

W W + 2 jets Analysis



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PDF rate uncertainties

- Reweight AlpGen Sample
- Compare acceptance
- Add positive and negative uncertainties in quadrature
- Use larger uncertainty
- Different from Jen's numbers, direct comparison probably not possible

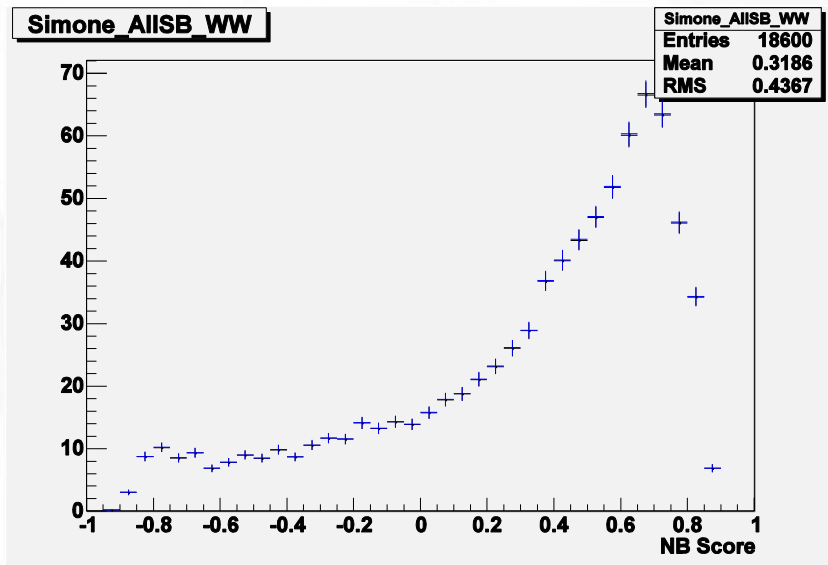
	0 Jet	1 Jet	2+ Jets
Positive	0.2%	1.1%	1.8%
Negative	0.8%	0.4%	0.6%

Jen's numbers:

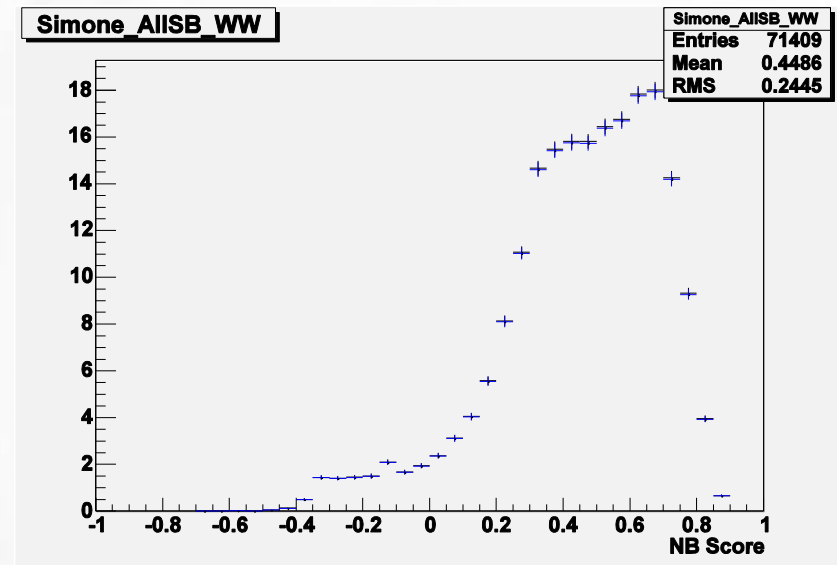
Channel:	0 Jets	1 Jet	2+ Jets	Low M_{ll}
Sum in quadrature (positive)	0	0.32%	2.95%	0
Sum in quadrature (negative)	1.09%	4.67%	4.23%	1.58%

