

Source	Type	Affected proc.	Channel			
			τ_μ 2018	τ_h 2018	τ_h 2017	τ_h 2016
Form factor	shape	$B_c^+ \rightarrow J/\psi \ell \nu_\ell$	✓	✓	✓	✓
TAUOLA model	shape	$B_c^+ \rightarrow J/\psi \tau^+ \nu_\tau$	—	✓	✓	✓
$H_b \rightarrow J/\psi X$ shape	shape	$H_b \rightarrow J/\psi X$ (data)	—	✓	✓	✓
Pileup weight	shape	All MC	✓	✓	✓	✓
B_c^+ lifetime	shape	All B_c^+ procs.	✓	✓	✓	✓
$B_c^+ \rightarrow$ others	shape	$B_c^+ \rightarrow$ others	—	✓	✓	✓
Finite MC size	shape	All	✓	✓	✓	✓
Triplet reco. eff.	norm.	$B_c^+ \rightarrow J/\psi \tau^+ \nu_\tau$	—	6.9% (✓)	6.9% (✓)	6.9% (✓)
$B_c^+ \rightarrow J/\psi D_s^{(*)+}$ normalization	norm.	$B_c^+ \rightarrow J/\psi D_s^{(*)+}$	38% (✓)	38% (✓)	38% (✓)	38% (✓)
$B_c^+ \rightarrow$ others normalization	norm.	$B_c^+ \rightarrow$ others	—	50% (✓)	50% (✓)	50% (✓)
Trigger ($\mu^+ \mu^-$)	norm.	All MC	10% (✓)	$10\%(\checkmark) \oplus 5\%$	10%	10%
Trigger (track)	norm.	All MC	—	10%	10%	10%
Trigger (J/ψ)	norm.	All MC	—	10%	10%	10%
Muon ID	norm.	All MC	4%	4%	4%	4%
Muon reco.	norm.	All MC	4% (✓)	4% (✓)	4%	4%
$H_b \rightarrow J/\psi X$ norm.	norm.	$H_b \rightarrow J/\psi X$ (data)	—	30%	30%	30%
B_c^+ MC norm.	norm.	All B_c^+	—	5%	30%	30%