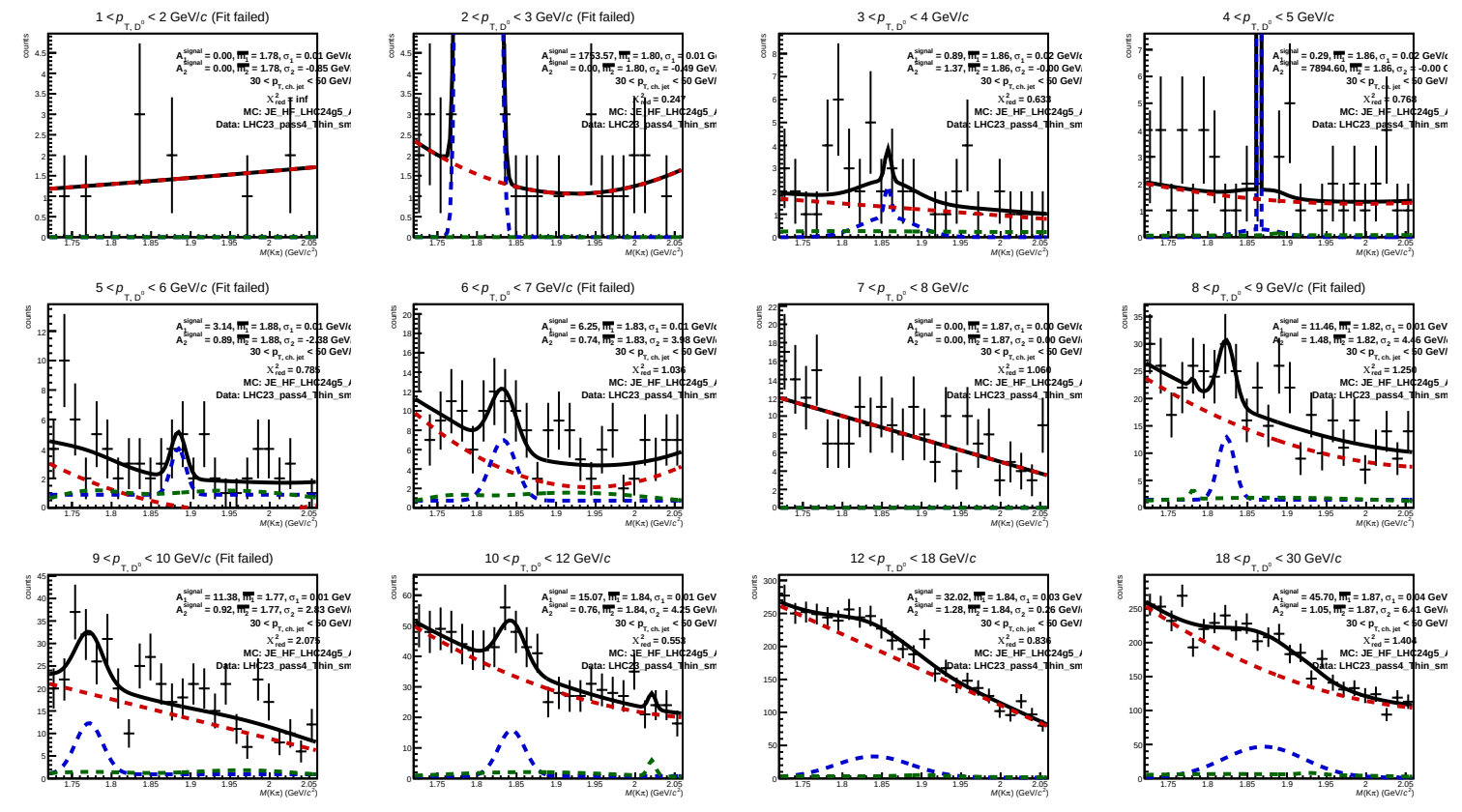
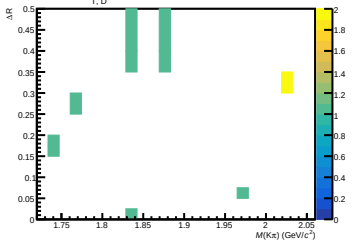
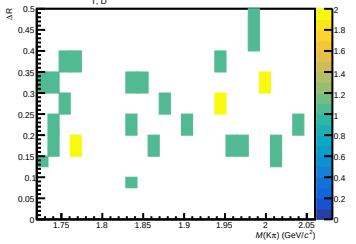
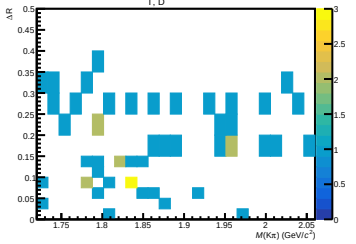
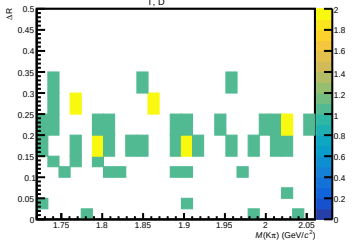
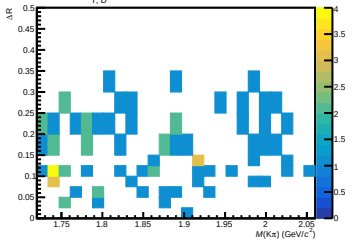

