

Monkeypox: What is it & How it Spreads.

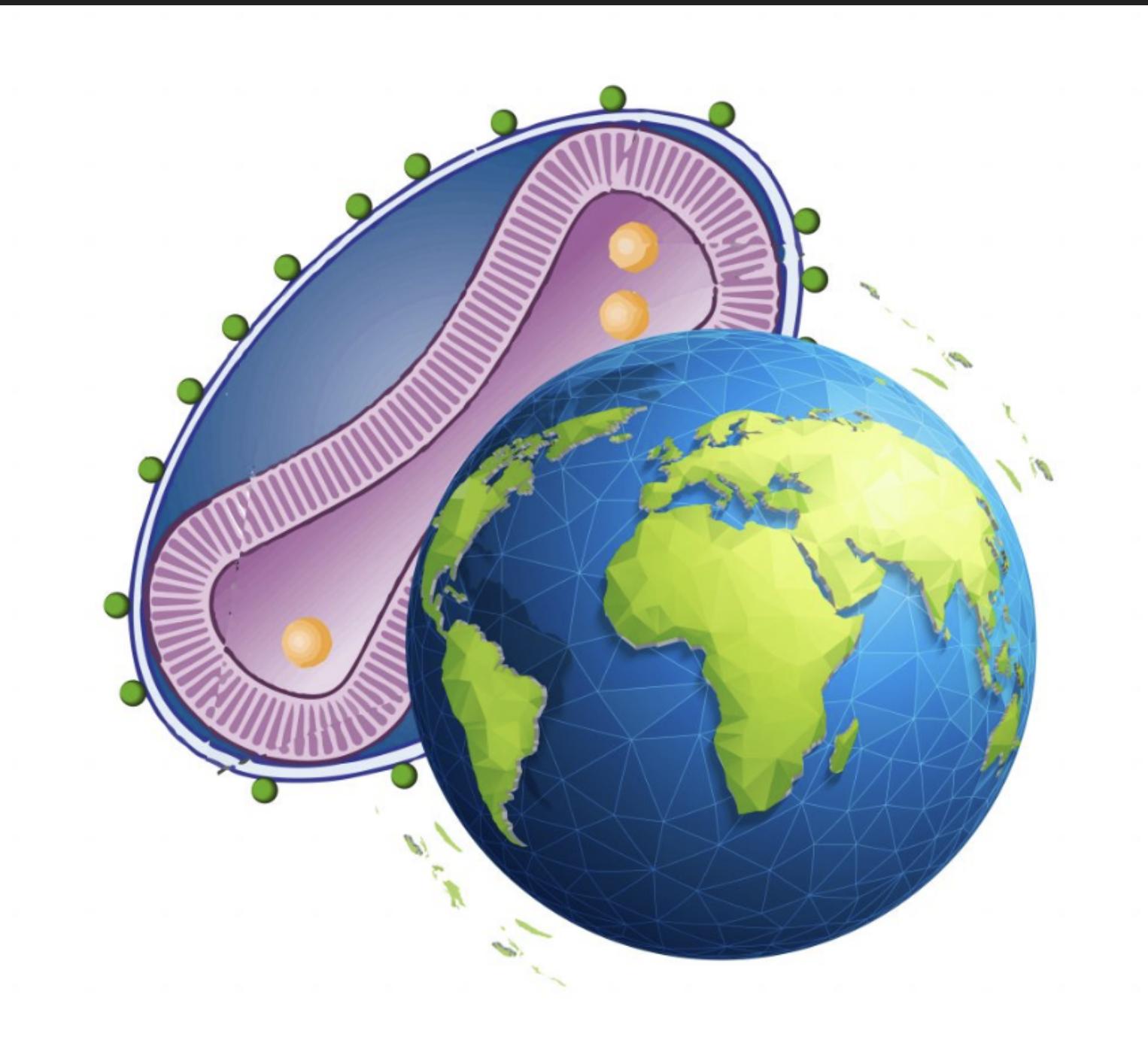


Image: <https://vitrosens.com/what-is-monkeypox-virus/>

Team 14:
Vatsalya Chaubey
Abhishek Suryavanshi
Raymond Urbina
Shayne Wang

Presentation Roadmap

- Our Motivation
- Monkeypox
- The Data
- Conclusion
- References



Image 1: <https://www.communityoffaith.org/the-road-ahead/>

Motivation

- COVID
- Who is primarily impacted?
- What the data will shows us



Image: <https://www.nature.com/articles/d41586-022-03204-7>

Kaggle Dataset



A screenshot of a Kaggle dataset page. The title is "Monkeypox Analysis a1222b". It features a small icon of a monkey and a green virus cell next to the title. Below the title, there's a brief description: "Python · Monkey_Pox, Monkeypox Virus , Smallpox (Small Monkey Pox?) +12".

