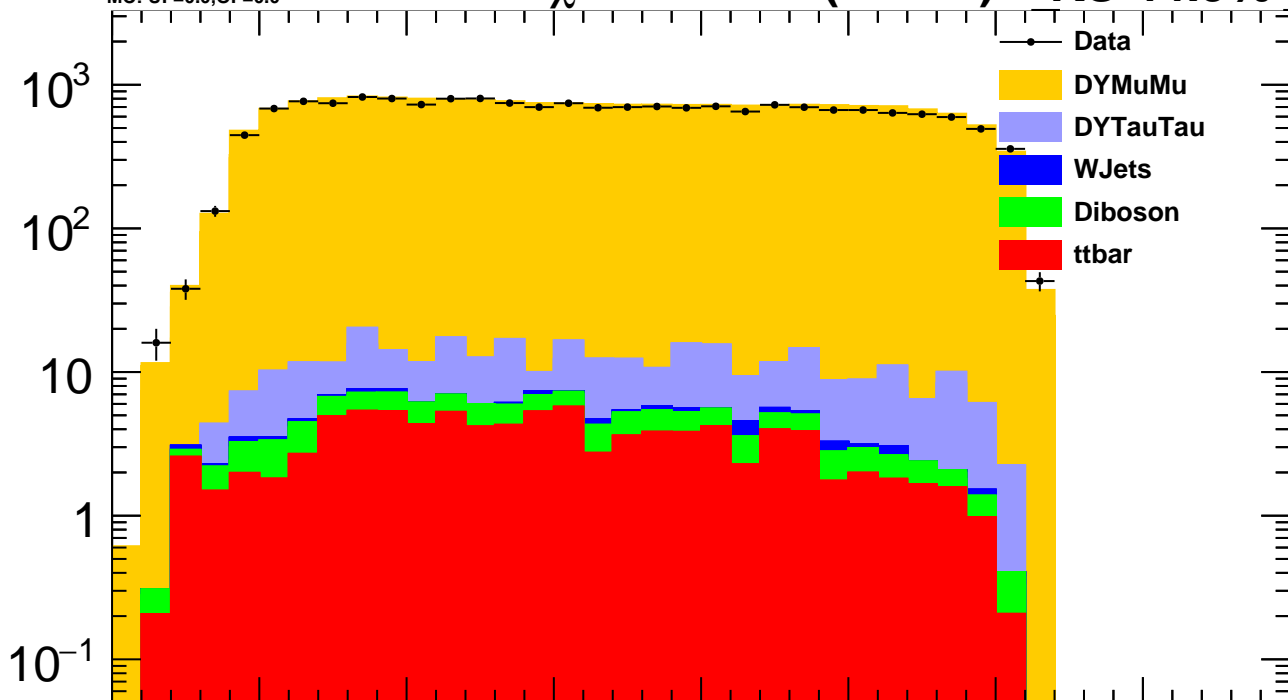


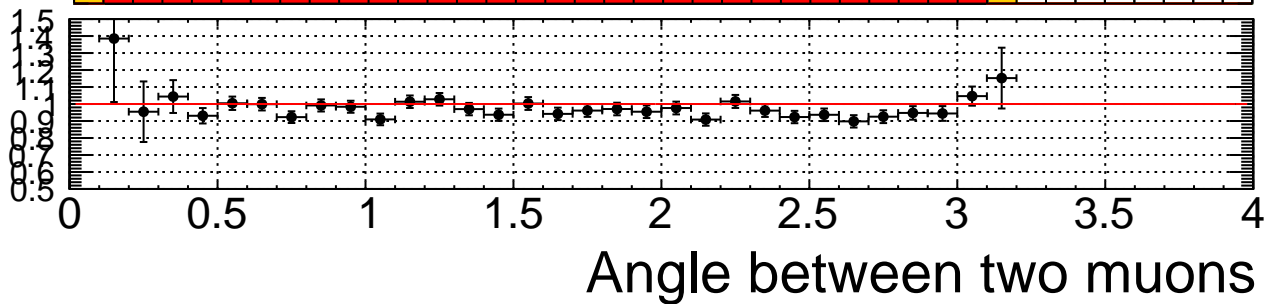
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0

$\chi^2/\text{ndf}=1.02$ (43.3%) **KS 44.9%**

Entry



data/Pred.



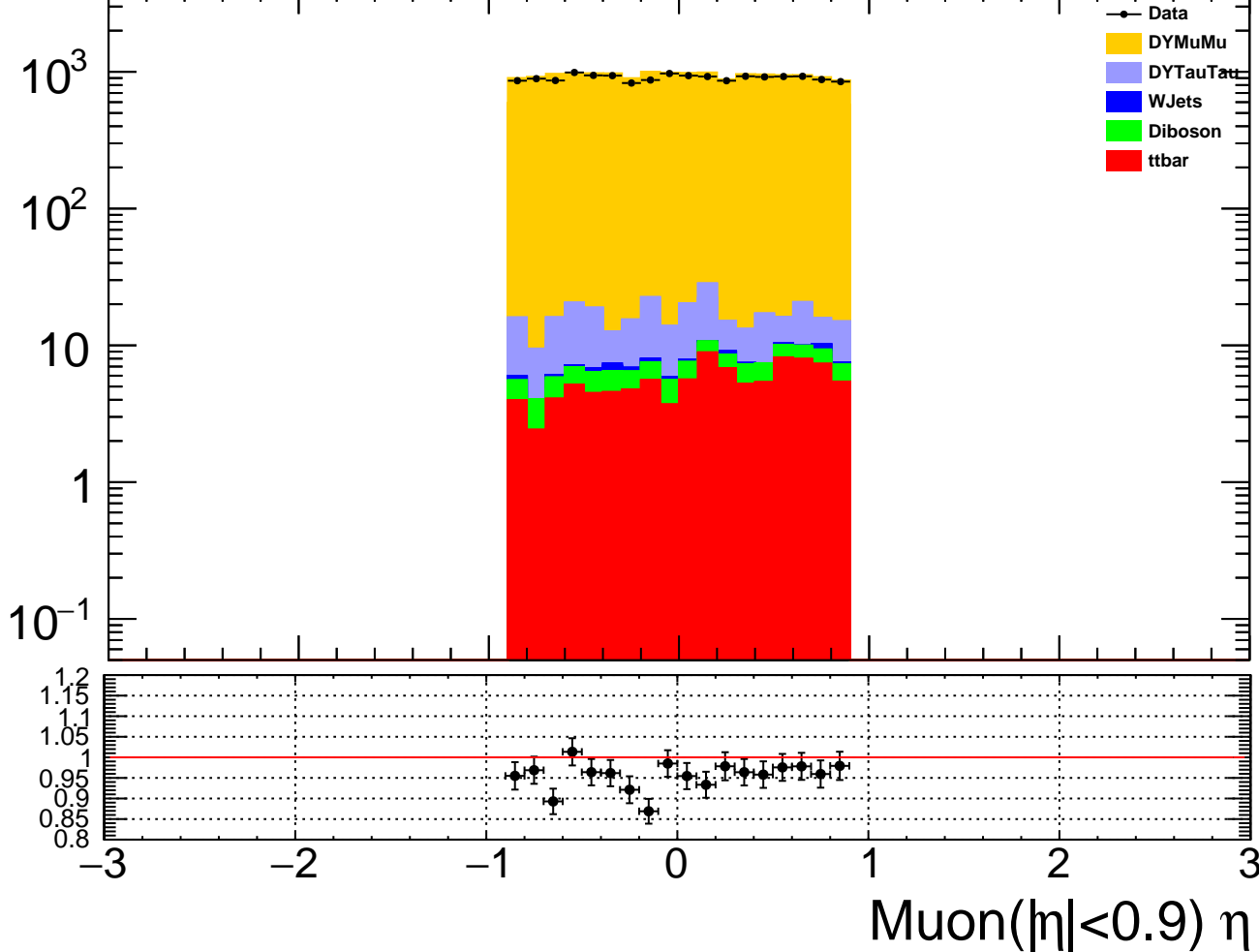
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.12$ (32.2%) KS 62.3%

—•— Data
DYMuMu
DYTauTau
WJets
Diboson
ttbar

 10^3
 10^2
10
1
 10^{-1}

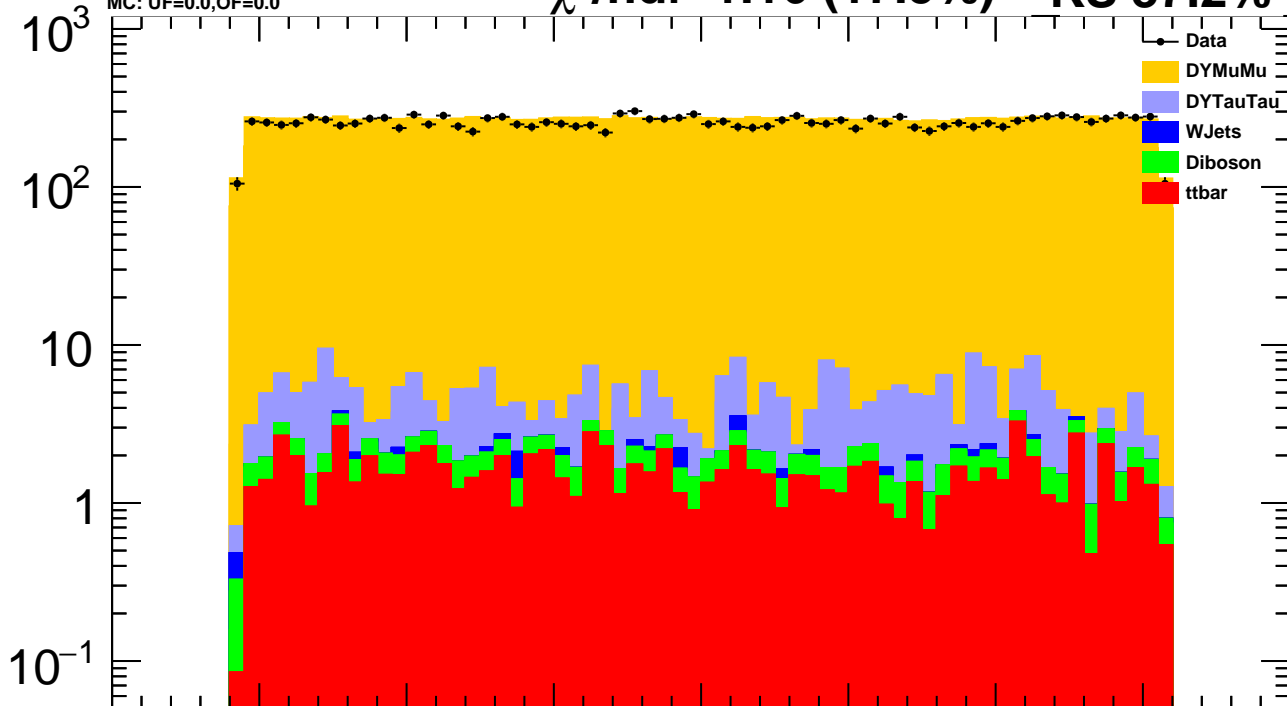
data/Pred.

1.2
1.15
1.1
1.05
1.0
0.95
0.9
0.85
0.8Muon($|\eta|<0.9$) η 

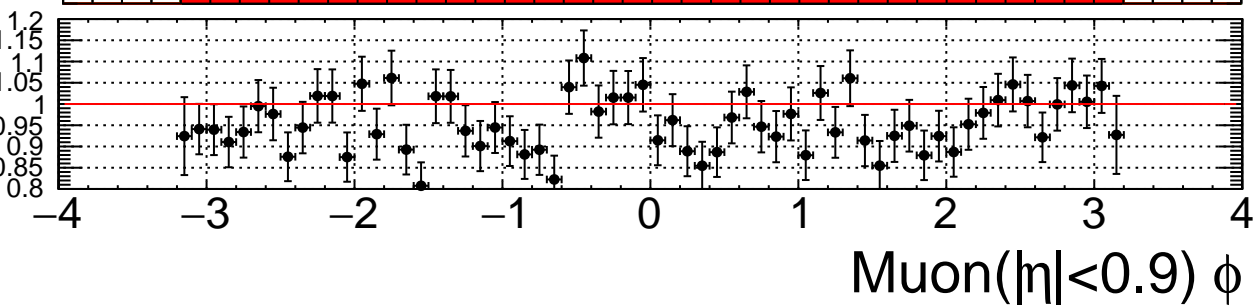
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.16$ (17.5%) KS 37.2%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



data/Pred.

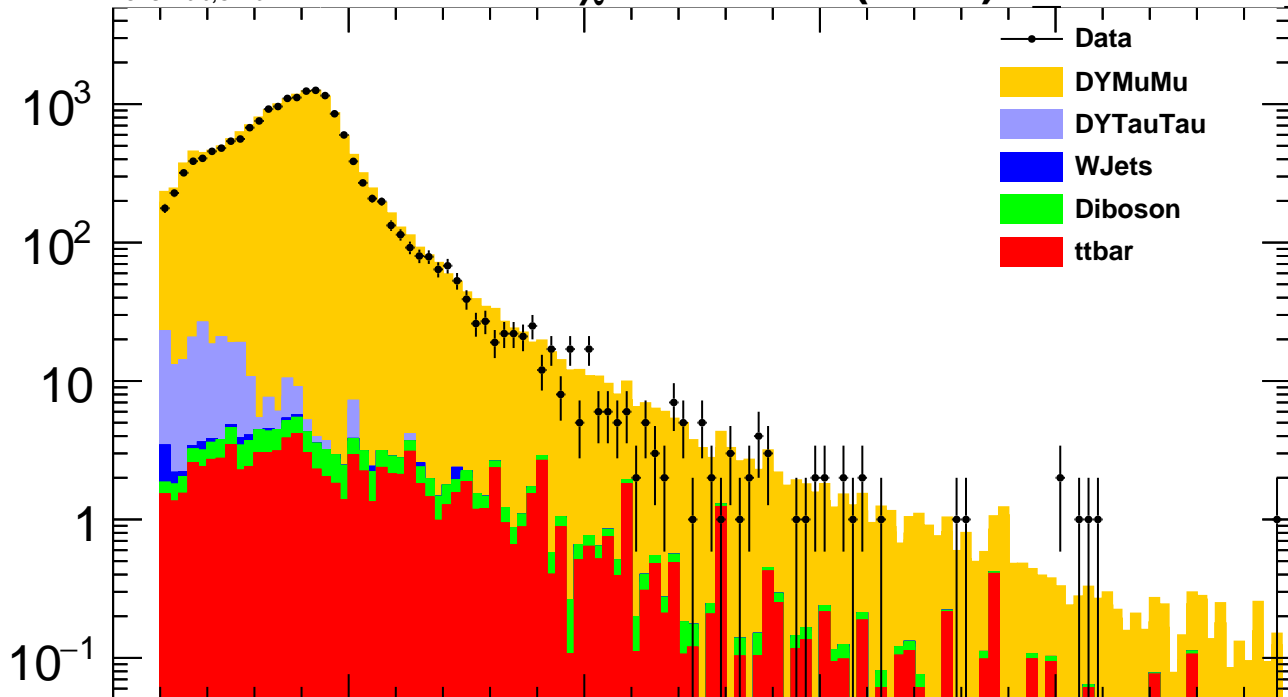


Entry

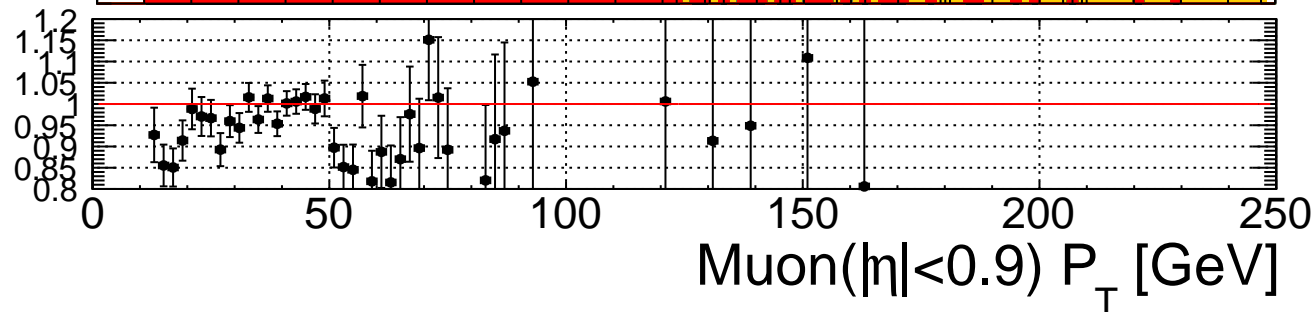
Data: UF=0,OF=3
MC: UF=0.0,OF=3.2 $\chi^2/\text{ndf}=1.23$ (4.8%)

KS 2.1%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



data/Pred.



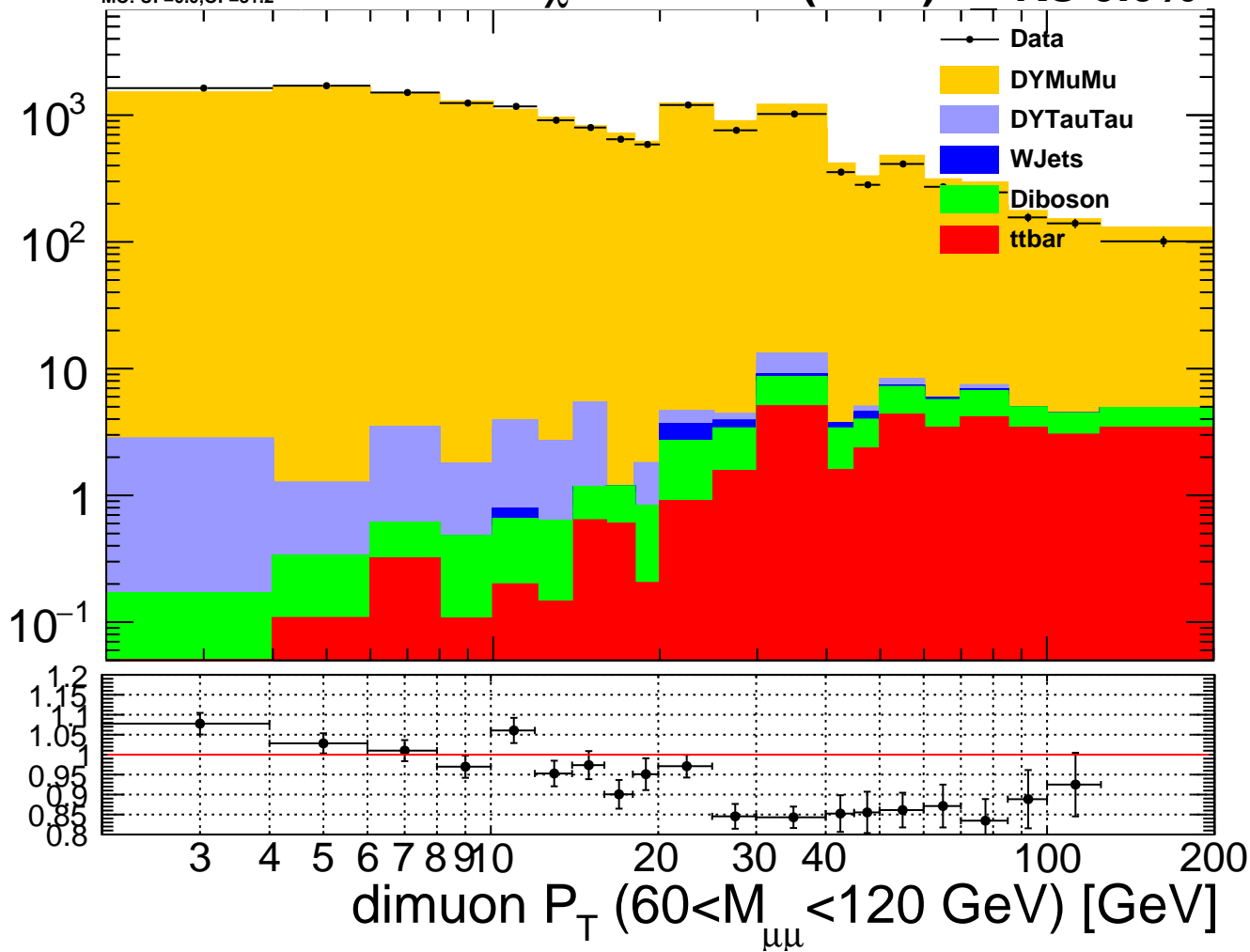
Entry

Data: UF=0,OF=19
MC: UF=0.0,OF=31.2 $\chi^2/\text{ndf}=7.23$ (0.0%)

KS 0.0%

—•— Data
DYMuMu
DYTauTau
WJets
Diboson
ttbar

data/Pred.

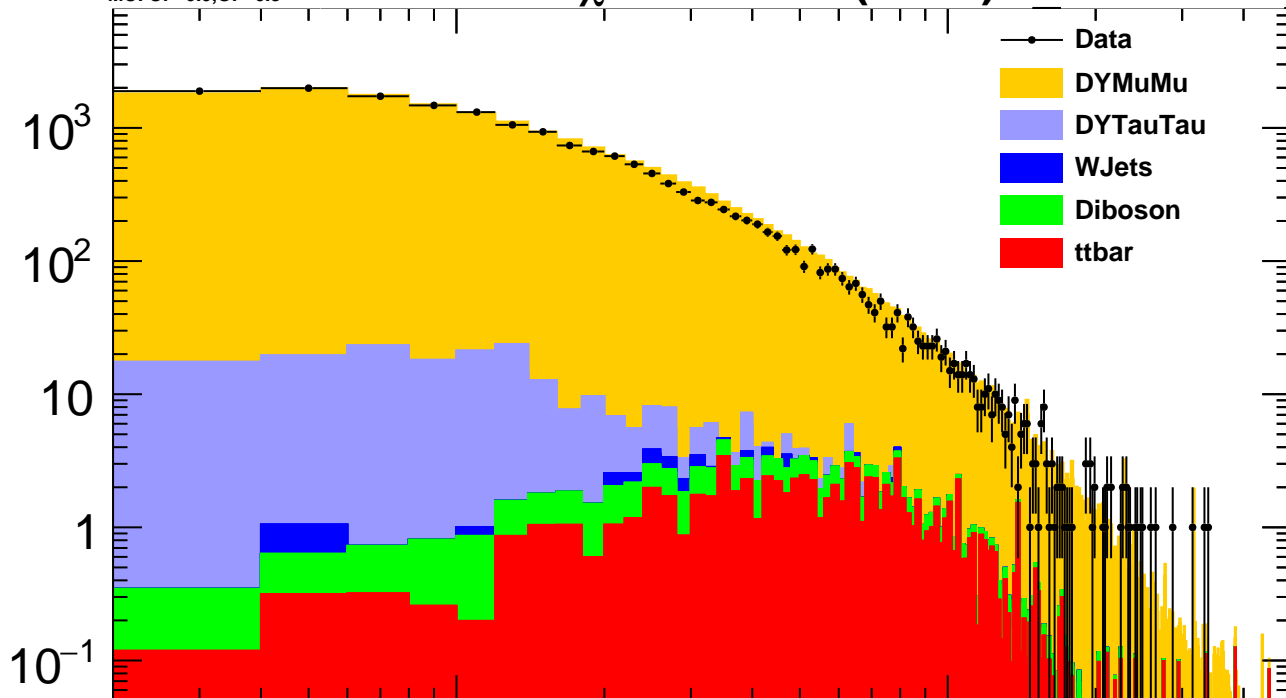


Entry

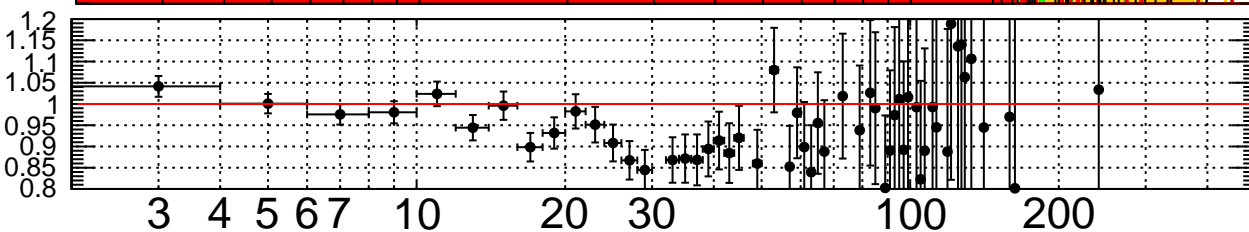
Data: UF=0,OF=0
MC: UF=0.0,OF=0.3 $\chi^2/\text{ndf}=2.61$ (0.0%)

KS 0.0%

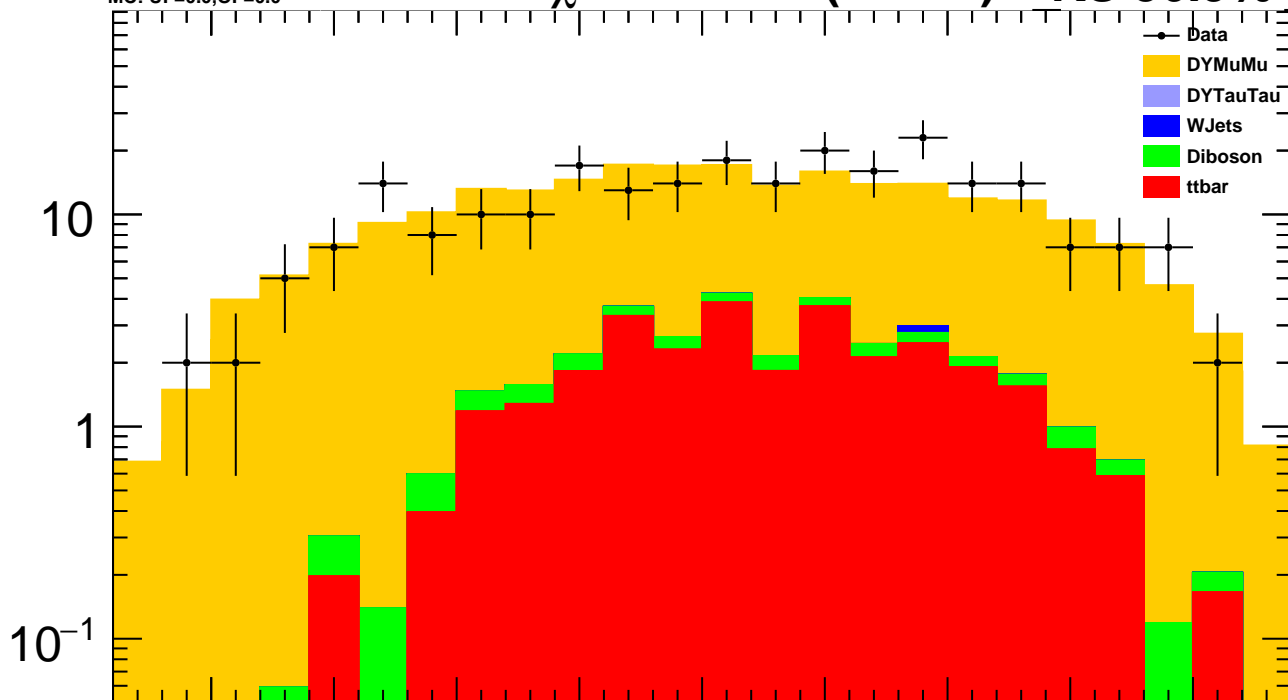
- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



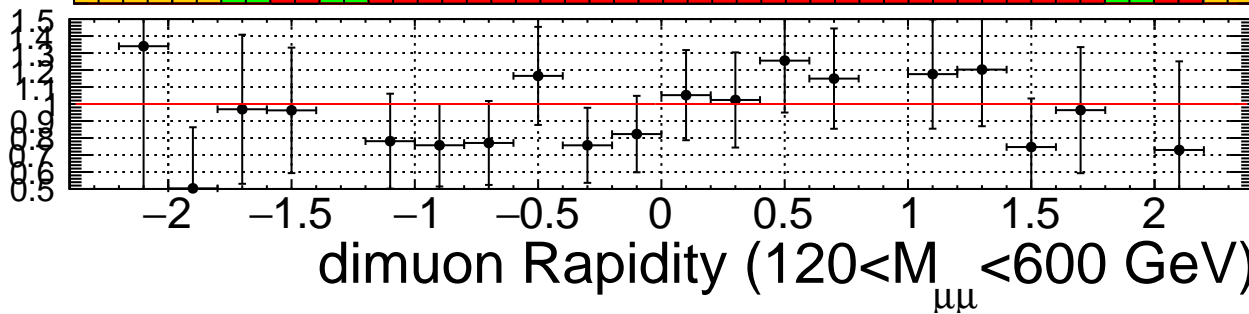
data/Pred.

dimuon P_T [GeV]

Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=0.75$ (79.2%) KS 36.9%

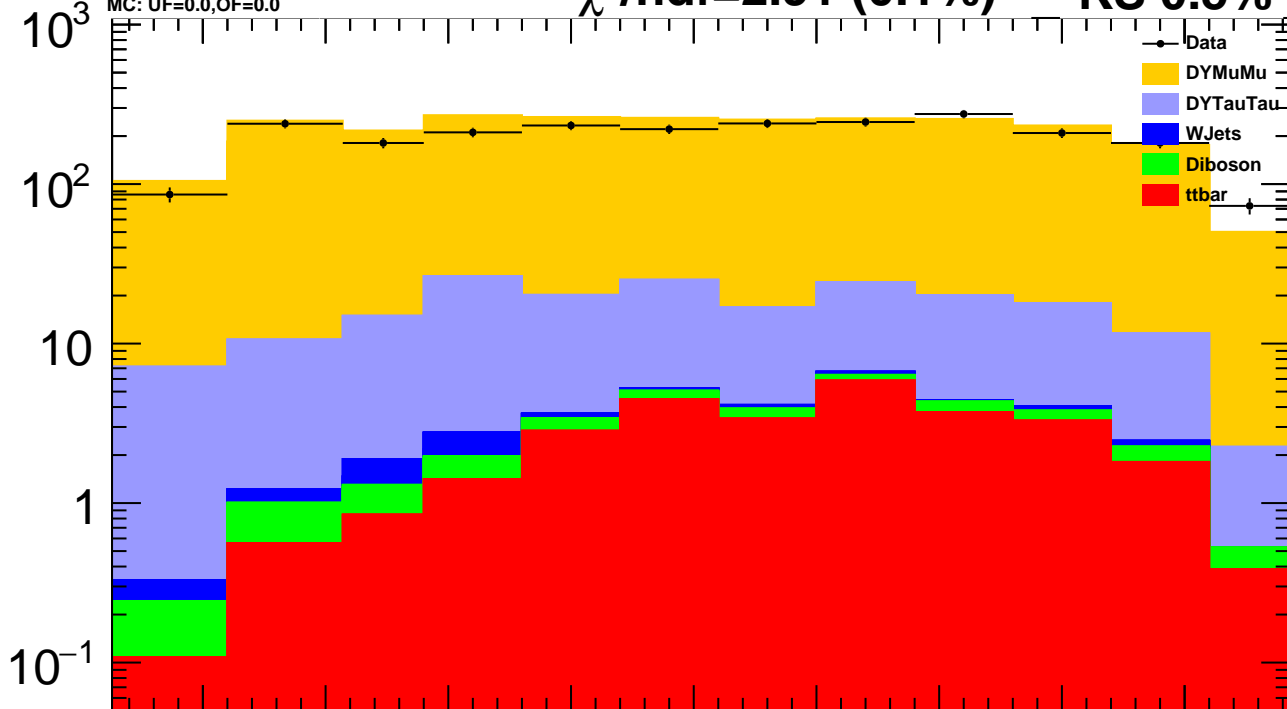
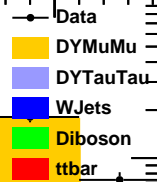
data/Pred.



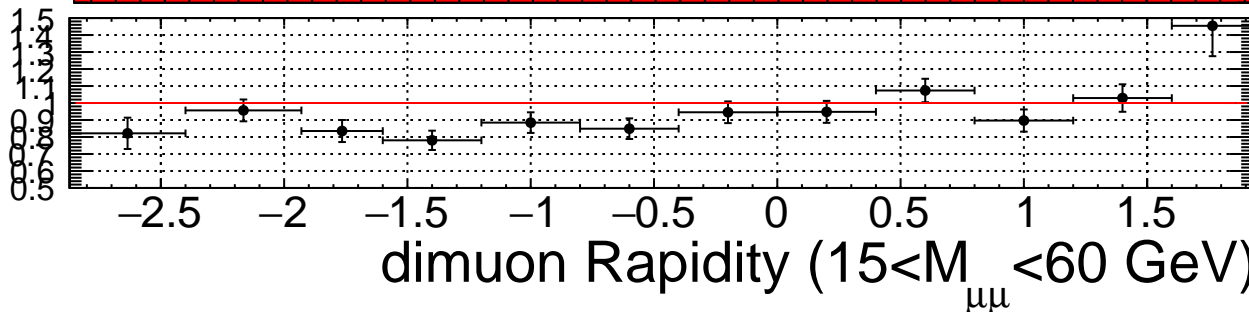
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=2.91$ (0.1%)

KS 0.5%



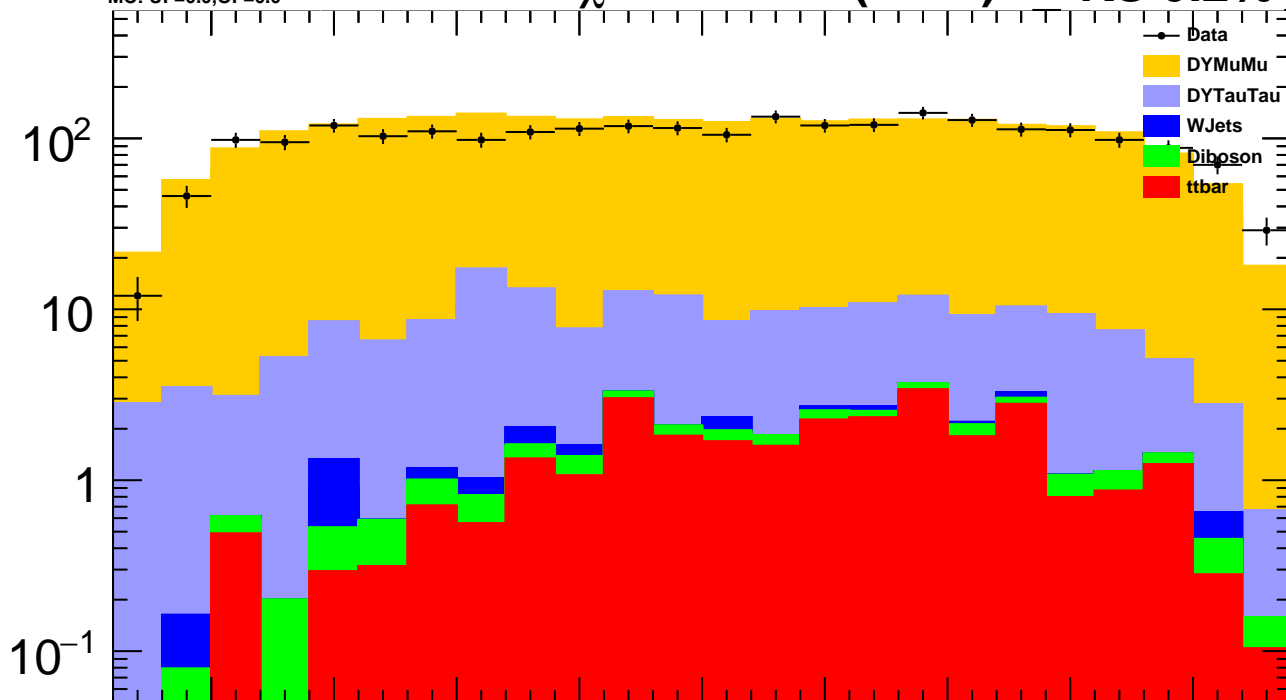
data/Pred.



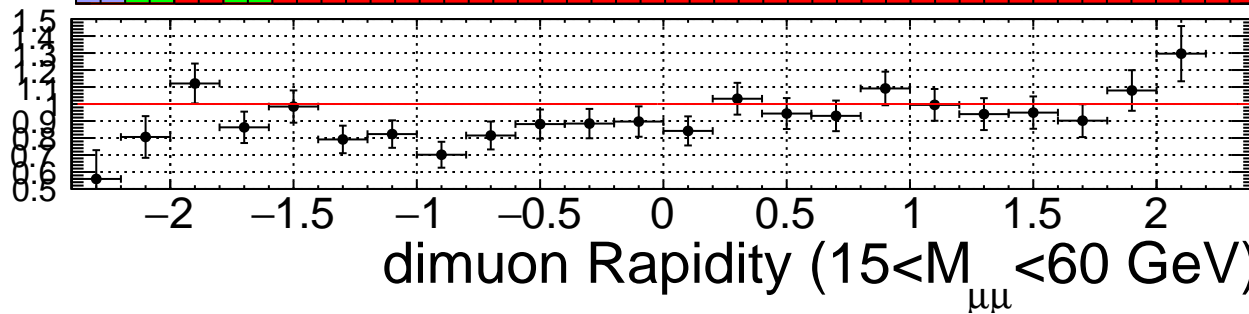
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.93$ (0.5%)

KS 0.2%



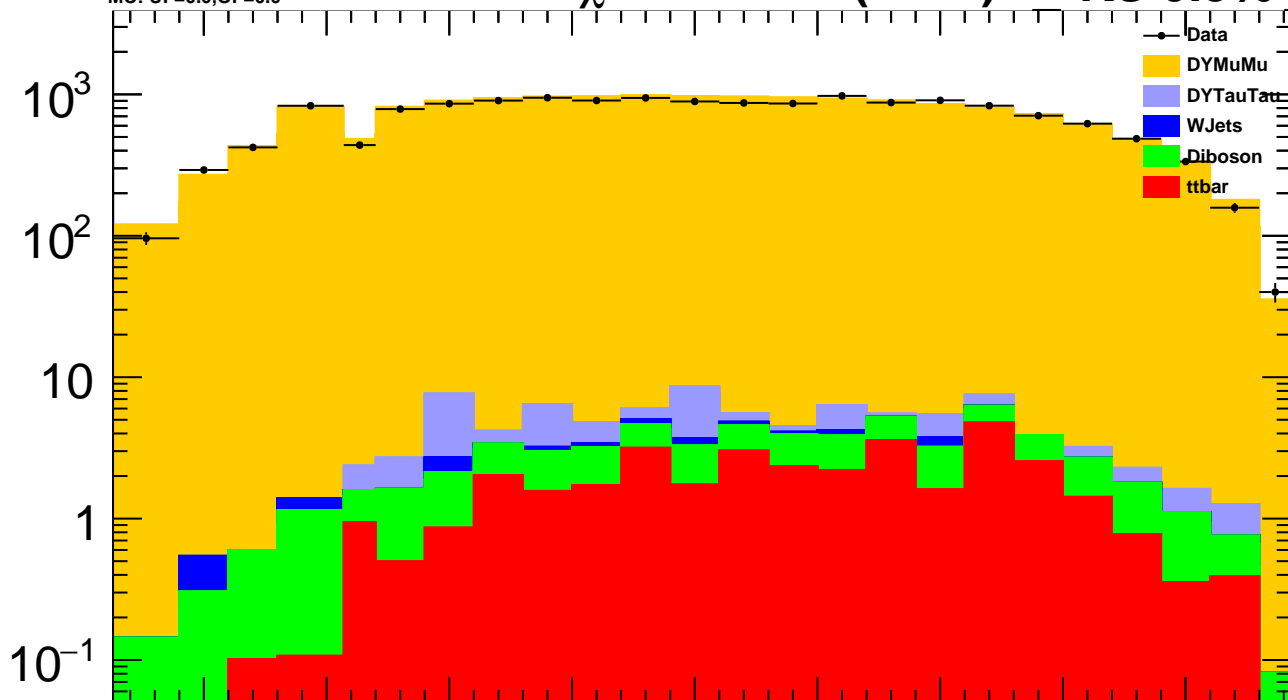
data/Pred.



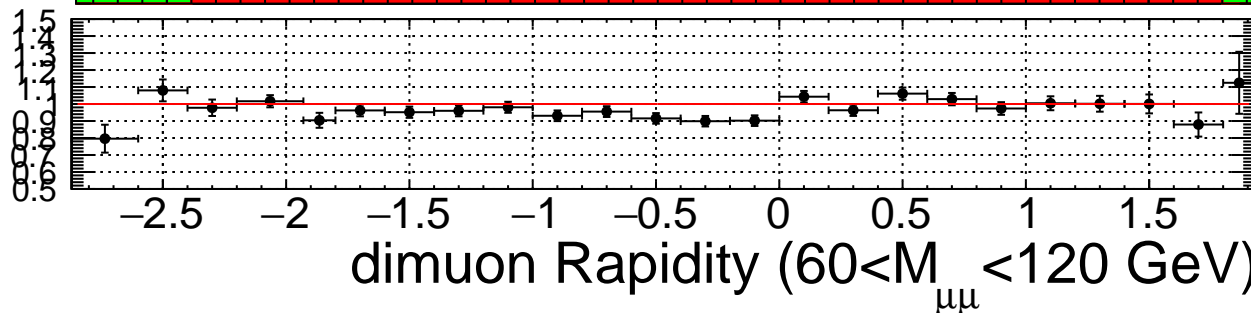
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.91$ (0.5%)

KS 0.3%



data/Pred.