1 < p_{T,D^0} < 2 GeV/c (Fit failed)
2 < p_{T,D^0} < 3 GeV/c (Fit failed)
3 < p_{T,D^0} < 4 GeV/c
4 < p_{T,D^0} < 5 GeV/c
5 < p_{T,D^0} < 6 GeV/c (Fit failed)
6 < p_{T,D^0} < 7 GeV/c (Fit failed)
7 < p_{T,D^0} < 8 GeV/c
8 < p_{T,D^0} < 9 GeV/c (Fit failed)
9 < p_{T,D^0} < 10 GeV/c (Fit failed)
10 < p_{T,D^0} < 12 GeV/c
12 < p_{T,D^0} < 18 GeV/c
18 < p_{T,D^0} < 30 GeV/c
counts
$M(K\pi)$ (GeV/c^2)
$30 < p_{T,\mathrm{ch.jet}} < 50$ GeV/
MC: JE_HF_LHC24g5_
Data: LHC23_pass4_Thin_sm

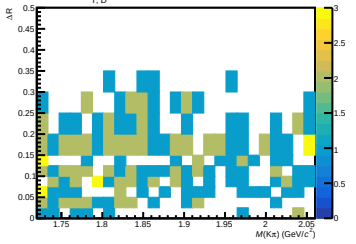

1 < p_{T,D^0} < 2 GeV/c (Fit failed) (Fit failed)
ΔR
$M(K\pi)$ (GeV/c^2)

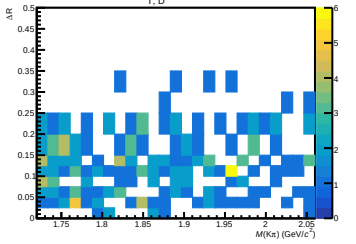

2 < p_{T,D^0} < 3 GeV/c (Fit failed) (Fit failed)
ΔR
$M(K\pi)$ (GeV/c^2)

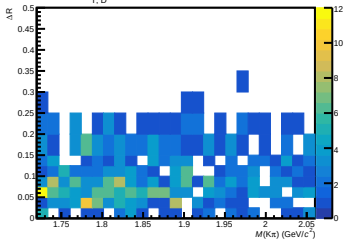

3 < p_{T,D^0} < 4 GeV/c
ΔR
$M(K\pi)$ (GeV/c^2)

