

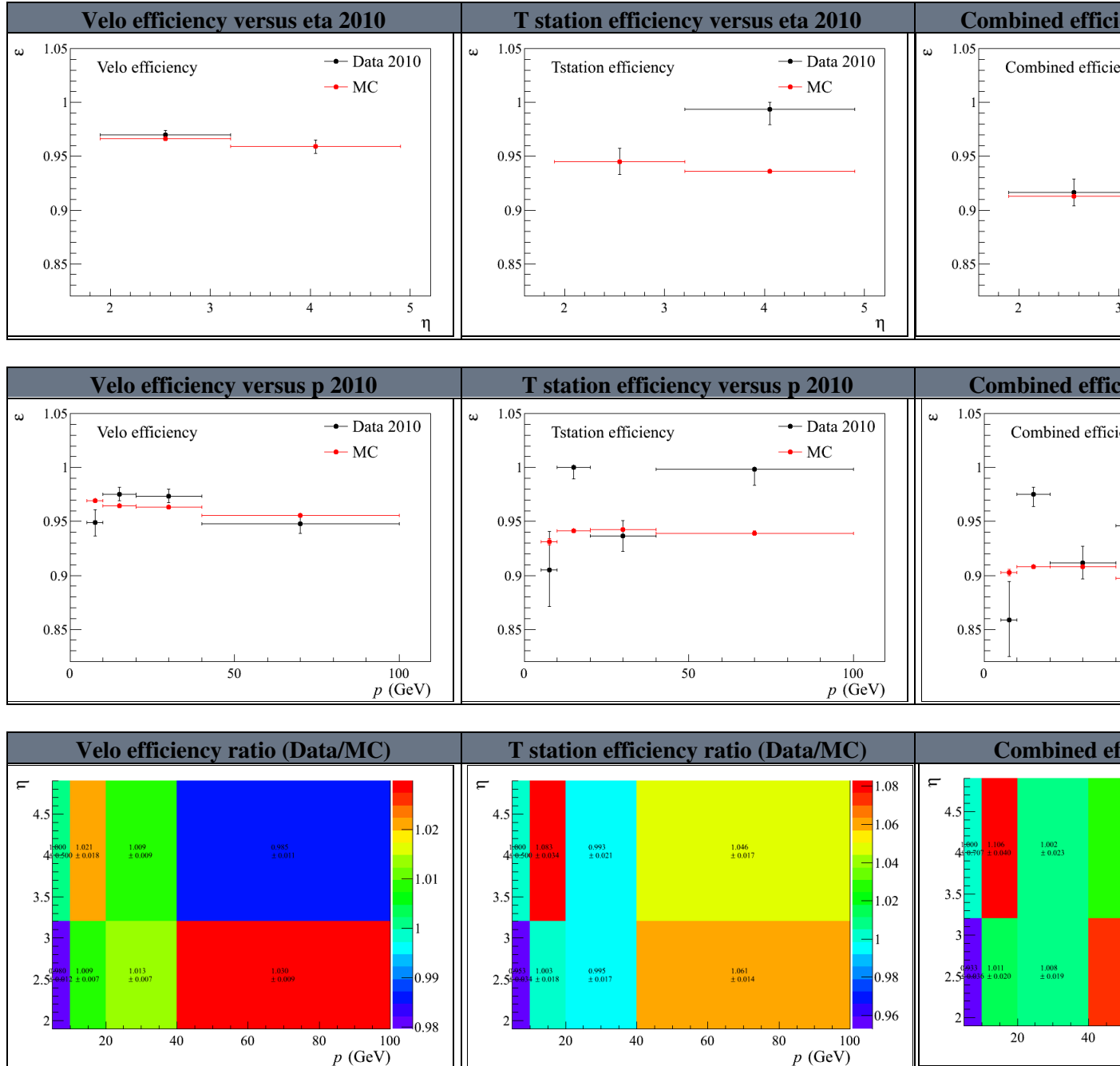
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# Status / Results

The results below correspond to these data samples.

