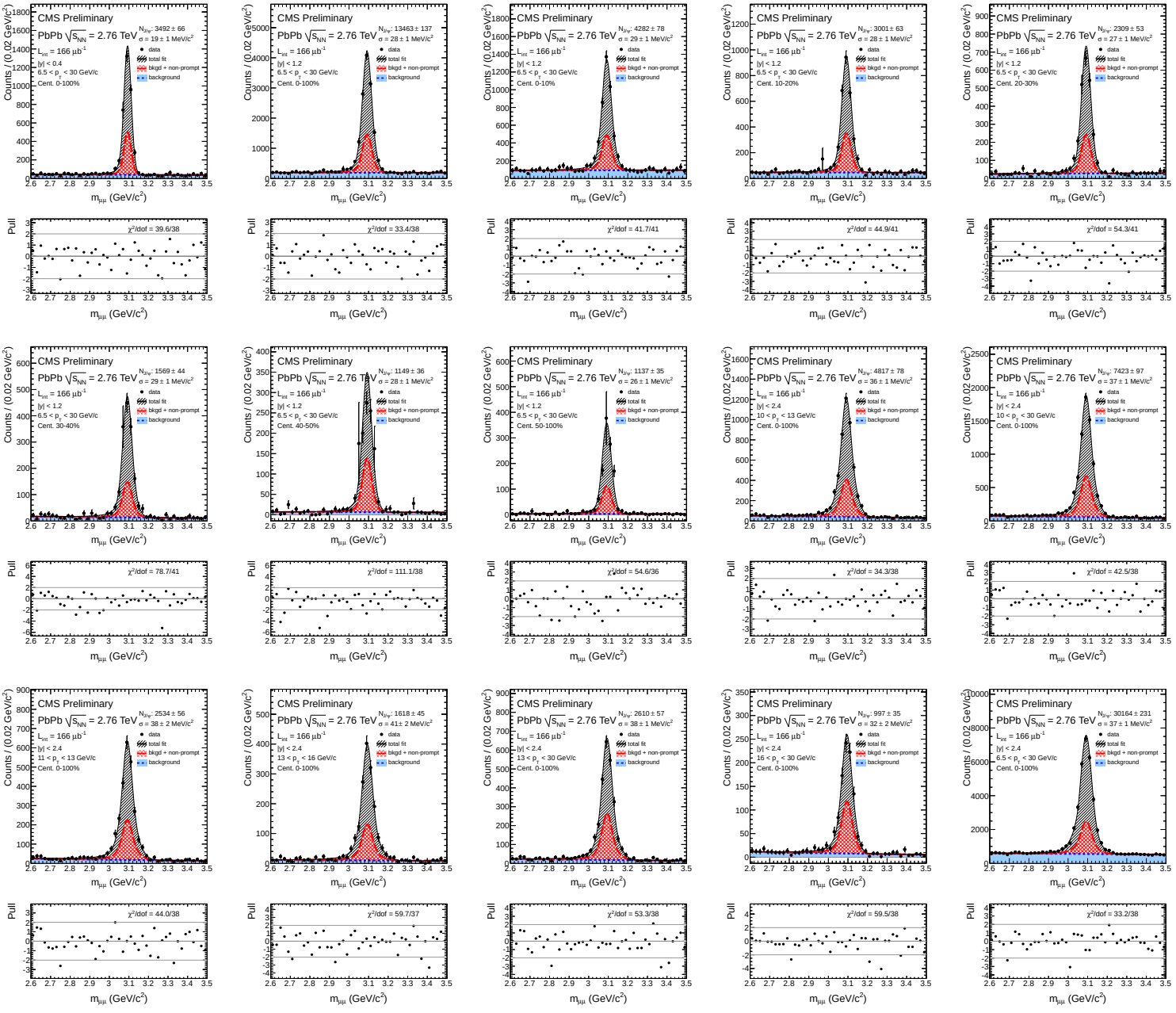
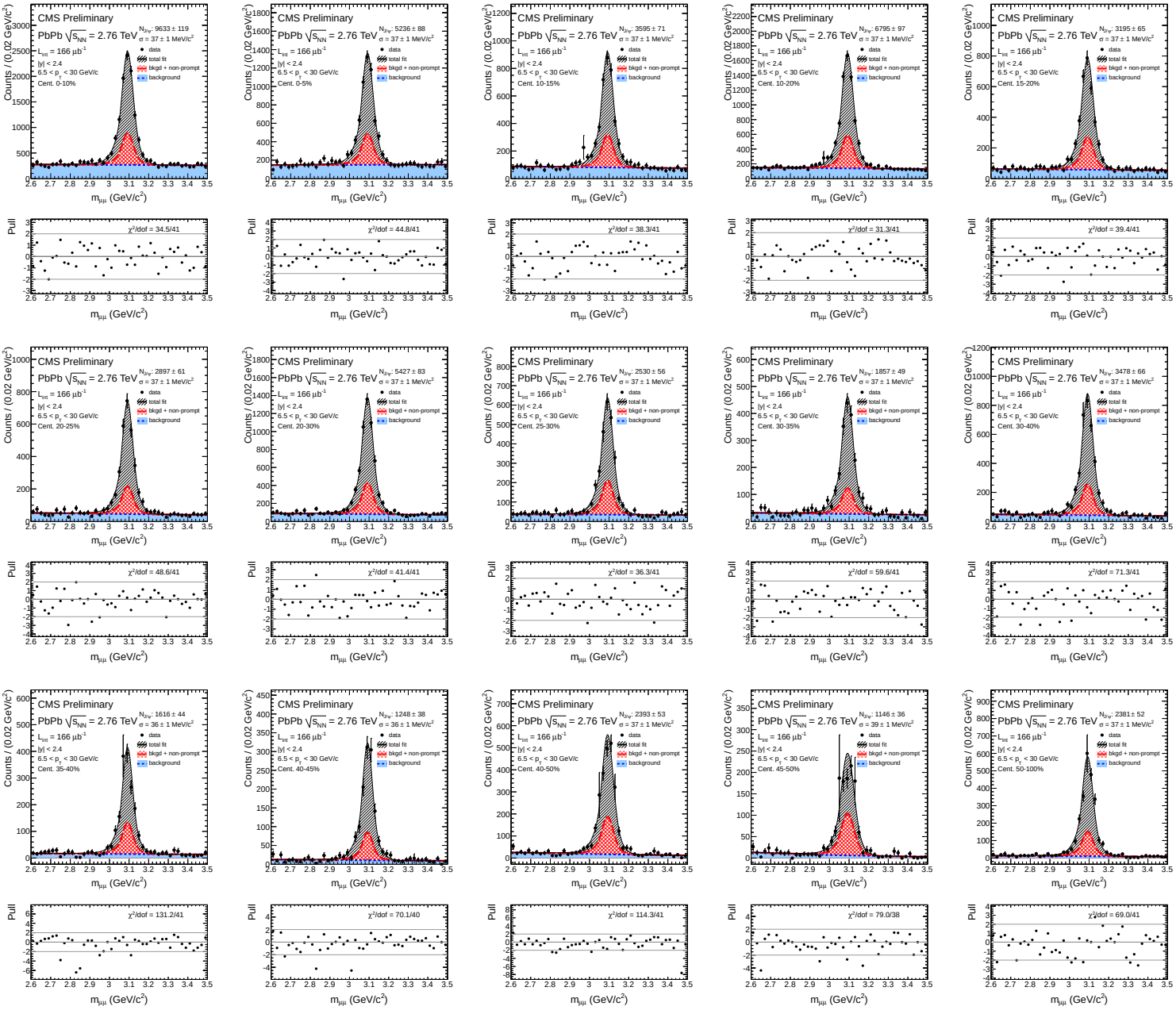
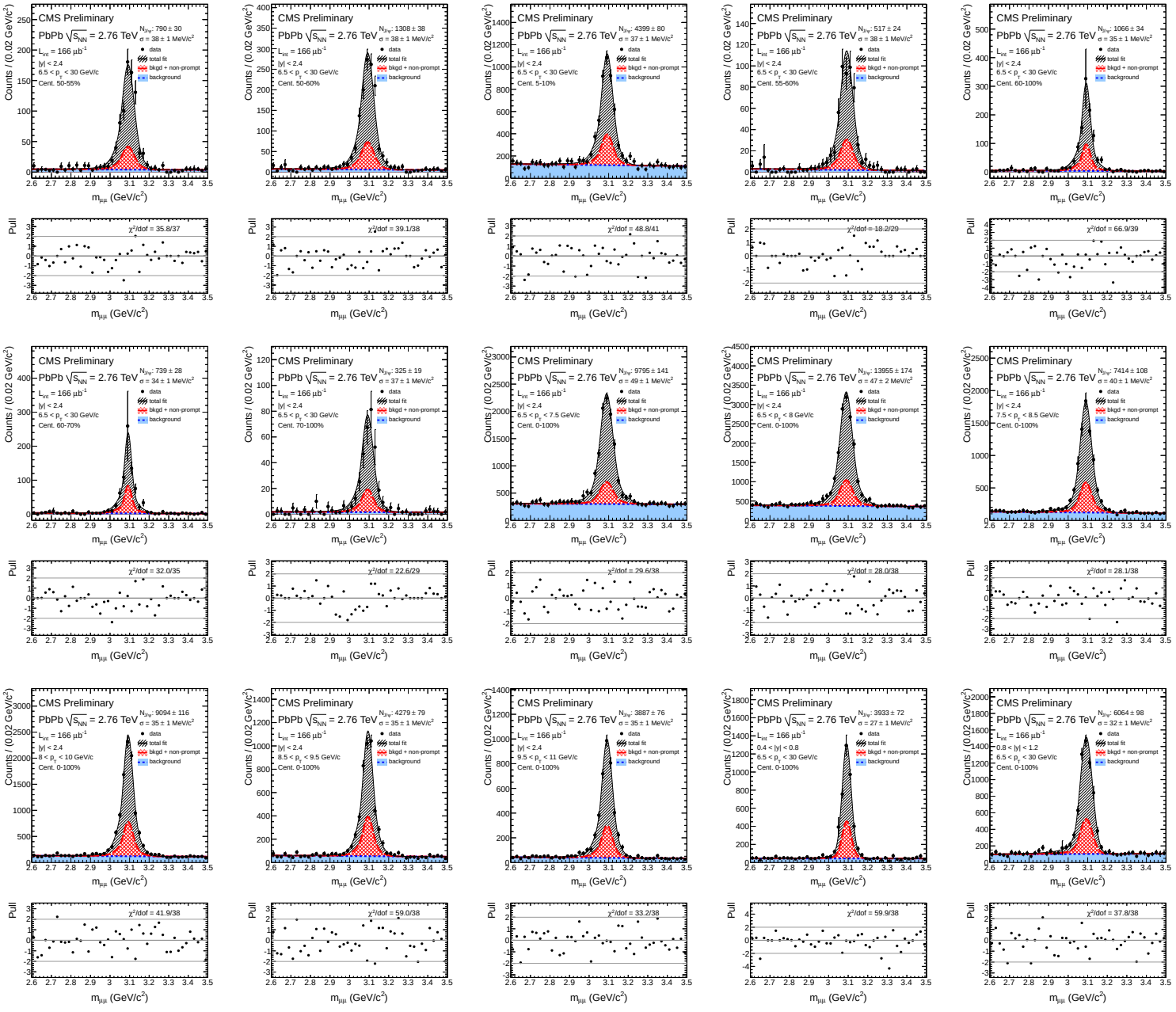
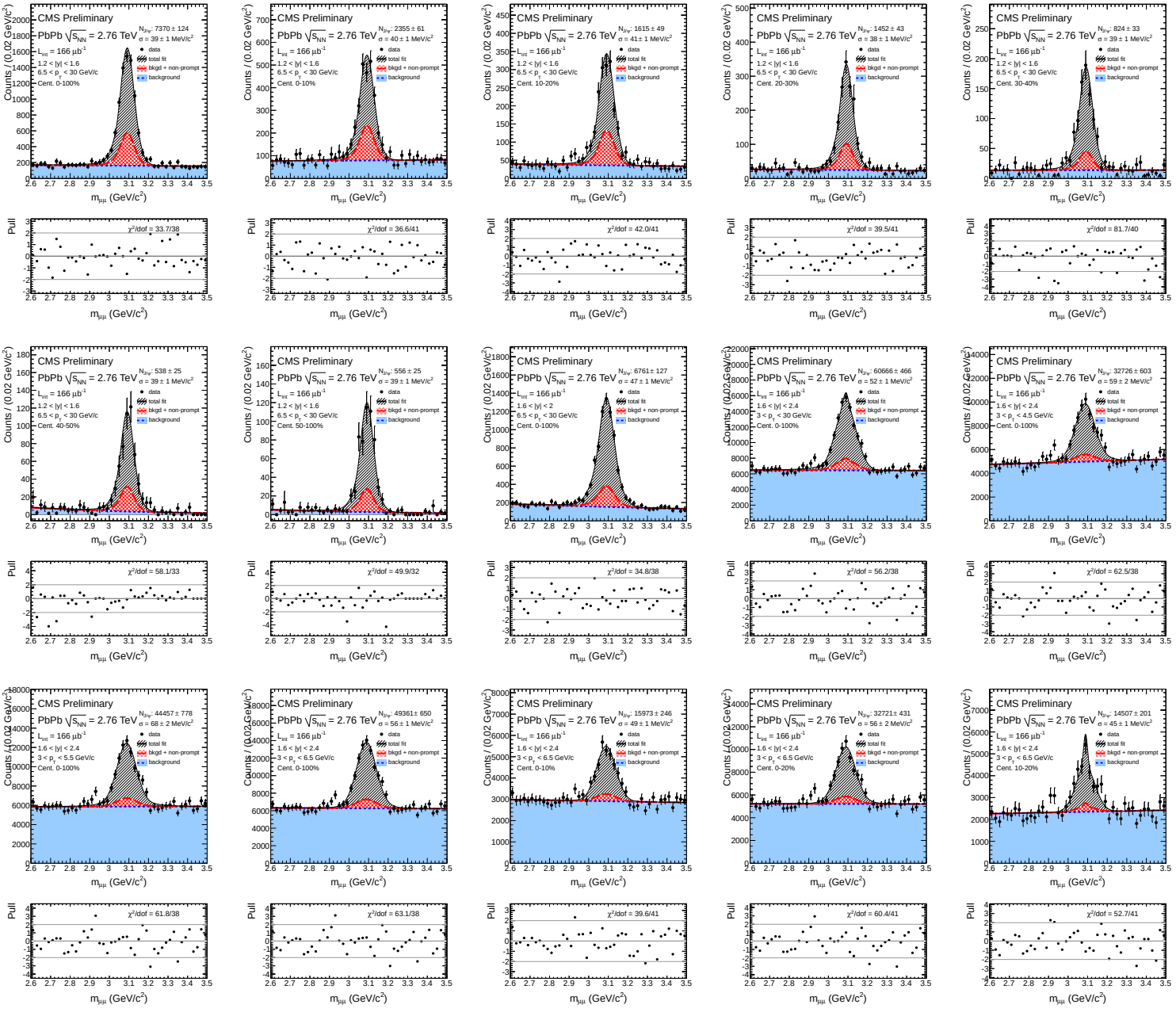
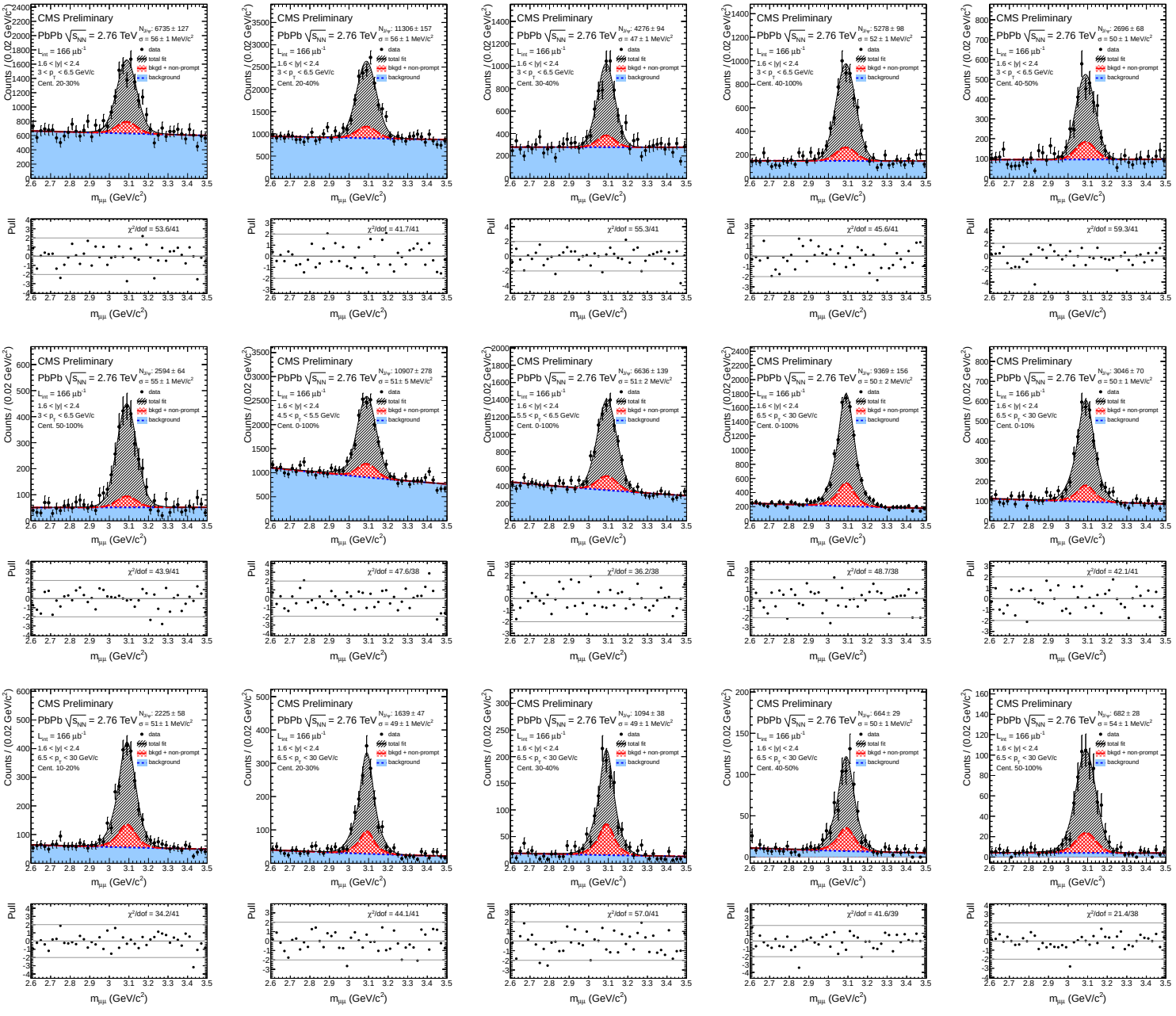
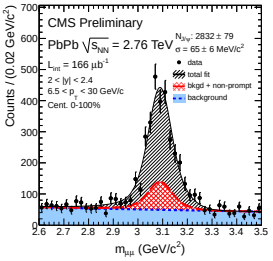

CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 0.4
6.5 < pT < 30 GeV/c
Cent. 0-100%
NJ/ψ: 3492 ± 66
σ = 19 ± 1 MeV/c2
data
total fit
bkgd + non-prompt
background
Counts / (0.02 GeV/c2)
mμμ (GeV/c2)
Pull
χ2/dof = 39.6/38
CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 1.2
6.5 < pT < 30 GeV/c
Cent. 0-100%
NJ/ψ: 13463 ± 137
σ = 28 ± 1 MeV/c2
χ2/dof = 33.4/38
CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 1.2
6.5 < pT < 30 GeV/c
Cent. 0-10%
NJ/ψ: 4282 ± 78
σ = 29 ± 1 MeV/c2
χ2/dof = 41.7/41
CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 1.2
6.5 < pT < 30 GeV/c
Cent. 10-20%
NJ/ψ: 3001 ± 63
σ = 28 ± 1 MeV/c2
χ2/dof = 44.9/41
CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 1.2
6.5 < pT < 30 GeV/c
Cent. 20-30%
NJ/ψ: 2309 ± 53
σ = 27 ± 1 MeV/c2
χ2/dof = 54.3/41
CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 1.2
6.5 < pT < 30 GeV/c
Cent. 30-40%
NJ/ψ: 1569 ± 44
σ = 29 ± 1 MeV/c2
χ2/dof = 78.7/41
CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 1.2
6.5 < pT < 30 GeV/c
Cent. 40-50%
NJ/ψ: 1149 ± 36
σ = 28 ± 1 MeV/c2
χ2/dof = 111.1/38
CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 1.2
