

Study of track DCA distributions with DIS events

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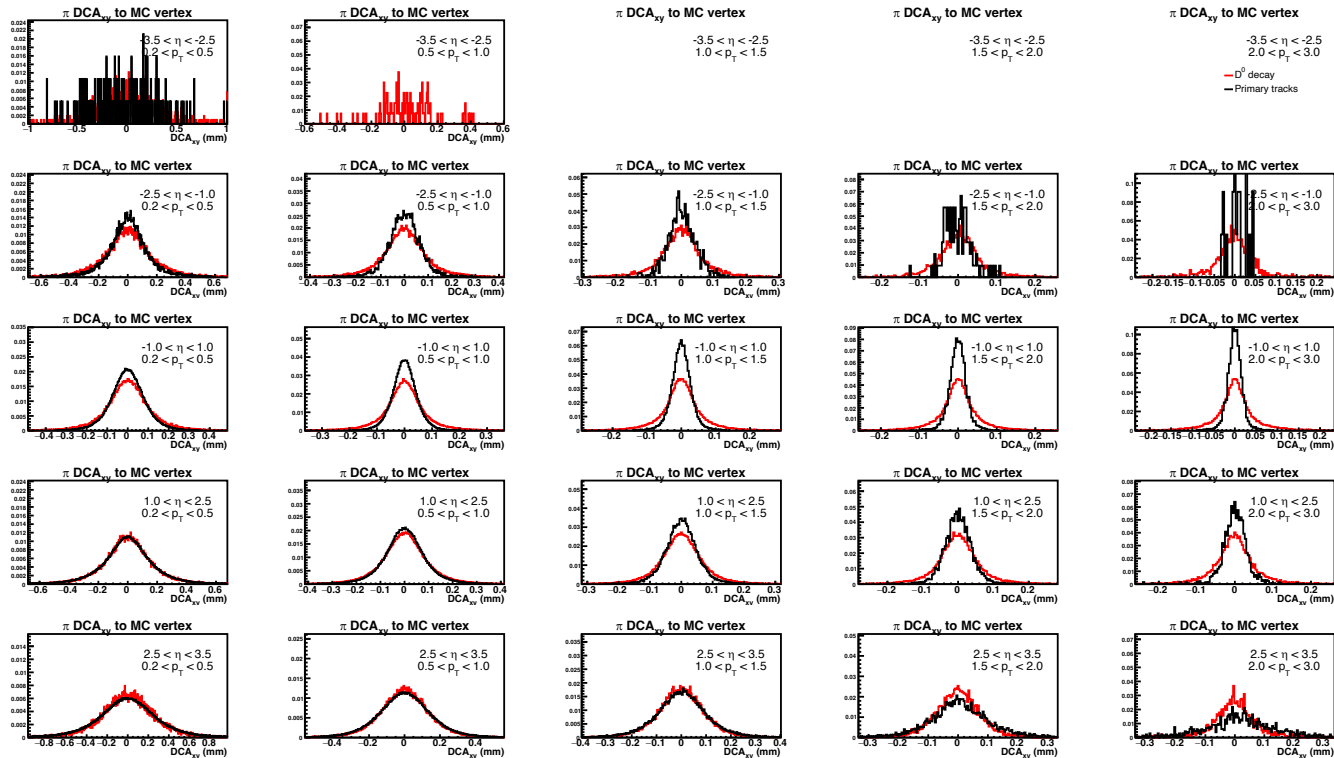
Primary vs. secondary tracks

Analysis setup

- Simulation sample
 - D0 events
 - ep @ 10x100
 - $Q^2 > 1 \text{ (GeV/c)}^2$
 - Simulation campaign: 25.04.1
- Track selection
 - Primary vs. secondary tracks
 - Truth PID

