1   Comments
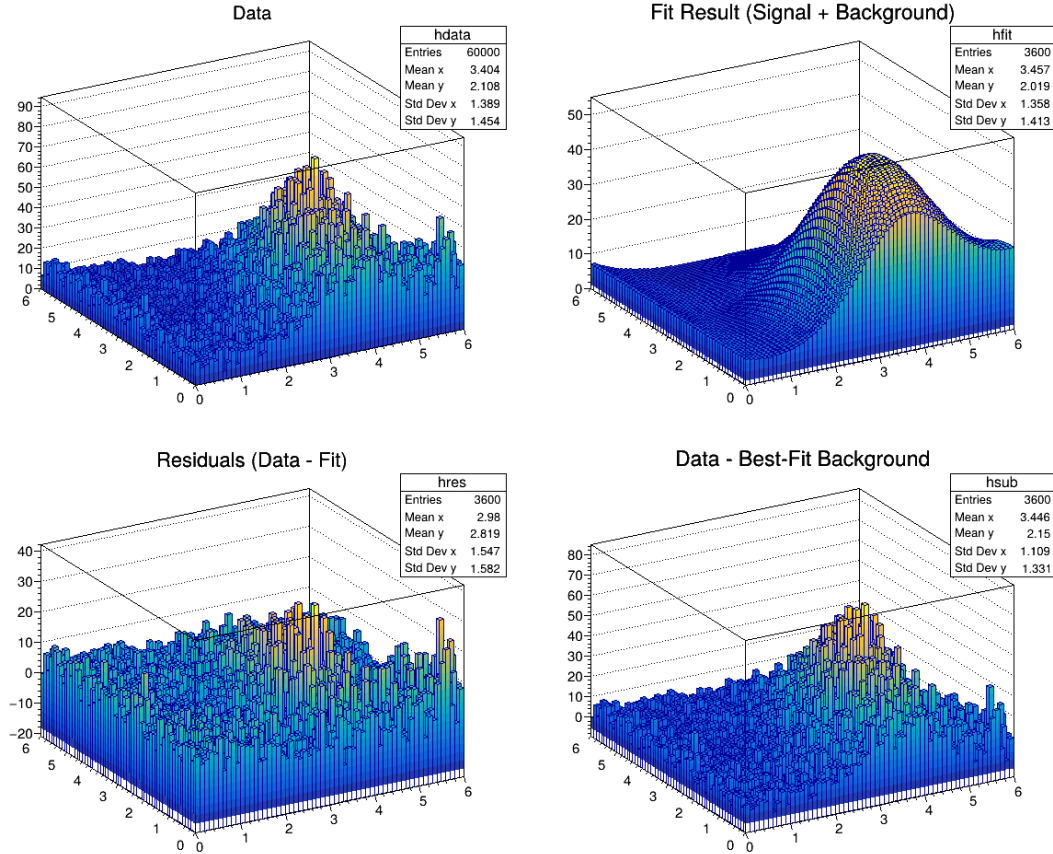

Figure 1:

here's the script output:

=== Fit Parameter Results === A = 33575.6 ± 275.146 mu1 = 3.55834 ± 0.00587431 mu2 = 1.56372 ± 0.0207186 sigma1 = 1 ± 7.70741e-05 sigma2 = 1.589 ± 0.0170731 B = 19736.5 ± 248.462

Chi2 = 6765.34 NDF = 3594 Reduced Chi2 = 1.8824

A should be the number of signals so there were 33575.6 ± 275.146 signal events. B covers the background which has 19736.5 ± 248.462 events. Visually my plots look right. The background is very heavy in the one corner, and my script successfully removes background events from that corner. The model being a 2D gaussian with that wavy background is visually what my fit result looks like, and the reduced chi2 is 1.88, meaning the model does well to describe the data.