PDF shape uncertainties

0 Jet



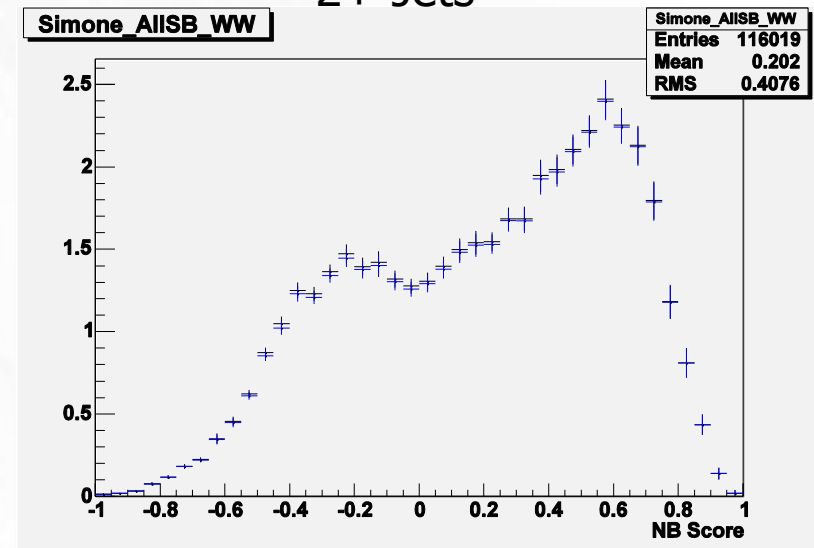
1 Jet



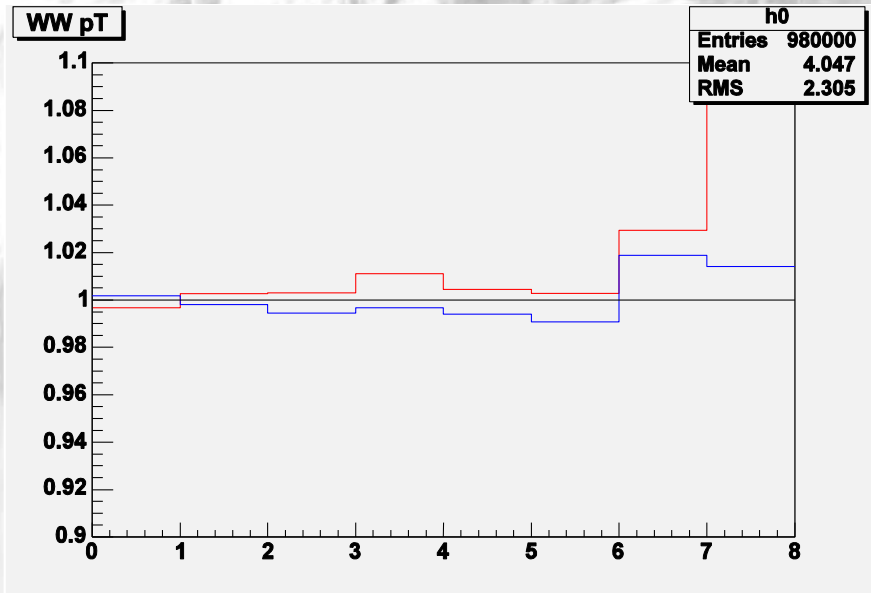
Default PDF and PDF 10080

- Chose PDF 10080 (largest differences in lower pT bins)
- Reweighted WW NN output
- Differences minimal, and not in most signal-like region