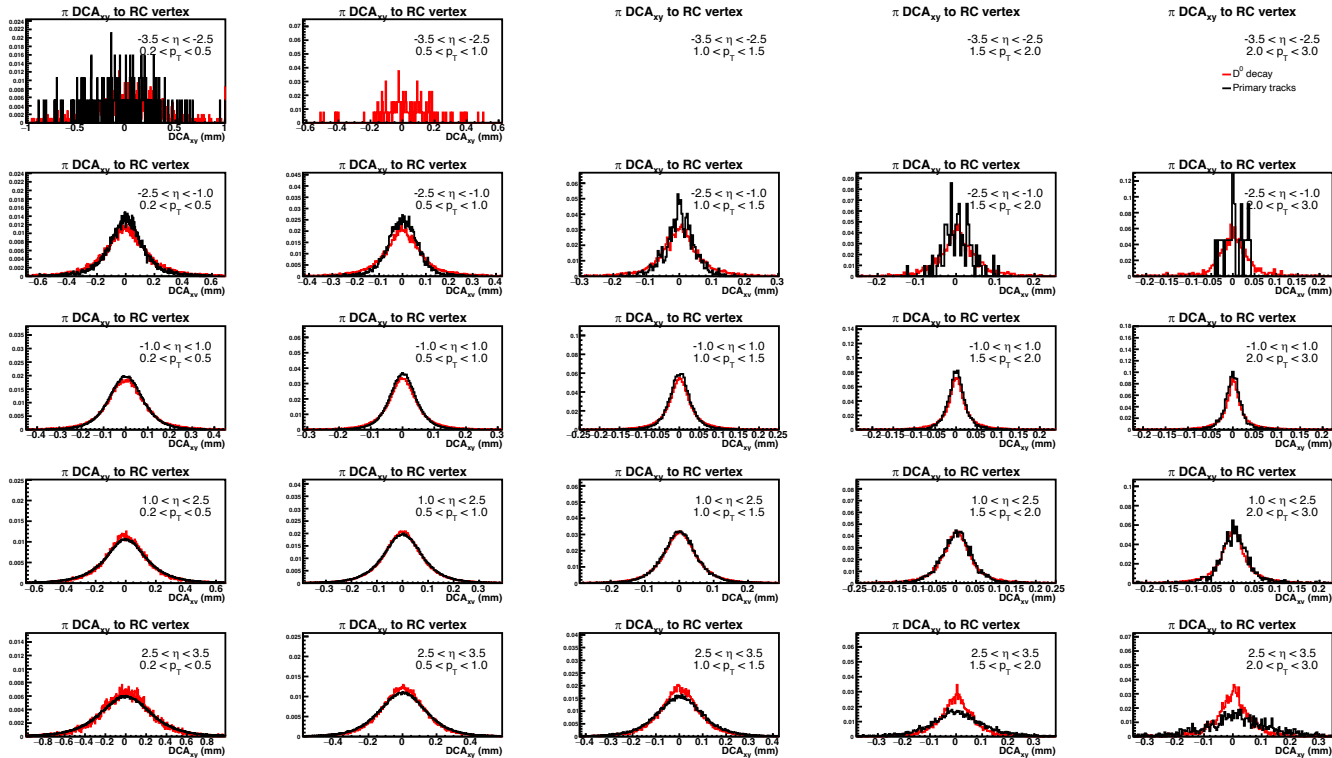
π DCA_{xy}

MC vertex



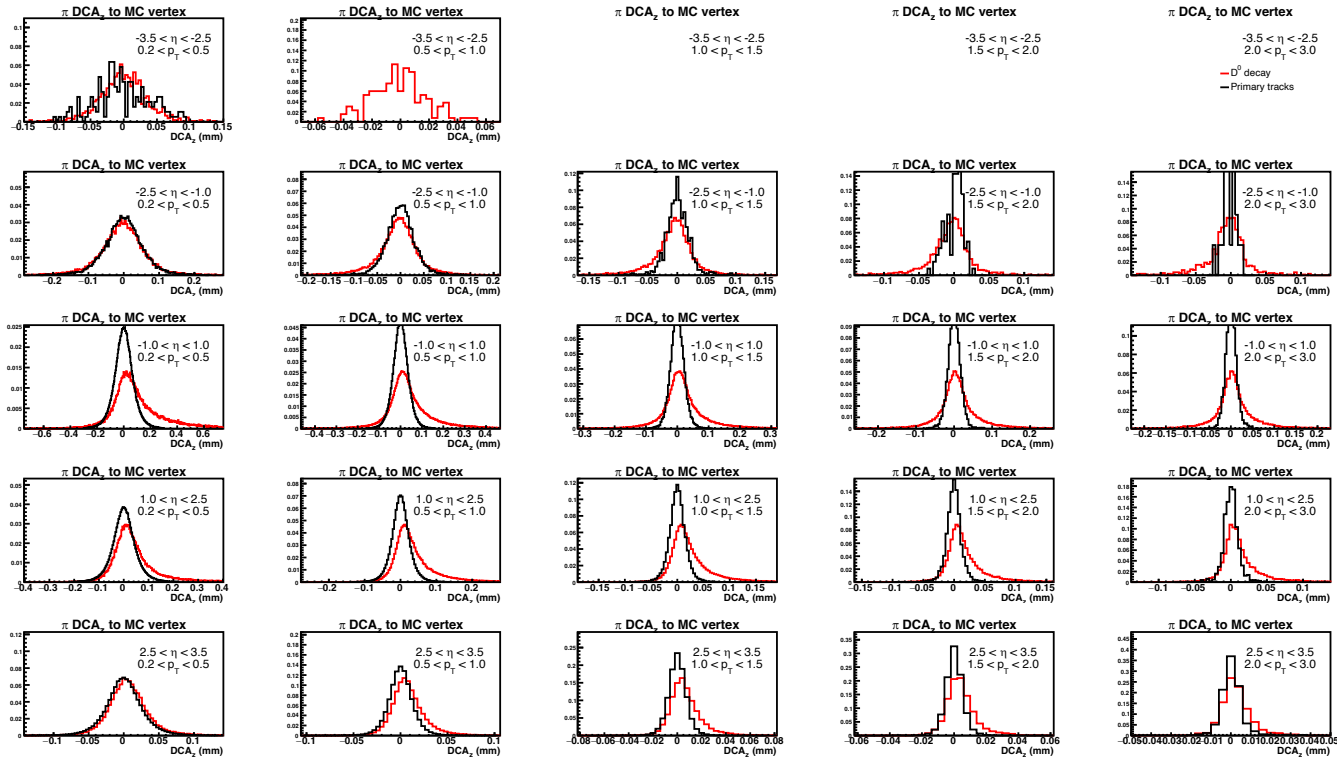