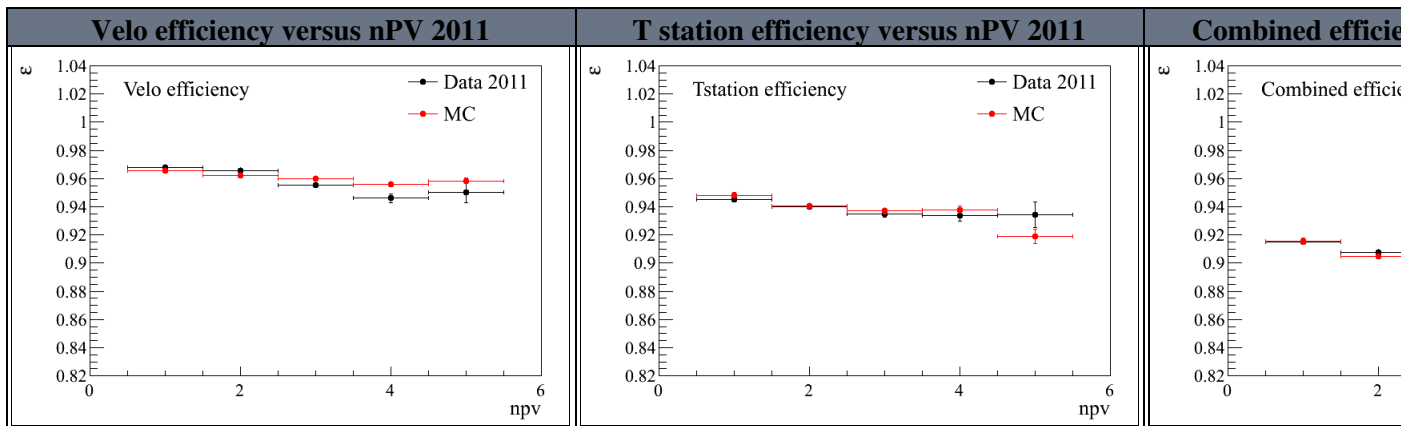
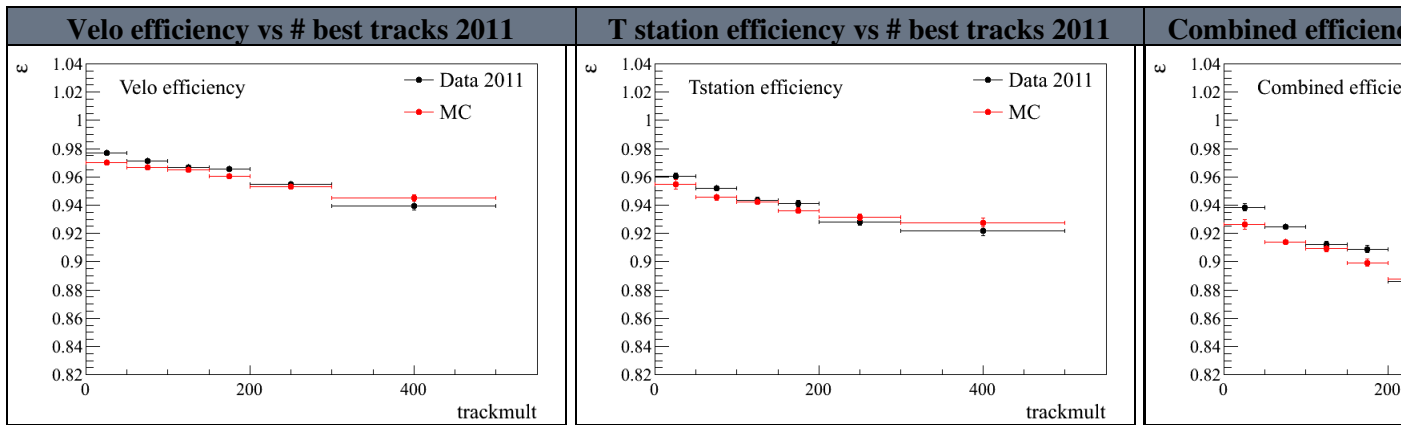
