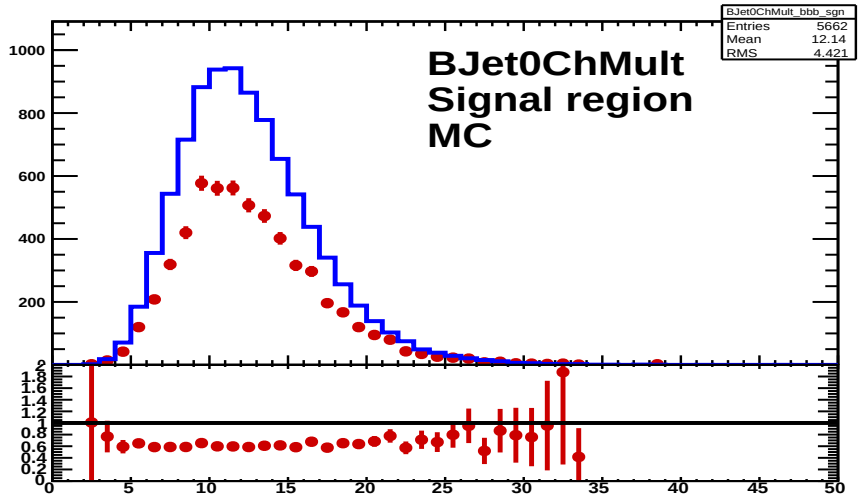
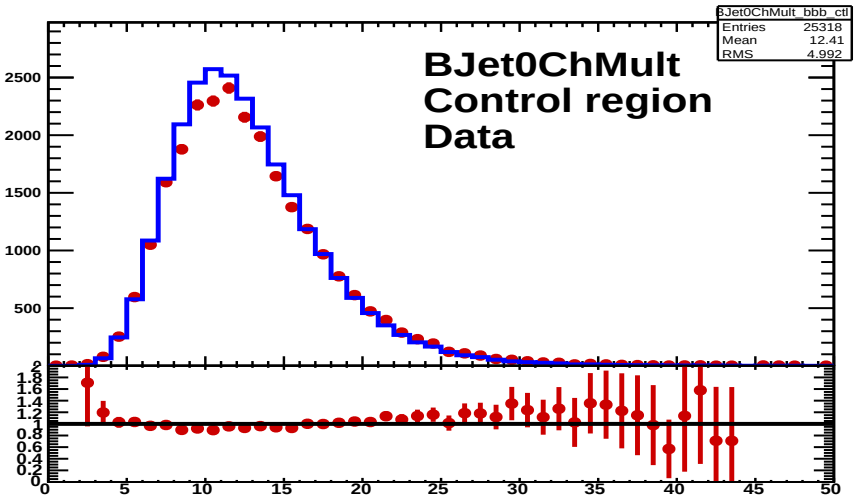
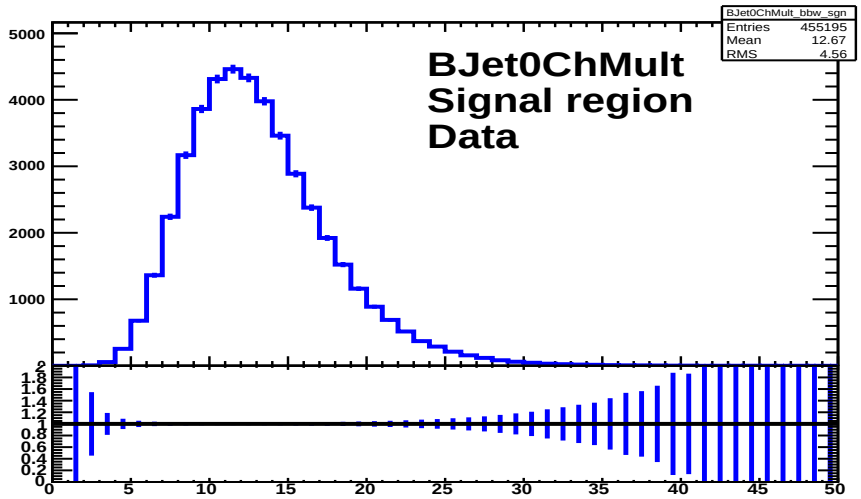
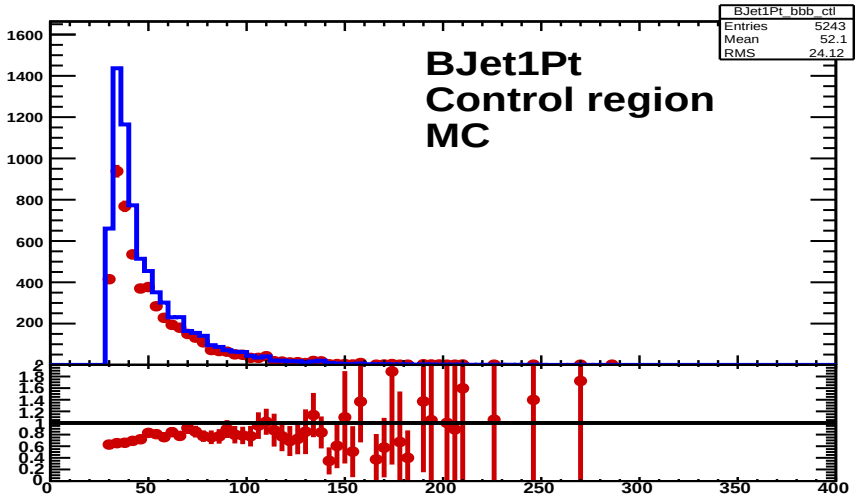
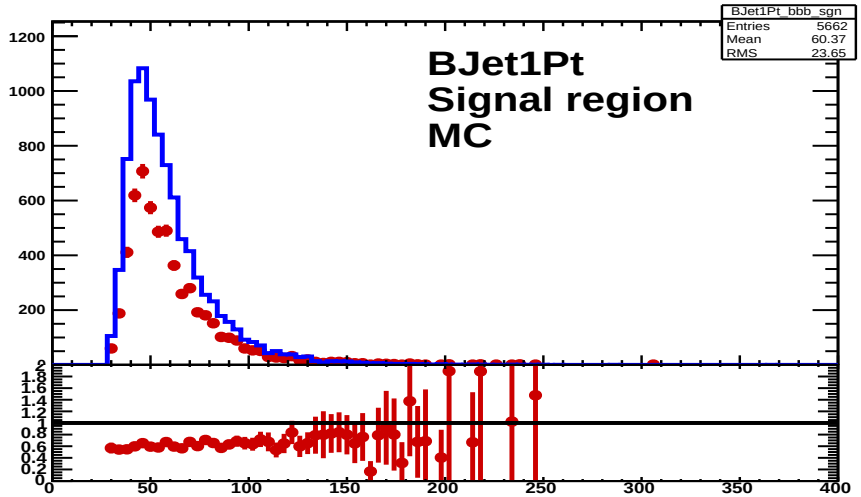
Control region
MC

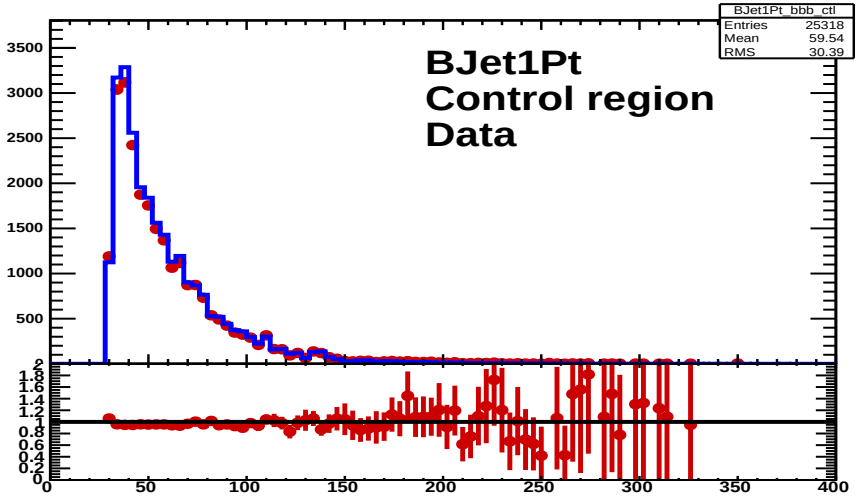

BJet0ChMult_bbb_sgn
Entries 5662
Mean 12.14
RMS 4.421
BJet0ChMult
Signal region
MC

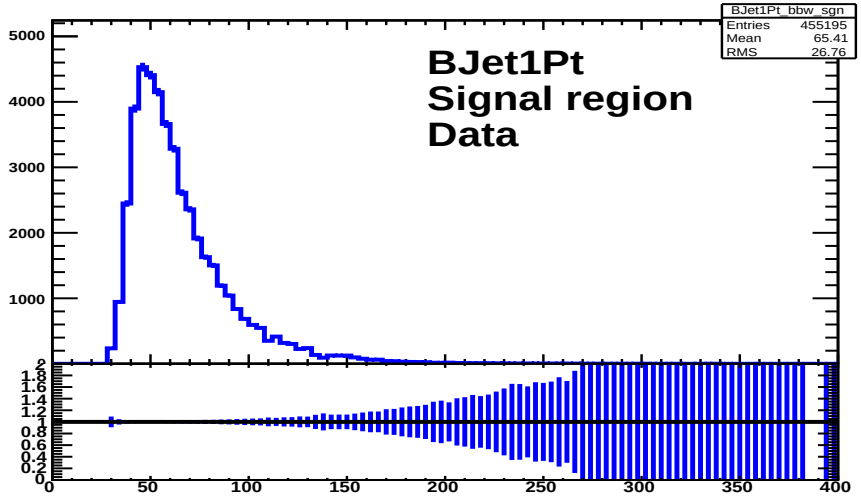

BJet0ChMult_bbb_ctl
Entries 25318
Mean 12.41
RMS 4.992
BJet0ChMult
Control region
Data

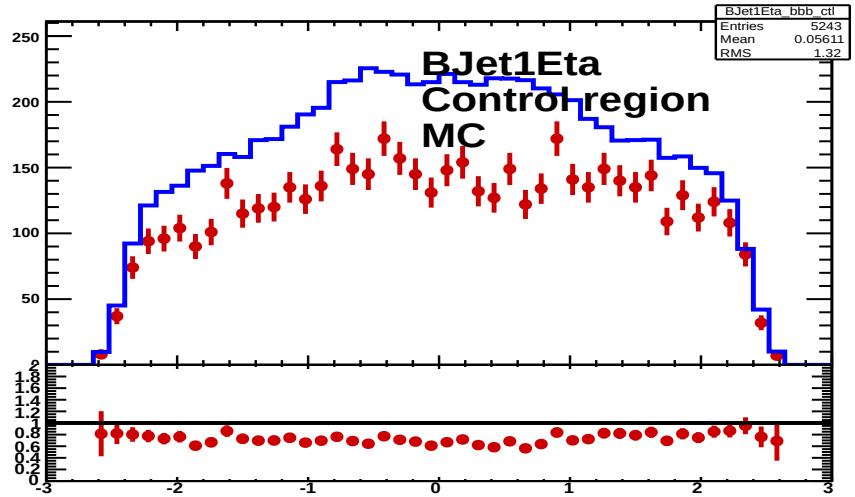

BJet0ChMult_bbw_sgn
Entries 455195
Mean 12.67
RMS 4.56
BJet0ChMult
Signal region
Data

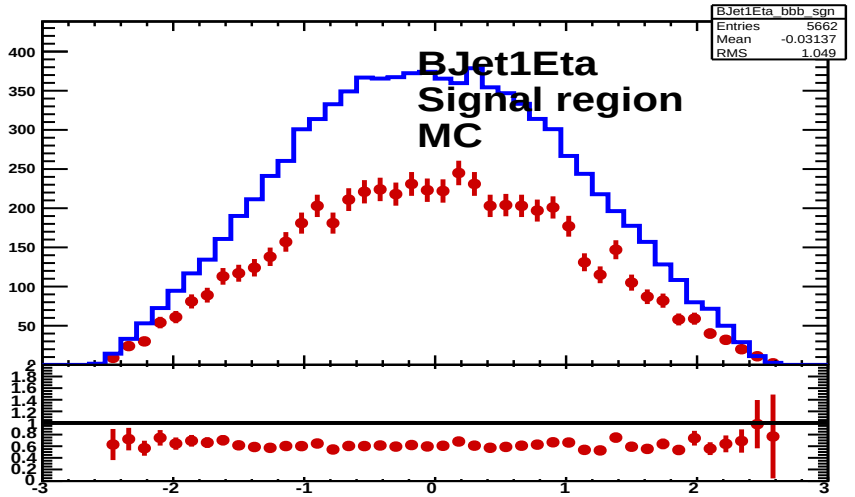

BJet1Pt_bbb_ctl
Entries 5243
Mean 52.1
RMS 24.12
BJet1Pt
Control region
MC

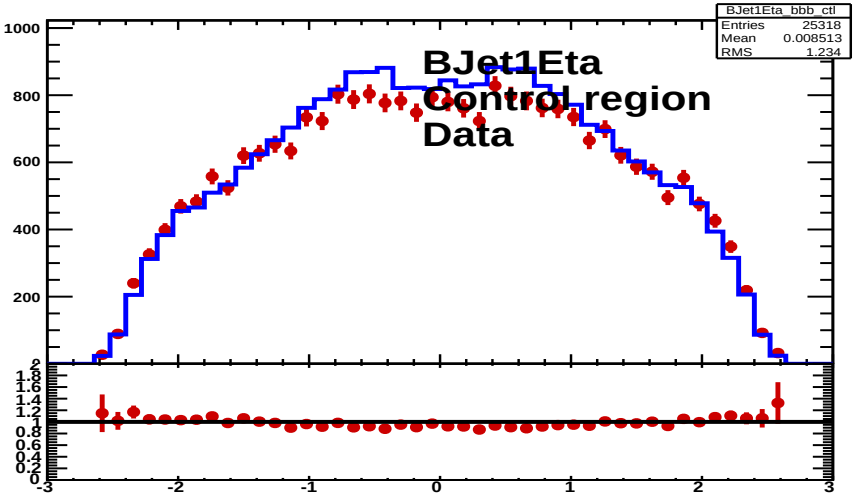

BJet1Pt_bbb_sgn
Entries 5662
Mean 60.37
RMS 23.65
BJet1Pt
Signal region
MC

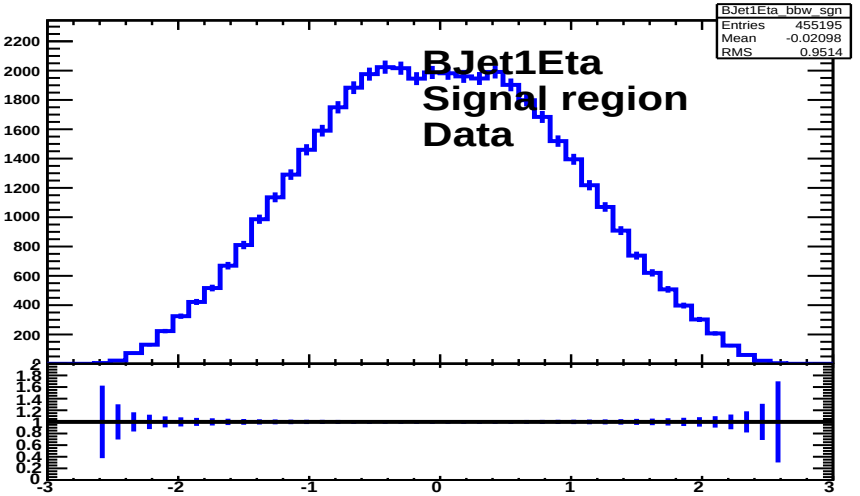

BJet1Pt_bbb_ctl
Entries 25318
Mean 59.54
RMS 30.39
BJet1Pt
Control region
Data

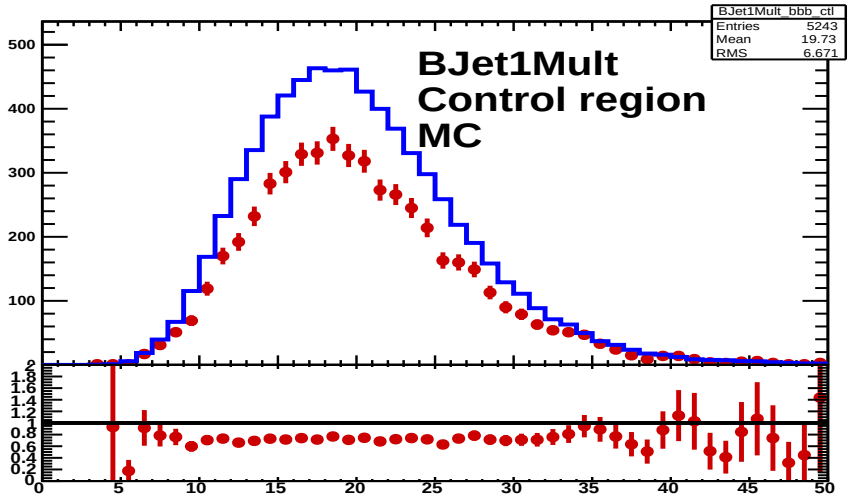

BJet1Pt_bbw_sgn
Entries 455195
Mean 65.41
RMS 26.76
BJet1Pt
Signal region
Data

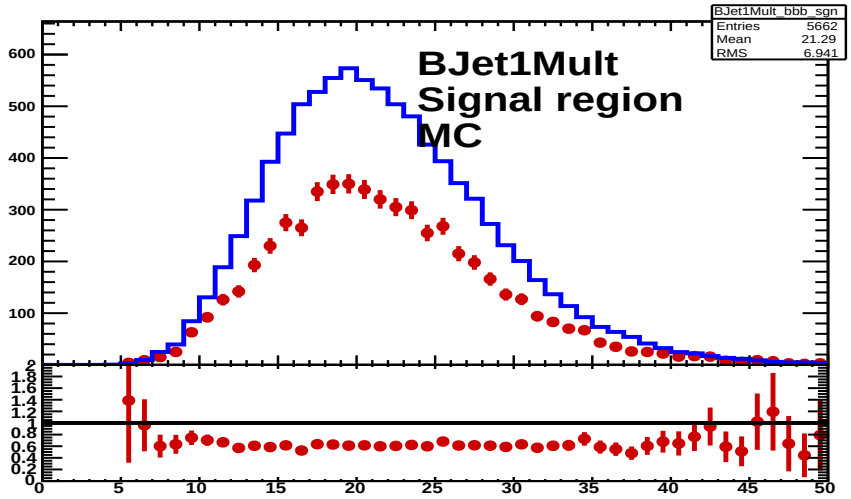

BJet1Eta_bbb_ctl
Entries 5243
Mean 0.05611
RMS 1.32
BJet1Eta
Control region
MC

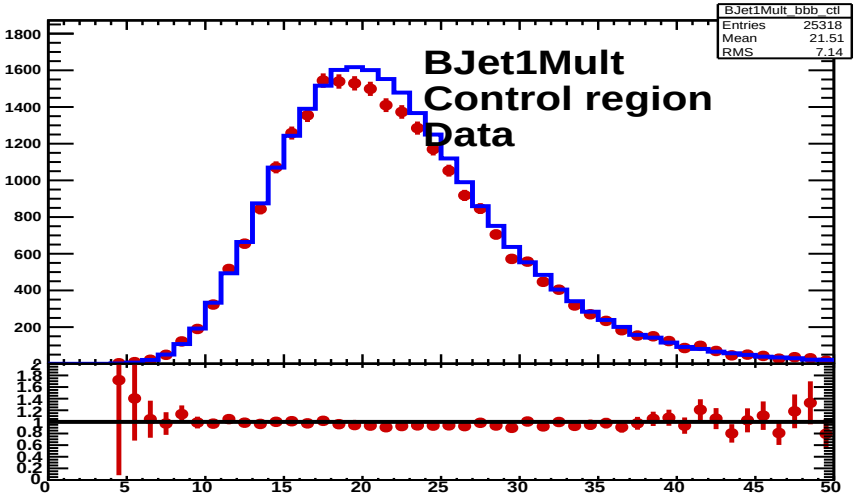

BJet1Eta_bbb_sgn
Entries 5662
Mean -0.03137
RMS 1.049
BJet1Eta
Signal region
MC

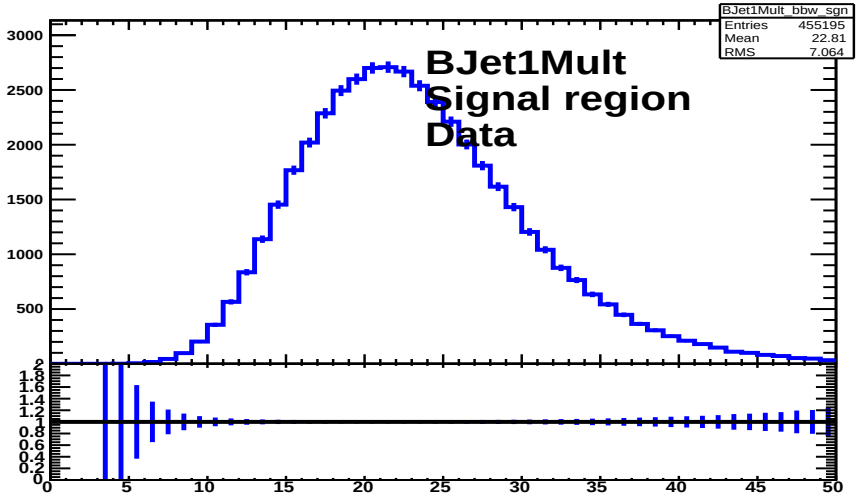

BJet1Eta_bbb_ctl
Entries 25318
Mean 0.008513
RMS 1.234
BJet1Eta
Control region
Data

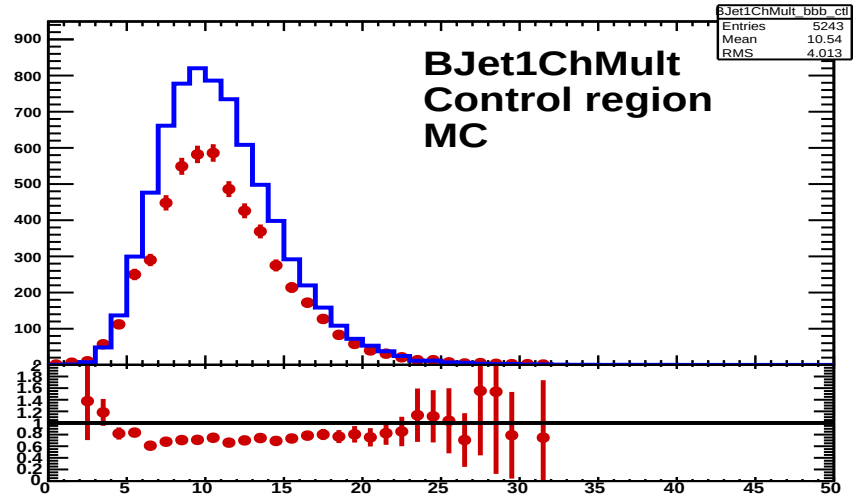

BJet1Eta_bbw_sgn
Entries 455195
Mean -0.02098
RMS 0.9514
BJet1Eta
Signal region
Data

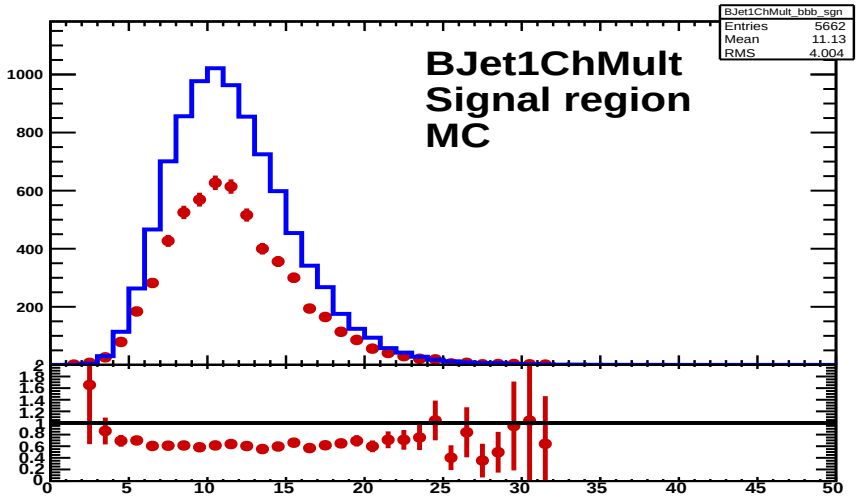

BJet1Mult_bbb_ctl
Entries 5243
Mean 19.73
RMS 6.671
BJet1Mult
Control region
MC

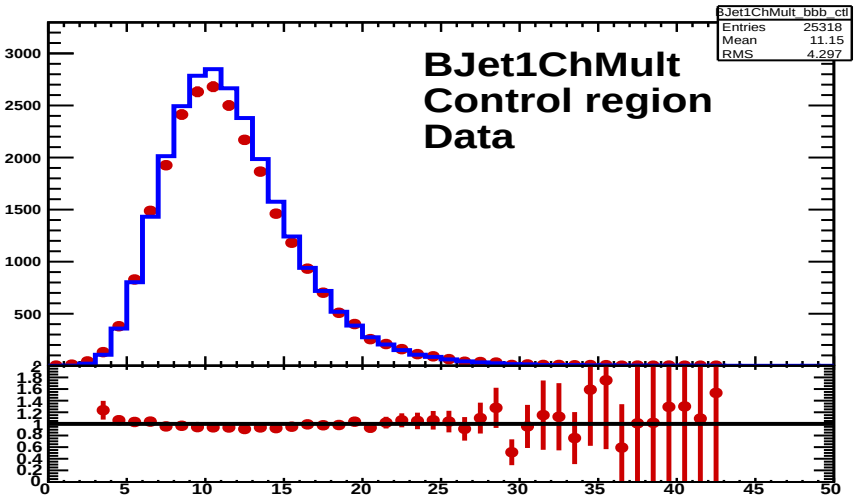

BJet1Mult_bbb_sgn
Entries 5662
Mean 21.29
RMS 6.941
BJet1Mult
Signal region
MC

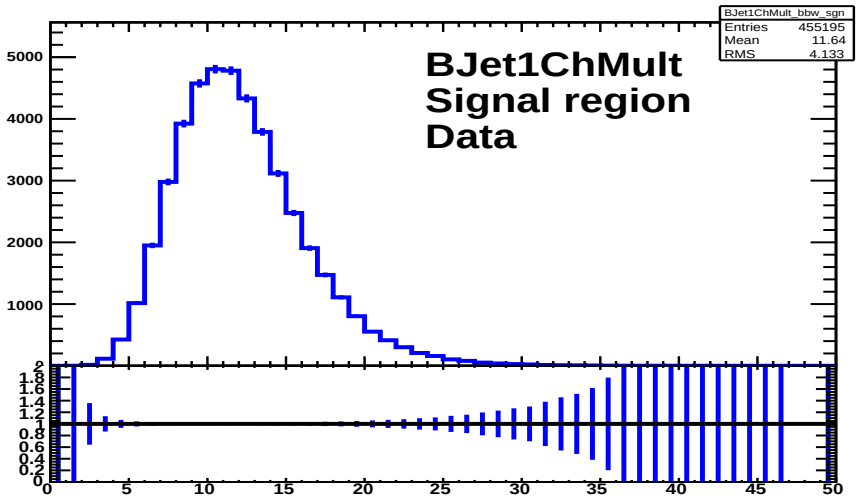

BJet1Mult_bbb_ctl
Entries 25318
Mean 21.51
RMS 7.14
BJet1Mult
Control region
Data

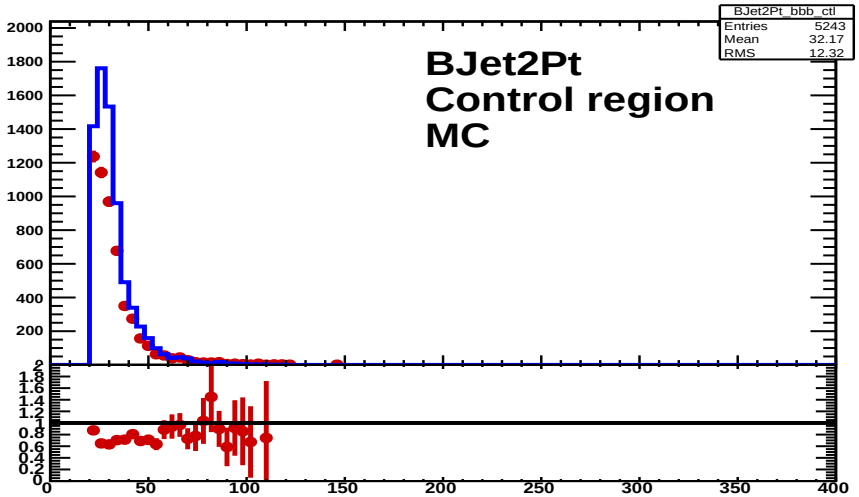

BJet1Mult_bbw_sgn
Entries 455195
Mean 22.81
RMS 7.064
BJet1Mult
Signal region
Data

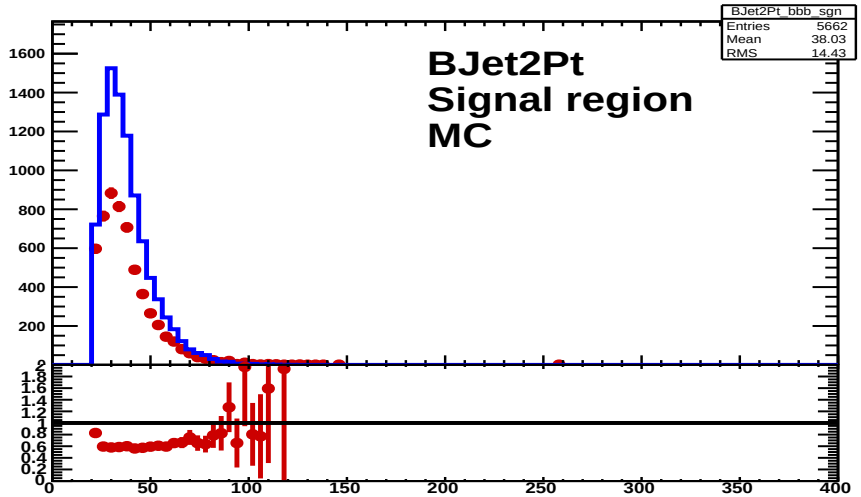

BJet1ChMult_bbb_ctl
Entries 5243
Mean 10.54
RMS 4.013
BJet1ChMult
Control region
MC

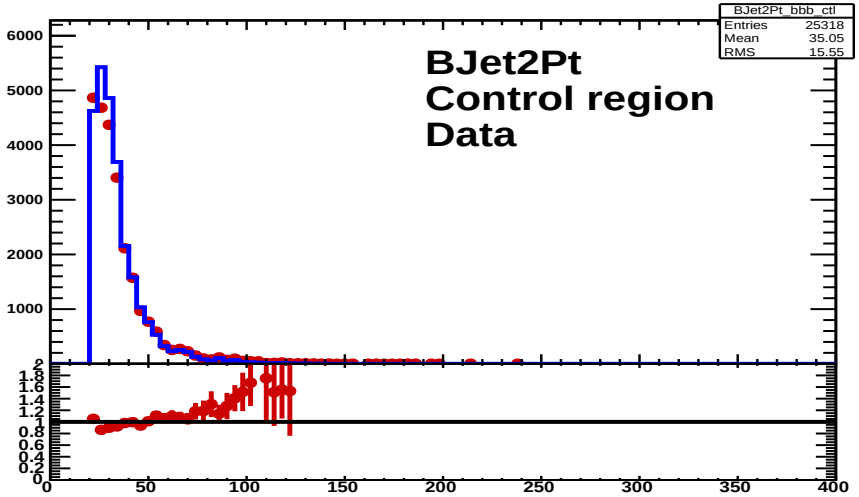

BJet1ChMult_bbb_sgn
Entries 5662
Mean 11.13
RMS 4.004
BJet1ChMult
Signal region
MC

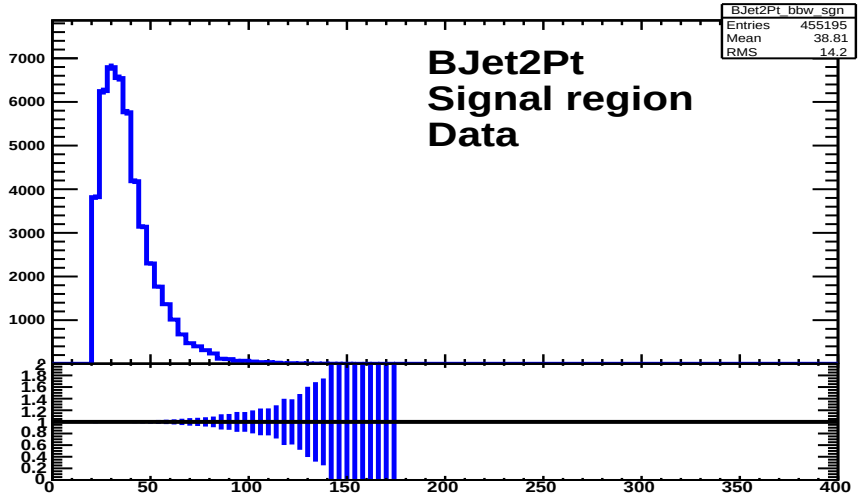

BJet1ChMult_bbb_ctl
Entries 25318
Mean 11.15
RMS 4.297
BJet1ChMult
Control region
Data

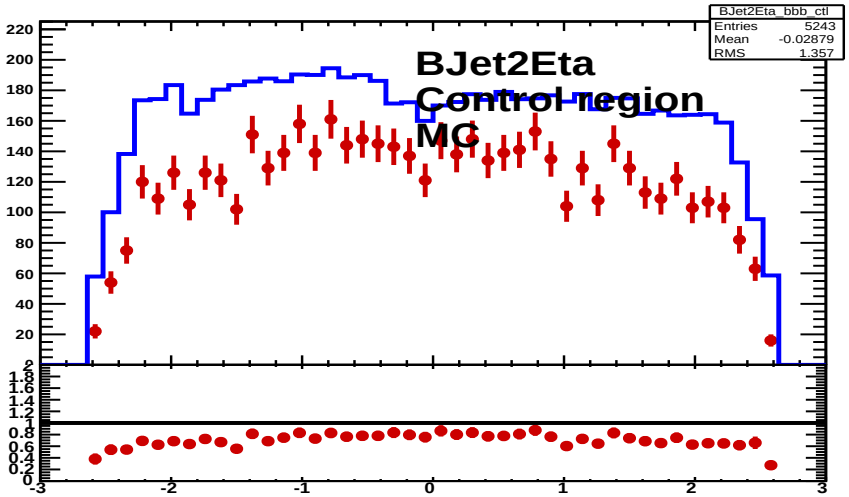

BJet1ChMult_bbw_sgn
Entries 455195
Mean 11.64
RMS 4.133
BJet1ChMult
Signal region
Data

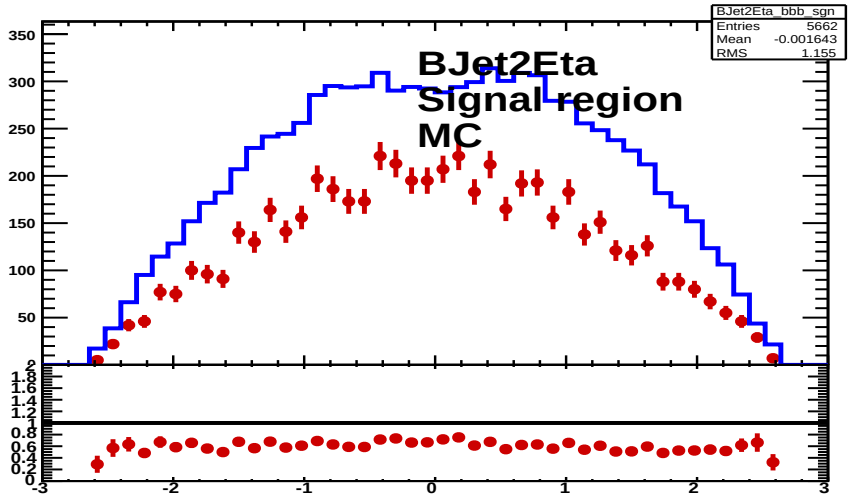

BJet2Pt_bbb_ctl
Entries 5243
Mean 32.17
RMS 12.32
BJet2Pt
Control region
MC

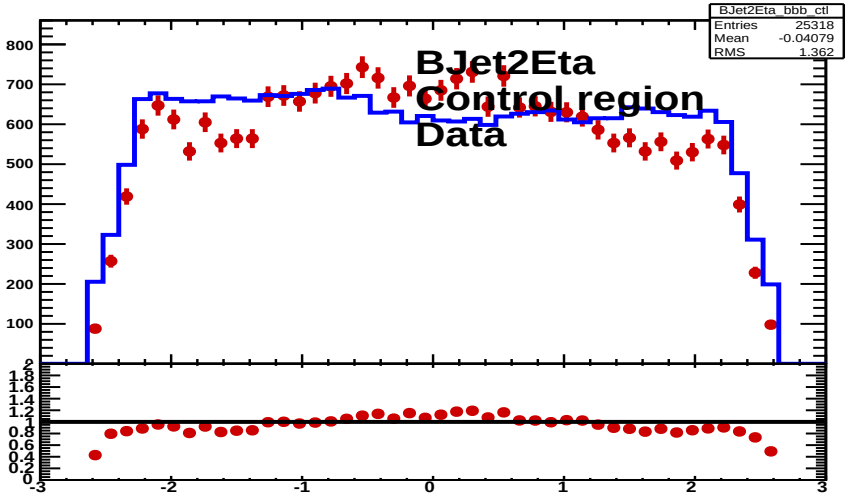

BJet2Pt_bbb_sgn
Entries 5662
Mean 38.03
RMS 14.43
BJet2Pt
Signal region
MC

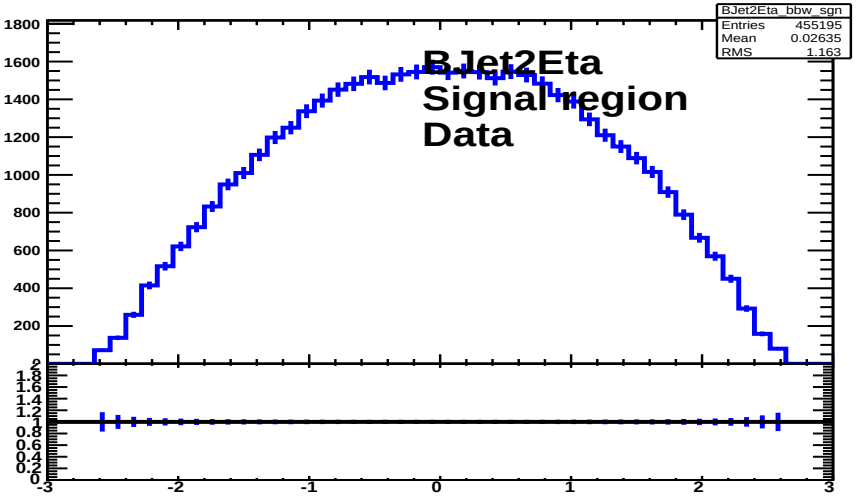

BJet2Pt_bbb_ctl
Entries 25318
Mean 35.05
RMS 15.55
BJet2Pt
Control region
Data

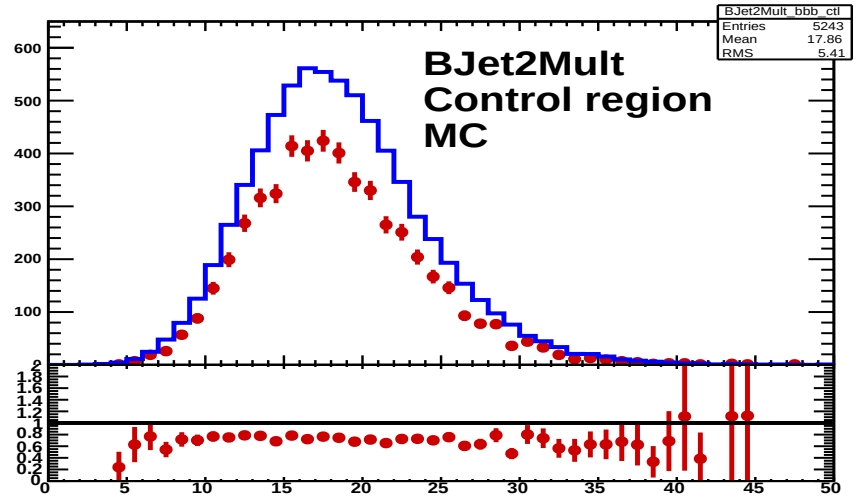

BJet2Pt_bbw_sgn
Entries 455195
Mean 38.81
RMS 14.2
BJet2Pt
Signal region
Data

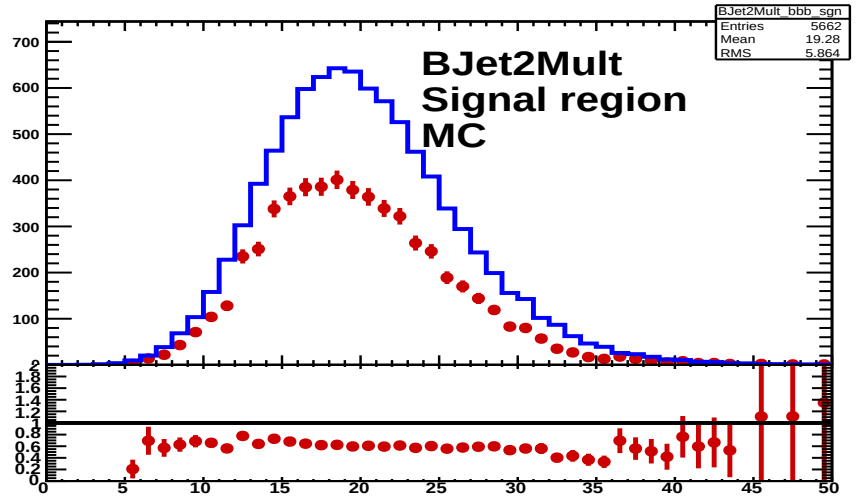

BJet2Eta_bbb_ctl
Entries 5243
Mean -0.02879
RMS 1.357
BJet2Eta
Control region
MC

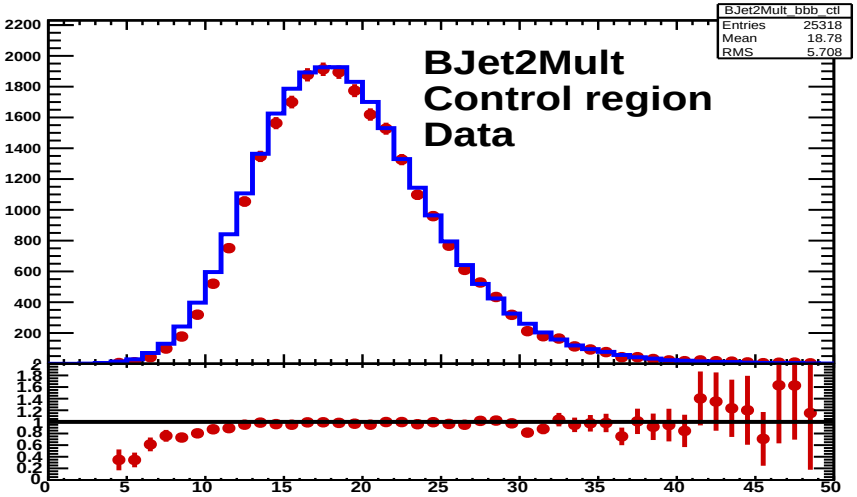

BJet2Eta_bbb_sgn
Entries 5662
Mean -0.001643
RMS 1.155
BJet2Eta
Signal region
MC

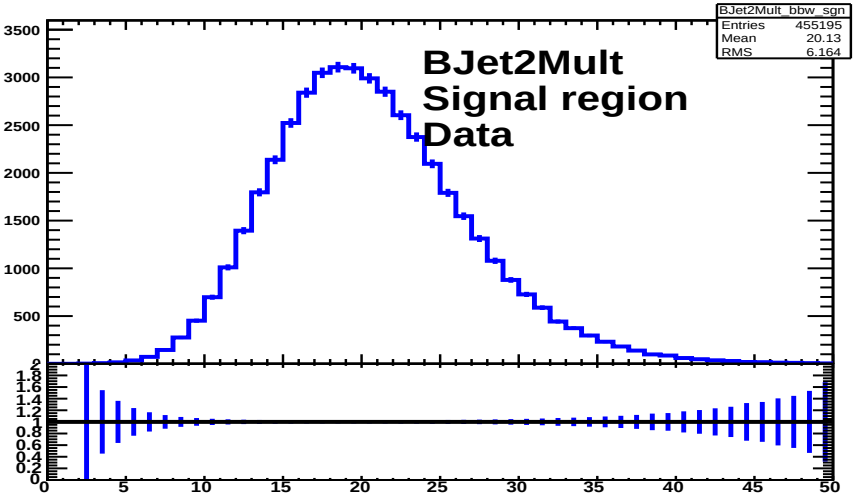

BJet2Eta_bbb_ctl
Entries 25318
Mean -0.04079
RMS 1.362
BJet2Eta
Control region
Data