6.5 < pT < 30 GeV/c
Cent. 50-100%
NJ/ψ: 1137 ± 35
σ = 26 ± 1 MeV/c2
χ2/dof = 54.6/36
CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 2.4
10 < pT < 13 GeV/c
Cent. 0-100%
NJ/ψ: 4817 ± 78
σ = 36 ± 1 MeV/c2
χ2/dof = 34.3/38
CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 2.4
10 < pT < 30 GeV/c
Cent. 0-100%
NJ/ψ: 7423 ± 97
σ = 37 ± 1 MeV/c2
χ2/dof = 42.5/38
CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 2.4
11 < pT < 13 GeV/c
Cent. 0-100%
NJ/ψ: 2534 ± 56
σ = 38 ± 2 MeV/c2
χ2/dof = 44.0/38
CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 2.4
13 < pT < 16 GeV/c
Cent. 0-100%
NJ/ψ: 1618 ± 45
σ = 41 ± 2 MeV/c2
χ2/dof = 59.7/37
CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 2.4
13 < pT < 30 GeV/c
Cent. 0-100%
NJ/ψ: 2610 ± 57
σ = 38 ± 1 MeV/c2
χ2/dof = 53.3/38
CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 2.4
16 < pT < 30 GeV/c
Cent. 0-100%
NJ/ψ: 997 ± 35
σ = 32 ± 2 MeV/c2
χ2/dof = 59.5/38
CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 2.4
6.5 < pT < 30 GeV/c
Cent. 0-100%
NJ/ψ: 30164 ± 231
σ = 37 ± 1 MeV/c2
χ2/dof = 33.2/38

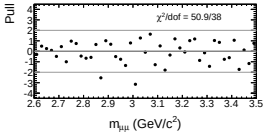

CMS Preliminary
PbPb √sNN = 2.76 TeV
Lint = 166 μb-1
|y| < 2.4
6.5 < pT < 30 GeV/c
Cent. 0-10%
NJ/ψ: 9633 ± 119
σ = 37 ± 1 MeV/c2
χ2/dof = 34.5/41
Cent. 0-5%
NJ/ψ: 5236 ± 88
σ = 37 ± 1 MeV/c2
χ2/dof = 44.8/41
Cent. 10-15%
NJ/ψ: 3595 ± 71
