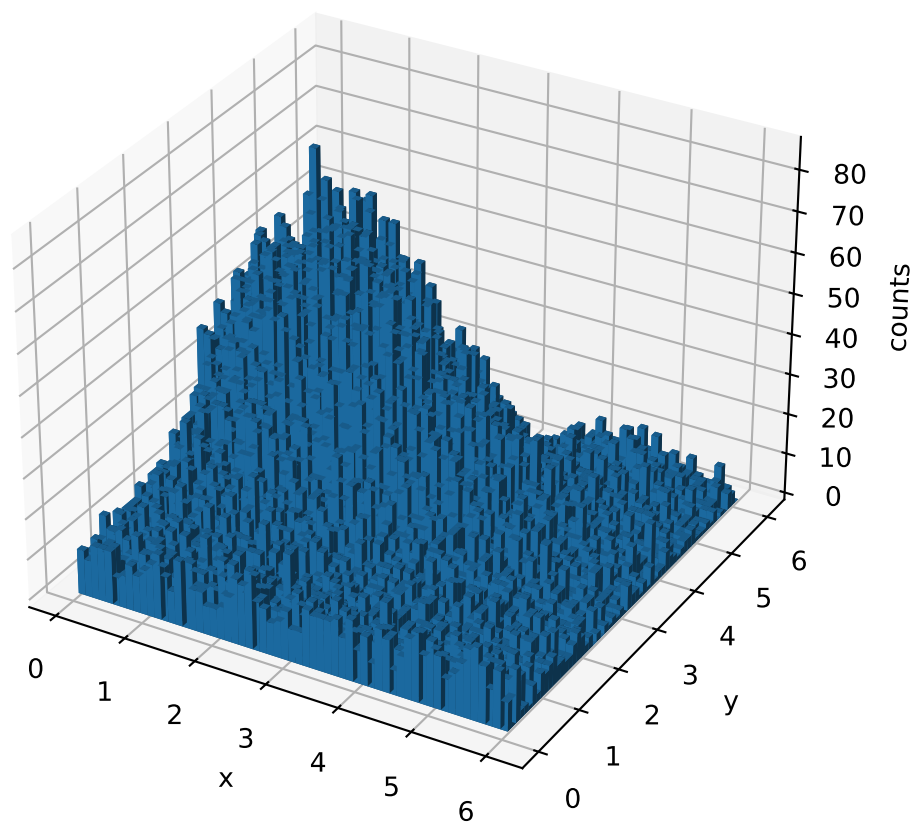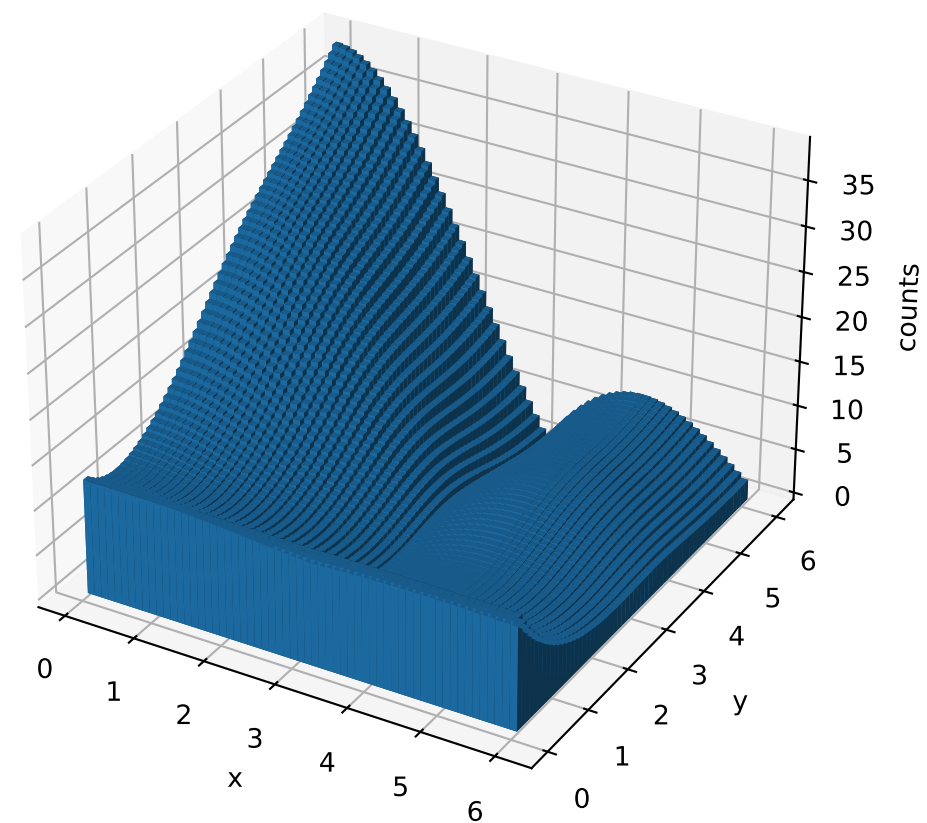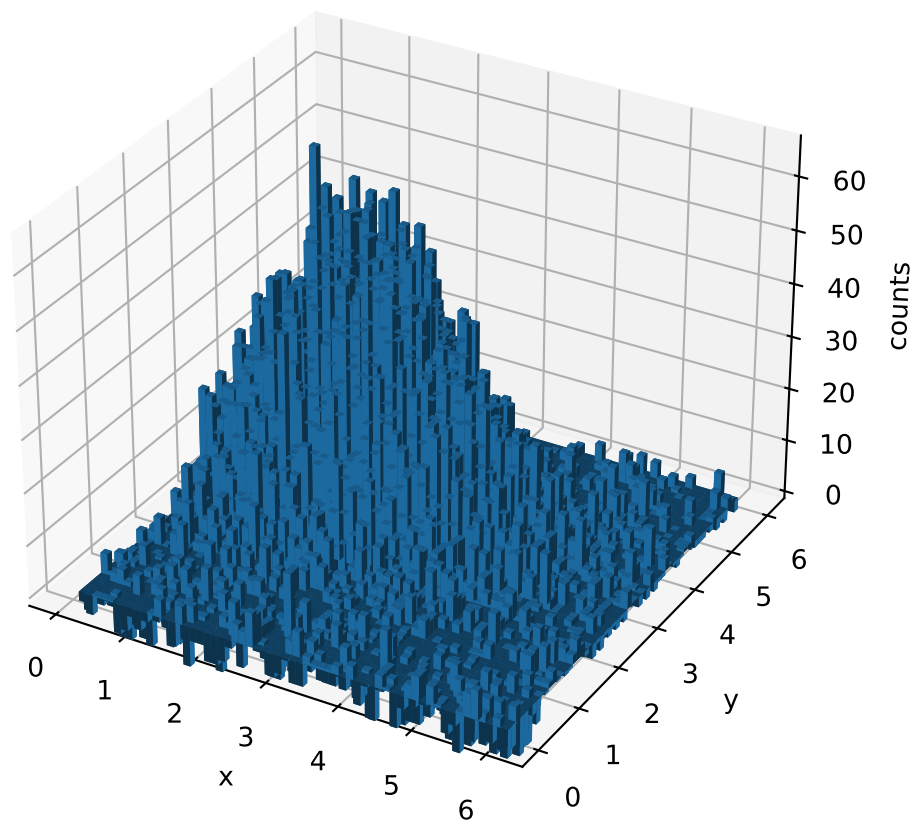Data

Fit (Signal+Background)

Residuals (Data-Fit)

Data - Best-fit Background

Fit results:
A = 336.1 ± 68.96
mu1 = 2.037 ± 1.072
mu2 = 3.503 ± 0.1217
sigma1 = 3.865 ± 1.352
sigma2 = 1.399 ± 0.192
B = 0.3255 ± 0.006742

Chi2/ndof = 20209.28/3594 = 5.623
Signal yield = 5709 ± 2312