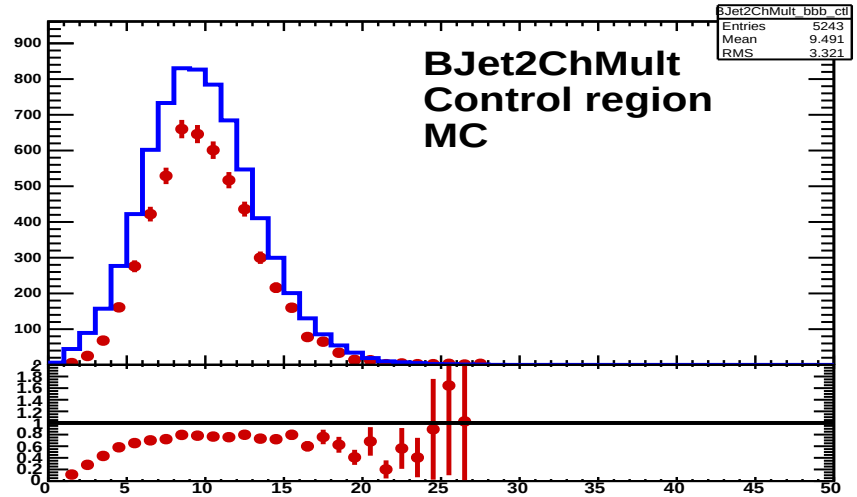

BJet2Eta_bbw_sgn
Entries 455195
Mean 0.02635
RMS 1.163
BJet2Eta
Signal region
Data

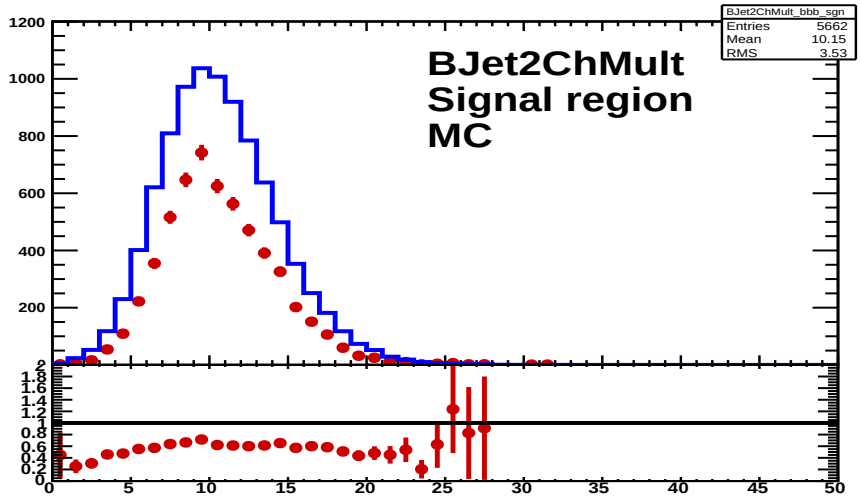

BJet2Mult_bbb_ctl
Entries 5243
Mean 17.86
RMS 5.41
BJet2Mult
Control region
MC

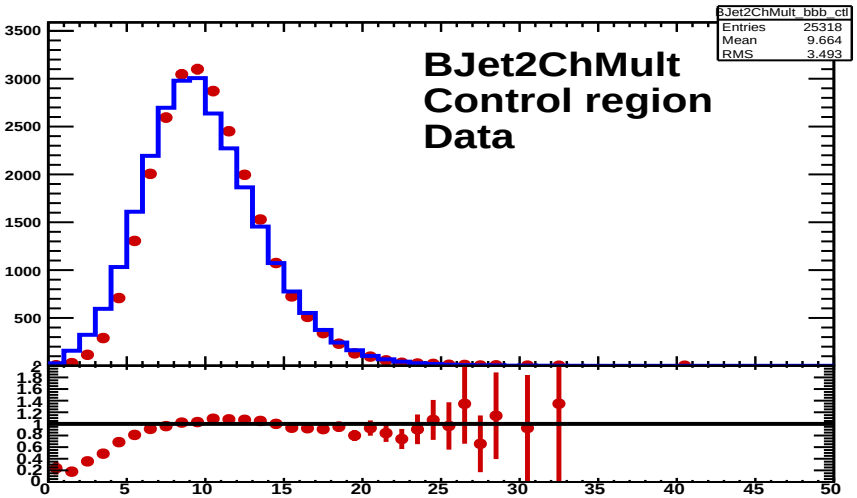

BJet2Mult_bbb_sgn
Entries 5662
Mean 19.28
RMS 5.864
BJet2Mult
Signal region
MC

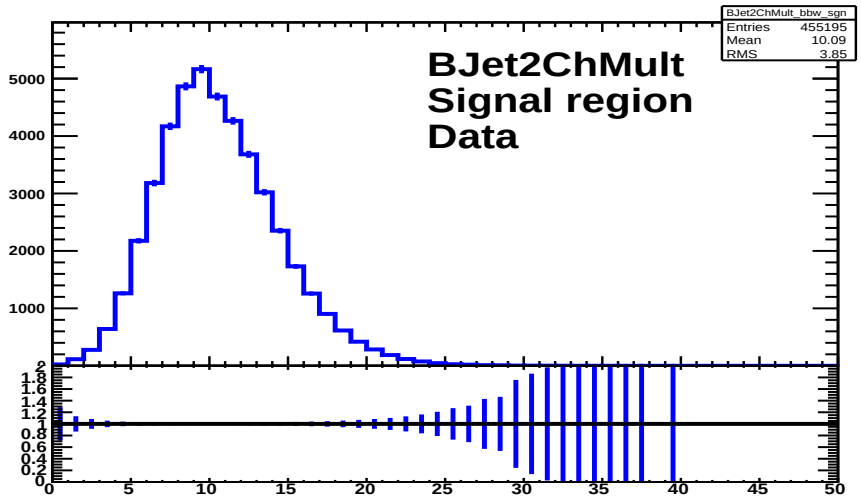

BJet2Mult_bbb_ctl
Entries 25318
Mean 18.78
RMS 5.708
BJet2Mult
Control region
Data

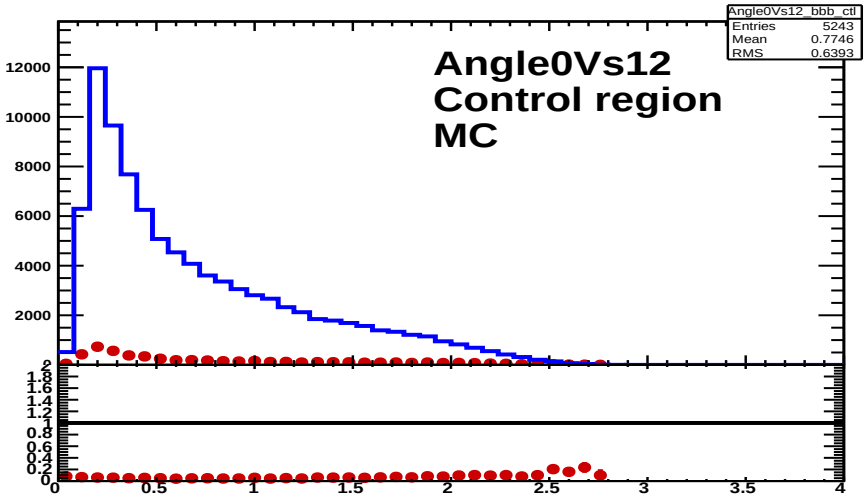

BJet2Mult_bbw_sgn
Entries 455195
Mean 20.13
RMS 6.164
BJet2Mult
Signal region
Data

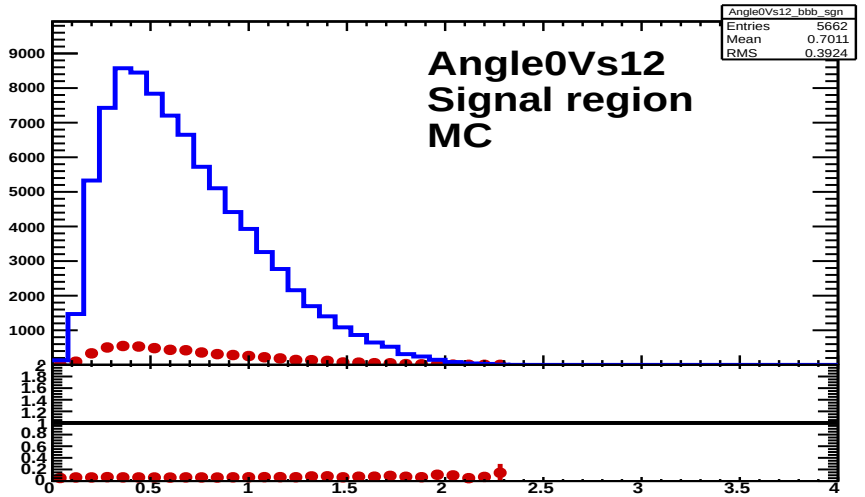

BJet2ChMult_bbb_ctl
Entries 5243
Mean 9.491
RMS 3.321
BJet2ChMult
Control region
MC

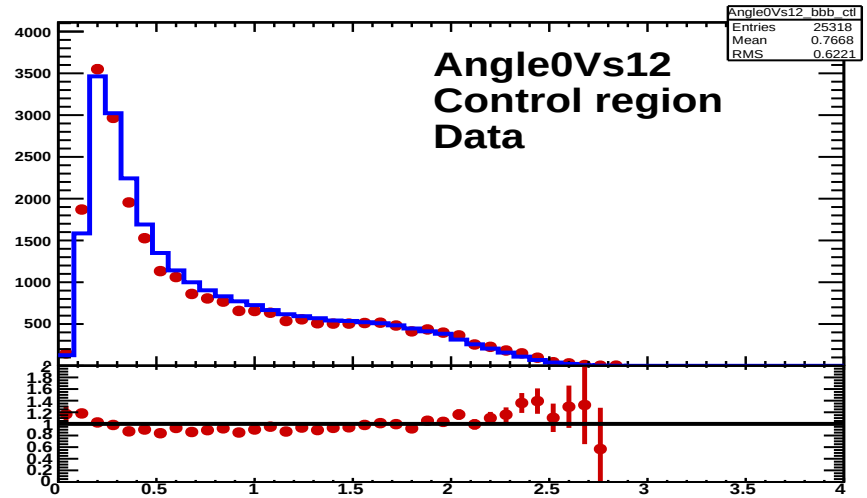

BJet2ChMult_bbb_sgn
Entries 5662
Mean 10.15
RMS 3.53
BJet2ChMult
Signal region
MC

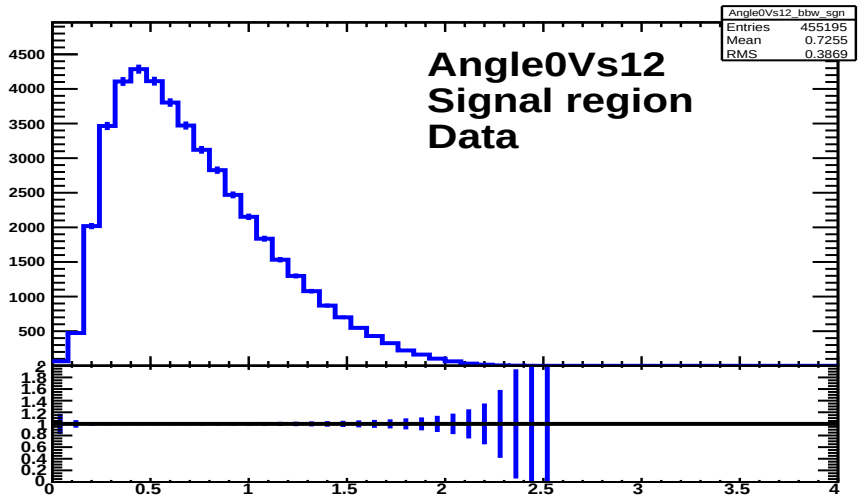

BJet2ChMult_bbb_ctl
Entries 25318
Mean 9.664
RMS 3.493
BJet2ChMult
Control region
Data

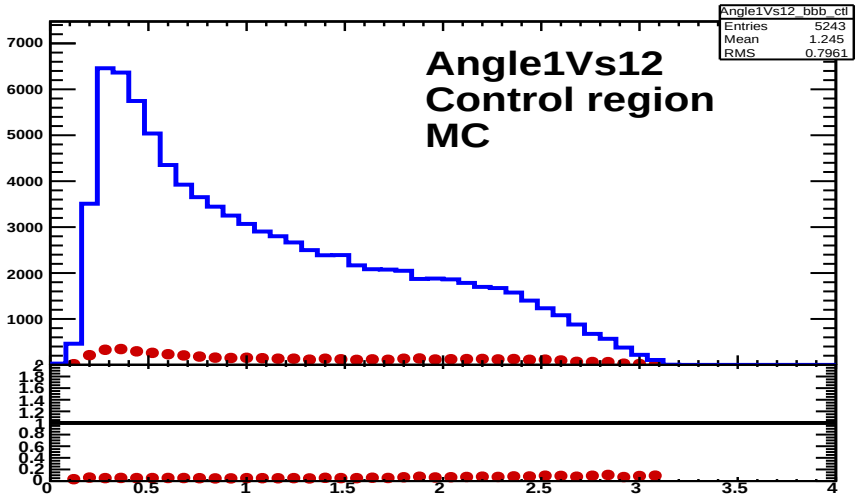

BJet2ChMult_bbw_sgn
Entries 455195
Mean 10.09
RMS 3.85
BJet2ChMult
Signal region
Data

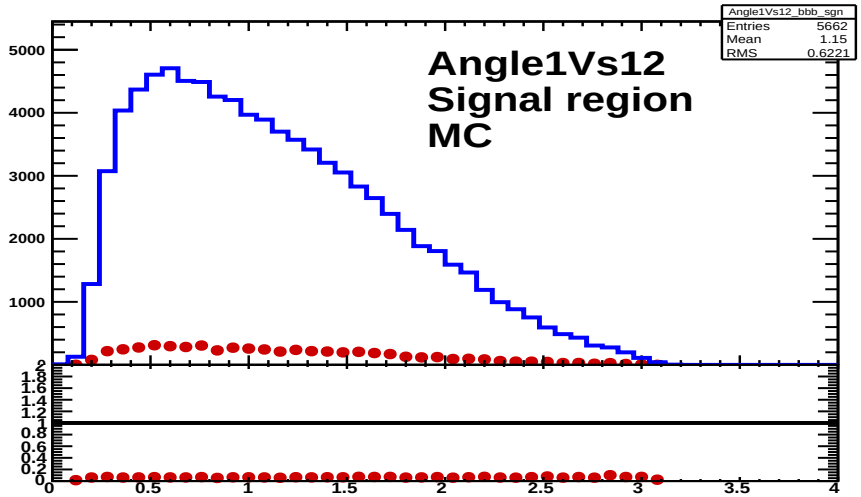

Angle0Vs12_bbb_ctl
Entries 5243
Mean 0.7746
RMS 0.6393
Angle0Vs12
Control region
MC

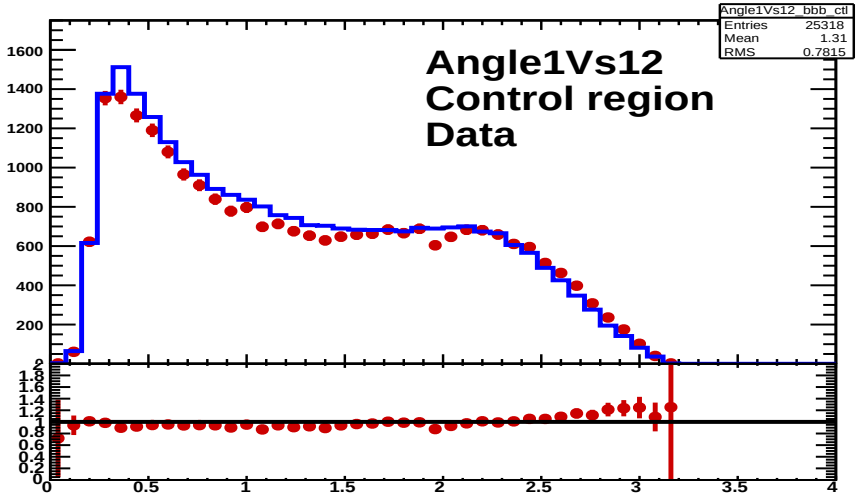

Angle0Vs12_bbb_sgn
Entries 5662
Mean 0.7011
RMS 0.3924
Angle0Vs12
Signal region
MC

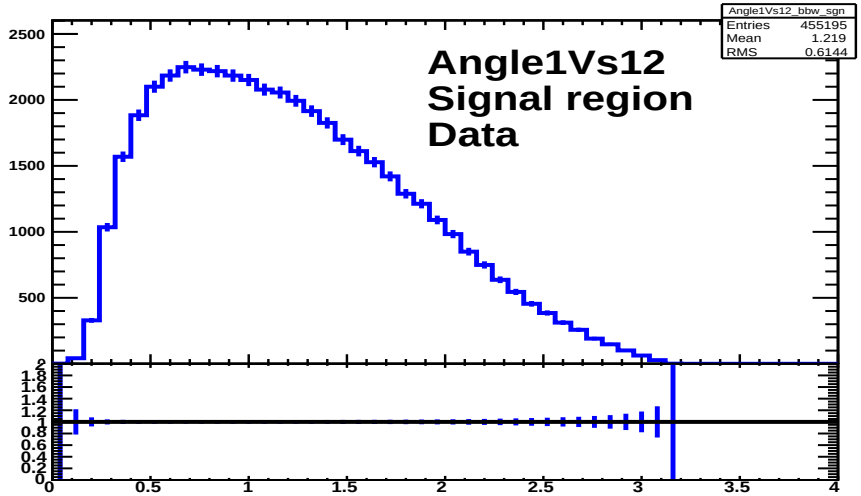

Angle0Vs12_bbb_ctl
Entries 25318
Mean 0.7668
RMS 0.6221
Angle0Vs12
Control region
Data

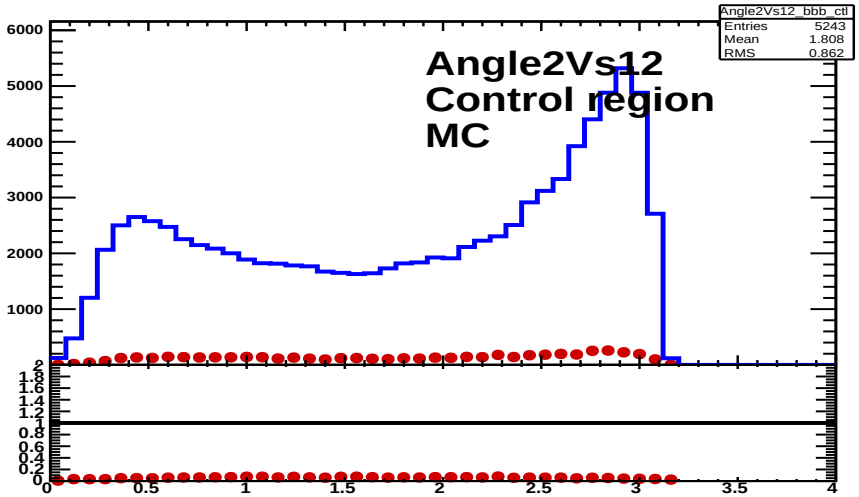

Angle0Vs12_bbw_sgn
Entries 455195
Mean 0.7255
RMS 0.3869
Angle0Vs12
Signal region
Data

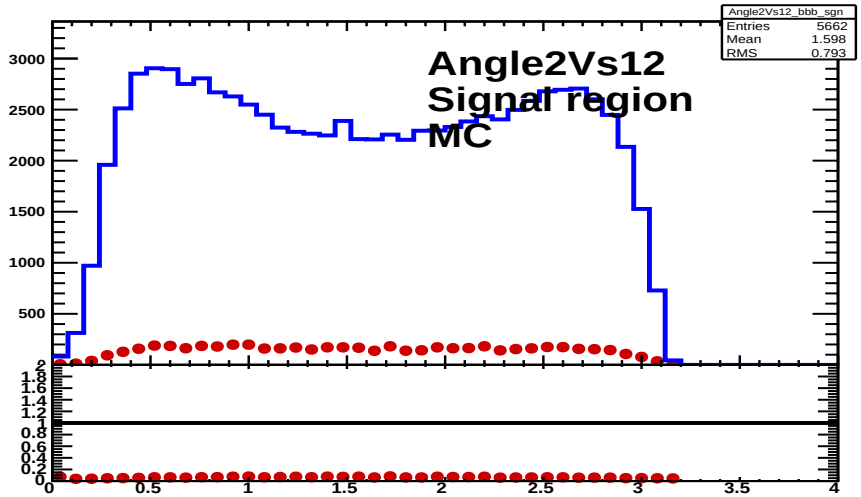

Angle1Vs12_bbb_ctl
Entries 5243
Mean 1.245
RMS 0.7961
Angle1Vs12
Control region
MC

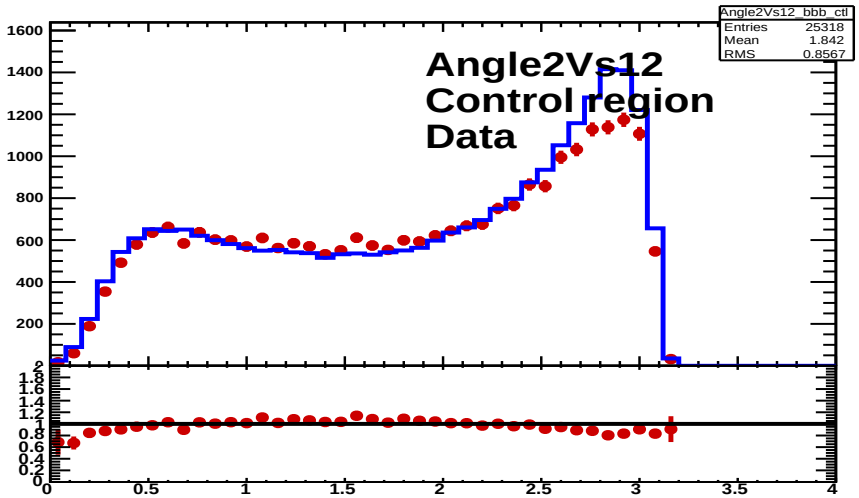

Angle1Vs12_bbb_sgn
Entries 5662
Mean 1.15
RMS 0.6221
Angle1Vs12
Signal region
MC

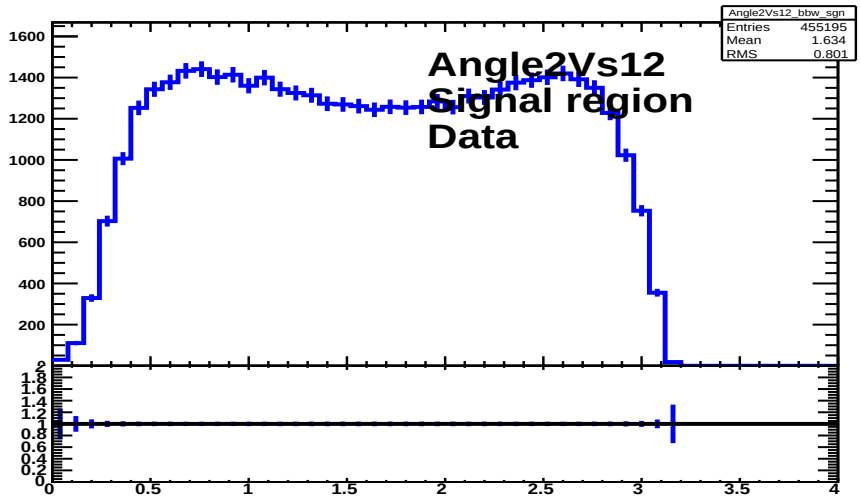

Angle1Vs12_bbb_ctl
Entries 25318
Mean 1.31
RMS 0.7815
Angle1Vs12
Control region
Data

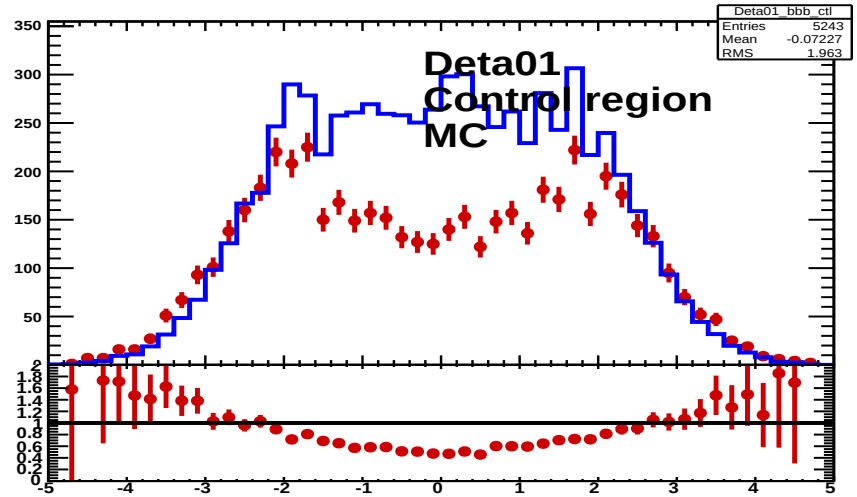

Angle1Vs12_bbw_sgn
Entries 455195
Mean 1.219
RMS 0.6144
Angle1Vs12
Signal region
Data

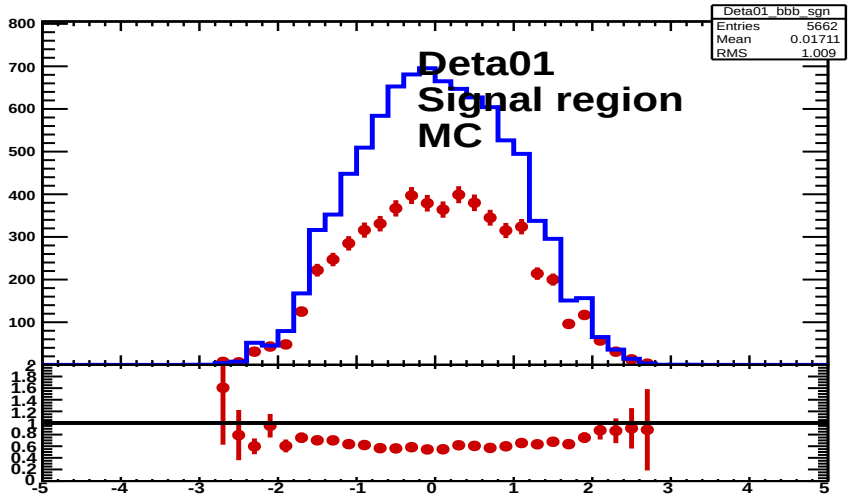

Angle2Vs12_bbb_ctl
Entries 5243
Mean 1.808
RMS 0.862
Angle2Vs12
Control region
MC

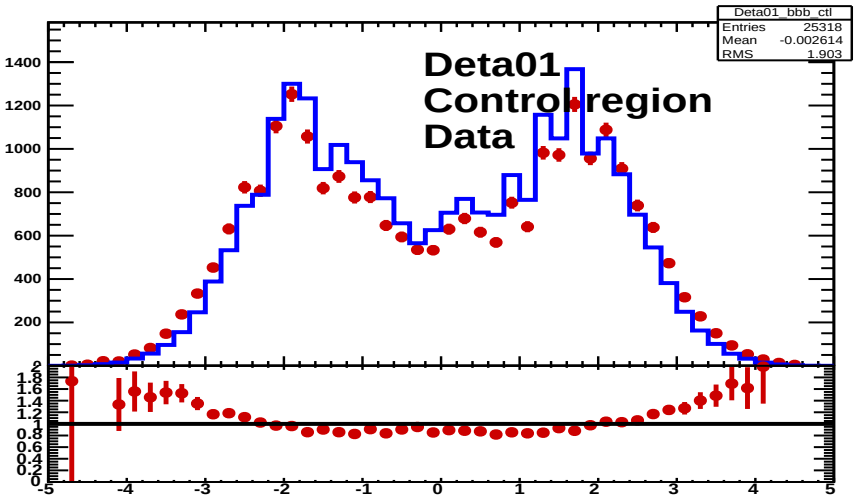

Angle2Vs12_bbb_sgn
Entries 5662
Mean 1.598
RMS 0.793
Angle2Vs12
Signal region
MC

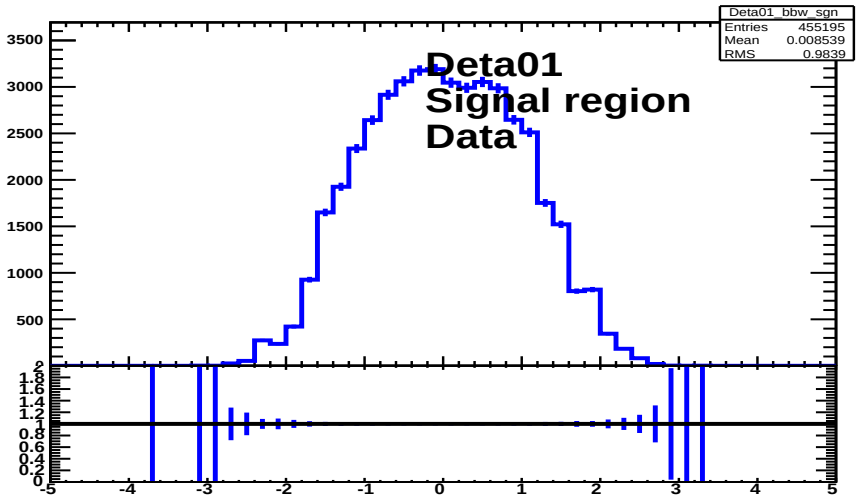

Angle2Vs12_bbb_ctl
Entries 25318
Mean 1.842
RMS 0.8567
Angle2Vs12
Control region
Data

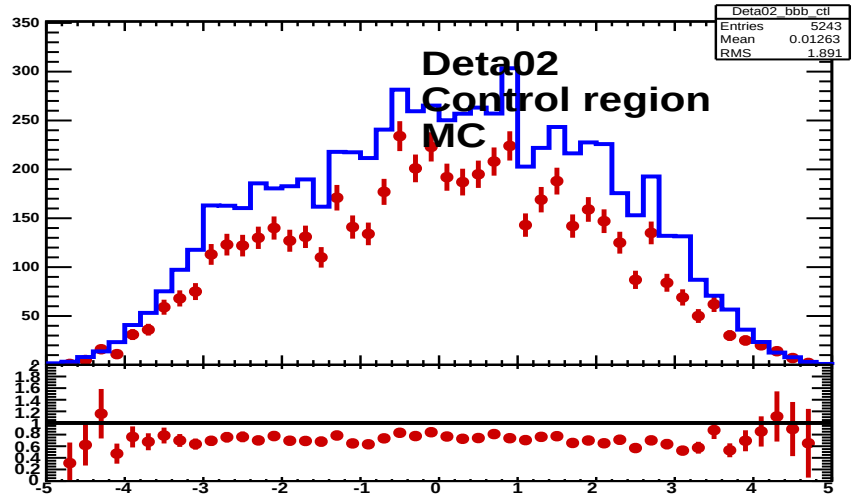

Angle2Vs12_bbw_sgn
Entries 455195
Mean 1.634
RMS 0.801
Angle2Vs12
Signal region
Data