σ = 37 ± 1 MeV/c2
χ2/dof = 38.3/41
Cent. 10-20%
NJ/ψ: 6795 ± 97
σ = 37 ± 1 MeV/c2
χ2/dof = 31.3/41
Cent. 15-20%
NJ/ψ: 3195 ± 65
σ = 37 ± 1 MeV/c2
χ2/dof = 39.4/41
Cent. 20-25%
NJ/ψ: 2897 ± 61
σ = 37 ± 1 MeV/c2
χ2/dof = 48.6/41
Cent. 20-30%
NJ/ψ: 5427 ± 83
σ = 37 ± 1 MeV/c2
χ2/dof = 41.4/41
Cent. 25-30%
NJ/ψ: 2530 ± 56
σ = 37 ± 1 MeV/c2
χ2/dof = 36.3/41
Cent. 30-35%
NJ/ψ: 1857 ± 49
σ = 37 ± 1 MeV/c2
χ2/dof = 59.6/41
Cent. 30-40%
NJ/ψ: 3478 ± 66
σ = 37 ± 1 MeV/c2
χ2/dof = 71.3/41
Cent. 35-40%
NJ/ψ: 1616 ± 44
σ = 36 ± 1 MeV/c2
χ2/dof = 131.2/41
Cent. 40-45%
NJ/ψ: 1248 ± 38
σ = 36 ± 1 MeV/c2
χ2/dof = 70.1/40
Cent. 40-50%
NJ/ψ: 2393 ± 53
σ = 37 ± 1 MeV/c2
χ2/dof = 114.3/41
Cent. 45-50%
NJ/ψ: 1146 ± 36
σ = 39 ± 1 MeV/c2
χ2/dof = 79.0/38
Cent. 50-100%
NJ/ψ: 2381 ± 52
σ = 37 ± 1 MeV/c2
χ2/dof = 69.0/41
data
total fit
bkgd + non-prompt
background
Counts / (0.02 GeV/c2)
Pull
mμμ (GeV/c2)


CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 790 ± 30
σ = 38 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
|y| < 2.4
6.5 < p_T < 30 GeV/c
Cent. 50-55%
data
total fit
bkgd + non-prompt
background
Counts / (0.02 GeV/c²)
$m_{\mu\mu}$ (GeV/c²)
Pull
χ²/dof = 35.8/37
$N_{J/\psi}$: 1308 ± 38
σ = 38 ± 1 MeV/c²
6.5 < p_T < 30 GeV/c
Cent. 50-60%
χ²/dof = 39.1/38
$N_{J/\psi}$: 4399 ± 80
σ = 37 ± 1 MeV/c²
Cent. 5-10%
χ²/dof = 48.8/41
$N_{J/\psi}$: 517 ± 24
σ = 38 ± 1 MeV/c²
Cent. 55-60%
