Variable	Description
	Common variables
$\cos\alpha_{2D}(B^+)$	Cosine of the angle in the plane transverse to the beams between the momentum vector of the B^+ candidate and the line connecting the beam line and the SV.
$p(B^+ \text{ vtx})$	Probability of the SV kinematic fit.
L_{xy}/σ_{xy}	Significance of the SV displacement in the transverse plane with respect to the beam line.
$p_T(B^+)$	Transverse momentum of the B^+ candidate; in the electron channel it is divided by $m_{K^+e^+e^-}$.
$p_T(K^+)$	Transverse momentum of the K^+ candidate; in the electron channel it is divided by $m_{K^+e^+e^-}$.
	Muon channel variables
$\min \Delta R(\mu, K^+)$	$\Delta R = \sqrt{(\Delta\eta)^2 + (\Delta\phi)^2}$ distance between the K^+ candidate and the closest muon candidate.
$\min \Delta z(\mu, K^+)$	Δz distance between the points of origin of the K^+ candidate and the closest muon candidate along the beam line direction.
$\text{Iso}(\mu_{\text{lead}})$	PF isolation for the p_T-leading muon candidate, defined as a scalar p_T sum all PF candidates, excluding the muon candidate itself, within $\Delta R < 0.4$ of the muon candidate and corrected for pileup.
	Electron channel variables
$p_T(e_i)/m_{K^+e^+e^-}$, $i = 1, 2$	Transverse momenta of the two electron candidates, divided by $m_{K^+e^+e^-}$.
$\Delta z(e_i, K^+),\ i = 1, 2$	Longitudinal distance between the points of origin of each electron candidate and the kaon candidate.
$\frac{\lvert d_{3D}(K^+, e^+e^-)\rvert}{\sigma_{\lvert d_{3D}(K^+, e^+e^-)\rvert}}$	Kaon candidate 3D impact parameter significance with respect to the dielectron vertex.
$\Delta R(e^+, e^-)$	ΔR between the two electron candidates.
$\Delta R(e_i, K^+),\ i = 1, 2$	ΔR between each electron candidate and the kaon candidate.
$\frac{\lvert \mathbf{p}(e^+e^-)\times\mathbf{r}\rvert - \lvert \mathbf{p}(K^+)\times\mathbf{r}\rvert}{\lvert \mathbf{p}(e^+e^-)\times\mathbf{r}\rvert + \lvert \mathbf{p}(K^+)\times\mathbf{r}\rvert}$	Asymmetry of the momentum of the dielectron system and that of the K^+ momentum with respect to the B^+ candidate trajectory, where $\mathbf{r}$ is a unit vector connecting the PV and SV.
$\text{ID}(e_i,\ i = 1, 2)$	Electron ID BDT score for two electron candidates.
$I^{\text{rel}}_{\Delta R=0.4}(e_i),\ i = 1, 2$ and $I^{\text{rel}}_{\Delta R=0.4}(K^+)$	Relative track-based isolation of the two electron candidates and the K^+ candidate, respectively, defined as a scalar p_T sum of all additional tracks in a $\Delta R < 0.4$ cone around the candidate, divided by the candidate's p_T.