corner.py: Scatterplot matrices in Python

Daniel Foreman-Mackey

Sagan Fellow, University of Washington

26 May 2016

## Summary

This Python module uses matplotlib (Hunter and others 2007) to visualize multidimensional samples using a scatterplot matrix. In these visualizations, each one- and two-dimensional projection of the sample is plotted to reveal covariances. *corner* was originally conceived to display the results of Markov Chain Monte Carlo simulations and the defaults are chosen with this application in mind but it can be used for displaying many qualitatively different samples.

Development of *corner* happens on GitHub and any issues can be raised there (Foreman-Mackey 2016). *corner* has been used extensively in the astronomical literature and it has occasionally been cited as `corner.py` or using its previous name `triangle.py` (System 2016). The source code for *corner* has been archived to Zenodo and it has the DOI (Zenodo Archive, n.d.)

The following is a simple demonstration of a visualization made with *corner*:

a demo corner plot

$x = 0.32^{+2.52}_{-1.17}$

$y = 0.19^{+1.10}_{-1.05}$

$\log \alpha = 0.02^{+0.99}_{-0.99}$

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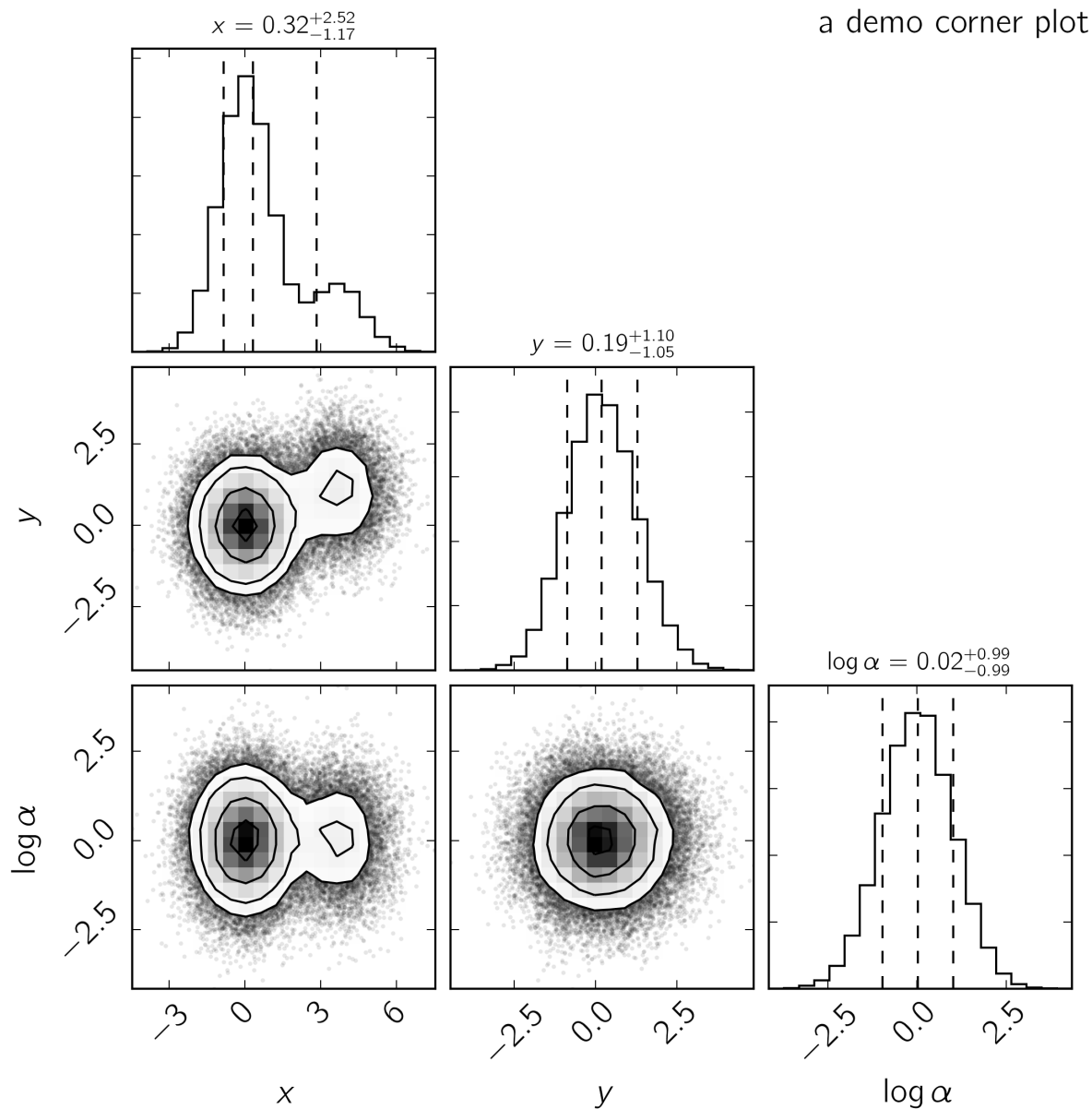
References

Foreman-Mackey, Daniel. 2016. "Corner.py on GitHub." https://github.com/dfm/corner.py.

Hunter, John D, and others. 2007. "Matplotlib: A 2D Graphics Environment." *Computing in Science and Engineering* 9 (3): 90–95.

System, Astrophysics Data. 2016. "ADS Search Results." https://ui.adsabs.harvard.edu/.

Zenodo Archive. n.d. "Corner.py: Scatterplot Matrices in Python." http://dx.doi.org/10.5281/zenodo.53155. doi:10.5281/zenodo.53155.