

DOES WEATHER AFFECT TRANSIT RIDERSHIP

Metis Webscraping & Linear
regression Module

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Weather

Heatwave in the western U.S., June 2021



Image ID: 175686044 | www.depositphotos.com

Data

- New York weather:

- temperature,
- precipitation,
- wind speed

- MTA daily:

- subway,
- bus

March 2020 – September 2021

- Date:

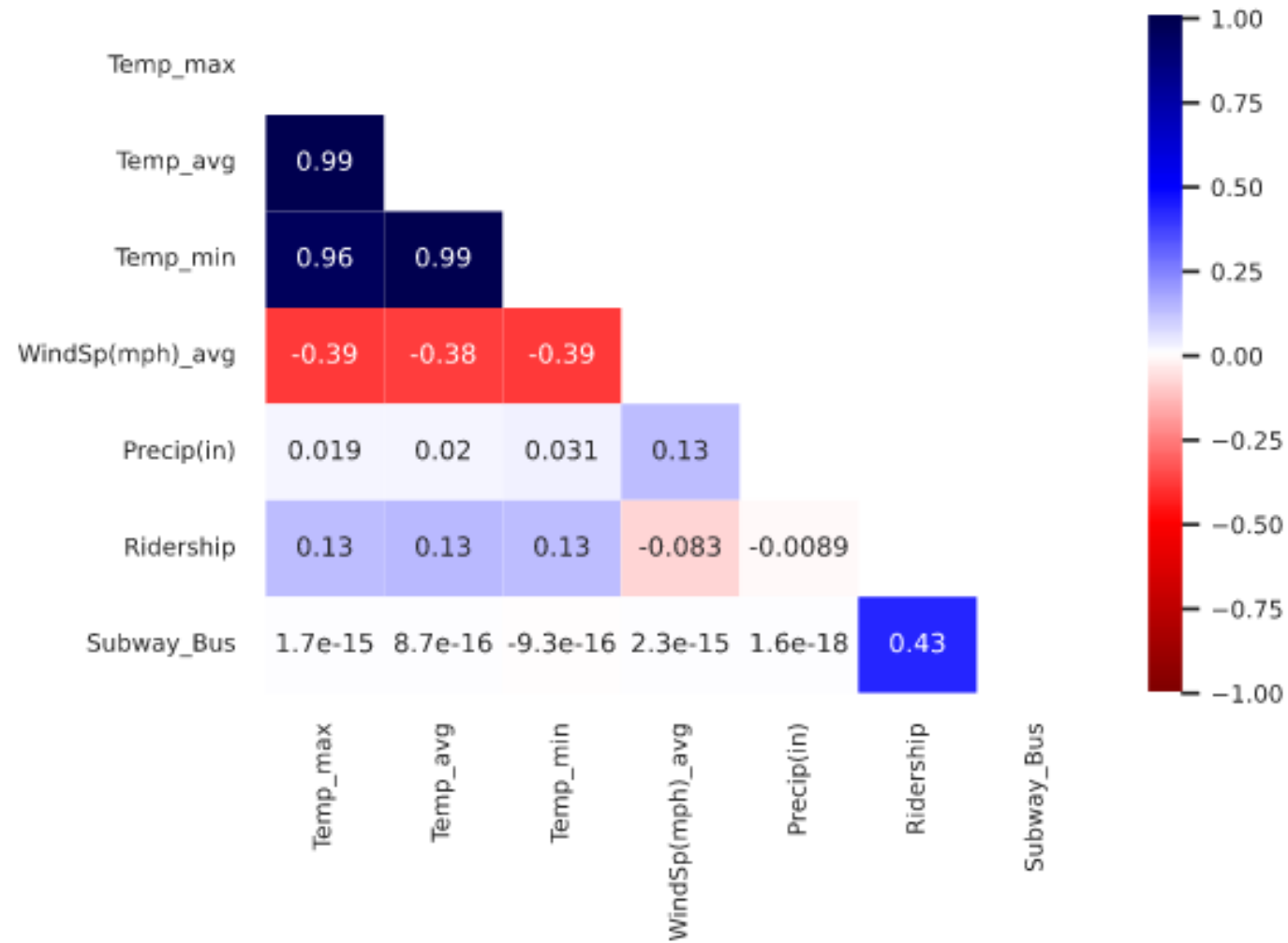
- days of week,
- season,
- Federal holidays