Image: <https://www.kaggle.com/code/amiragk/monkeypox-analysis-a1222b>

Data Cleaning

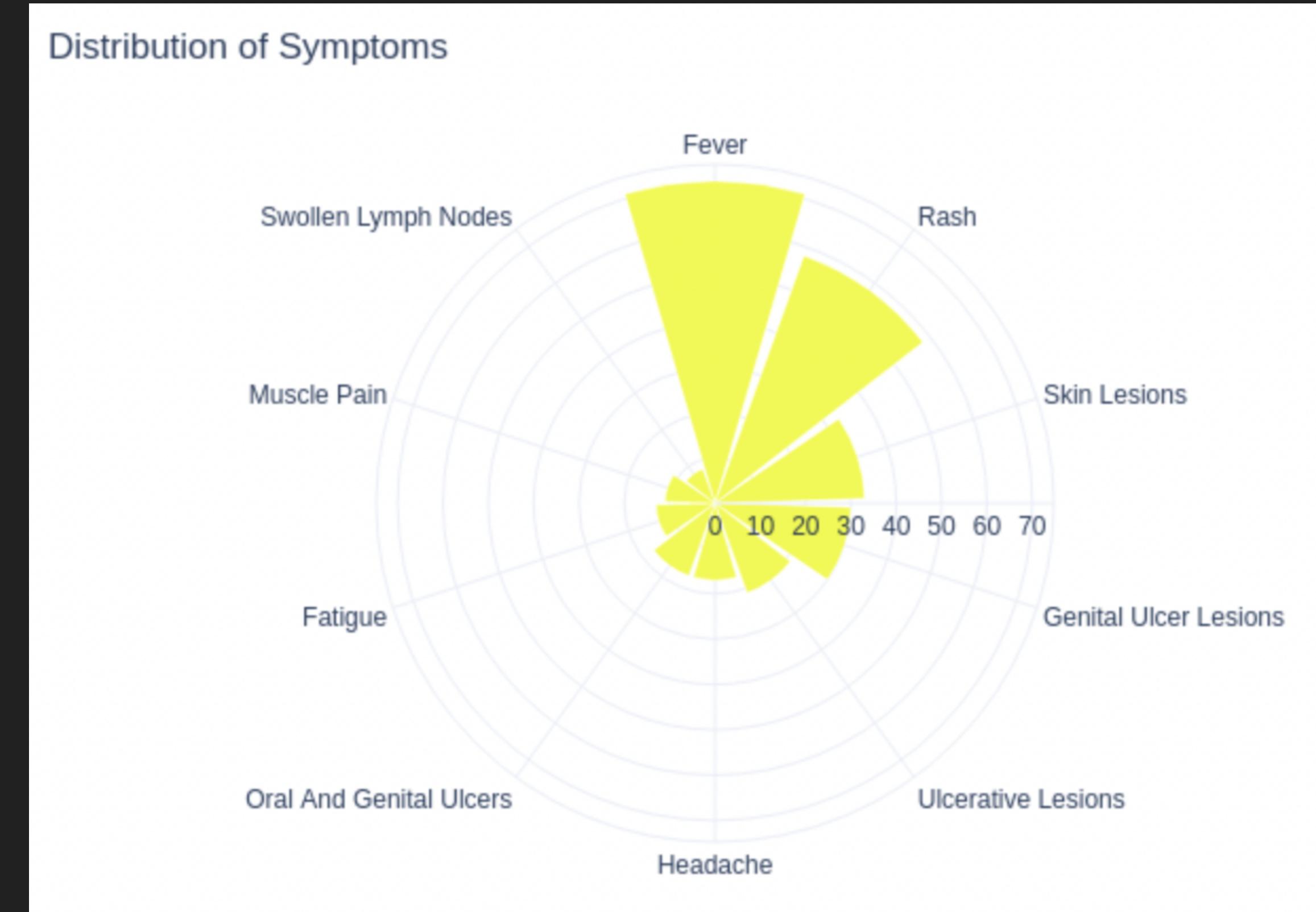
- Inconsistencies in labeling
- Replace NaN values with NA
- Map plot coordinates
- Make things uniform



