



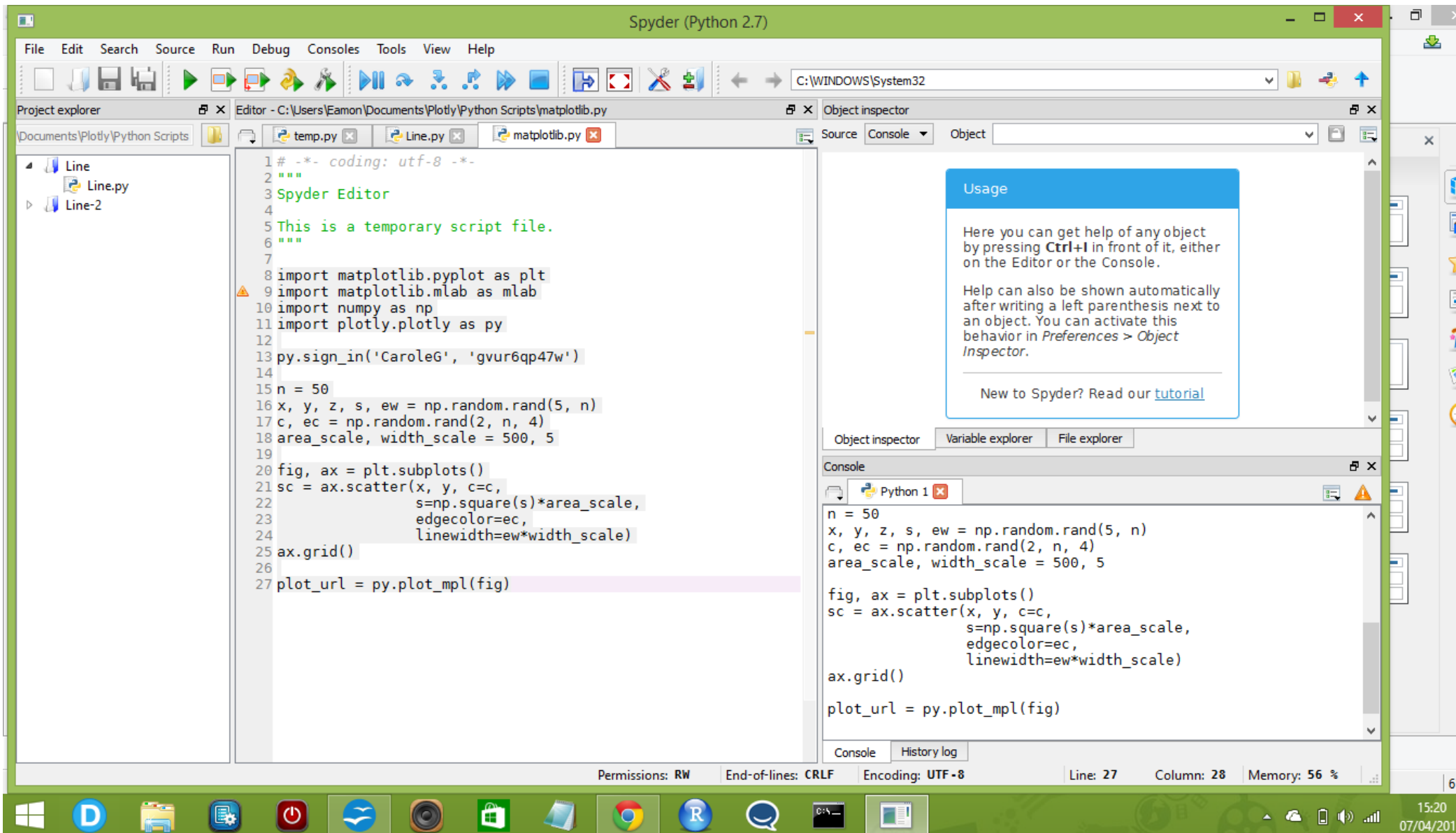
Introducing Widgets

Collaborative data science.

Plotly is the easiest way to graph and share your data.

Presented by Carole@plot.ly

We demonstrated using Anaconda Python Interpreter, we placed a file containing graph data, using matplotlib and calling plot.ly to open upon run



Graph was automatically opened in Plotly



Plotly reproduced the data, contained within the Python programme



This shows the python code, we can also produce JSON, MATLAB, Javascript, R and Julia

The screenshot shows the Plotly web interface in a browser. The address bar displays `https://plot.ly/~CaroleG/652`. The page header indicates it was "Made by CaroleG" and "Last edited 2 minutes ago". Navigation links include "Public", "Edit graph", and "View full-size graph".