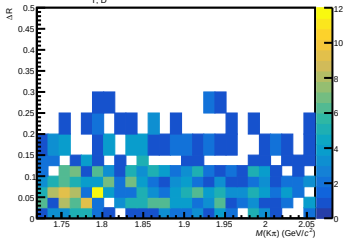

4 < p_{T,D^0} < 5 GeV/c
ΔR
$M(K\pi)$ (GeV/c^2)

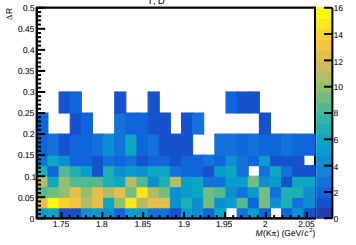

5 < p_{T,D^0} < 6 GeV/c (Fit failed) (Fit failed)
ΔR
$M(K\pi)$ (GeV/c^2)

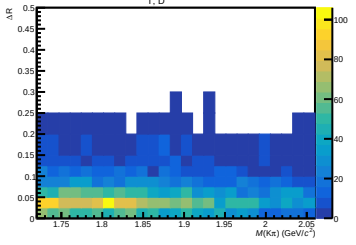

6 < p_{T,D^0} < 7 GeV/c (Fit failed) (Fit failed)
ΔR
$M(K\pi)$ (GeV/c^2)

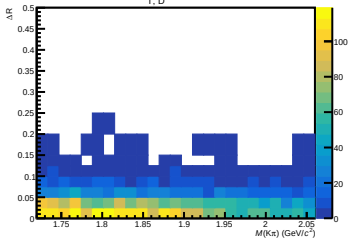

7 < p_{T,D^0} < 8 GeV/c
ΔR
$M(K\pi)$ (GeV/c^2)

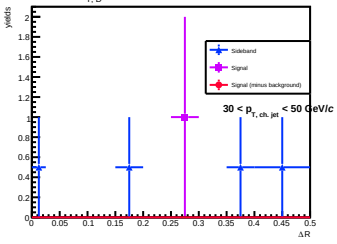

8 < p_{T,D^0} < 9 GeV/c (Fit failed) (Fit failed)
ΔR
$M(K\pi)$ (GeV/c^2)

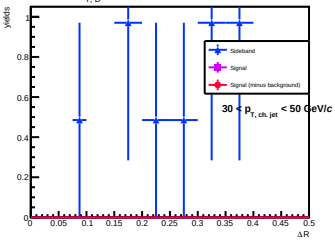

9 < p_{T,D^0} < 10 GeV/c (Fit failed) (Fit failed)
ΔR
$M(K\pi)$ (GeV/c^2)

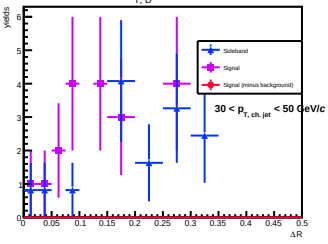

10 < p_{T,D^0} < 12 GeV/c
ΔR
$M(K\pi)$ (GeV/c^2)

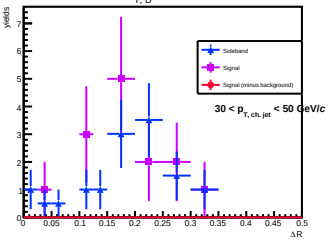

12 < p_{T,D^0} < 18 GeV/c
ΔR
$M(K\pi)$ (GeV/c^2)

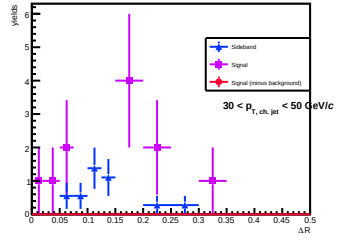

18 < p_{T,D^0} < 30 GeV/c
ΔR
$M(K\pi)$ (GeV/c^2)

