

Plotly: Online Plotting and Collaboration with R

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1. Plotly

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Plotly is an online plotting platform. Think of it like GitHub, but for sharing data, graphs, and scripts for plotting. Plotly has a GUI and APIs for making graphs with *R*, *Python*, *MATLAB*, *Perl*, *Julia*, *Arduino*, *Ruby*, *Raspberry Pi*, and *REST*. The APIs let users make and share web-based graphs and interface a desktop environment with Plotly. Public sharing is free, users own their data, and users control whether data and graphs are public or private.

Using Plotly and R to Make and Share Graphs

For our talk, we would like to demonstrate our *R* API. We will show how to import and graph data and use *R* and the Plotly GUI for graphing, sharing, and embedding graphs. We will also use Plotly with **knitr** to make an **R Pub** [1], use the **maps** package to create interactive Plotly graphs [2], and use **ggplot2** to make Plotly graphs with Plotly's own **ggplotly** package. We will demonstrate how to use Plotly in conjunction with **rOpenSci**, a package that Plotly is now a part of. We will also demonstrate the use of Plotly as an interactive graphing element when used with **Rmagic** and **IPython**.

These are currently available features. By the time of the conference, we anticipate having a more robust **ggplotly** experience available. The RStudio team informed us that they plan to sandbox their viewer. Currently you cannot serve web content into the viewer, but with a sandbox, we could serve Plotly graphs in an iframe into the viewer, pairing graphs, data, and scripts together online. Authors, and journalists from the Washington Post [5] and Wired Science [6] use these Plotly features and the capacity to embed graphs in an iframe.

References

[1] Dylan Matthews (2013). HYPERLINK

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[2] Rhett Allain (2014). HYPERLINK

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