



Figure 1: This figure shows the invariant mass distributions of charm candidates in 5 pb^{-1} of collision data, in the mode $D^{*+} \rightarrow D^0\pi^+$, $D^0 \rightarrow K^-\pi^+$. On the left is a 2-D plot of ΔM and $M(K\pi)$, on the upper right is ΔM for $1.845 < M(K\pi) < 1.885 \text{ GeV}/c^2$ and on the lower right is $M(K\pi)$ for $0.144 < \Delta M < 0.146 \text{ GeV}/c^2$. Events are required to contain at least three good tracks to purify the sample with processes of the type $e^+e^- \rightarrow \text{hadrons}$, while rejecting beam induced background, Bhabha scattering, and other low multiplicity background sources. The charged kaon and pion tracks are required to have impact parameters, $|d_0|$ and $|z_0|$ less than 0.5 cm and 3.0 cm respectively. No particle identification criteria are applied. The D^* candidates are required to have a centre-of-mass momentum of greater than $2.5 \text{ GeV}/c$ to select $c\bar{c}$ events. The internal document reference is BELLE2-NOTE-PH-2018-004.