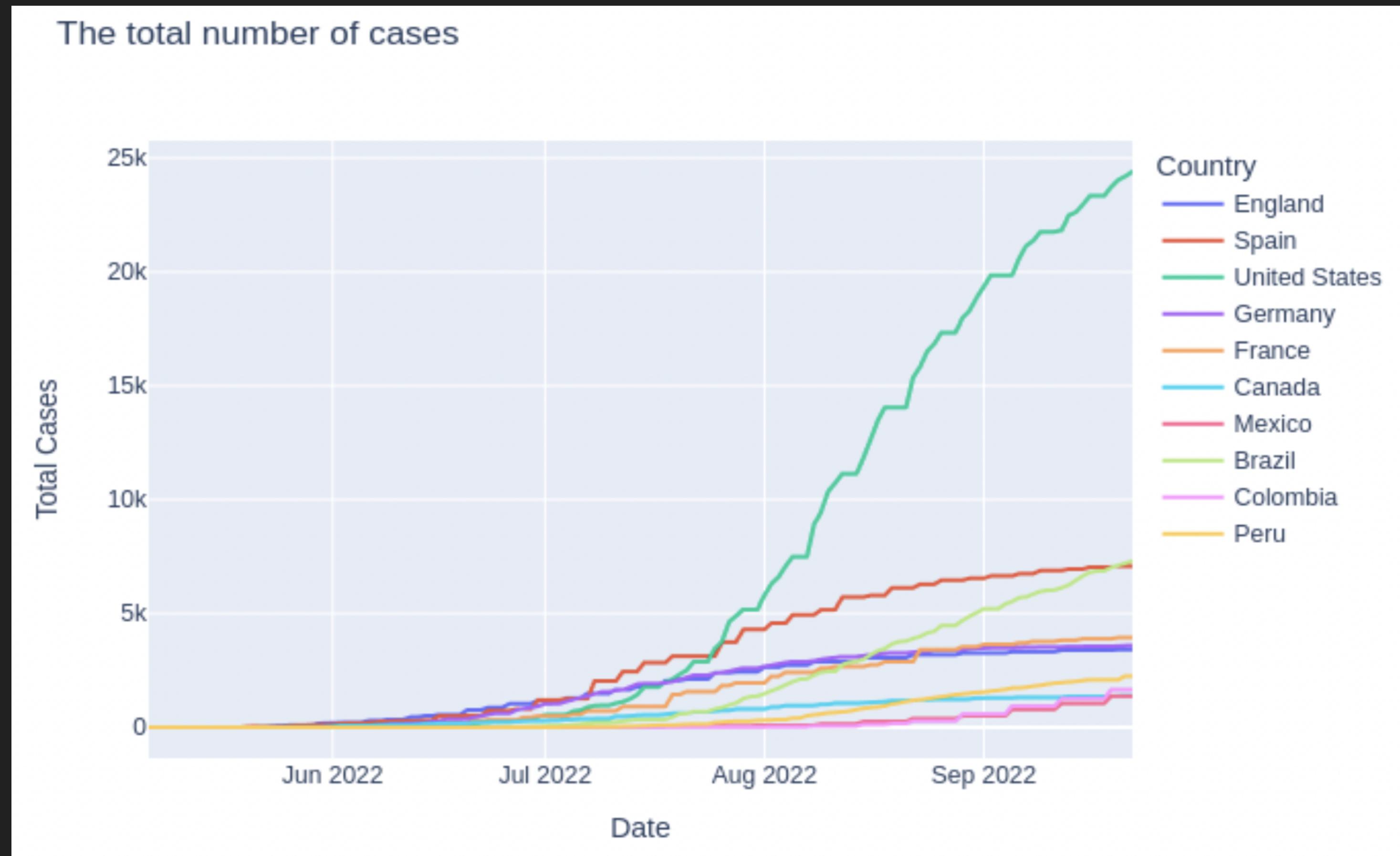
Image: <https://technologyadvice.com/blog/information-technology/data-cleaning/>

What is Monkeypox?

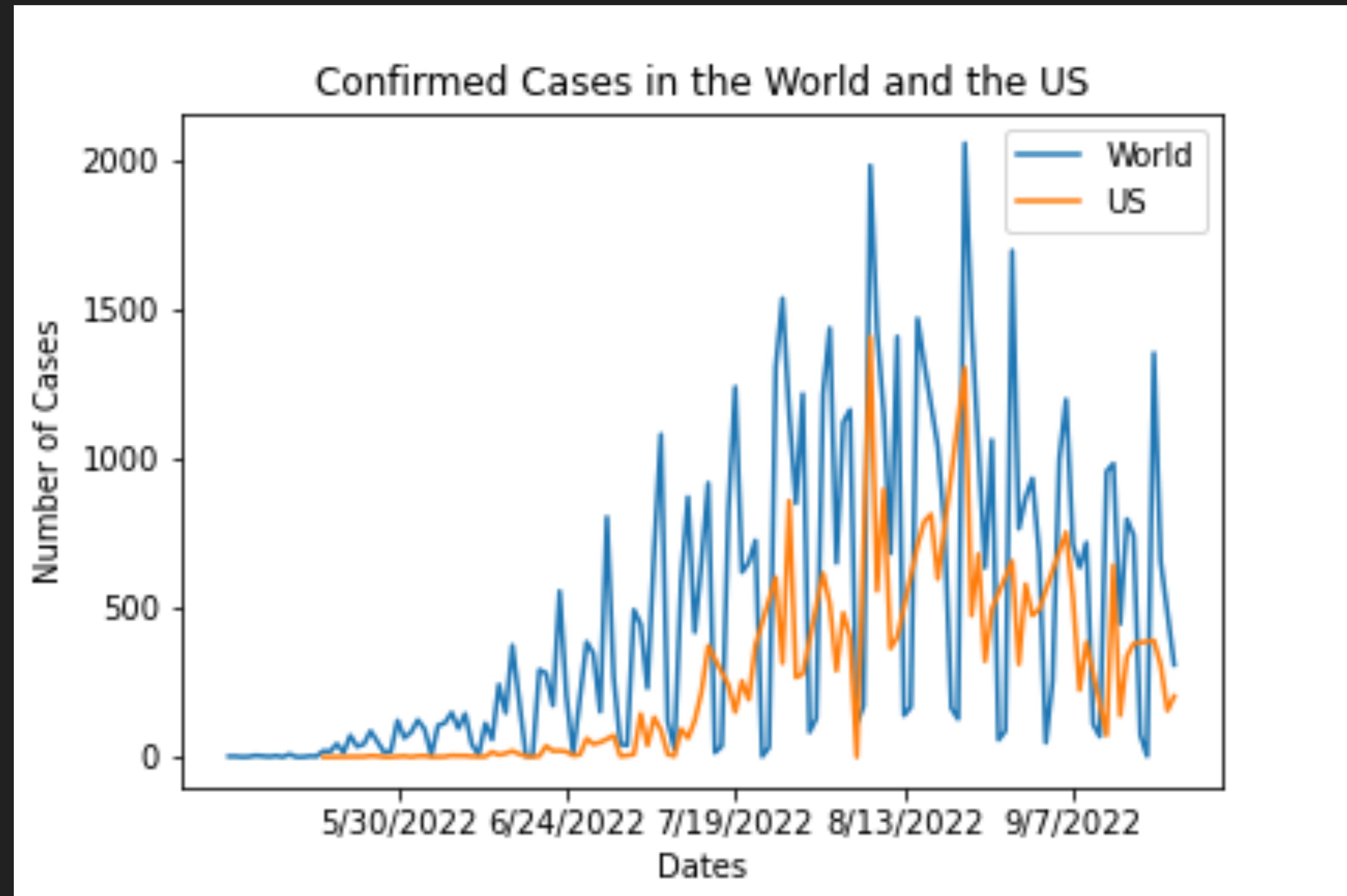
- Part of Orthopoxvirus family
- Spreads by Contact
- Originated in Africa in 1970's



