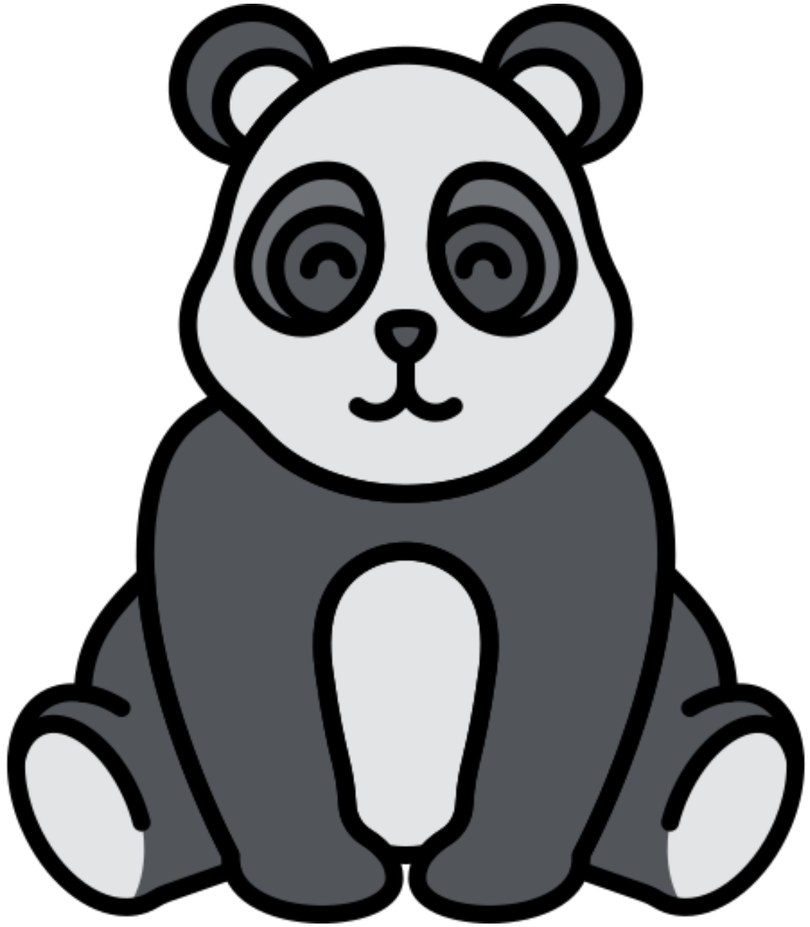
# WELCOME TO
# FLYING WITH CORONA

How corona changed the world!