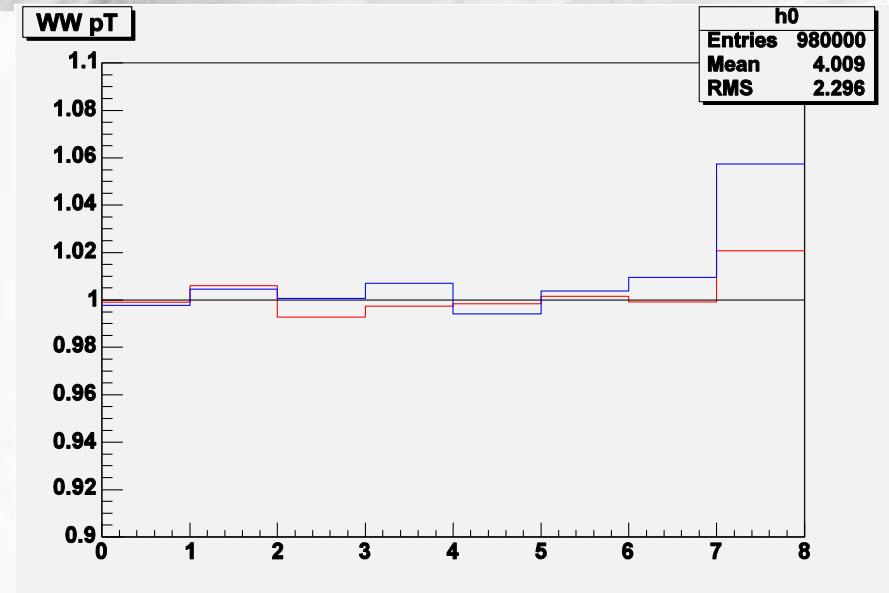
2+ Jets



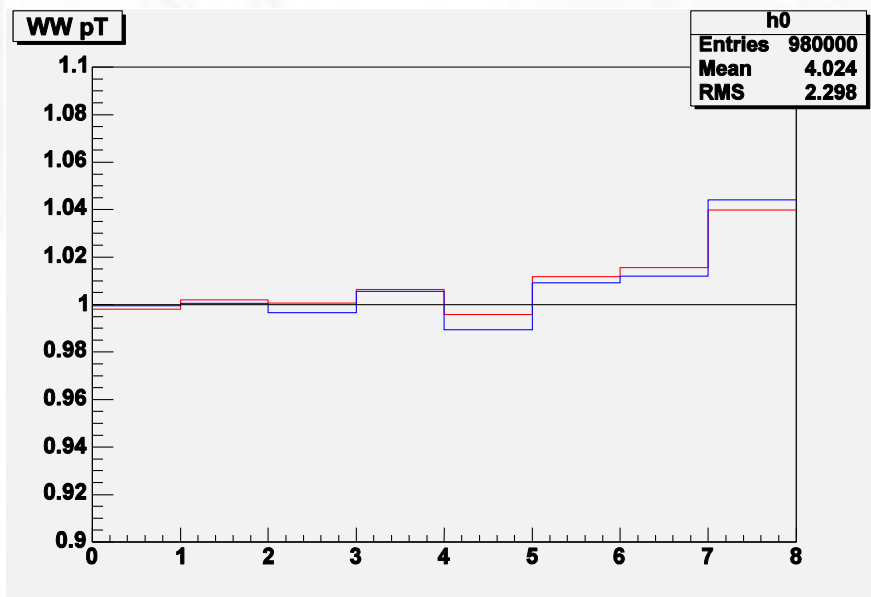
PDF scale factors



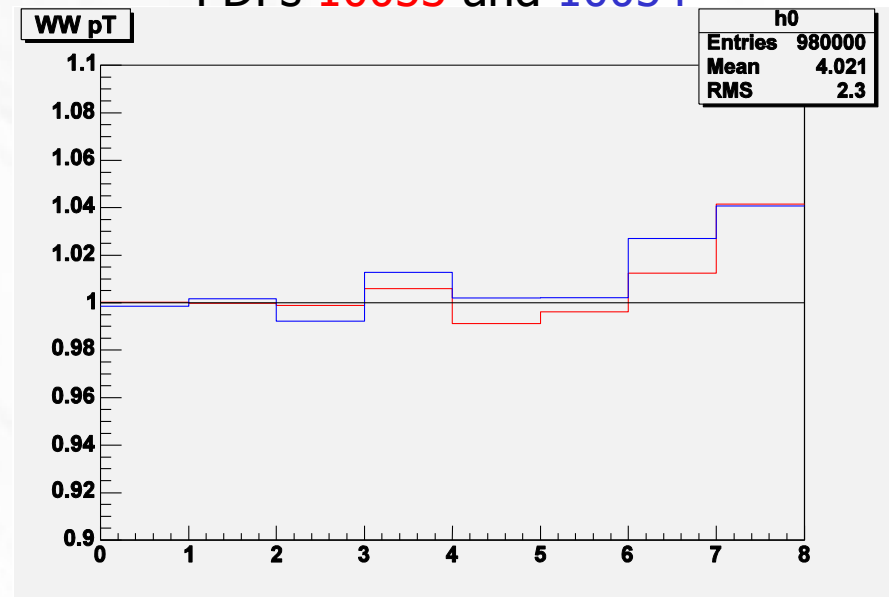
PDFs 10051 and 10052



PDFs 10053 and 10054

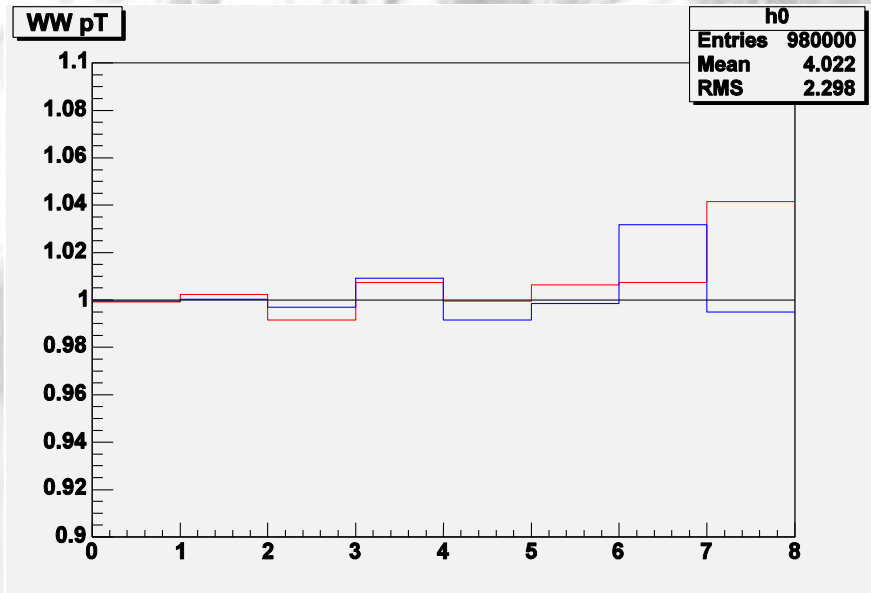


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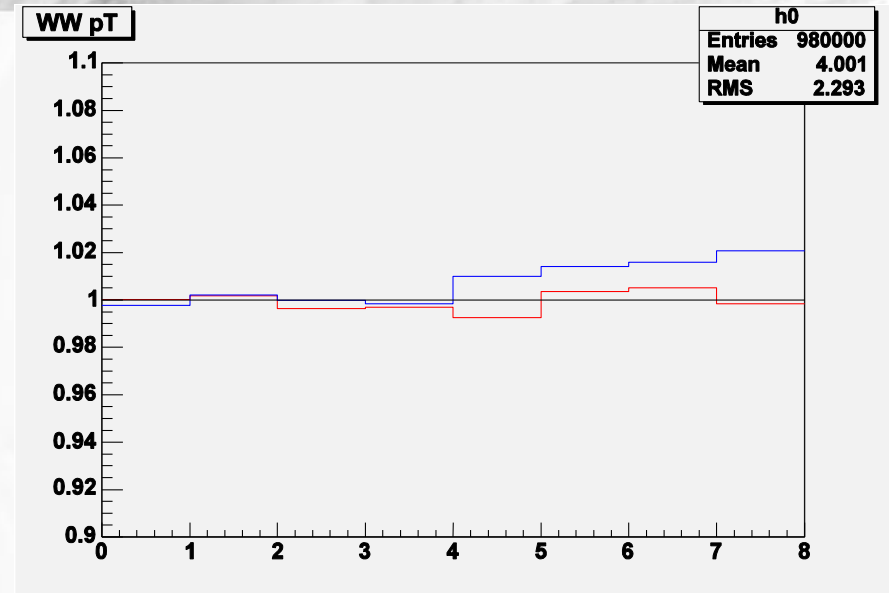