π DCA_{xy}

RC vertex



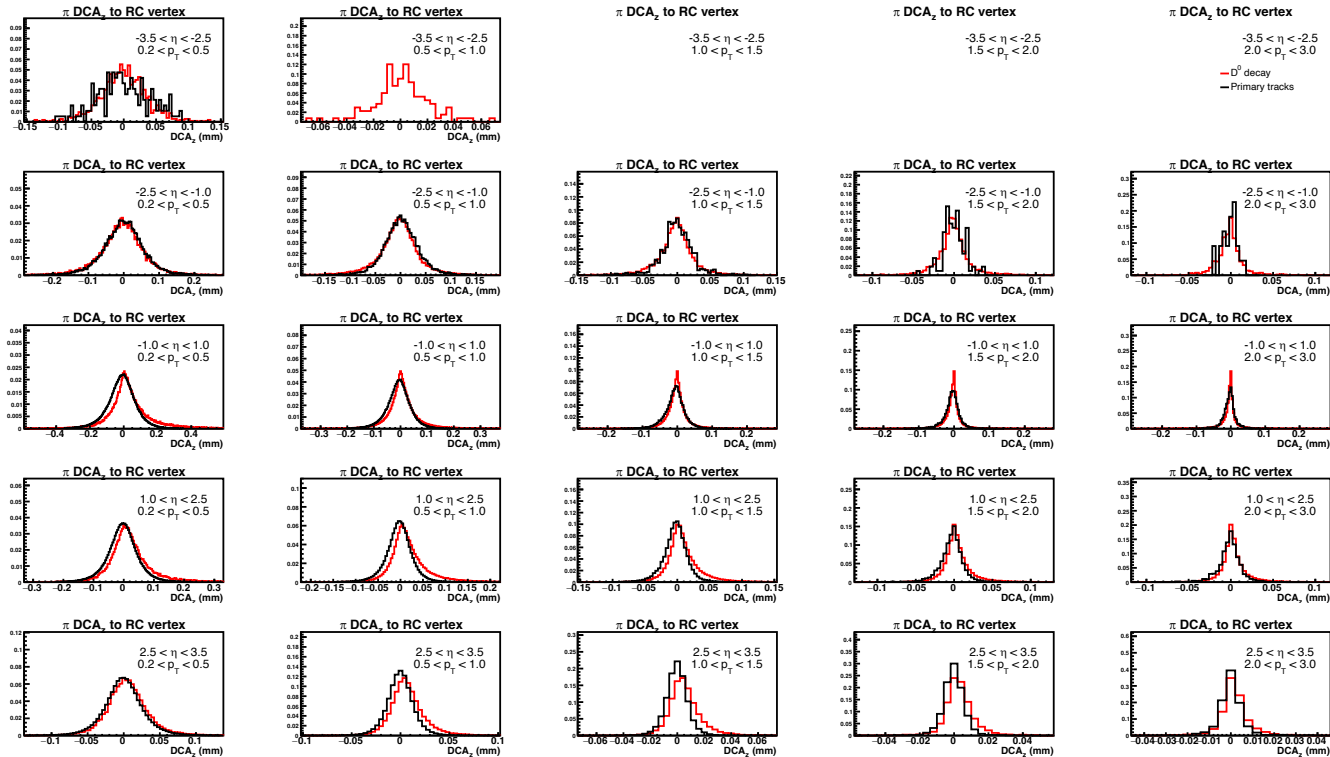
π DCA_z

MC vertex



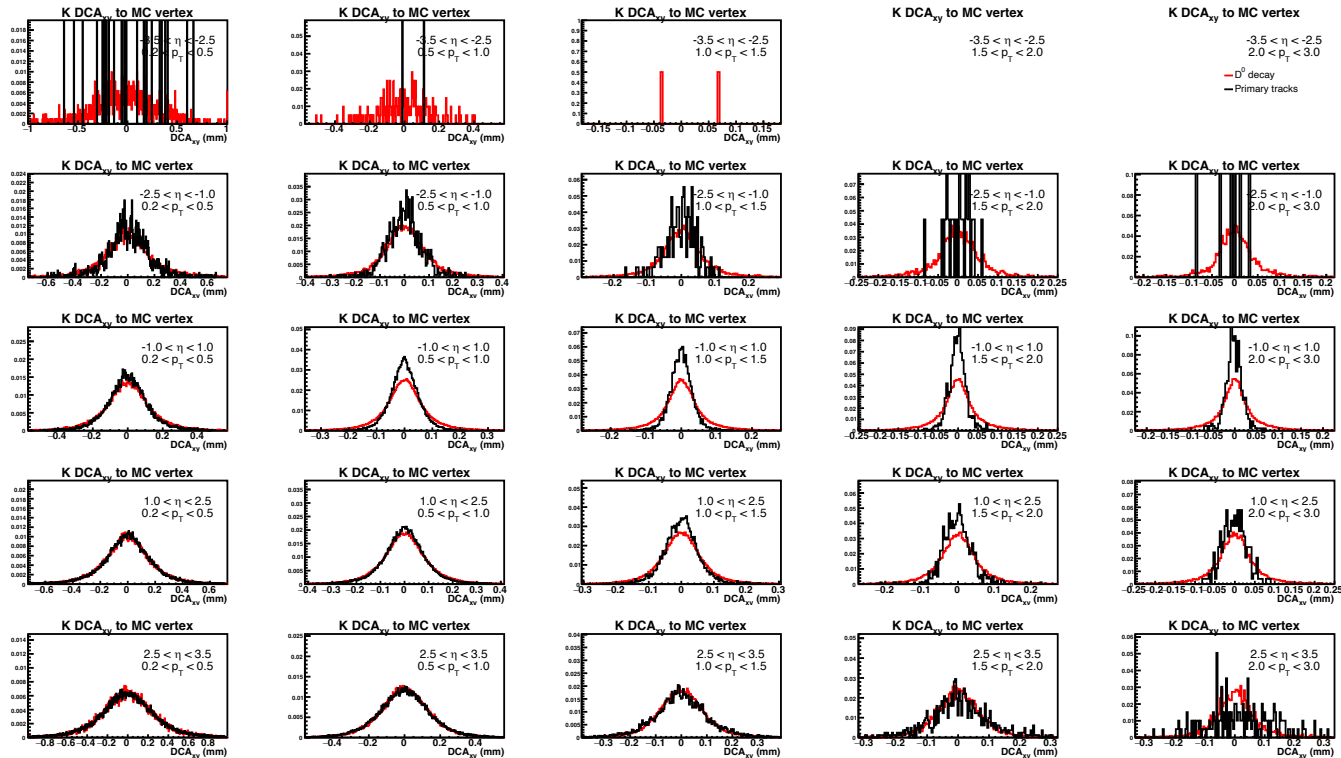