DEVELOPED BY

Shelley Obery, Kyrian Bourgi &
Mikki Seidenschnur

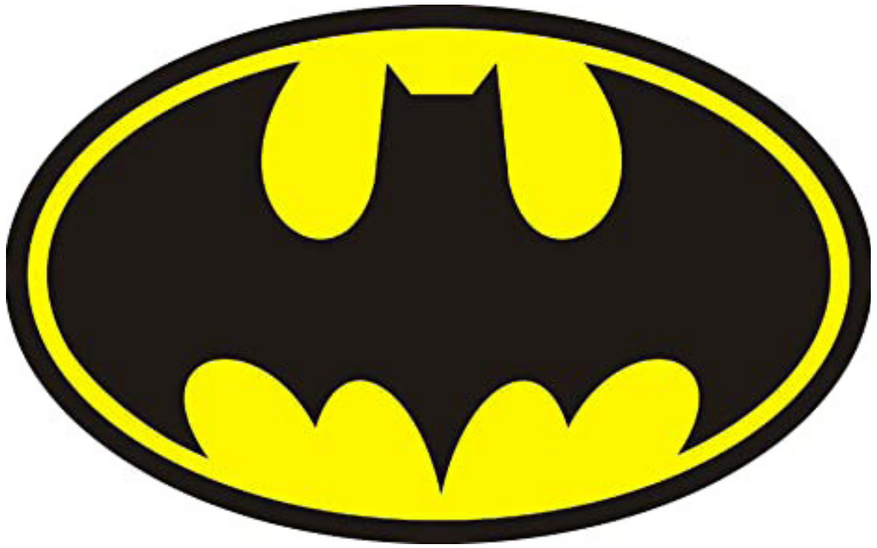
# The pandas team



**Kyrian Bourgi**
*“Let’s do something financial!“*

**Shelley Obery**
*“It’s all good, but let’s save the analysis for later“*

**Mikki Seidenschnur**
*“It’s all about the story!“*



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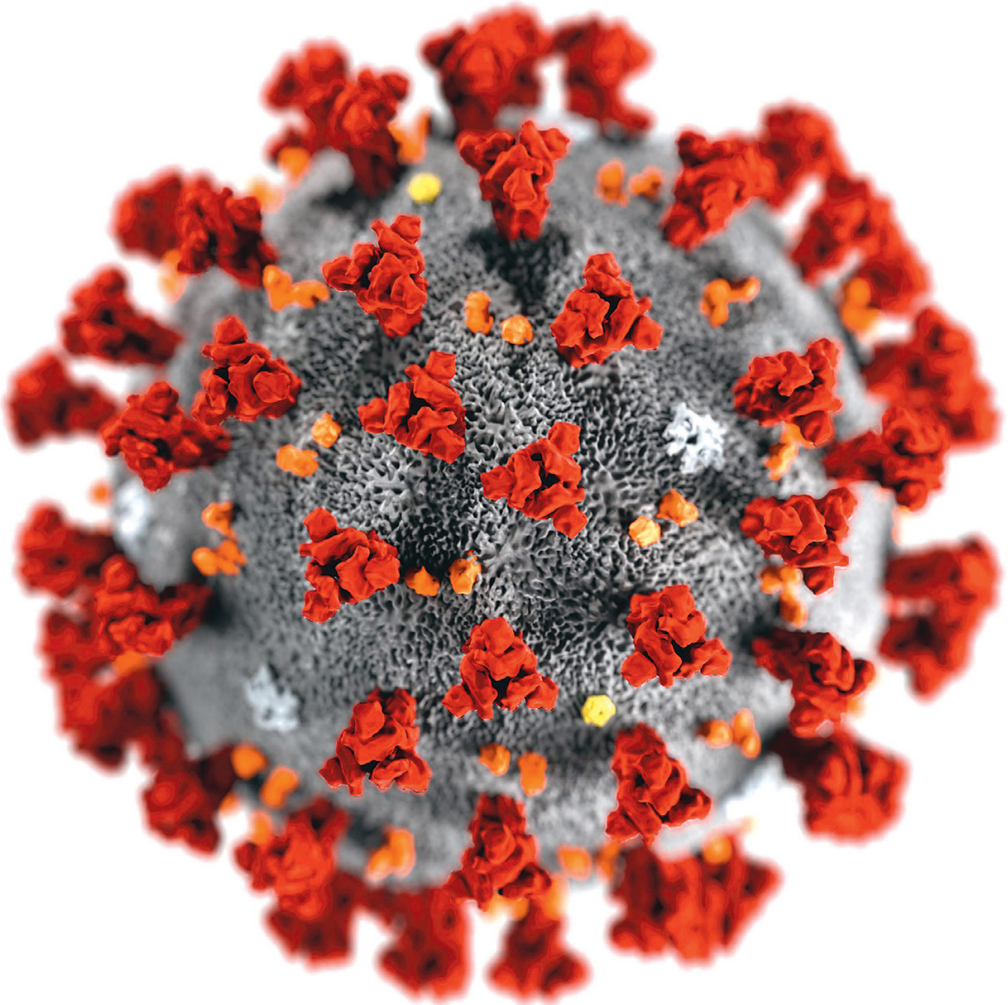
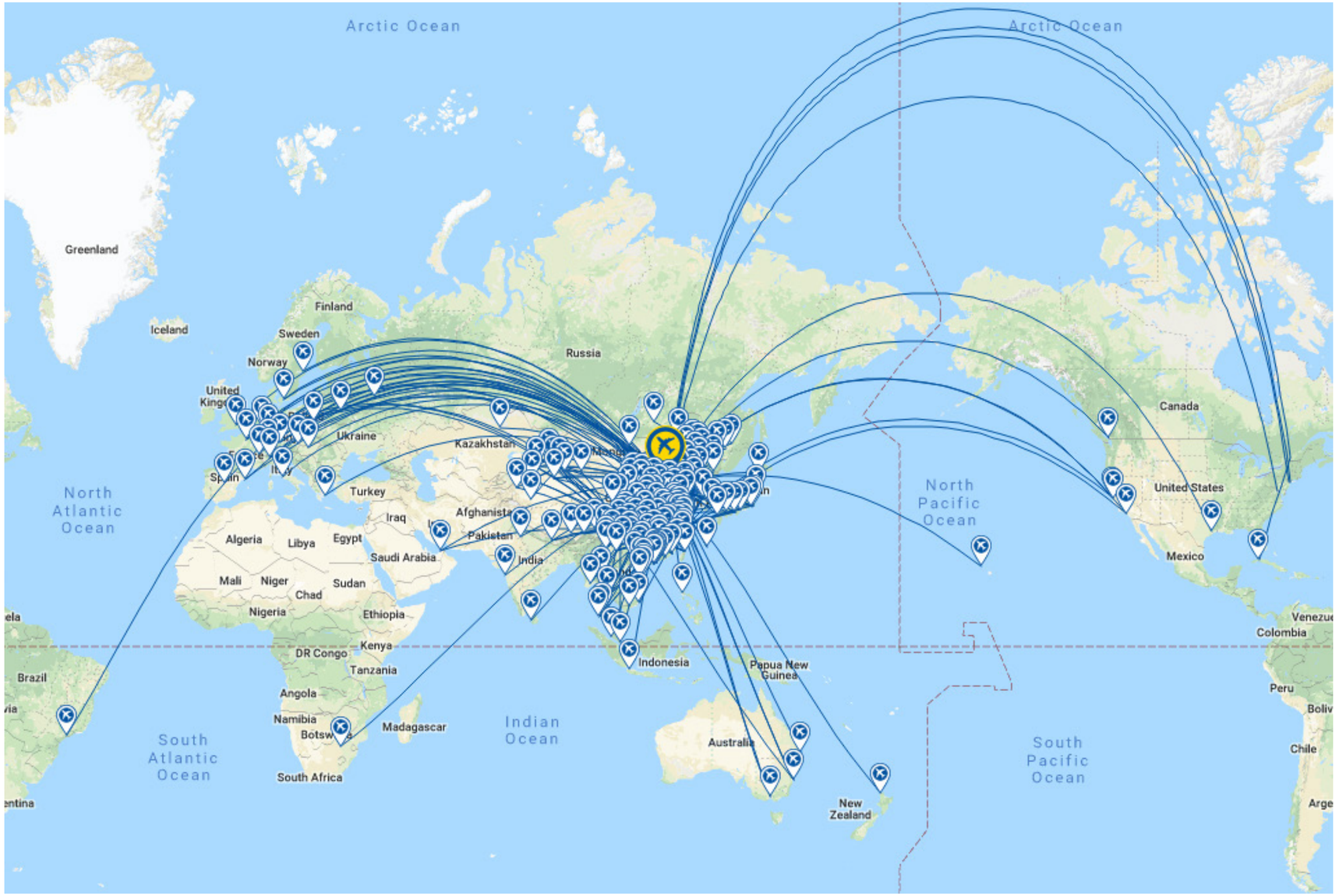
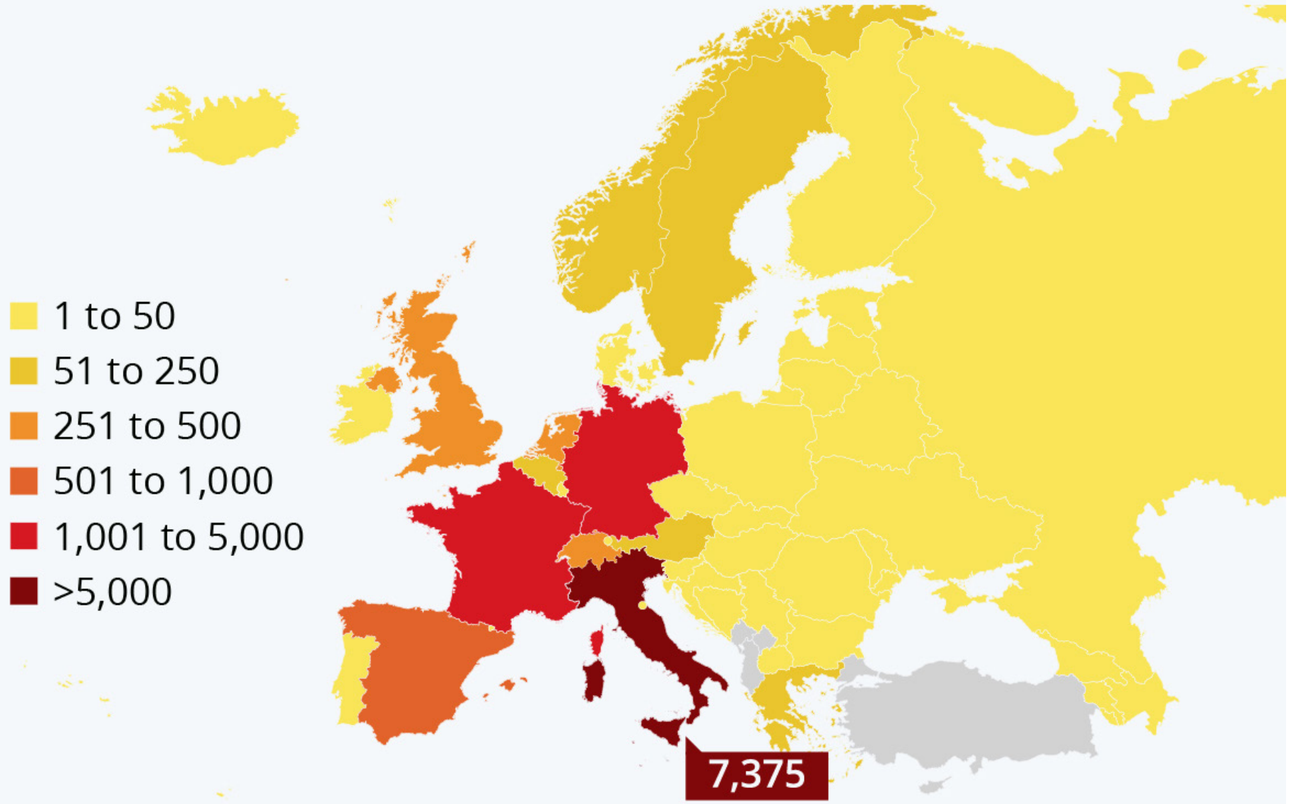