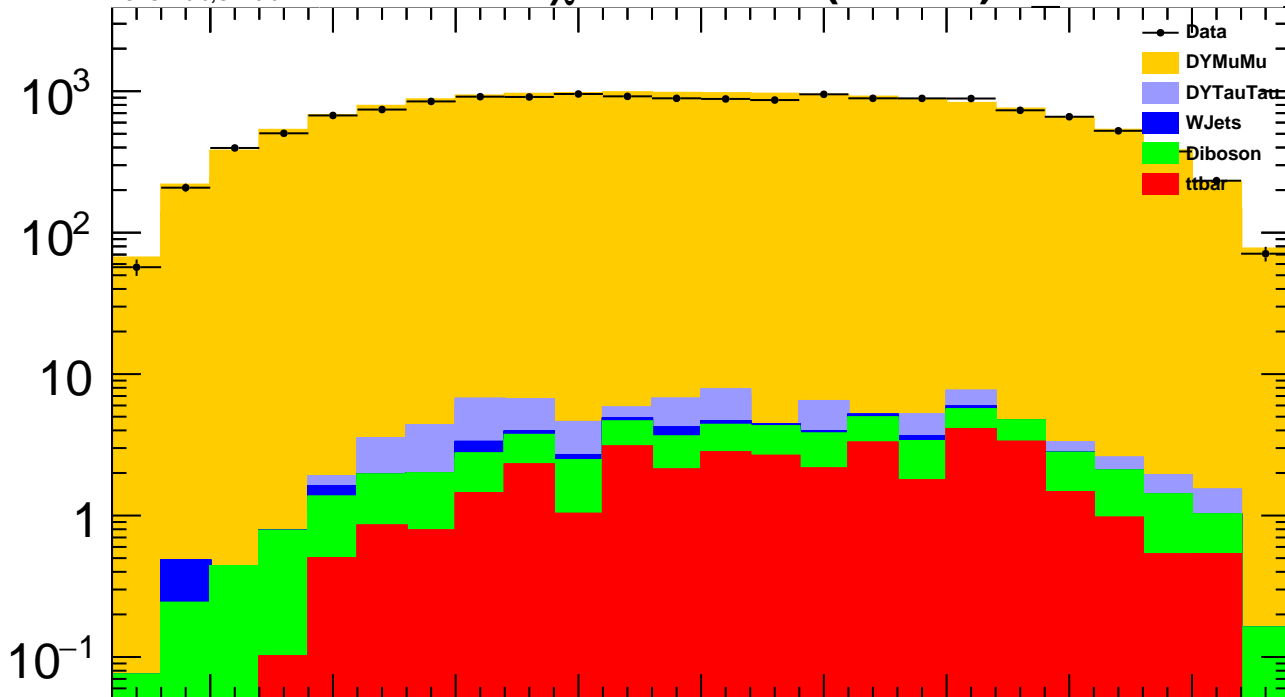


Entry

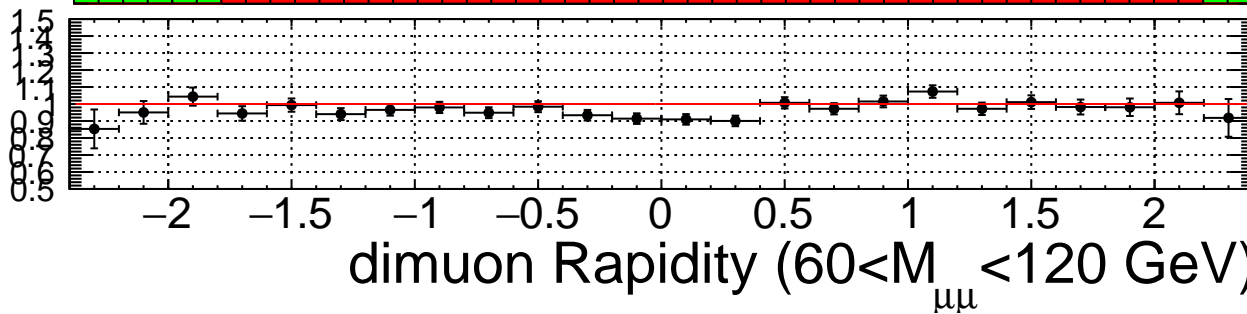
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.36$ (11.5%)

KS 0.9%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



data/Pred.

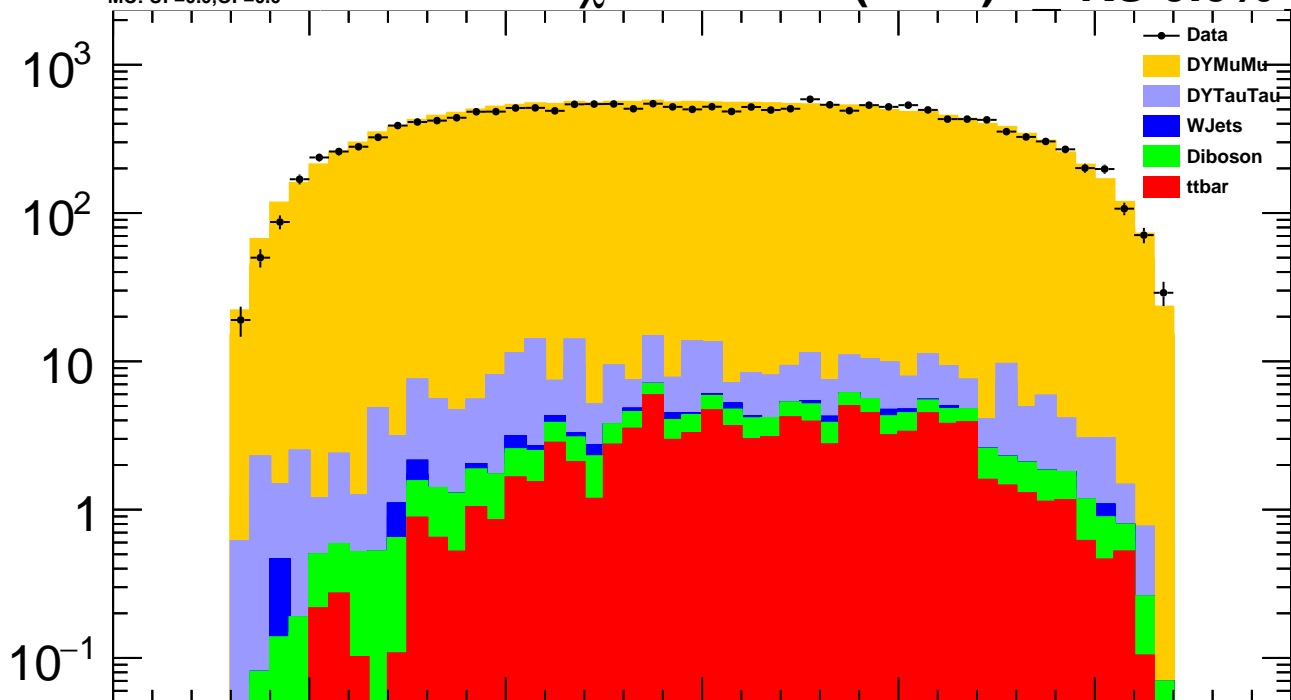


Data: UF=0,OF=0
MC: UF=0.0,OF=0.0

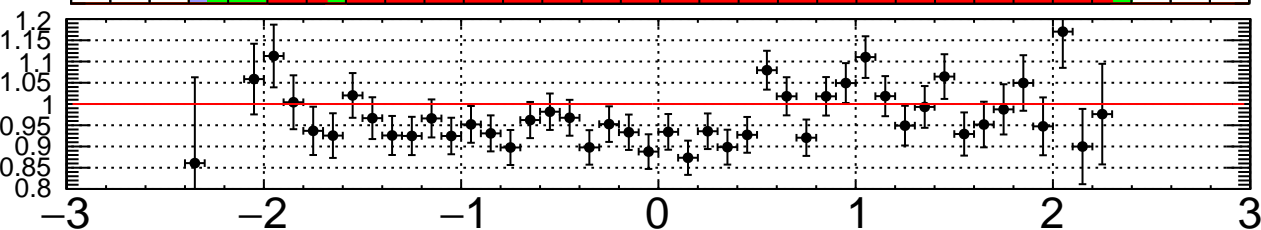
$\chi^2/\text{ndf}=1.72$ (0.1%)

KS 0.0%

Entry



data/Pred.



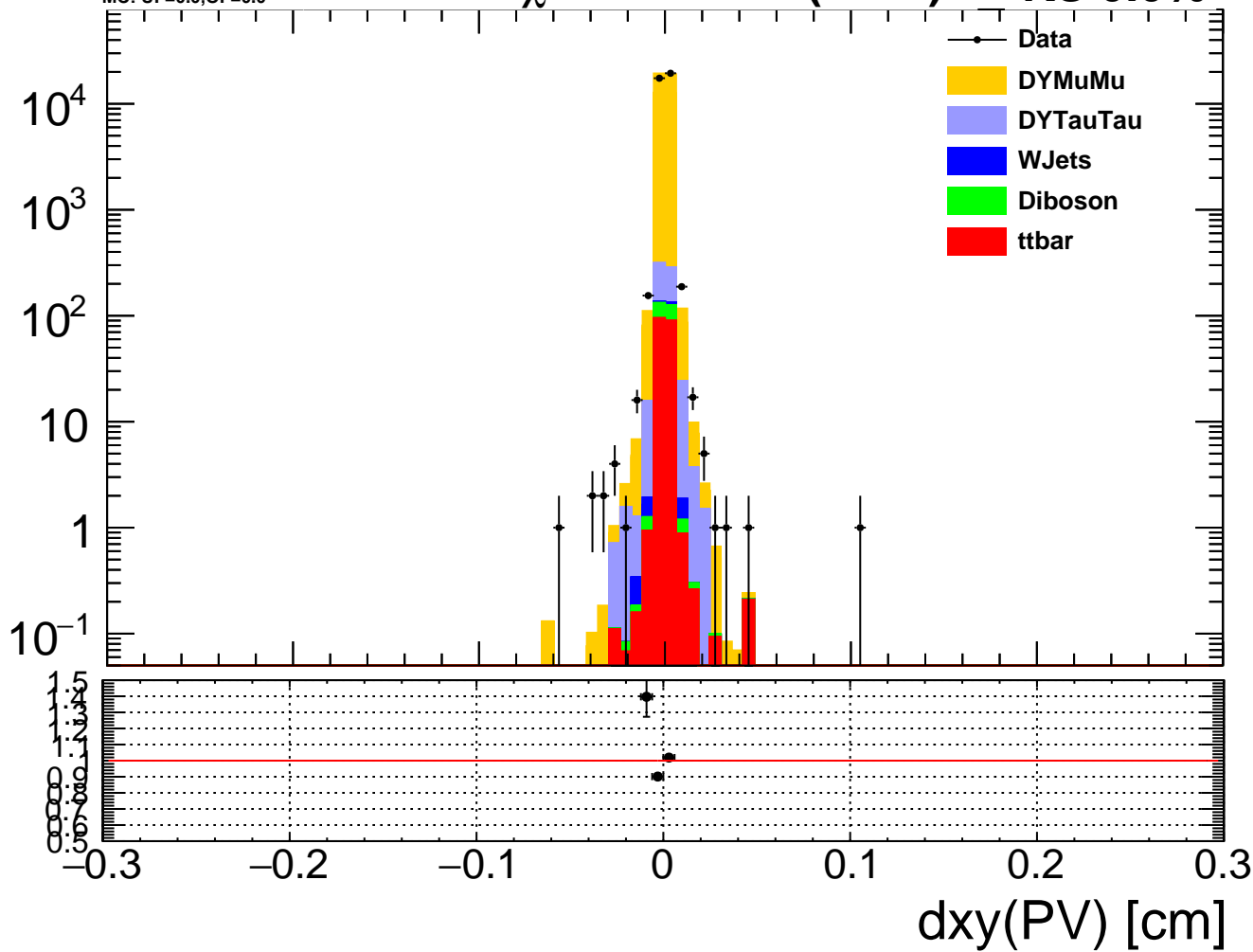
dimuon Rapidity

Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=11.17$ (0.0%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



Entry

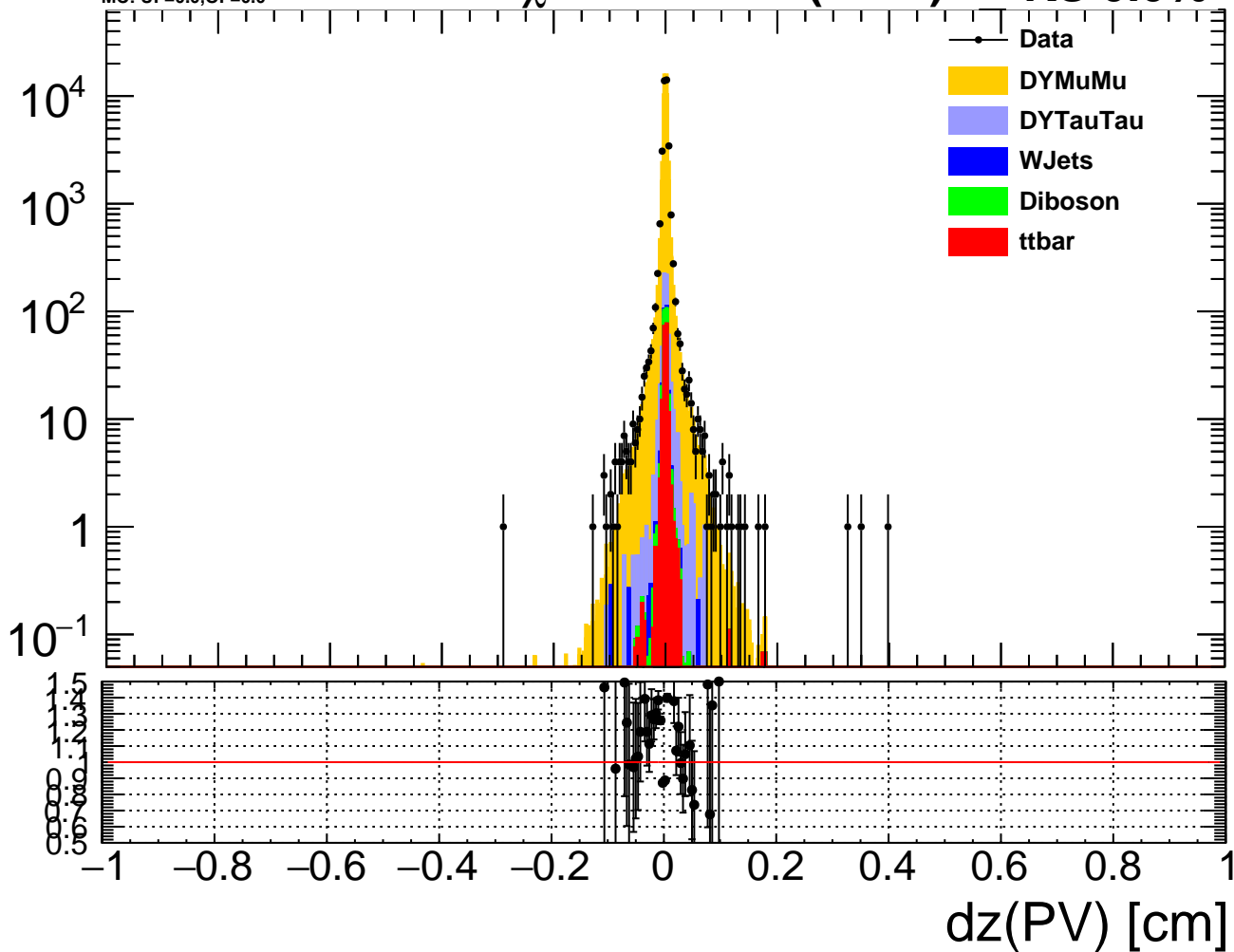
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=11.01$ (0.0%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar

10⁴
10³
10²
10
1
10⁻¹

data/Pred.

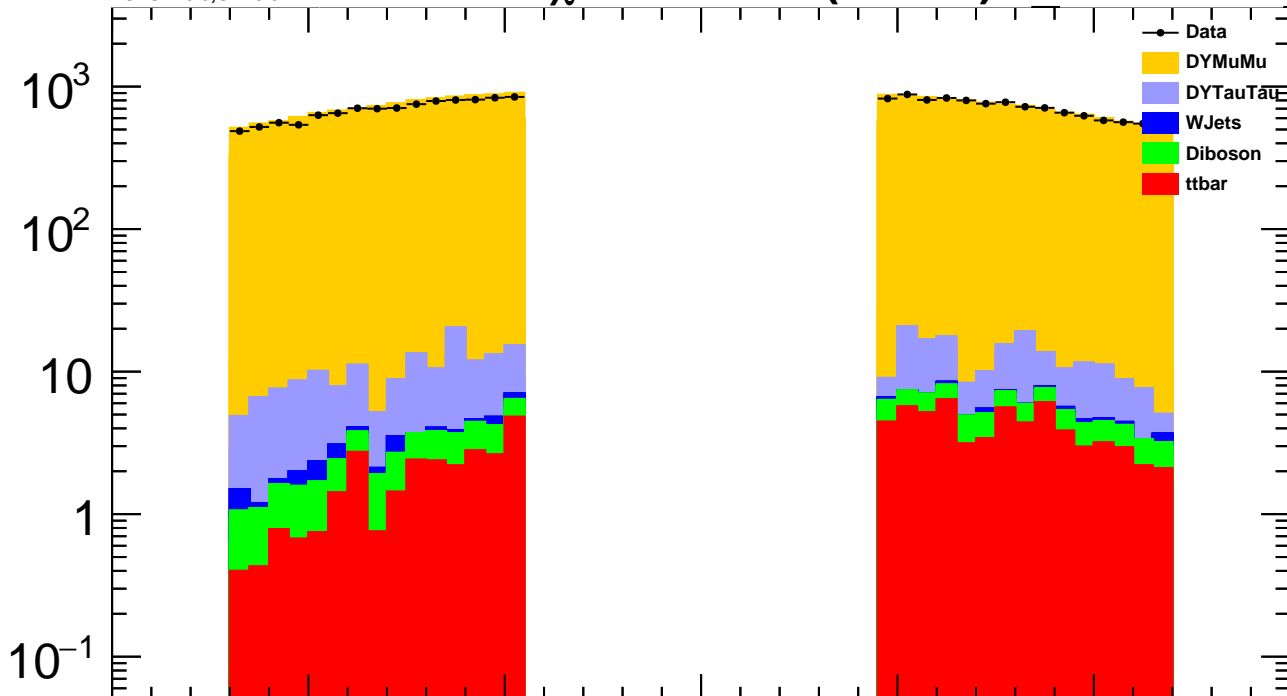
1
0.5
0.2
0.1
0.05
0.02
0.01-1 -0.8 -0.6 -0.4 -0.2 0 0.2 0.4 0.6 0.8 1
dz(PV) [cm]

Entry

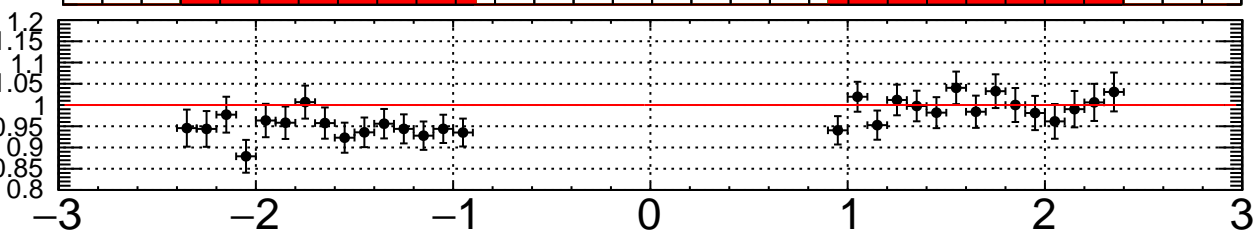
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=0.98$ (48.8%)

KS 0.1%

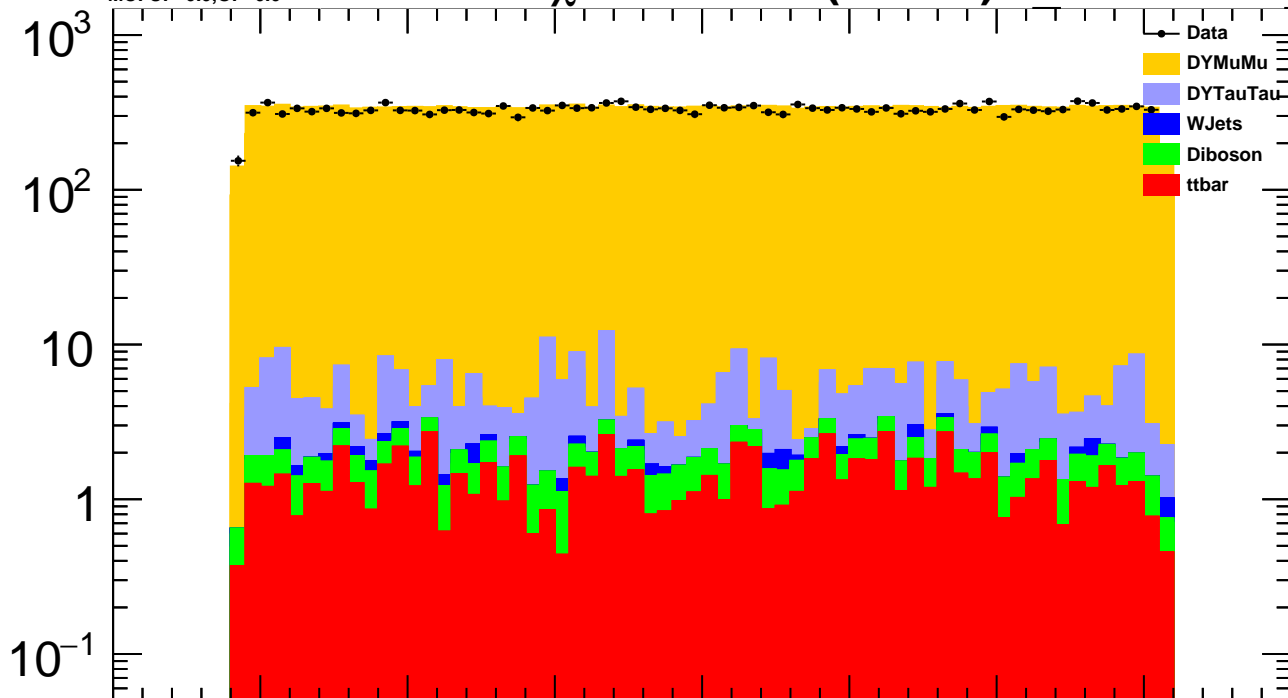
— Data
DYMuMu
DYTauTau
WJets
Diboson
ttbar



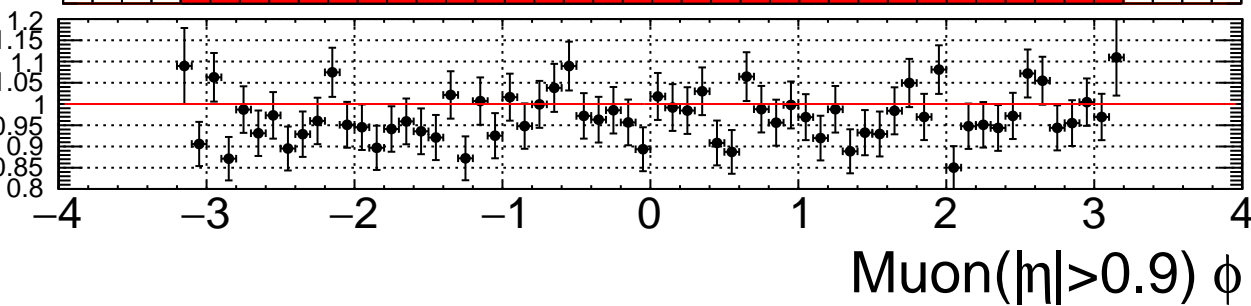
data/Pred.

Muon($|\eta|>0.9$) η

Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.11$ (25.5%) KS 51.2%

data/Pred.



Entry

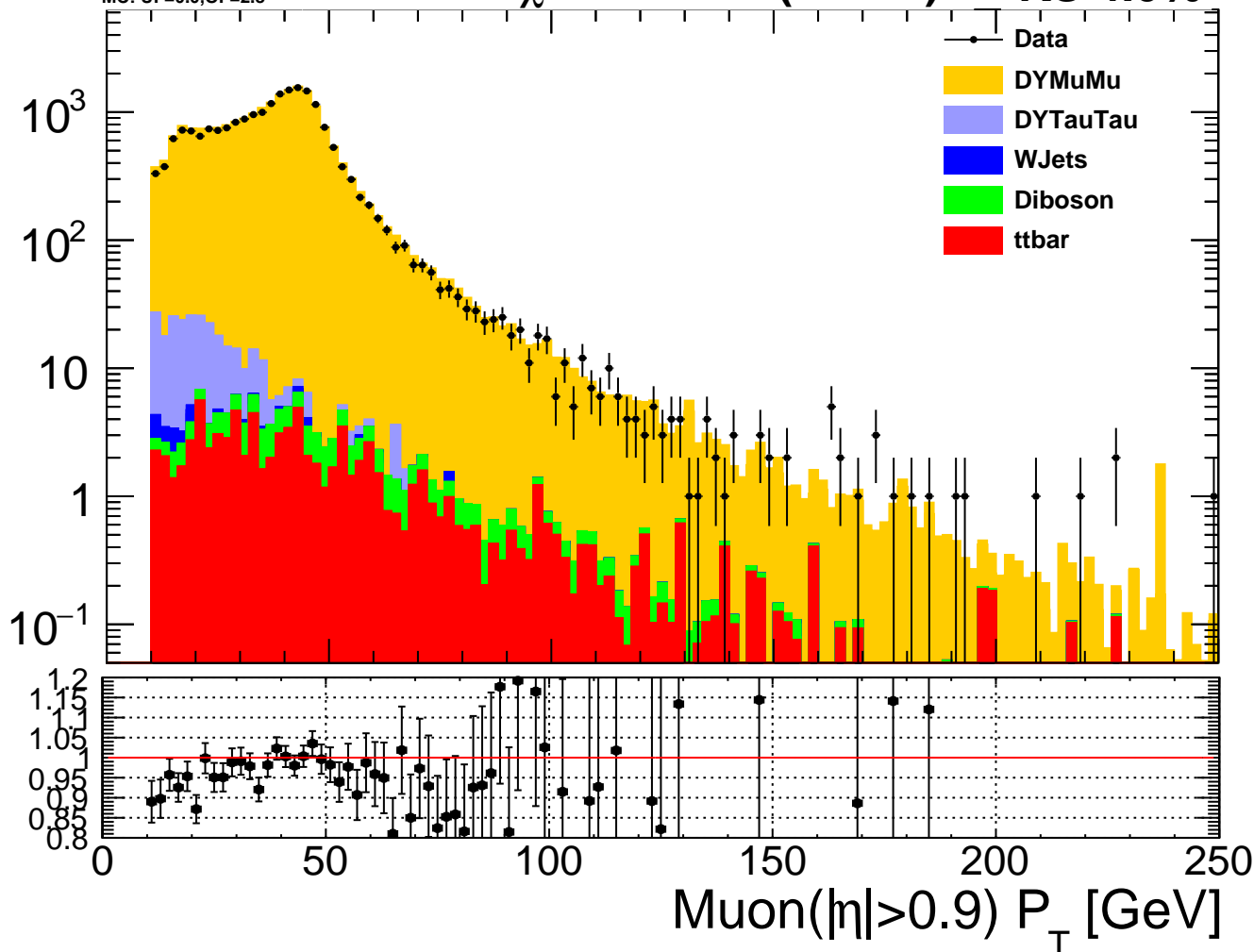
Data: UF=0,OF=0
MC: UF=0.0,OF=2.8 $\chi^2/\text{ndf}=1.14$ (14.7%)

KS 4.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar

10³
10²
10
1
10⁻¹

data/Pred.

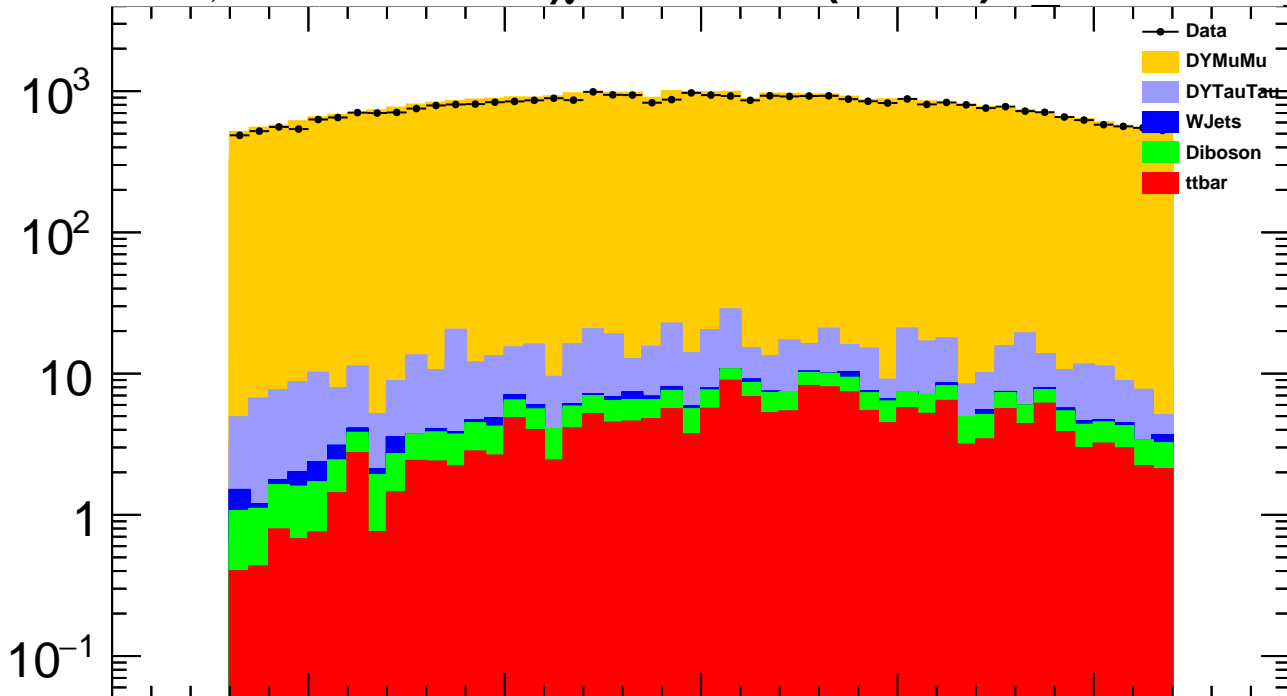
1.2
1.1
1.05
1.0
0.95
0.9
0.85
0.80 50 100 150 200 250
Muon($|\eta|>0.9$) P_T [GeV]

Entry

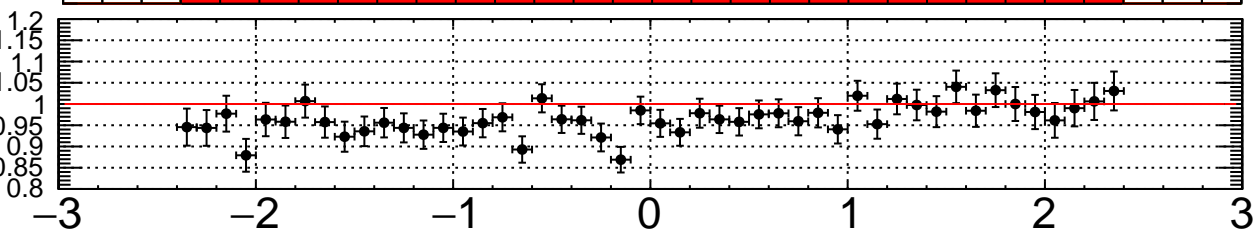
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.05$ (37.4%)

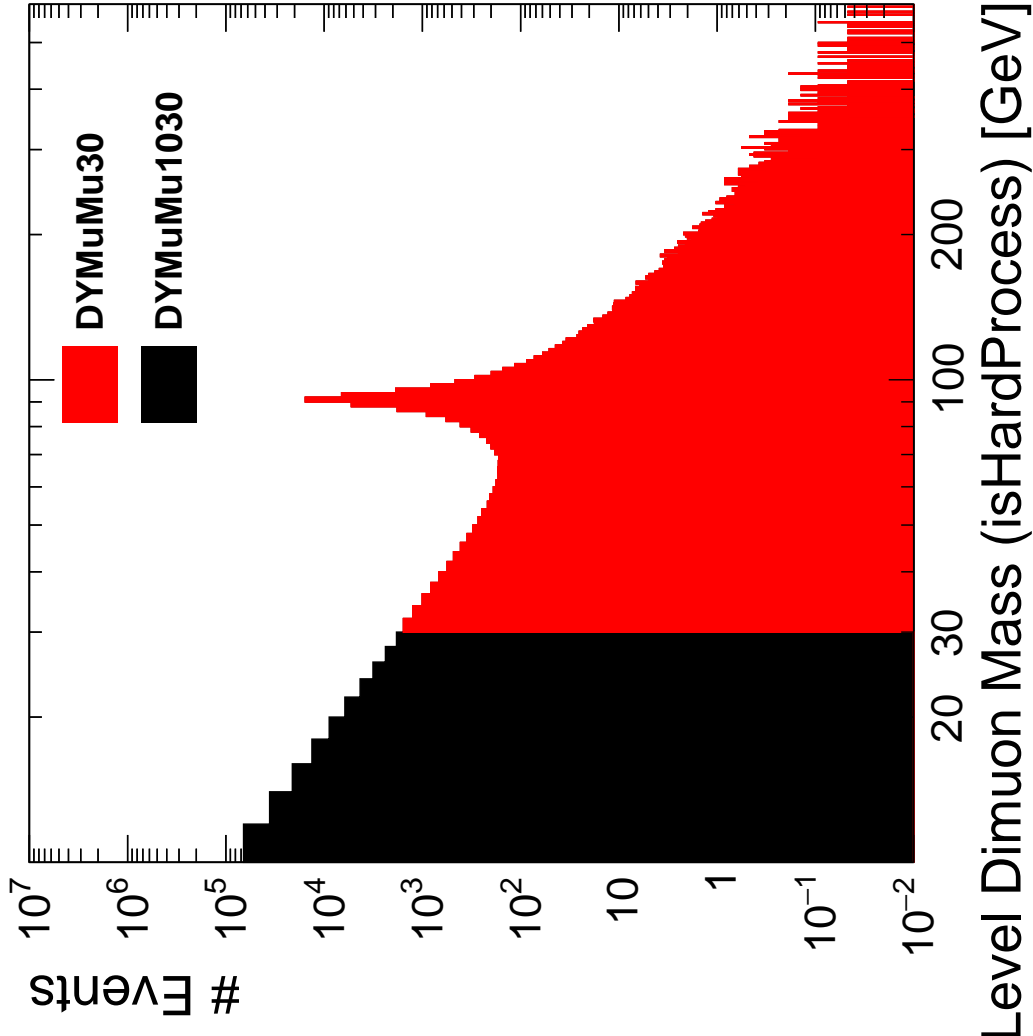
KS 0.2%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



data/Pred.

Muon η

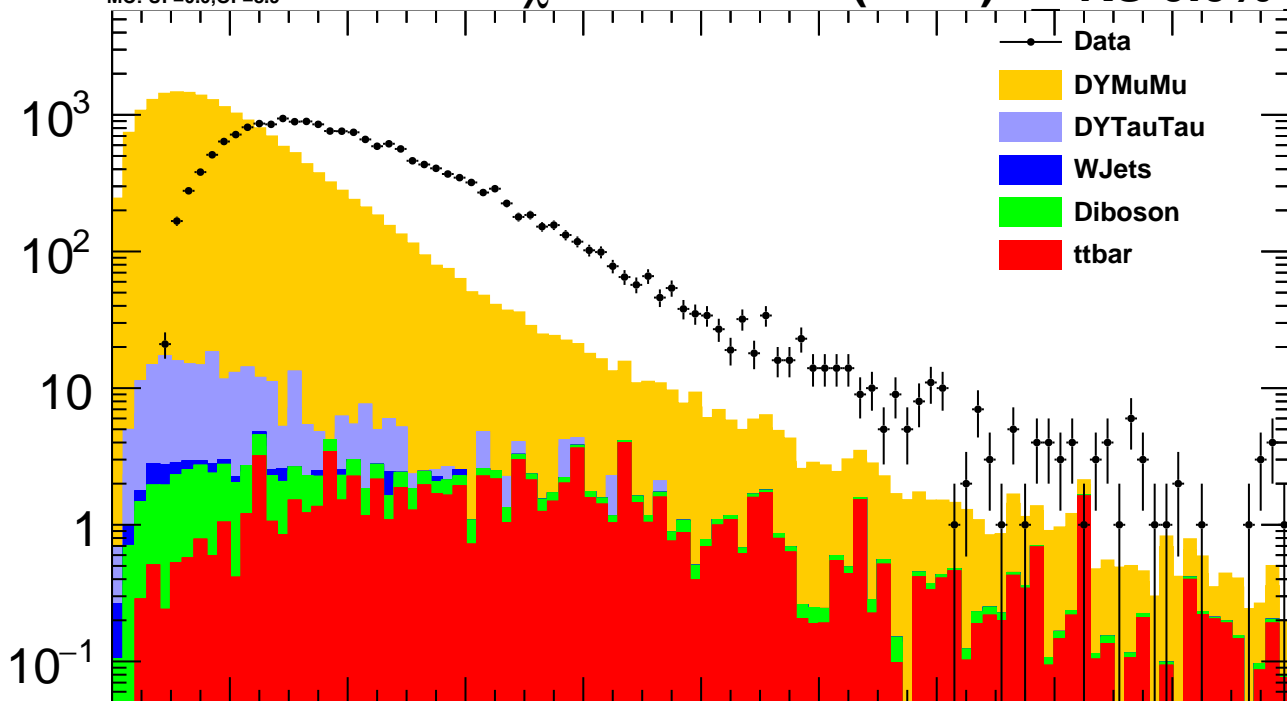


Entry

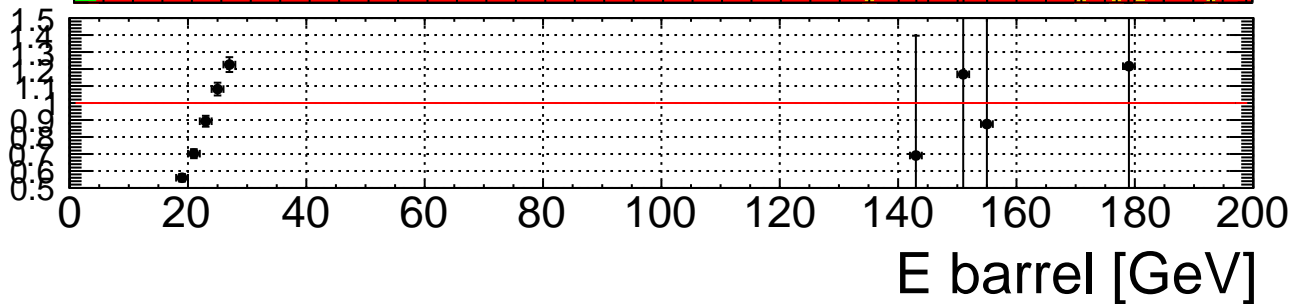
Data: UF=0,OF=27
MC: UF=0.0,OF=8.9 $\chi^2/\text{ndf}=304.05$ (0.0%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



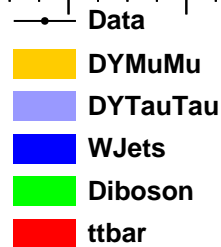
data/Pred.