On the left, a sidebar contains tabs for "PLOT", "DATA", "CODE", and "EXTRAS". The "CODE" tab is active, displaying the following Python code:

```
# You can reproduce this figure in Python with the following code!

# Learn about API authentication here: https://plot.ly/python/getting-started
# Find your api_key here: https://plot.ly/settings/api

import plotly.plotly as py
from plotly.graph_objs import *
py.sign_in('username', 'api_key')

data = Data([
    Scatter(
        x=[0.6242553730581, 0.23589537517156844, 0.6889859698347415, 0.4595202113487177, 0.8585003778374897, 0.342579015346517, 0.4
        y=[0.3706822477610875, 0.812164645701131, 0.14932823316534938, 0.7140937205933549, 0.6113402106161212, 0.7711057438048257,
        mode='markers',
        marker=Marker(
            color=['rgba(217,138,120,0.71978057033)', 'rgba(185,111,128,0.211397582679)', 'rgba(221,159,76,0.944757837763)', 'rgba(
            size=[0.2619372096606955, 6.034432088988261, 17.85844699088396, 11.306167054689741, 10.713995754433805, 22.265371298597
```

On the right, a "Language:" dropdown menu is open, showing options: JSON, Python (selected), MATLAB, Javascript, R, and Julia.

At the bottom, a Windows taskbar is visible with various application icons. A "Contact us!" button is located in the bottom right corner of the Plotly interface.

You can attach the original data this means it never get's lost

The screenshot shows a web browser window with the URL `https://plot.ly/~CaroleG/652`. The page header indicates it was "Made by CaroleG" and "Last edited 2 minutes ago". Navigation links include "Public", "Edit graph", and "View full-size graph". A left sidebar contains tabs for "PLOT", "DATA", "CODE", and "EXTRAS" (which is highlighted). The main content area under the "EXTRAS" tab shows a "Browse..." button for attaching files. Below this, text explains that extra files are arbitrary files related to plots or grids, and that others viewing the plot can download them. A note states that currently, extras can only be attached to plots or grids owned by the user. The Windows taskbar at the bottom shows various application icons, and a "Contact us!" button is visible in the bottom right corner of the browser window.

https://plot.ly/~CaroleG/652 plot.ly

Made by CaroleG Last edited 2 minutes ago Public Edit graph View full-size graph

PLOT

DATA

CODE

EXTRAS

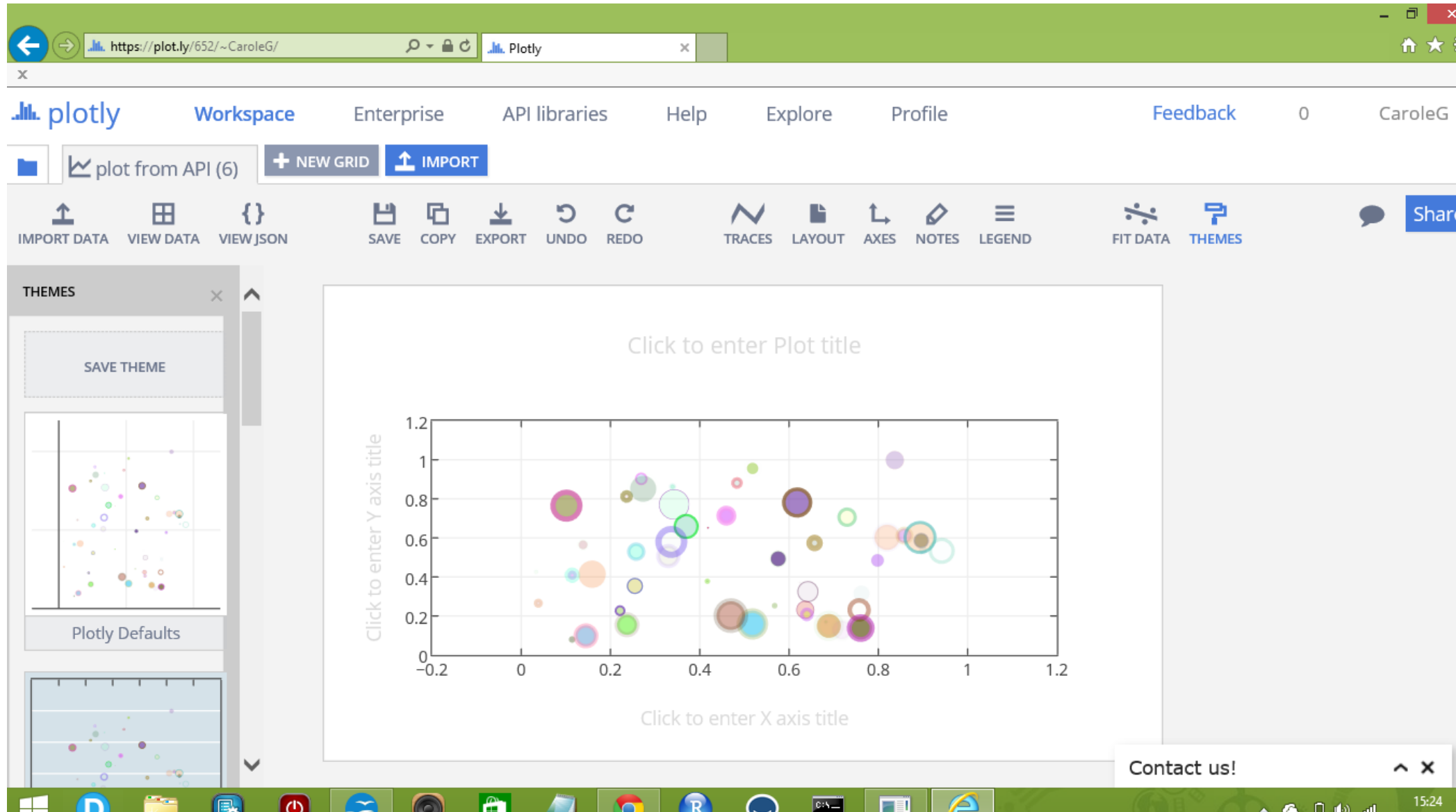
Browse...