Arctic Ocean
Arctic Ocean
Greenland
Iceland
Finland
Sweden
Norway
Russia
United Kingdom
Ukraine
Kazakhstan
Canada
United States
Mexico
Spain
Italy
Turkey
Iraq
Afghanistan
Pakistan
India
Saudi Arabia
Egypt
Libya
Algeria
Mali
Niger
Chad
Sudan
Nigeria
Ethiopia
Kenya
DR Congo
Tanzania
Angola
Namibia
Botswana
South Africa
Madagascar
Brazil
Indonesia
Papua New Guinea
Australia
New Zealand
Colombia
Peru
Chile
North Atlantic Ocean
South Atlantic Ocean
Indian Ocean
North Pacific Ocean
South Pacific Ocean

# The Coronavirus in Europe

Confirmed cases of the COVID-19 coronavirus in Europe*



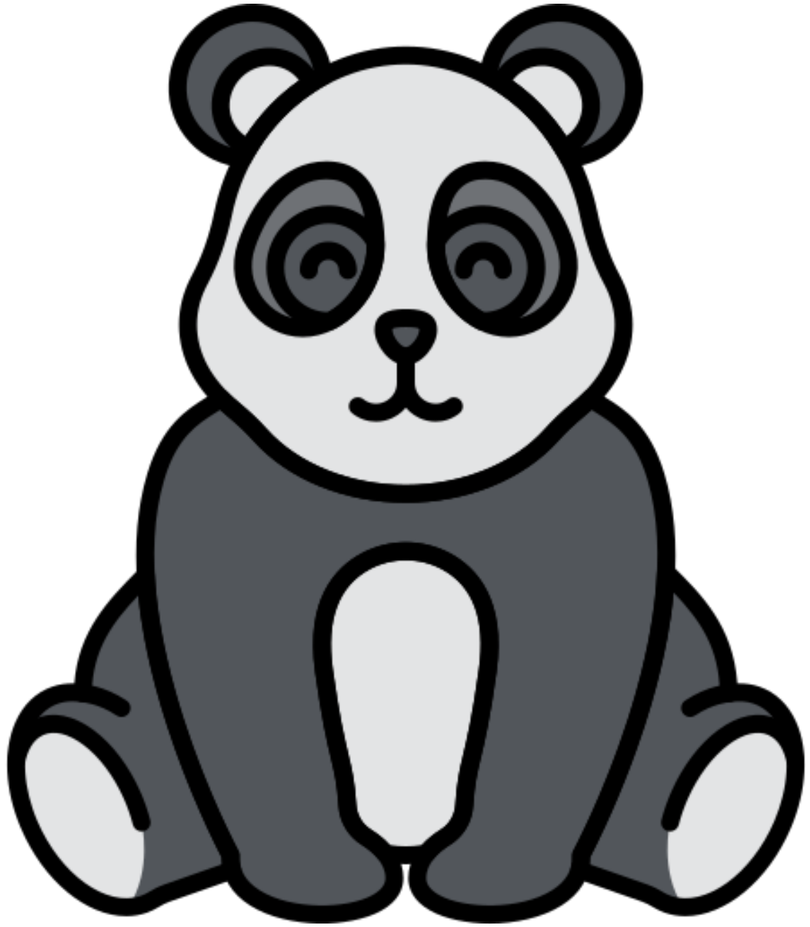

* As of 9 March 2020 at 08:30 CET

Source: Johns Hopkins University

March 23 2020 most of europe reintroduced border control
POLIZEI

# CORONA VIRUS HAS SEVERELY IMPACTED THE GLOBALIZED WORLD THAT WE LIVE IN!

# DATA SOURCES



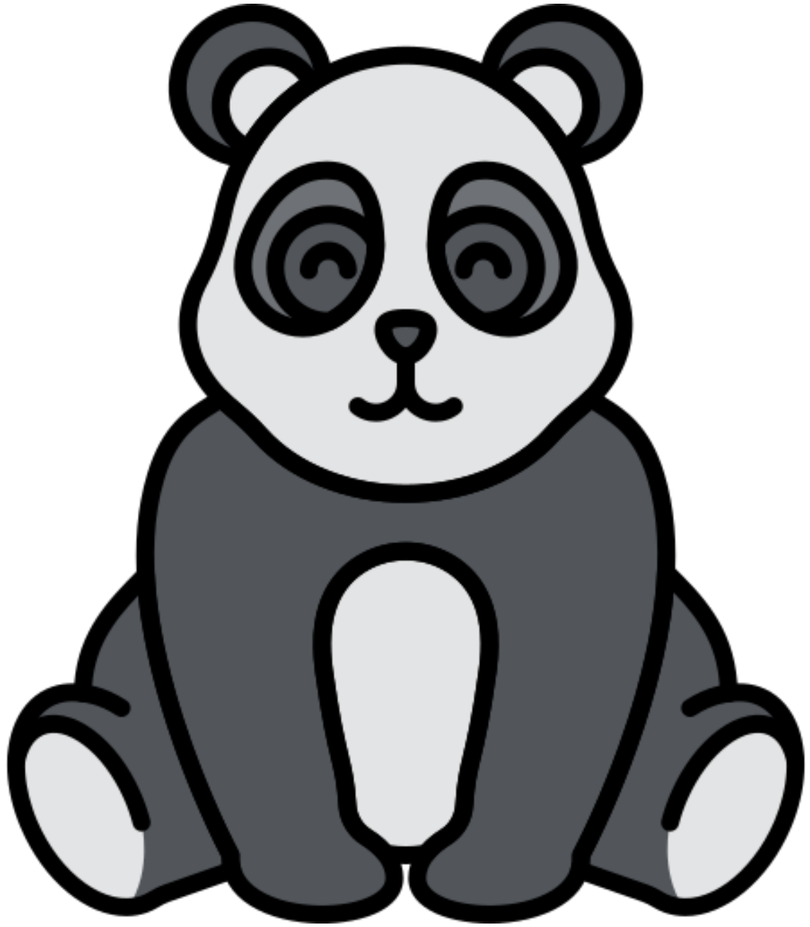
**World pollution data**
***Source:*** *https://aqicn.org/api/*
***Type:*** *API*