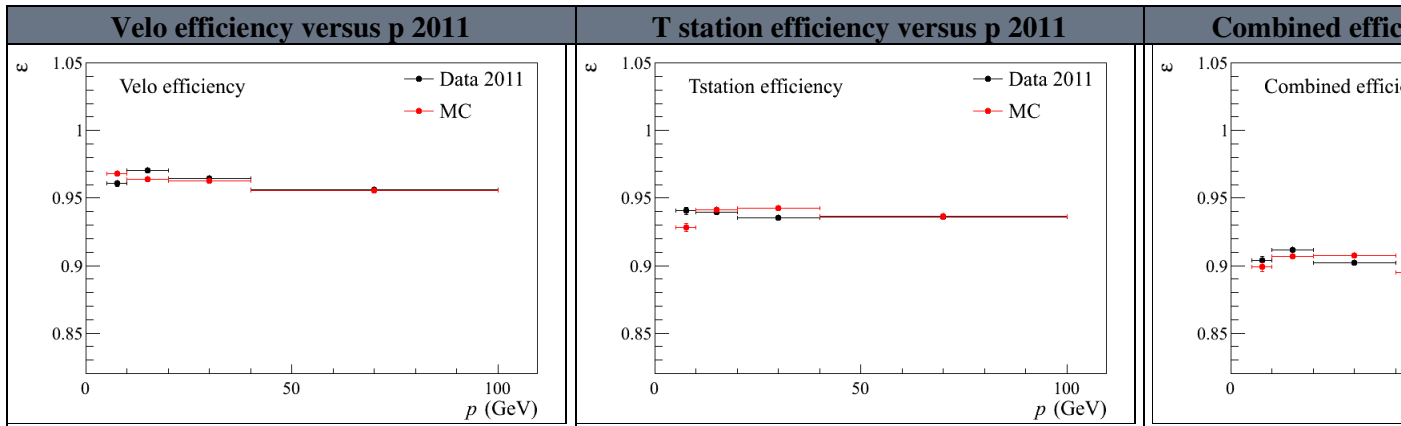
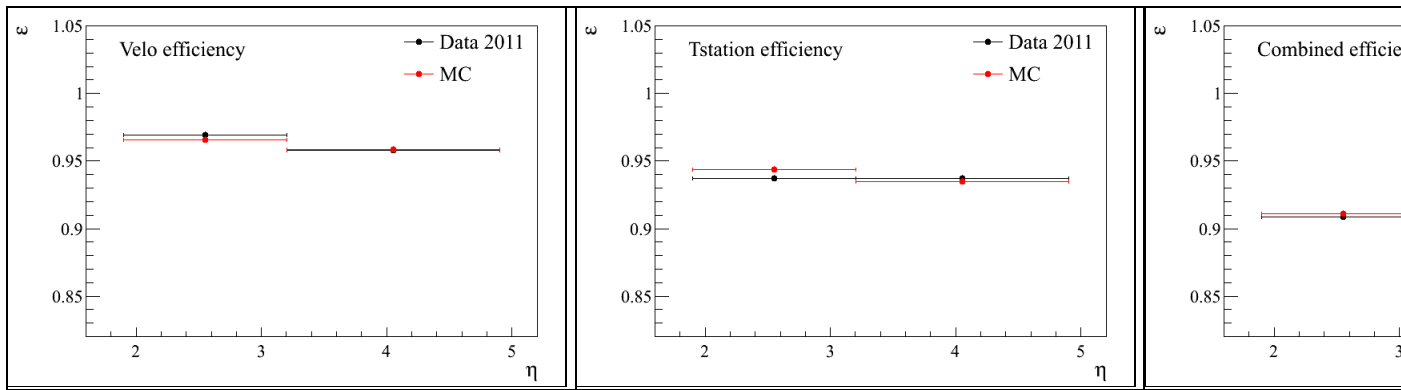
## 2010 Results