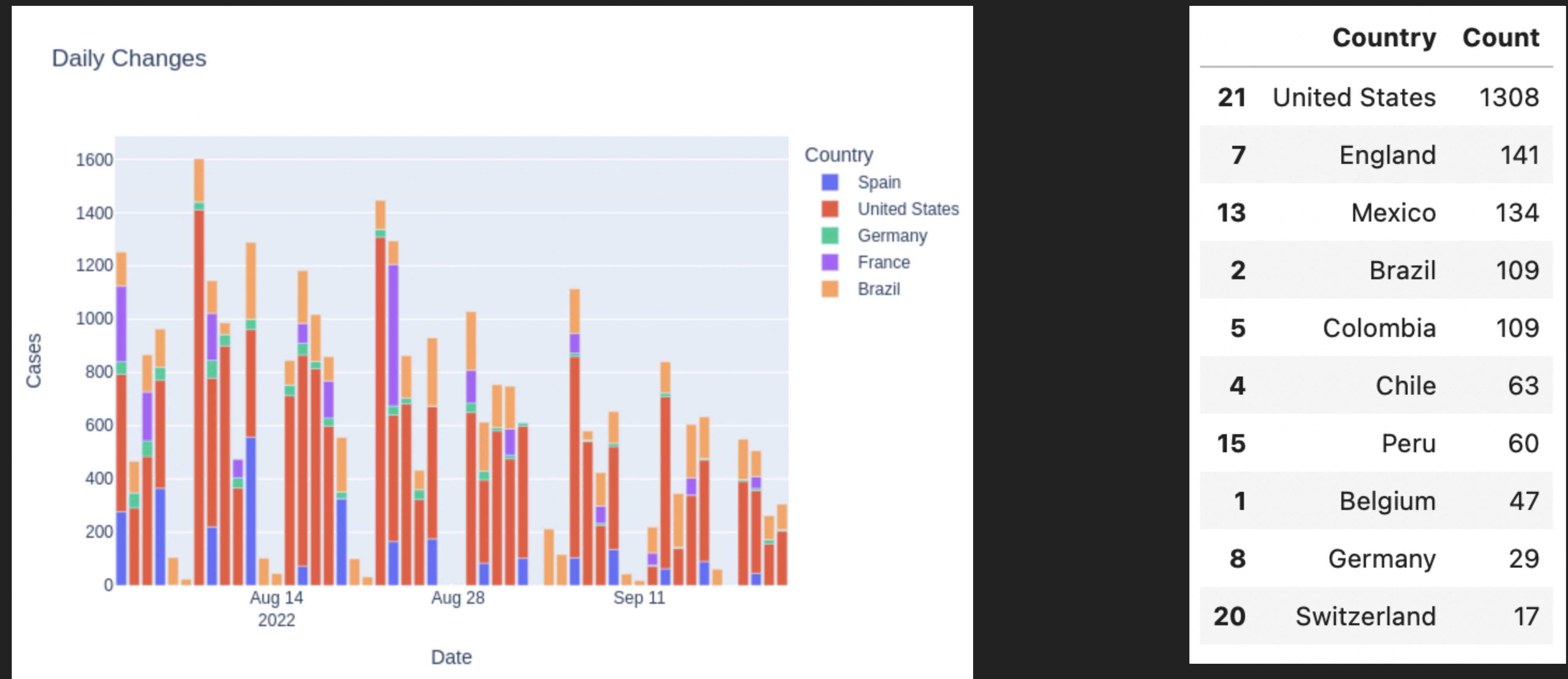
Current Outbreak Timeline



