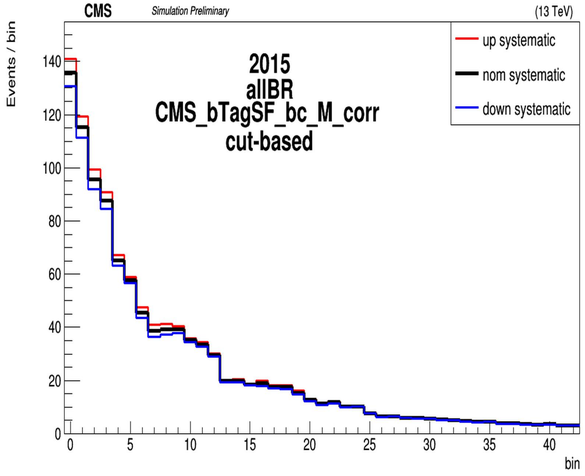
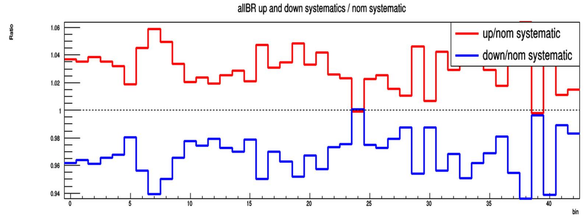
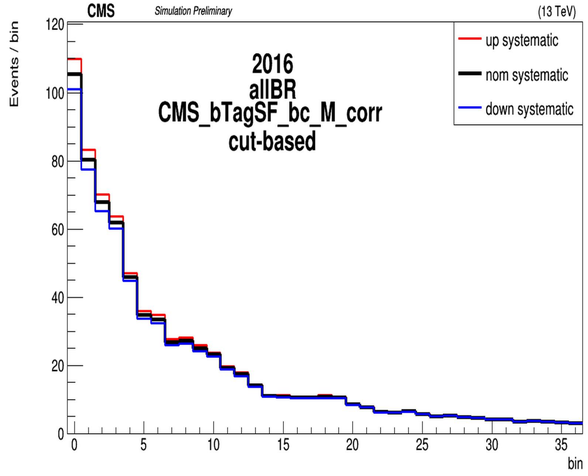
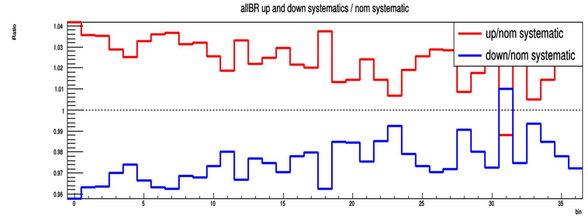
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_M_corr uncertainties (2016preAPV) (cut-based)



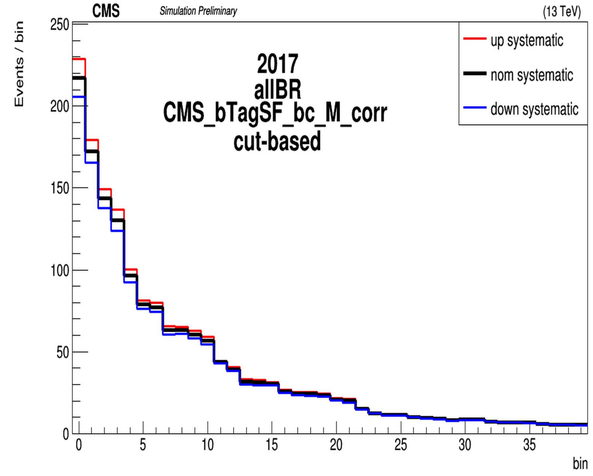


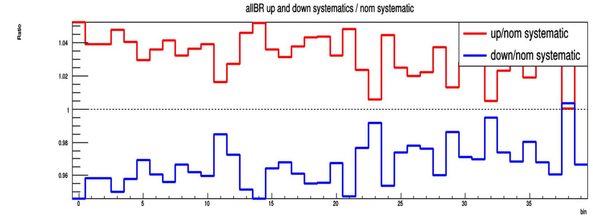
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_M_corr uncertainties (2016postAPV) (cut-based)



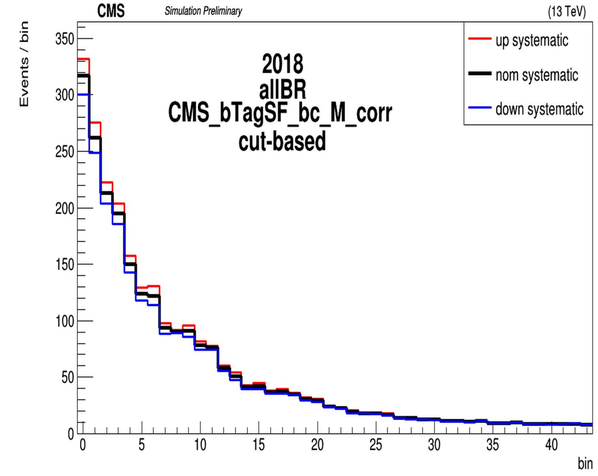


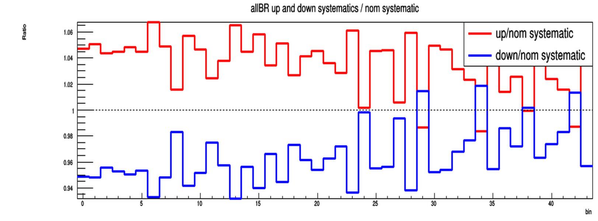
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_M_corr uncertainties (2017) (cut-based)



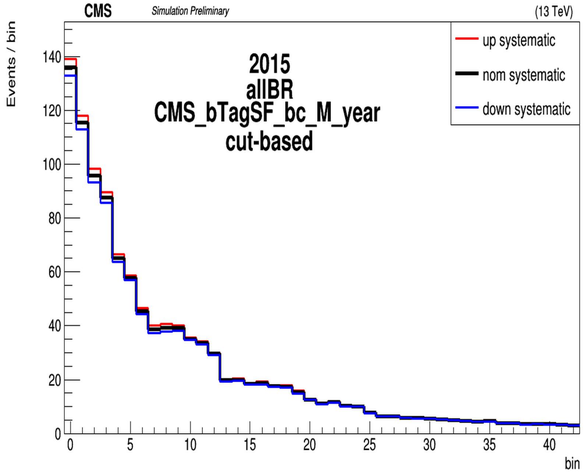


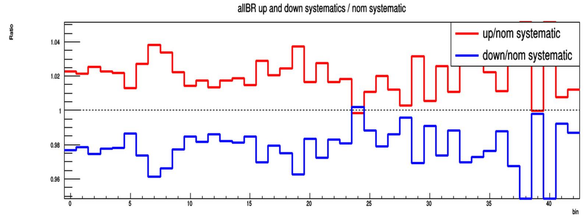
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_M_corr uncertainties (2018) (cut-based)



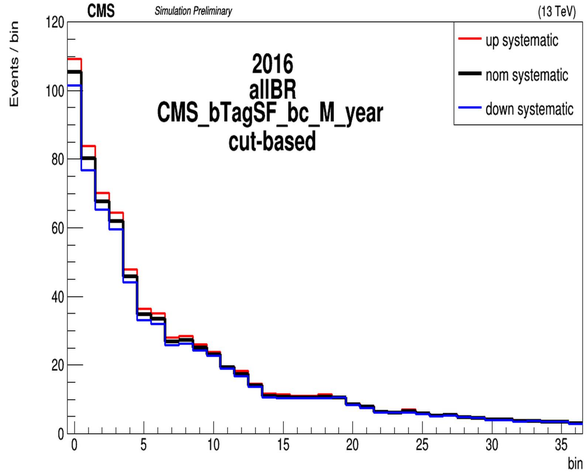


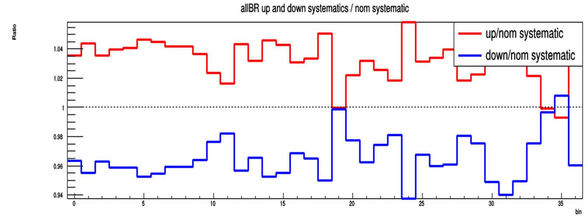
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_M_year uncertainties (2016preAPV) (cut-based)



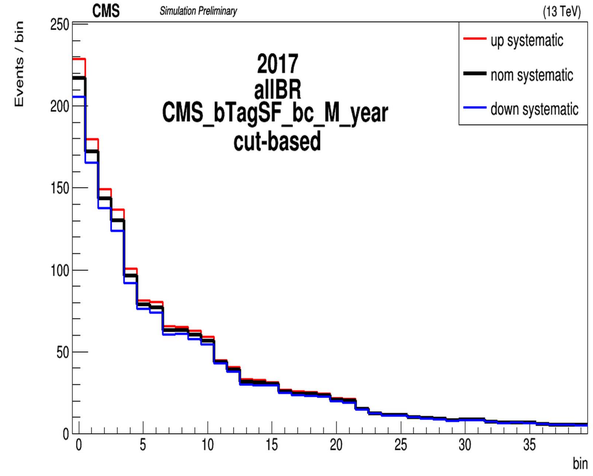


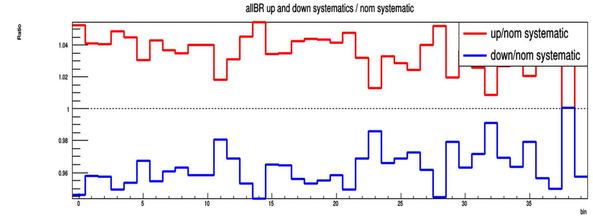
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_M_year uncertainties (2016postAPV) (cut-based)



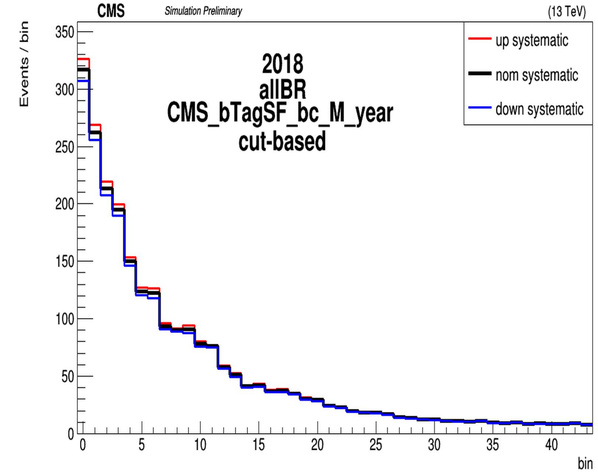


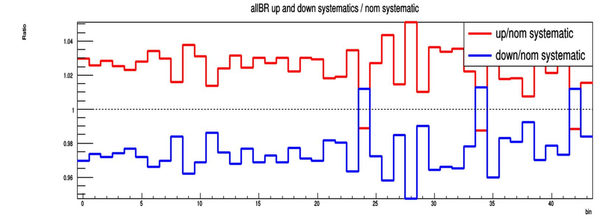
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_M_year uncertainties (2017) (cut-based)



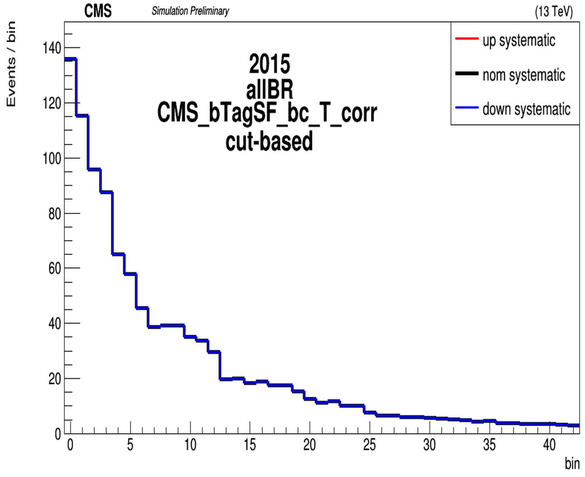


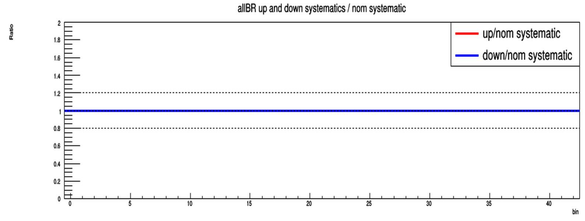
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_M_year uncertainties (2018) (cut-based)



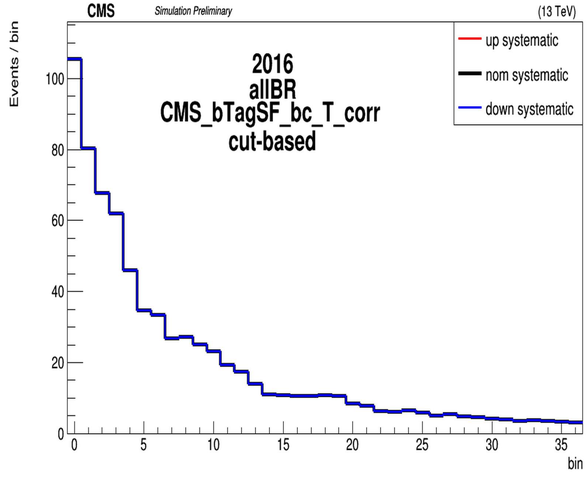


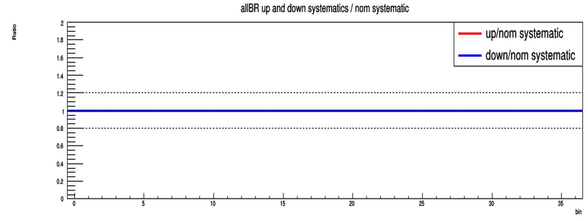
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_T_corr uncertainties (2016preAPV) (cut-based)



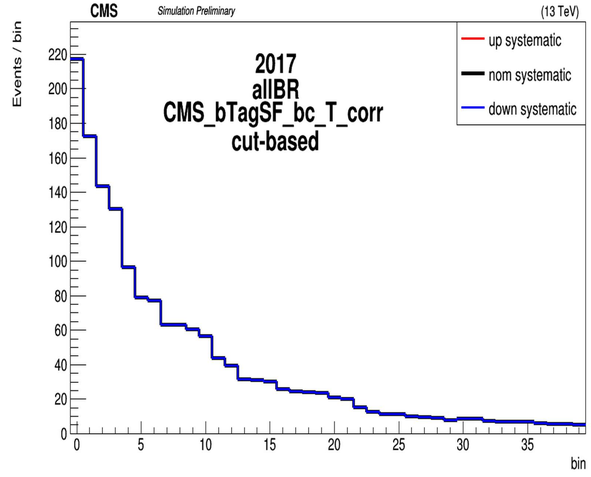


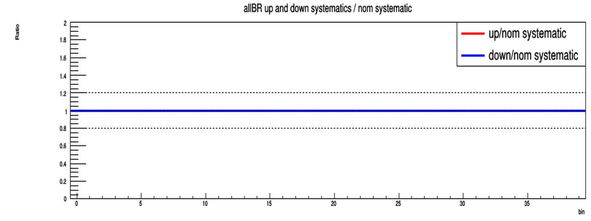
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_T_corr uncertainties (2016postAPV) (cut-based)



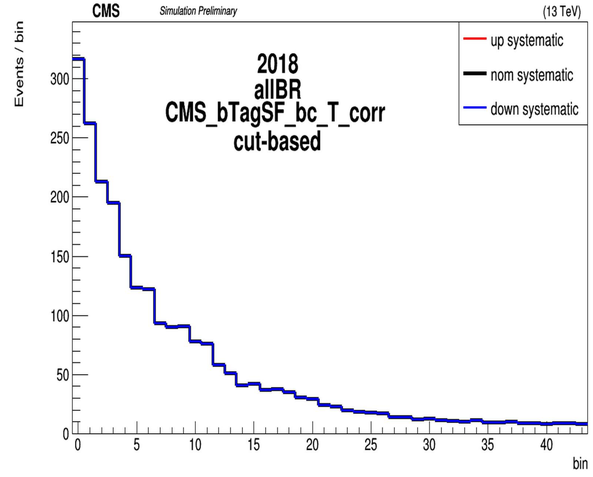


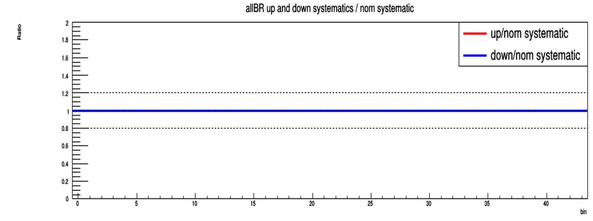
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_T_corr uncertainties (2017) (cut-based)



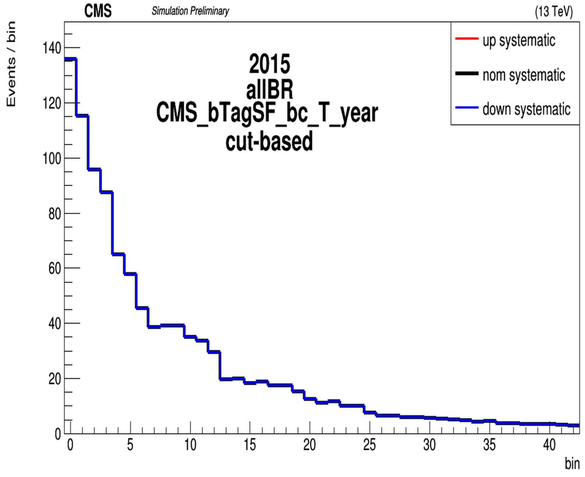


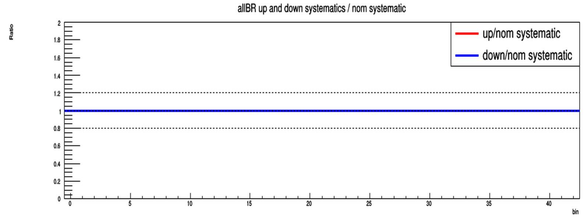
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_T_corr uncertainties (2018) (cut-based)



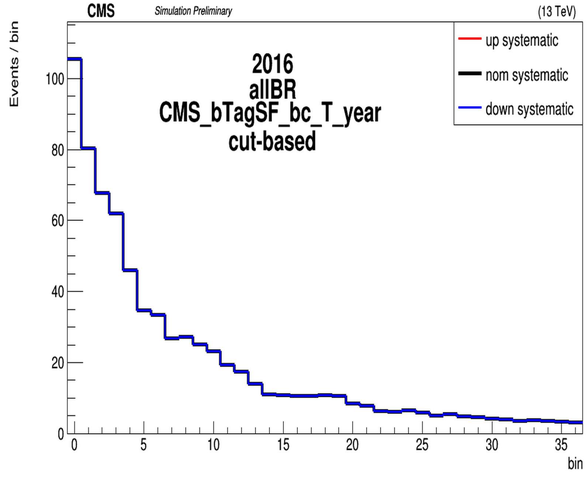


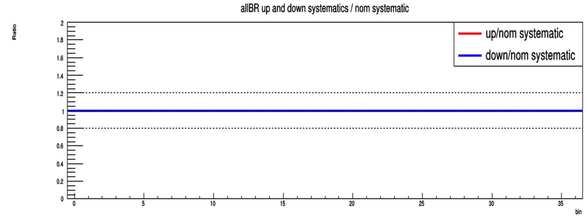
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_T_year uncertainties (2016preAPV) (cut-based)



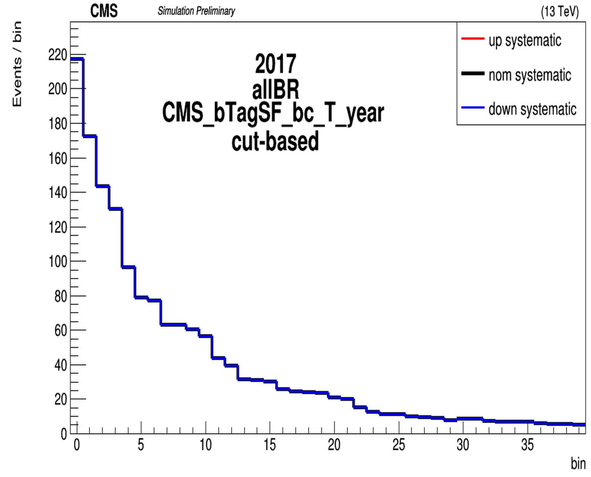


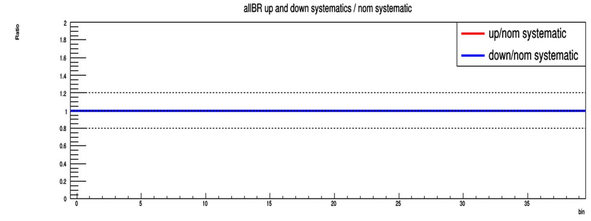
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_T_year uncertainties (2016postAPV) (cut-based)



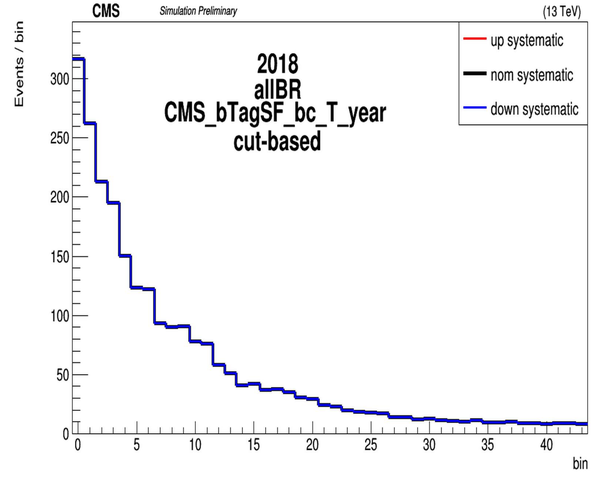


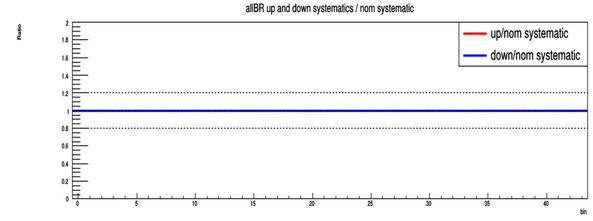
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_T_year uncertainties (2017) (cut-based)

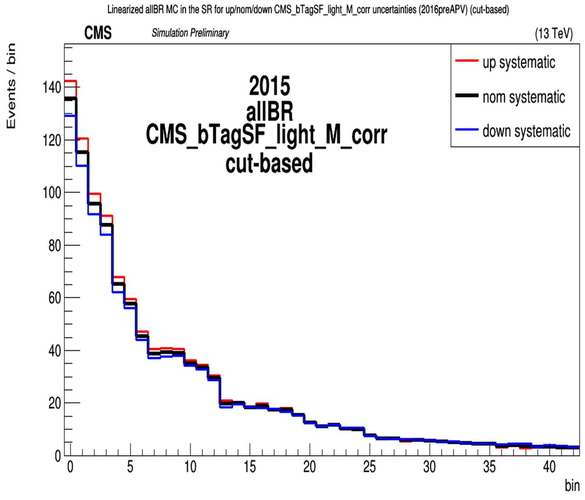


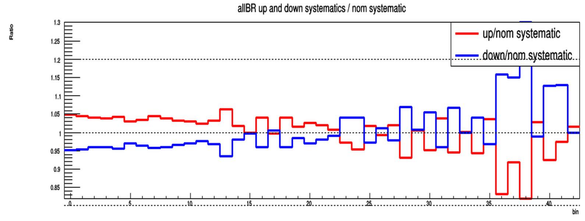


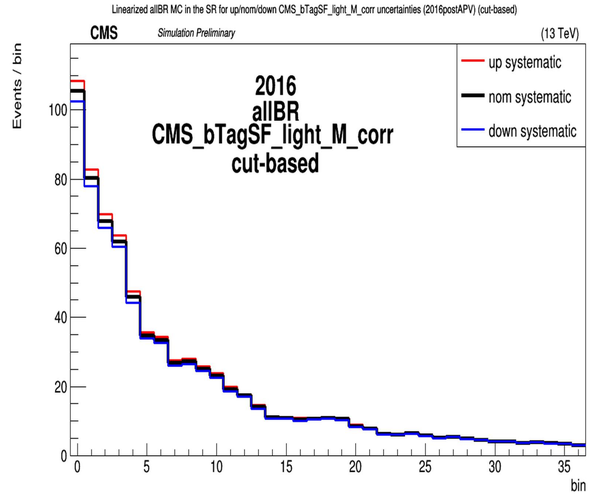
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_bc_T_year uncertainties (2018) (cut-based)

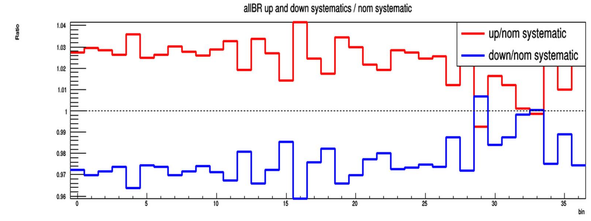


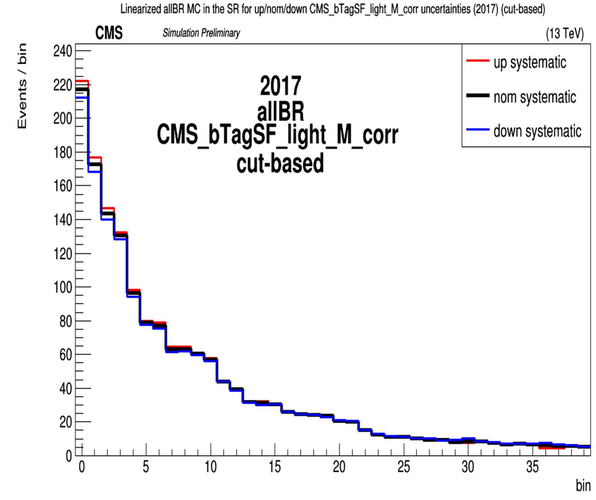



Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_M_corr uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_bTagSF_light_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin


allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin


Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_M_corr uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_bTagSF_light_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin


allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin


Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_M_corr uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_bTagSF_light_M_corr
cut-based
up systematic
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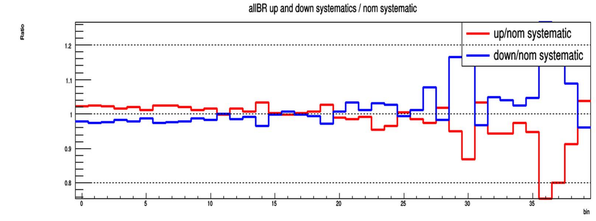
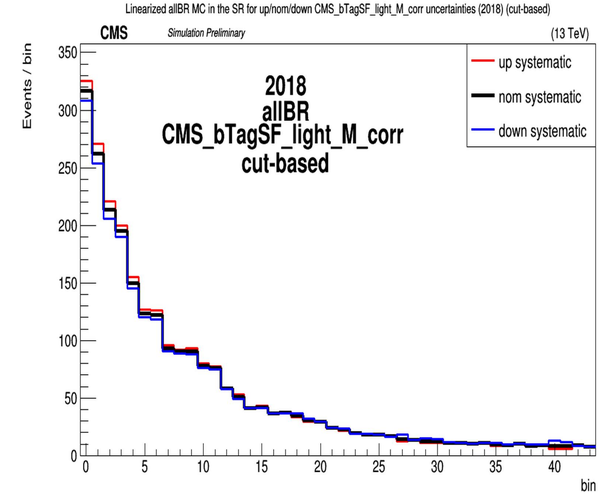
Events / bin
bin


allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin


Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_M_corr uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_bTagSF_light_M_corr
cut-based
up systematic
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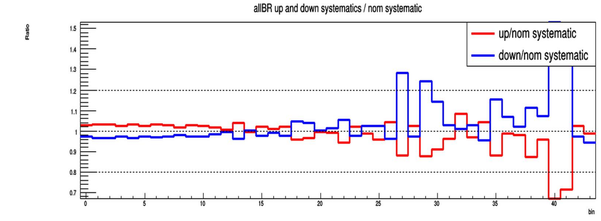
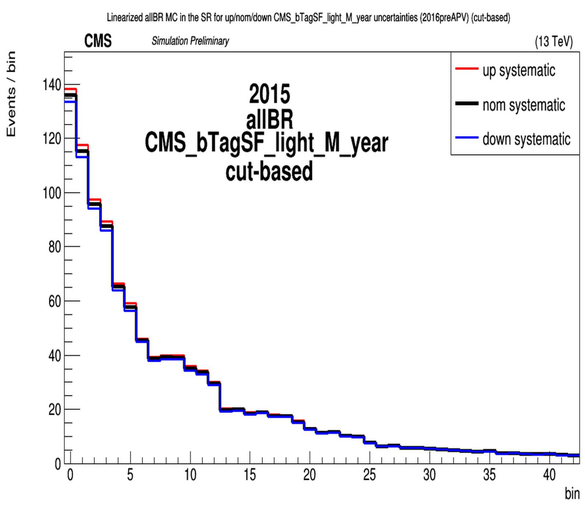
Events / bin
bin


allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin


Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_M_year uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_bTagSF_light_M_year
cut-based
up systematic
nom systematic
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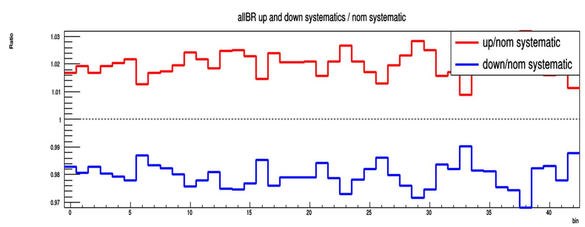
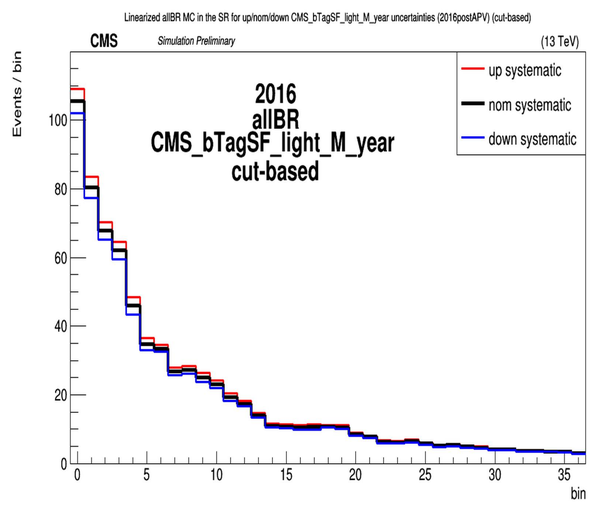
Events / bin
bin


allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin


Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_M_year uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_bTagSF_light_M_year
cut-based
up systematic
nom systematic
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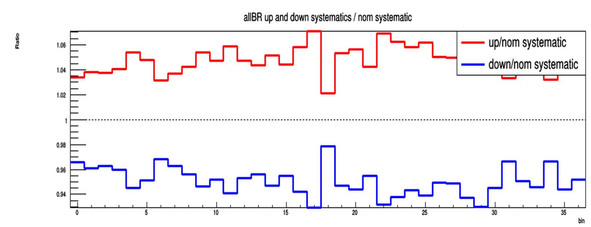
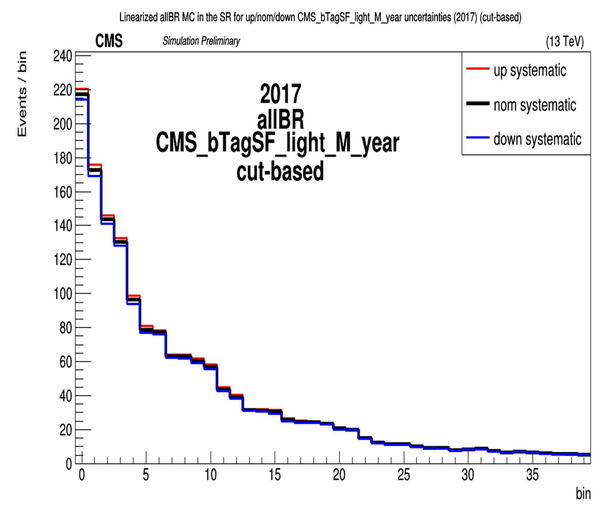
Events / bin
bin


allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin


Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_M_year uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_bTagSF_light_M_year
cut-based
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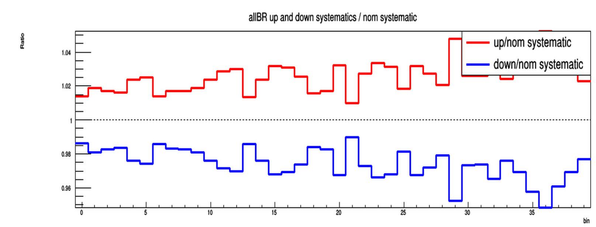
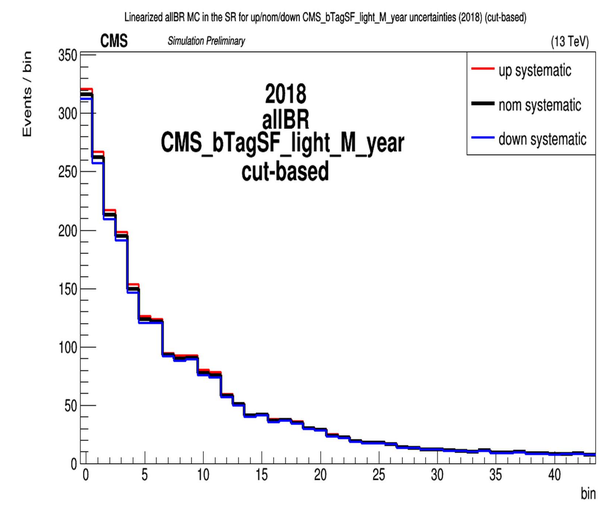
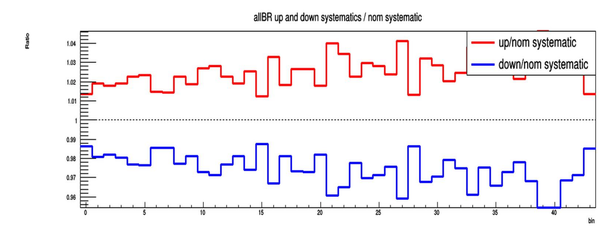
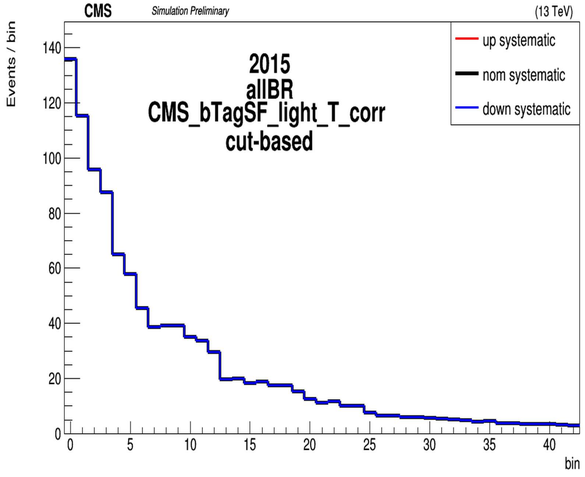
Events / bin
bin

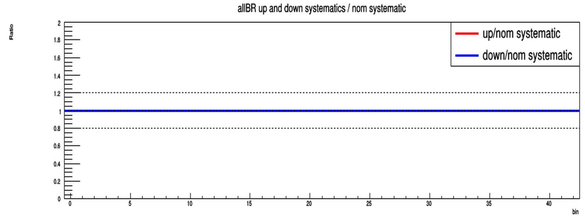

allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin


Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_M_year uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_bTagSF_light_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

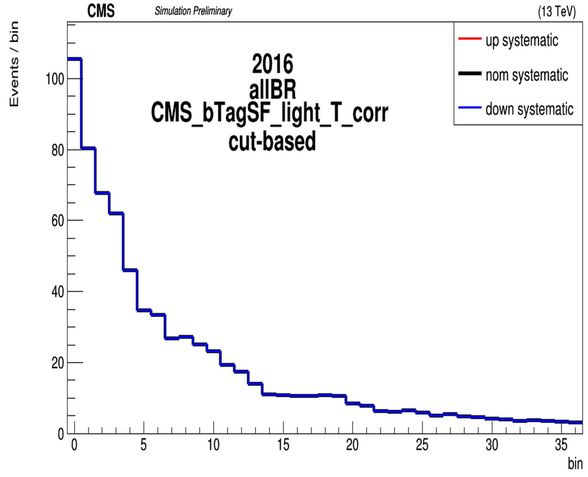

allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

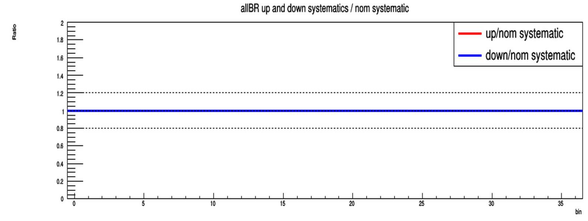
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_T_corr uncertainties (2016preAPV) (cut-based)



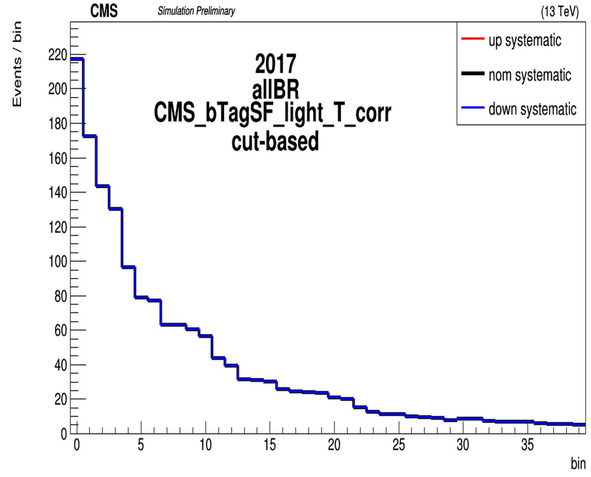


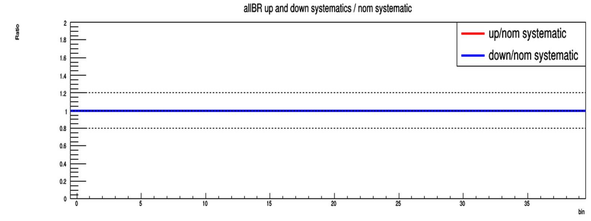
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_T_corr uncertainties (2016postAPV) (cut-based)



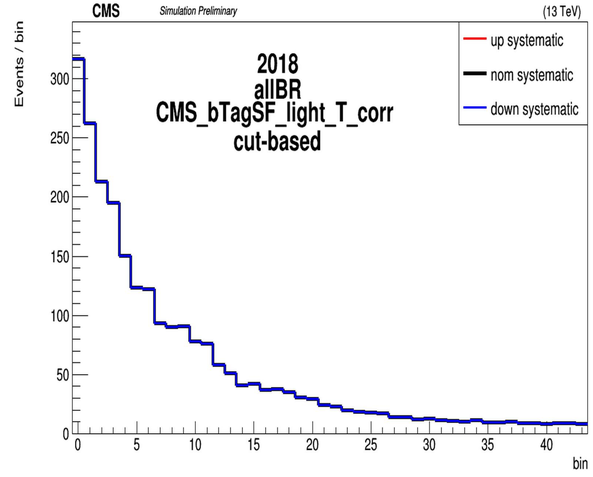


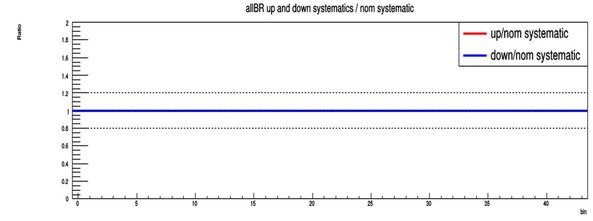
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_T_corr uncertainties (2017) (cut-based)



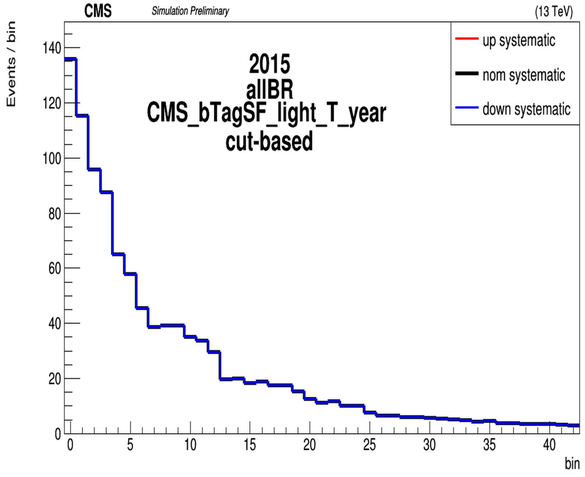


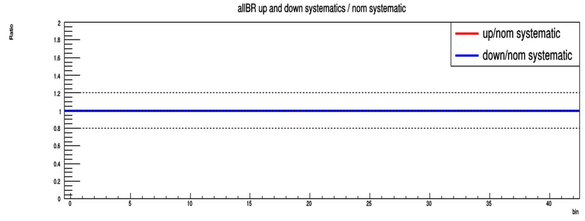
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_T_corr uncertainties (2018) (cut-based)



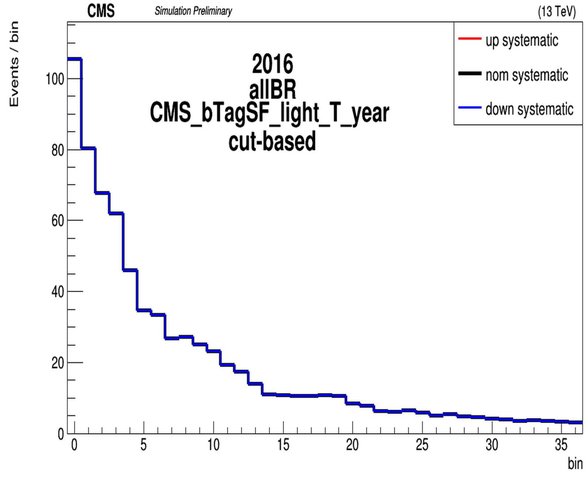


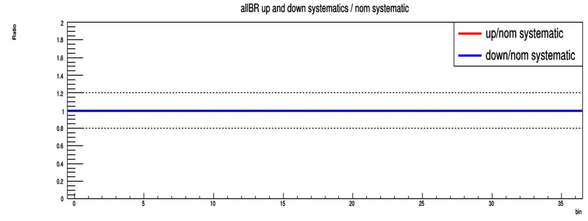
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_T_year uncertainties (2016preAPV) (cut-based)



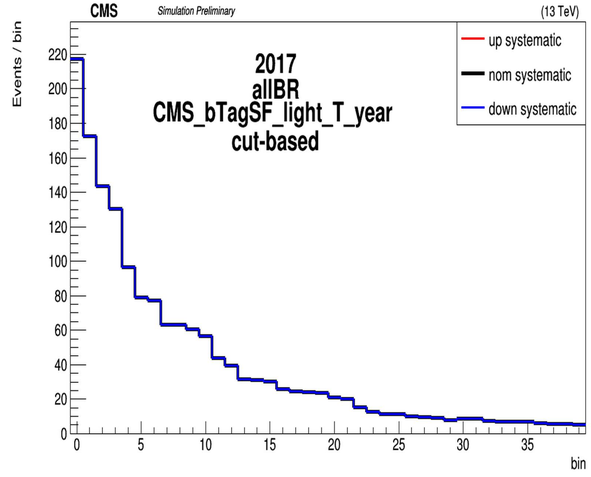


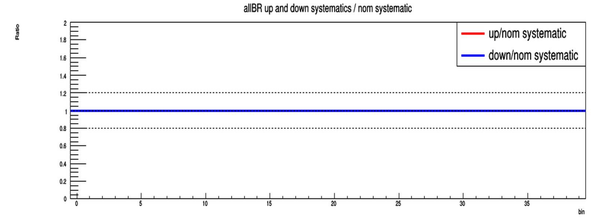
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_T_year uncertainties (2016postAPV) (cut-based)



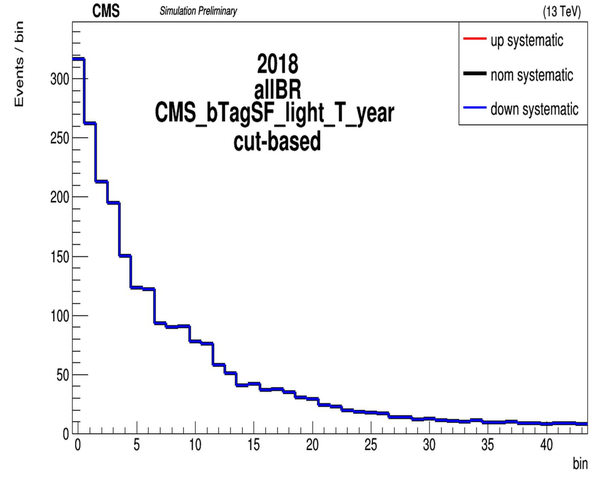


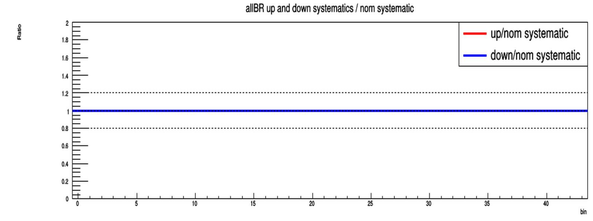
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_T_year uncertainties (2017) (cut-based)



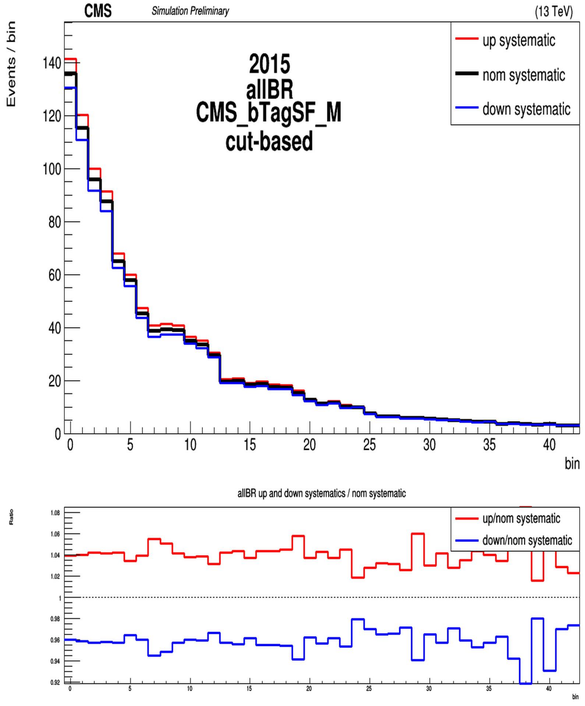


Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_light_T_year uncertainties (2018) (cut-based)

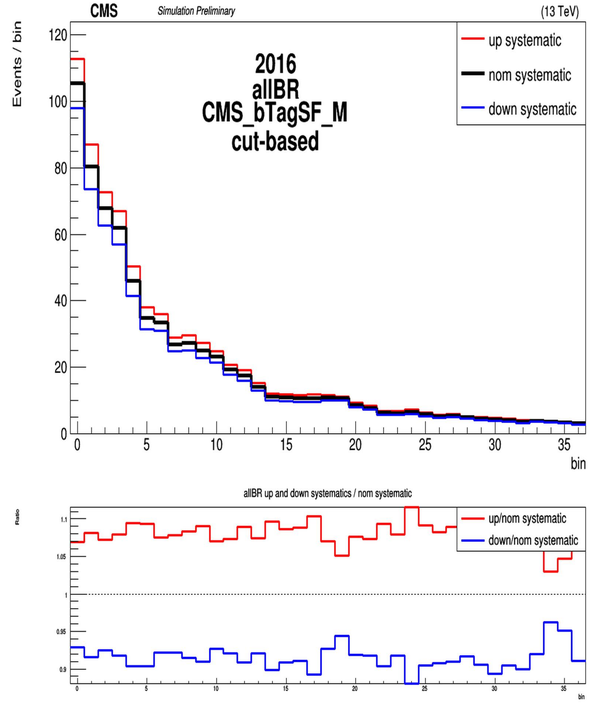




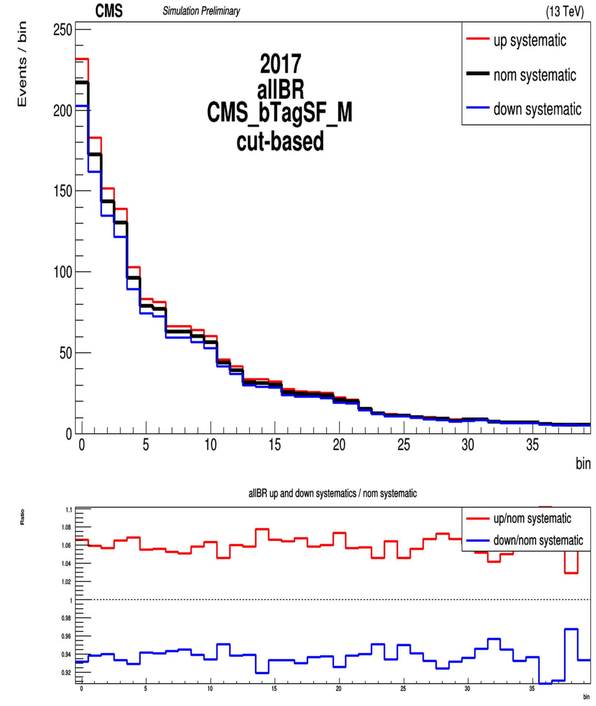
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_M uncertainties (2016preAPV) (cut-based)



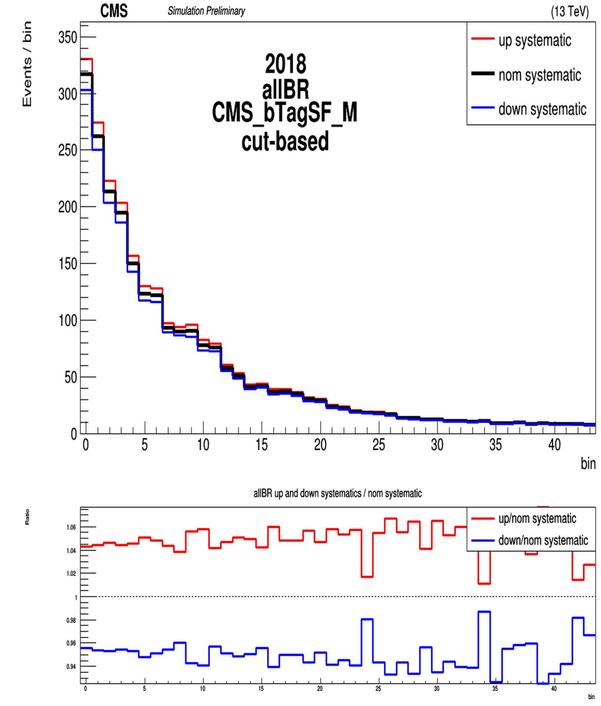
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_M uncertainties (2016postAPV) (cut-based)



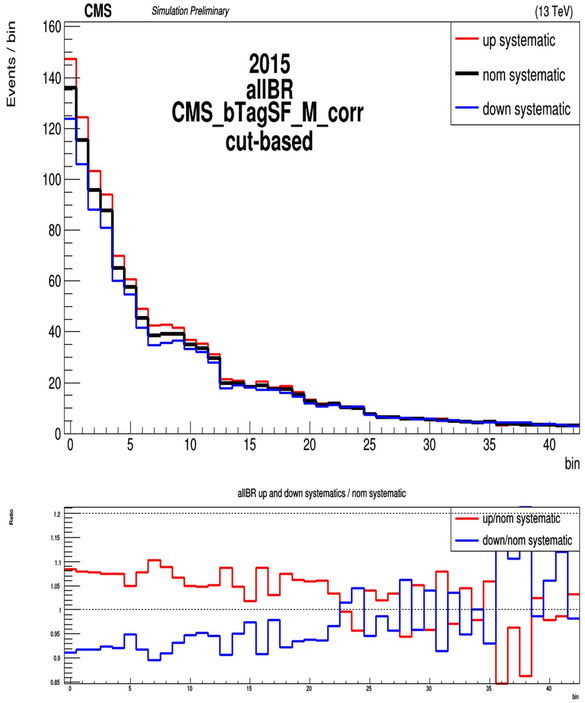
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_M uncertainties (2017) (cut-based)



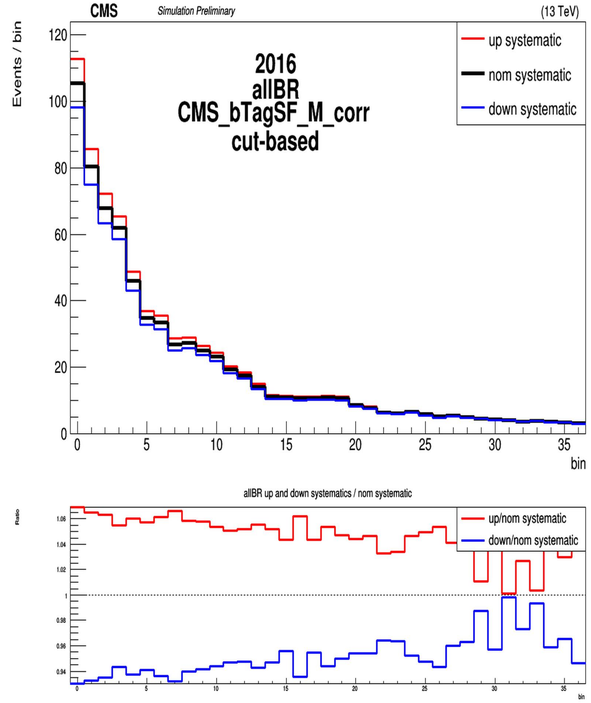
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_M uncertainties (2018) (cut-based)



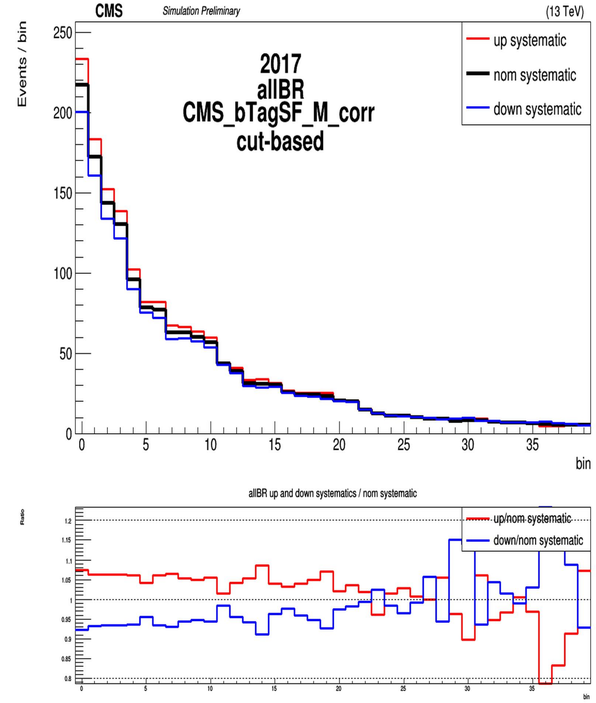
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_M_corr uncertainties (2016preAPV) (cut-based)



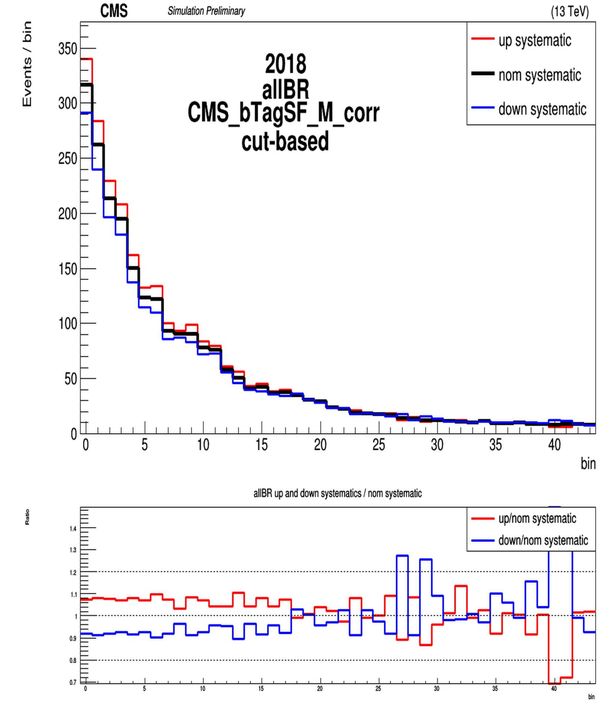
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_M_corr uncertainties (2016postAPV) (cut-based)

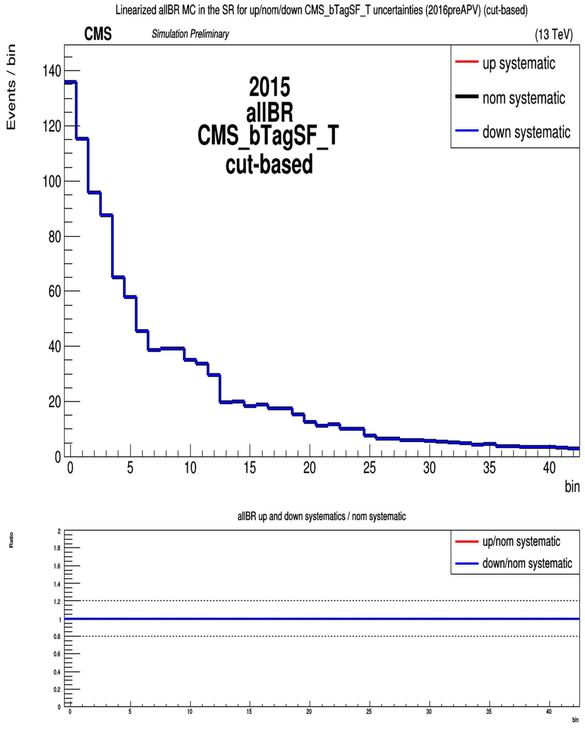


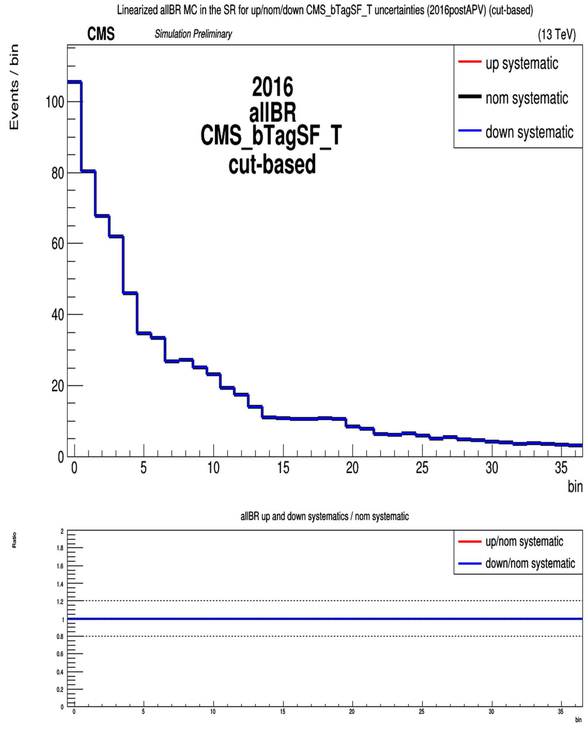
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_M_corr uncertainties (2017) (cut-based)

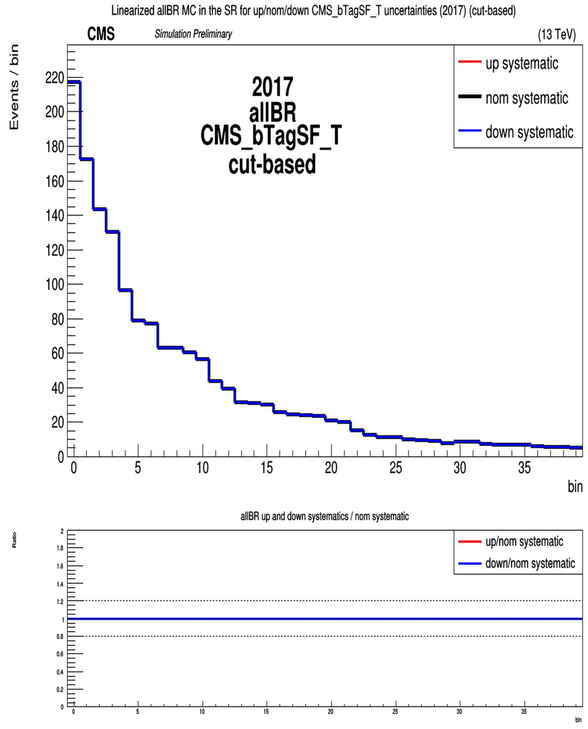


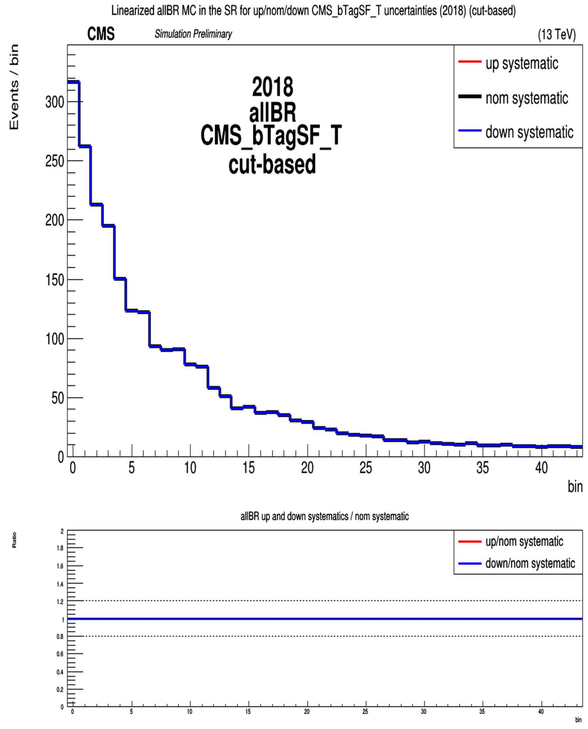
Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_M_corr uncertainties (2018) (cut-based)

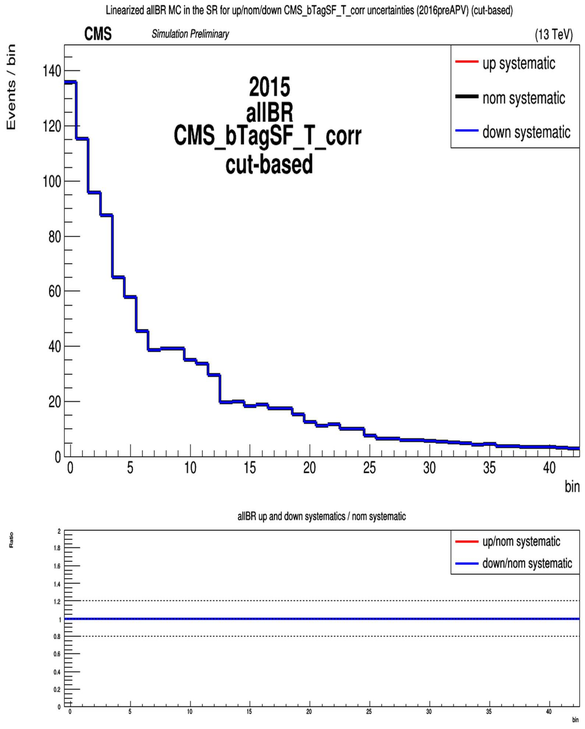


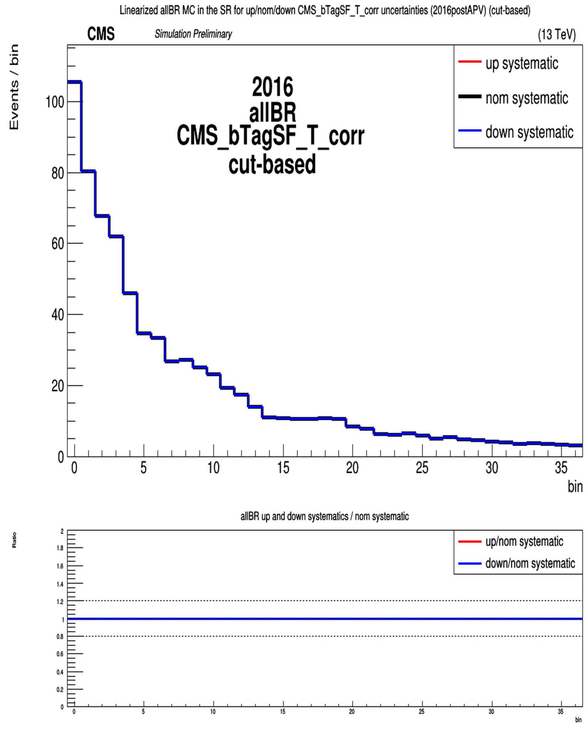

Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_T uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_bTagSF_T
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

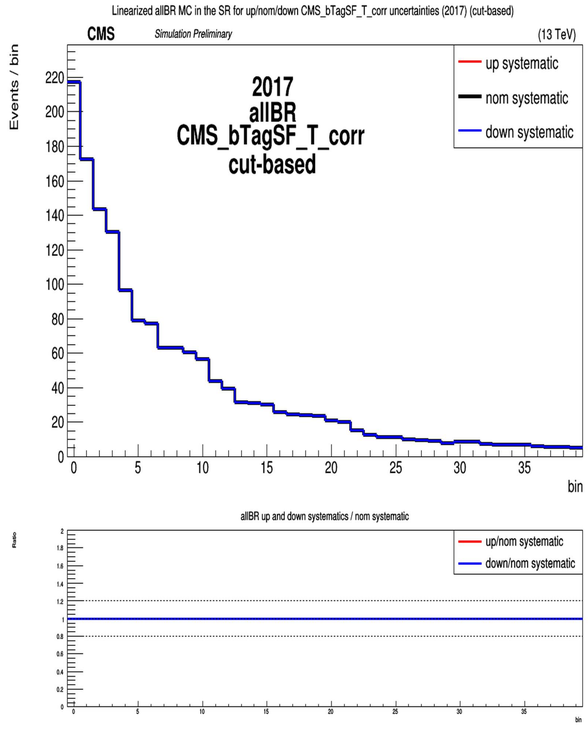

Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_T uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_bTagSF_T
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

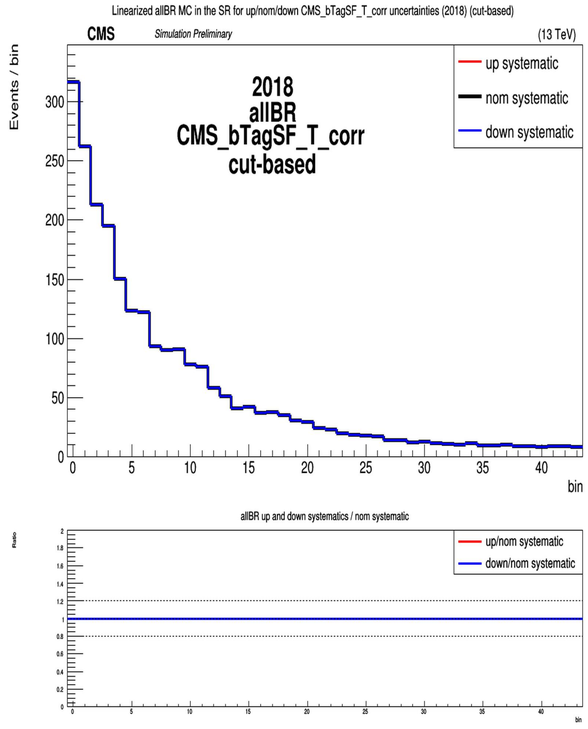

Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_T uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_bTagSF_T
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

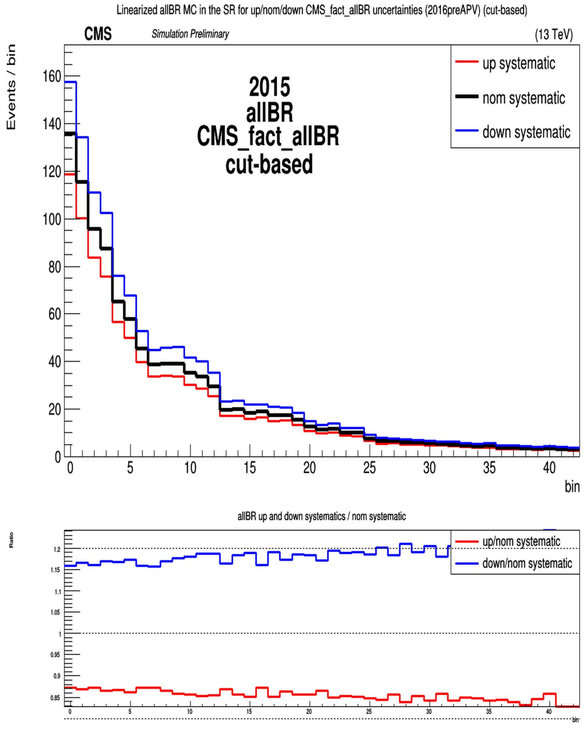

Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_T uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_bTagSF_T
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

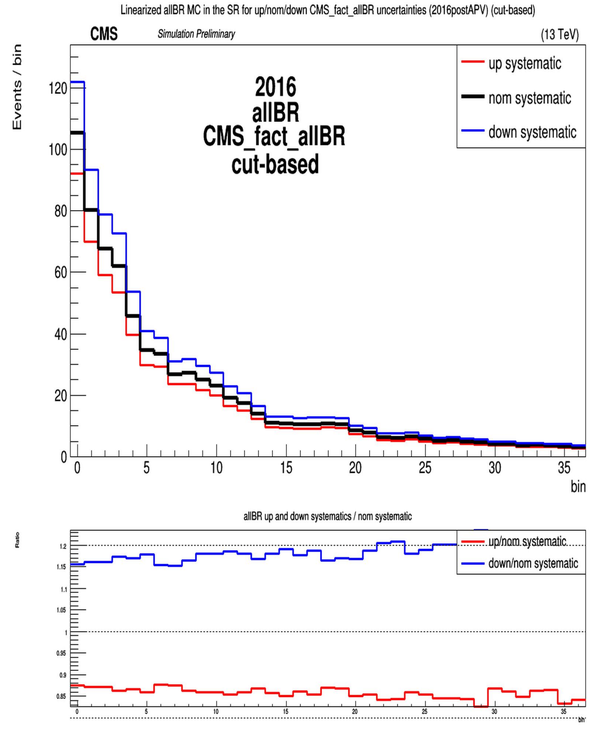

Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_T_corr uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_bTagSF_T_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

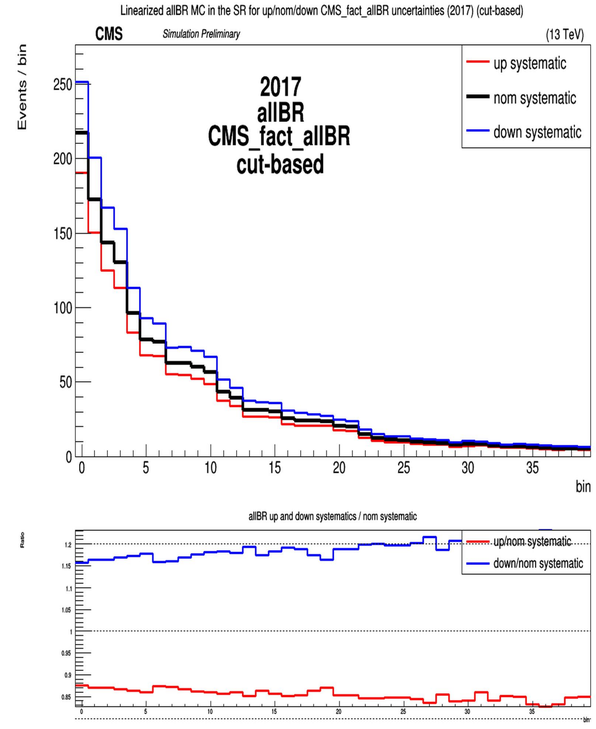

Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_T_corr uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_bTagSF_T_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

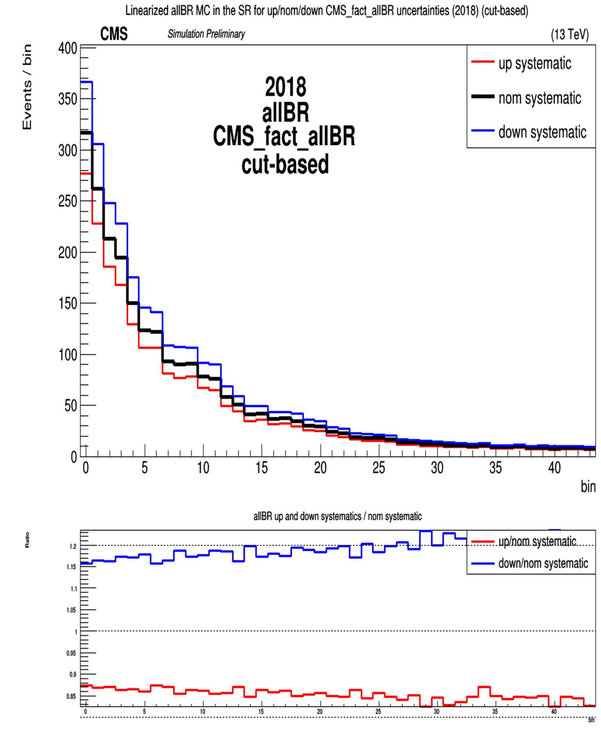

Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_T_corr uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_bTagSF_T_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

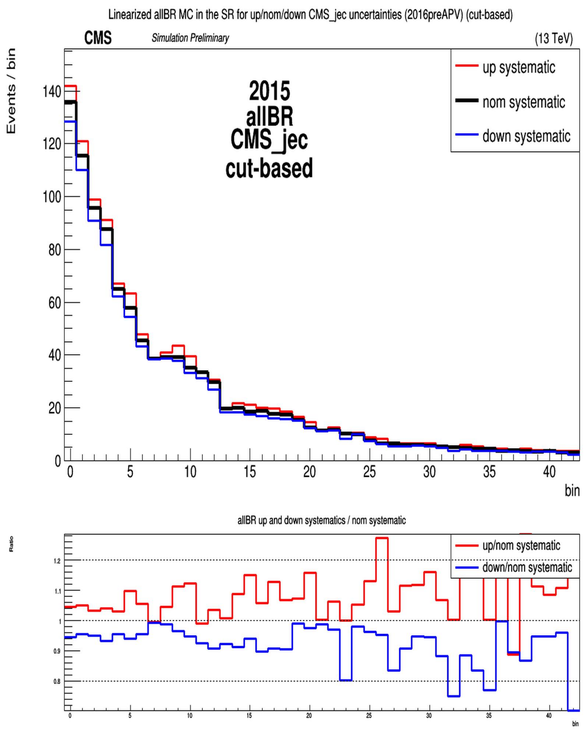

Linearized allBR MC in the SR for up/nom/down CMS_bTagSF_T_corr uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_bTagSF_T_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