PDFs 10057 and 10058

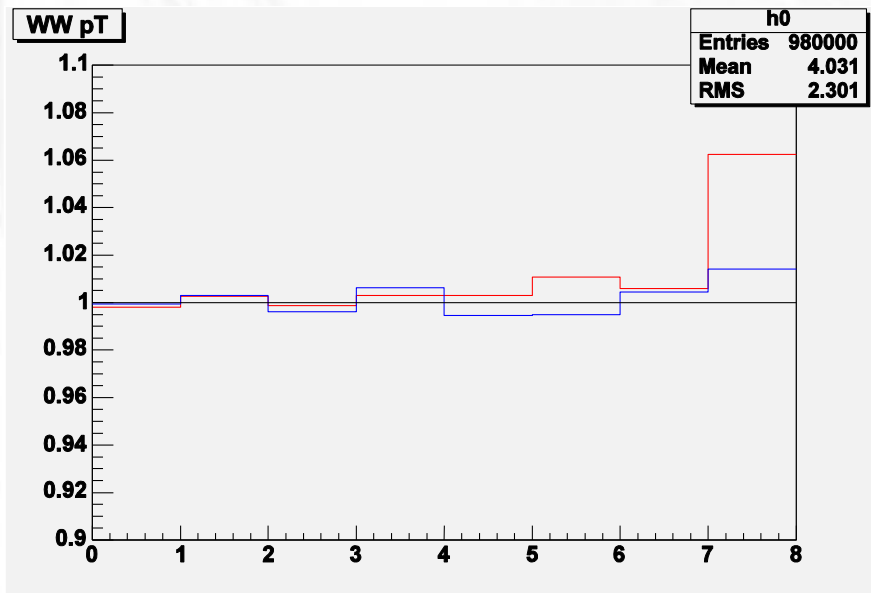
PDF scale factors



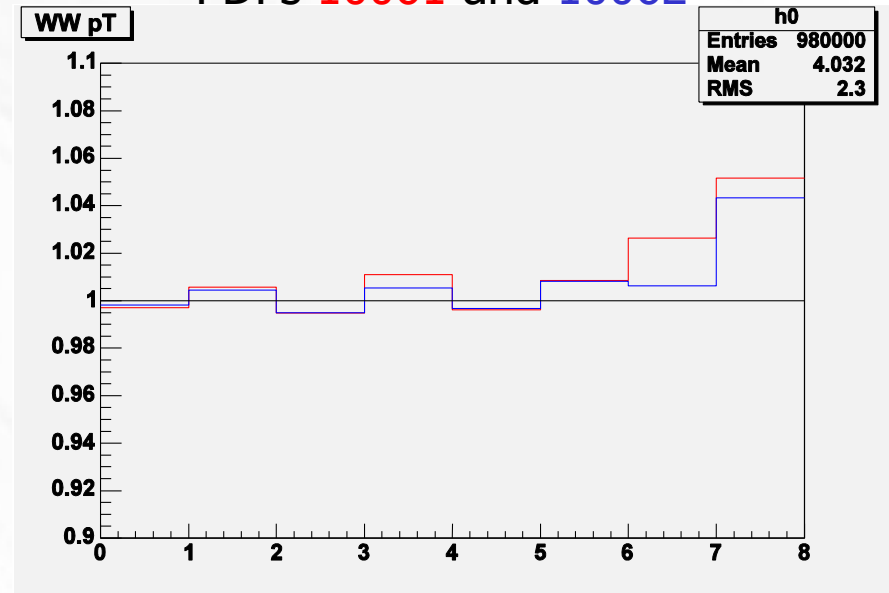
PDFs 10059 and 10060



PDFs 10061 and 10062

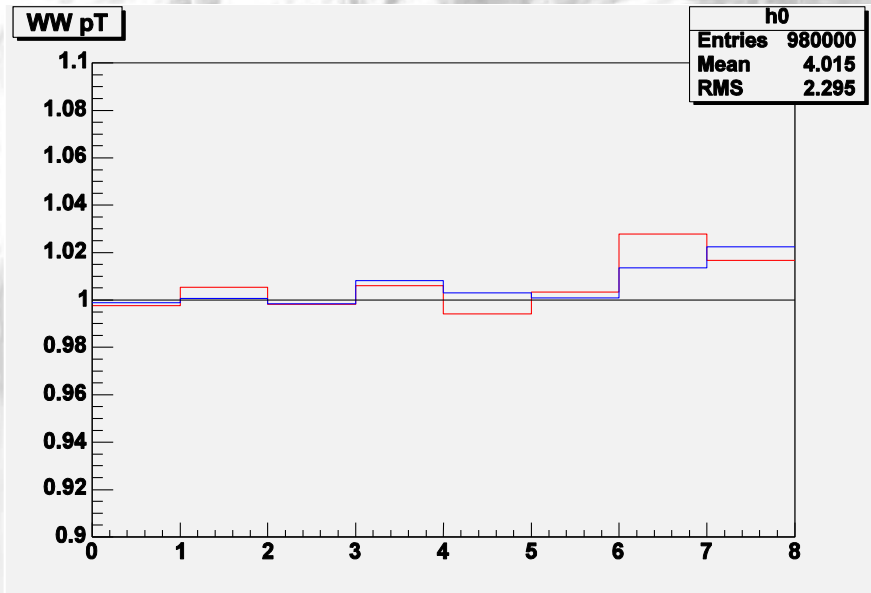