χ²/dof = 18.2/29
$N_{J/\psi}$: 1066 ± 34
σ = 35 ± 1 MeV/c²
Cent. 60-100%
χ²/dof = 66.9/39
$N_{J/\psi}$: 739 ± 28
σ = 34 ± 1 MeV/c²
Cent. 60-70%
χ²/dof = 32.0/35
$N_{J/\psi}$: 325 ± 19
σ = 37 ± 1 MeV/c²
Cent. 70-100%
χ²/dof = 22.6/29
$N_{J/\psi}$: 9795 ± 141
σ = 49 ± 1 MeV/c²
6.5 < p_T < 7.5 GeV/c
Cent. 0-100%
χ²/dof = 29.6/38
$N_{J/\psi}$: 13955 ± 174
σ = 47 ± 2 MeV/c²
6.5 < p_T < 8 GeV/c
Cent. 0-100%
χ²/dof = 28.0/38
$N_{J/\psi}$: 7414 ± 108
σ = 40 ± 1 MeV/c²
7.5 < p_T < 8.5 GeV/c
Cent. 0-100%
χ²/dof = 28.1/38
$N_{J/\psi}$: 9094 ± 116
σ = 35 ± 1 MeV/c²
8 < p_T < 10 GeV/c
Cent. 0-100%
χ²/dof = 41.9/38
$N_{J/\psi}$: 4279 ± 79
σ = 35 ± 1 MeV/c²
8.5 < p_T < 9.5 GeV/c
Cent. 0-100%
χ²/dof = 59.0/38
$N_{J/\psi}$: 3887 ± 76
σ = 35 ± 1 MeV/c²
9.5 < p_T < 11 GeV/c
Cent. 0-100%
χ²/dof = 33.2/38
$N_{J/\psi}$: 3933 ± 72
σ = 27 ± 1 MeV/c²
0.4 < |y| < 0.8
6.5 < p_T < 30 GeV/c
Cent. 0-100%
χ²/dof = 59.9/38
$N_{J/\psi}$: 6064 ± 98
σ = 32 ± 1 MeV/c²
0.8 < |y| < 1.2
6.5 < p_T < 30 GeV/c
Cent. 0-100%
χ²/dof = 37.8/38


CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 7370 ± 124
σ = 39 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.2 < |y| < 1.6
6.5 < p_T < 30 GeV/c
Cent. 0-100%
data
total fit
bkgd + non-prompt
background
Counts / (0.02 GeV/c²)
$m_{\mu\mu}$ (GeV/c²)
Pull
χ²/dof = 33.7/38
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 2355 ± 61