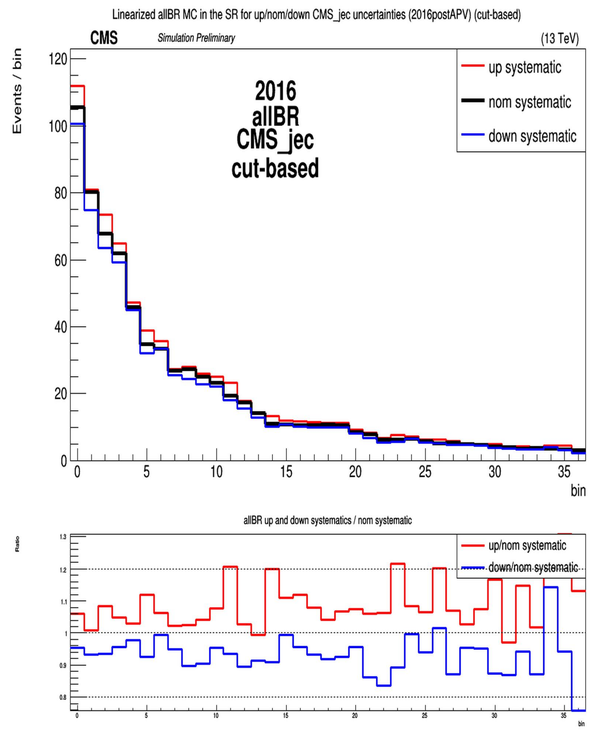

Linearized allBR MC in the SR for up/nom/down CMS_fact_allBR uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_fact_allBR
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

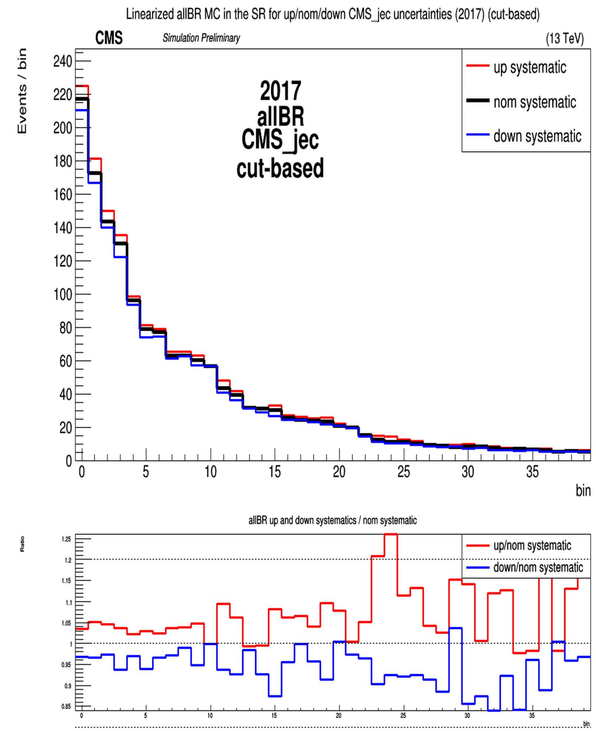

Linearized allBR MC in the SR for up/nom/down CMS_fact_allBR uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_fact_allBR
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

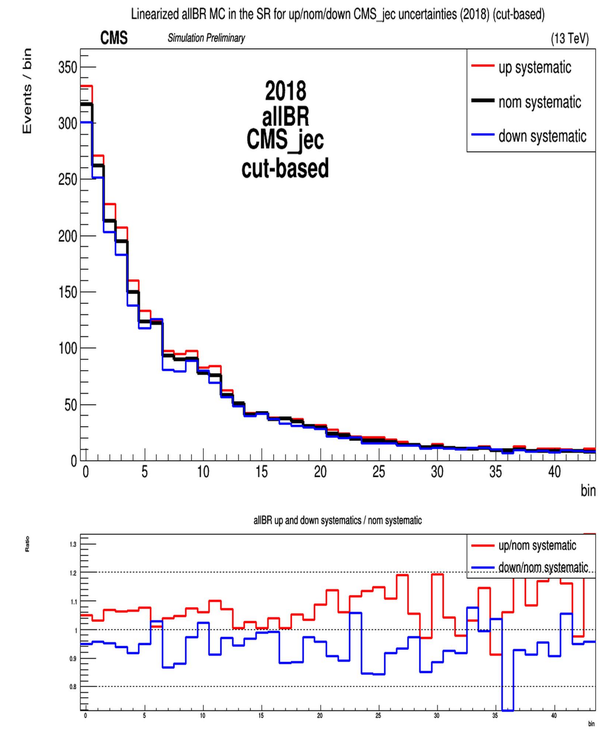

Linearized allBR MC in the SR for up/nom/down CMS_fact_allBR uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_fact_allBR
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized allBR MC in the SR for up/nom/down CMS_fact_allBR uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_fact_allBR
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

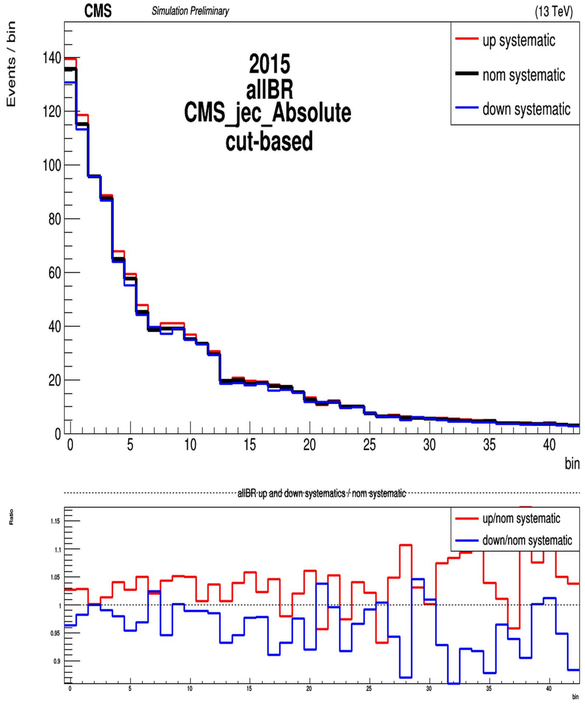

Linearized allBR MC in the SR for up/nom/down CMS_jec uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_jec
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized allBR MC in the SR for up/nom/down CMS_jec uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_jec
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

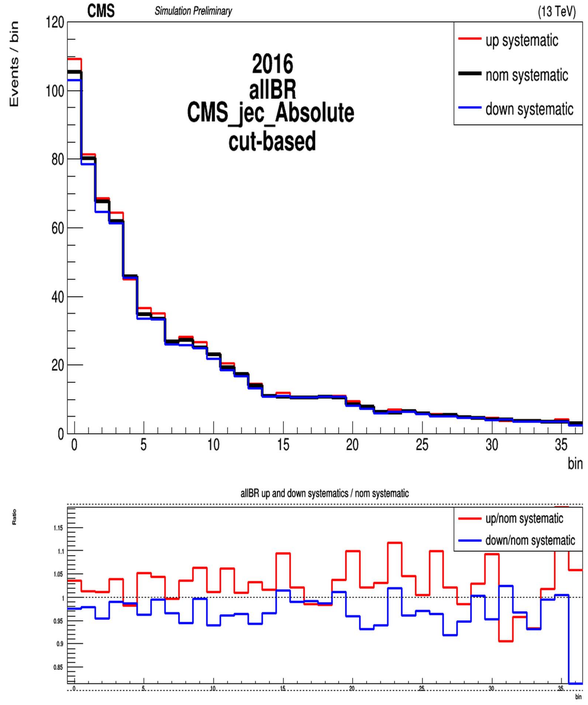

Linearized allBR MC in the SR for up/nom/down CMS_jec uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_jec
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized allBR MC in the SR for up/nom/down CMS_jec uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_jec
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

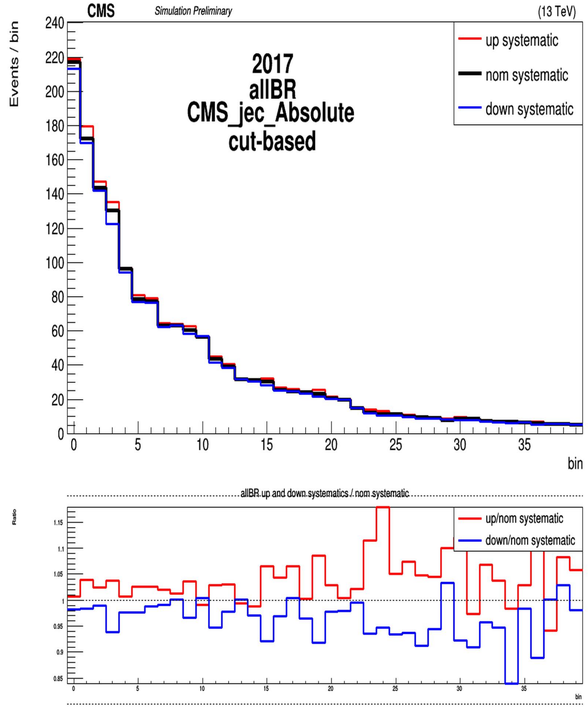
Linearized allBR MC in the SR for up/nom/down CMS_jec_Absolute uncertainties (2016preAPV) (cut-based)



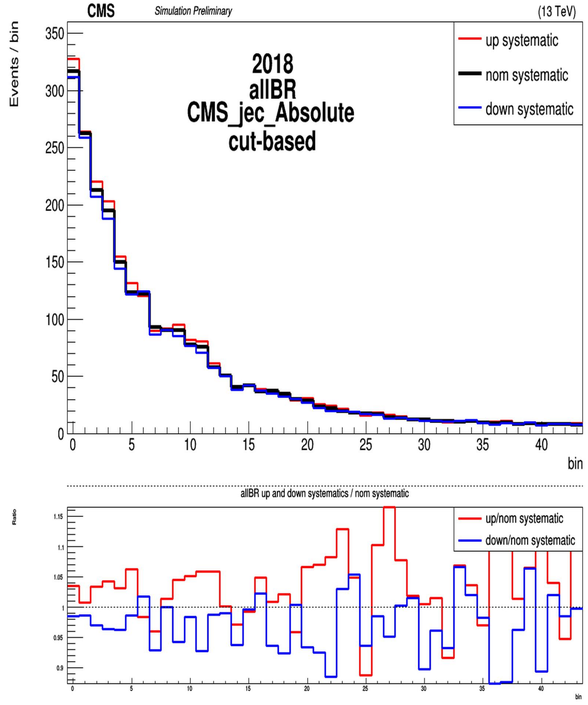
Linearized allBR MC in the SR for up/nom/down CMS_jec_Absolute uncertainties (2016postAPV) (cut-based)



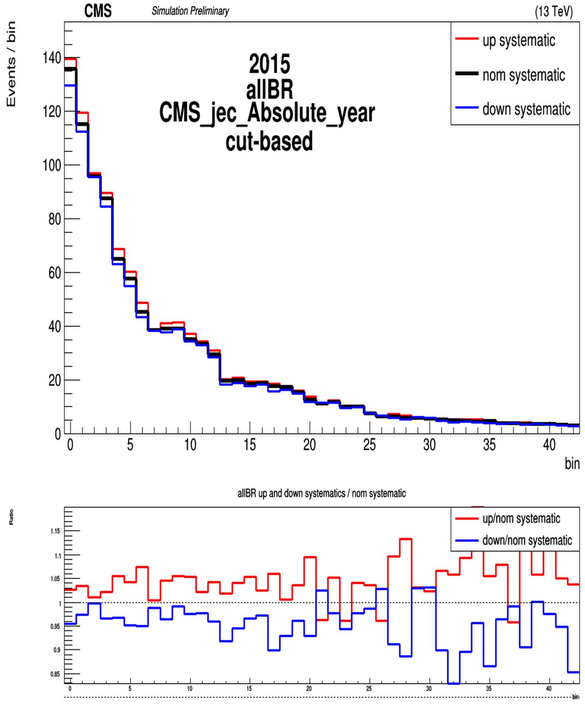
Linearized allBR MC in the SR for up/nom/down CMS_jec_Absolute uncertainties (2017) (cut-based)



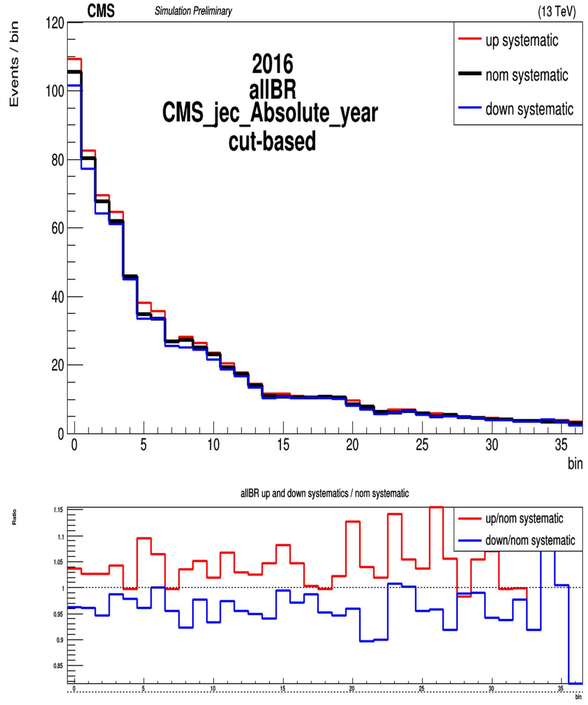
Linearized allBR MC in the SR for up/nom/down CMS_jec_Absolute uncertainties (2018) (cut-based)



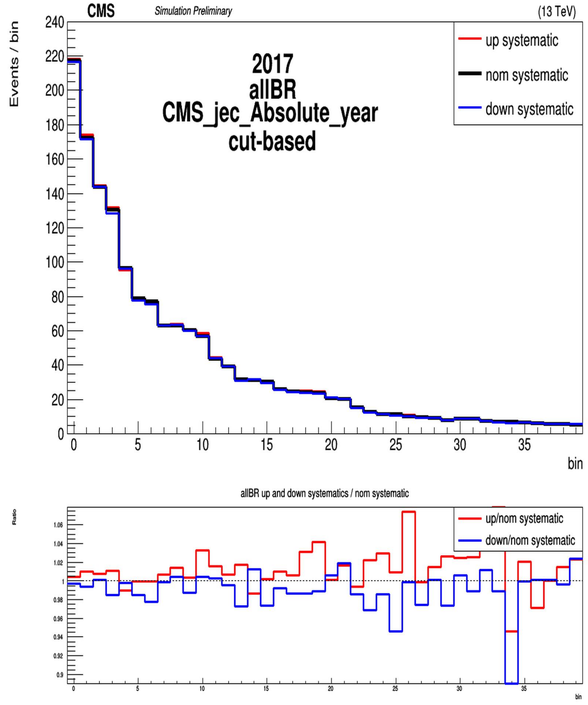
Linearized allBR MC in the SR for up/nom/down CMS_jec_Absolute_year uncertainties (2016preAPV) (cut-based)



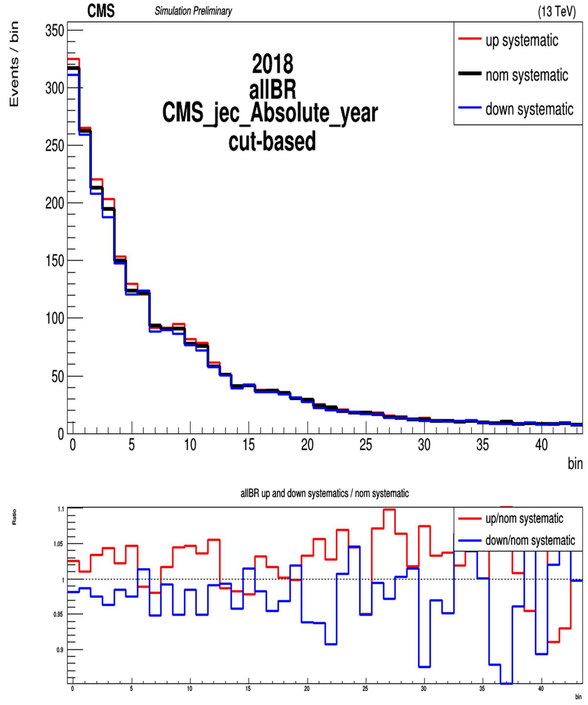
Linearized allBR MC in the SR for up/nom/down CMS_jec_Absolute_year uncertainties (2016postAPV) (cut-based)

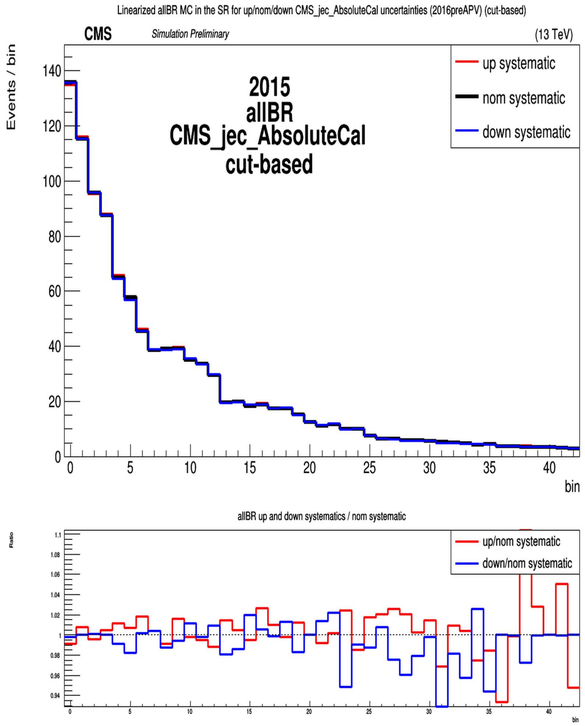


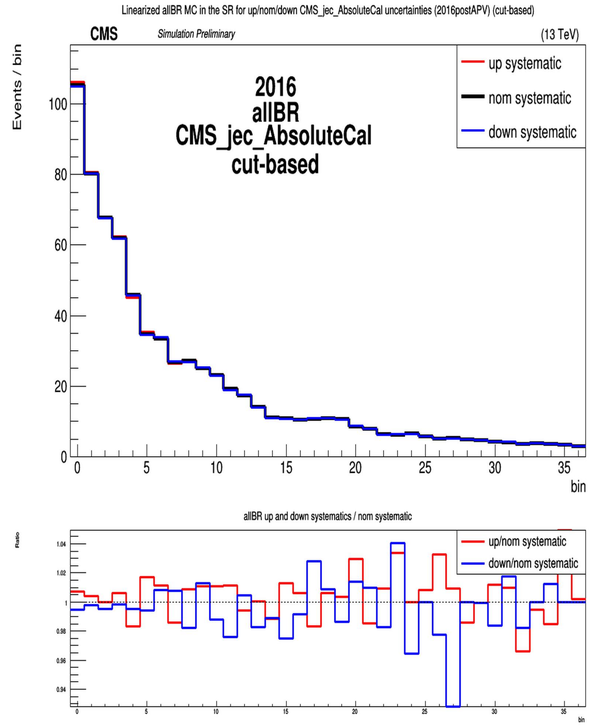
Linearized allBR MC in the SR for up/nom/down CMS_jec_Absolute_year uncertainties (2017) (cut-based)

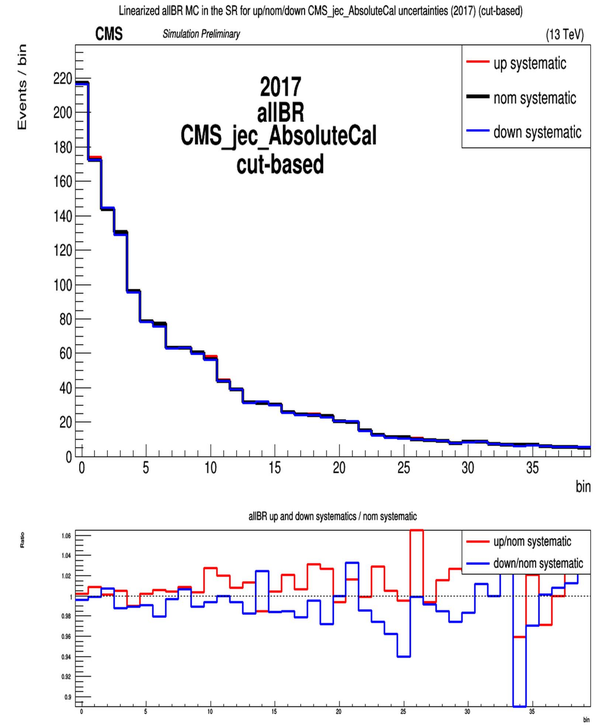


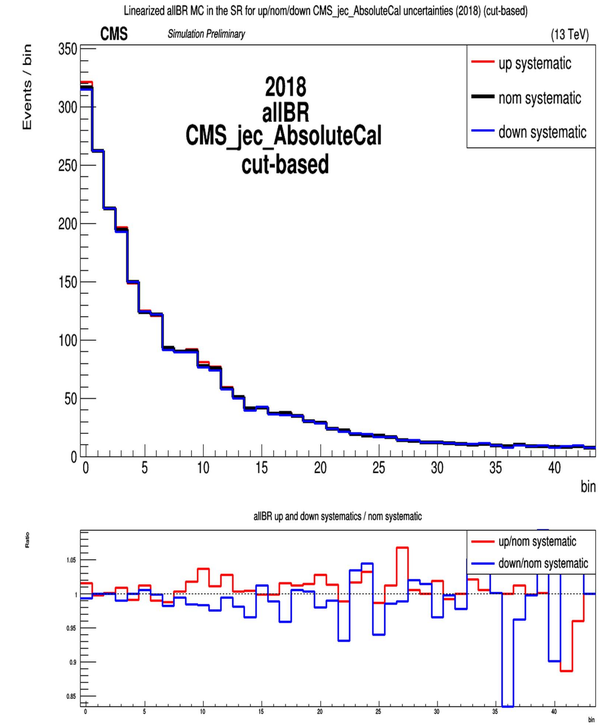
Linearized allBR MC in the SR for up/nom/down CMS_jec_Absolute_year uncertainties (2018) (cut-based)

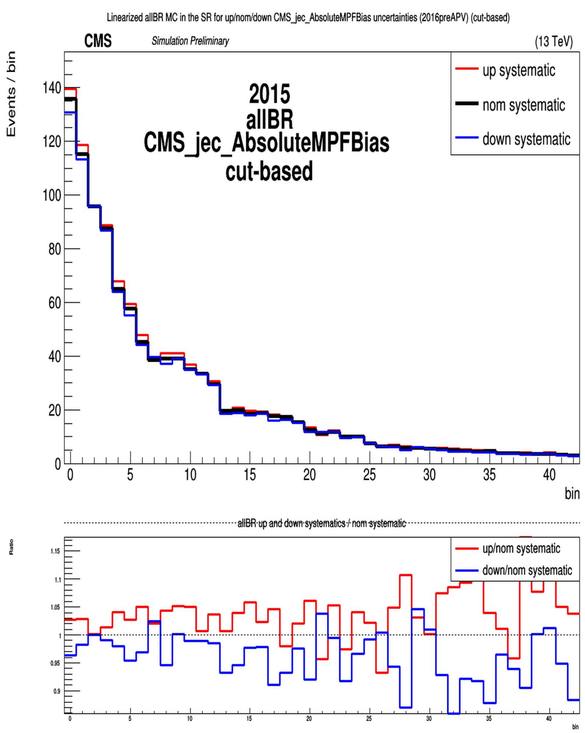


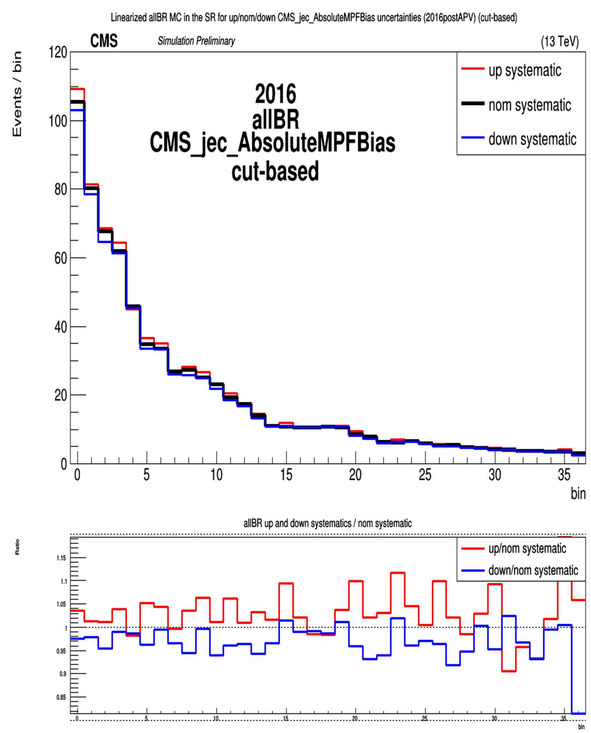

Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteCal uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_jec_AbsoluteCal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

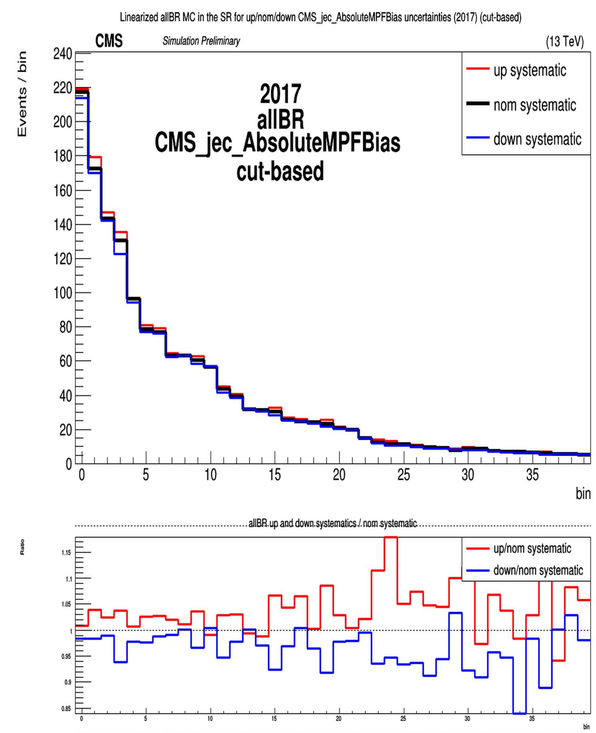

Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteCal uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_jec_AbsoluteCal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

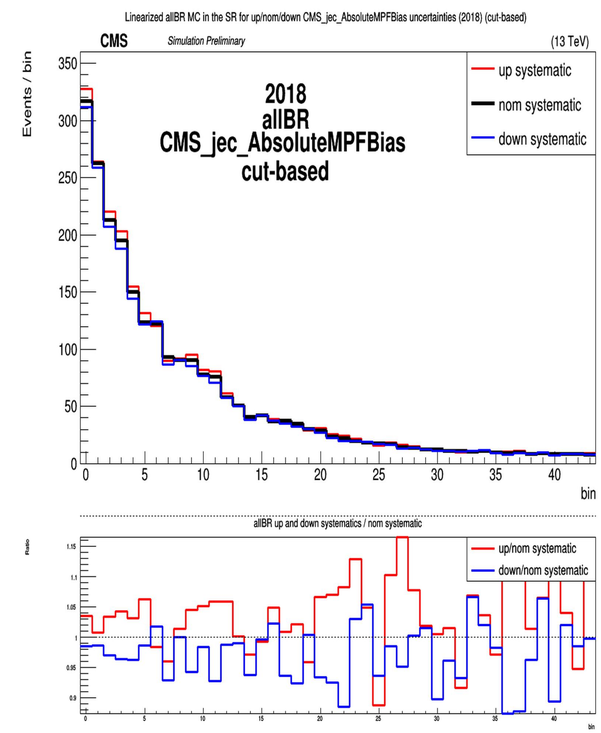

Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteCal uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_jec_AbsoluteCal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

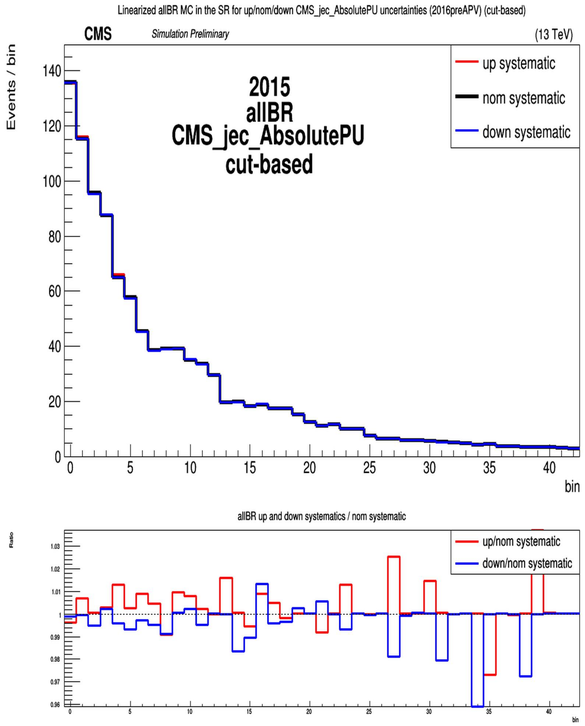

Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteCal uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_jec_AbsoluteCal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

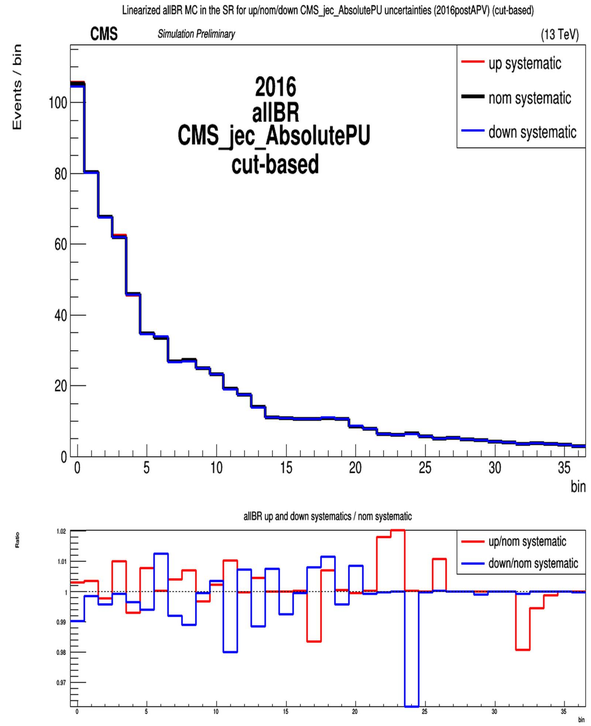

Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteMPFBias uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_jec_AbsoluteMPFBias
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

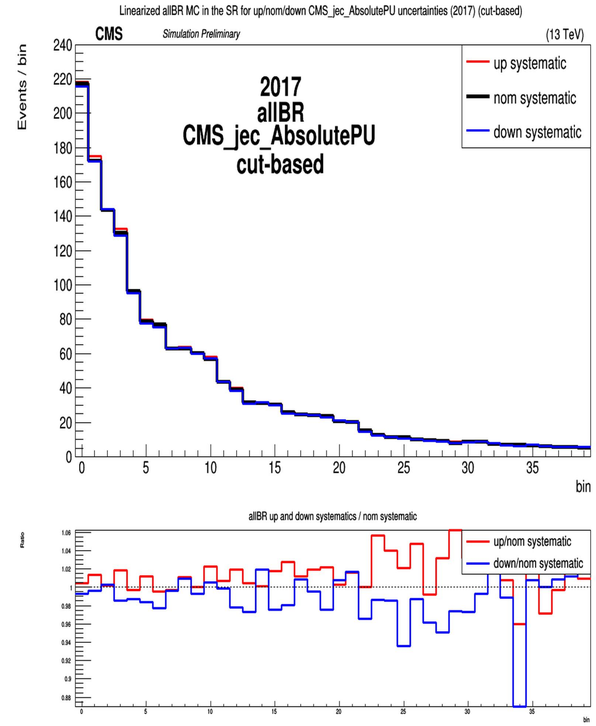

Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteMPFBias uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_jec_AbsoluteMPFBias
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

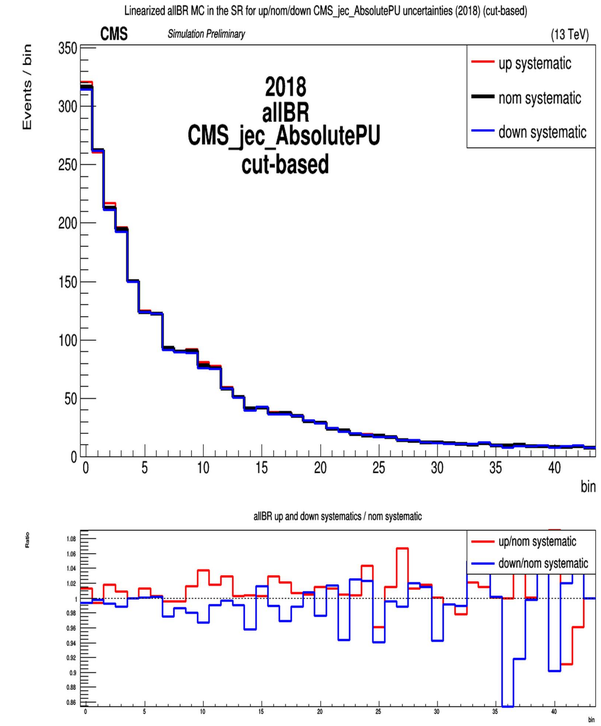

Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteMPFBias uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_jec_AbsoluteMPFBias
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

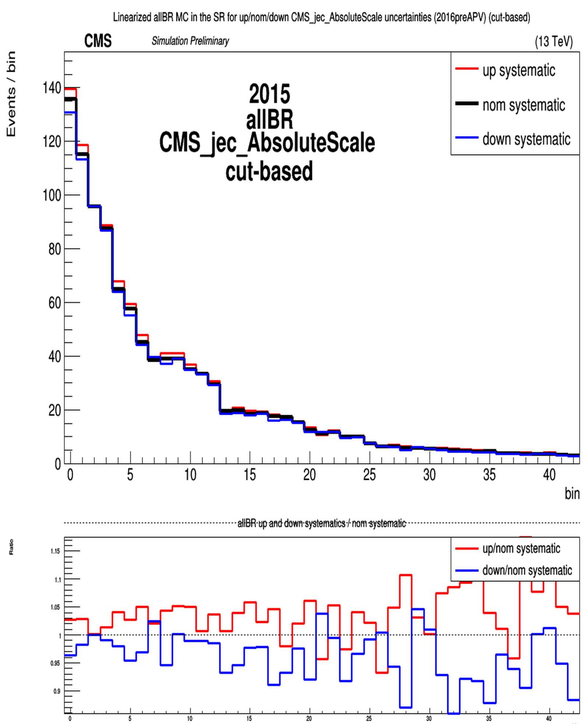

Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteMPFBias uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_jec_AbsoluteMPFBias
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

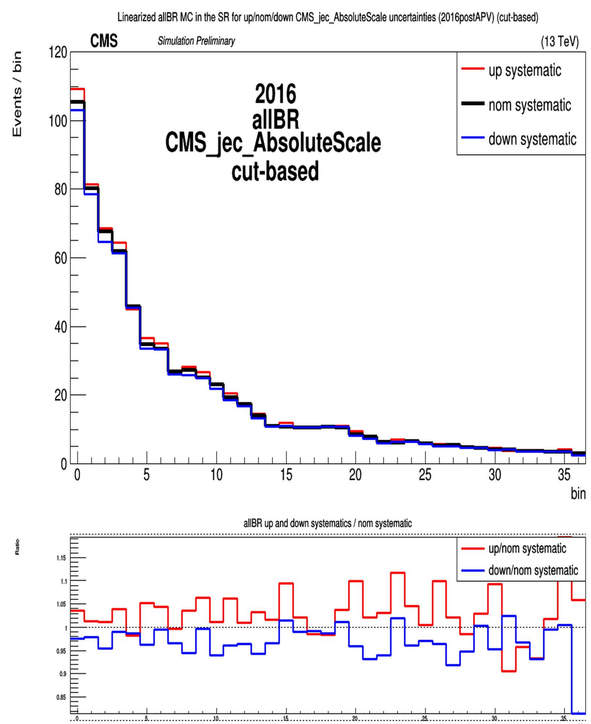

Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsolutePU uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_jec_AbsolutePU
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

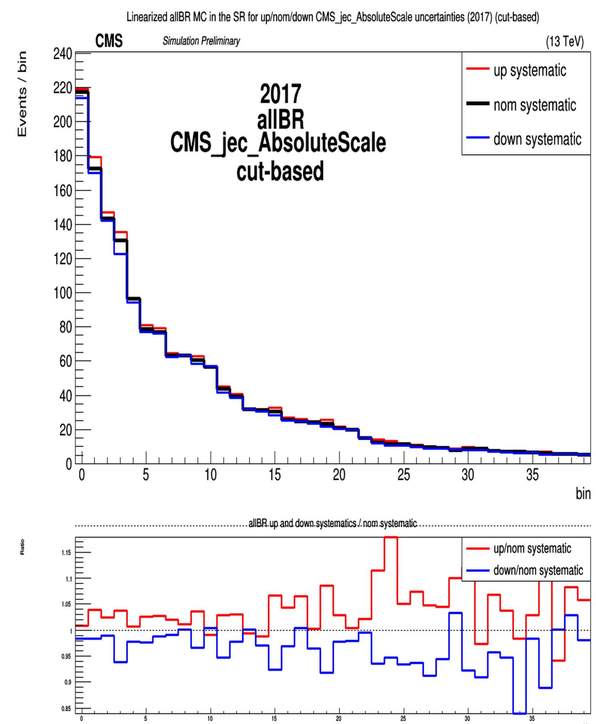

Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsolutePU uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_jec_AbsolutePU
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

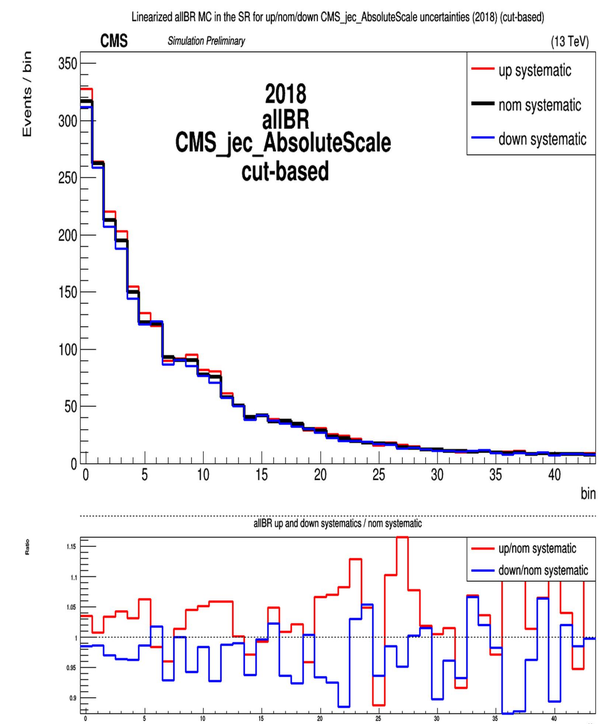

Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsolutePU uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_jec_AbsolutePU
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsolutePU uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_jec_AbsolutePU
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

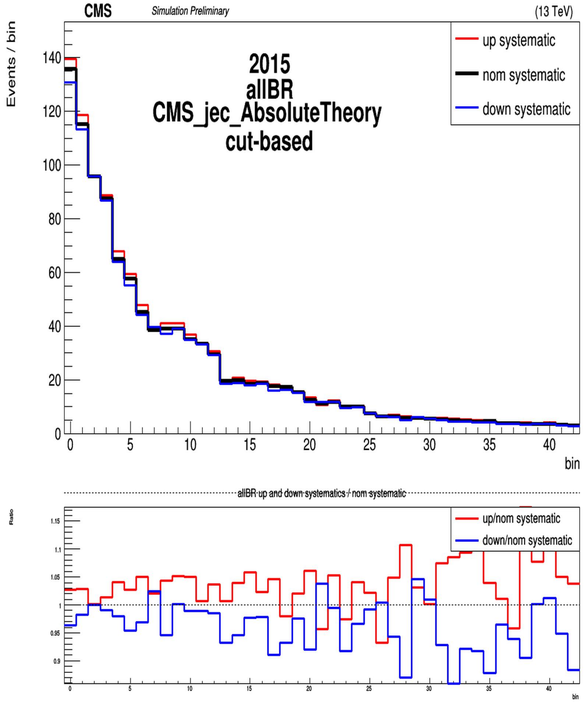

Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteScale uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_jec_AbsoluteScale
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteScale uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_jec_AbsoluteScale
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

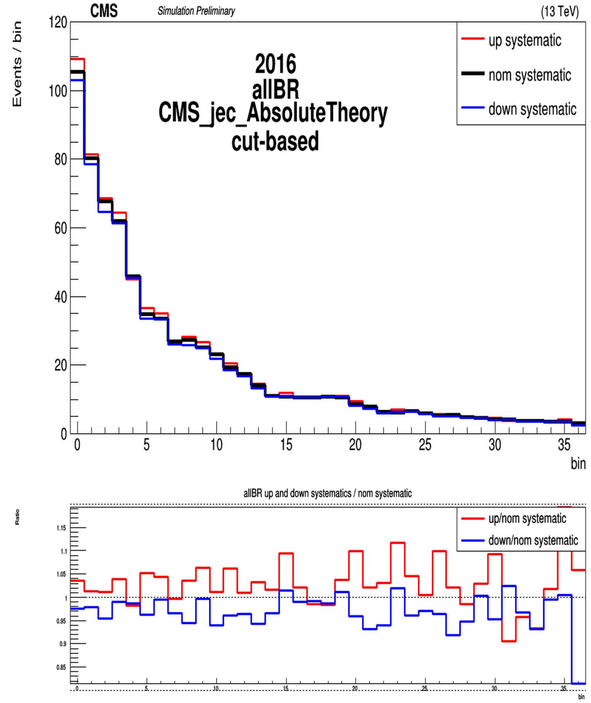

Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteScale uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_jec_AbsoluteScale
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteScale uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_jec_AbsoluteScale
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

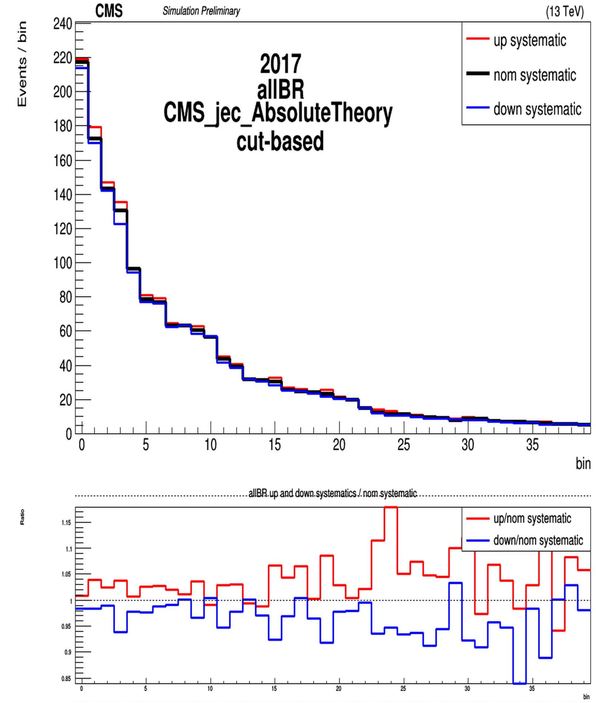
Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteTheory uncertainties (2016preAPV) (cut-based)



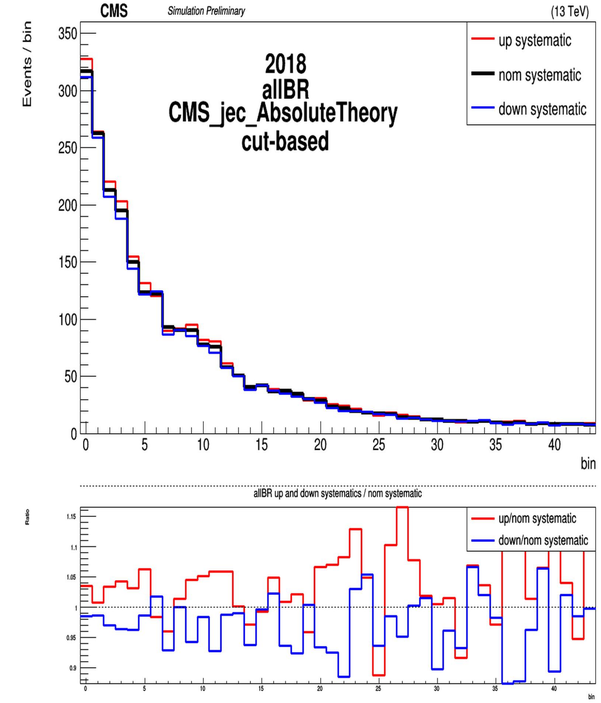
Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteTheory uncertainties (2016postAPV) (cut-based)



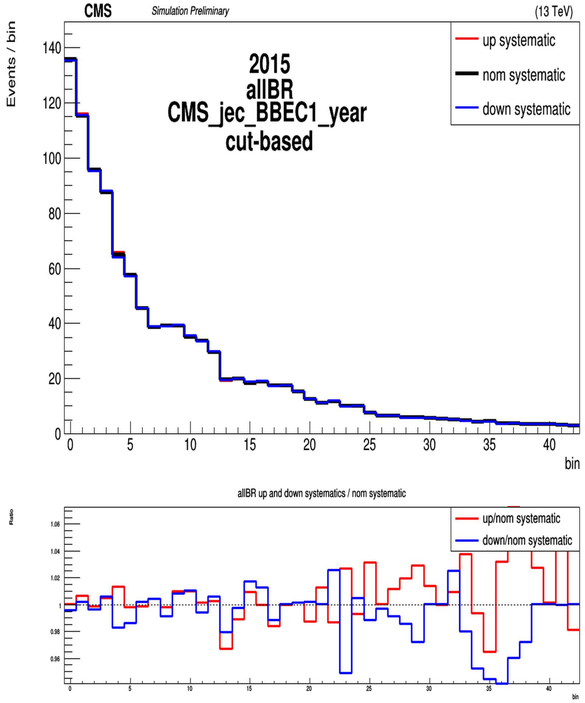
Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteTheory uncertainties (2017) (cut-based)



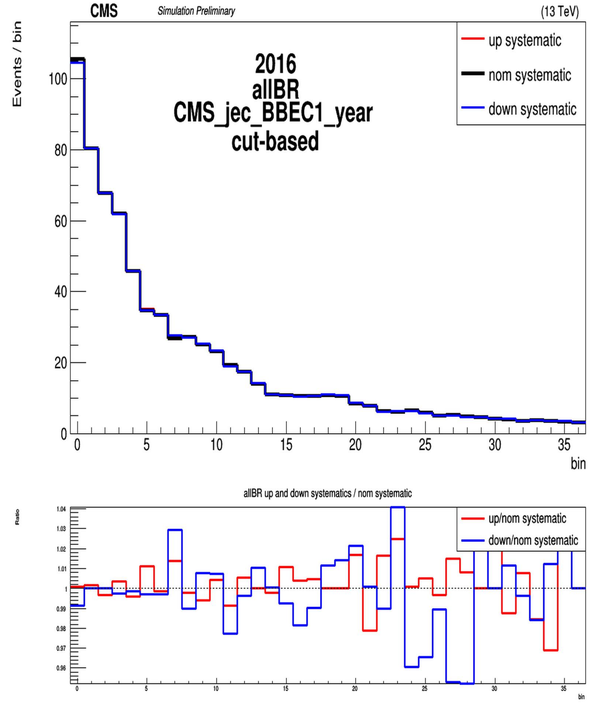
Linearized allBR MC in the SR for up/nom/down CMS_jec_AbsoluteTheory uncertainties (2018) (cut-based)



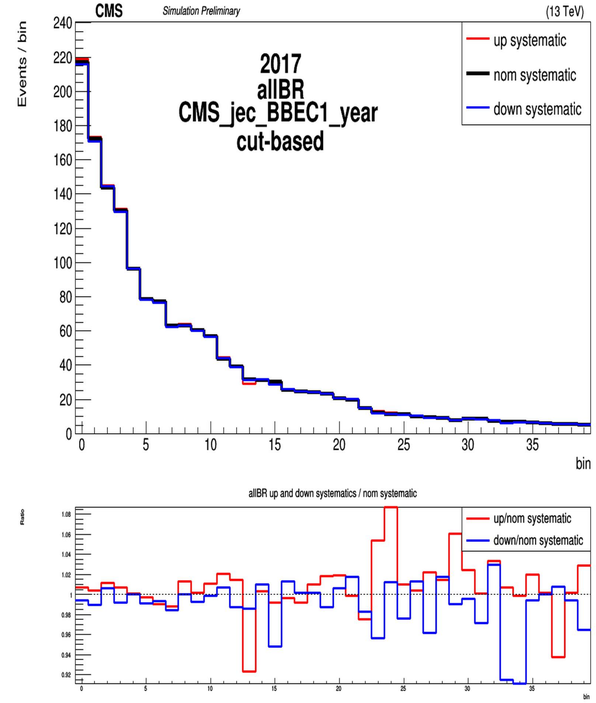
Linearized allBR MC in the SR for up/nom/down CMS_jec_BBEC1_year uncertainties (2016preAPV) (cut-based)



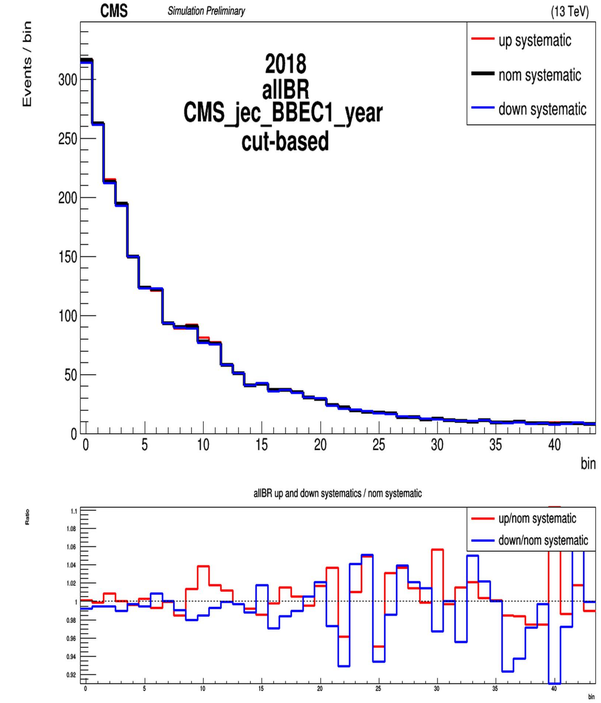
Linearized allBR MC in the SR for up/nom/down CMS_jec_BBEC1_year uncertainties (2016postAPV) (cut-based)

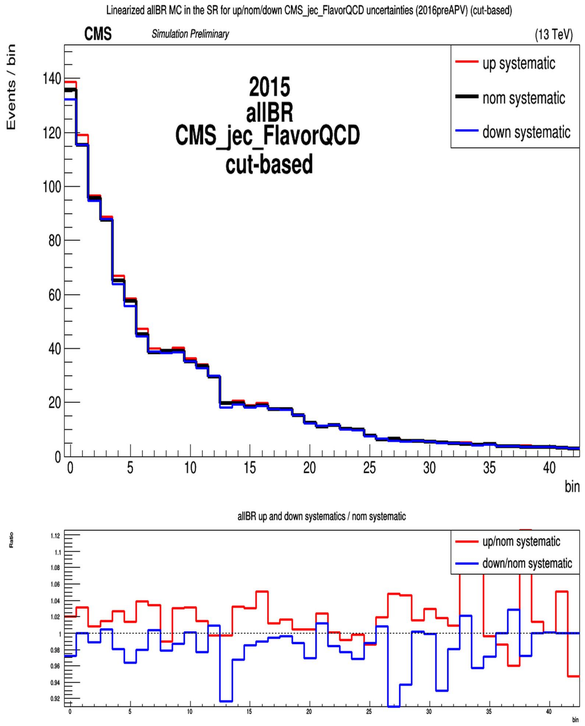


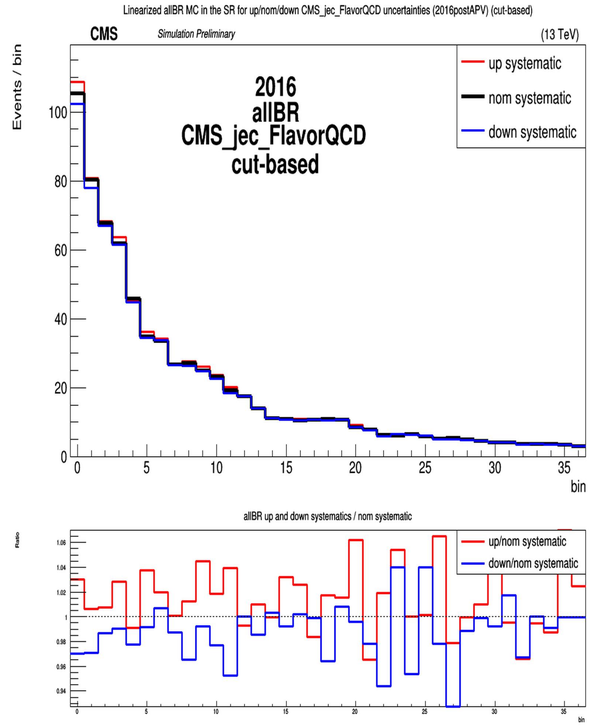
Linearized allBR MC in the SR for up/nom/down CMS_jec_BBEC1_year uncertainties (2017) (cut-based)

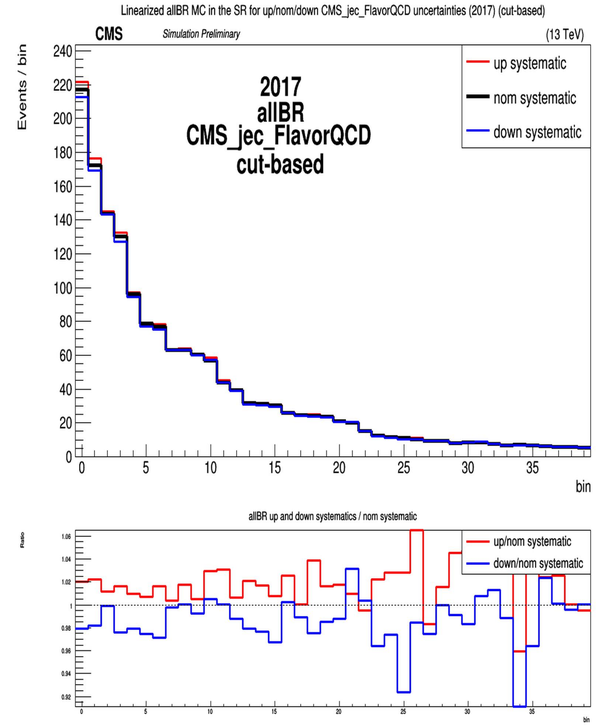


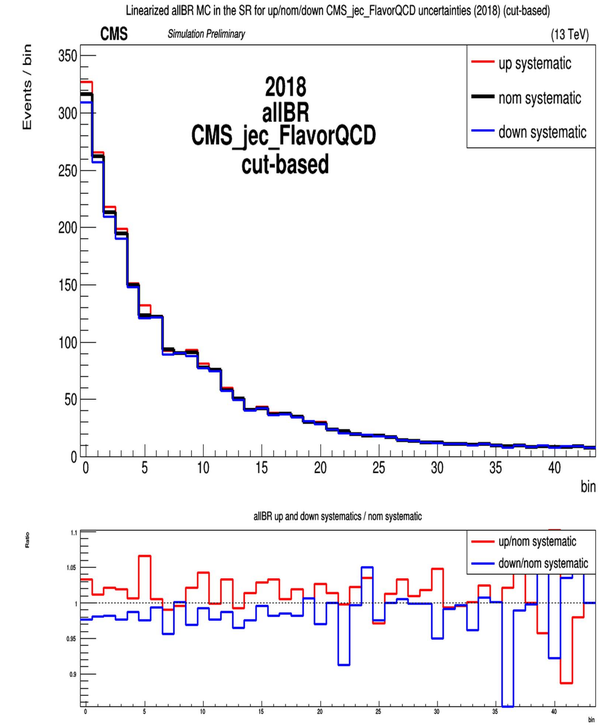
Linearized allBR MC in the SR for up/nom/down CMS_jec_BBEC1_year uncertainties (2018) (cut-based)

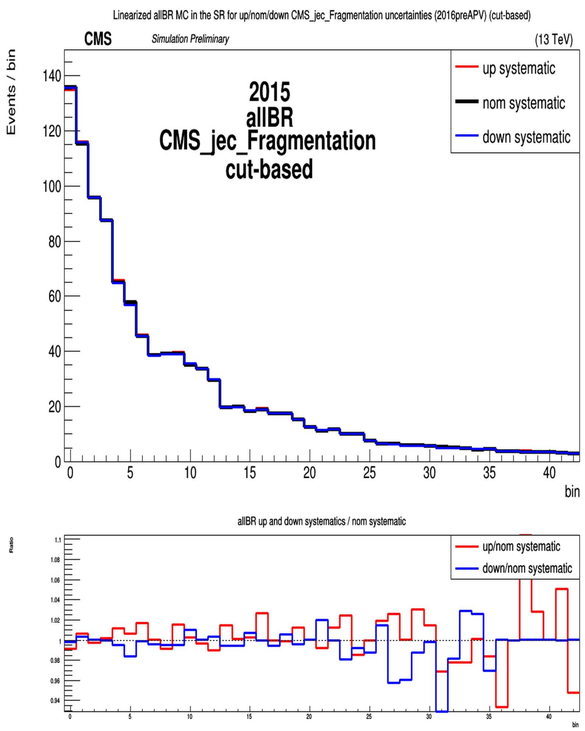


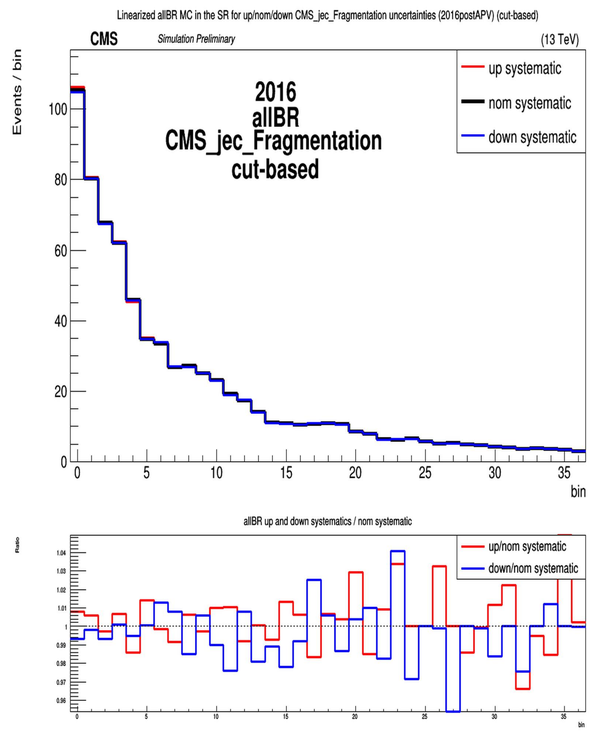

Linearized allBR MC in the SR for up/nom/down CMS_jec_FlavorQCD uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_jec_FlavorQCD
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

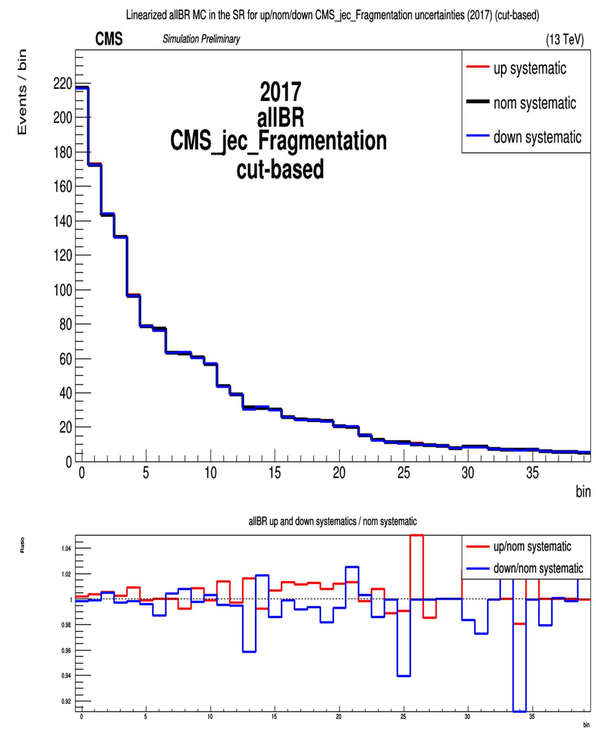

Linearized allBR MC in the SR for up/nom/down CMS_jec_FlavorQCD uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_jec_FlavorQCD
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

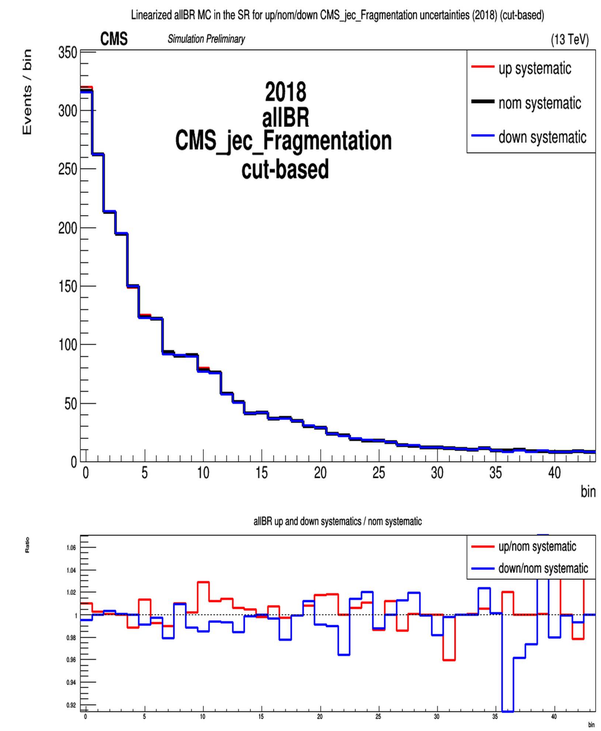

Linearized allBR MC in the SR for up/nom/down CMS_jec_FlavorQCD uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_jec_FlavorQCD
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

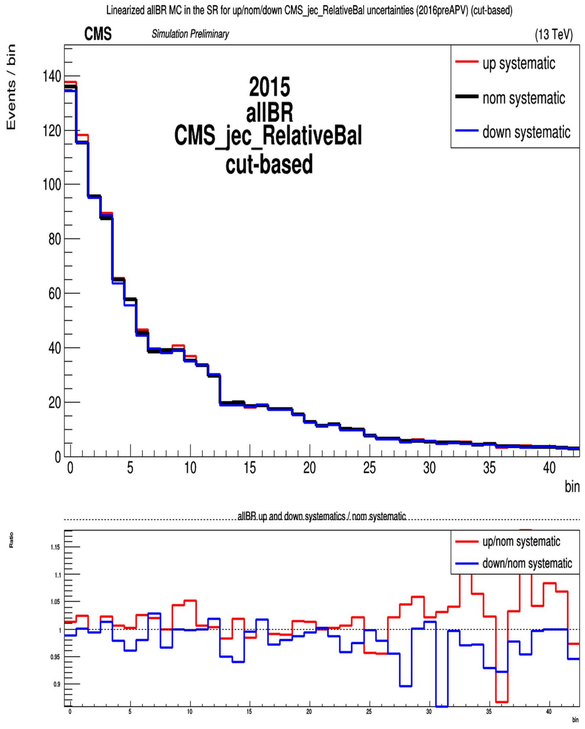

Linearized allBR MC in the SR for up/nom/down CMS_jec_FlavorQCD uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_jec_FlavorQCD
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

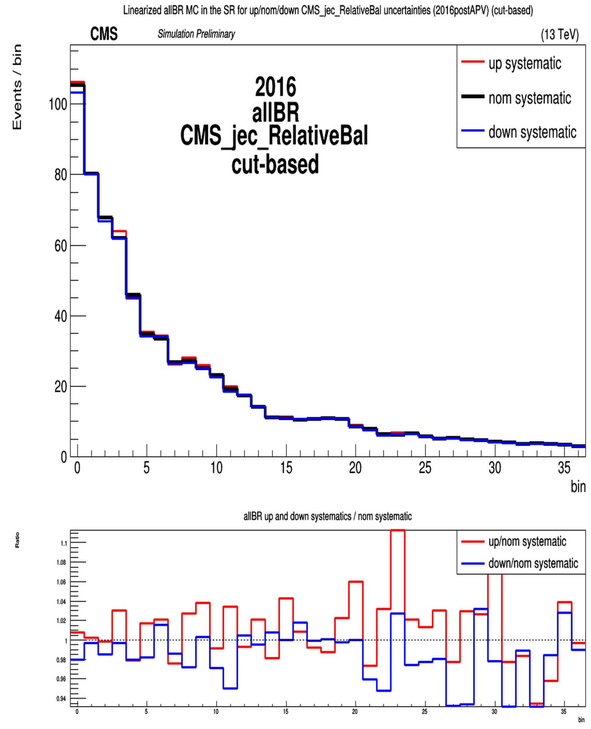

Linearized allBR MC in the SR for up/nom/down CMS_jec_Fragmentation uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_jec_Fragmentation
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

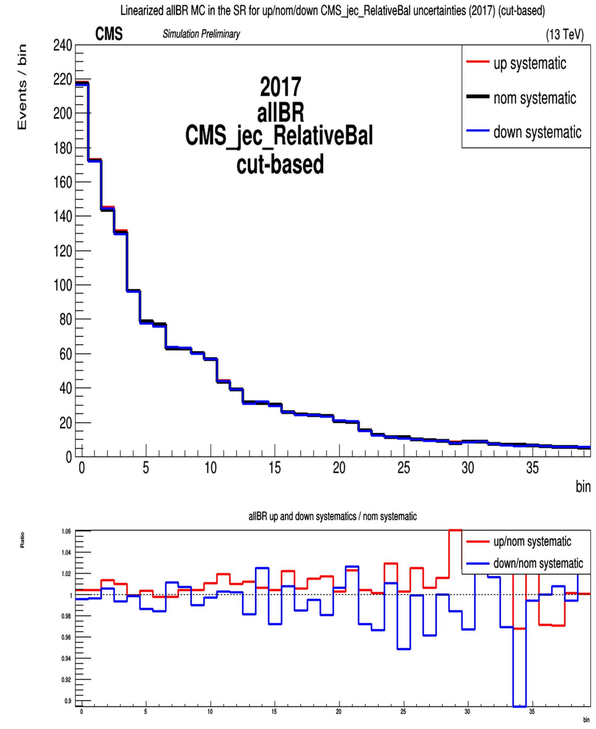

Linearized allBR MC in the SR for up/nom/down CMS_jec_Fragmentation uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_jec_Fragmentation
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

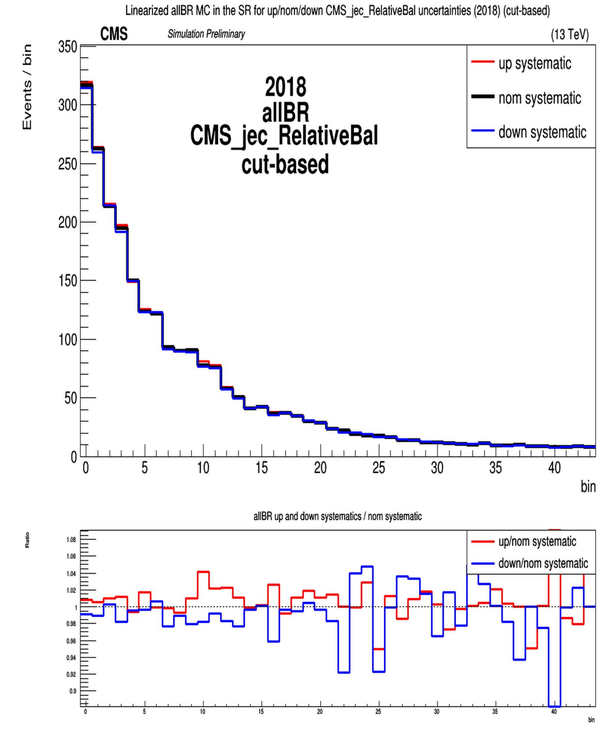

Linearized allBR MC in the SR for up/nom/down CMS_jec_Fragmentation uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_jec_Fragmentation
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

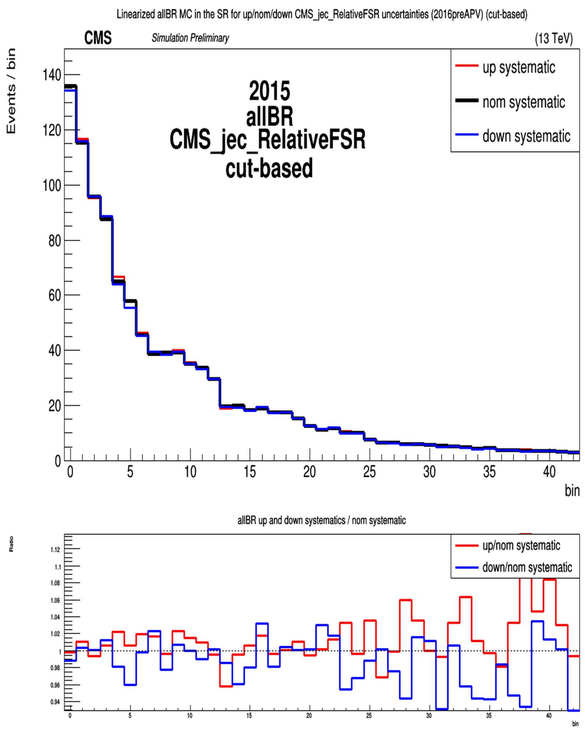

Linearized allBR MC in the SR for up/nom/down CMS_jec_Fragmentation uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_jec_Fragmentation
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

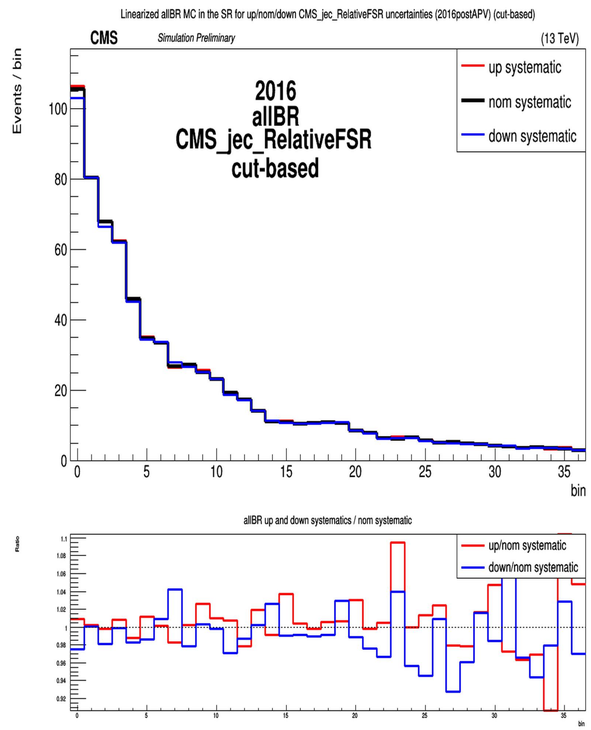

Linearized allBR MC in the SR for up/nom/down CMS_jec_RelativeBal uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_jec_RelativeBal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

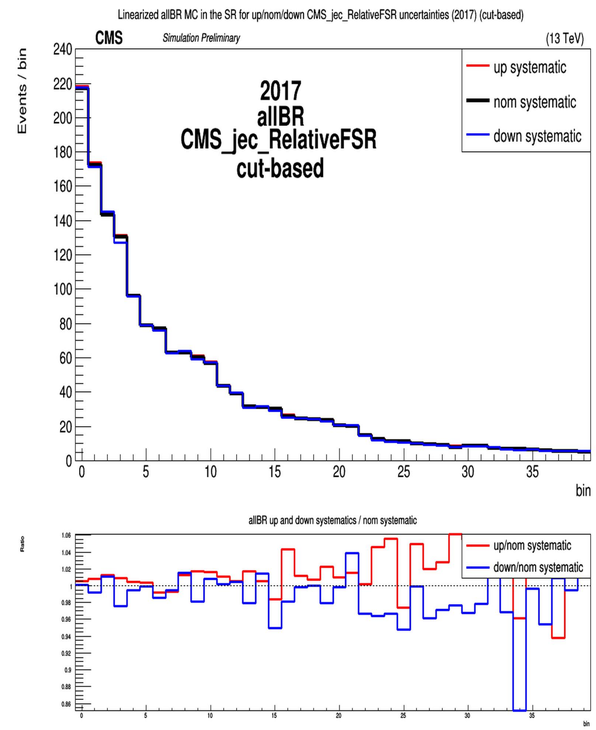

Linearized allBR MC in the SR for up/nom/down CMS_jec_RelativeBal uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_jec_RelativeBal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

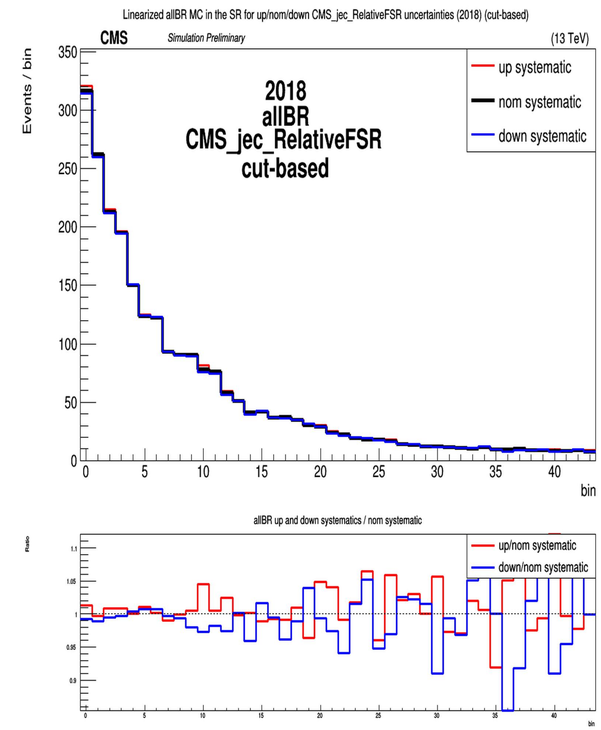

Linearized allBR MC in the SR for up/nom/down CMS_jec_RelativeBal uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_jec_RelativeBal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

