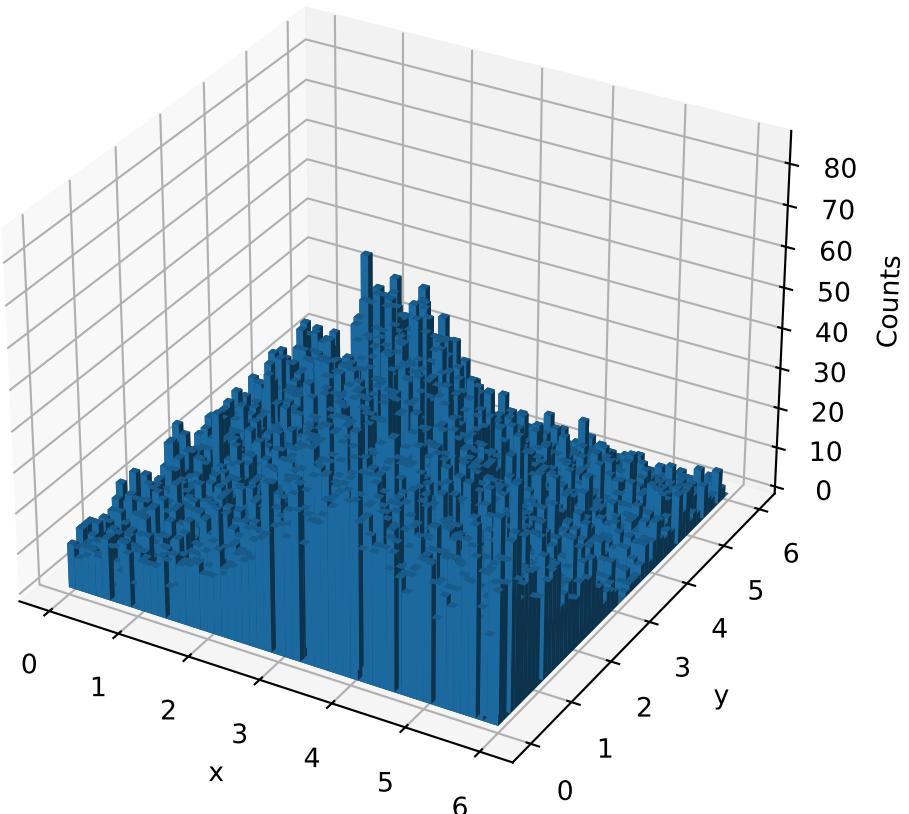
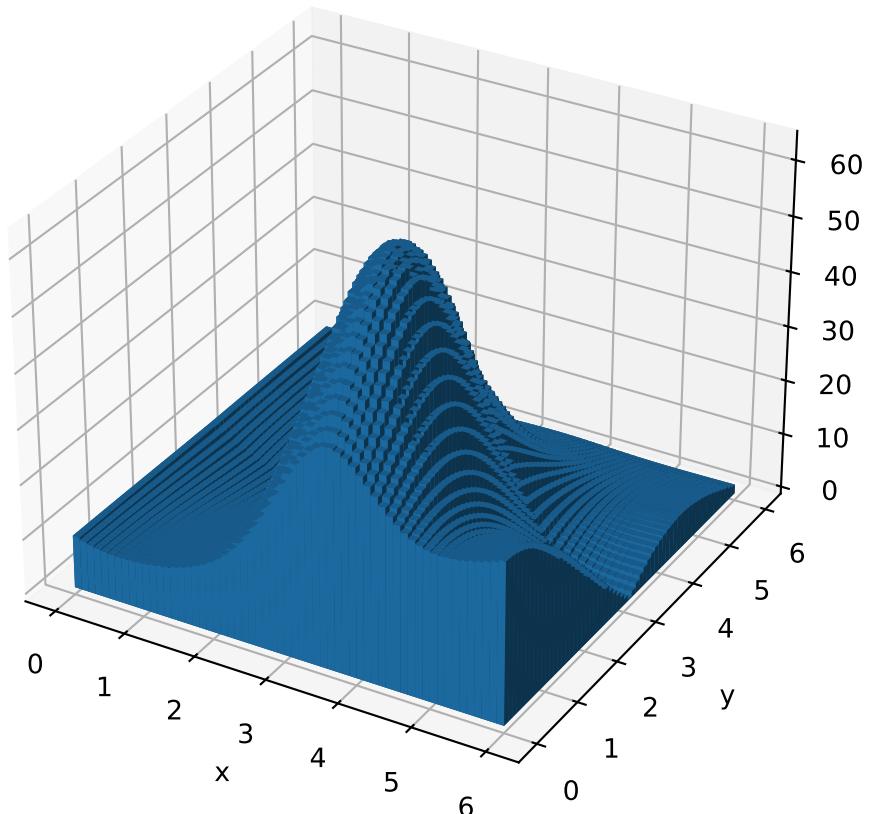


Data (hdata)

