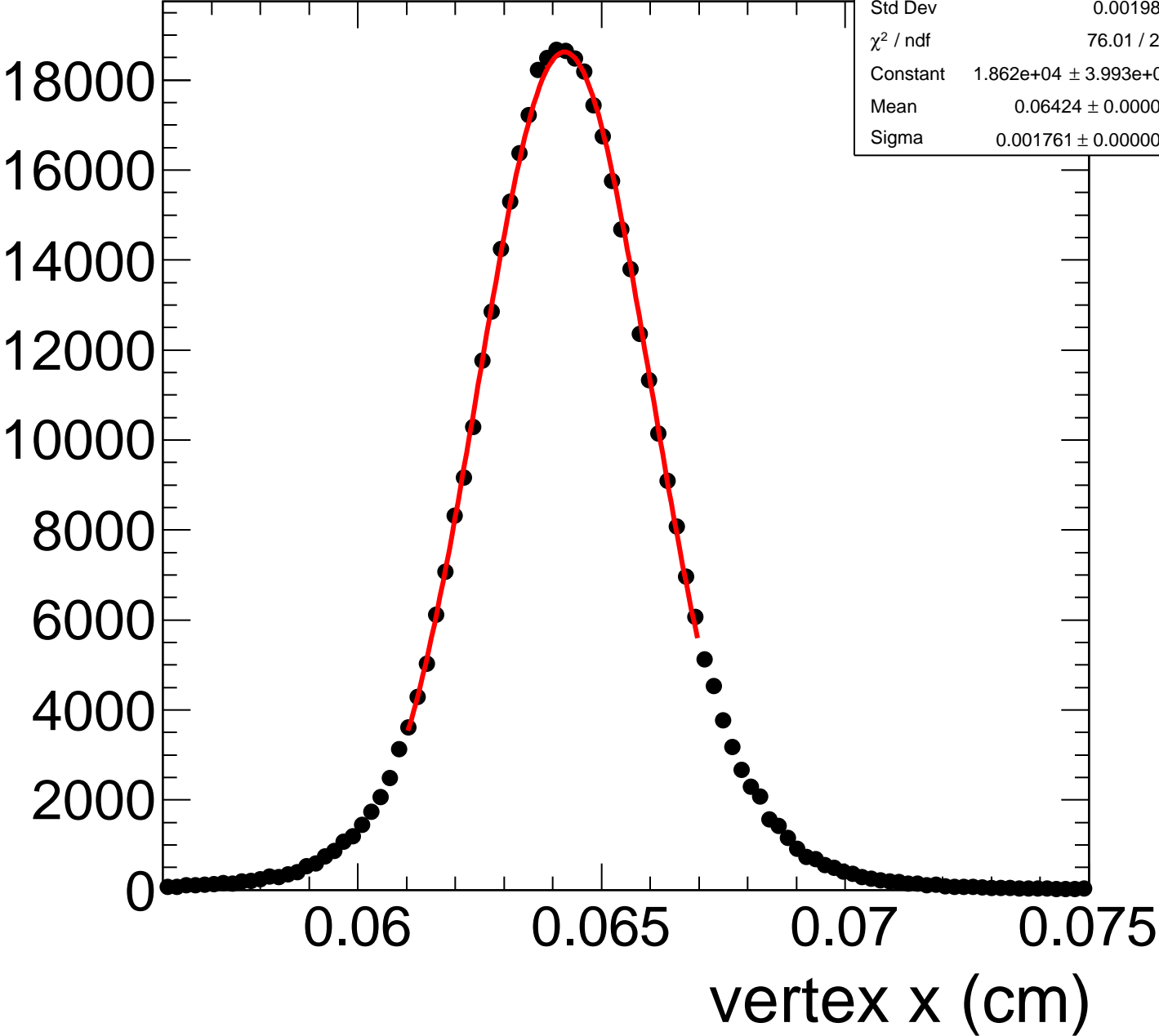