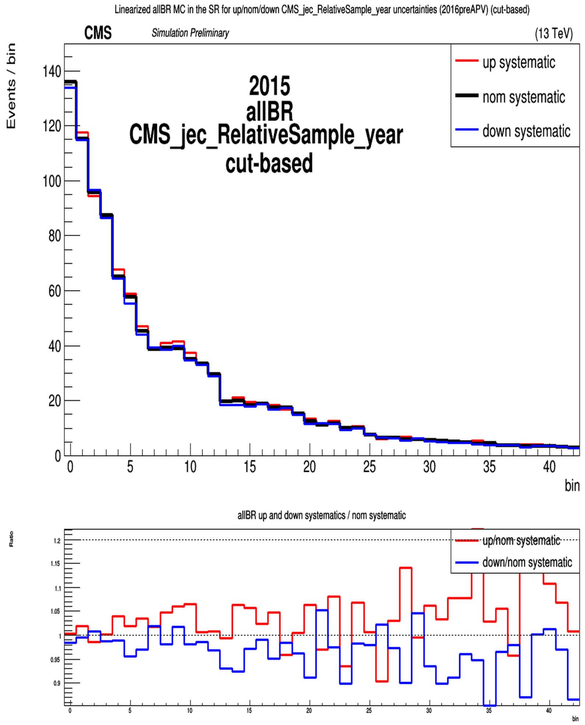

Linearized allBR MC in the SR for up/nom/down CMS_jec_RelativeBal uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_jec_RelativeBal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

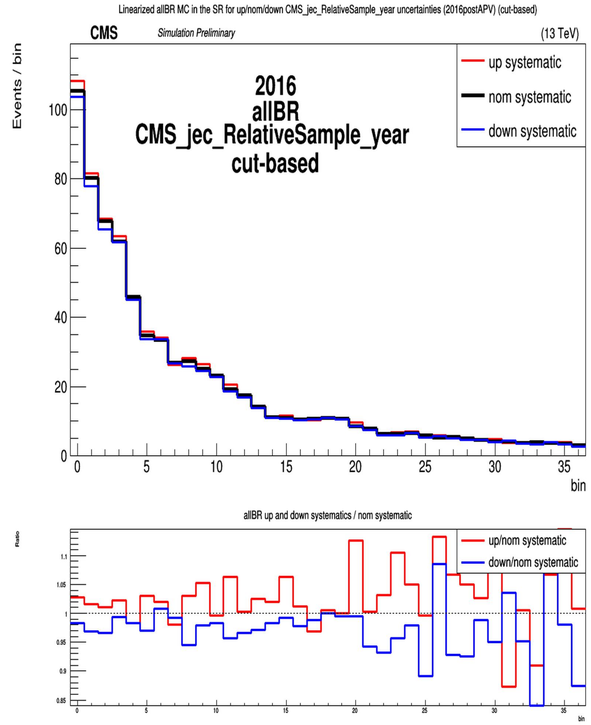

Linearized allBR MC in the SR for up/nom/down CMS_jec_RelativeFSR uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_jec_RelativeFSR
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

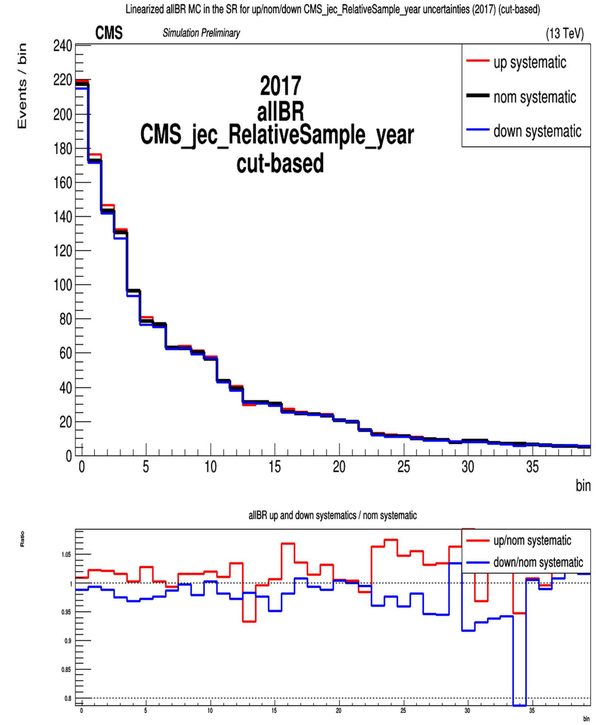

Linearized allBR MC in the SR for up/nom/down CMS_jec_RelativeFSR uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_jec_RelativeFSR
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

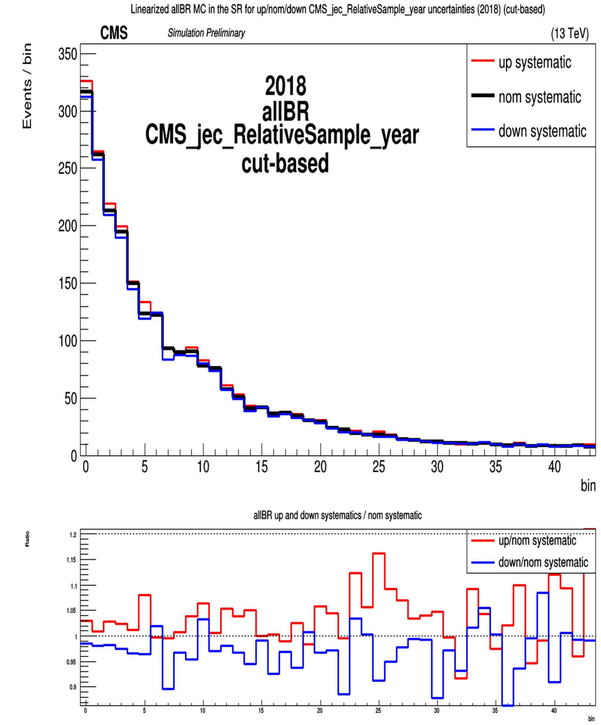

Linearized allBR MC in the SR for up/nom/down CMS_jec_RelativeFSR uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_jec_RelativeFSR
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

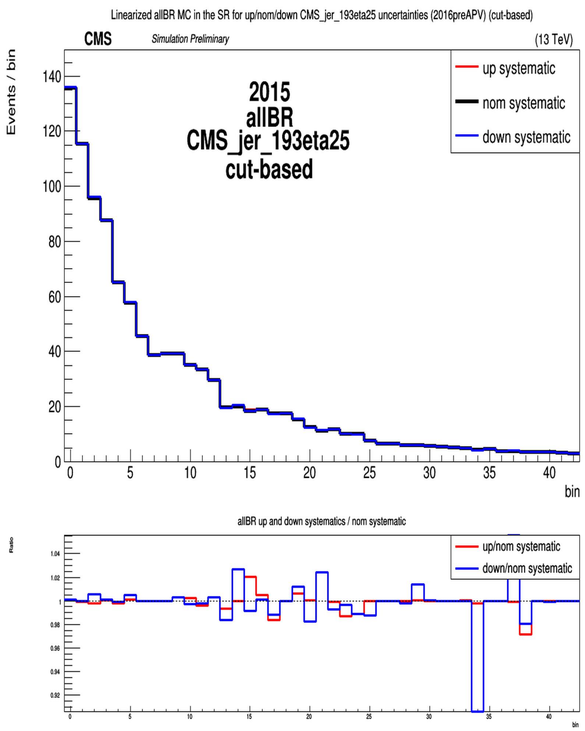

Linearized allBR MC in the SR for up/nom/down CMS_jec_RelativeFSR uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_jec_RelativeFSR
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

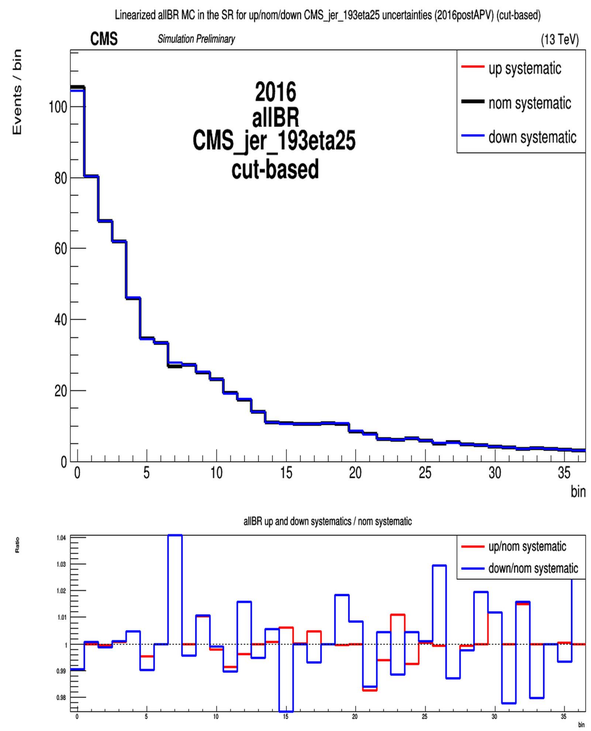

Linearized allBR MC in the SR for up/nom/down CMS_jec_RelativeSample_year uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_jec_RelativeSample_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

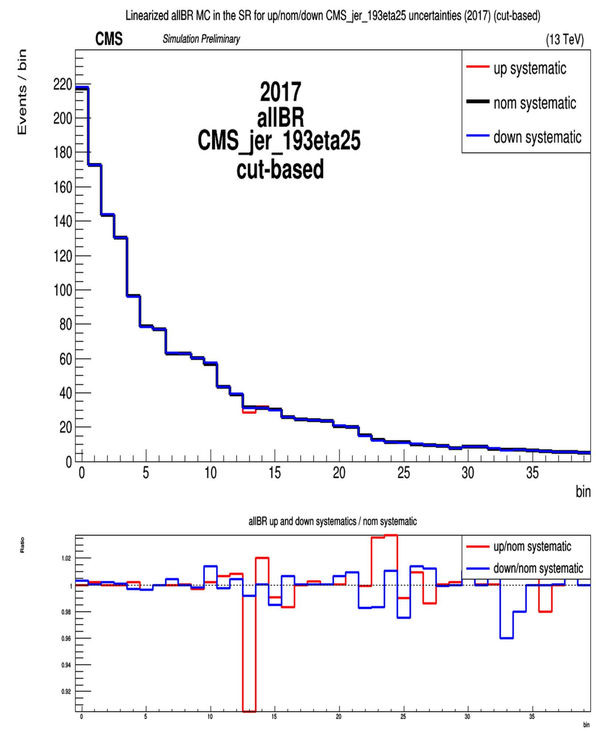

Linearized allBR MC in the SR for up/nom/down CMS_jec_RelativeSample_year uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_jec_RelativeSample_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

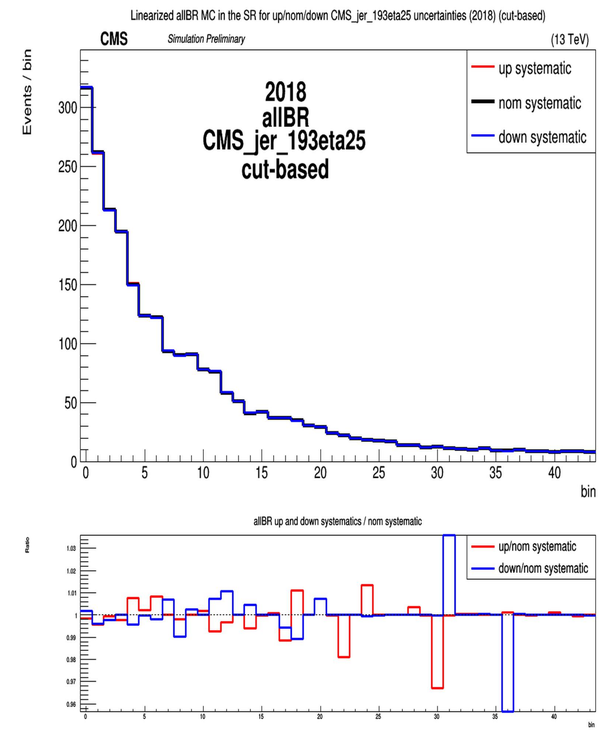

Linearized allBR MC in the SR for up/nom/down CMS_jec_RelativeSample_year uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_jec_RelativeSample_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized allBR MC in the SR for up/nom/down CMS_jec_RelativeSample_year uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_jec_RelativeSample_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

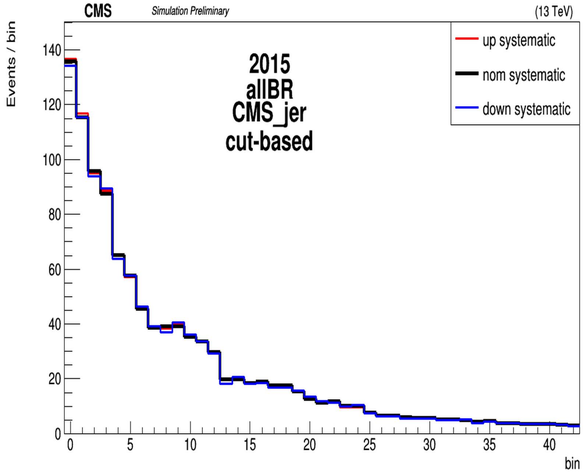

Linearized allBR MC in the SR for up/nom/down CMS_jer_193eta25 uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
allBR
CMS_jer_193eta25
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

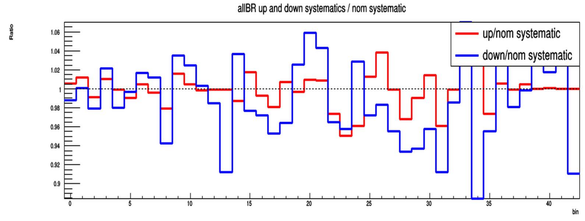

Linearized allBR MC in the SR for up/nom/down CMS_jer_193eta25 uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
allBR
CMS_jer_193eta25
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized allBR MC in the SR for up/nom/down CMS_jer_193eta25 uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
allBR
CMS_jer_193eta25
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

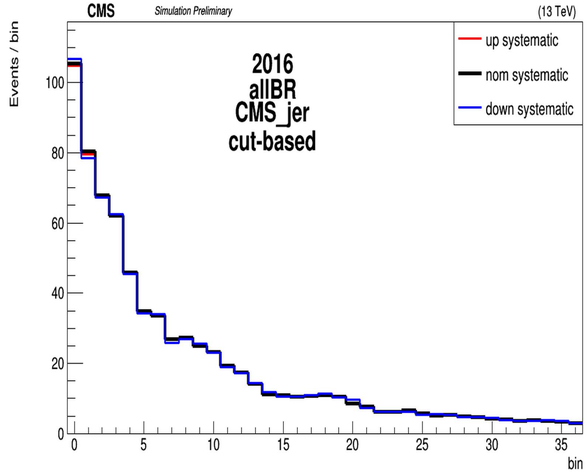

Linearized allBR MC in the SR for up/nom/down CMS_jer_193eta25 uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
allBR
CMS_jer_193eta25
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
allBR up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

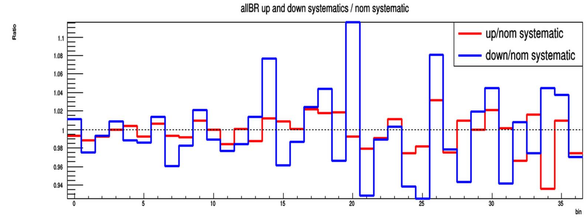
Linearized allBR MC in the SR for up/nom/down CMS_jer uncertainties (2016preAPV) (cut-based)



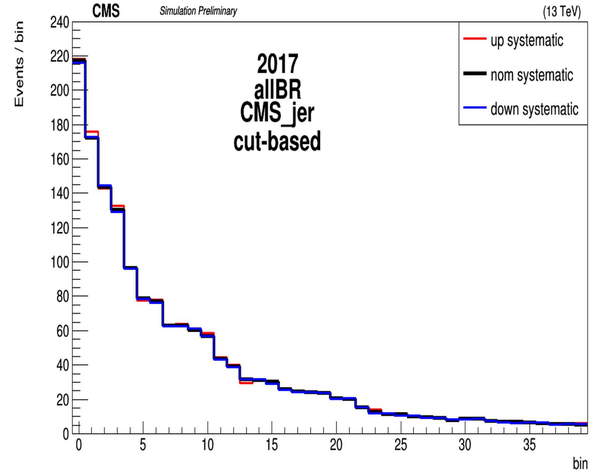


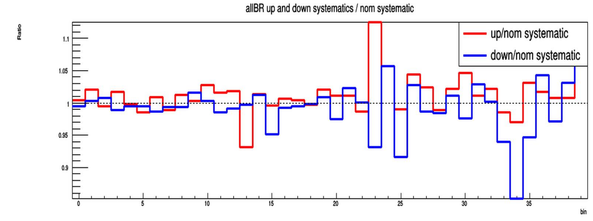
Linearized allBR MC in the SR for up/nom/down CMS_jer uncertainties (2016postAPV) (cut-based)



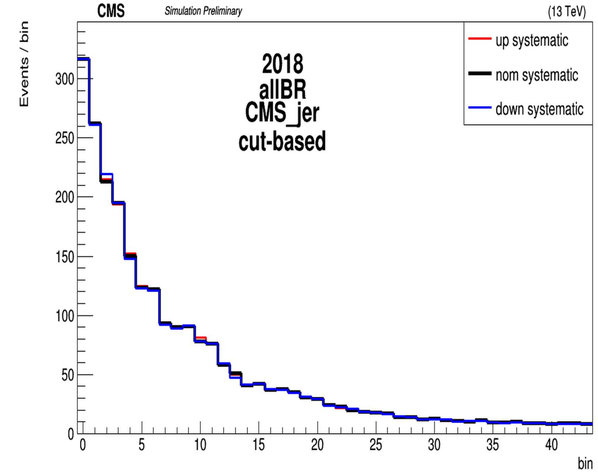


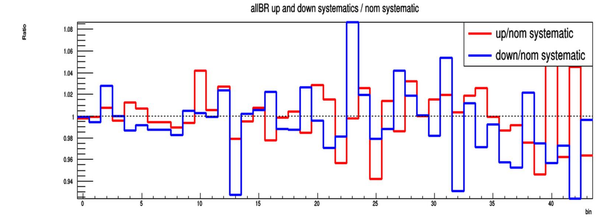
Linearized allBR MC in the SR for up/nom/down CMS_jer uncertainties (2017) (cut-based)



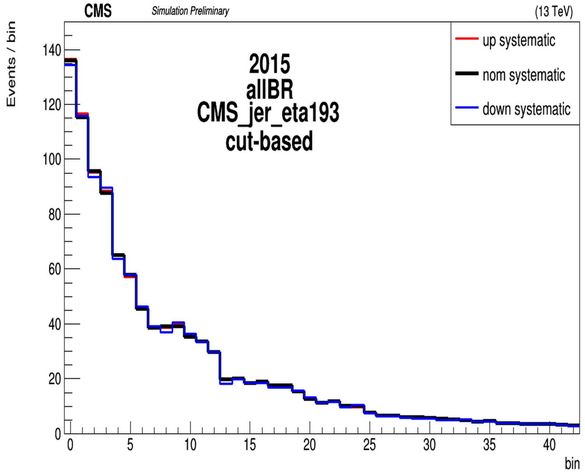


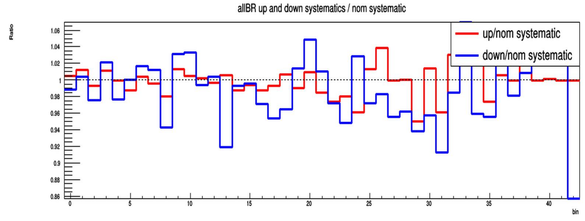
Linearized allBR MC in the SR for up/nom/down CMS_jer uncertainties (2018) (cut-based)



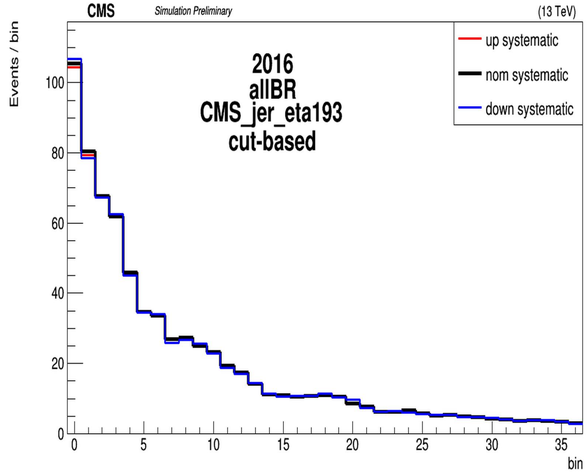


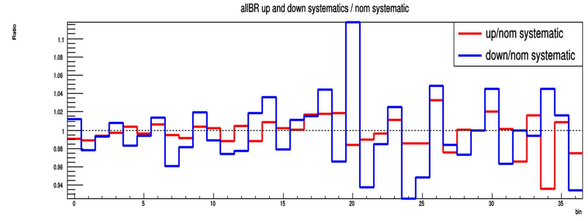
Linearized allBR MC in the SR for up/nom/down CMS_jer_eta193 uncertainties (2016preAPV) (cut-based)



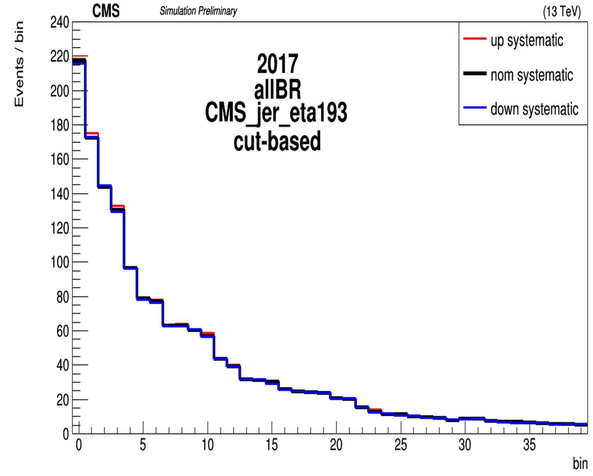


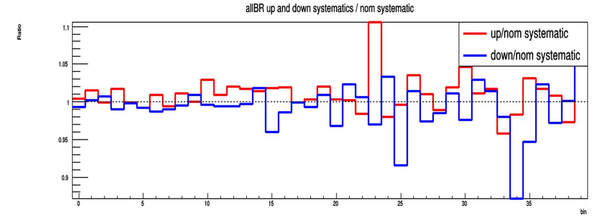
Linearized allBR MC in the SR for up/nom/down CMS_jer_eta193 uncertainties (2016postAPV) (cut-based)



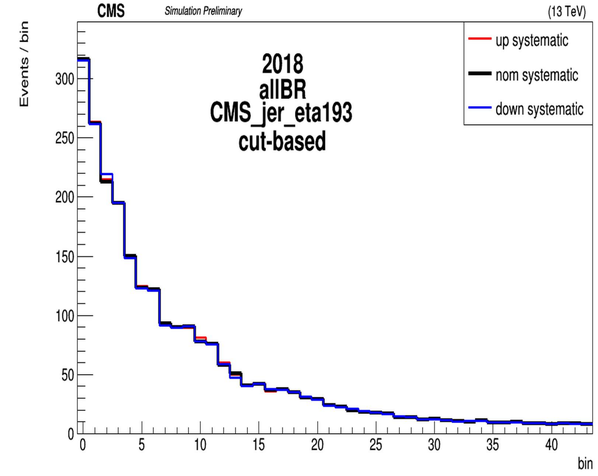


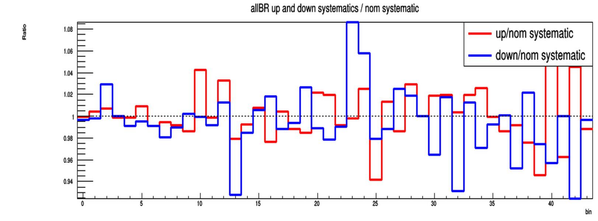
Linearized allBR MC in the SR for up/nom/down CMS_jer_eta193 uncertainties (2017) (cut-based)



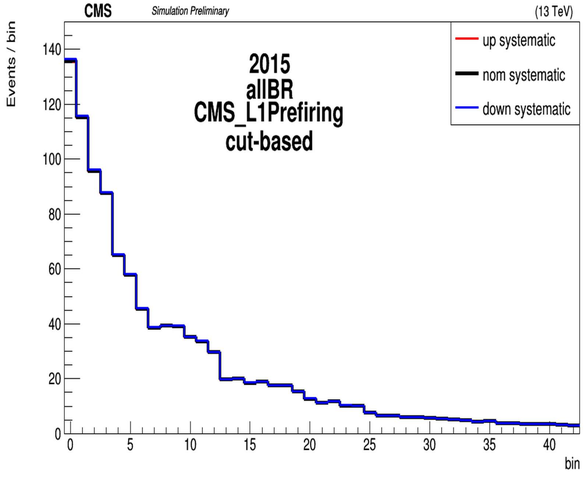


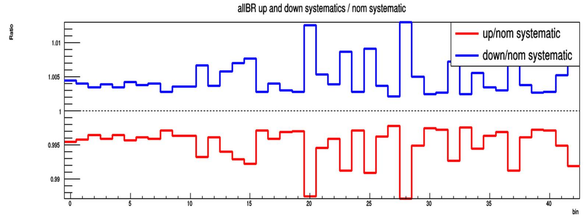
Linearized allBR MC in the SR for up/nom/down CMS_jer_eta193 uncertainties (2018) (cut-based)



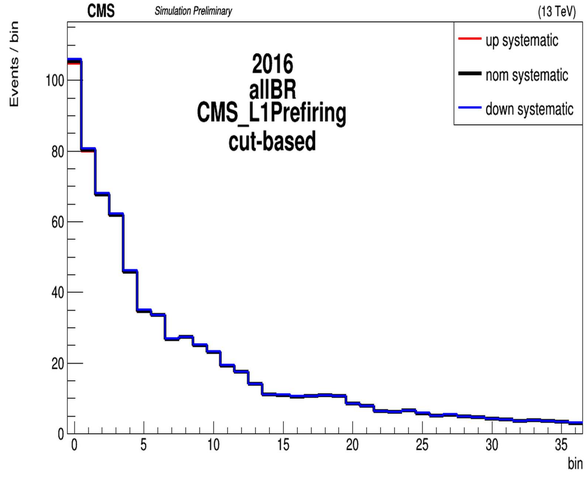


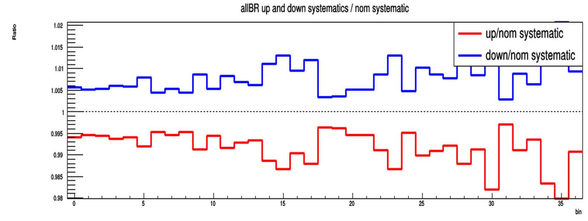
Linearized allBR MC in the SR for up/nom/down CMS_L1Prefiring uncertainties (2016preAPV) (cut-based)



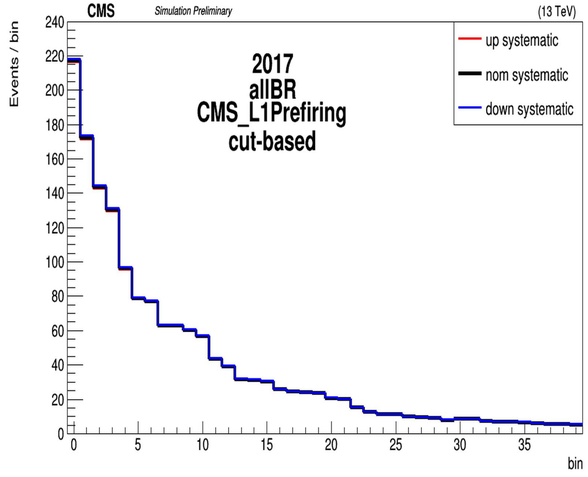


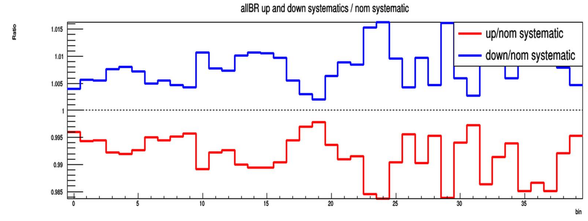
Linearized allBR MC in the SR for up/nom/down CMS_L1Prefiring uncertainties (2016postAPV) (cut-based)



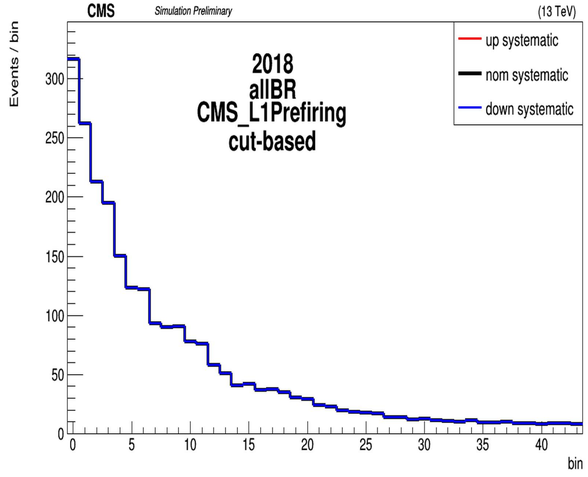


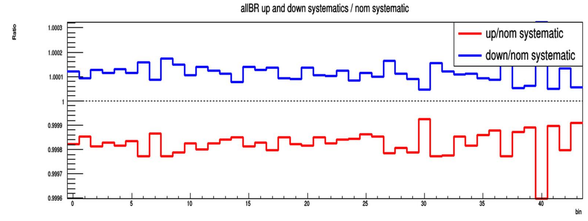
Linearized allBR MC in the SR for up/nom/down CMS_L1Prefiring uncertainties (2017) (cut-based)



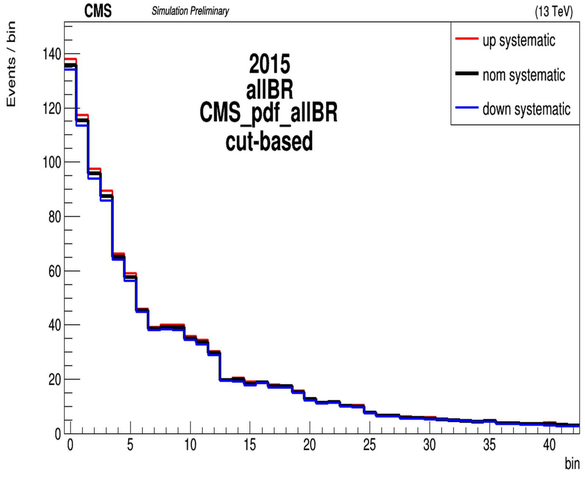


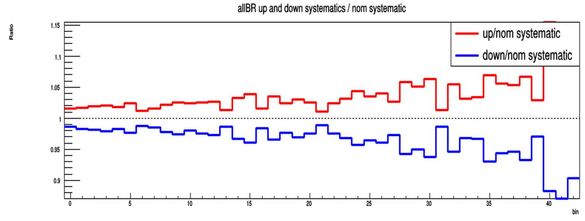
Linearized allBR MC in the SR for up/nom/down CMS_L1Prefiring uncertainties (2018) (cut-based)



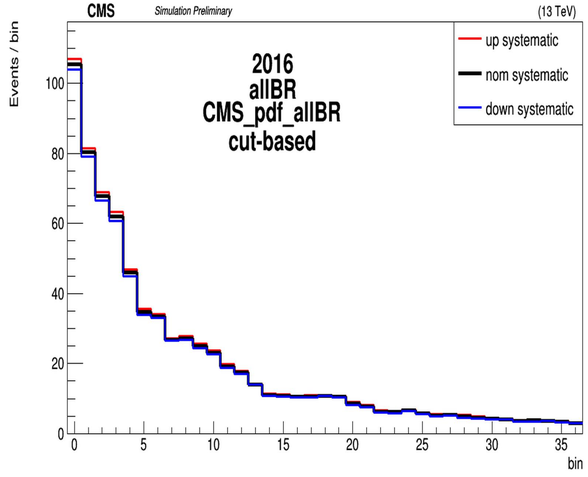


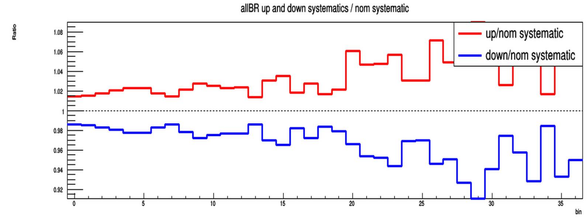
Linearized allBR MC in the SR for up/nom/down CMS_pdf_allBR uncertainties (2016preAPV) (cut-based)



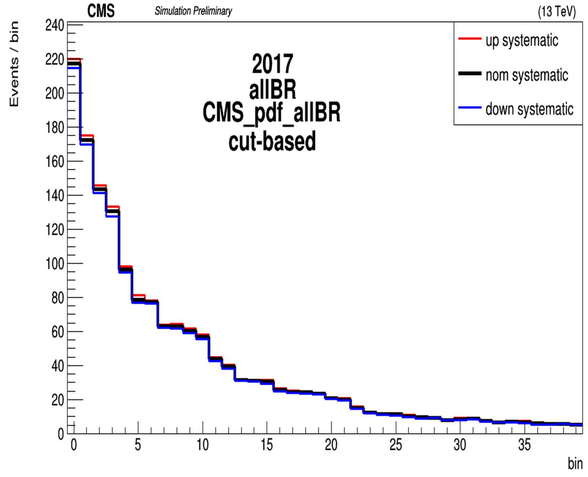


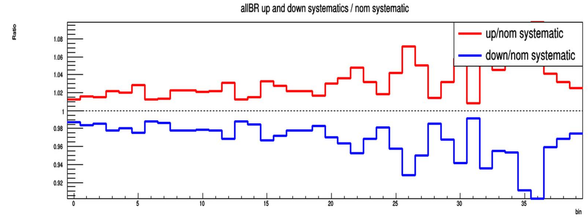
Linearized allBR MC in the SR for up/nom/down CMS_pdf_allBR uncertainties (2016postAPV) (cut-based)



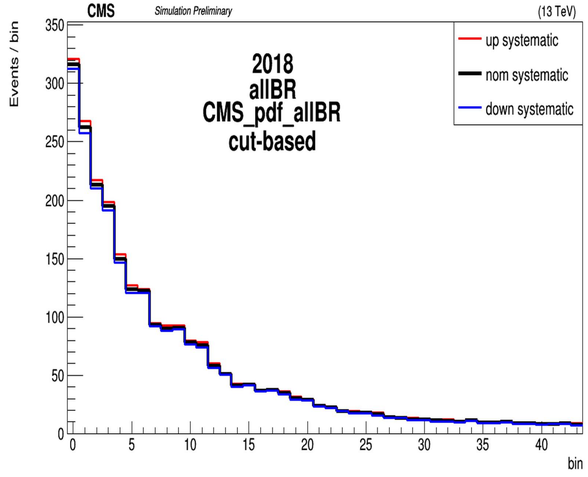


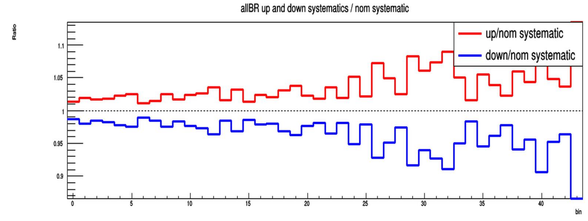
Linearized allBR MC in the SR for up/nom/down CMS_pdf_allBR uncertainties (2017) (cut-based)



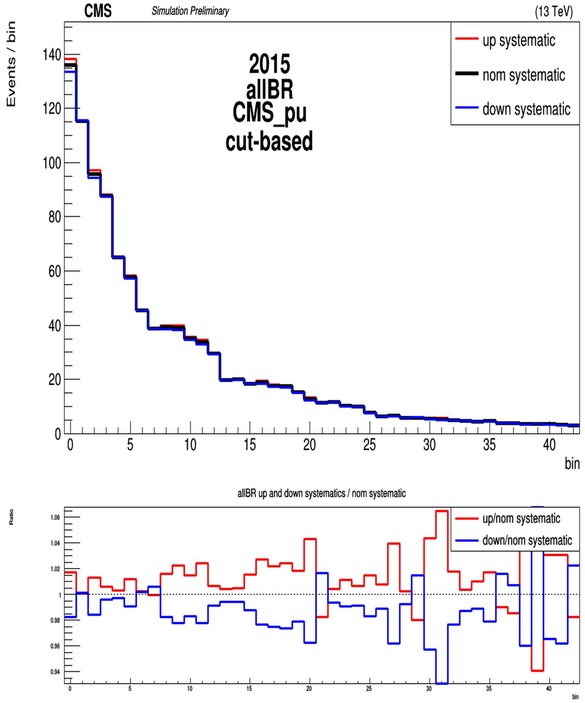


Linearized allBR MC in the SR for up/nom/down CMS_pdf_allBR uncertainties (2018) (cut-based)

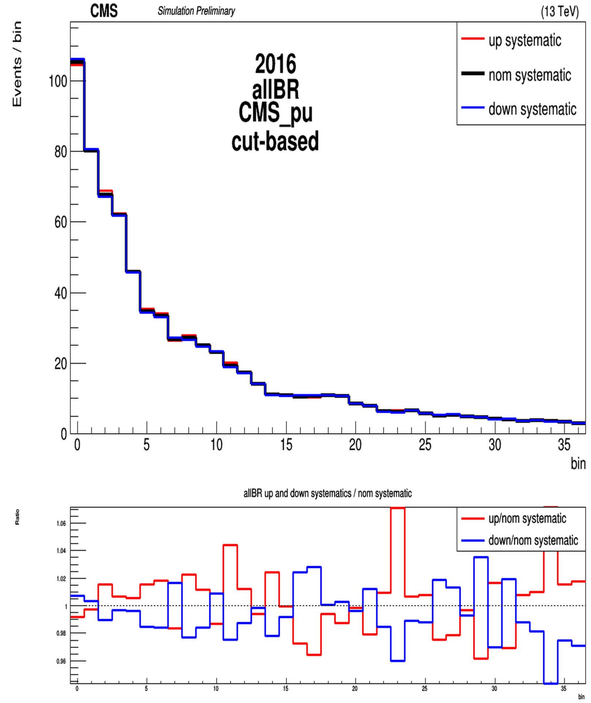




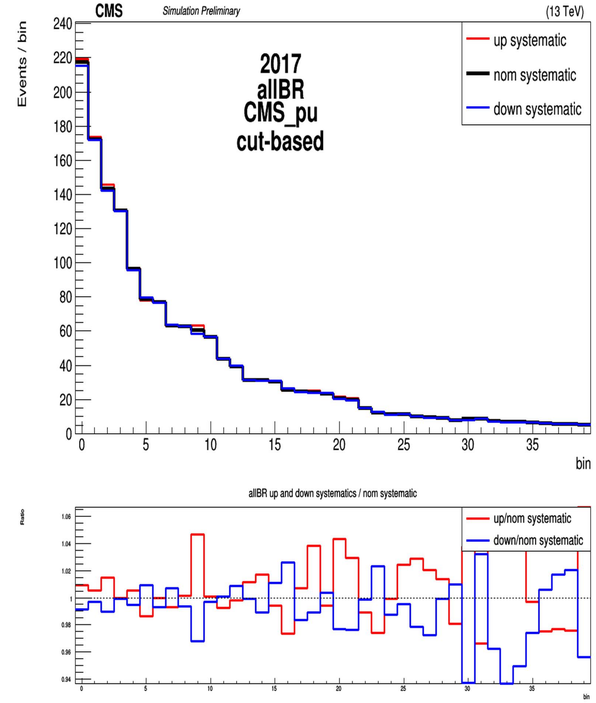
Linearized allBR MC in the SR for up/nom/down CMS_pu uncertainties (2016preAPV) (cut-based)



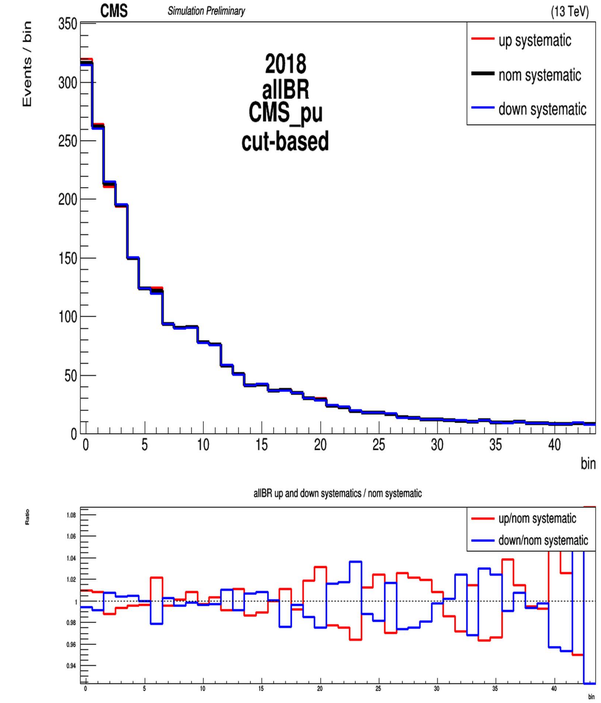
Linearized allBR MC in the SR for up/nom/down CMS_pu uncertainties (2016postAPV) (cut-based)



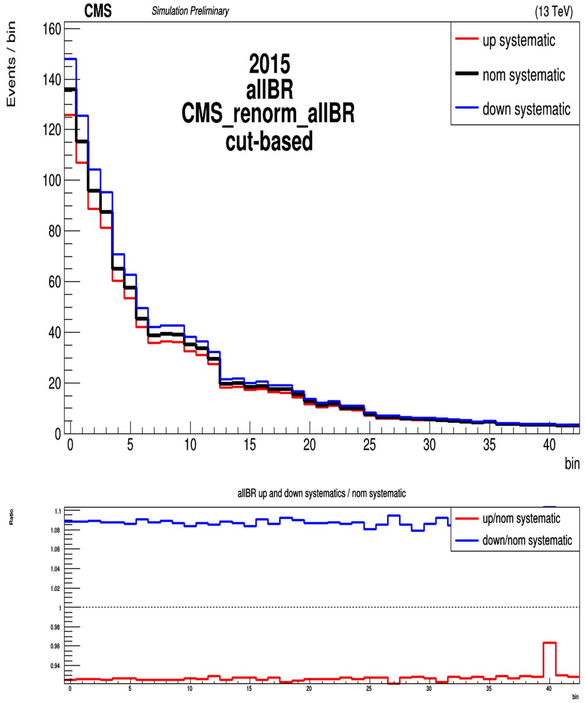
Linearized allBR MC in the SR for up/nom/down CMS_pu uncertainties (2017) (cut-based)



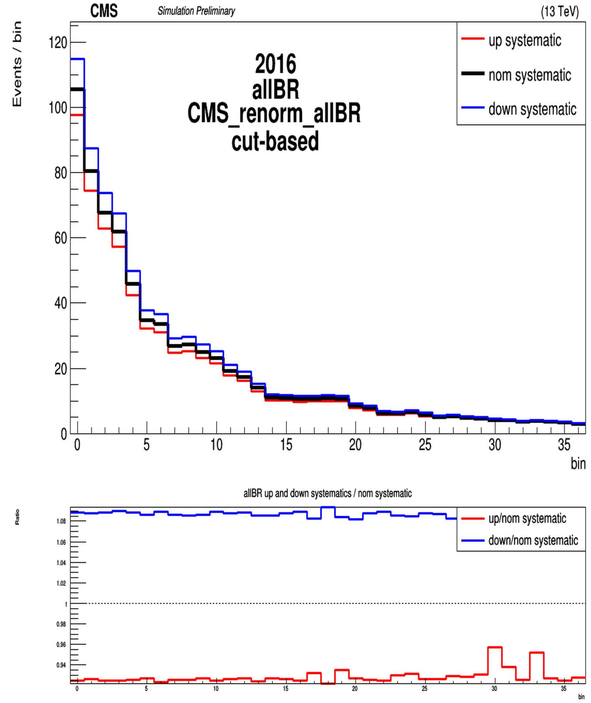
Linearized allBR MC in the SR for up/nom/down CMS_pu uncertainties (2018) (cut-based)



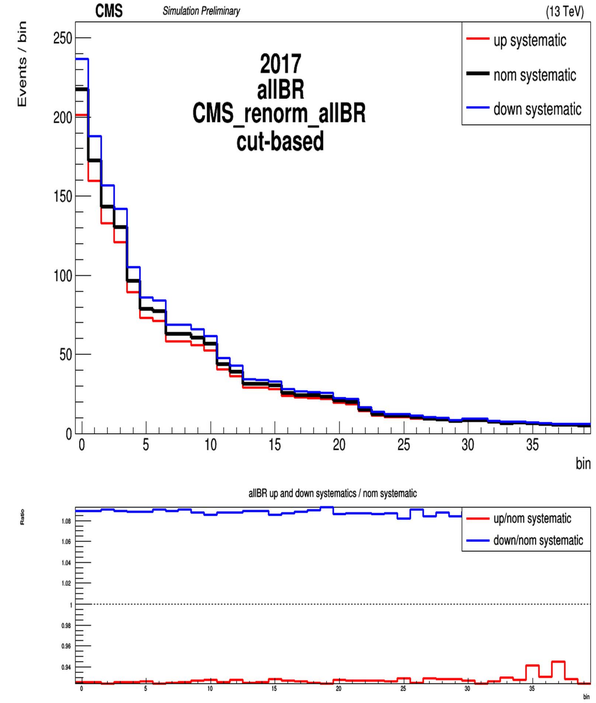
Linearized allBR MC in the SR for up/nom/down CMS_renorm_allBR uncertainties (2016preAPV) (cut-based)



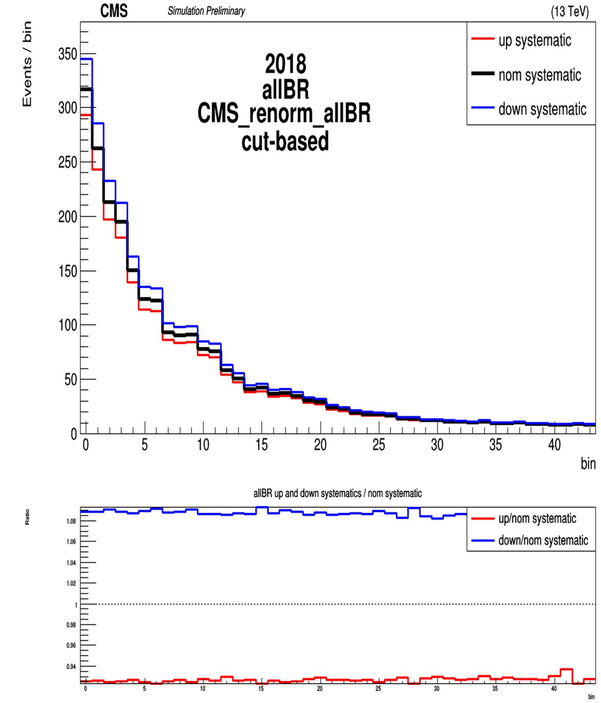
Linearized allBR MC in the SR for up/nom/down CMS_renorm_allBR uncertainties (2016postAPV) (cut-based)



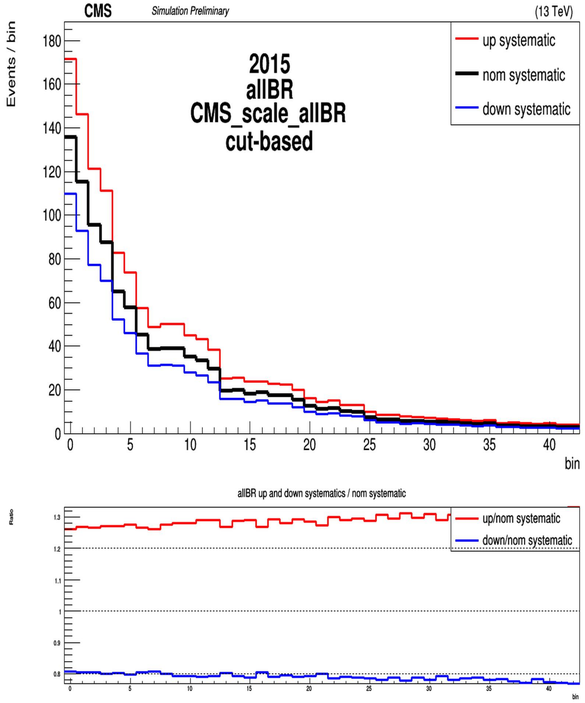
Linearized allBR MC in the SR for up/nom/down CMS_renorm_allBR uncertainties (2017) (cut-based)



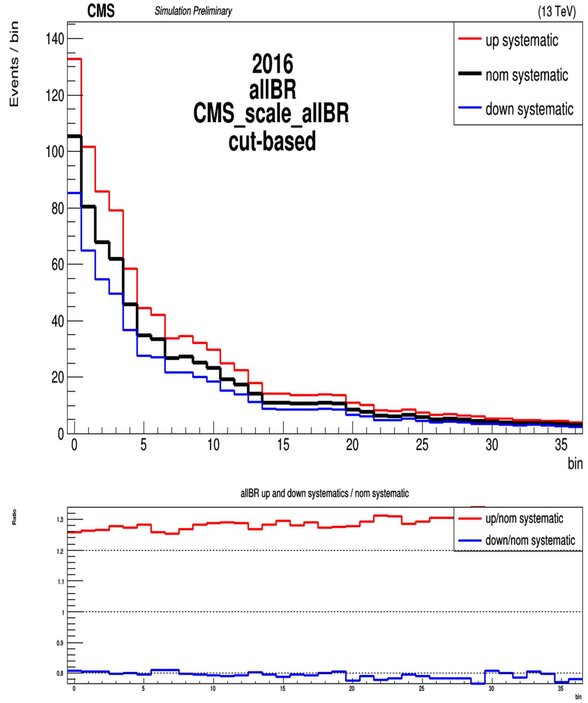
Linearized allBR MC in the SR for up/nom/down CMS_renorm_allBR uncertainties (2018) (cut-based)



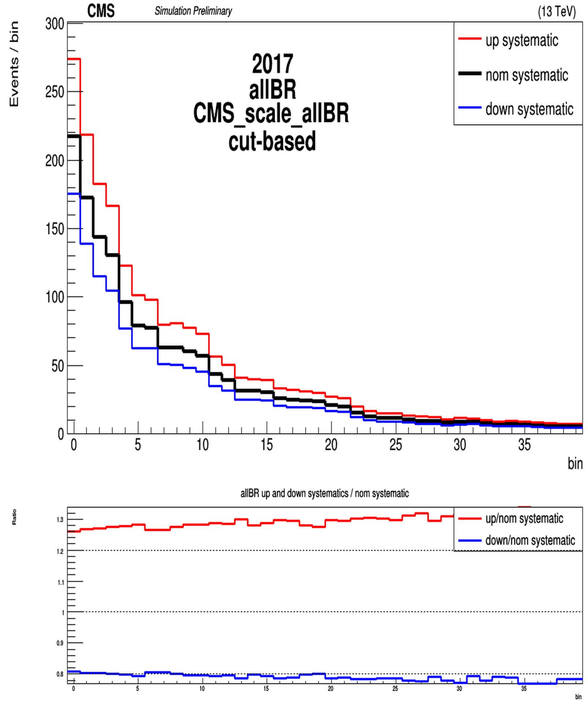
Linearized allBR MC in the SR for up/nom/down CMS_scale_allBR uncertainties (2016preAPV) (cut-based)



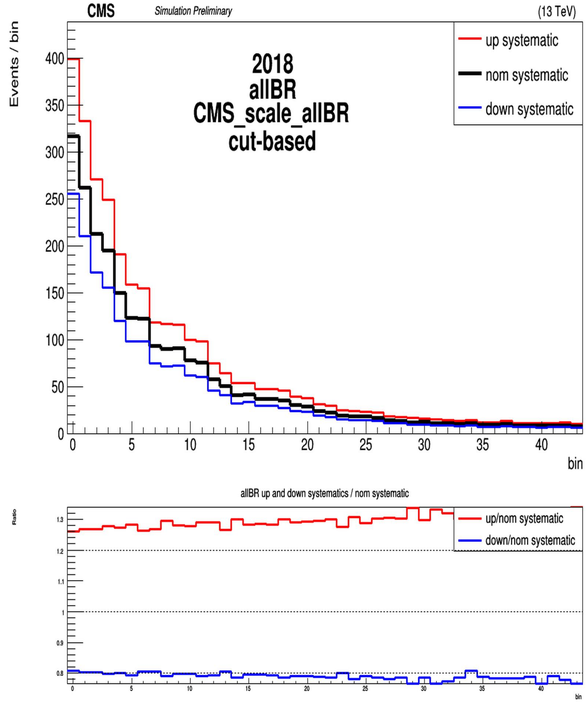
Linearized allBR MC in the SR for up/nom/down CMS_scale_allBR uncertainties (2016postAPV) (cut-based)



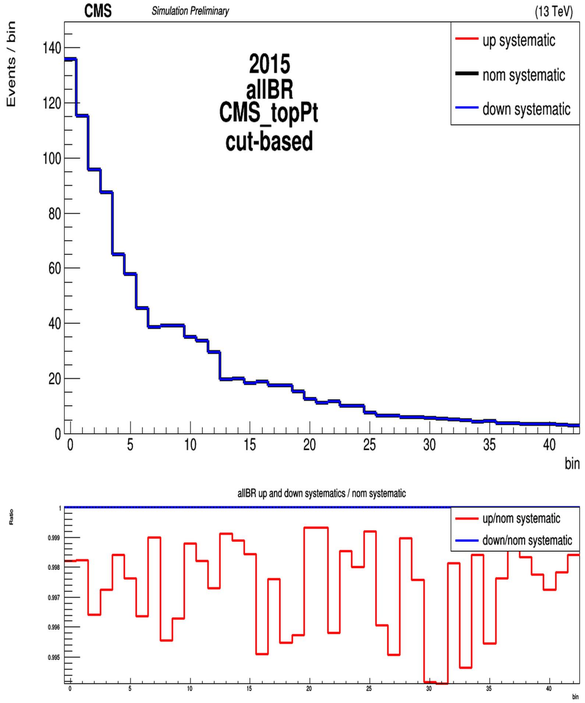
Linearized allBR MC in the SR for up/nom/down CMS_scale_allBR uncertainties (2017) (cut-based)



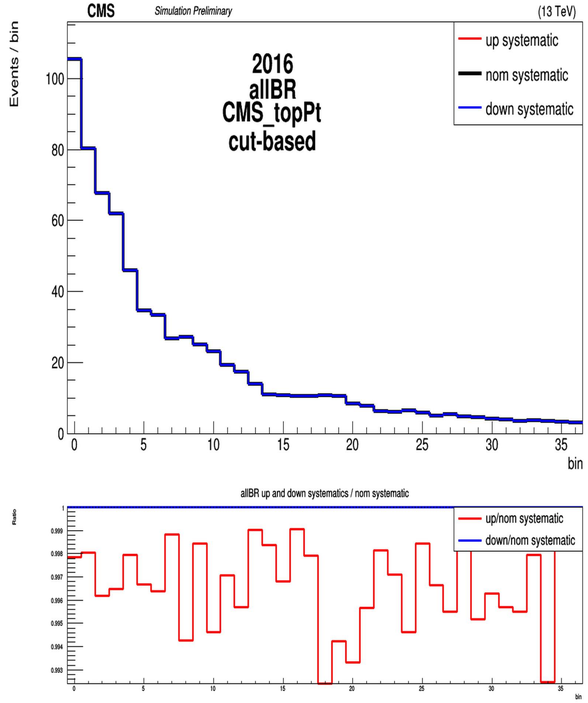
Linearized allBR MC in the SR for up/nom/down CMS_scale_allBR uncertainties (2018) (cut-based)



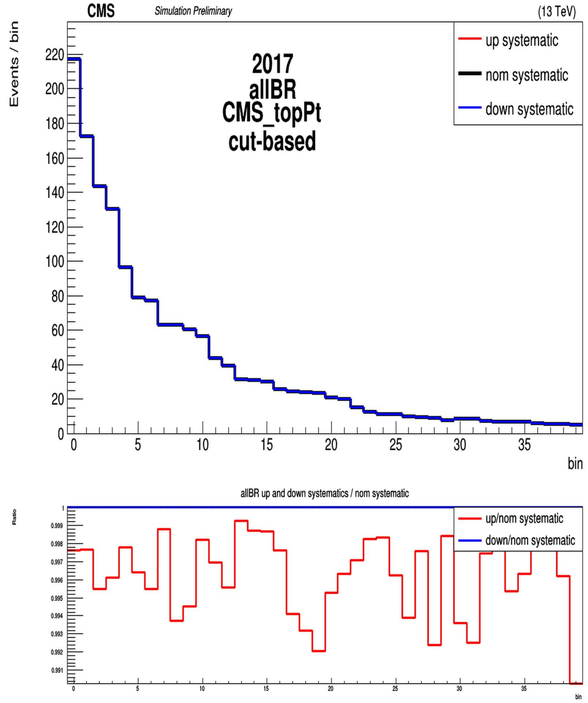
Linearized allBR MC in the SR for up/nom/down CMS_topPt uncertainties (2016preAPV) (cut-based)



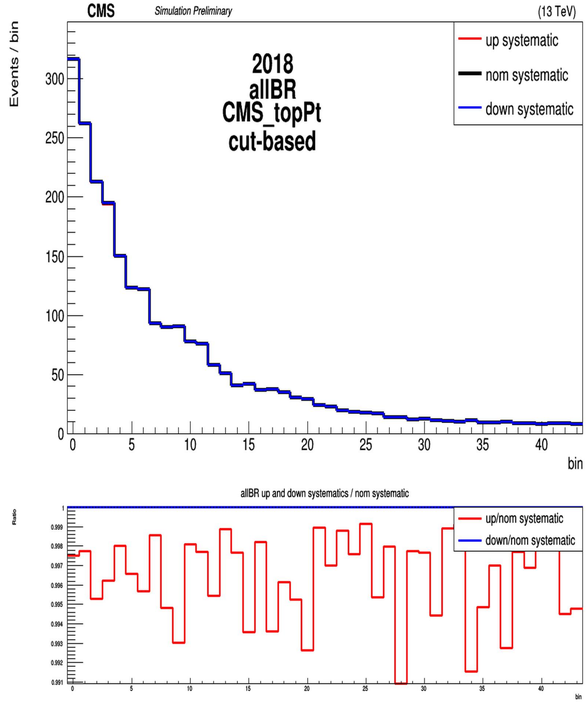
Linearized allBR MC in the SR for up/nom/down CMS_topPt uncertainties (2016postAPV) (cut-based)

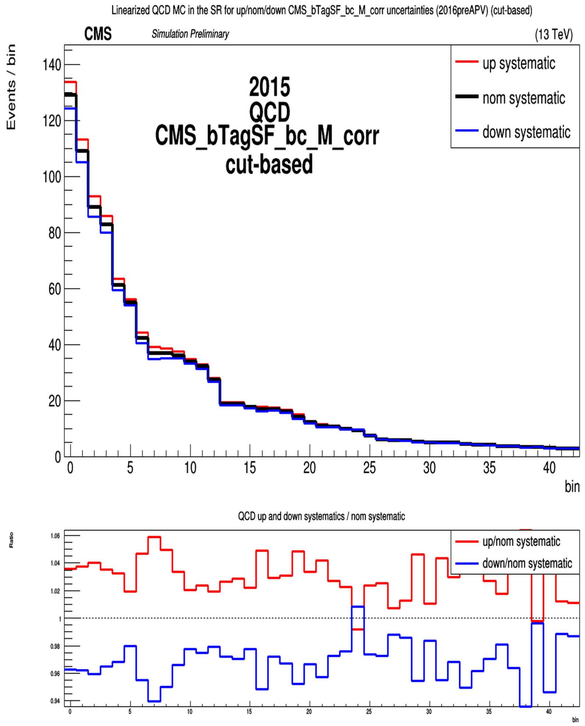


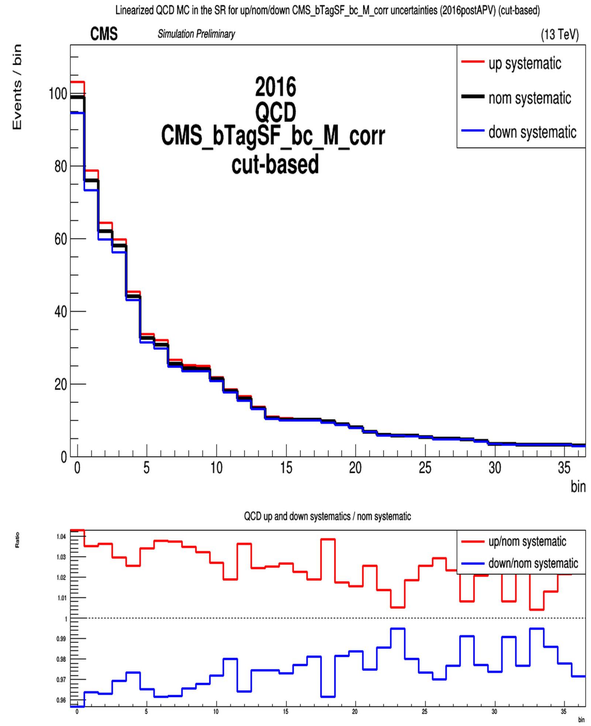
Linearized allBR MC in the SR for up/nom/down CMS_topPt uncertainties (2017) (cut-based)

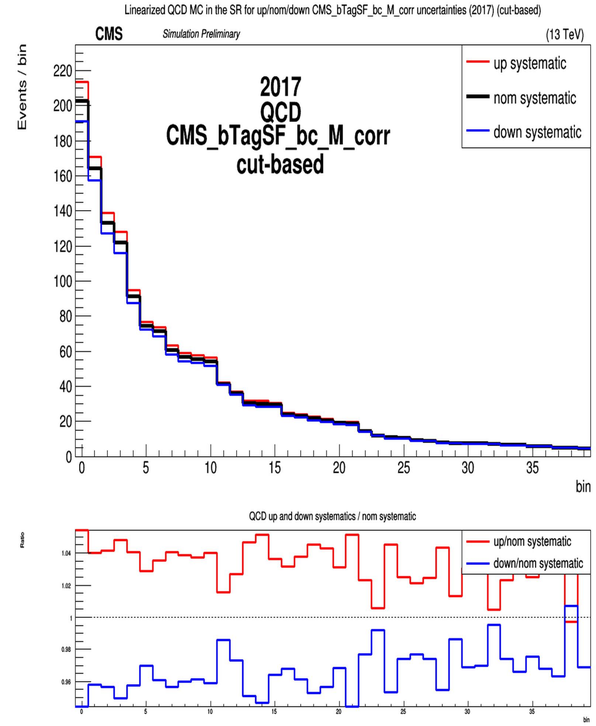


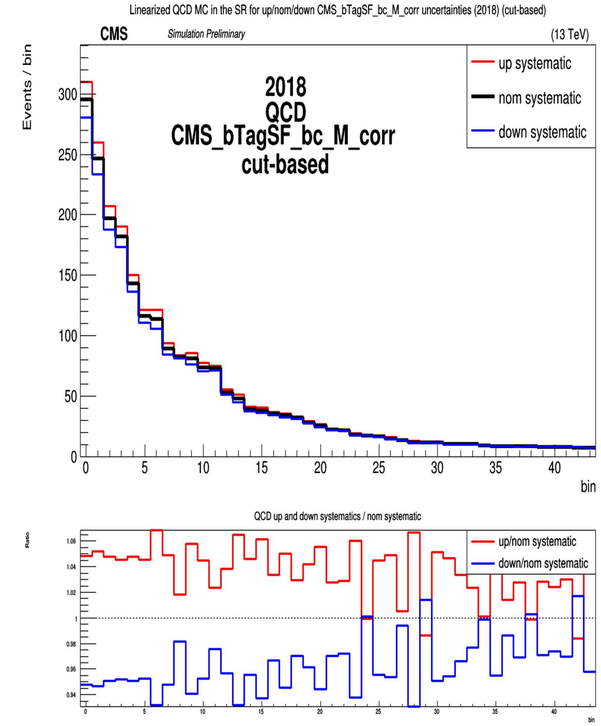
Linearized allBR MC in the SR for up/nom/down CMS_topPt uncertainties (2018) (cut-based)

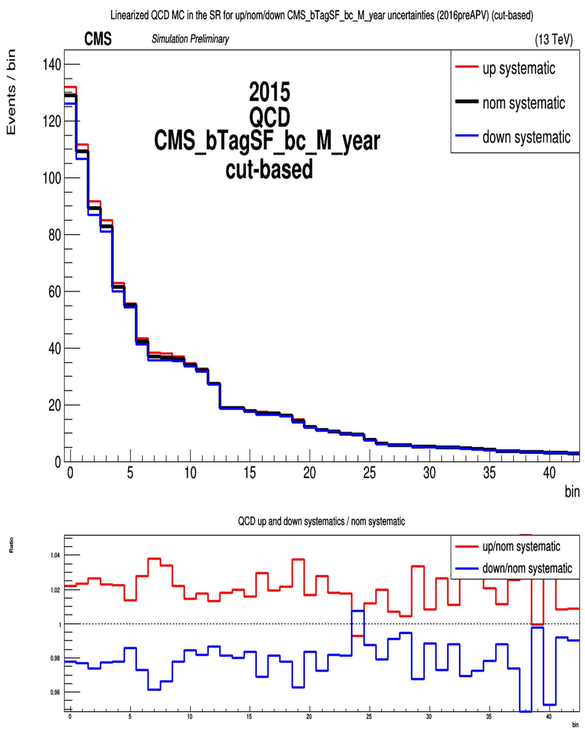


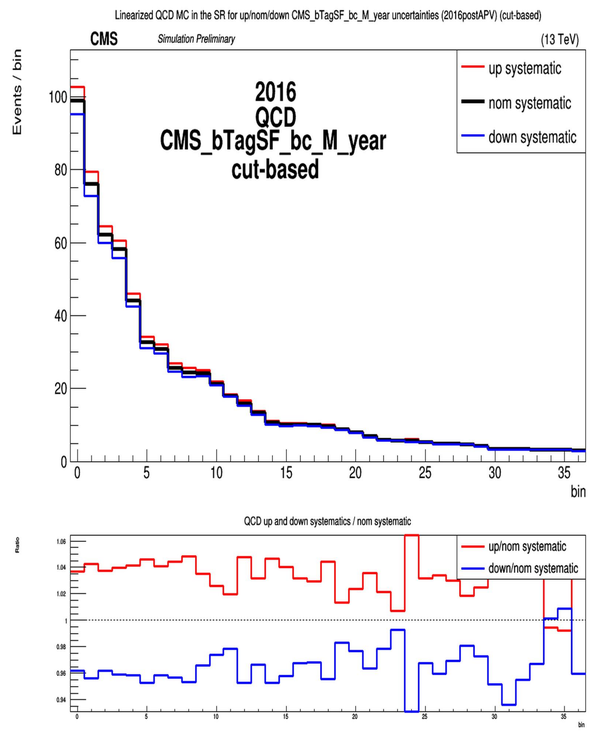

Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_M_corr uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_bTagSF_bc_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

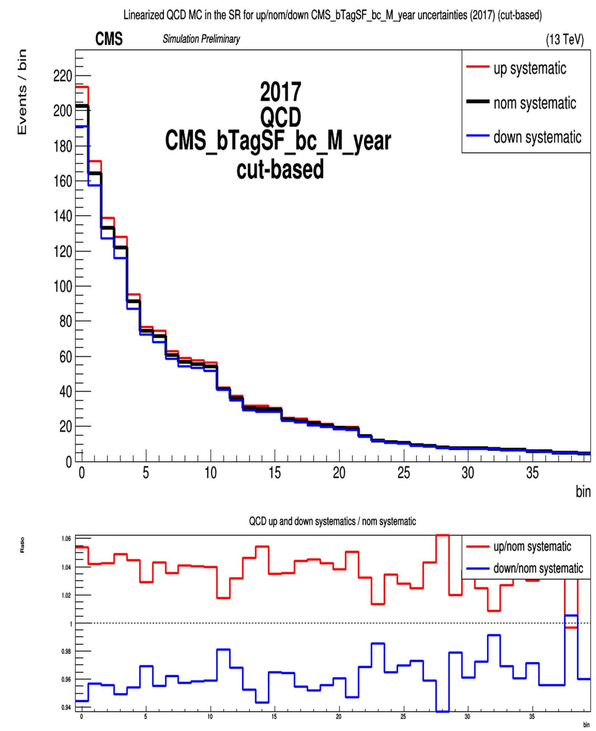

Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_M_corr uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_bTagSF_bc_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

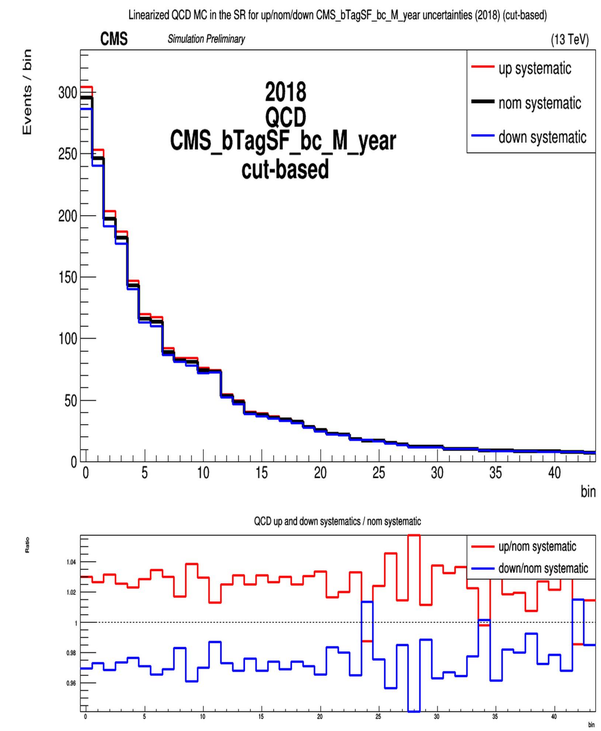

Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_M_corr uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_bTagSF_bc_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_M_corr uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_bTagSF_bc_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

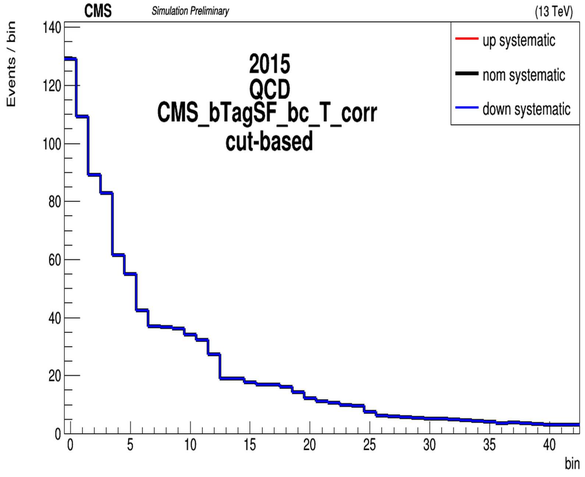

Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_M_year uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_bTagSF_bc_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_M_year uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_bTagSF_bc_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

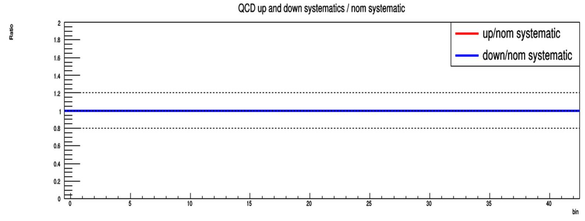

Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_M_year uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_bTagSF_bc_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_M_year uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_bTagSF_bc_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

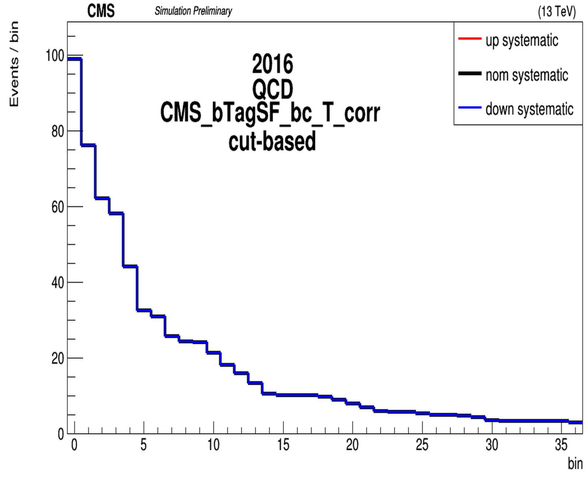
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_T_corr uncertainties (2016preAPV) (cut-based)



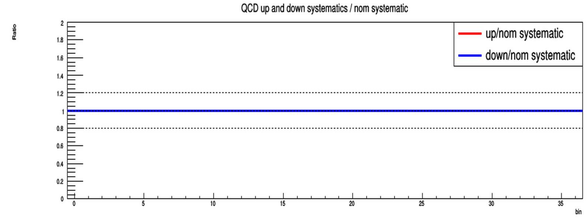
QCD up and down systematics / nom systematic



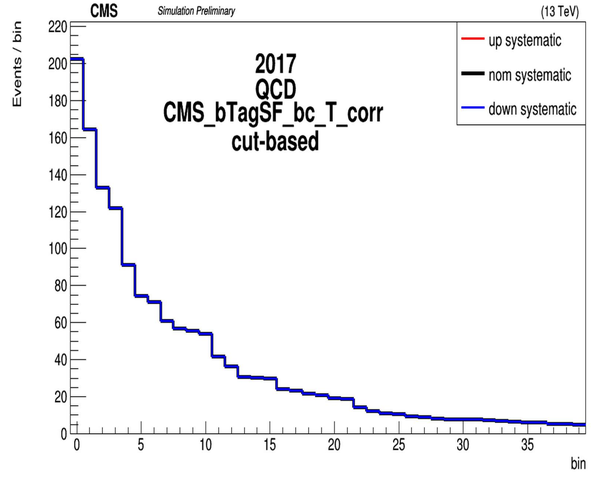
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_T_corr uncertainties (2016postAPV) (cut-based)



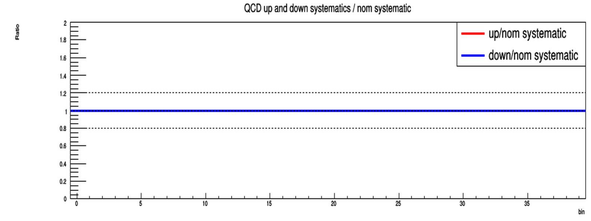
QCD up and down systematics / nom systematic



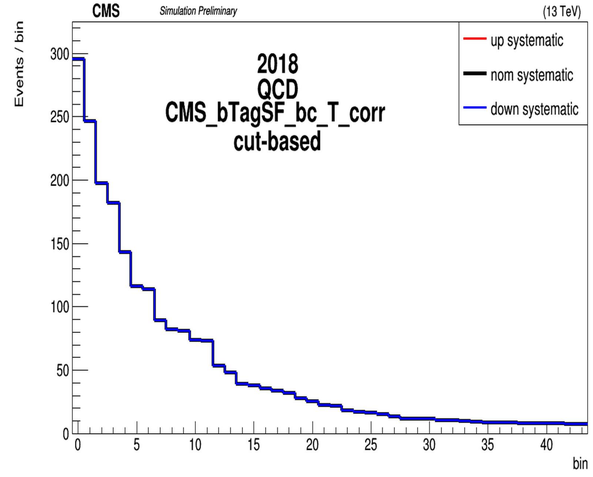
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_T_corr uncertainties (2017) (cut-based)



