

Source	Uncertainty range (%)	Correlated between 2016 and 2017	Impact on the $t\bar{t}Z$ cross section (%)
Integrated luminosity	2.5	×	2
PU modeling	1–2	✓	1
Trigger	2	×	2
Lepton ID efficiency	4.5–6	✓	4
Jet energy scale	1–9	✓	2
Jet energy resolution	0–1	✓	1
btagging light flavor	0–4	×	1
btagging heavy flavor	1–4	×	2
Choice in μ_R and μ_F	1–4	✓	1
PDF choice	1–2	✓	1
Color reconnection	1.5	✓	<1
Parton shower	1–8	✓	1
WZ cross section	10–20	✓	3
WZ + heavy flavor	8	✓	1
ZZ cross section	10	✓	1
$t(\bar{t})X$ background	10–15	✓	3
$X\gamma$ background	20	✓	1
Nonprompt background	30	✓	<1
Rare SM background	50	✓	2
Stat. unc. in nonprompt bkg.	5–50	×	<1
Stat. unc. in rare SM bkg.	5–100	×	<1
Total systematic uncertainty			6
Statistical uncertainty			5
Total			8