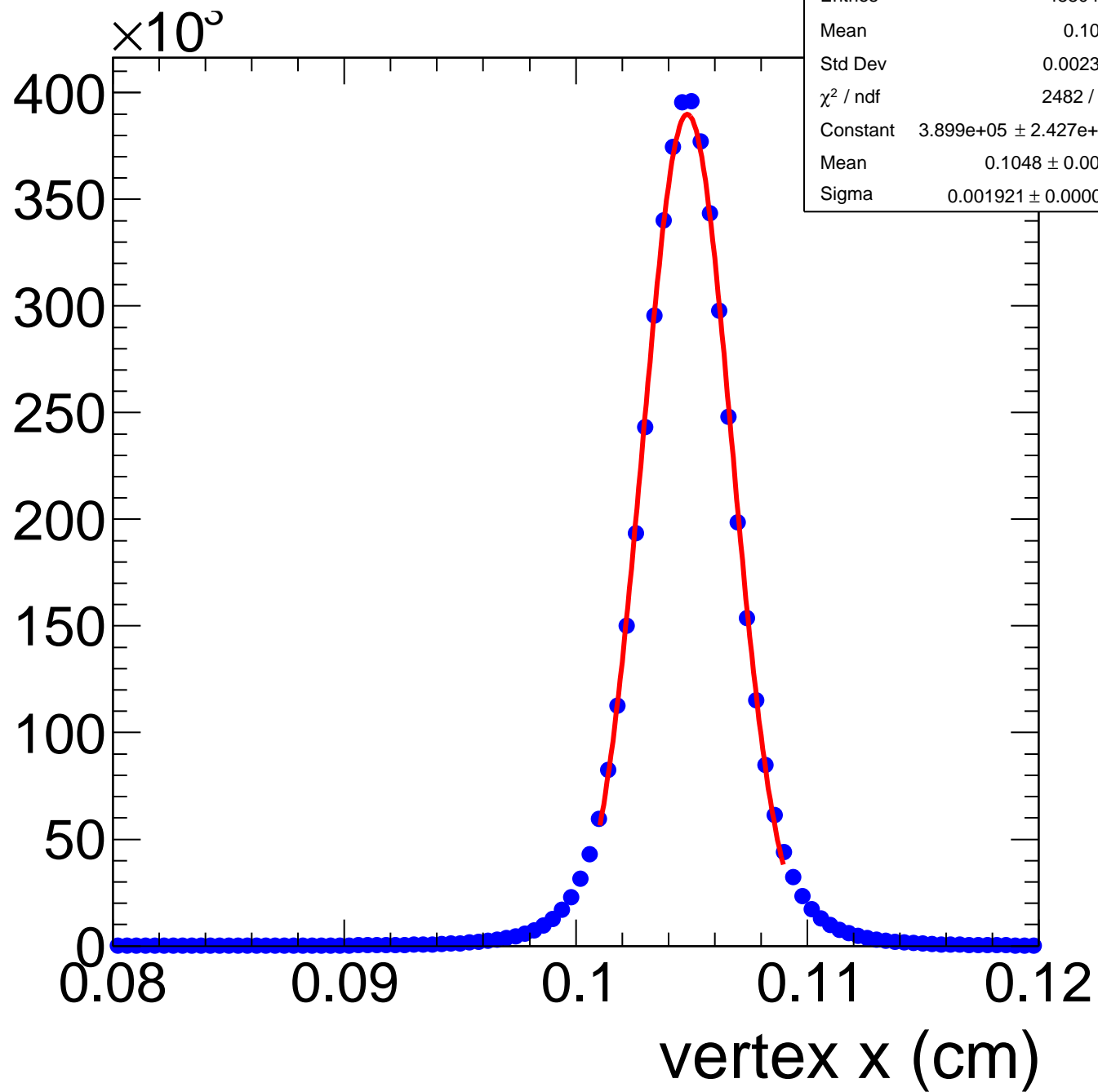