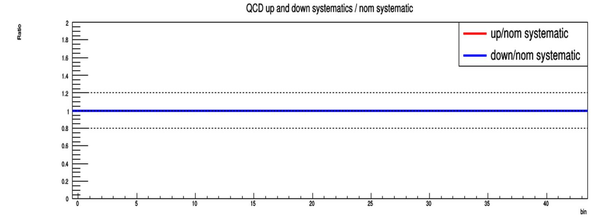
QCD up and down systematics / nom systematic



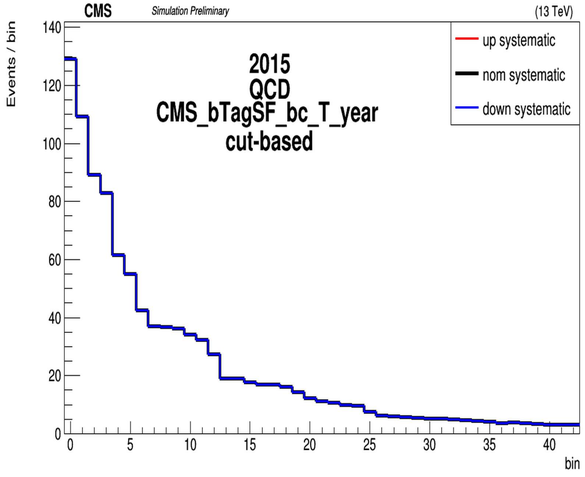
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_T_corr uncertainties (2018) (cut-based)



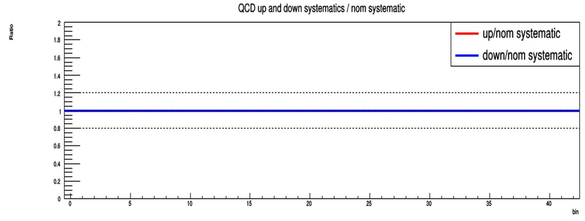
QCD up and down systematics / nom systematic



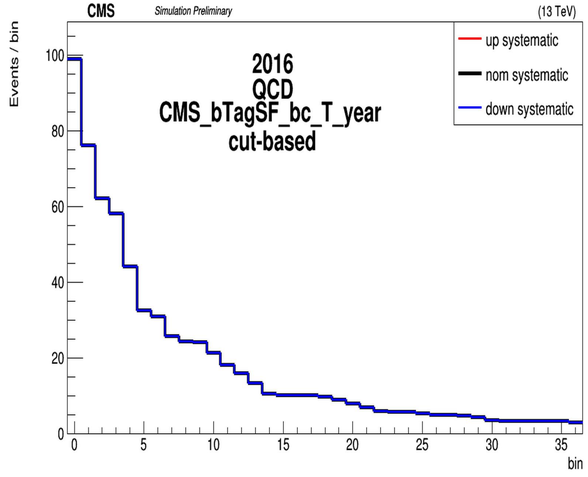
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_T_year uncertainties (2016preAPV) (cut-based)



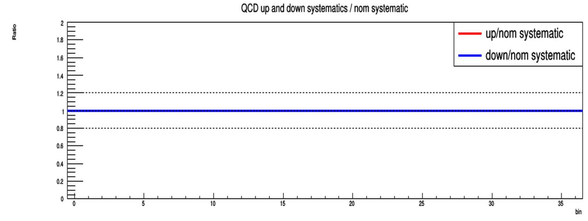
QCD up and down systematics / nom systematic



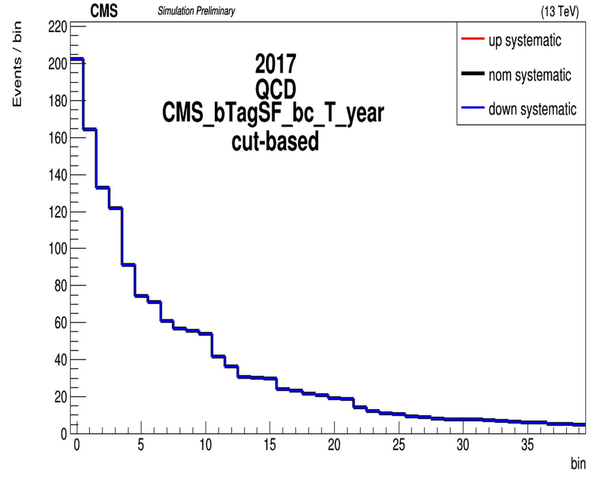
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_T_year uncertainties (2016postAPV) (cut-based)



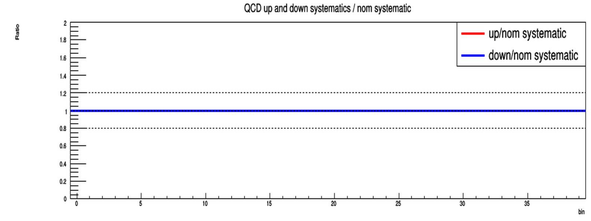
QCD up and down systematics / nom systematic



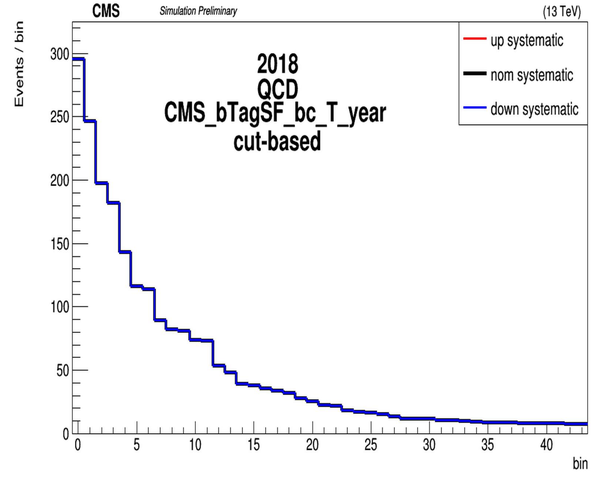
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_T_year uncertainties (2017) (cut-based)



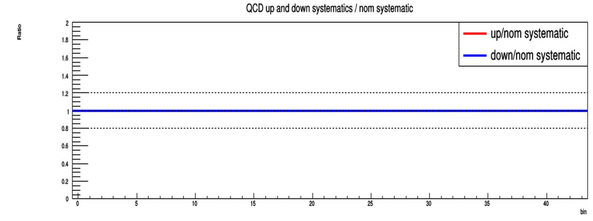
QCD up and down systematics / nom systematic

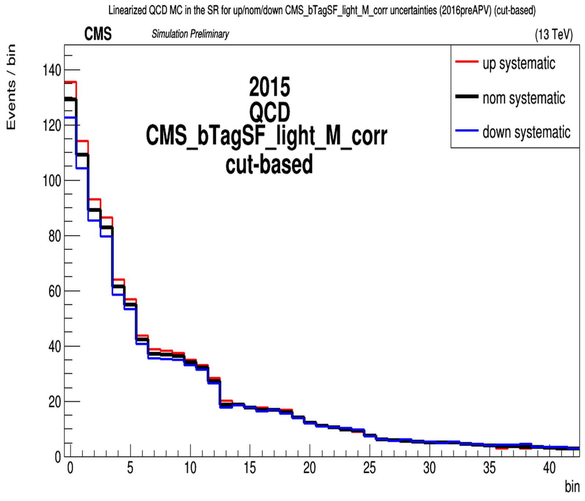


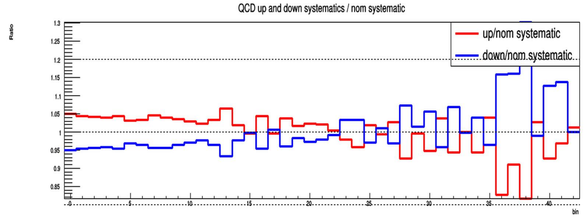
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_bc_T_year uncertainties (2018) (cut-based)

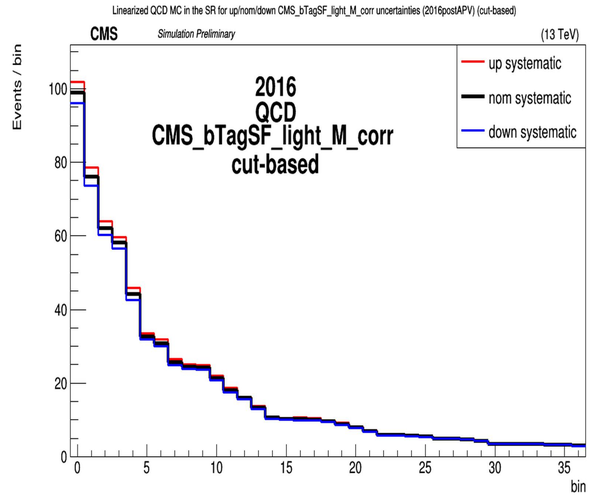


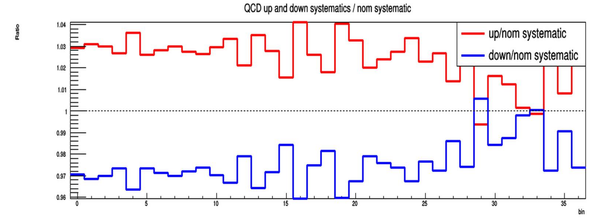
QCD up and down systematics / nom systematic

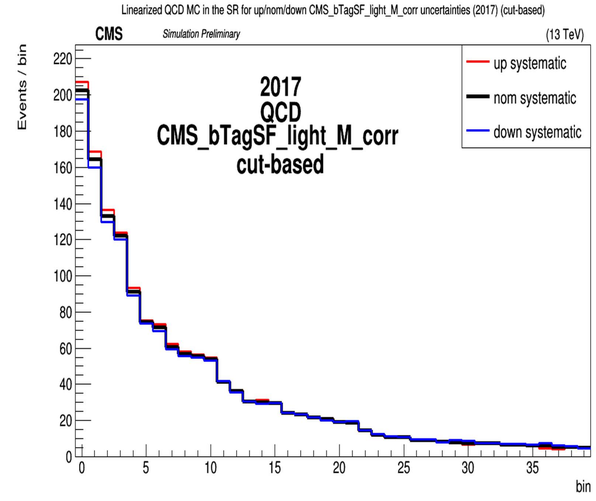


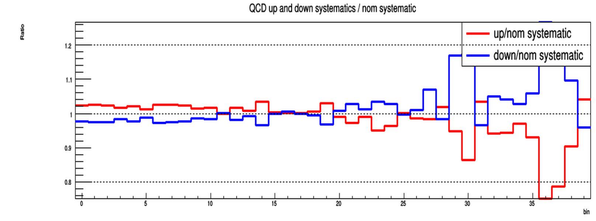

Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_M_corr uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_bTagSF_light_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

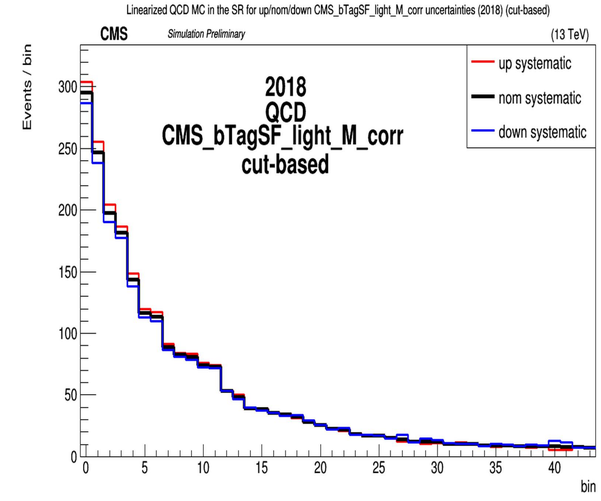

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

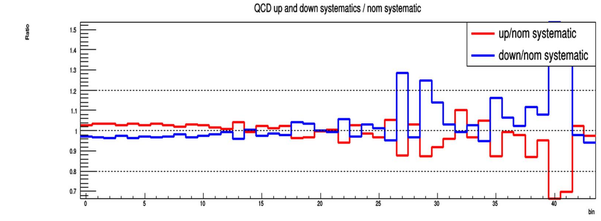

Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_M_corr uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_bTagSF_light_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

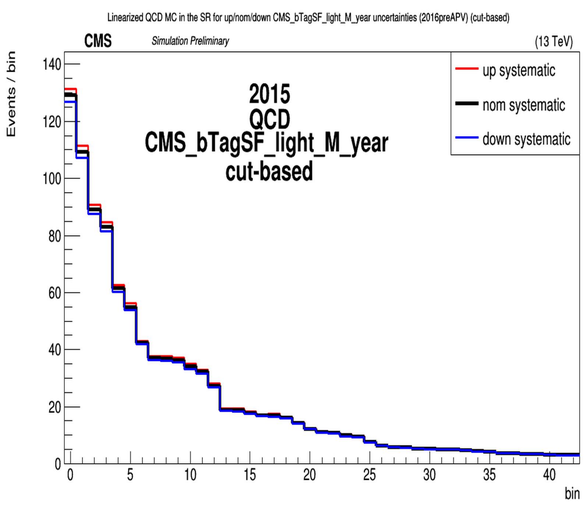

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

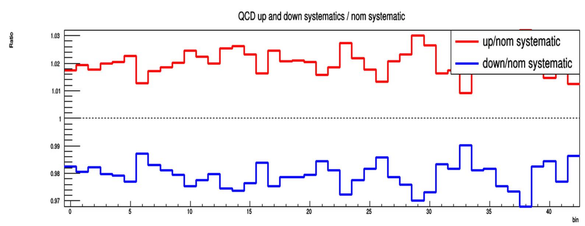

Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_M_corr uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_bTagSF_light_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

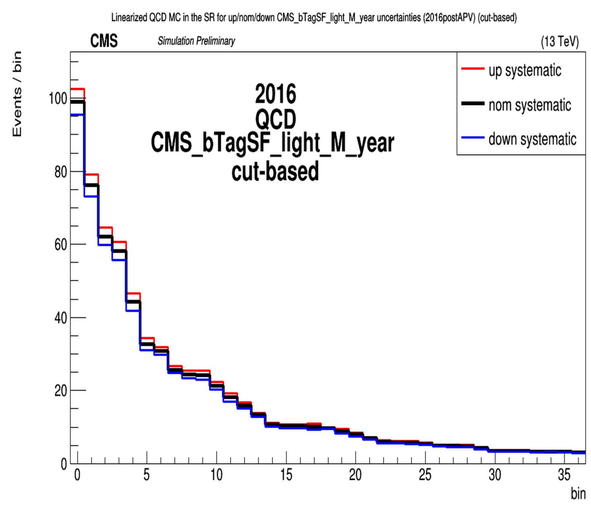

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

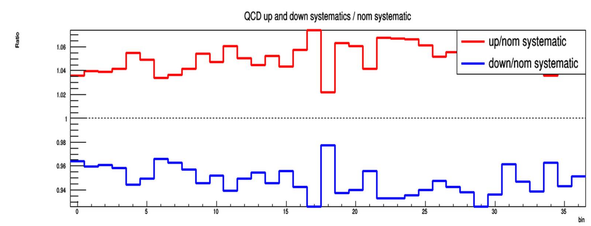

Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_M_corr uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_bTagSF_light_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

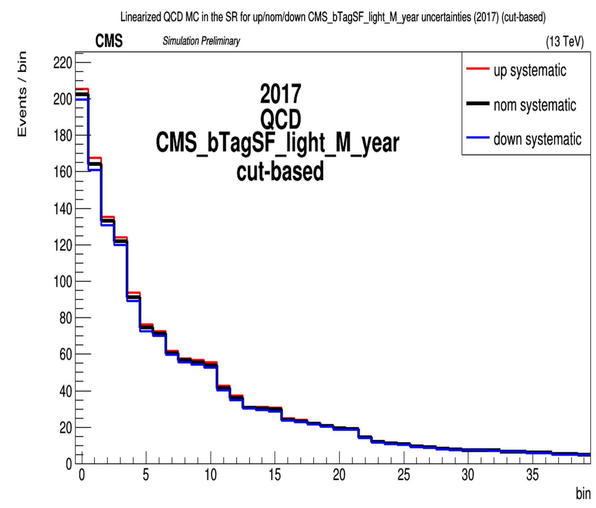

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin


Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_M_year uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_bTagSF_light_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin


QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin


Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_M_year uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_bTagSF_light_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin


QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin


Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_M_year uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_bTagSF_light_M_year
cut-based
up systematic
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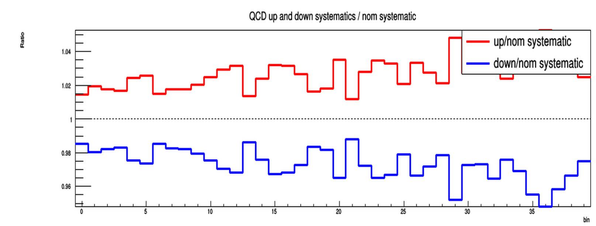
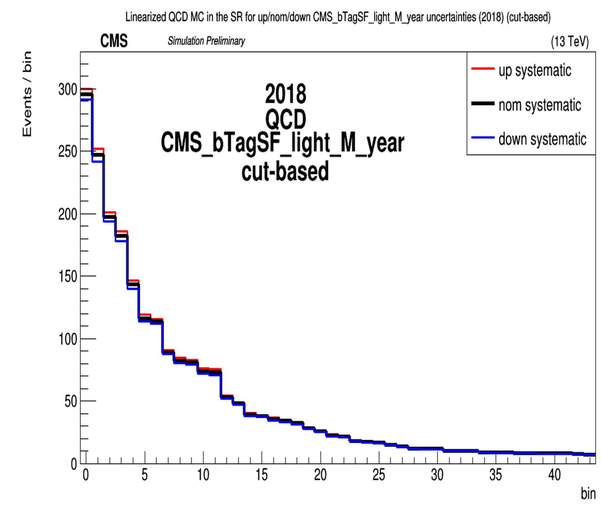
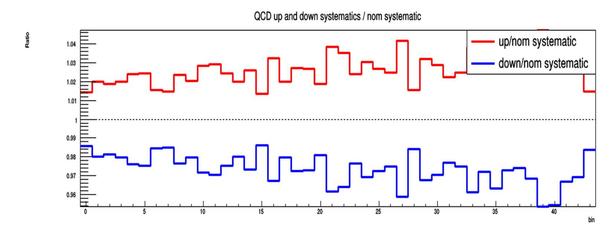
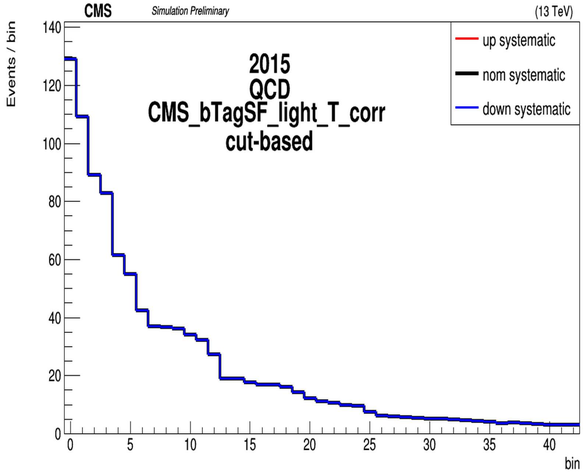
Events / bin
bin


QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

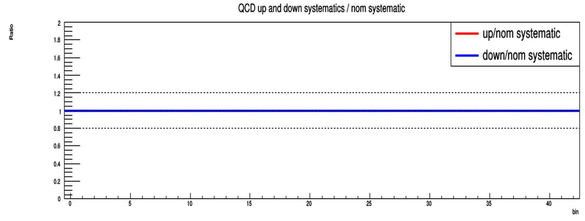

Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_M_year uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_bTagSF_light_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin


QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

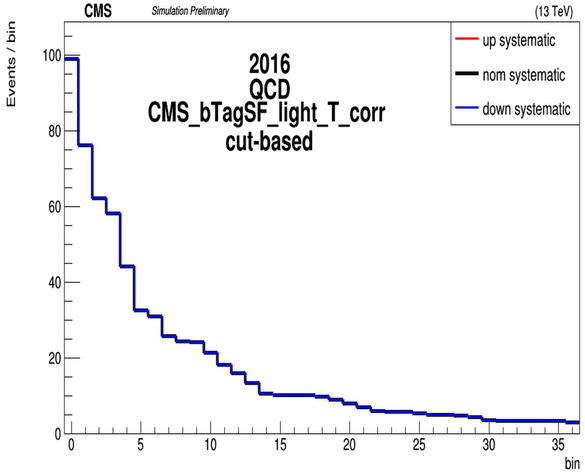
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_T_corr uncertainties (2016preAPV) (cut-based)



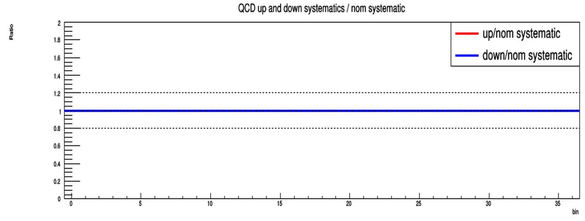
QCD up and down systematics / nom systematic



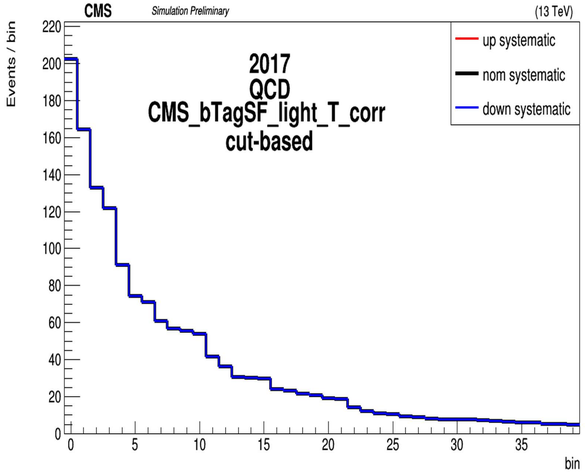
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_T_corr uncertainties (2016postAPV) (cut-based)



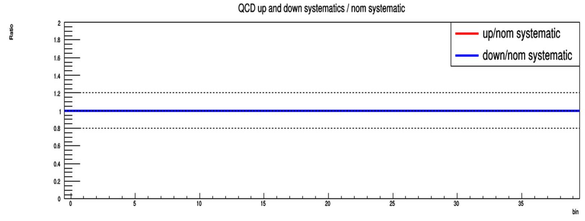
QCD up and down systematics / nom systematic



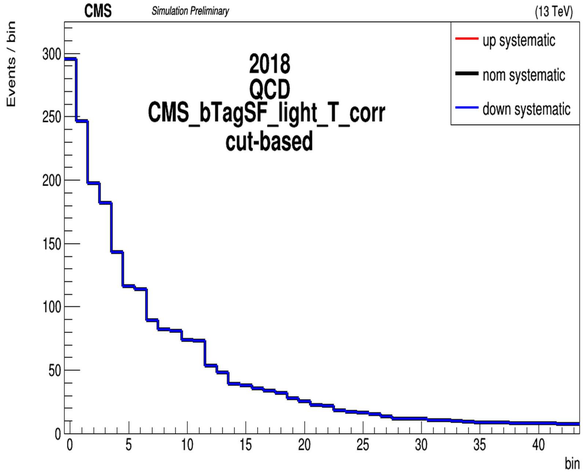
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_T_corr uncertainties (2017) (cut-based)



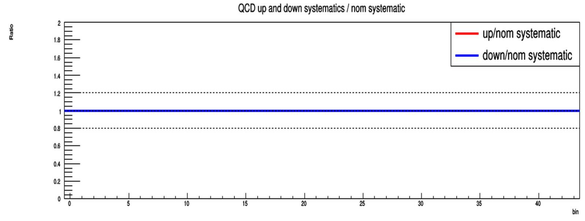
QCD up and down systematics / nom systematic



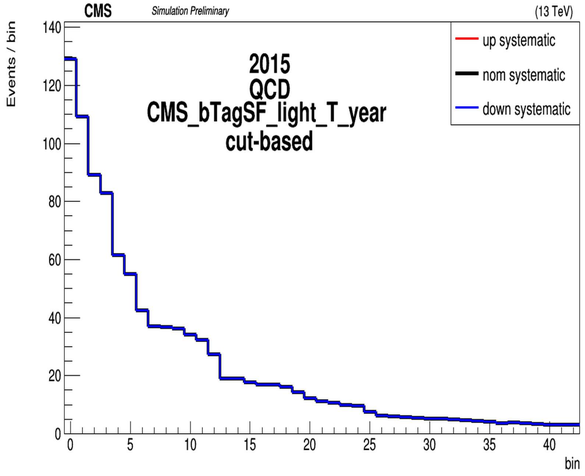
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_T_corr uncertainties (2018) (cut-based)



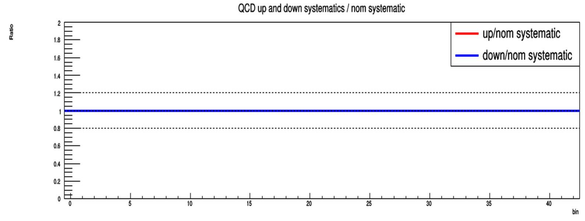
QCD up and down systematics / nom systematic



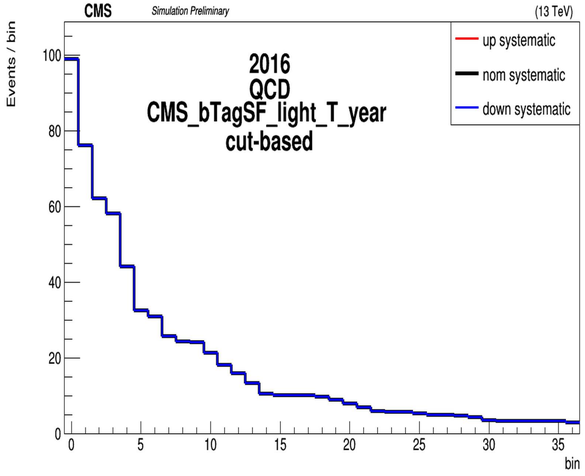
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_T_year uncertainties (2016preAPV) (cut-based)



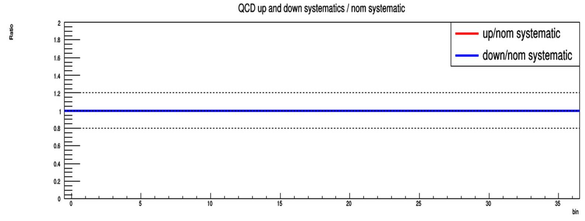
QCD up and down systematics / nom systematic



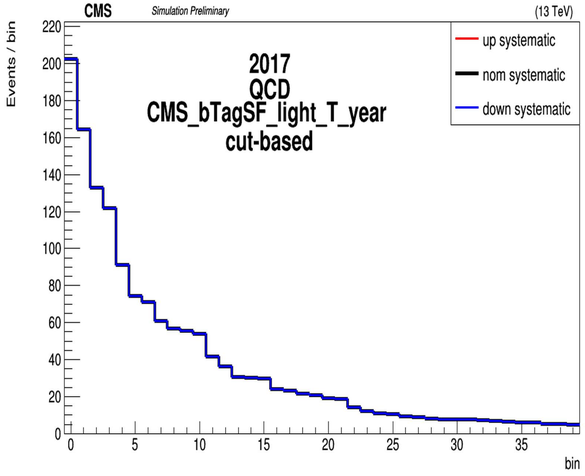
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_T_year uncertainties (2016postAPV) (cut-based)



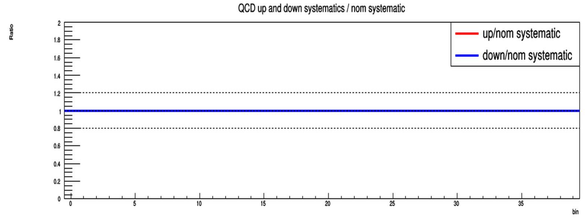
QCD up and down systematics / nom systematic



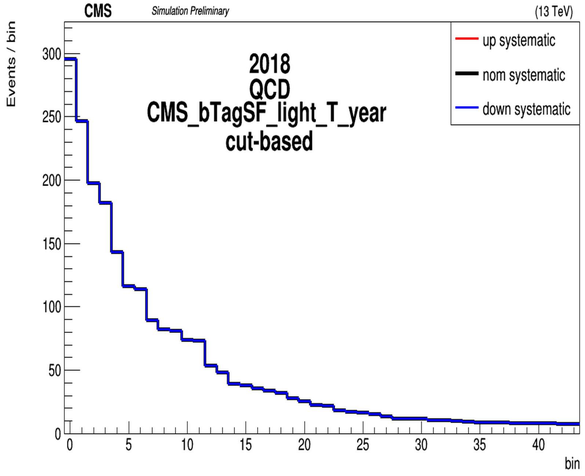
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_T_year uncertainties (2017) (cut-based)



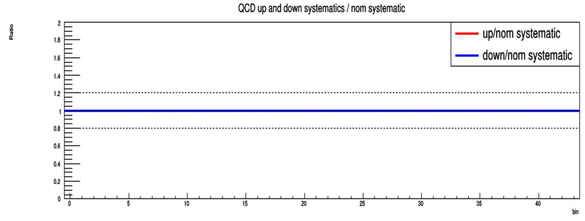
QCD up and down systematics / nom systematic



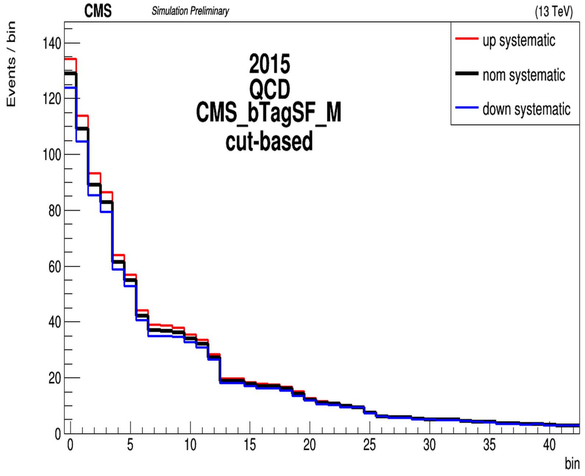
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_light_T_year uncertainties (2018) (cut-based)

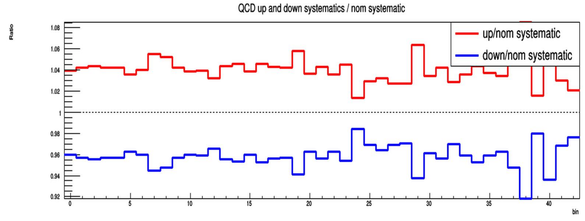


QCD up and down systematics / nom systematic

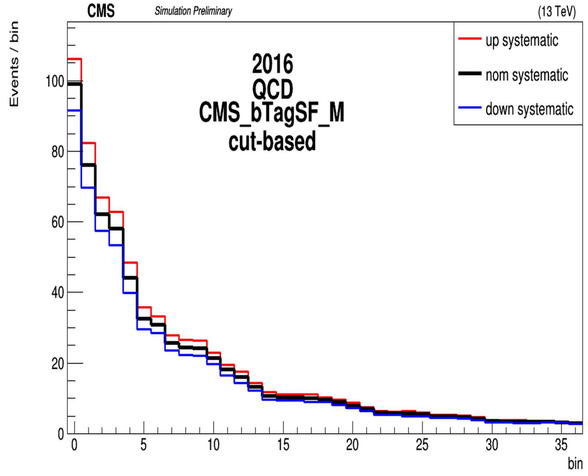


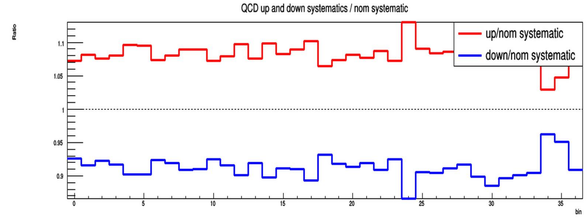
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_M uncertainties (2016preAPV) (cut-based)



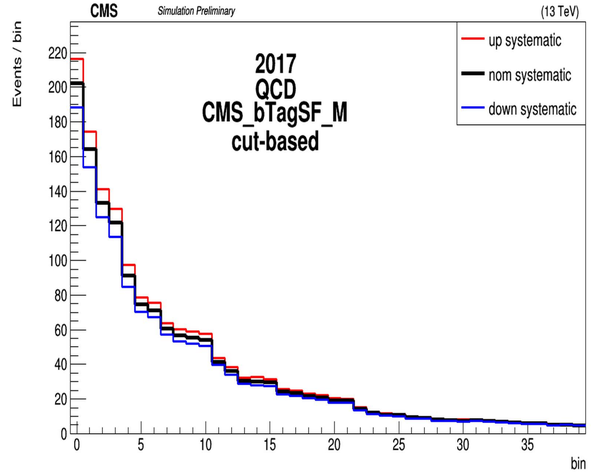


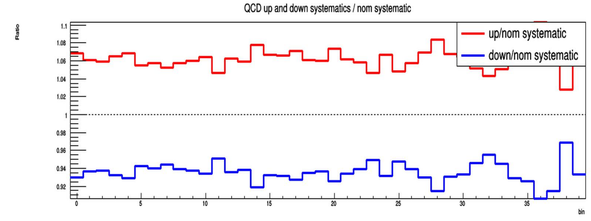
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_M uncertainties (2016postAPV) (cut-based)



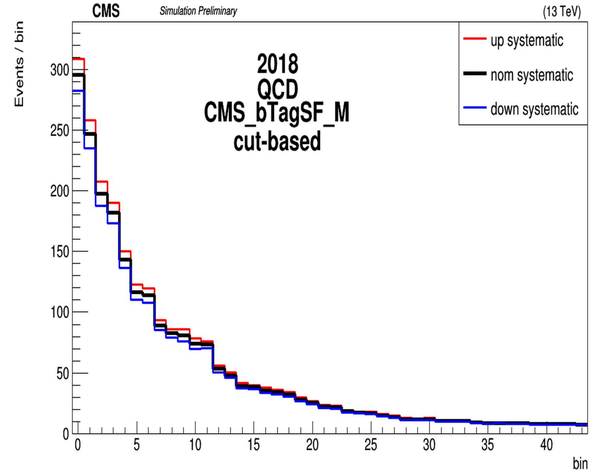


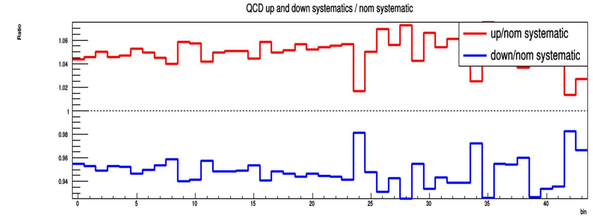
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_M uncertainties (2017) (cut-based)



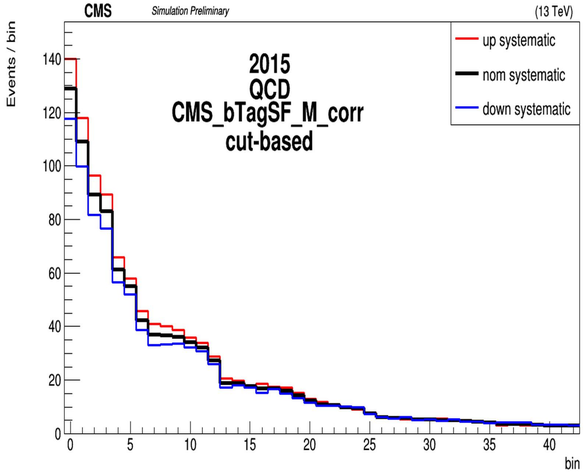


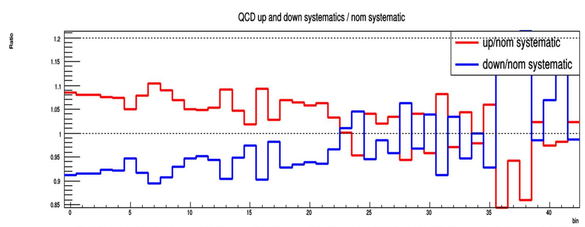
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_M uncertainties (2018) (cut-based)



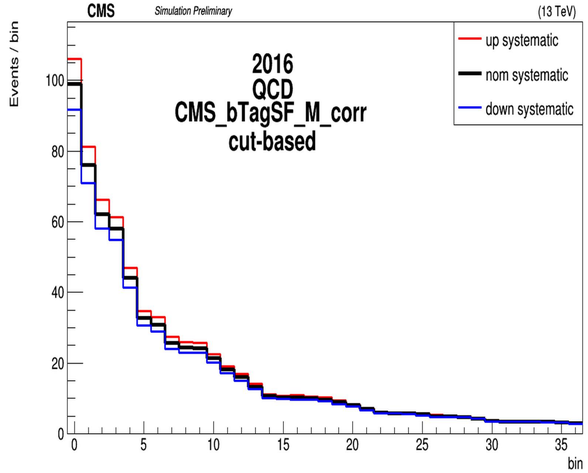


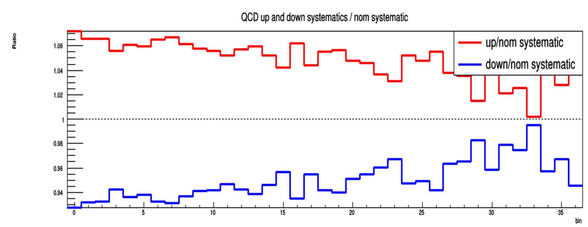
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_M_corr uncertainties (2016preAPV) (cut-based)



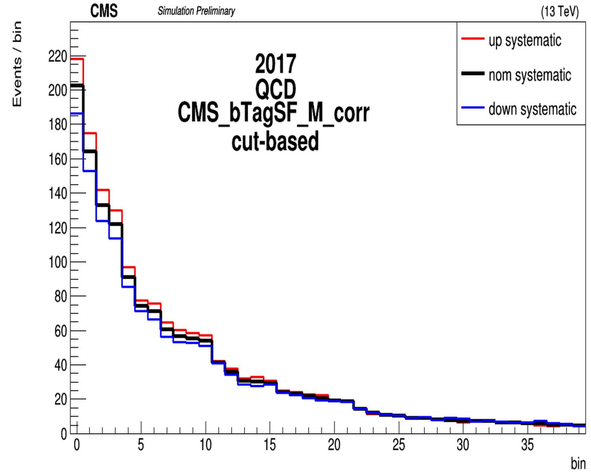


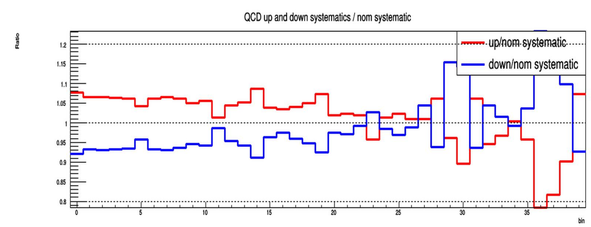
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_M_corr uncertainties (2016postAPV) (cut-based)



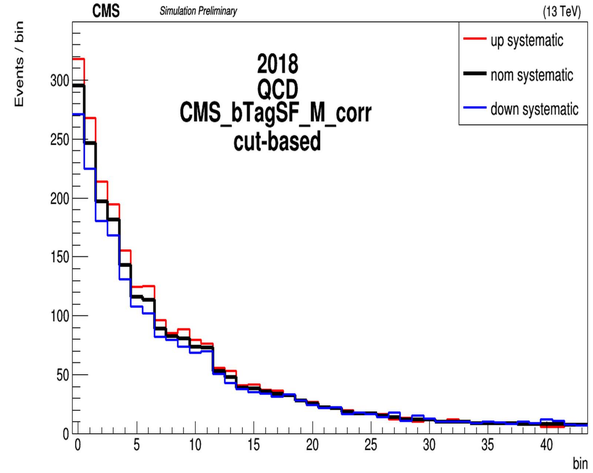


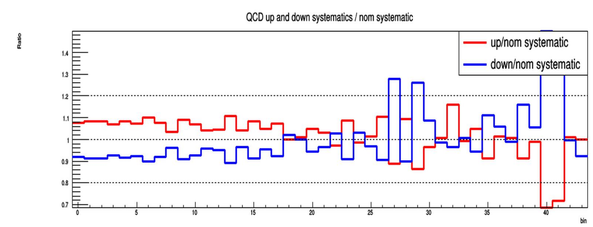
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_M_corr uncertainties (2017) (cut-based)



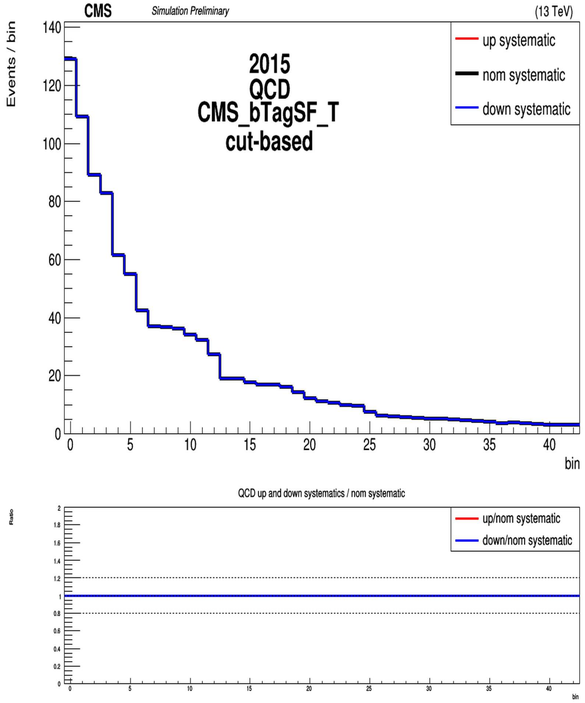


Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_M_corr uncertainties (2018) (cut-based)

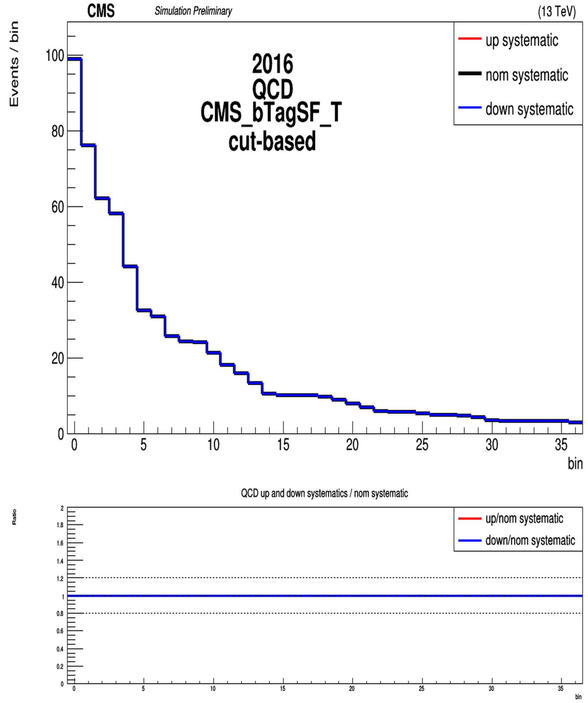




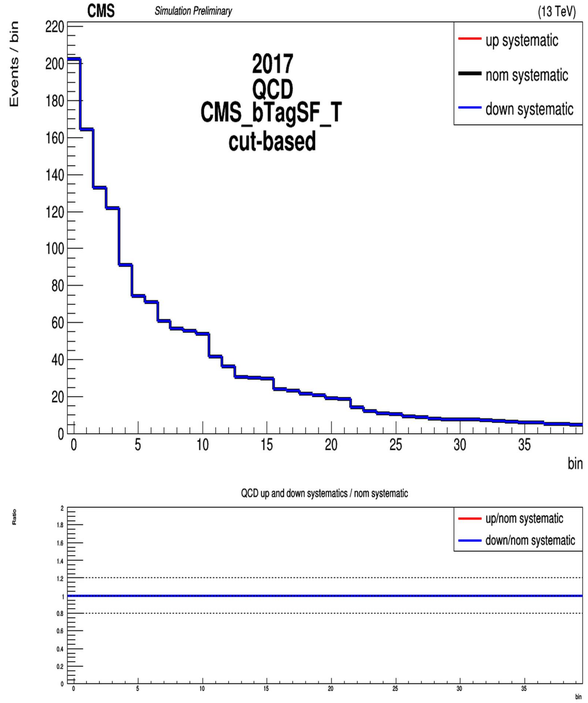
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_T uncertainties (2016preAPV) (cut-based)



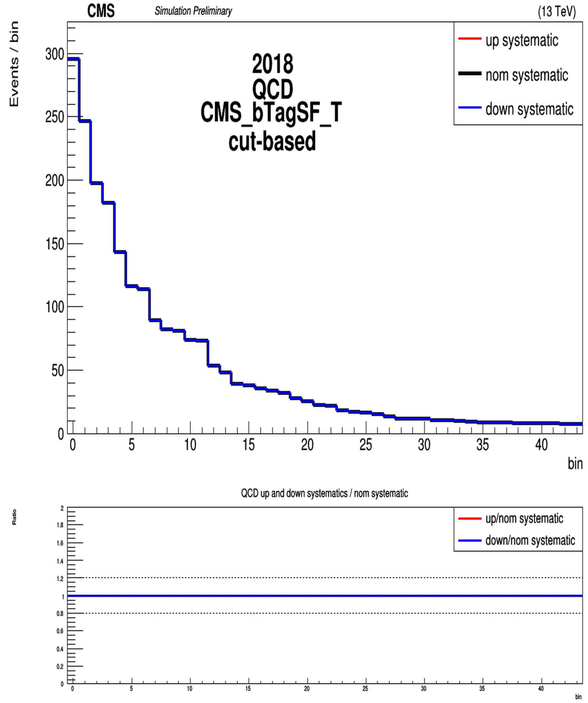
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_T uncertainties (2016postAPV) (cut-based)



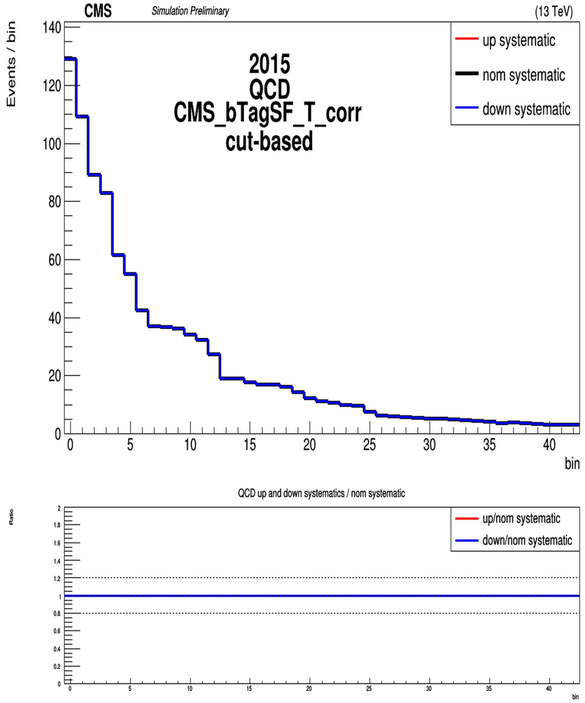
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_T uncertainties (2017) (cut-based)



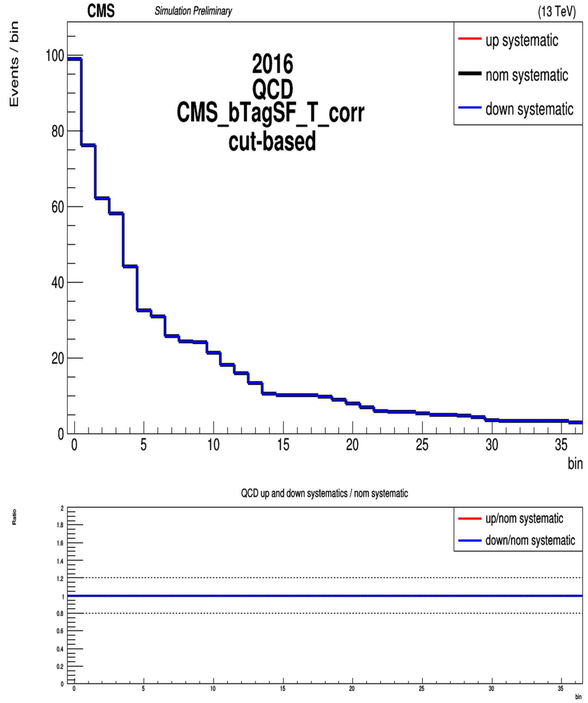
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_T uncertainties (2018) (cut-based)



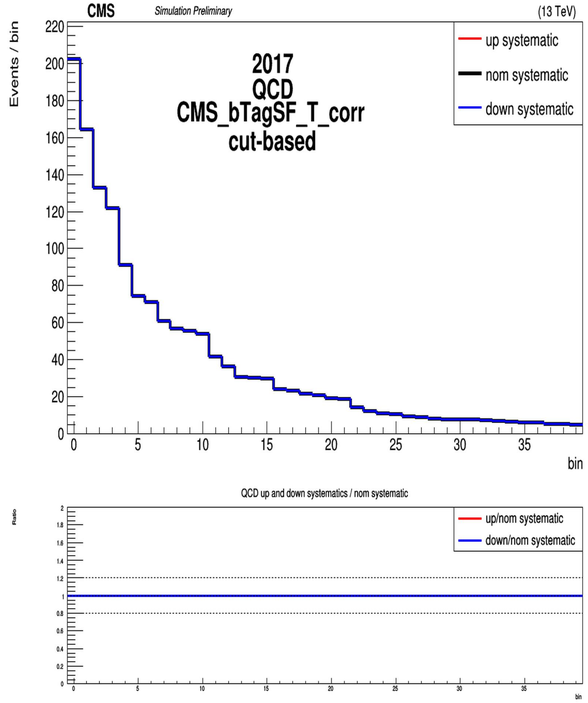
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_T_corr uncertainties (2016preAPV) (cut-based)



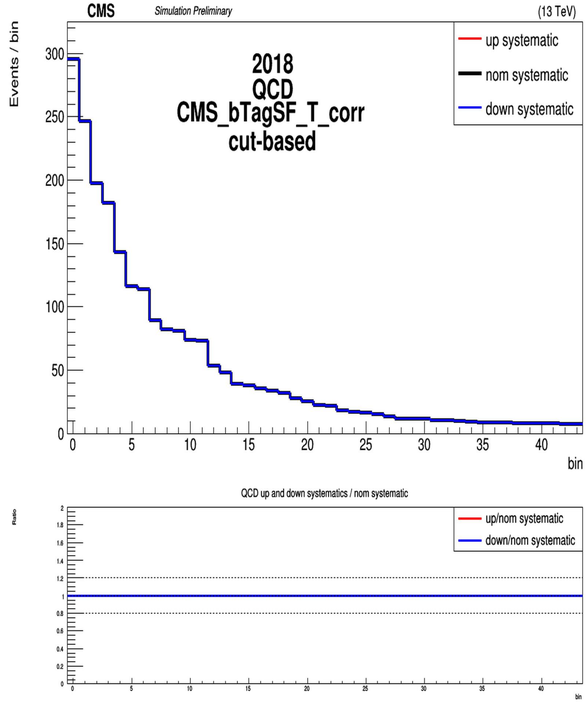
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_T_corr uncertainties (2016postAPV) (cut-based)

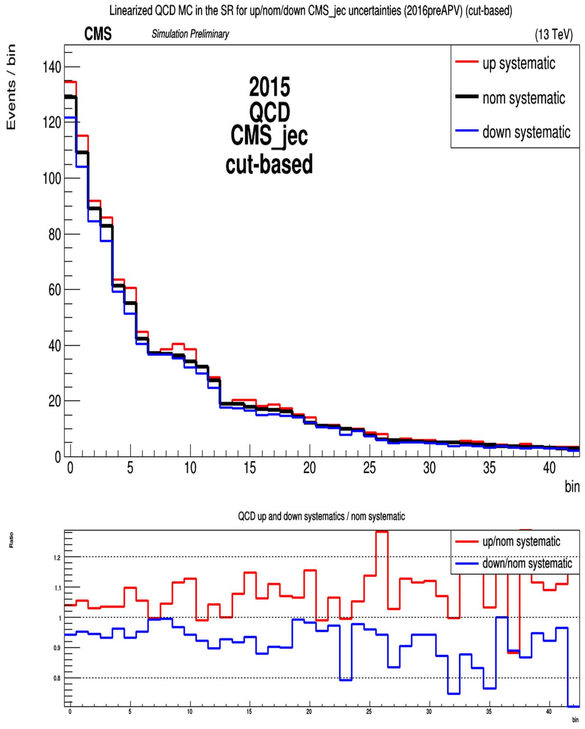


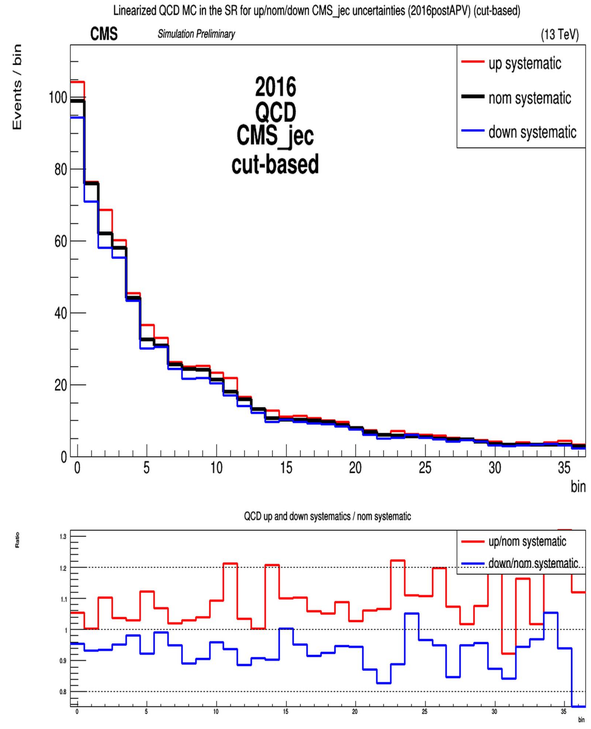
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_T_corr uncertainties (2017) (cut-based)

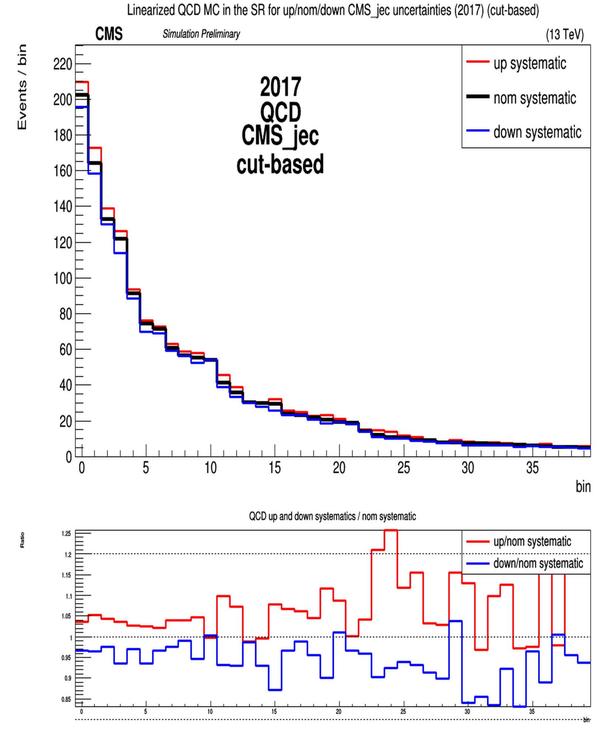


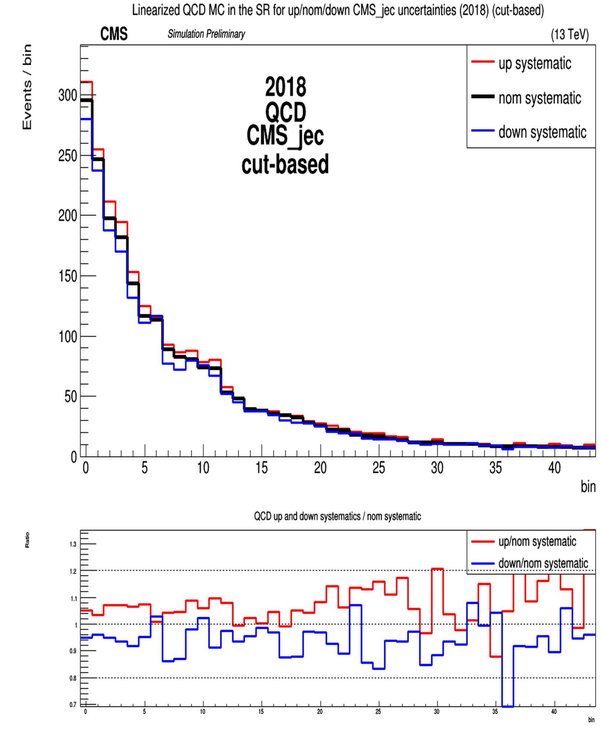
Linearized QCD MC in the SR for up/nom/down CMS_bTagSF_T_corr uncertainties (2018) (cut-based)

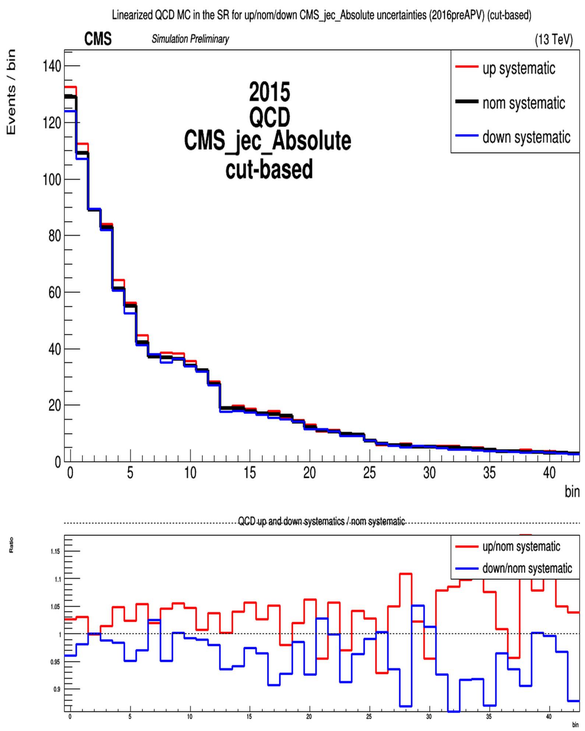


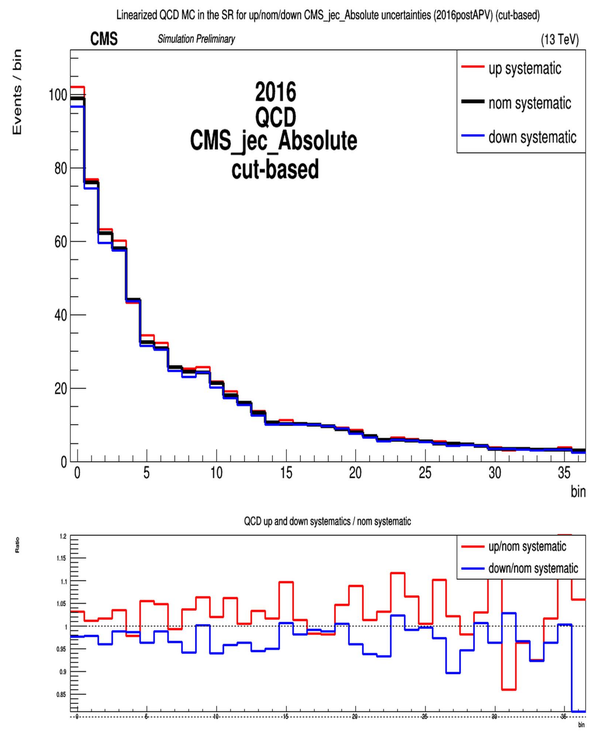

Linearized QCD MC in the SR for up/nom/down CMS_jec uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_jec
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

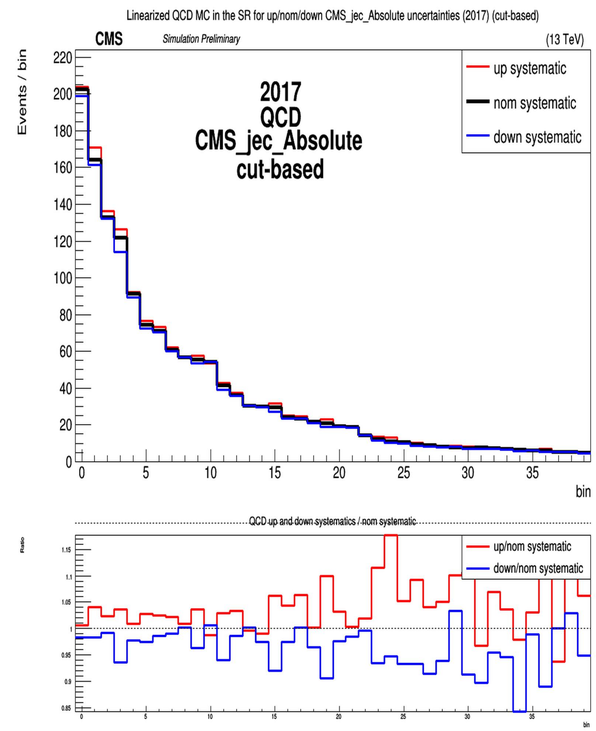

Linearized QCD MC in the SR for up/nom/down CMS_jec uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_jec
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

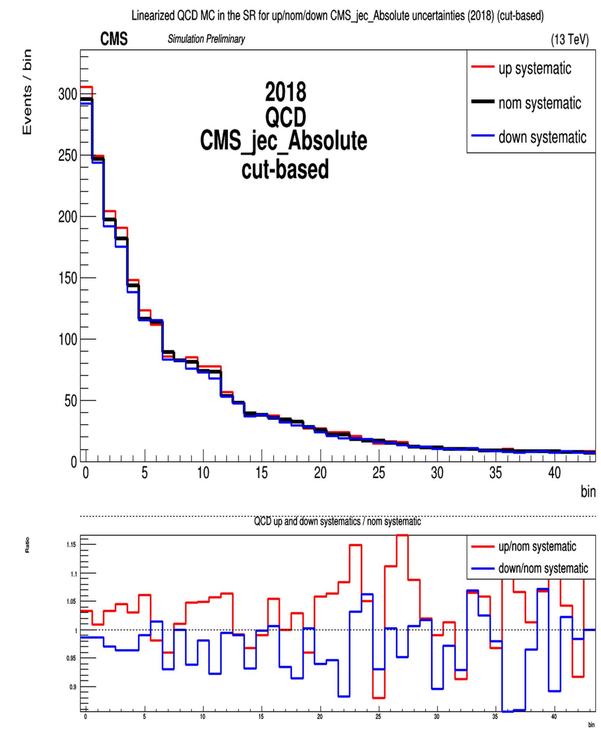

Linearized QCD MC in the SR for up/nom/down CMS_jec uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_jec
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

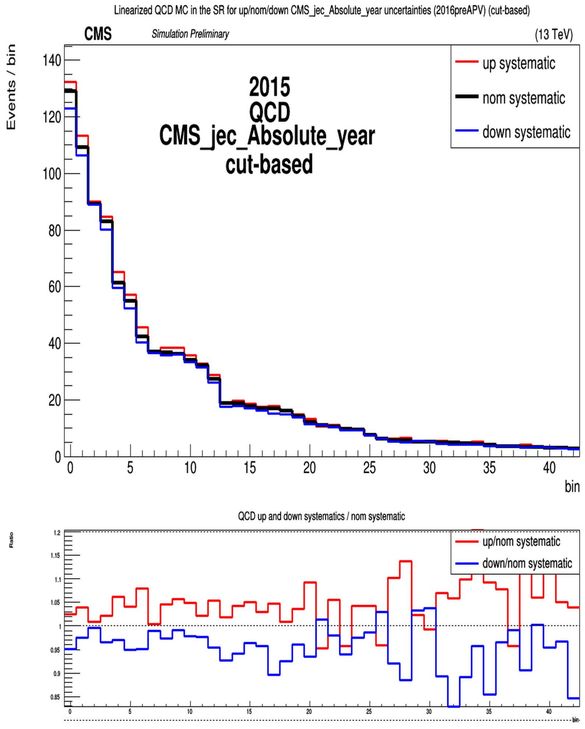

Linearized QCD MC in the SR for up/nom/down CMS_jec uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_jec
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

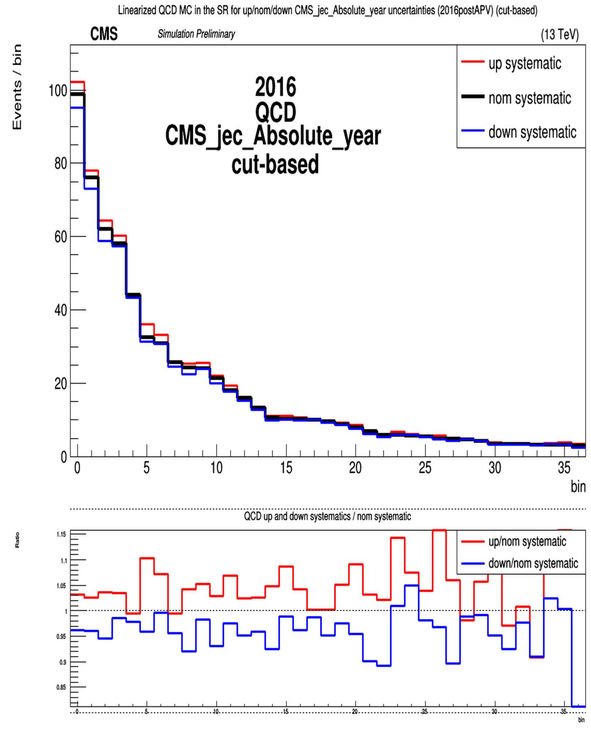

Linearized QCD MC in the SR for up/nom/down CMS_jec_Absolute uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_jec_Absolute
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

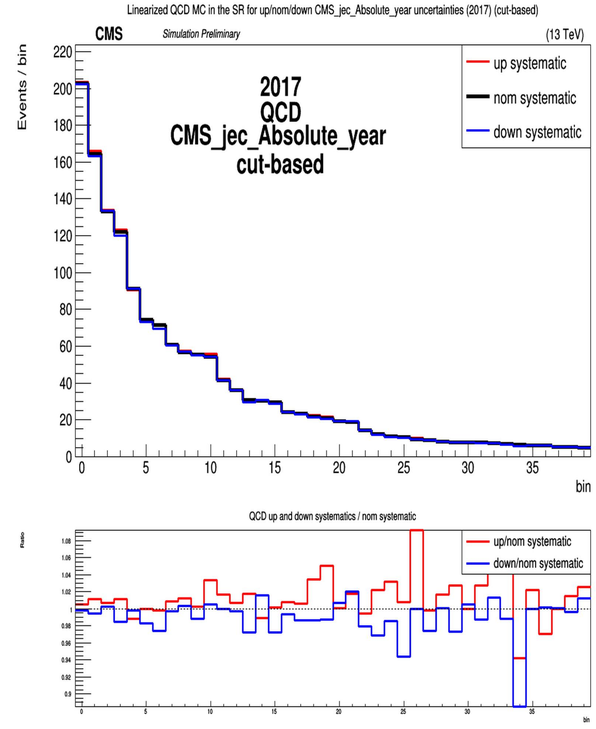

Linearized QCD MC in the SR for up/nom/down CMS_jec_Absolute uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_jec_Absolute
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

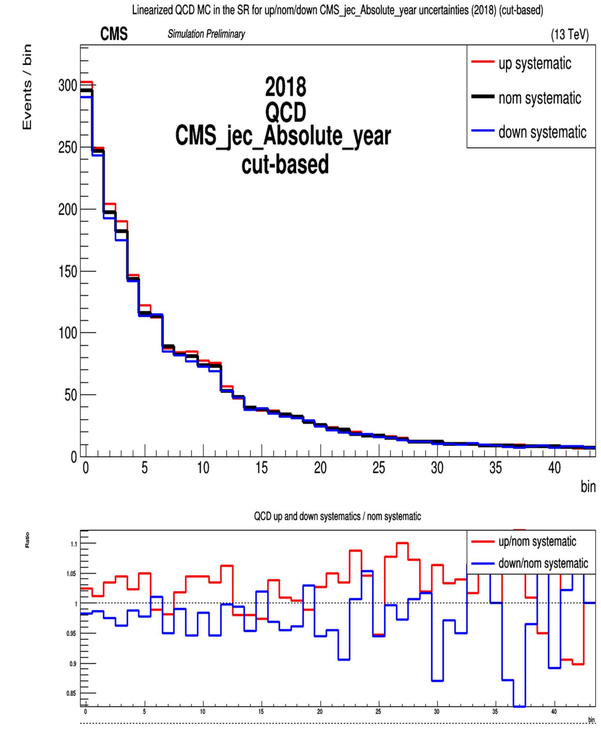

Linearized QCD MC in the SR for up/nom/down CMS_jec_Absolute uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_jec_Absolute
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

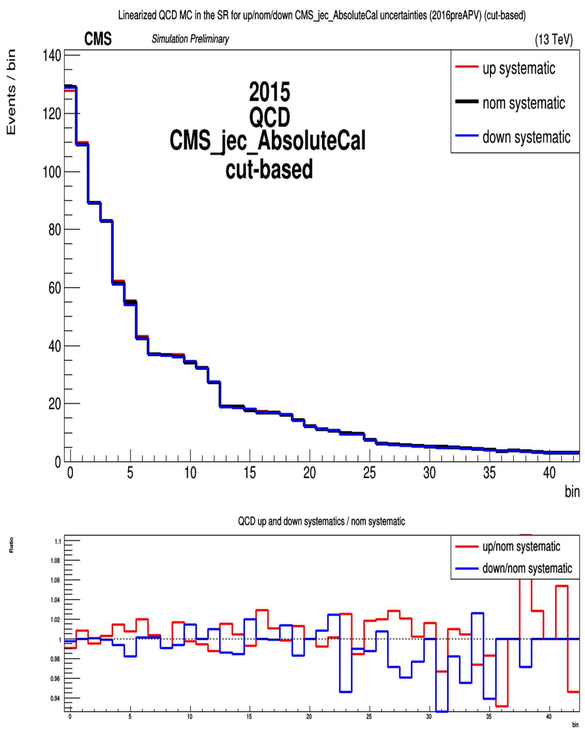

Linearized QCD MC in the SR for up/nom/down CMS_jec_Absolute uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_jec_Absolute
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

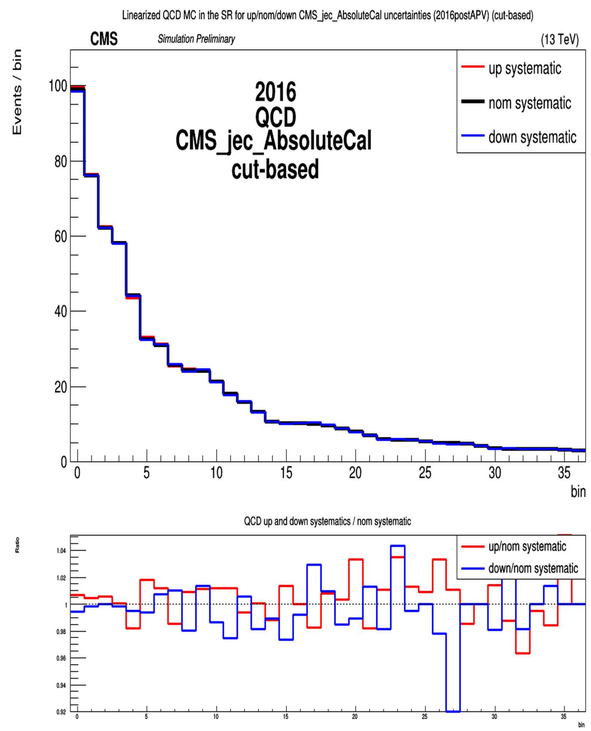

Linearized QCD MC in the SR for up/nom/down CMS_jec_Absolute_year uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_jec_Absolute_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

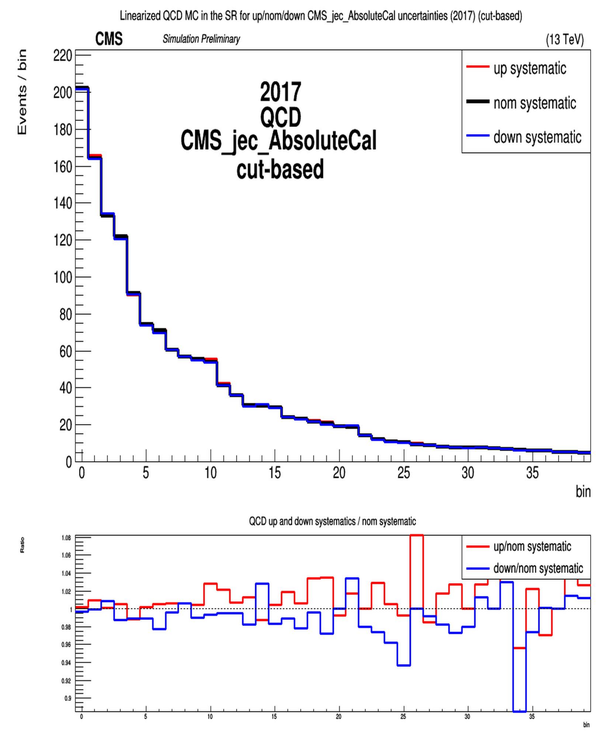

Linearized QCD MC in the SR for up/nom/down CMS_jec_Absolute_year uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_jec_Absolute_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

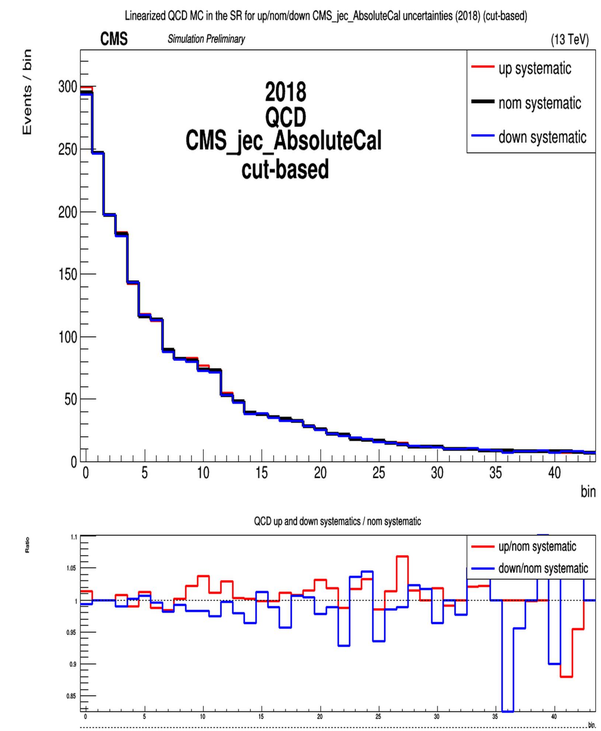

Linearized QCD MC in the SR for up/nom/down CMS_jec_Absolute_year uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_jec_Absolute_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