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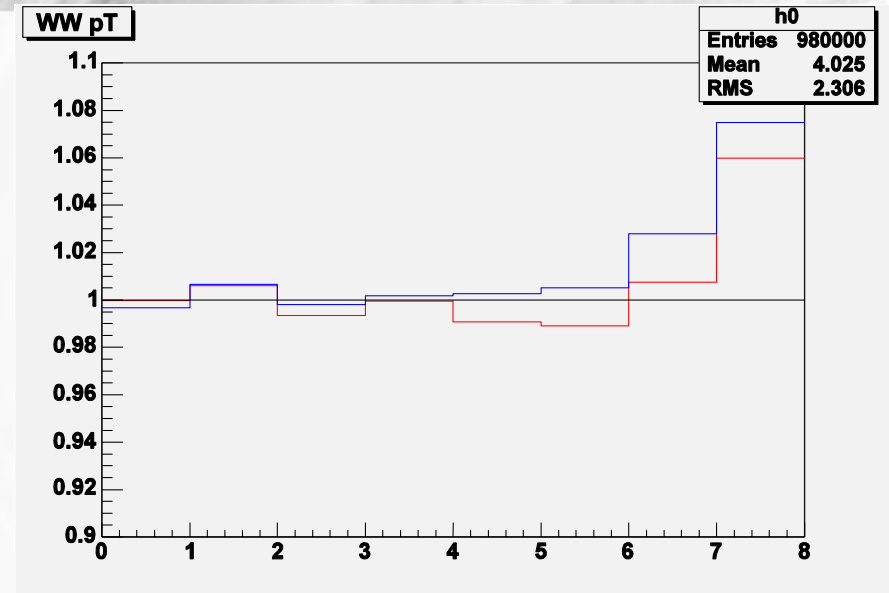


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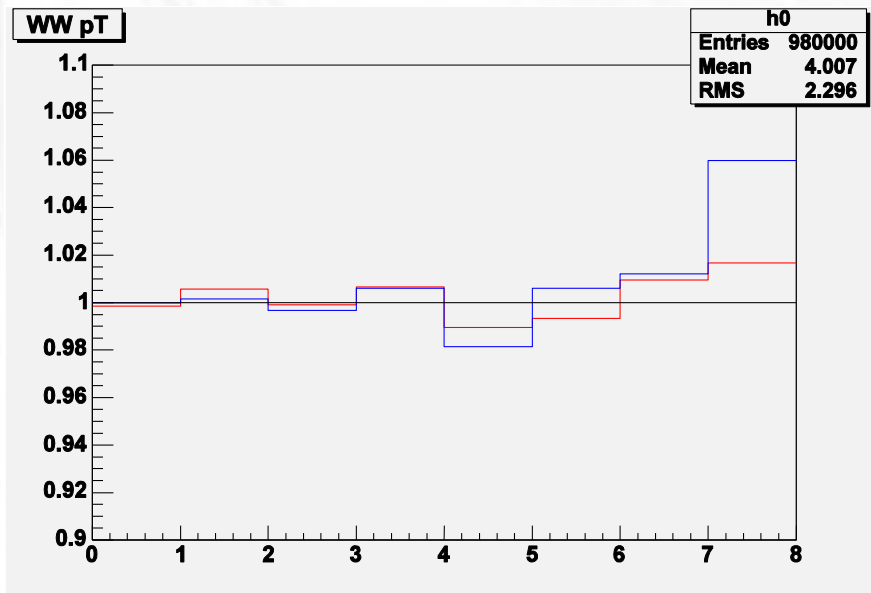
PDF scale factors



