

A close-up photograph of a koala clinging to a tree trunk. The koala's light brown, fuzzy fur is visible, along with its dark eyes and nose. Its front paws are gripping the rough, textured bark of the tree. The background is a soft-focus green, suggesting a forest environment.

Plan Your Wild
Adventure

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What is Animal Kingdom?

A conservatory, zoo,
theme park and a few
thrill rides





Problem Statement:

Guests at Disney's Animal Kingdom near Orlando have limited time to squeeze in all the fun they wish and zero desire to wait in lines longer than necessary.

As these monkeys can attest, waiting is dull.



Longest Wait Times

1. Flight of Passage
2. Na'vi River Journey
3. Kiliminjaro Safaris
4. Expedition Everest



Goals

1. Help guests estimate wait times
2. Help guests decide whether to purchase Genie+ or Lightning Lane
3. Help guests reduce waiting time

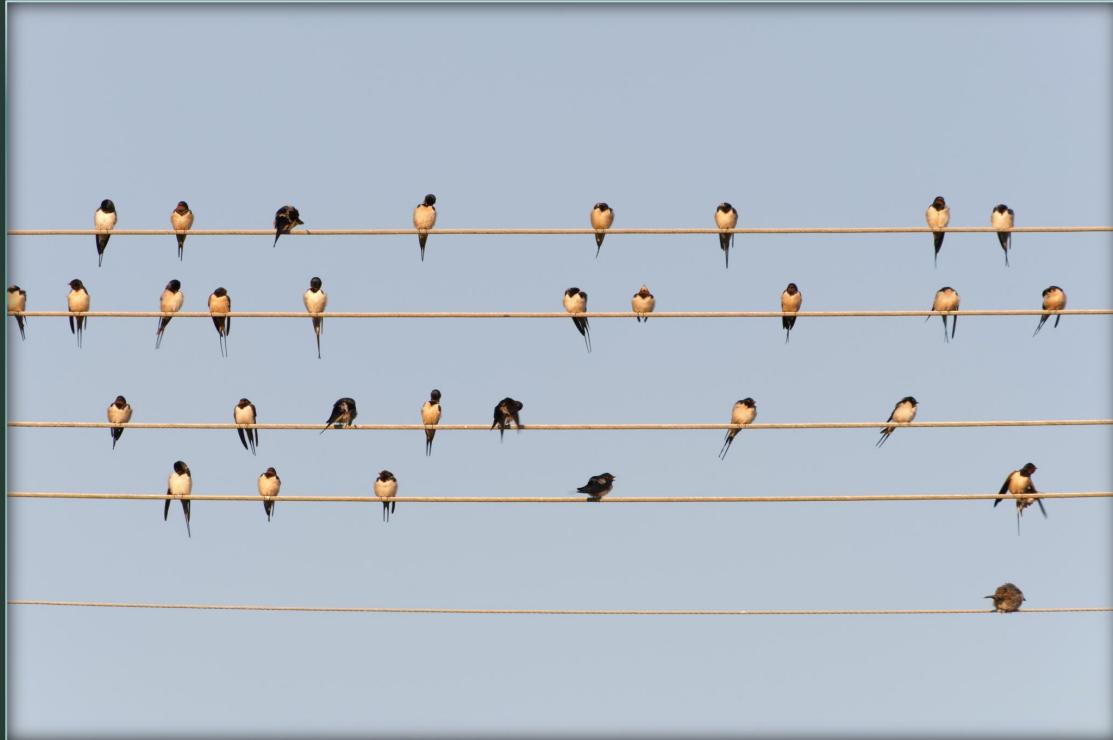
Common Questions

1. Are there better and worse times to ride rides (or a specific ride) during one day?
2. Are certain days of the week better than others?
3. Are crowds predictable on a weekly basis?