Data Vertex X

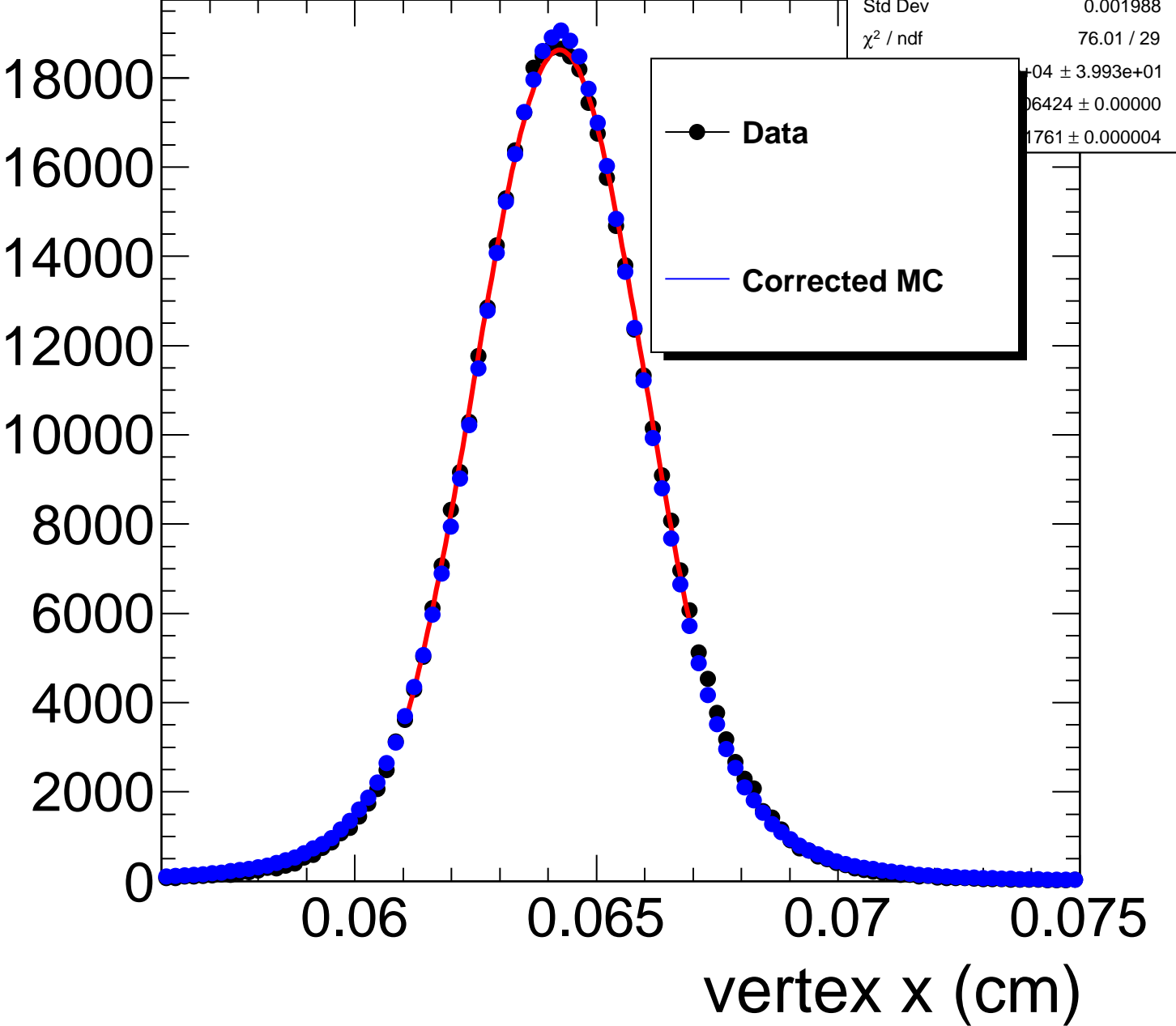
hdt_x	
Entries	448736
Mean	0.06428
Std Dev	0.001988
χ^2 / ndf	76.01 / 29
Constant	$1.862\text{e}+04 \pm 3.993\text{e}+01$
Mean	0.06424 ± 0.00000
Sigma	0.001761 ± 0.000004