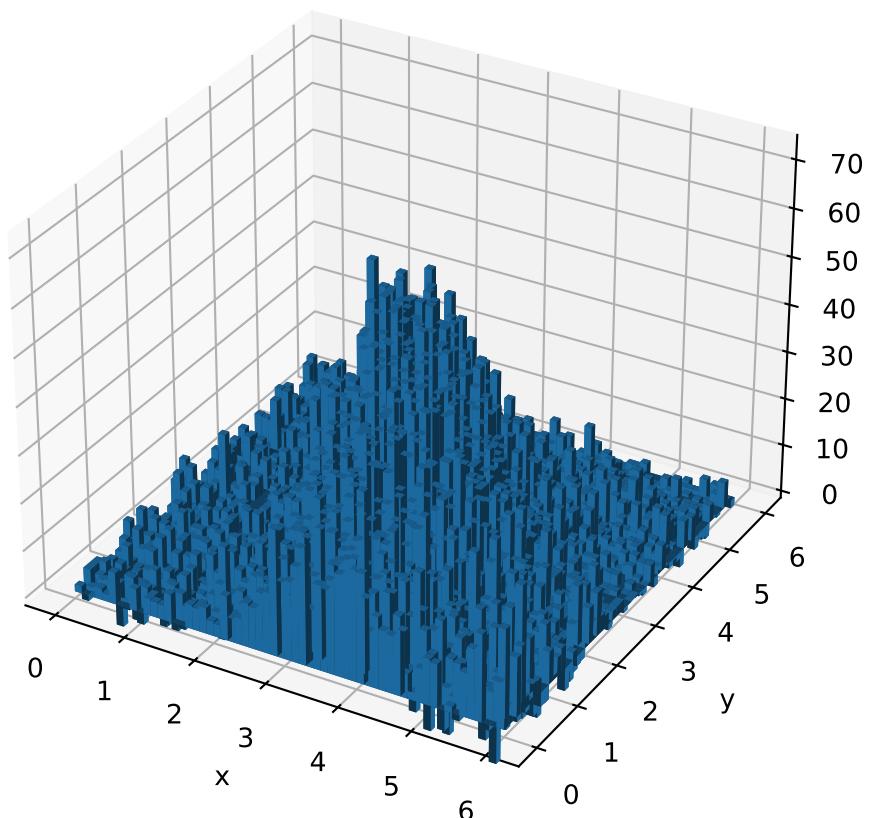
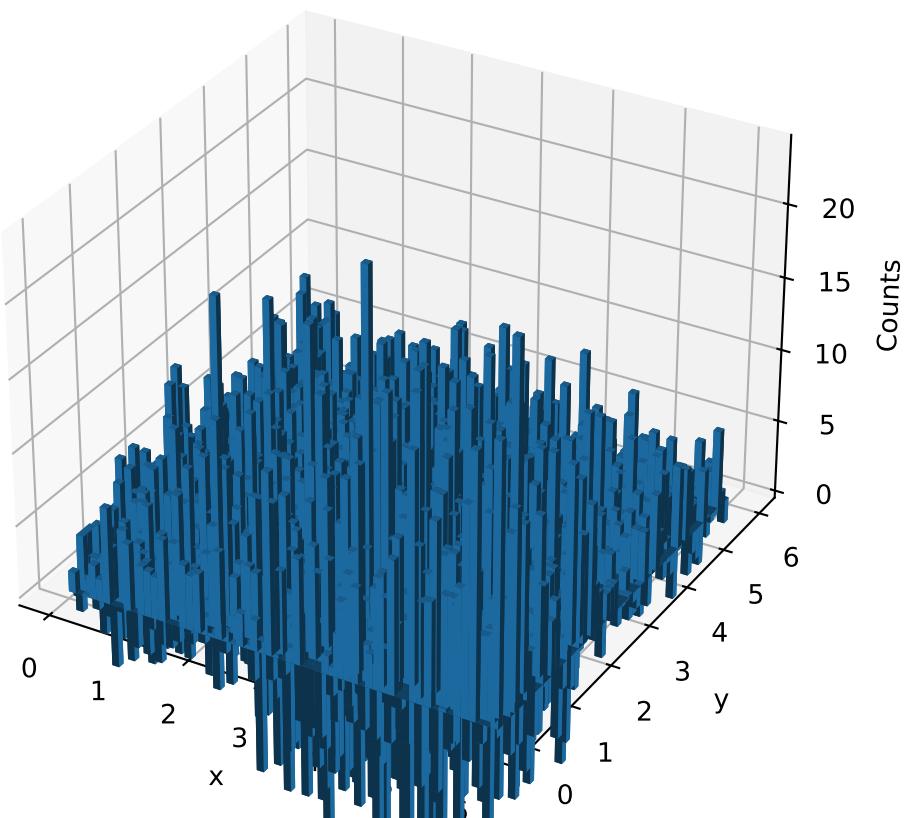


Residuals: data – fit

Fit: signal +  $\beta \cdot$ hbkg



Data –  $\beta \cdot$ hbkg



## **Fit summary**

A = 54 ± 0.6093

mux = 3.517 ± 0.006245

sigx = 0.6995 ± 0.005836

muy = 1.904 ± 0.01719

sigy = 1.382 ± 0.01486

beta = 0.2451 ± 0.002635

$\chi^2 = 4111.1$ , dof = 3565, p = 3.38e-10

Estimated total signal events = 29975.169 ± 288.401

Fit the data with bump + background.

Signal count = sum of fitted bump over all bins.

Error comes from fit's own uncertainties: let each fitted number wiggle by its error and see how the sum would change.

Combine those changes and take square root