My Data

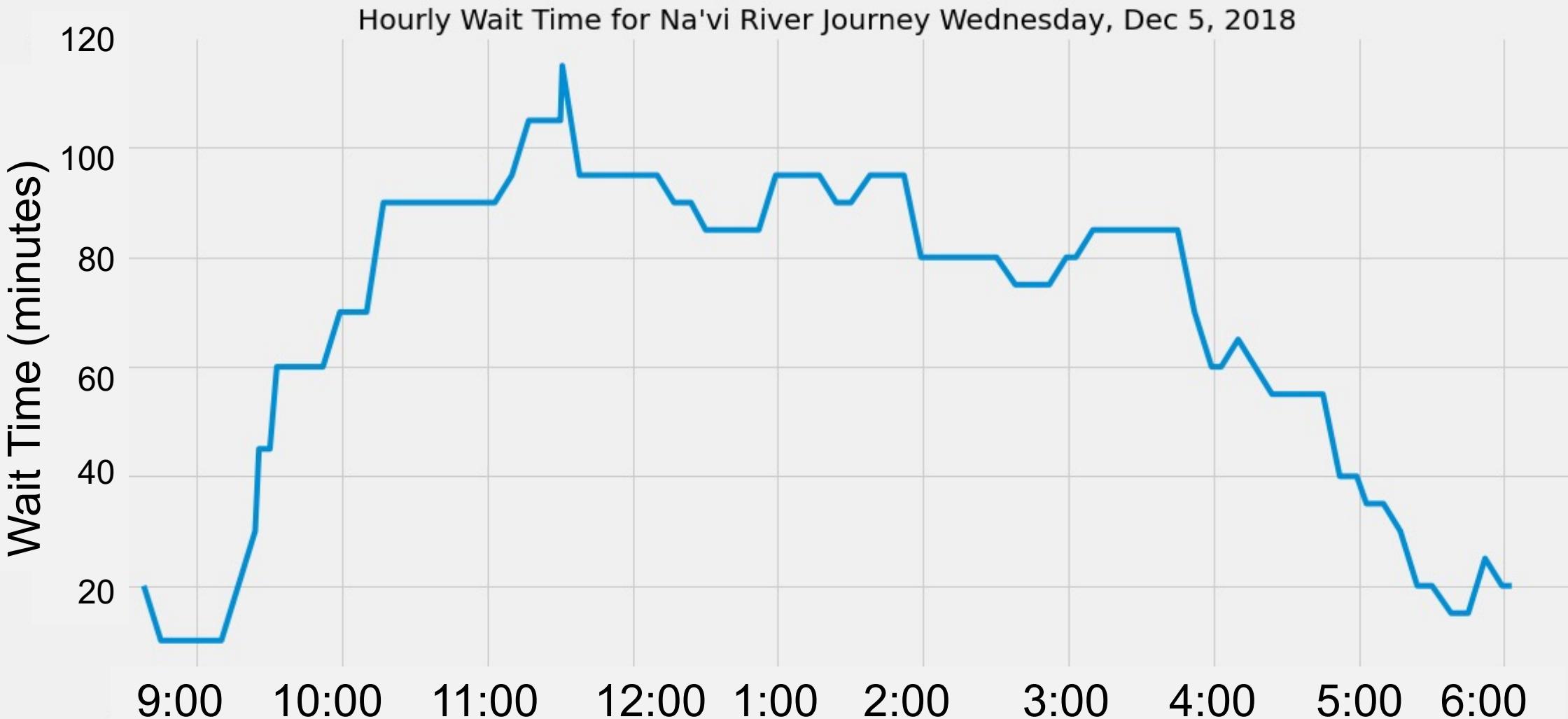
<https://touringplans.com/walt-disney-world/crowd-calendar#DataSets>