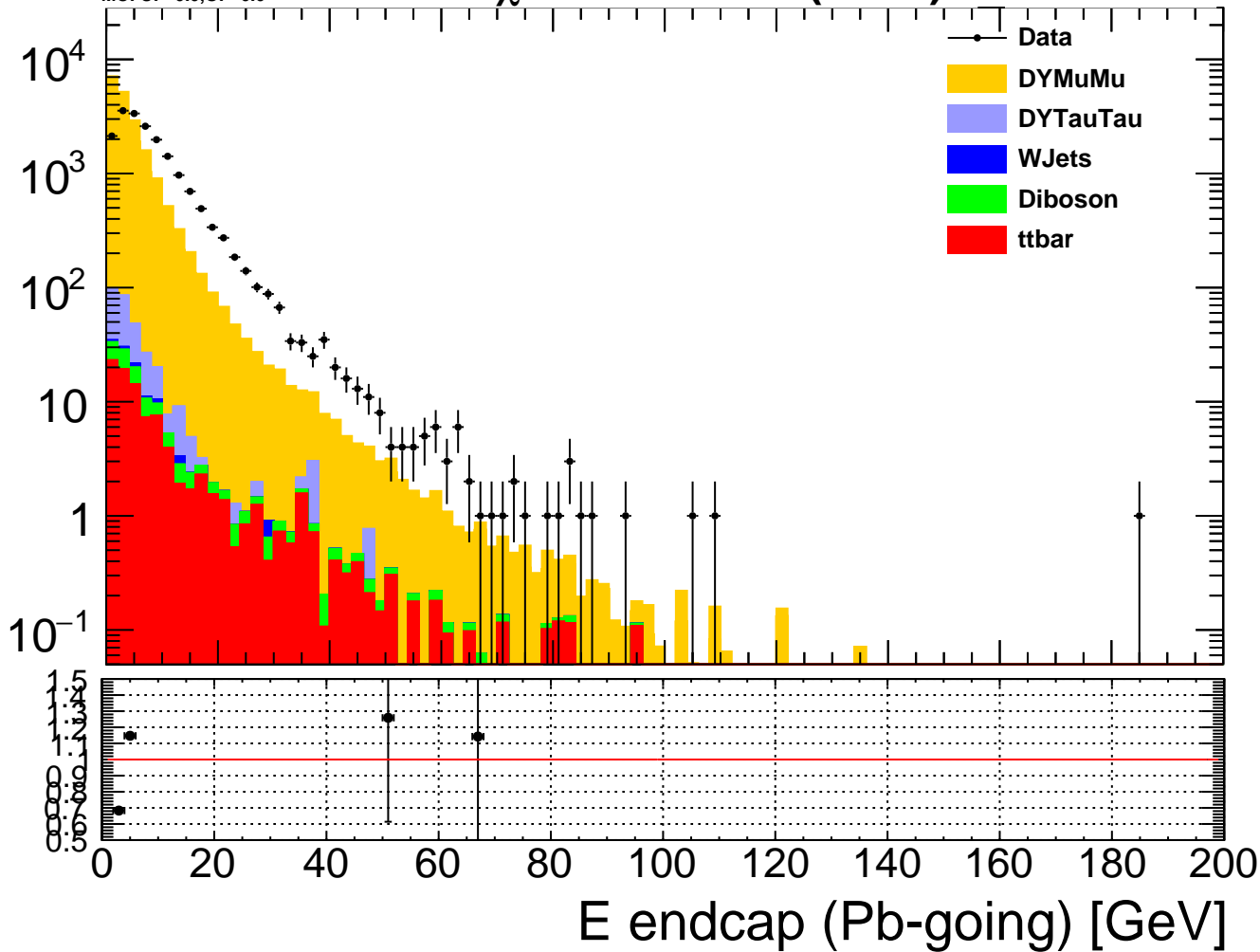
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=148.21$ (0.0%)

KS 0.0%



data/Pred.



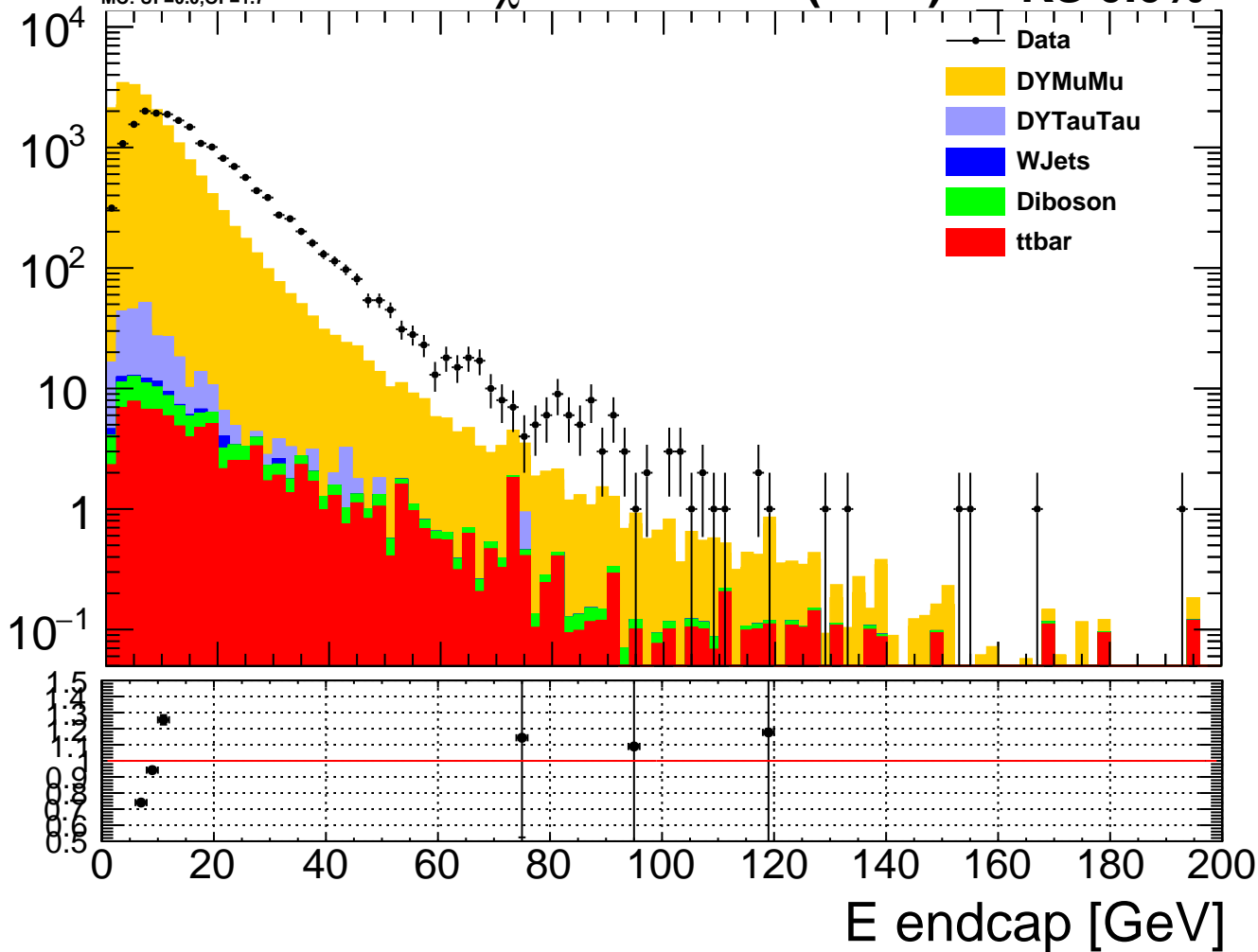
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=1.7 $\chi^2/\text{ndf}=150.80$ (0.0%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar

data/Pred.



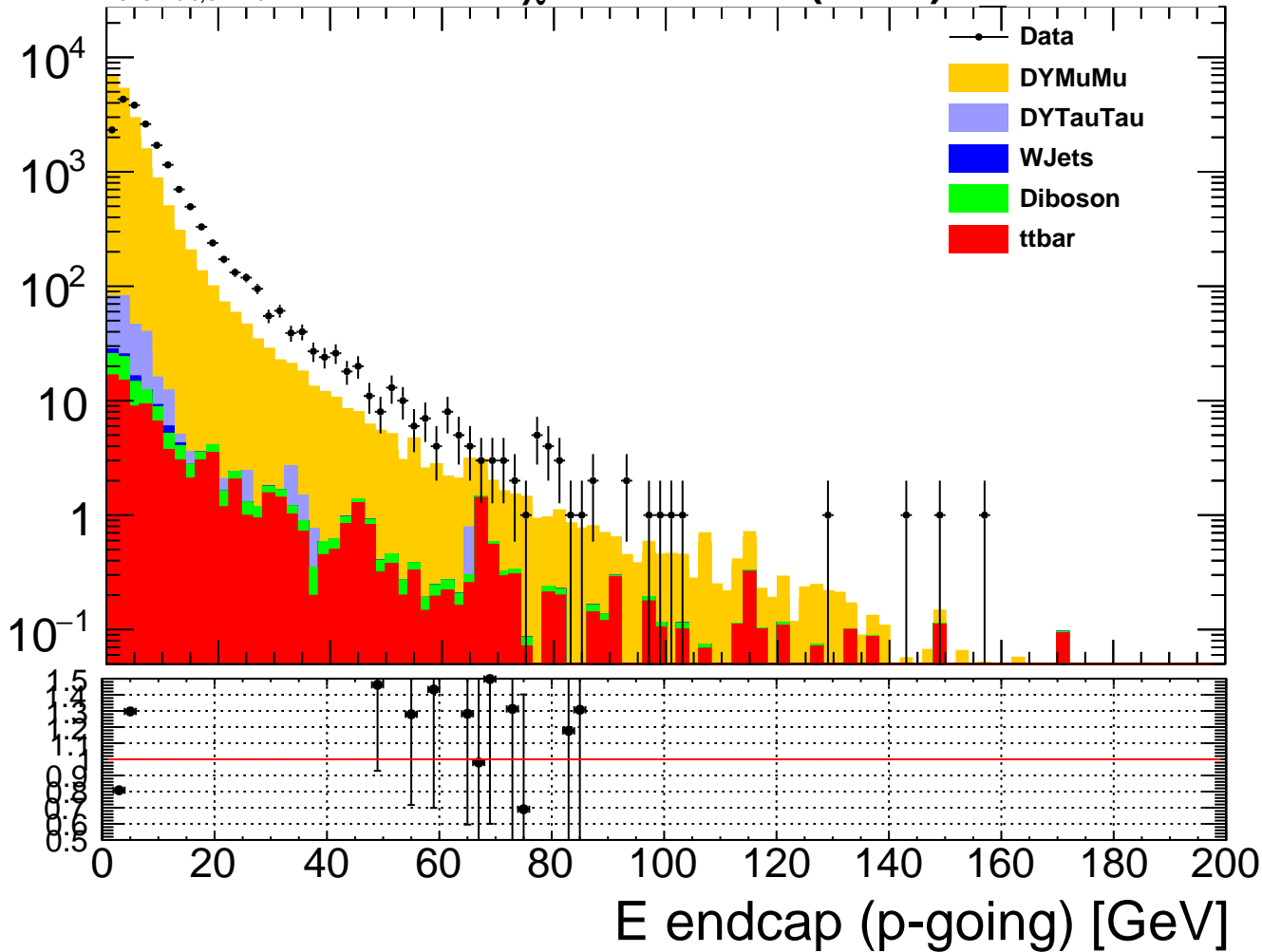
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=1.6 $\chi^2/\text{ndf}=80.48$ (0.0%)

KS 0.0%



data/Pred.

 $E_{\text{endcap (p-going)}}$ [GeV]

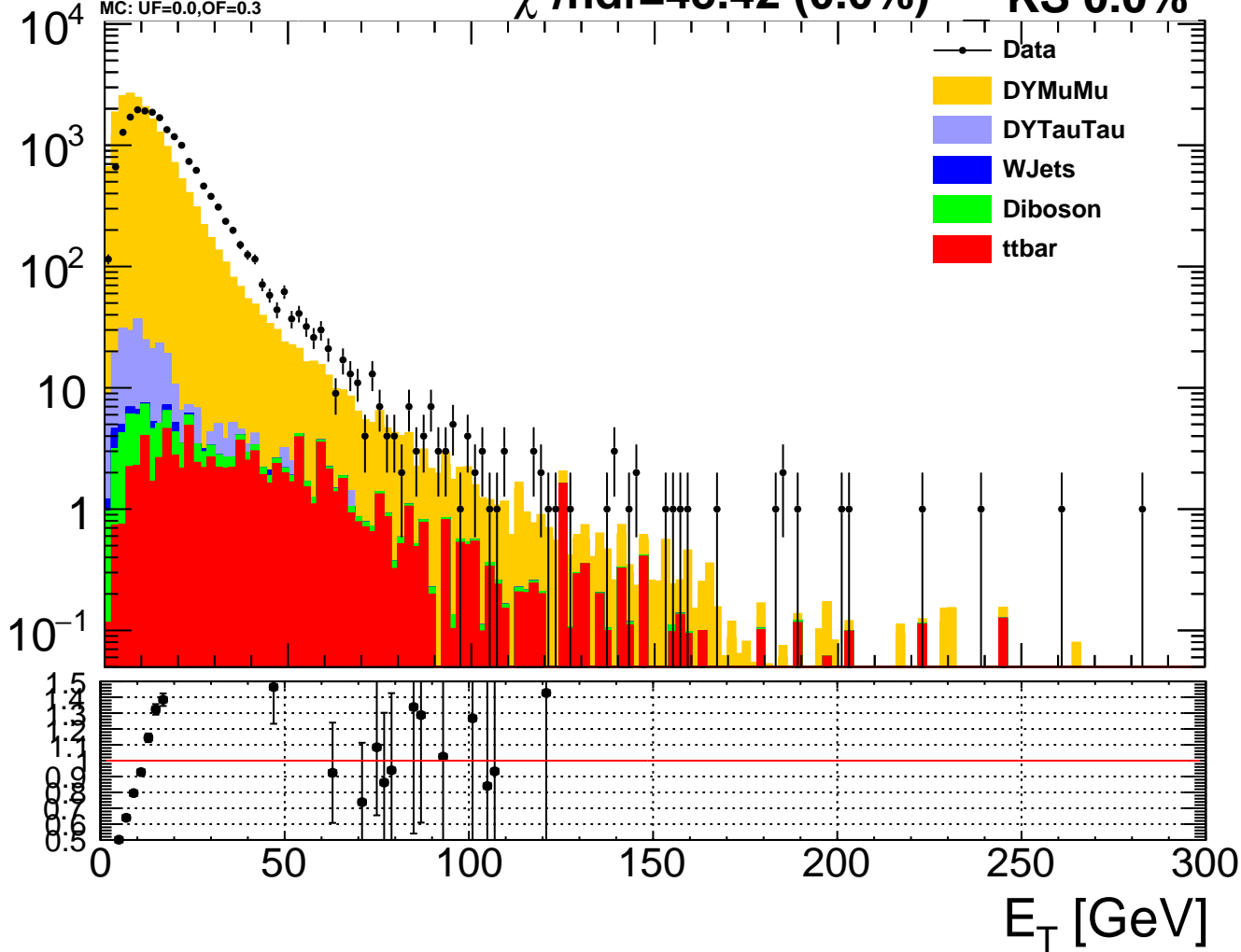
Entry

Data: UF=0,OF=1
MC: UF=0.0,OF=0.3 $\chi^2/\text{ndf}=45.42$ (0.0%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar

data/Pred.

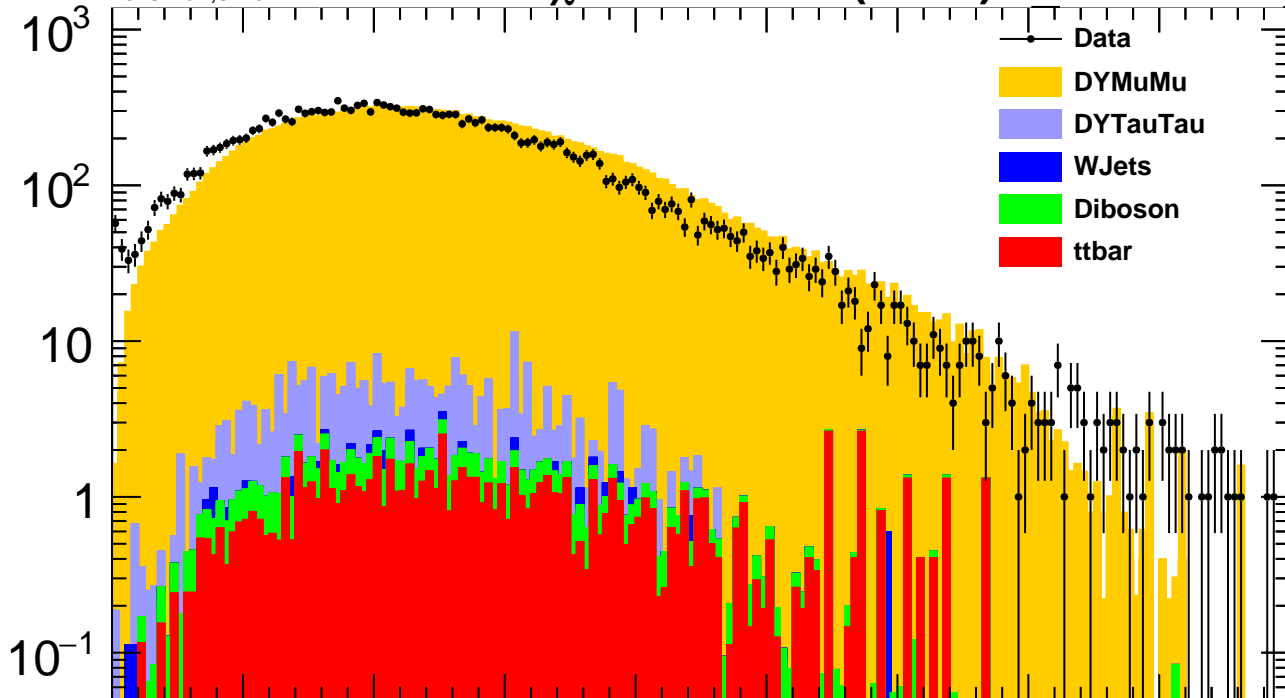


Entry

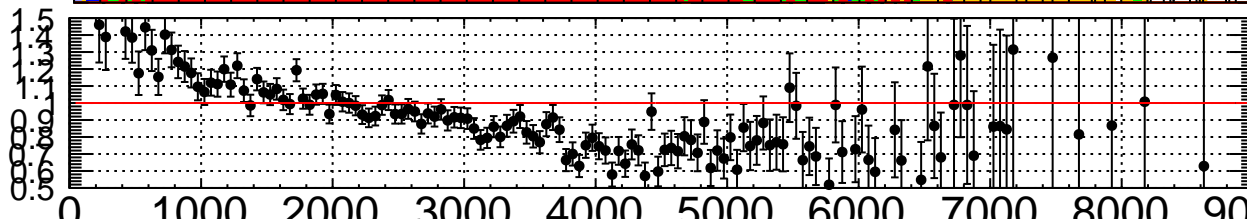
Data: UF=39,OF=6
MC: UF=0.1,OF=0.4 $\chi^2/\text{ndf}=12.00$ (0.0%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



data/Pred.



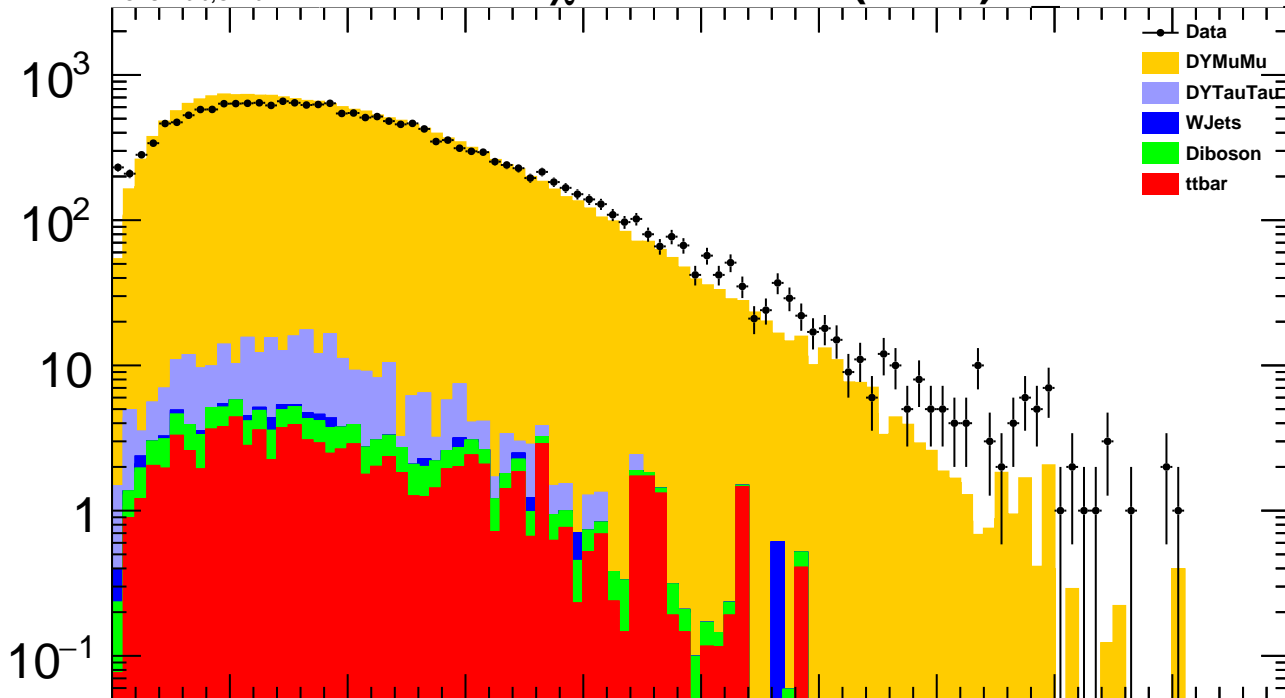
HF hits

Entry

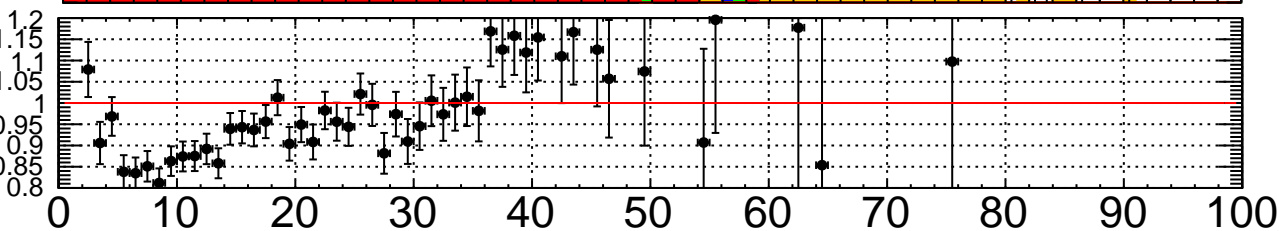
Data: UF=0,OF=2
MC: UF=0.0,OF=0.4 $\chi^2/\text{ndf}=13.20$ (0.0%)

KS 0.0%

—•— Data
■ DYMuMu
■ DYTauTau
■ WJets
■ Diboson
■ ttbar



data/Pred.

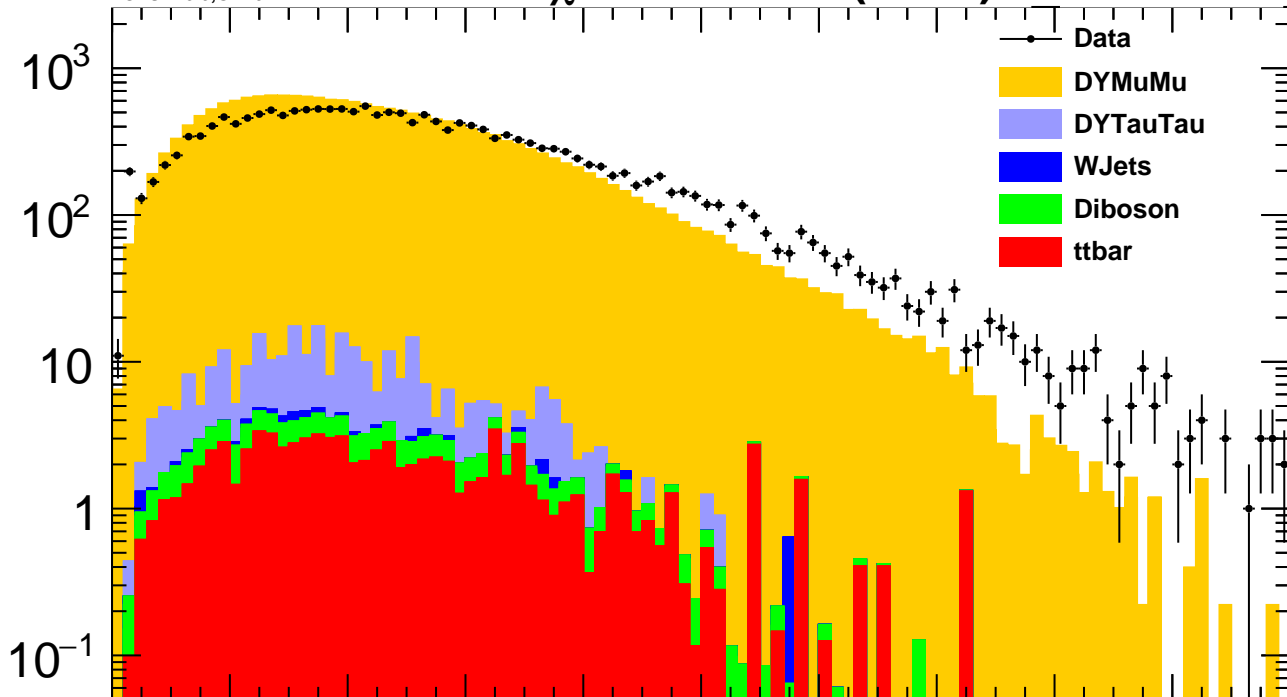
HF (Pb-going, $|\eta|>4$) energy [GeV]

Entry

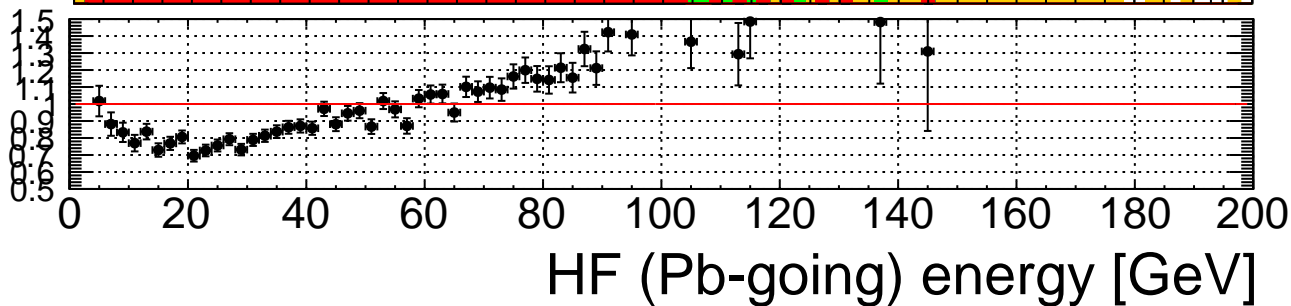
Data: UF=0,OF=19
MC: UF=0.0,OF=0.4 $\chi^2/\text{ndf}=19.06$ (0.0%)

KS 0.0%

—•— Data
DYMuMu
DYTauTau
WJets
Diboson
ttbar



data/Pred.



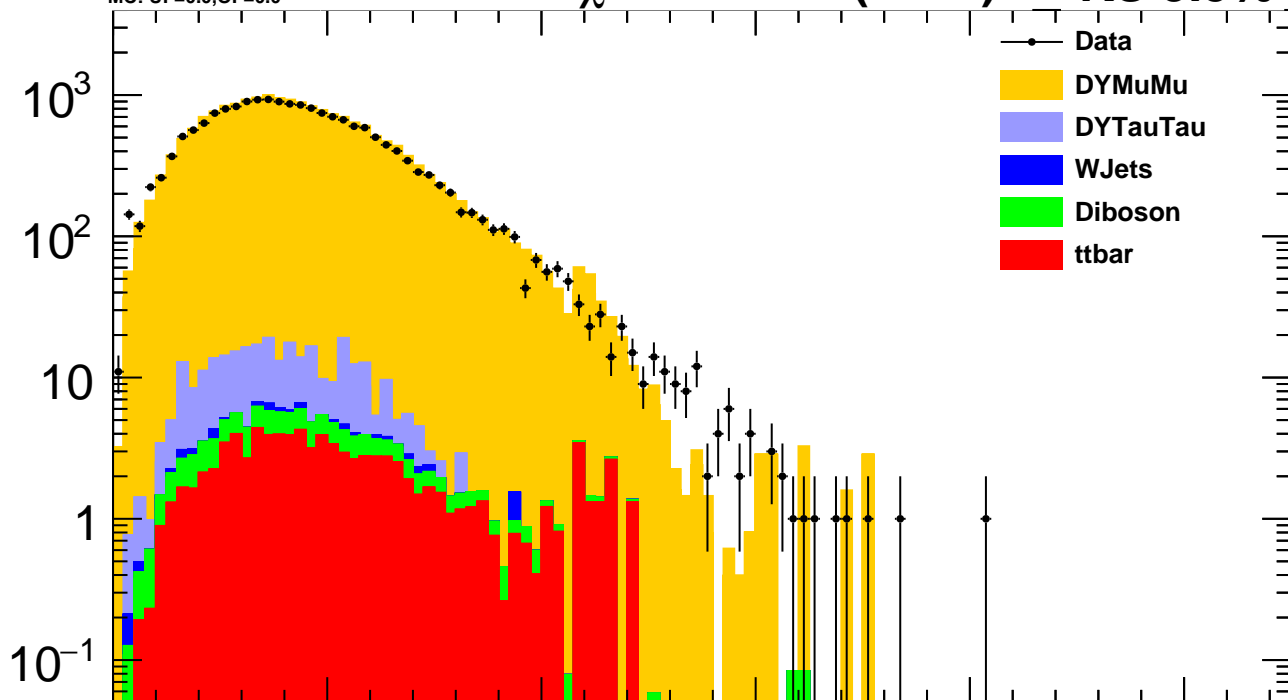
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0

$\chi^2/\text{ndf}=5.86$ (0.0%)

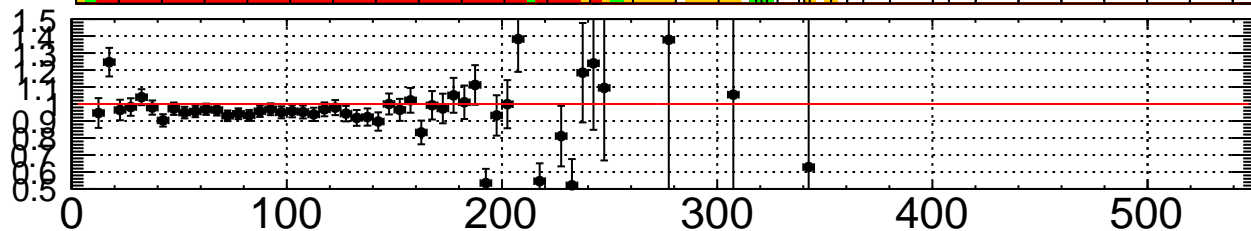
KS 3.5%

Entry

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



data/Pred.



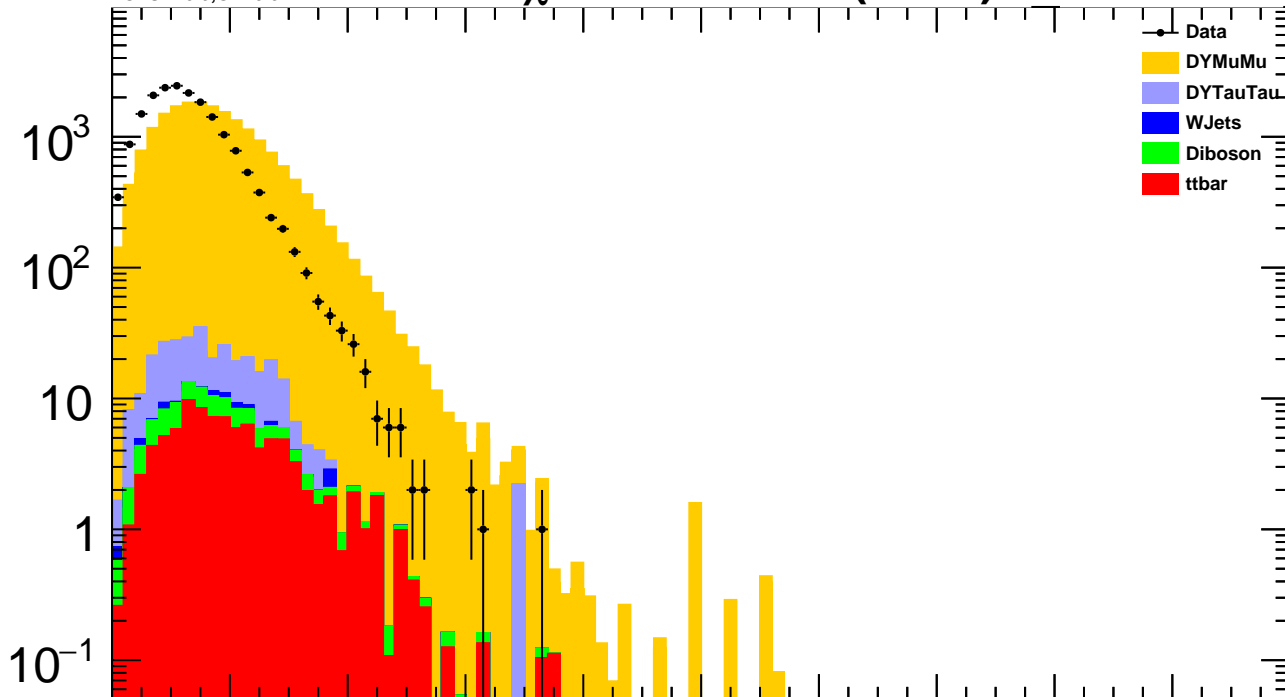
HF energy [GeV]

Entry

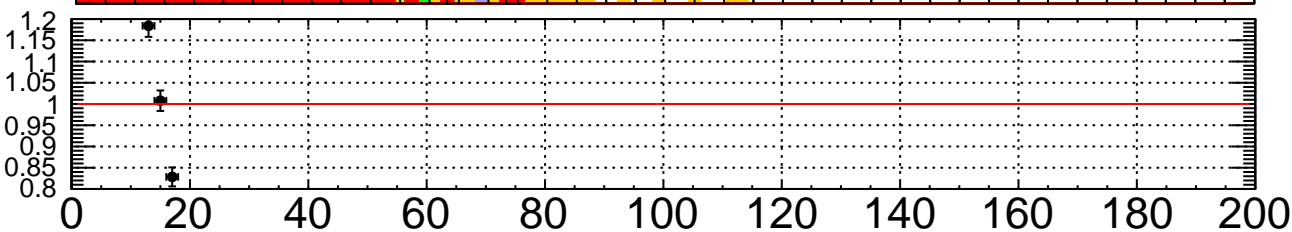
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=116.60$ (0.0%)

KS 0.0%

—•— Data
■ DYMuMu
■ DYTauTau
■ WJets
■ Diboson
■ ttbar



data/Pred.

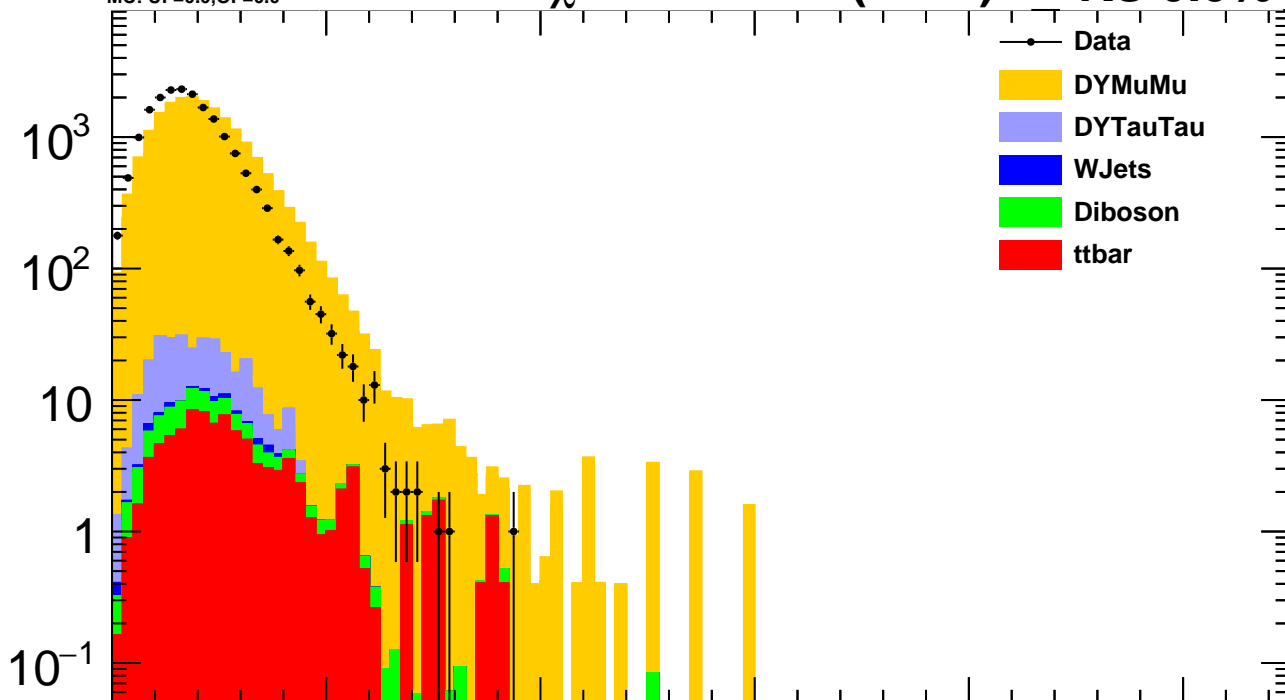
HF (p-going, $|\eta| > 4$) energy [GeV]

Entry

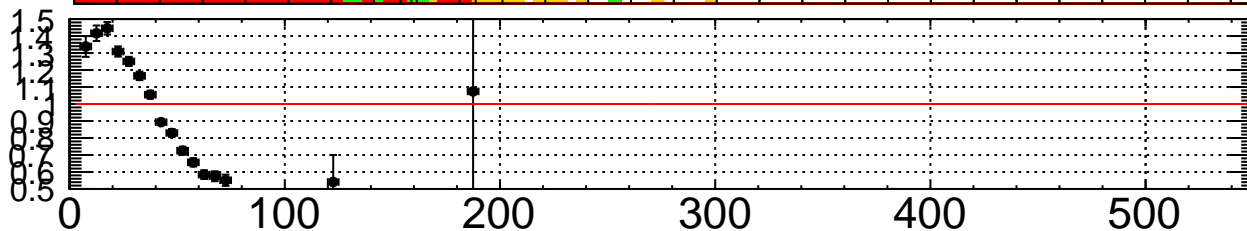
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=39.94$ (0.0%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



data/Pred.



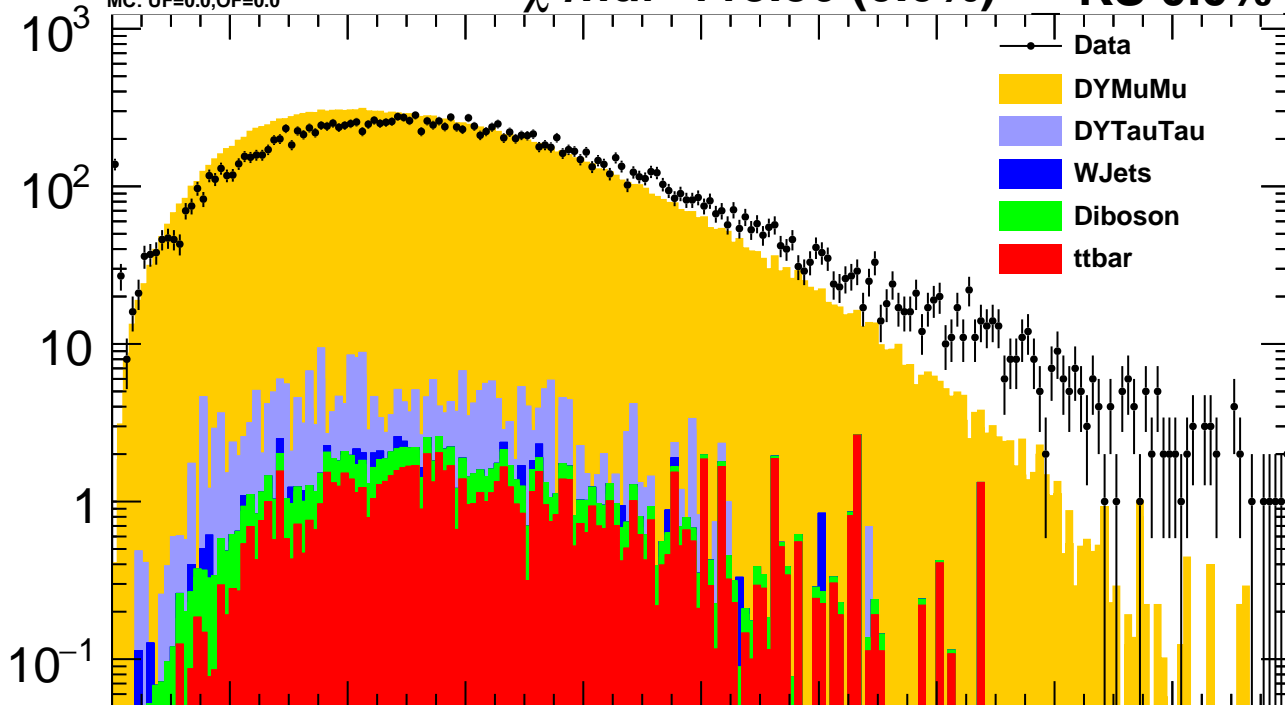
HF (p-going) energy [GeV]

Entry

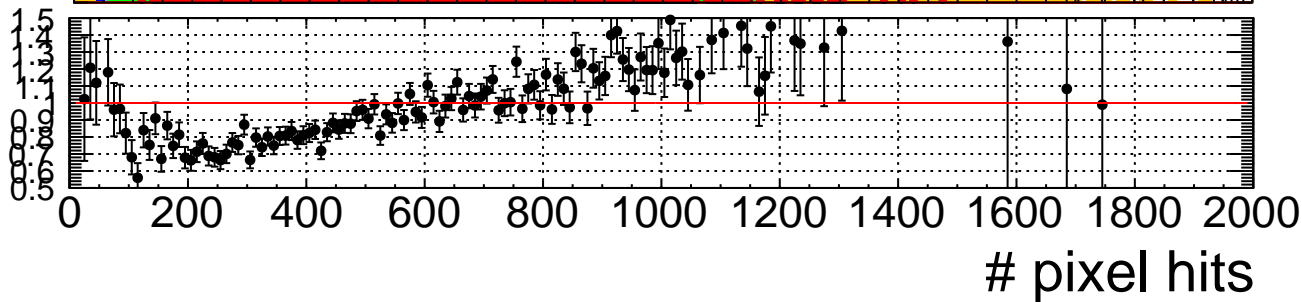
Data: UF=0,OF=28
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=118.86$ (0.0%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



data/Pred.