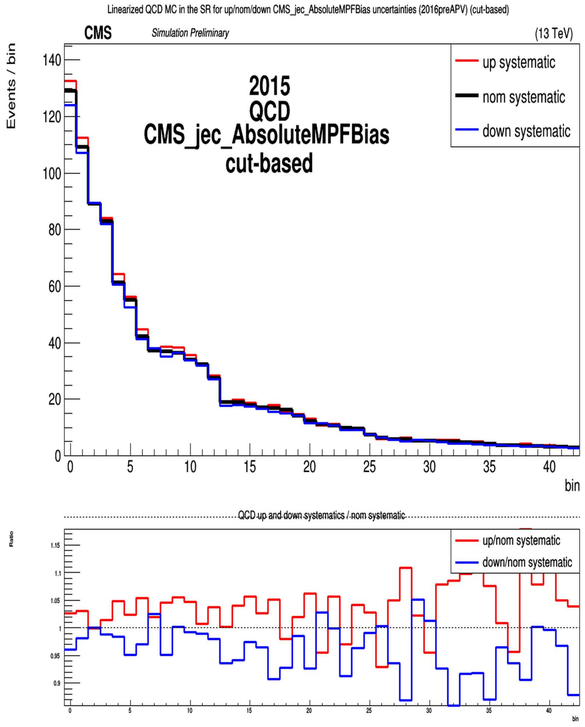

Linearized QCD MC in the SR for up/nom/down CMS_jec_Absolute_year uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_jec_Absolute_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

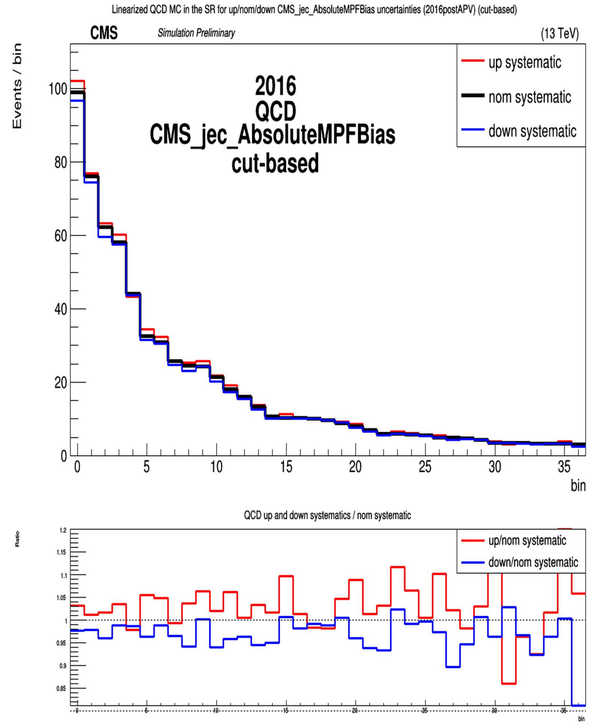

Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteCal uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_jec_AbsoluteCal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

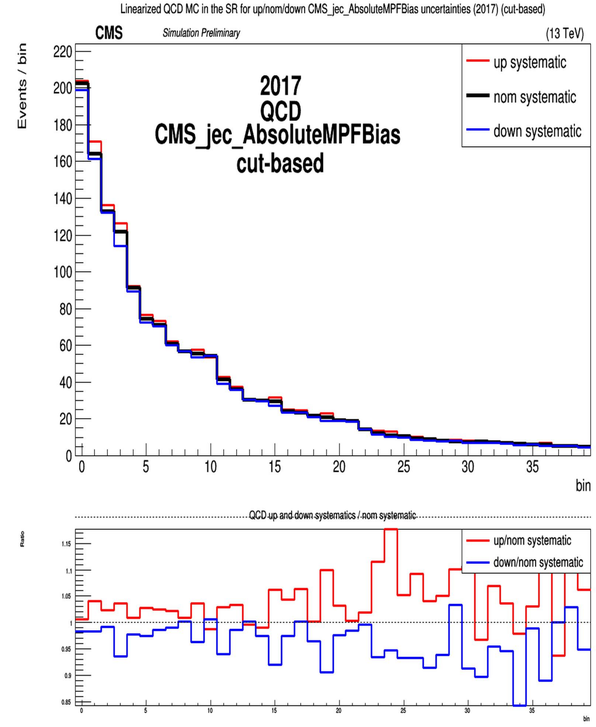

Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteCal uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_jec_AbsoluteCal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

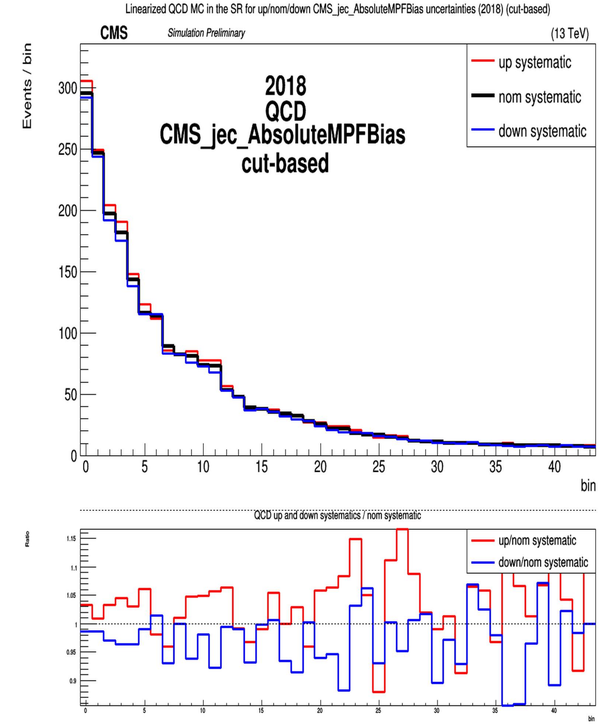

Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteCal uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_jec_AbsoluteCal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

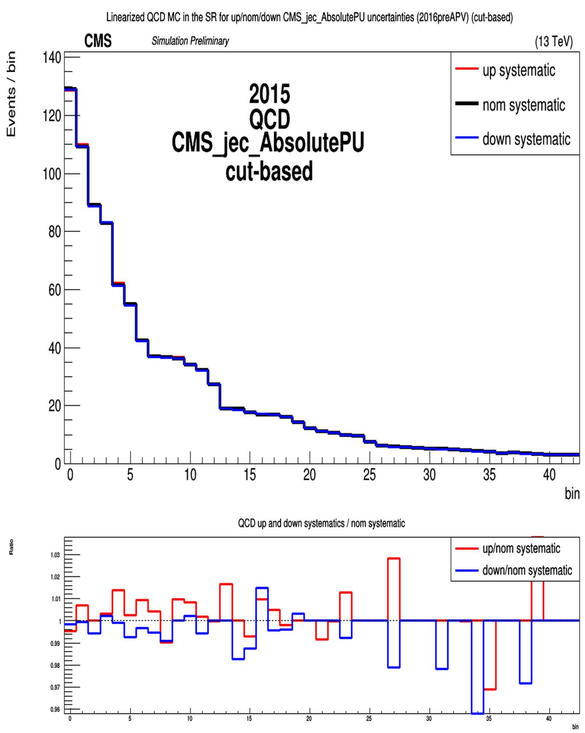

Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteCal uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_jec_AbsoluteCal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

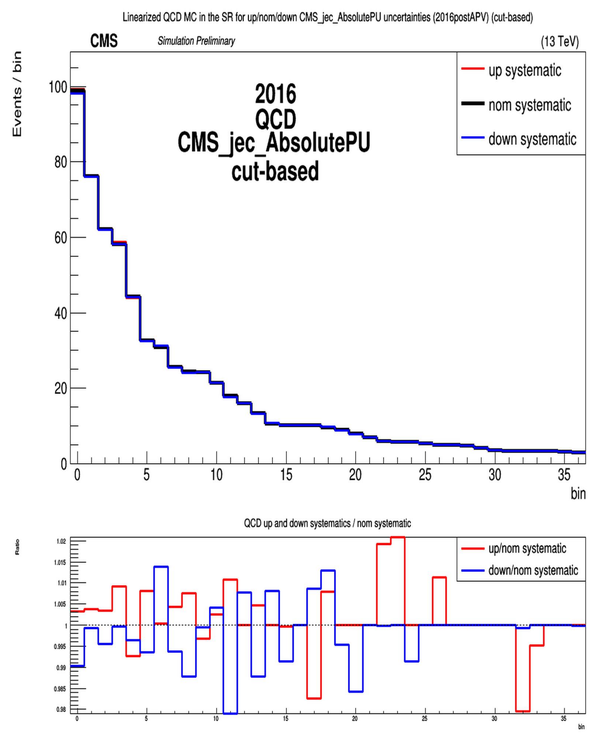

Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteMPFBias uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_jec_AbsoluteMPFBias
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

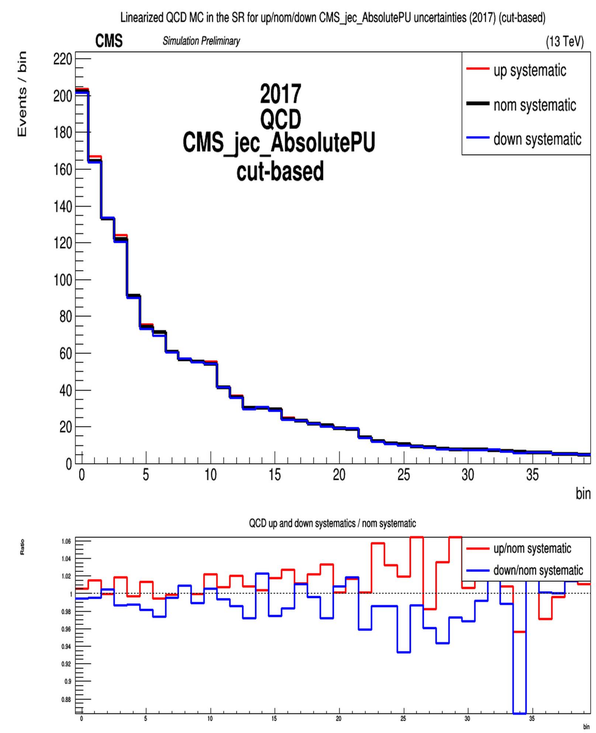

Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteMPFBias uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_jec_AbsoluteMPFBias
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

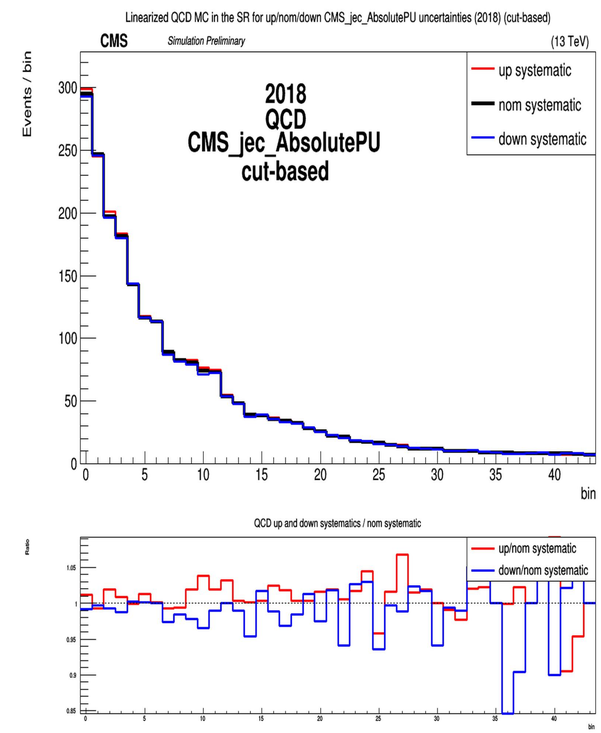

Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteMPFBias uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_jec_AbsoluteMPFBias
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteMPFBias uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_jec_AbsoluteMPFBias
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

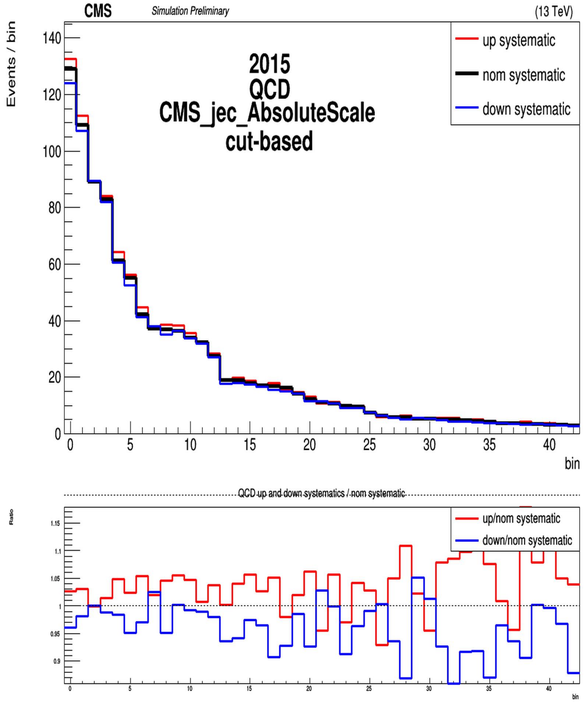

Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsolutePU uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_jec_AbsolutePU
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsolutePU uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_jec_AbsolutePU
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

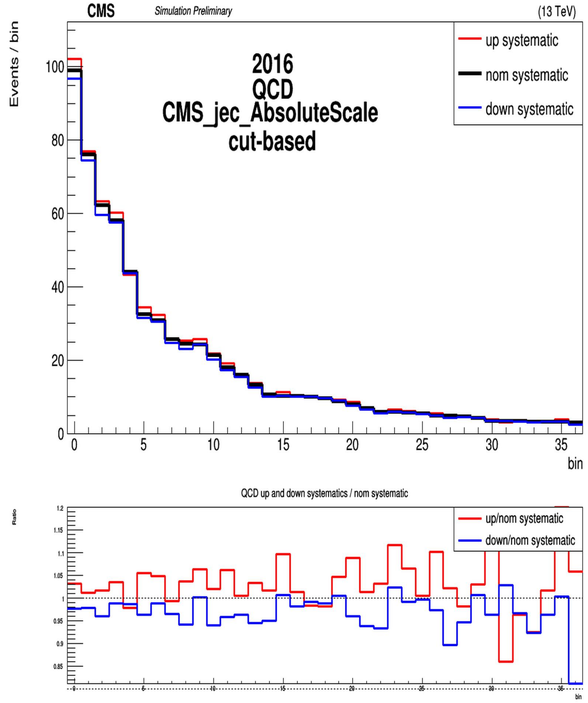

Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsolutePU uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_jec_AbsolutePU
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsolutePU uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_jec_AbsolutePU
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

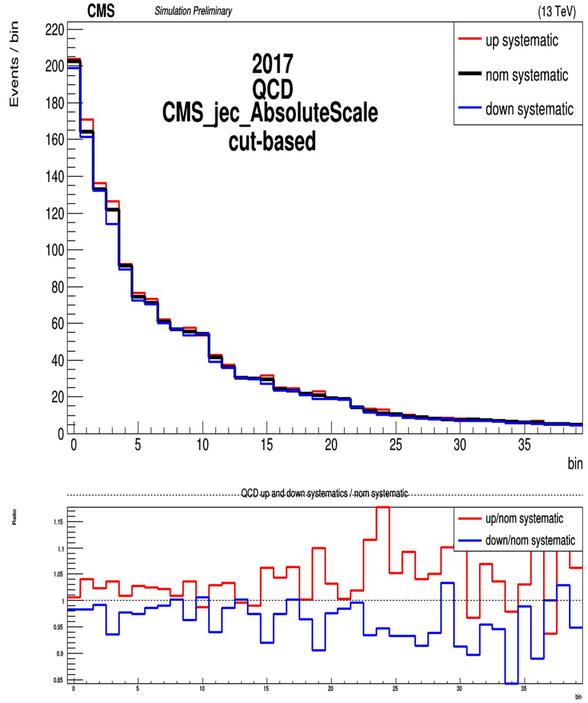
Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteScale uncertainties (2016preAPV) (cut-based)



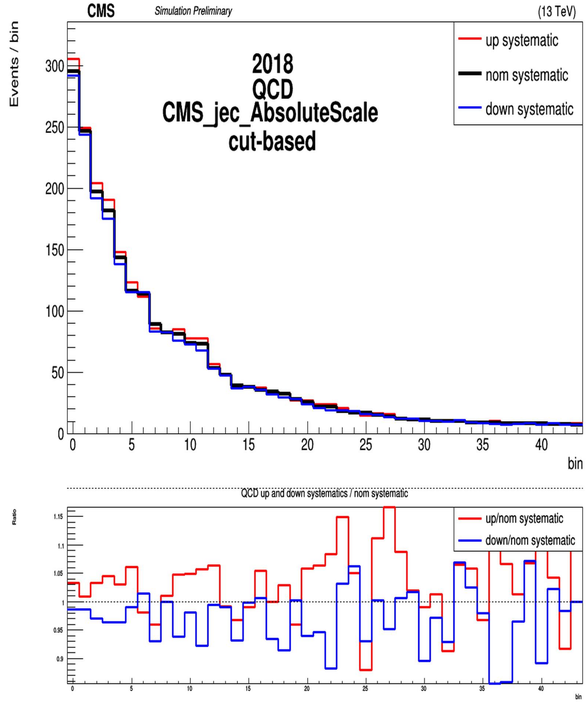
Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteScale uncertainties (2016postAPV) (cut-based)



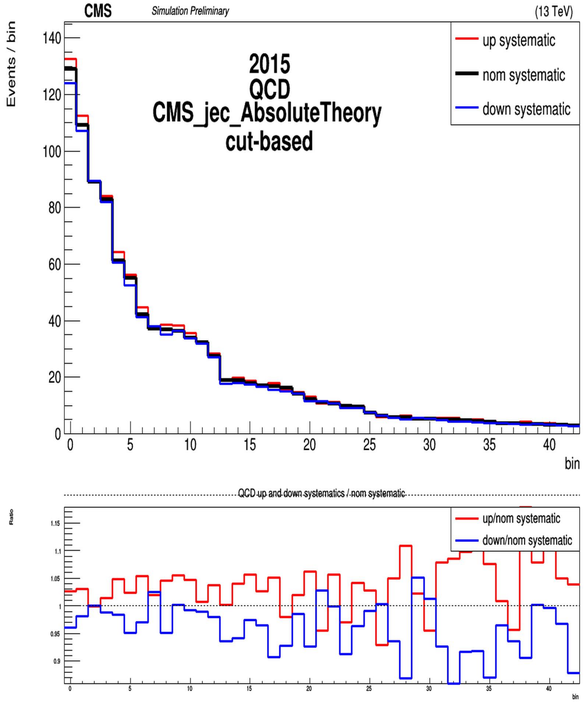
Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteScale uncertainties (2017) (cut-based)



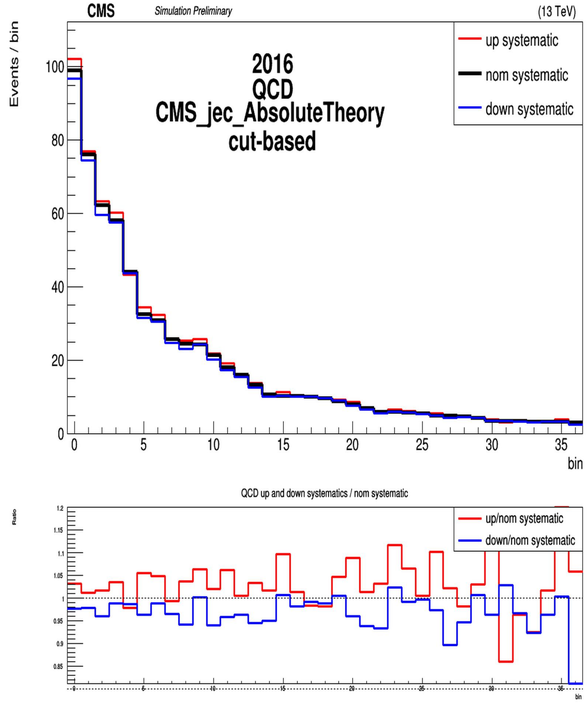
Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteScale uncertainties (2018) (cut-based)



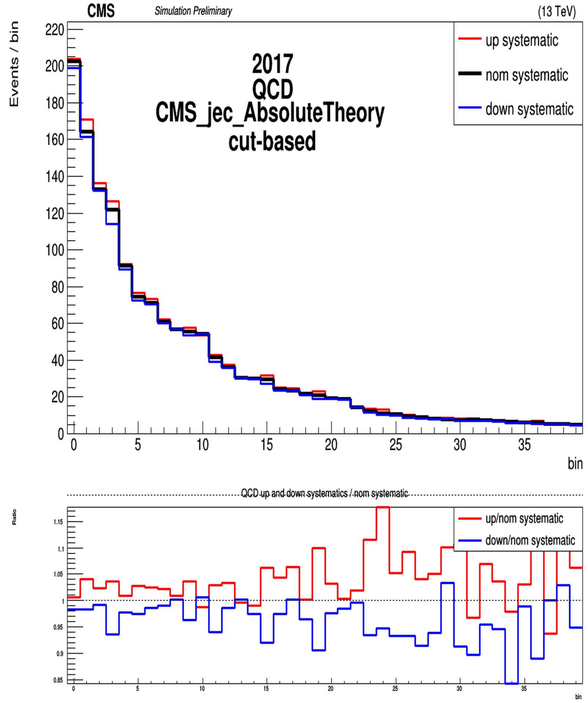
Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteTheory uncertainties (2016preAPV) (cut-based)



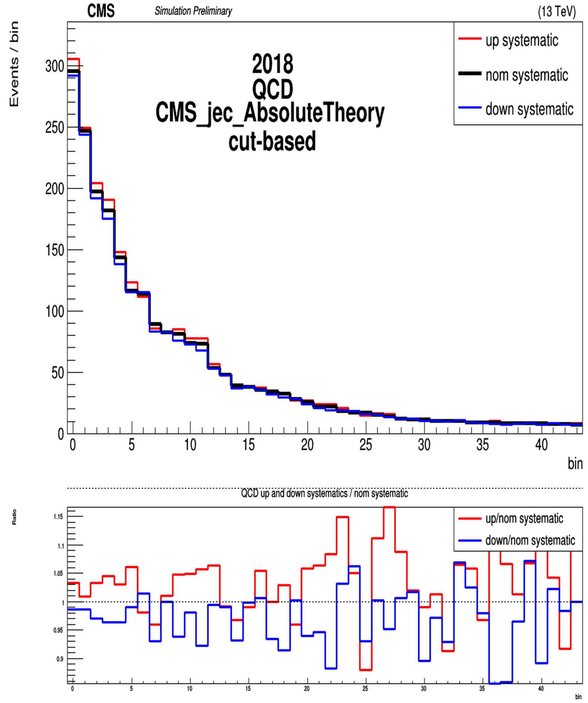
Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteTheory uncertainties (2016postAPV) (cut-based)



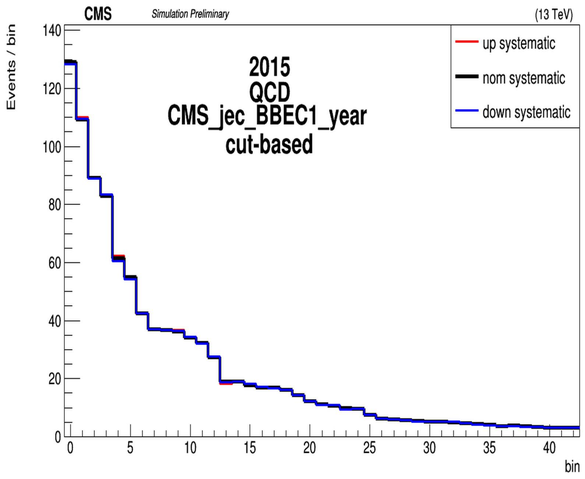
Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteTheory uncertainties (2017) (cut-based)



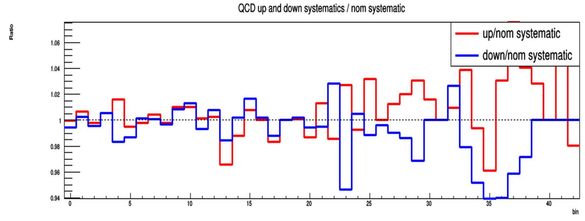
Linearized QCD MC in the SR for up/nom/down CMS_jec_AbsoluteTheory uncertainties (2018) (cut-based)



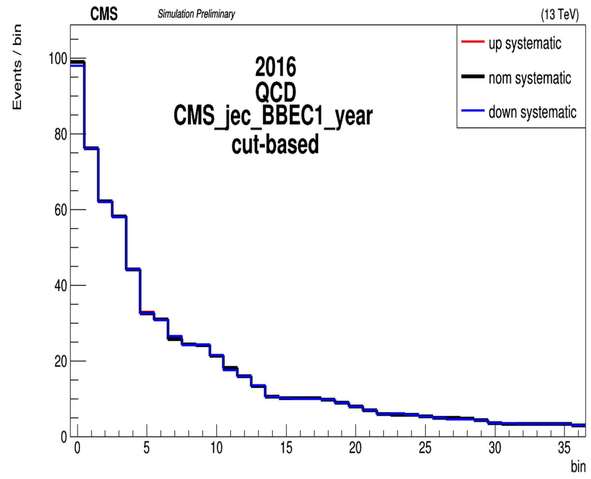
Linearized QCD MC in the SR for up/nom/down CMS_jec_BBEC1_year uncertainties (2016preAPV) (cut-based)



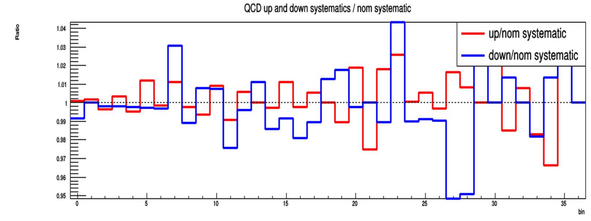
QCD up and down systematics / nom systematic



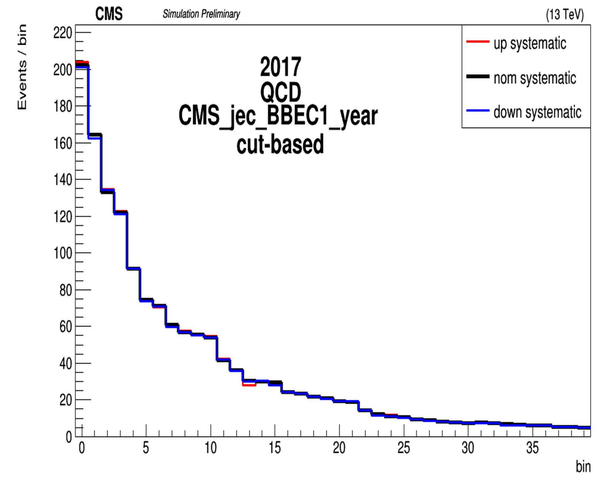
Linearized QCD MC in the SR for up/nom/down CMS_jec_BBEC1_year uncertainties (2016postAPV) (cut-based)



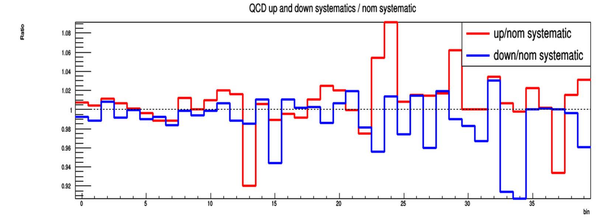
QCD up and down systematics / nom systematic



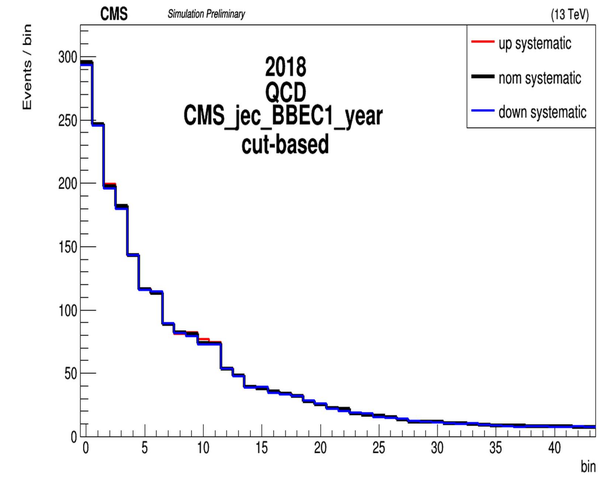
Linearized QCD MC in the SR for up/nom/down CMS_jec_BBEC1_year uncertainties (2017) (cut-based)



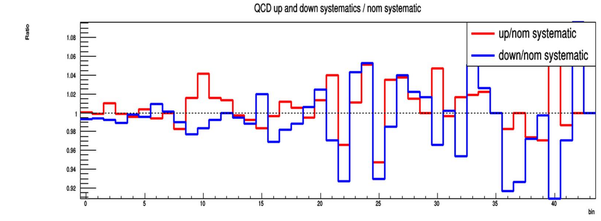
QCD up and down systematics / nom systematic



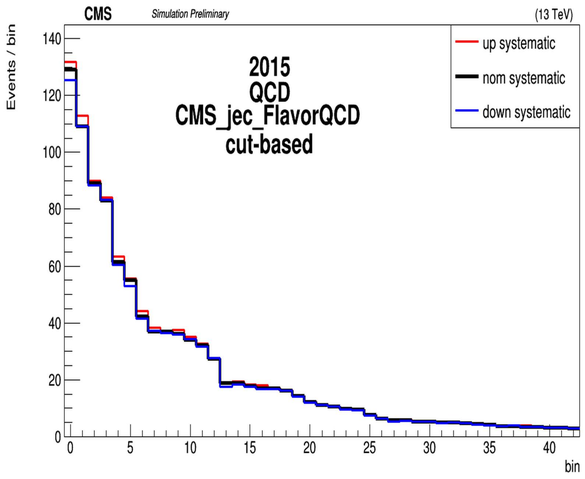
Linearized QCD MC in the SR for up/nom/down CMS_jec_BBEC1_year uncertainties (2018) (cut-based)



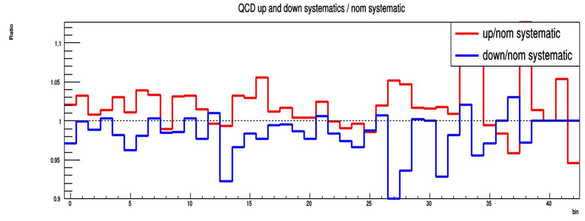
QCD up and down systematics / nom systematic



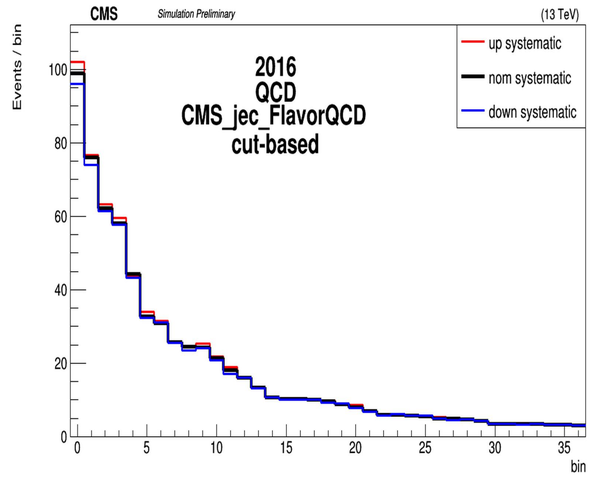
Linearized QCD MC in the SR for up/nom/down CMS_jec_FlavorQCD uncertainties (2016preAPV) (cut-based)



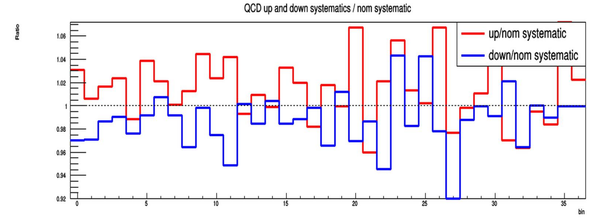
QCD up and down systematics / nom systematic



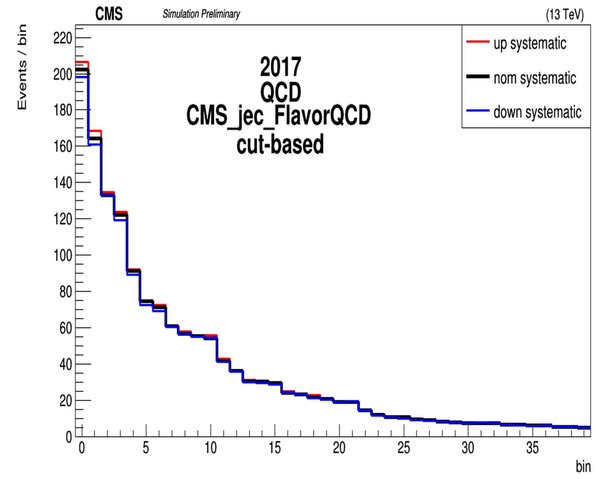
Linearized QCD MC in the SR for up/nom/down CMS_jec_FlavorQCD uncertainties (2016postAPV) (cut-based)



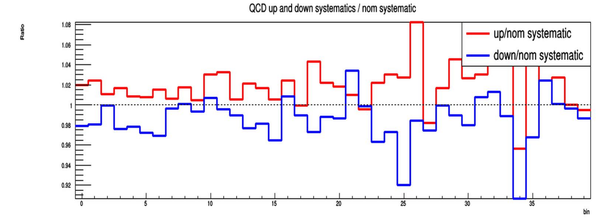
QCD up and down systematics / nom systematic



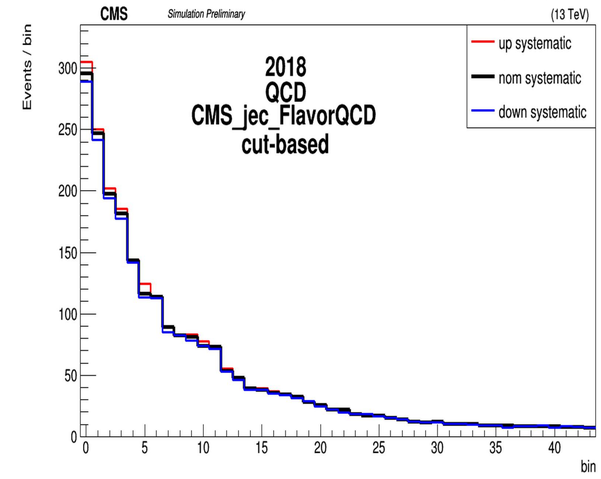
Linearized QCD MC in the SR for up/nom/down CMS_jec_FlavorQCD uncertainties (2017) (cut-based)



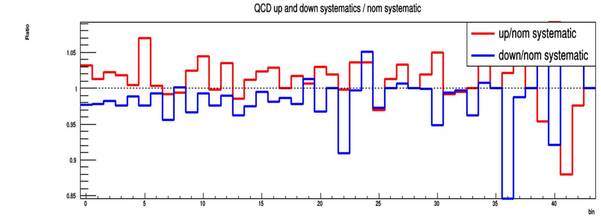
QCD up and down systematics / nom systematic

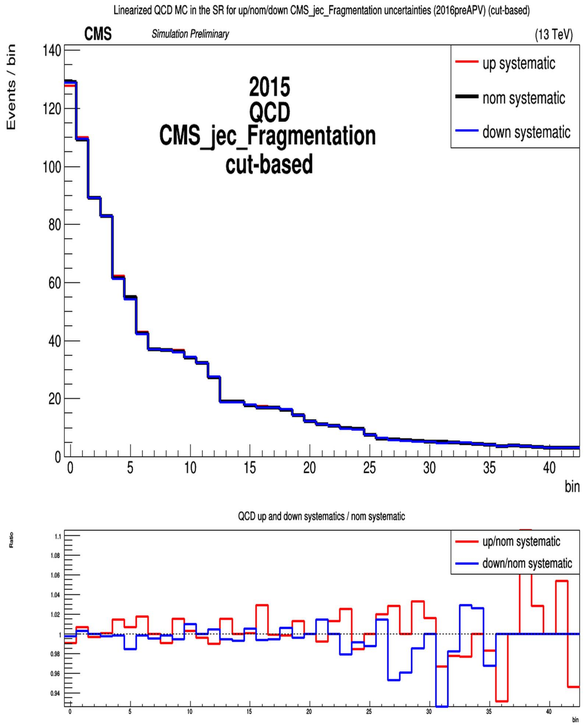


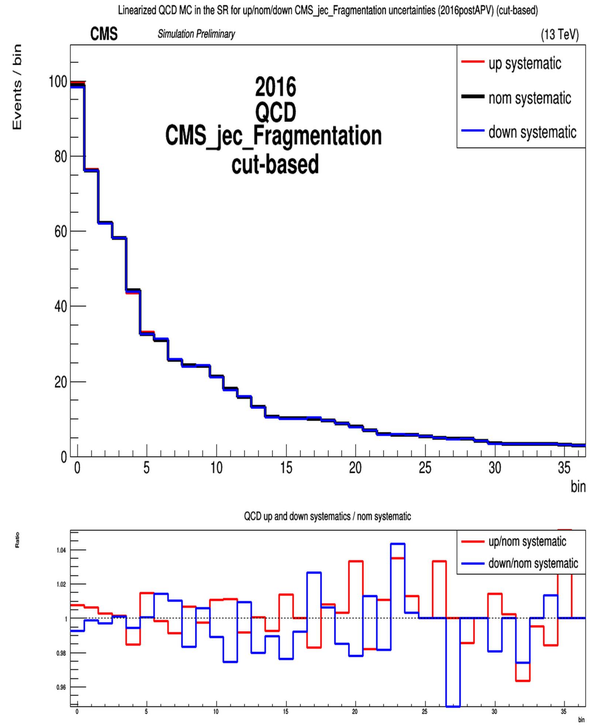
Linearized QCD MC in the SR for up/nom/down CMS_jec_FlavorQCD uncertainties (2018) (cut-based)

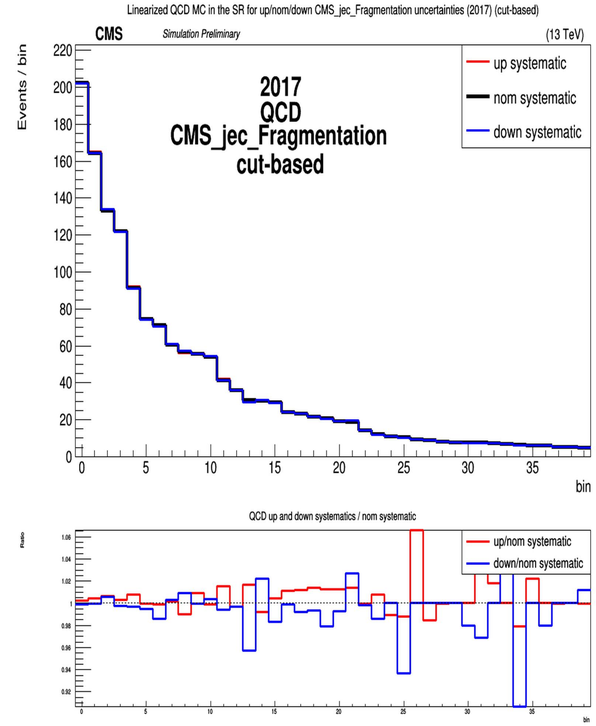


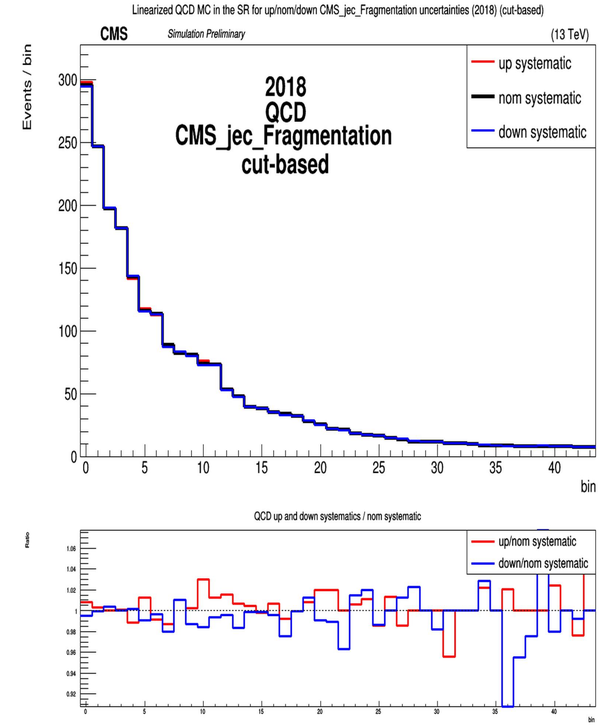
QCD up and down systematics / nom systematic

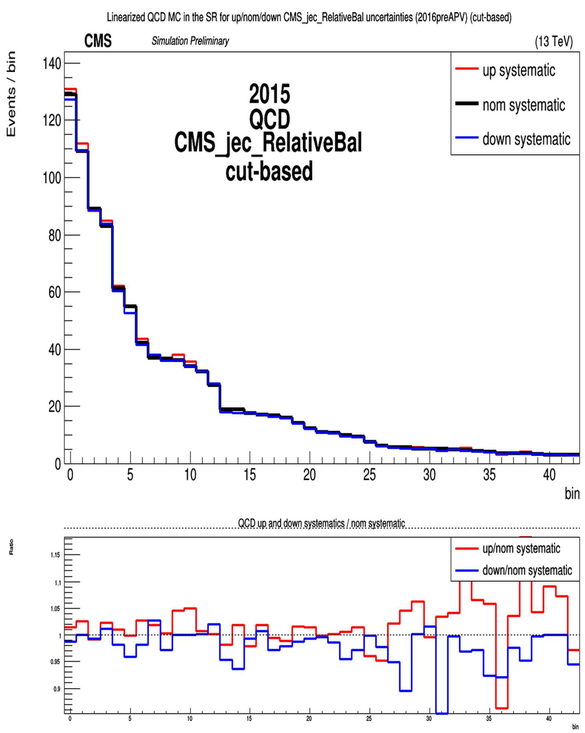


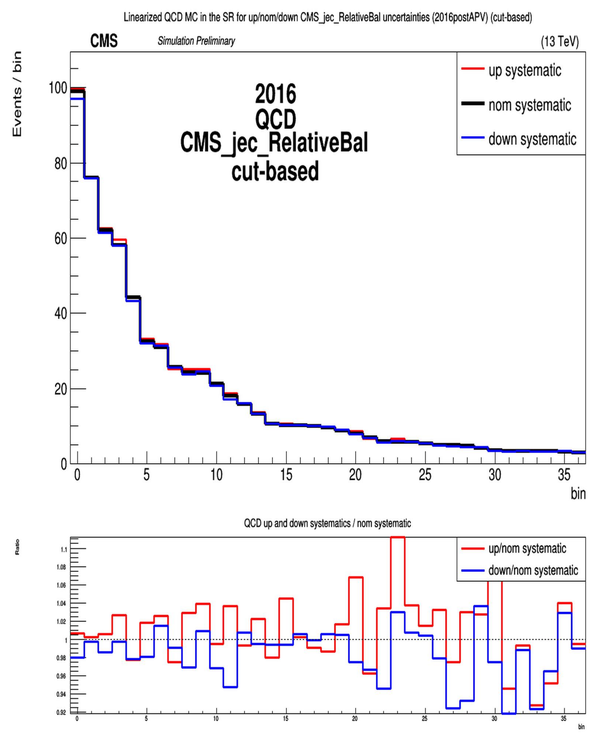

Linearized QCD MC in the SR for up/nom/down CMS_jec_Fragmentation uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_jec_Fragmentation
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

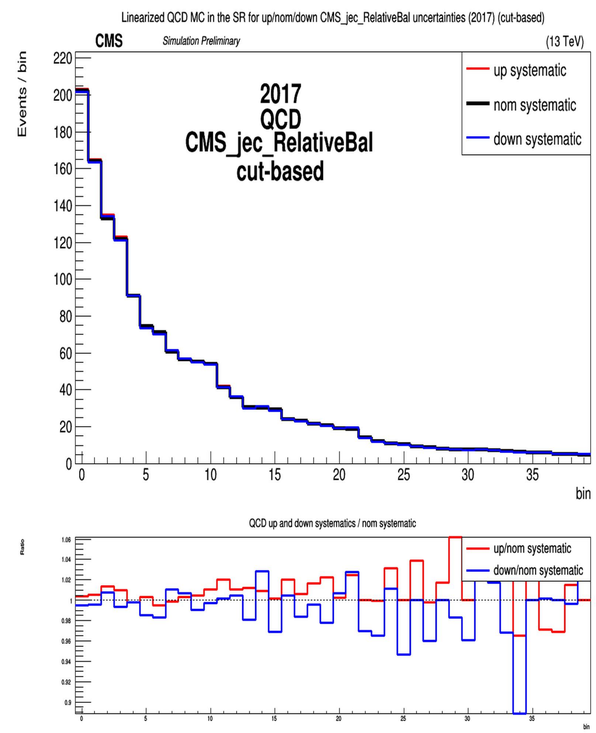

Linearized QCD MC in the SR for up/nom/down CMS_jec_Fragmentation uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_jec_Fragmentation
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

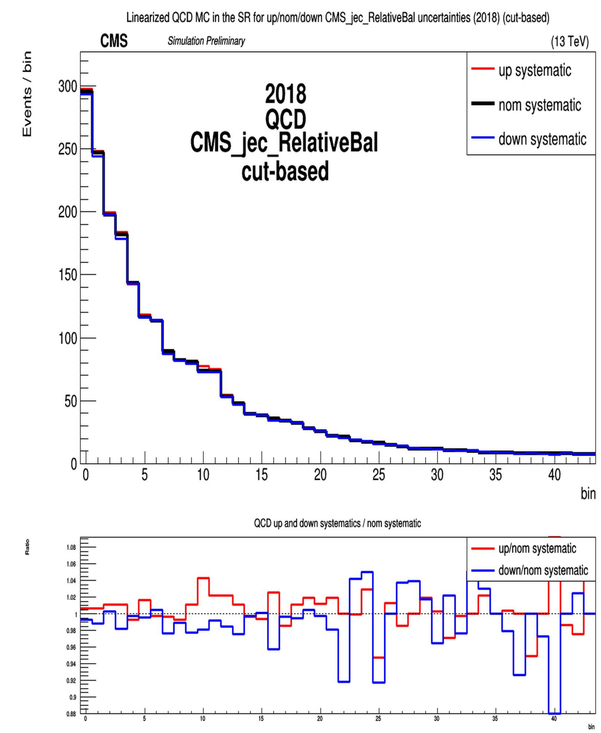

Linearized QCD MC in the SR for up/nom/down CMS_jec_Fragmentation uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_jec_Fragmentation
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

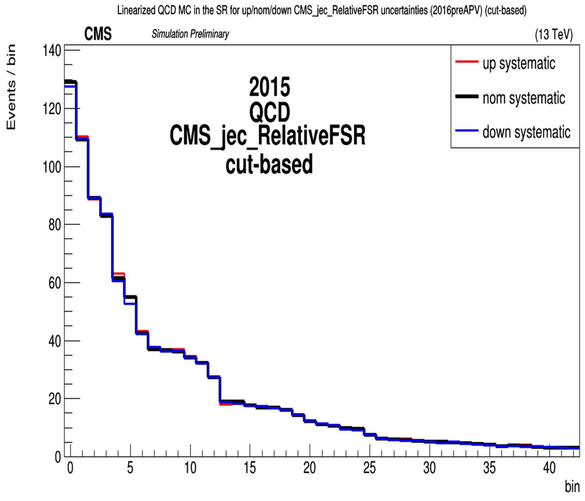

Linearized QCD MC in the SR for up/nom/down CMS_jec_Fragmentation uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_jec_Fragmentation
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

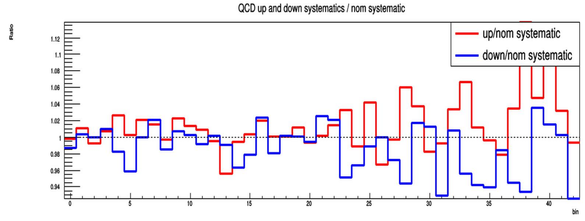

Linearized QCD MC in the SR for up/nom/down CMS_jec_RelativeBal uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_jec_RelativeBal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

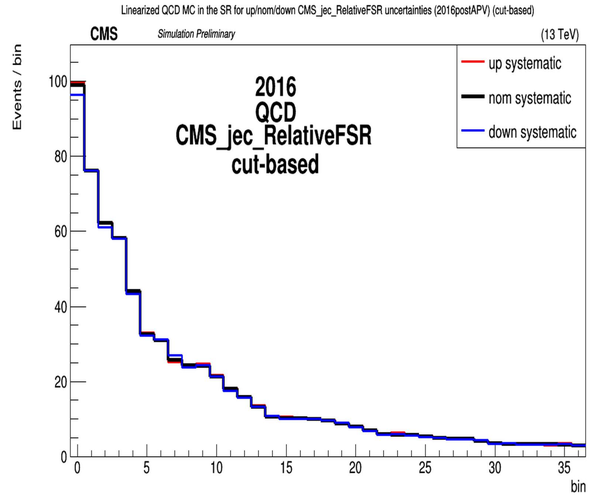

Linearized QCD MC in the SR for up/nom/down CMS_jec_RelativeBal uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_jec_RelativeBal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

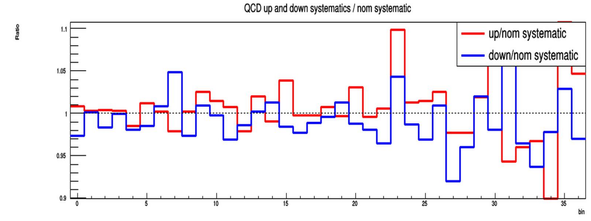

Linearized QCD MC in the SR for up/nom/down CMS_jec_RelativeBal uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_jec_RelativeBal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

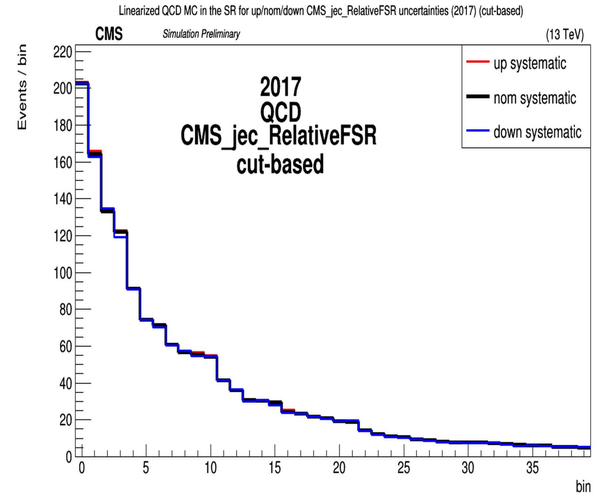

Linearized QCD MC in the SR for up/nom/down CMS_jec_RelativeBal uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_jec_RelativeBal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

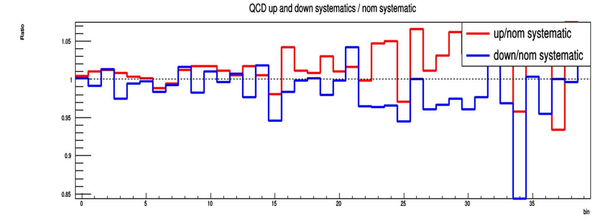

Linearized QCD MC in the SR for up/nom/down CMS_jec_RelativeFSR uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_jec_RelativeFSR
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

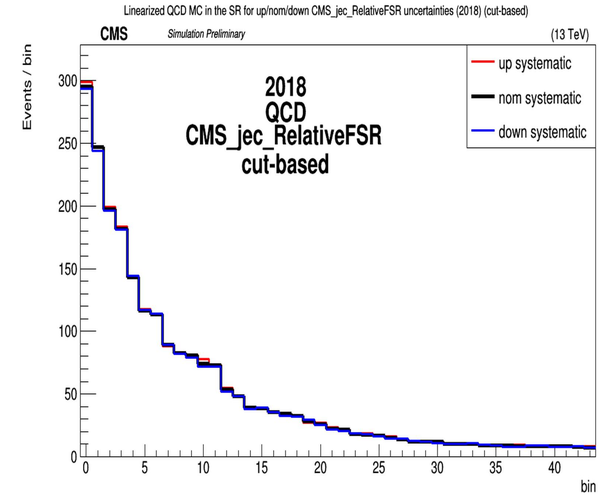

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

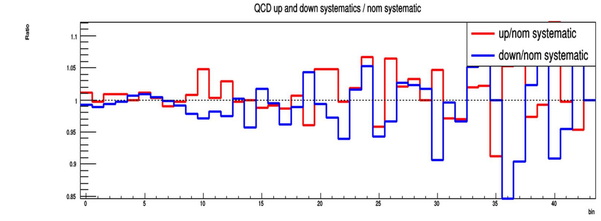

Linearized QCD MC in the SR for up/nom/down CMS_jec_RelativeFSR uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_jec_RelativeFSR
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

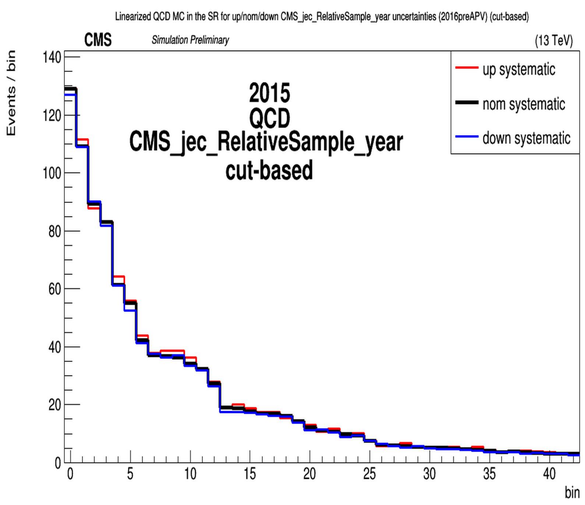

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

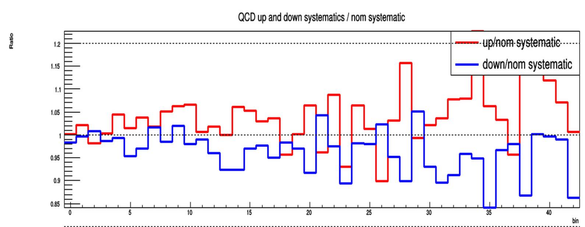

Linearized QCD MC in the SR for up/nom/down CMS_jec_RelativeFSR uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_jec_RelativeFSR
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

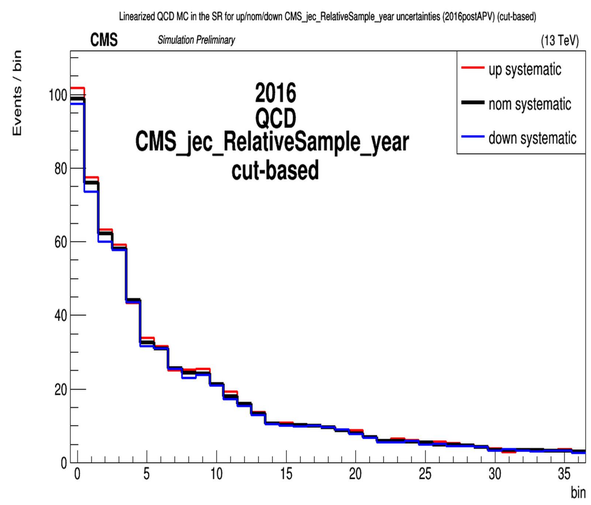

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

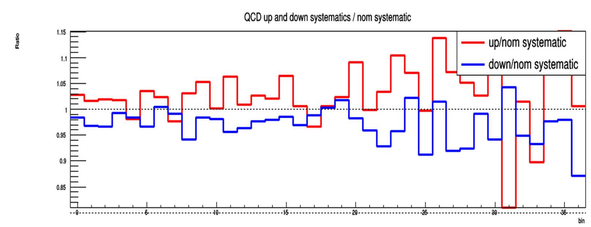

Linearized QCD MC in the SR for up/nom/down CMS_jec_RelativeFSR uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_jec_RelativeFSR
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

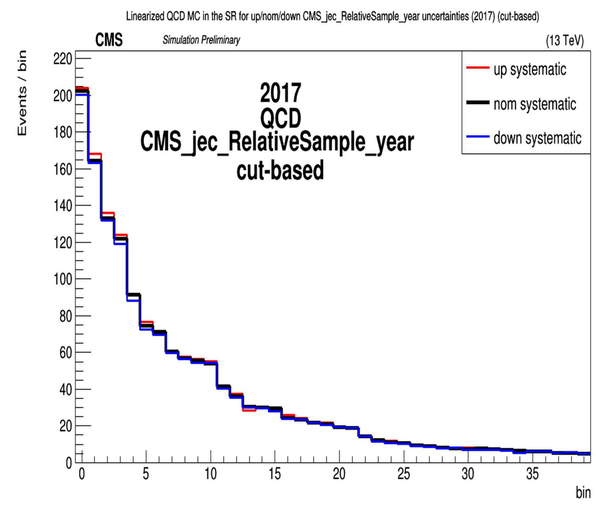

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

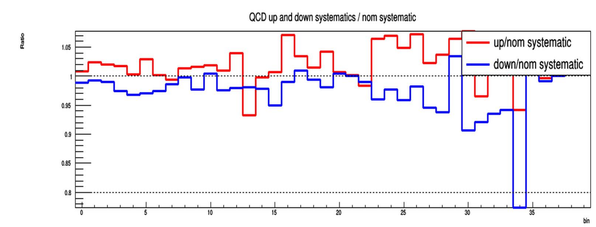

Linearized QCD MC in the SR for up/nom/down CMS_jec_RelativeSample_year uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_jec_RelativeSample_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

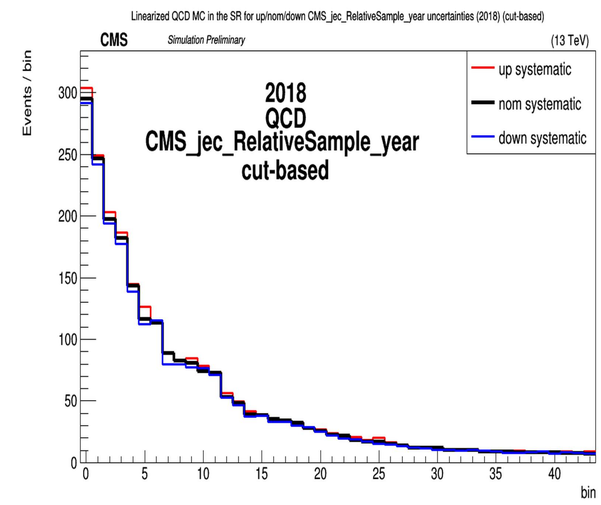

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

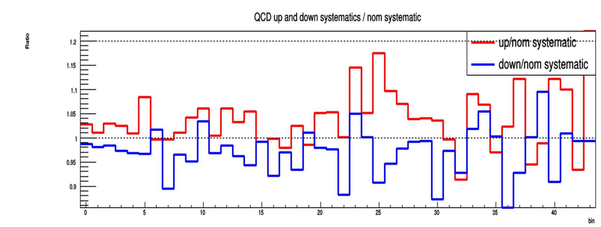

Linearized QCD MC in the SR for up/nom/down CMS_jec_RelativeSample_year uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_jec_RelativeSample_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

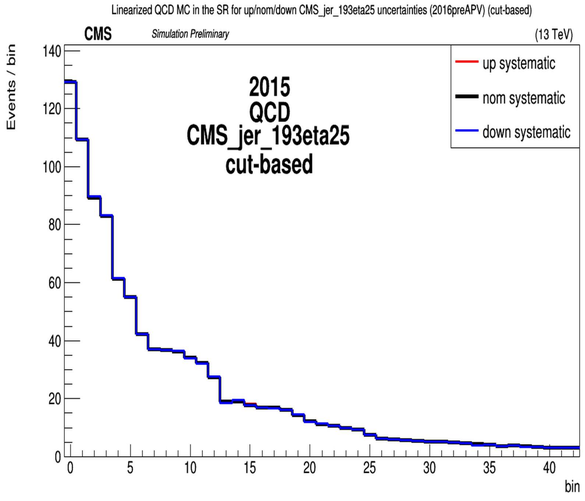

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

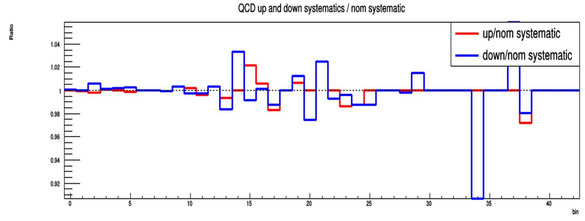

Linearized QCD MC in the SR for up/nom/down CMS_jec_RelativeSample_year uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_jec_RelativeSample_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

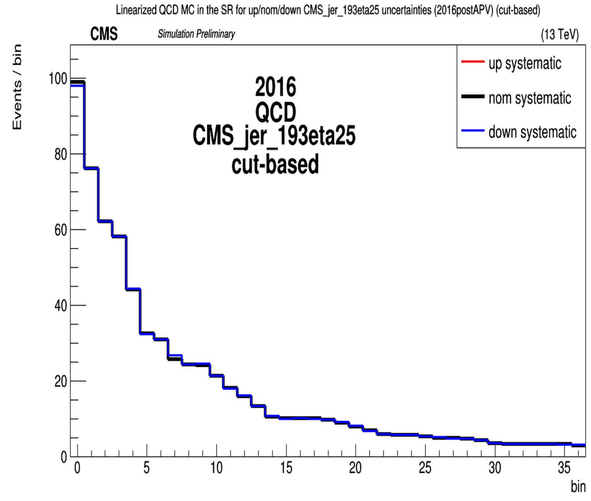

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

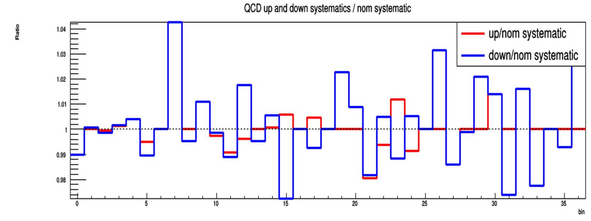

Linearized QCD MC in the SR for up/nom/down CMS_jec_RelativeSample_year uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_jec_RelativeSample_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

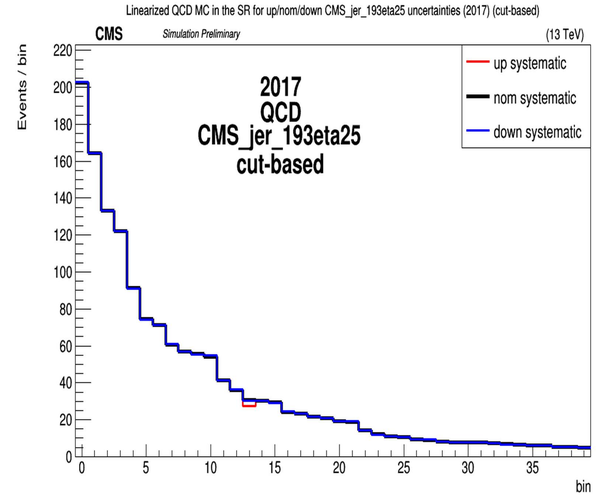

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

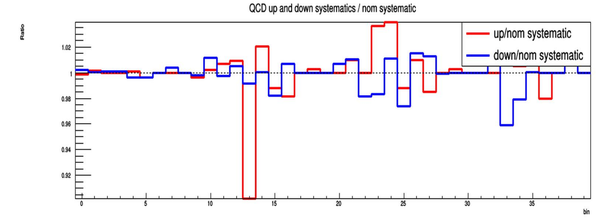

Linearized QCD MC in the SR for up/nom/down CMS_jer_193eta25 uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_jer_193eta25
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

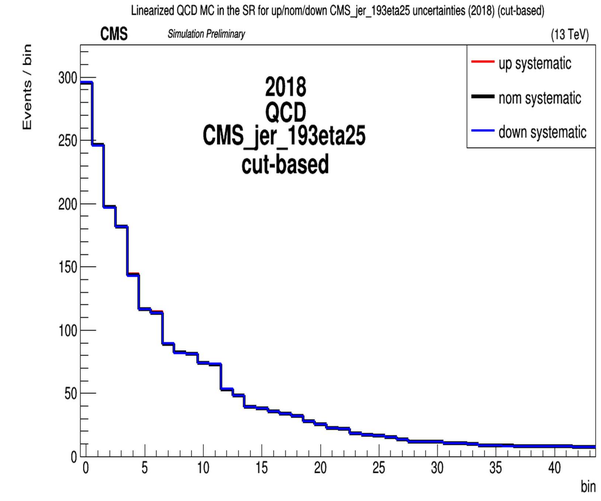

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

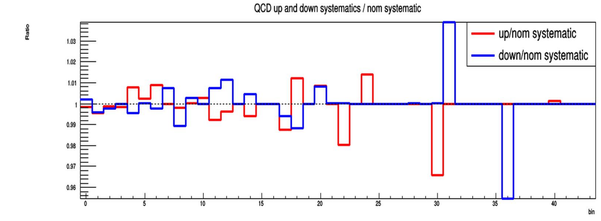

Linearized QCD MC in the SR for up/nom/down CMS_jer_193eta25 uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_jer_193eta25
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

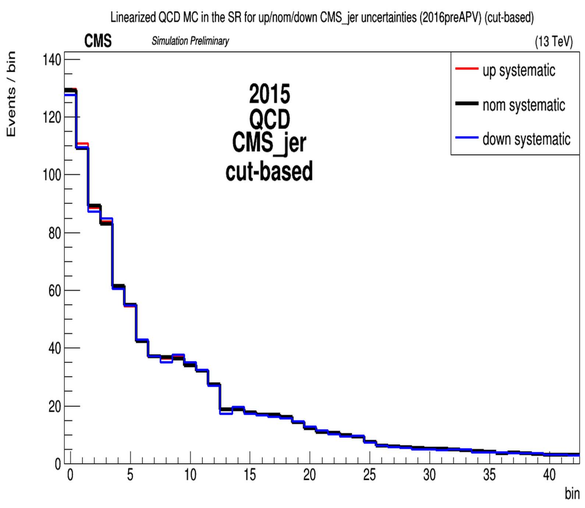

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

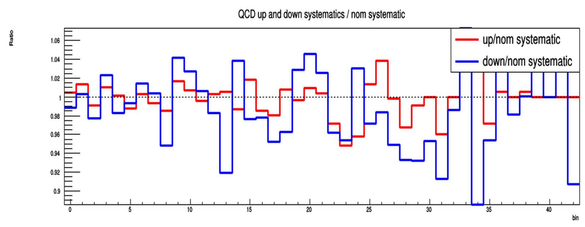

Linearized QCD MC in the SR for up/nom/down CMS_jer_193eta25 uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_jer_193eta25
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

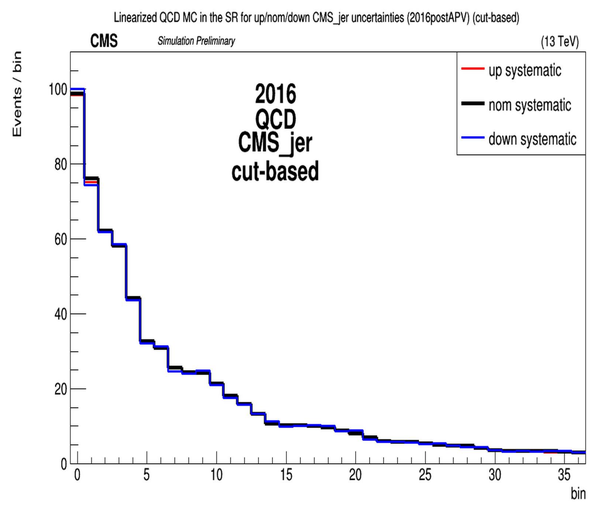

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

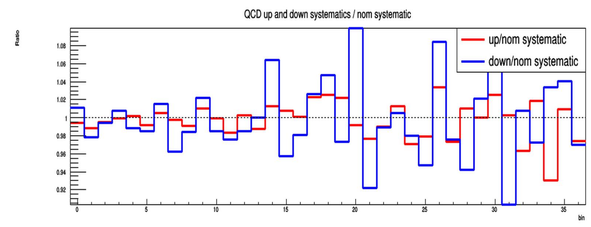

Linearized QCD MC in the SR for up/nom/down CMS_jer_193eta25 uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_jer_193eta25
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

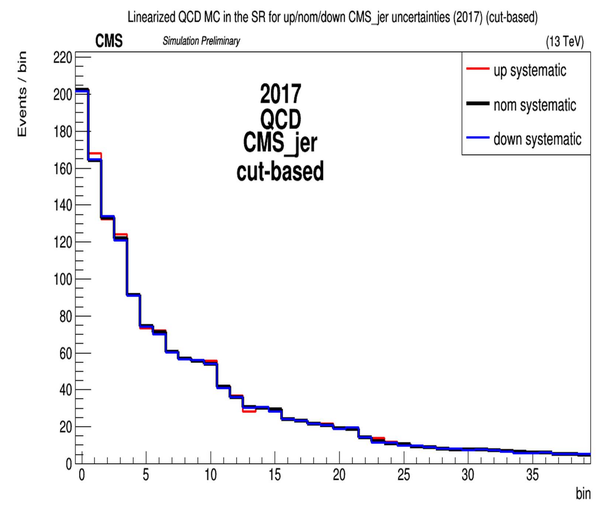

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

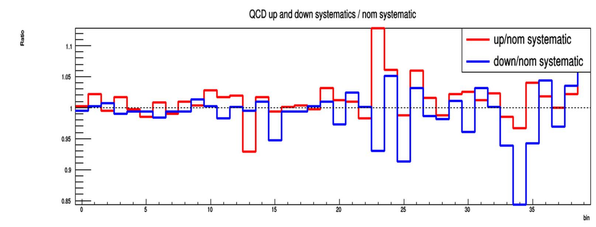

Linearized QCD MC in the SR for up/nom/down CMS_jer uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_jer
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

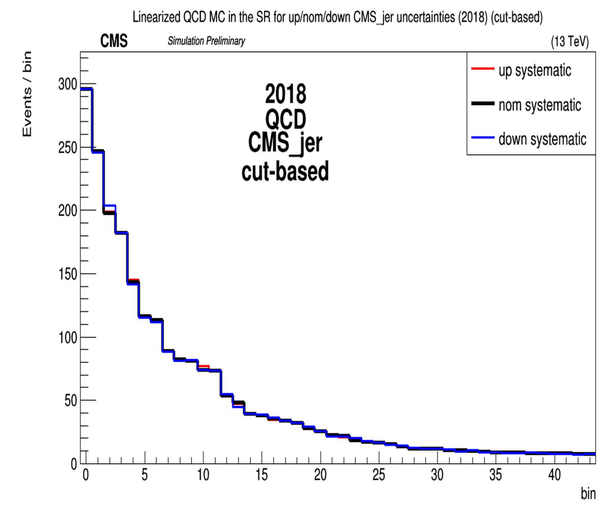

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

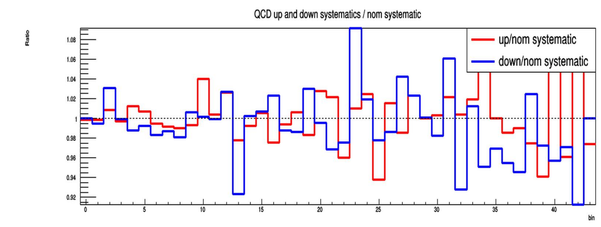

Linearized QCD MC in the SR for up/nom/down CMS_jer uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_jer
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

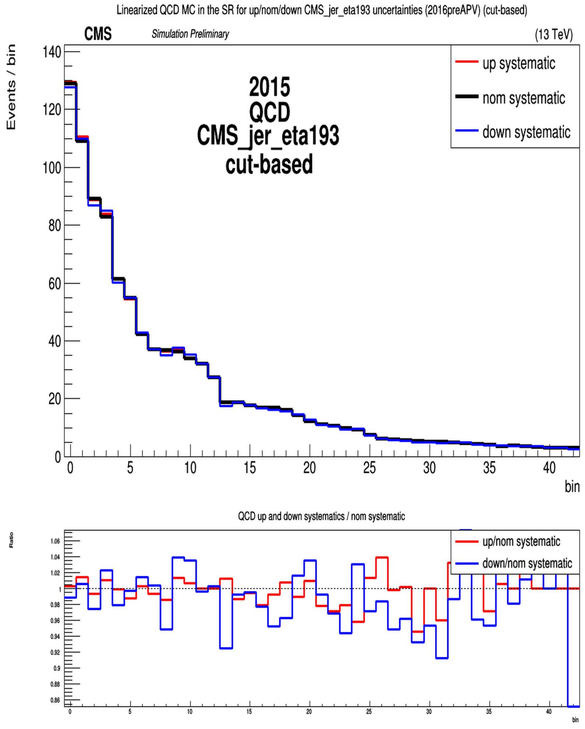

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

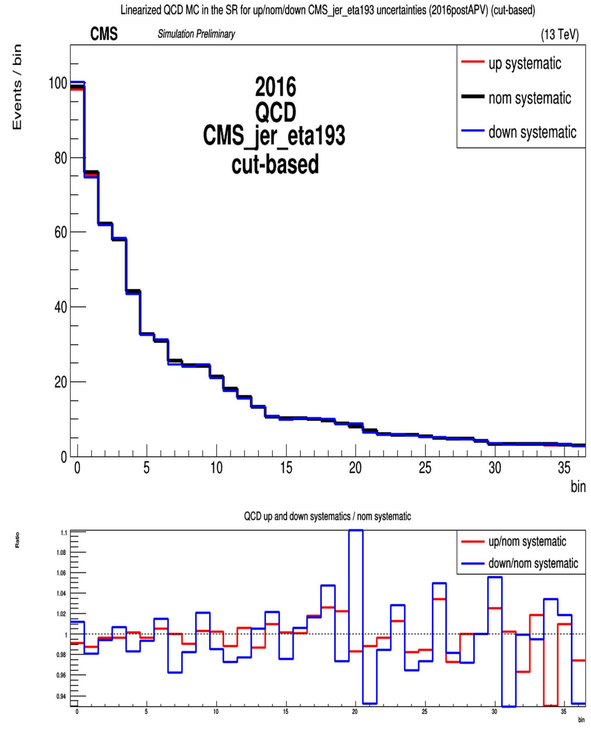

Linearized QCD MC in the SR for up/nom/down CMS_jer uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_jer
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