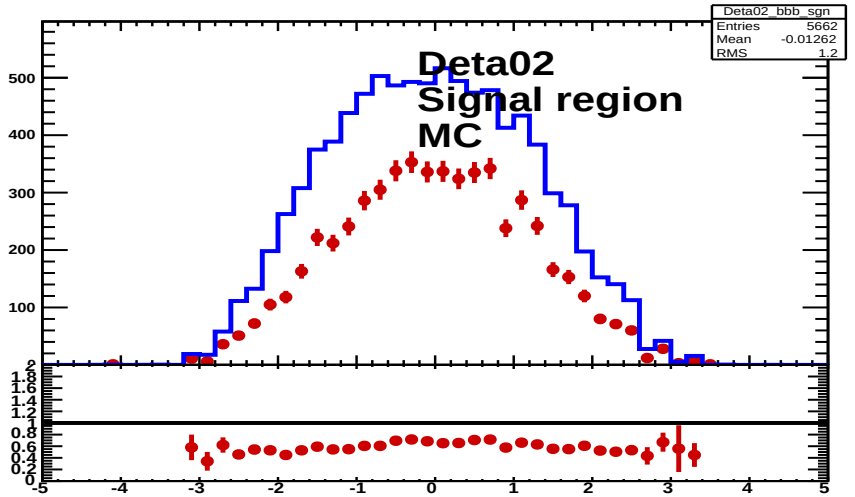

Deta01_bbb_ctl
Entries 5243
Mean -0.07227
RMS 1.963
Deta01
Control region
MC

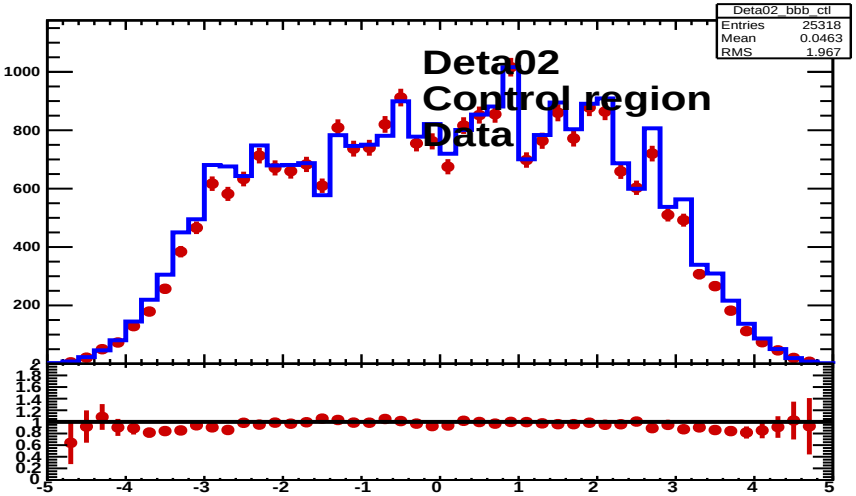

Deta01_bbb_sgn
Entries 5662
Mean 0.01711
RMS 1.009
Deta01
Signal region
MC

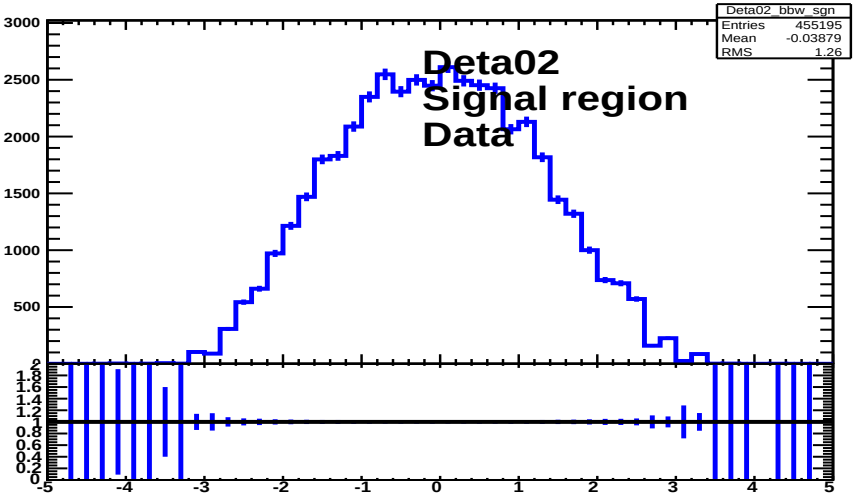

Deta01_bbb_ctl
Entries 25318
Mean -0.002614
RMS 1.903
Deta01
Control region
Data

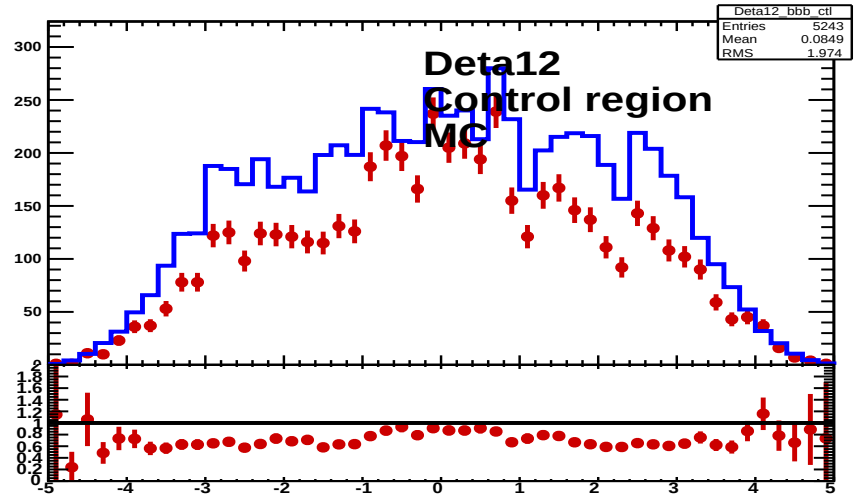

Deta01_bbw_sgn
Entries 455195
Mean 0.008539
RMS 0.9839
Deta01
Signal region
Data

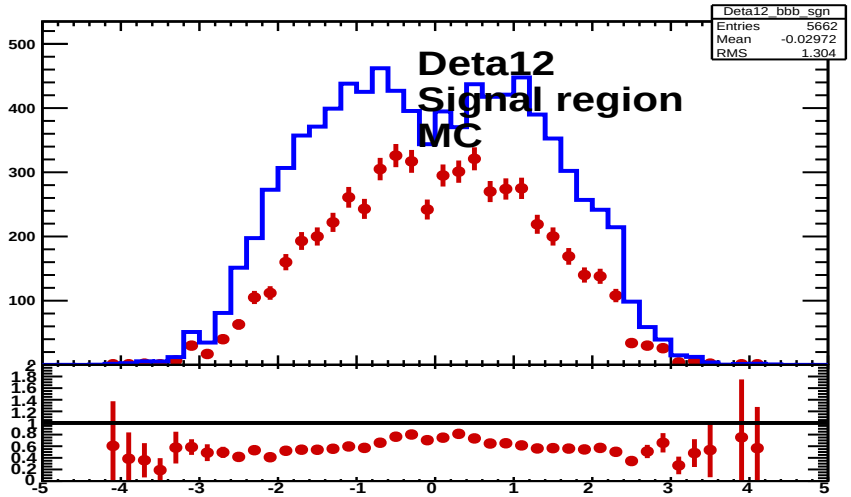

Deta02_bbb_ctl
Entries 5243
Mean 0.01263
RMS 1.891
Deta02
Control region
MC

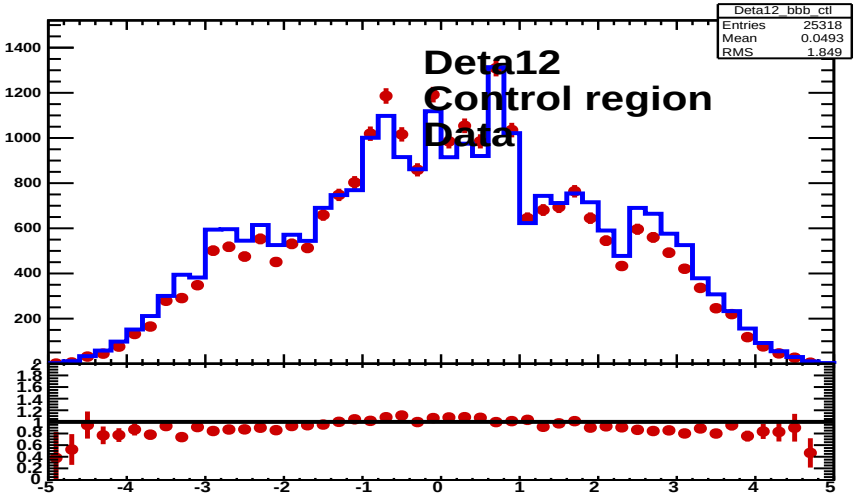

Deta02_bbb_sgn
Entries 5662
Mean -0.01262
RMS 1.2
Deta02
Signal region
MC

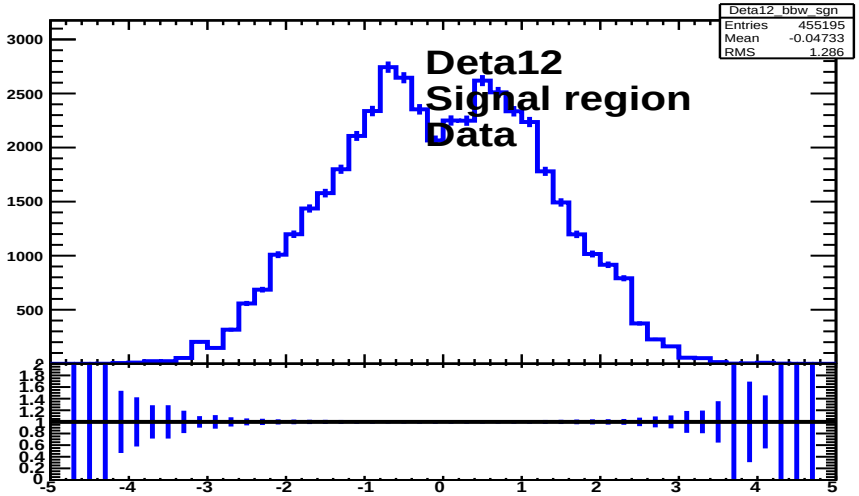

Deta02_bbb_ctl
Entries 25318
Mean 0.0463
RMS 1.967
Deta02
Control region
Data

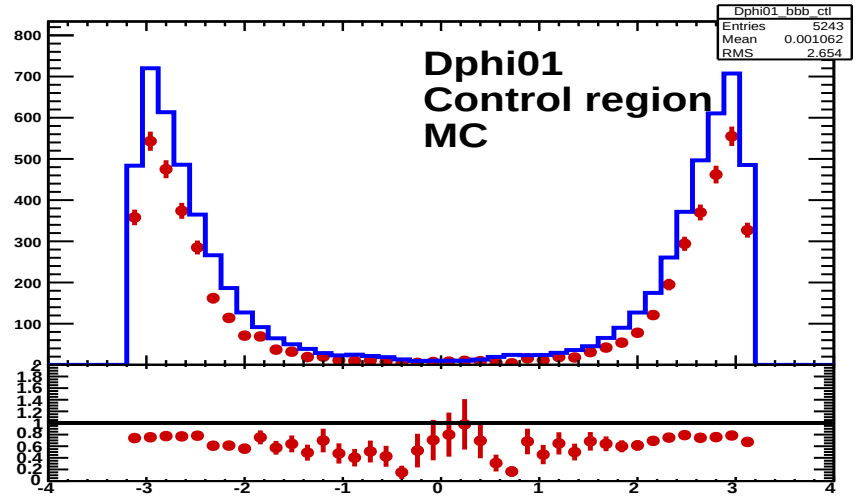

Deta02_bbw_sgn
Entries 455195
Mean -0.03879
RMS 1.26
Deta02
Signal region
Data

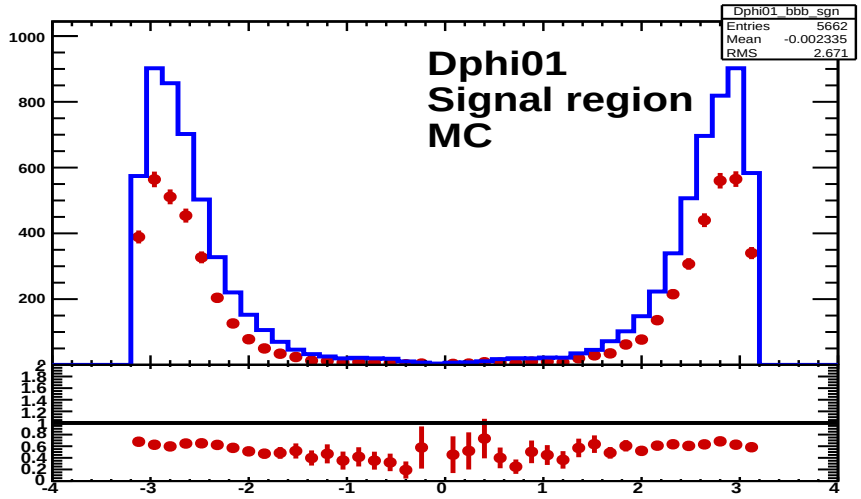

Deta12_bbb_ctl
Entries 5243
Mean 0.0849
RMS 1.974
Deta12
Control region
MC

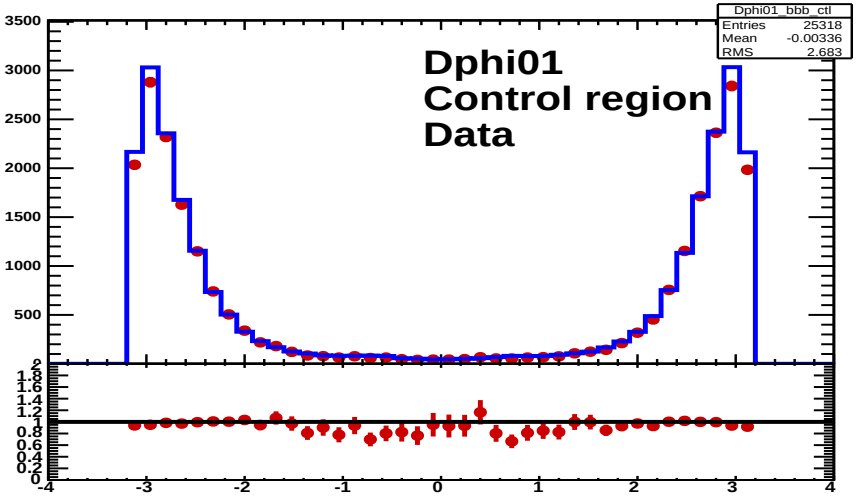

Deta12_bbb_sgn
Entries 5662
Mean -0.02972
RMS 1.304
Deta12
Signal region
MC

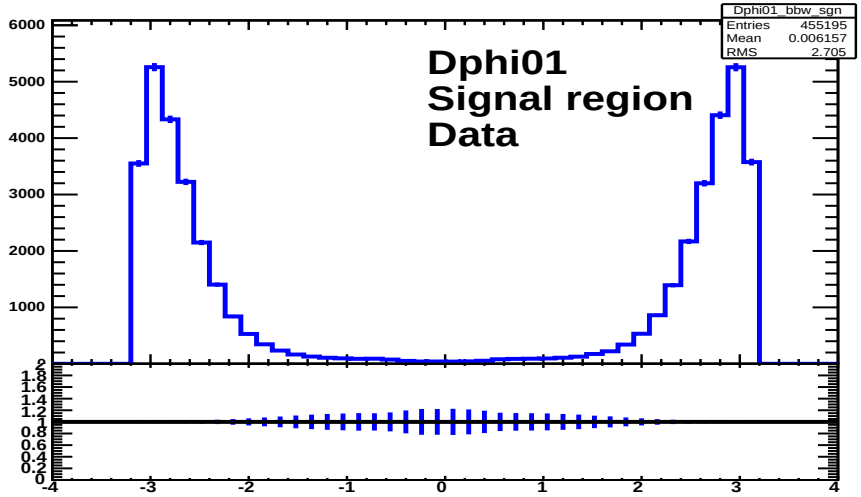

Deta12_bbb_ctl
Entries 25318
Mean 0.0493
RMS 1.849
Deta12
Control region
Data

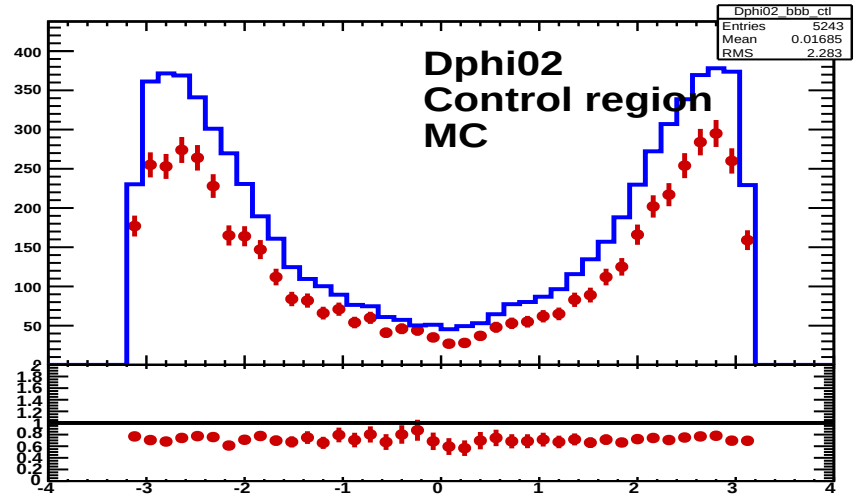

Deta12_bbw_sgn
Entries 455195
Mean -0.04733
RMS 1.286
Deta12
Signal region
Data

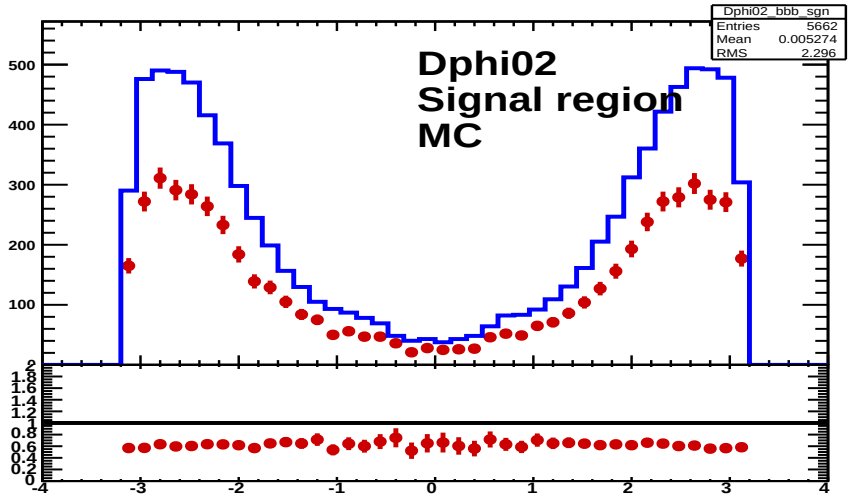

Dphi01_bbb_ctl
Entries 5243
Mean 0.001062
RMS 2.654
Dphi01
Control region
MC

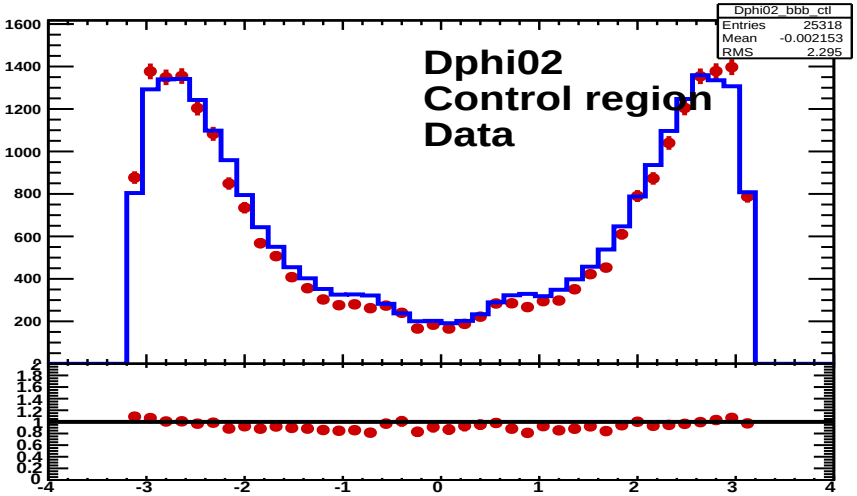

Dphi01_bbb_sgn
Entries 5662
Mean -0.002335
RMS 2.671
Dphi01
Signal region
MC

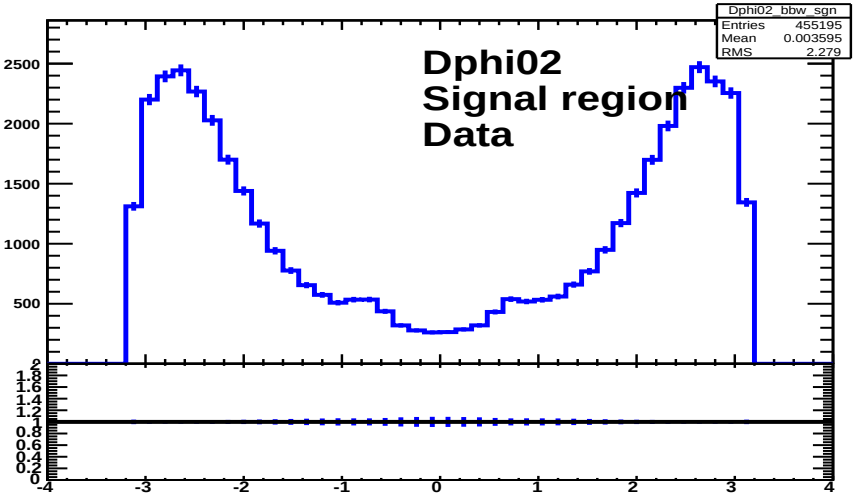

Dphi01_bbb_ctl
Entries 25318
Mean -0.00336
RMS 2.683
Dphi01
Control region
Data

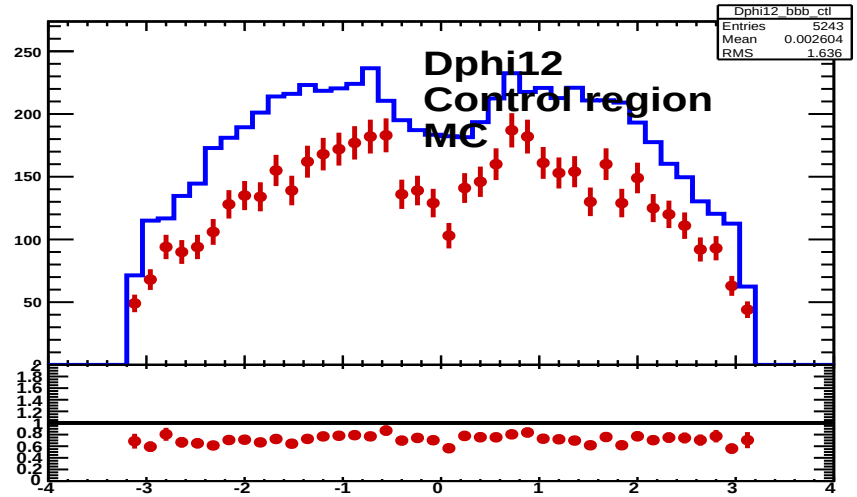

Dphi01_bbw_sgn
Entries 455195
Mean 0.006157
RMS 2.705
Dphi01
Signal region
Data

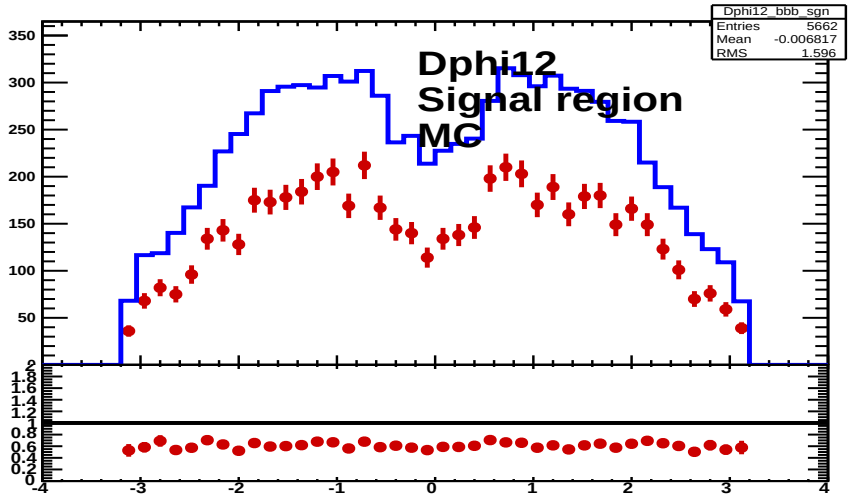

Dphi02_bbb_ctl
Entries 5243
Mean 0.01685
RMS 2.283
Dphi02
Control region
MC

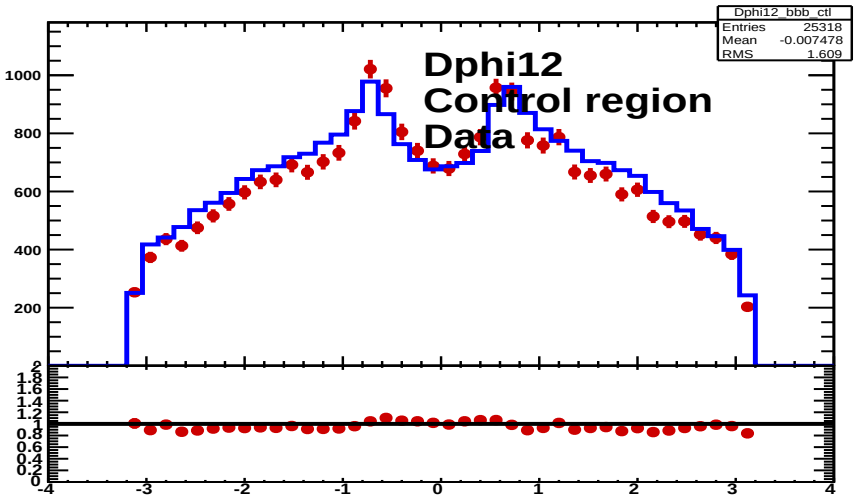

Dphi02_bbb_sgn
Entries 5662
Mean 0.005274
RMS 2.296
Dphi02
Signal region
MC

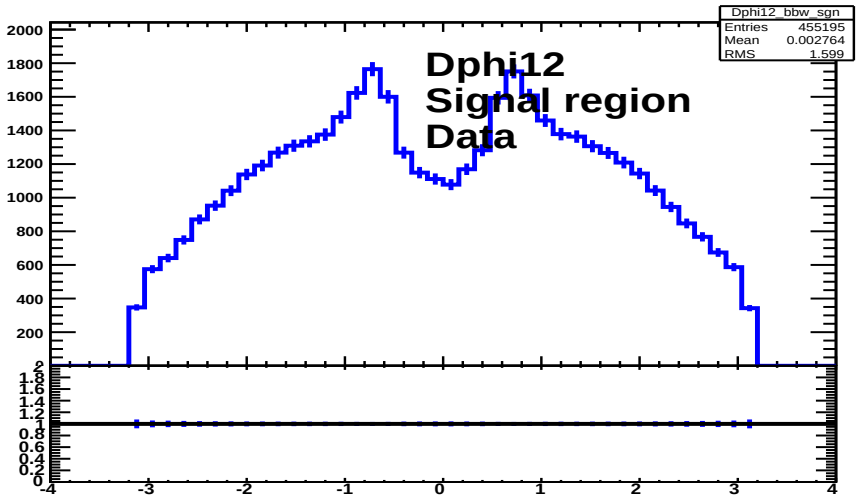

Dphi02_bbb_ctl
Entries 25318
Mean -0.002153
RMS 2.295
Dphi02
Control region
Data

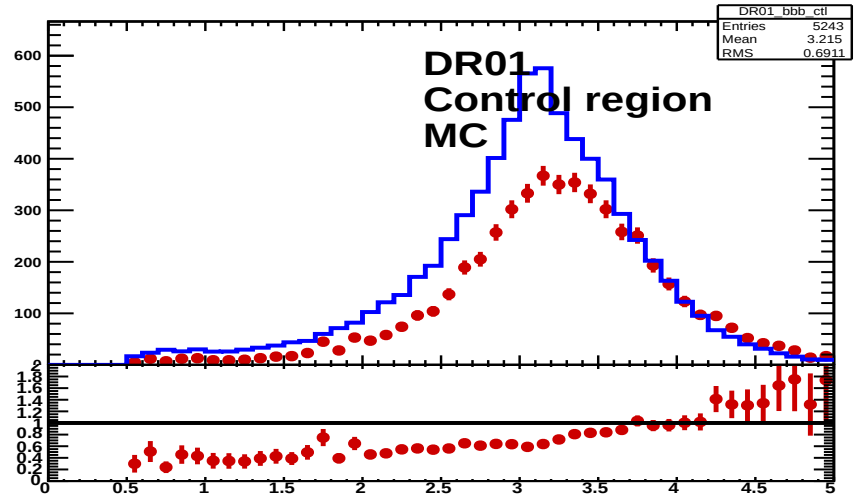

Dphi02_bbw_sgn
Entries 455195
Mean 0.003595
RMS 2.279
Dphi02
Signal region
Data

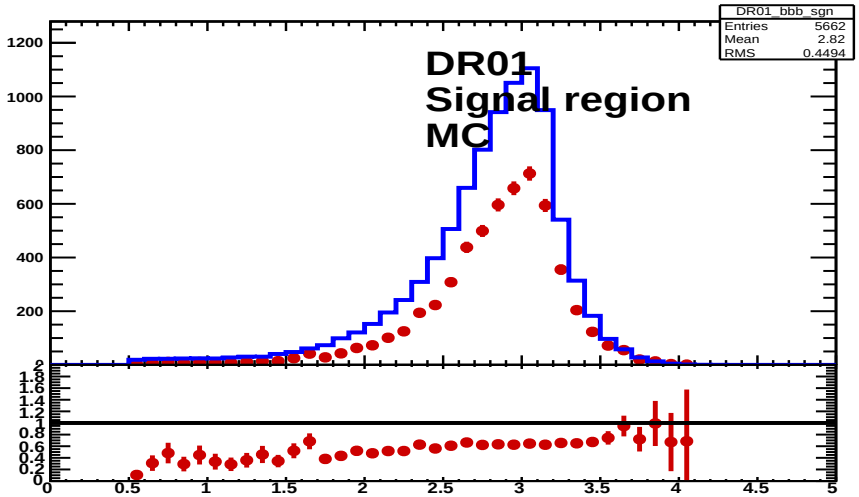

Dphi12_bbb_ctl
Entries 5243
Mean 0.002604
RMS 1.636
Dphi12
Control region
MC

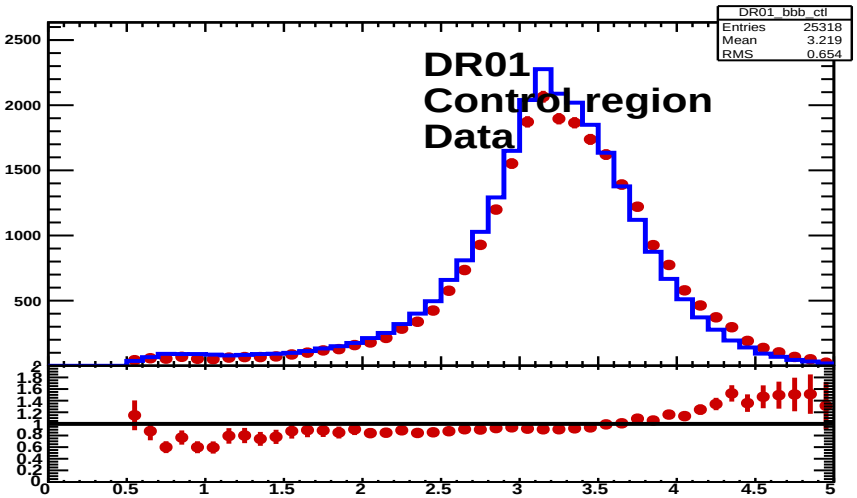

Dphi12_bbb_sgn
Entries 5662
Mean -0.006817
RMS 1.596
Dphi12
Signal region
MC

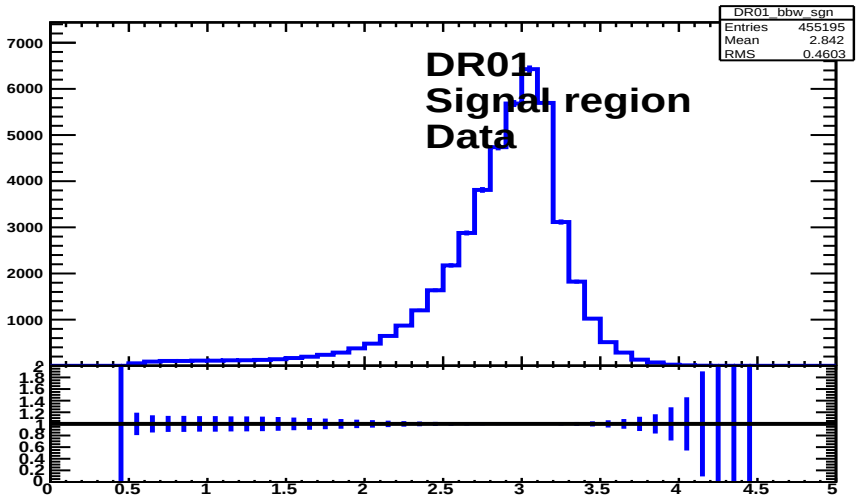

Dphi12_bbb_ctl
Entries 25318
Mean -0.007478
RMS 1.609
Dphi12
Control region
Data

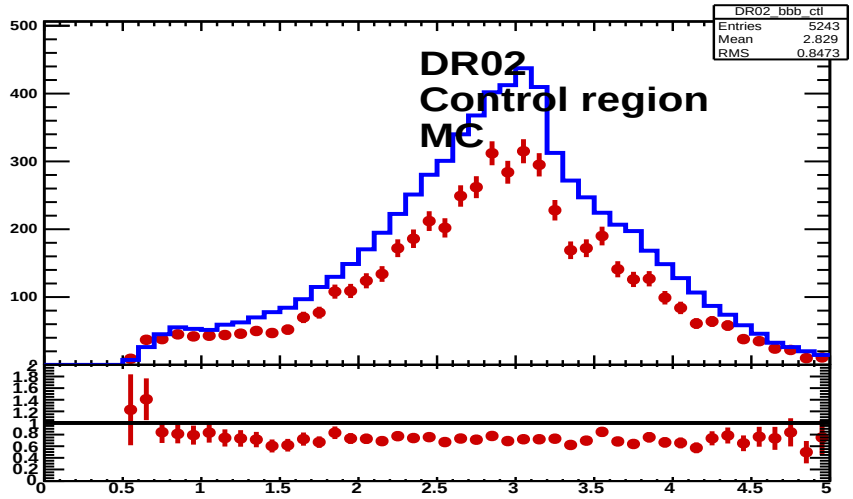

Dphi12_bbw_sgn
Entries 455195
Mean 0.002764
RMS 1.599
Dphi12
Signal region
Data

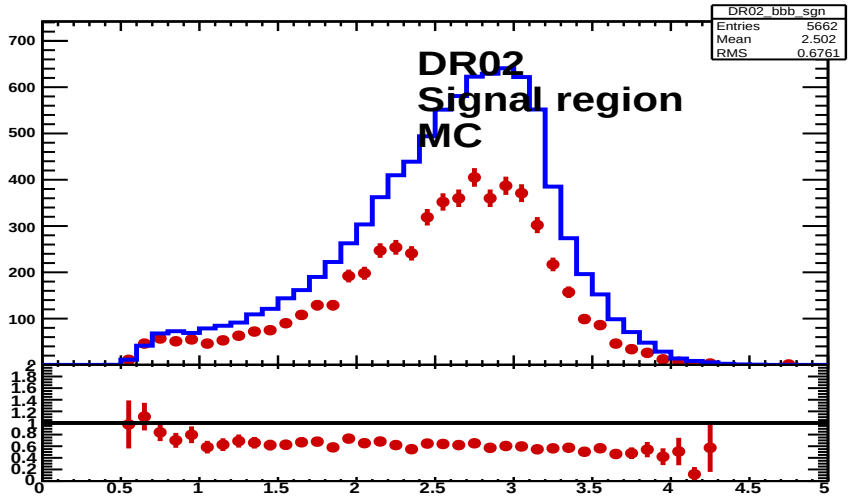

DR01_bbb_ctl
Entries 5243
Mean 3.215
RMS 0.6911
DR01
Control region
MC

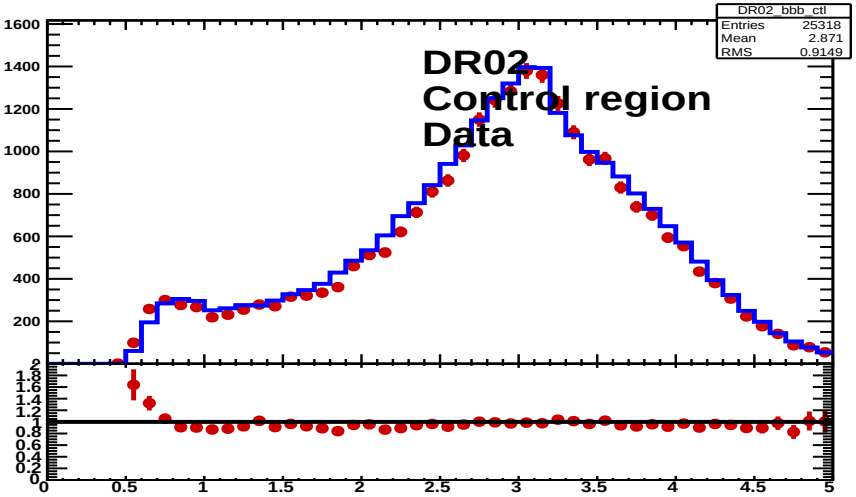

DR01_bbb_sgn
Entries 5662
Mean 2.82
RMS 0.4494
DR01
Signal region
MC

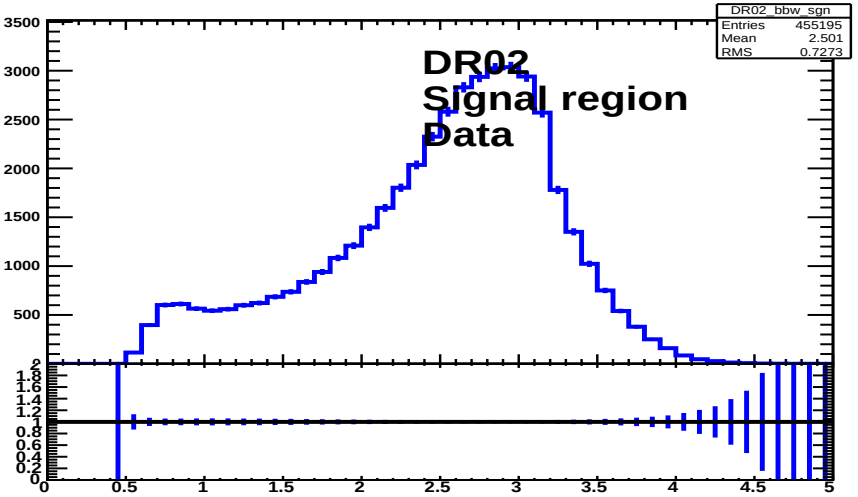

DR01_bbb_ctl
Entries 25318
Mean 3.219
RMS 0.654
DR01
Control region
Data

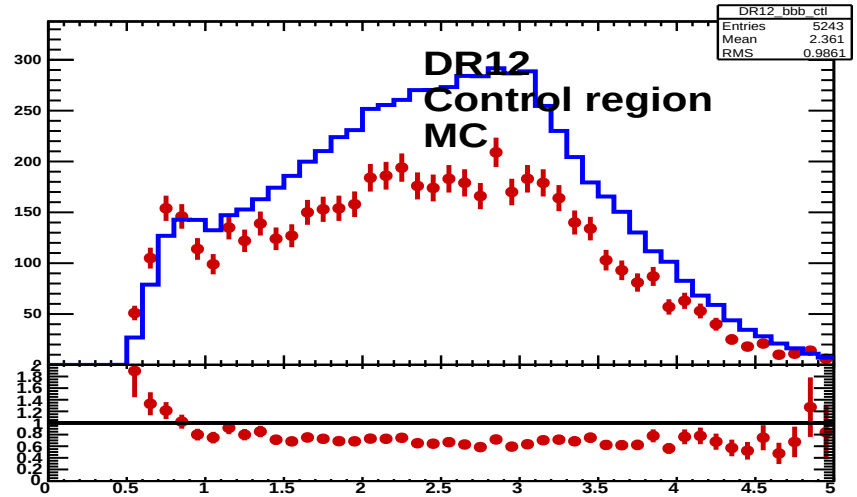

DR01_bbw_sgn
Entries 455195
Mean 2.842
RMS 0.4603
DR01
Signal region
Data

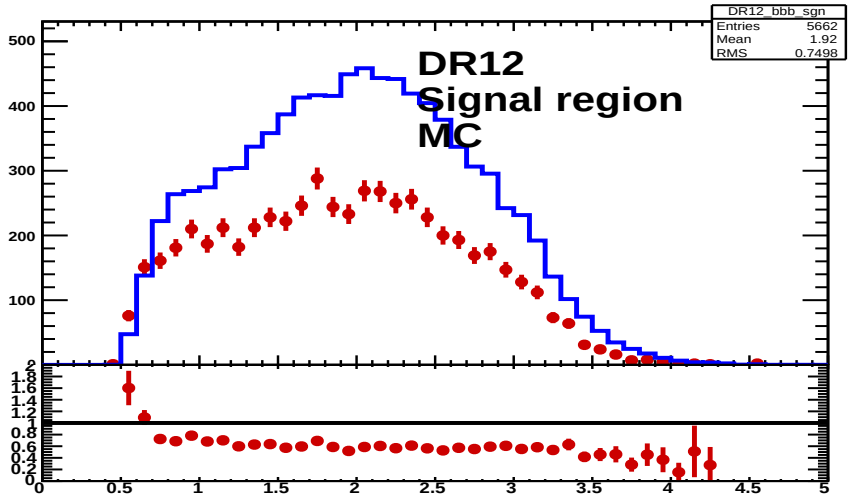

DR02_bbb_ctl
Entries 5243
Mean 2.829
RMS 0.8473
DR02
Control region
MC

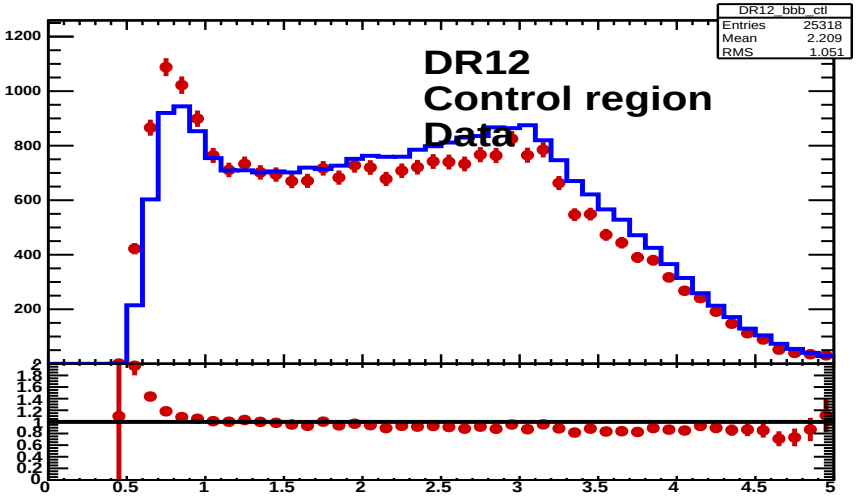

DR02_bbb_sgn
Entries 5662
Mean 2.502
RMS 0.6761
DR02
Signal region
MC

