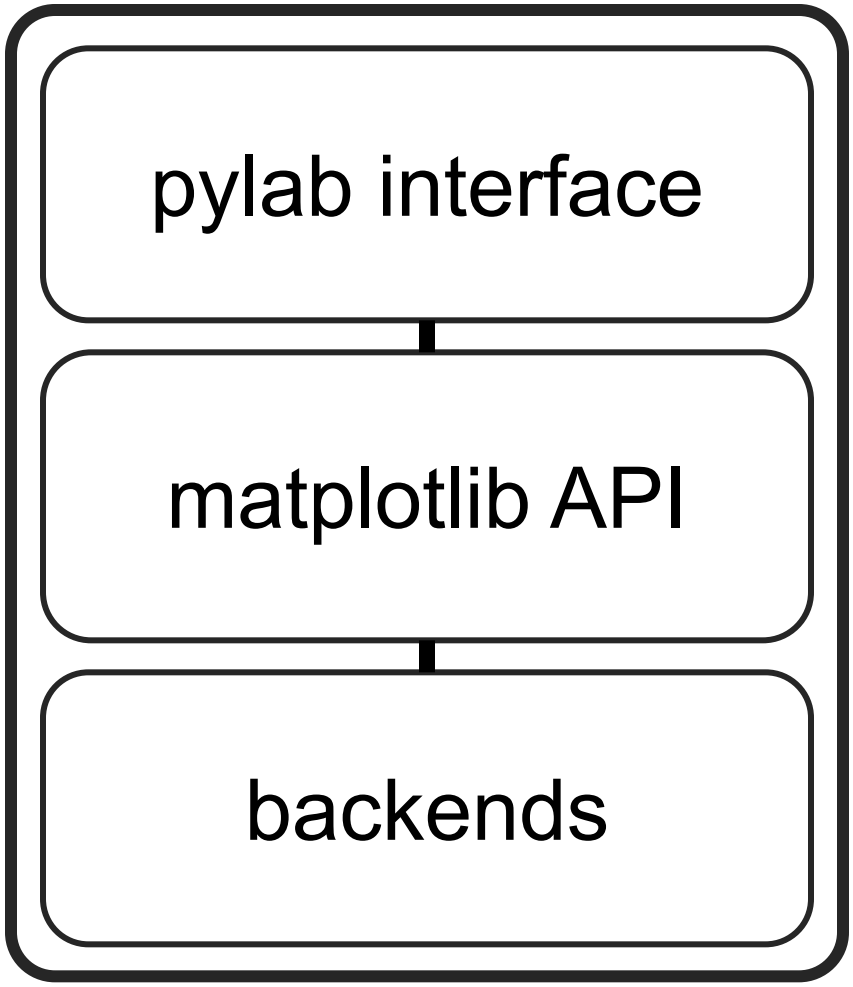
Seaborn

And Other High-Level Plotting Tool Kits

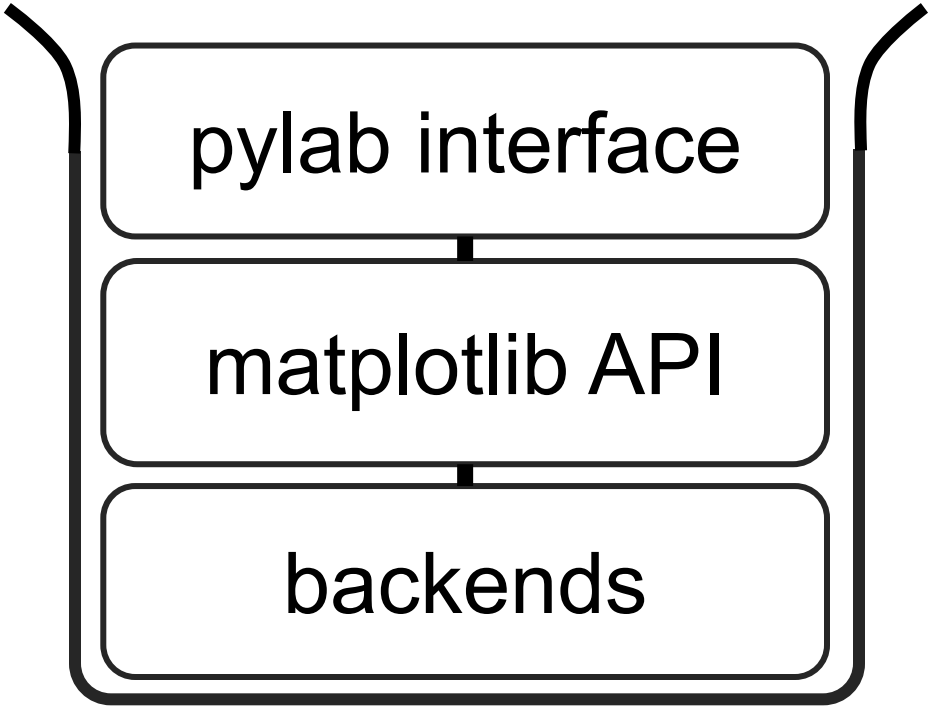
Matplotlib: Today



Another Level

seaborn ggplot basemap holoviews