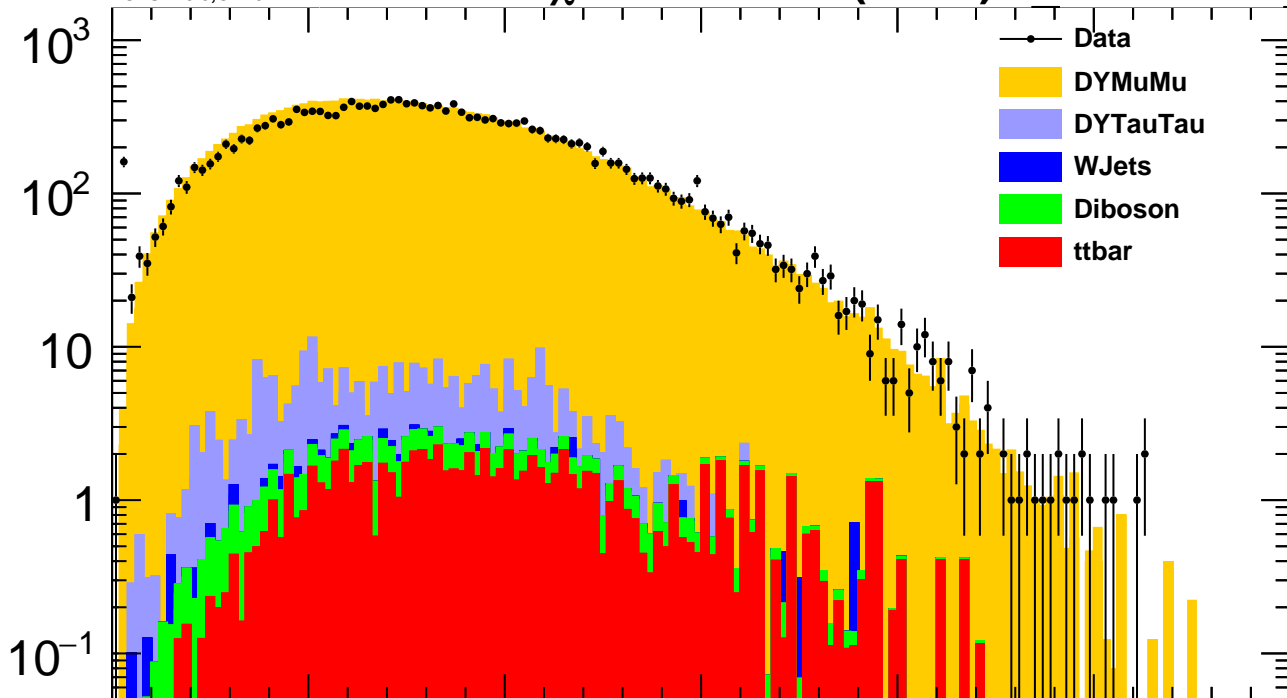


Entry

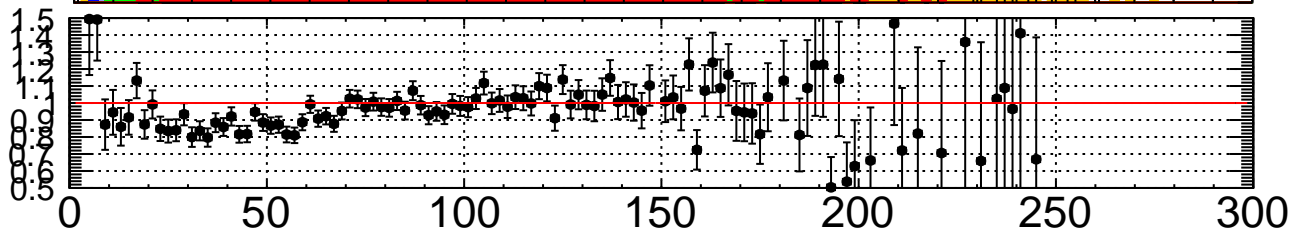
Data: UF=0,OF=0
MC: UF=0.0,OF=0.2 $\chi^2/\text{ndf}=39.84$ (0.0%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



data/Pred.



tracks

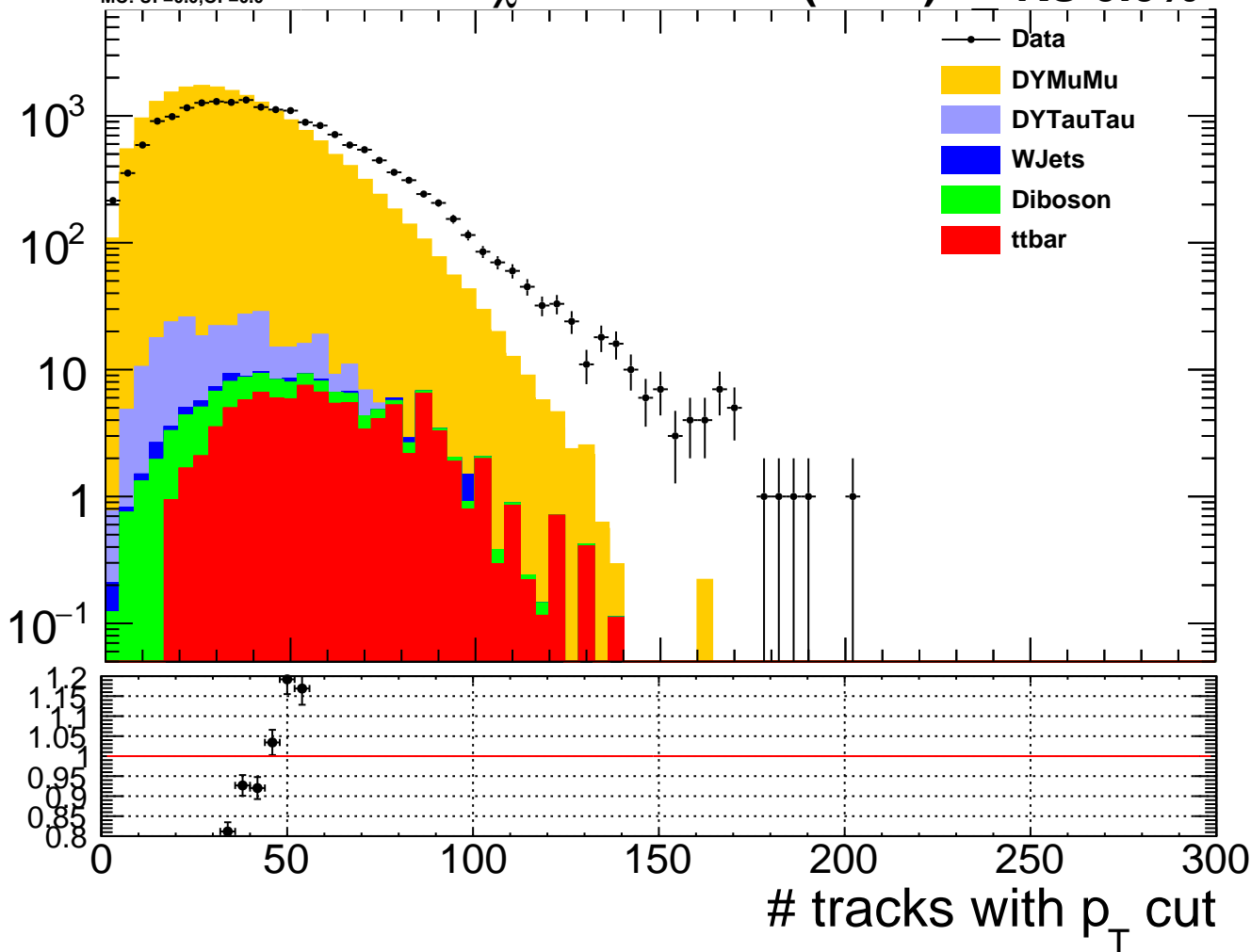
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=219.60$ (0.0%)

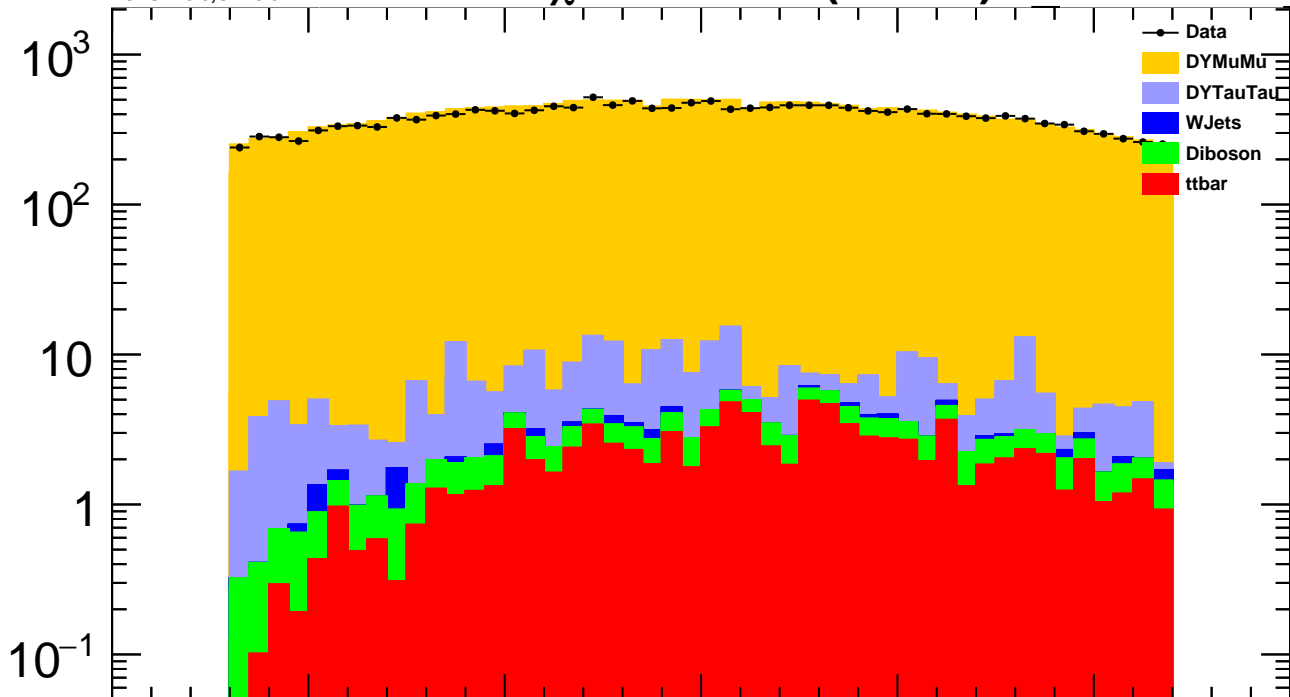
KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar

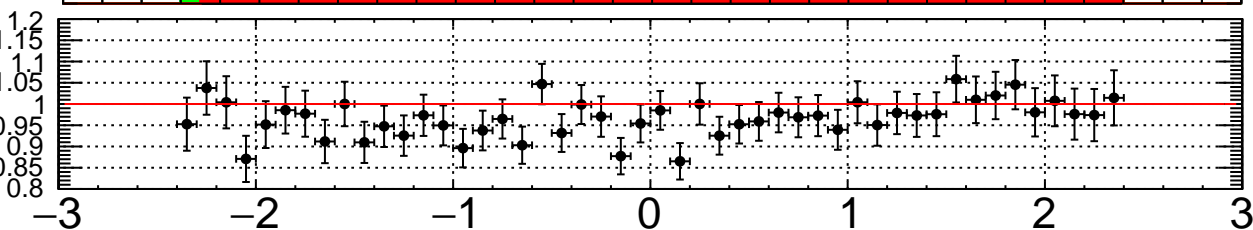
data/Pred.



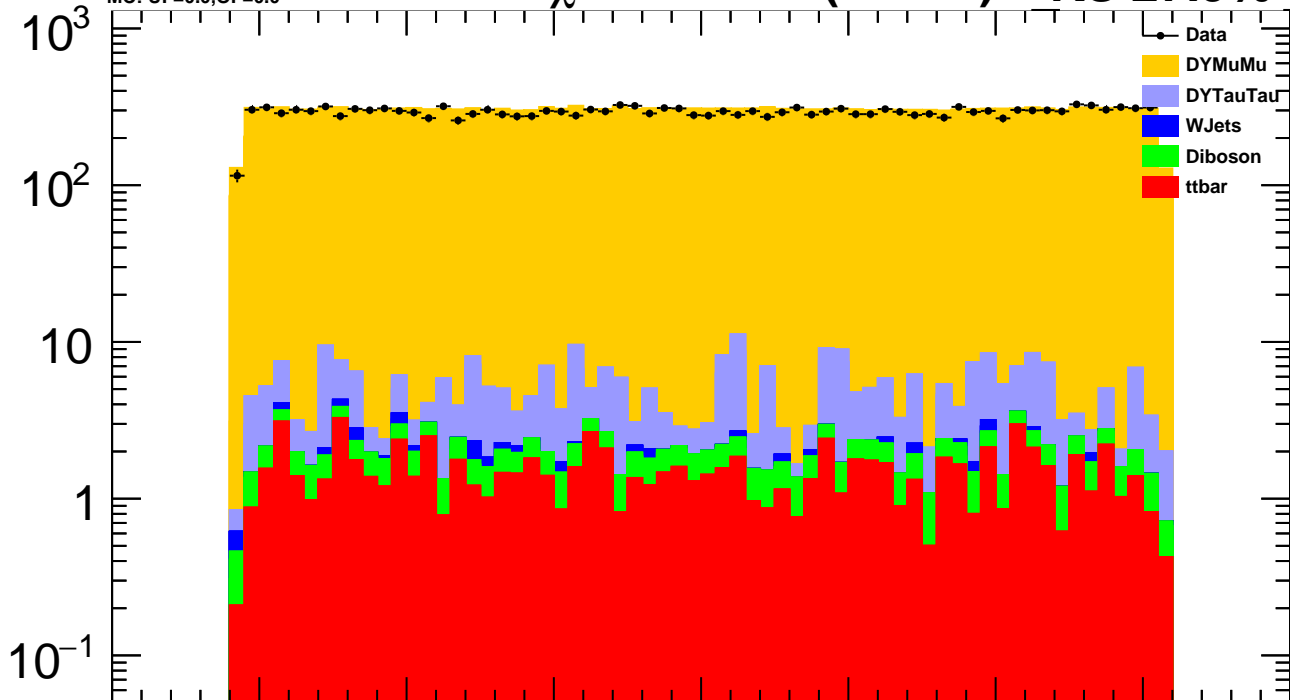
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=0.79$ (85.0%) KS 12.1%

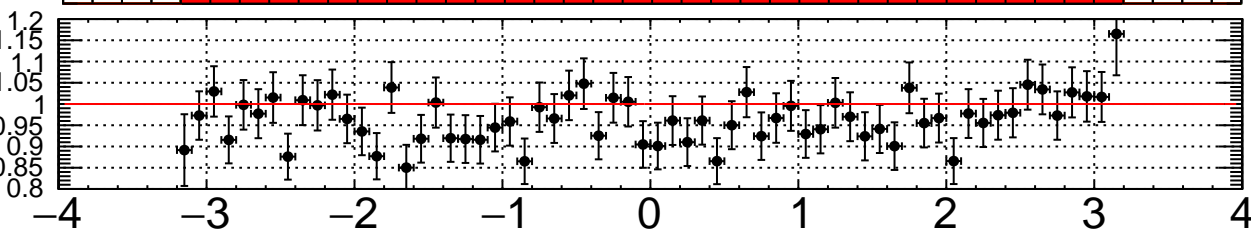
data/Pred.

Leading Muon η

Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=0.88$ (73.5%) KS 27.9%

data/Pred.

Leading Muon ϕ

Entry

Data: UF=0,OF=3
MC: UF=0.0,OF=5.9 $\chi^2/\text{ndf}=1.21$ (6.0%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar

10³
10²
10
1
10⁻¹

data/Pred.

1.2
1.15
1.1
1.05
1.0
0.95
0.9
0.85
0.8

0

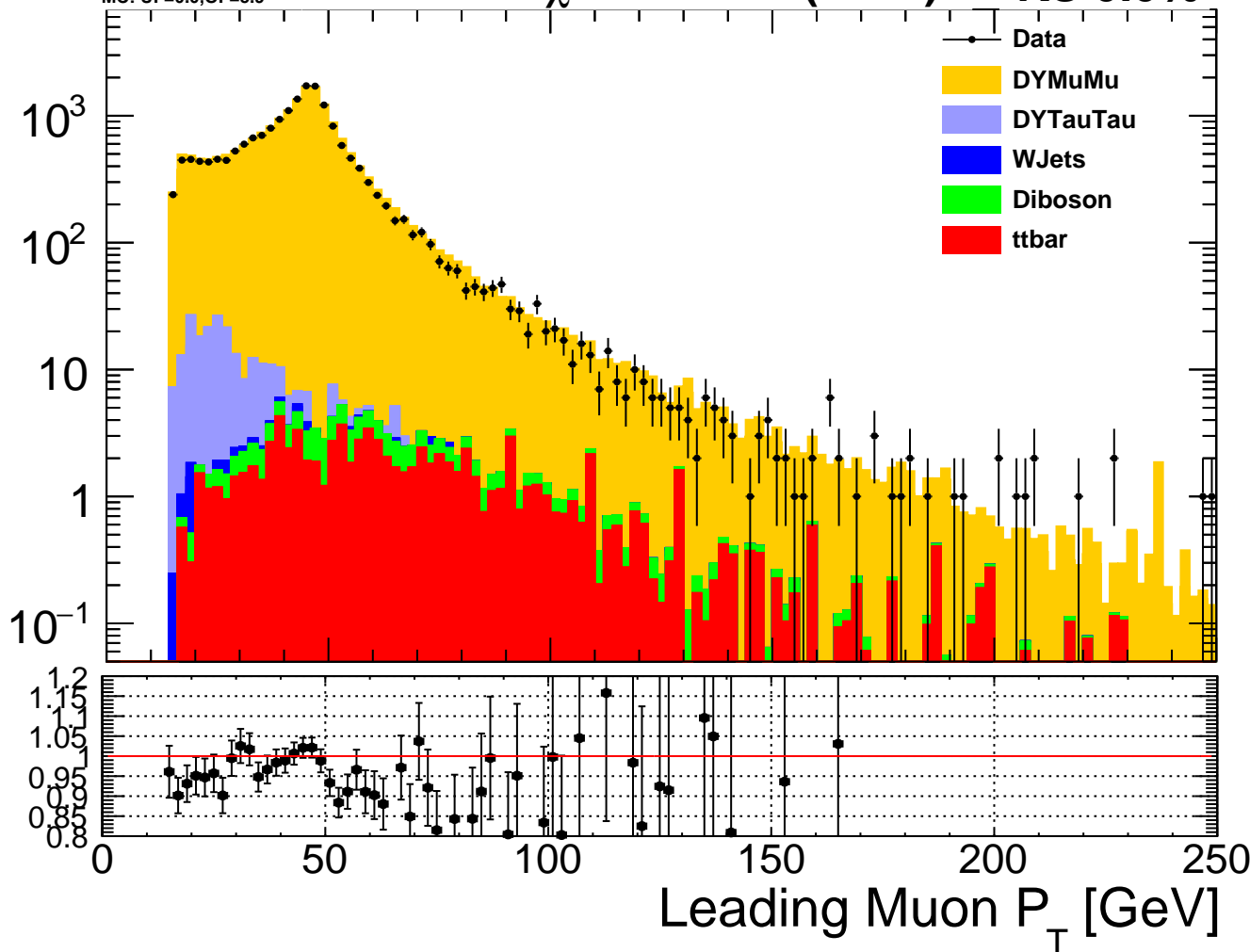
50

100

150

200

250

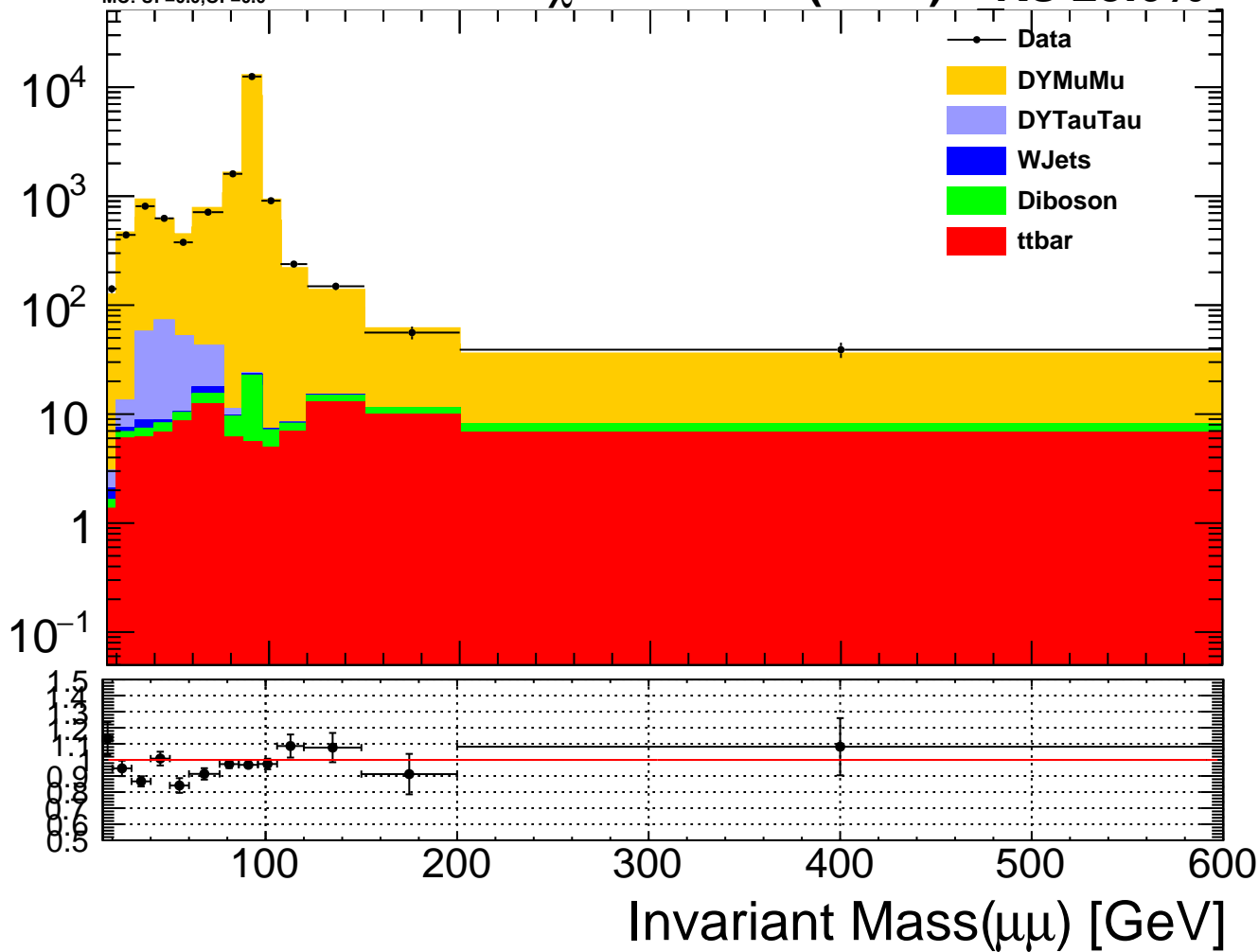
Leading Muon P_T [GeV]

Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=2.29$ (0.7%) KS 23.6%

—•— Data
DYMuMu
DYTauTau
WJets
Diboson
ttbar

data/Pred.

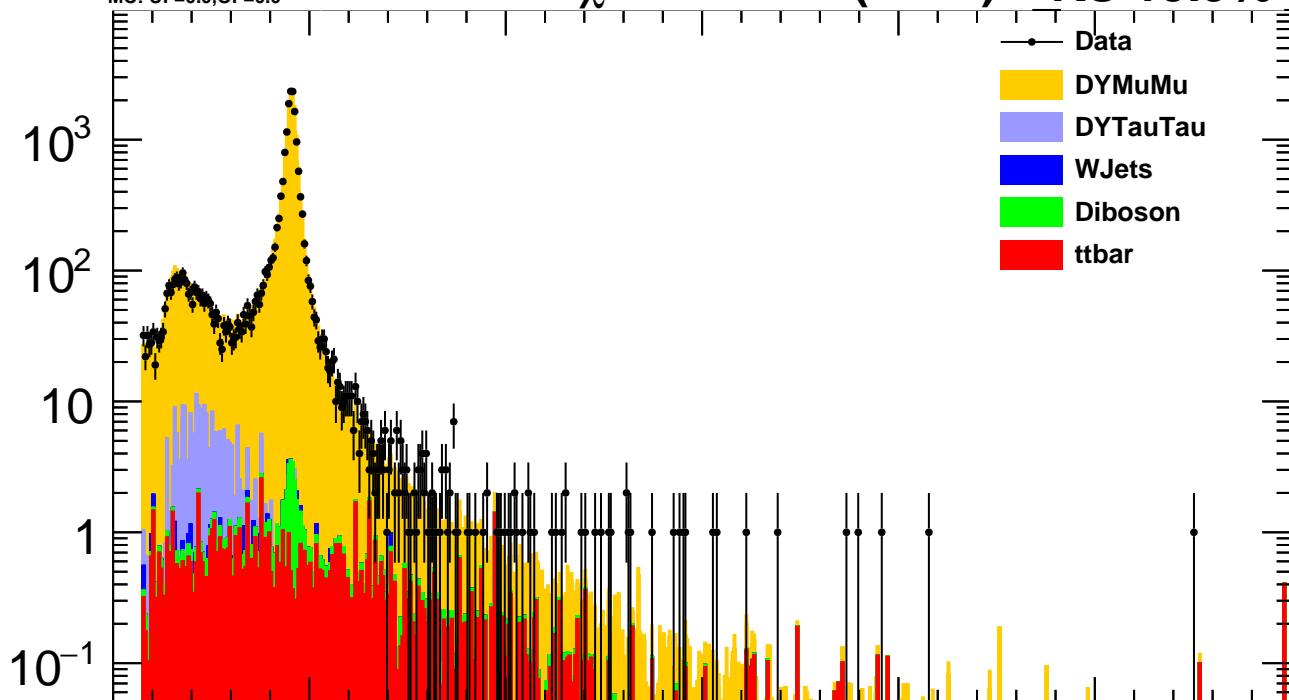


Data: UF=0,OF=0
MC: UF=0.0,OF=0.0

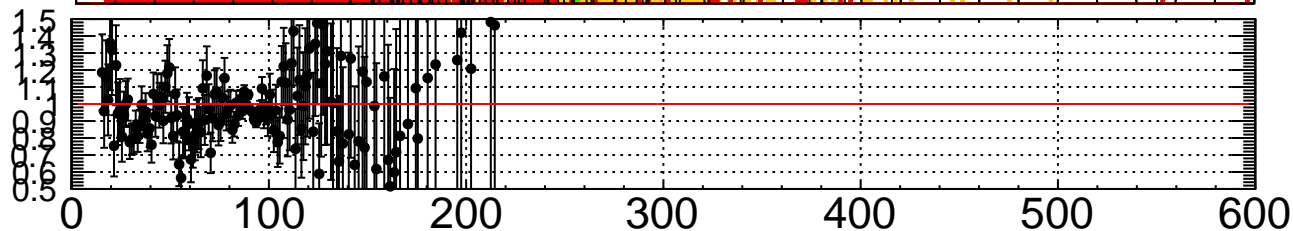
$\chi^2/\text{ndf}=1.84$ (0.0%) **KS 13.9%**

Entry

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



data/Pred.



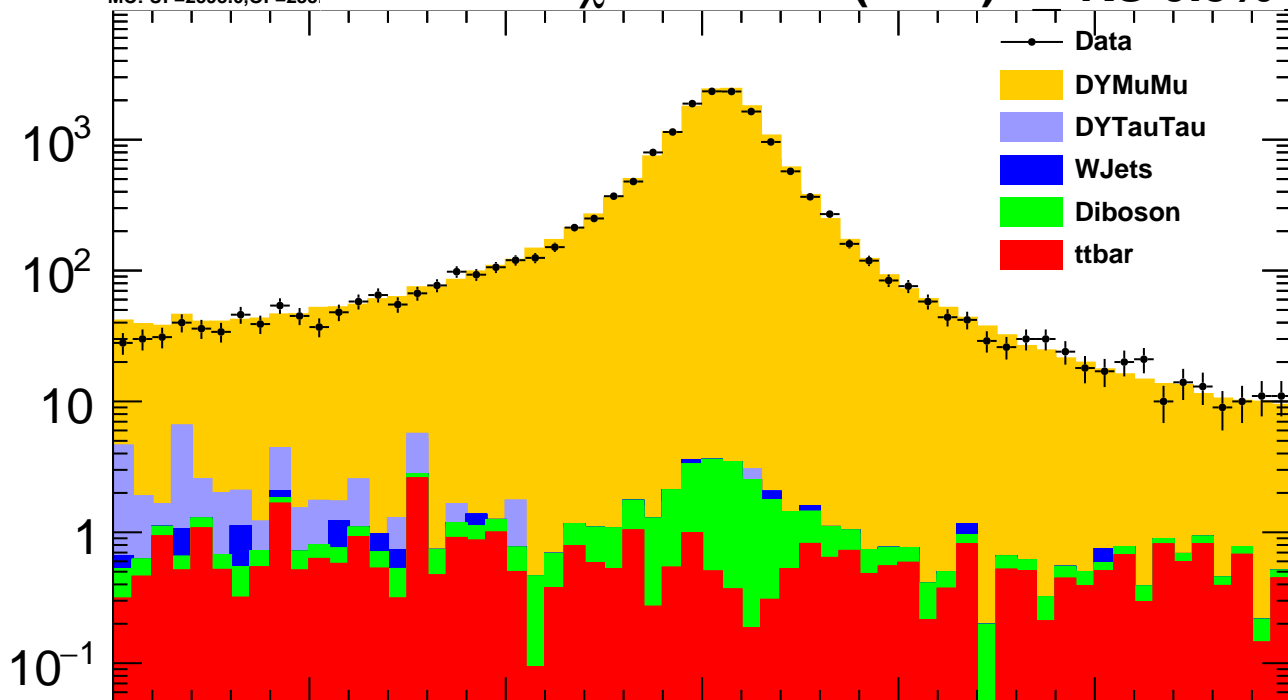
Invariant Mass($\mu\mu$) [GeV]

Data: UF=2394,OF=244
MC: UF=2593.0,OF=235.

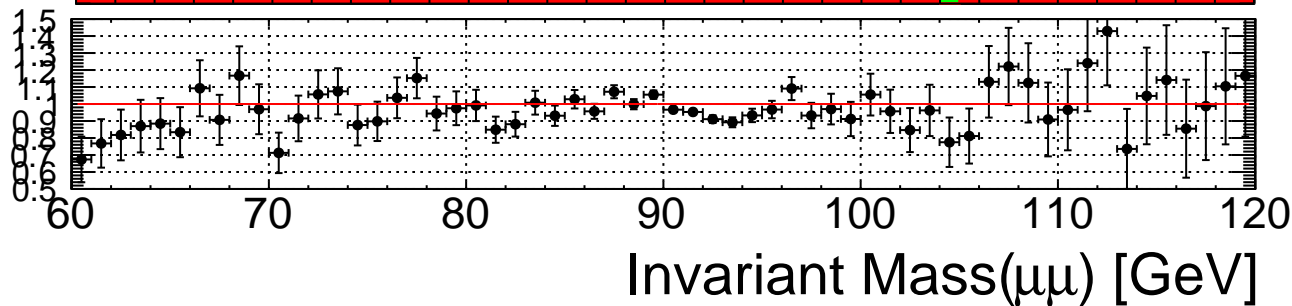
$\chi^2/\text{ndf}=1.30$ (6.2%)

KS 0.5%

Entry



data/Pred.



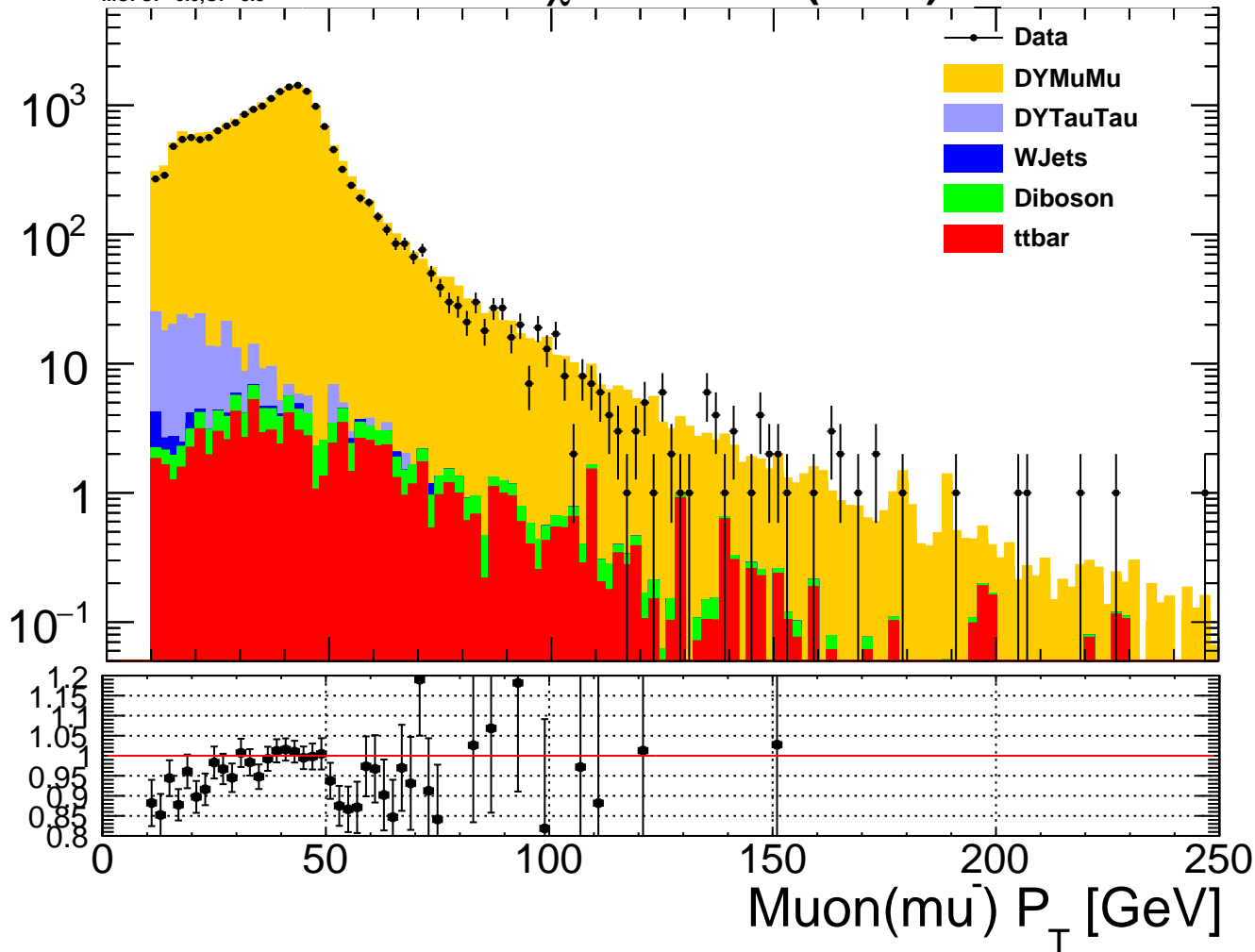
Entry

Data: UF=0,OF=1
MC: UF=0.0,OF=3.5 $\chi^2/\text{ndf}=1.20$ (7.0%)

KS 3.8%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar

data/Pred.

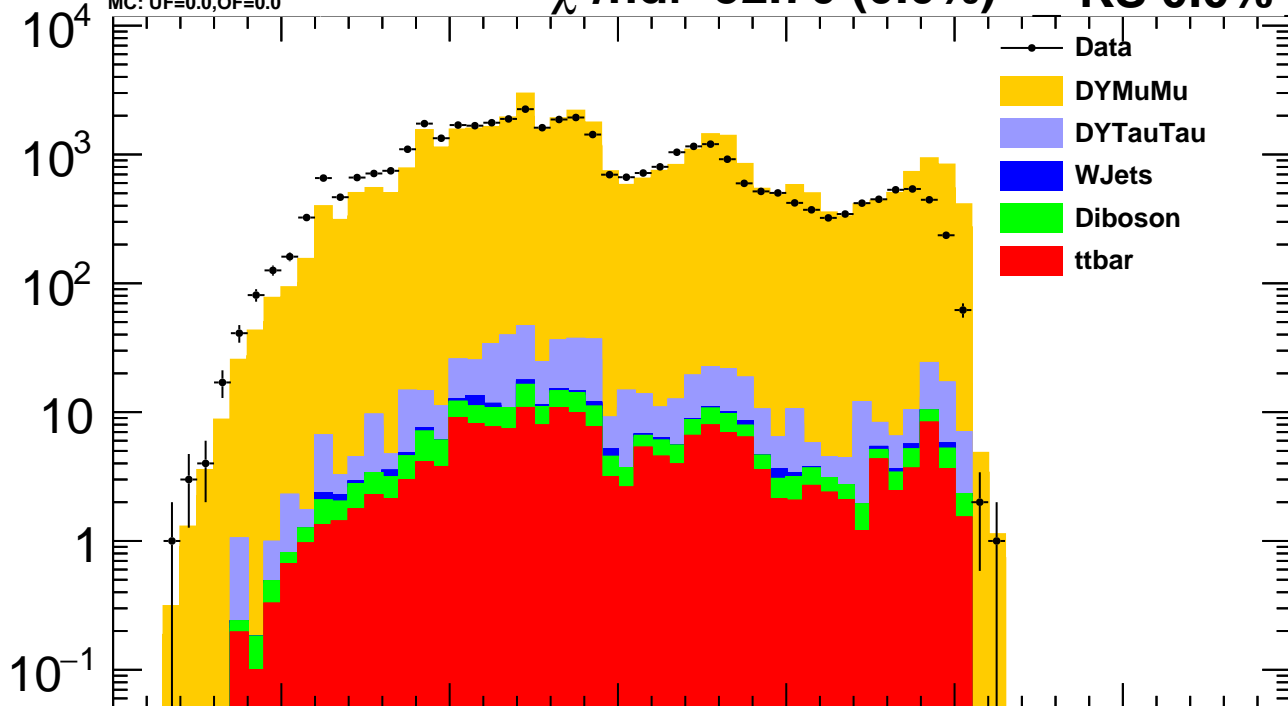


Entry

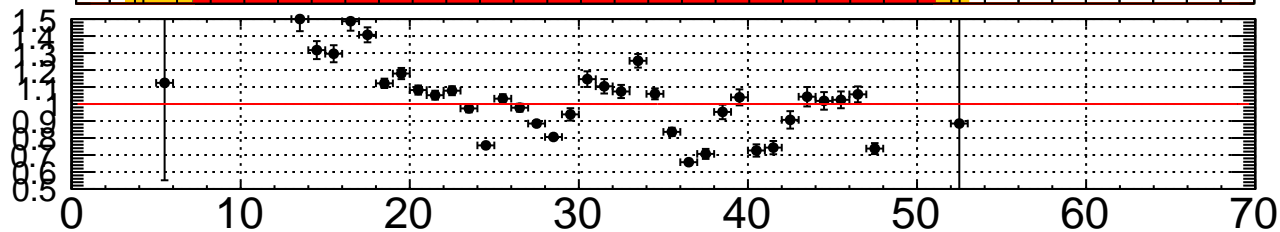
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=52.70$ (0.0%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



data/Pred.

