

Systematic	Background	Signal	Variation
tt normalization	✓	-	5%
DY+jets normalization	✓	-	2-5%
multijet normalization (2 - ℓ channel)	✓	-	50%
Normalization of other background processes	✓	-	10-50%
Luminosity	✓	✓	2.5%
μ (e) identification and isolation	✓	✓	2(3)%
Jets misidentified as hadr. τ leptons	✓	-	10%
Leptons misidentified as hadr. τ leptons	✓	-	10%
Tau identification	✓	✓	5%
Top p_T reweighting	✓	-	Not applied/ applied twice
Z p_T	✓	-	Not applied/ applied twice
ISR reweighting	-	✓	
Muon energy scale	✓	✓	$\pm 1\%$
Electron energy scale	✓	✓	$\pm 1(2.5)\%$ for barrel (endcap)
τ energy scale	✓	✓	$\pm 3\%$
Jet energy scale	✓	✓	5-9%
B tagging	✓	-	1-10%
B tagging misidentification rate	✓	✓	$\pm 1\sigma$
p_T^{miss} recoil	✓	-	1-10%
Unclustered p_T^{miss}	✓	-	$\pm 1\sigma$
Fast- vs Fullsim p_T^{miss}	-	✓	15%
PDF	✓	✓	max variation
Q^2	✓	✓	max variation
Bin-by-bin uncert.	✓	✓	uncorrelated
Jets mis/ed as τ_h with varied JES	✓	-	$\pm 1\sigma$
Jets mis/ed as τ_h with varied muon energy scale	✓	-	$\pm 1\%$
Jets mis/ed as τ_h with varied electron energy scale	✓	-	1 (2.5)% for Barrel (EndCap)