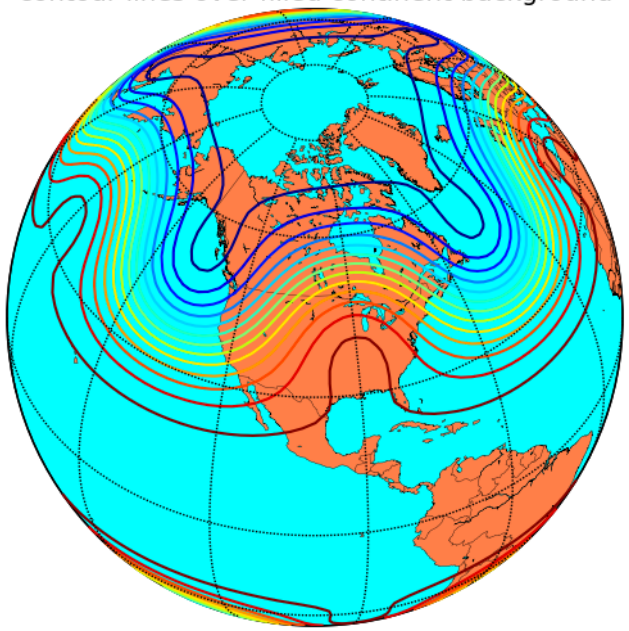
prettyplotlib mplot3d AxesGrid



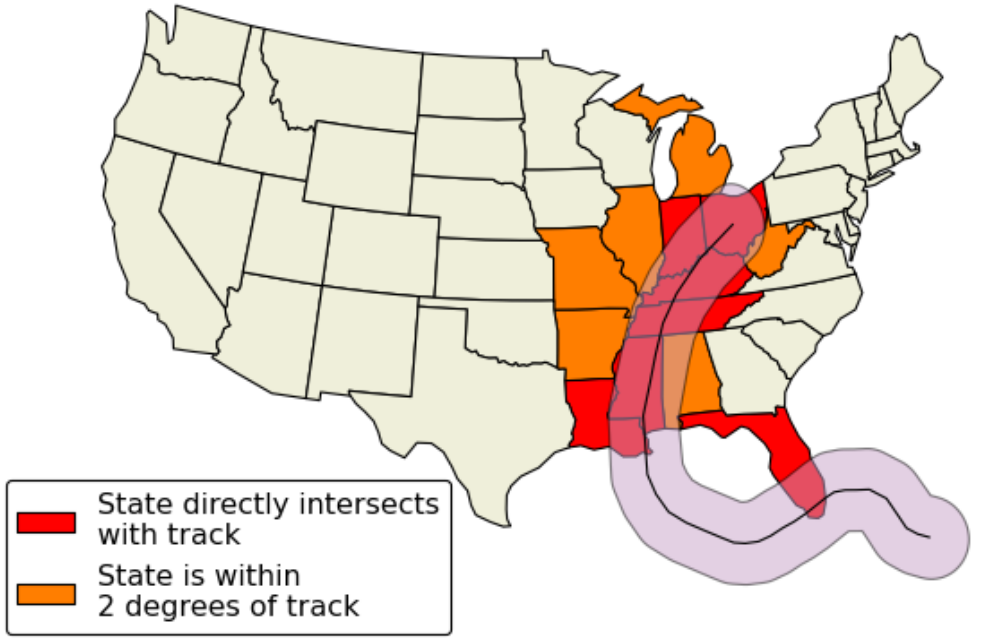
List maintained at
http://matplotlib.org/mpl_toolkits/