**Flight data**
***Source:*** *www.flightradar24.com/data*
***Type:*** *Downloadable CSV file*

**Cryptocurrency**
***Source:*** *www.coingecko.com/api*
***Source:*** *https://exchangeratesapi.io/*
***Type:*** *API*

**“Zoom” market value**
***Source:*** *finance.yahoo.com/quote/api*
***Type:*** *API*

# TECHNICAL CHALLENGES



**World pollution data**
***How to make rows columns and filter data on dates and city***

**Flight data**
***Source:*** *www.flightradar24.com/data*
***Type:*** *Downloadable CSV file*

**Cryptocurrency**
***How to compare cryptocurrency with different country currencies***

**"Zoom" market value**
***Source:*** *finance.yahoo.com/quote/api*
***Type:*** *API*

# POLLUTION DATA - MAKING ROWS COLUMNS

| | Date | Country | City | Specie | Median (PPM) |
|---|---|---|---|---|---|
| **0** | 2019-01-16 | AE | Abu Dhabi | PM10 | 85 |
| **1** | 2019-01-22 | AE | Abu Dhabi | PM10 | 20 |
| **2** | 2019-01-26 | AE | Abu Dhabi | PM10 | 38 |
| **3** | 2019-01-07 | AE | Abu Dhabi | PM10 | 69 |
| **4** | 2019-01-10 | AE | Abu Dhabi | PM10 | 23 |
| **5** | 2019-01-16 | AE | Abu Dhabi | PM2.5 | 123 |
| **6** | 2019-01-22 | AE | Abu Dhabi | PM2.5 | 232 |
| **7** | 2019-01-26 | AE | Abu Dhabi | PM2.5 | 111 |
| **8** | 2019-01-07 | AE | Abu Dhabi | PM2.5 | 42 |
| **9** | 2019-01-10 | AE | Abu Dhabi | PM2.5 | 102 |
| **10** | 2019-01-16 | AE | Abu Dhabi | NO2 | 40 |
| **11** | 2019-01-22 | AE | Abu Dhabi | NO2 | 21 |
| **12** | 2019-01-26 | AE | Abu Dhabi | NO2 | 34 |
| **13** | 2019-01-07 | AE | Abu Dhabi | NO2 | 23 |
| **...** | ... | ... | ... | ... | ... |
| **491156** | 2019-01-16 | RS | Belgrade | CO | 12 |
| **491157** | 2019-01-22 | RS | Belgrade | CO | 23 |
| **491158** | 2019-01-26 | RS | Belgrade | CO | 5 |
| **491159** | 2019-01-07 | RS | Belgrade | CO | 2 |