The screenshot shows a web browser window with the address bar displaying `wunderground.com/history/monthly/us/ny/new-york-city/KLGA/date/2021-8`. The page title is "Daily Observations". The main content is a table with the following structure:

Time	Temperature (° F)			Dew Point (° F)			Humidity (%)			Wind Speed (mph)		
	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min
Aug 1	77	72.9	68	62	58.5	55	78	61.0	48	15	9.0	0
2	81	73.2	64	63	55.7	51	81	56.7	35	20	10.7	3
3	79	73.4	68	56	52.5	50	65	48.6	37	9	5.0	0
4	75	72.7	70	63	59.3	54	76	62.9	50	15	7.1	0
5	81	73.5	69	66	62.2	60	76	68.2	52	13	9.0	3
6	89	80.0	72	65	61.8	58	76	55.4	35	15	8.0	0
7	87	80.7	75	67	61.2	54	64	52.3	33	15	9.5	5
8	79	71.0	67	65	62.4	57	87	75.1	52	22	12.5	0
9	78	74.3	71	70	67.3	65	88	78.8	68	15	8.8	3
10	84	77.5	73	72	68.9	65	89	75.0	60	15	7.7	0
11	90	82.0	76	74	70.4	68	82	68.6	52	21	9.2	3

The browser's developer tools are open, showing the "Elements" panel with the HTML structure of the table. A box model diagram is visible, showing the dimensions of a table cell: border (10px), padding (8px), and content (27.250x21px). The "Console" panel shows a message about the Chrome DevTools language support update.