Basemap, Cartopy

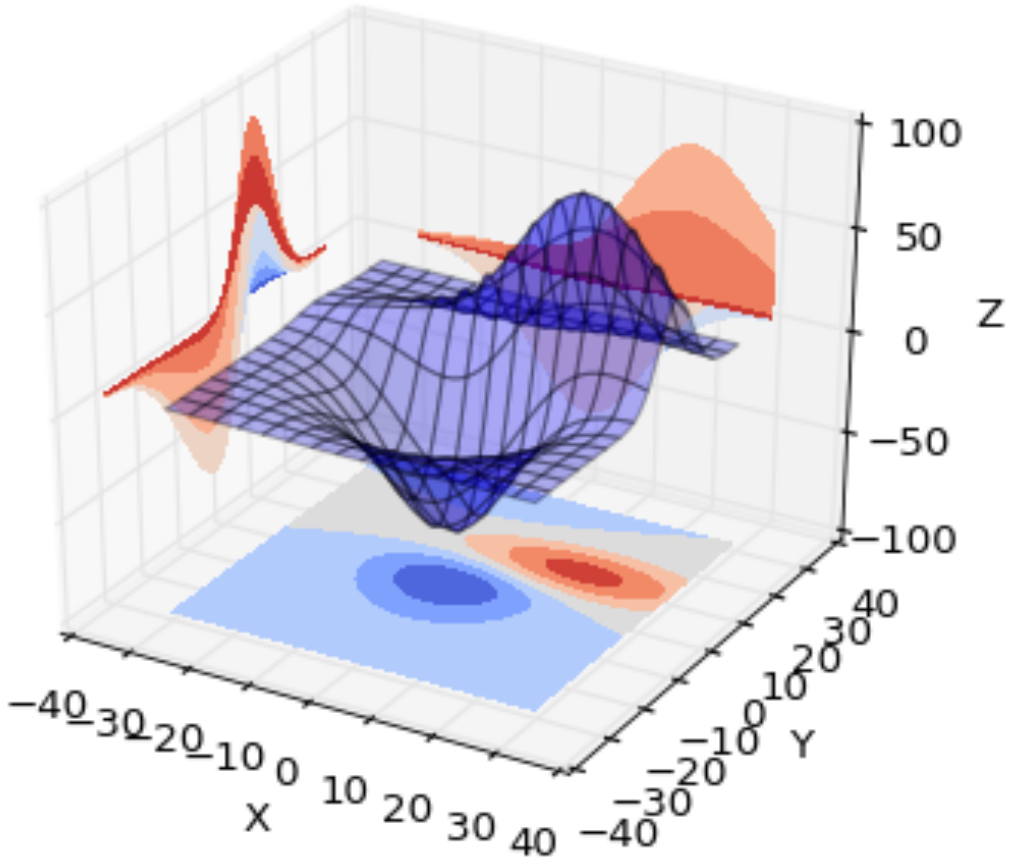
contour lines over filled continent background



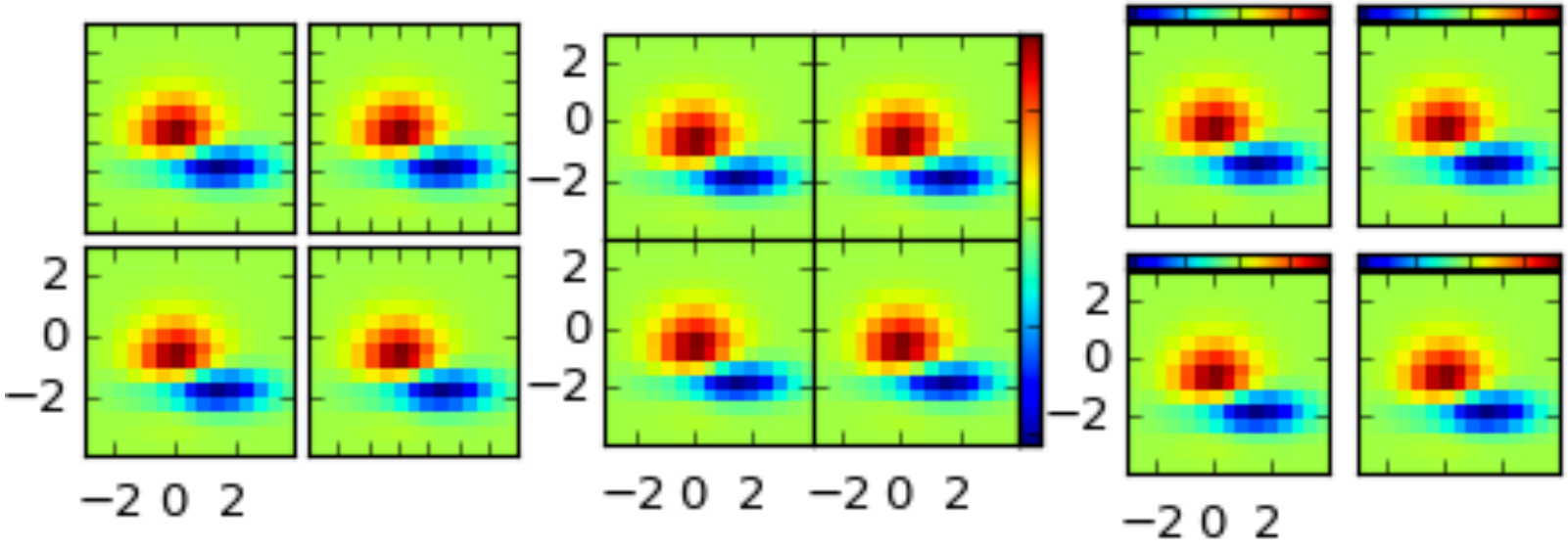
US States which intersect the track of Hurricane Katrina (2005)