σ = 40 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.2 < |y| < 1.6
6.5 < p_T < 30 GeV/c
Cent. 0-10%
χ²/dof = 36.6/41
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 1615 ± 49
σ = 41 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.2 < |y| < 1.6
6.5 < p_T < 30 GeV/c
Cent. 10-20%
χ²/dof = 42.0/41
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 1452 ± 43
σ = 38 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.2 < |y| < 1.6
6.5 < p_T < 30 GeV/c
Cent. 20-30%
χ²/dof = 39.5/41
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 824 ± 33
σ = 39 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.2 < |y| < 1.6
6.5 < p_T < 30 GeV/c
Cent. 30-40%
χ²/dof = 81.7/40
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 538 ± 25
σ = 39 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.2 < |y| < 1.6
6.5 < p_T < 30 GeV/c
Cent. 40-50%
χ²/dof = 58.1/33
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 556 ± 25
σ = 39 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.2 < |y| < 1.6
6.5 < p_T < 30 GeV/c
Cent. 50-100%
χ²/dof = 49.9/32
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 6761 ± 127
σ = 47 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2
6.5 < p_T < 30 GeV/c
Cent. 0-100%
χ²/dof = 34.8/38
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 60666 ± 466
σ = 52 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
3 < p_T < 30 GeV/c