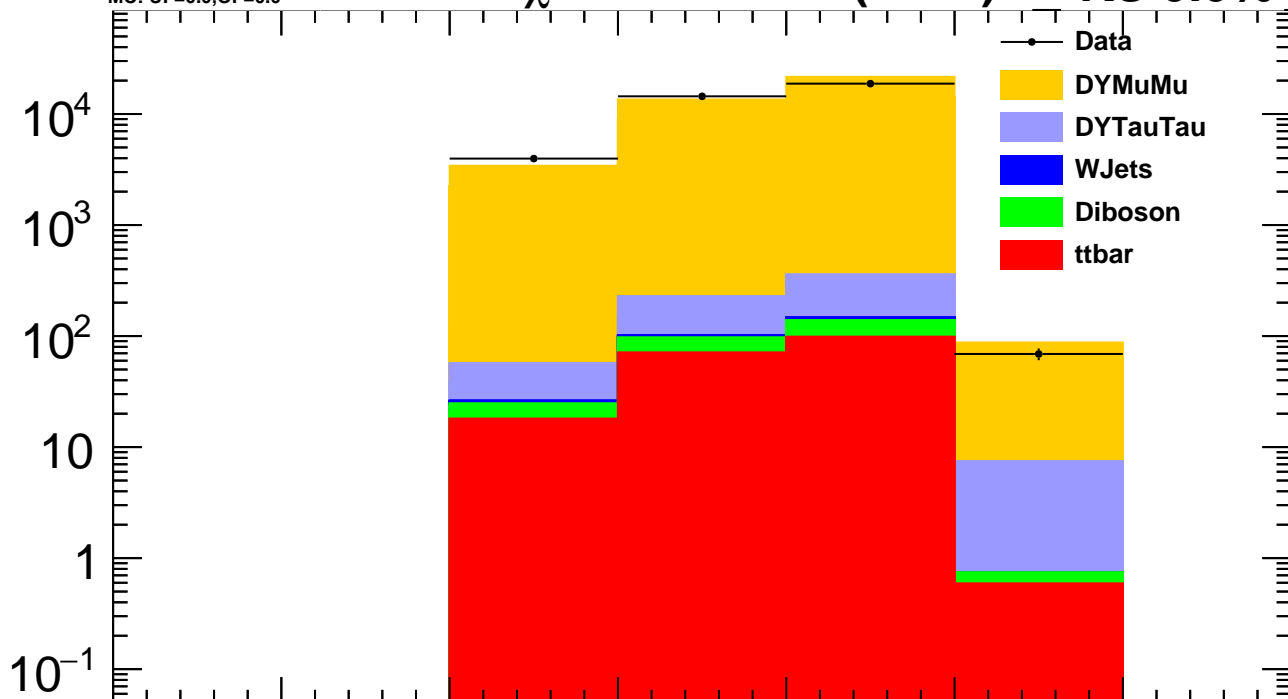
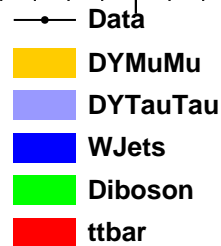


Muon Hits

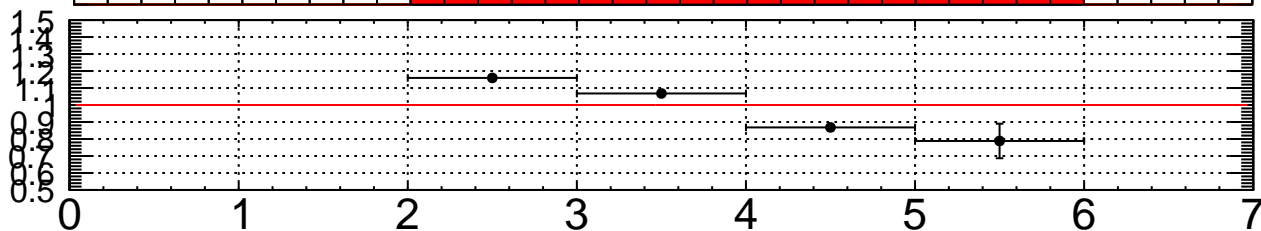
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=157.97$ (0.0%)

KS 0.0%



data/Pred.



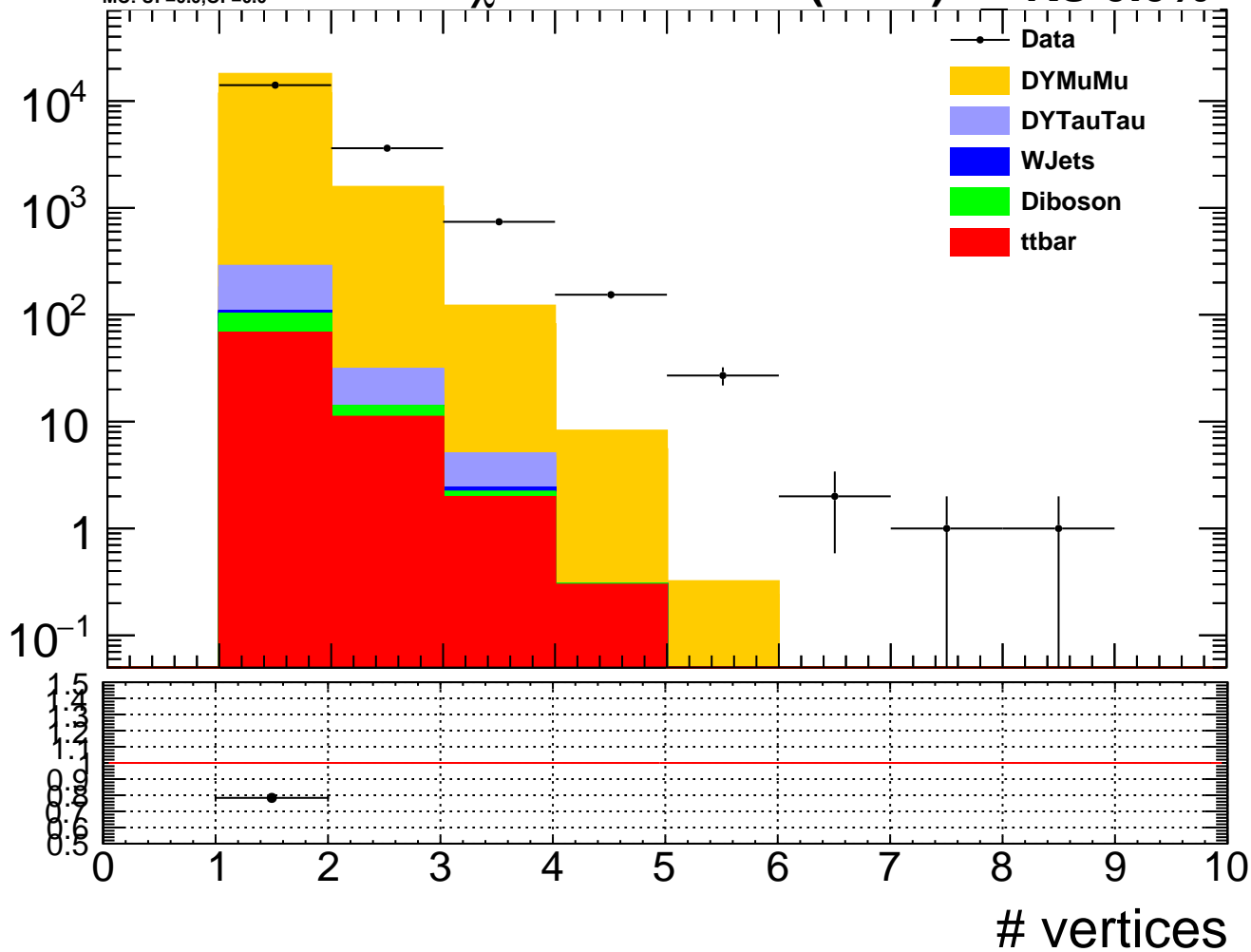
Matched Stations

Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1289.96$ (0.0%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



data/Pred.

vertices

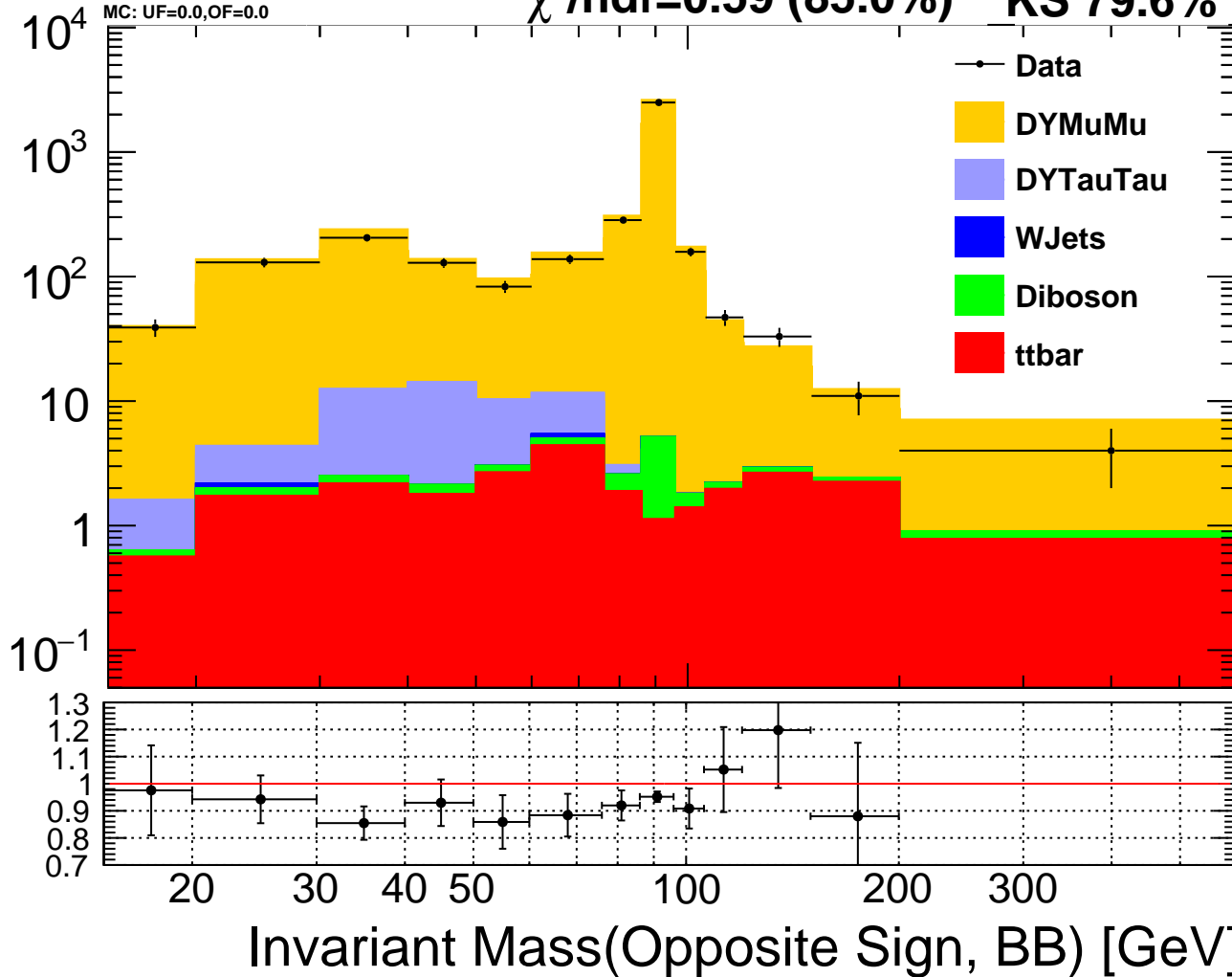
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=0.59$ (85.0%)

KS 79.6%

—•— Data
DYMuMu
DYTauTau
WJets
Diboson
ttbar

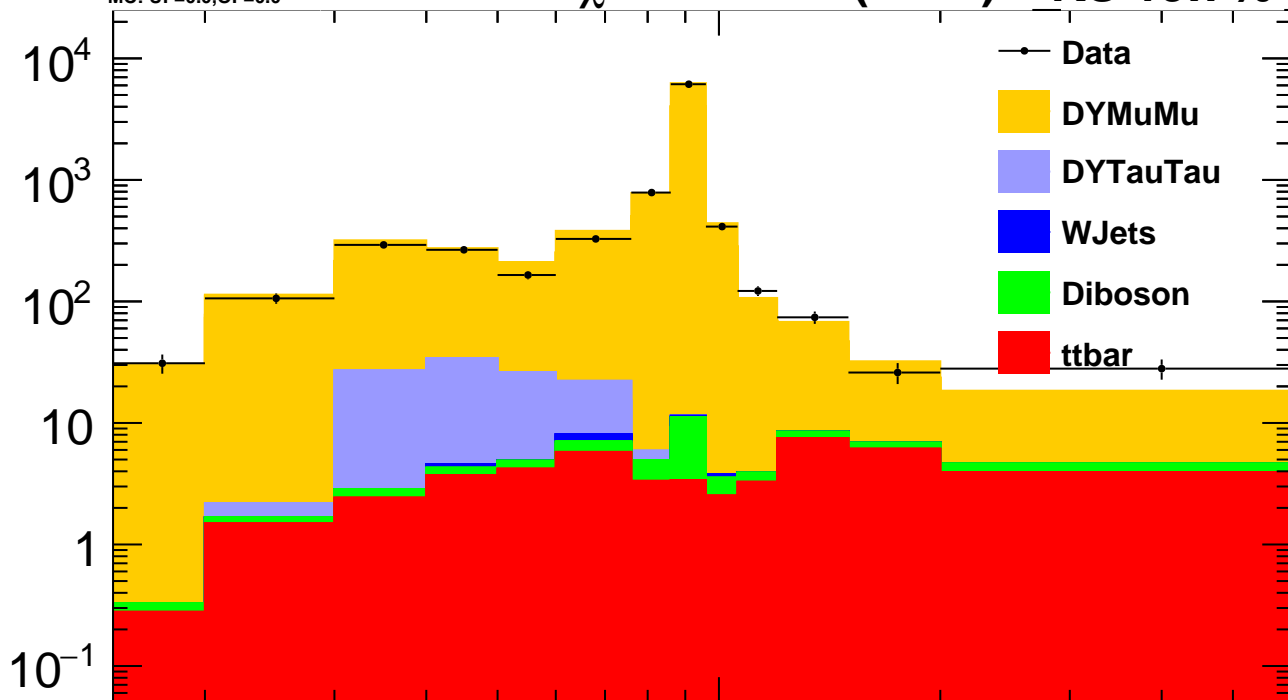
data/Pred.



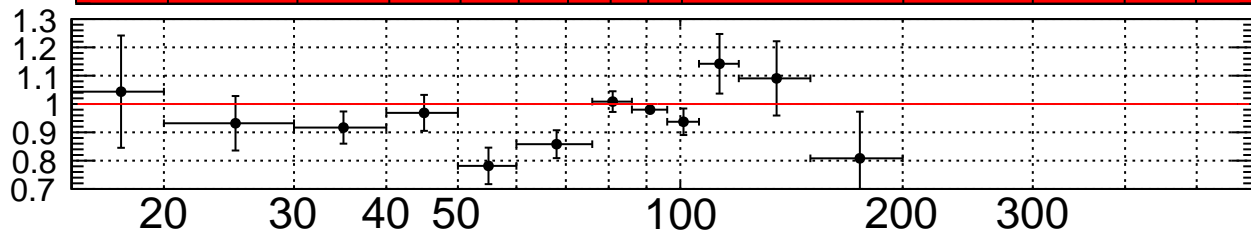
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0

$\chi^2/\text{ndf}=2.08$ (1.5%) KS 19.7%

Entry



data/Pred.



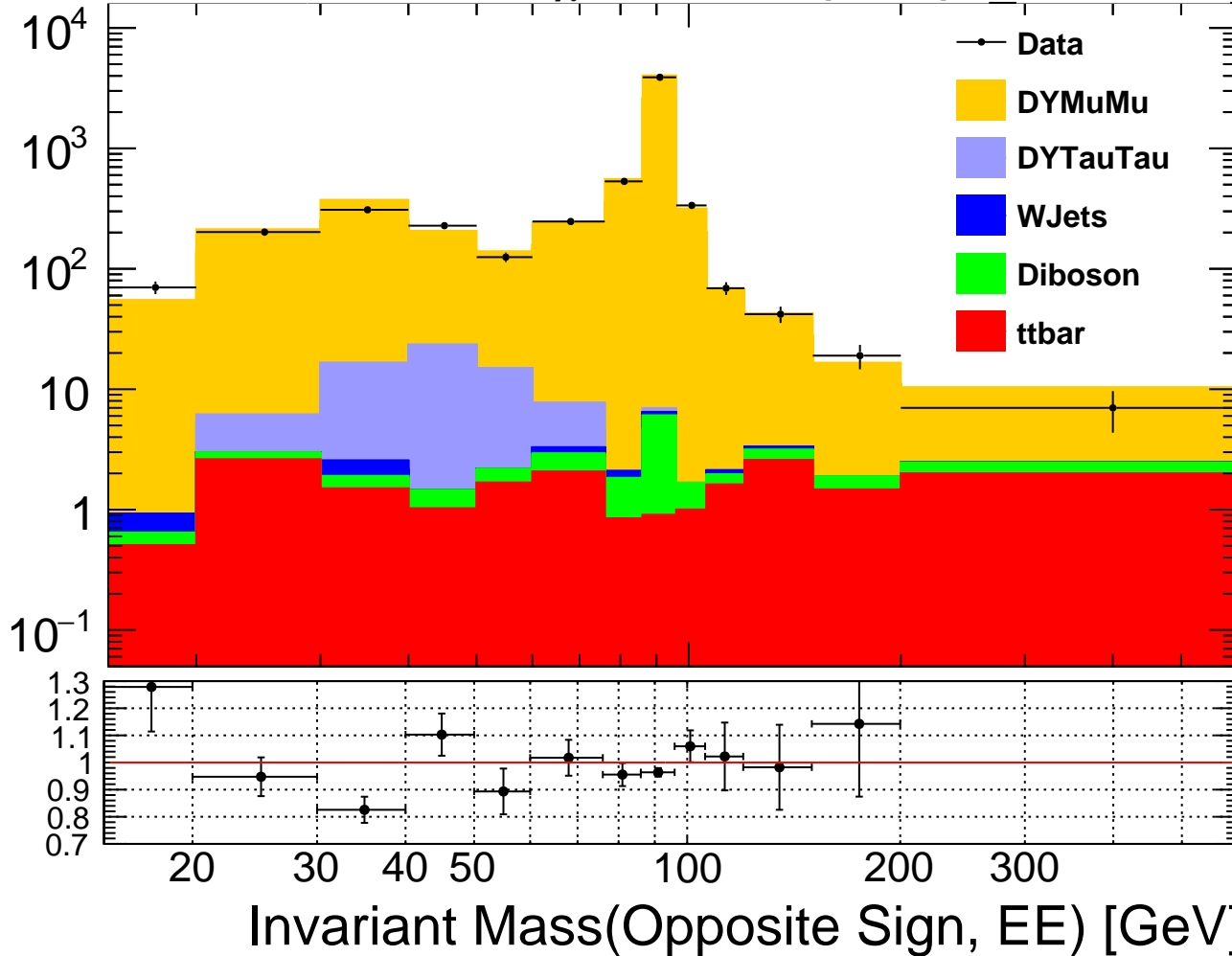
Invariant Mass(Opposite Sign, BE) [GeV]

Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.79$ (4.4%) KS 95.9%

—•— Data
DYMuMu
DYTauTau
WJets
Diboson
ttbar

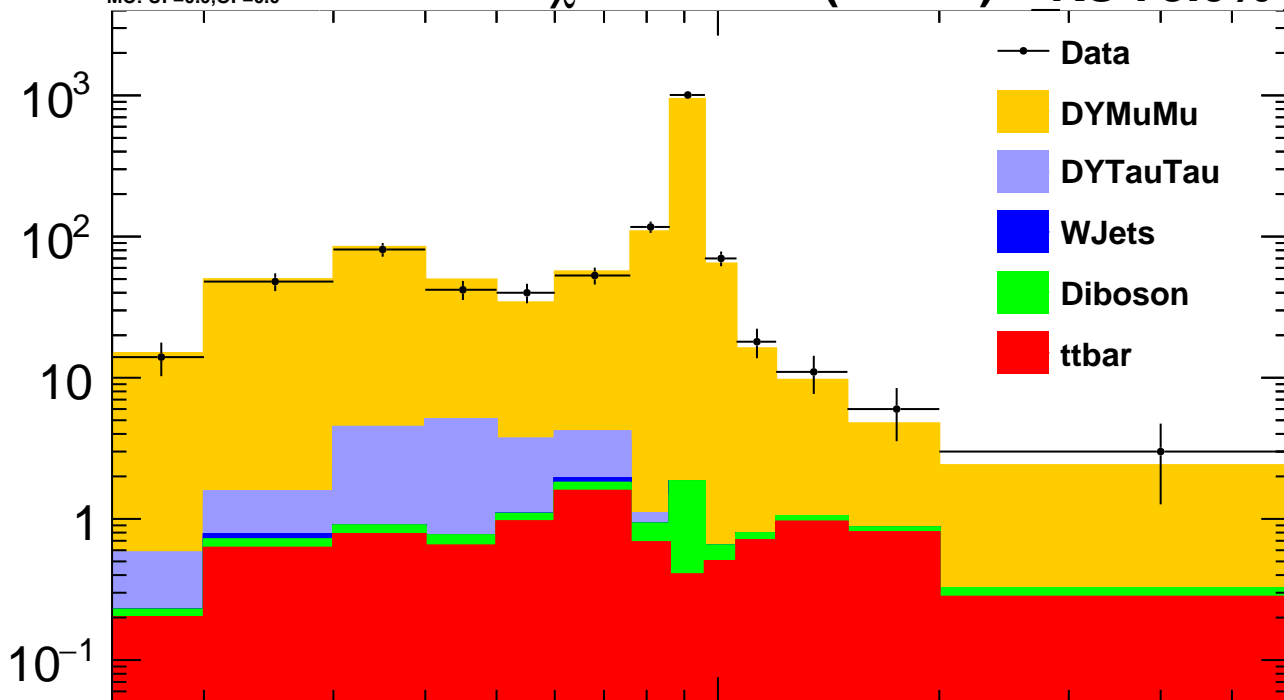
data/Pred.



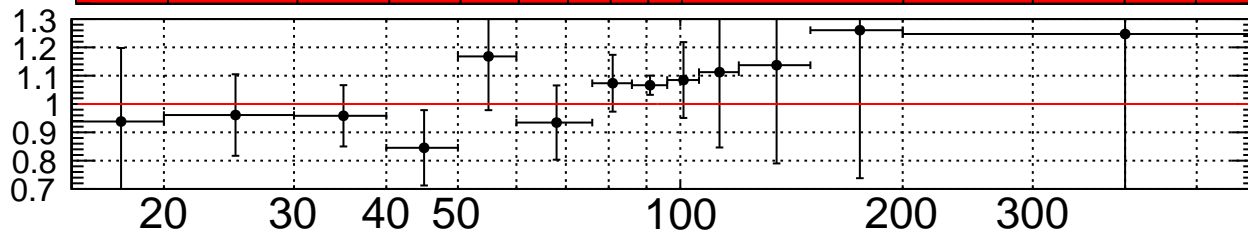
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0

$\chi^2/\text{ndf}=0.41$ (95.9%) KS 78.0%

Entry



data/Pred.

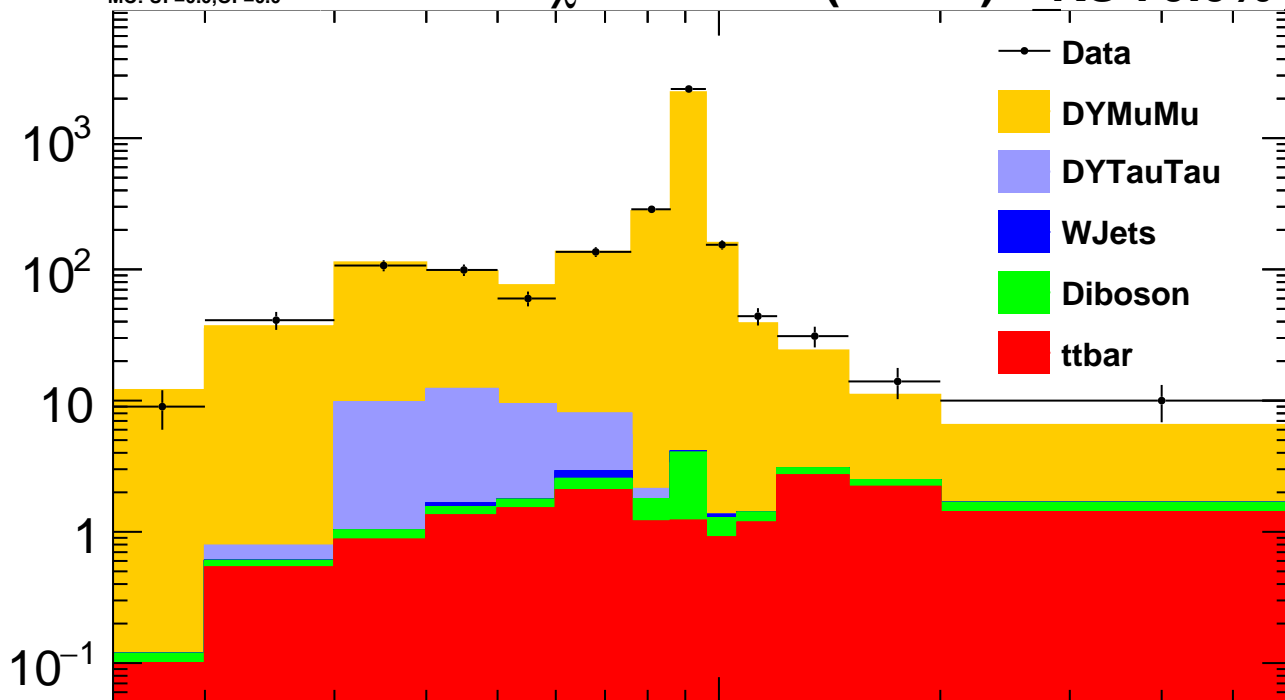


Invariant Mass(OS, BB) [GeV] (part1)

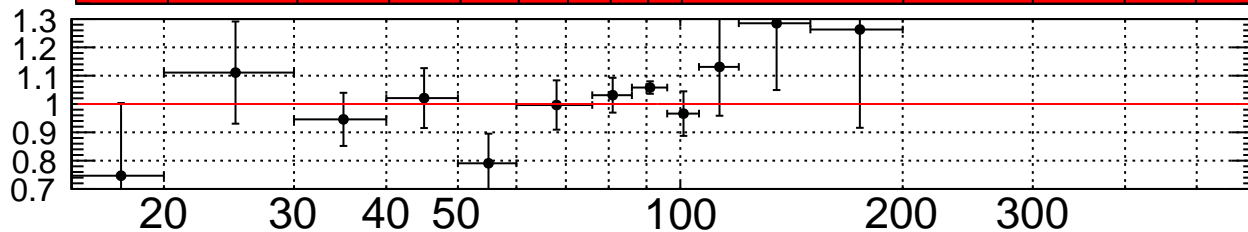
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0

$\chi^2/\text{ndf}=0.98$ (46.7%) KS 70.0%

Entry



data/Pred.

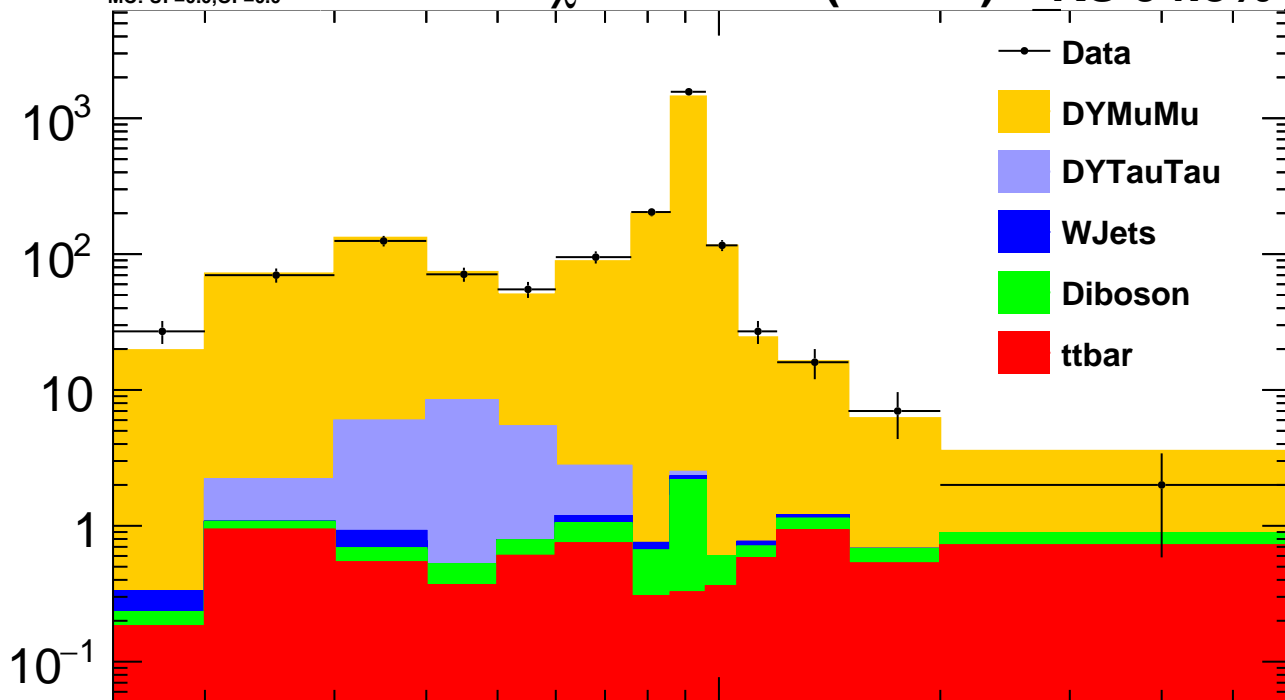


Invariant Mass(OS, BE) [GeV] (part1)

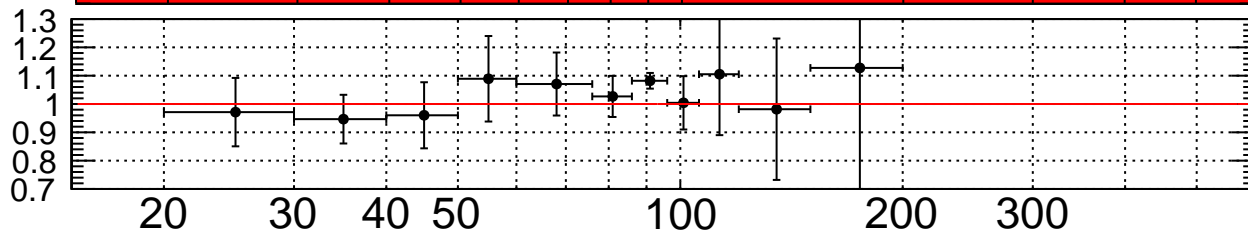
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0

$\chi^2/\text{ndf}=0.55$ (88.0%) KS 94.8%

Entry



data/Pred.

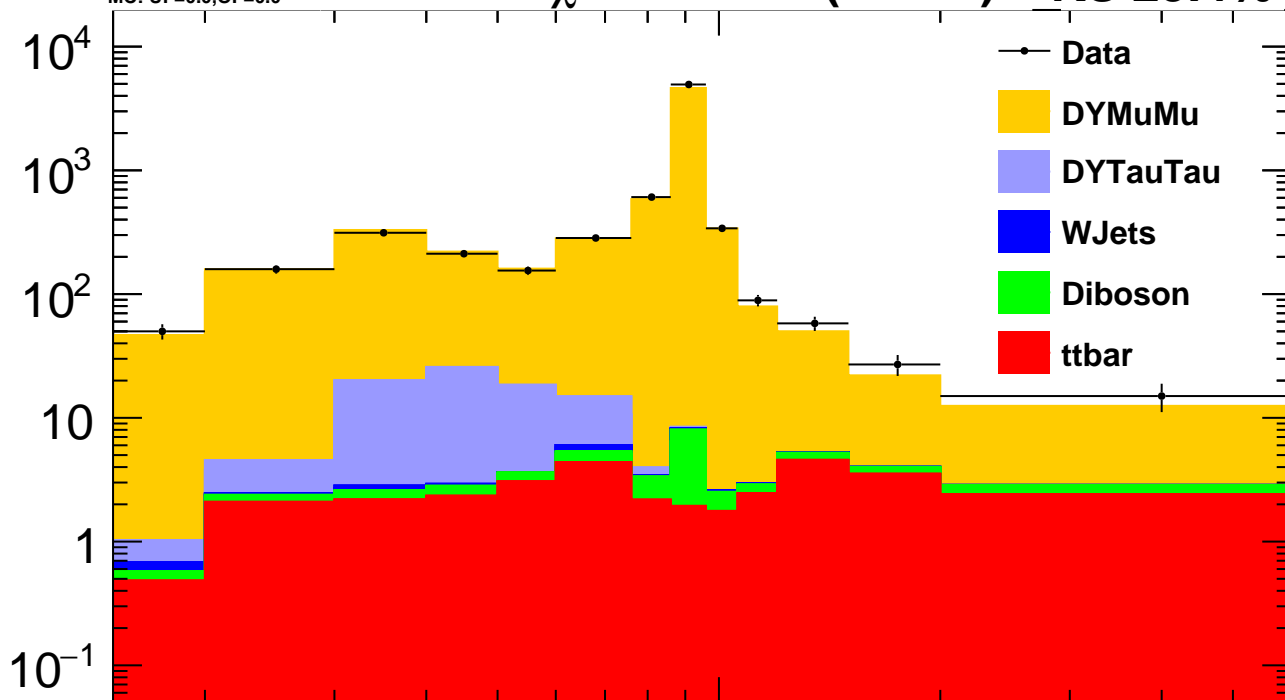


Invariant Mass(OS, EE) [GeV] (part1)

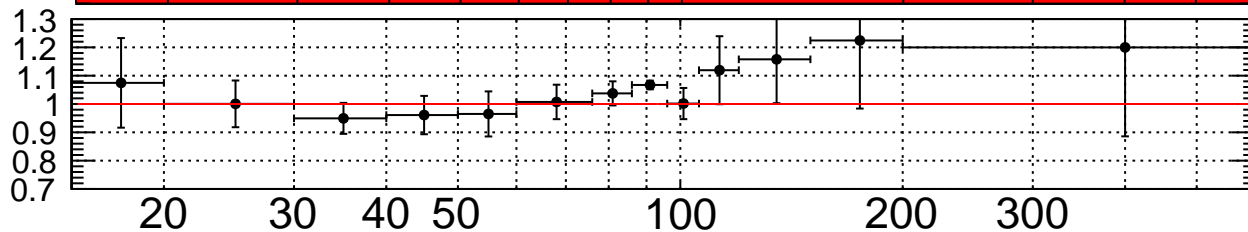
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0

$\chi^2/\text{ndf}=0.87$ (58.0%) KS 23.4%

Entry



data/Pred.

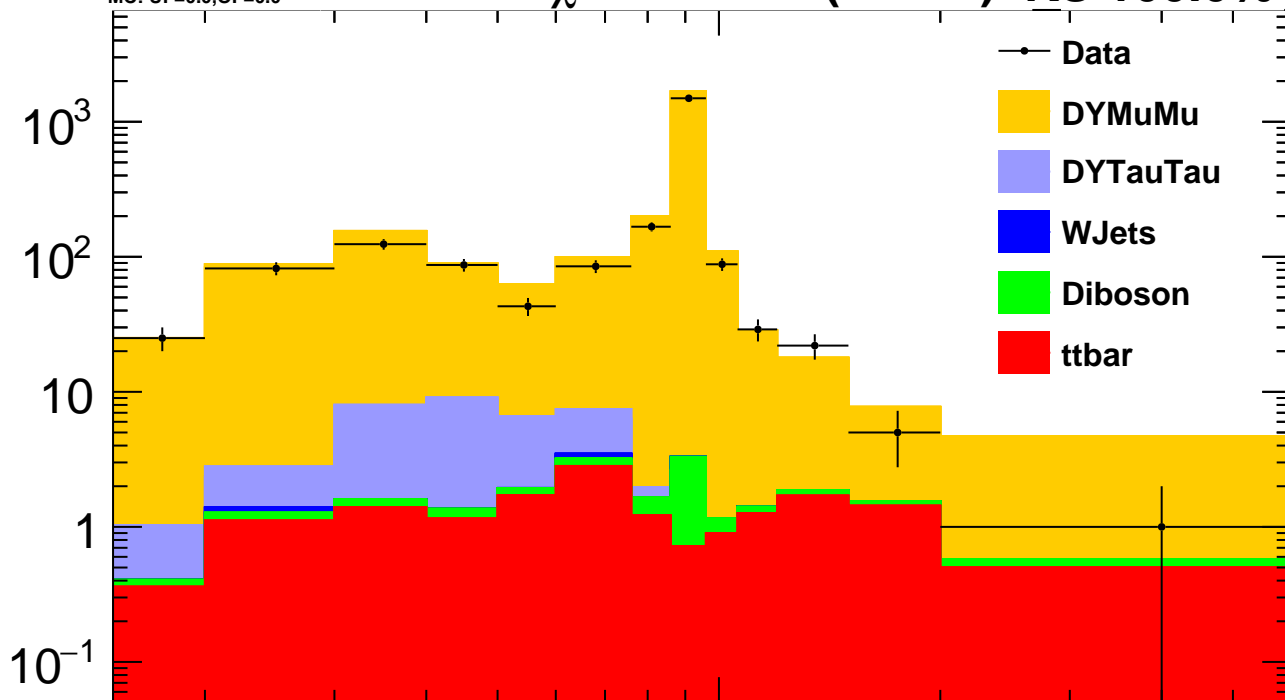


Invariant Mass (Opposite Sign) [GeV] (part1)

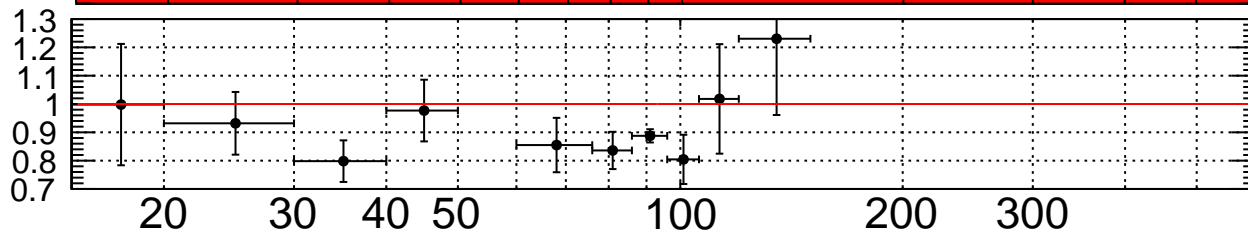
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0

$\chi^2/\text{ndf}=1.01$ (44.0%) KS 100.0%

Entry



data/Pred.



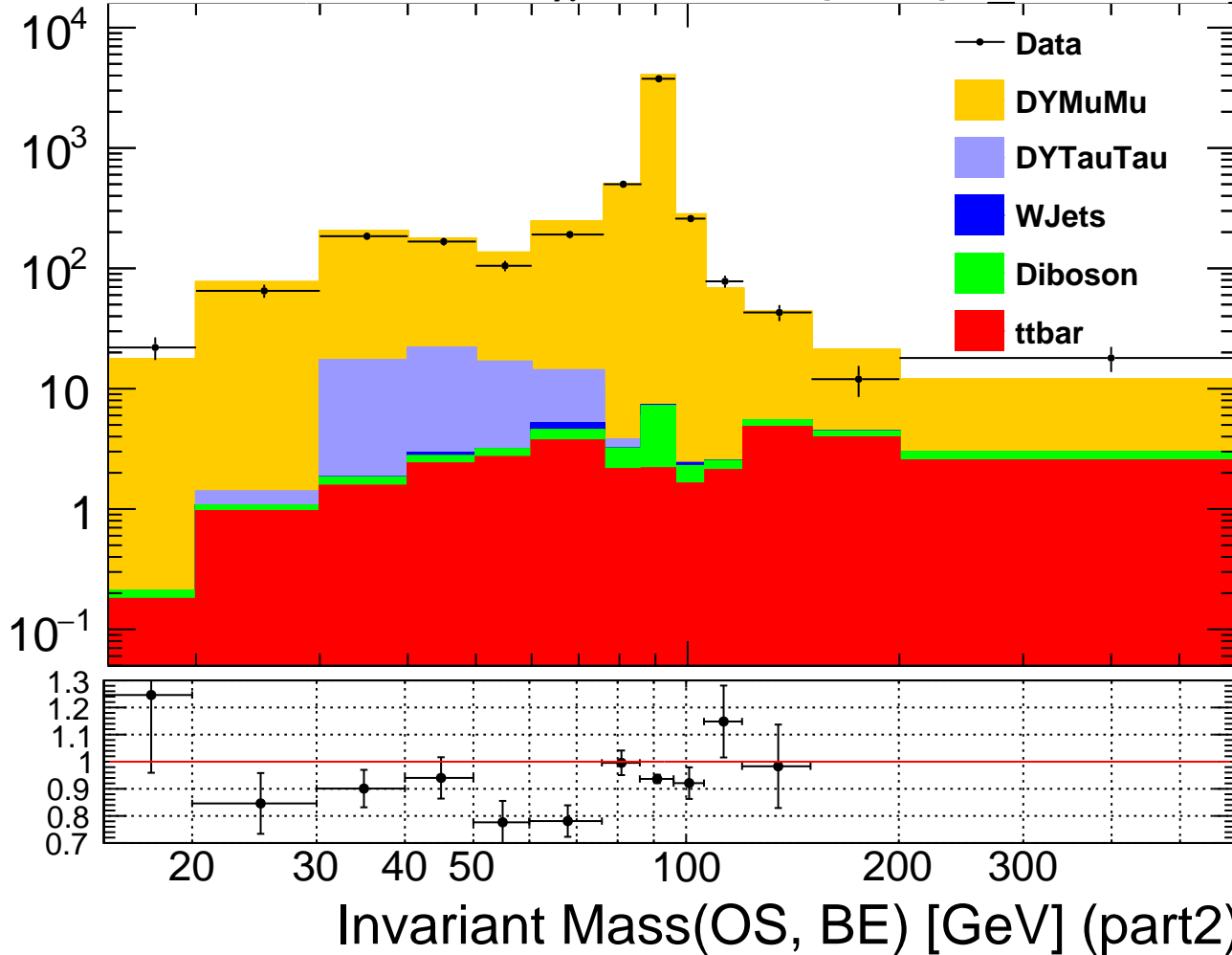
Invariant Mass(OS, BB) [GeV] (part2)

Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.98$ (2.2%) KS 46.6%

—•— Data
DYMuMu
DYTauTau
WJets
Diboson
ttbar

data/Pred.