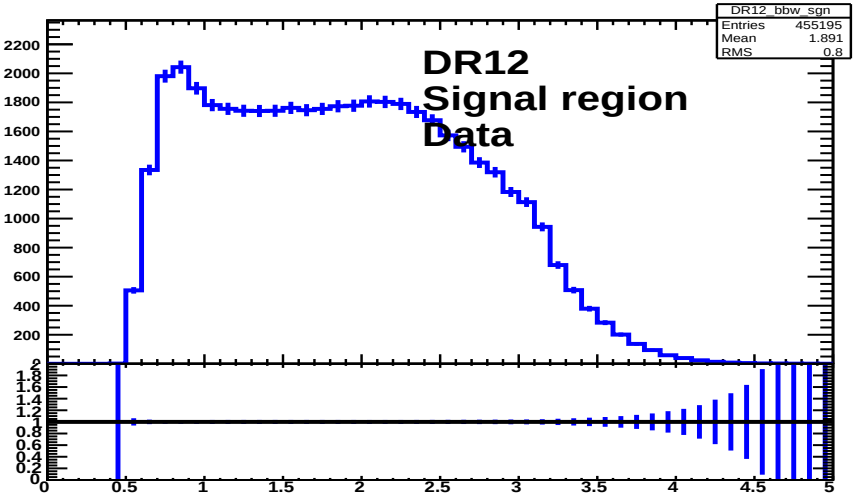

DR02_bbb_ctl
Entries 25318
Mean 2.871
RMS 0.9149
DR02
Control region
Data

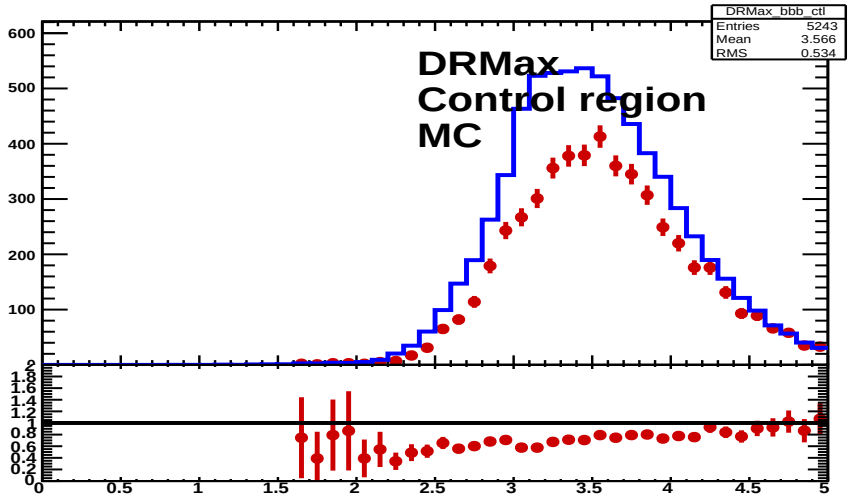

DR02_bbw_sgn
Entries 455195
Mean 2.501
RMS 0.7273
DR02
Signal region
Data

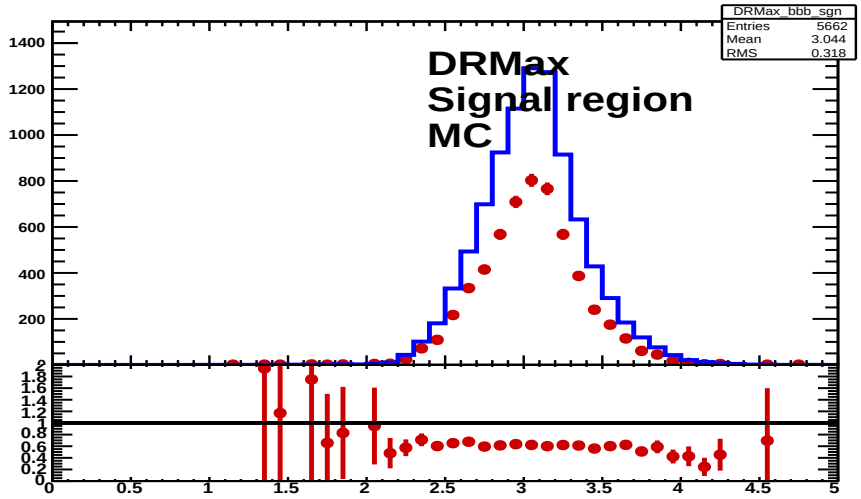

DR12_bbb_ctl
Entries 5243
Mean 2.361
RMS 0.9861
DR12
Control region
MC

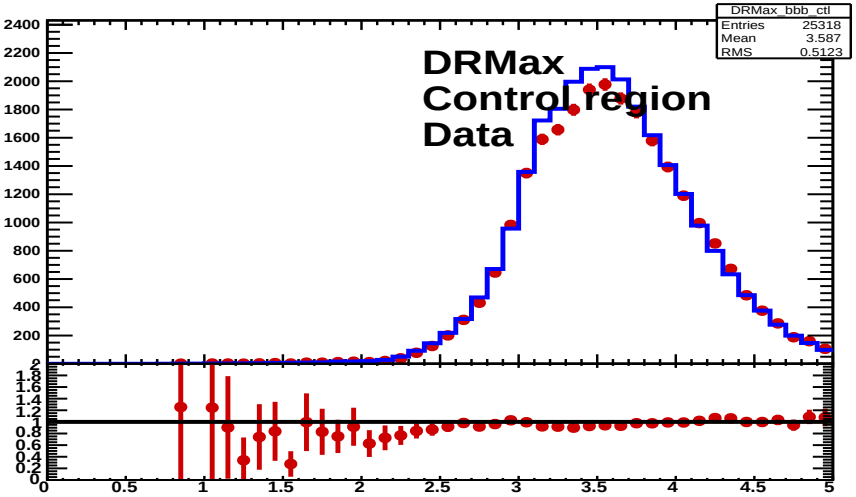

DR12_bbb_sgn
Entries 5662
Mean 1.92
RMS 0.7498
DR12
Signal region
MC

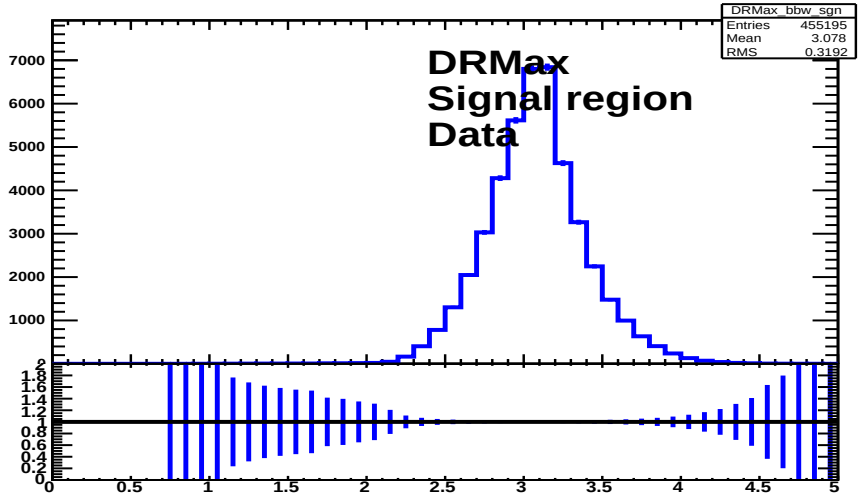

DR12_bbb_ctl
Entries 25318
Mean 2.209
RMS 1.051
DR12
Control region
Data

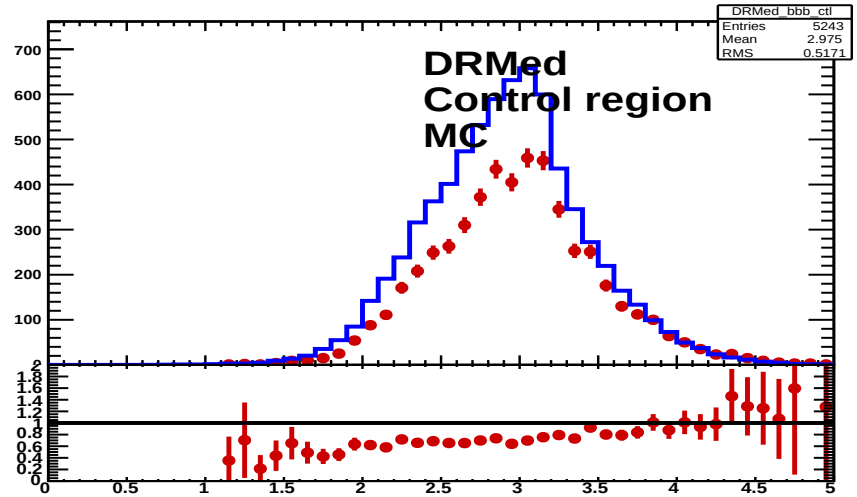

DR12_bbw_sgn
Entries 455195
Mean 1.891
RMS 0.8
DR12
Signal region
Data

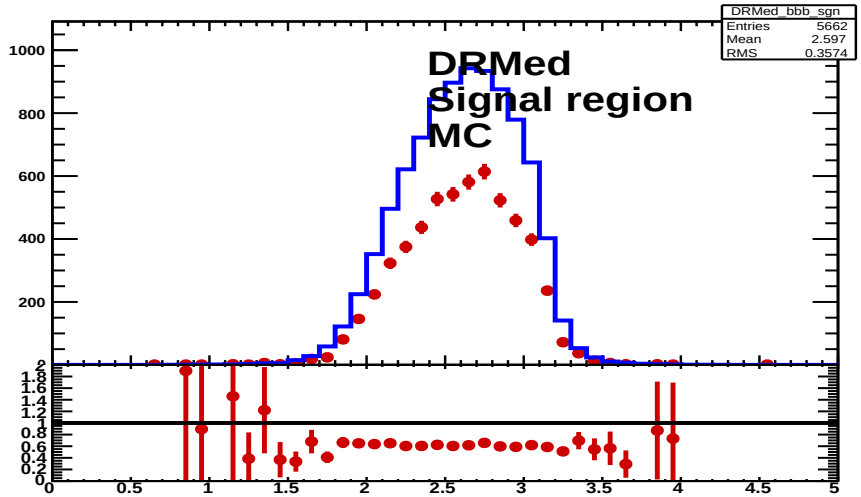

DRMax_bbb_ctl
Entries 5243
Mean 3.566
RMS 0.534
DRMax
Control region
MC

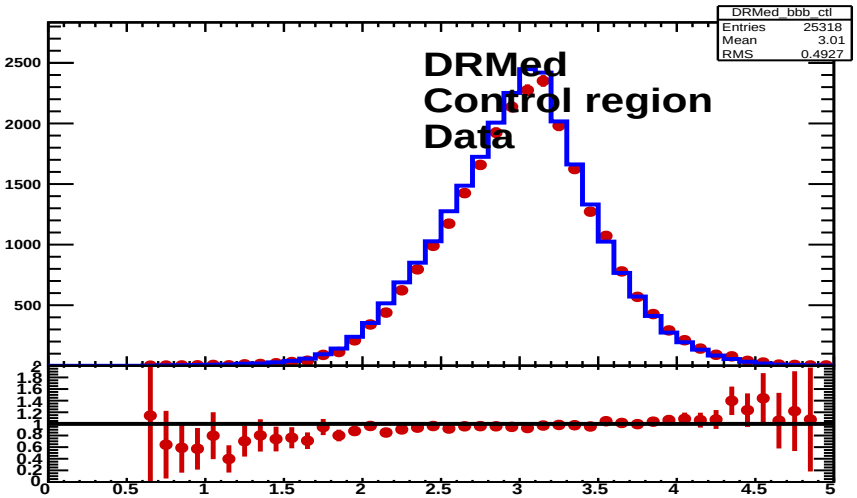

DRMax_bbb_sgn
Entries 5662
Mean 3.044
RMS 0.318
DRMax
Signal region
MC

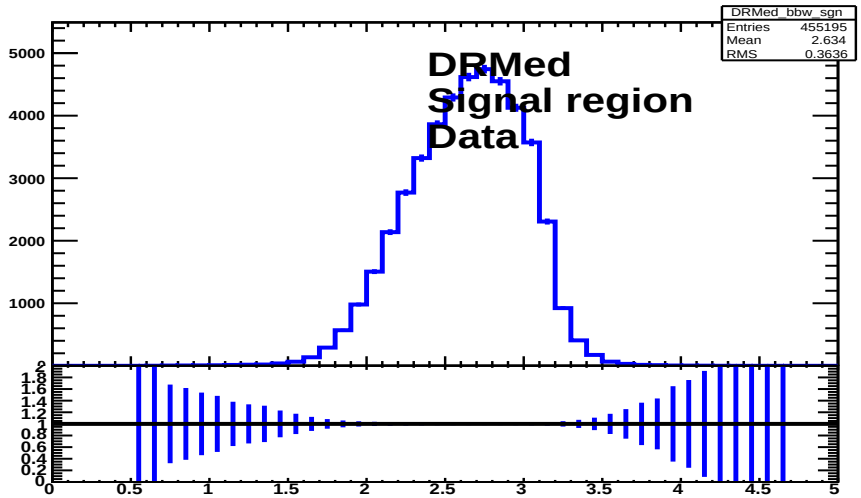

DRMax_bbb_ctl
Entries 25318
Mean 3.587
RMS 0.5123
DRMax
Control region
Data

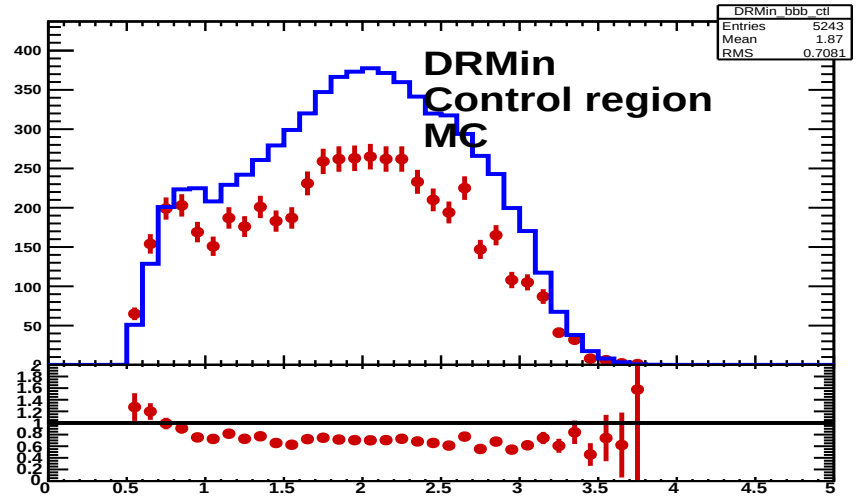

DRMax_bbw_sgn
Entries 455195
Mean 3.078
RMS 0.3192
DRMax
Signal region
Data

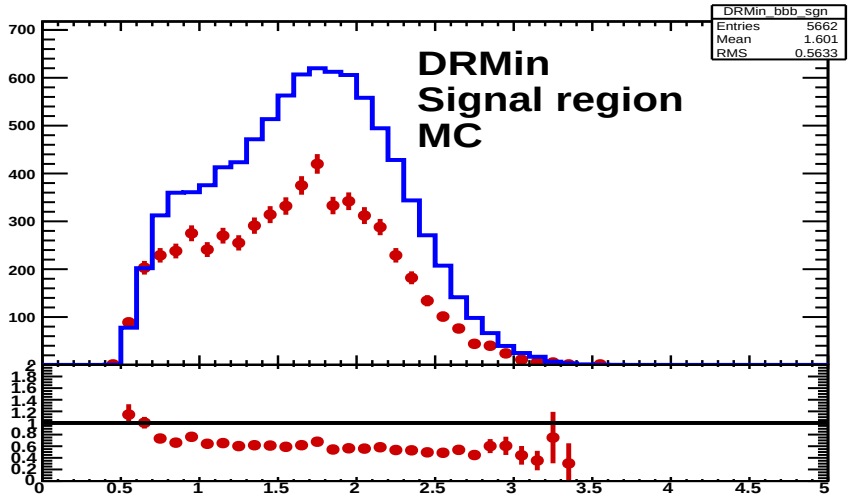

DRMed_bbb_ctl
Entries 5243
Mean 2.975
RMS 0.5171
DRMed
Control region
MC

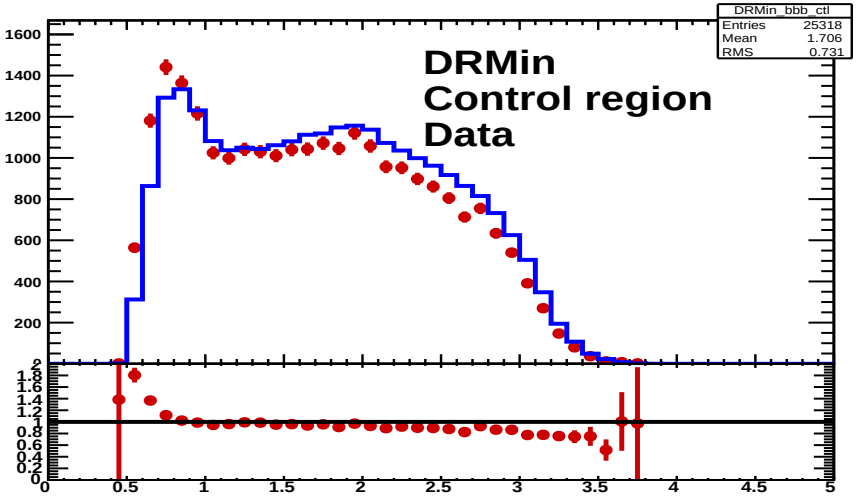

DRMed_bbb_sgn
Entries 5662
Mean 2.597
RMS 0.3574
DRMed
Signal region
MC

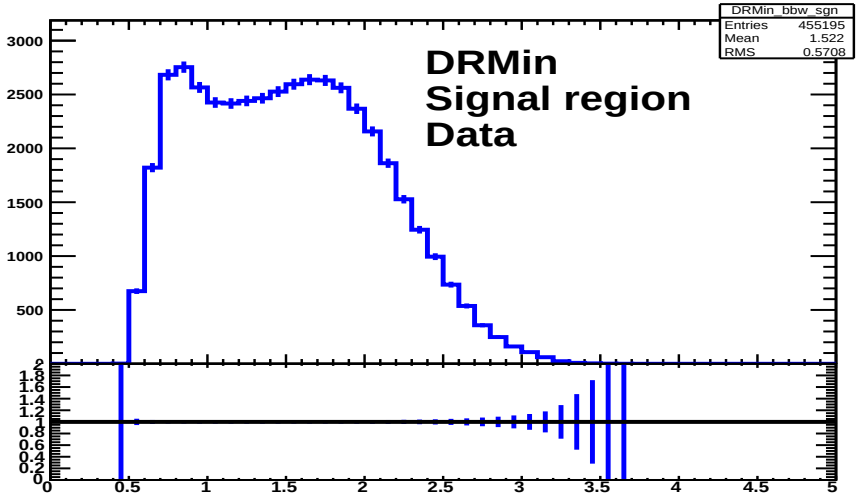

DRMed_bbb_ctl
Entries 25318
Mean 3.01
RMS 0.4927
DRMed
Control region
Data

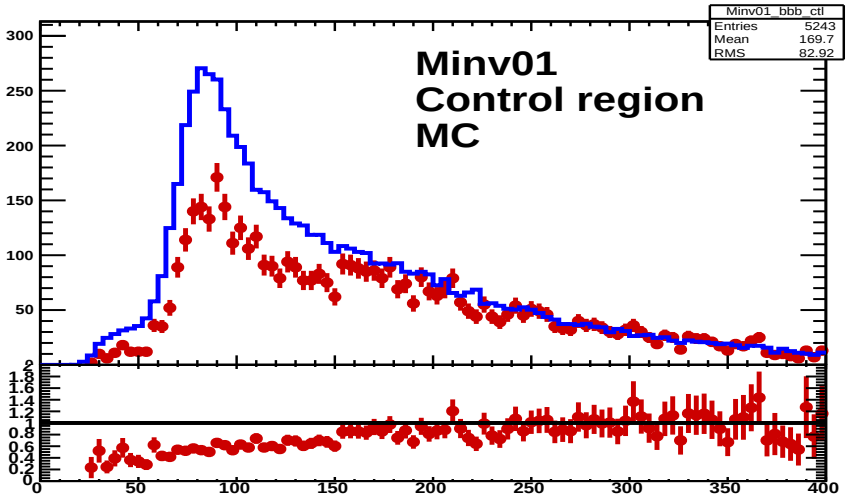

DRMed_bbw_sgn
Entries 455195
Mean 2.634
RMS 0.3636
DRMed
Signal region
Data

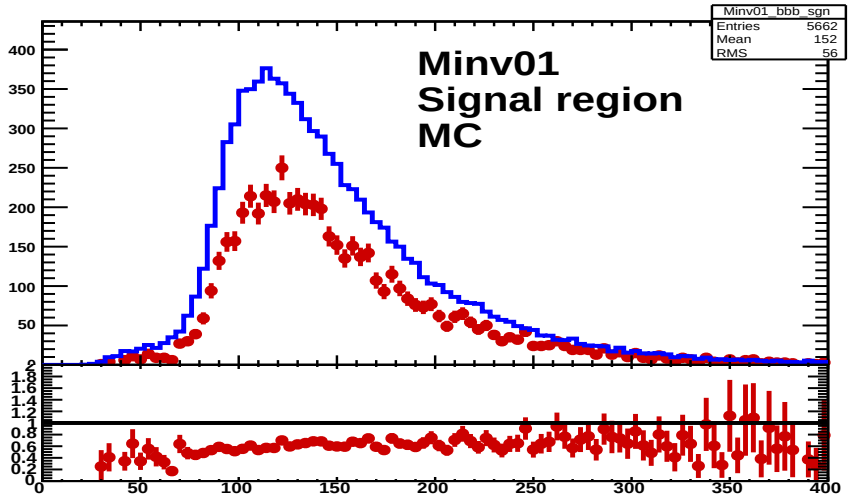

DRMin_bbb_ctl
Entries 5243
Mean 1.87
RMS 0.7081
DRMin
Control region
MC

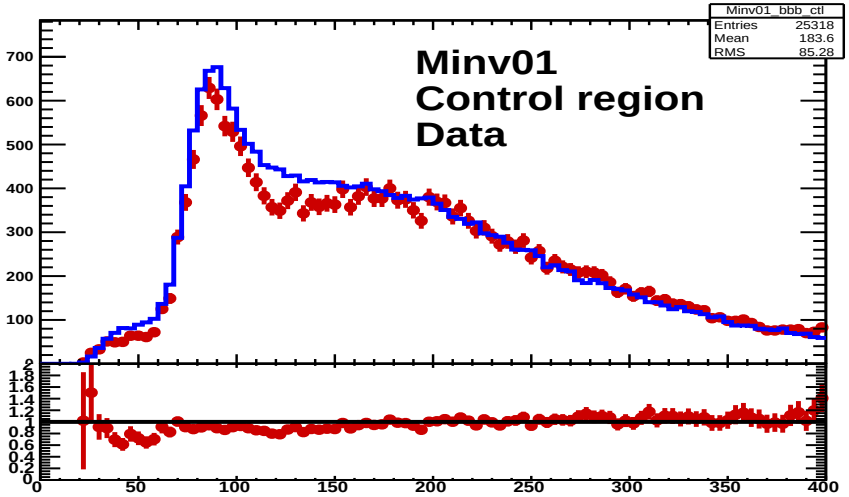

DRMin_bbb_sgn
Entries 5662
Mean 1.601
RMS 0.5633
DRMin
Signal region
MC

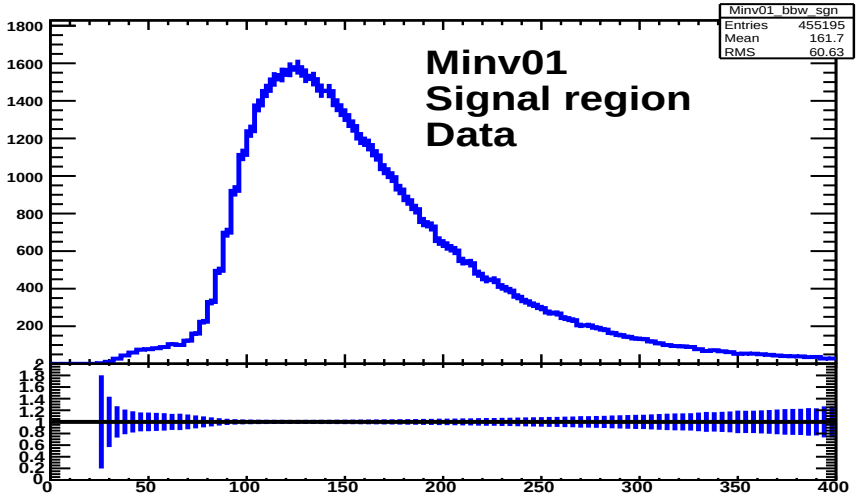

DRMin_bbb_ctl
Entries 25318
Mean 1.706
RMS 0.731
DRMin
Control region
Data

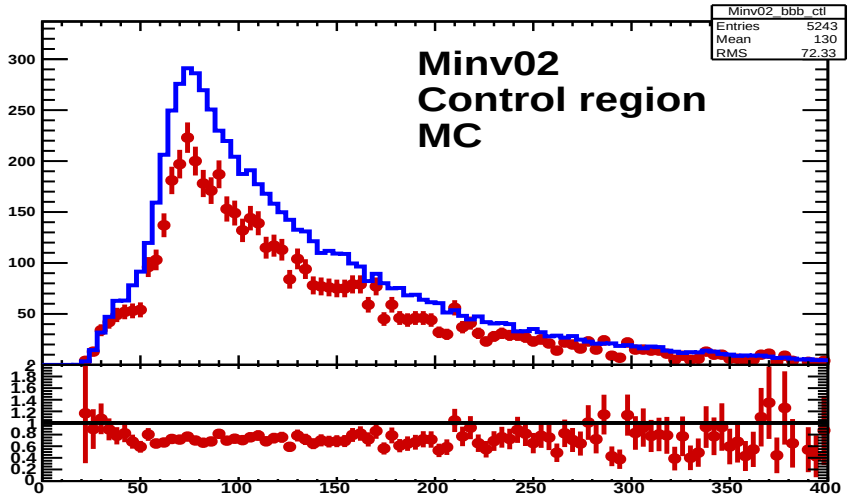

DRMin_bbw_sgn
Entries 455195
Mean 1.522
RMS 0.5708
DRMin
Signal region
Data

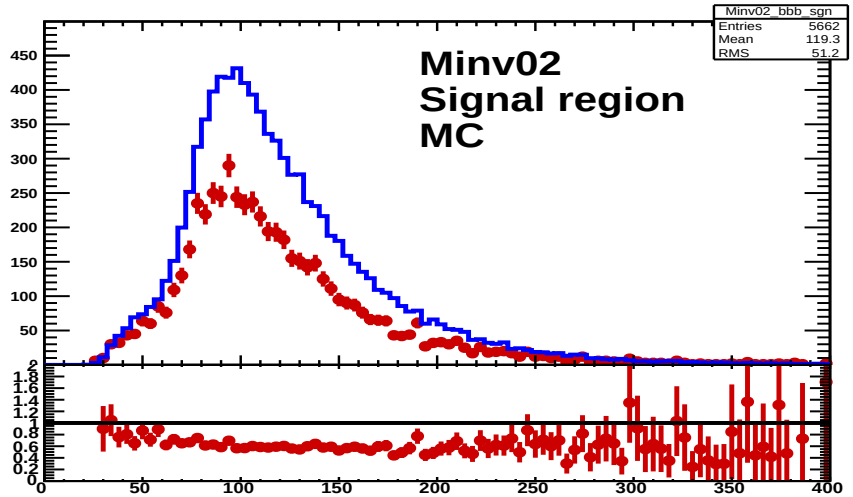

Minv01_bbb_ctl
Entries 5243
Mean 169.7
RMS 82.92
Minv01
Control region
MC

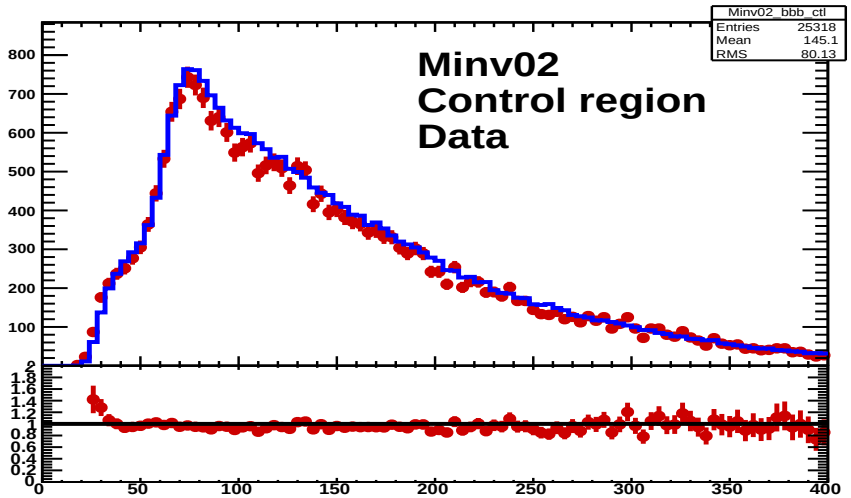

Minv01_bbb_sgn
Entries 5662
Mean 152
RMS 56
Minv01
Signal region
MC

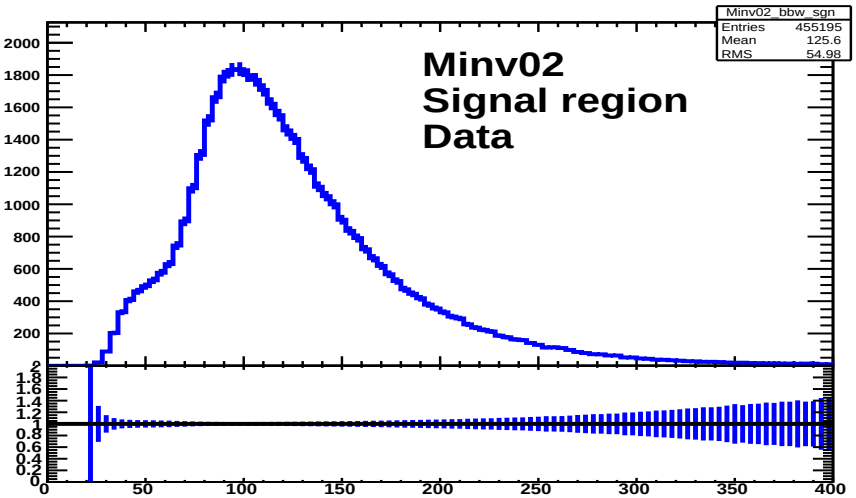

Minv01_bbb_ctl
Entries 25318
Mean 183.6
RMS 85.28
Minv01
Control region
Data

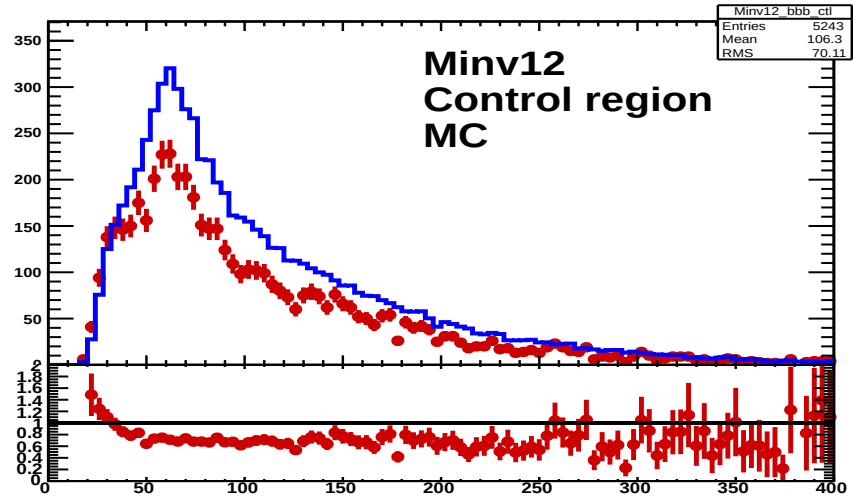

Minv01_bbw_sgn
Entries 455195
Mean 161.7
RMS 60.63
Minv01
Signal region
Data

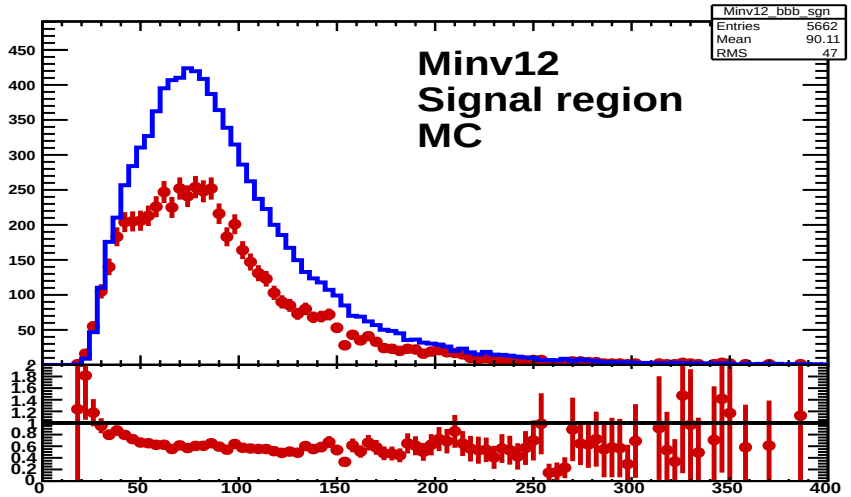

Minv02_bbb_ctl
Entries 5243
Mean 130
RMS 72.33
Minv02
Control region
MC

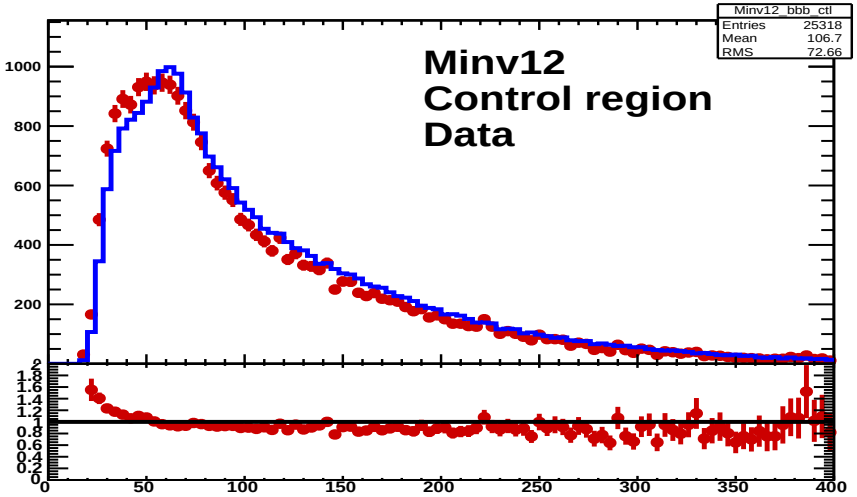

Minv02_bbb_sgn
Entries 5662
Mean 119.3
RMS 51.2
Minv02
Signal region
MC

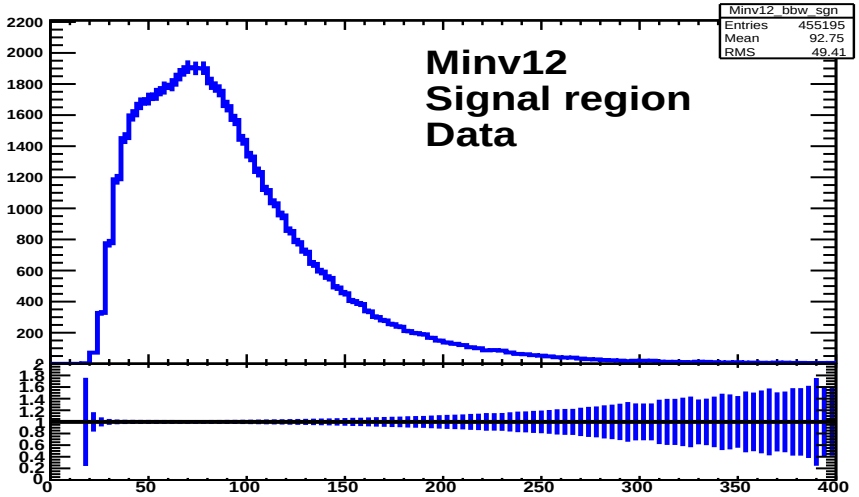

Minv02_bbb_ctl
Entries 25318
Mean 145.1
RMS 80.13
Minv02
Control region
Data

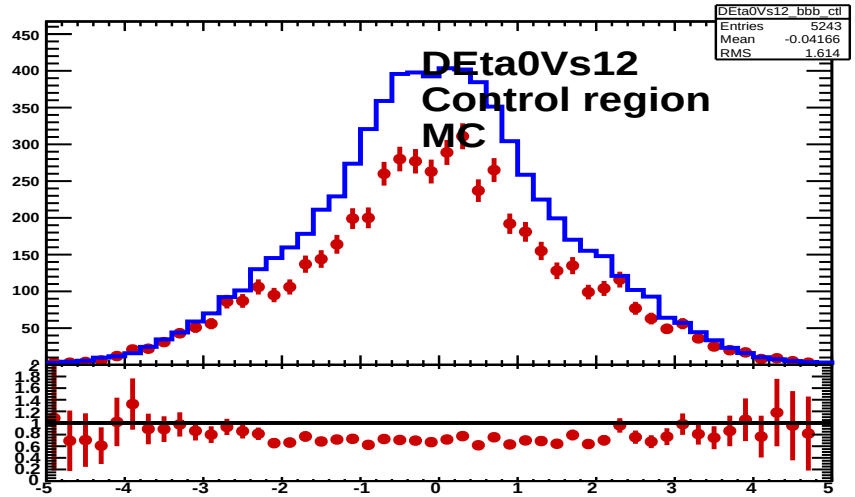

Minv02_bbw_sgn
Entries 455195
Mean 125.6
RMS 54.98
Minv02
Signal region
Data

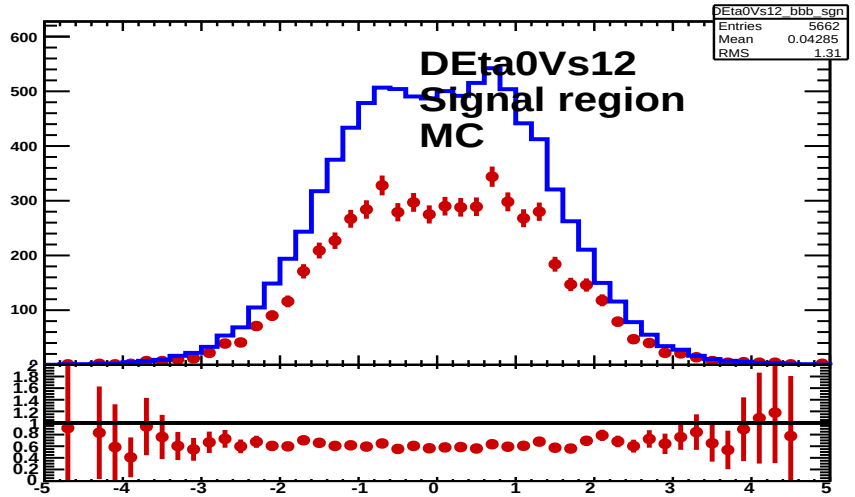

Minv12_bbb_ctl
Entries 5243
Mean 106.3
RMS 70.11
Minv12
Control region
MC

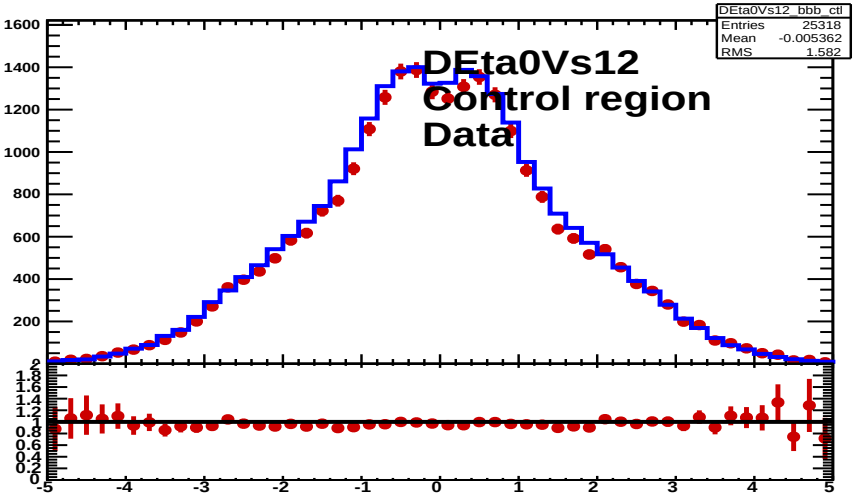

Minv12_bbb_sgn
Entries 5662
Mean 90.11
RMS 47
Minv12
Signal region
MC

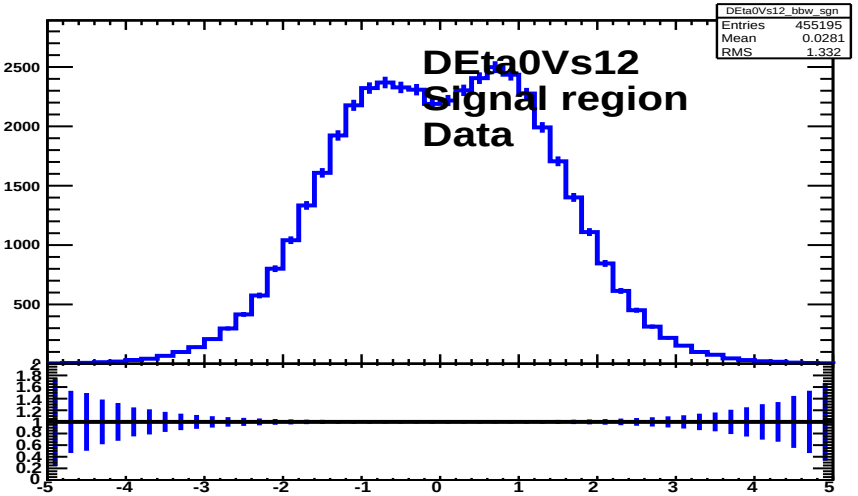

Minv12_bbb_ctl
Entries 25318
Mean 106.7
RMS 72.66
Minv12
Control region
Data

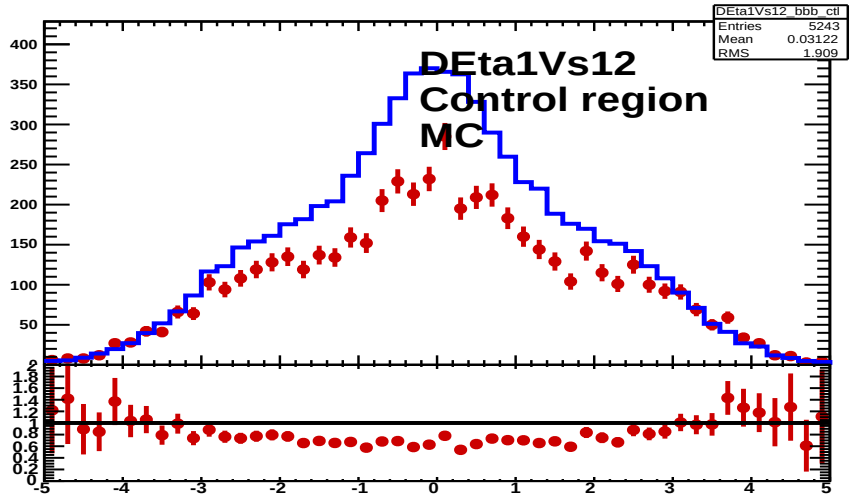

Minv12_bbw_sgn
Entries 455195
Mean 92.75
RMS 49.41
Minv12
Signal region
Data

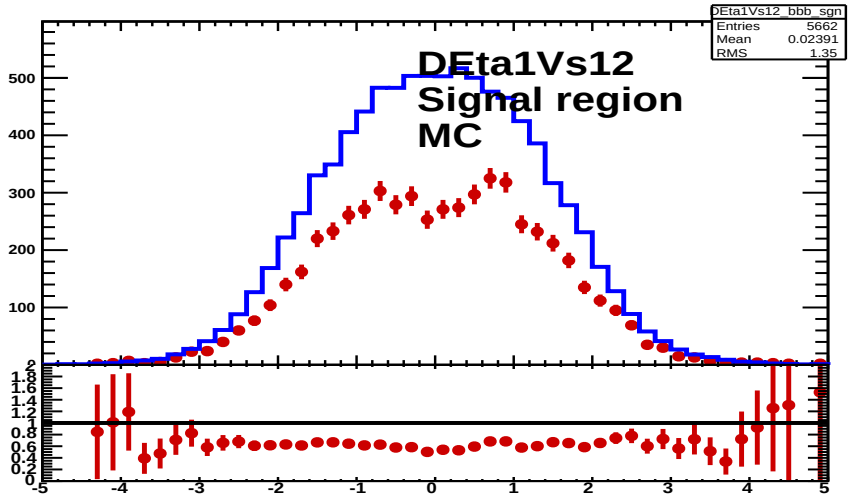

DEta0Vs12_bbb_ctl
Entries 5243
Mean -0.04166
RMS 1.614
DEta0Vs12
Control region
MC

