

Variable	Requirement	Targeted background
$[z(3\pi) - z(B^0)]/\sigma_{(z(3\pi)-z(B^0))}$	> 4	prompt
$p_T(\pi), \pi$ from 3π	> 250 MeV/ c	all
3π vertex χ^2	< 10	combinatorial
$\chi_{\text{IP}}^2(\pi), \pi$ from 3π	> 15	combinatorial
$\chi_{\text{IP}}^2(\bar{D}^0)$	> 10	charm
$[z(3\pi) - z(\text{PV})]/\sigma_{(z(3\pi)-z(\text{PV}))}$	> 10	charm
$r_{3\pi}$	$\in [0.2, 5.0]$ mm	spurious 3π
$\text{PV}(\bar{D}^0)$	$= \text{PV}(3\pi)$	charm/combinatorial
number of B^0 candidates	$= 1$	all
$\Delta m \equiv m(D^{*-}) - m(\bar{D}^0)$	$\in [143, 148]$ MeV/ c^2	combinatorial