Extra files are arbitrary files you relate to plots or grids.
When others view your shared plot or grid, they will be able to download the files you link here.

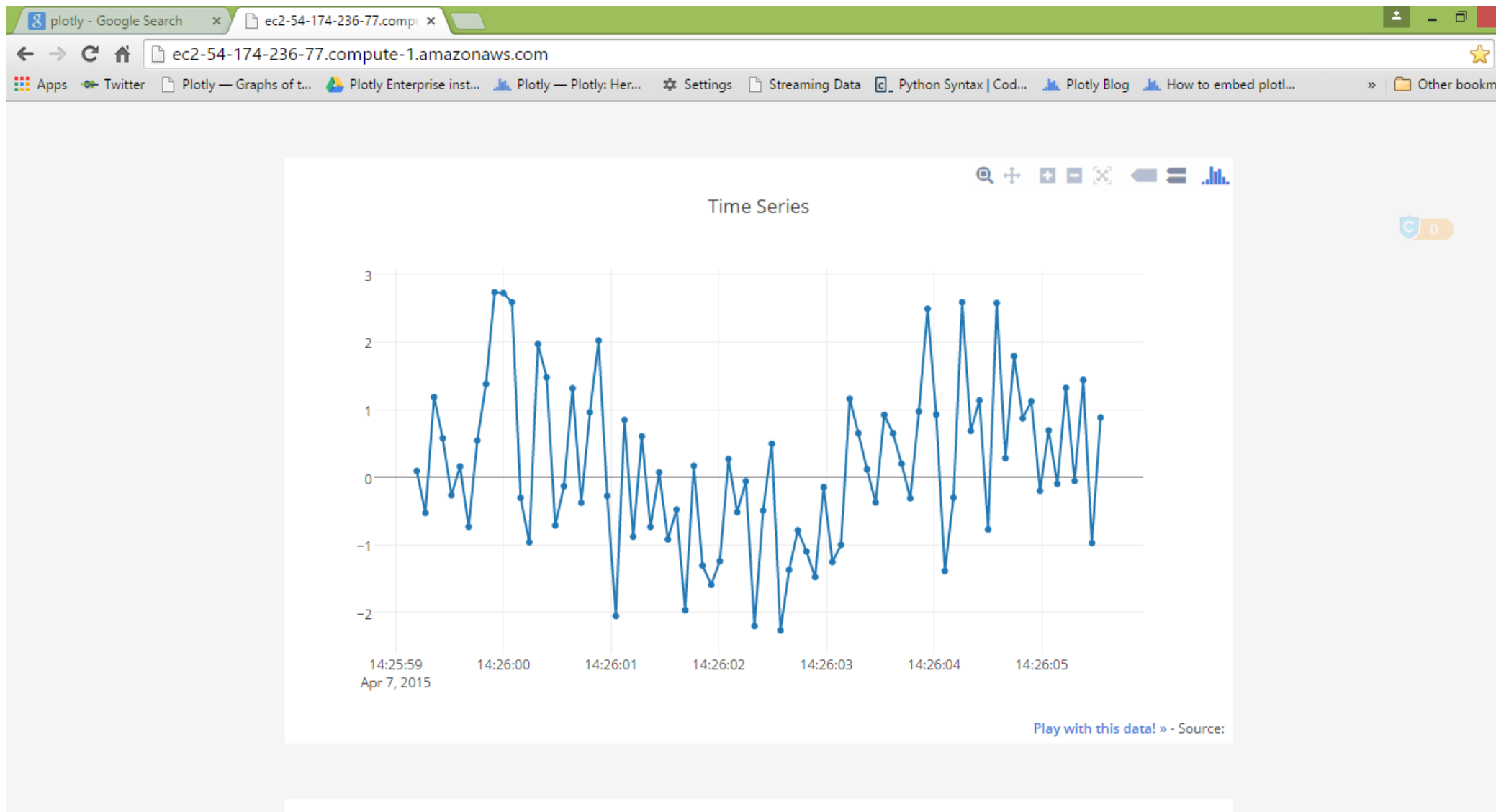
Currently, you may only attach Extras to plots or grids which you own.

