

Quarto Python Demo

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Executive Summary

[Quarto](#) is amazing! While you can generate PDFs from Jupyter Notebooks, the formatting options are extremely minimal and the result is not a polished product. Quarto allows you to create a product based off of [Pandoc](#) that you can proudly present to stakeholders. This demo is outputting to PDF. However, HTML, .docx, and various presenter files are also options. That list also includes a wealth of [additional formats](#) and the ability to publish dynamic content to websites.

LaTeX Table Demo

Table 1: First 5 Data Entries

First Five Sunspot Counts	Months
58	1
62.6	2
70	3
55.7	4
85	5

Code Based Text Field

You can generate text to output to markdown through a code cell. You can even format text around it in a LaTeX formula. (*Average Sunspot Value = 82.1583 sunspots per month*). An example $\sqrt{R_a^2} \neq 24.0000$. This is because R_a^2 is on a 0 to 1 scale.

Plot Demo

Sunspots from 1749 and 1750



Figure 1: Jagged Lines in Original Line Chart

Sunspots from 1749 and 1750

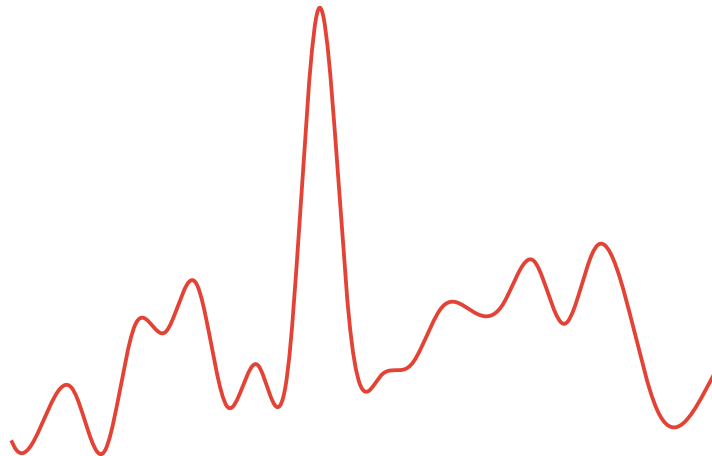


Figure 2: Smoothed Points from Interpolated Data

Format Comparisons

You can `format` text per Markdown standards, with LaTeX, and additional standards. Some common examples include *italics*, **bold**, superscript^{sup}, subscript_{submarine}, ~~strikethrough~~, and code snippets.

Markdown headers follow standard levels. For example, the first 4 levels look like this:

Header 1

Header 2

Header 3

Header 4

Lists

Additionally, lists can be unordered or ordered.

- $H_0 : \text{model slope} = 0$
- $H_a : \text{model slope} \neq 0$
- Significance $\alpha = 0.1$

1. Ice cream
2. Cookies
3. Cake

Conclusion

Quarto is incredibly powerful. This is a quick example of how you can easily create a polished PDF report using Python as your programming language and choose multiple ways to cleanly present your findings.