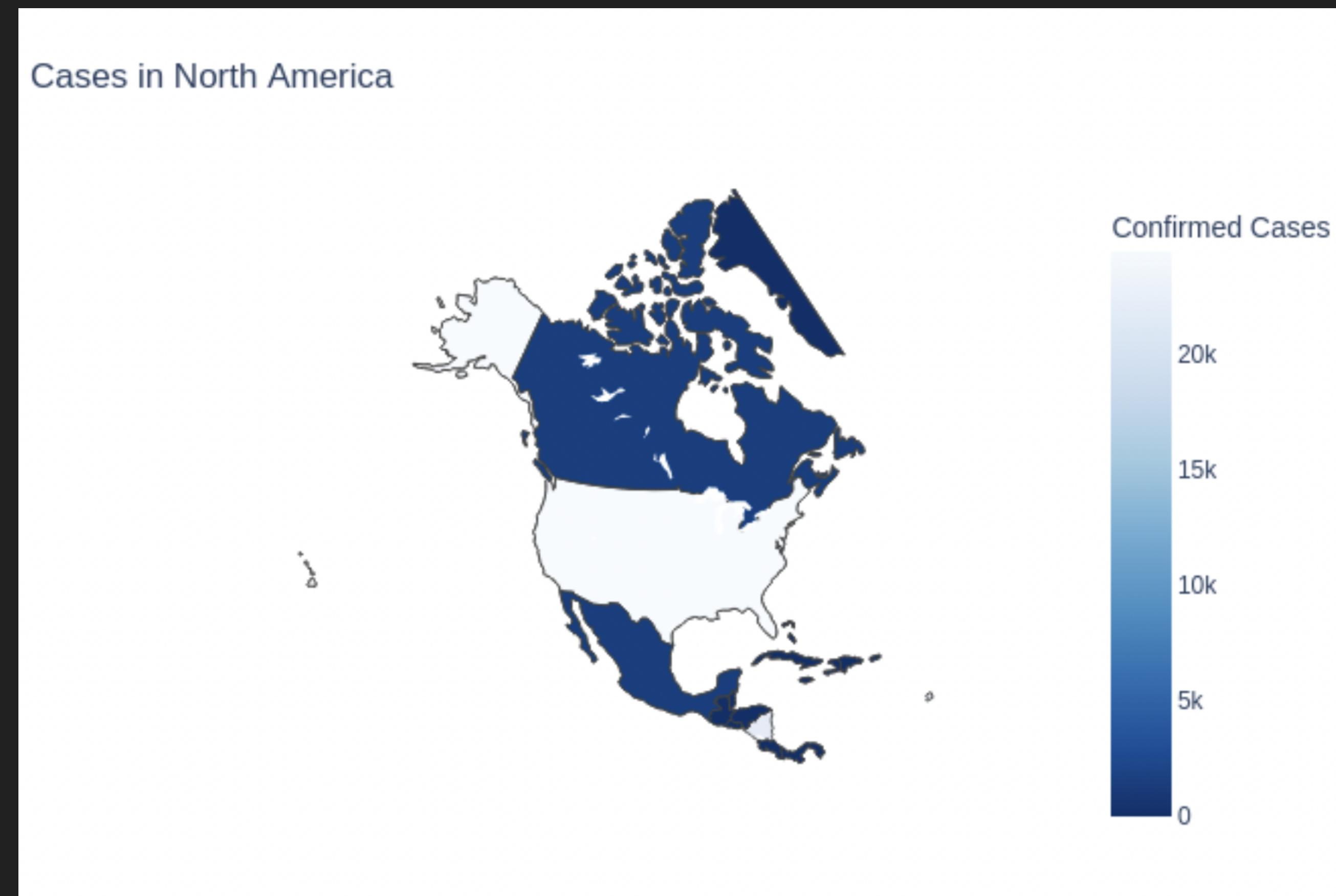
Timeline of United States vs World