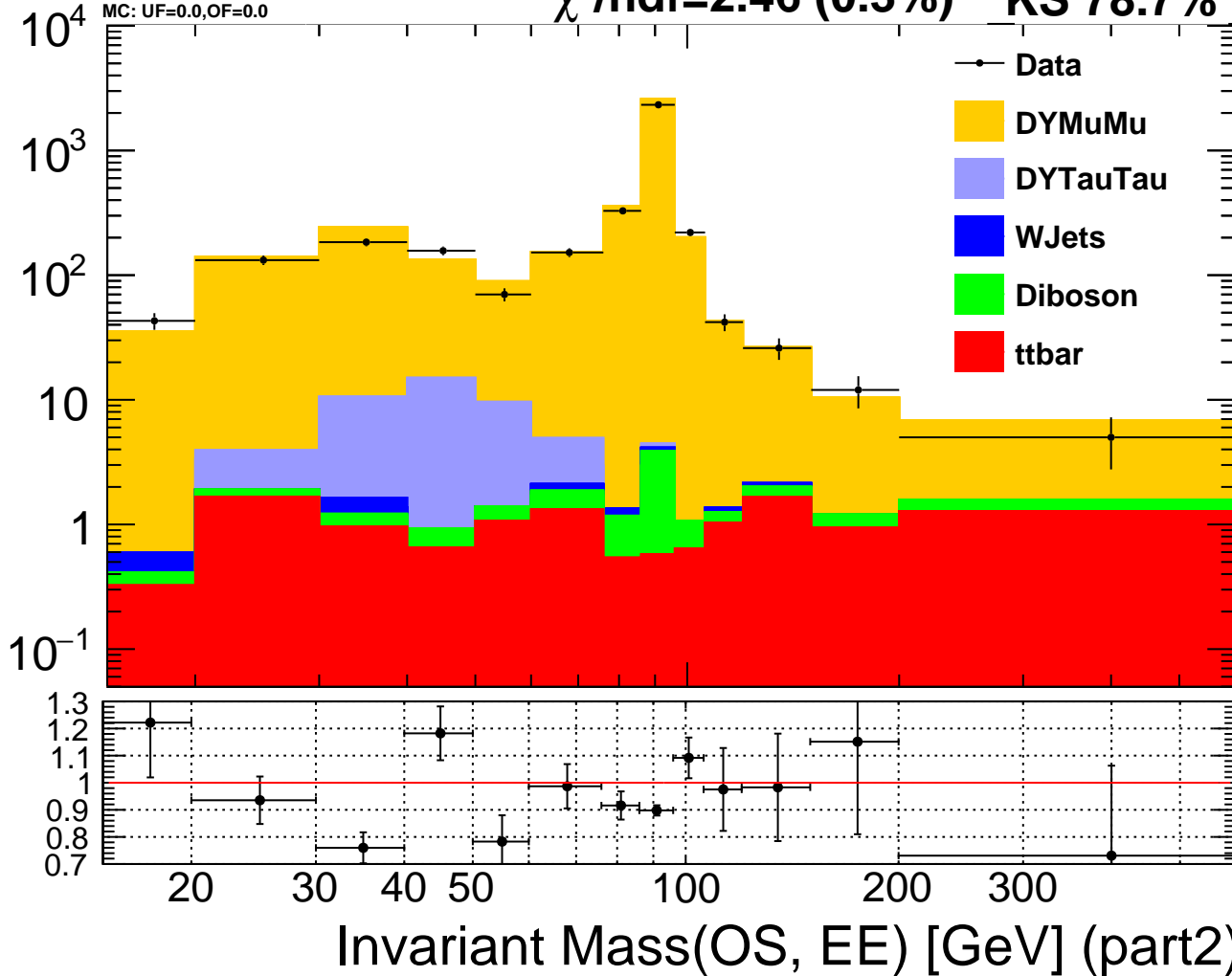


Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=2.46$ (0.3%) KS 78.7%

—•— Data
DYMuMu
DYTauTau
WJets
Diboson
ttbar

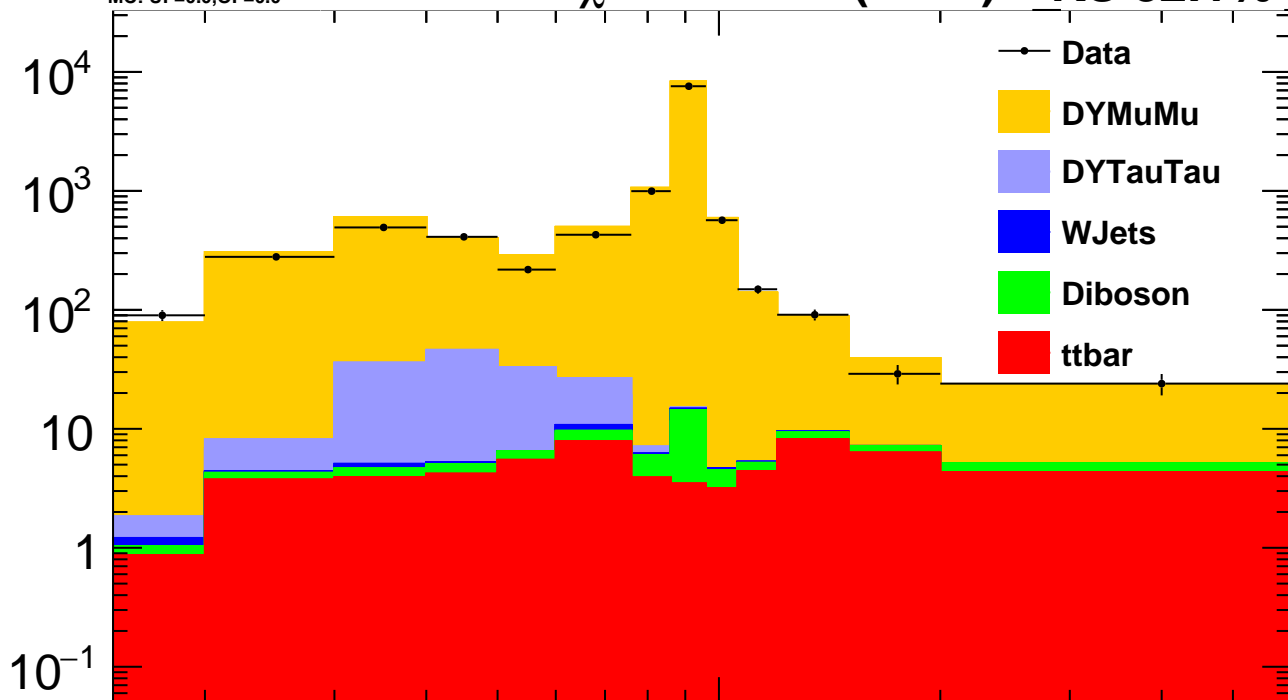
data/Pred.



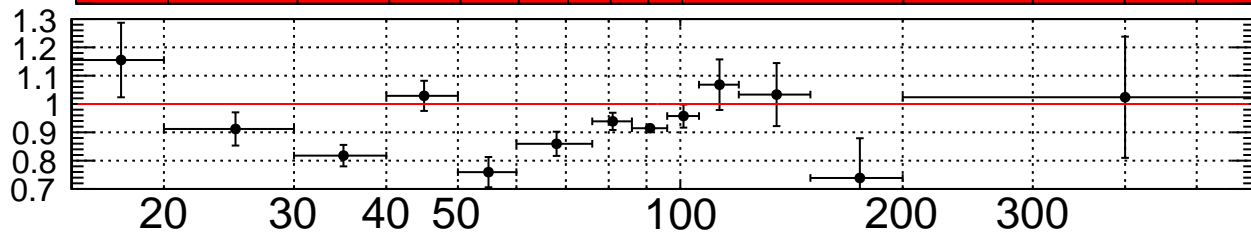
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0

$\chi^2/\text{ndf}=2.66$ (0.1%) KS 82.1%

Entry



data/Pred.

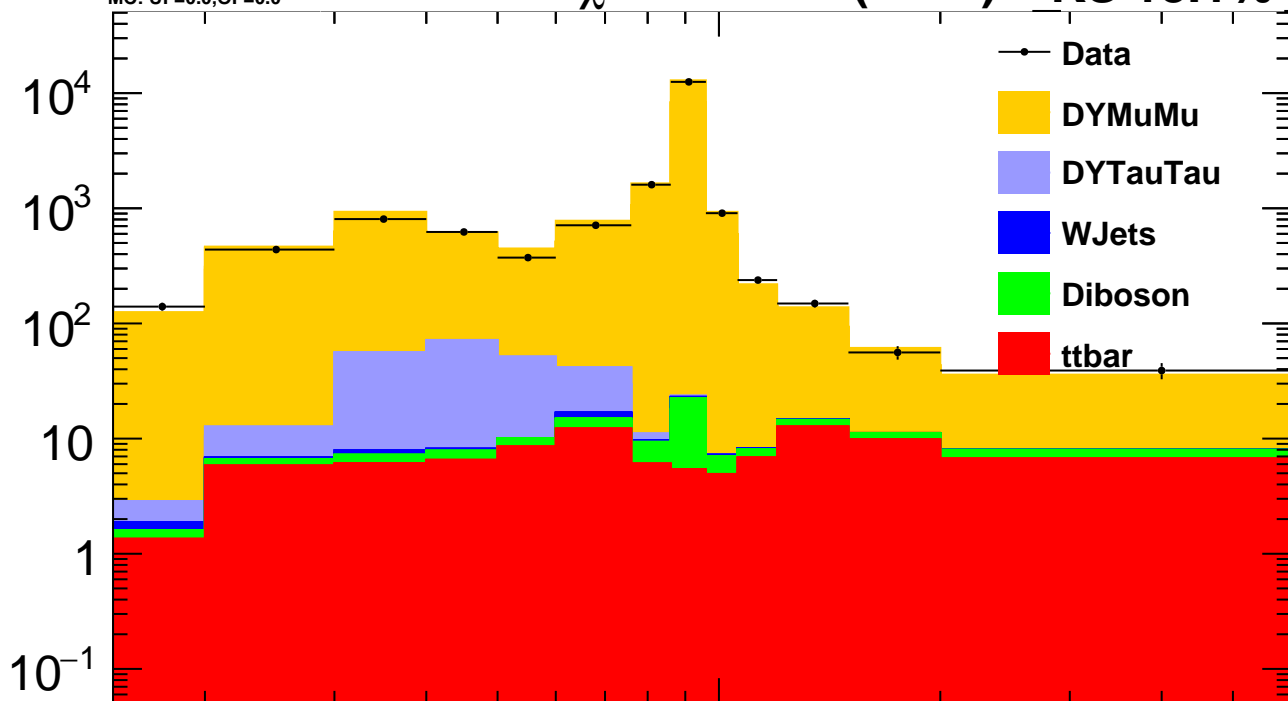


Invariant Mass(Opposite Sign) [GeV] (part2)

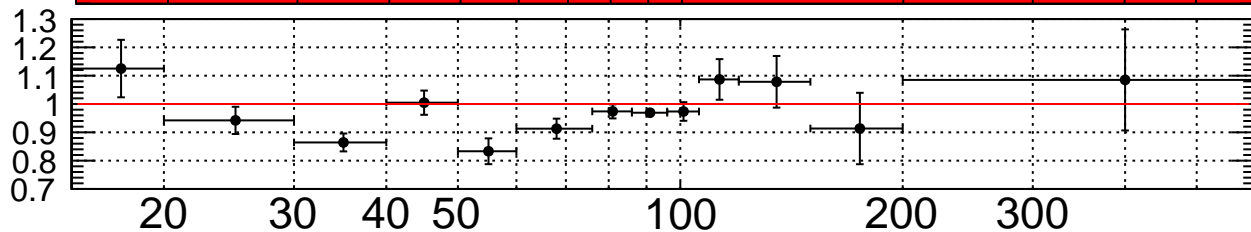
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0

$\chi^2/\text{ndf}=2.37$ (0.5%) KS 18.1%

Entry



data/Pred.

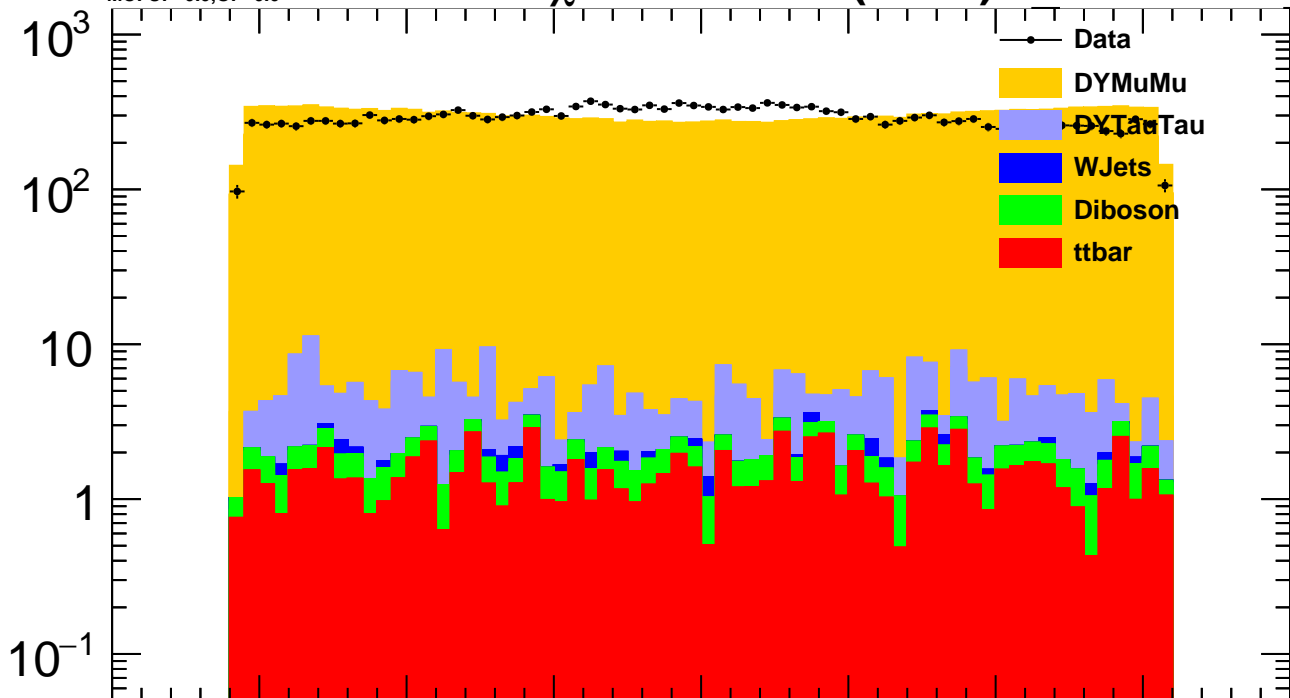


Invariant Mass(Opposite Sign) [GeV]

Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=10.97$ (0.0%)

KS 0.0%



data/Pred.

PF MET ϕ

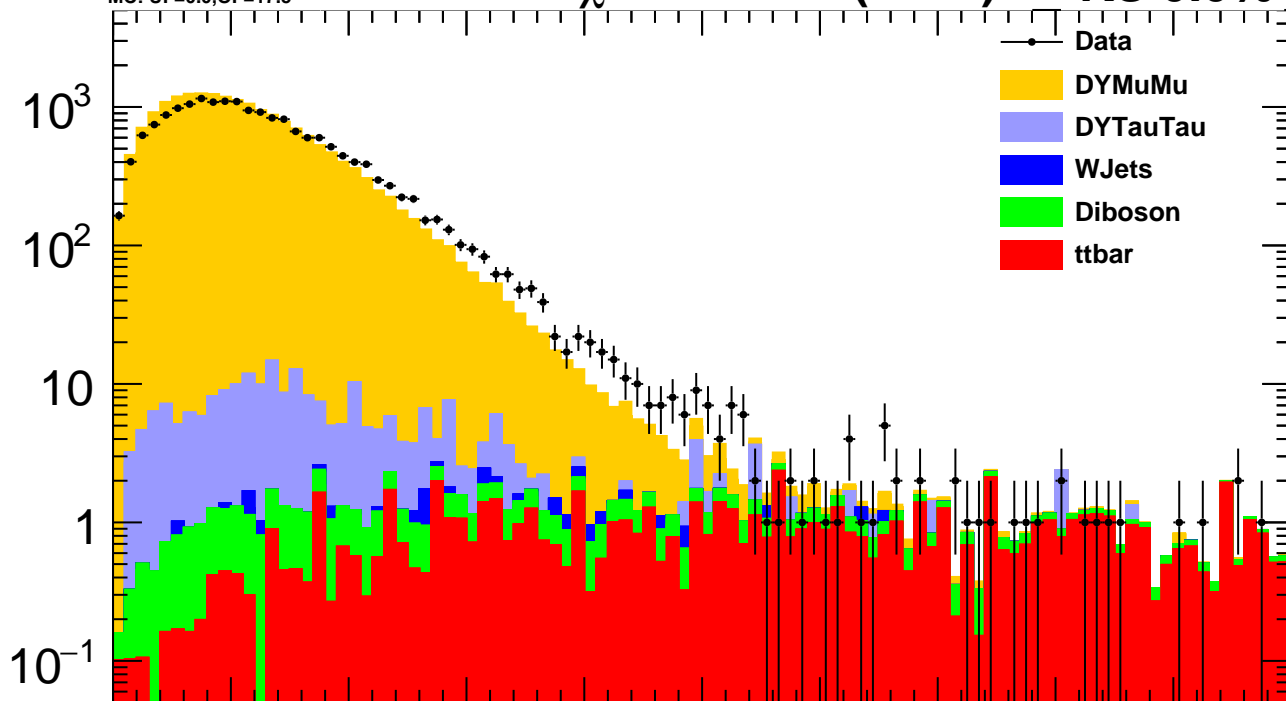
Data: UF=0,OF=10
MC: UF=0.0,OF=17.5

$\chi^2/\text{ndf}=5.01$ (0.0%)

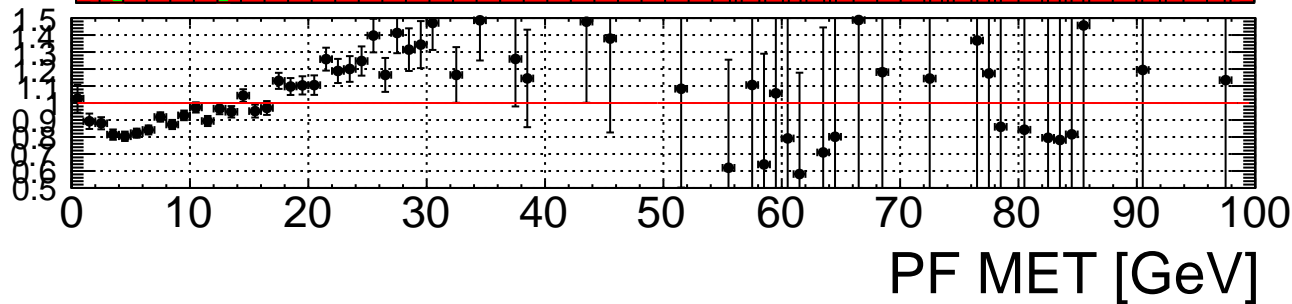
KS 0.0%

Entry

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



data/Pred.

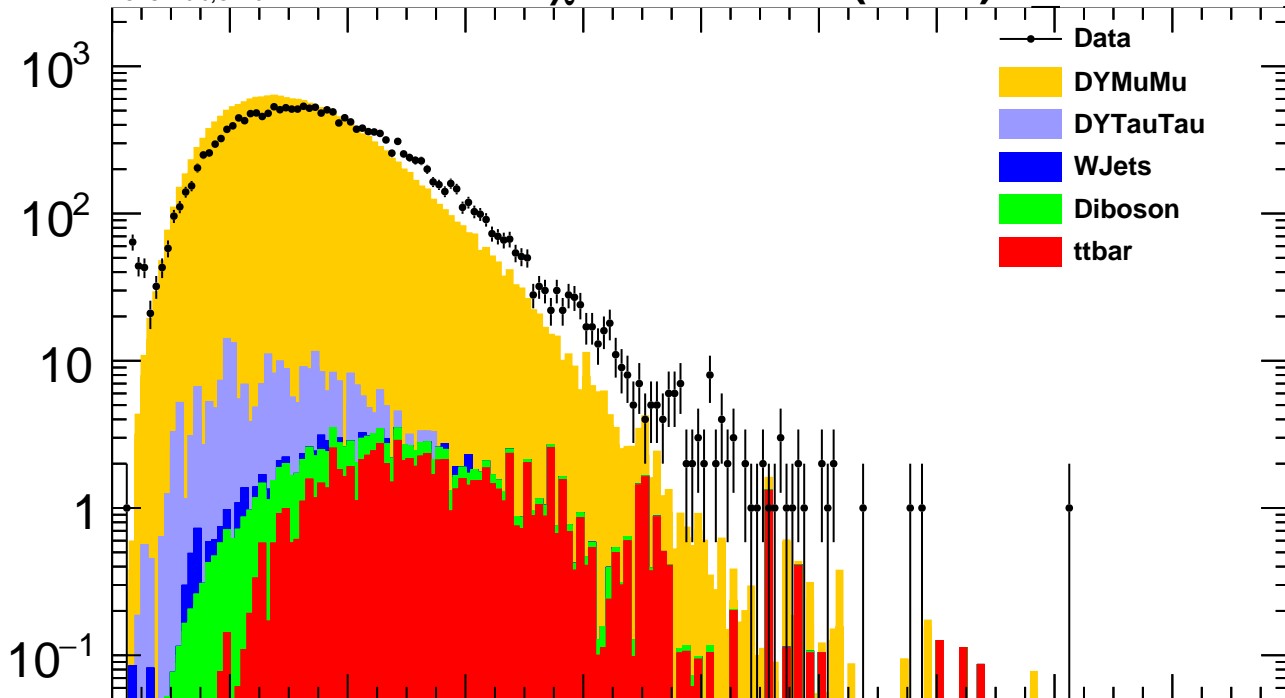


Entry

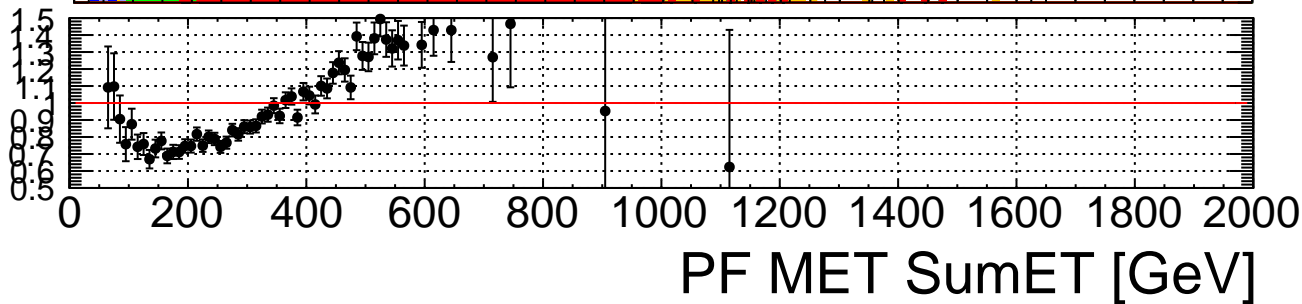
Data: UF=0,OF=0
MC: UF=0.0,OF=0.1 $\chi^2/\text{ndf}=40.60$ (0.0%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



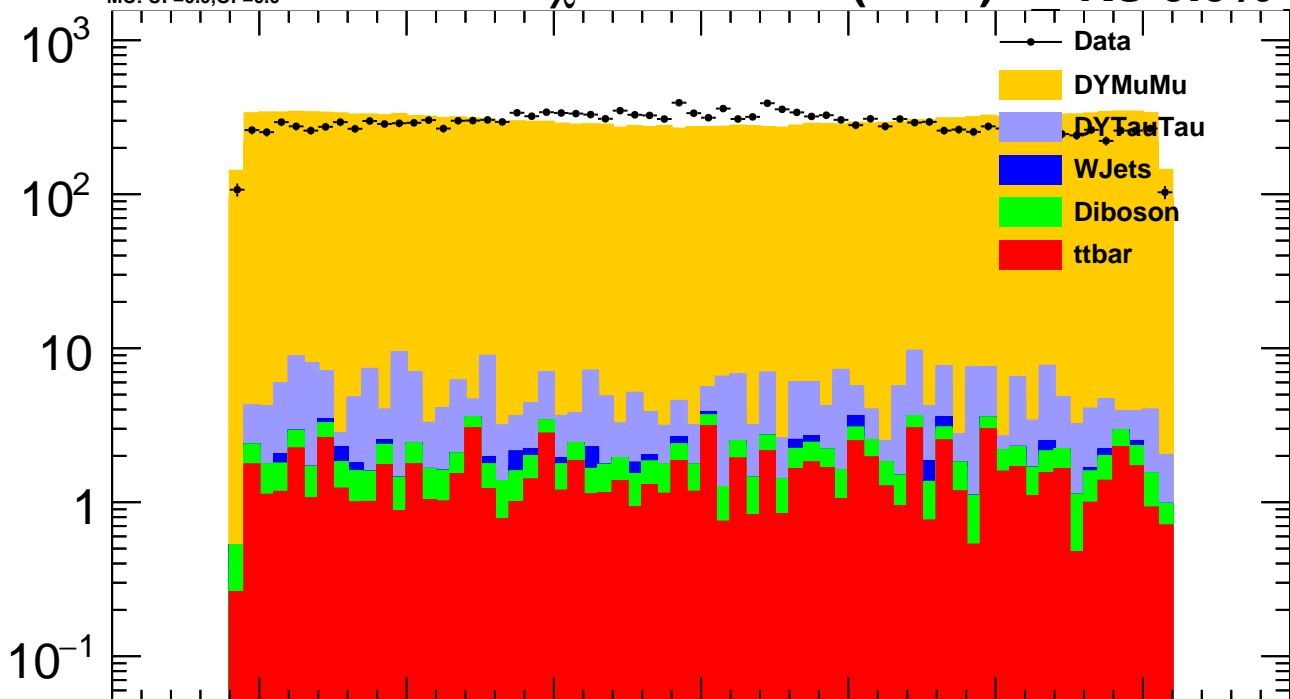
data/Pred.



Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=10.79$ (0.0%)

KS 0.0%



data/Pred.

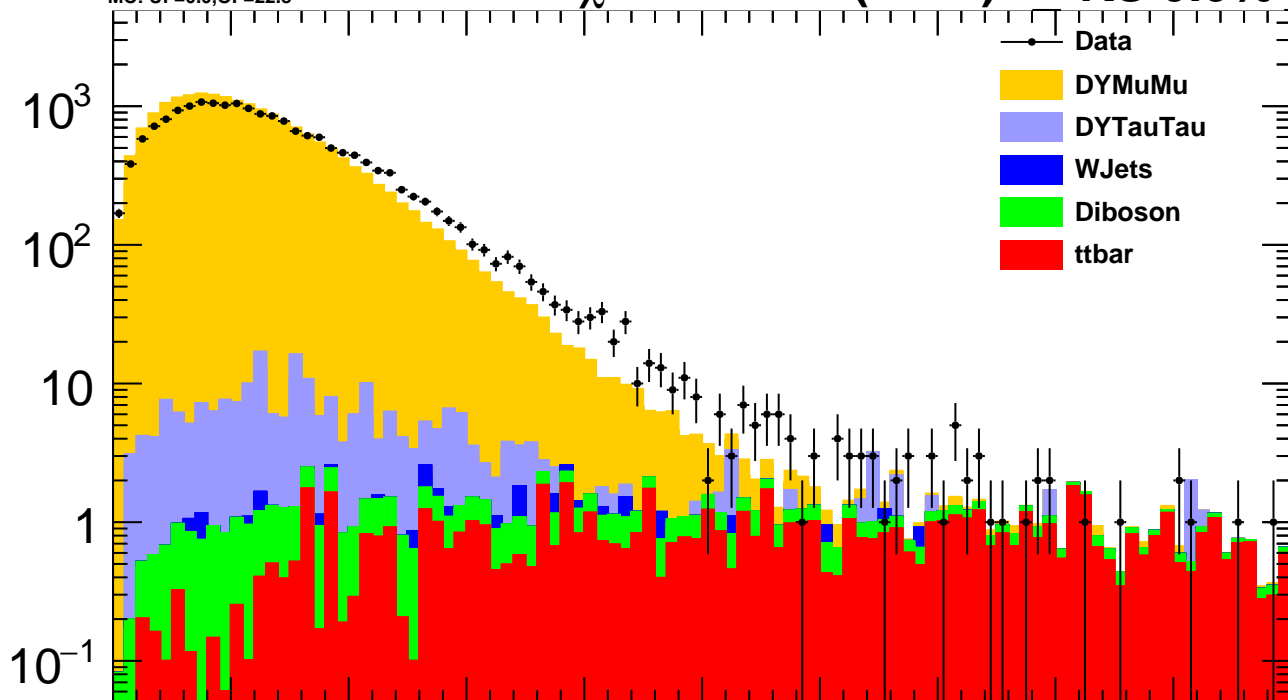
PF Type1 MET ϕ

Data: UF=0,OF=13
MC: UF=0.0,OF=22.8

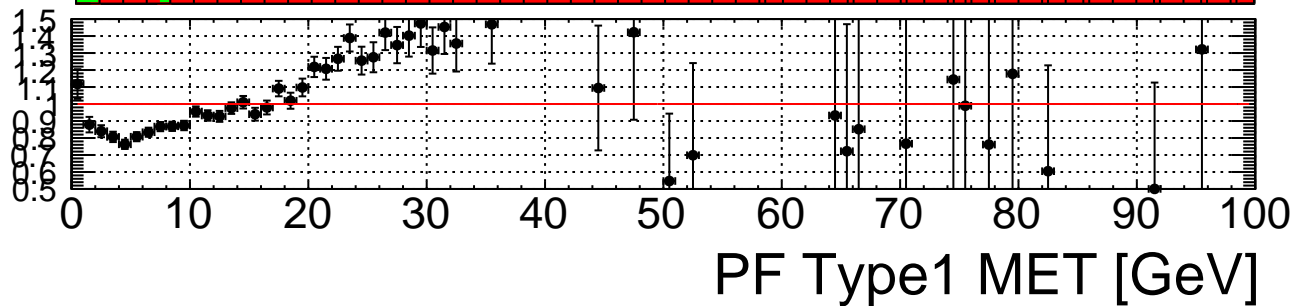
$\chi^2/\text{ndf}=7.36$ (0.0%)

KS 0.0%

Entry



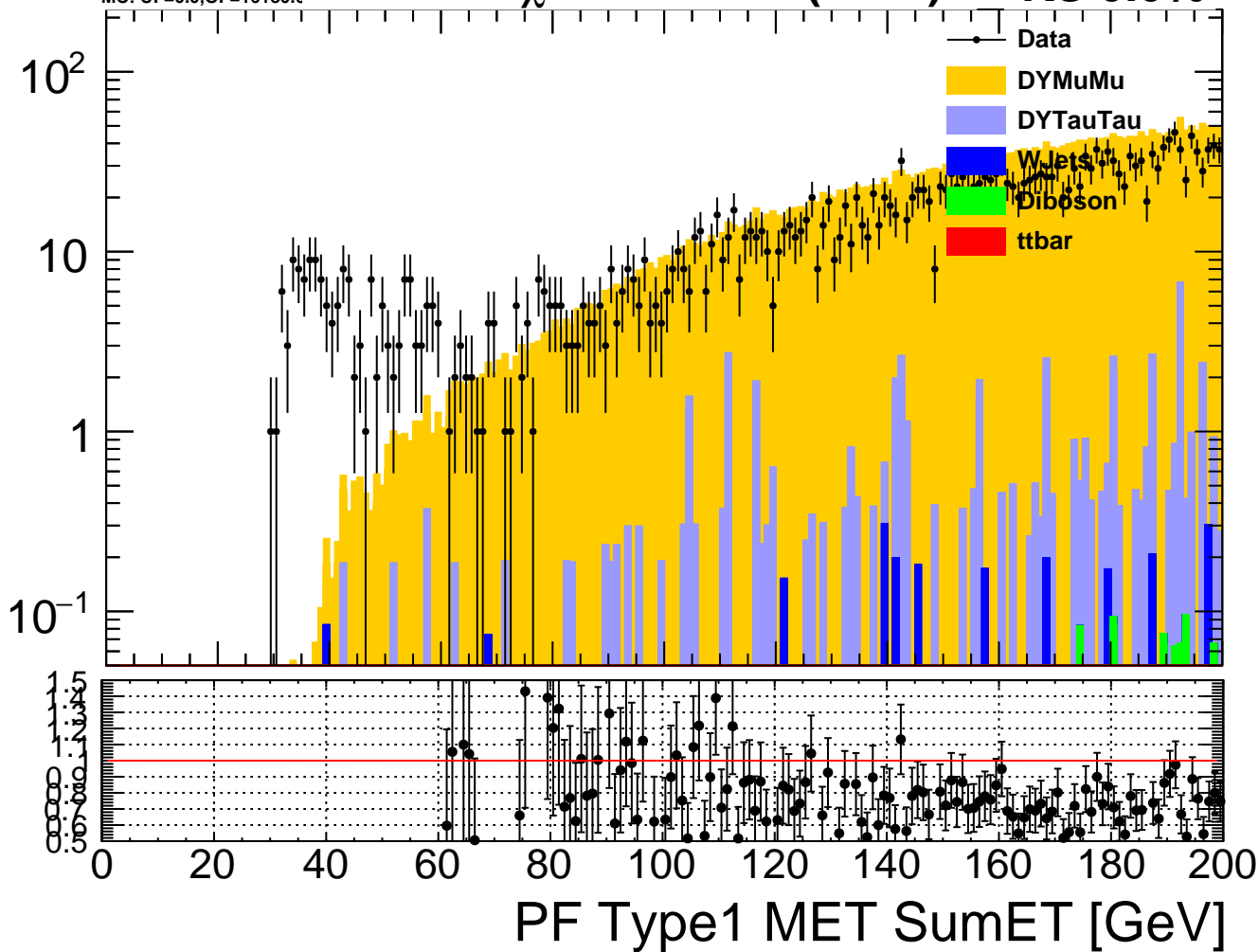
data/Pred.



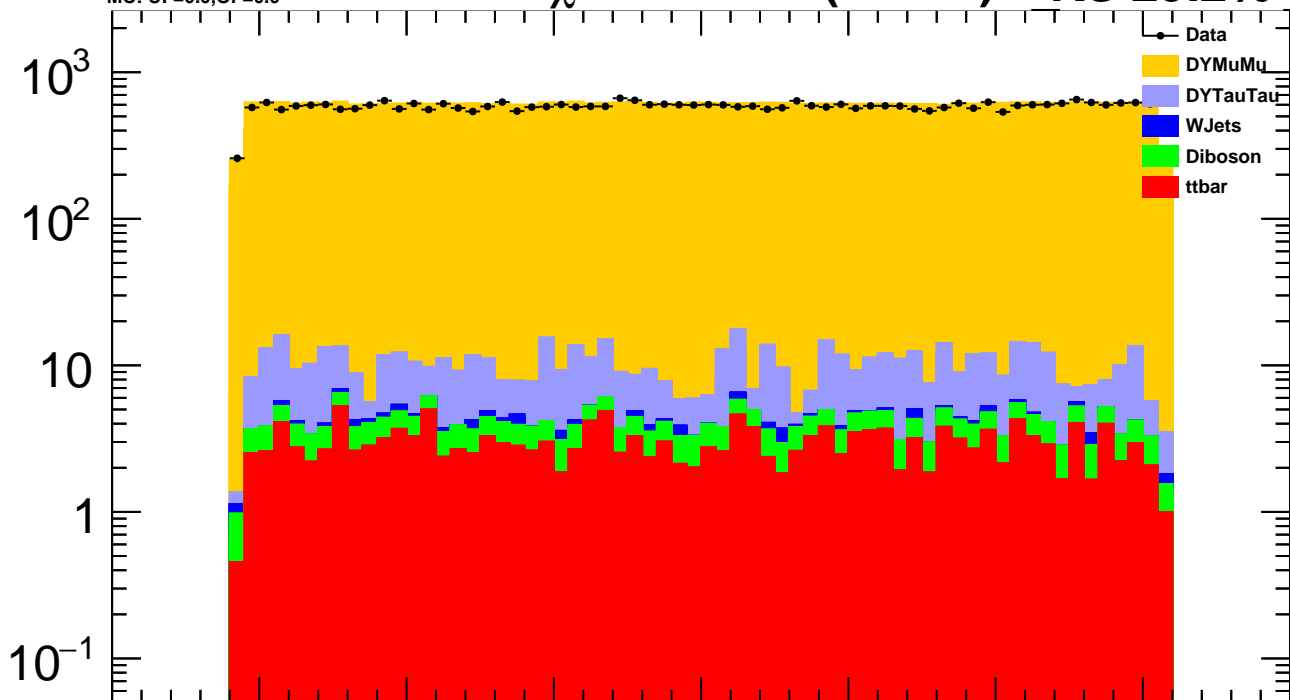
Entry

Data: UF=0,OF=16173
MC: UF=0.0,OF=16180.6 $\chi^2/\text{ndf}=37.66$ (0.0%)

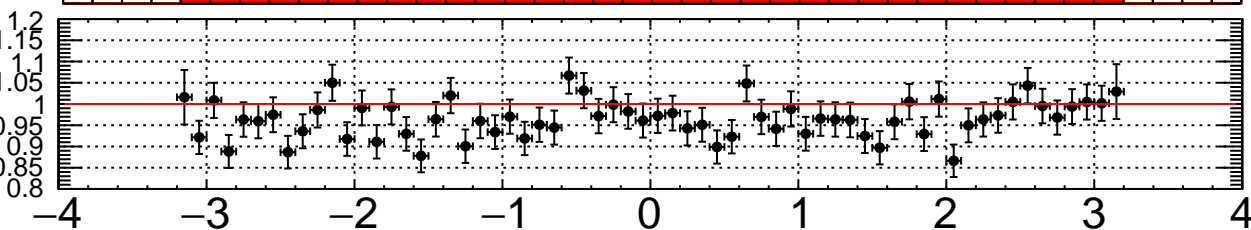
KS 0.0%



Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.17$ (17.1%) KS 29.2%

data/Pred.