Contact us!

Fork and Edit, you can share, embed in a website, edit traces , axes etc.

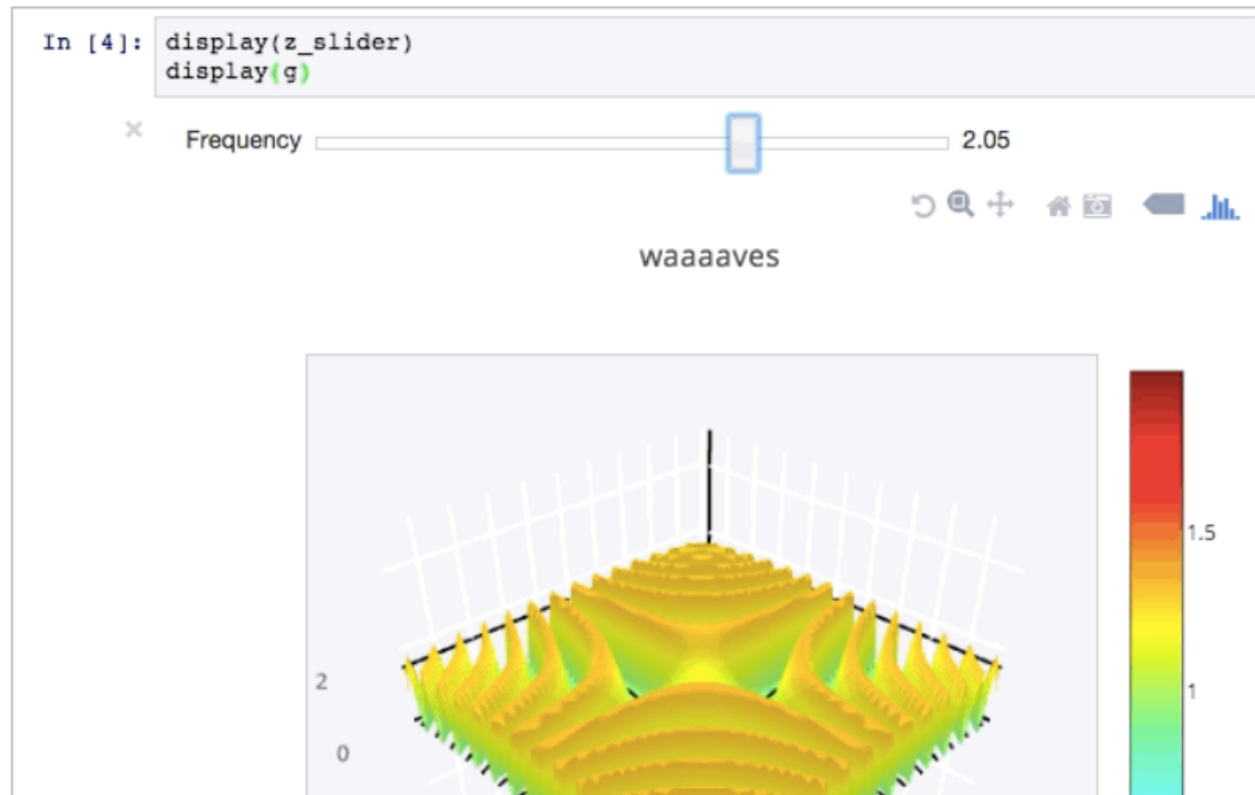


Example of streaming data, if a live demo it does stream as you will have seen.



Widget's were shown in 3D, you can drill in and out of the graph using the slider

WHAT'S A WIDGET?



Further example of a Widget

← →

http://moderndata.plot.ly/widgets-in-ipython-notebo

Plotly

Widgets in IPython notebo...

Interactive charts with Plotly a...

⌵


EXAMPLE 1: SLIDERS AND FRACTAL TREE

Interactively change the parameters of an L-System fractal.

iterations

branch angle

Grow a new tree



LINK TO IPYTHON
NOTEBOOK

5-SECOND DEMO VIDEO

WIDGETS: SLIDERS,
BUTTONS

C 0

Windows

D

File Explorer

Settings

Power

Mail

Calendar

Photos

Chrome

R

Slack

Terminal

VS Code

Edge

System Tray

15:30

07/04/2015

Try for yourself- Widget Demo

<http://moderndata.plot.ly/widgets-in-ipython-notebook-and-plotly/>