

Source	Uncertainty range (%)	Correlated in 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
B tagging light flavor	0–4	×	1
B tagging 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
$t(\bar{t})X$ bg.	10–15	✓	3
$X\gamma$ background	20	✓	1
Nonprompt background	30	✓	< 1
Rare SM background	50	✓	2
Stat. unc. in nonprompt bg.	5–50	×	< 1
Stat. unc. in rare SM bg.	5–100	×	< 1
Total uncertainty			7