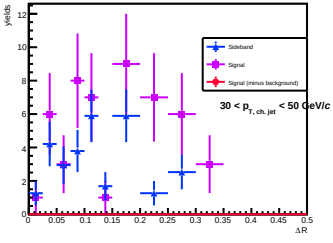

1 < p_{T,D^0} < 2 GeV/c (Fit failed) (Fit failed)
yields
ΔR
Sideband
Signal
Signal (minus background)
30 < $p_{T,ch.jet}$ < 50 GeV/c

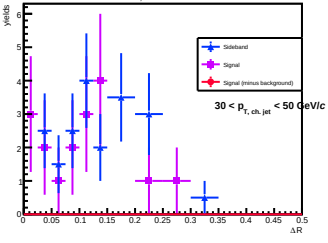

2 < p_{T,D^0} < 3 GeV/c (Fit failed) (Fit failed)
yields
ΔR
Sideband
Signal
Signal (minus background)
30 < $p_{T,ch.jet}$ < 50 GeV/c

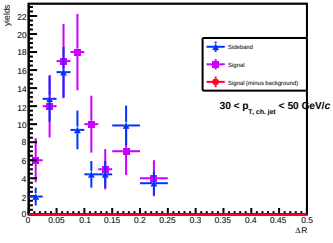

3 < p_{T,D^0} < 4 GeV/c
yields
ΔR
Sideband
Signal
Signal (minus background)
30 < $p_{T,ch.jet}$ < 50 GeV/c

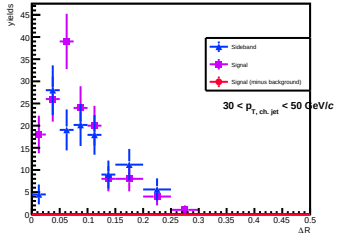

4 < p_{T,D^0} < 5 GeV/c
yields
ΔR
Sideband
Signal
Signal (minus background)
30 < $p_{T,ch.jet}$ < 50 GeV/c

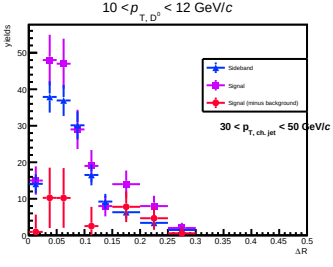

5 < p_{T,D^0} < 6 GeV/c (Fit failed) (Fit failed)
yields
ΔR
Sideband
Signal
Signal (minus background)
30 < $p_{T,ch.jet}$ < 50 GeV/c

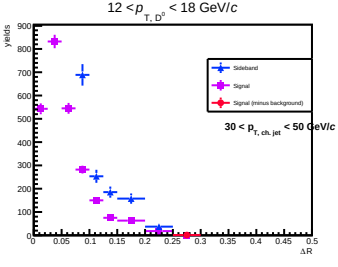

6 < p_{T,D^0} < 7 GeV/c (Fit failed) (Fit failed)
yields
ΔR
Sideband
Signal
Signal (minus background)
30 < $p_{T,ch.jet}$ < 50 GeV/c

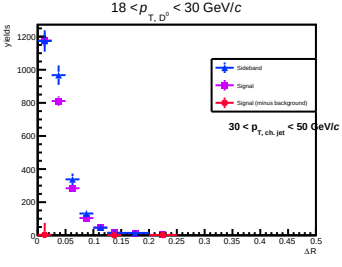

7 < p_{T,D^0} < 8 GeV/c
yields
ΔR
Sideband
Signal
Signal (minus background)
30 < $p_{T,ch.jet}$ < 50 GeV/c