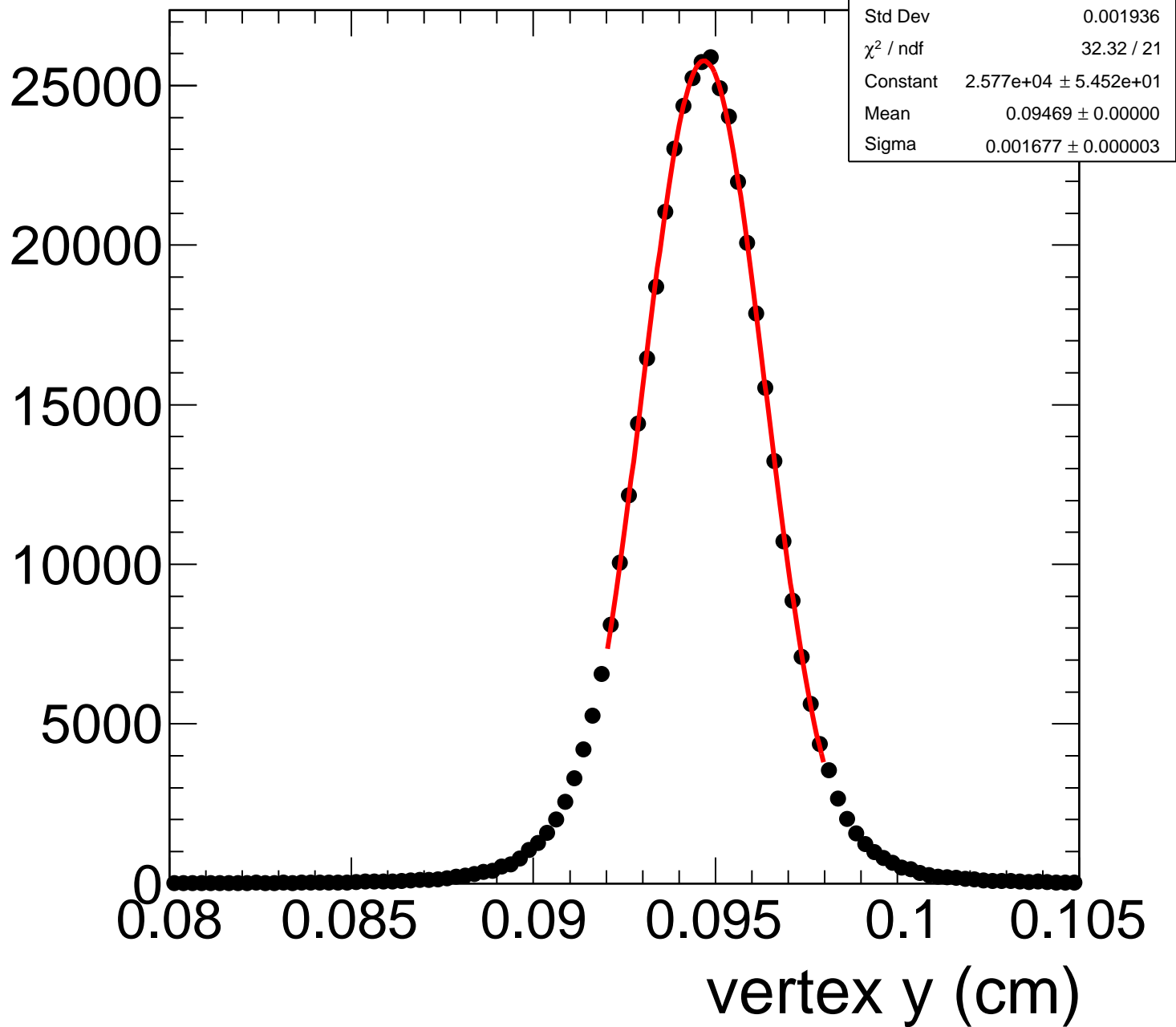
MC Vertex X



Data Vertex X

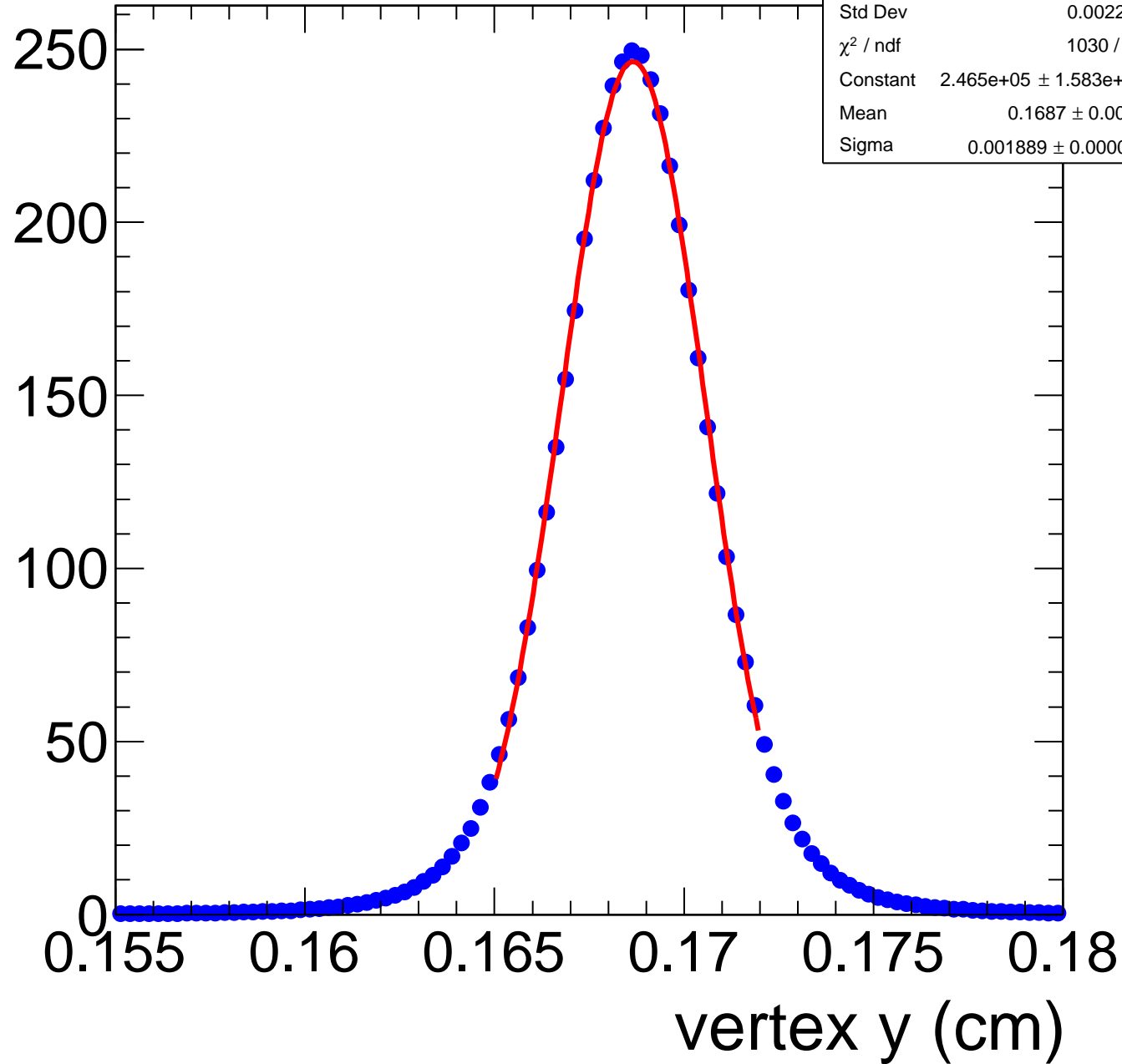