mplot3d



AxesGrid



mpld3

Connects matplotlib to a D3 as a backend

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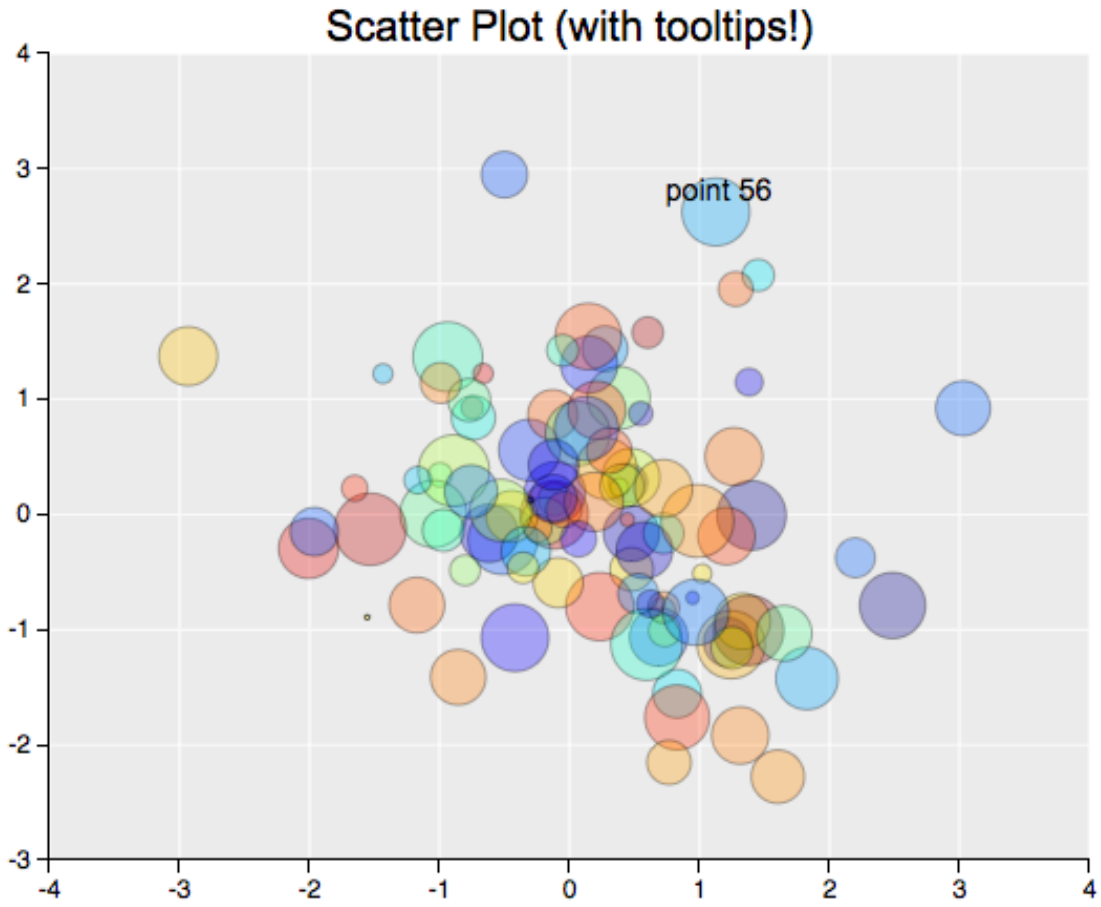
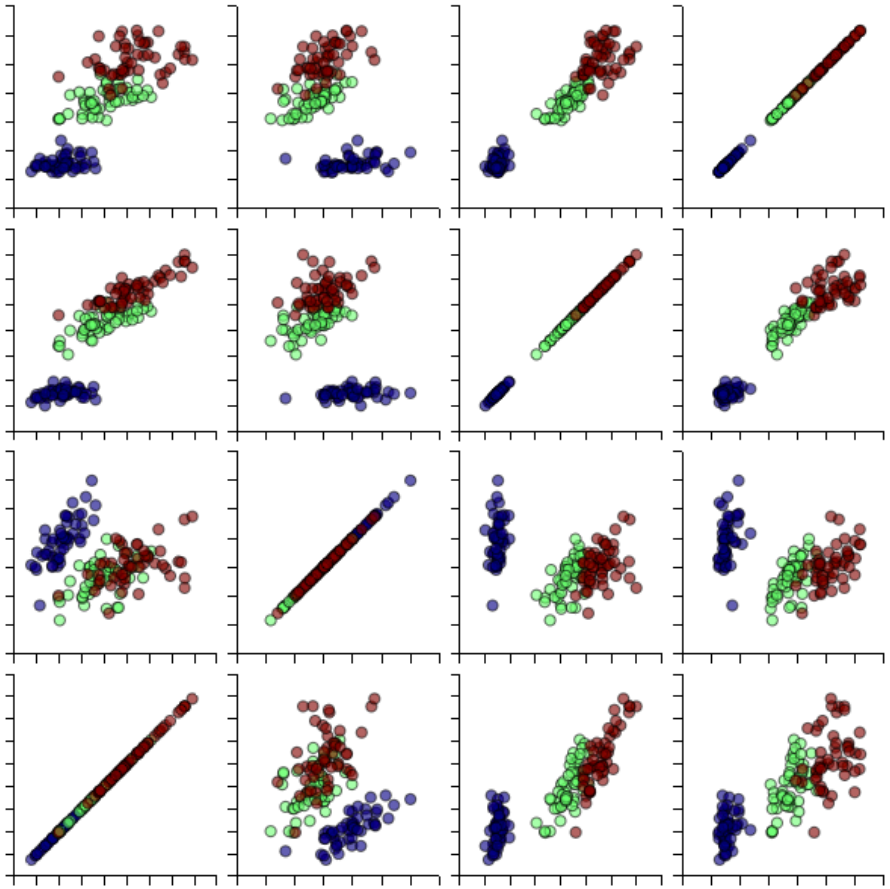
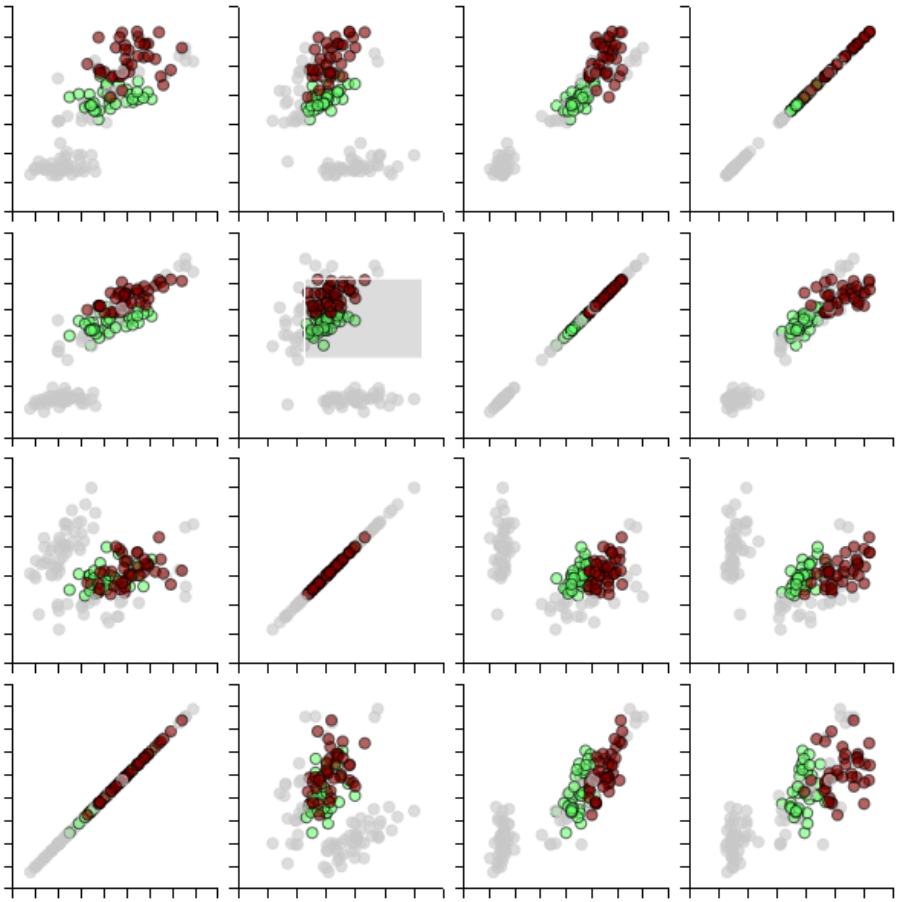