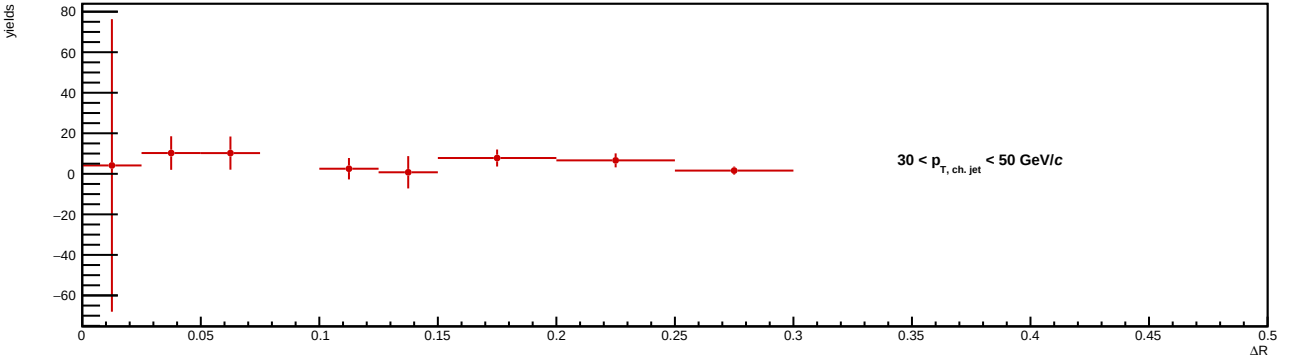

8 < p_{T,D^0} < 9 GeV/c (Fit failed) (Fit failed)
yields
ΔR
Sideband
Signal
Signal (minus background)
30 < $p_{T,ch.jet}$ < 50 GeV/c


9 < p_{T,D^0} < 10 GeV/c (Fit failed) (Fit failed)
yields
ΔR
Sideband
Signal
Signal (minus background)
30 < $p_{T,ch.jet}$ < 50 GeV/c

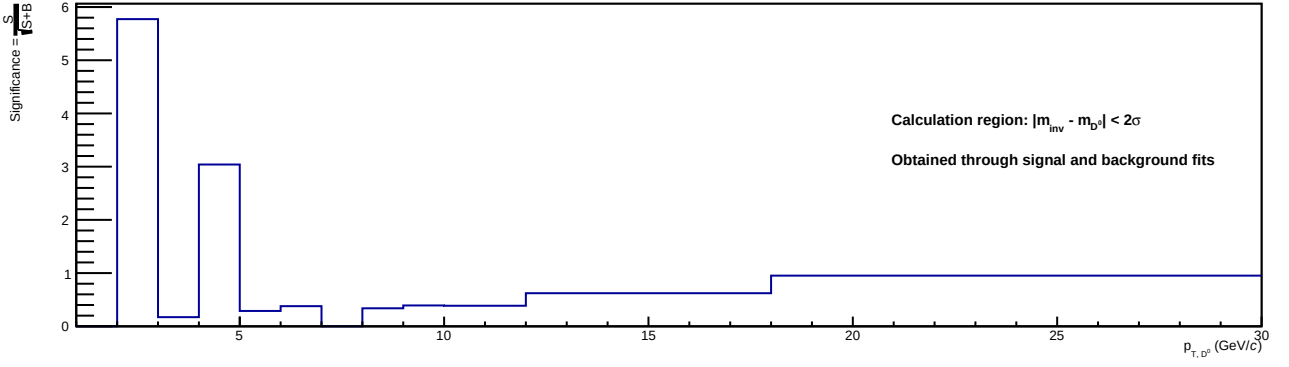

10 < p_{T,D^0} < 12 GeV/c
yields
ΔR
Sideband
Signal
Signal (minus background)
30 < $p_{T,ch.jet}$ < 50 GeV/c

