$Z_m(\mu = 2.000 \text{ GeV})$ $Z_m(am_q) = k_1 + k_2 am_q \log(am_q) + k_3 (am_q)^2$ **C**1 F1S 6 fit p-value:0.56 fit *p*-value:0.06 fit *p*-value:0.00 2.6 $---am_q^* (M_{\eta_c}^* = 2.4 \text{ GeV})$ $--am_q^* (M_{\eta_c}^* = 2.4 \text{ GeV})$ $--am_q^* (M_{\eta_c}^* = 2.4 \text{ GeV})$ 5.0 - $---am_q^* (M_{\eta_c}^* = 2.6 \text{ GeV})$ $---am_q^* (M_{\eta_c}^* = 2.6 \text{ GeV})$ $---am_q^* (M_{\eta_c}^* = 2.6 \text{ GeV})$ $---am_q^*(M_{\eta_c}^* = PDG)$ $--am_q^* (M_{\eta_c}^* = PDG)$ $--am_q^* (M_{\eta_c}^* = PDG)$ $\mathbf{\underline{\bullet}}$ simulated am_q 4.5 simulated am_q simulated am_q 2.4 -4.0 2.2 -3.5 3.0 · 2.0 2.5 -1.8 -2.0 1.6 1.5 -0.2 0.2 0.3 0.4 0.2 0.5 0.3 0.0 0.4 0.1 0.3 0.4 0.0 0.1 0.0 0.1

 am_q

 am_q

 am_q