

Mode	Preselection
common for all $X_b \rightarrow Y_s \mu \mu$	$\mu_{1,2}$ identification and $ \Delta z(\mu_1, \mu_2) < 1.0 \text{ cm}$, $\text{prob}(X_b \text{ vertex}) > 10^{-3}$, $\cos \alpha > 0.90$, $p_T(K/\pi/K_S^0/\Lambda) > 0.7 \text{ GeV}$, $ \text{IP}_{3D}(K/\pi/K_S^0/\Lambda) < 0.045 \text{ cm}$, $ \Delta z(\mu; K/\pi/K_S^0/\Lambda) < 1.0 \text{ cm}$ & $m(\mu, h \rightarrow K, \pi) > 2.0 \text{ GeV}$
$B^+ \rightarrow K^+ \mu \mu$	$m(\mu, h \rightarrow \mu \mu) < 3.0$ or $3.2 < m(\mu, h \rightarrow \mu \mu)$
$B^0 \rightarrow K_S^0 \mu \mu$	$q_T^+ > 0.105 \text{ GeV}$
$B^+ \rightarrow K^{*+} \mu \mu$	$q_T^+ > 0.105 \text{ GeV}$ & $0.742 < m(K_S^0 \pi^+) < 1.042 \text{ GeV}$
$B^0 \rightarrow K^{*0} \mu \mu$	$0.742 < m(K \pi) < 1.042 \text{ GeV}$
$B_s^0 \rightarrow \phi \mu \mu$	$1.01 < m(KK) < 1.03 \text{ GeV}$
$\Lambda_b^0 \rightarrow \Lambda \mu \mu$	$q_T^+ < 0.105 \text{ GeV}$