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| Abu Dhabi | Date | PM10 | PM2.5 | NO2 | CO |
|---|---|---|---|---|---|
| **0** | 2019-01-16 | 85 | 123 | 40 | 12 |
| **1** | 2019-01-22 | 20 | 232 | 21 | 23 |
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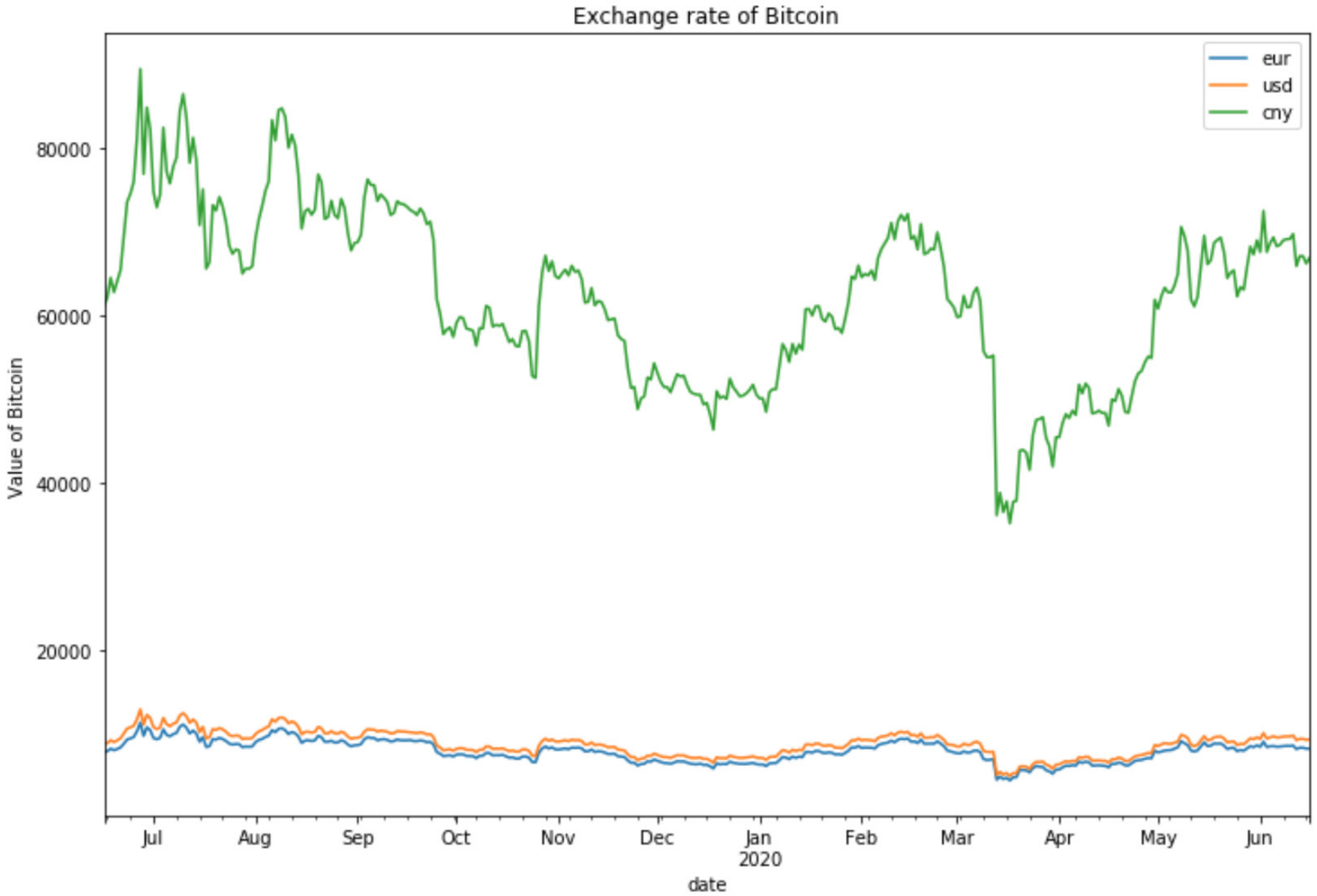
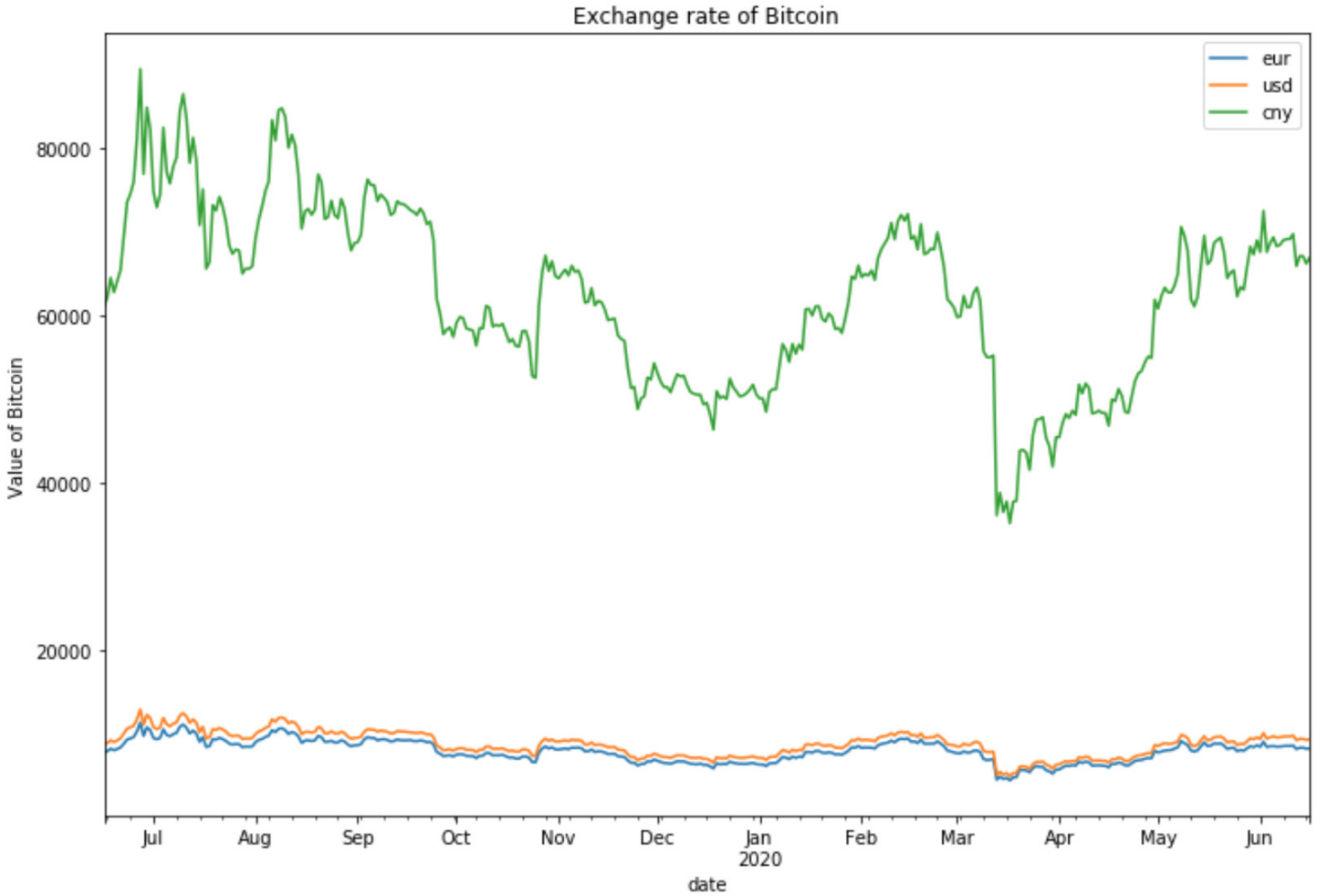
| **3** | 2019-01-07 | 69 | 42 | 23 | 2 |
| **4** | 2019-01-10 | 23 | 102 | 20 | 12 |