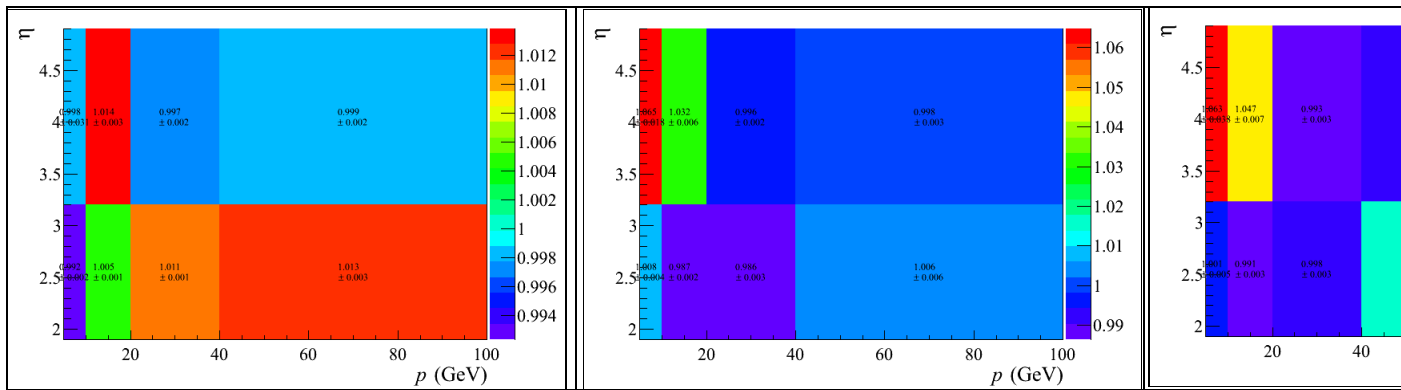


## 2011 Results



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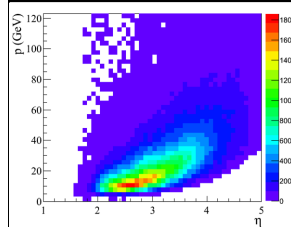


## Overall efficiency ratio and its error

- Overall combined efficiency ratio and error (per long track). This number depends on the p-eta spectrum observed in the weighted MC. Below are three examples:
  - ◆ Eta-p spectrum for  $J/\psi$  legs from Velo efficiency method. The total efficiency ratio for this spectrum is:

◆ **2010 data:**  $101.4 \pm 1.0\%$

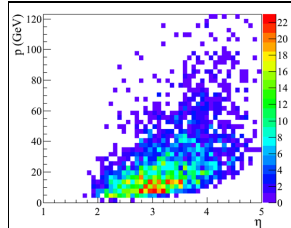
◆ **2011 data:**  $100.0 \pm 0.1\%$ .



- ◆ Spectrum for  $B_s \rightarrow J/\psi\phi$ . The total efficiency ratio for this spectrum is

◆ **2010 data:**  $102.6 \pm 1.1\%$

◆ **2011 data:**  $100.7 \pm 0.2\%$ .



- ◆ Spectrum for  $X(3872) \rightarrow J/\psi\pi^+\pi^-$ . The total efficiency ratio for this spectrum is

◆ **2010 data:**  $102.2 \pm 1.2\%$

◆ **2011 data:**  $101.3 \pm 0.5\%$ .

## Systematic error

Source of uncertainty	Error	
Apply different reweighting	0.3% (Velo)	0.2% (T station)
Sideband subtraction vs full mass fit	0.2% (Velo)	0.3% (T station)
Combined method vs Long track eff	0.5 %	
<b>Overall uncertainty</b>	<b>0.7 %</b>	

- Comparison long versus combined methods

## High-pT tracks (for EW analyses)

The status (twiki) for the tracking efficiency measurement for the Z and W cross section measurements with MuonTT tracks can be seen here

-- JeroenVanTilburg - 08-Jul-2011

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This topic: LHCb > TrackingEffStatus

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