mpld3

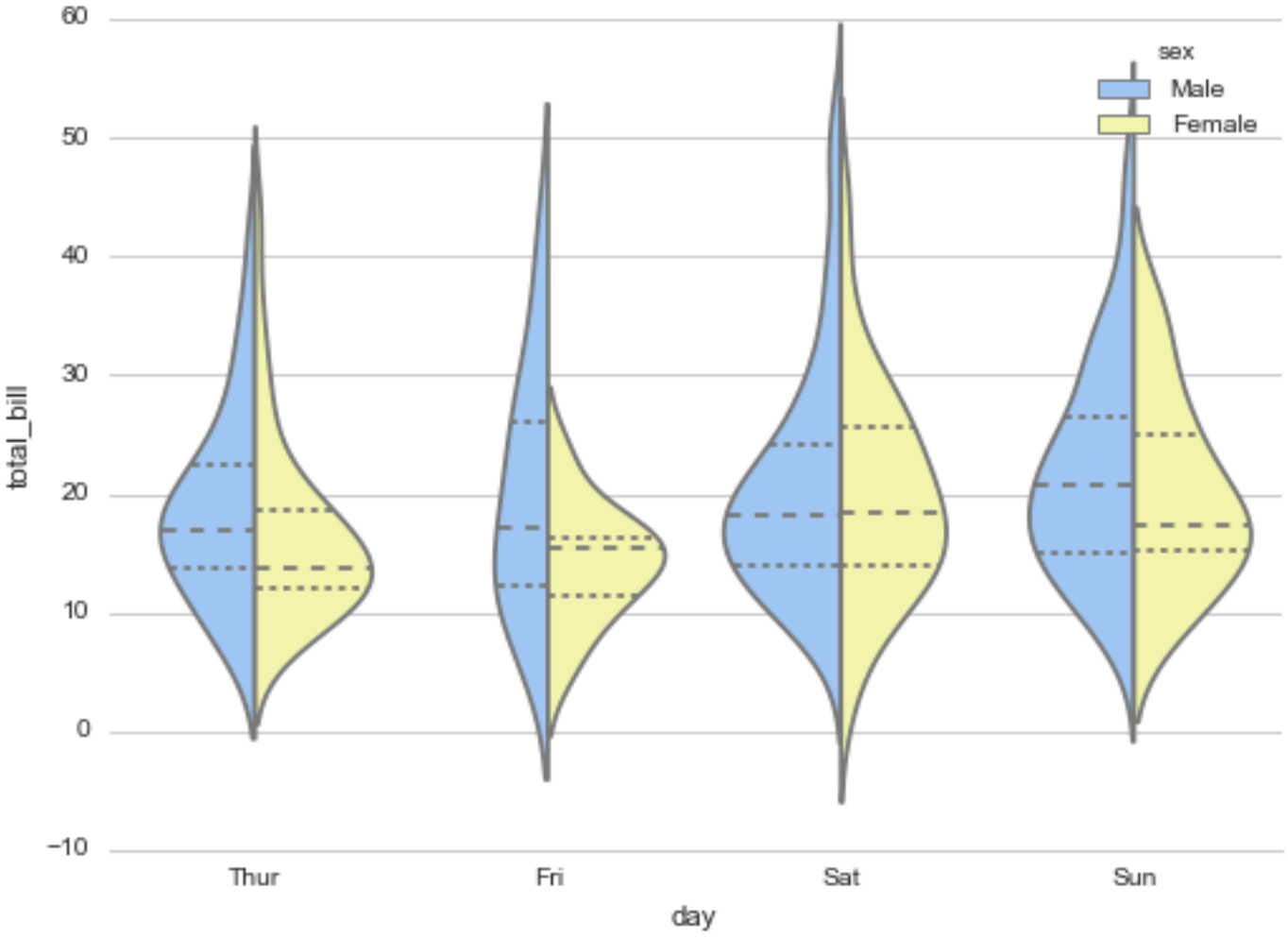




mpld3

http://mpld3.github.io/

seaborn!


