

Peer-graded Assignment: Becoming an Independent Data Scientist

You submitted!

Your work is ready to be reviewed by classmates.
Next, you need to review your classmates' work.
We'll email you when your grade is ready. Your grade should be ready by **March 7, 11:59 PM PST**.

[Review Classmates' Work](#)[Instructions](#)[My submission](#)

Ski resort's stock prices in relation to the weather

[Discussions](#)

Submitted on February 13, 2018

[Shareable Link](#)

PROMPT

From time to time, Dr. Chris Brooks may want to share your work anonymously (via social media channels such as Twitter), to highlight some of the accomplishments of learners in this course.

If you agree that you are comfortable with instructor sharing your Assignment #4 as an example of great work, please type YES in the text box.

Y

PROMPT

State the region and the domain category that your data sets are about (e.g., Chaohu, China and sports or athletics).

[Help Center](#)

Vail, colorado USA and Vail ski resorts stock prices

PROMPT

Create a research question about the domain category and region that you identified.

Has the weather influence over the stock price of a ski resort?
..duh

PROMPT

Provide at least two links to publicly accessible datasets. These could be links to files such as CSV or Excel files, or links to websites which might have data in tabular form, such as Wikipedia pages.

<https://www.ncdc.noaa.gov/> for weather data

<https://finance.google.com/finance> for stock price

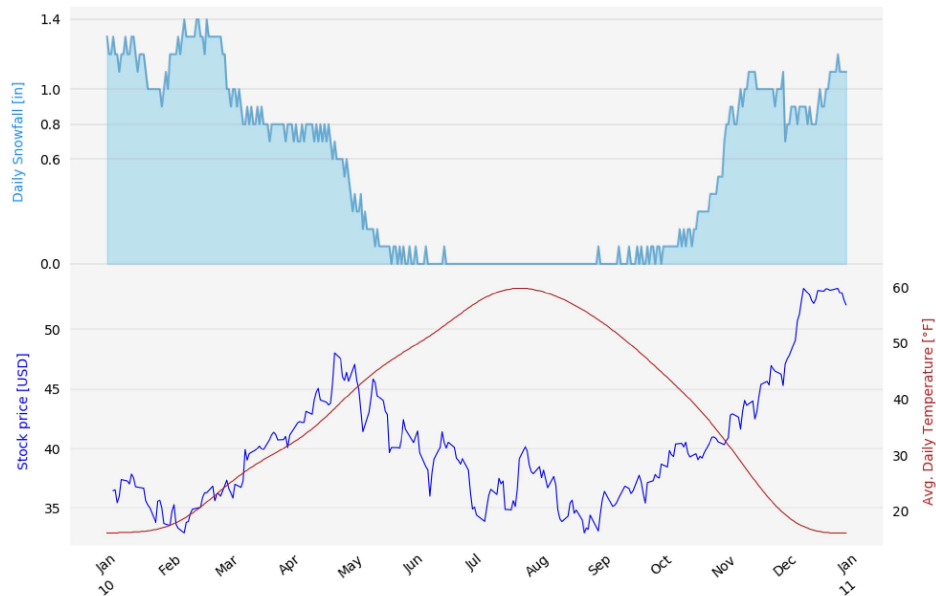
PROMPT

Upload an image which addresses your research question.

In addition to addressing your research question, this visual should address Cairo's principles of truthfulness, functionality, beauty, and insightfulness.

Vail Resorts' Stock Price in Relation to the Weather

Data Location: Vail, Colorado
Time Period: January 1st to December 31st 2010



PROMPT

Provide a short (1-2 paragraphs) justification of how your visual addresses your research question.

Have you ever heard of "Weather derivatives" in the financial world?

Well me neither. They are basically a form of insurance against too hot or too cold weather that, mostly seasonal, industries buy to hedge them self against the uncertainty of the weather.

Here is more detailed explanation:

<https://www.investopedia.com/articles/optioninvestor/05/052505.asp>

At first I wanted to plot the historical prices of these derivatives against the Vail resorts' stock price and the weather data to analyze if the derivatives' prices would be higher for not optimal weather conditions for winter sports and how this reflected on the overall stock price.

An example I thought I would see is: if the winter is or it is to be predicted warm would the company buy weather futures? If they did buy some by how much would this "insurance" be reflected in the stock price during the summer? Being a seasonal industry the prices tend to fall during the summer and raise in the winter, I wanted to see if the prices would stay the same, or on a smaller spread, during the summer. And compare all this to a year where the conditions were optimal for skiing (ie. good weather in the winter, lets not buy any insurance, stock falls in the summer as usual)

little did I know that to get all the necessary data is impossible for a layman: the historical data for the derivatives and detailed weather data over a longer span of periods is only available at a high prices that only bank institutions and co.

can afford to pay.

So I decided to go for a much simpler way by plotting the stock price against the daily snowfall and avg. temperatures. This plot still shows the seasonality of the ski resort industry and how it is affected by the weather. Though I couldn't get more daily Snowfall data other than for the year 2010.

PROMPT

As this assignment is for the whole course, you must incorporate and defend the principles discussed in the first week, specifically, Cairo's principles of truth, beauty, function, and insight.

For each of the following prompts, please provide a response that links each principle to one or more elements of your visual.

- Describe your design choices for your visual in regards to Cairo's principle of **truthfulness**.
- Describe your design choices for your visual in regards to Cairo's principle of **beauty**.
- Describe your design choices for your visual in regards to Cairo's principle of **functionality**.
- Describe your design choices for your visual in regards to Cairo's principle of **insightfulness**.

truthfulness: No data was manipulated to "fit" my research question, all data was plotted as raw as it comes. To be honest not much cleaning was necessary and the data is straightforward. No reason to mislead the audience.


beauty: color of plot lines matches color of the labels avoiding to use a legend (I guess this should be in functionality). The background is not white straining your eyes less. No unnecessary spines or ticks.

Functionality: there isn't any chart junk or over plotting. it is easy to read and its easy to see the correlations I was looking for.

Insightfulness: I hope you get a "eureka moment"

PROMPT

Please upload your source code.

 ass4_plot_final.ipynb

Edit submission

Comments

Comments left for the learner are visible only to that learner and the person who left the comment.



share your thoughts...



Help Center