Muon ϕ

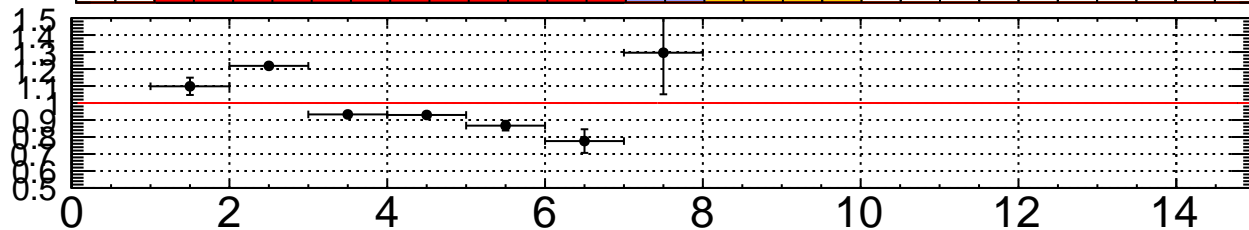
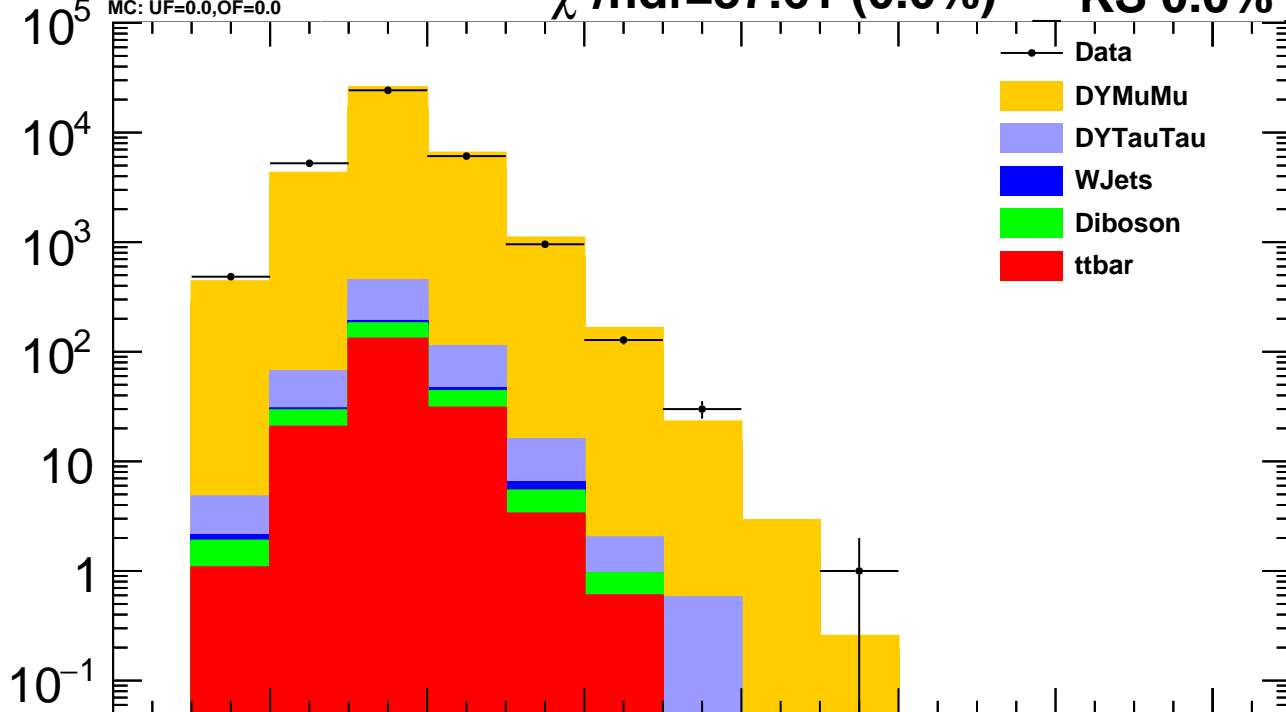
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=37.61$ (0.0%)

KS 0.0%

—•— Data
DYMuMu
DYTauTau
WJets
Diboson
ttbar

data/Pred.



muon Pixel Hits

Entry

Data: UF=0,OF=2
MC: UF=0.0,OF=2.5 $\chi^2/\text{ndf}=1.19$ (7.9%)

KS 8.4%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar

10³
10²
10
1
10⁻¹

data/Pred.

1.2
1.1
1.05
1.0
0.95
0.9
0.85
0.8

0

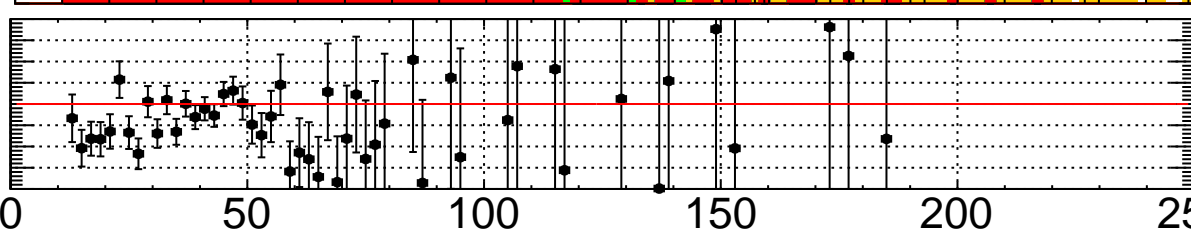
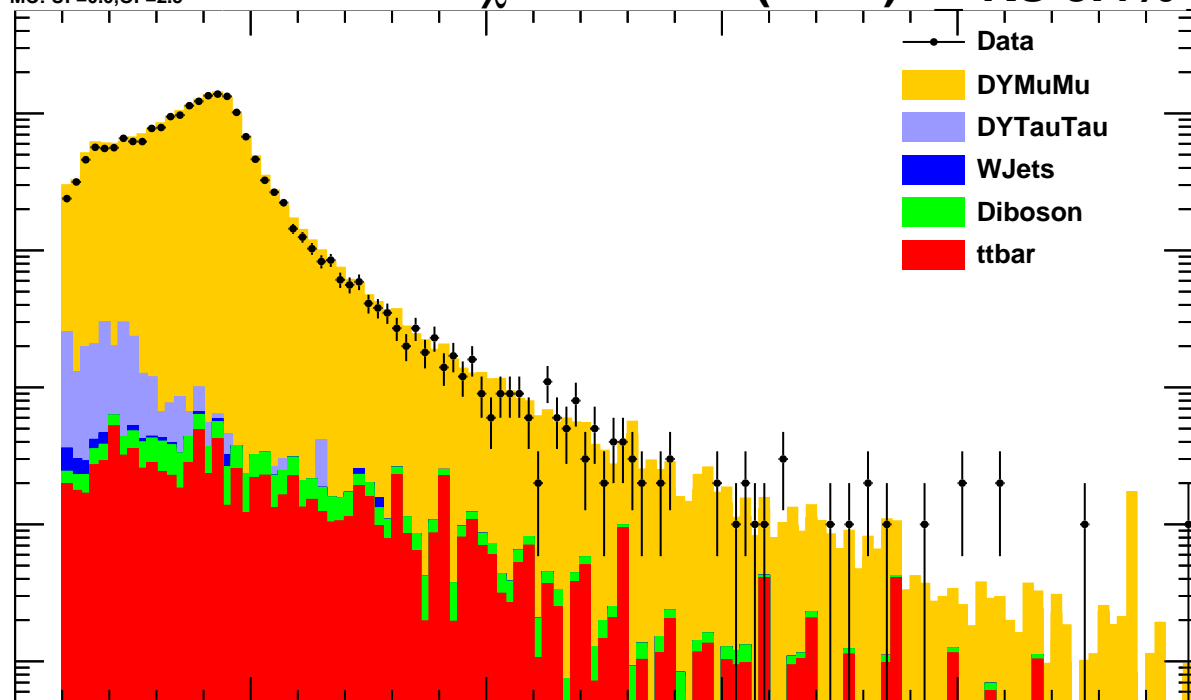
50

100

150

200

250

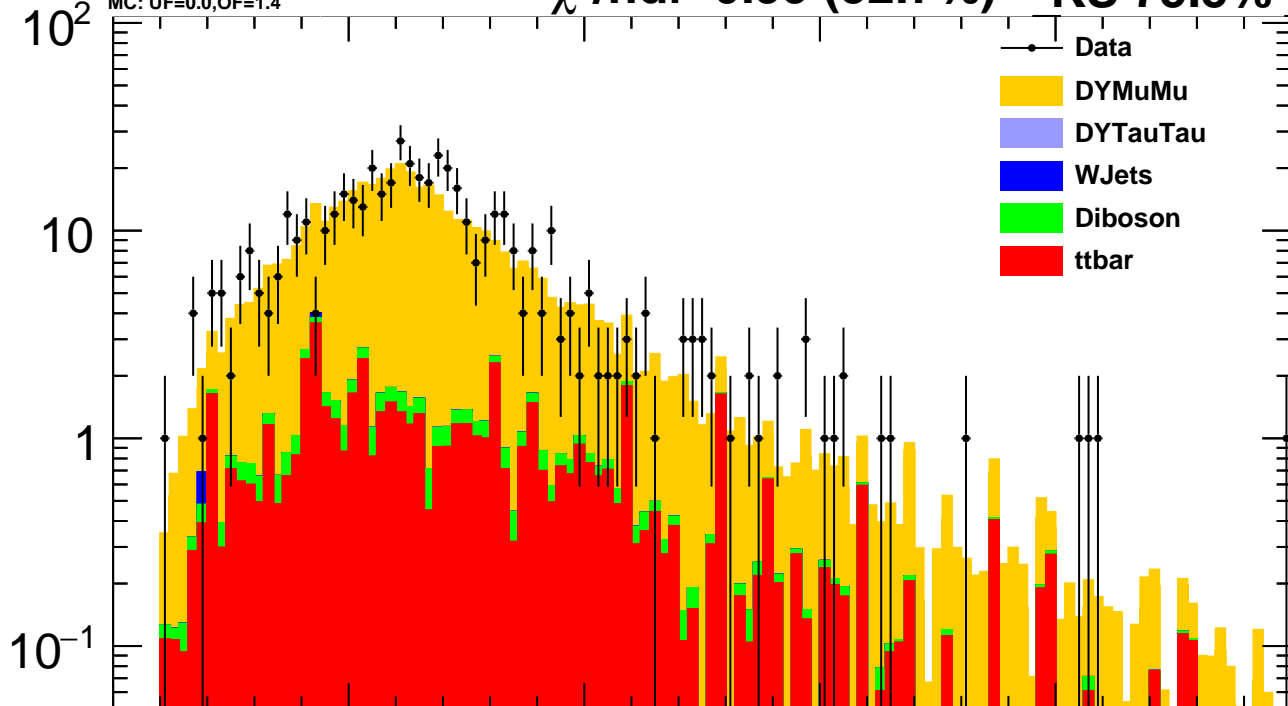
Muon(mu⁺) P_T [GeV]

Entry

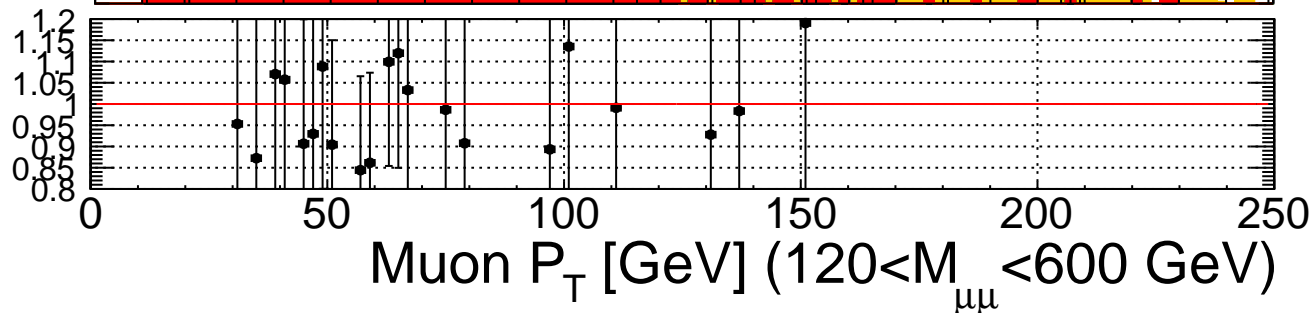
Data: UF=0,OF=1
MC: UF=0.0,OF=1.4 $\chi^2/\text{ndf}=0.99$ (52.7%)

KS 75.5%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



data/Pred.



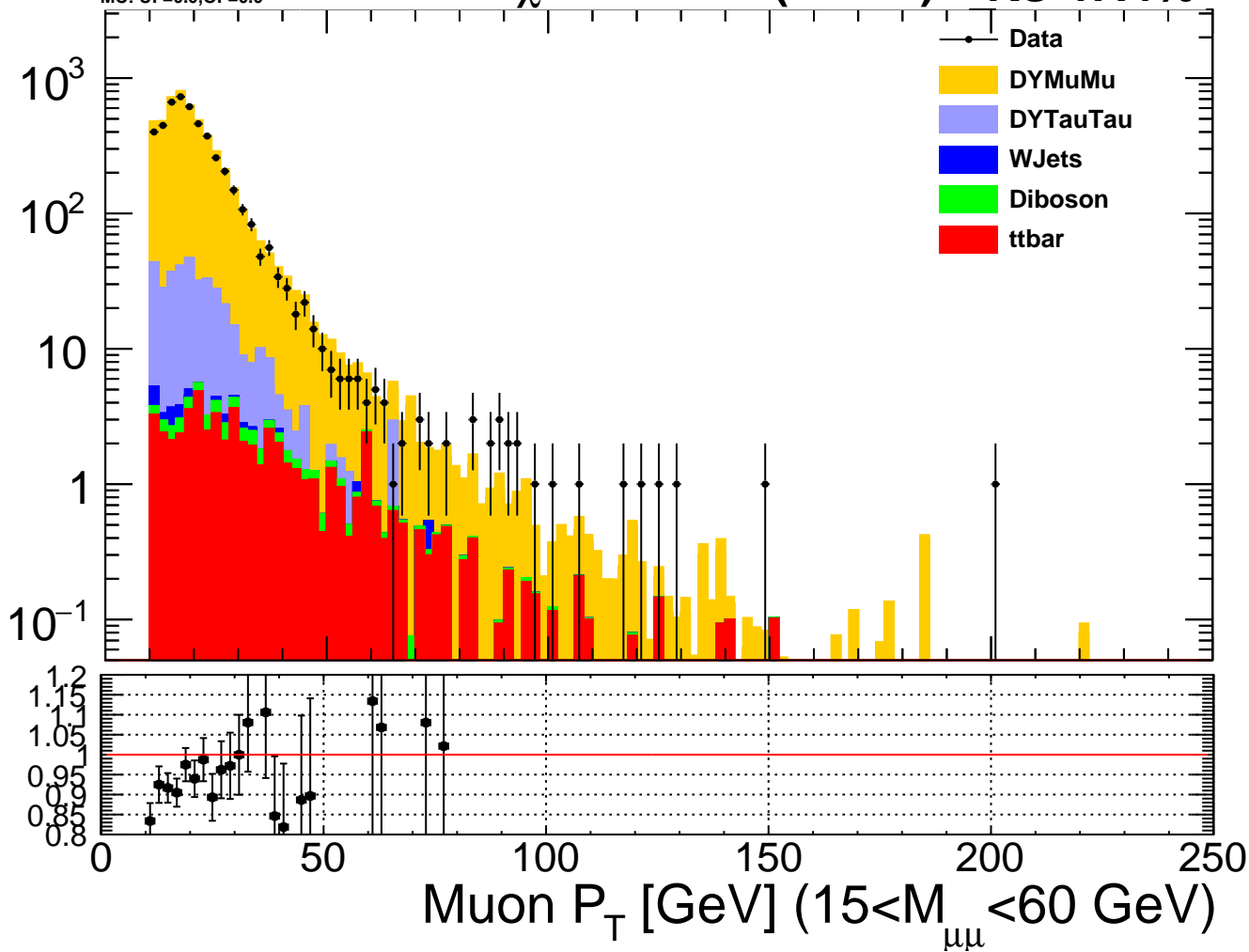
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=0.76$ (96.3%)

KS 47.4%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar

data/Pred.



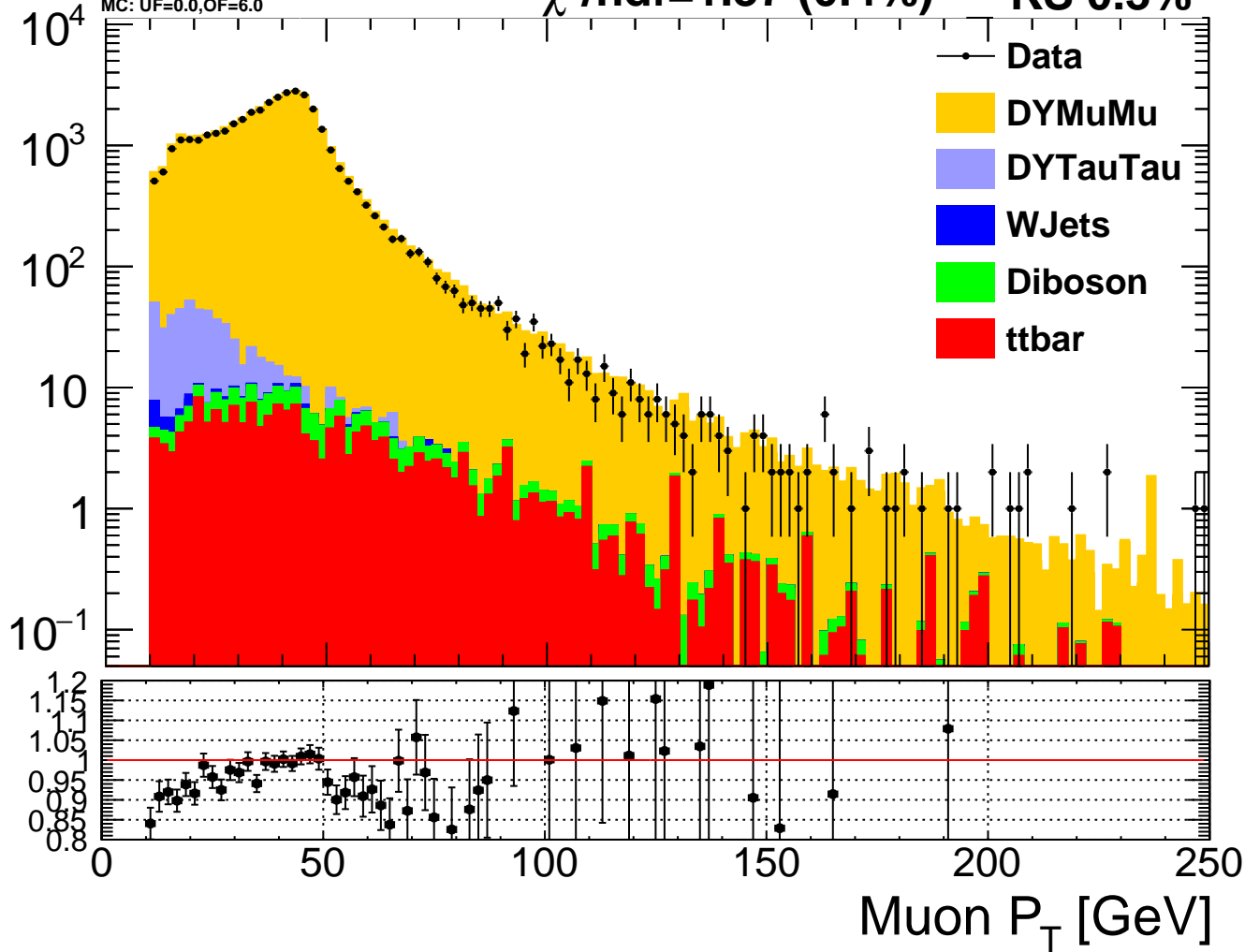
Entry

Data: UF=0,OF=3
MC: UF=0.0,OF=6.0 $\chi^2/\text{ndf}=1.37$ (0.4%)

KS 0.3%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar

data/Pred.



Entry

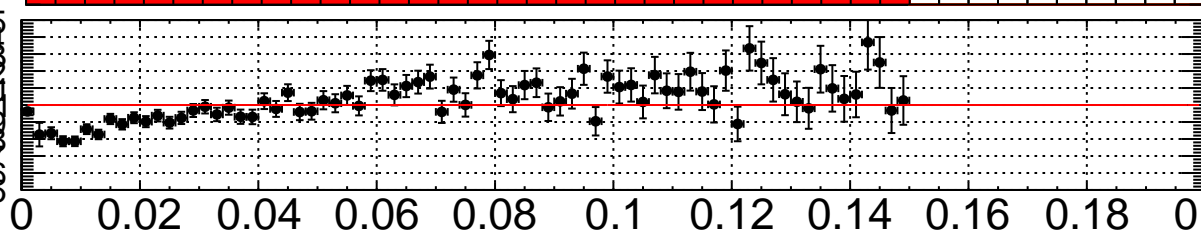
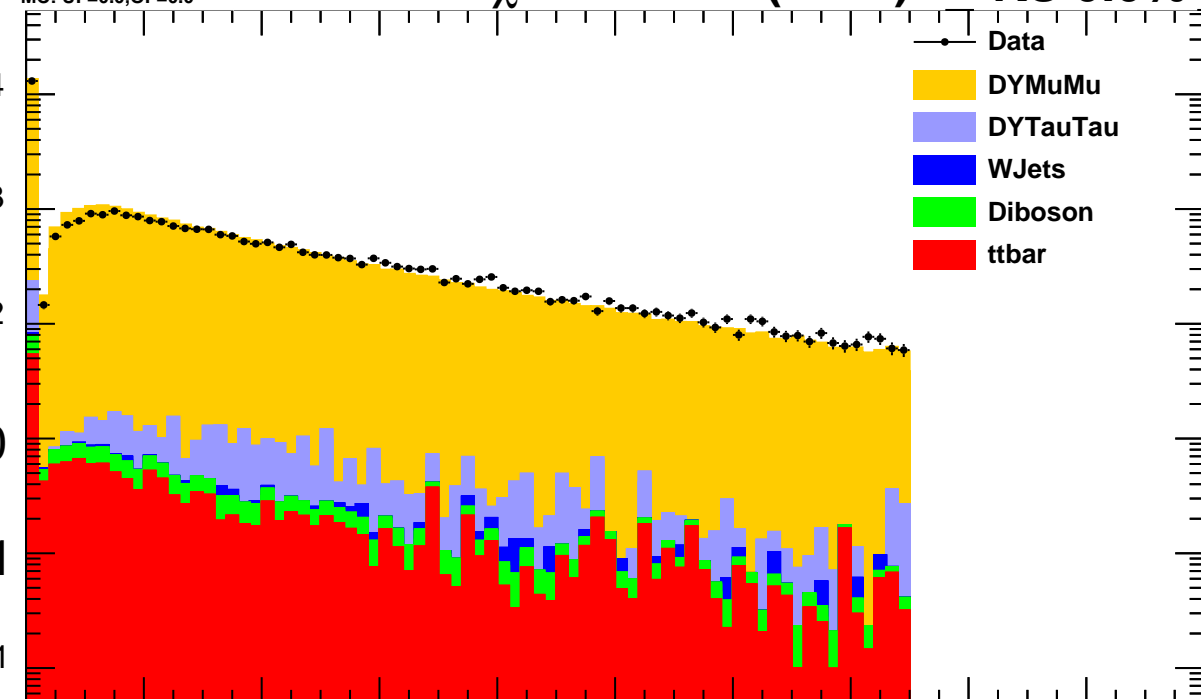
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=4.29$ (0.0%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar

10⁴
10³
10²
10
1
10⁻¹

data/Pred.

5
4
3
2
1
0.5
0.2
0.1PFIso / P_T

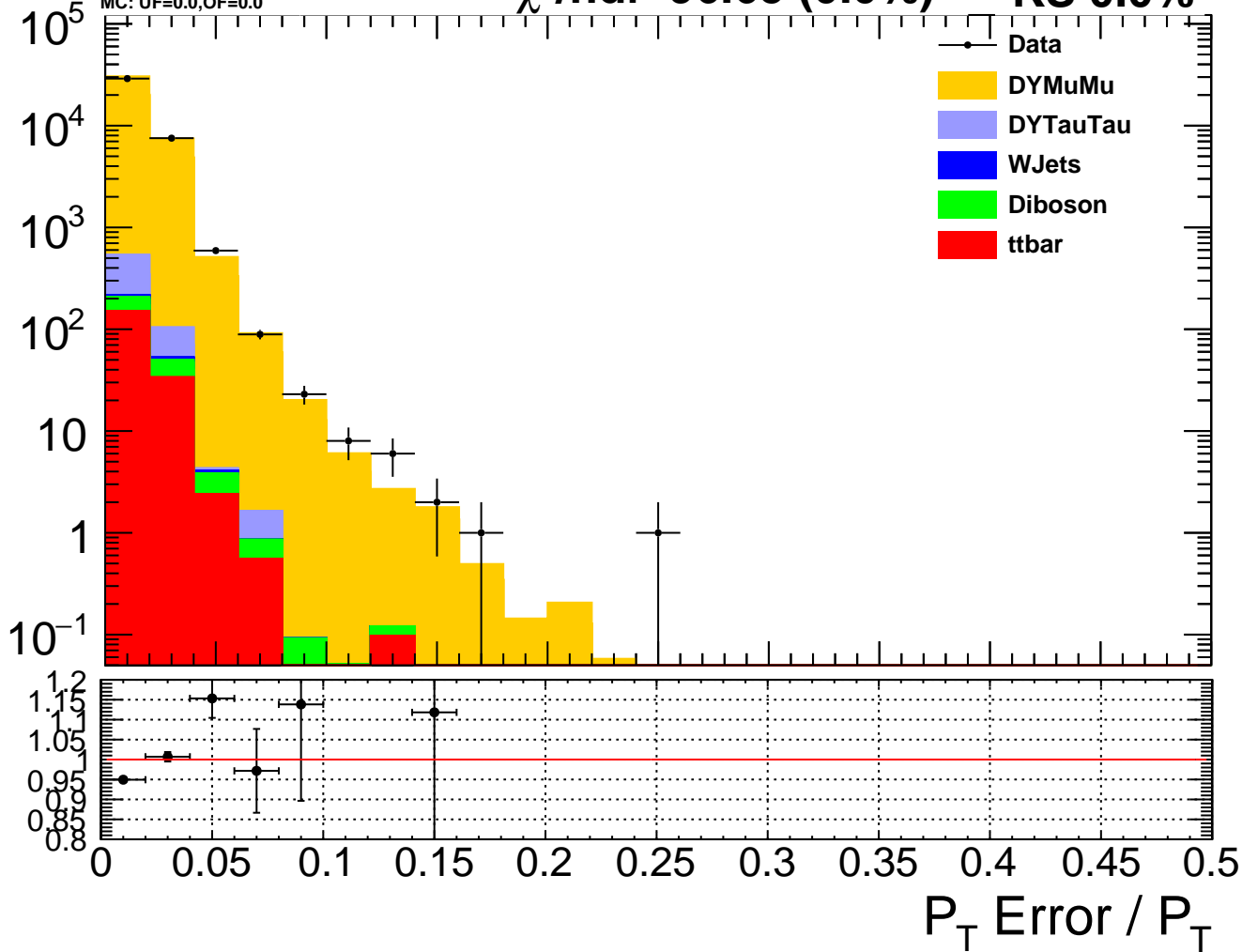
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=96.65$ (0.0%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar

data/Pred.

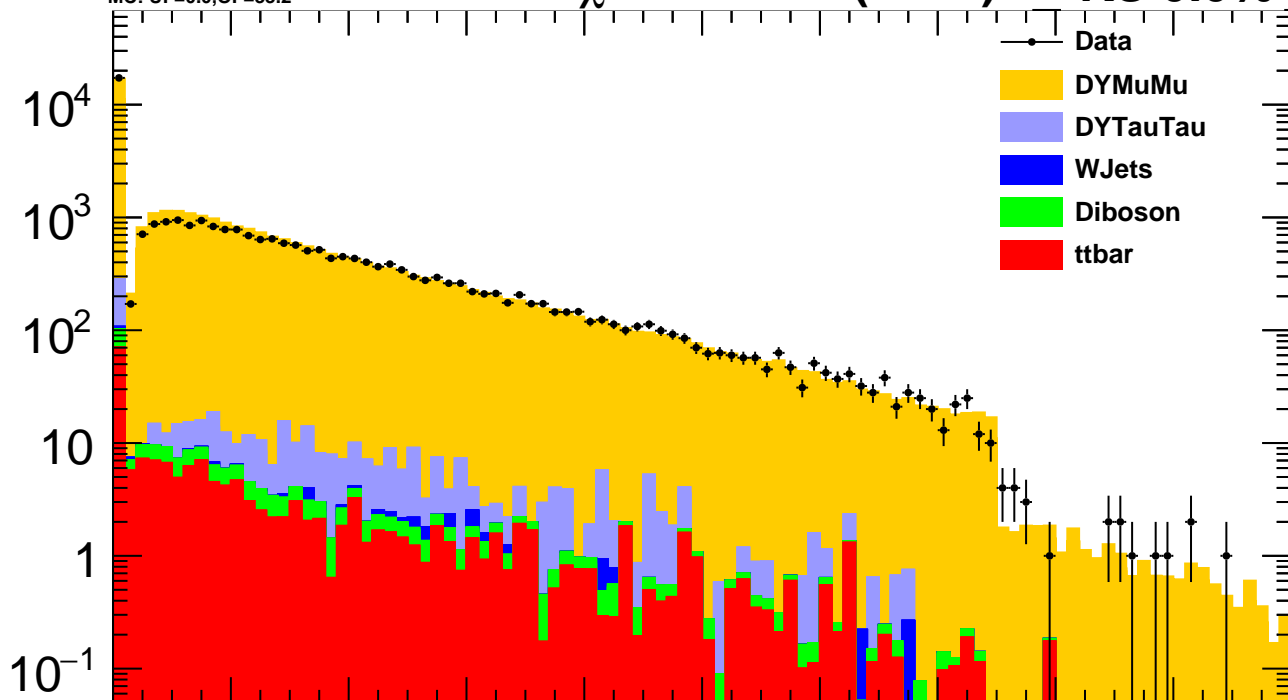


Data: UF=0,OF=45
MC: UF=0.0,OF=33.2

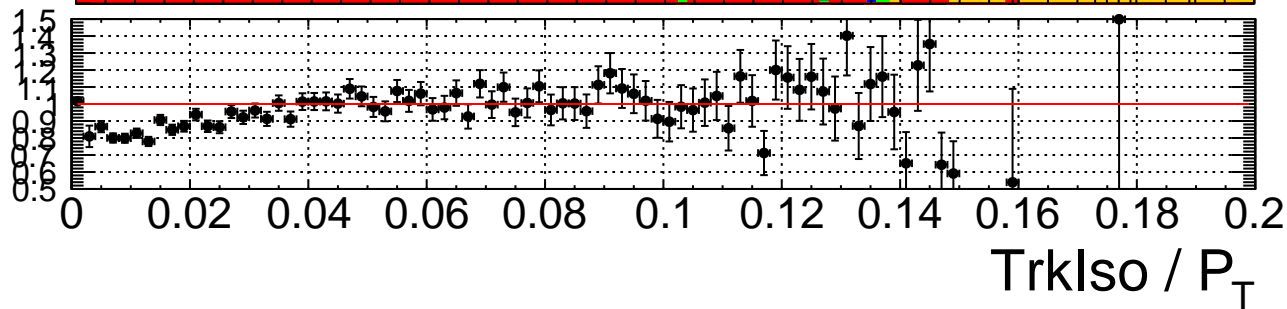
$\chi^2/\text{ndf}=3.17$ (0.0%)

KS 0.0%

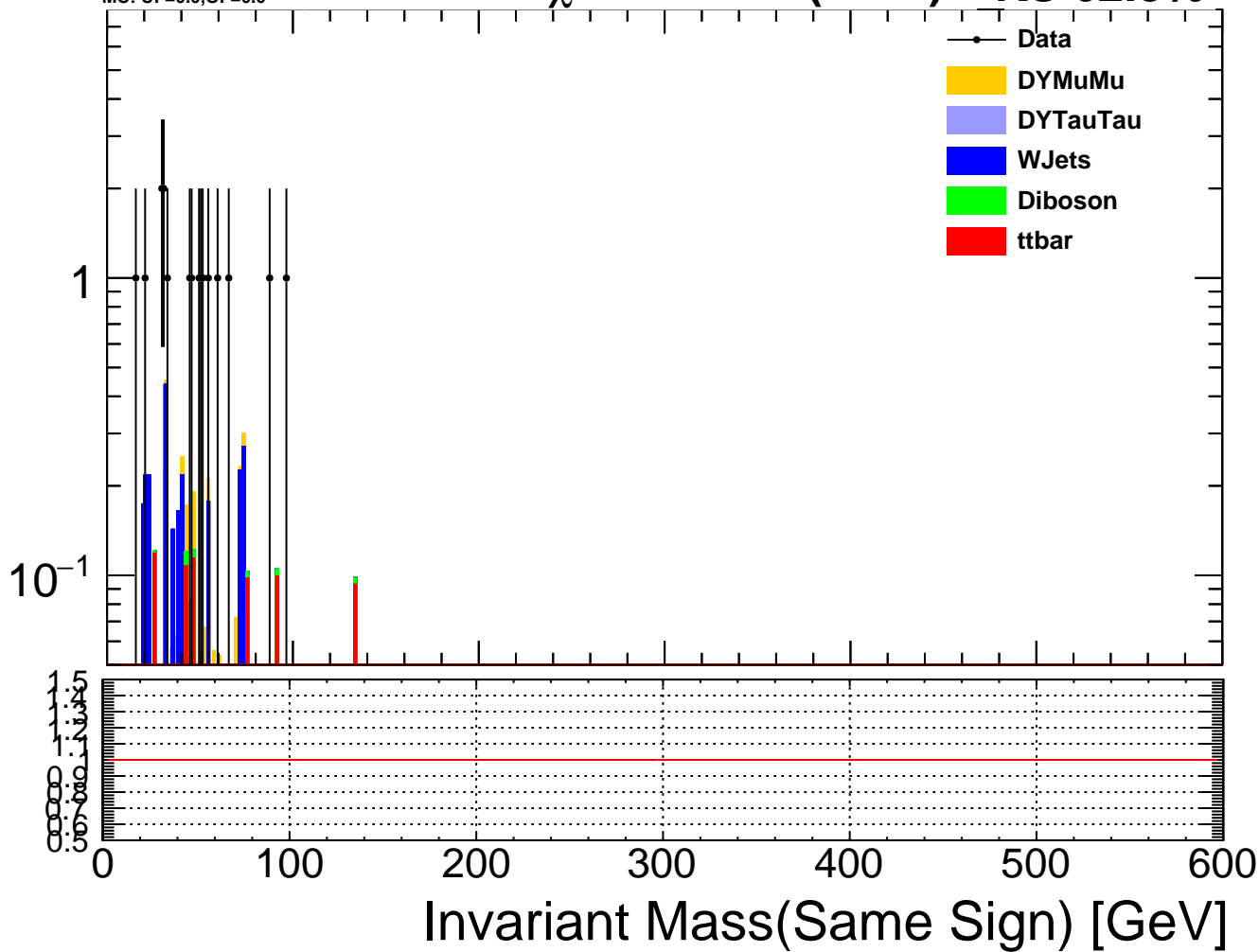
Entry



data/Pred.



Entry

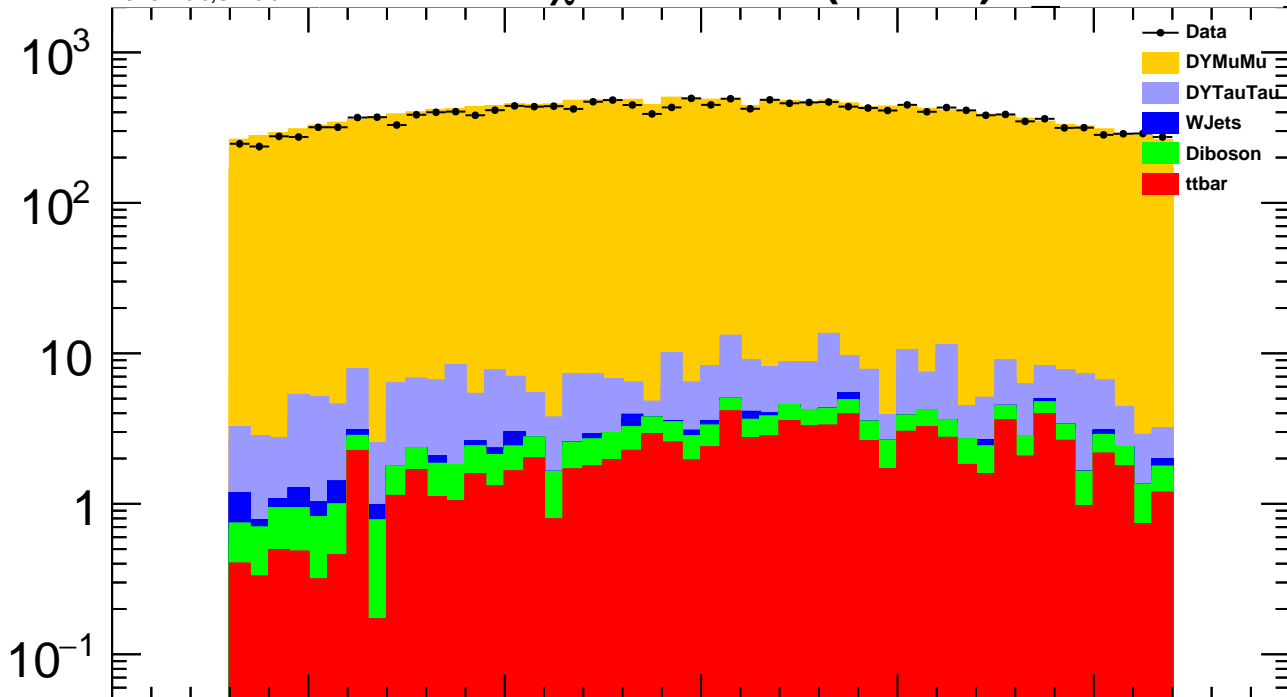
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.92$ (0.0%) KS 62.8%

Entry

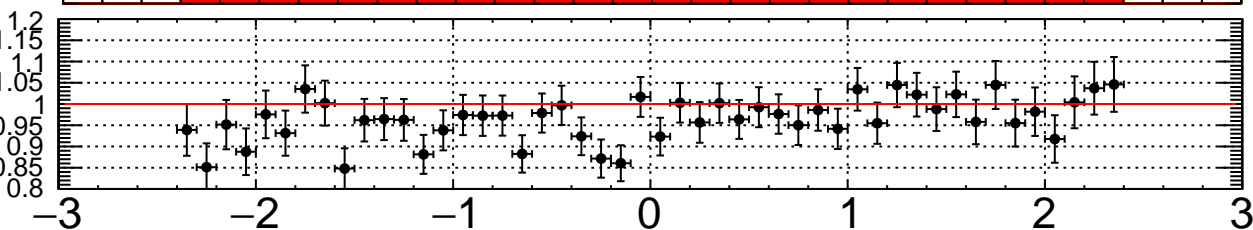
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.05$ (37.8%)

KS 0.6%

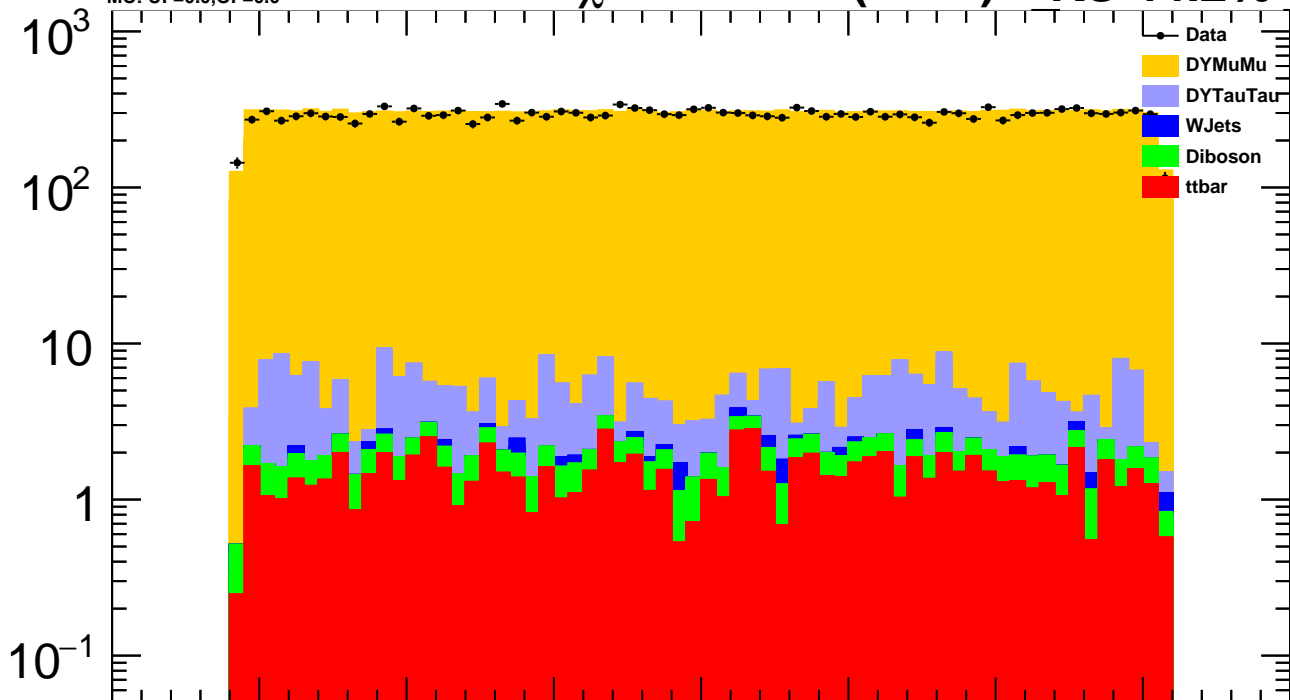
—•— Data
DYMuMu
DYTauTau
WJets
Diboson
ttbar



