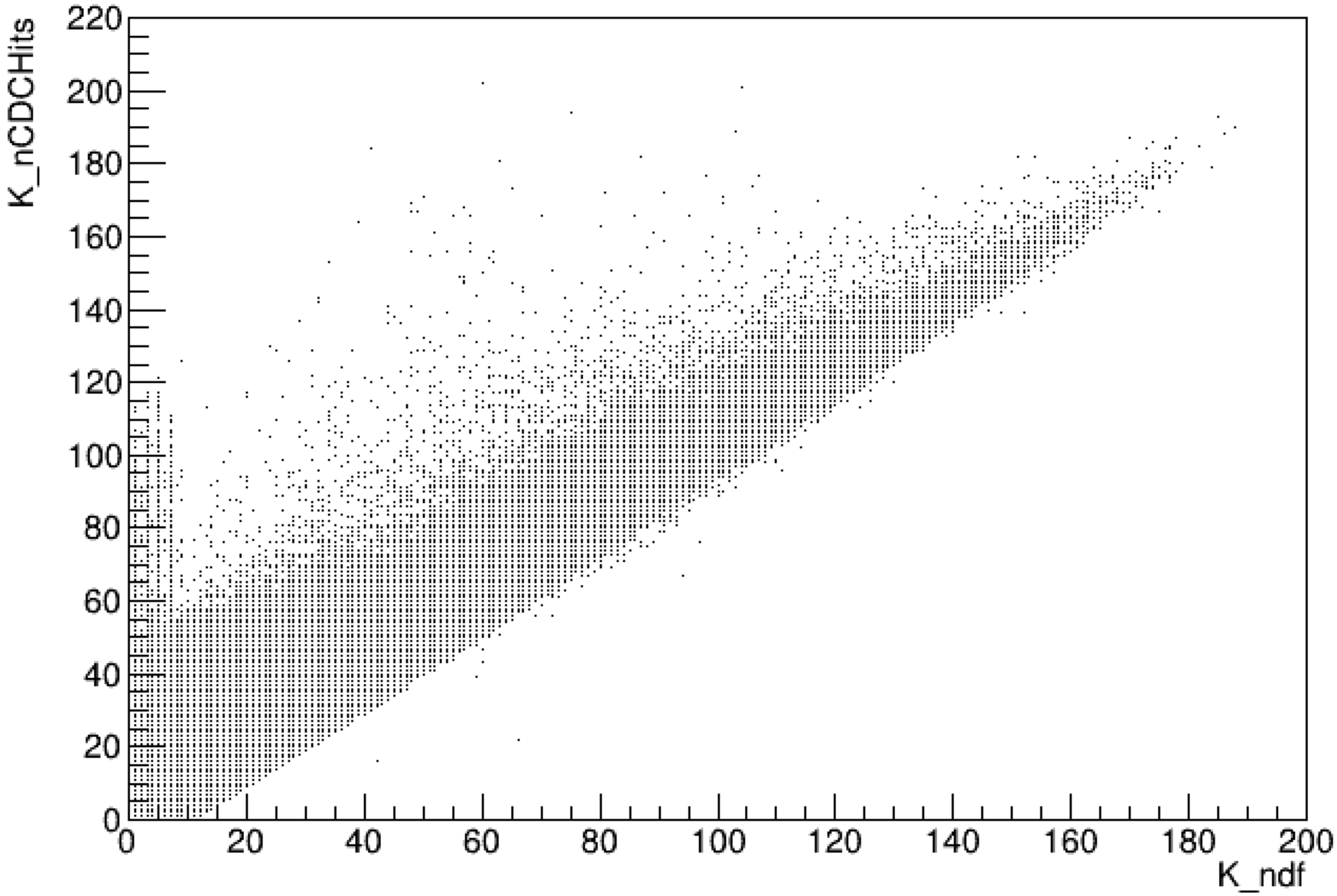
$\mathcal{A}_{\mathrm{det}}(K\pi)$ closure-test with MC: CDChits vs ndf



$\mathcal{A}_{\mathrm{det}}(K\pi)$ closure-test with MC (using ndf of Kaon)