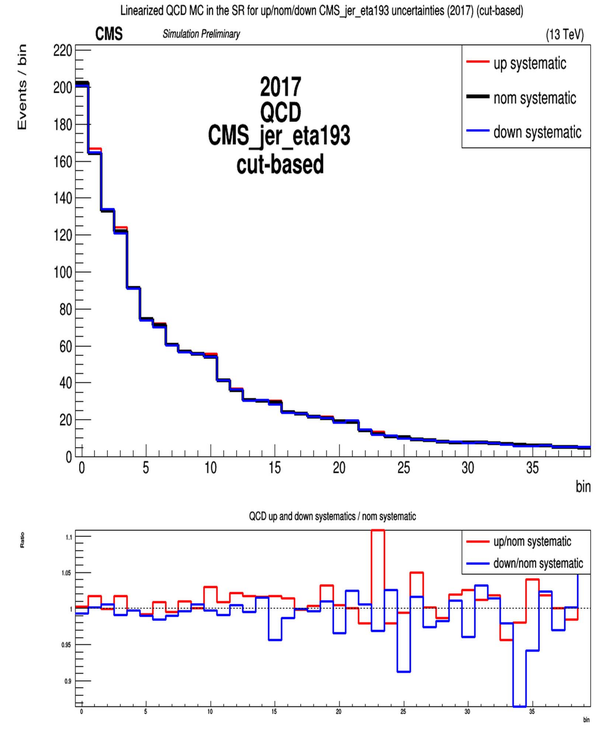

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

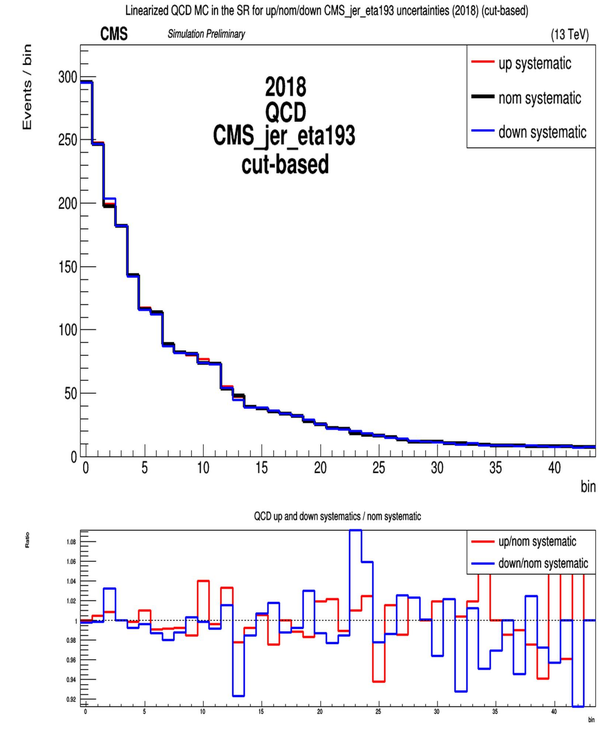

Linearized QCD MC in the SR for up/nom/down CMS_jer uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_jer
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

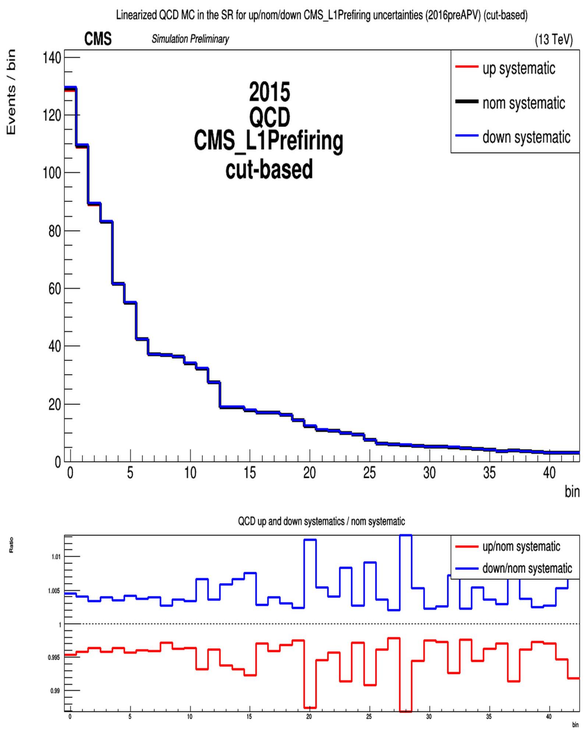

QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

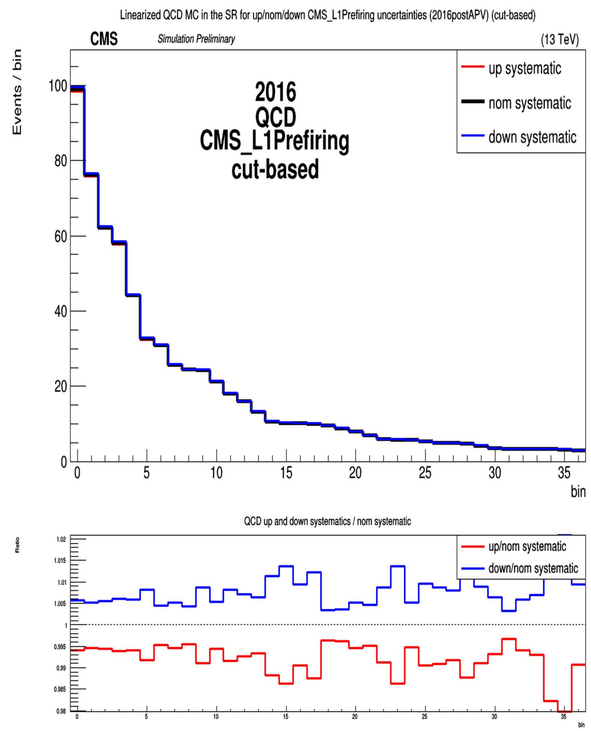

Linearized QCD MC in the SR for up/nom/down CMS_jer_eta193 uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_jer_eta193
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

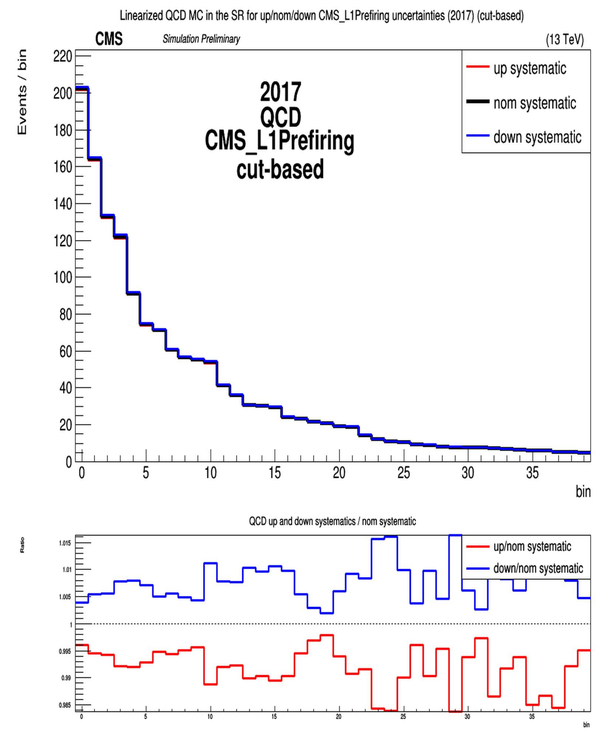

Linearized QCD MC in the SR for up/nom/down CMS_jer_eta193 uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_jer_eta193
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

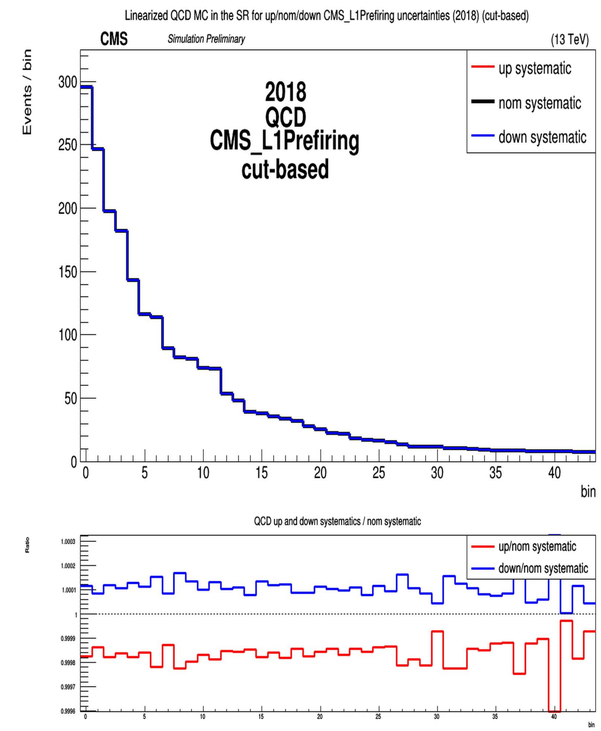

Linearized QCD MC in the SR for up/nom/down CMS_jer_eta193 uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_jer_eta193
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized QCD MC in the SR for up/nom/down CMS_jer_eta193 uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_jer_eta193
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

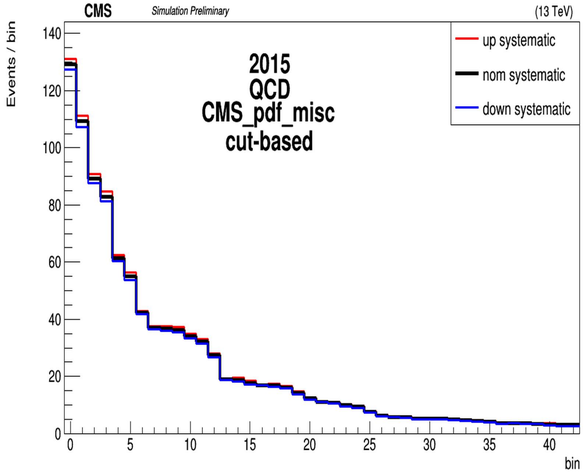

Linearized QCD MC in the SR for up/nom/down CMS_L1Prefiring uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
QCD
CMS_L1Prefiring
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

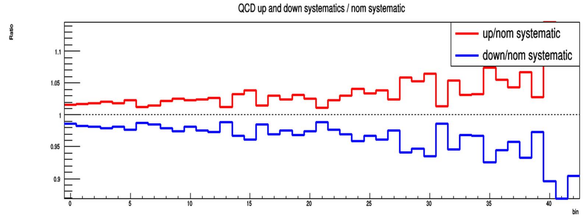

Linearized QCD MC in the SR for up/nom/down CMS_L1Prefiring uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
QCD
CMS_L1Prefiring
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized QCD MC in the SR for up/nom/down CMS_L1Prefiring uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
QCD
CMS_L1Prefiring
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

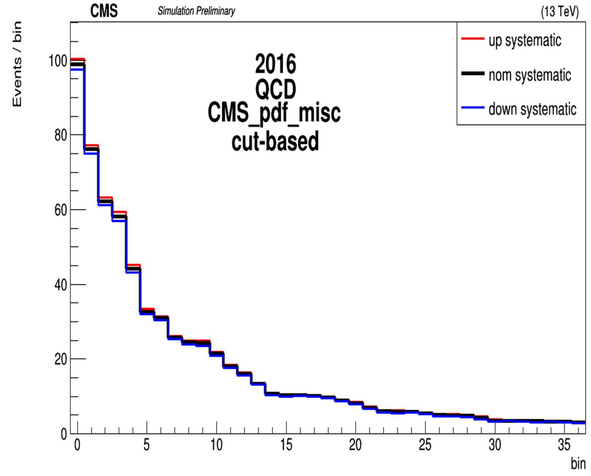

Linearized QCD MC in the SR for up/nom/down CMS_L1Prefiring uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
QCD
CMS_L1Prefiring
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
QCD up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

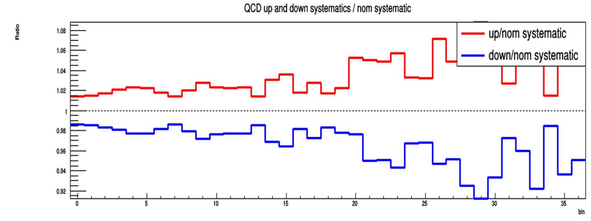
Linearized QCD MC in the SR for up/nom/down CMS_pdf_misc uncertainties (2016preAPV) (cut-based)



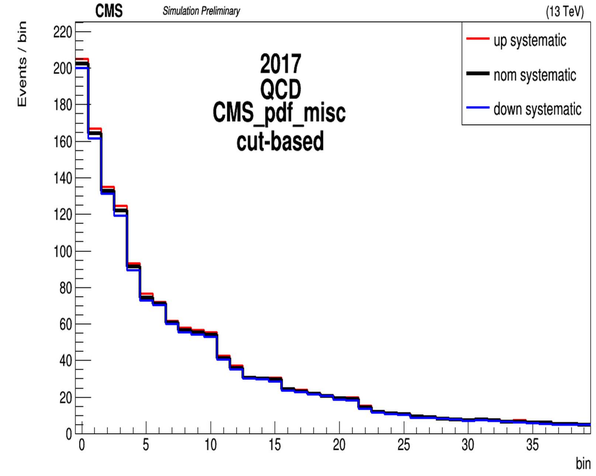


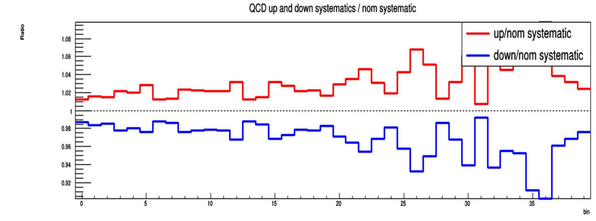
Linearized QCD MC in the SR for up/nom/down CMS_pdf_misc uncertainties (2016postAPV) (cut-based)



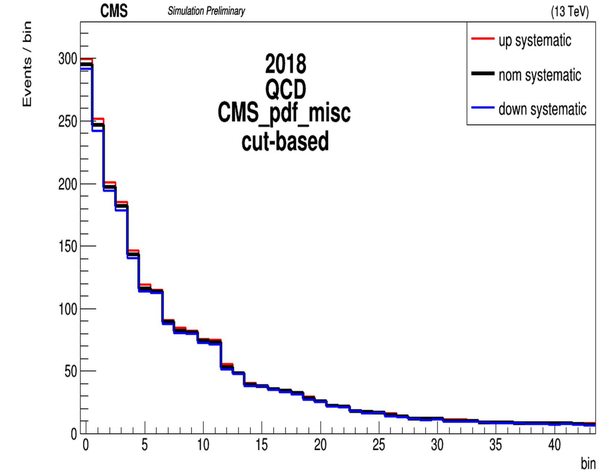


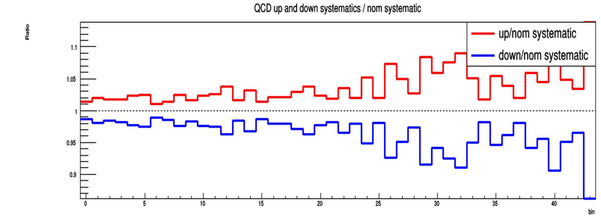
Linearized QCD MC in the SR for up/nom/down CMS_pdf_misc uncertainties (2017) (cut-based)



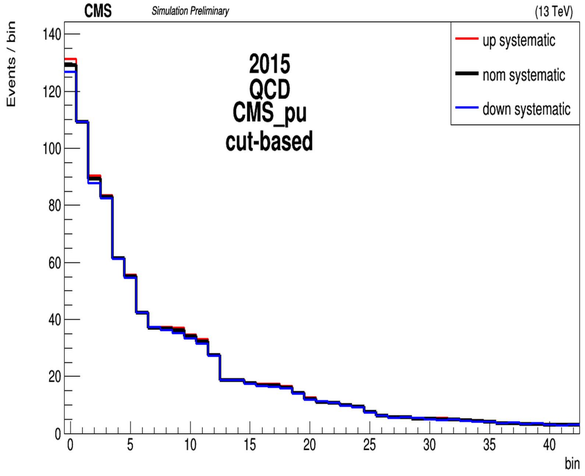


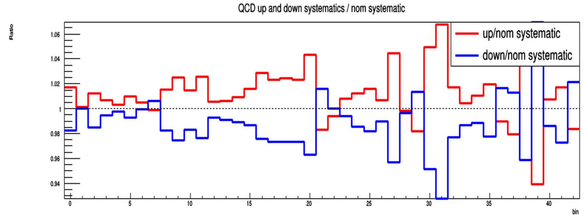
Linearized QCD MC in the SR for up/nom/down CMS_pdf_misc uncertainties (2018) (cut-based)



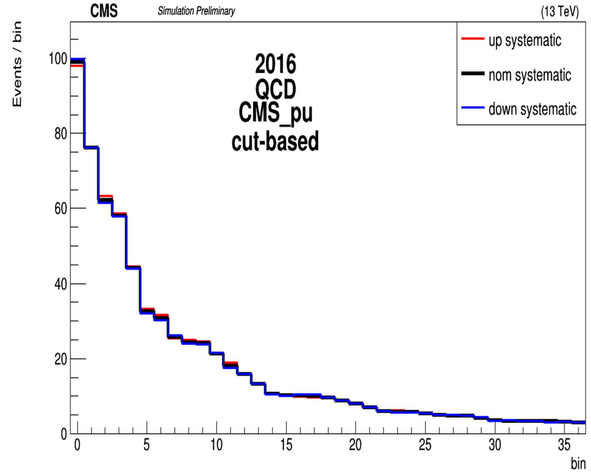


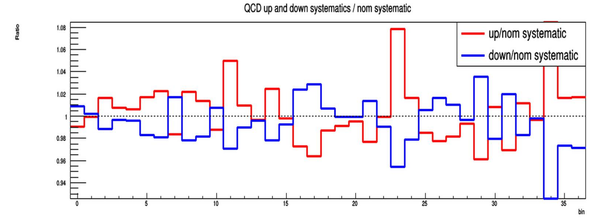
Linearized QCD MC in the SR for up/nom/down CMS_pu uncertainties (2016preAPV) (cut-based)



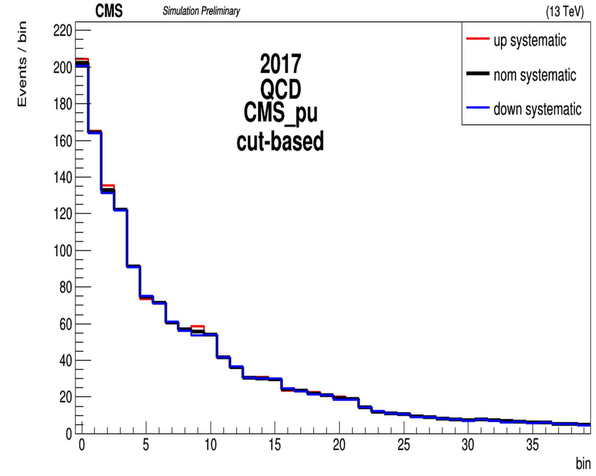


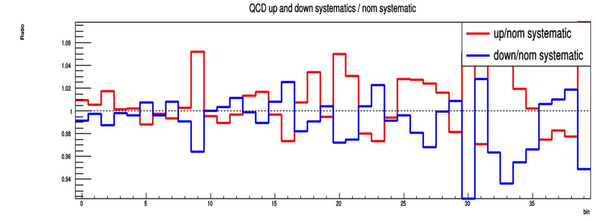
Linearized QCD MC in the SR for up/nom/down CMS_pu uncertainties (2016postAPV) (cut-based)



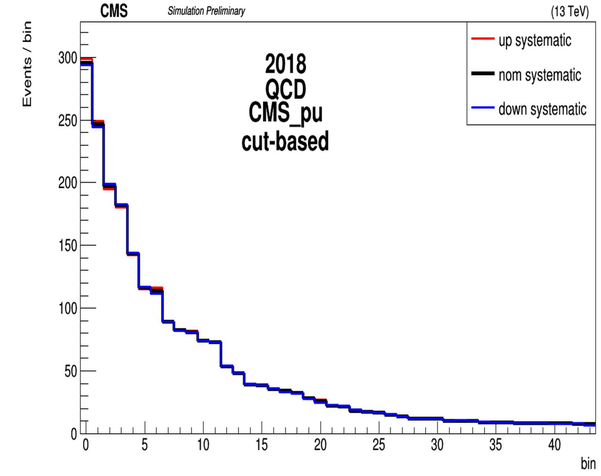


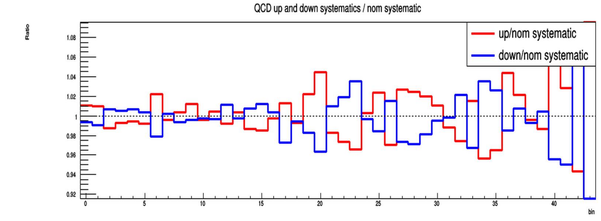
Linearized QCD MC in the SR for up/nom/down CMS_pu uncertainties (2017) (cut-based)

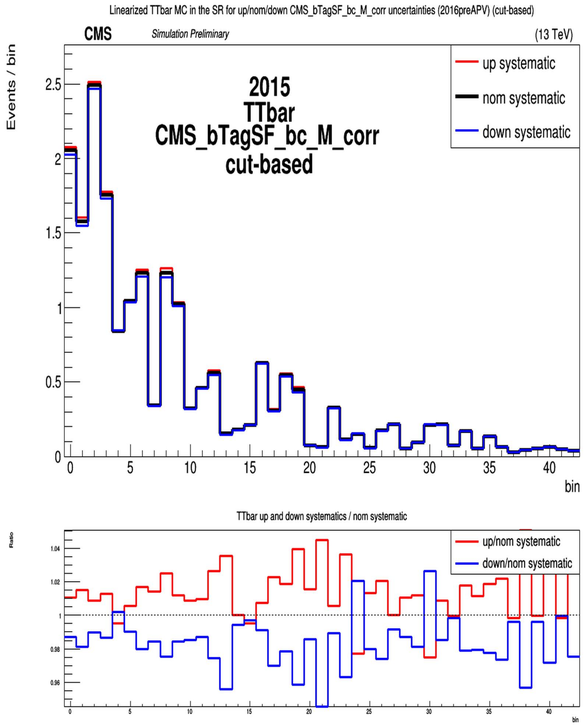


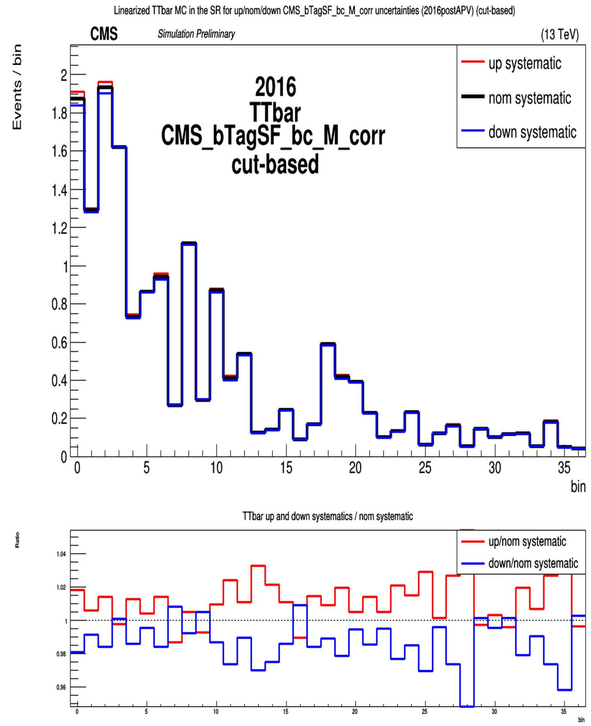


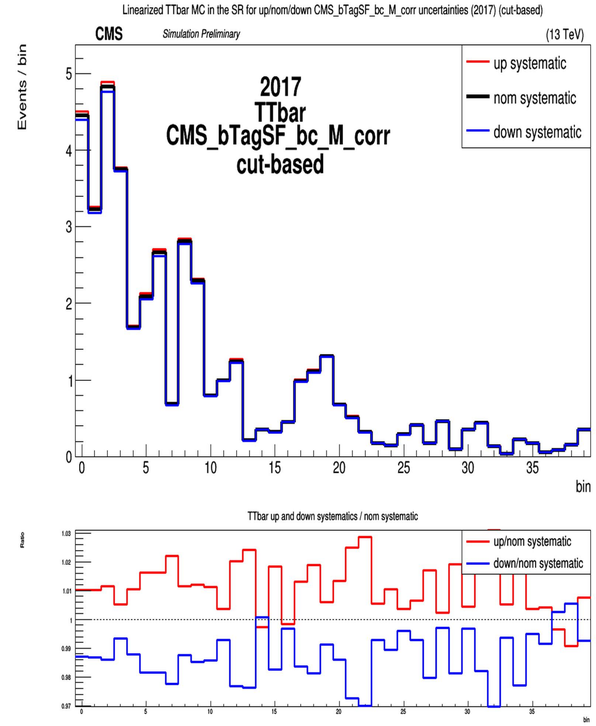
Linearized QCD MC in the SR for up/nom/down CMS_pu uncertainties (2018) (cut-based)

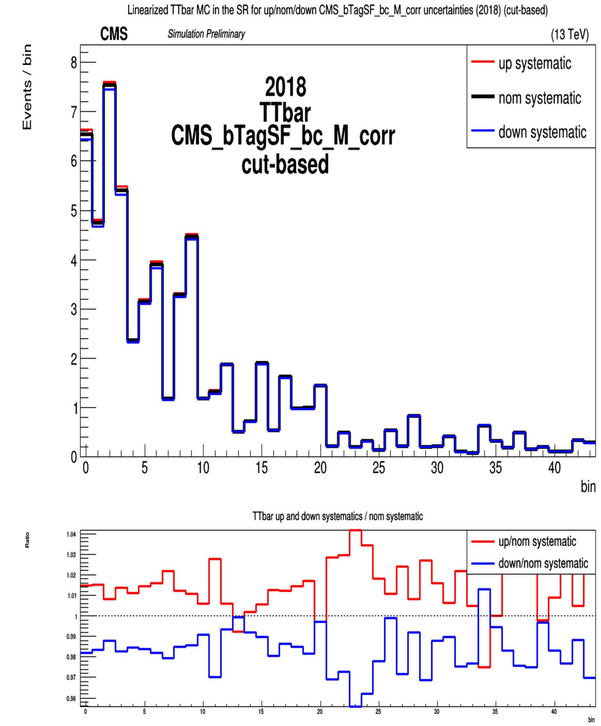


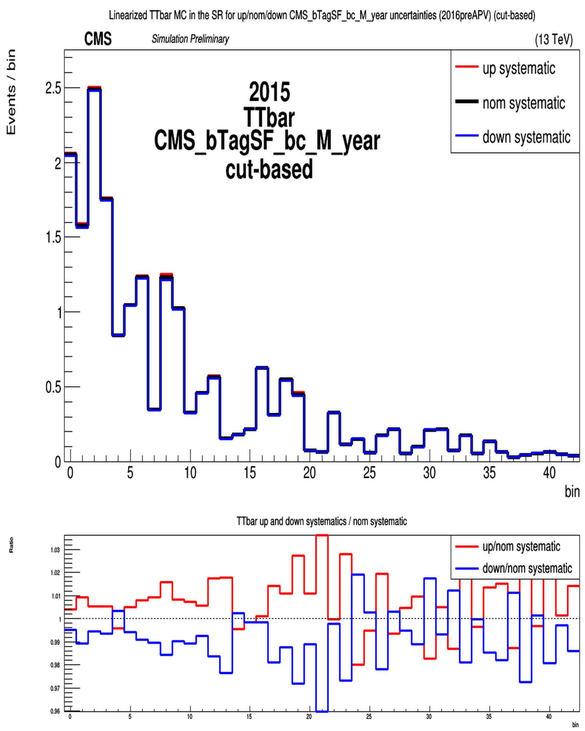


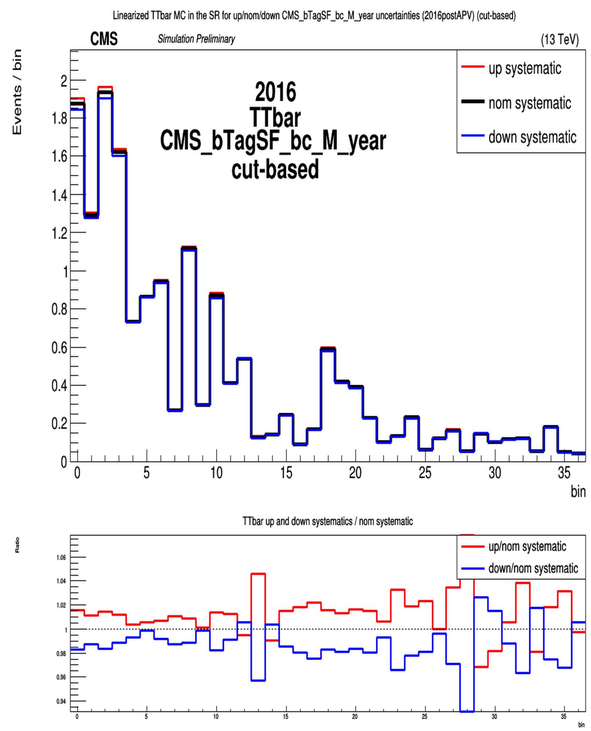

Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_M_corr uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_bTagSF_bc_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

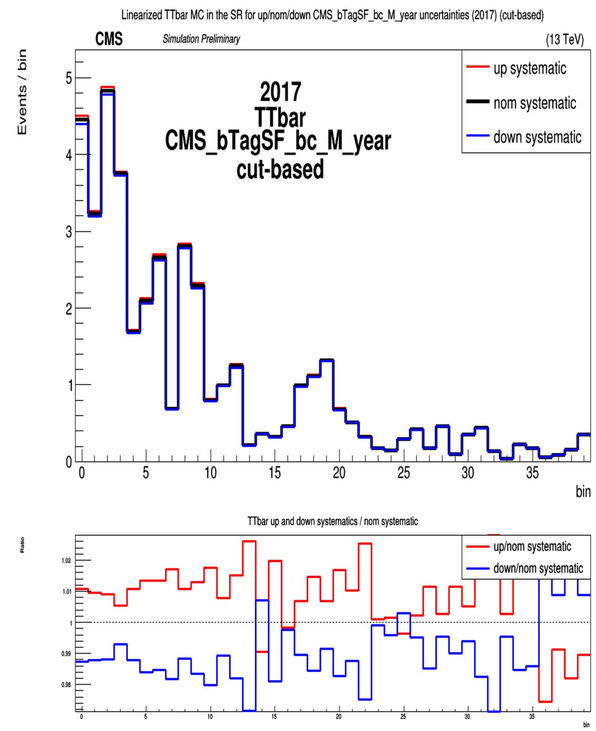

Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_M_corr uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_bTagSF_bc_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

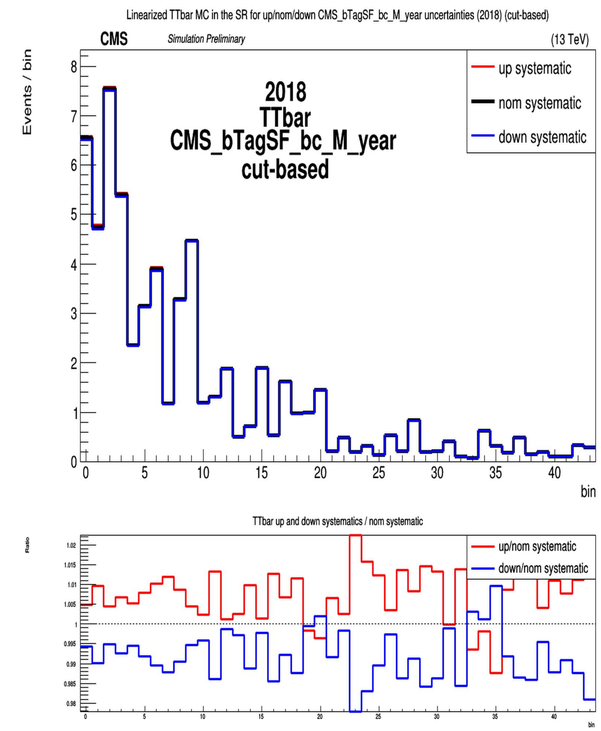

Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_M_corr uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_bTagSF_bc_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_M_corr uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_bTagSF_bc_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

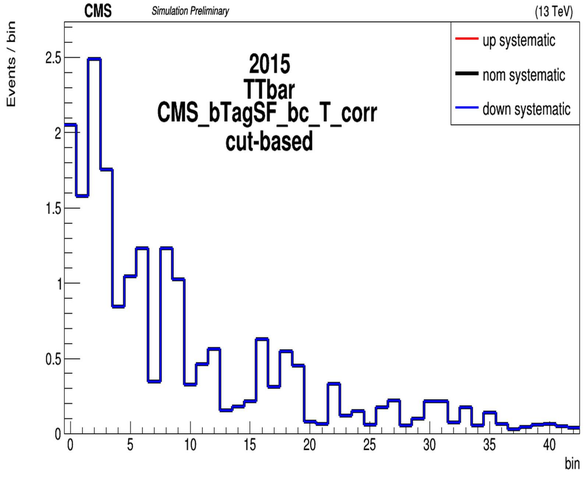

Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_M_year uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_bTagSF_bc_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

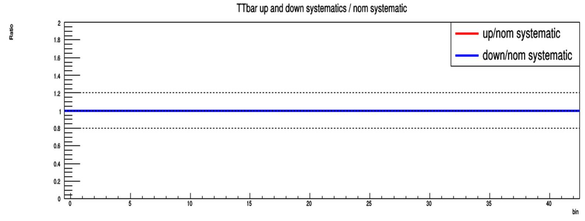

Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_M_year uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_bTagSF_bc_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_M_year uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_bTagSF_bc_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

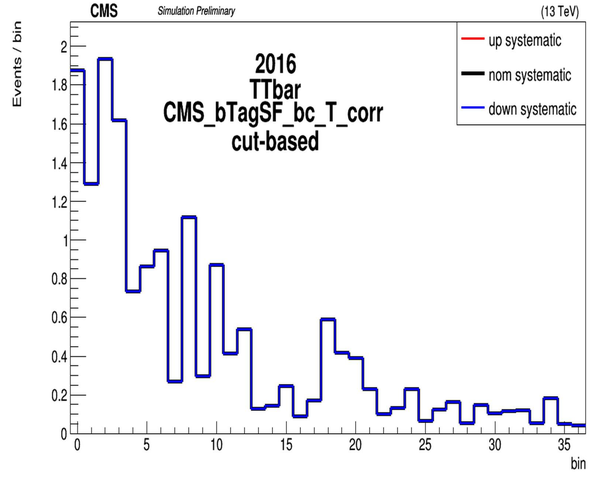

Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_M_year uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_bTagSF_bc_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

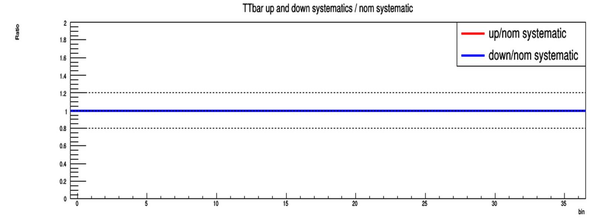
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_T_corr uncertainties (2016preAPV) (cut-based)



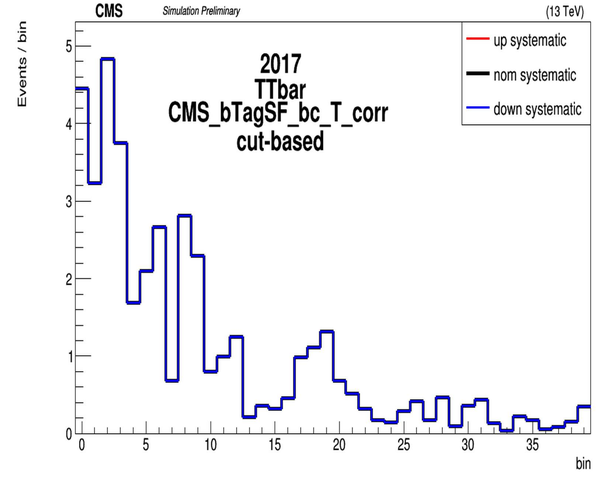


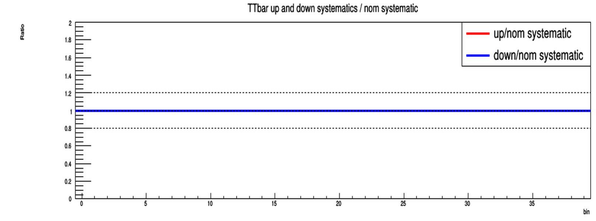
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_T_corr uncertainties (2016postAPV) (cut-based)



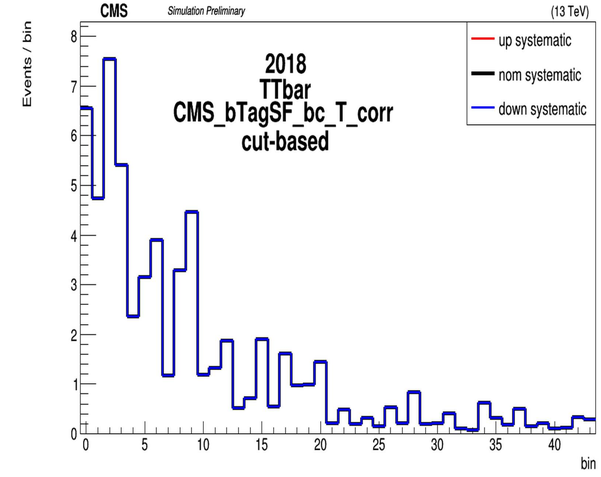


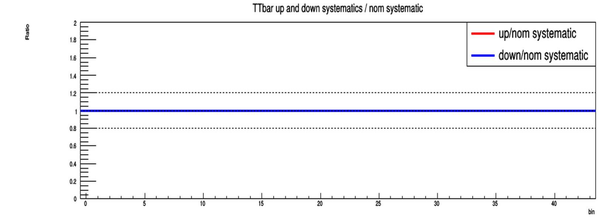
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_T_corr uncertainties (2017) (cut-based)



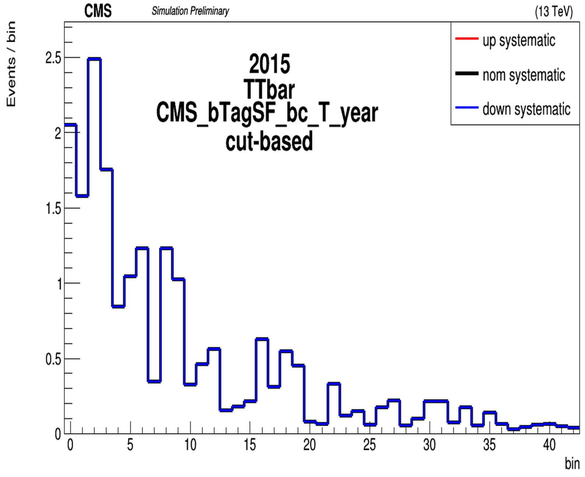


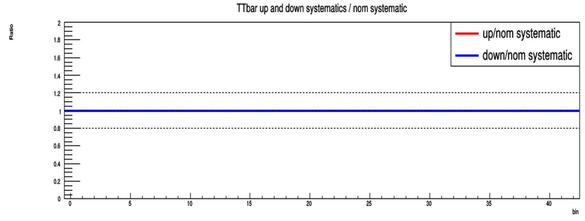
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_T_corr uncertainties (2018) (cut-based)



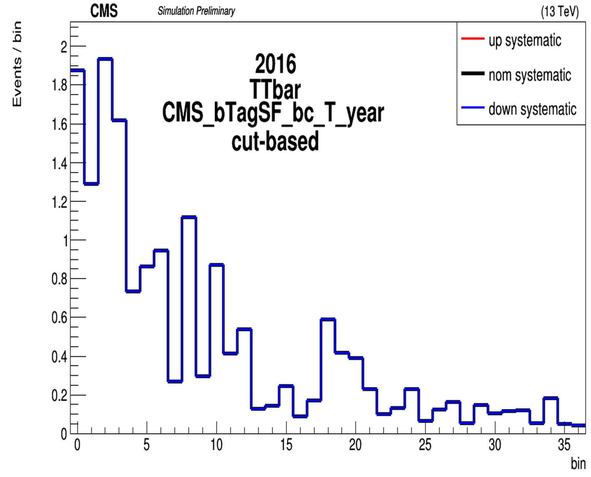


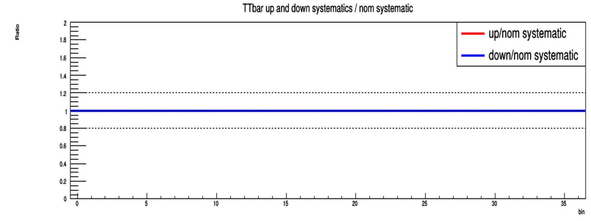
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_T_year uncertainties (2016preAPV) (cut-based)



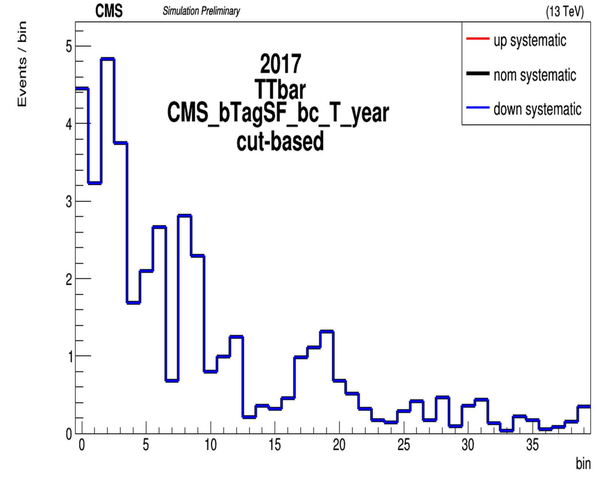


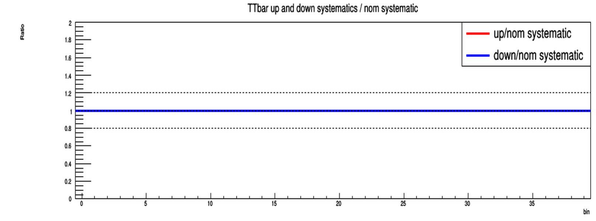
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_T_year uncertainties (2016postAPV) (cut-based)



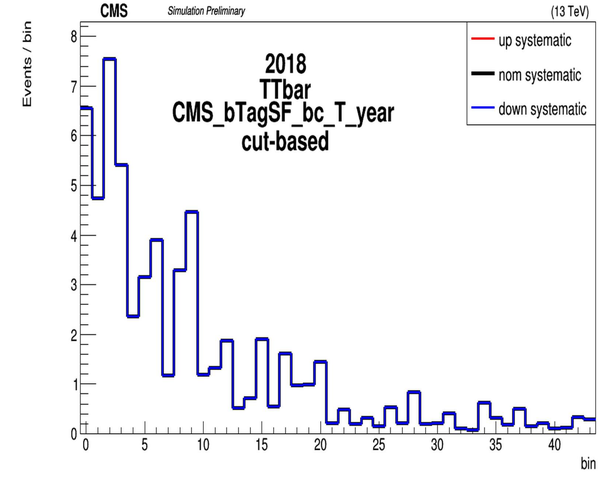


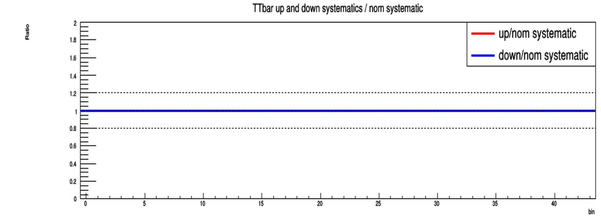
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_T_year uncertainties (2017) (cut-based)

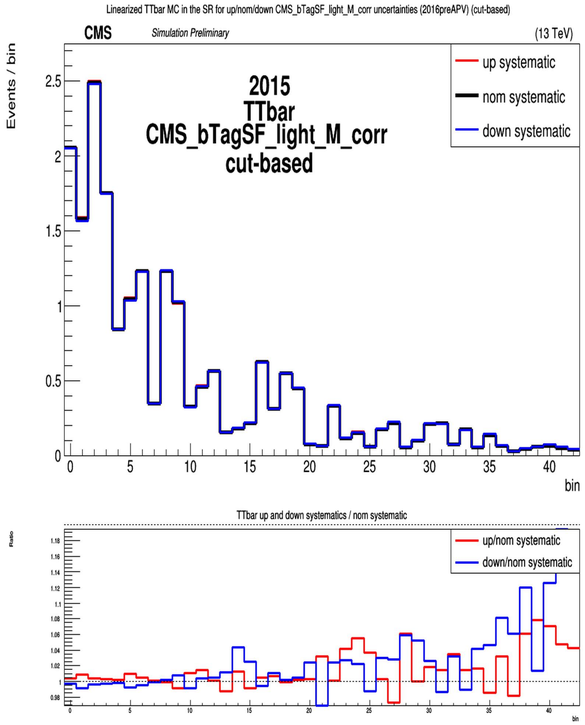


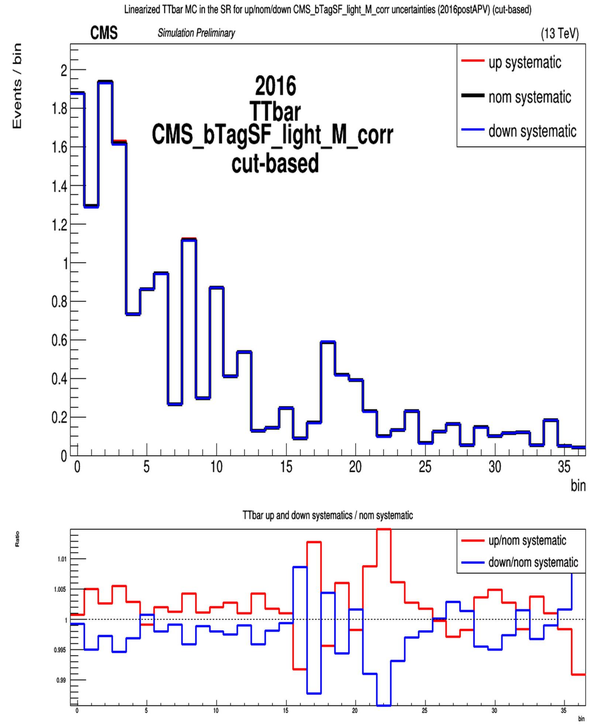


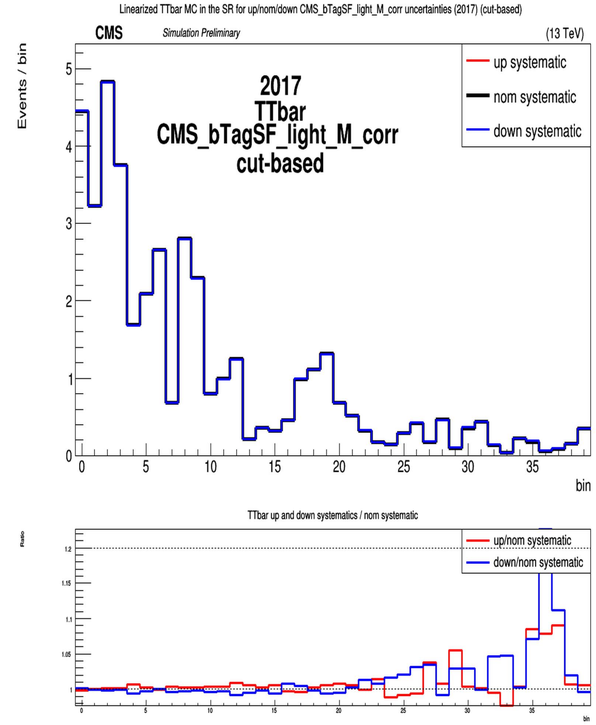
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_bc_T_year uncertainties (2018) (cut-based)

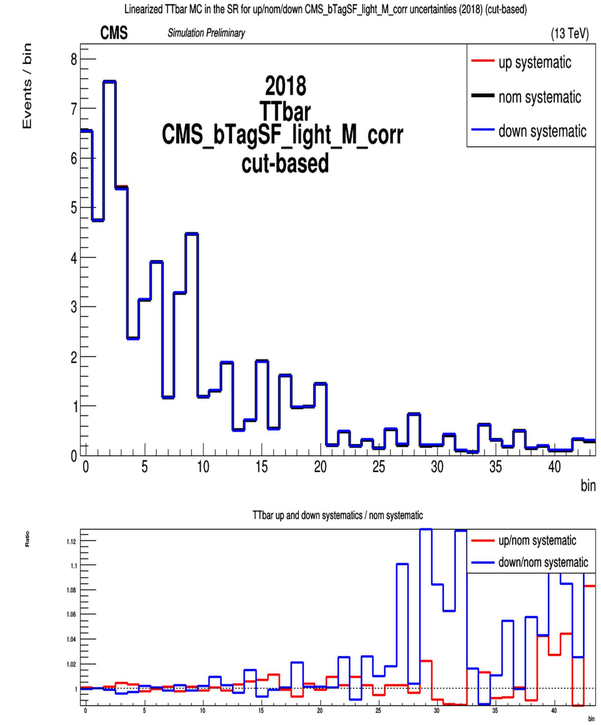


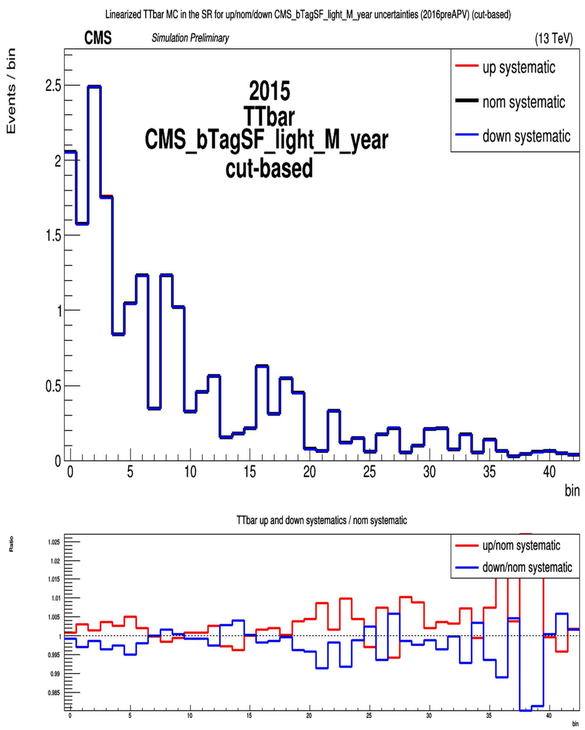


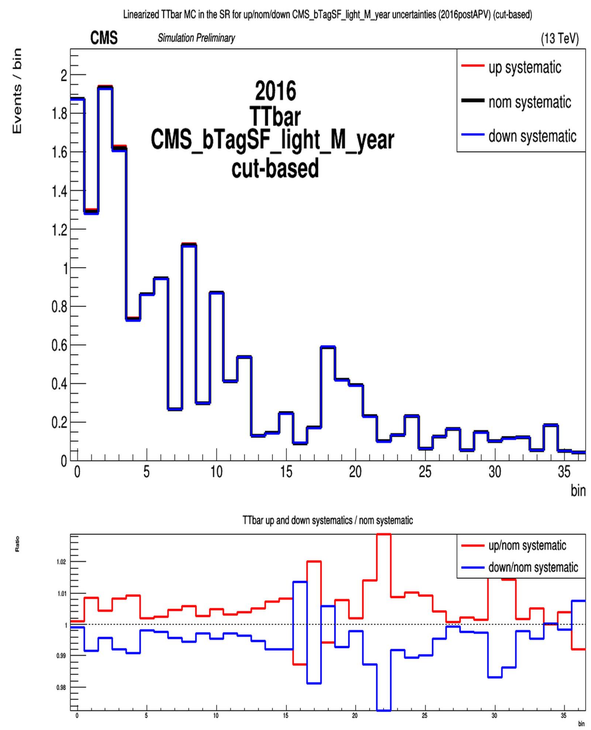

Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_M_corr uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_bTagSF_light_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

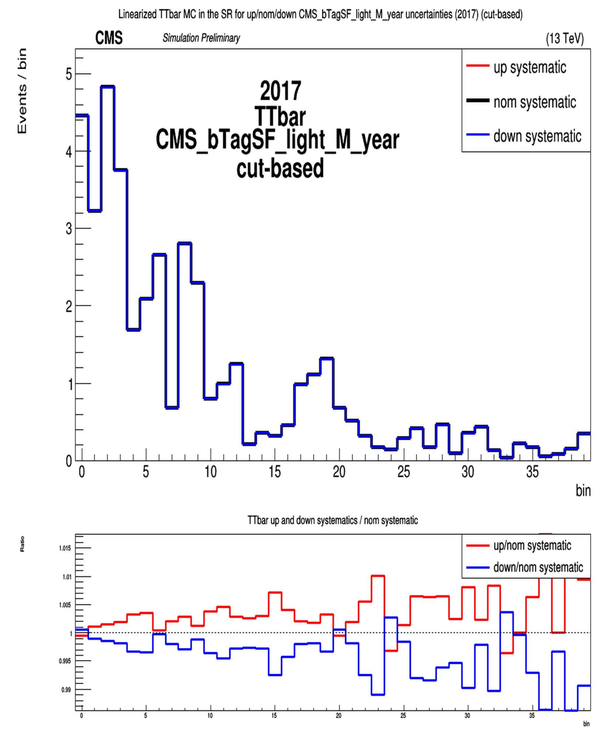

Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_M_corr uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_bTagSF_light_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

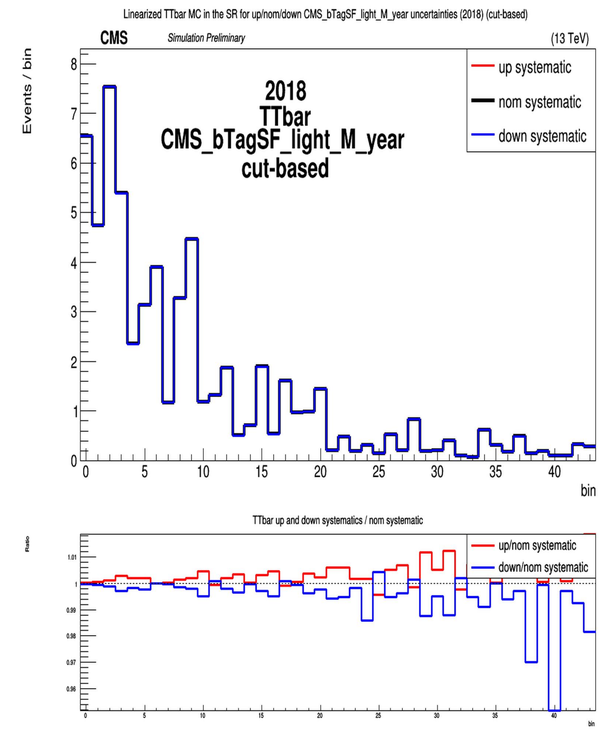

Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_M_corr uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_bTagSF_light_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_M_corr uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_bTagSF_light_M_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

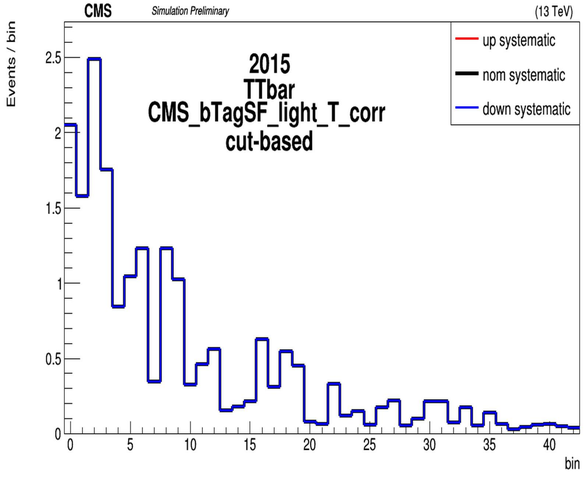

Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_M_year uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_bTagSF_light_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

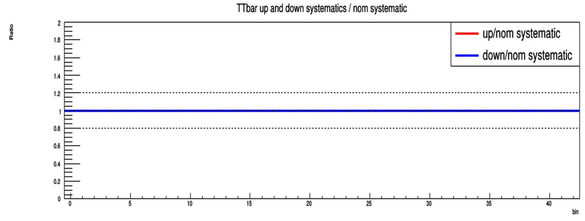

Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_M_year uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_bTagSF_light_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_M_year uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_bTagSF_light_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

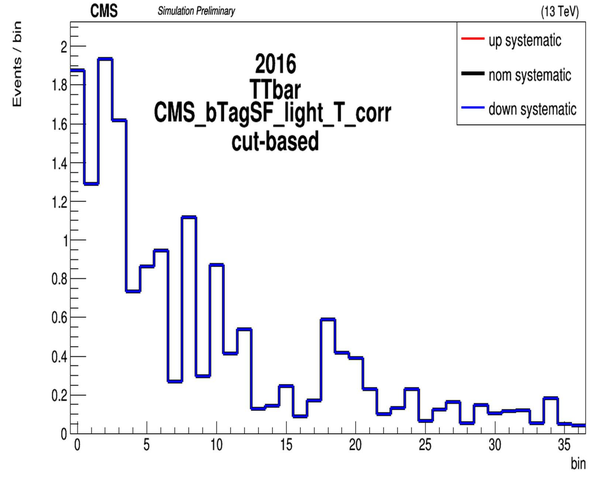

Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_M_year uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_bTagSF_light_M_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

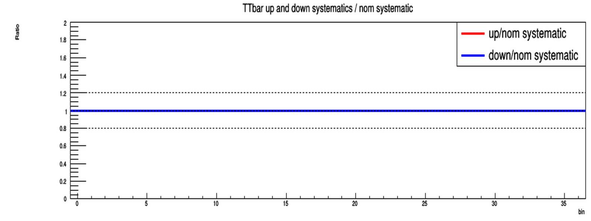
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_T_corr uncertainties (2016preAPV) (cut-based)



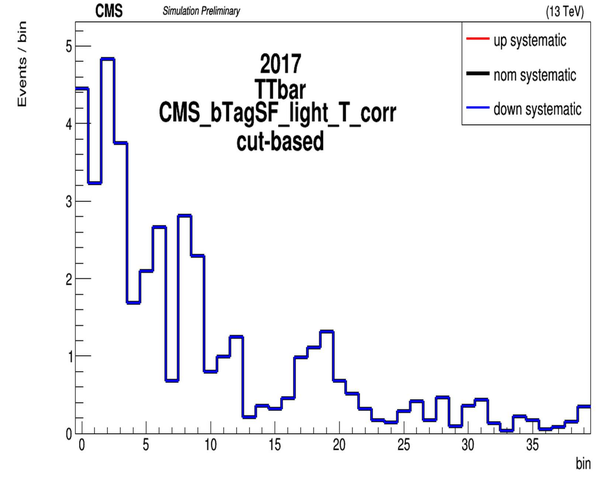


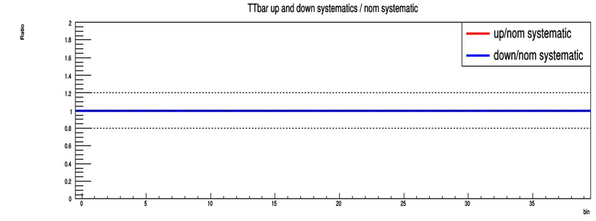
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_T_corr uncertainties (2016postAPV) (cut-based)



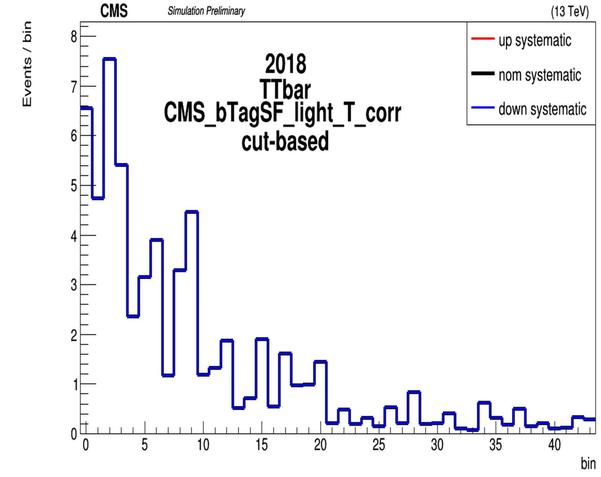


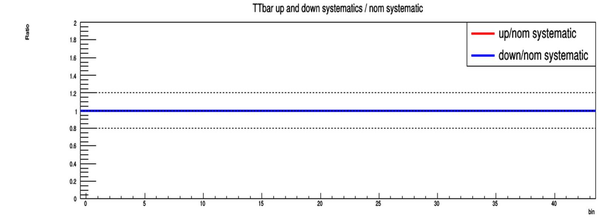
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_T_corr uncertainties (2017) (cut-based)



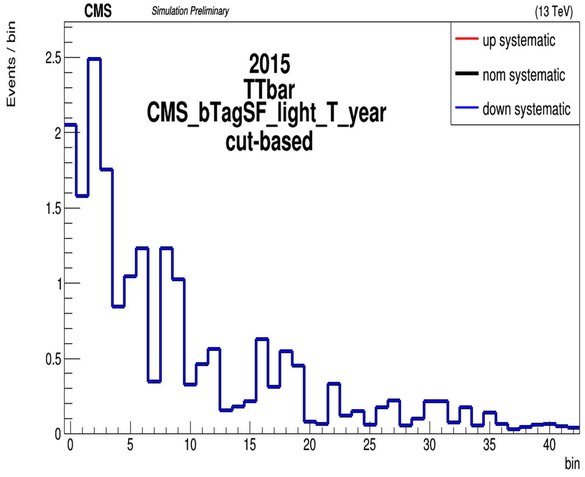


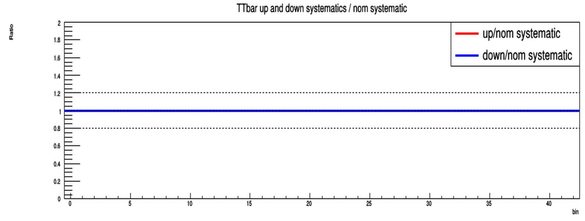
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_T_corr uncertainties (2018) (cut-based)



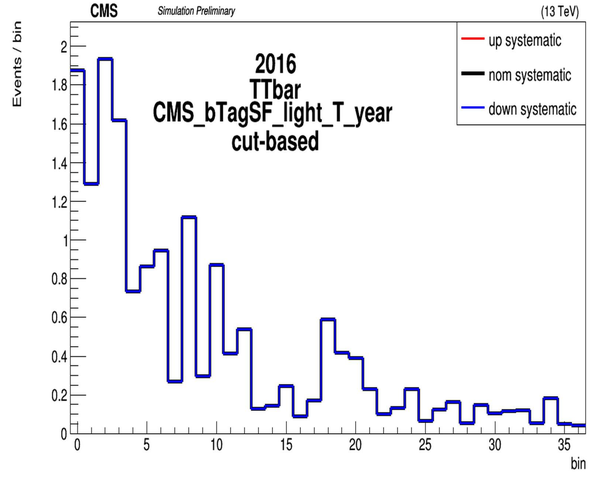


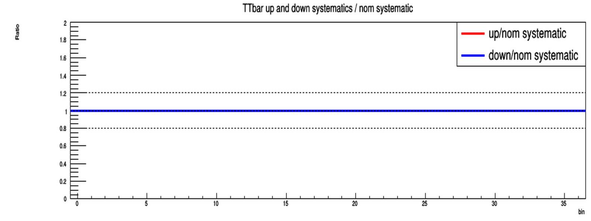
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_T_year uncertainties (2016preAPV) (cut-based)



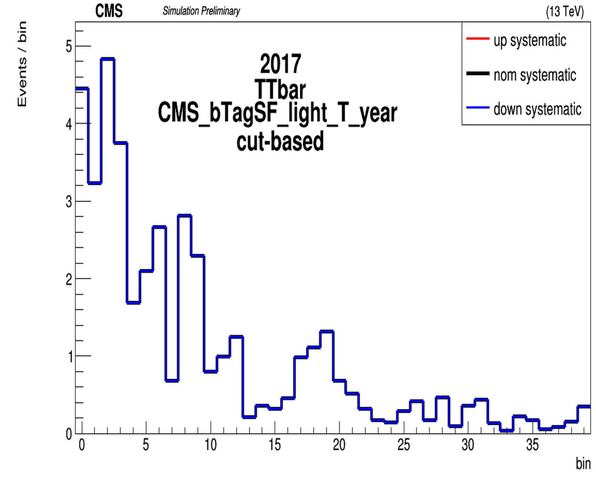


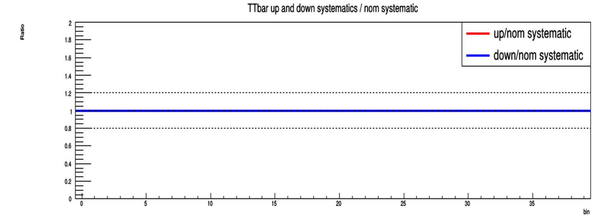
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_T_year uncertainties (2016postAPV) (cut-based)



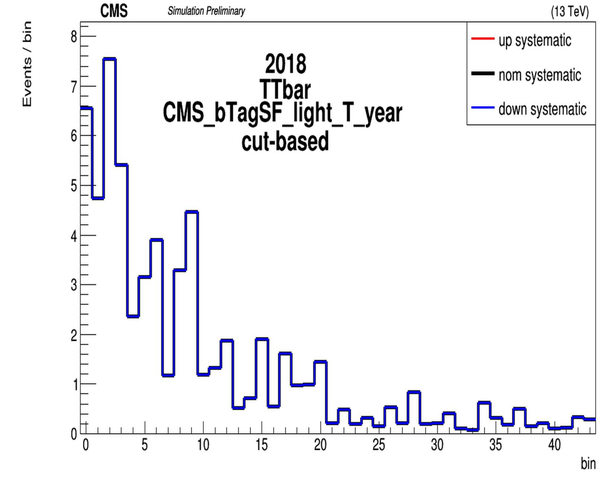


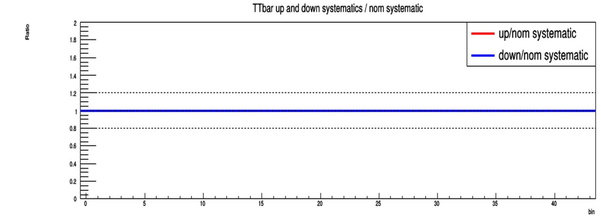
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_T_year uncertainties (2017) (cut-based)



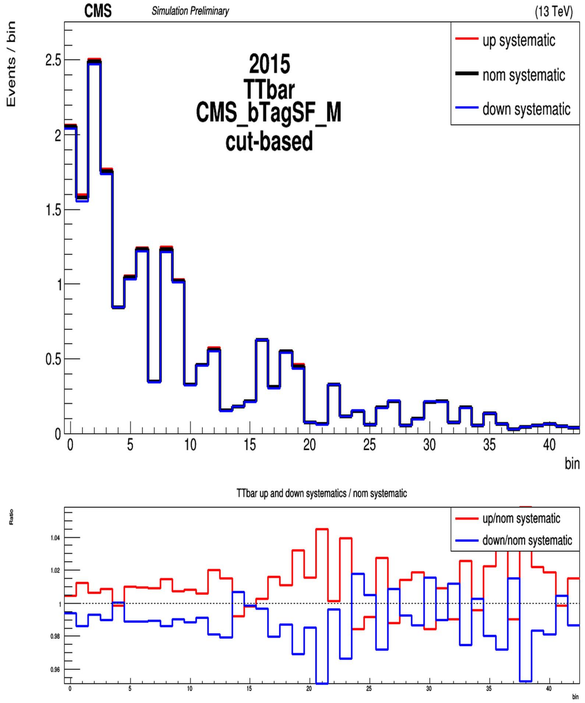


Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_light_T_year uncertainties (2018) (cut-based)

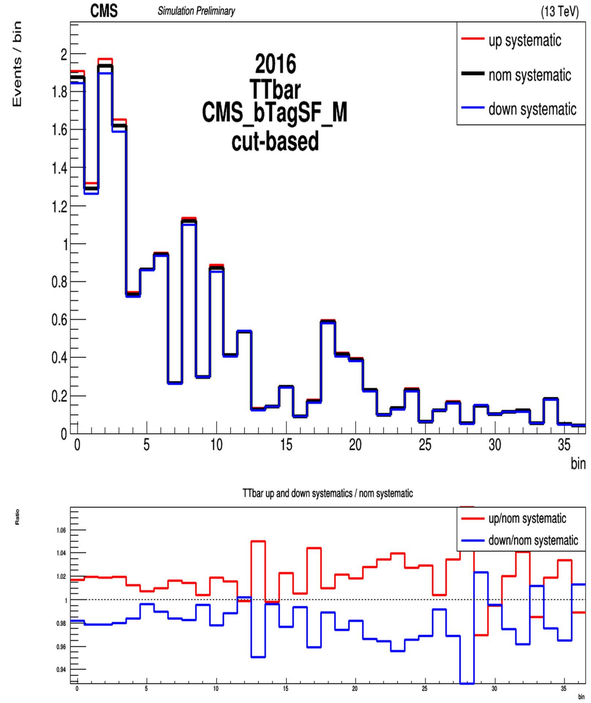




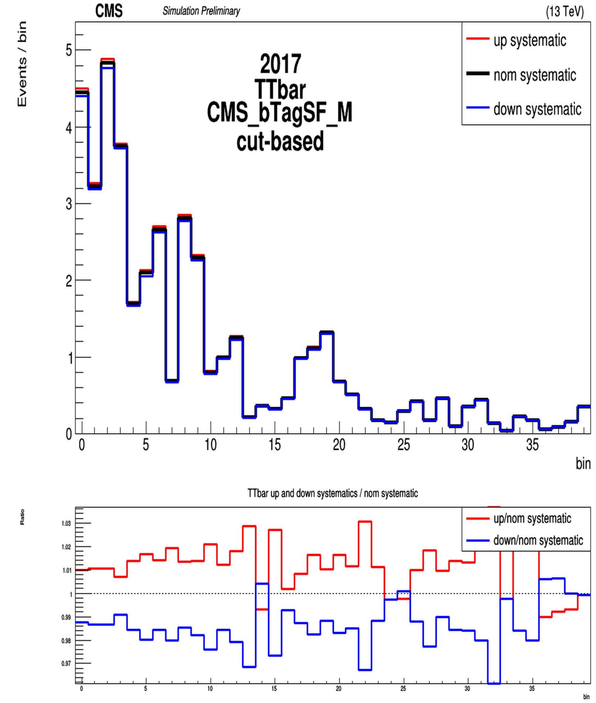
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_M uncertainties (2016preAPV) (cut-based)



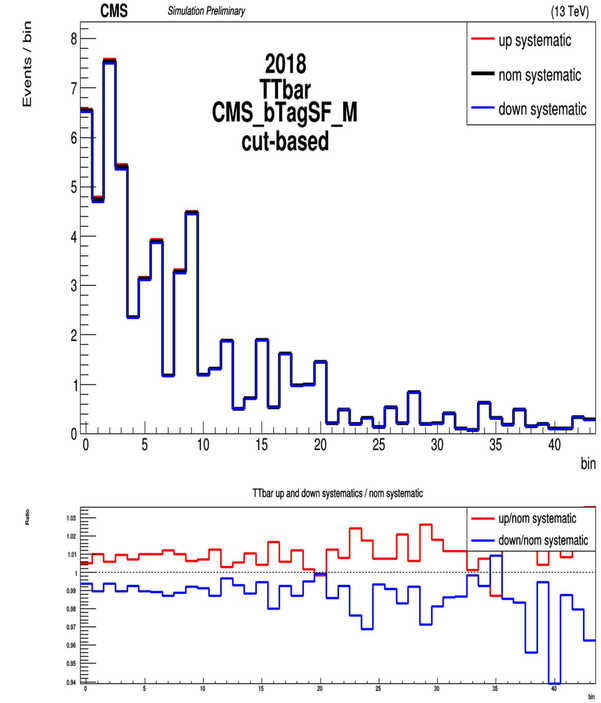
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_M uncertainties (2016postAPV) (cut-based)



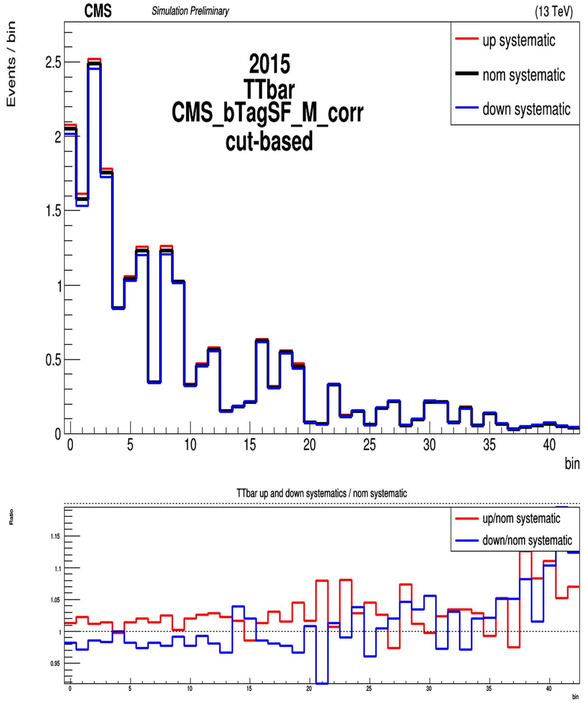
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_M uncertainties (2017) (cut-based)



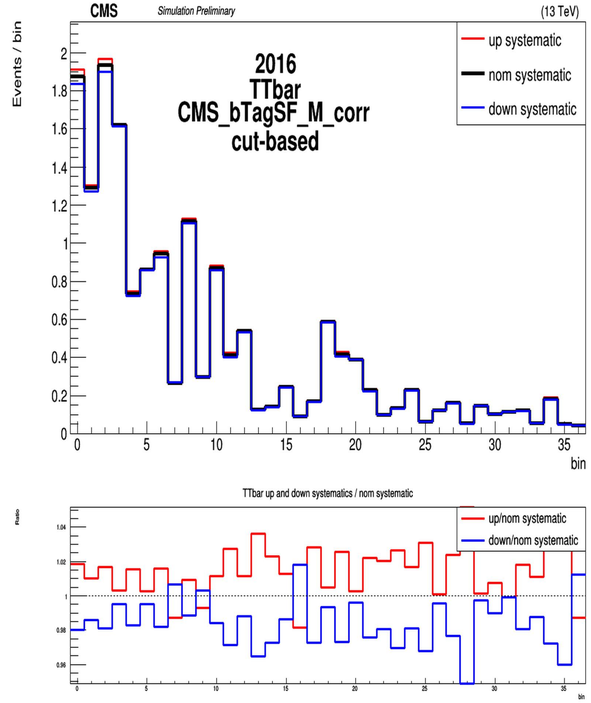
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_M uncertainties (2018) (cut-based)