Hourly Differences

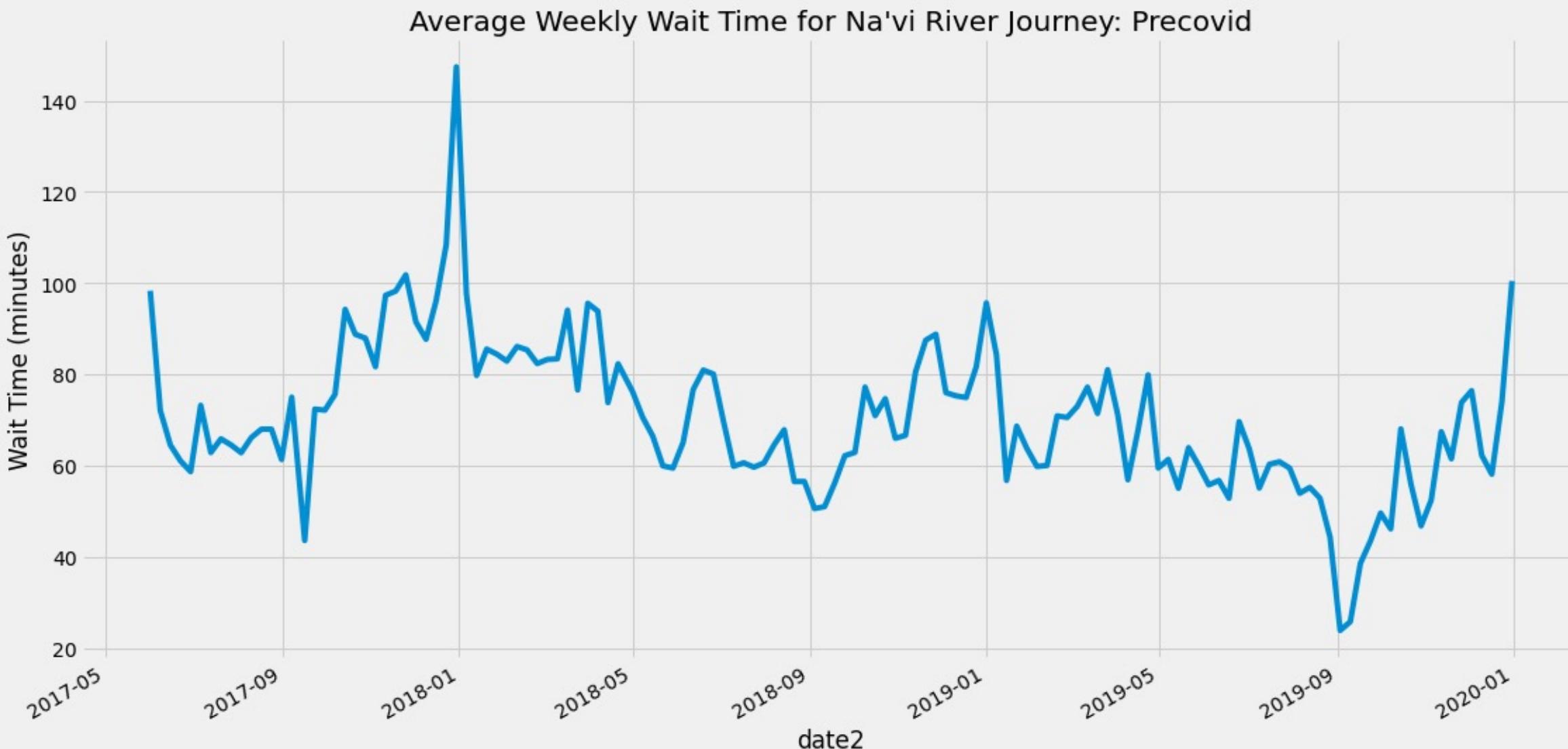
Hourly Wait Times: Na'vi River Journey





Weekly Seasonality