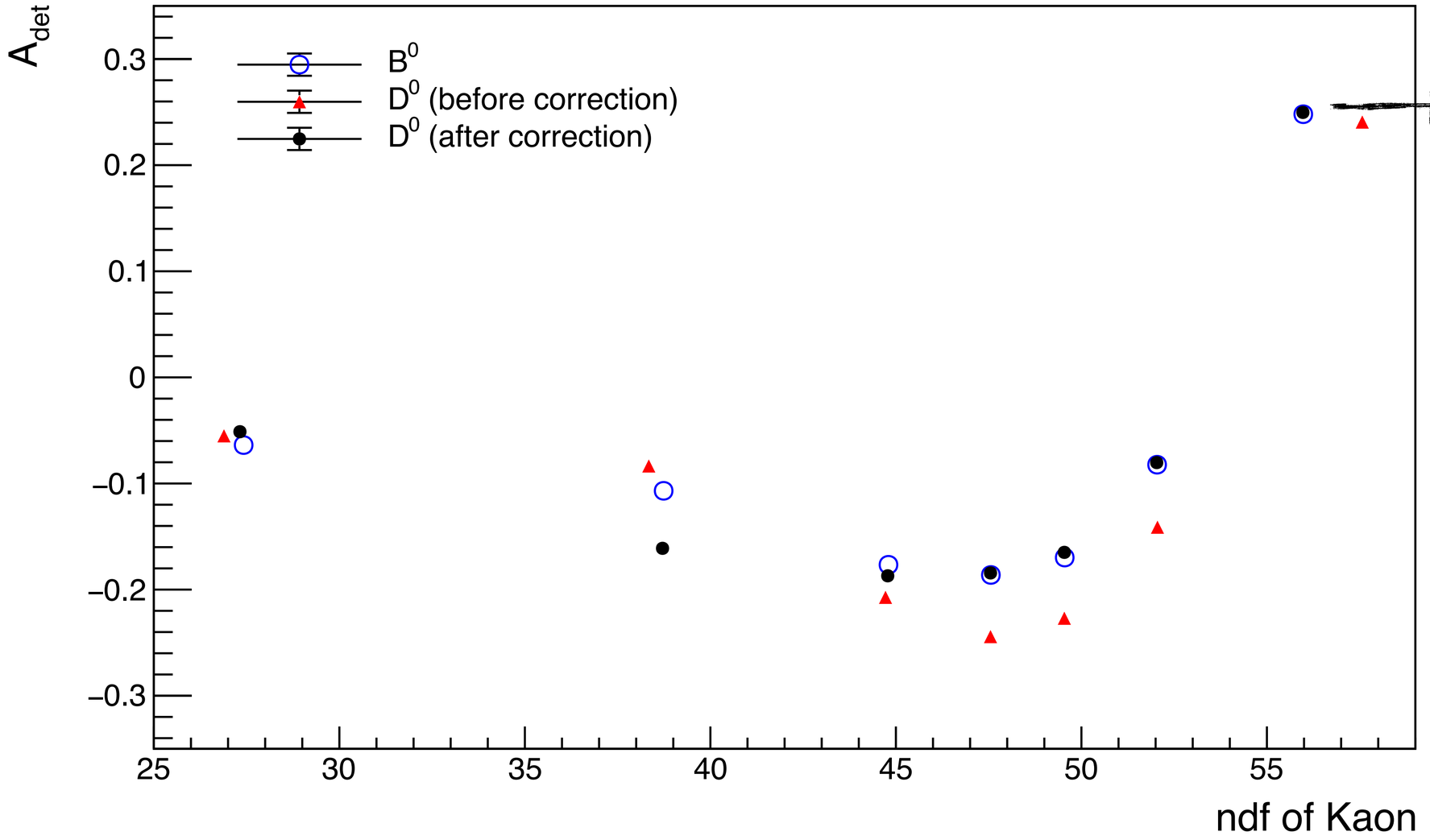
- Consider $B^0 \to K\pi$ decays (CS>0.95, KaonID>0.25, ndf of Kaon>=20).

  $\mathcal{A}_{\mathrm{det}}(K\pi) = 0.0002 \pm 0.0015$ (target).

- $D^0 \to K\pi$ control channel (CS>0.50, KaonID>0.25, ndf of Kaon>=20.).

  $\mathcal{A}_{\mathrm{det}}(K\pi) = -0.0096 \pm 0.0007$ (start value).

$\mathscr{A}_{\mathrm{det}}(K\pi)$ closure-test with MC (using ndf of Kaon)



$\mathscr{A}_{det}$ from $D^0 \to K\pi$ after the correction: match the target value.

$\mathscr{A}_{\mathrm{det}}(K\pi)$ closure-test with MC (using ndf of Kaon)

- Average $\mathscr{A}_{det}(K\pi)$ values from corrected D^0 sample, considering ndf(K) distribution of B^0:

$$\mathscr{A}_{det}(K\pi) = 0.0205 \pm 0.0007 \text{ (after correction)}$$

in disagreement with

$$\mathscr{A}_{det}(K\pi) = 0.0002 \pm 0.0015 \text{ (target)}$$