60
50
40
30
20
10
0
−10
total_bill
Thur
Fri
Sat
Sun
day
sex
Male
Female

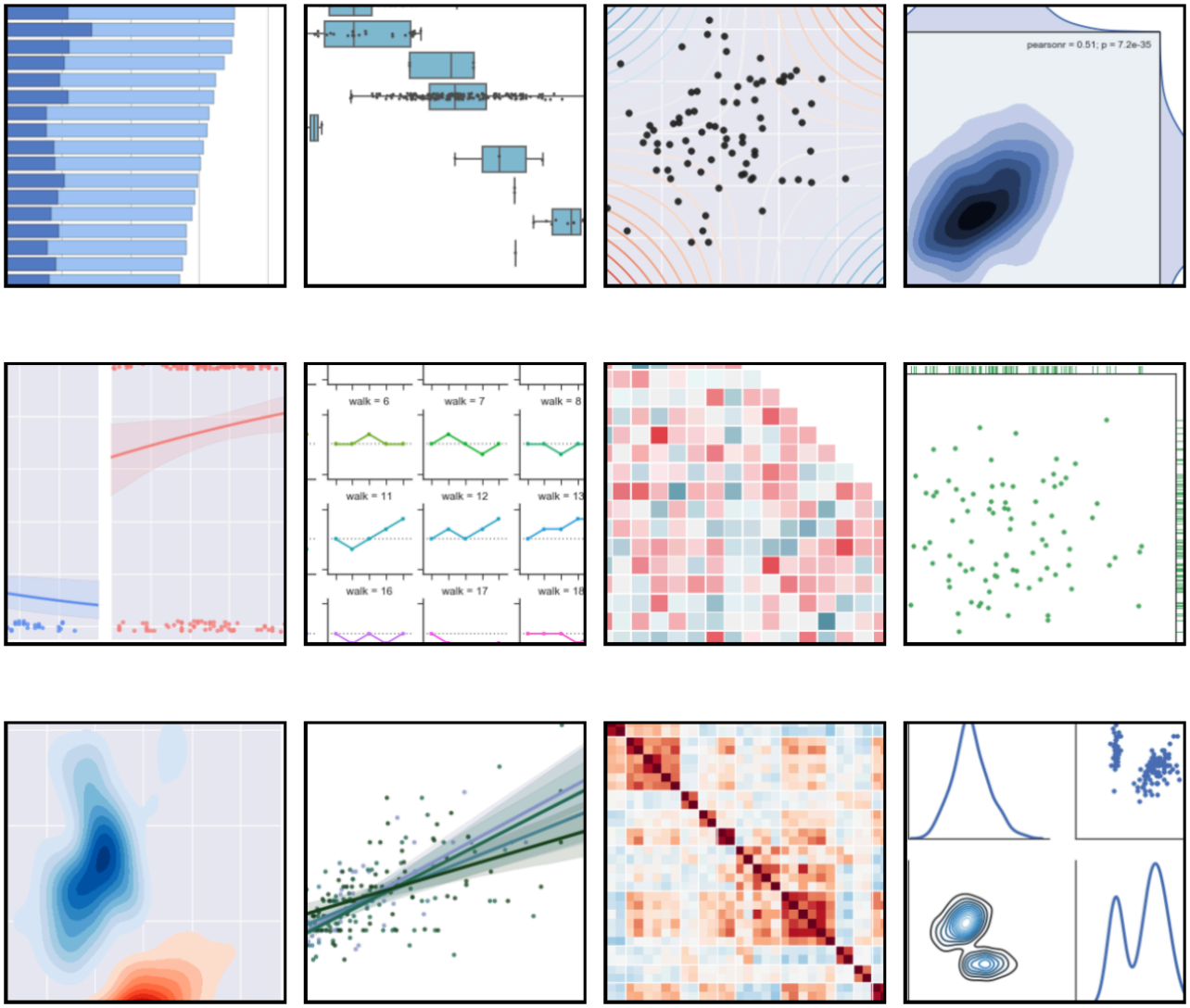
seaborn!

```
import seaborn as sns
sns.set(style="whitegrid", palette="pastel", color_codes=True)

# Load the example tips dataset
tips = sns.load_dataset("tips")

# Draw a nested violinplot and split the violins for easier comparison
sns.violinplot(x="day", y="total_bill", hue="sex", data=tips, split=True,
               inner="quart", palette={"Male": "b", "Female": "y"})
sns.despine(left=True)
```

seaborn!


pearsonr = 0.51; p = 7.2e-35
walk = 6
walk = 7
walk = 8
walk = 11
walk = 12
walk = 16
walk = 17

seaborn!

http://seaborn.pydata.org/examples/

Other Notables

Use Jupyter widgets + Matplotlib to generate interactive graphics.

Other Notables

```
In [7]: interact(Lorenz, N=fixed(10), angle=(0.,360.),
                 σ=(0.0,50.0),β=(0.,5), ρ=(0.0,50.0));
```