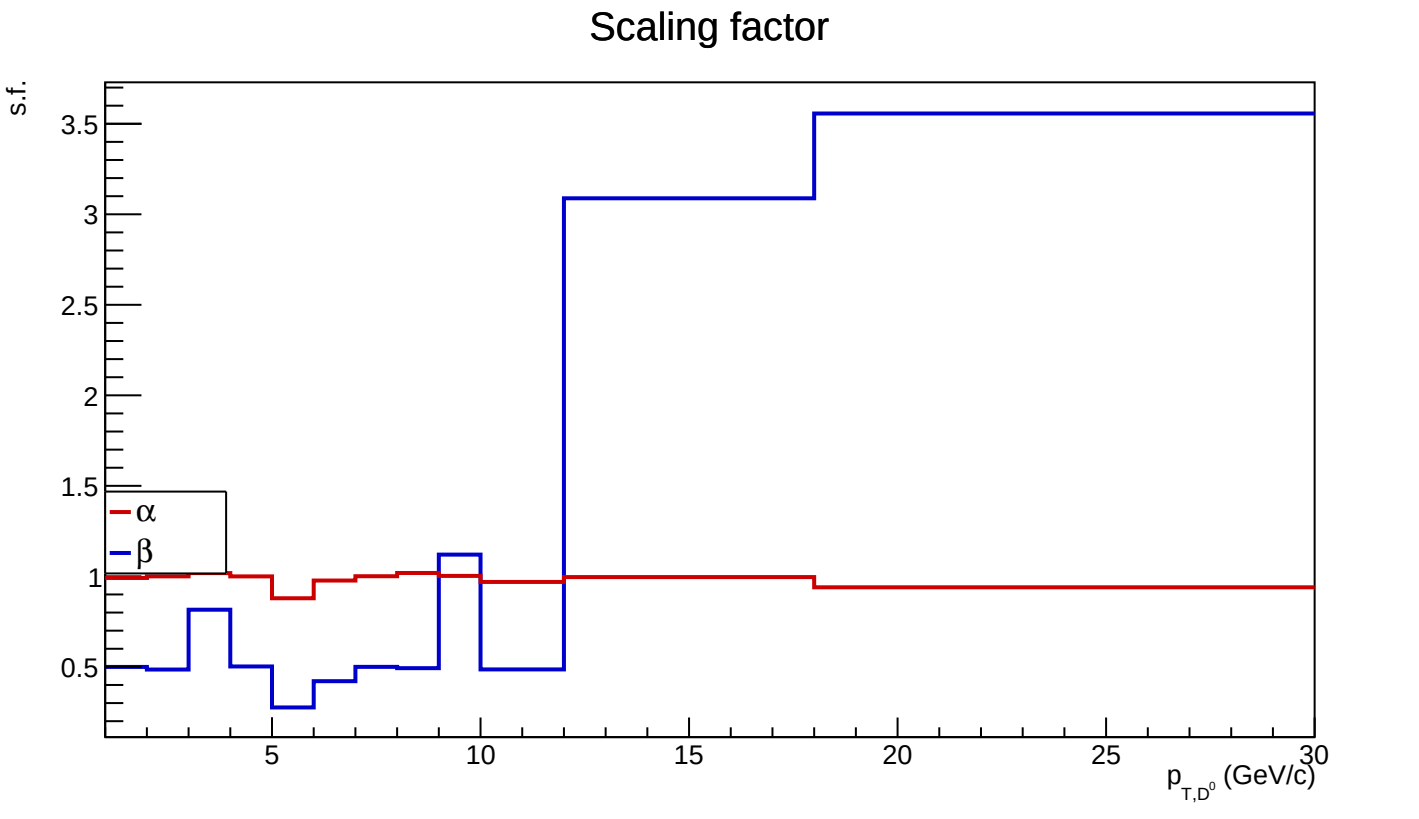

12 < p_{T,D^0} < 18 GeV/c
yields
ΔR
Sideband
Signal
Signal (minus background)
30 < $p_{T,ch.jet}$ < 50 GeV/c


18 < p_{T,D^0} < 30 GeV/c
yields
ΔR
Sideband
Signal
Signal (minus background)
30 < $p_{T,ch.jet}$ < 50 GeV/c



Estimated significance for each $m_{invariant}$ distribution bin




Scaling factor
s.f.
3.5
3
2.5
2
1.5
1
0.5
α
β
5
10
15
20
25
30
p_{T,D^0} (GeV/c)