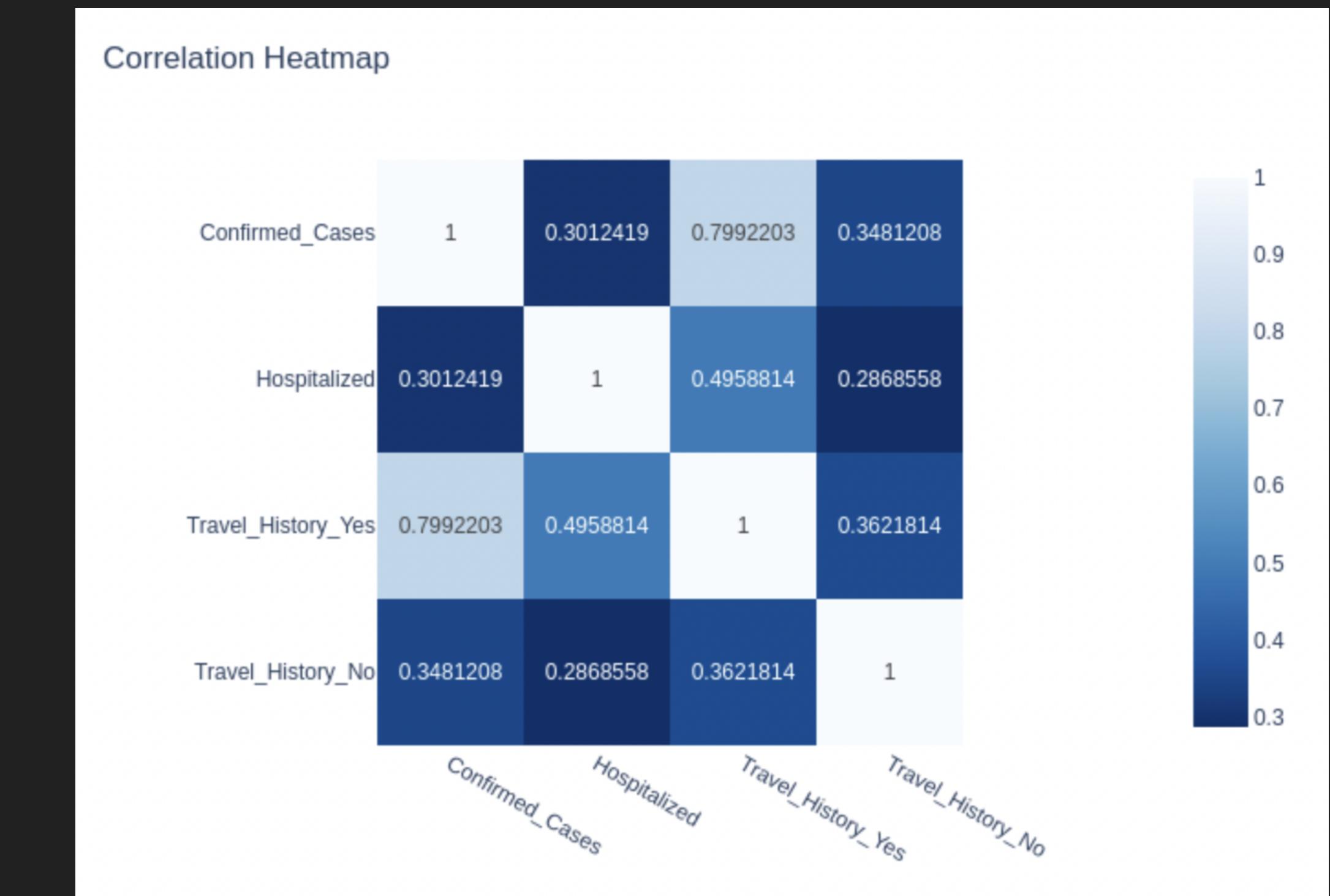
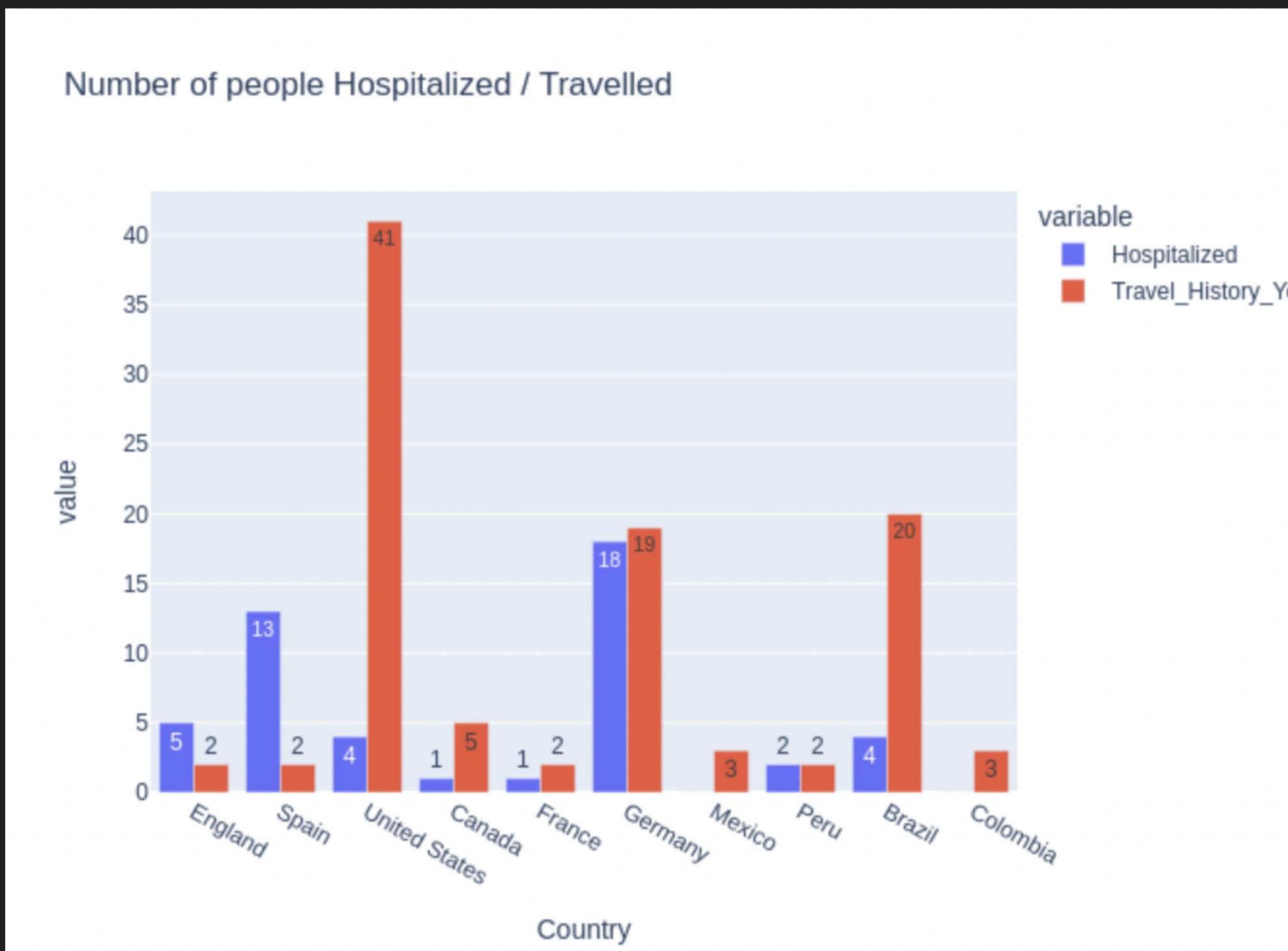
Daily Changes