Heat map



Relevant features

Population

Employment or economic indicators

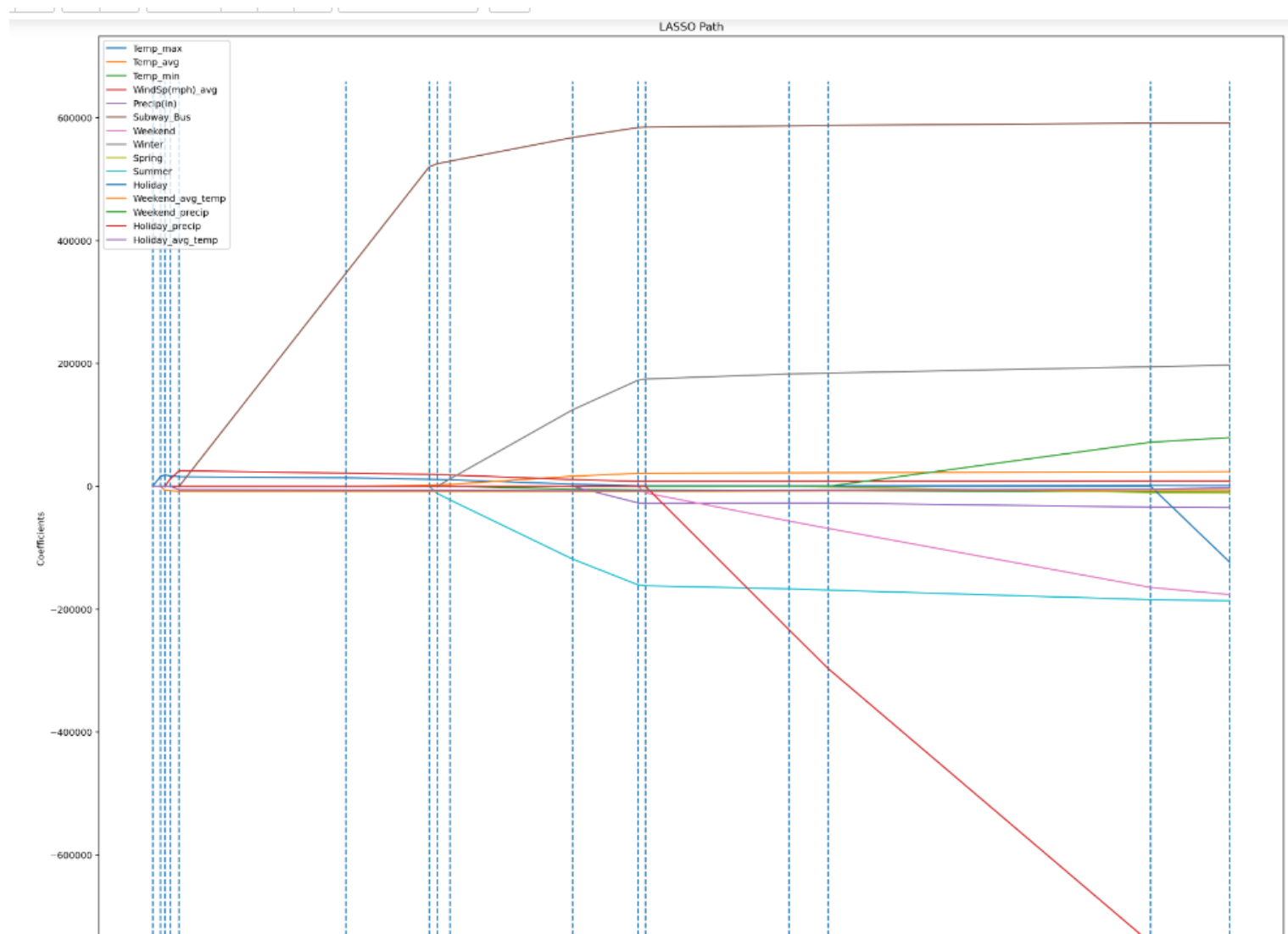
Quality of service: frequency

&

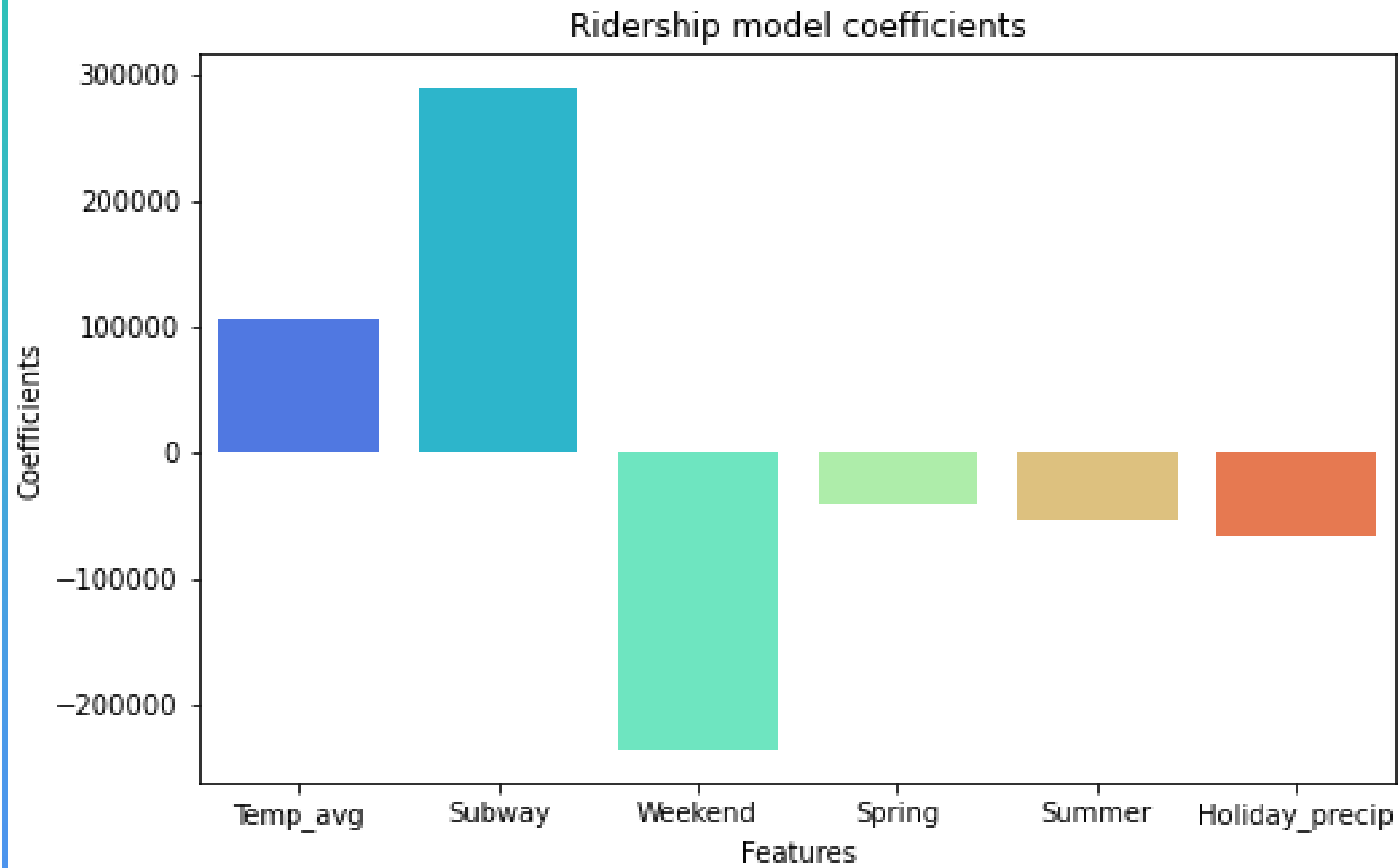
Covid!

- On a daily basis?
