

DC06 Preselection update & Stripping

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Changes to DC06 Preselection

- Old preselection had obsolete cuts.
- A rewrite was needed.
- Some algorithms were obsolete.
- New version uses DaVinci v23r2p1 and Bender v12r1
- New version uses StdLooseDetachedKstar (New Kstar cuts made by Diego)
- New cut added

Changes to DC06 Preselection

Old DC06 Cuts	New DC06 updated Cuts
<p>B mass window = 500 MeV B Vertex max Chi2 = 25 B IP significance < 4 Flight distance in significance > 8 Flight distance >0 (forward) K* mass window = 150 MeV K* Pt < 750 MeV K* Vertex max Chi2 = 15 K,pi Pt > 350 MeV K,pi P > 1000 MeV K,pi IP significance > 2</p>	<p>B mass window = 500 MeV B Vertex max Chi2 = 25 B IP Chi2 < 16 Flight distance in Chi2 > 64 Flight distance >0 (forward) K* mass window = 150 MeV K* Pt < 750 MeV K* Vertex max Chi2 = 15 K,pi Pt > 350 MeV K,pi P > 1000 MeV K,pi IP Chi2 > 4 K* IP Chi2 > 2.25 (from StdLooseDetachedKstar)</p>

Changes to DC06 Preselection

- If Offline selection remains the same.

Old DC06 Cuts(no trigger)	New DC06 updated Cuts(no trigger)
N Bs Presel = 30,3K N Bs Selected= 14,2 K	N Bs Presel = 25K N Bs Selected = 14,5 K

- Bd and bb-inclusive are yet to be re-processed.
(bookkeeping issues)

DC06 L0-mbias processing

- Work in progress. Currently only 4M out of 5M processed.
 - 4394/4326404 (preselection cuts)
 - Equivalent to 1KHz.
 - No trigger.
 - No applied cuts.
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DC06 Stripping cuts (possible)

- Work in progress
- Vertex χ^2 on B and K^*0 - Used on Phi Phi
- PID – Used on PhiPhi
- IP- χ^2 (particles and K^*)-Used on Phi Phi
- Pt
- P
- Mass windows – Used on Phi Phi