Cent. 0-100%
χ²/dof = 56.2/38
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 32726 ± 603
σ = 59 ± 2 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
3 < p_T < 4.5 GeV/c
Cent. 0-100%
χ²/dof = 62.5/38
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 44457 ± 778
σ = 68 ± 2 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
3 < p_T < 5.5 GeV/c
Cent. 0-100%
χ²/dof = 61.8/38
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 49361 ± 650
σ = 56 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
3 < p_T < 6.5 GeV/c
Cent. 0-100%
χ²/dof = 63.1/38
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 15973 ± 246
σ = 49 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
3 < p_T < 6.5 GeV/c
Cent. 0-10%
χ²/dof = 39.6/41
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 32721 ± 431
σ = 56 ± 2 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
3 < p_T < 6.5 GeV/c
Cent. 0-20%
χ²/dof = 60.4/41
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 14507 ± 201
σ = 45 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
3 < p_T < 6.5 GeV/c
Cent. 10-20%
χ²/dof = 52.7/41


CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 6735 ± 127
σ = 56 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
3 < p_T < 6.5 GeV/c
Cent. 20-30%
data
total fit
bkgd + non-prompt
background
Counts / (0.02 GeV/c²)
$m_{\mu\mu}$ (GeV/c²)
Pull
χ²/dof = 53.6/41