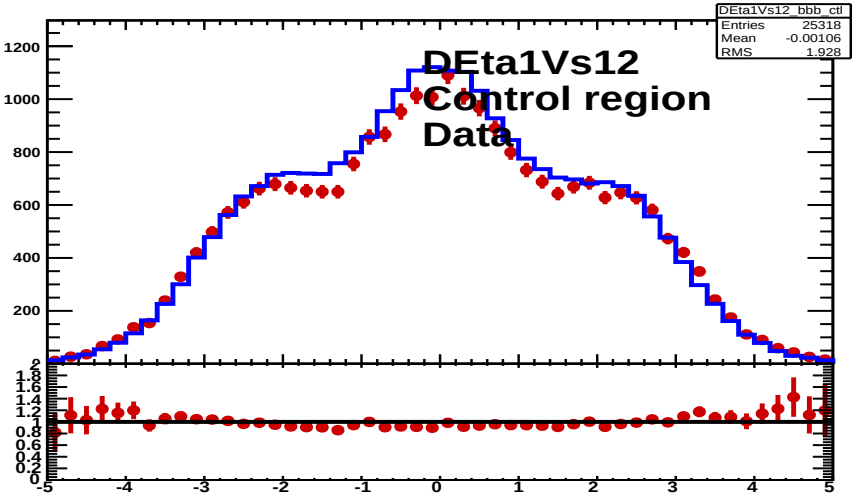

DEta0Vs12_bbb_sgn
Entries 5662
Mean 0.04285
RMS 1.31
DEta0Vs12
Signal region
MC

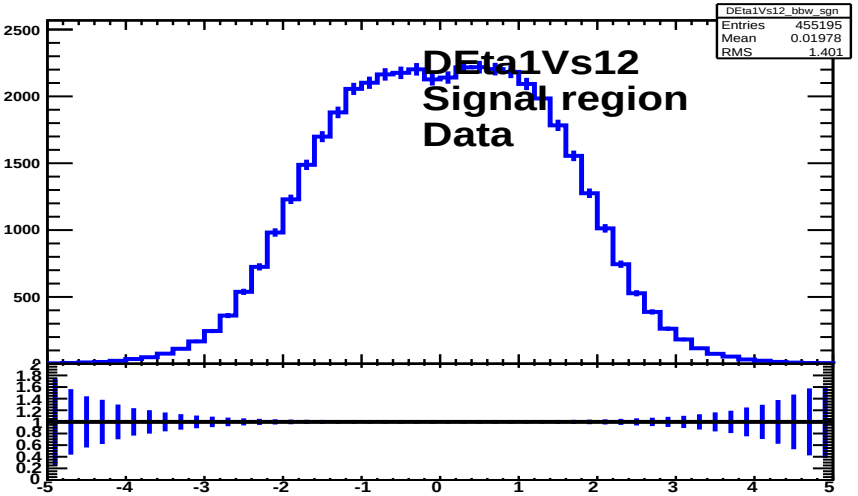

DEta0Vs12_bbb_ctl
Entries 25318
Mean -0.005362
RMS 1.582
DEta0Vs12
Control region
Data

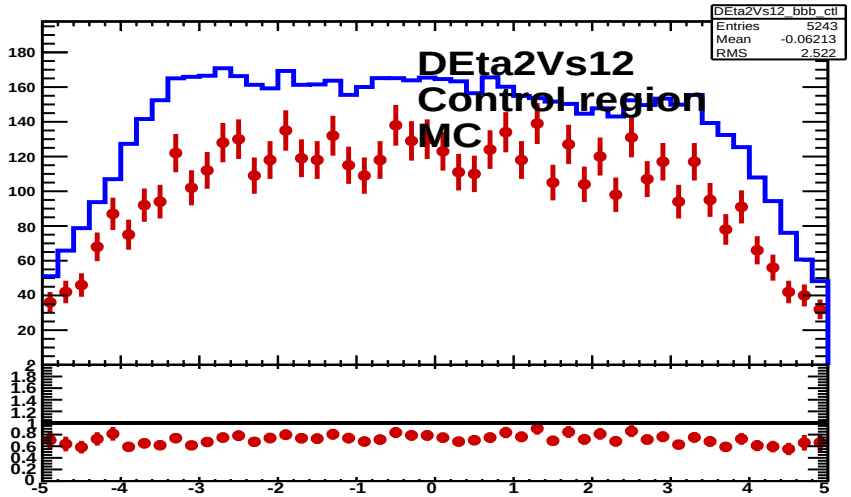

DEta0Vs12_bbw_sgn
Entries 455195
Mean 0.0281
RMS 1.332
DEta0Vs12
Signal region
Data

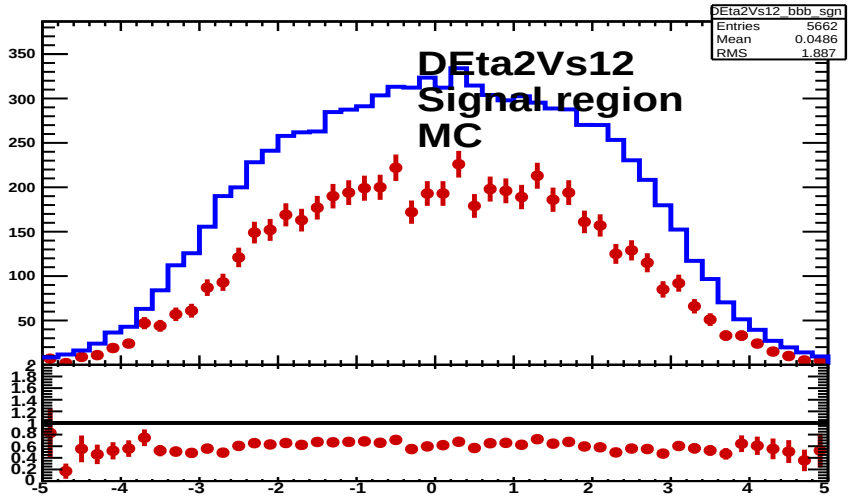

DEta1Vs12_bbb_ctl
Entries 5243
Mean 0.03122
RMS 1.909
DEta1Vs12
Control region
MC

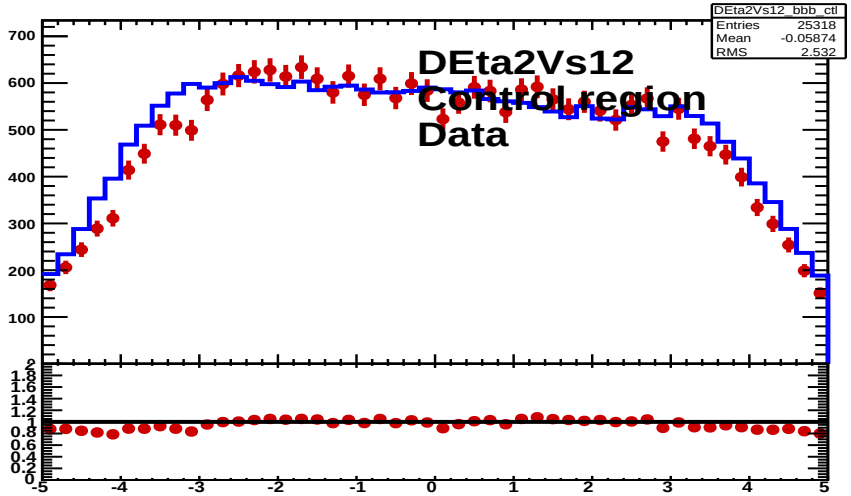

DEta1Vs12_bbb_sgn
Entries 5662
Mean 0.02391
RMS 1.35
DEta1Vs12
Signal region
MC

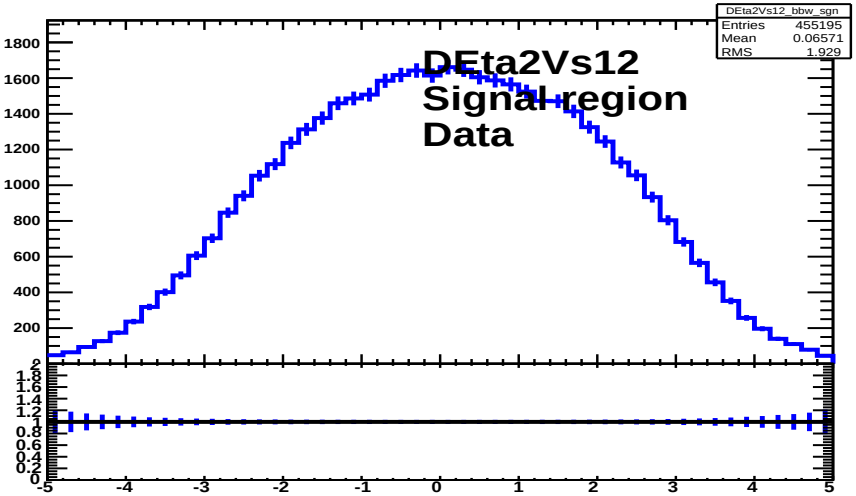

DEta1Vs12_bbb_ctl
Entries 25318
Mean -0.00106
RMS 1.928
DEta1Vs12
Control region
Data

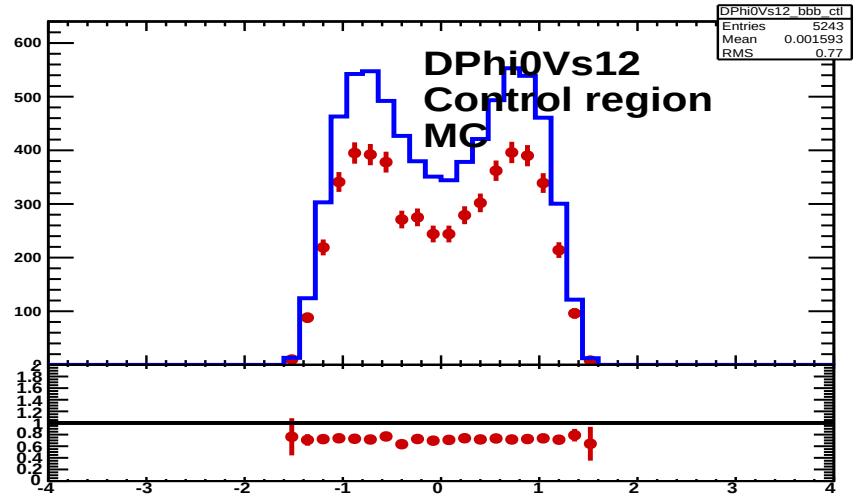

DEta1Vs12_bbw_sgn
Entries 455195
Mean 0.01978
RMS 1.401
DEta1Vs12
Signal region
Data

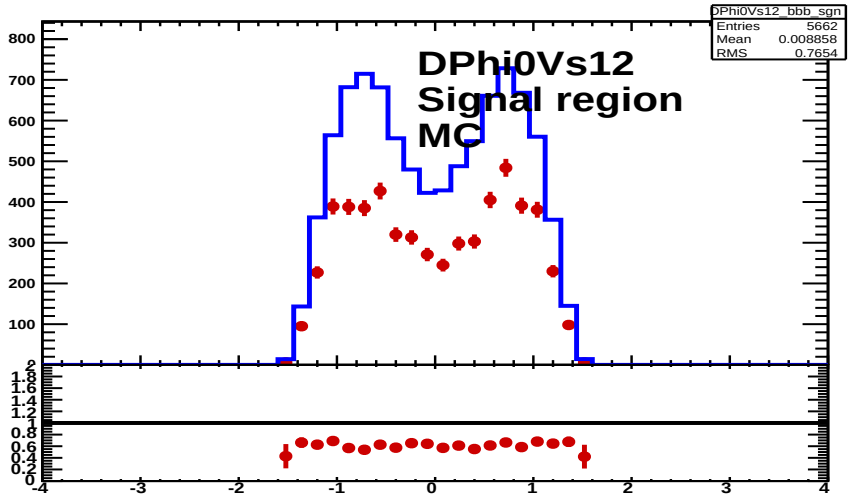

DEta2Vs12_bbb_ctl
Entries 5243
Mean -0.06213
RMS 2.522
DEta2Vs12
Control region
MC

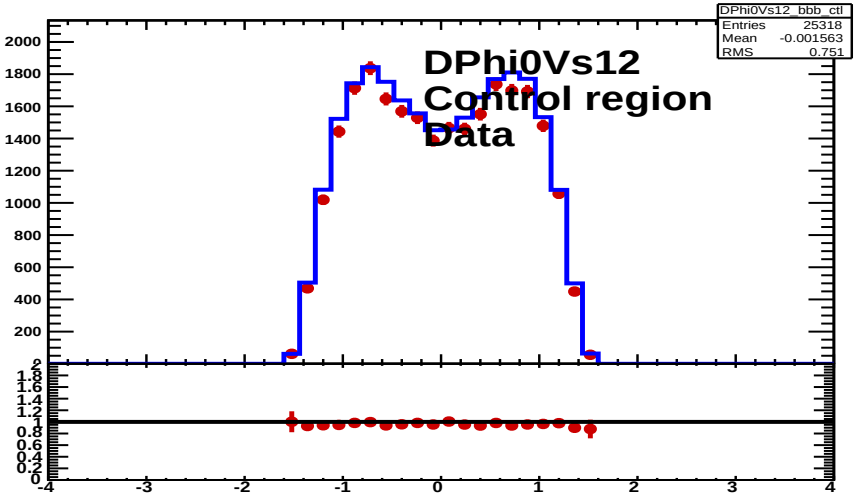

DEta2Vs12_bbb_sgn
Entries 5662
Mean 0.0486
RMS 1.887
DEta2Vs12
Signal region
MC

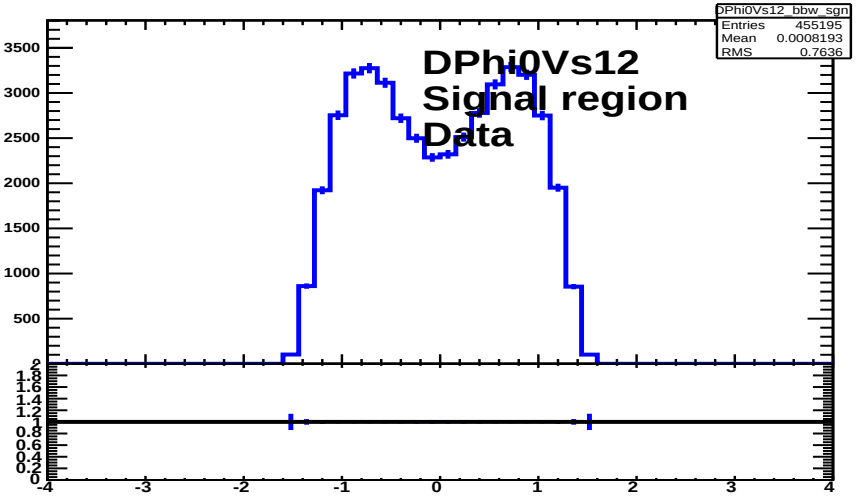

DEta2Vs12_bbb_ctl
Entries 25318
Mean -0.05874
RMS 2.532
DEta2Vs12
Control region
Data

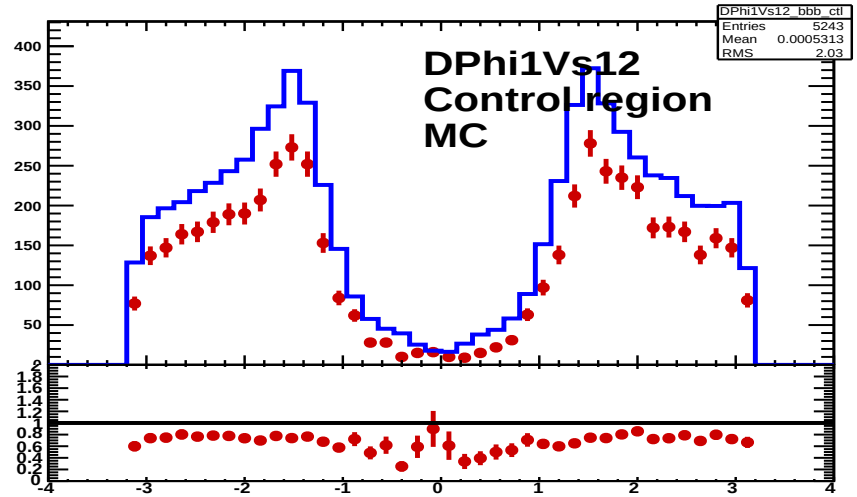

DEta2Vs12_bbw_sgn
Entries 455195
Mean 0.06571
RMS 1.929
DEta2Vs12
Signal region
Data

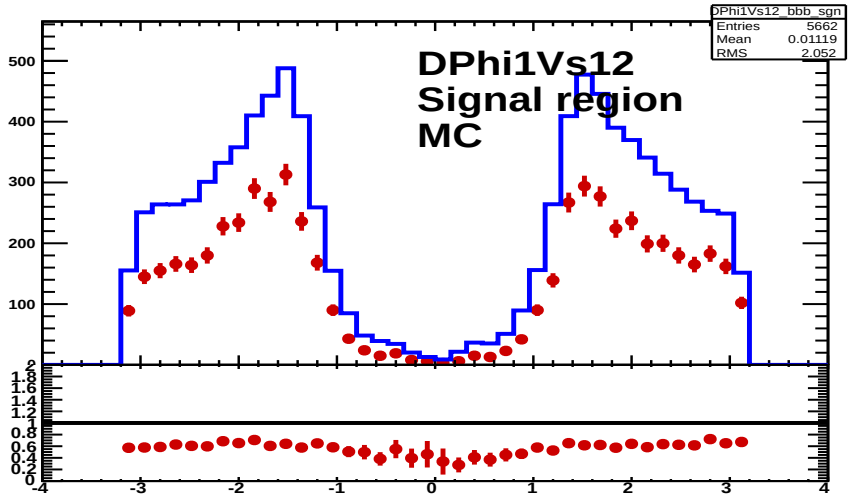

DPhi0Vs12_bbb_ctl
Entries 5243
Mean 0.001593
RMS 0.77
DPhi0Vs12
Control region
MC

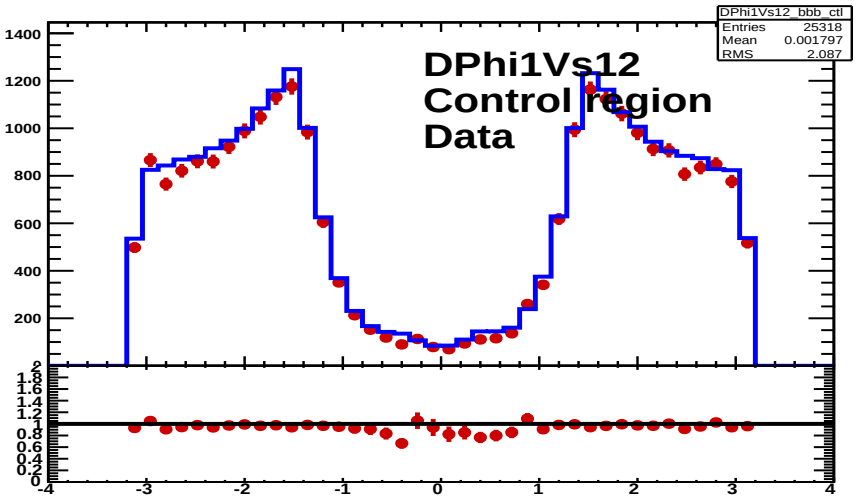

DPhi0Vs12_bbb_sgn
Entries 5662
Mean 0.008858
RMS 0.7654
DPhi0Vs12
Signal region
MC

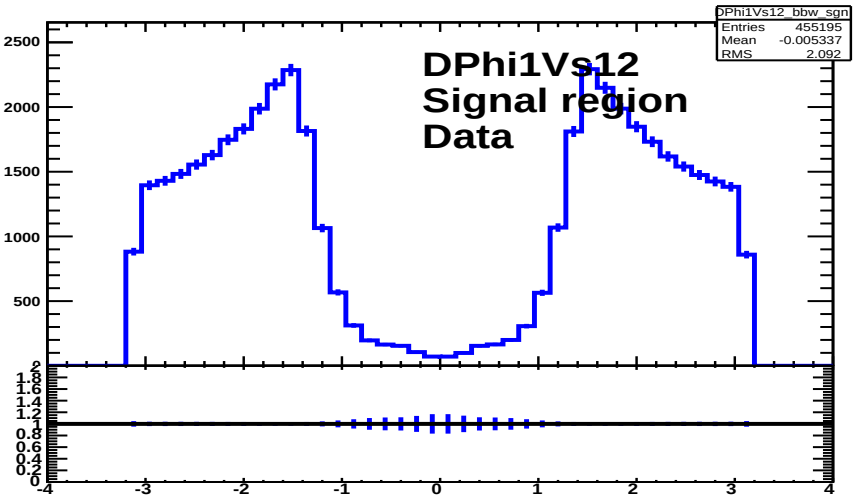

DPhi0Vs12_bbb_ctl
Entries 25318
Mean -0.001563
RMS 0.751
DPhi0Vs12
Control region
Data

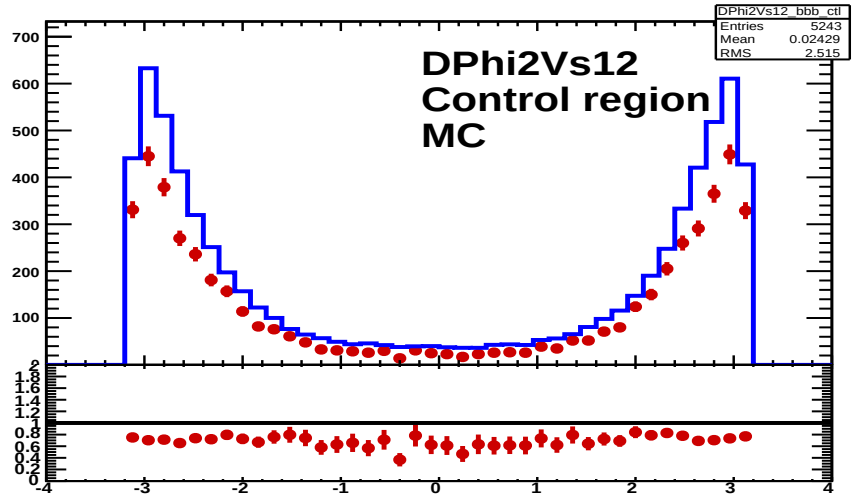

DPhi0Vs12_bbw_sgn
Entries 455195
Mean 0.0008193
RMS 0.7636
DPhi0Vs12
Signal region
Data

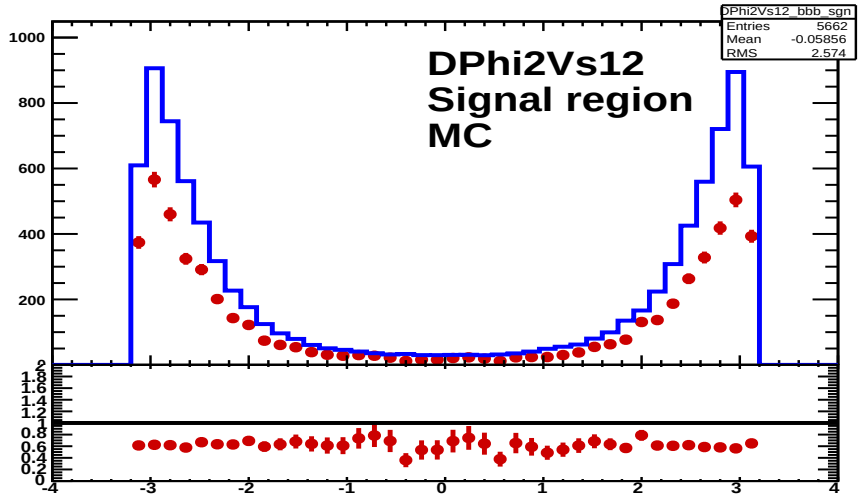

DPhi1Vs12_bbb_ctl
Entries 5243
Mean 0.0005313
RMS 2.03
DPhi1Vs12
Control region
MC

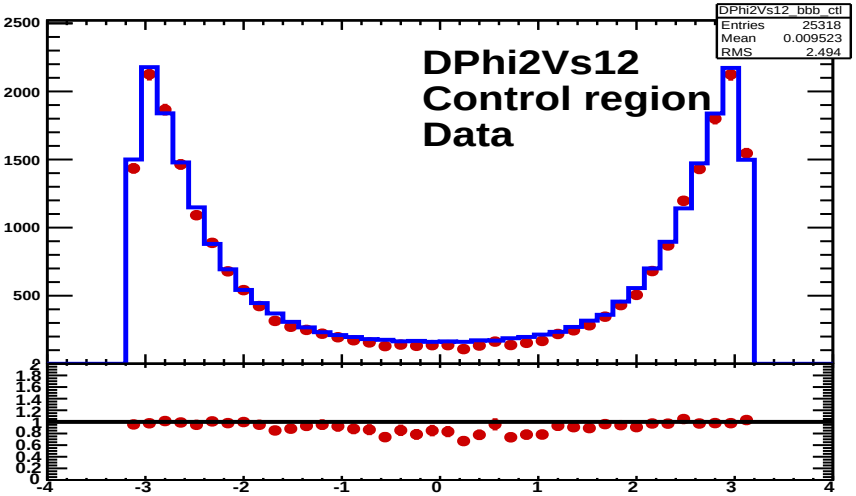

DPhi1Vs12_bbb_sgn
Entries 5662
Mean 0.01119
RMS 2.052
DPhi1Vs12
Signal region
MC

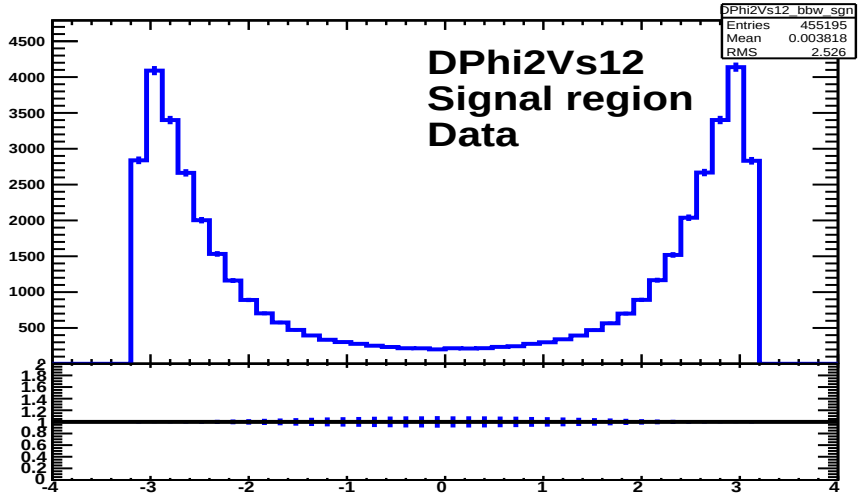

DPhi1Vs12_bbb_ctl
Entries 25318
Mean 0.001797
RMS 2.087
DPhi1Vs12
Control region
Data

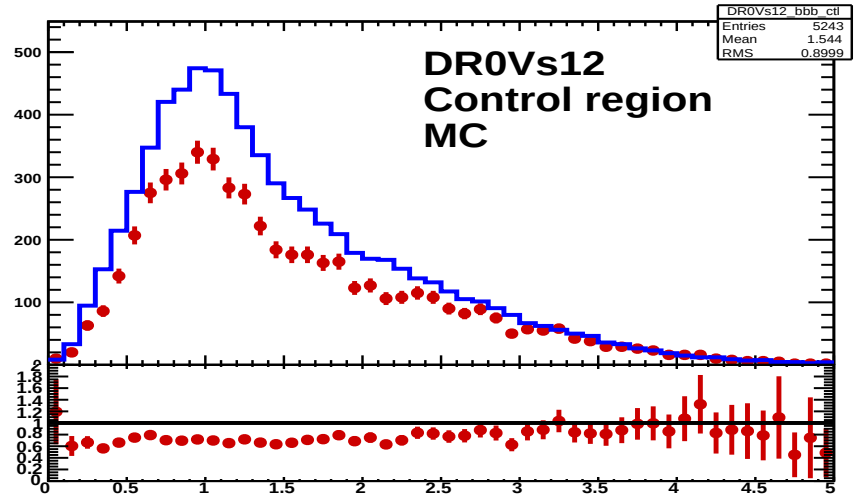

DPhi1Vs12_bbw_sgn
Entries 455195
Mean -0.005337
RMS 2.092
DPhi1Vs12
Signal region
Data

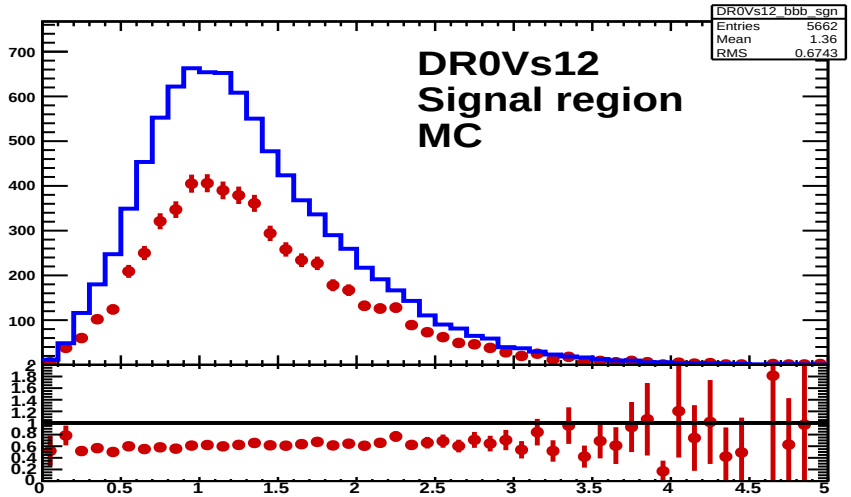

DPhi2Vs12_bbb_ctl
Entries 5243
Mean 0.02429
RMS 2.515
DPhi2Vs12
Control region
MC

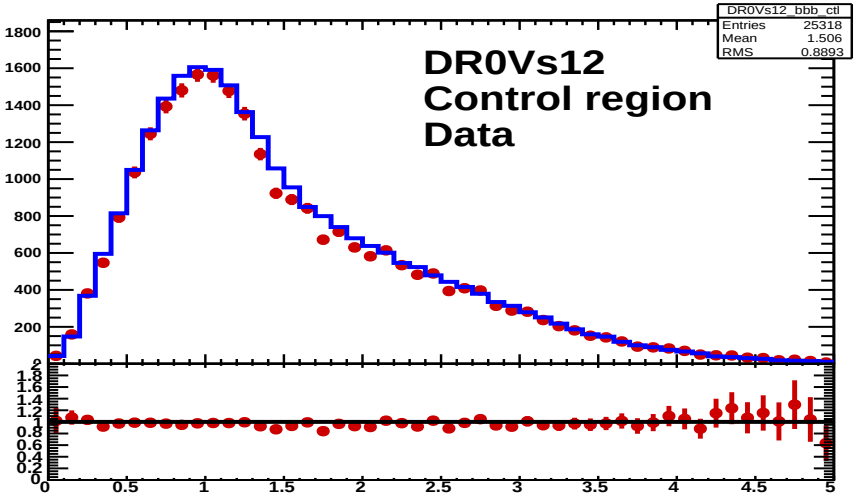

DPhi2Vs12_bbb_sgn
Entries 5662
Mean -0.05856
RMS 2.574
DPhi2Vs12
Signal region
MC

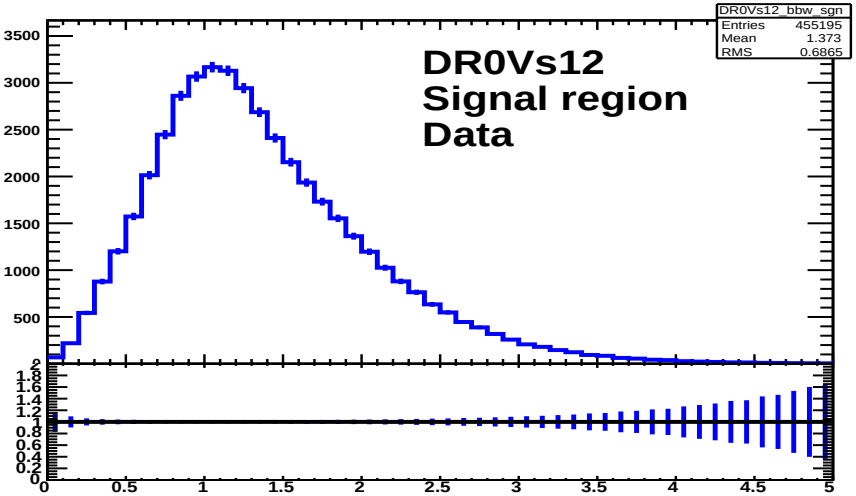

DPhi2Vs12_bbb_ctl
Entries 25318
Mean 0.009523
RMS 2.494
DPhi2Vs12
Control region
Data

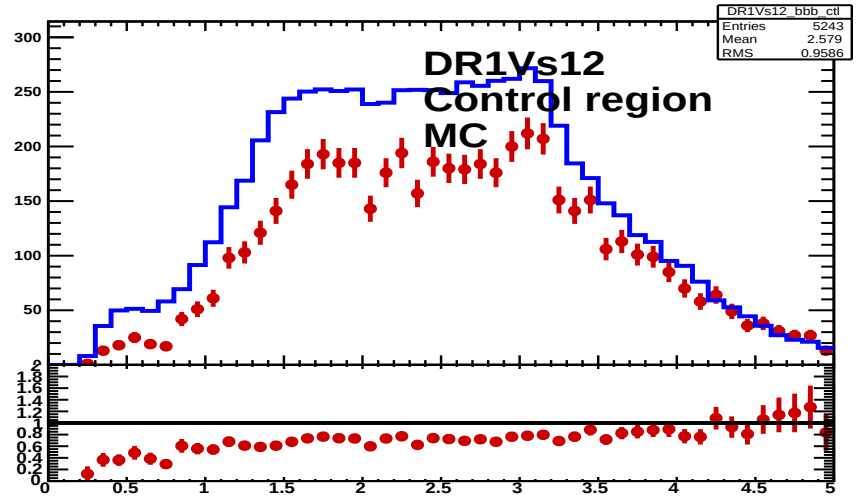

DPhi2Vs12_bbw_sgn
Entries 455195
Mean 0.003818
RMS 2.526
DPhi2Vs12
Signal region
Data