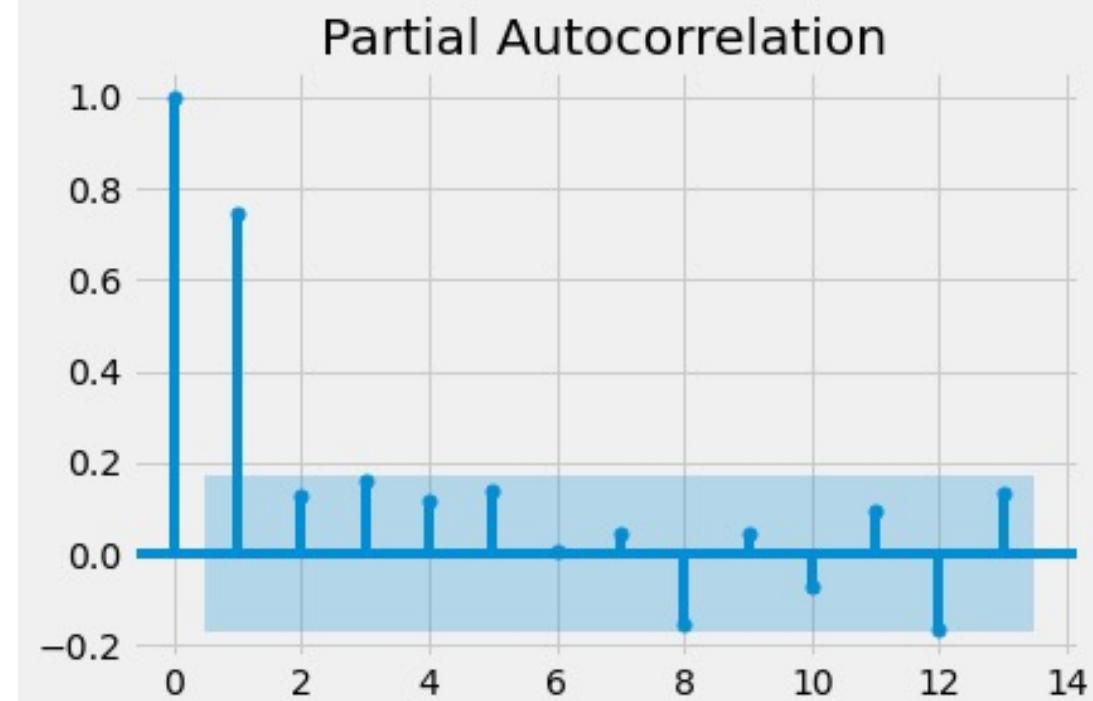
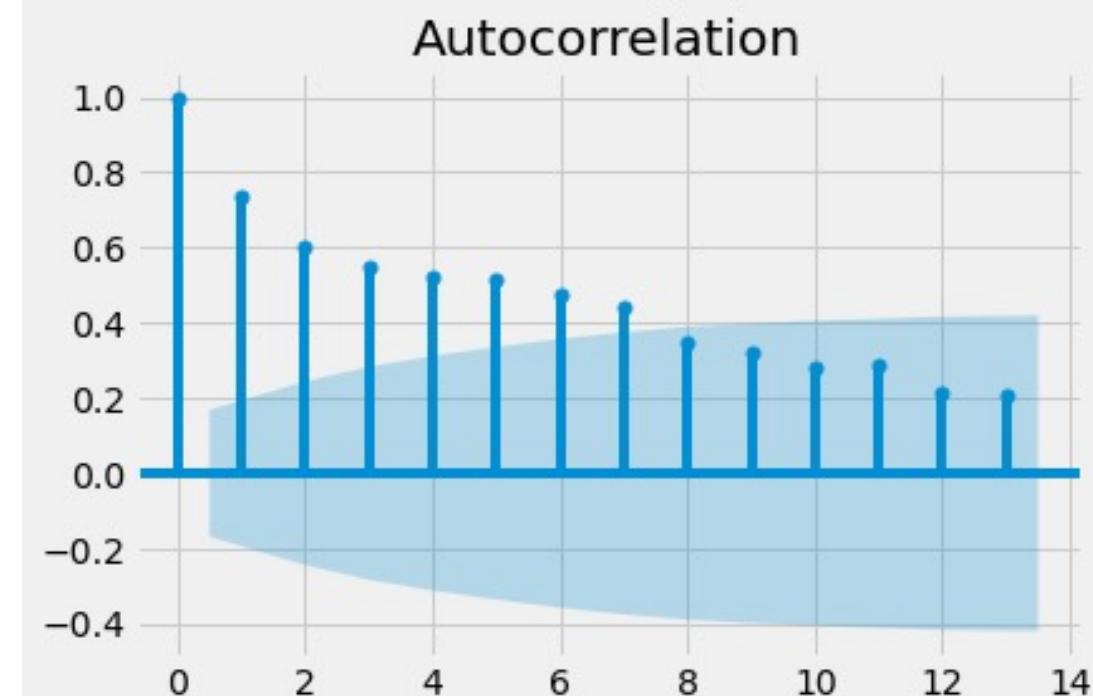
Average Weekly Wait Times (Precovid): Na'vi River Journey