- On a city scale?

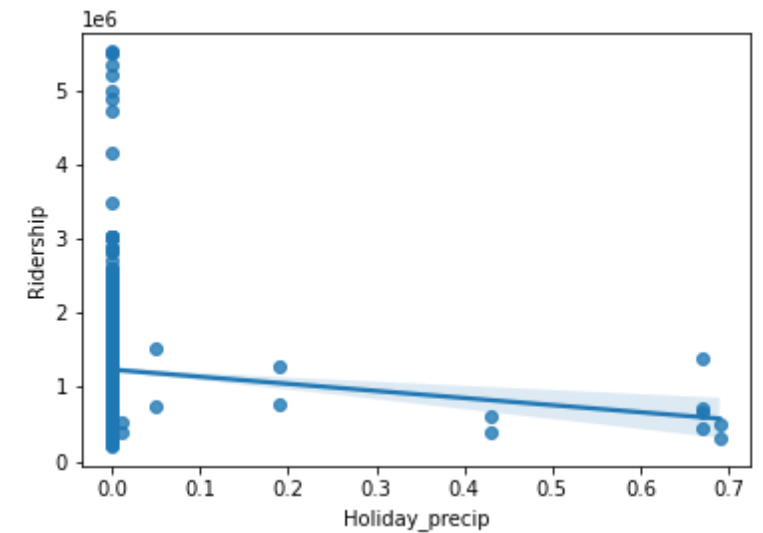
Larsplot



Model



Model Test Score: 0.33



Conclusions

- Transit stops near holiday attractions
- Cold weather & precipitation

Future work

- Covid features
- Time-series