π DCA_z

RC vertex



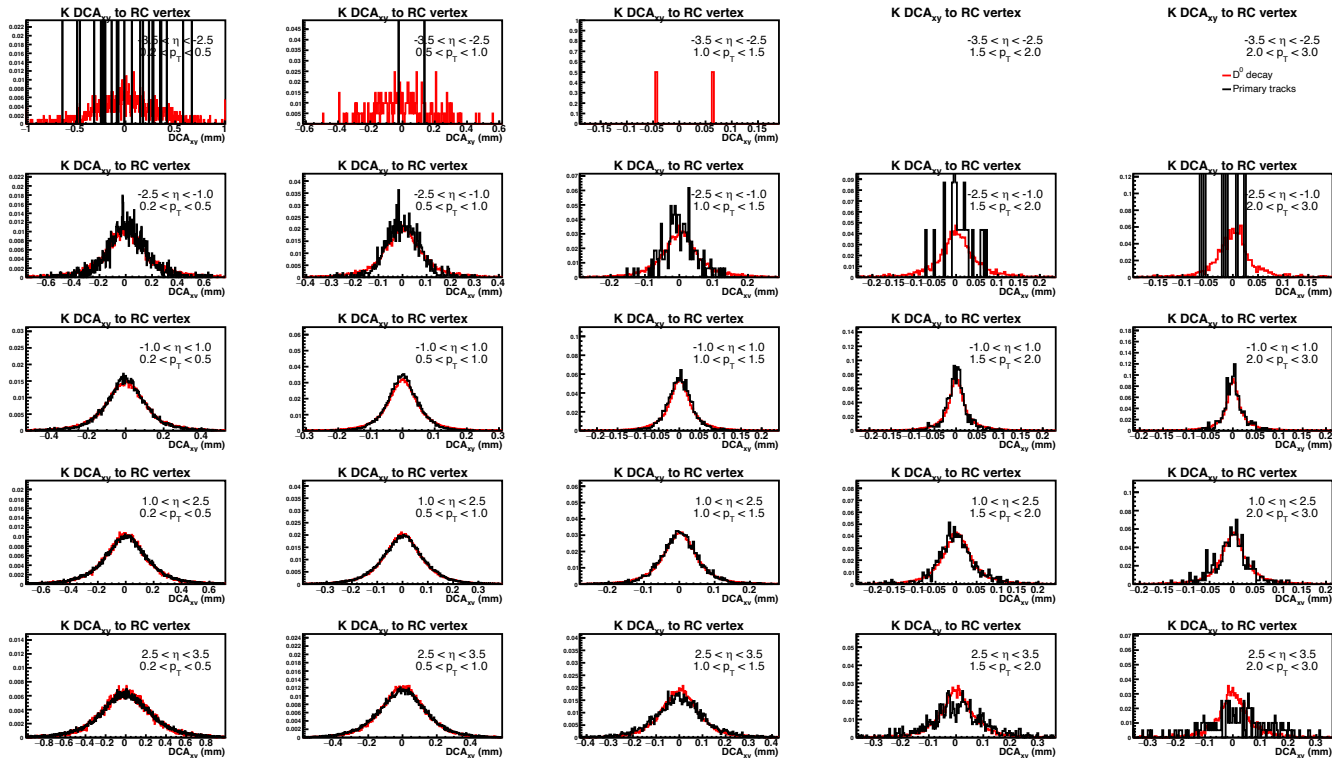
Kaon DCA_{xy}

MC vertex