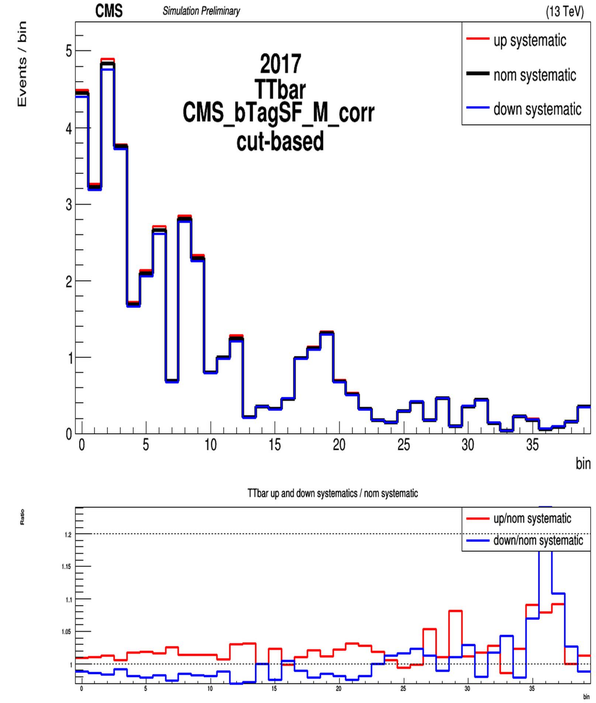
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_M_corr uncertainties (2016preAPV) (cut-based)



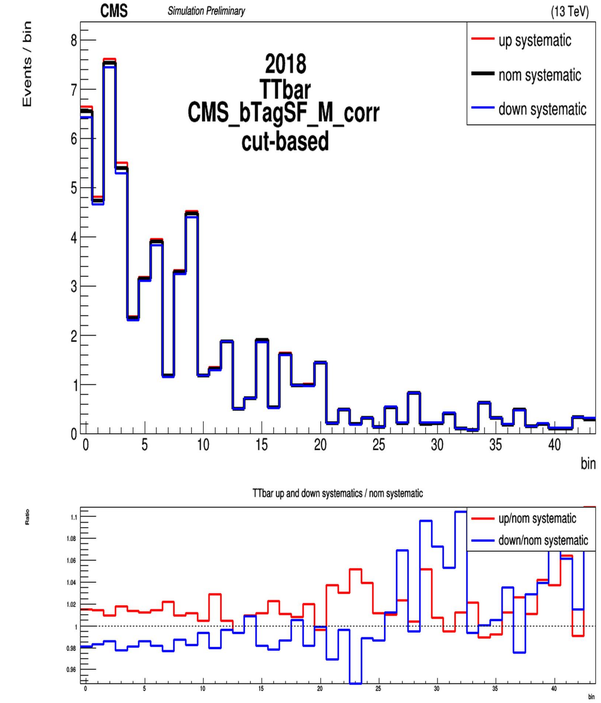
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_M_corr uncertainties (2016postAPV) (cut-based)

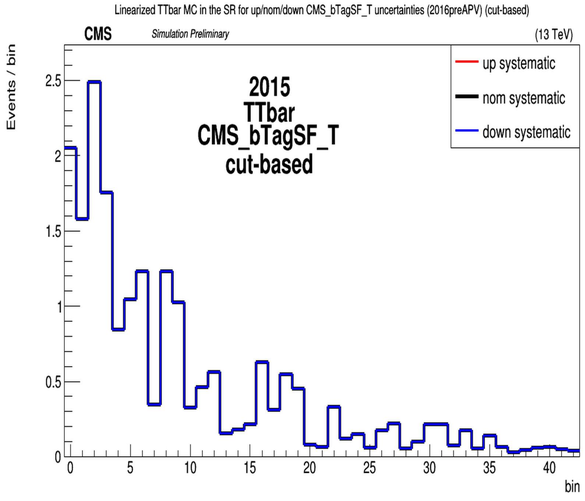


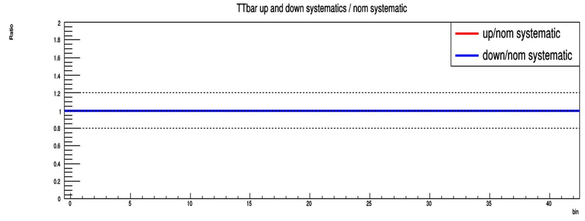
Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_M_corr uncertainties (2017) (cut-based)

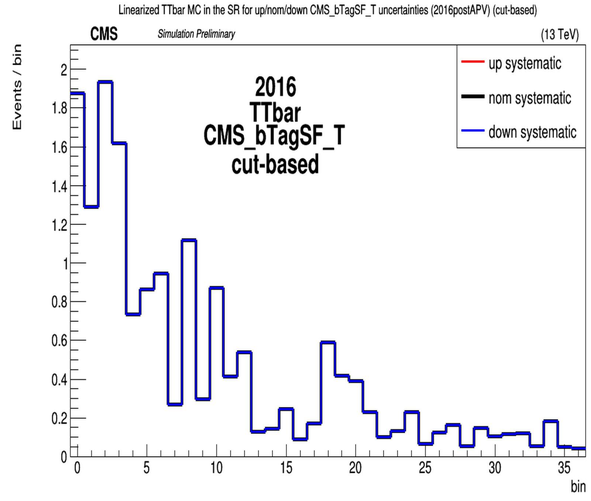


Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_M_corr uncertainties (2018) (cut-based)




Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_T uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_bTagSF_T
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin


TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin


Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_T uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_bTagSF_T
cut-based
up systematic
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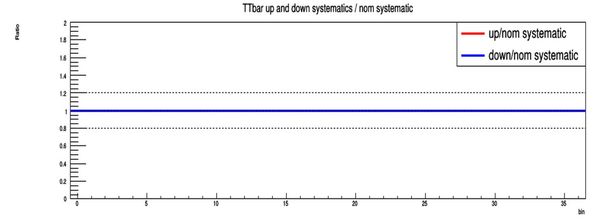
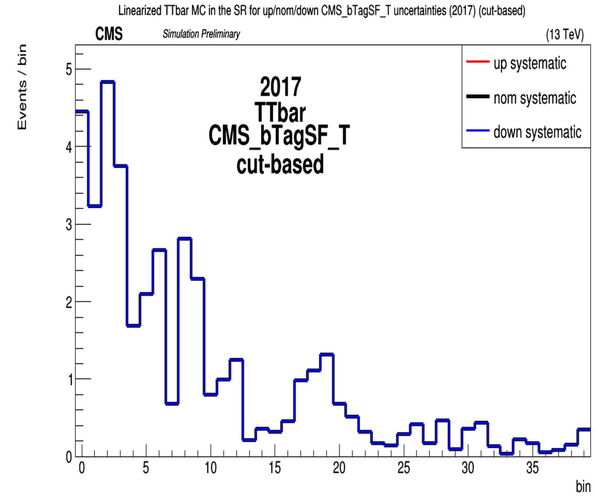
Events / bin
bin


TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin


Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_T uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_bTagSF_T
cut-based
up systematic
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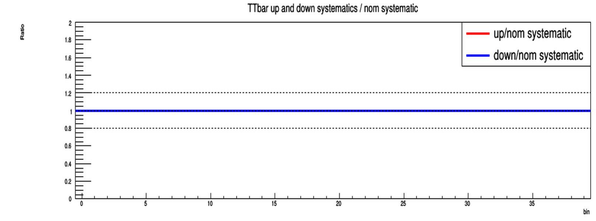
Events / bin
bin


TTbar up and down systematics / nom systematic
up/nom systematic
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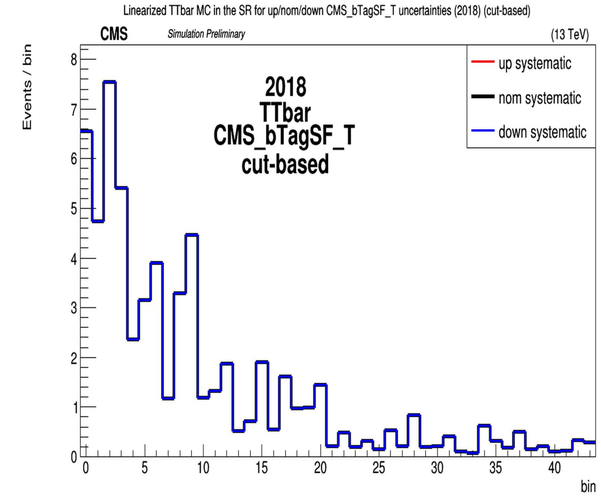
Ratio
bin


Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_T uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_bTagSF_T
cut-based
up systematic
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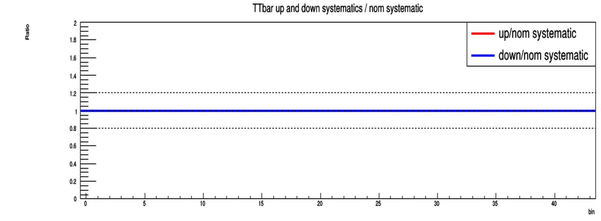
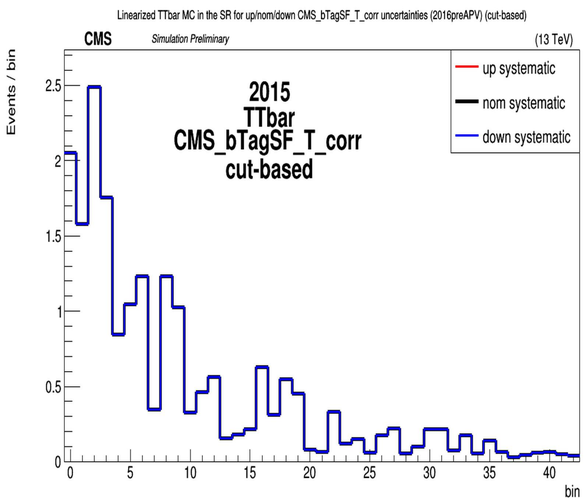
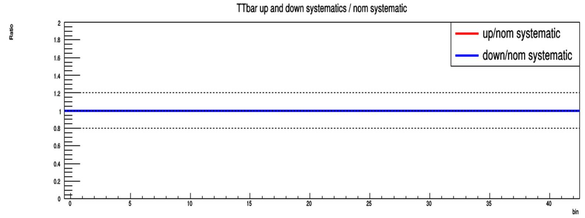
bin


TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin


Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_T_corr uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_bTagSF_T_corr
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin


TTbar up and down systematics / nom systematic
up/nom systematic
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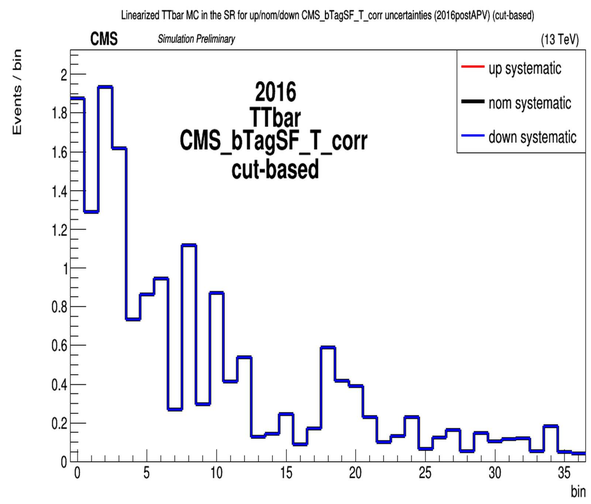
Ratio
bin


Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_T_corr uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_bTagSF_T_corr
cut-based
up systematic
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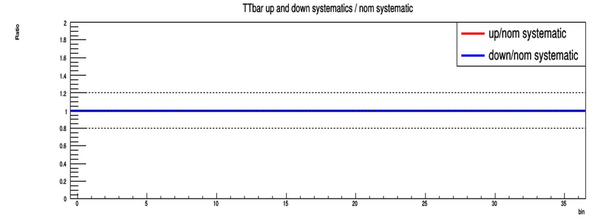
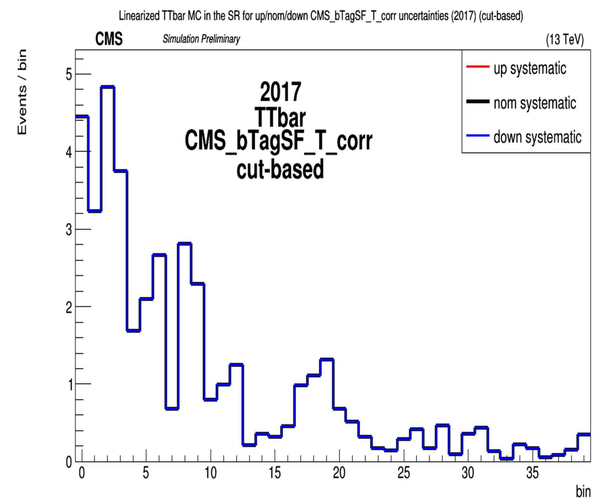
Events / bin
bin


TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin


Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_T_corr uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_bTagSF_T_corr
cut-based
up systematic
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Events / bin
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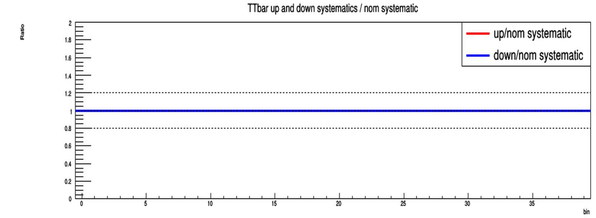
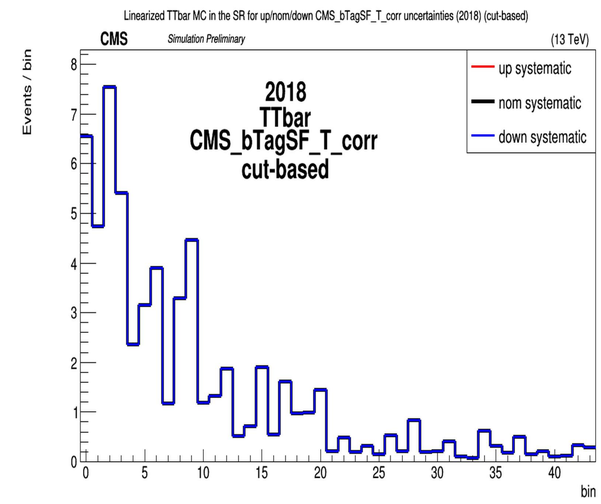

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin


Linearized TTbar MC in the SR for up/nom/down CMS_bTagSF_T_corr uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_bTagSF_T_corr
cut-based
up systematic
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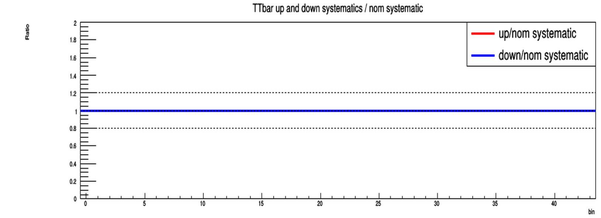
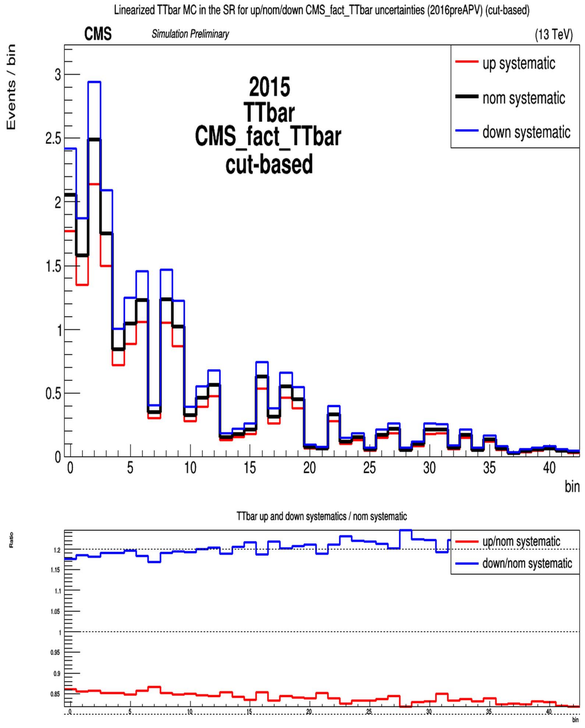
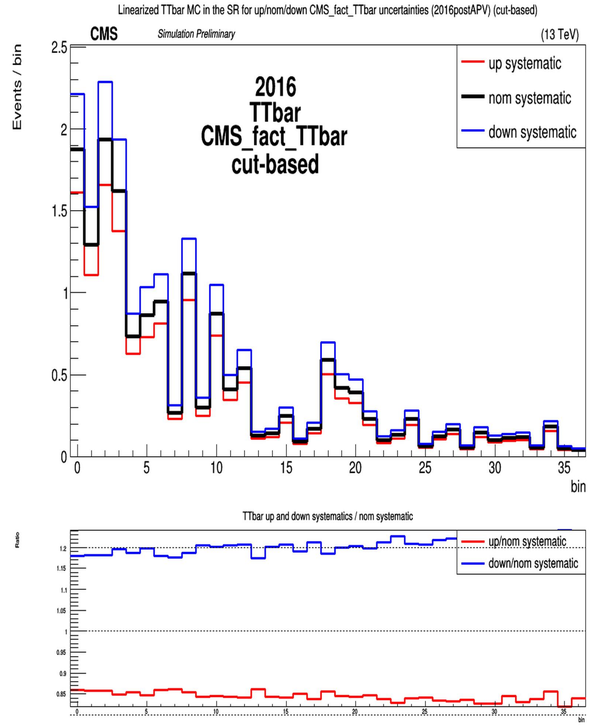
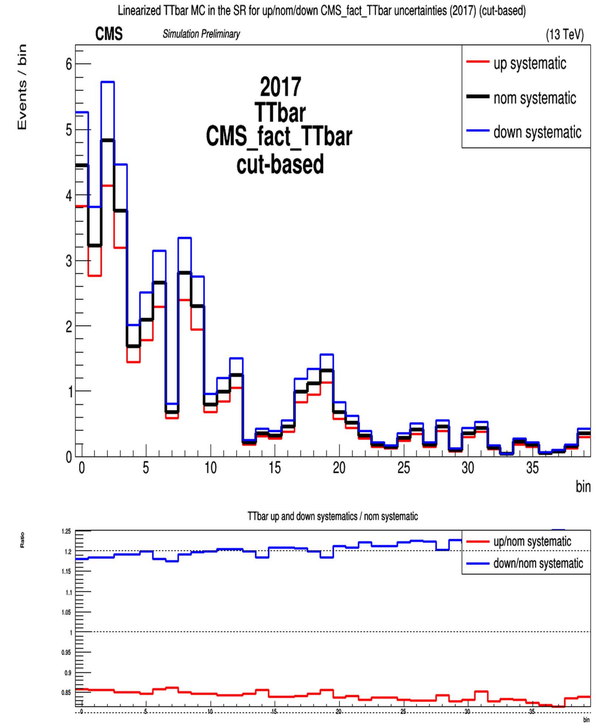
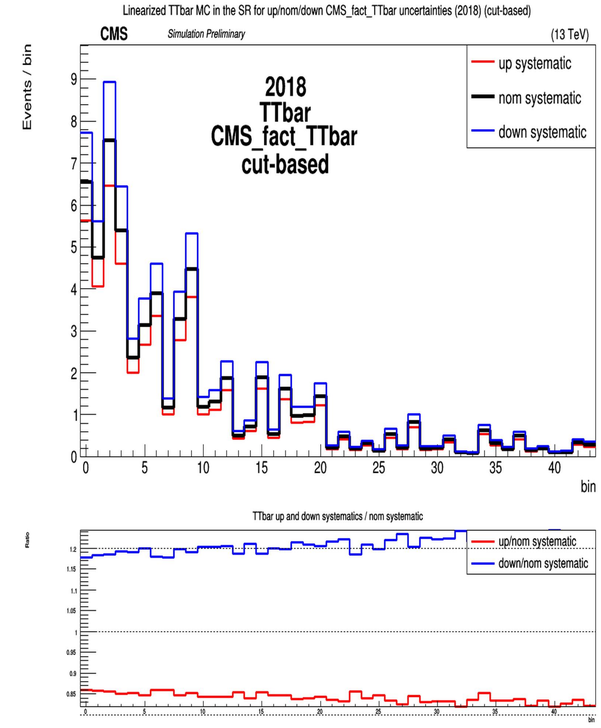
Events / bin
bin

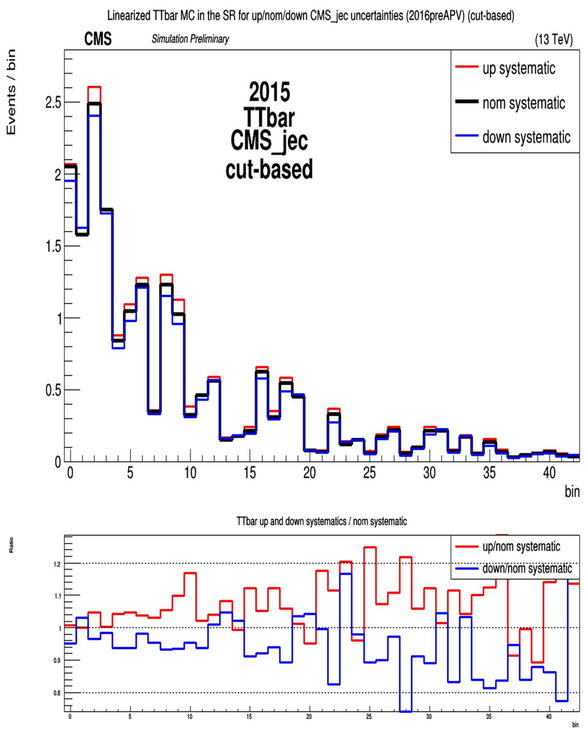

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

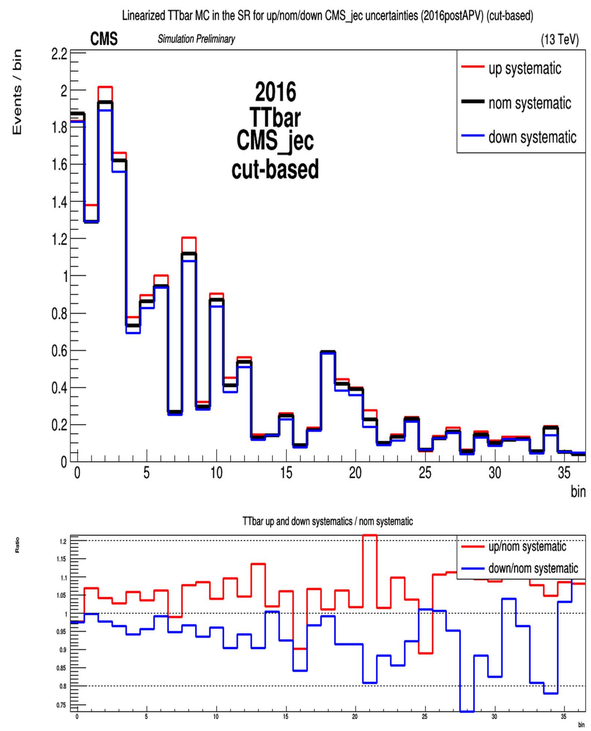

Linearized TTbar MC in the SR for up/nom/down CMS_fact_TTbar uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_fact_TTbar
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

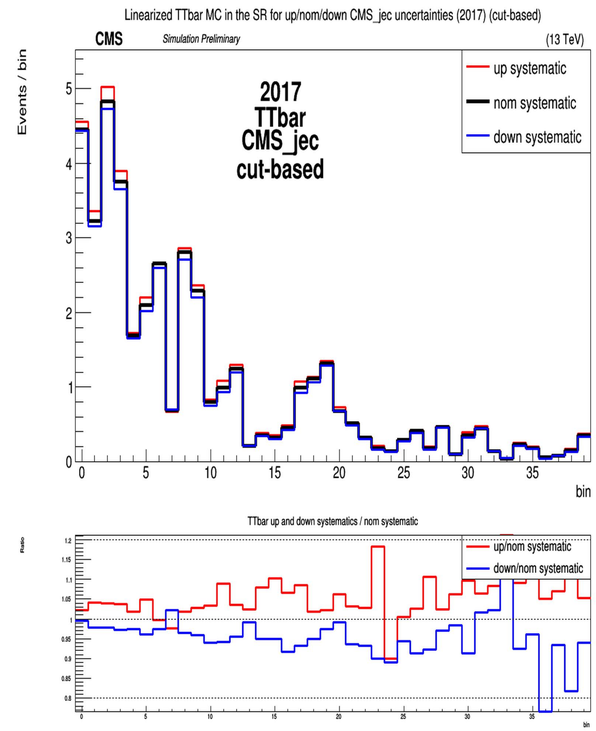

Linearized TTbar MC in the SR for up/nom/down CMS_fact_TTbar uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_fact_TTbar
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

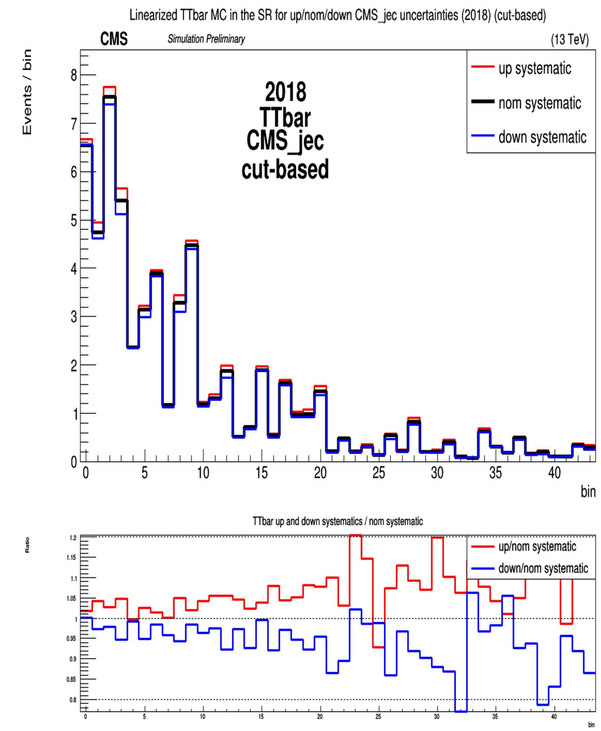

Linearized TTbar MC in the SR for up/nom/down CMS_fact_TTbar uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_fact_TTbar
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_fact_TTbar uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_fact_TTbar
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

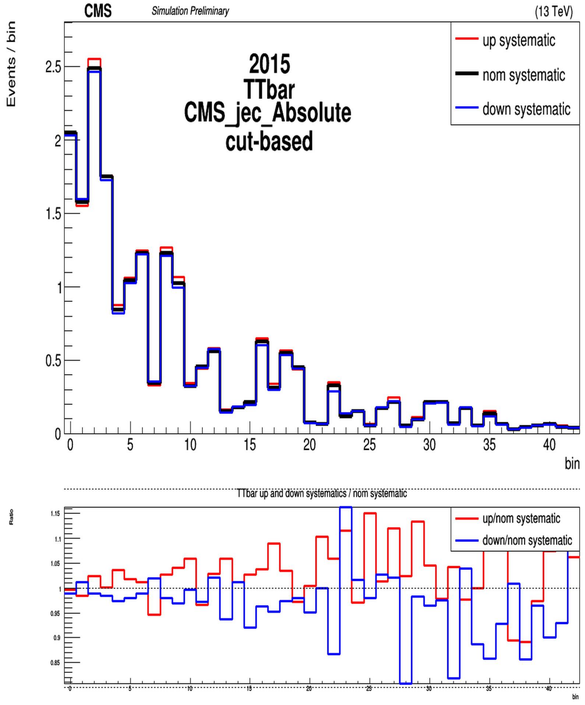

Linearized TTbar MC in the SR for up/nom/down CMS_jec uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_jec
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_jec uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_jec
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

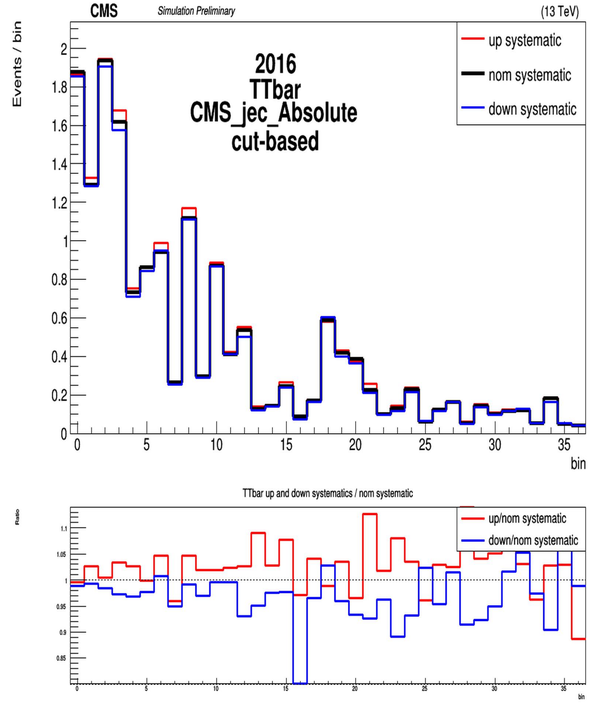

Linearized TTbar MC in the SR for up/nom/down CMS_jec uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_jec
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_jec uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_jec
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

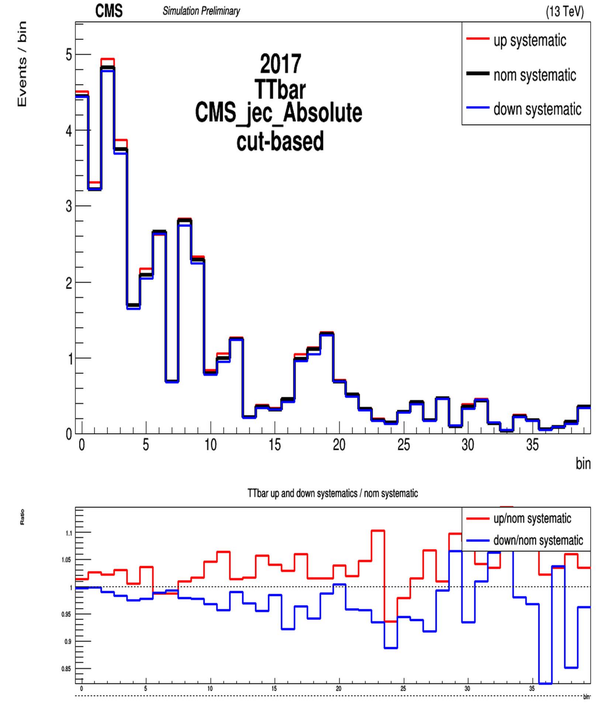
Linearized TTbar MC in the SR for up/nom/down CMS_jec_Absolute uncertainties (2016preAPV) (cut-based)



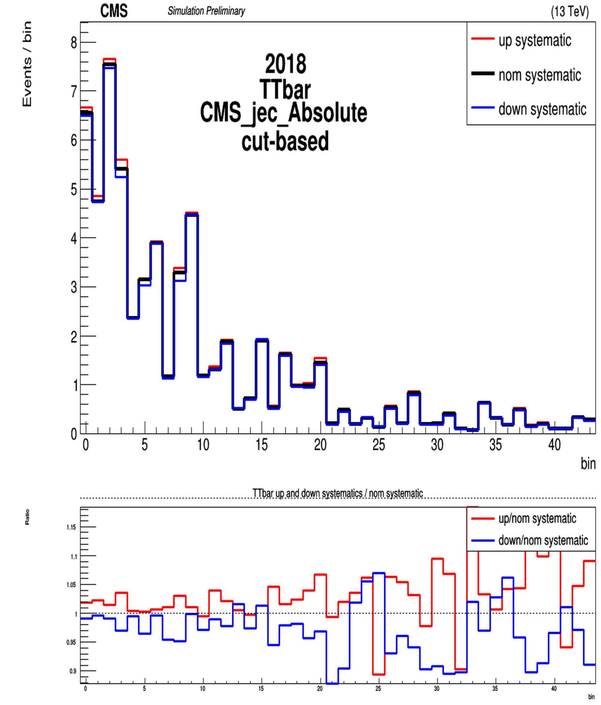
Linearized TTbar MC in the SR for up/nom/down CMS_jec_Absolute uncertainties (2016postAPV) (cut-based)



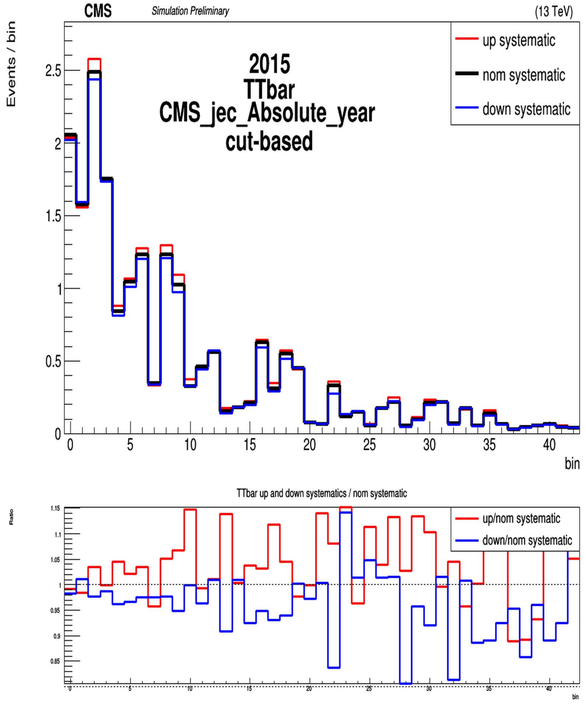
Linearized TTbar MC in the SR for up/nom/down CMS_jec_Absolute uncertainties (2017) (cut-based)



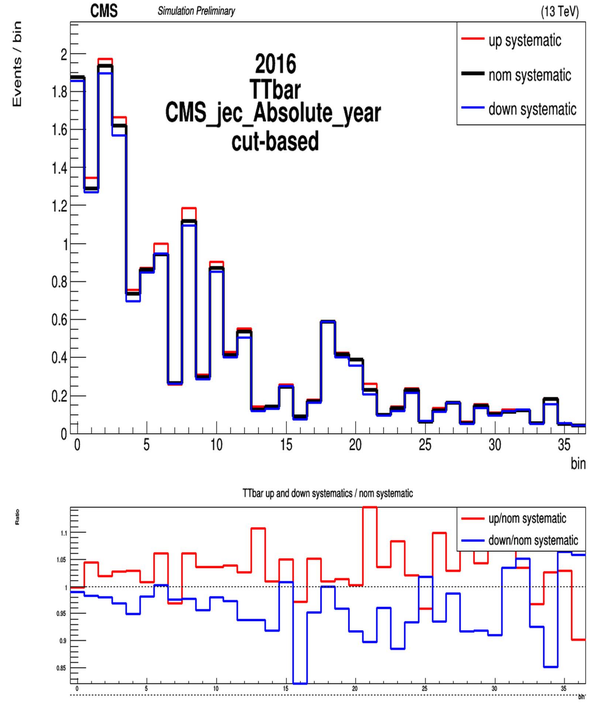
Linearized TTbar MC in the SR for up/nom/down CMS_jec_Absolute uncertainties (2018) (cut-based)



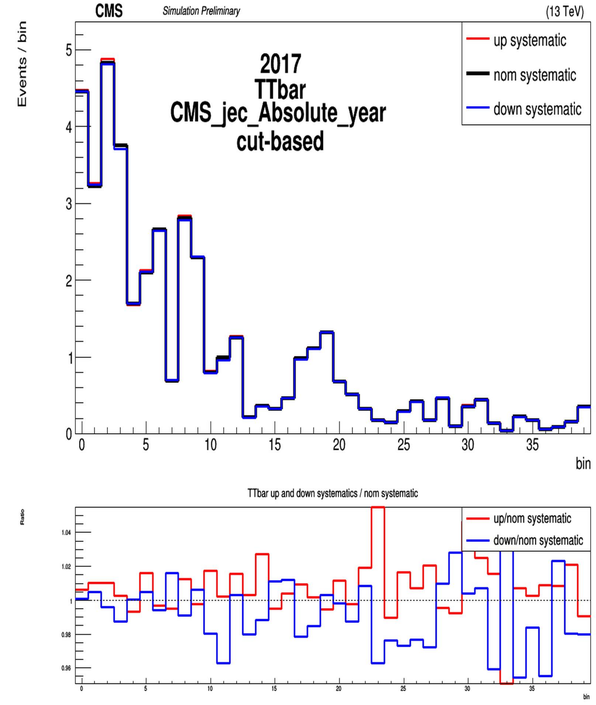
Linearized TTbar MC in the SR for up/nom/down CMS_jec_Absolute_year uncertainties (2016preAPV) (cut-based)



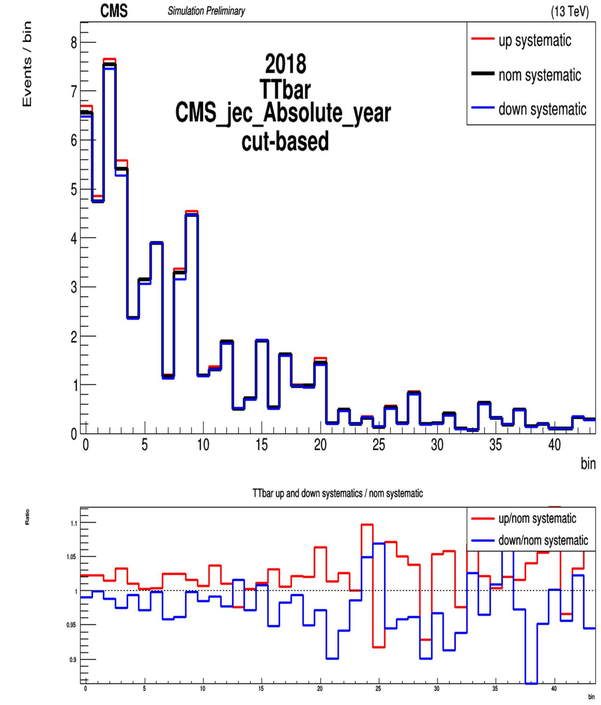
Linearized TTbar MC in the SR for up/nom/down CMS_jec_Absolute_year uncertainties (2016postAPV) (cut-based)

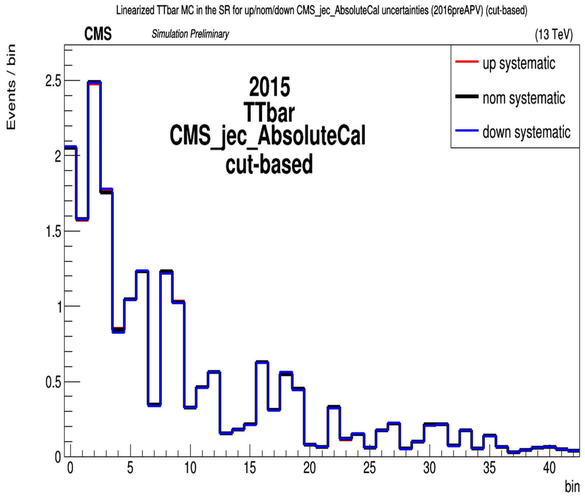


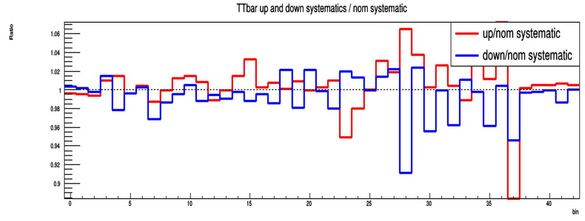
Linearized TTbar MC in the SR for up/nom/down CMS_jec_Absolute_year uncertainties (2017) (cut-based)

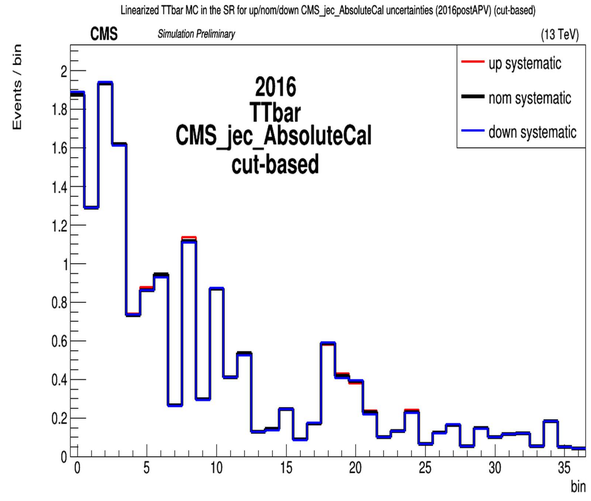


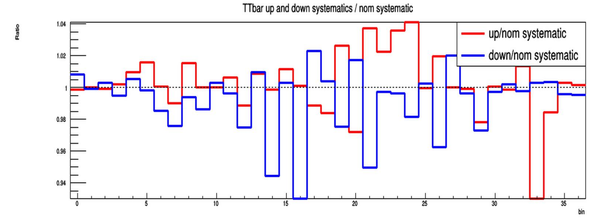
Linearized TTbar MC in the SR for up/nom/down CMS_jec_Absolute_year uncertainties (2018) (cut-based)

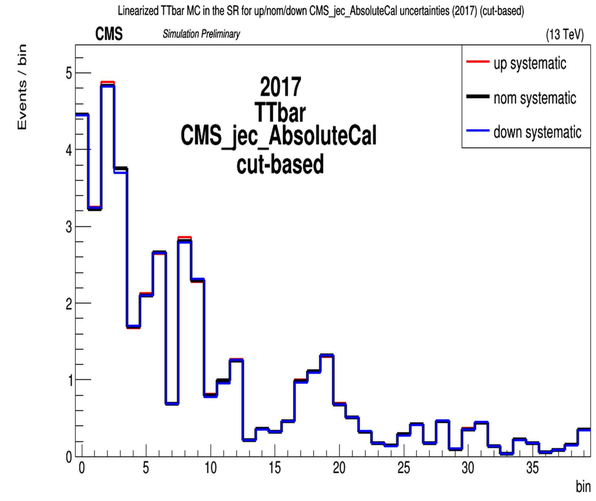


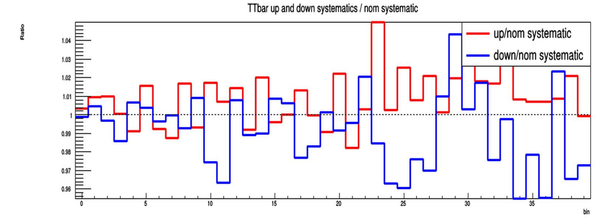

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteCal uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_jec_AbsoluteCal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

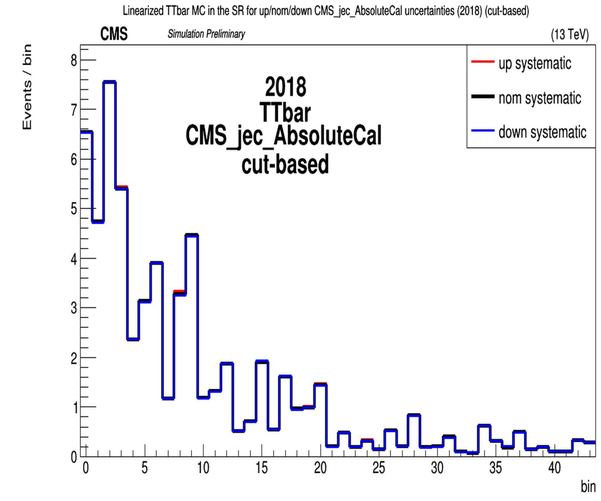

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

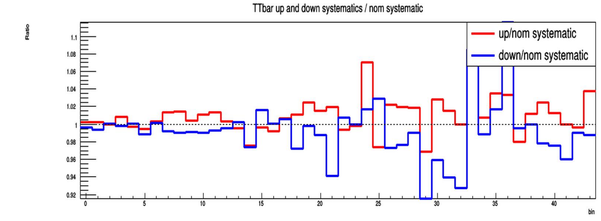

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteCal uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_jec_AbsoluteCal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

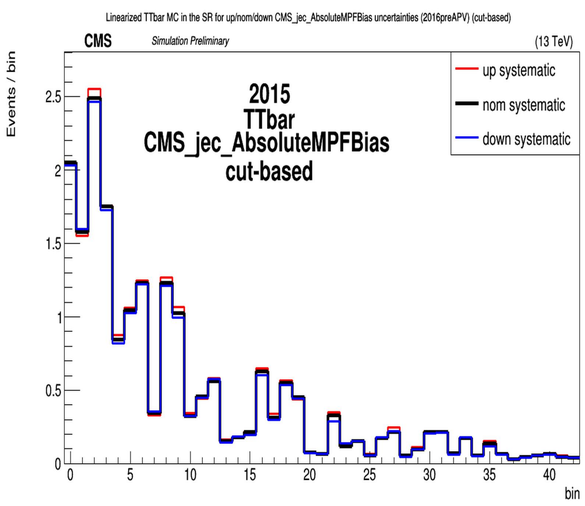

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

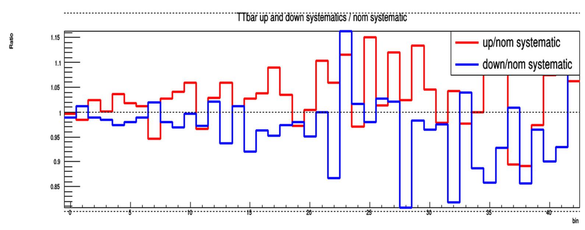

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteCal uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_jec_AbsoluteCal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

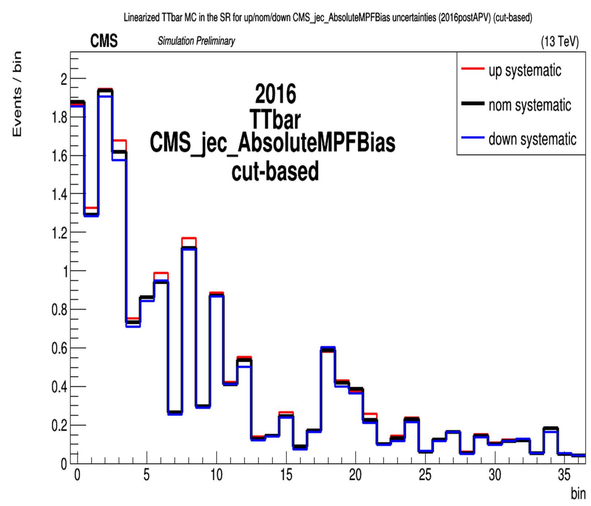

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

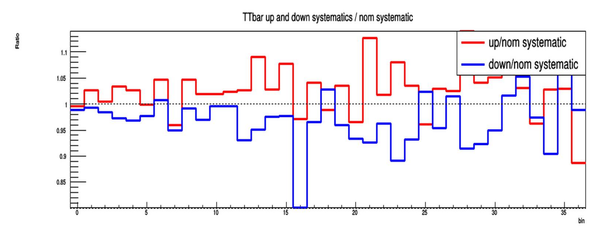

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteCal uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_jec_AbsoluteCal
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

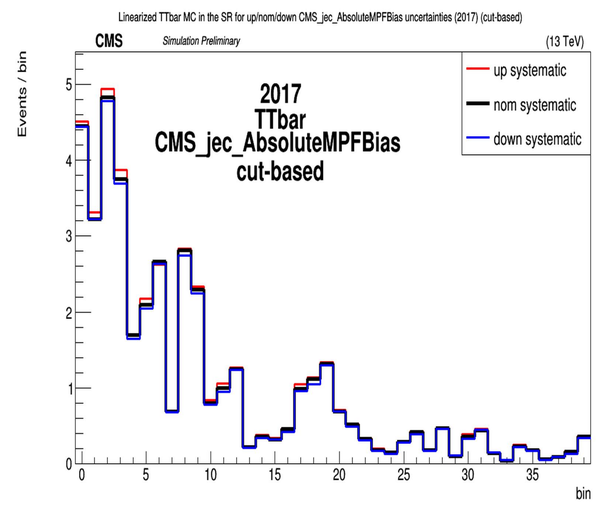

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

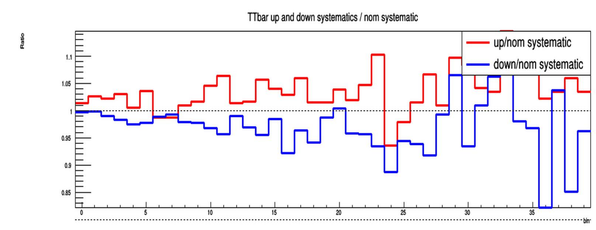

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteMPFBias uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_jec_AbsoluteMPFBias
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

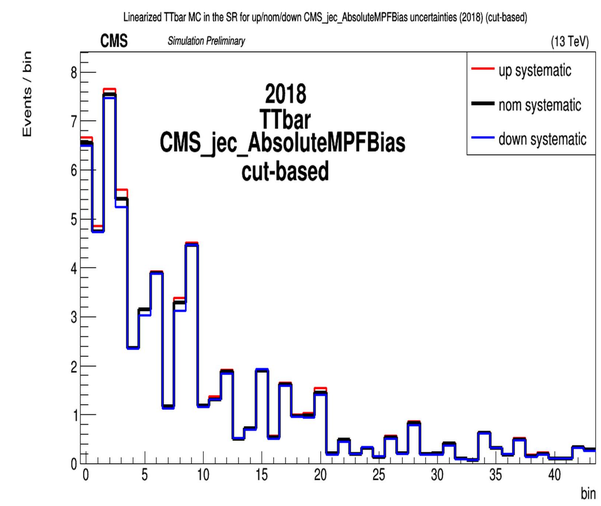

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

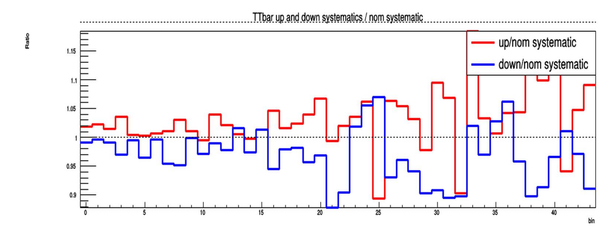

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteMPFBias uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_jec_AbsoluteMPFBias
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

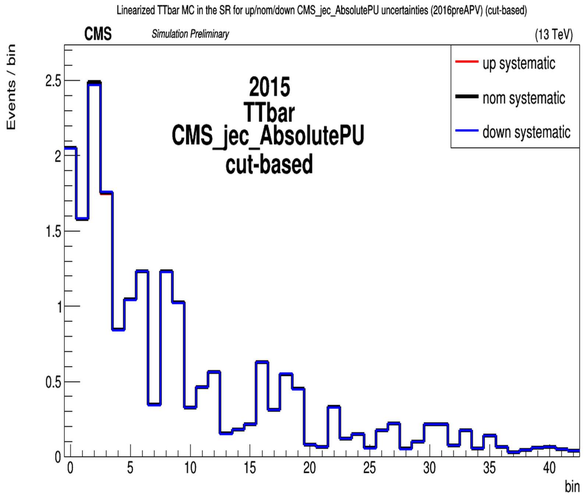

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

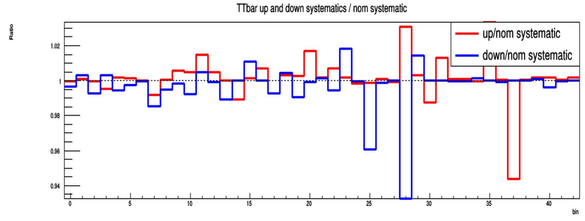

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteMPFBias uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_jec_AbsoluteMPFBias
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

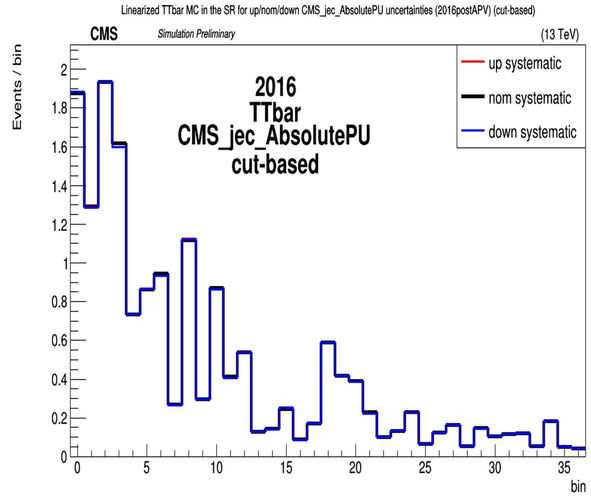

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

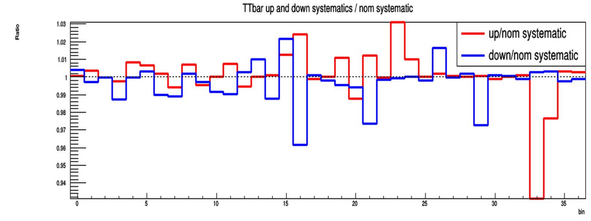

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteMPFBias uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_jec_AbsoluteMPFBias
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

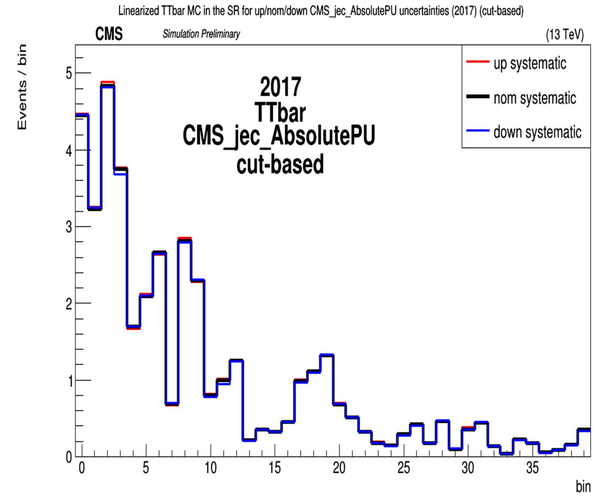

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

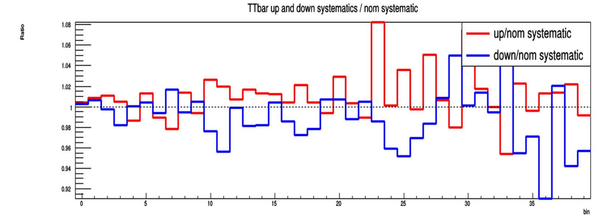

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsolutePU uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_jec_AbsolutePU
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

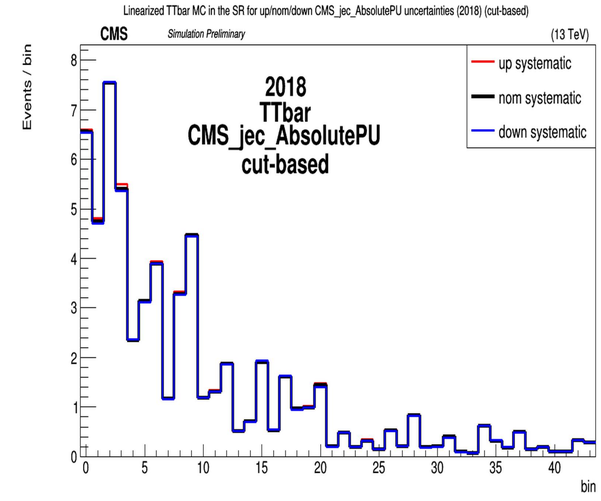

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

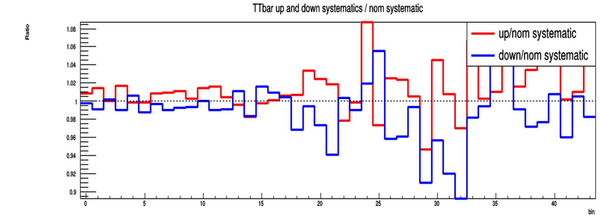

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsolutePU uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_jec_AbsolutePU
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

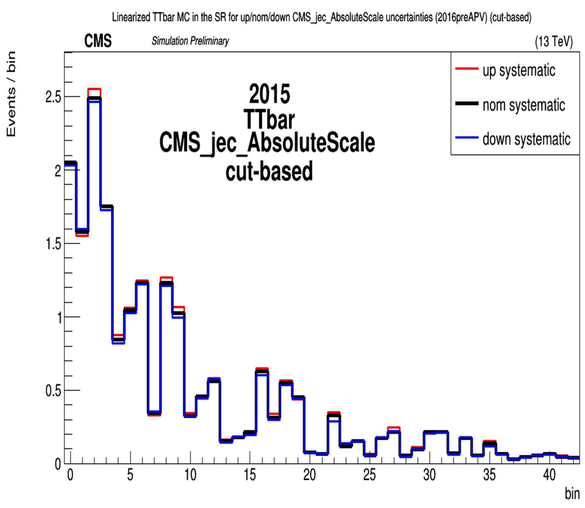

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

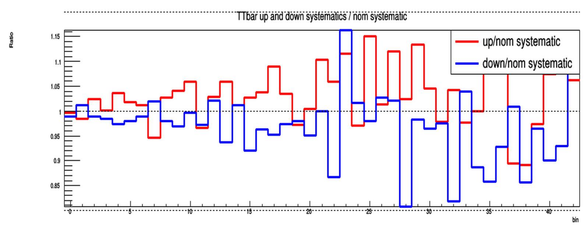

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsolutePU uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_jec_AbsolutePU
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

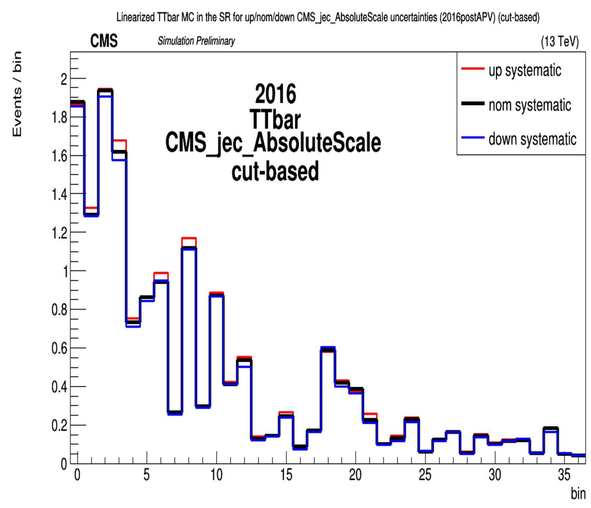

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

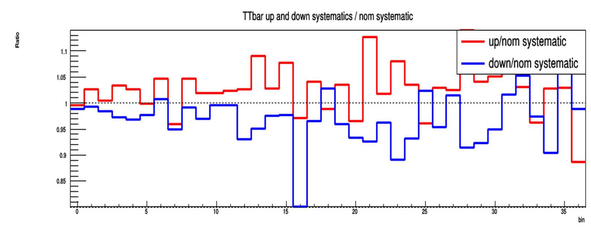

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsolutePU uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_jec_AbsolutePU
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

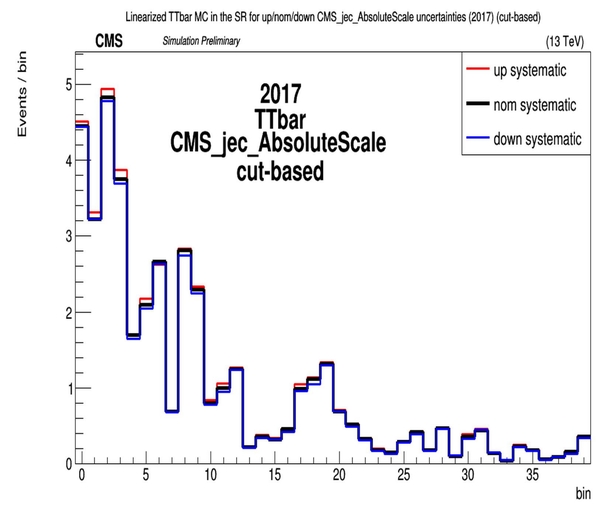

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

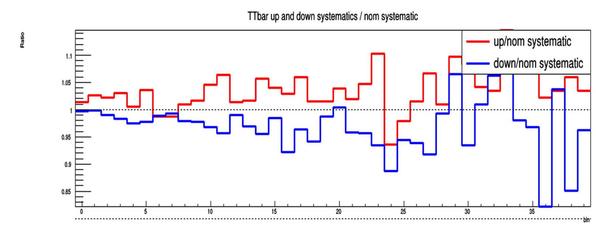

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteScale uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_jec_AbsoluteScale
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

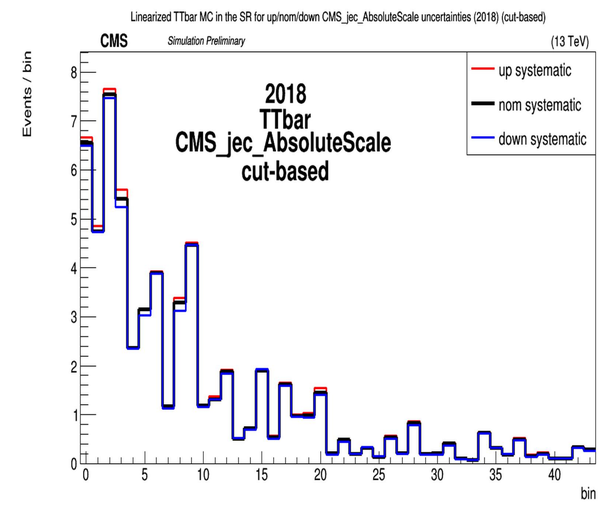

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

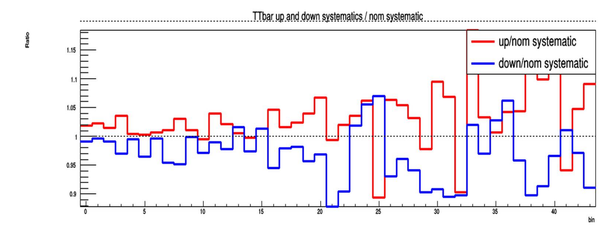

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteScale uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_jec_AbsoluteScale
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

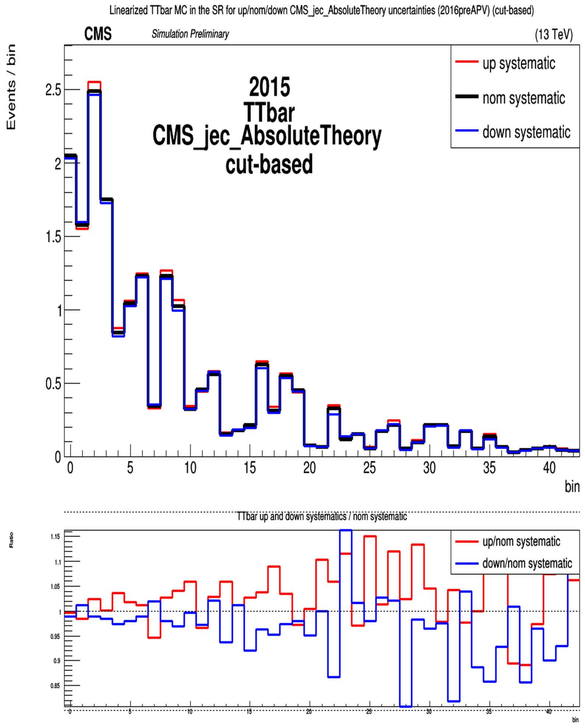

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

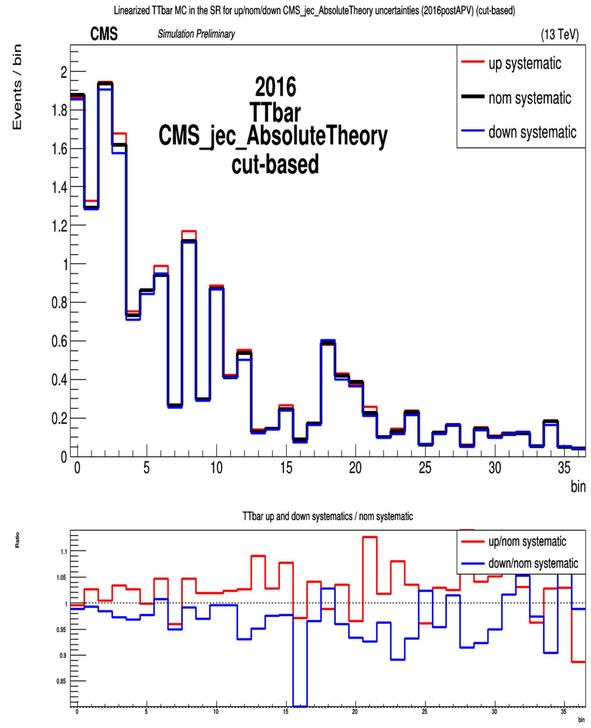

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteScale uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_jec_AbsoluteScale
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

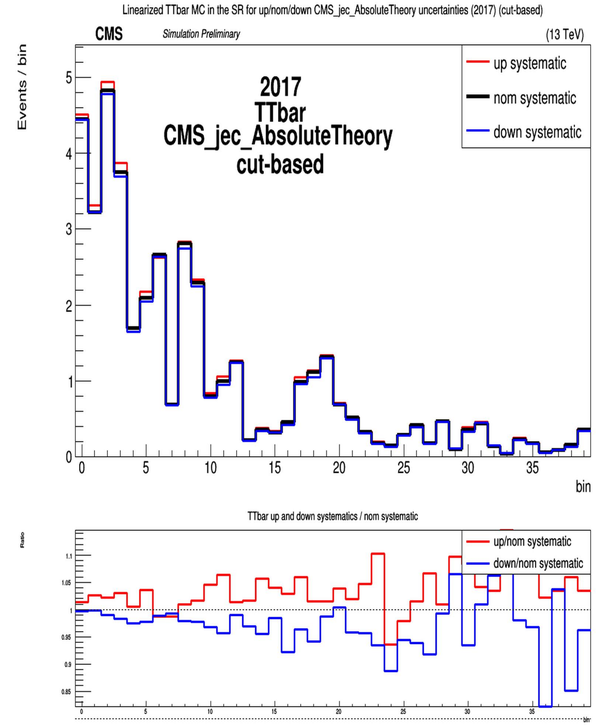

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

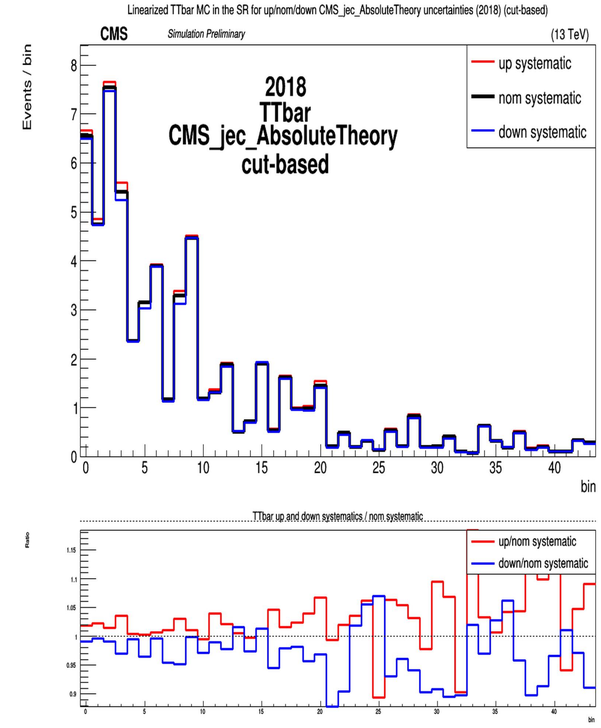

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteScale uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_jec_AbsoluteScale
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin

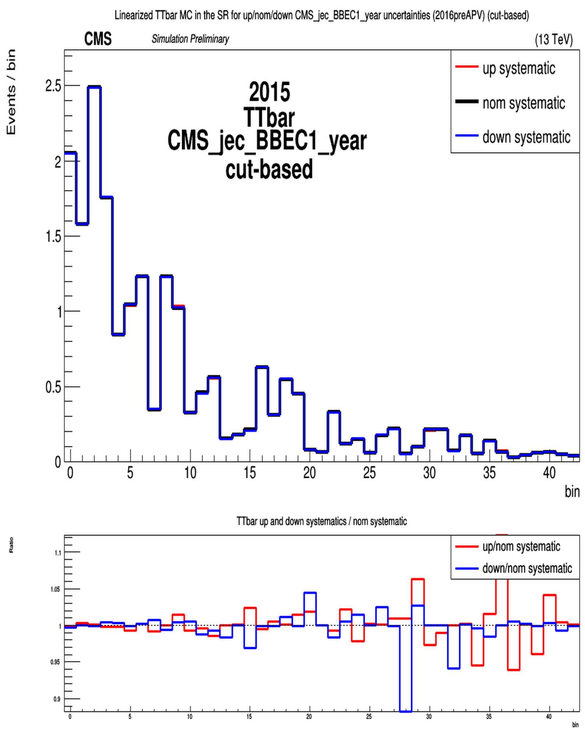

TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio
bin

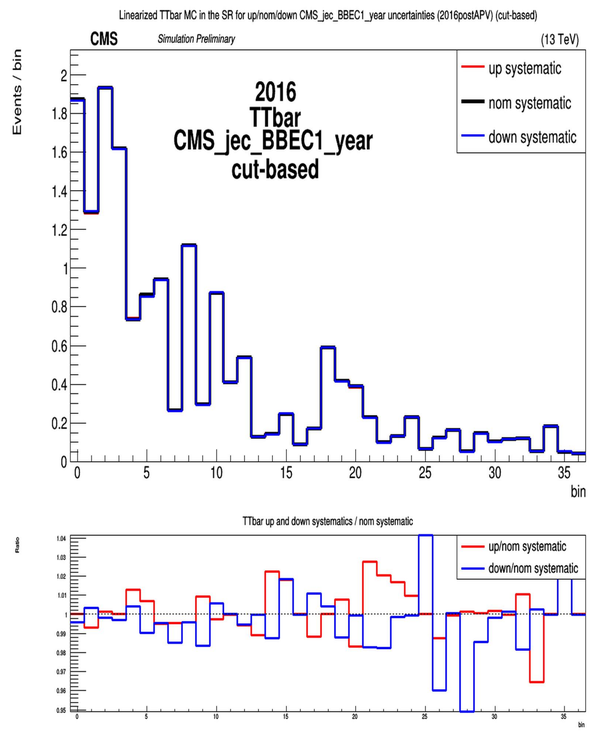

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteTheory uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_jec_AbsoluteTheory
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

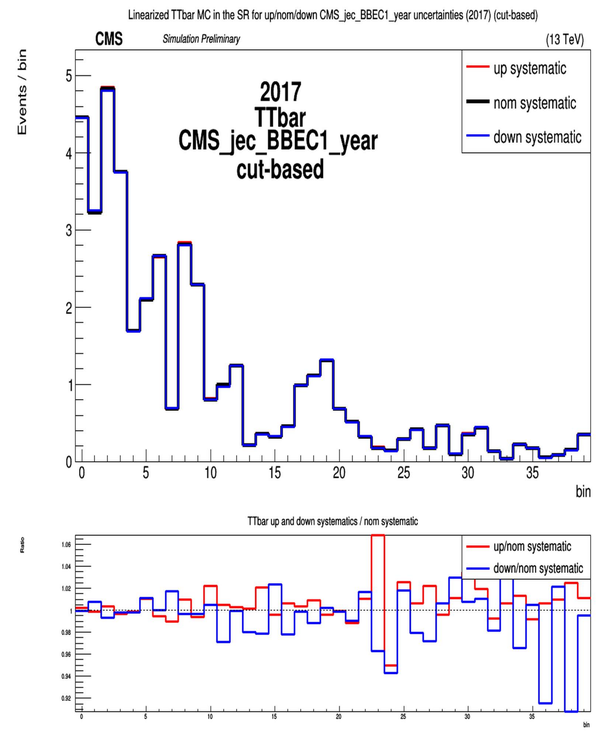

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteTheory uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_jec_AbsoluteTheory
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

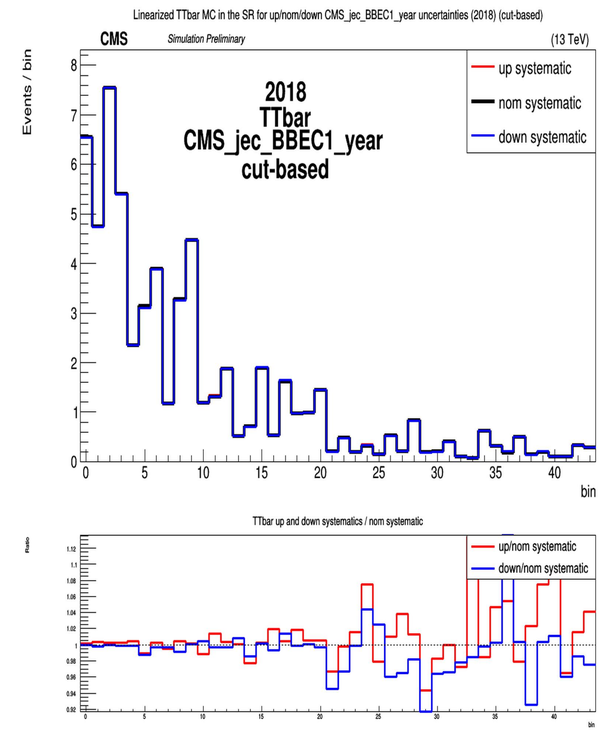

Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteTheory uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_jec_AbsoluteTheory
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_jec_AbsoluteTheory uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_jec_AbsoluteTheory
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

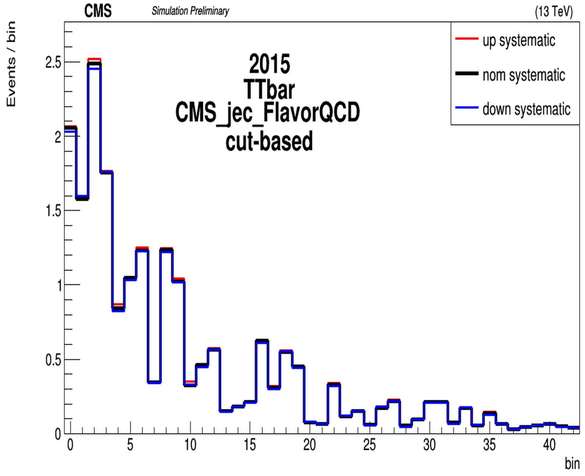

Linearized TTbar MC in the SR for up/nom/down CMS_jec_BBEC1_year uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_jec_BBEC1_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_jec_BBEC1_year uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_jec_BBEC1_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

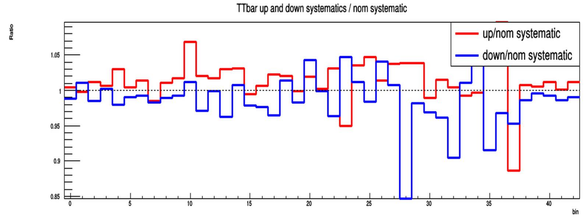

Linearized TTbar MC in the SR for up/nom/down CMS_jec_BBEC1_year uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_jec_BBEC1_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_jec_BBEC1_year uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_jec_BBEC1_year
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

