

| Sources | | Systematic uncertainty (%) | | | |
|--|--|----------------------------|----------|----------------|----------|
| | | 8 TeV 2012 | 2016 | 13 TeV 2017 | 2018 |
| Mass fit | Signal lineshape | 0.6 | | 2.3 | |
| | Fraction of two F_{DSCB} | 0.0–3.6 | | 0.0–5.6 | |
| | $\sigma_2^{\psi(2S)} / \sigma_1^{\psi(2S)}$ | 0.0–2.7 | | 0.0–6.8 | |
| | $\sigma_1^{\chi_{c1}(3872)} / \sigma_1^{\psi(2S)}$ | 0.2–3.6 | | 0.2–5.1 | |
| | $\sigma_2^{\chi_{c1}(3872)} / \sigma_2^{\psi(2S)}$ | 0.2–5.6 | | 0.2–6.2 | |
| | Background lineshape | 0.0–1.5 | | 0.0–3.7 | |
| t_z fit | t_z resolution function | 0.0–1.4 | 0.0–3.0 | 0.0–1.6 | 0.0–1.0 |
| | Fixed mean of t_z resolution | 0.0–0.4 | 0.0–1.0 | 0.0–0.8 | 0.0–0.6 |
| | Wrong PV | 0.0–2.8 | 0.0–4.1 | 0.0–3.6 | 0.0–1.8 |
| | Background shape | 2.4 | | 2.4 | |
| | Fixed pseudo-lifetime | 0.1–10.9 | 1.0–12.1 | 1.3–8.0 | 1.3–7.8 |
| Tracking | | 0.1–0.7 | 0.1–0.2 | 0.1–1.4 | 0.1–1.0 |
| Muon identification | | 0.0–6.1 | 0.0–1.8 | 0.0–1.8 | 0.0–1.5 |
| Pion identification | | 0.1–6.7 | 0.0–0.4 | 0.0–0.9 | 0.0–0.3 |
| Trigger thresholds | | – | 0.0–15.1 | 0.3–6.4 | 0.3–7.3 |
| Simulation weighting | | 4.5–9.3 | 3.6–7.4 | 3.2–8.9 | 3.2–6.1 |
| Global event requirements | | 0.5 | | 1.9 | |
| $M_{\pi^+\pi^-}$ spectrum | | 2.0 | | 2.0 | |
| Trigger efficiency | | 1.0 | | 1.0 | |
| Total systematic uncertainty | | 6.7–14.8 | 7.1–17.9 | 6.0–15.3 | 6.0–13.1 |
| Total statistical uncertainty: prompt | | 7–17 | 5–19 | 6–31 | 5–13 |
| Total statistical uncertainty: nonprompt | | 13–26 | 11–23 | 10–32 | 9–19 |