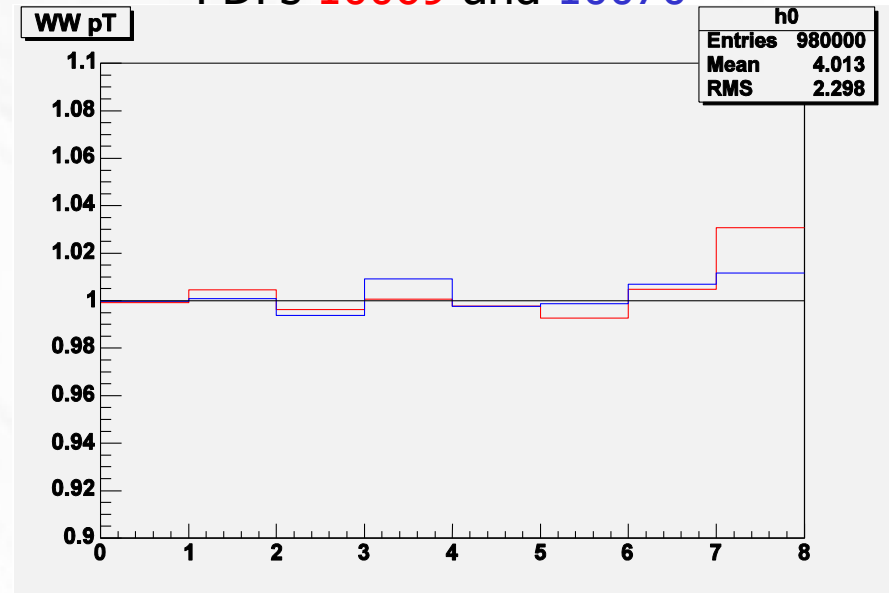
PDFs 10067 and 10068



PDFs 10069 and 10070

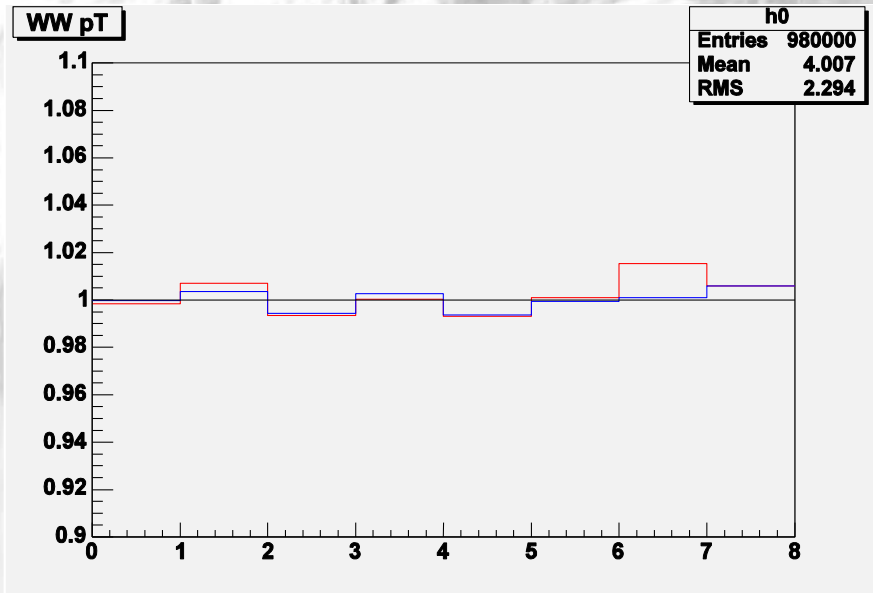


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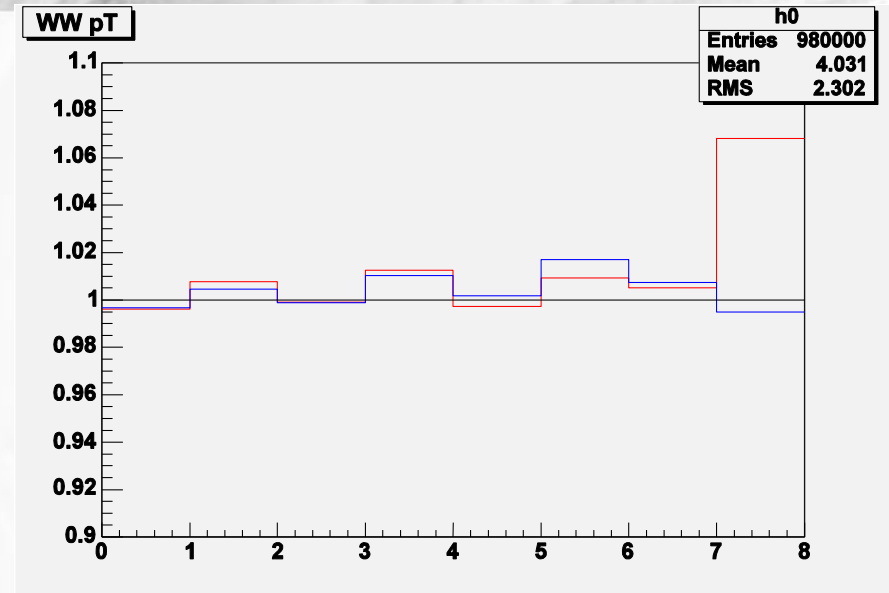


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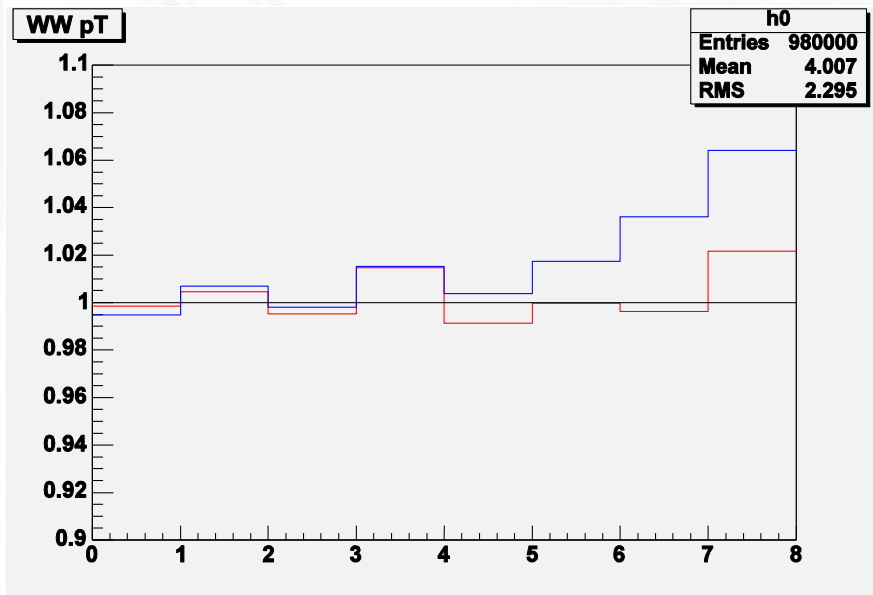
PDF scale factors