# CRYPTOCURRENCY - VISUAL COMPARISON

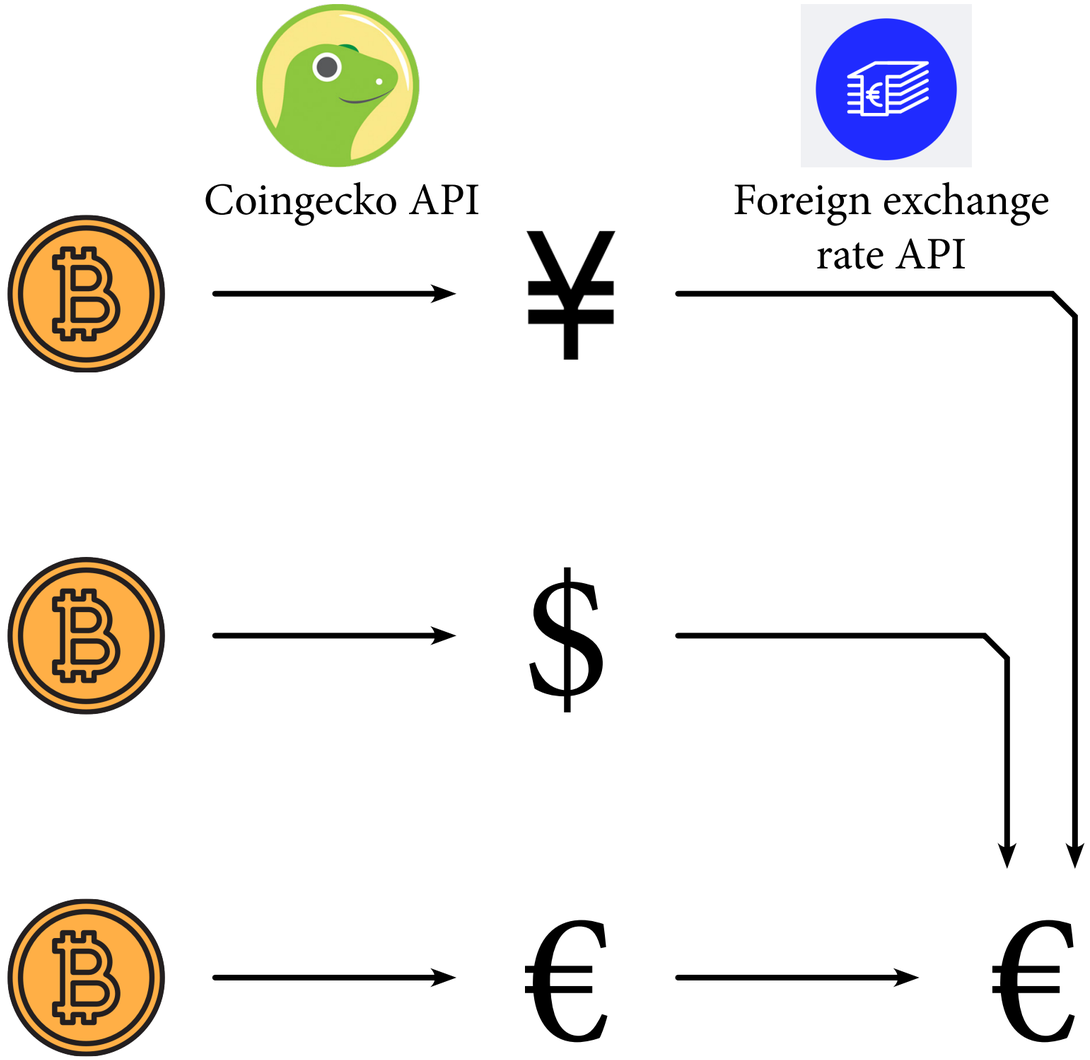


# CRYPTOCURRENCY - VISUAL COMPARISON




Visual comparison is next to impossible!

Does it follow the same trend?


Coingecko API
Foreign exchange rate API
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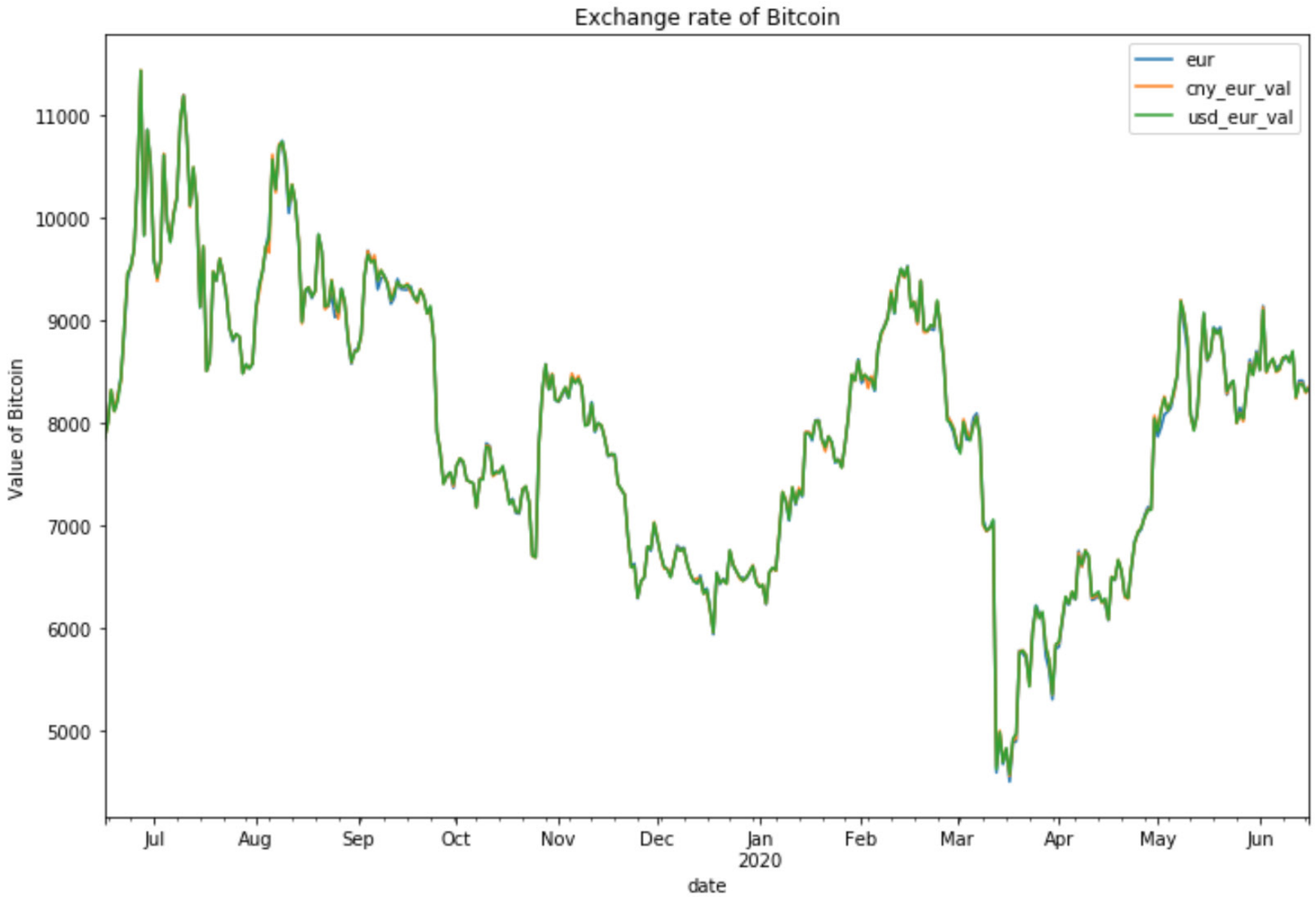
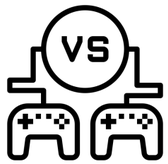
$
€
€