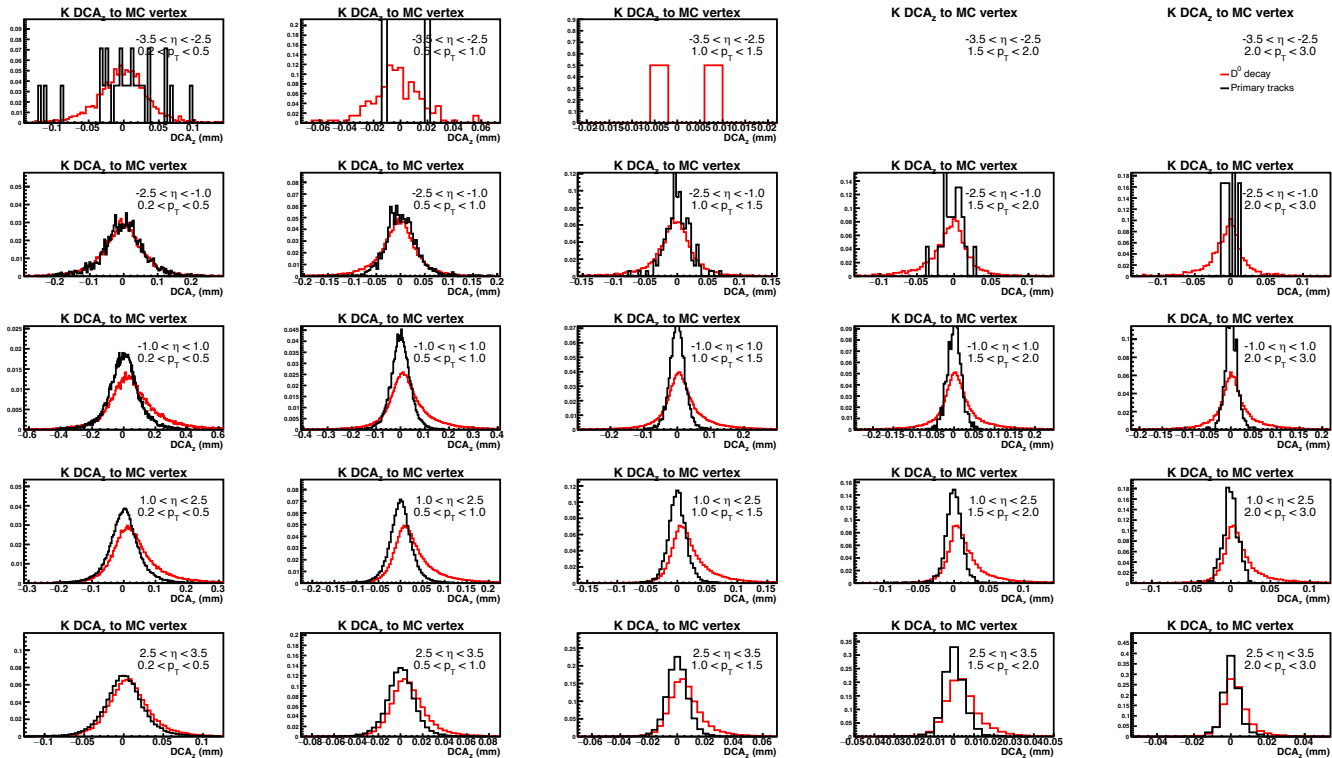
Kaon DCA_{xy}

RC vertex



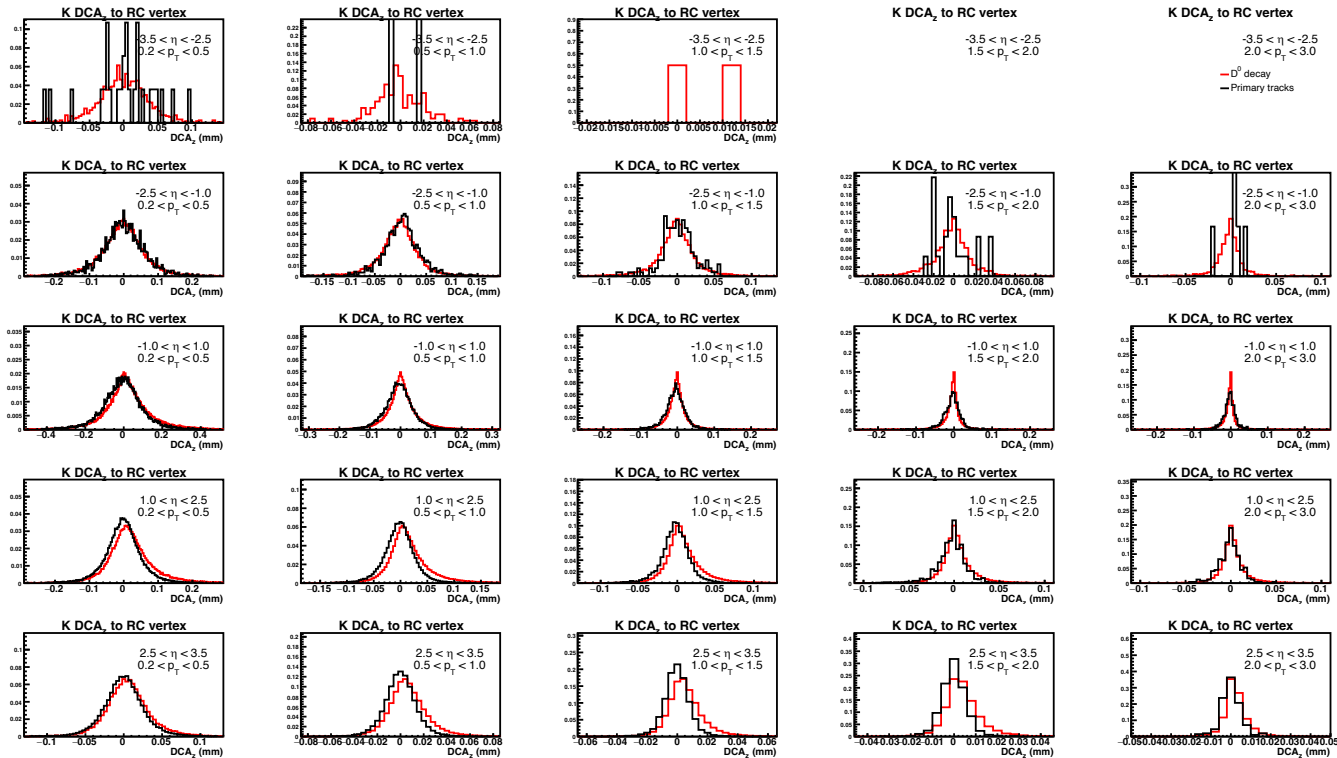