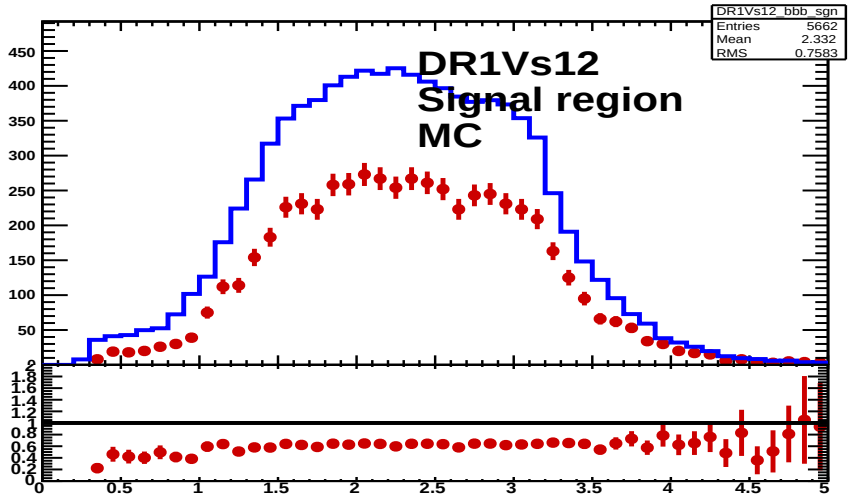

DR0Vs12_bbb_ctl
Entries 5243
Mean 1.544
RMS 0.8999
DR0Vs12
Control region
MC

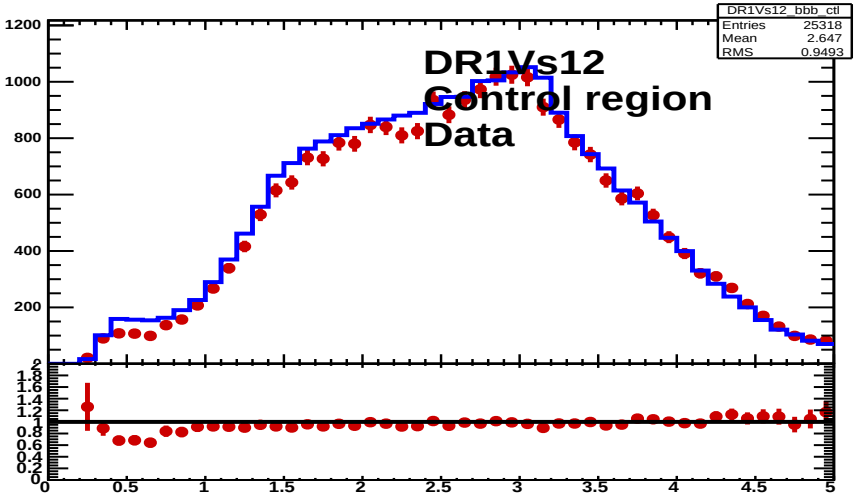

DR0Vs12_bbb_sgn
Entries 5662
Mean 1.36
RMS 0.6743
DR0Vs12
Signal region
MC

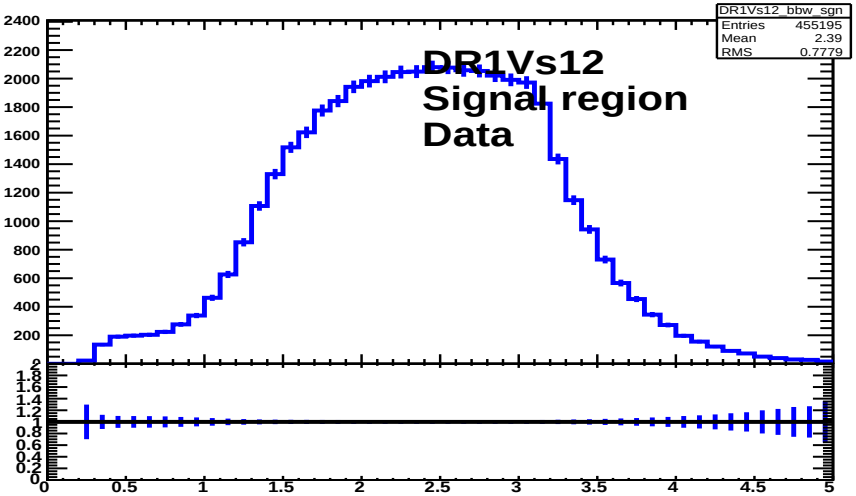

DR0Vs12_bbb_ctl
Entries 25318
Mean 1.506
RMS 0.8893
DR0Vs12
Control region
Data

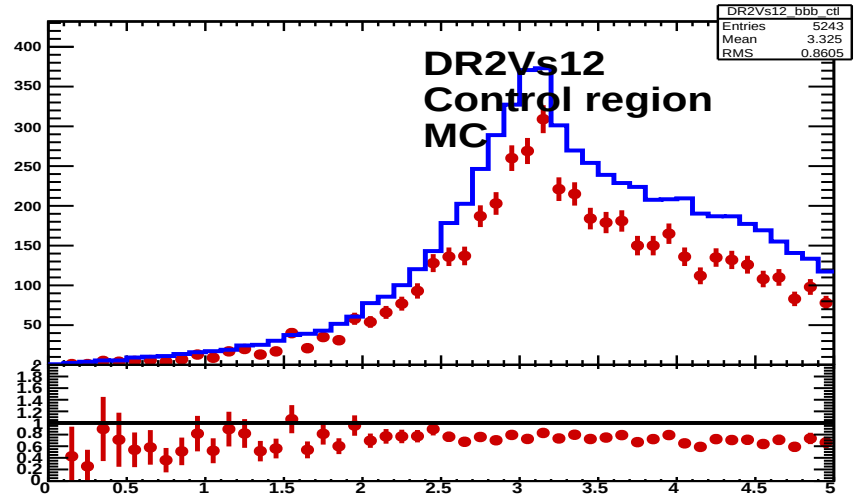

DR0Vs12_bbw_sgn
Entries 455195
Mean 1.373
RMS 0.6865
DR0Vs12
Signal region
Data

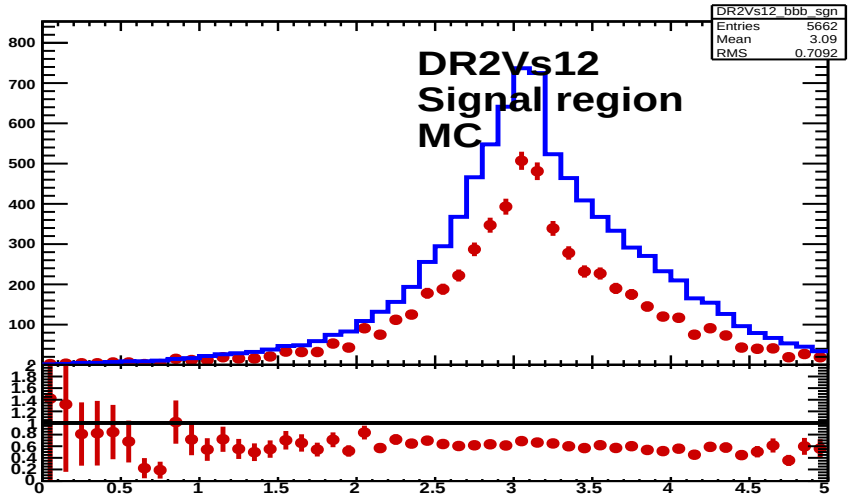

DR1Vs12_bbb_ctl
Entries 5243
Mean 2.579
RMS 0.9586
DR1Vs12
Control region
MC

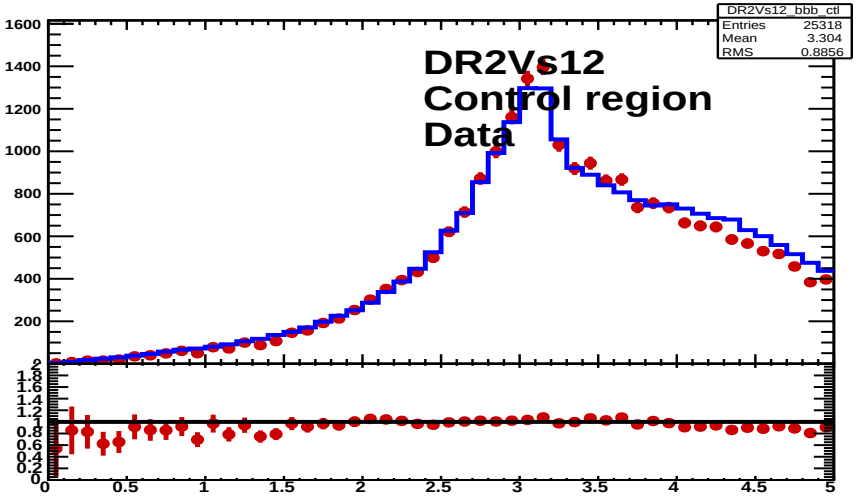

DR1Vs12_bbb_sgn
Entries 5662
Mean 2.332
RMS 0.7583
DR1Vs12
Signal region
MC

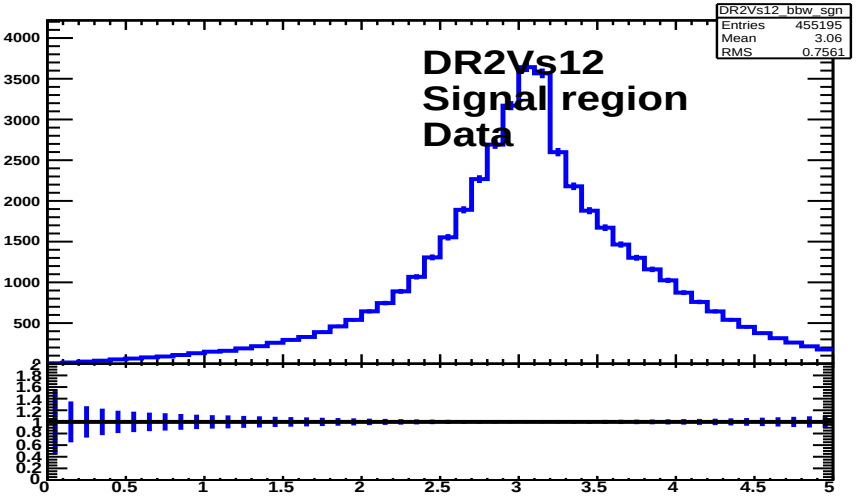

DR1Vs12_bbb_ctl
Entries 25318
Mean 2.647
RMS 0.9493
DR1Vs12
Control region
Data

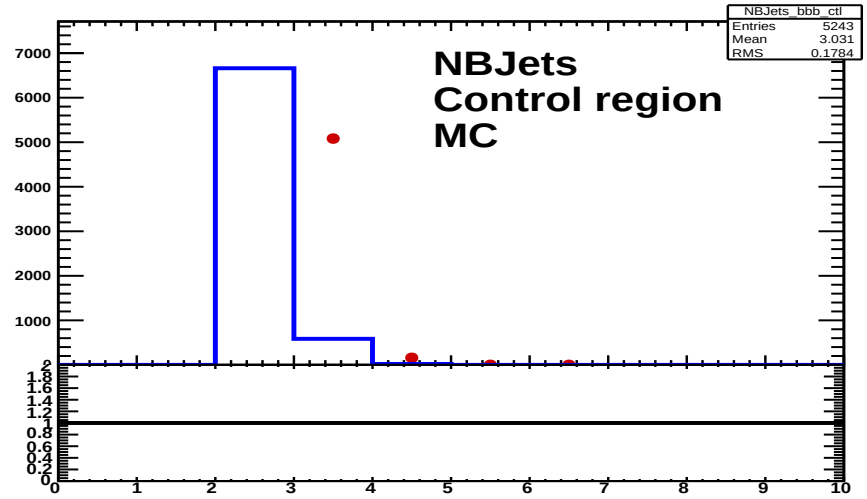

DR1Vs12_bbw_sgn
Entries 455195
Mean 2.39
RMS 0.7779
DR1Vs12
Signal region
Data

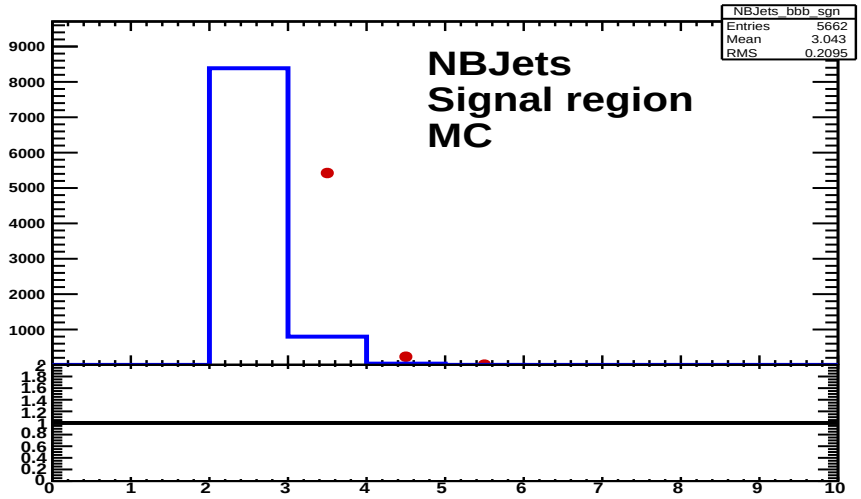

DR2Vs12_bbb_ctl
Entries 5243
Mean 3.325
RMS 0.8605
DR2Vs12
Control region
MC

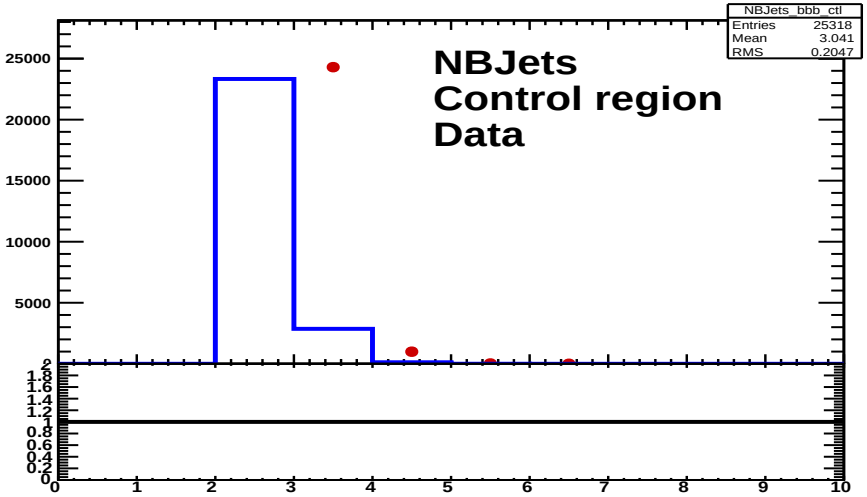

DR2Vs12_bbb_sgn
Entries 5662
Mean 3.09
RMS 0.7092
DR2Vs12
Signal region
MC

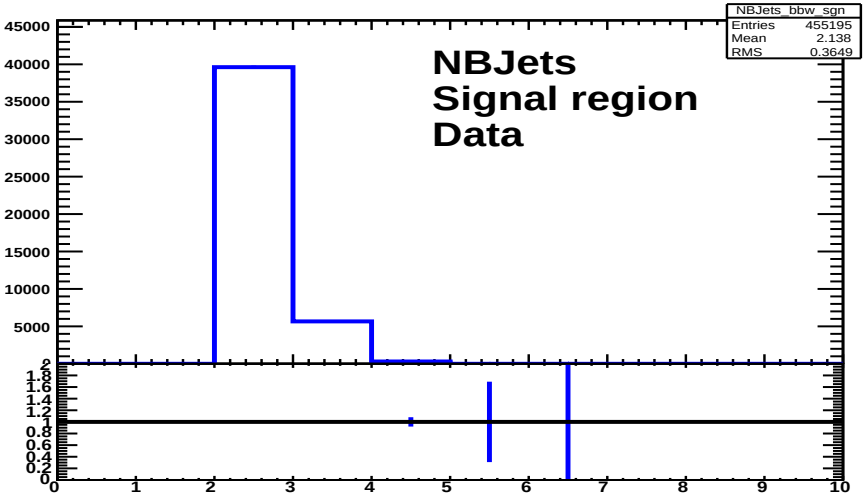

DR2Vs12_bbb_ctl
Entries 25318
Mean 3.304
RMS 0.8856
DR2Vs12
Control region
Data

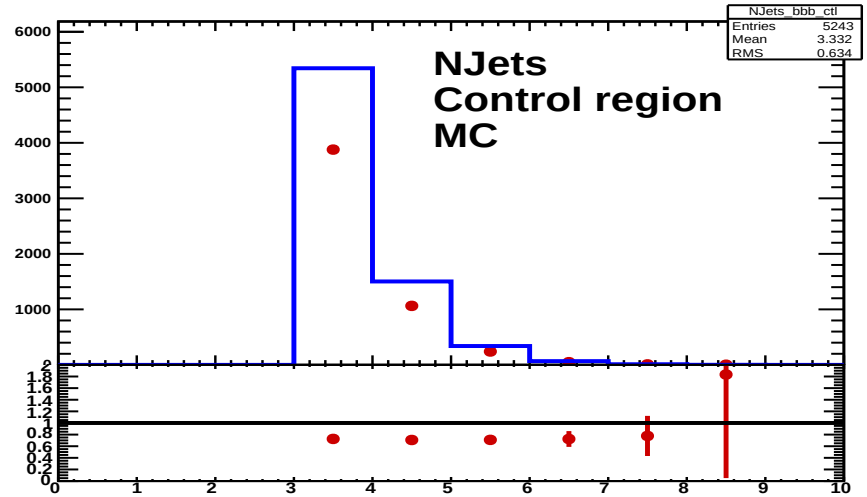

DR2Vs12_bbw_sgn
Entries 455195
Mean 3.06
RMS 0.7561
DR2Vs12
Signal region
Data

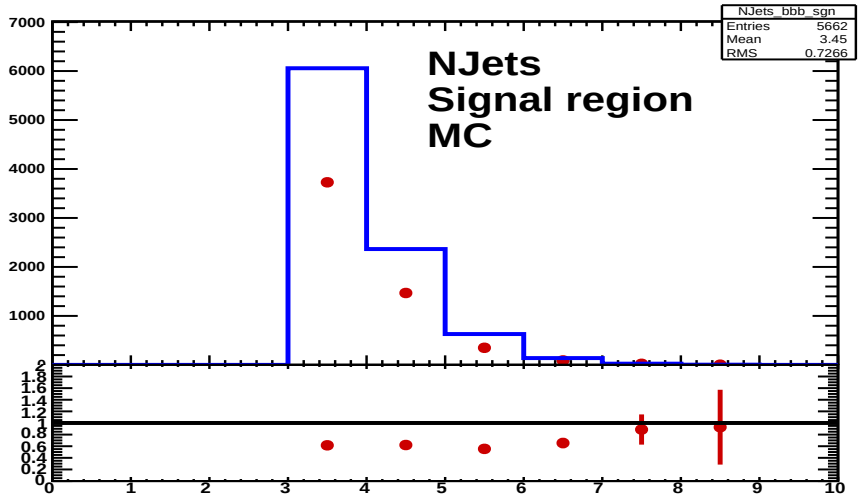

NBJets_bbb_ctl
Entries 5243
Mean 3.031
RMS 0.1784
NBJets
Control region
MC

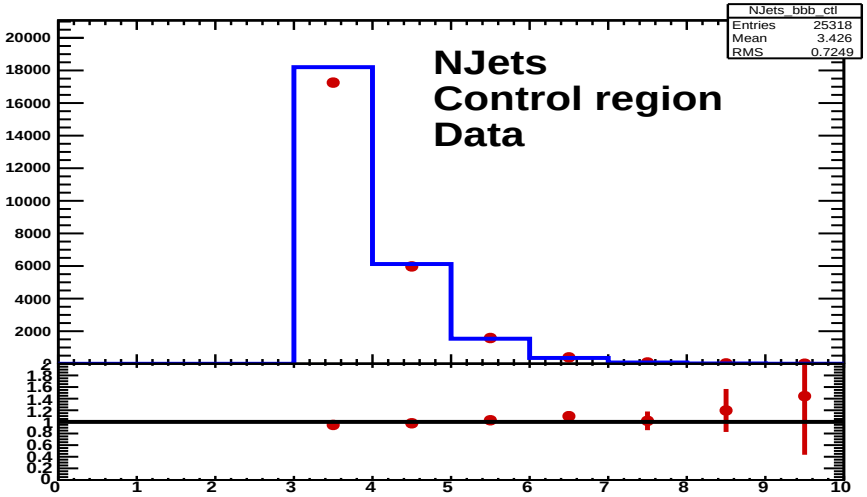

NBJets_bbb_sgn
Entries 5662
Mean 3.043
RMS 0.2095
NBJets
Signal region
MC

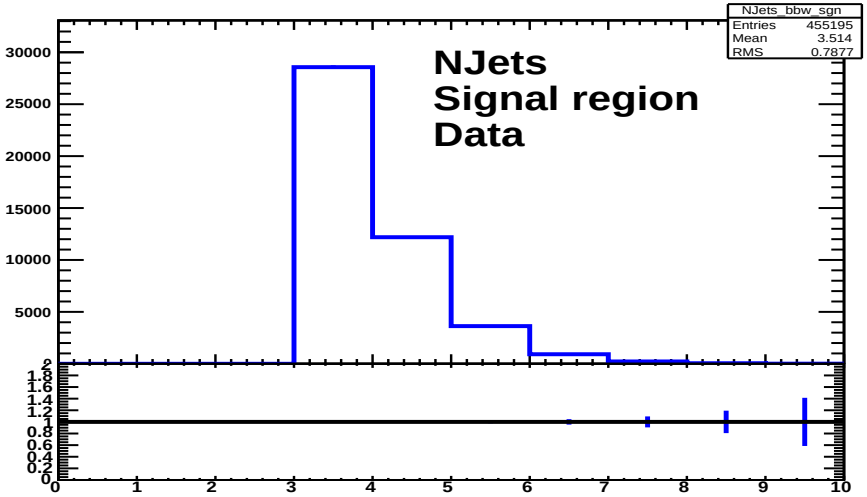

NBJets_bbb_ctl
Entries 25318
Mean 3.041
RMS 0.2047
NBJets
Control region
Data

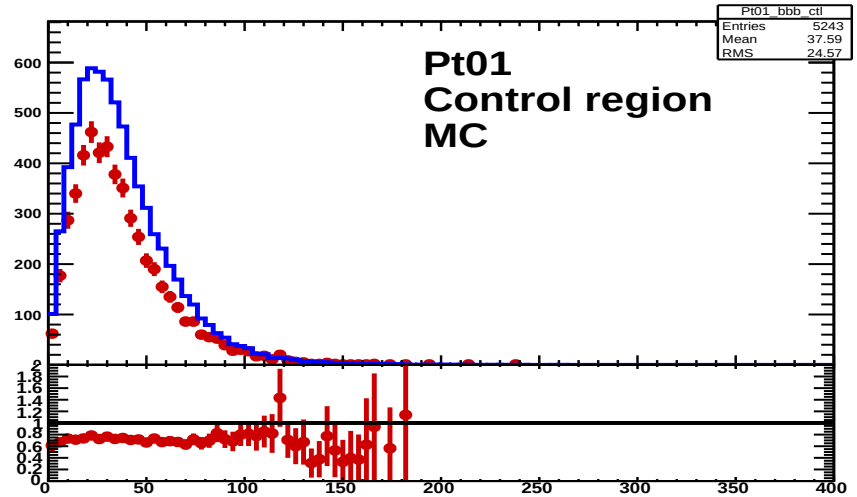

NBJets_bbw_sgn
Entries 455195
Mean 2.138
RMS 0.3649
NBJets
Signal region
Data

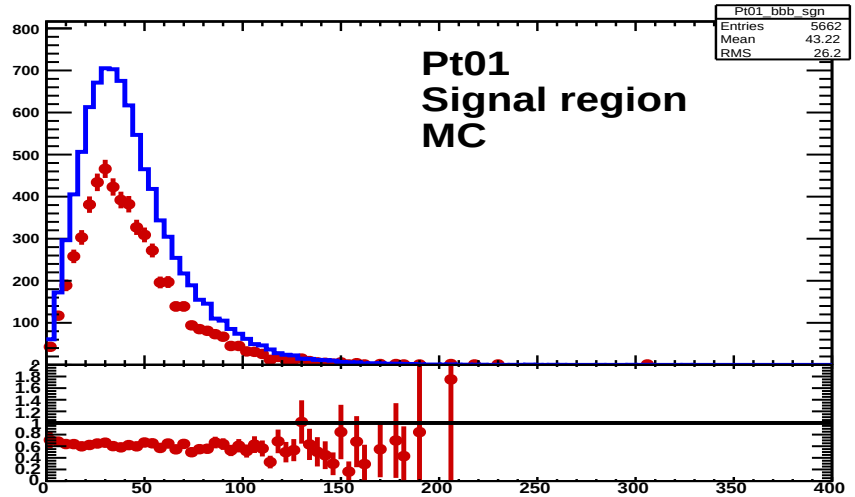

NJets_bbb_ctl
Entries 5243
Mean 3.332
RMS 0.634
NJets
Control region
MC

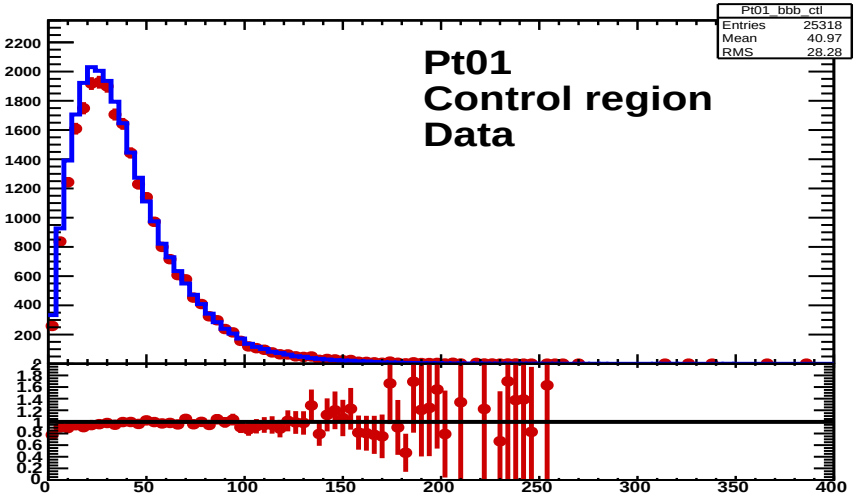

NJets_bbb_sgn
Entries 5662
Mean 3.45
RMS 0.7266
NJets
Signal region
MC

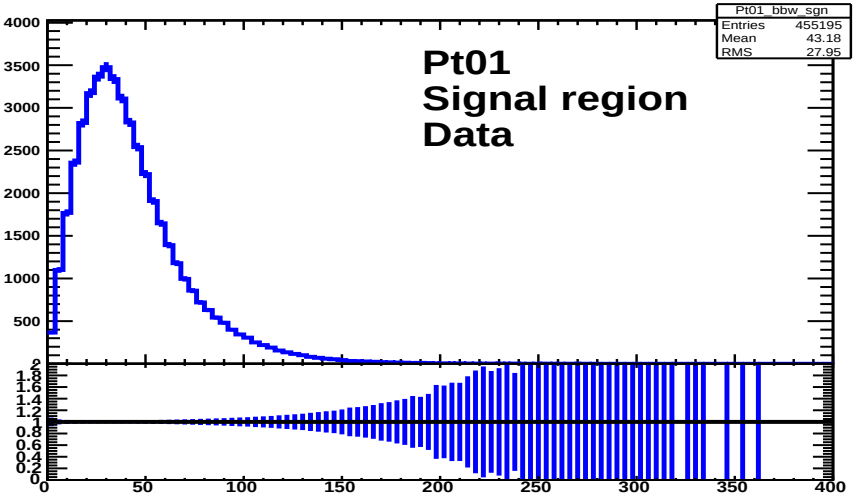

NJets_bbb_ctl
Entries 25318
Mean 3.426
RMS 0.7249
NJets
Control region
Data

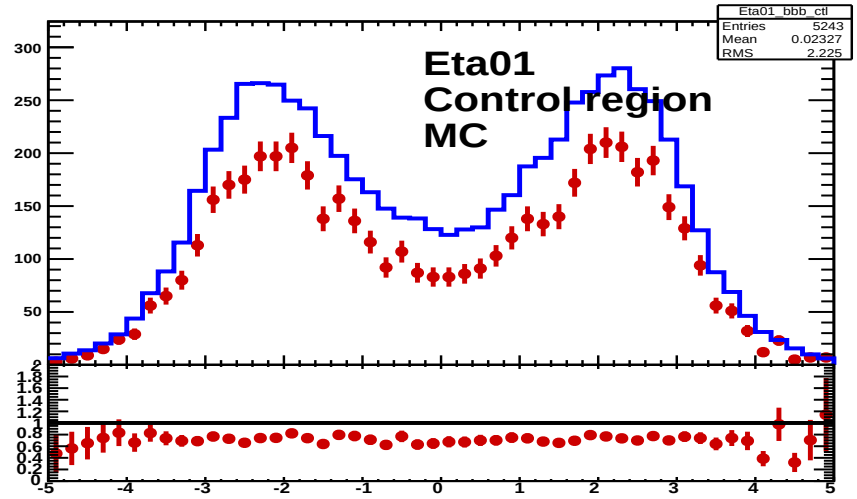

NJets_bbw_sgn
Entries 455195
Mean 3.514
RMS 0.7877
NJets
Signal region
Data

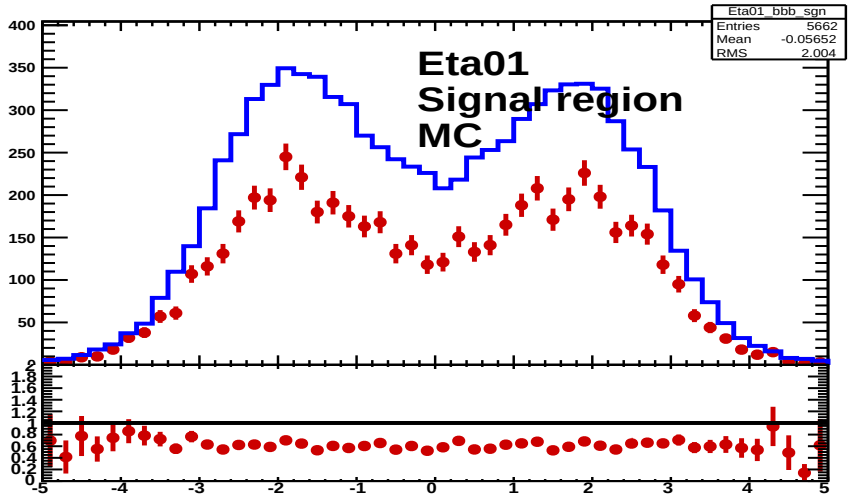

Pt01_bbb_ctl
Entries 5243
Mean 37.59
RMS 24.57
Pt01
Control region
MC

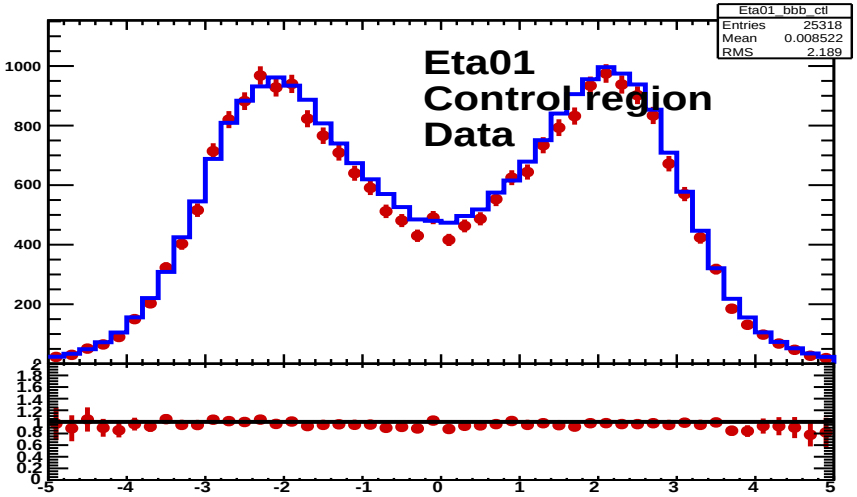

Pt01_bbb_sgn
Entries 5662
Mean 43.22
RMS 26.2
Pt01
Signal region
MC

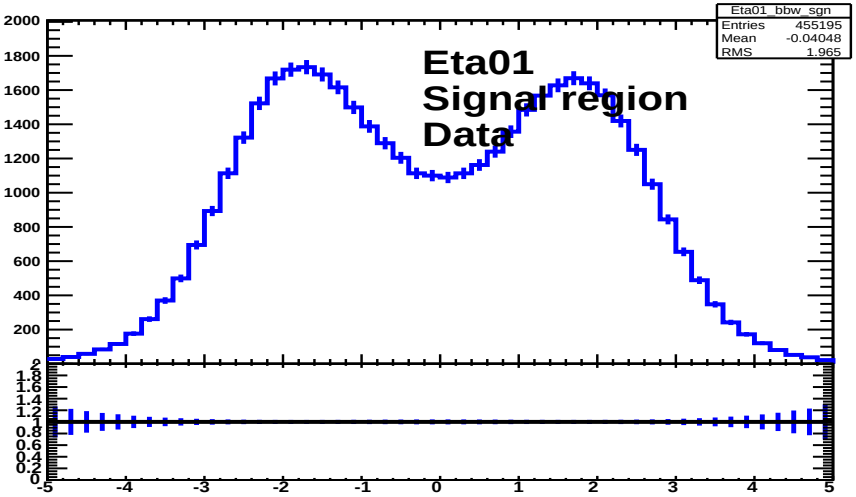

Pt01_bbb_ctl
Entries 25318
Mean 40.97
RMS 28.28
Pt01
Control region
Data

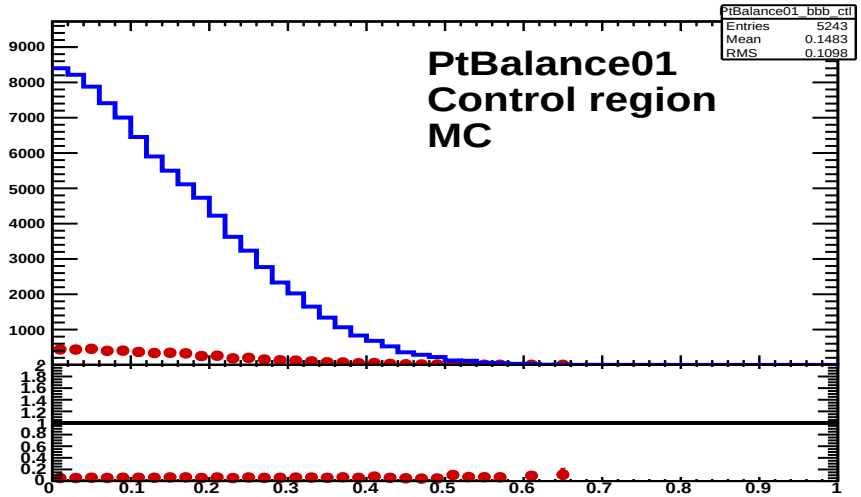

Pt01_bbw_sgn
Entries 455195
Mean 43.18
RMS 27.95
Pt01
Signal region
Data

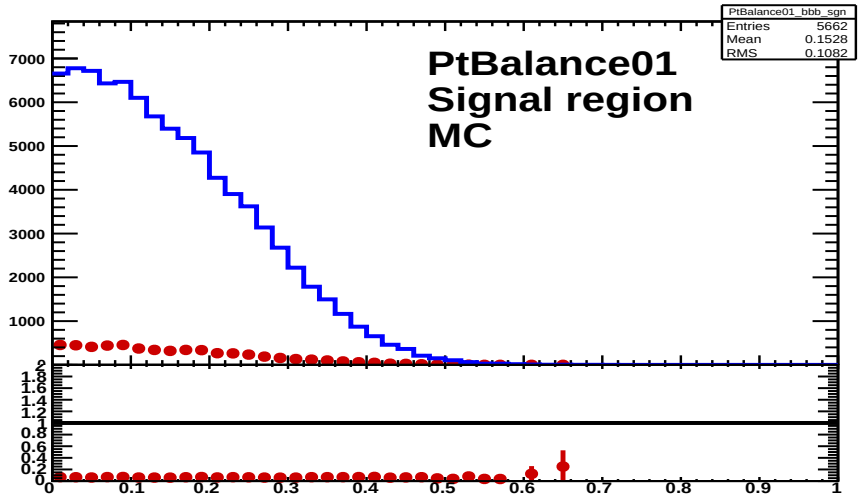

Eta01_bbb_ctl
Entries 5243
Mean 0.02327
RMS 2.225
Eta01
Control region
MC

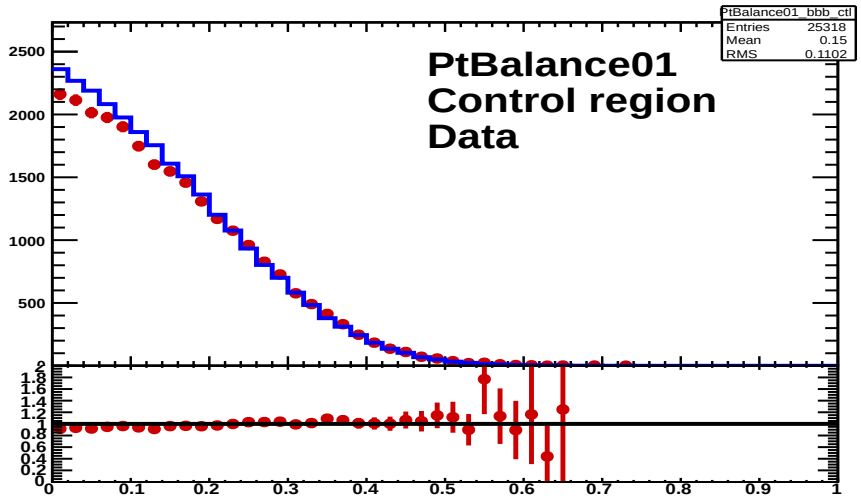

Eta01_bbb_sgn
Entries 5662
Mean -0.05652
RMS 2.004
Eta01
Signal region
MC

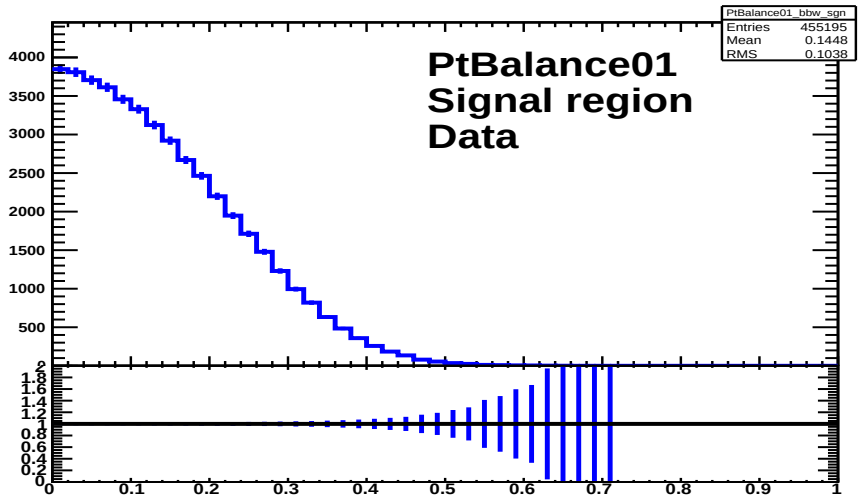

Eta01_bbb_ctl
Entries 25318
Mean 0.008522
RMS 2.189
Eta01
Control region
Data

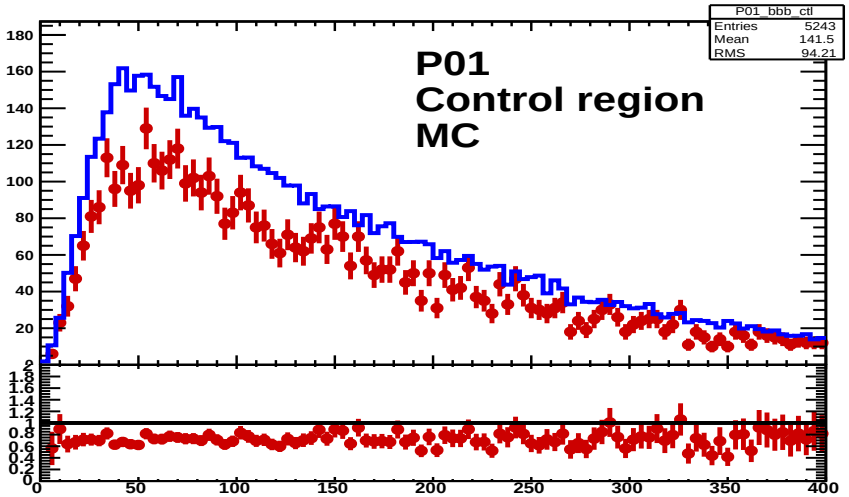

Eta01_bbw_sgn
Entries 455195
Mean -0.04048
RMS 1.965
Eta01
Signal region
Data

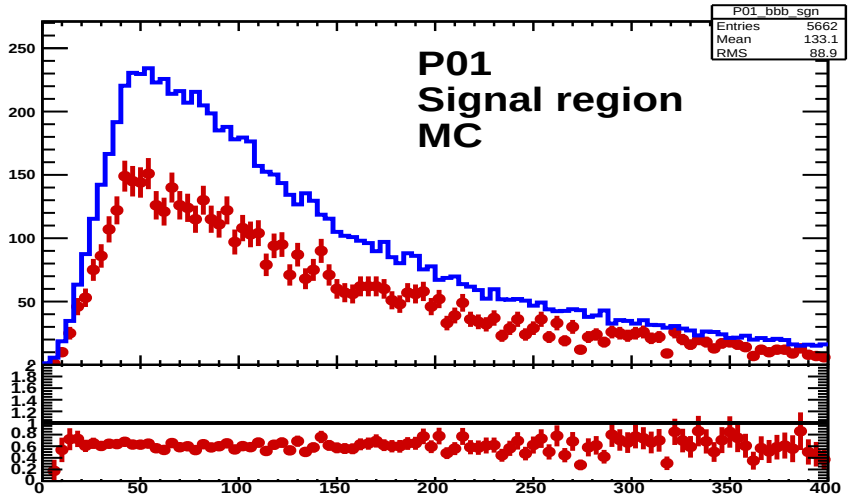

PtBalance01_bbb_ctl
Entries 5243
Mean 0.1483
RMS 0.1098
PtBalance01
Control region
MC

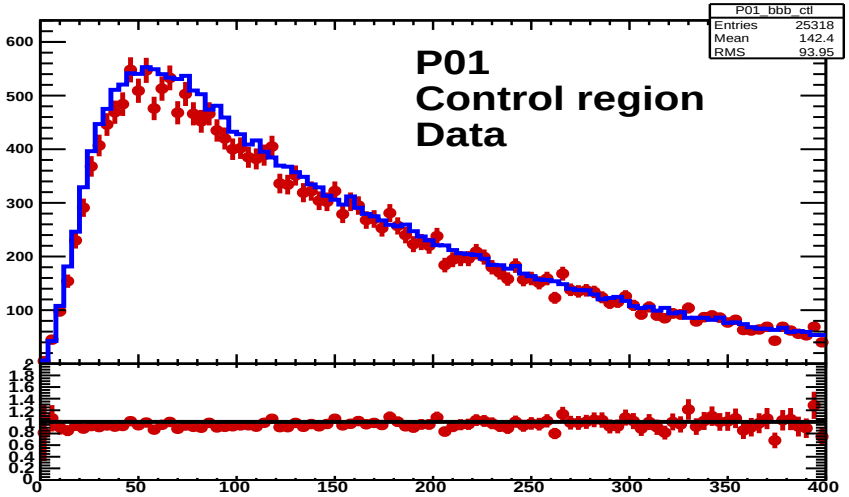

PtBalance01_bbb_sgn
Entries 5662
Mean 0.1528
RMS 0.1082
PtBalance01
Signal region
MC

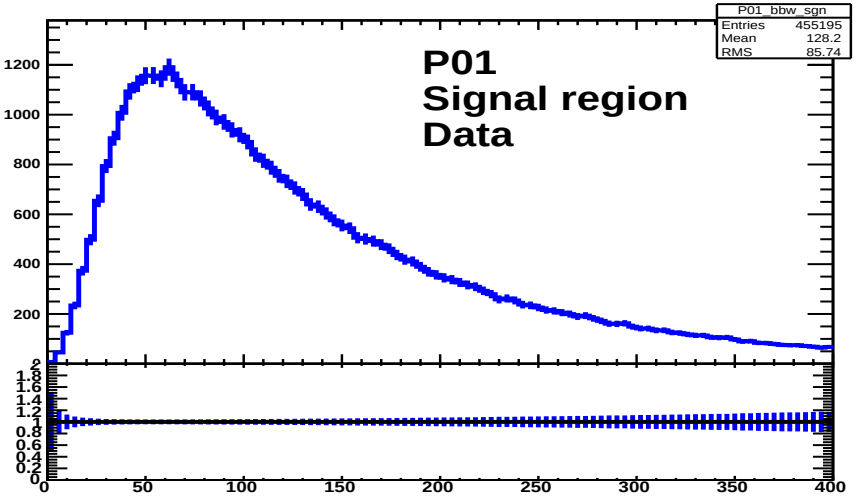

PtBalance01_bbb_ctl
Entries 25318
Mean 0.15
RMS 0.1102
PtBalance01
Control region
Data

