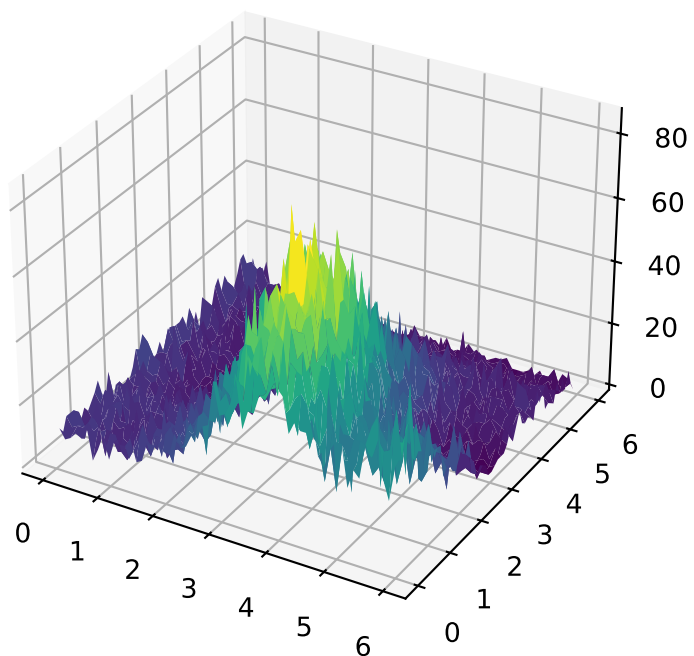
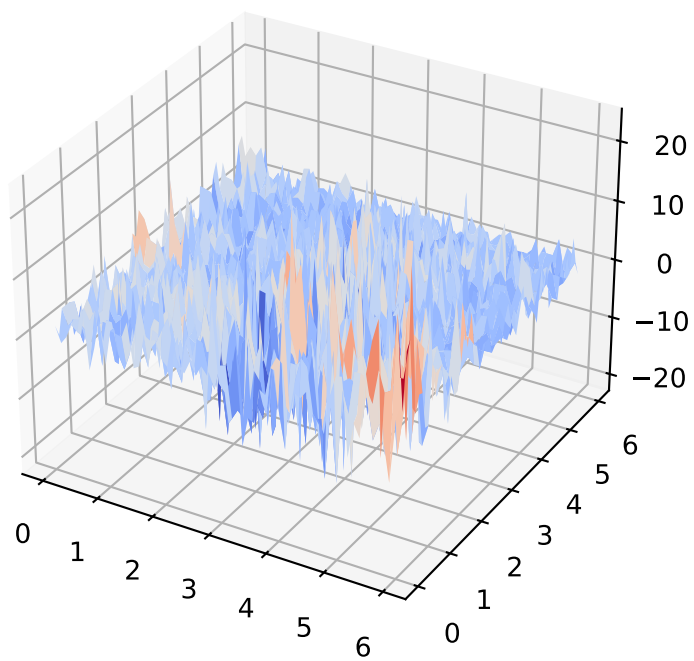


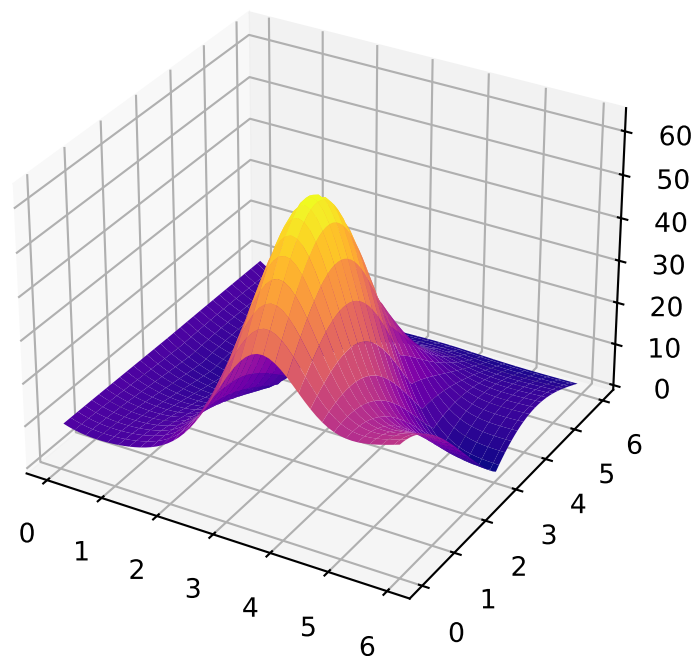
Data Histogram



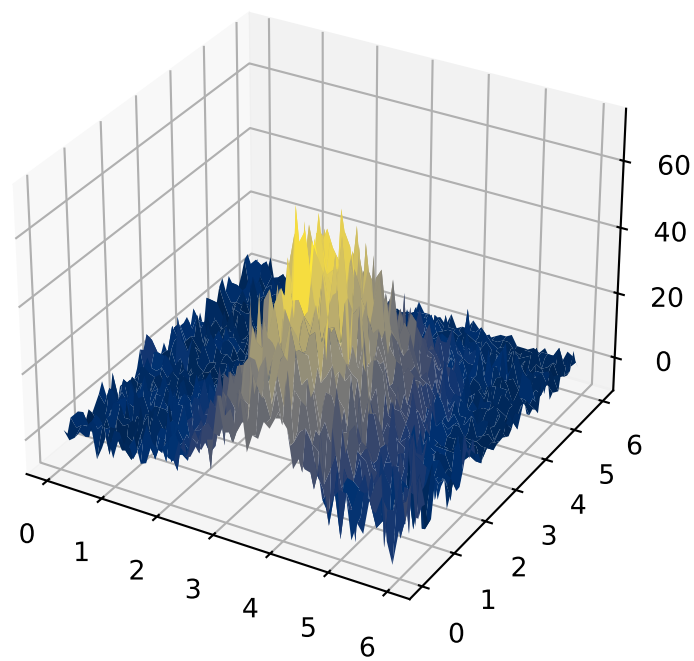
Residuals



Fit Result



Data - Background



## 2D Fit Results Summary

p0 (amp) =  $54.170 \pm 0.576$

p1 (mean x) =  $3.517 \pm 0.006$

p2 (sigma x) =  $0.700 \pm 0.005$

p3 (mean y) =  $1.899 \pm 0.016$

p4 (sigma y) =  $1.381 \pm 0.014$

bn (bkg norm) =  $0.243 \pm 0.002$

$\chi^2 = 4269.1$ , dof = 3594, p-value = 0.000

Total signal events  $\approx 30060.0 \pm 319.4$

The signal events and error are given above, the number of signal events is obtained from summing over the bins. The error is obtained using the parameter p0 where we take p0 to be the value and sigma p0 to be the error, then the error on number of events is number of events x (sigma p0/p0)