Kaon DCA_z

MC vertex



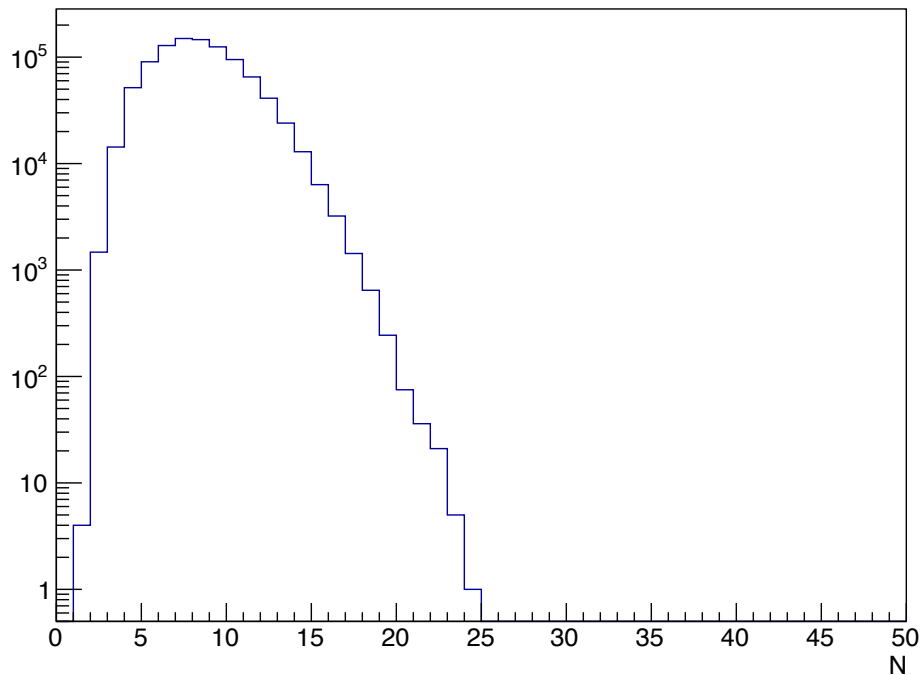
Kaon DCA_z

RC vertex



Tracks used for finding vertices