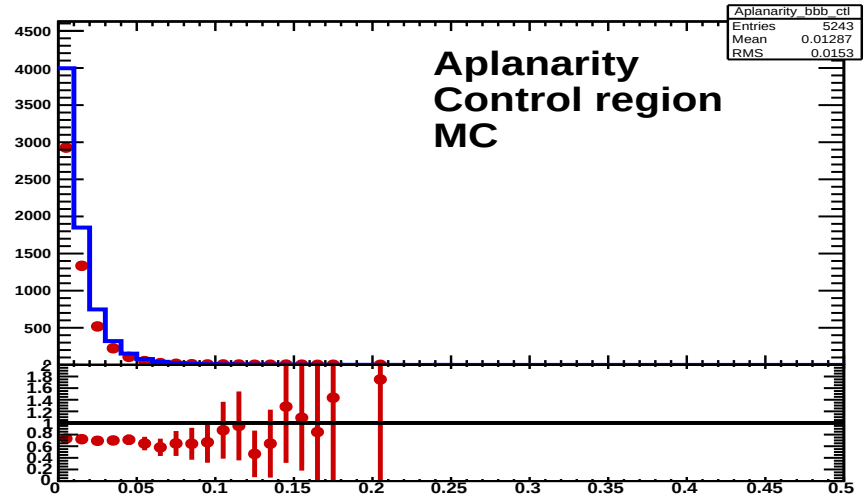

PtBalance01_bbw_sgn
Entries 455195
Mean 0.1448
RMS 0.1038
PtBalance01
Signal region
Data

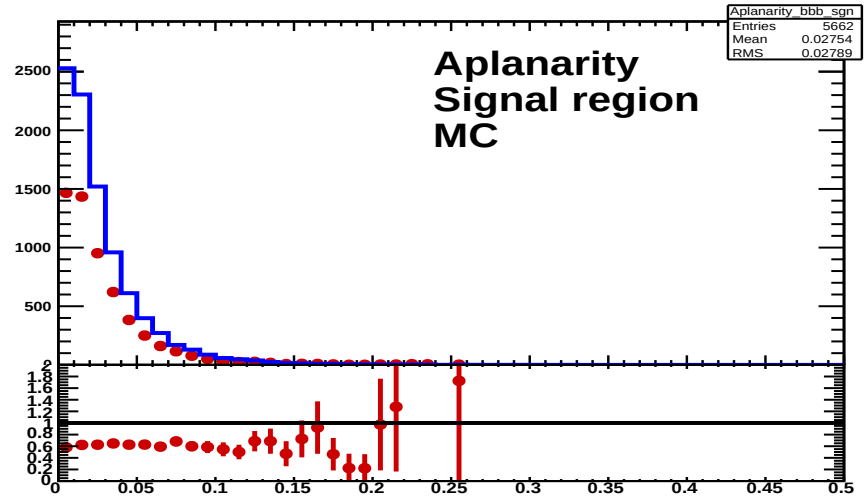

P01_bbb_ctl
Entries 5243
Mean 141.5
RMS 94.21
P01
Control region
MC

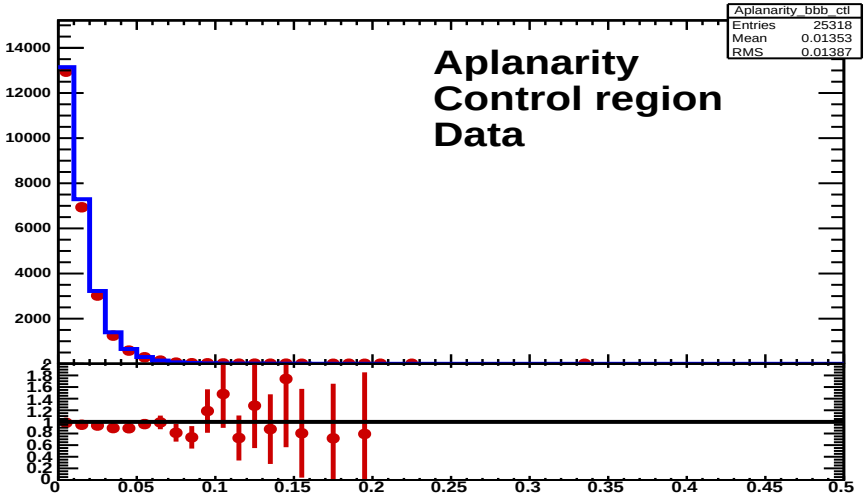

P01_bbb_sgn
Entries 5662
Mean 133.1
RMS 88.9
P01
Signal region
MC

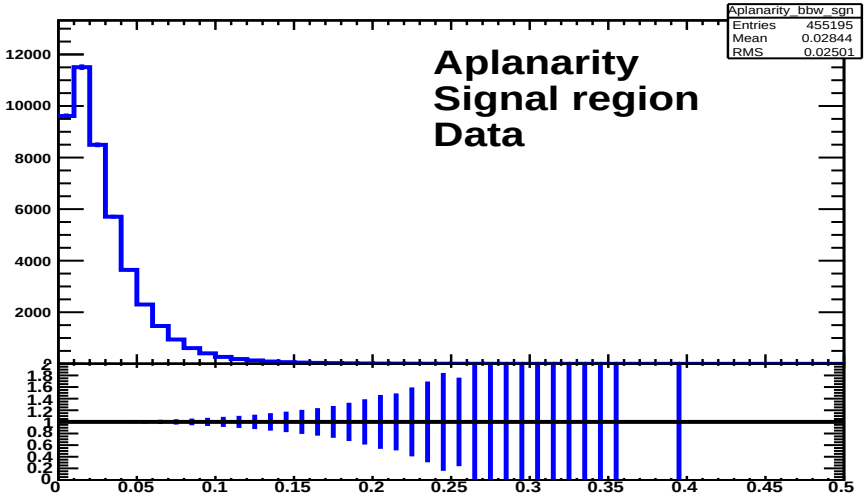

P01_bbb_ctl
Entries 25318
Mean 142.4
RMS 93.95
P01
Control region
Data

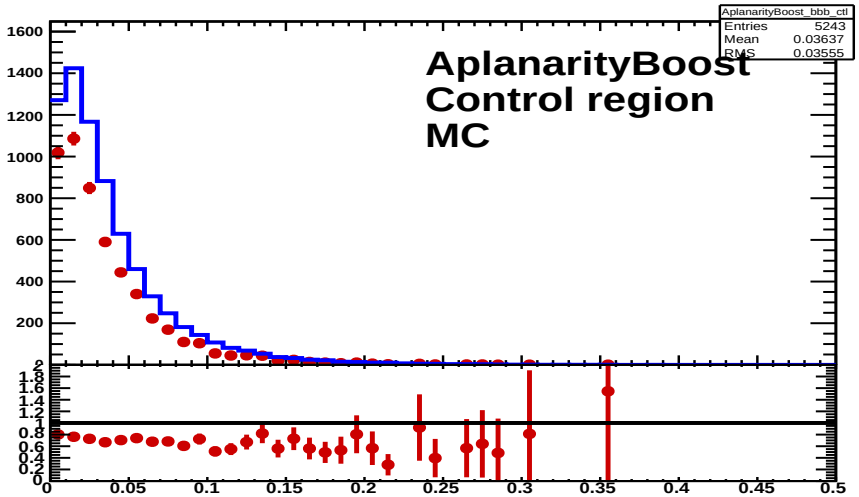

P01_bbw_sgn
Entries 455195
Mean 128.2
RMS 85.74
P01
Signal region
Data

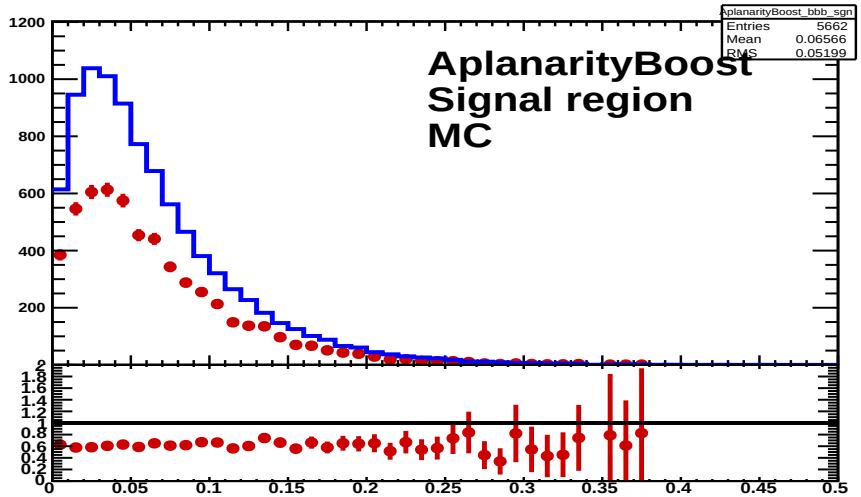

Aplanarity_bbb_ctl
Entries 5243
Mean 0.01287
RMS 0.0153
Aplanarity
Control region
MC

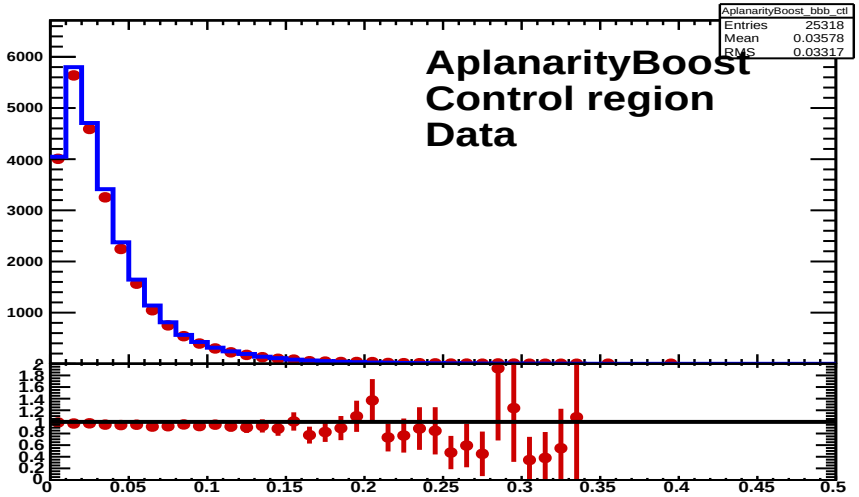

Aplanarity_bbb_sgn
Entries 5662
Mean 0.02754
RMS 0.02789
Aplanarity
Signal region
MC

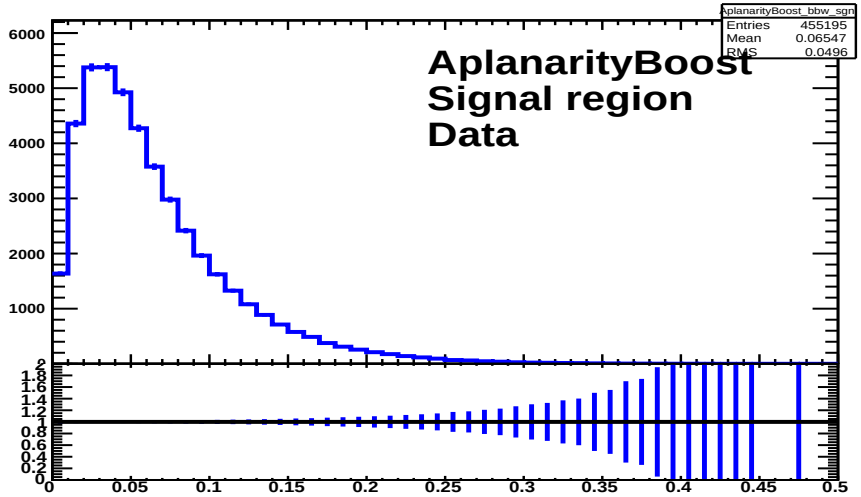

Aplanarity_bbb_ctl
Entries 25318
Mean 0.01353
RMS 0.01387
Aplanarity
Control region
Data

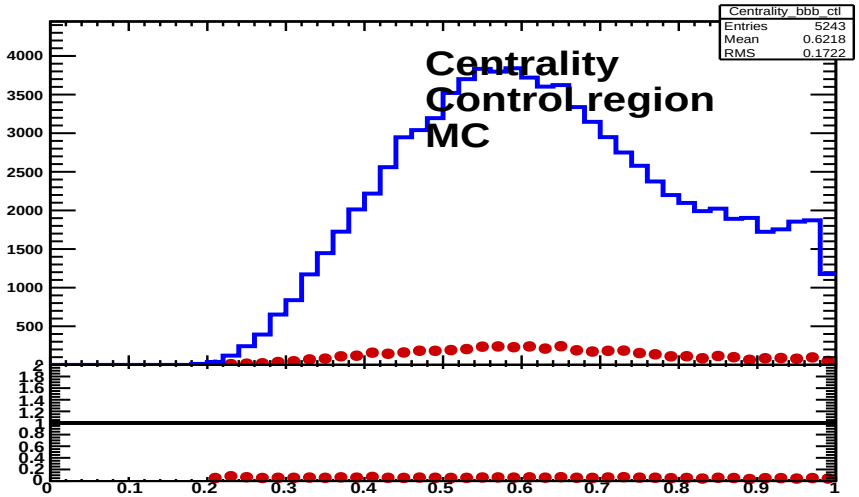

Aplanarity_bbw_sgn
Entries 455195
Mean 0.02844
RMS 0.02501
Aplanarity
Signal region
Data

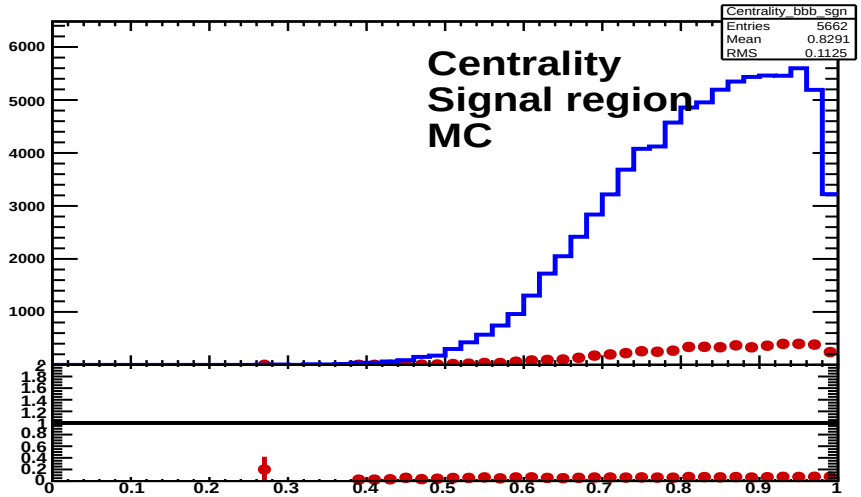

AplanarityBoost_bbb_ctl
Entries 5243
Mean 0.03637
RMS 0.03555
AplanarityBoost
Control region
MC

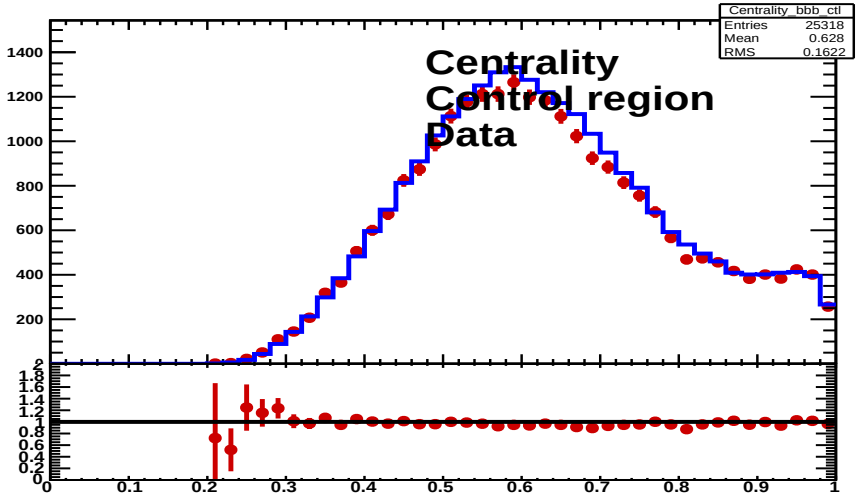

AplanarityBoost_bbb_sgn
Entries 5662
Mean 0.06566
RMS 0.05199
AplanarityBoost
Signal region
MC

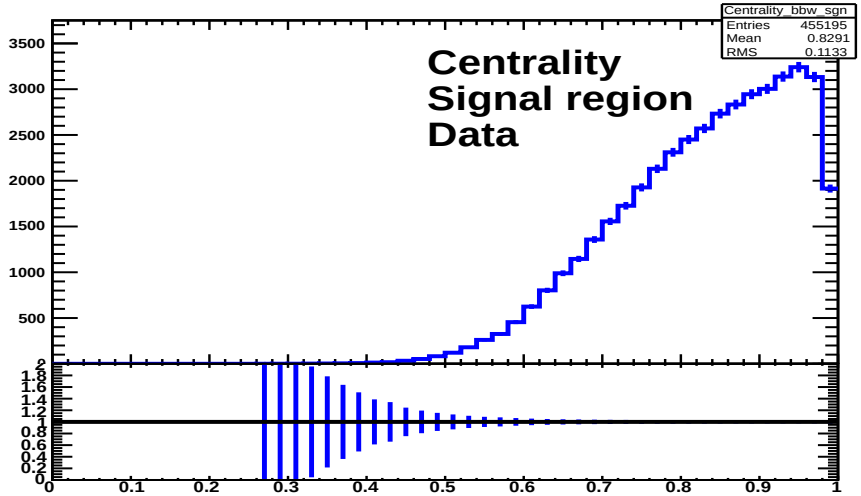

AplanarityBoost_bbb_ctl
Entries 25318
Mean 0.03578
RMS 0.03317
AplanarityBoost
Control region
Data

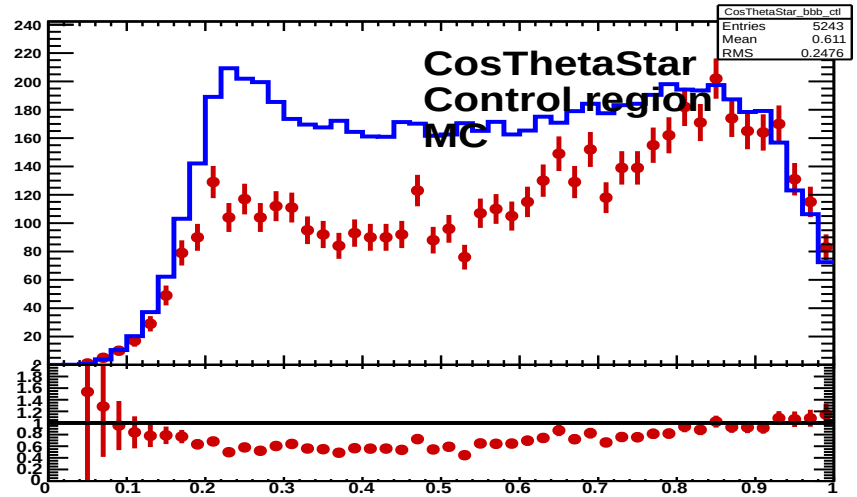

AplanarityBoost_bbw_sgn
Entries 455195
Mean 0.06547
RMS 0.0496
AplanarityBoost
Signal region
Data

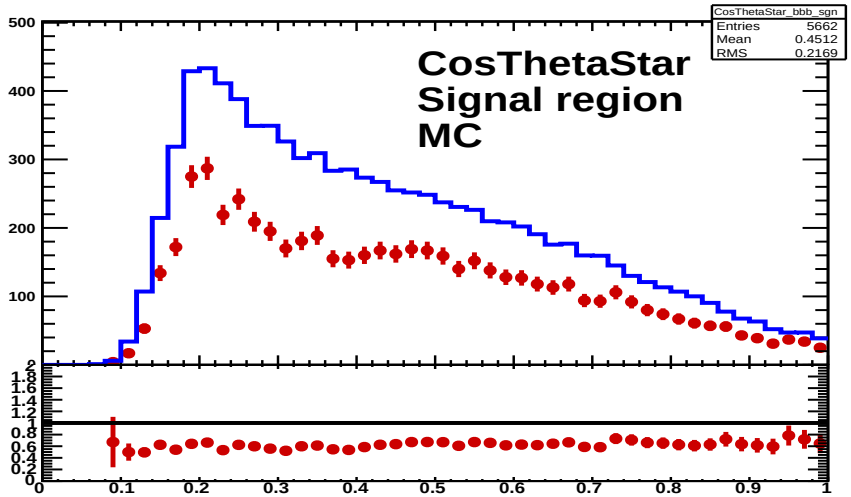

Centrality_bbb_ctl
Entries 5243
Mean 0.6218
RMS 0.1722
Centrality
Control region
MC

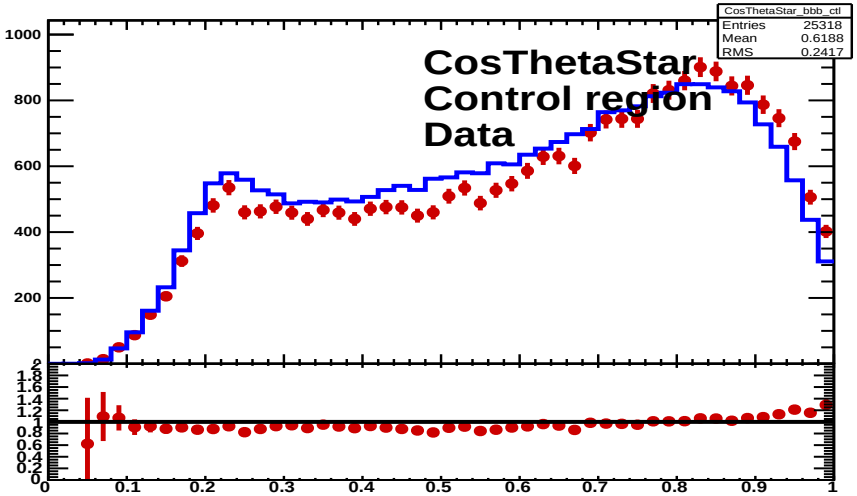

Centrality_bbb_sgn
Entries 5662
Mean 0.8291
RMS 0.1125
Centrality
Signal region
MC

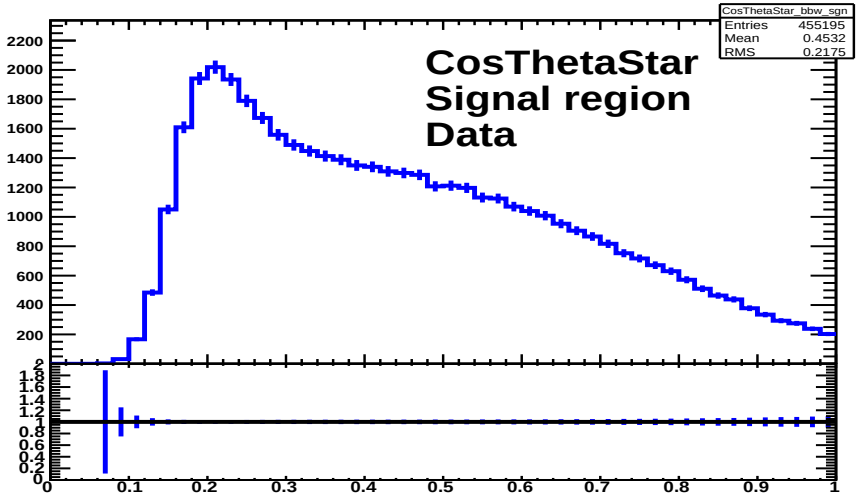

Centrality_bbb_ctl
Entries 25318
Mean 0.628
RMS 0.1622
Centrality
Control region
Data

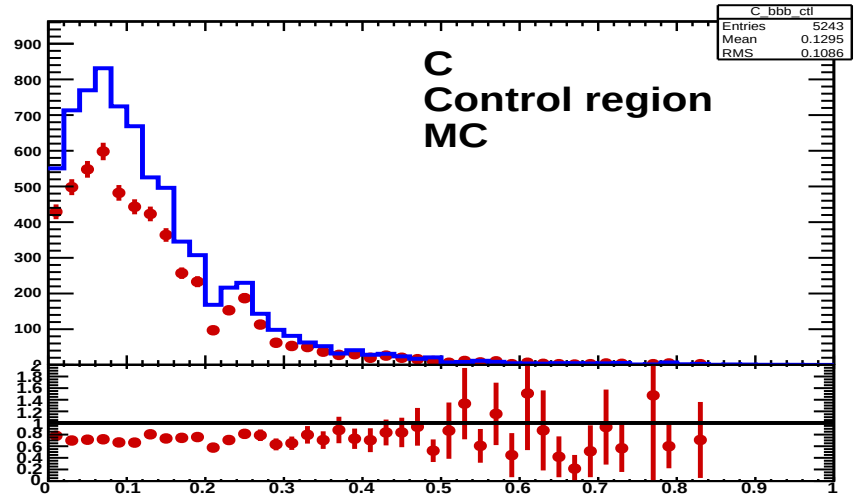

Centrality_bbw_sgn
Entries 455195
Mean 0.8291
RMS 0.1133
Centrality
Signal region
Data

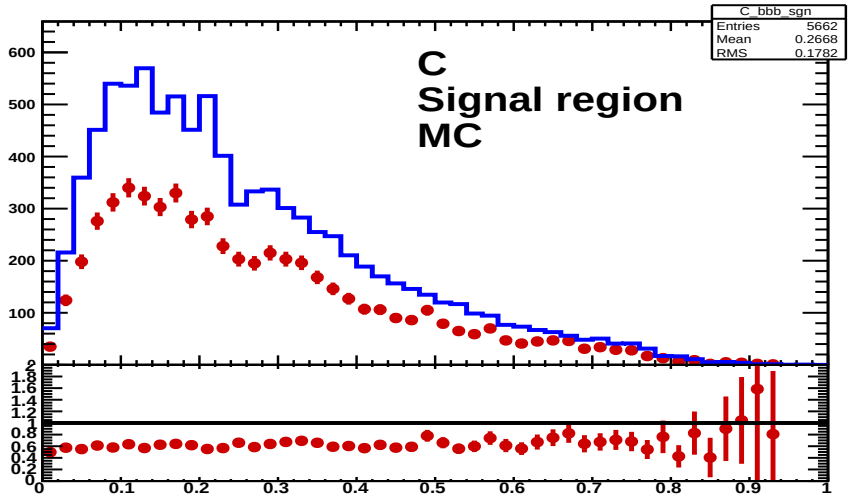

CosThetaStar_bbb_ctl
Entries 5243
Mean 0.611
RMS 0.2476
CosThetaStar
Control region
MC

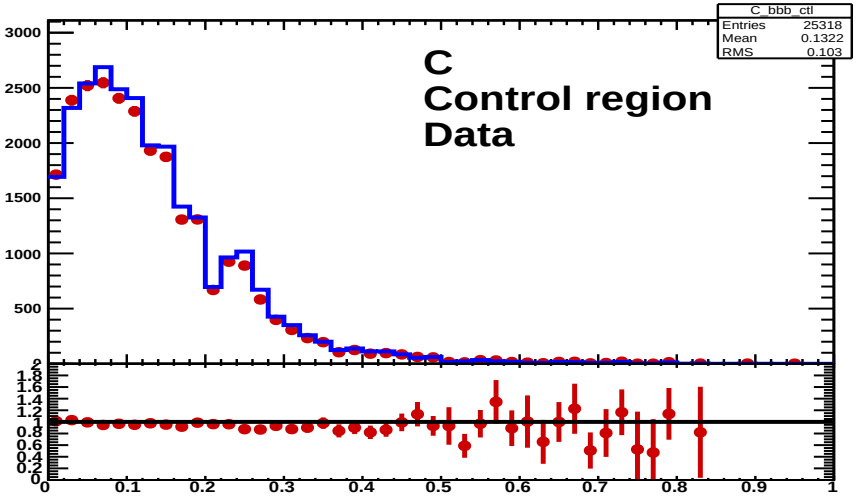

CosThetaStar_bbb_sgn
Entries 5662
Mean 0.4512
RMS 0.2169
CosThetaStar
Signal region
MC

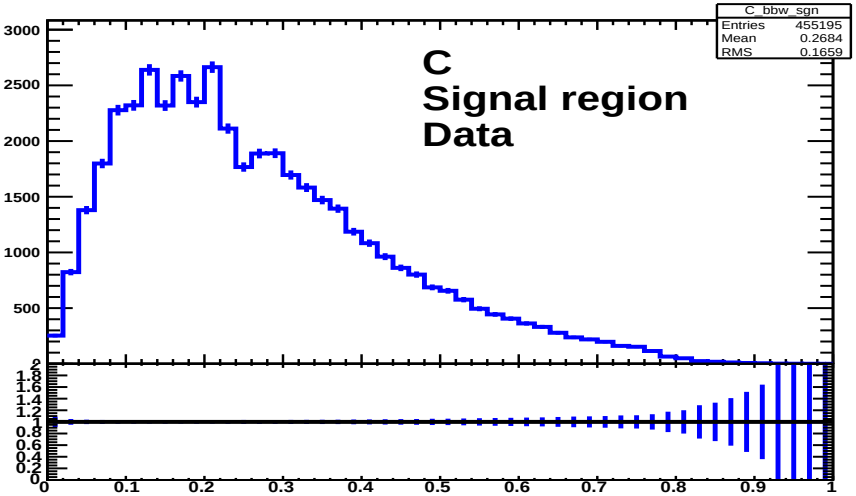

CosThetaStar_bbb_ctl
Entries 25318
Mean 0.6188
RMS 0.2417
CosThetaStar
Control region
Data

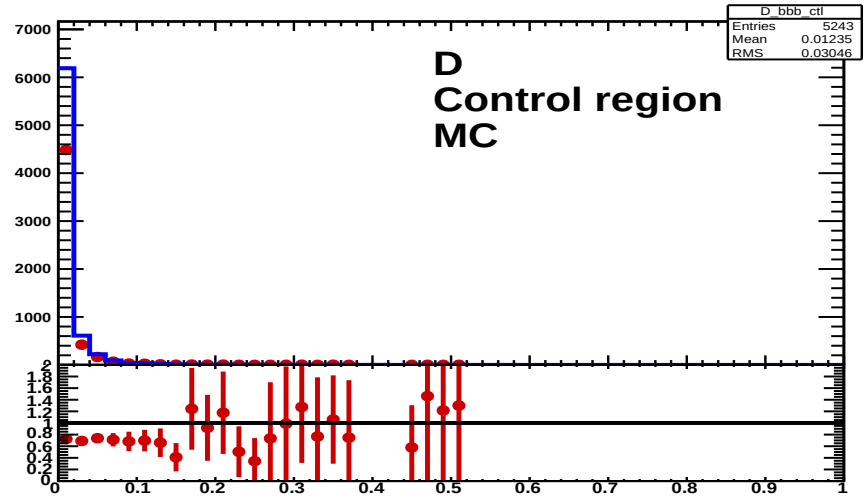

CosThetaStar_bbw_sgn
Entries 455195
Mean 0.4532
RMS 0.2175
CosThetaStar
Signal region
Data