Data Vertex Y

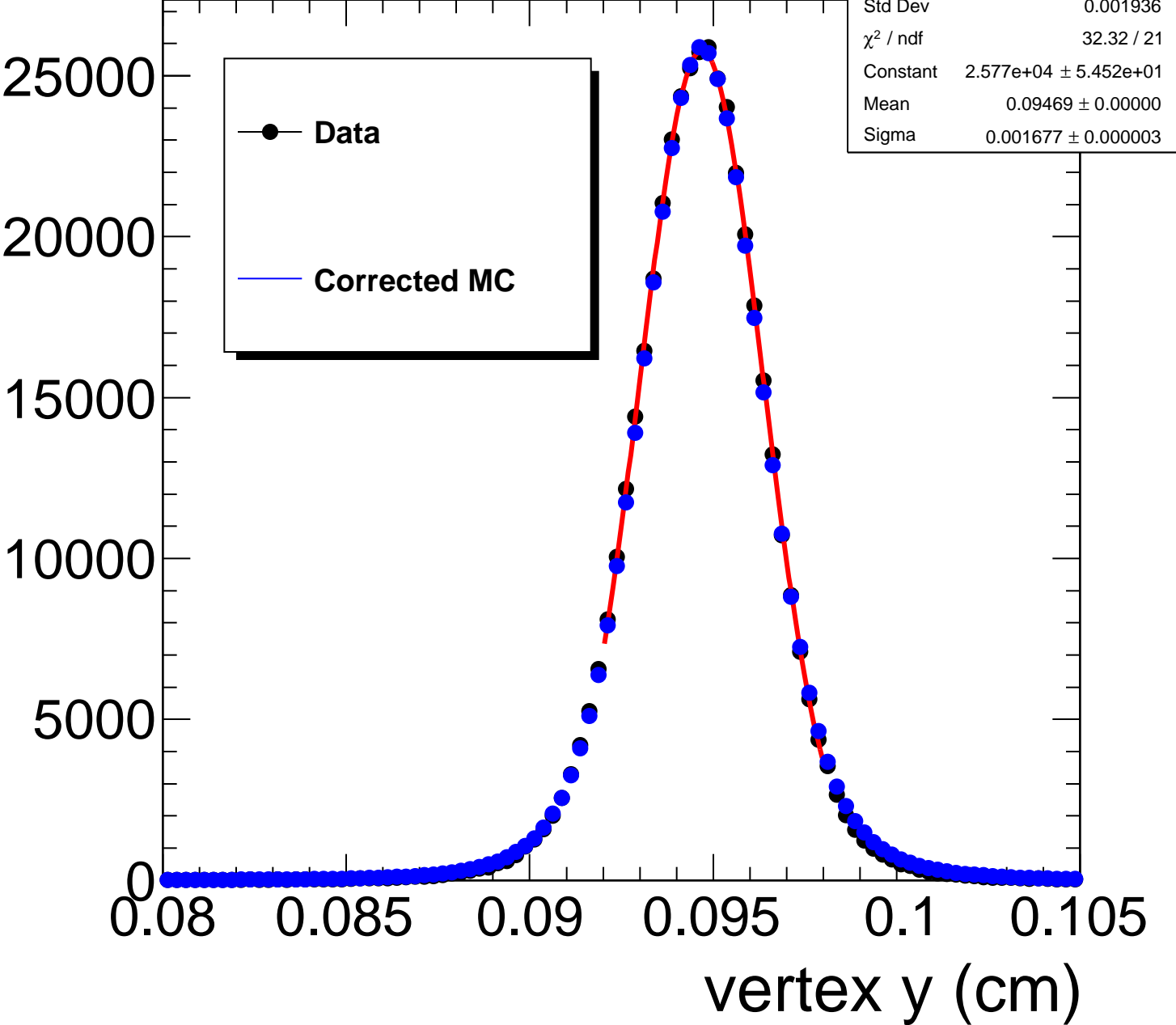


MC Vertex Y

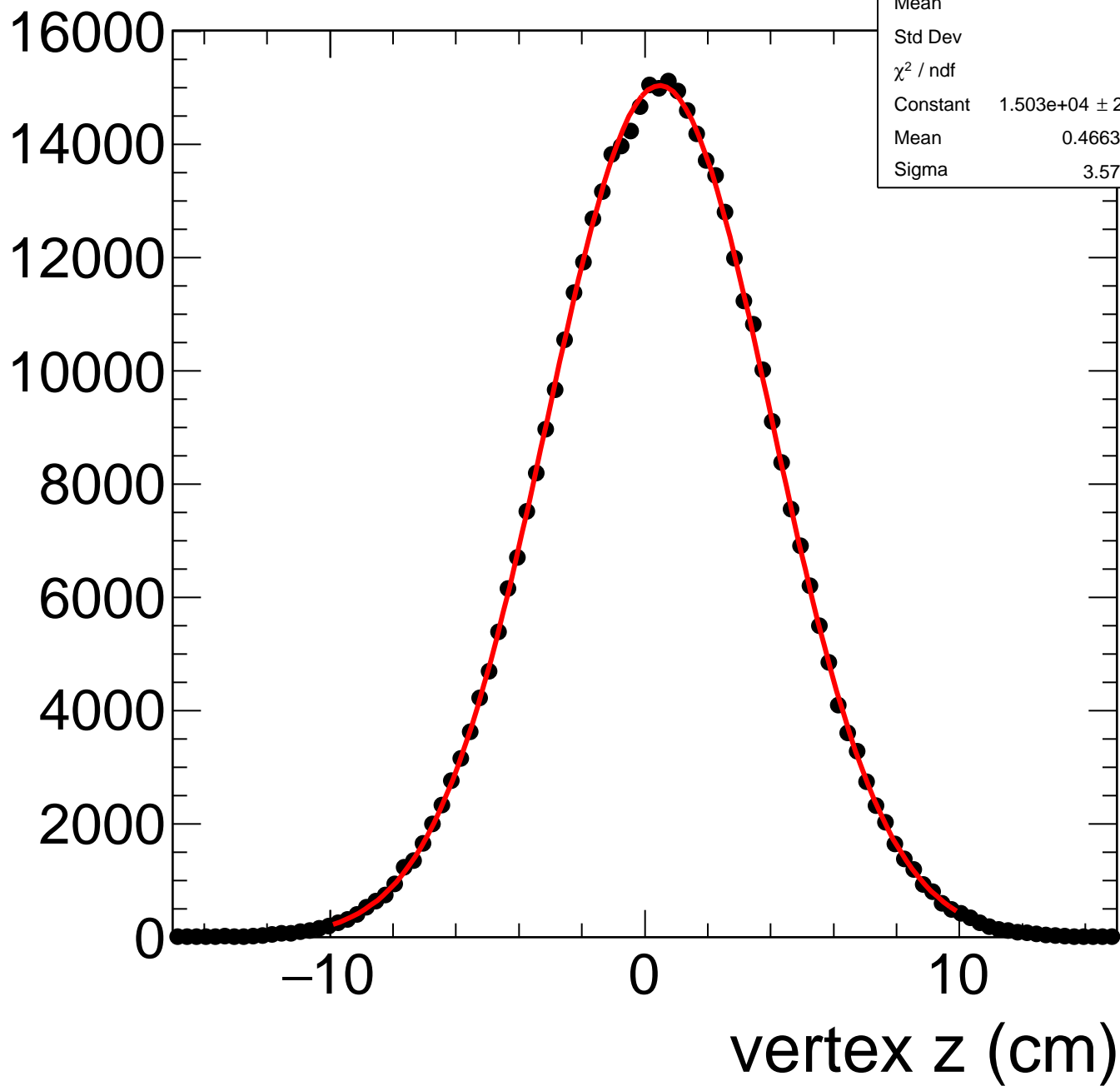
$\times 10^9$