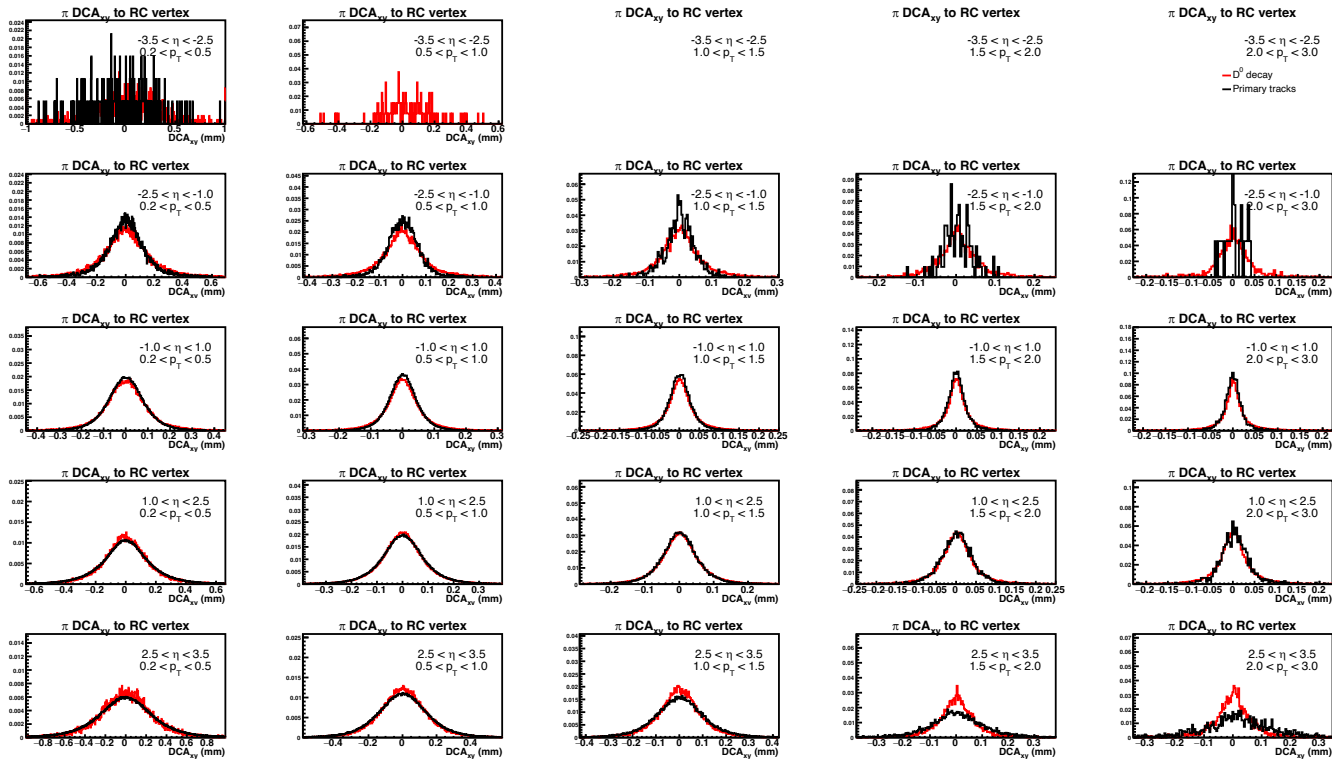
Number of tracks used for reconstructing vertices