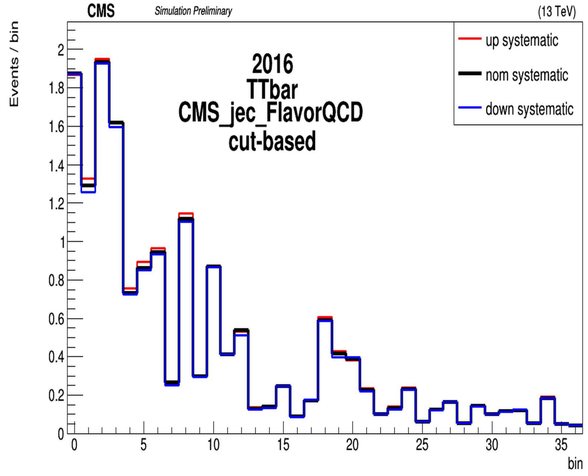
Linearized TTbar MC in the SR for up/nom/down CMS_jec_FlavorQCD uncertainties (2016preAPV) (cut-based)



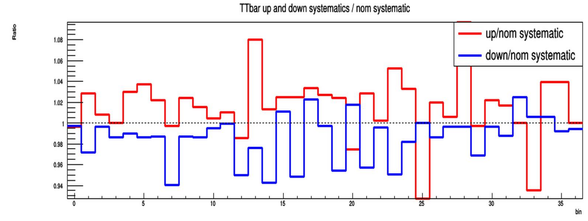
TTbar up and down systematics / nom systematic



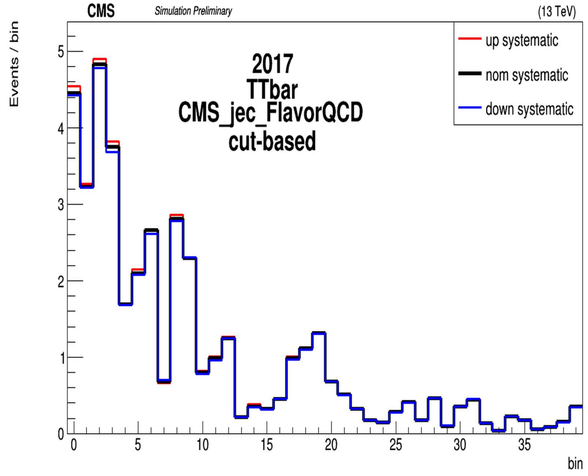
Linearized TTbar MC in the SR for up/nom/down CMS_jec_FlavorQCD uncertainties (2016postAPV) (cut-based)



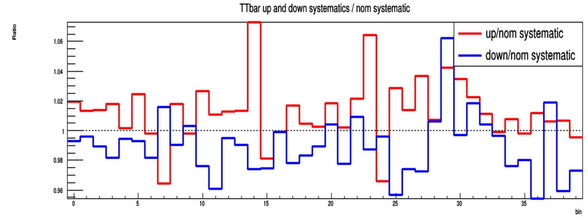
TTbar up and down systematics / nom systematic



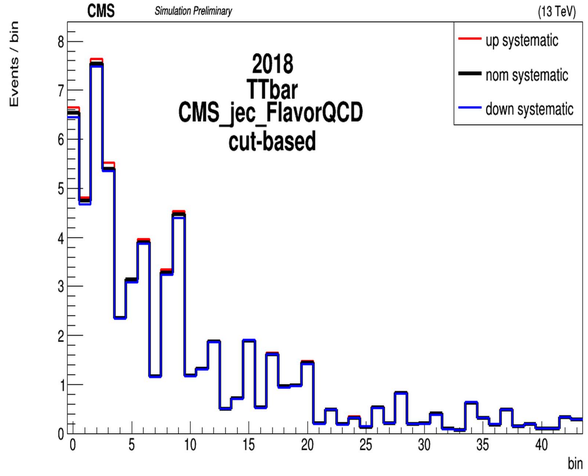
Linearized TTbar MC in the SR for up/nom/down CMS_jec_FlavorQCD uncertainties (2017) (cut-based)



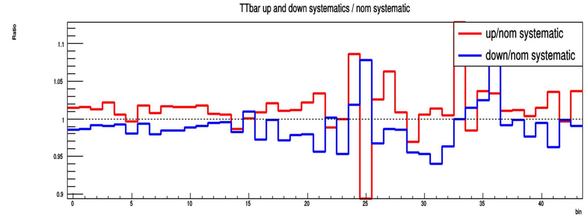
TTbar up and down systematics / nom systematic



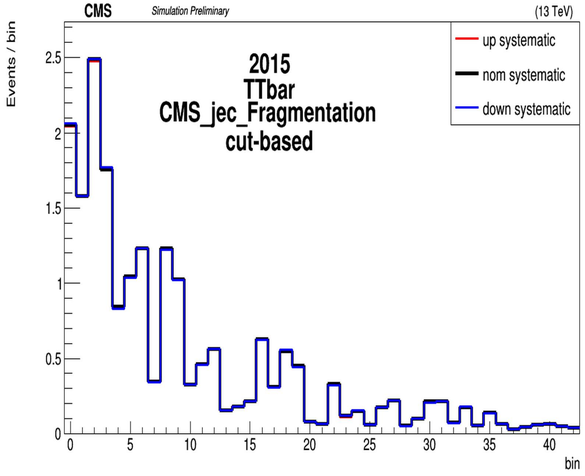
Linearized TTbar MC in the SR for up/nom/down CMS_jec_FlavorQCD uncertainties (2018) (cut-based)



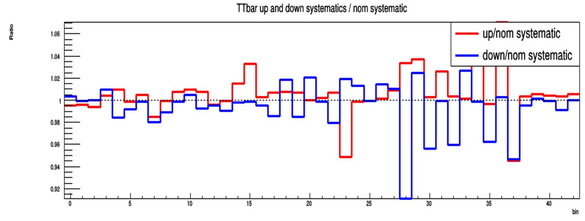
TTbar up and down systematics / nom systematic



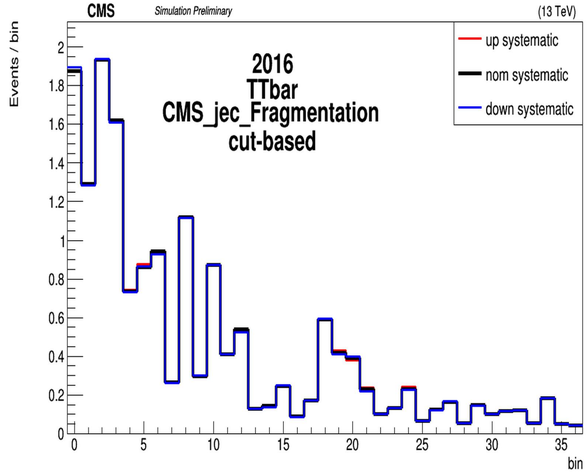
Linearized TTbar MC in the SR for up/nom/down CMS_jec_Fragmentation uncertainties (2016preAPV) (cut-based)



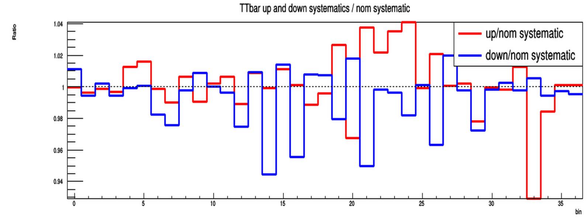
TTbar up and down systematics / nom systematic



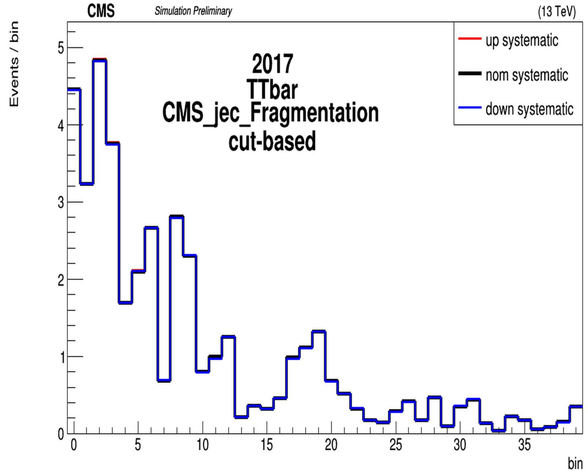
Linearized TTbar MC in the SR for up/nom/down CMS_jec_Fragmentation uncertainties (2016postAPV) (cut-based)



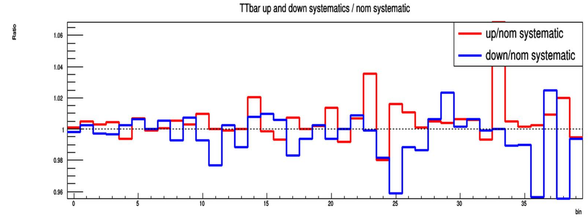
TTbar up and down systematics / nom systematic



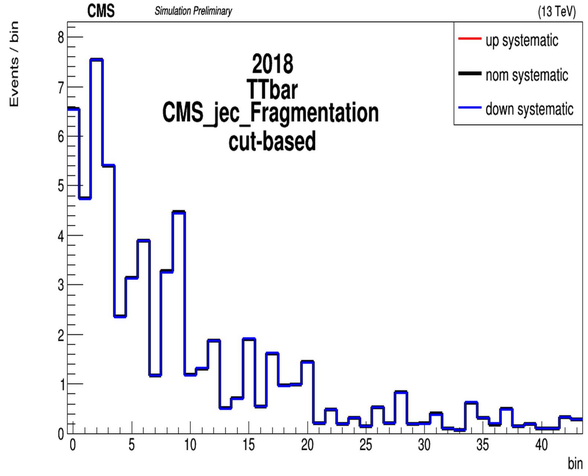
Linearized TTbar MC in the SR for up/nom/down CMS_jec_Fragmentation uncertainties (2017) (cut-based)



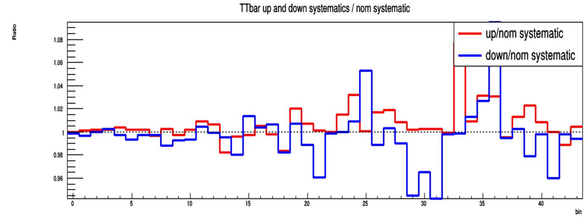
TTbar up and down systematics / nom systematic



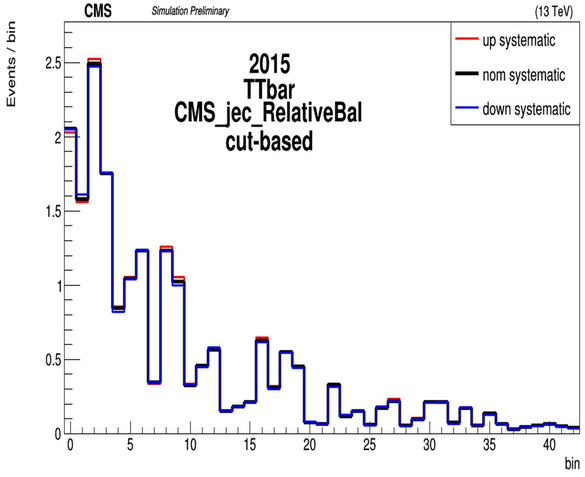
Linearized TTbar MC in the SR for up/nom/down CMS_jec_Fragmentation uncertainties (2018) (cut-based)



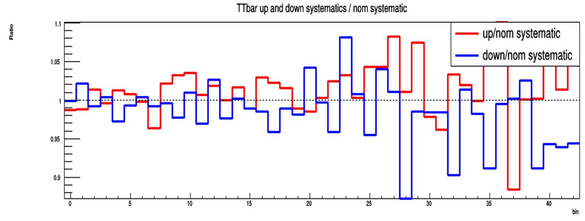
TTbar up and down systematics / nom systematic



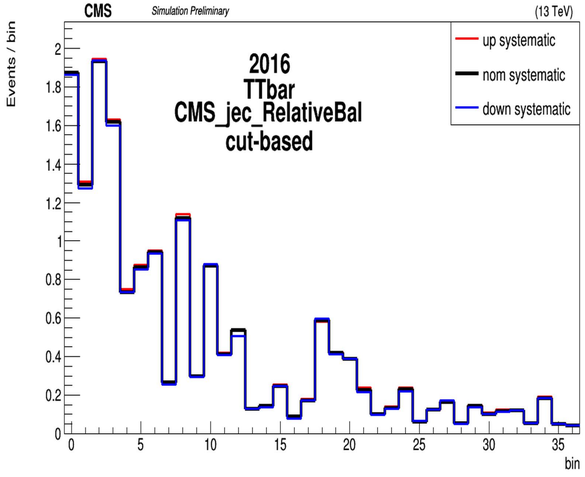
Linearized TTbar MC in the SR for up/nom/down CMS_jec_RelativeBal uncertainties (2016preAPV) (cut-based)



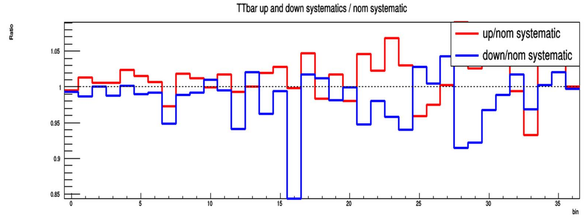
TTbar up and down systematics / nom systematic



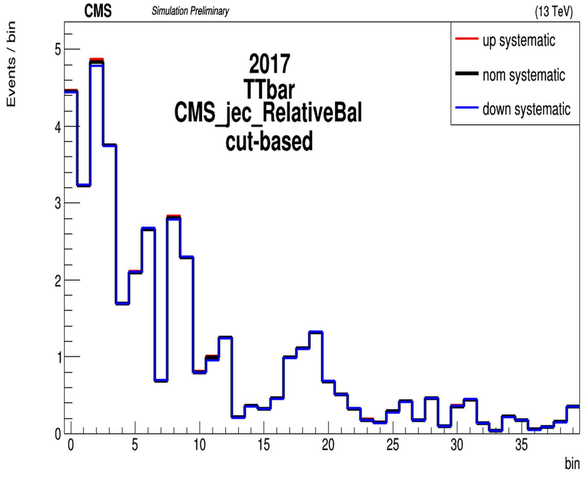
Linearized TTbar MC in the SR for up/nom/down CMS_jec_RelativeBal uncertainties (2016postAPV) (cut-based)



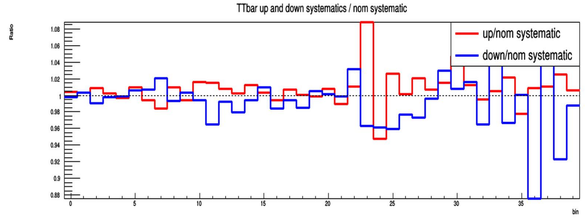
TTbar up and down systematics / nom systematic



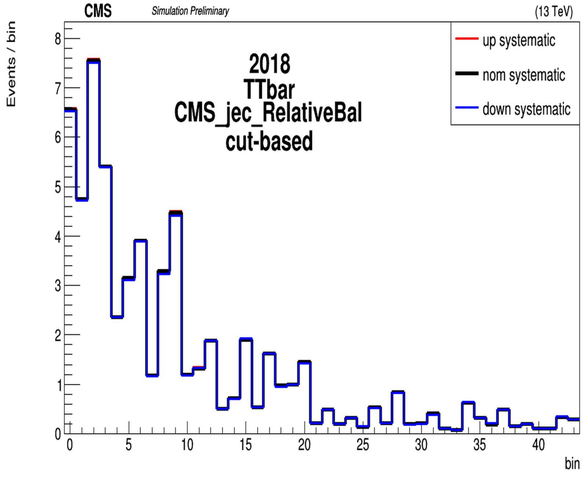
Linearized TTbar MC in the SR for up/nom/down CMS_jec_RelativeBal uncertainties (2017) (cut-based)



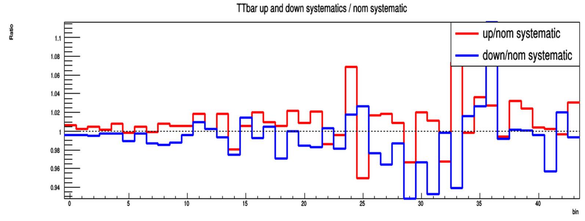
TTbar up and down systematics / nom systematic



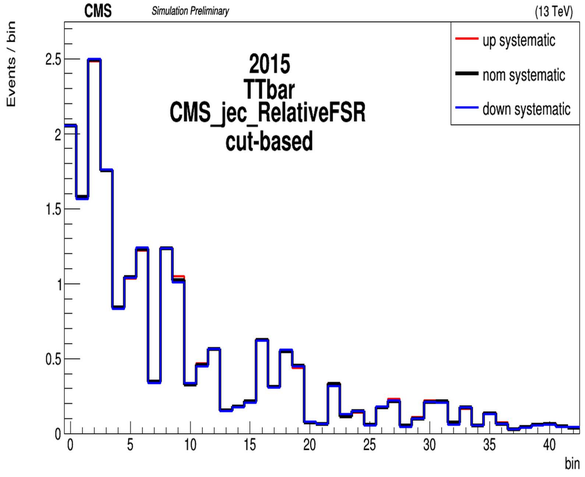
Linearized TTbar MC in the SR for up/nom/down CMS_jec_RelativeBal uncertainties (2018) (cut-based)



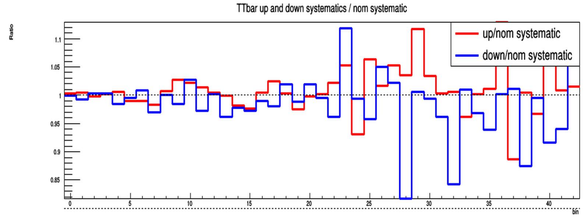
TTbar up and down systematics / nom systematic



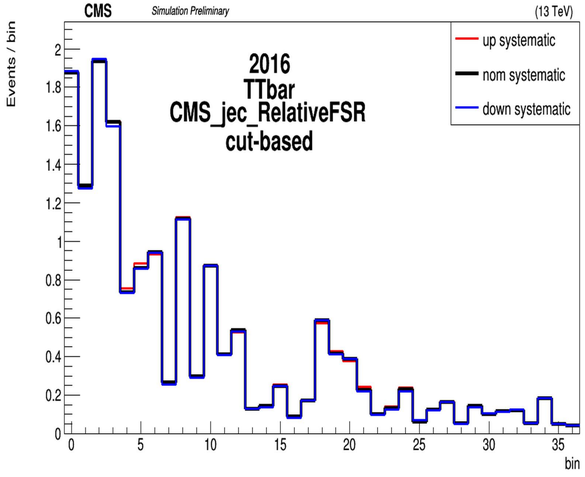
Linearized TTbar MC in the SR for up/nom/down CMS_jec_RelativeFSR uncertainties (2016preAPV) (cut-based)



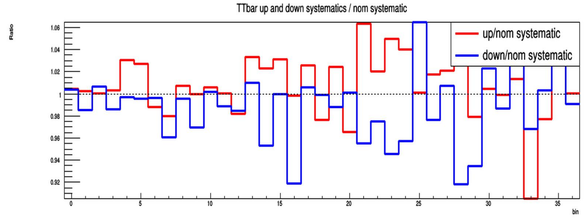
TTbar up and down systematics / nom systematic



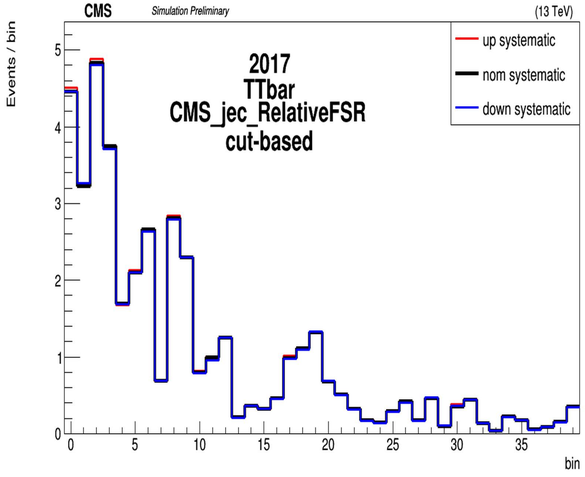
Linearized TTbar MC in the SR for up/nom/down CMS_jec_RelativeFSR uncertainties (2016postAPV) (cut-based)



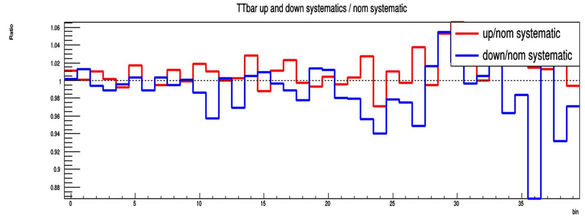
TTbar up and down systematics / nom systematic



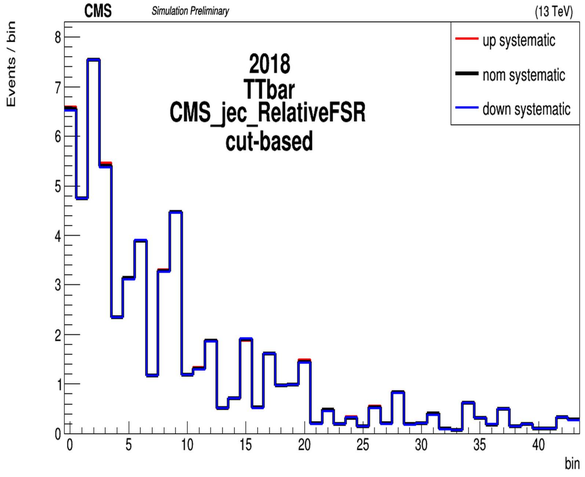
Linearized TTbar MC in the SR for up/nom/down CMS_jec_RelativeFSR uncertainties (2017) (cut-based)



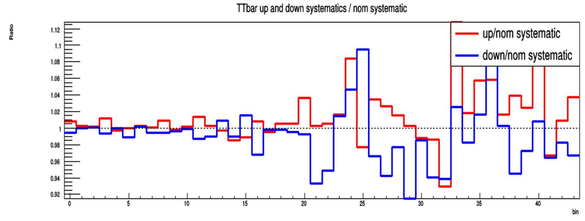
TTbar up and down systematics / nom systematic



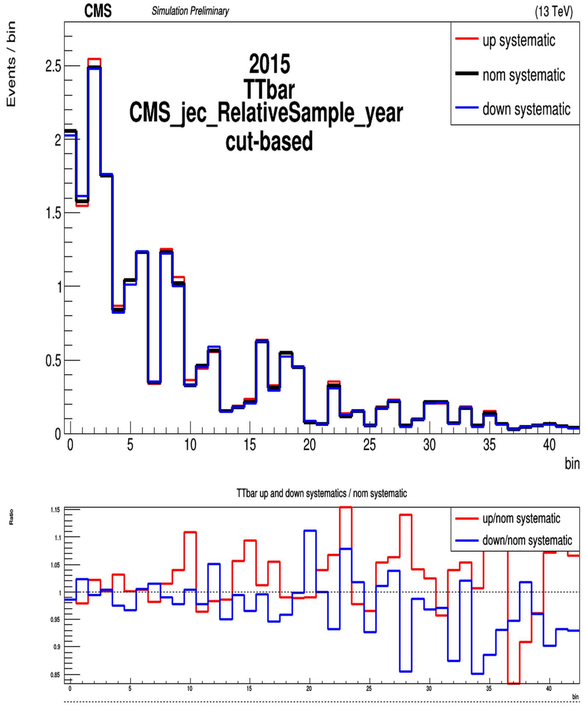
Linearized TTbar MC in the SR for up/nom/down CMS_jec_RelativeFSR uncertainties (2018) (cut-based)



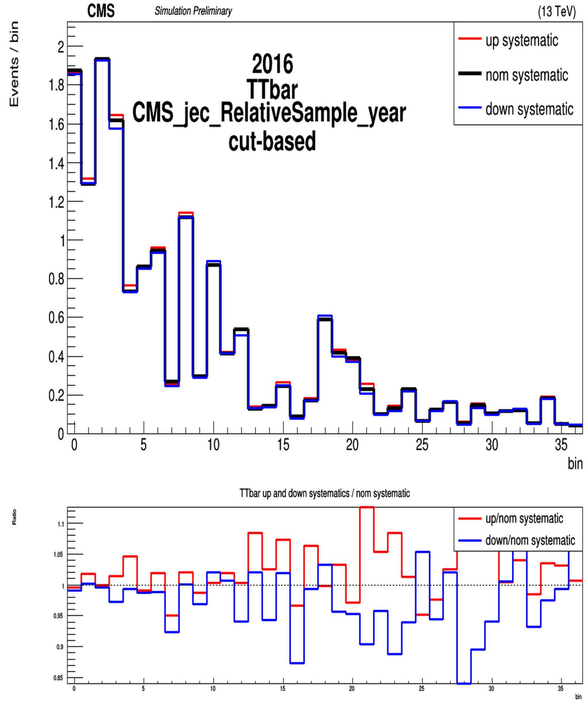
TTbar up and down systematics / nom systematic



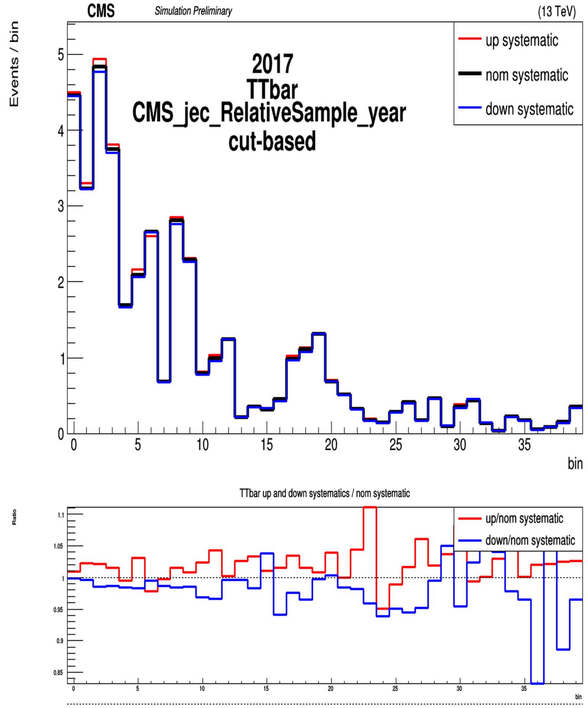
Linearized TTbar MC in the SR for up/nom/down CMS_jec_RelativeSample_year uncertainties (2016preAPV) (cut-based)



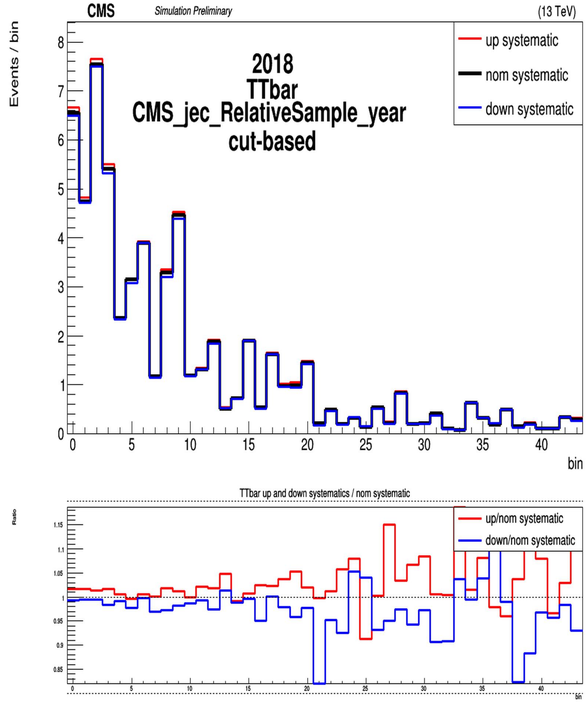
Linearized TTbar MC in the SR for up/nom/down CMS_jec_RelativeSample_year uncertainties (2016postAPV) (cut-based)



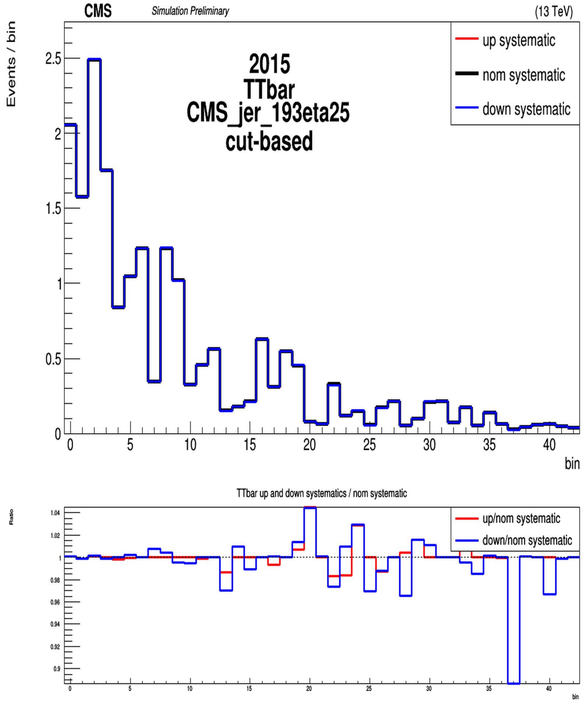
Linearized TTbar MC in the SR for up/nom/down CMS_jec_RelativeSample_year uncertainties (2017) (cut-based)



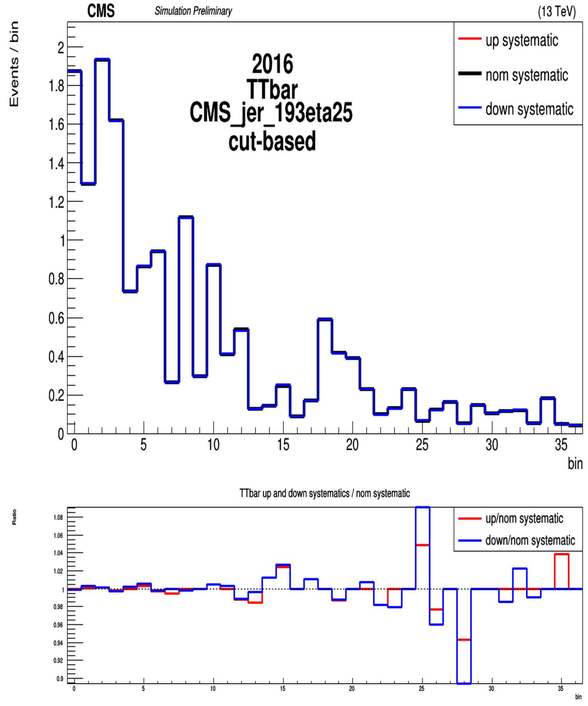
Linearized TTbar MC in the SR for up/nom/down CMS_jec_RelativeSample_year uncertainties (2018) (cut-based)



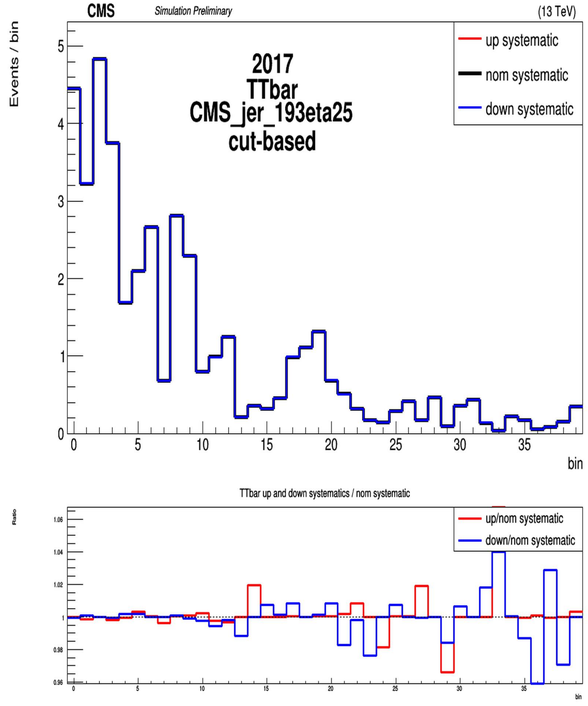
Linearized TTbar MC in the SR for up/nom/down CMS_jer_193eta25 uncertainties (2016preAPV) (cut-based)



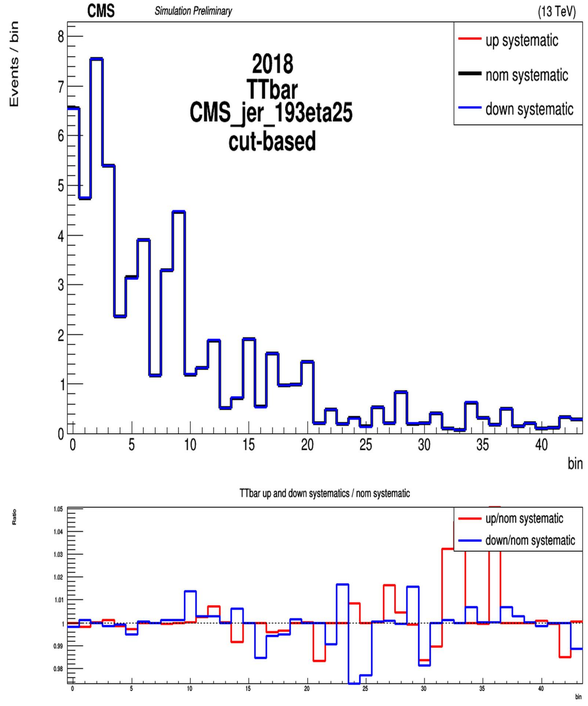
Linearized TTbar MC in the SR for up/nom/down CMS_jer_193eta25 uncertainties (2016postAPV) (cut-based)



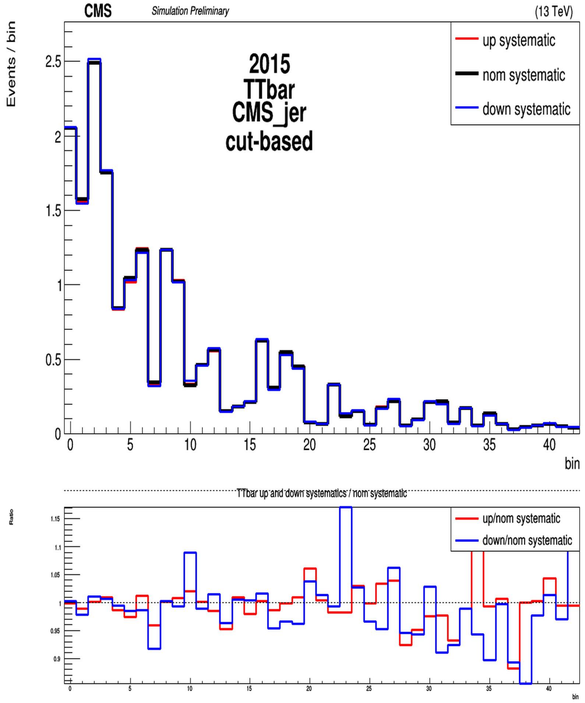
Linearized TTbar MC in the SR for up/nom/down CMS_jer_193eta25 uncertainties (2017) (cut-based)



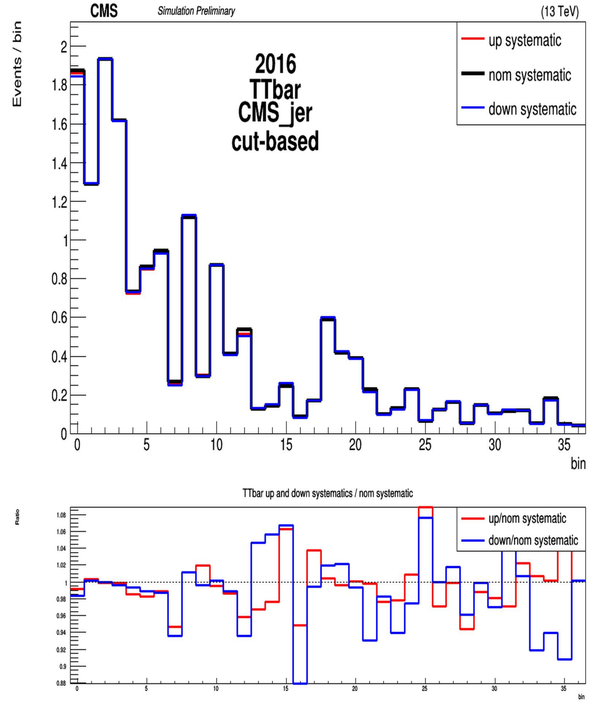
Linearized TTbar MC in the SR for up/nom/down CMS_jer_193eta25 uncertainties (2018) (cut-based)



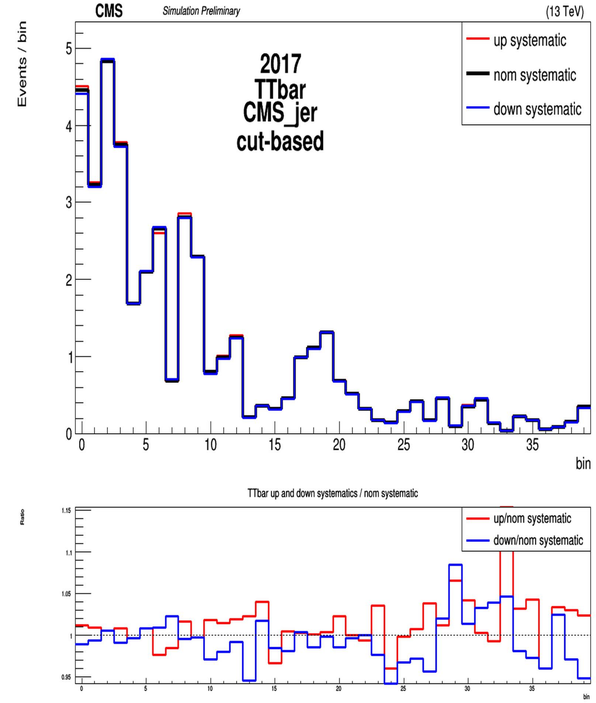
Linearized TTbar MC in the SR for up/nom/down CMS_jer uncertainties (2016preAPV) (cut-based)



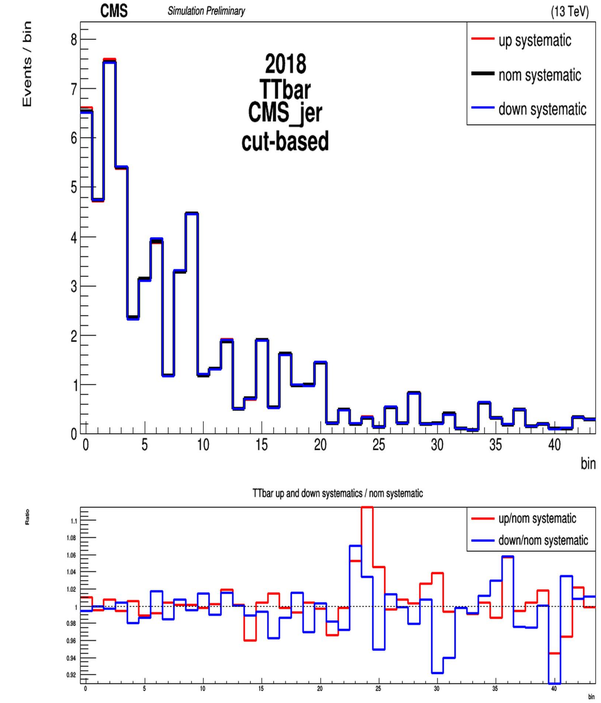
Linearized TTbar MC in the SR for up/nom/down CMS_jer uncertainties (2016postAPV) (cut-based)



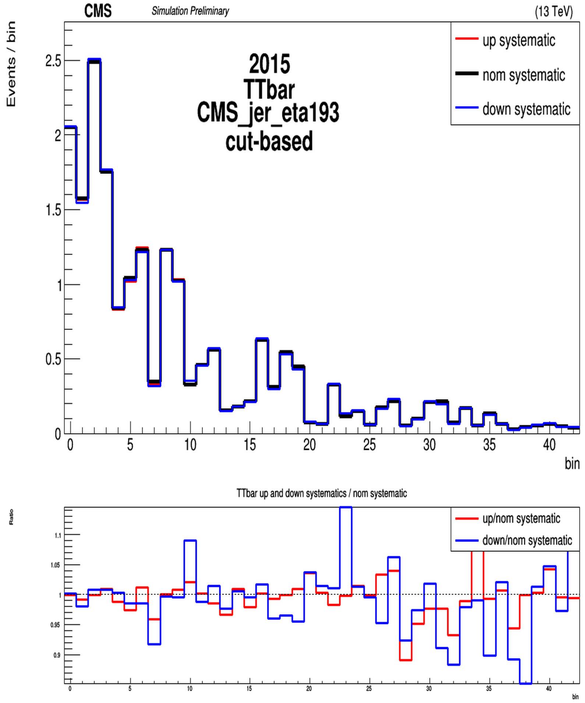
Linearized TTbar MC in the SR for up/nom/down CMS_jer uncertainties (2017) (cut-based)



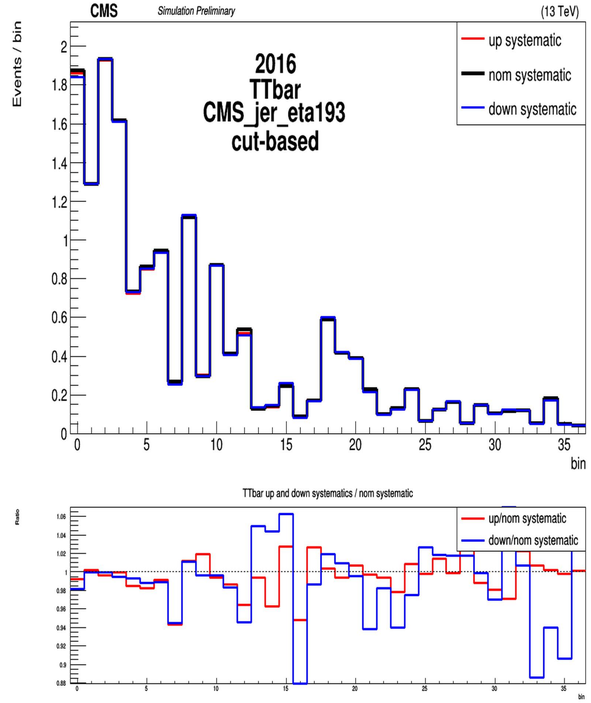
Linearized TTbar MC in the SR for up/nom/down CMS_jer uncertainties (2018) (cut-based)



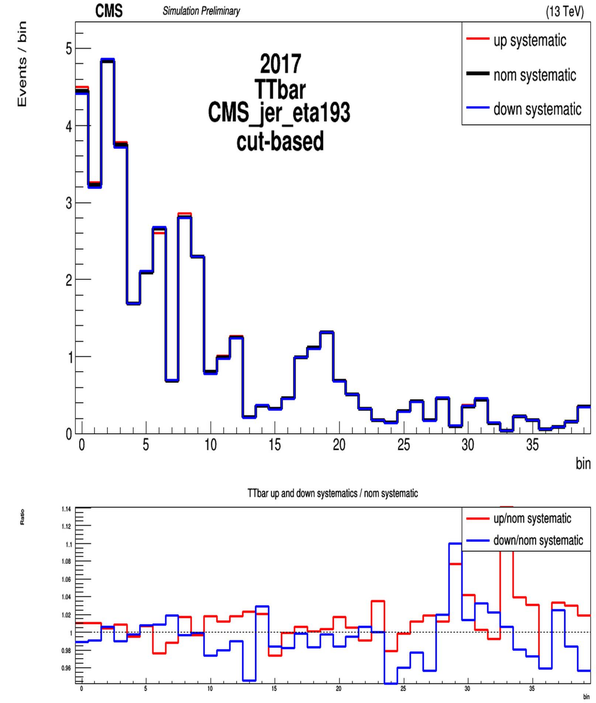
Linearized TTbar MC in the SR for up/nom/down CMS_jer_eta193 uncertainties (2016preAPV) (cut-based)



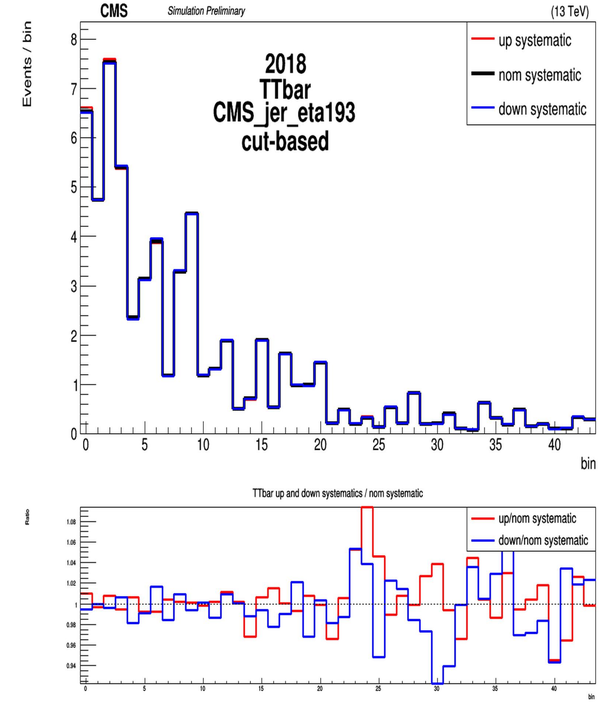
Linearized TTbar MC in the SR for up/nom/down CMS_jer_eta193 uncertainties (2016postAPV) (cut-based)

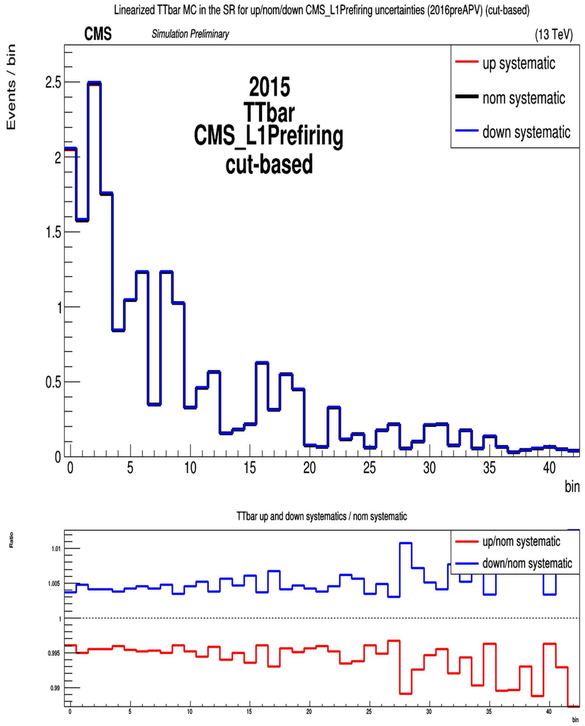


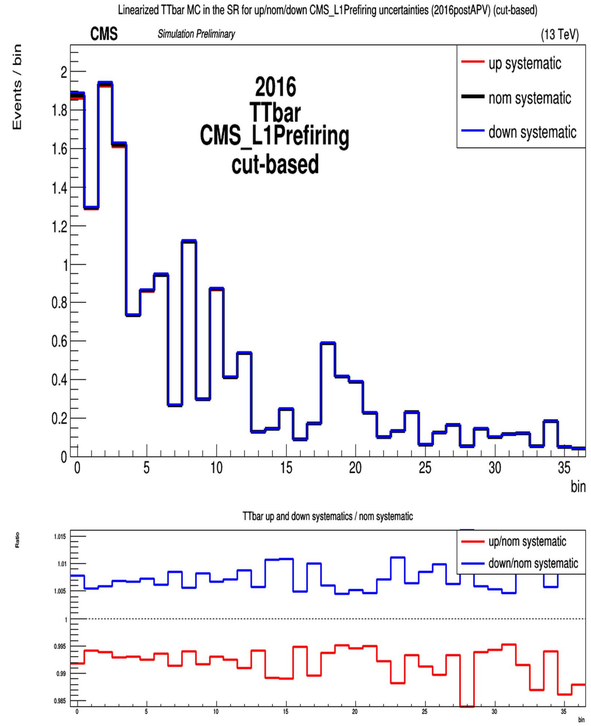
Linearized TTbar MC in the SR for up/nom/down CMS_jer_eta193 uncertainties (2017) (cut-based)

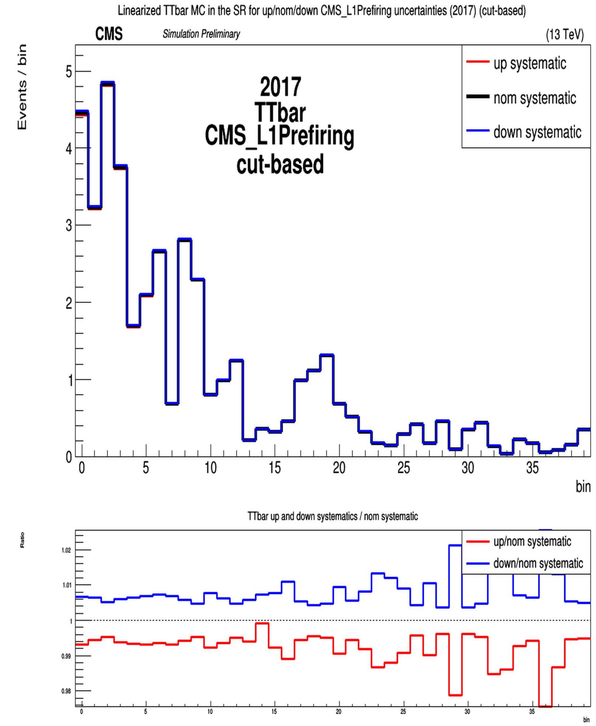


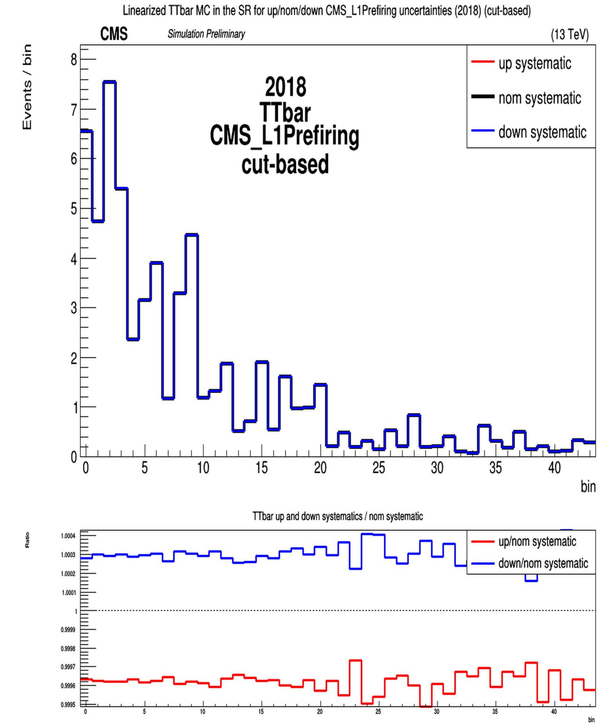
Linearized TTbar MC in the SR for up/nom/down CMS_jer_eta193 uncertainties (2018) (cut-based)

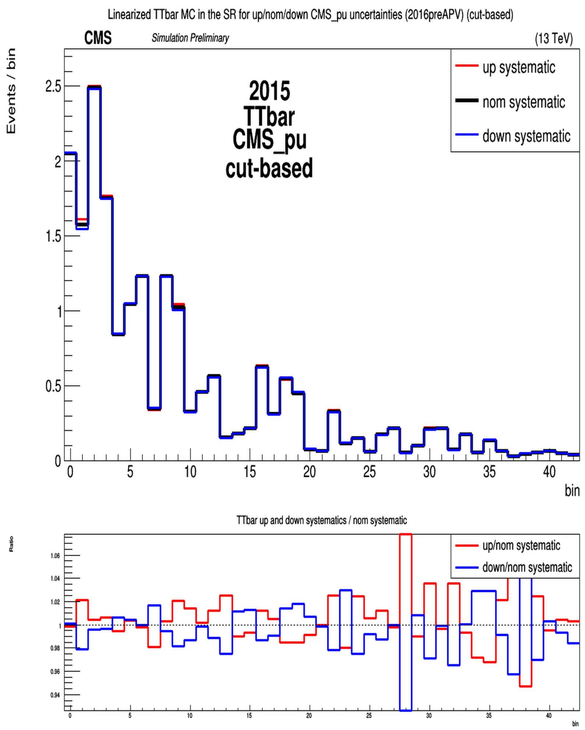


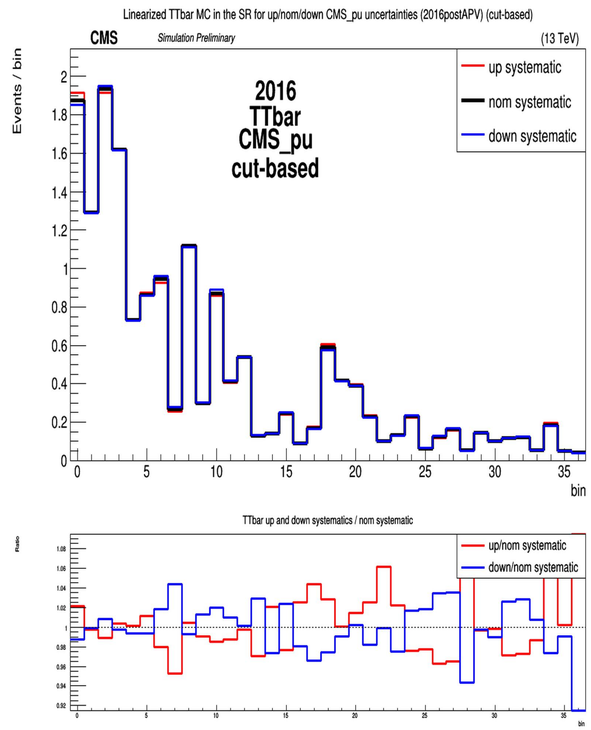

Linearized TTbar MC in the SR for up/nom/down CMS_L1Prefiring uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_L1Prefiring
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

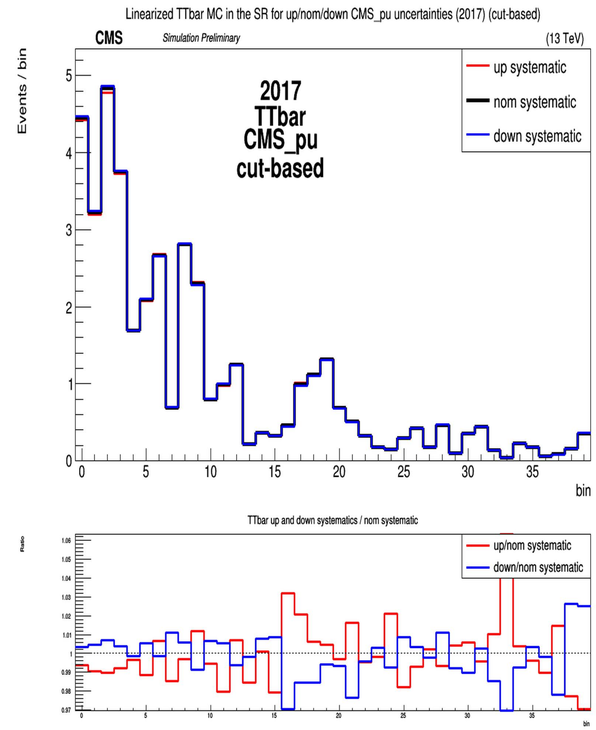

Linearized TTbar MC in the SR for up/nom/down CMS_L1Prefiring uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_L1Prefiring
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

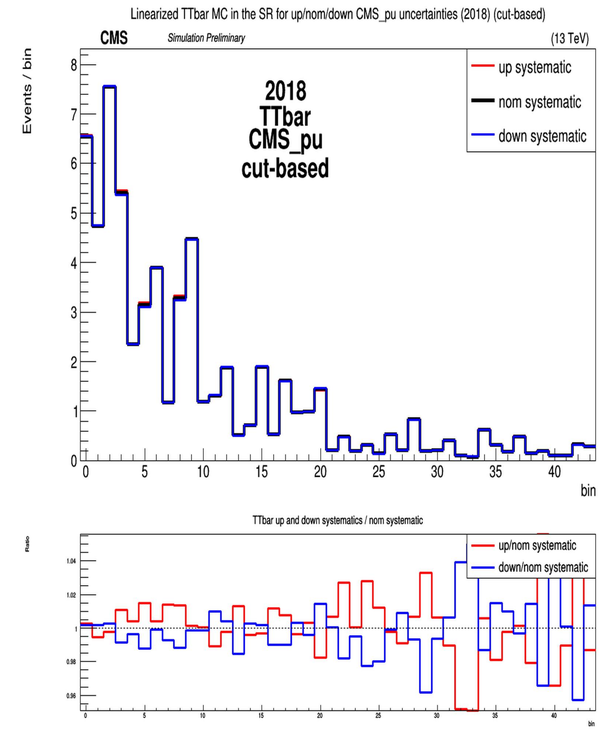

Linearized TTbar MC in the SR for up/nom/down CMS_L1Prefiring uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_L1Prefiring
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_L1Prefiring uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_L1Prefiring
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

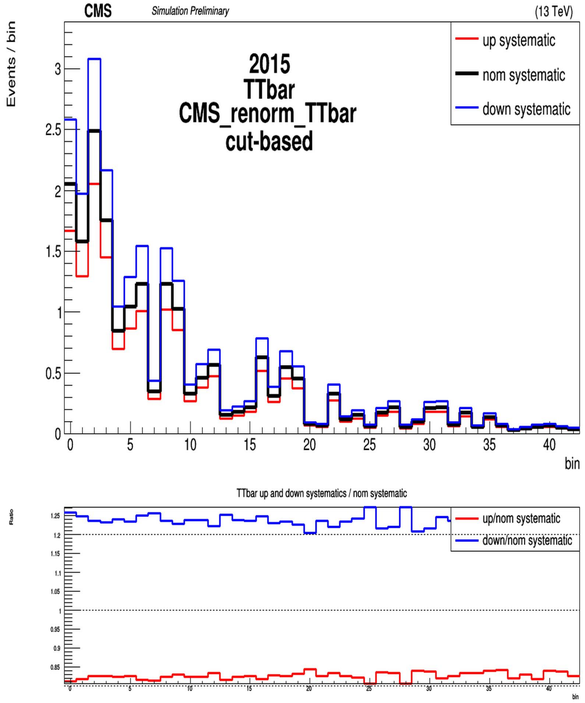

Linearized TTbar MC in the SR for up/nom/down CMS_pu uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_pu
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_pu uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_pu
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

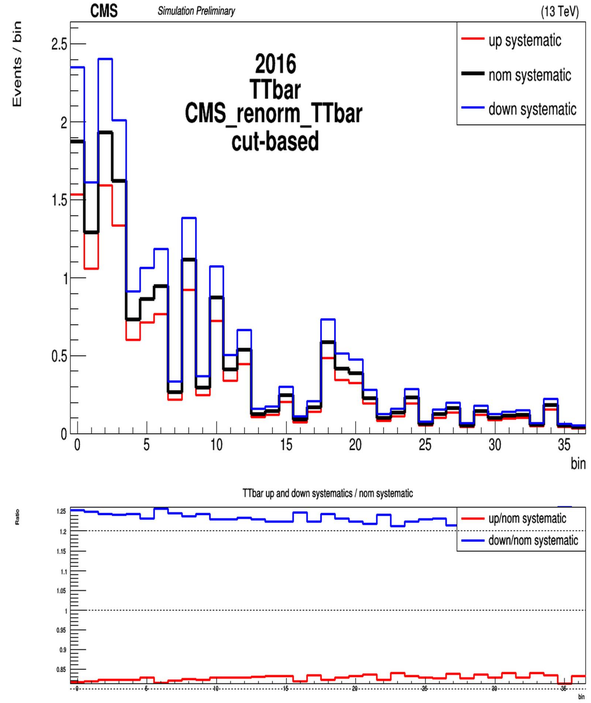

Linearized TTbar MC in the SR for up/nom/down CMS_pu uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_pu
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_pu uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_pu
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio

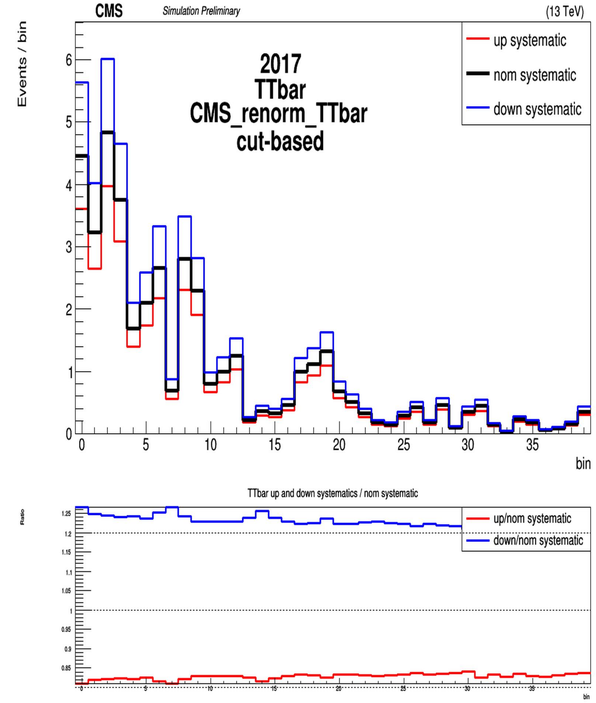
Linearized TTbar MC in the SR for up/nom/down CMS_renorm_TTbar uncertainties (2016preAPV) (cut-based)



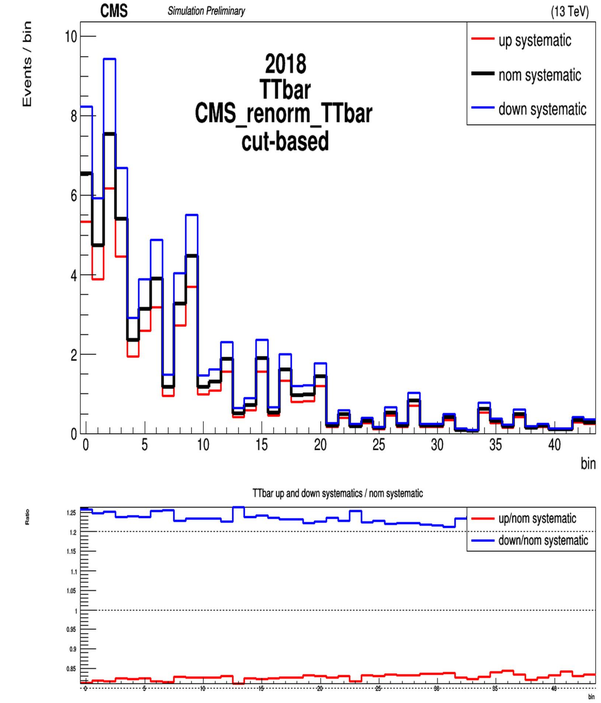
Linearized TTbar MC in the SR for up/nom/down CMS_renorm_TTbar uncertainties (2016postAPV) (cut-based)



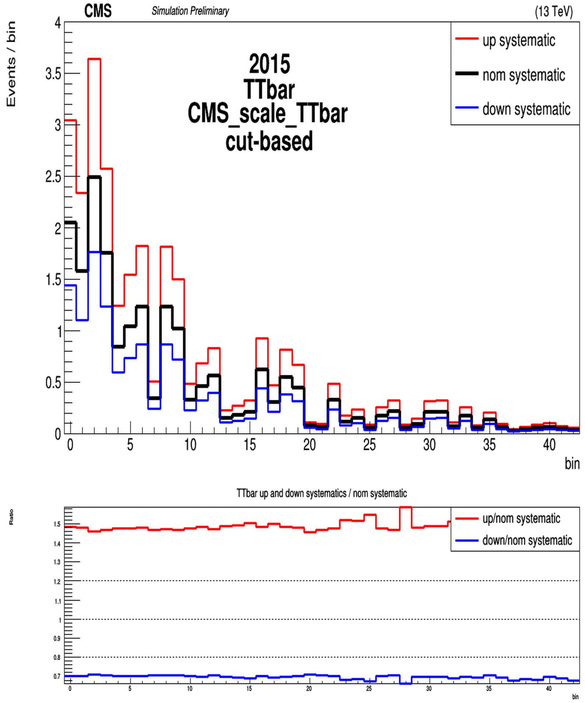
Linearized TTbar MC in the SR for up/nom/down CMS_renorm_TTbar uncertainties (2017) (cut-based)



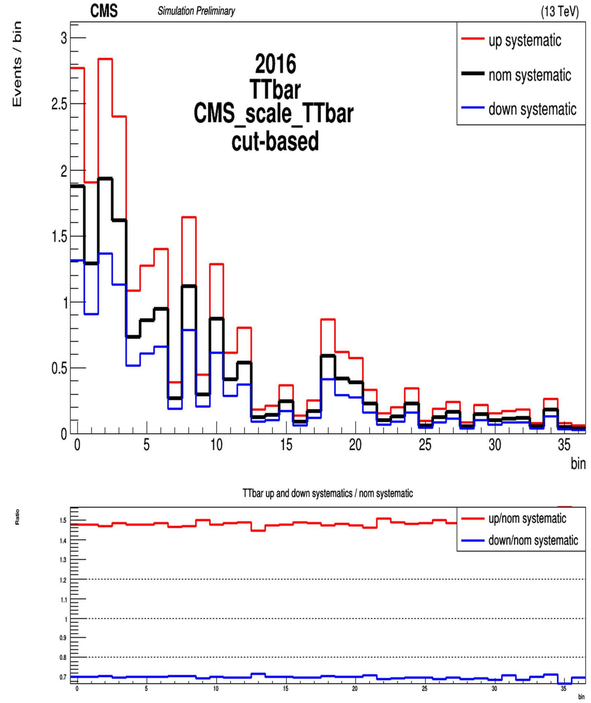
Linearized TTbar MC in the SR for up/nom/down CMS_renorm_TTbar uncertainties (2018) (cut-based)



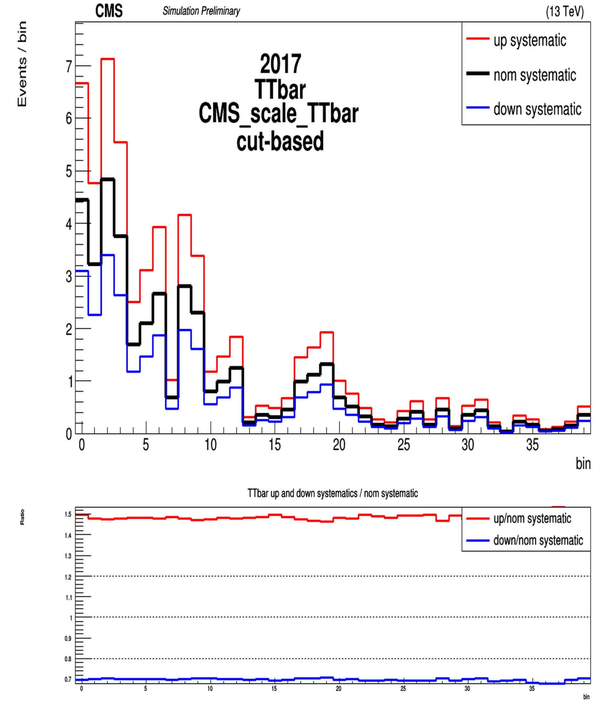
Linearized TTbar MC in the SR for up/nom/down CMS_scale_TTbar uncertainties (2016preAPV) (cut-based)



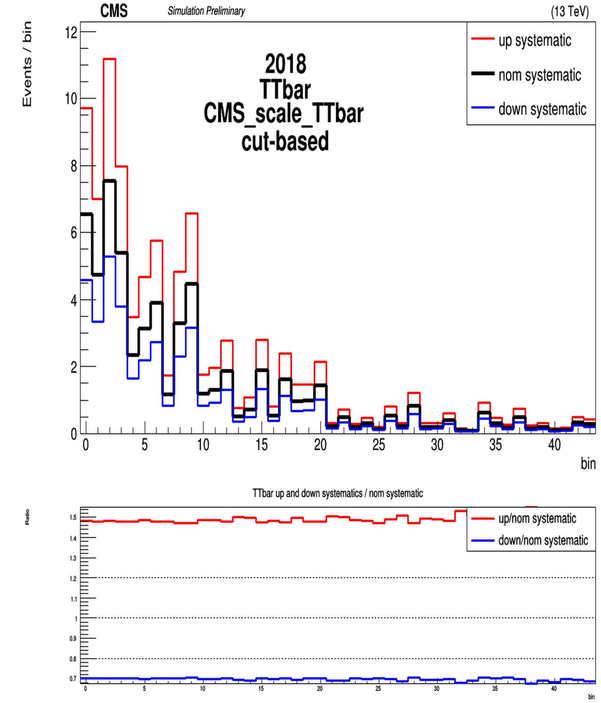
Linearized TTbar MC in the SR for up/nom/down CMS_scale_TTbar uncertainties (2016postAPV) (cut-based)

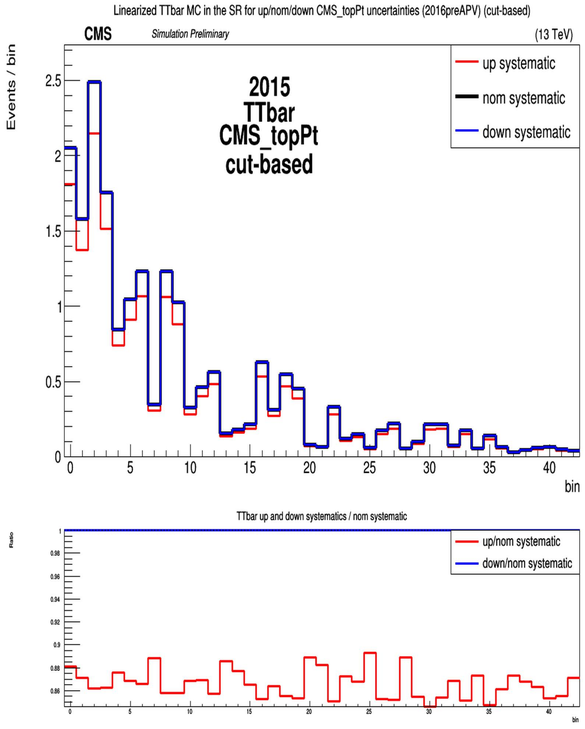


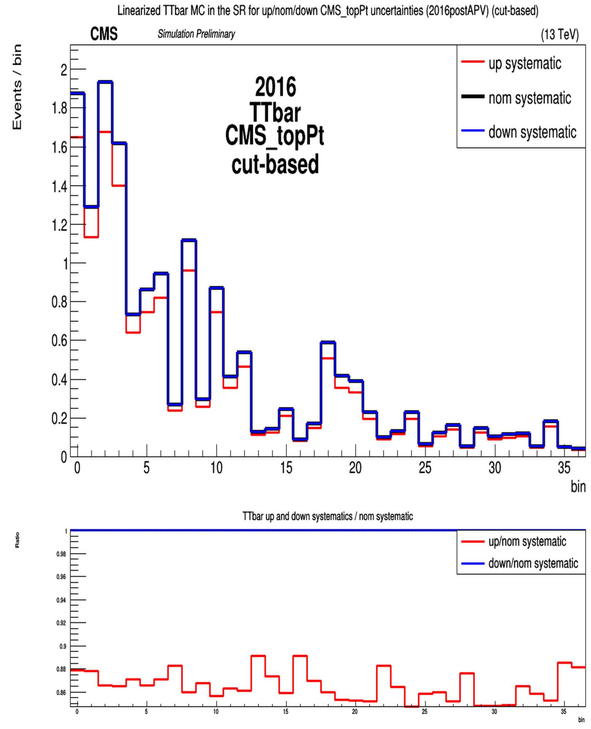
Linearized TTbar MC in the SR for up/nom/down CMS_scale_TTbar uncertainties (2017) (cut-based)

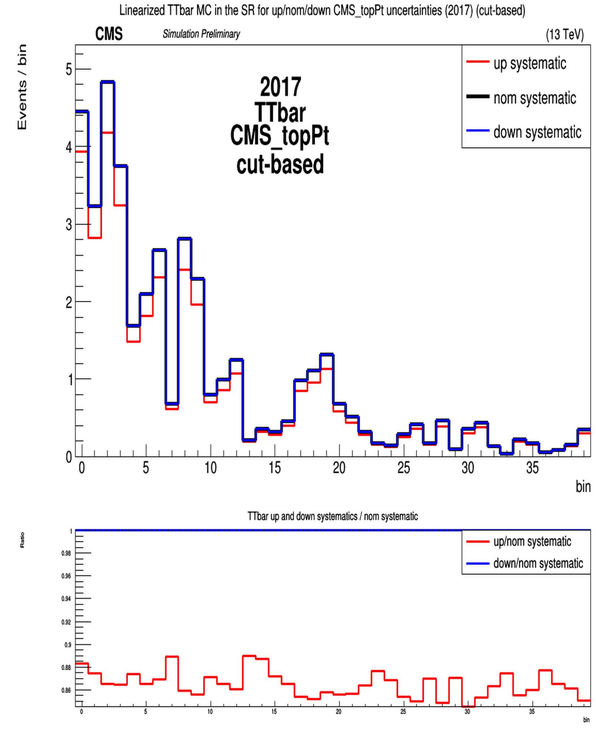


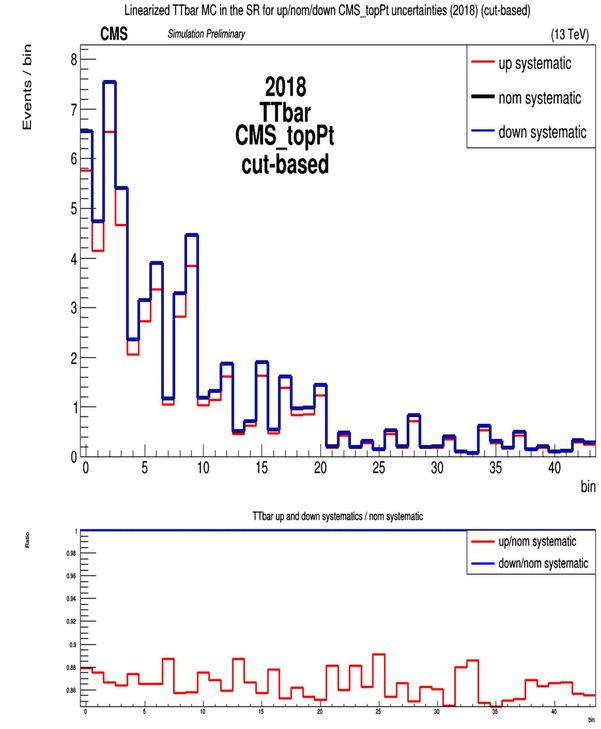
Linearized TTbar MC in the SR for up/nom/down CMS_scale_TTbar uncertainties (2018) (cut-based)




Linearized TTbar MC in the SR for up/nom/down CMS_topPt uncertainties (2016preAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2015
TTbar
CMS_topPt
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_topPt uncertainties (2016postAPV) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2016
TTbar
CMS_topPt
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_topPt uncertainties (2017) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2017
TTbar
CMS_topPt
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio


Linearized TTbar MC in the SR for up/nom/down CMS_topPt uncertainties (2018) (cut-based)
CMS
Simulation Preliminary
(13 TeV)
2018
TTbar
CMS_topPt
cut-based
up systematic
nom systematic
down systematic
Events / bin
bin
TTbar up and down systematics / nom systematic
up/nom systematic
down/nom systematic
Ratio