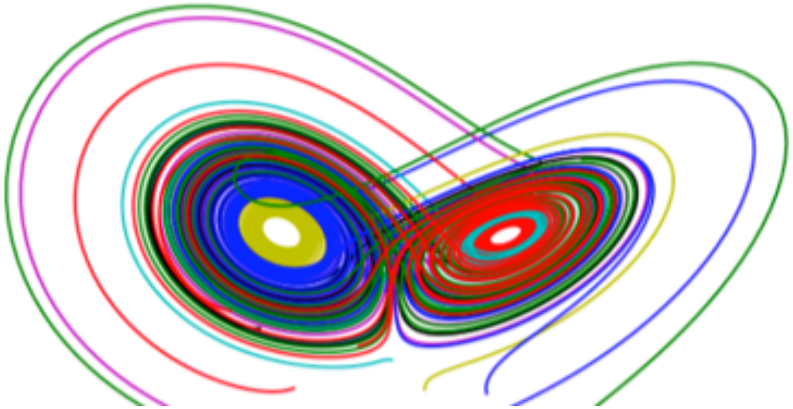
angle 308.2

max_time 12

σ 10

β 2.6

ρ 28



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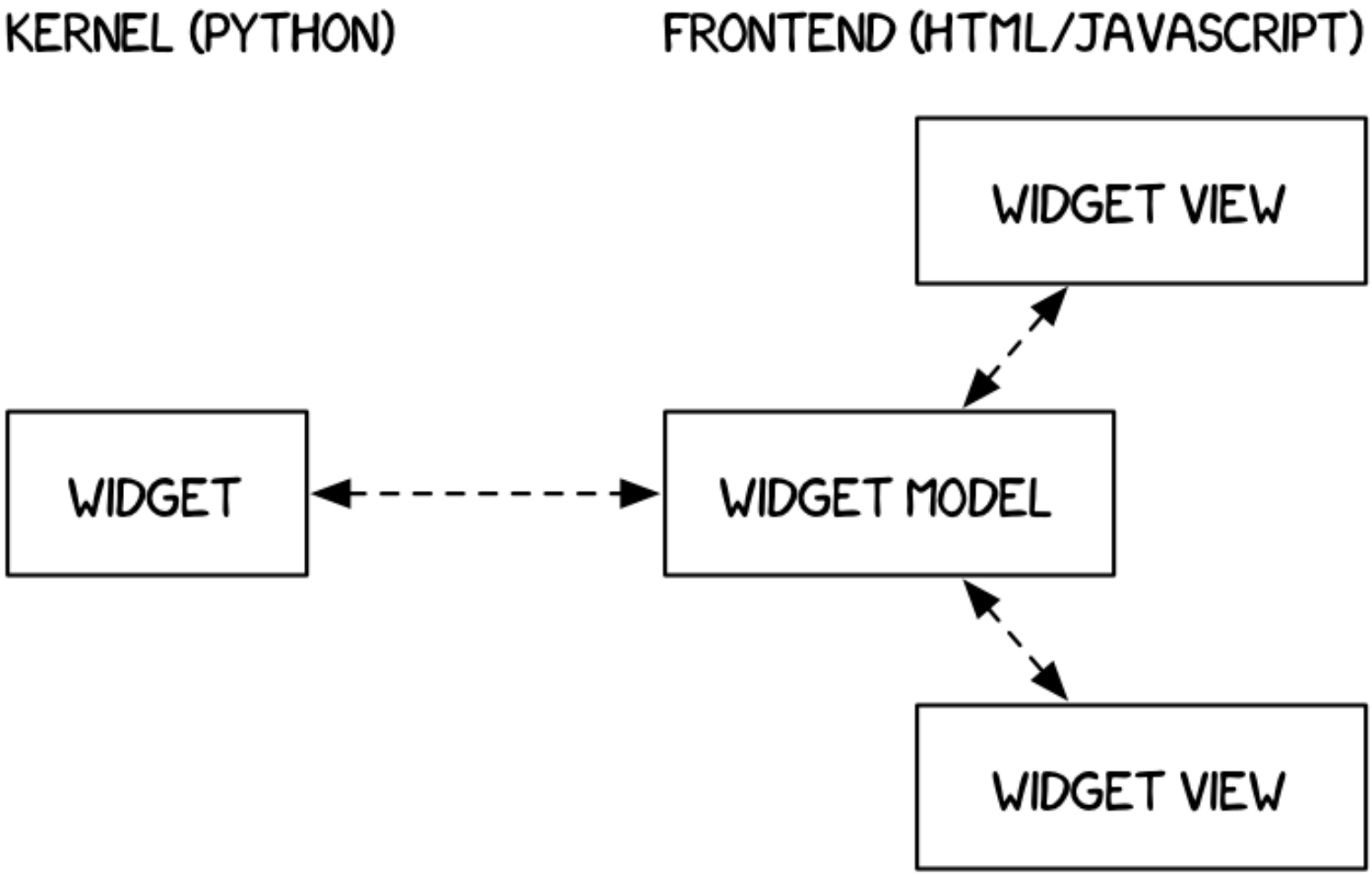

Other Notable Matplotlib Strategies

Use Jupyter widgets + Matplotlib to generate interactive graphics.

Define your own plotting function in Matplotlib (e.g., Pandas does this).

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Transfer data to custom D3 visualization inside Jupyter.

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