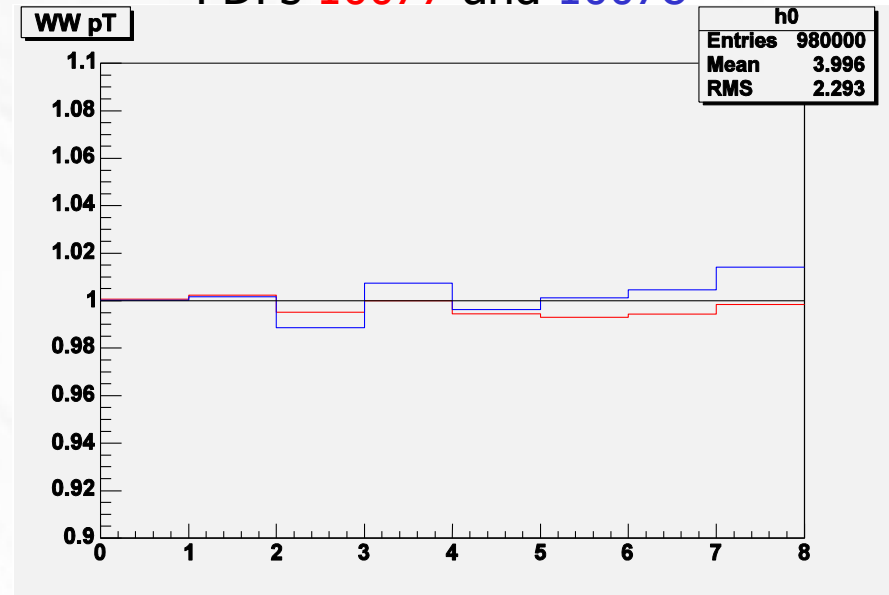
PDFs 10075 and 10076



PDFs 10077 and 10078

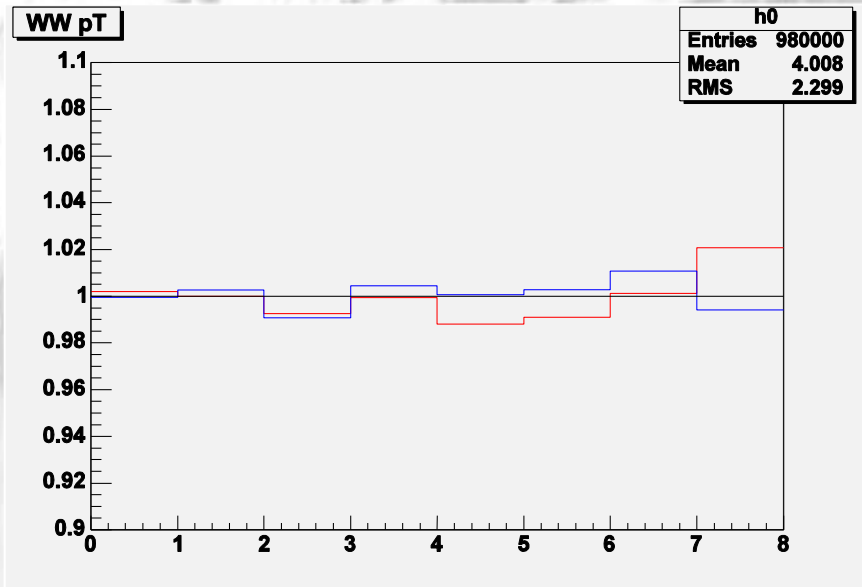


PDFs 10079 and 10080

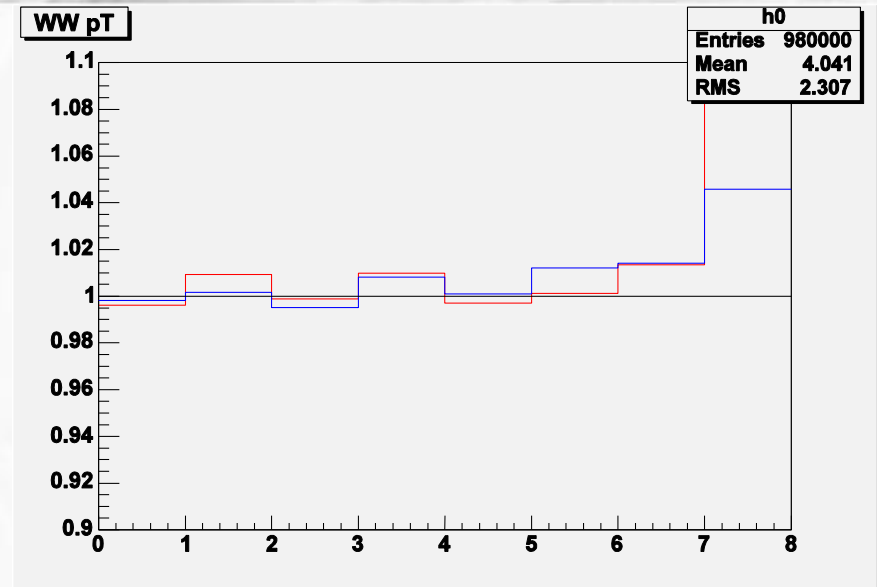


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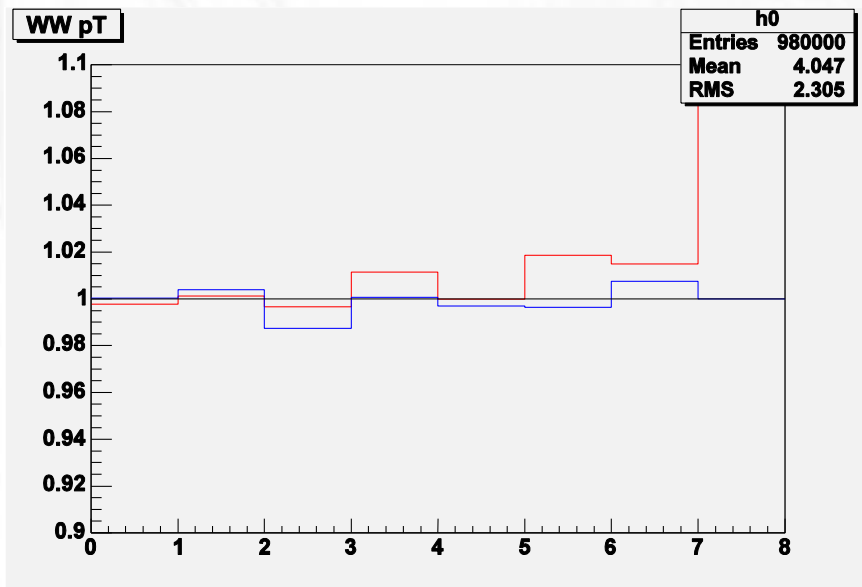
PDF scale factors