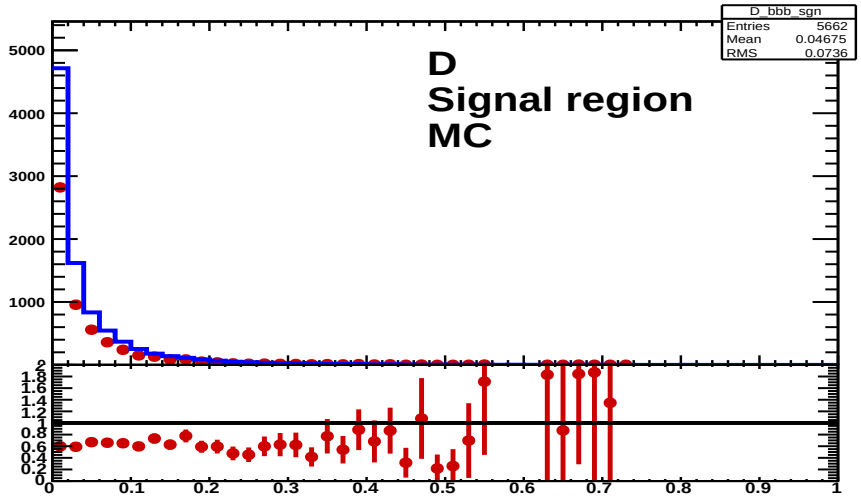

C_bbb_ctl
Entries 5243
Mean 0.1295
RMS 0.1086
C
Control region
MC

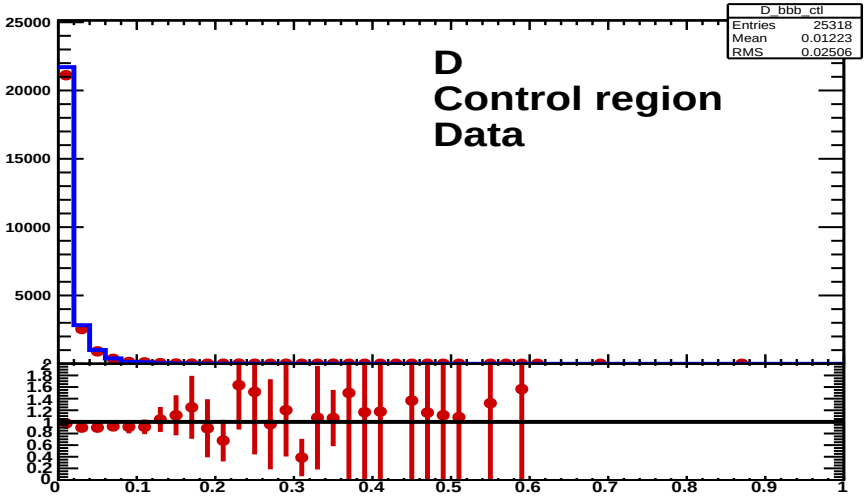

C_bbb_sgn
Entries 5662
Mean 0.2668
RMS 0.1782
C
Signal region
MC

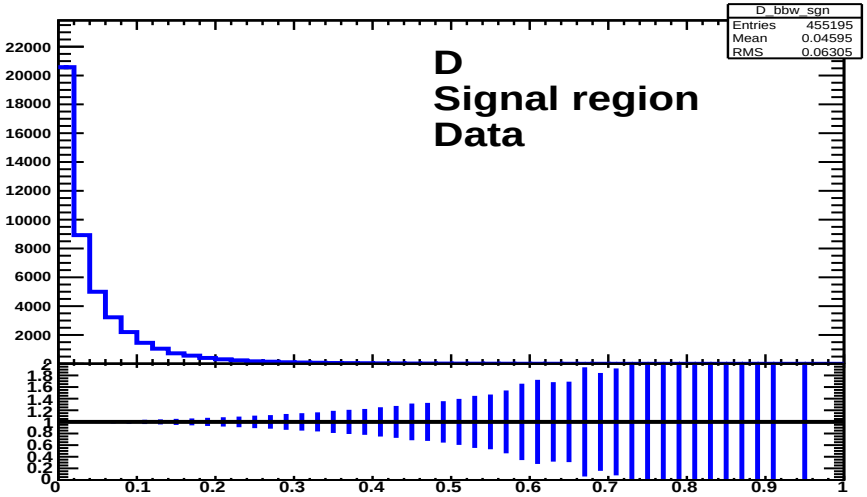

C_bbb_ctl
Entries 25318
Mean 0.1322
RMS 0.103
C
Control region
Data

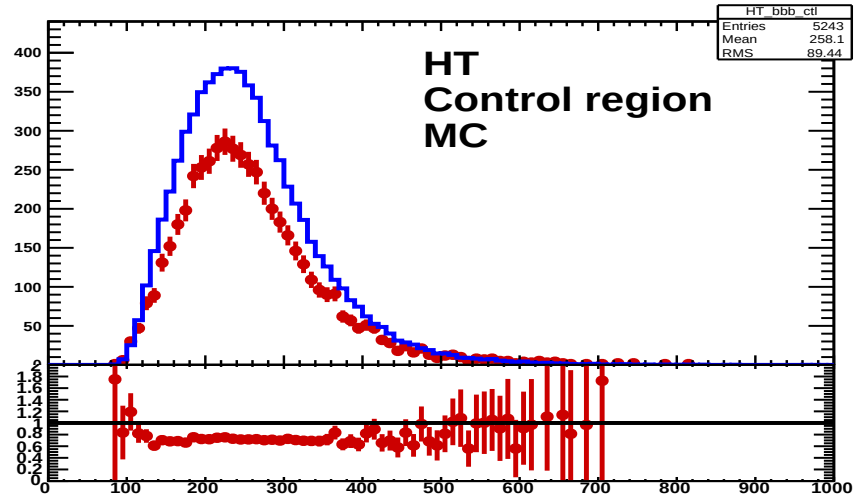

C_bbw_sgn
Entries 455195
Mean 0.2684
RMS 0.1659
C
Signal region
Data

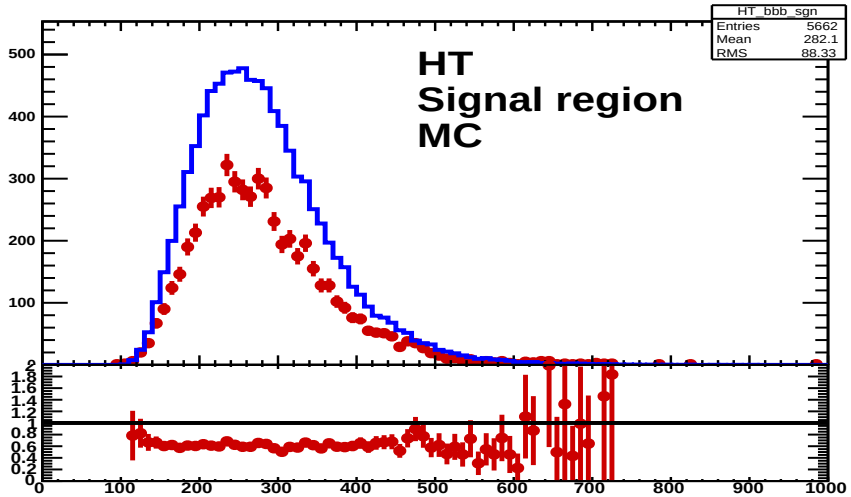

D_bbb_ctl
Entries 5243
Mean 0.01235
RMS 0.03046
D
Control region
MC

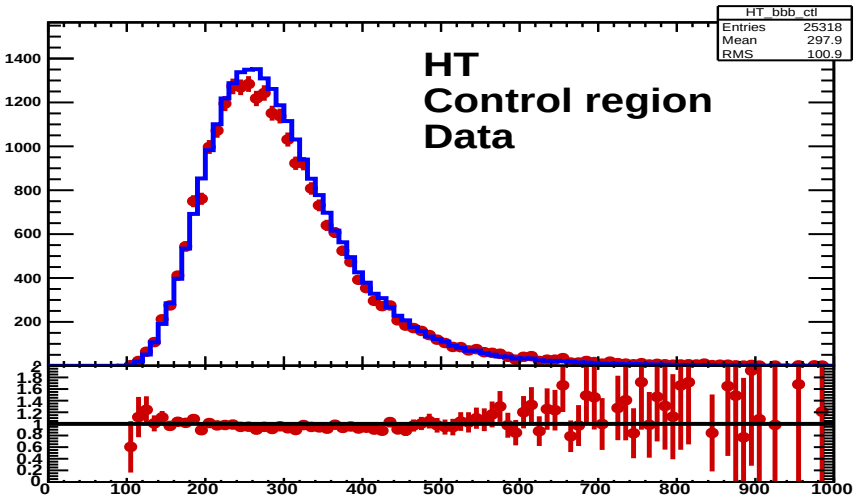

D_bbb_sgn
Entries 5662
Mean 0.04675
RMS 0.0736
D
Signal region
MC

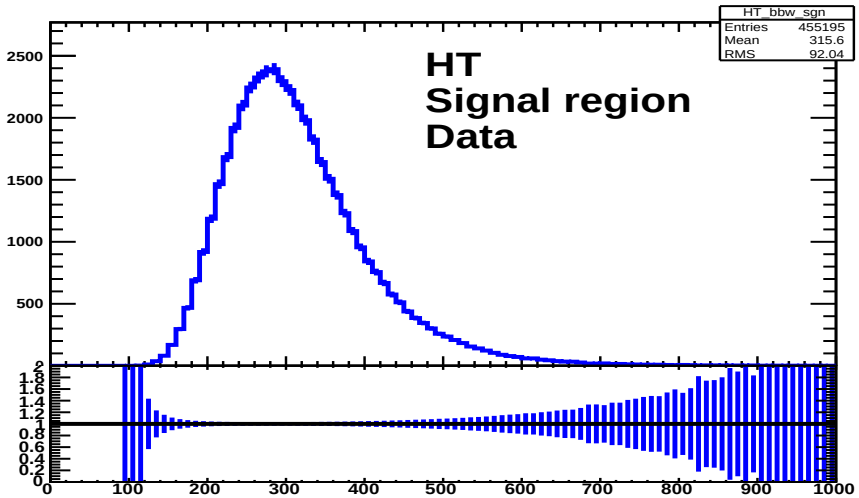

D_bbb_ctl
Entries 25318
Mean 0.01223
RMS 0.02506
D
Control region
Data

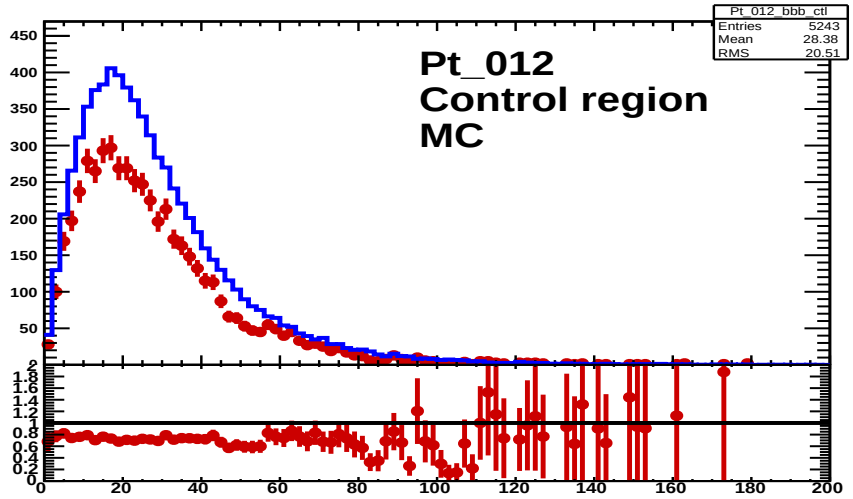

D_bbw_sgn
Entries 455195
Mean 0.04595
RMS 0.06305
D
Signal region
Data

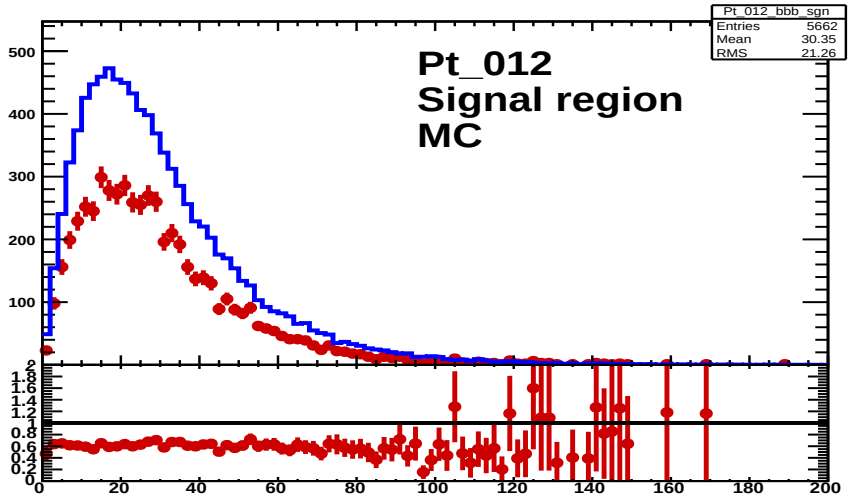

HT_bbb_ctl
Entries 5243
Mean 258.1
RMS 89.44
HT
Control region
MC

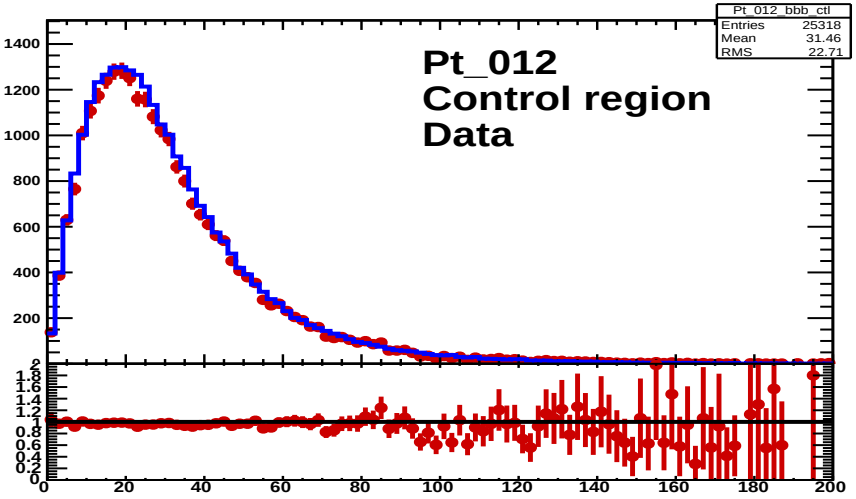

HT_bbb_sgn
Entries 5662
Mean 282.1
RMS 88.33
HT
Signal region
MC

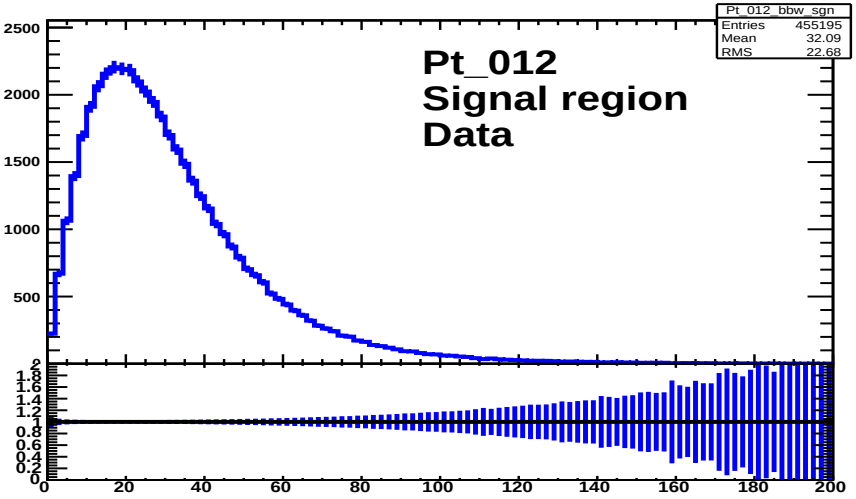

HT_bbb_ctl
Entries 25318
Mean 297.9
RMS 100.9
HT
Control region
Data

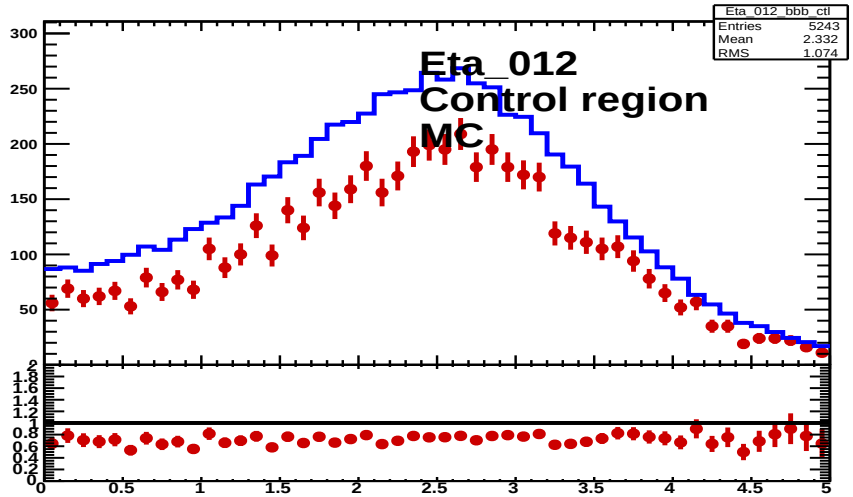

HT_bbw_sgn
Entries 455195
Mean 315.6
RMS 92.04
HT
Signal region
Data

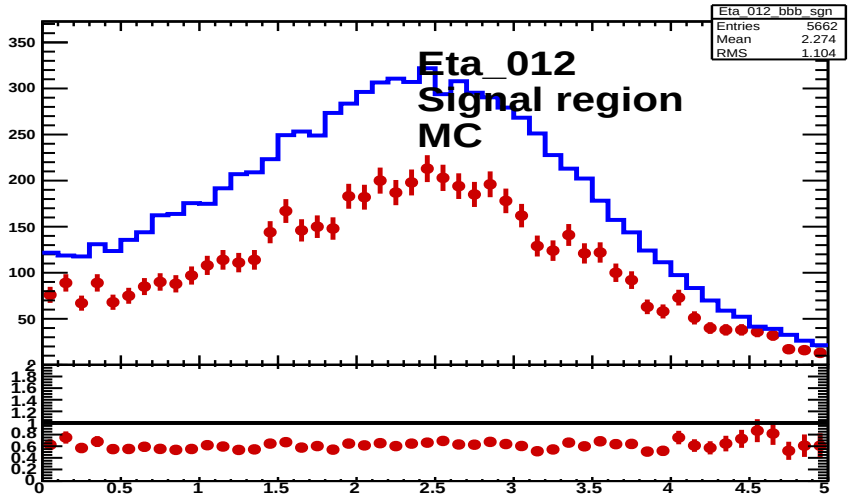

Pt_012_bbb_ctl
Entries 5243
Mean 28.38
RMS 20.51
Pt_012
Control region
MC

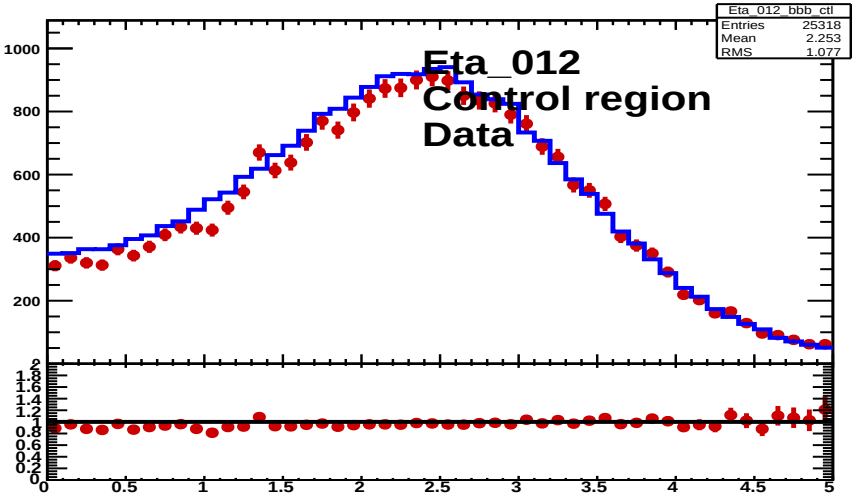

Pt_012_bbb_sgn
Entries 5662
Mean 30.35
RMS 21.26
Pt_012
Signal region
MC

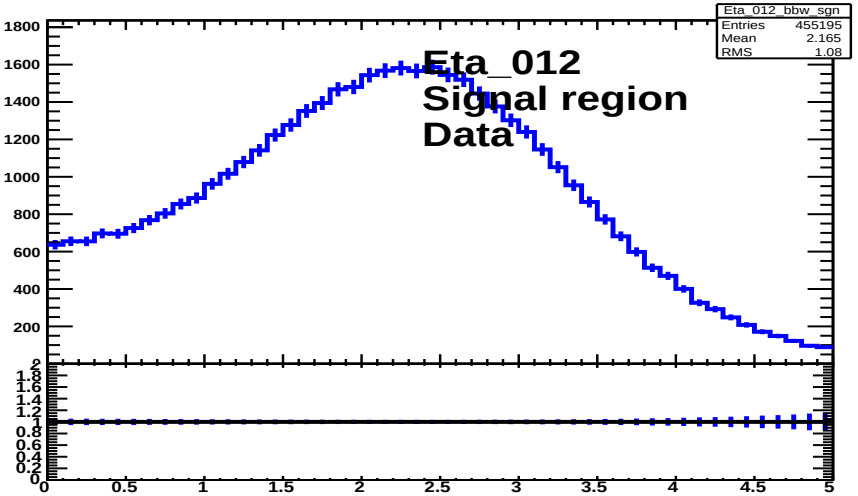

Pt_012_bbb_ctl
Entries 25318
Mean 31.46
RMS 22.71
Pt_012
Control region
Data

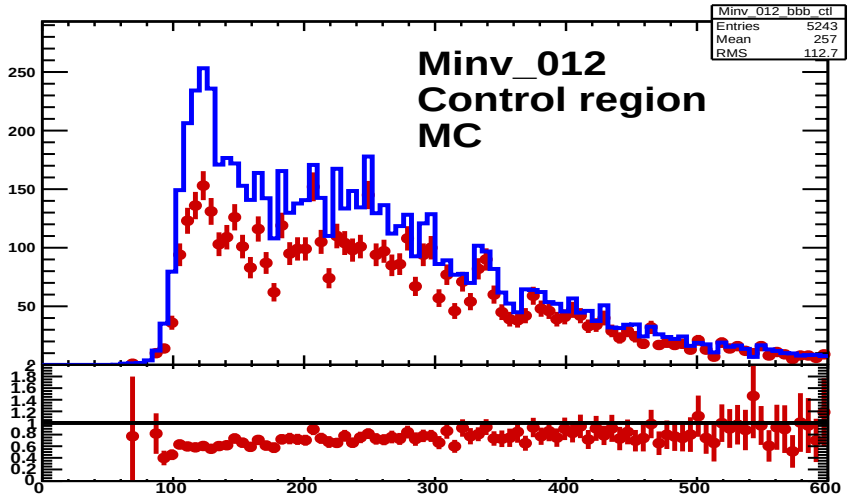

Pt_012_bbw_sgn
Entries 455195
Mean 32.09
RMS 22.68
Pt_012
Signal region
Data

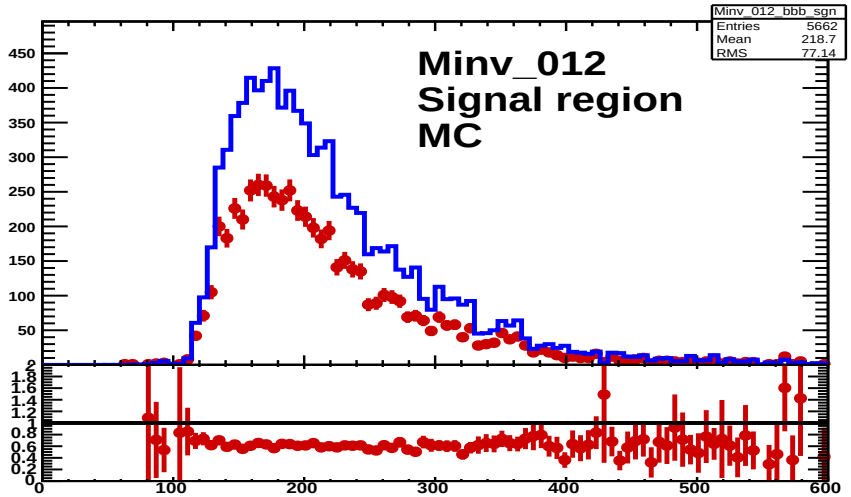

Eta_012_bbb_ctl
Entries 5243
Mean 2.332
RMS 1.074
Eta_012
Control region
MC

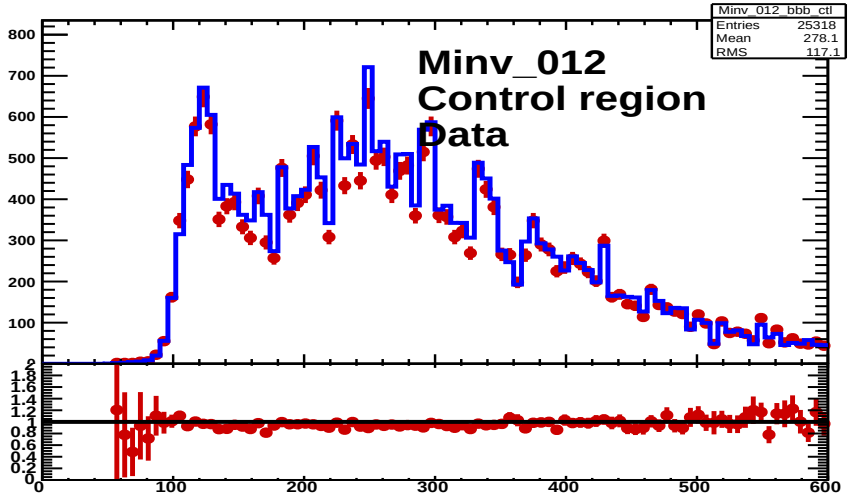

Eta_012_bbb_sgn
Entries 5662
Mean 2.274
RMS 1.104
Eta_012
Signal region
MC

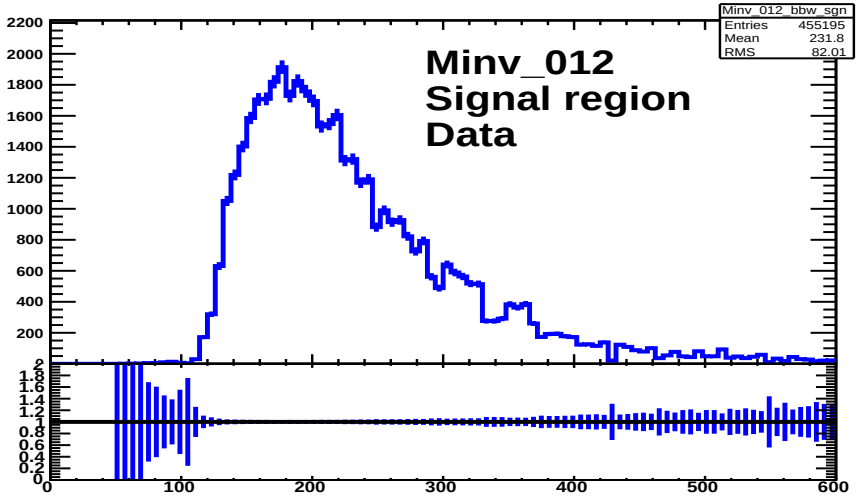

Eta_012_bbb_ctl
Entries 25318
Mean 2.253
RMS 1.077
Eta_012
Control region
Data

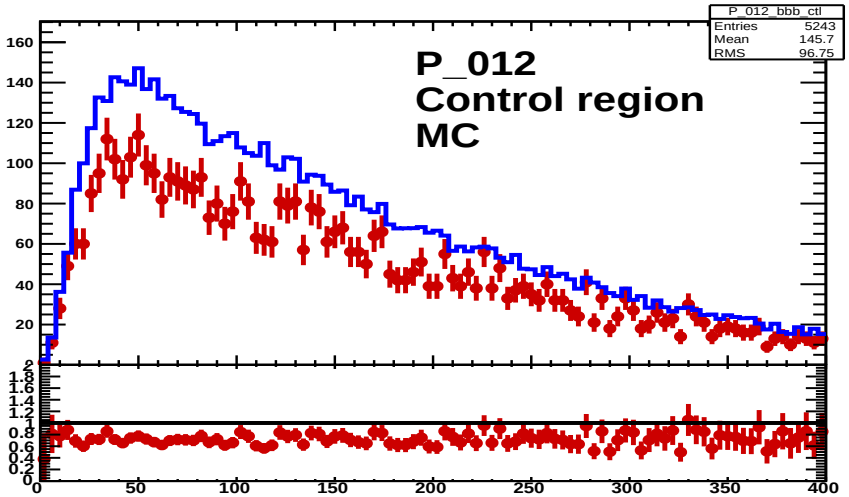

Eta_012_bbw_sgn
Entries 455195
Mean 2.165
RMS 1.08
Eta_012
Signal region
Data

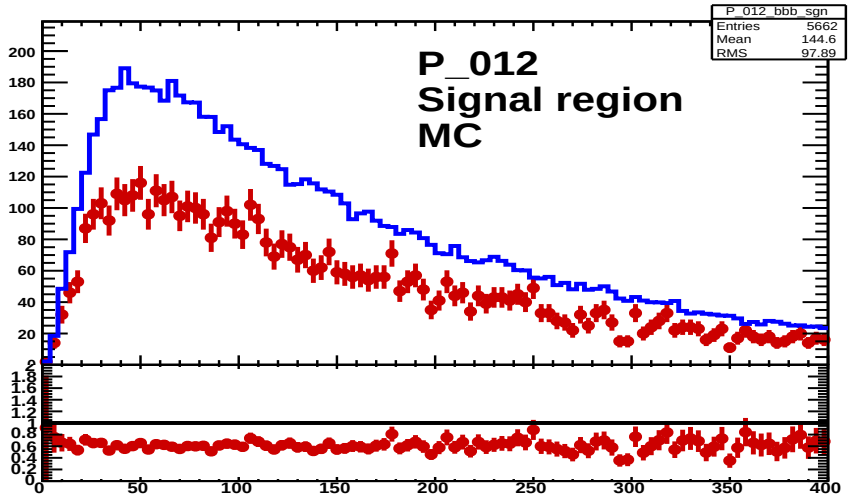

Minv_012_bbb_ctl
Entries 5243
Mean 257
RMS 112.7
Minv_012
Control region
MC

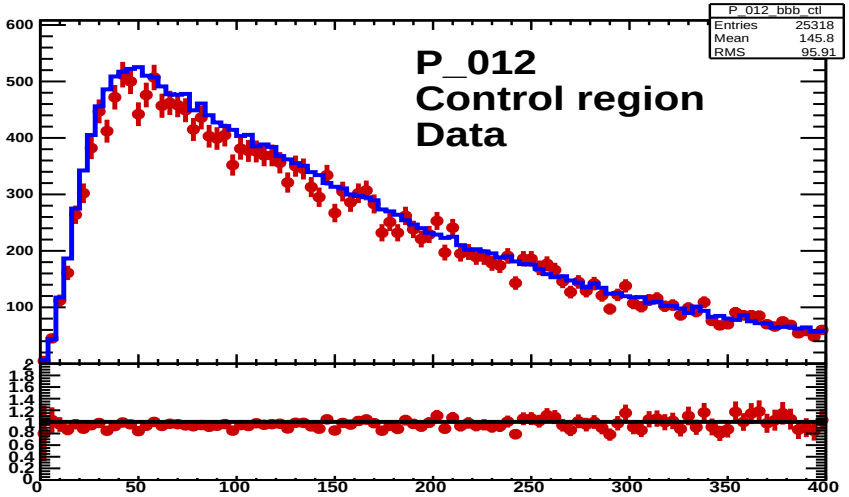

Minv_012_bbb_sgn
Entries 5662
Mean 218.7
RMS 77.14
Minv_012
Signal region
MC

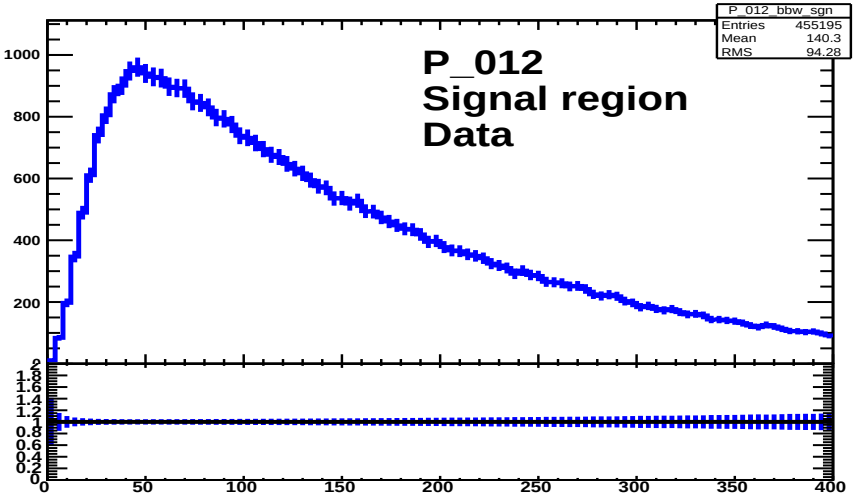

Minv_012_bbb_ctl
Entries 25318
Mean 278.1
RMS 117.1
Minv_012
Control region
Data

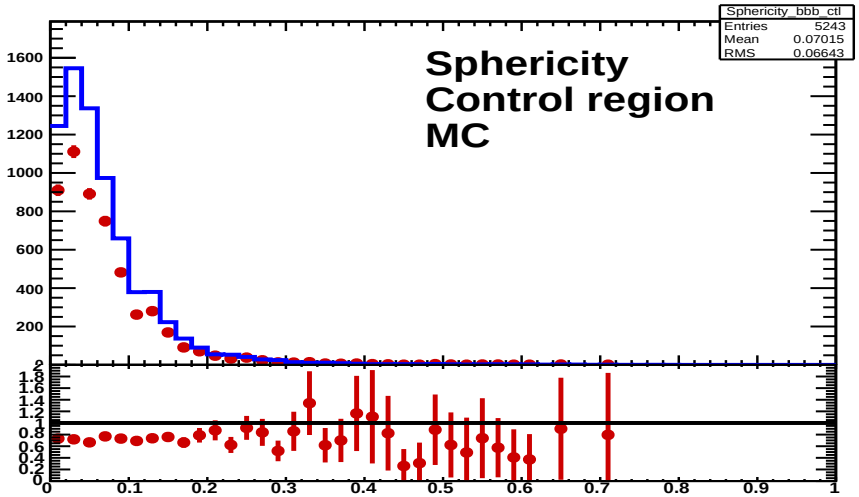

Minv_012_bbw_sgn
Entries 455195
Mean 231.8
RMS 82.01
Minv_012
Signal region
Data

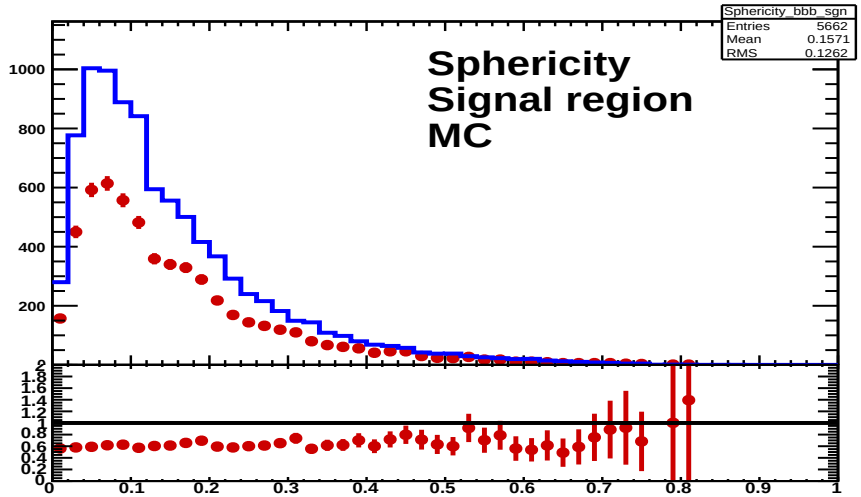

P_012_bbb_ctl
Entries 5243
Mean 145.7
RMS 96.75
P_012
Control region
MC

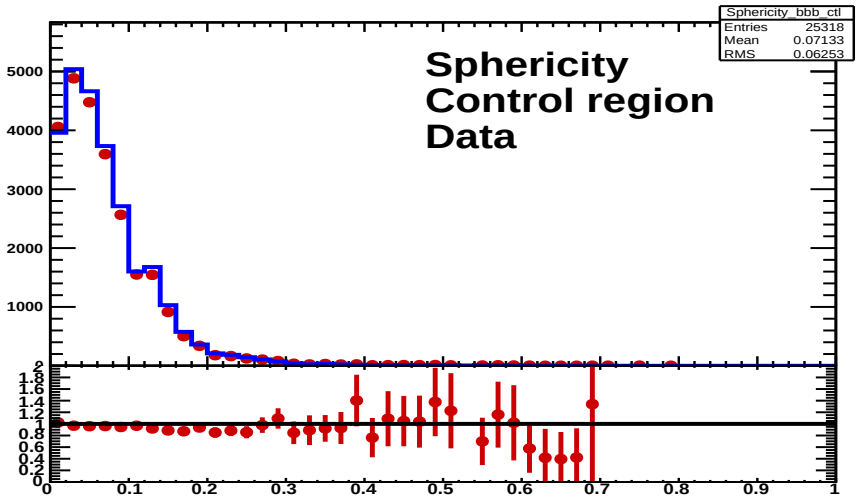

P_012_bbb_sgn
Entries 5662
Mean 144.6
RMS 97.89
P_012
Signal region
MC

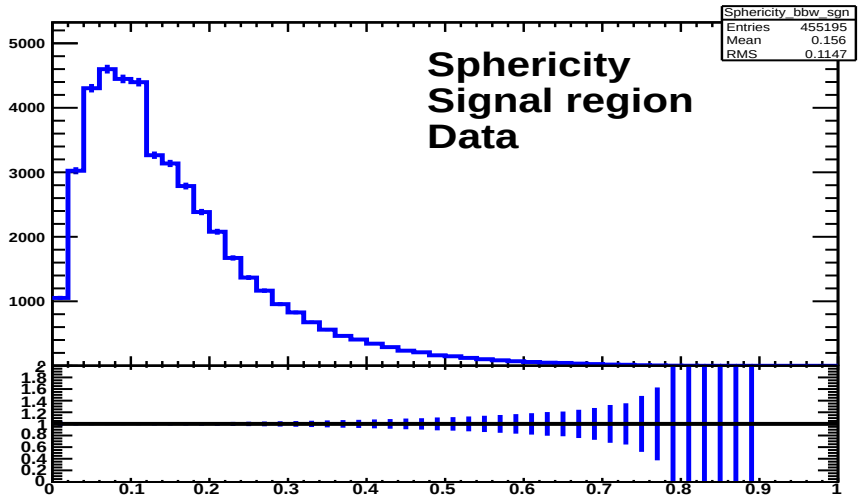

P_012_bbb_ctl
Entries 25318
Mean 145.8
RMS 95.91
P_012
Control region
Data

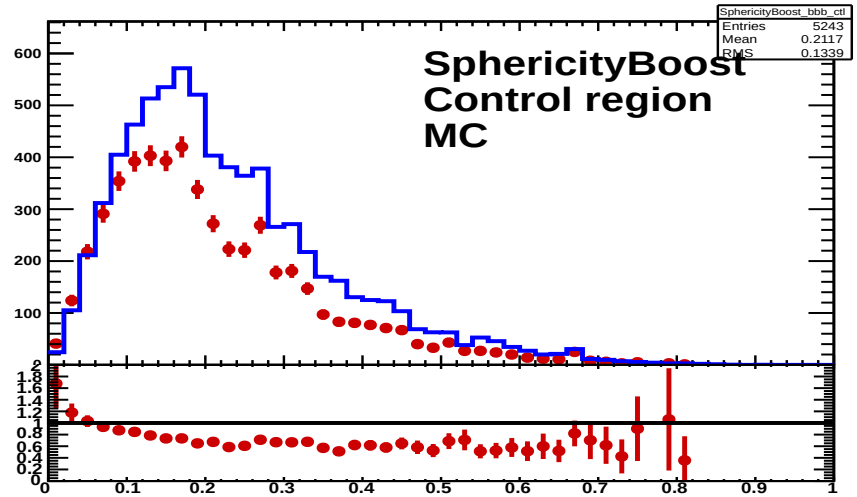

P_012_bbw_sgn
Entries 455195
Mean 140.3
RMS 94.28
P_012
Signal region
Data

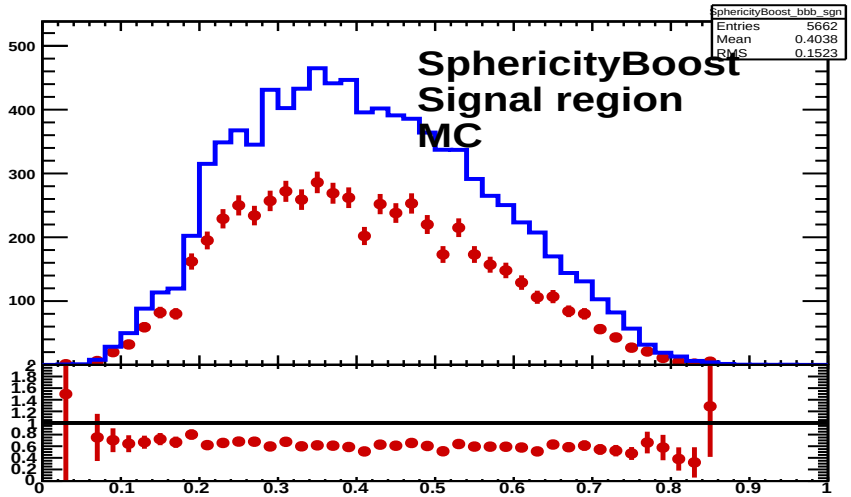

Sphericity_bbb_ctl
Entries 5243
Mean 0.07015
RMS 0.06643
Sphericity
Control region
MC

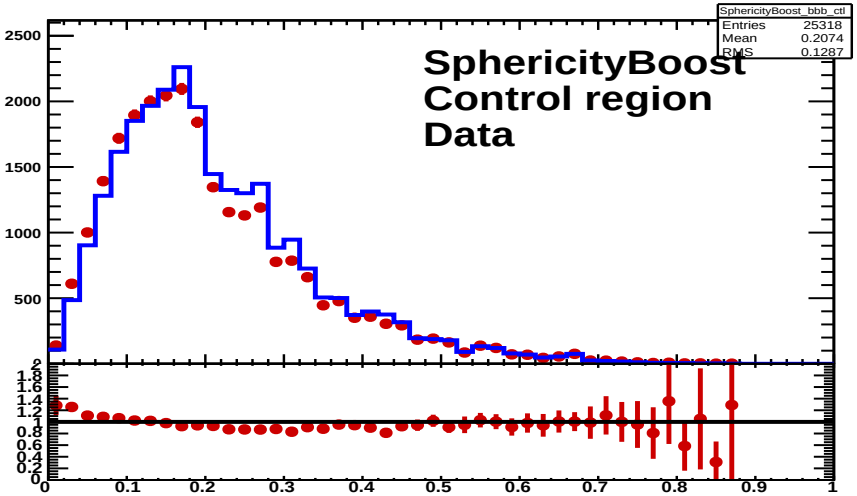

Sphericity_bbb_sgn
Entries 5662
Mean 0.1571
RMS 0.1262
Sphericity
Signal region
MC

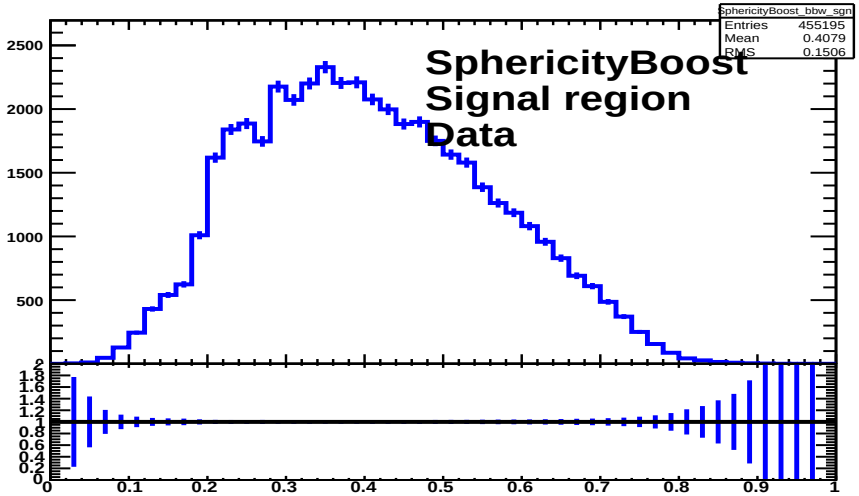

Sphericity_bbb_ctl
Entries 25318
Mean 0.07133
RMS 0.06253
Sphericity
Control region
Data

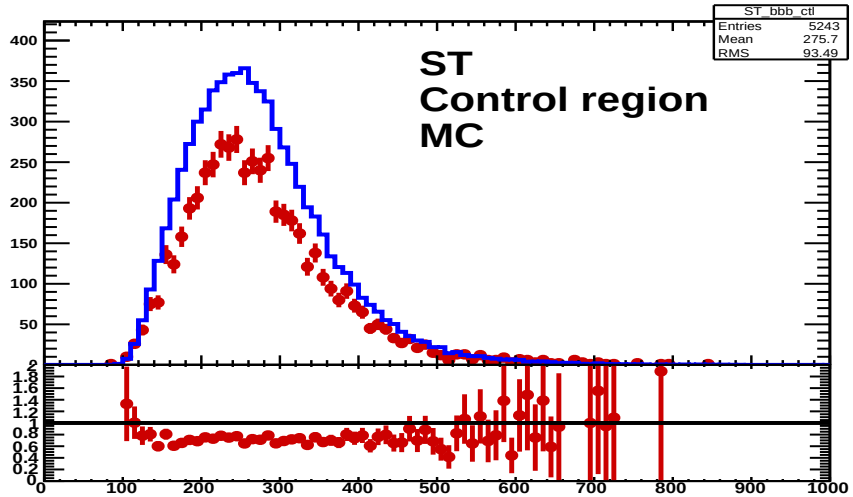

Sphericity_bbw_sgn
Entries 455195
Mean 0.156
RMS 0.1147
Sphericity
Signal region
Data

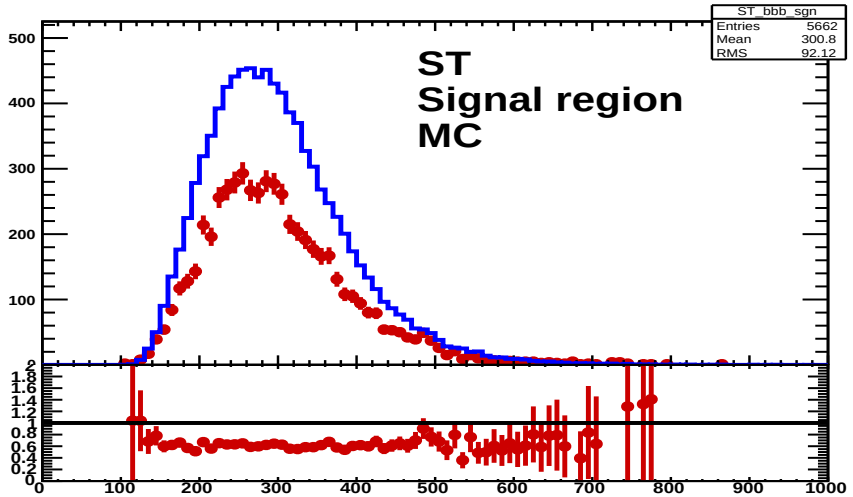

SphericityBoost_bbb_ctl
Entries 5243
Mean 0.2117
RMS 0.1339
SphericityBoost
Control region
MC

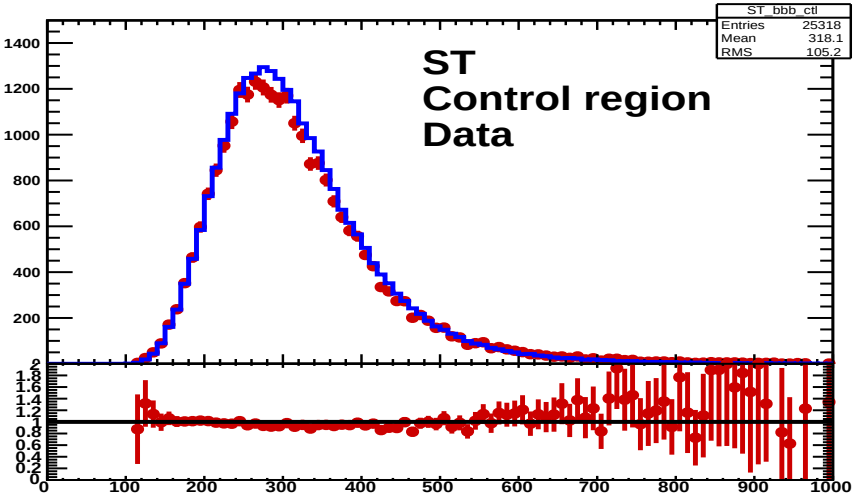

SphericityBoost_bbb_sgn
Entries 5662
Mean 0.4038
RMS 0.1523
SphericityBoost
Signal region
MC

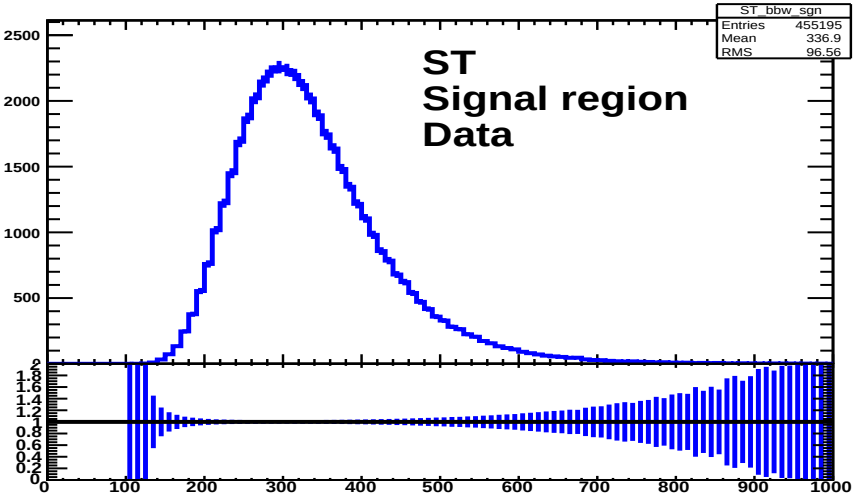

SphericityBoost_bbb_ctl
Entries 25318
Mean 0.2074
RMS 0.1287
SphericityBoost
Control region
Data


SphericityBoost_bbw_sgn
Entries 455195
Mean 0.4079
RMS 0.1506
SphericityBoost
Signal region
Data


ST_bbb_ctl
Entries 5243
Mean 275.7
RMS 93.49
ST
Control region
MC


ST_bbb_sgn
Entries 5662
Mean 300.8
RMS 92.12
ST
Signal region
MC


ST_bbb_ctl
Entries 25318
Mean 318.1
RMS 105.2
ST
Control region
Data


ST_bbw_sgn
Entries 455195
Mean 336.9
RMS 96.56
ST
Signal region
Data