Data Vertex Y



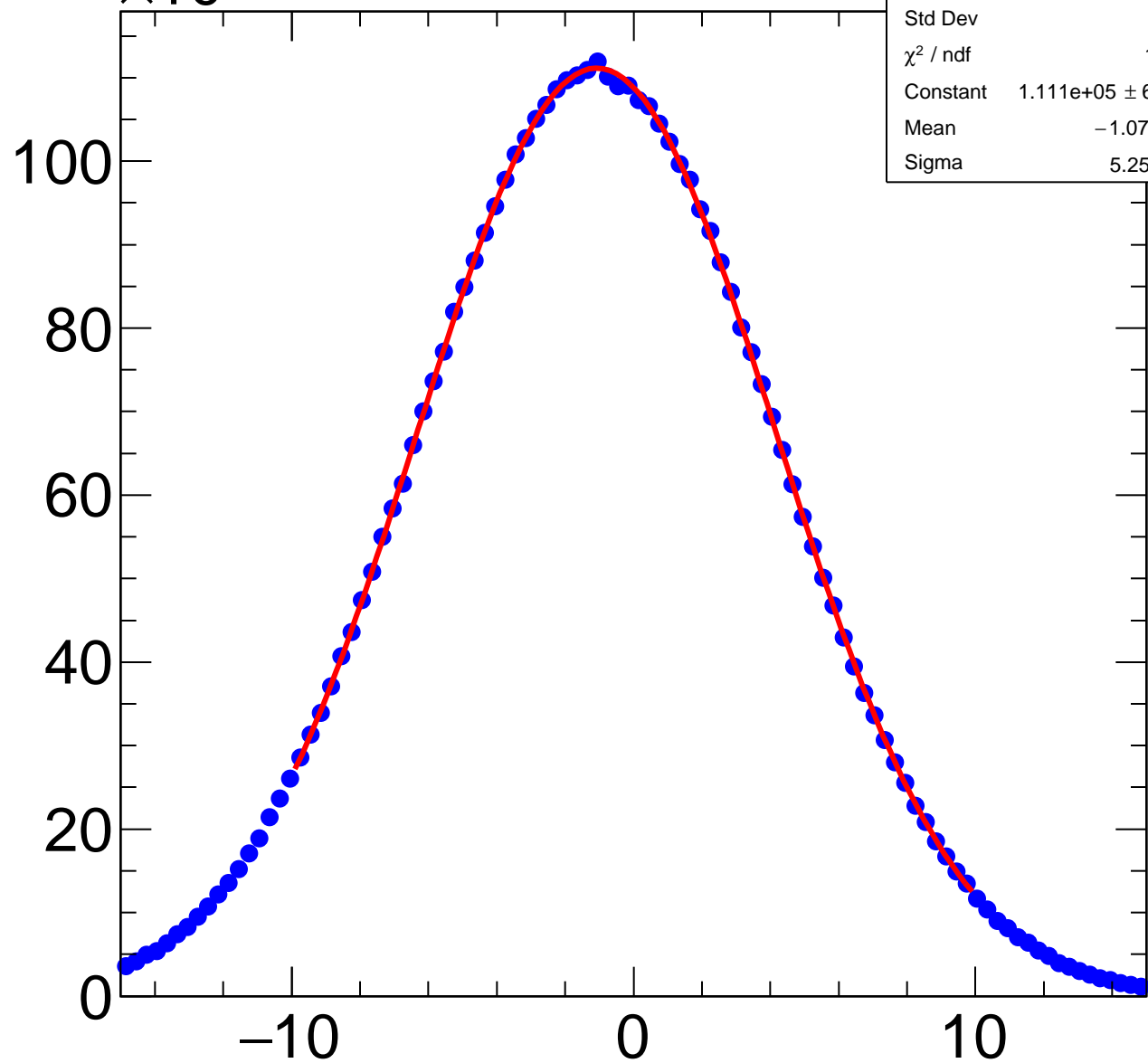
Data Vertex Z



hdt_z	
Entries	448736
Mean	0.4651
Std Dev	3.566
χ^2 / ndf	66.4 / 63
Constant	$1.503\text{e}+04 \pm 2.821\text{e}+01$
Mean	0.4663 ± 0.0055
Sigma	3.573 ± 0.004