# CRYPTOCURRENCY - VISUAL COMPARISON

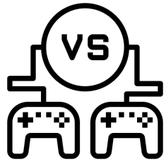


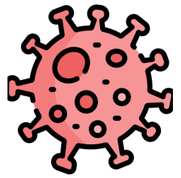
Flight data



Pollution data

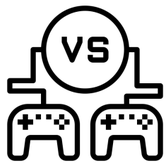
Zoom price

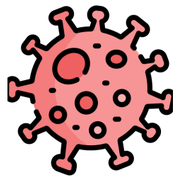


Corona lockdown

Cryptocoins

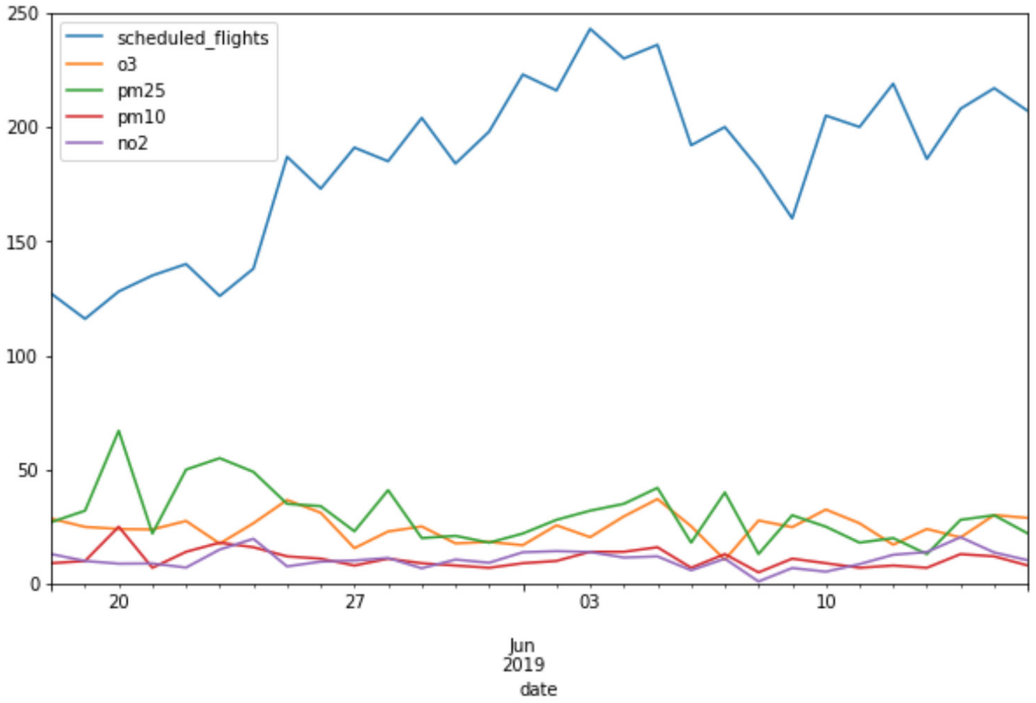


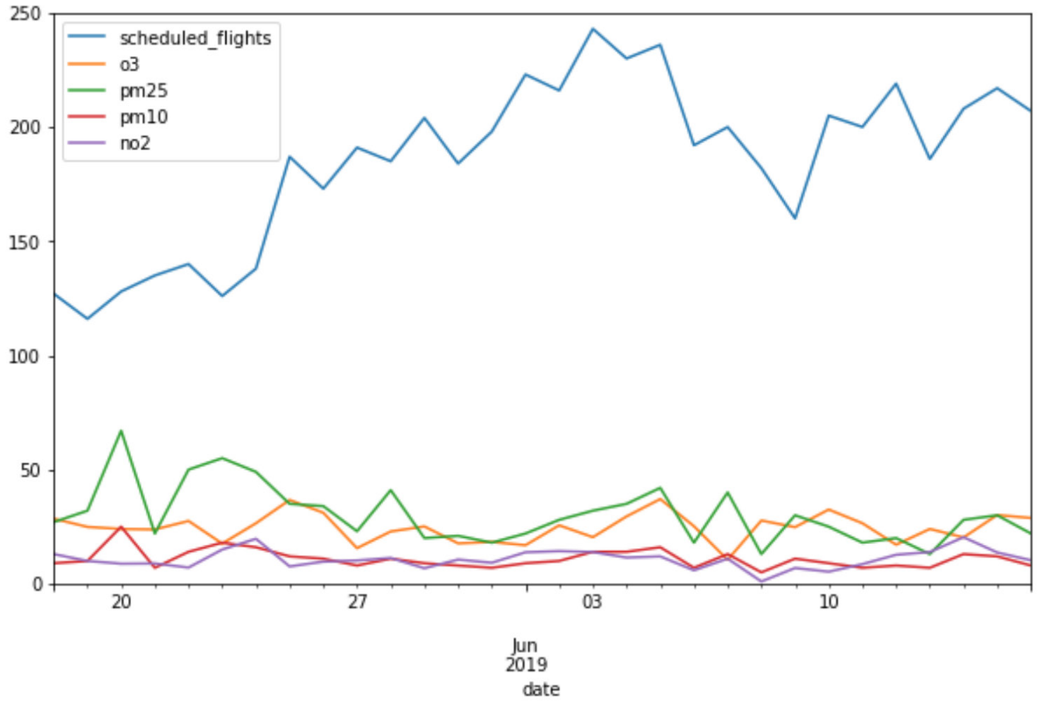



Corona lockdown

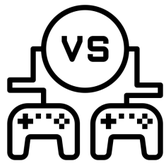
**Flight data**

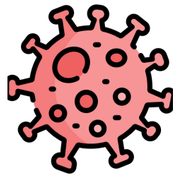
**Pollution data**



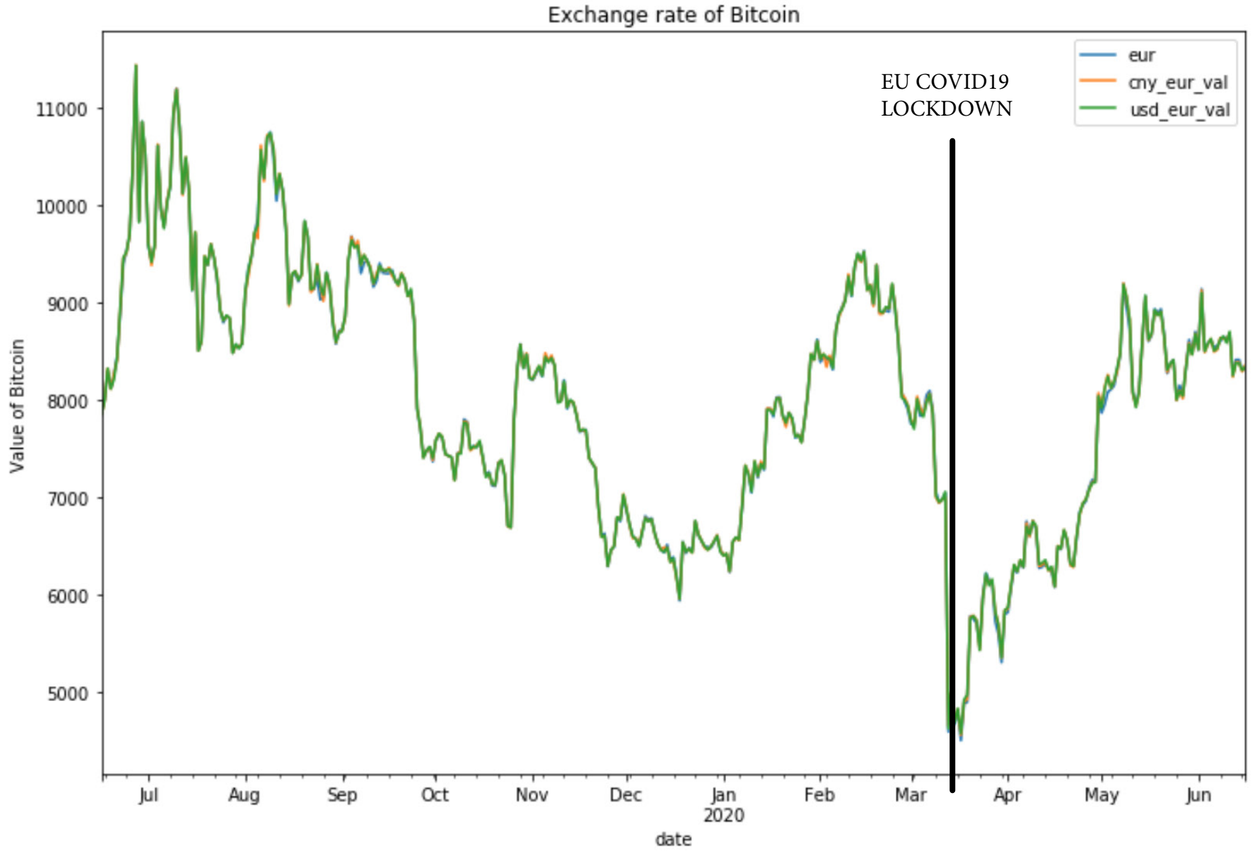



**Cryptocoins**

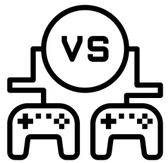