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 11306 ± 157
σ = 56 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
3 < p_T < 6.5 GeV/c
Cent. 20-40%
χ²/dof = 41.7/41
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 4276 ± 94
σ = 47 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
3 < p_T < 6.5 GeV/c
Cent. 30-40%
χ²/dof = 55.3/41
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 5278 ± 98
σ = 52 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
3 < p_T < 6.5 GeV/c
Cent. 40-100%
χ²/dof = 45.6/41
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 2696 ± 68
σ = 50 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
3 < p_T < 6.5 GeV/c
Cent. 40-50%
χ²/dof = 59.3/41
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 2594 ± 64
σ = 55 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
3 < p_T < 6.5 GeV/c
Cent. 50-100%
χ²/dof = 43.9/41
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 10907 ± 278
σ = 51 ± 5 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
4.5 < p_T < 5.5 GeV/c
Cent. 0-100%
χ²/dof = 47.6/38
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 6636 ± 139
σ = 51 ± 2 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
6.5 < p_T < 6.5 GeV/c
Cent. 0-100%
χ²/dof = 36.2/38
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 9369 ± 156
σ = 50 ± 2 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
6.5 < p_T < 30 GeV/c
Cent. 0-100%
χ²/dof = 48.7/38
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 3046 ± 70
σ = 50 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
6.5 < p_T < 30 GeV/c
Cent. 0-10%
χ²/dof = 42.1/41
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 2225 ± 58
σ = 51 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
6.5 < p_T < 30 GeV/c
Cent. 10-20%
χ²/dof = 34.2/41
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 1639 ± 47
σ = 49 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
6.5 < p_T < 30 GeV/c
Cent. 20-30%
χ²/dof = 44.1/41
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 1094 ± 38
σ = 49 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
6.5 < p_T < 30 GeV/c
Cent. 30-40%
χ²/dof = 57.0/41
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 664 ± 29
σ = 50 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
6.5 < p_T < 30 GeV/c
Cent. 40-50%
χ²/dof = 41.6/39
CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 682 ± 28
σ = 54 ± 1 MeV/c²
L_{int} = 166 μb⁻¹
1.6 < |y| < 2.4
6.5 < p_T < 30 GeV/c
Cent. 50-100%
χ²/dof = 21.4/38


CMS Preliminary
PbPb $\sqrt{s_{NN}}$ = 2.76 TeV
$N_{J/\psi}$: 2832 ± 79
σ = 65 ± 6 MeV/c²
L_{int} = 166 μb⁻¹
2 < |y| < 2.4
6.5 < p_T < 30 GeV/c
Cent. 0-100%
data
total fit
bkgd + non-prompt
background
Counts / (0.02 GeV/c²)
$m_{\mu\mu}$ (GeV/c²)


χ^2/dof = 50.9/38
Pull
$m_{\mu\mu}$ (GeV/c²)