π DCA_{xy}

RC vertex

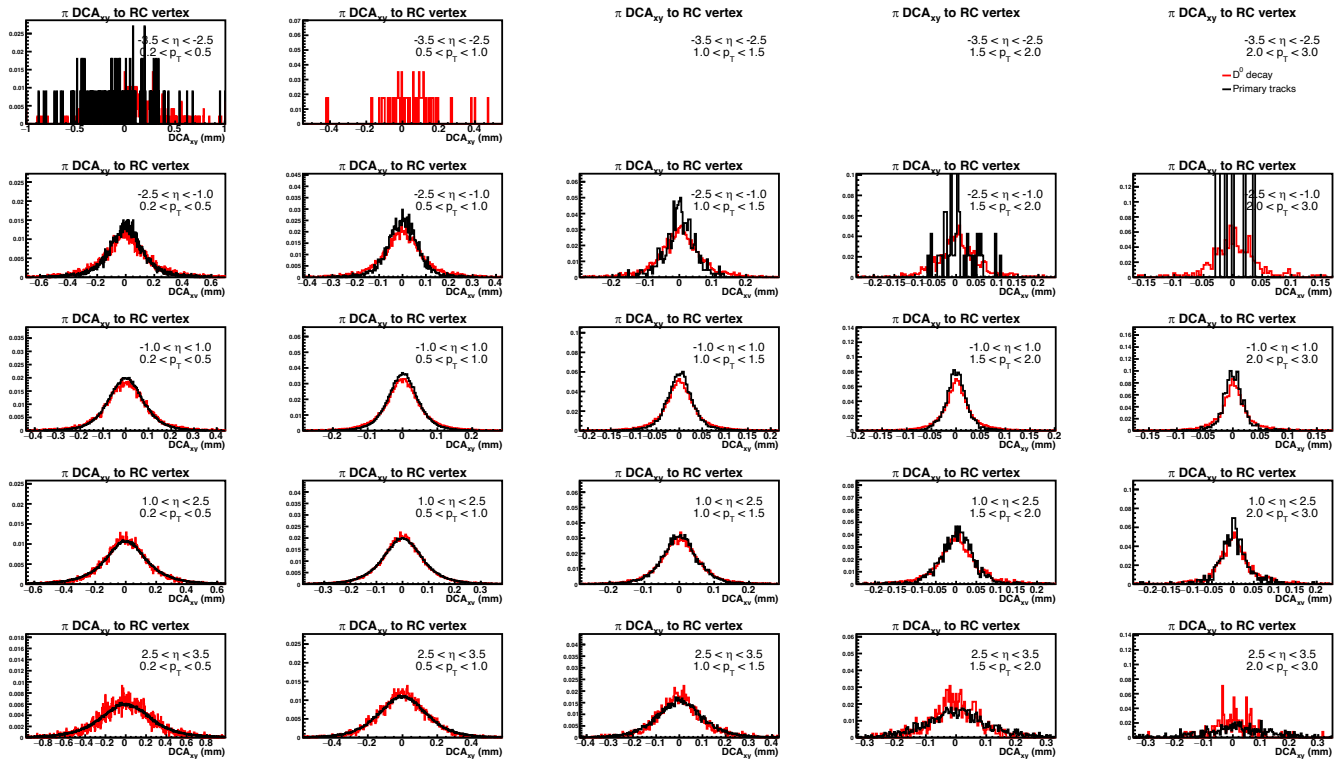
$N_{\text{trk}} > 0$



π DCA_{xy}

RC vertex

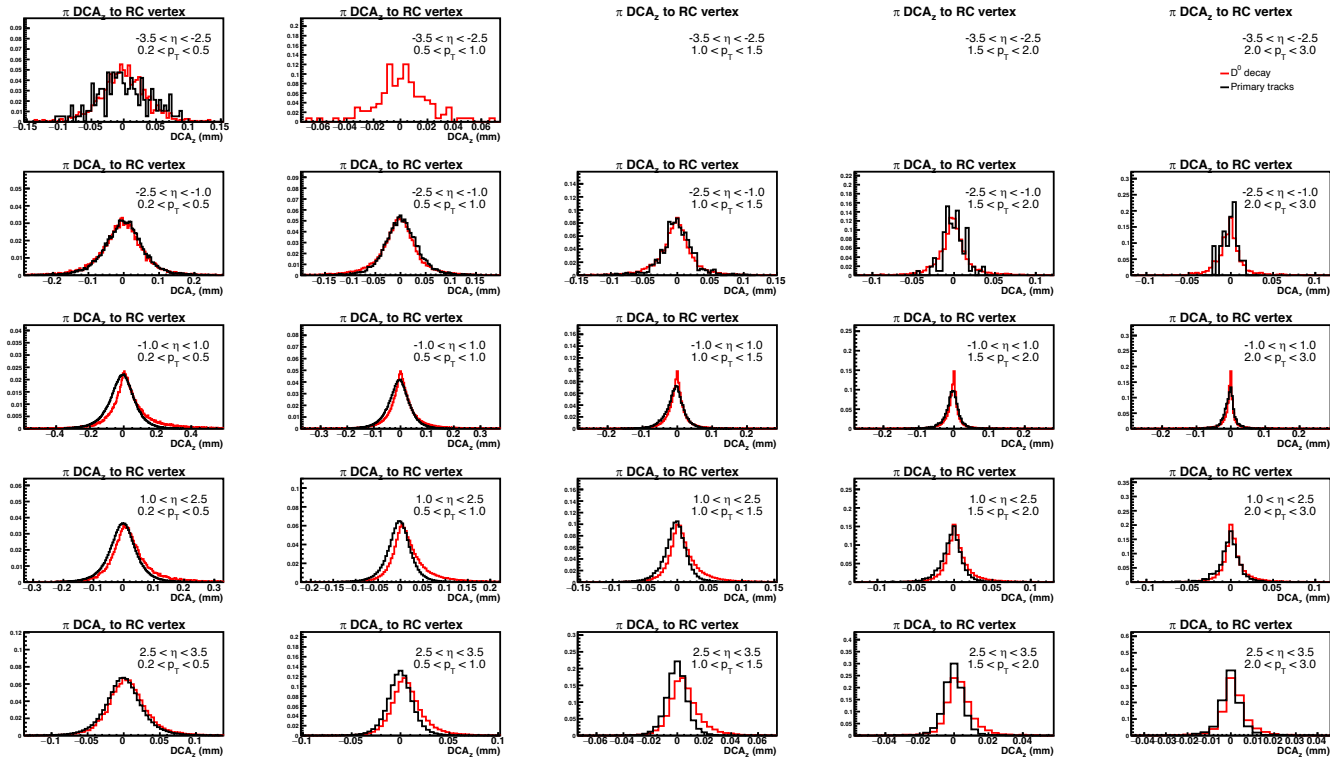
$N_{\text{trk}} \geq 10$



π DCA_z

RC vertex

$N_{\text{trk}} > 0$



π DCA_z

RC vertex

$N_{\text{trk}} \geq 10$

