

Source	Uncertainty	Samples	Impact	
			Up	Down
$t\bar{t}$ cross section	$\pm 20\%$	$t\bar{t}$	-4.6	+4.4%
Single top cross section	$\pm 30\%$	Single top	+1.2	-1.4%
Integrated luminosity	$\pm 1.8\%$	$t\bar{t}$, single top, signal	+1.6	-1.1%
Pileup	Shape (σ_{mb})	$t\bar{t}$, single top, signal	+0.3	-0.2%
Trigger prefiring	Shape (p_T, η)	$t\bar{t}$, single top, signal	+0.0	+0.1%
Jet energy scale	Shape (p_T)	$t\bar{t}$, single top, signal	+0.3	-0.6%
Jet energy resolution	Shape (p_T, η)	$t\bar{t}$, single top, signal	-0.4	-0.5%
Jet mass scale	Shape (m_W)	$t\bar{t}$, single top, signal	-0.1	-0.0%
Jet mass resolution	Shape (m_W)	$t\bar{t}$, single top, signal	+0.0	+0.9%
Wtagging	Shape (p_T)	Single top, signal	+0.9	-0.9%
Wtagging: p_T extrapolation	Shape (p_T)	Single top, signal	+4.9	-4.9%
Top tagging, merged	Shape (p_T)	$t\bar{t}$, single top, signal	+0.2	-0.2%
Top tagging, semimerged	Shape (p_T)	$t\bar{t}$, single top, signal	+1.1	-0.9%
Top tagging, not merged	Shape (p_T)	$t\bar{t}$, single top, signal	-0.1	+0.1%
Trigger	Shape (H_T)	$t\bar{t}$, single top, signal	+0.3	-0.4%
Top quark p_T correction c_1	Shape (p_T)	$t\bar{t}$	-0.3	+0.3%
Top quark p_T correction c_2	Shape (p_T)	$t\bar{t}$	-3.9	+3.5%
PDF	Shape (m_t, m_{tW})	Signal	+0.1	-0.1%
KDE bandwidth	Shape (m_t, m_{tW})	Multijet (from simulation)	-1.2	+0.2%
$R_{\text{ratio}}^{\text{SR}}(m_t, m_{tW})p_0$	Shape (m_t, m_{tW})	Multijet (from data)	-4.4	+0.0%
$R_{\text{ratio}}^{\text{SR}}(m_t, m_{tW})p_1$	Shape (m_t, m_{tW})	Multijet (from data)	-2.0	+2.2%
$R_{\text{ratio}}^{\text{SR}}(m_t, m_{tW})p_2$	Shape (m_t, m_{tW})	Multijet (from data)	+0.9	-0.8%
$R_{\text{ratio}}^{\text{SR}}(m_t, m_{tW})p_3$	Shape (m_t, m_{tW})	Multijet (from data)	+18.6	-18.8%
$R_{\text{ratio}}^{\text{tMR}}(m_t, m_{tt})p_0$	Shape (m_t, m_{tt})	Multijet (from data)	-0.4	+0.6%
$R_{\text{ratio}}^{\text{tMR}}(m_t, m_{tt})p_1$	Shape (m_t, m_{tt})	Multijet (from data)	-0.4	+0.6%
$R_{\text{ratio}}^{\text{tMR}}(m_t, m_{tt})p_2$	Shape (m_t, m_{tt})	Multijet (from data)	+0.5	-0.6%
$R_{\text{ratio}}^{\text{tMR}}(m_t, m_{tt})p_3$	Shape (m_t, m_{tt})	Multijet (from data)	-0.6	+0.6%