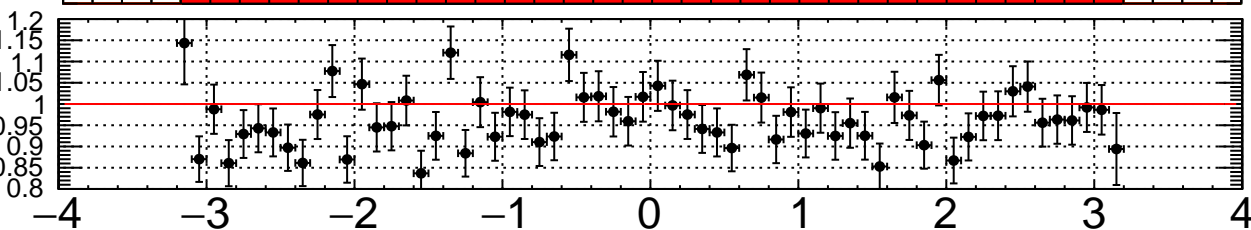
data/Pred.

sub-leading Muon η

Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.25$ (8.8%) KS 44.2%

data/Pred.

sub-leading Muon ϕ

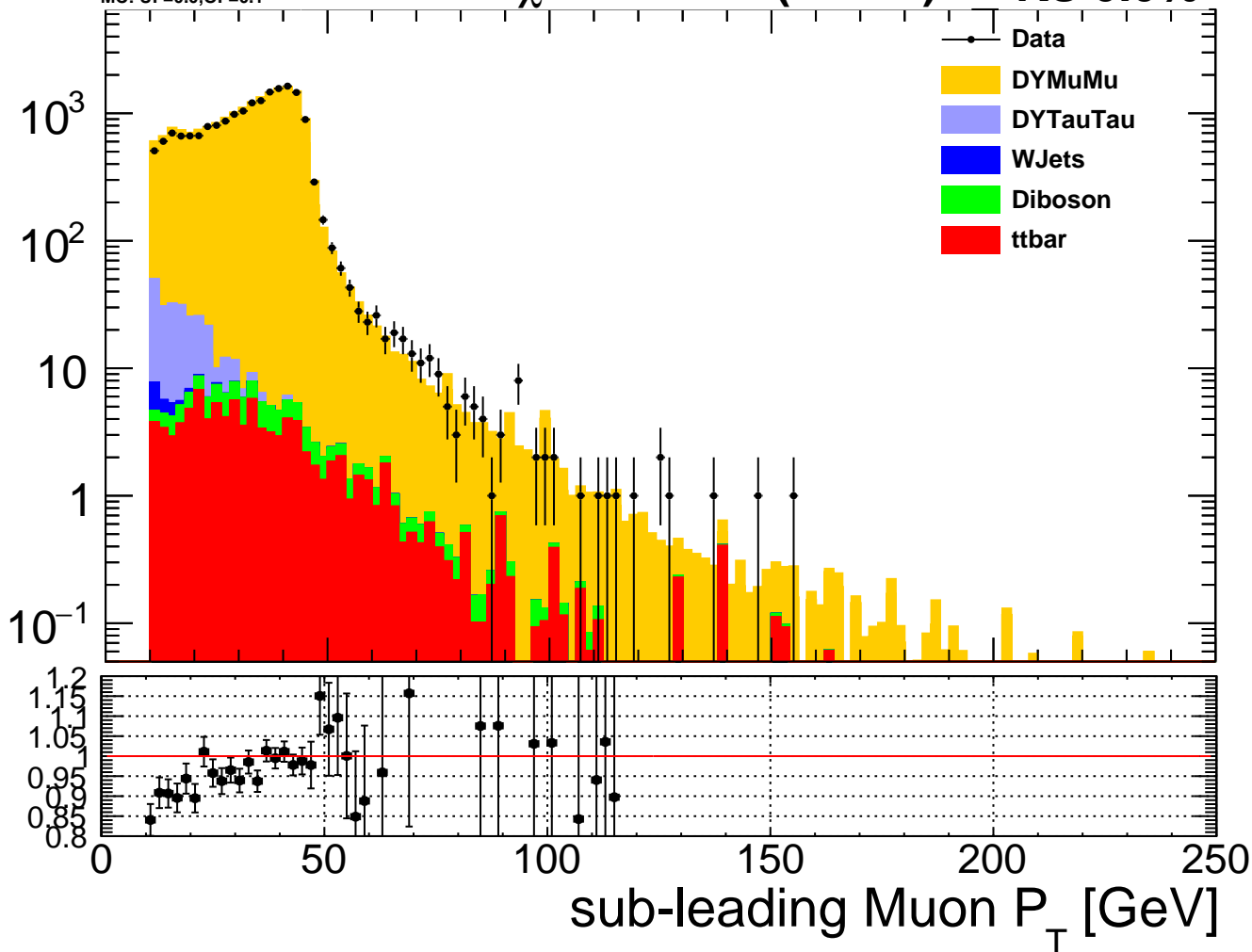
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.1 $\chi^2/\text{ndf}=0.91$ (74.7%)

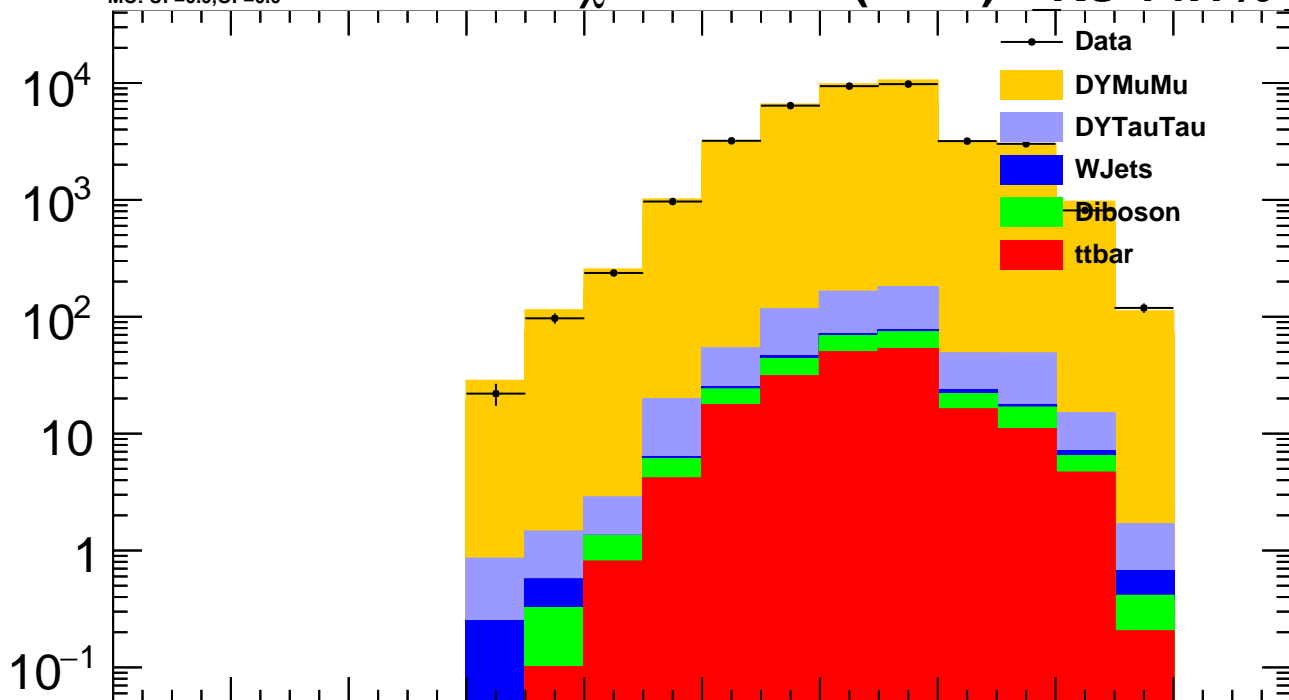
KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar

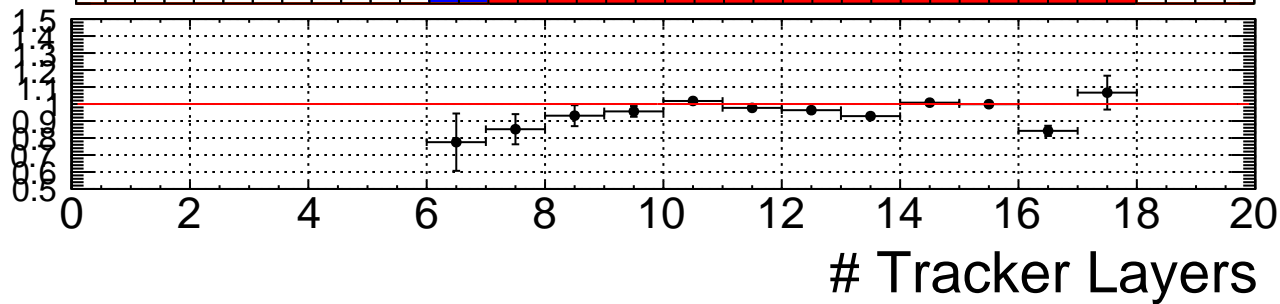
data/Pred.



Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=4.65$ (0.0%) KS 14.1%

data/Pred.

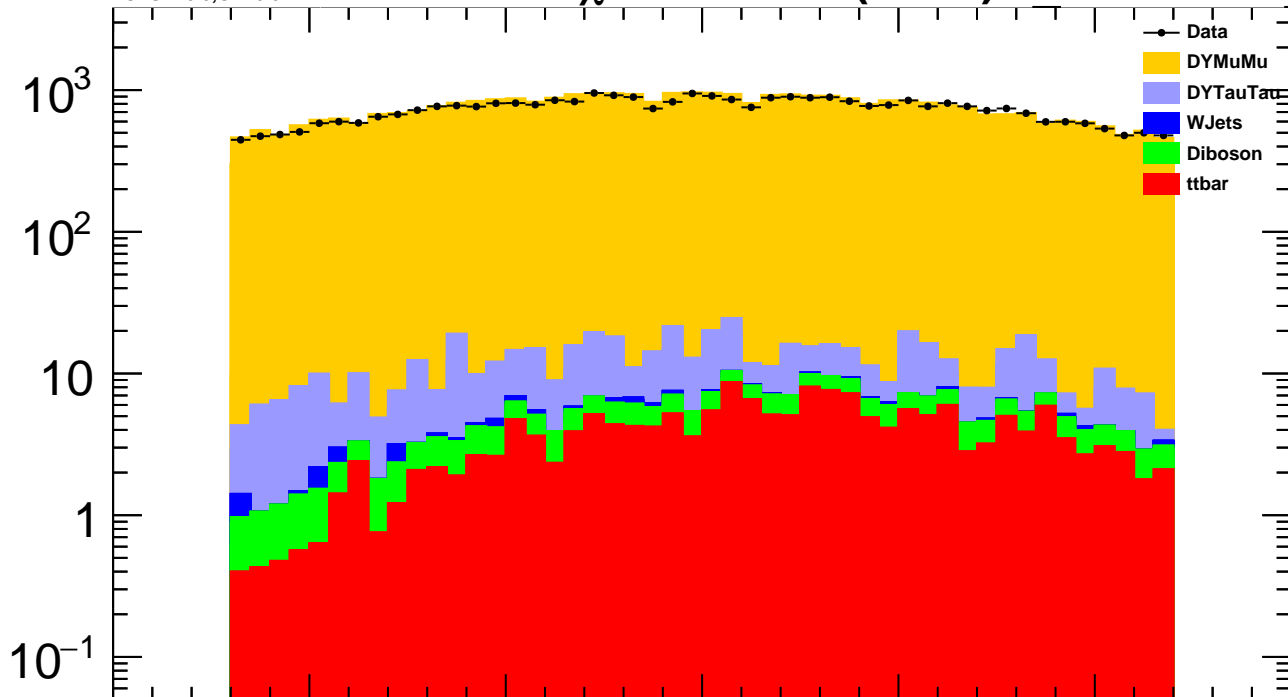


Entry

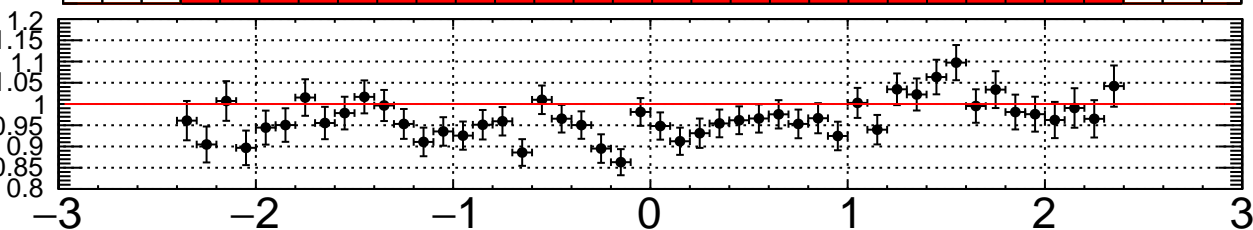
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.60$ (0.6%)

KS 0.0%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



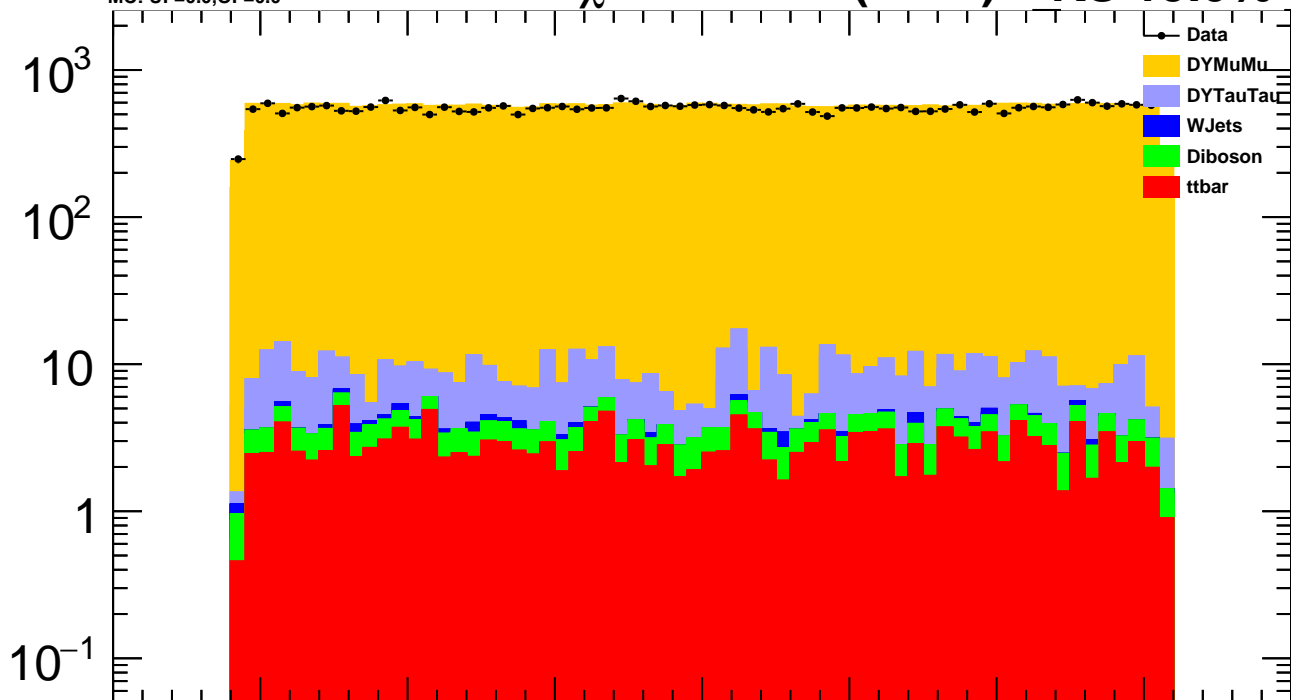
data/Pred.

Muon(Matched with Trigger) η

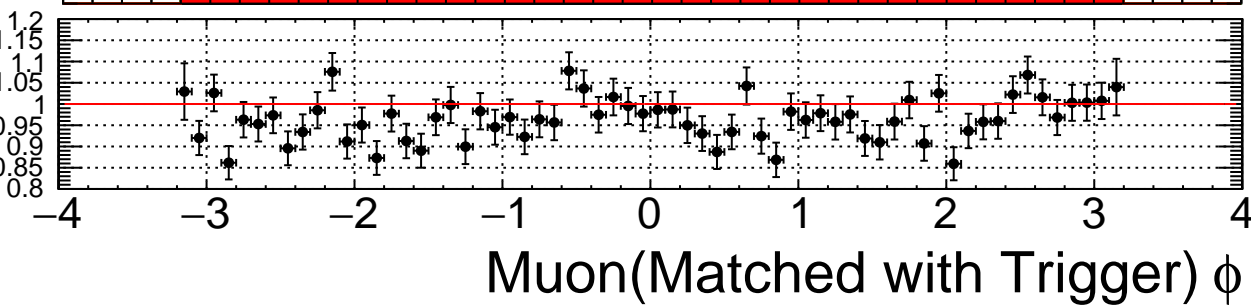
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0

$\chi^2/\text{ndf}=1.49$ (0.7%) KS 15.0%

Entry



data/Pred.



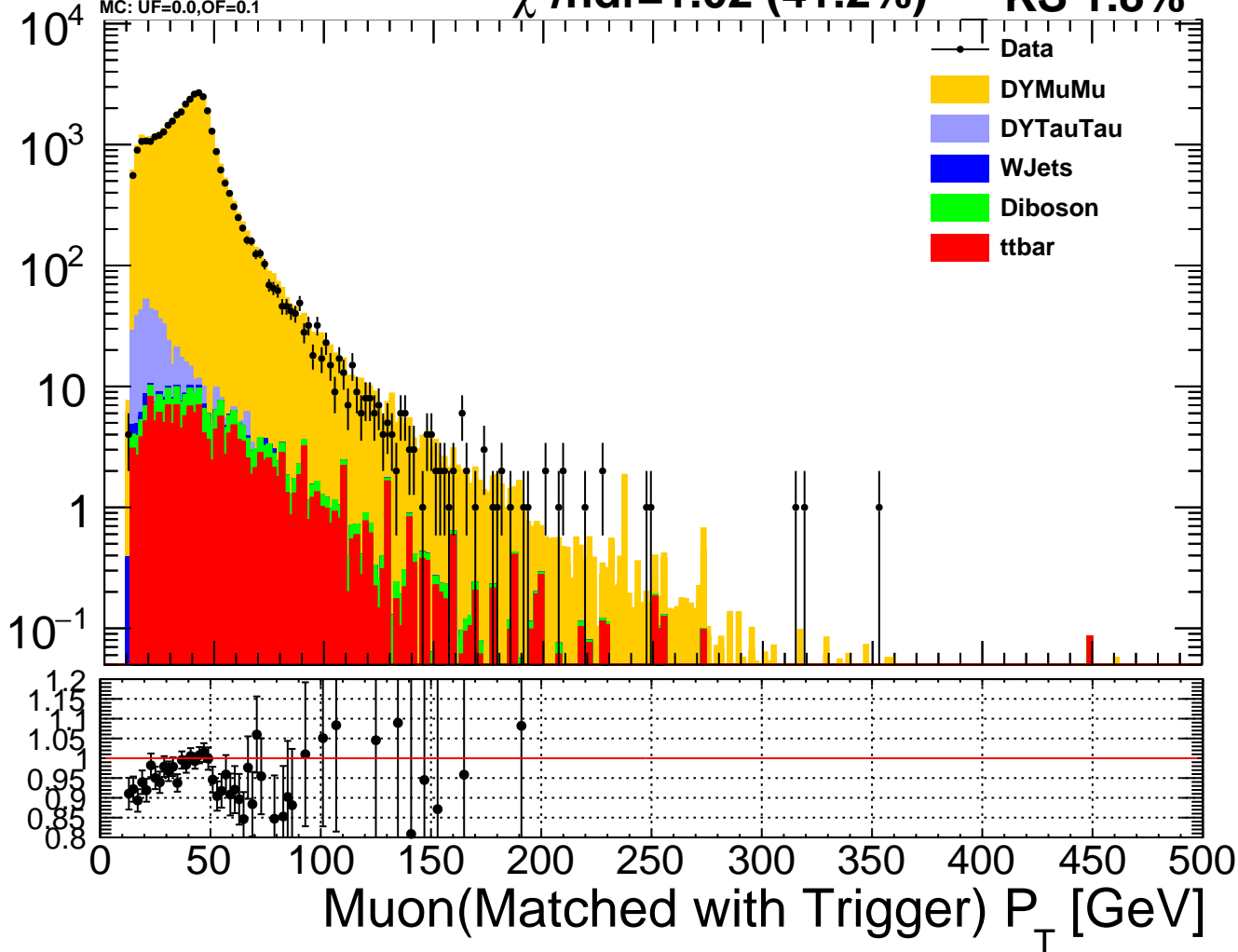
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.1 $\chi^2/\text{ndf}=1.02$ (41.2%)

KS 1.8%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar

data/Pred.

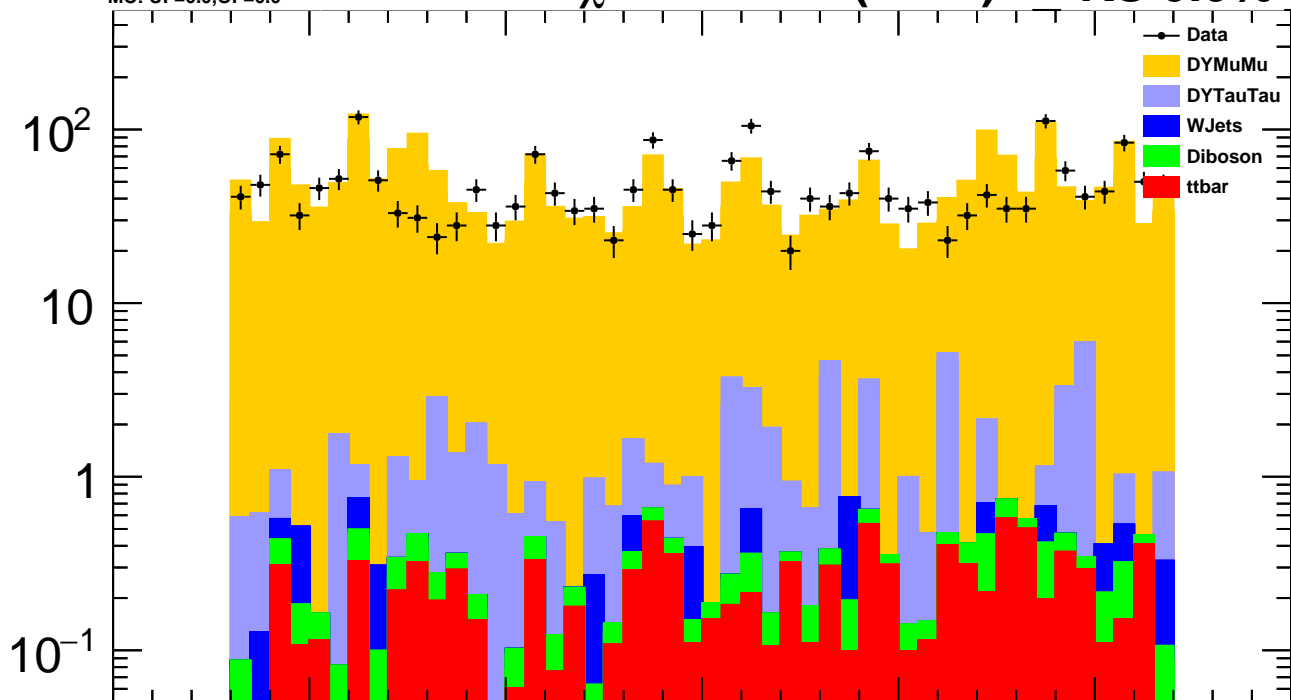


Data: UF=0,OF=0
MC: UF=0.0,OF=0.0

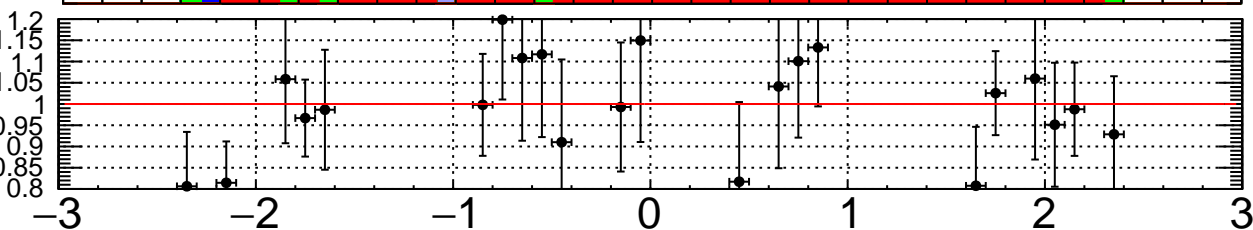
$\chi^2/\text{ndf}=5.51$ (0.0%)

KS 0.0%

Entry



data/Pred.

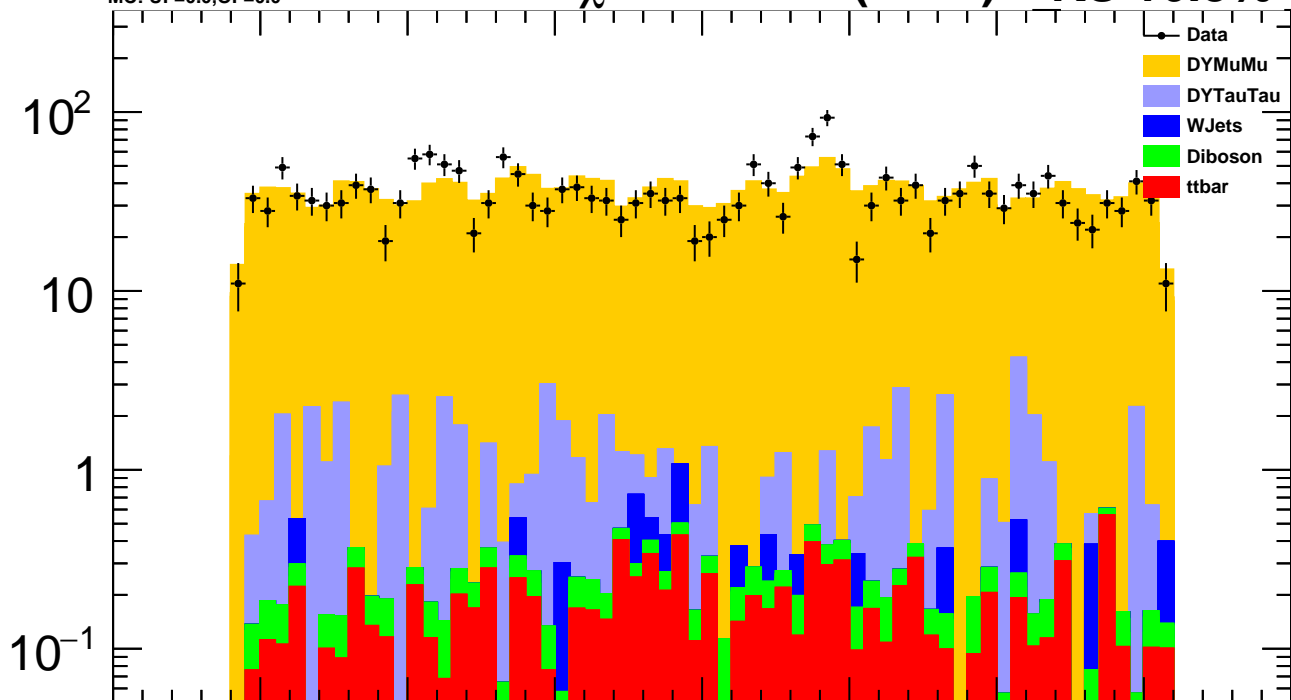


Muon(NOT Matched with Trigger) η

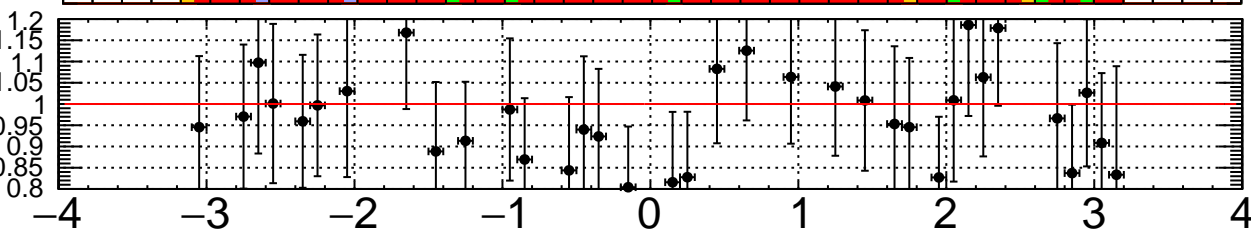
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0

$\chi^2/\text{ndf}=2.44$ (0.0%) KS 16.8%

Entry



data/Pred.



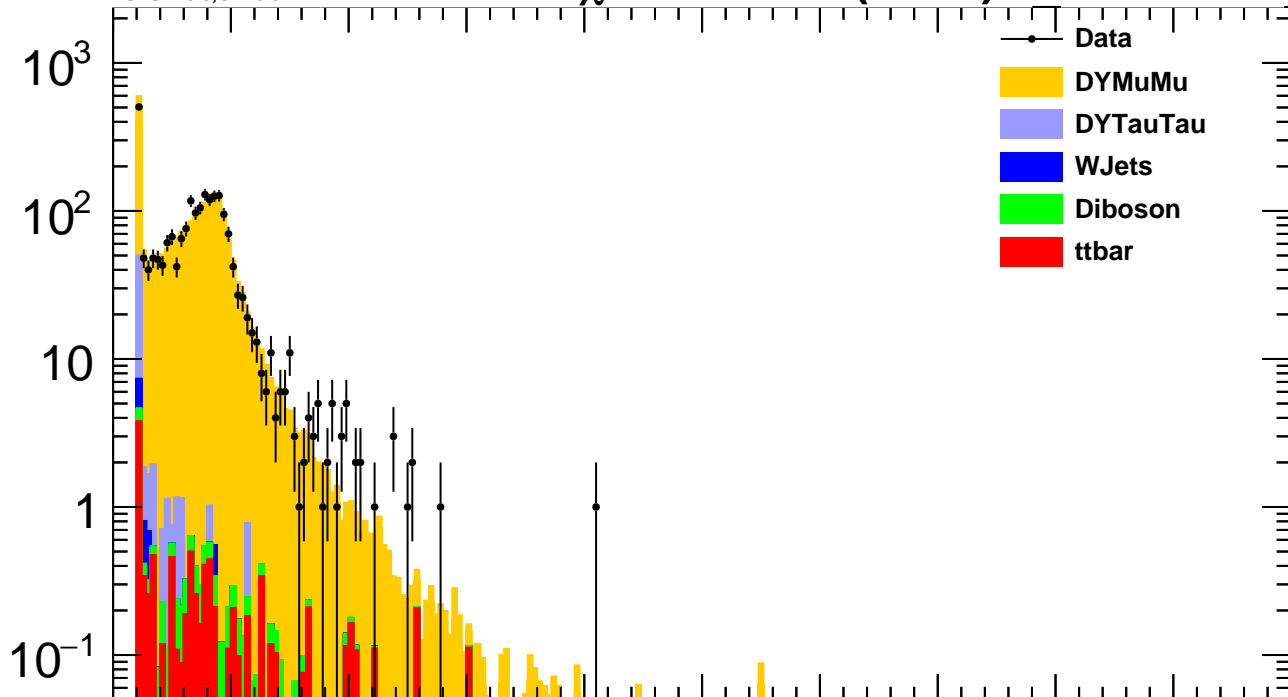
$\text{Muon(NOT Matched with Trigger) } \phi$

Entry

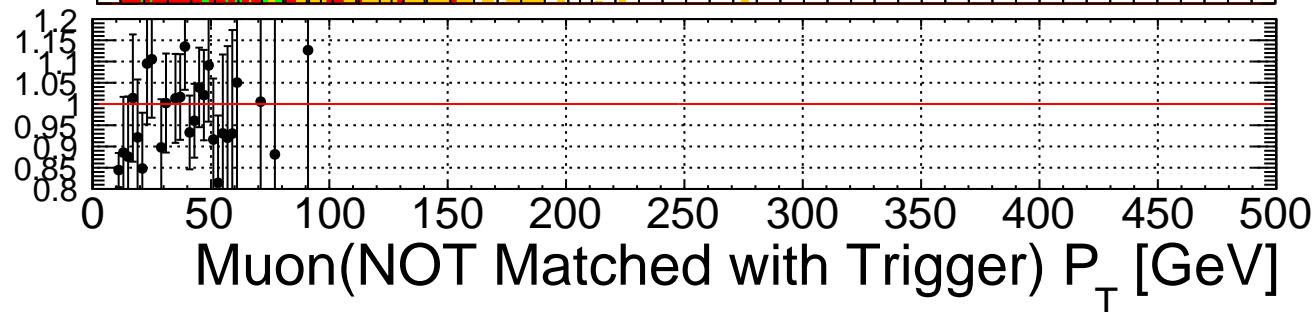
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.31$ (1.2%)

KS 0.1%

- Data
- DYMuMu
- DYTauTau
- WJets
- Diboson
- ttbar



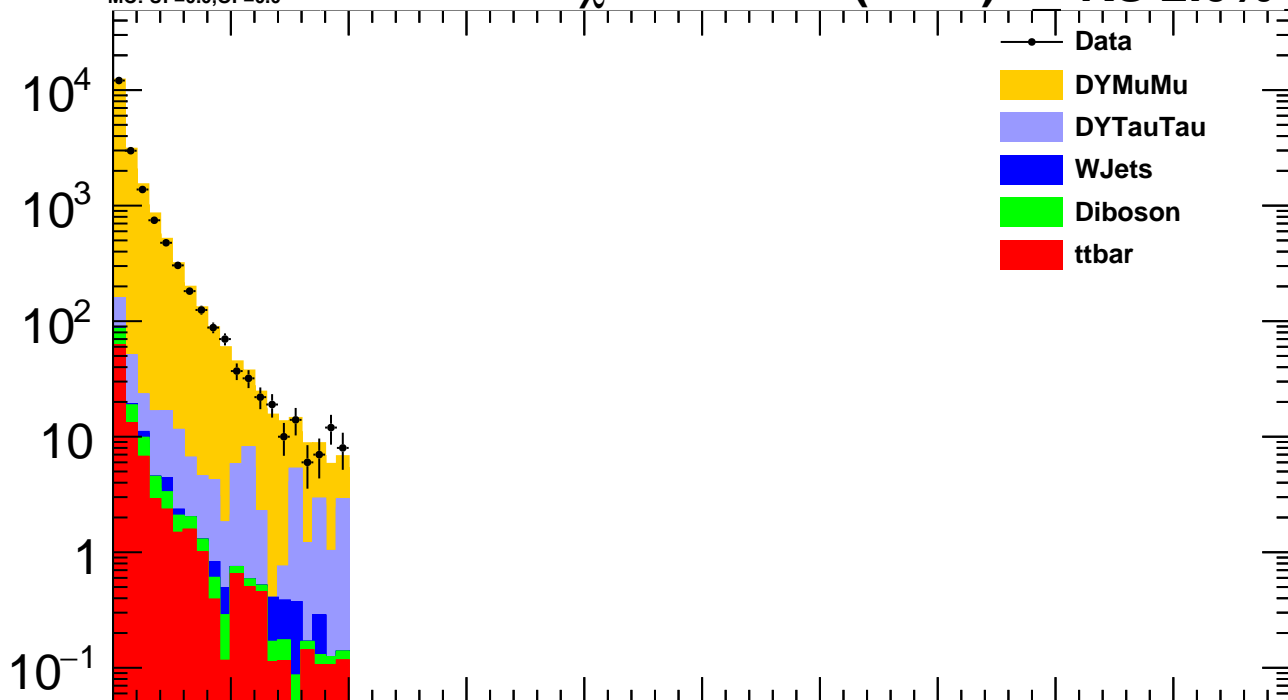
data/Pred.



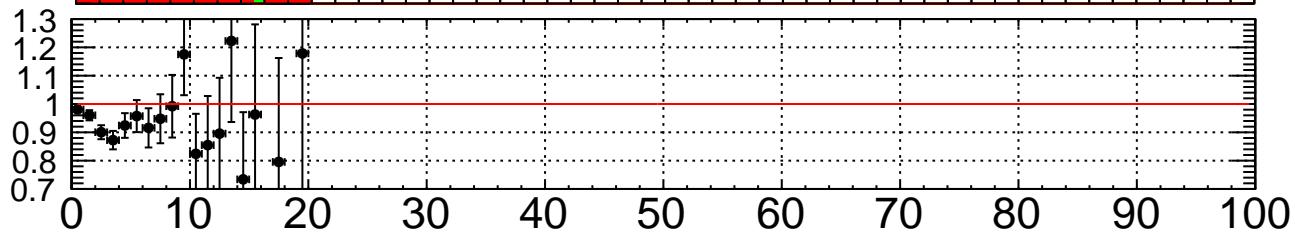
Entry

Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.63$ (4.0%)

KS 2.0%



data/Pred.

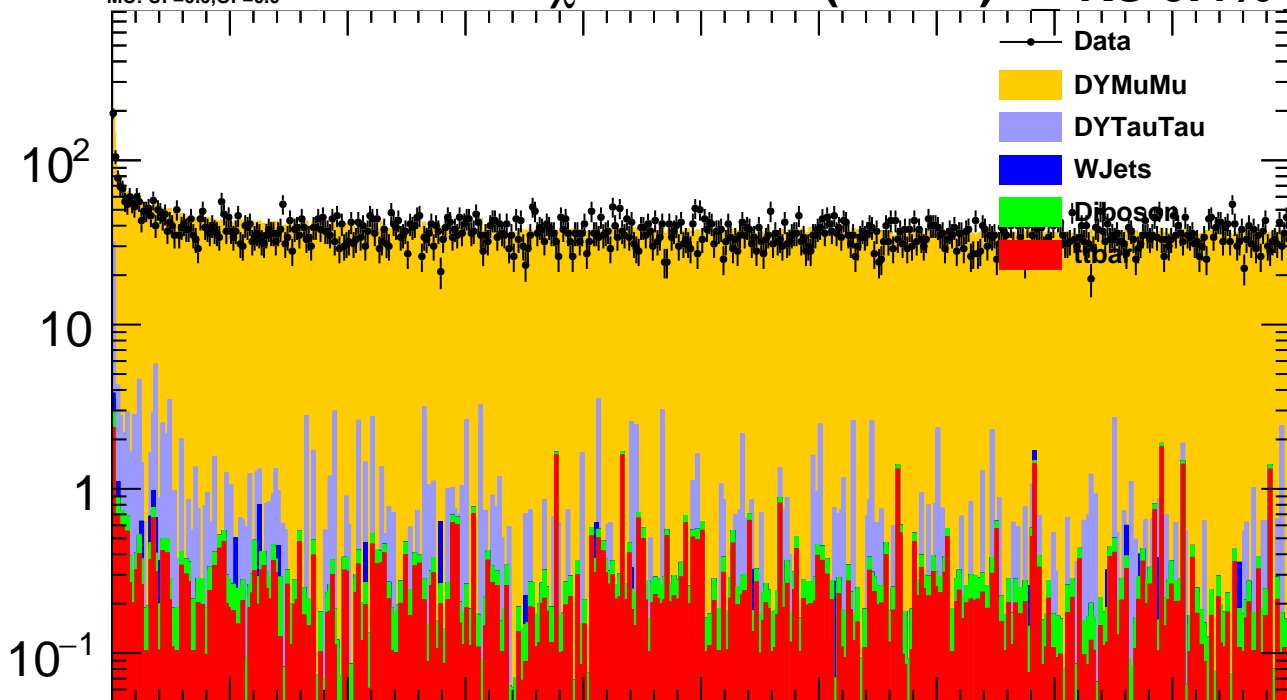
Vertex Normalized χ^2

Entry

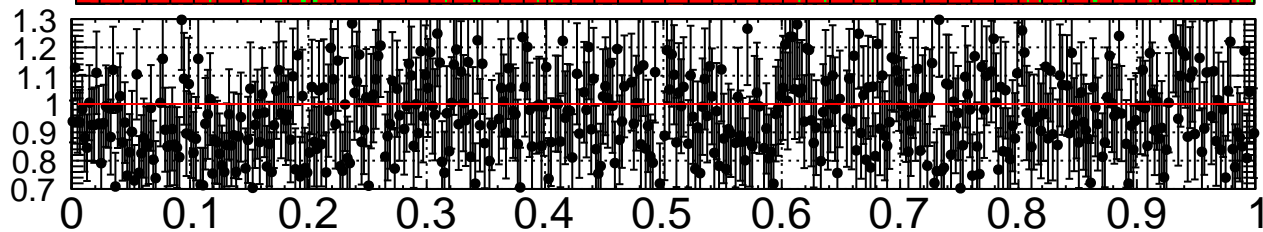
Data: UF=0,OF=0
MC: UF=0.0,OF=0.0 $\chi^2/\text{ndf}=1.00$ (48.8%)

KS 0.4%

—•— Data
DYMuMu
DYTauTau
WJets
Diboson
ttbar



data/Pred.



Vertex Probability