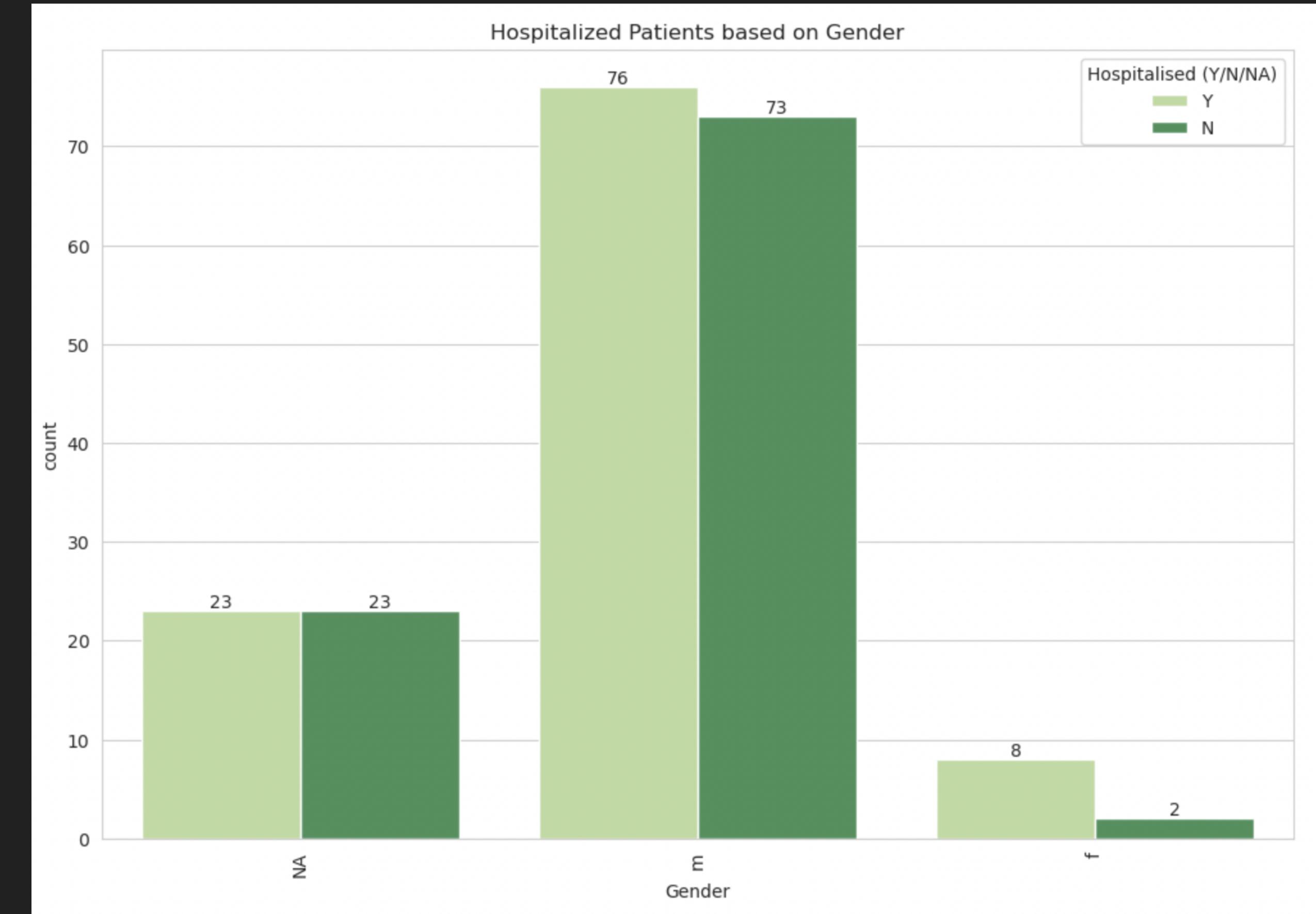
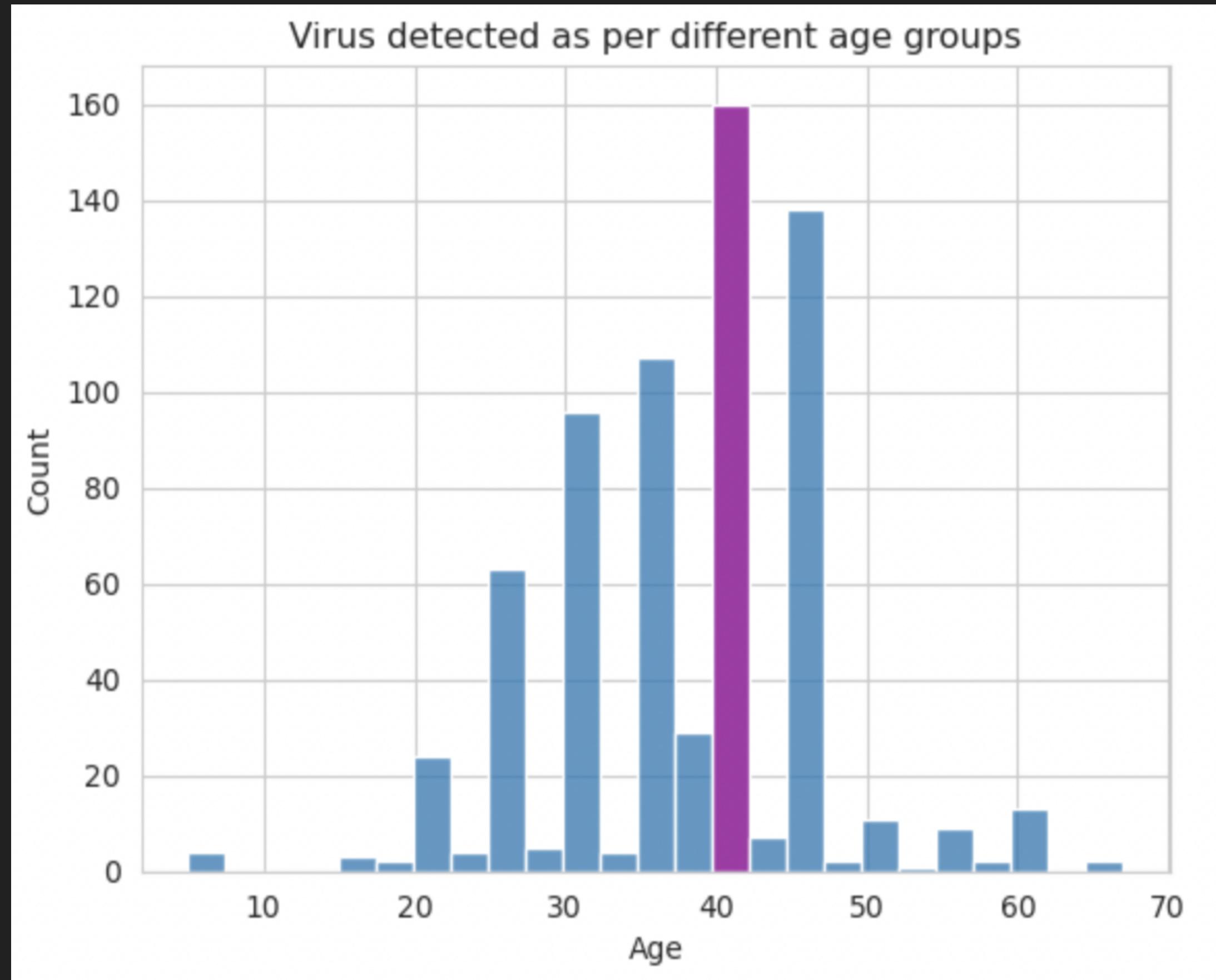
World Spread



Contributing Factor Travel



Observations for Hospitalized Patients



Limitations

- Self-Reported
- Timeline of data limited
- Classification limited



Image: <https://www.dreamstime.com/limitations-can-separate-person-world-lock-isolation-limits-pictured-as-human-figure-locked-inside-glass-image202042375>

Conclusion

- USA vs World
- Travel Impacted Spread
- Hospitalized cases



Image: <https://www.faithfellowshipministries.net/new-blog/2015/12/8/bright-future-ahead>

Thank You!!

- Github Repo:

<https://github.com/vatch123/Monkey-Pox>

- Interactive dashboard:

<https://vatch123-monkey-pox-main-eur34g.streamlit.app/>

References

- <https://www.kaggle.com/code/amiragk/monkeypox-analysis-a1222b>
- <https://www.cdc.gov/smallpox/bioterrorism/public/threat.html>