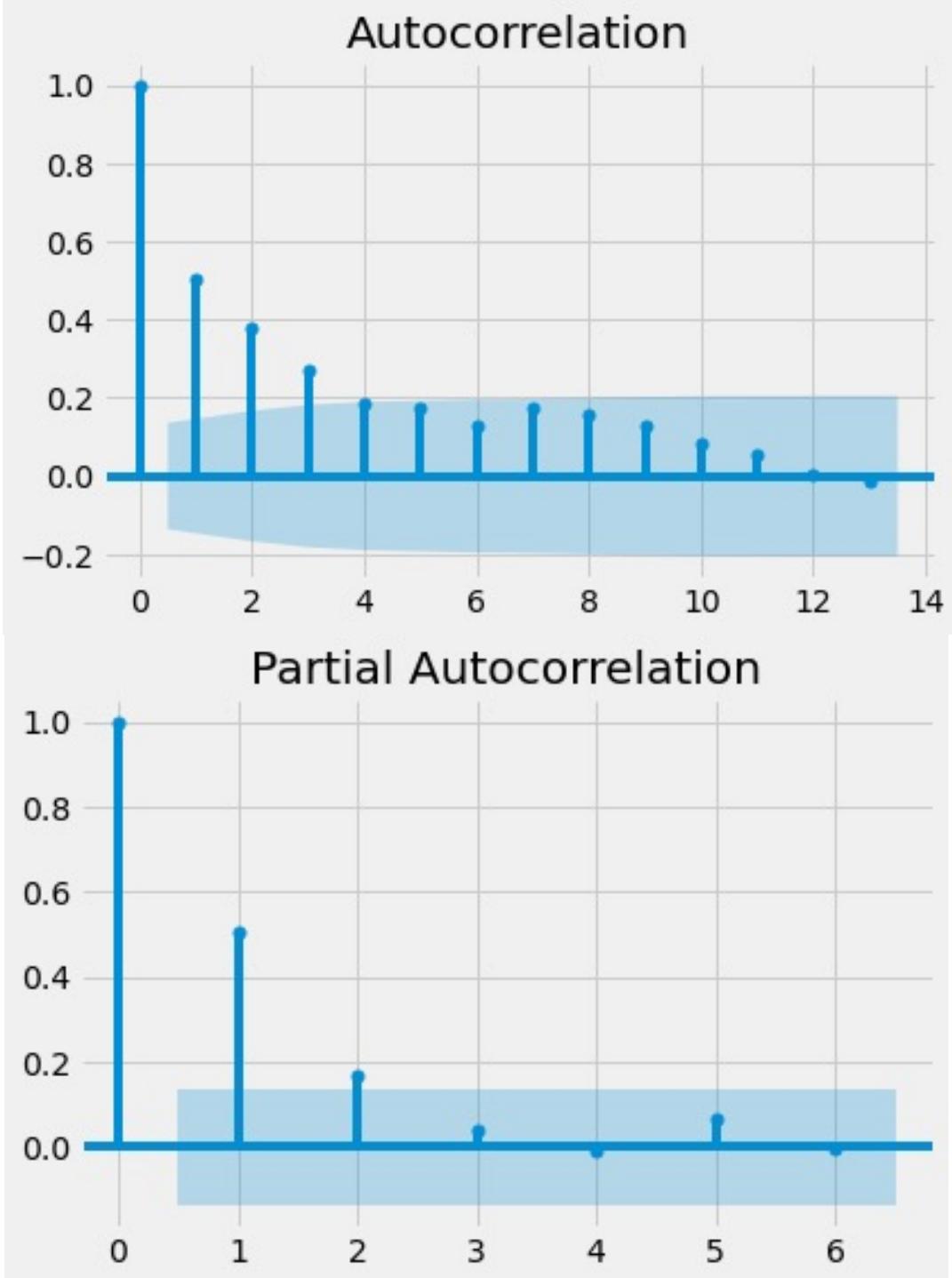
Na'vi River Journey:



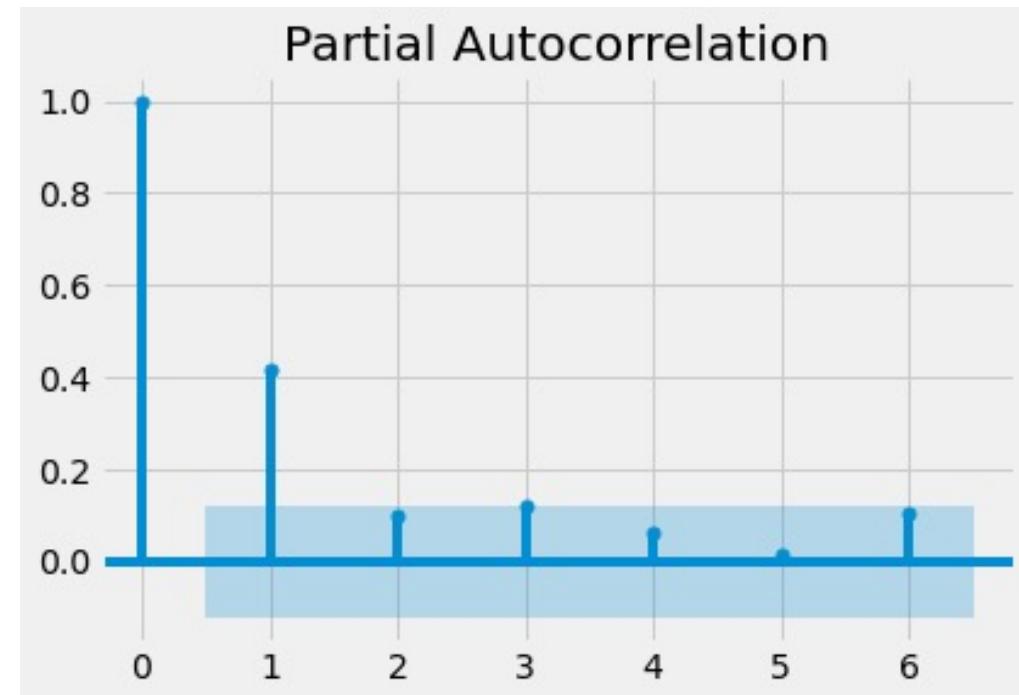
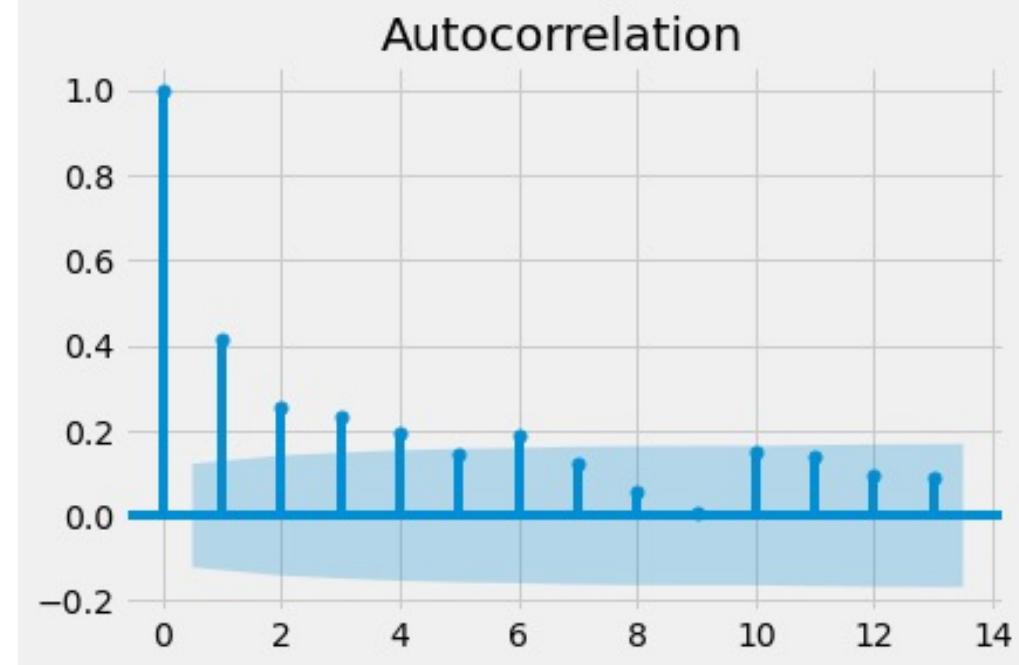
Weekly
Correlations over
13 Weeks



Kiliminjaro Safaris: Weekly Correlations over 13 weeks



Everest Expedition: Weekly Correlations over 13 weeks



Stationarity Tests

Metric	Na'vi River Journey	Kiliminjaro Safaris	Expedition Everest
p-value	.0005	.00162	.0000000973
MSE	181.041	58.638	175.738
MAE	8.83	4.791	9.304

Allegedly, all of these datasets are stationary. But stationarity means nothing to the guest standing in line in the sun on cement. Qualitatively, this information is less than useless, given the plotted fluctuations in wait times on many days.

Stationarity



- All of these datasets are **stationary**.
- Stationarity means nothing to the guest standing in line in the sun on cement.
- Qualitatively, this information does little to help guests.

What's the Solution?

Disney's Answer: Pay more to wait less

- Genie+
- Individual Lightning Lane
- Shorten your wait options must be booked day of visit
 - Opens 7am for resort guests; 8am for others



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An App



A ostrich standing in a field of tall, dry grass.

Recommendations

Frequent UX reviews of new system
(guests and cast members) ▾

Analyze how wait times have
changed for out of town visitors

Finish the app

Improve the app

Questions?