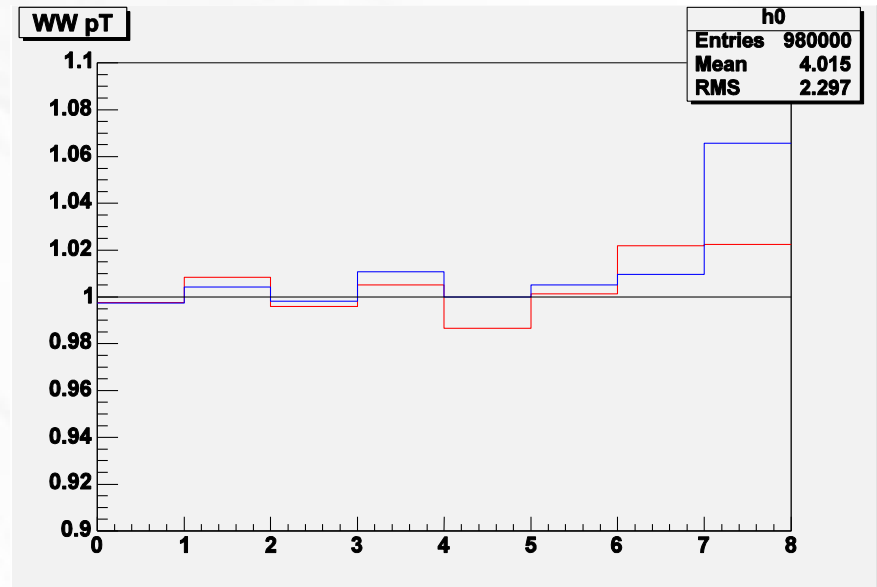
PDFs 10083 and 10084



PDFs 10085 and 10086

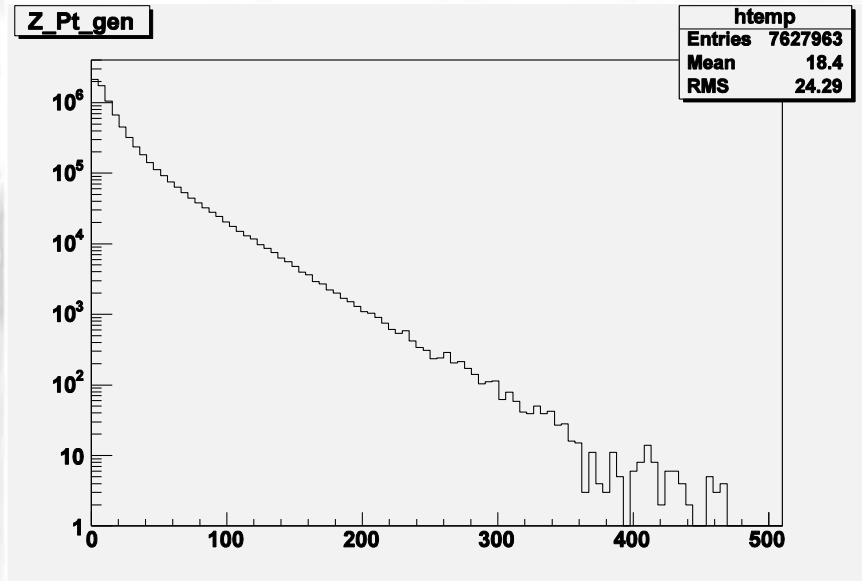


PDFs 10087 and 10088

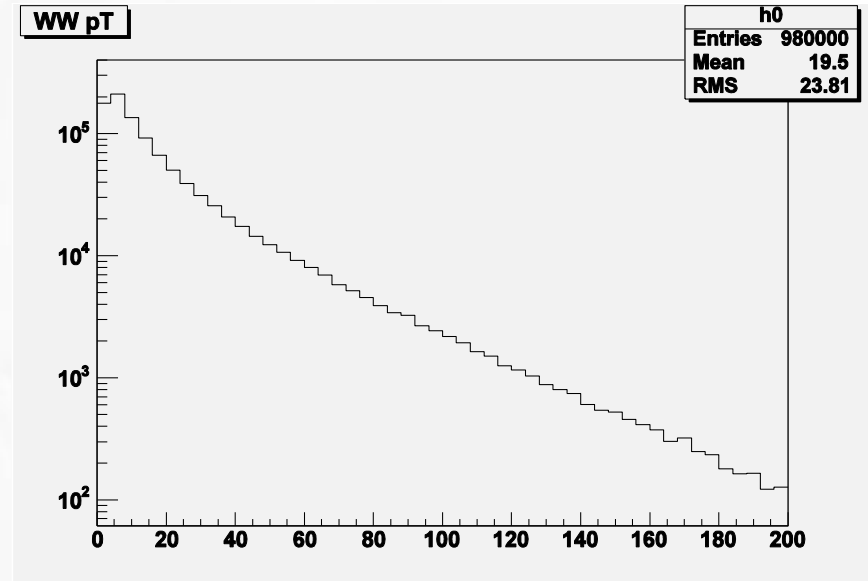


PDFs 10089 and 10090

WW pT spectrum



Analysis ntp



PDF sample 10050

- PDF sample seems to match analysis sample, cross sections are close as well (11.7 vs 11.34)
- Next slide shows PDF reweighting factors, all looking about as expected
- More on the way