MC Vertex Z

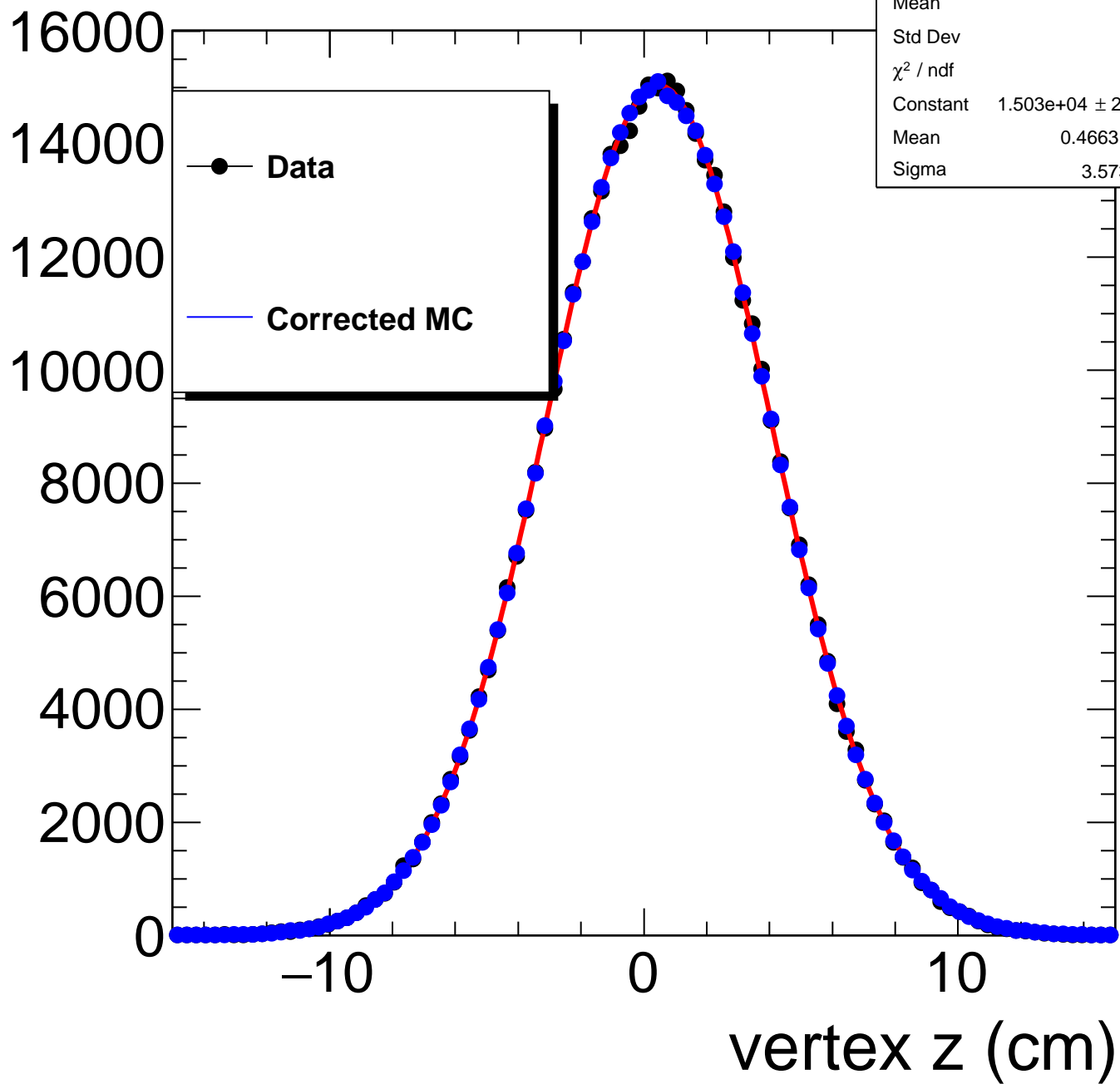
$\times 10^9$



hmc_z	
Entries	4880463
Mean	-1.037
Std Dev	5.141
χ^2 / ndf	104.8 / 63
Constant	1.111e+05 \pm 6.876e+01
Mean	-1.079 \pm 0.003
Sigma	5.256 \pm 0.003

vertex z (cm)

Data Vertex Z



hdt_z	
Entries	448736
Mean	0.4651
Std Dev	3.566
χ^2 / ndf	66.4 / 63
Constant	1.503e+04 \pm 2.821e+01
Mean	0.4663 \pm 0.0055
Sigma	3.573 \pm 0.004