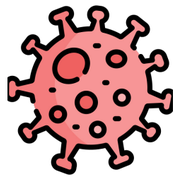



**Corona lockdown**

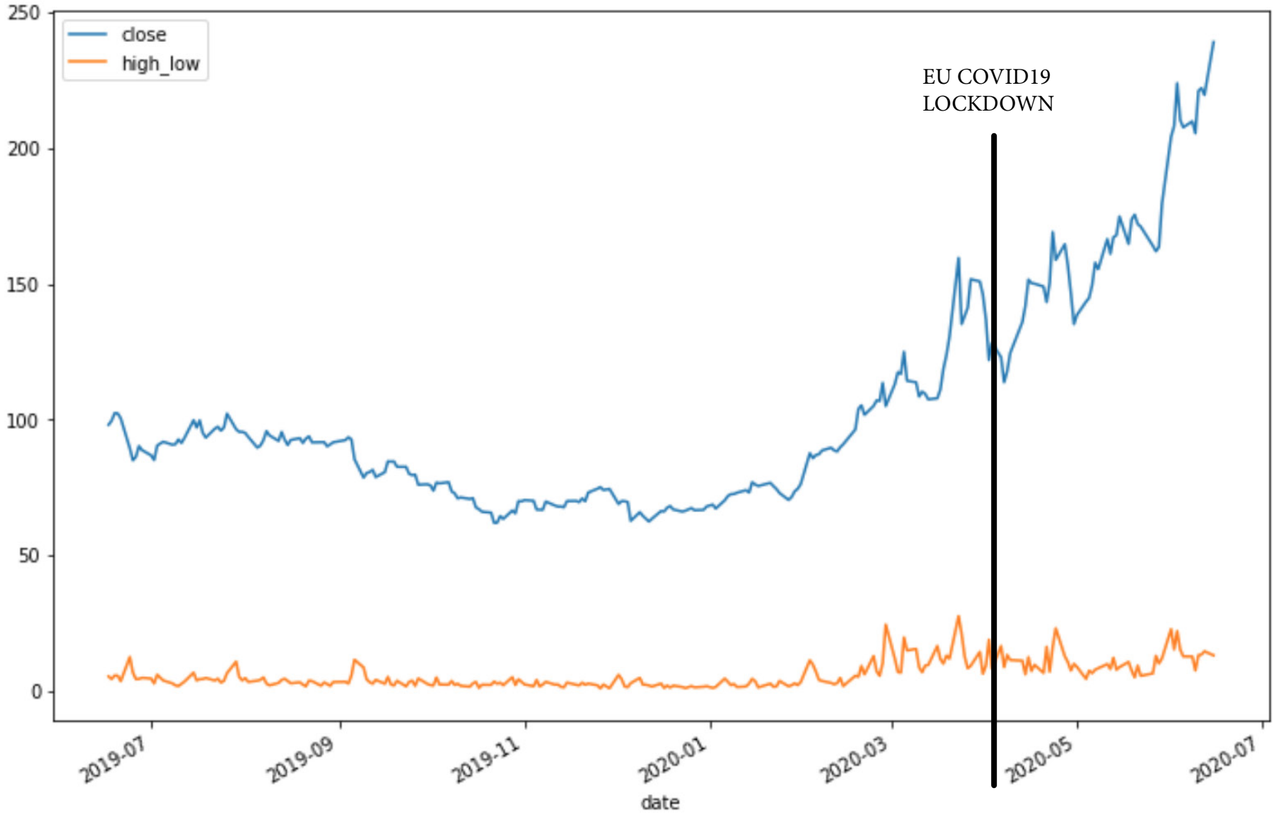


**Zoom stock price**



**Corona lockdown**



# Conclusion

## The graphs indicate the following:

Corona virus has affected the bitcoin positively

Corona virus has affected the zoom share prices positively

No conclusion could be drawn on the
pollution level measured compared to the flights

# Insights

Data is not neccesarily easy to get!

Write functions for your data cleaning!
- OR deal with the consequences

Statistical analysis is imparative to
make sense of correlations

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